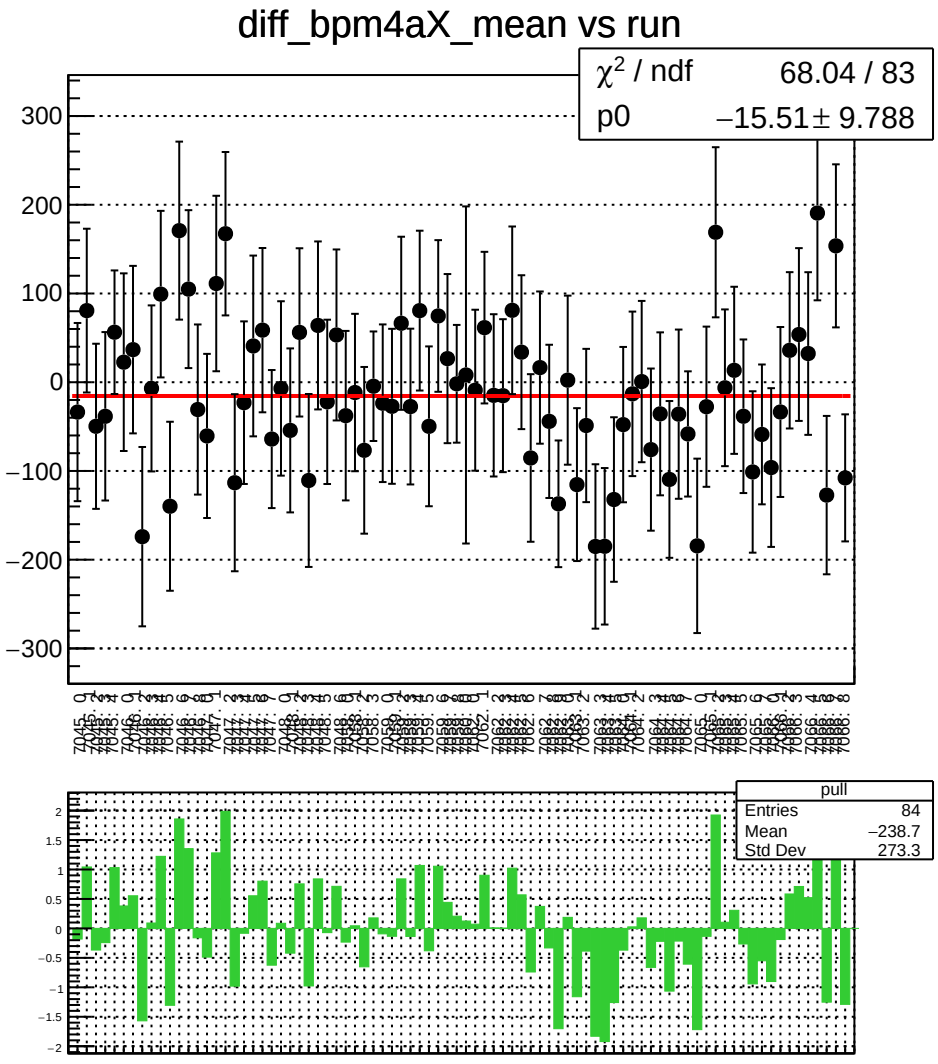
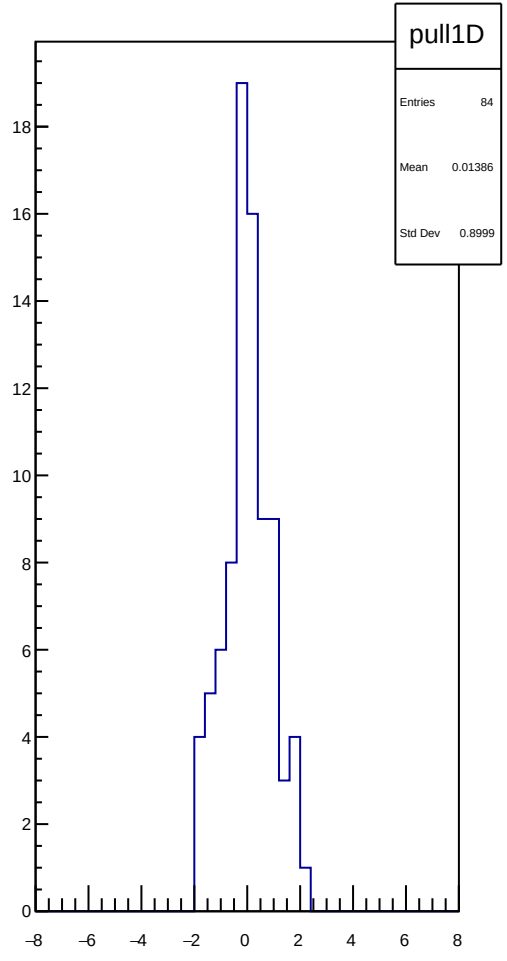
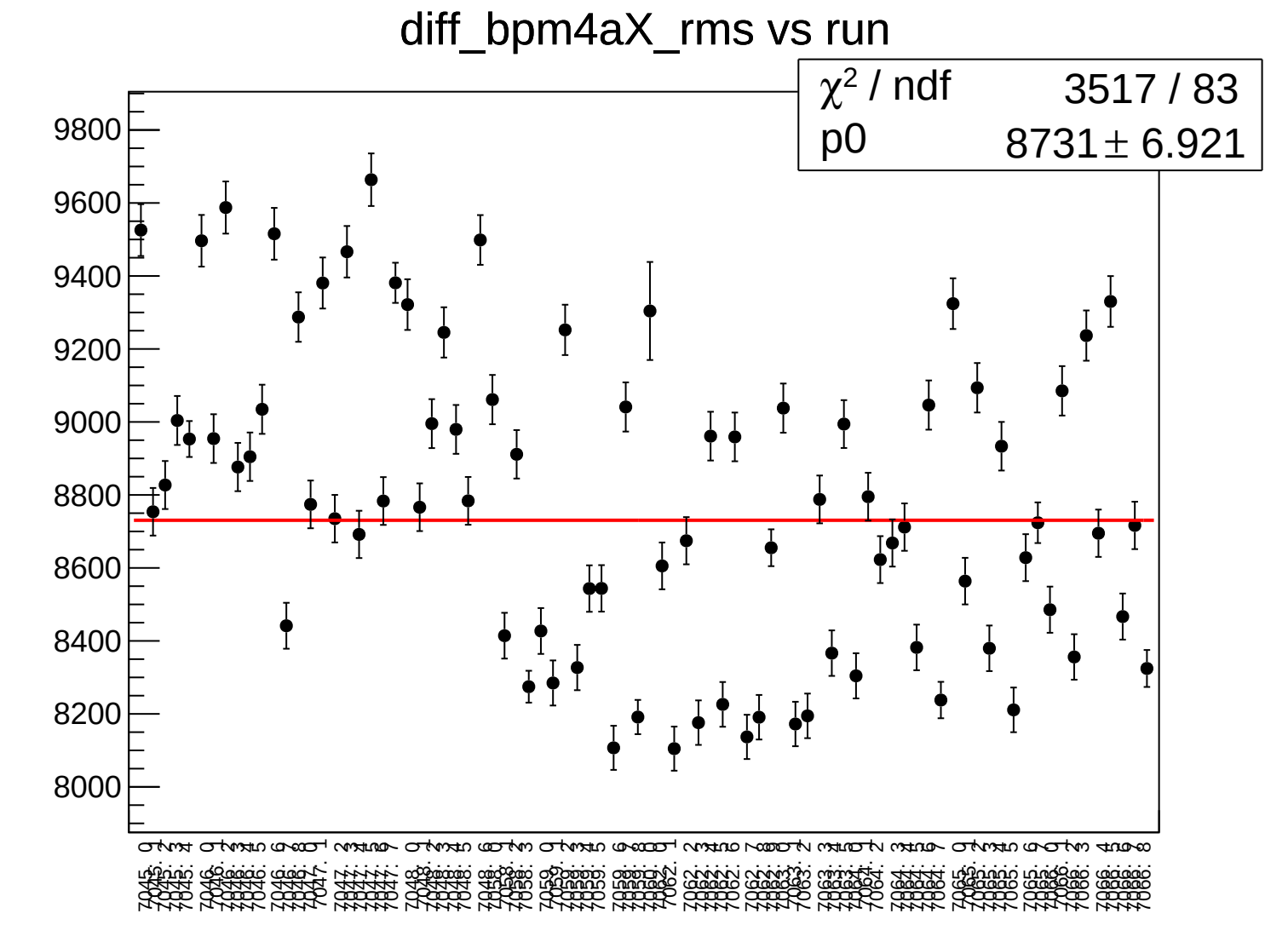
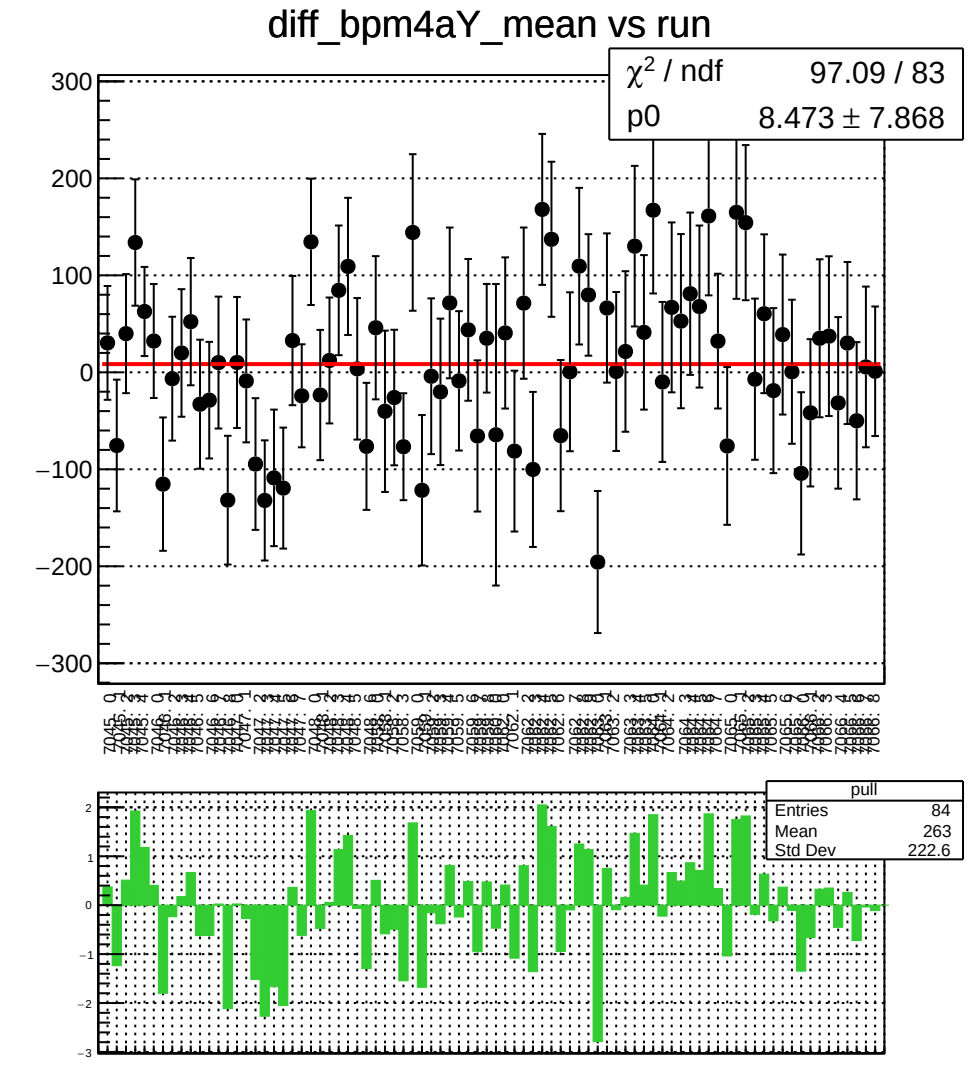
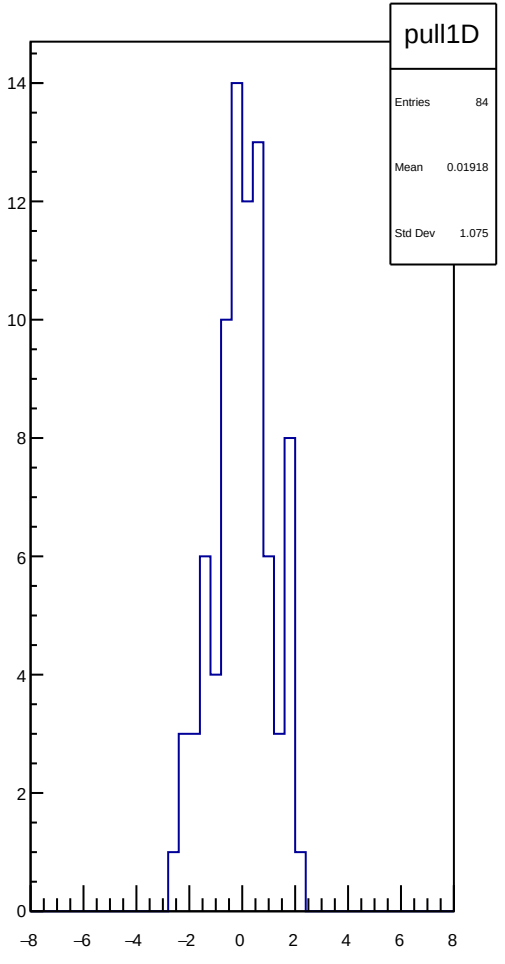
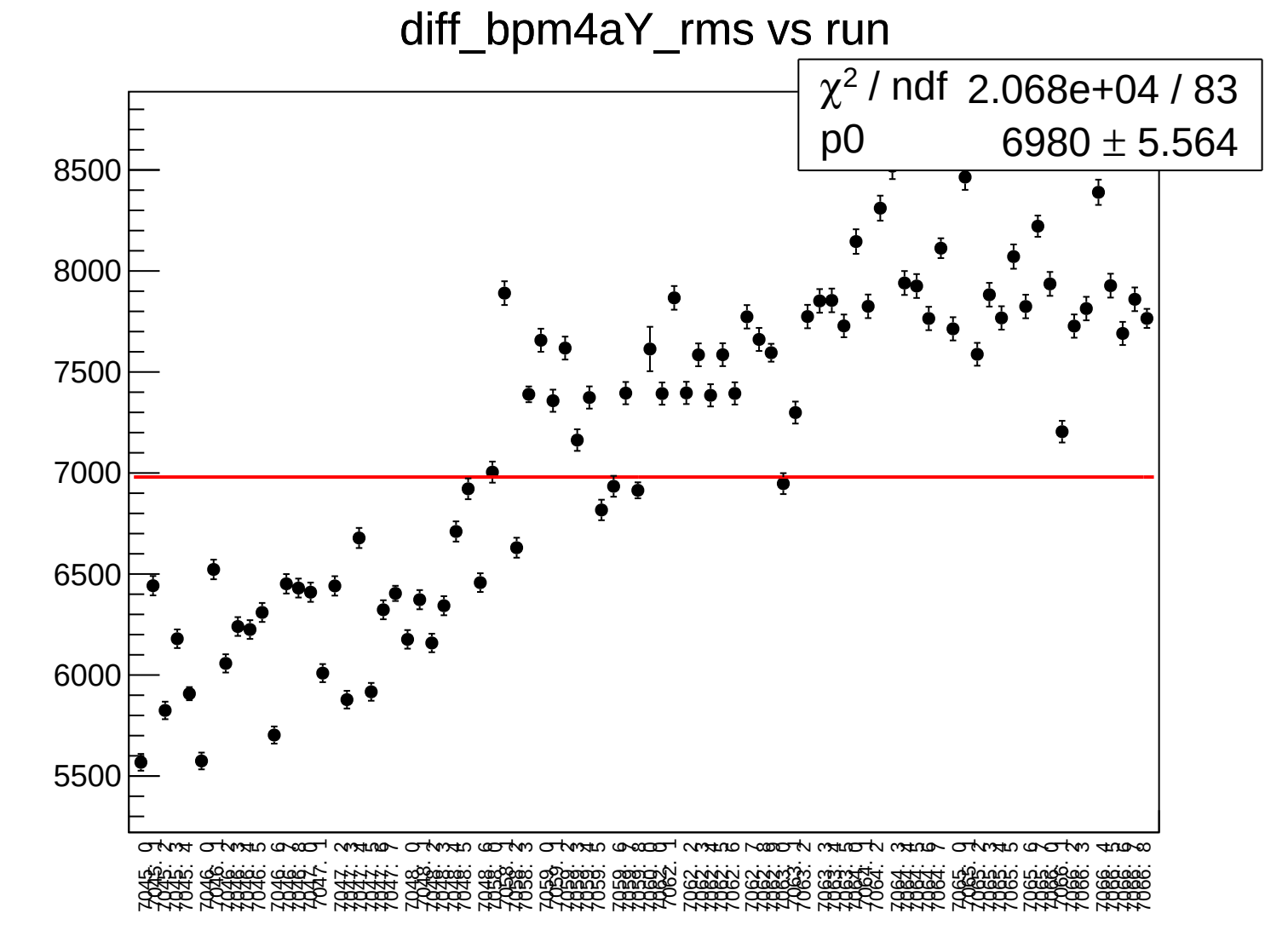

diff_bpm4aX_mean vs run
χ² / ndf 68.04 / 83
p0 −15.51 ± 9.788
300
200
100
0
−100
−200
−300
pull
Entries 84
Mean −238.7
Std Dev 273.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

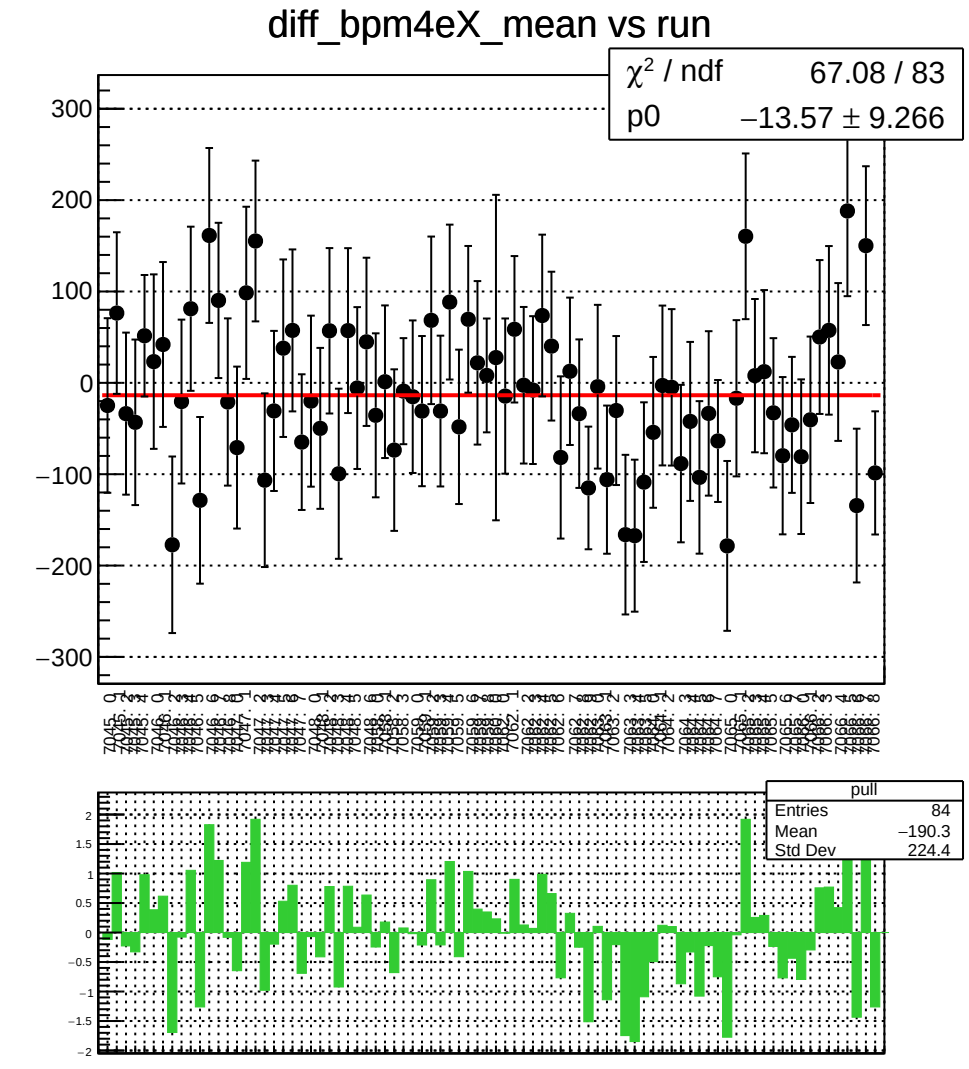

pull1D
Entries 84
Mean 0.01386
Std Dev 0.8999
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

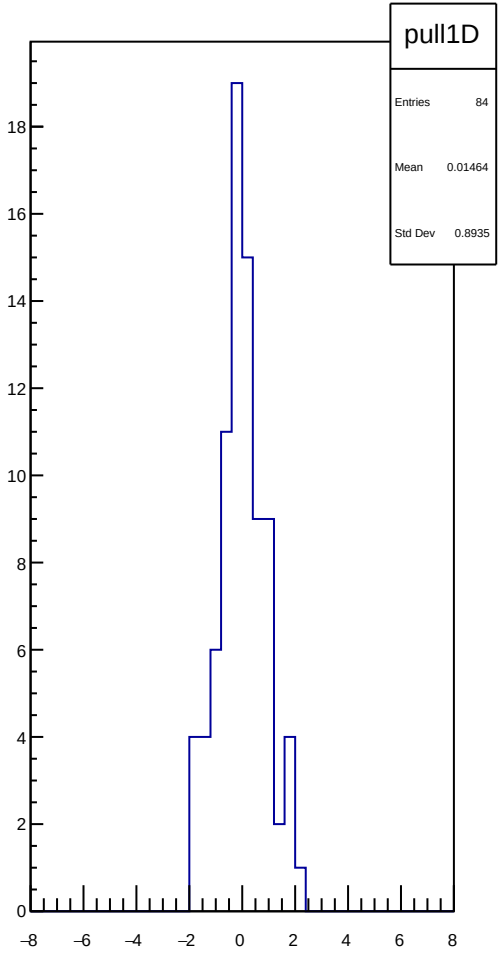

diff_bpm4aX_rms vs run
χ² / ndf 3517 / 83
p0 8731 ± 6.921
9800
9600
9400
9200
9000
8800
8600
8400
8200
8000

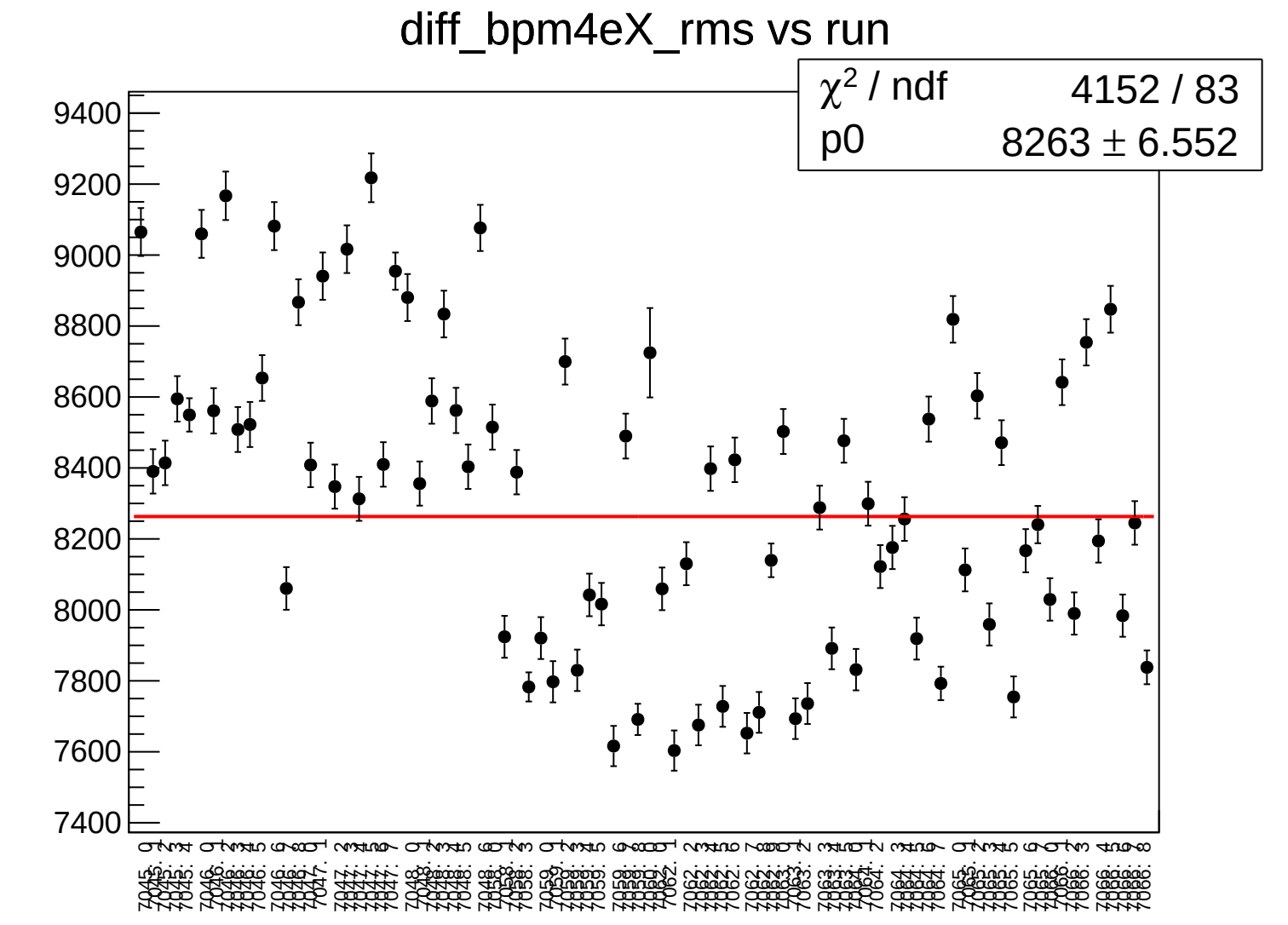

diff_bpm4aY_mean vs run
χ² / ndf 97.09 / 83
p0 8.473 ± 7.868
pull
Entries 84
Mean 263
Std Dev 222.6

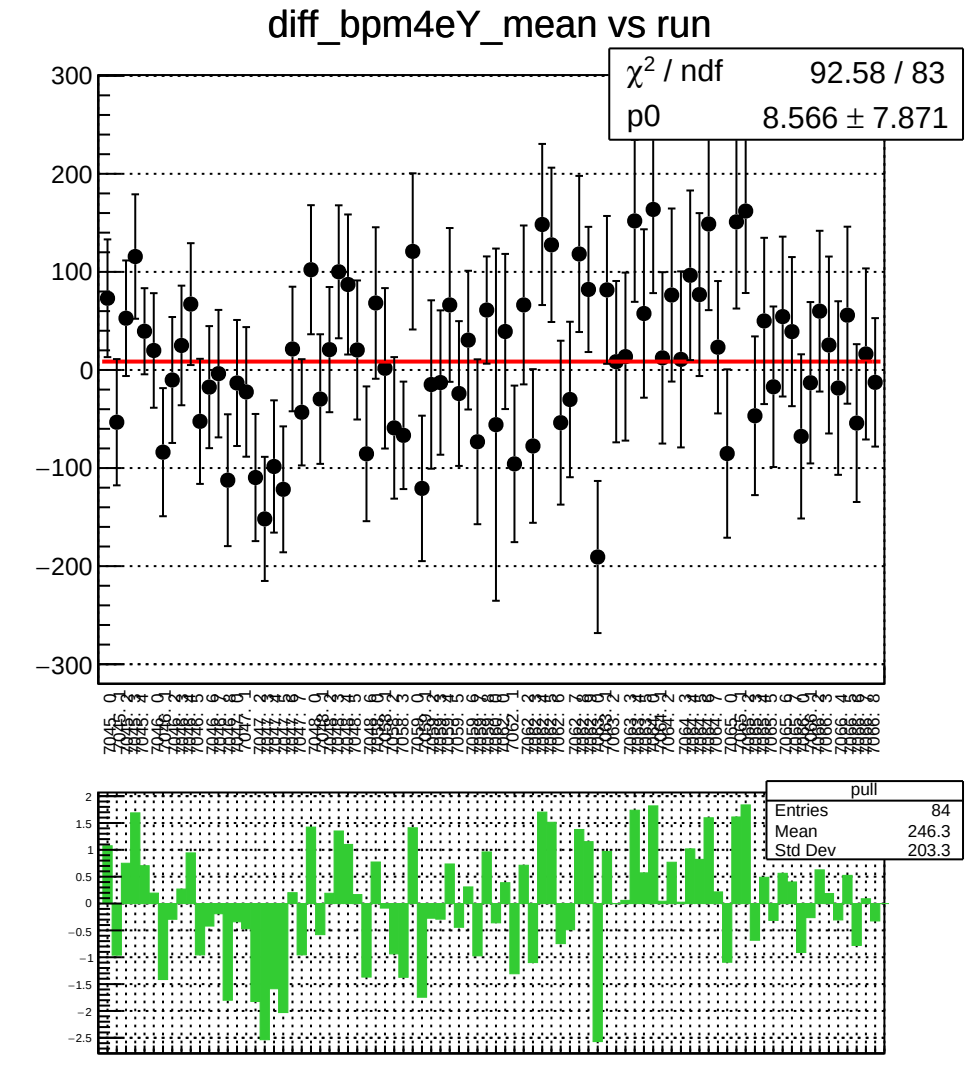

pull1D
Entries 84
Mean 0.01918
Std Dev 1.075

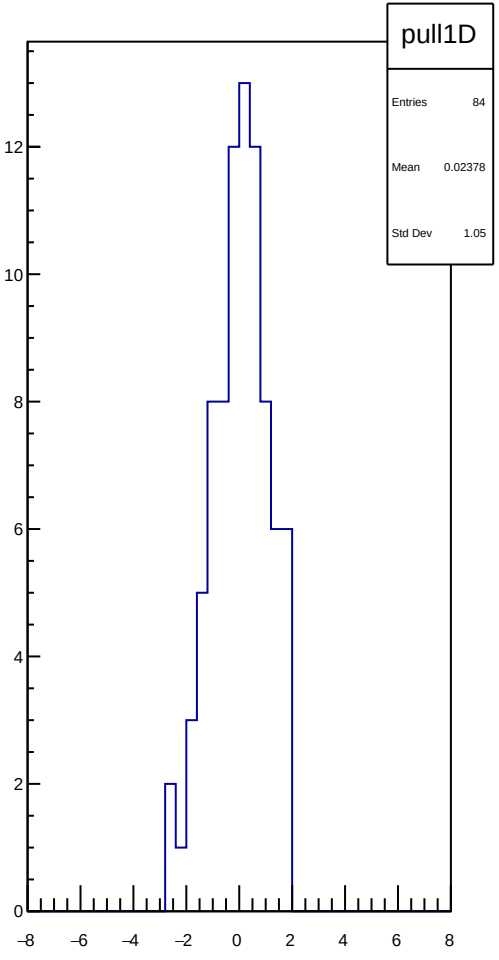

diff_bpm4aY_rms vs run
χ^2 / ndf 2.068e+04 / 83
p0 6980 ± 5.564
8500
8000
7500
7000
6500
6000
5500

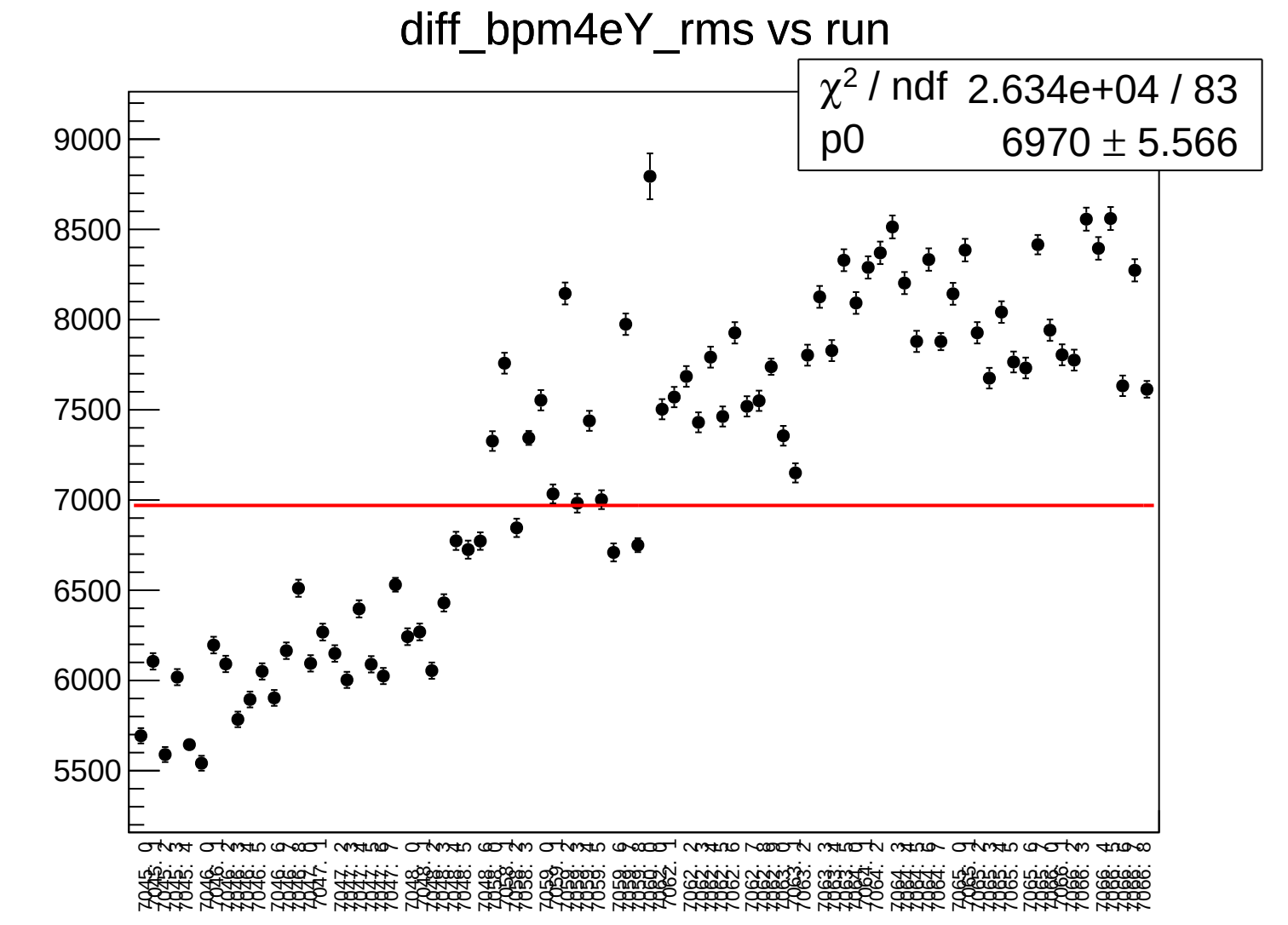

diff_bpm4eX_mean vs run
χ² / ndf 67.08 / 83
p0 −13.57 ± 9.266
pull
Entries 84
Mean −190.3
Std Dev 224.4

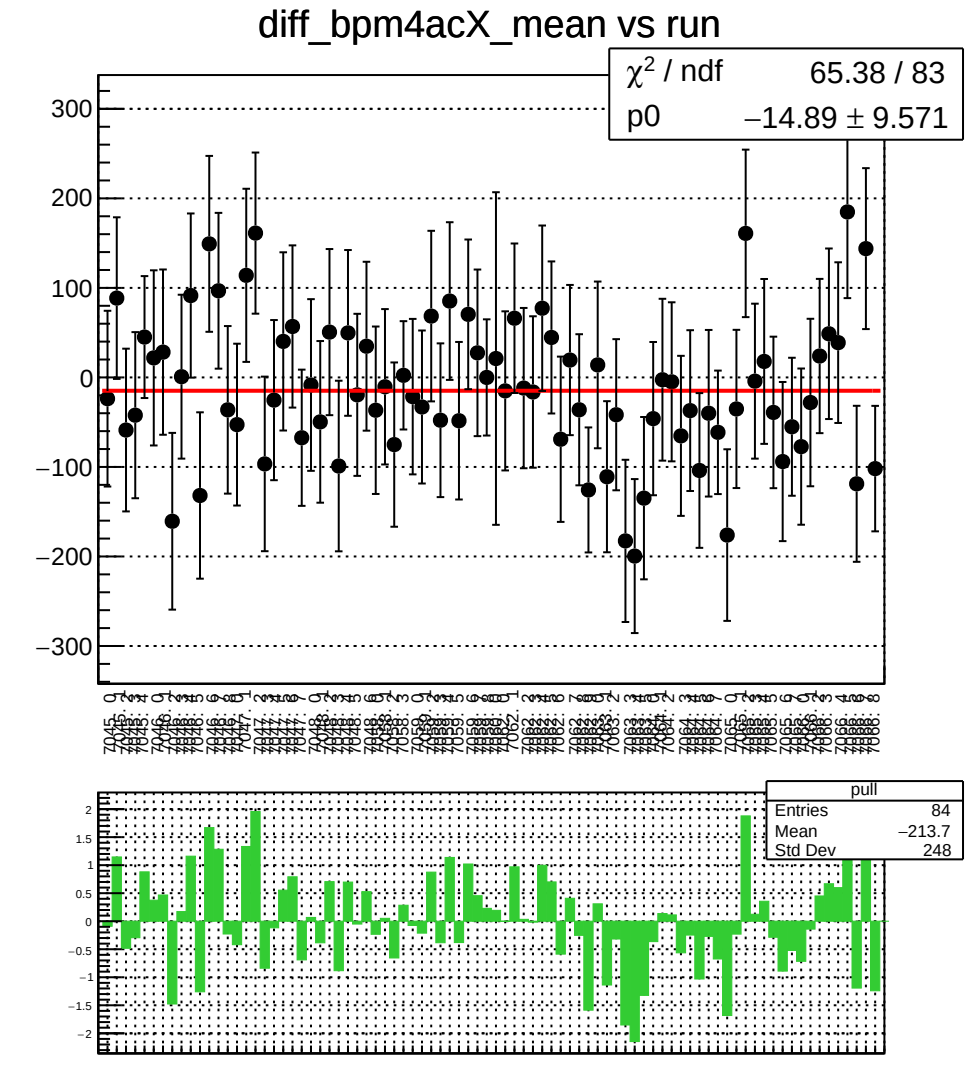

pull1D
Entries 84
Mean 0.01464
Std Dev 0.8935

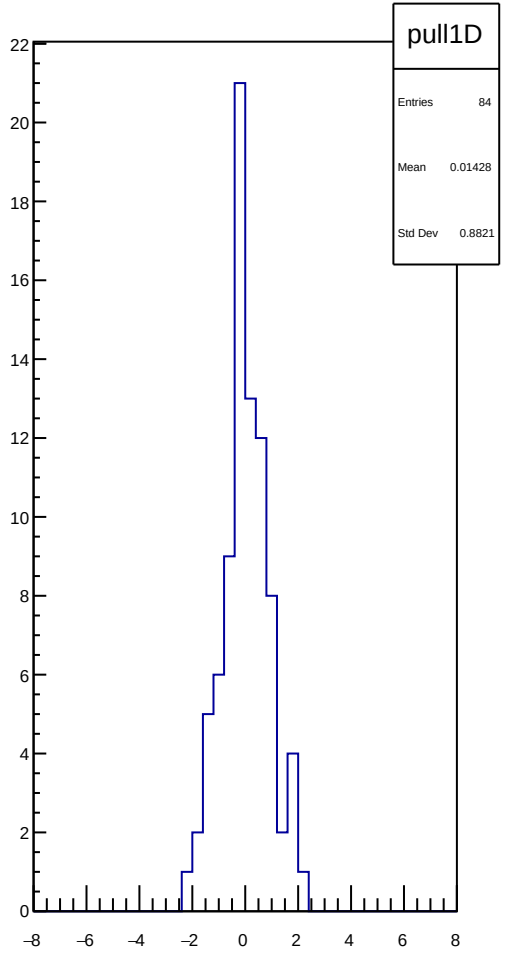

diff_bpm4eX_rms vs run
χ² / ndf 4152 / 83
p0 8263 ± 6.552
9400
9200
9000
8800
8600
8400
8200
8000
7800
7600
7400

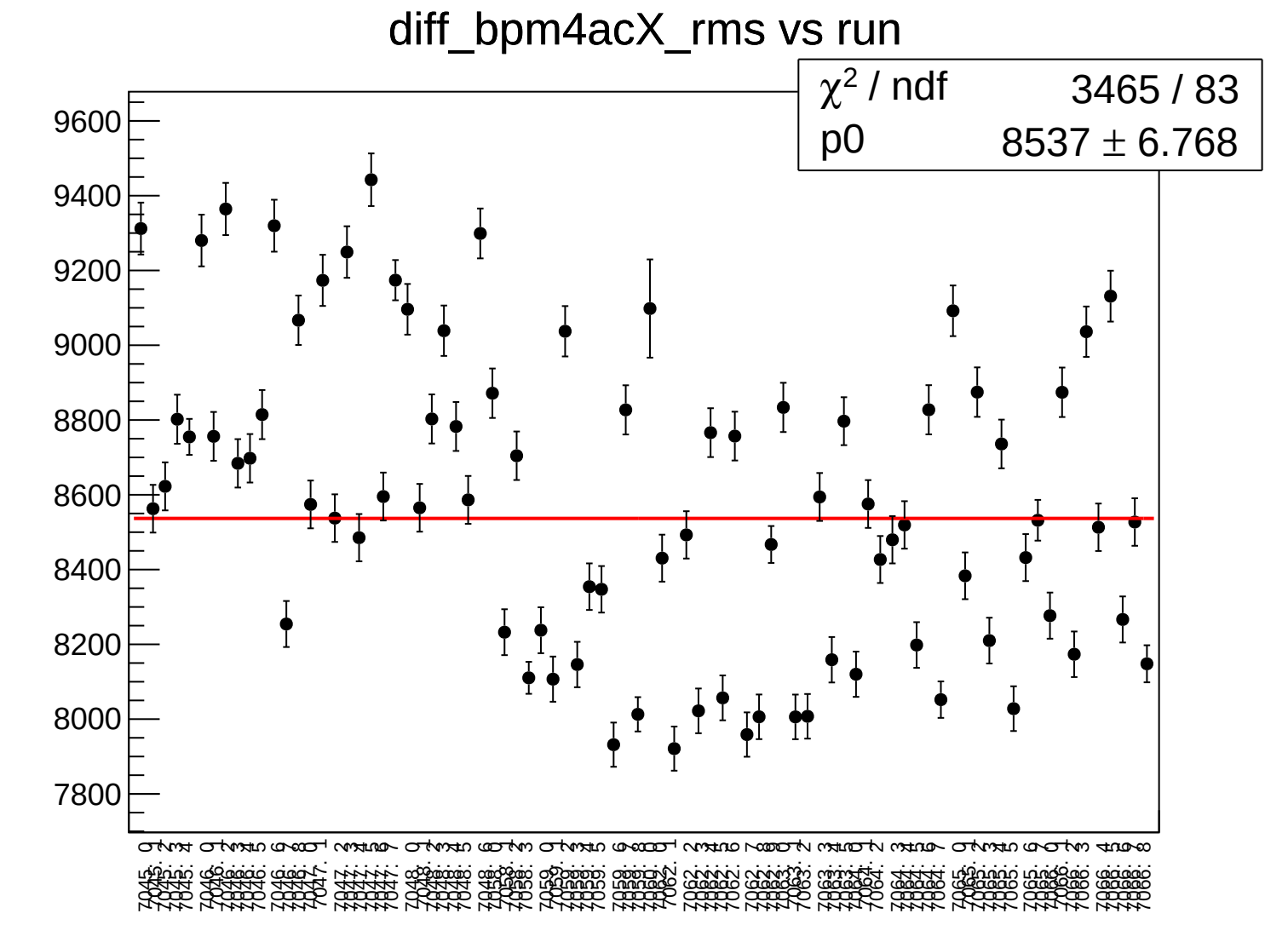

diff_bpm4eY_mean vs run
χ² / ndf 92.58 / 83
p0 8.566 ± 7.871
pull
Entries 84
Mean 246.3
Std Dev 203.3

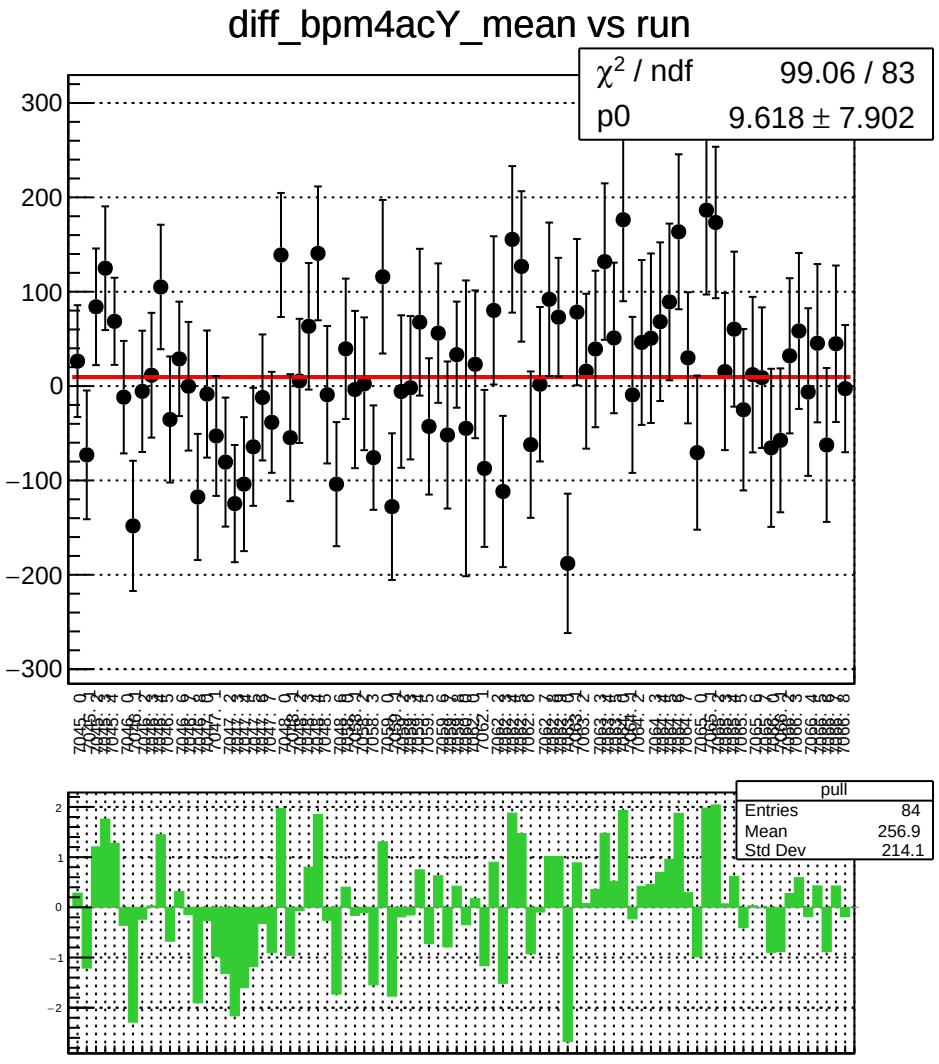

pull1D
Entries 84
Mean 0.02378
Std Dev 1.05

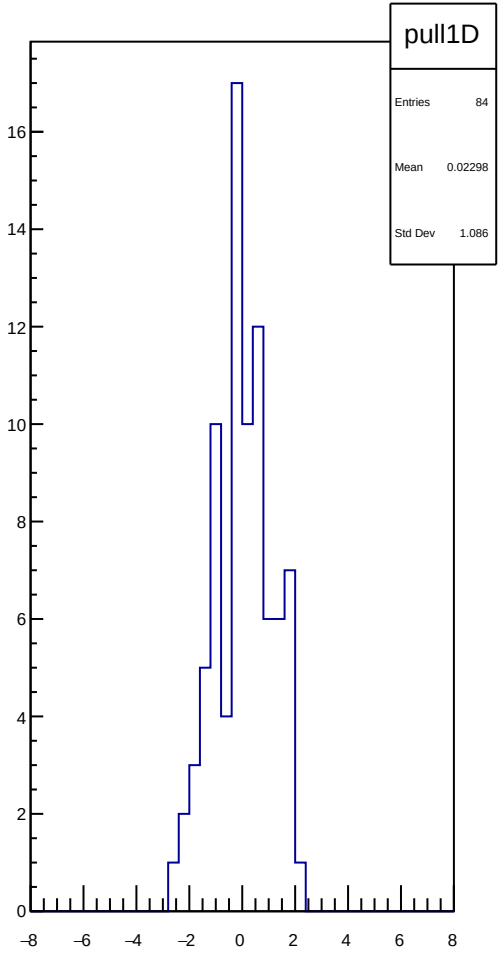

diff_bpm4eY_rms vs run
χ^2 / ndf 2.634e+04 / 83
p0 6970 ± 5.566
9000
8500
8000
7500
7000
6500
6000
5500

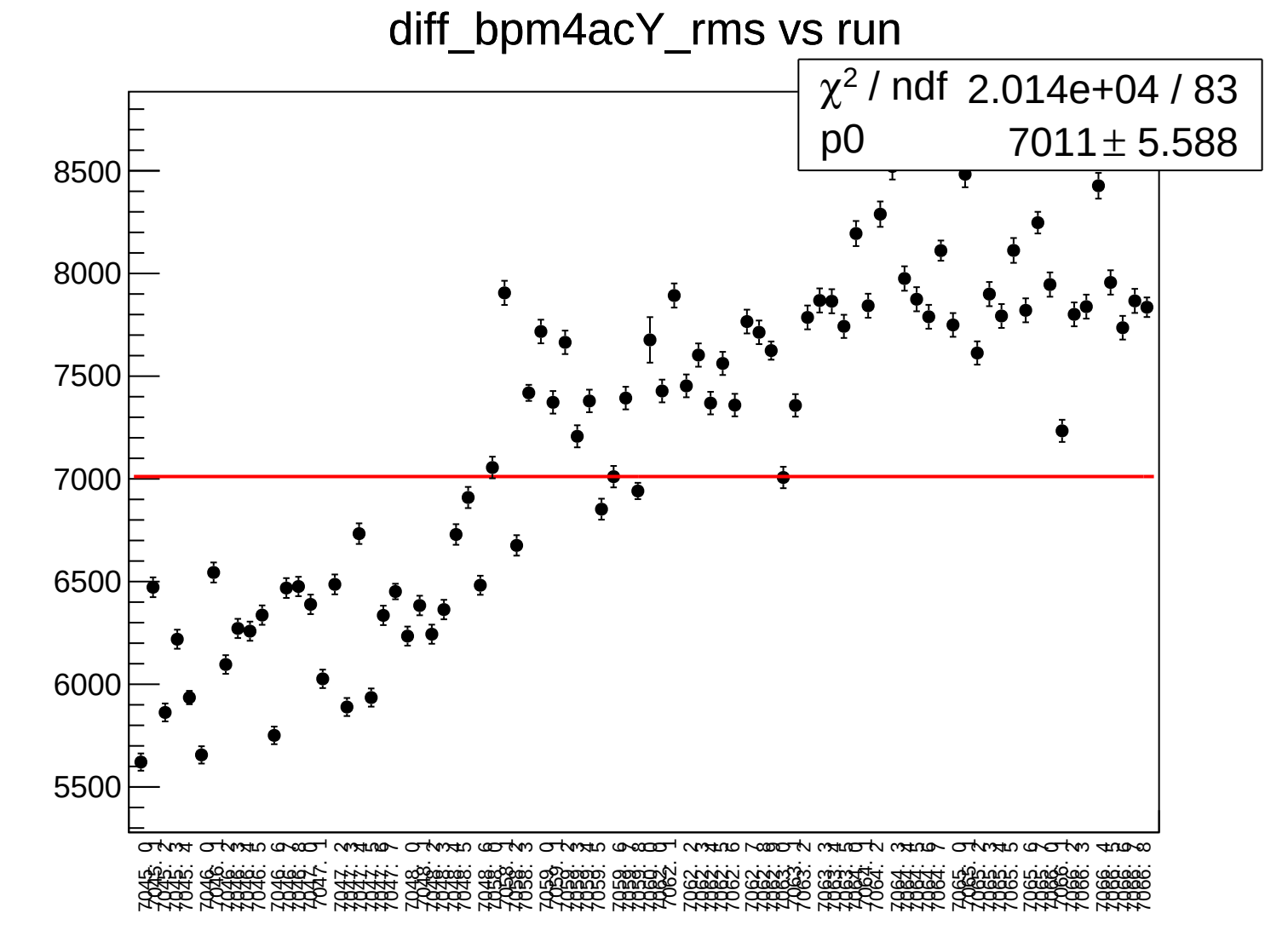

diff_bpm4acX_mean vs run
χ² / ndf 65.38 / 83
p0 −14.89 ± 9.571
300
200
100
0
−100
−200
−300
pull
Entries 84
Mean −213.7
Std Dev 248
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

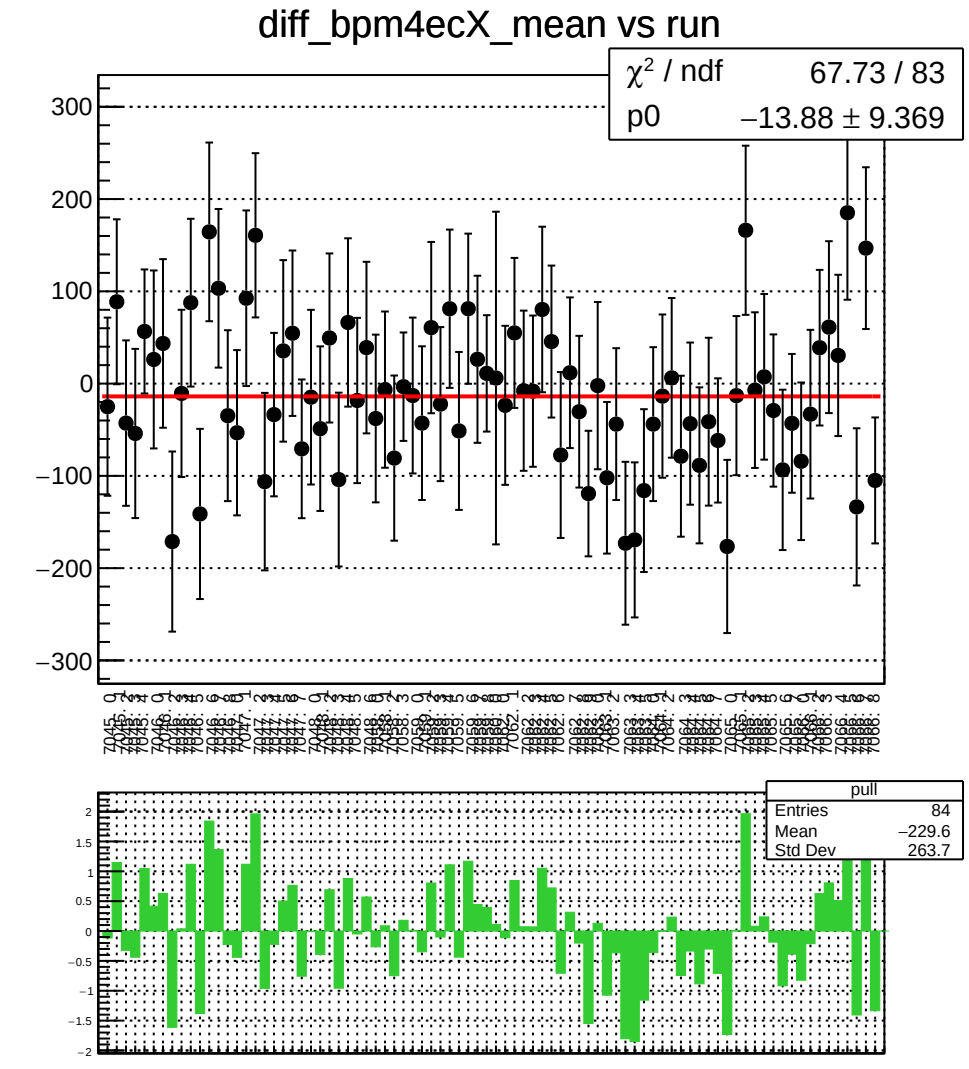

pull1D
Entries 84
Mean 0.01428
Std Dev 0.8821
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

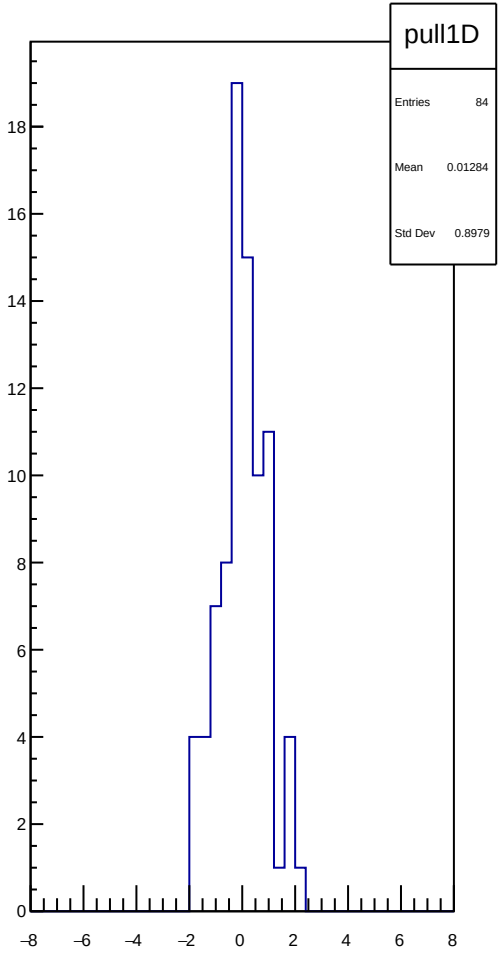

diff_bpm4acX_rms vs run
χ^2 / ndf 3465 / 83
p0 8537 ± 6.768
9600
9400
9200
9000
8800
8600
8400
8200
8000
7800

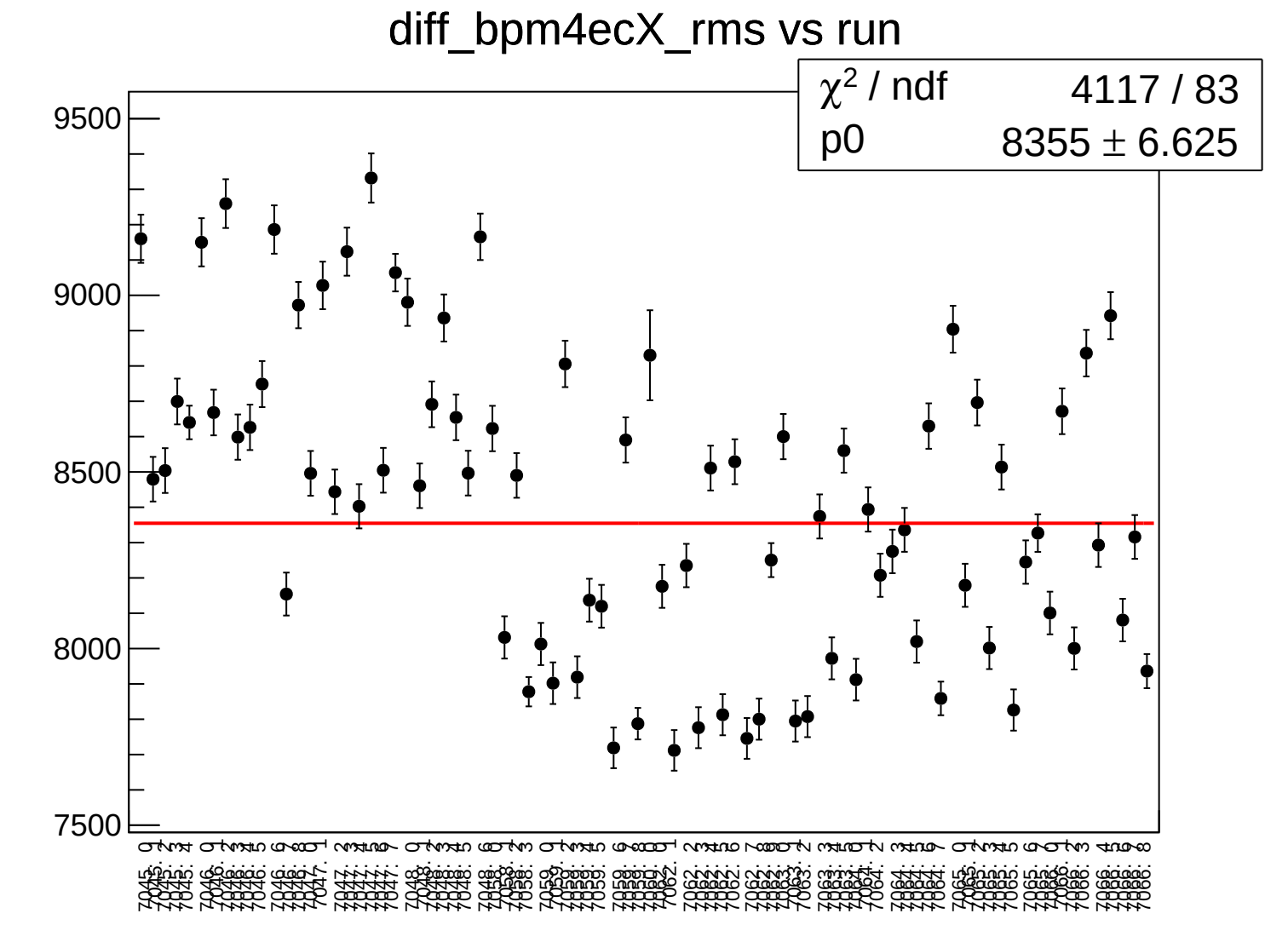

diff_bpm4acY_mean vs run
χ² / ndf 99.06 / 83
p0 9.618 ± 7.902
pull
Entries 84
Mean 256.9
Std Dev 214.1

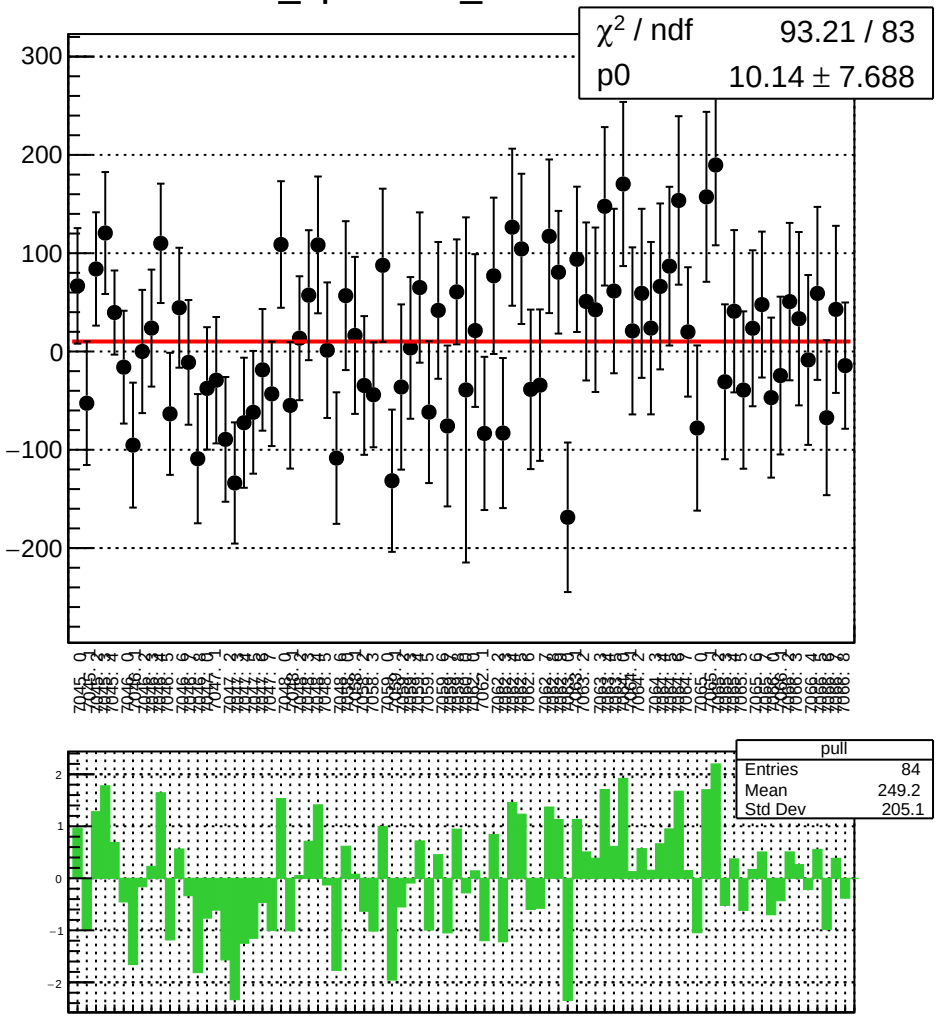

pull1D
Entries 84
Mean 0.02298
Std Dev 1.086

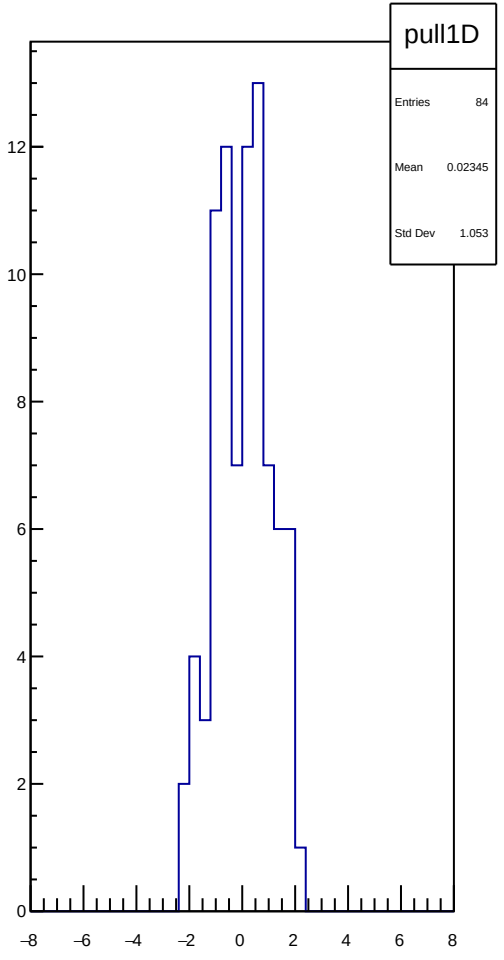

diff_bpm4acY_rms vs run
χ² / ndf 2.014e+04 / 83
p0 7011 ± 5.588
8500
8000
7500
7000
6500
6000
5500

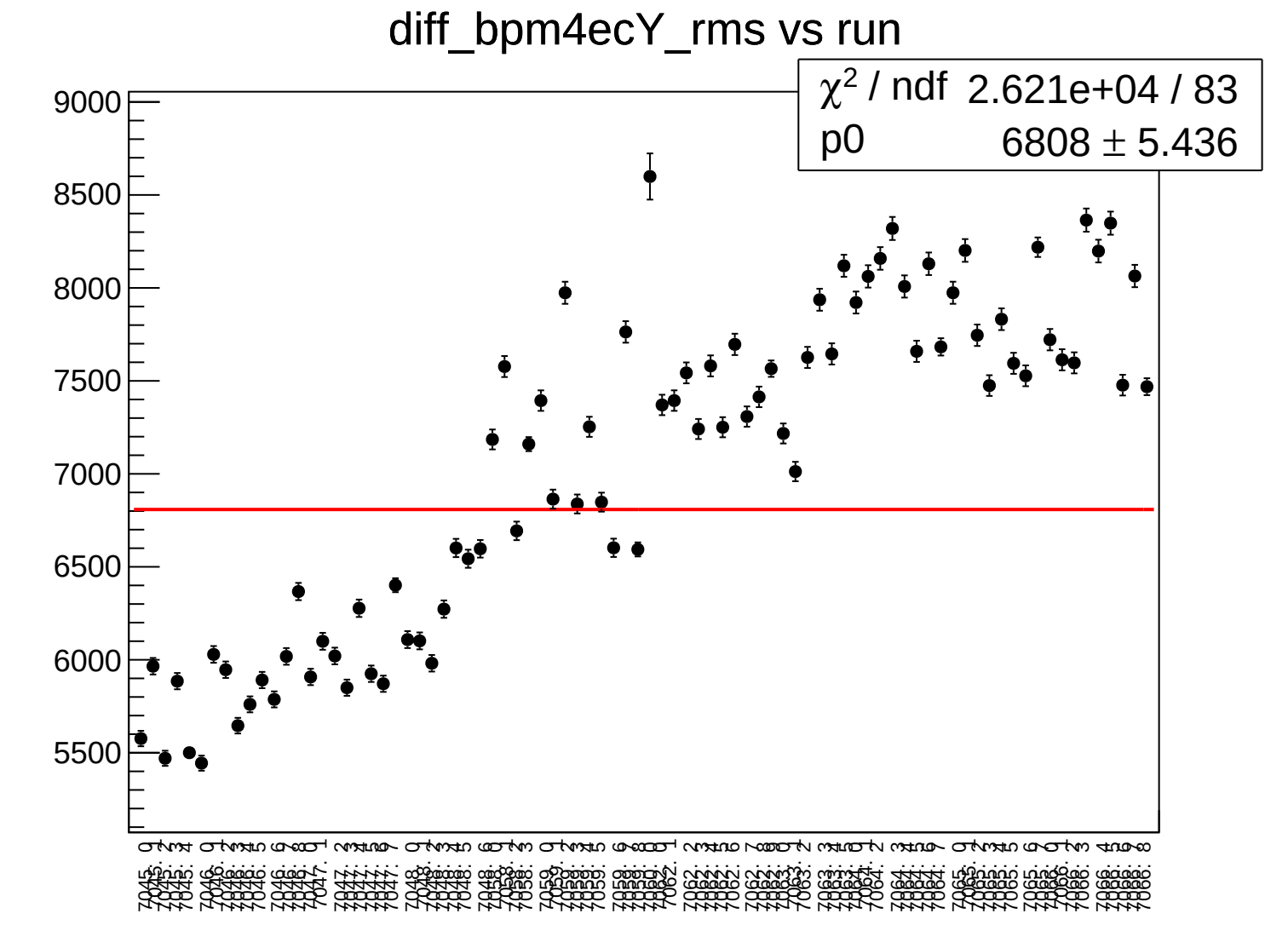

diff_bpm4ecX_mean vs run
χ² / ndf 67.73 / 83
p0 −13.88 ± 9.369
pull
Entries 84
Mean −229.6
Std Dev 263.7

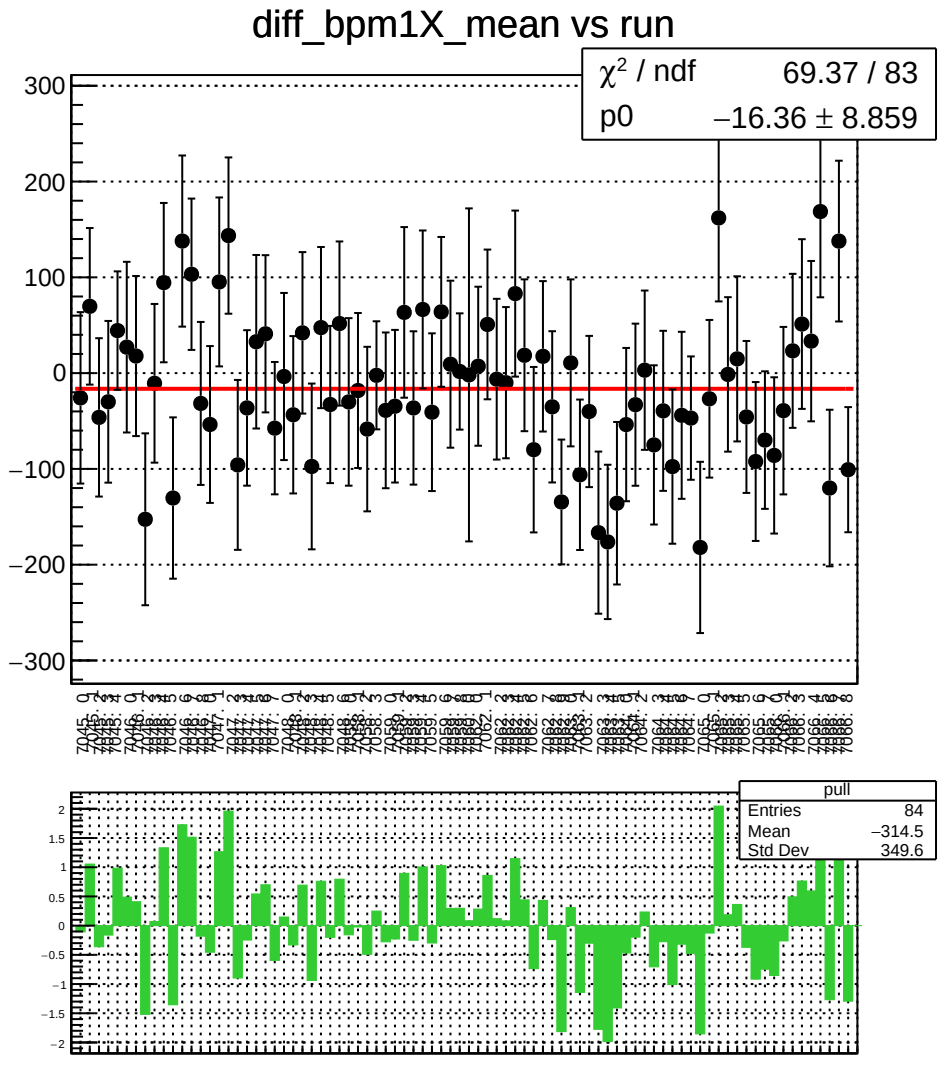

pull1D
Entries 84
Mean 0.01284
Std Dev 0.8979

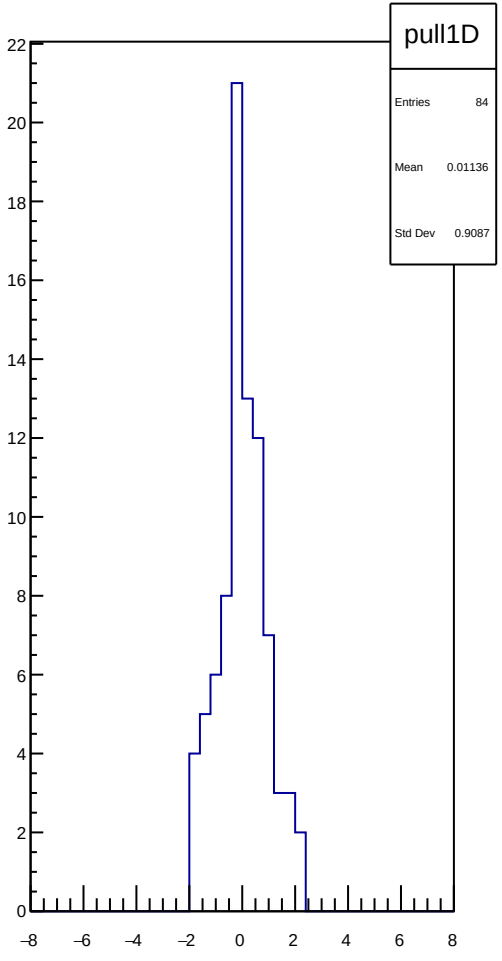

diff_bpm4ecX_rms vs run
χ² / ndf 4117 / 83
p0 8355 ± 6.625
9500
9000
8500
8000
7500

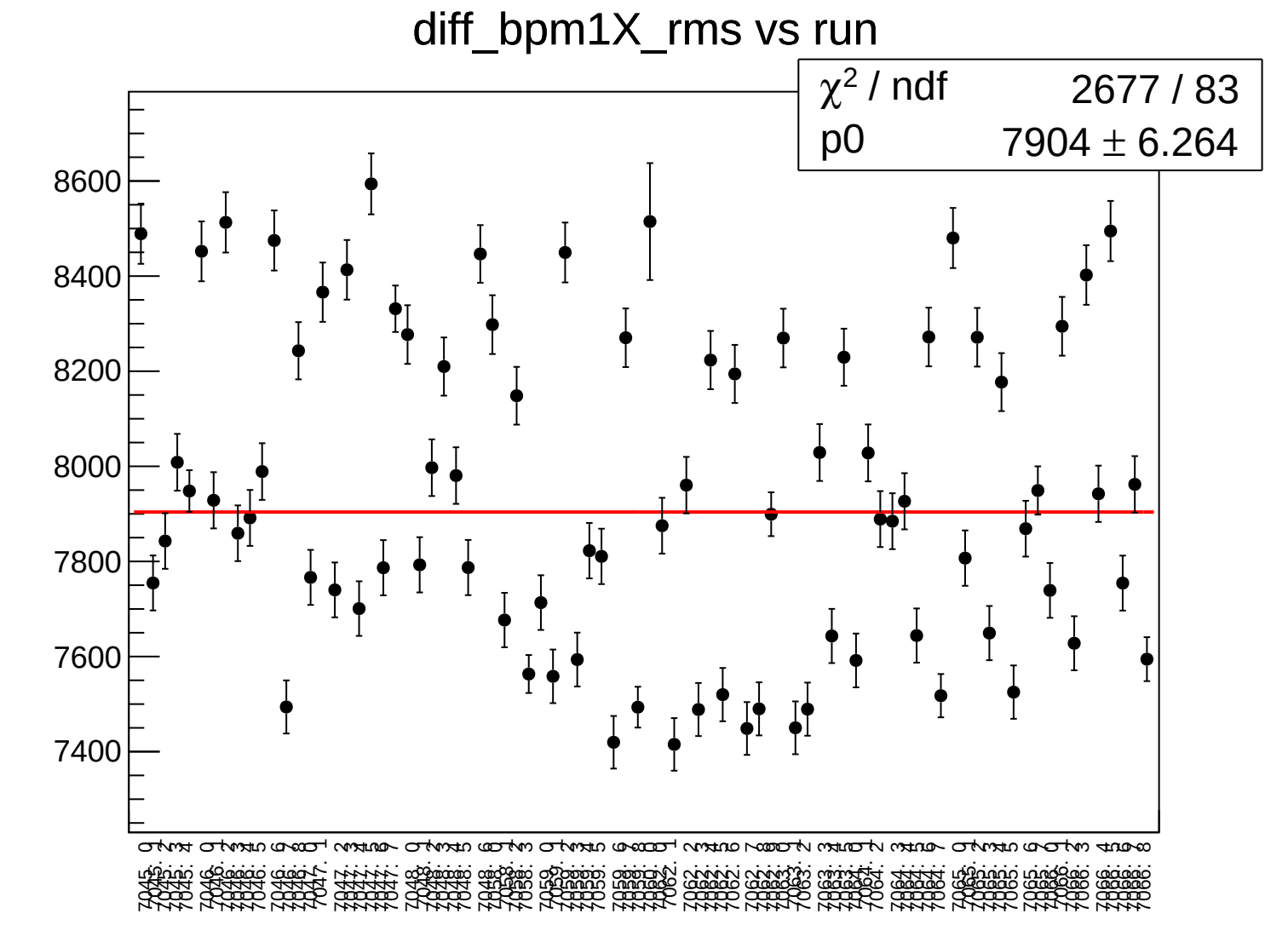

diff_bpm4ecY_mean vs run
χ² / ndf 93.21 / 83
p0 10.14 ± 7.688
300
200
100
0
−100
−200
pull
Entries 84
Mean 249.2
Std Dev 205.1
2
1
0
−1
−2

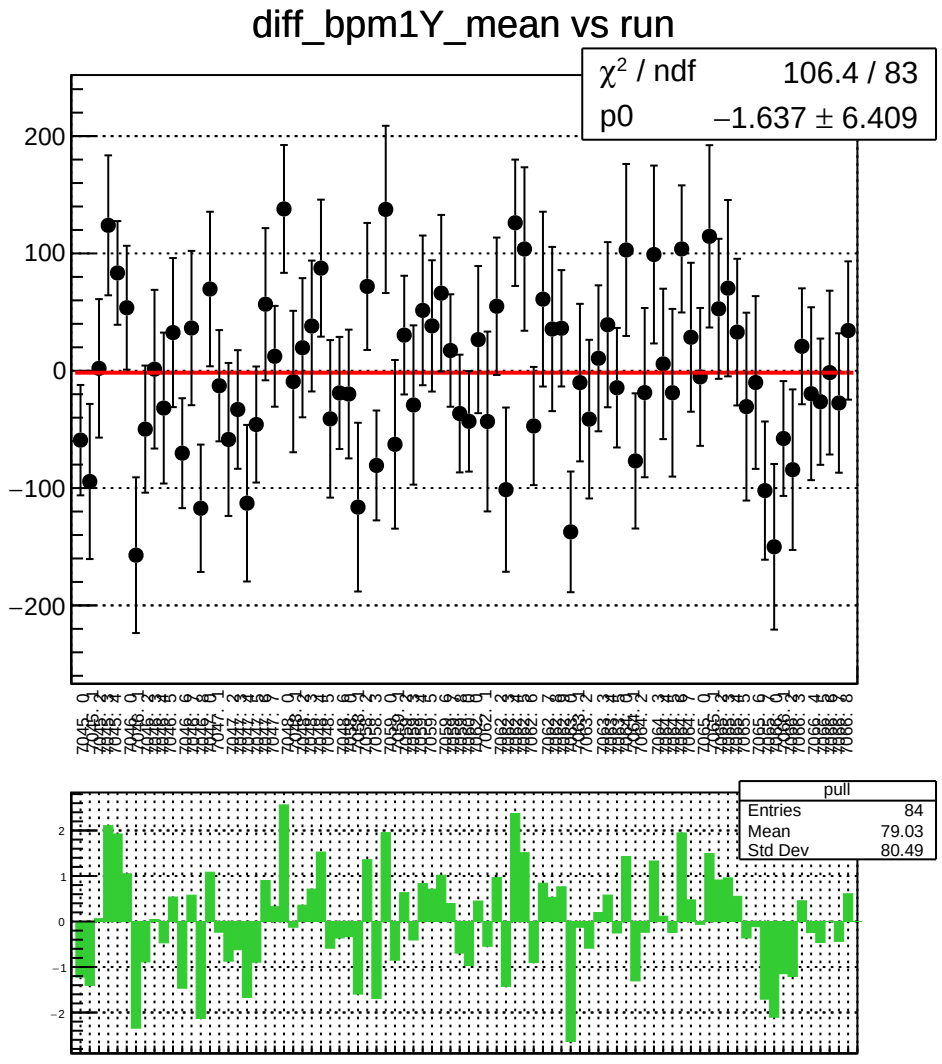

pull1D
Entries 84
Mean 0.02345
Std Dev 1.053
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

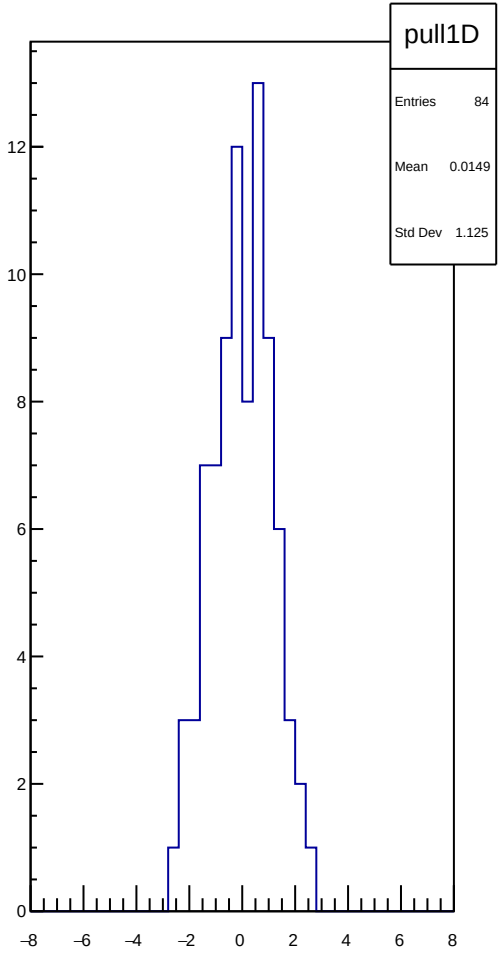

diff_bpm4ecY_rms vs run
χ² / ndf 2.621e+04 / 83
p0 6808 ± 5.436
9000
8500
8000
7500
7000
6500
6000
5500

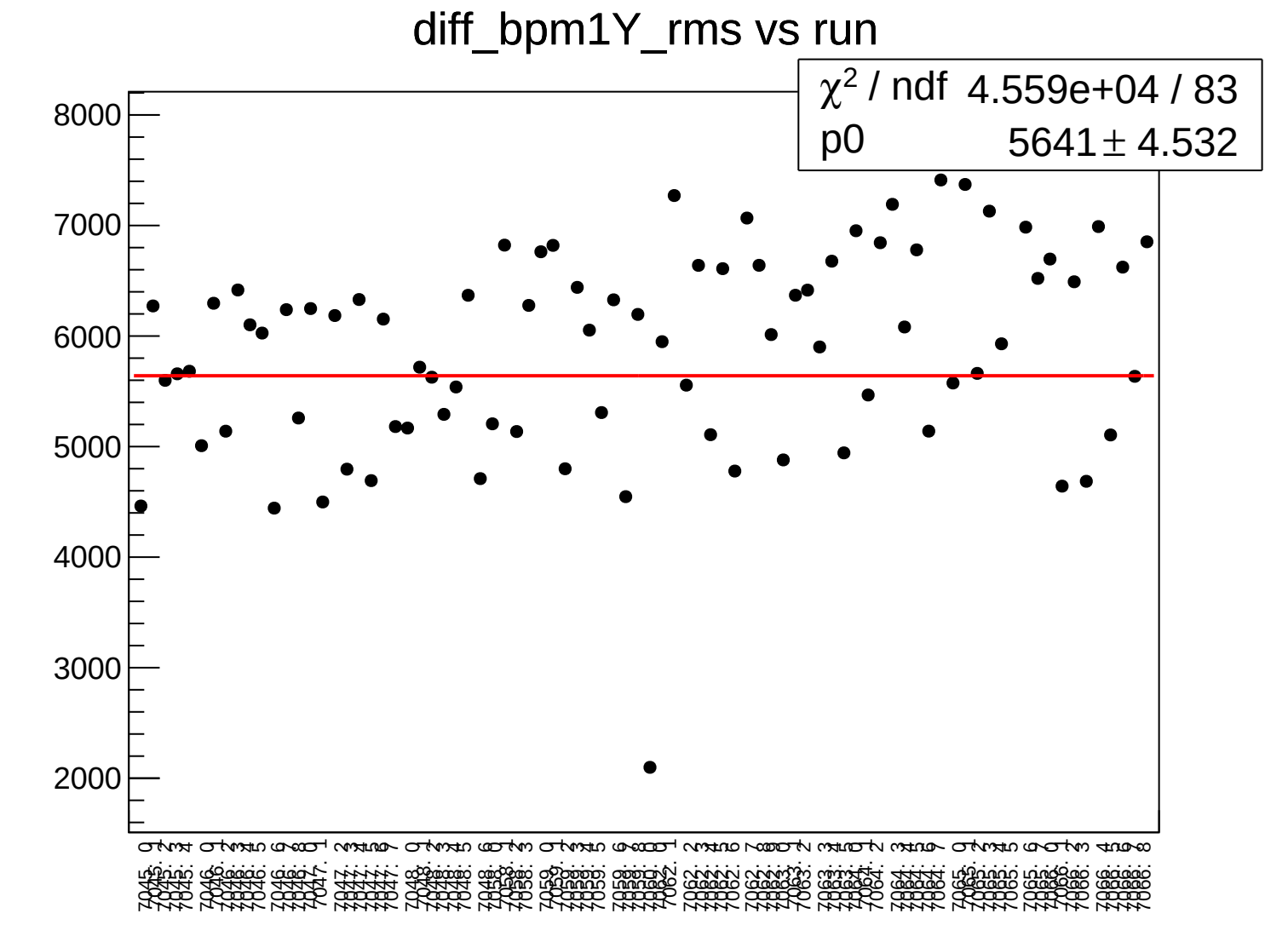

diff_bpm1X_mean vs run
χ² / ndf 69.37 / 83
p0 −16.36 ± 8.859
pull
Entries 84
Mean −314.5
Std Dev 349.6

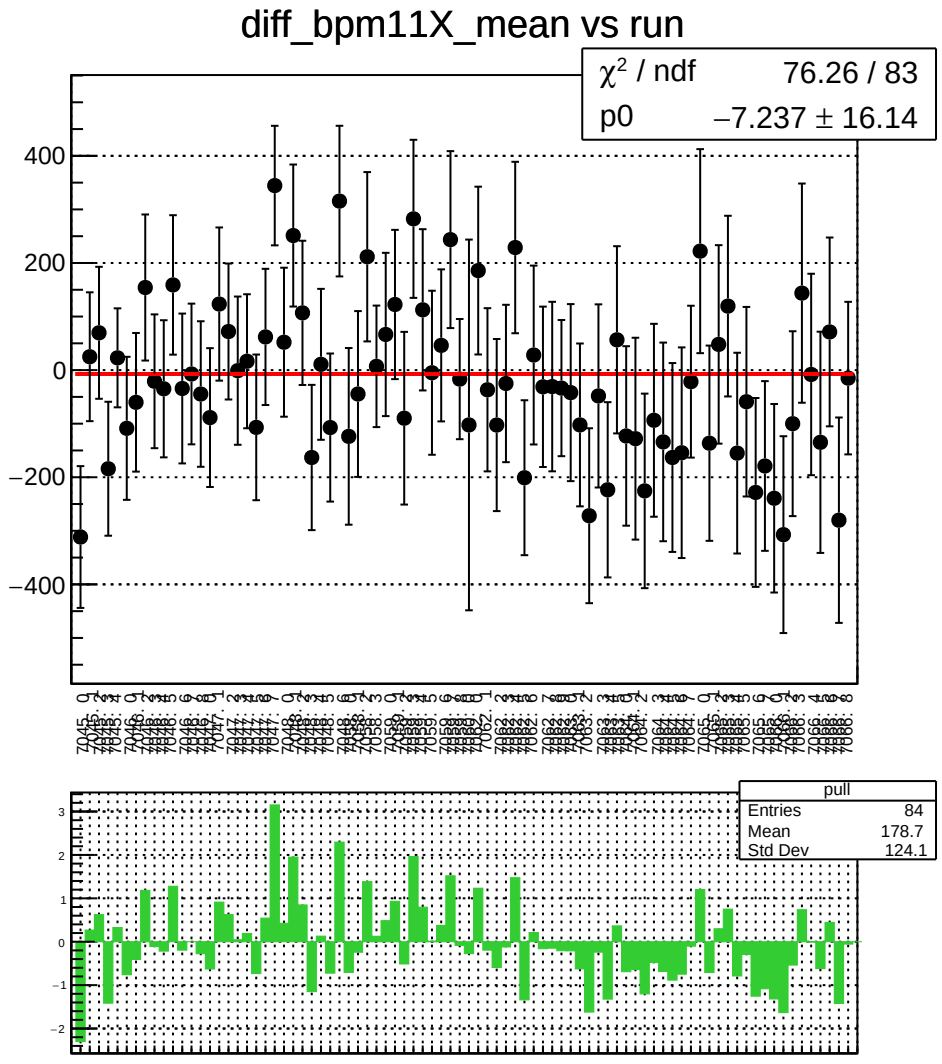

pull1D
Entries 84
Mean 0.01136
Std Dev 0.9087

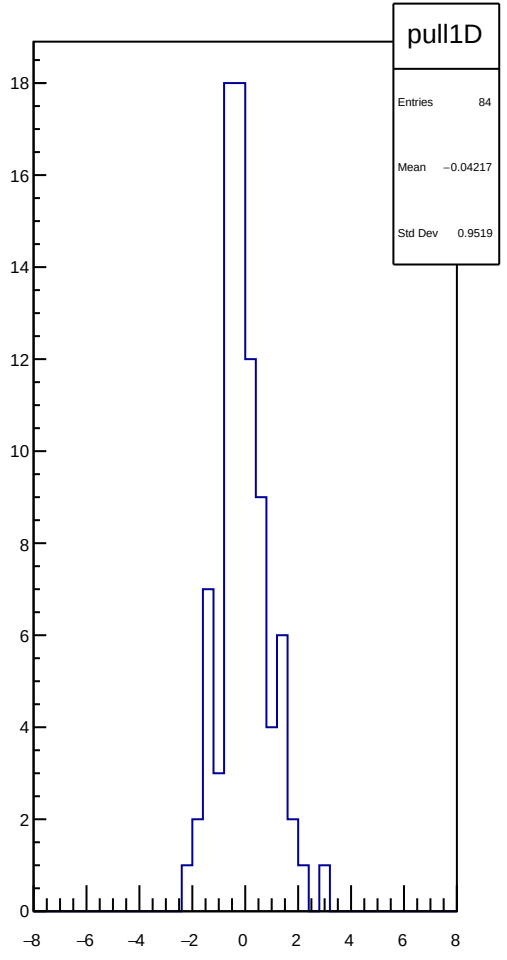

diff_bpm1X_rms vs run
χ² / ndf 2677 / 83
p0 7904 ± 6.264
8600
8400
8200
8000
7800
7600
7400

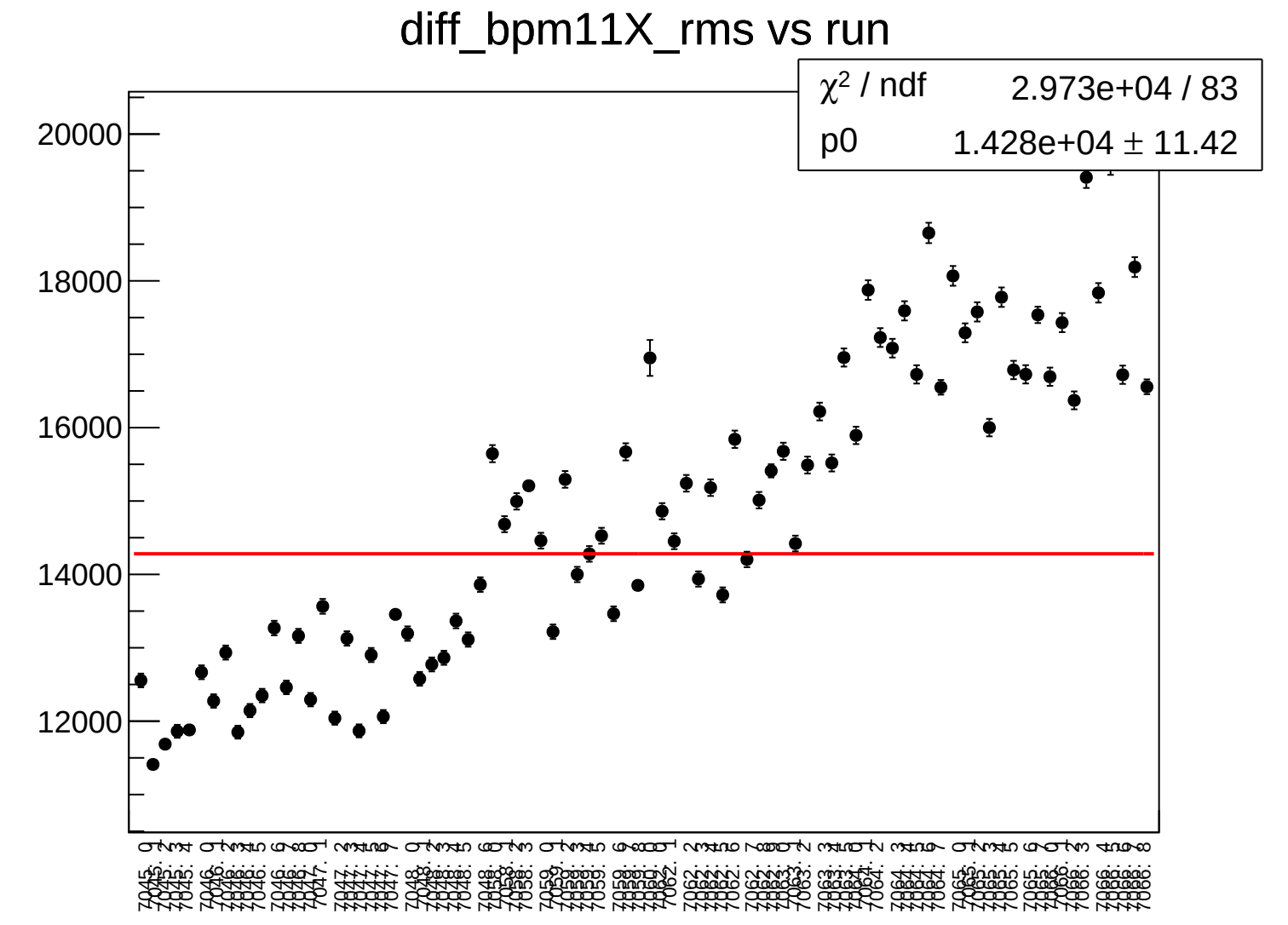

diff_bpm1Y_mean vs run
χ² / ndf 106.4 / 83
p0 −1.637 ± 6.409
200
100
0
−100
−200
pull
Entries 84
Mean 79.03
Std Dev 80.49
2
1
0
−1
−2

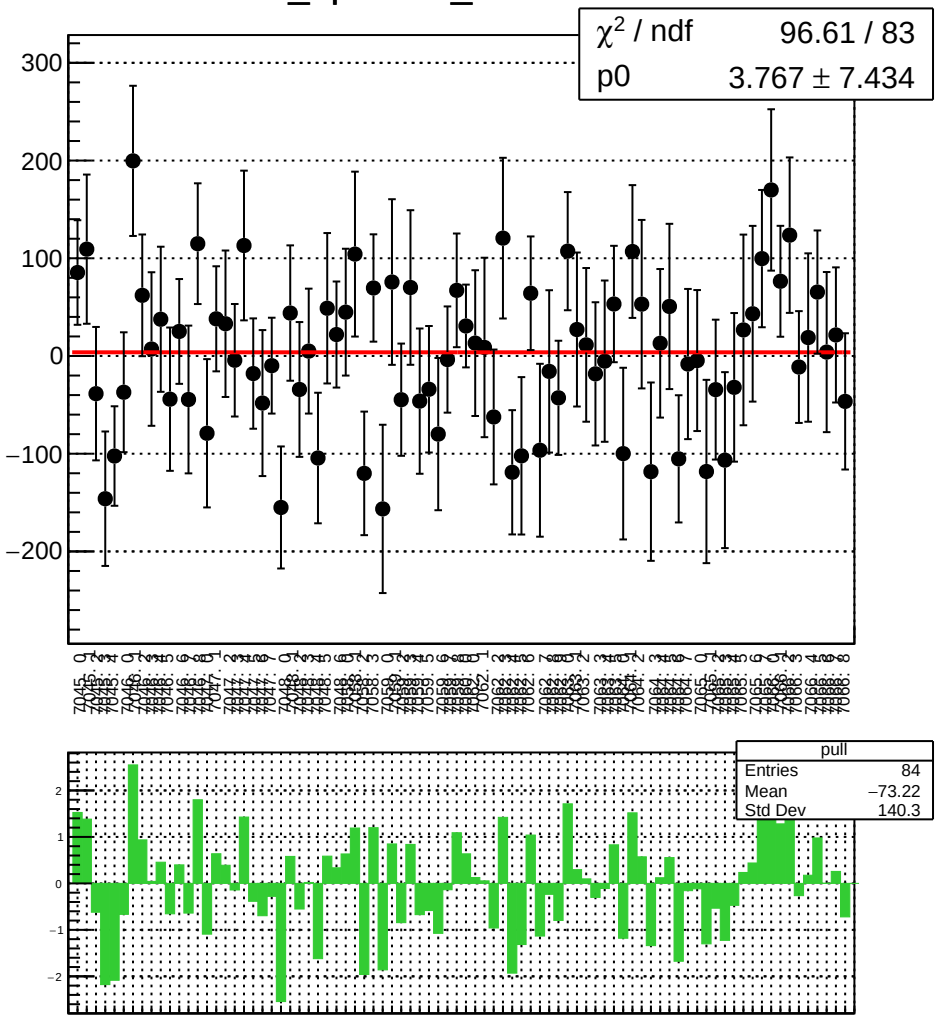

pull1D
Entries 84
Mean 0.0149
Std Dev 1.125
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

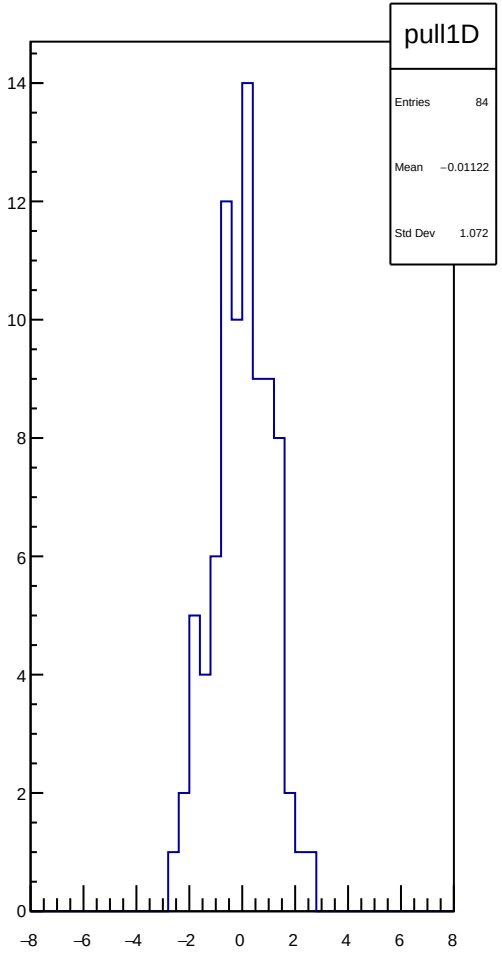

diff_bpm1Y_rms vs run
χ² / ndf 4.559e+04 / 83
p0 5641 ± 4.532
8000
7000
6000
5000
4000
3000
2000

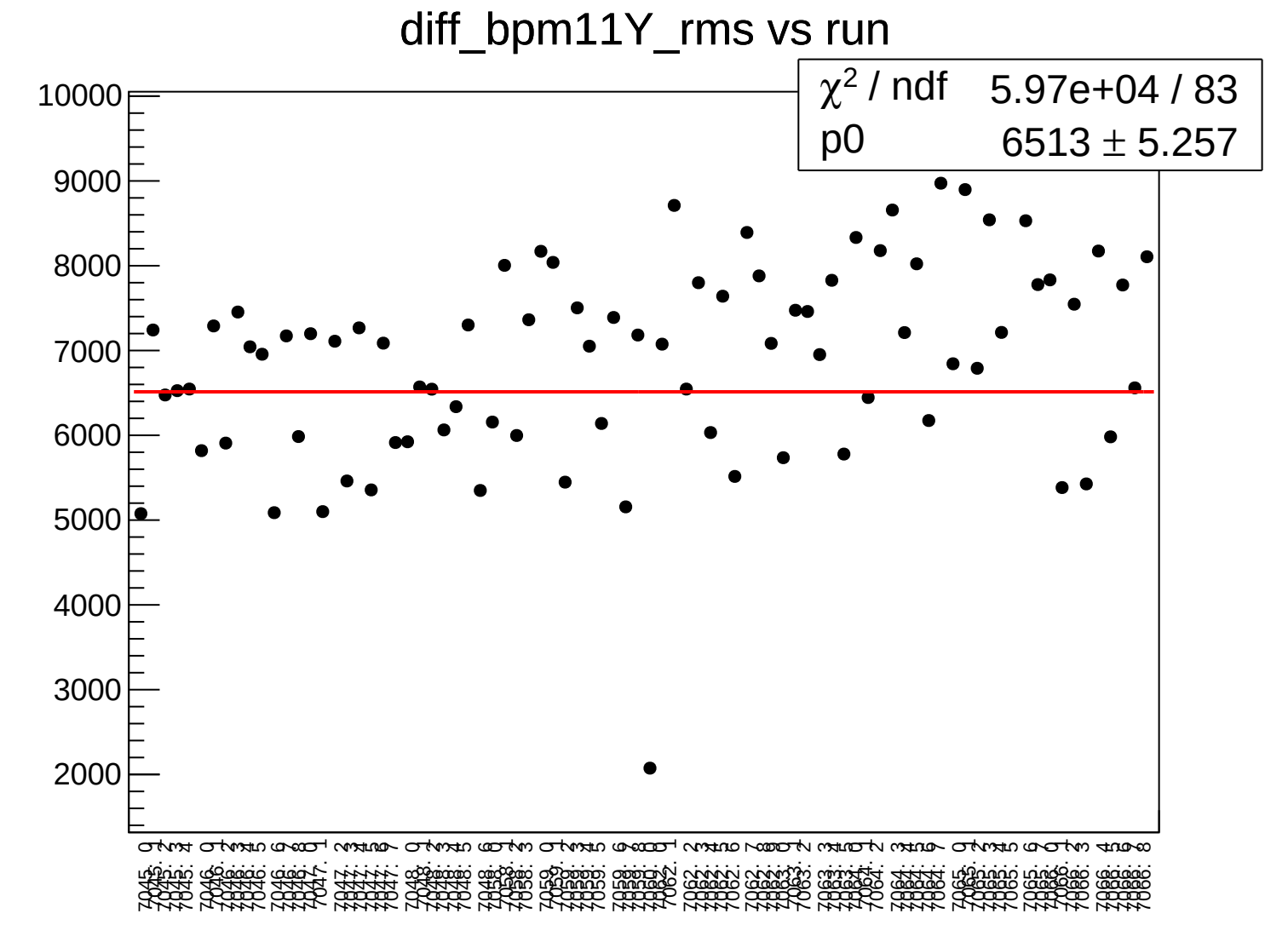

diff_bpm11X_mean vs run
χ² / ndf 76.26 / 83
p0 −7.237 ± 16.14
400
200
0
−200
−400
pull
Entries 84
Mean 178.7
Std Dev 124.1
3
2
1
0
−1
−2

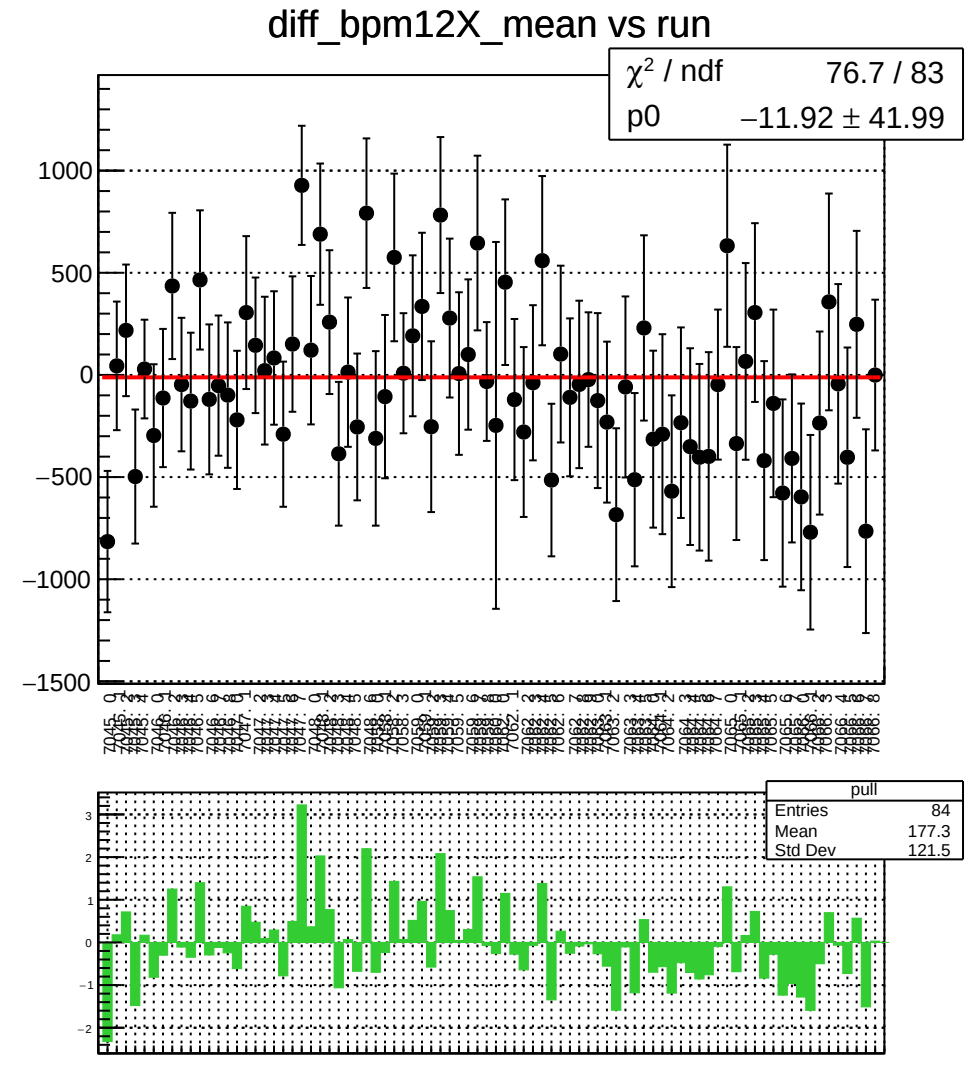

pull1D
Entries 84
Mean −0.04217
Std Dev 0.9519
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

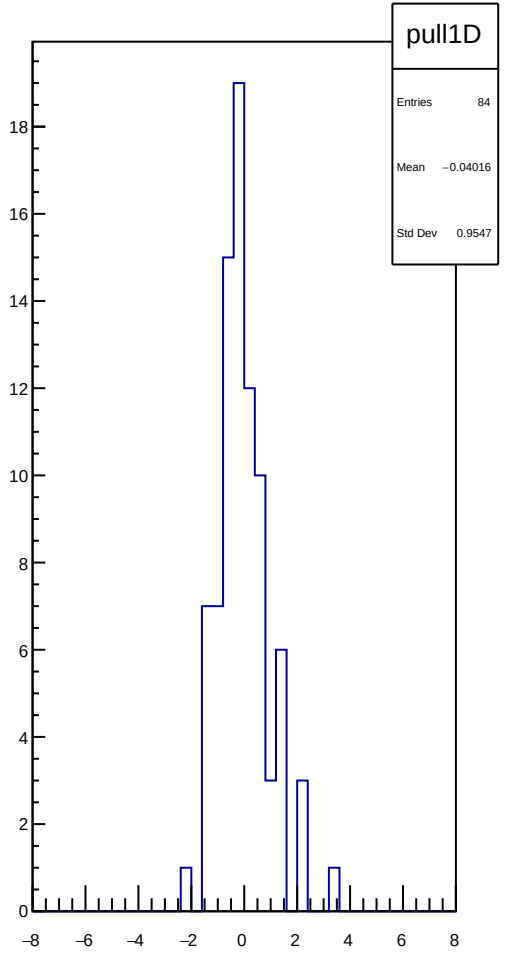

diff_bpm11X_rms vs run
χ² / ndf 2.973e+04 / 83
p0 1.428e+04 ± 11.42
20000
18000
16000
14000
12000

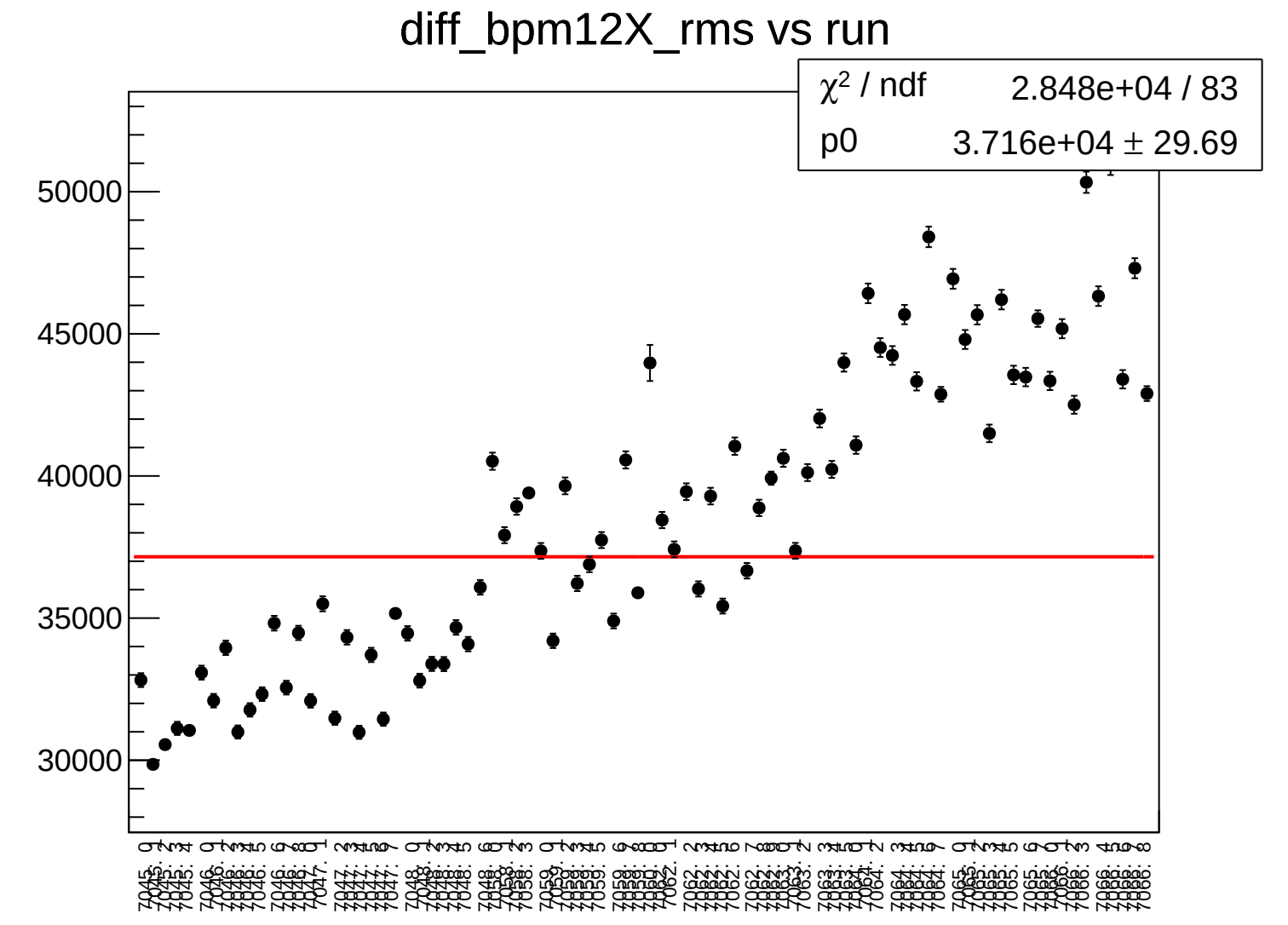

diff_bpm11Y_mean vs run
χ² / ndf 96.61 / 83
p0 3.767 ± 7.434
300
200
100
0
−100
−200
pull
Entries 84
Mean −73.22
Std Dev 140.3
2
1
0
−1
−2

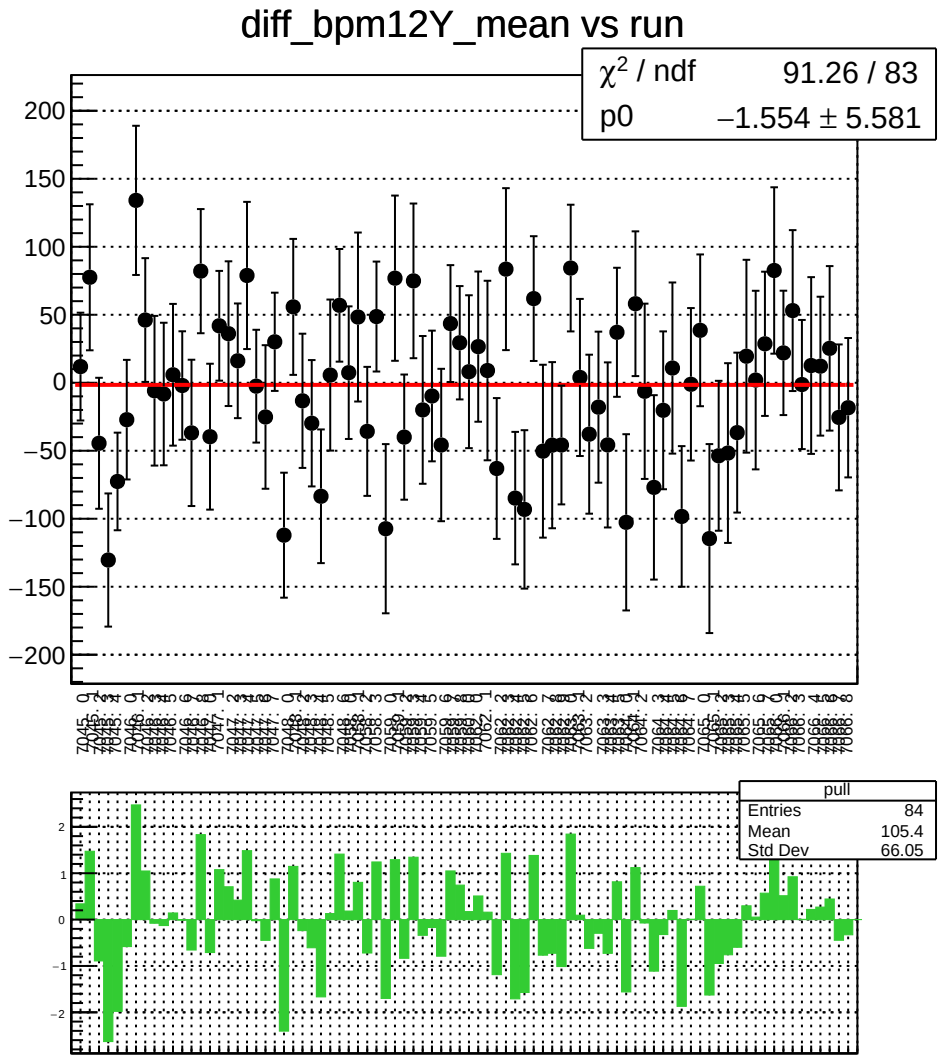

pull1D
Entries 84
Mean −0.01122
Std Dev 1.072
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

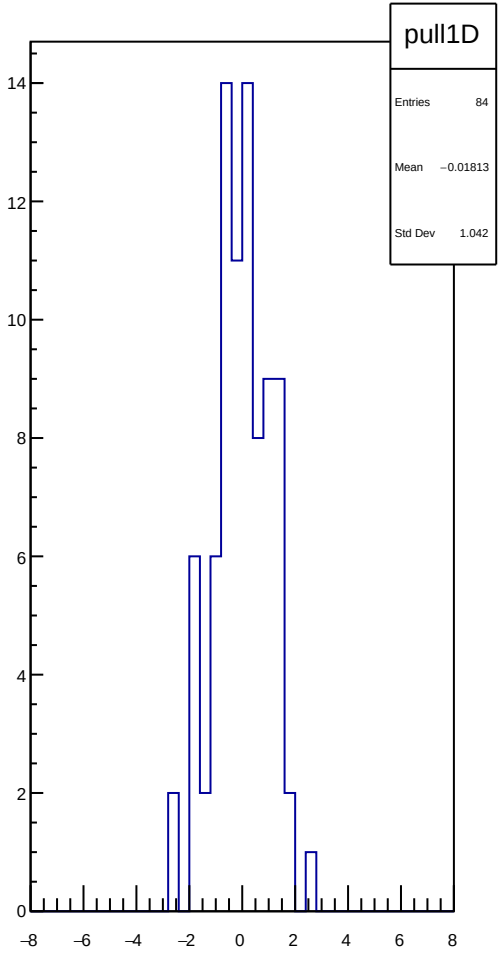

diff_bpm11Y_rms vs run
χ^2 / ndf 5.97e+04 / 83
p0 6513 ± 5.257
10000
9000
8000
7000
6000
5000
4000
3000
2000

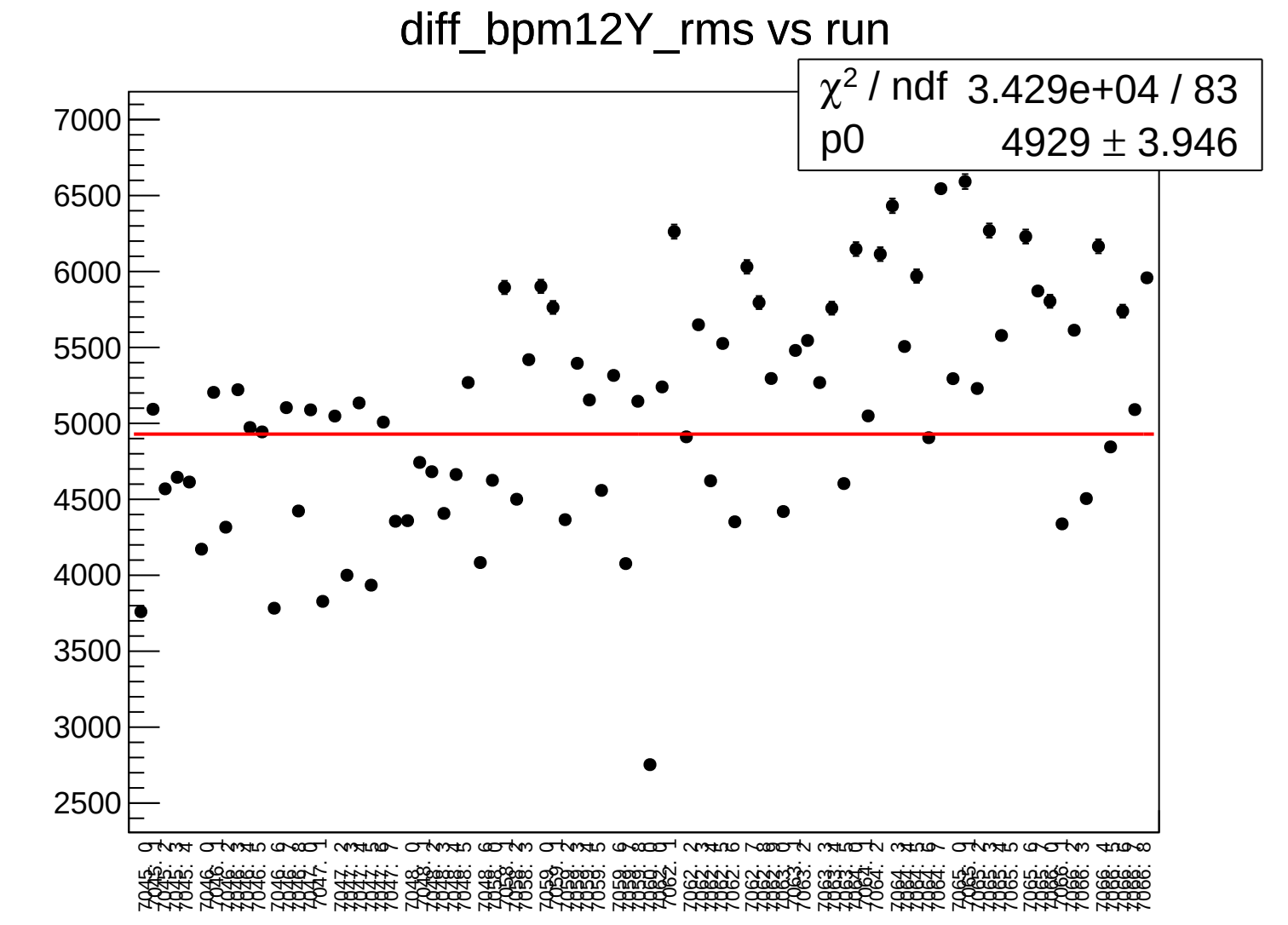

diff_bpm12X_mean vs run
χ² / ndf 76.7 / 83
p0 −11.92 ± 41.99
1000
500
0
−500
−1000
−1500
pull
Entries 84
Mean 177.3
Std Dev 121.5
3
2
1
0
−1
−2

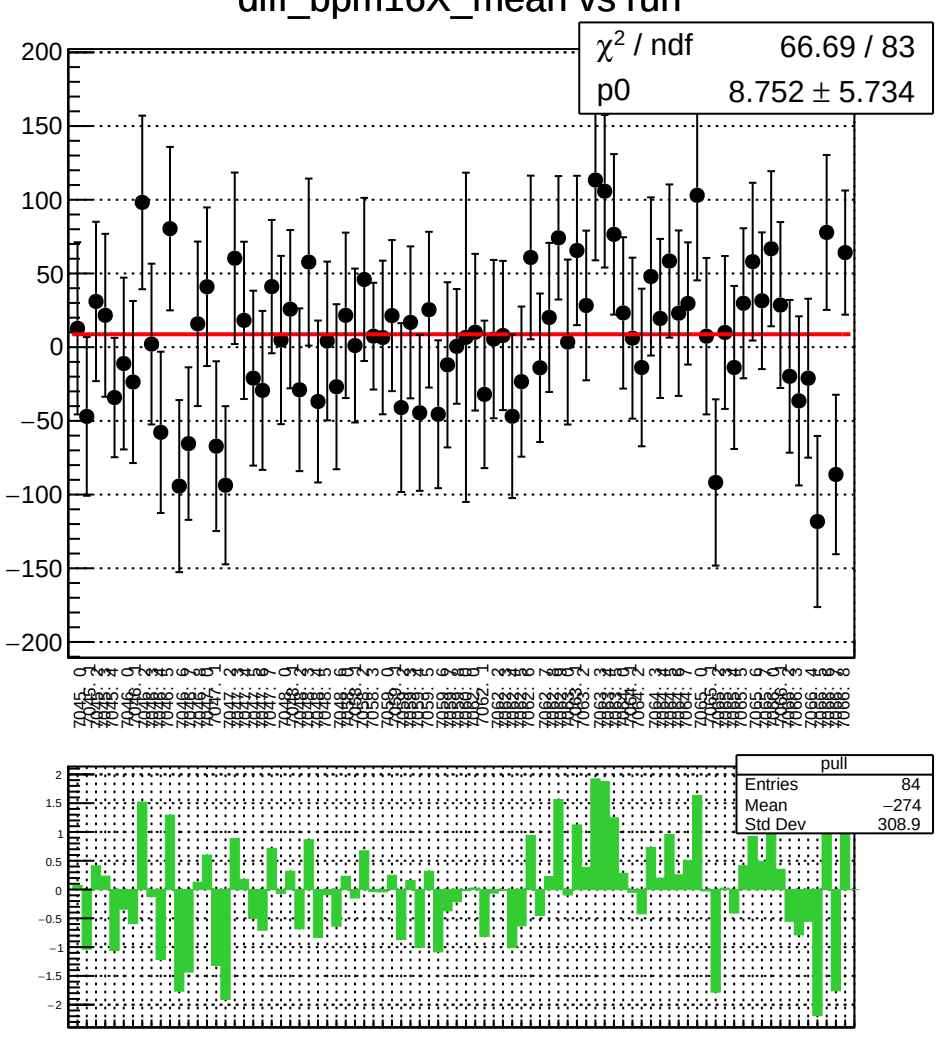

pull1D
Entries 84
Mean −0.04016
Std Dev 0.9547
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

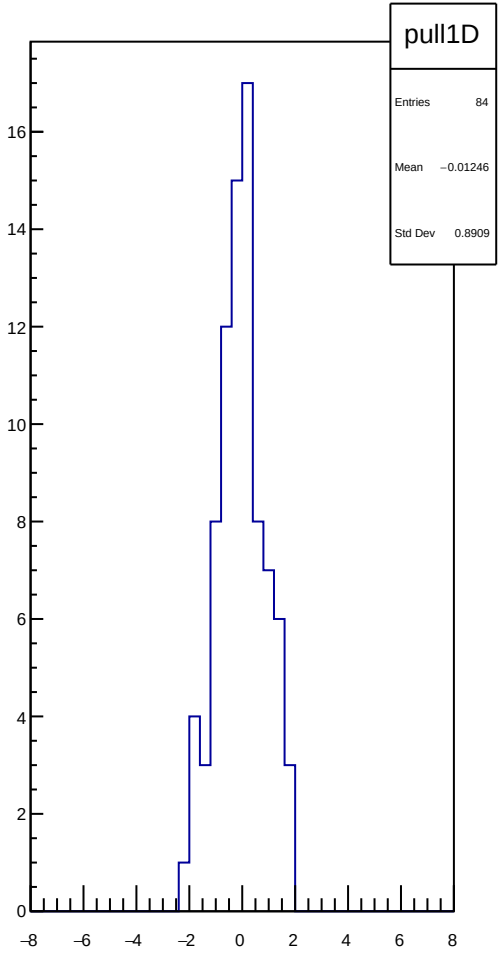

diff_bpm12X_rms vs run
χ² / ndf 2.848e+04 / 83
p0 3.716e+04 ± 29.69
50000
45000
40000
35000
30000

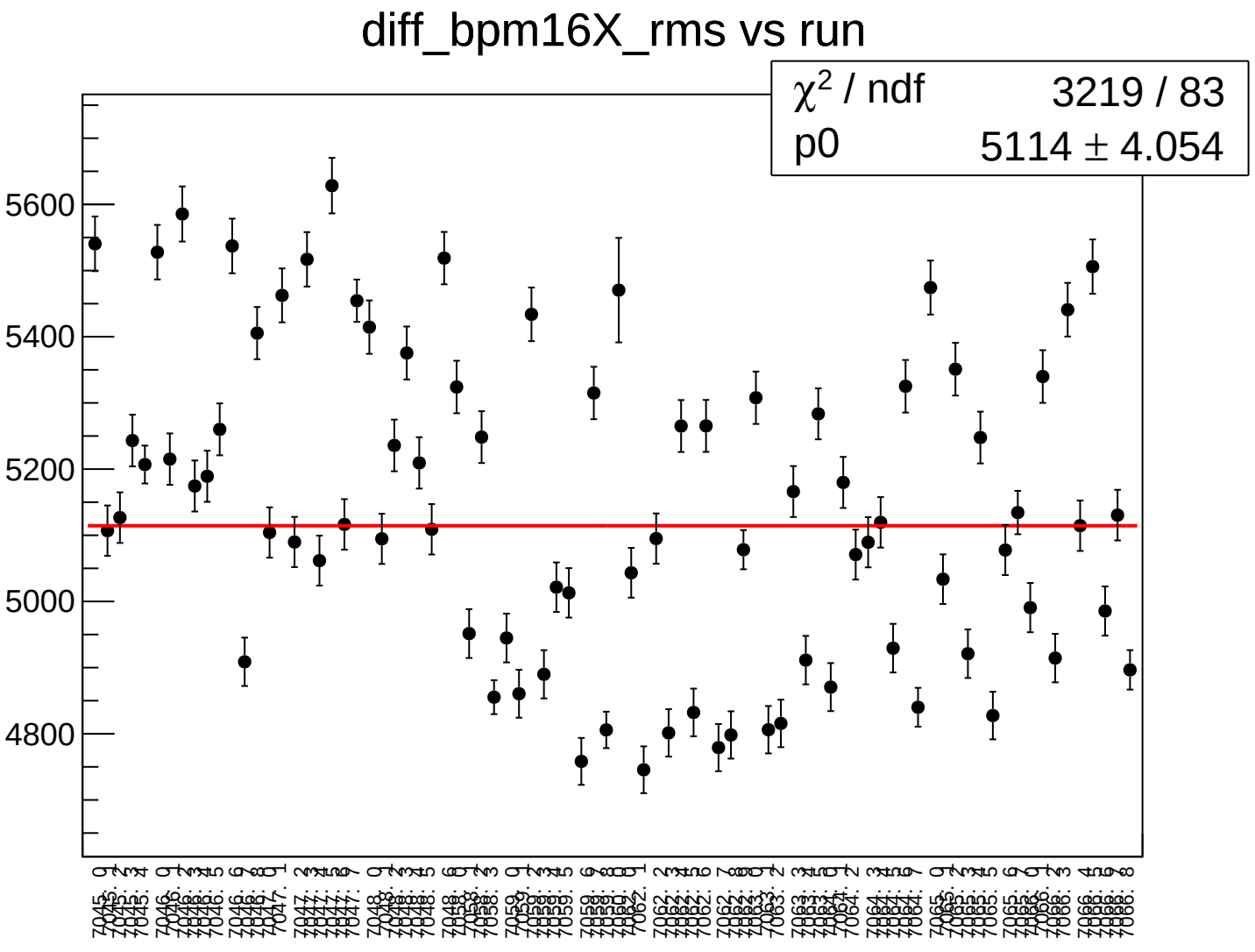

diff_bpm12Y_mean vs run
χ² / ndf 91.26 / 83
p0 −1.554 ± 5.581
pull
Entries 84
Mean 105.4
Std Dev 66.05

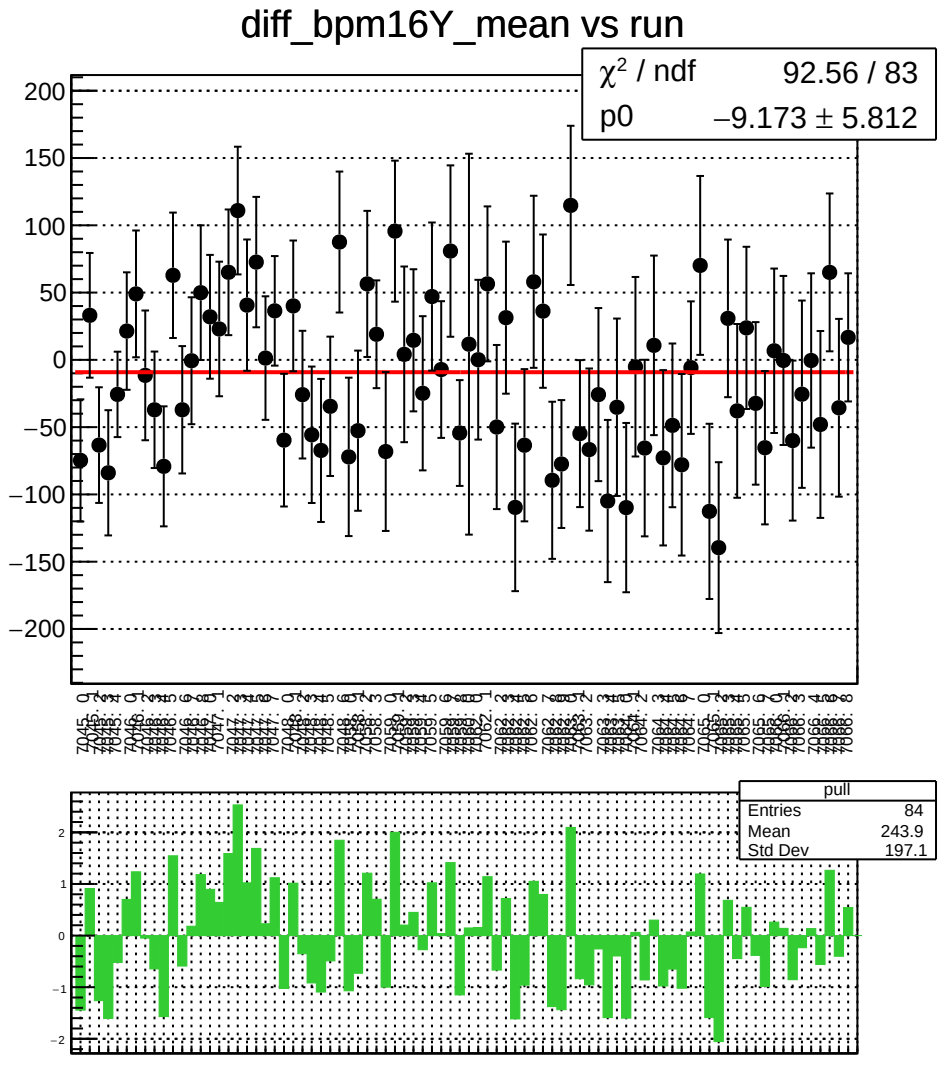

pull1D
Entries 84
Mean −0.01813
Std Dev 1.042

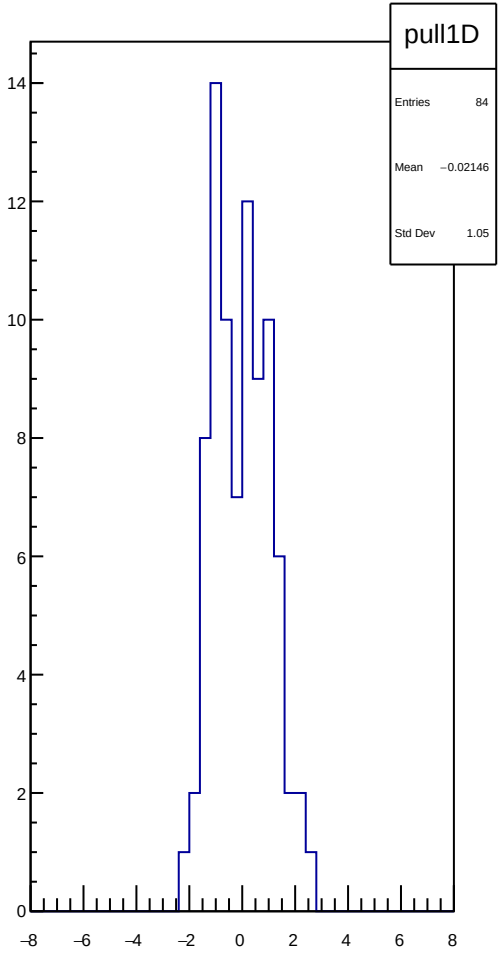

diff_bpm12Y_rms vs run
χ² / ndf 3.429e+04 / 83
p0 4929 ± 3.946
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500

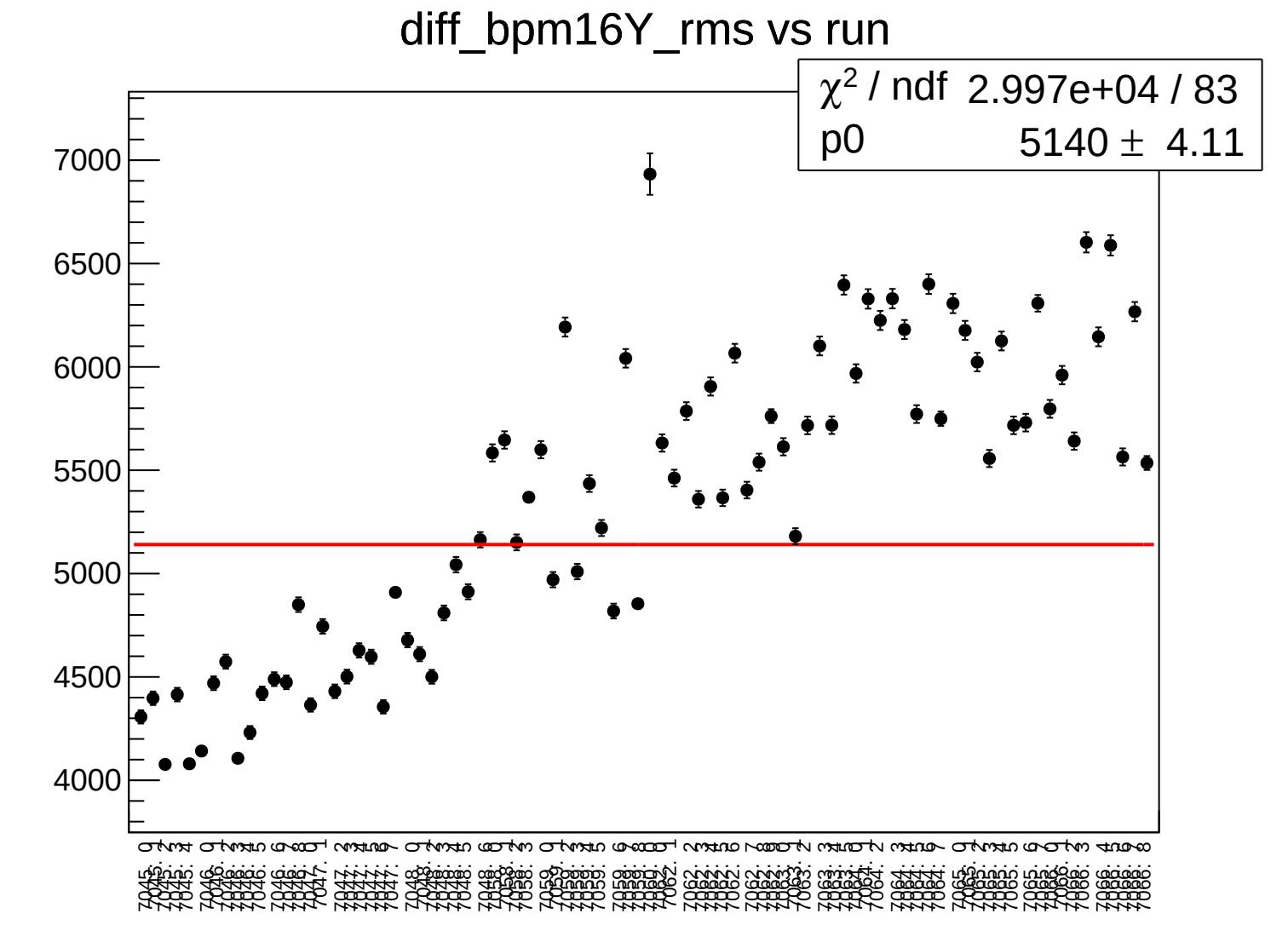

diff_bpm16X_mean vs run
χ^2 / ndf 66.69 / 83
p0 8.752 ± 5.734
pull
Entries 84
Mean −274
Std Dev 308.9

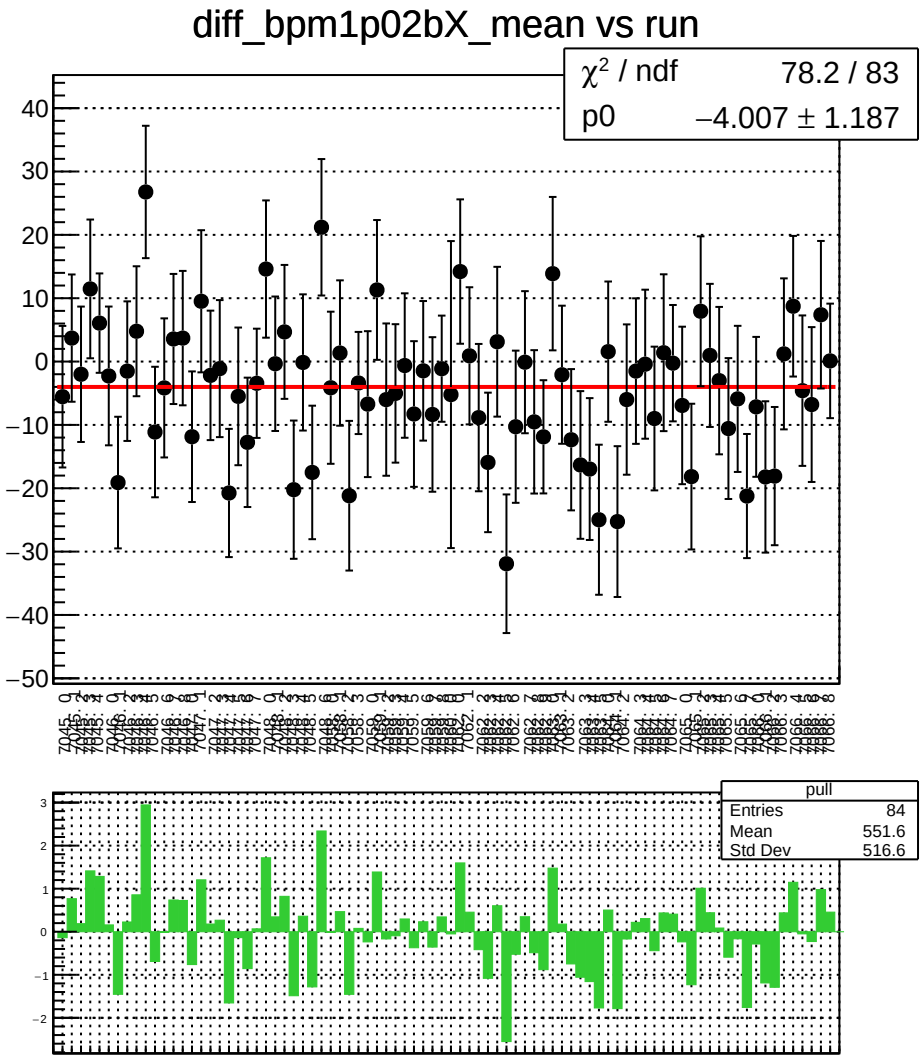

pull1D
Entries 84
Mean −0.01246
Std Dev 0.8909

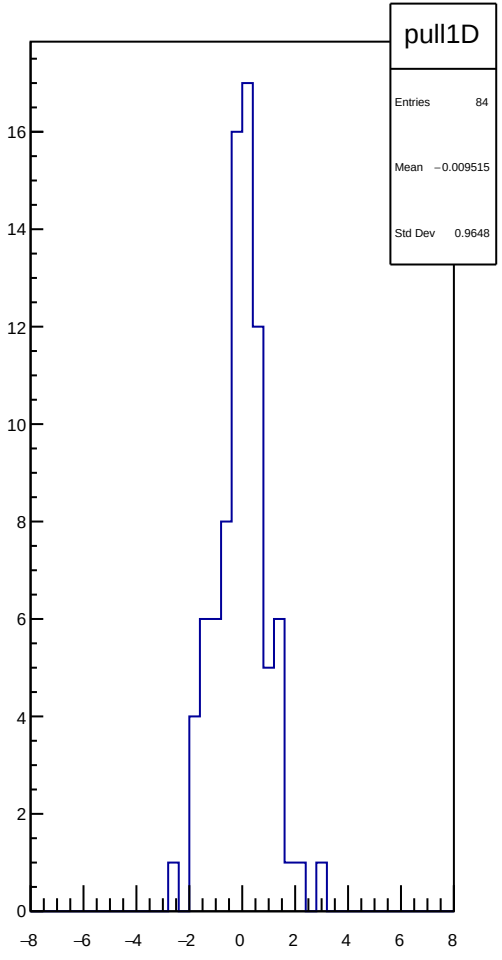

diff_bpm16X_rms vs run
χ² / ndf 3219 / 83
p0 5114 ± 4.054
5600
5400
5200
5000
4800

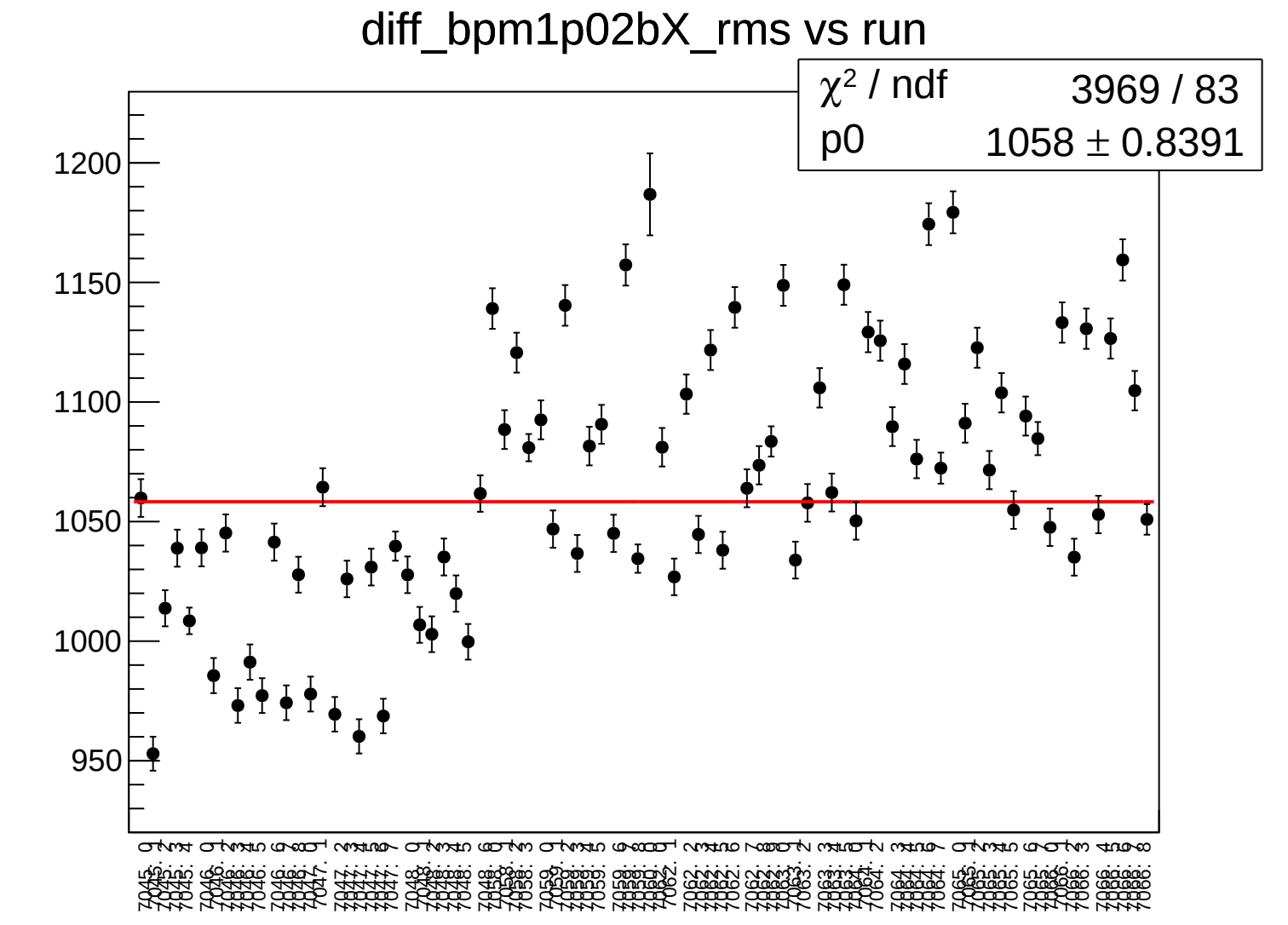

diff_bpm16Y_mean vs run
χ² / ndf 92.56 / 83
p0 −9.173 ± 5.812
pull
Entries 84
Mean 243.9
Std Dev 197.1

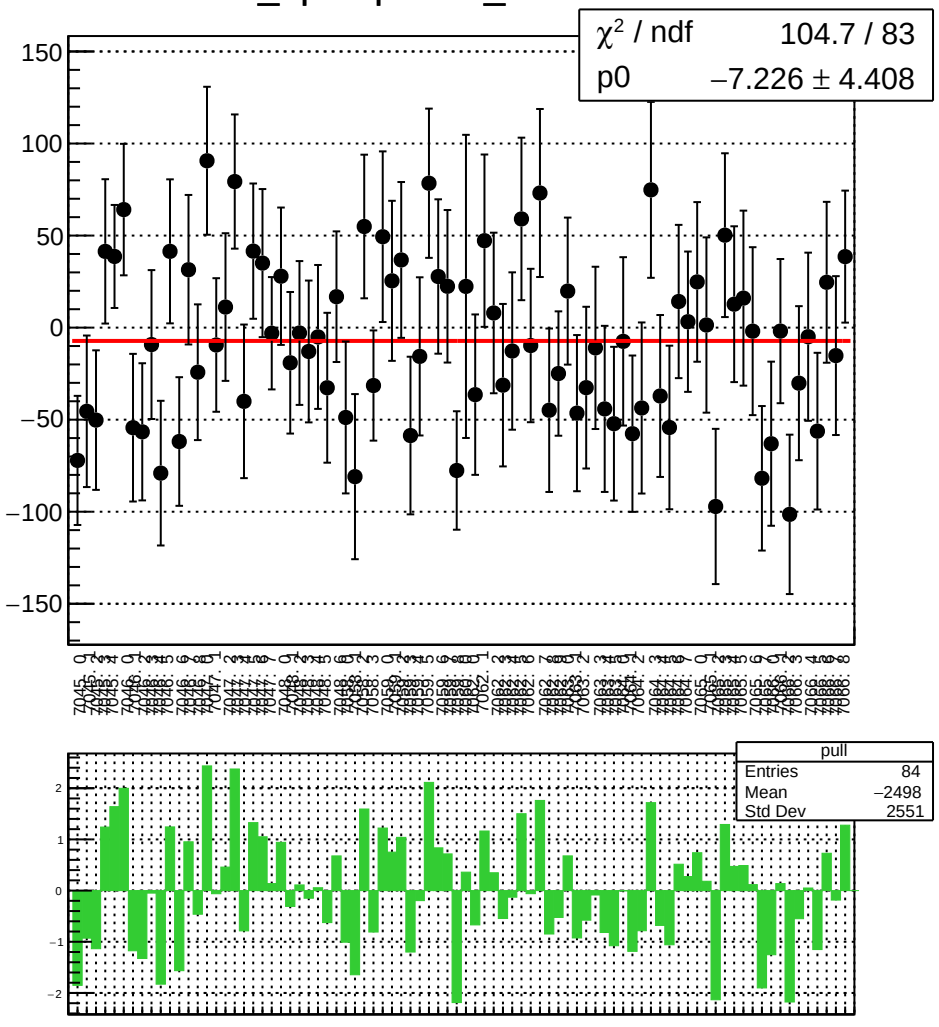

pull1D
Entries 84
Mean −0.02146
Std Dev 1.05

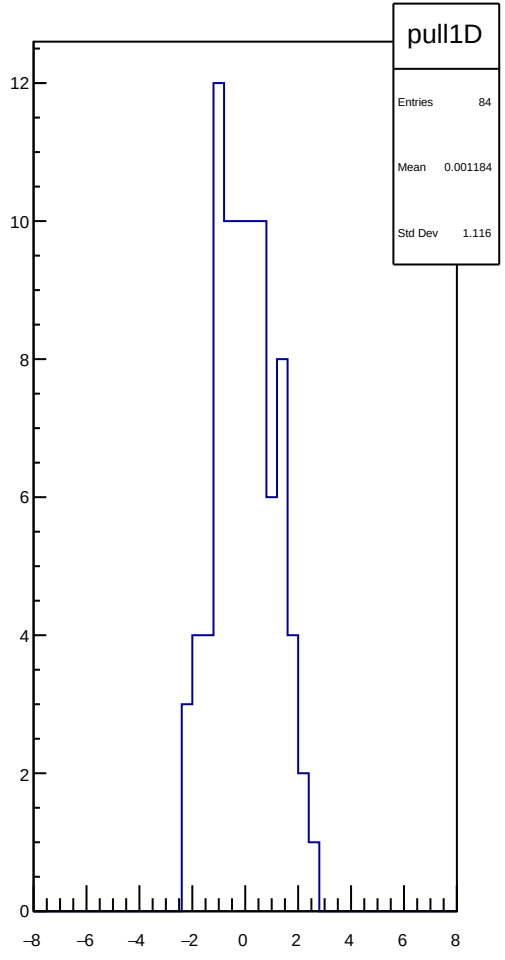

diff_bpm16Y_rms vs run
χ² / ndf 2.997e+04 / 83
p0 5140 ± 4.11
7000
6500
6000
5500
5000
4500
4000

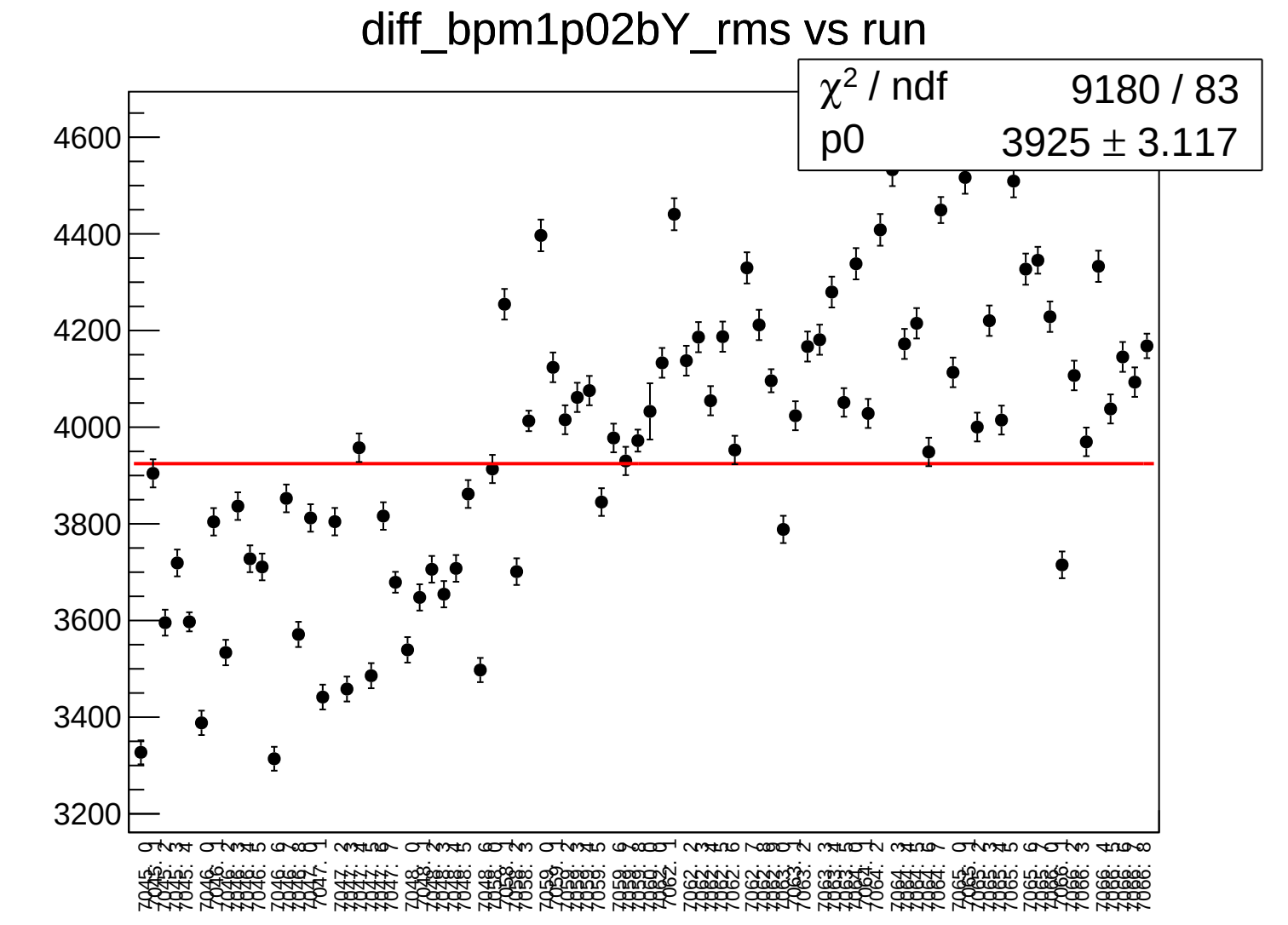

diff_bpm1p02bX_mean vs run
χ² / ndf 78.2 / 83
p0 −4.007 ± 1.187
pull
Entries 84
Mean 551.6
Std Dev 516.6

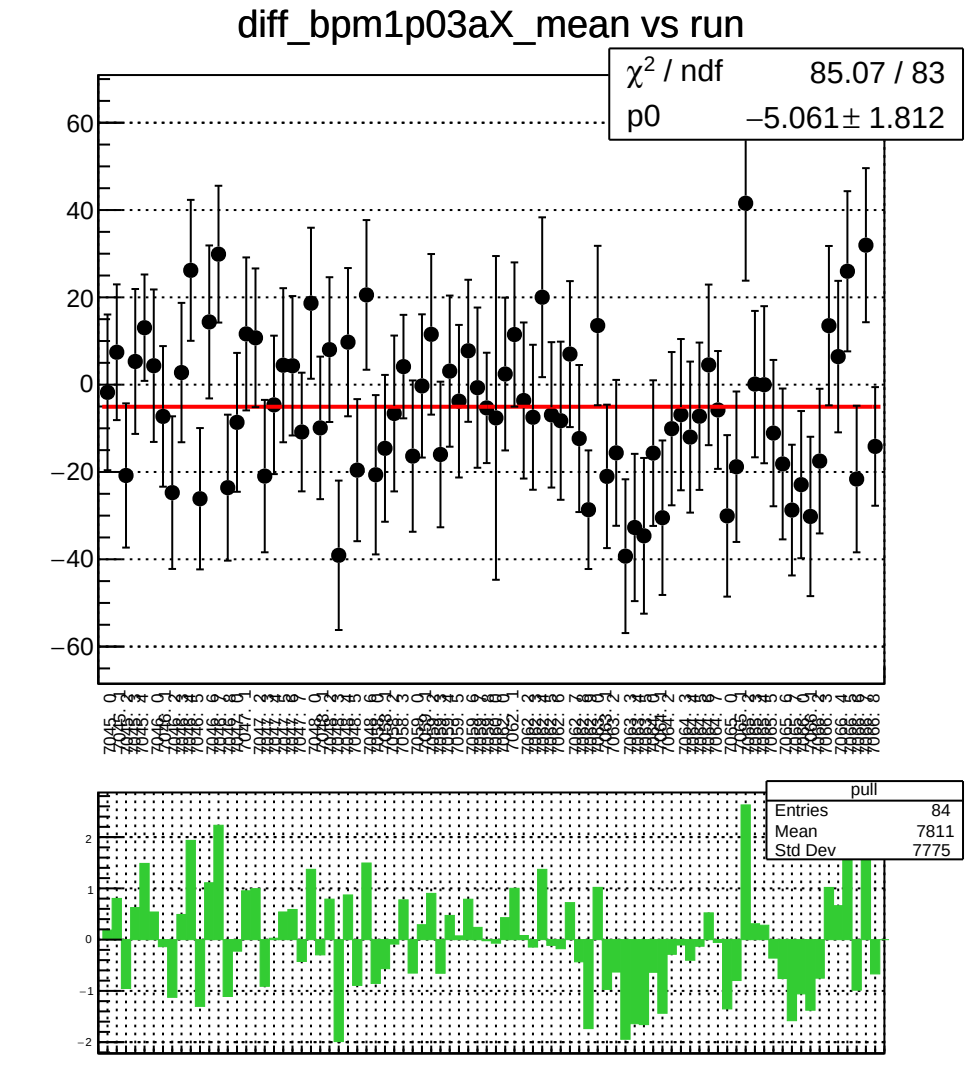

pull1D
Entries 84
Mean −0.009515
Std Dev 0.9648

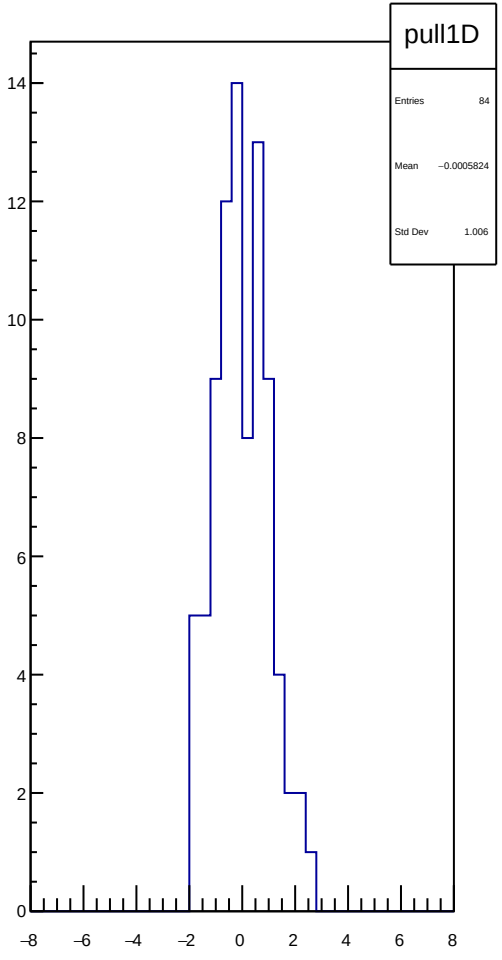

diff_bpm1p02bX_rms vs run
χ² / ndf 3969 / 83
p0 1058 ± 0.8391
1200
1150
1100
1050
1000
950

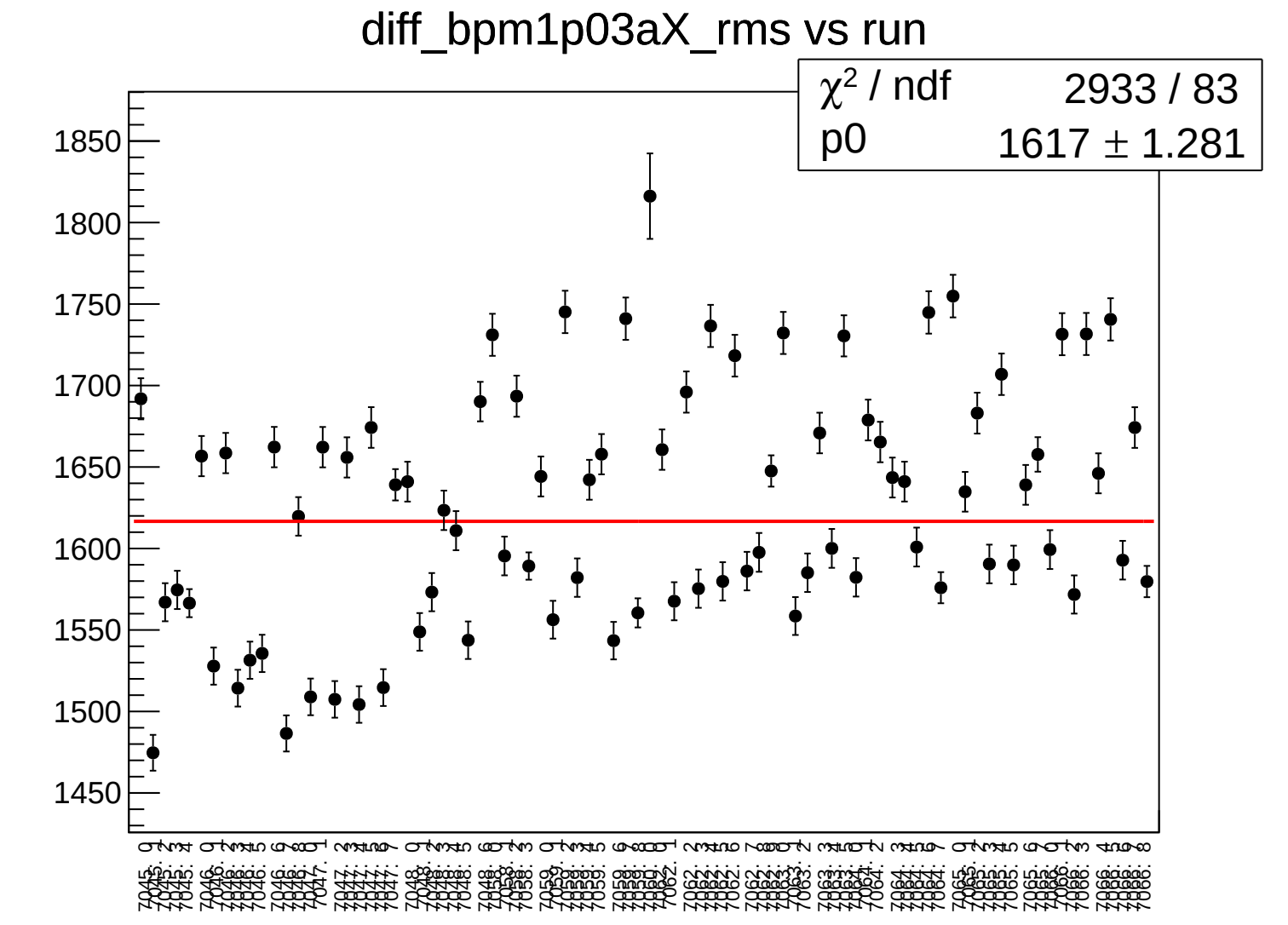

diff_bpm1p02bY_mean vs run
χ² / ndf 104.7 / 83
p0 −7.226 ± 4.408
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean −2498
Std Dev 2551
2
1
0
−1
−2

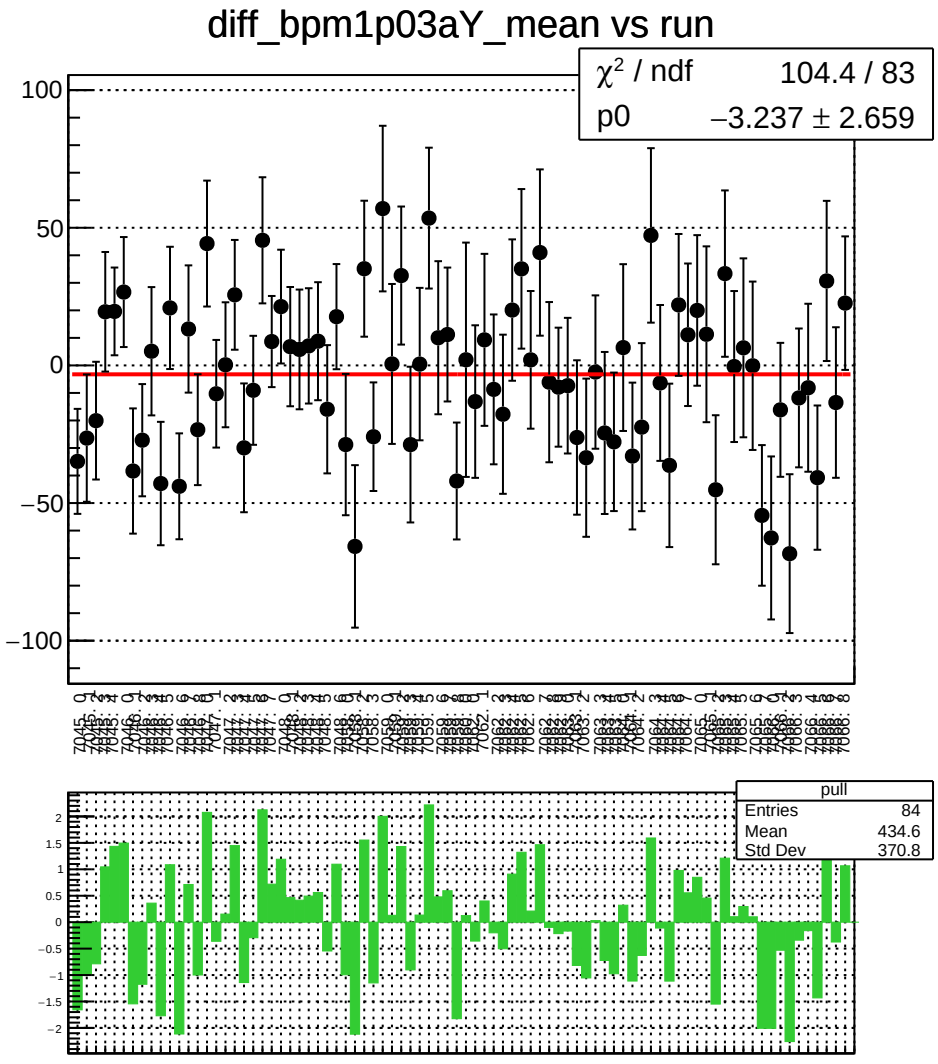

pull1D
Entries 84
Mean 0.001184
Std Dev 1.116
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

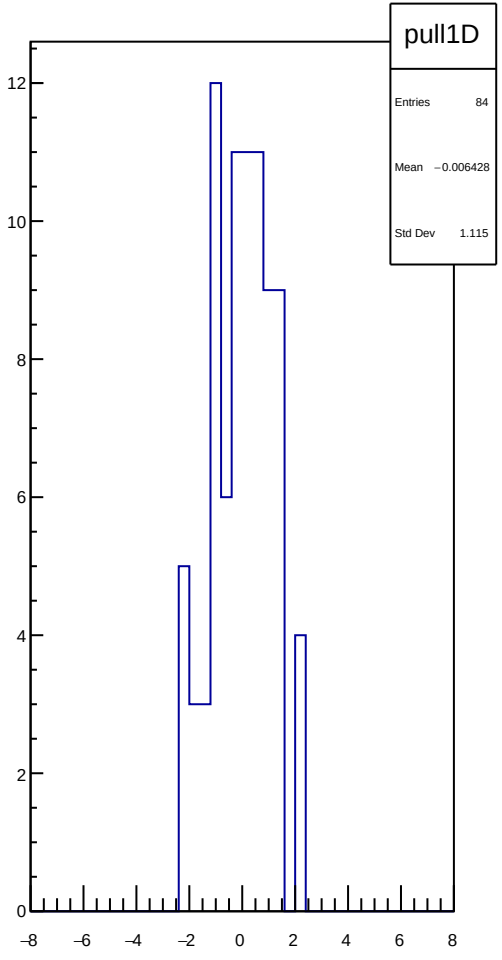

diff_bpm1p02bY_rms vs run
χ² / ndf 9180 / 83
p0 3925 ± 3.117
4600
4400
4200
4000
3800
3600
3400
3200

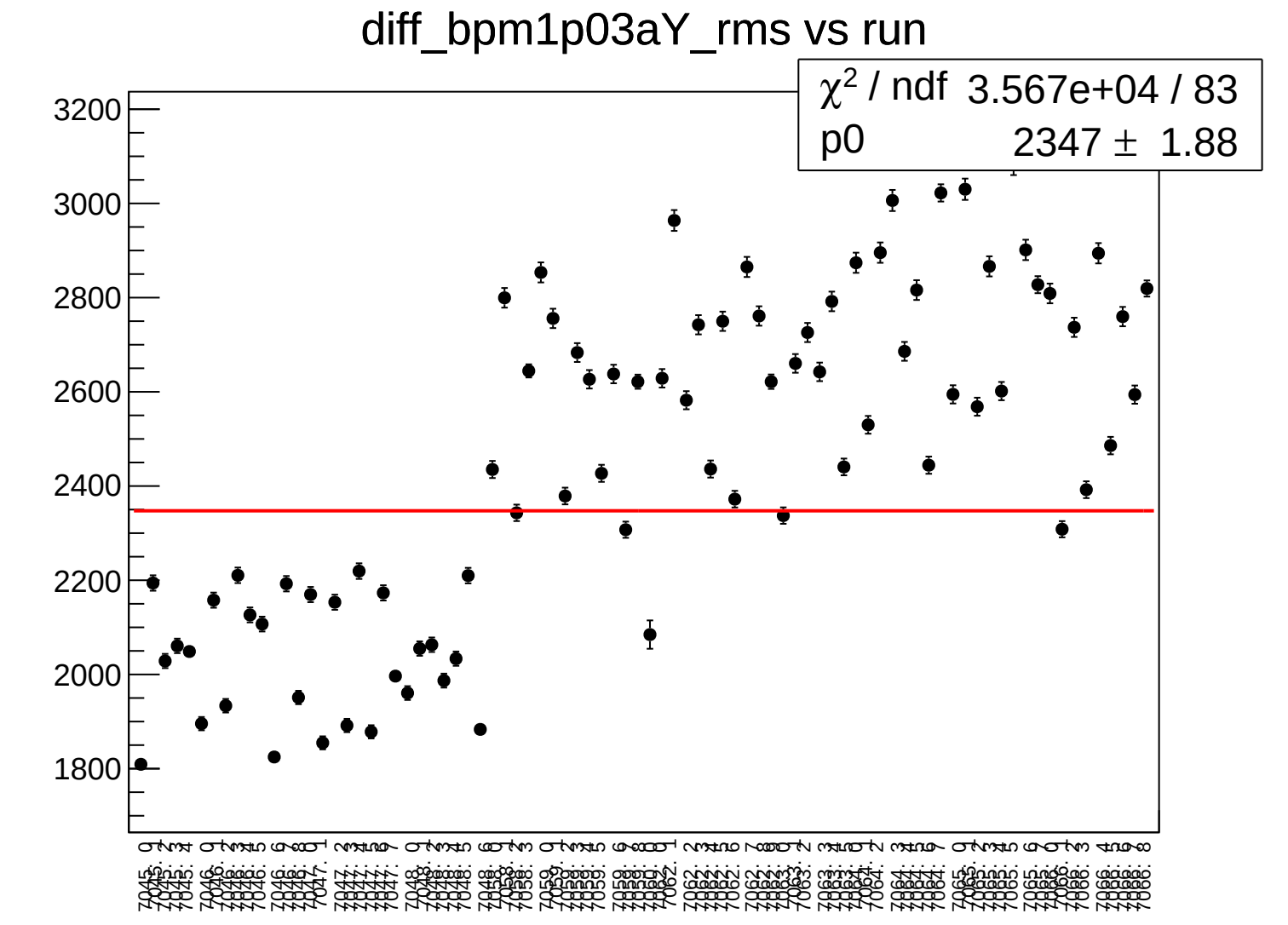

diff_bpm1p03aX_mean vs run
χ² / ndf 85.07 / 83
p0 −5.061 ± 1.812
pull
Entries 84
Mean 7811
Std Dev 7775

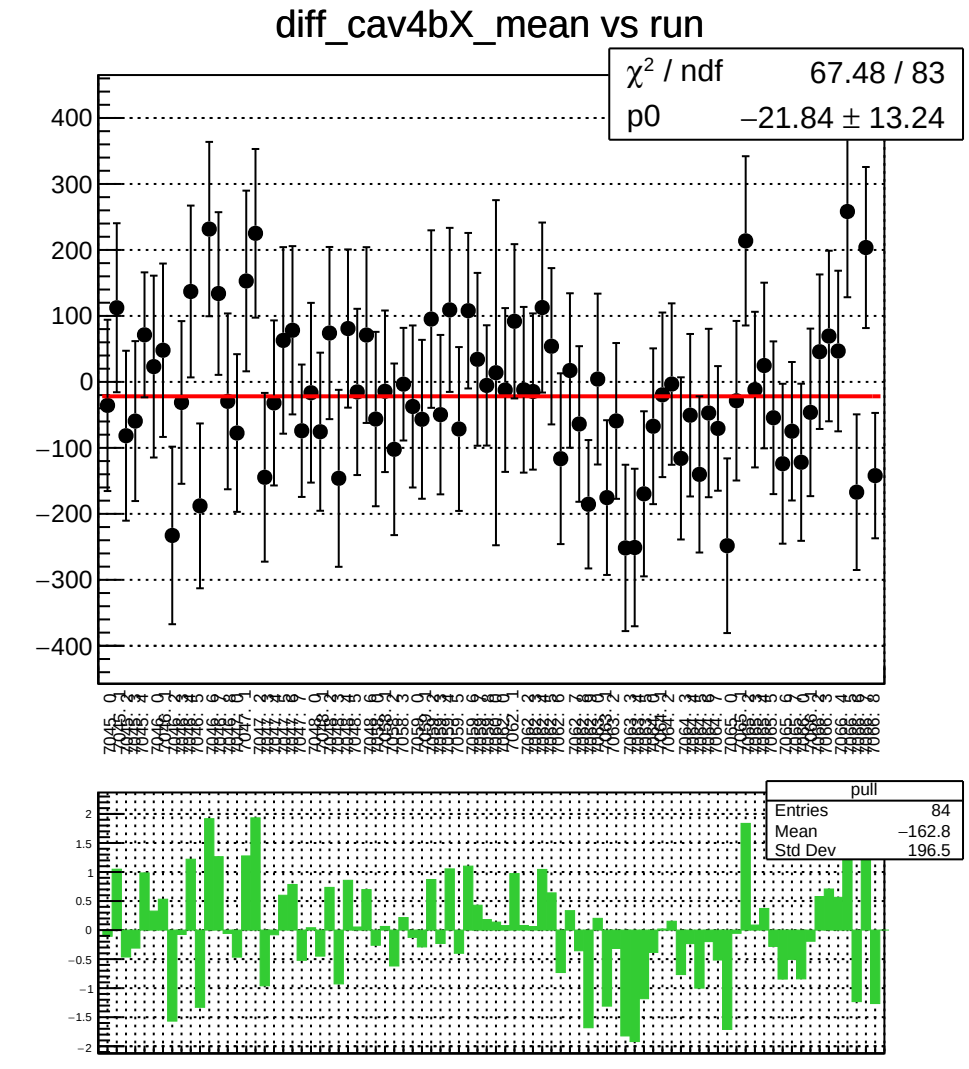

pull1D
Entries 84
Mean −0.0005824
Std Dev 1.006

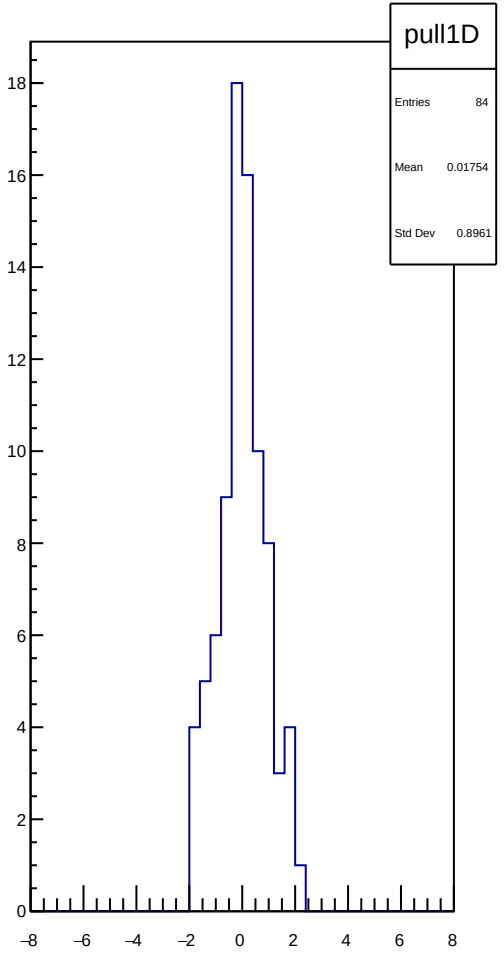

diff_bpm1p03aX_rms vs run
χ² / ndf 2933 / 83
p0 1617 ± 1.281
1850
1800
1750
1700
1650
1600
1550
1500
1450

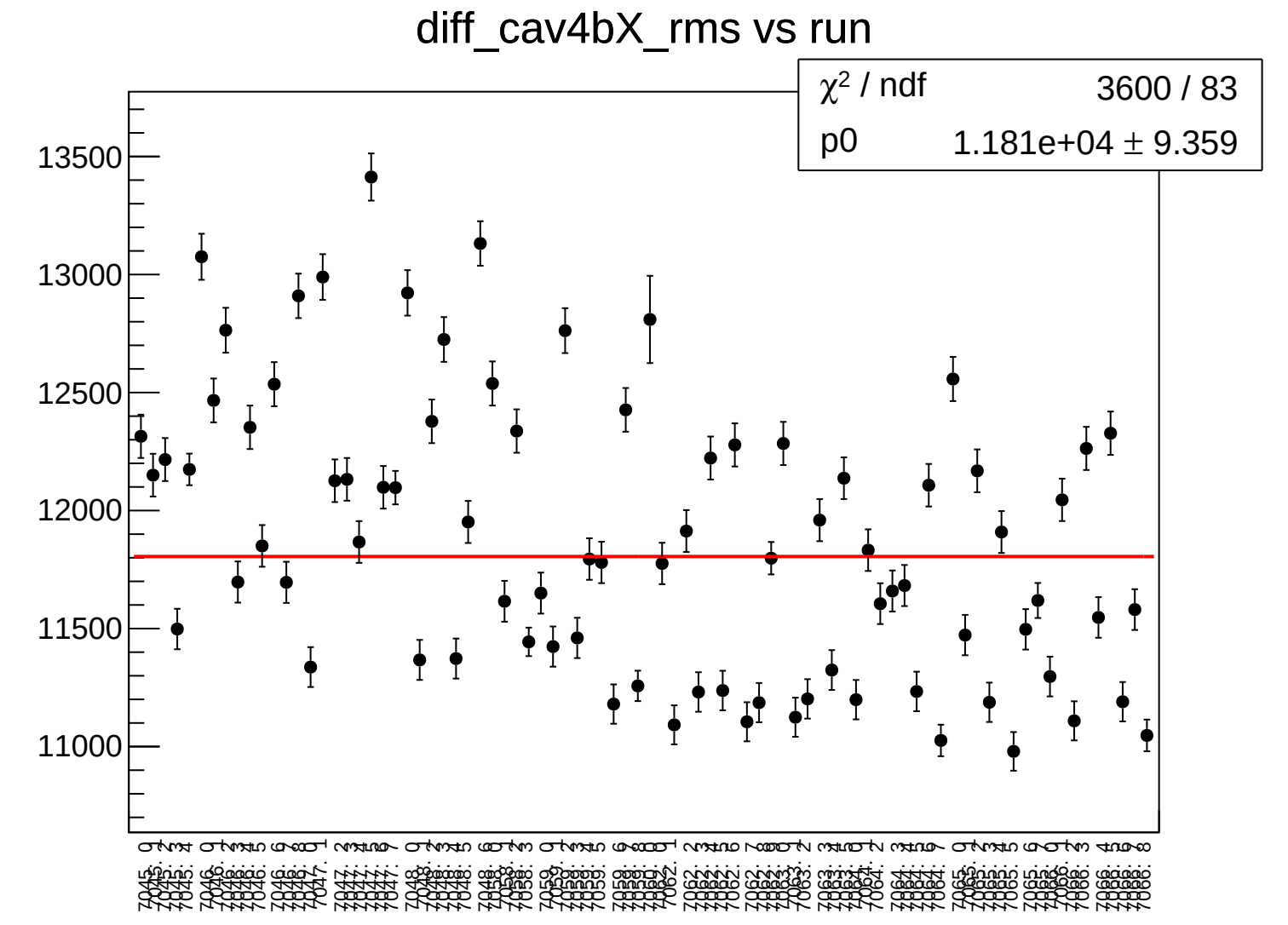

diff_bpm1p03aY_mean vs run
χ² / ndf 104.4 / 83
p0 −3.237 ± 2.659
100
50
0
−50
−100
pull
Entries 84
Mean 434.6
Std Dev 370.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

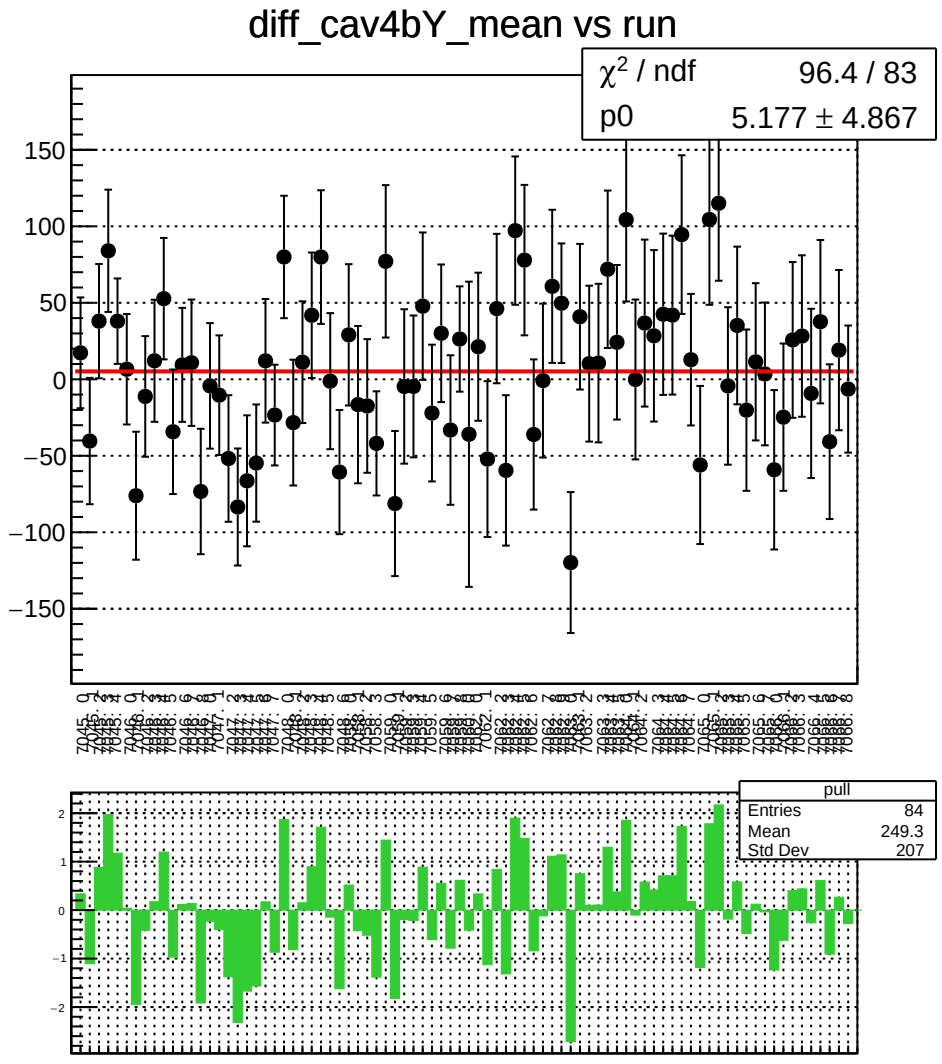

pull1D
Entries 84
Mean −0.006428
Std Dev 1.115
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

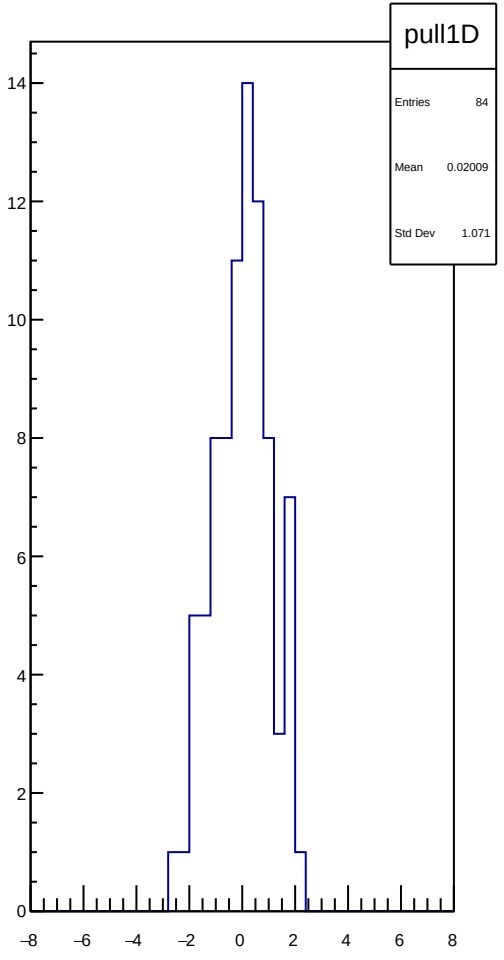

diff_bpm1p03aY_rms vs run
χ² / ndf 3.567e+04 / 83
p0 2347 ± 1.88
3200
3000
2800
2600
2400
2200
2000
1800

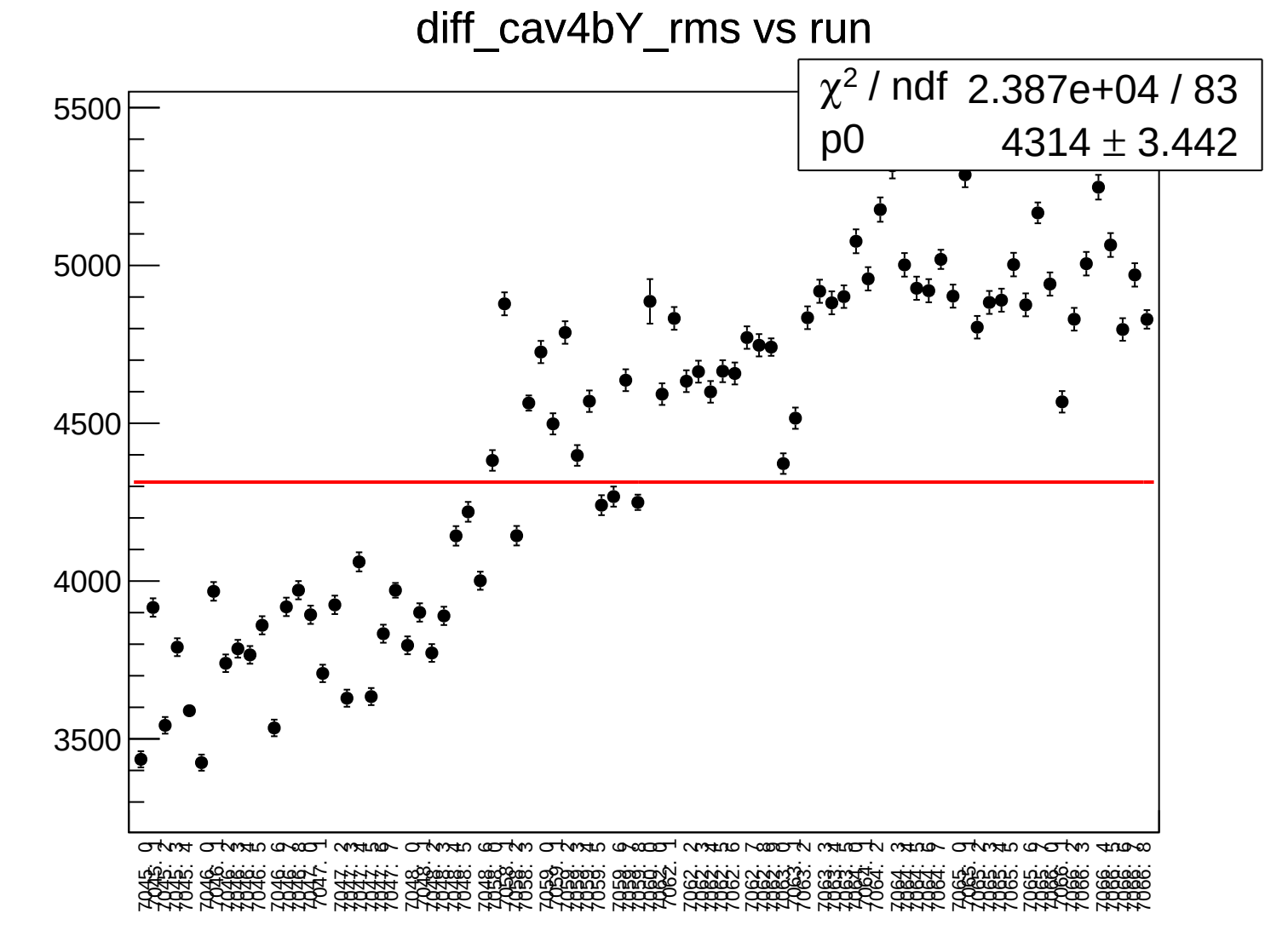

diff_cav4bX_mean vs run
χ² / ndf 67.48 / 83
p0 −21.84 ± 13.24
pull
Entries 84
Mean −162.8
Std Dev 196.5

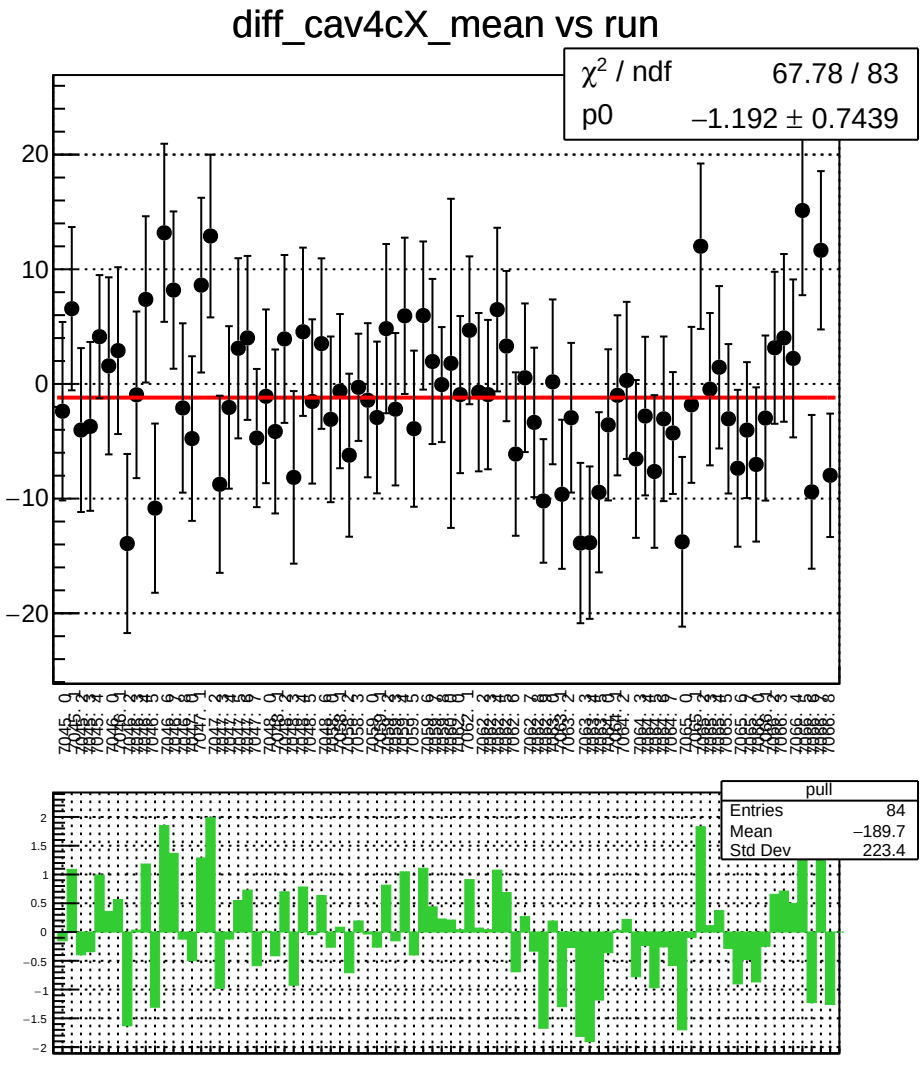

pull1D
Entries 84
Mean 0.01754
Std Dev 0.8961

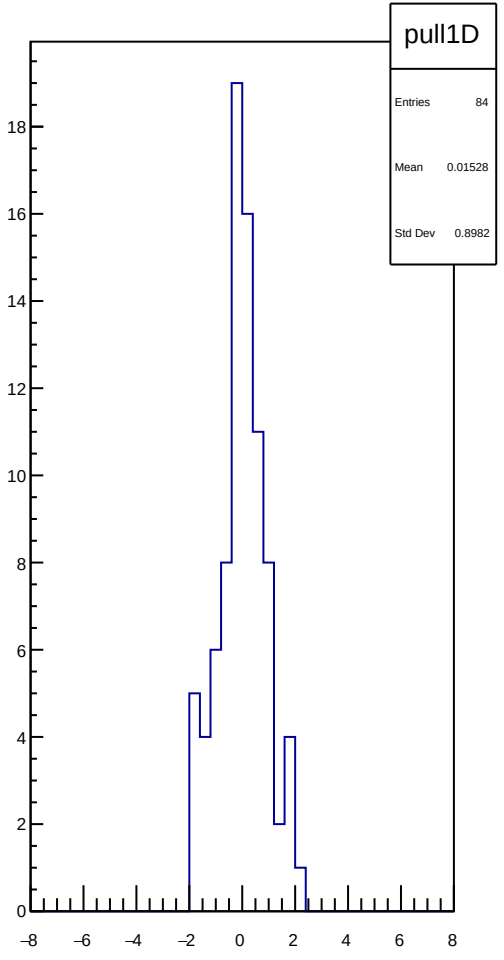

diff_cav4bX_rms vs run
χ² / ndf 3600 / 83
p0 1.181e+04 ± 9.359
13500
13000
12500
12000
11500
11000

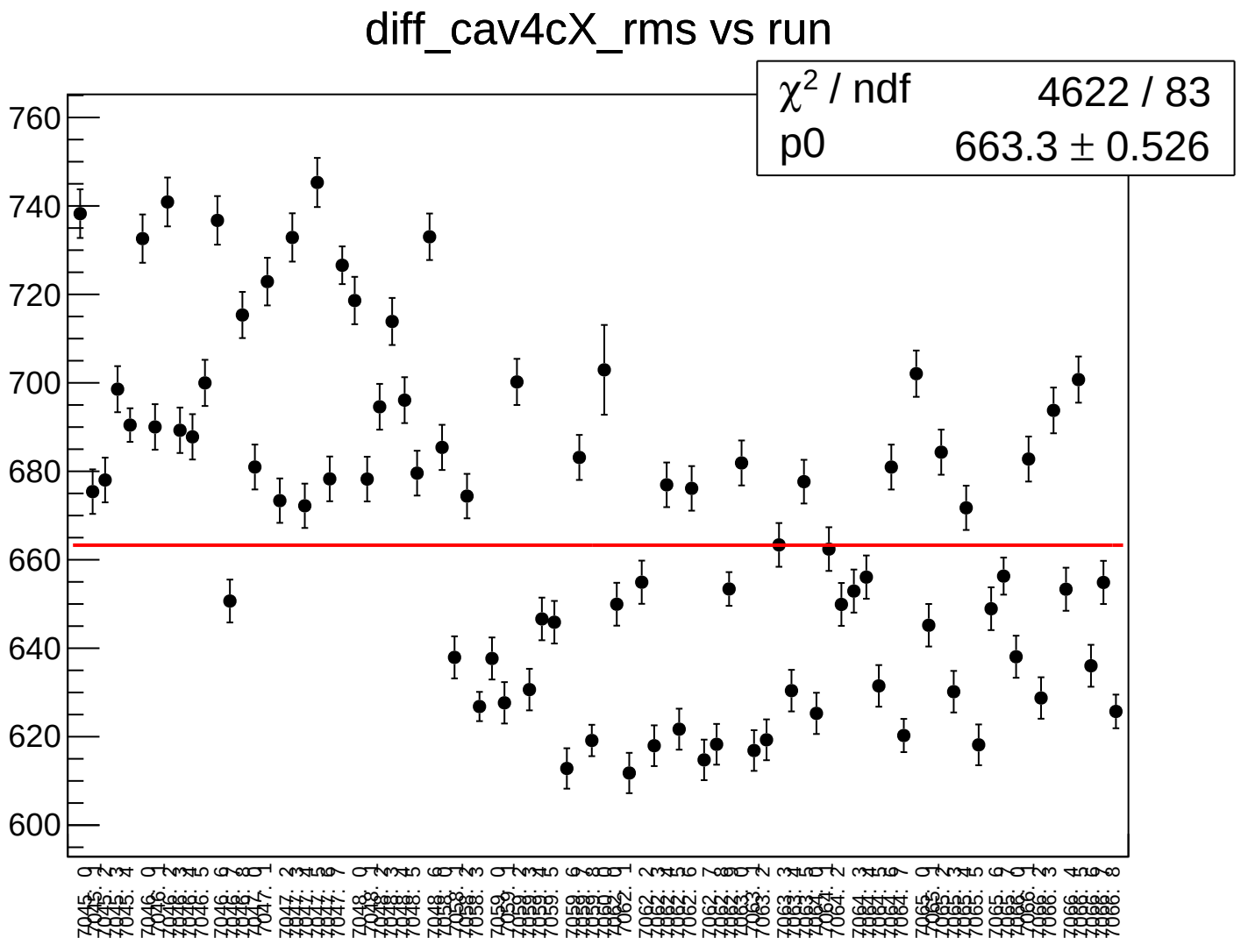

diff_cav4bY_mean vs run
χ² / ndf 96.4 / 83
p0 5.177 ± 4.867
150
100
50
0
−50
−100
−150
pull
Entries 84
Mean 249.3
Std Dev 207
2
1
0
−1
−2

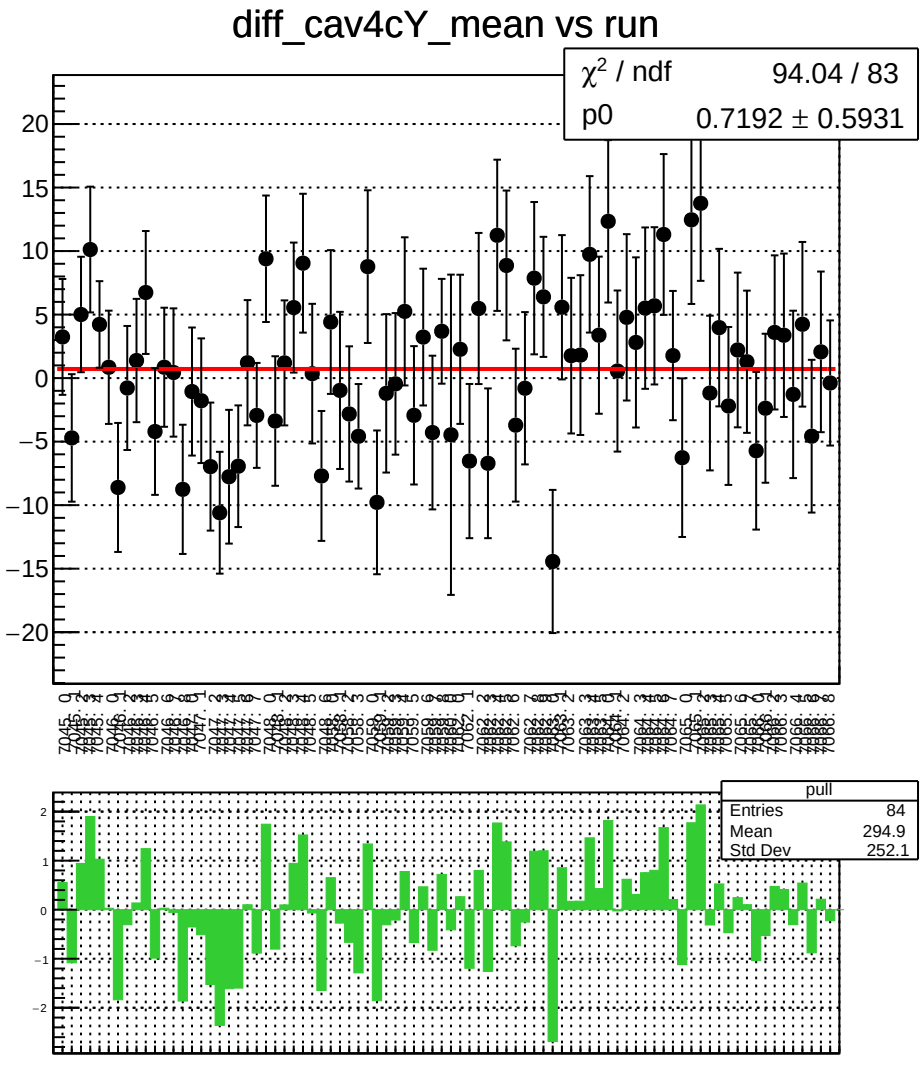

pull1D
Entries 84
Mean 0.02009
Std Dev 1.071
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

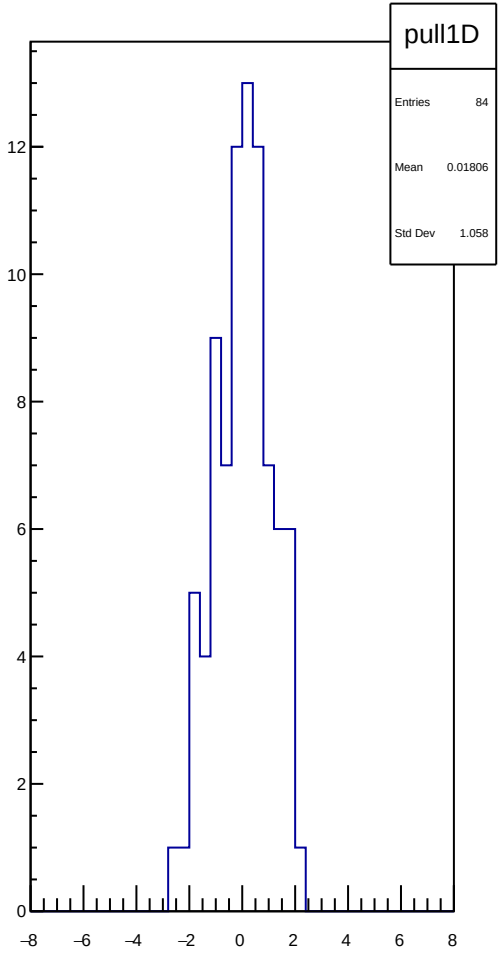

diff_cav4bY_rms vs run
χ^2 / ndf 2.387e+04 / 83
p0 4314 ± 3.442
5500
5000
4500
4000
3500

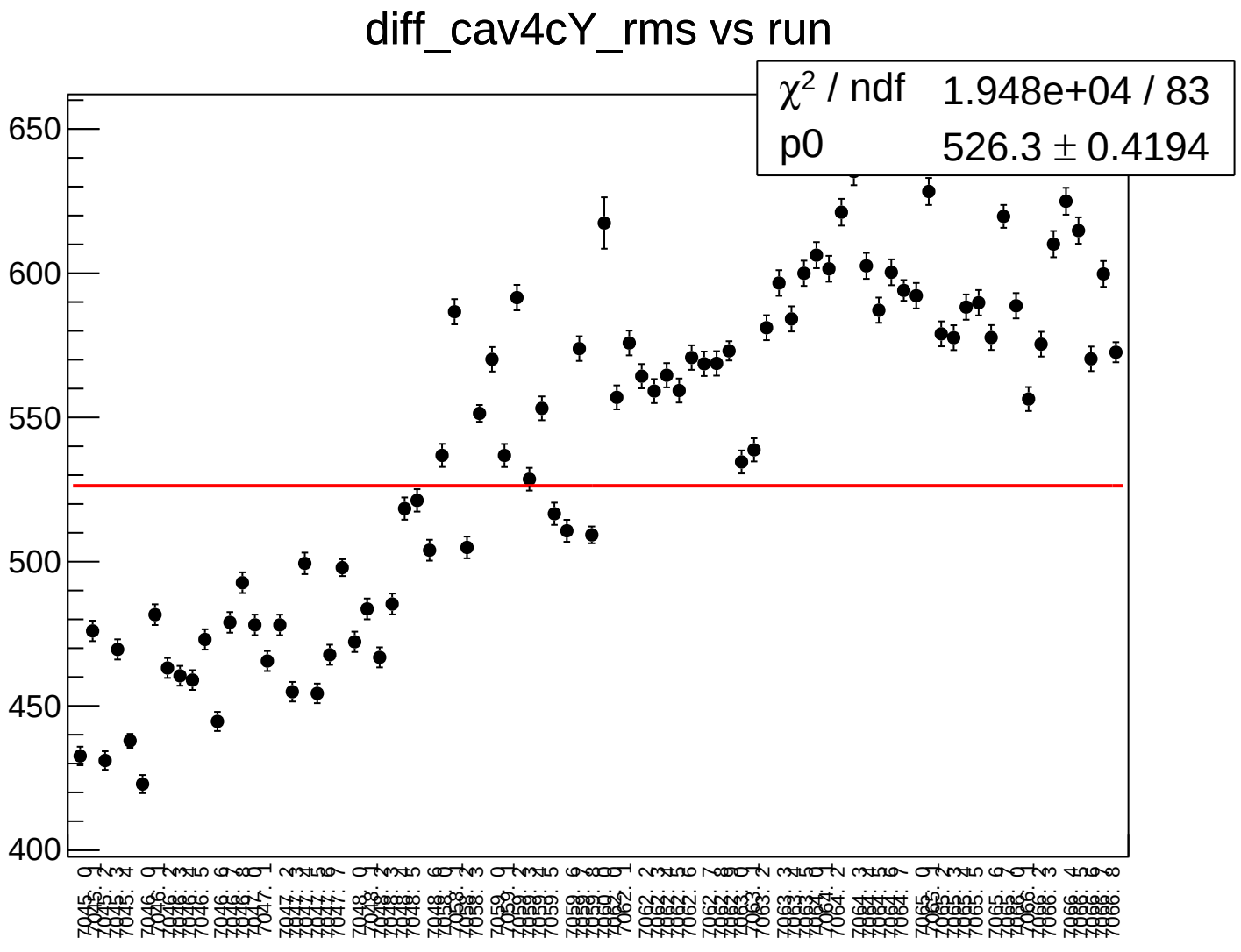

diff_cav4cX_mean vs run
χ² / ndf 67.78 / 83
p0 −1.192 ± 0.7439
pull
Entries 84
Mean −189.7
Std Dev 223.4

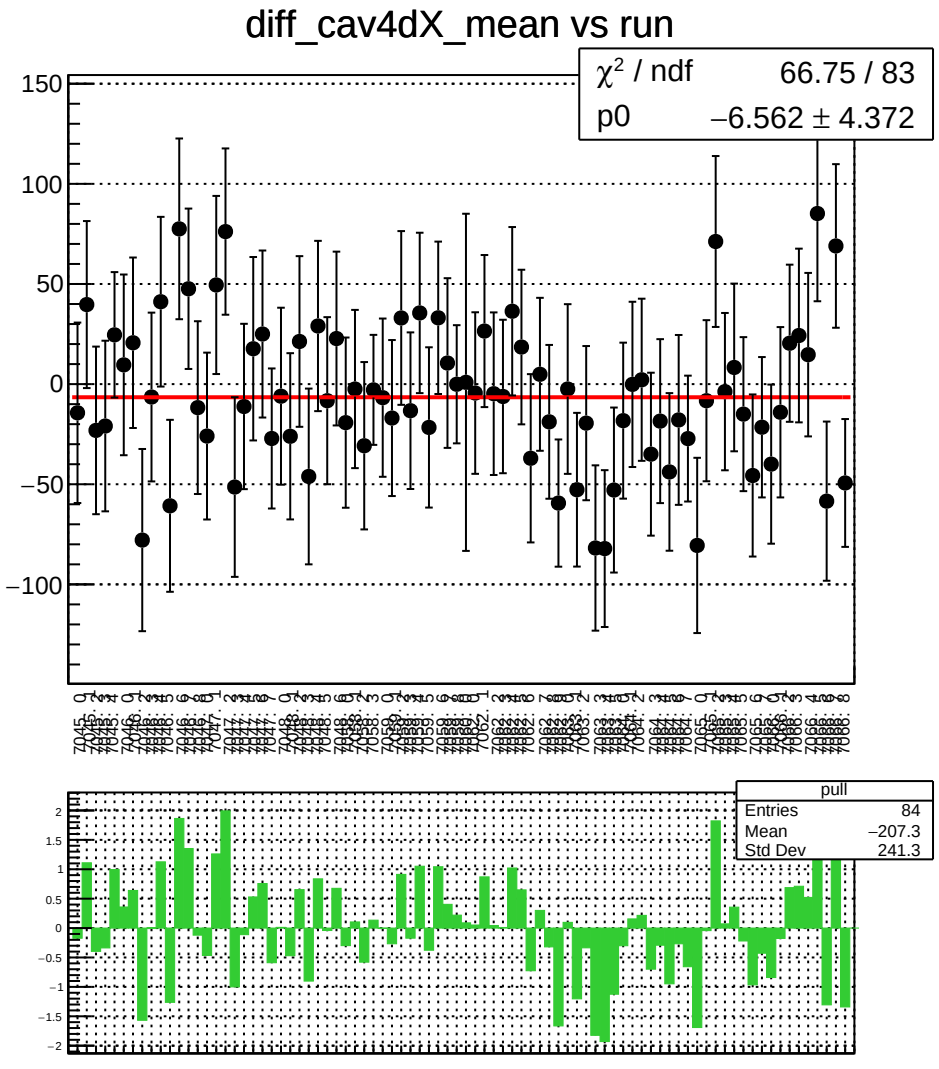

pull1D
Entries 84
Mean 0.01528
Std Dev 0.8982

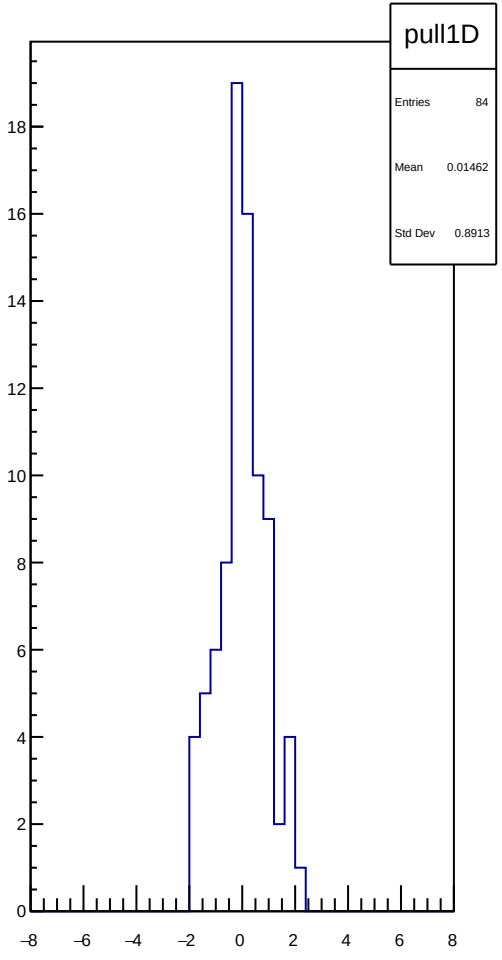

diff_cav4cX_rms vs run
χ² / ndf 4622 / 83
p0 663.3 ± 0.526
760
740
720
700
680
660
640
620
600

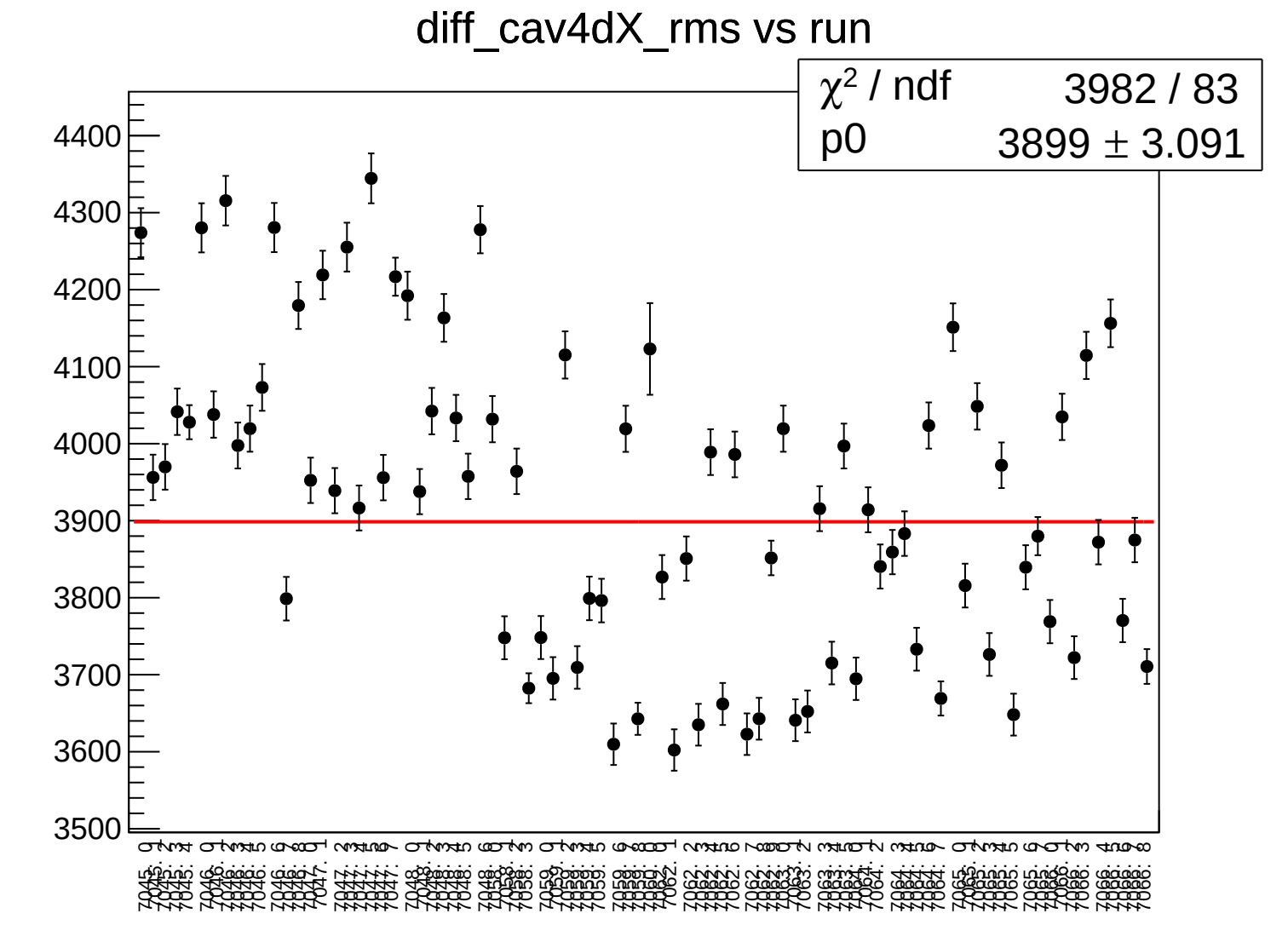

diff_cav4cY_mean vs run
χ² / ndf 94.04 / 83
p0 0.7192 ± 0.5931
pull
Entries 84
Mean 294.9
Std Dev 252.1

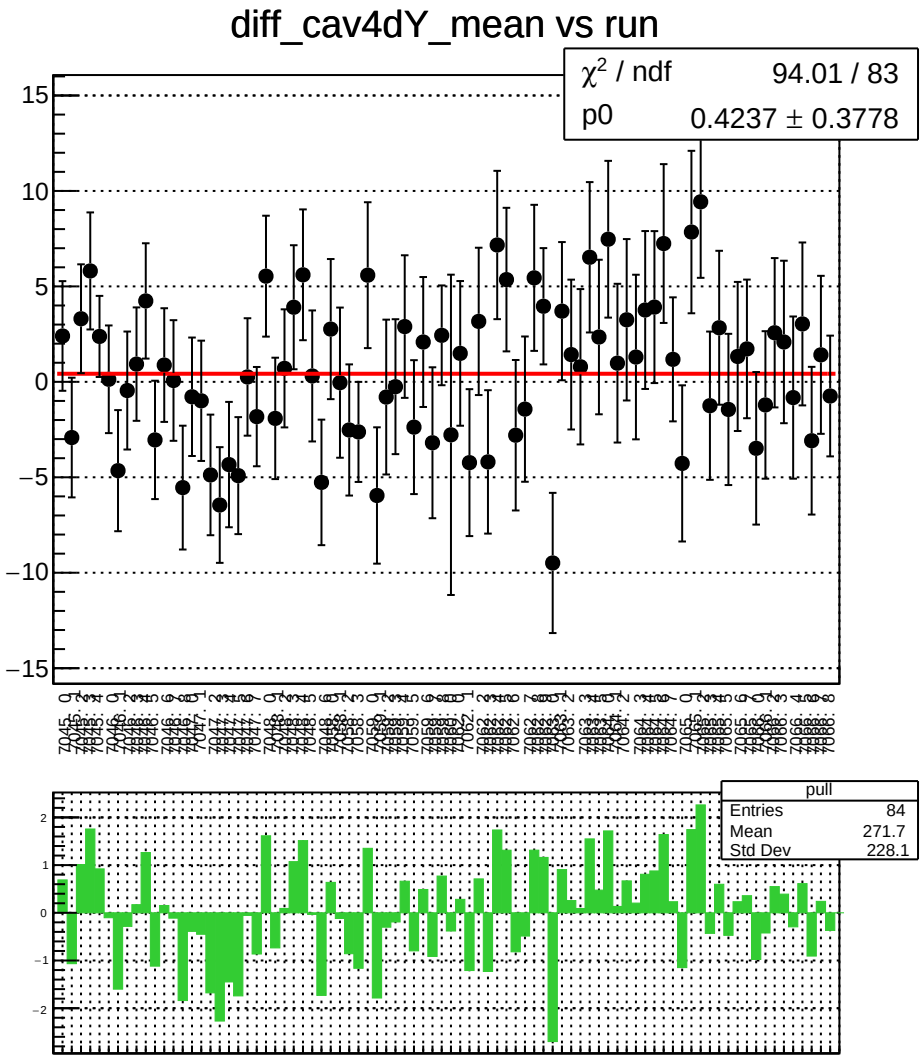

pull1D
Entries 84
Mean 0.01806
Std Dev 1.058

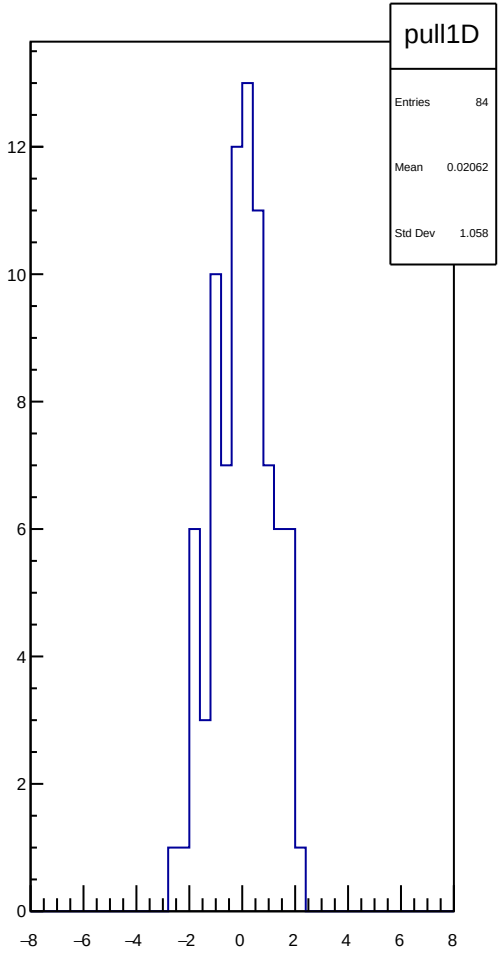

diff_cav4cY_rms vs run
χ² / ndf 1.948e+04 / 83
p0 526.3 ± 0.4194
650
600
550
500
450
400

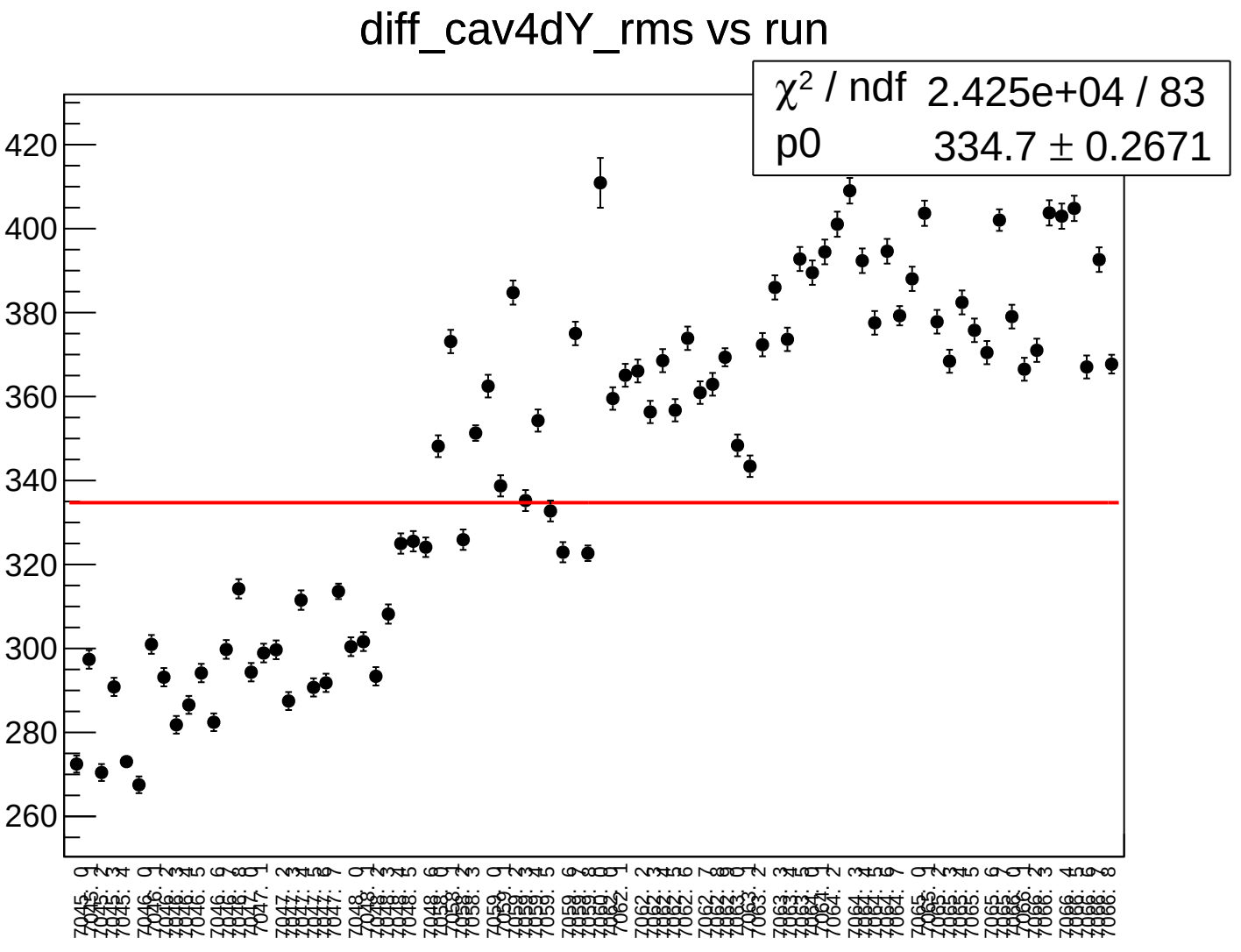

diff_cav4dX_mean vs run
χ² / ndf 66.75 / 83
p0 −6.562 ± 4.372
pull
Entries 84
Mean −207.3
Std Dev 241.3

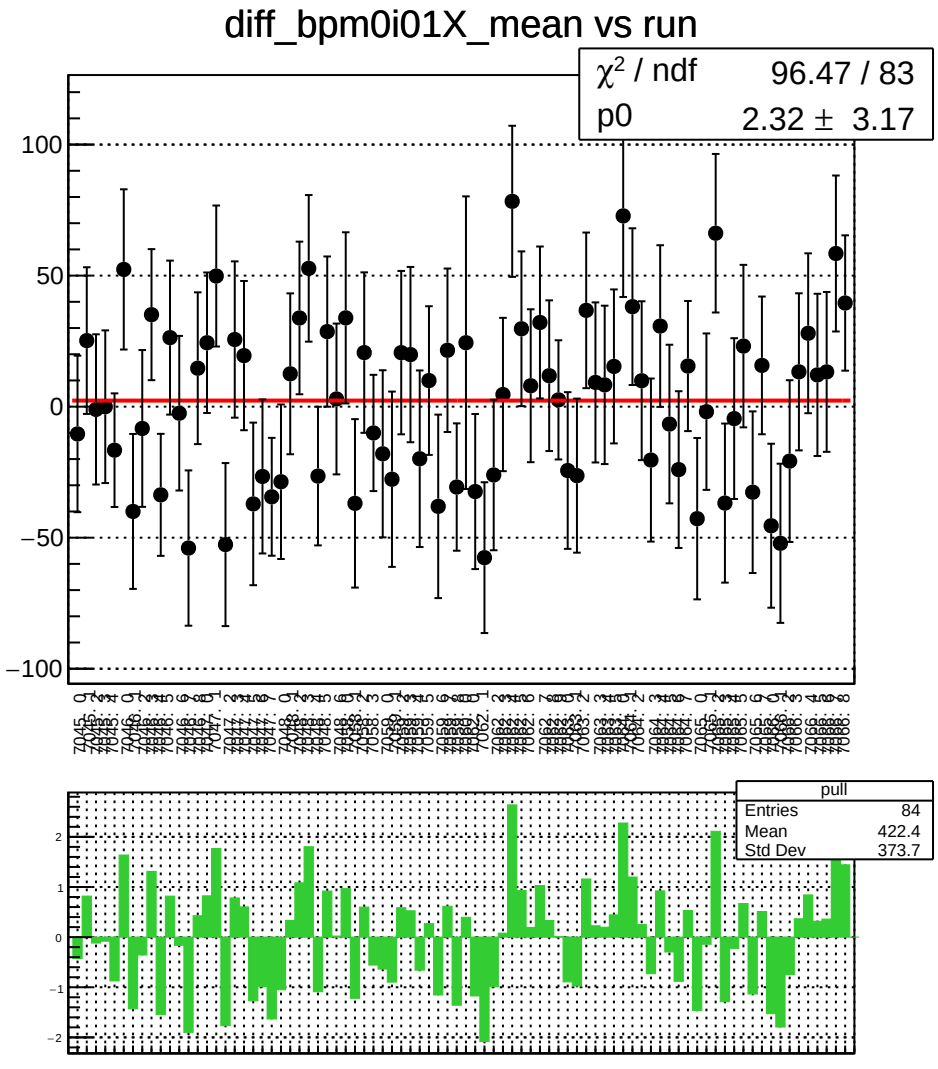

pull1D
Entries 84
Mean 0.01462
Std Dev 0.8913

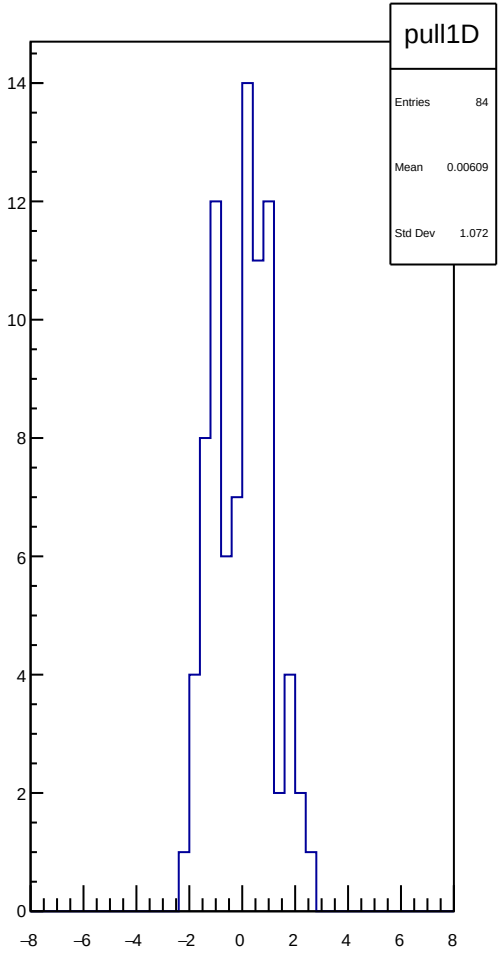

diff_cav4dX_rms vs run
χ² / ndf 3982 / 83
p0 3899 ± 3.091
4400
4300
4200
4100
4000
3900
3800
3700
3600
3500

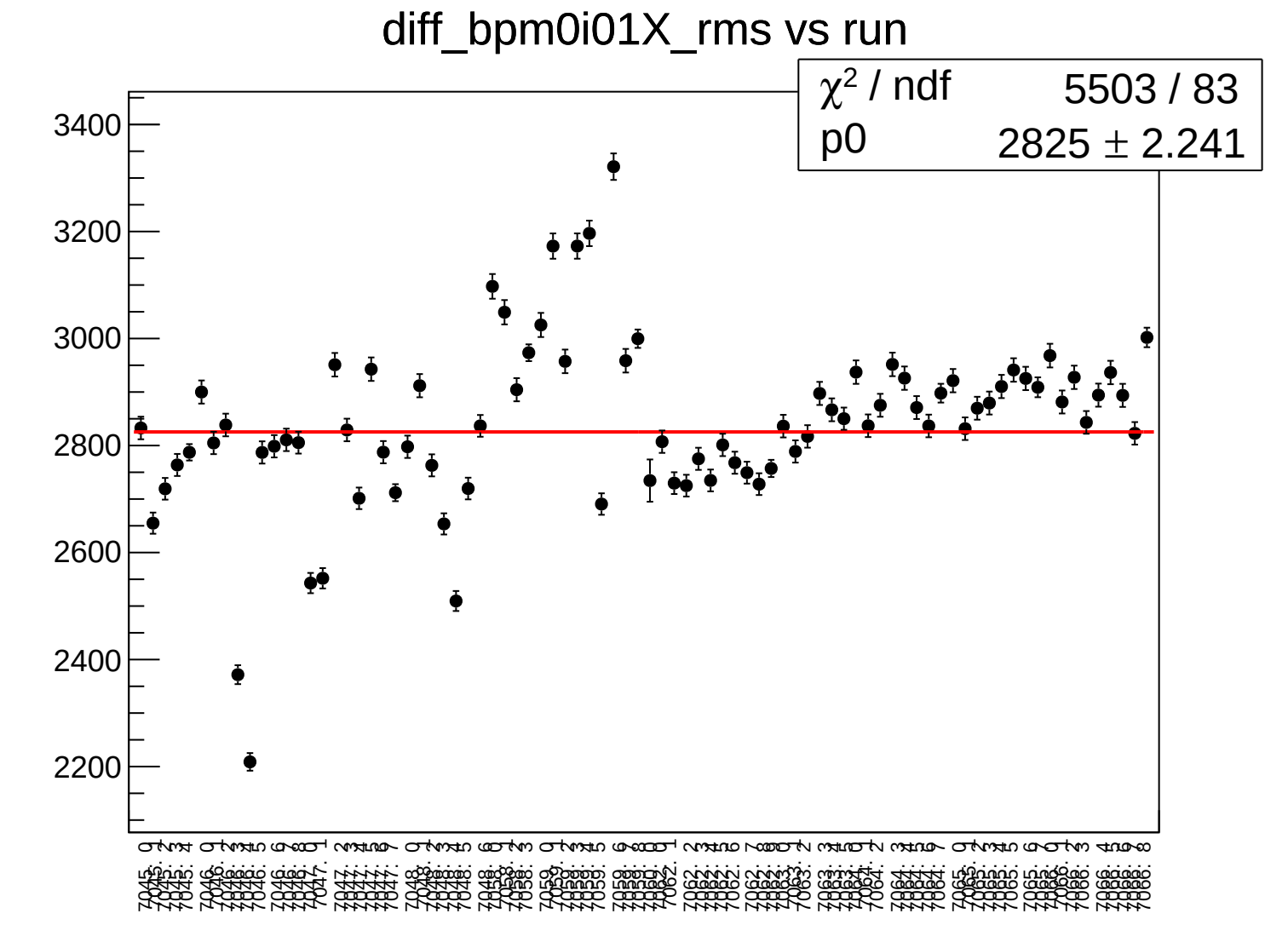

diff_cav4dY_mean vs run
χ² / ndf 94.01 / 83
p0 0.4237 ± 0.3778
pull
Entries 84
Mean 271.7
Std Dev 228.1

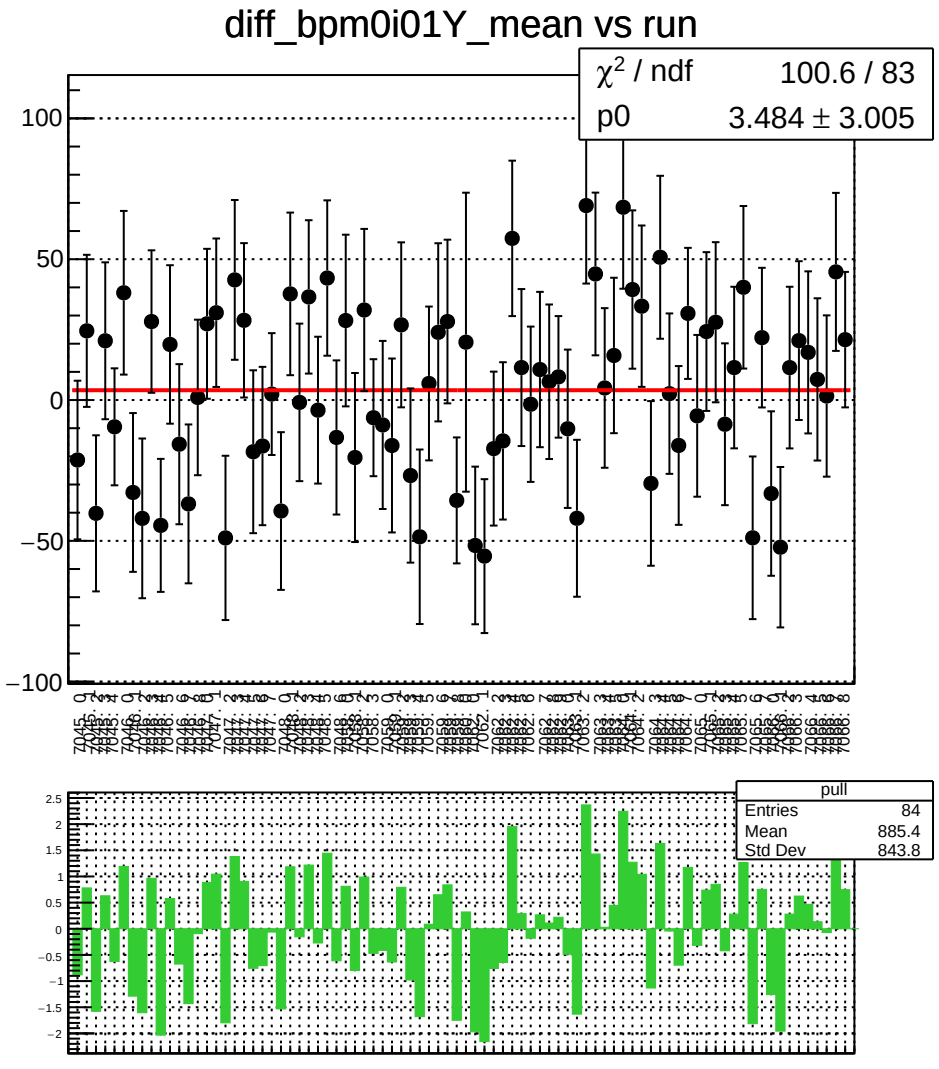

pull1D
Entries 84
Mean 0.02062
Std Dev 1.058

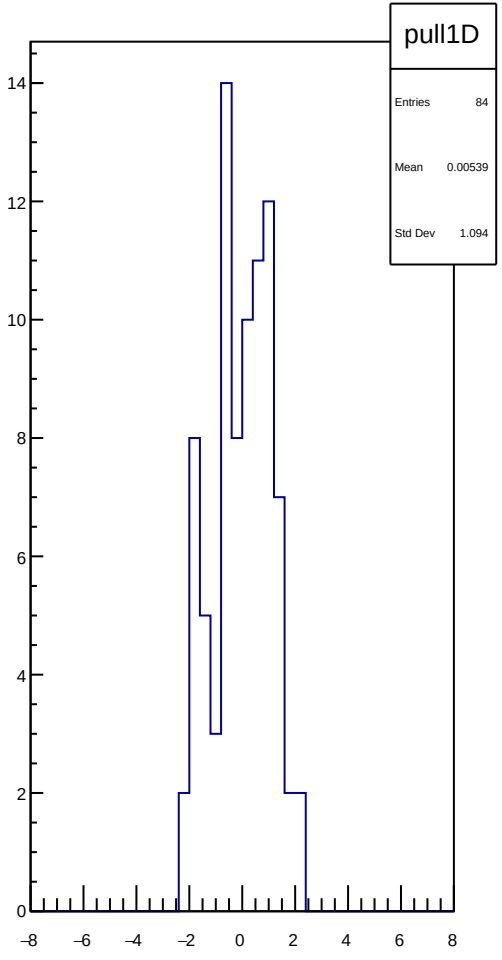

diff_cav4dY_rms vs run
χ² / ndf 2.425e+04 / 83
p0 334.7 ± 0.2671
420
400
380
360
340
320
300
280
260

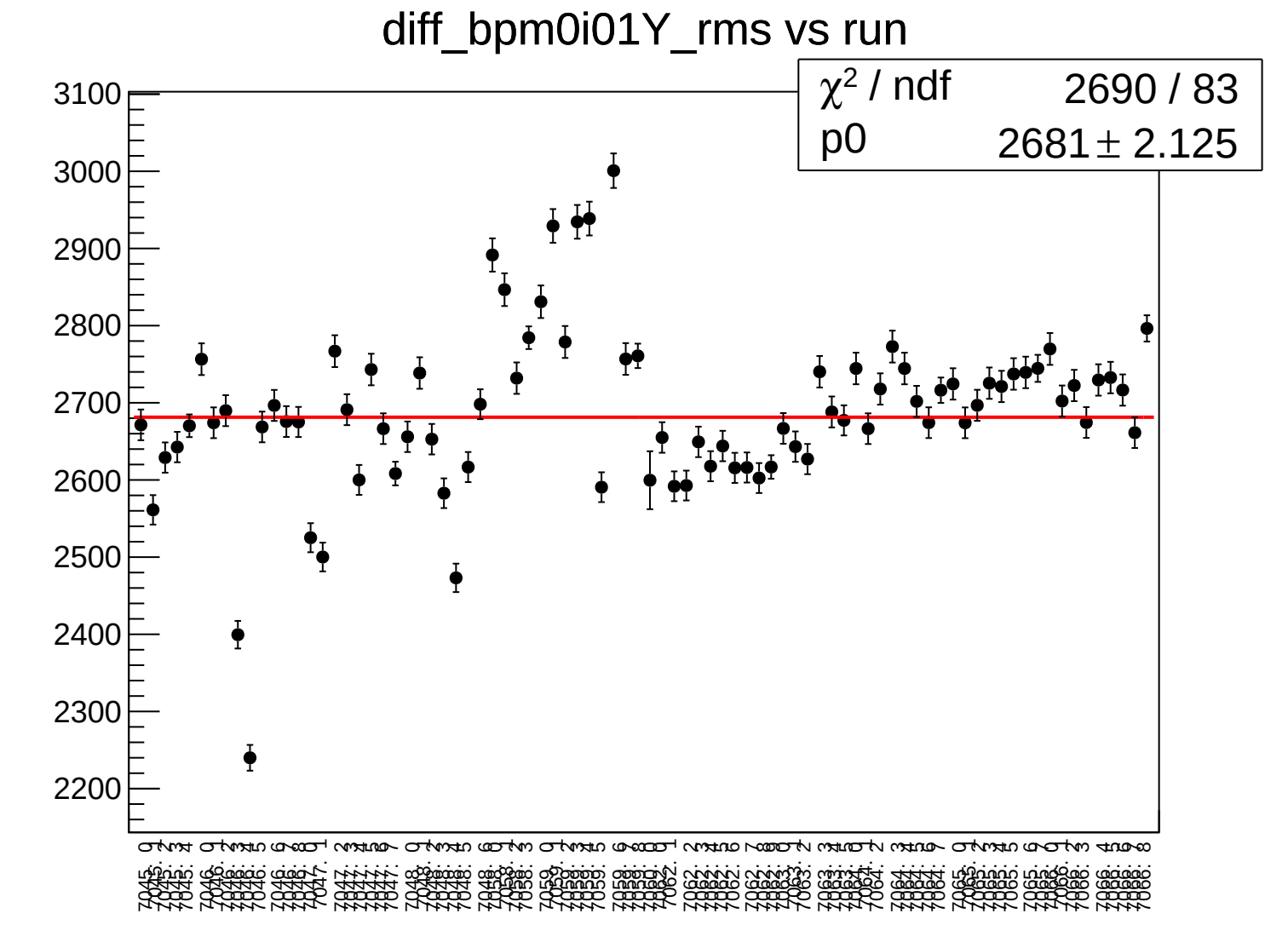

diff_bpm0i01X_mean vs run
χ² / ndf 96.47 / 83
p0 2.32 ± 3.17
100
50
0
−50
−100
pull
Entries 84
Mean 422.4
Std Dev 373.7
2
1
0
−1
−2

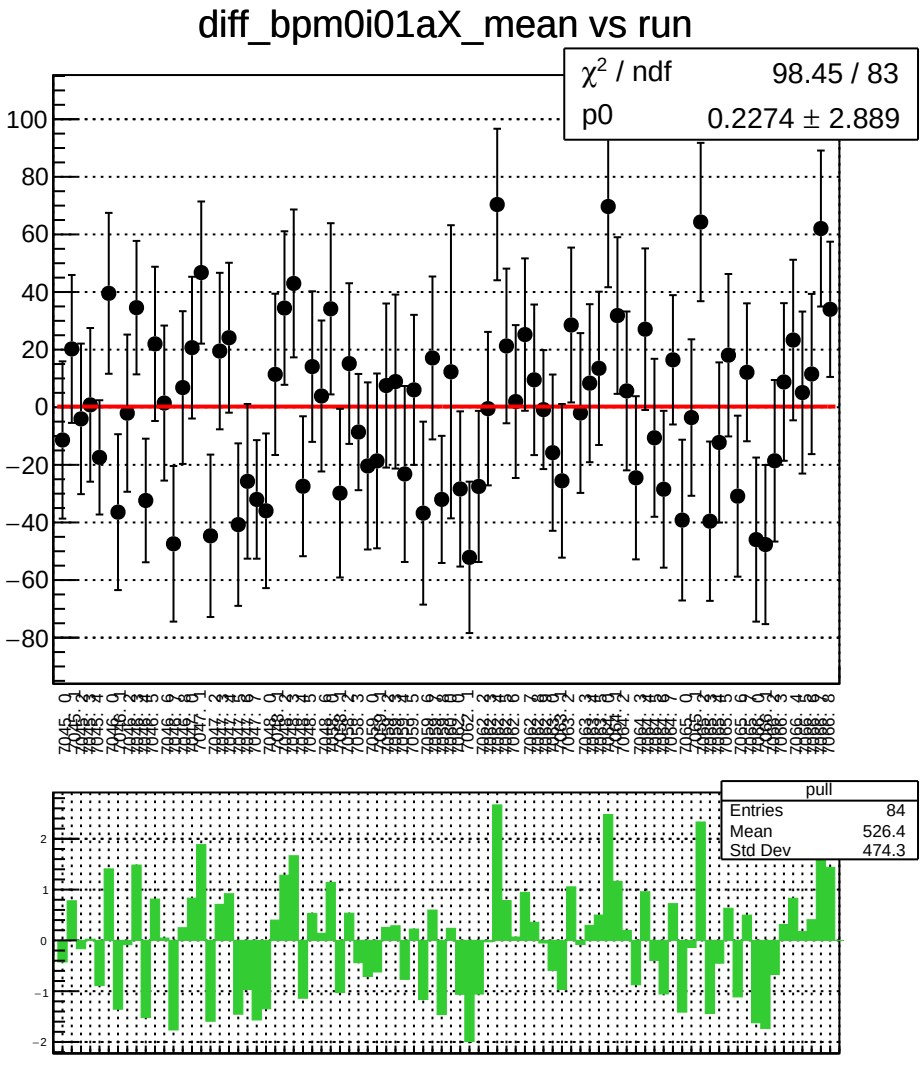

pull1D
Entries 84
Mean 0.00609
Std Dev 1.072
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

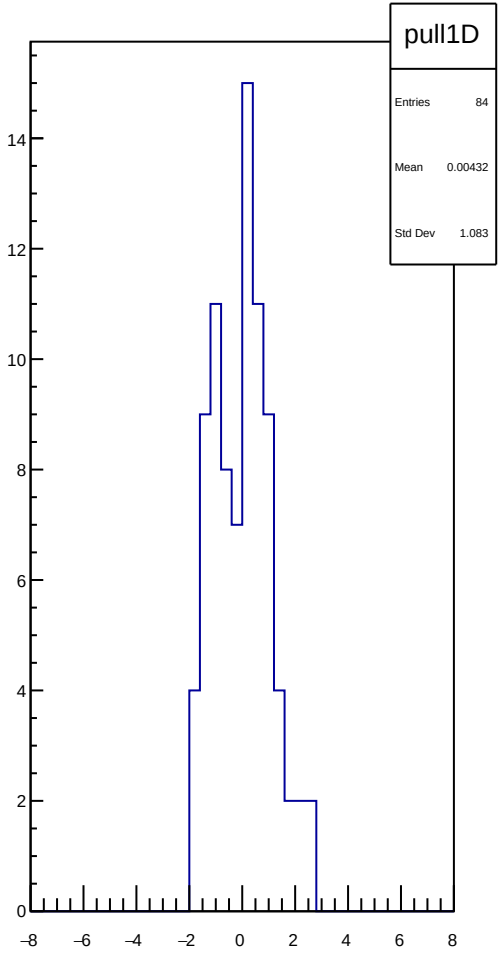

diff_bpm0i01X_rms vs run
χ² / ndf 5503 / 83
p0 2825 ± 2.241
3400
3200
3000
2800
2600
2400
2200

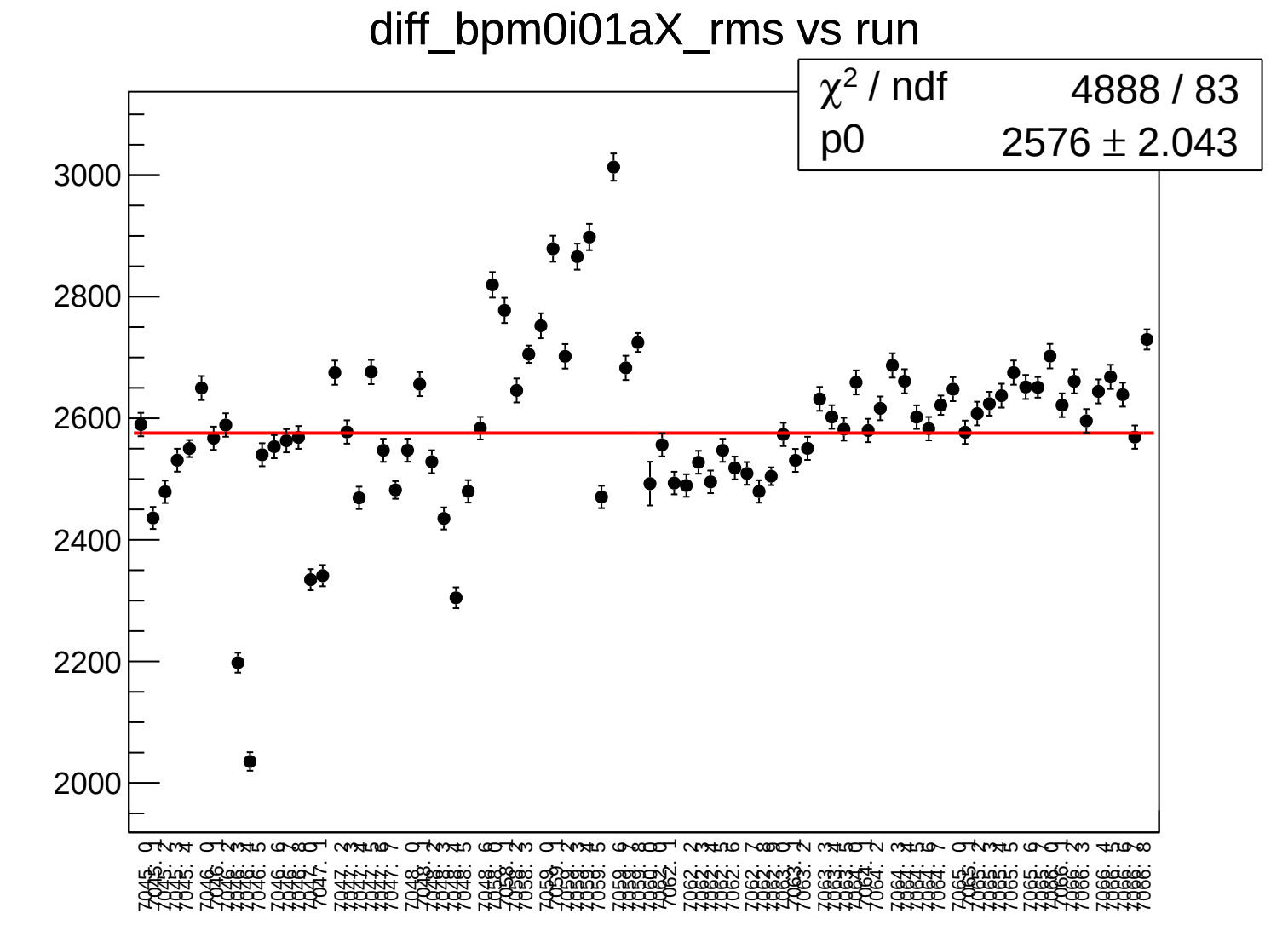

diff_bpm0i01Y_mean vs run
χ² / ndf 100.6 / 83
p0 3.484 ± 3.005
pull
Entries 84
Mean 885.4
Std Dev 843.8

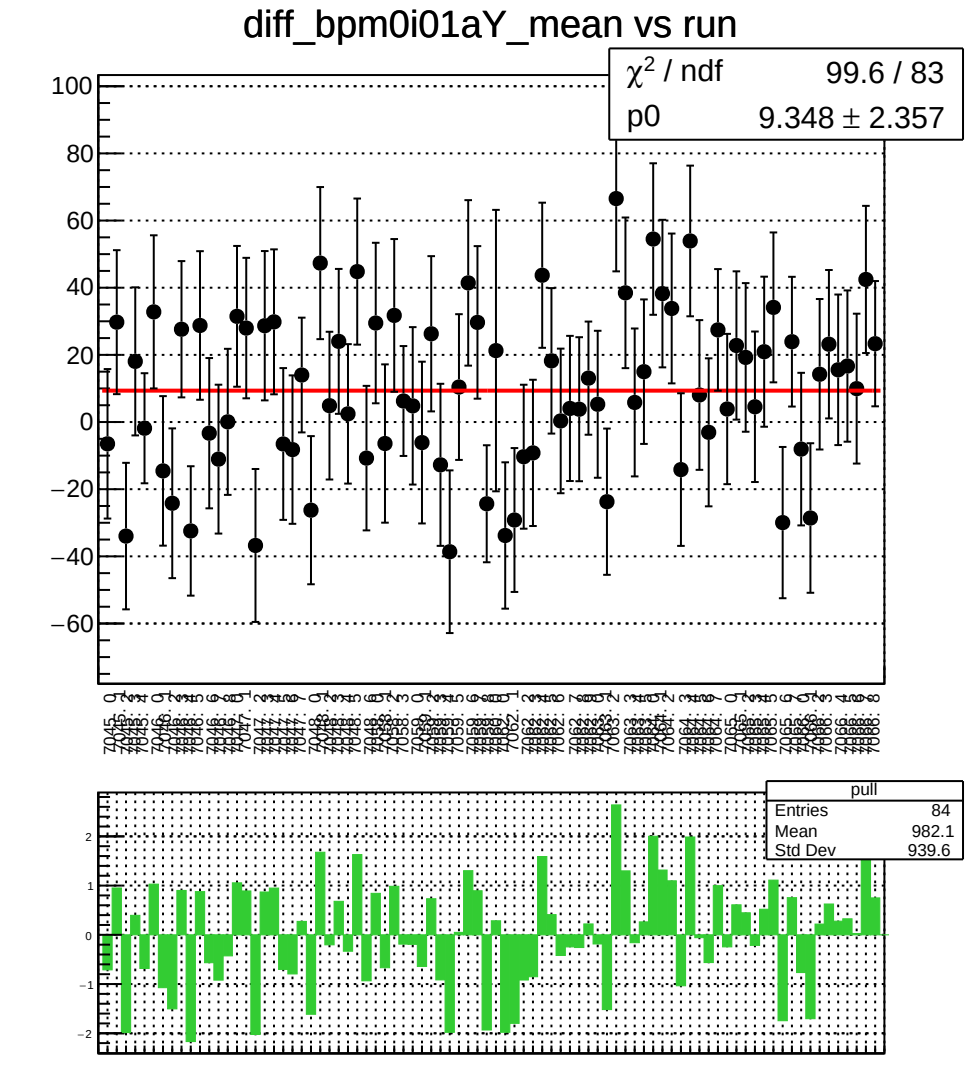

pull1D
Entries 84
Mean 0.00539
Std Dev 1.094

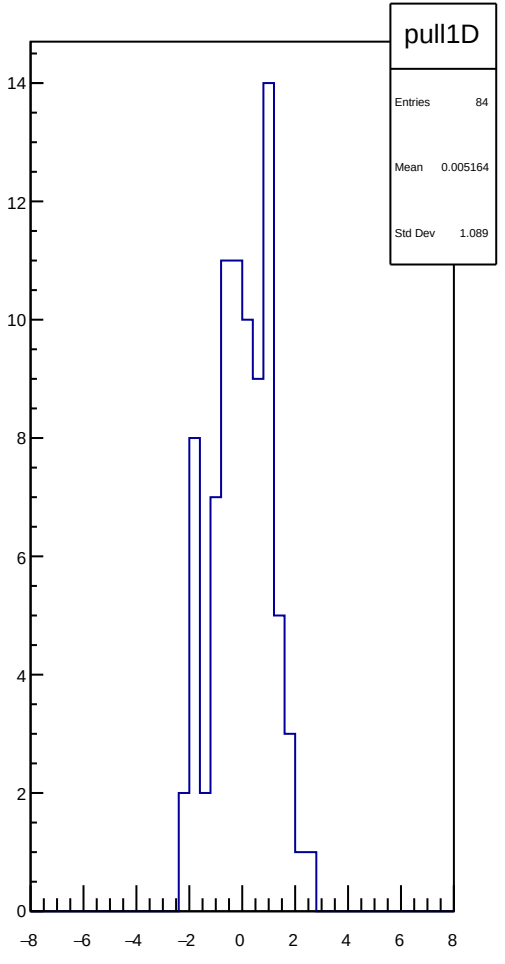

diff_bpm0i01Y_rms vs run
χ² / ndf 2690 / 83
p0 2681 ± 2.125
3100
3000
2900
2800
2700
2600
2500
2400
2300
2200

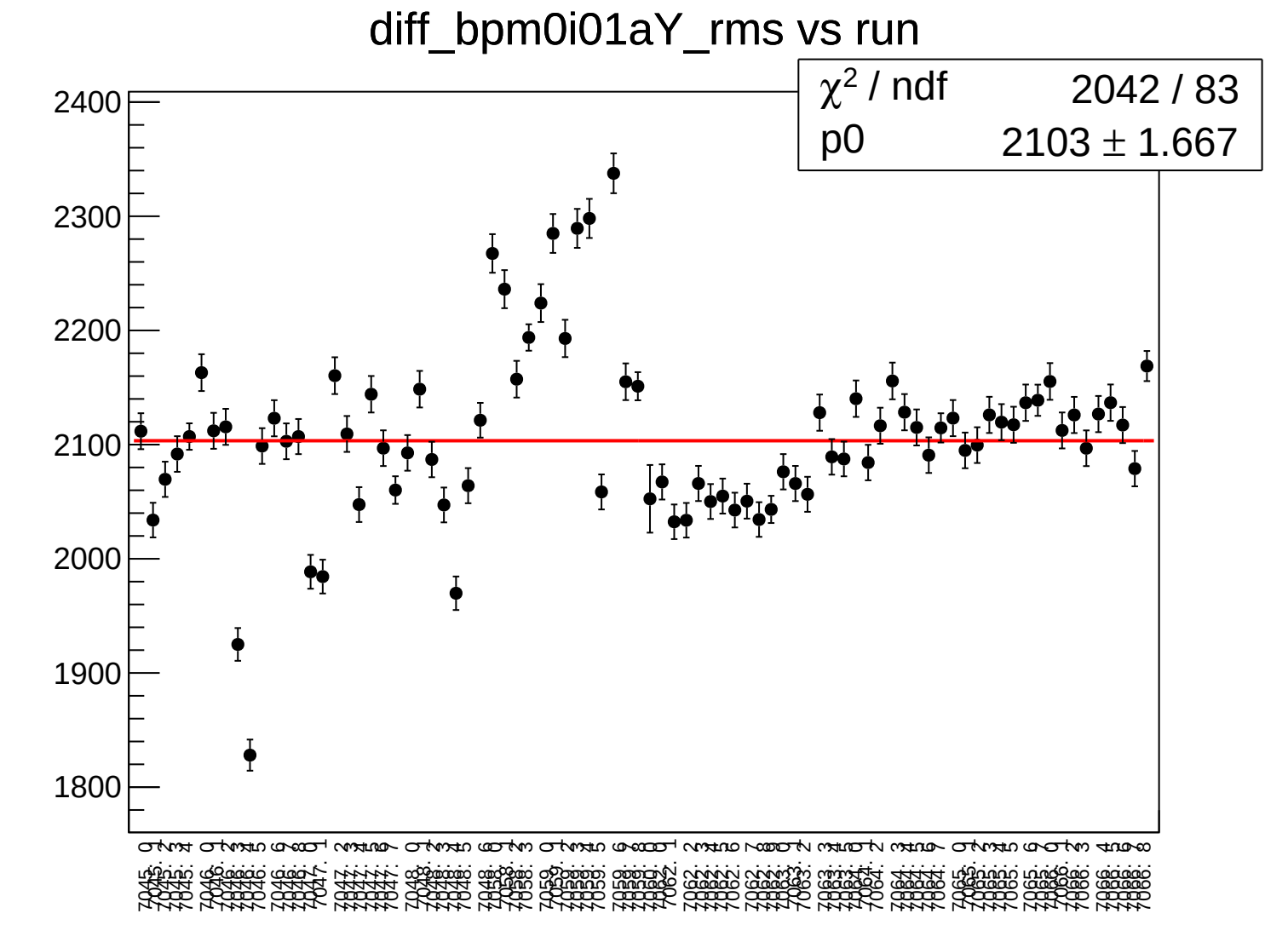

diff_bpm0i01aX_mean vs run
χ² / ndf 98.45 / 83
p0 0.2274 ± 2.889
pull
Entries 84
Mean 526.4
Std Dev 474.3

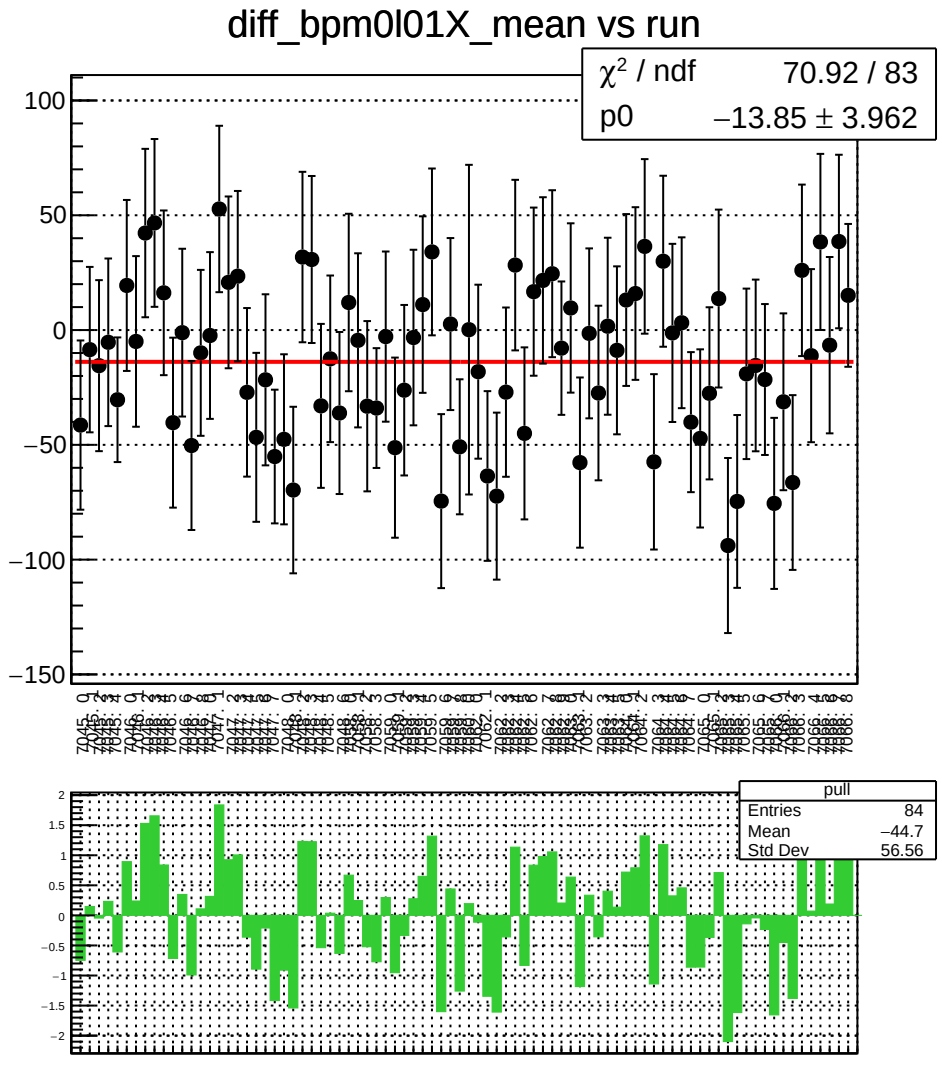

pull1D
Entries 84
Mean 0.00432
Std Dev 1.083

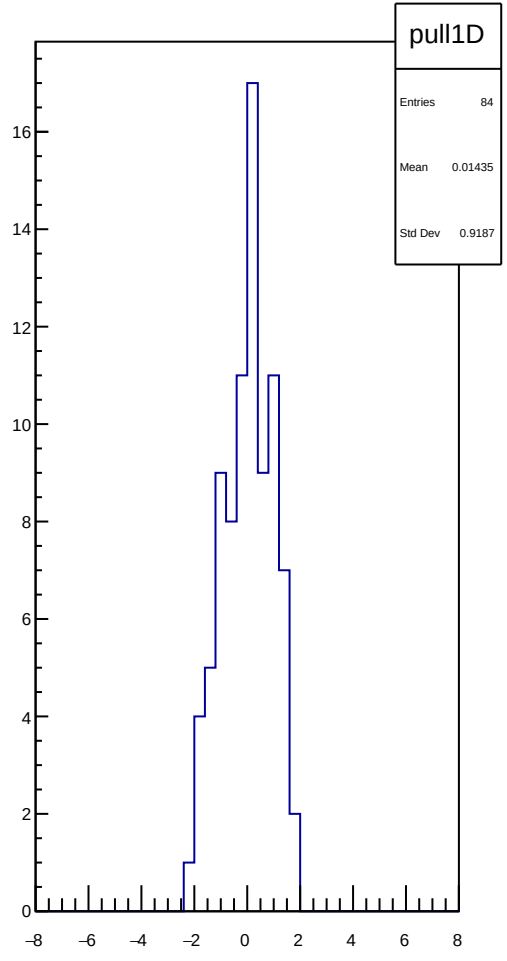

diff_bpm0i01aX_rms vs run
χ² / ndf 4888 / 83
p0 2576 ± 2.043
3000
2800
2600
2400
2200
2000

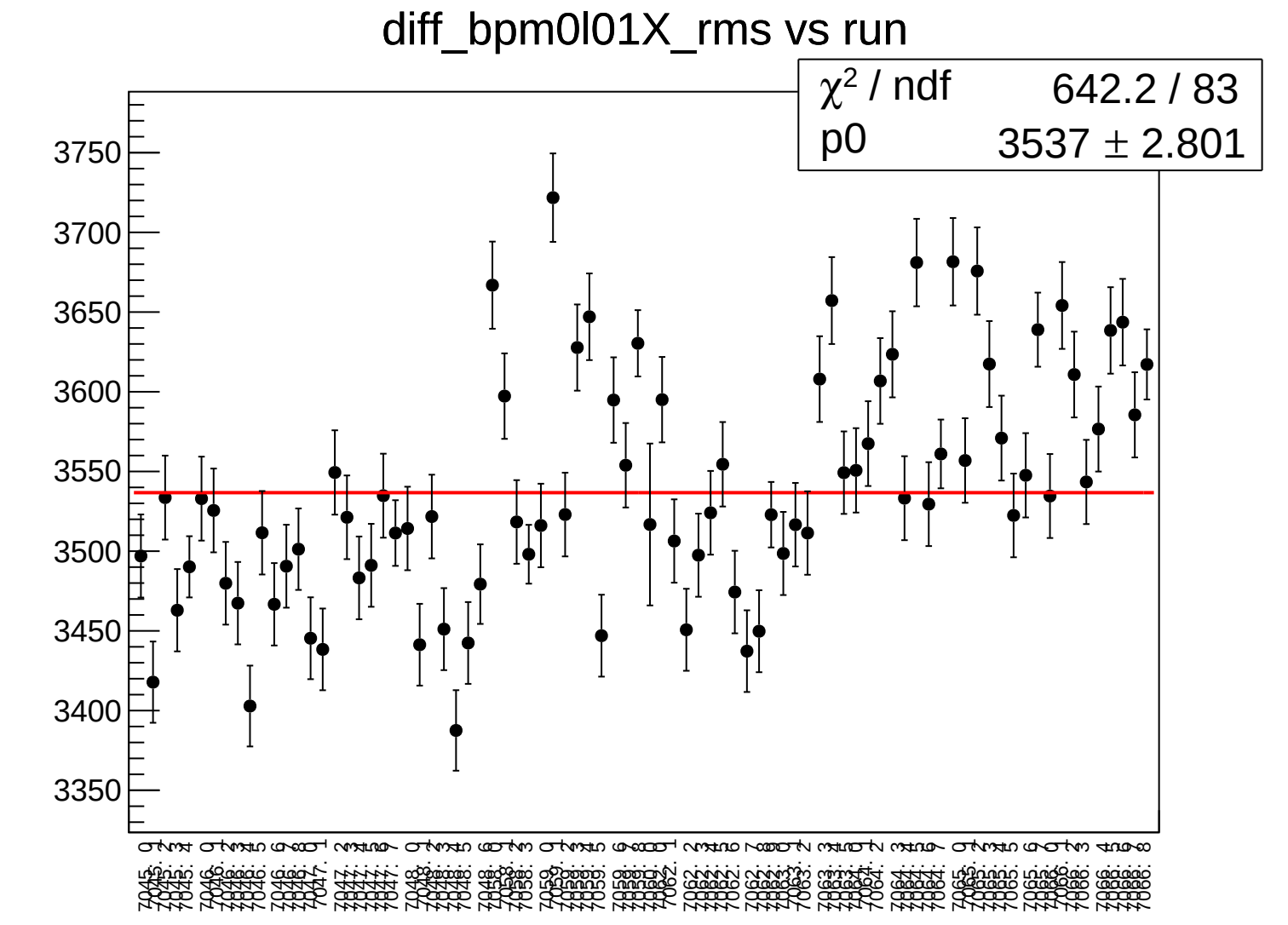

diff_bpm0i01aY_mean vs run
χ² / ndf 99.6 / 83
p0 9.348 ± 2.357
pull
Entries 84
Mean 982.1
Std Dev 939.6

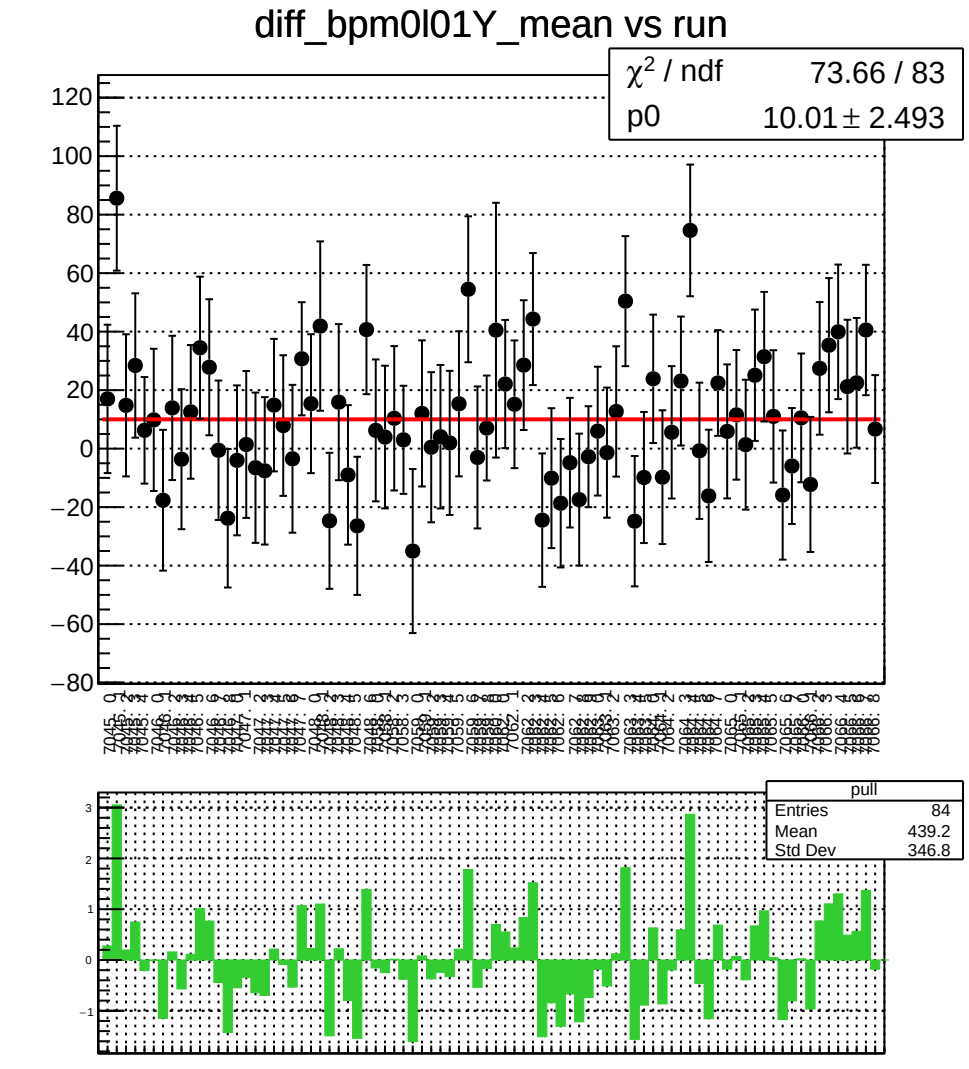

pull1D
Entries 84
Mean 0.005164
Std Dev 1.089

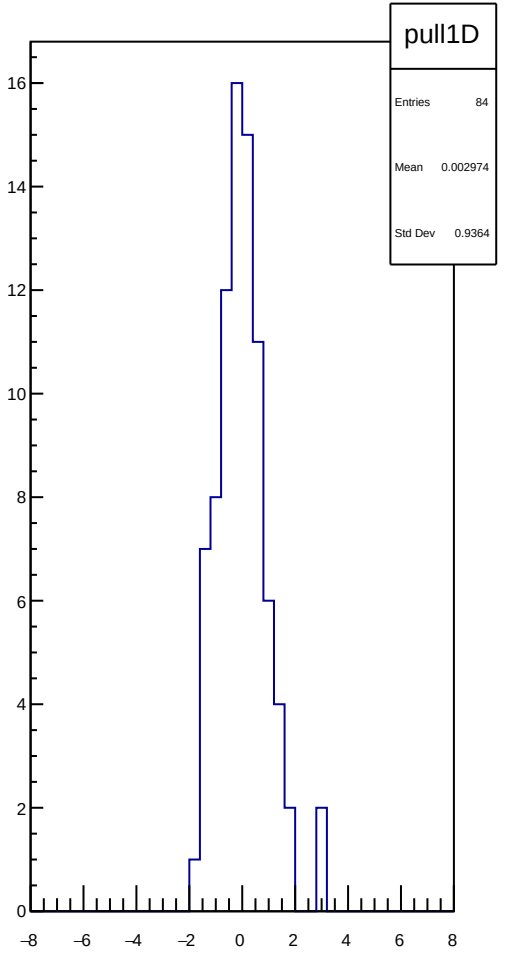

diff_bpm0i01aY_rms vs run
χ² / ndf 2042 / 83
p0 2103 ± 1.667
2400
2300
2200
2100
2000
1900
1800

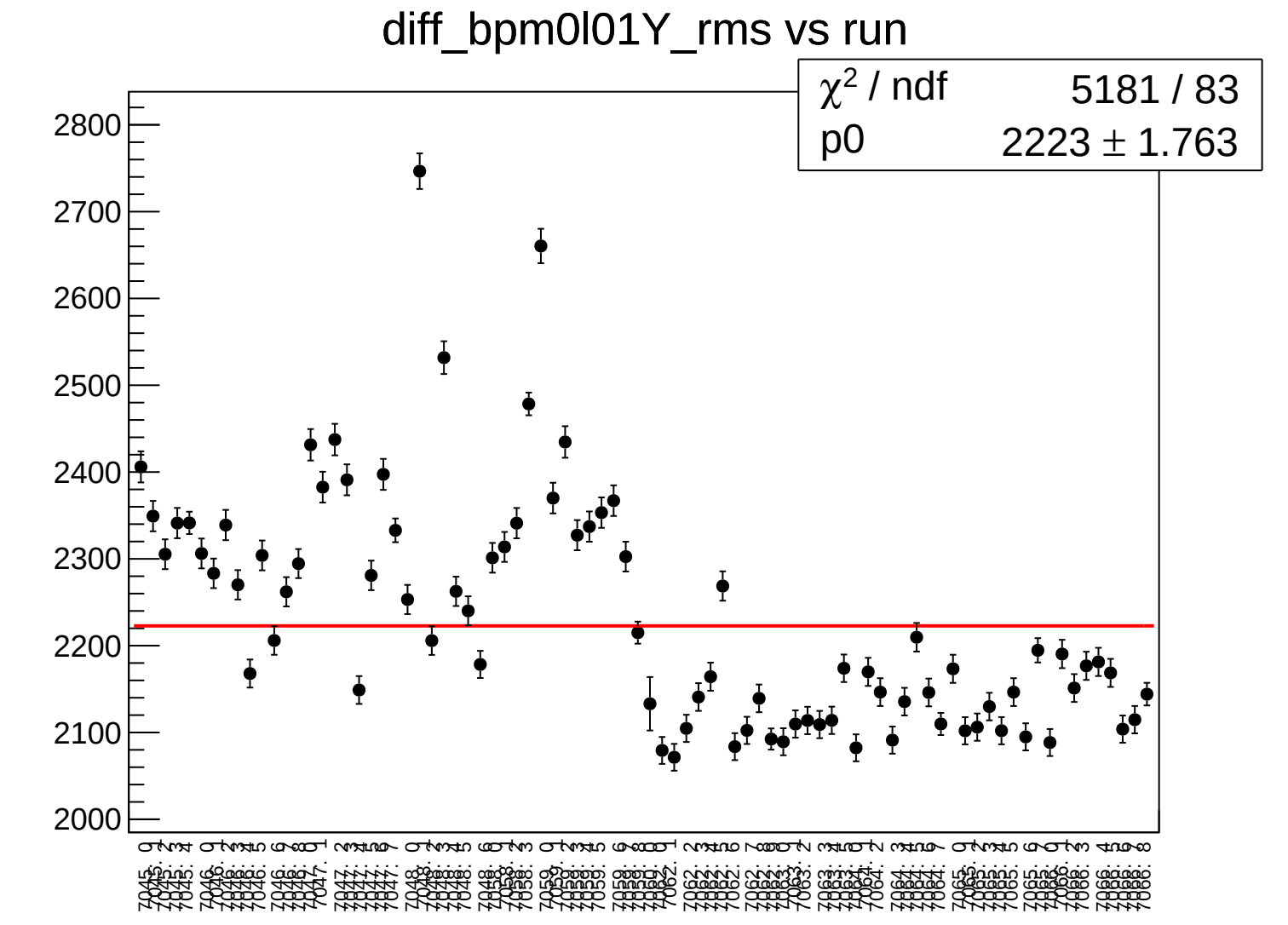

diff_bpm0l01X_mean vs run
χ^2 / ndf 70.92 / 83
p0 −13.85 ± 3.962
100
50
0
−50
−100
−150
pull
Entries 84
Mean −44.7
Std Dev 56.56
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

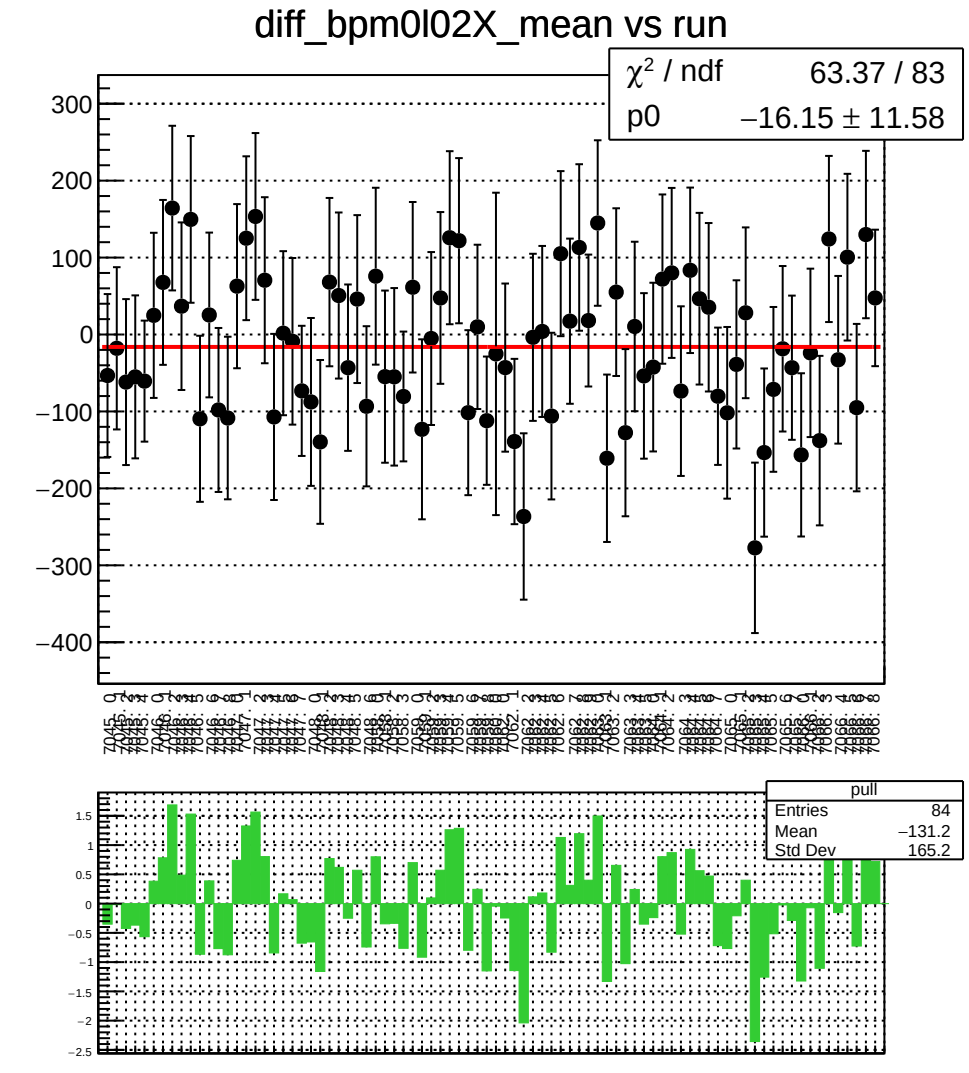

pull1D
Entries 84
Mean 0.01435
Std Dev 0.9187
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

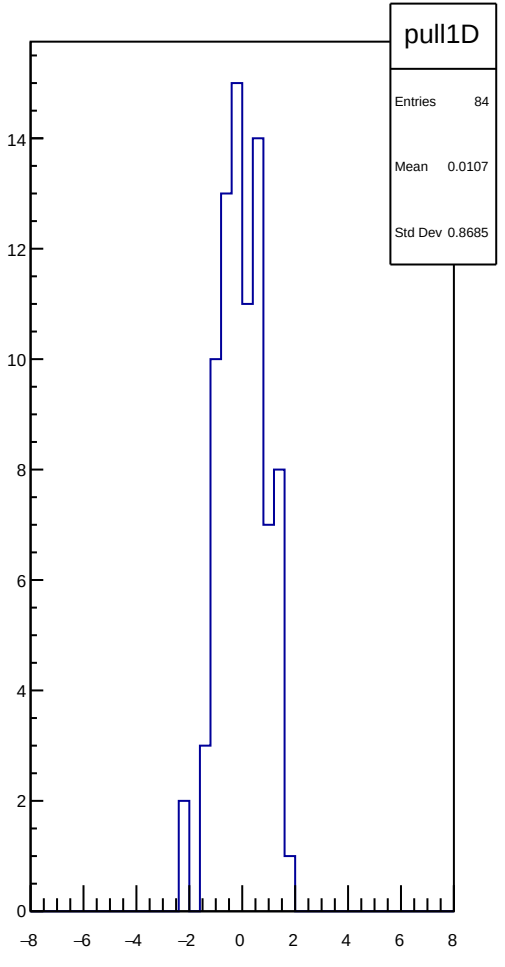

diff_bpm0l01X_rms vs run
χ² / ndf 642.2 / 83
p0 3537 ± 2.801
3750
3700
3650
3600
3550
3500
3450
3400
3350

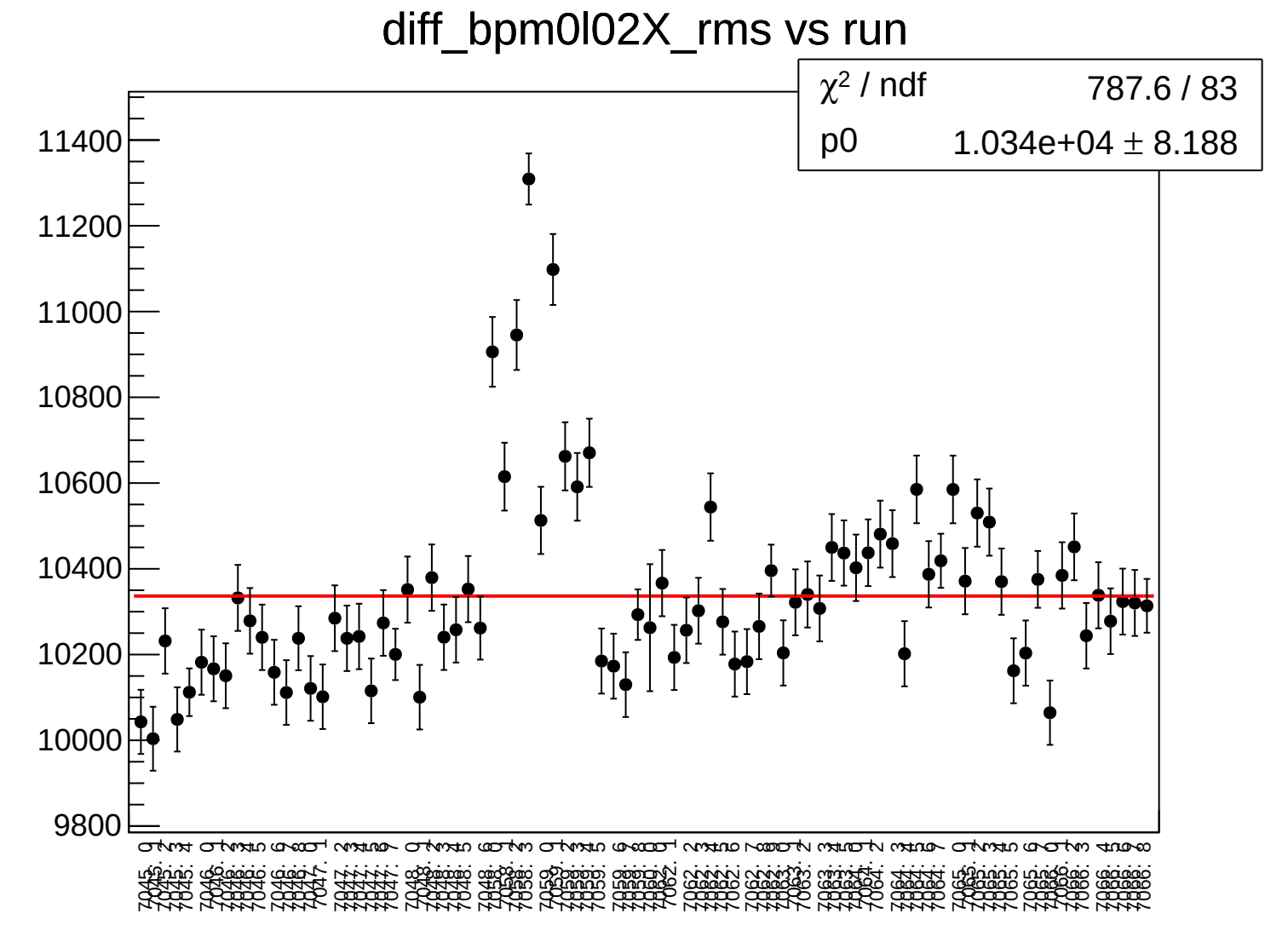

diff_bpm0l01Y_mean vs run
χ² / ndf 73.66 / 83
p0 10.01 ± 2.493
pull
Entries 84
Mean 439.2
Std Dev 346.8

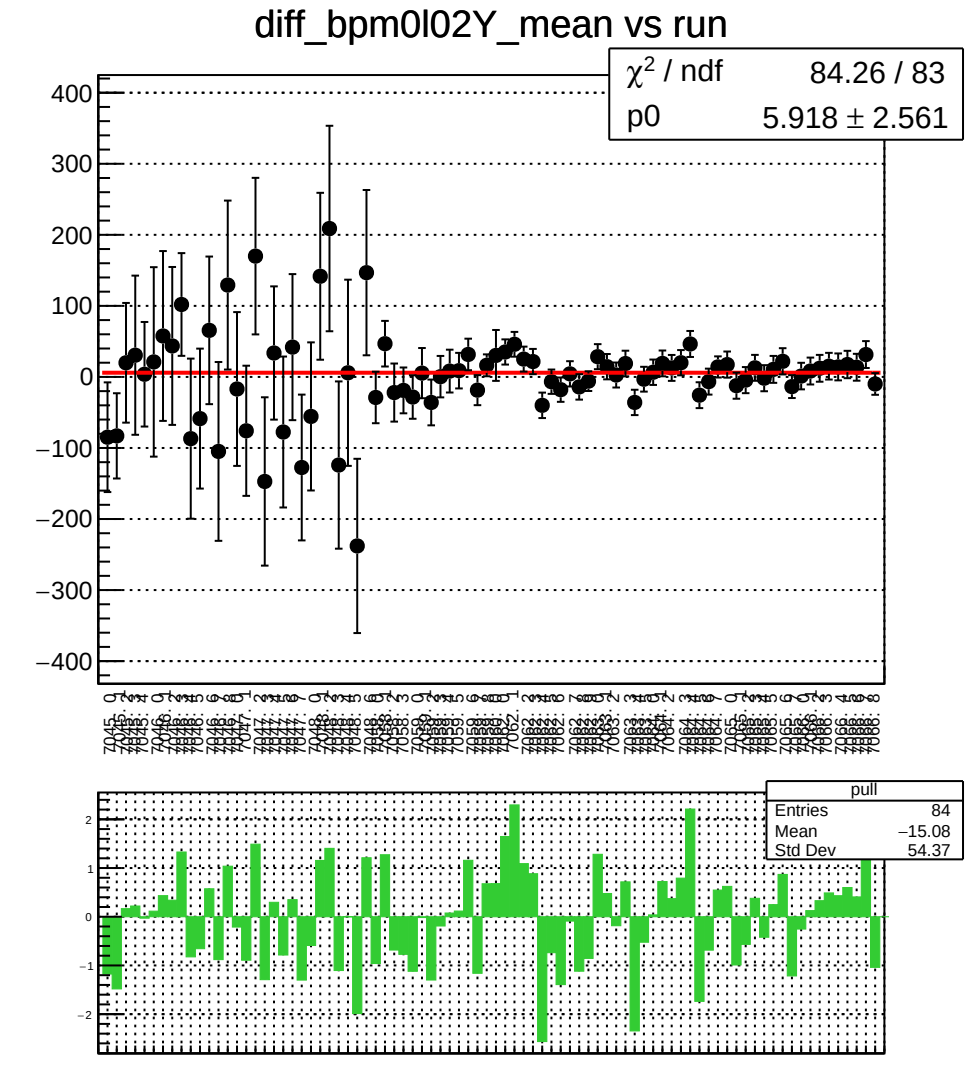

pull1D
Entries 84
Mean 0.002974
Std Dev 0.9364

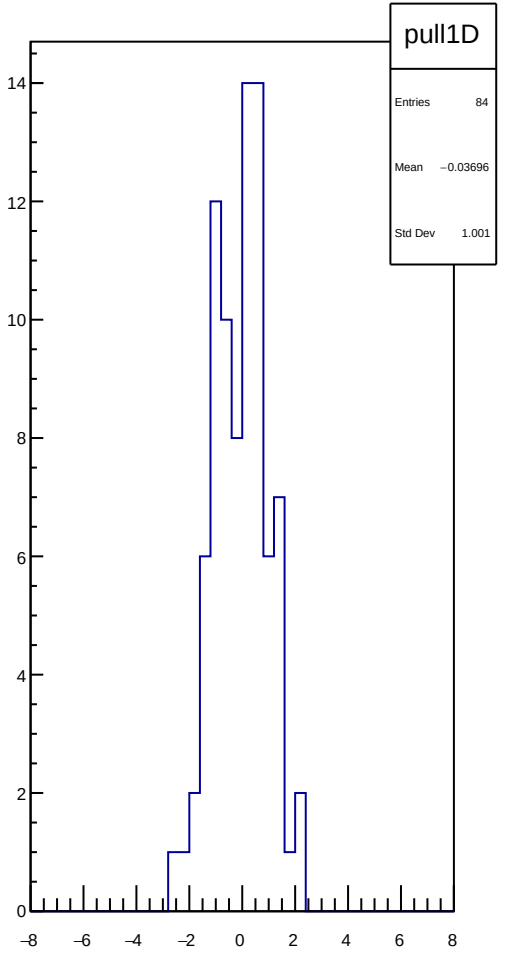

diff_bpm0l01Y_rms vs run
χ^2 / ndf 5181 / 83
p0 2223 ± 1.763
2800
2700
2600
2500
2400
2300
2200
2100
2000

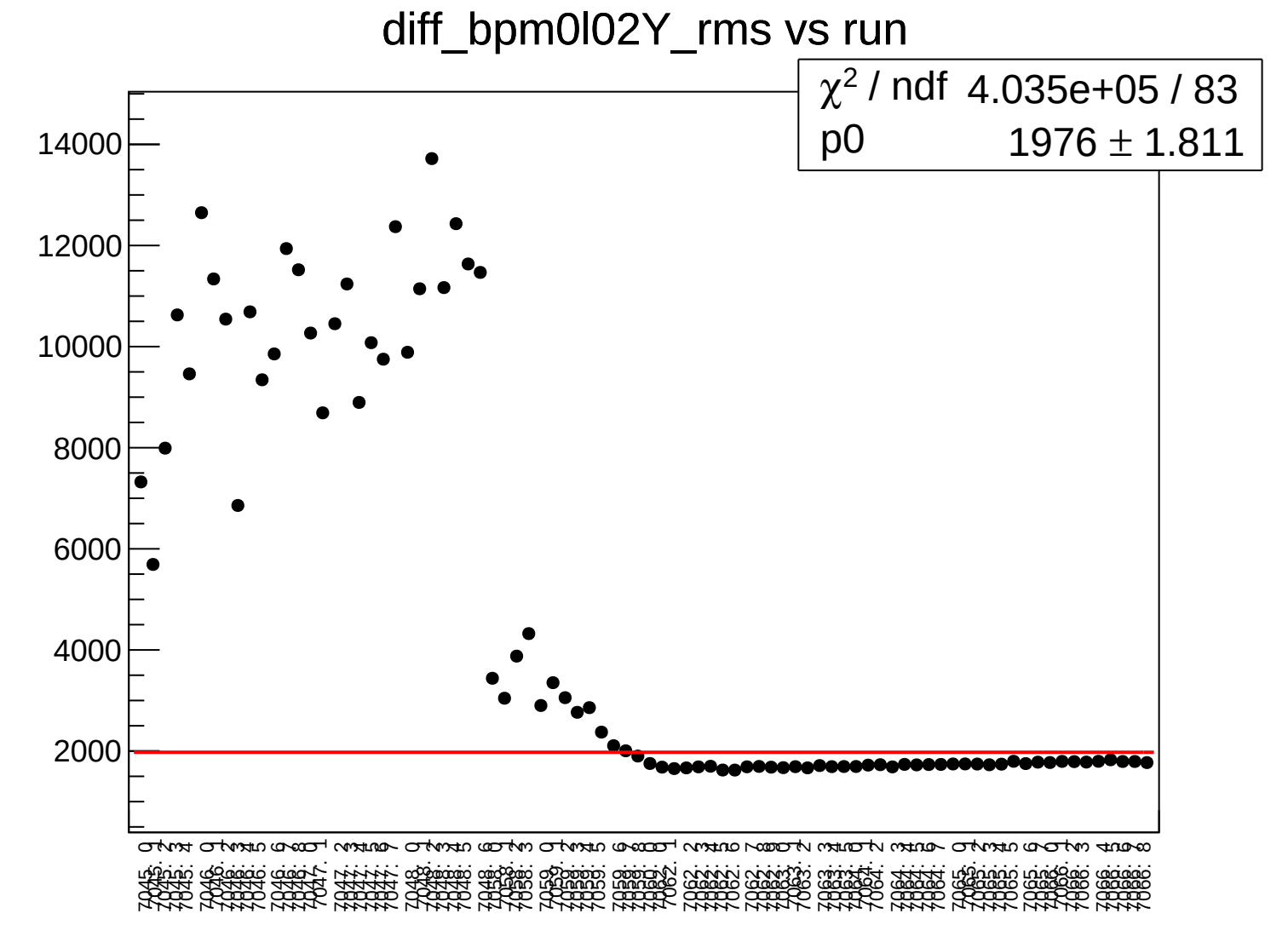

diff_bpm0l02X_mean vs run
χ² / ndf 63.37 / 83
p0 −16.15 ± 11.58
pull
Entries 84
Mean −131.2
Std Dev 165.2

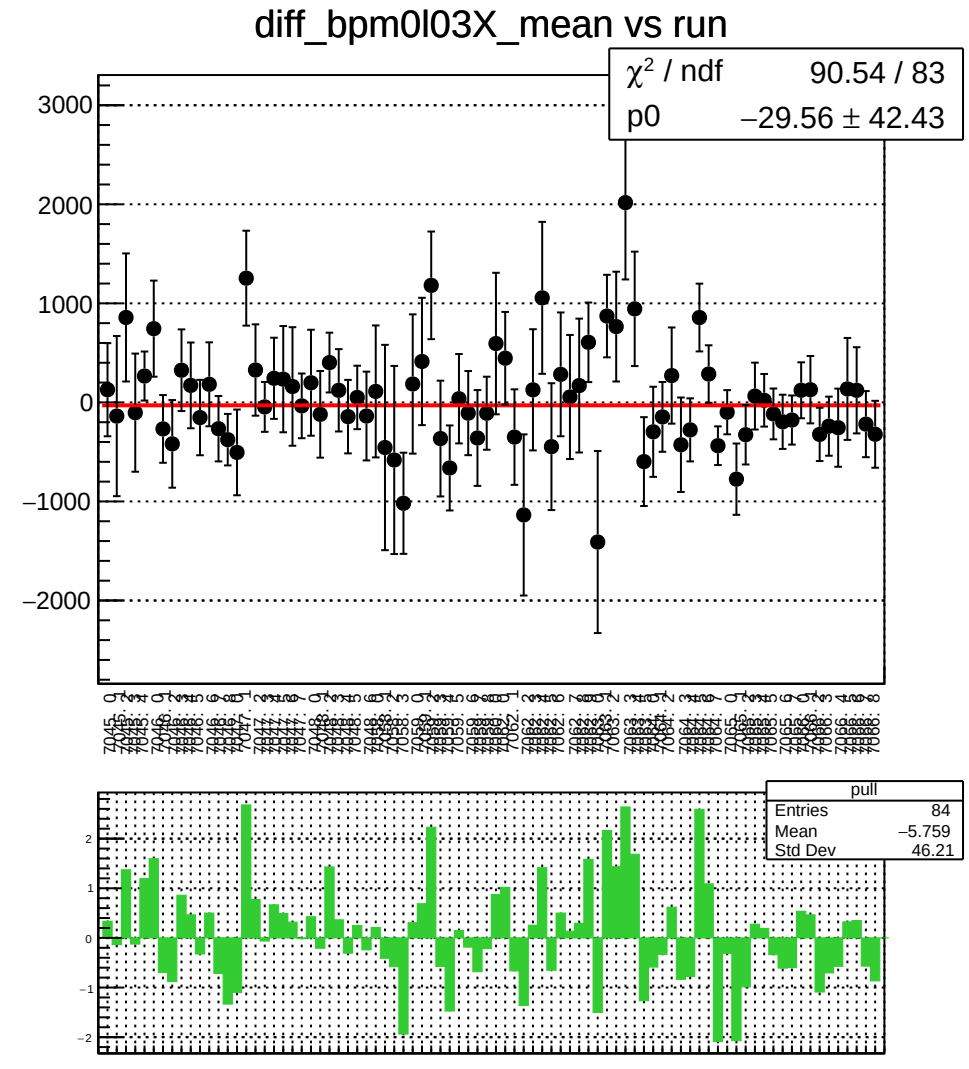

pull1D
Entries 84
Mean 0.0107
Std Dev 0.8685

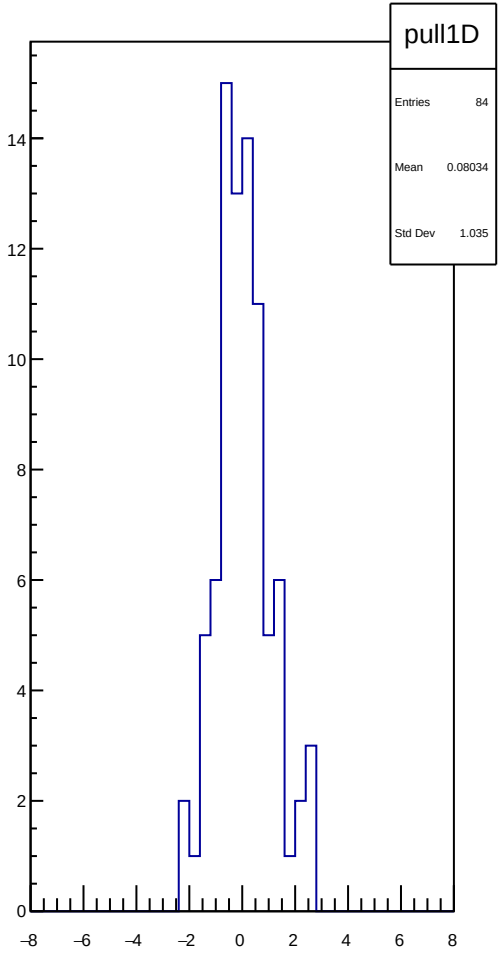

diff_bpm0l02X_rms vs run
χ² / ndf 787.6 / 83
p0 1.034e+04 ± 8.188
11400
11200
11000
10800
10600
10400
10200
10000
9800

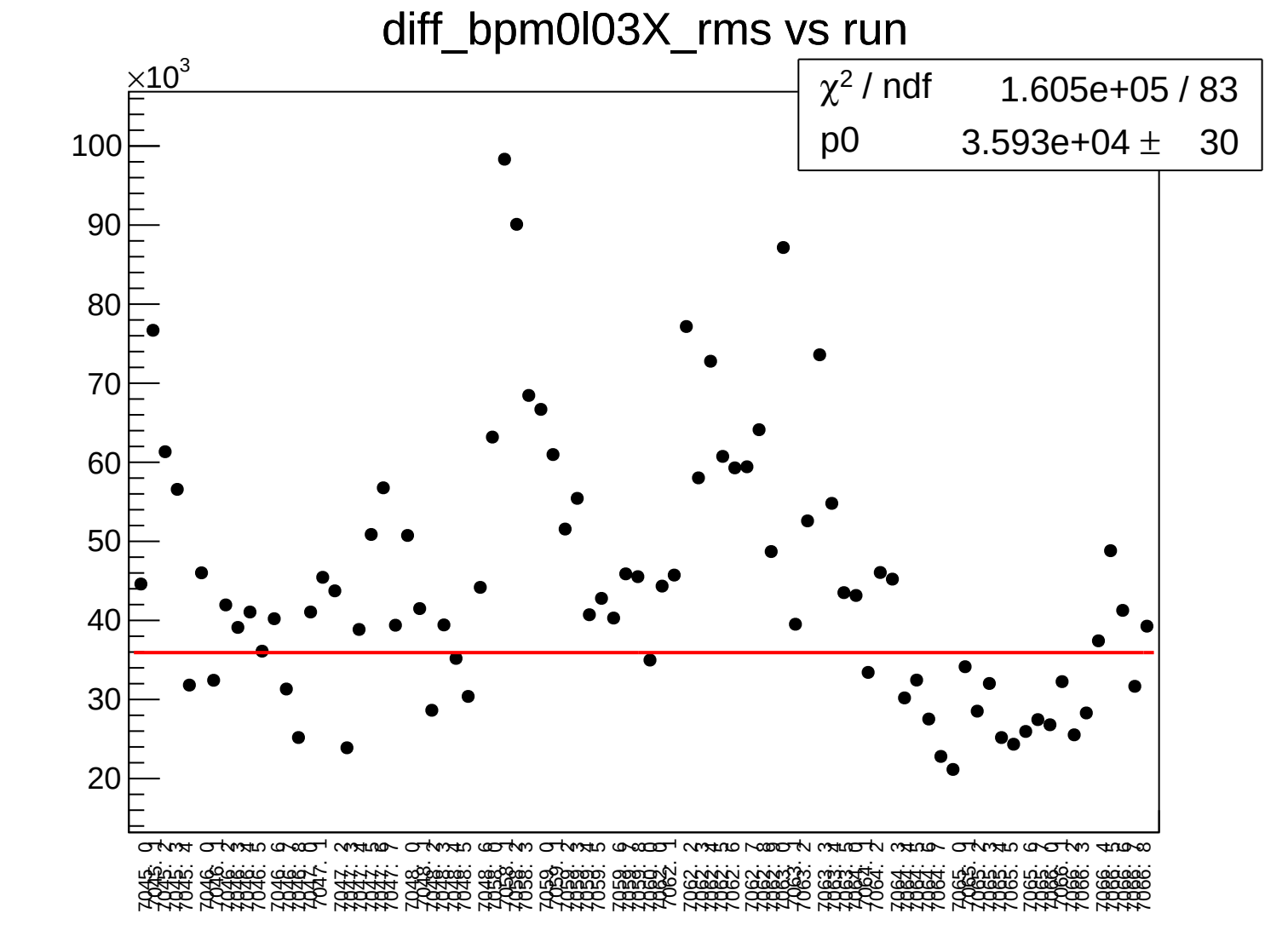

diff_bpm0l02Y_mean vs run
χ² / ndf 84.26 / 83
p0 5.918 ± 2.561
pull
Entries 84
Mean −15.08
Std Dev 54.37

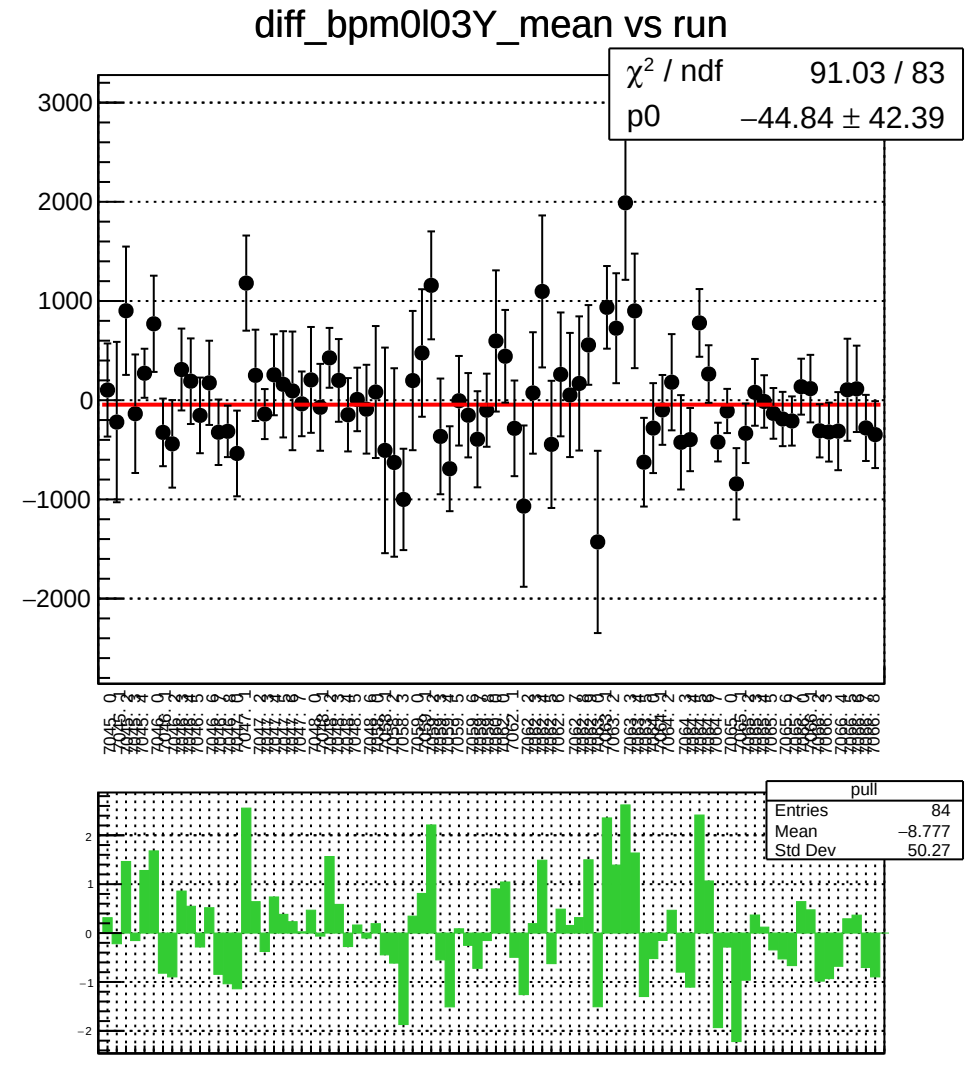

pull1D
Entries 84
Mean −0.03696
Std Dev 1.001

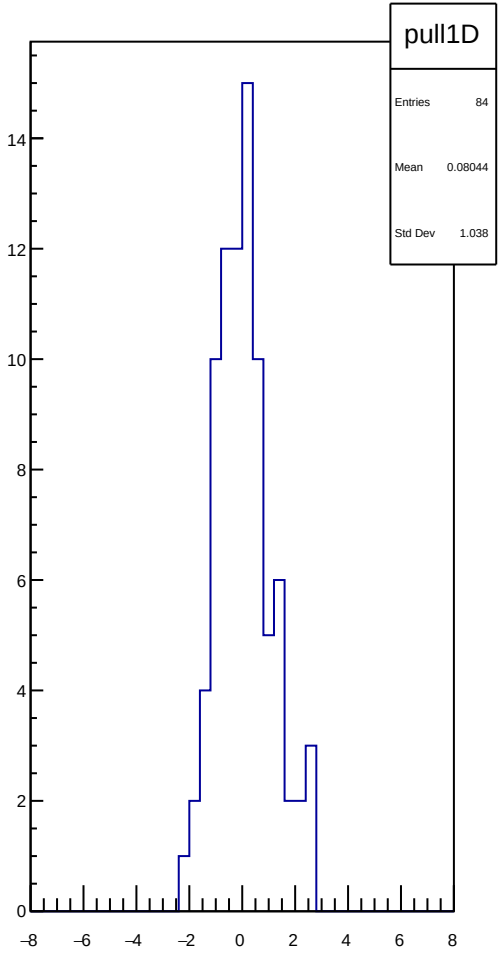

diff_bpm0l02Y_rms vs run
χ² / ndf 4.035e+05 / 83
p0 1976 ± 1.811
14000
12000
10000
8000
6000
4000
2000

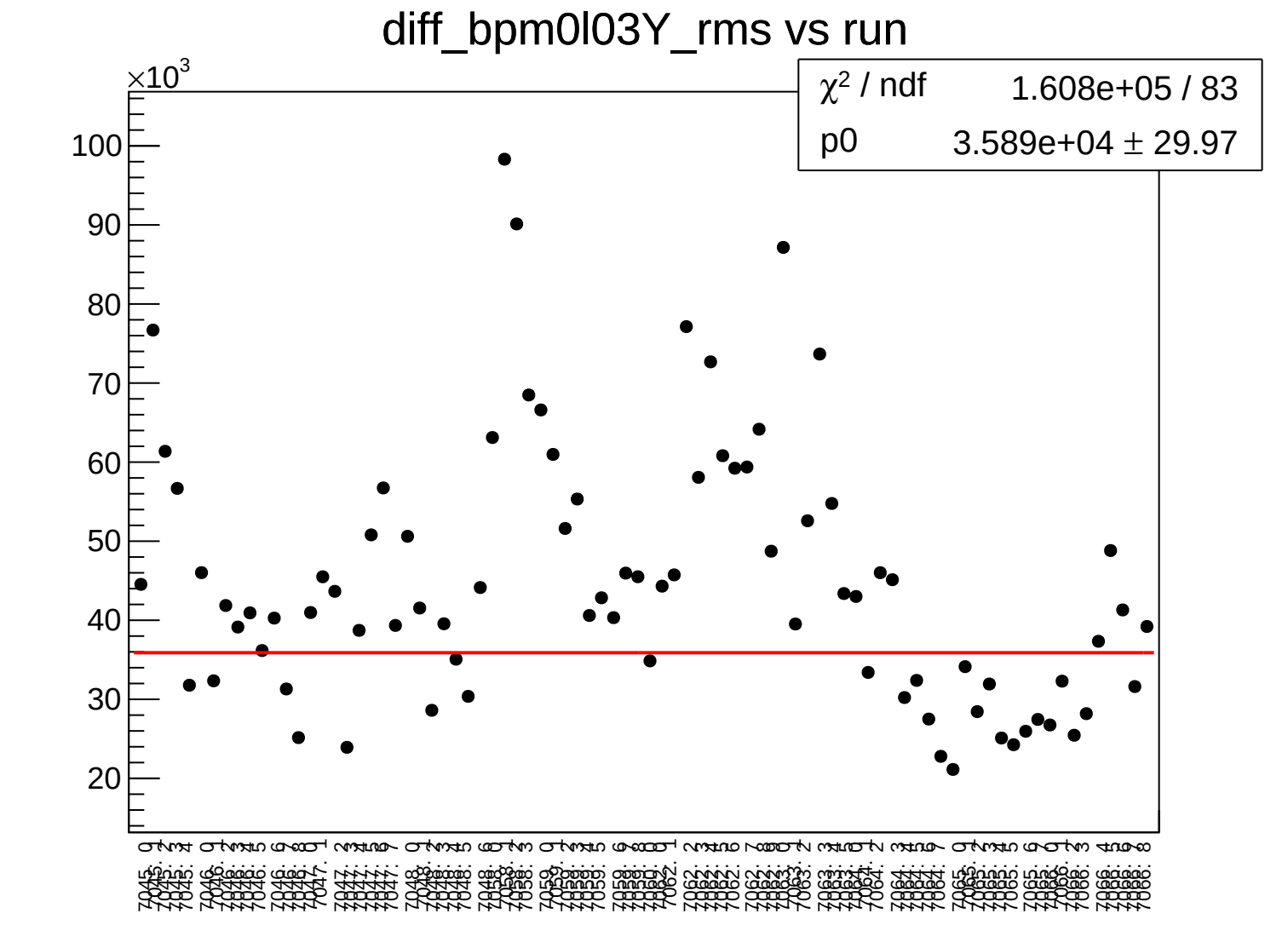

diff_bpm0l03X_mean vs run
χ² / ndf 90.54 / 83
p0 −29.56 ± 42.43
pull
Entries 84
Mean −5.759
Std Dev 46.21

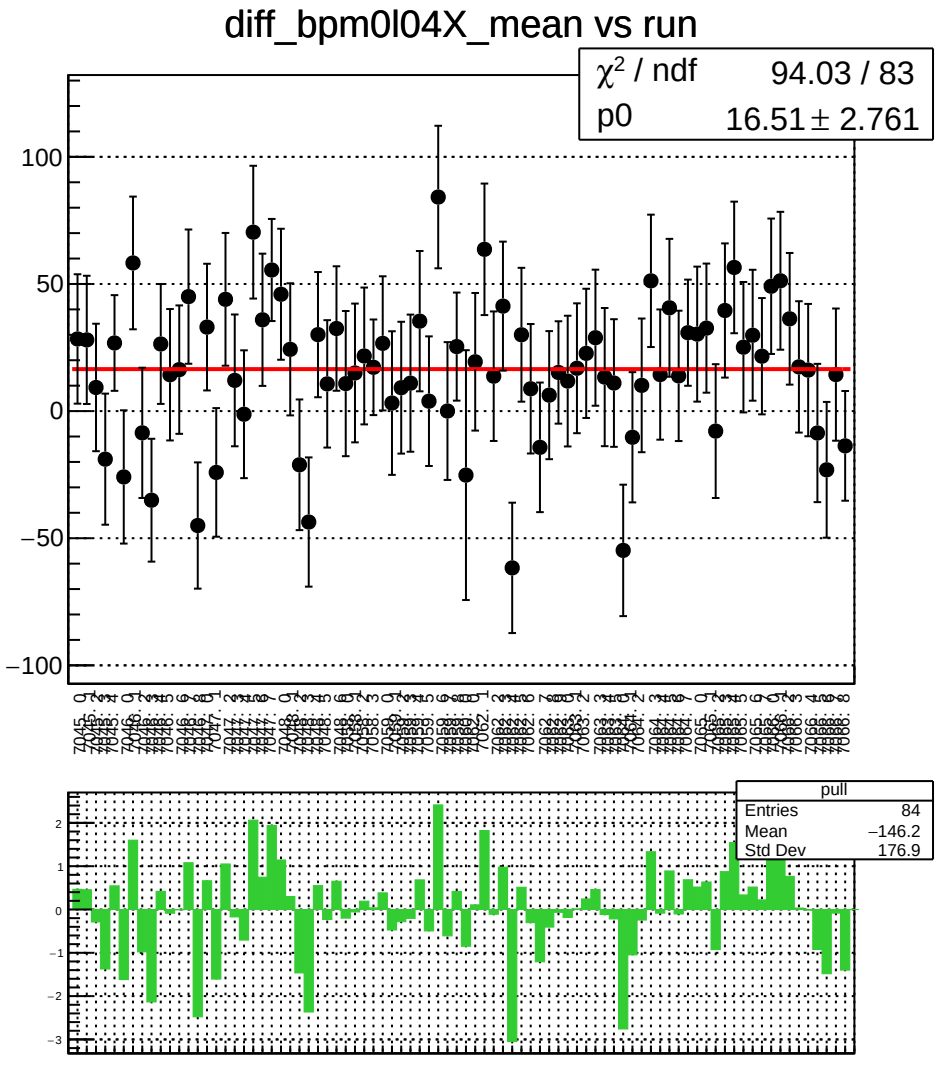

pull1D
Entries 84
Mean 0.08034
Std Dev 1.035

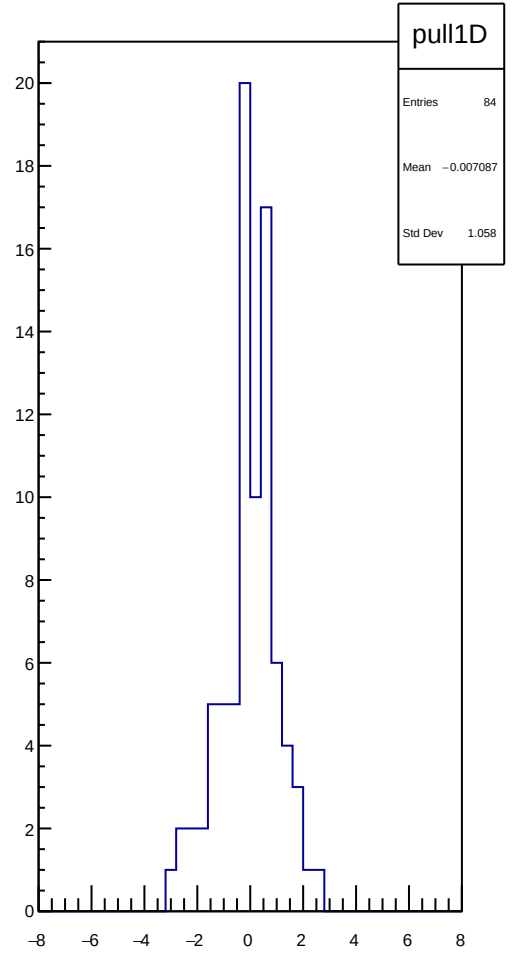

diff_bpm0l03X_rms vs run
×10^3
χ^2 / ndf 1.605e+05 / 83
p0 3.593e+04 ± 30
100
90
80
70
60
50
40
30
20

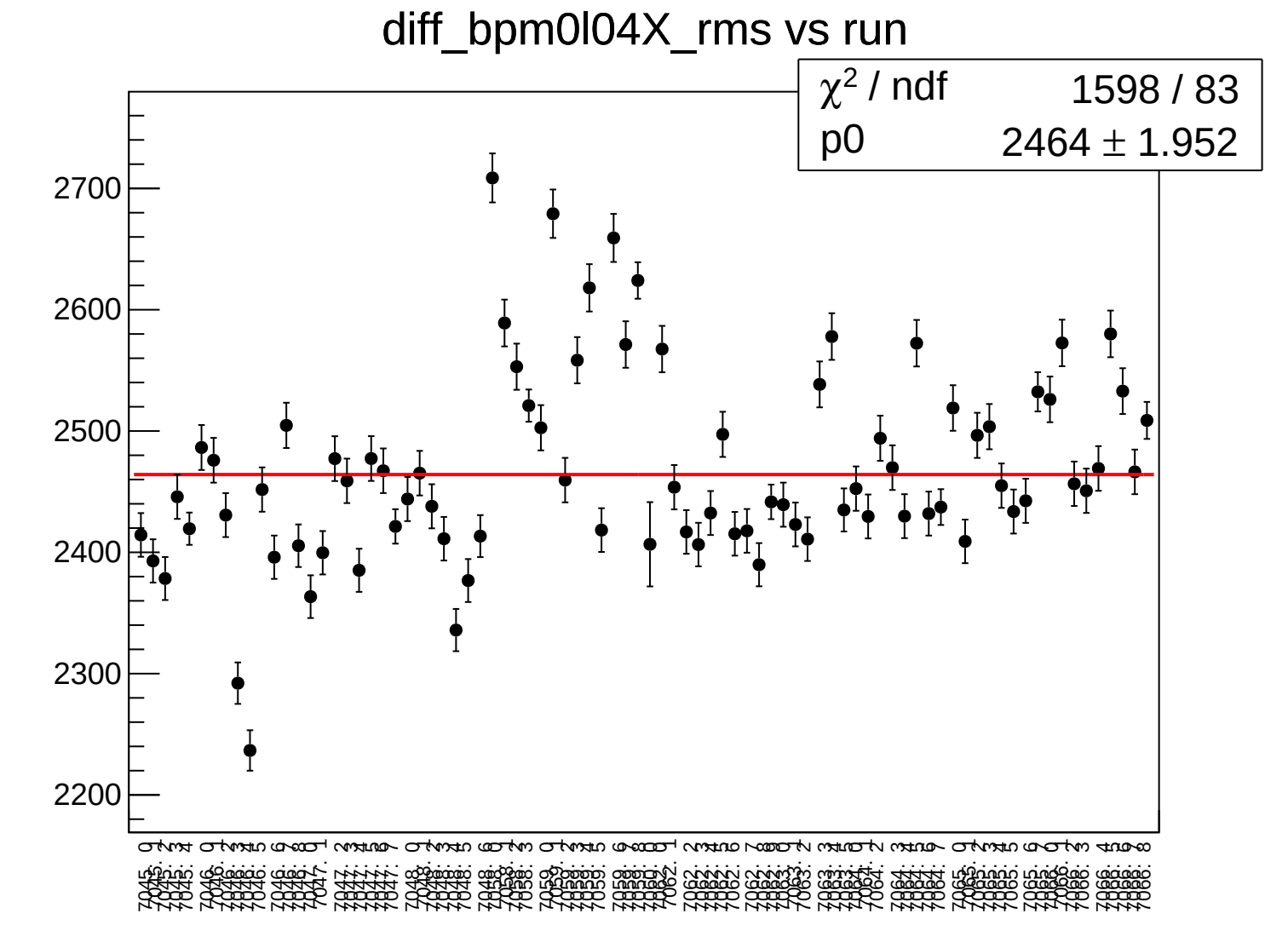

diff_bpm0l03Y_mean vs run
χ² / ndf 91.03 / 83
p0 −44.84 ± 42.39
3000
2000
1000
0
−1000
−2000
pull
Entries 84
Mean −8.777
Std Dev 50.27
2
1
0
−1
−2

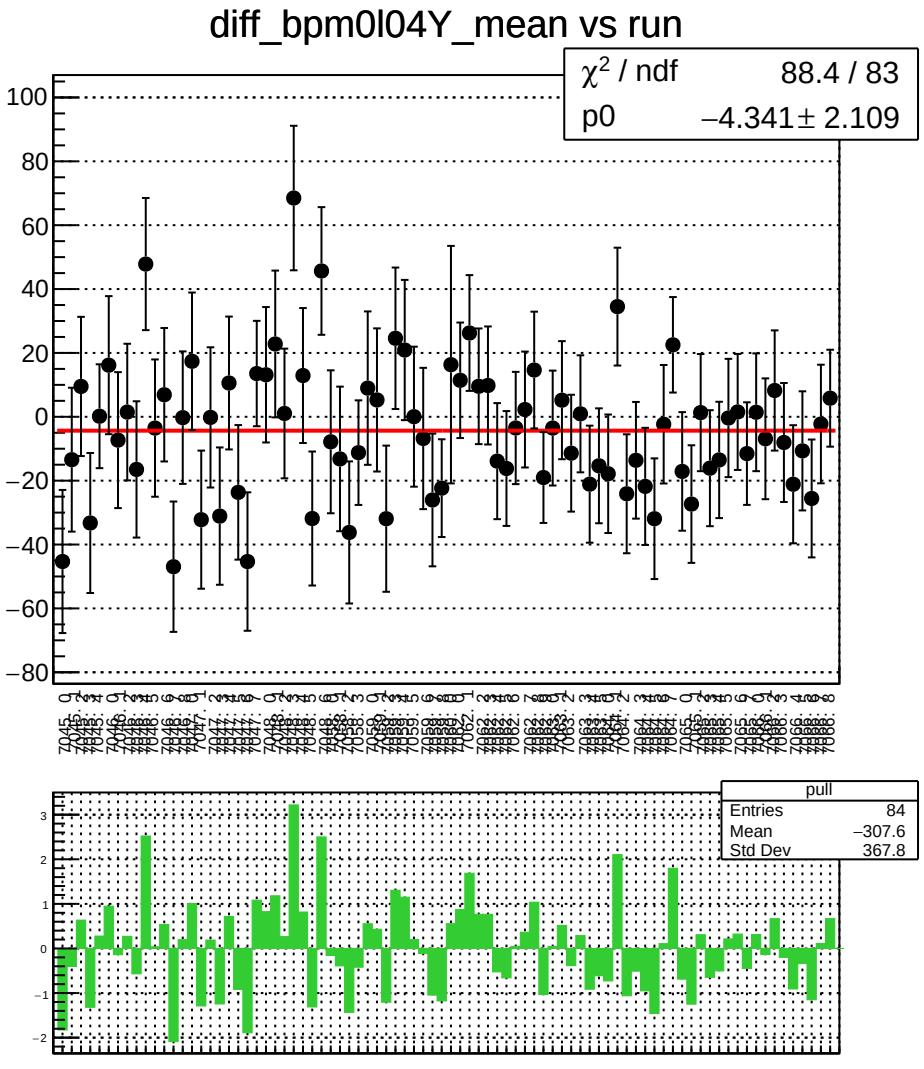

pull1D
Entries 84
Mean 0.08044
Std Dev 1.038
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

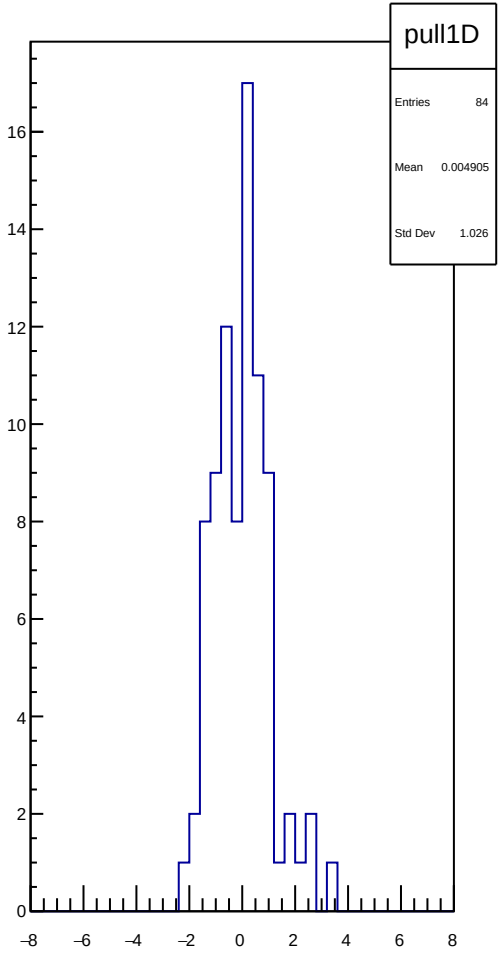

diff_bpm0l03Y_rms vs run
×10^3
χ² / ndf 1.608e+05 / 83
p0 3.589e+04 ± 29.97
100
90
80
70
60
50
40
30
20

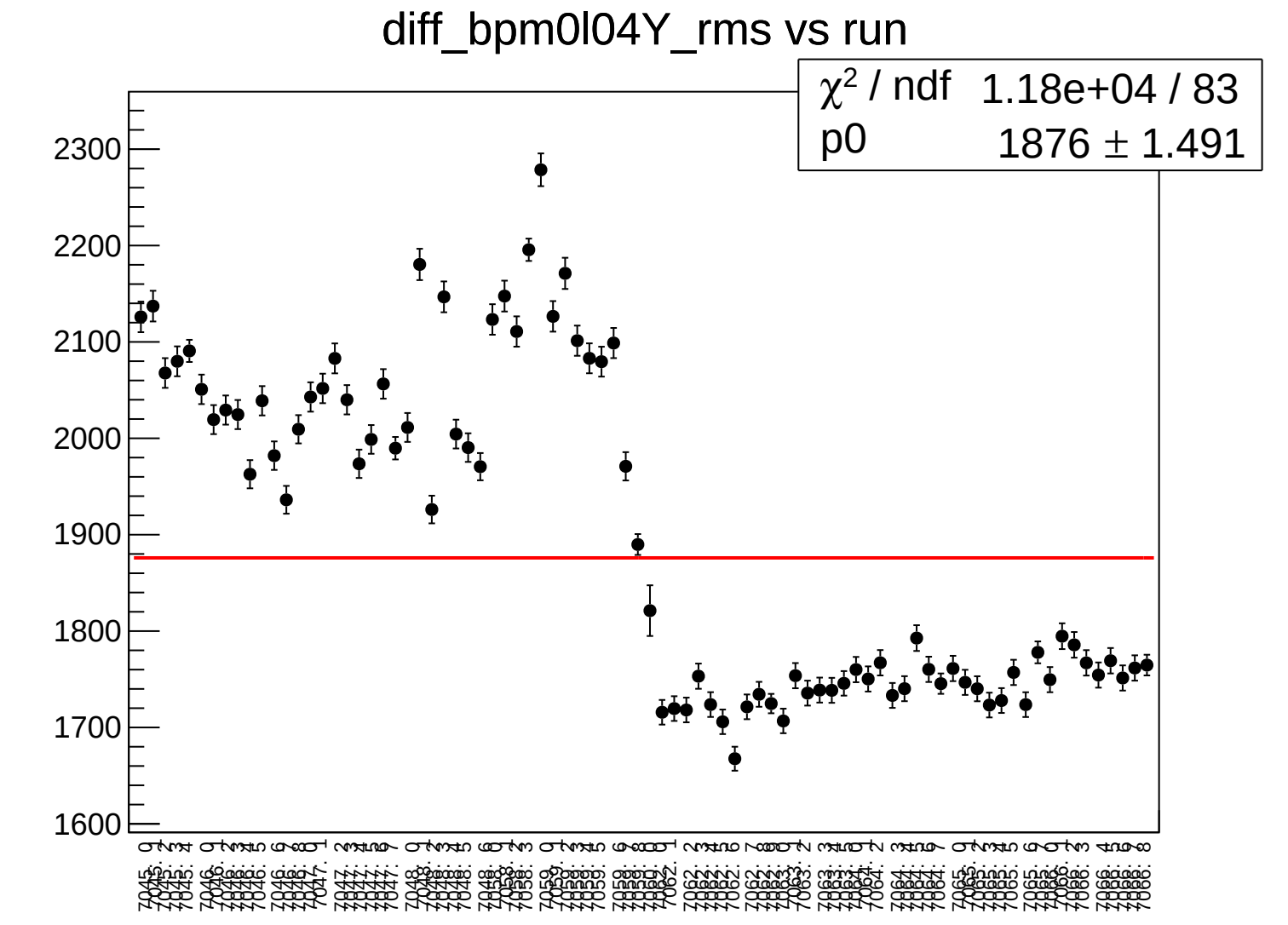

diff_bpm0l04X_mean vs run
χ^2 / ndf 94.03 / 83
p0 16.51 ± 2.761
100
50
0
−50
−100
pull
Entries 84
Mean −146.2
Std Dev 176.9
2
1
0
−1
−2
−3

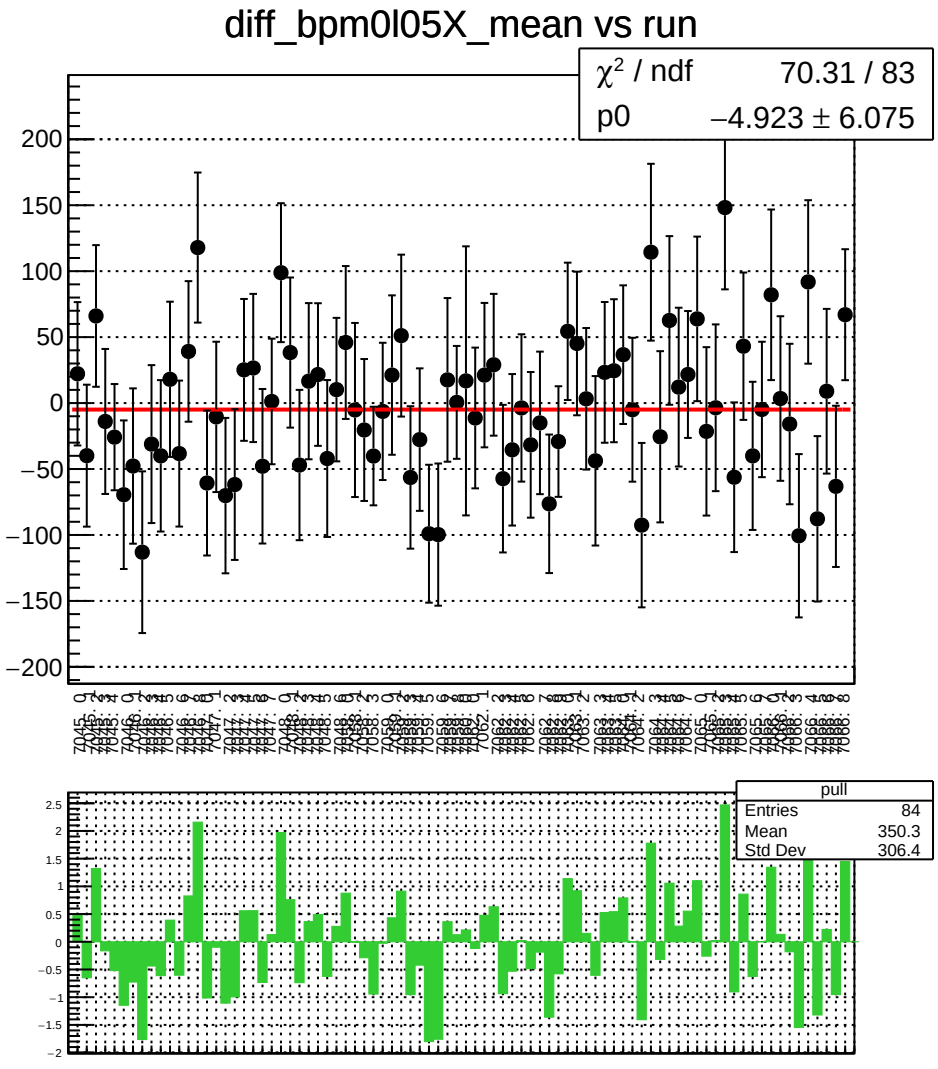

pull1D
Entries 84
Mean −0.007087
Std Dev 1.058
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

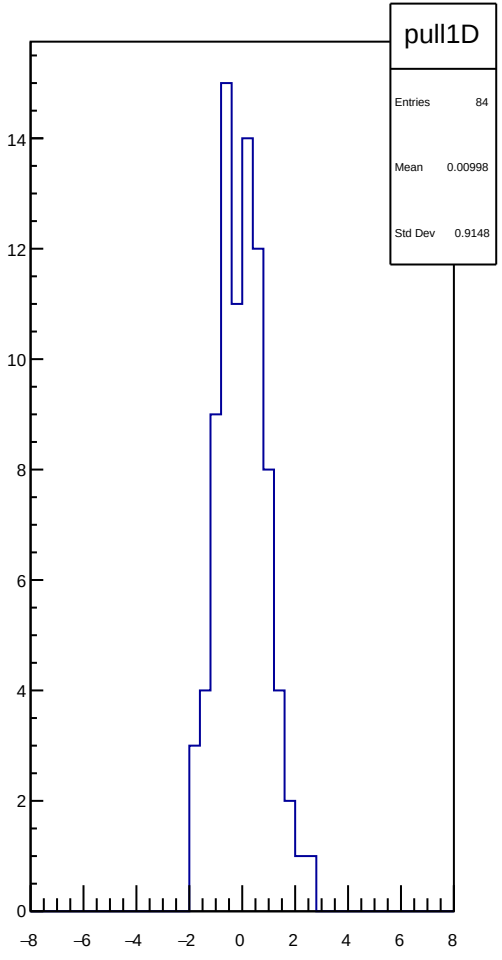

diff_bpm0l04X_rms vs run
χ² / ndf 1598 / 83
p0 2464 ± 1.952
2700
2600
2500
2400
2300
2200

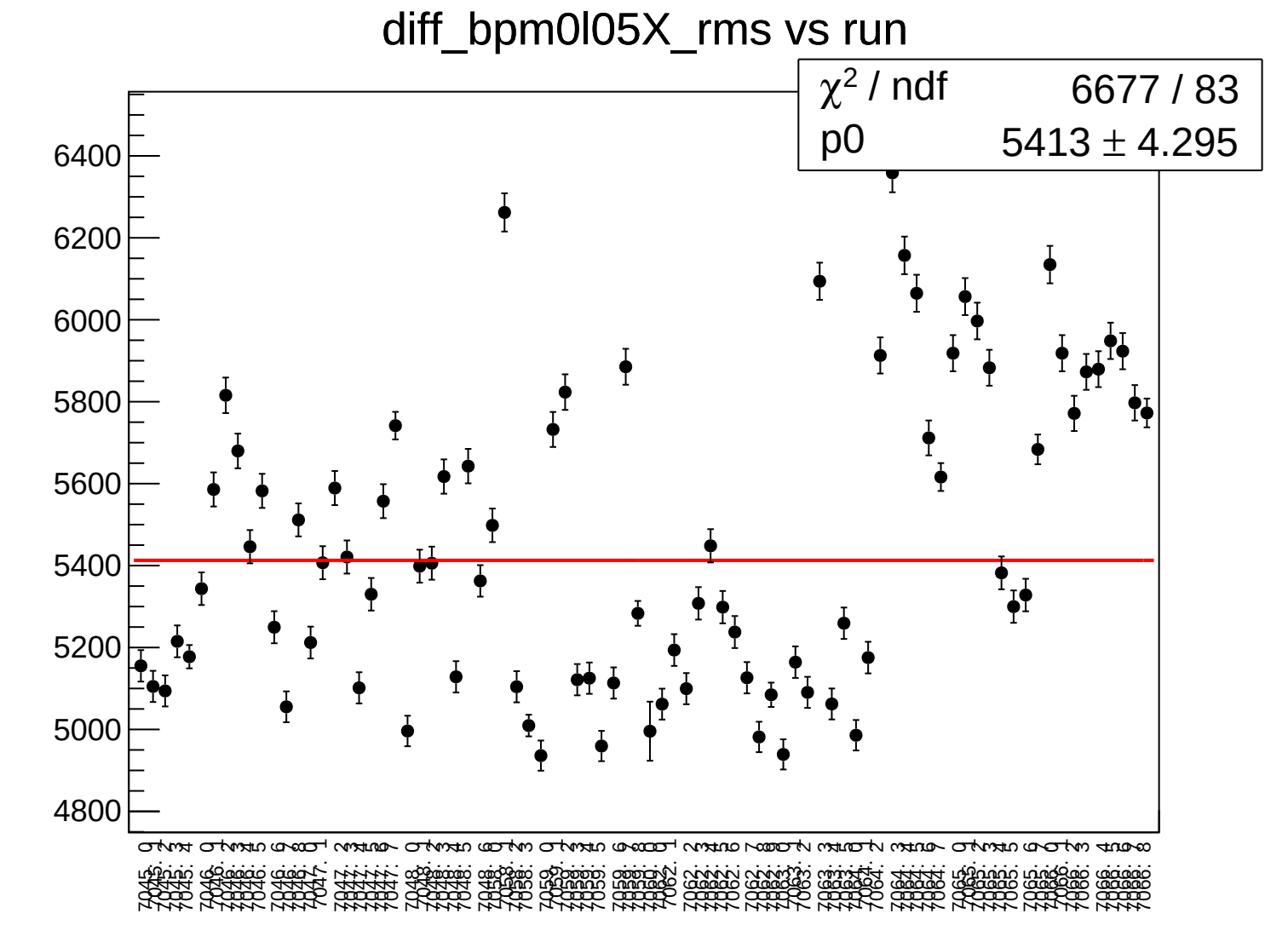

diff_bpm0l04Y_mean vs run
χ² / ndf 88.4 / 83
p0 −4.341 ± 2.109
pull
Entries 84
Mean −307.6
Std Dev 367.8

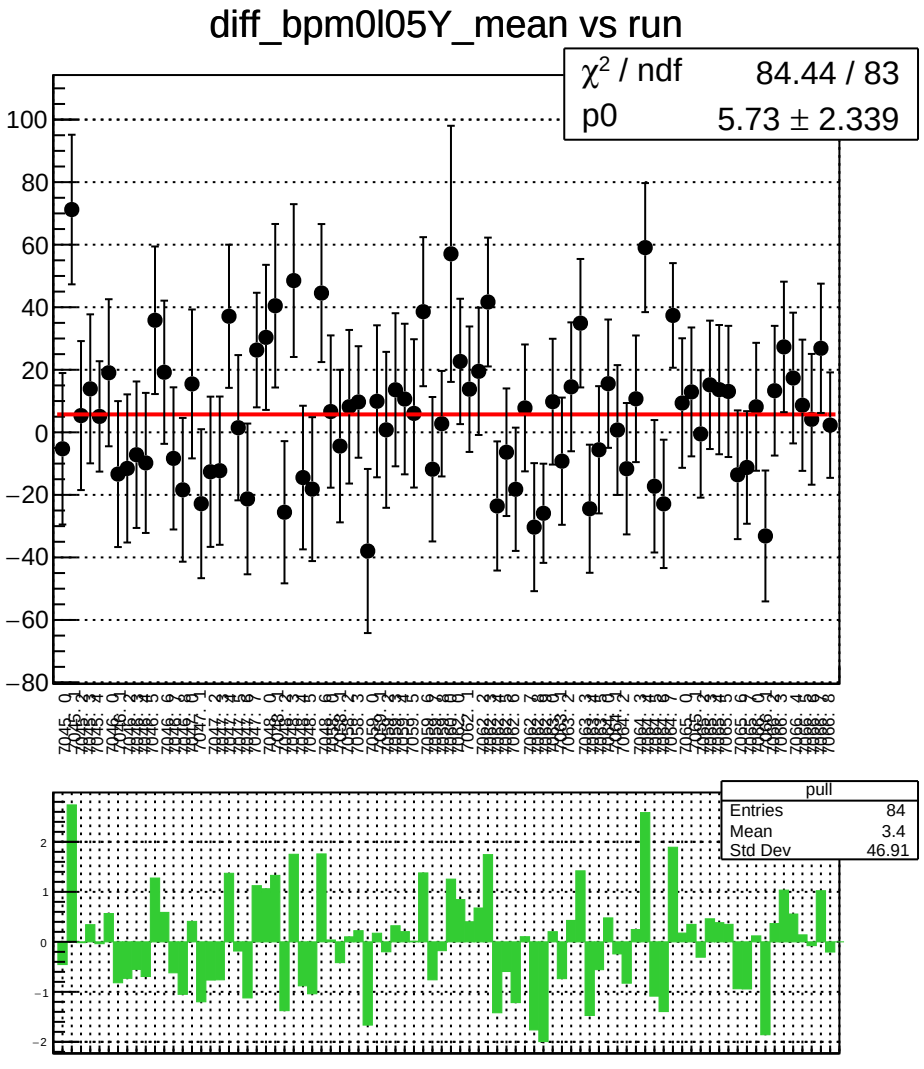

pull1D
Entries 84
Mean 0.004905
Std Dev 1.026

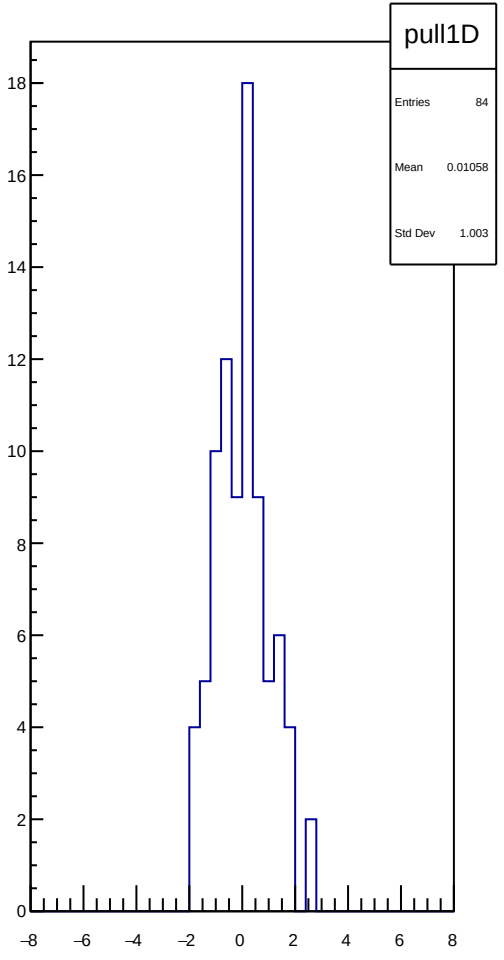

diff_bpm0l04Y_rms vs run
χ² / ndf 1.18e+04 / 83
p0 1876 ± 1.491
2300
2200
2100
2000
1900
1800
1700
1600

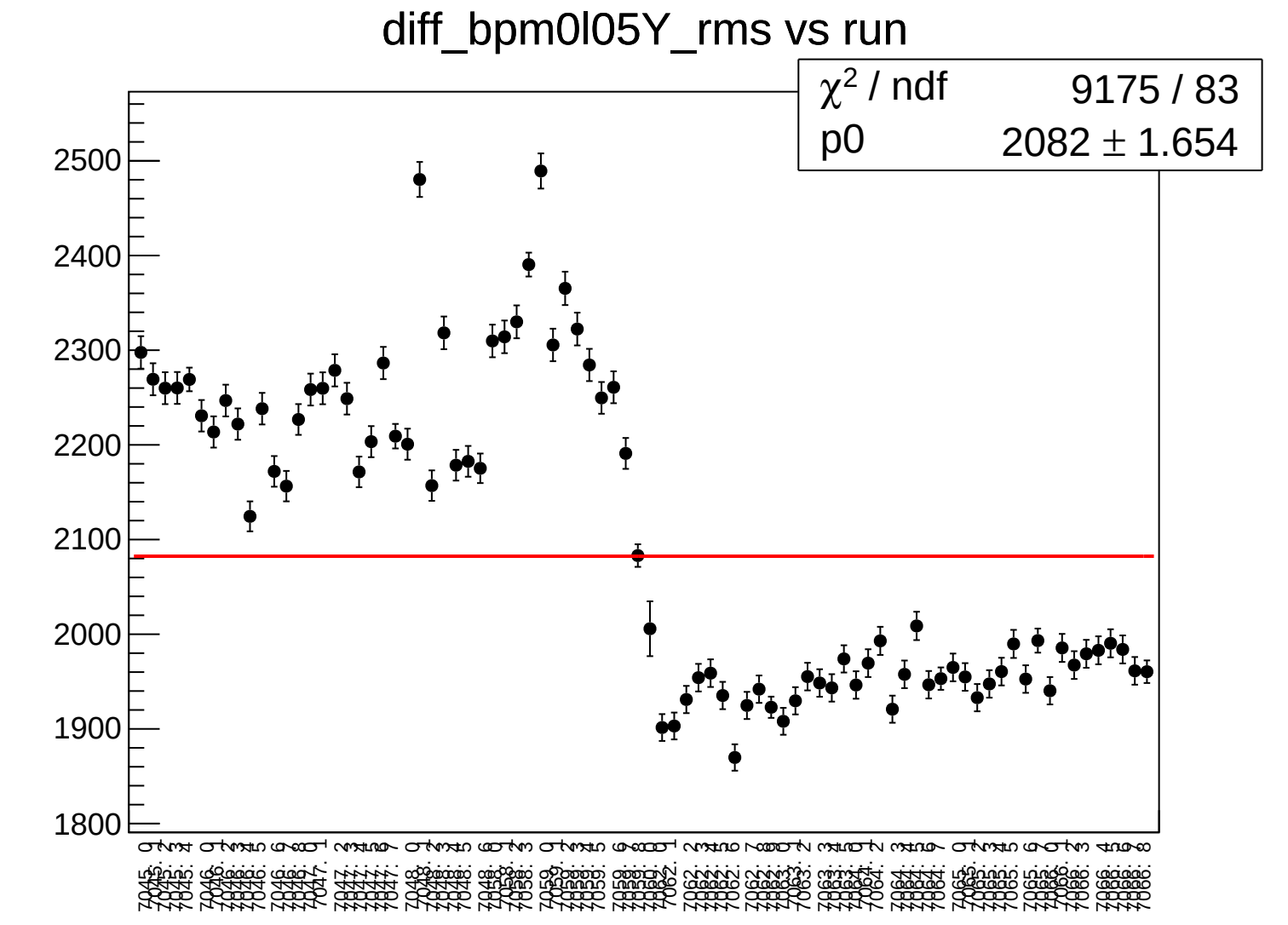

diff_bpm0l05X_mean vs run
χ² / ndf 70.31 / 83
p0 −4.923 ± 6.075
pull
Entries 84
Mean 350.3
Std Dev 306.4

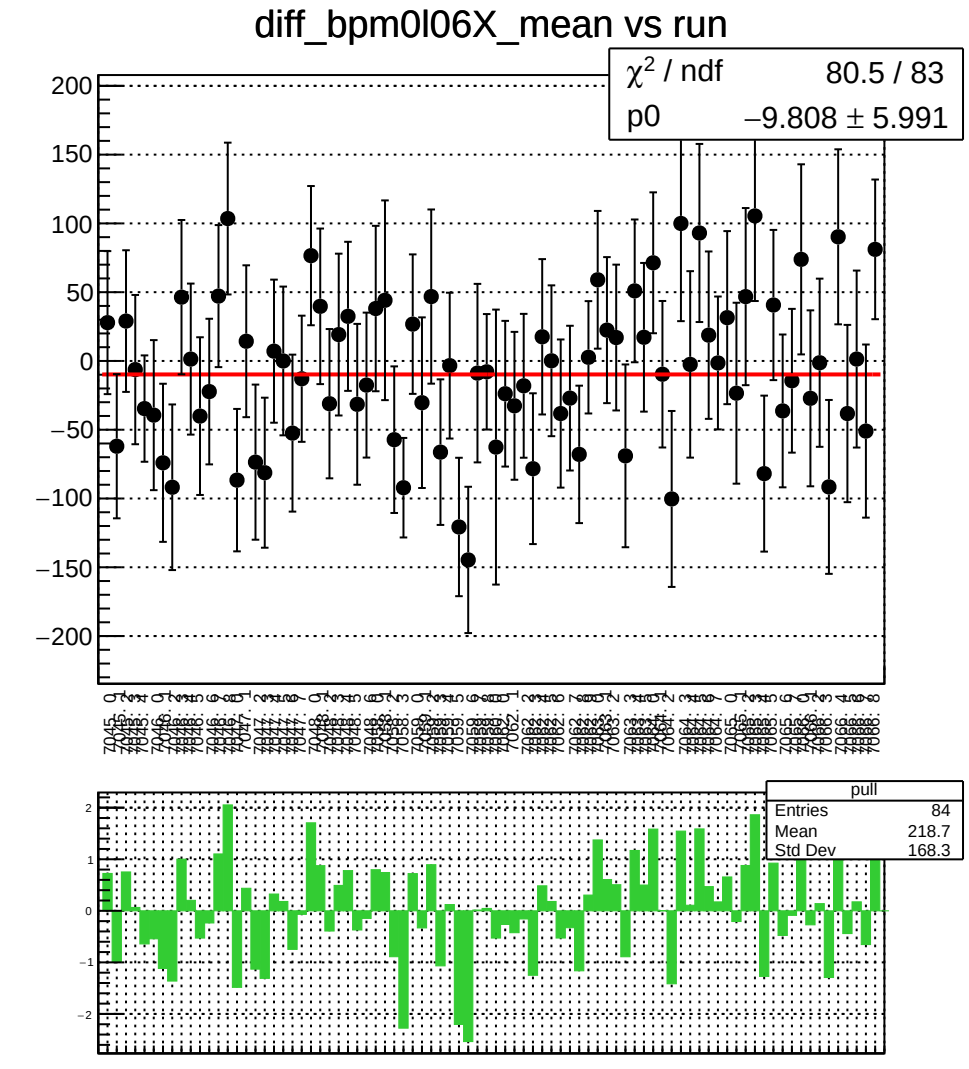

pull1D
Entries 84
Mean 0.00998
Std Dev 0.9148

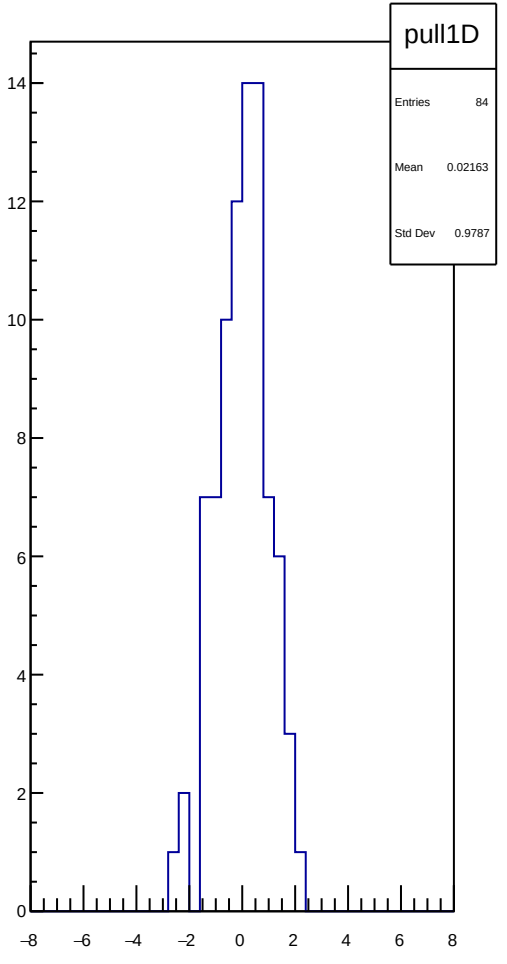

diff_bpm0l05X_rms vs run
χ² / ndf 6677 / 83
p0 5413 ± 4.295
6400
6200
6000
5800
5600
5400
5200
5000
4800

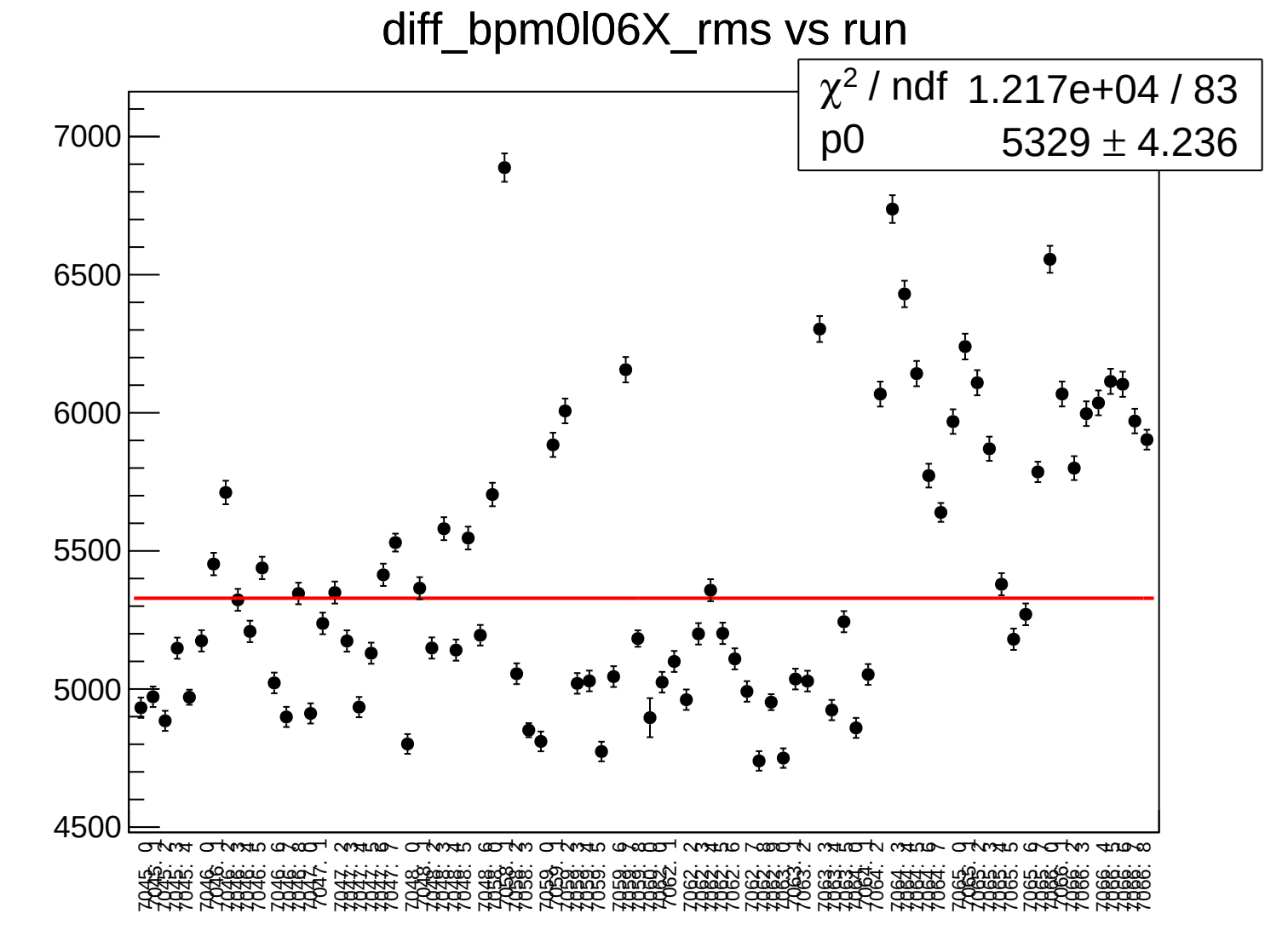

diff_bpm0l05Y_mean vs run
χ^2 / ndf 84.44 / 83
p0 5.73 ± 2.339
pull
Entries 84
Mean 3.4
Std Dev 46.91

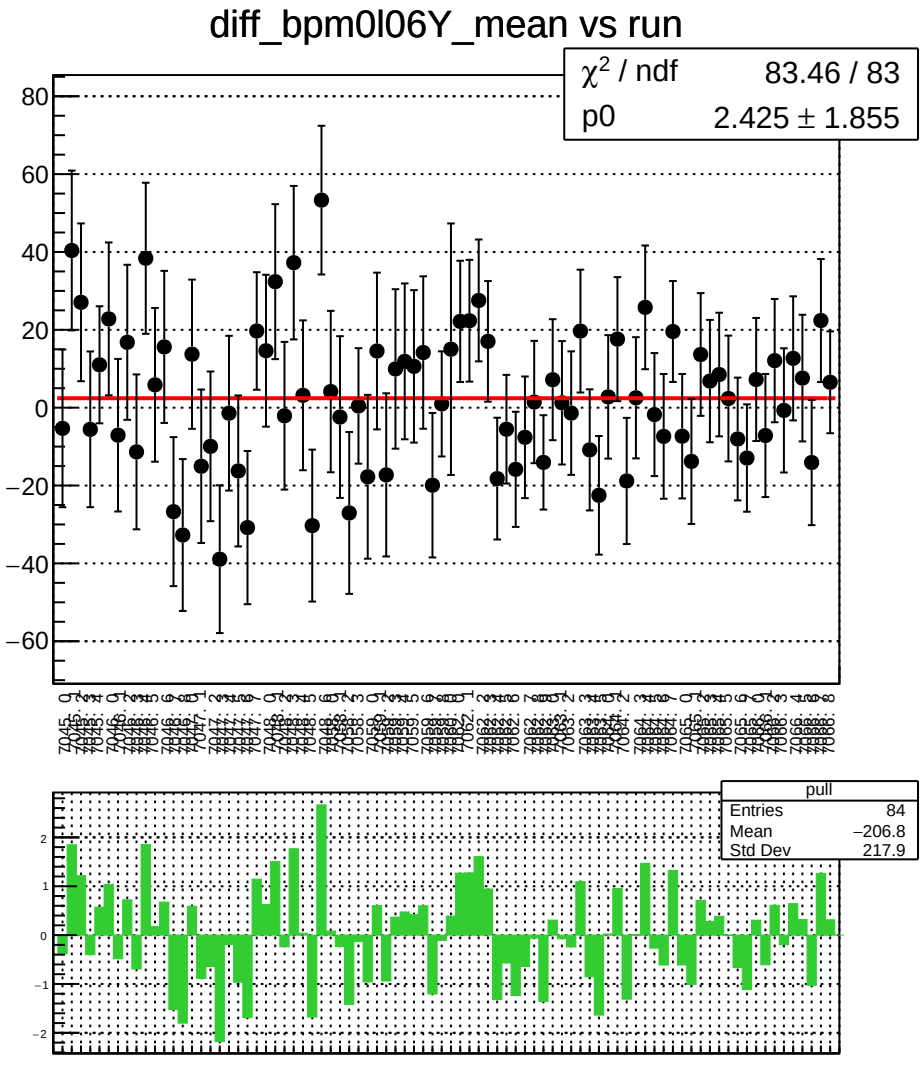

pull1D
Entries 84
Mean 0.01058
Std Dev 1.003

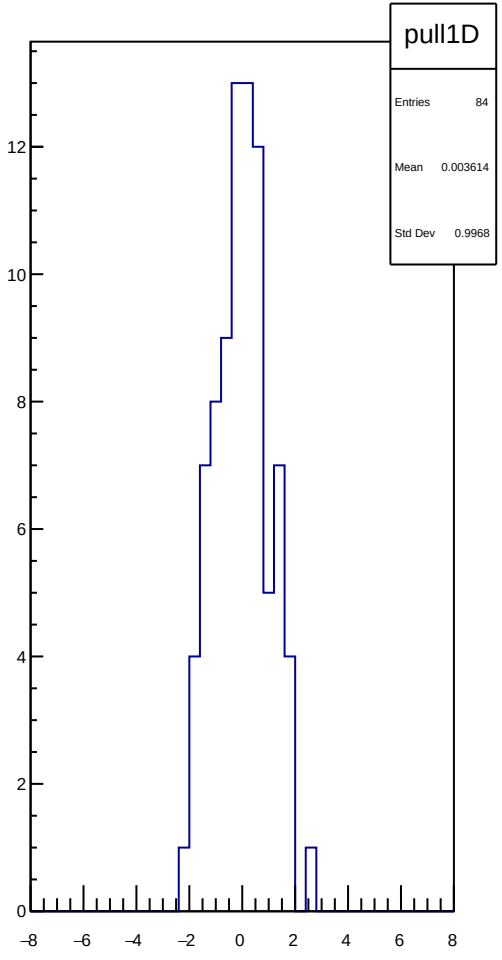

diff_bpm0l05Y_rms vs run
χ^2 / ndf 9175 / 83
p0 2082 ± 1.654
2500
2400
2300
2200
2100
2000
1900
1800

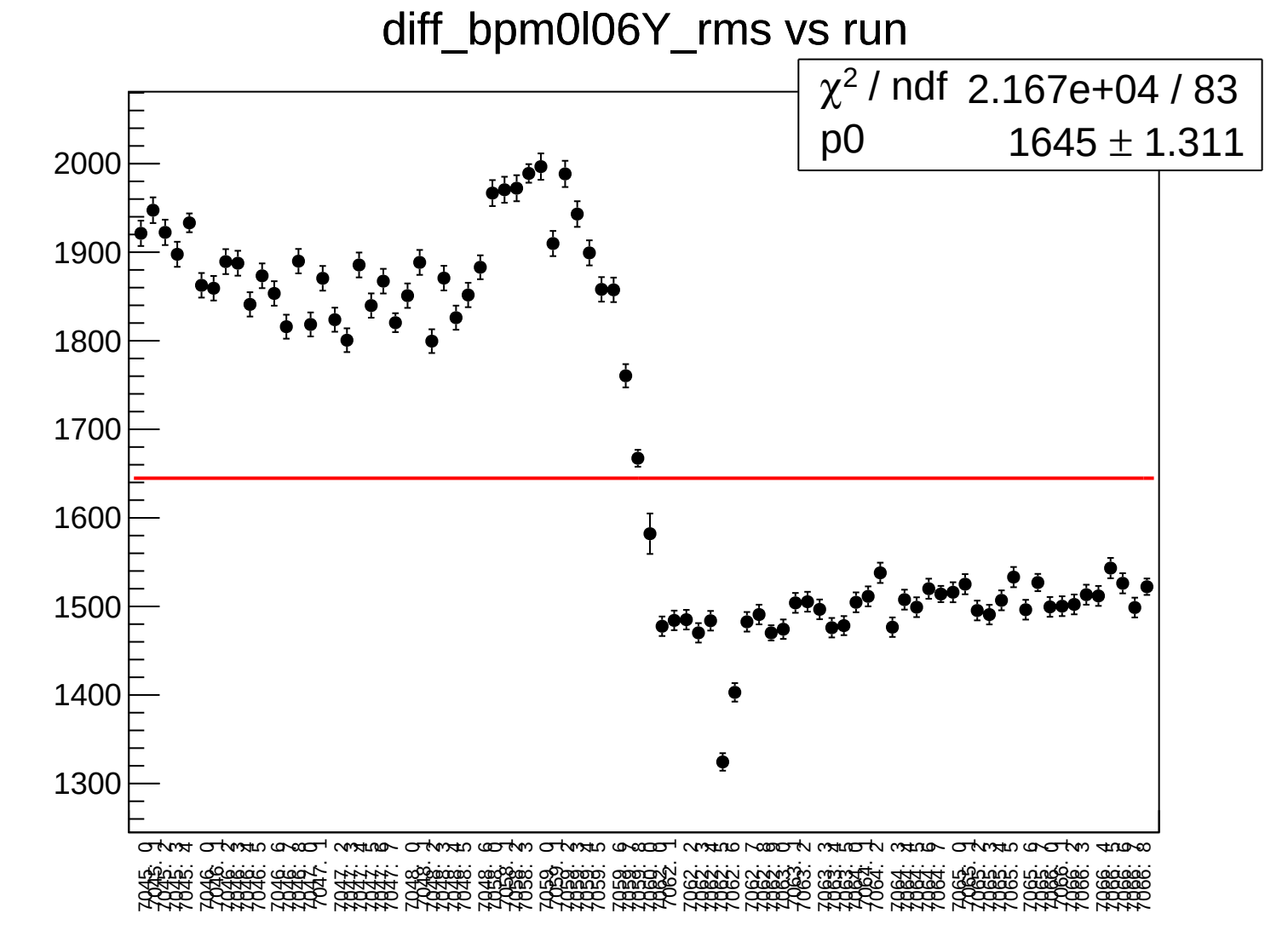

diff_bpm0l06X_mean vs run
χ² / ndf 80.5 / 83
p0 −9.808 ± 5.991
pull
Entries 84
Mean 218.7
Std Dev 168.3

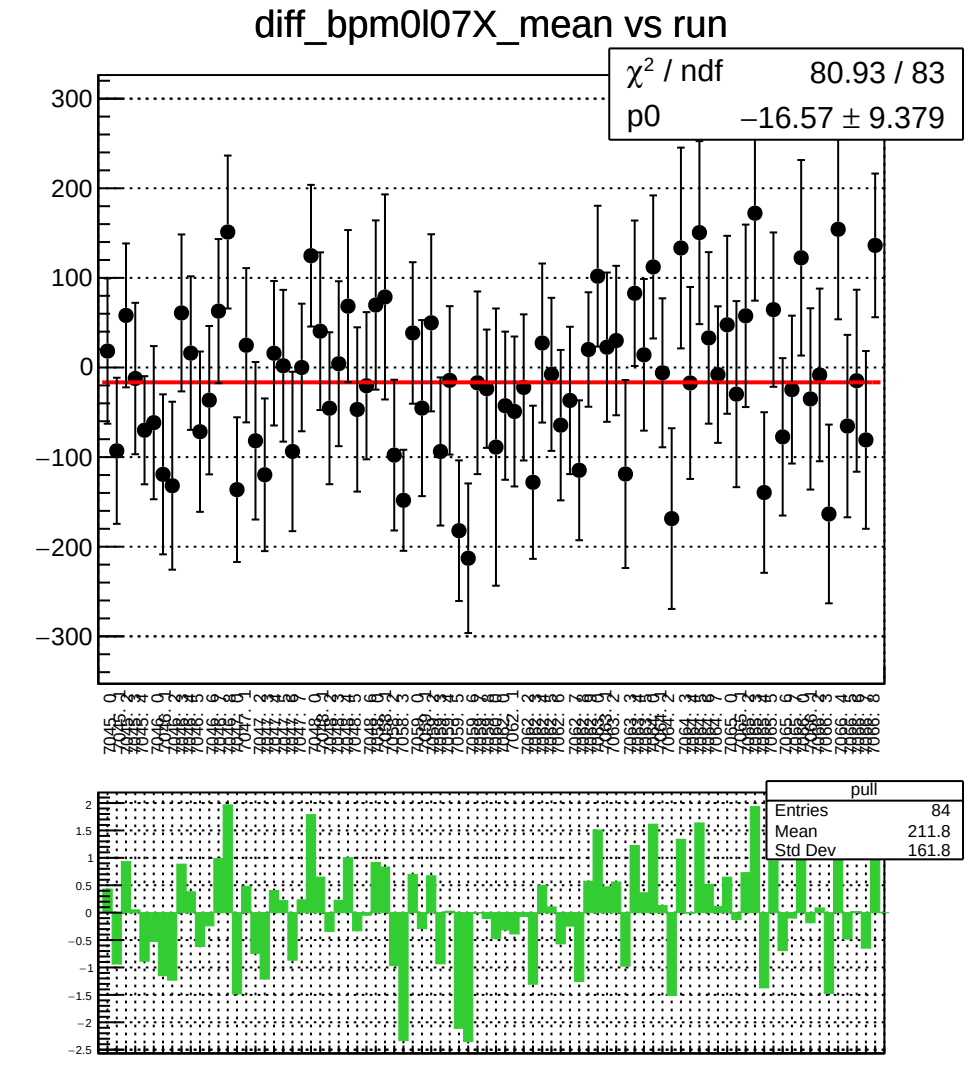

pull1D
Entries 84
Mean 0.02163
Std Dev 0.9787

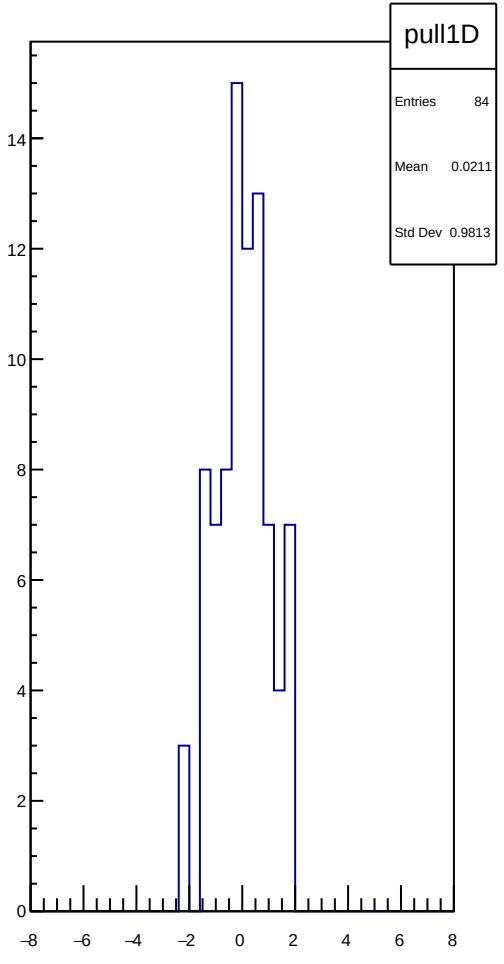

diff_bpm0l06X_rms vs run
χ² / ndf 1.217e+04 / 83
p0 5329 ± 4.236
7000
6500
6000
5500
5000
4500

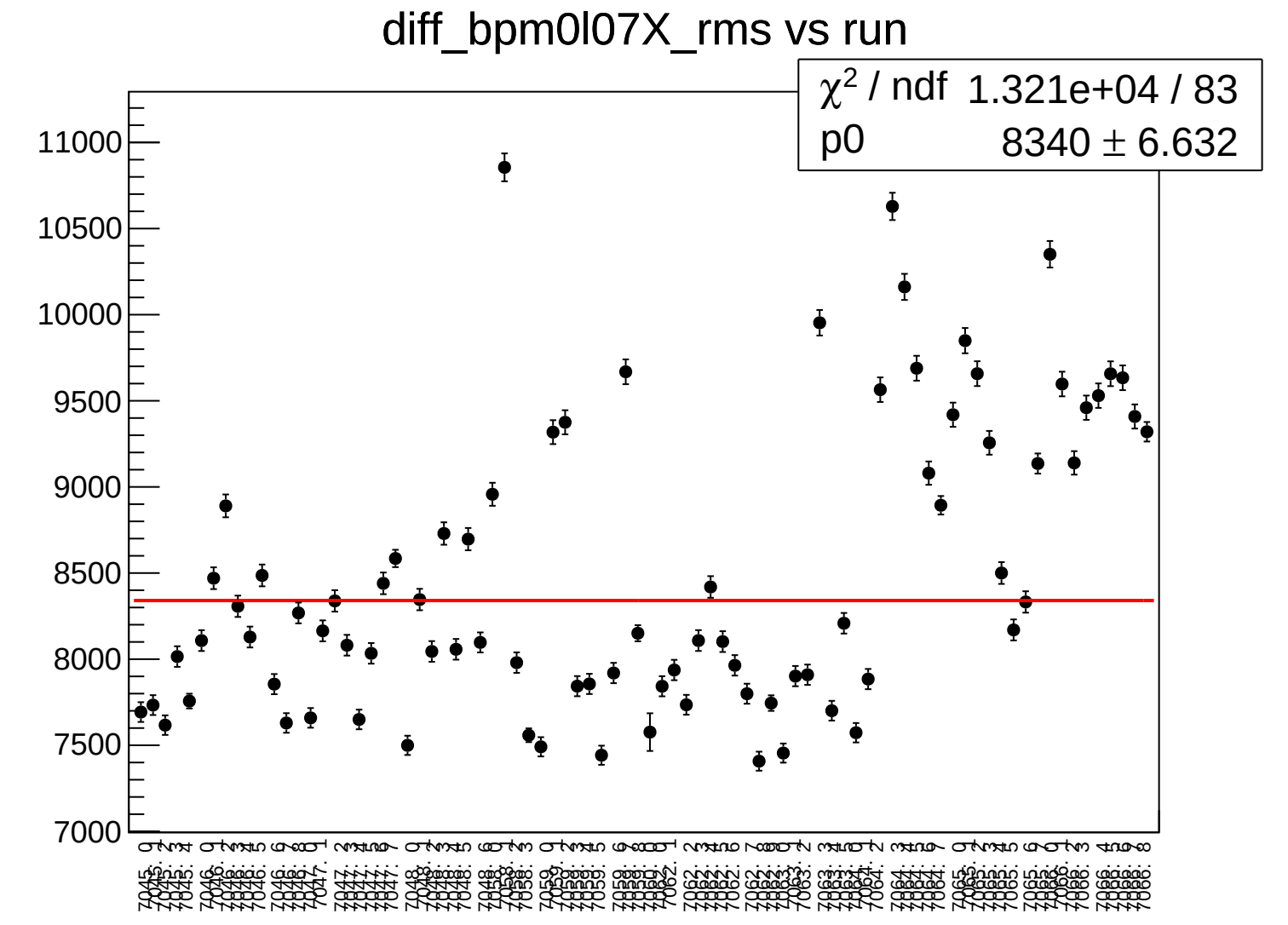

diff_bpm0l06Y_mean vs run
χ² / ndf 83.46 / 83
p0 2.425 ± 1.855
pull
Entries 84
Mean −206.8
Std Dev 217.9

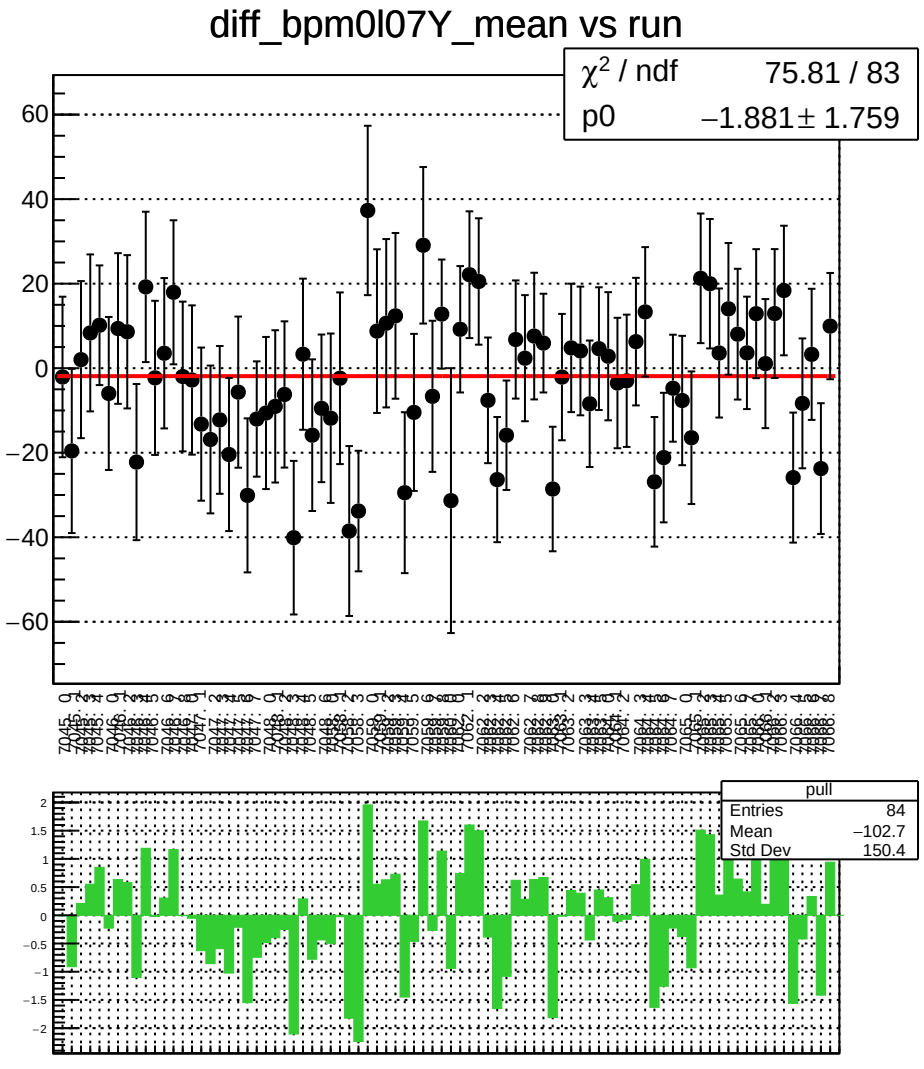

pull1D
Entries 84
Mean 0.003614
Std Dev 0.9968

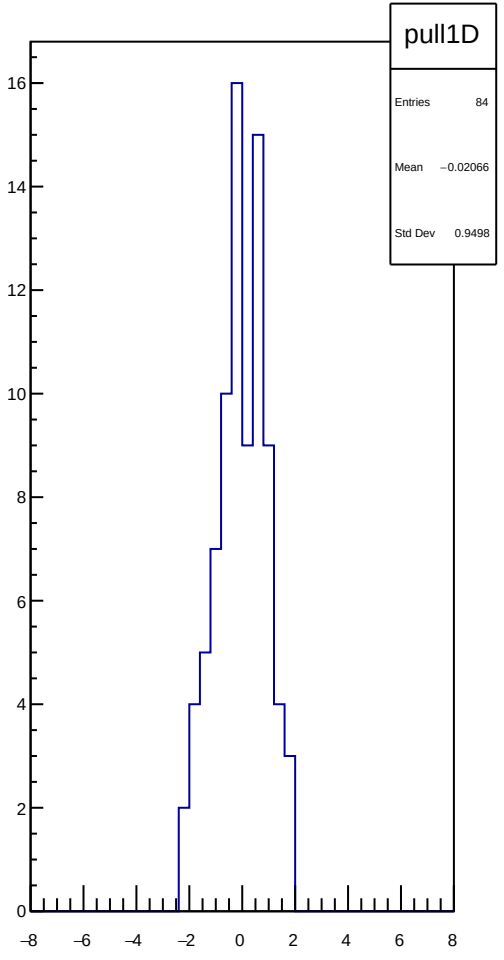

diff_bpm0l06Y_rms vs run
χ^2 / ndf 2.167e+04 / 83
p0 1645 ± 1.311
2000
1900
1800
1700
1600
1500
1400
1300

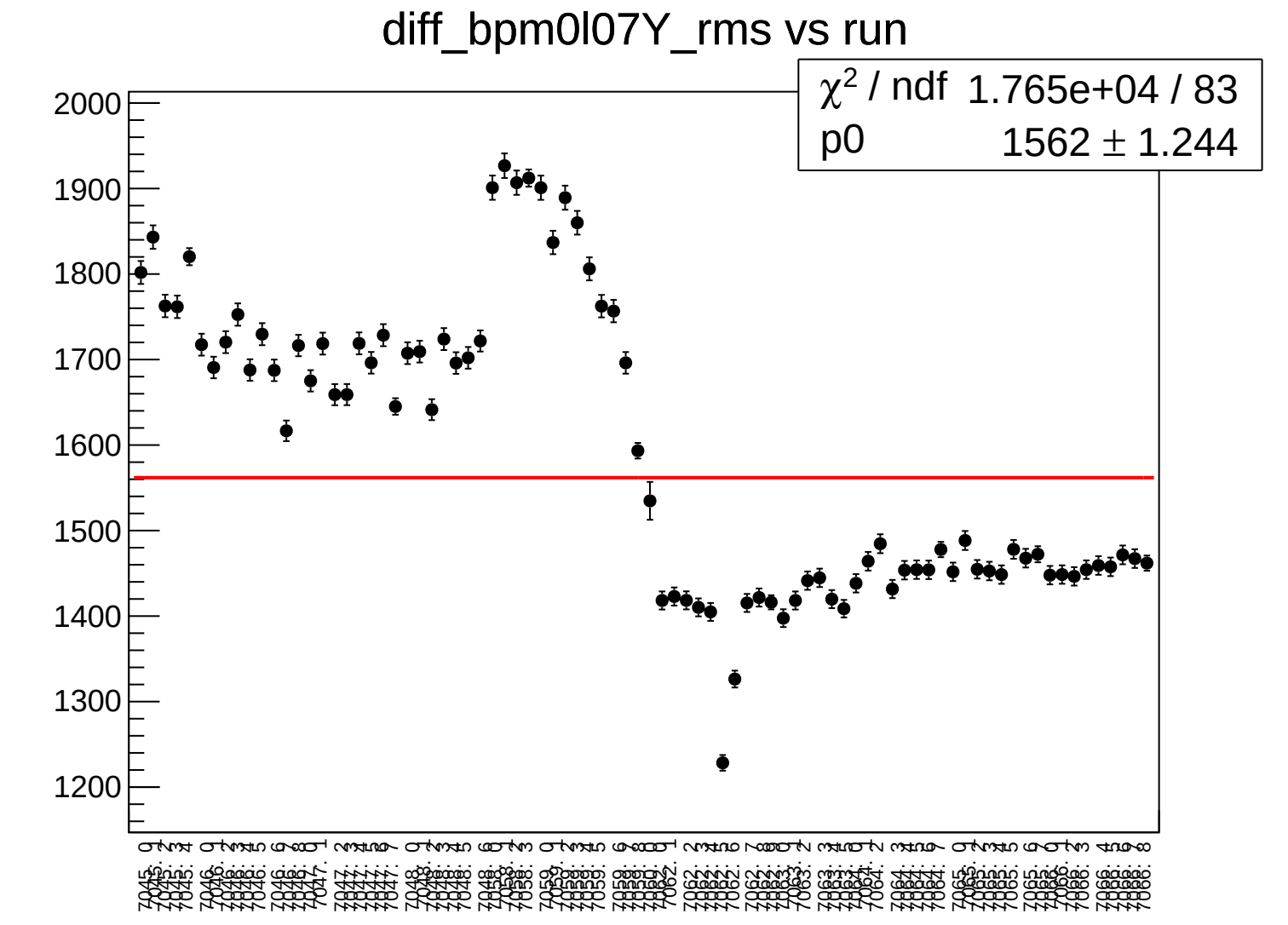

diff_bpm0l07X_mean vs run
χ² / ndf 80.93 / 83
p0 −16.57 ± 9.379
pull
Entries 84
Mean 211.8
Std Dev 161.8

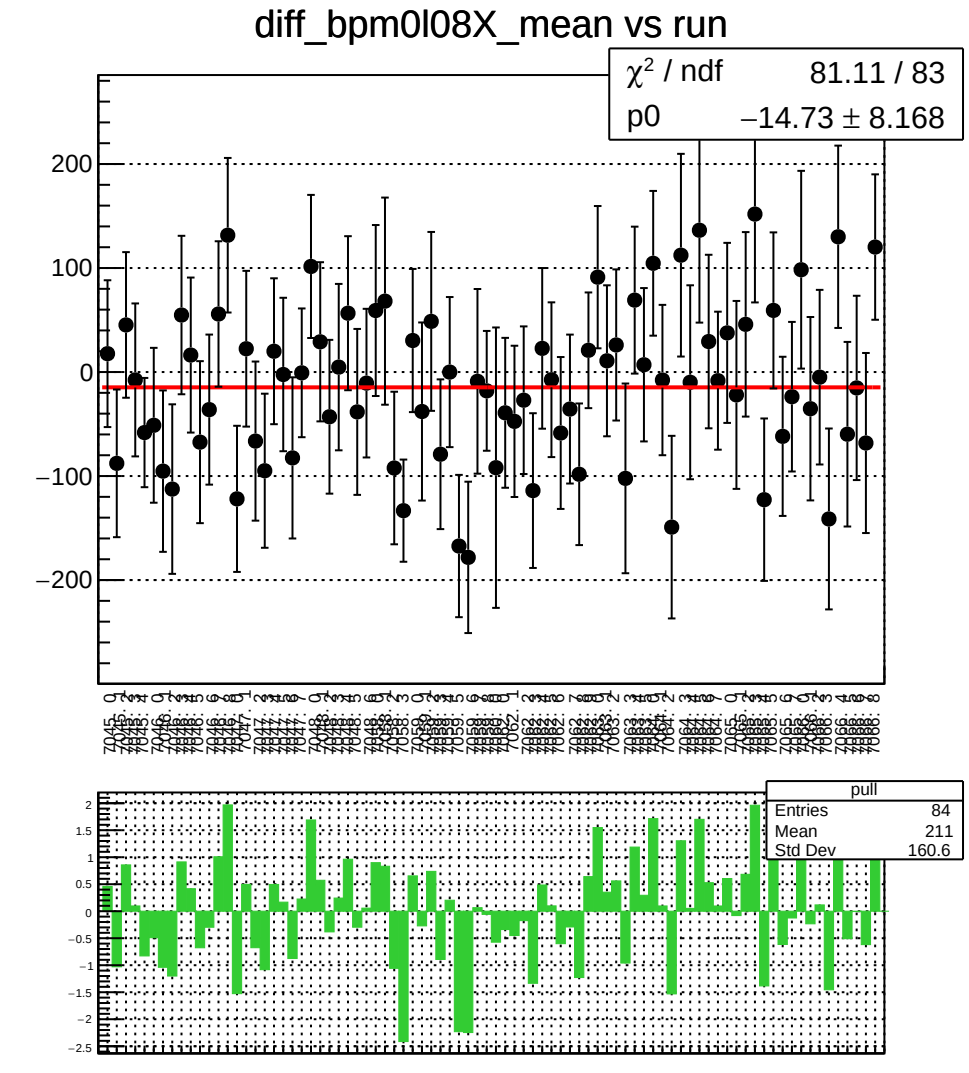

pull1D
Entries 84
Mean 0.0211
Std Dev 0.9813

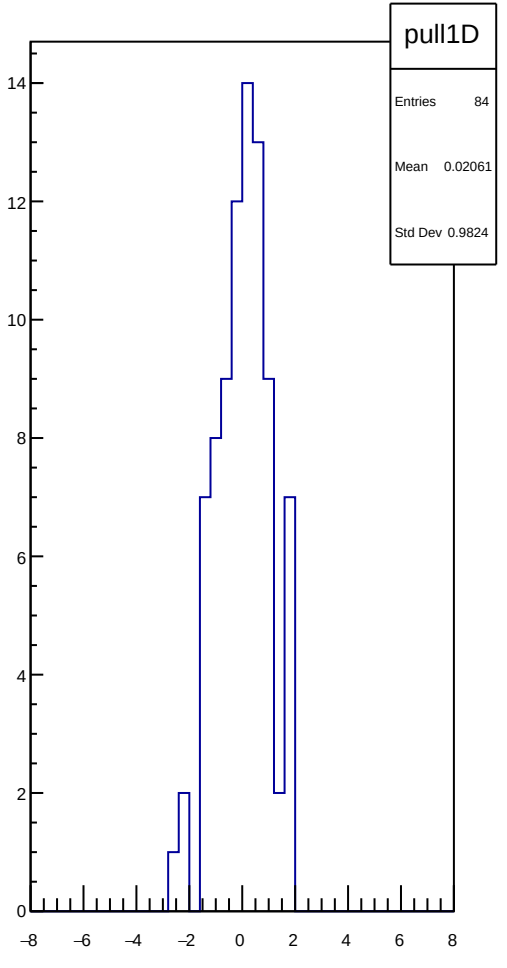

diff_bpm0l07X_rms vs run
χ^2 / ndf 1.321e+04 / 83
p0 8340 ± 6.632
11000
10500
10000
9500
9000
8500
8000
7500
7000

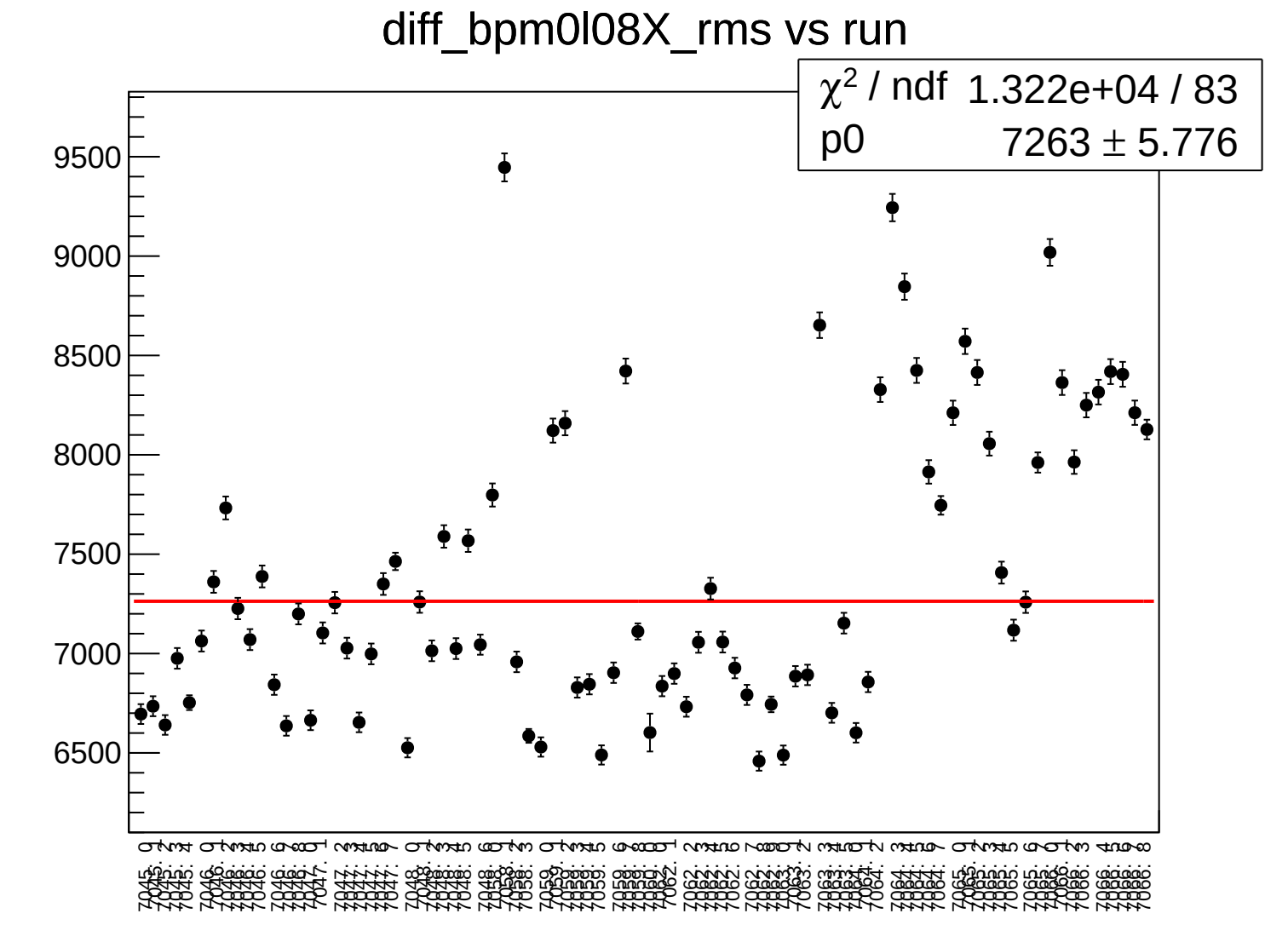

diff_bpm0l07Y_mean vs run
χ^2 / ndf 75.81 / 83
p0 −1.881± 1.759
pull
Entries 84
Mean −102.7
Std Dev 150.4

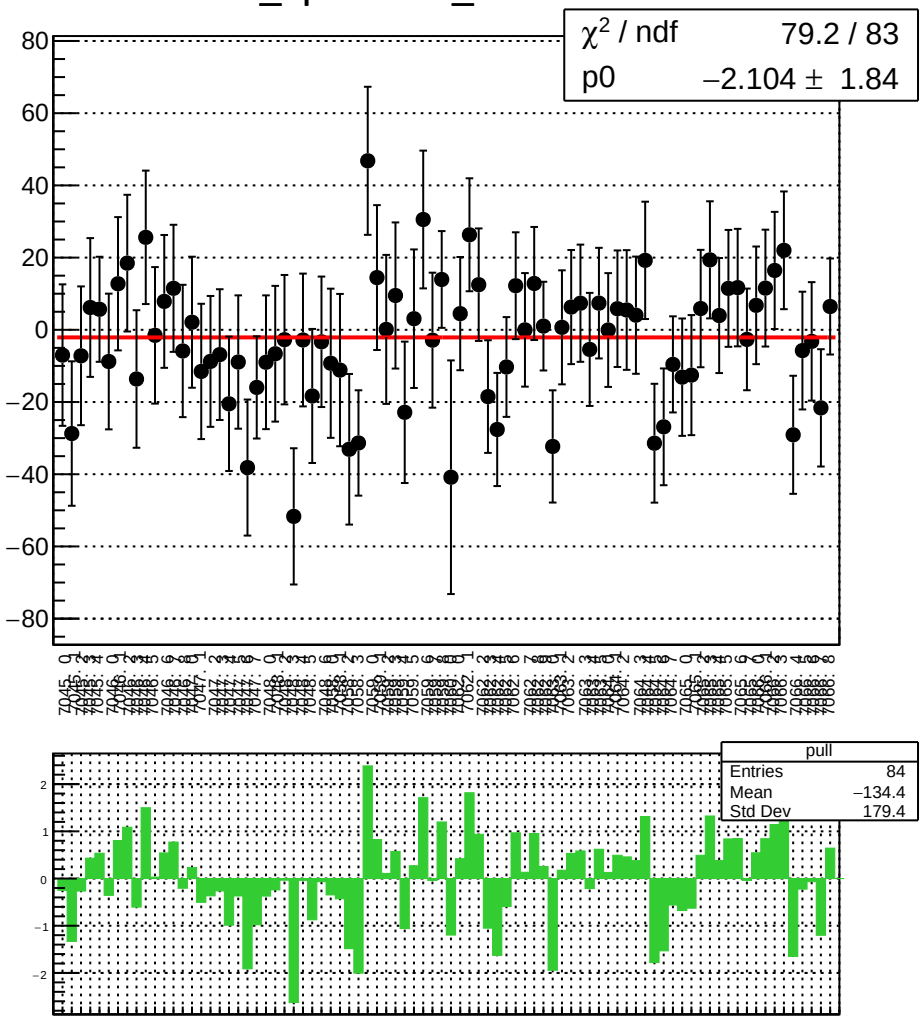

pull1D
Entries 84
Mean −0.02066
Std Dev 0.9498

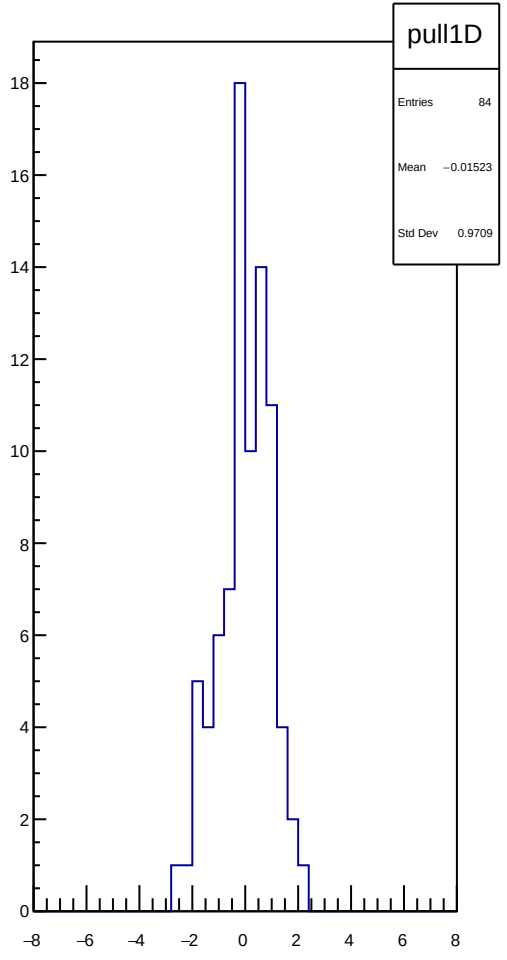

diff_bpm0l07Y_rms vs run
χ^2 / ndf 1.765e+04 / 83
p0 1562 ± 1.244
2000
1900
1800
1700
1600
1500
1400
1300
1200

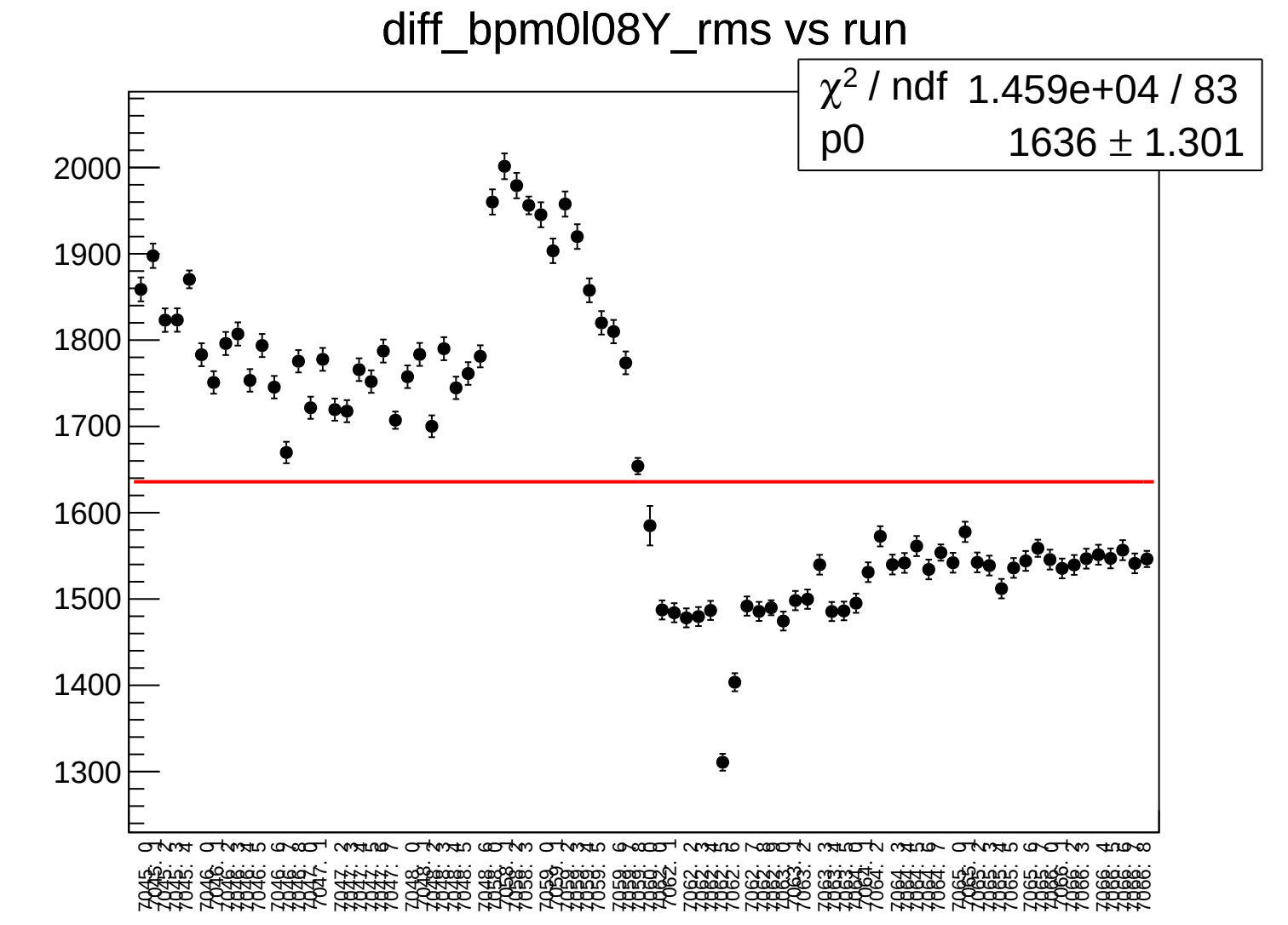

diff_bpm0l08X_mean vs run
χ² / ndf 81.11 / 83
p0 −14.73 ± 8.168
200
100
0
−100
−200
pull
Entries 84
Mean 211
Std Dev 160.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

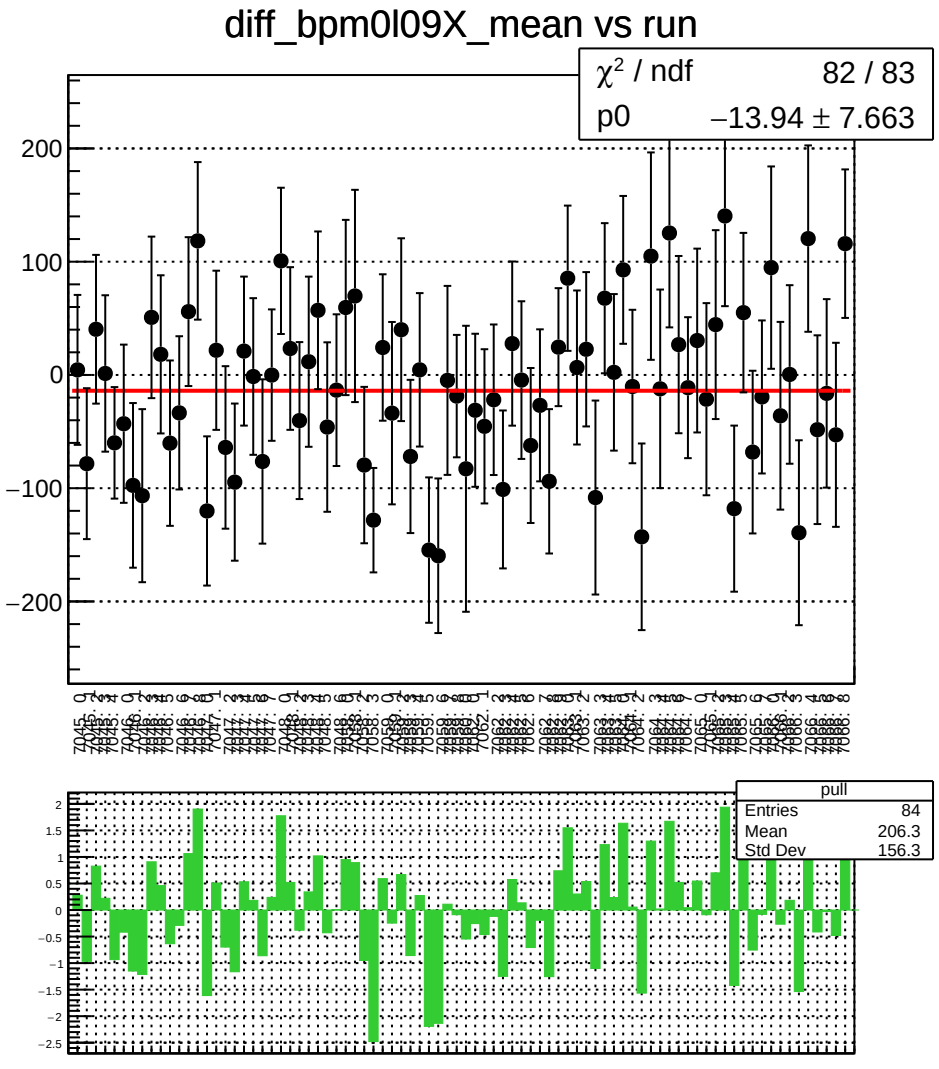

pull1D
Entries 84
Mean 0.02061
Std Dev 0.9824
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

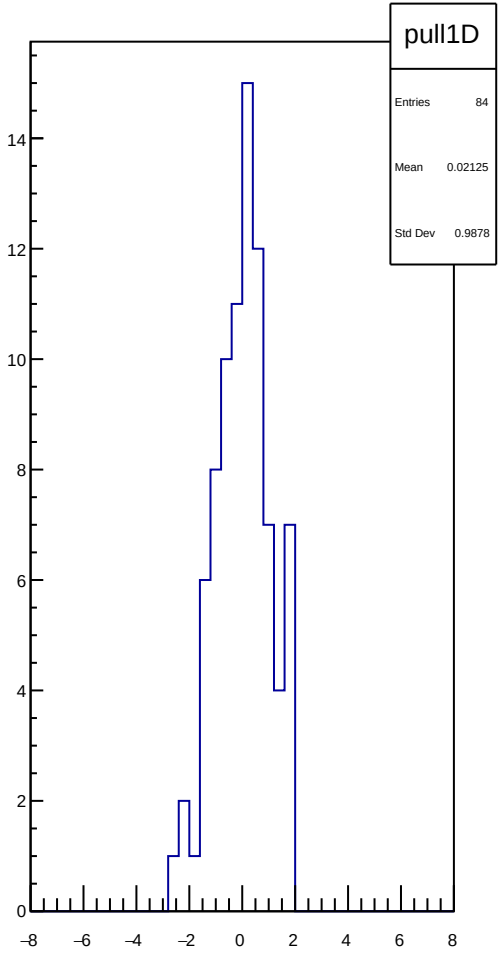

diff_bpm0l08X_rms vs run
χ^2 / ndf 1.322e+04 / 83
p0 7263 ± 5.776
9500
9000
8500
8000
7500
7000
6500

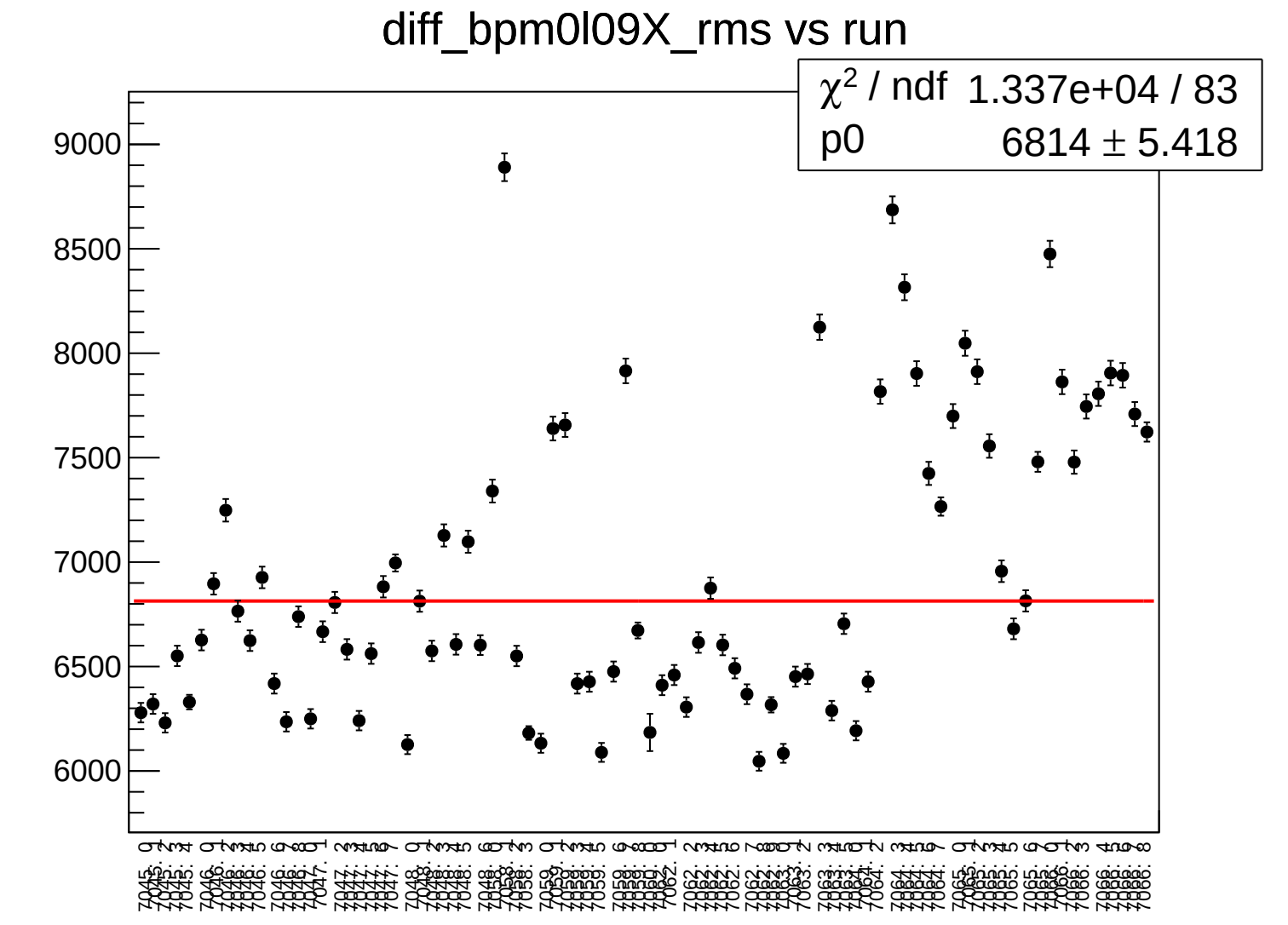

diff_bpm0l08Y_mean vs run
χ² / ndf 79.2 / 83
p0 −2.104 ± 1.84
pull
Entries 84
Mean −134.4
Std Dev 179.4

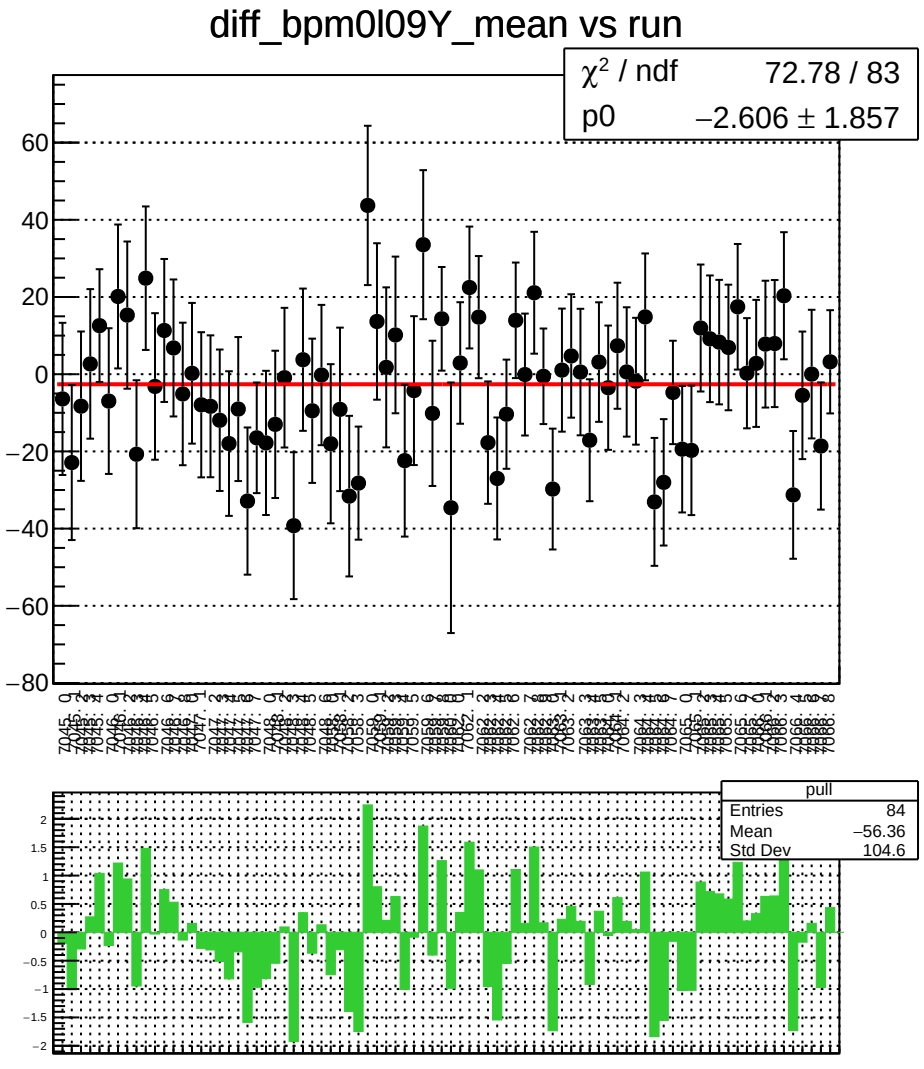

pull1D
Entries 84
Mean −0.01523
Std Dev 0.9709

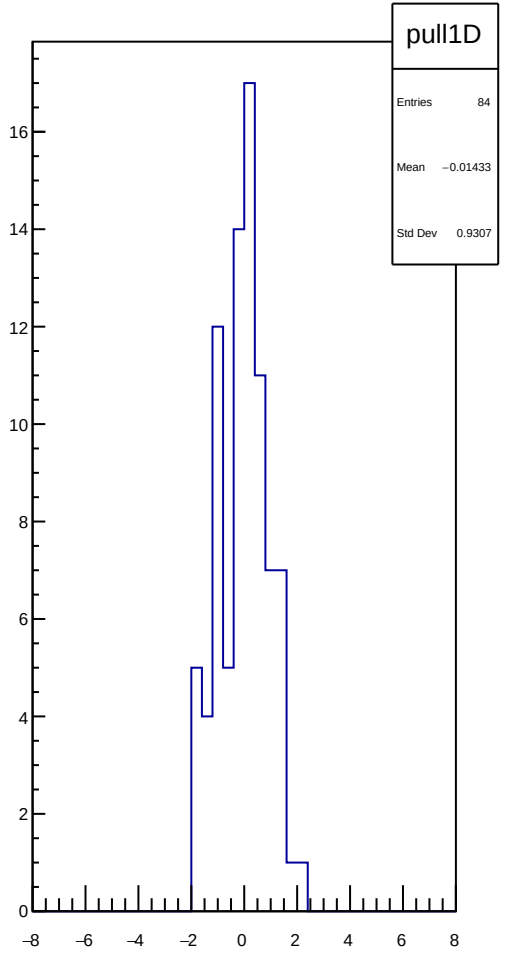

diff_bpm0l08Y_rms vs run
χ² / ndf 1.459e+04 / 83
p0 1636 ± 1.301
2000
1900
1800
1700
1600
1500
1400
1300

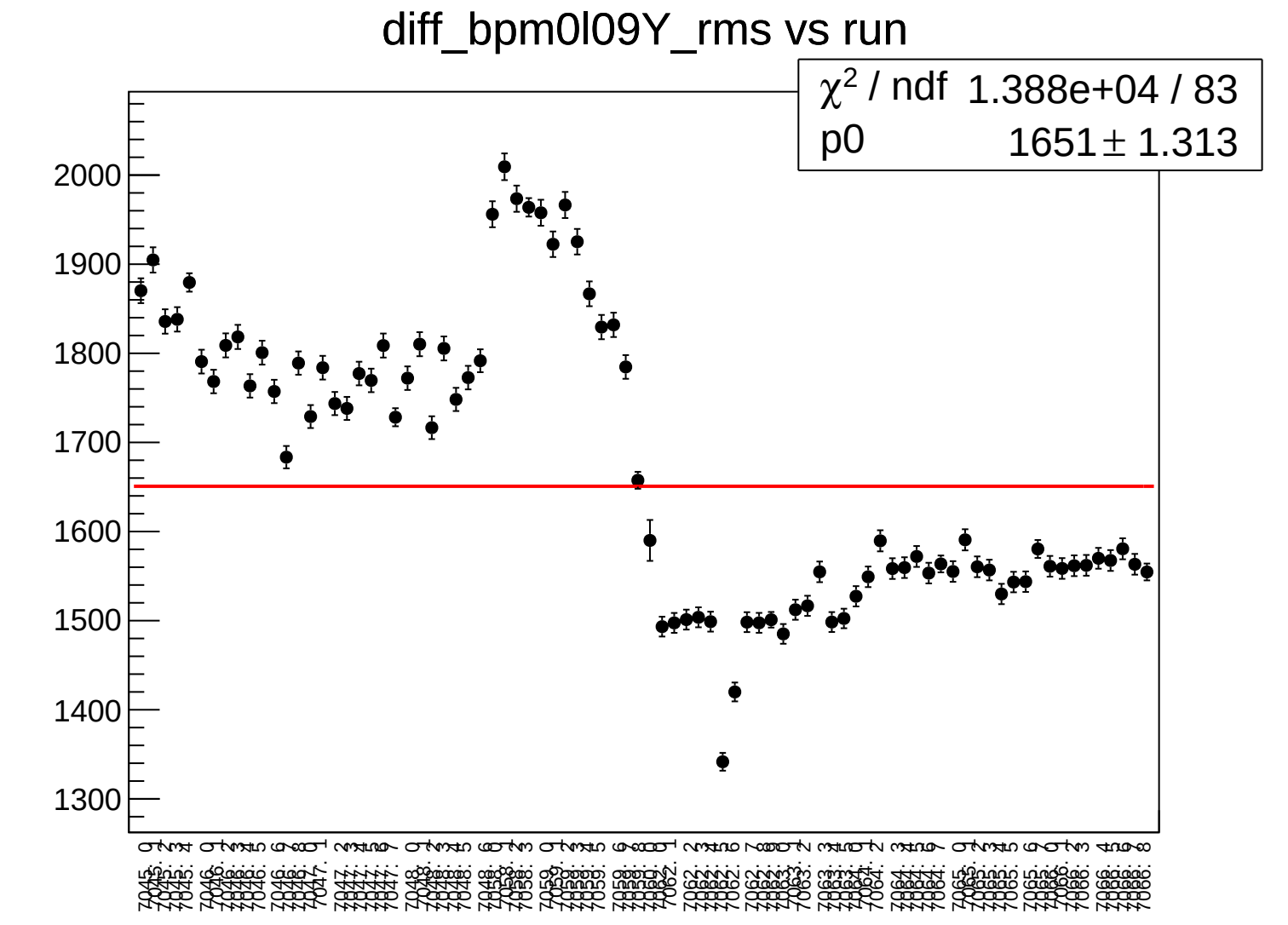

diff_bpm0l09X_mean vs run
χ² / ndf 82 / 83
p0 −13.94 ± 7.663
pull
Entries 84
Mean 206.3
Std Dev 156.3

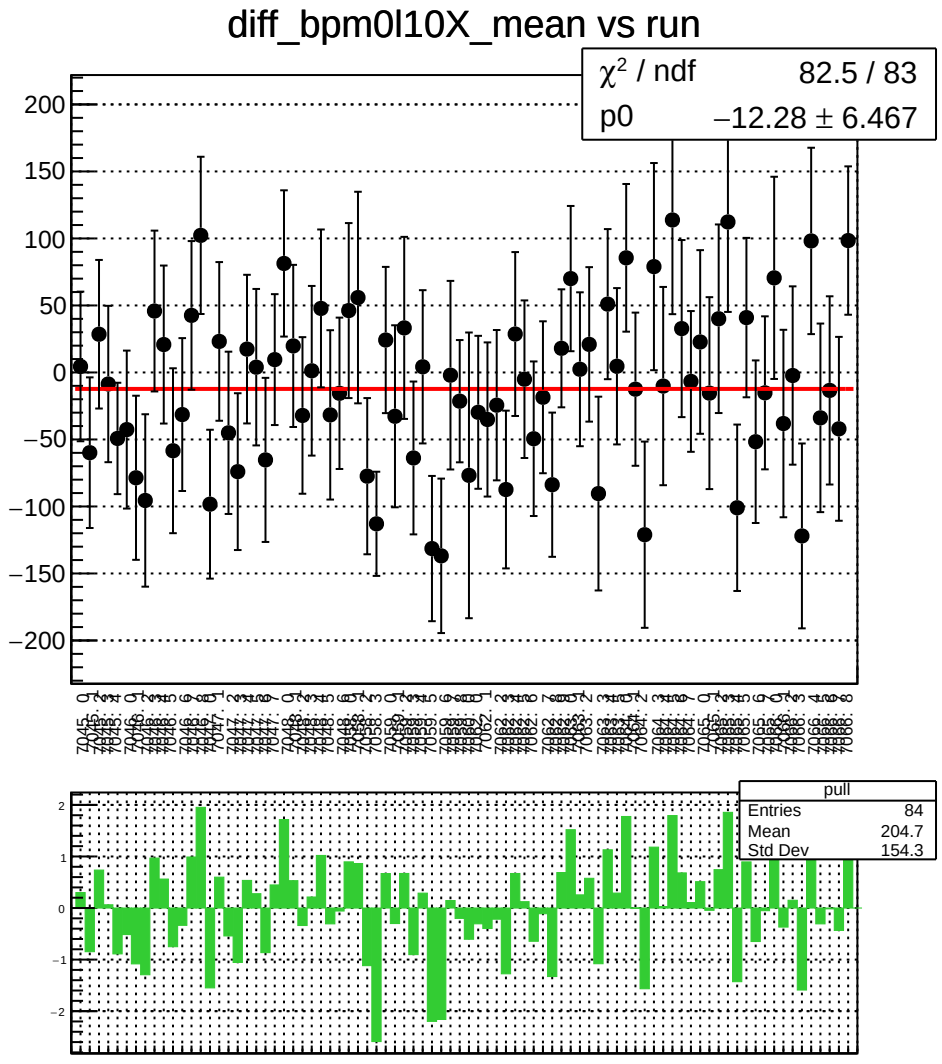

pull1D
Entries 84
Mean 0.02125
Std Dev 0.9878

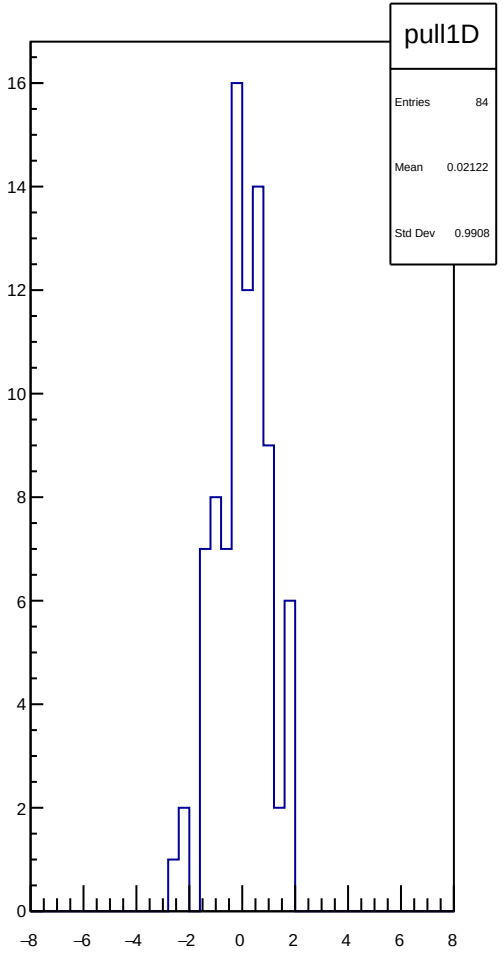

diff_bpm0l09X_rms vs run
χ² / ndf 1.337e+04 / 83
p0 6814 ± 5.418
9000
8500
8000
7500
7000
6500
6000

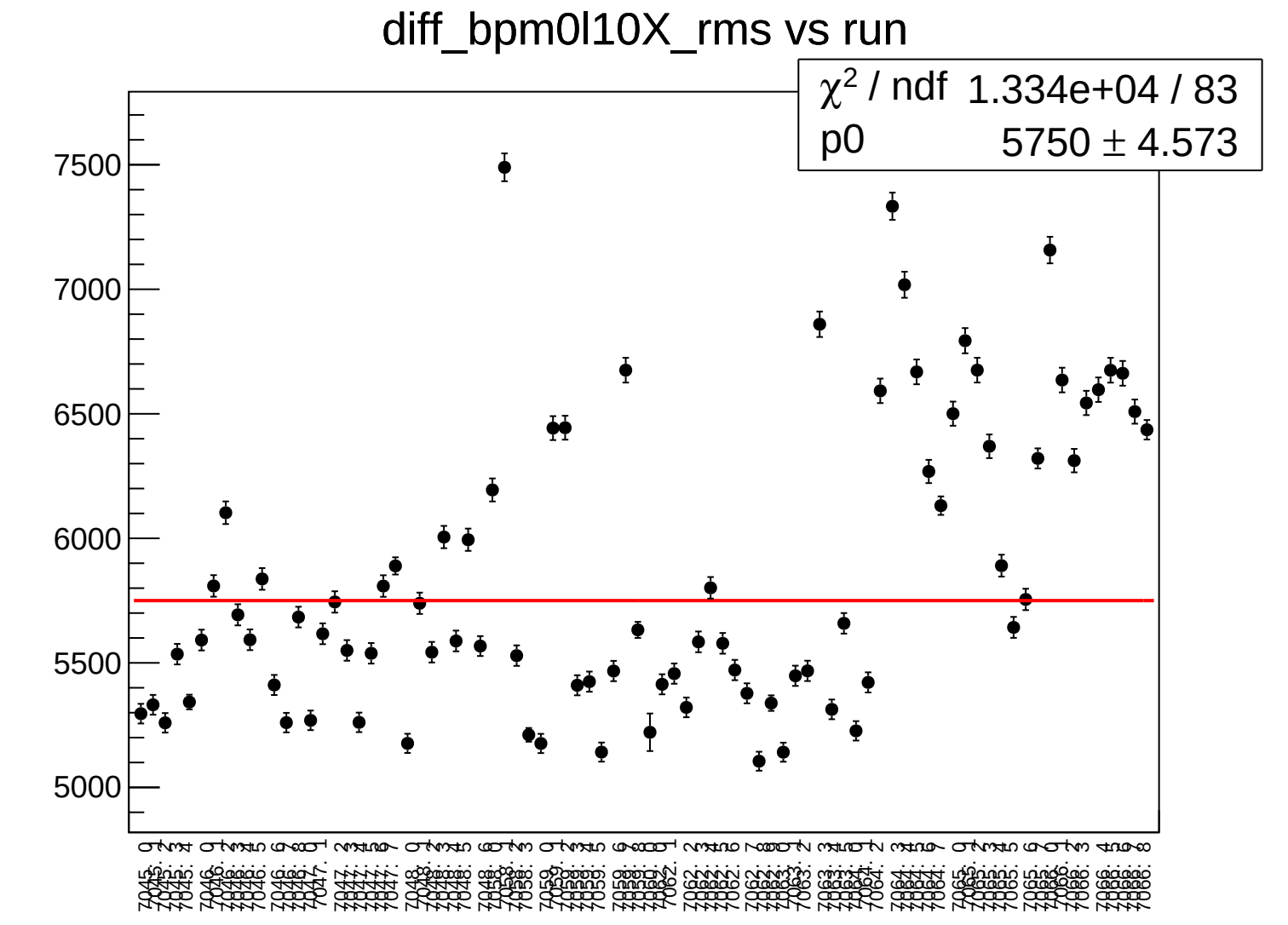

diff_bpm0l09Y_mean vs run
χ² / ndf 72.78 / 83
p0 −2.606 ± 1.857
pull
Entries 84
Mean −56.36
Std Dev 104.6

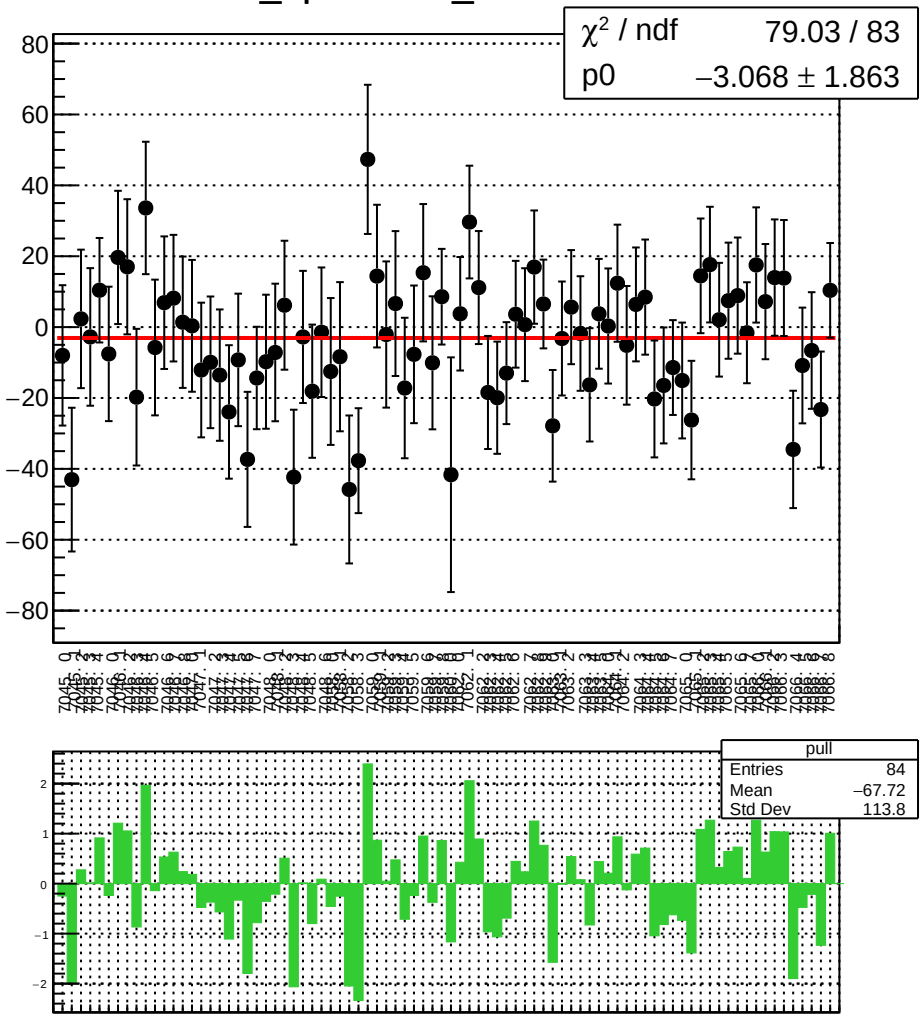

pull1D
Entries 84
Mean −0.01433
Std Dev 0.9307

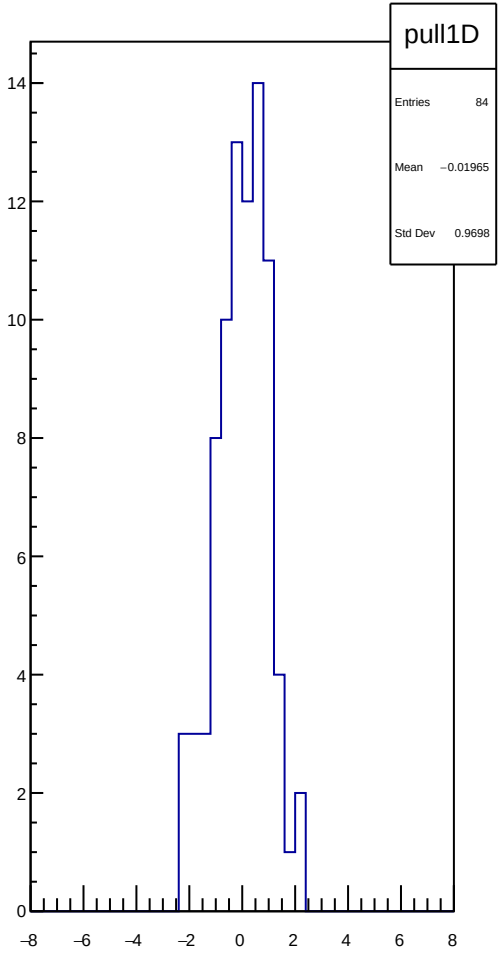

diff_bpm0l09Y_rms vs run
χ² / ndf 1.388e+04 / 83
p0 1651 ± 1.313
2000
1900
1800
1700
1600
1500
1400
1300

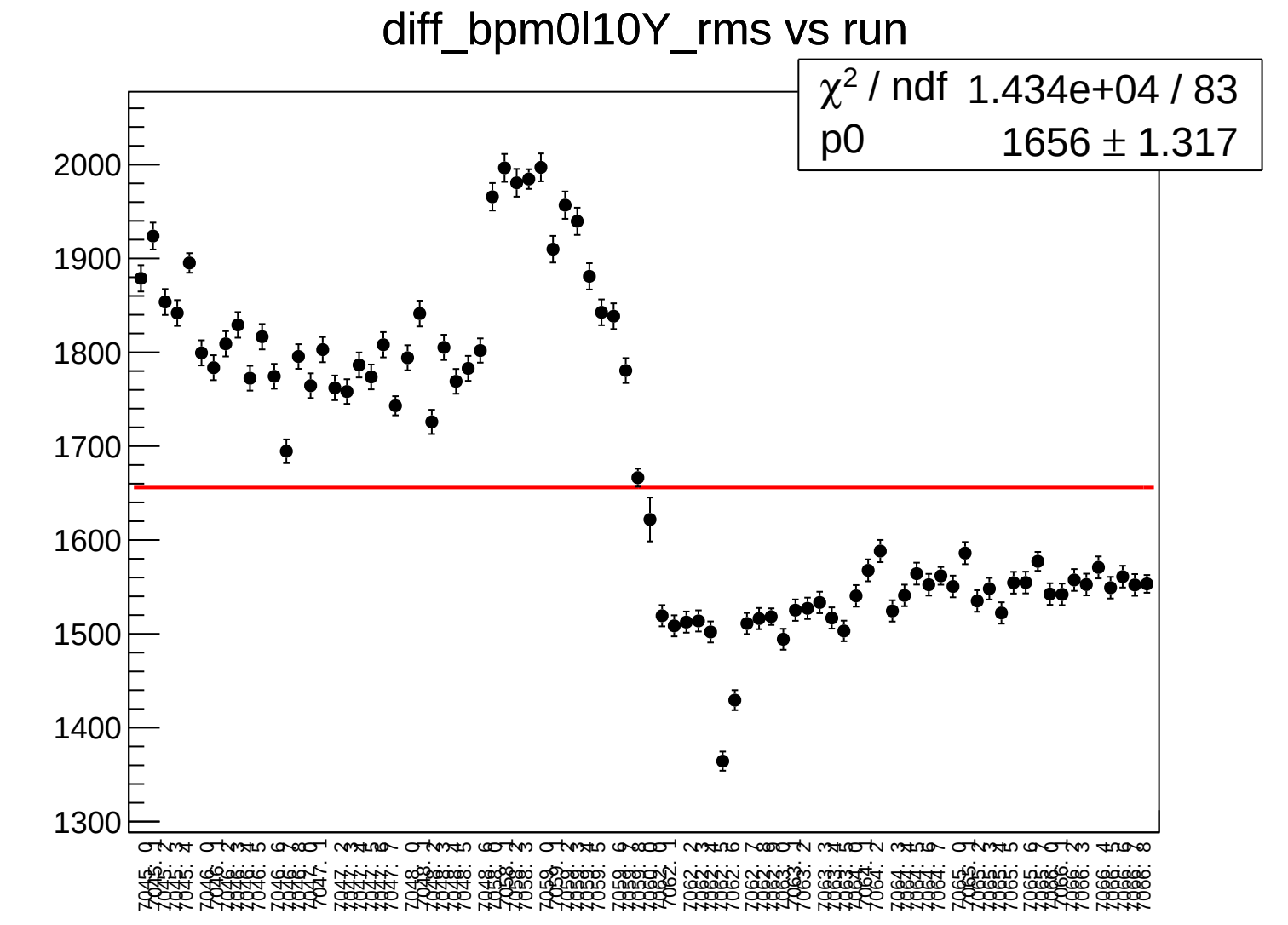

diff_bpm0l10X_mean vs run
χ² / ndf 82.5 / 83
p0 −12.28 ± 6.467
pull
Entries 84
Mean 204.7
Std Dev 154.3

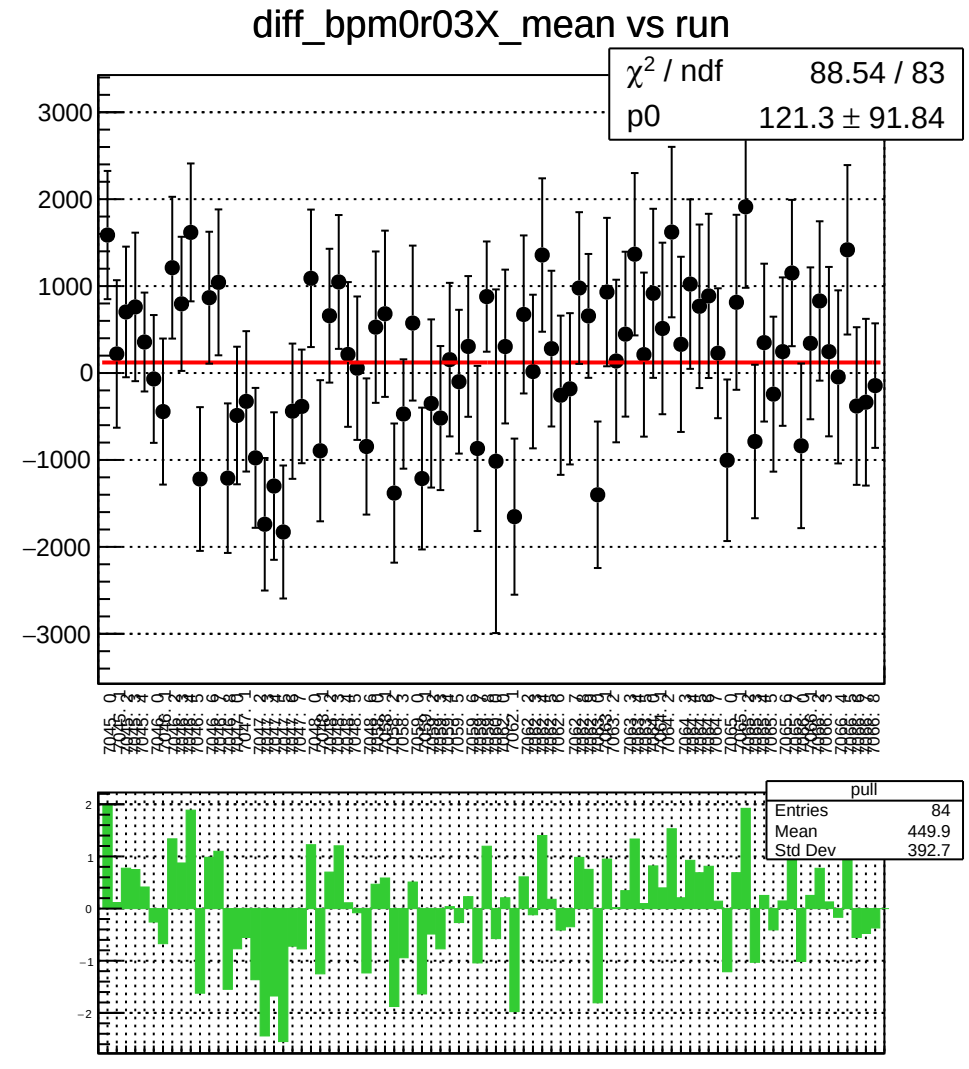

pull1D
Entries 84
Mean 0.02122
Std Dev 0.9908

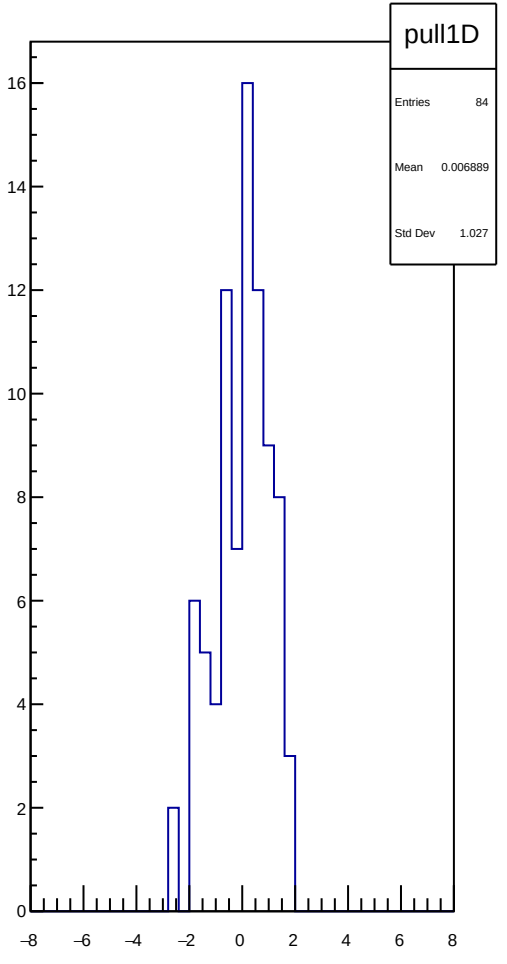

diff_bpm0l10X_rms vs run
χ² / ndf 1.334e+04 / 83
p0 5750 ± 4.573
7500
7000
6500
6000
5500
5000

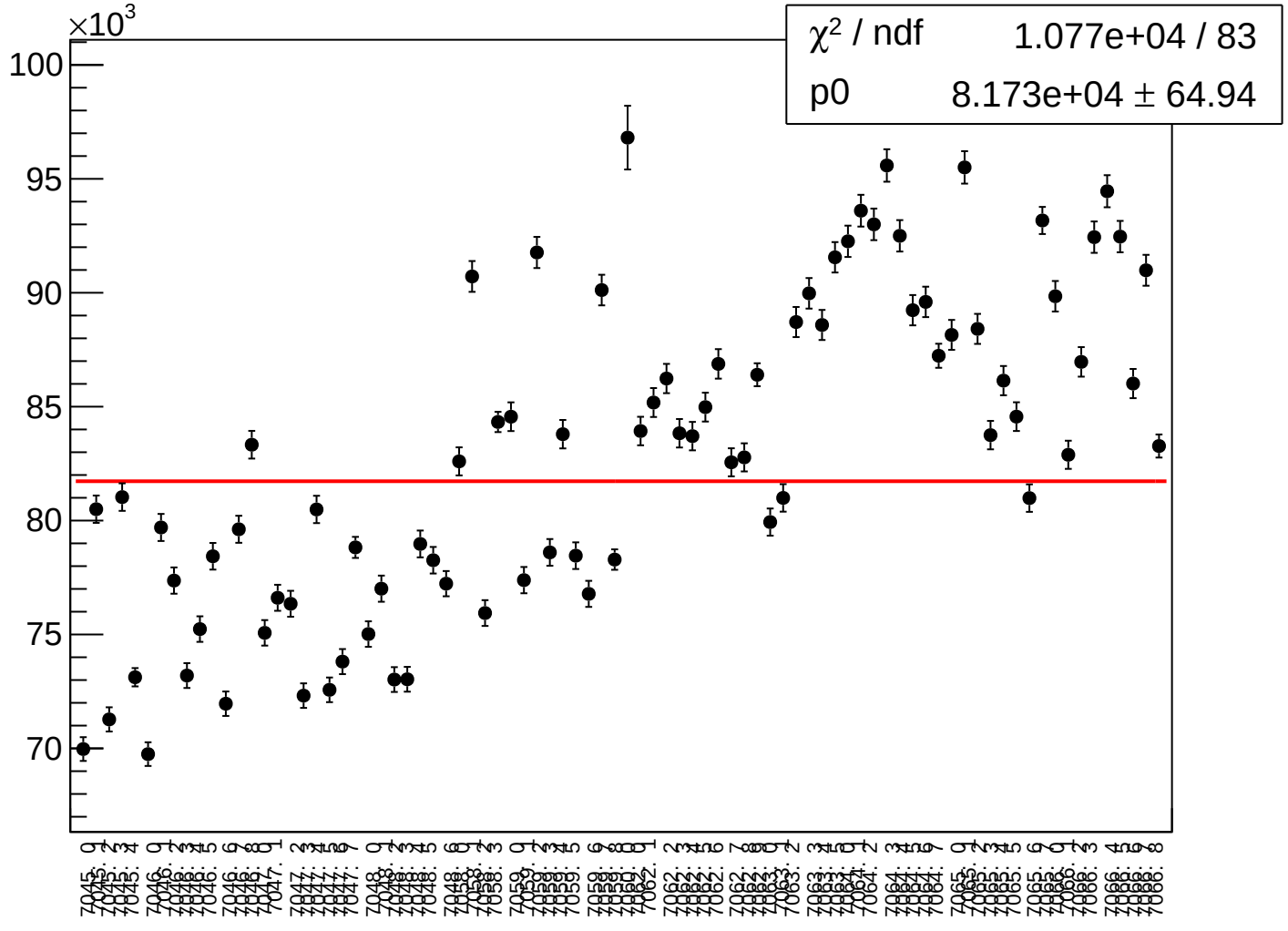

diff_bpm0l10Y_mean vs run
χ² / ndf 79.03 / 83
p0 −3.068 ± 1.863
pull
Entries 84
Mean −67.72
Std Dev 113.8

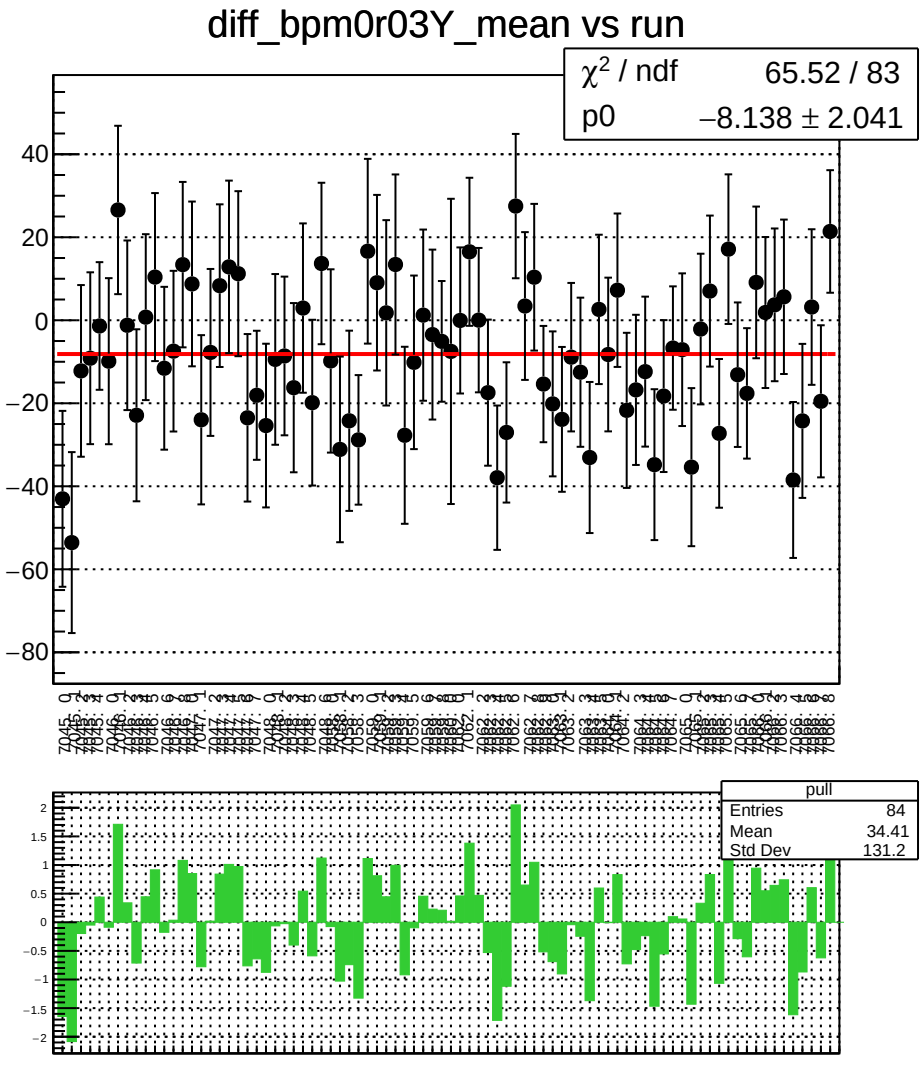

pull1D
Entries 84
Mean −0.01965
Std Dev 0.9698

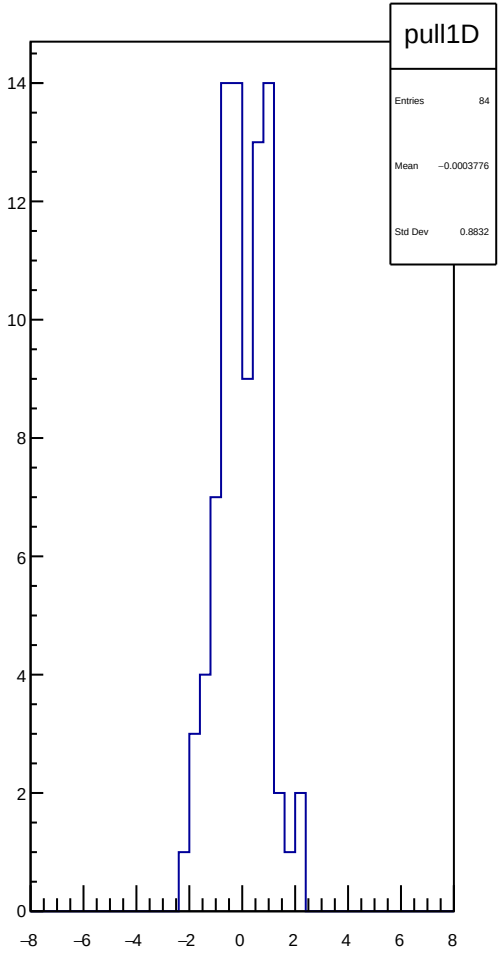

diff_bpm0l10Y_rms vs run
χ^2 / ndf 1.434e+04 / 83
p0 1656 ± 1.317
2000
1900
1800
1700
1600
1500
1400
1300

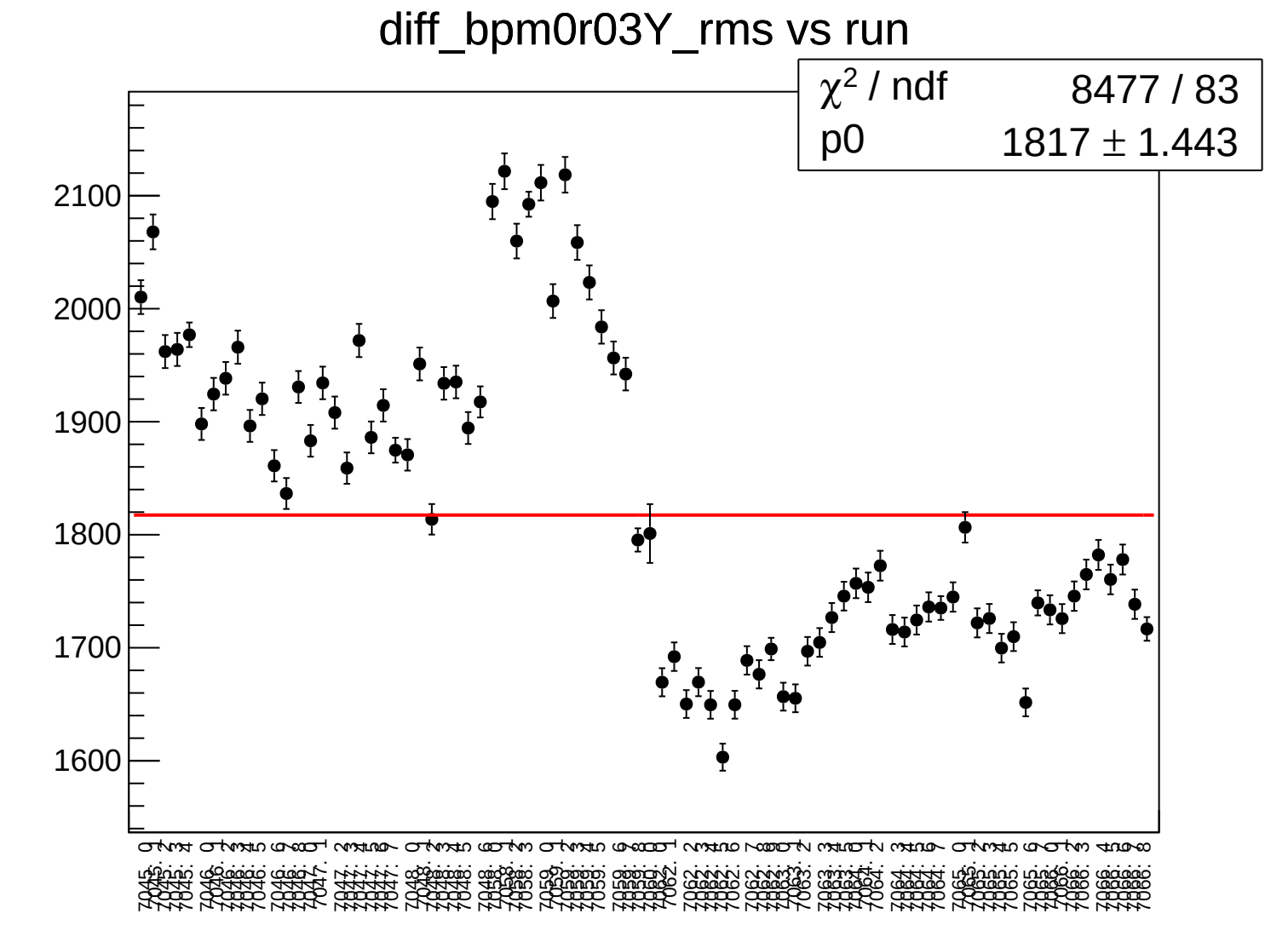

diff_bpm0r03X_mean vs run
χ² / ndf 88.54 / 83
p0 121.3 ± 91.84
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 84
Mean 449.9
Std Dev 392.7
2
1
0
−1
−2

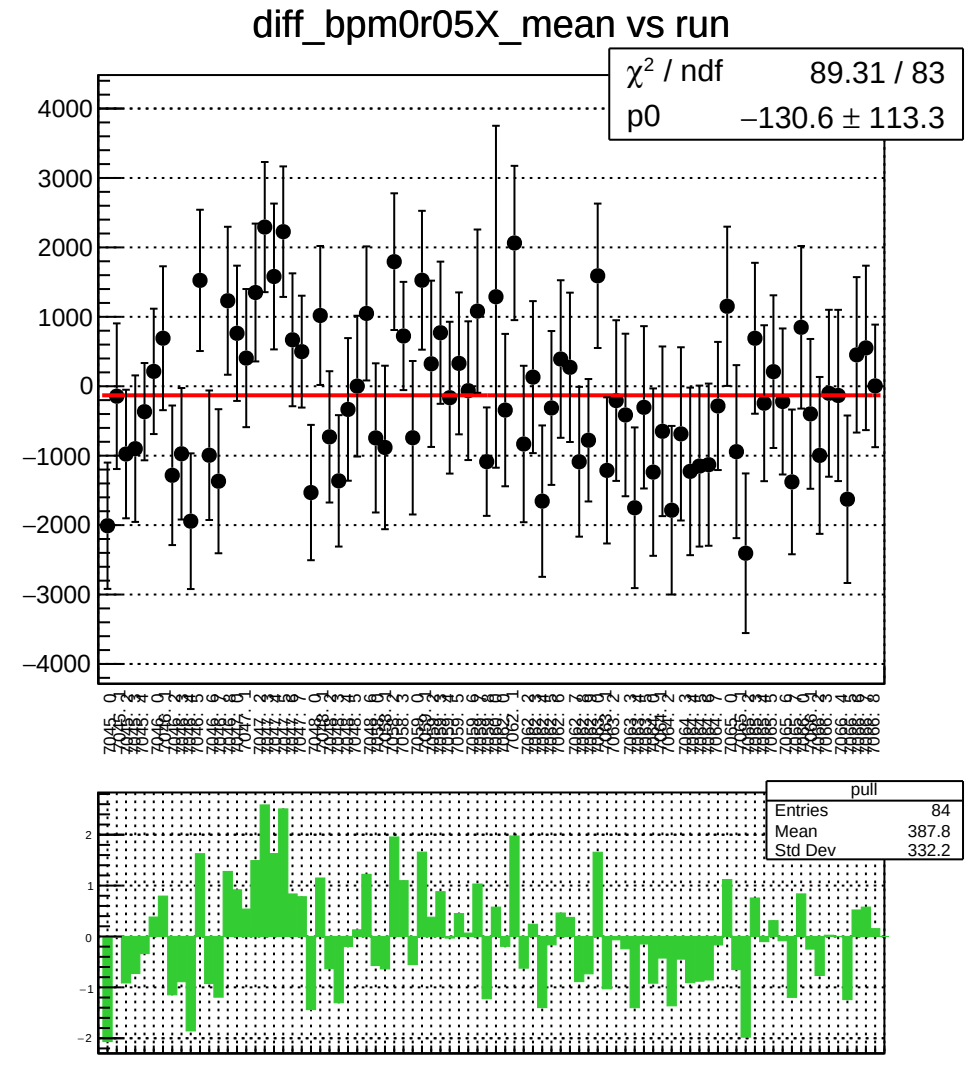

pull1D
Entries 84
Mean 0.006889
Std Dev 1.027
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

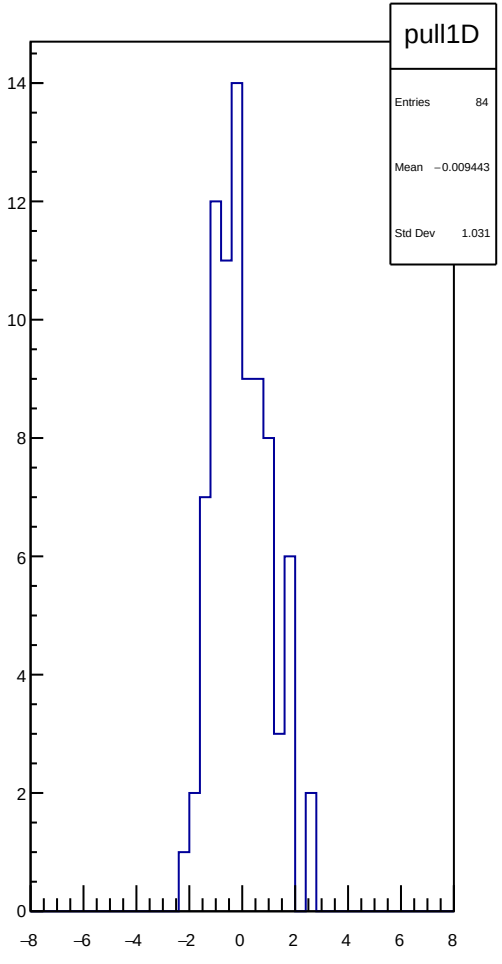

diff_bpm0r03X_rms vs run
×10^3
100
95
90
85
80
75
70
χ² / ndf 1.077e+04 / 83
p0 8.173e+04 ± 64.94

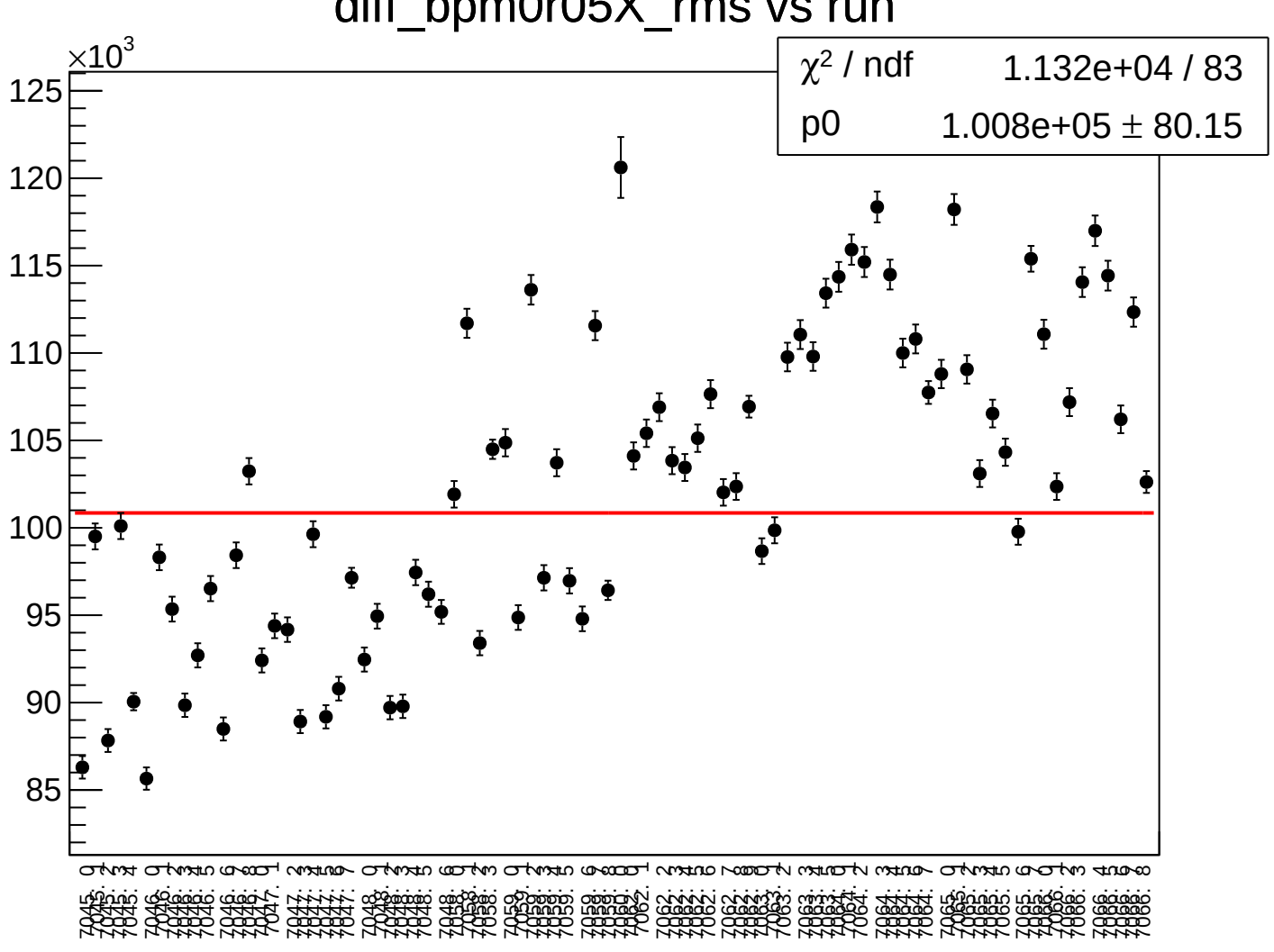

diff_bpm0r03Y_mean vs run
χ² / ndf 65.52 / 83
p0 −8.138 ± 2.041
pull
Entries 84
Mean 34.41
Std Dev 131.2

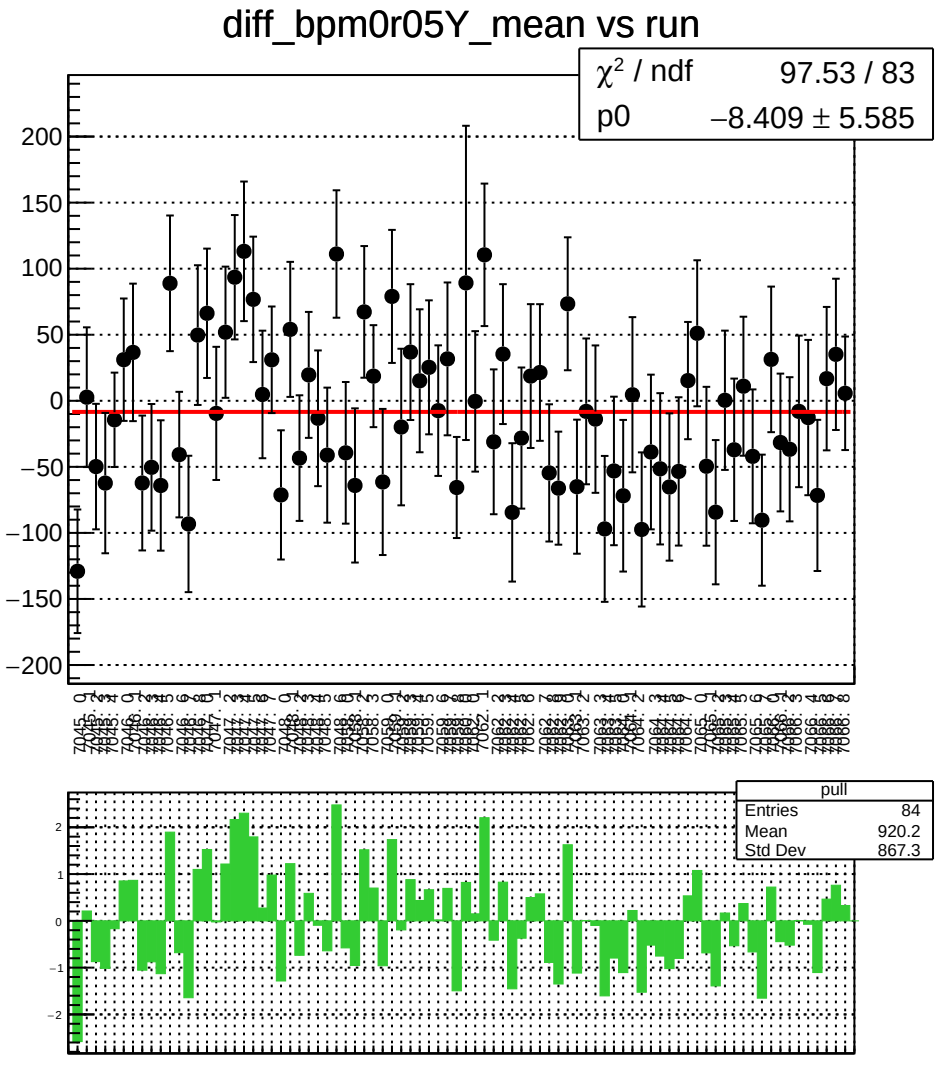

pull1D
Entries 84
Mean −0.0003776
Std Dev 0.8832

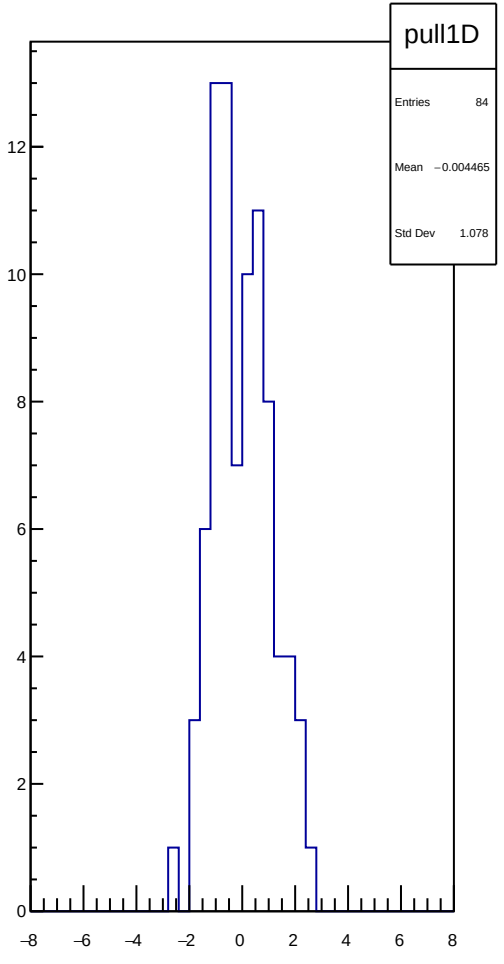

diff_bpm0r03Y_rms vs run
χ² / ndf 8477 / 83
p0 1817 ± 1.443
2100
2000
1900
1800
1700
1600

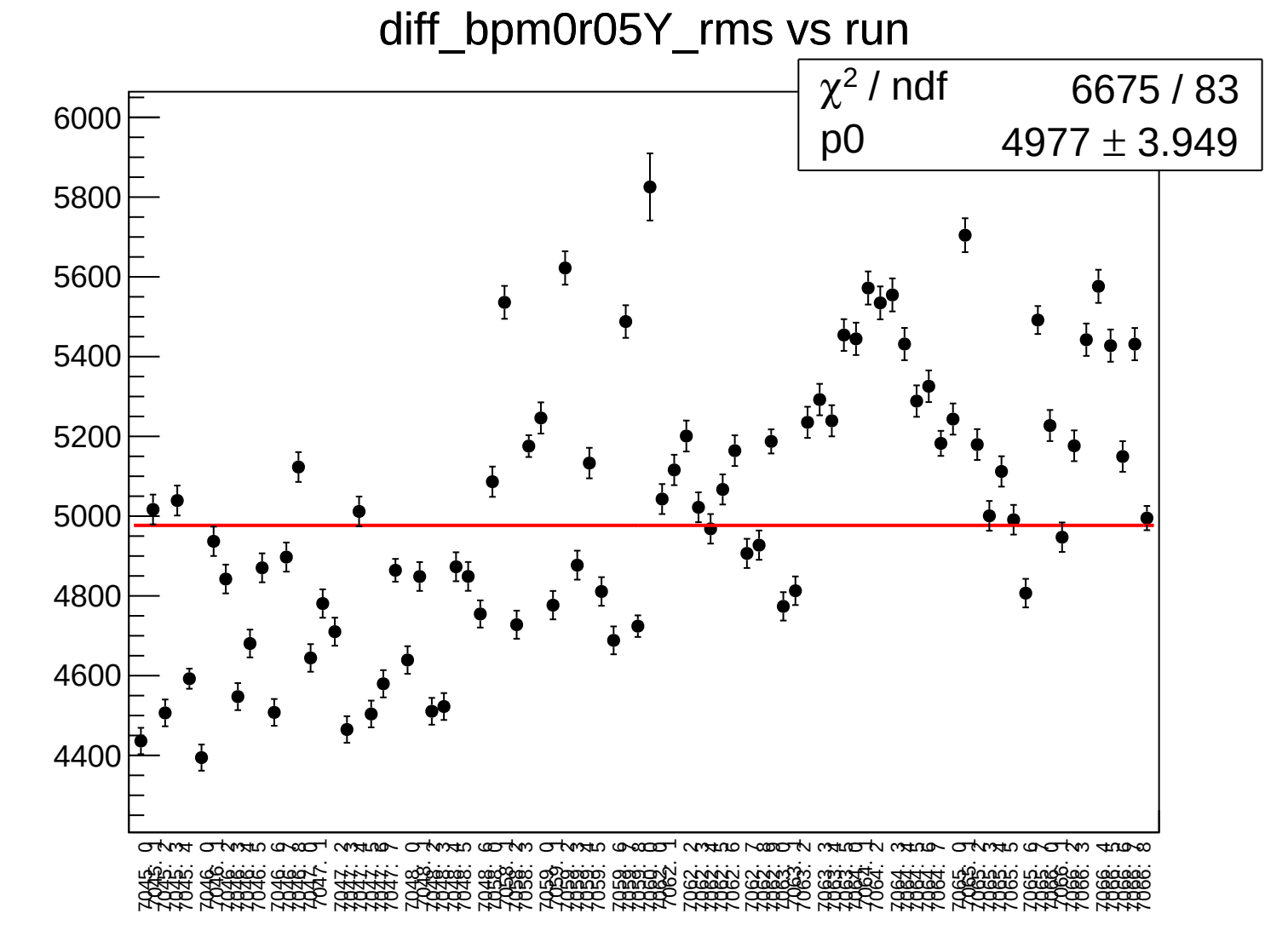

diff_bpm0r05X_mean vs run
χ² / ndf 89.31 / 83
p0 −130.6 ± 113.3
pull
Entries 84
Mean 387.8
Std Dev 332.2

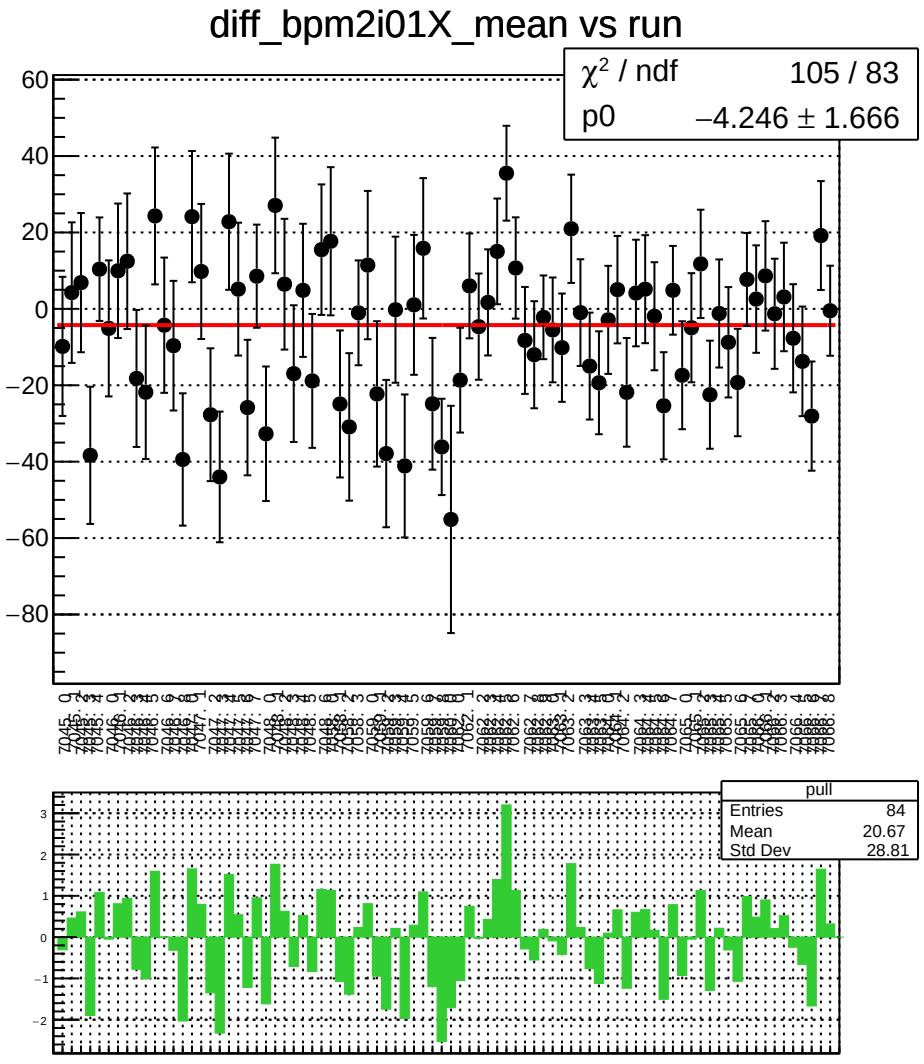

pull1D
Entries 84
Mean −0.009443
Std Dev 1.031

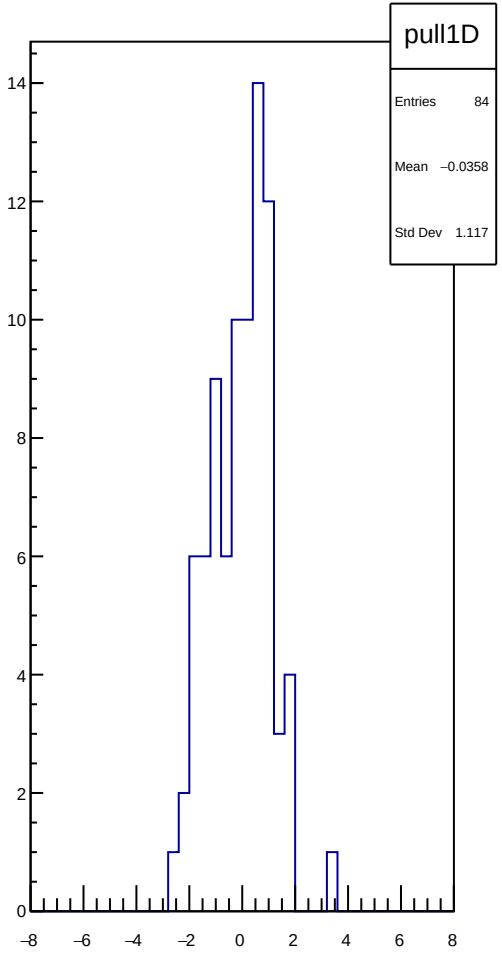

diff_bpm0r05X_rms vs run
×10^3
125
120
115
110
105
100
95
90
85
χ² / ndf 1.132e+04 / 83
p0 1.008e+05 ± 80.15

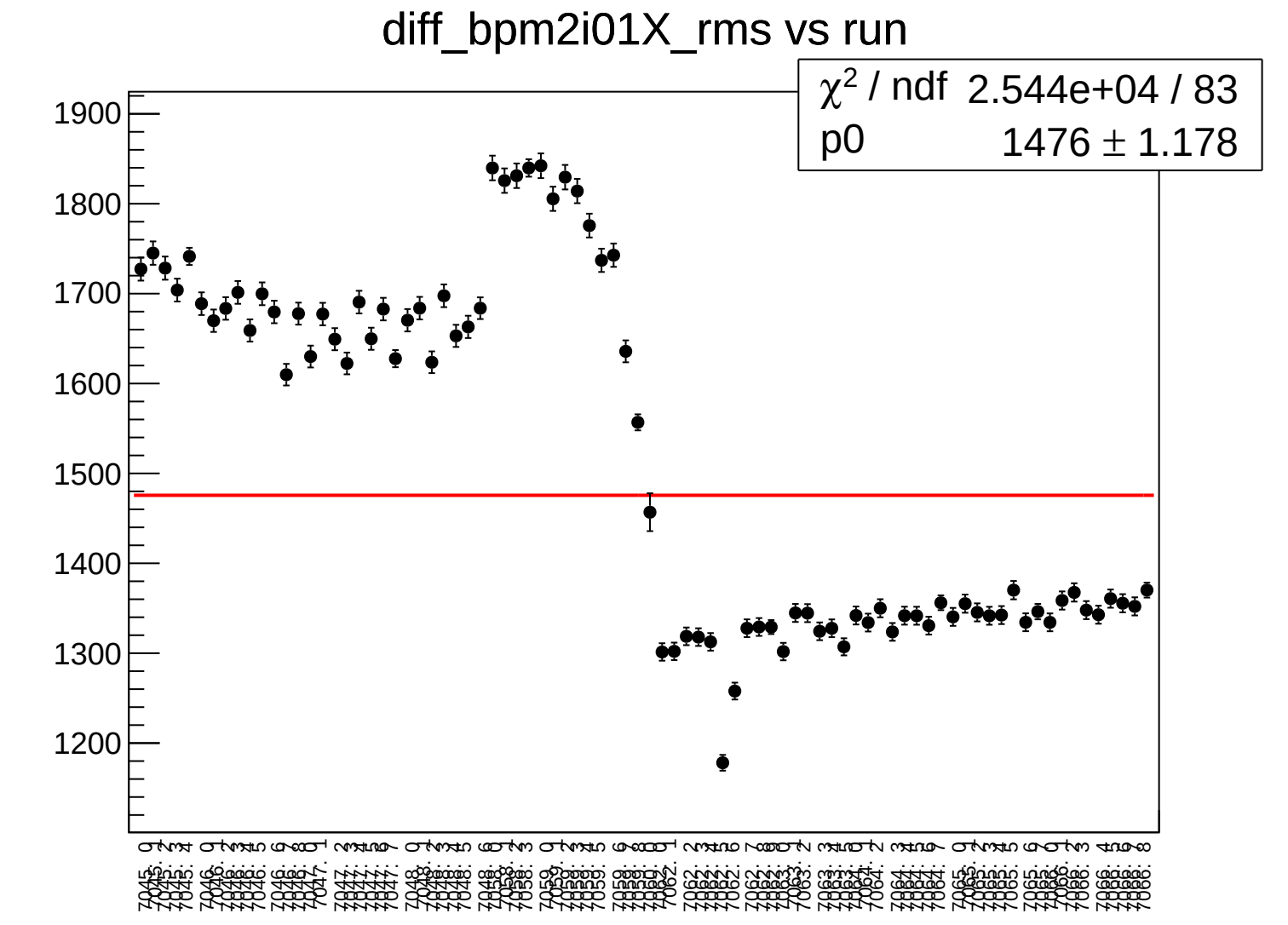

diff_bpm0r05Y_mean vs run
χ² / ndf 97.53 / 83
p0 −8.409 ± 5.585
pull
Entries 84
Mean 920.2
Std Dev 867.3

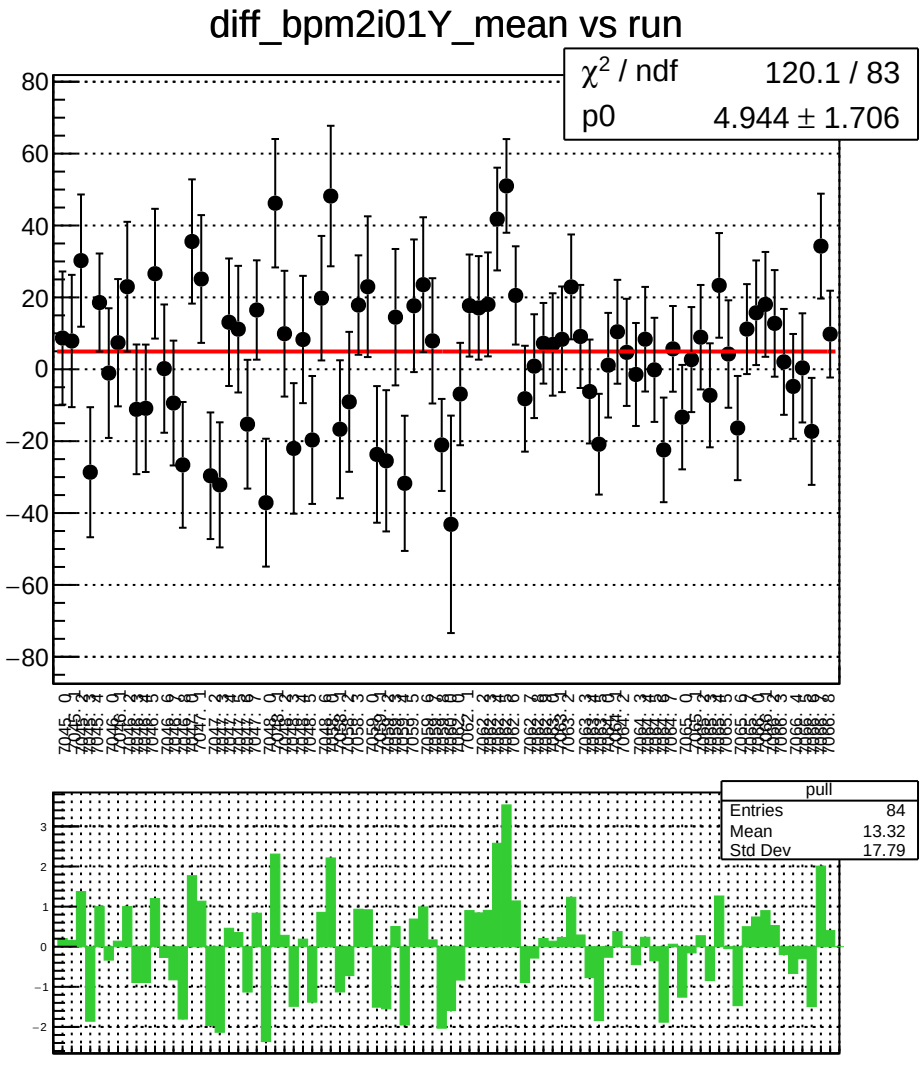

pull1D
Entries 84
Mean −0.004465
Std Dev 1.078

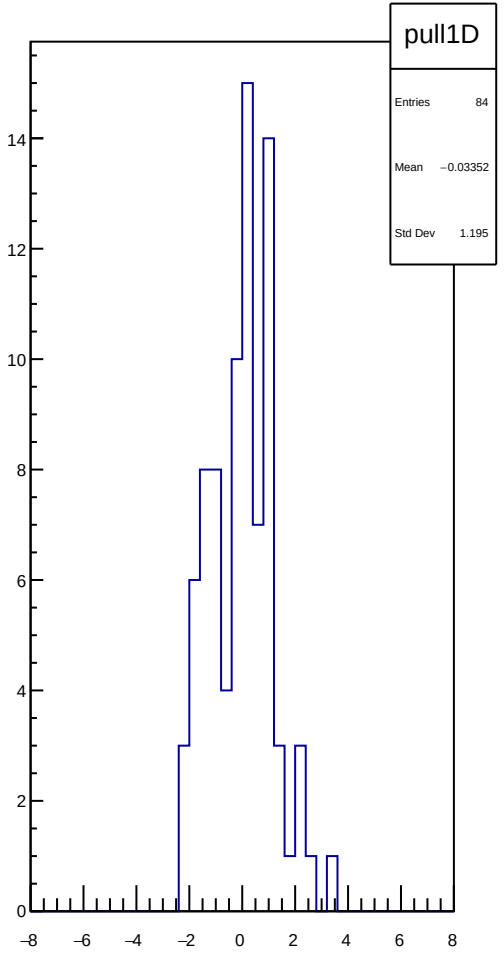

diff_bpm0r05Y_rms vs run
χ² / ndf 6675 / 83
p0 4977 ± 3.949
6000
5800
5600
5400
5200
5000
4800
4600
4400

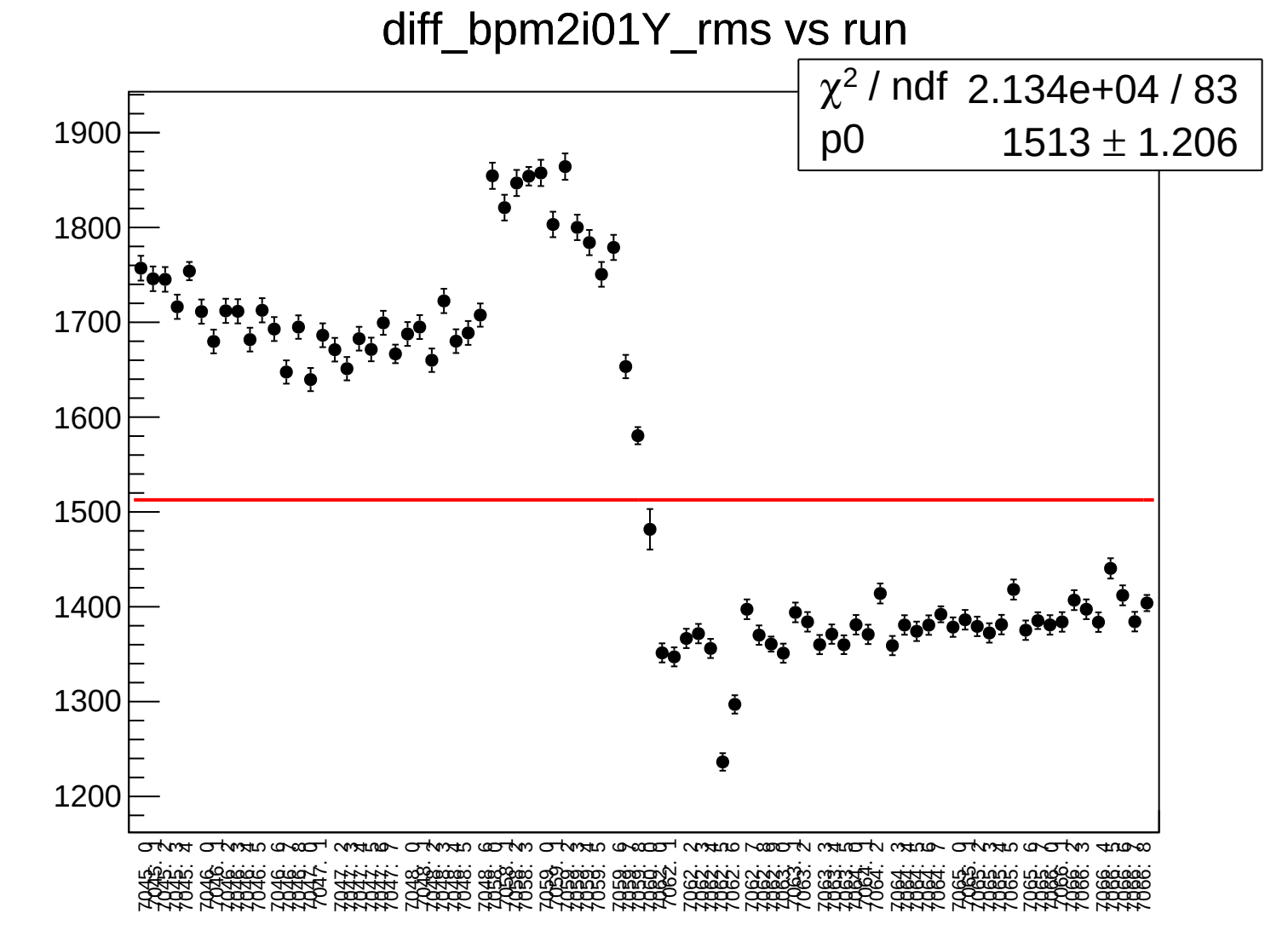

diff_bpm2i01X_mean vs run
χ² / ndf 105 / 83
p0 −4.246 ± 1.666
pull
Entries 84
Mean 20.67
Std Dev 28.81

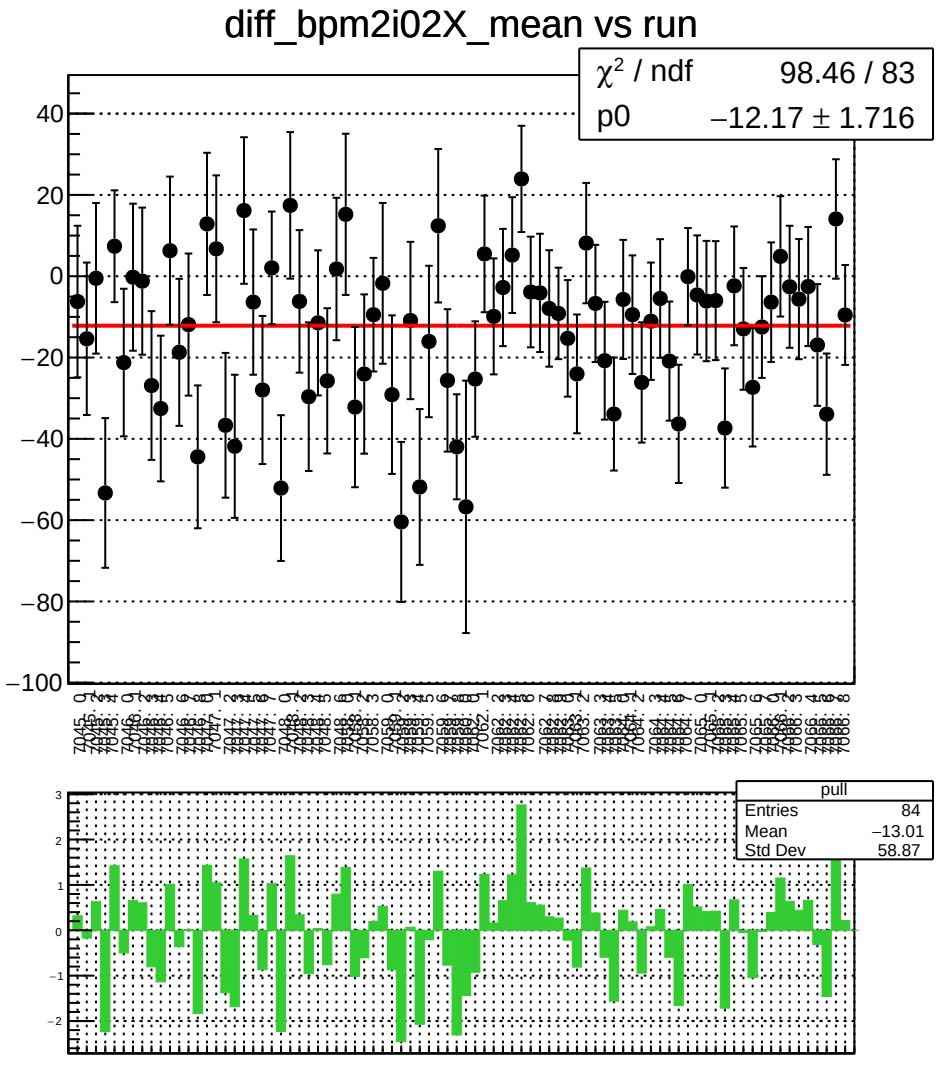

pull1D
Entries 84
Mean −0.0358
Std Dev 1.117

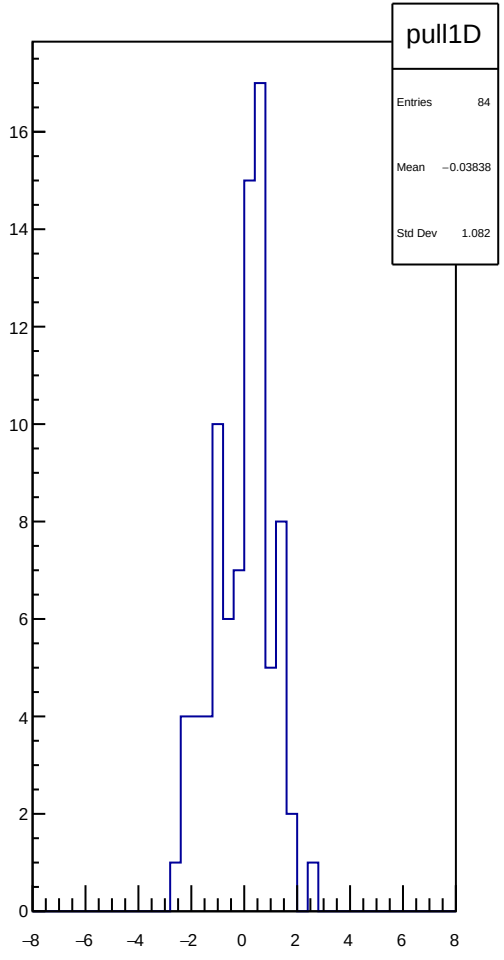

diff_bpm2i01X_rms vs run
χ² / ndf 2.544e+04 / 83
p0 1476 ± 1.178
1900
1800
1700
1600
1500
1400
1300
1200

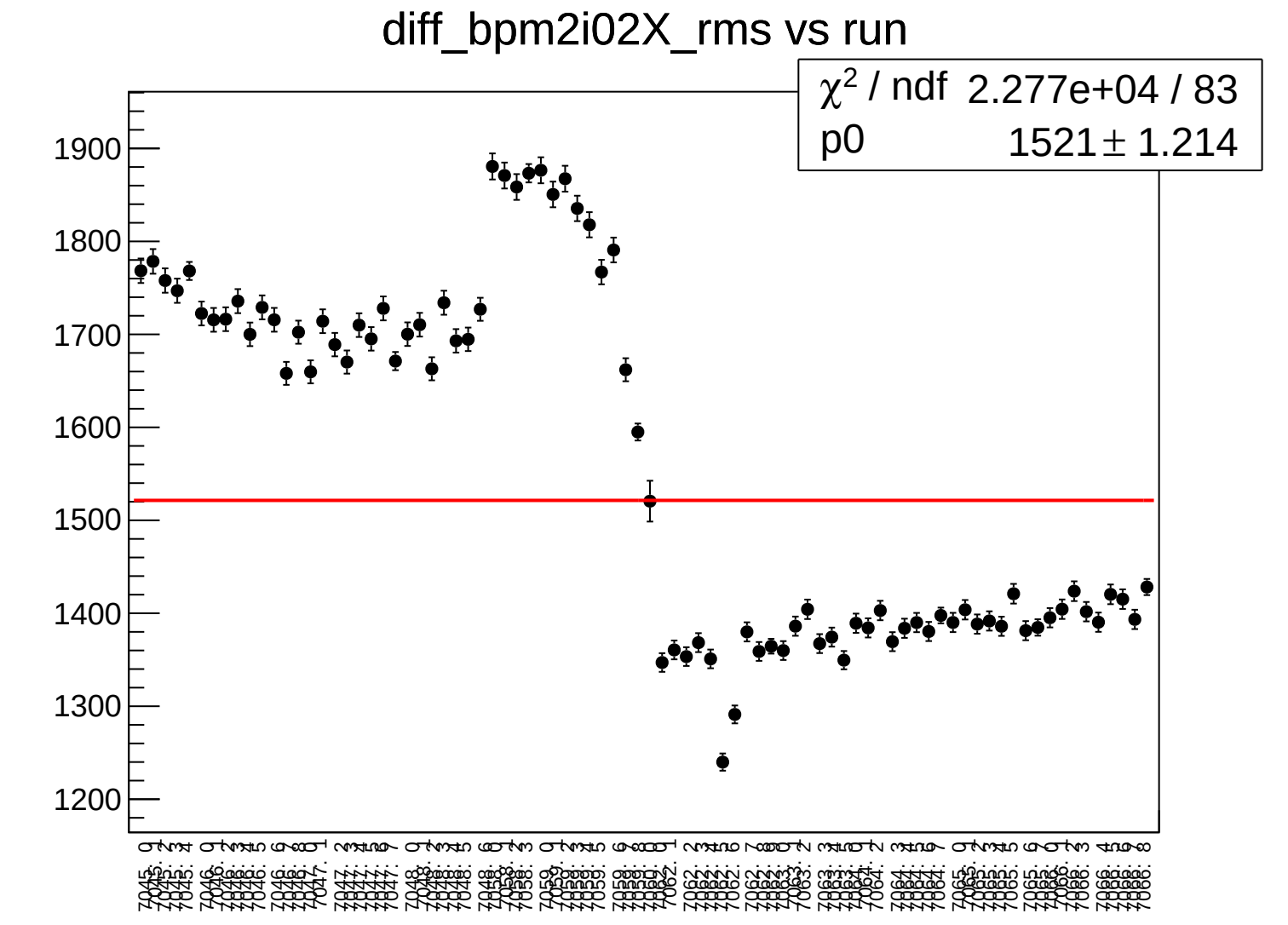

diff_bpm2i01Y_mean vs run
χ² / ndf 120.1 / 83
p0 4.944 ± 1.706
pull
Entries 84
Mean 13.32
Std Dev 17.79

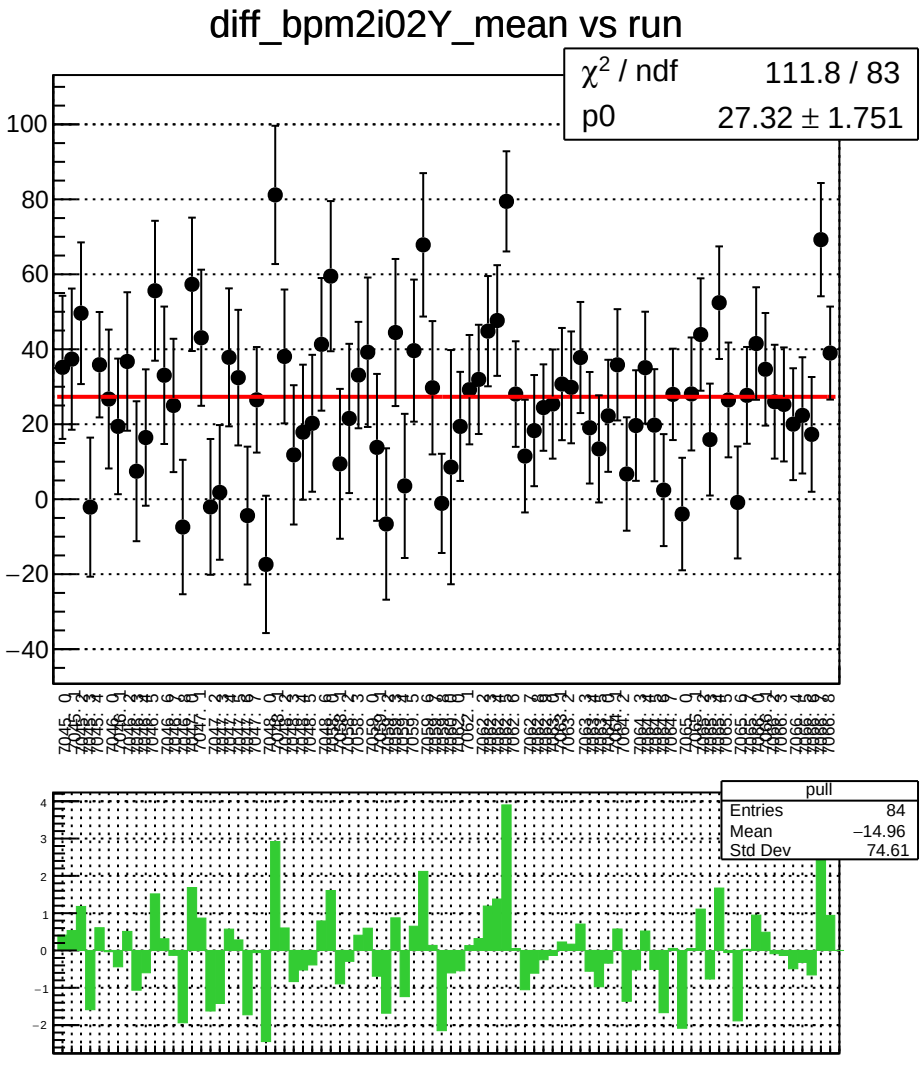

pull1D
Entries 84
Mean −0.03352
Std Dev 1.195

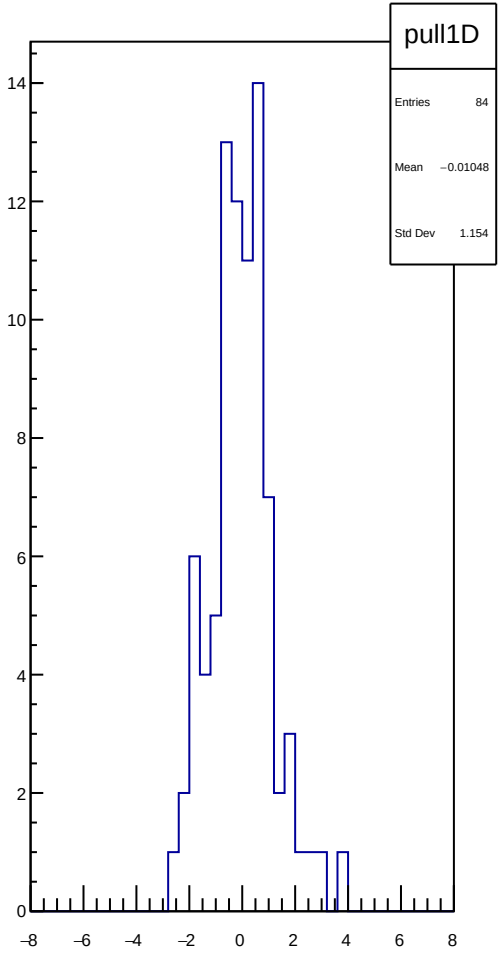

diff_bpm2i01Y_rms vs run
χ² / ndf 2.134e+04 / 83
p0 1513 ± 1.206
1900
1800
1700
1600
1500
1400
1300
1200

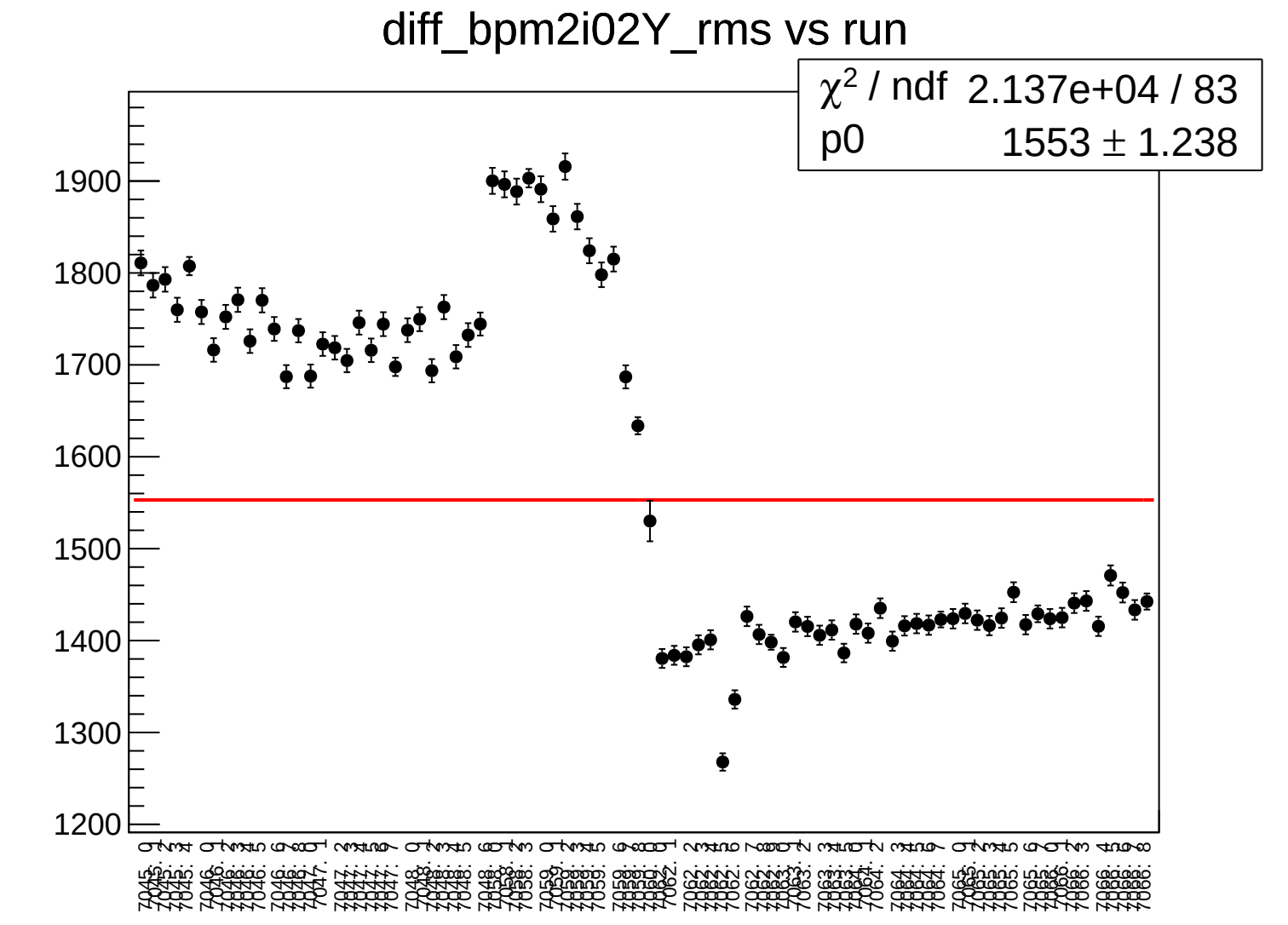

diff_bpm2i02X_mean vs run
χ² / ndf 98.46 / 83
p0 −12.17 ± 1.716
pull
Entries 84
Mean −13.01
Std Dev 58.87

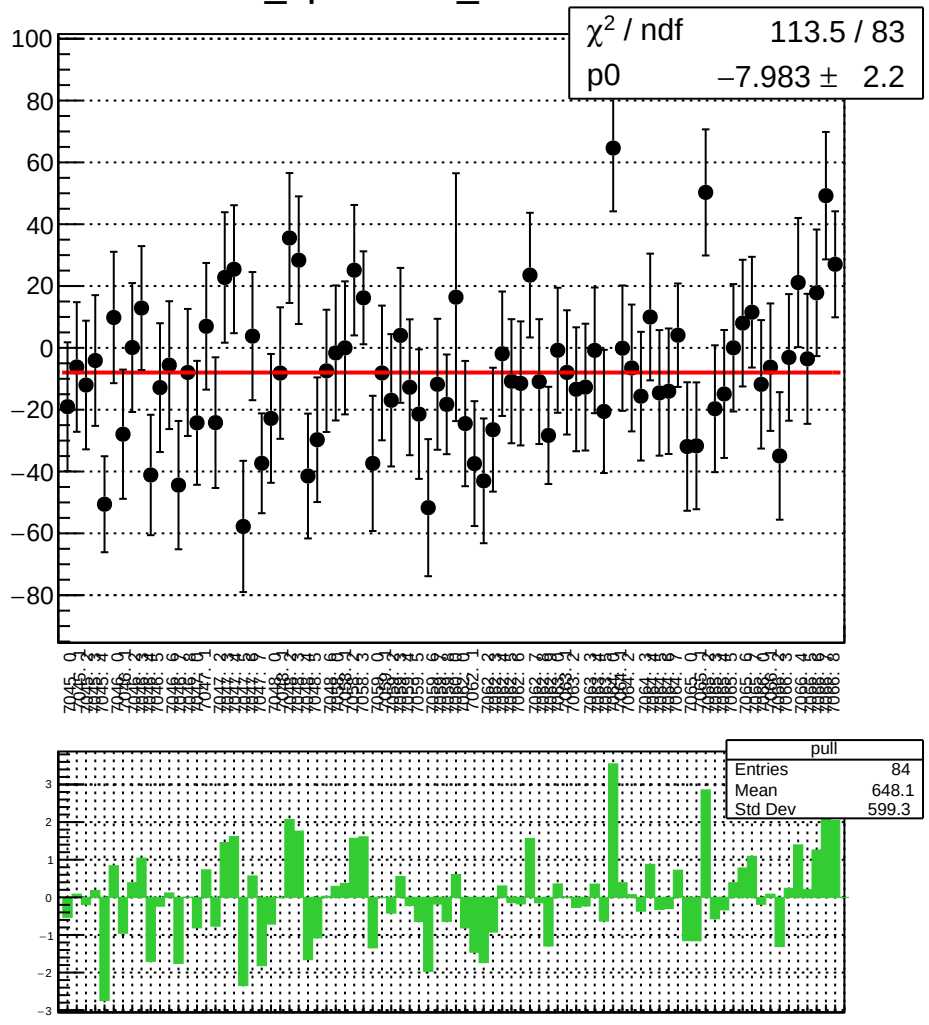

pull1D
Entries 84
Mean −0.03838
Std Dev 1.082

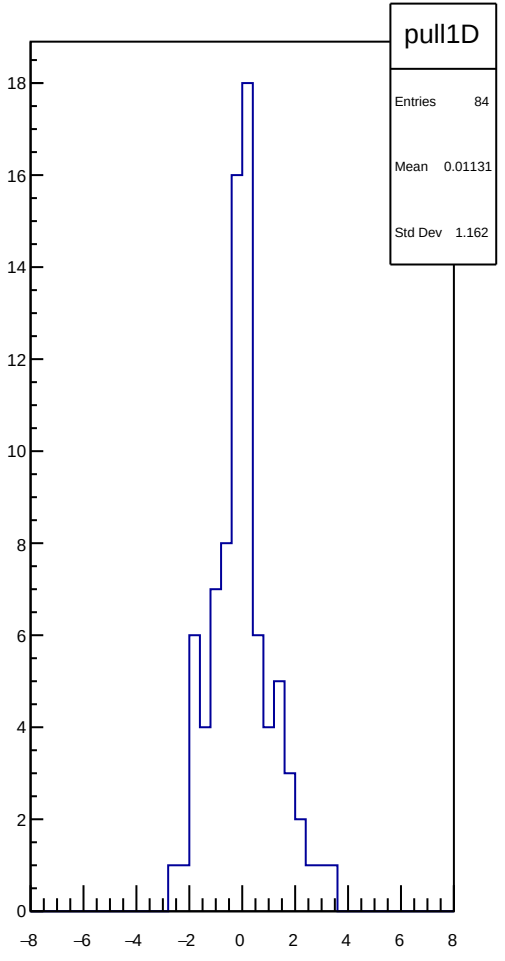

diff_bpm2i02X_rms vs run
χ² / ndf 2.277e+04 / 83
p0 1521 ± 1.214
1900
1800
1700
1600
1500
1400
1300
1200

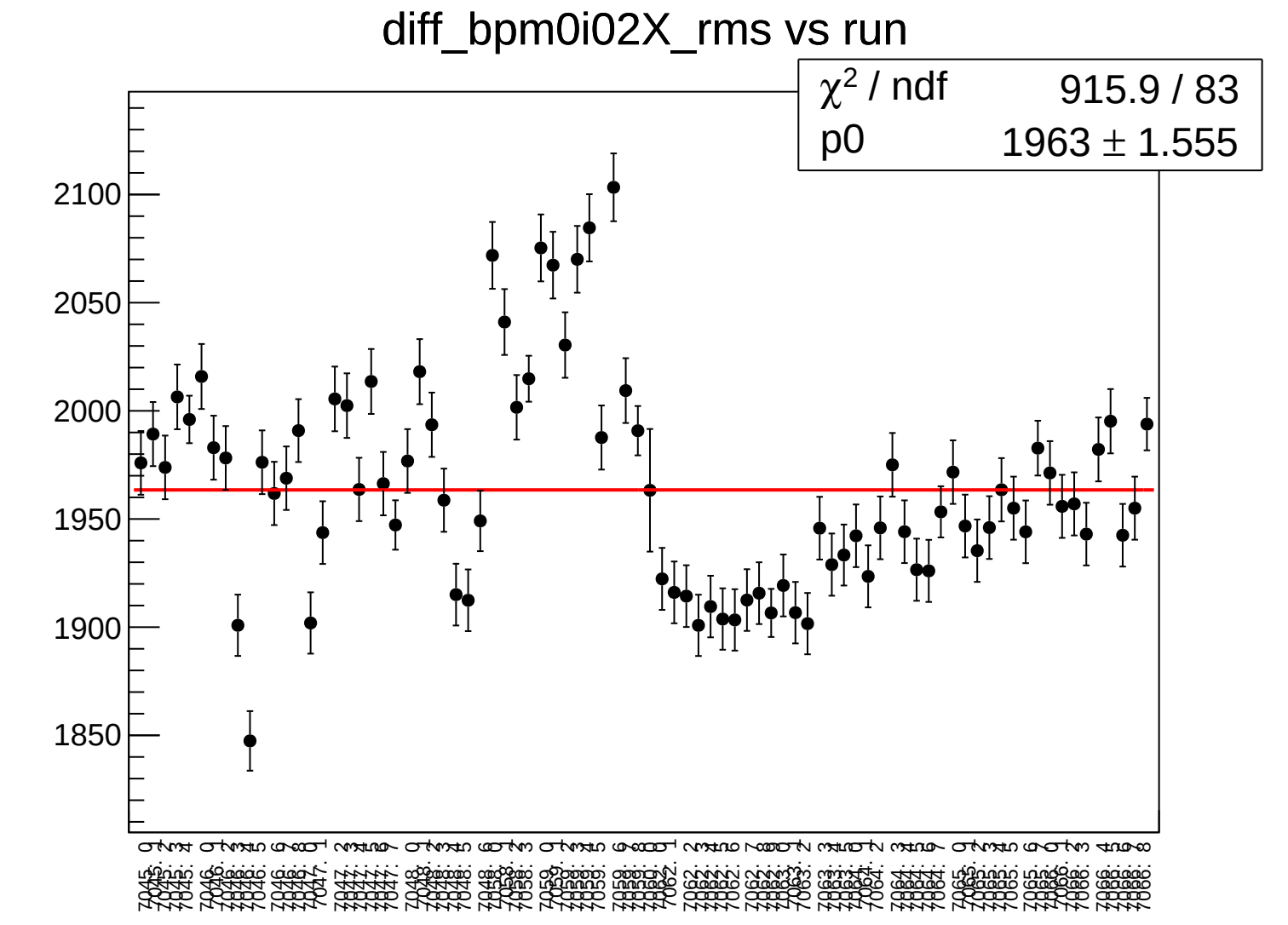

diff_bpm2i02Y_mean vs run
χ^2 / ndf 111.8 / 83
p0 27.32 ± 1.751
pull
Entries 84
Mean −14.96
Std Dev 74.61

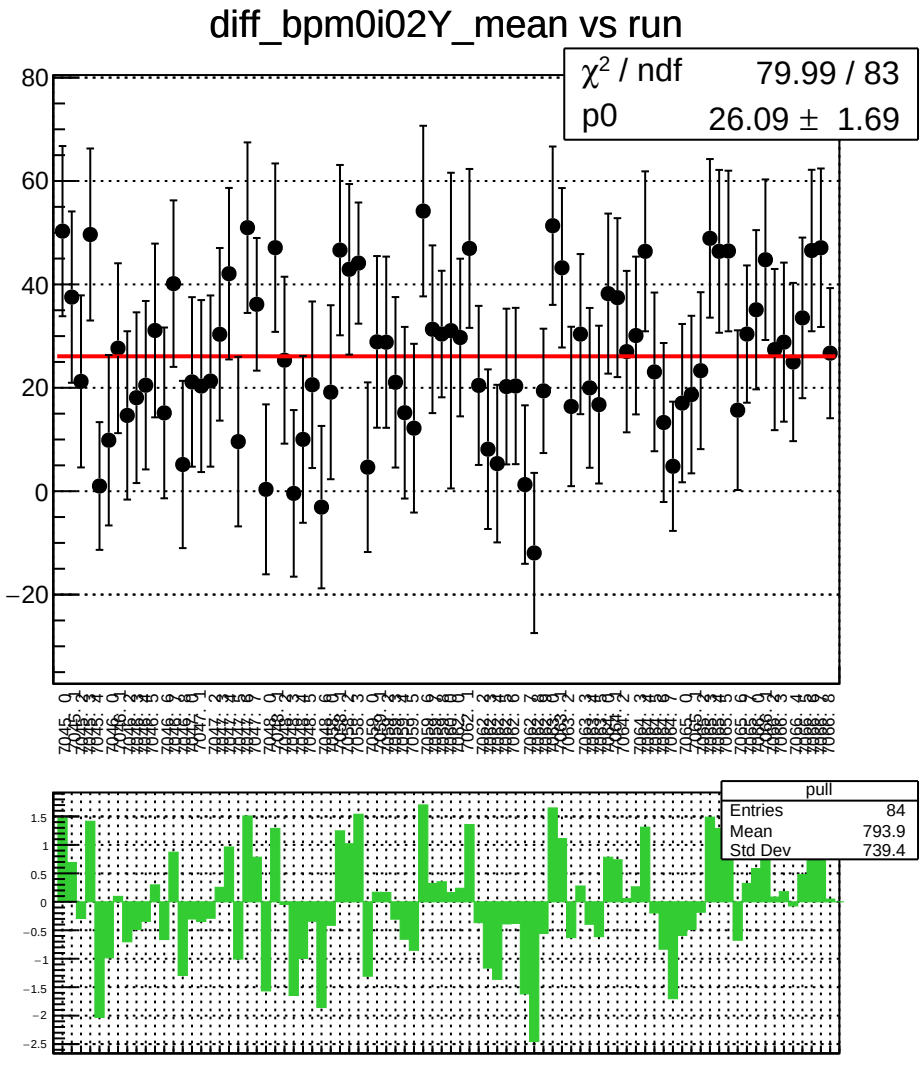

pull1D
Entries 84
Mean −0.01048
Std Dev 1.154

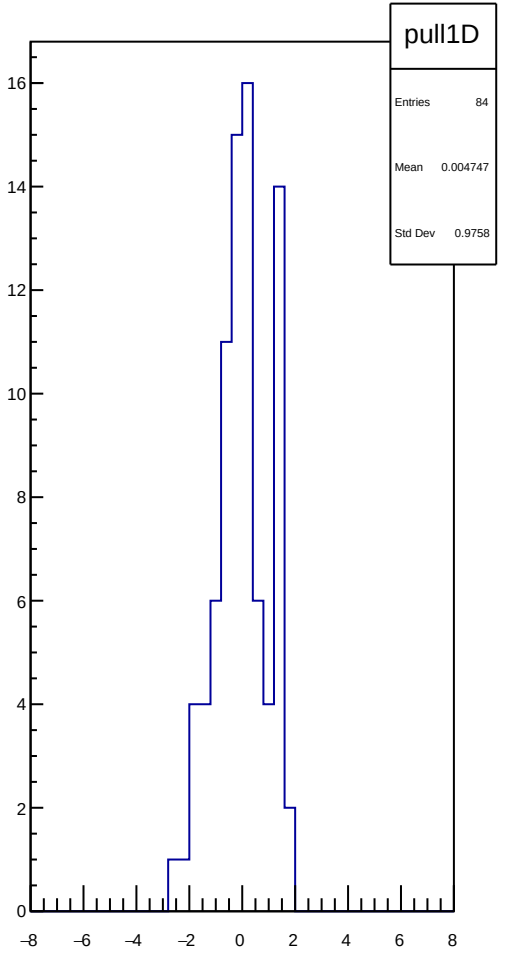

diff_bpm2i02Y_rms vs run
χ^2 / ndf 2.137e+04 / 83
p0 1553 ± 1.238
1900
1800
1700
1600
1500
1400
1300
1200

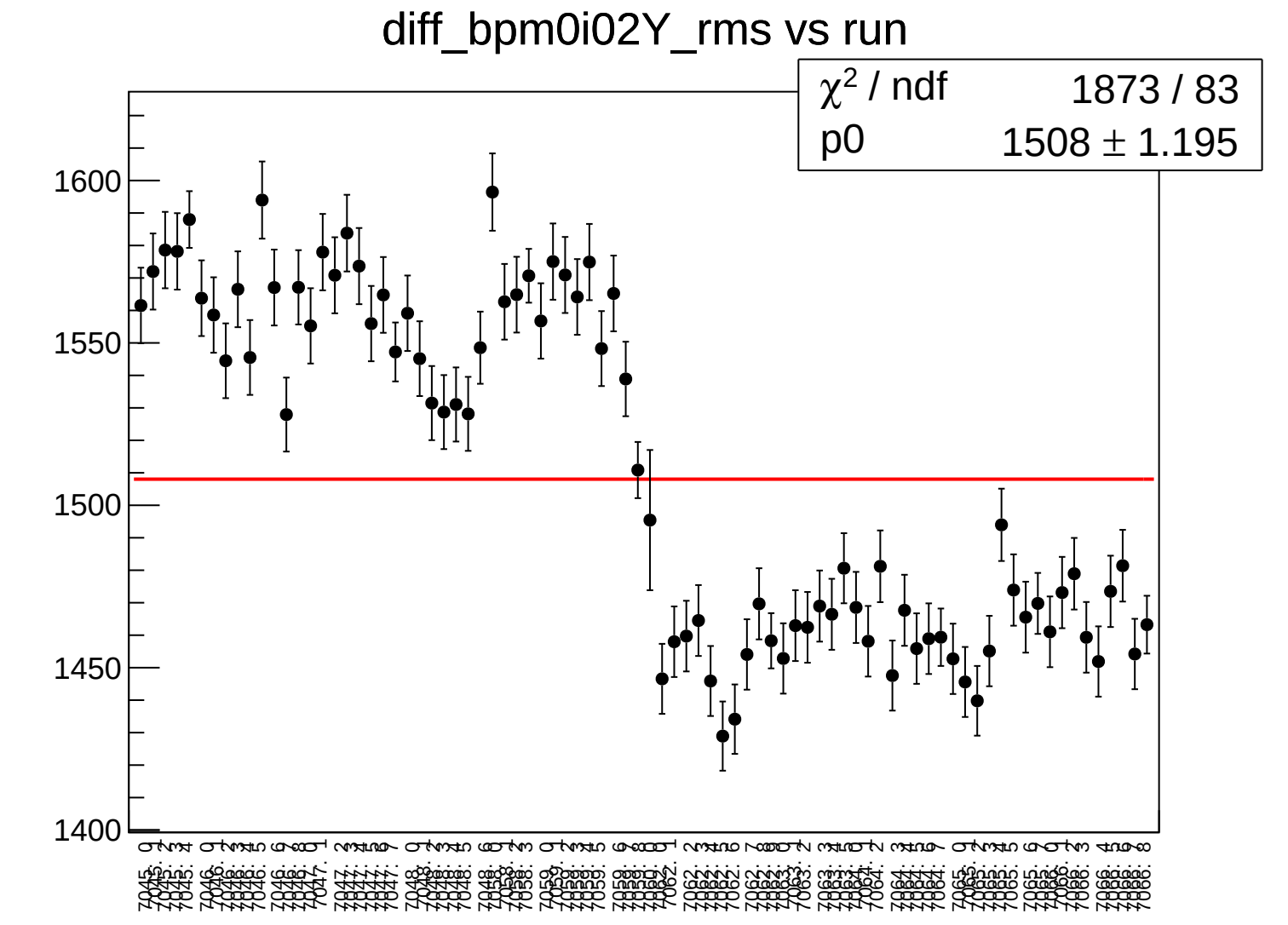

diff_bpm0i02X_mean vs run
χ^2 / ndf 113.5 / 83
p0 −7.983 ± 2.2
pull
Entries 84
Mean 648.1
Std Dev 599.3

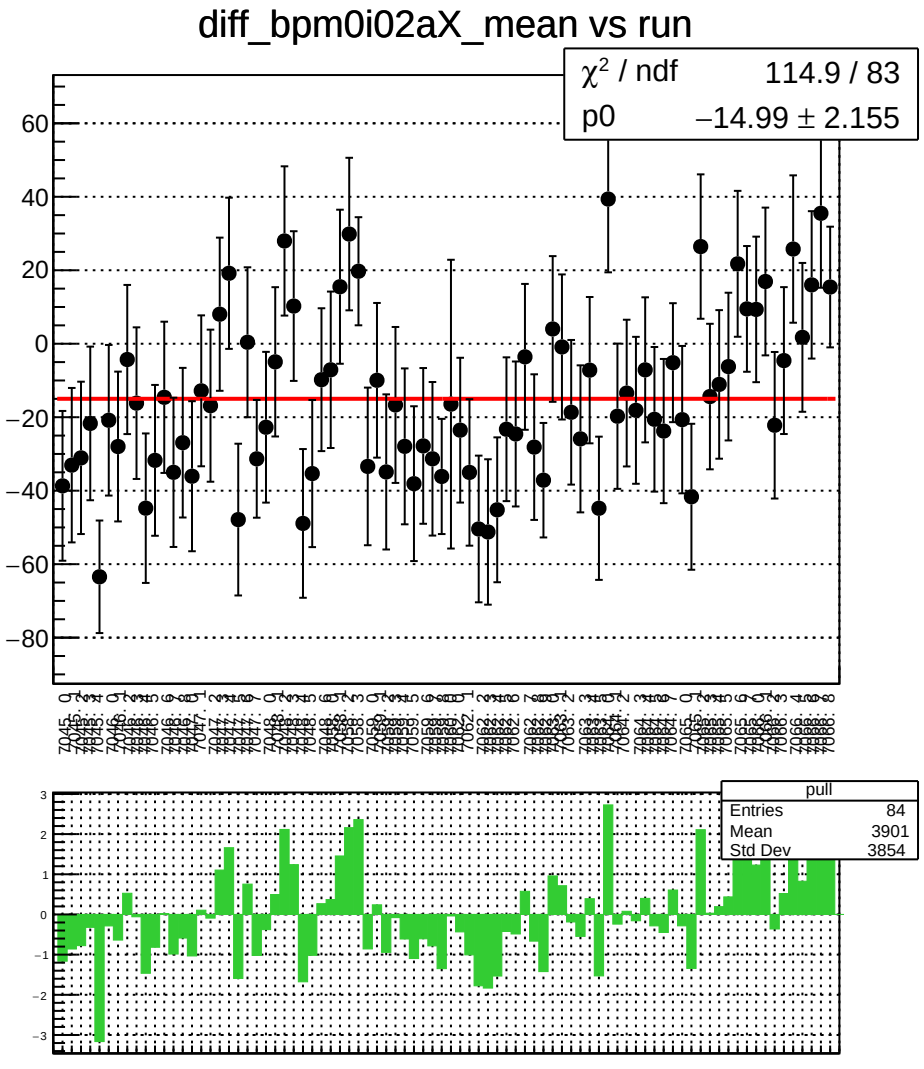

pull1D
Entries 84
Mean 0.01131
Std Dev 1.162

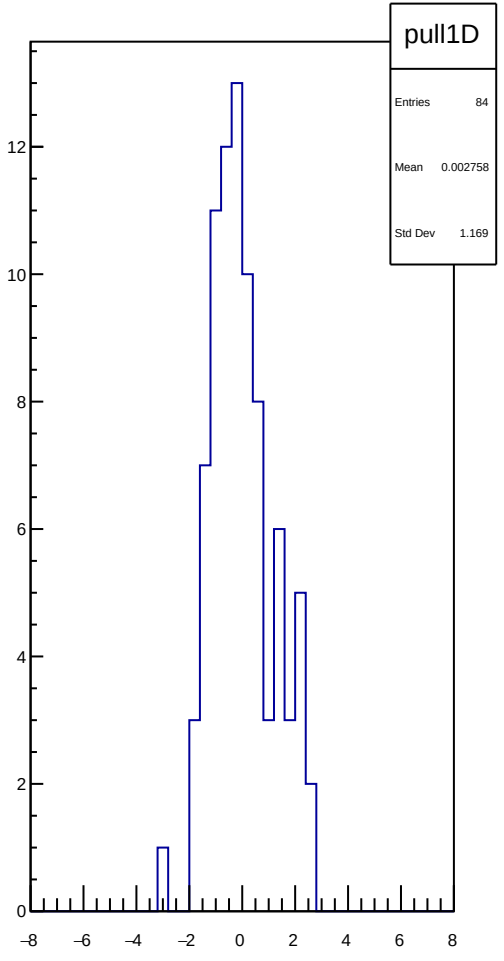

diff_bpm0i02X_rms vs run
χ^2 / ndf 915.9 / 83
p0 1963 ± 1.555
2100
2050
2000
1950
1900
1850

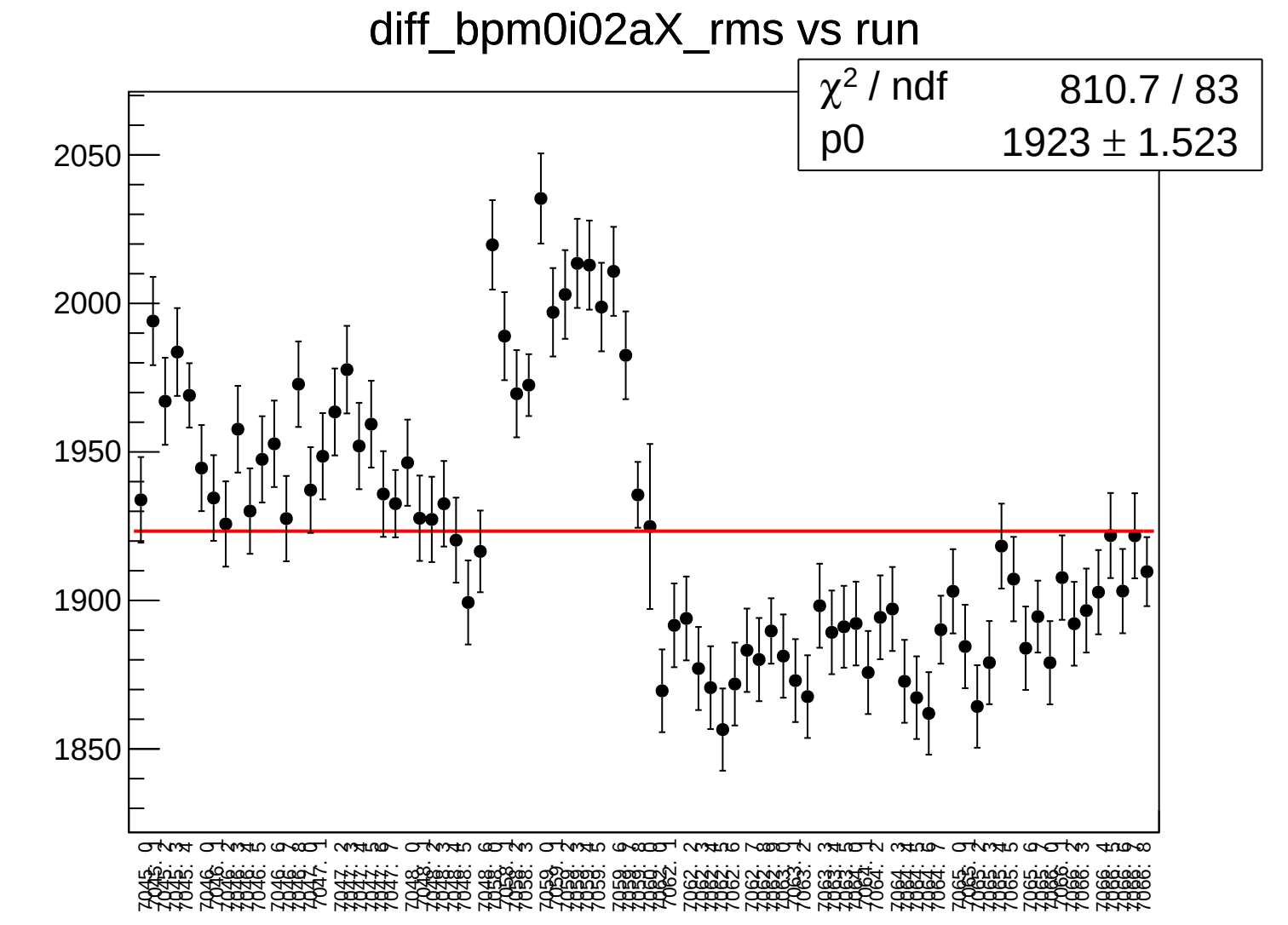

diff_bpm0i02Y_mean vs run
χ^2 / ndf 79.99 / 83
p0 26.09 ± 1.69
pull
Entries 84
Mean 793.9
Std Dev 739.4

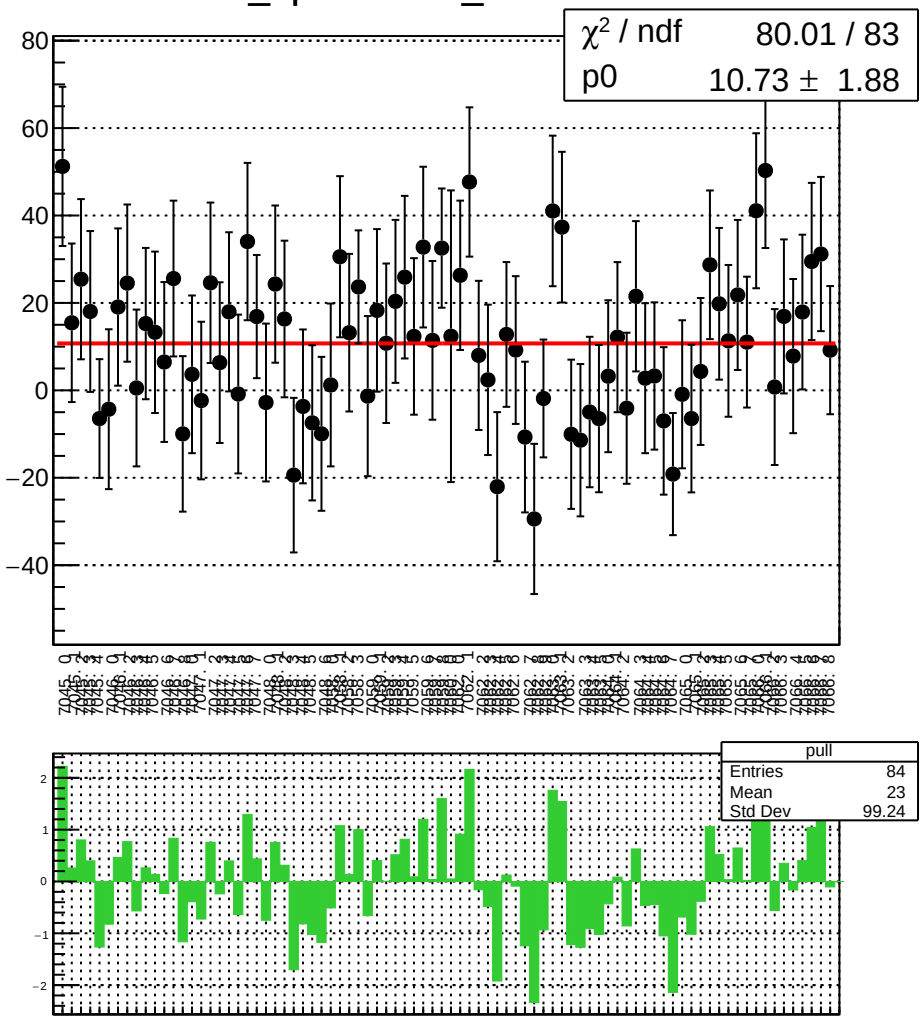

pull1D
Entries 84
Mean 0.004747
Std Dev 0.9758

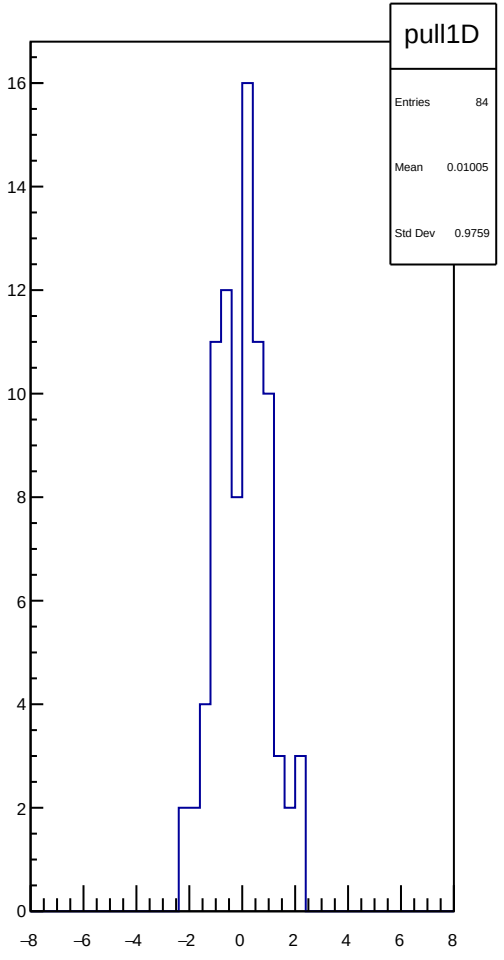

diff_bpm0i02Y_rms vs run
χ² / ndf 1873 / 83
p0 1508 ± 1.195
1600
1550
1500
1450
1400

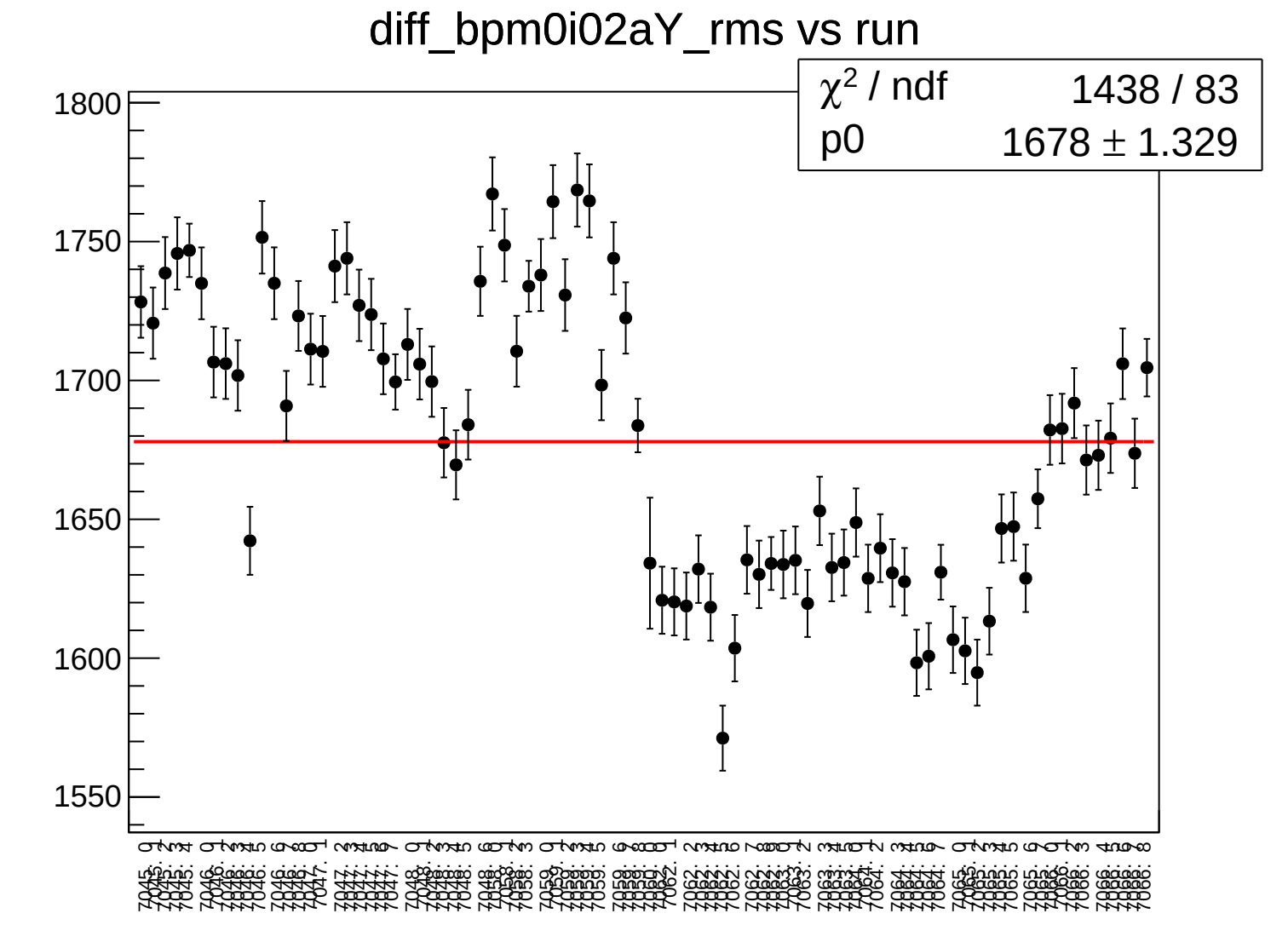

diff_bpm0i02aX_mean vs run
χ² / ndf 114.9 / 83
p0 −14.99 ± 2.155
pull
Entries 84
Mean 3901
Std Dev 3854

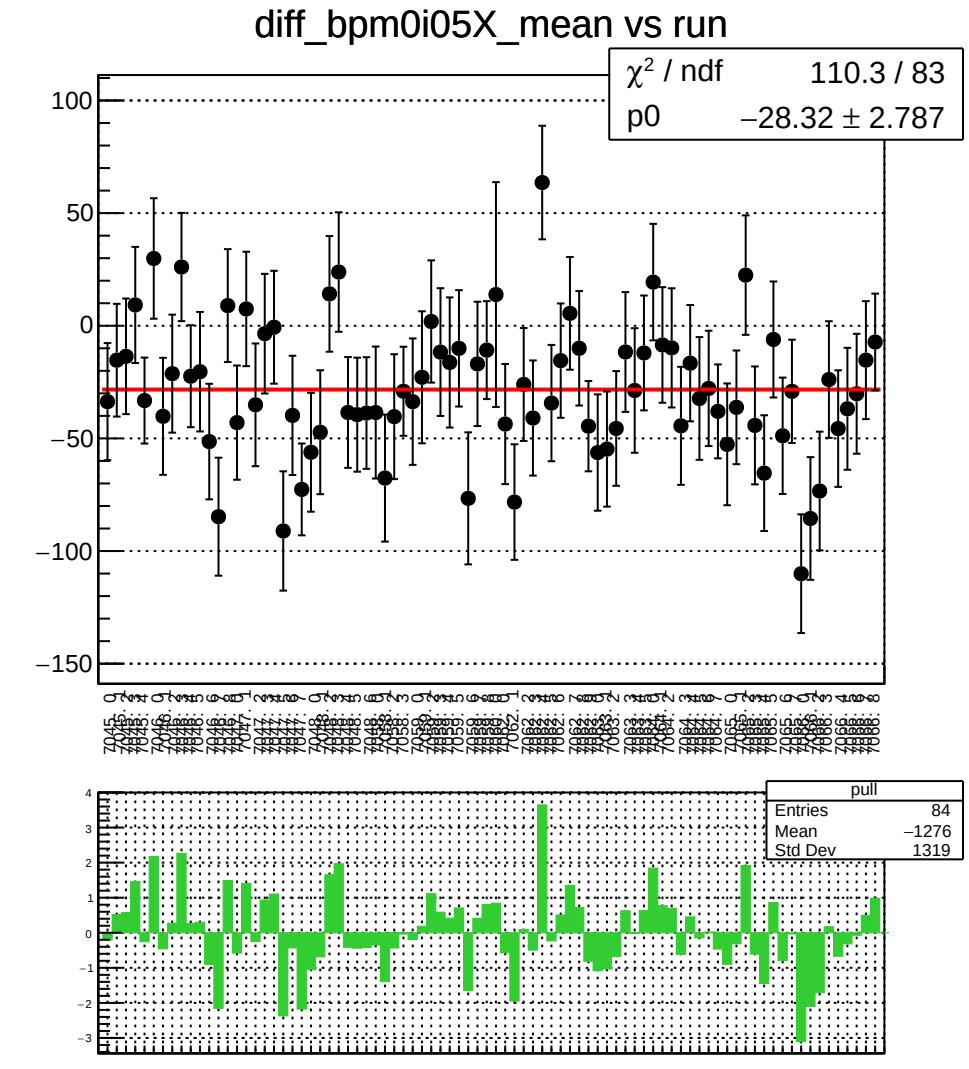

pull1D
Entries 84
Mean 0.002758
Std Dev 1.169

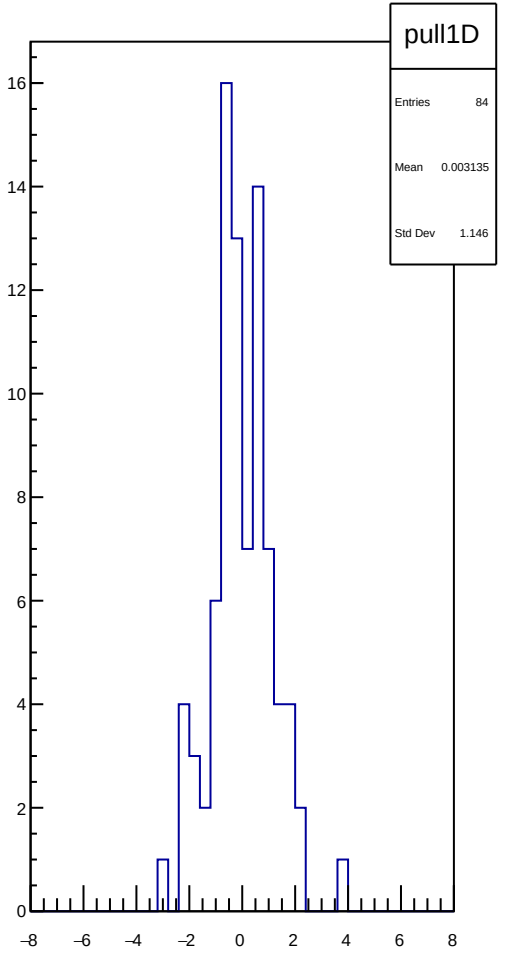

diff_bpm0i02aX_rms vs run
χ² / ndf 810.7 / 83
p0 1923 ± 1.523
2050
2000
1950
1900
1850

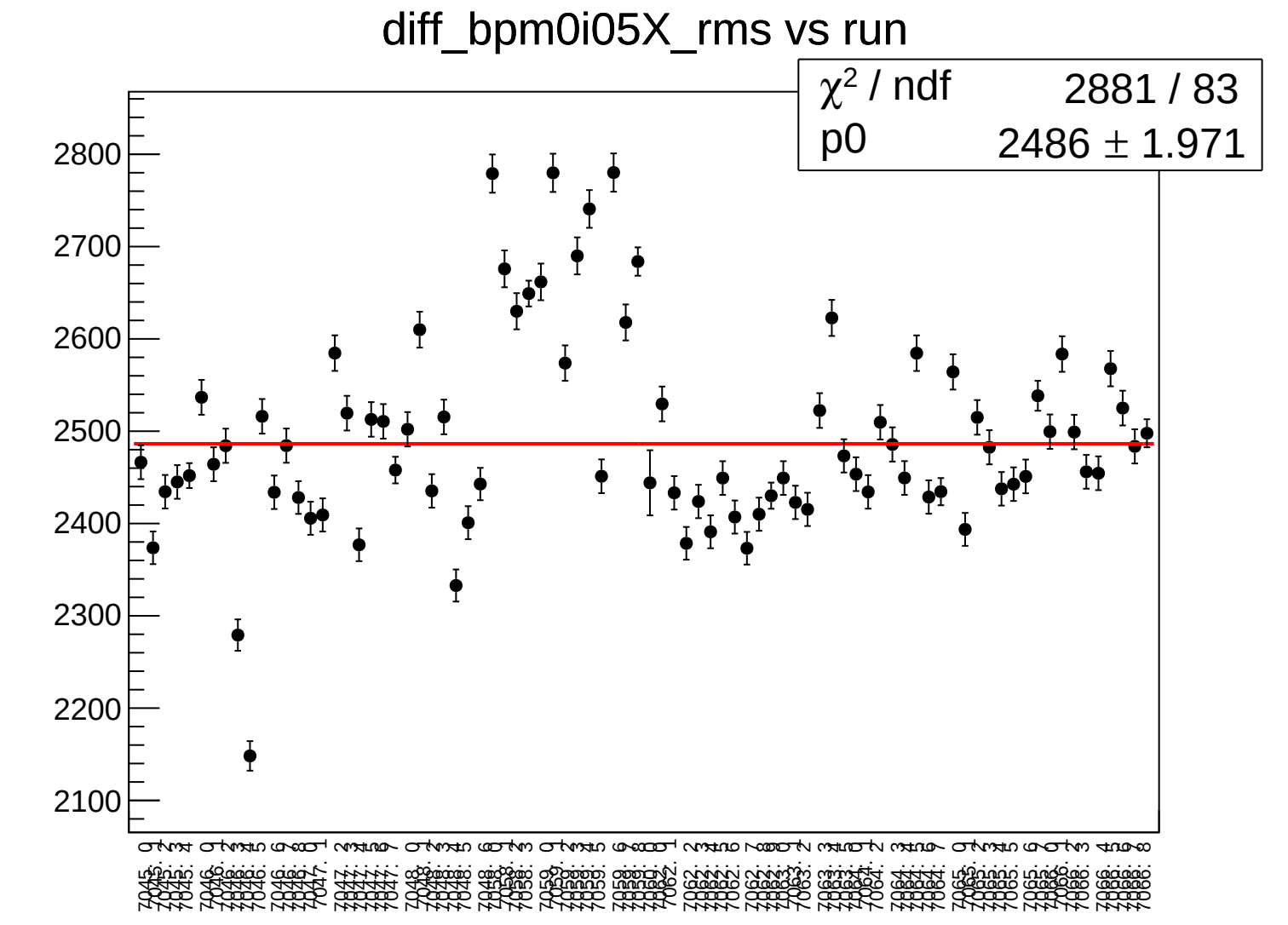

diff_bpm0i02aY_mean vs run
χ² / ndf 80.01 / 83
p0 10.73 ± 1.88
pull
Entries 84
Mean 23
Std Dev 99.24

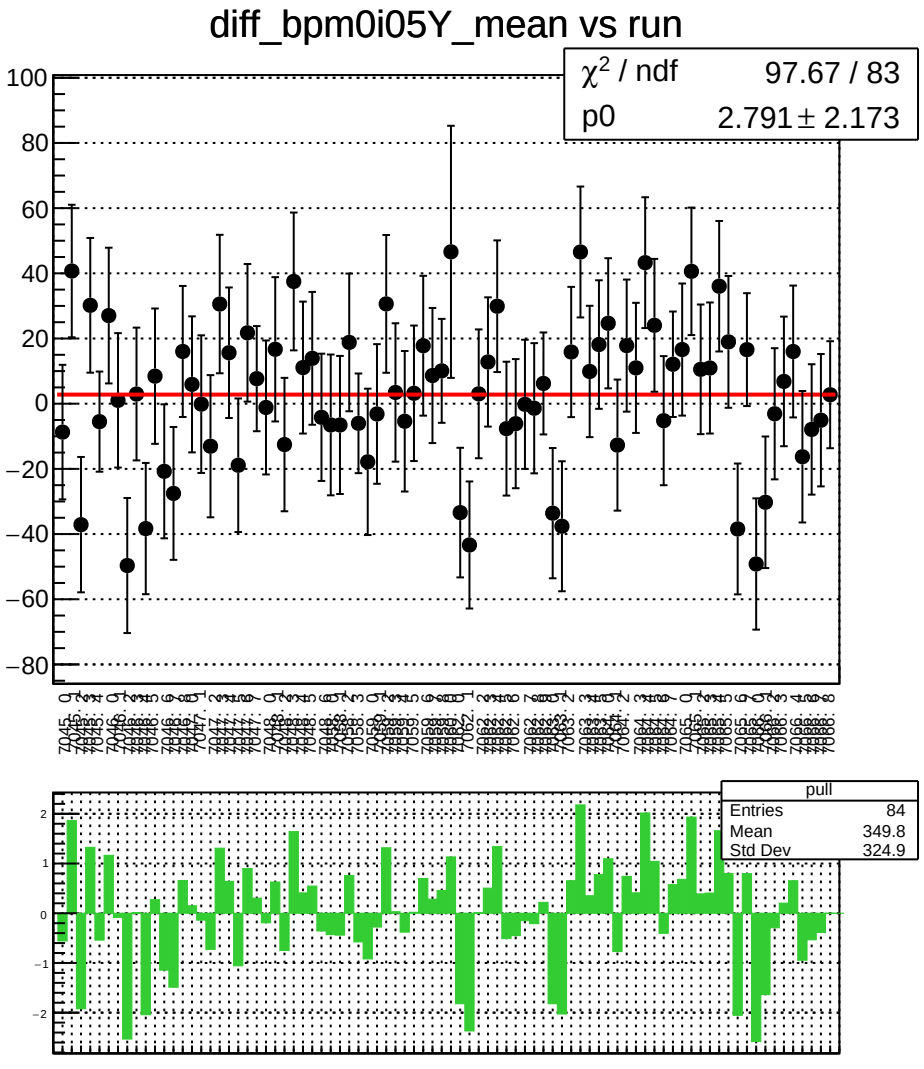

pull1D
Entries 84
Mean 0.01005
Std Dev 0.9759

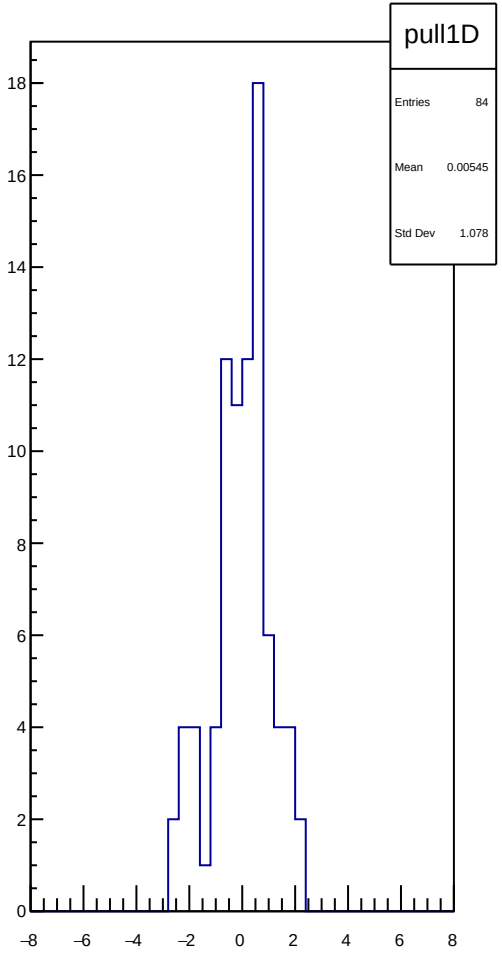

diff_bpm0i02aY_rms vs run
χ² / ndf 1438 / 83
p0 1678 ± 1.329
1800
1750
1700
1650
1600
1550

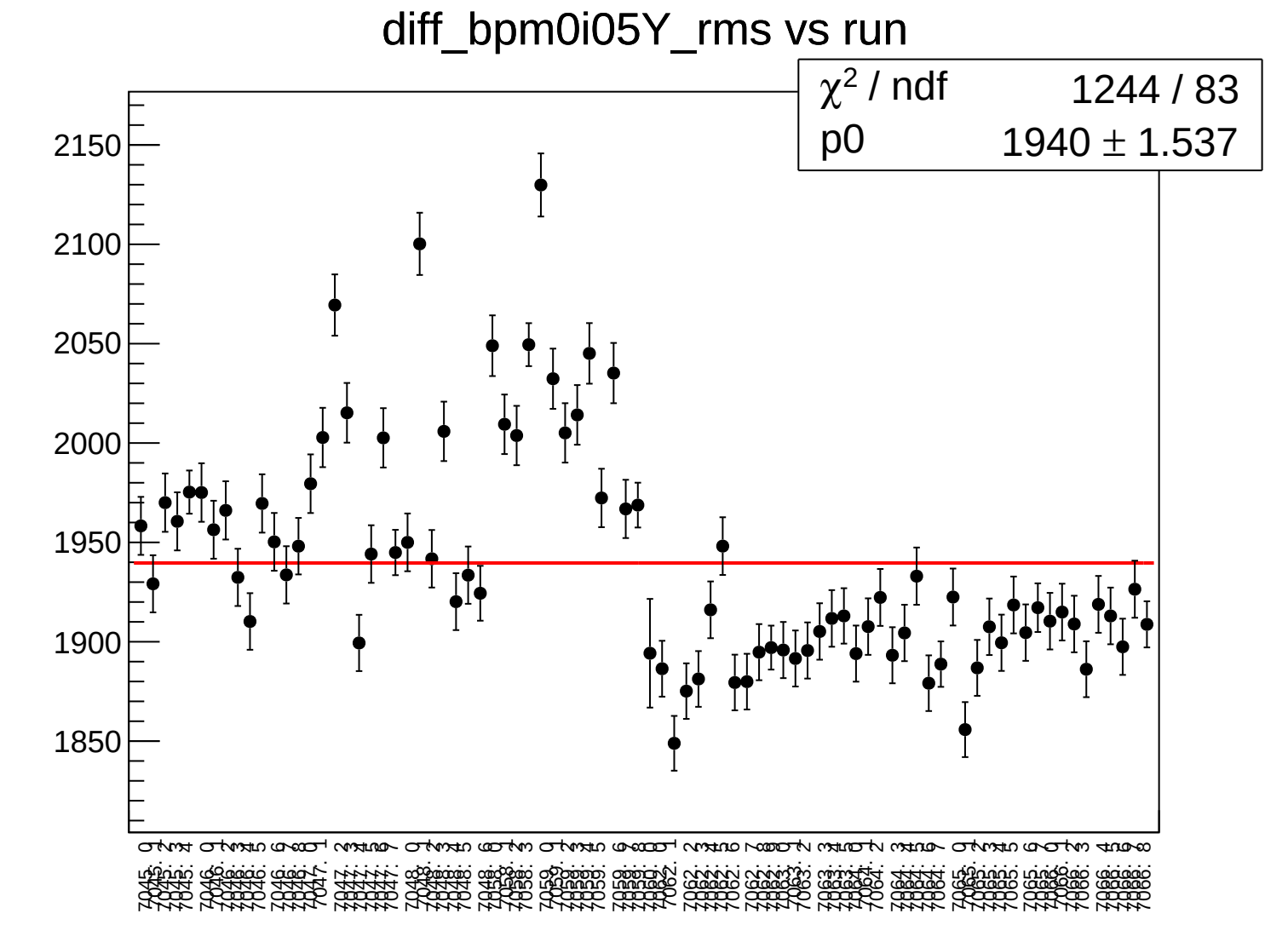

diff_bpm0i05X_mean vs run
χ² / ndf 110.3 / 83
p0 −28.32 ± 2.787
pull
Entries 84
Mean −1276
Std Dev 1319

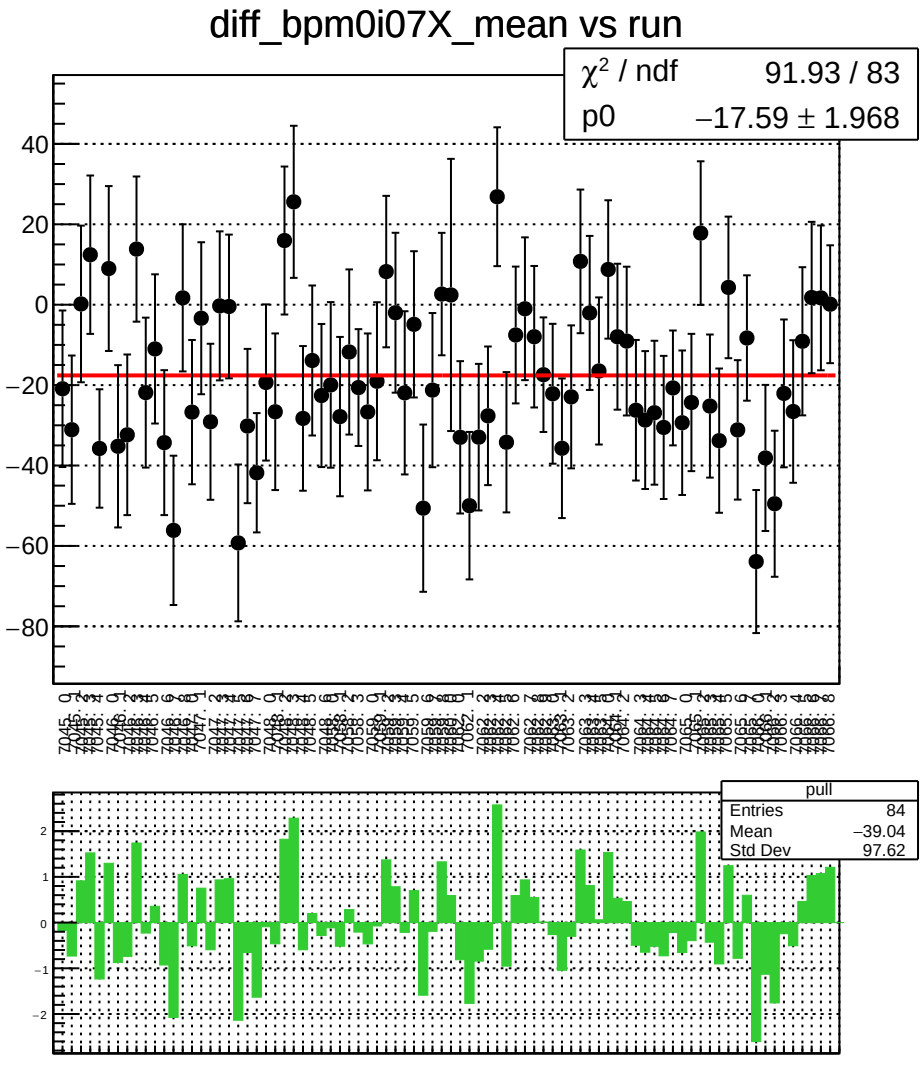

pull1D
Entries 84
Mean 0.003135
Std Dev 1.146

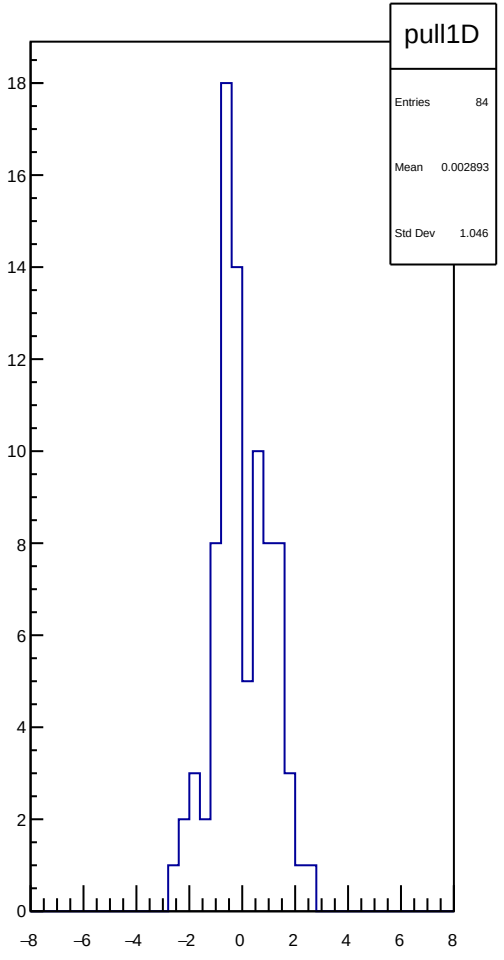

diff_bpm0i05X_rms vs run
χ² / ndf 2881 / 83
p0 2486 ± 1.971
2800
2700
2600
2500
2400
2300
2200
2100

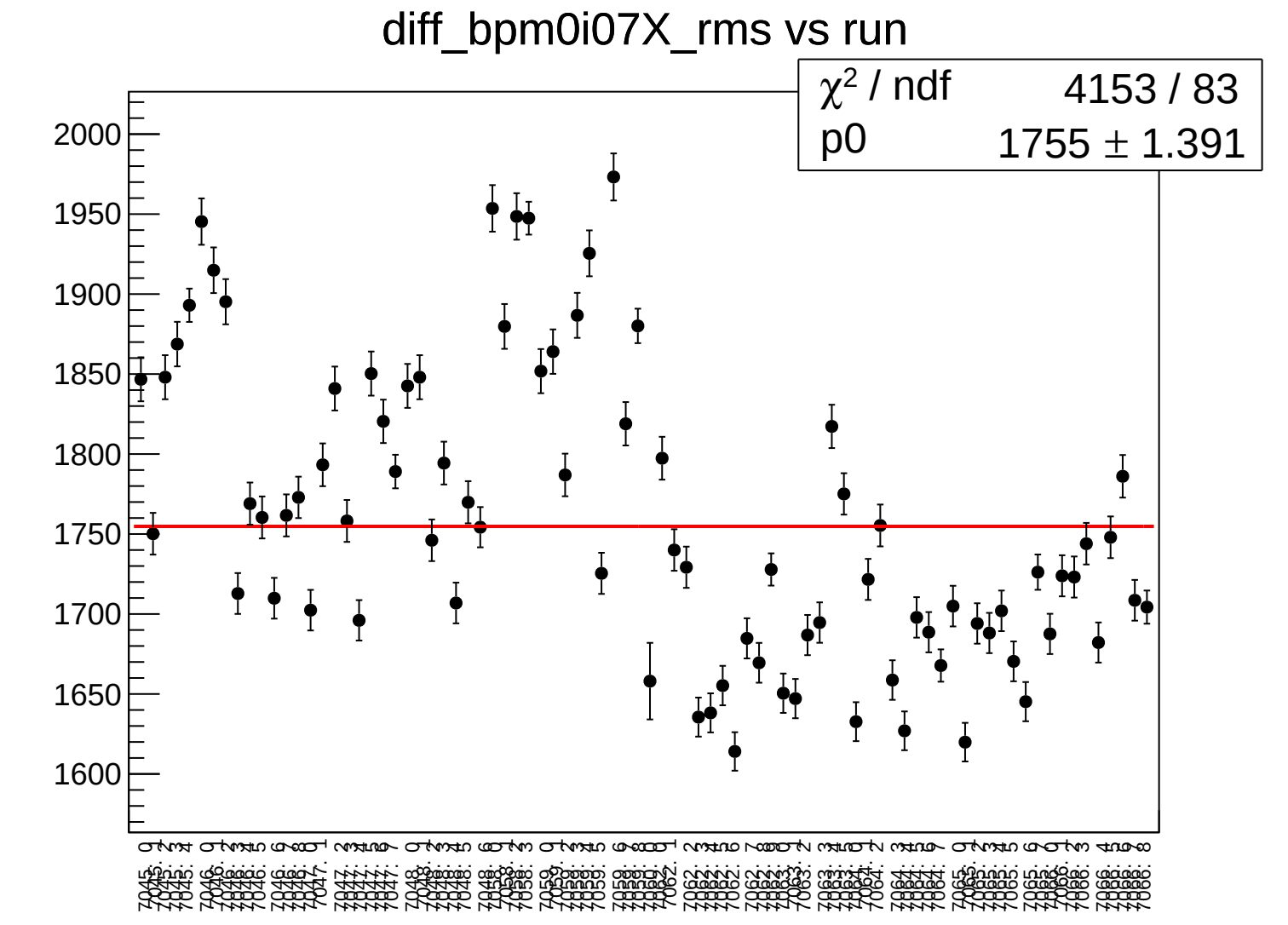

diff_bpm0i05Y_mean vs run
χ² / ndf 97.67 / 83
p0 2.791 ± 2.173
pull
Entries 84
Mean 349.8
Std Dev 324.9

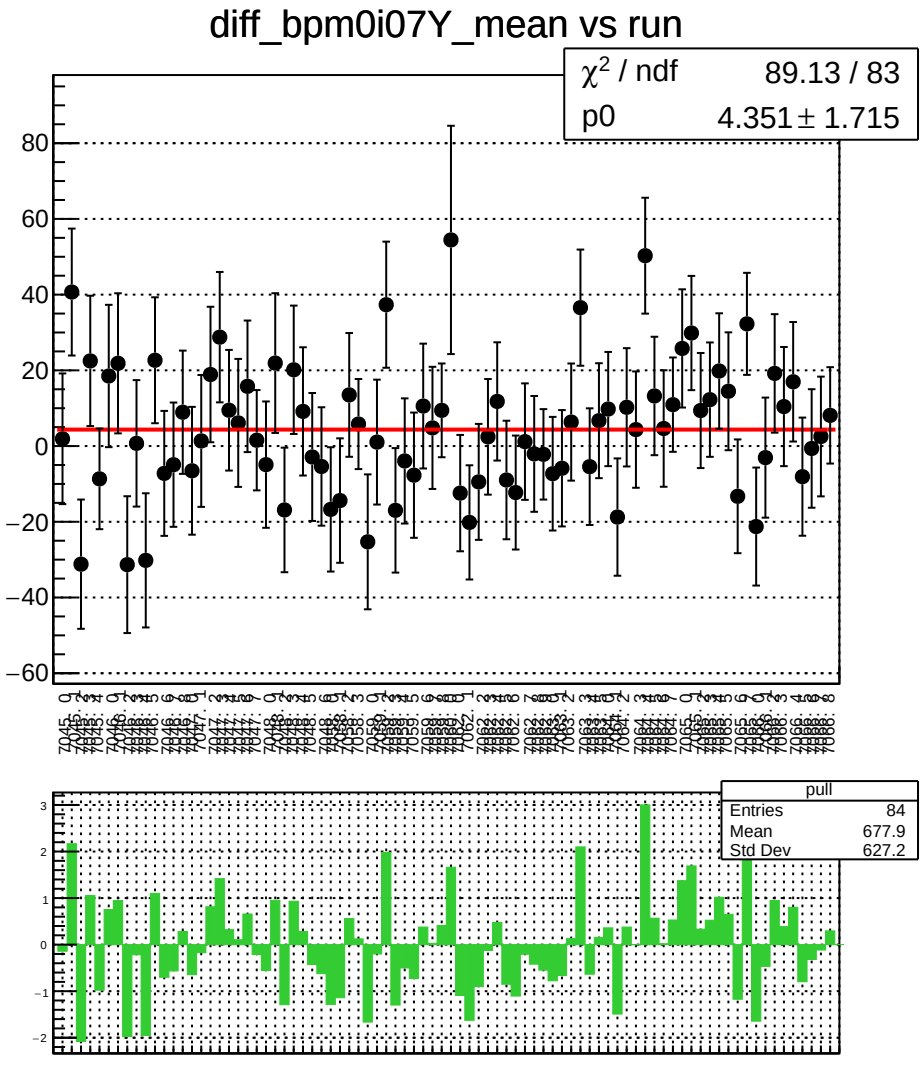

pull1D
Entries 84
Mean 0.00545
Std Dev 1.078

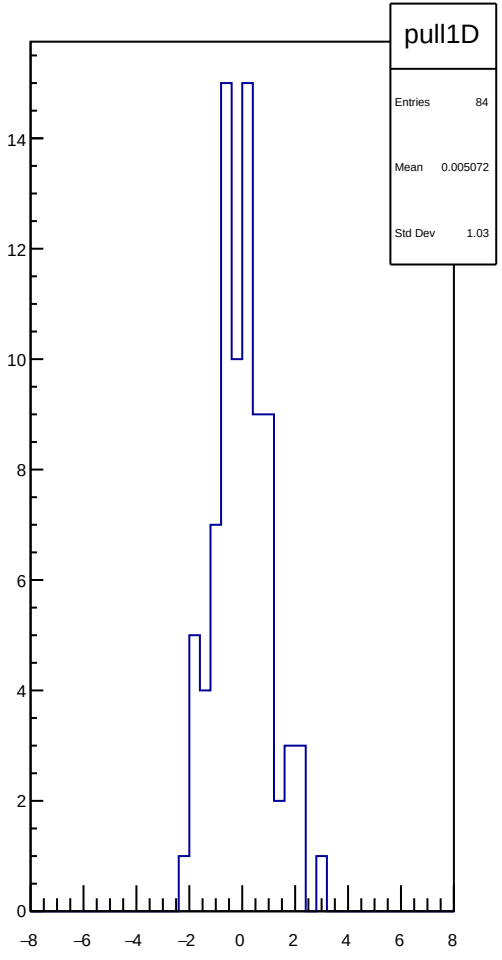

diff_bpm0i05Y_rms vs run
χ² / ndf 1244 / 83
p0 1940 ± 1.537
2150
2100
2050
2000
1950
1900
1850

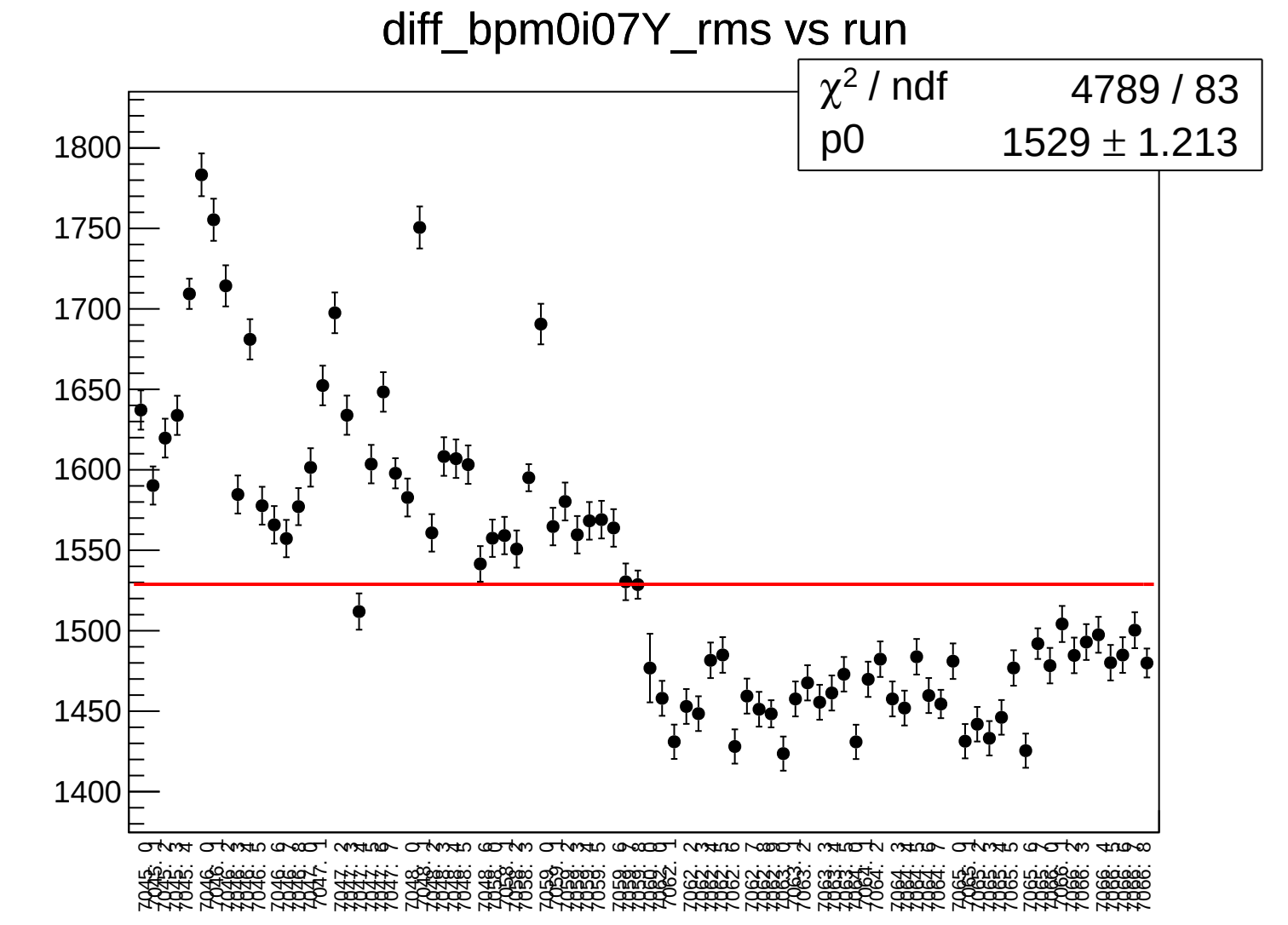

diff_bpm0i07X_mean vs run
χ² / ndf 91.93 / 83
p0 −17.59 ± 1.968
pull
Entries 84
Mean −39.04
Std Dev 97.62

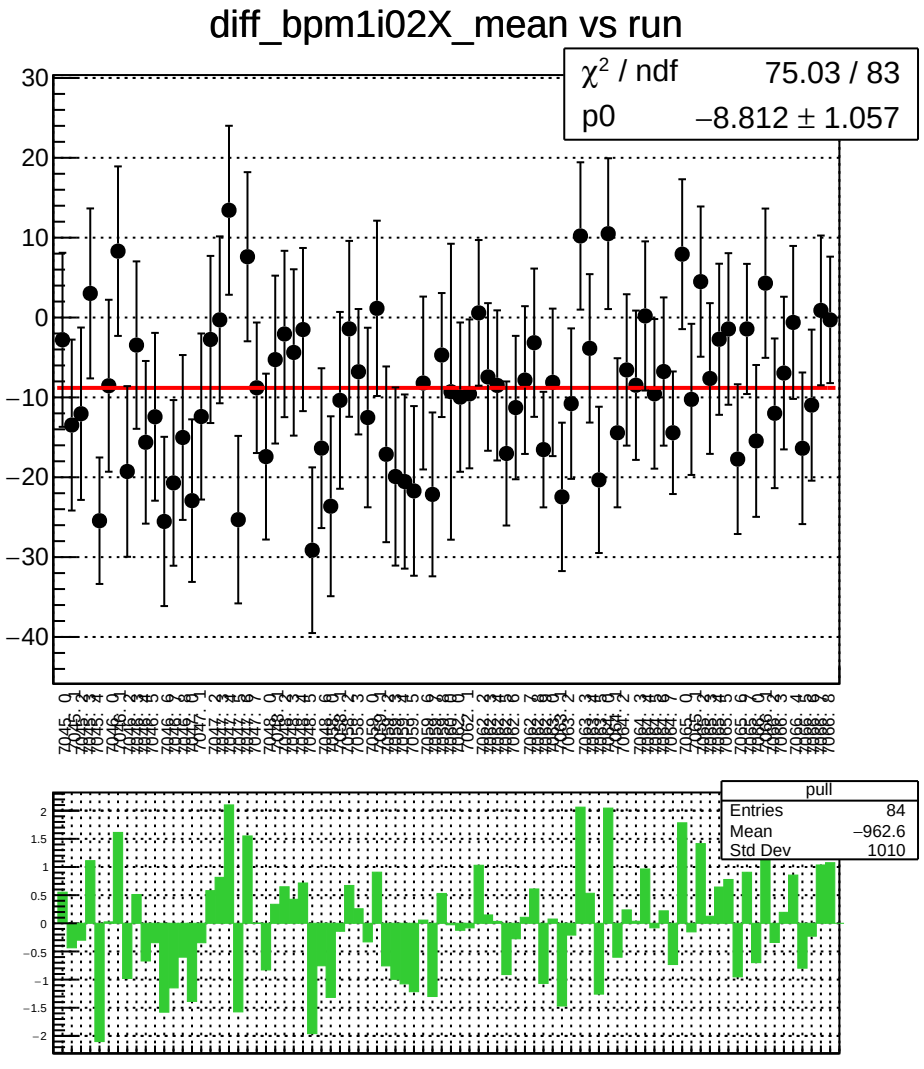

pull1D
Entries 84
Mean 0.002893
Std Dev 1.046

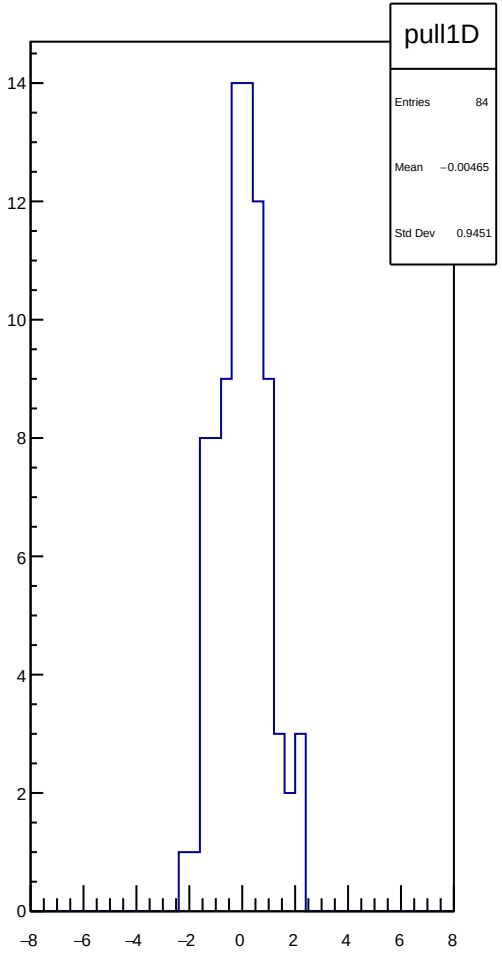

diff_bpm0i07X_rms vs run
χ² / ndf 4153 / 83
p0 1755 ± 1.391
2000
1950
1900
1850
1800
1750
1700
1650
1600

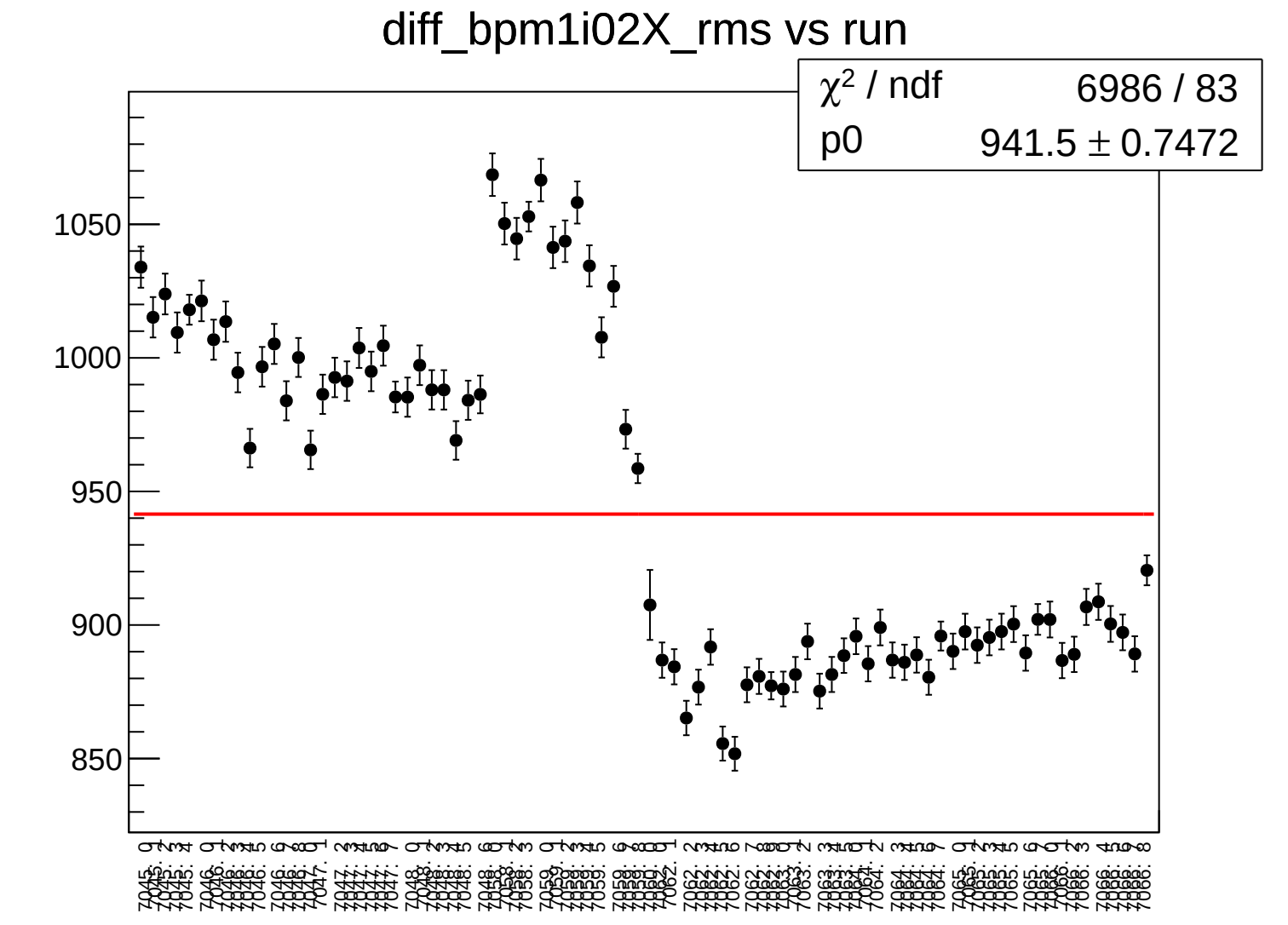

diff_bpm0i07Y_mean vs run
χ² / ndf 89.13 / 83
p0 4.351 ± 1.715
pull
Entries 84
Mean 677.9
Std Dev 627.2

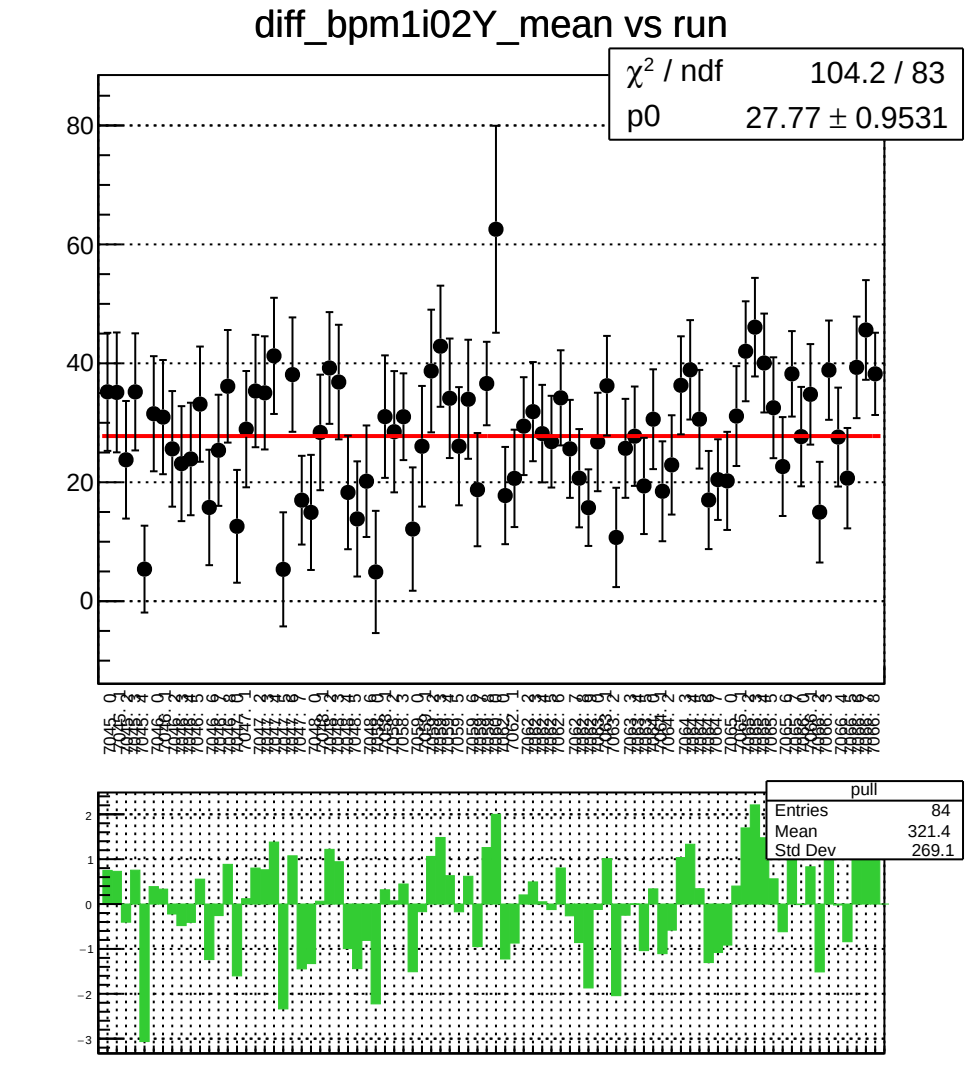

pull1D
Entries 84
Mean 0.005072
Std Dev 1.03

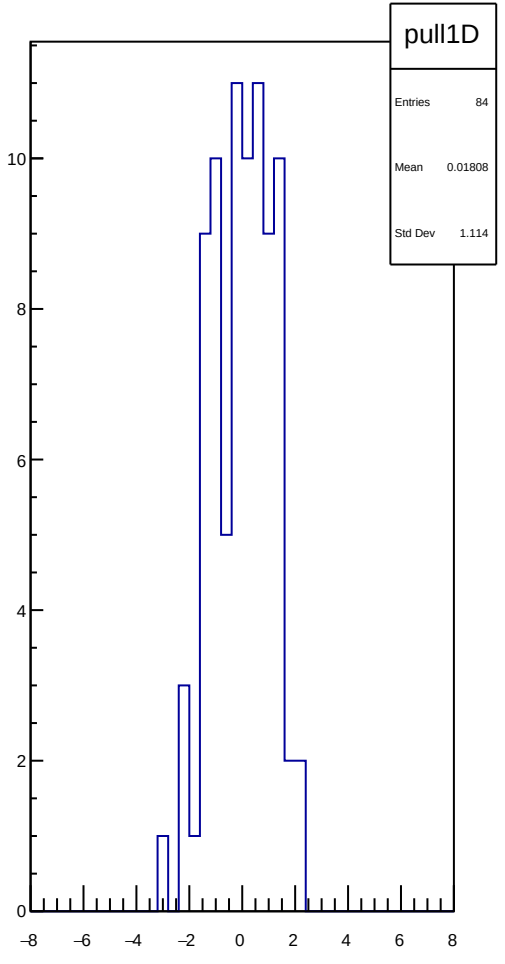

diff_bpm0i07Y_rms vs run
χ² / ndf 4789 / 83
p0 1529 ± 1.213
1800
1750
1700
1650
1600
1550
1500
1450
1400

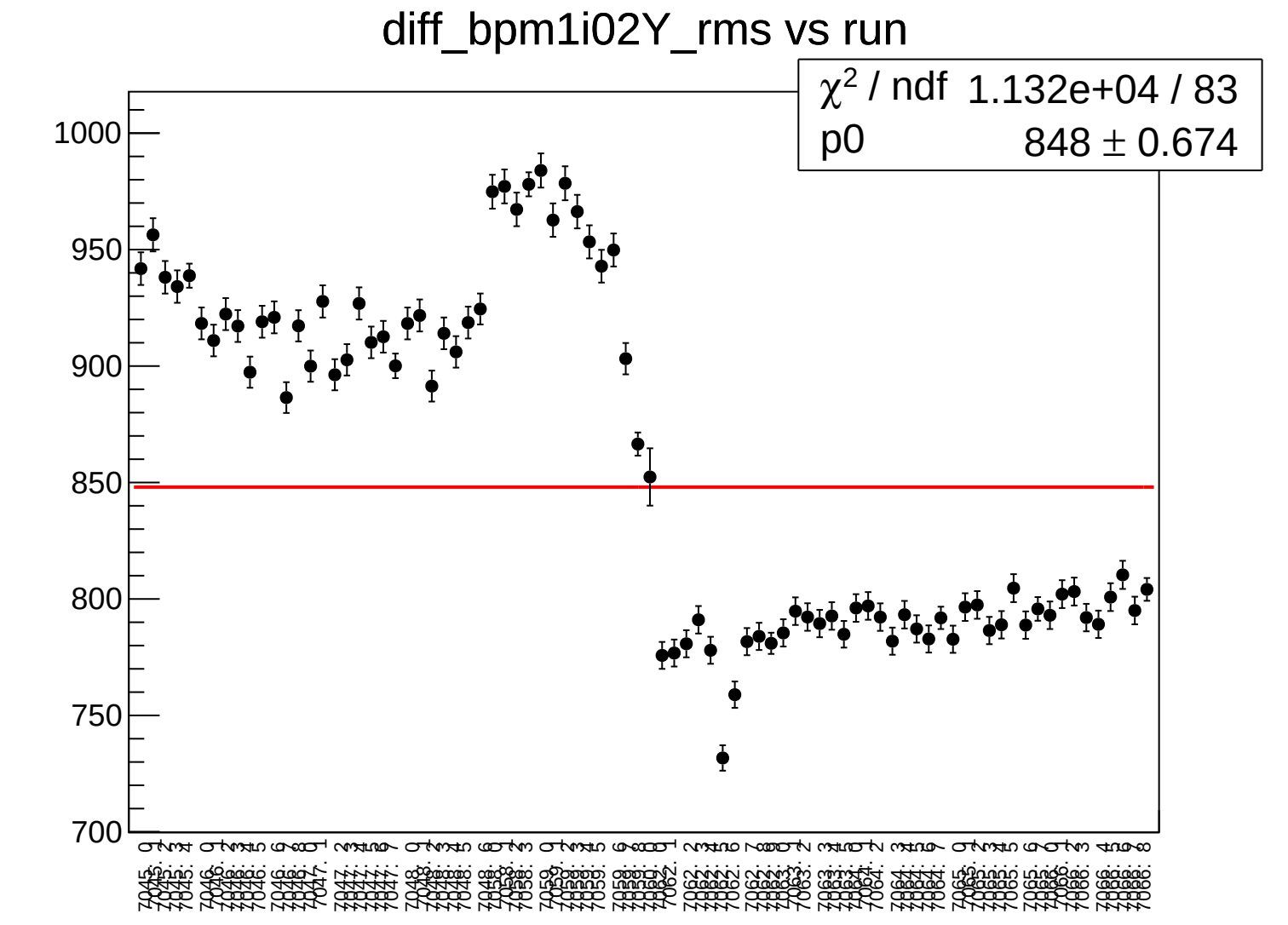

diff_bpm1i02X_mean vs run
χ² / ndf 75.03 / 83
p0 −8.812 ± 1.057
pull
Entries 84
Mean −962.6
Std Dev 1010

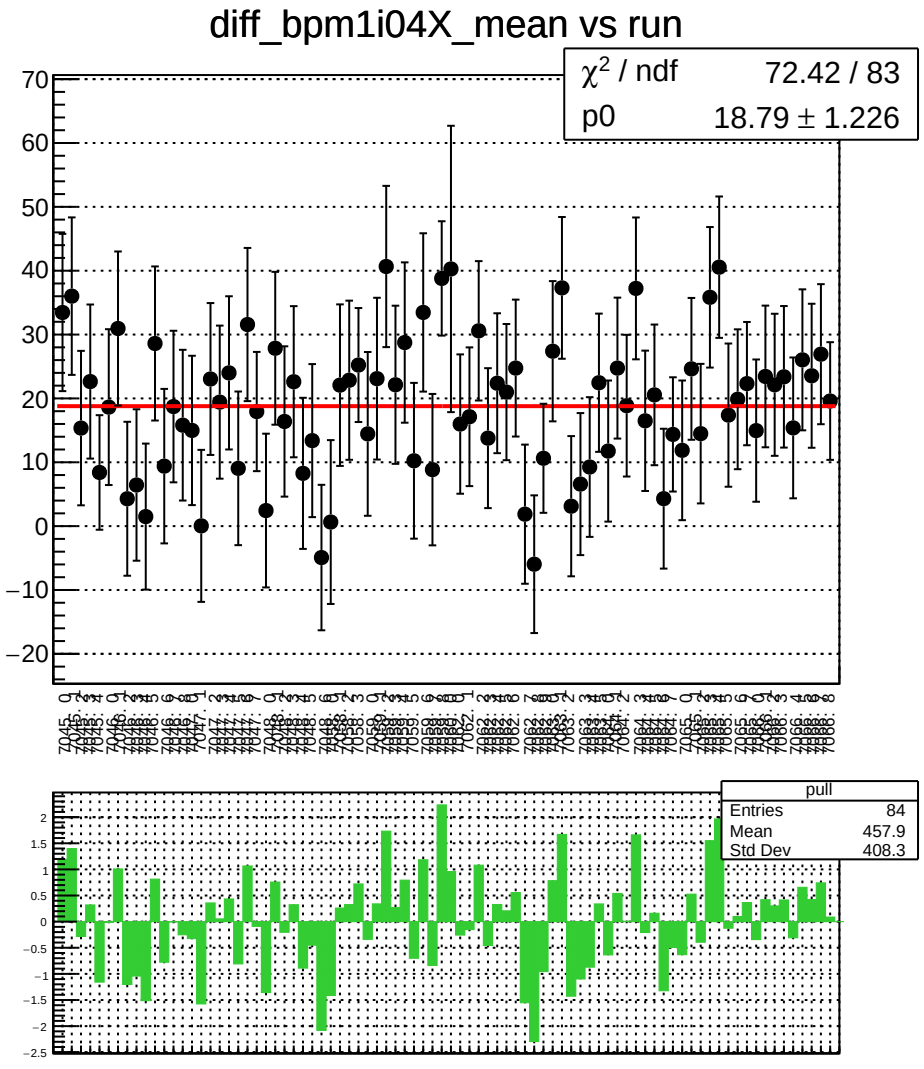

pull1D
Entries 84
Mean −0.00465
Std Dev 0.9451

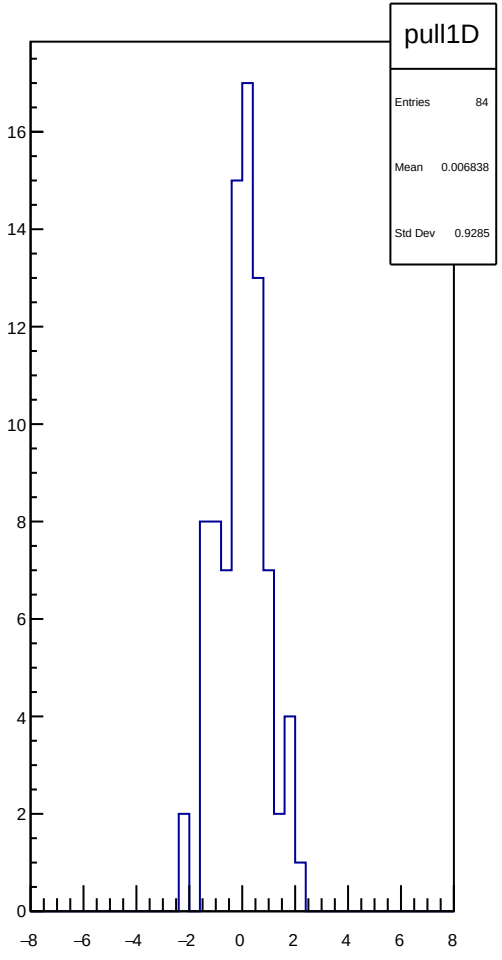

diff_bpm1i02X_rms vs run
χ^2 / ndf 6986 / 83
p0 941.5 ± 0.7472
1050
1000
950
900
850

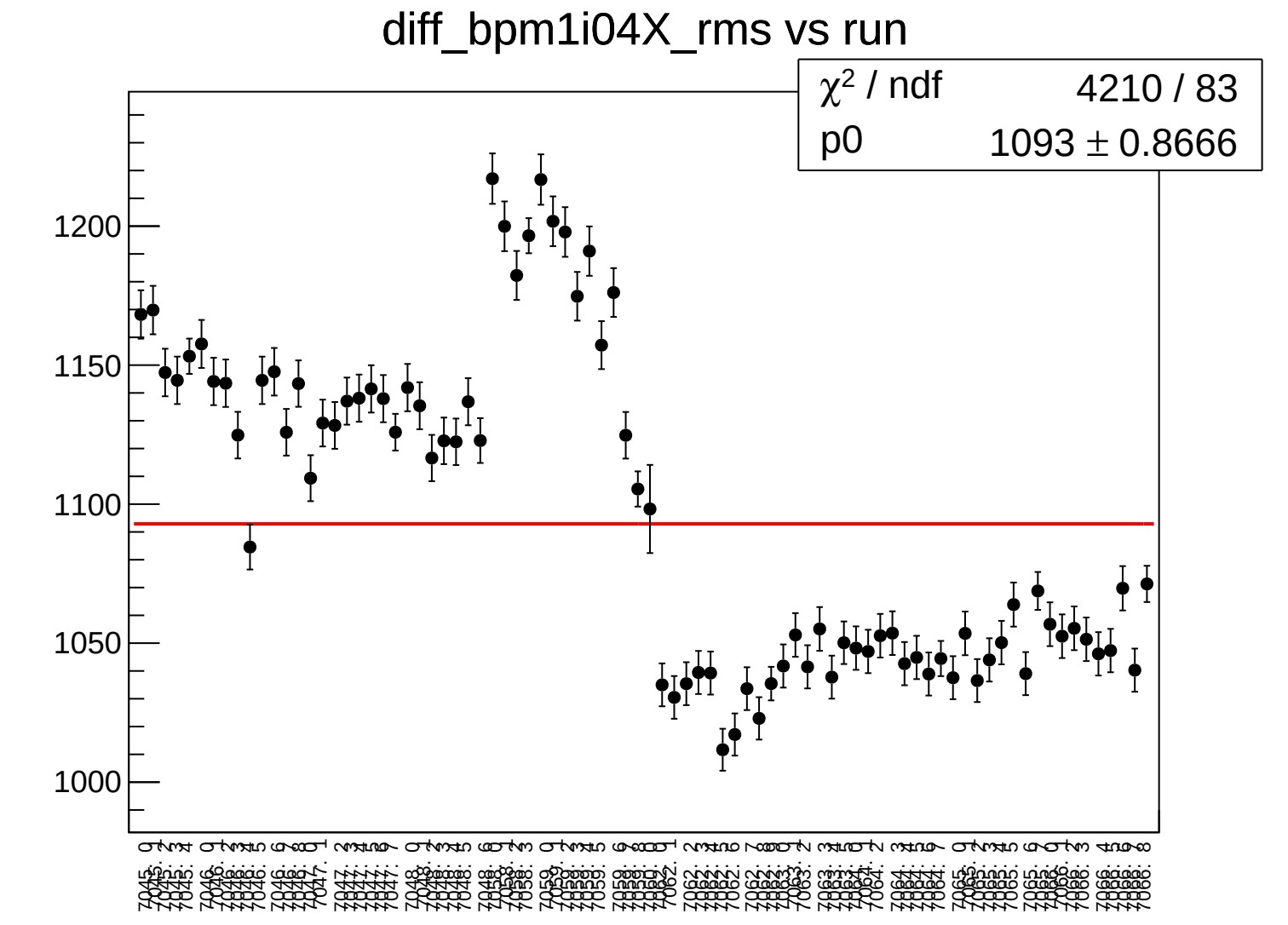

diff_bpm1i02Y_mean vs run
χ² / ndf 104.2 / 83
p0 27.77 ± 0.9531
pull
Entries 84
Mean 321.4
Std Dev 269.1

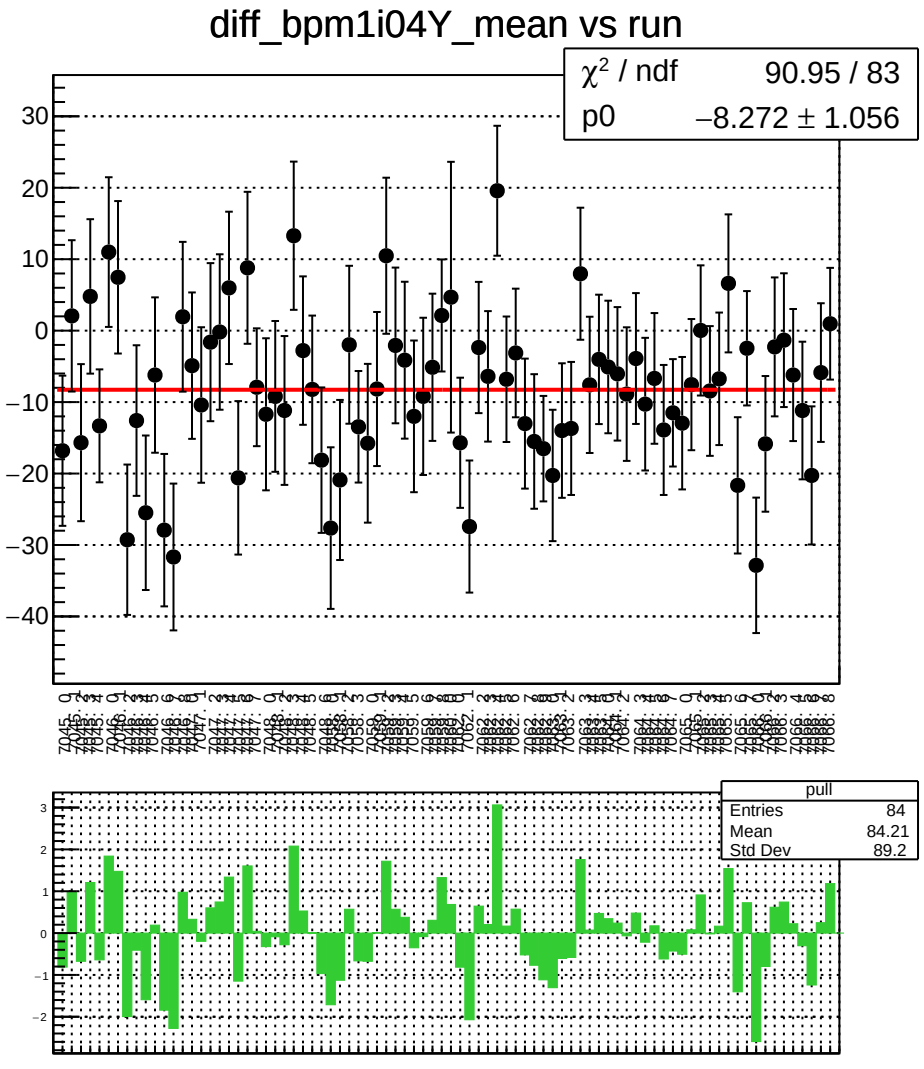

pull1D
Entries 84
Mean 0.01808
Std Dev 1.114

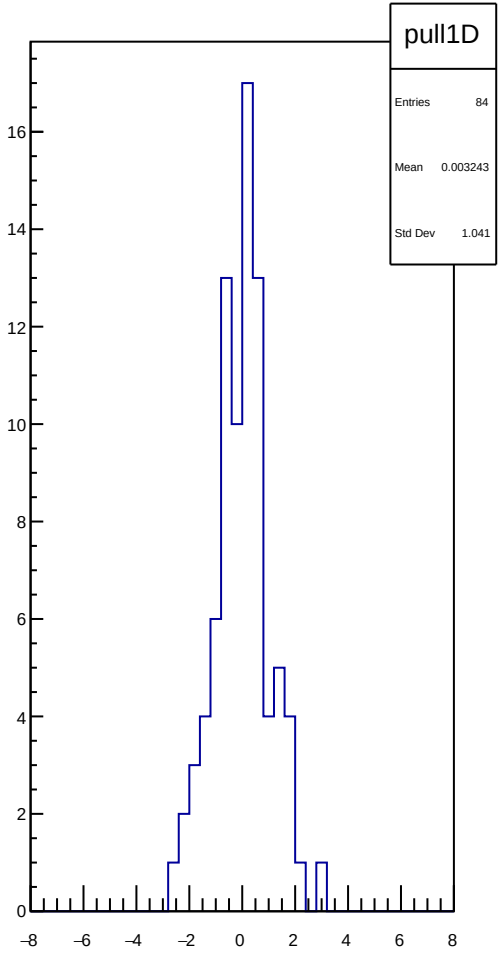

diff_bpm1i02Y_rms vs run
χ² / ndf 1.132e+04 / 83
p0 848 ± 0.674
1000
950
900
850
800
750
700

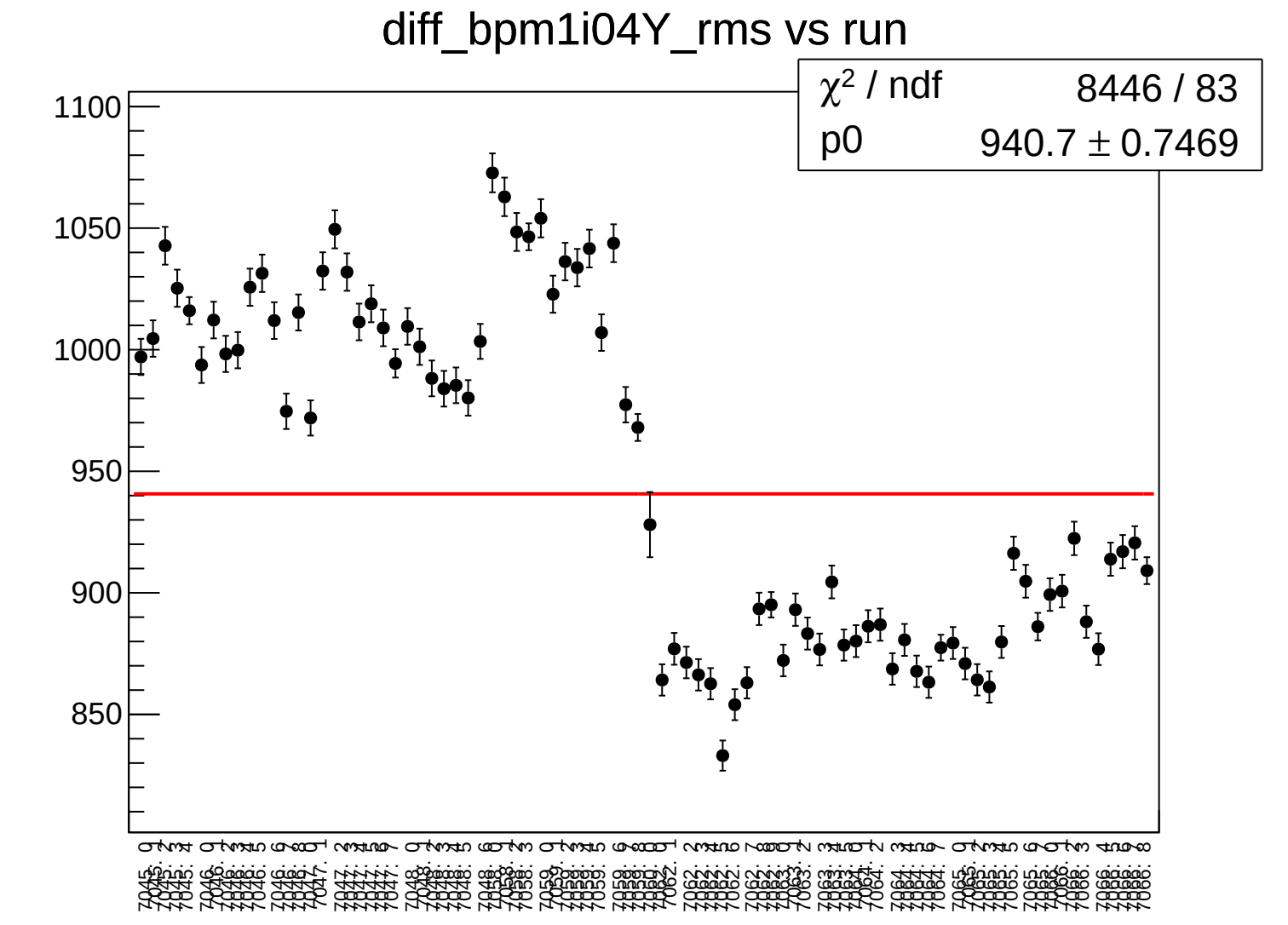

diff_bpm1i04X_mean vs run
χ^2 / ndf 72.42 / 83
p0 18.79 ± 1.226
pull
Entries 84
Mean 457.9
Std Dev 408.3

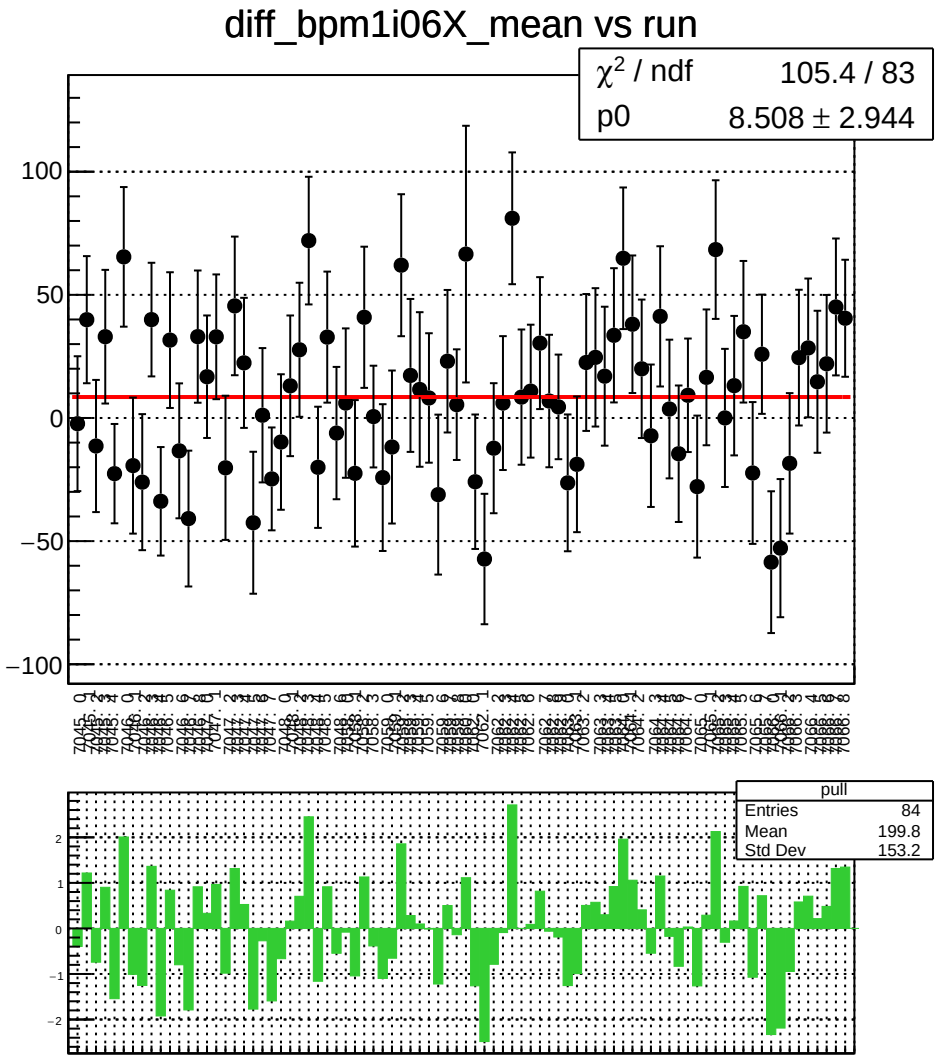

pull1D
Entries 84
Mean 0.006838
Std Dev 0.9285

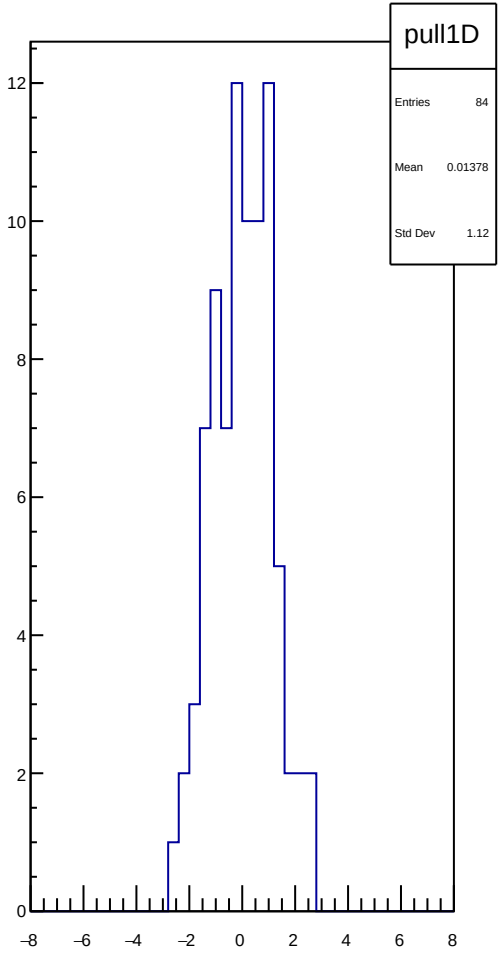

diff_bpm1i04X_rms vs run
χ² / ndf 4210 / 83
p0 1093 ± 0.8666
1200
1150
1100
1050
1000

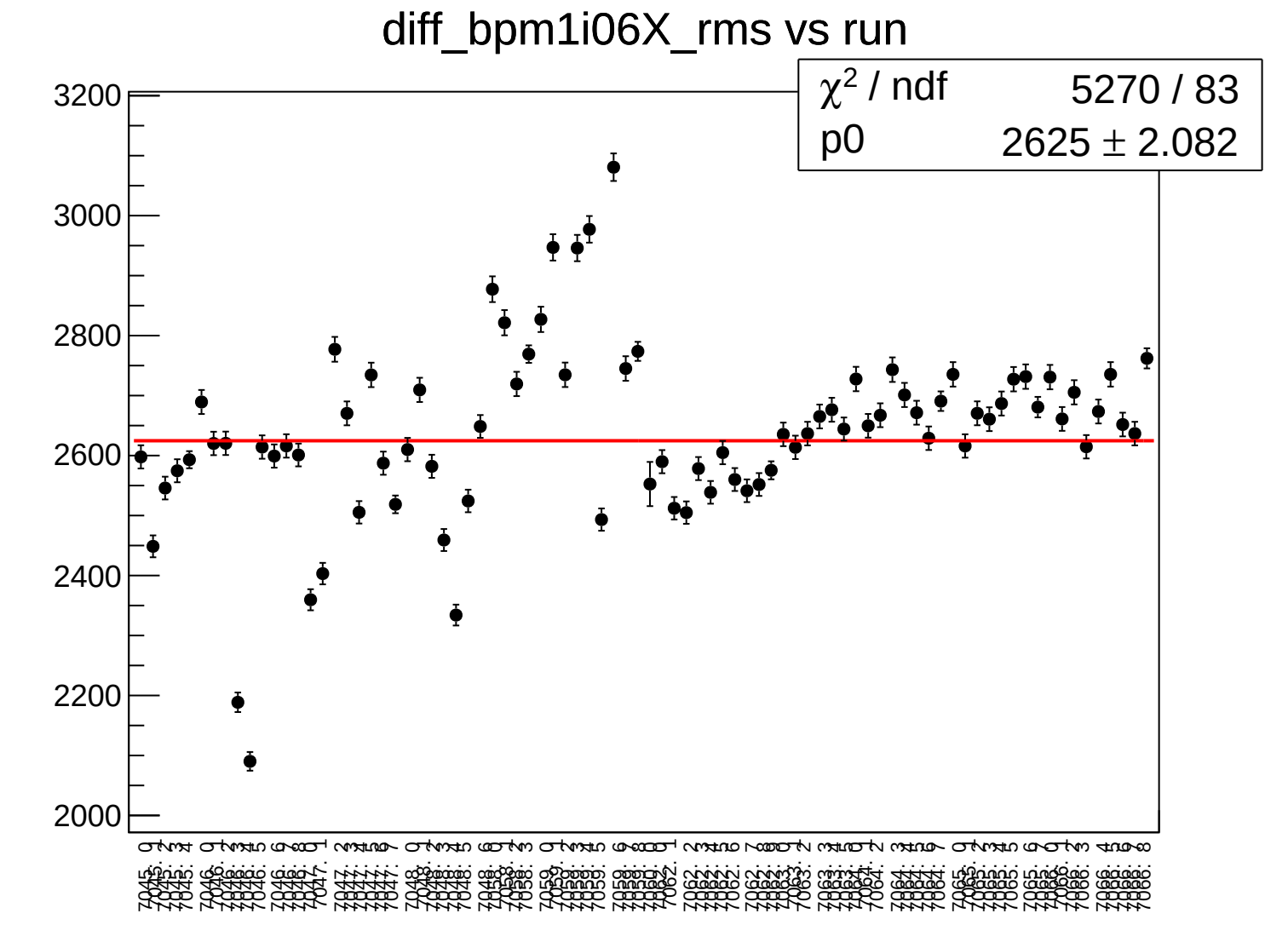

diff_bpm1i04Y_mean vs run
χ² / ndf 90.95 / 83
p0 −8.272 ± 1.056
pull
Entries 84
Mean 84.21
Std Dev 89.2

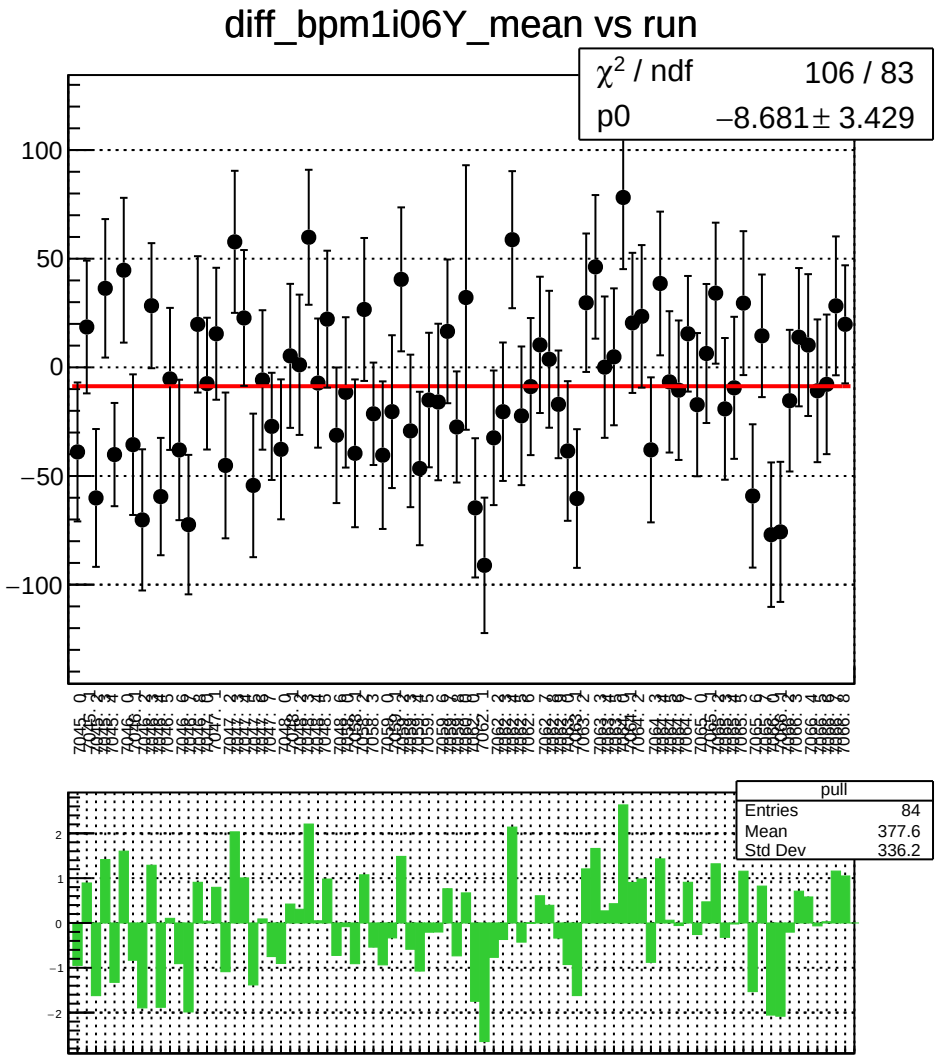

pull1D
Entries 84
Mean 0.003243
Std Dev 1.041

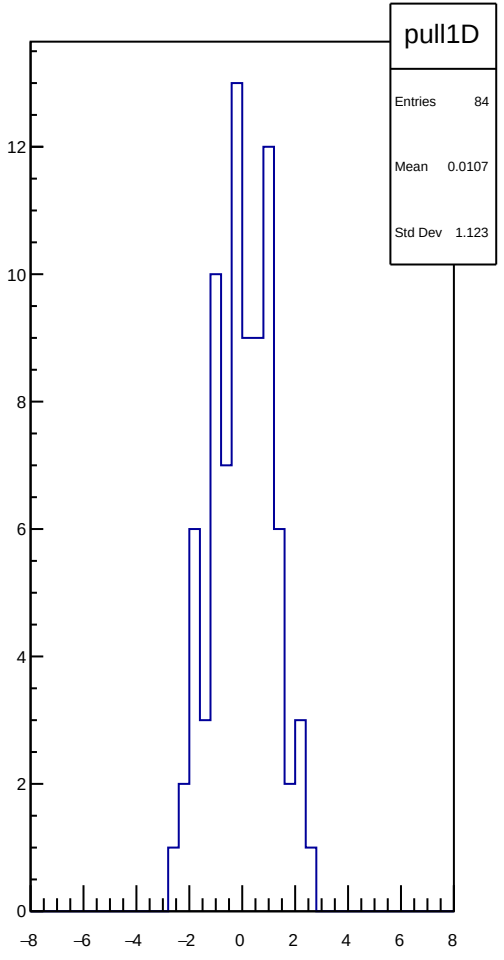

diff_bpm1i04Y_rms vs run
χ² / ndf 8446 / 83
p0 940.7 ± 0.7469
1100
1050
1000
950
900
850

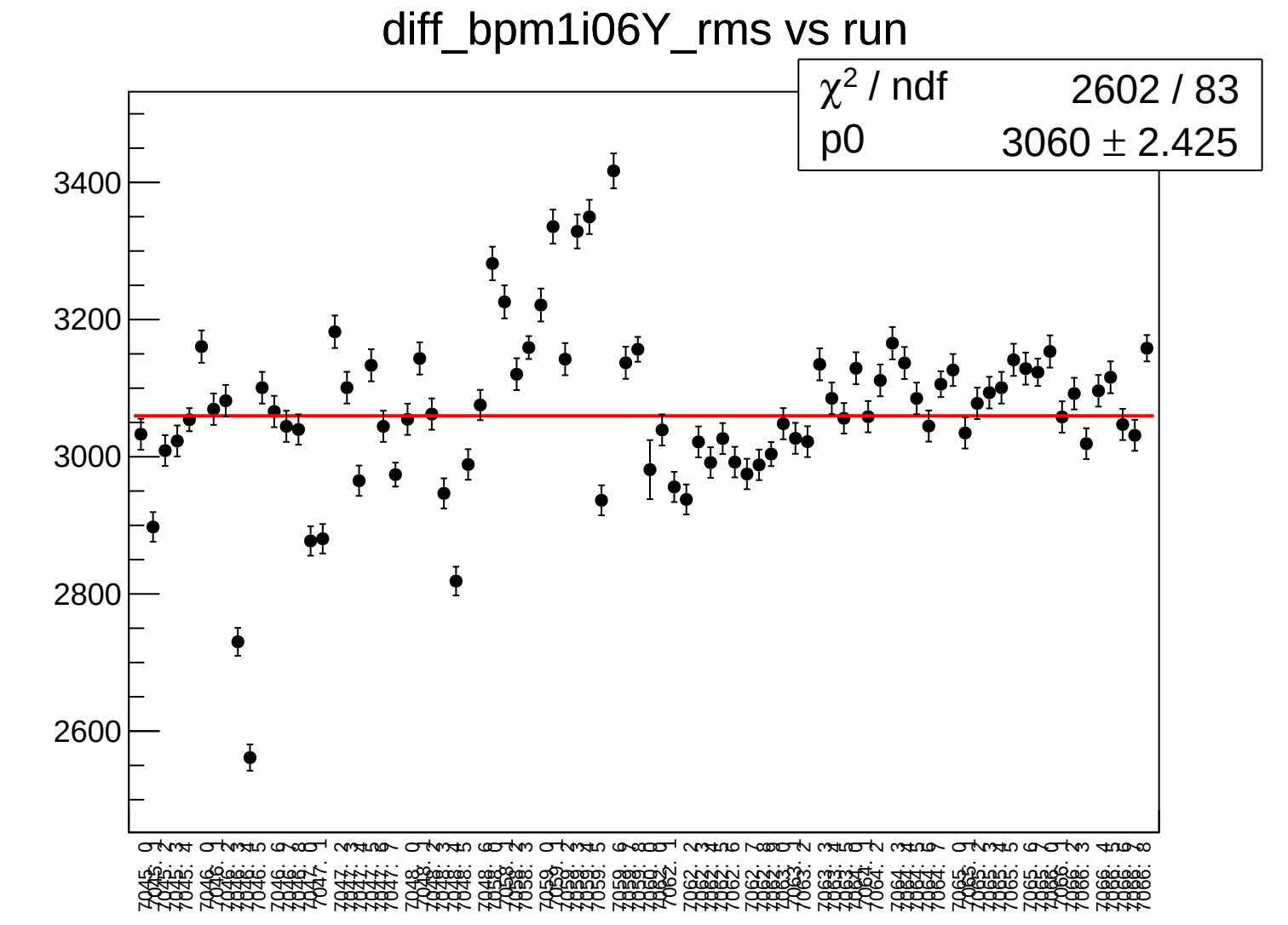

diff_bpm1i06X_mean vs run
χ^2 / ndf 105.4 / 83
p0 8.508 ± 2.944
100
50
0
−50
−100
pull
Entries 84
Mean 199.8
Std Dev 153.2
2
1
0
−1
−2

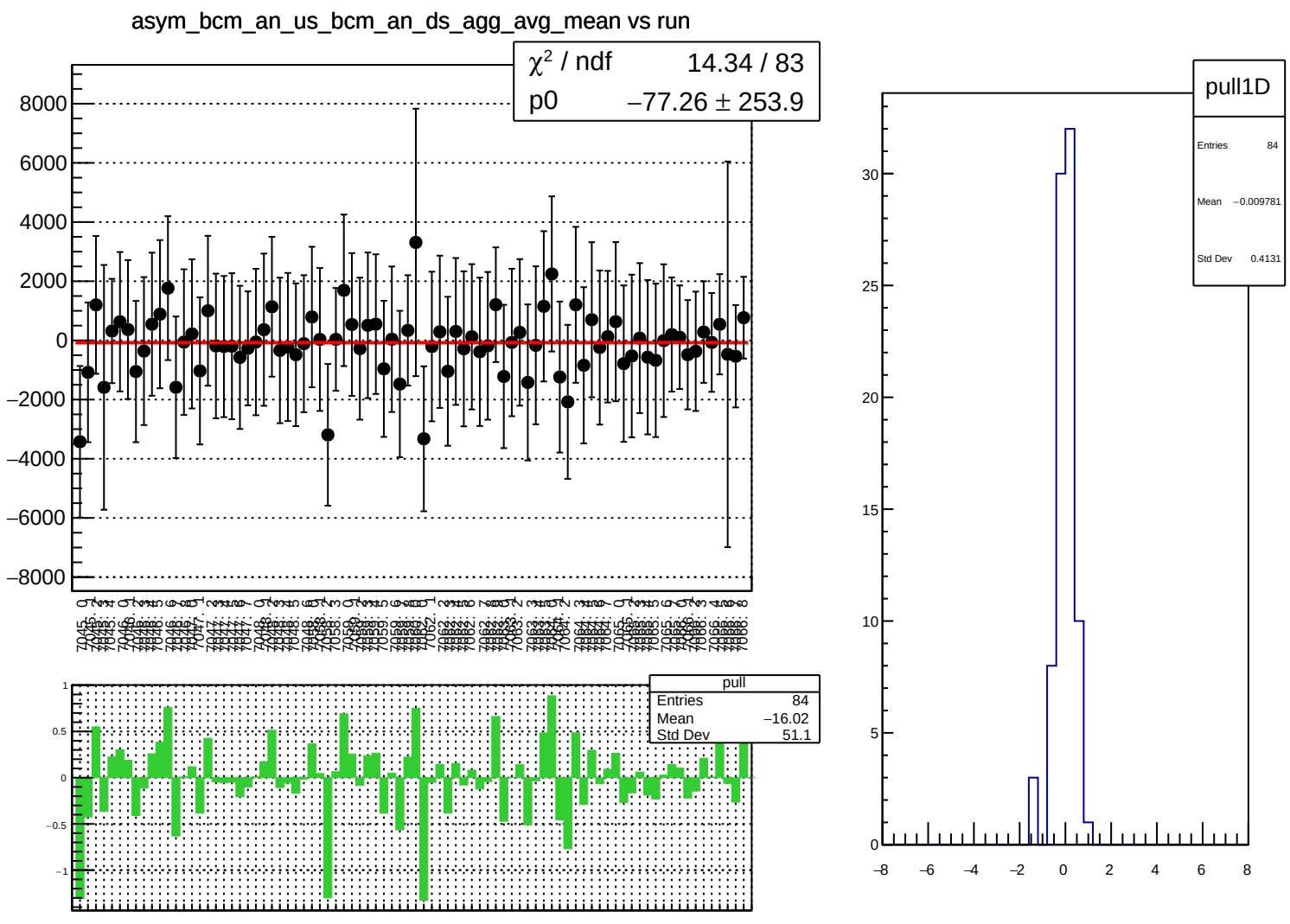

pull1D
Entries 84
Mean 0.01378
Std Dev 1.12
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

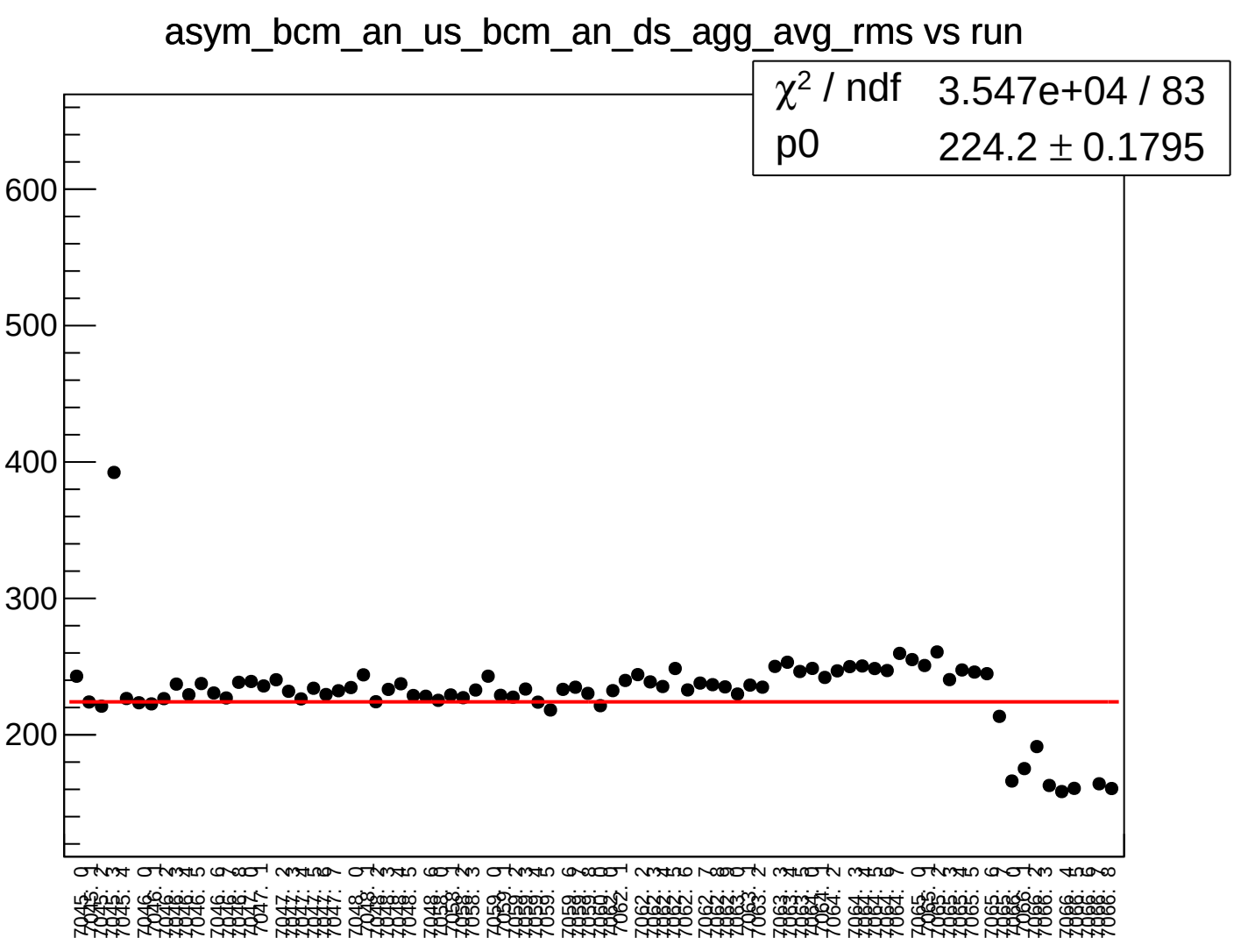

diff_bpm1i06X_rms vs run
χ² / ndf 5270 / 83
p0 2625 ± 2.082
3200
3000
2800
2600
2400
2200
2000

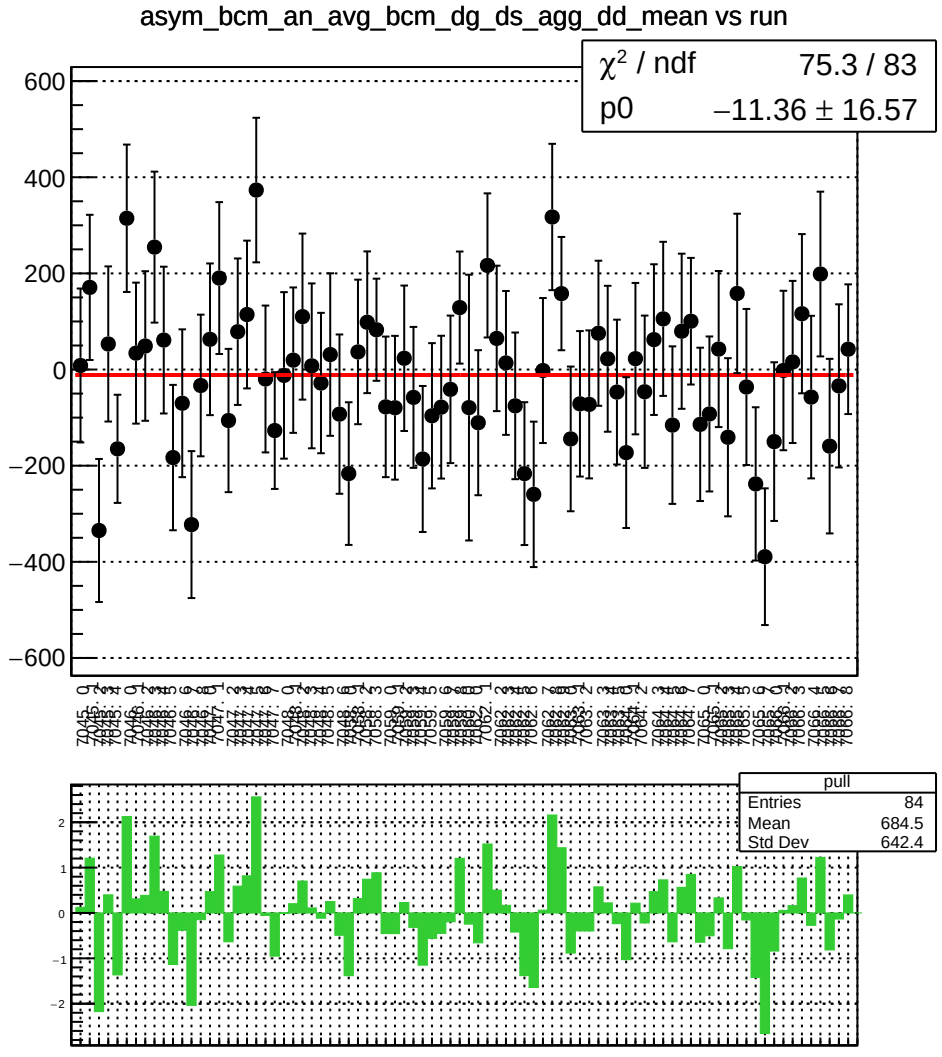

diff_bpm1i06Y_mean vs run
χ² / ndf 106 / 83
p0 −8.681 ± 3.429
100
50
0
−50
−100
pull
Entries 84
Mean 377.6
Std Dev 336.2
2
1
0
−1
−2

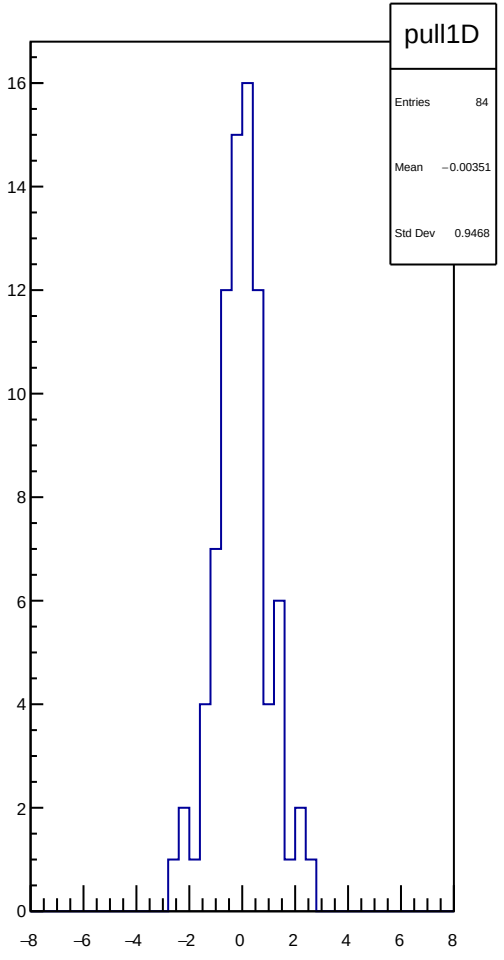

pull1D
Entries 84
Mean 0.0107
Std Dev 1.123
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

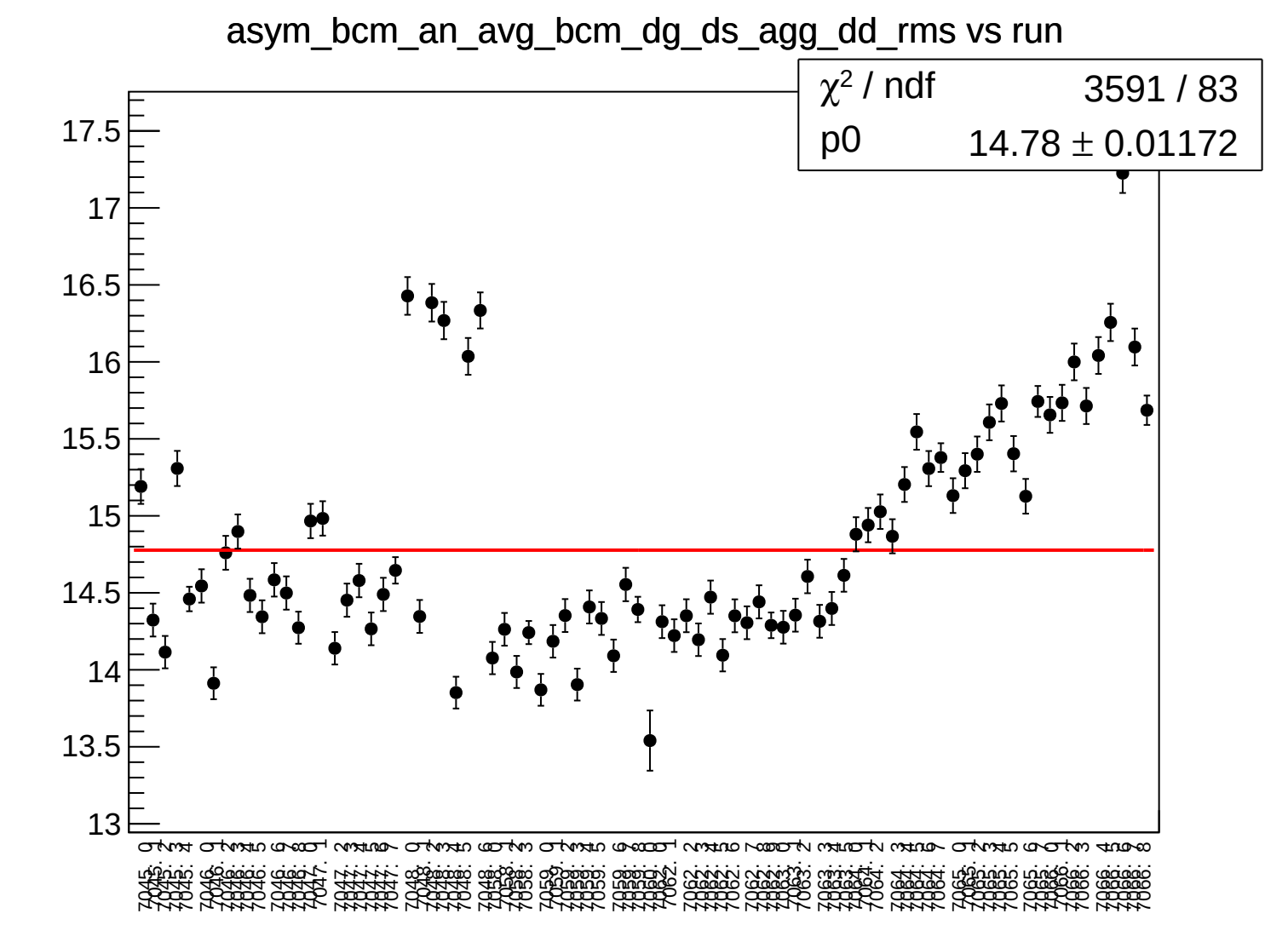

diff_bpm1i06Y_rms vs run
χ² / ndf 2602 / 83
p0 3060 ± 2.425
3400
3200
3000
2800
2600

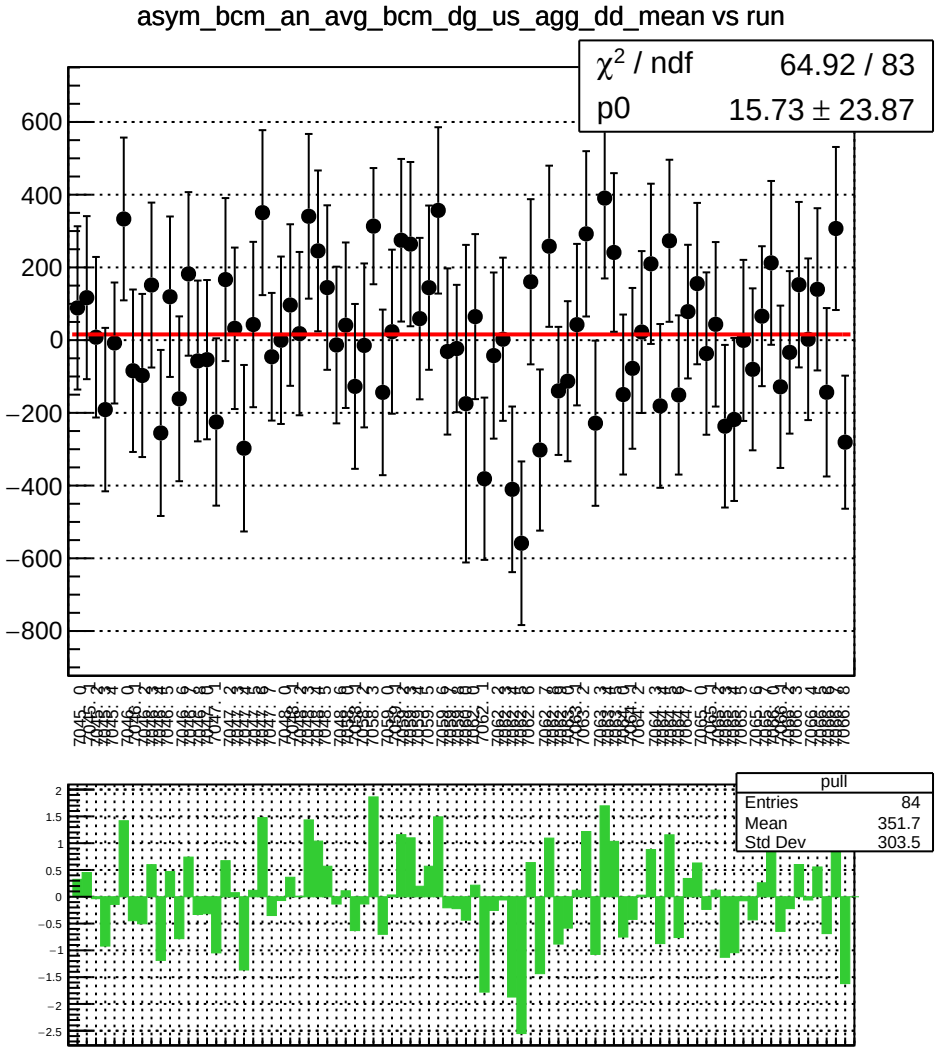

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.34 / 83
p0 −77.26 ± 253.9
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 84
Mean −16.02
Std Dev 51.1
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean −0.009781
Std Dev 0.4131
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

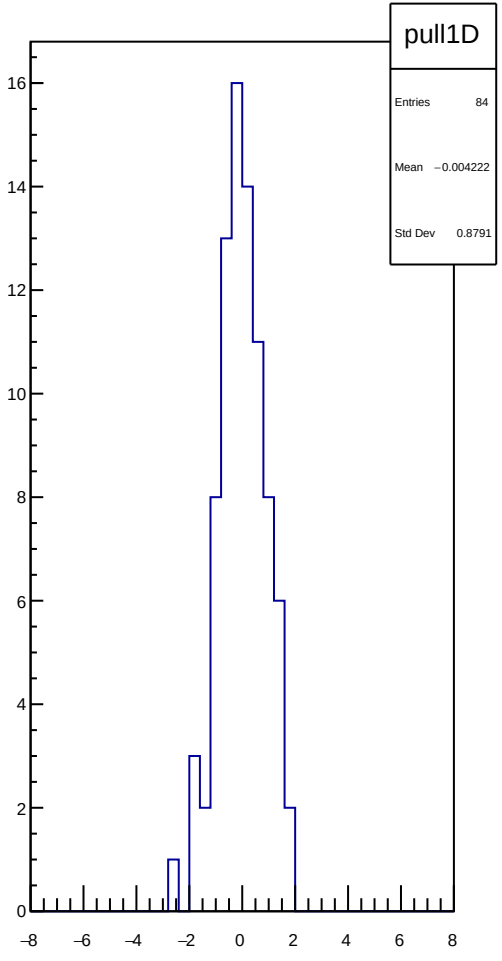

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 3.547e+04 / 83
p0 224.2 ± 0.1795
600
500
400
300
200

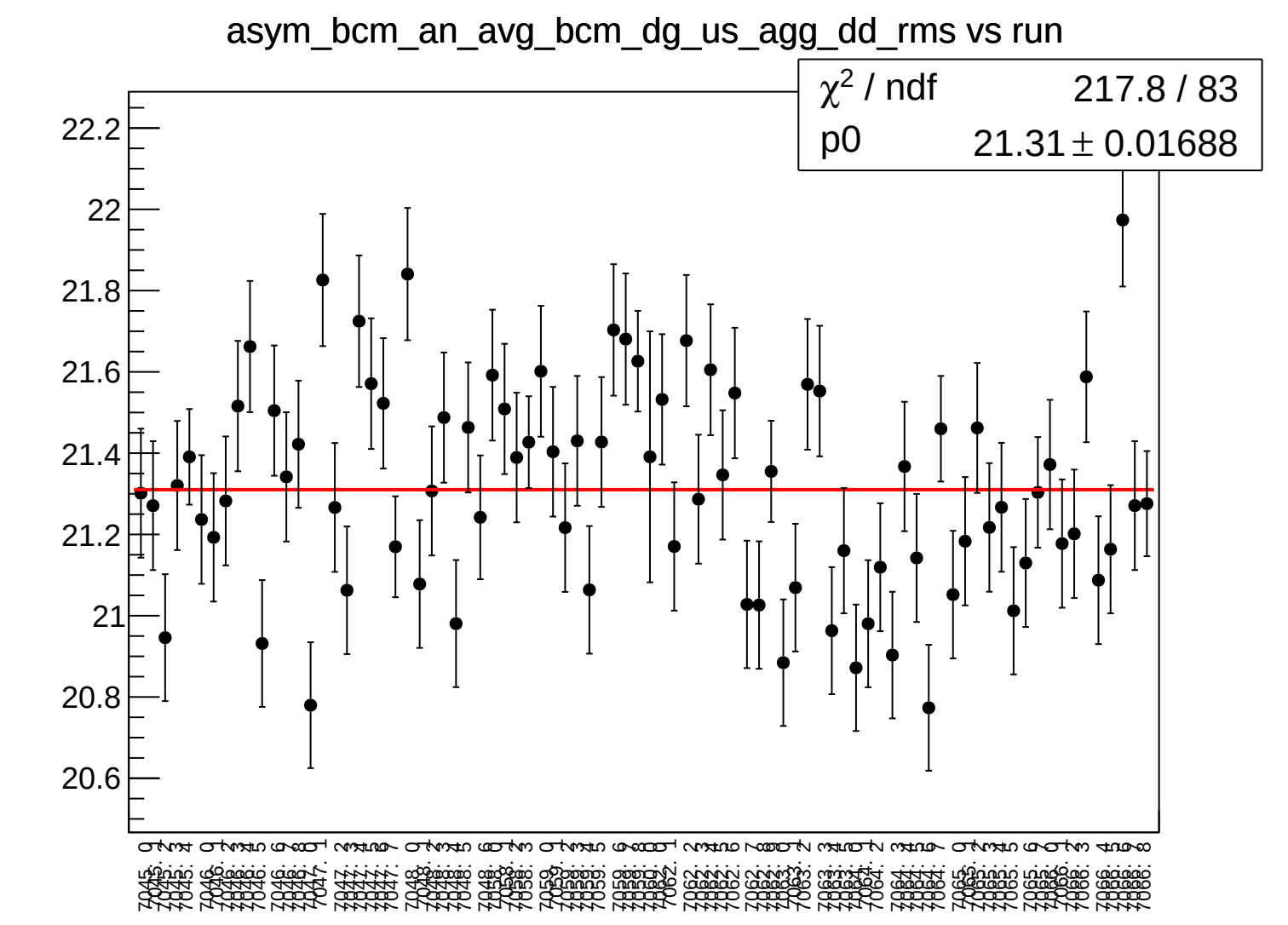

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 75.3 / 83
p0 −11.36 ± 16.57
pull
Entries 84
Mean 684.5
Std Dev 642.4

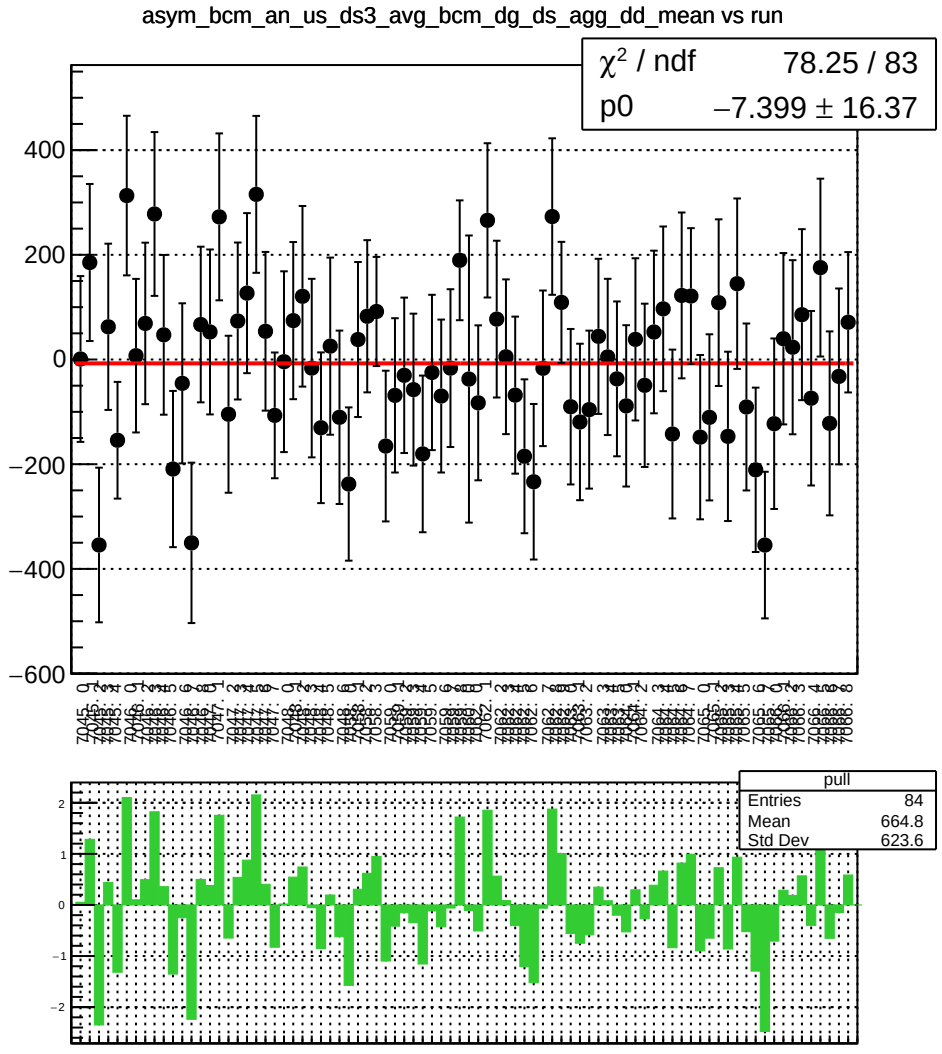

pull1D
Entries 84
Mean −0.00351
Std Dev 0.9468

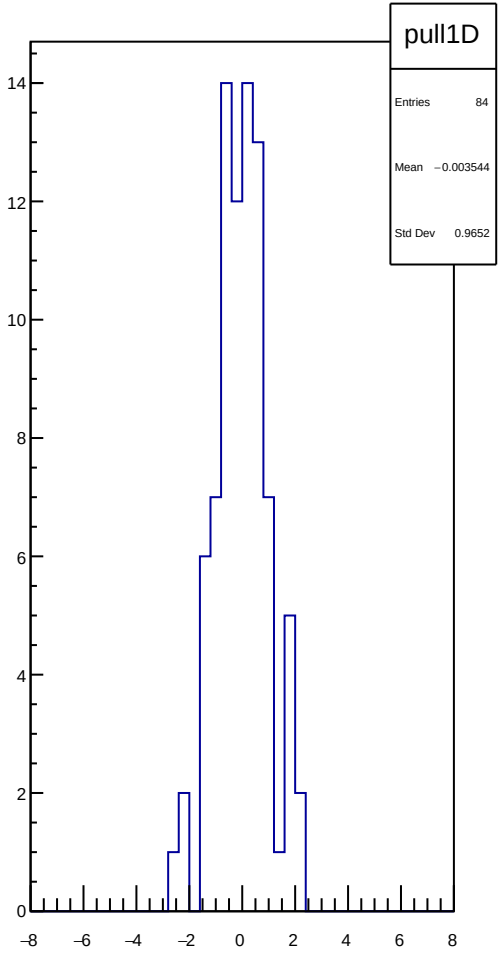

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3591 / 83
p0 14.78 ± 0.01172
17.5
17
16.5
16
15.5
15
14.5
14
13.5
13

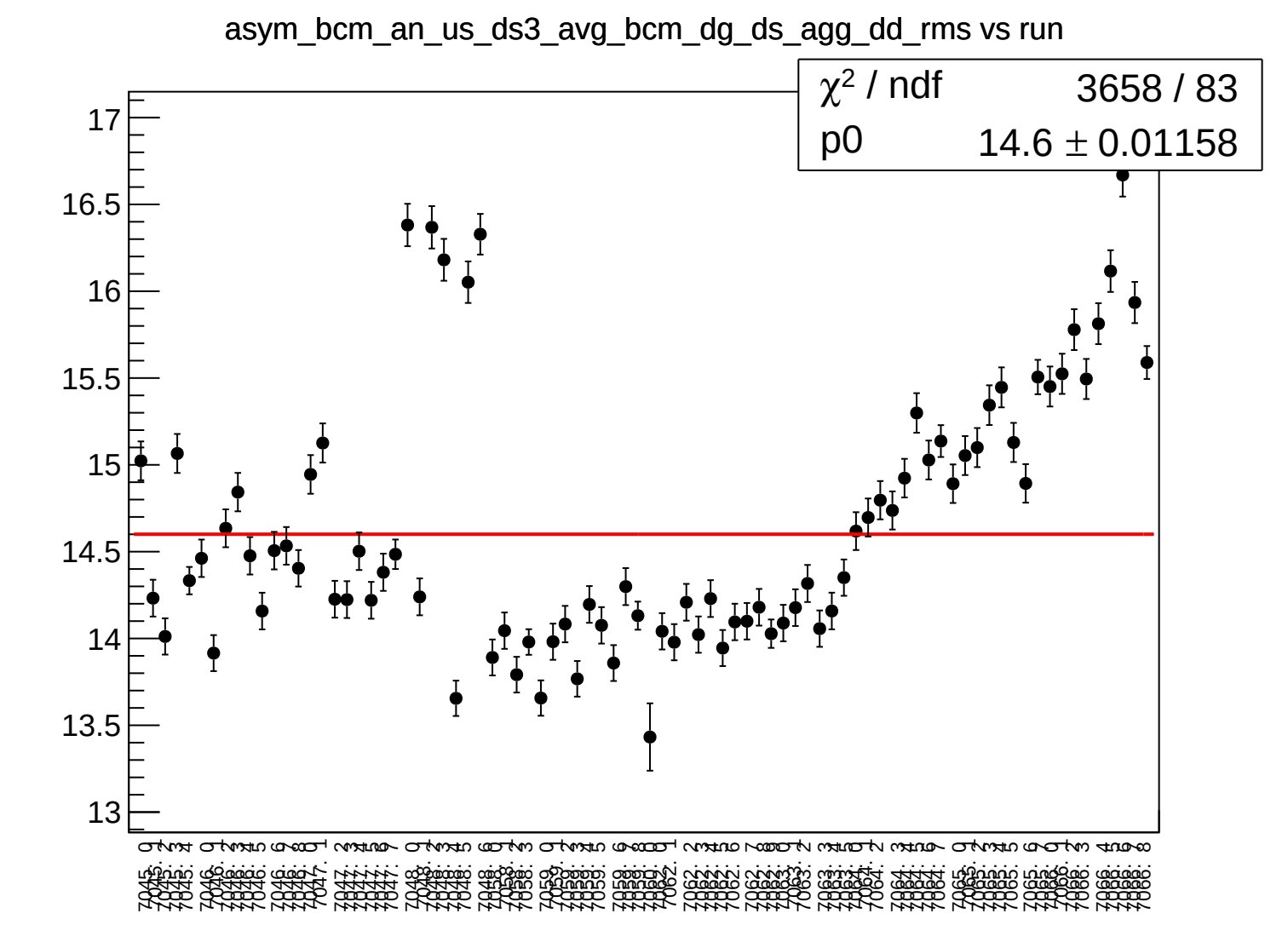

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 64.92 / 83
p0 15.73 ± 23.87
pull
Entries 84
Mean 351.7
Std Dev 303.5

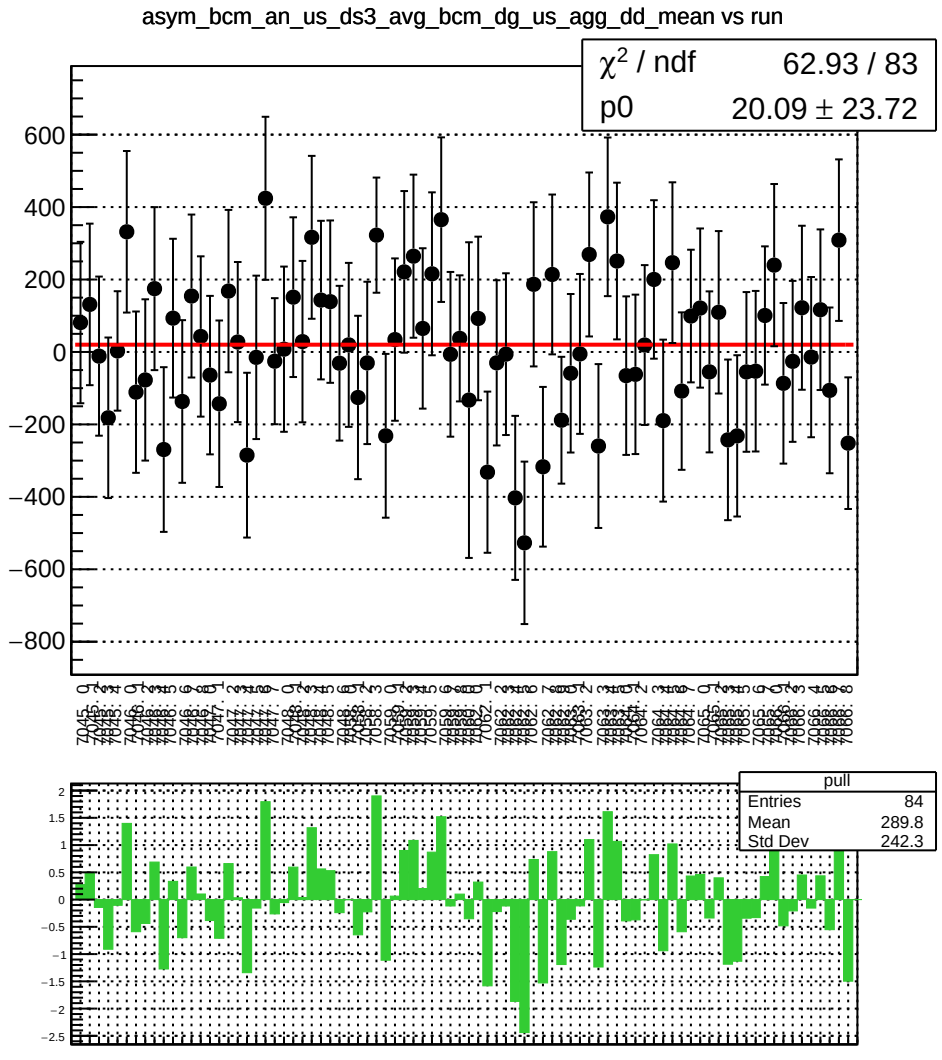

pull1D
Entries 84
Mean −0.004222
Std Dev 0.8791

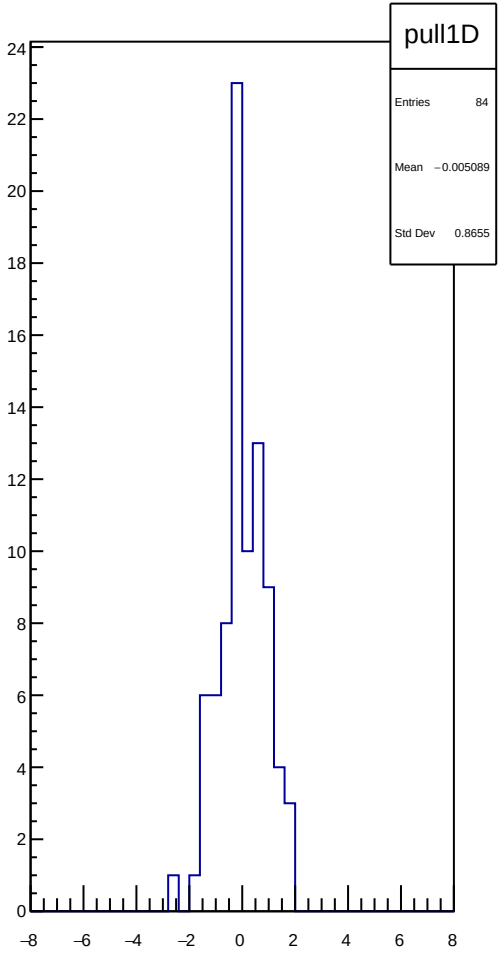

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 217.8 / 83
p0 21.31 ± 0.01688
22.2
22
21.8
21.6
21.4
21.2
21
20.8
20.6

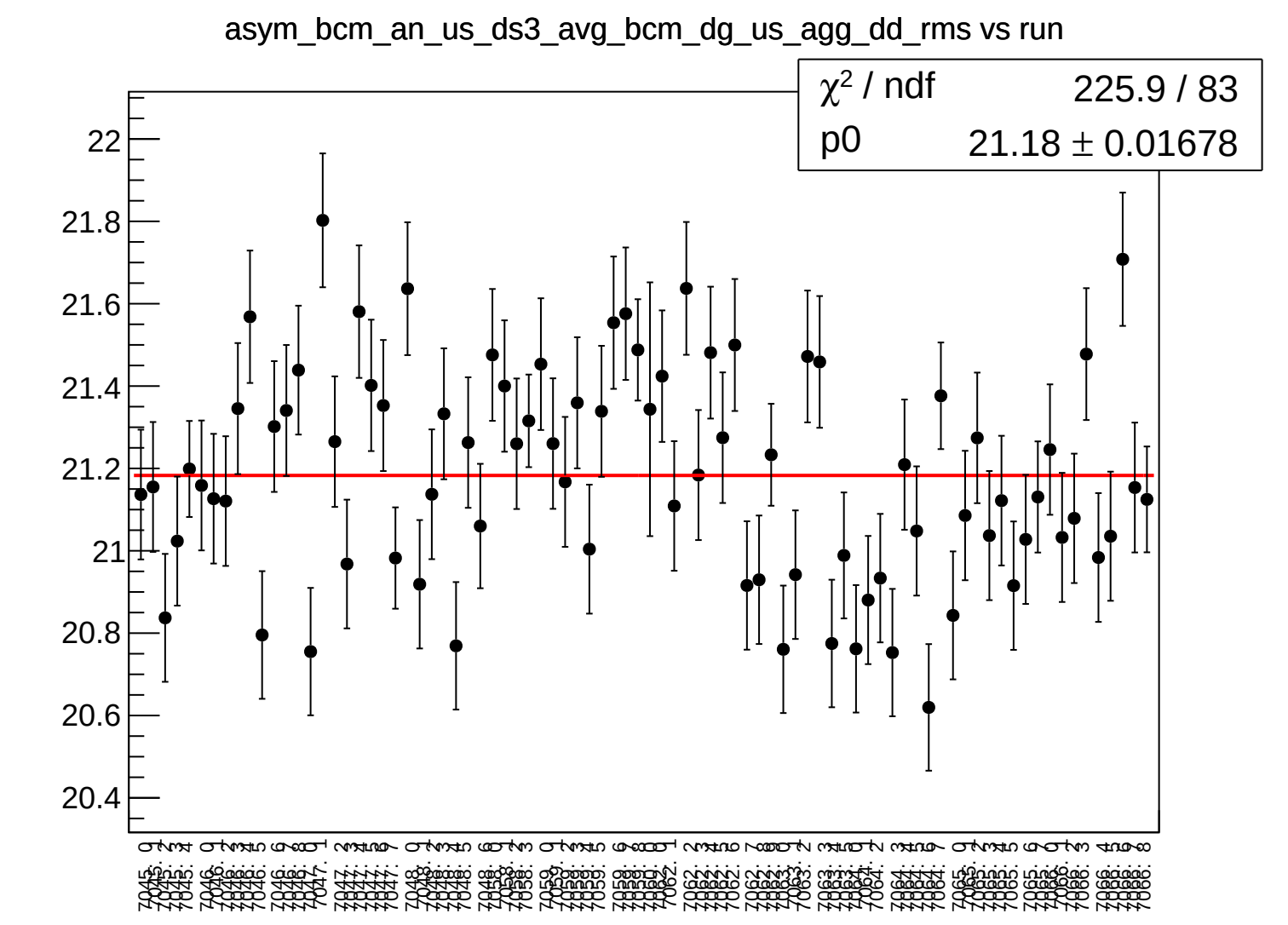

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 78.25 / 83
p0 −7.399 ± 16.37
pull
Entries 84
Mean 664.8
Std Dev 623.6

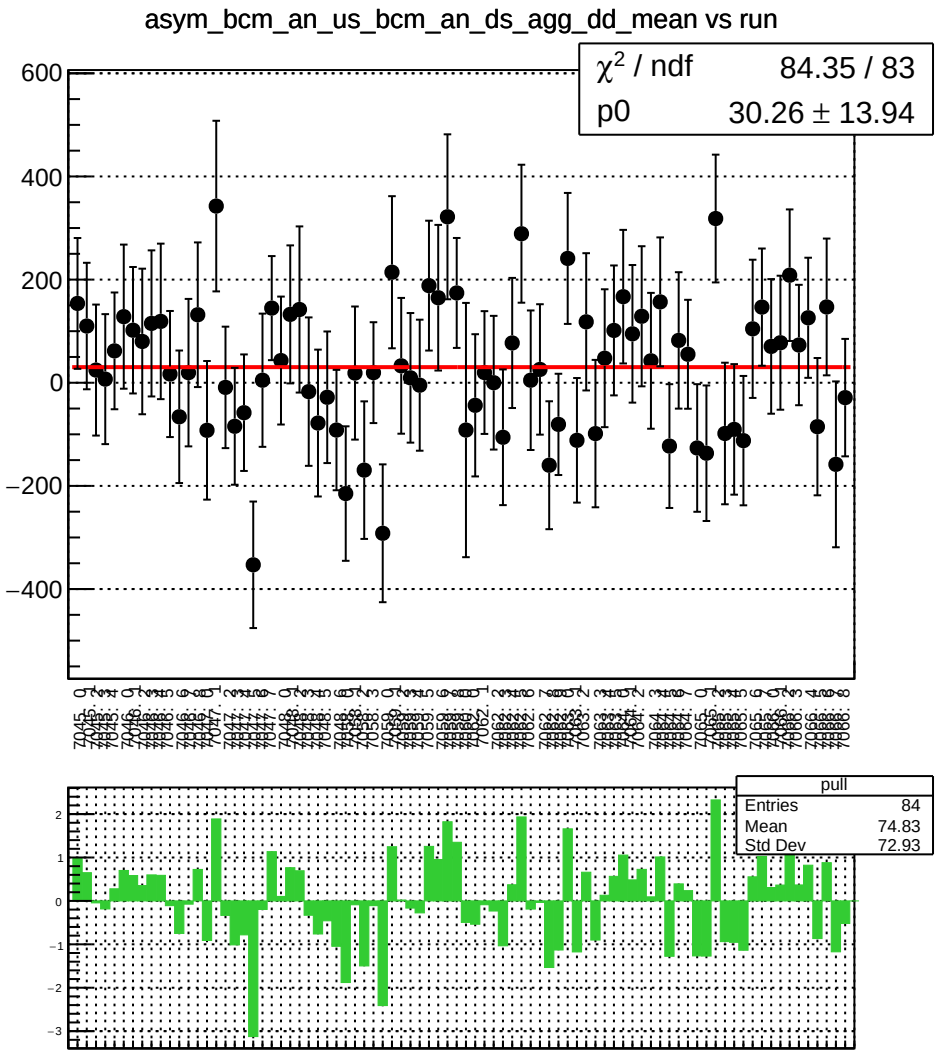

pull1D
Entries 84
Mean −0.003544
Std Dev 0.9652

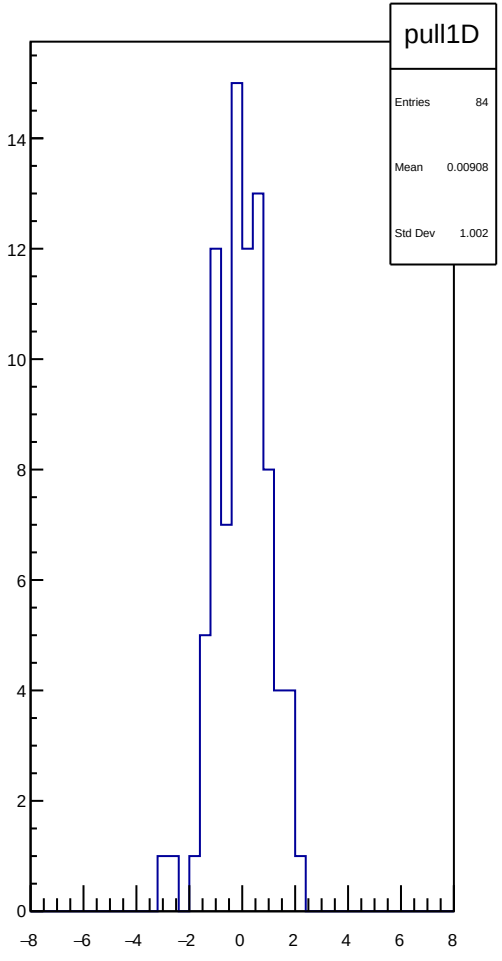

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3658 / 83
p0 14.6 ± 0.01158
17
16.5
16
15.5
15
14.5
14
13.5
13

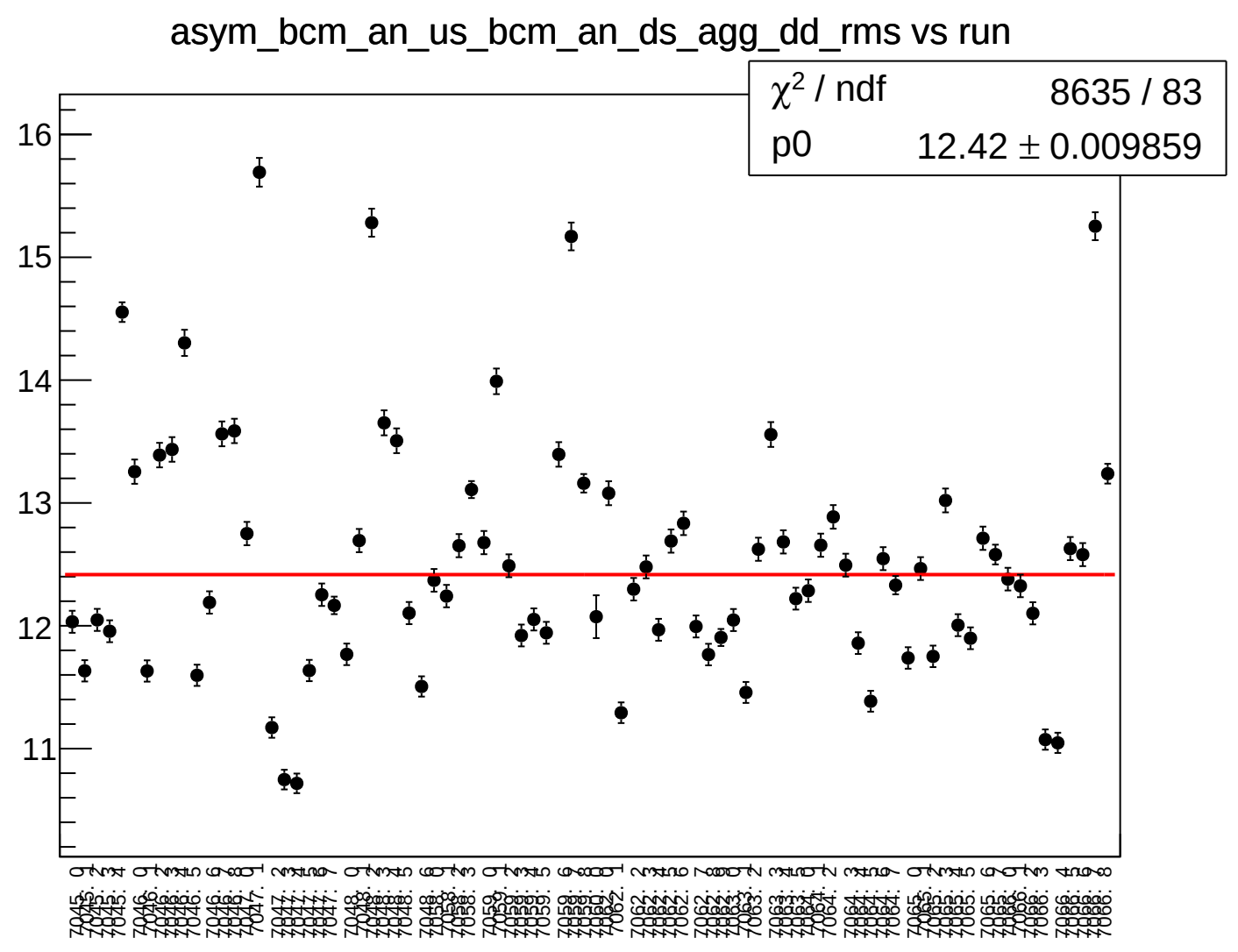

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 62.93 / 83
p0 20.09 ± 23.72
pull
Entries 84
Mean 289.8
Std Dev 242.3

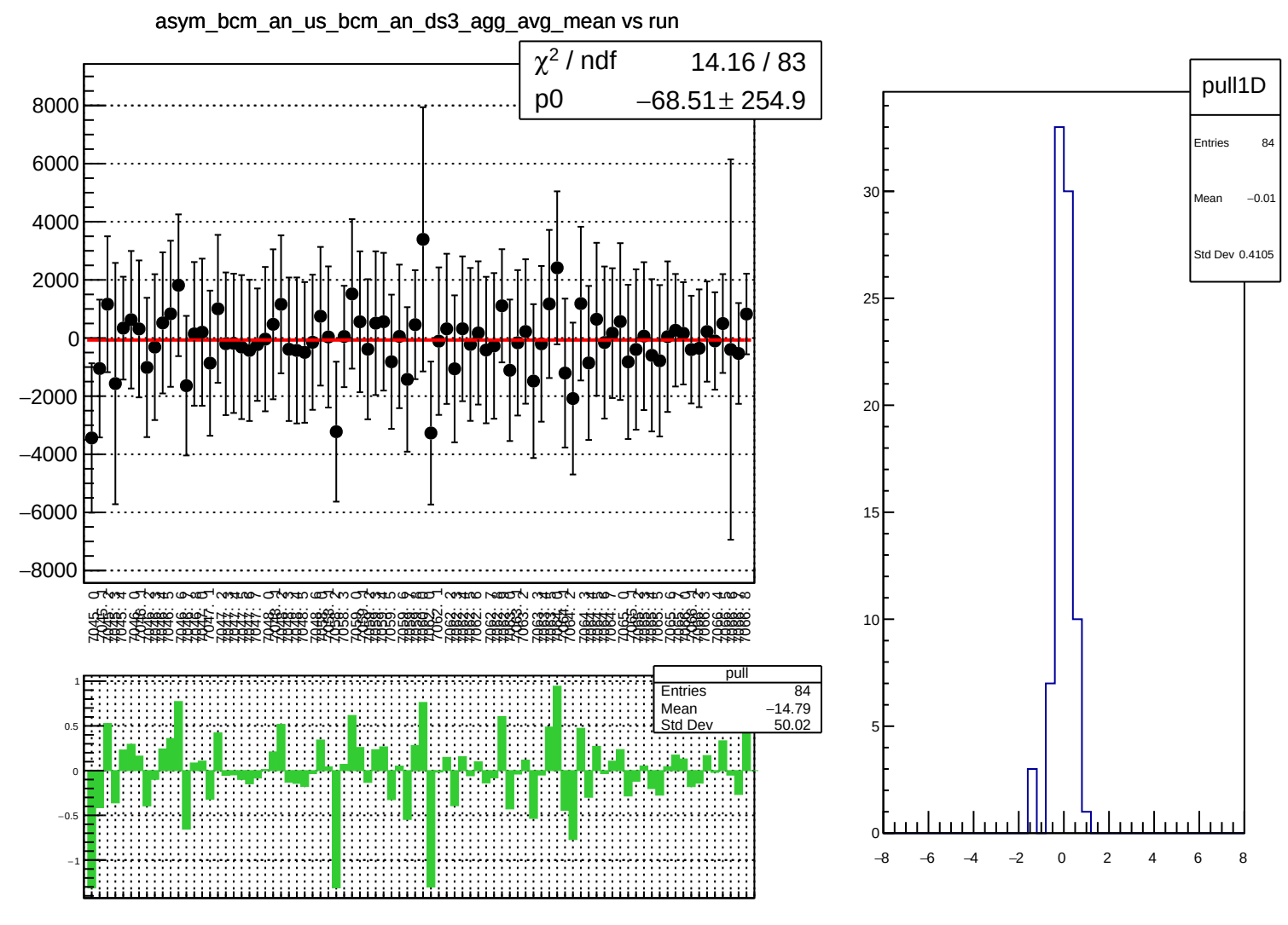

pull1D
Entries 84
Mean −0.005089
Std Dev 0.8655

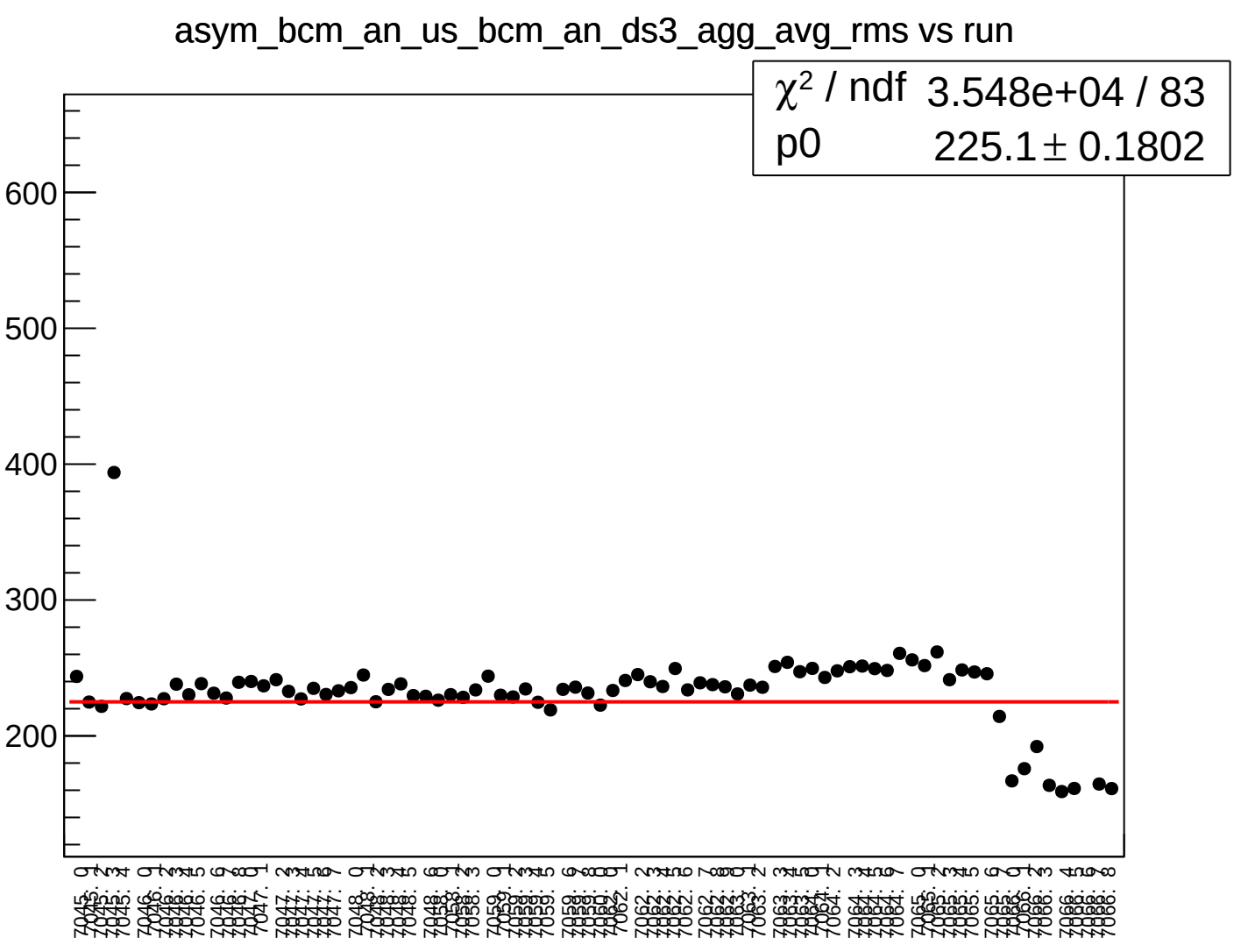

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 225.9 / 83
p0 21.18 ± 0.01678
22
21.8
21.6
21.4
21.2
21
20.8
20.6
20.4

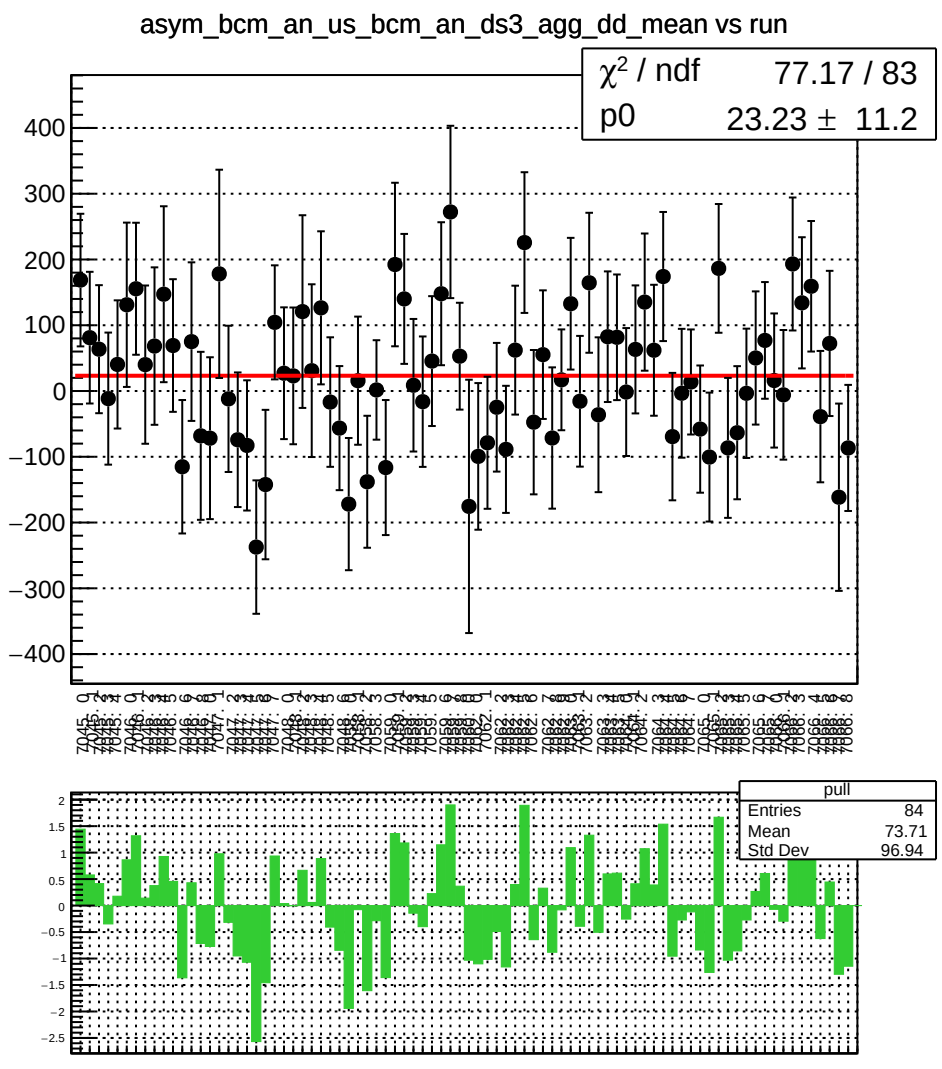

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 84.35 / 83
p0 30.26 ± 13.94
pull
Entries 84
Mean 74.83
Std Dev 72.93

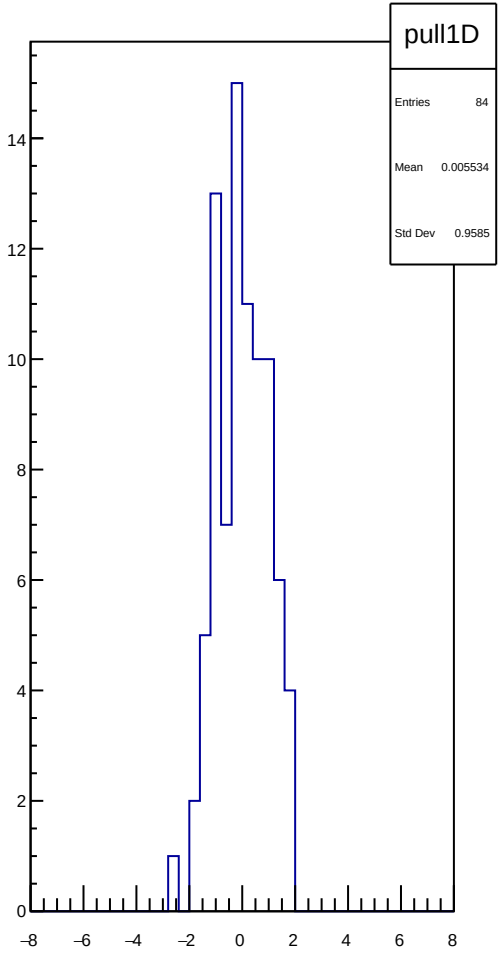

pull1D
Entries 84
Mean 0.00908
Std Dev 1.002

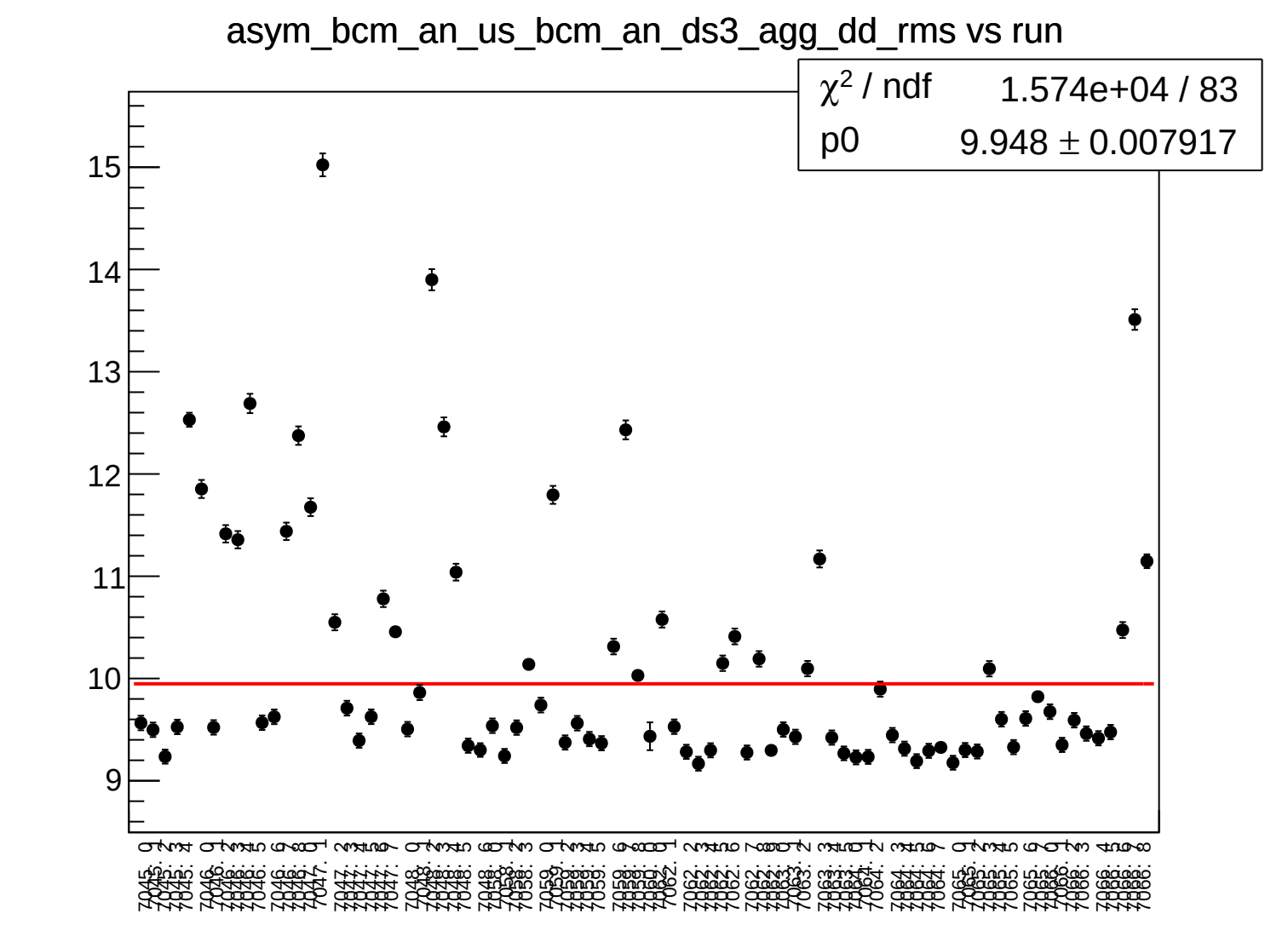

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 8635 / 83
p0 12.42 ± 0.009859
16
15
14
13
12
11

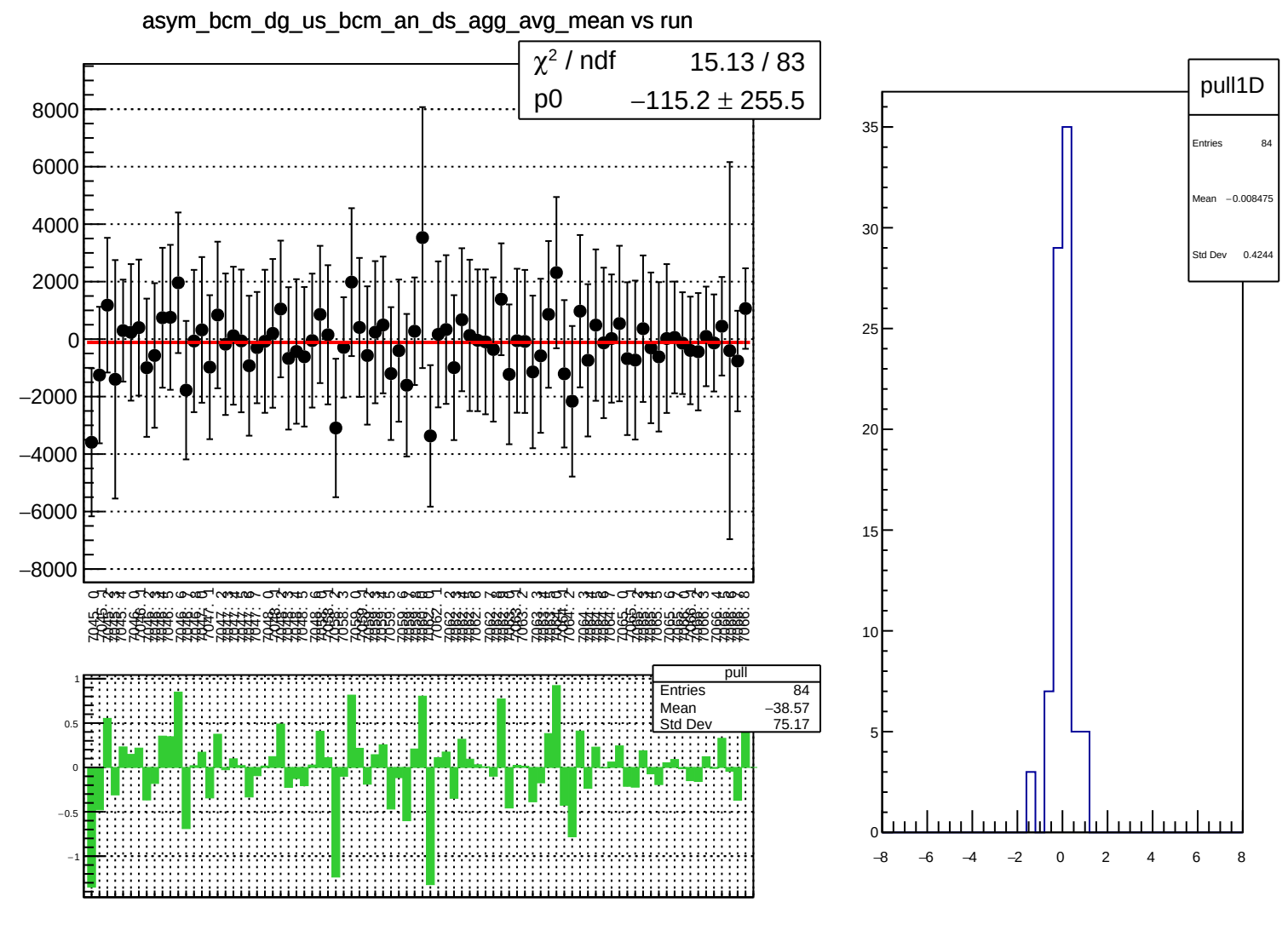

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 14.16 / 83
p0 −68.51 ± 254.9
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 84
Mean −14.79
Std Dev 50.02
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean −0.01
Std Dev 0.4105
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

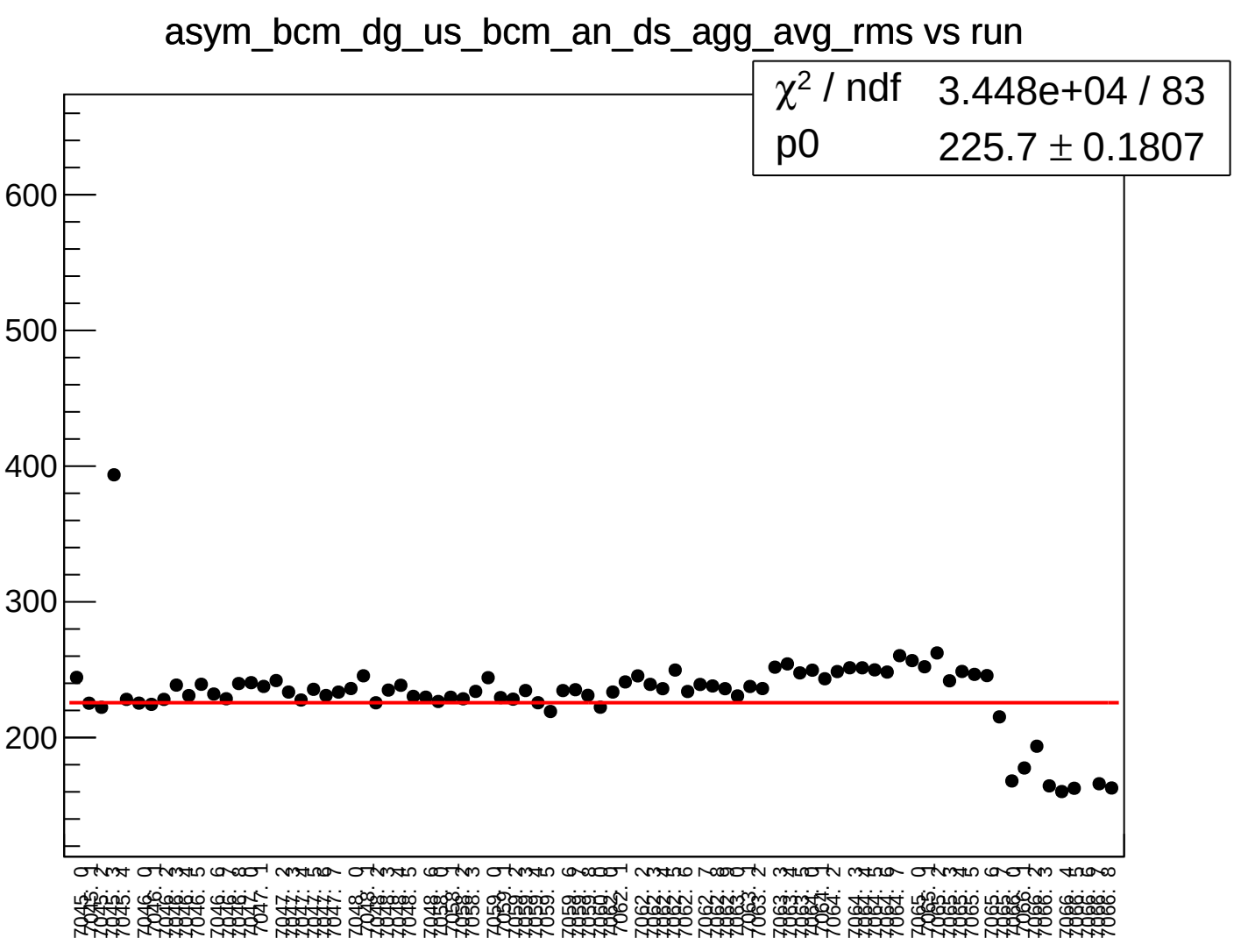

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 3.548e+04 / 83
p0 225.1 ± 0.1802
600
500
400
300
200

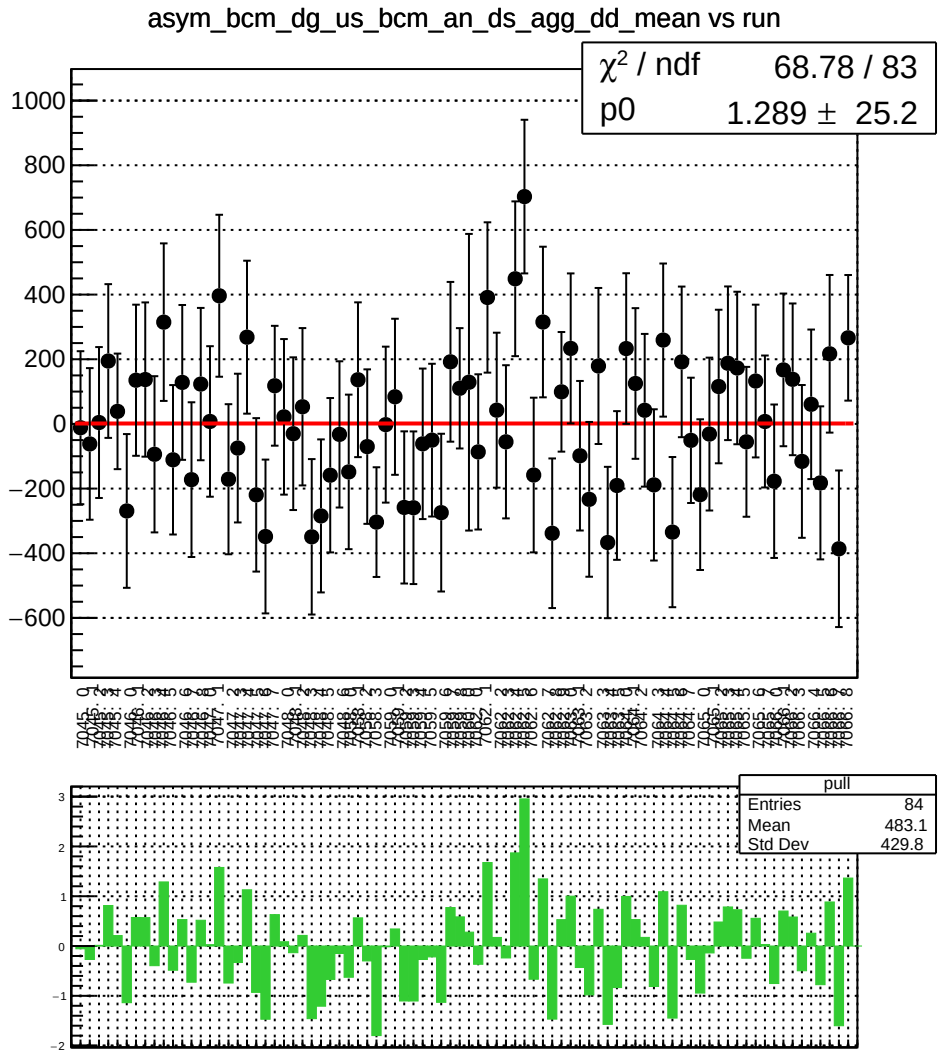

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 77.17 / 83
p0 23.23 ± 11.2
pull
Entries 84
Mean 73.71
Std Dev 96.94

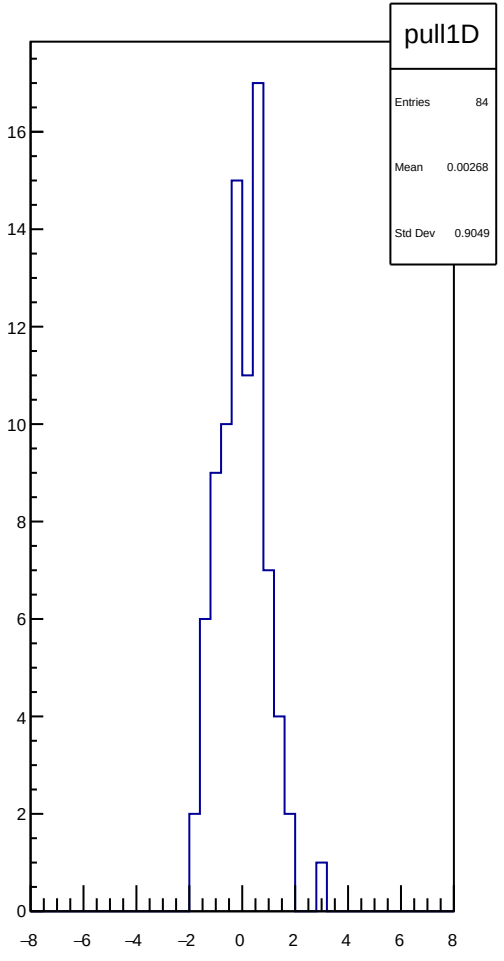

pull1D
Entries 84
Mean 0.005534
Std Dev 0.9585

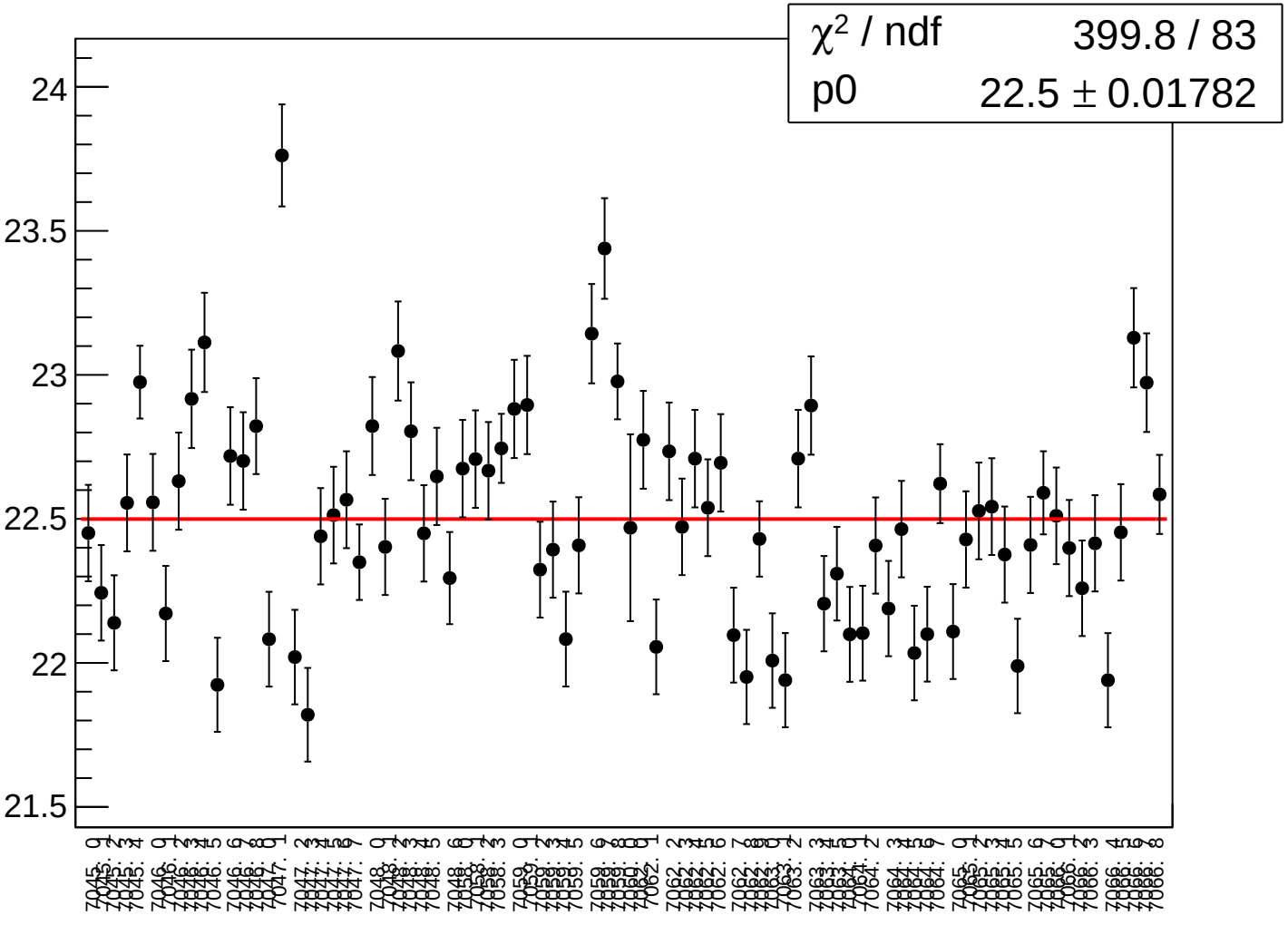

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1.574e+04 / 83
p0 9.948 ± 0.007917
15
14
13
12
11
10
9

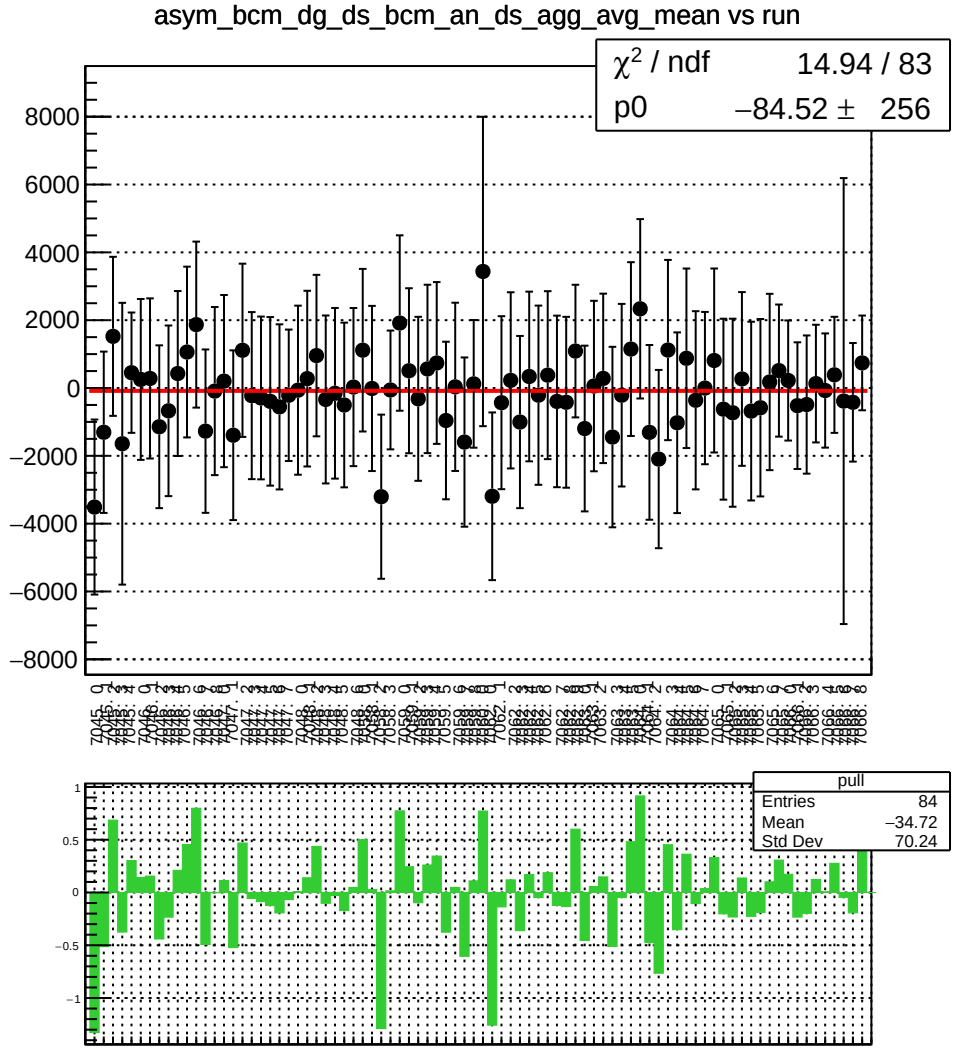

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.13 / 83
p0 −115.2 ± 255.5
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 84
Mean −38.57
Std Dev 75.17
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean −0.008475
Std Dev 0.4244
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

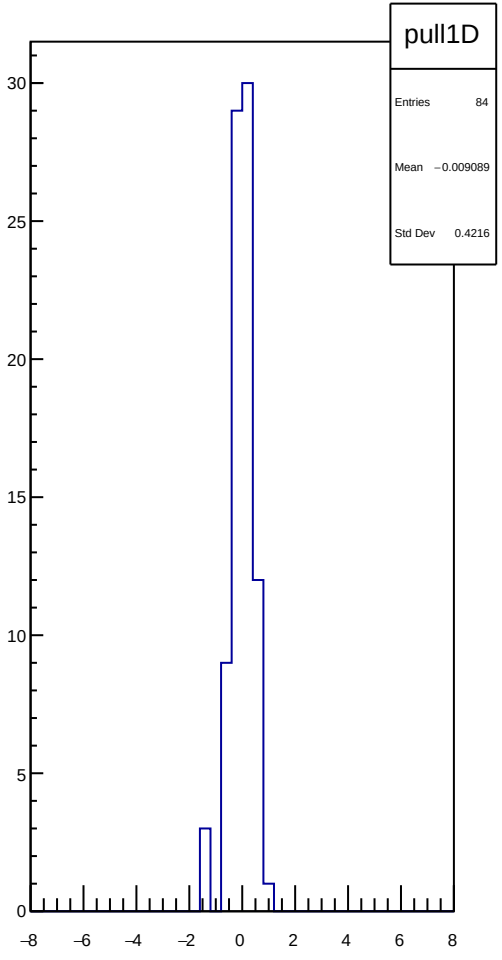

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 3.448e+04 / 83
p0 225.7 ± 0.1807
600
500
400
300
200

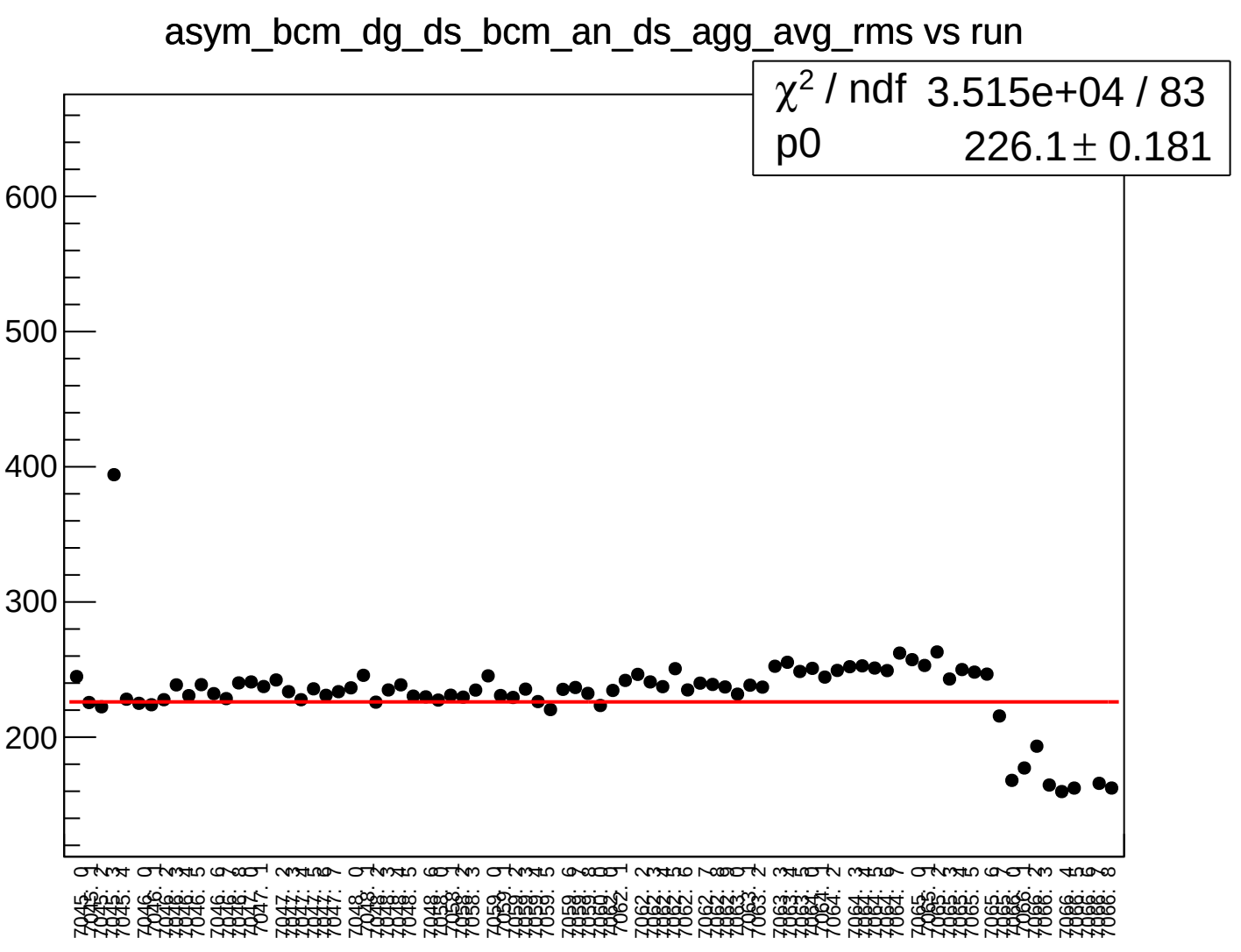

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.78 / 83
p0 1.289 ± 25.2
pull
Entries 84
Mean 483.1
Std Dev 429.8

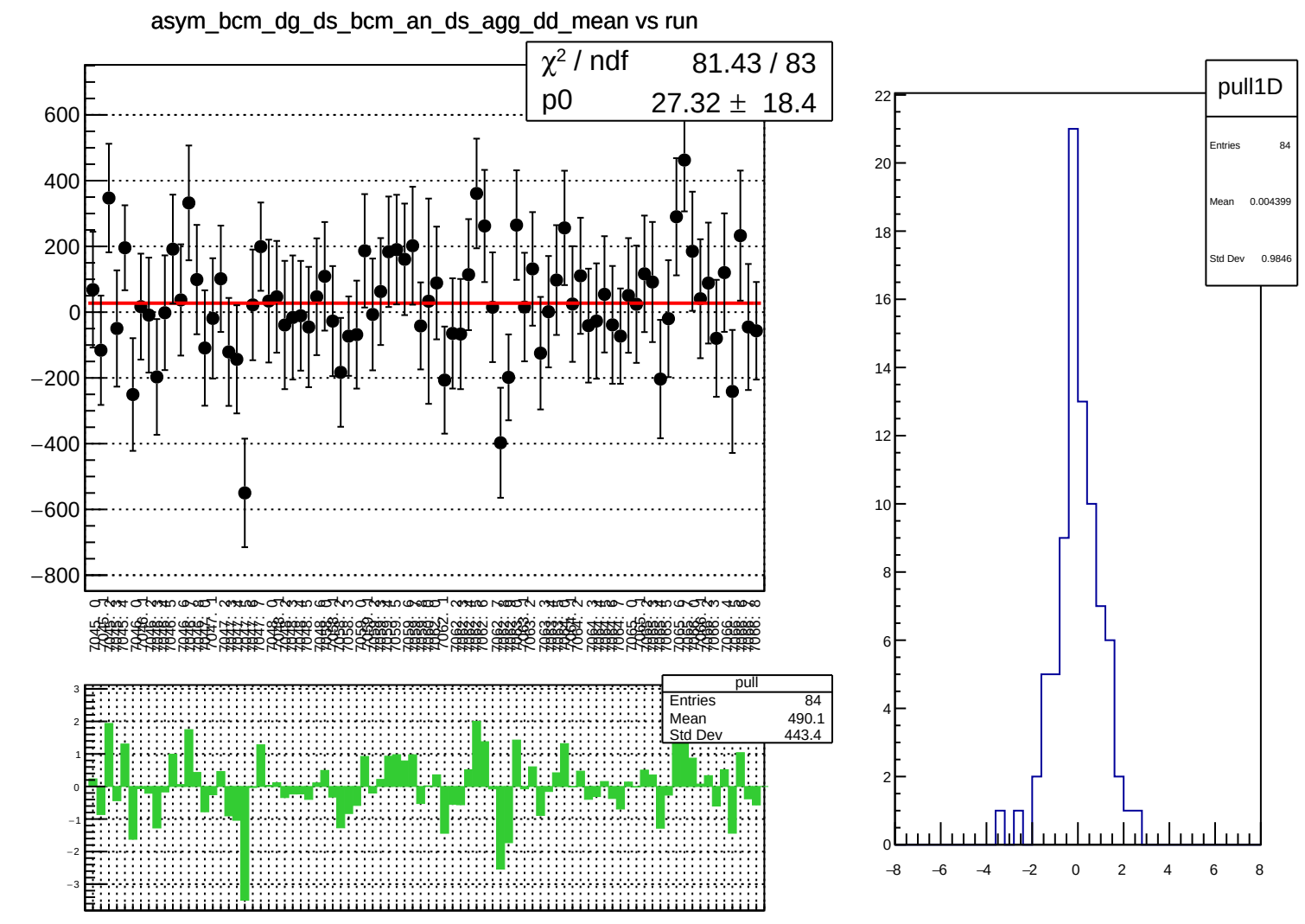

pull1D
Entries 84
Mean 0.00268
Std Dev 0.9049

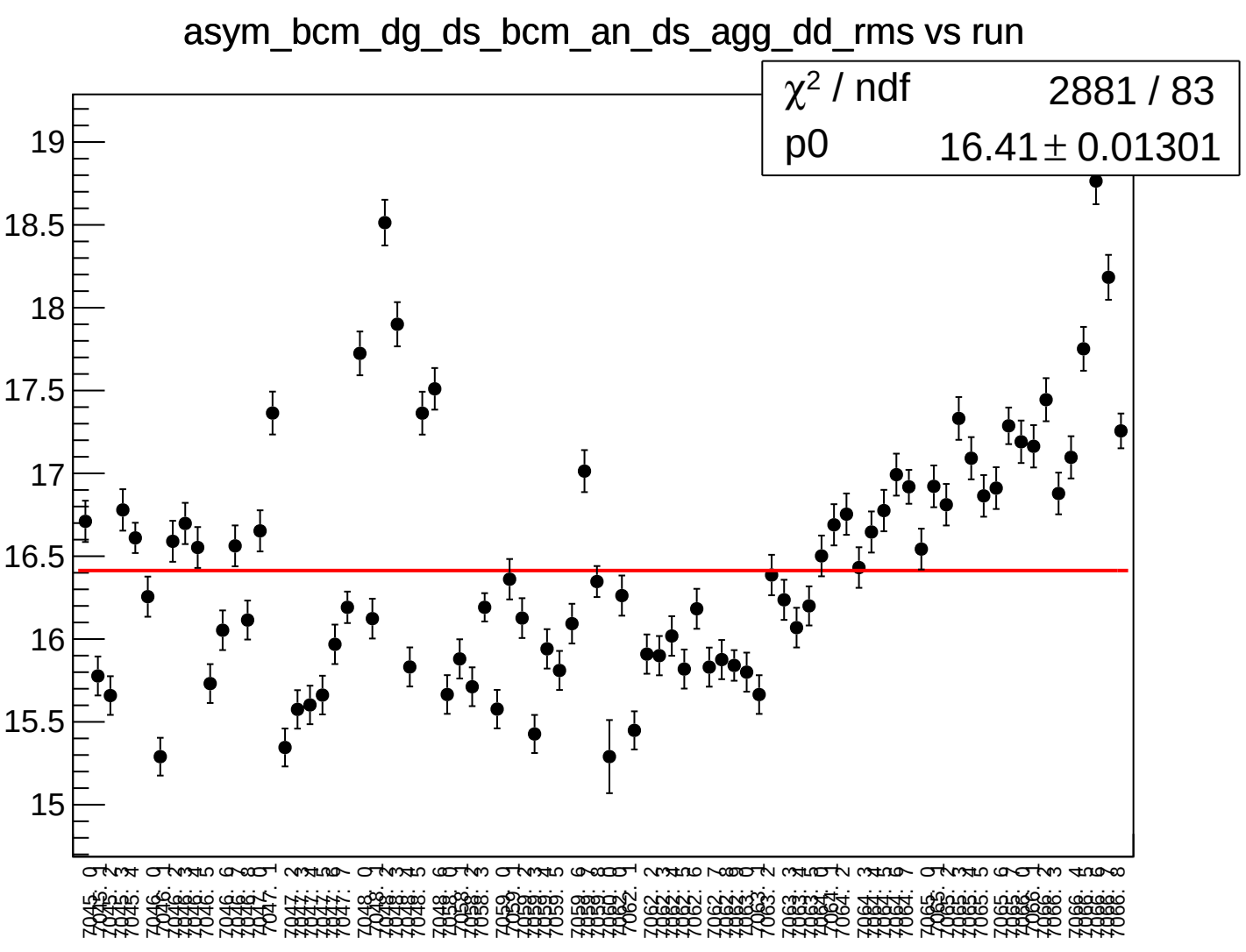

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 399.8 / 83
p0 22.5 ± 0.01782
24
23.5
23
22.5
22
21.5

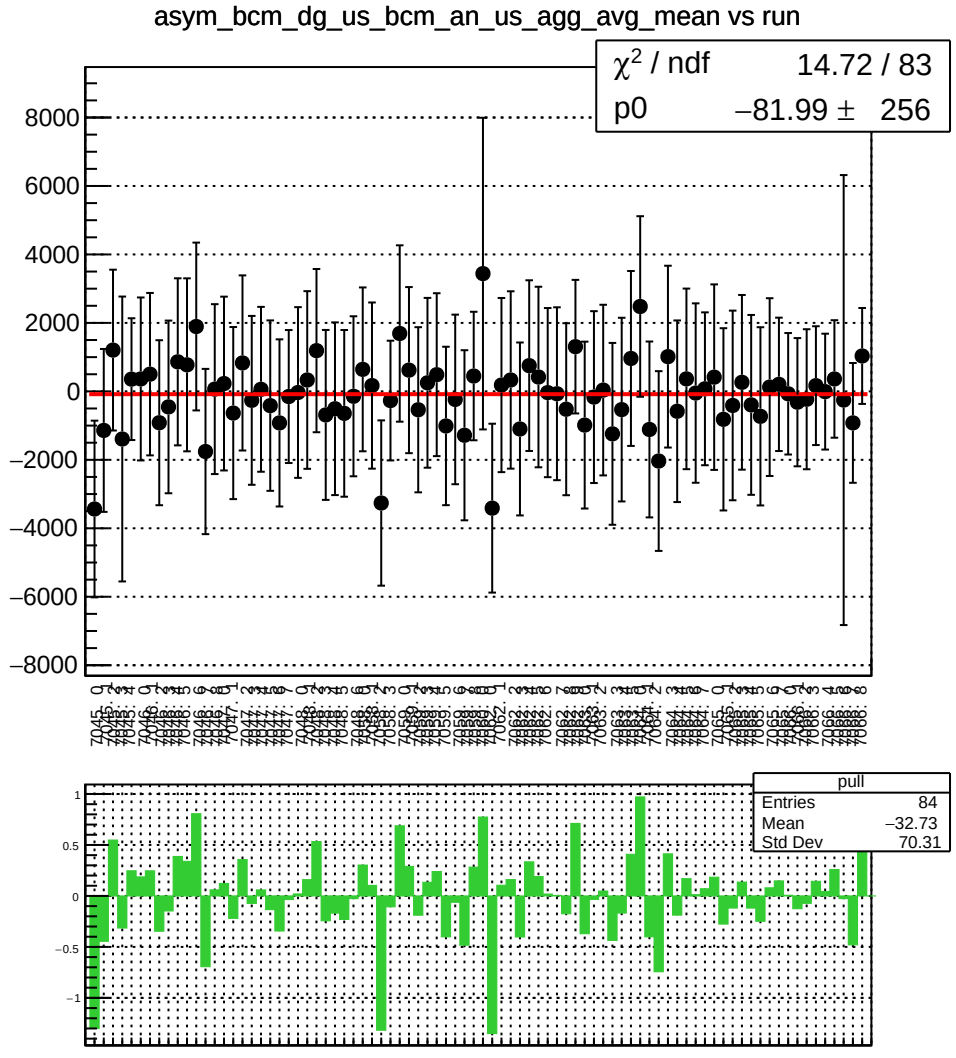

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.94 / 83
p0 −84.52 ± 256
pull
Entries 84
Mean −34.72
Std Dev 70.24

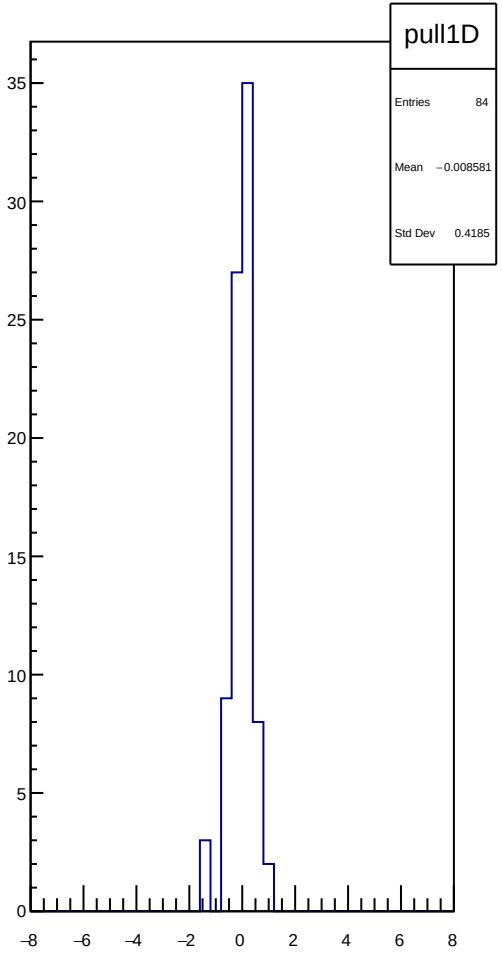

pull1D
Entries 84
Mean −0.009089
Std Dev 0.4216

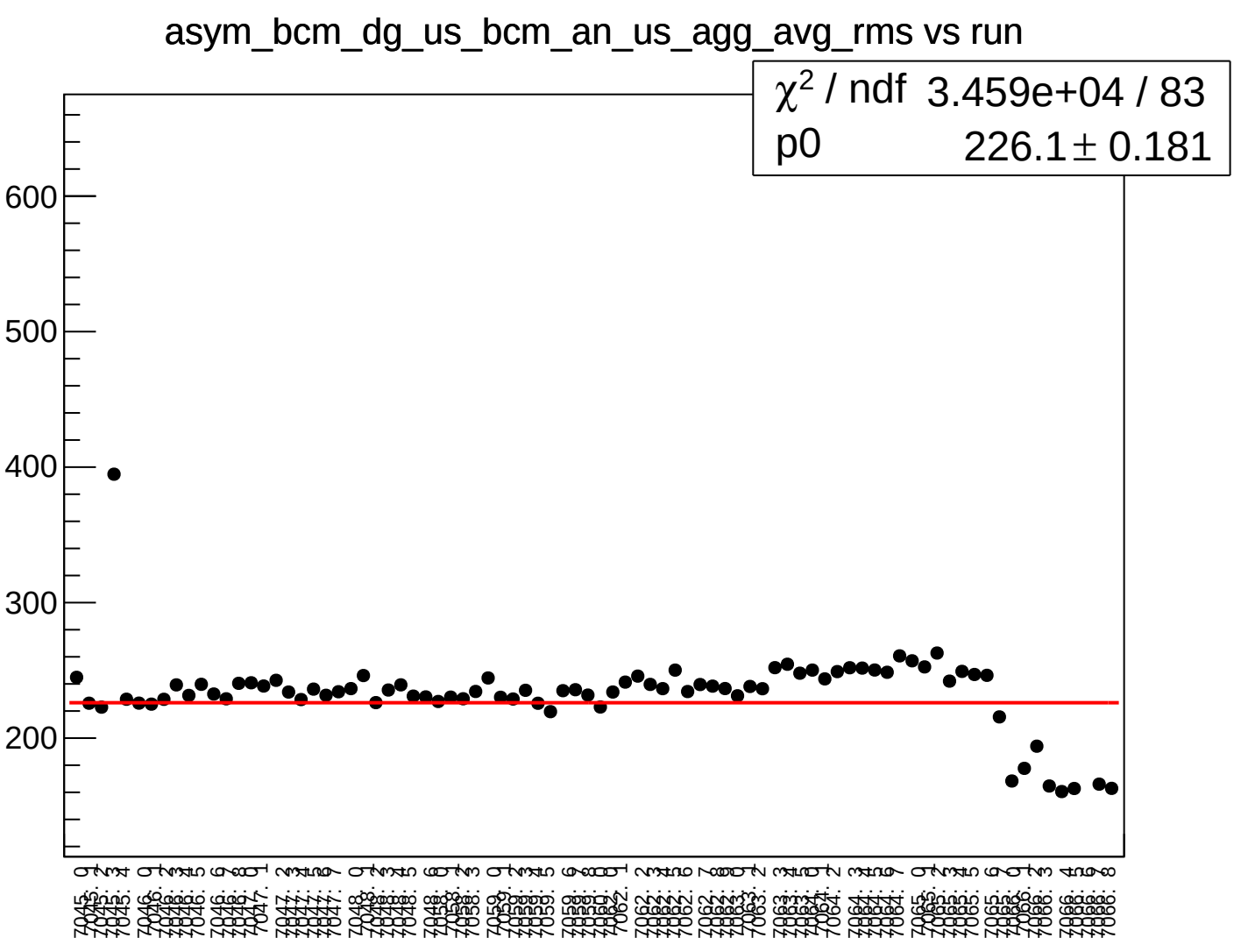

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 3.515e+04 / 83
p0 226.1 ± 0.181
600
500
400
300
200

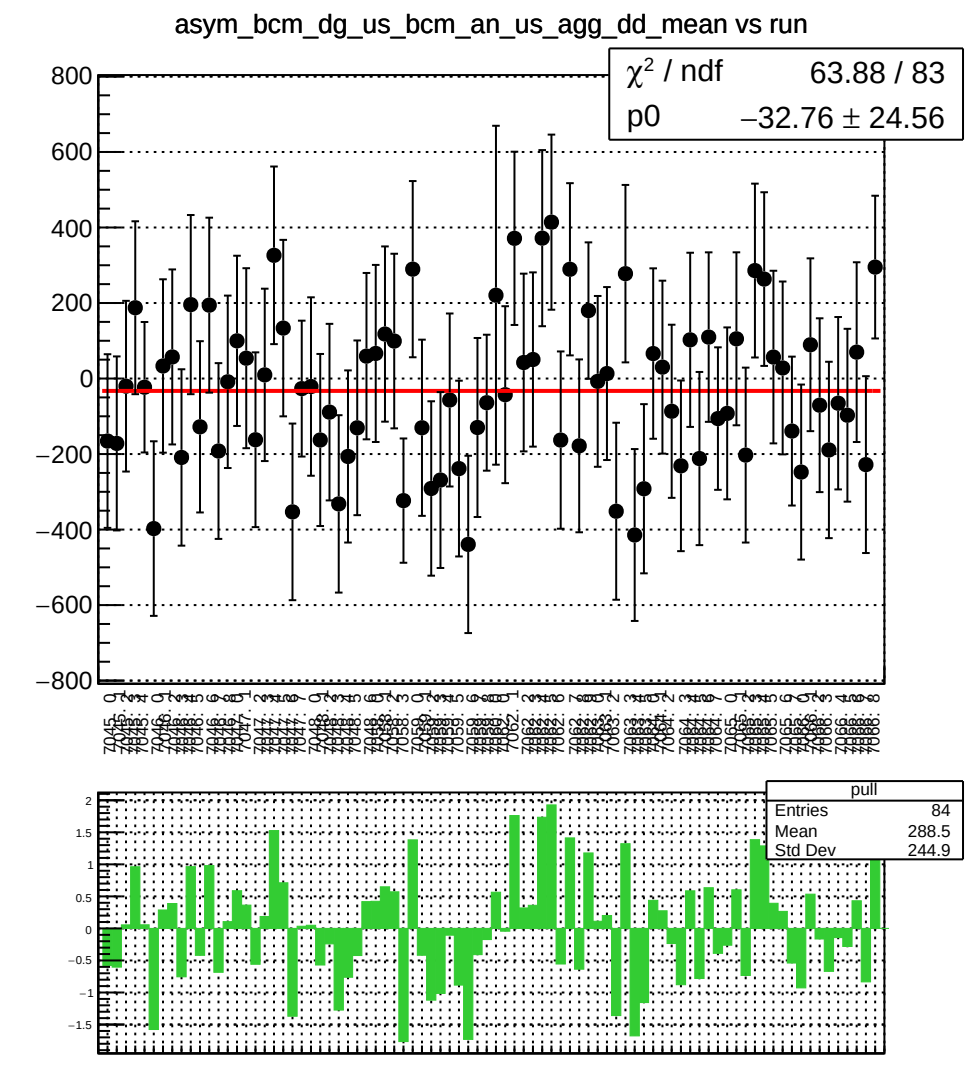

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.43 / 83
p0 27.32 ± 18.4
pull
Entries 84
Mean 490.1
Std Dev 443.4
pull1D
Entries 84
Mean 0.004399
Std Dev 0.9846

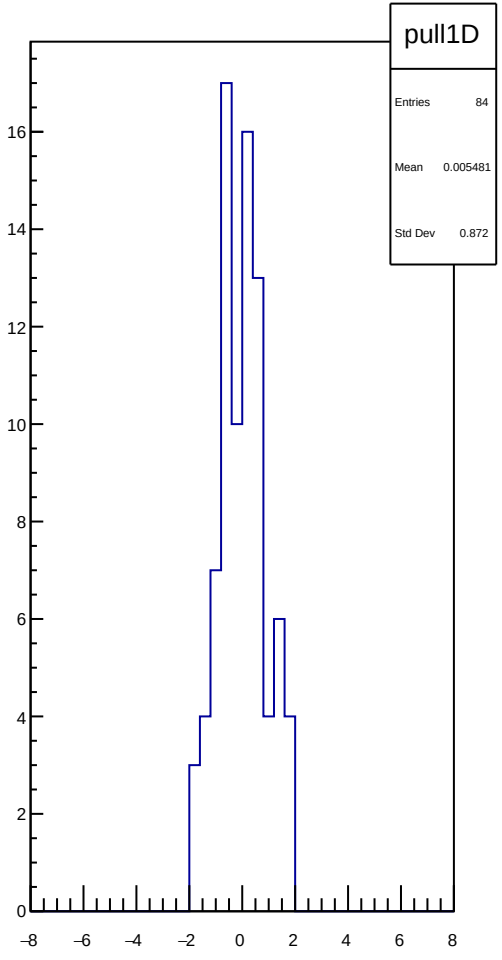

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2881 / 83
p0 16.41 ± 0.01301
19
18.5
18
17.5
17
16.5
16
15.5
15

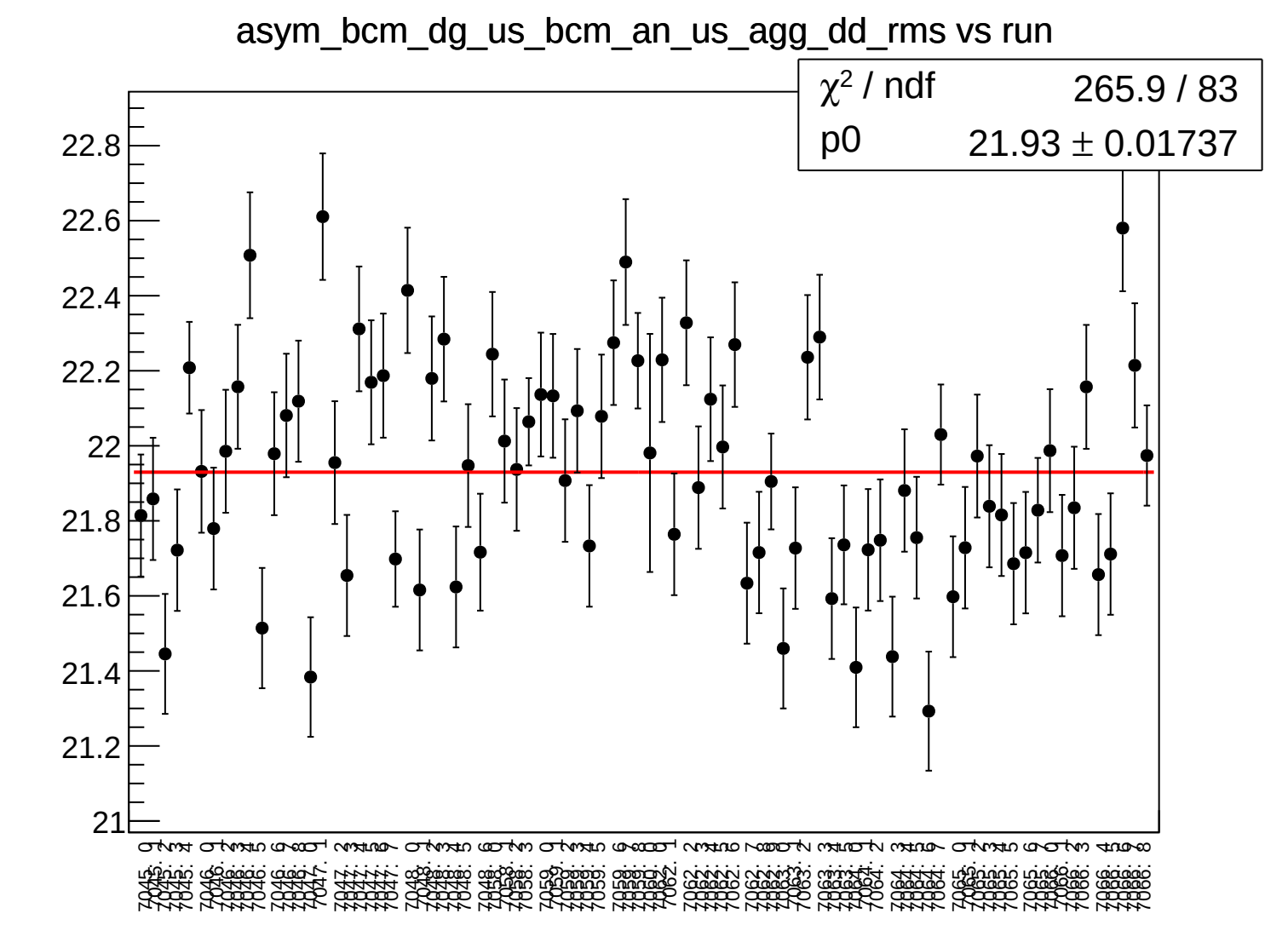

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.72 / 83
p0 −81.99 ± 256
pull
Entries 84
Mean −32.73
Std Dev 70.31

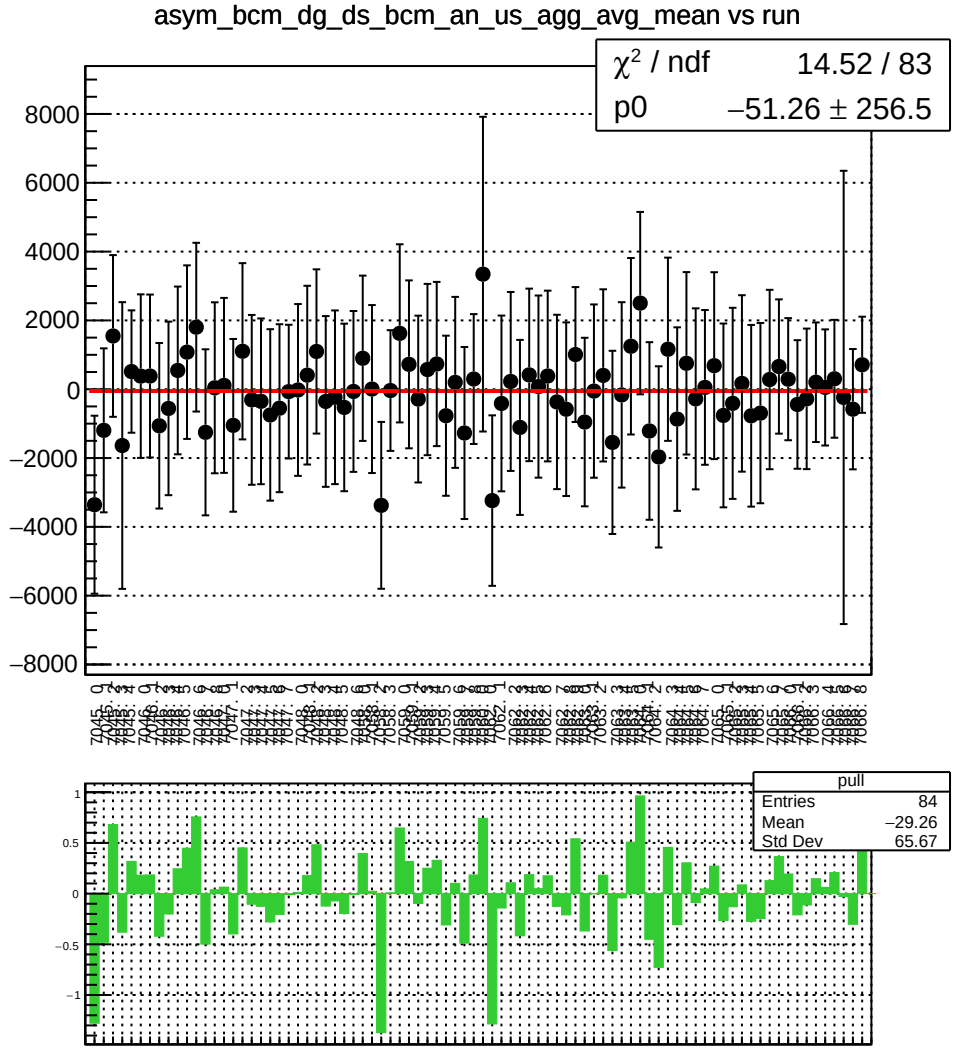

pull1D
Entries 84
Mean −0.008581
Std Dev 0.4185

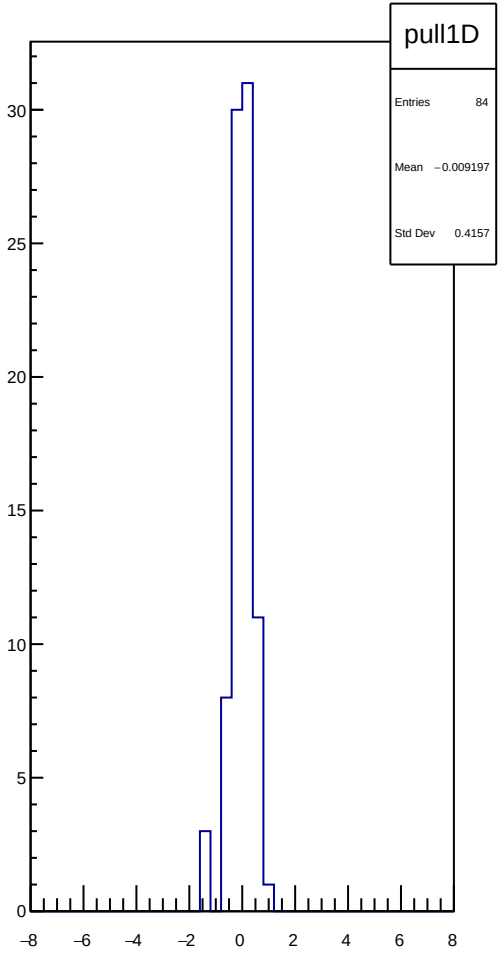

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 3.459e+04 / 83
p0 226.1 ± 0.181
600
500
400
300
200

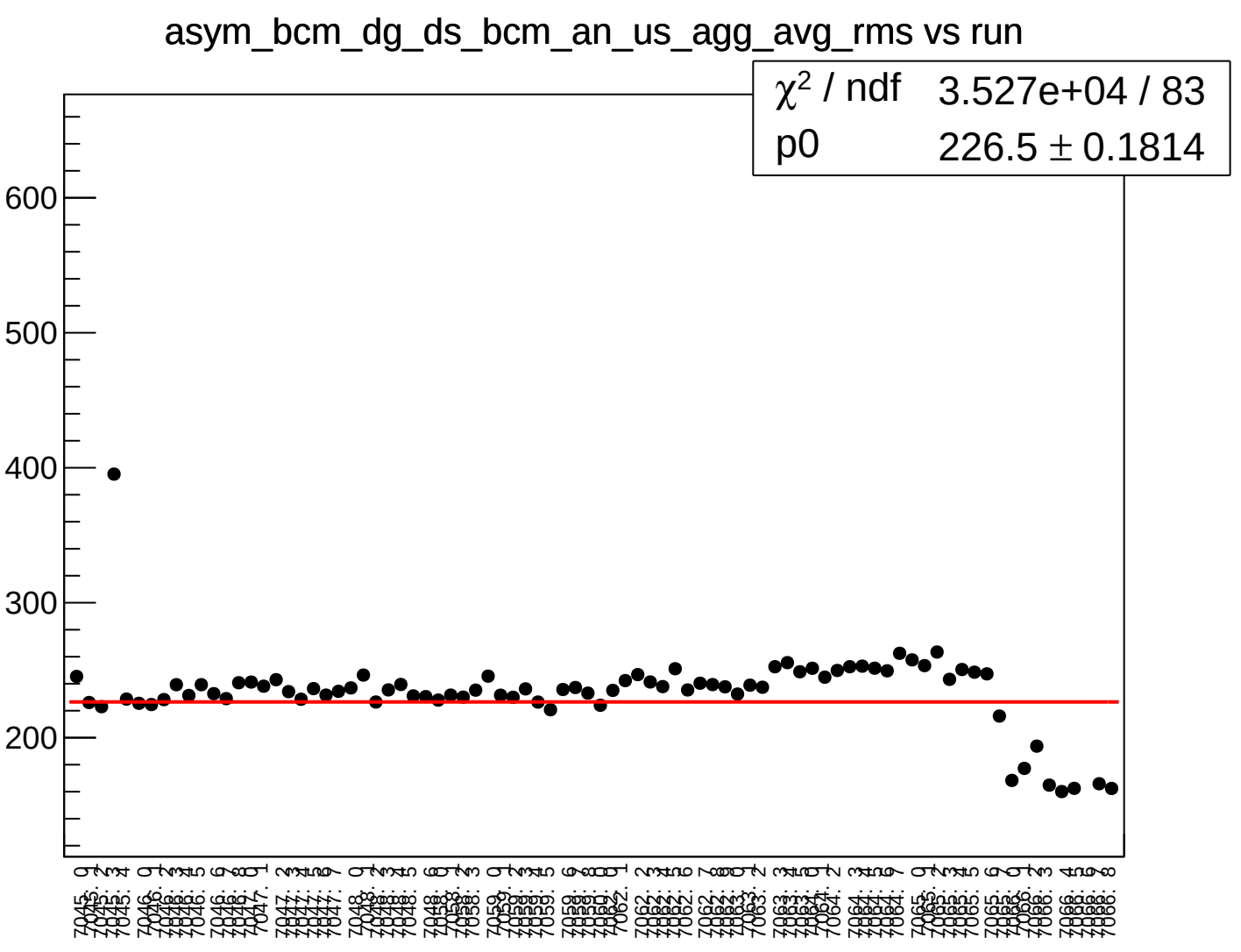

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 63.88 / 83
p0 −32.76 ± 24.56
pull
Entries 84
Mean 288.5
Std Dev 244.9

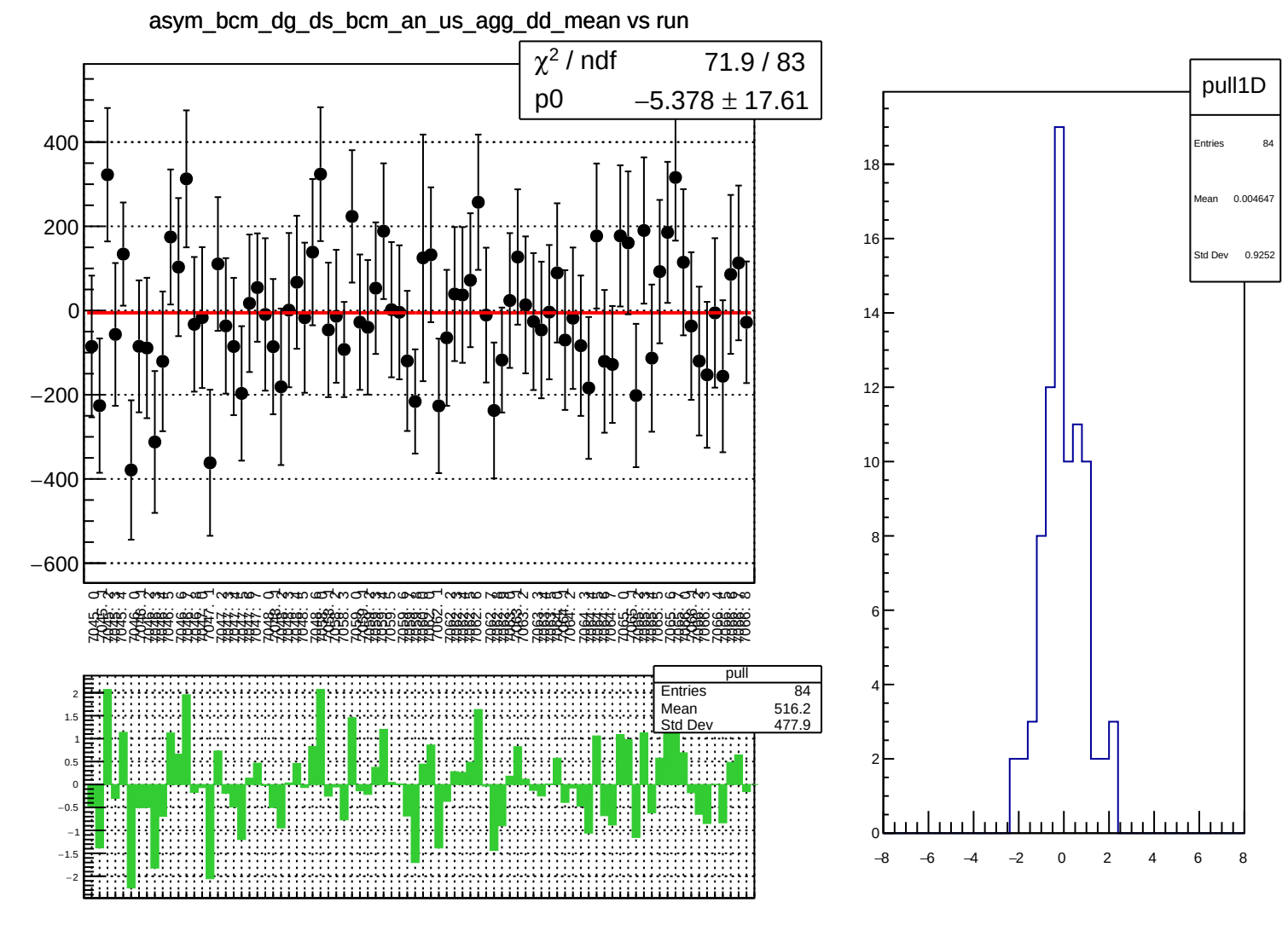

pull1D
Entries 84
Mean 0.005481
Std Dev 0.872

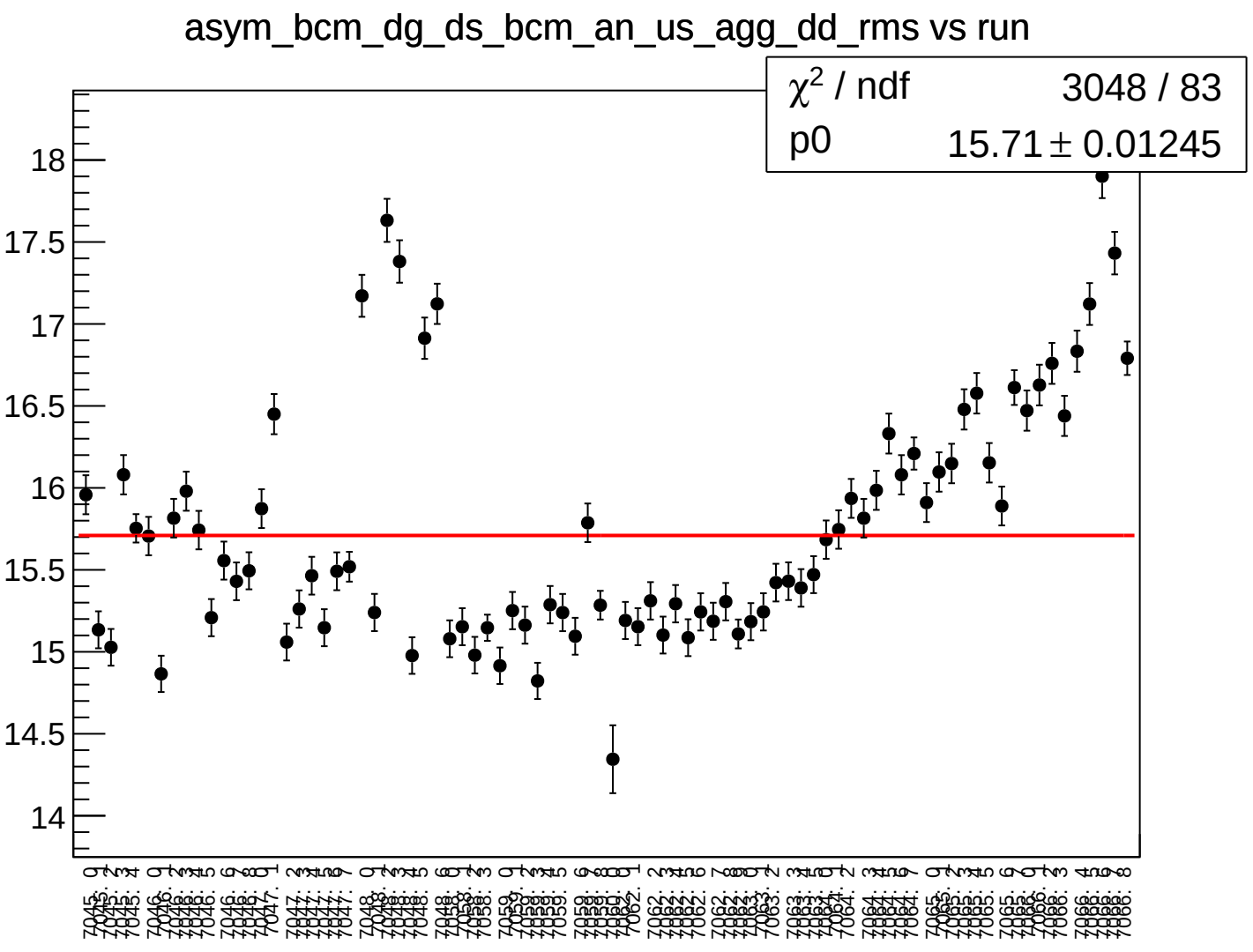

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 265.9 / 83
p0 21.93 ± 0.01737
22.8
22.6
22.4
22.2
22
21.8
21.6
21.4
21.2
21

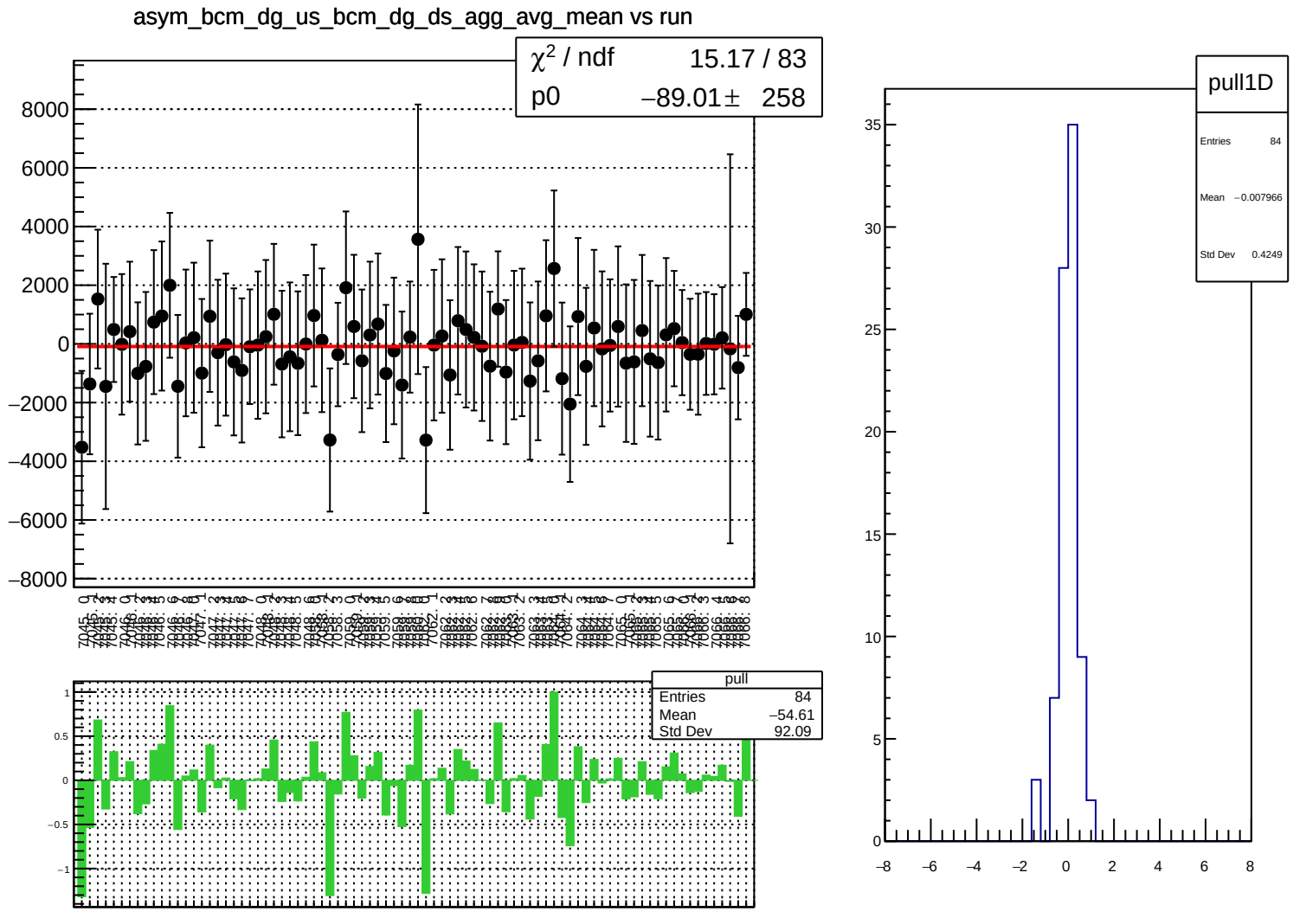

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.52 / 83
p0 −51.26 ± 256.5
pull
Entries 84
Mean −29.26
Std Dev 65.67

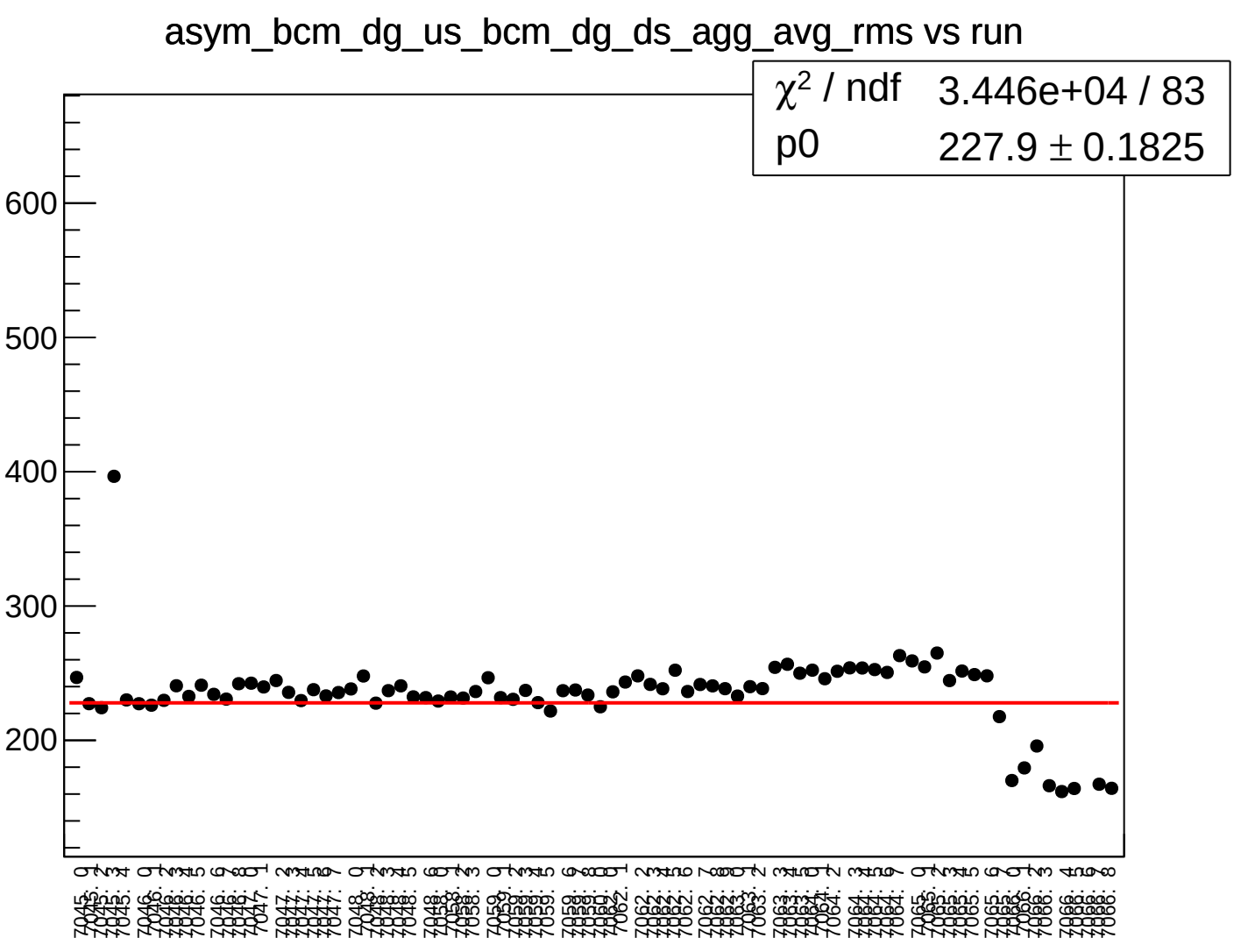

pull1D
Entries 84
Mean −0.009197
Std Dev 0.4157

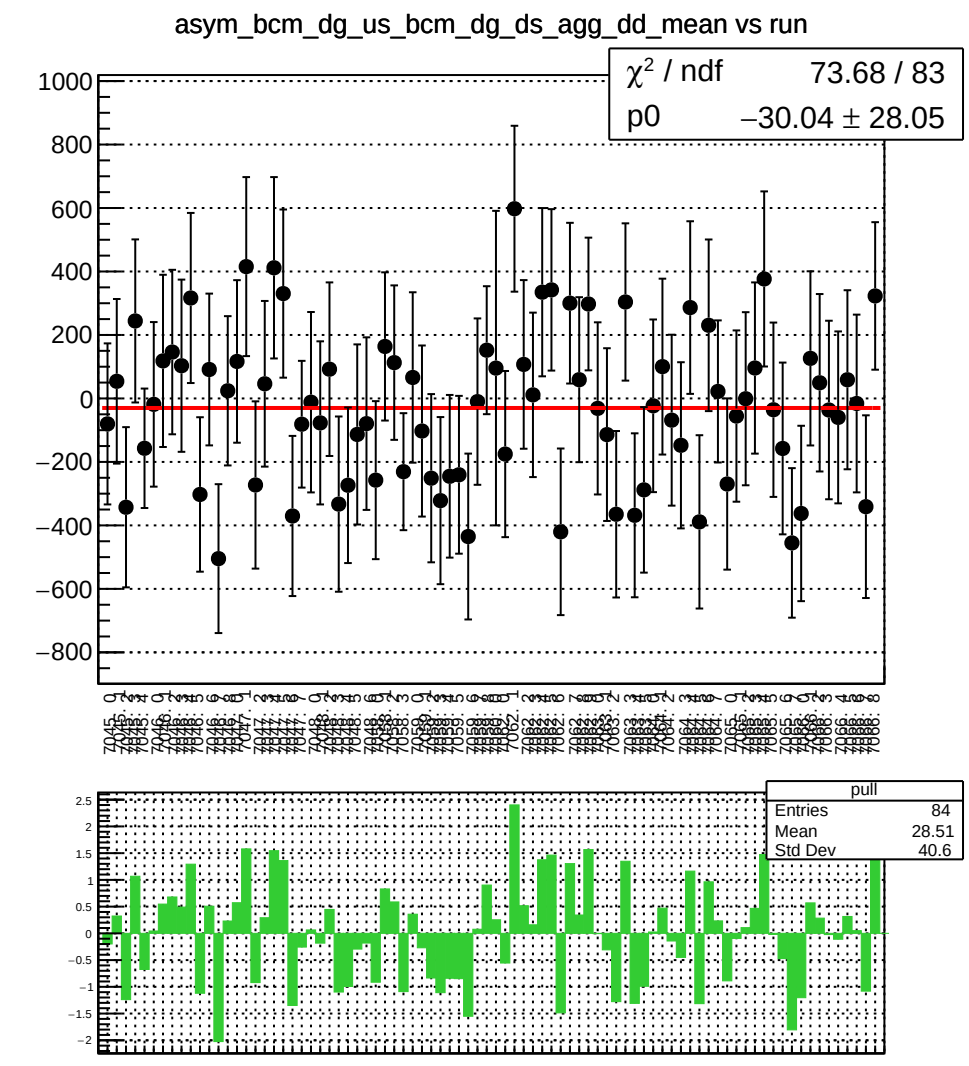

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 3.527e+04 / 83
p0 226.5 ± 0.1814
600
500
400
300
200

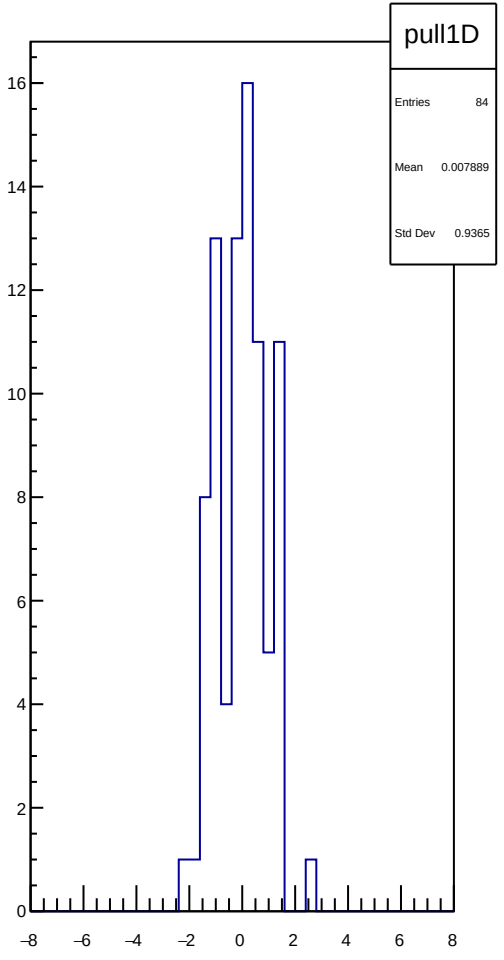

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 71.9 / 83
p0 −5.378 ± 17.61
400
200
0
−200
−400
−600
pull
Entries 84
Mean 516.2
Std Dev 477.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 84
Mean 0.004647
Std Dev 0.9252
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

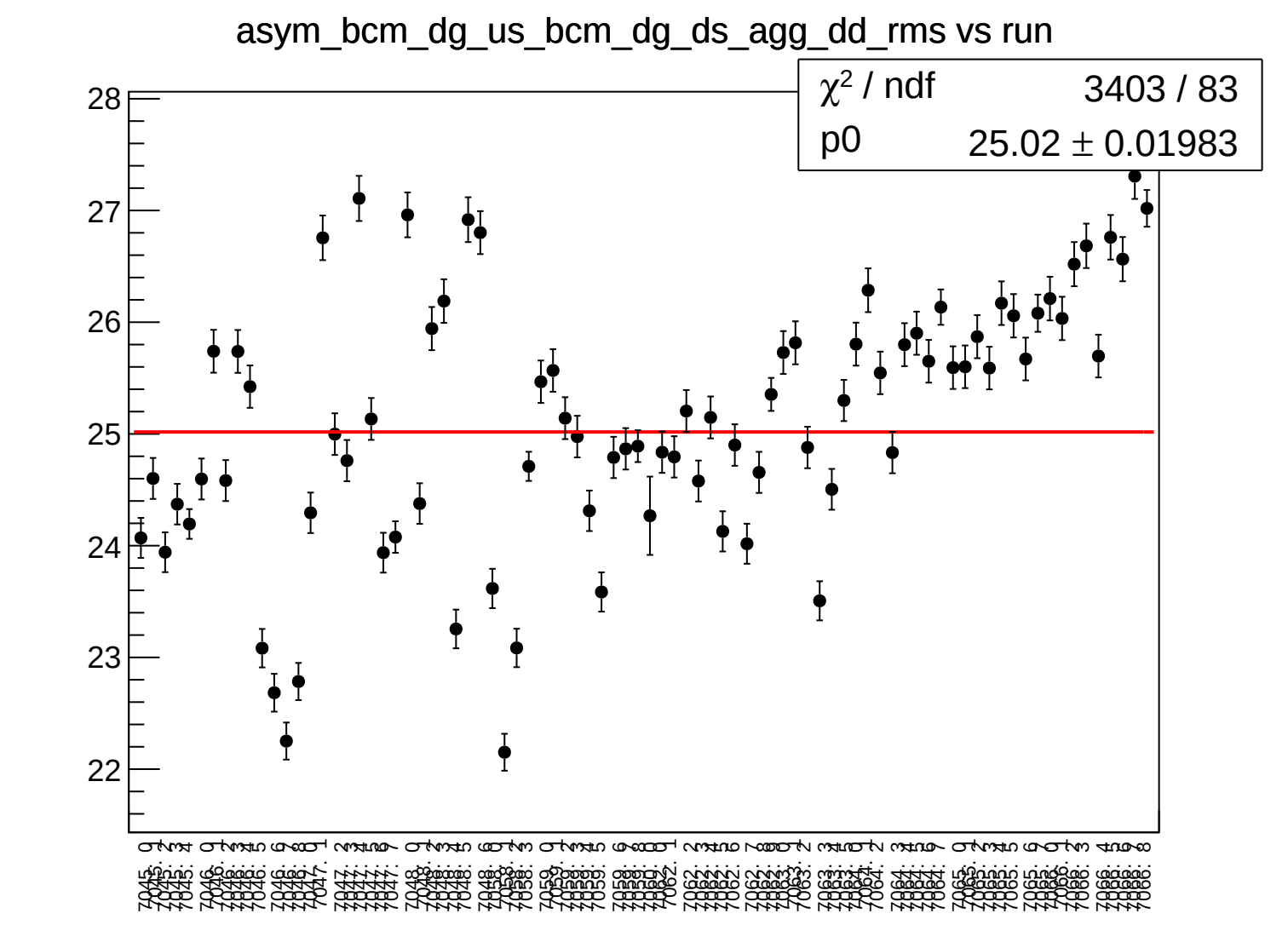

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ^2 / ndf 3048 / 83
p0 15.71 ± 0.01245
18
17.5
17
16.5
16
15.5
15
14.5
14

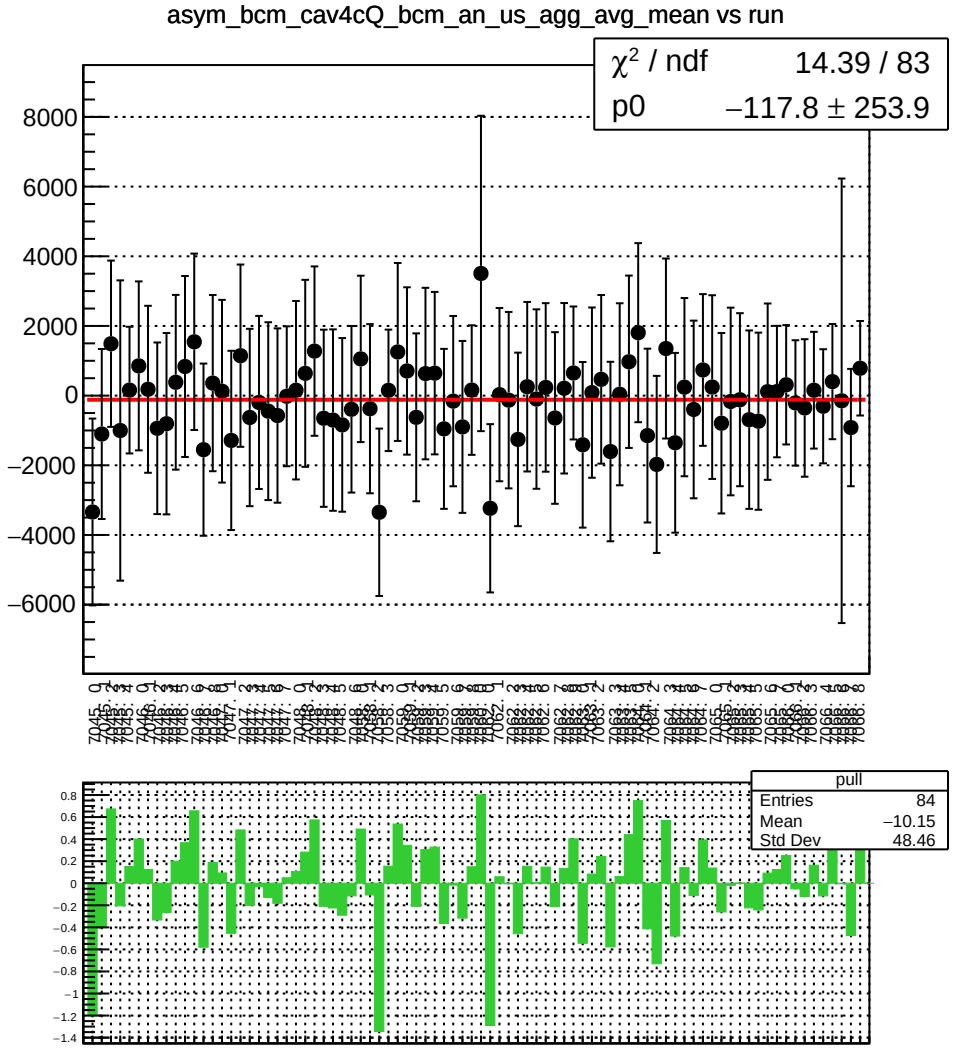

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.17 / 83
p0 −89.01 ± 258
pull
Entries 84
Mean −54.61
Std Dev 92.09
pull1D
Entries 84
Mean −0.007966
Std Dev 0.4249

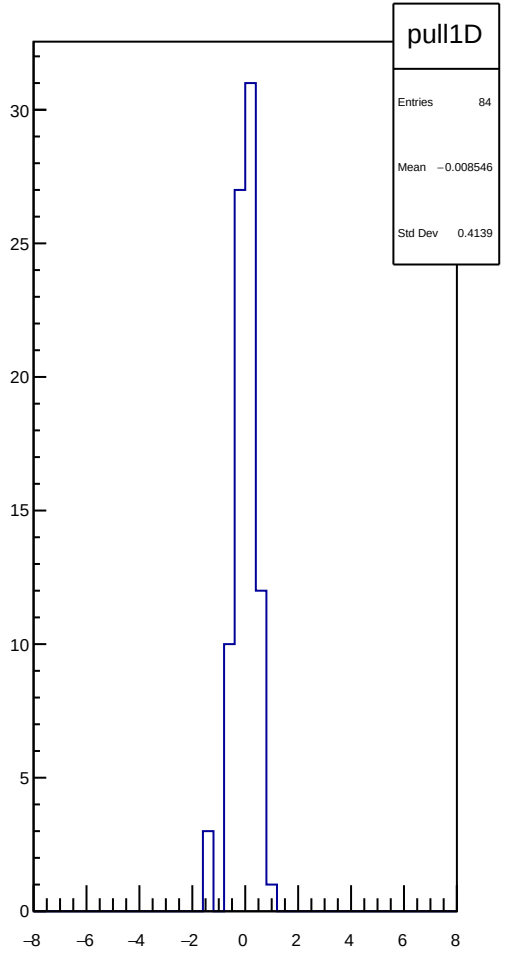

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 3.446e+04 / 83
p0 227.9 ± 0.1825
600
500
400
300
200

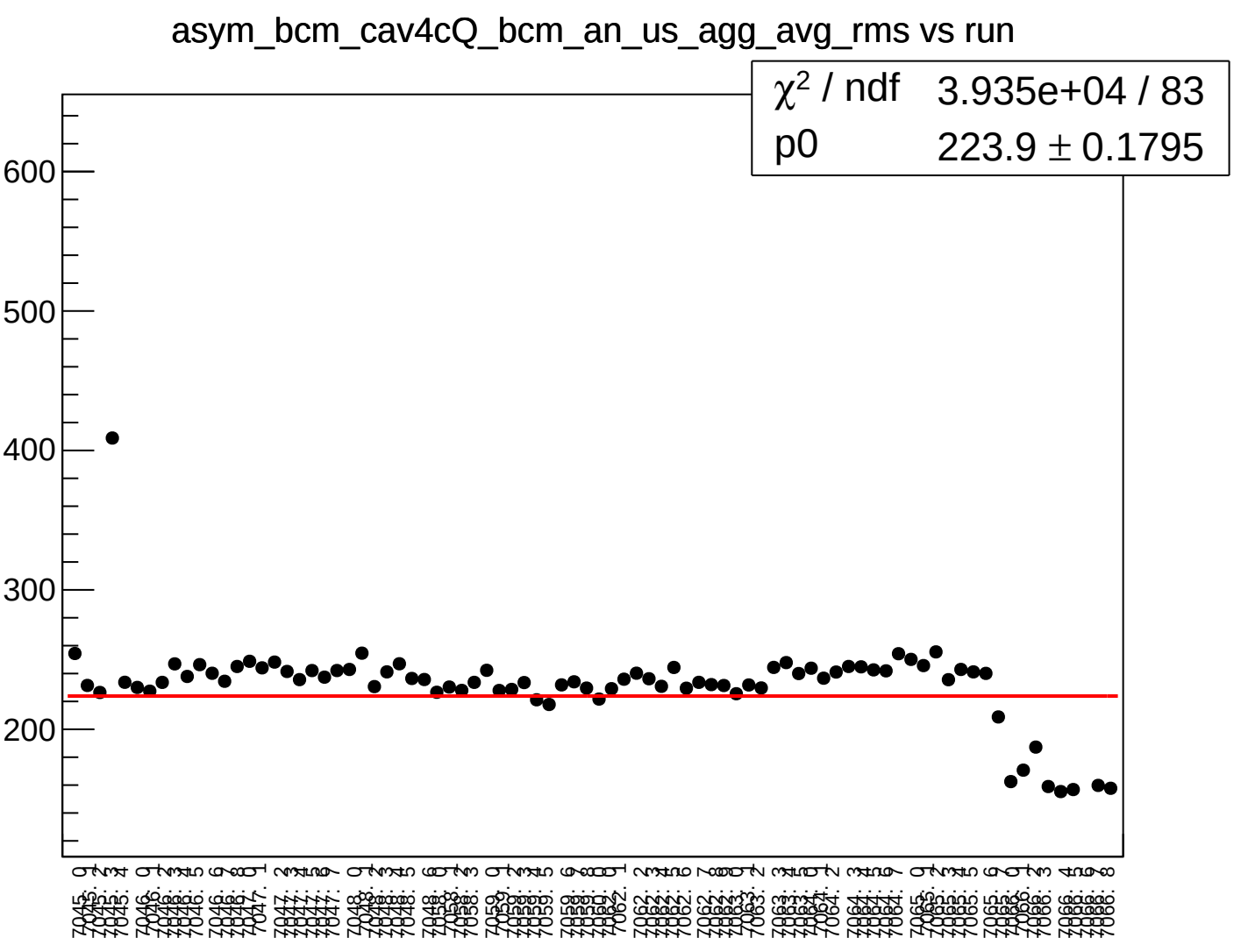

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 73.68 / 83
p0 −30.04 ± 28.05
pull
Entries 84
Mean 28.51
Std Dev 40.6

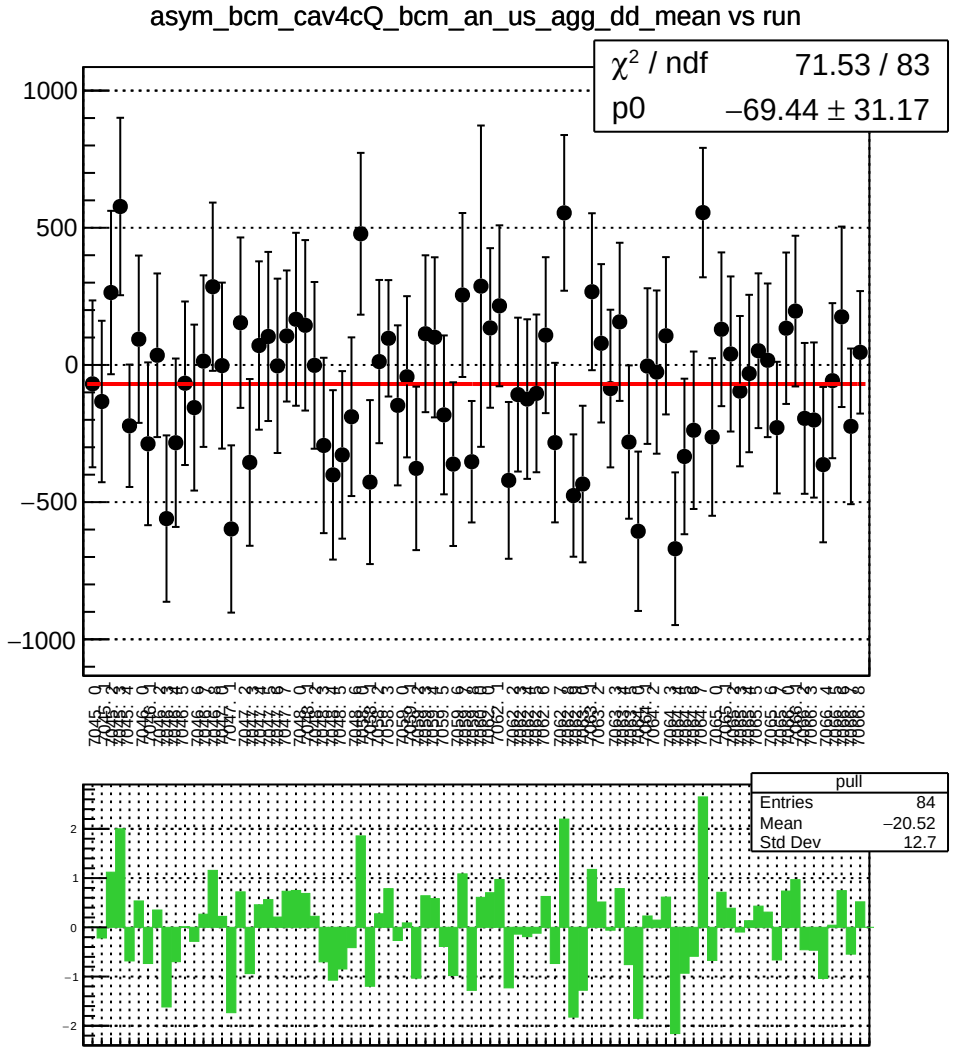

pull1D
Entries 84
Mean 0.007889
Std Dev 0.9365

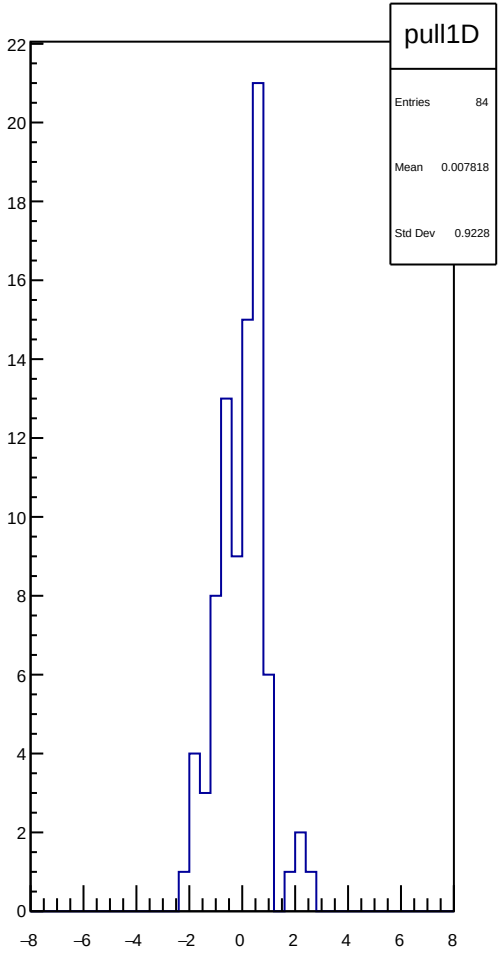

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3403 / 83
p0 25.02 ± 0.01983
28
27
26
25
24
23
22

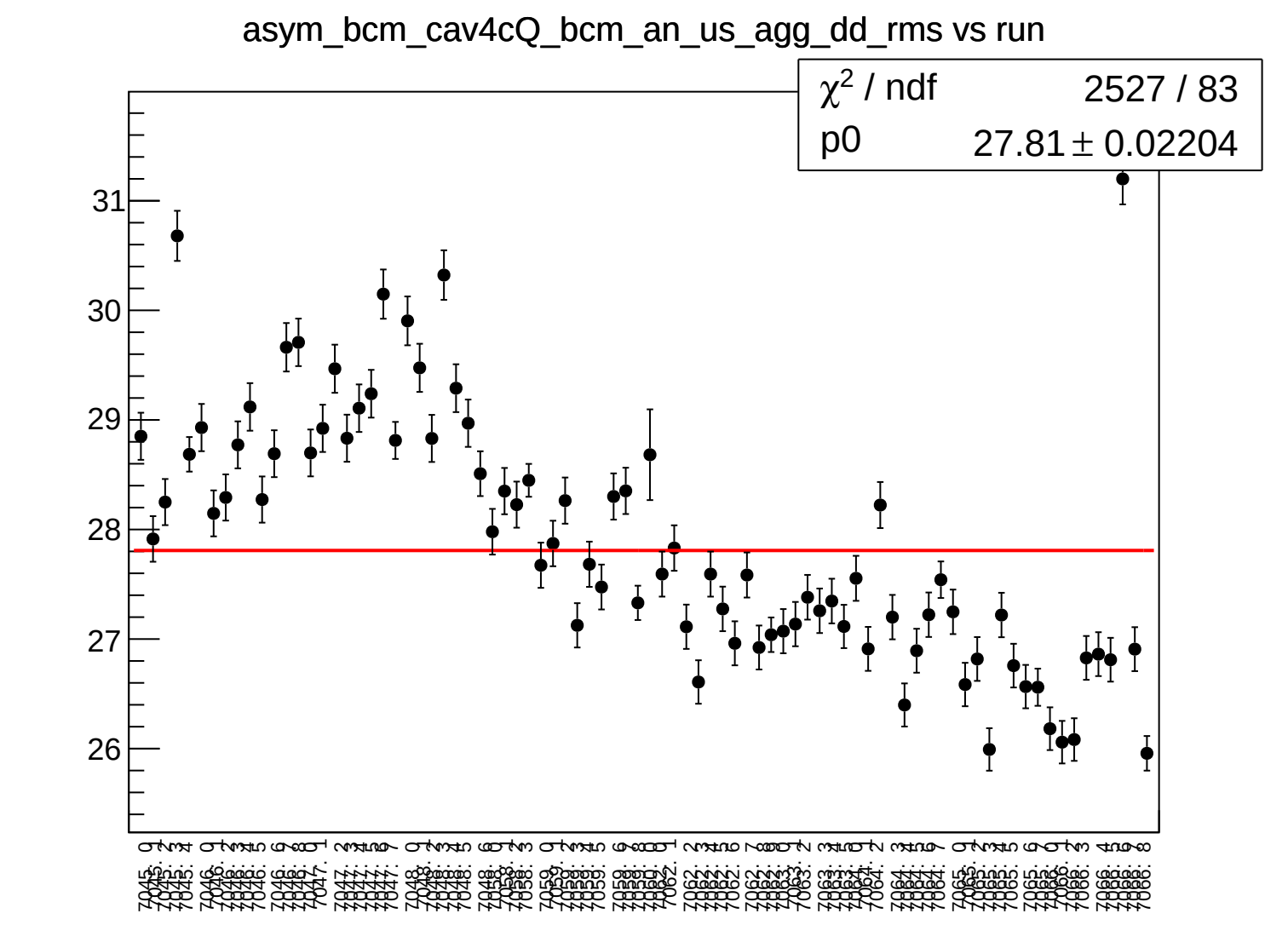

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 14.39 / 83
p0 −117.8 ± 253.9
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 84
Mean −10.15
Std Dev 48.46
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4

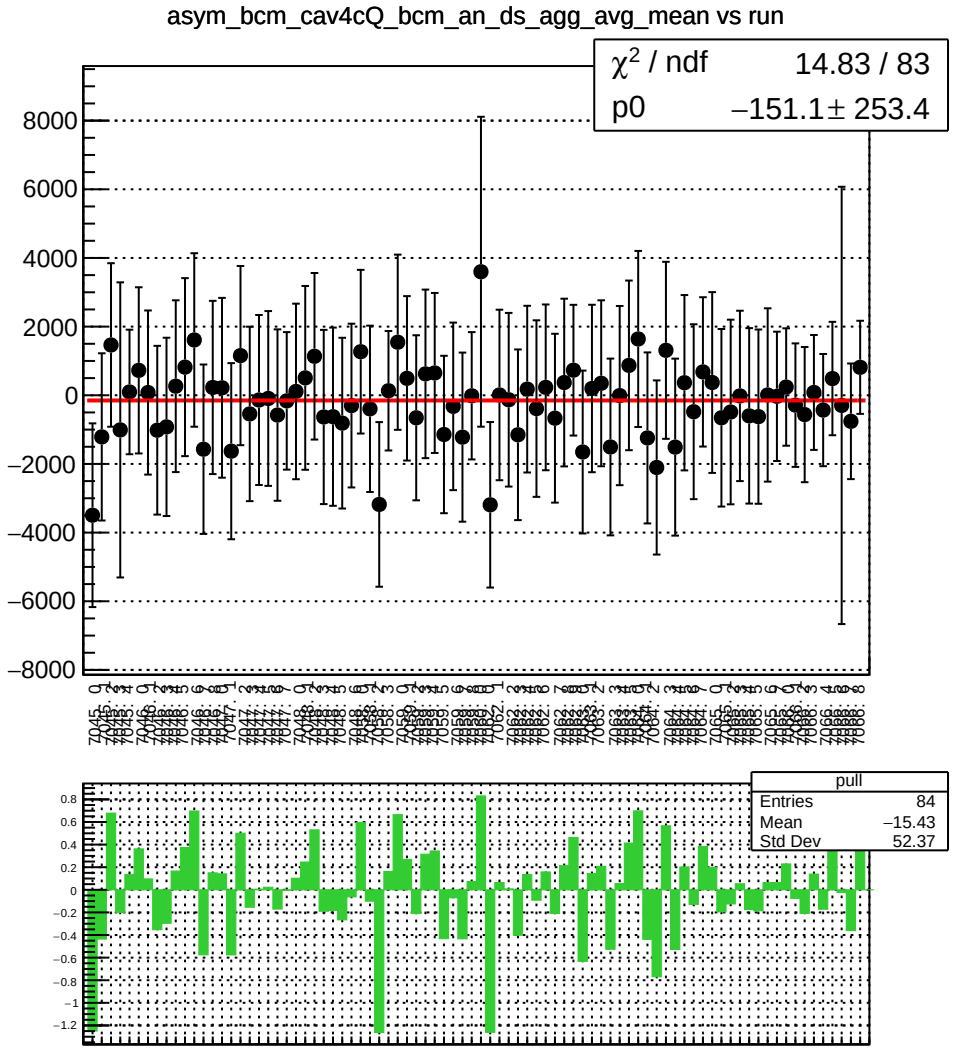

pull1D
Entries 84
Mean −0.008546
Std Dev 0.4139
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

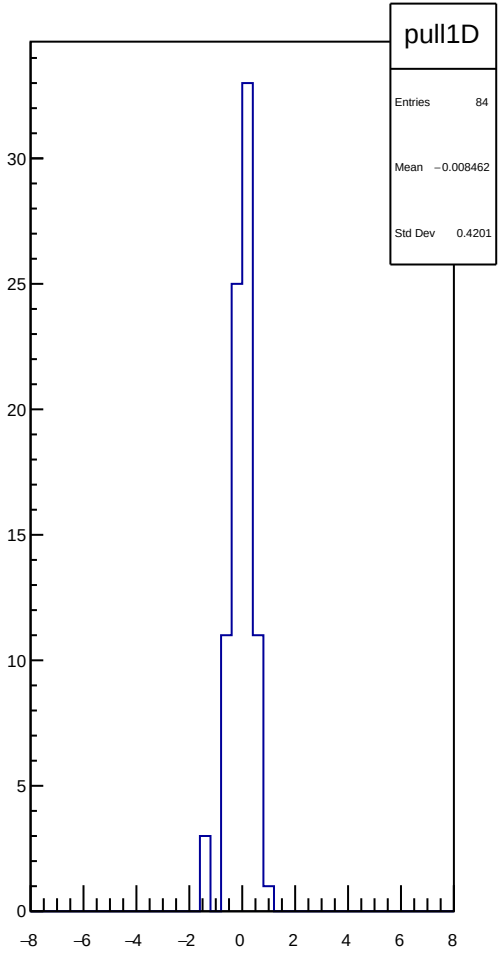

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 3.935e+04 / 83
p0 223.9 ± 0.1795
600
500
400
300
200

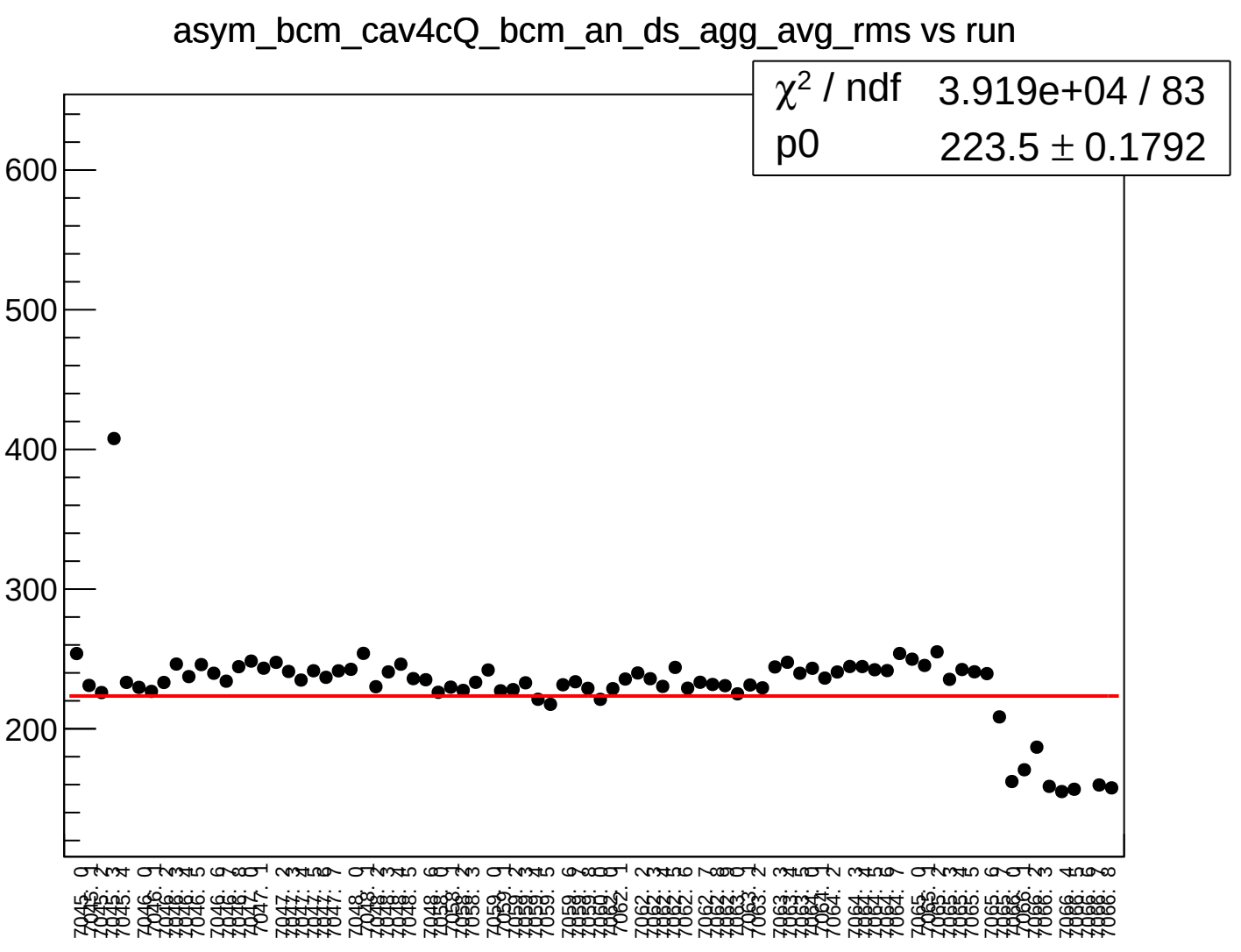

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 71.53 / 83
p0 −69.44 ± 31.17
1000
500
0
−500
−1000
pull
Entries 84
Mean −20.52
Std Dev 12.7
2
1
0
−1
−2

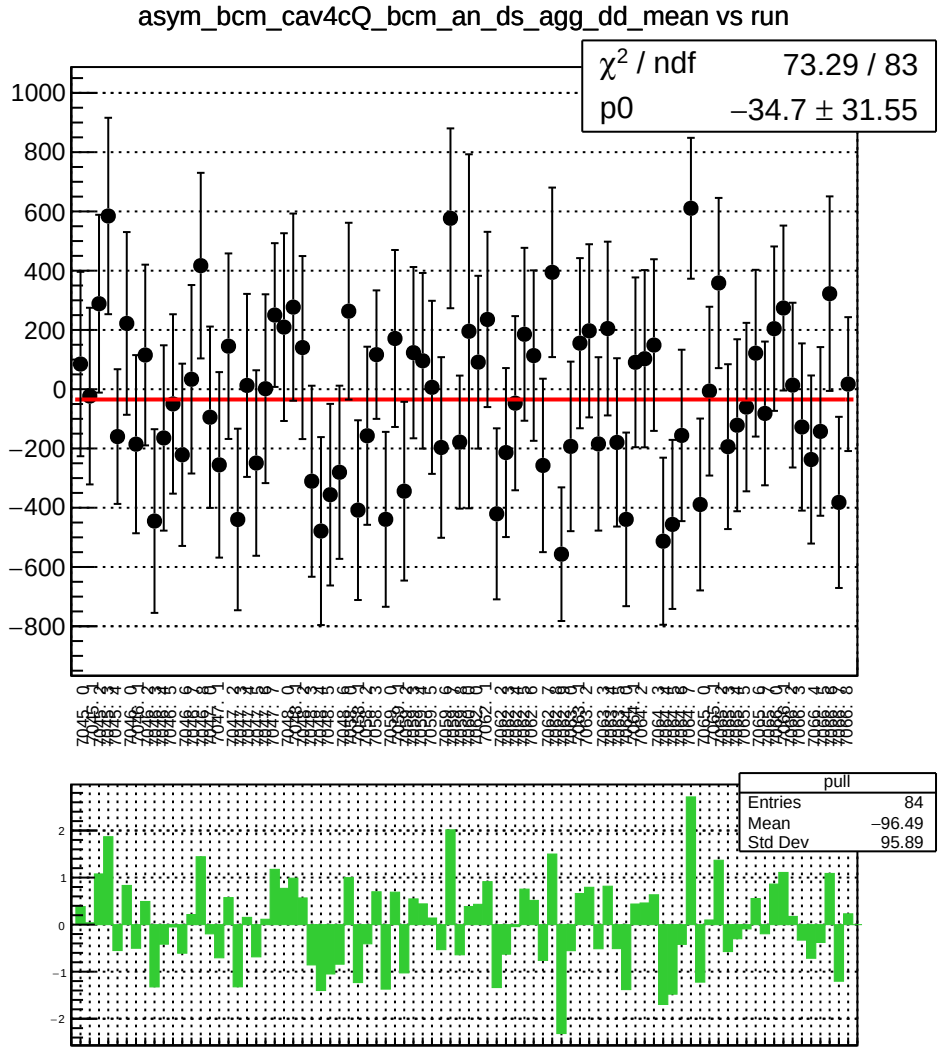

pull1D
Entries 84
Mean 0.007818
Std Dev 0.9228
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

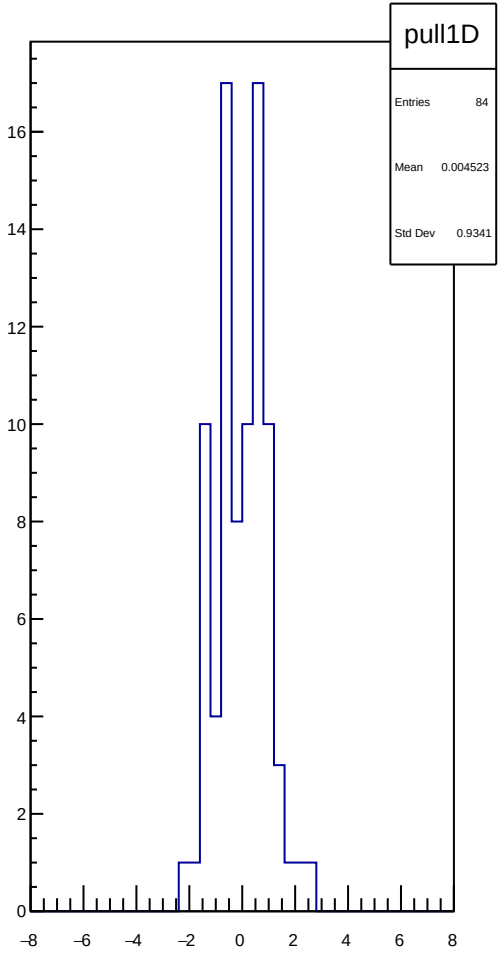

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2527 / 83
p0 27.81 ± 0.02204
31
30
29
28
27
26

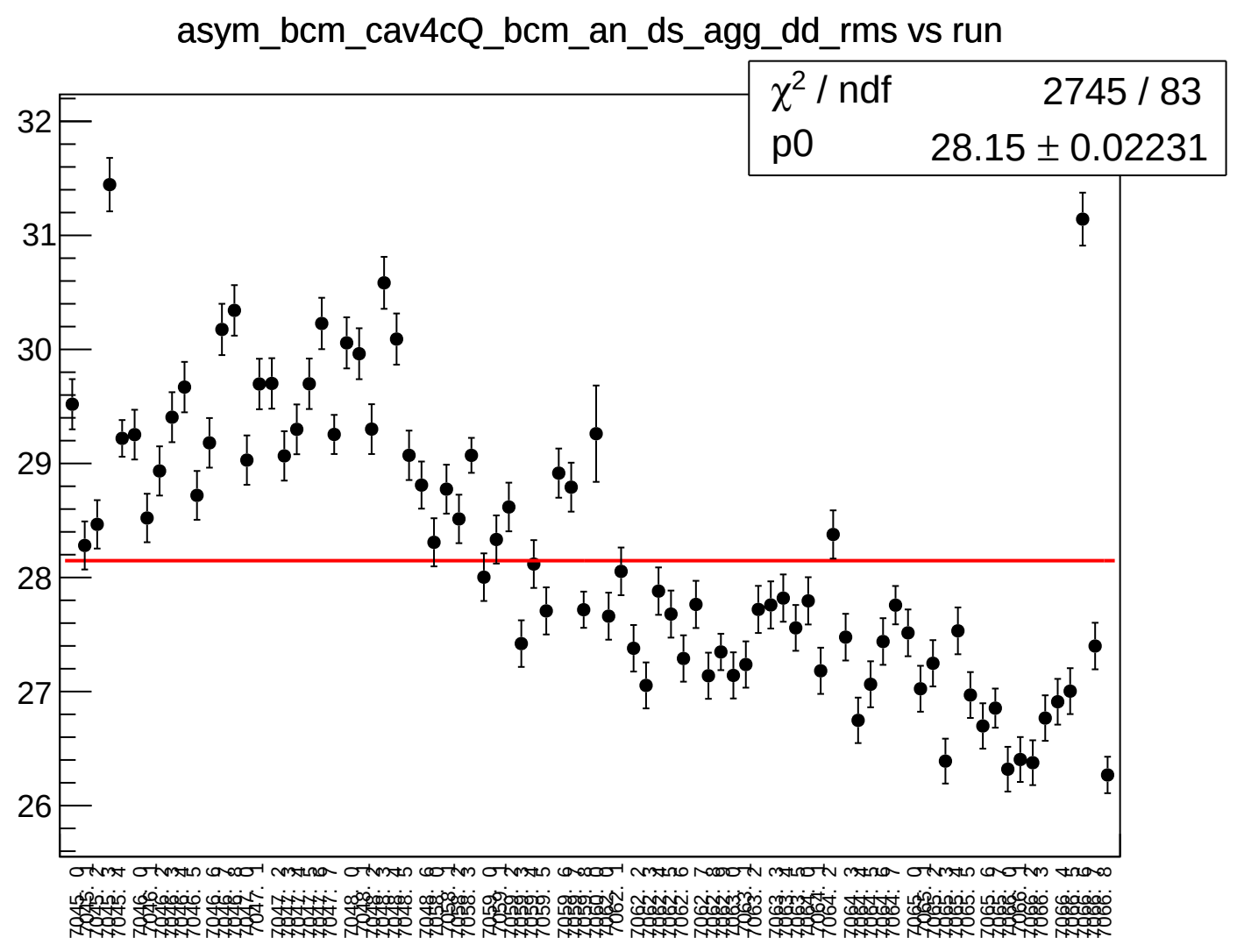

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.83 / 83
p0 −151.1± 253.4
pull
Entries 84
Mean −15.43
Std Dev 52.37

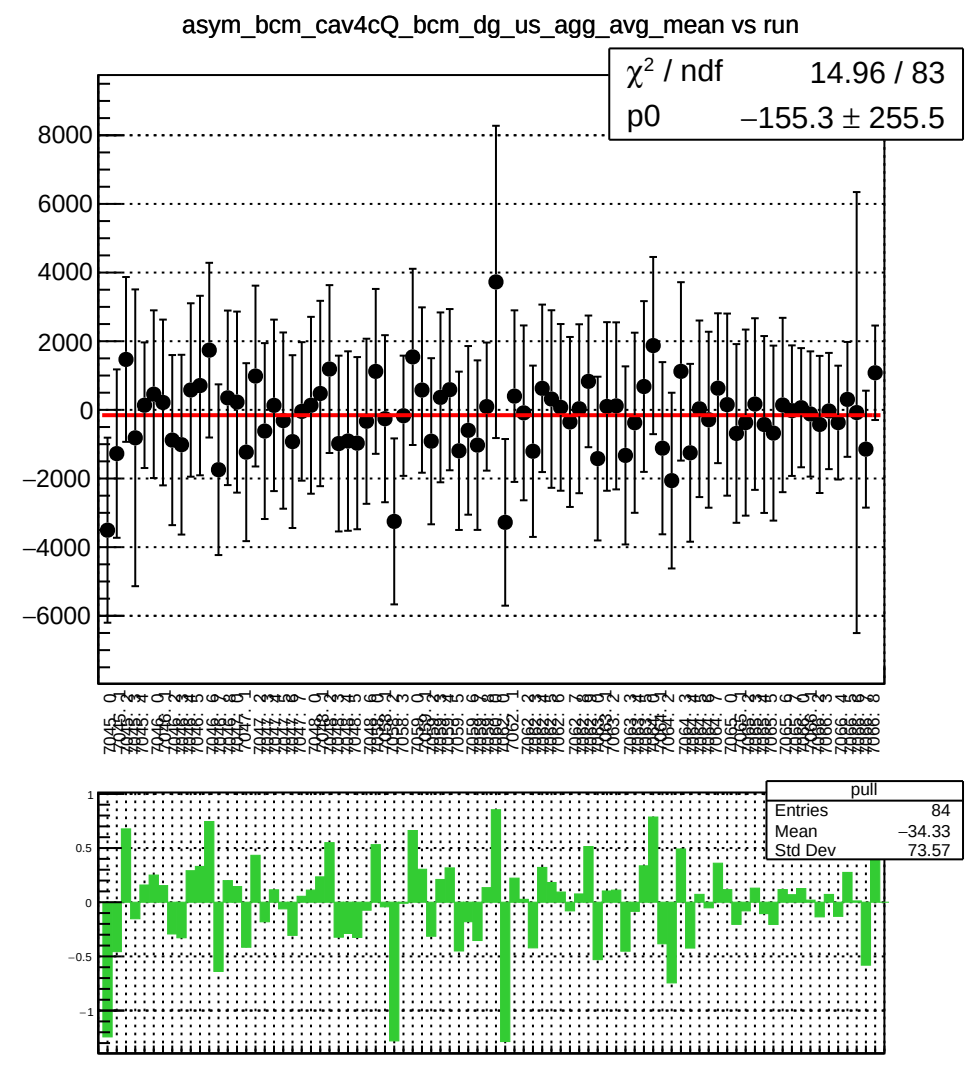

pull1D
Entries 84
Mean −0.008462
Std Dev 0.4201

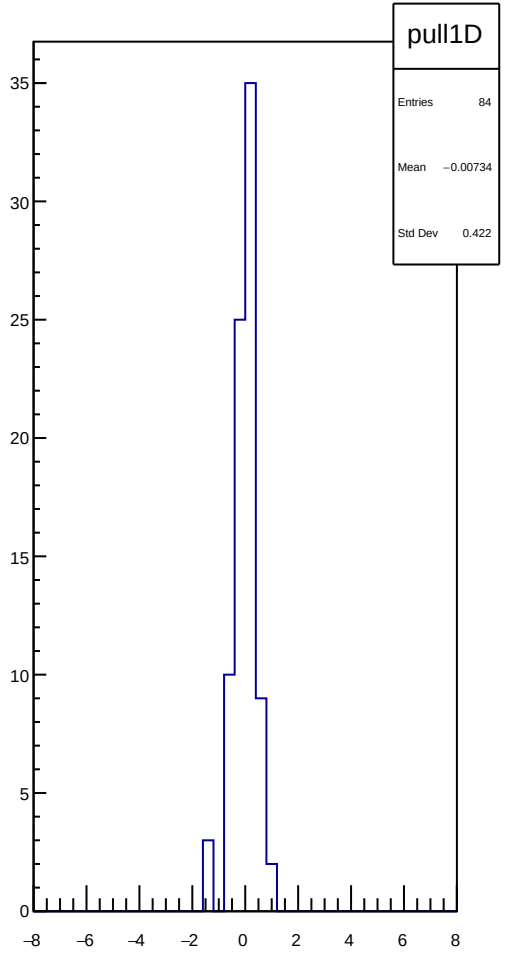

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 3.919e+04 / 83
p0 223.5 ± 0.1792
600
500
400
300
200

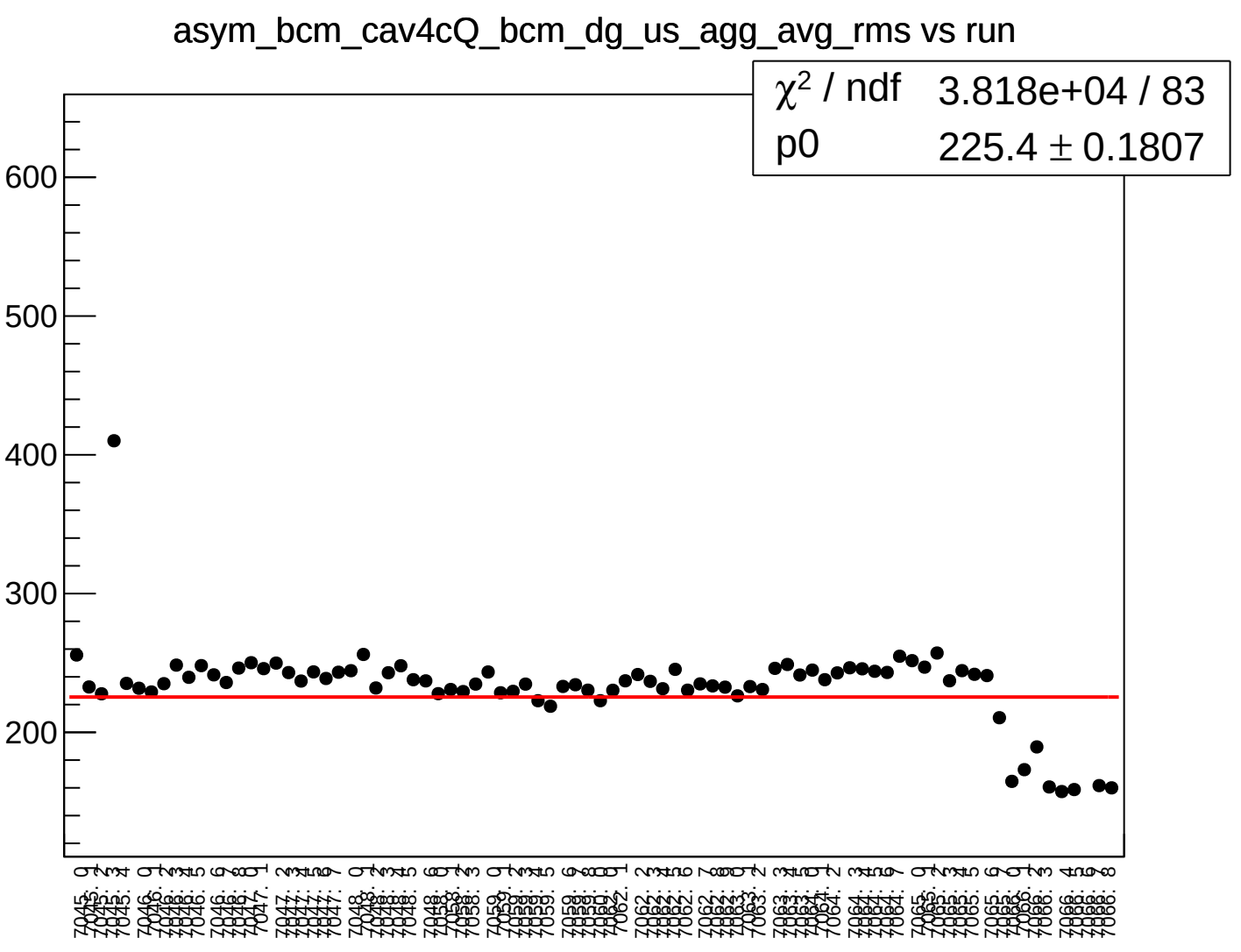

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 73.29 / 83
p0 −34.7 ± 31.55
pull
Entries 84
Mean −96.49
Std Dev 95.89

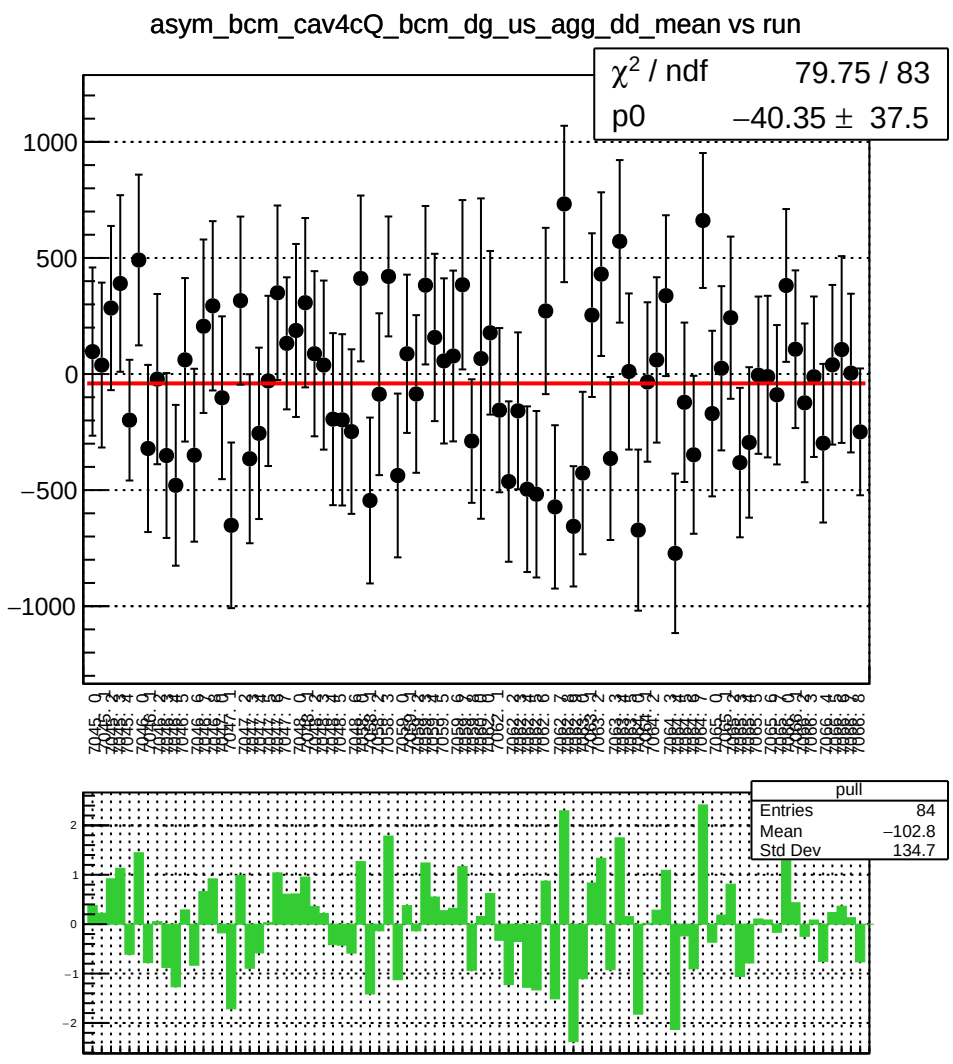

pull1D
Entries 84
Mean 0.004523
Std Dev 0.9341

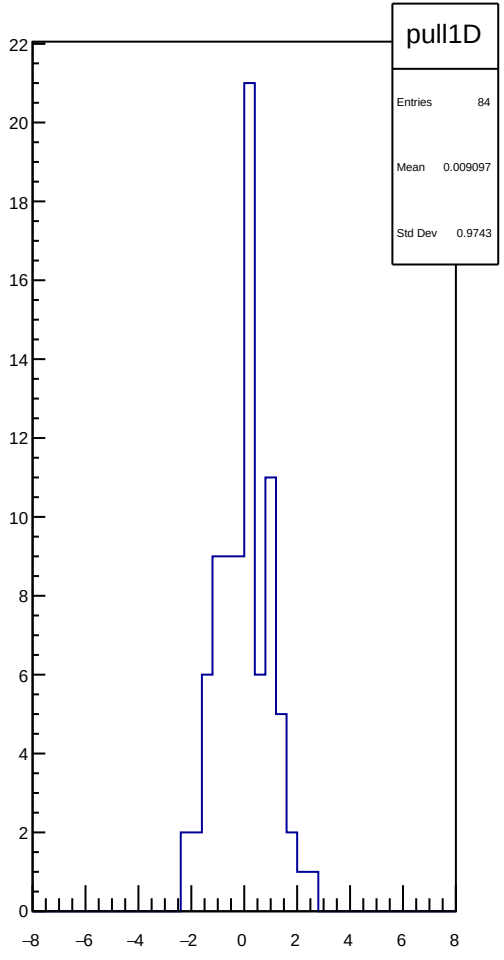

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2745 / 83
p0 28.15 ± 0.02231
32
31
30
29
28
27
26

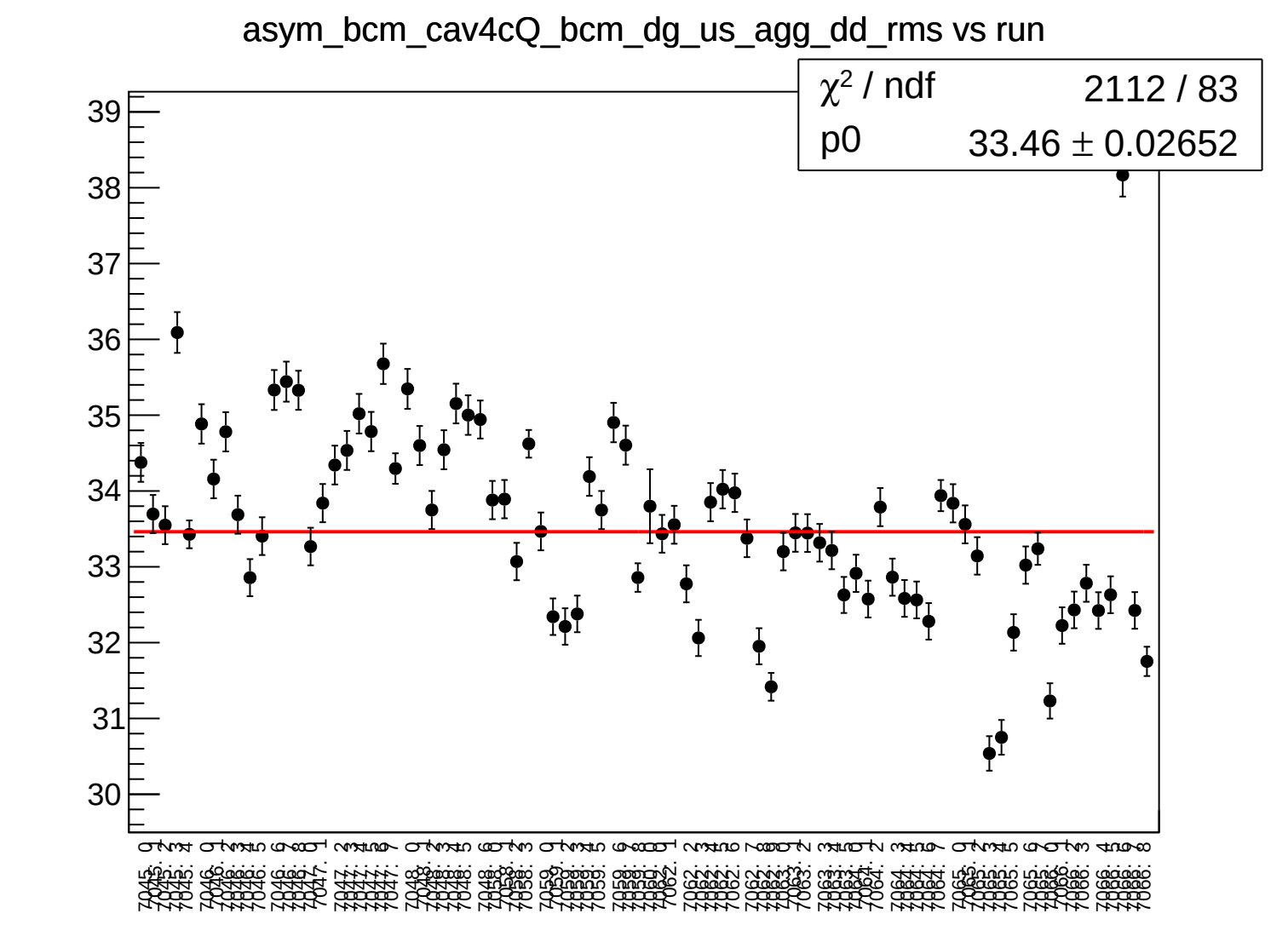

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 14.96 / 83
p0 −155.3 ± 255.5
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 84
Mean −34.33
Std Dev 73.57
1
0.5
0
−0.5
−1

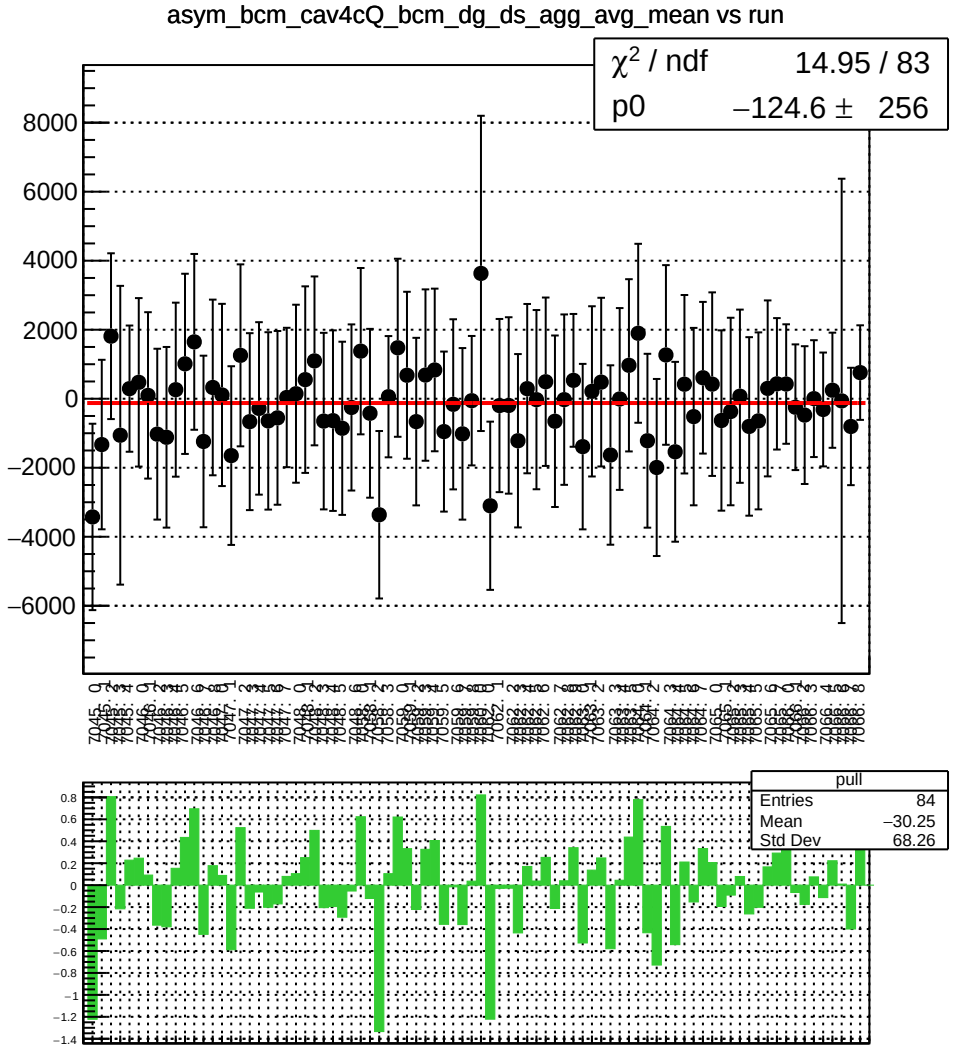

pull1D
Entries 84
Mean −0.00734
Std Dev 0.422
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

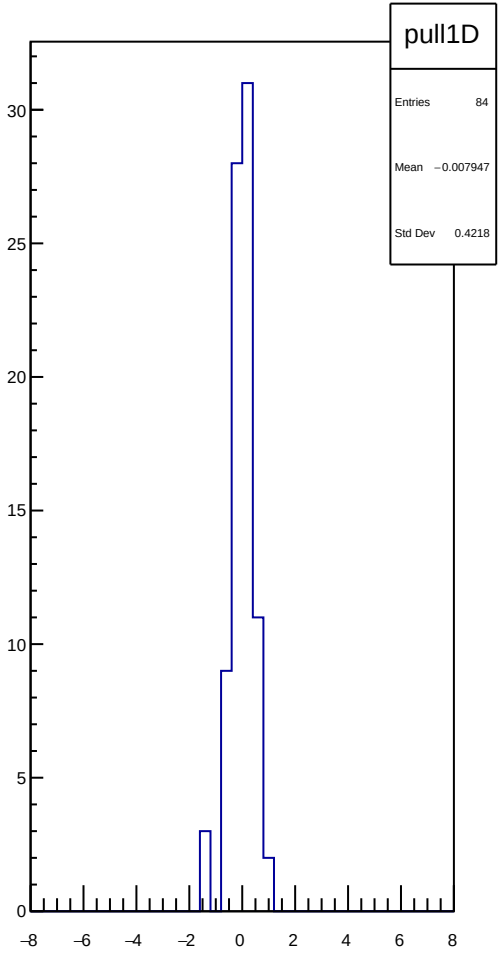

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 3.818e+04 / 83
p0 225.4 ± 0.1807
600
500
400
300
200

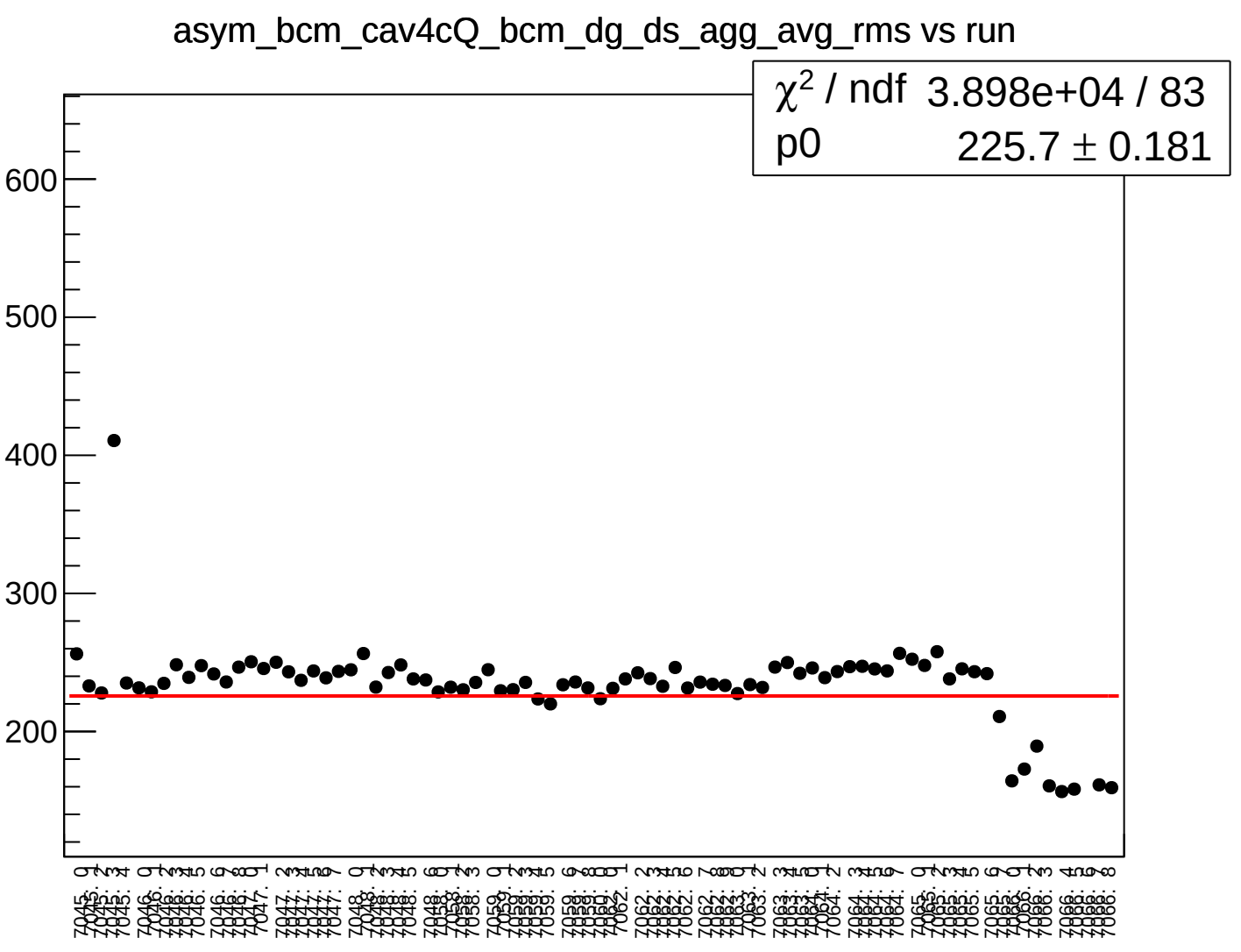

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 79.75 / 83
p0 −40.35 ± 37.5
1000
500
0
−500
−1000
pull
Entries 84
Mean −102.8
Std Dev 134.7
2
1
0
−1
−2

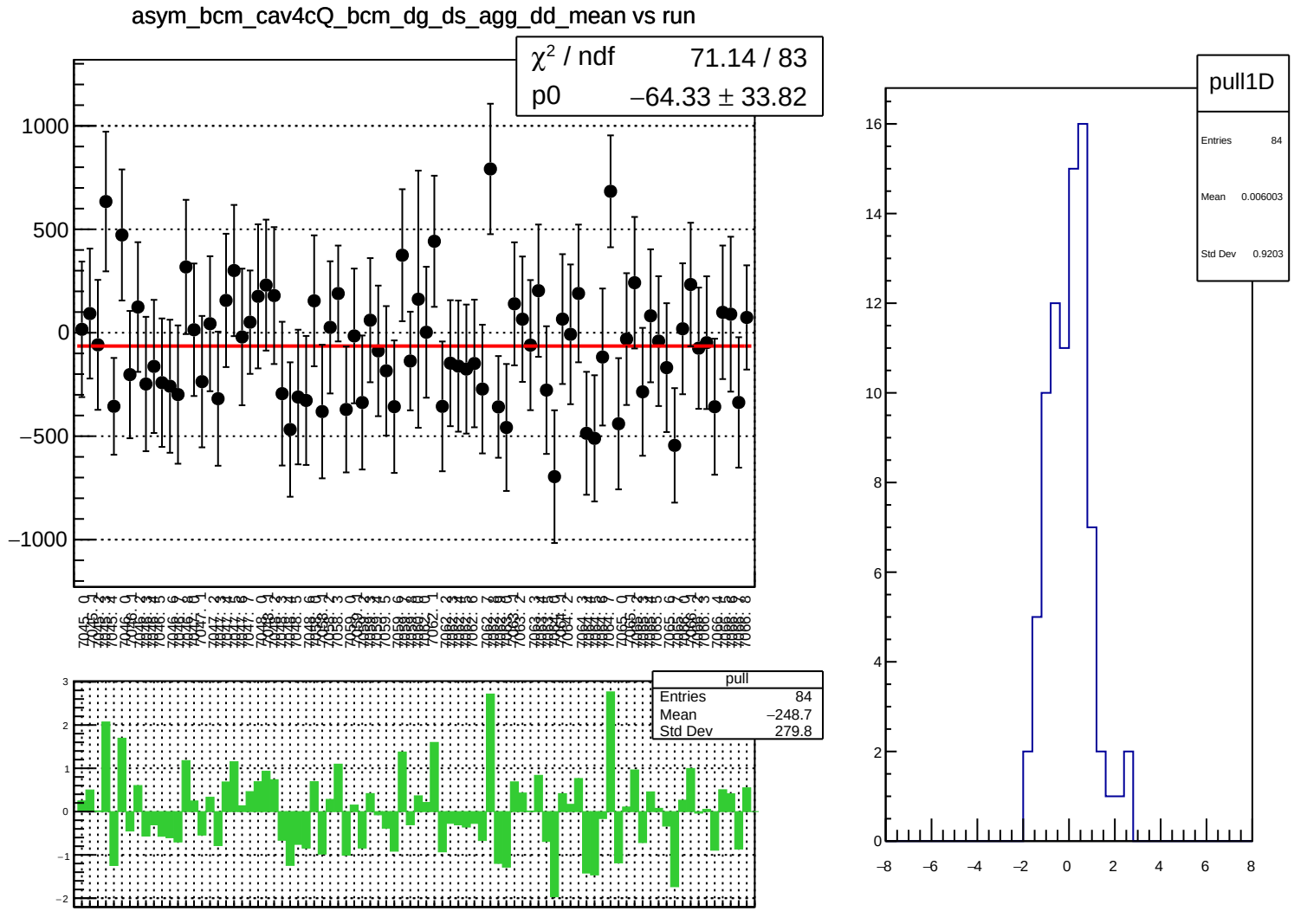

pull1D
Entries 84
Mean 0.009097
Std Dev 0.9743
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

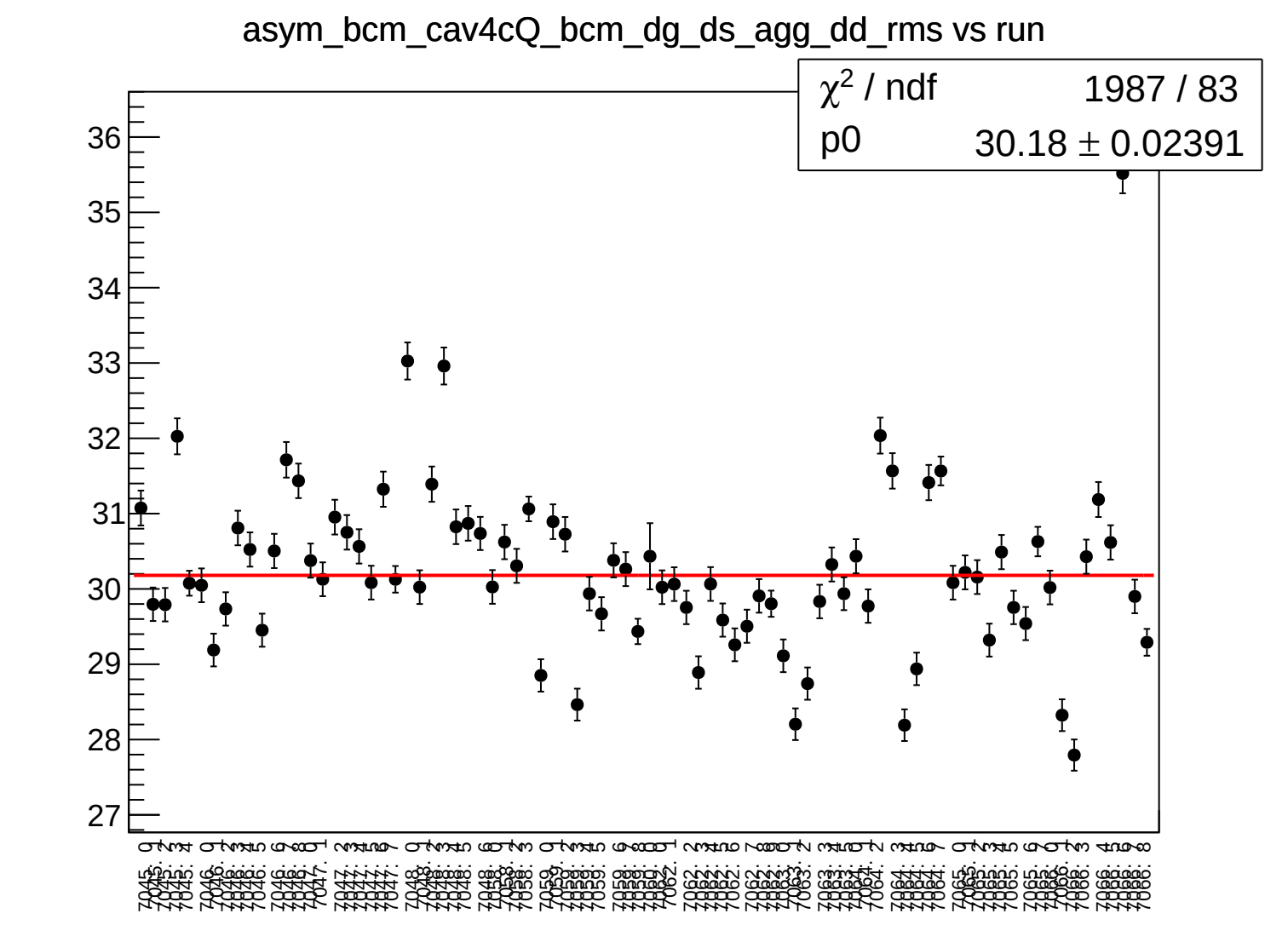

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2112 / 83
p0 33.46 ± 0.02652
39
38
37
36
35
34
33
32
31
30

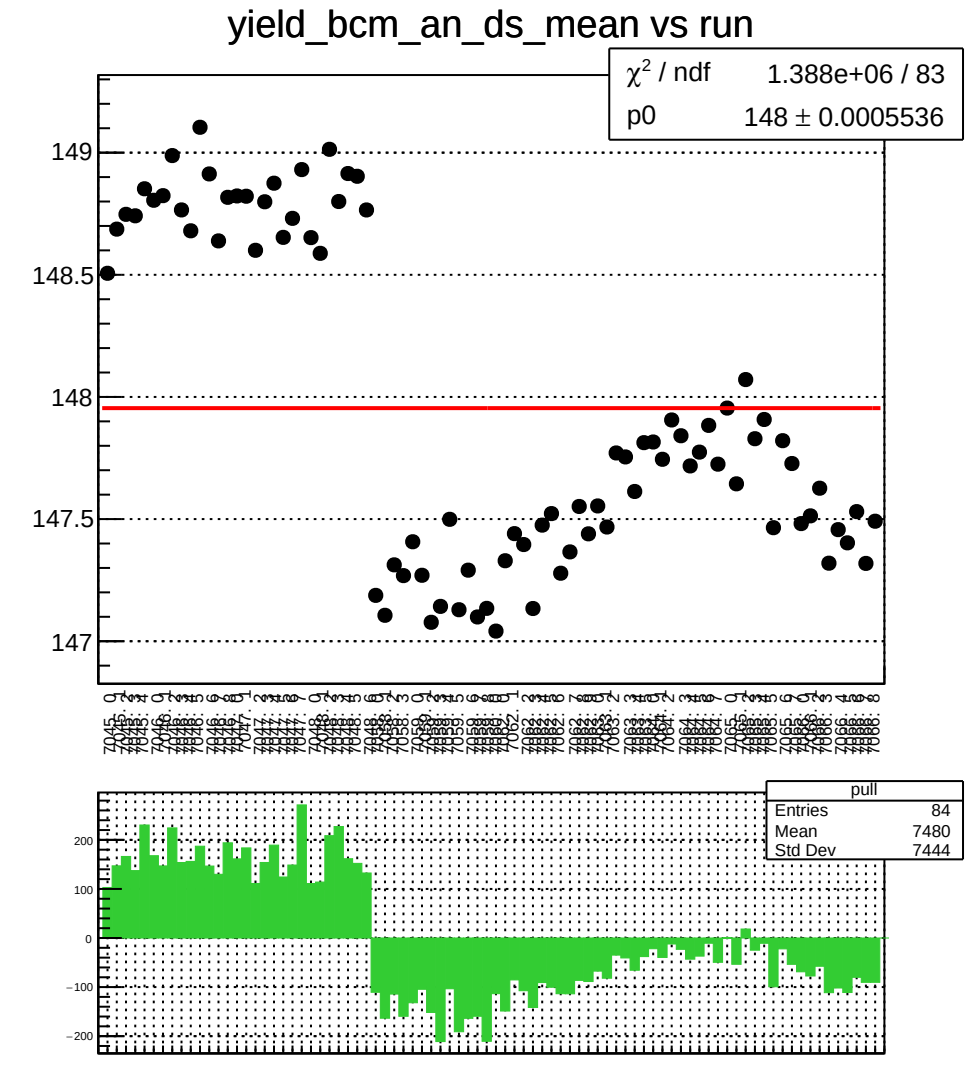

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 14.95 / 83
p0 −124.6 ± 256
pull
Entries 84
Mean −30.25
Std Dev 68.26

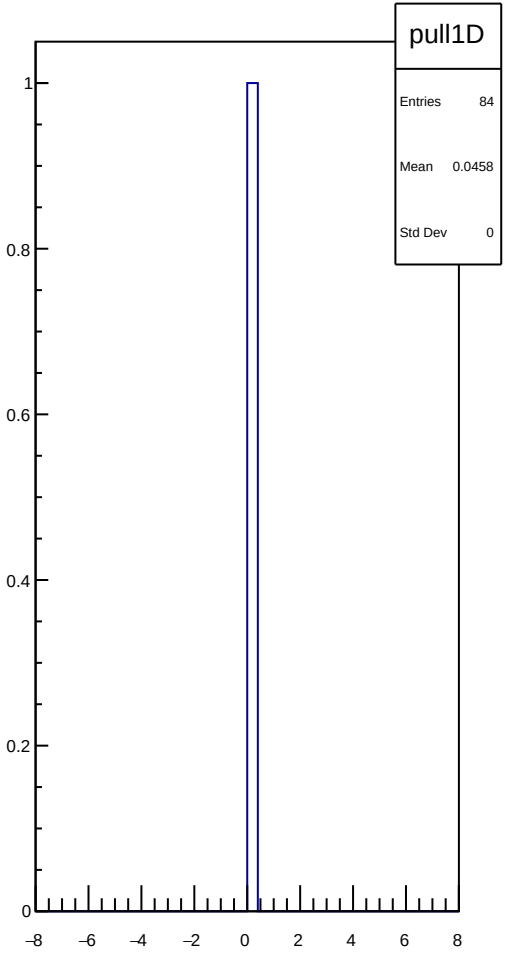

pull1D
Entries 84
Mean −0.007947
Std Dev 0.4218

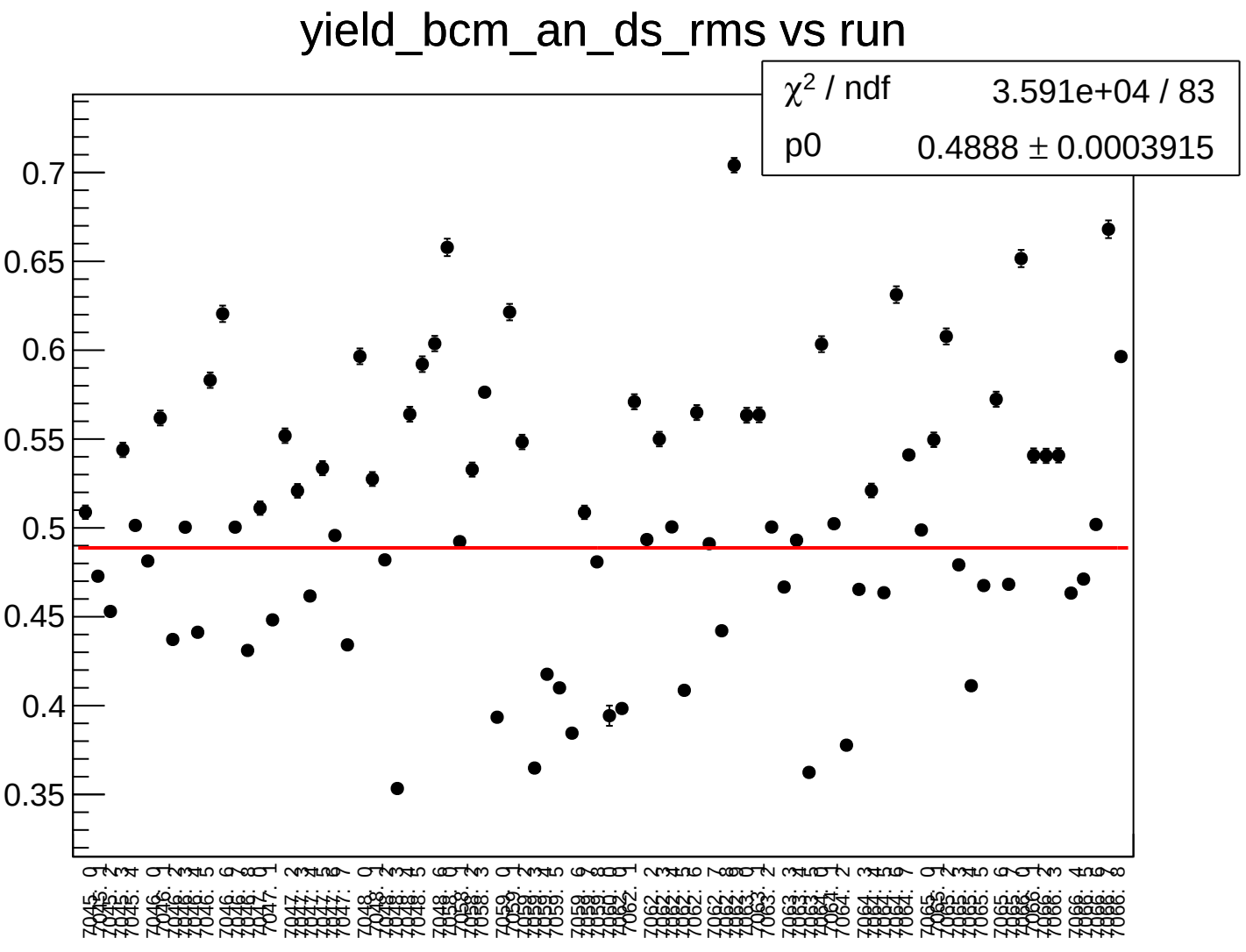

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 3.898e+04 / 83
p0 225.7 ± 0.181
600
500
400
300
200

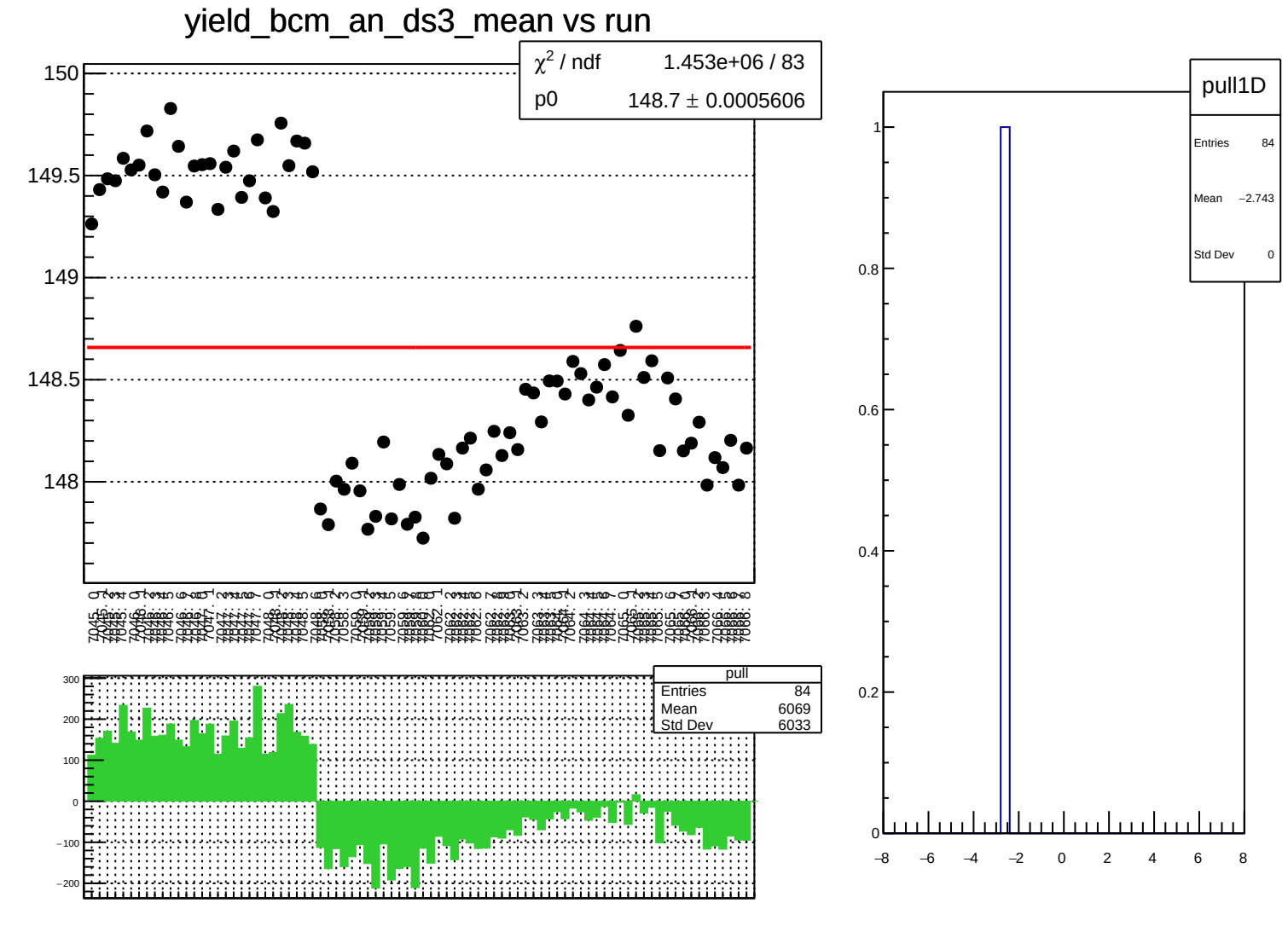

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 71.14 / 83
p0 −64.33 ± 33.82
1000
500
0
−500
−1000
pull
Entries 84
Mean −248.7
Std Dev 279.8
3
2
1
0
−1
−2
pull1D
Entries 84
Mean 0.006003
Std Dev 0.9203
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

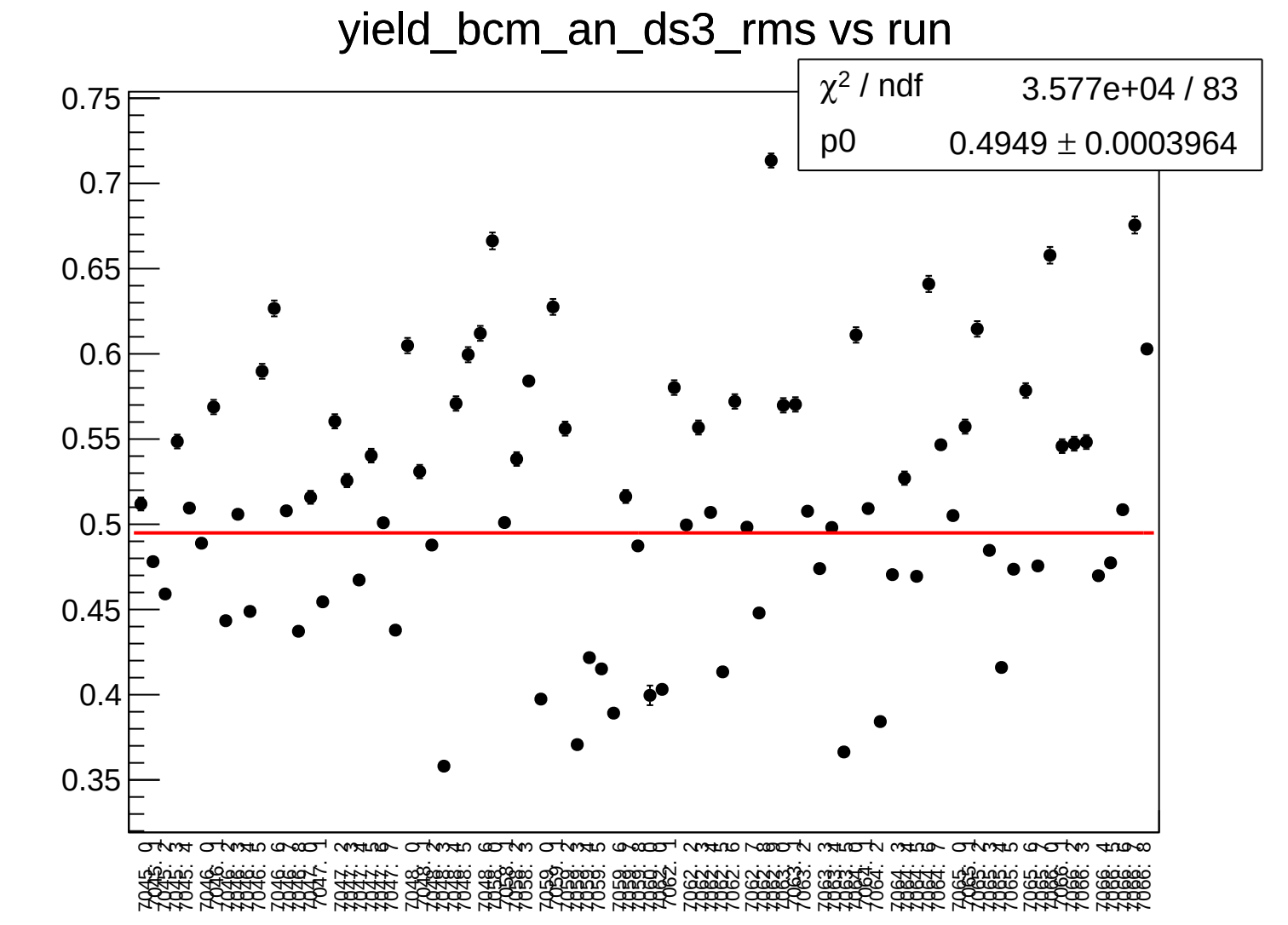

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1987 / 83
p0 30.18 ± 0.02391
36
35
34
33
32
31
30
29
28
27

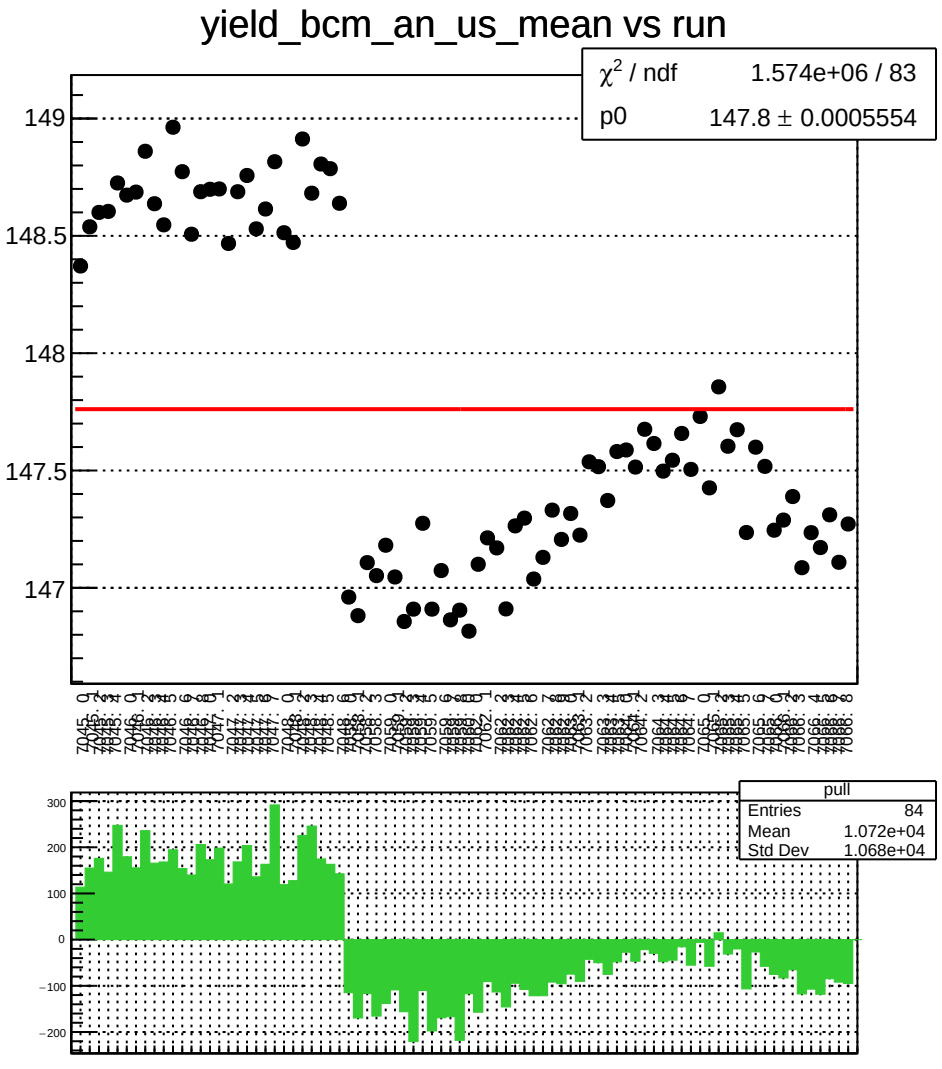

yield_bcm_an_ds_mean vs run
χ² / ndf 1.388e+06 / 83
p0 148 ± 0.0005536
149
148.5
148
147.5
147
pull
Entries 84
Mean 7480
Std Dev 7444
200
100
0
−100
−200

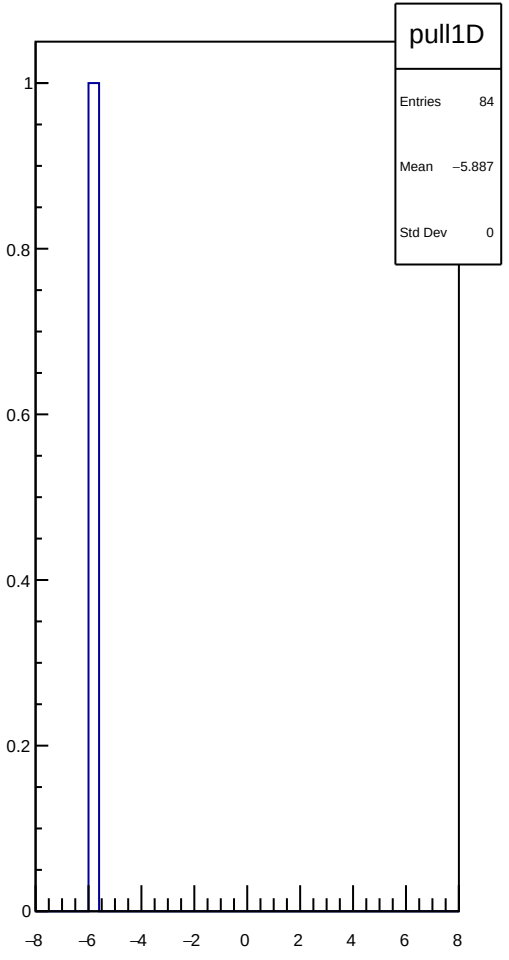

pull1D
Entries 84
Mean 0.0458
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

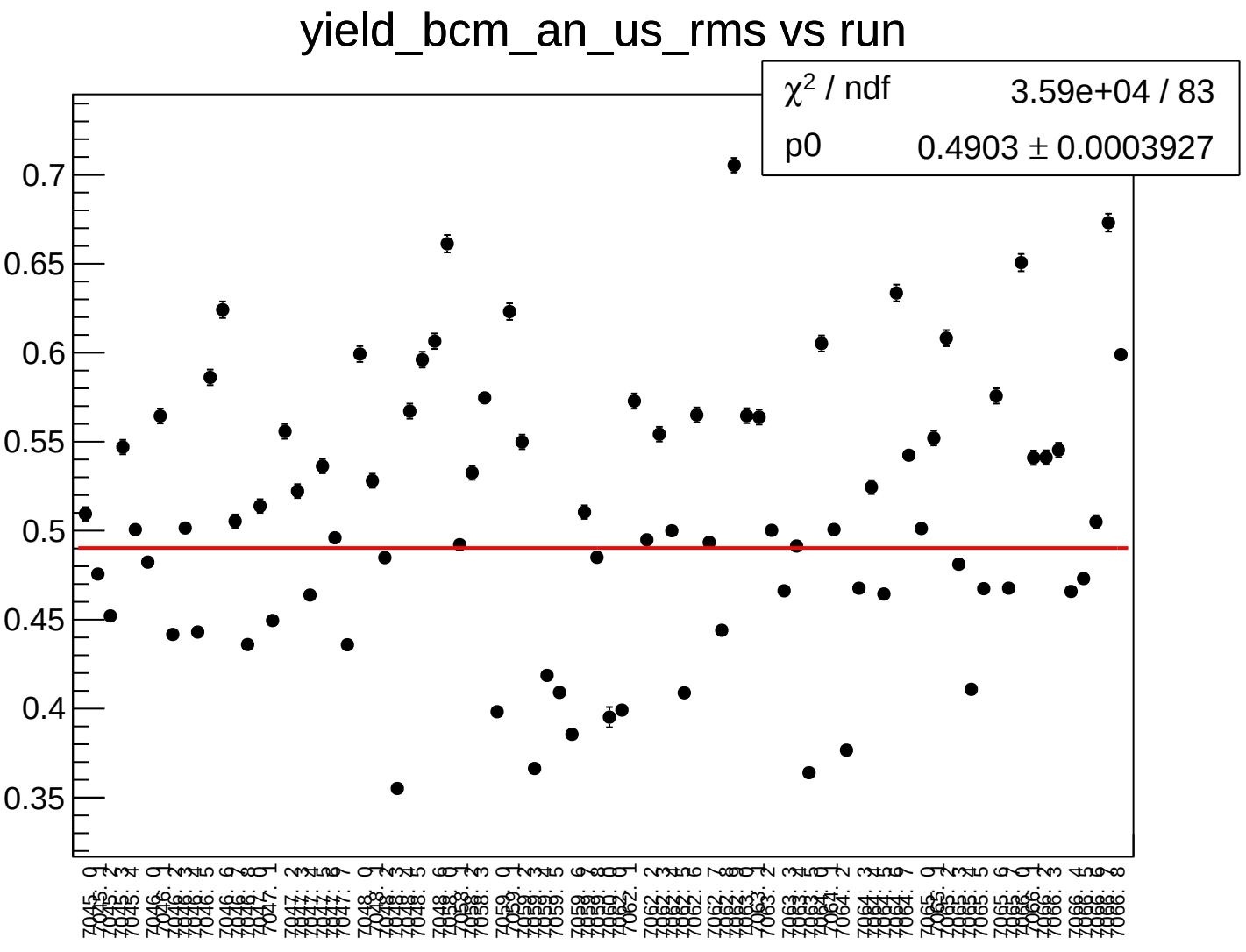

yield_bcm_an_ds_rms vs run
χ² / ndf 3.591e+04 / 83
p0 0.4888 ± 0.0003915
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

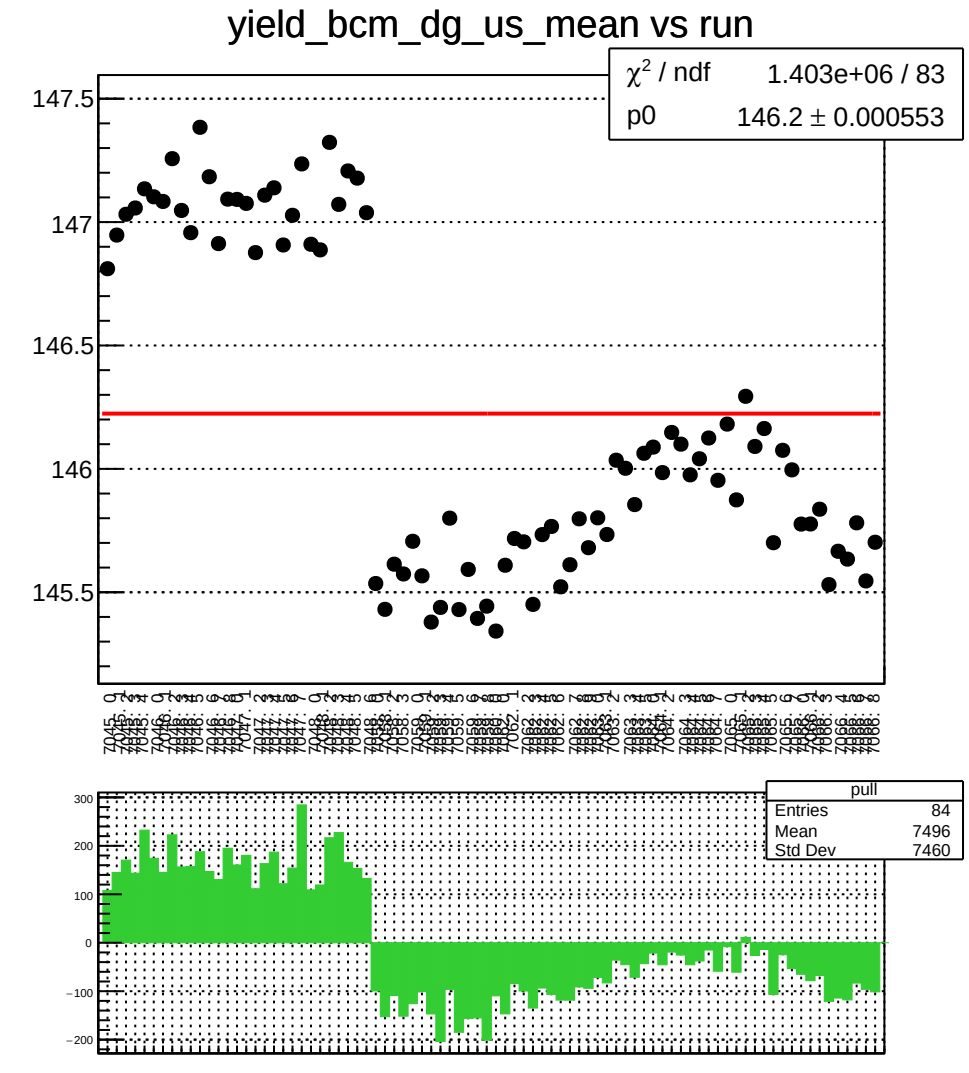

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.453e+06 / 83
p0 148.7 ± 0.0005606
150
149.5
149
148.5
148
pull
Entries 84
Mean 6069
Std Dev 6033
300
200
100
0
−100
−200
pull1D
Entries 84
Mean −2.743
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

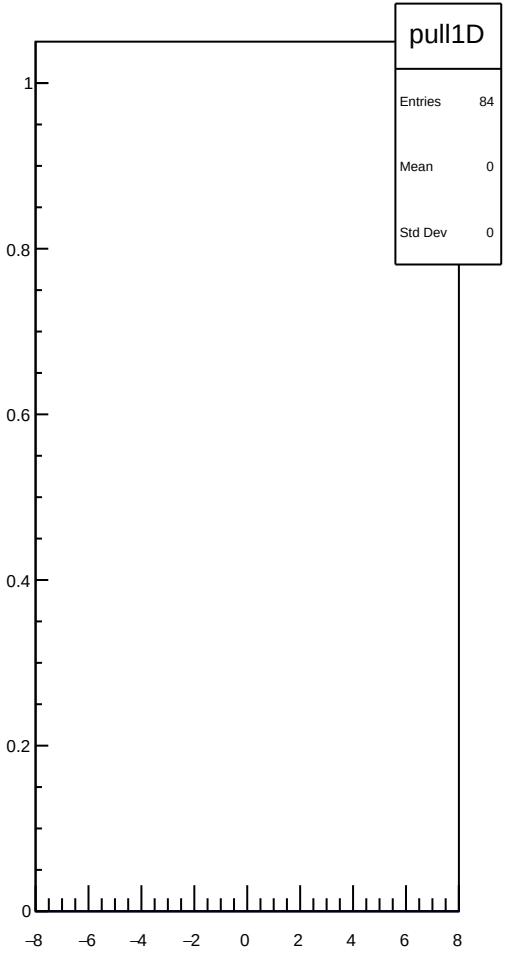

yield_bcm_an_ds3_rms vs run
χ² / ndf 3.577e+04 / 83
p0 0.4949 ± 0.0003964
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

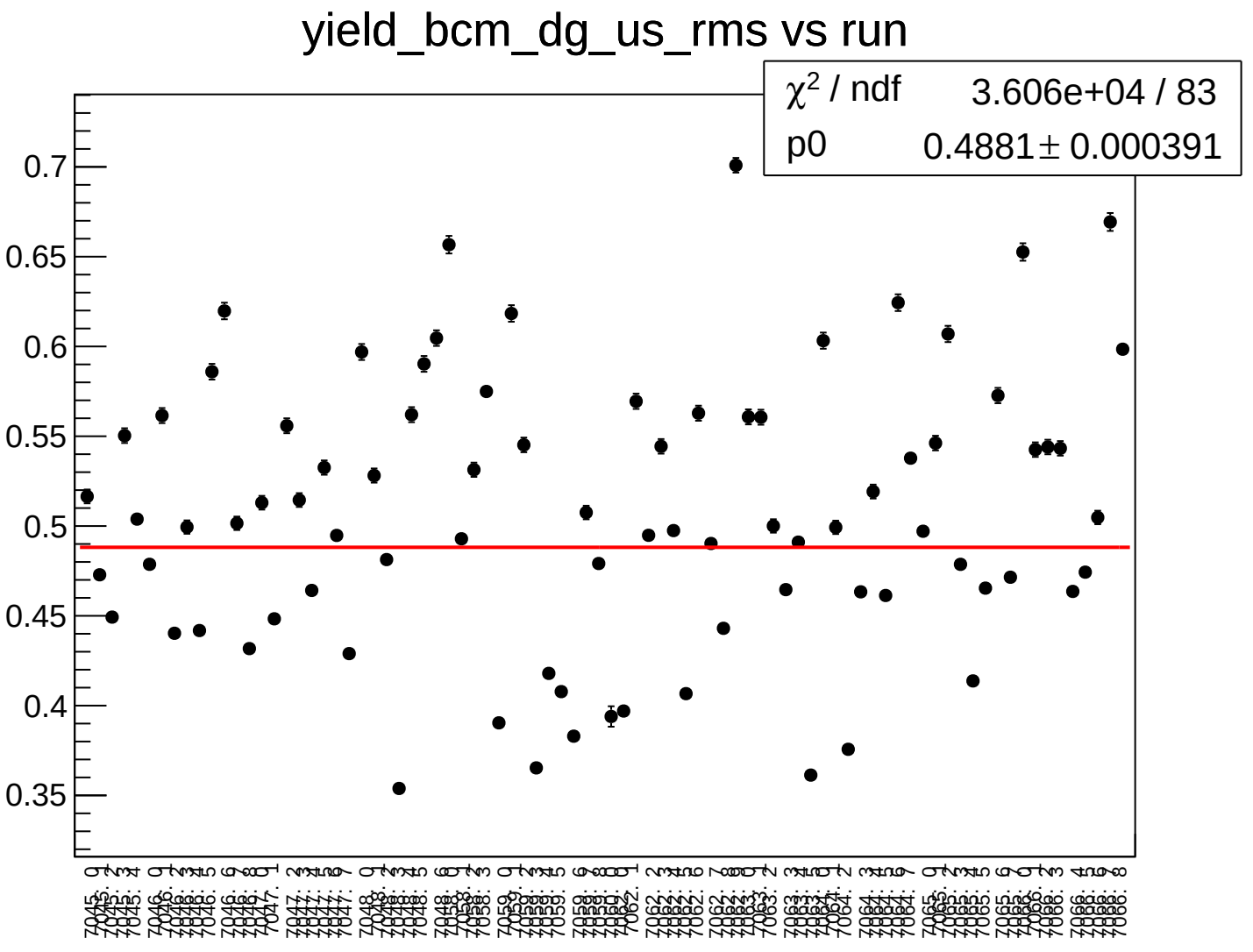

yield_bcm_an_us_mean vs run
χ² / ndf 1.574e+06 / 83
p0 147.8 ± 0.0005554
149
148.5
148
147.5
147
pull
Entries 84
Mean 1.072e+04
Std Dev 1.068e+04
300
200
100
0
−100
−200

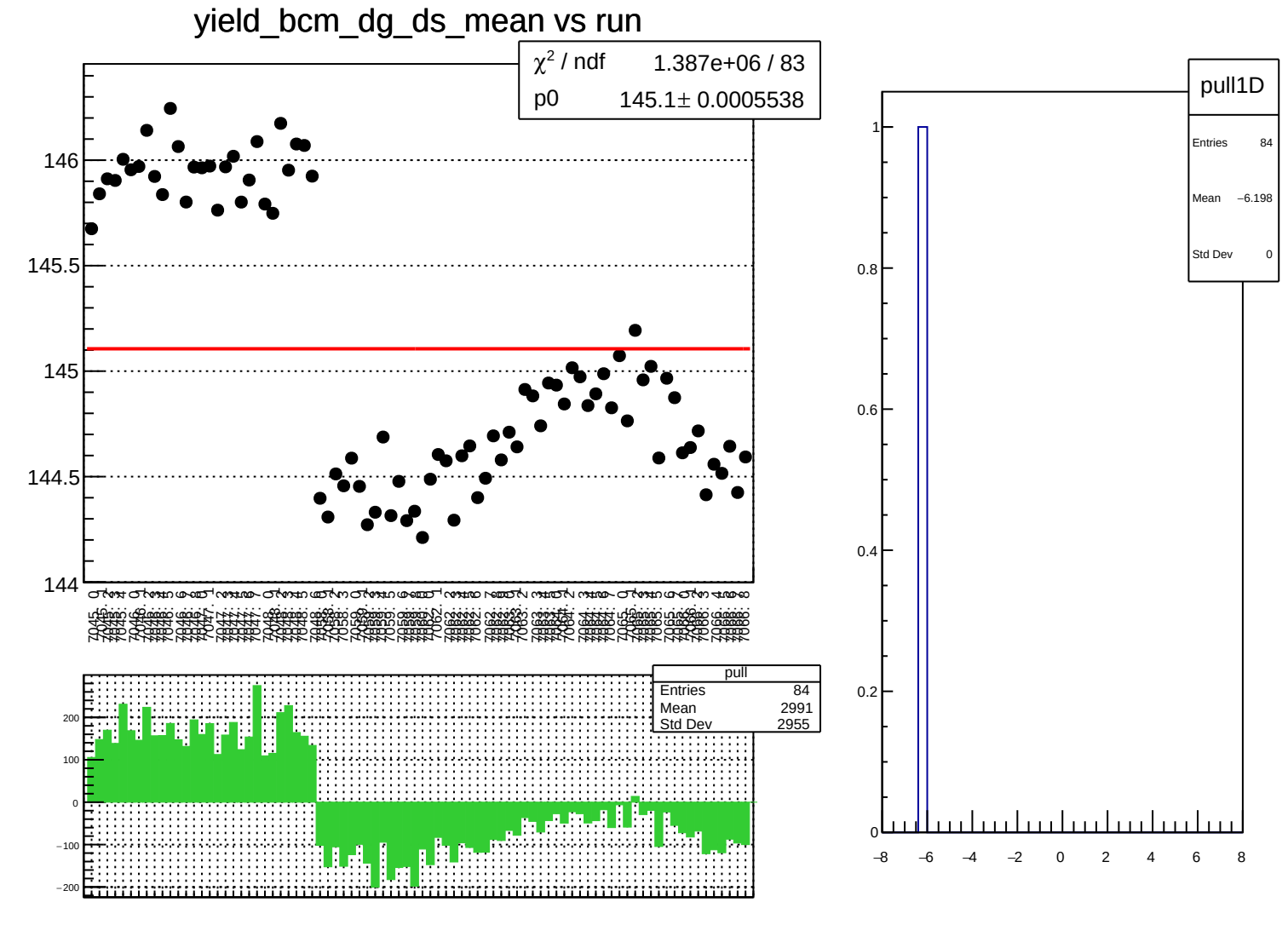

pull1D
Entries 84
Mean −5.887
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

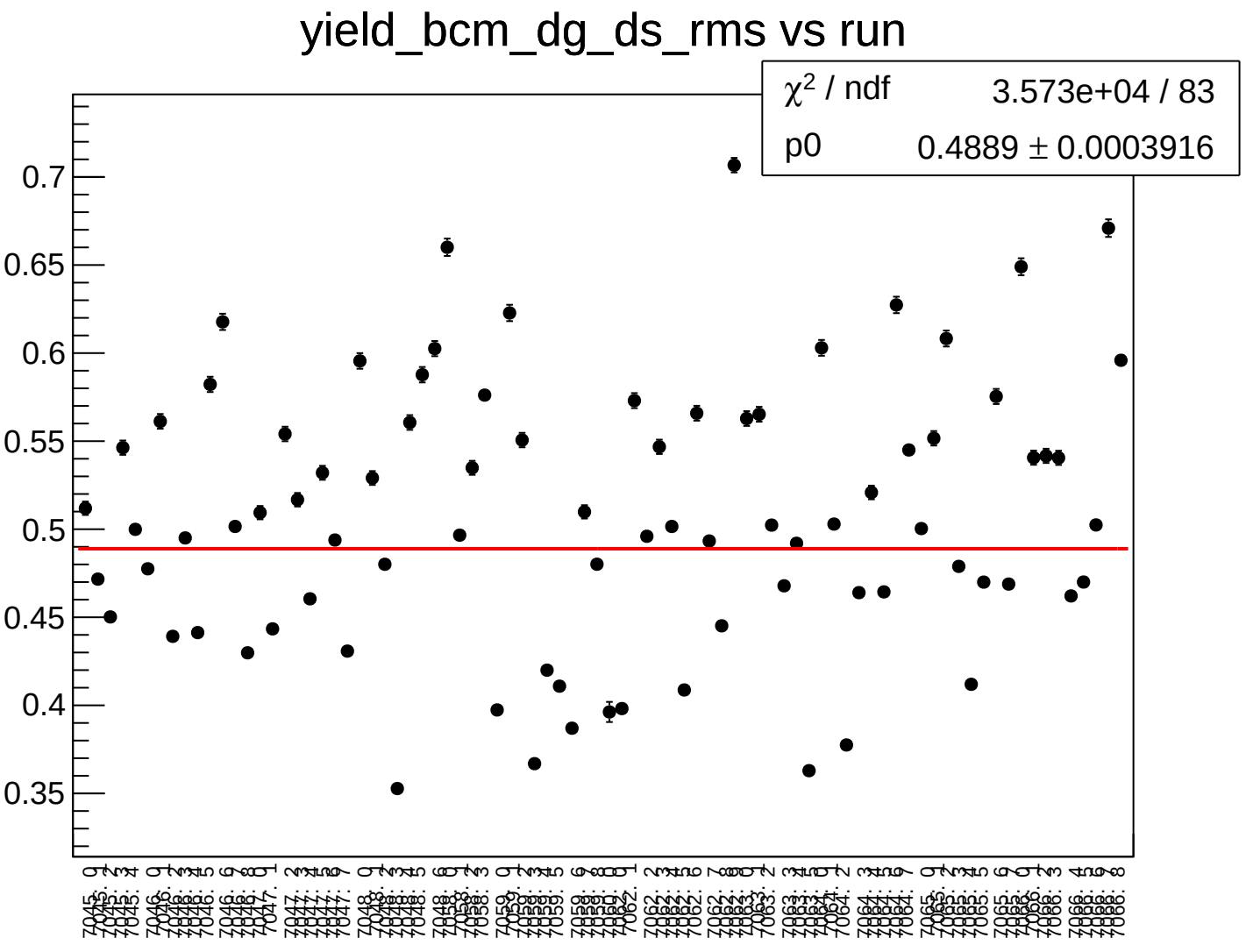

yield_bcm_an_us_rms vs run
χ^2 / ndf 3.59e+04 / 83
p0 0.4903 ± 0.0003927
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

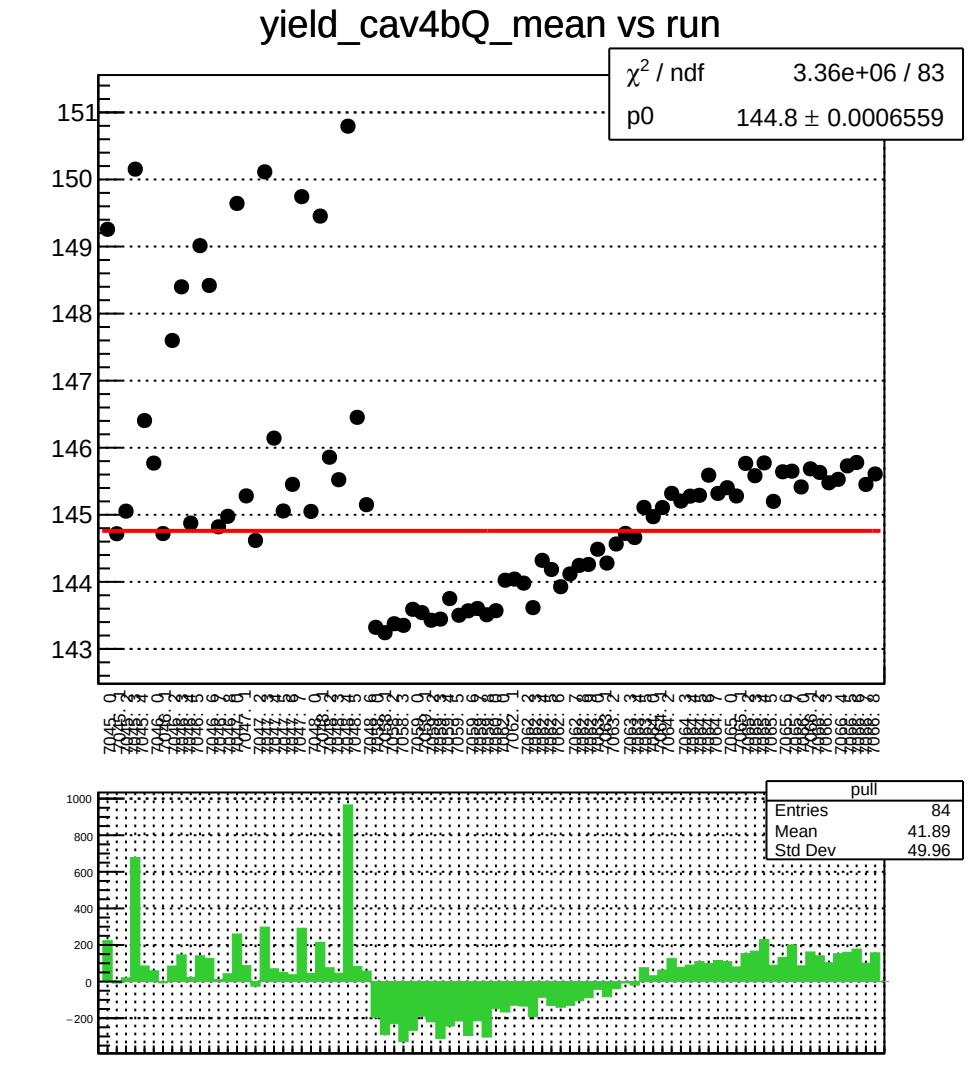

yield_bcm_dg_us_mean vs run
χ² / ndf 1.403e+06 / 83
p0 146.2 ± 0.000553
147.5
147
146.5
146
145.5
pull
Entries 84
Mean 7496
Std Dev 7460
300
200
100
0
−100
−200

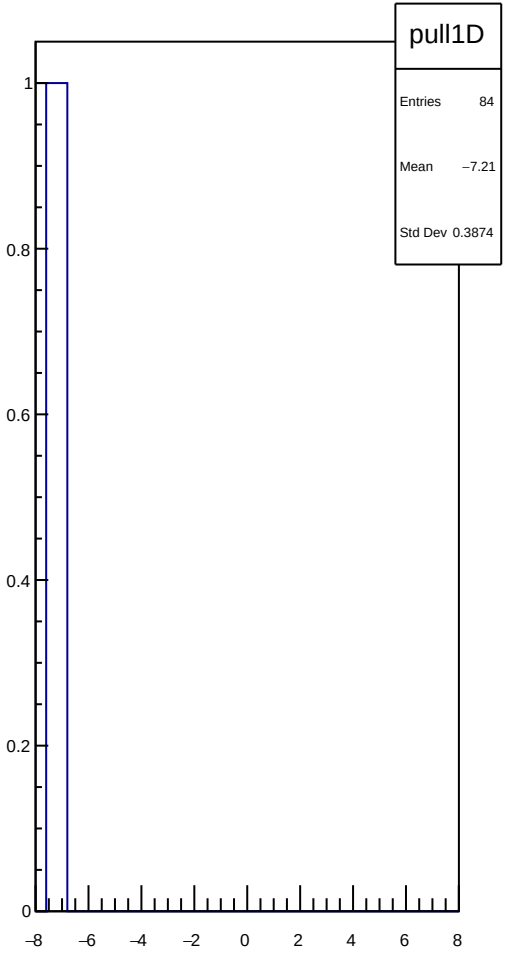

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

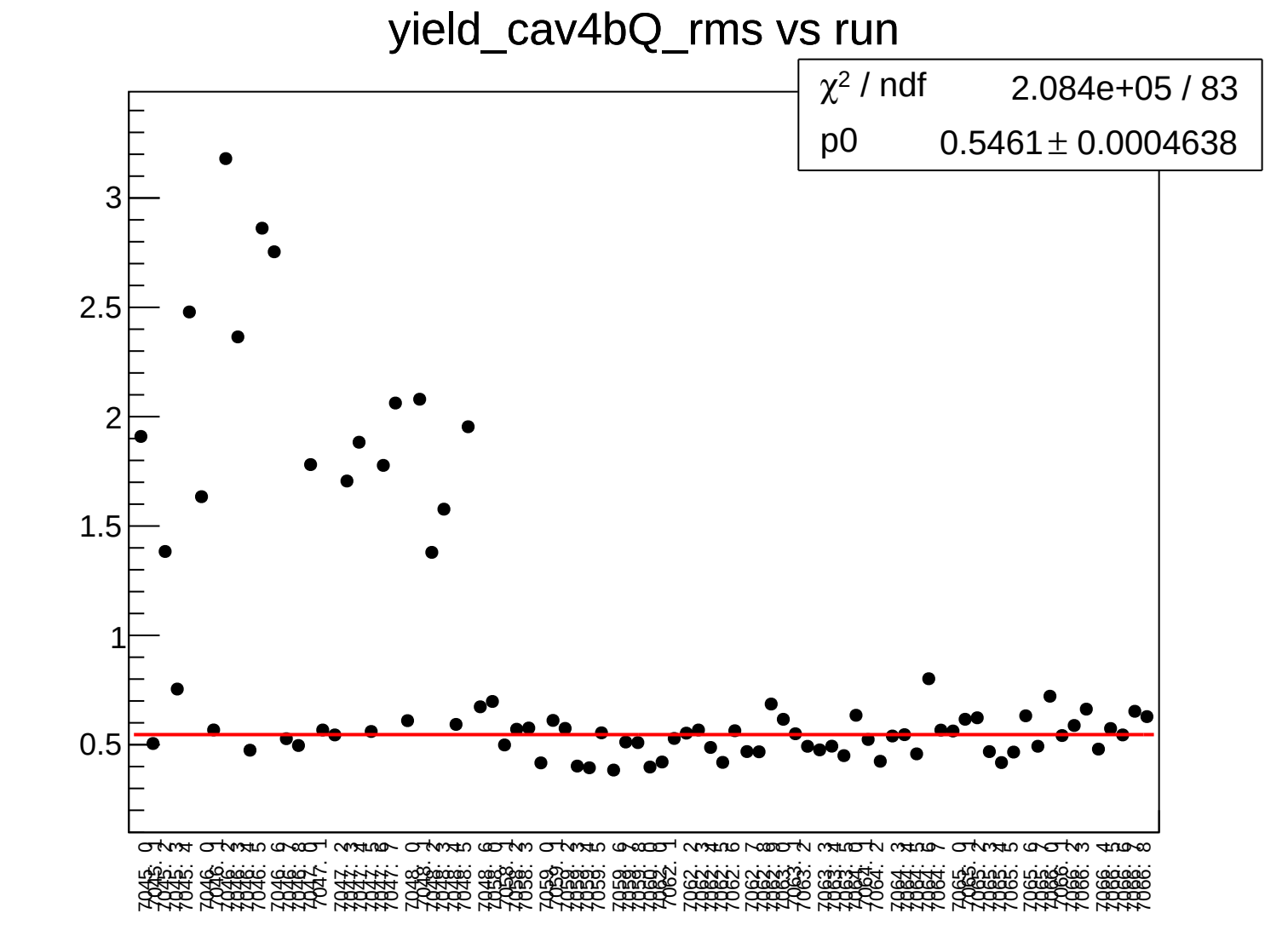

yield_bcm_dg_us_rms vs run
χ² / ndf 3.606e+04 / 83
p0 0.4881 ± 0.000391
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

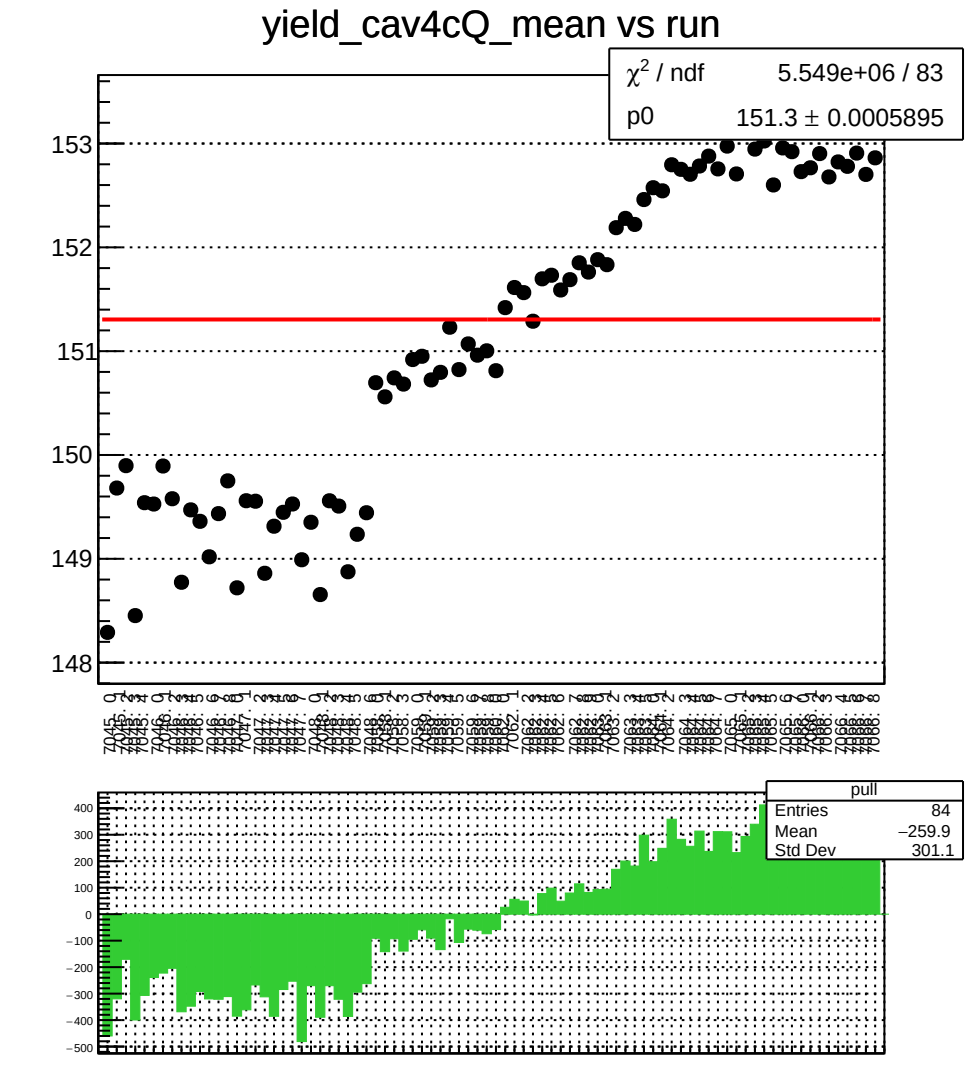

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.387e+06 / 83
p0 145.1± 0.0005538
146
145.5
145
144.5
144
pull
Entries 84
Mean 2991
Std Dev 2955
200
100
0
−100
−200
pull1D
Entries 84
Mean −6.198
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

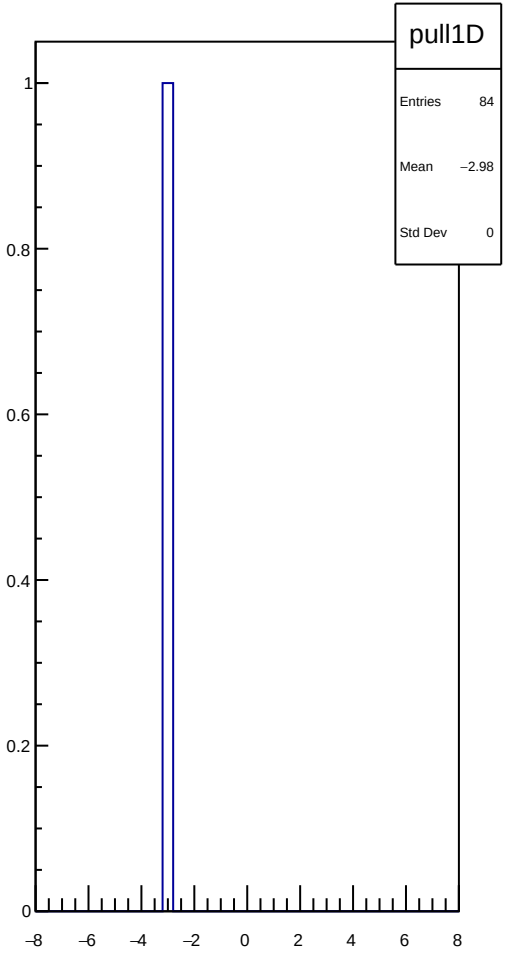

yield_bcm_dg_ds_rms vs run
χ² / ndf 3.573e+04 / 83
p0 0.4889 ± 0.0003916
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

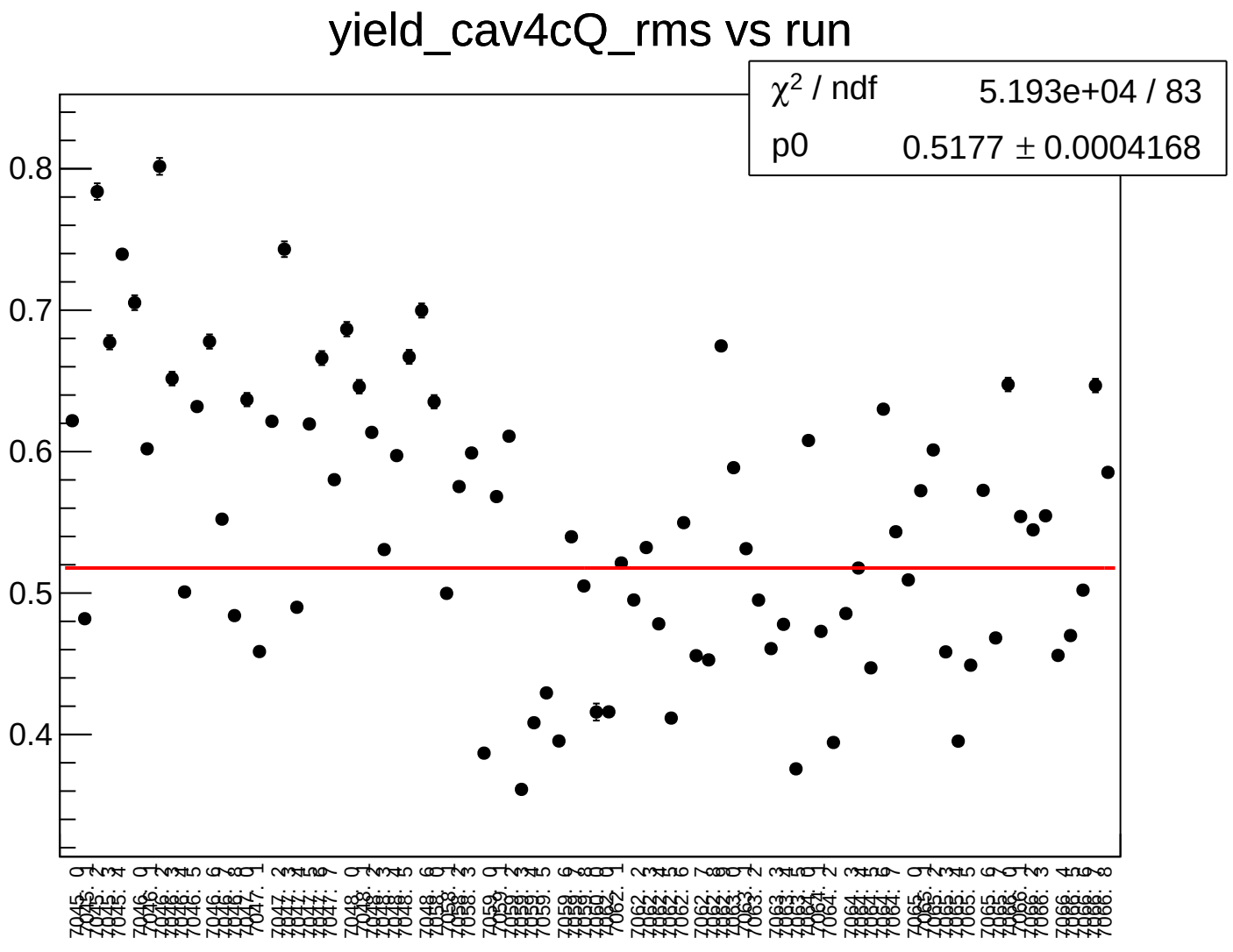

yield_cav4bQ_mean vs run
χ² / ndf 3.36e+06 / 83
p0 144.8 ± 0.0006559
151
150
149
148
147
146
145
144
143
pull
Entries 84
Mean 41.89
Std Dev 49.96
1000
800
600
400
200
0
−200

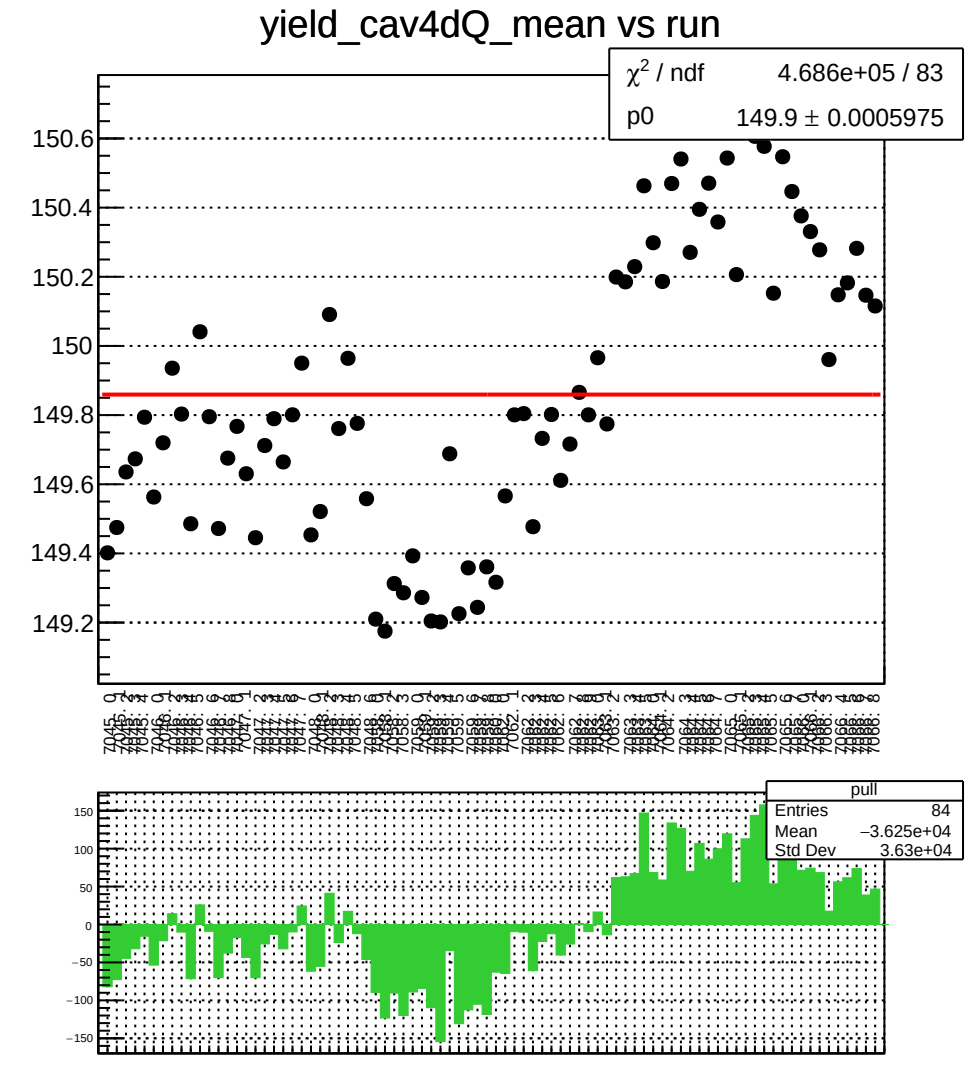

pull1D
Entries 84
Mean −7.21
Std Dev 0.3874
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

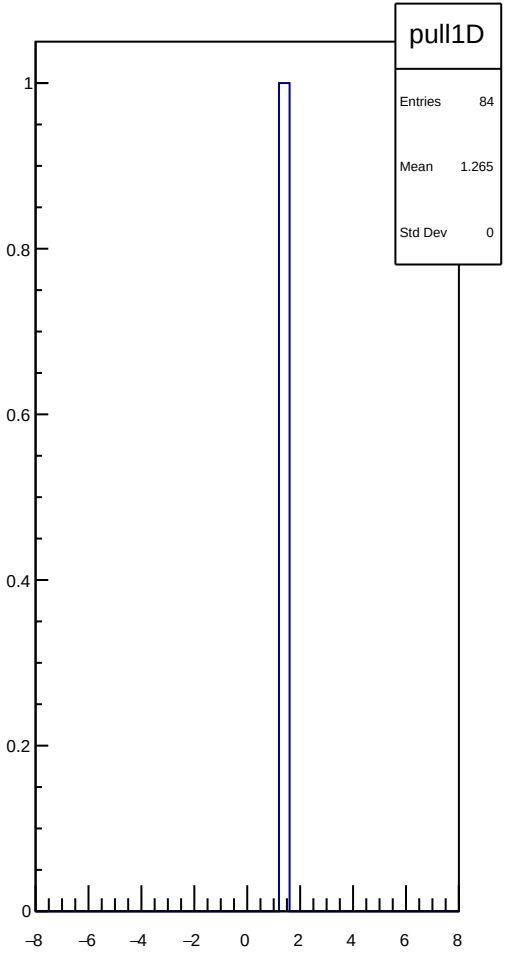

yield_cav4bQ_rms vs run
χ² / ndf 2.084e+05 / 83
p0 0.5461 ± 0.0004638
3
2.5
2
1.5
1
0.5

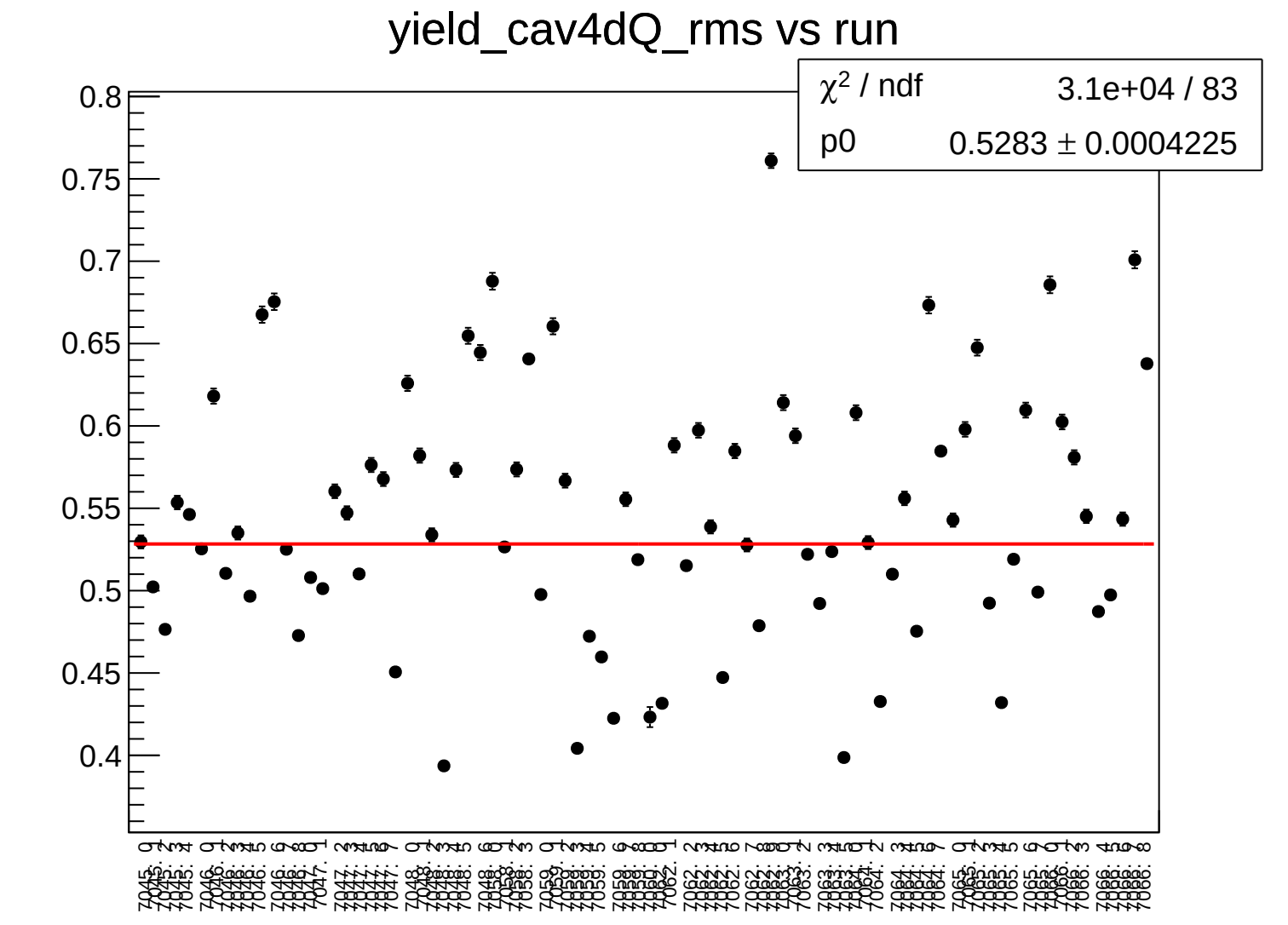

yield_cav4cQ_mean vs run
χ² / ndf 5.549e+06 / 83
p0 151.3 ± 0.0005895
153
152
151
150
149
148
pull
Entries 84
Mean −259.9
Std Dev 301.1
400
300
200
100
0
−100
−200
−300
−400
−500

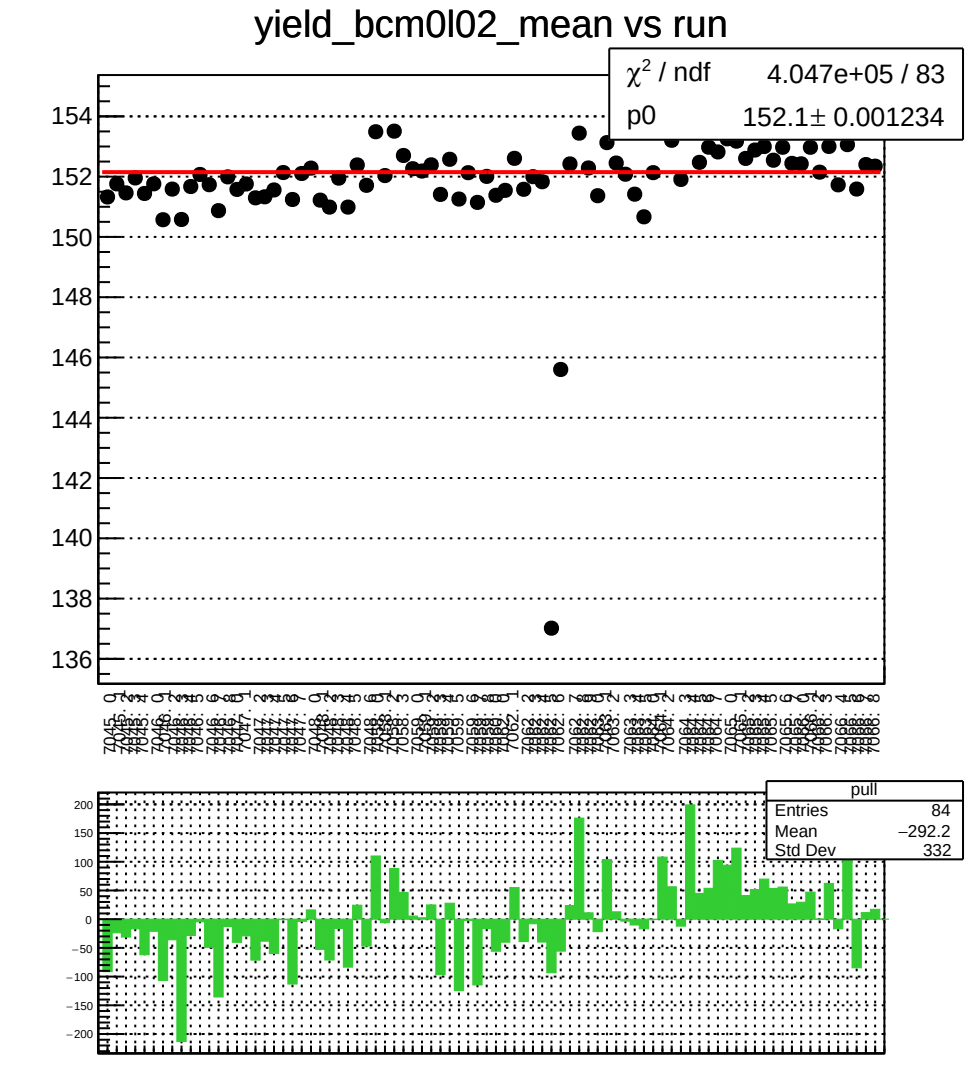

pull1D
Entries 84
Mean −2.98
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

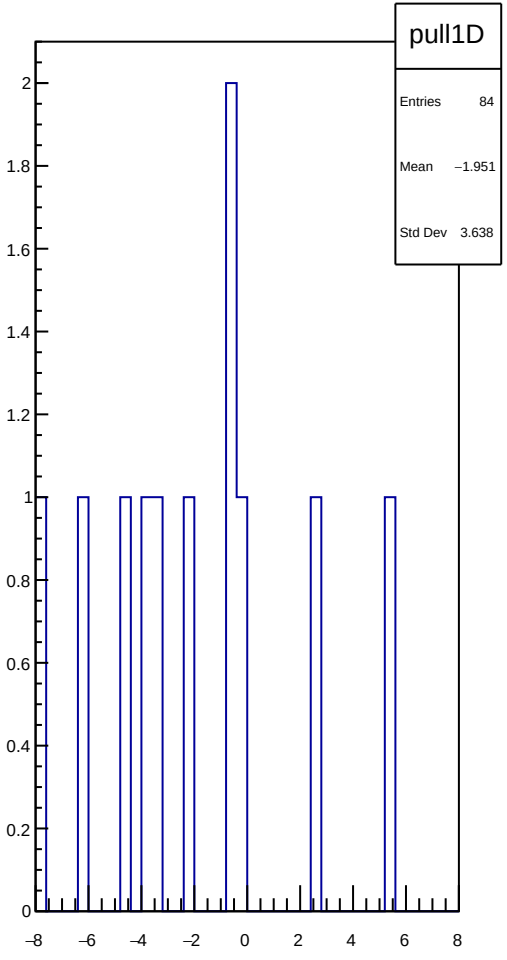

yield_cav4cQ_rms vs run
χ² / ndf 5.193e+04 / 83
p0 0.5177 ± 0.0004168
0.8
0.7
0.6
0.5
0.4

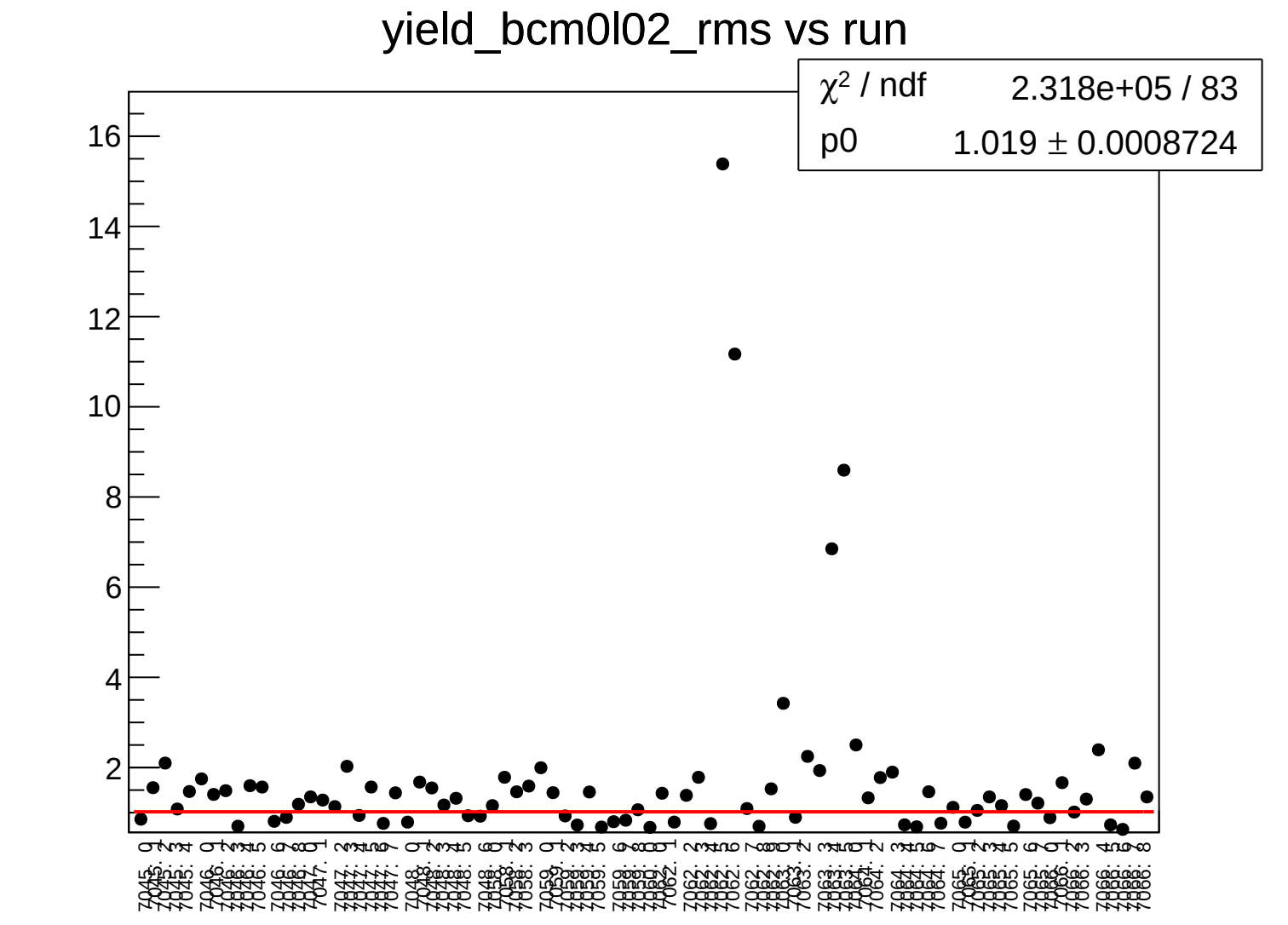

yield_cav4dQ_mean vs run
χ² / ndf 4.686e+05 / 83
p0 149.9 ± 0.0005975
150.6
150.4
150.2
150
149.8
149.6
149.4
149.2
pull
Entries 84
Mean −3.625e+04
Std Dev 3.63e+04
150
100
50
0
−50
−100
−150

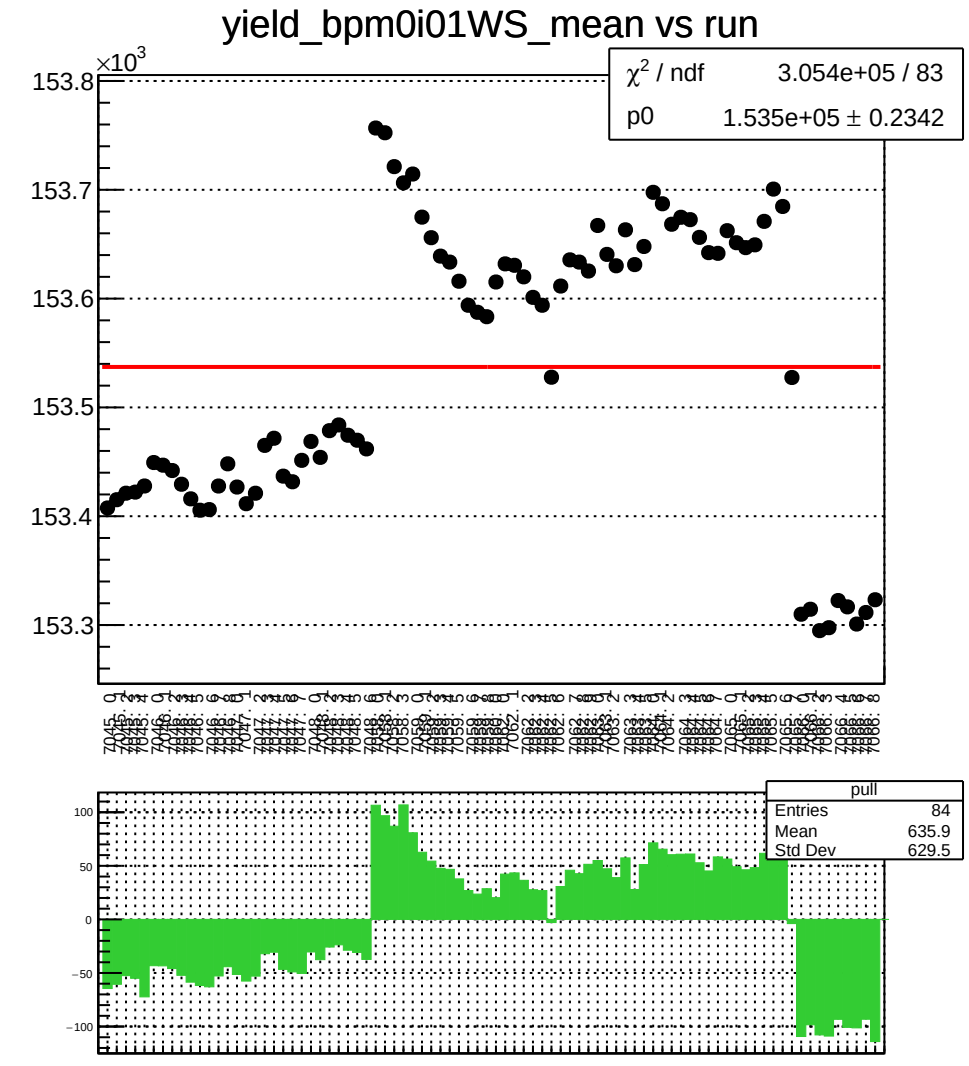

pull1D
Entries 84
Mean 1.265
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

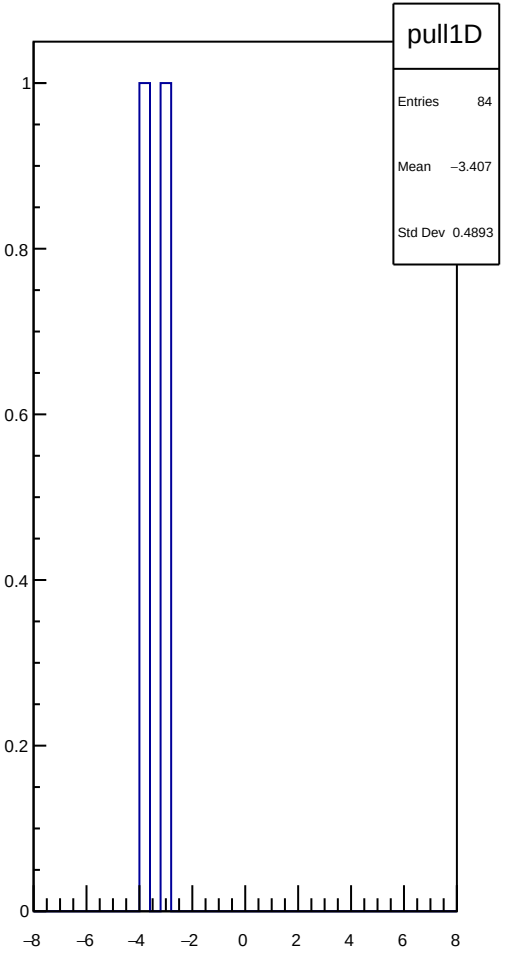

yield_cav4dQ_rms vs run
χ² / ndf 3.1e+04 / 83
p0 0.5283 ± 0.0004225
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

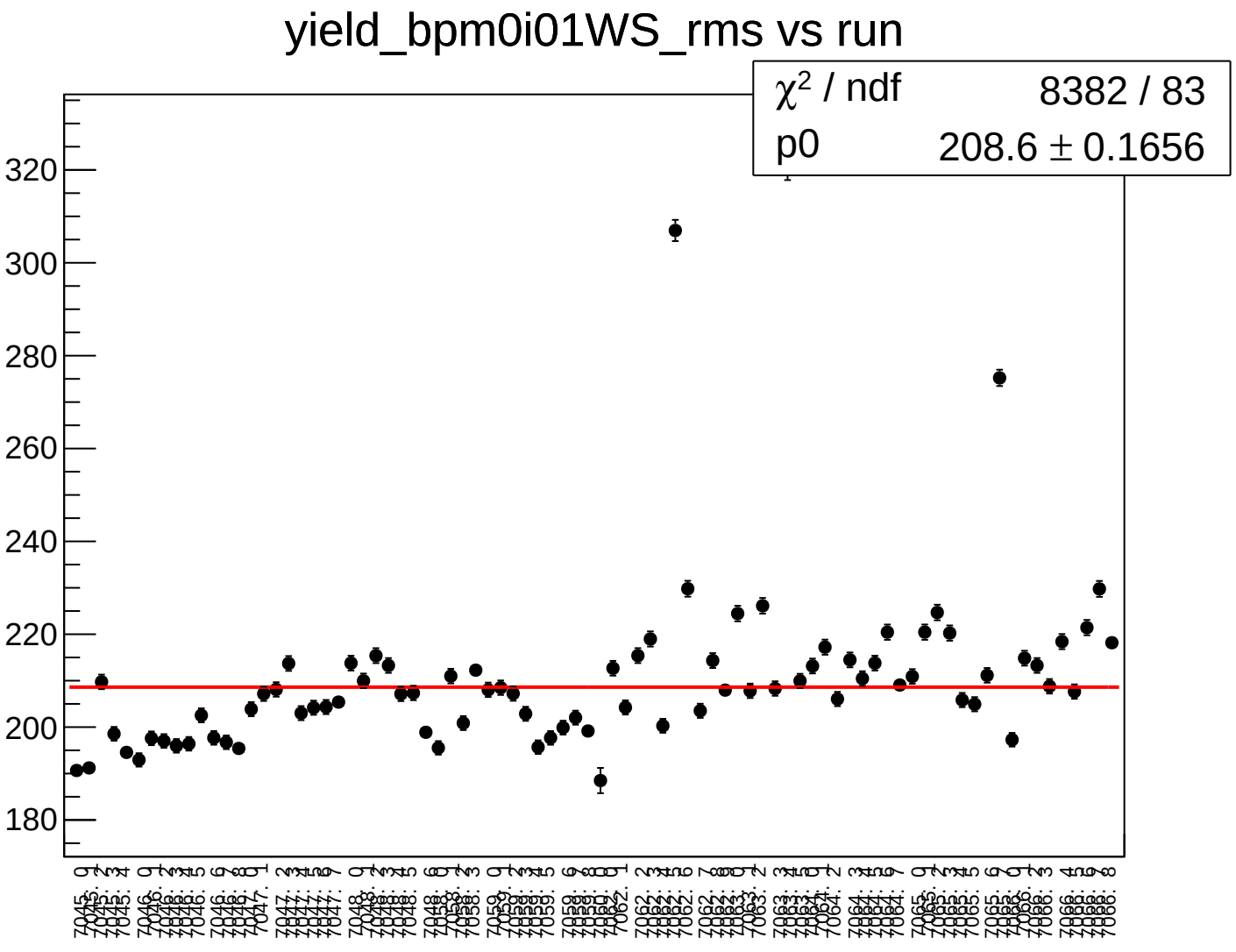

yield_bcm0l02_mean vs run
χ² / ndf 4.047e+05 / 83
p0 152.1± 0.001234
154
152
150
148
146
144
142
140
138
136
pull
Entries 84
Mean −292.2
Std Dev 332
200
150
100
50
0
−50
−100
−150
−200

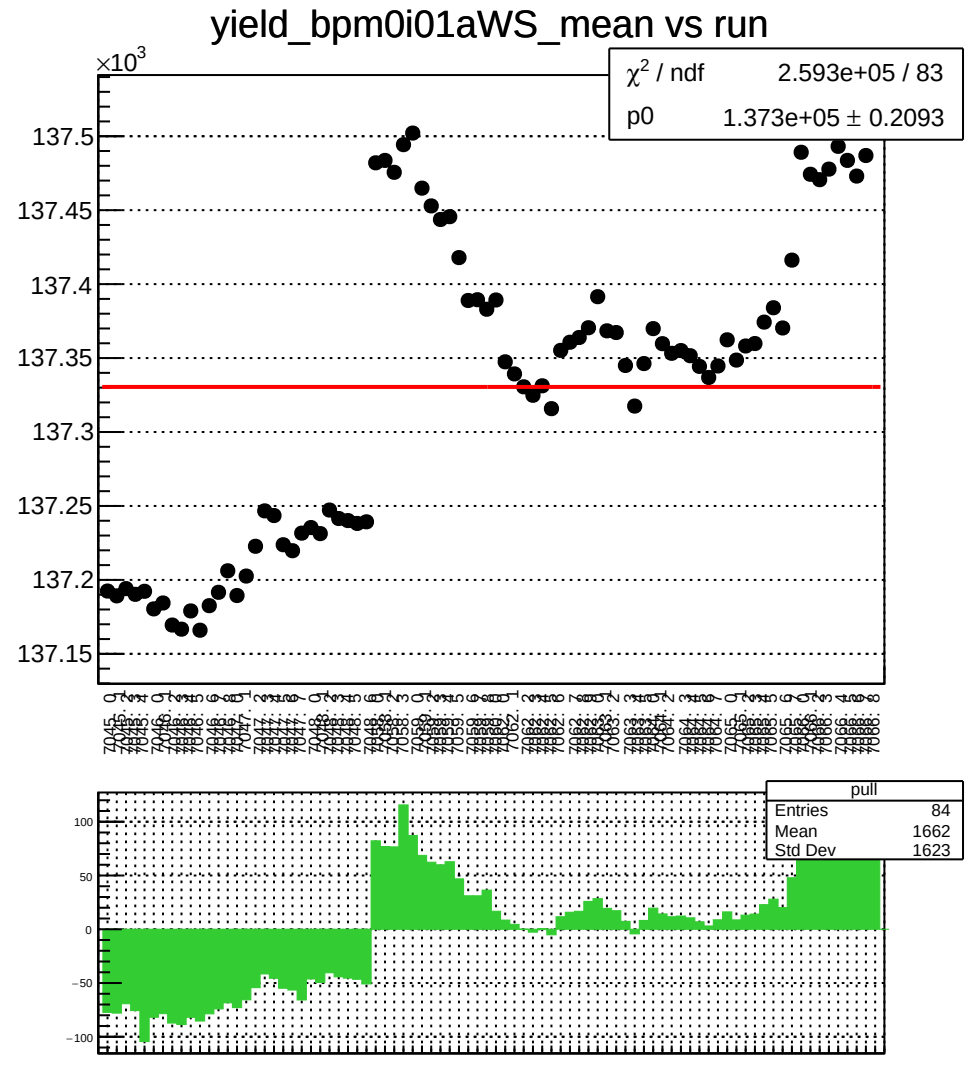

pull1D
Entries 84
Mean −1.951
Std Dev 3.638
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

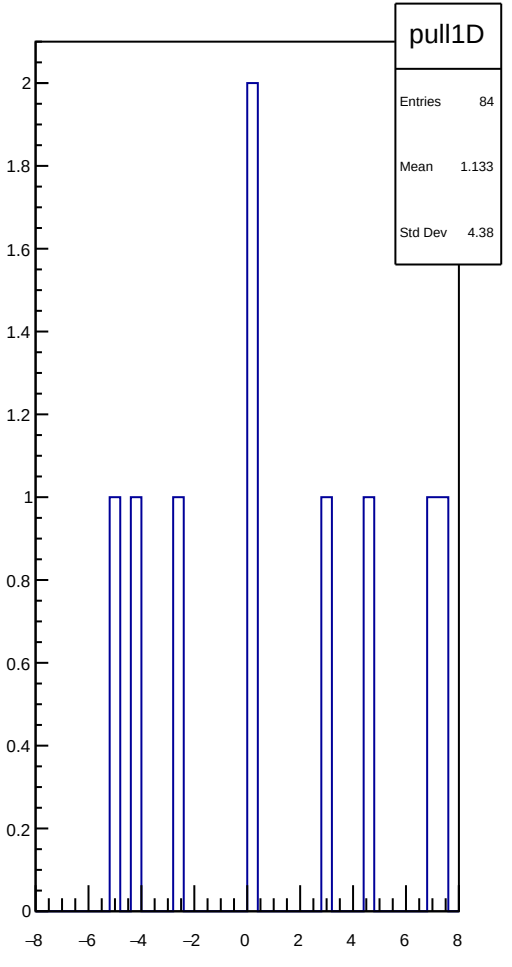

yield_bcm0l02_rms vs run
χ² / ndf 2.318e+05 / 83
p0 1.019 ± 0.0008724
16
14
12
10
8
6
4
2

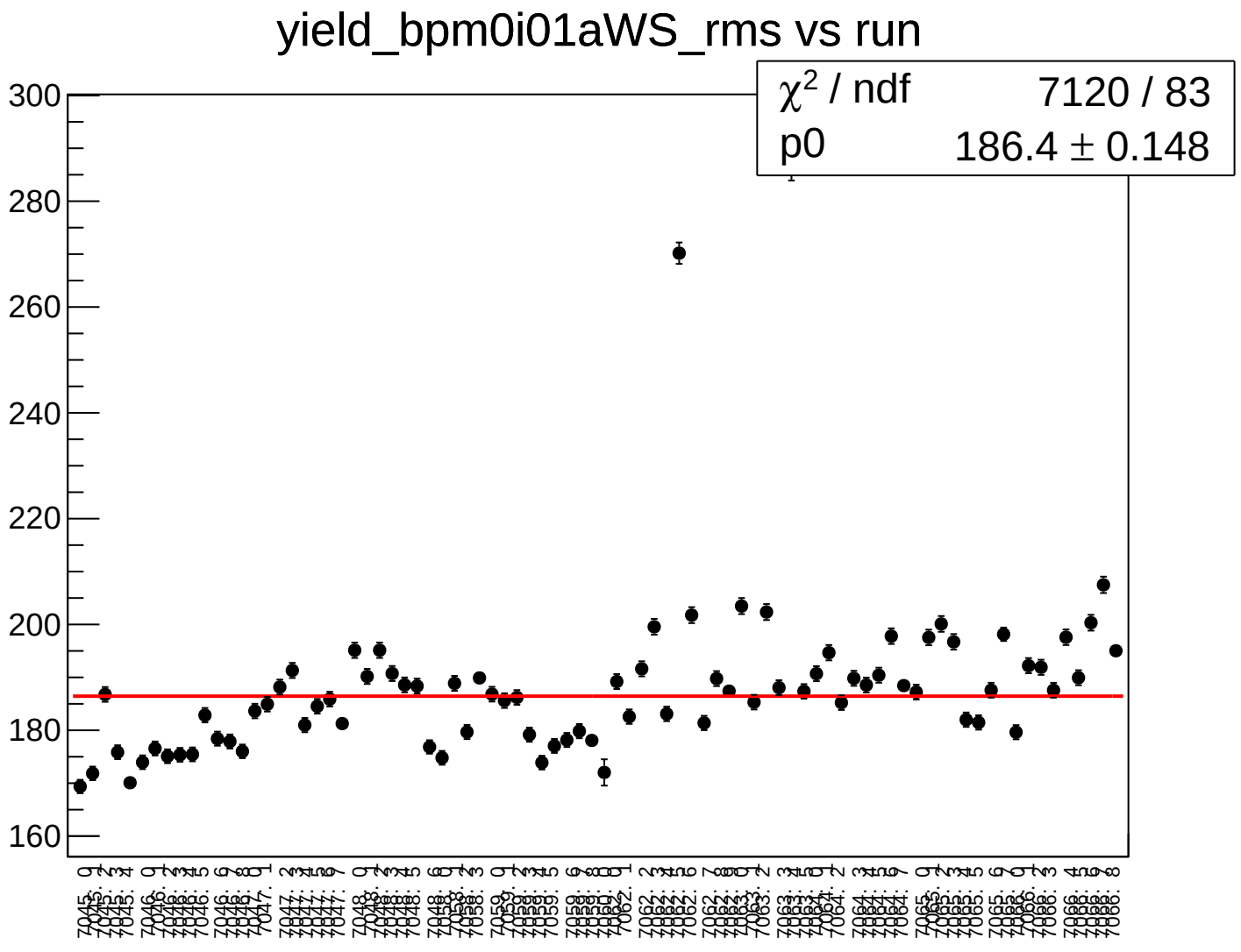

yield_bpm0i01WS_mean vs run
×10^3
153.8
153.7
153.6
153.5
153.4
153.3
χ² / ndf 3.054e+05 / 83
p0 1.535e+05 ± 0.2342
pull
Entries 84
Mean 635.9
Std Dev 629.5
100
50
0
−50
−100

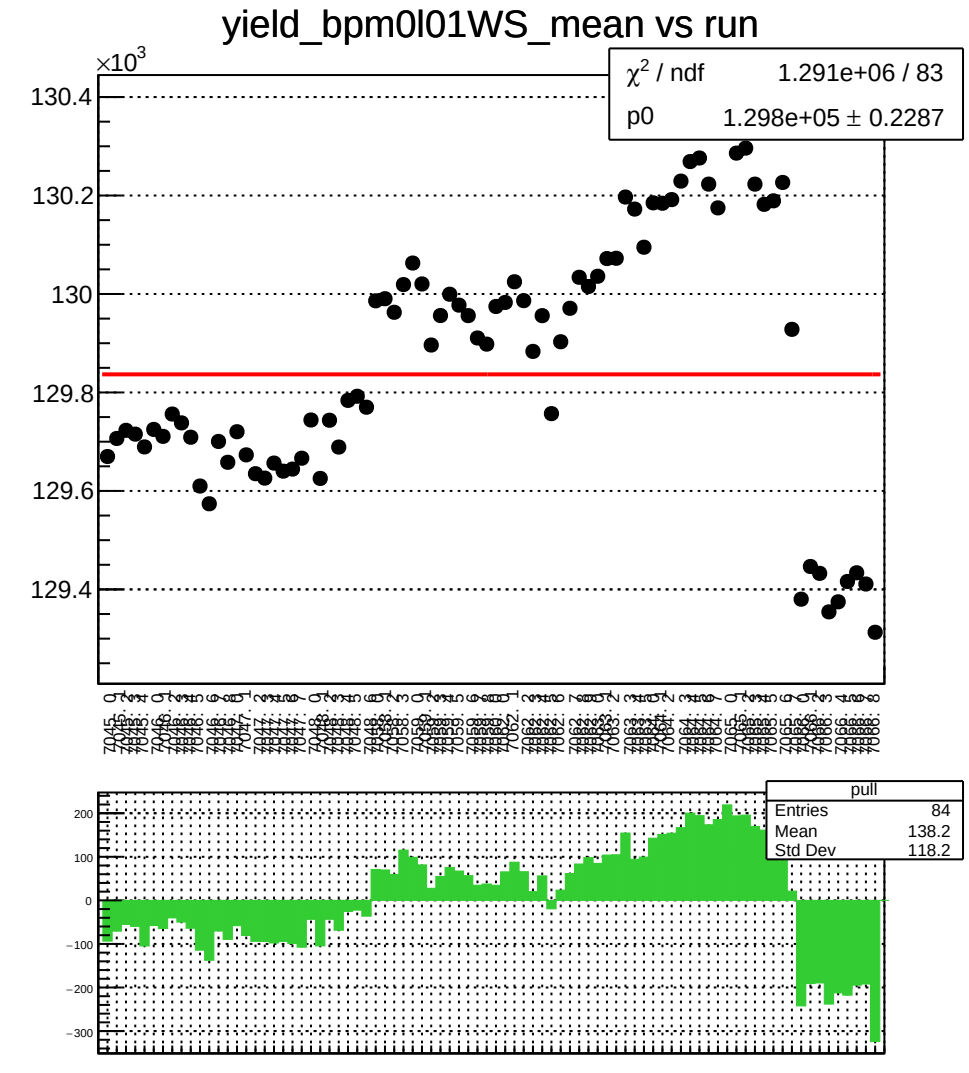

pull1D
Entries 84
Mean −3.407
Std Dev 0.4893
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

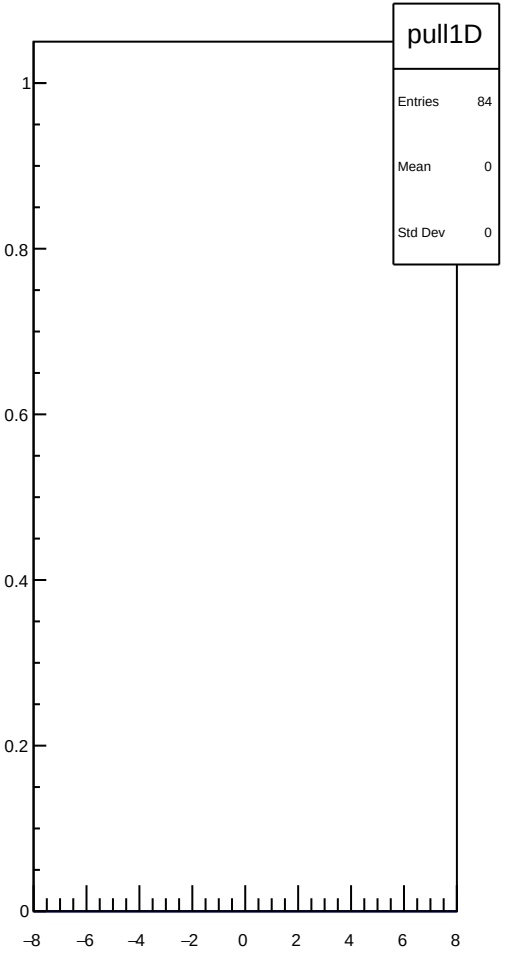

yield_bpm0i01WS_rms vs run
χ² / ndf 8382 / 83
p0 208.6 ± 0.1656
320
300
280
260
240
220
200
180

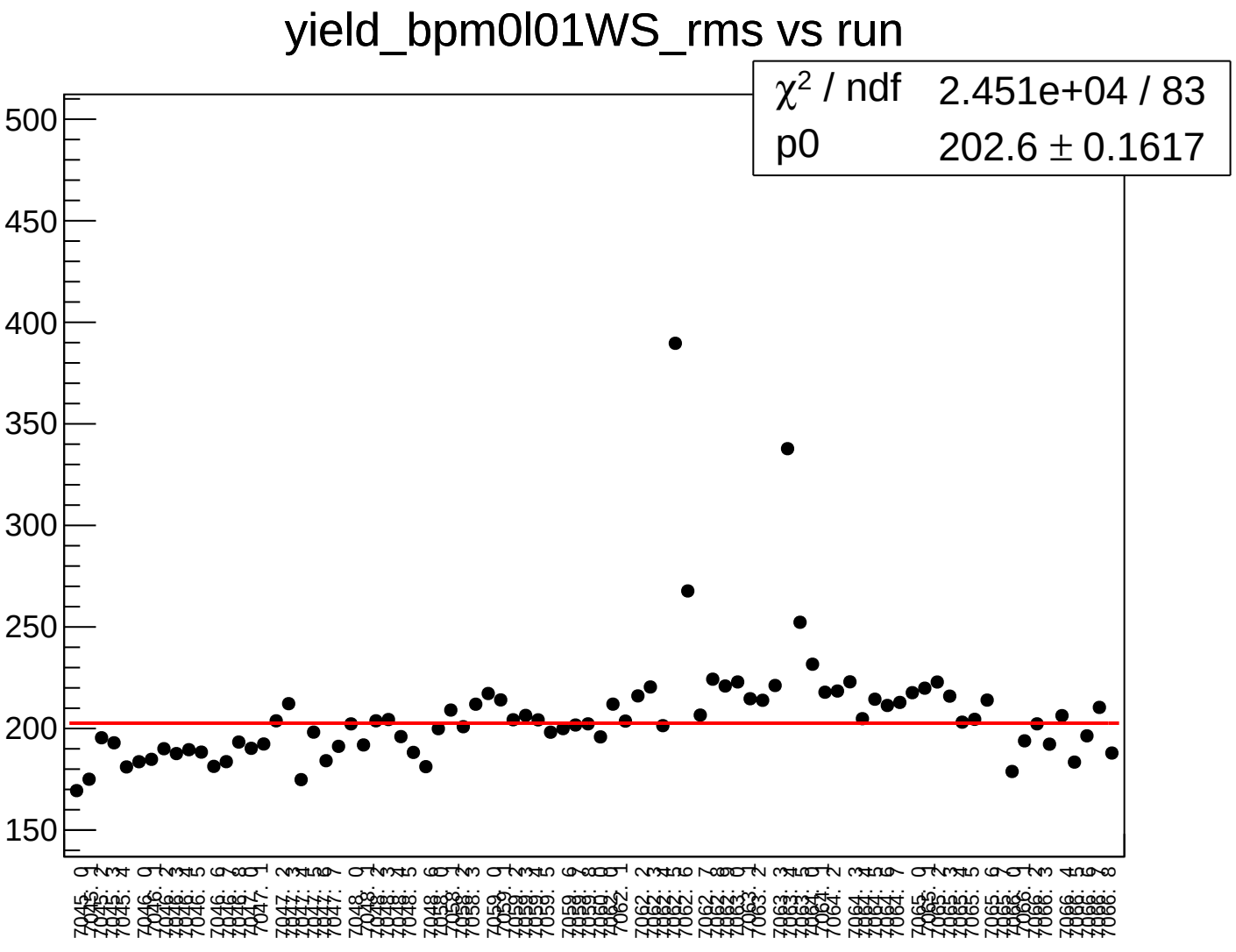

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 2.593e+05 / 83
p0 1.373e+05 ± 0.2093
137.5
137.45
137.4
137.35
137.3
137.25
137.2
137.15
pull
Entries 84
Mean 1662
Std Dev 1623
100
50
0
−50
−100

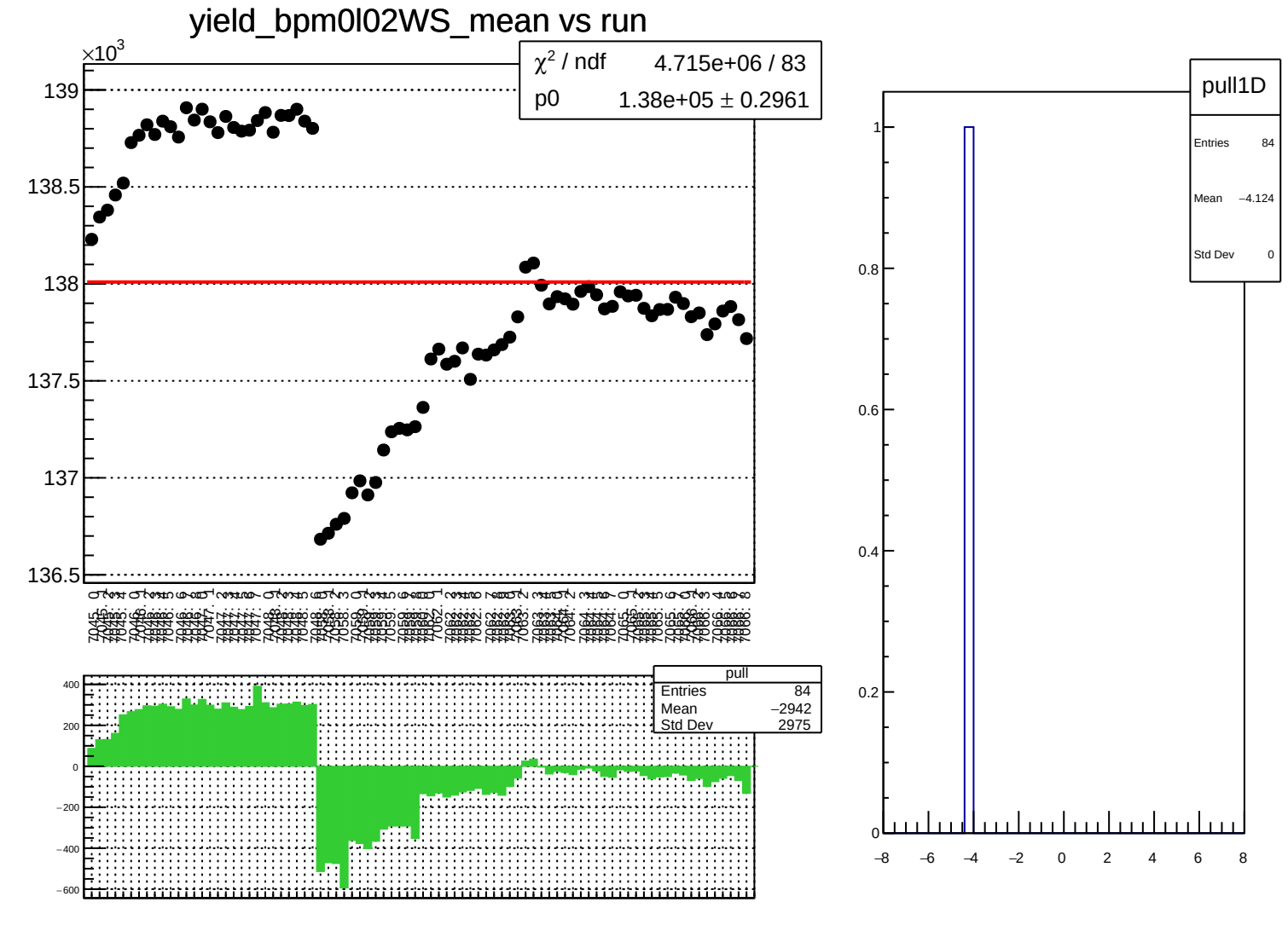

pull1D
Entries 84
Mean 1.133
Std Dev 4.38
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

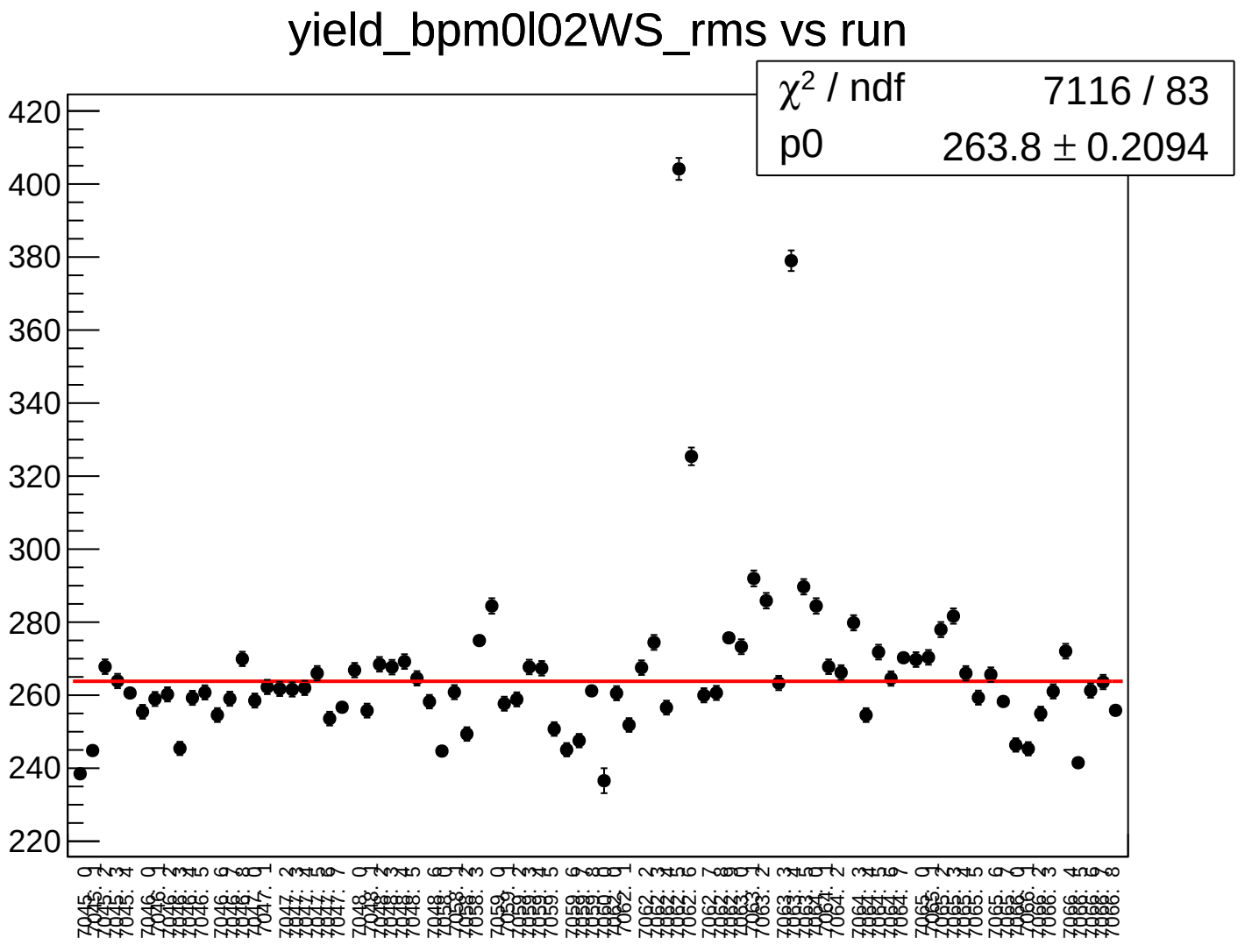

yield_bpm0i01aWS_rms vs run
χ² / ndf 7120 / 83
p0 186.4 ± 0.148
300
280
260
240
220
200
180
160

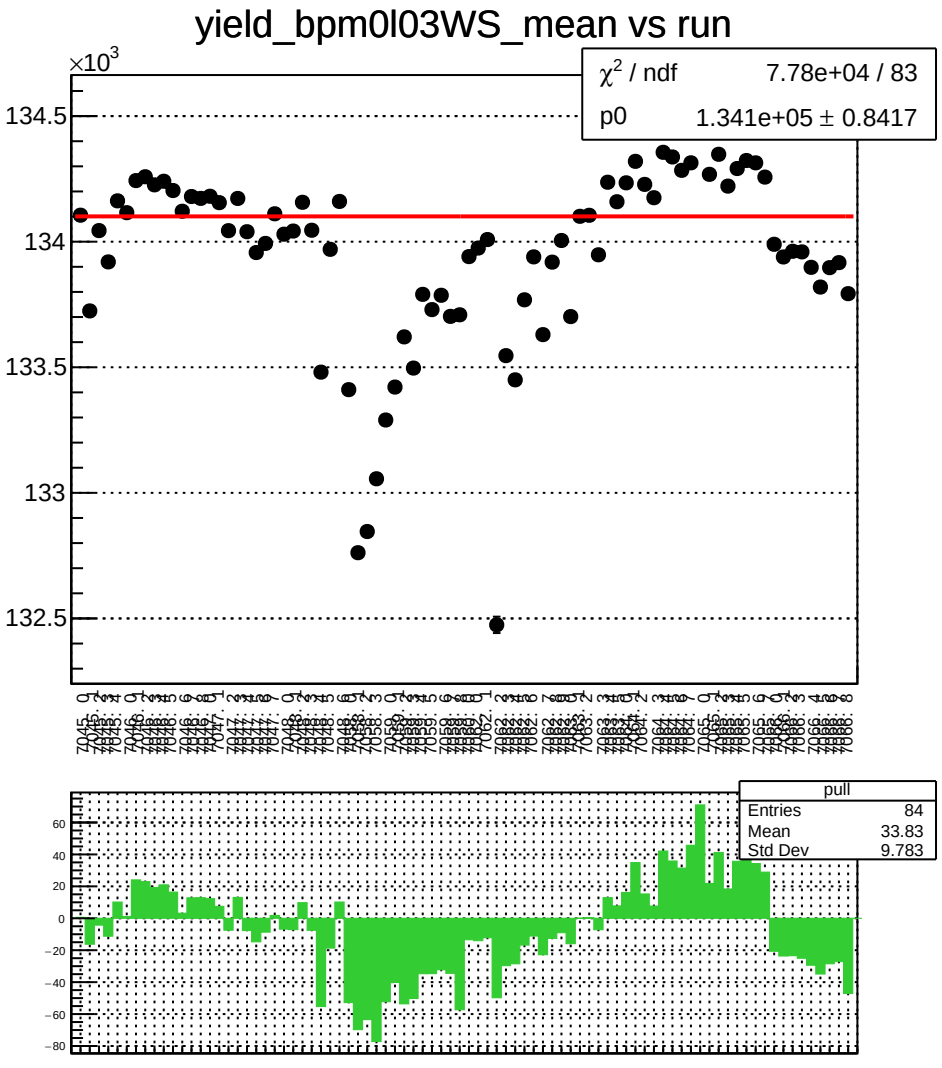

yield_bpm0l01WS_mean vs run
×10^3
130.4
130.2
130
129.8
129.6
129.4
χ² / ndf 1.291e+06 / 83
p0 1.298e+05 ± 0.2287
pull
Entries 84
Mean 138.2
Std Dev 118.2
200
100
0
−100
−200
−300

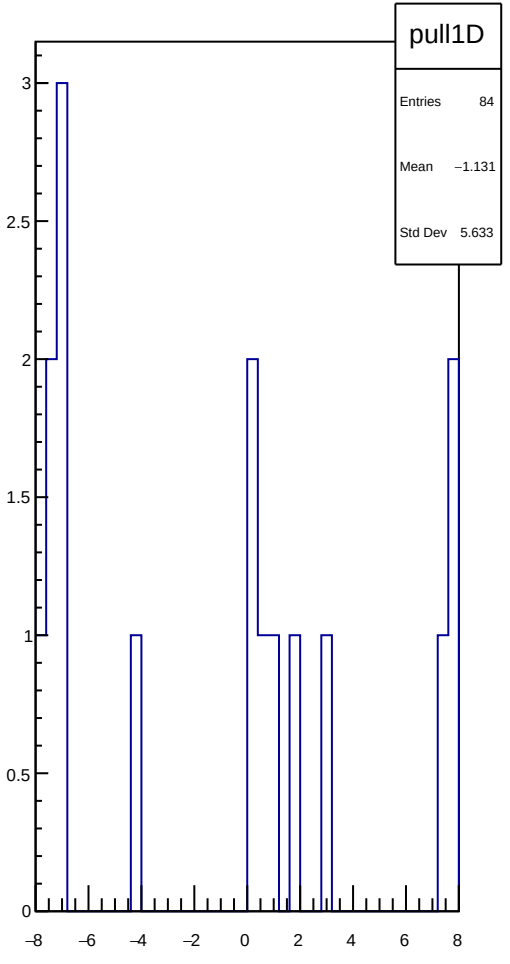

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

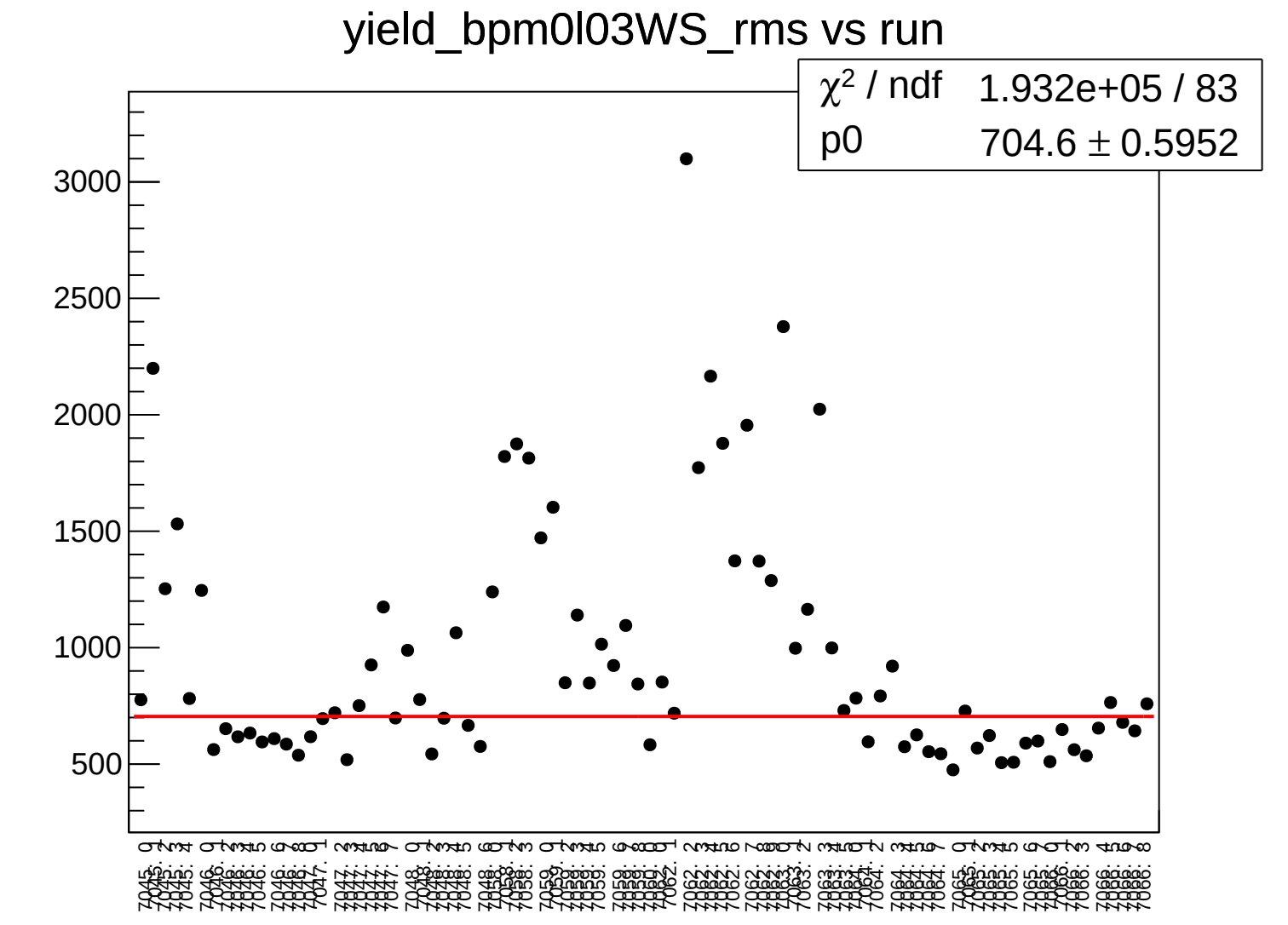

yield_bpm0l01WS_rms vs run
χ² / ndf 2.451e+04 / 83
p0 202.6 ± 0.1617
500
450
400
350
300
250
200
150

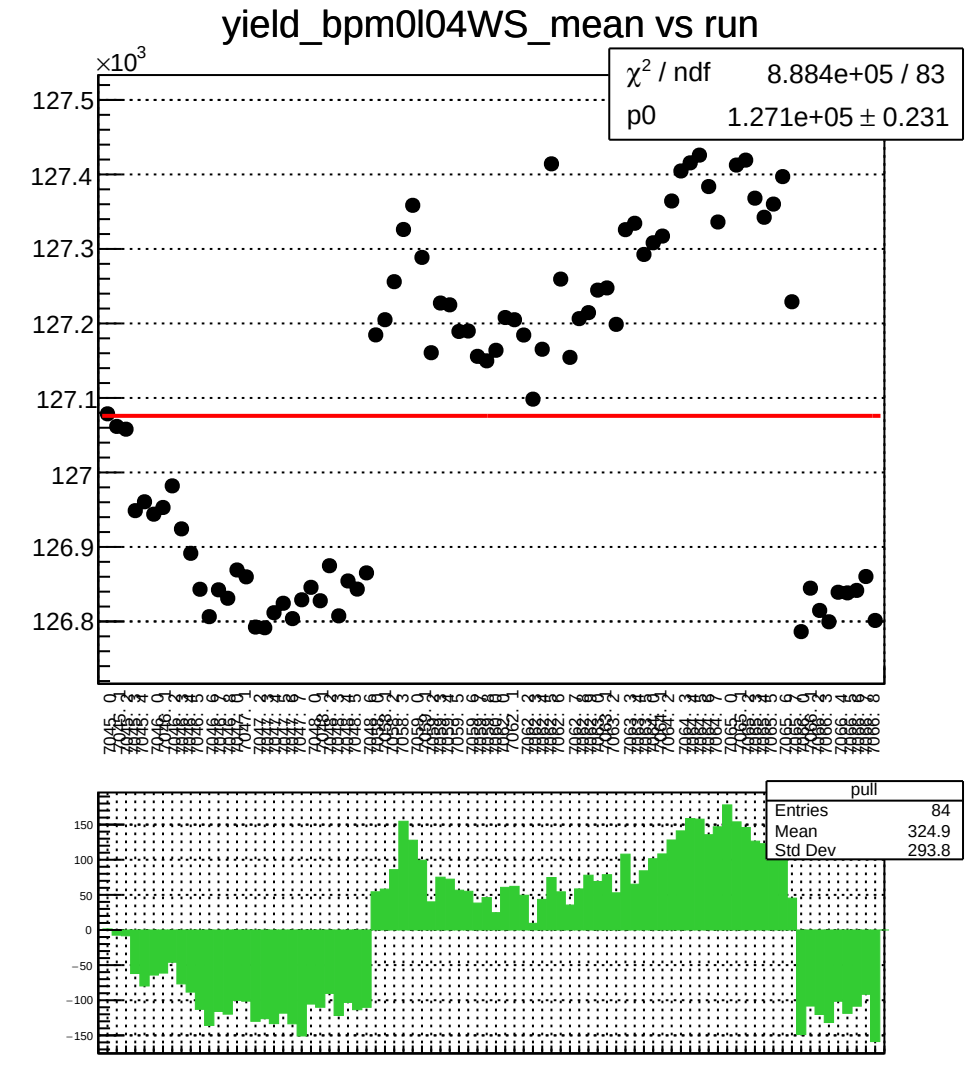

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 4.715e+06 / 83
p0 1.38e+05 ± 0.2961
139
138.5
138
137.5
137
136.5
pull
Entries 84
Mean −2942
Std Dev 2975
400
200
0
−200
−400
−600
pull1D
Entries 84
Mean −4.124
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

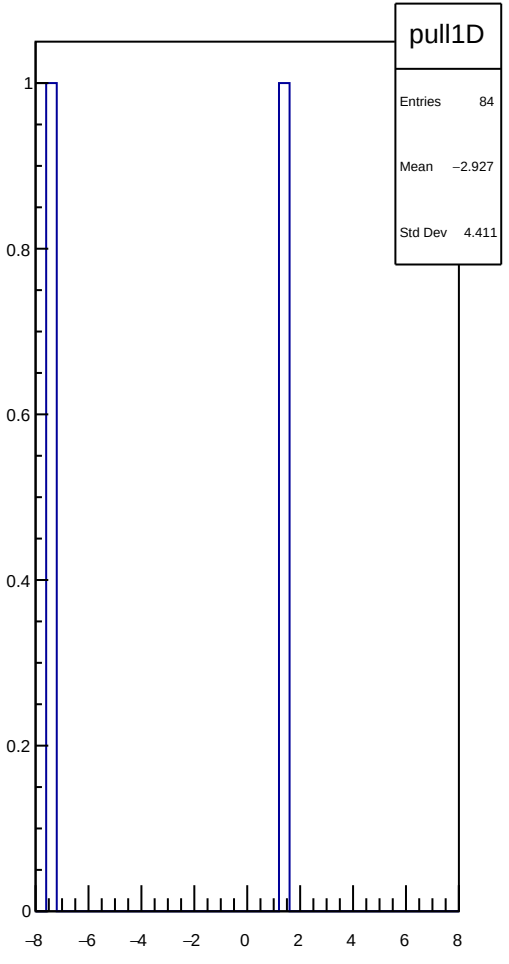

yield_bpm0l02WS_rms vs run
χ² / ndf 7116 / 83
p0 263.8 ± 0.2094
420
400
380
360
340
320
300
280
260
240
220

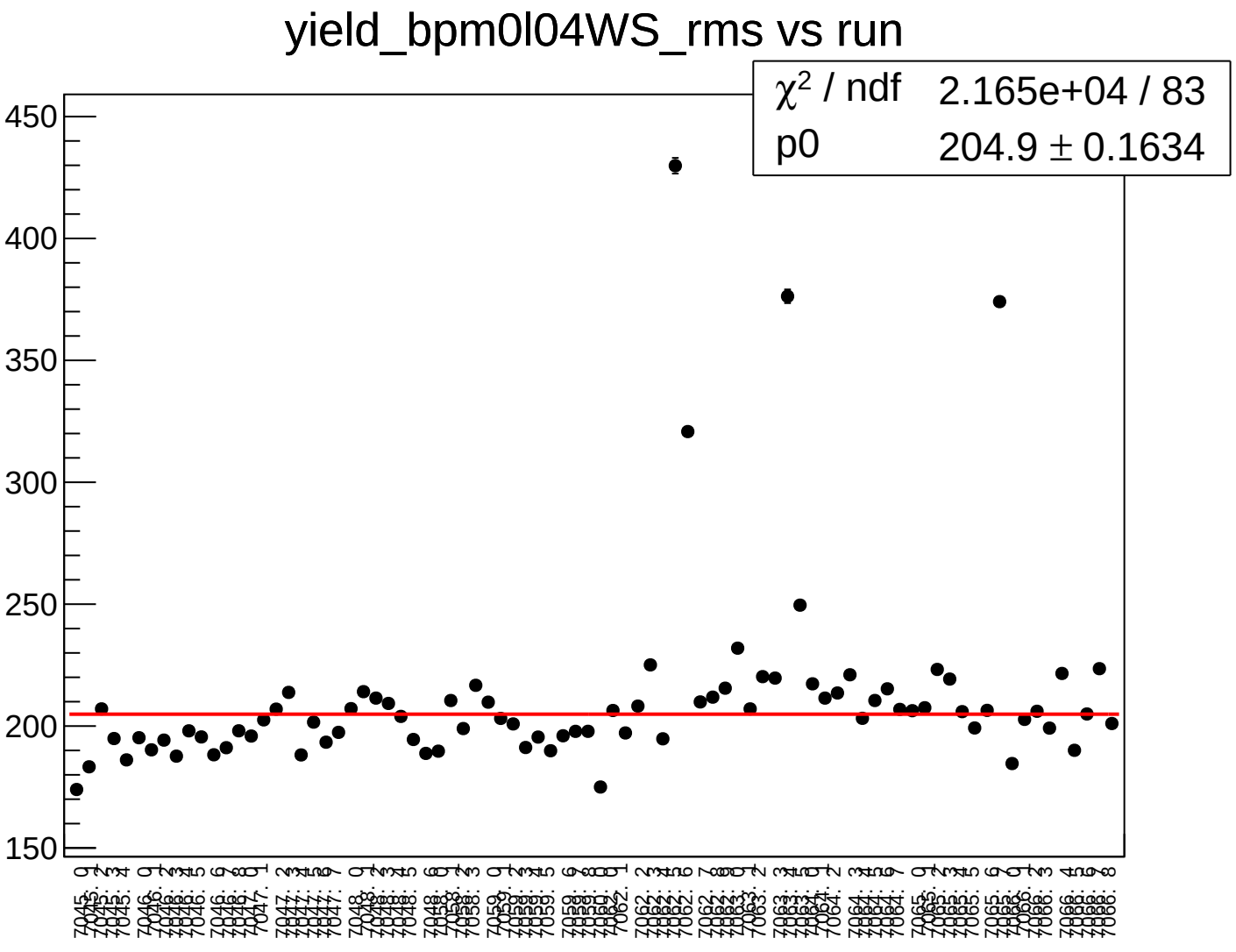

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 7.78e+04 / 83
p0 1.341e+05 ± 0.8417
134.5
134
133.5
133
132.5
pull
Entries 84
Mean 33.83
Std Dev 9.783
60
40
20
0
−20
−40
−60
−80

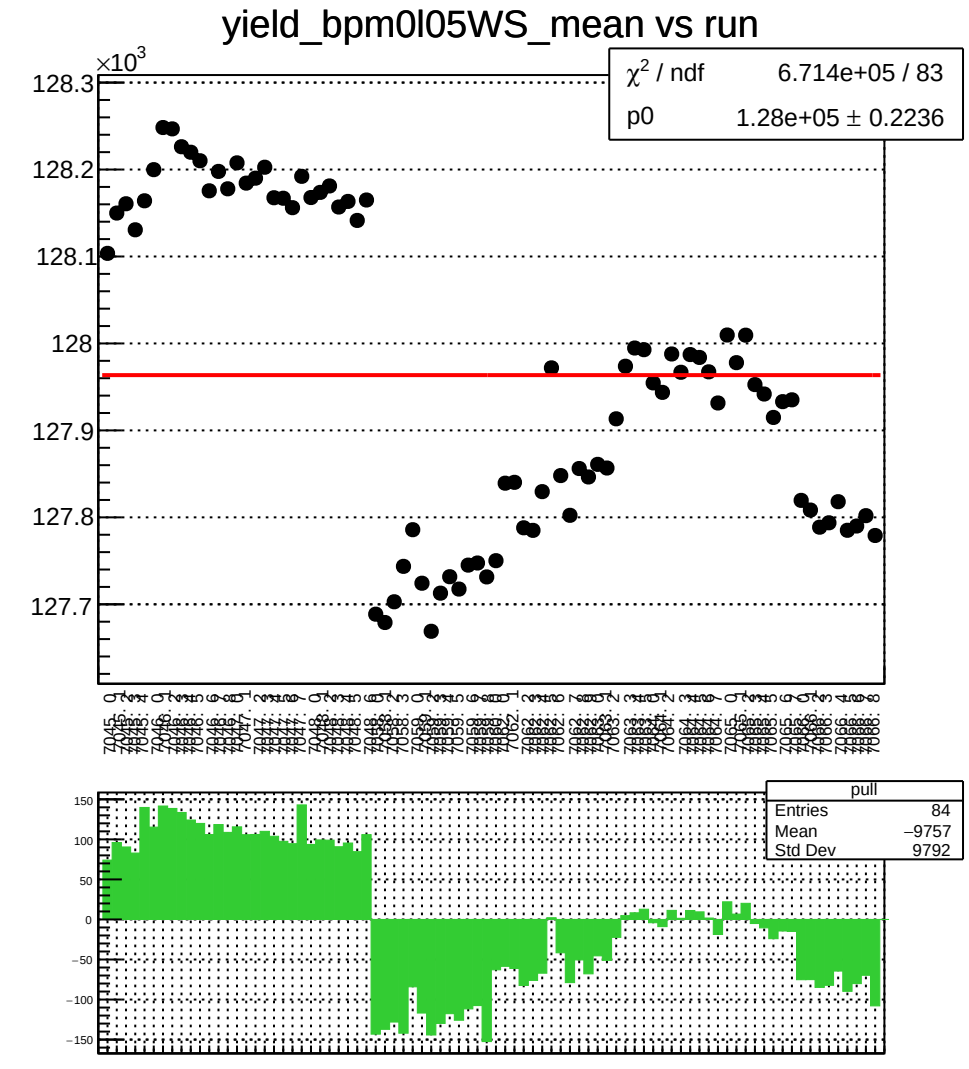

pull1D
Entries 84
Mean −1.131
Std Dev 5.633
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

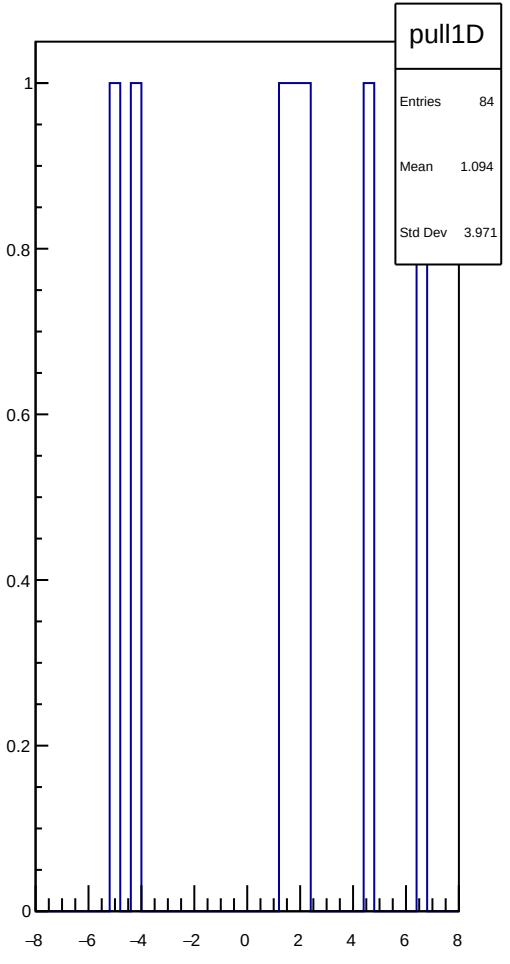

yield_bpm0l03WS_rms vs run
χ^2 / ndf 1.932e+05 / 83
p0 704.6 ± 0.5952
3000
2500
2000
1500
1000
500

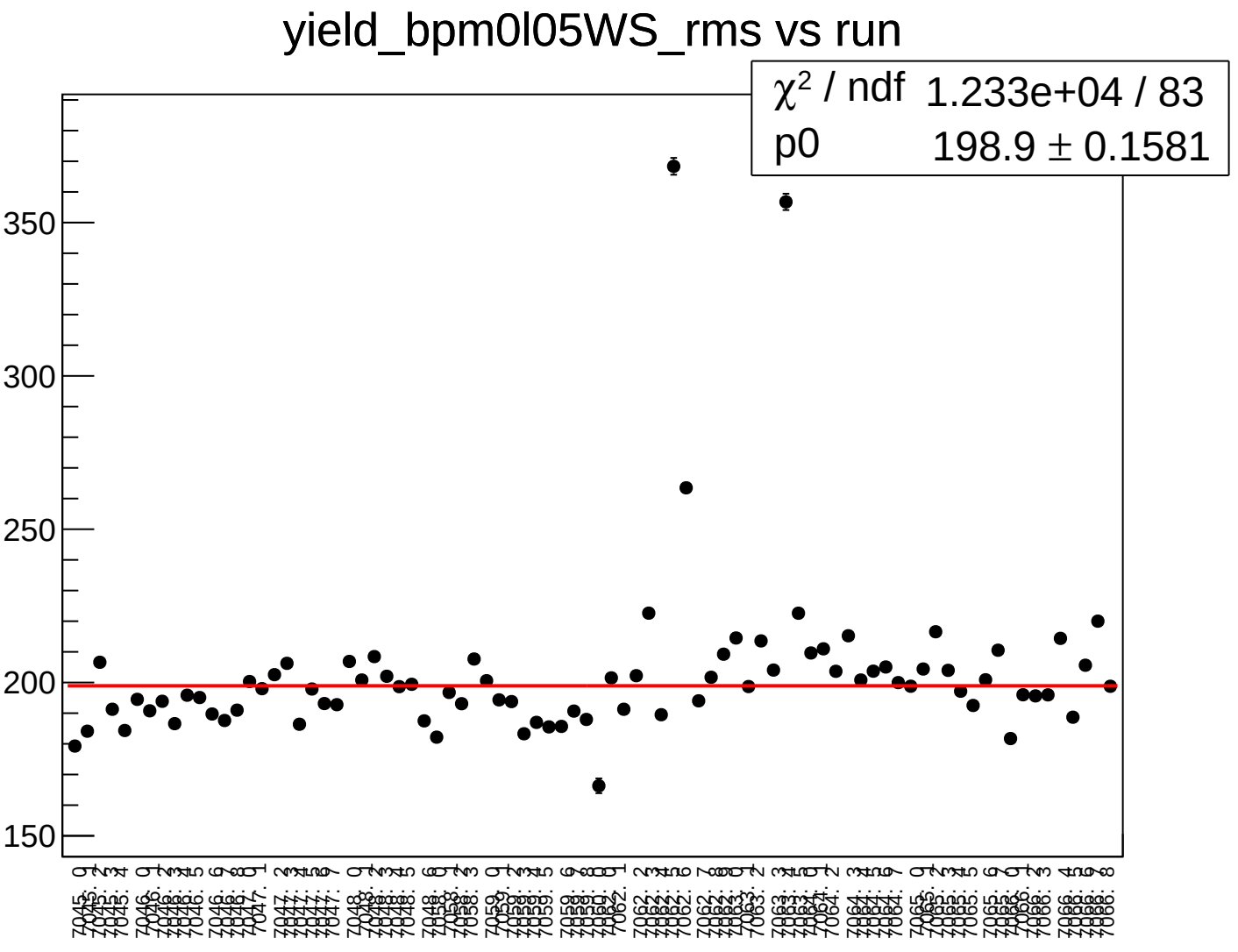

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 8.884e+05 / 83
p0 1.271e+05 ± 0.231
127.5
127.4
127.3
127.2
127.1
127
126.9
126.8
pull
Entries 84
Mean 324.9
Std Dev 293.8
150
100
50
0
−50
−100
−150

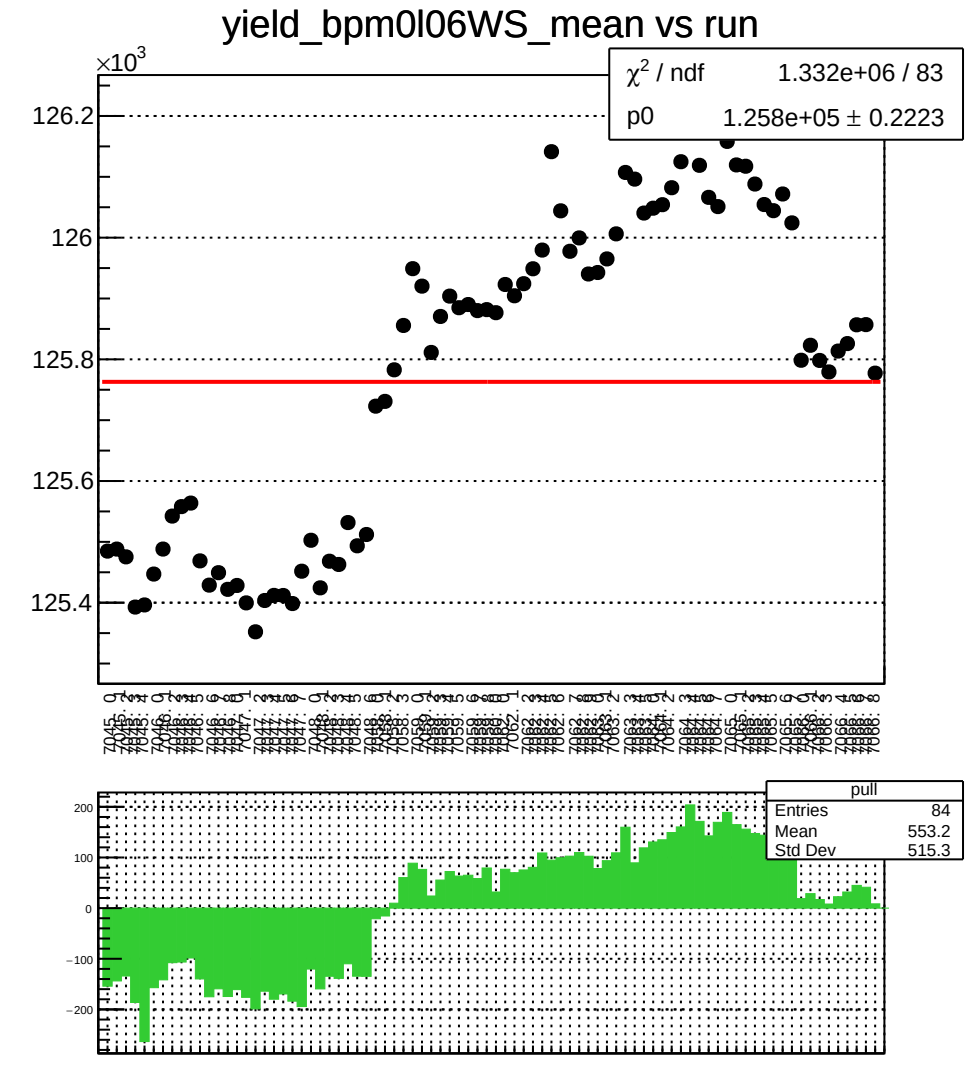

pull1D
Entries 84
Mean −2.927
Std Dev 4.411
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

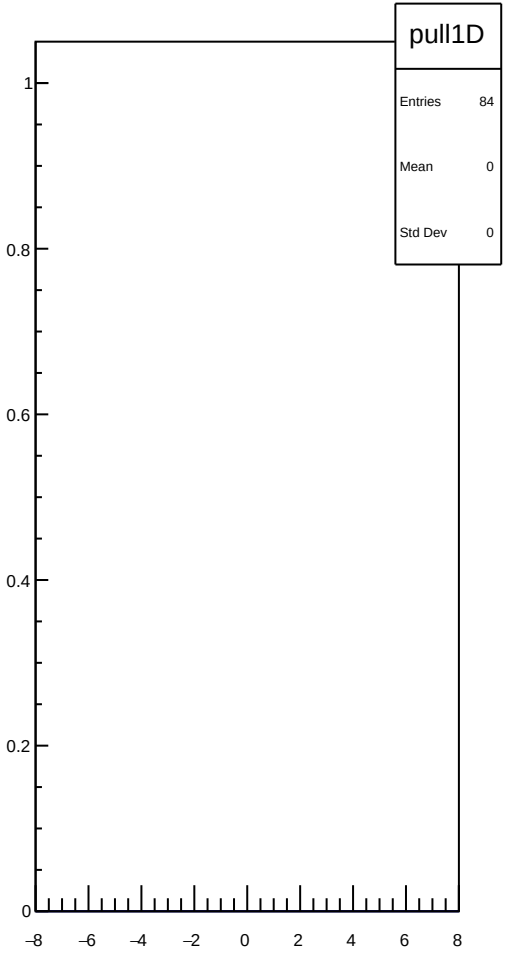

yield_bpm0l04WS_rms vs run
χ² / ndf 2.165e+04 / 83
p0 204.9 ± 0.1634
450
400
350
300
250
200
150

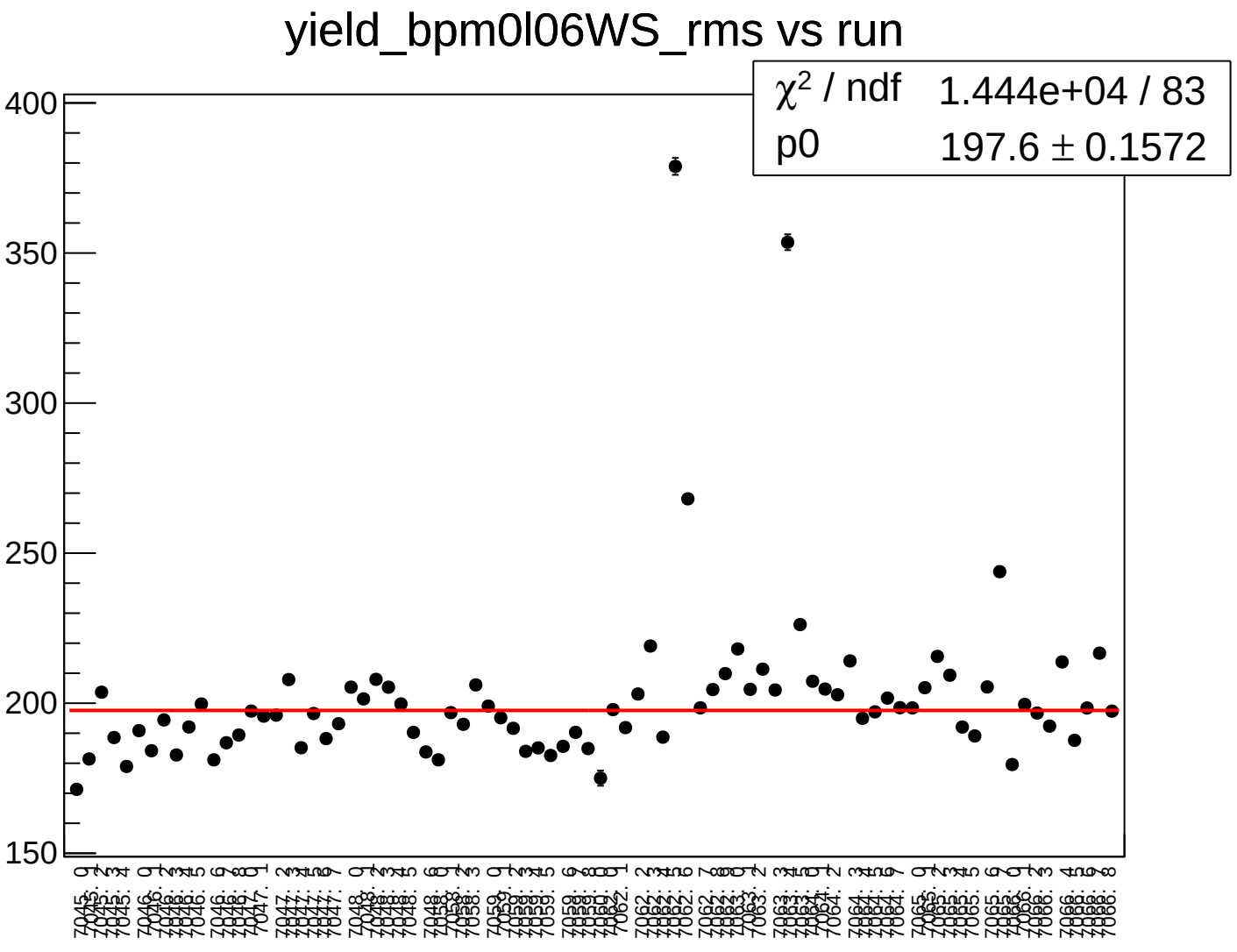

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 6.714e+05 / 83
p0 1.28e+05 ± 0.2236
128.3
128.2
128.1
128
127.9
127.8
127.7
pull
Entries 84
Mean −9757
Std Dev 9792
150
100
50
0
−50
−100
−150

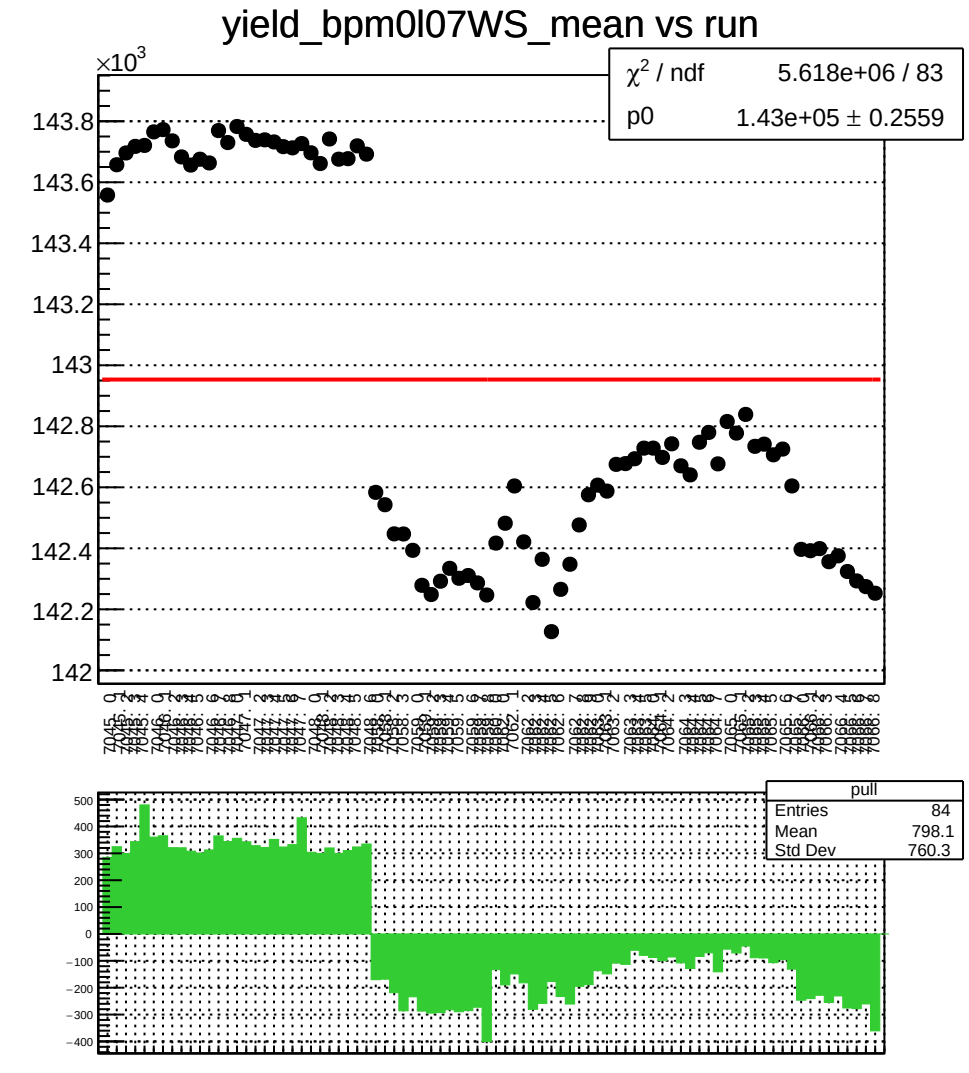

pull1D
Entries 84
Mean 1.094
Std Dev 3.971
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

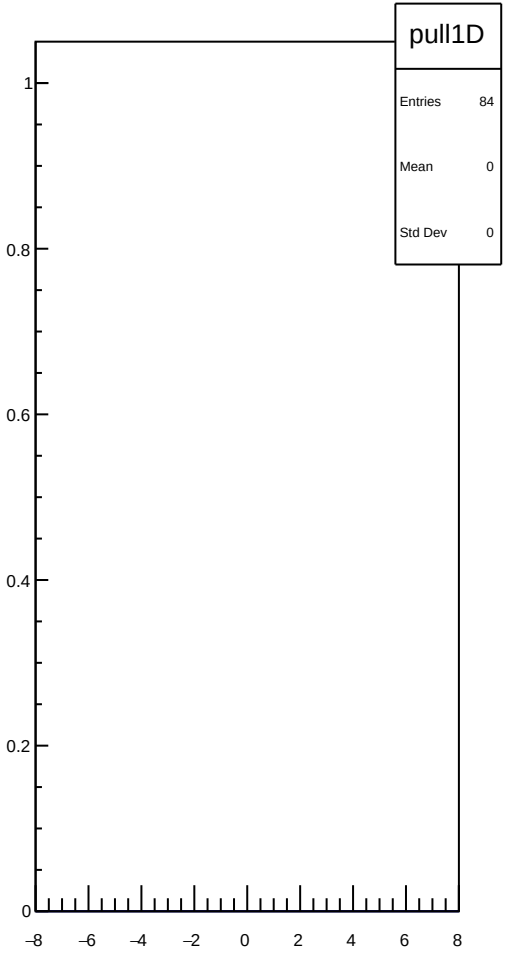

yield_bpm0l05WS_rms vs run
χ² / ndf 1.233e+04 / 83
p0 198.9 ± 0.1581
350
300
250
200
150

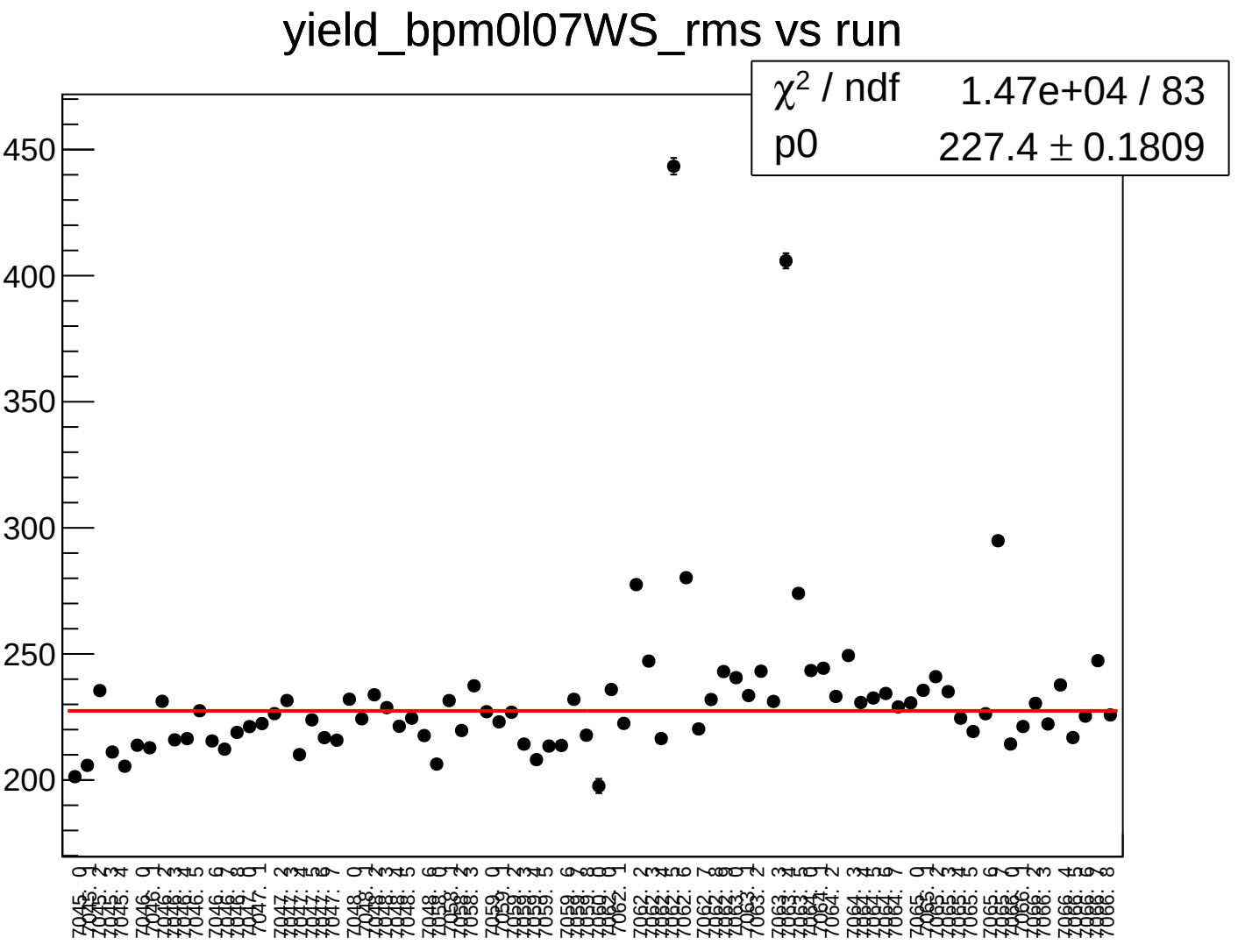

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 1.332e+06 / 83
p0 1.258e+05 ± 0.2223
126.2
126
125.8
125.6
125.4
pull
Entries 84
Mean 553.2
Std Dev 515.3
200
100
0
−100
−200

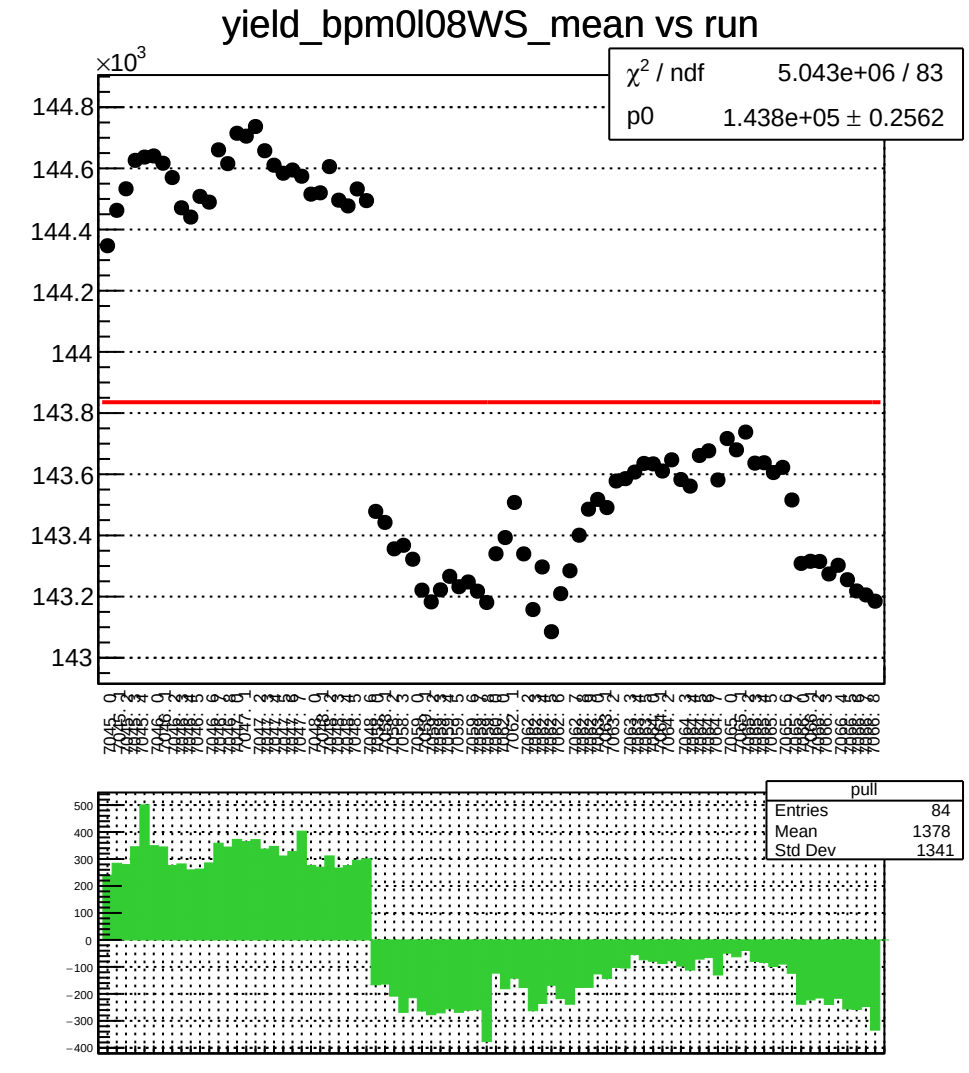

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

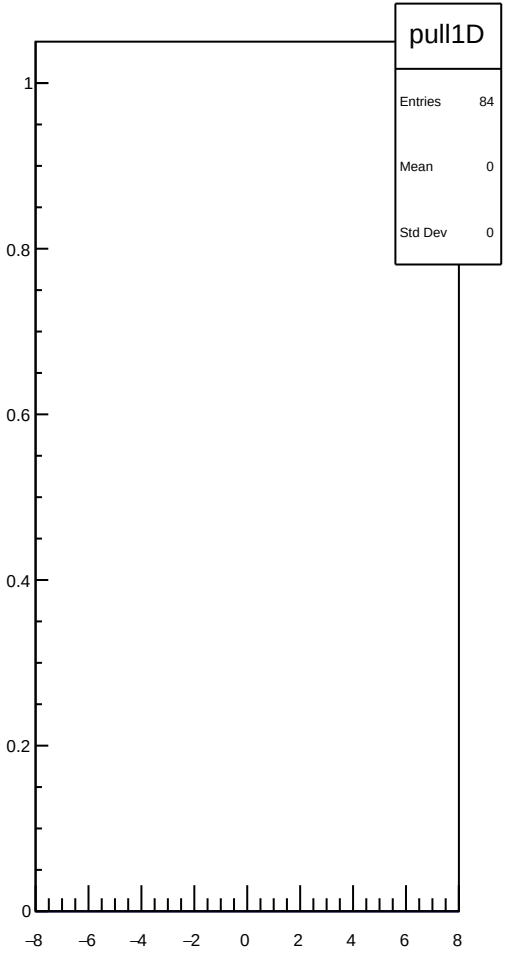

yield_bpm0l06WS_rms vs run
χ² / ndf 1.444e+04 / 83
p0 197.6 ± 0.1572
400
350
300
250
200
150

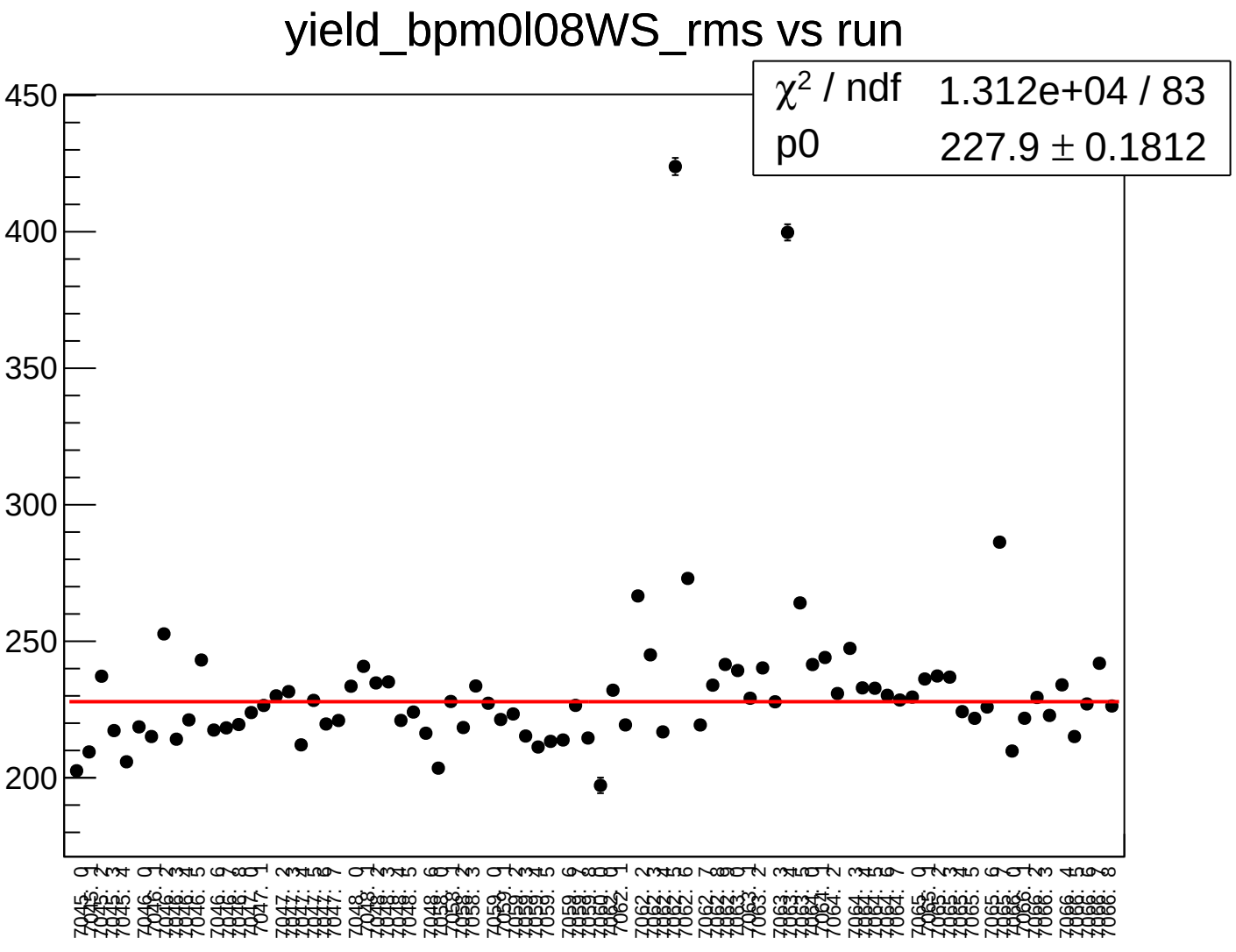

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 5.618e+06 / 83
p0 1.43e+05 ± 0.2559
143.8
143.6
143.4
143.2
143
142.8
142.6
142.4
142.2
142
pull
Entries 84
Mean 798.1
Std Dev 760.3
500
400
300
200
100
0
−100
−200
−300
−400

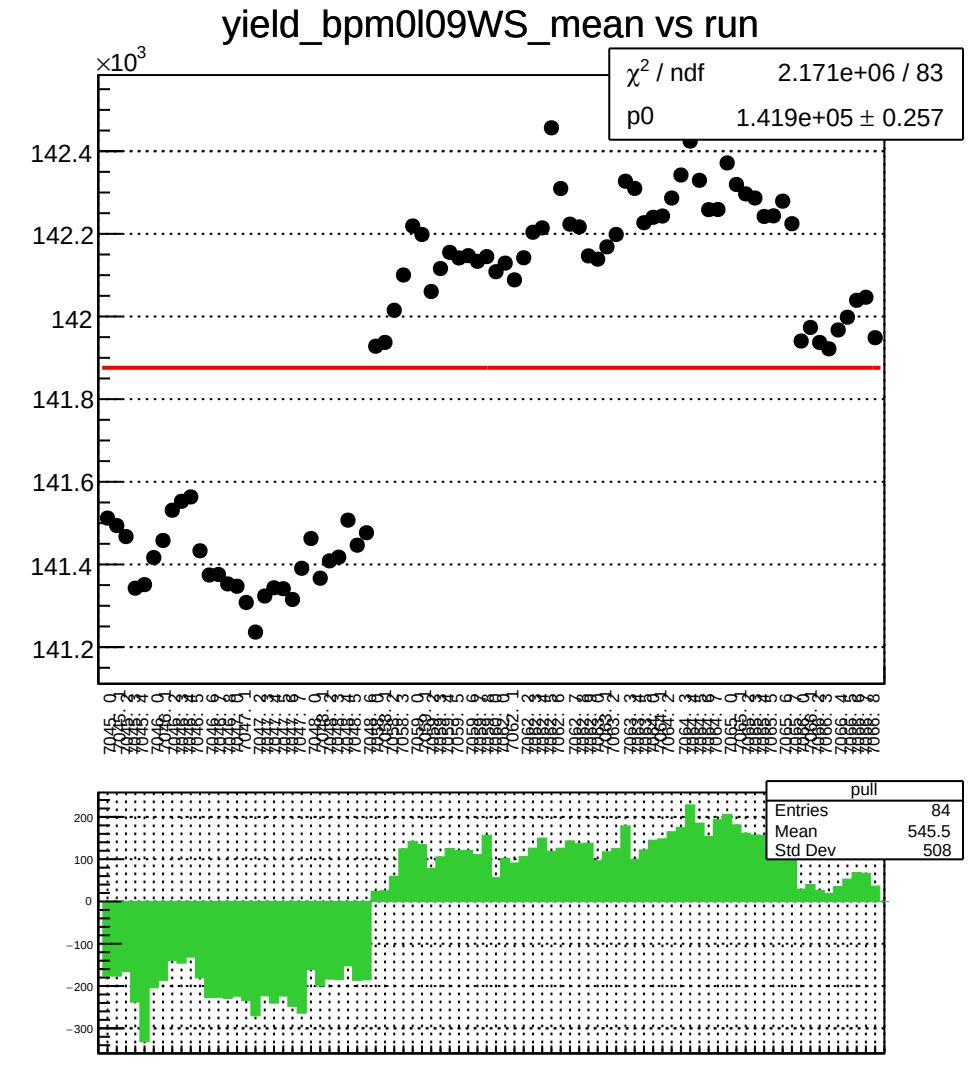

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

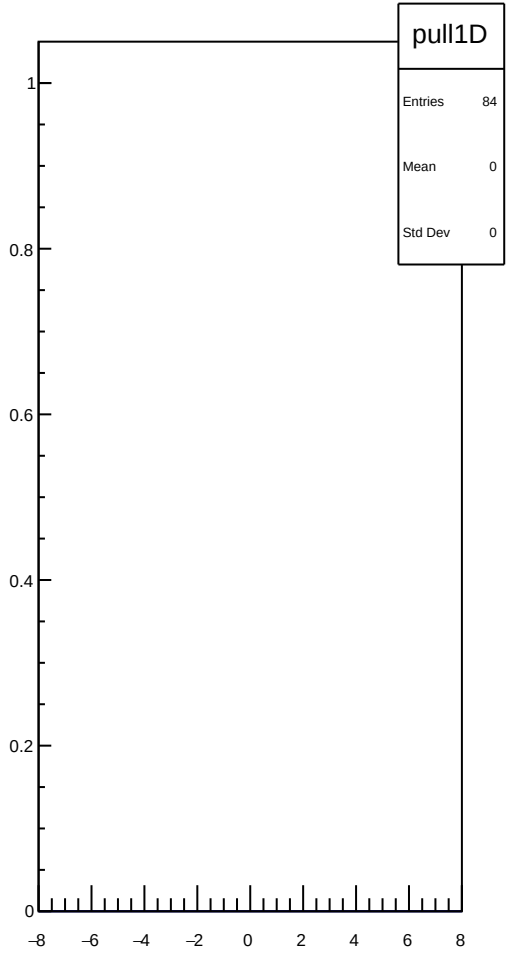

yield_bpm0l07WS_rms vs run
χ² / ndf 1.47e+04 / 83
p0 227.4 ± 0.1809
450
400
350
300
250
200

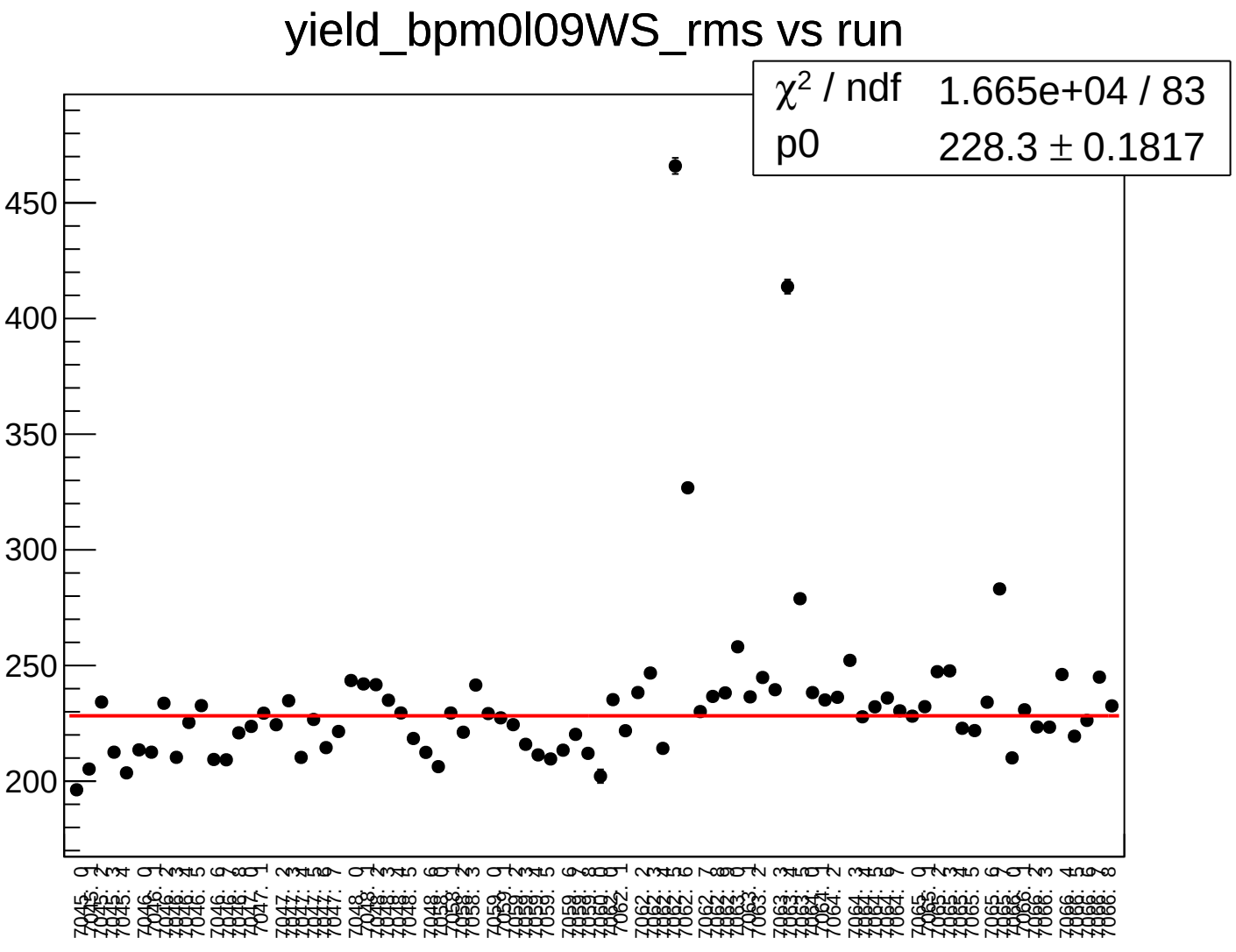

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 5.043e+06 / 83
p0 1.438e+05 ± 0.2562
144.8
144.6
144.4
144.2
144
143.8
143.6
143.4
143.2
143
pull
Entries 84
Mean 1378
Std Dev 1341
500
400
300
200
100
0
−100
−200
−300
−400

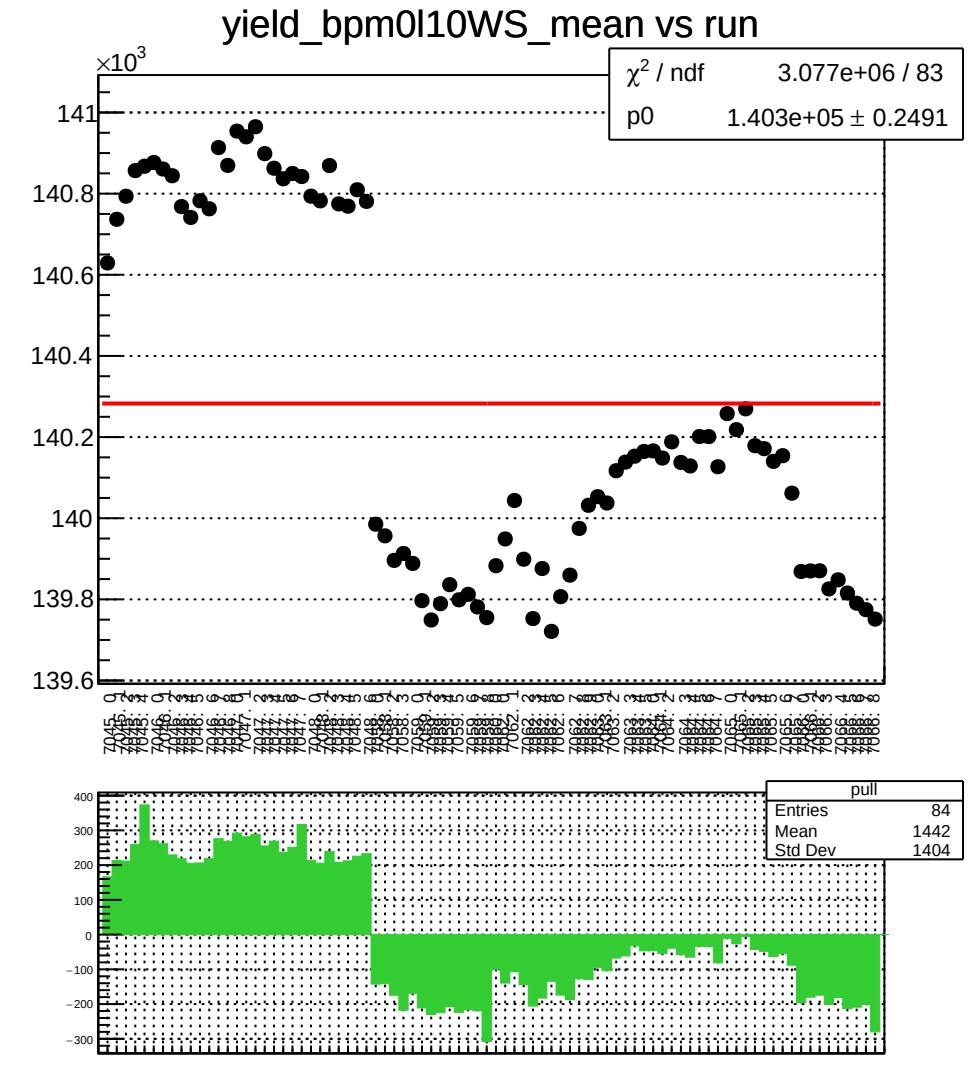

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

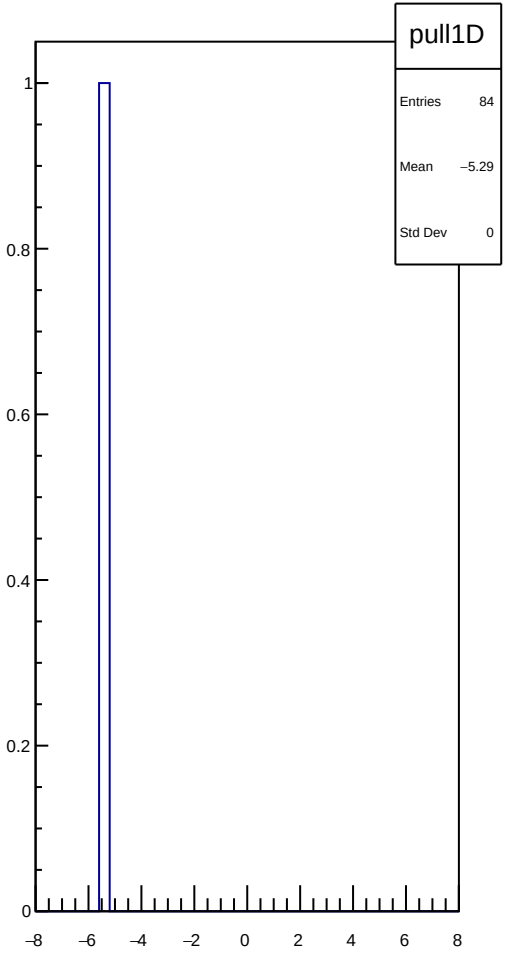

yield_bpm0l08WS_rms vs run
χ^2 / ndf 1.312e+04 / 83
p0 227.9 ± 0.1812
450
400
350
300
250
200

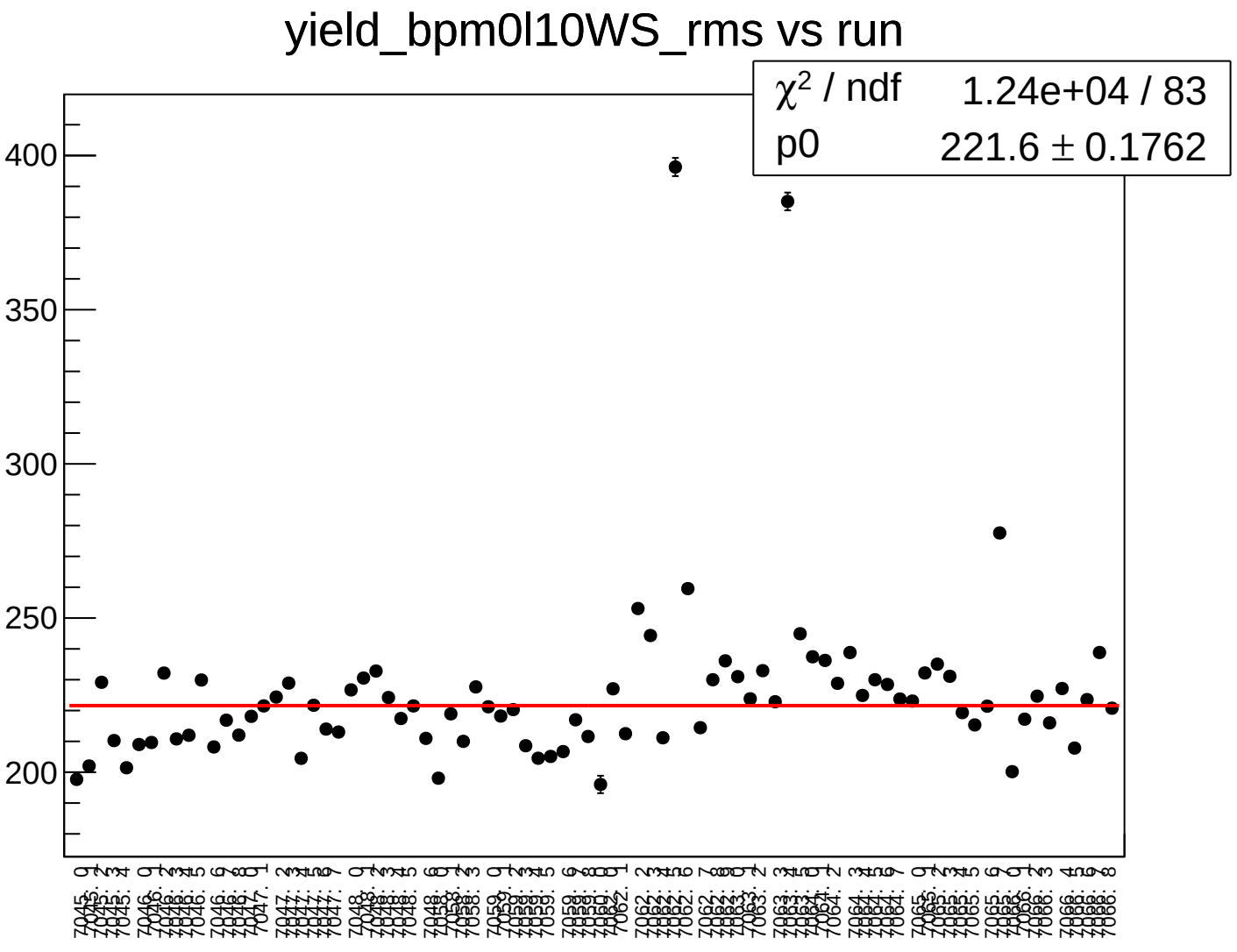

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 2.171e+06 / 83
p0 1.419e+05 ± 0.257
142.4
142.2
142
141.8
141.6
141.4
141.2
pull
Entries 84
Mean 545.5
Std Dev 508
200
100
0
−100
−200
−300

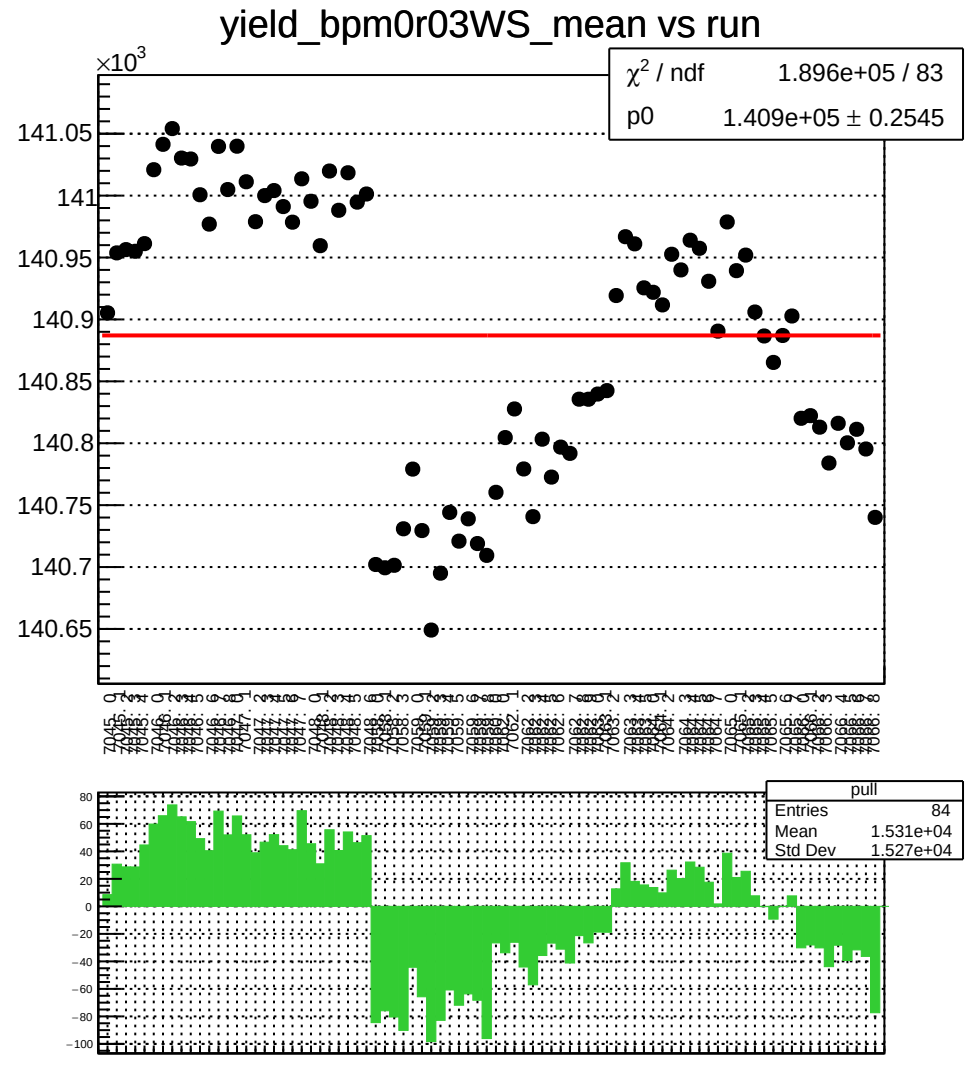

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

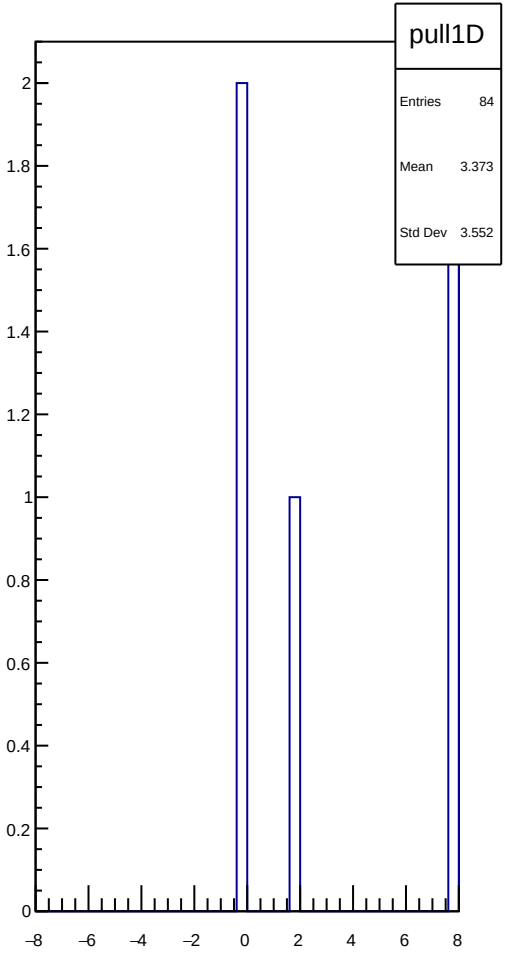

yield_bpm0l09WS_rms vs run
χ² / ndf 1.665e+04 / 83
p0 228.3 ± 0.1817
450
400
350
300
250
200

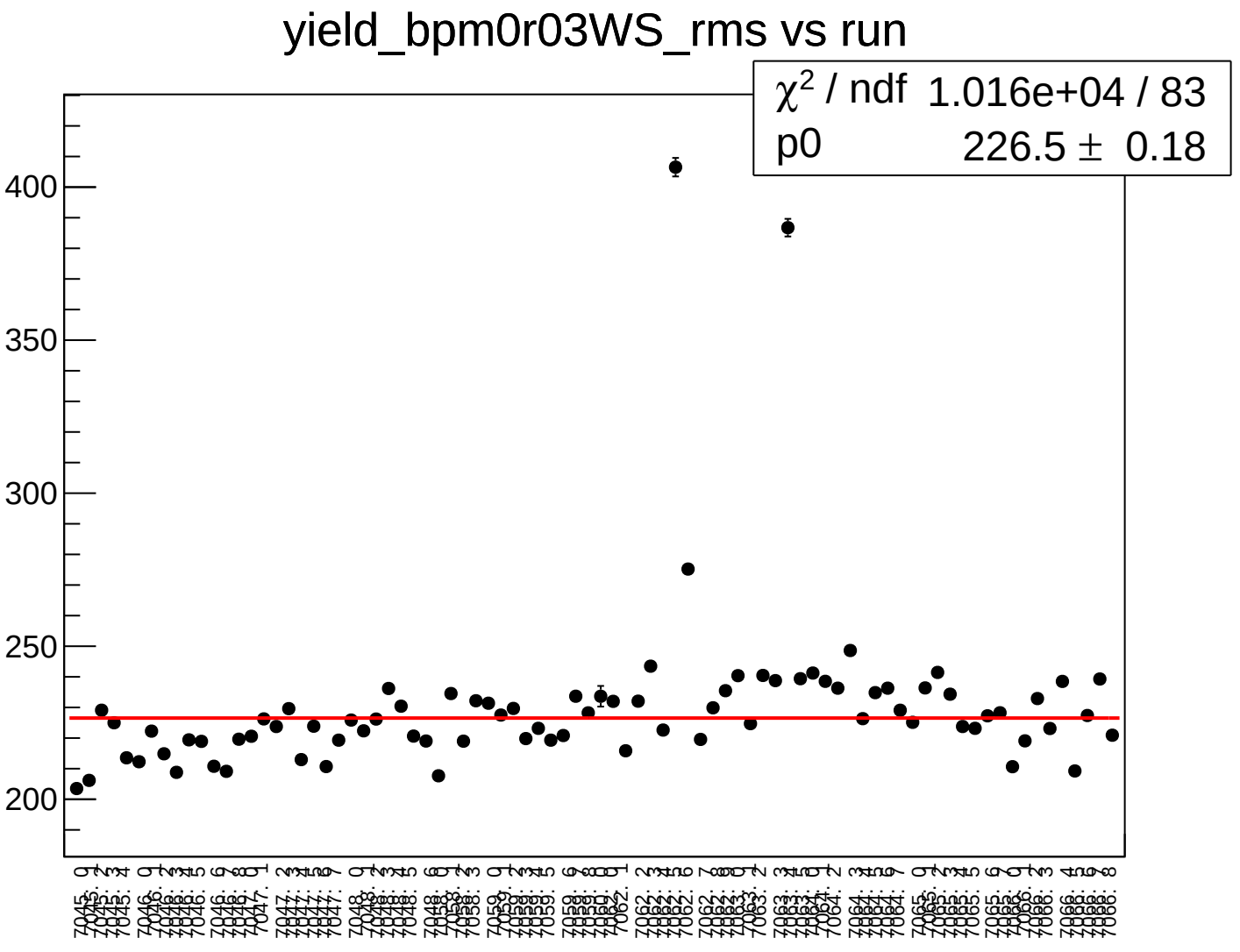

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 3.077e+06 / 83
p0 1.403e+05 ± 0.2491
141
140.8
140.6
140.4
140.2
140
139.8
139.6
pull
Entries 84
Mean 1442
Std Dev 1404
400
300
200
100
0
−100
−200
−300

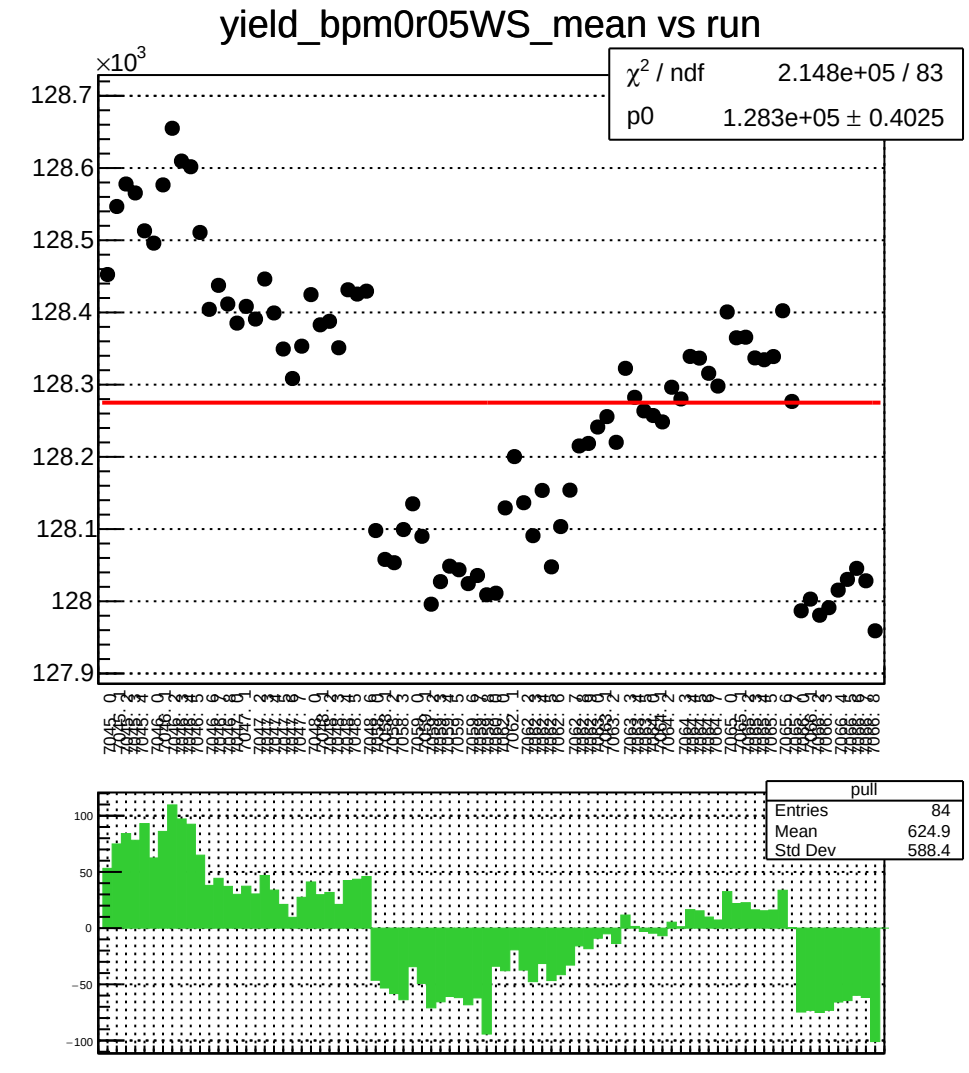

pull1D
Entries 84
Mean −5.29
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

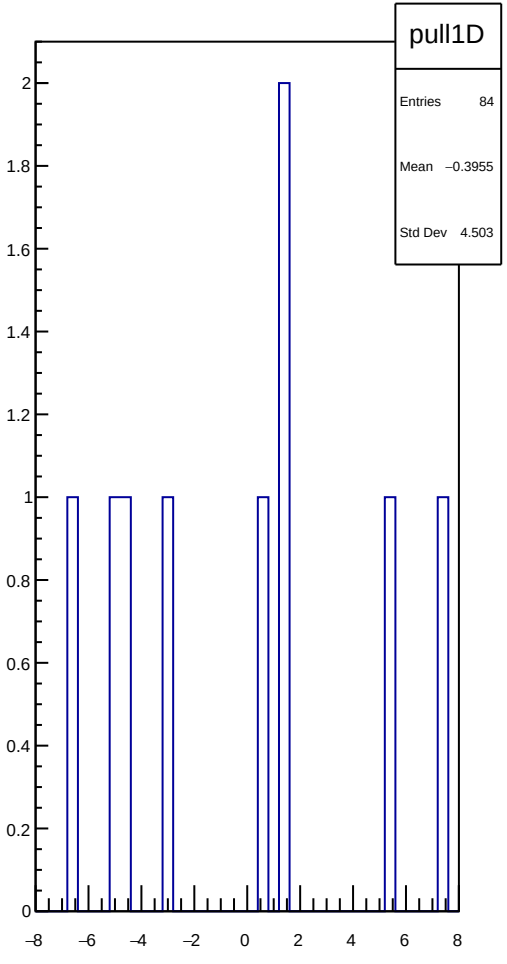

yield_bpm0l10WS_rms vs run
χ² / ndf 1.24e+04 / 83
p0 221.6 ± 0.1762
400
350
300
250
200

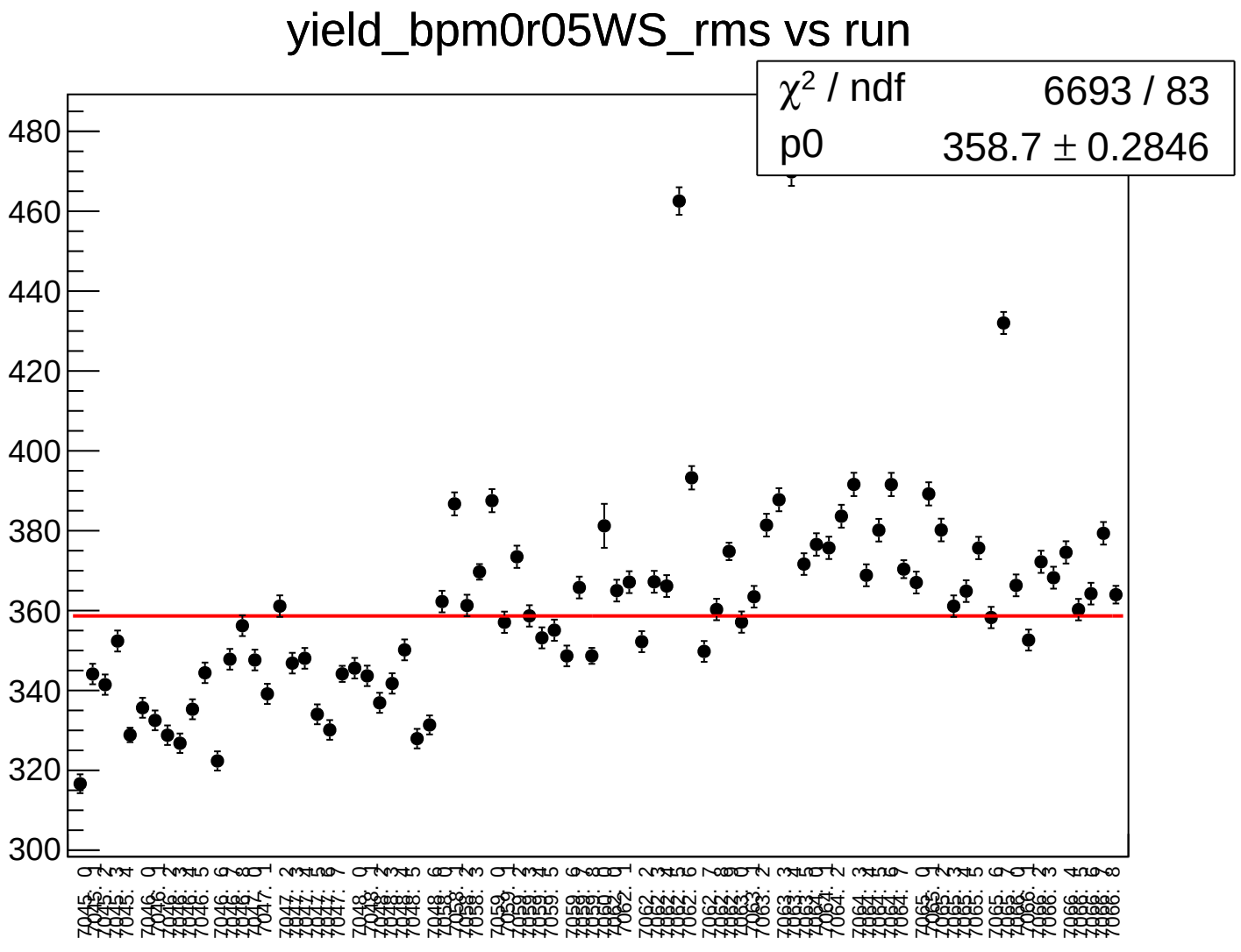

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 1.896e+05 / 83
p0 1.409e+05 ± 0.2545
141.05
141
140.95
140.9
140.85
140.8
140.75
140.7
140.65
pull
Entries 84
Mean 1.531e+04
Std Dev 1.527e+04
80
60
40
20
0
−20
−40
−60
−80
−100

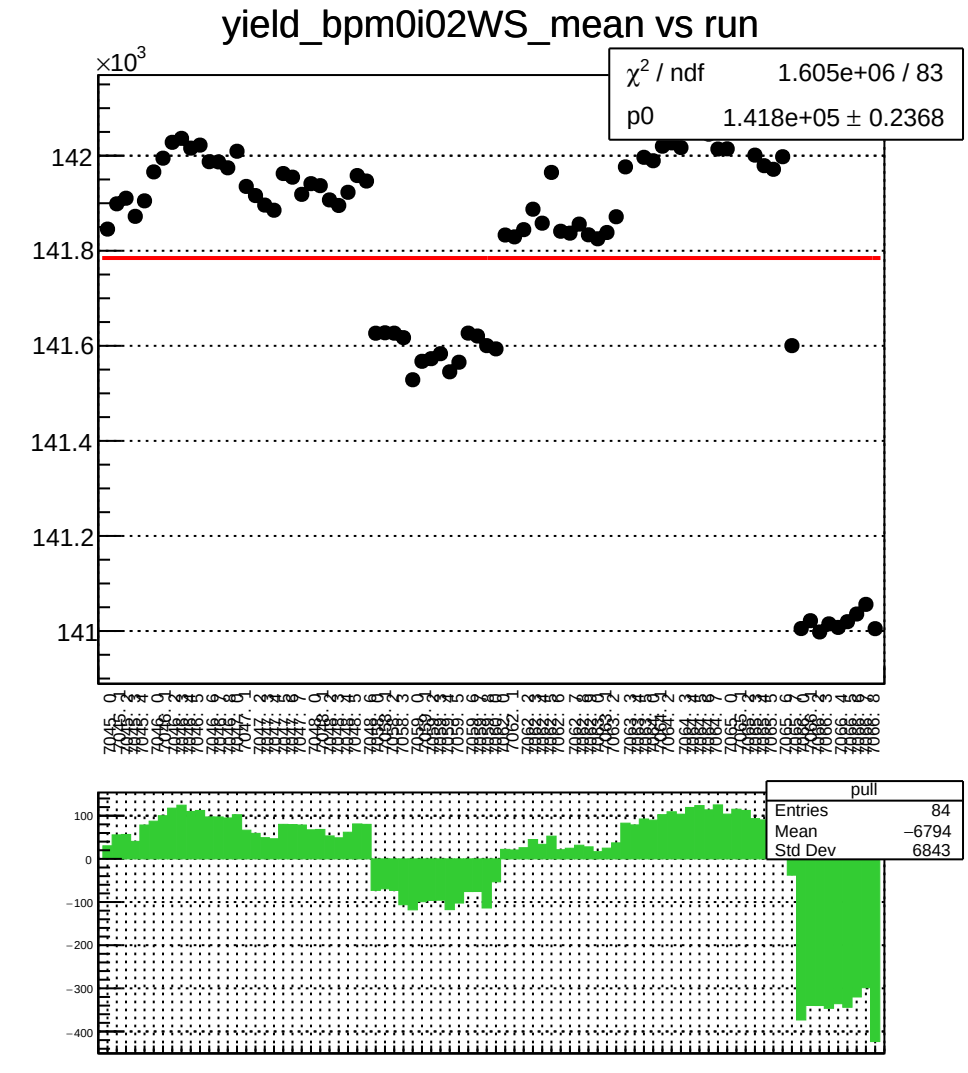

pull1D
Entries 84
Mean 3.373
Std Dev 3.552
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

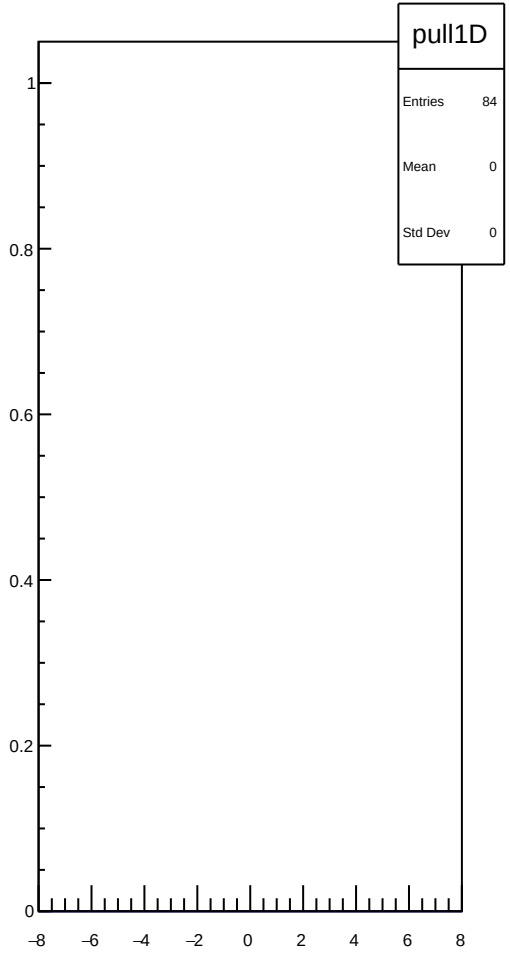

yield_bpm0r03WS_rms vs run
χ² / ndf 1.016e+04 / 83
p0 226.5 ± 0.18
400
350
300
250
200

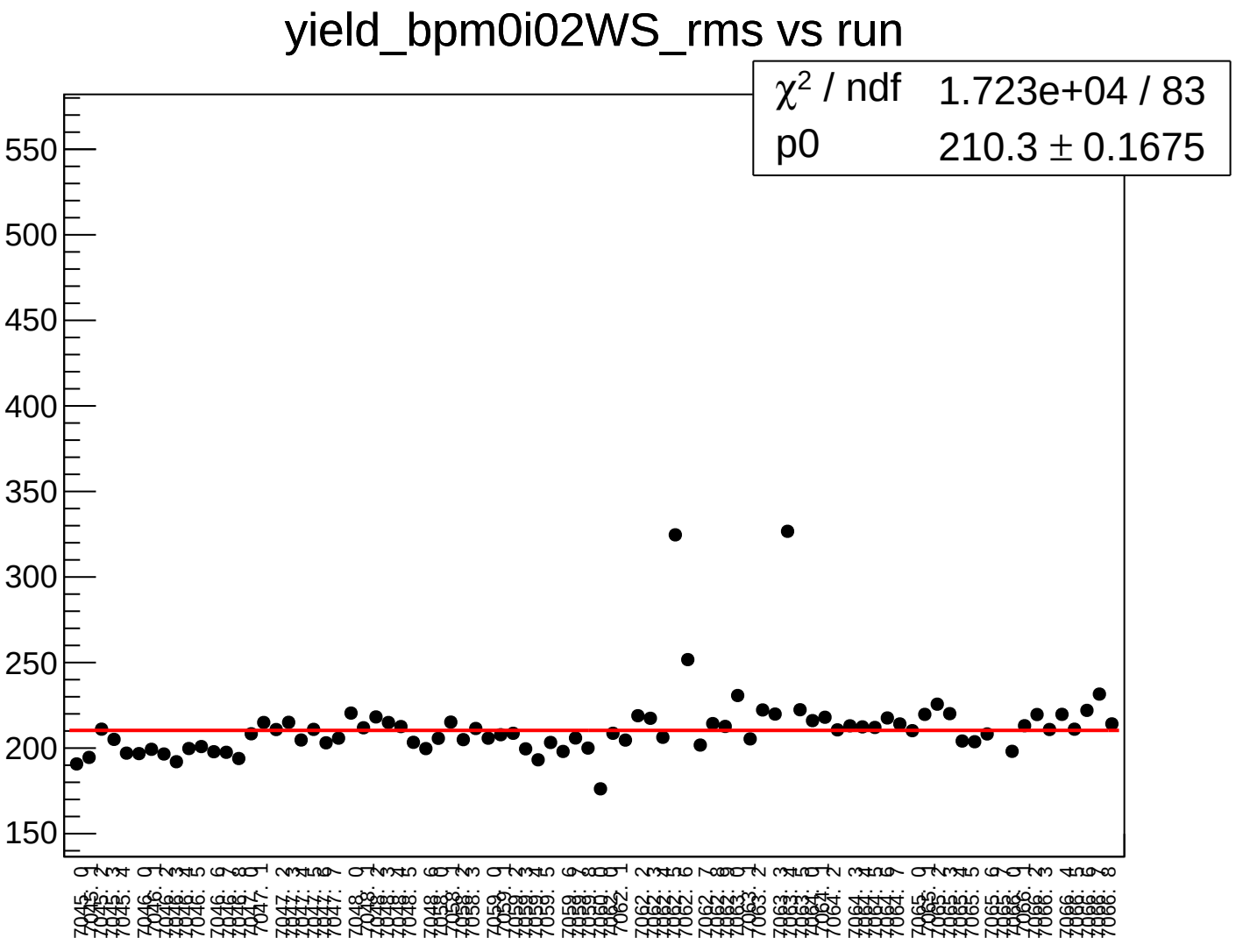

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 2.148e+05 / 83
p0 1.283e+05 ± 0.4025
128.7
128.6
128.5
128.4
128.3
128.2
128.1
128
127.9
pull
Entries 84
Mean 624.9
Std Dev 588.4
100
50
0
−50
−100

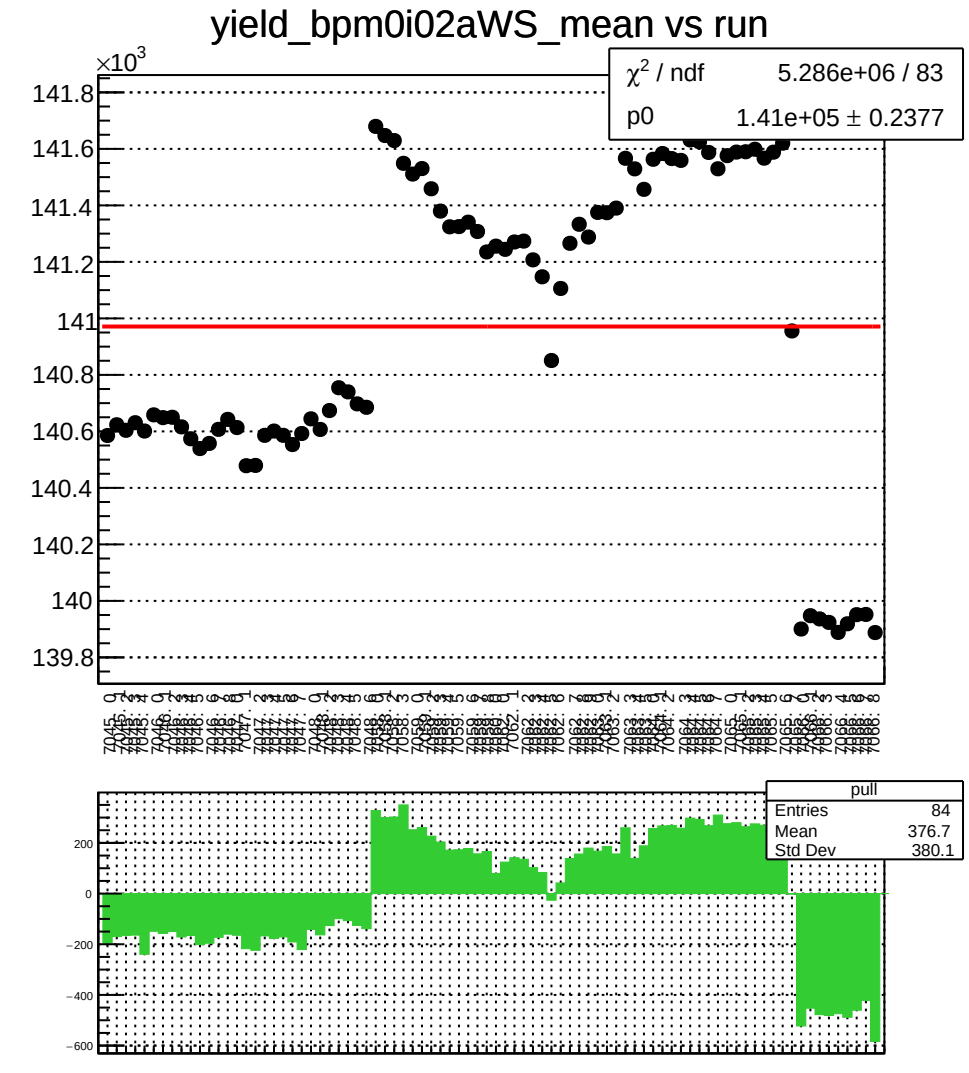

pull1D
Entries 84
Mean −0.3955
Std Dev 4.503
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

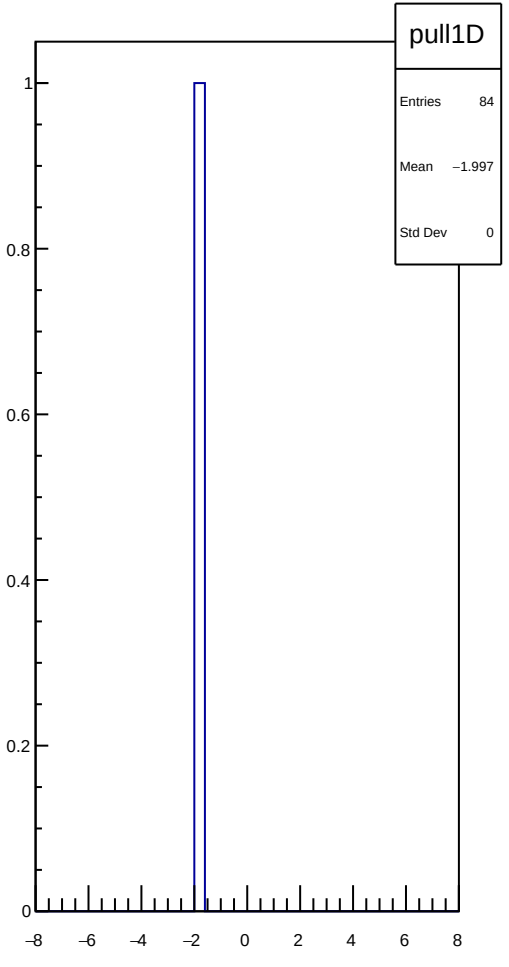

yield_bpm0r05WS_rms vs run
χ² / ndf 6693 / 83
p0 358.7 ± 0.2846
480
460
440
420
400
380
360
340
320
300

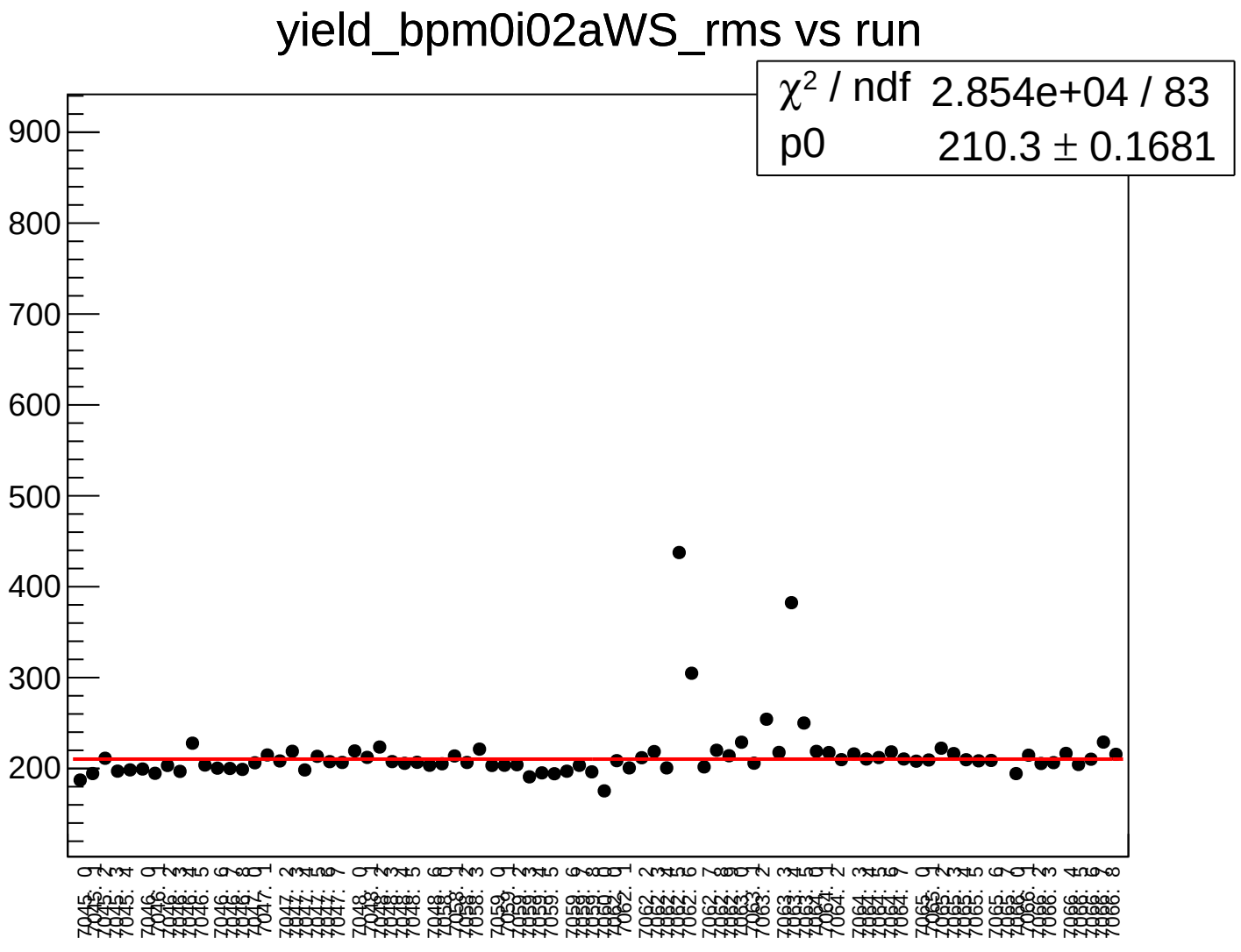

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 1.605e+06 / 83
p0 1.418e+05 ± 0.2368
142
141.8
141.6
141.4
141.2
141
pull
Entries 84
Mean −6794
Std Dev 6843
100
0
−100
−200
−300
−400

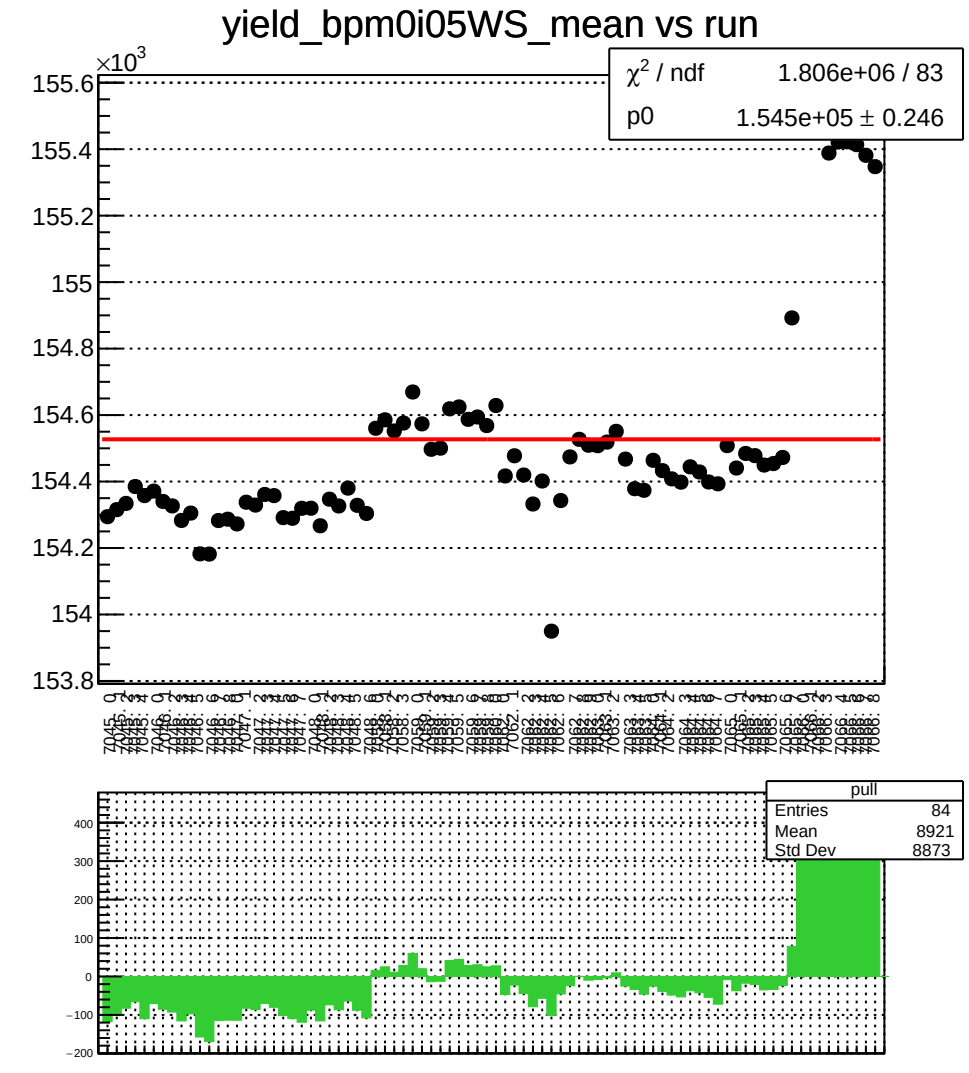

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

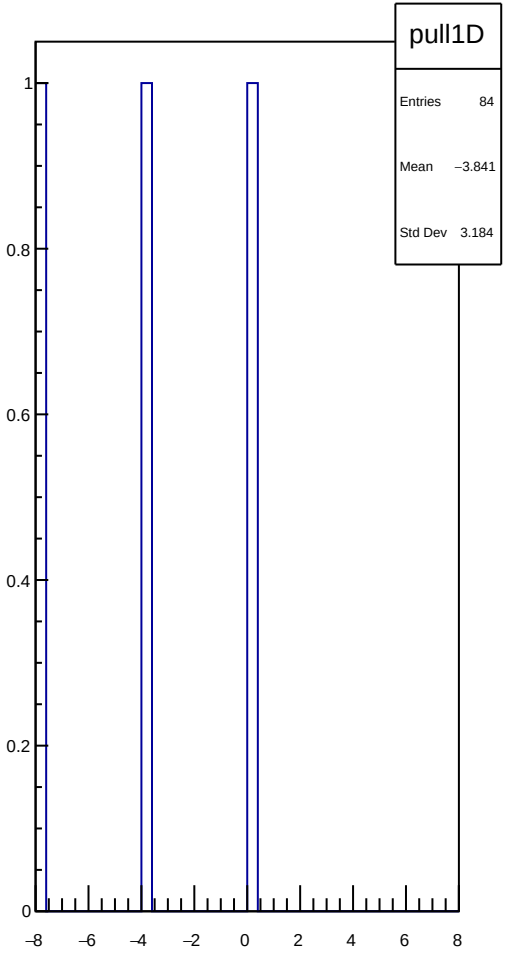

yield_bpm0i02WS_rms vs run
χ² / ndf 1.723e+04 / 83
p0 210.3 ± 0.1675
550
500
450
400
350
300
250
200
150

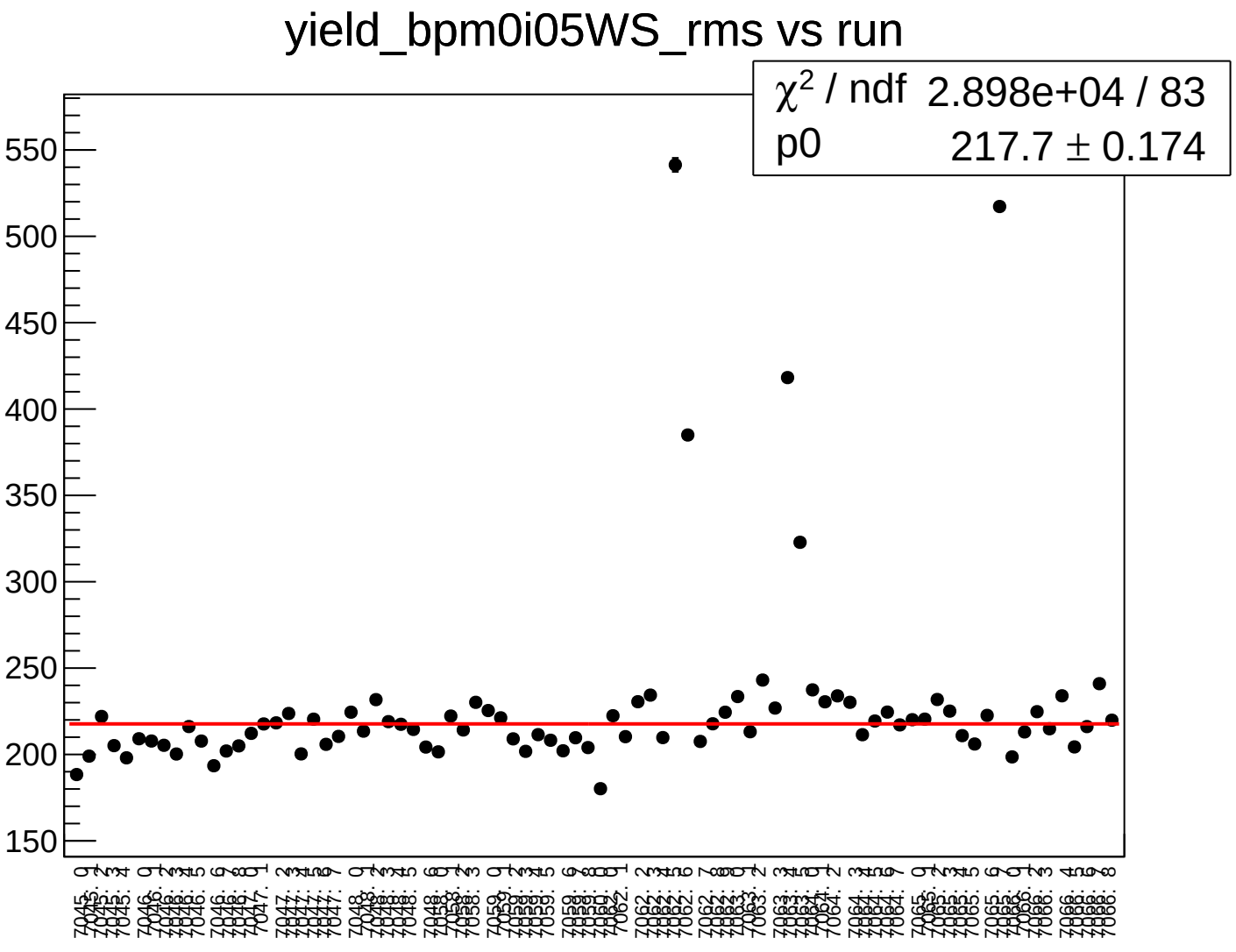

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 5.286e+06 / 83
p0 1.41e+05 ± 0.2377
141.8
141.6
141.4
141.2
141
140.8
140.6
140.4
140.2
140
139.8
pull
Entries 84
Mean 376.7
Std Dev 380.1
200
0
−200
−400
−600

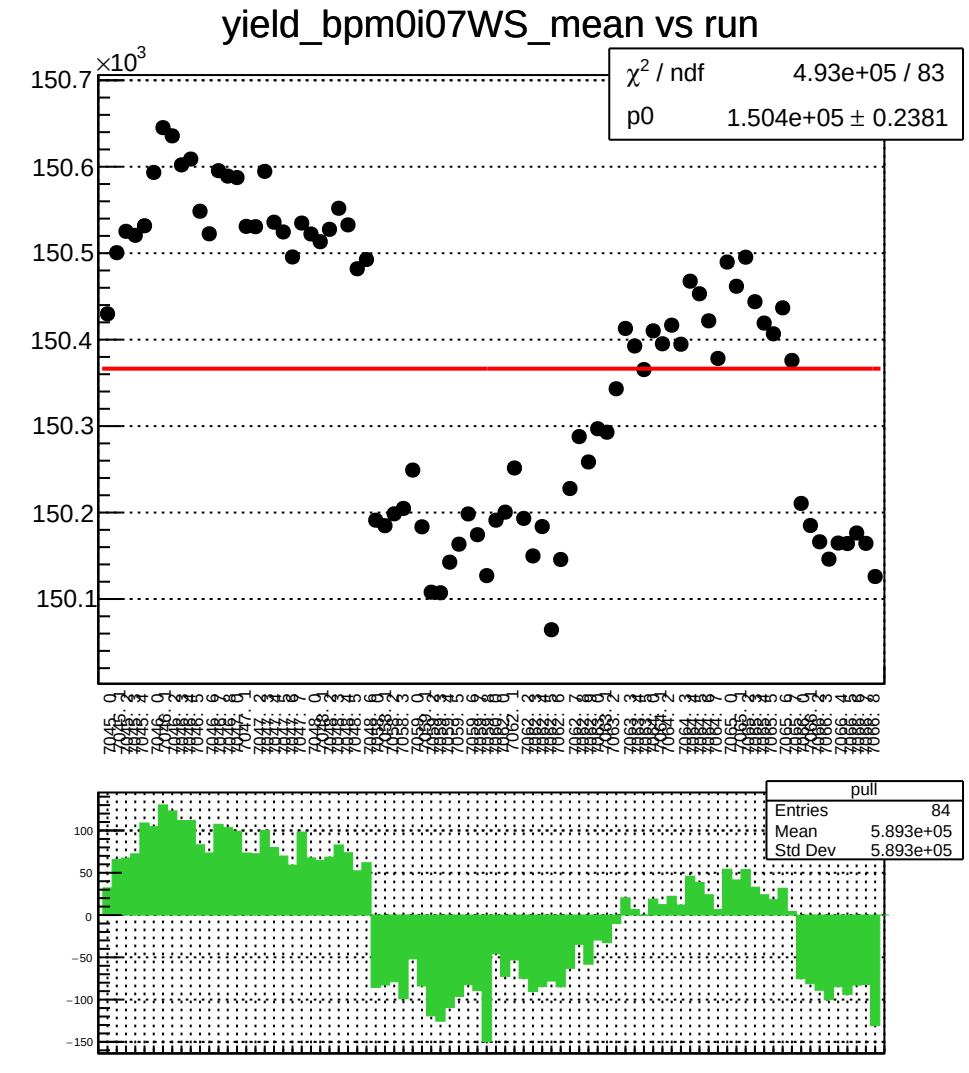

pull1D
Entries 84
Mean −1.997
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

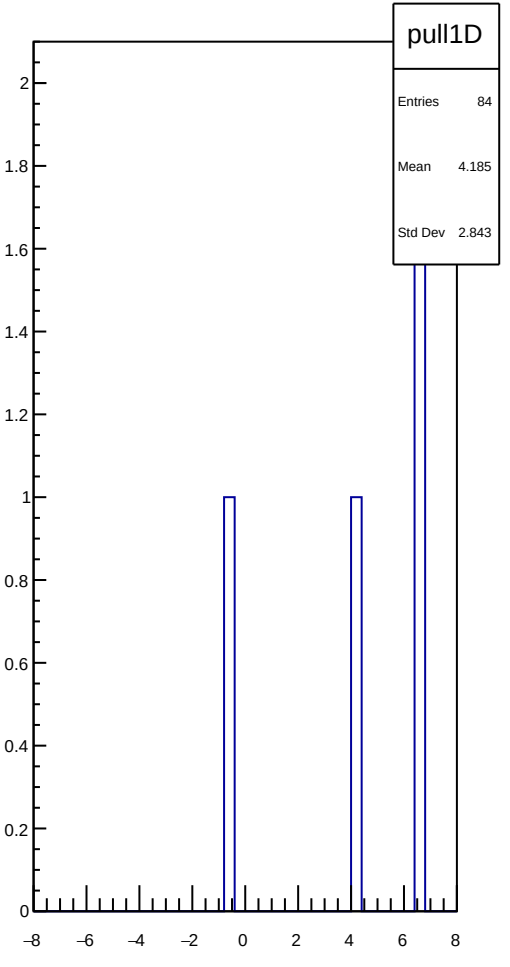

yield_bpm0i02aWS_rms vs run
χ² / ndf 2.854e+04 / 83
p0 210.3 ± 0.1681
900
800
700
600
500
400
300
200

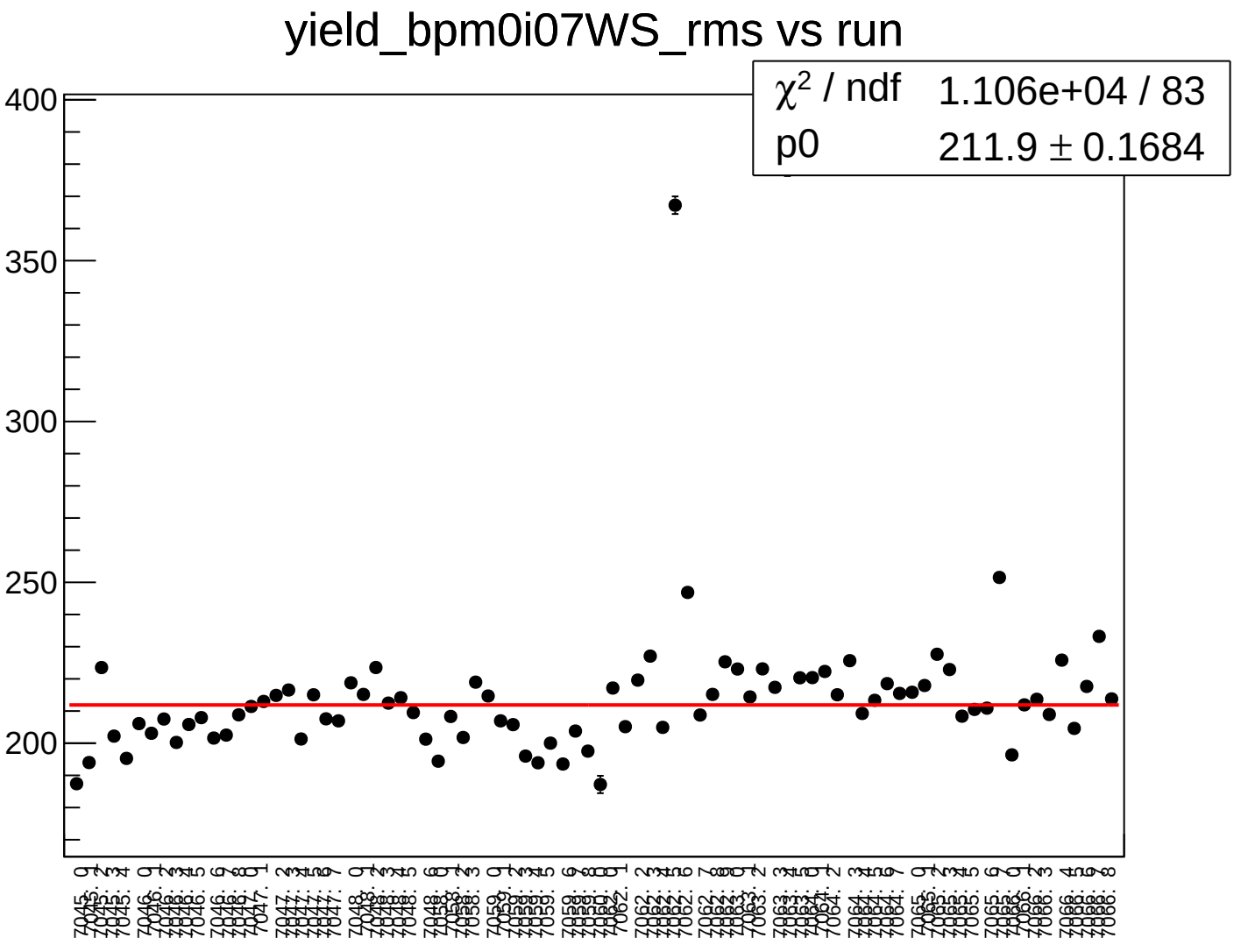

yield_bpm0i05WS_mean vs run
×10^3
155.6
155.4
155.2
155
154.8
154.6
154.4
154.2
154
153.8
χ² / ndf 1.806e+06 / 83
p0 1.545e+05 ± 0.246
pull
Entries 84
Mean 8921
Std Dev 8873
400
300
200
100
0
−100
−200

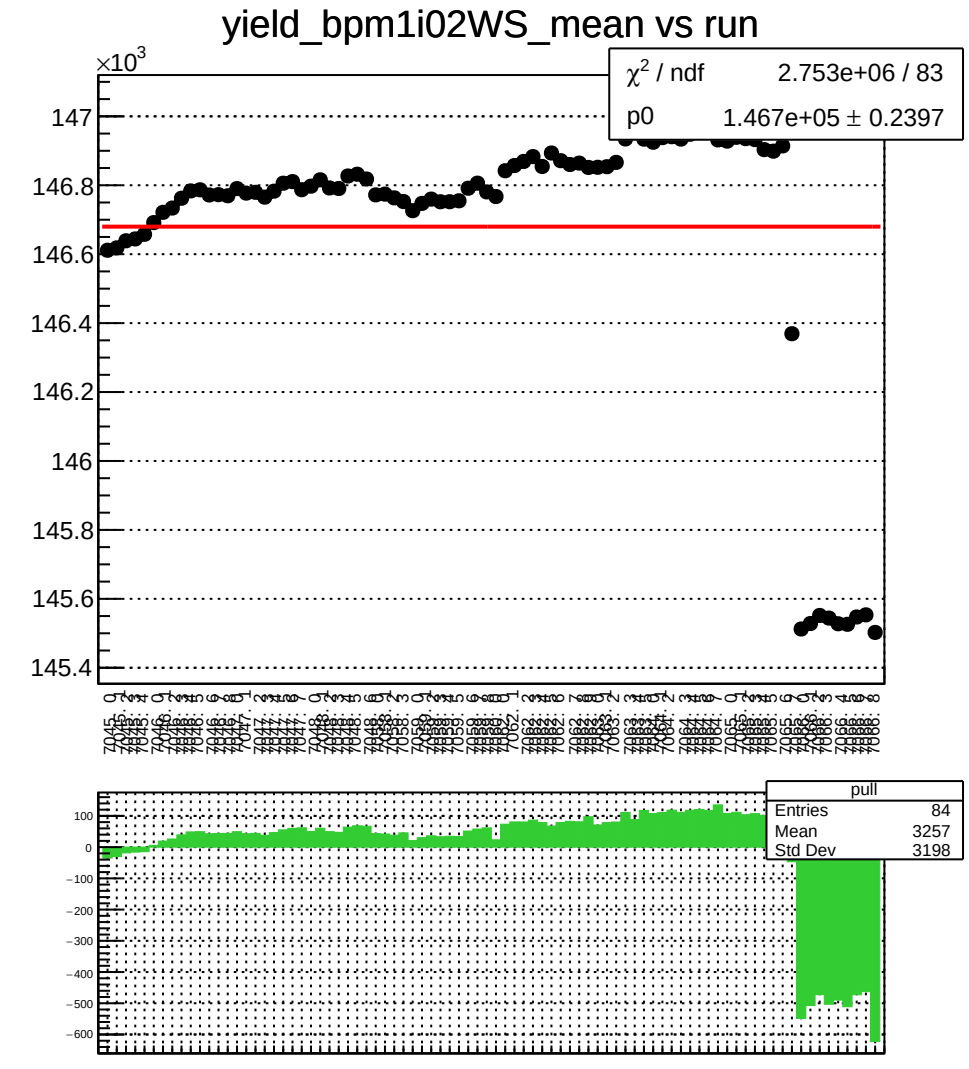

pull1D
Entries 84
Mean −3.841
Std Dev 3.184
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

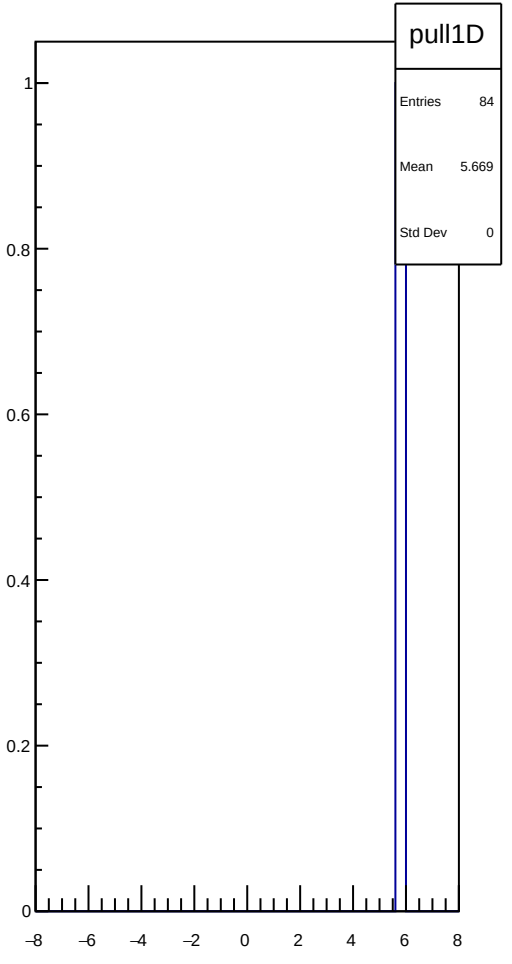

yield_bpm0i05WS_rms vs run
χ² / ndf 2.898e+04 / 83
p0 217.7 ± 0.174
550
500
450
400
350
300
250
200
150

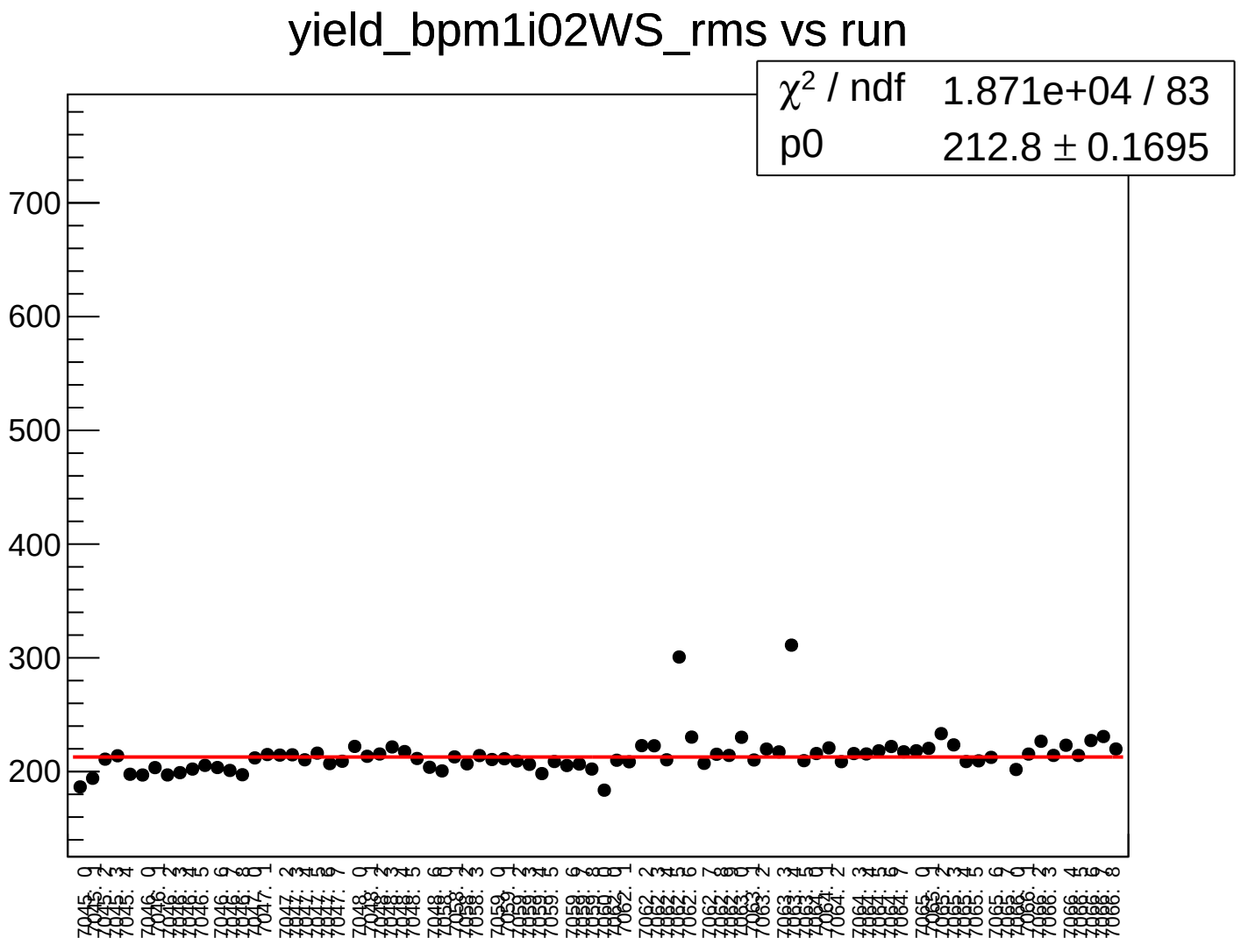

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 4.93e+05 / 83
p0 1.504e+05 ± 0.2381
150.7
150.6
150.5
150.4
150.3
150.2
150.1
pull
Entries 84
Mean 5.893e+05
Std Dev 5.893e+05
100
50
0
−50
−100
−150

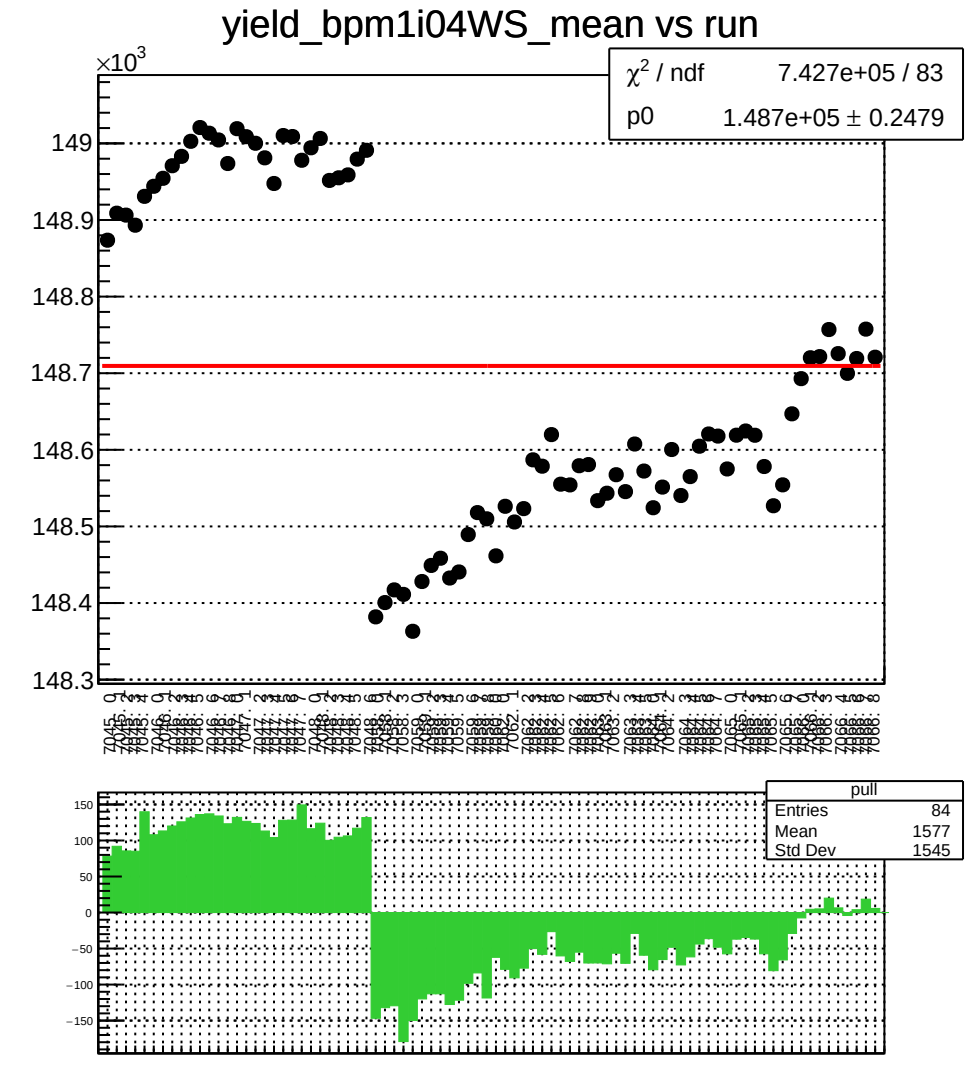

pull1D
Entries 84
Mean 4.185
Std Dev 2.843
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

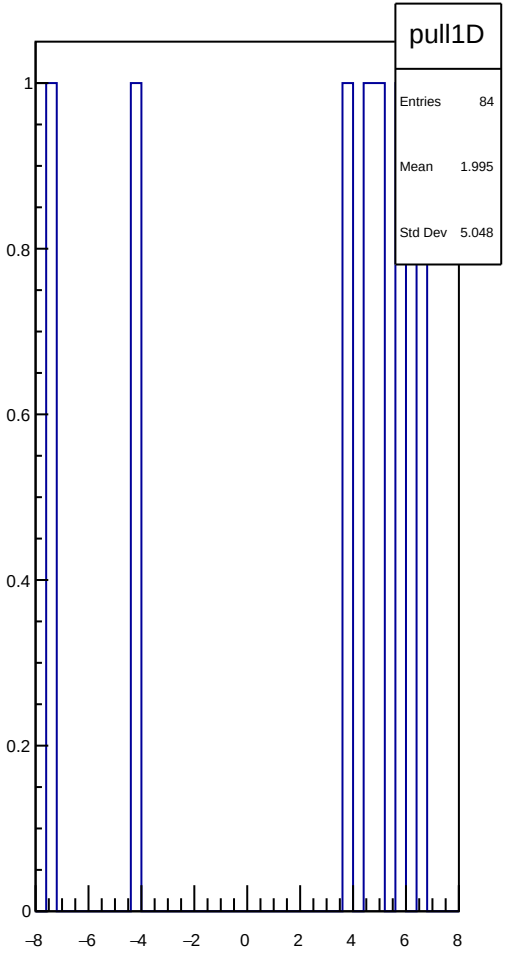

yield_bpm0i07WS_rms vs run
χ² / ndf 1.106e+04 / 83
p0 211.9 ± 0.1684
400
350
300
250
200

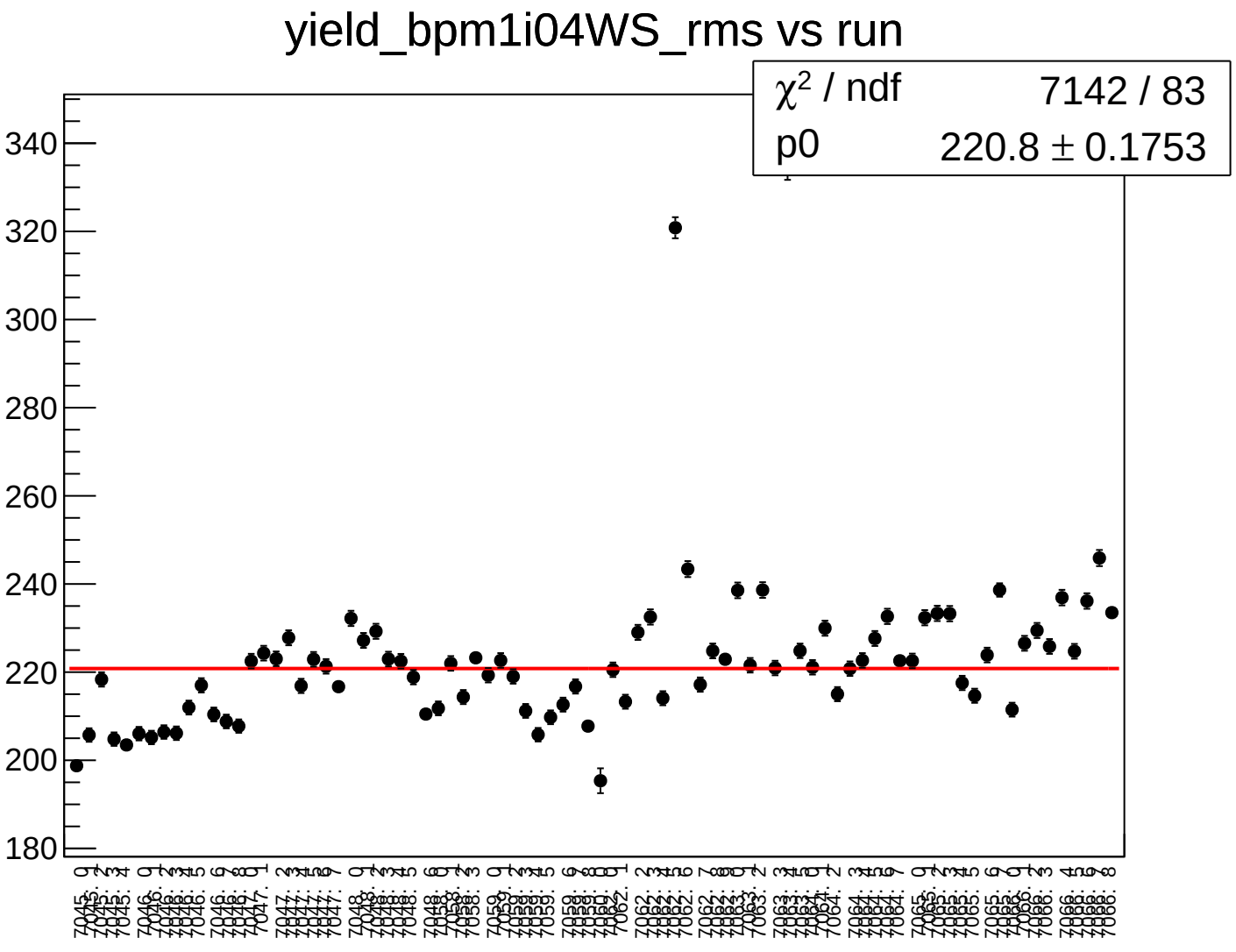

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 2.753e+06 / 83
p0 1.467e+05 ± 0.2397
147
146.8
146.6
146.4
146.2
146
145.8
145.6
145.4
pull
Entries 84
Mean 3257
Std Dev 3198
100
0
−100
−200
−300
−400
−500
−600

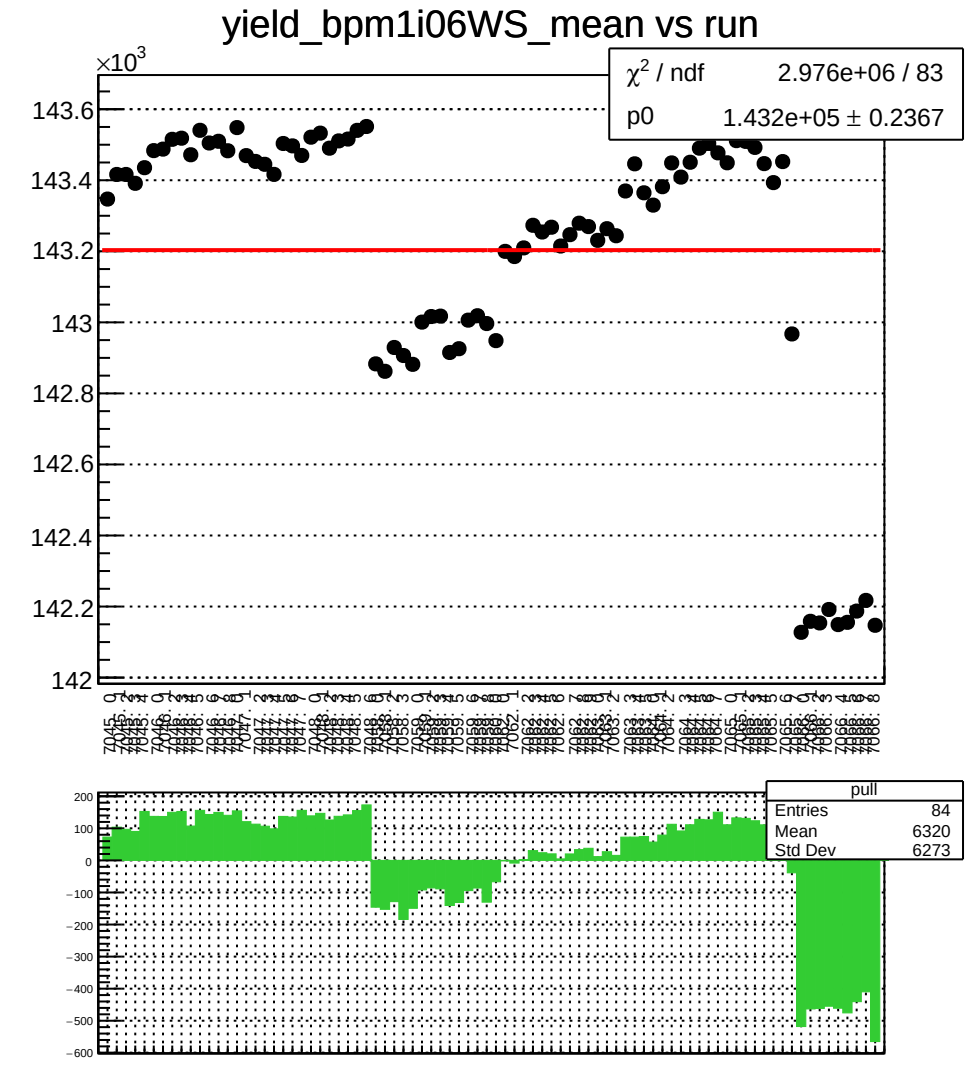

pull1D
Entries 84
Mean 5.669
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

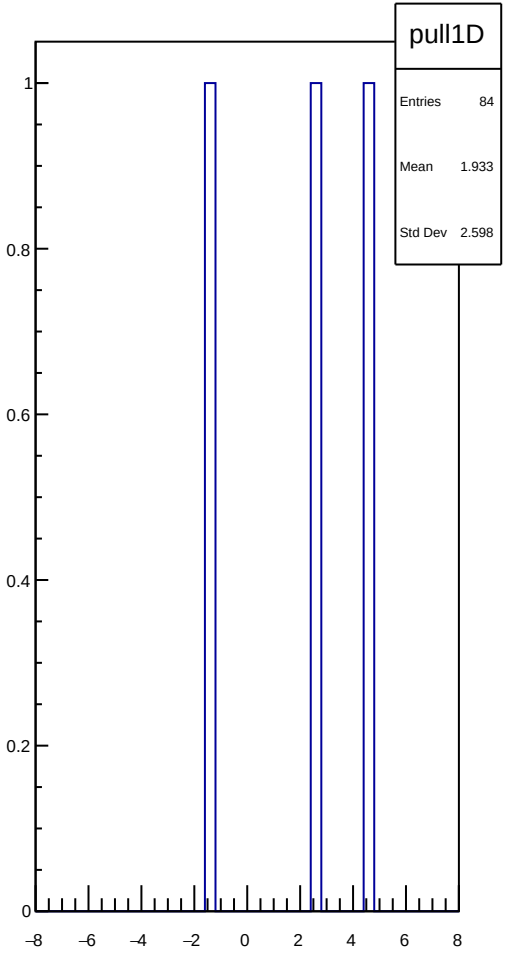

yield_bpm1i02WS_rms vs run
χ² / ndf 1.871e+04 / 83
p0 212.8 ± 0.1695
700
600
500
400
300
200

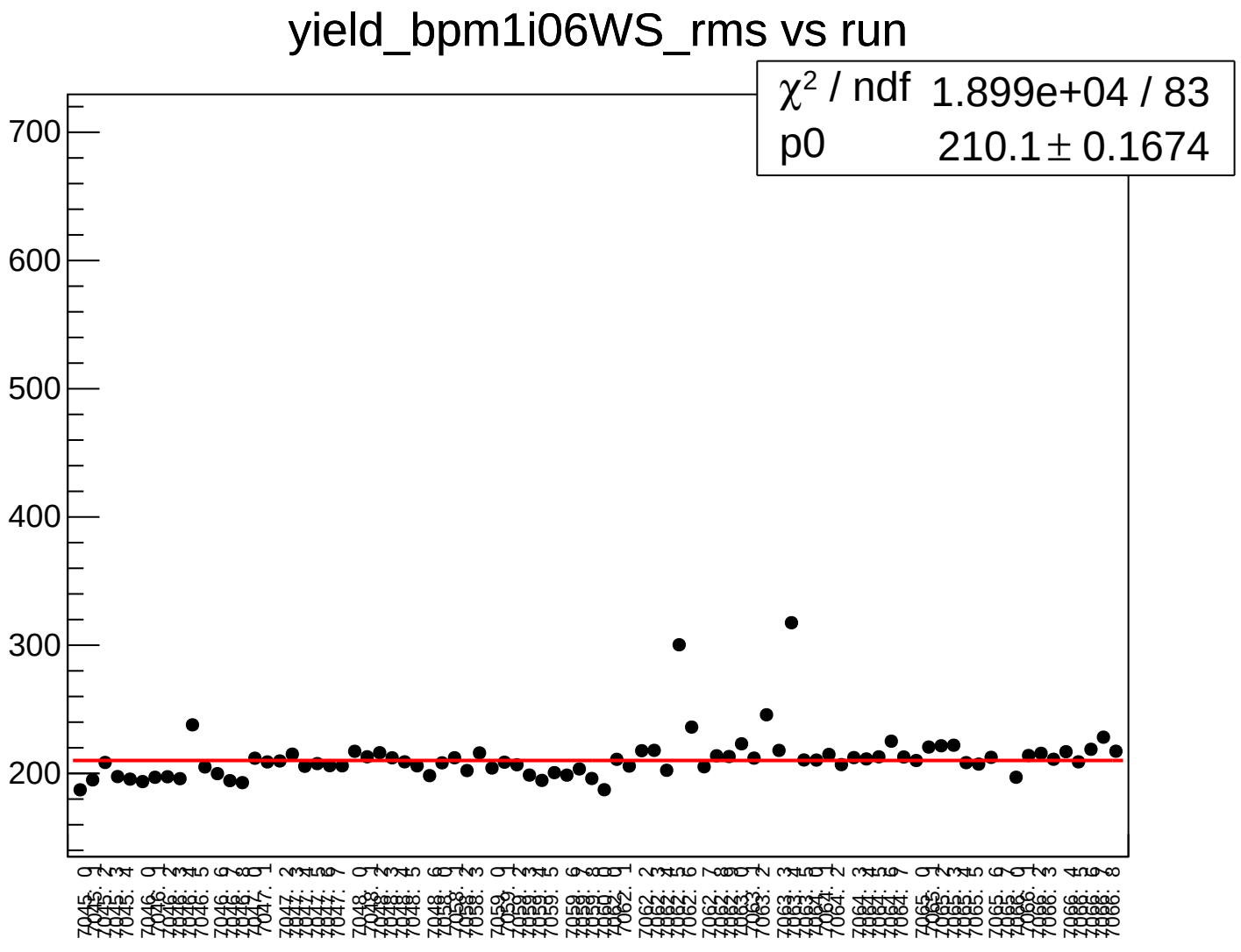

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 7.427e+05 / 83
p0 1.487e+05 ± 0.2479
149
148.9
148.8
148.7
148.6
148.5
148.4
148.3
pull
Entries 84
Mean 1577
Std Dev 1545
150
100
50
0
−50
−100
−150

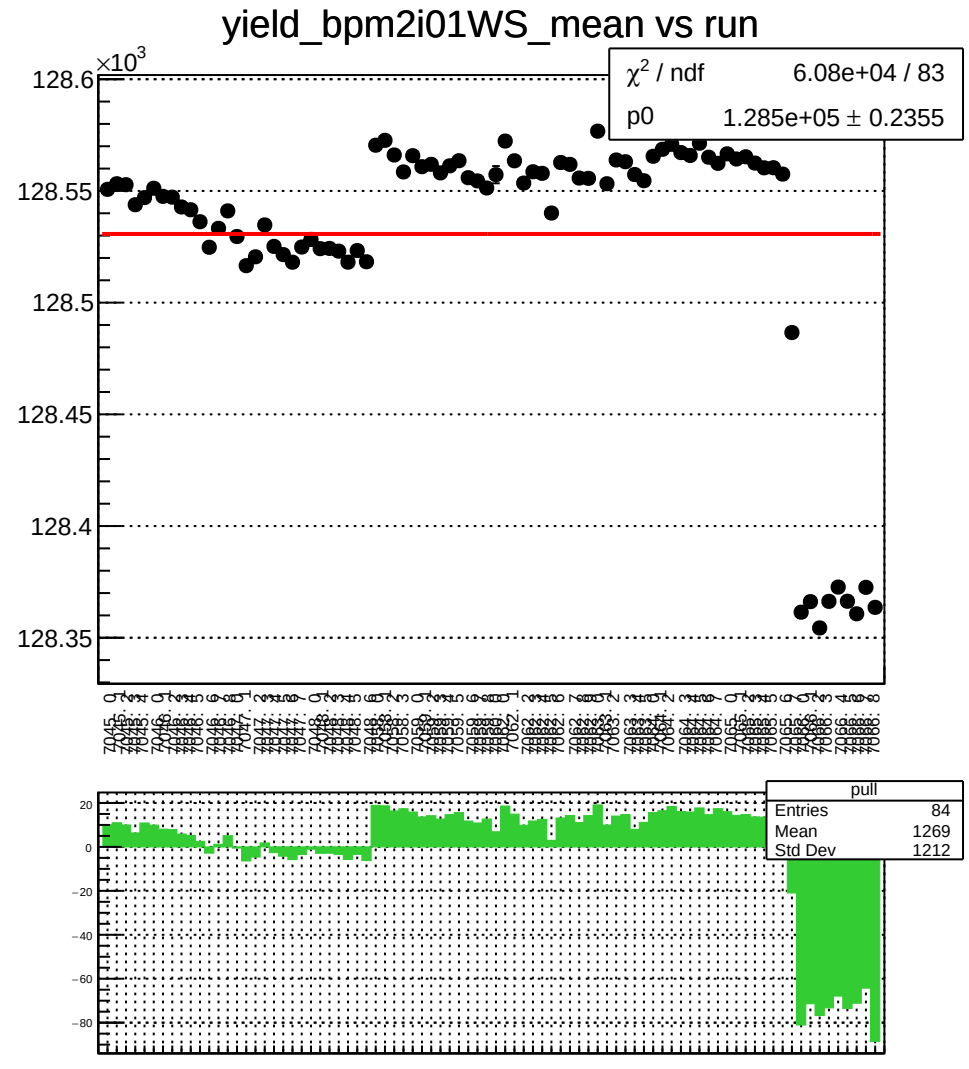

pull1D
Entries 84
Mean 1.995
Std Dev 5.048
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

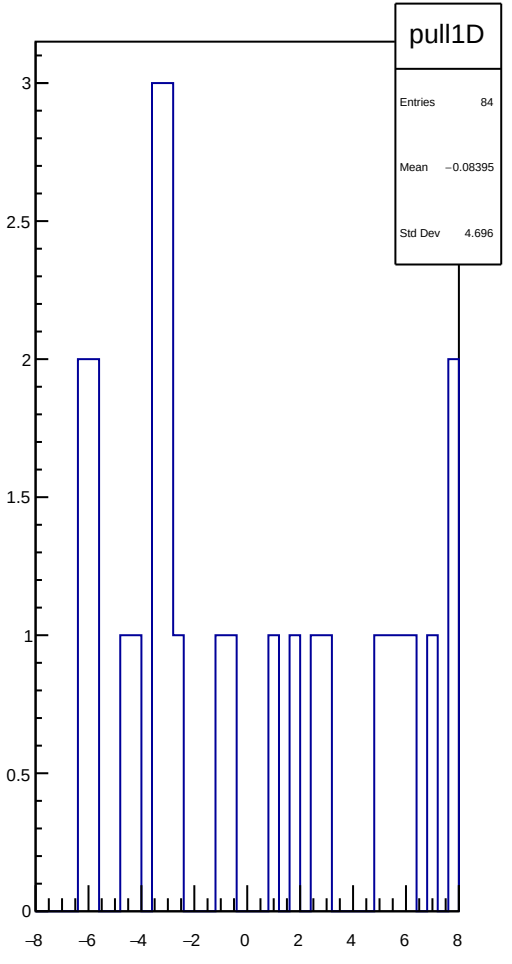

yield_bpm1i04WS_rms vs run
χ² / ndf 7142 / 83
p0 220.8 ± 0.1753
340
320
300
280
260
240
220
200
180

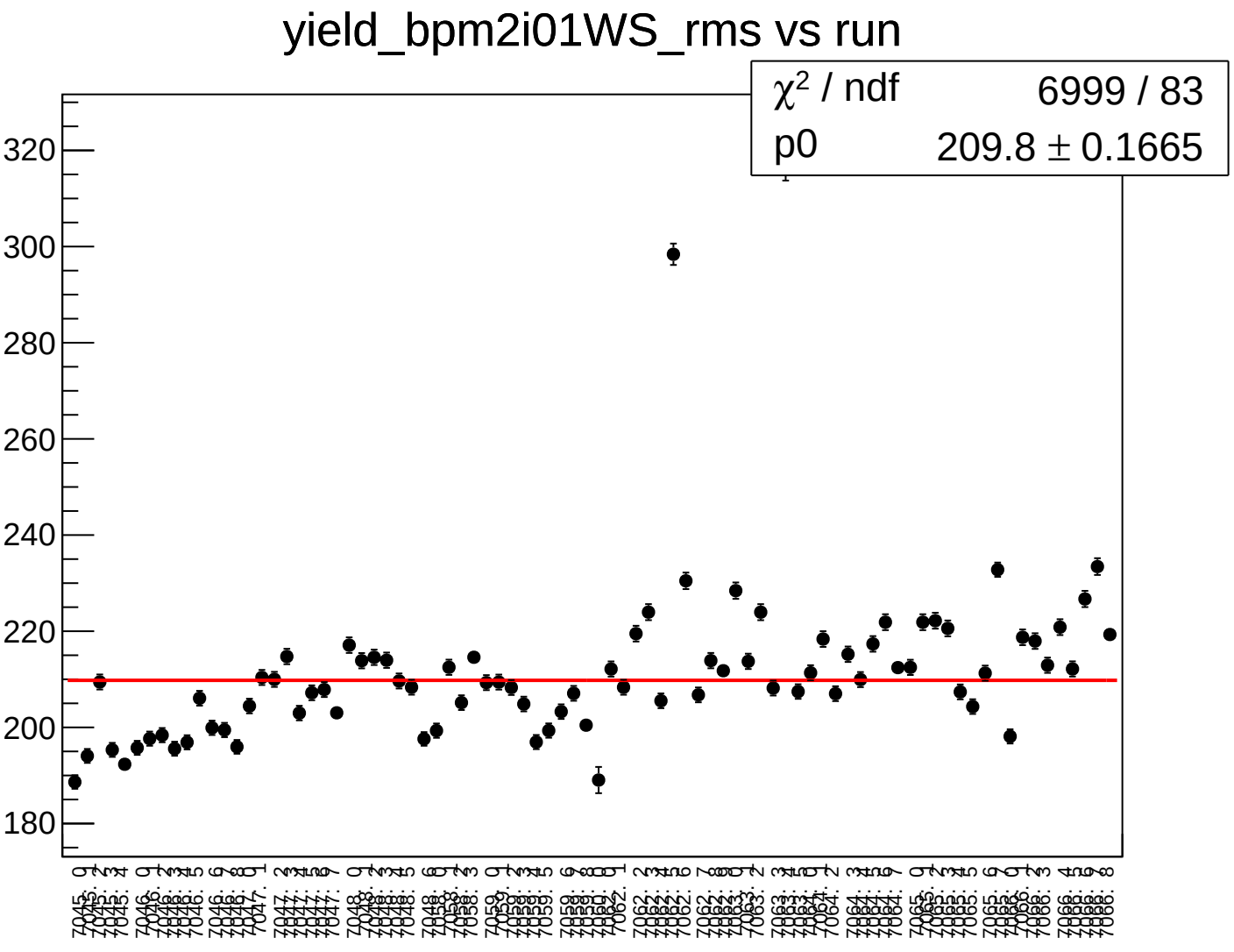

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 2.976e+06 / 83
p0 1.432e+05 ± 0.2367
143.6
143.4
143.2
143
142.8
142.6
142.4
142.2
142
pull
Entries 84
Mean 6320
Std Dev 6273
200
100
0
−100
−200
−300
−400
−500
−600

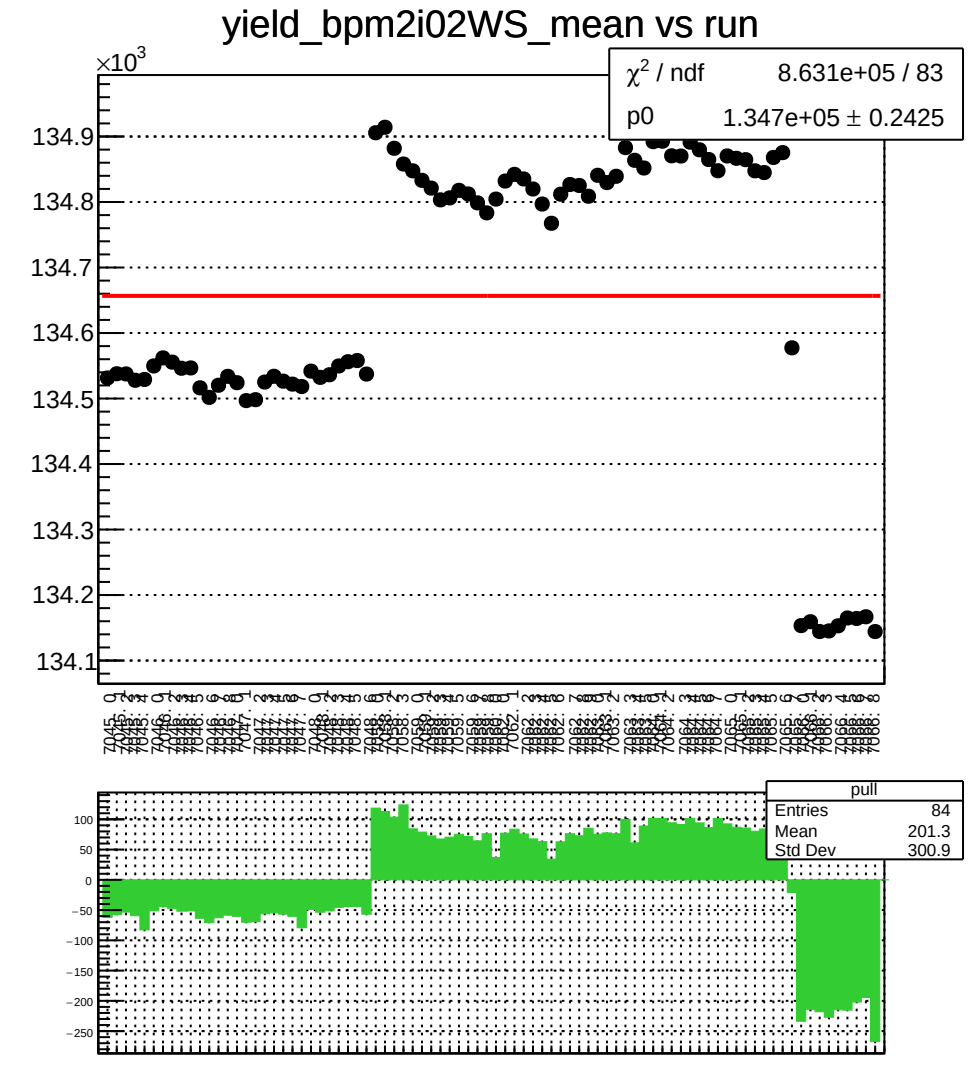

pull1D
Entries 84
Mean 1.933
Std Dev 2.598
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

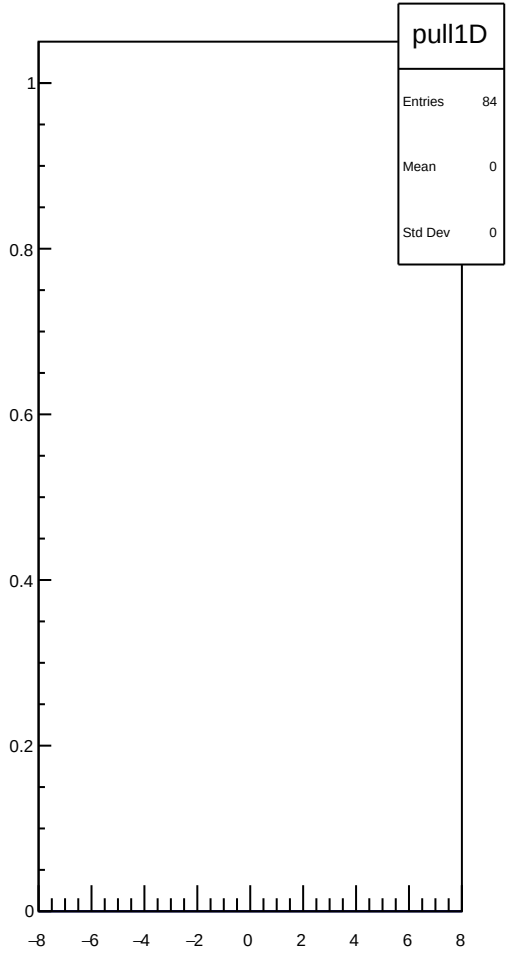

yield_bpm1i06WS_rms vs run
χ² / ndf 1.899e+04 / 83
p0 210.1 ± 0.1674
700
600
500
400
300
200

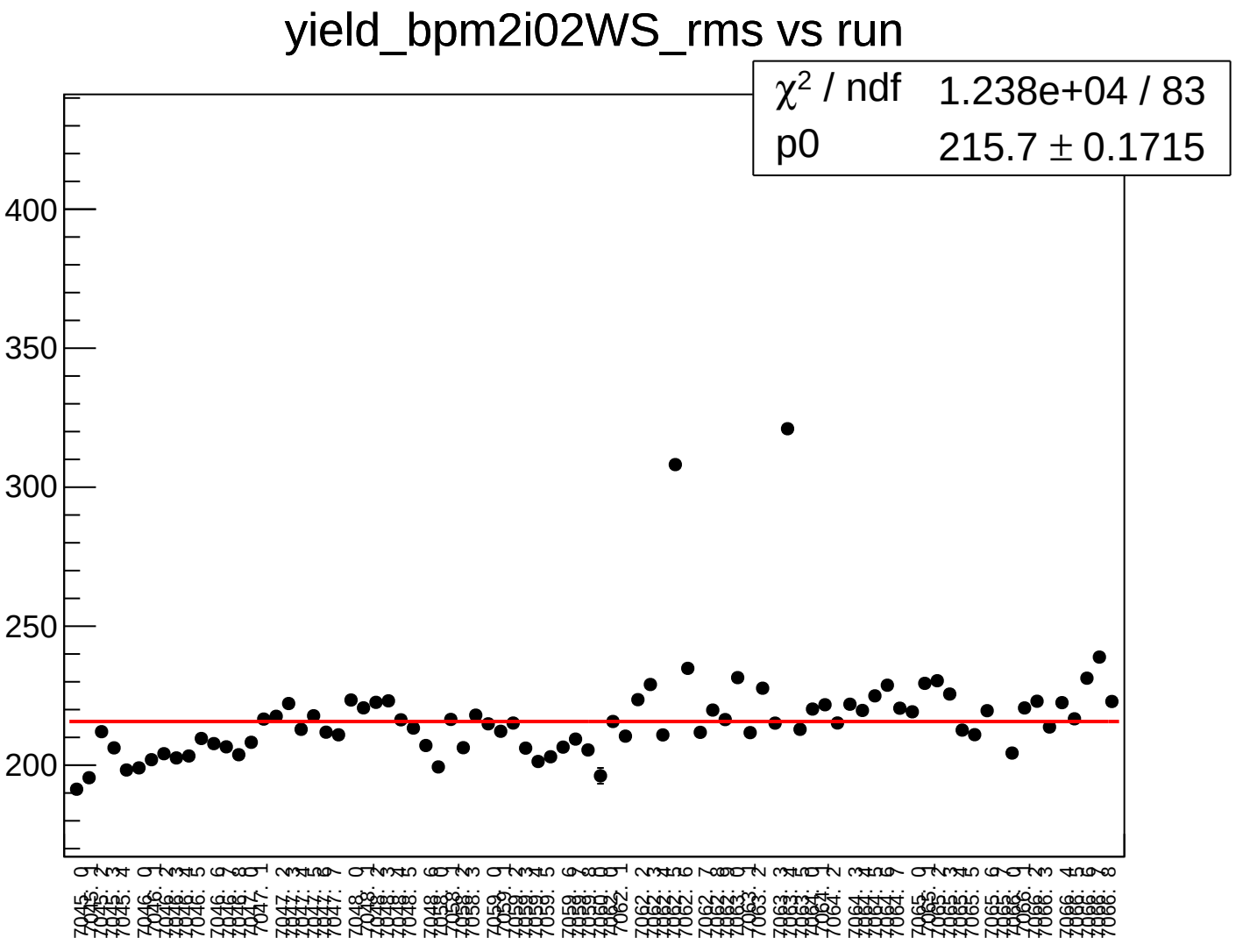

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 6.08e+04 / 83
p0 1.285e+05 ± 0.2355
128.6
128.55
128.5
128.45
128.4
128.35
pull
Entries 84
Mean 1269
Std Dev 1212
20
0
−20
−40
−60
−80

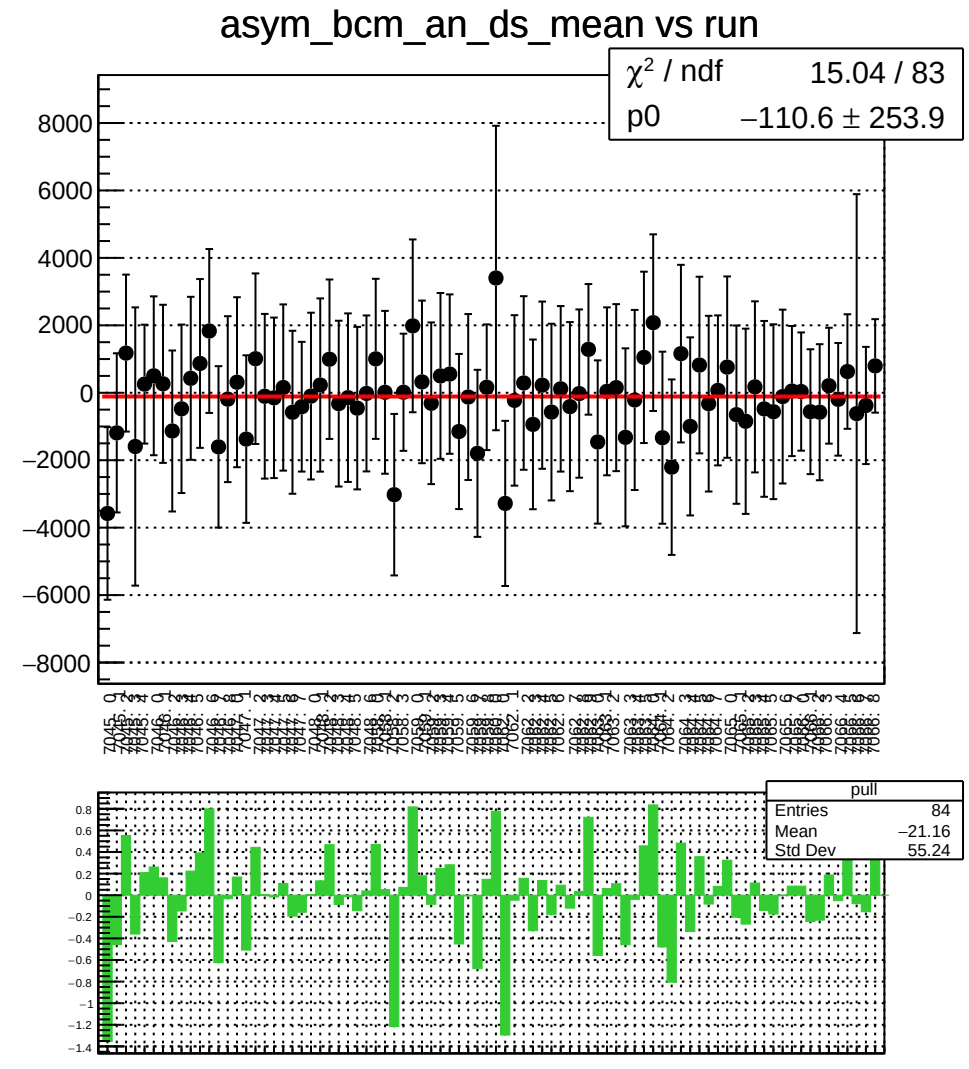

pull1D
Entries 84
Mean −0.08395
Std Dev 4.696
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

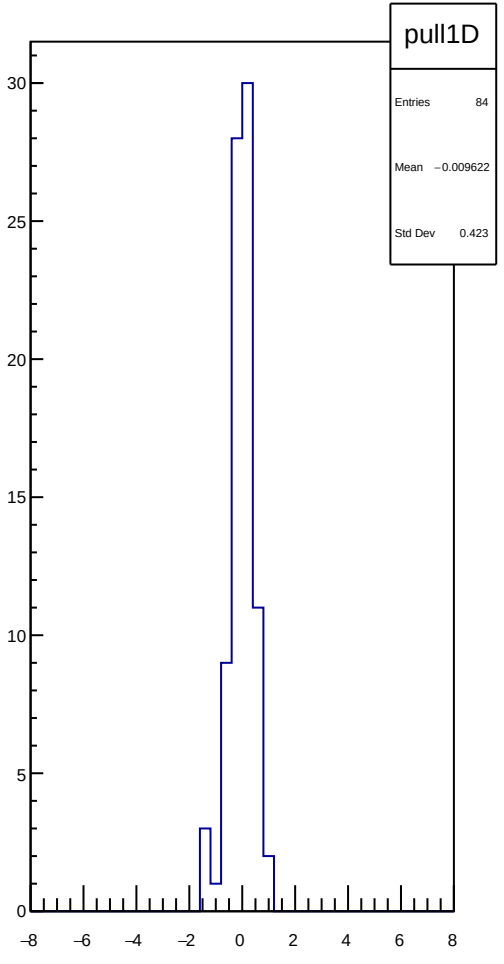

yield_bpm2i01WS_rms vs run
χ² / ndf 6999 / 83
p0 209.8 ± 0.1665
320
300
280
260
240
220
200
180

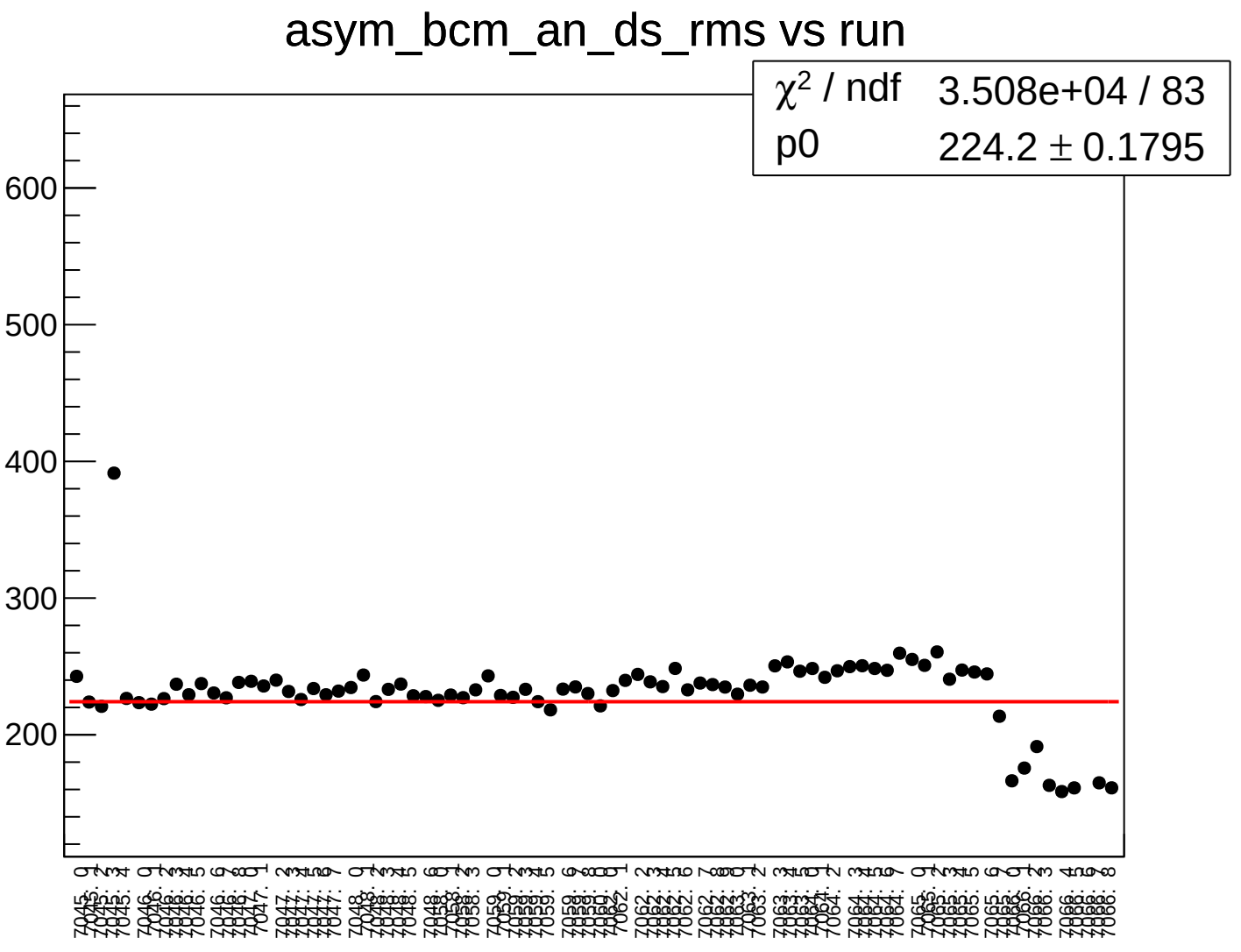

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 8.631e+05 / 83
p0 1.347e+05 ± 0.2425
134.9
134.8
134.7
134.6
134.5
134.4
134.3
134.2
134.1
pull
Entries 84
Mean 201.3
Std Dev 300.9
100
50
0
−50
−100
−150
−200
−250

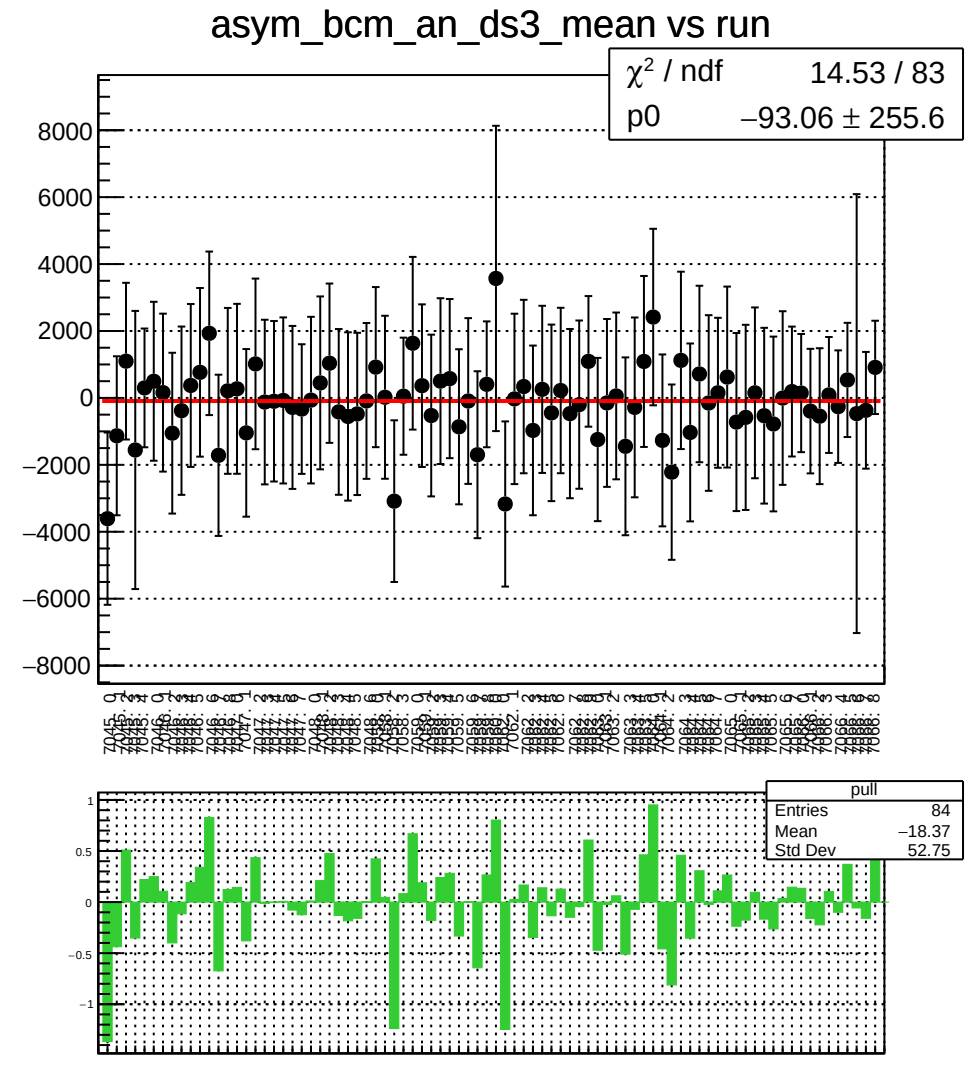

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

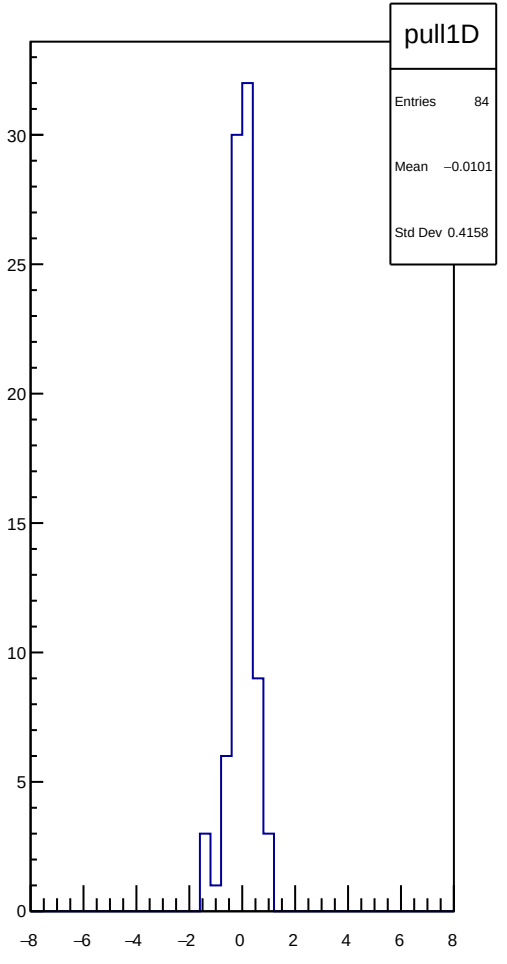

yield_bpm2i02WS_rms vs run
χ² / ndf 1.238e+04 / 83
p0 215.7 ± 0.1715
400
350
300
250
200

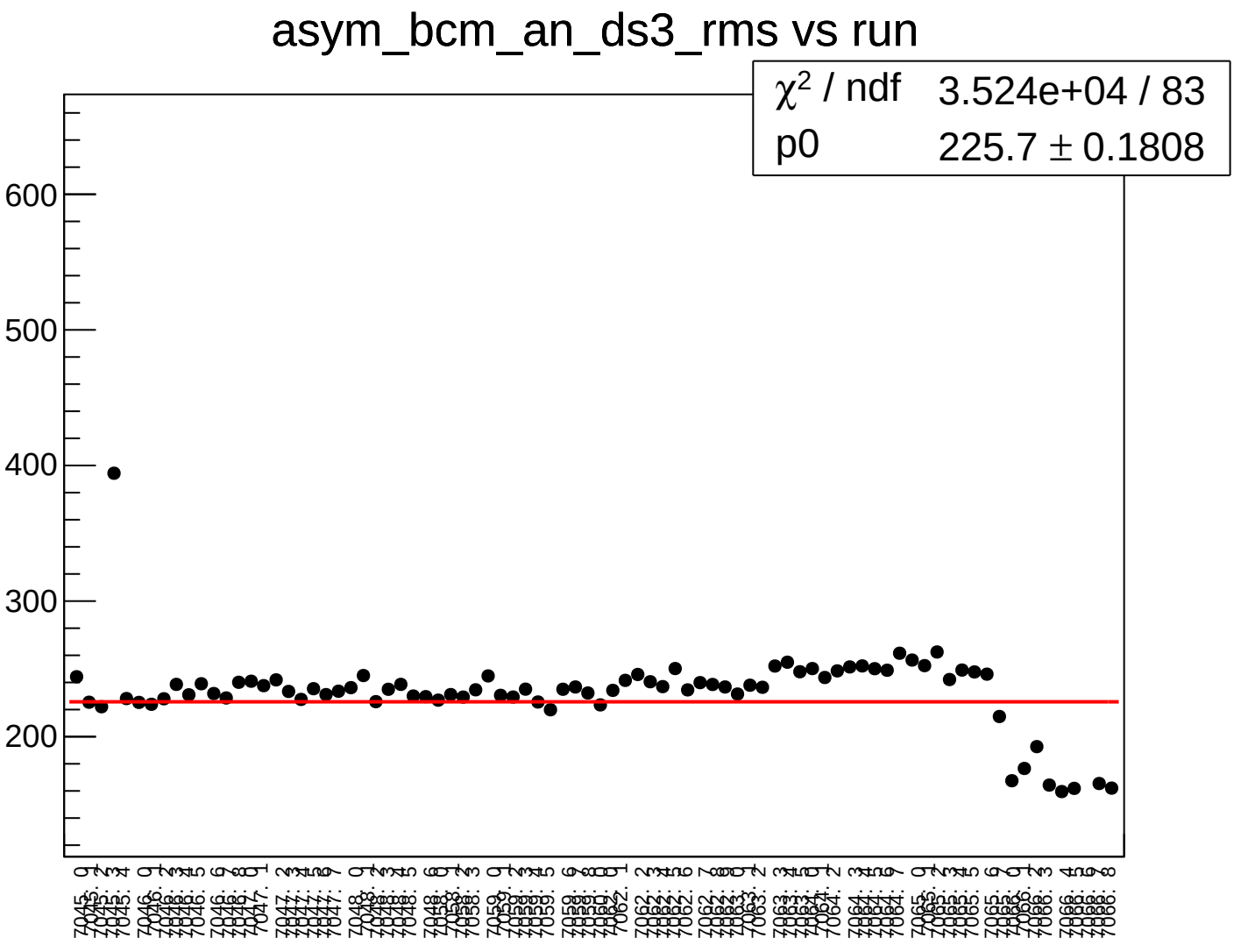

asym_bcm_an_ds_mean vs run
χ² / ndf 15.04 / 83
p0 −110.6 ± 253.9
pull
Entries 84
Mean −21.16
Std Dev 55.24

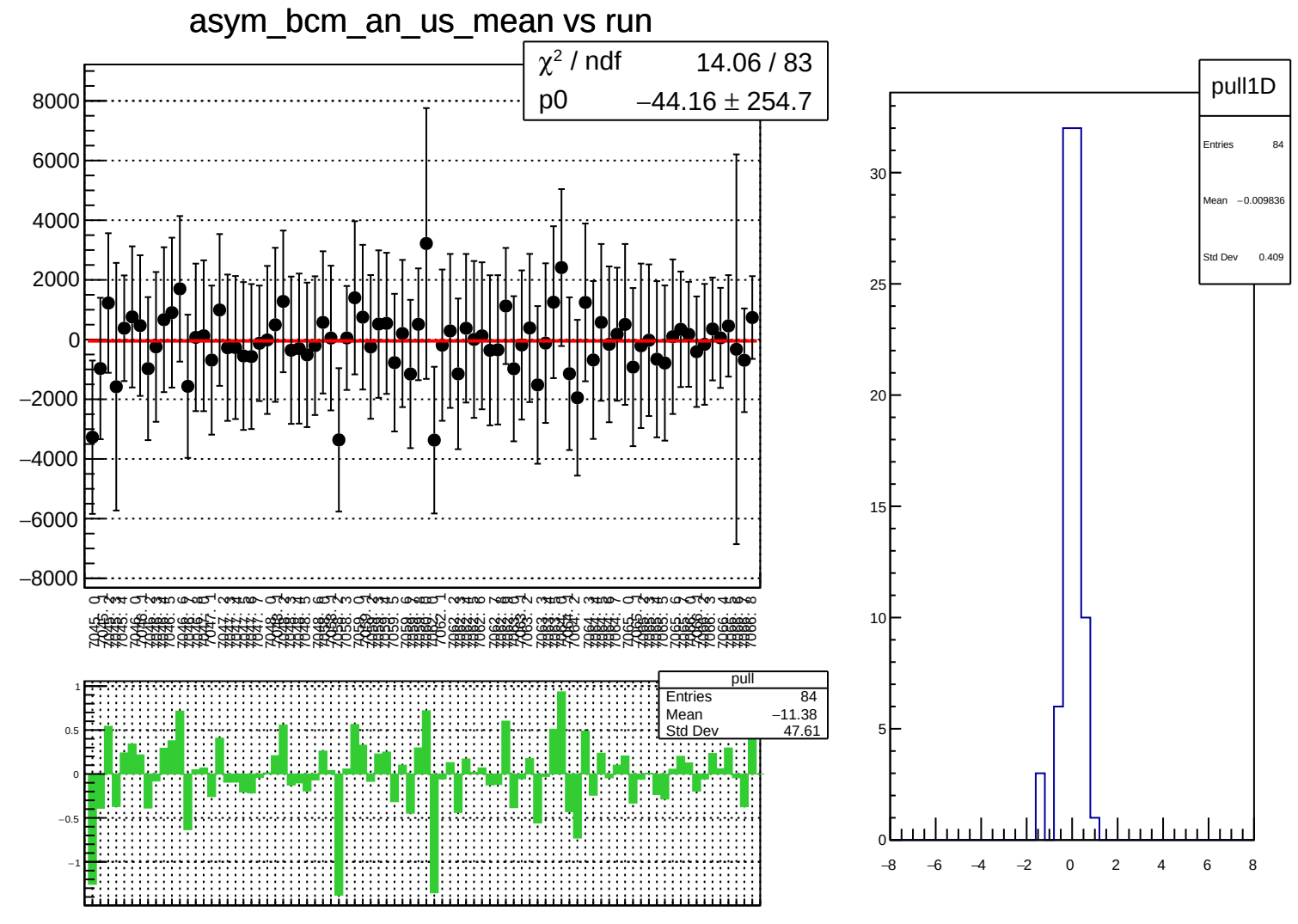

pull1D
Entries 84
Mean −0.009622
Std Dev 0.423

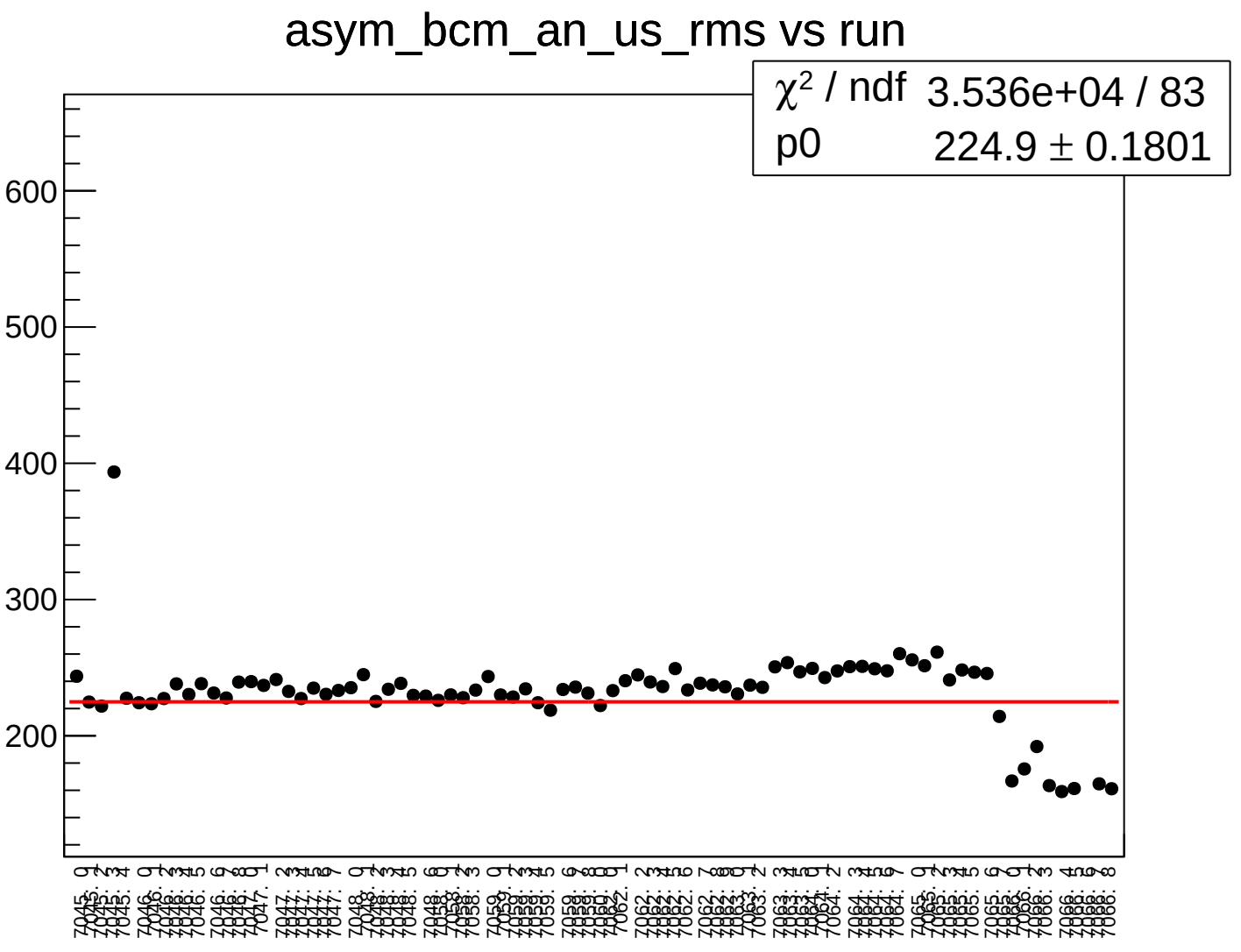

asym_bcm_an_ds_rms vs run
χ^2 / ndf 3.508e+04 / 83
p0 224.2 ± 0.1795
600
500
400
300
200

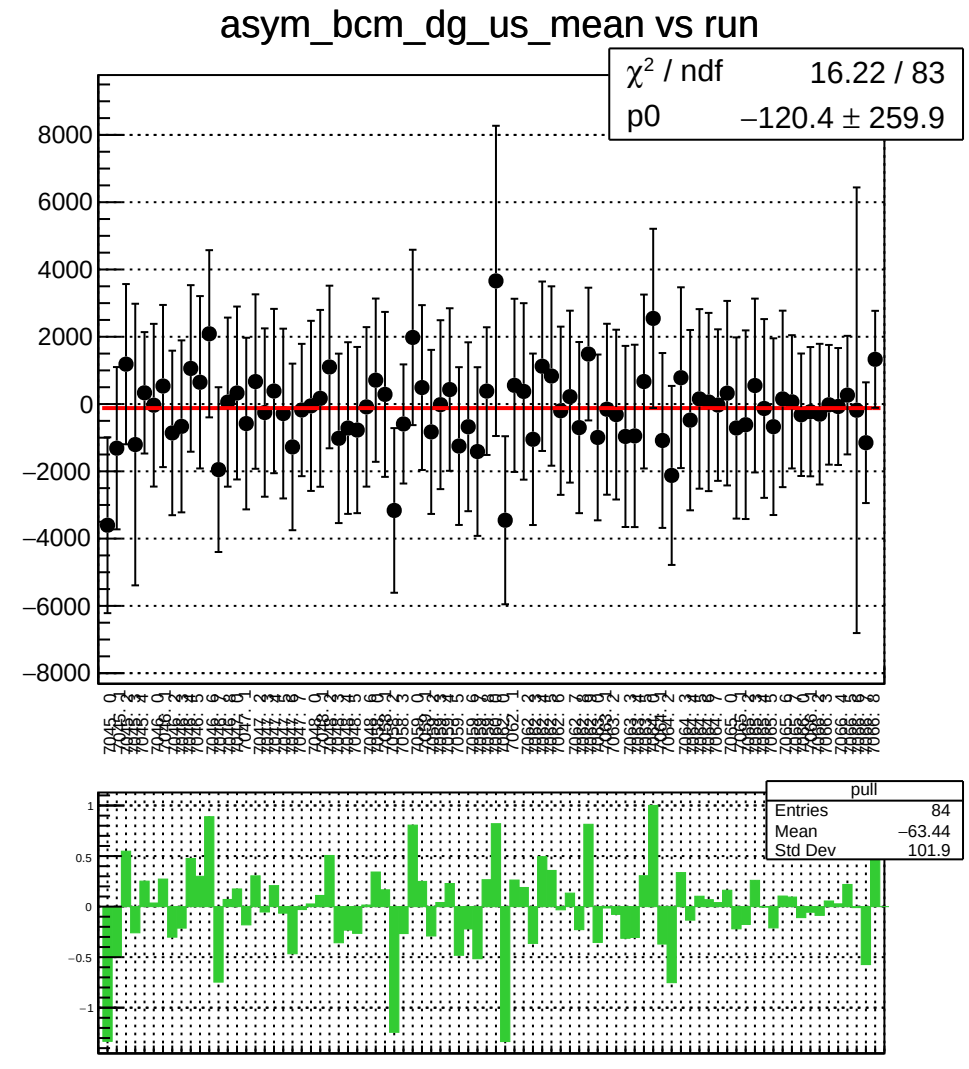

asym_bcm_an_ds3_mean vs run
χ² / ndf 14.53 / 83
p0 −93.06 ± 255.6
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 84
Mean −18.37
Std Dev 52.75
1
0.5
0
−0.5
−1

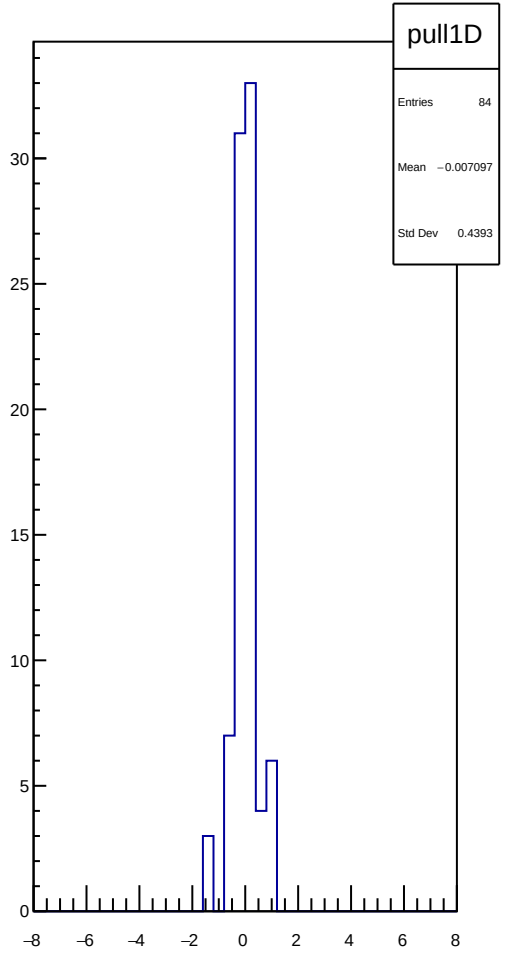

pull1D
Entries 84
Mean −0.0101
Std Dev 0.4158
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

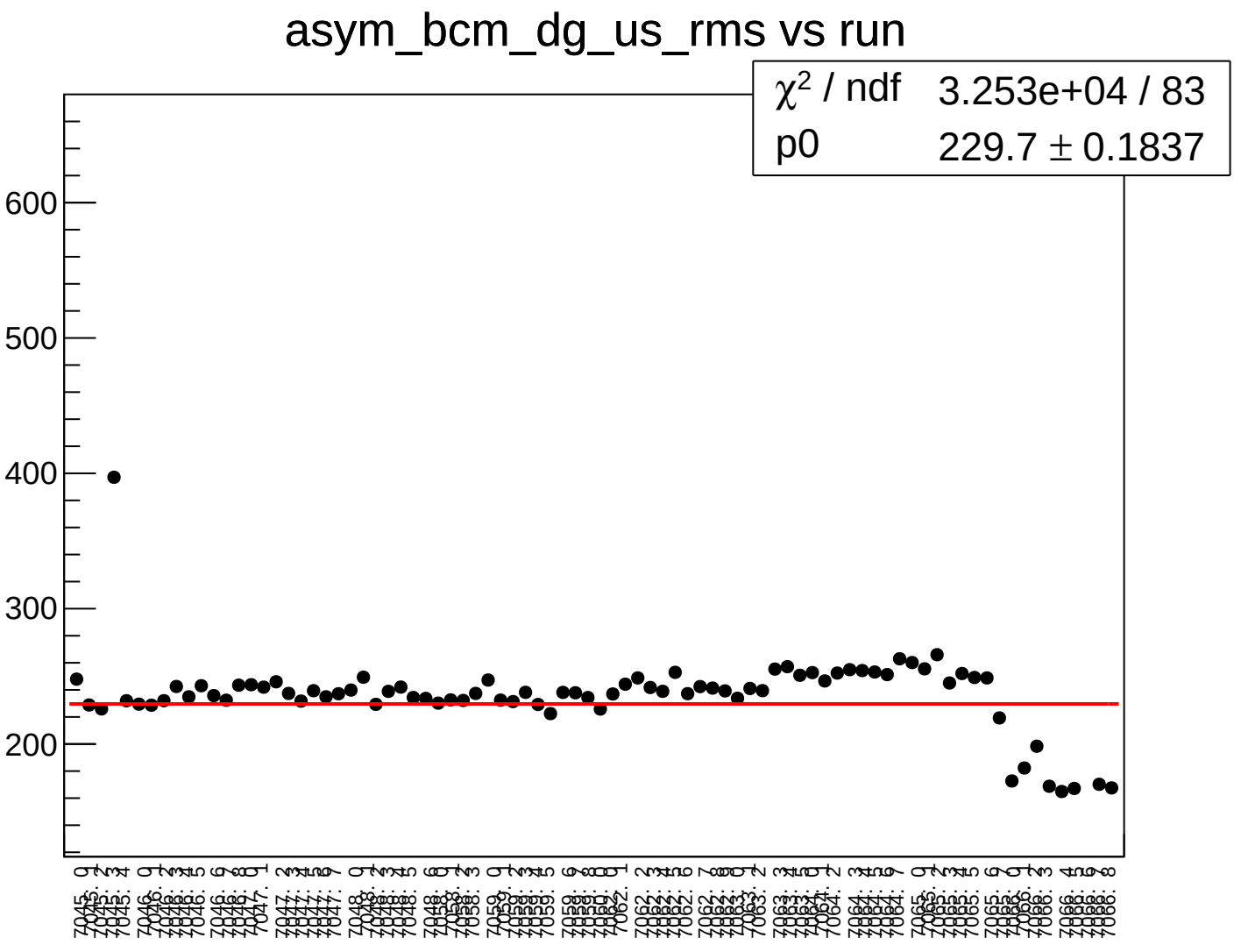

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 3.524e+04 / 83
p0 225.7 ± 0.1808
600
500
400
300
200

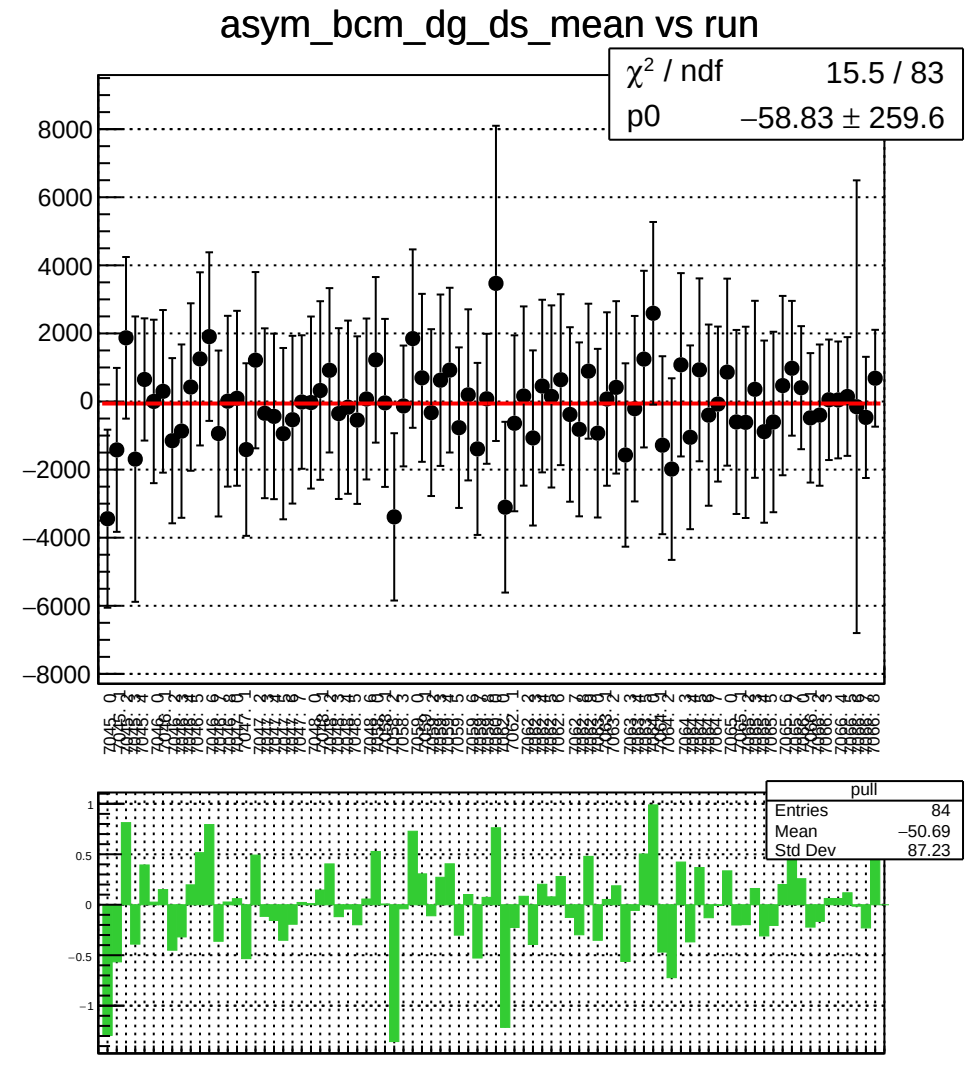

asym_bcm_an_us_mean vs run
χ² / ndf 14.06 / 83
p0 −44.16 ± 254.7
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 84
Mean −11.38
Std Dev 47.61
1
0.5
0
−0.5
−1
pull1D
Entries 84
Mean −0.009836
Std Dev 0.409
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

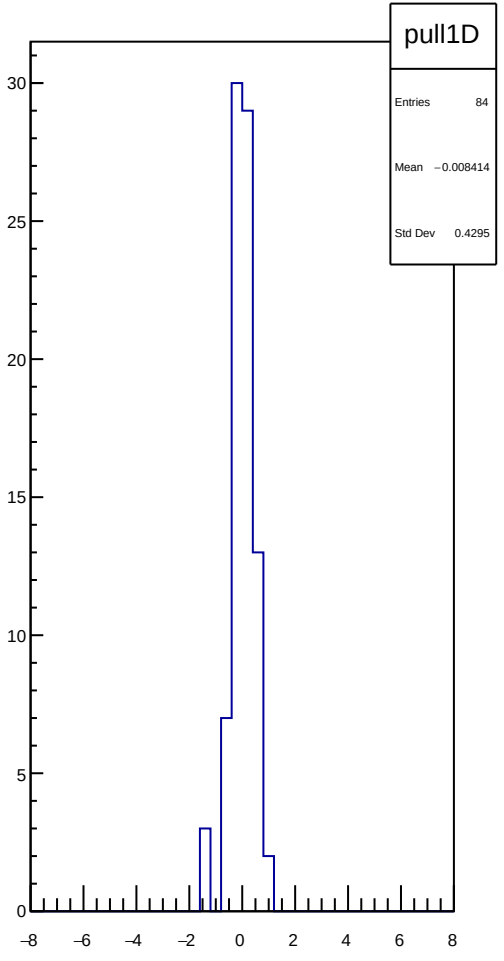

asym_bcm_an_us_rms vs run
χ^2 / ndf 3.536e+04 / 83
p0 224.9 ± 0.1801
600
500
400
300
200

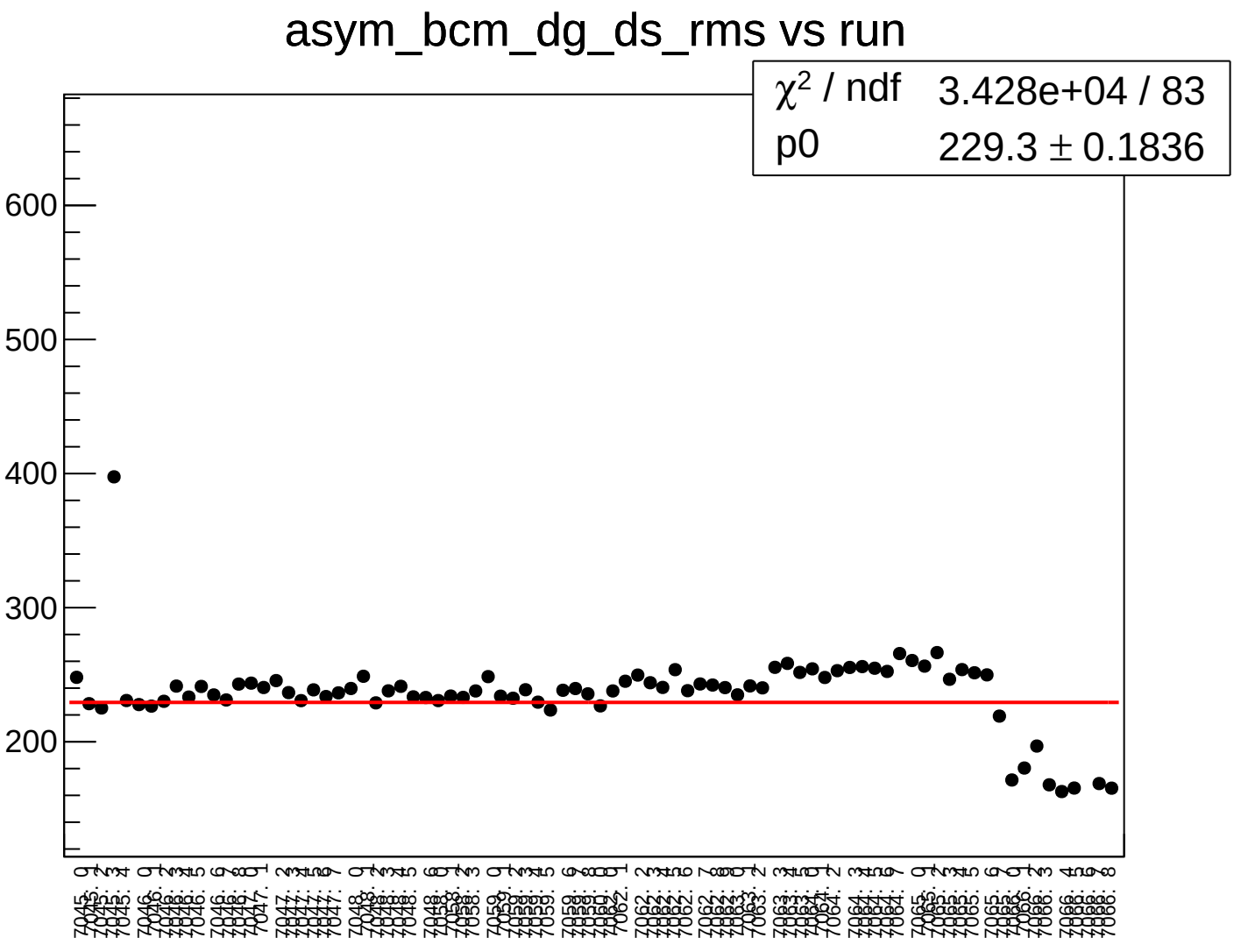

asym_bcm_dg_us_mean vs run
χ² / ndf 16.22 / 83
p0 −120.4 ± 259.9
pull
Entries 84
Mean −63.44
Std Dev 101.9

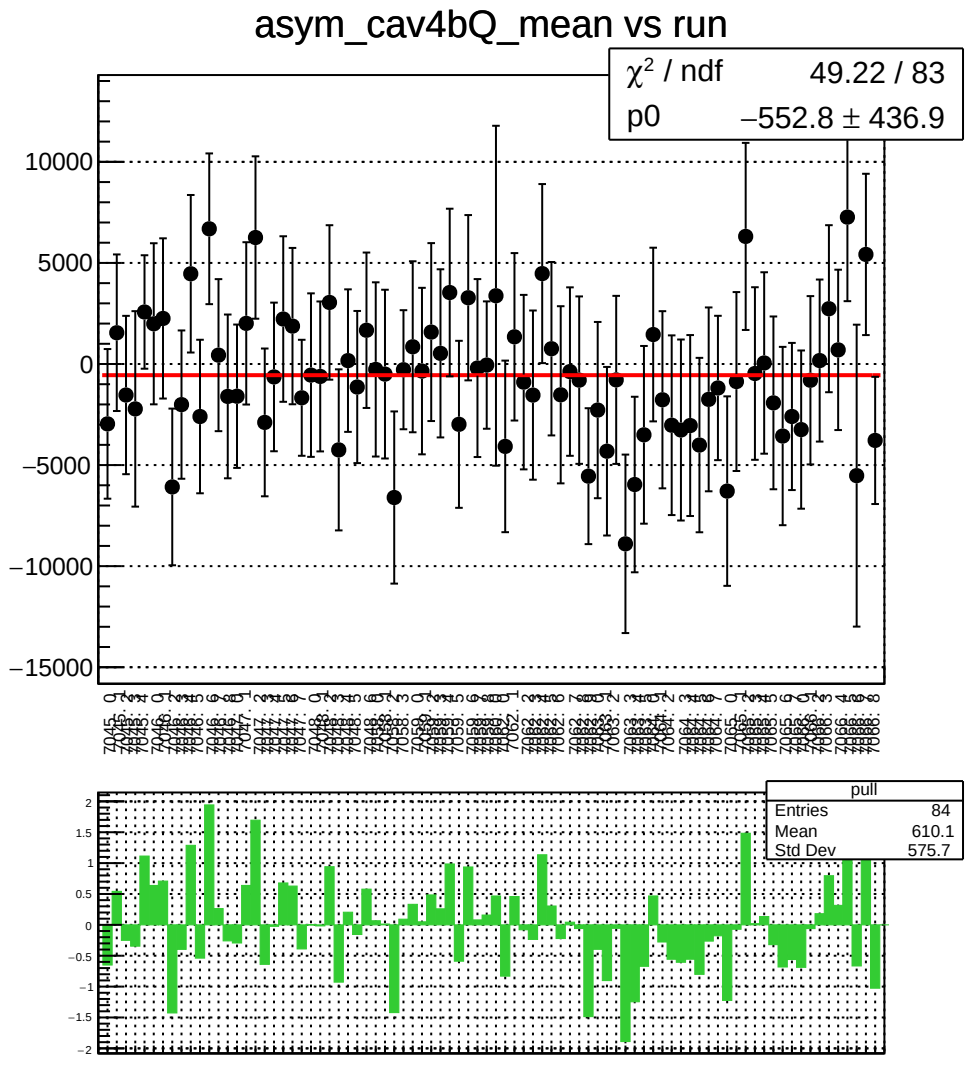

pull1D
Entries 84
Mean −0.007097
Std Dev 0.4393

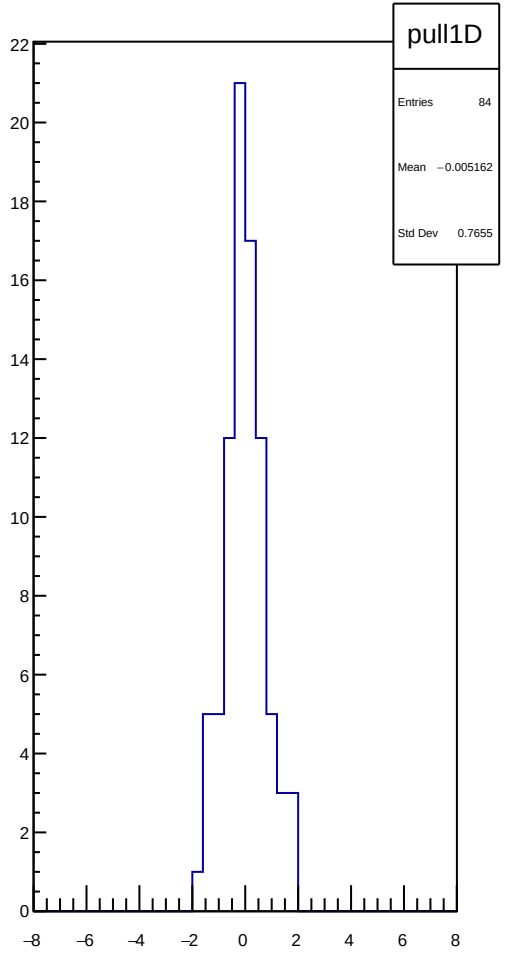

asym_bcm_dg_us_rms vs run
χ² / ndf 3.253e+04 / 83
p0 229.7 ± 0.1837
600
500
400
300
200

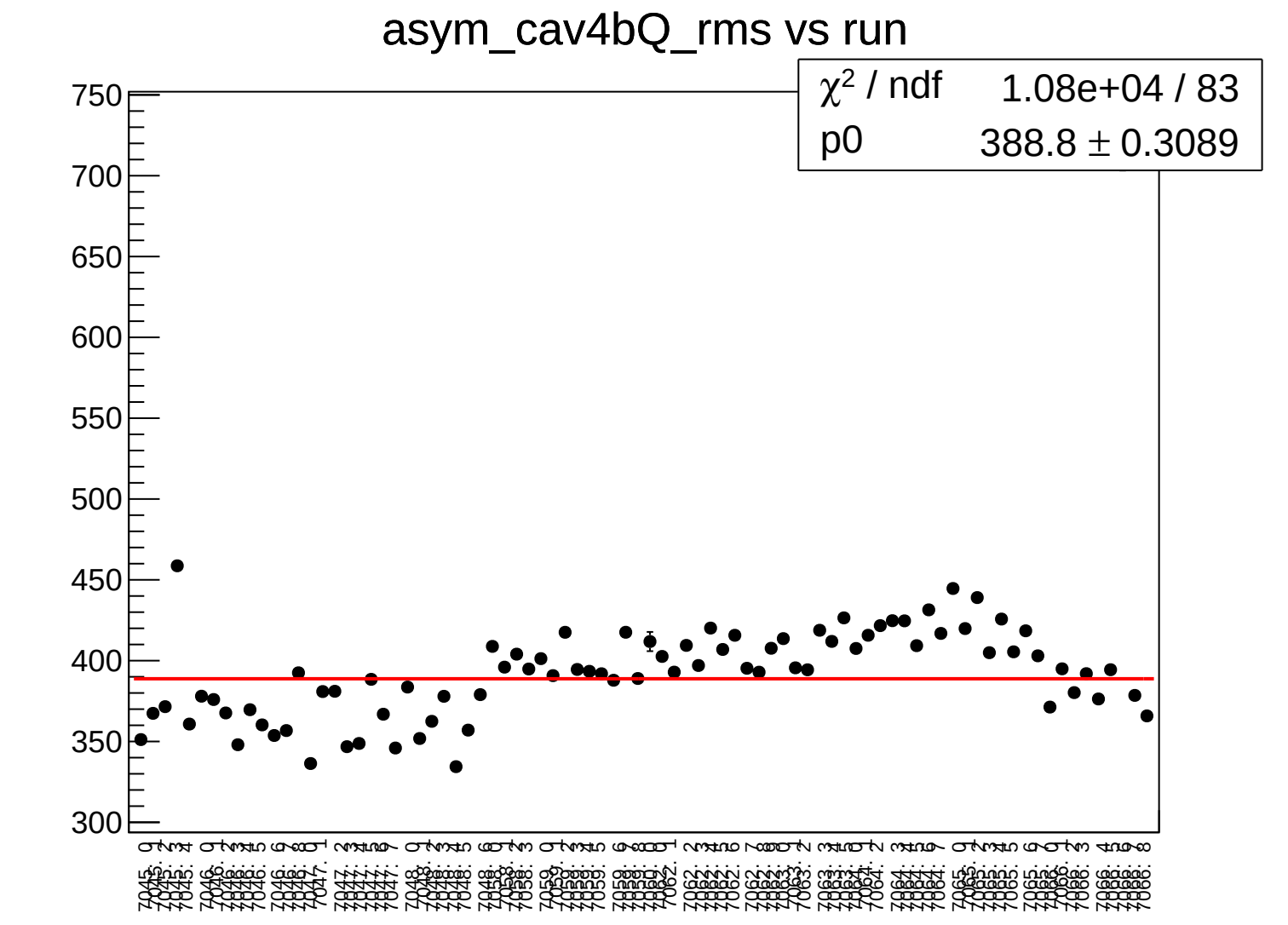

asym_bcm_dg_ds_mean vs run
χ² / ndf 15.5 / 83
p0 −58.83 ± 259.6
pull
Entries 84
Mean −50.69
Std Dev 87.23

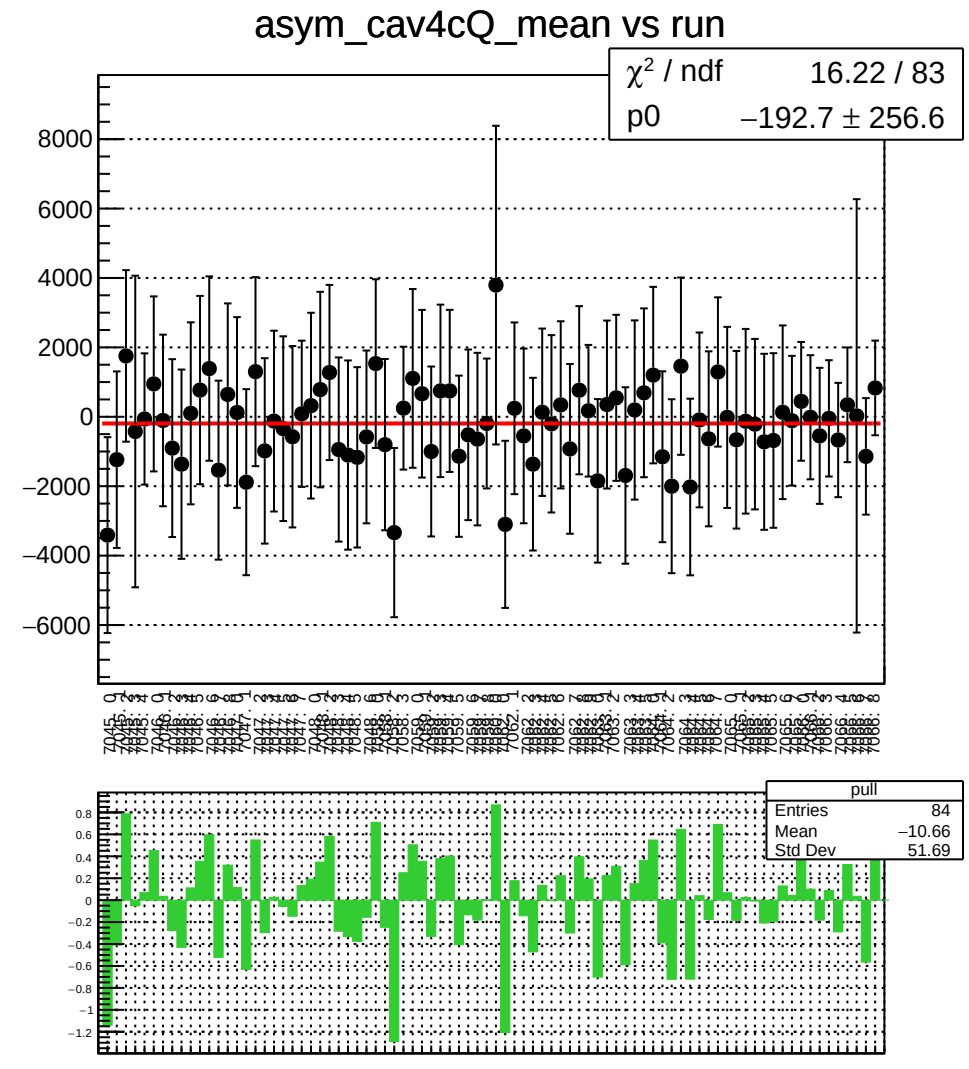

pull1D
Entries 84
Mean −0.008414
Std Dev 0.4295

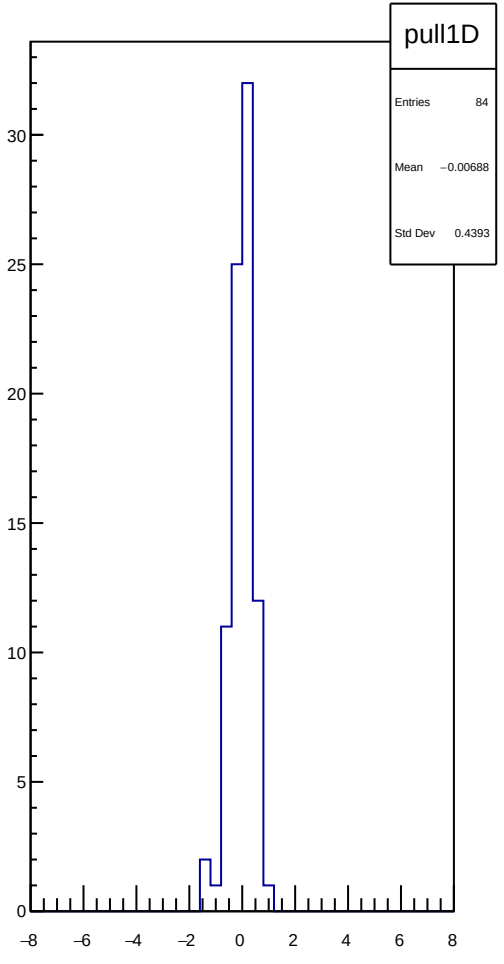

asym_bcm_dg_ds_rms vs run
χ^2 / ndf 3.428e+04 / 83
p0 229.3 ± 0.1836
600
500
400
300
200

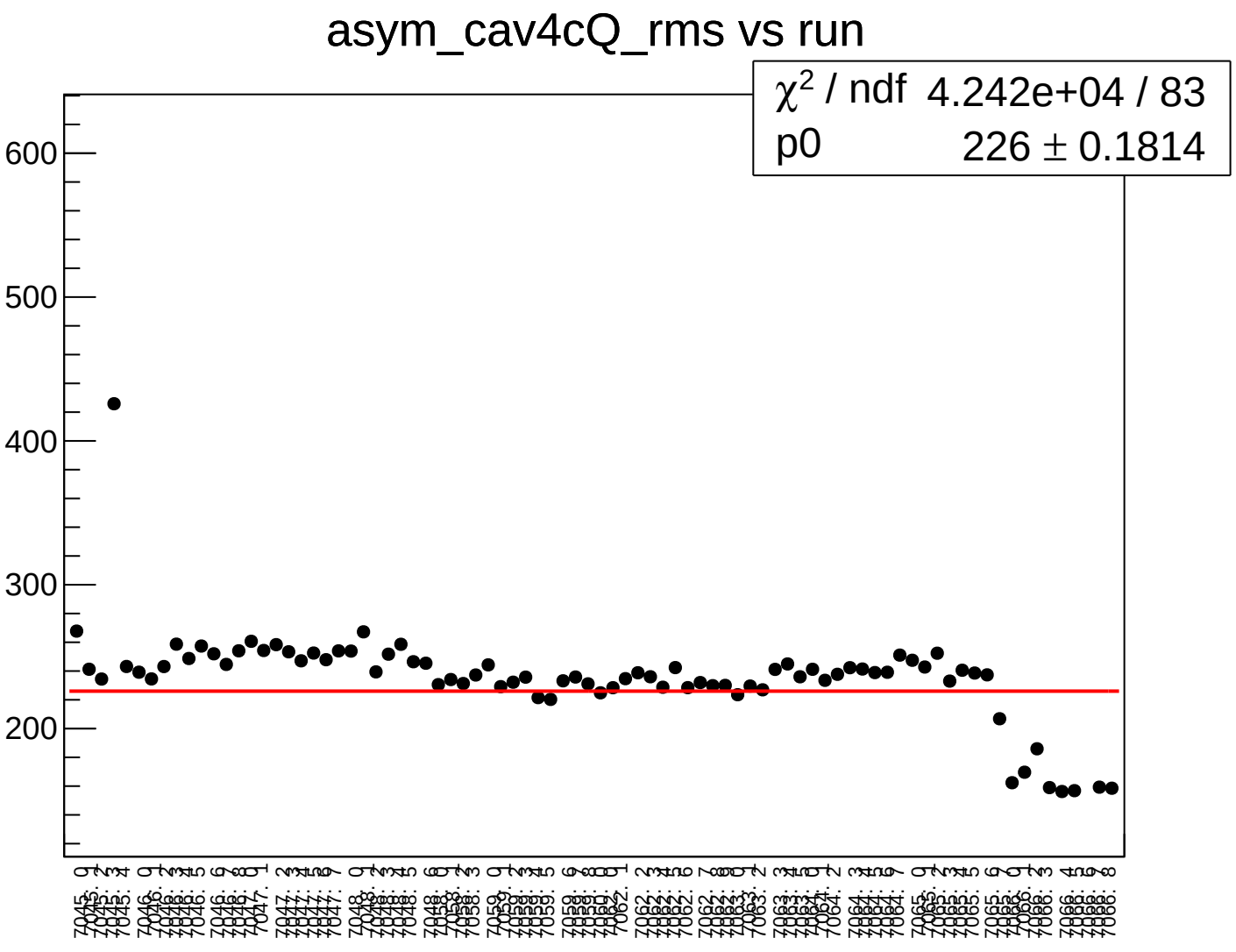

asym_cav4bQ_mean vs run
χ² / ndf 49.22 / 83
p0 −552.8 ± 436.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean 610.1
Std Dev 575.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

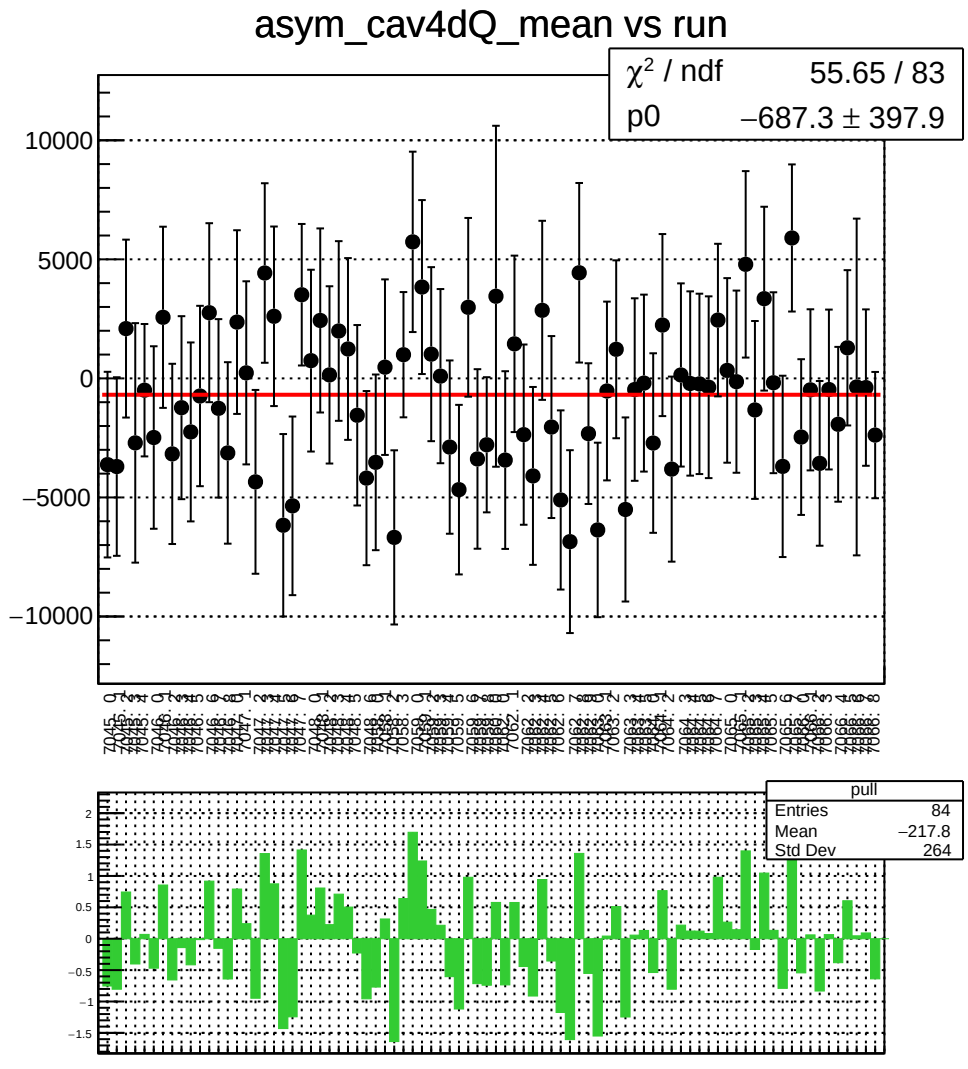

pull1D
Entries 84
Mean −0.005162
Std Dev 0.7655
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

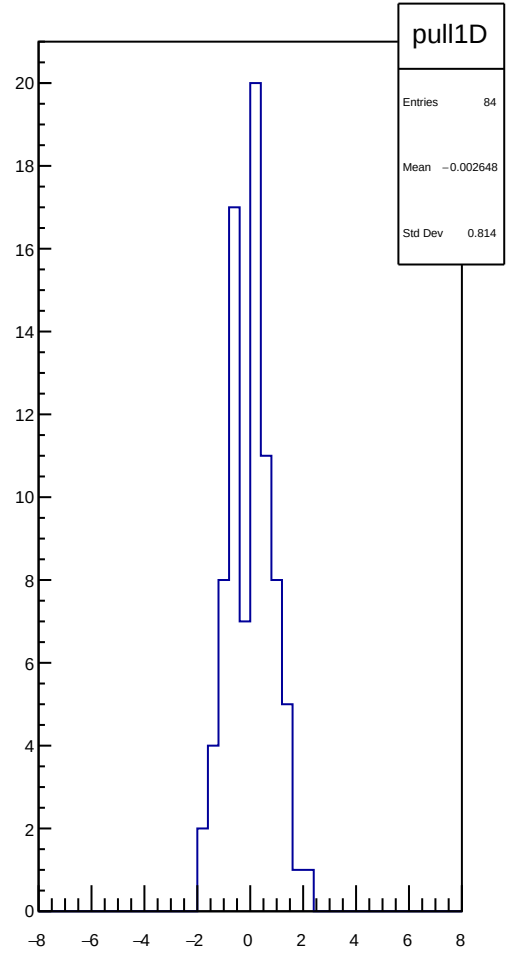

asym_cav4bQ_rms vs run
χ² / ndf 1.08e+04 / 83
p0 388.8 ± 0.3089
750
700
650
600
550
500
450
400
350
300

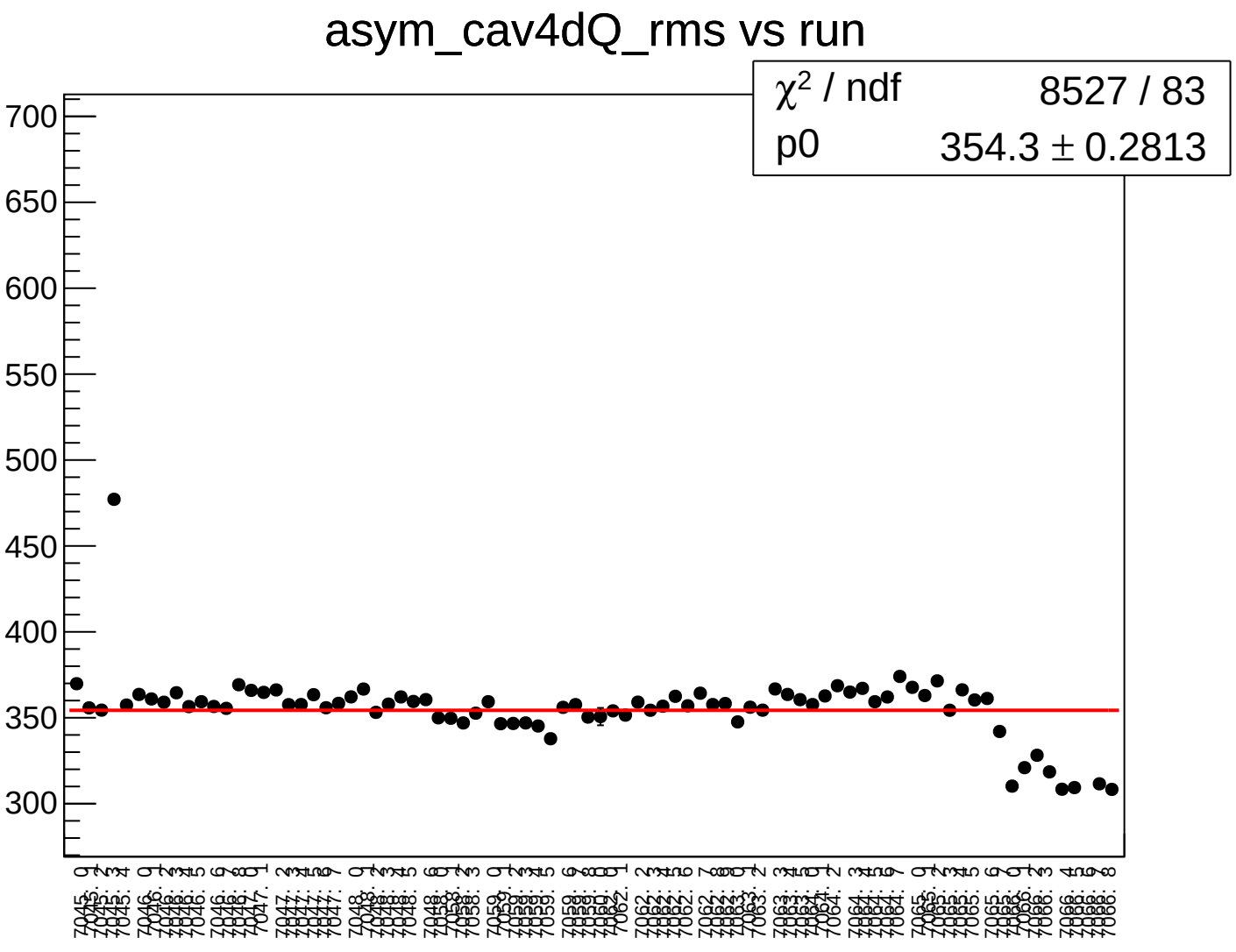

asym_cav4cQ_mean vs run
χ² / ndf 16.22 / 83
p0 −192.7 ± 256.6
pull
Entries 84
Mean −10.66
Std Dev 51.69

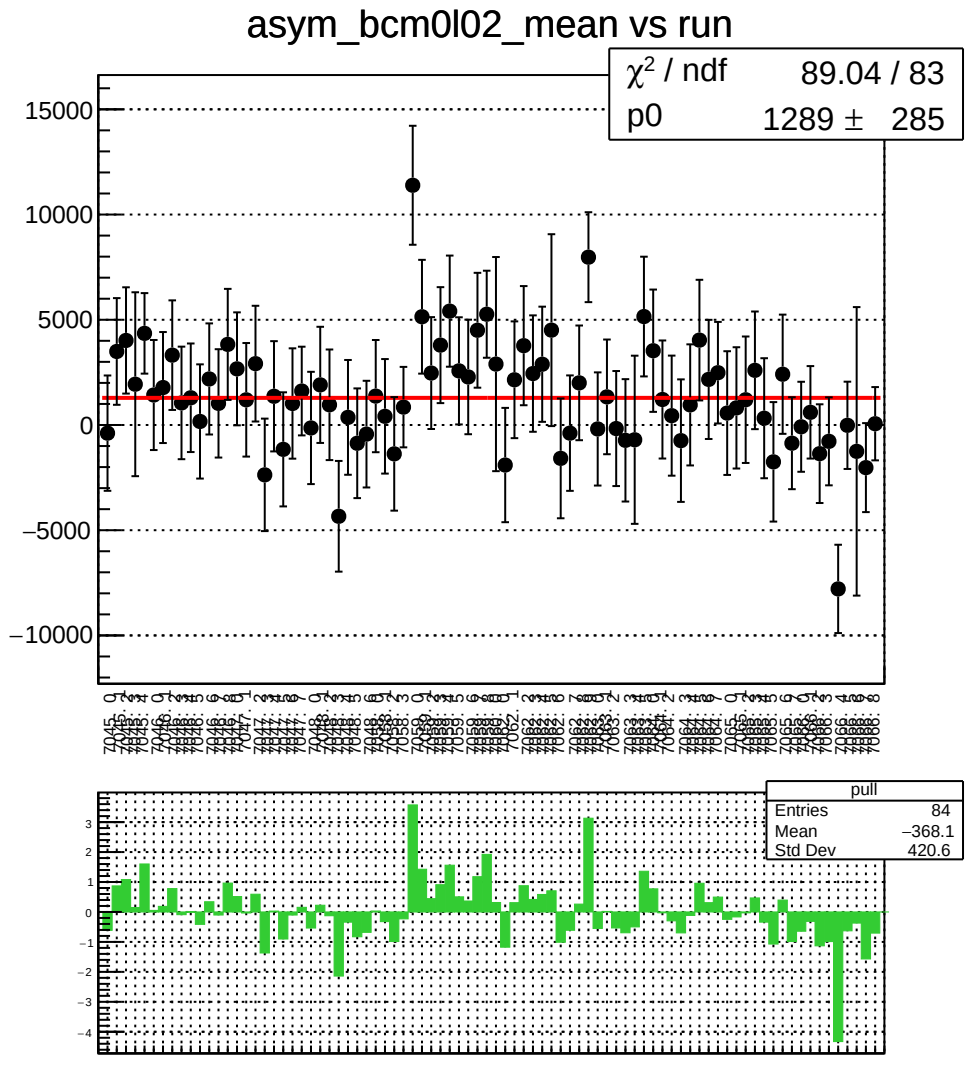

pull1D
Entries 84
Mean −0.00688
Std Dev 0.4393

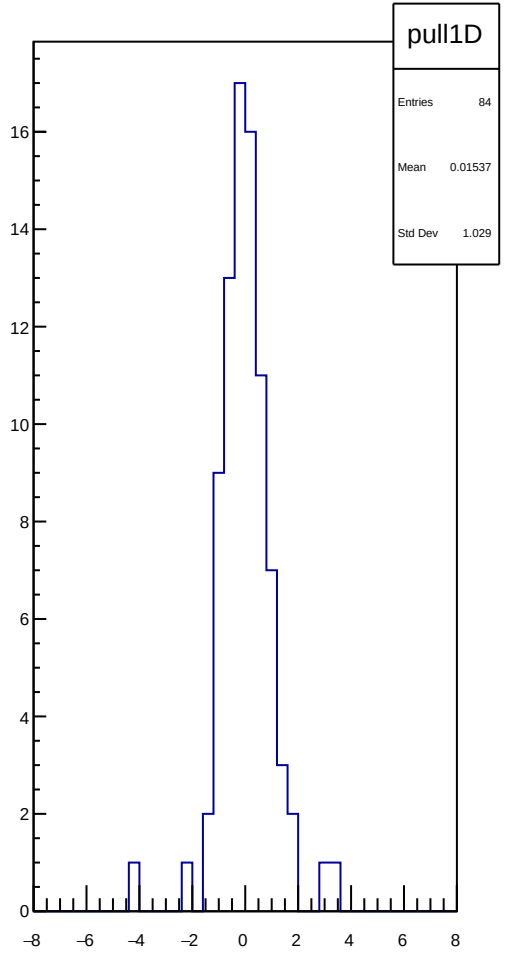

asym_cav4cQ_rms vs run
χ^2 / ndf 4.242e+04 / 83
p0 226 ± 0.1814
600
500
400
300
200

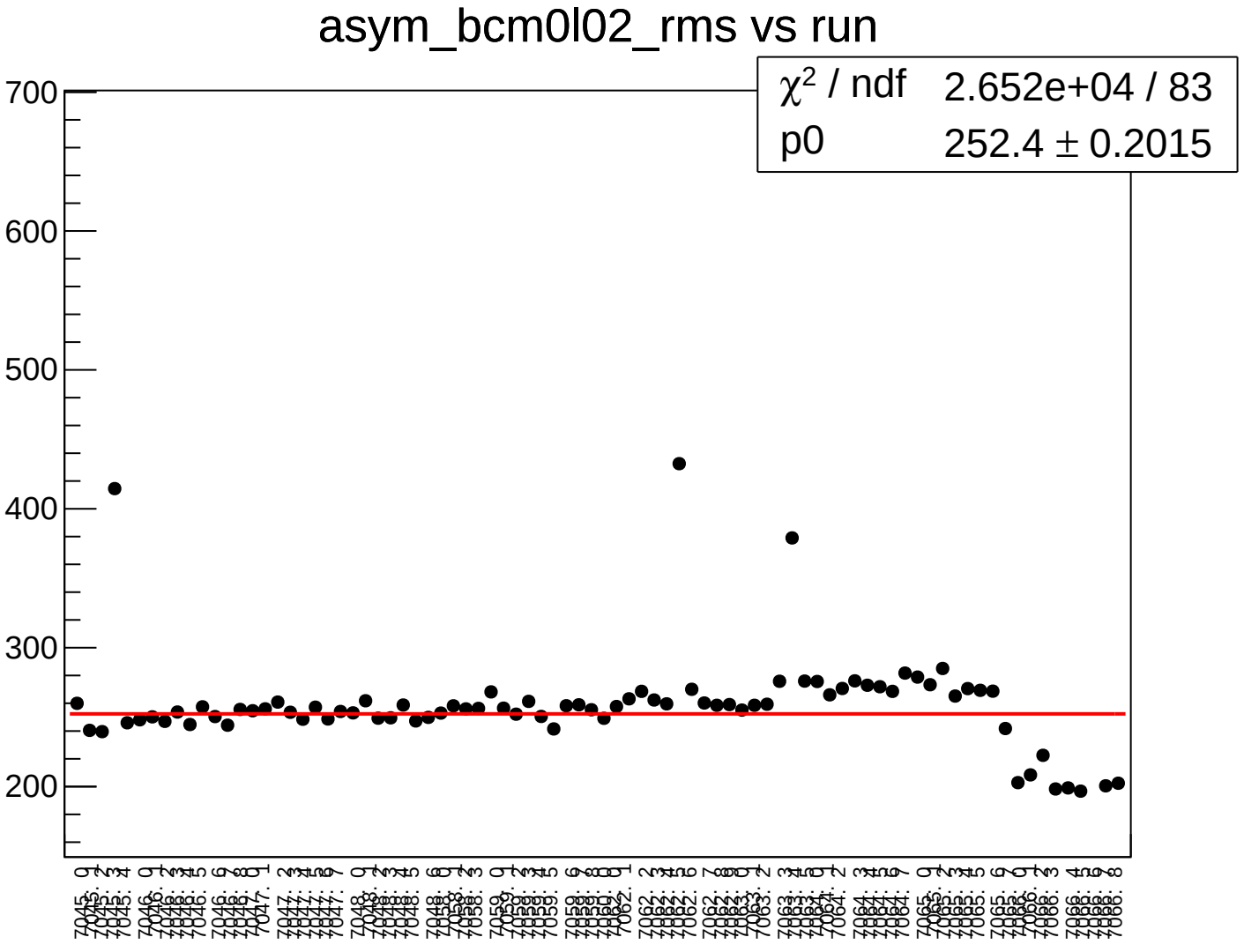

asym_cav4dQ_mean vs run
χ² / ndf 55.65 / 83
p0 −687.3 ± 397.9
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −217.8
Std Dev 264
2
1.5
1
0.5
0
−0.5
−1
−1.5

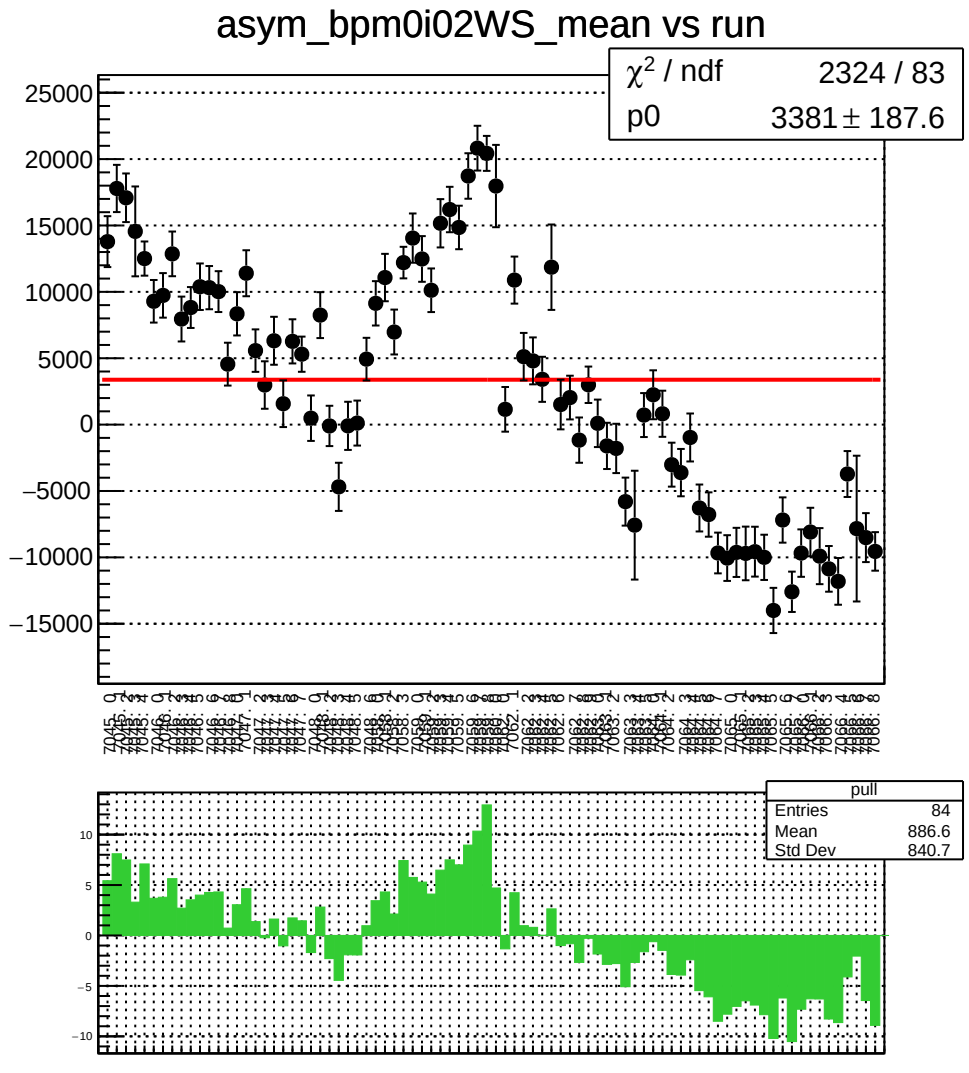

pull1D
Entries 84
Mean −0.002648
Std Dev 0.814
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

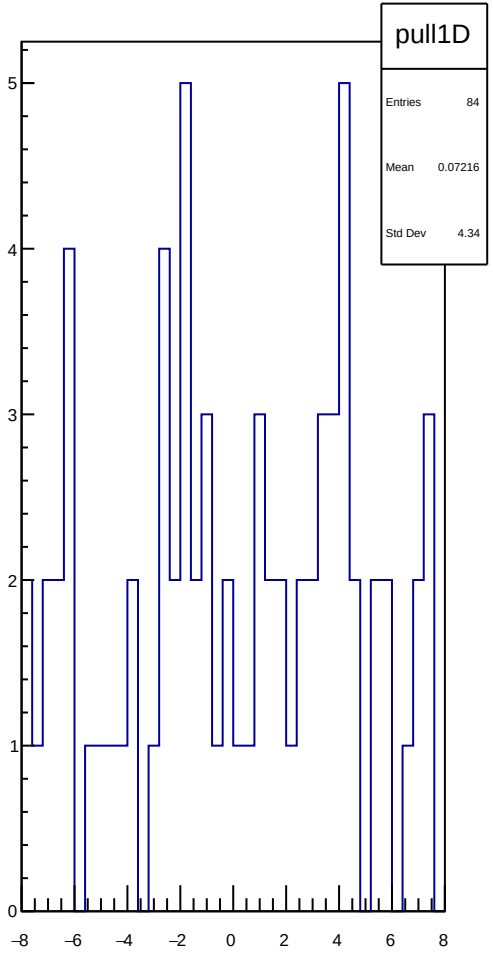

asym_cav4dQ_rms vs run
χ² / ndf 8527 / 83
p0 354.3 ± 0.2813
700
650
600
550
500
450
400
350
300

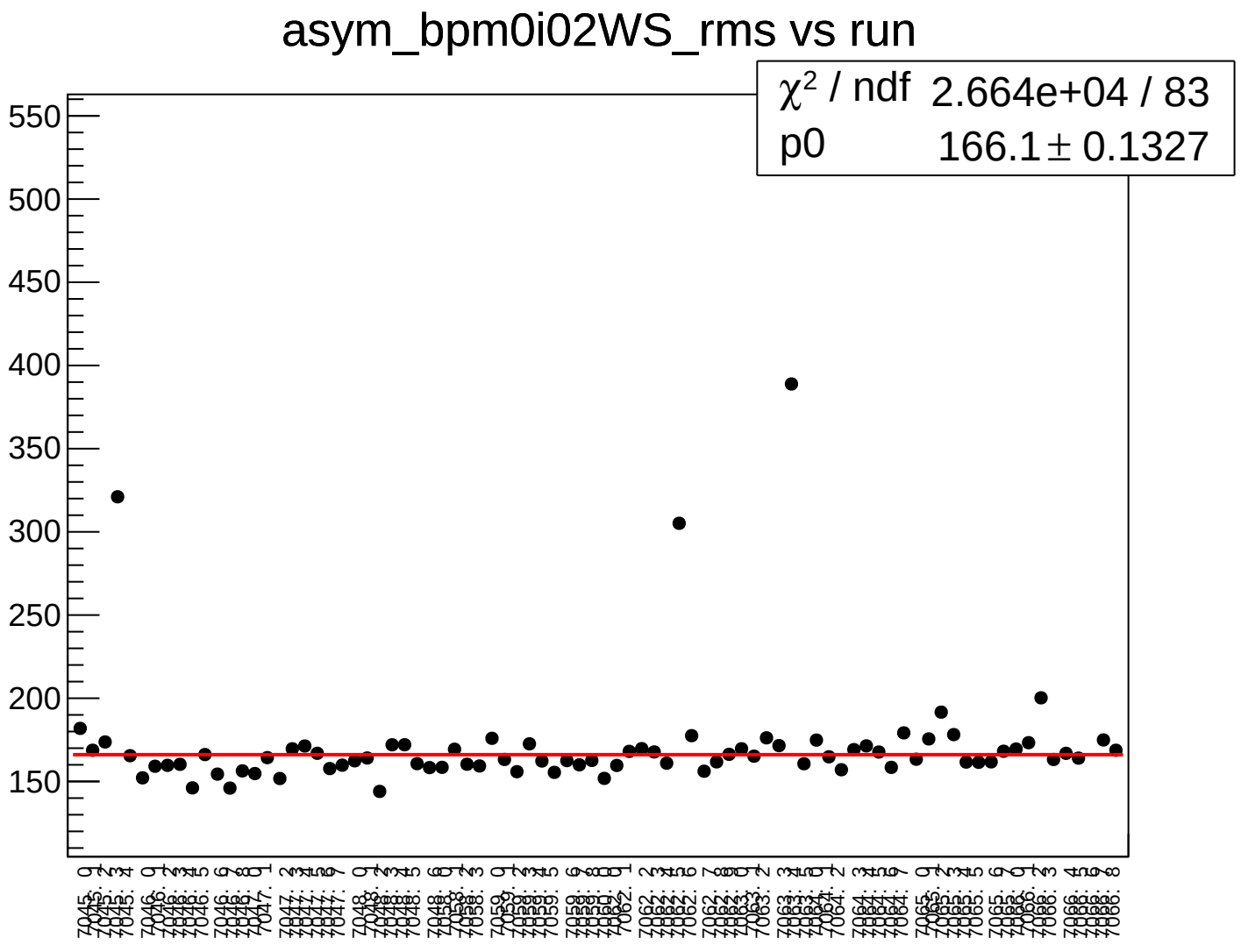

asym_bcm0l02_mean vs run
χ² / ndf 89.04 / 83
p0 1289 ± 285
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −368.1
Std Dev 420.6
3
2
1
0
−1
−2
−3
−4

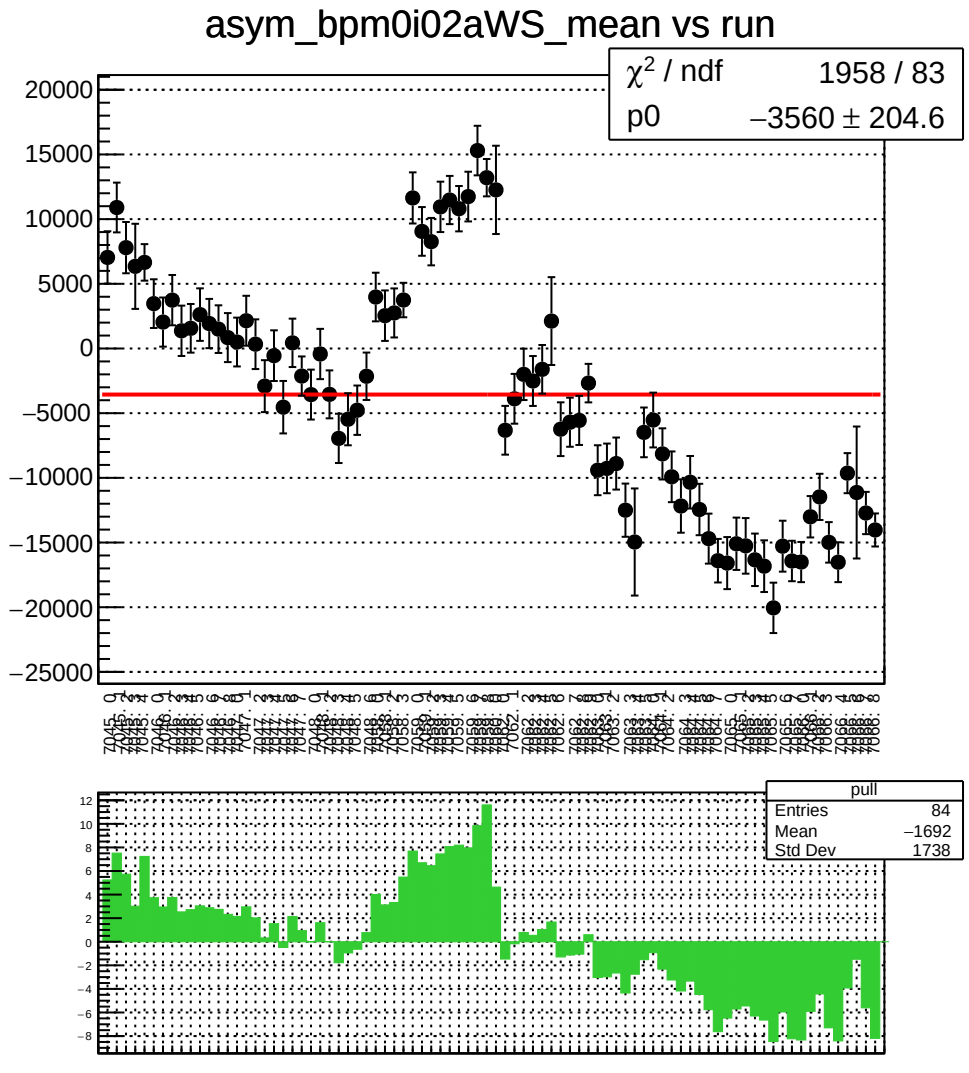

pull1D
Entries 84
Mean 0.01537
Std Dev 1.029
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

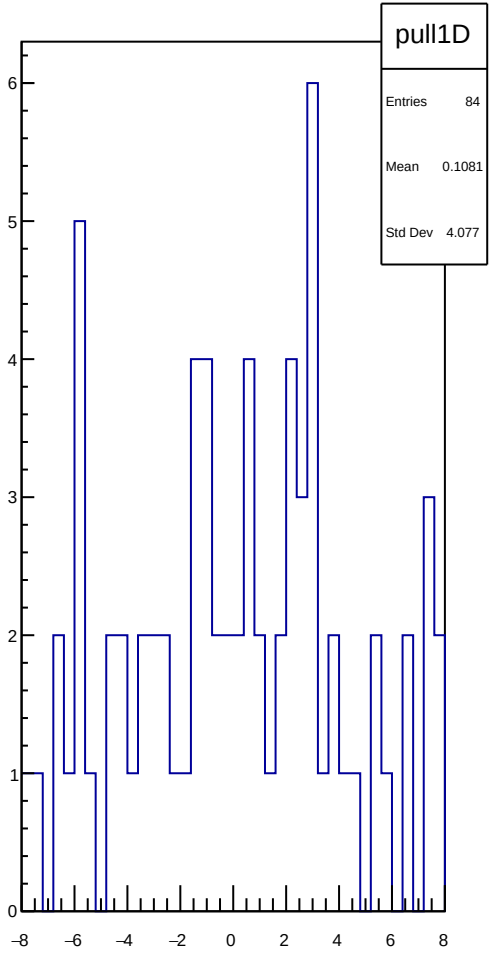

asym_bcm0l02_rms vs run
χ^2 / ndf 2.652e+04 / 83
p0 252.4 ± 0.2015
700
600
500
400
300
200

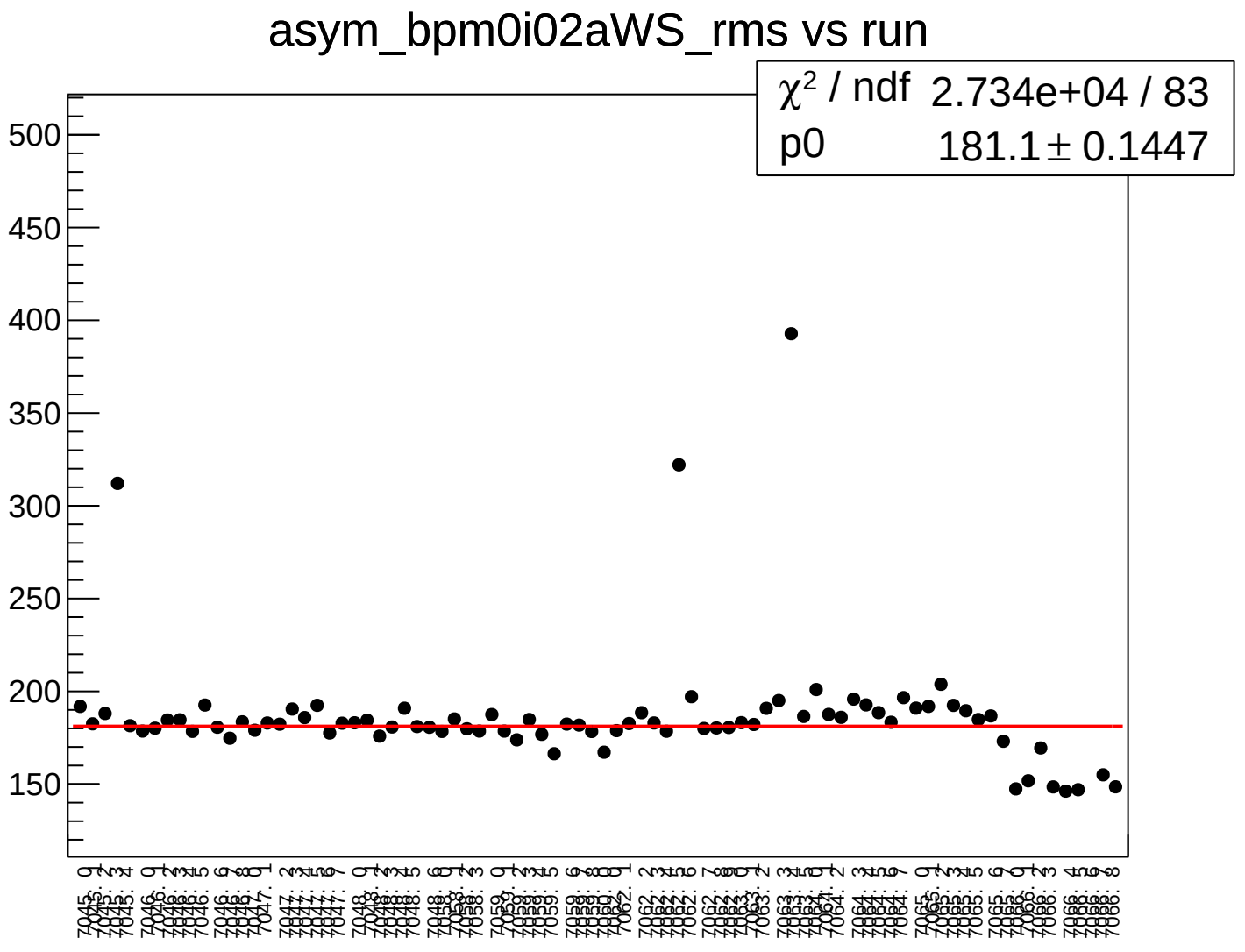

asym_bpm0i02WS_mean vs run
χ² / ndf 2324 / 83
p0 3381 ± 187.6
pull
Entries 84
Mean 886.6
Std Dev 840.7

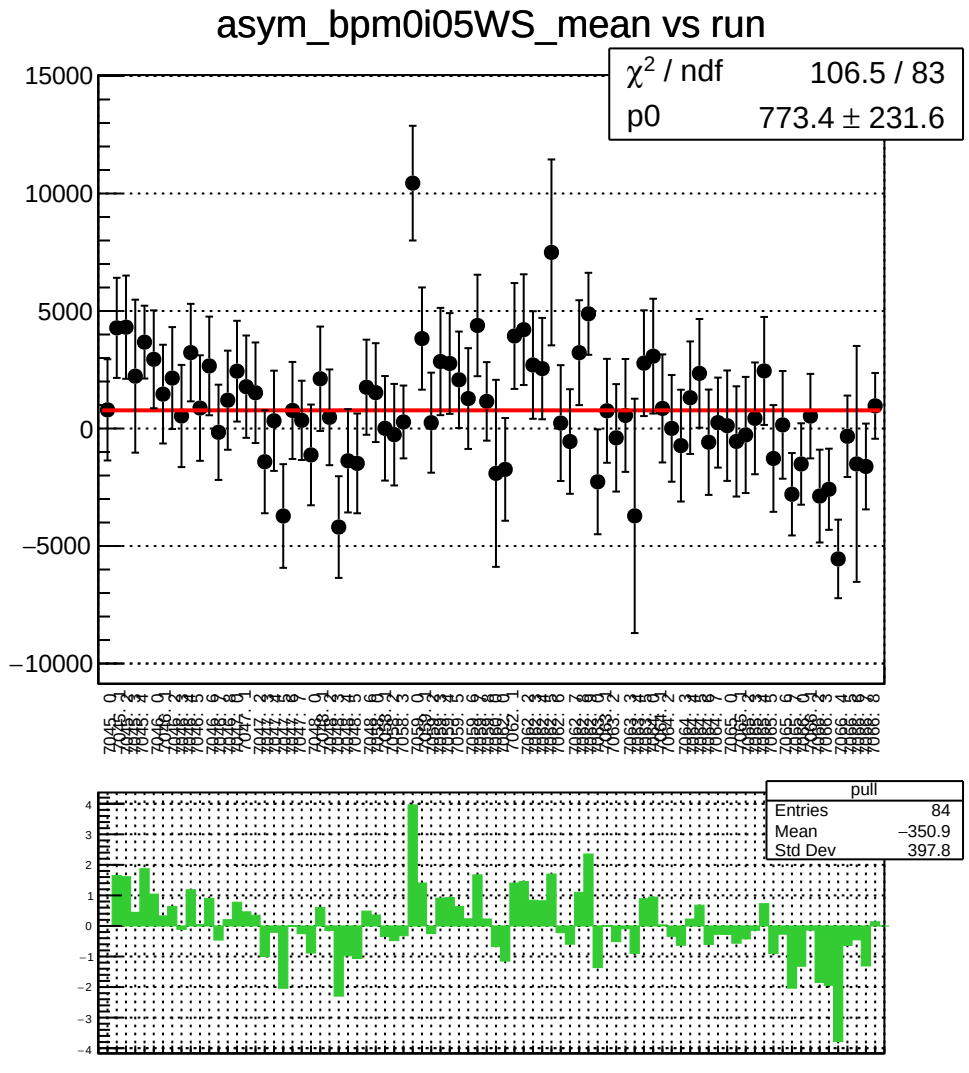

pull1D
Entries 84
Mean 0.07216
Std Dev 4.34

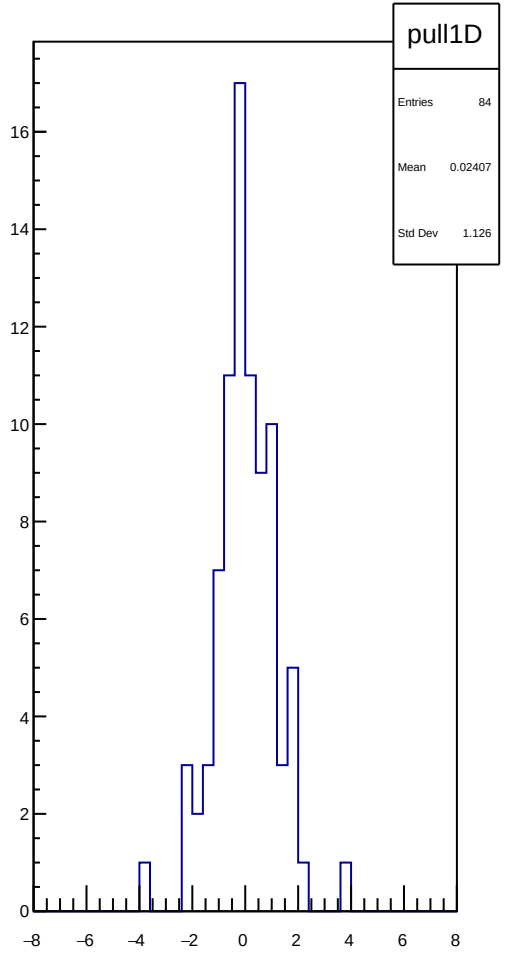

asym_bpm0i02WS_rms vs run
χ^2 / ndf 2.664e+04 / 83
p0 166.1 ± 0.1327
550
500
450
400
350
300
250
200
150

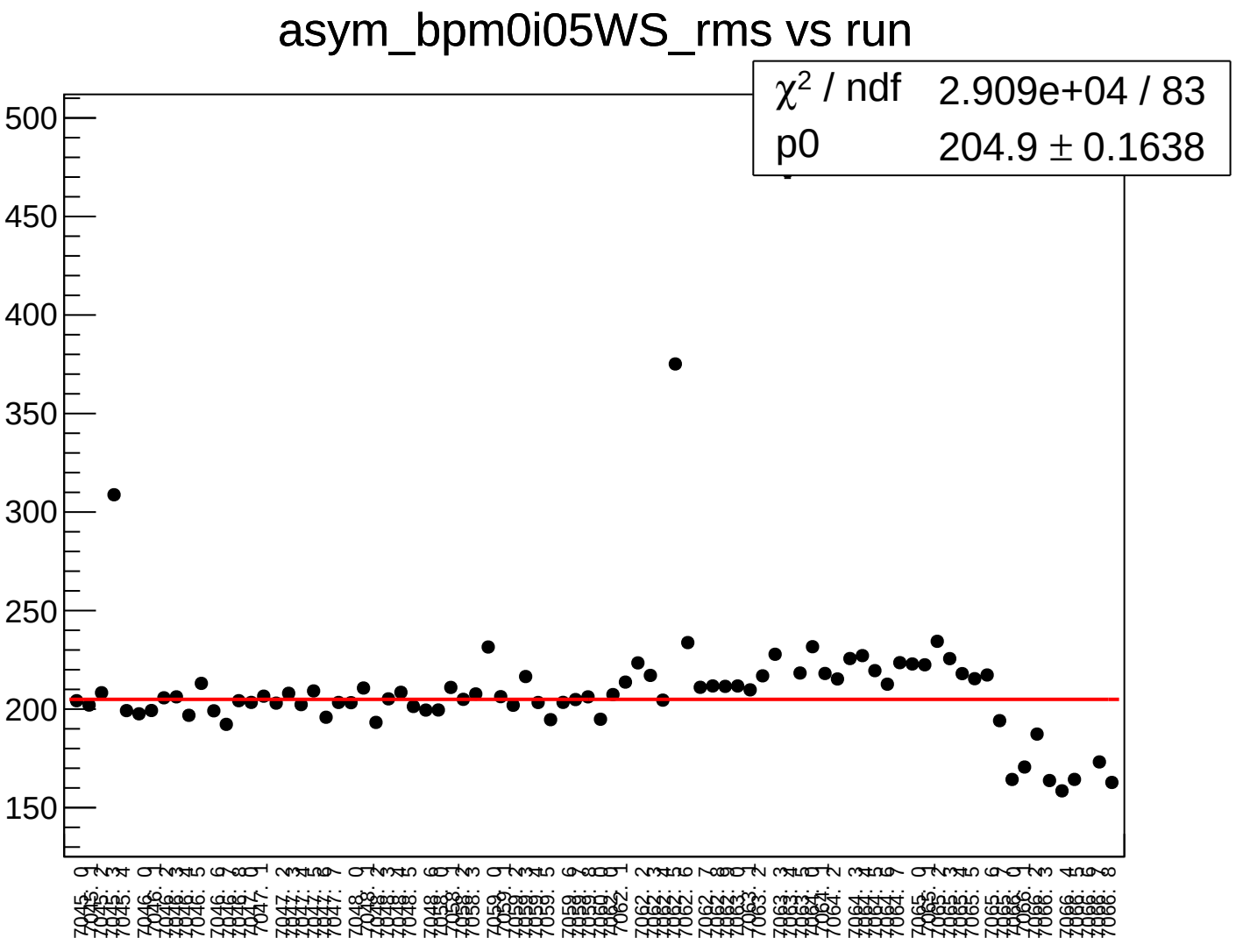

asym_bpm0i02aWS_mean vs run
χ² / ndf 1958 / 83
p0 −3560 ± 204.6
pull
Entries 84
Mean −1692
Std Dev 1738

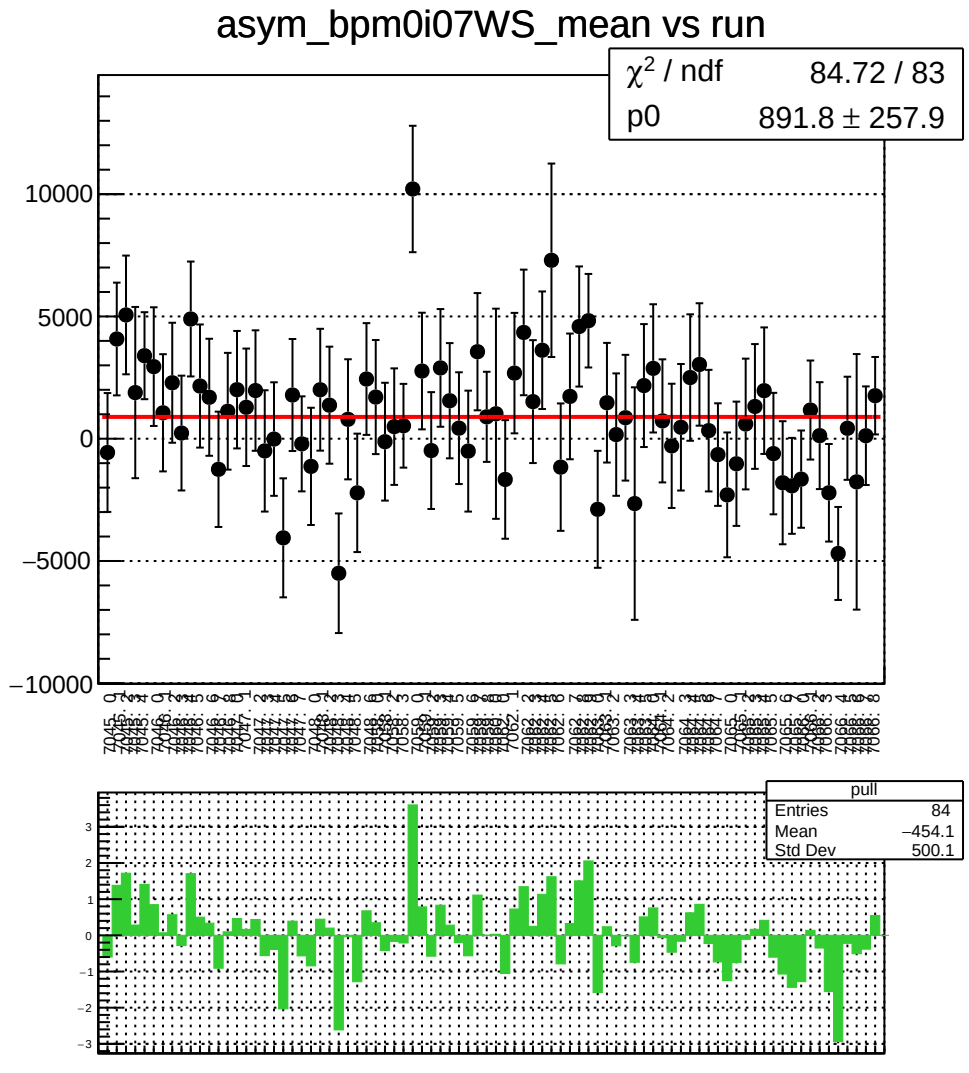

pull1D
Entries 84
Mean 0.1081
Std Dev 4.077

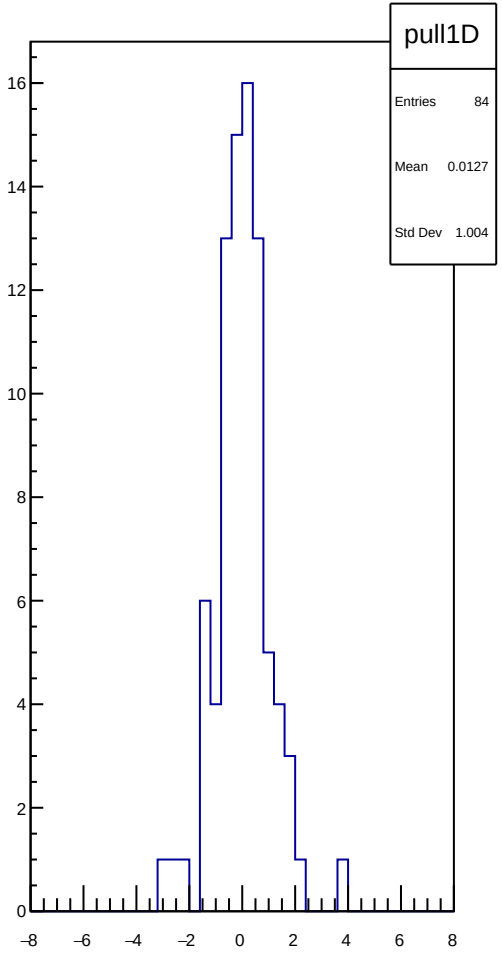

asym_bpm0i02aWS_rms vs run
χ² / ndf 2.734e+04 / 83
p0 181.1 ± 0.1447
500
450
400
350
300
250
200
150

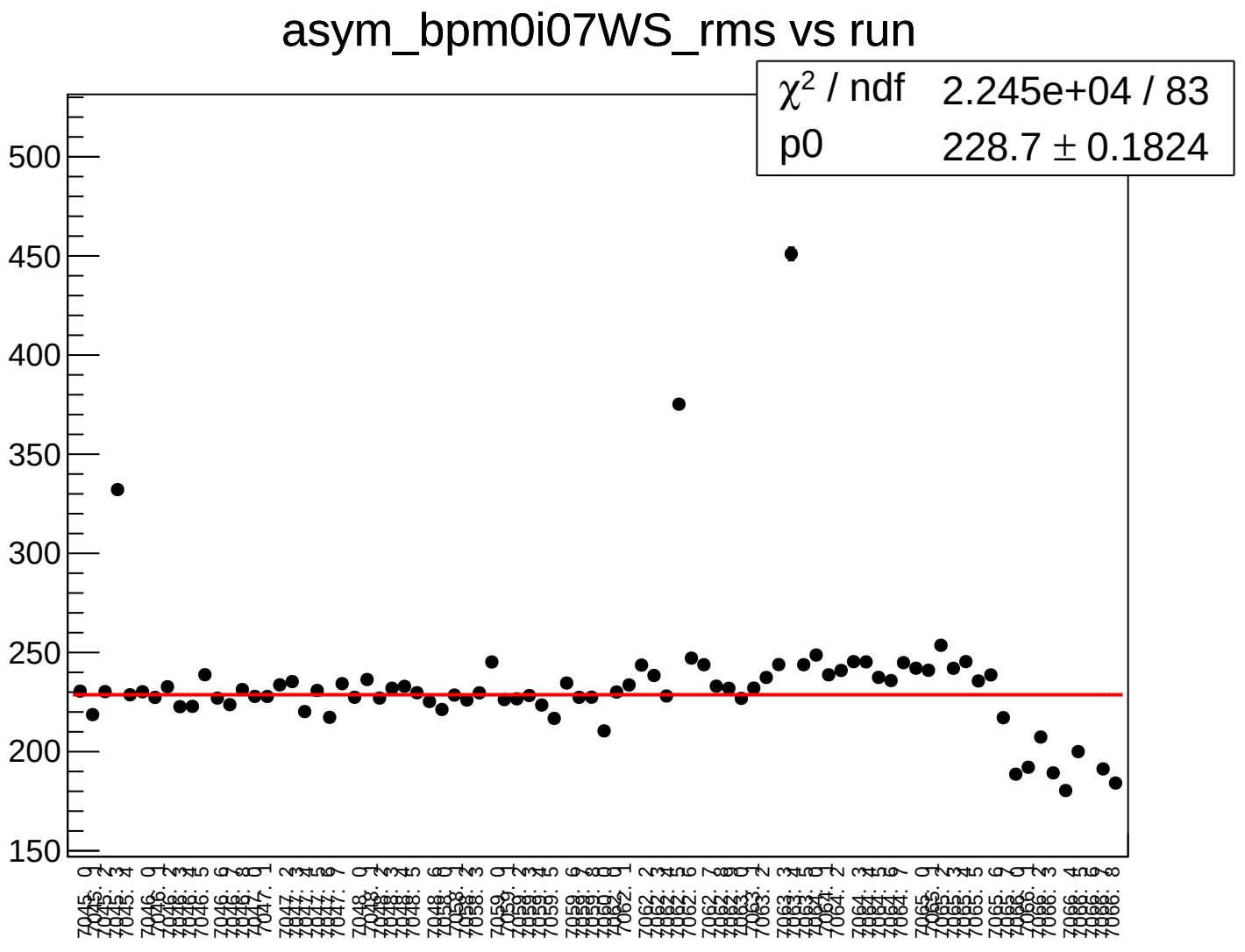

asym_bpm0i05WS_mean vs run
χ² / ndf 106.5 / 83
p0 773.4 ± 231.6
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −350.9
Std Dev 397.8
4
3
2
1
0
−1
−2
−3
−4

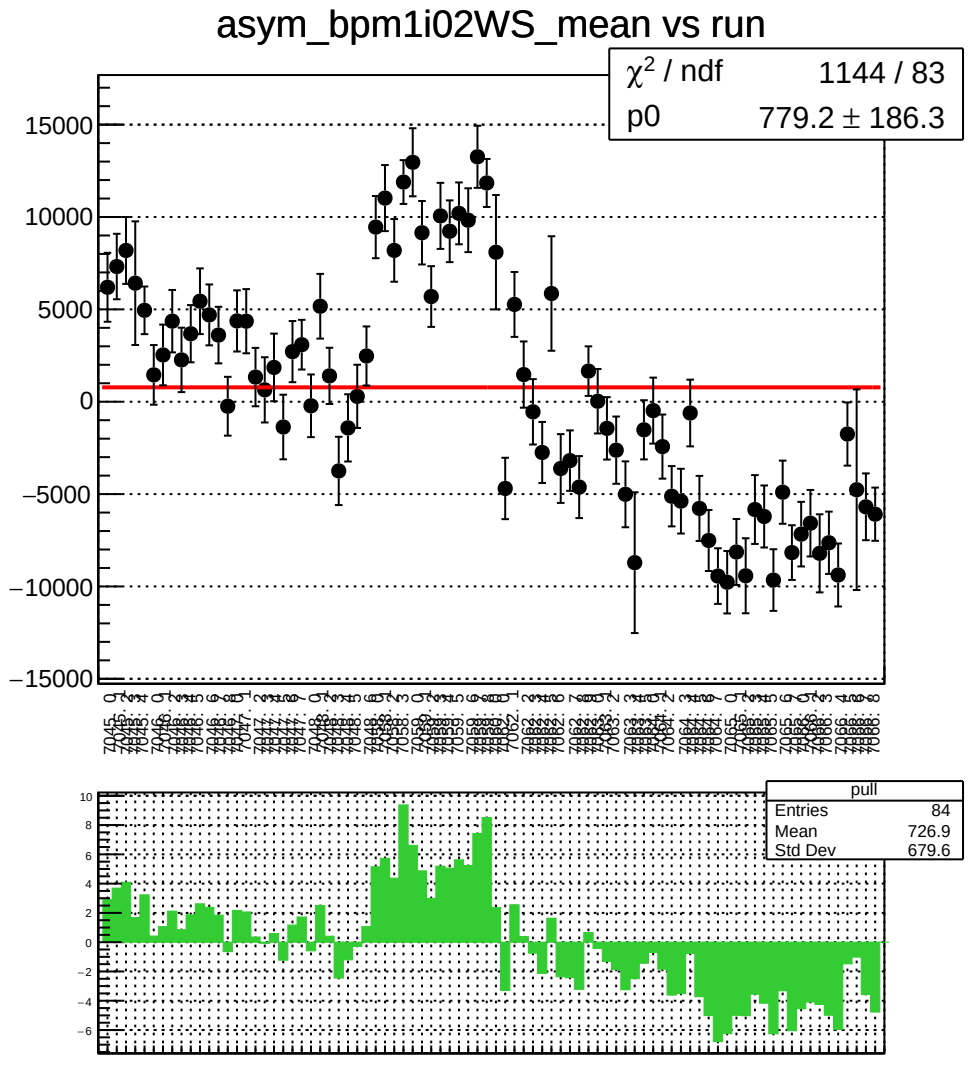

pull1D
Entries 84
Mean 0.02407
Std Dev 1.126
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

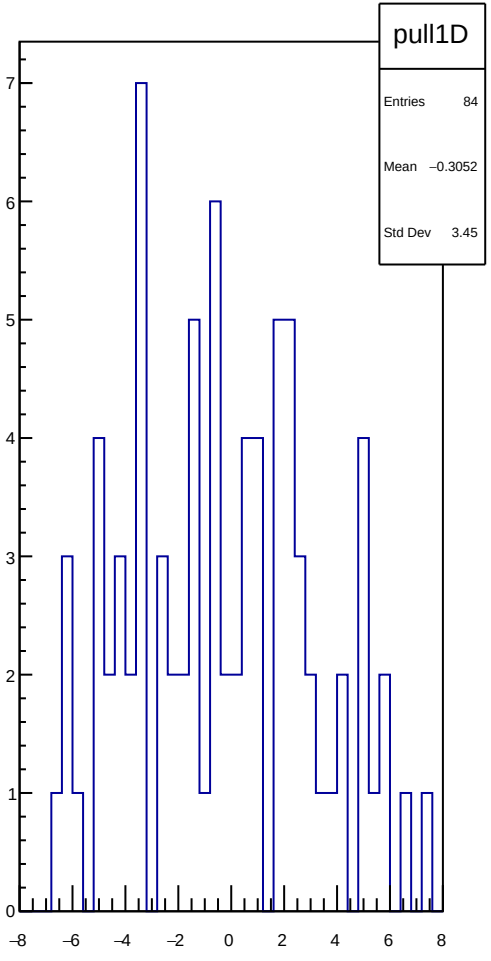

asym_bpm0i05WS_rms vs run
χ² / ndf 2.909e+04 / 83
p0 204.9 ± 0.1638
500
450
400
350
300
250
200
150

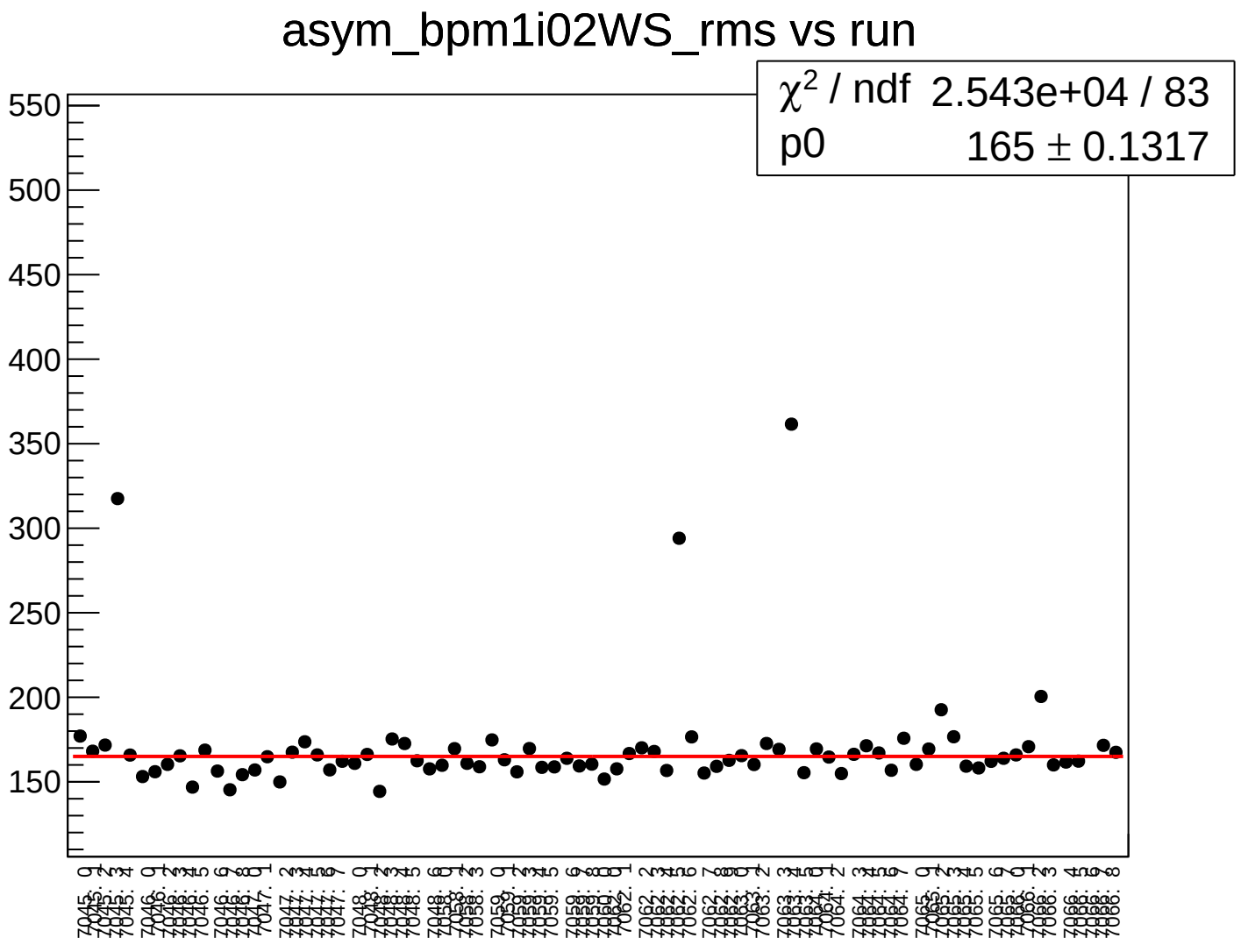

asym_bpm0i07WS_mean vs run
χ² / ndf 84.72 / 83
p0 891.8 ± 257.9
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −454.1
Std Dev 500.1
3
2
1
0
−1
−2
−3

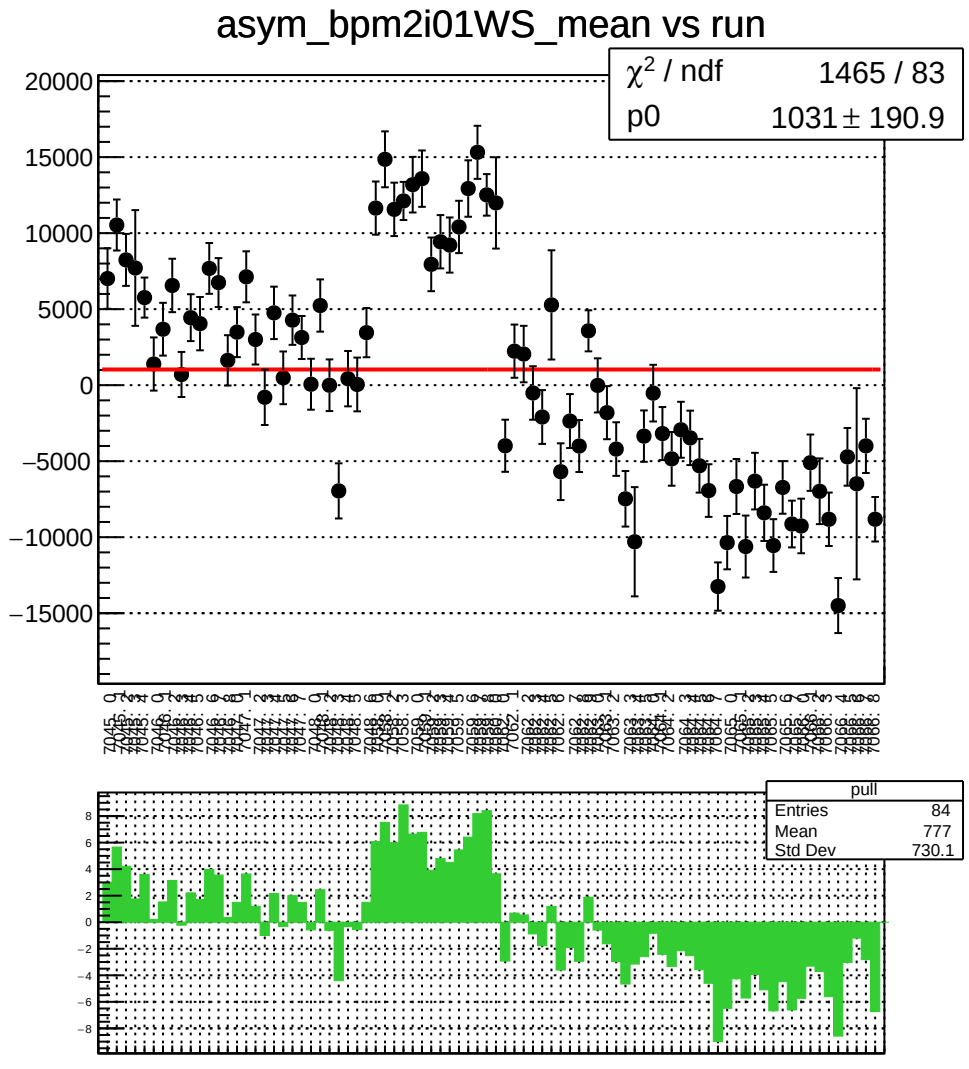

pull1D
Entries 84
Mean 0.0127
Std Dev 1.004
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

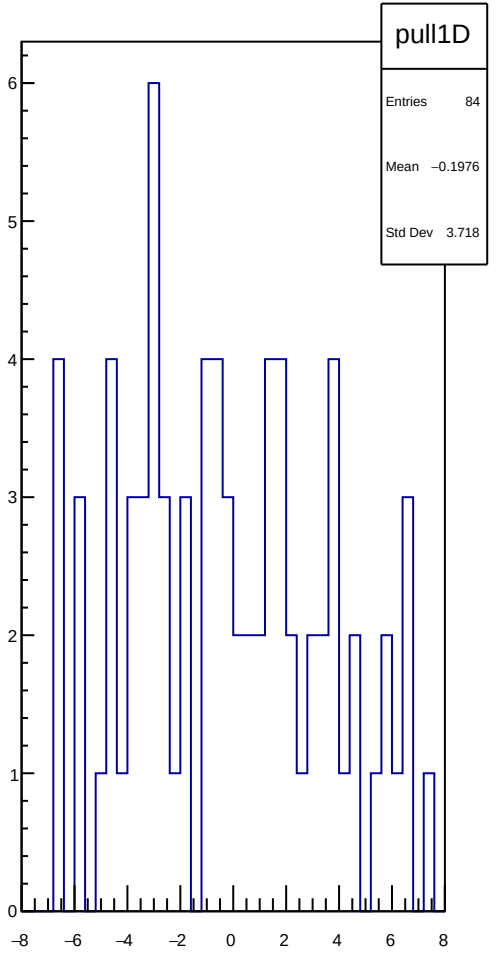

asym_bpm0i07WS_rms vs run
χ^2 / ndf 2.245e+04 / 83
p0 228.7 ± 0.1824
500
450
400
350
300
250
200
150

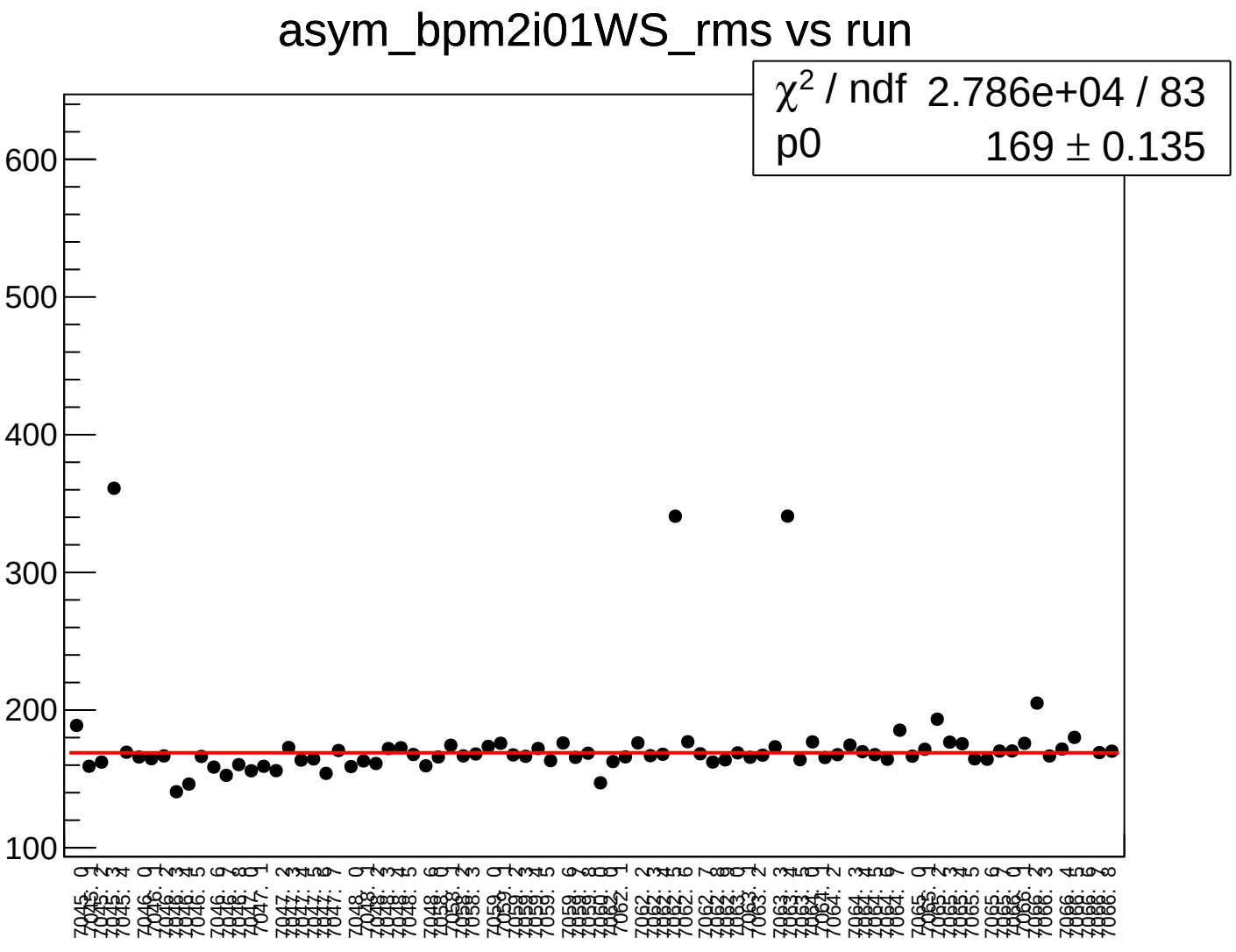

asym_bpm1i02WS_mean vs run
χ² / ndf 1144 / 83
p0 779.2 ± 186.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean 726.9
Std Dev 679.6
10
8
6
4
2
0
−2
−4
−6

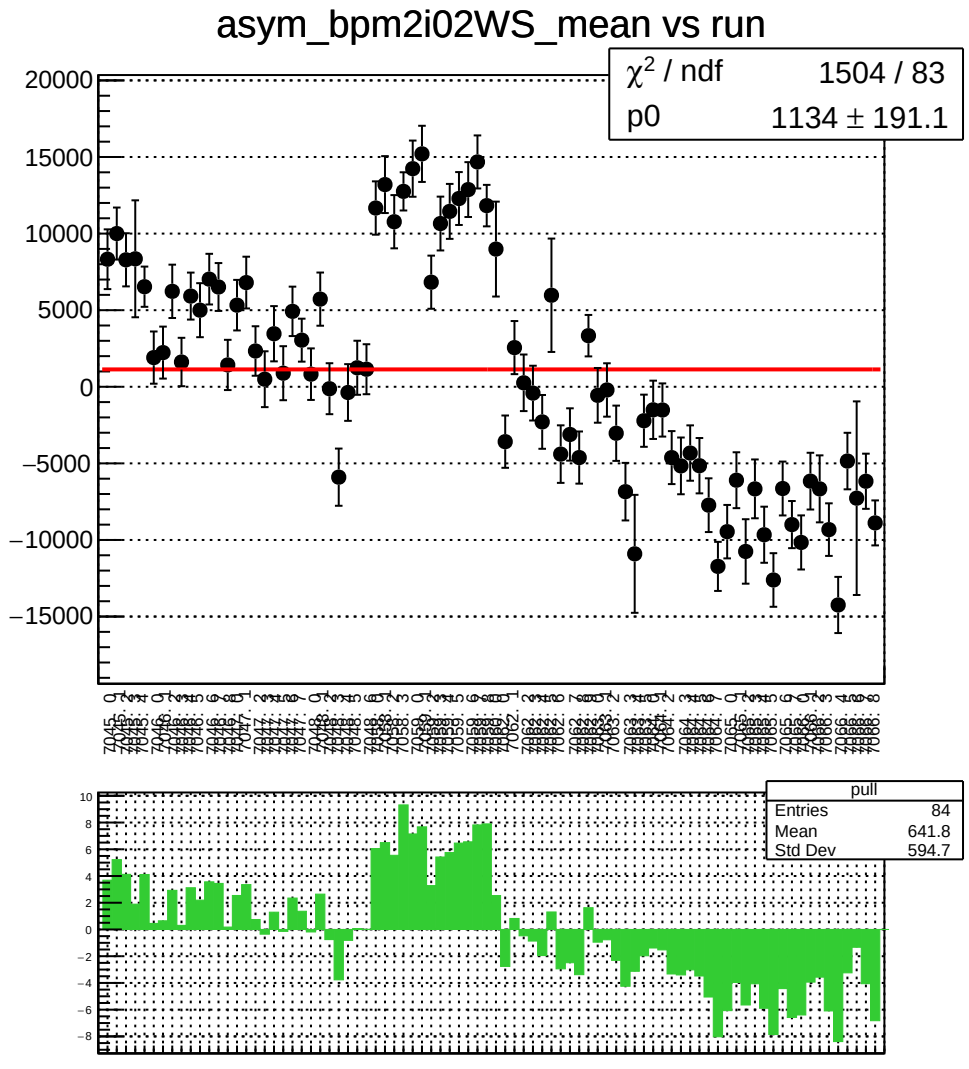

pull1D
Entries 84
Mean −0.3052
Std Dev 3.45
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

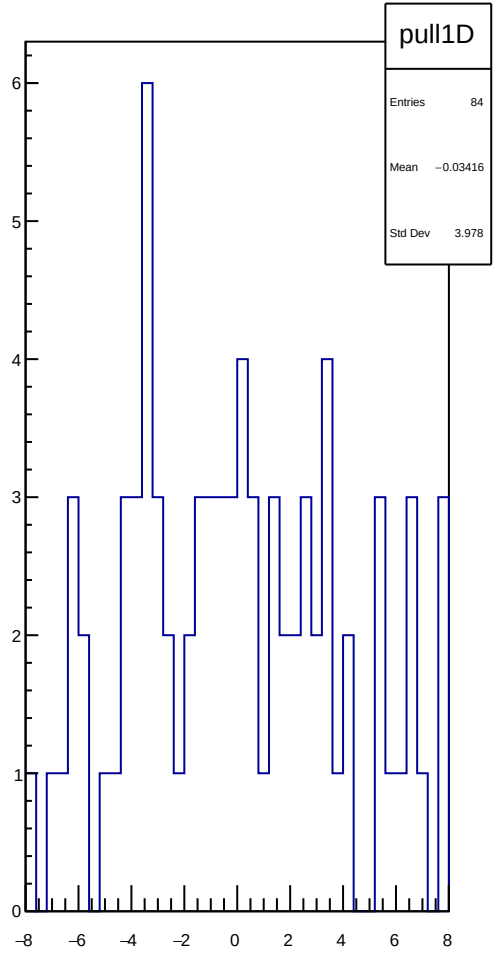

asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.543e+04 / 83
p0 165 ± 0.1317
550
500
450
400
350
300
250
200
150

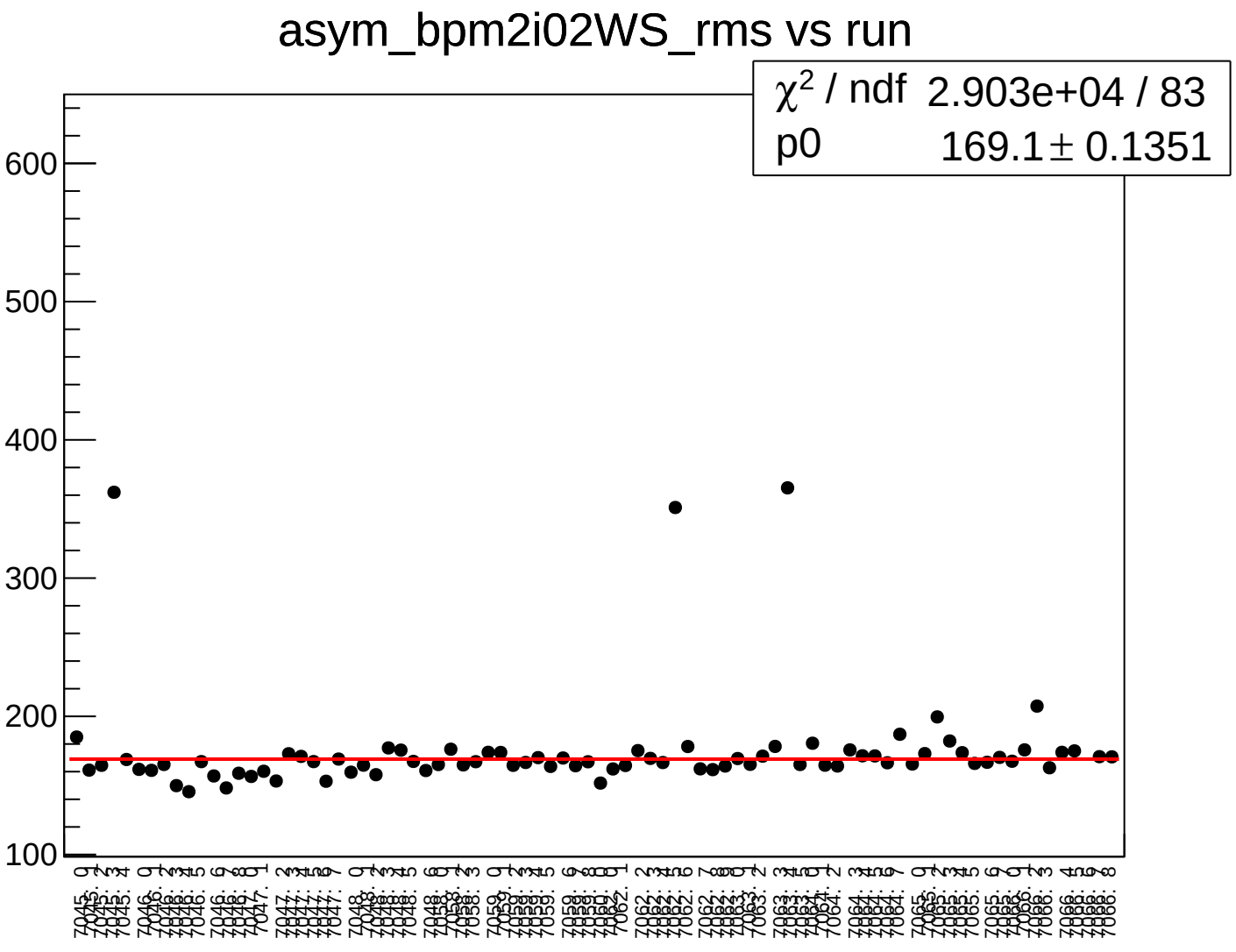

asym_bpm2i01WS_mean vs run
χ² / ndf 1465 / 83
p0 1031 ± 190.9
pull
Entries 84
Mean 777
Std Dev 730.1

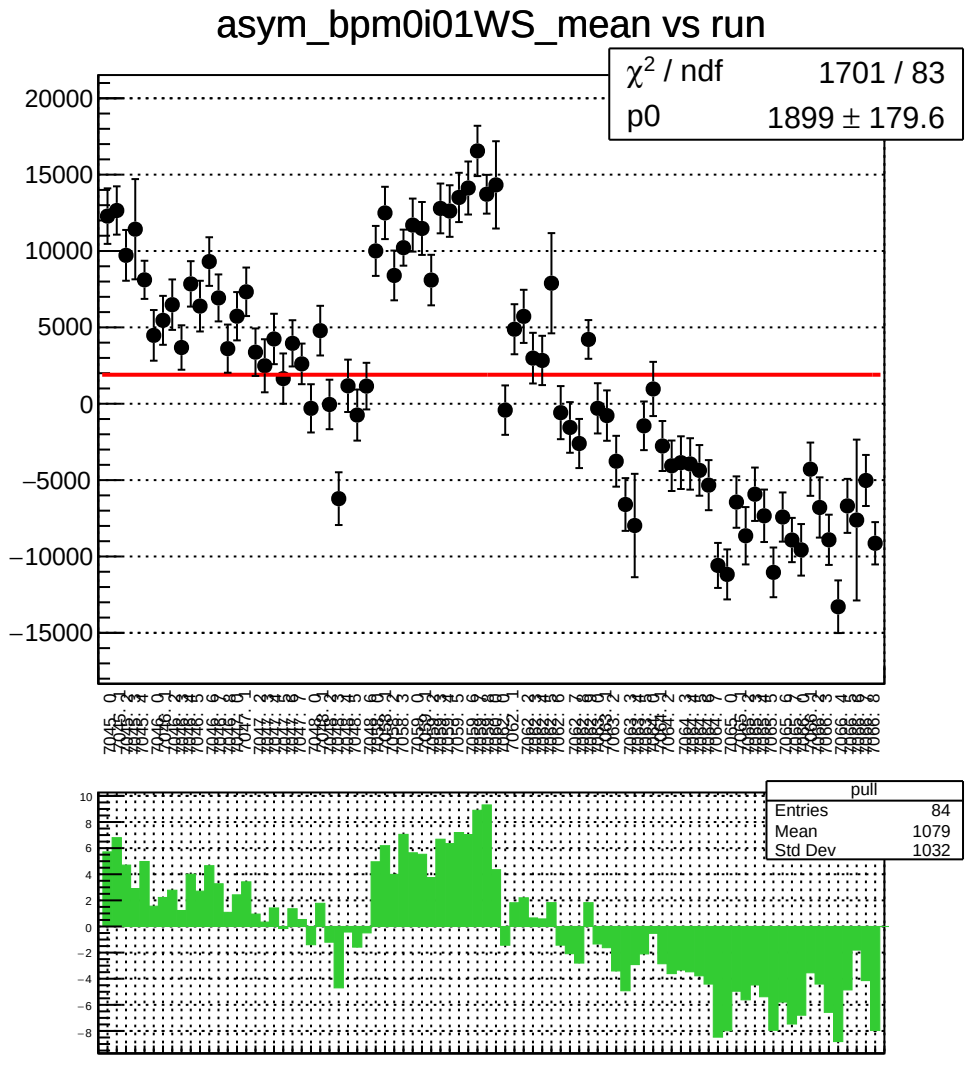

pull1D
Entries 84
Mean −0.1976
Std Dev 3.718

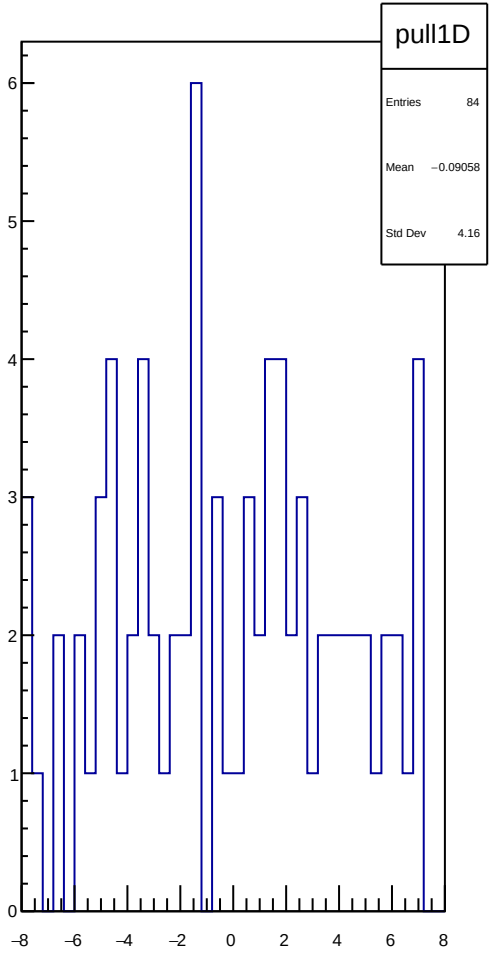

asym_bpm2i01WS_rms vs run
χ^2 / ndf 2.786e+04 / 83
p0 169 ± 0.135
600
500
400
300
200
100

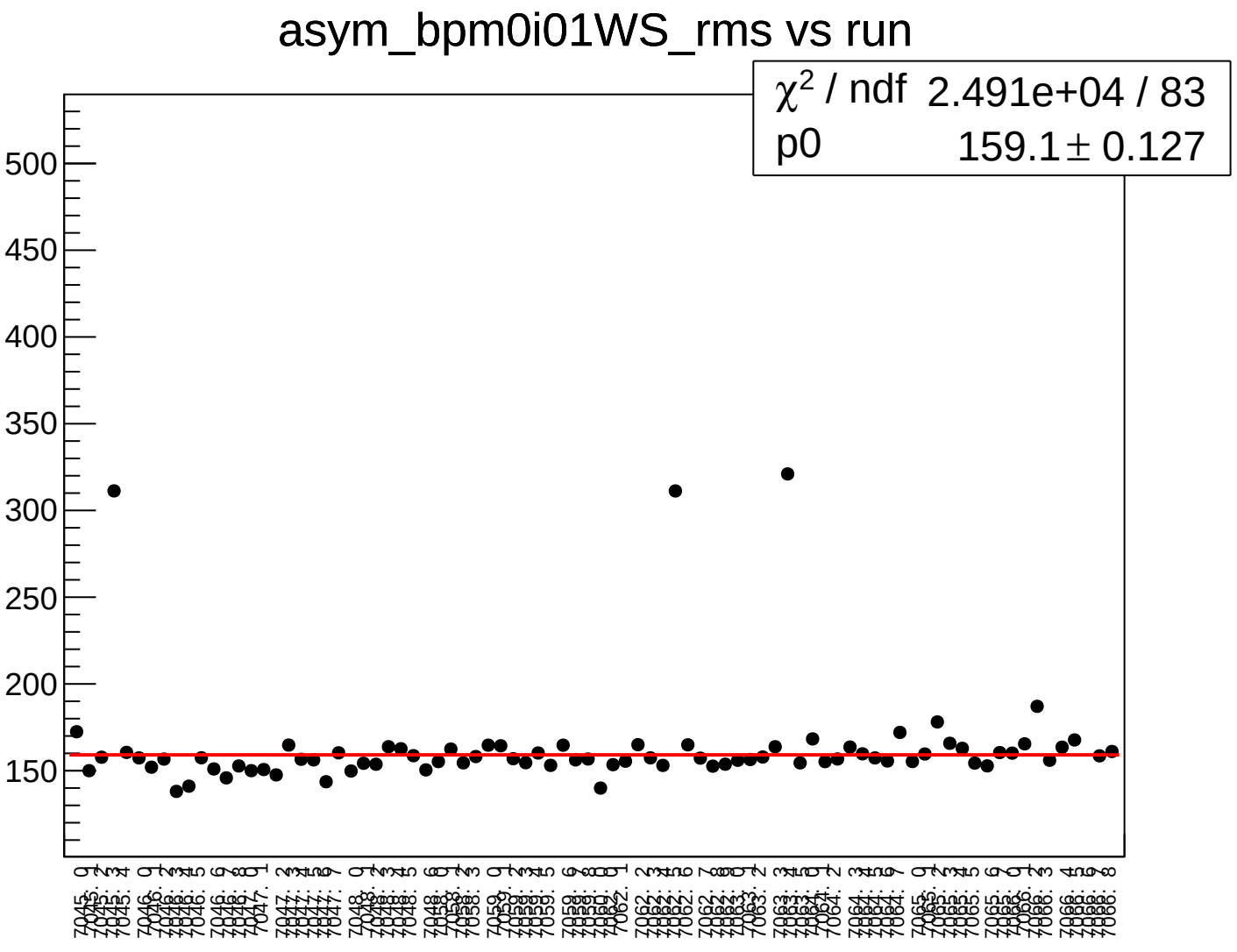

asym_bpm2i02WS_mean vs run
χ² / ndf 1504 / 83
p0 1134 ± 191.1
pull
Entries 84
Mean 641.8
Std Dev 594.7

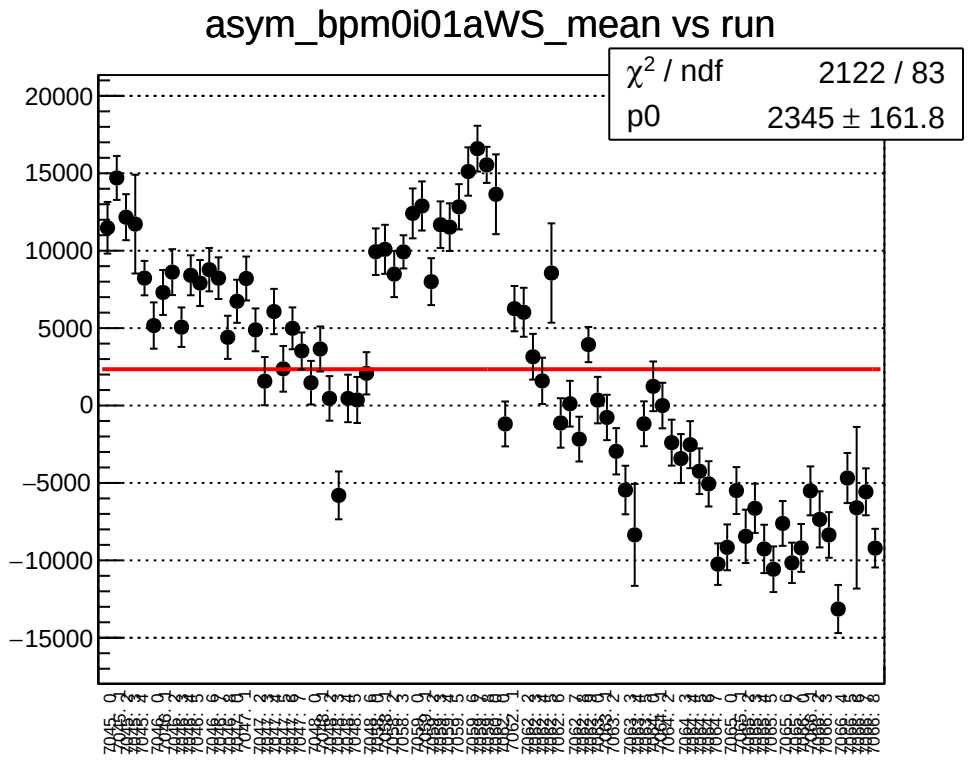

pull1D
Entries 84
Mean −0.03416
Std Dev 3.978

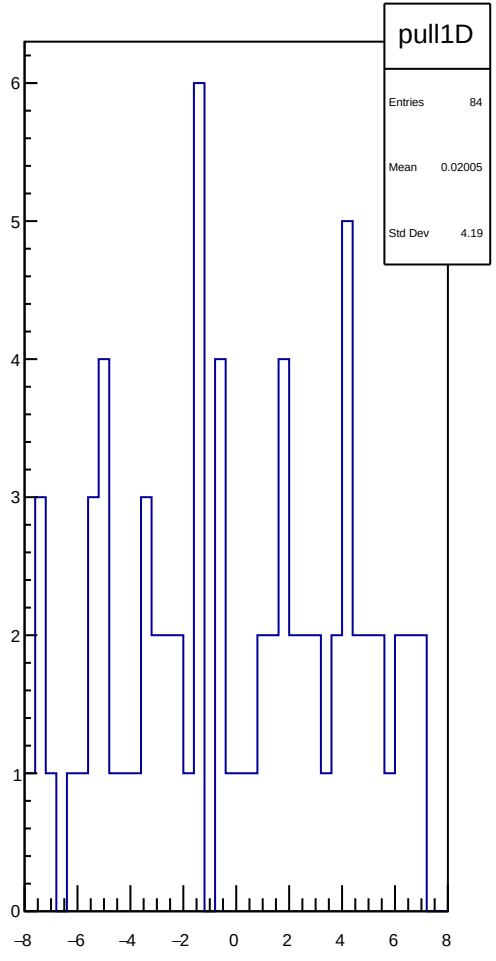

asym_bpm2i02WS_rms vs run
χ^2 / ndf 2.903e+04 / 83
p0 169.1 ± 0.1351
600
500
400
300
200
100

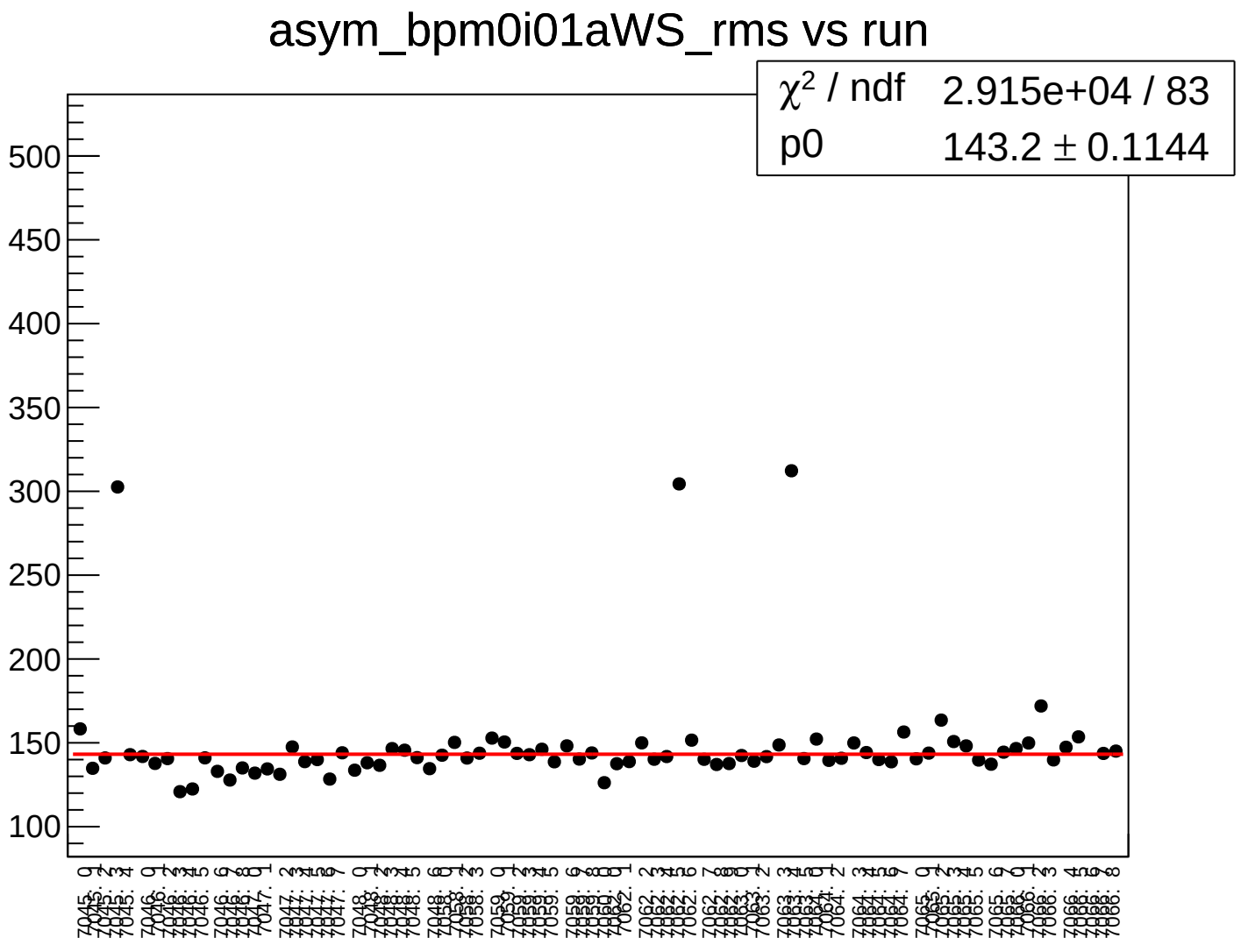

asym_bpm0i01WS_mean vs run
χ² / ndf 1701 / 83
p0 1899 ± 179.6
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean 1079
Std Dev 1032
10
8
6
4
2
0
−2
−4
−6
−8

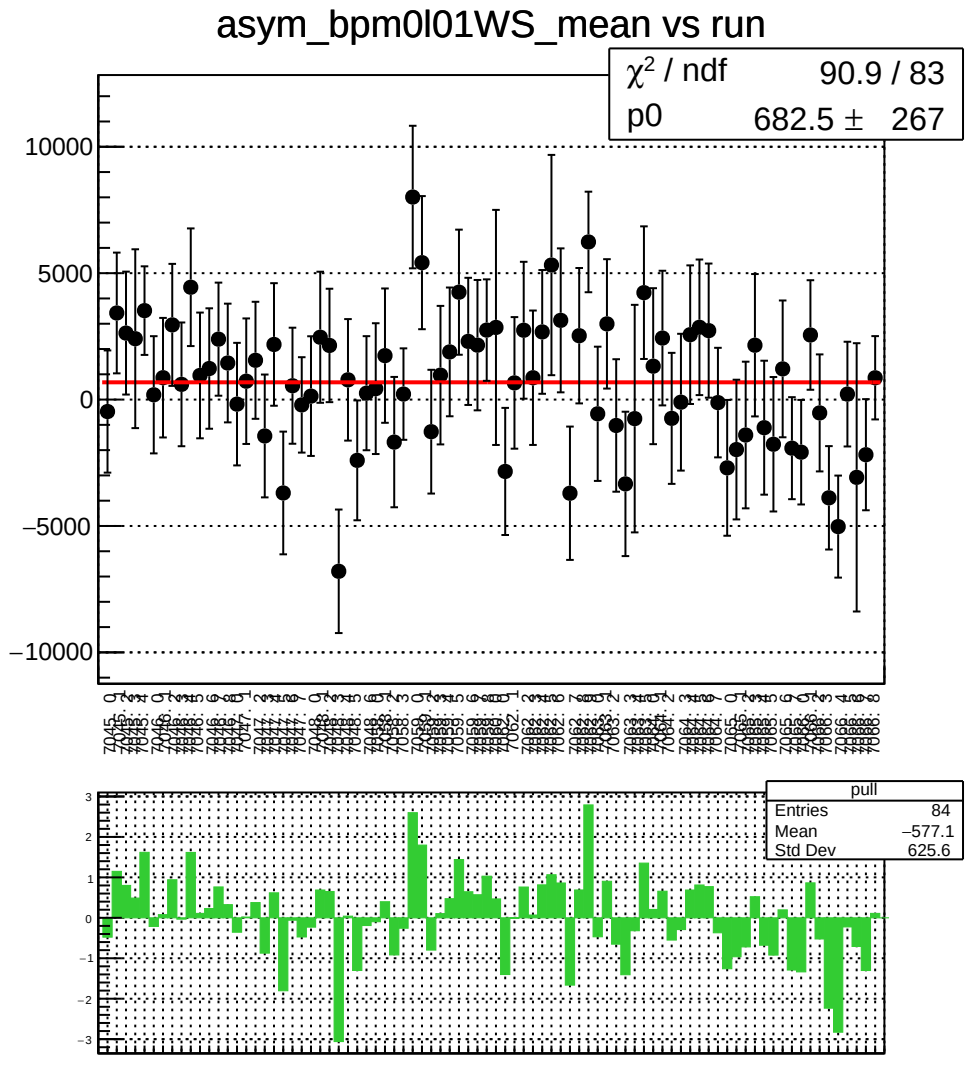

pull1D
Entries 84
Mean −0.09058
Std Dev 4.16
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

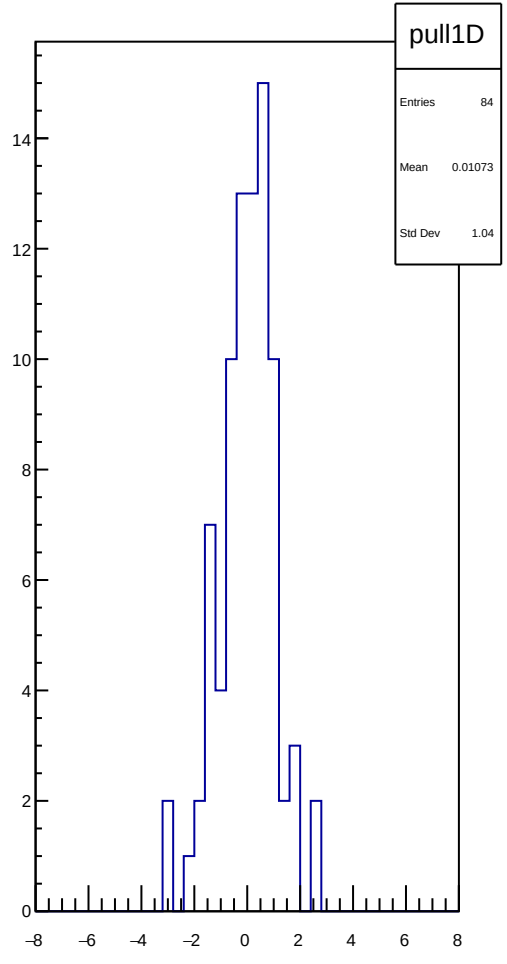

asym_bpm0i01WS_rms vs run
χ^2 / ndf 2.491e+04 / 83
p0 159.1 ± 0.127
500
450
400
350
300
250
200
150

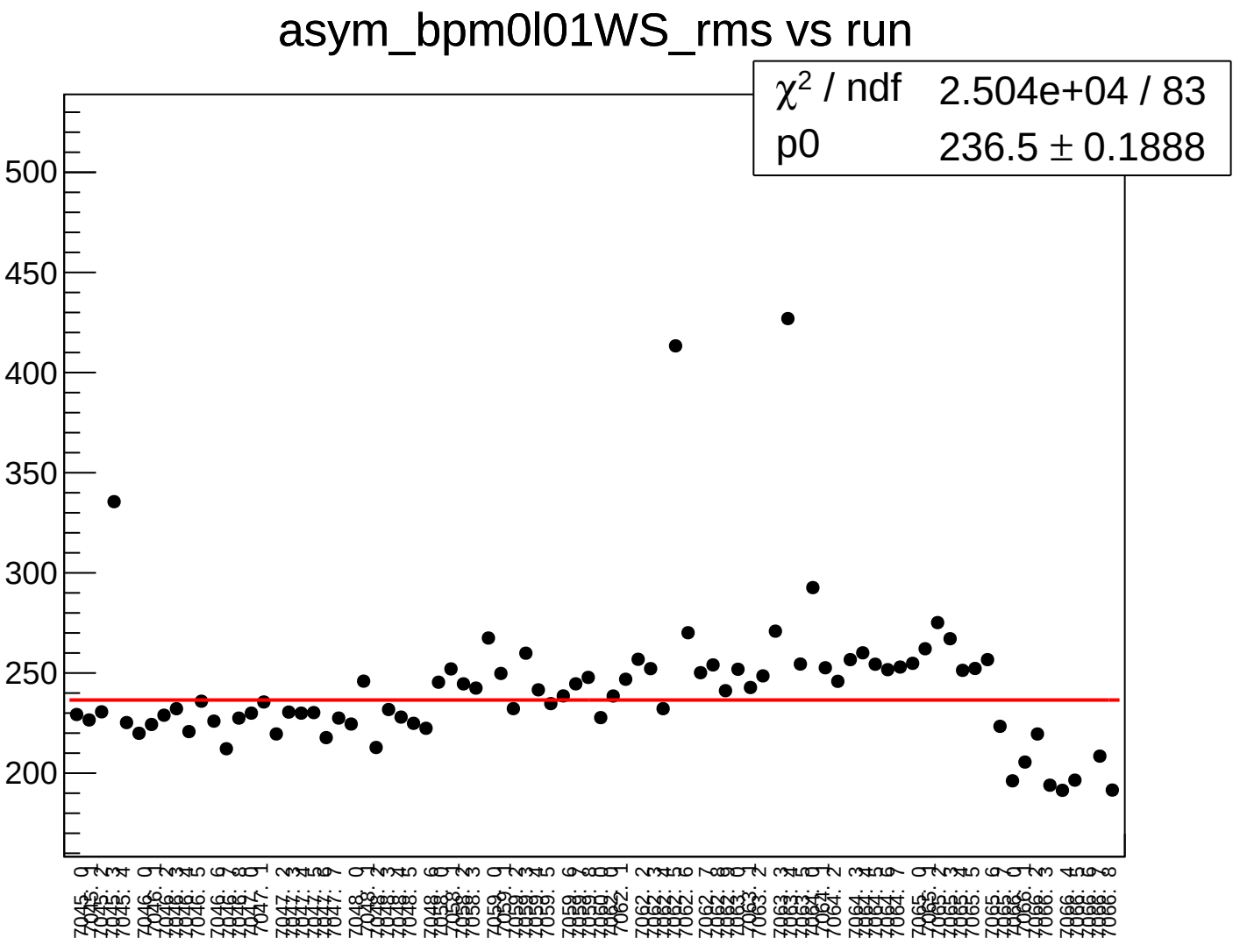

asym_bpm0i01aWS_mean vs run
χ² / ndf 2122 / 83
p0 2345 ± 161.8
pull
Entries 84
Mean 1029
Std Dev 983.5

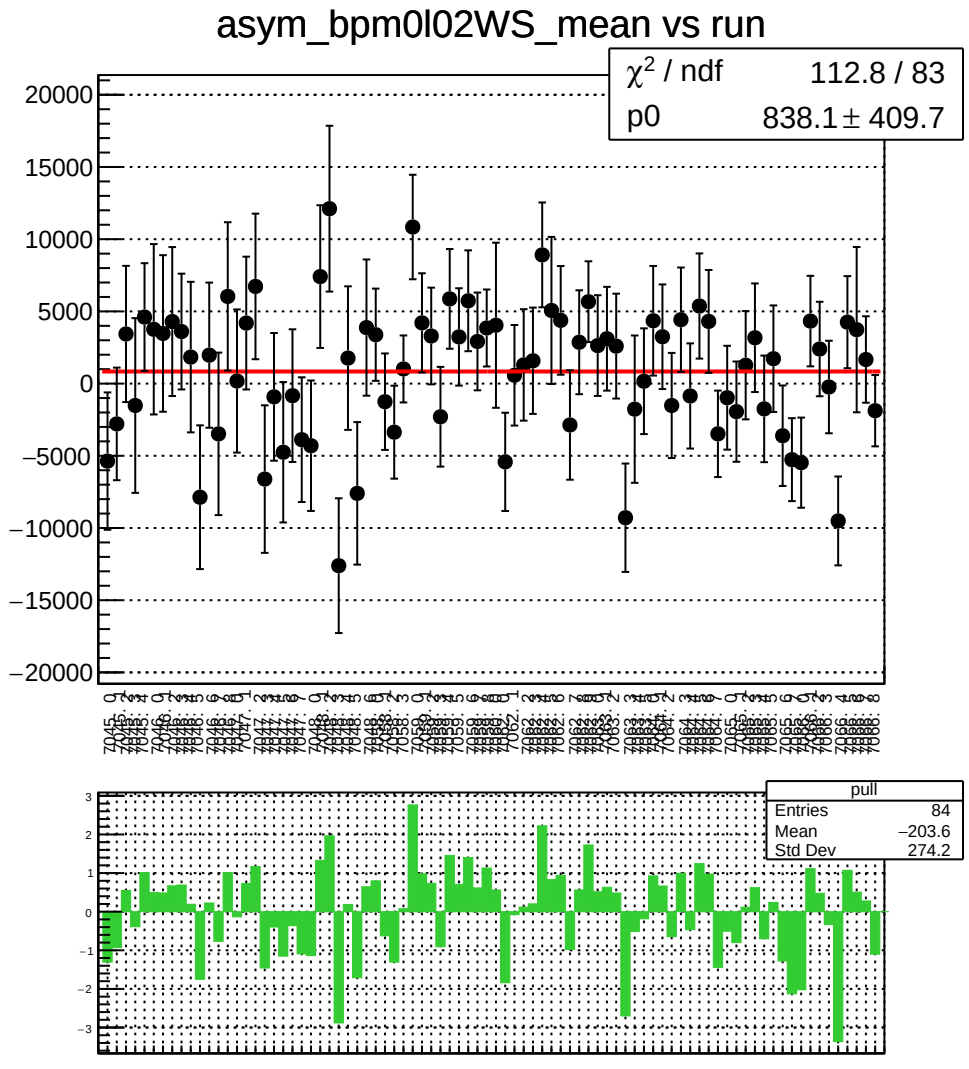

pull1D
Entries 84
Mean 0.02005
Std Dev 4.19

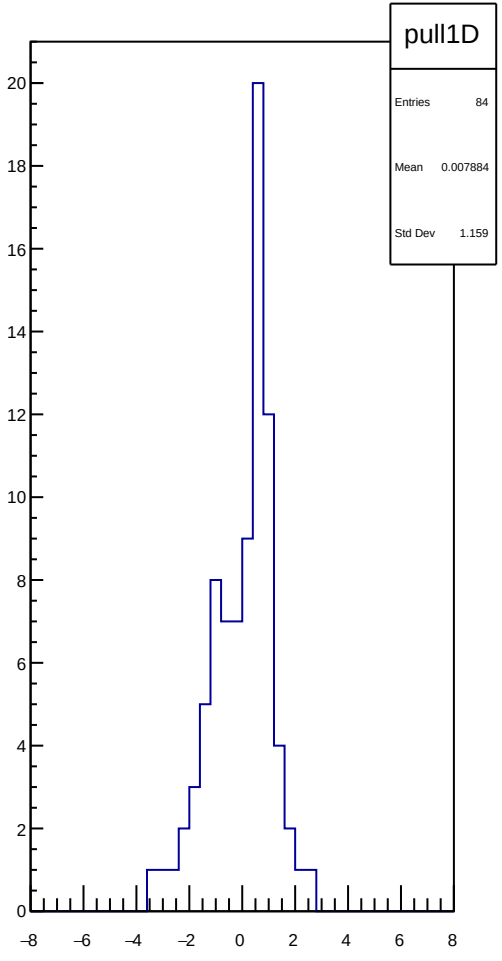

asym_bpm0i01aWS_rms vs run
χ² / ndf 2.915e+04 / 83
p0 143.2 ± 0.1144
500
450
400
350
300
250
200
150
100

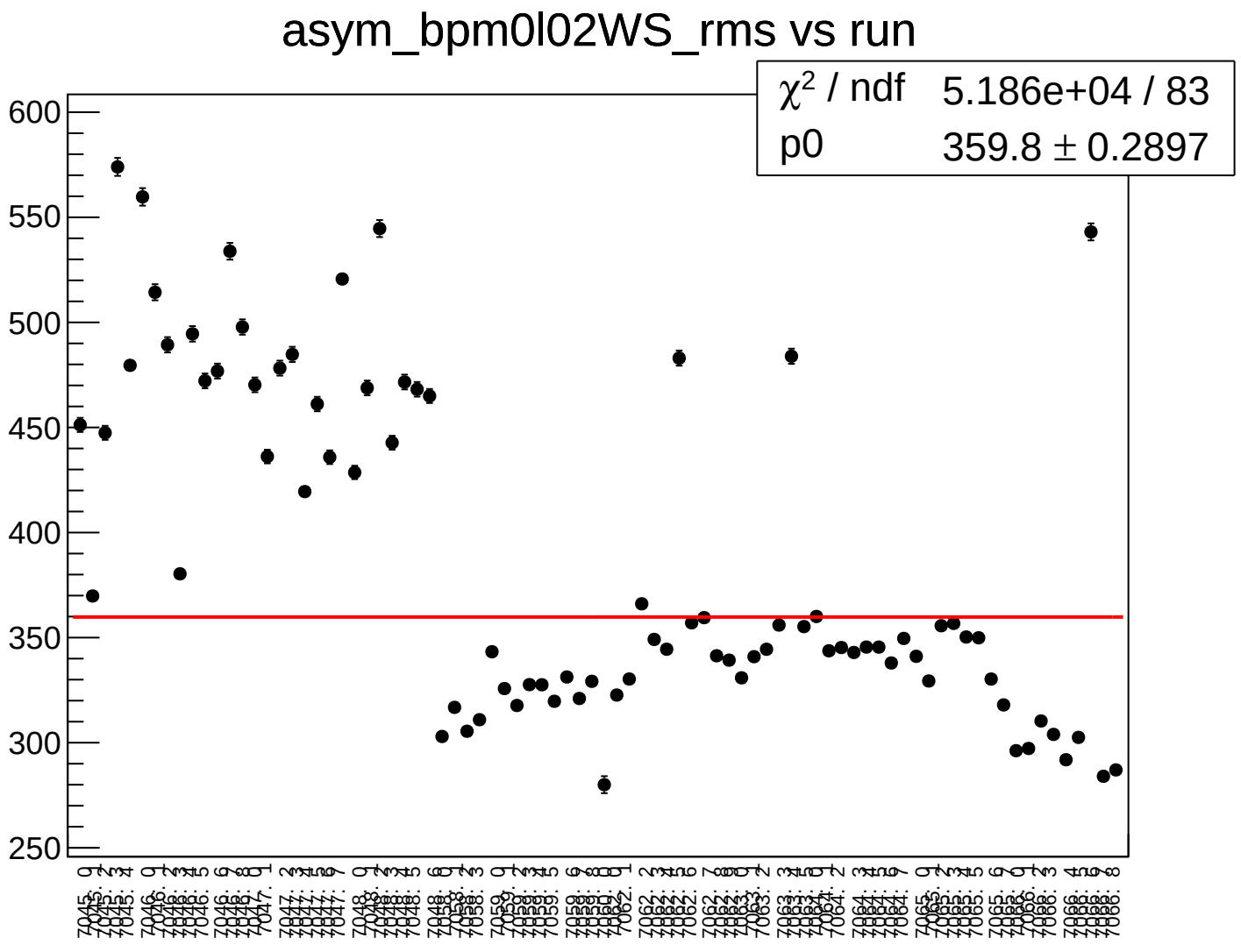

asym_bpm0l01WS_mean vs run
χ² / ndf 90.9 / 83
p0 682.5 ± 267
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −577.1
Std Dev 625.6
3
2
1
0
−1
−2
−3

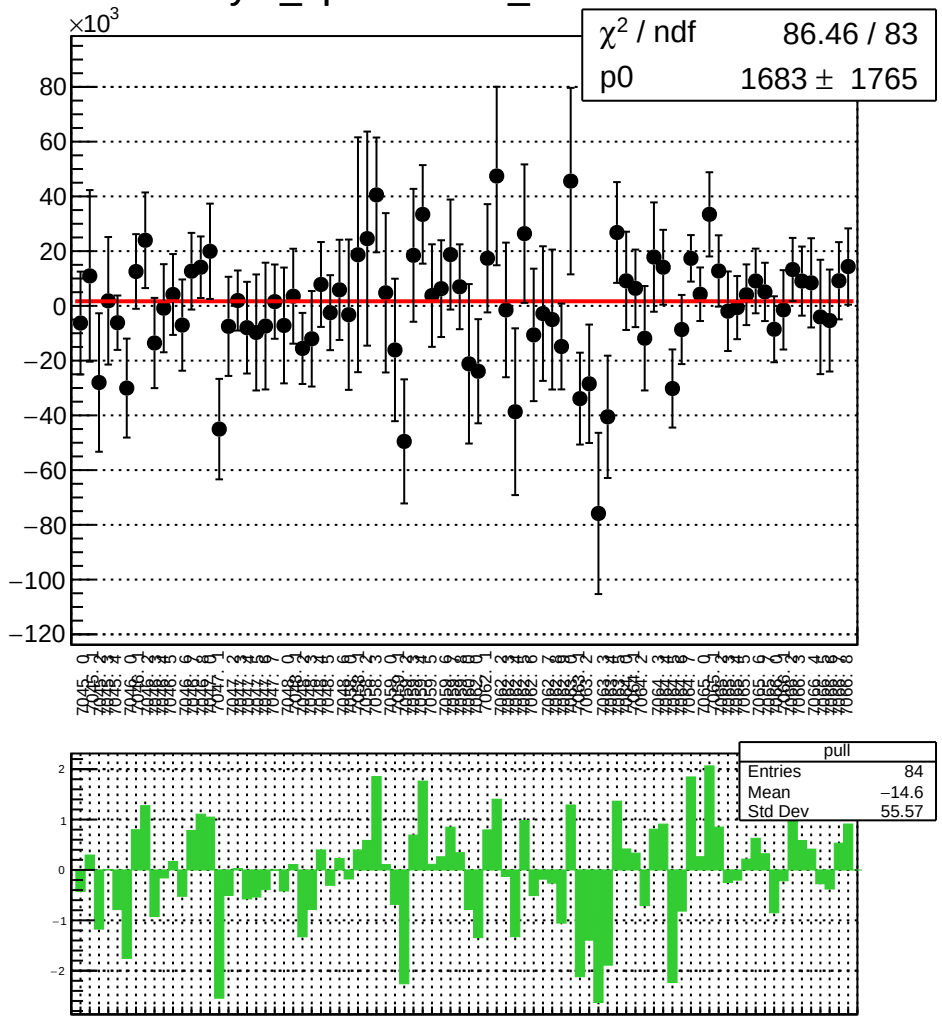

pull1D
Entries 84
Mean 0.01073
Std Dev 1.04
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

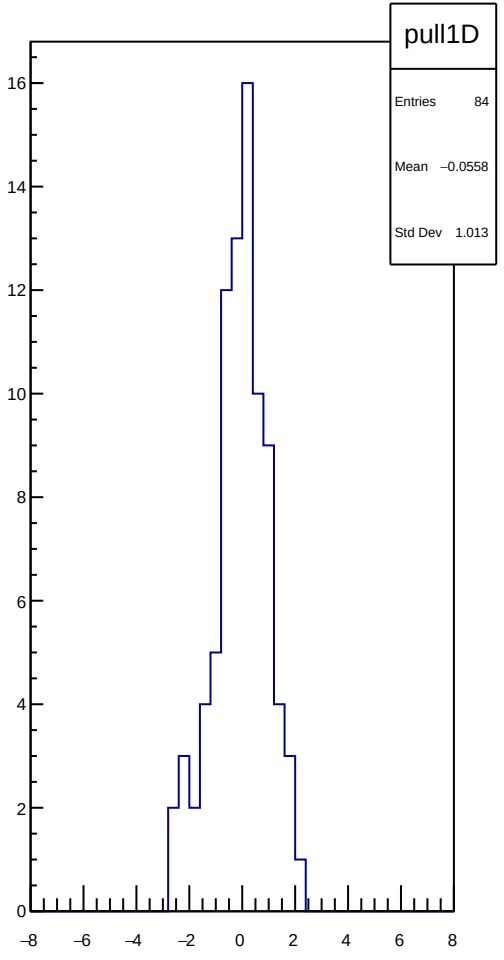

asym_bpm0l01WS_rms vs run
χ² / ndf 2.504e+04 / 83
p0 236.5 ± 0.1888
500
450
400
350
300
250
200

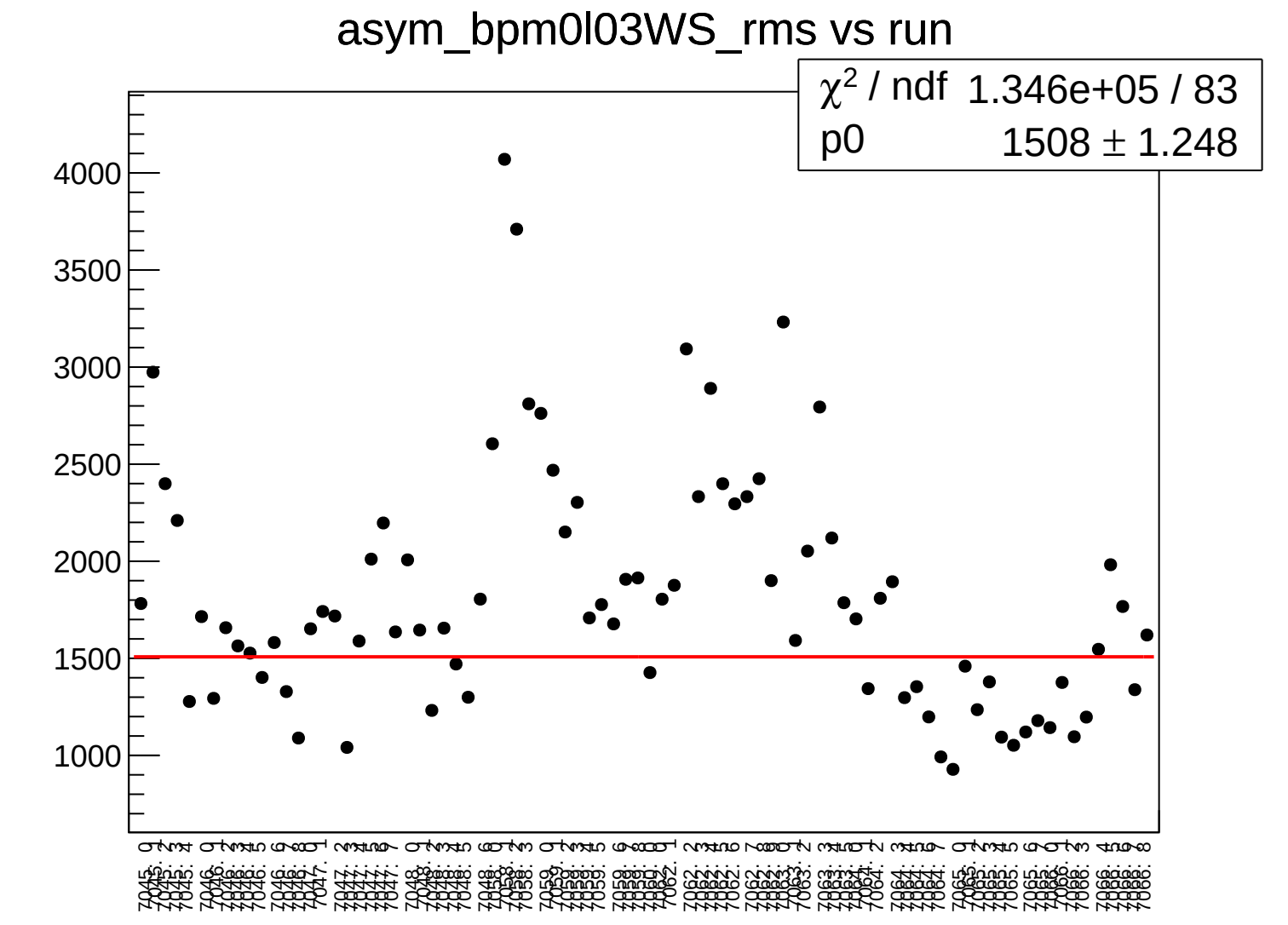

asym_bpm0l02WS_mean vs run
χ² / ndf 112.8 / 83
p0 838.1 ± 409.7
pull
Entries 84
Mean −203.6
Std Dev 274.2

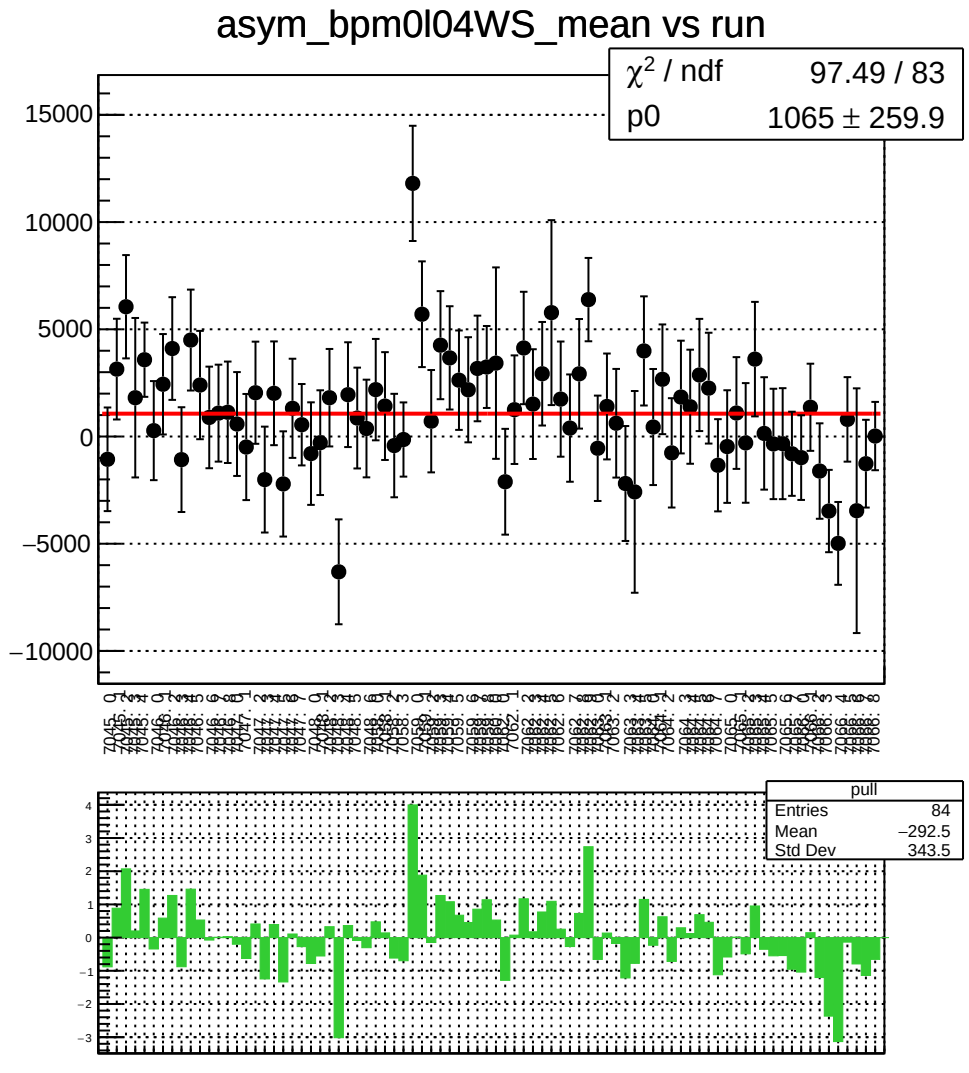

pull1D
Entries 84
Mean 0.007884
Std Dev 1.159

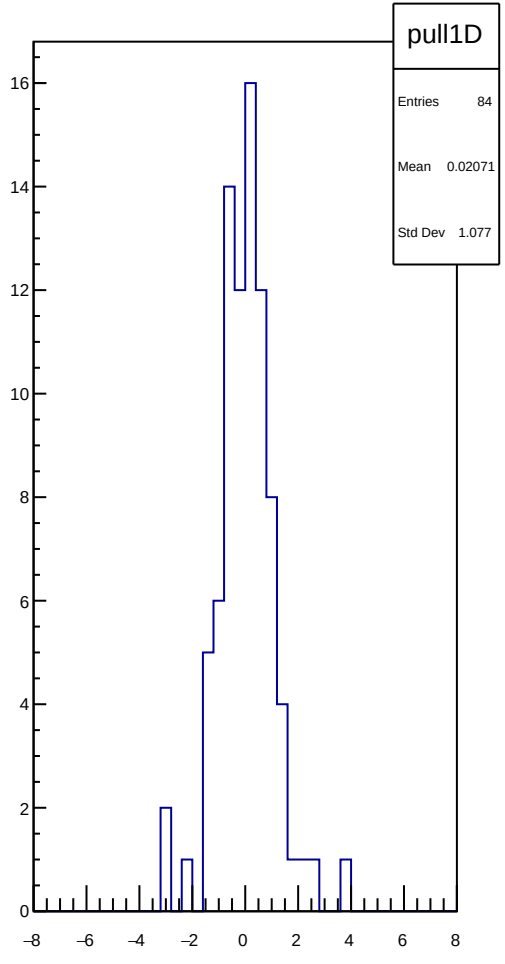

asym_bpm0l02WS_rms vs run
χ^2 / ndf 5.186e+04 / 83
p0 359.8 ± 0.2897
600
550
500
450
400
350
300
250

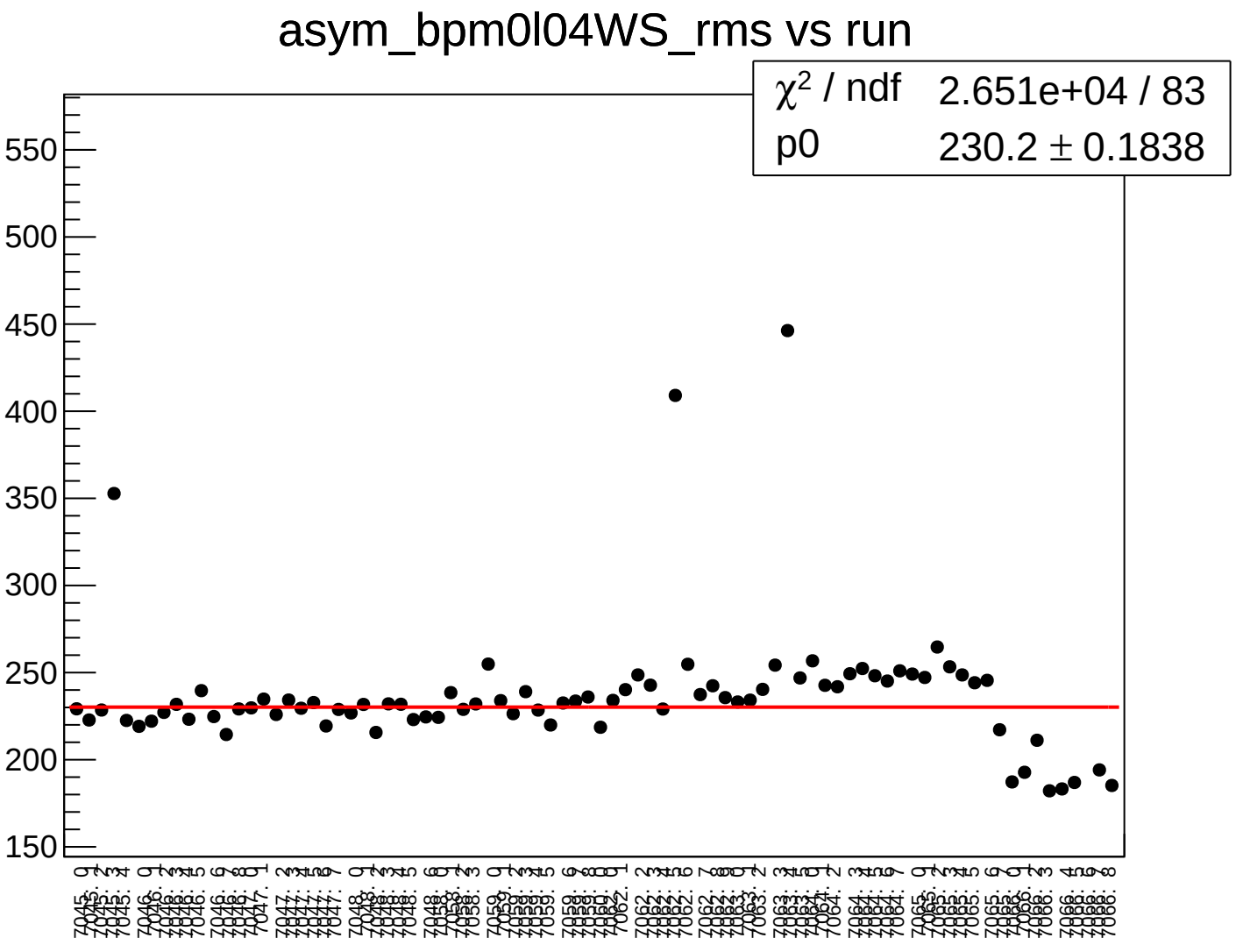

asym_bpm0l03WS_mean vs run
×10^3
χ^2 / ndf 86.46 / 83
p0 1683 ± 1765
pull
Entries 84
Mean −14.6
Std Dev 55.57

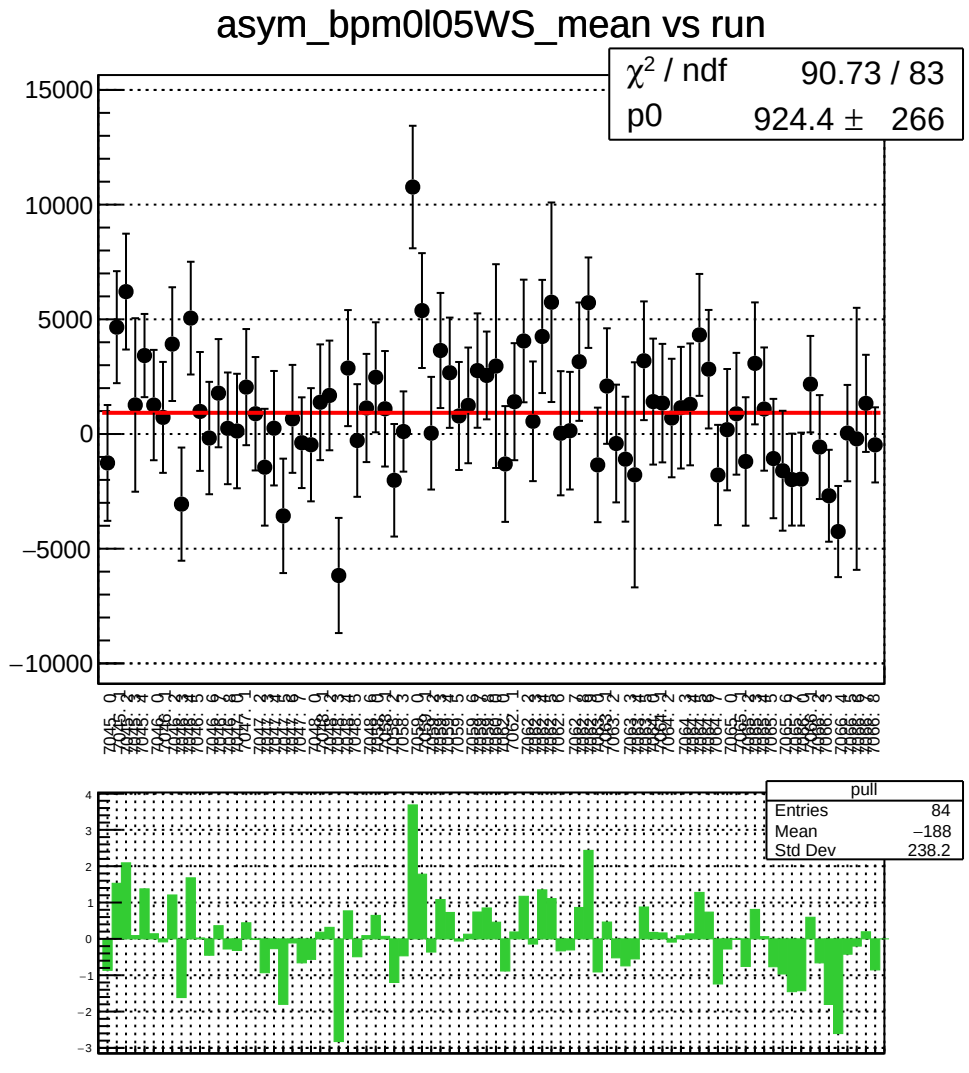

pull1D
Entries 84
Mean −0.0558
Std Dev 1.013

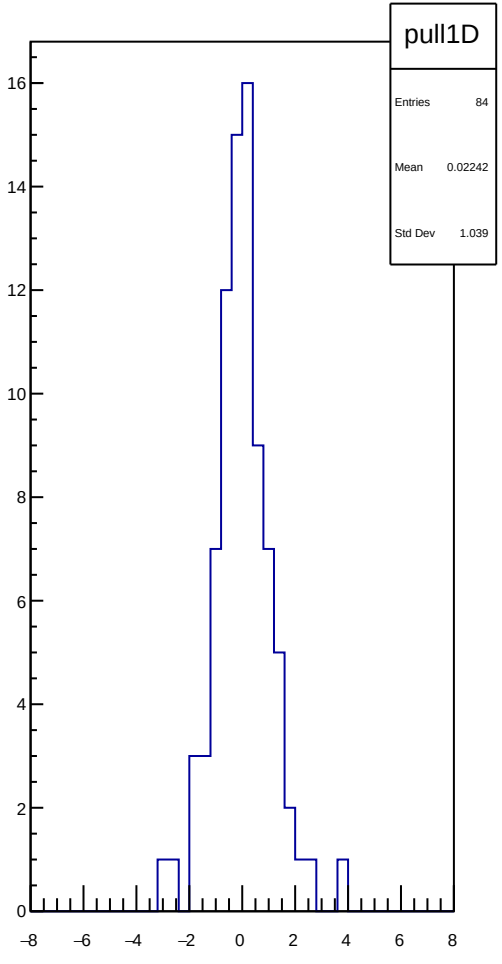

asym_bpm0l03WS_rms vs run
χ^2 / ndf 1.346e+05 / 83
p0 1508 ± 1.248
4000
3500
3000
2500
2000
1500
1000


asym_bpm0l04WS_mean vs run
χ² / ndf 97.49 / 83
p0 1065 ± 259.9
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −292.5
Std Dev 343.5
4
3
2
1
0
−1
−2
−3


pull1D
Entries 84
Mean 0.02071
Std Dev 1.077
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


asym_bpm0l04WS_rms vs run
χ² / ndf 2.651e+04 / 83
p0 230.2 ± 0.1838
550
500
450
400
350
300
250
200
150


asym_bpm0l05WS_mean vs run
χ² / ndf 90.73 / 83
p0 924.4 ± 266
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −188
Std Dev 238.2
4
3
2
1
0
−1
−2
−3


pull1D
Entries 84
Mean 0.02242
Std Dev 1.039
16
14
12
10
8
6
4
2
0
−8
−6
−4
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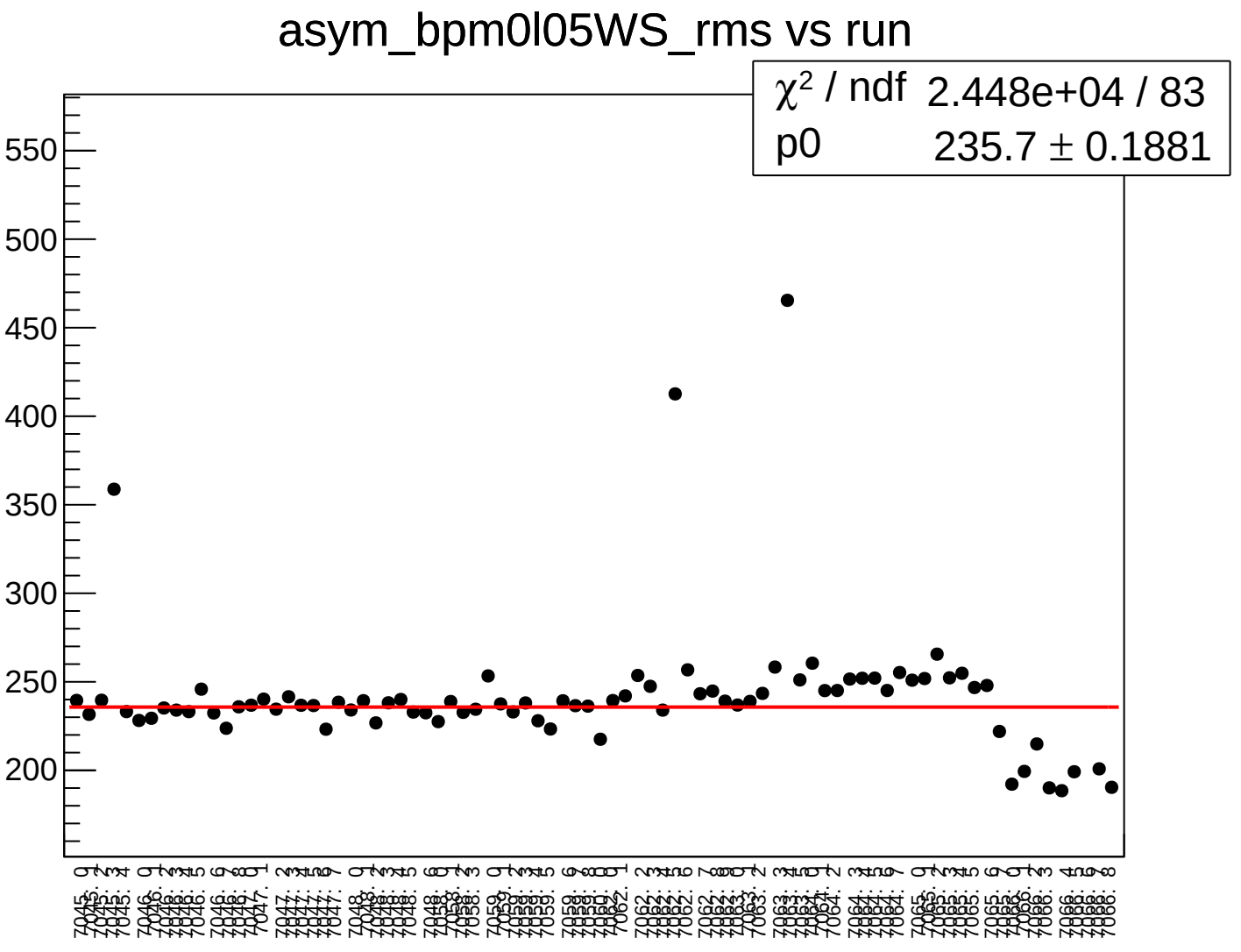
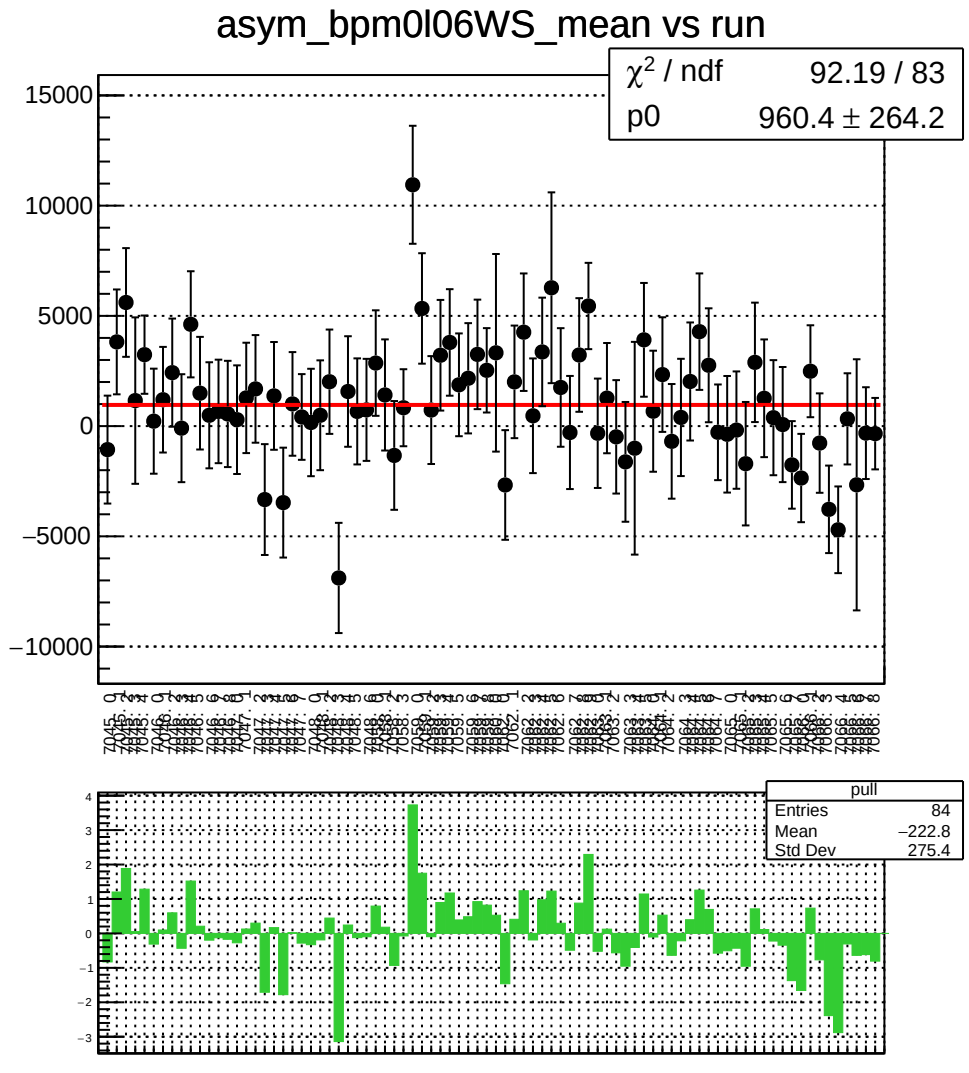
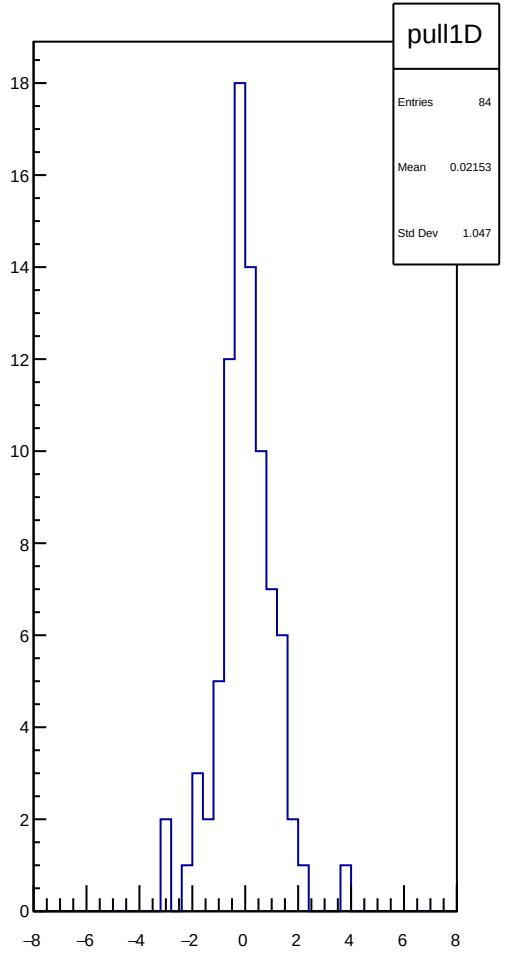
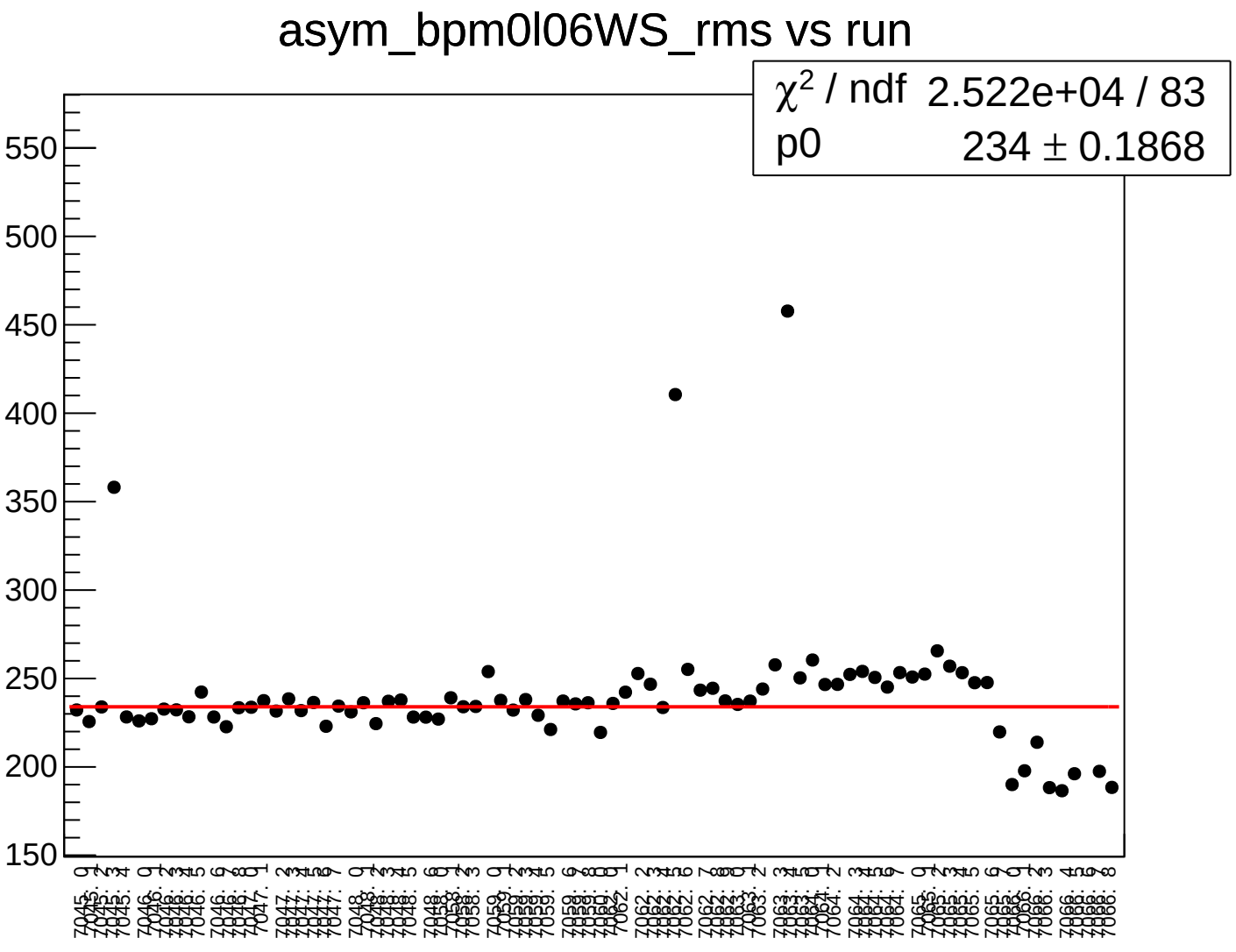
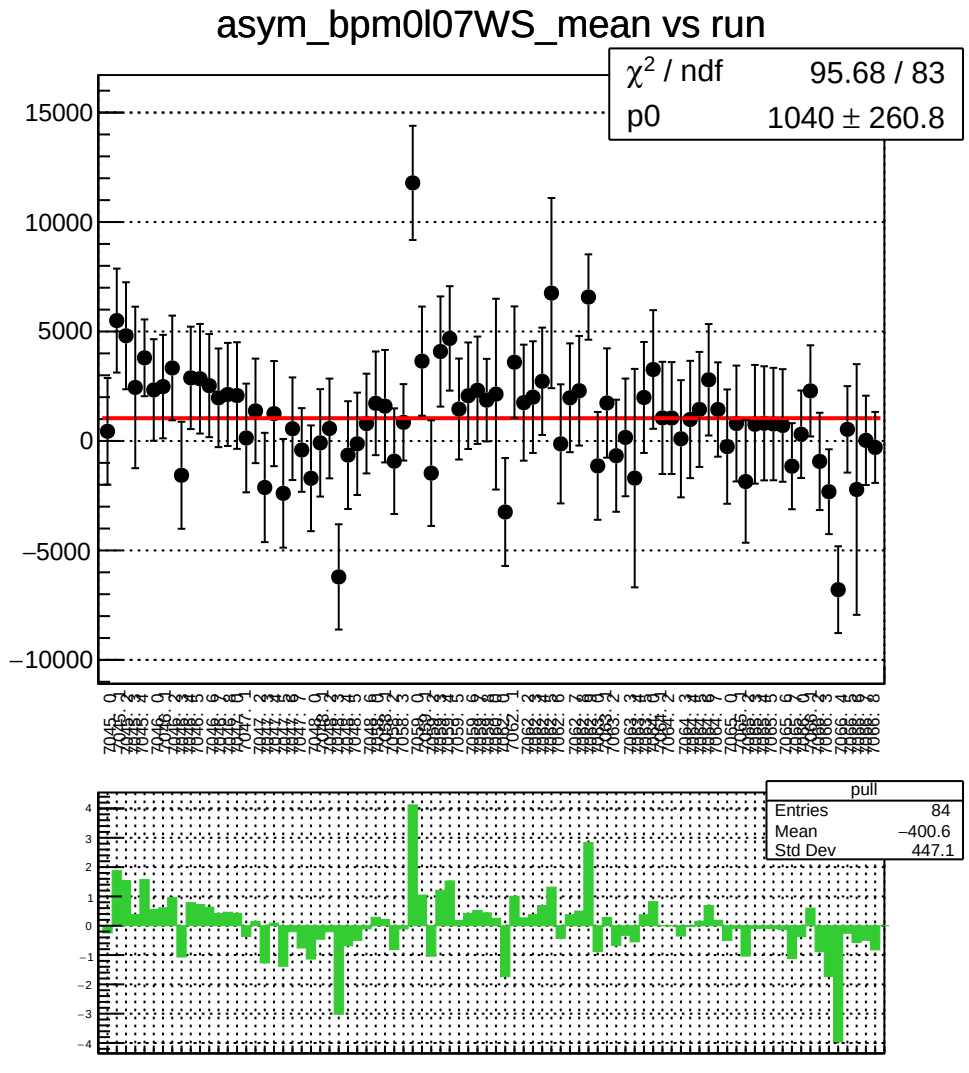
0
2
4
6
8

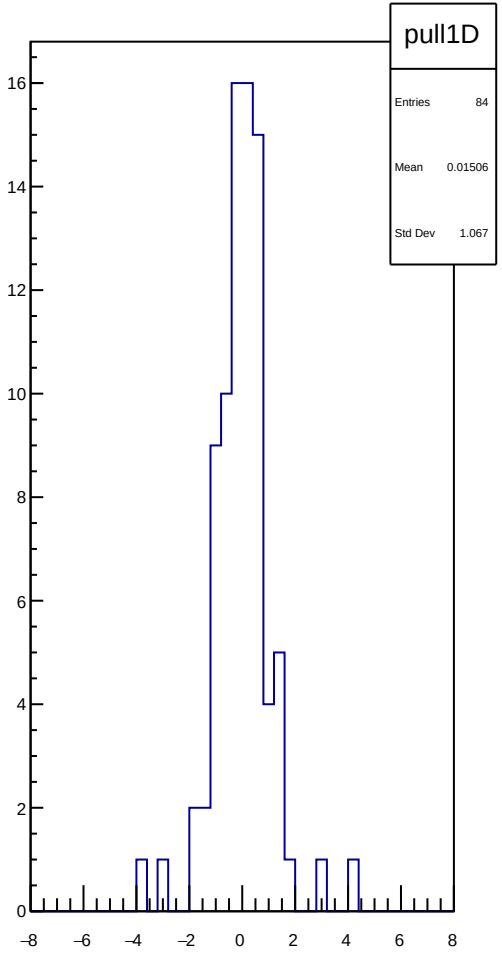

asym_bpm0l05WS_rms vs run
χ² / ndf 2.448e+04 / 83
p0 235.7 ± 0.1881
550
500
450
400
350
300
250
200

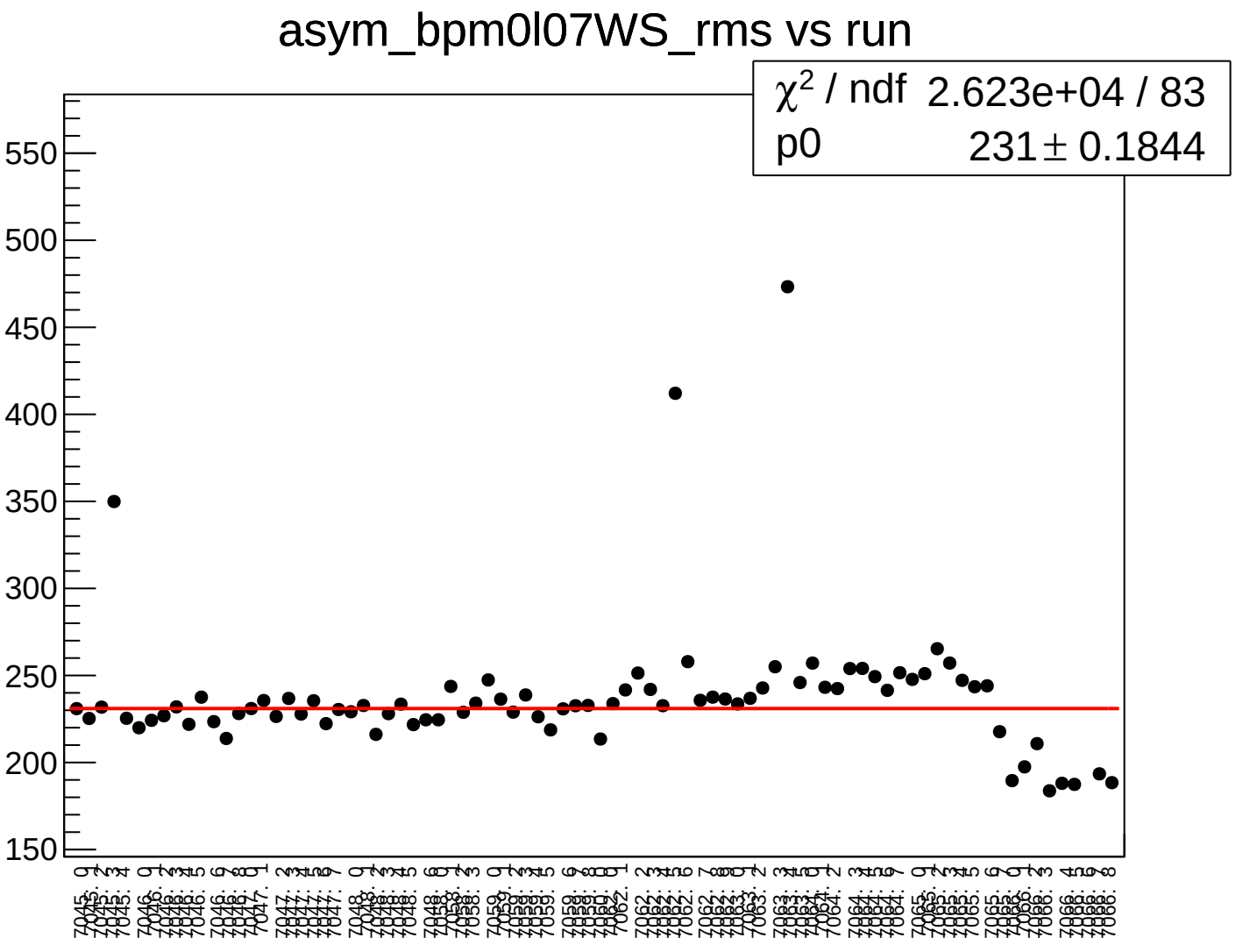

asym_bpm0l06WS_mean vs run
χ² / ndf 92.19 / 83
p0 960.4 ± 264.2
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −222.8
Std Dev 275.4
4
3
2
1
0
−1
−2
−3

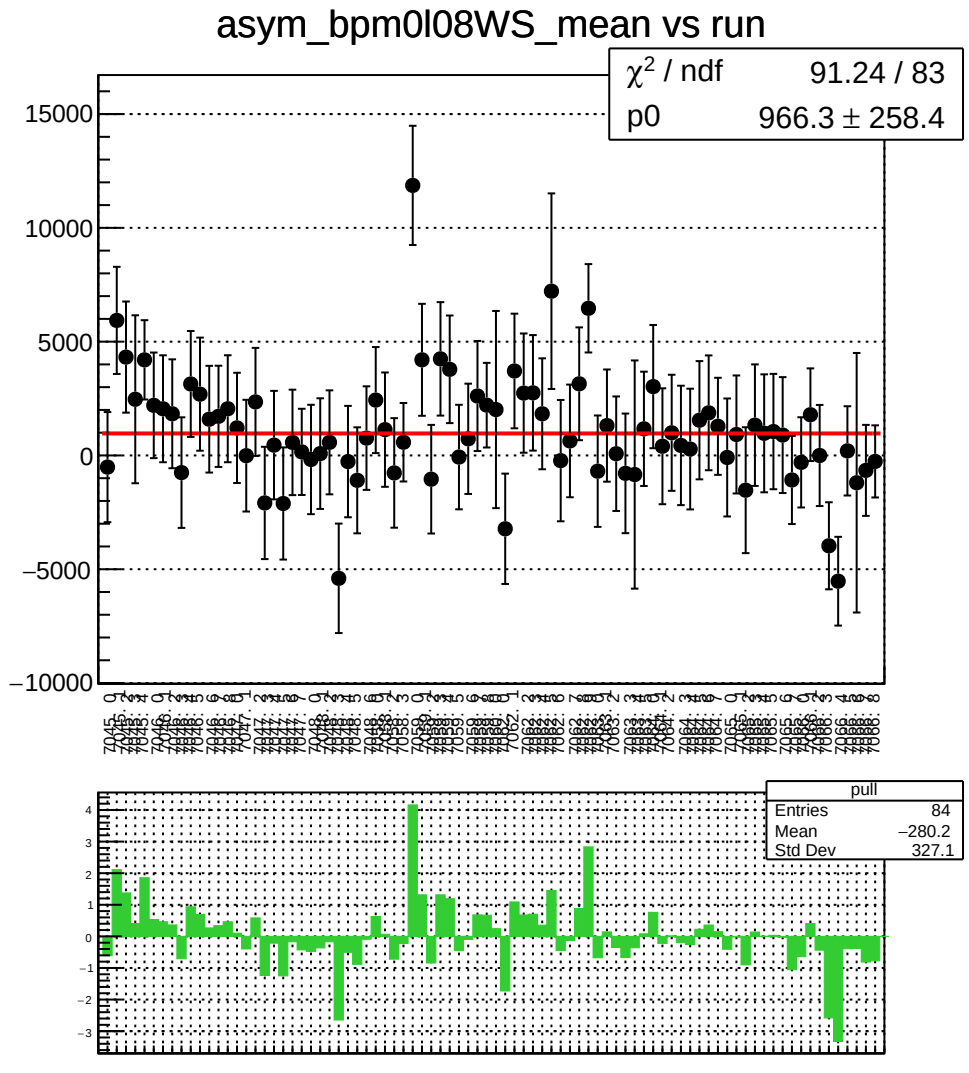

pull1D
Entries 84
Mean 0.02153
Std Dev 1.047
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

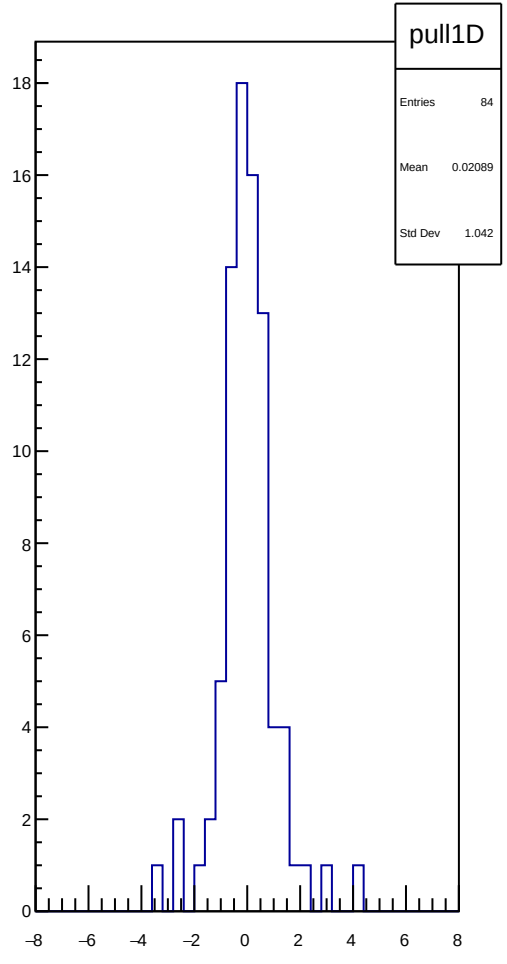

asym_bpm0l06WS_rms vs run
χ^2 / ndf 2.522e+04 / 83
p0 234 ± 0.1868
550
500
450
400
350
300
250
200
150

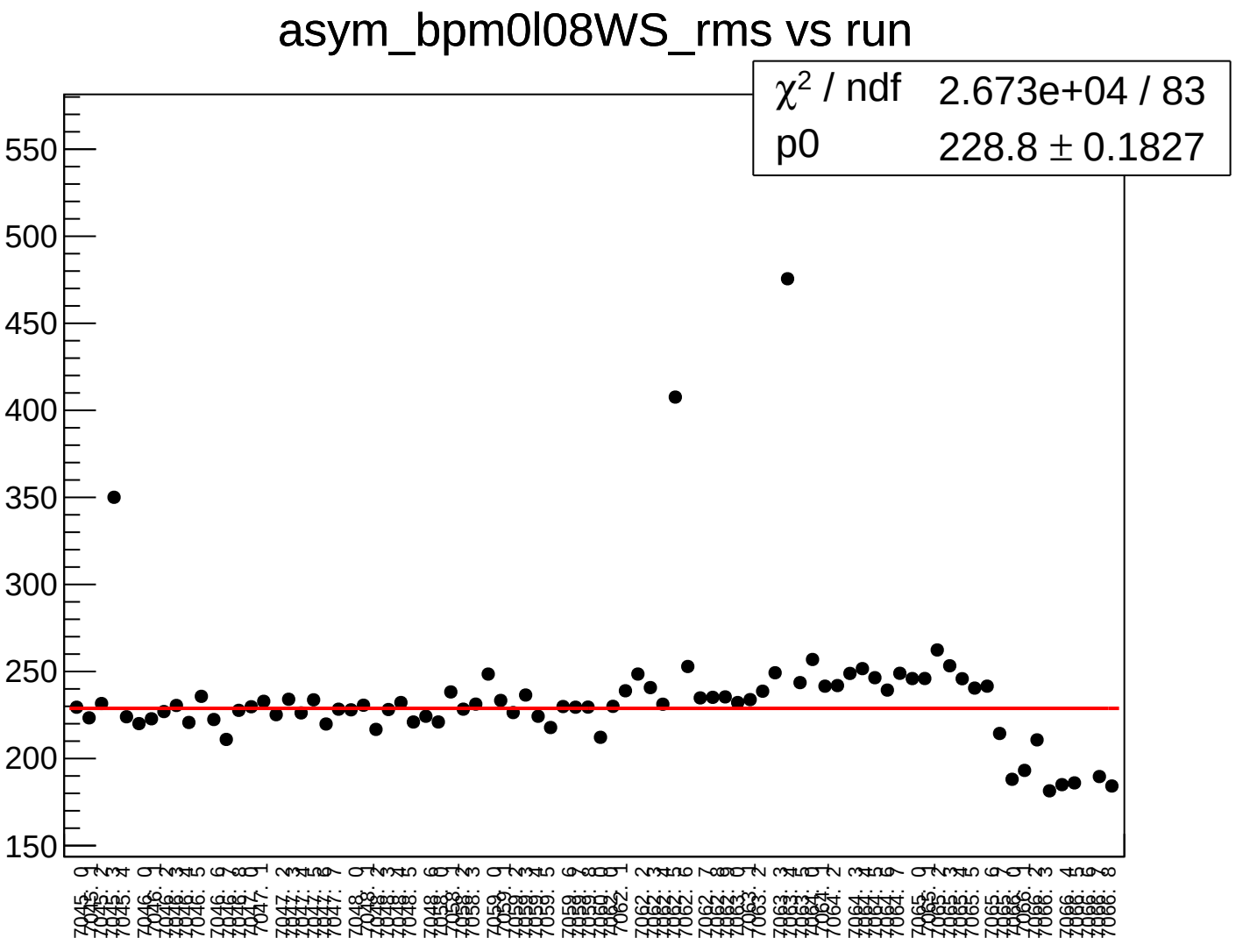

asym_bpm0l07WS_mean vs run
χ² / ndf 95.68 / 83
p0 1040 ± 260.8
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −400.6
Std Dev 447.1
4
3
2
1
0
−1
−2
−3
−4

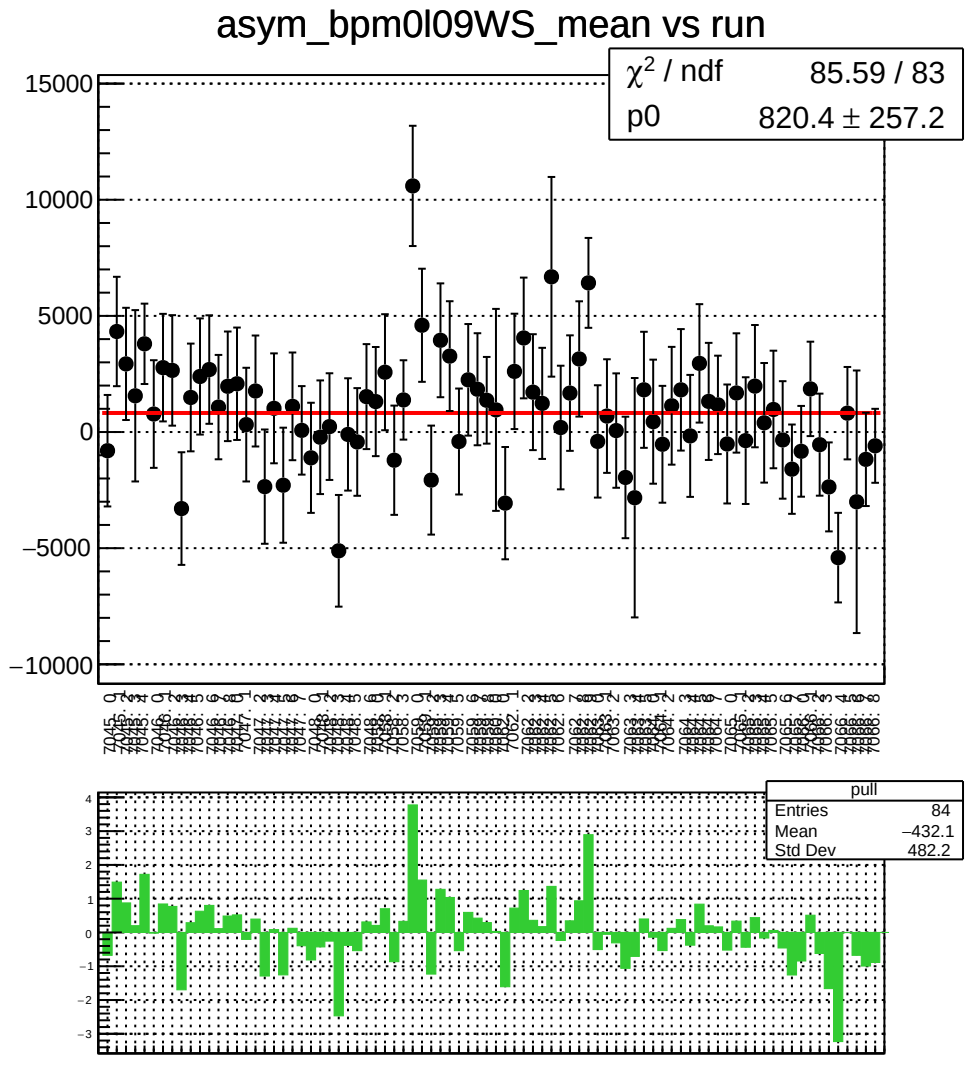

pull1D
Entries 84
Mean 0.01506
Std Dev 1.067
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

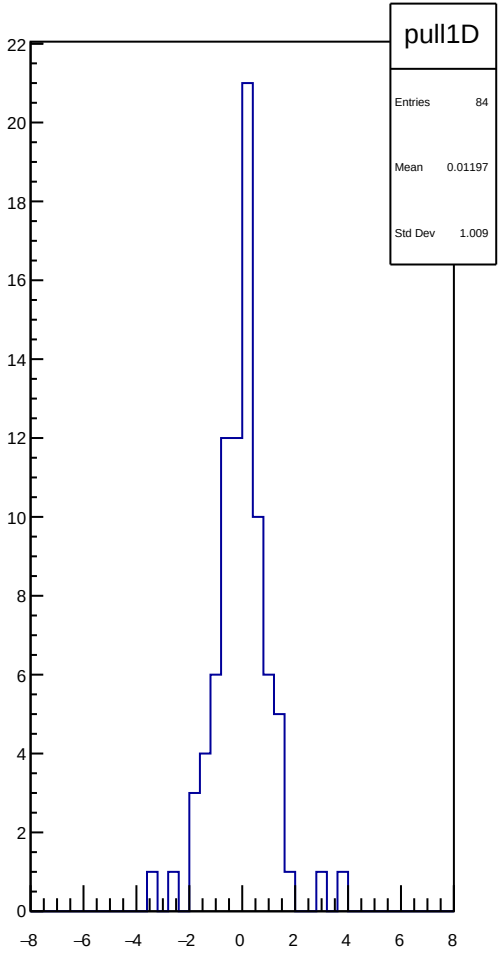

asym_bpm0l07WS_rms vs run
χ^2 / ndf 2.623e+04 / 83
p0 231 ± 0.1844
550
500
450
400
350
300
250
200
150

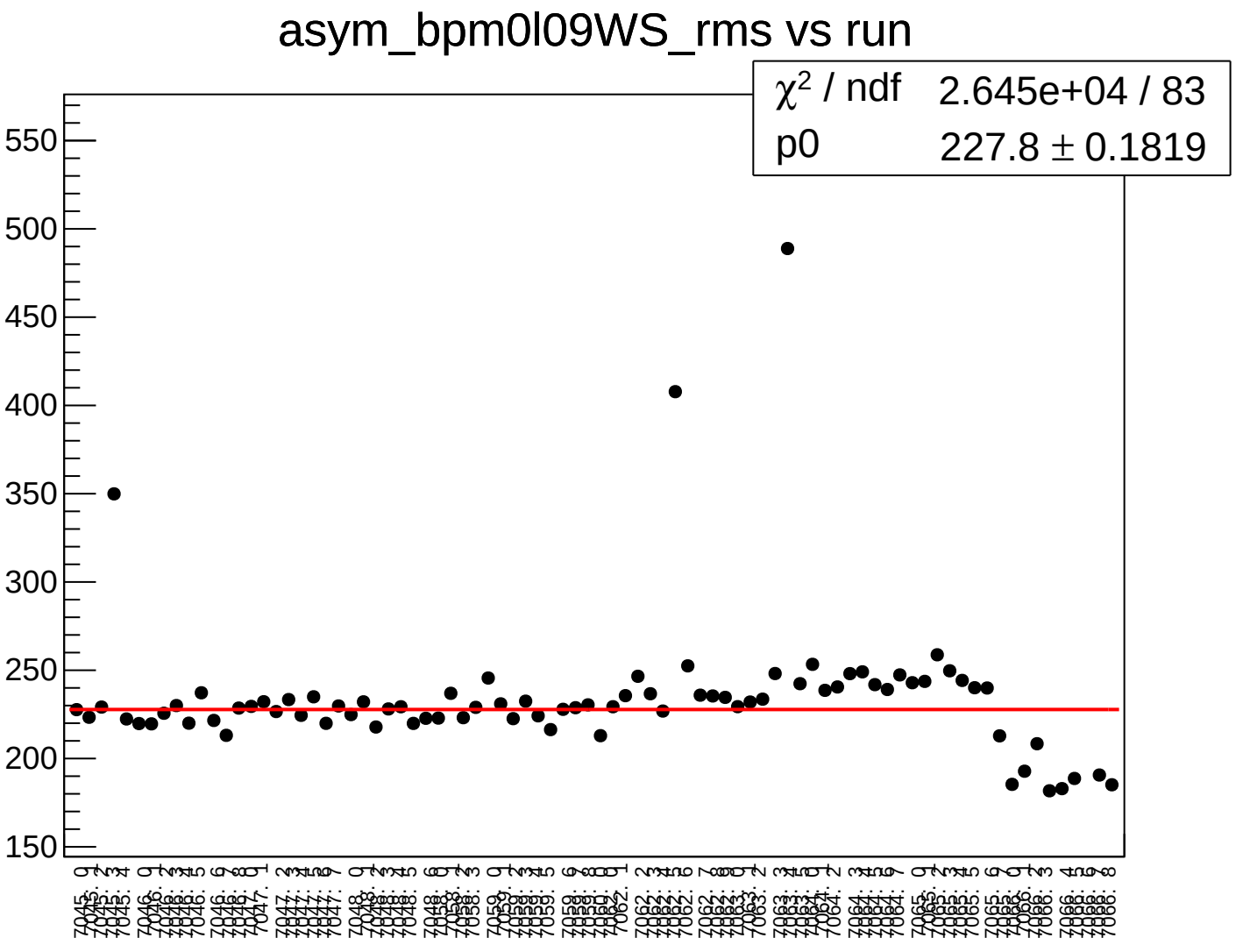

asym_bpm0l08WS_mean vs run
χ² / ndf 91.24 / 83
p0 966.3 ± 258.4
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −280.2
Std Dev 327.1
4
3
2
1
0
−1
−2
−3

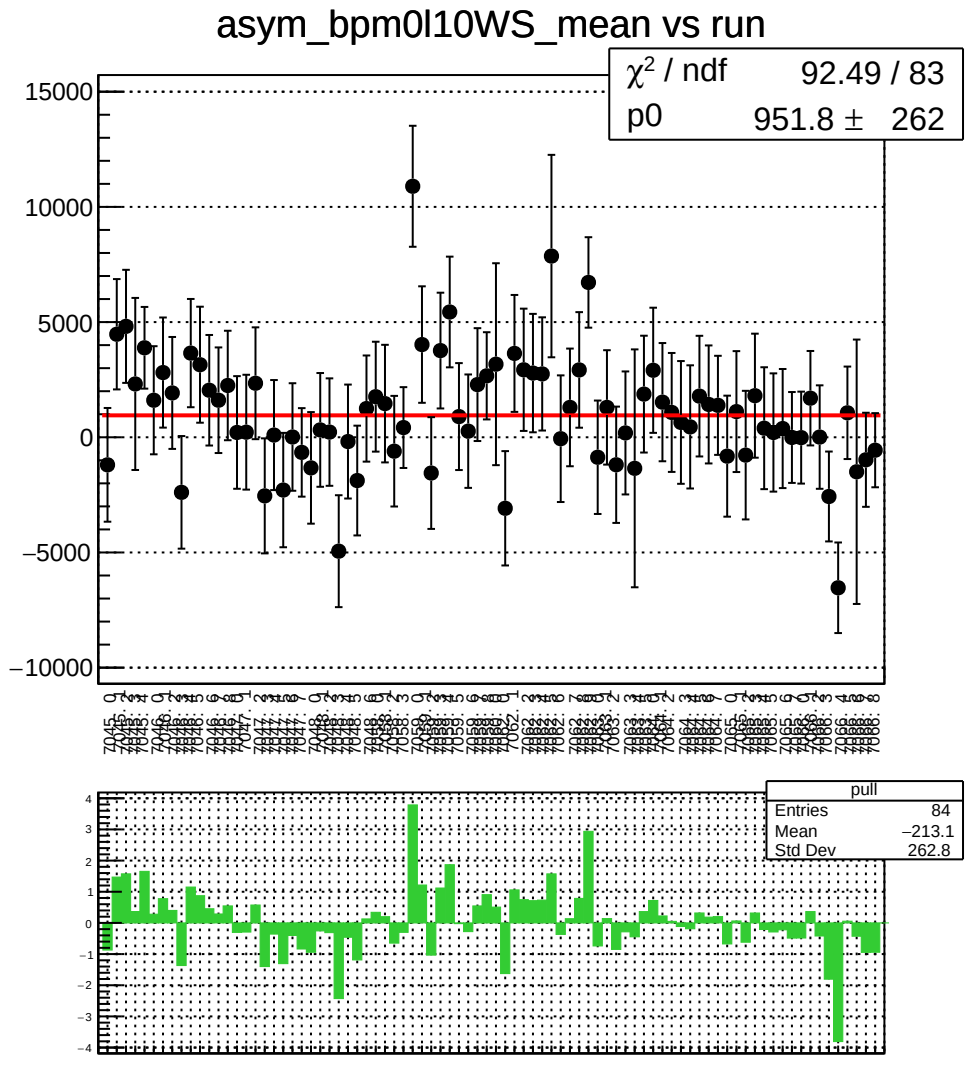

pull1D
Entries 84
Mean 0.02089
Std Dev 1.042
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

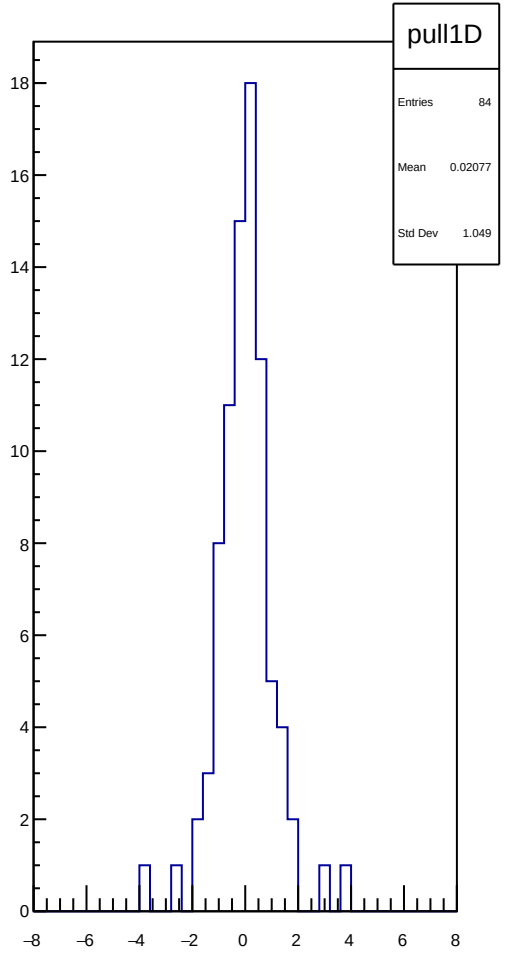

asym_bpm0l08WS_rms vs run
χ^2 / ndf 2.673e+04 / 83
p0 228.8 ± 0.1827
550
500
450
400
350
300
250
200
150

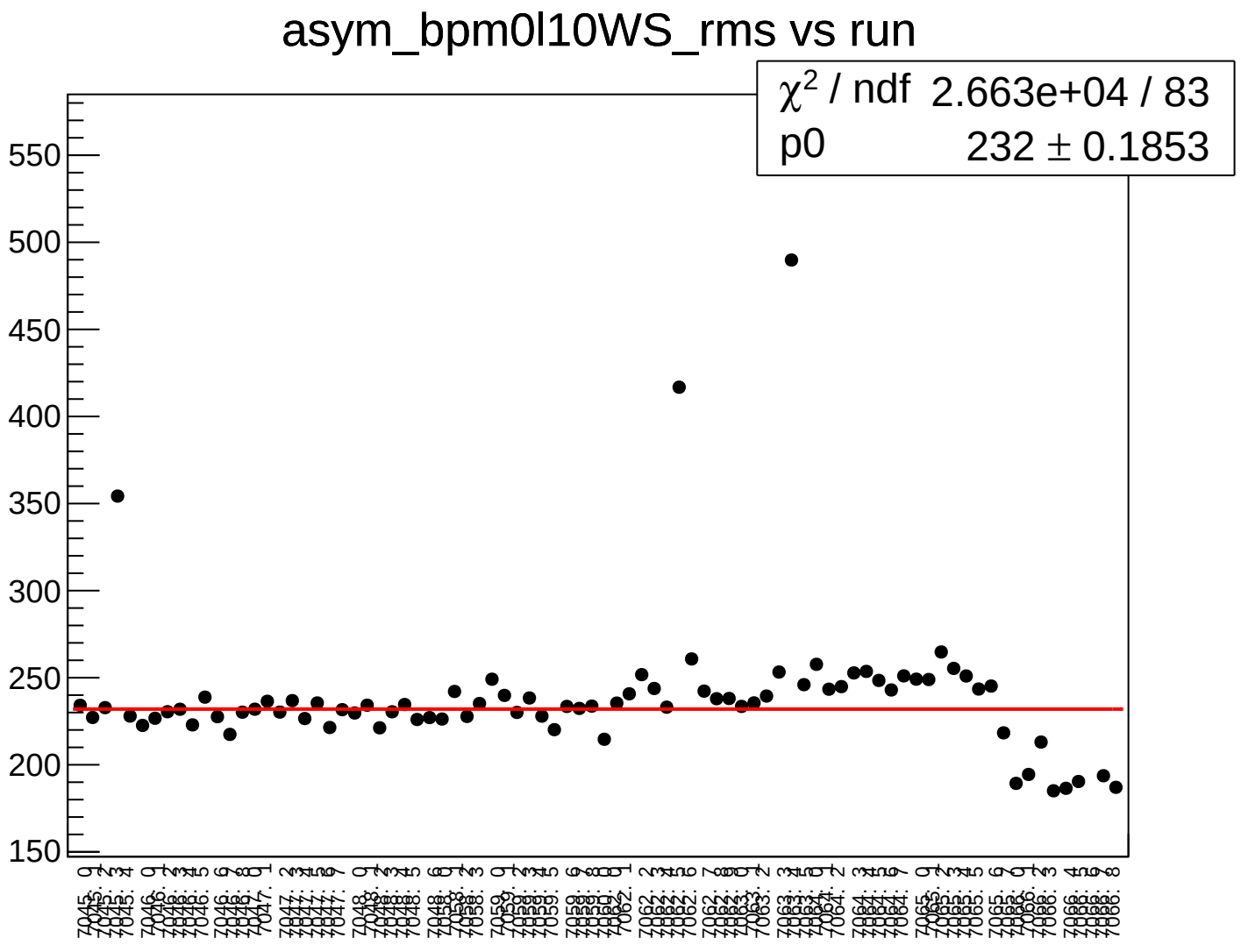

asym_bpm0l09WS_mean vs run
χ² / ndf 85.59 / 83
p0 820.4 ± 257.2
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −432.1
Std Dev 482.2
4
3
2
1
0
−1
−2
−3

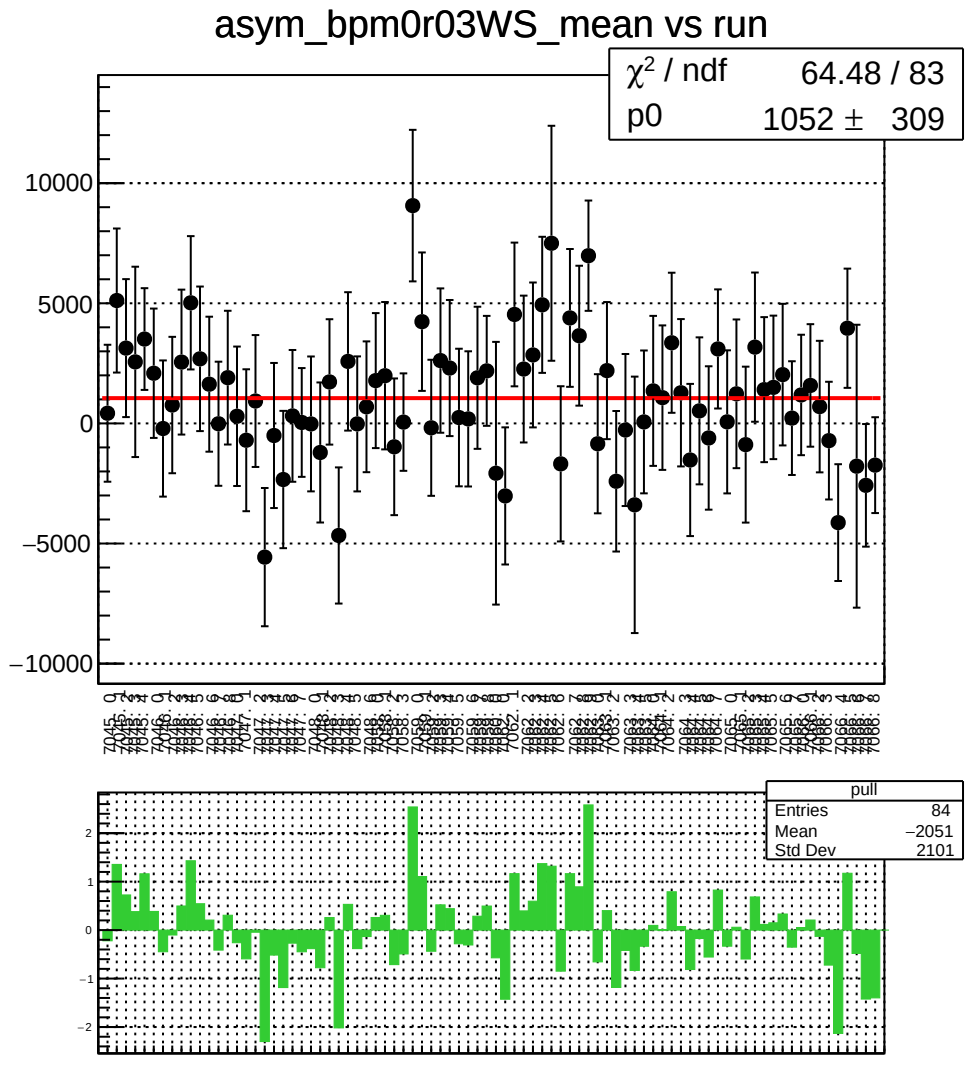

pull1D
Entries 84
Mean 0.01197
Std Dev 1.009
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

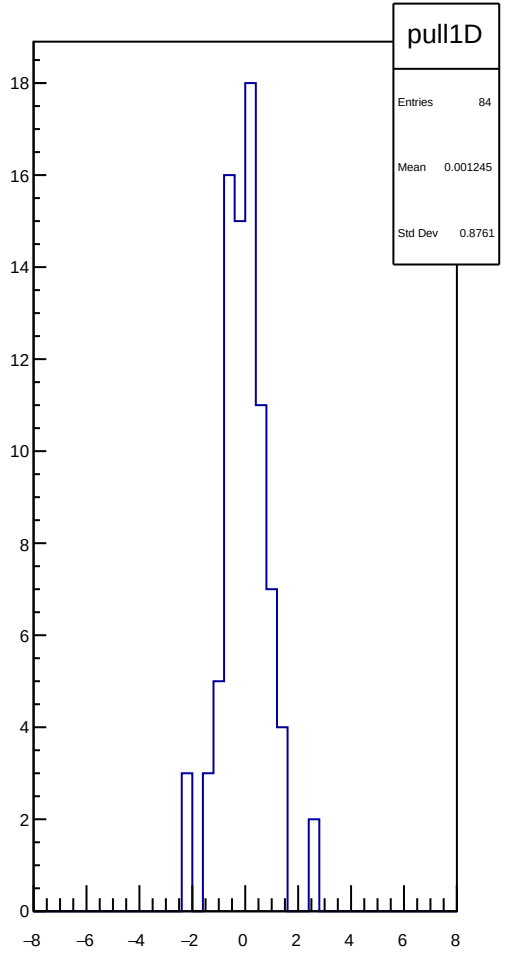

asym_bpm0l09WS_rms vs run
χ^2 / ndf 2.645e+04 / 83
p0 227.8 ± 0.1819
550
500
450
400
350
300
250
200
150

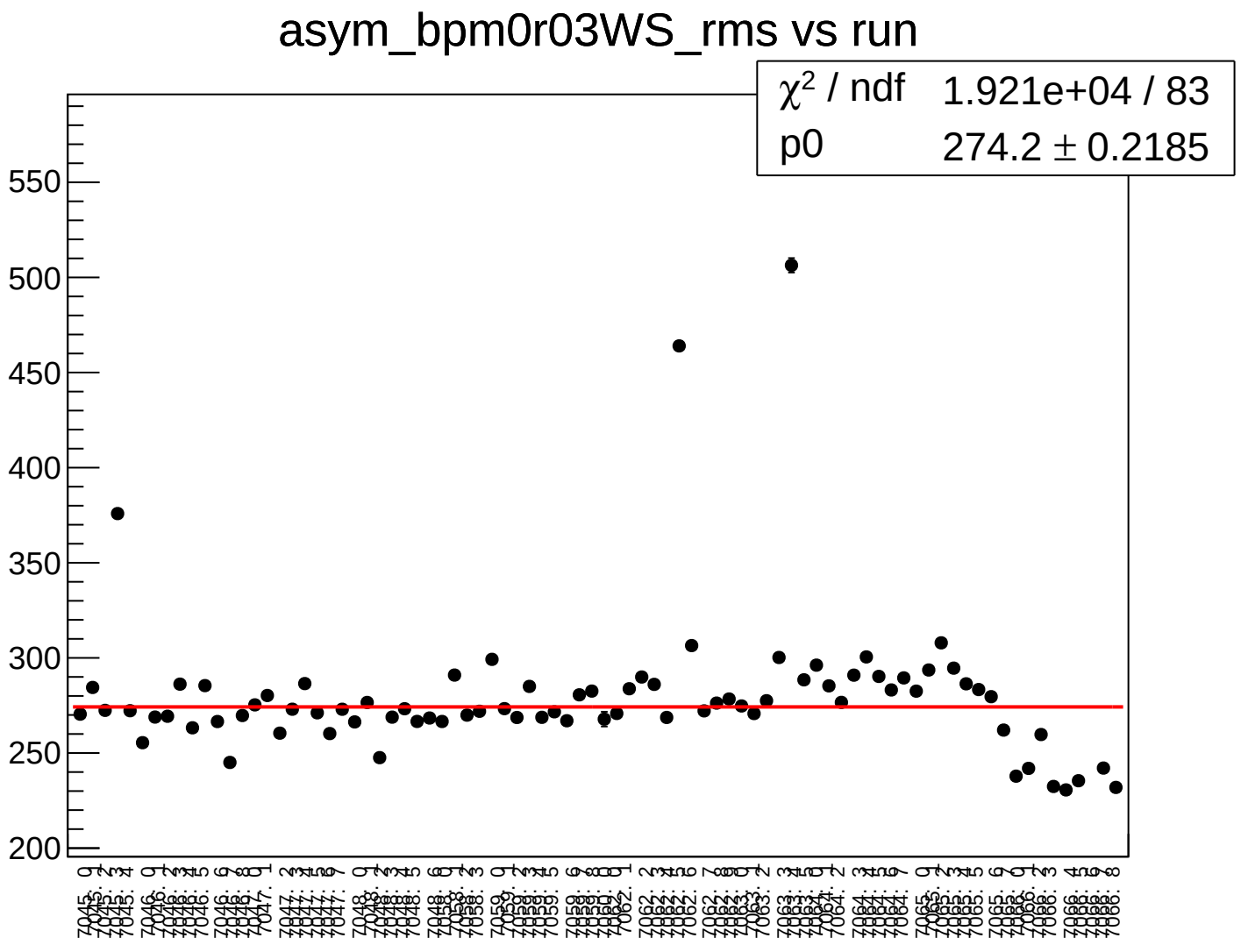

asym_bpm0l10WS_mean vs run
χ² / ndf 92.49 / 83
p0 951.8 ± 262
pull
Entries 84
Mean −213.1
Std Dev 262.8

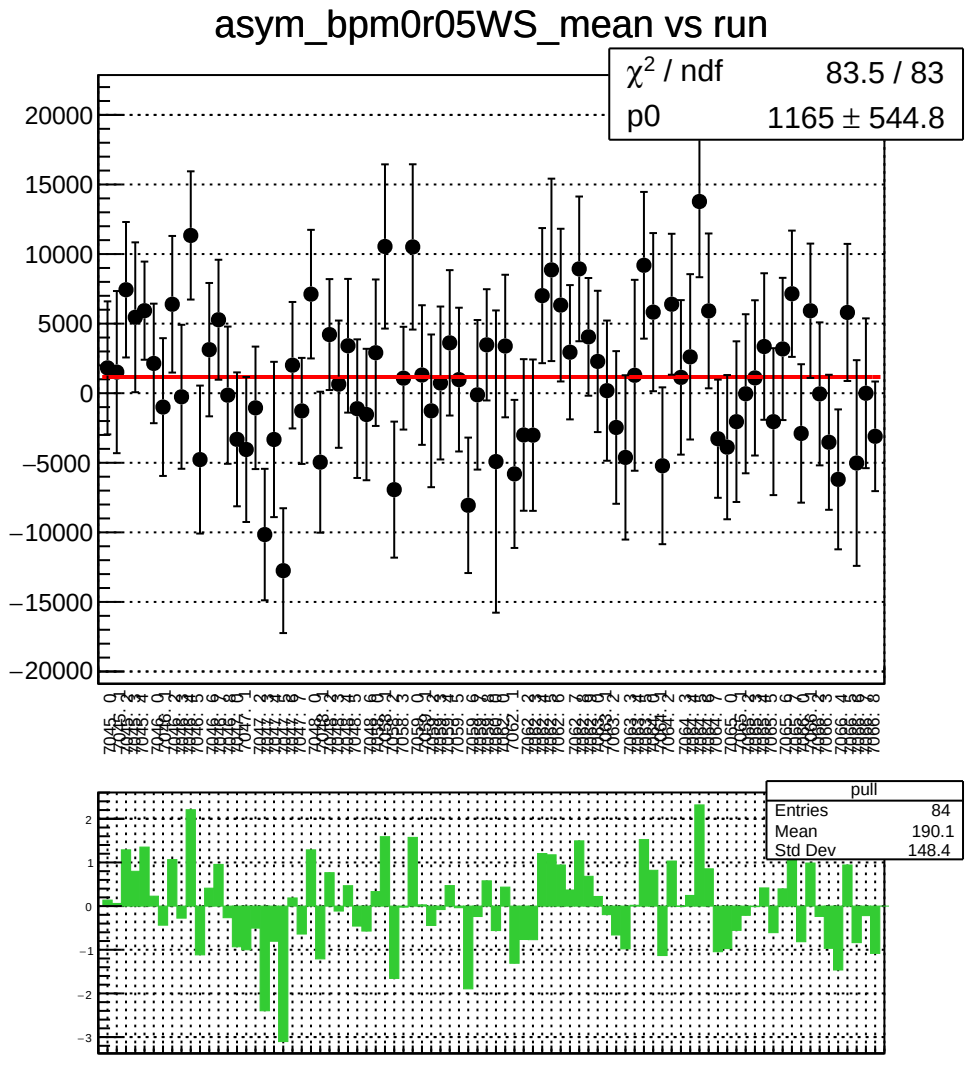

pull1D
Entries 84
Mean 0.02077
Std Dev 1.049

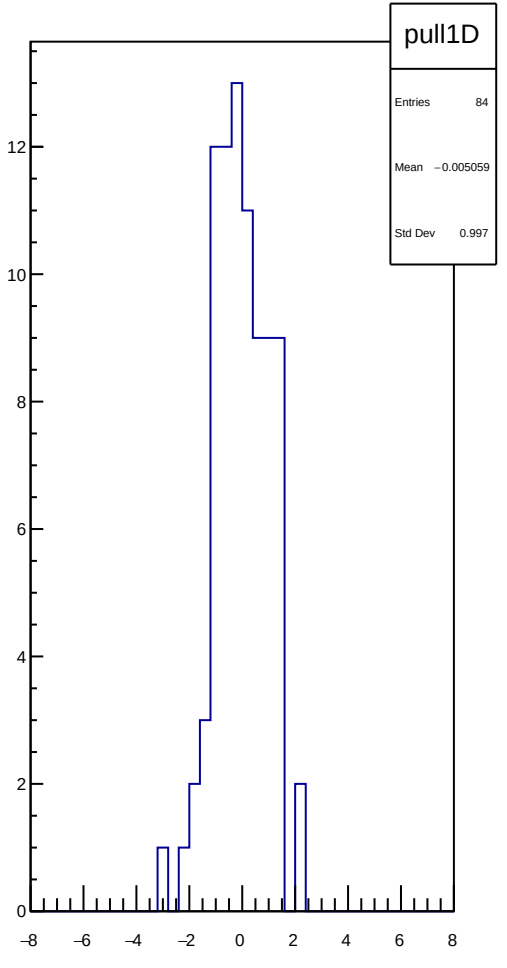

asym_bpm0l10WS_rms vs run
χ² / ndf 2.663e+04 / 83
p0 232 ± 0.1853
550
500
450
400
350
300
250
200
150

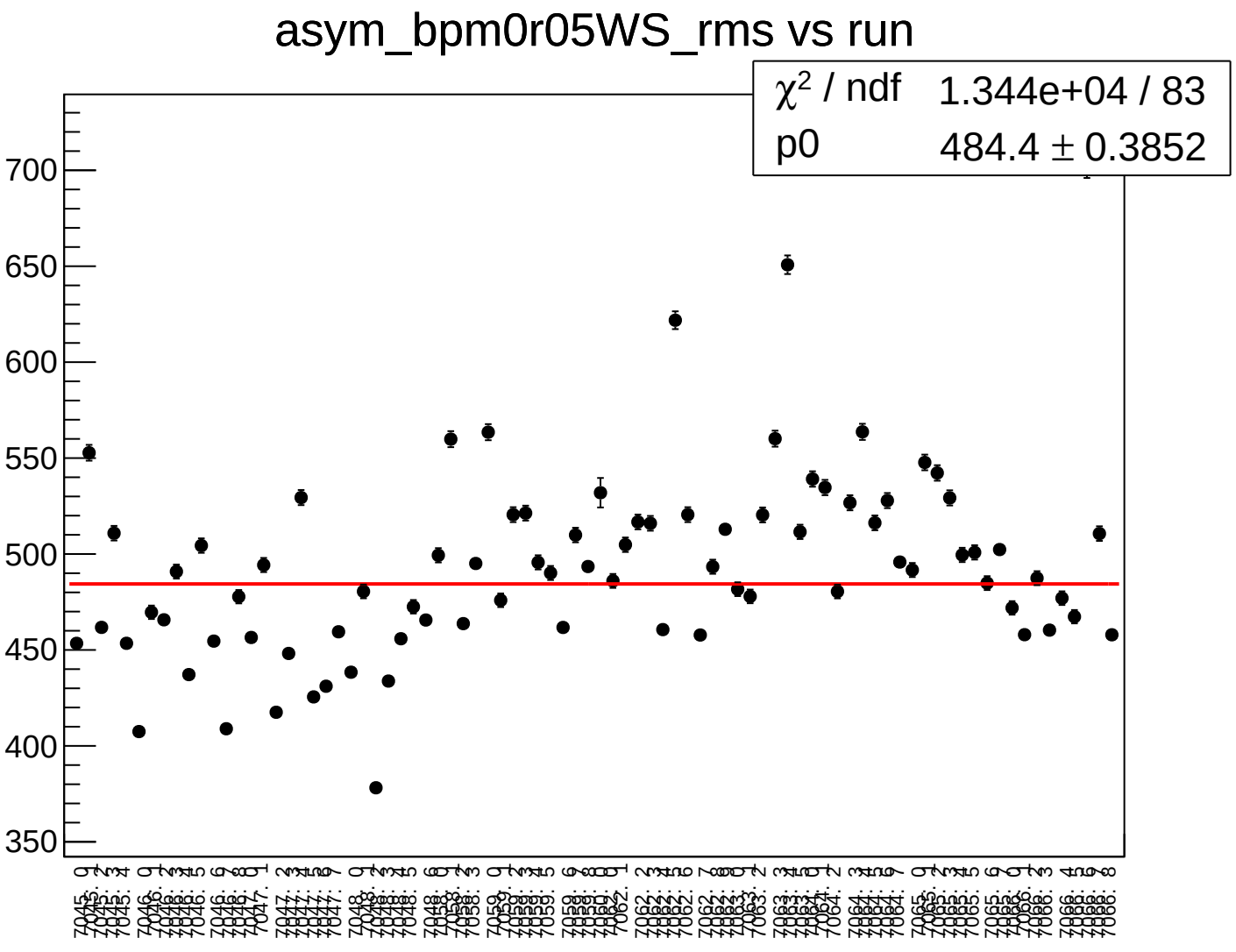

asym_bpm0r03WS_mean vs run
χ² / ndf 64.48 / 83
p0 1052 ± 309
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −2051
Std Dev 2101
2
1
0
−1
−2

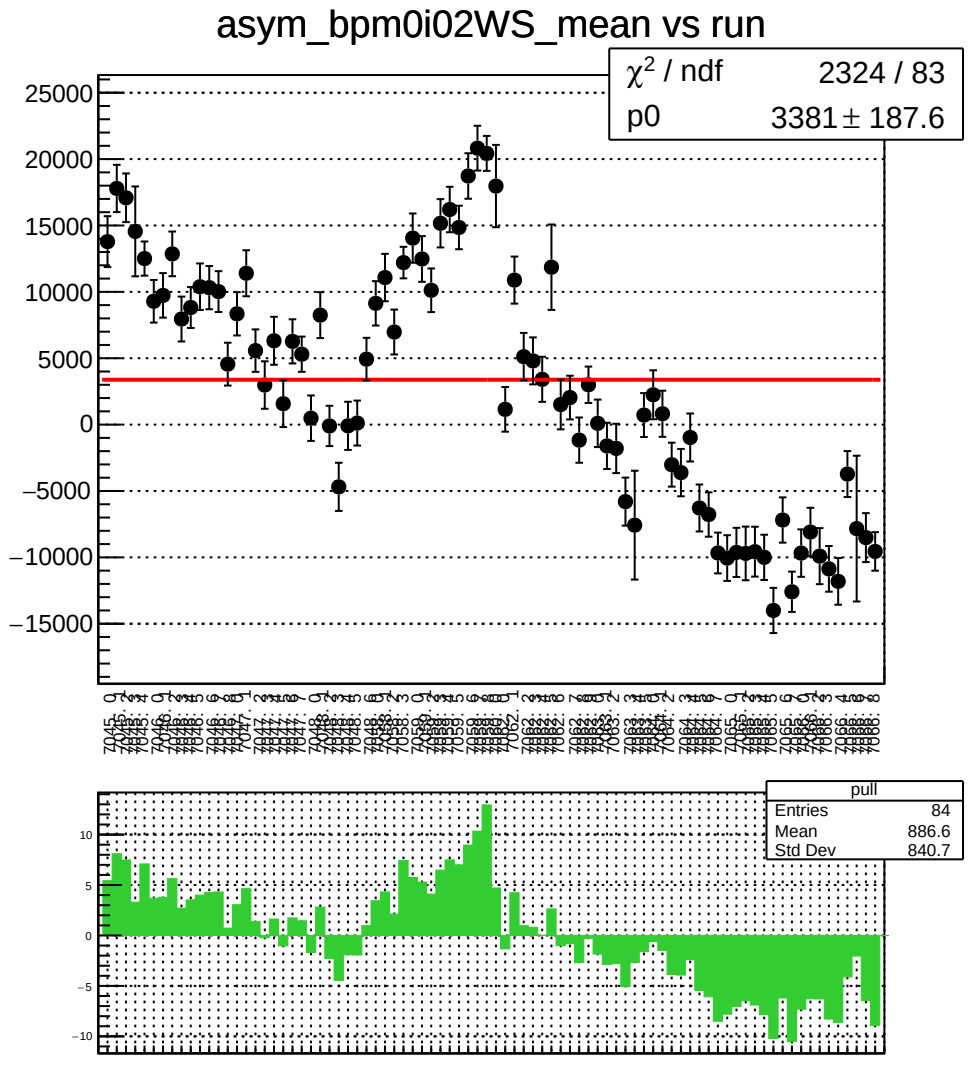

pull1D
Entries 84
Mean 0.001245
Std Dev 0.8761
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

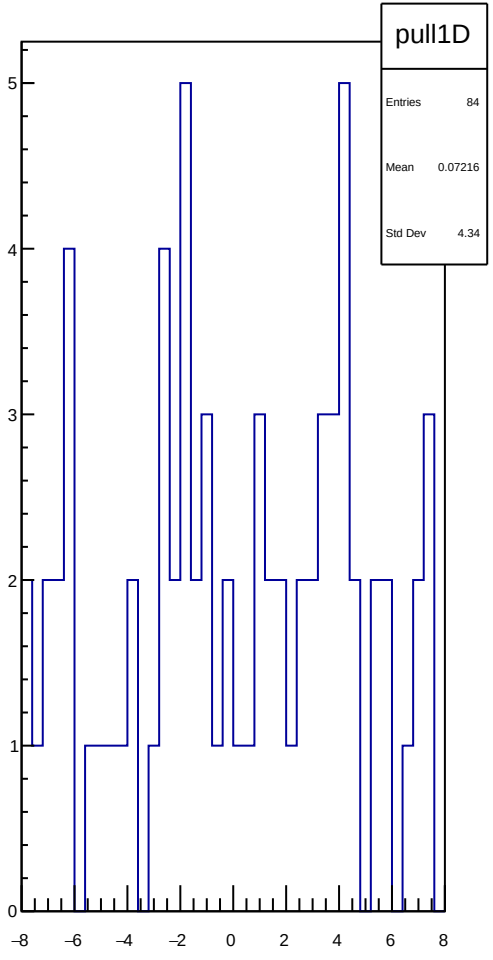

asym_bpm0r03WS_rms vs run
χ^2 / ndf 1.921e+04 / 83
p0 274.2 ± 0.2185
550
500
450
400
350
300
250
200

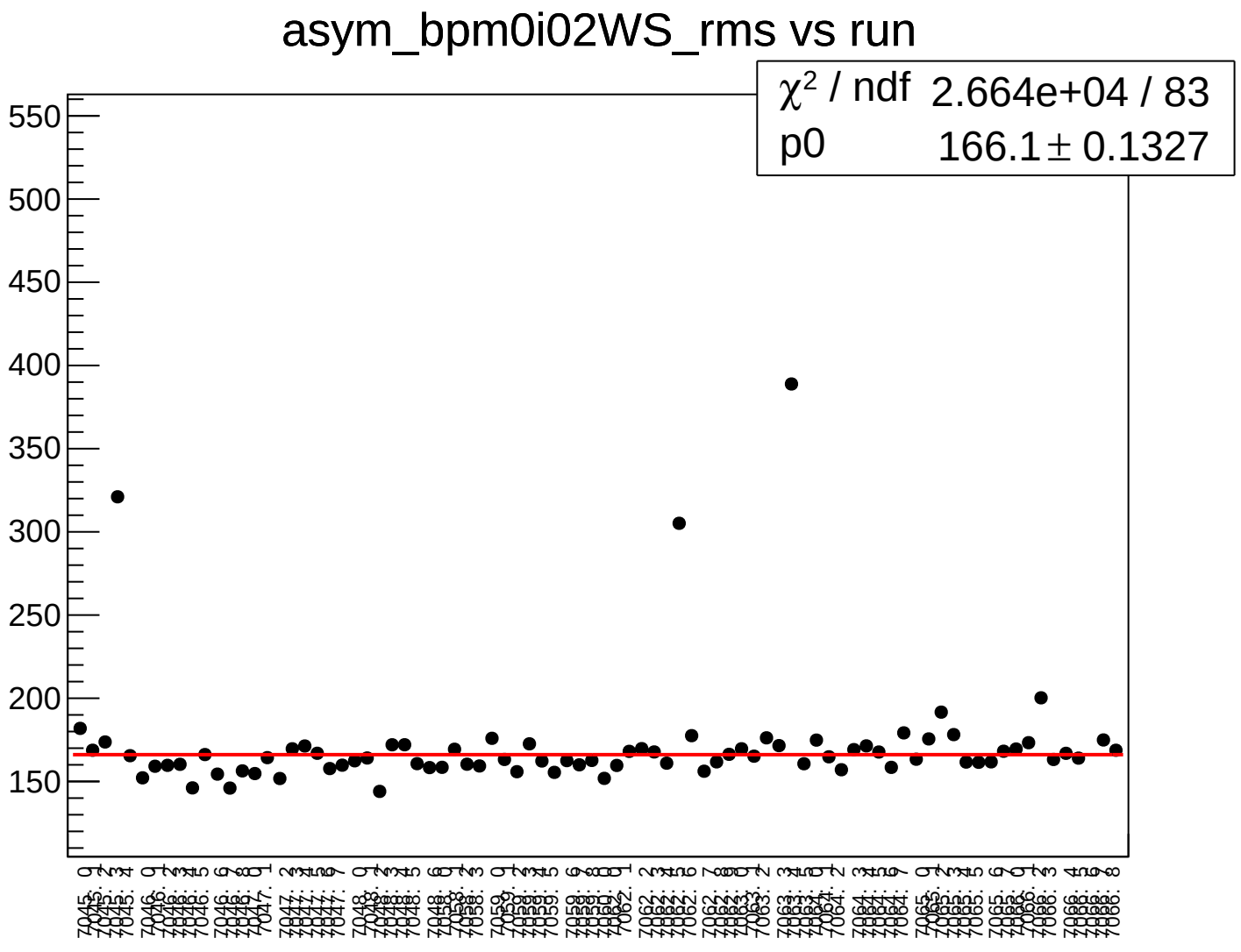

asym_bpm0r05WS_mean vs run
χ² / ndf 83.5 / 83
p0 1165 ± 544.8
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 84
Mean 190.1
Std Dev 148.4
2
1
0
−1
−2
−3

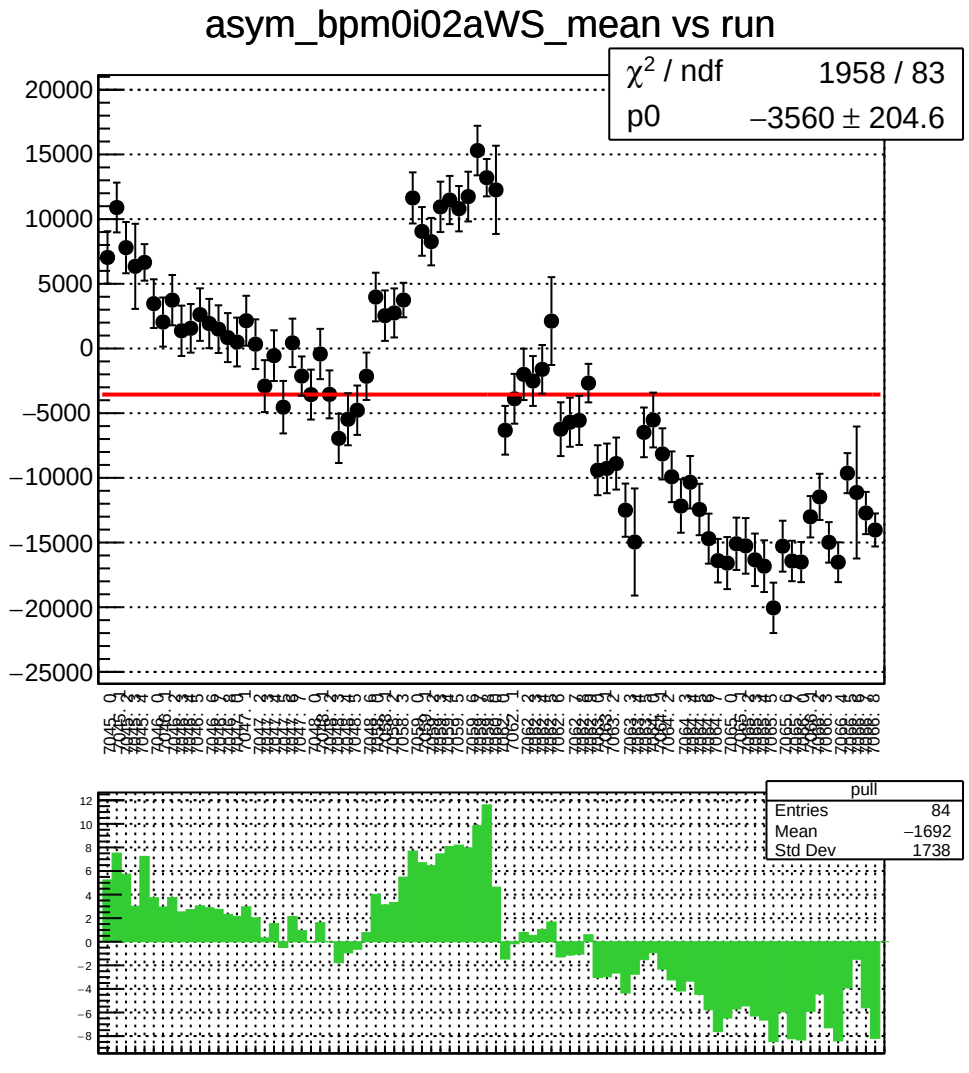

pull1D
Entries 84
Mean −0.005059
Std Dev 0.997
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

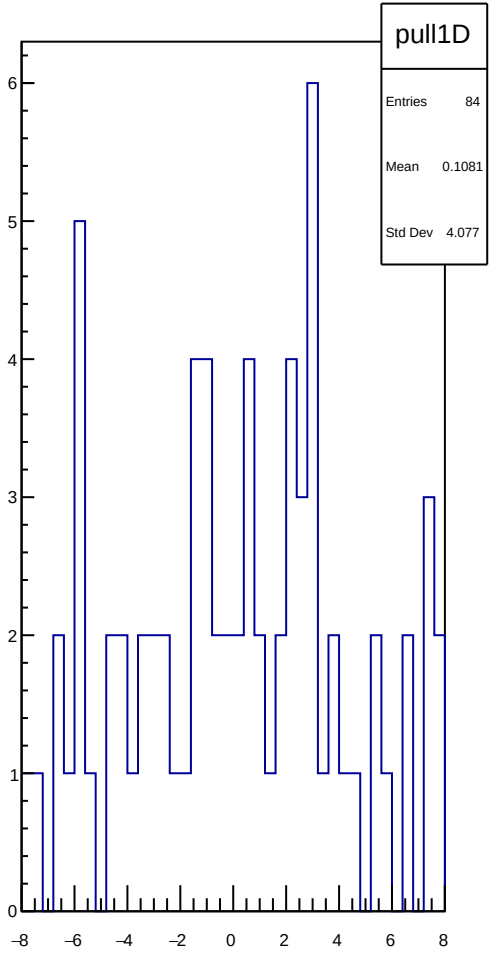

asym_bpm0r05WS_rms vs run
χ² / ndf 1.344e+04 / 83
p0 484.4 ± 0.3852
700
650
600
550
500
450
400
350

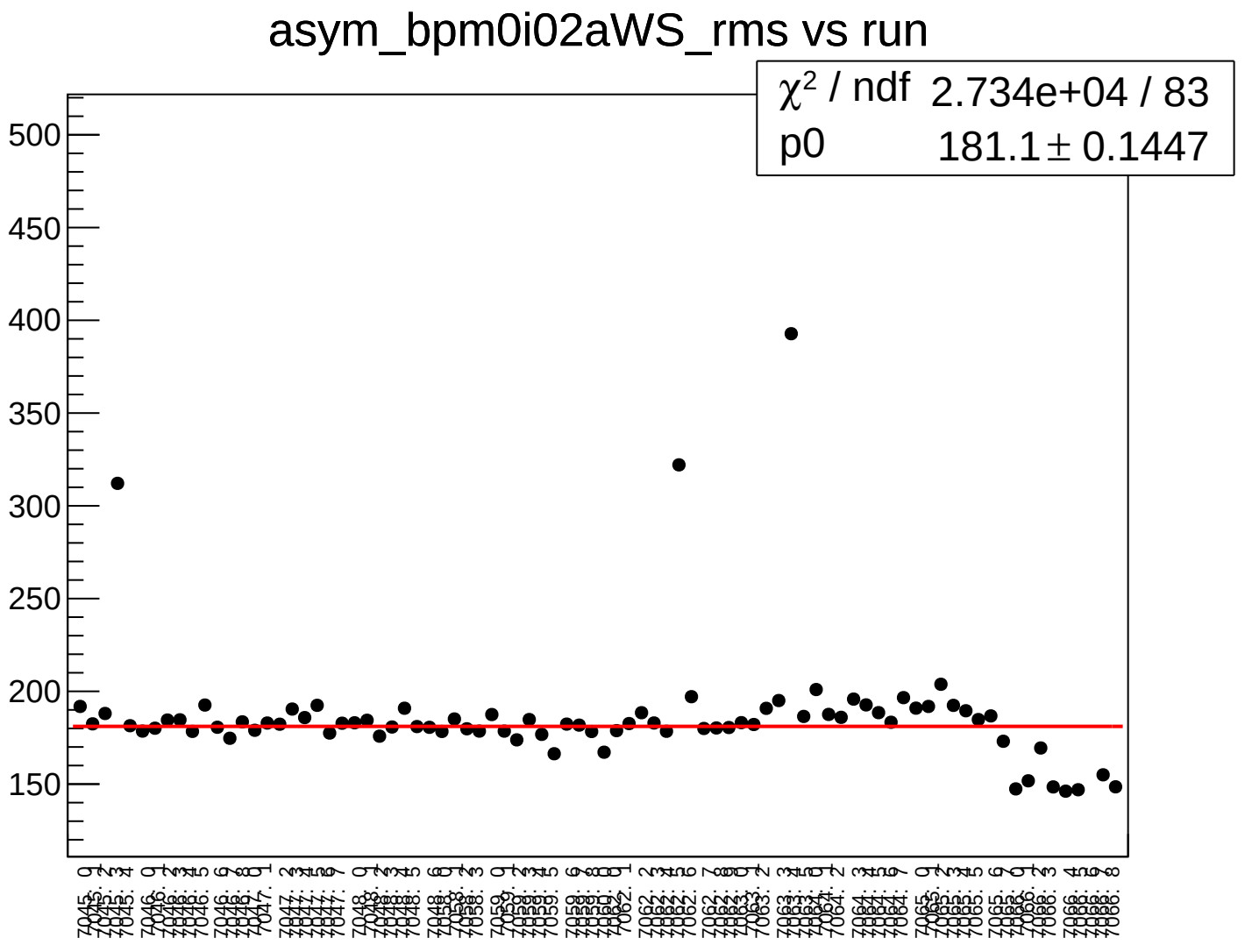

asym_bpm0i02WS_mean vs run
χ² / ndf 2324 / 83
p0 3381 ± 187.6
pull
Entries 84
Mean 886.6
Std Dev 840.7

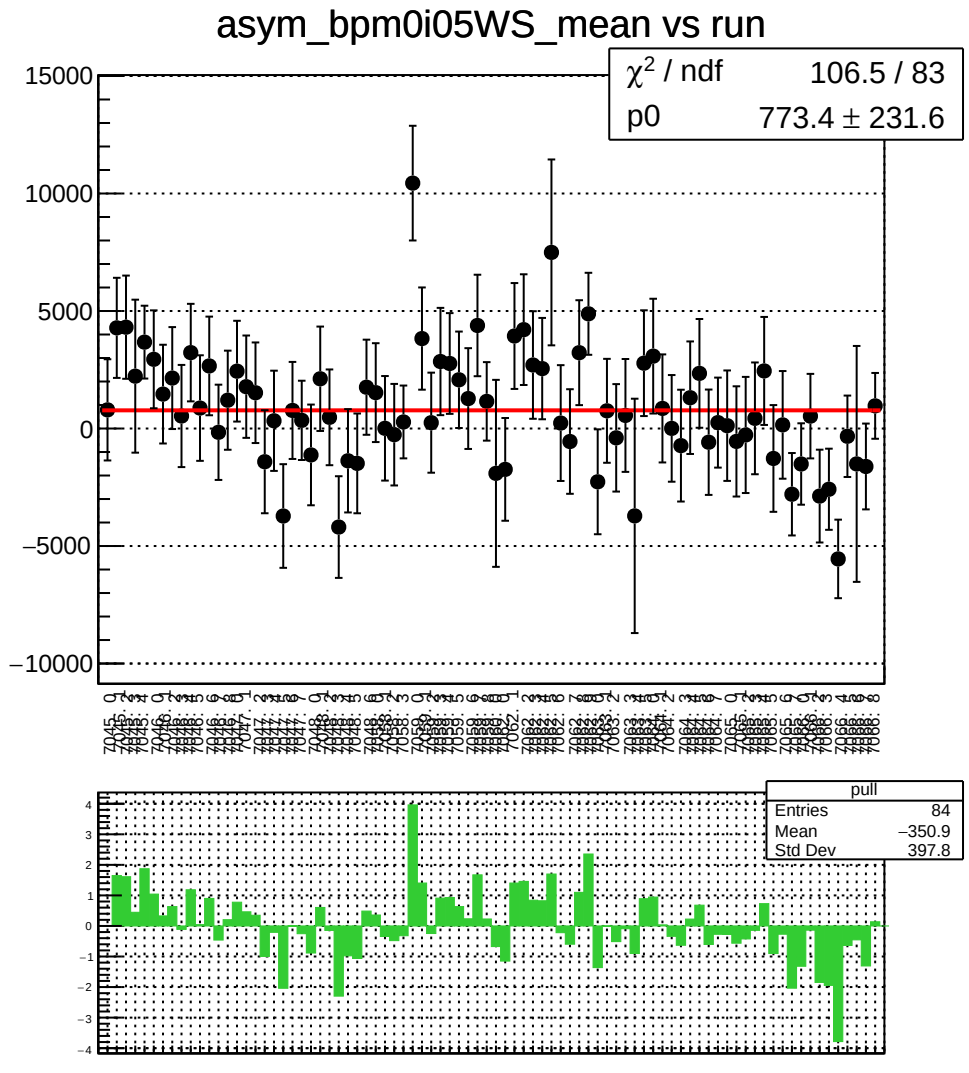

pull1D
Entries 84
Mean 0.07216
Std Dev 4.34

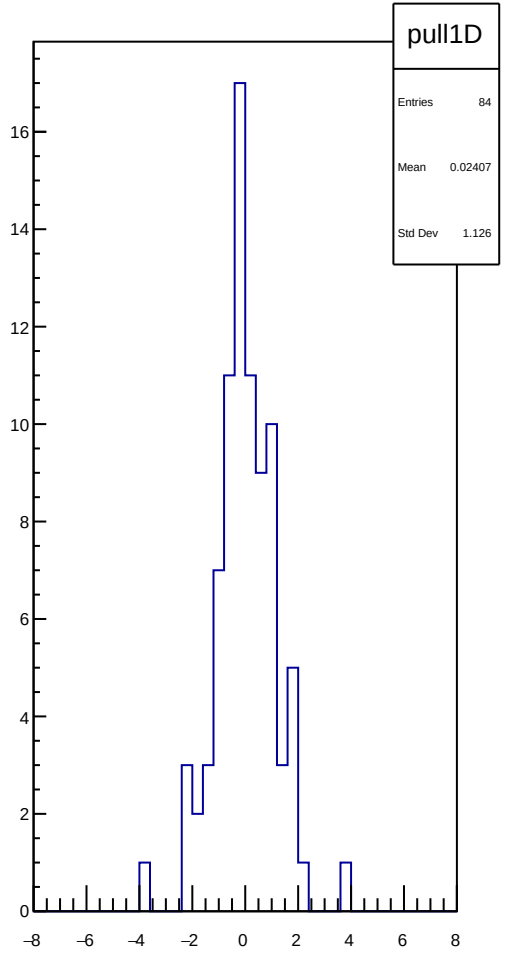

asym_bpm0i02WS_rms vs run
χ^2 / ndf 2.664e+04 / 83
p0 166.1 ± 0.1327
550
500
450
400
350
300
250
200
150

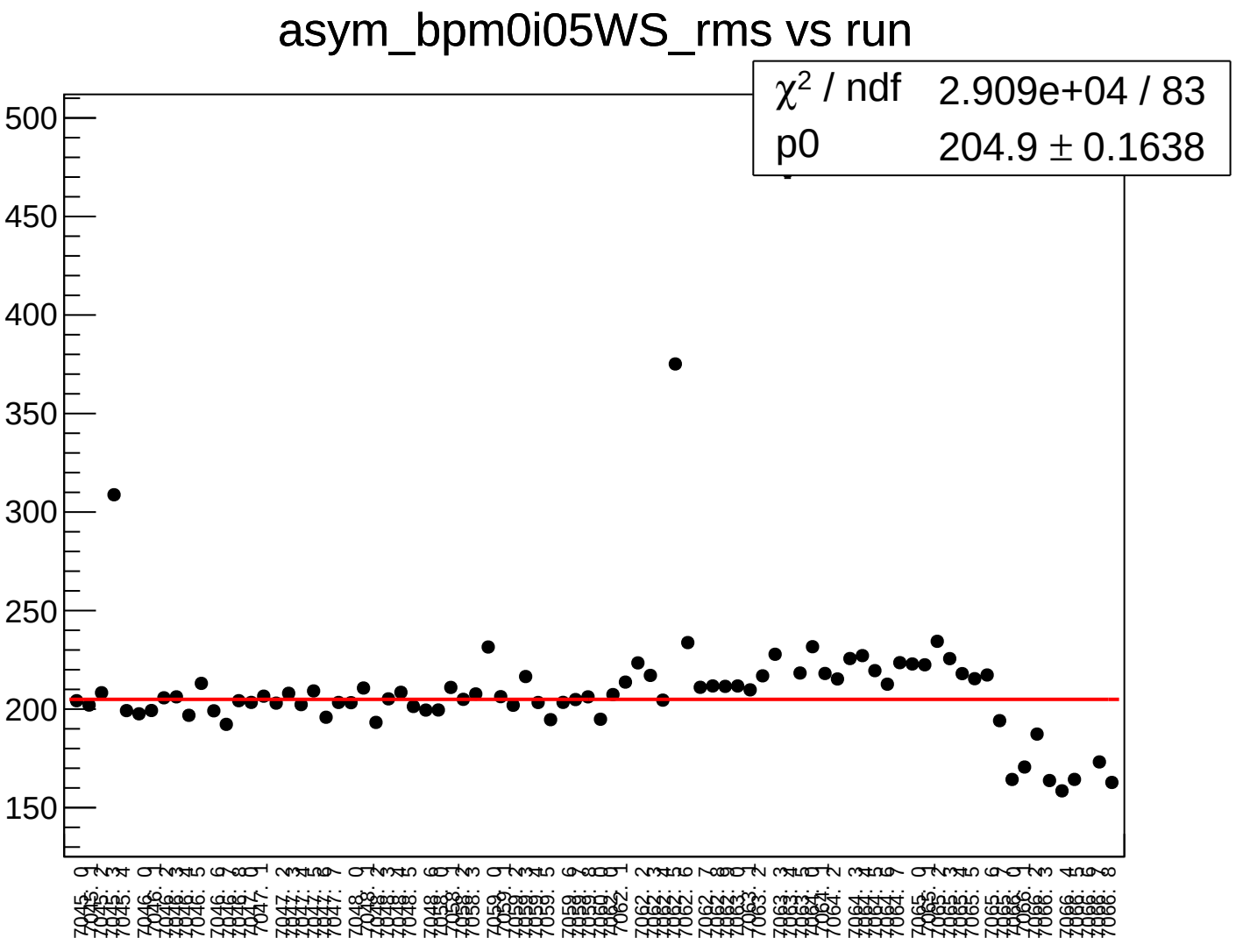

asym_bpm0i02aWS_mean vs run
χ² / ndf 1958 / 83
p0 −3560 ± 204.6
pull
Entries 84
Mean −1692
Std Dev 1738

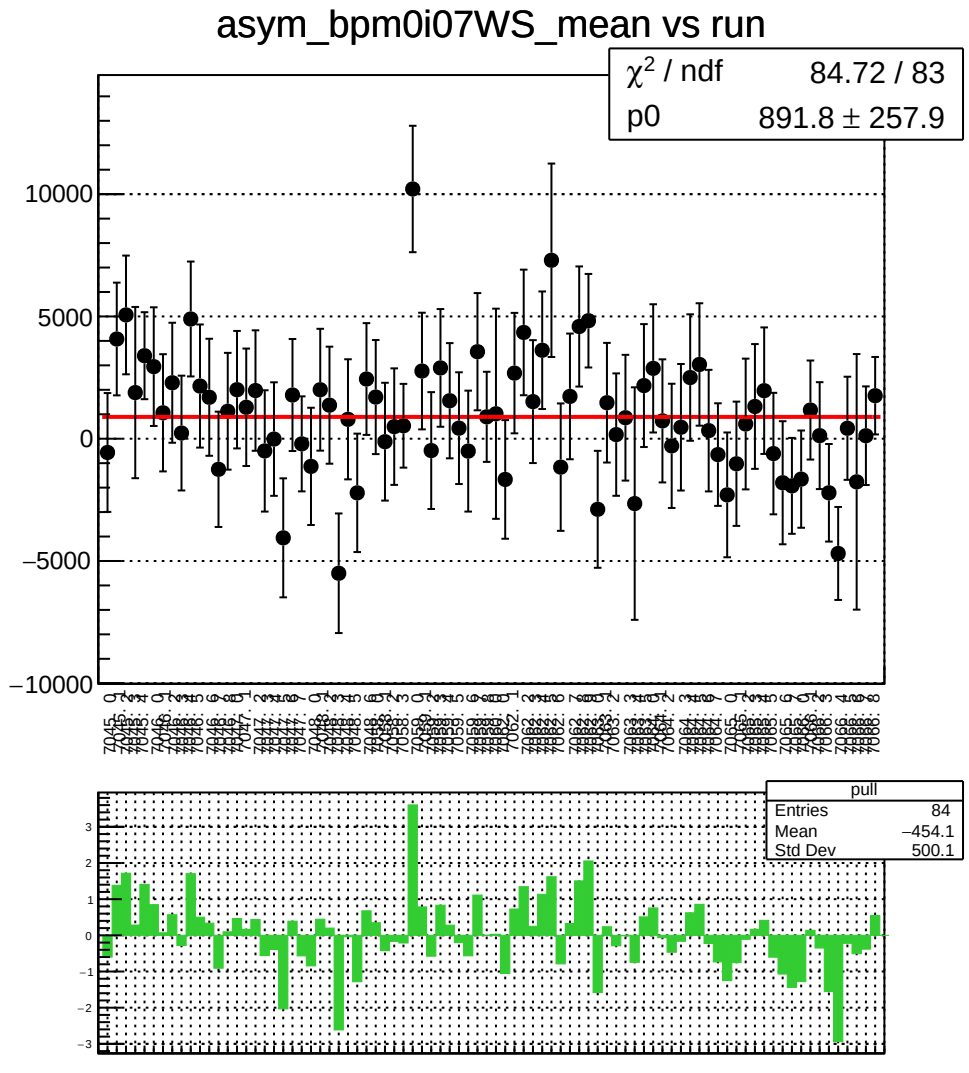

pull1D
Entries 84
Mean 0.1081
Std Dev 4.077

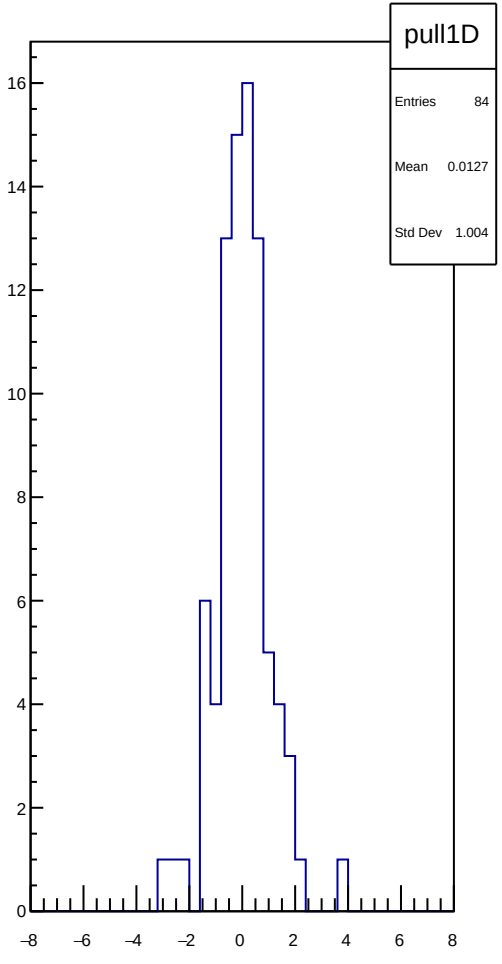

asym_bpm0i02aWS_rms vs run
χ² / ndf 2.734e+04 / 83
p0 181.1 ± 0.1447
500
450
400
350
300
250
200
150

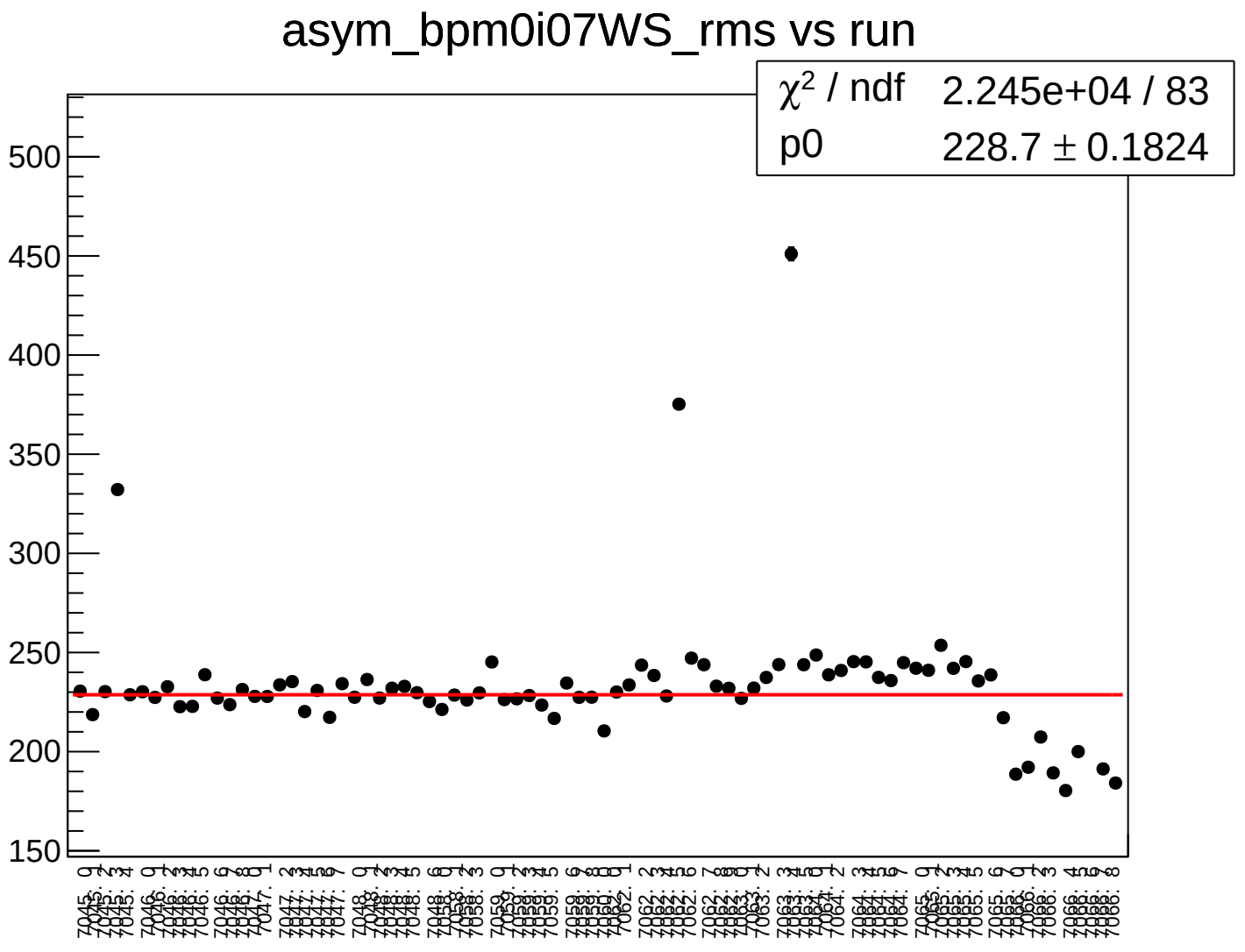

asym_bpm0i05WS_mean vs run
χ² / ndf 106.5 / 83
p0 773.4 ± 231.6
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −350.9
Std Dev 397.8
4
3
2
1
0
−1
−2
−3
−4

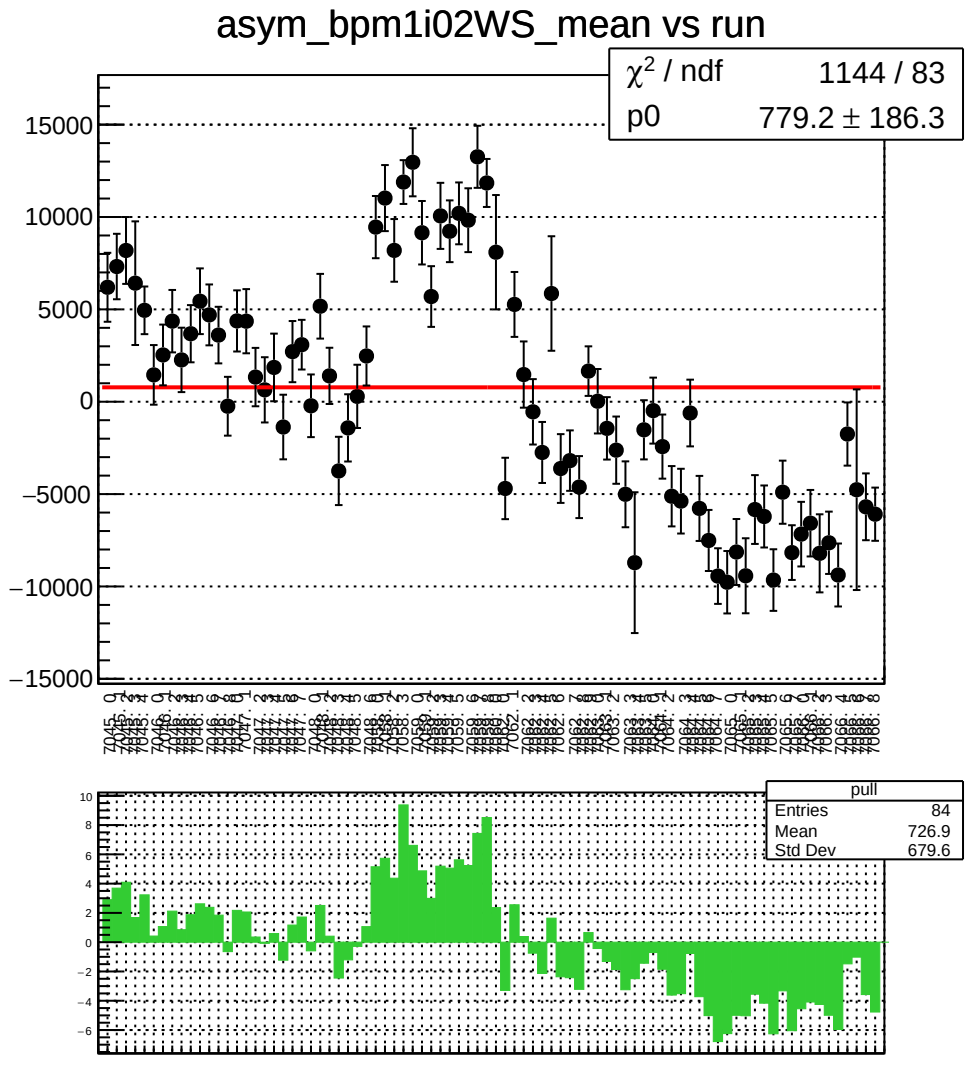

pull1D
Entries 84
Mean 0.02407
Std Dev 1.126
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

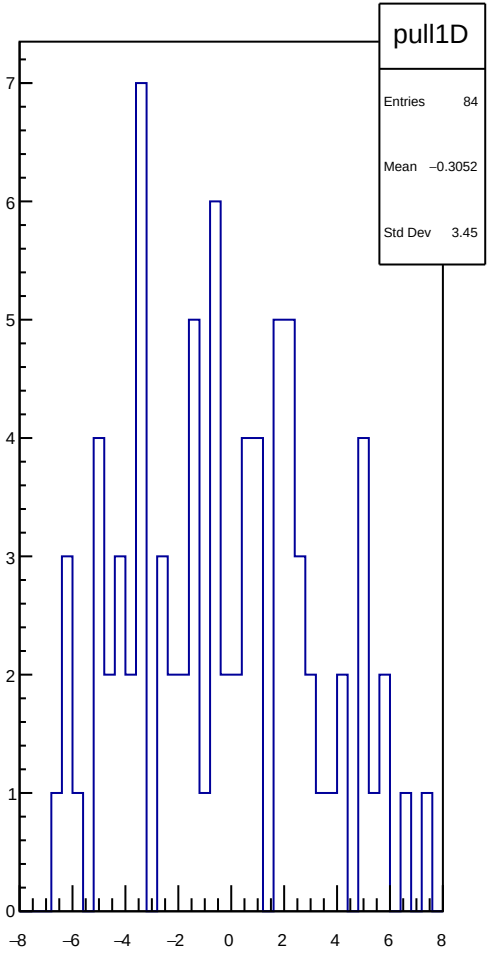

asym_bpm0i05WS_rms vs run
χ² / ndf 2.909e+04 / 83
p0 204.9 ± 0.1638
500
450
400
350
300
250
200
150

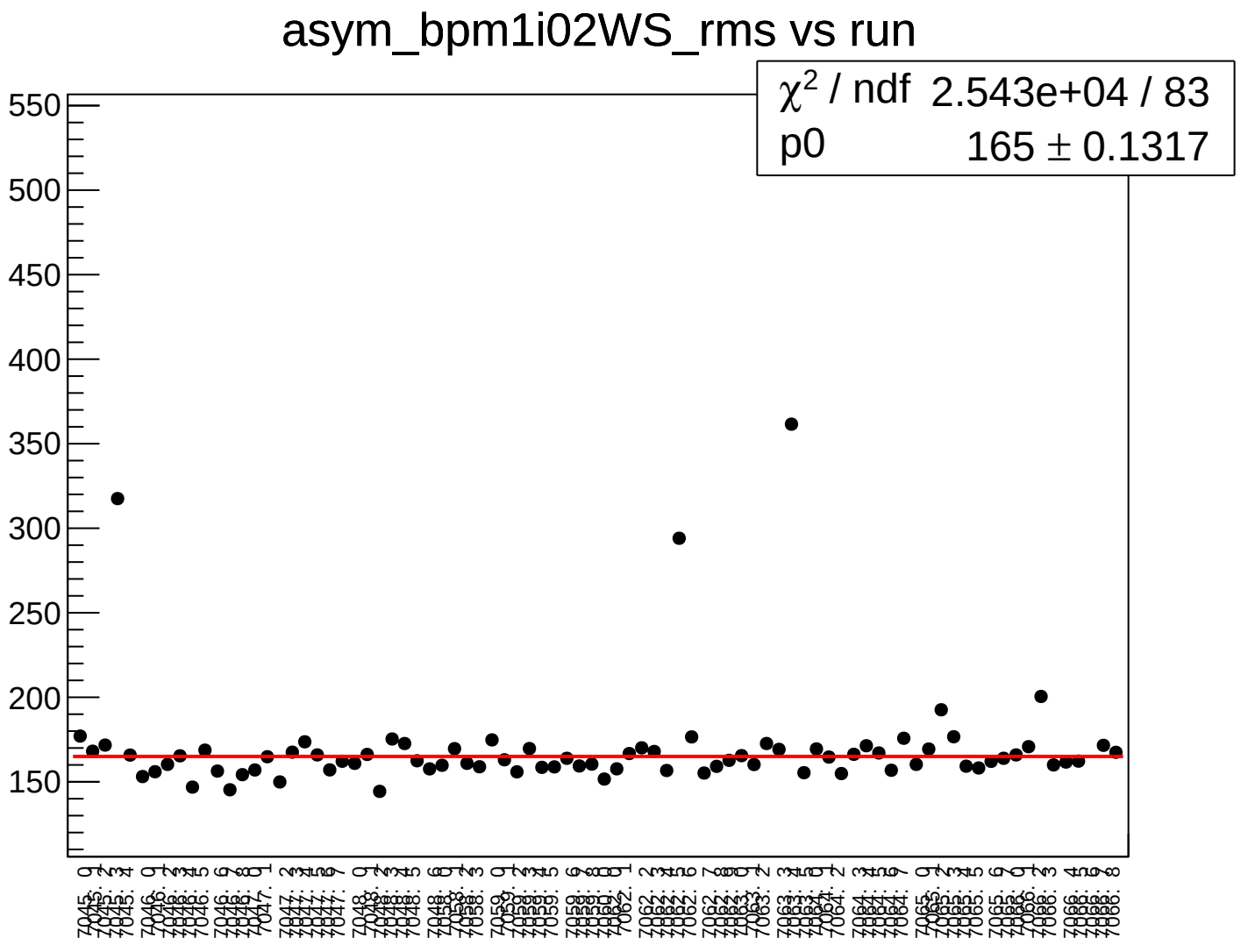

asym_bpm0i07WS_mean vs run
χ² / ndf 84.72 / 83
p0 891.8 ± 257.9
10000
5000
0
−5000
−10000
pull
Entries 84
Mean −454.1
Std Dev 500.1
3
2
1
0
−1
−2
−3

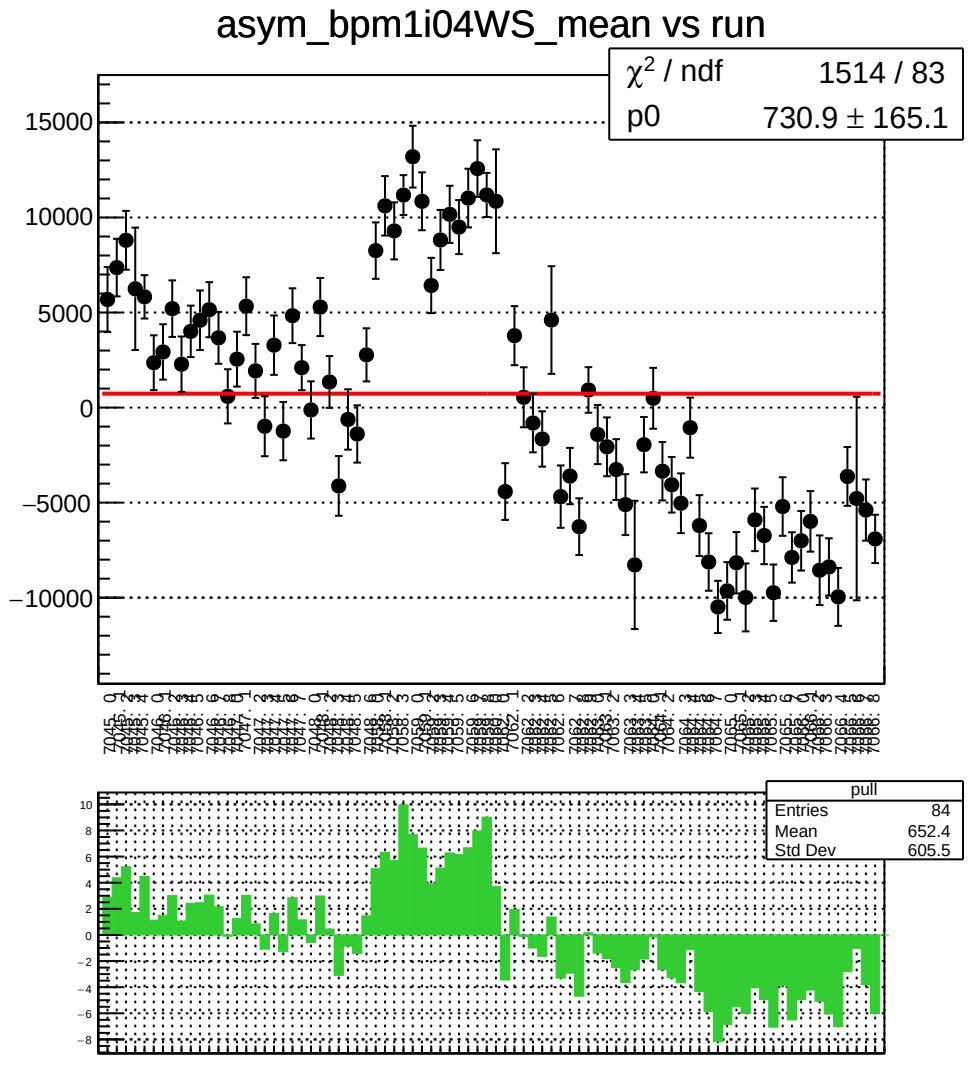

pull1D
Entries 84
Mean 0.0127
Std Dev 1.004
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

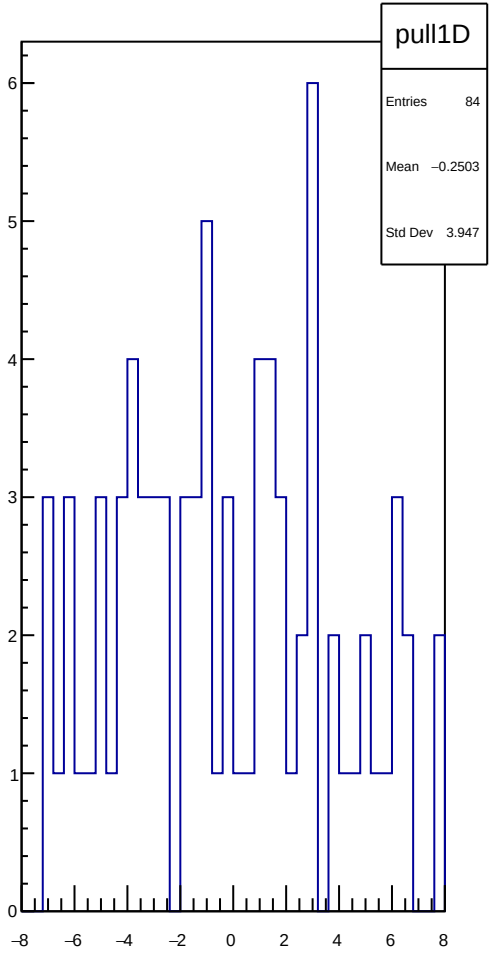

asym_bpm0i07WS_rms vs run
χ^2 / ndf 2.245e+04 / 83
p0 228.7 ± 0.1824
500
450
400
350
300
250
200
150

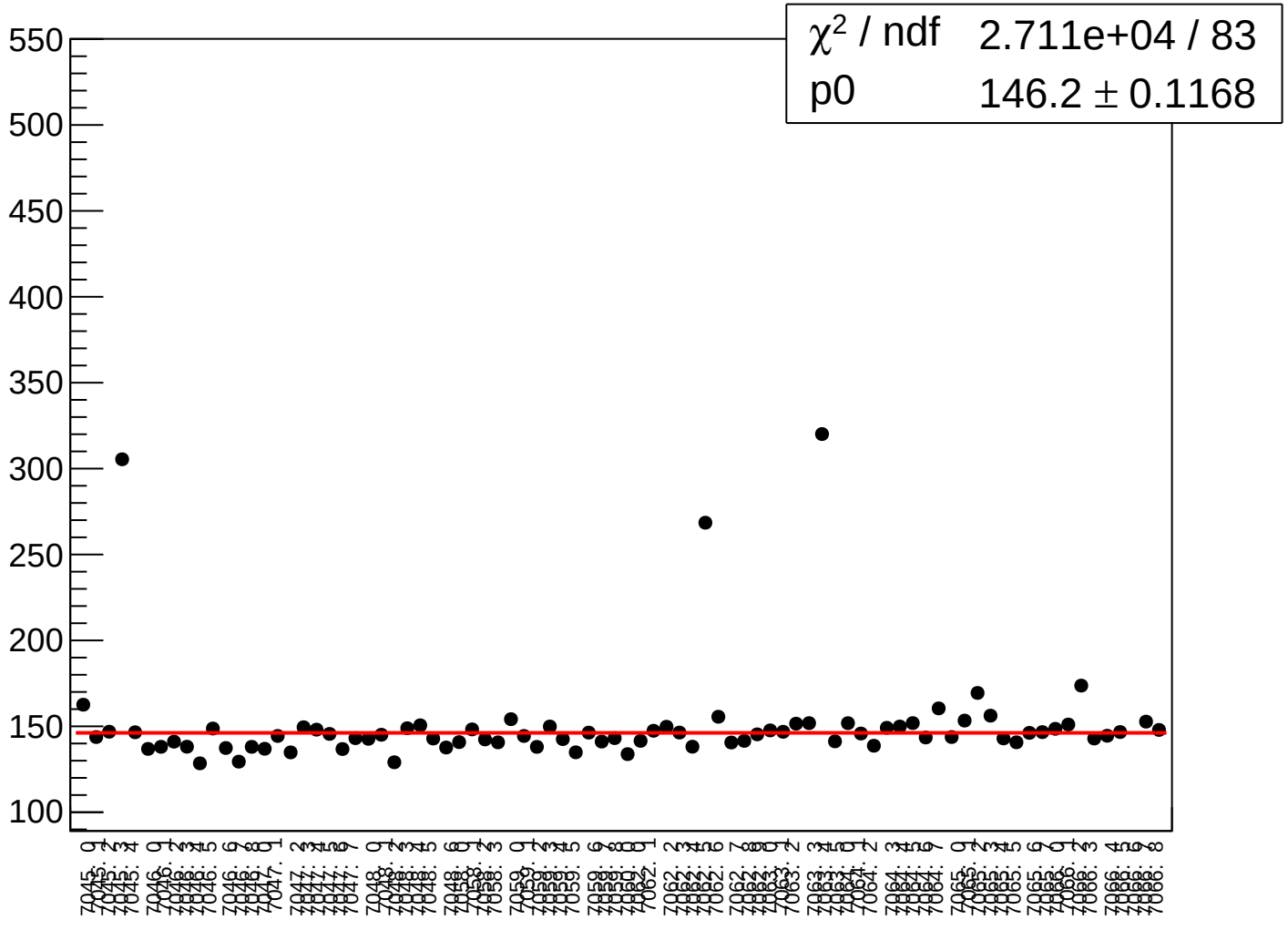

asym_bpm1i02WS_mean vs run
χ² / ndf 1144 / 83
p0 779.2 ± 186.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean 726.9
Std Dev 679.6
10
8
6
4
2
0
−2
−4
−6

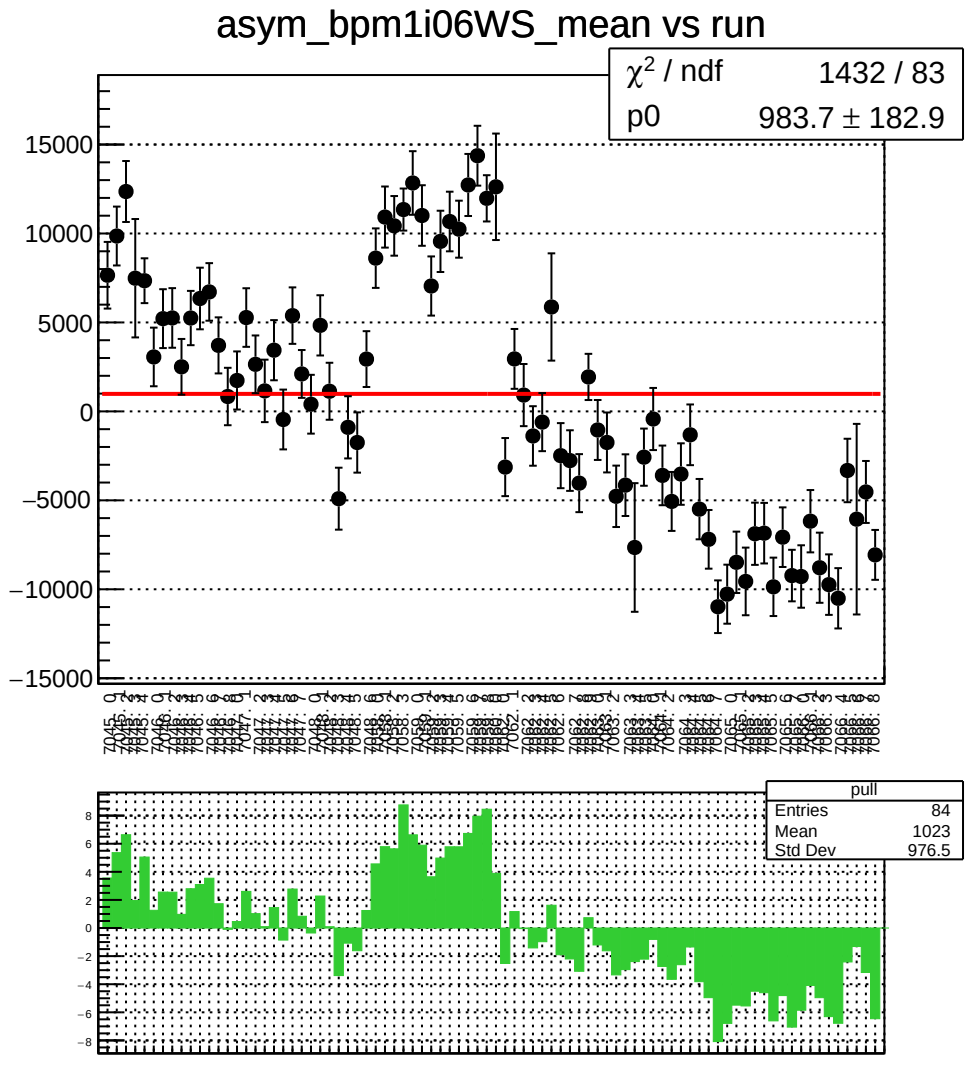

pull1D
Entries 84
Mean −0.3052
Std Dev 3.45
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

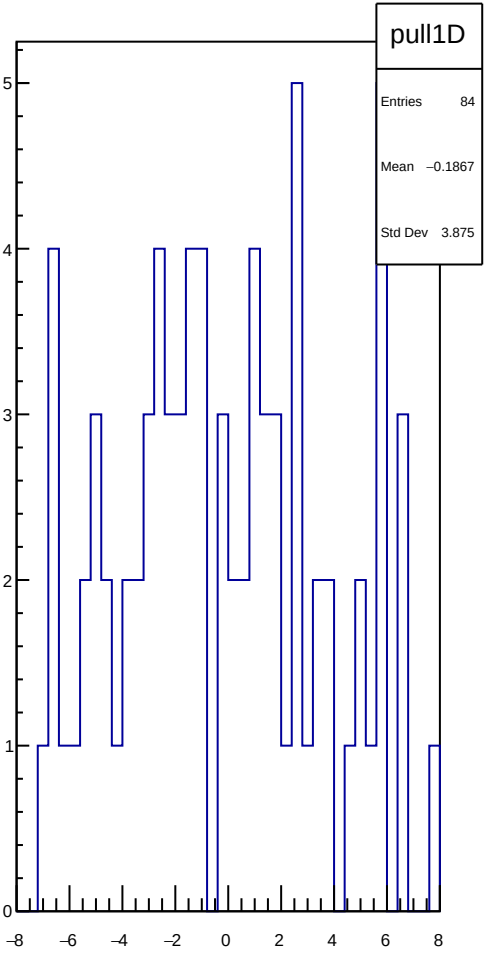

asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.543e+04 / 83
p0 165 ± 0.1317
550
500
450
400
350
300
250
200
150

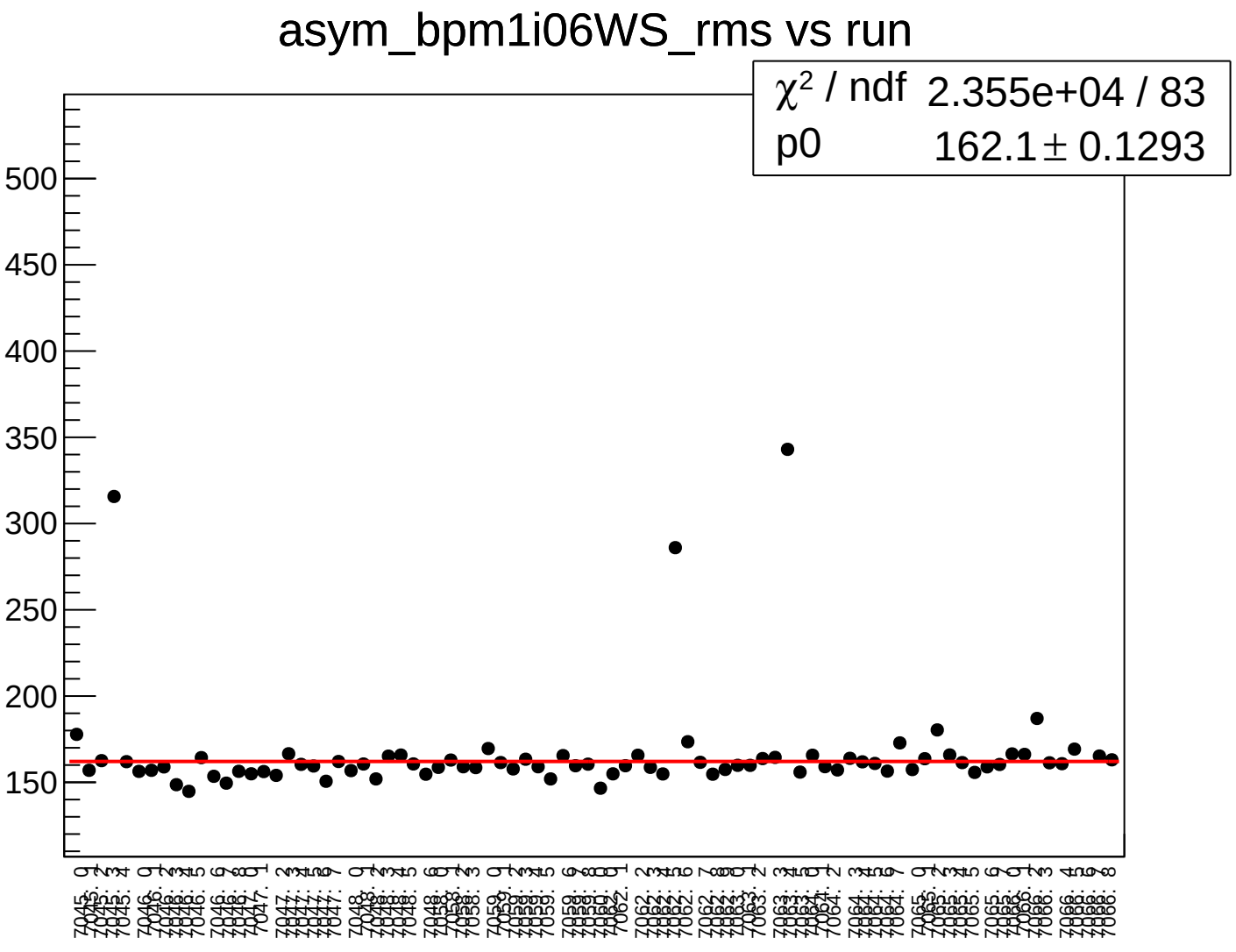

asym_bpm1i04WS_mean vs run
χ² / ndf 1514 / 83
p0 730.9 ± 165.1
15000
10000
5000
0
−5000
−10000
pull
Entries 84
Mean 652.4
Std Dev 605.5
10
8
6
4
2
0
−2
−4
−6
−8

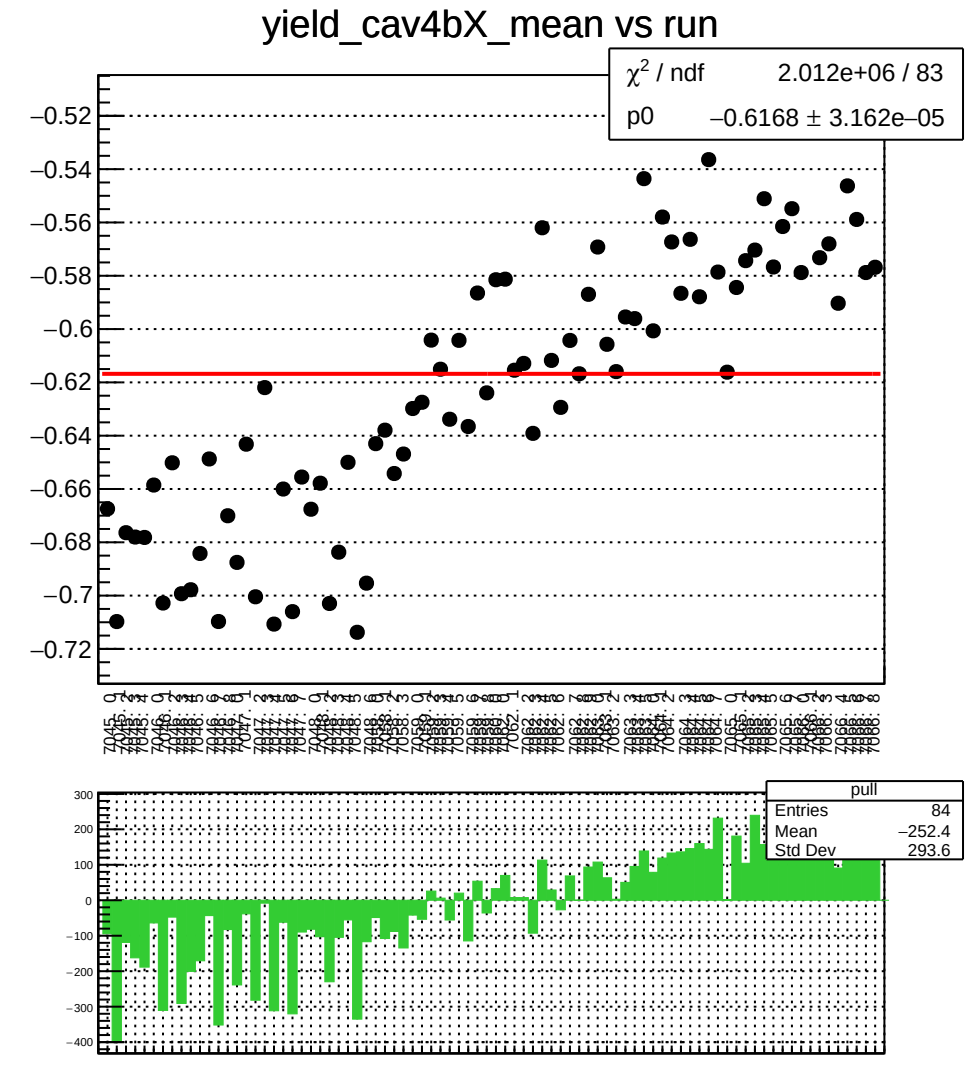

pull1D
Entries 84
Mean −0.2503
Std Dev 3.947
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

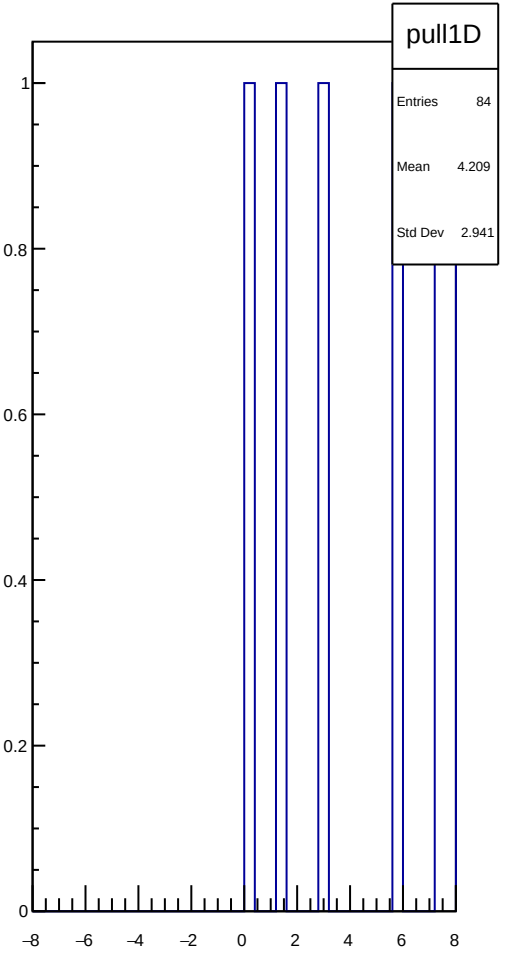

asym_bpm1i04WS_rms vs run
χ² / ndf 2.711e+04 / 83
p0 146.2 ± 0.1168
550
500
450
400
350
300
250
200
150
100

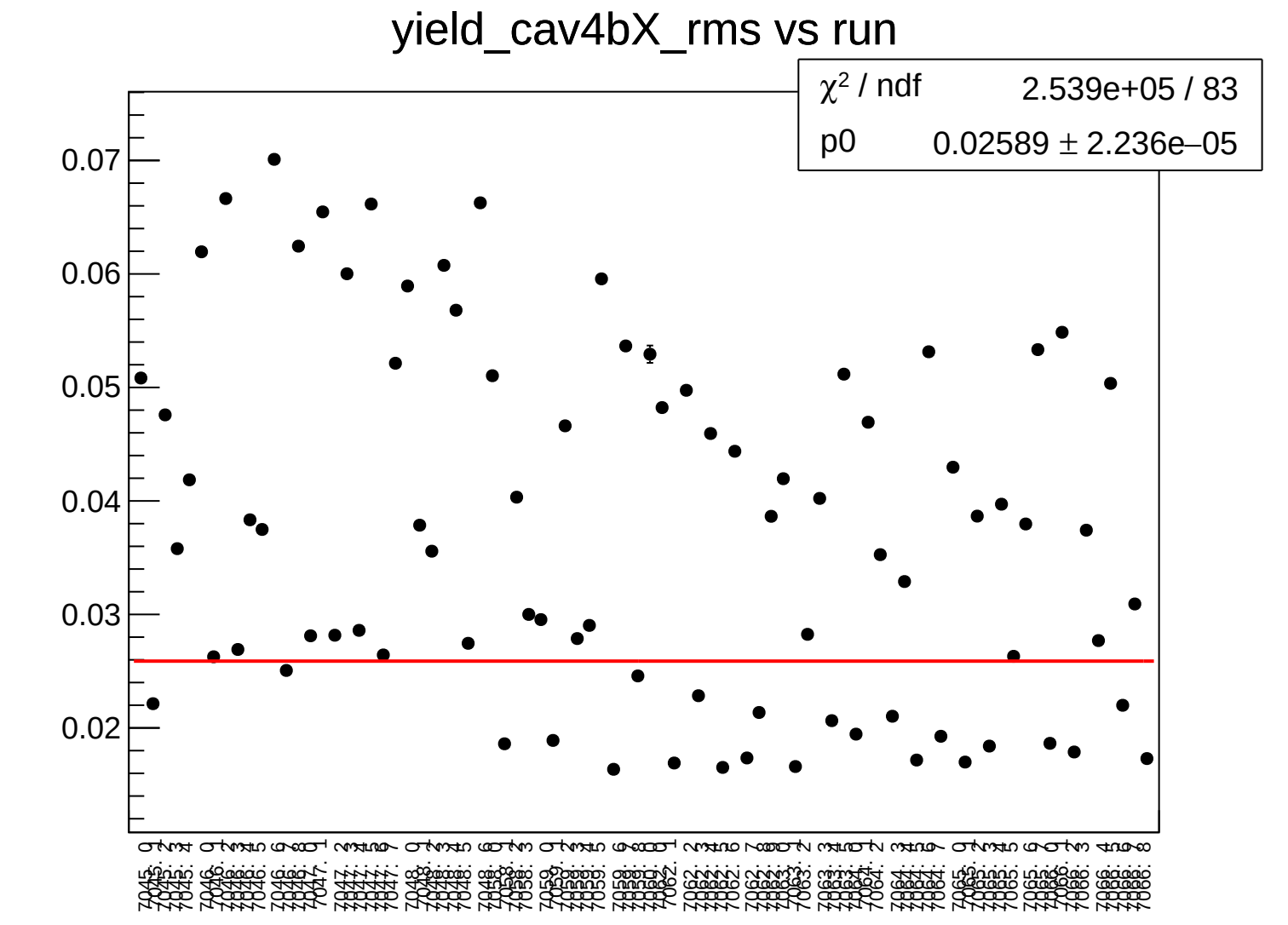

asym_bpm1i06WS_mean vs run
χ² / ndf 1432 / 83
p0 983.7 ± 182.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 84
Mean 1023
Std Dev 976.5
8
6
4
2
0
−2
−4
−6
−8

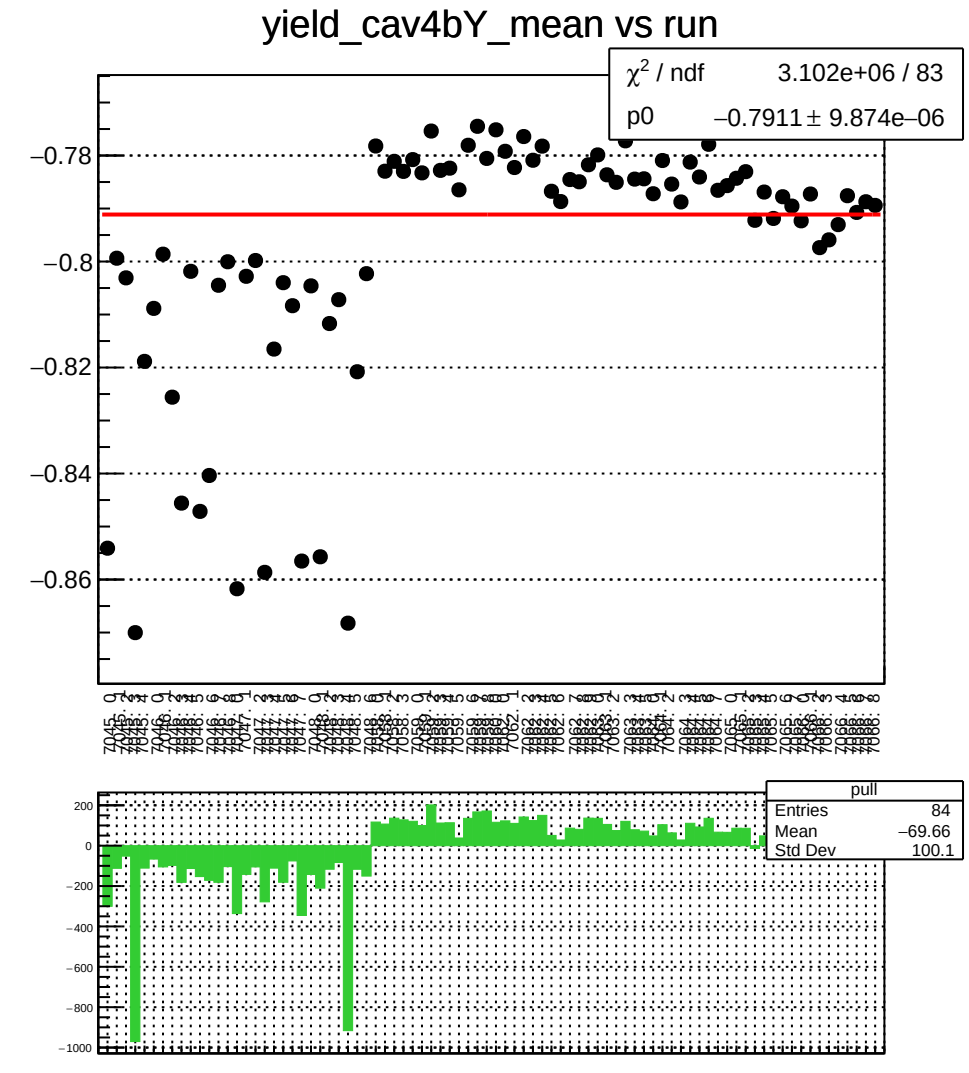

pull1D
Entries 84
Mean −0.1867
Std Dev 3.875
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

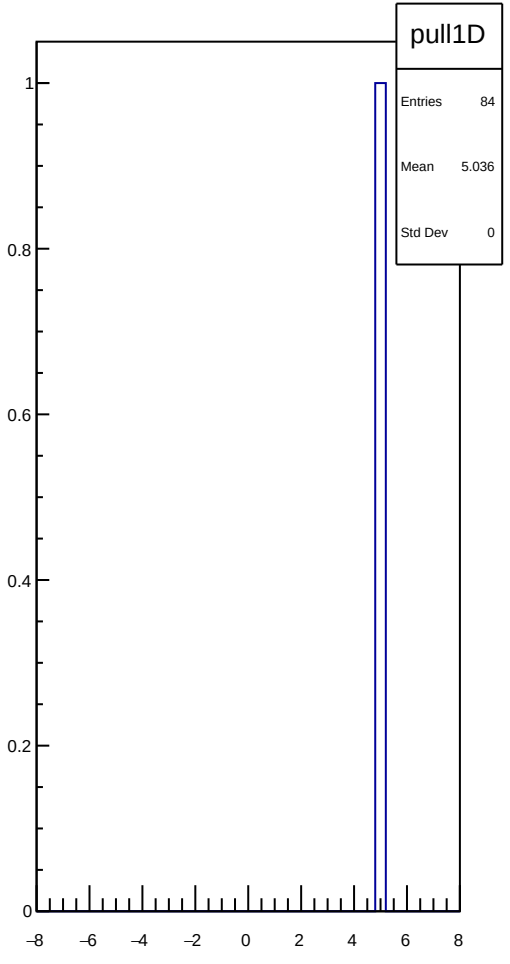

asym_bpm1i06WS_rms vs run
χ² / ndf 2.355e+04 / 83
p0 162.1 ± 0.1293
500
450
400
350
300
250
200
150

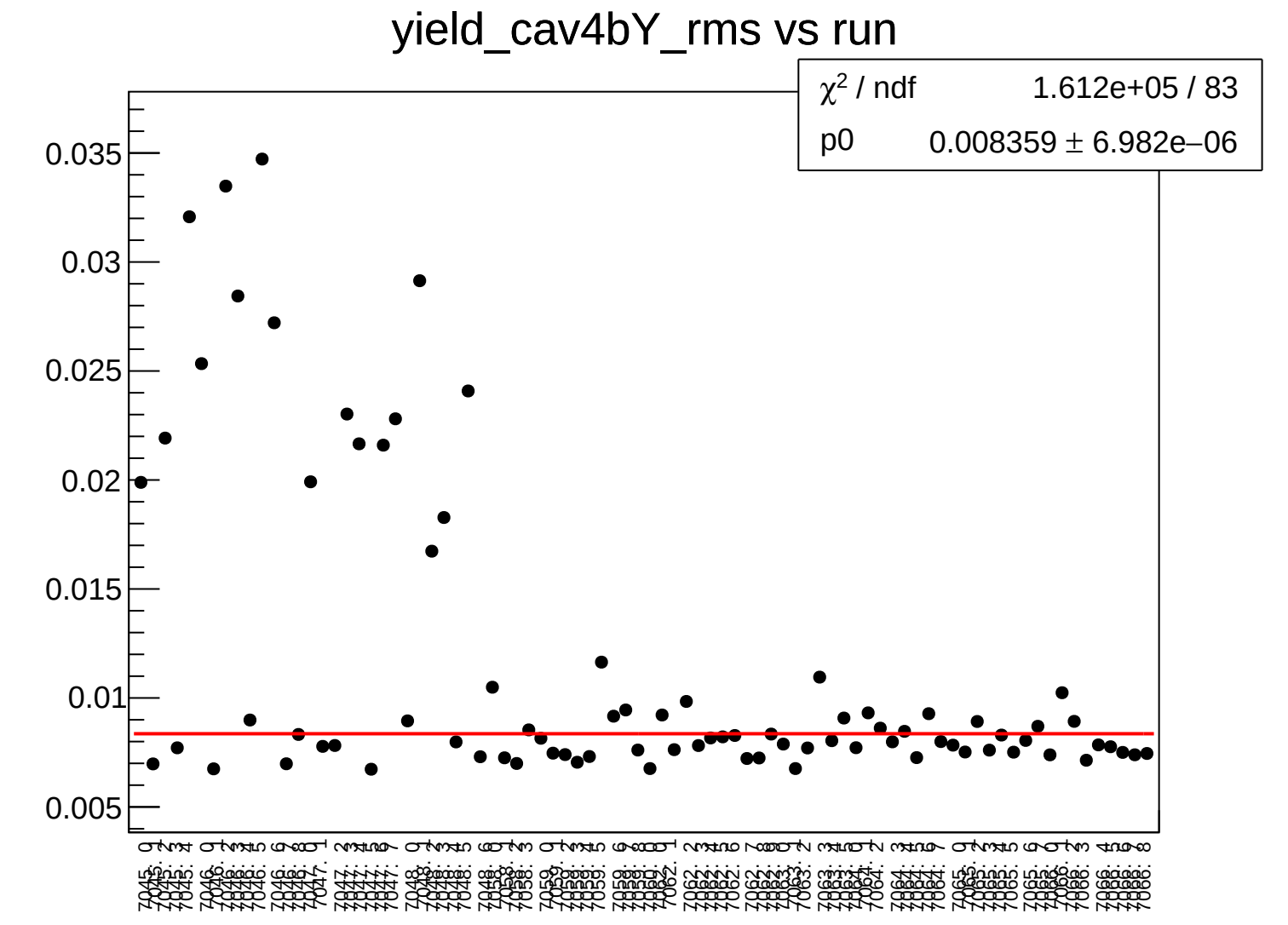

yield_cav4bX_mean vs run
χ² / ndf 2.012e+06 / 83
p0 −0.6168 ± 3.162e−05
−0.52
−0.54
−0.56
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
pull
Entries 84
Mean −252.4
Std Dev 293.6
300
200
100
0
−100
−200
−300
−400

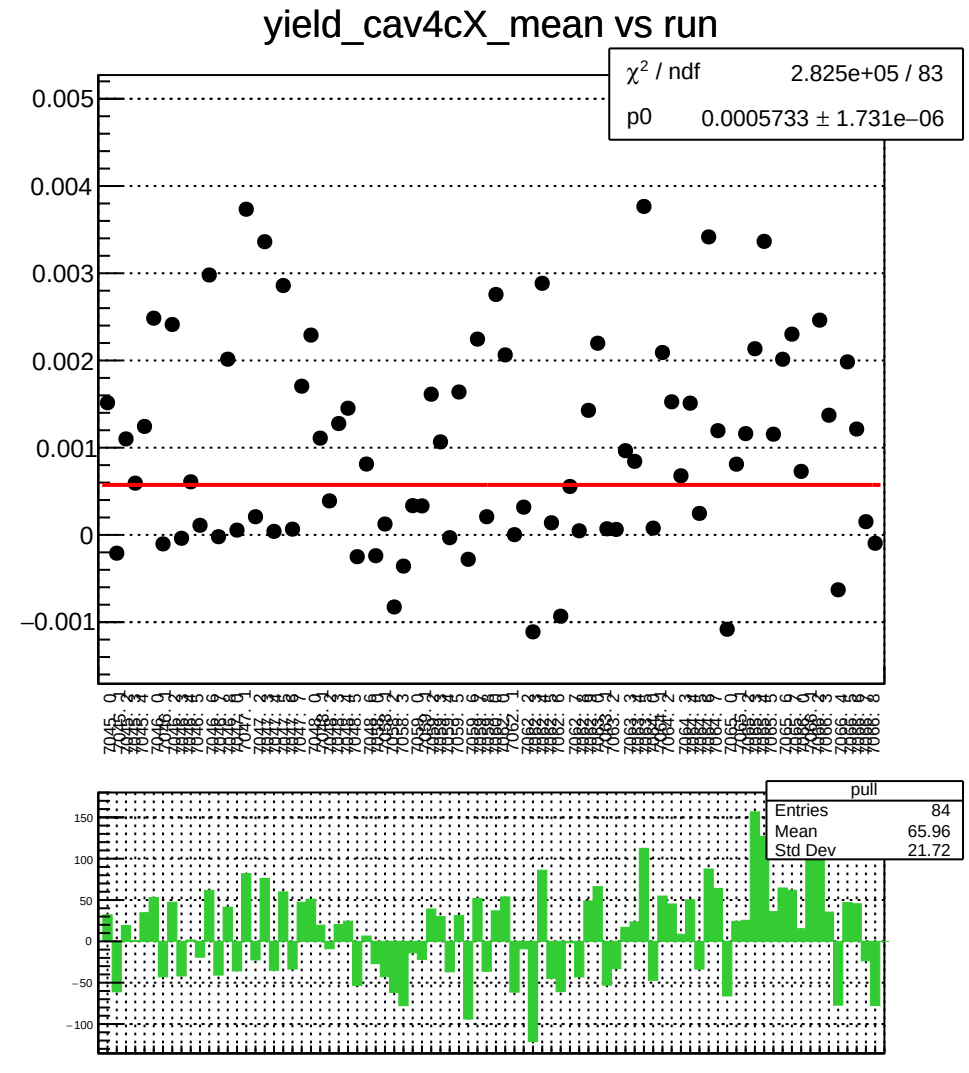

pull1D
Entries 84
Mean 4.209
Std Dev 2.941
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

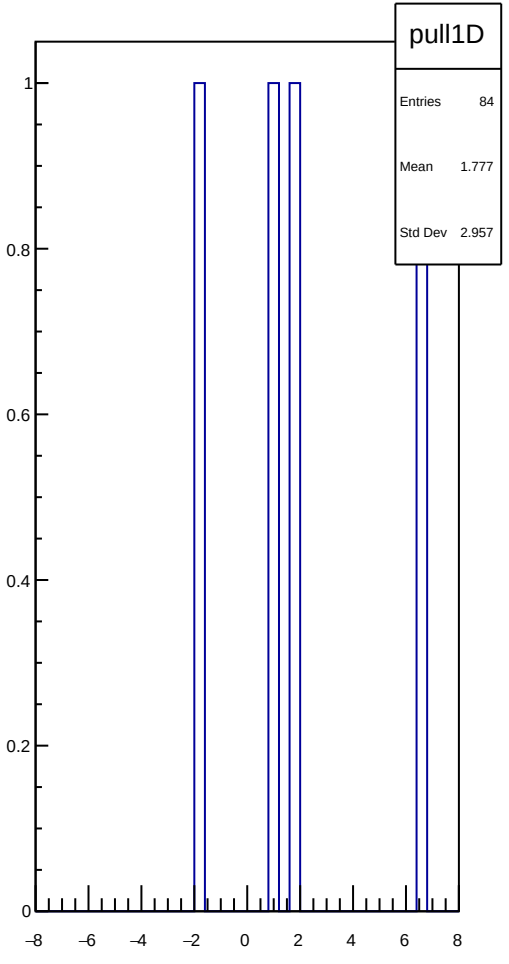

yield_cav4bX_rms vs run
χ² / ndf 2.539e+05 / 83
p0 0.02589 ± 2.236e−05
0.07
0.06
0.05
0.04
0.03
0.02

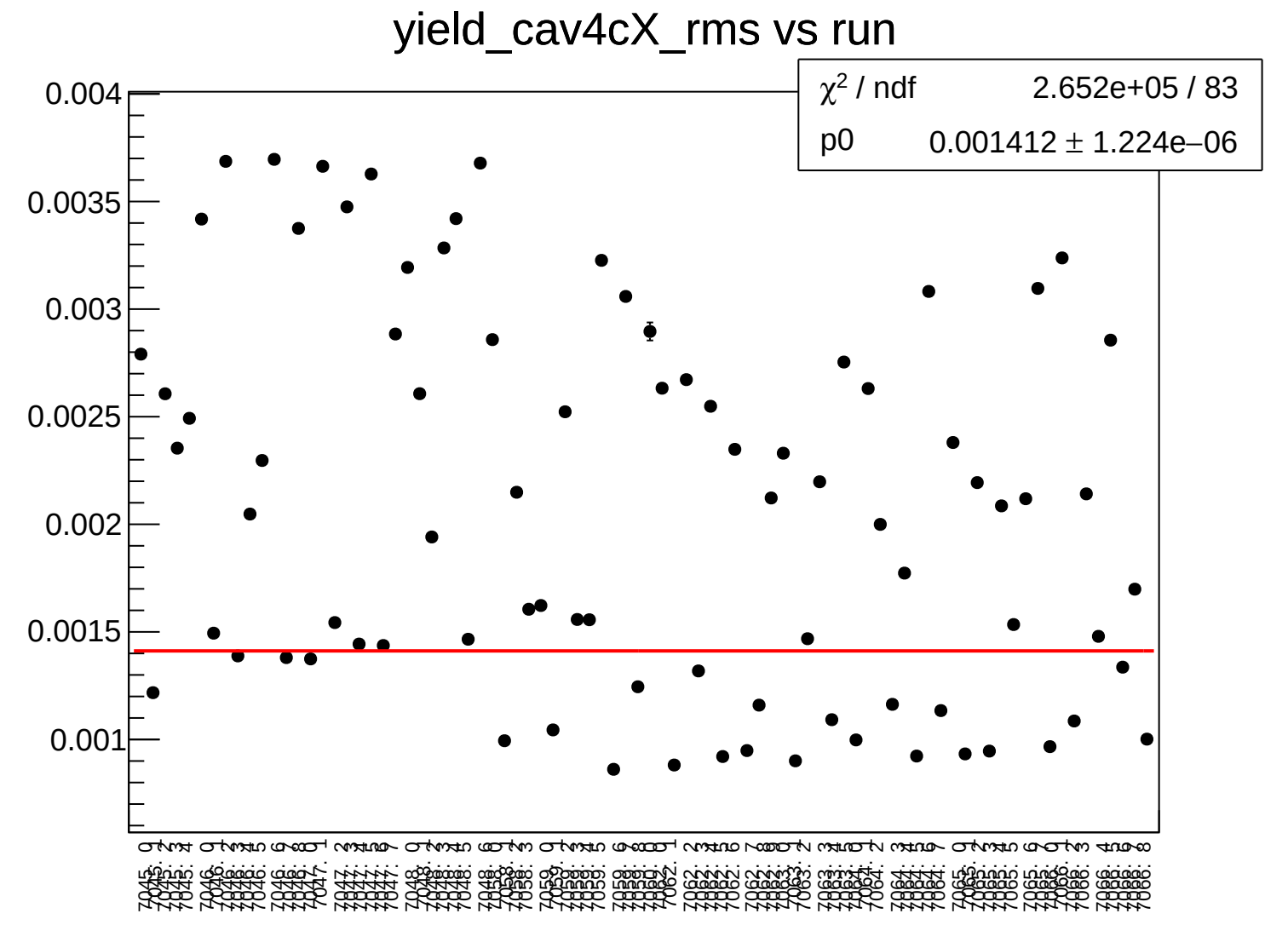

yield_cav4bY_mean vs run
χ² / ndf 3.102e+06 / 83
p0 −0.7911 ± 9.874e−06
−0.78
−0.8
−0.82
−0.84
−0.86
pull
Entries 84
Mean −69.66
Std Dev 100.1
200
0
−200
−400
−600
−800
−1000

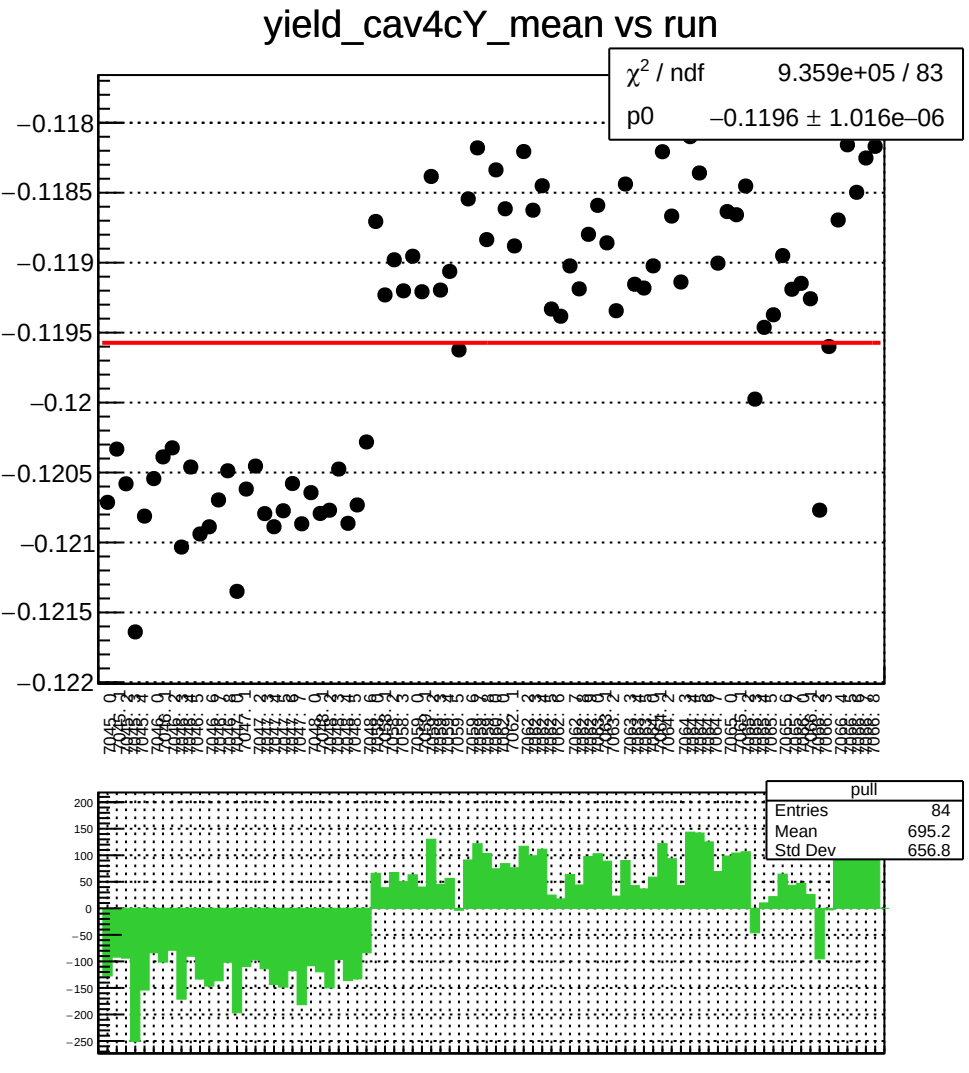

pull1D
Entries 84
Mean 5.036
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

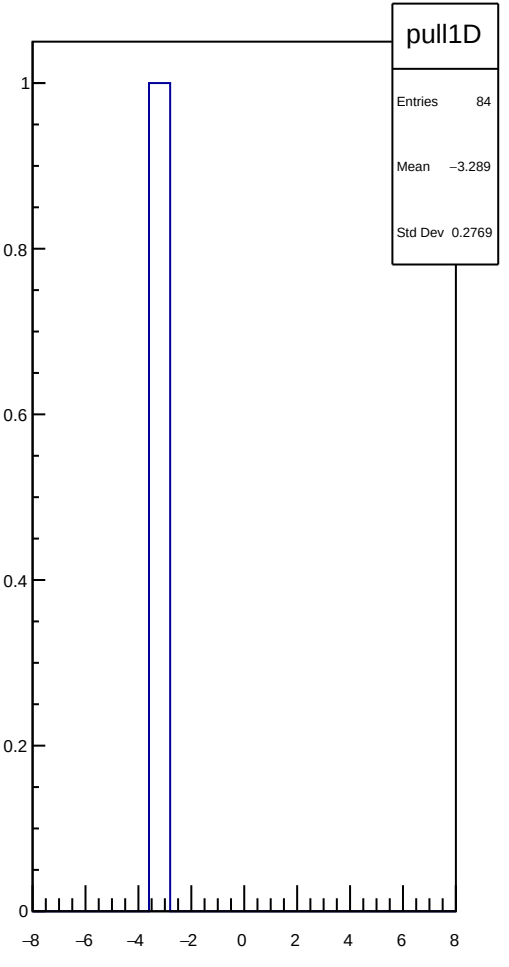

yield_cav4bY_rms vs run
χ² / ndf 1.612e+05 / 83
p0 0.008359 ± 6.982e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

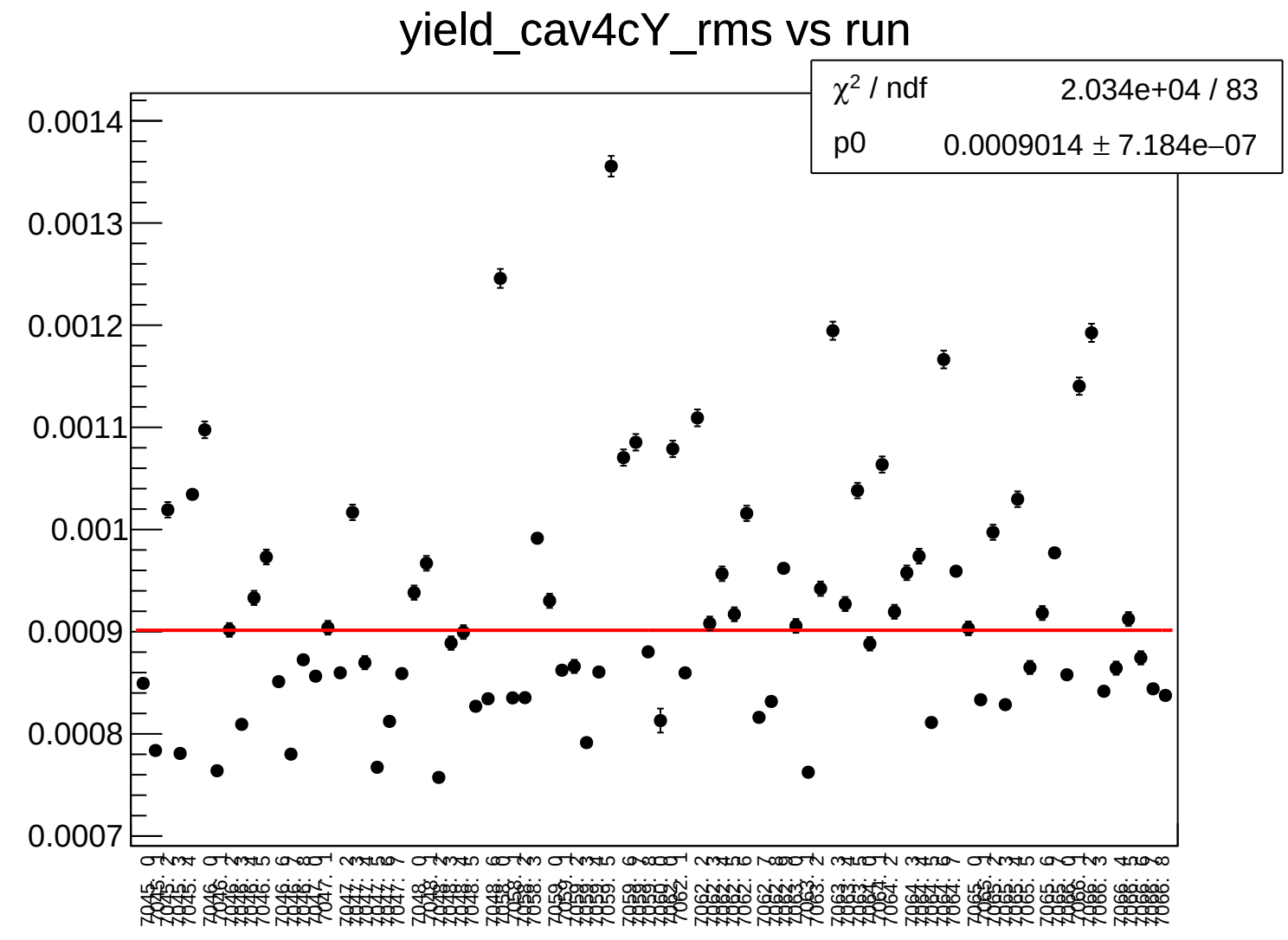

yield_cav4cX_mean vs run
χ² / ndf 2.825e+05 / 83
p0 0.0005733 ± 1.731e−06
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 84
Mean 65.96
Std Dev 21.72
150
100
50
0
−50
−100

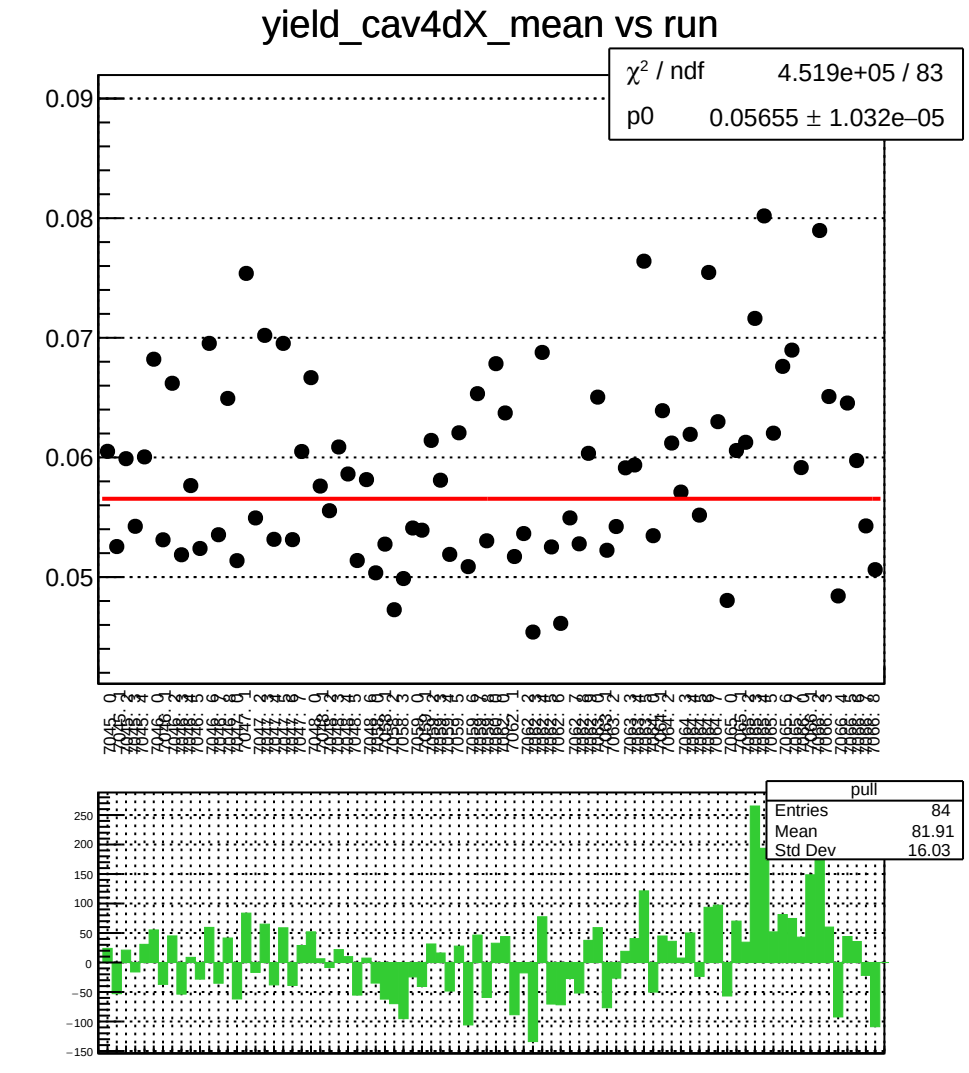

pull1D
Entries 84
Mean 1.777
Std Dev 2.957
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

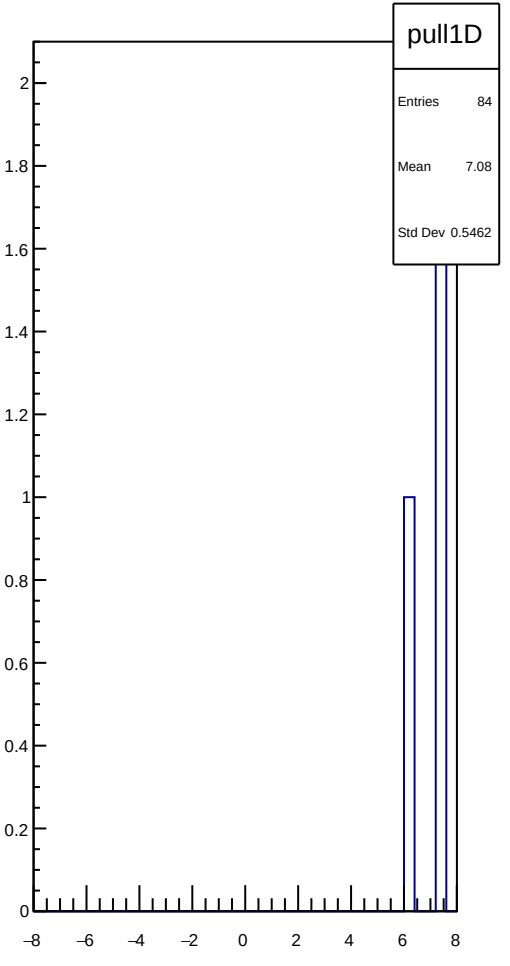

yield_cav4cX_rms vs run
χ² / ndf 2.652e+05 / 83
p0 0.001412 ± 1.224e−06
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

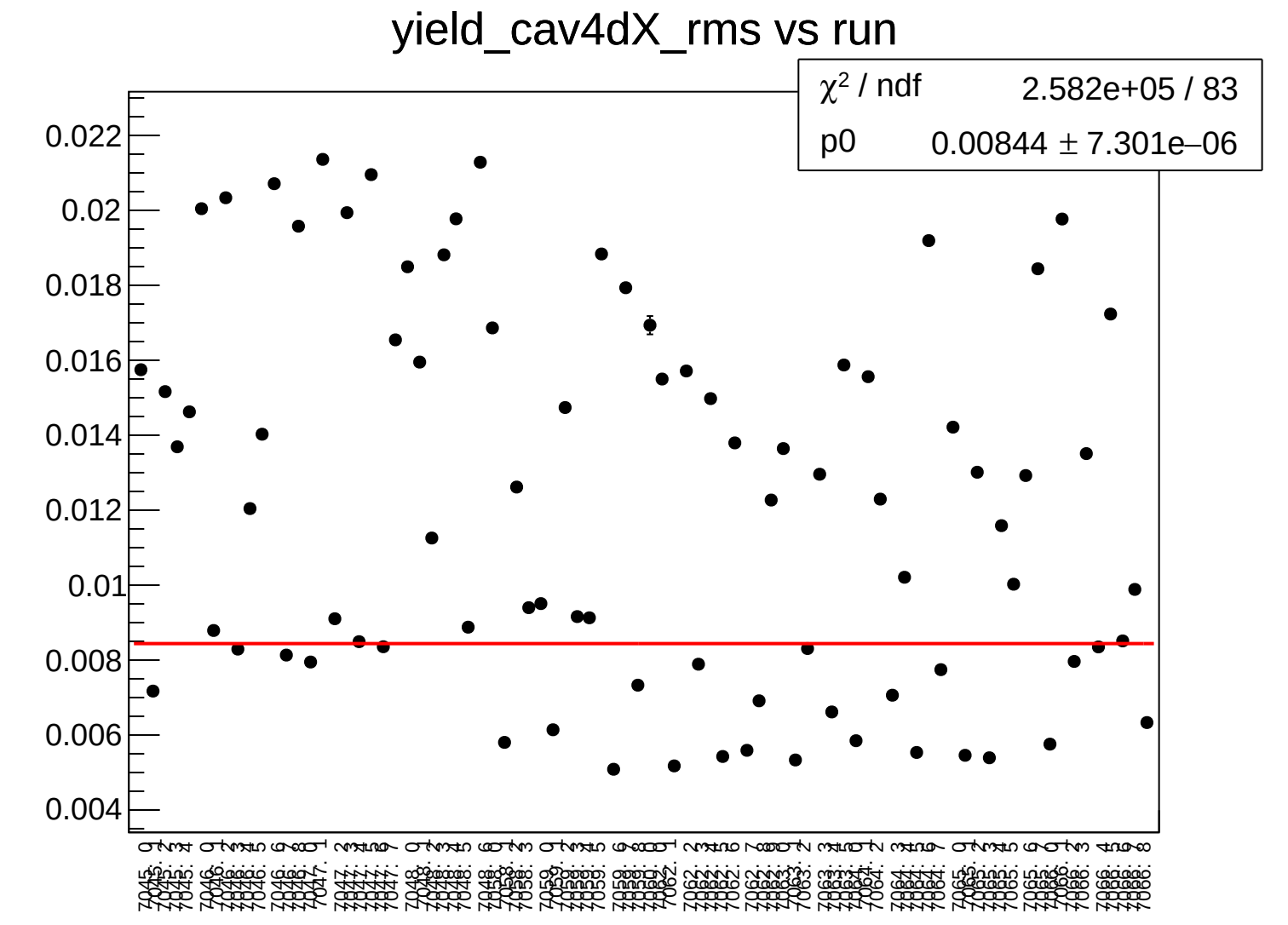

yield_cav4cY_mean vs run
χ² / ndf 9.359e+05 / 83
p0 −0.1196 ± 1.016e−06
−0.118
−0.1185
−0.119
−0.1195
−0.12
−0.1205
−0.121
−0.1215
−0.122
pull
Entries 84
Mean 695.2
Std Dev 656.8
200
150
100
50
0
−50
−100
−150
−200
−250

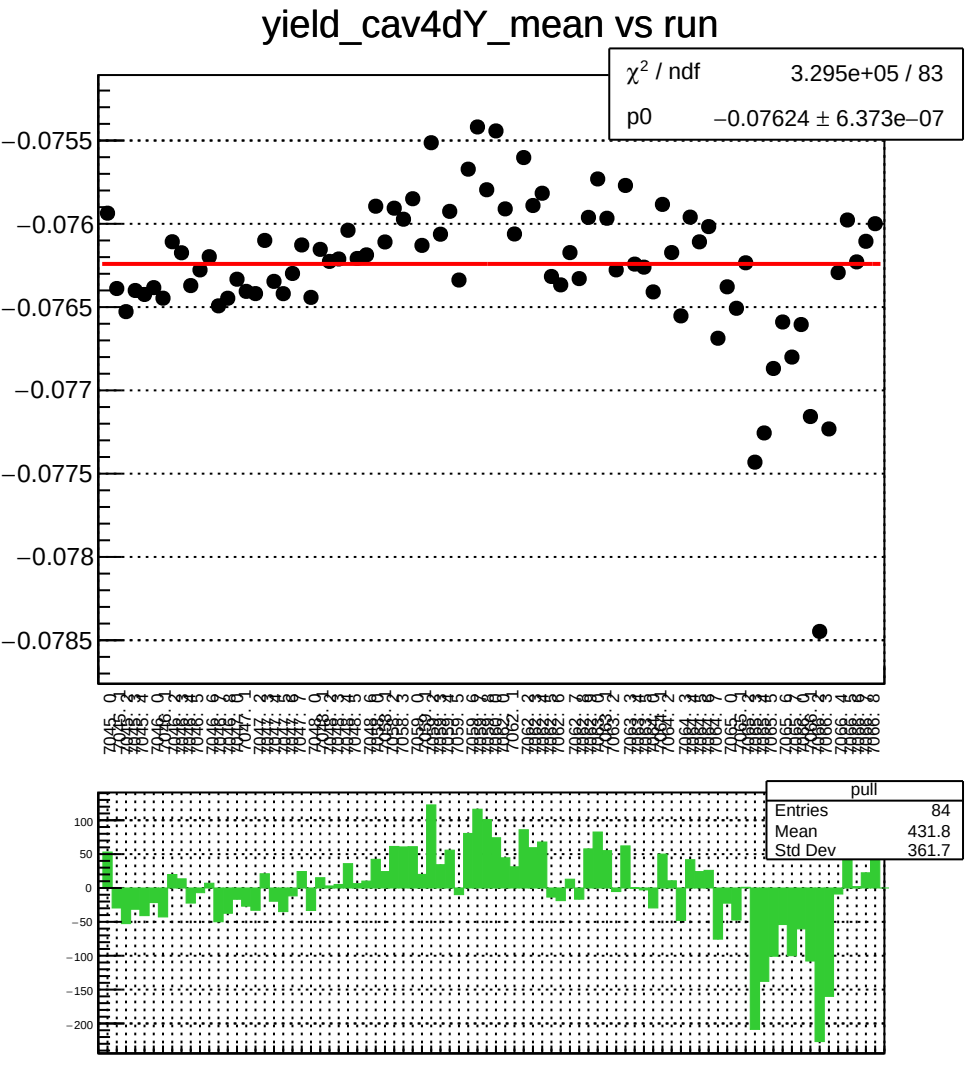

pull1D
Entries 84
Mean −3.289
Std Dev 0.2769
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

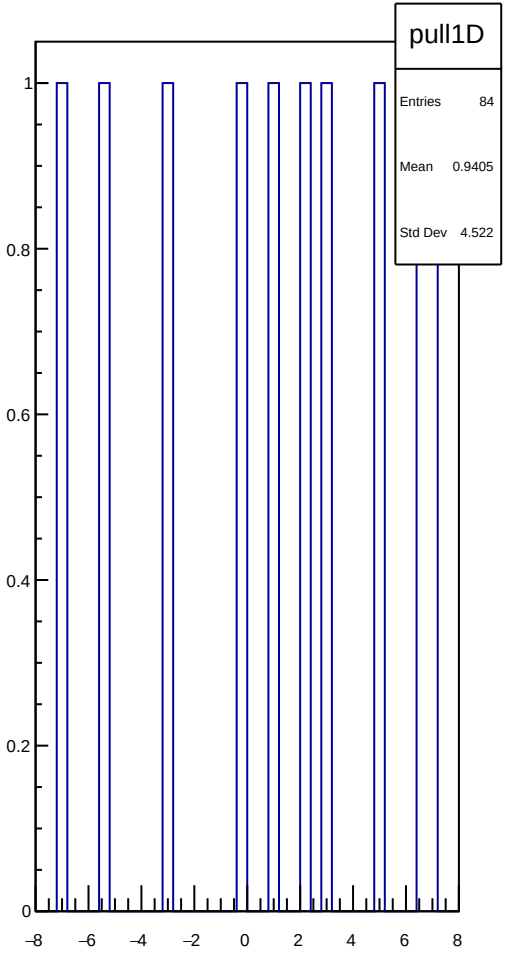

yield_cav4cY_rms vs run
χ² / ndf 2.034e+04 / 83
p0 0.0009014 ± 7.184e−07
0.0014
0.0013
0.0012
0.0011
0.001
0.0009
0.0008
0.0007

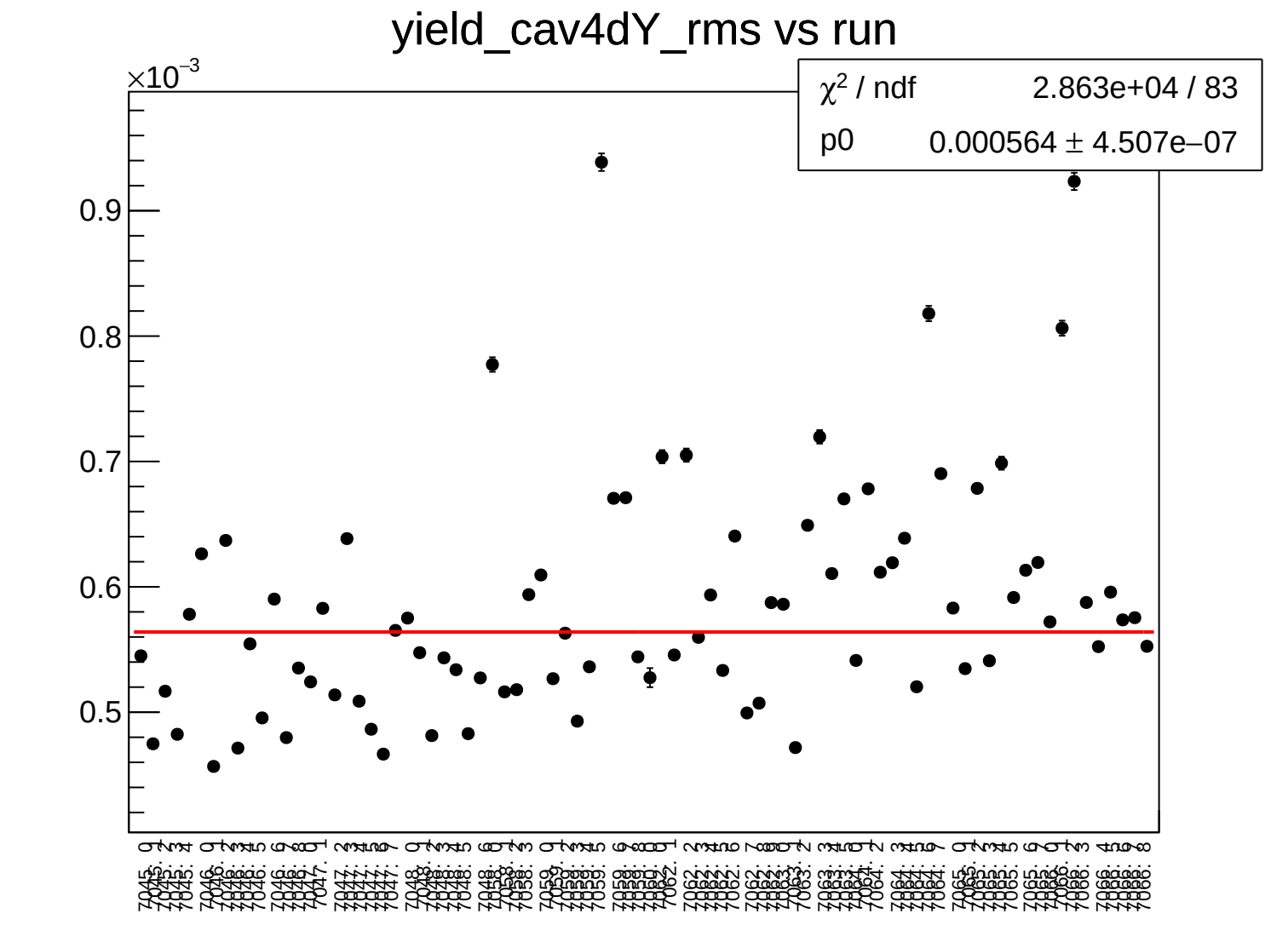

yield_cav4dX_mean vs run
χ² / ndf 4.519e+05 / 83
p0 0.05655 ± 1.032e−05
0.09
0.08
0.07
0.06
0.05
pull
Entries 84
Mean 81.91
Std Dev 16.03
250
200
150
100
50
0
−50
−100
−150

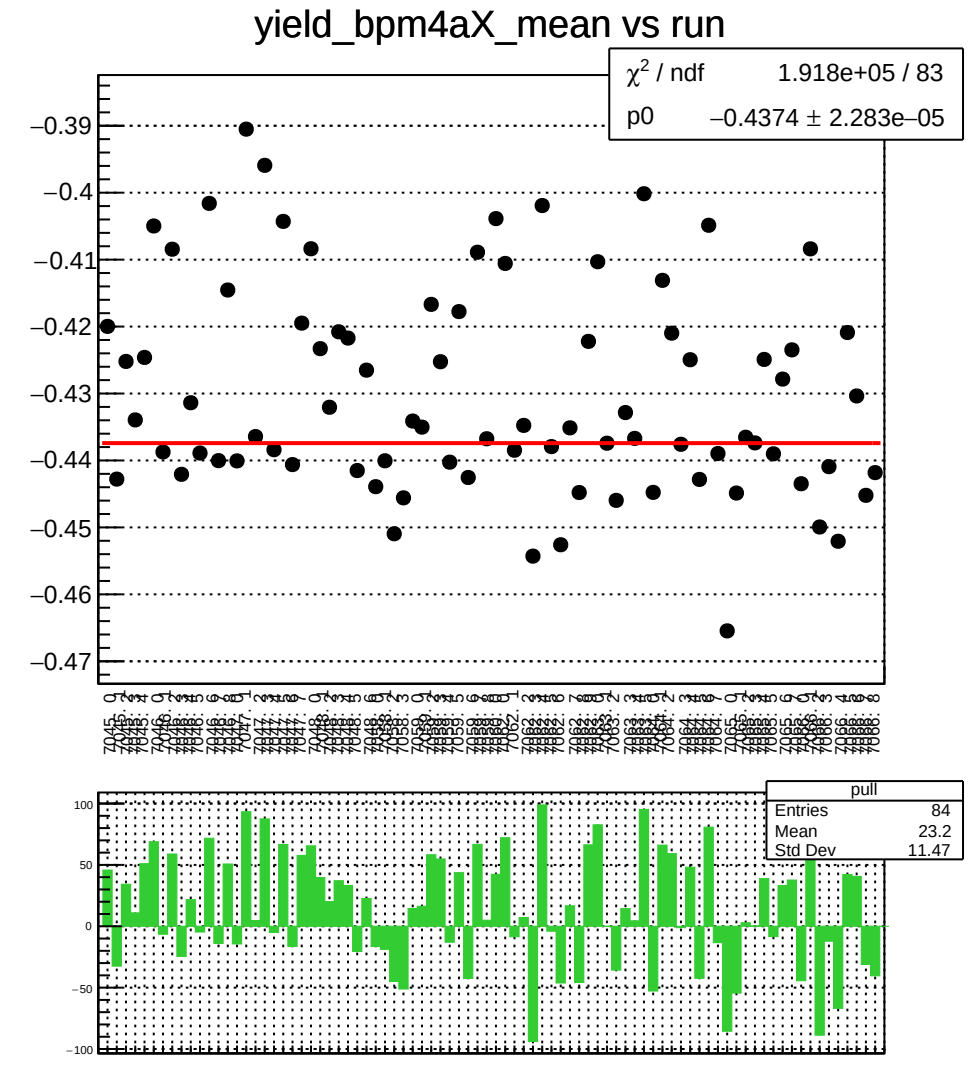

pull1D
Entries 84
Mean 7.08
Std Dev 0.5462
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

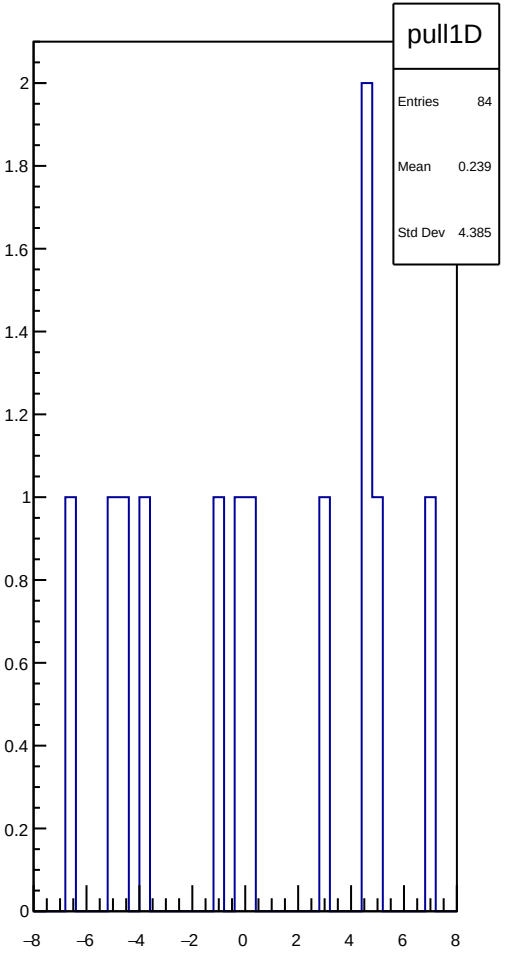

yield_cav4dX_rms vs run
χ² / ndf 2.582e+05 / 83
p0 0.00844 ± 7.301e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

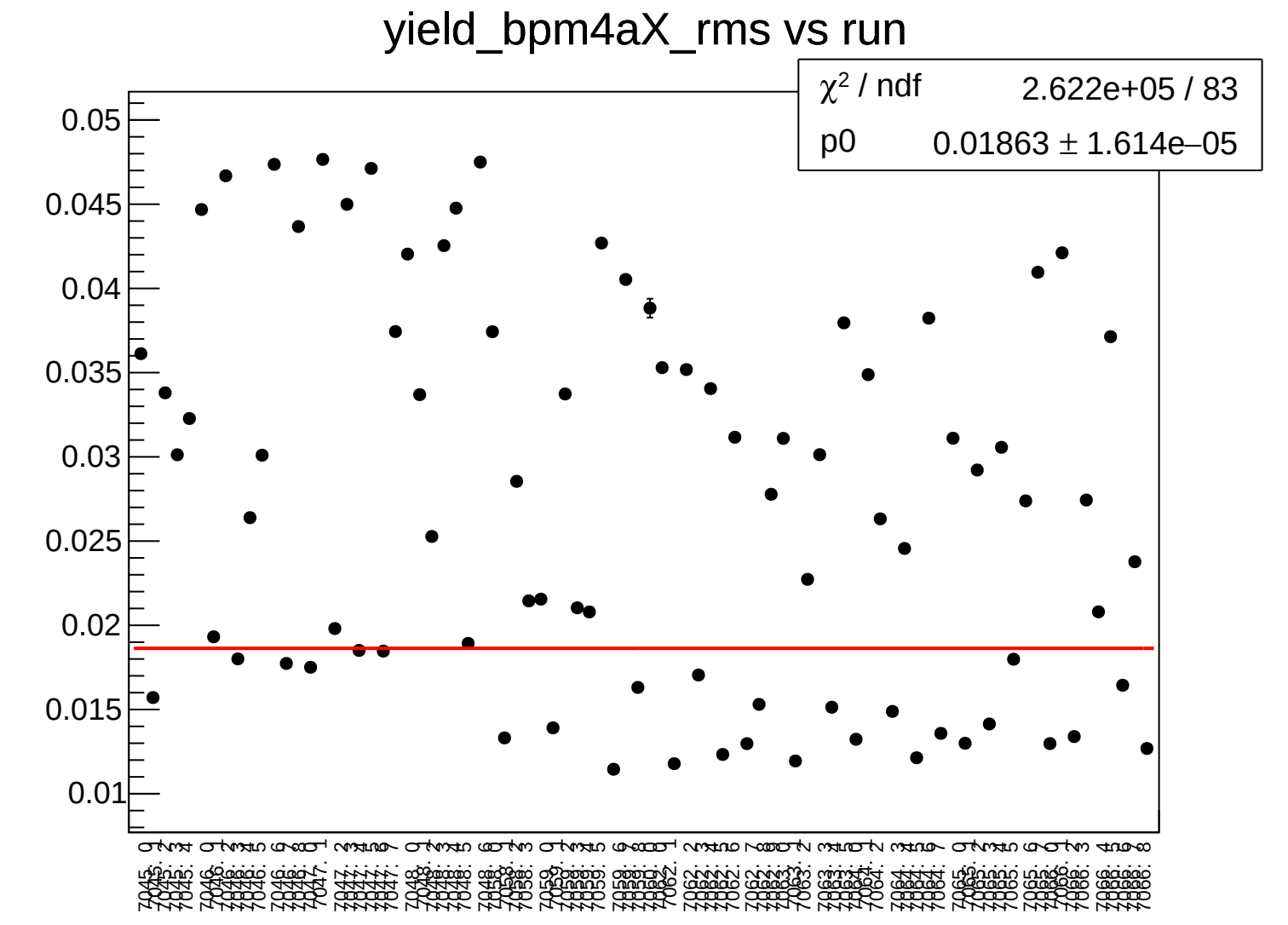

yield_cav4dY_mean vs run
χ² / ndf 3.295e+05 / 83
p0 −0.07624 ± 6.373e−07
−0.0755
−0.076
−0.0765
−0.077
−0.0775
−0.078
−0.0785
pull
Entries 84
Mean 431.8
Std Dev 361.7
100
50
0
−50
−100
−150
−200

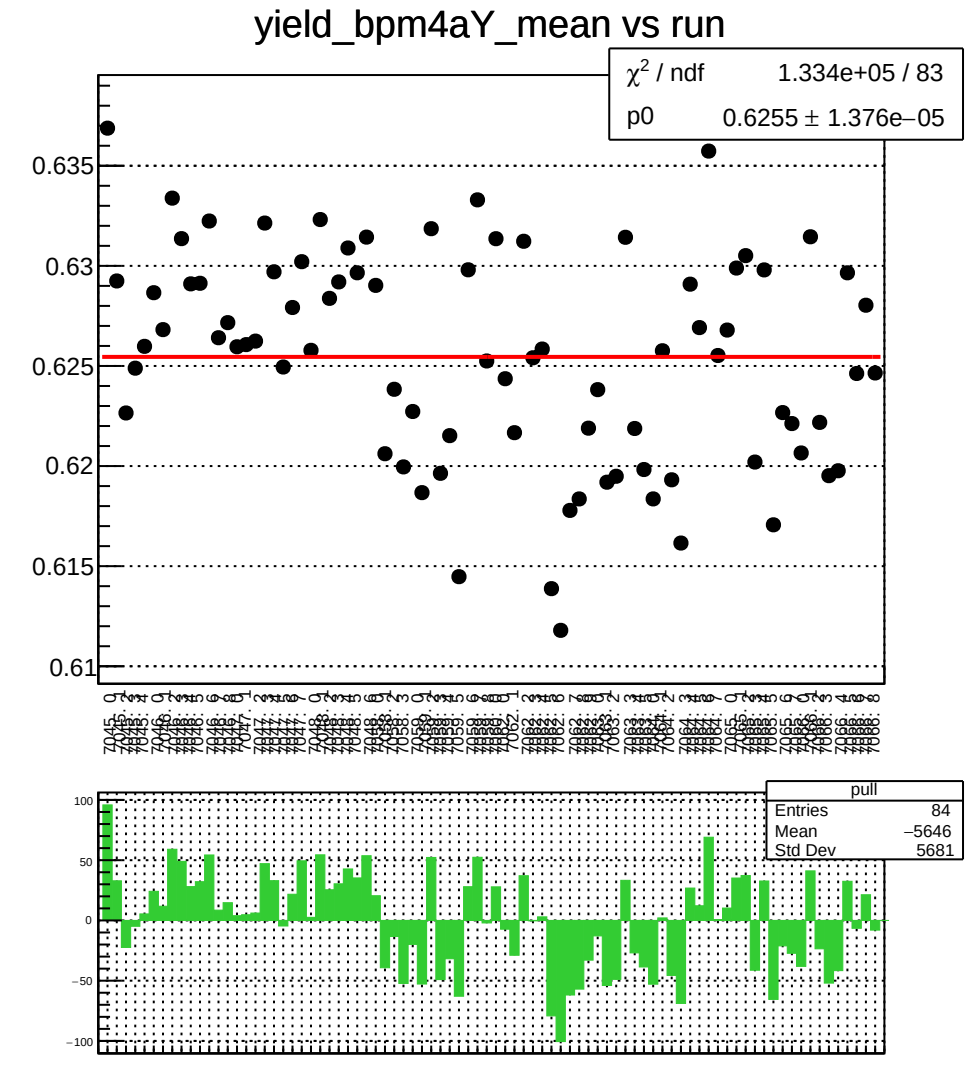

pull1D
Entries 84
Mean 0.9405
Std Dev 4.522
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

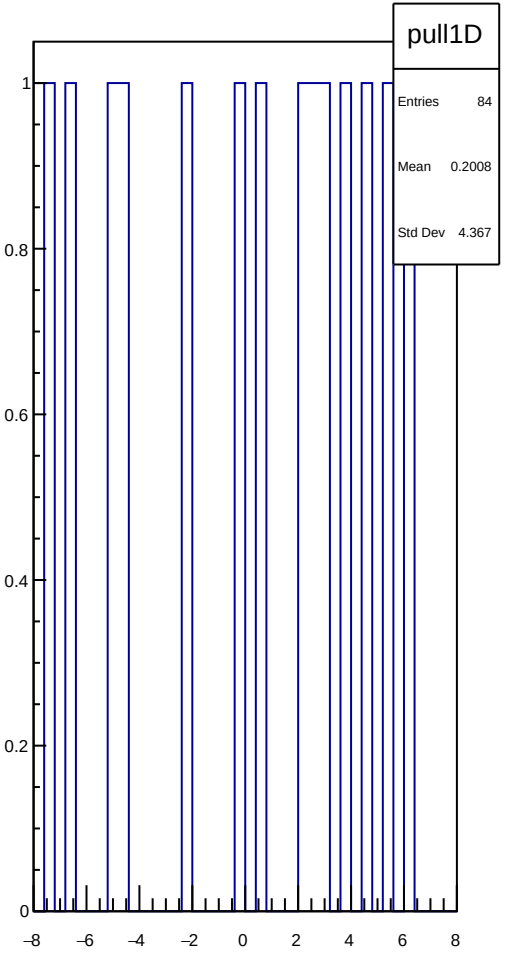

yield_cav4dY_rms vs run
×10⁻³
χ² / ndf 2.863e+04 / 83
p0 0.000564 ± 4.507e−07
0.9
0.8
0.7
0.6
0.5

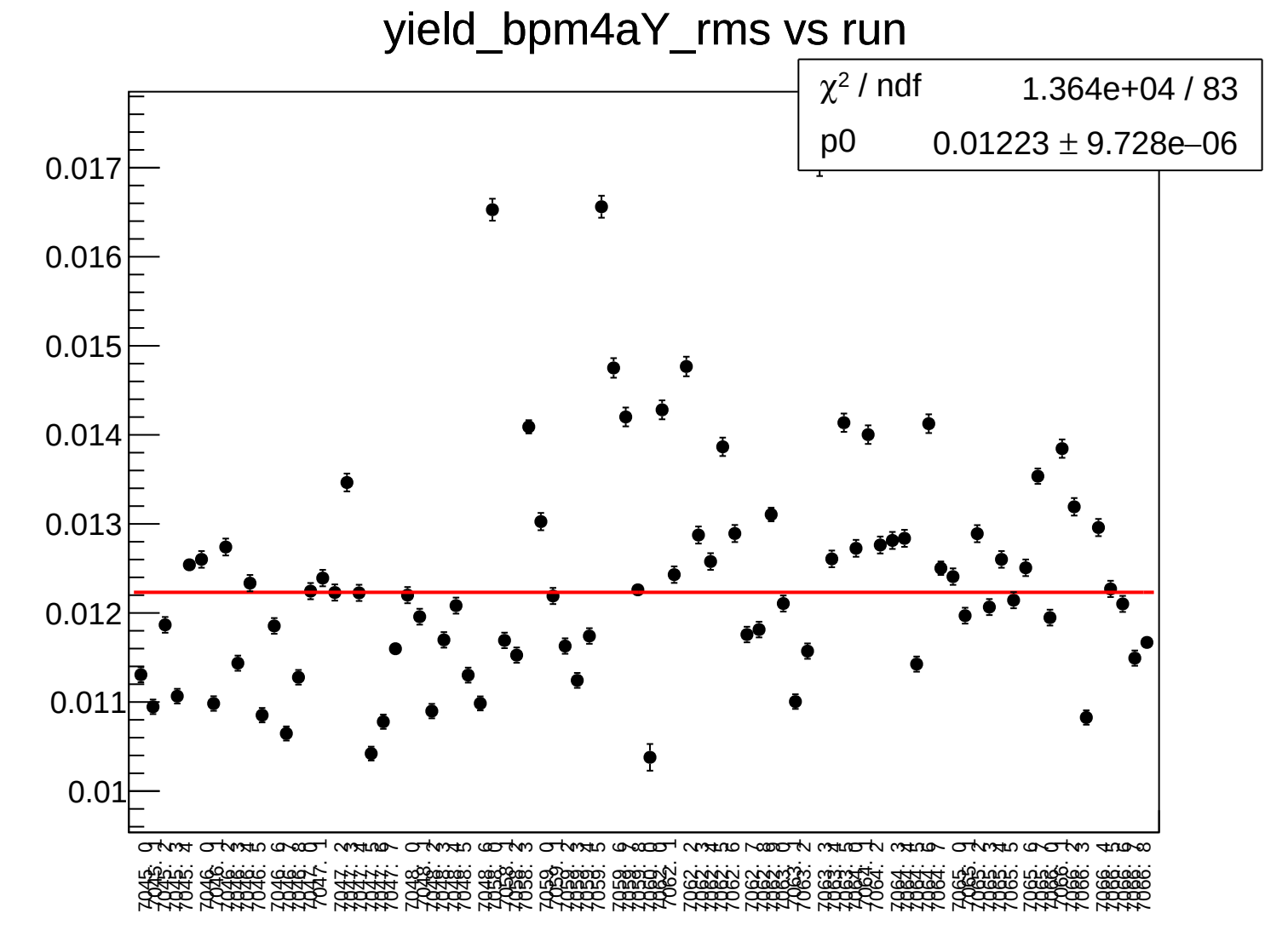

yield_bpm4aX_mean vs run
χ² / ndf 1.918e+05 / 83
p0 −0.4374 ± 2.283e−05
−0.39
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
−0.46
−0.47
pull
Entries 84
Mean 23.2
Std Dev 11.47
100
50
0
−50
−100

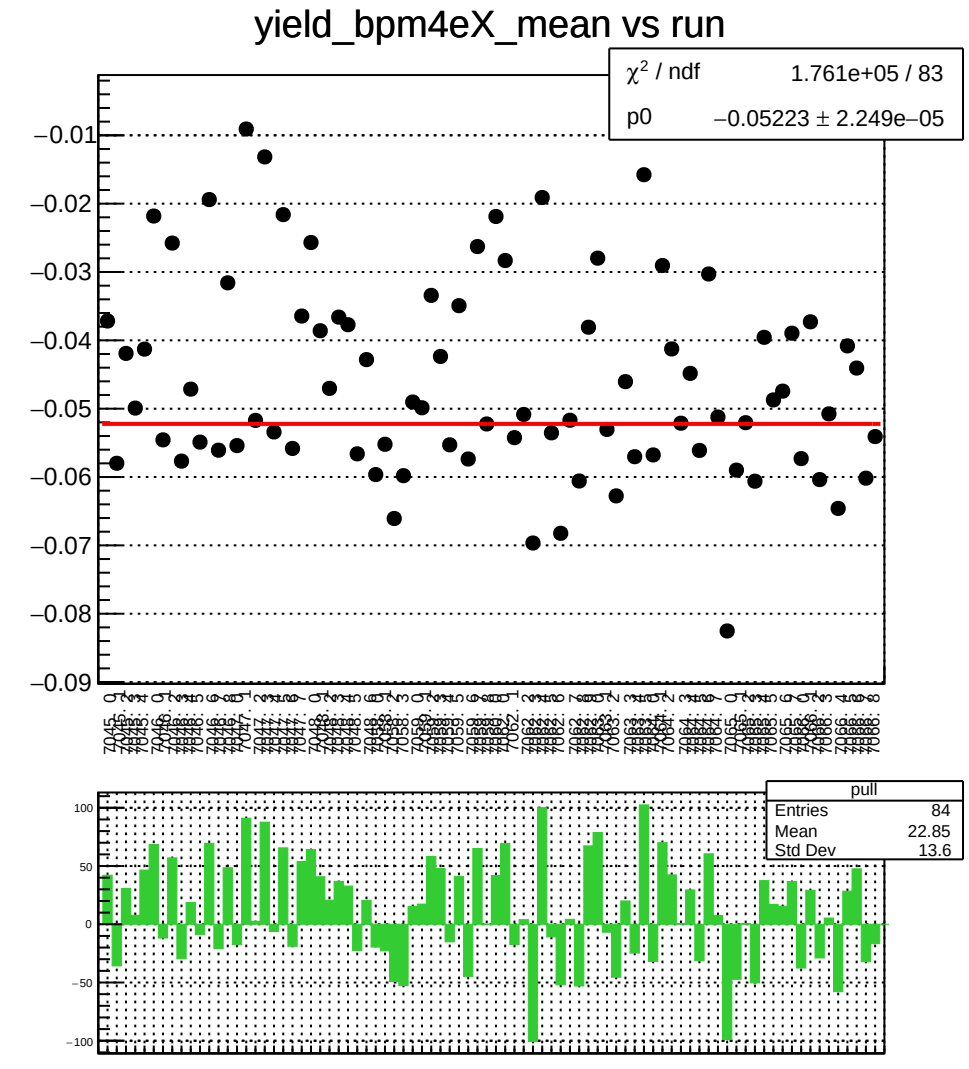

pull1D
Entries 84
Mean 0.239
Std Dev 4.385
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

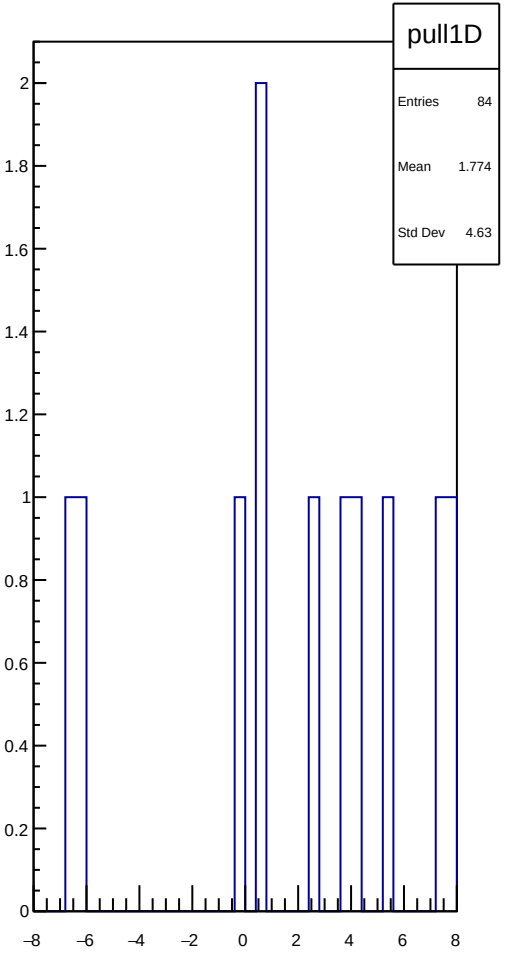

yield_bpm4aX_rms vs run
χ² / ndf 2.622e+05 / 83
p0 0.01863 ± 1.614e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

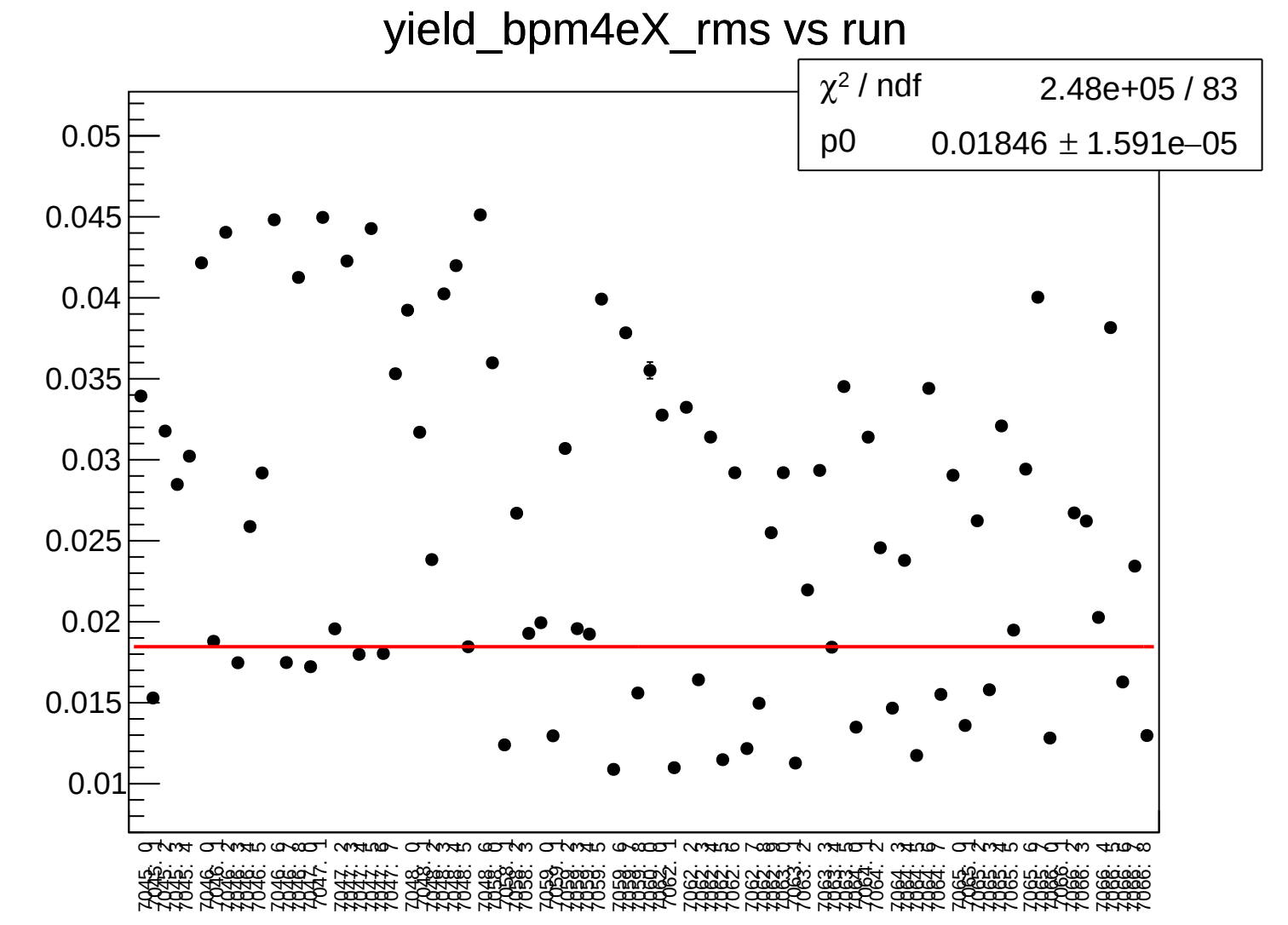

yield_bpm4aY_mean vs run
χ² / ndf 1.334e+05 / 83
p0 0.6255 ± 1.376e−05
0.635
0.63
0.625
0.62
0.615
0.61
pull
Entries 84
Mean −5646
Std Dev 5681
100
50
0
−50
−100

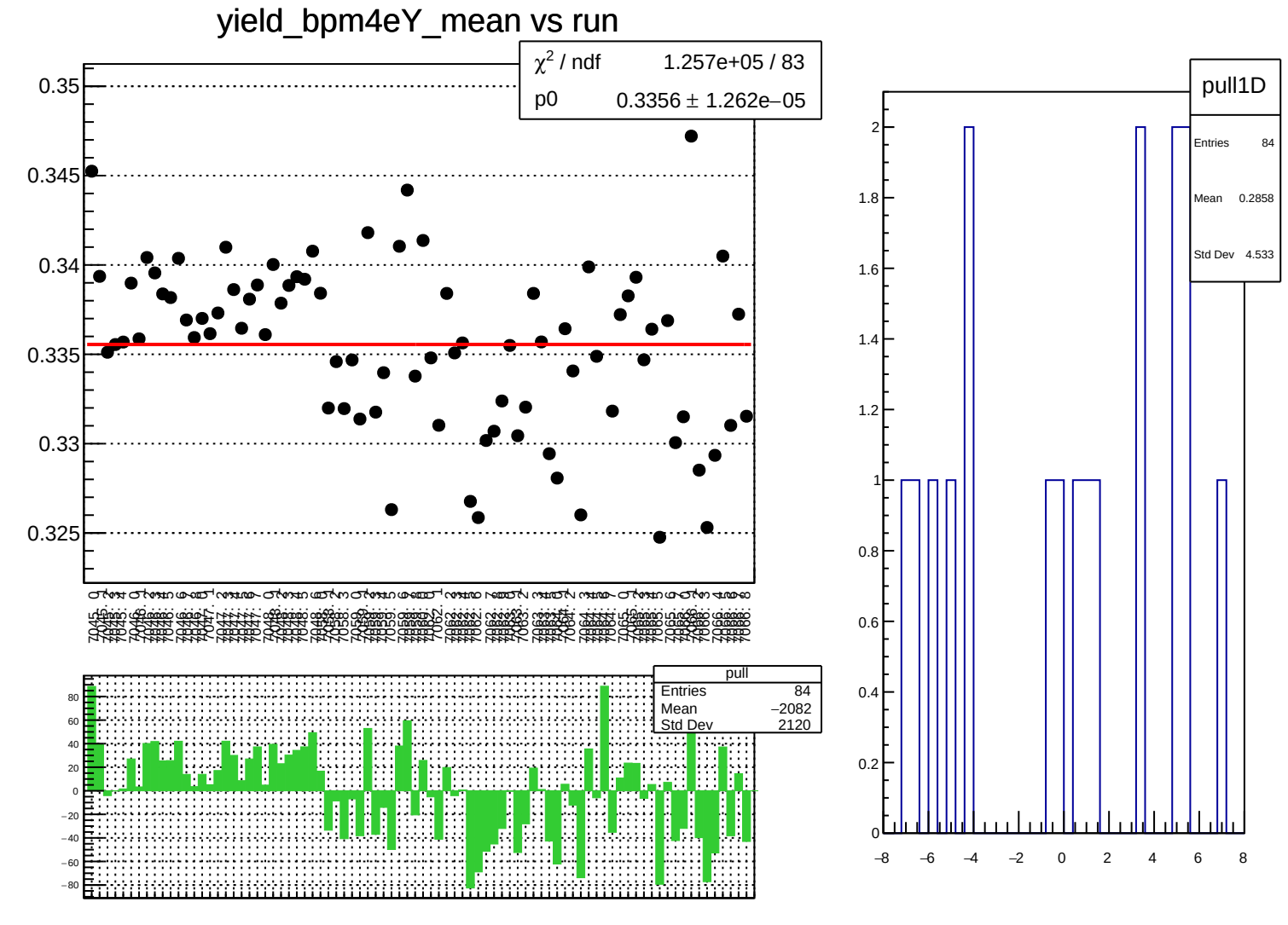

pull1D
Entries 84
Mean 0.2008
Std Dev 4.367
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

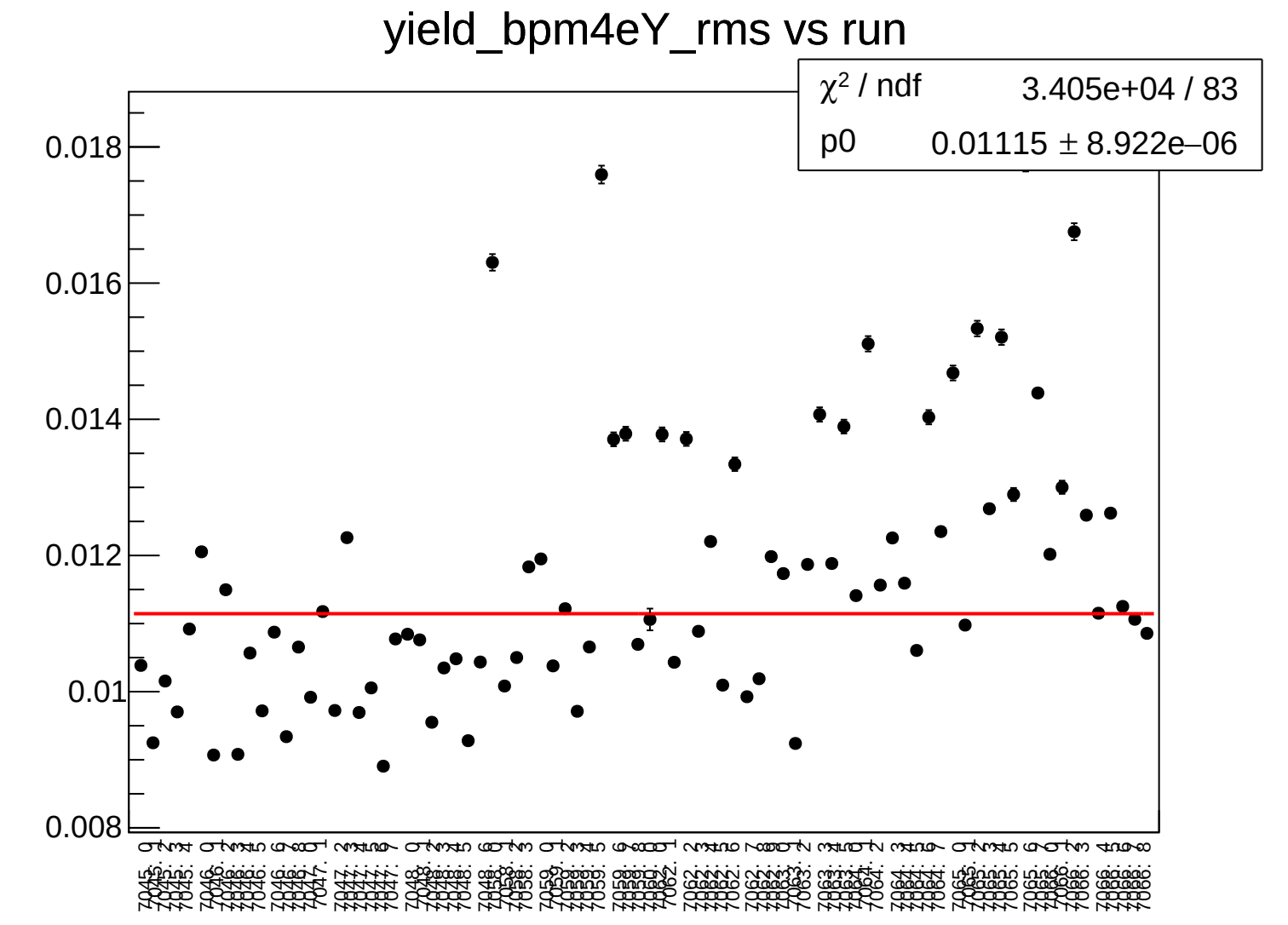

yield_bpm4aY_rms vs run
χ² / ndf 1.364e+04 / 83
p0 0.01223 ± 9.728e–06
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01

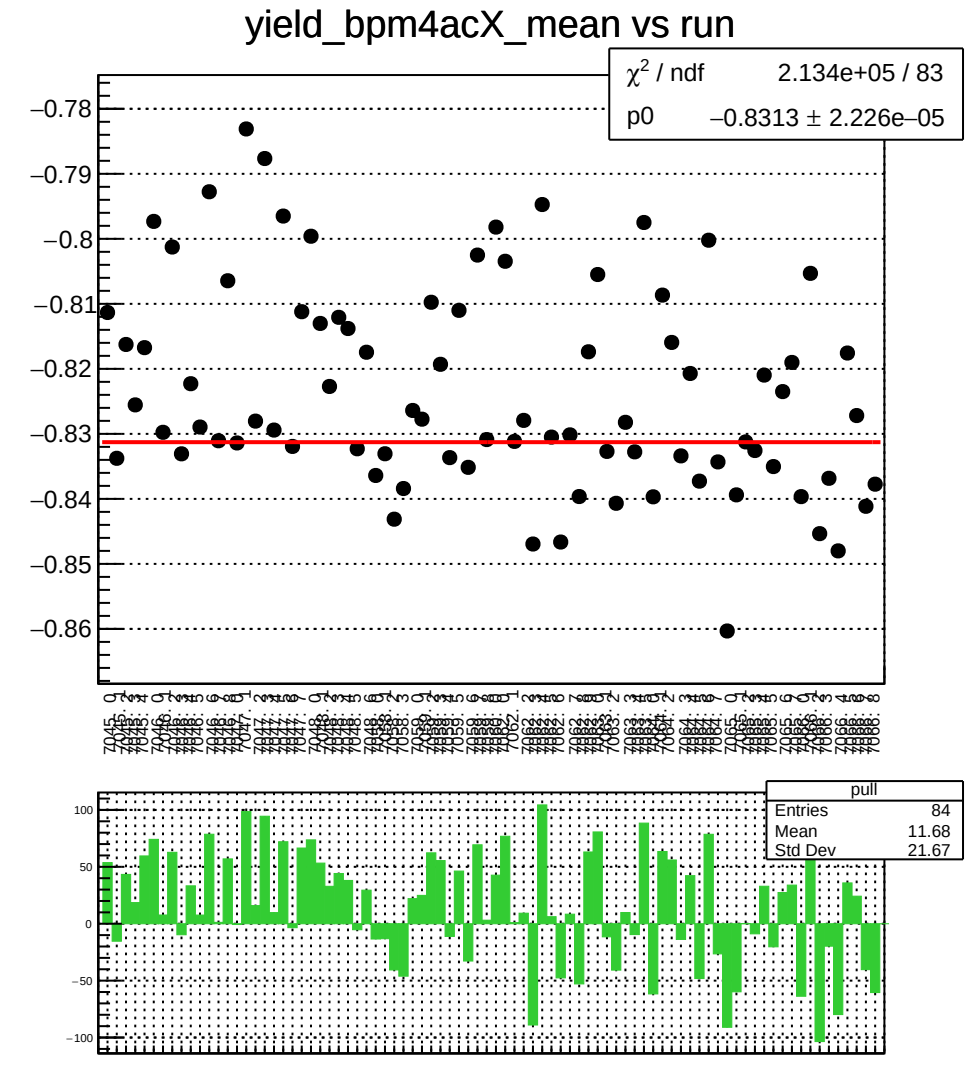

yield_bpm4eX_mean vs run
χ² / ndf 1.761e+05 / 83
p0 −0.05223 ± 2.249e−05
pull
Entries 84
Mean 22.85
Std Dev 13.6

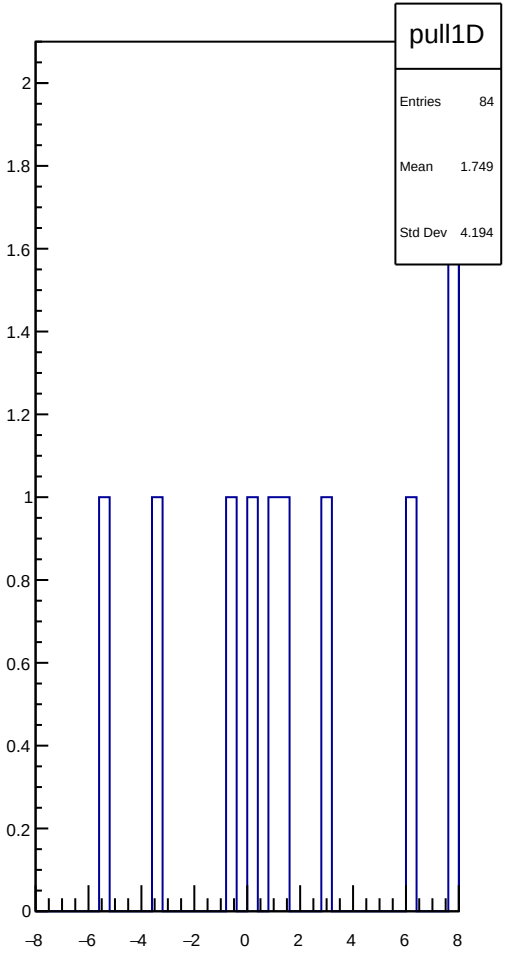

pull1D
Entries 84
Mean 1.774
Std Dev 4.63

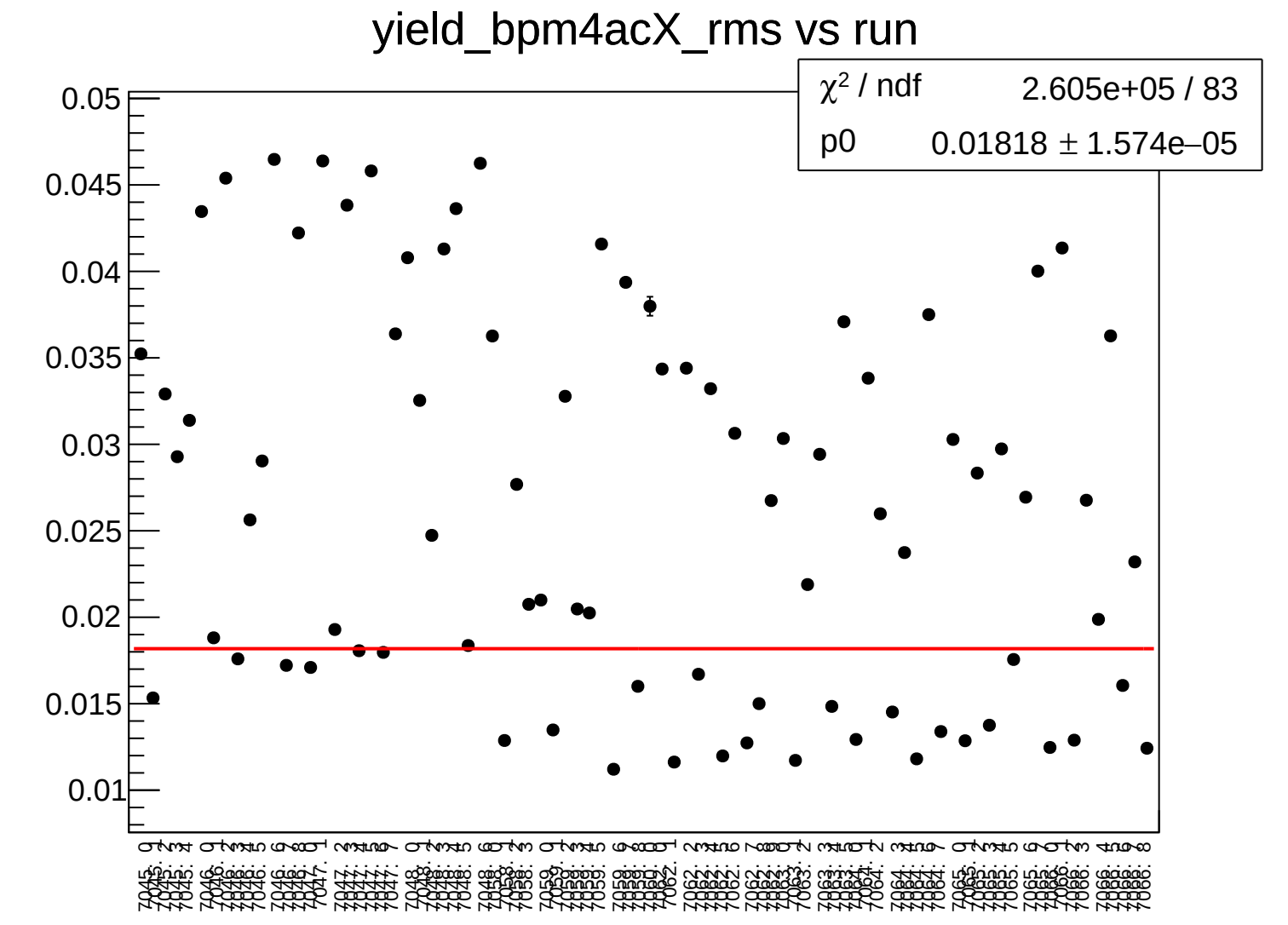

yield_bpm4eX_rms vs run
χ² / ndf 2.48e+05 / 83
p0 0.01846 ± 1.591e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

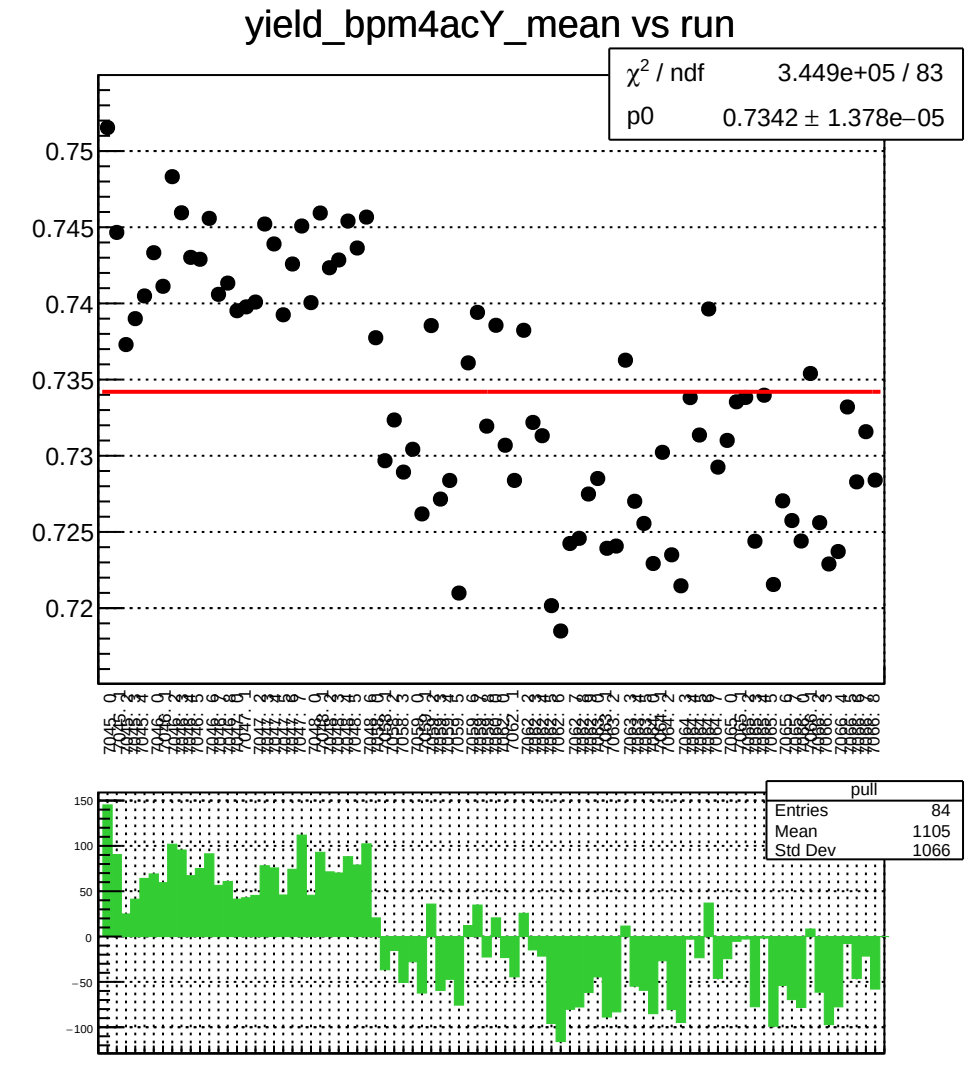

yield_bpm4eY_mean vs run
χ² / ndf 1.257e+05 / 83
p0 0.3356 ± 1.262e−05
0.35
0.345
0.34
0.335
0.33
0.325
pull
Entries 84
Mean −2082
Std Dev 2120
80
60
40
20
0
−20
−40
−60
−80
pull1D
Entries 84
Mean 0.2858
Std Dev 4.533
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

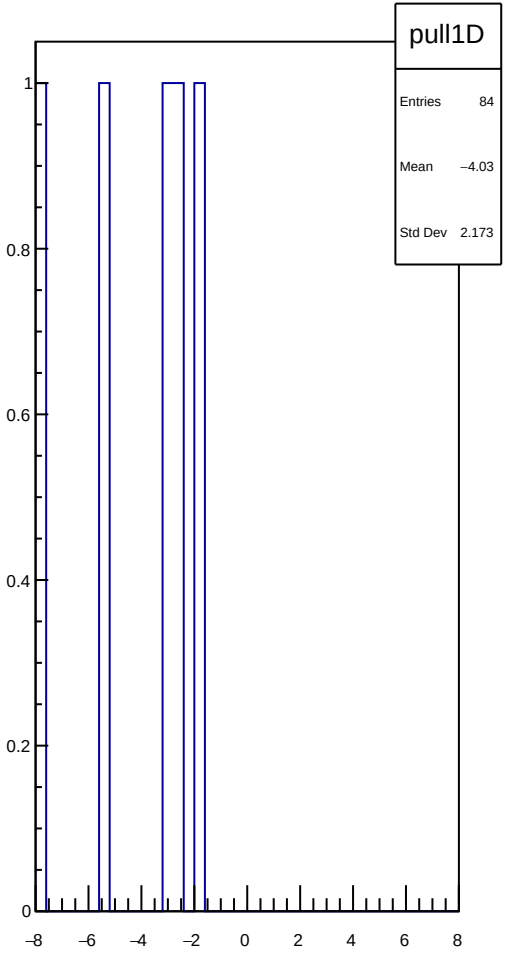

yield_bpm4eY_rms vs run
χ² / ndf 3.405e+04 / 83
p0 0.01115 ± 8.922e−06
0.018
0.016
0.014
0.012
0.01
0.008

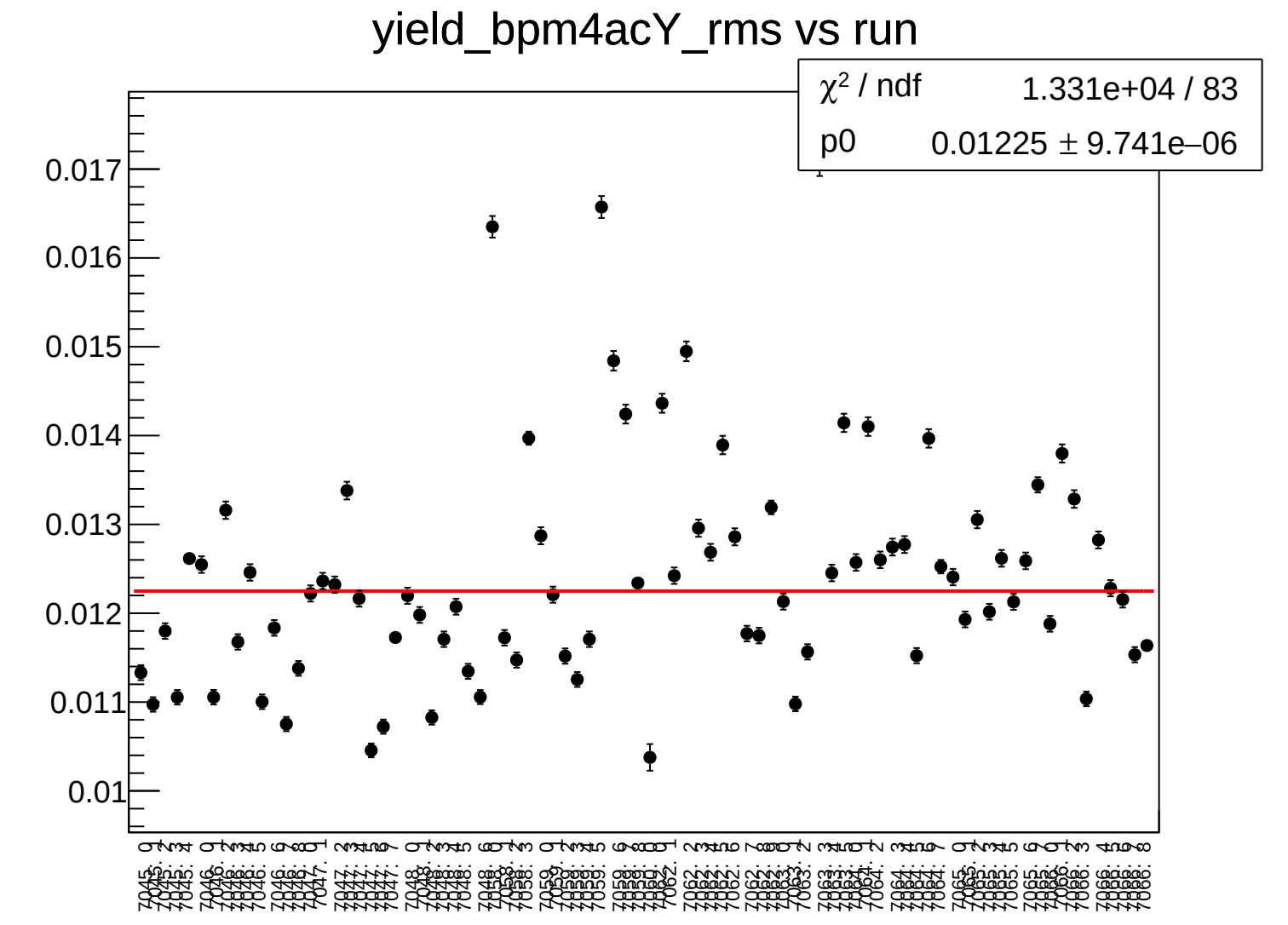

yield_bpm4acX_mean vs run
χ² / ndf 2.134e+05 / 83
p0 −0.8313 ± 2.226e−05
pull
Entries 84
Mean 11.68
Std Dev 21.67

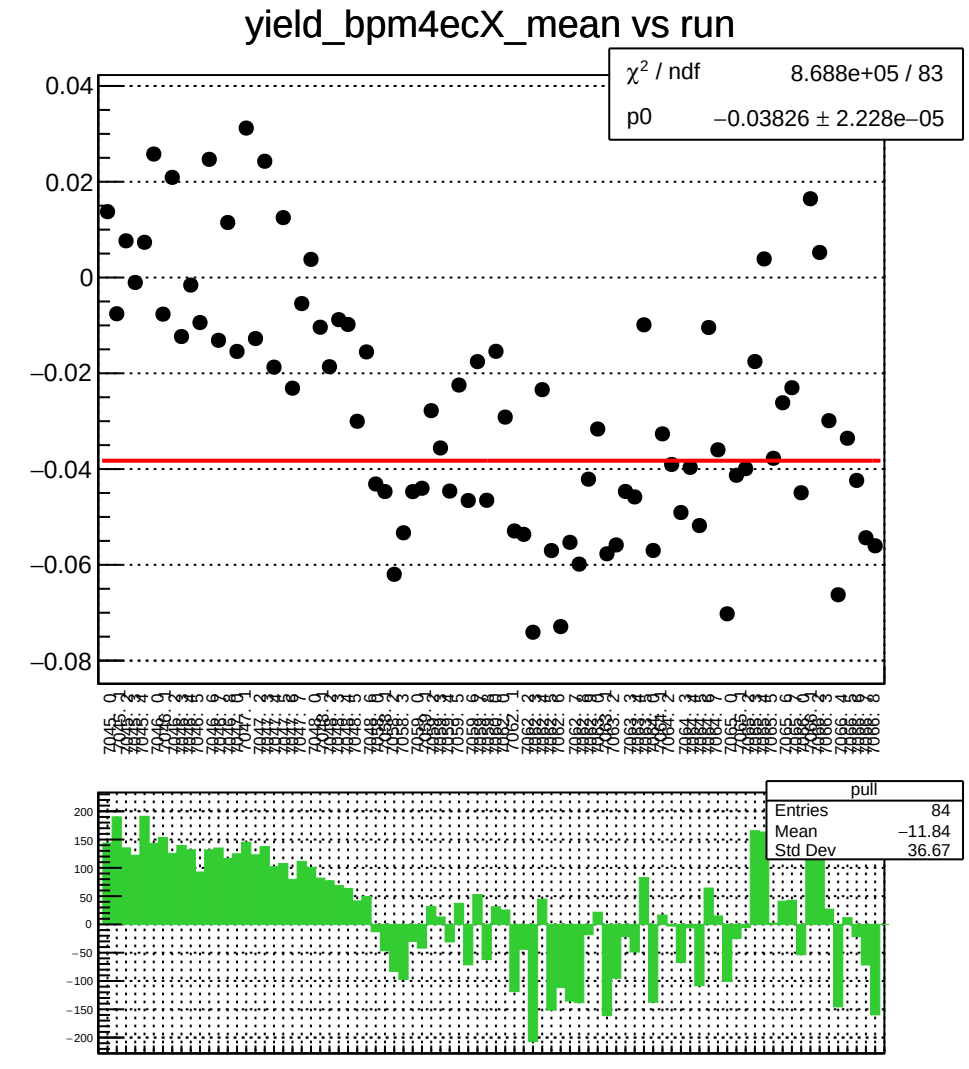

pull1D
Entries 84
Mean 1.749
Std Dev 4.194

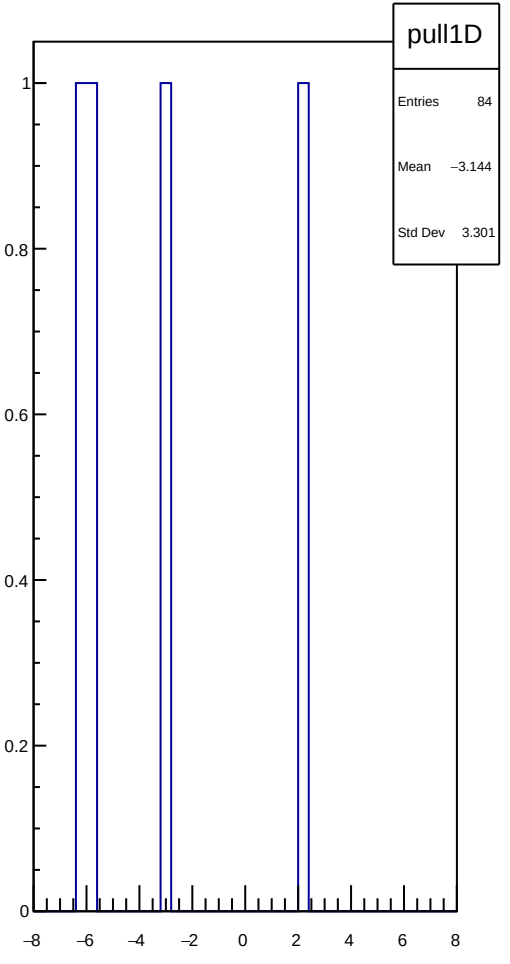

yield_bpm4acX_rms vs run
χ² / ndf 2.605e+05 / 83
p0 0.01818 ± 1.574e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

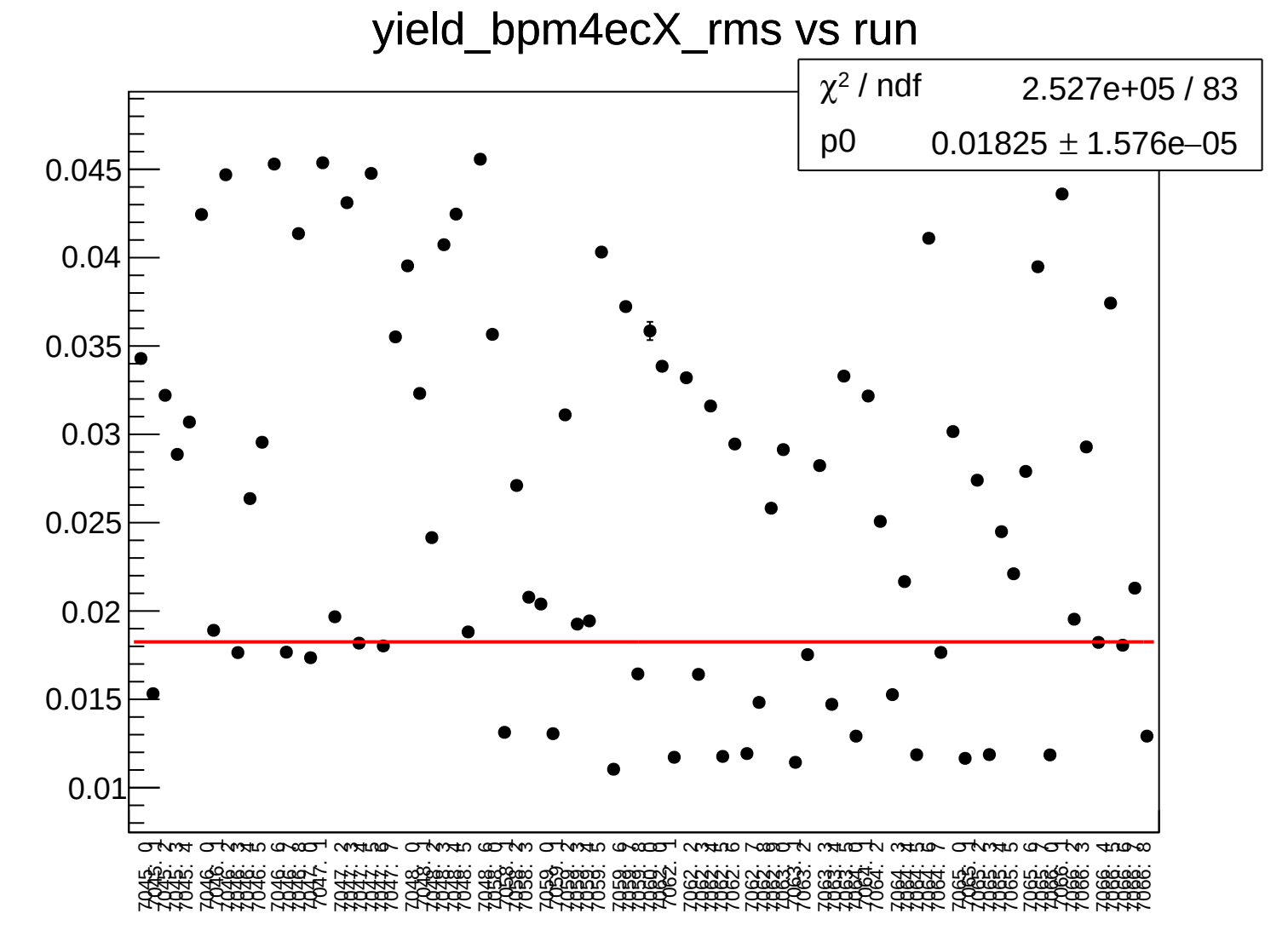

yield_bpm4acY_mean vs run
χ² / ndf 3.449e+05 / 83
p0 0.7342 ± 1.378e−05
0.75
0.745
0.74
0.735
0.73
0.725
0.72
pull
Entries 84
Mean 1105
Std Dev 1066
150
100
50
0
−50
−100

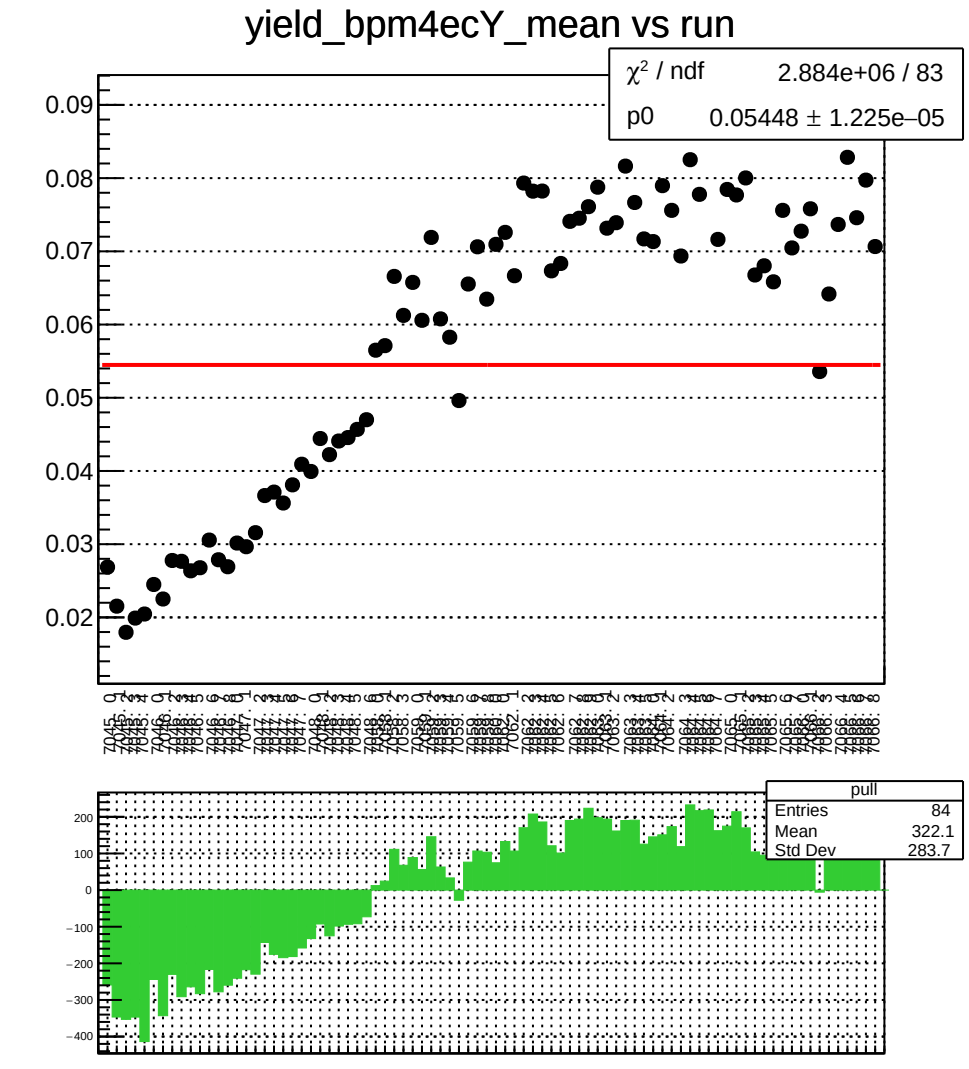

pull1D
Entries 84
Mean −4.03
Std Dev 2.173
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

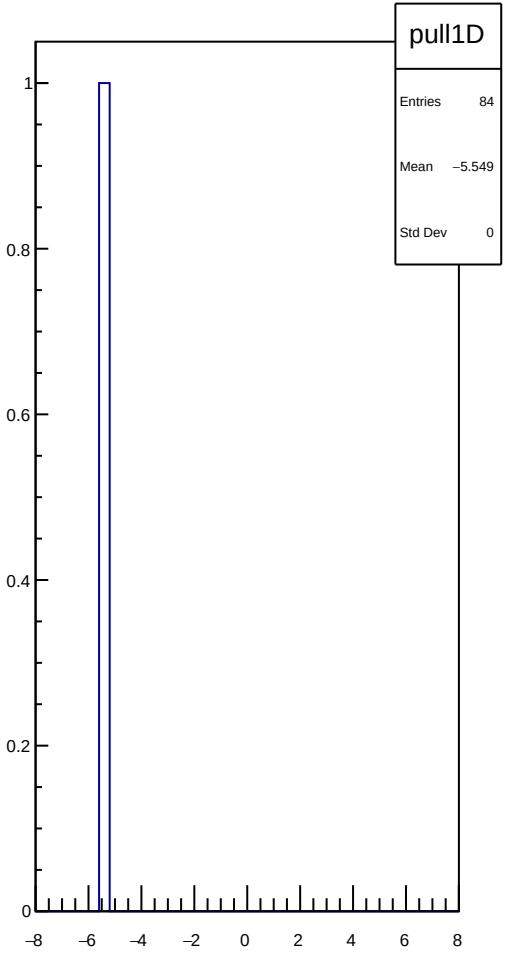

yield_bpm4acY_rms vs run
χ² / ndf 1.331e+04 / 83
p0 0.01225 ± 9.741e–06
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01

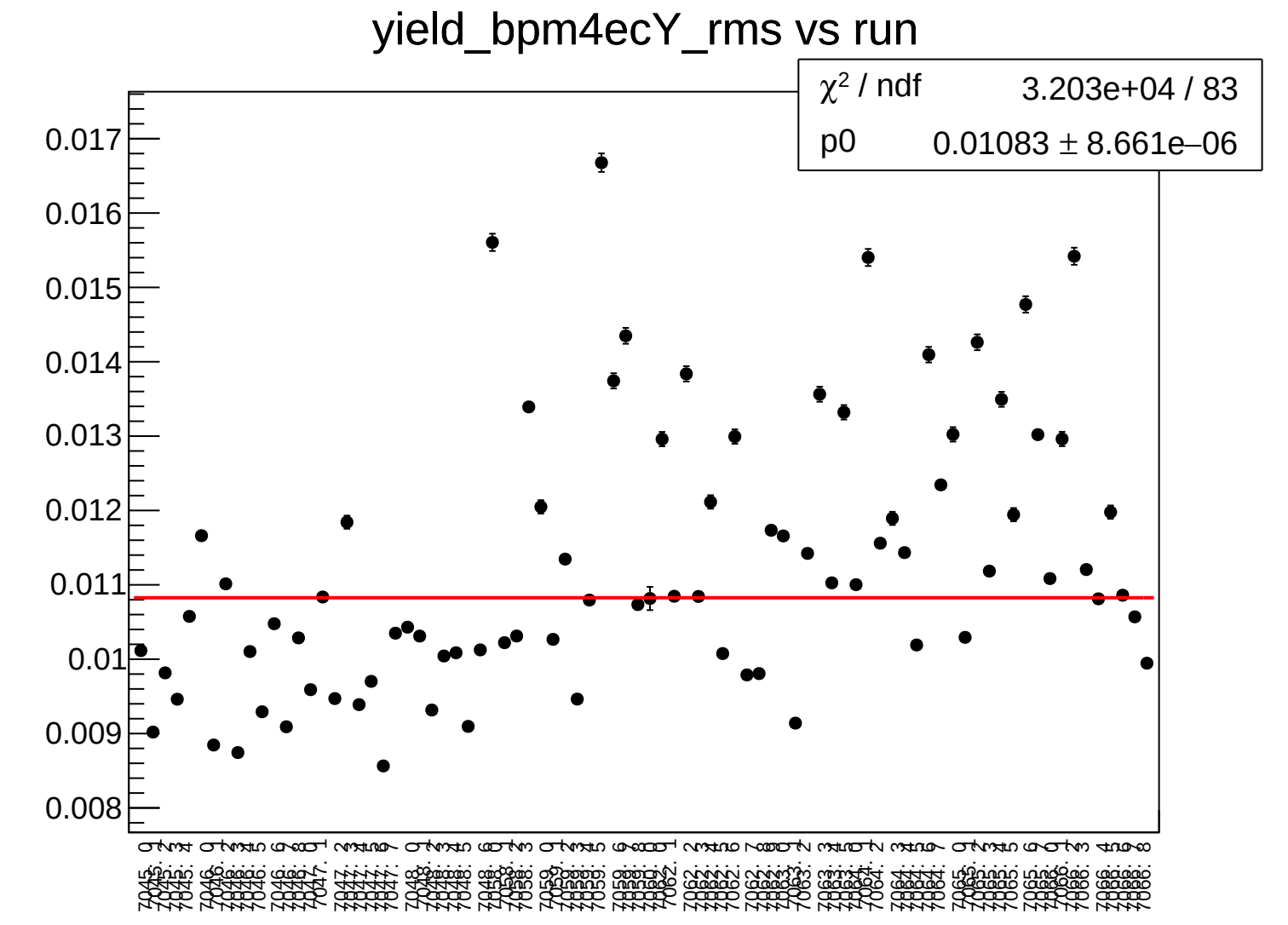

yield_bpm4ecX_mean vs run
χ² / ndf 8.688e+05 / 83
p0 −0.03826 ± 2.228e−05
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull
Entries 84
Mean −11.84
Std Dev 36.67
200
150
100
50
0
−50
−100
−150
−200

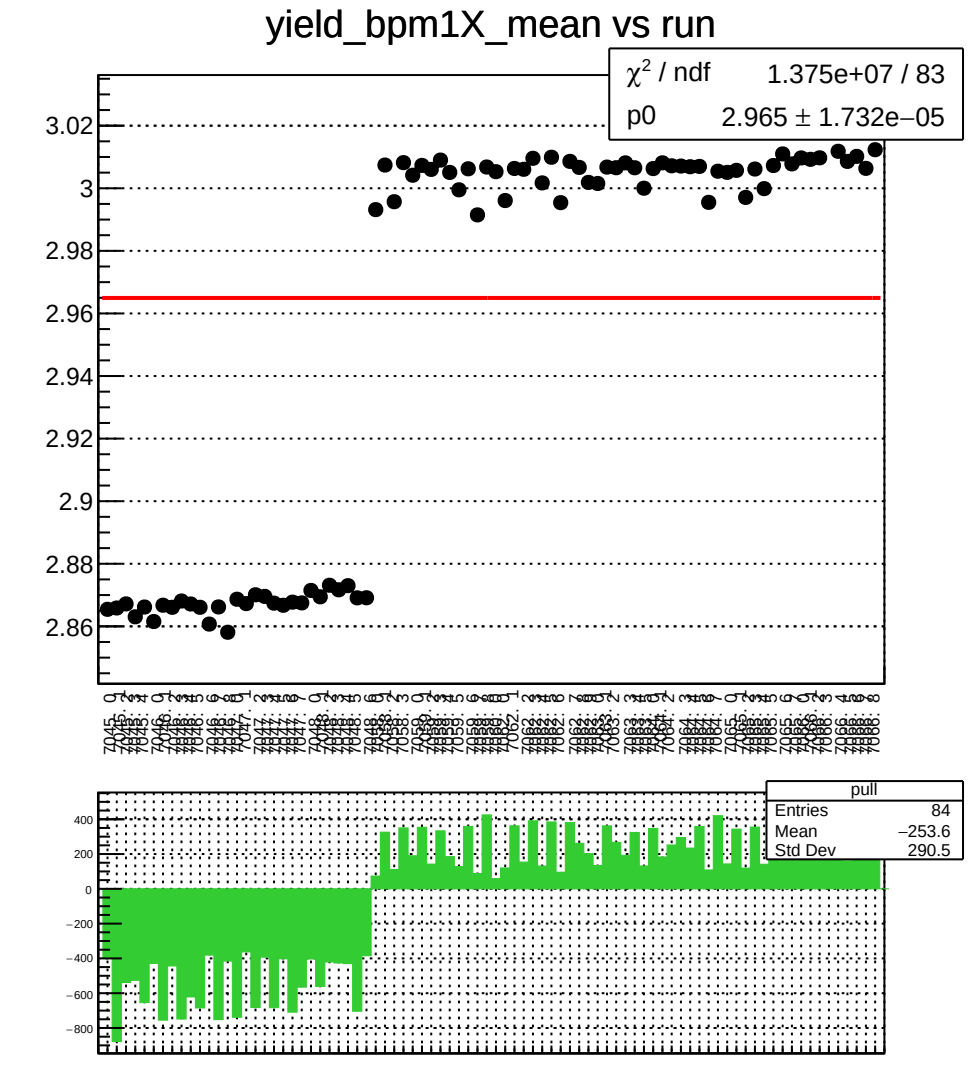

pull1D
Entries 84
Mean −3.144
Std Dev 3.301
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

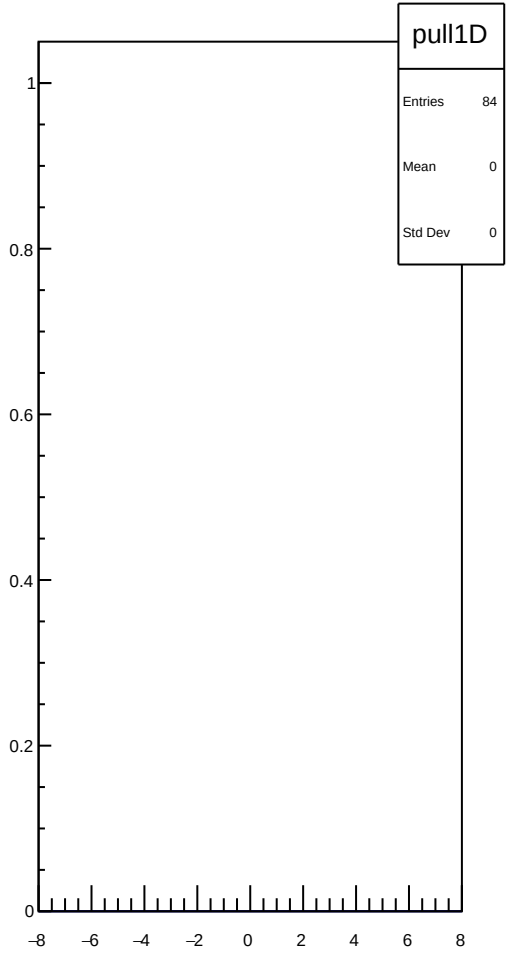

yield_bpm4ecX_rms vs run
χ² / ndf 2.527e+05 / 83
p0 0.01825 ± 1.576e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

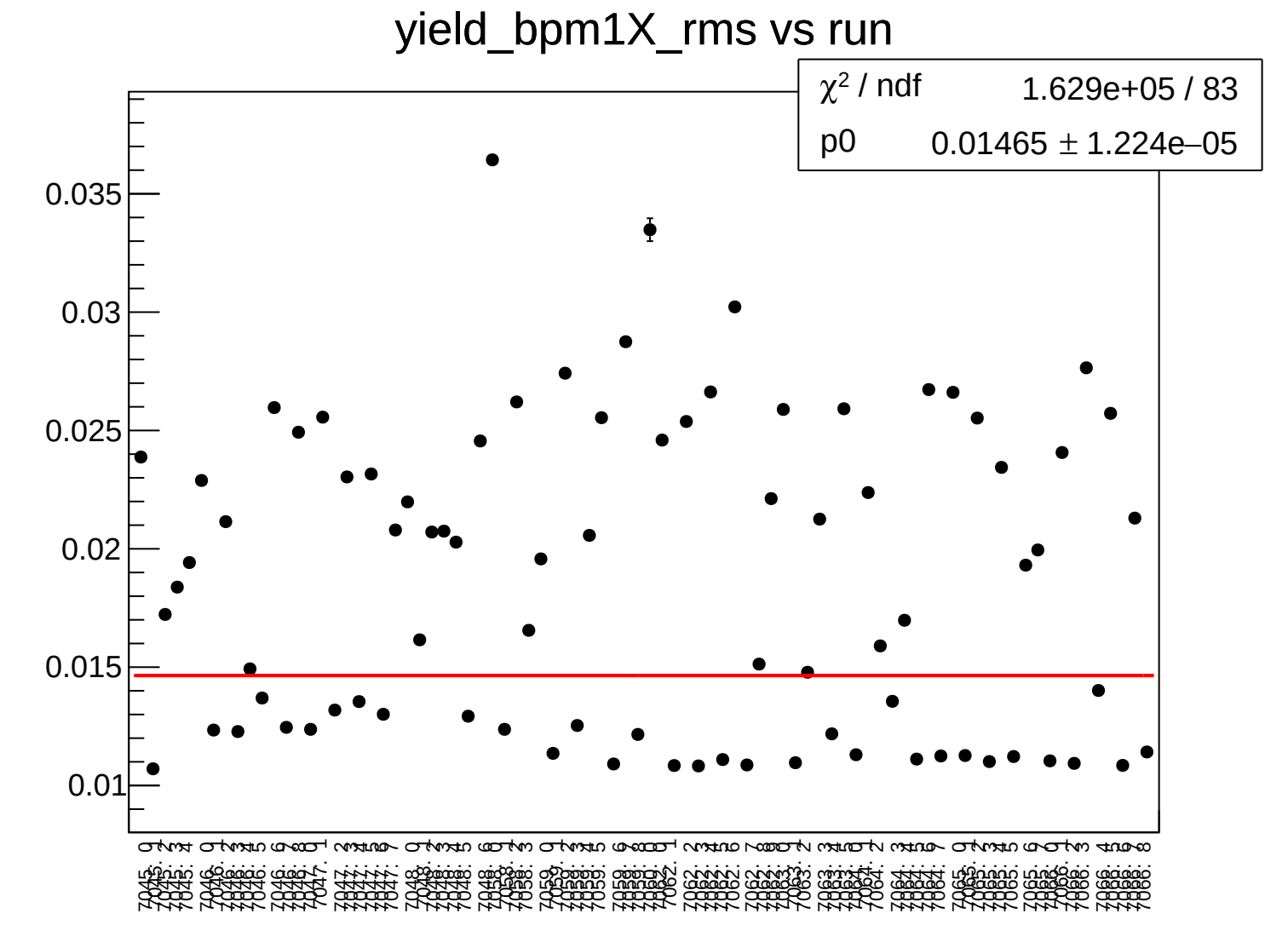

yield_bpm4ecY_mean vs run
χ² / ndf 2.884e+06 / 83
p0 0.05448 ± 1.225e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
pull
Entries 84
Mean 322.1
Std Dev 283.7
200
100
0
−100
−200
−300
−400

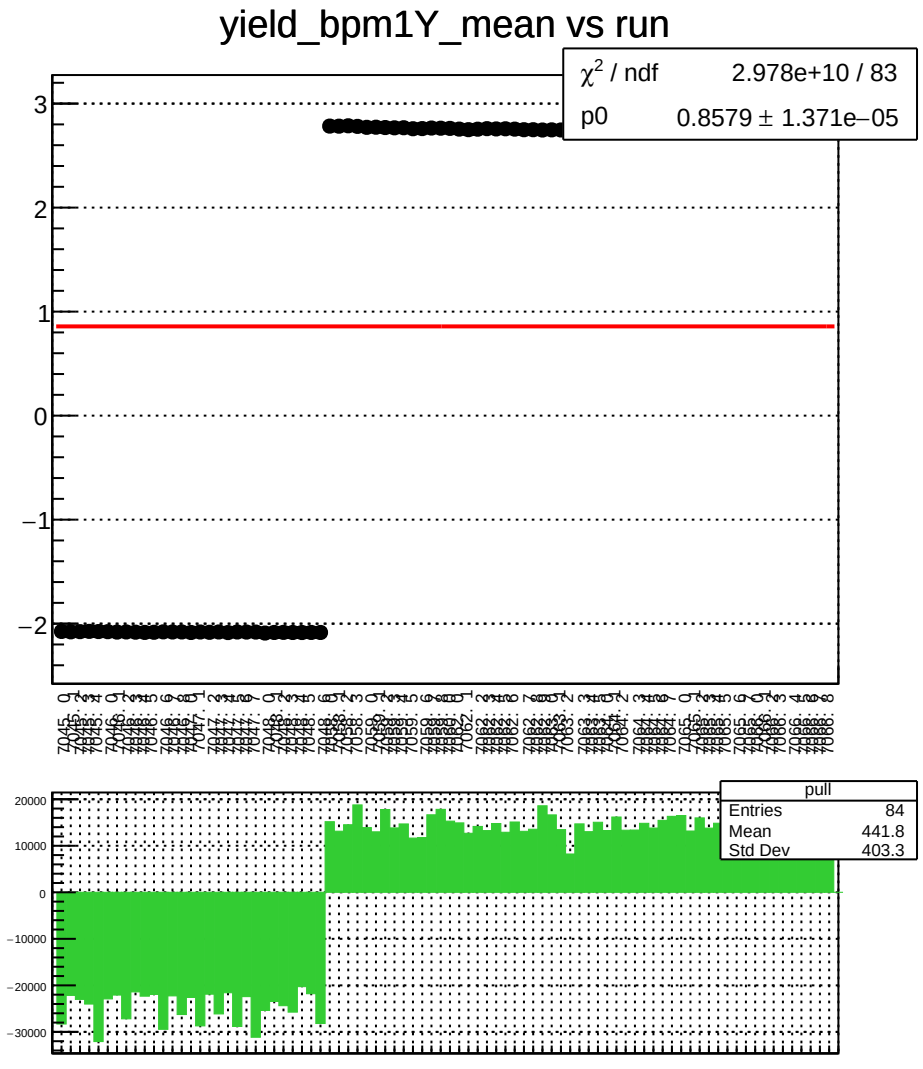

pull1D
Entries 84
Mean −5.549
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

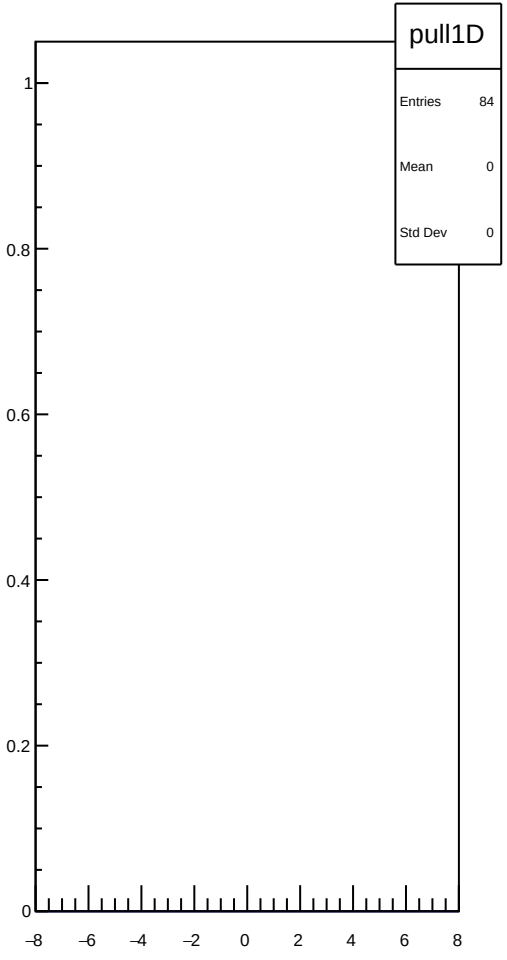

yield_bpm4ecY_rms vs run
χ² / ndf 3.203e+04 / 83
p0 0.01083 ± 8.661e–06
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

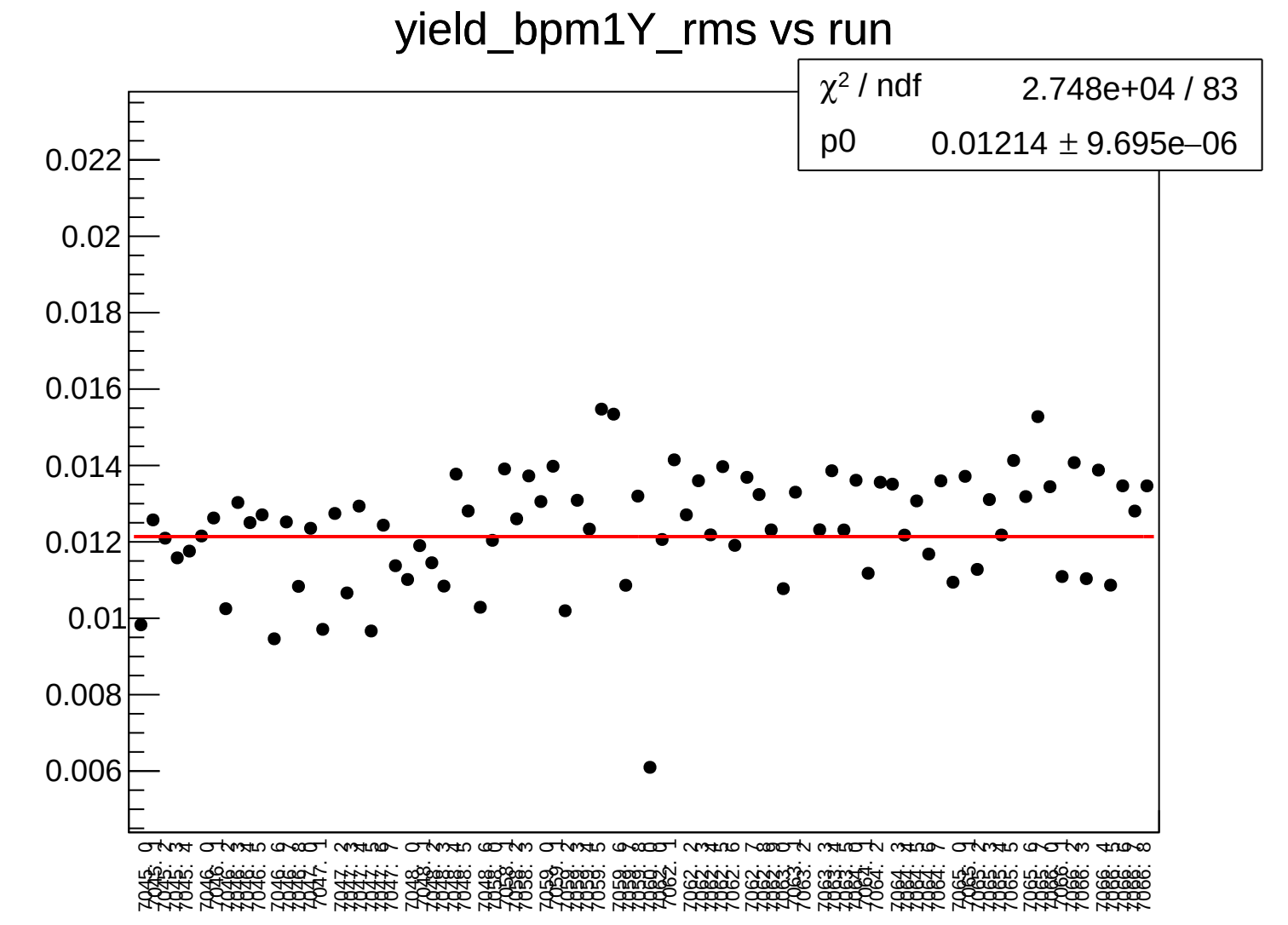

yield_bpm1X_mean vs run
χ² / ndf 1.375e+07 / 83
p0 2.965 ± 1.732e−05
3.02
3
2.98
2.96
2.94
2.92
2.9
2.88
2.86
pull
Entries 84
Mean −253.6
Std Dev 290.5
400
200
0
−200
−400
−600
−800

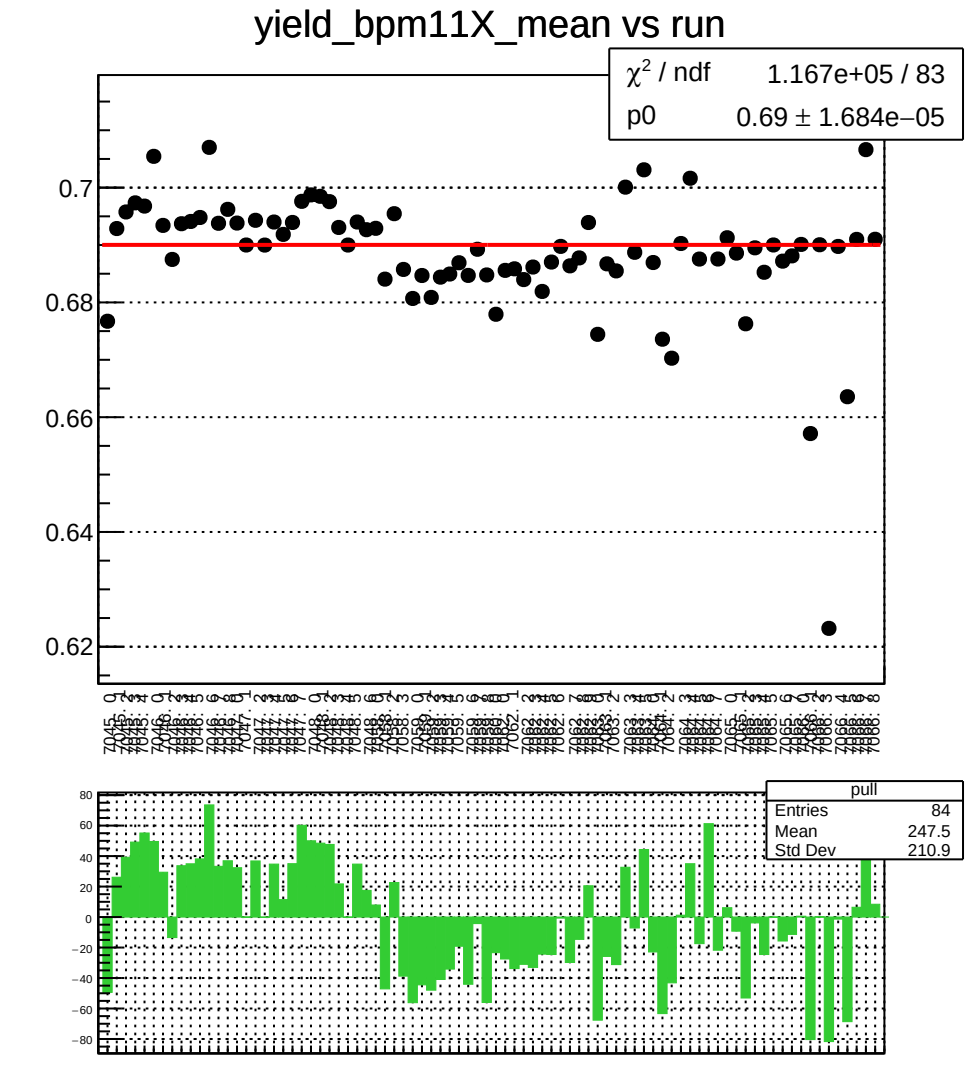

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

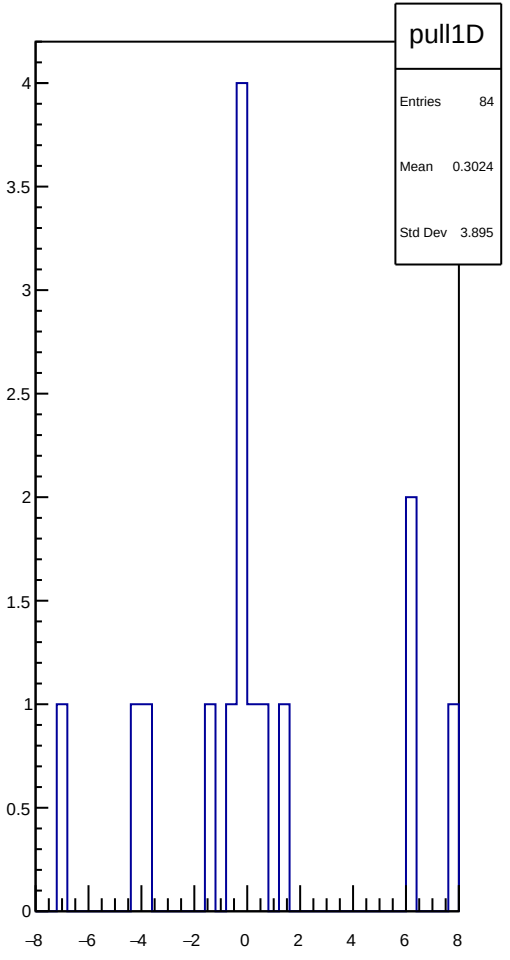

yield_bpm1X_rms vs run
χ² / ndf 1.629e+05 / 83
p0 0.01465 ± 1.224e−05
0.035
0.03
0.025
0.02
0.015
0.01

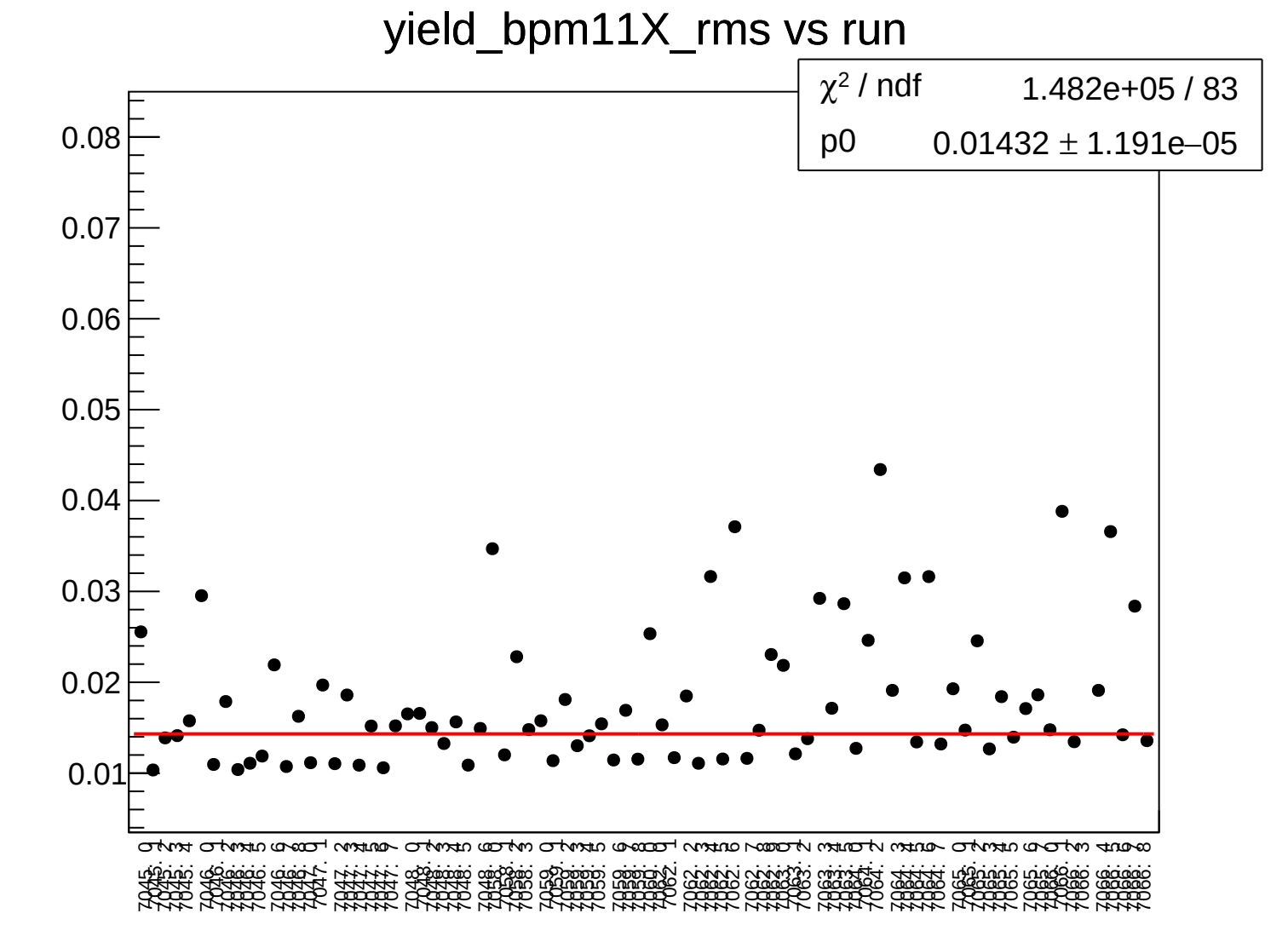

yield_bpm1Y_mean vs run
χ² / ndf 2.978e+10 / 83
p0 0.8579 ± 1.371e−05
pull
Entries 84
Mean 441.8
Std Dev 403.3

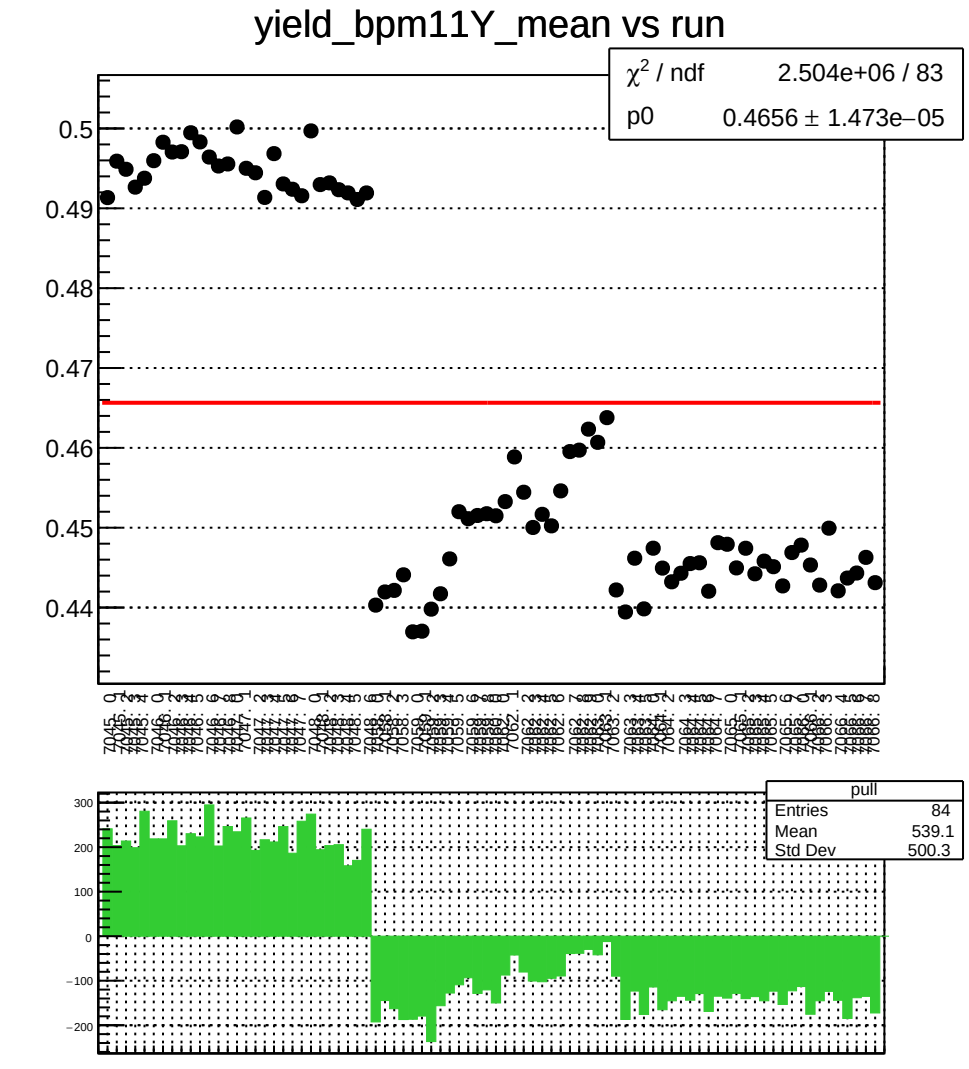

pull1D
Entries 84
Mean 0
Std Dev 0

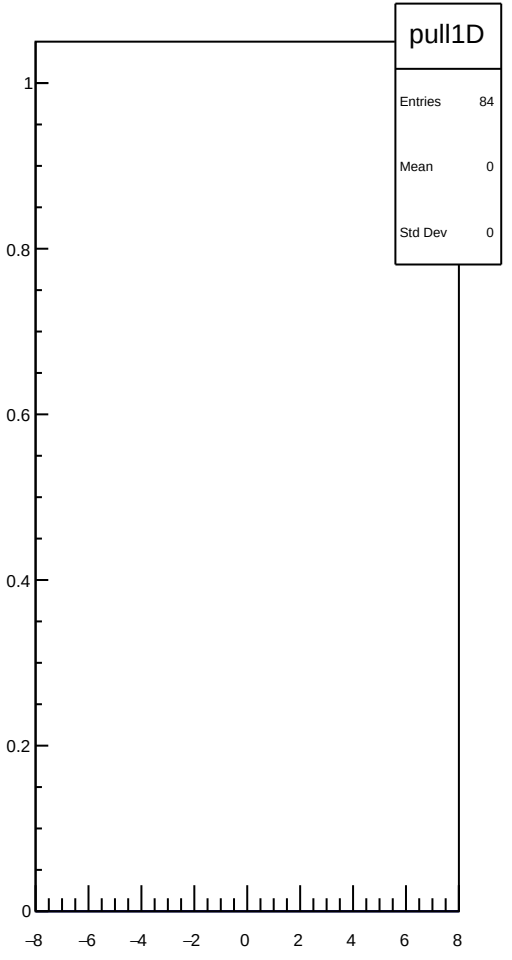

yield_bpm1Y_rms vs run
χ² / ndf 2.748e+04 / 83
p0 0.01214 ± 9.695e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

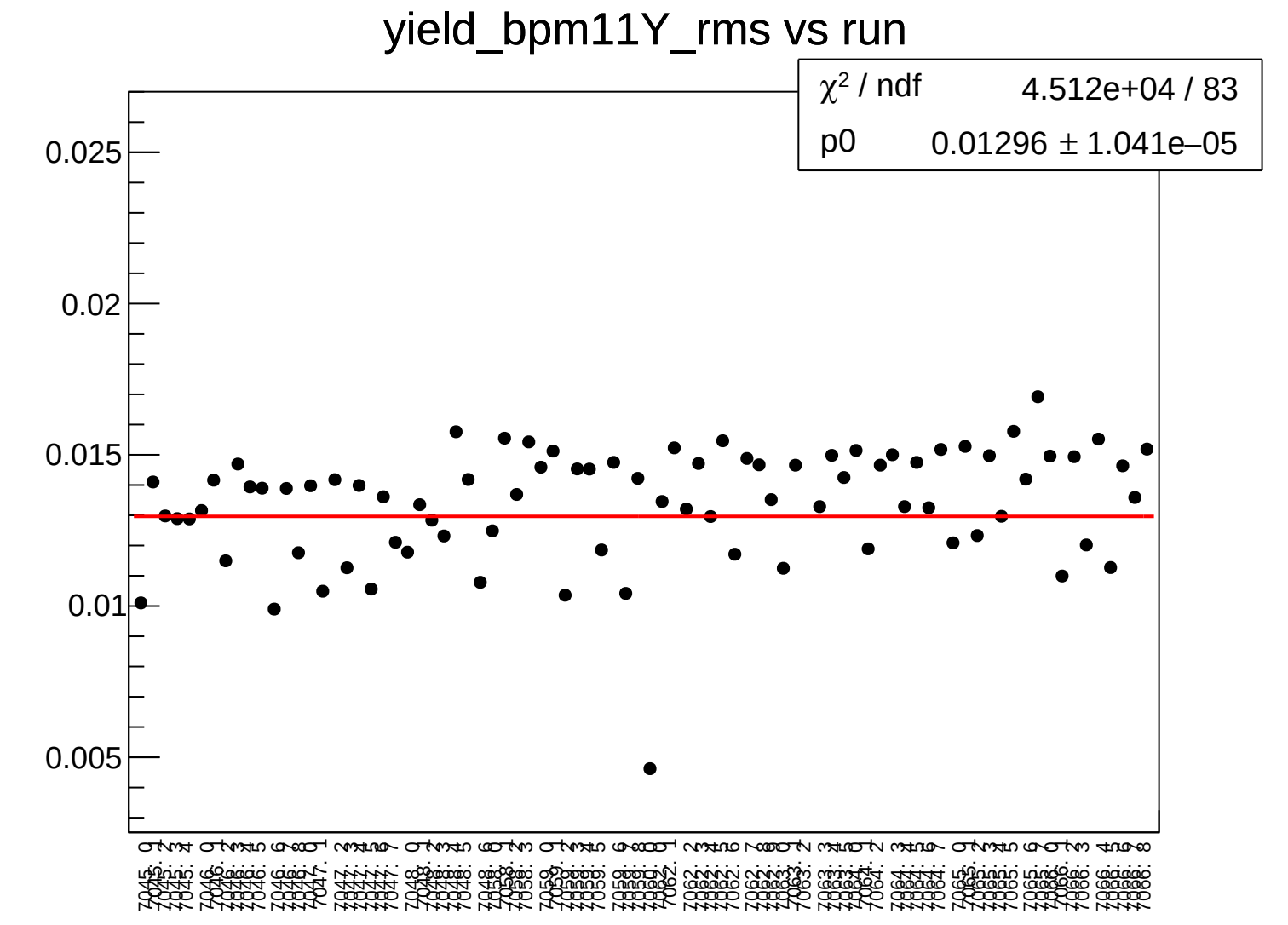

yield_bpm11X_mean vs run
χ² / ndf 1.167e+05 / 83
p0 0.69 ± 1.684e−05
0.7
0.68
0.66
0.64
0.62
pull
Entries 84
Mean 247.5
Std Dev 210.9
80
60
40
20
0
−20
−40
−60
−80

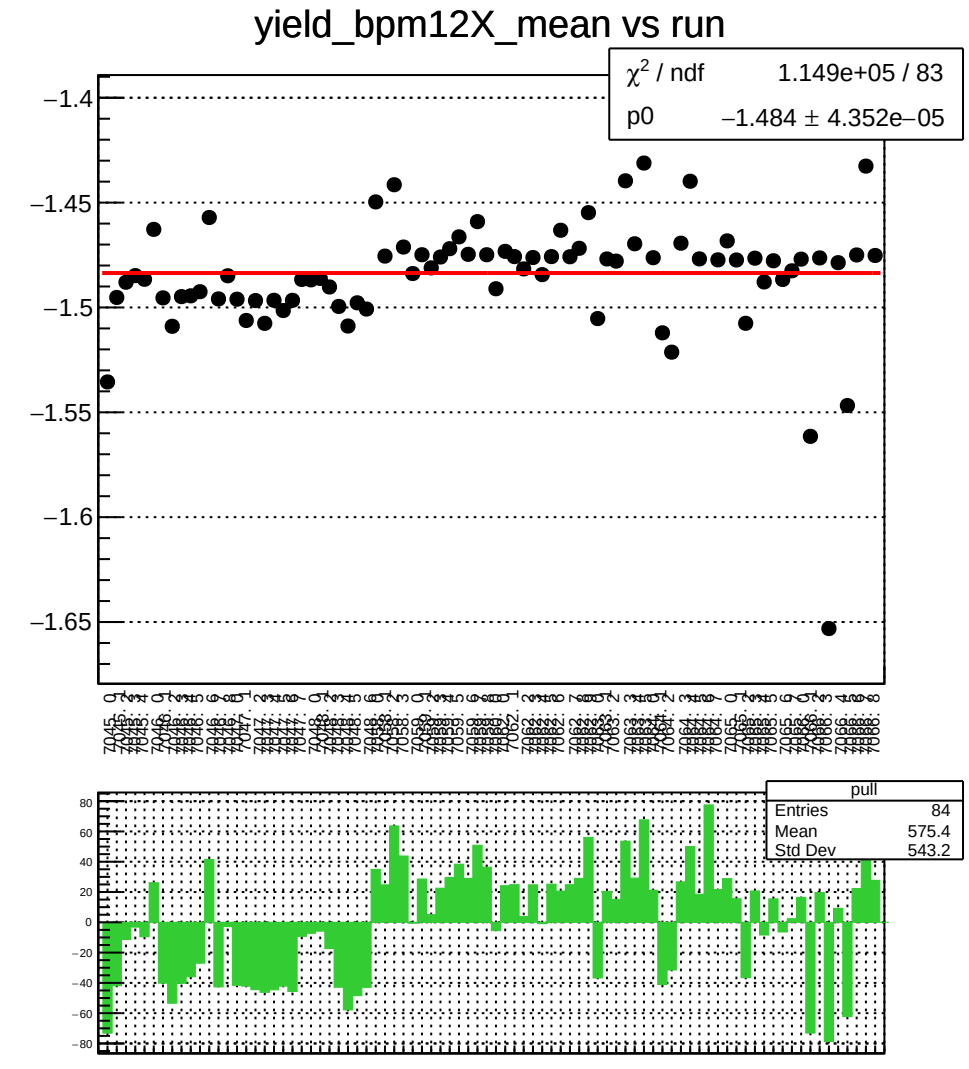

pull1D
Entries 84
Mean 0.3024
Std Dev 3.895
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

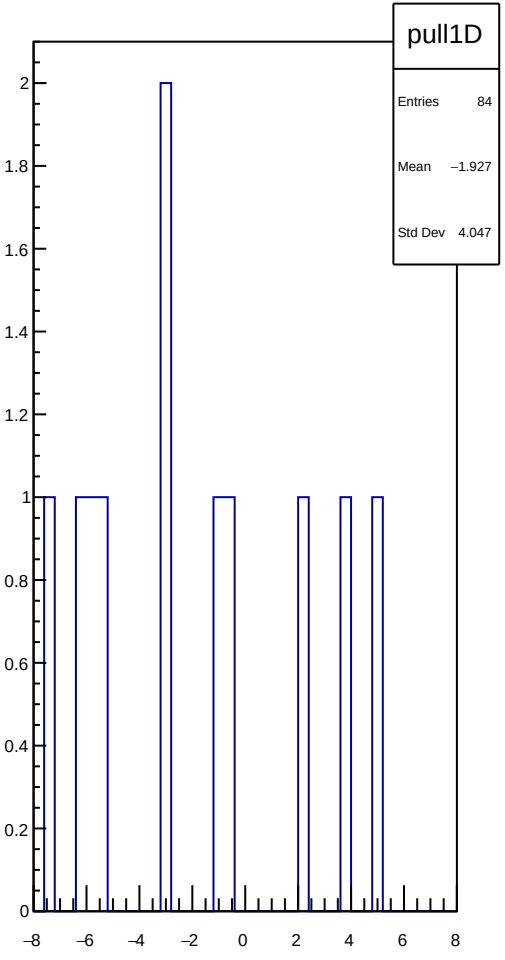

yield_bpm11X_rms vs run
χ² / ndf 1.482e+05 / 83
p0 0.01432 ± 1.191e–05
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

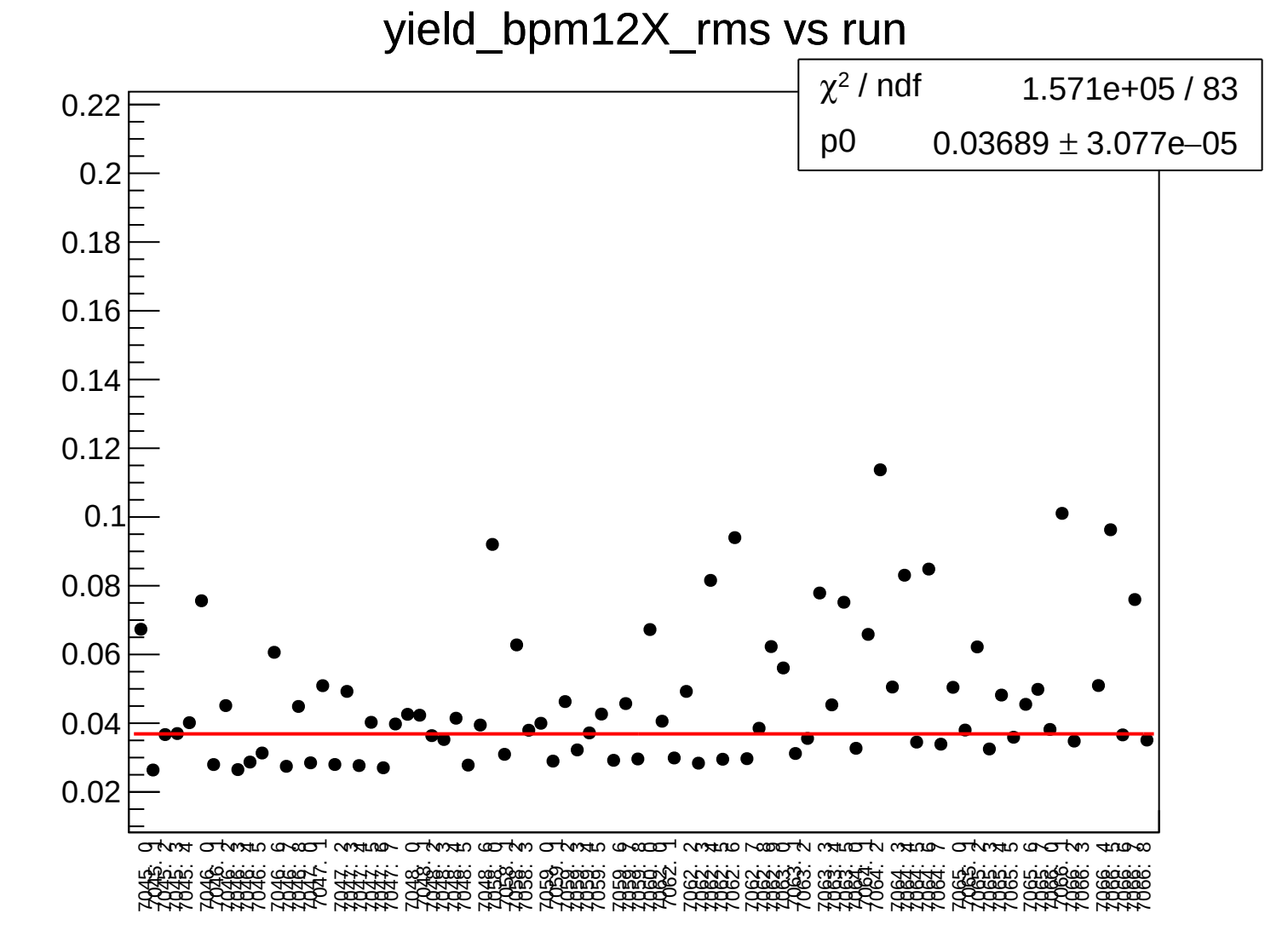

yield_bpm11Y_mean vs run
χ² / ndf 2.504e+06 / 83
p0 0.4656 ± 1.473e−05
0.5
0.49
0.48
0.47
0.46
0.45
0.44
pull
Entries 84
Mean 539.1
Std Dev 500.3
300
200
100
0
−100
−200

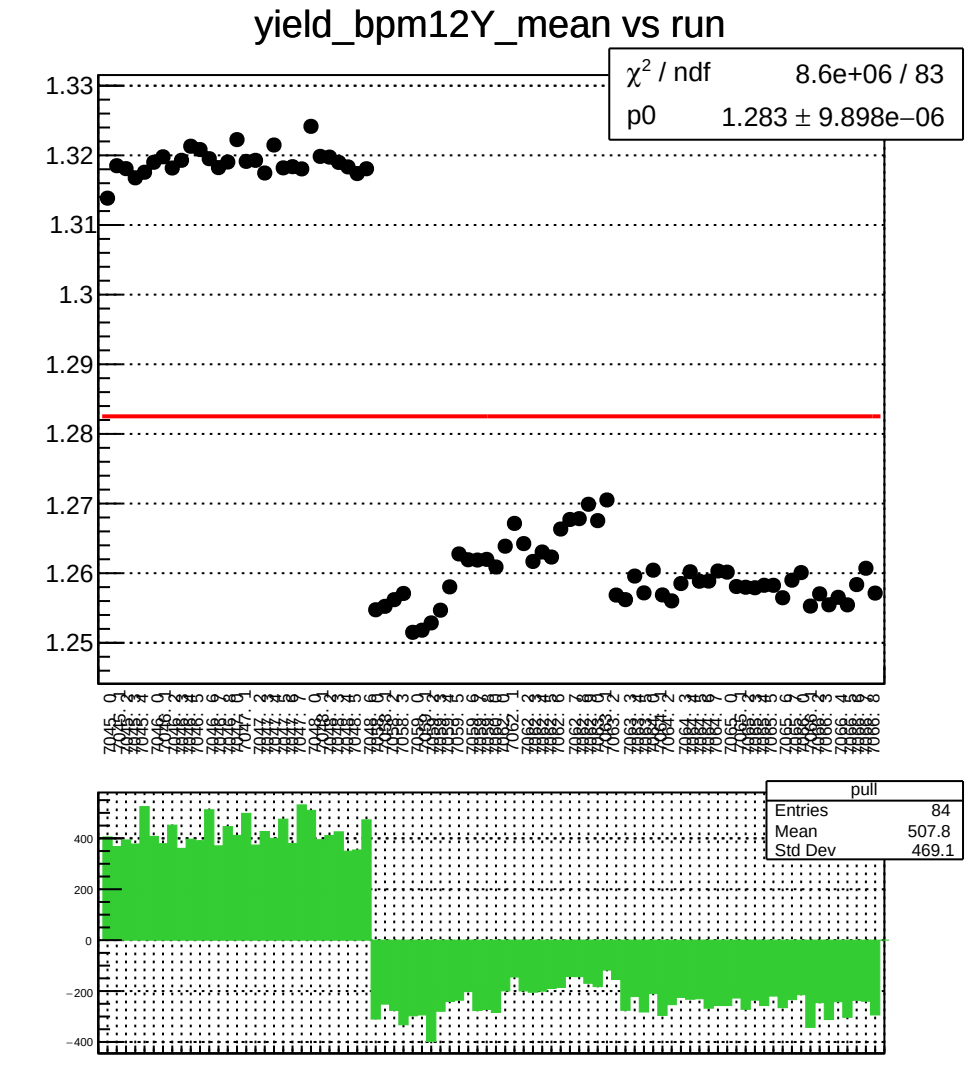

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

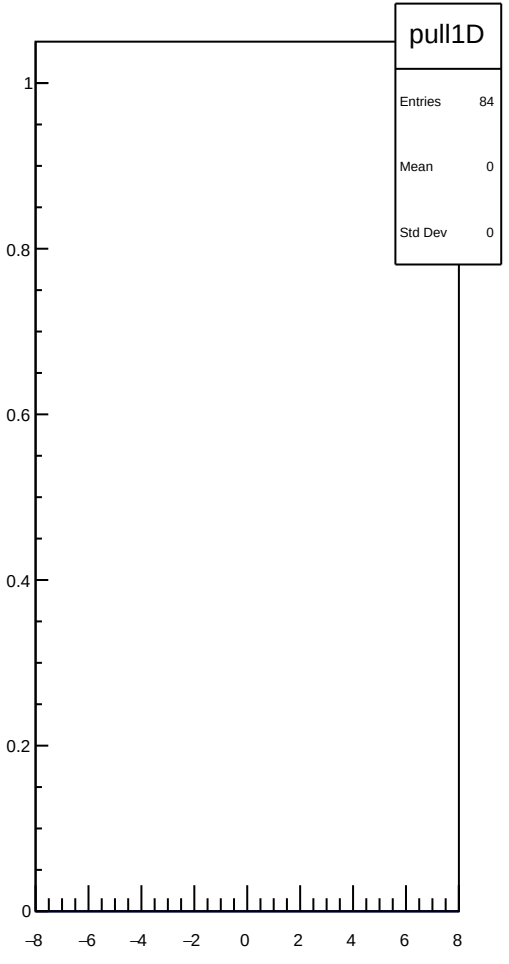

yield_bpm11Y_rms vs run
χ² / ndf 4.512e+04 / 83
p0 0.01296 ± 1.041e–05
0.025
0.02
0.015
0.01
0.005

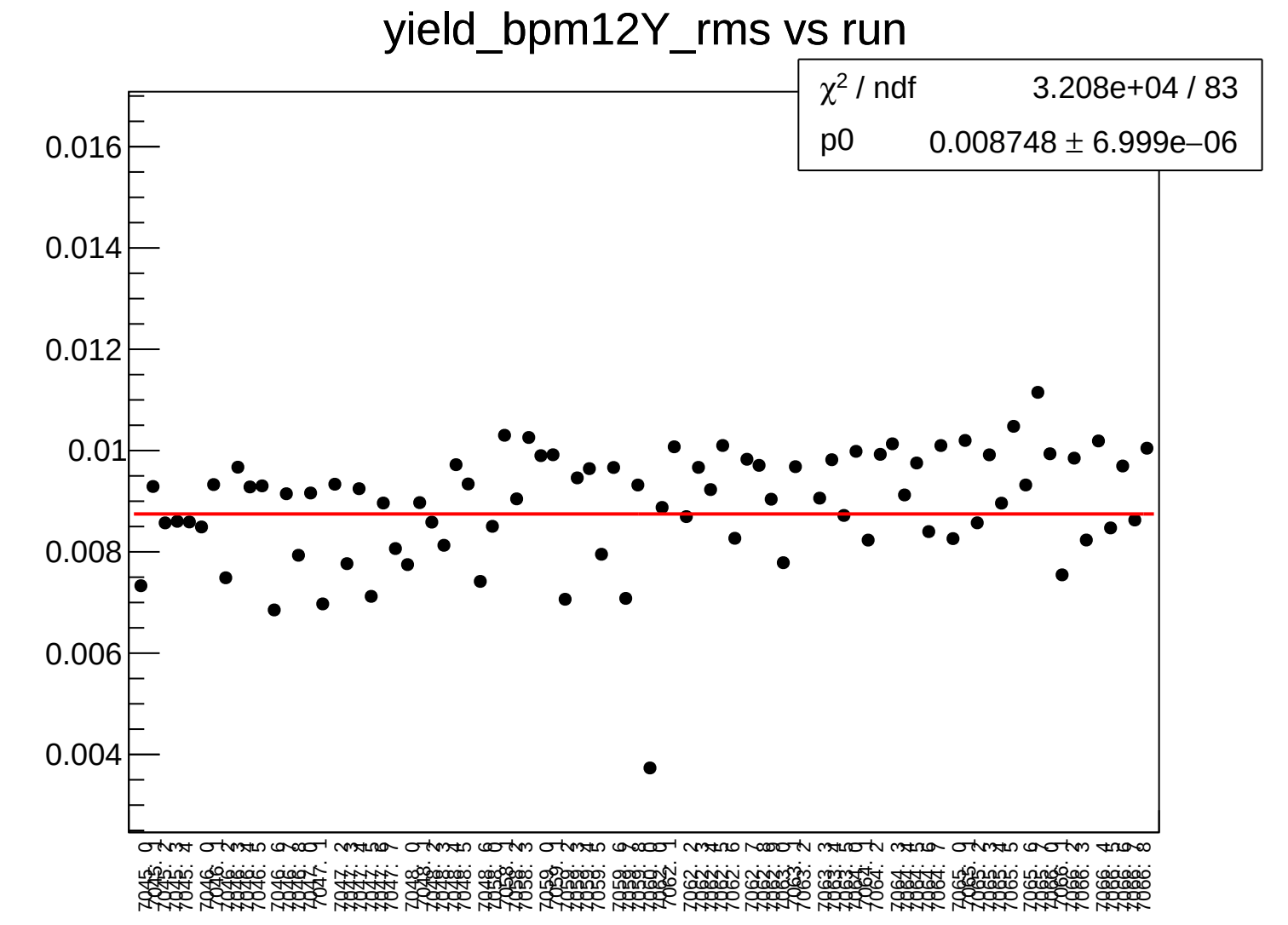

yield_bpm12X_mean vs run
χ² / ndf 1.149e+05 / 83
p0 −1.484 ± 4.352e−05
−1.4
−1.45
−1.5
−1.55
−1.6
−1.65
pull
Entries 84
Mean 575.4
Std Dev 543.2
80
60
40
20
0
−20
−40
−60
−80

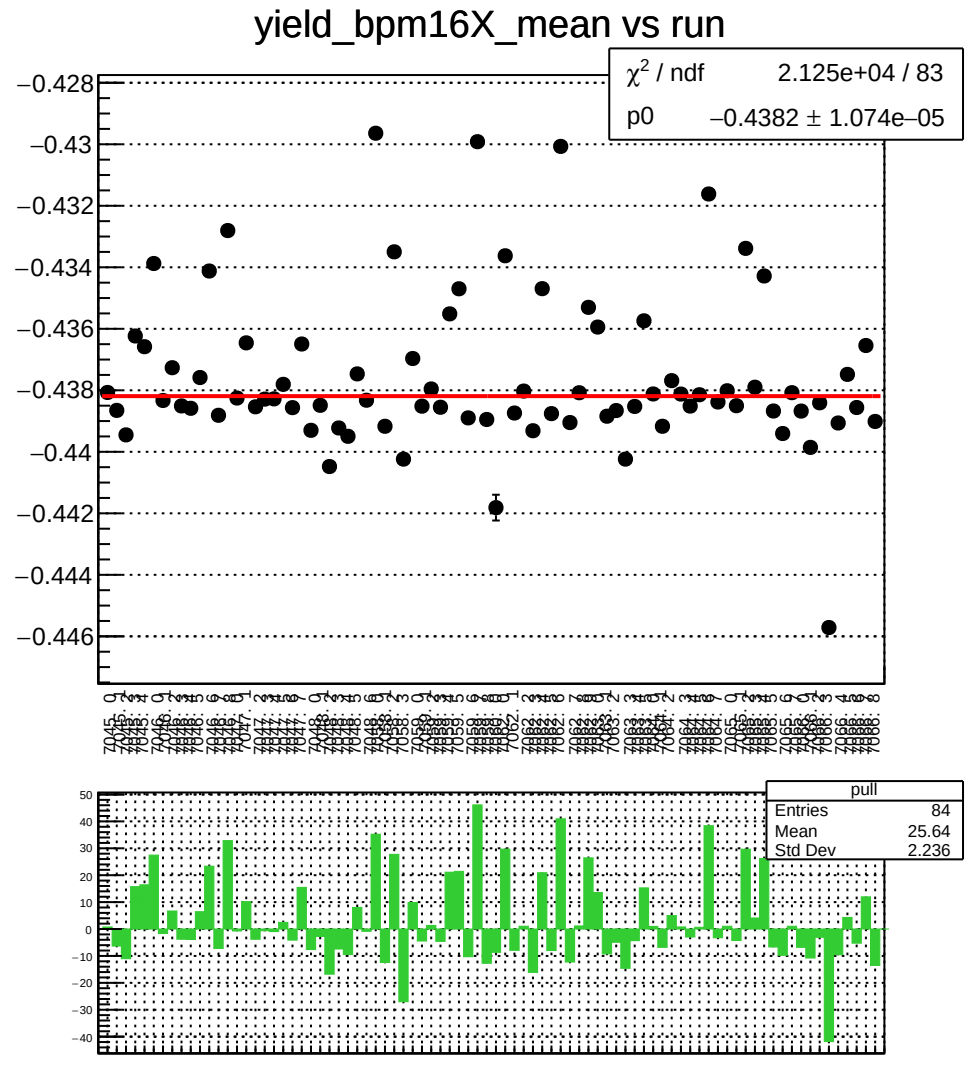

pull1D
Entries 84
Mean −1.927
Std Dev 4.047
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

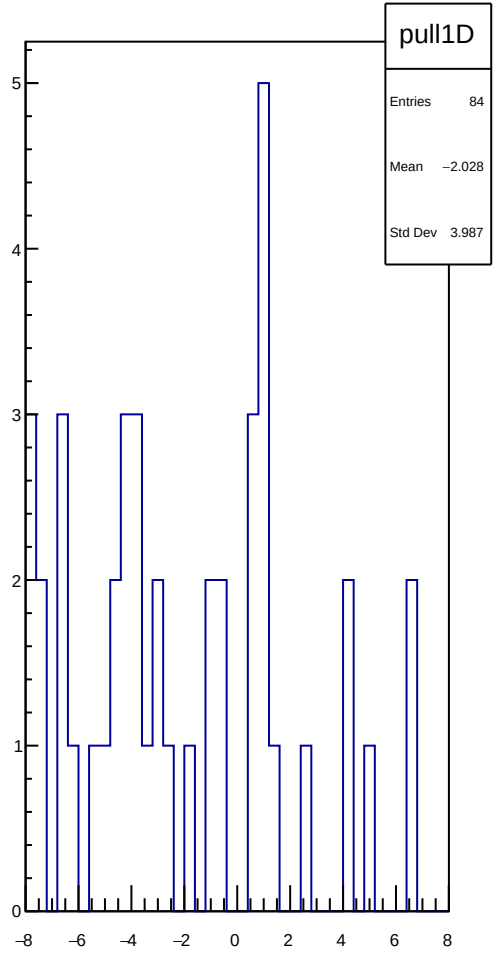

yield_bpm12X_rms vs run
χ² / ndf 1.571e+05 / 83
p0 0.03689 ± 3.077e–05
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

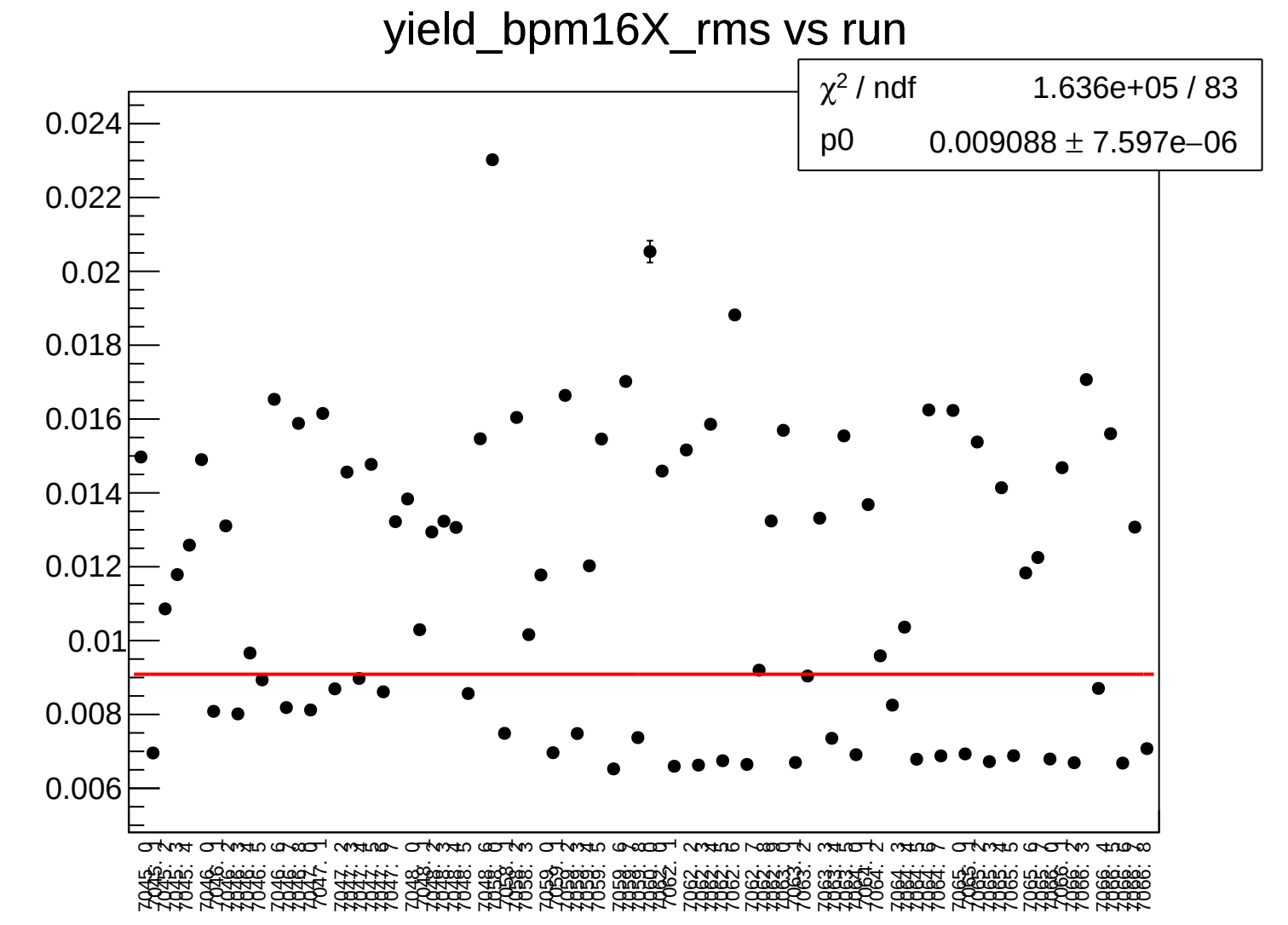

yield_bpm12Y_mean vs run
χ² / ndf 8.6e+06 / 83
p0 1.283 ± 9.898e−06
1.33
1.32
1.31
1.3
1.29
1.28
1.27
1.26
1.25
pull
Entries 84
Mean 507.8
Std Dev 469.1
400
200
0
−200
−400

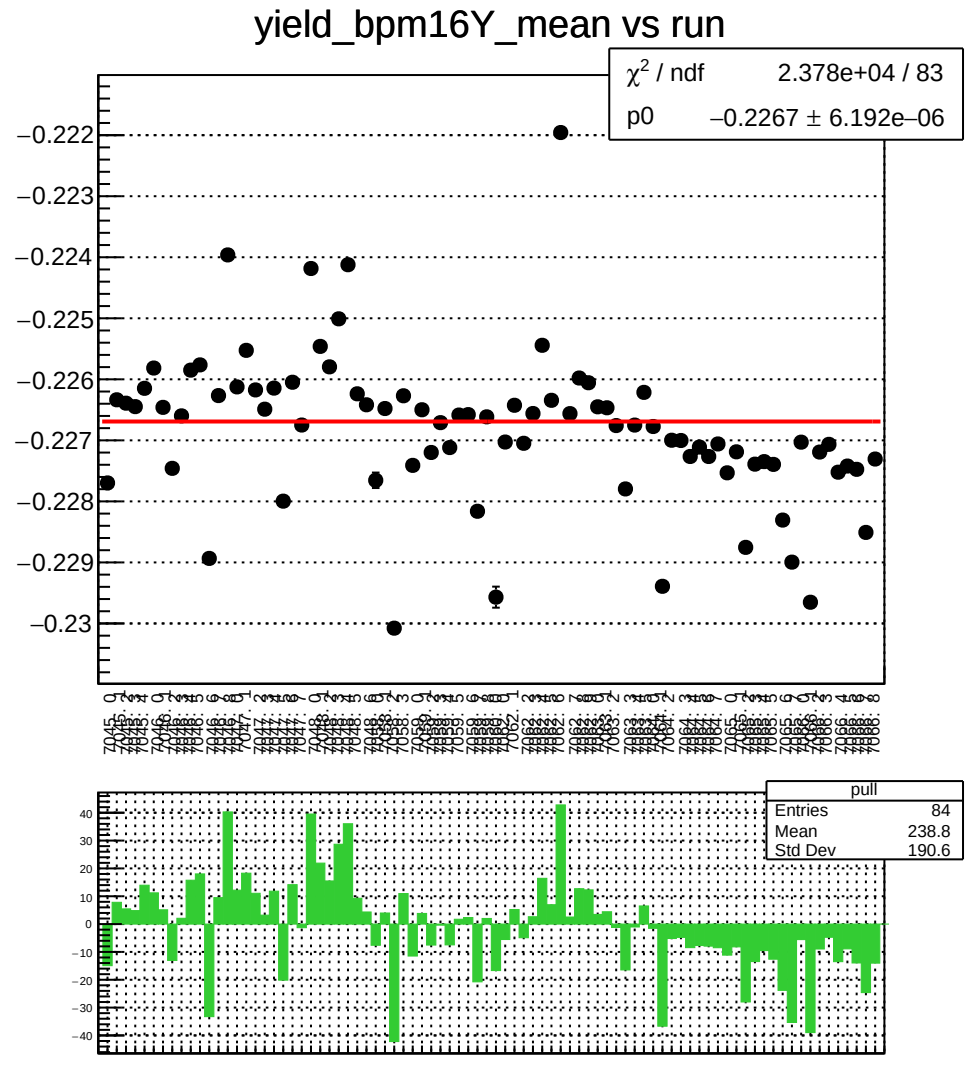

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

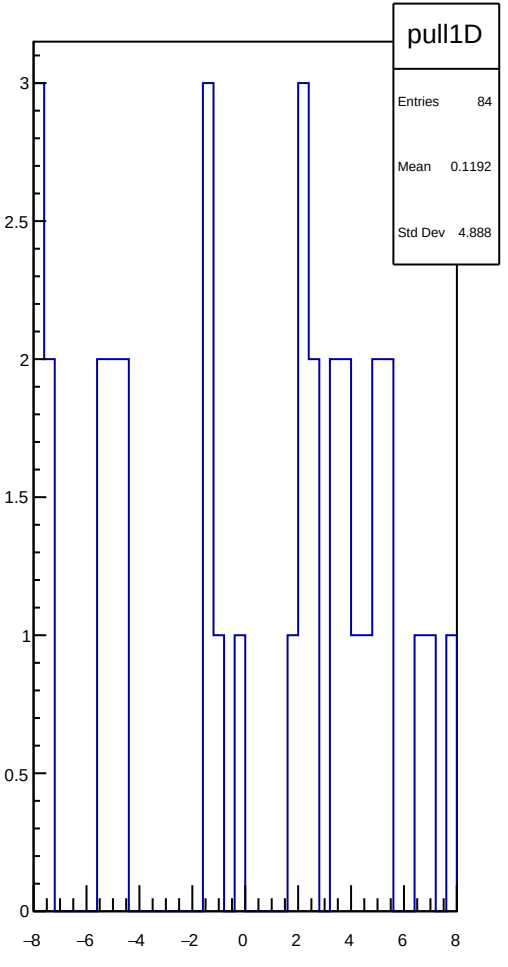

yield_bpm12Y_rms vs run
χ² / ndf 3.208e+04 / 83
p0 0.008748 ± 6.999e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004

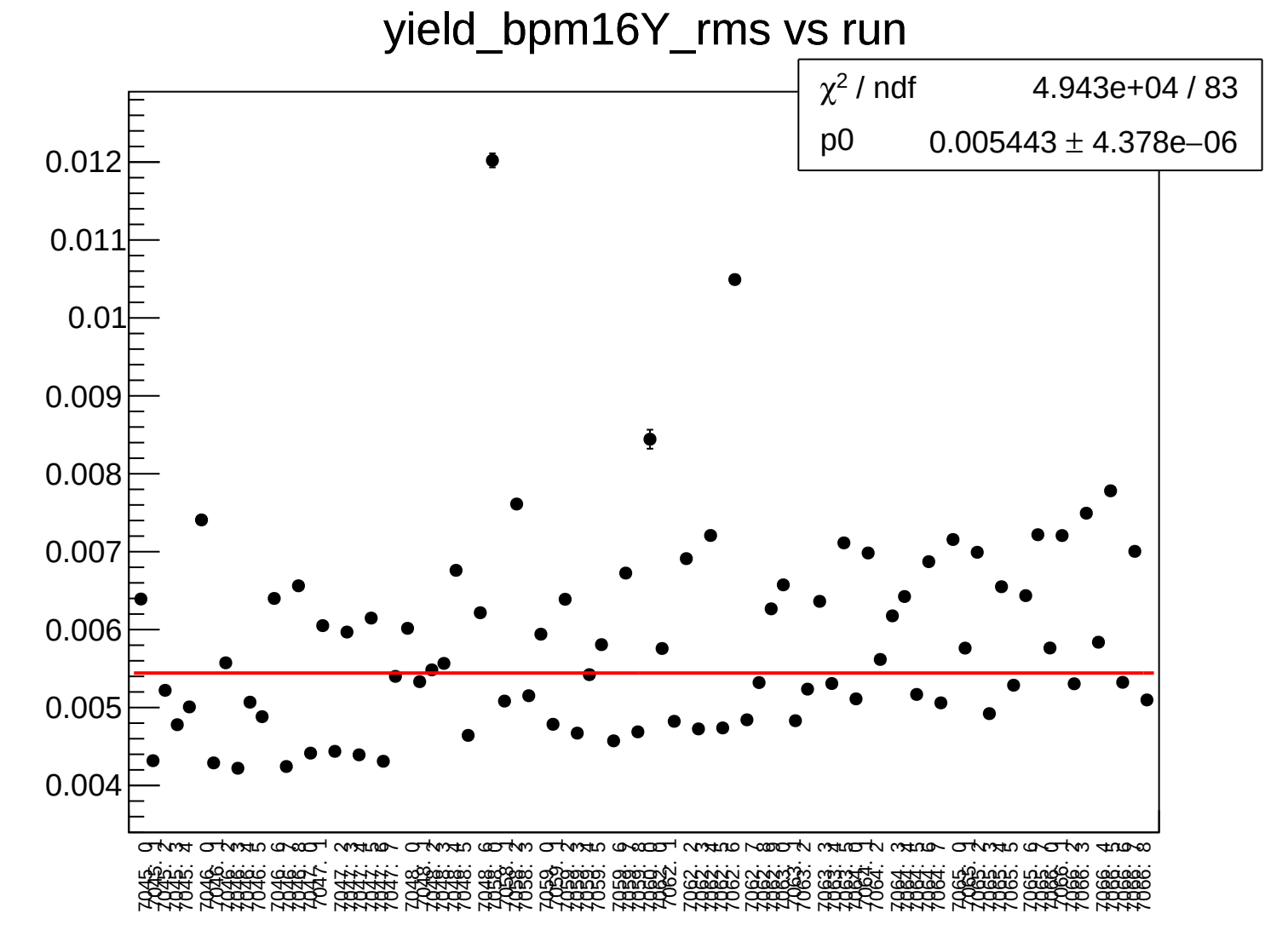

yield_bpm16X_mean vs run
χ² / ndf 2.125e+04 / 83
p0 −0.4382 ± 1.074e−05
−0.428
−0.43
−0.432
−0.434
−0.436
−0.438
−0.44
−0.442
−0.444
−0.446
pull
Entries 84
Mean 25.64
Std Dev 2.236
50
40
30
20
10
0
−10
−20
−30
−40

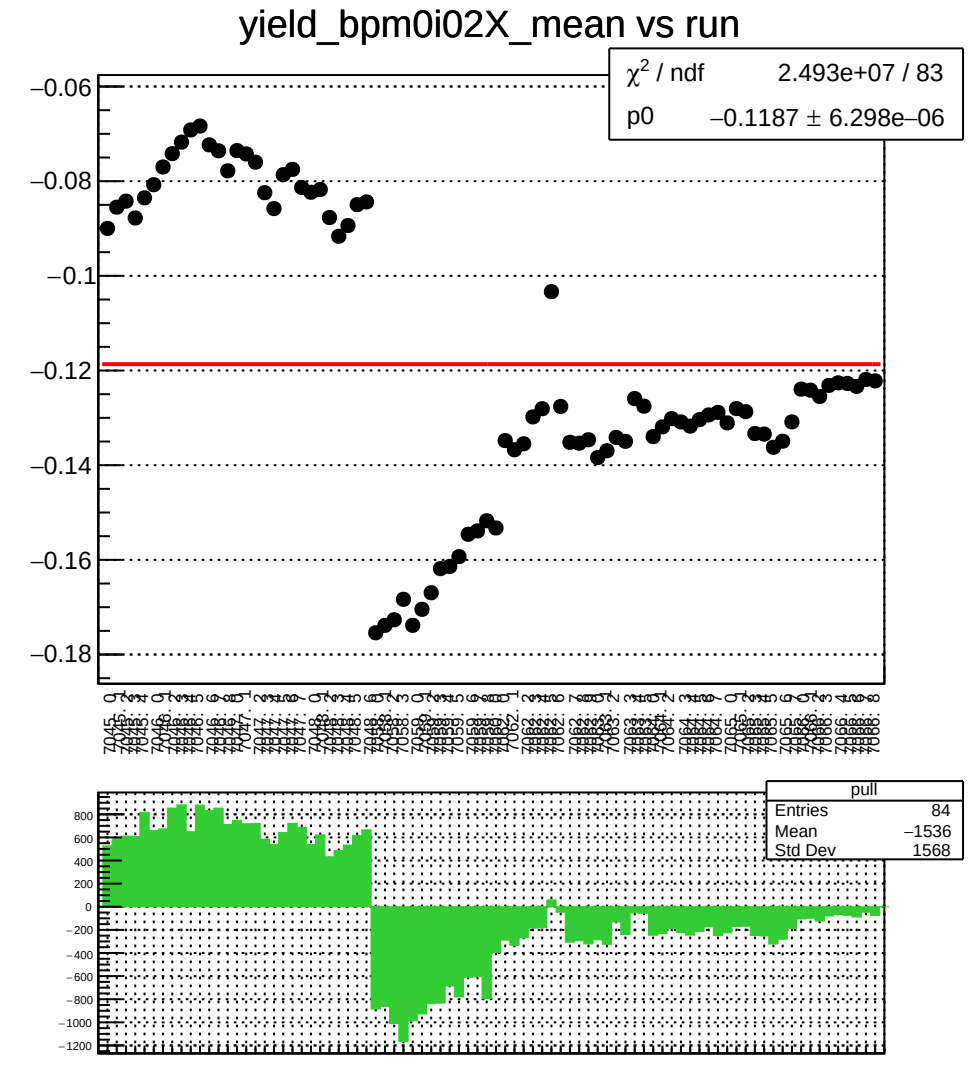

pull1D
Entries 84
Mean −2.028
Std Dev 3.987
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

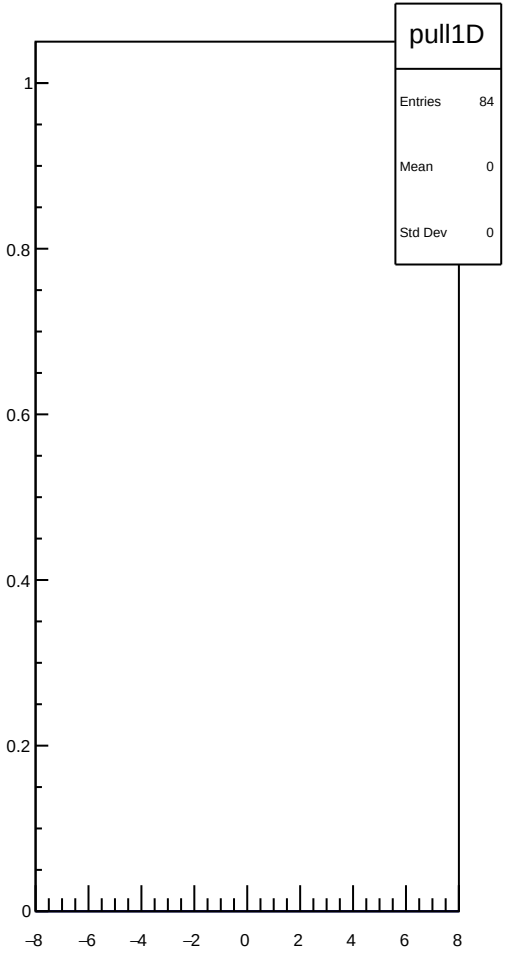

yield_bpm16X_rms vs run
χ² / ndf 1.636e+05 / 83
p0 0.009088 ± 7.597e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

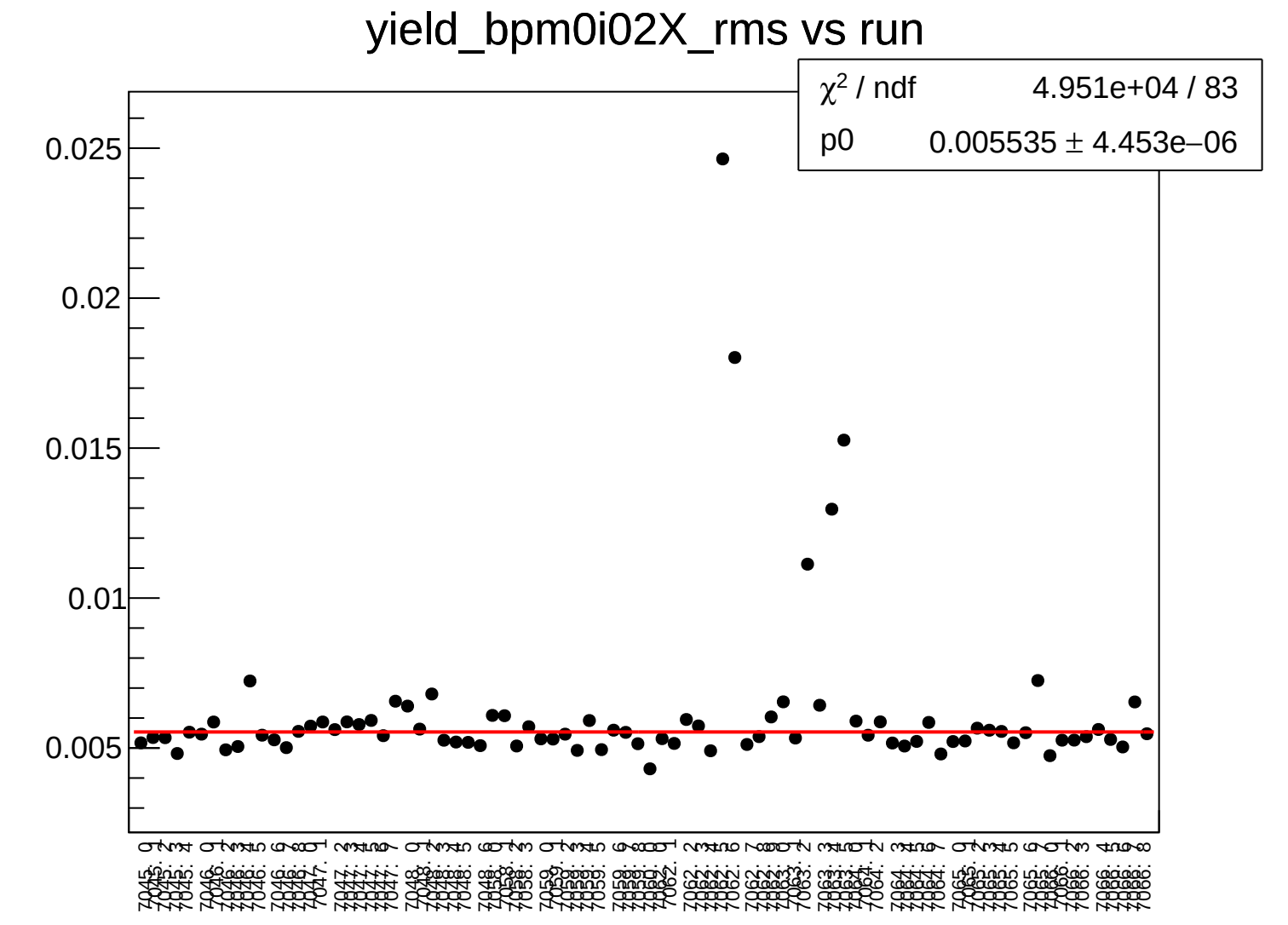

yield_bpm16Y_mean vs run
χ² / ndf 2.378e+04 / 83
p0 −0.2267 ± 6.192e−06
−0.222
−0.223
−0.224
−0.225
−0.226
−0.227
−0.228
−0.229
−0.23
pull
Entries 84
Mean 238.8
Std Dev 190.6
40
30
20
10
0
−10
−20
−30
−40

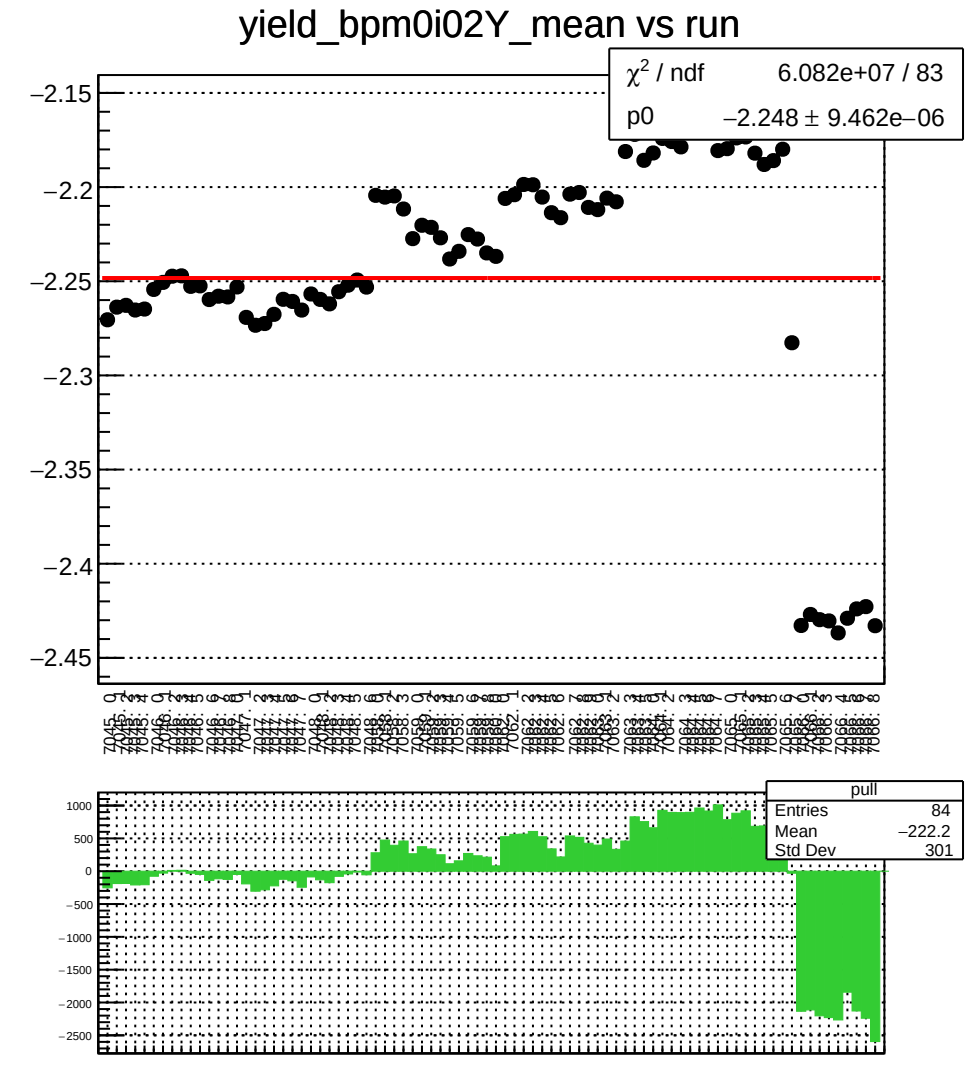

pull1D
Entries 84
Mean 0.1192
Std Dev 4.888
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

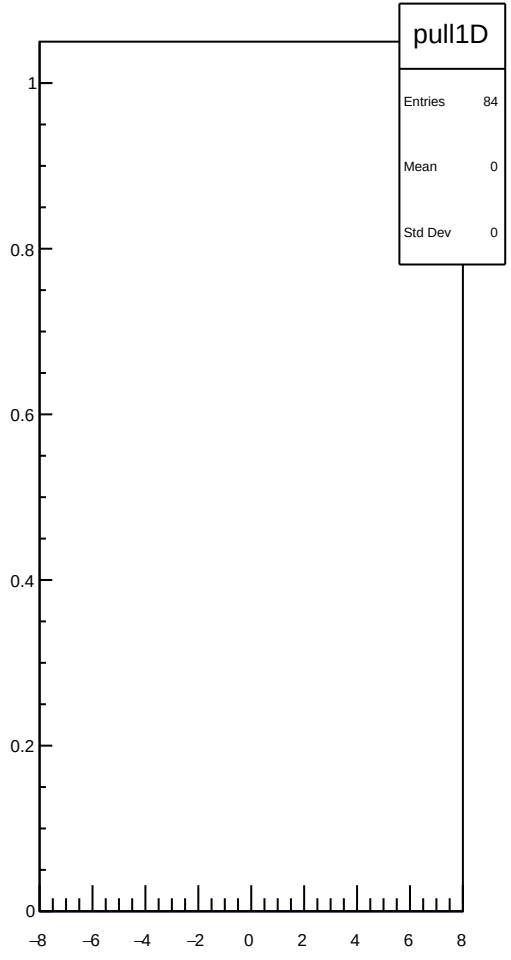

yield_bpm16Y_rms vs run
χ² / ndf 4.943e+04 / 83
p0 0.005443 ± 4.378e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

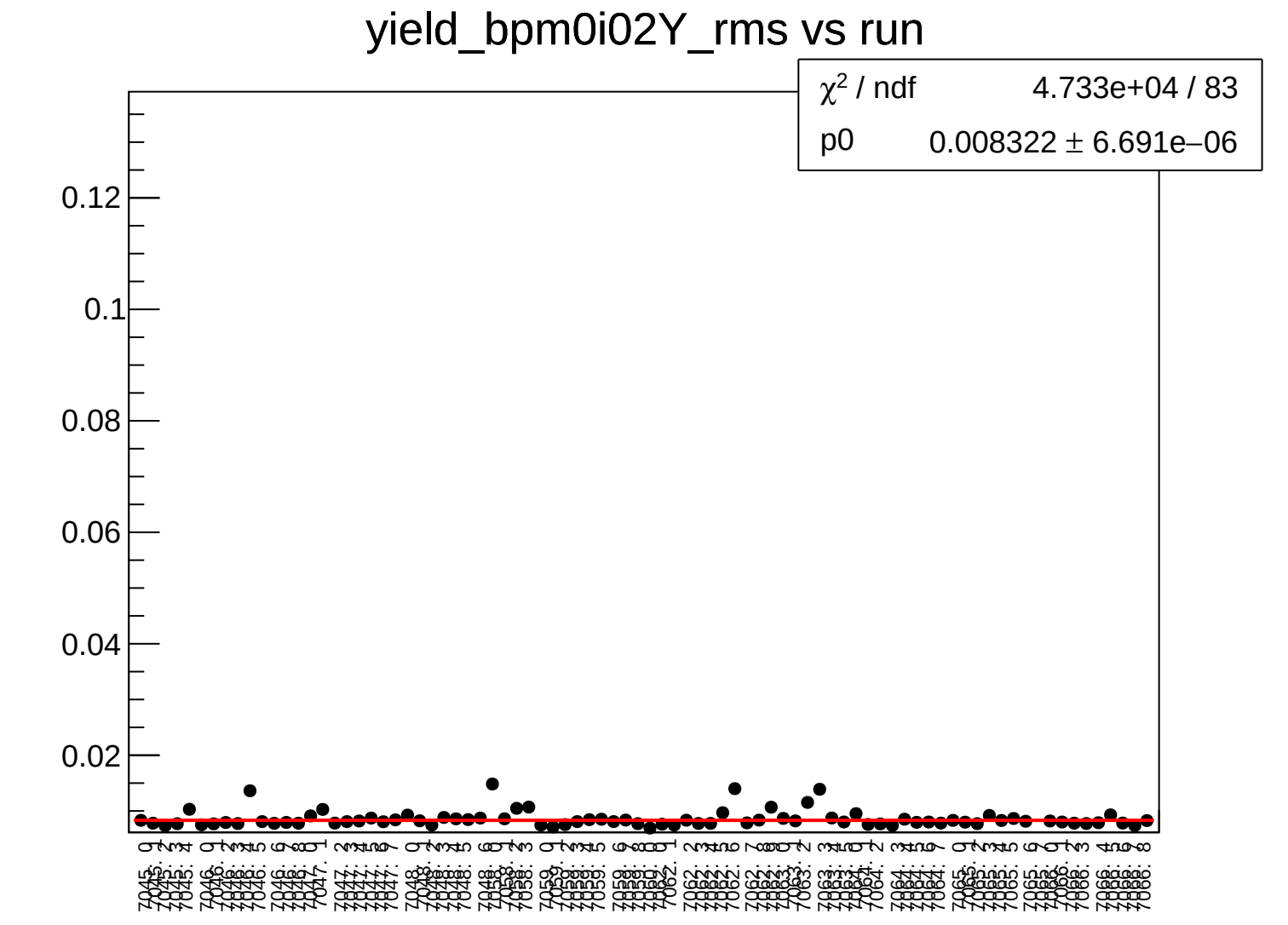

yield_bpm0i02X_mean vs run
χ² / ndf 2.493e+07 / 83
p0 −0.1187 ± 6.298e−06
−0.06
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 84
Mean −1536
Std Dev 1568
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

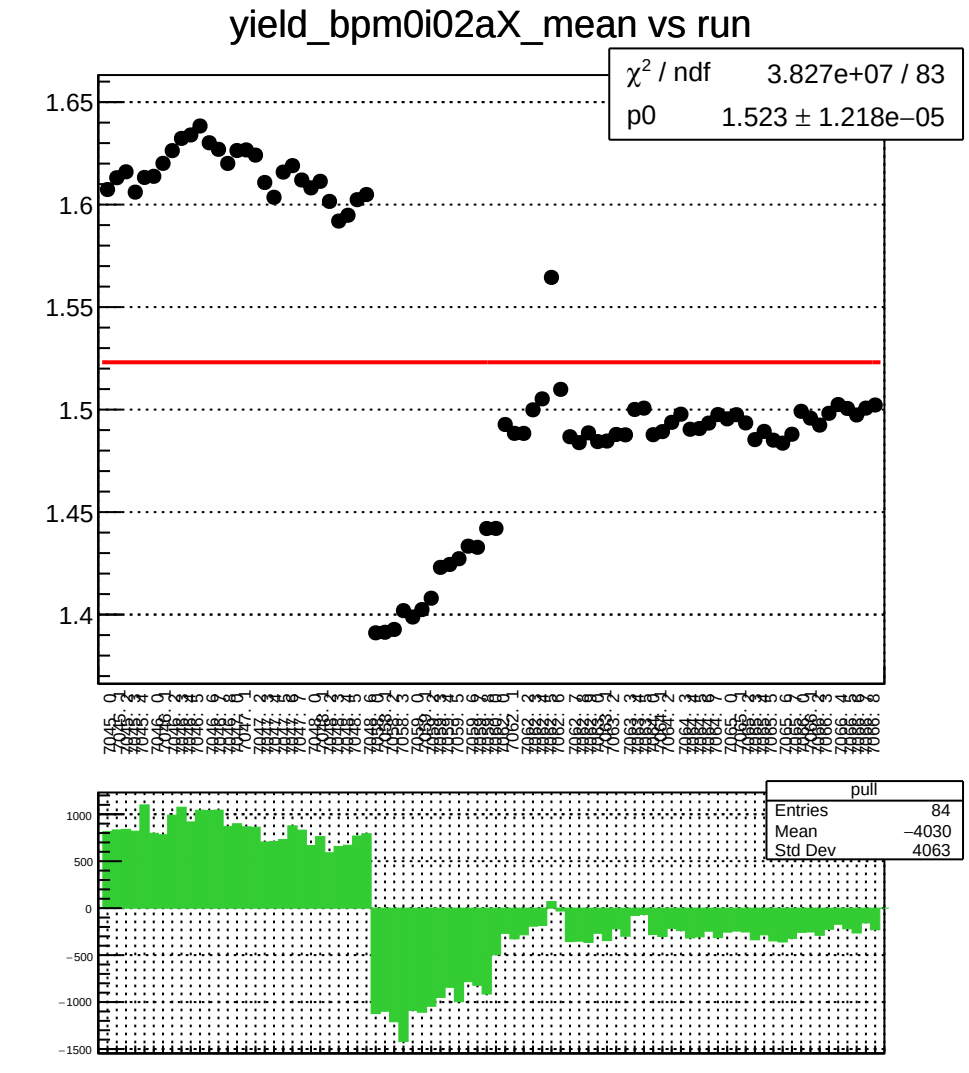

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

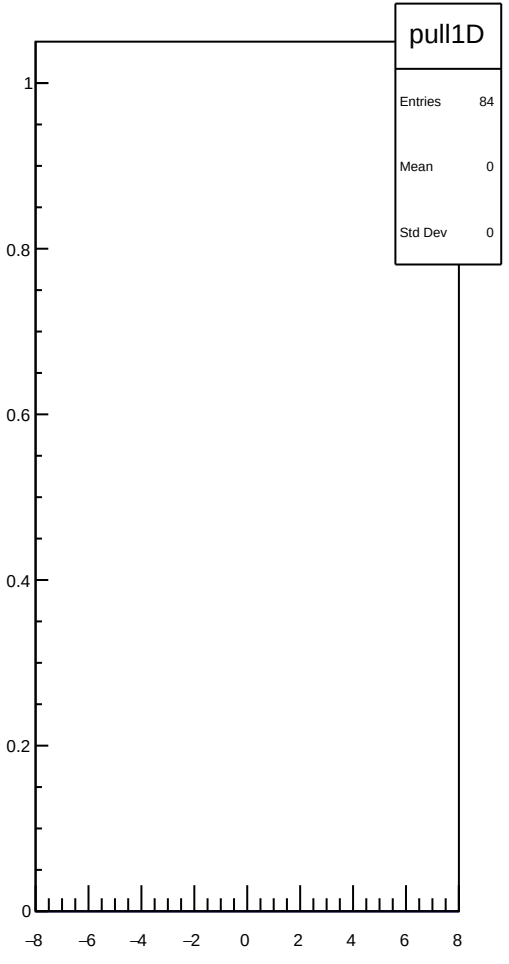

yield_bpm0i02X_rms vs run
χ² / ndf 4.951e+04 / 83
p0 0.005535 ± 4.453e−06
0.025
0.02
0.015
0.01
0.005

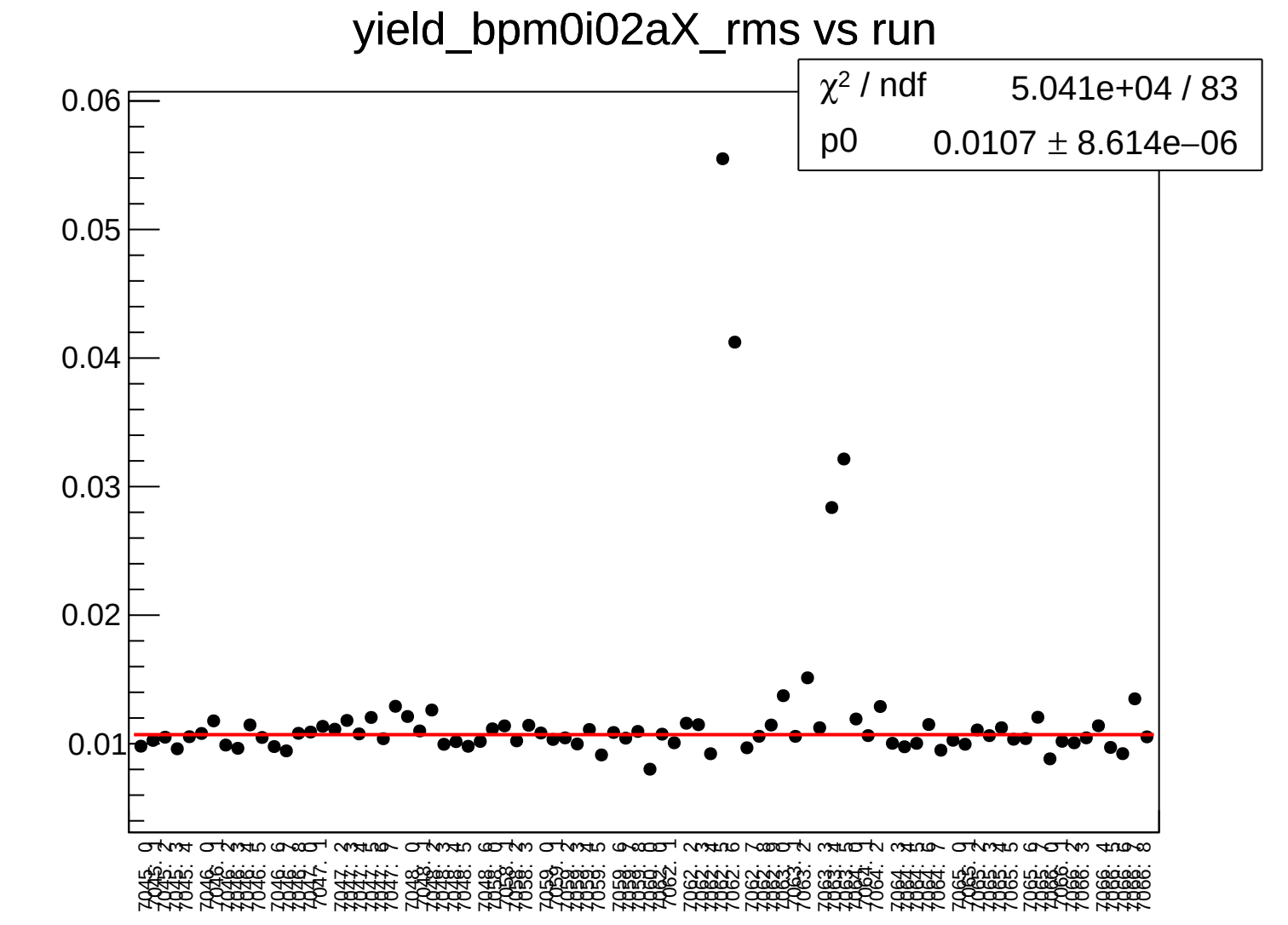

yield_bpm0i02Y_mean vs run
χ² / ndf 6.082e+07 / 83
p0 −2.248 ± 9.462e−06
−2.15
−2.2
−2.25
−2.3
−2.35
−2.4
−2.45
pull
Entries 84
Mean −222.2
Std Dev 301
1000
500
0
−500
−1000
−1500
−2000
−2500

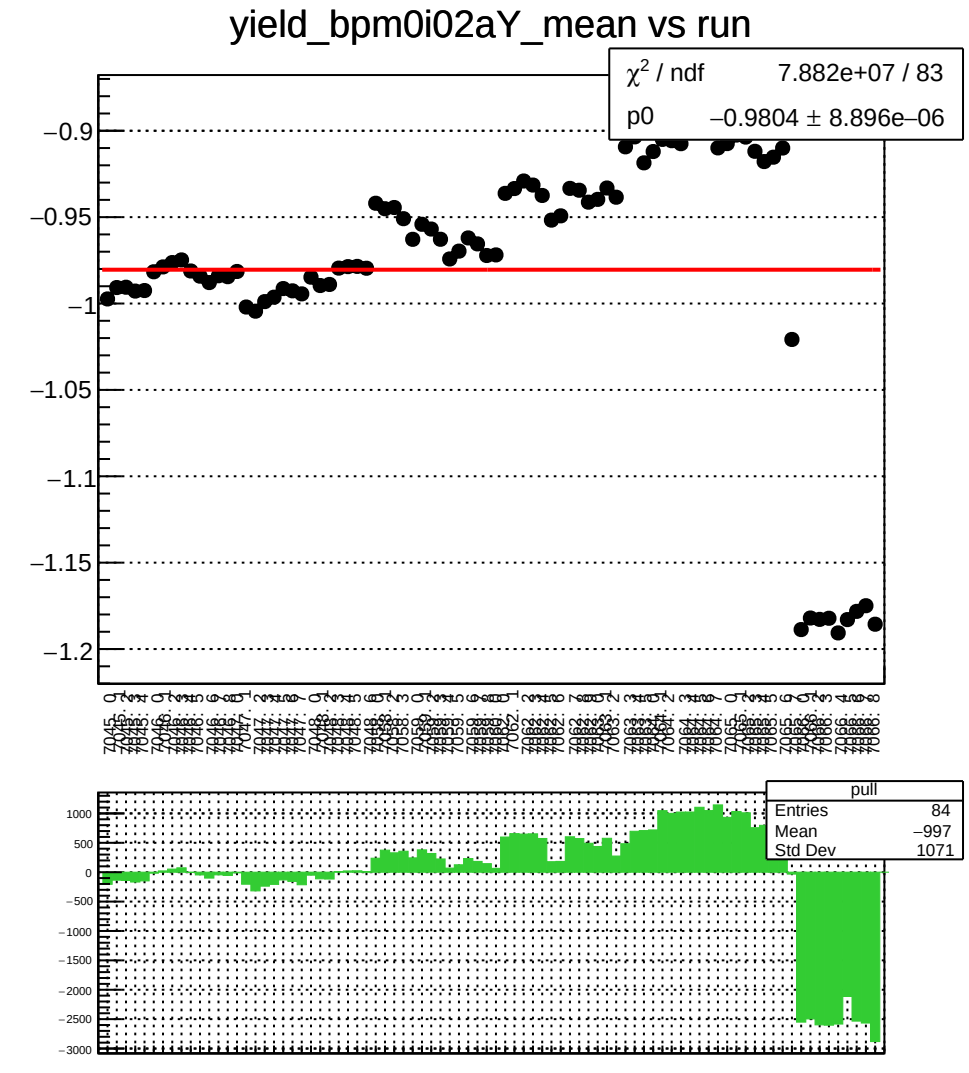

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

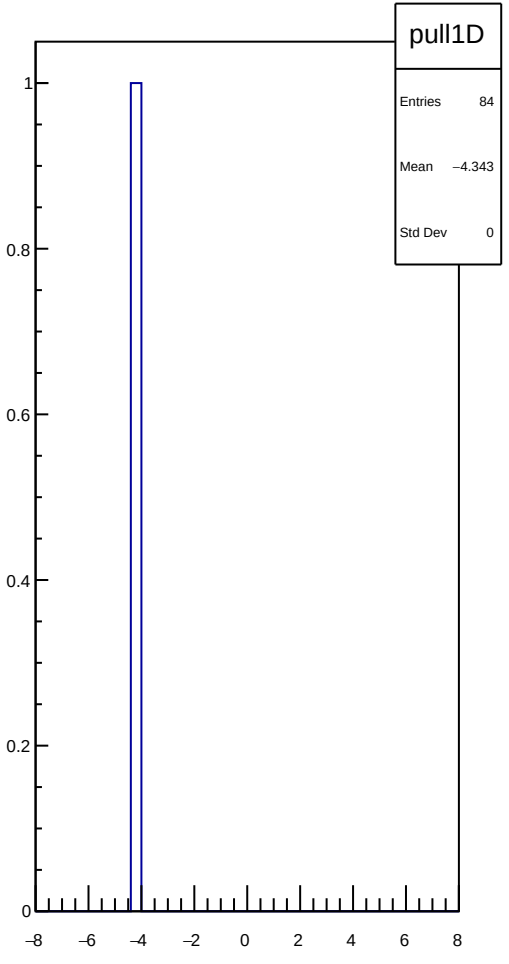

yield_bpm0i02Y_rms vs run
χ² / ndf 4.733e+04 / 83
p0 0.008322 ± 6.691e−06
0.12
0.1
0.08
0.06
0.04
0.02

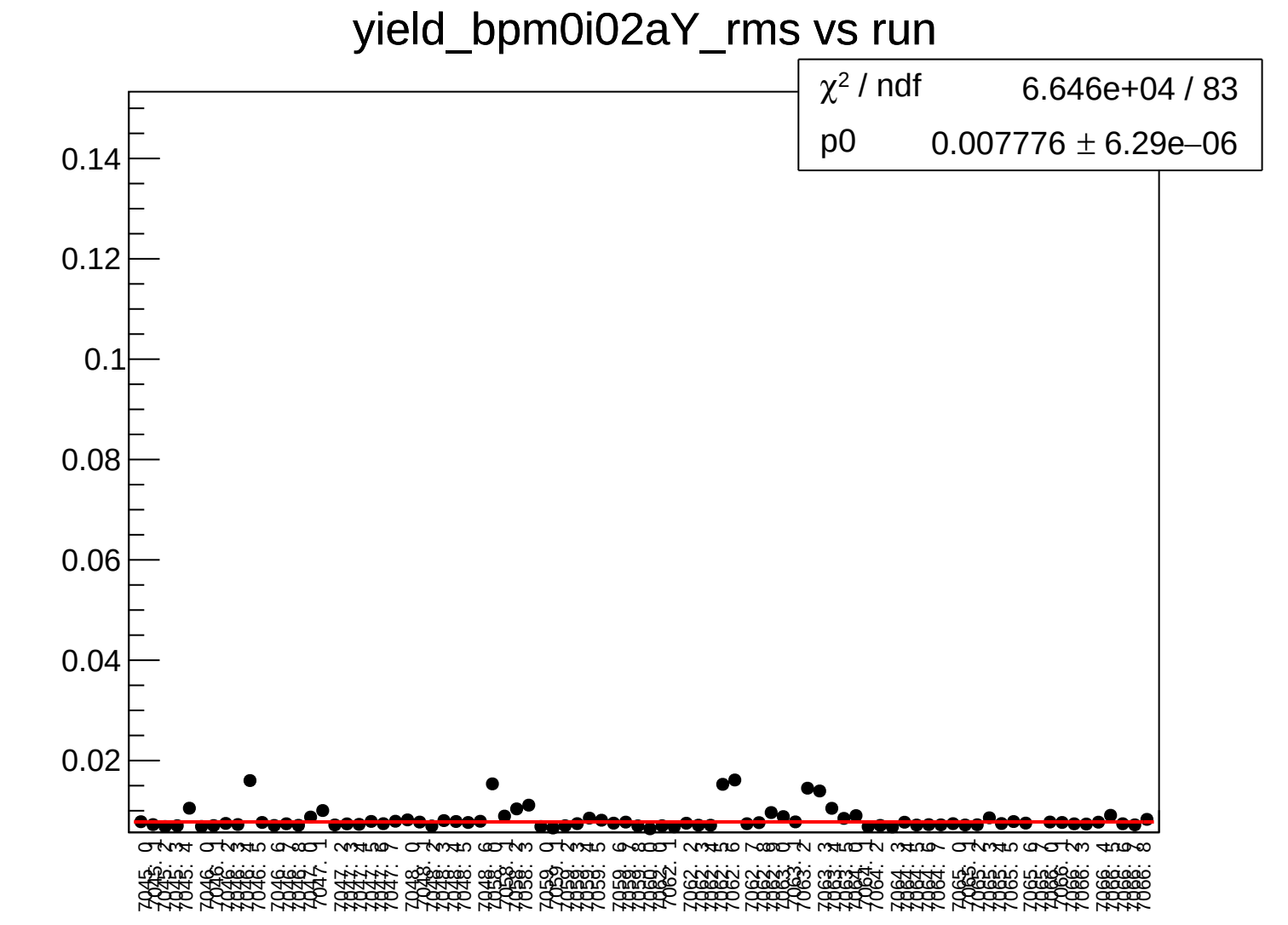

yield_bpm0i02aX_mean vs run
χ² / ndf 3.827e+07 / 83
p0 1.523 ± 1.218e−05
1.65
1.6
1.55
1.5
1.45
1.4
pull
Entries 84
Mean −4030
Std Dev 4063
1000
500
0
−500
−1000
−1500

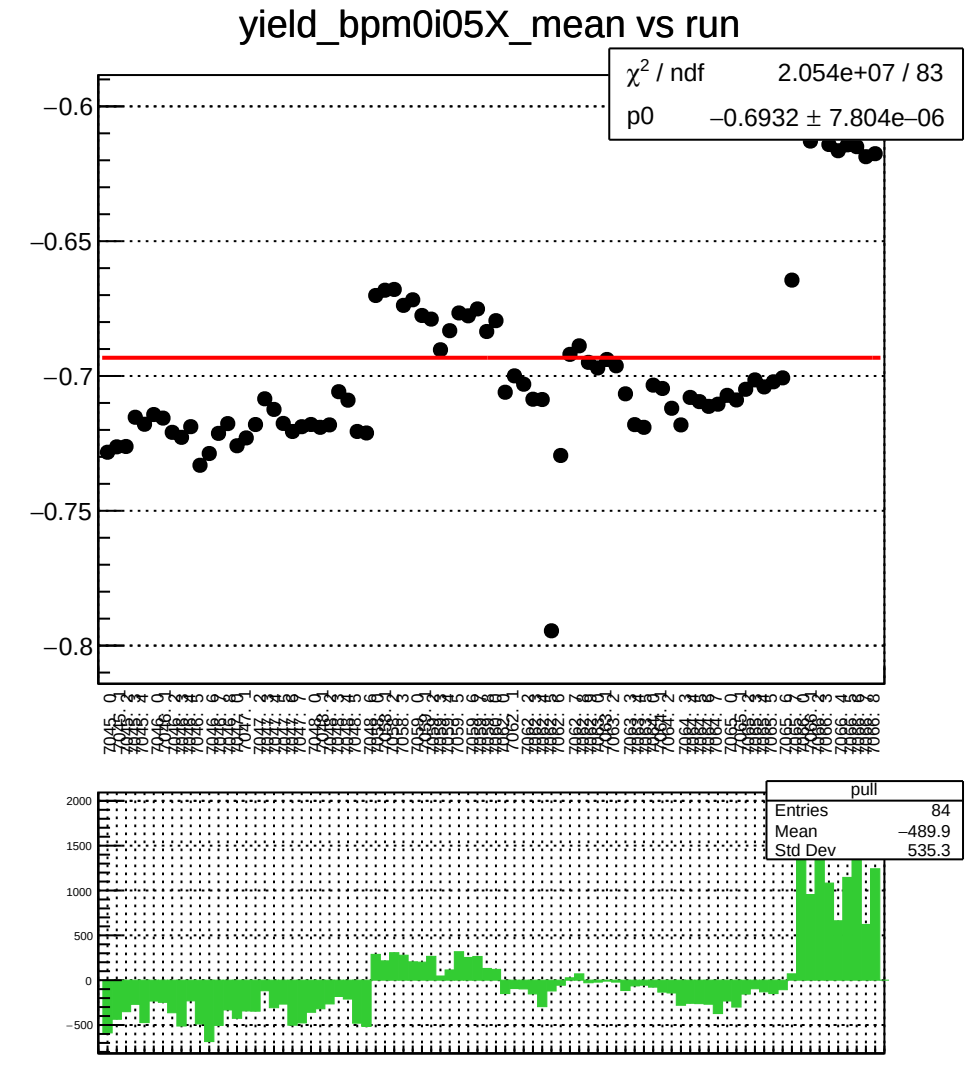

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

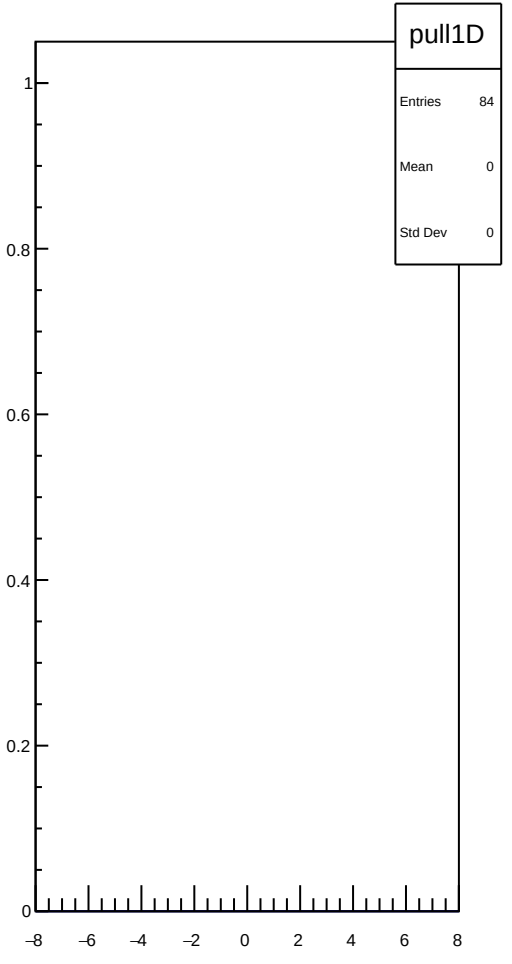

yield_bpm0i02aX_rms vs run
χ² / ndf 5.041e+04 / 83
p0 0.0107 ± 8.614e−06
0.06
0.05
0.04
0.03
0.02
0.01

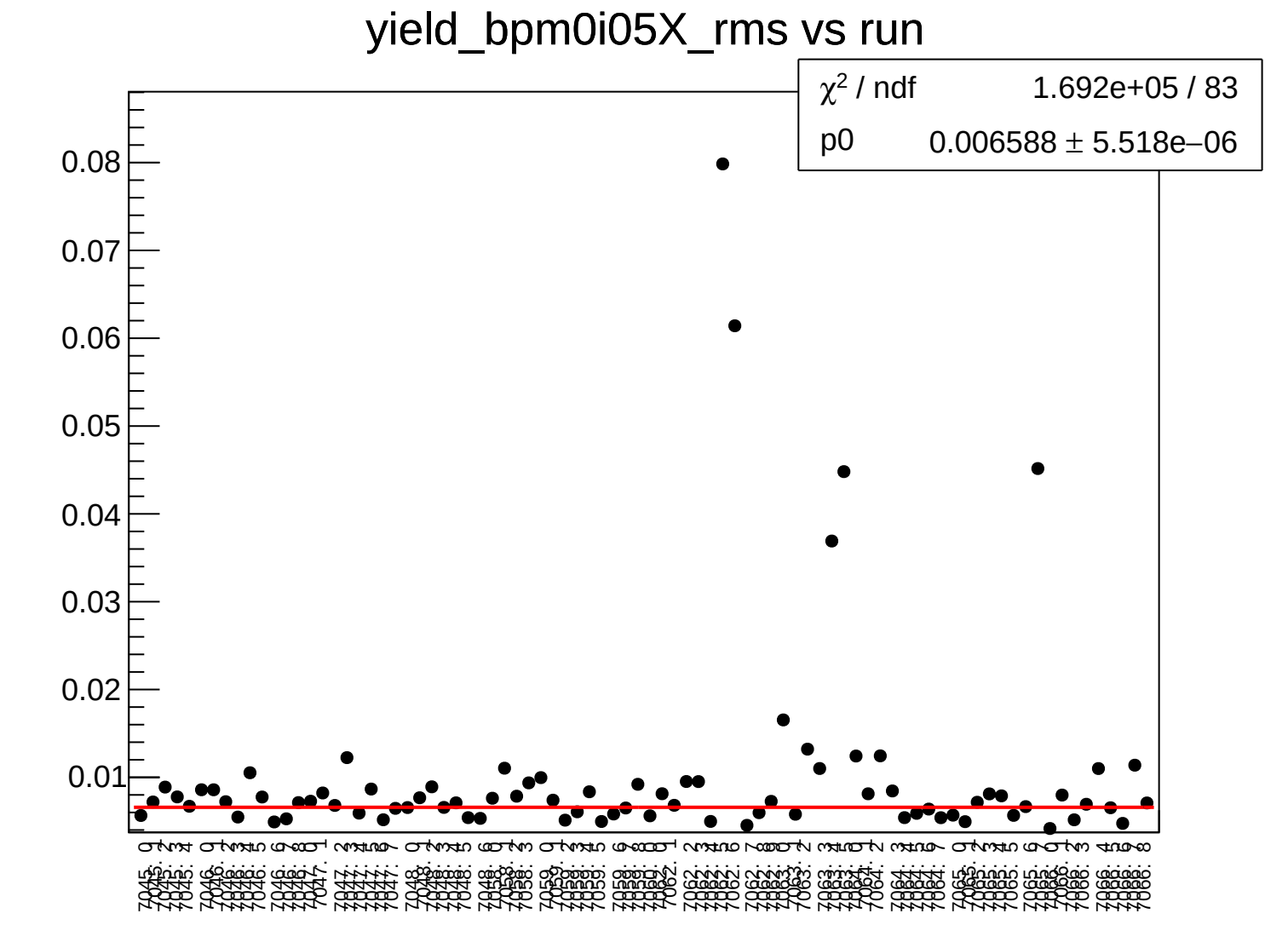

yield_bpm0i02aY_mean vs run
χ² / ndf 7.882e+07 / 83
p0 −0.9804 ± 8.896e−06
−0.9
−0.95
−1
−1.05
−1.1
−1.15
−1.2
pull
Entries 84
Mean −997
Std Dev 1071
1000
500
0
−500
−1000
−1500
−2000
−2500
−3000

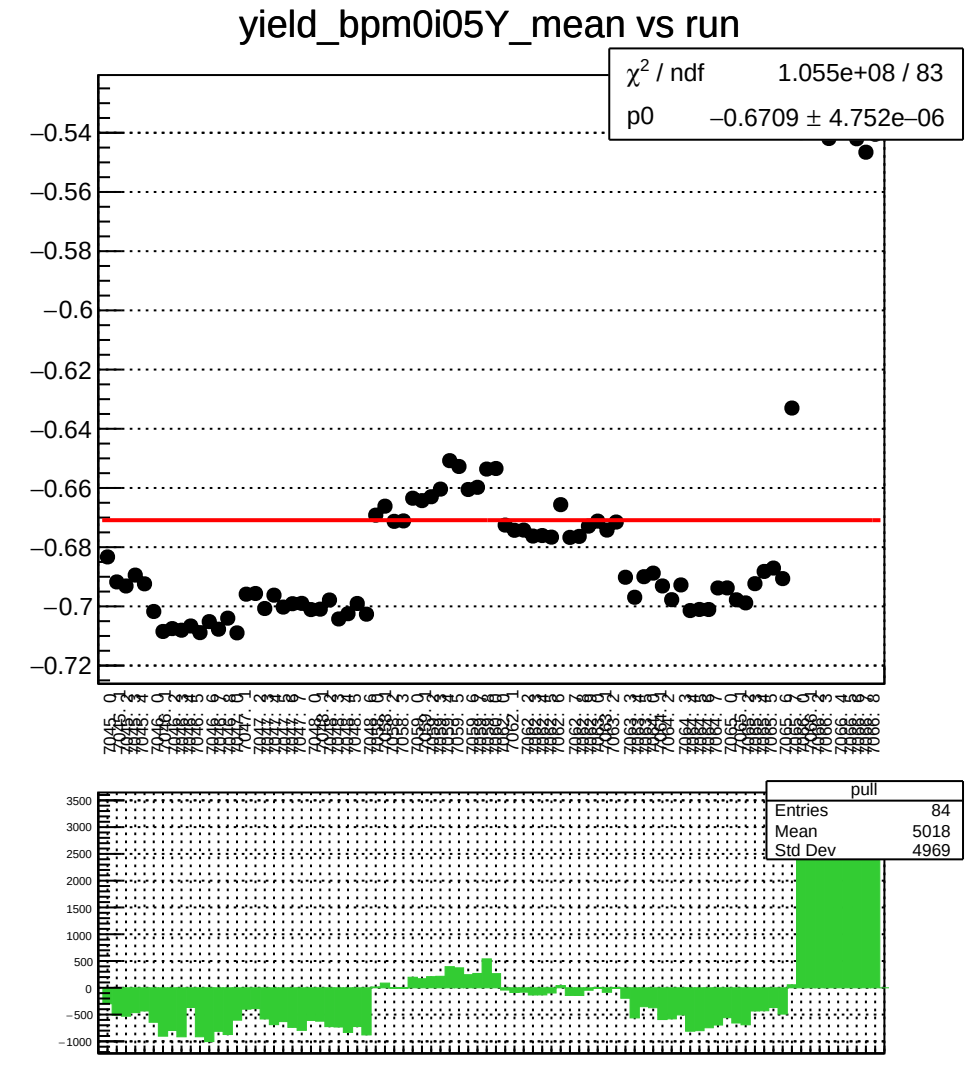

pull1D
Entries 84
Mean −4.343
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

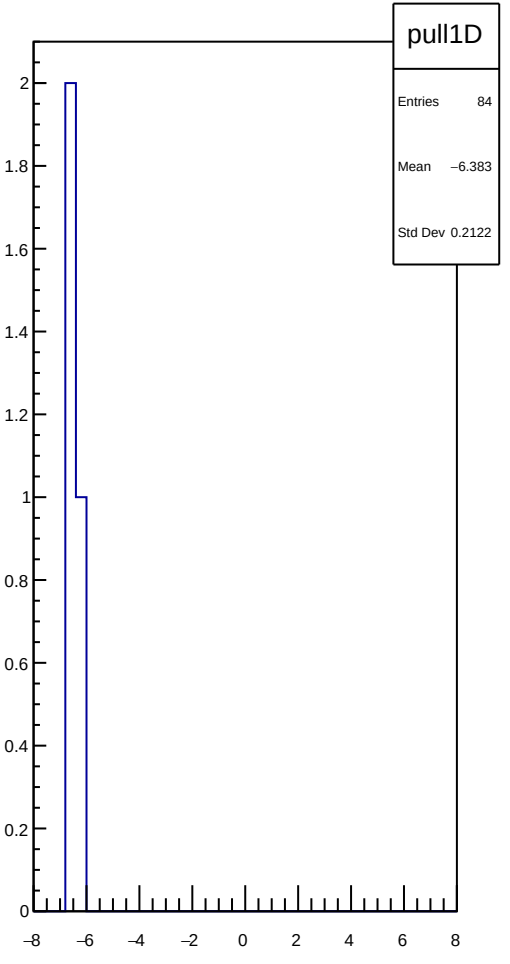

yield_bpm0i02aY_rms vs run
χ² / ndf 6.646e+04 / 83
p0 0.007776 ± 6.29e–06
0.14
0.12
0.1
0.08
0.06
0.04
0.02

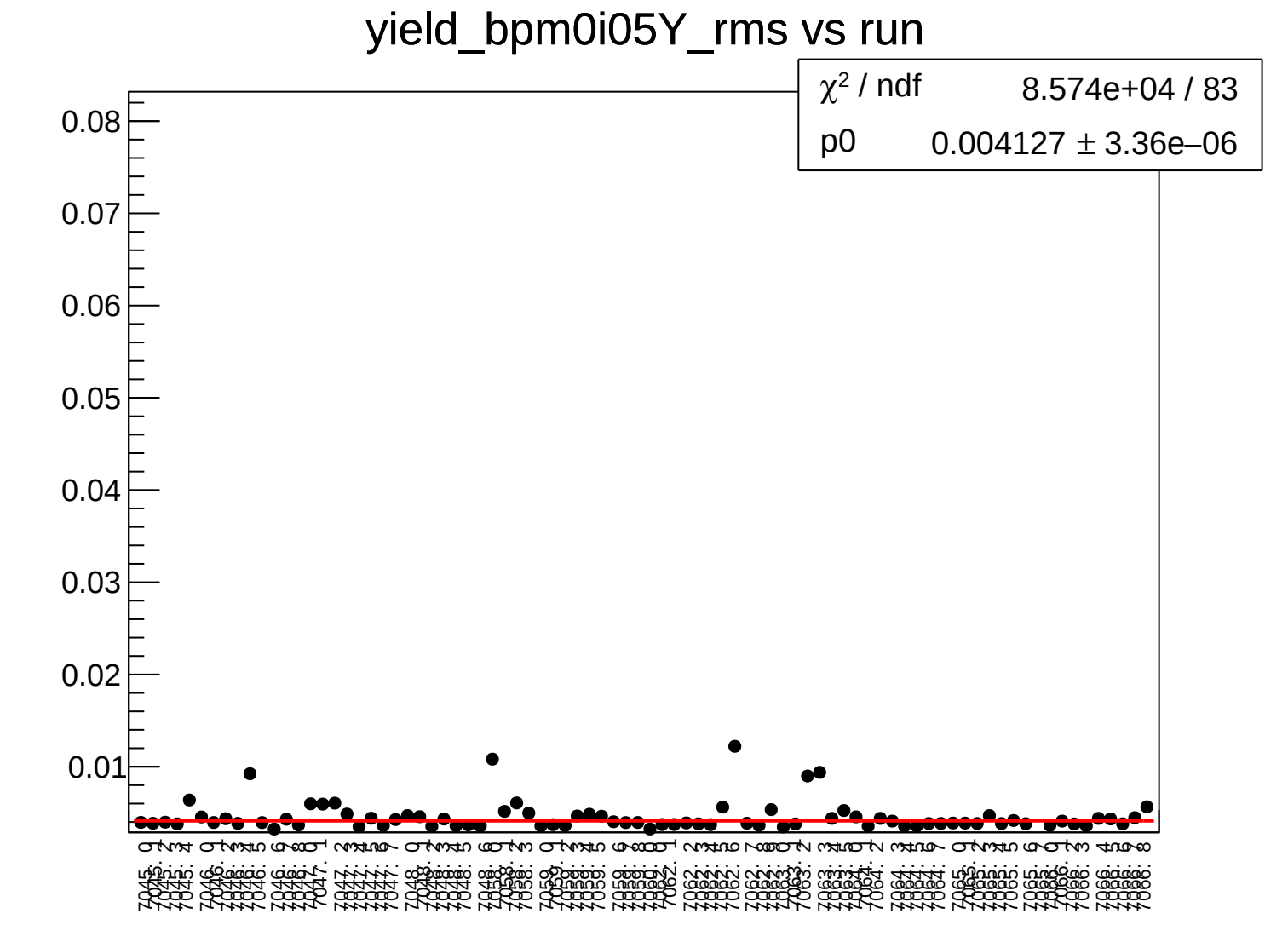

yield_bpm0i05X_mean vs run
χ² / ndf 2.054e+07 / 83
p0 −0.6932 ± 7.804e−06
−0.6
−0.65
−0.7
−0.75
−0.8
pull
Entries 84
Mean −489.9
Std Dev 535.3
2000
1500
1000
500
0
−500

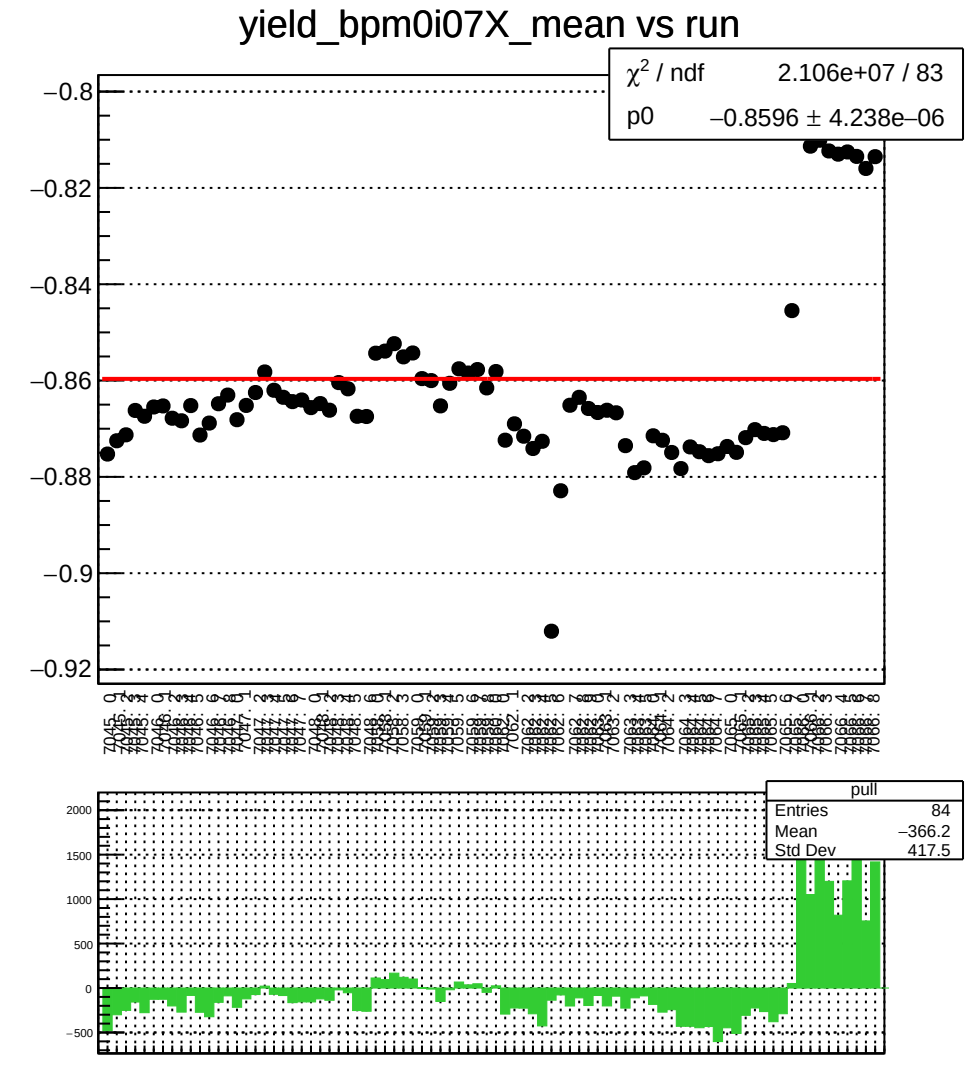

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

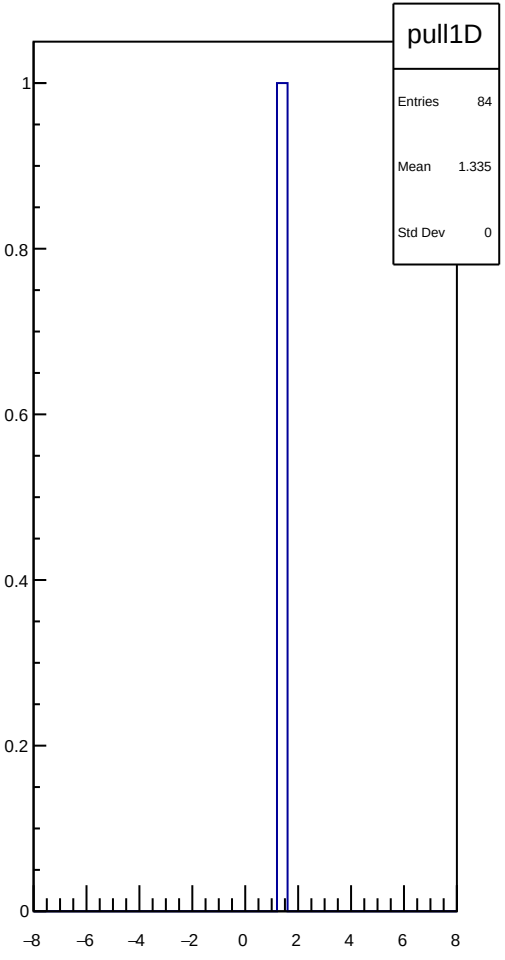

yield_bpm0i05X_rms vs run
χ² / ndf 1.692e+05 / 83
p0 0.006588 ± 5.518e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

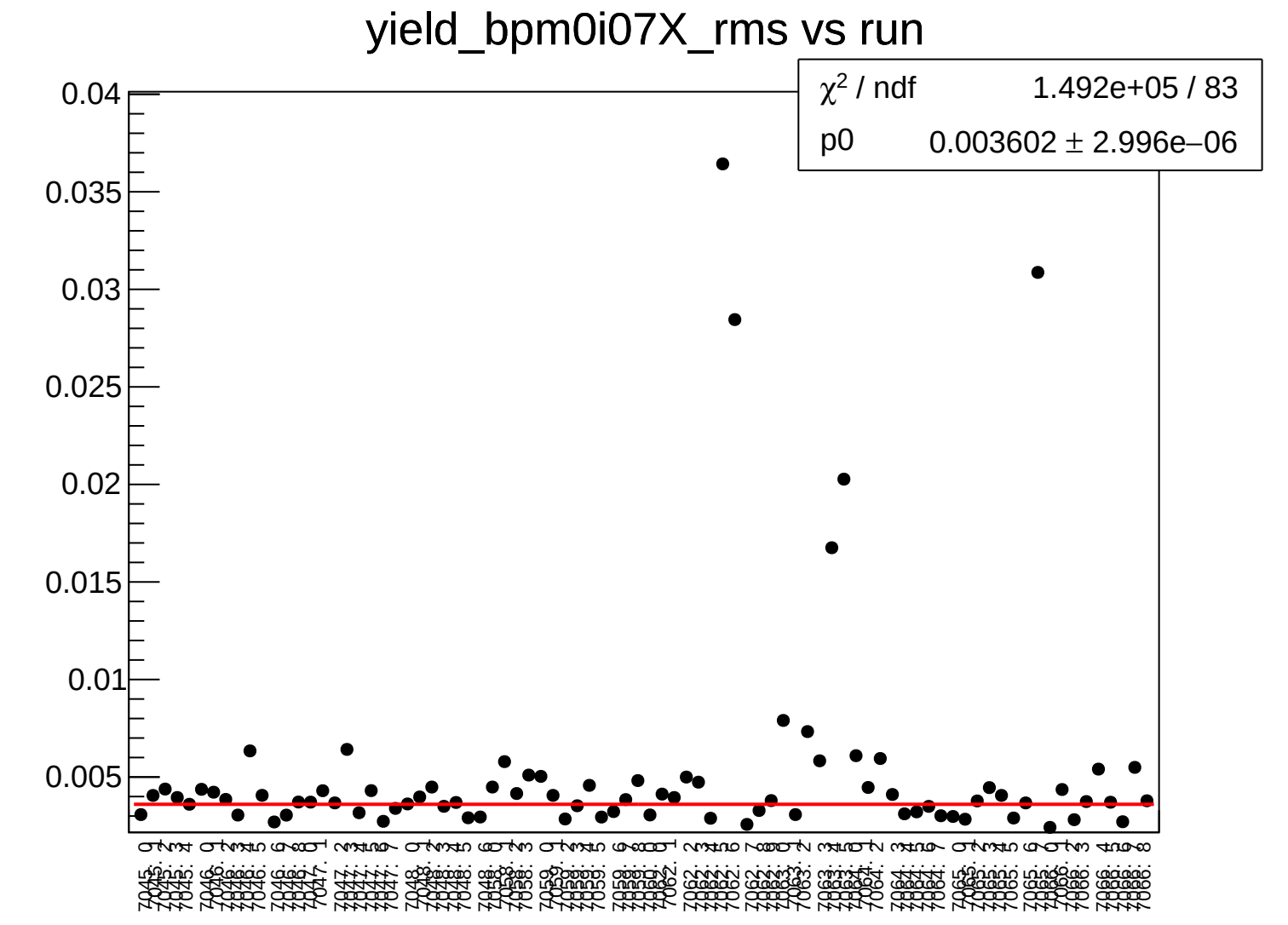

yield_bpm0i05Y_mean vs run
χ² / ndf 1.055e+08 / 83
p0 −0.6709 ± 4.752e−06
−0.54
−0.56
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
pull
Entries 84
Mean 5018
Std Dev 4969
3500
3000
2500
2000
1500
1000
500
0
−500
−1000

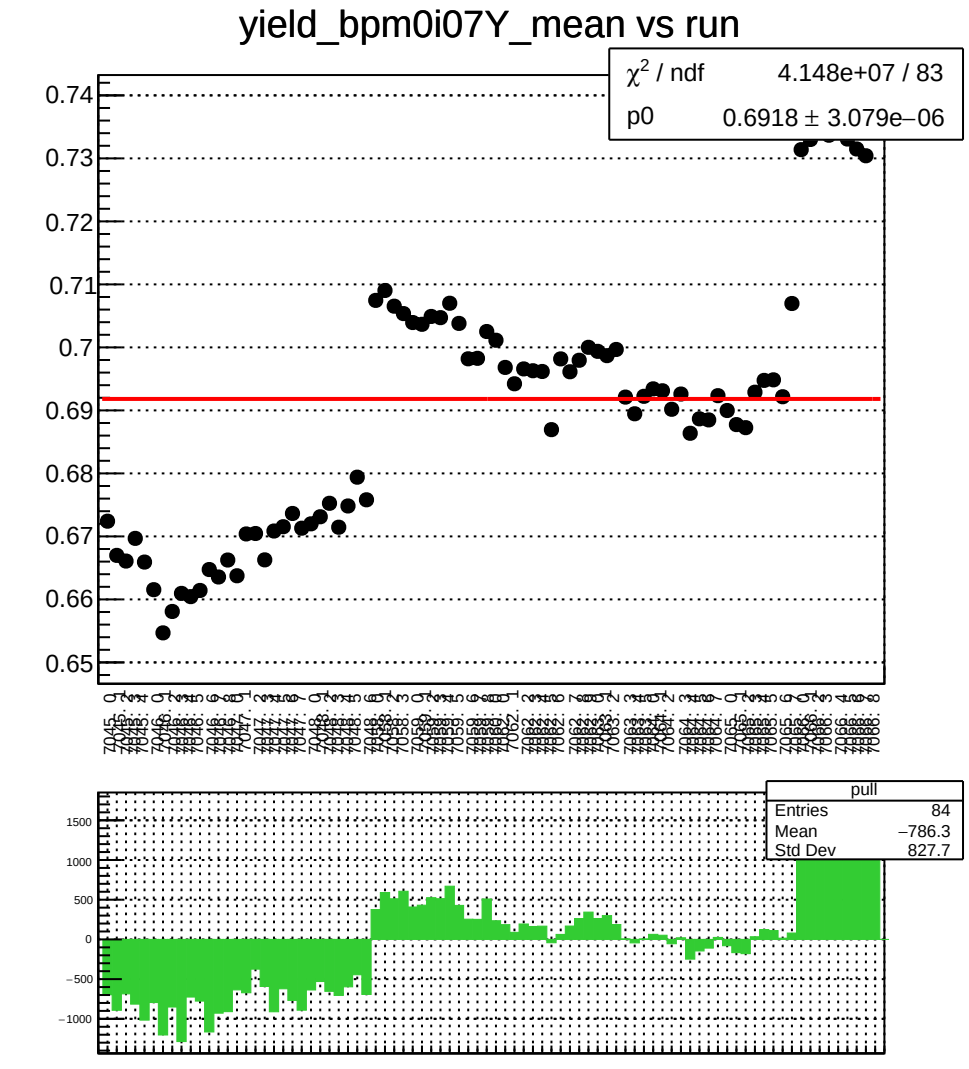

pull1D
Entries 84
Mean −6.383
Std Dev 0.2122
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

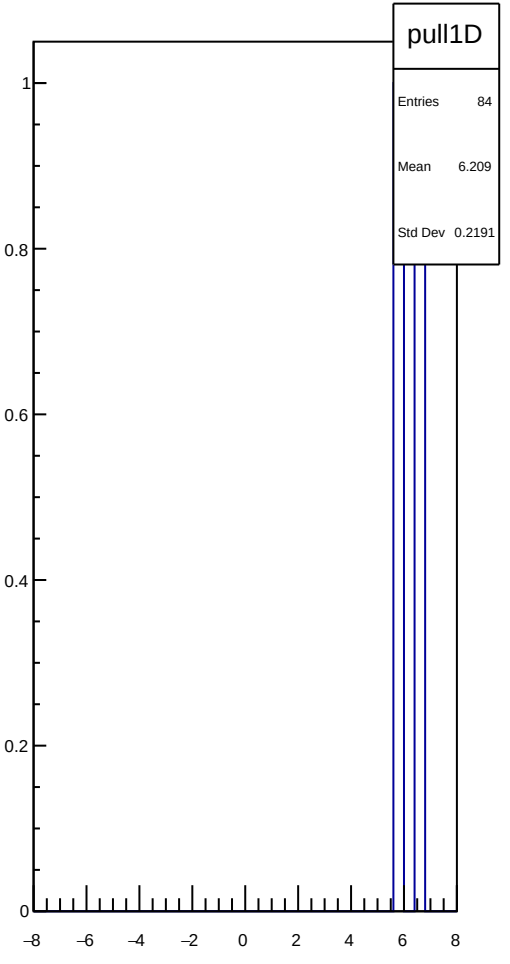

yield_bpm0i05Y_rms vs run
χ² / ndf 8.574e+04 / 83
p0 0.004127 ± 3.36e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

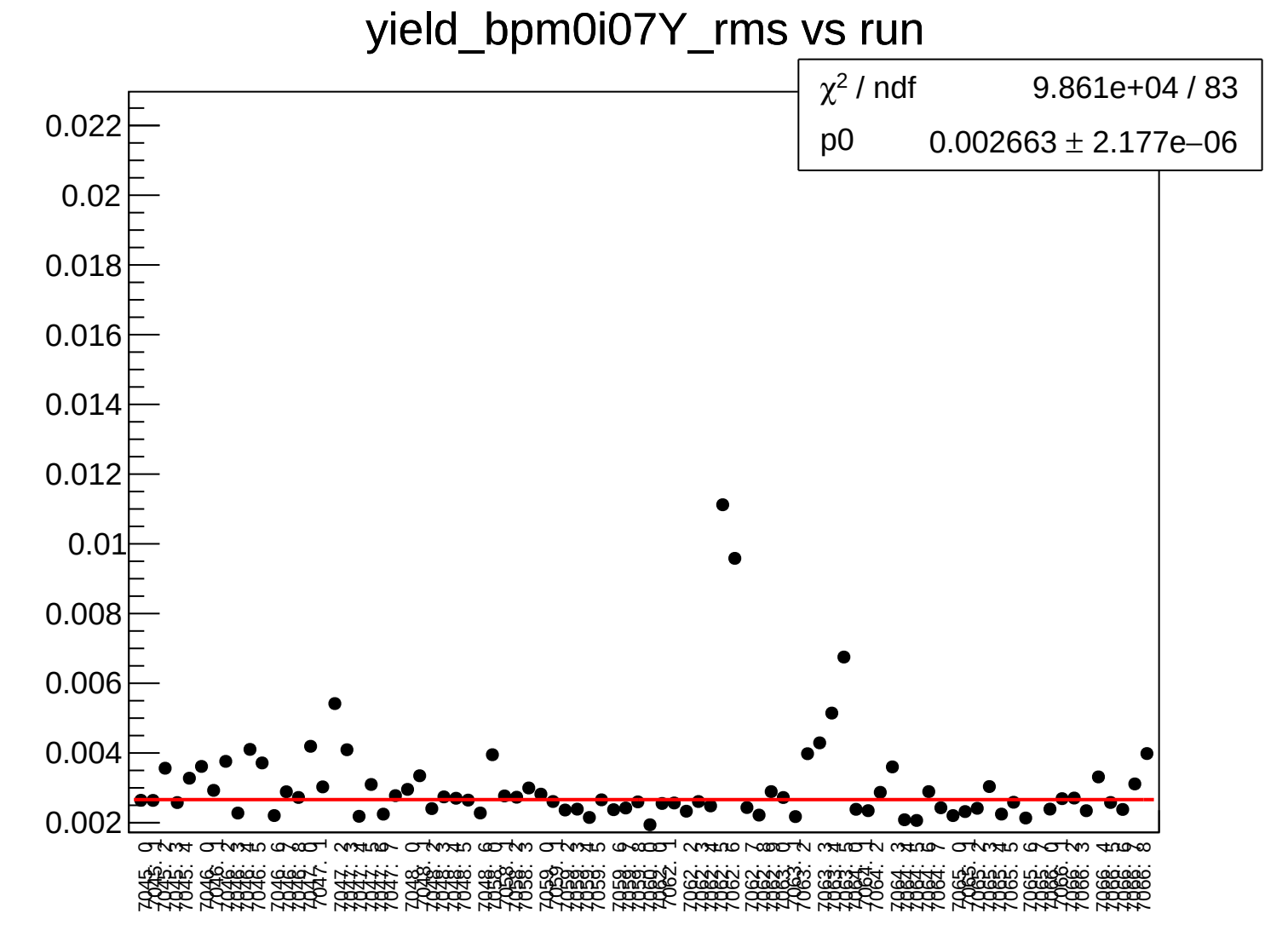

yield_bpm0i07X_mean vs run
χ² / ndf 2.106e+07 / 83
p0 −0.8596 ± 4.238e−06
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
pull
Entries 84
Mean −366.2
Std Dev 417.5
2000
1500
1000
500
0
−500

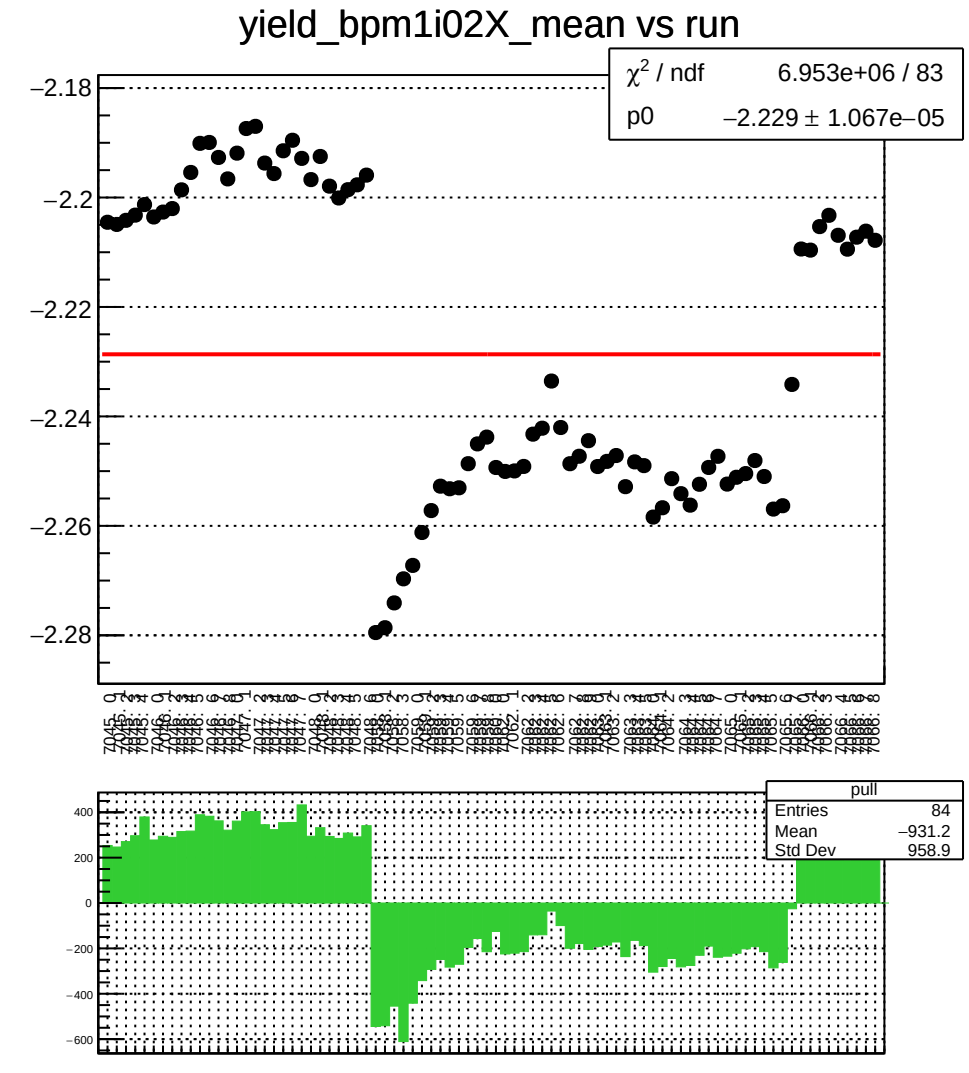

pull1D
Entries 84
Mean 1.335
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

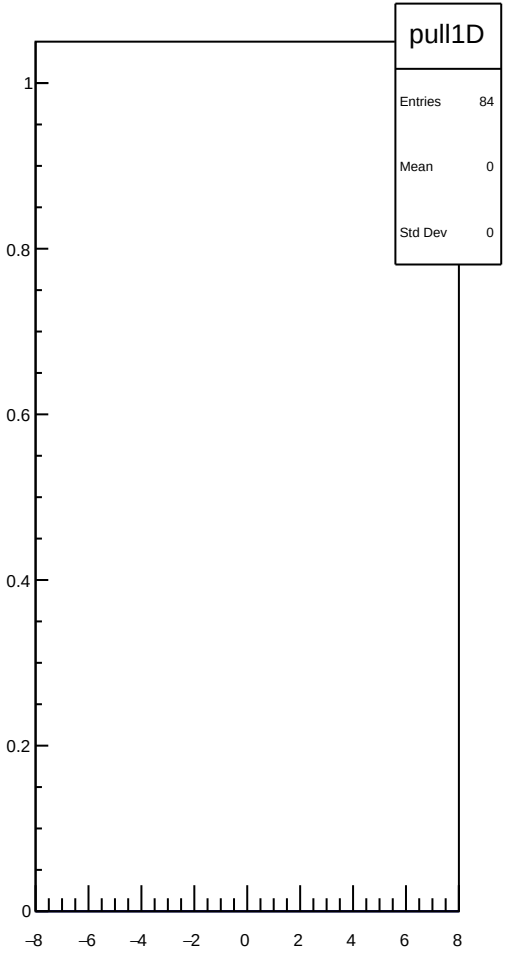

yield_bpm0i07X_rms vs run
χ^2 / ndf 1.492e+05 / 83
p0 0.003602 ± 2.996e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

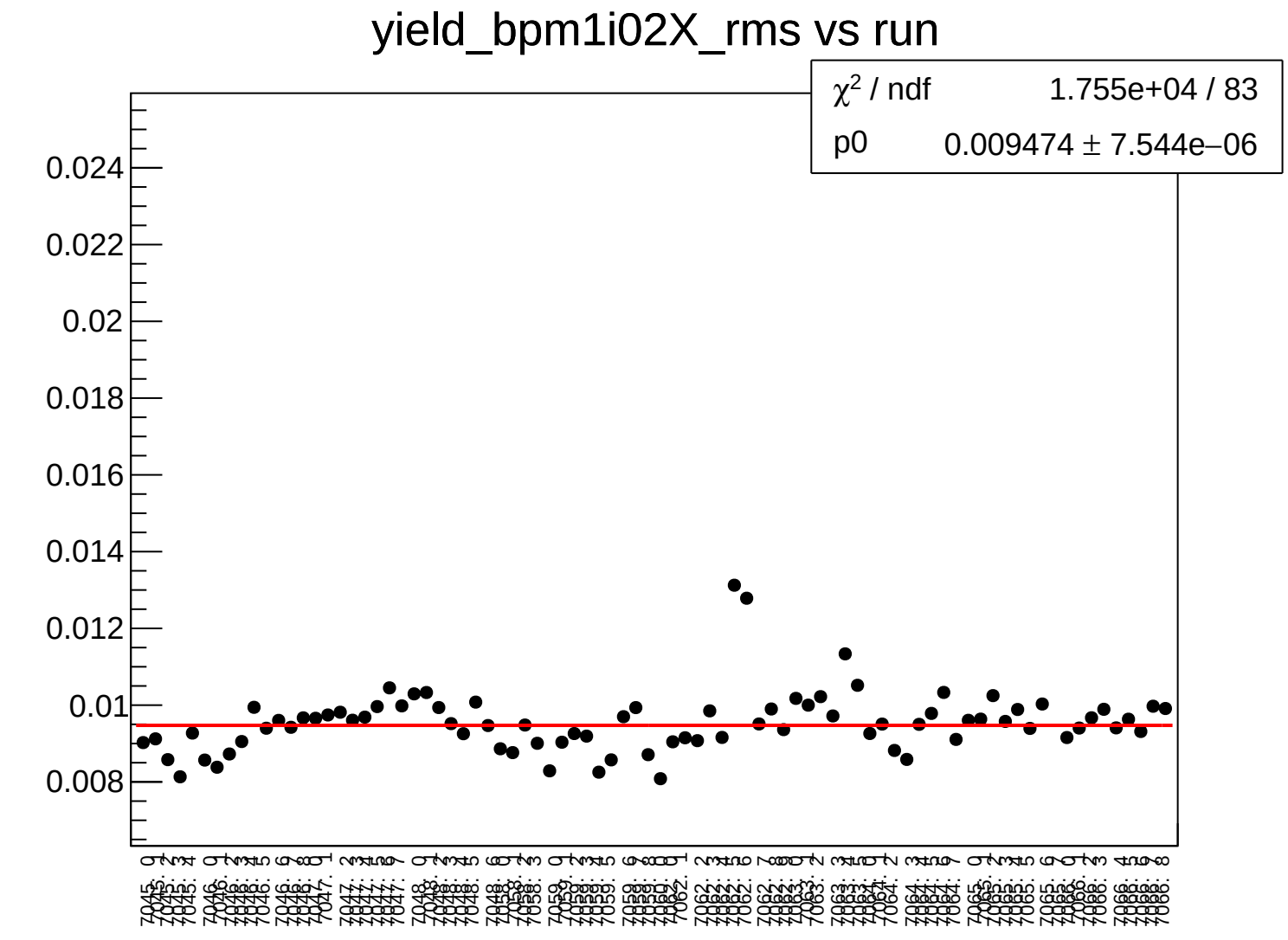

yield_bpm0i07Y_mean vs run
χ² / ndf 4.148e+07 / 83
p0 0.6918 ± 3.079e−06
0.74
0.73
0.72
0.71
0.7
0.69
0.68
0.67
0.66
0.65
pull
Entries 84
Mean −786.3
Std Dev 827.7
1500
1000
500
0
−500
−1000

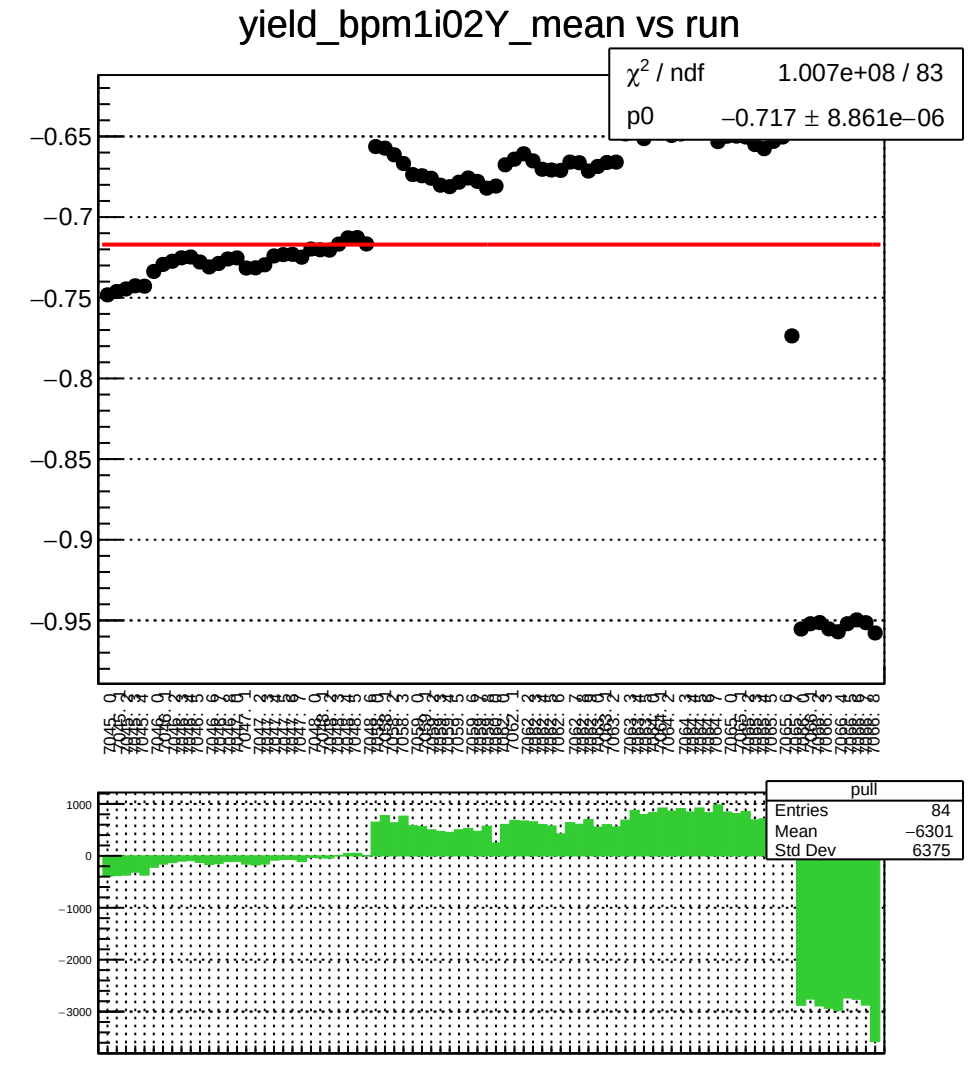

pull1D
Entries 84
Mean 6.209
Std Dev 0.2191
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

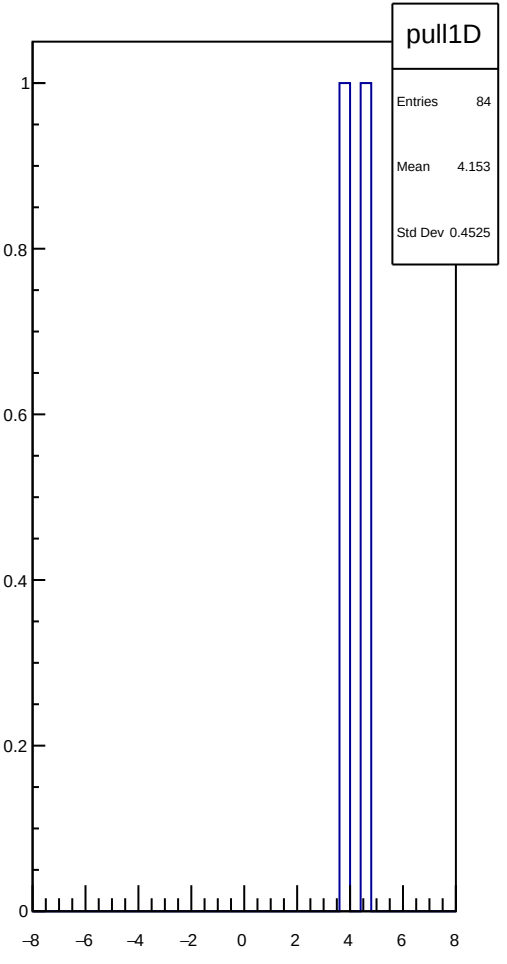

yield_bpm0i07Y_rms vs run
χ^2 / ndf 9.861e+04 / 83
p0 0.002663 ± 2.177e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

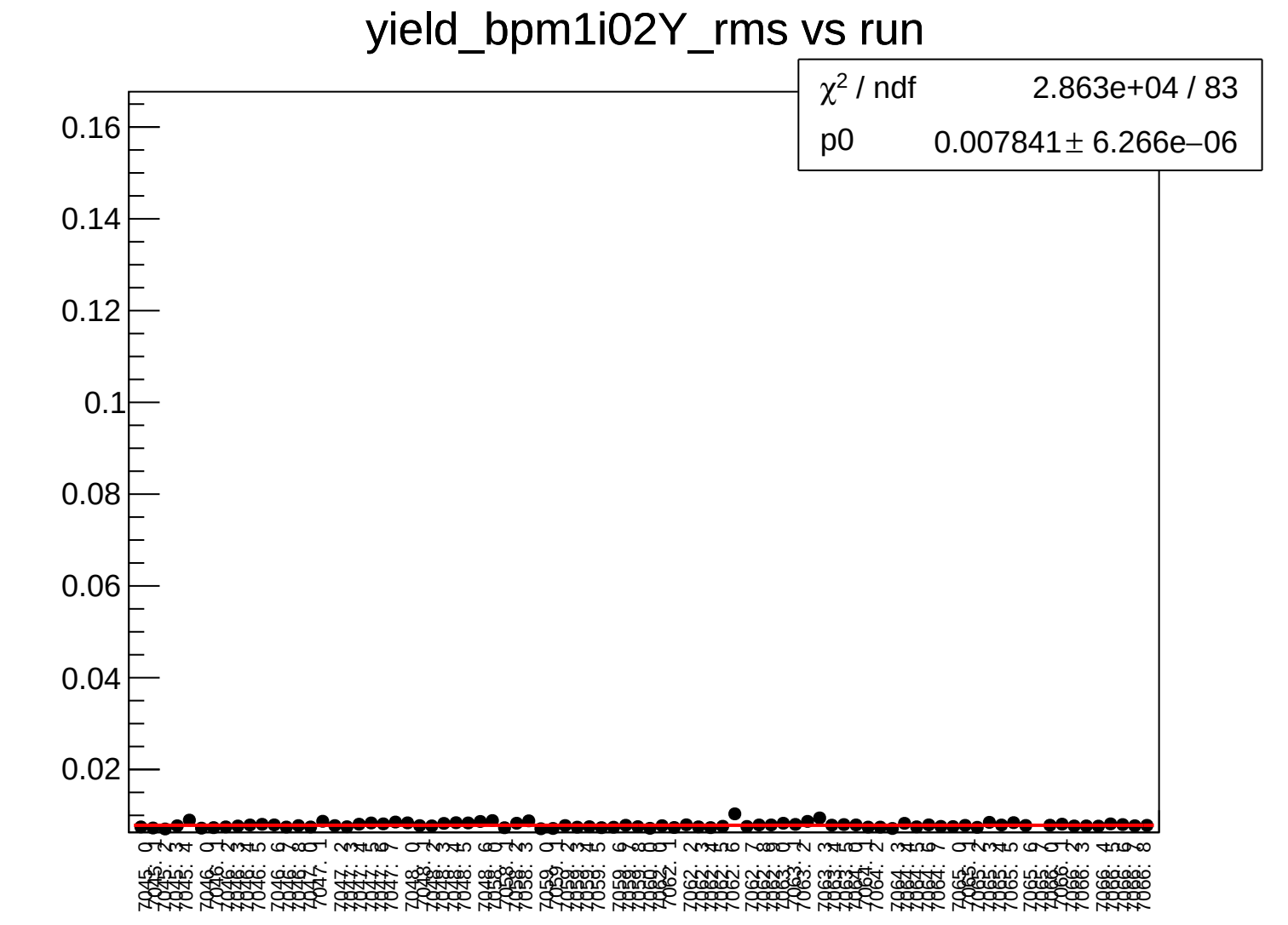

yield_bpm1i02X_mean vs run
χ² / ndf 6.953e+06 / 83
p0 −2.229 ± 1.067e−05
−2.18
−2.2
−2.22
−2.24
−2.26
−2.28
pull
Entries 84
Mean −931.2
Std Dev 958.9
400
200
0
−200
−400
−600

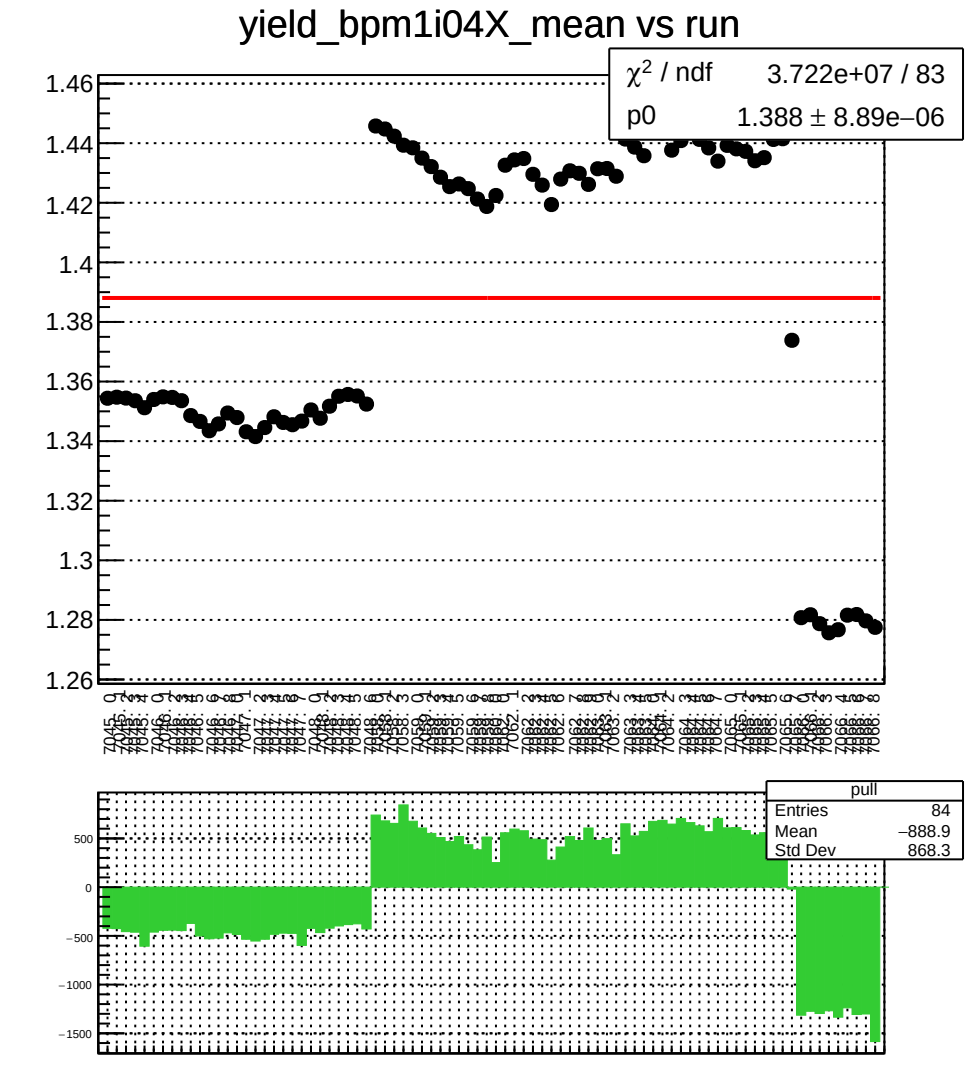

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

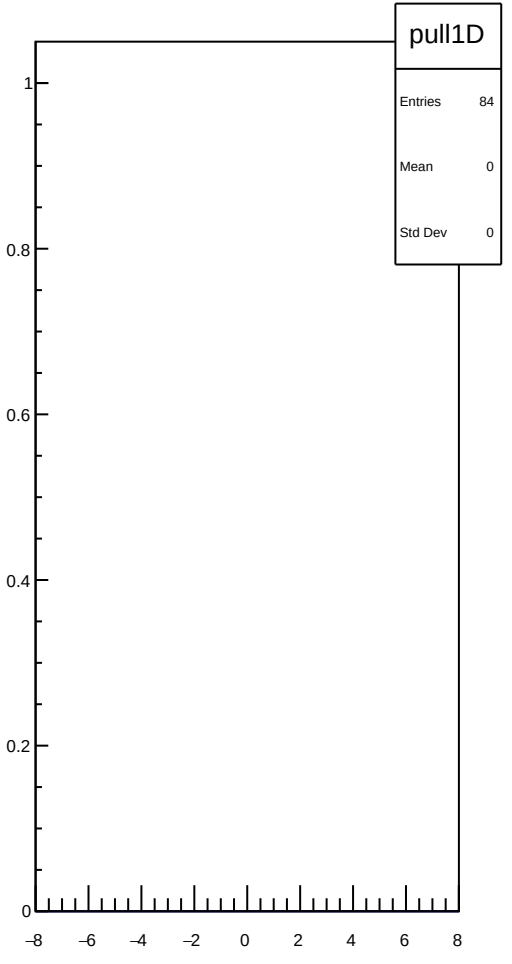

yield_bpm1i02X_rms vs run
χ² / ndf 1.755e+04 / 83
p0 0.009474 ± 7.544e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

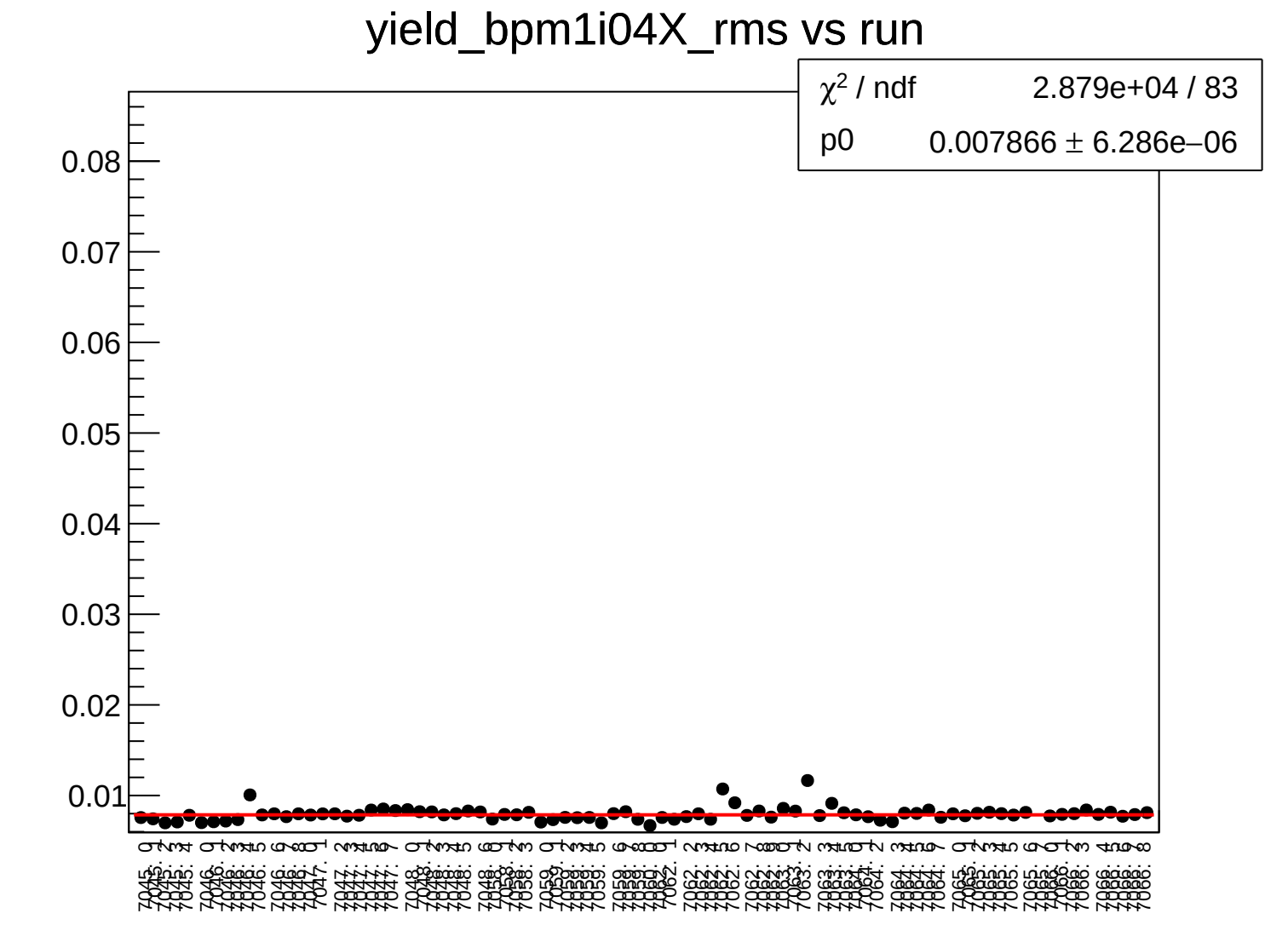

yield_bpm1i02Y_mean vs run
χ² / ndf 1.007e+08 / 83
p0 −0.717 ± 8.861e−06
−0.65
−0.7
−0.75
−0.8
−0.85
−0.9
−0.95
pull
Entries 84
Mean −6301
Std Dev 6375
1000
0
−1000
−2000
−3000

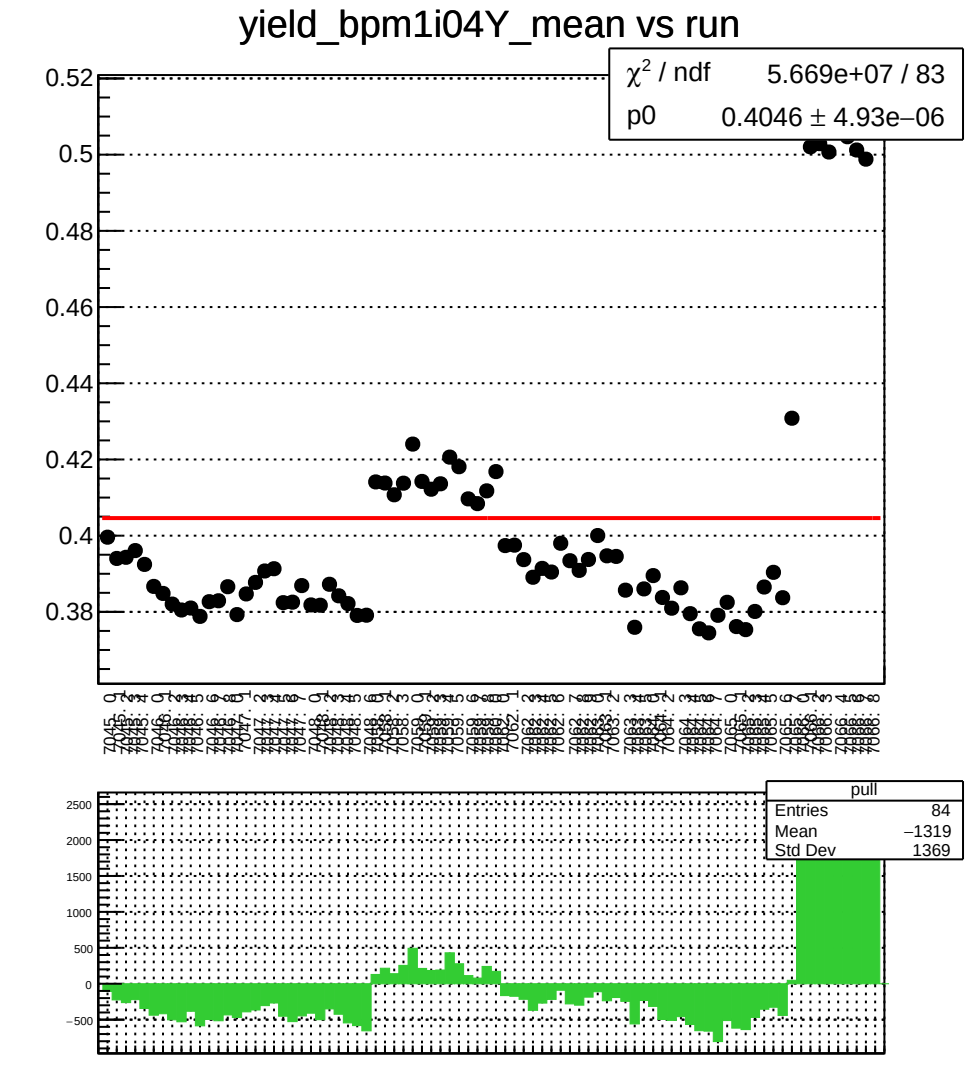

pull1D
Entries 84
Mean 4.153
Std Dev 0.4525
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

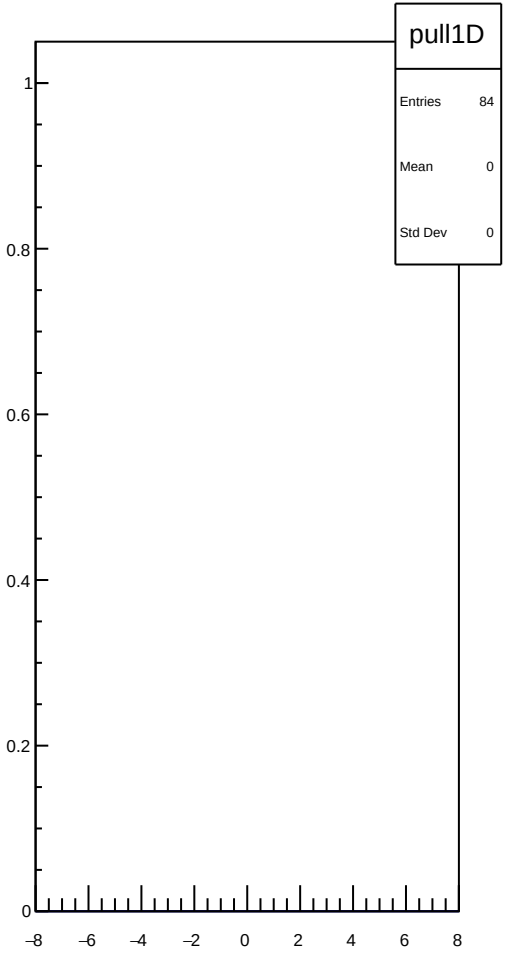

yield_bpm1i02Y_rms vs run
χ² / ndf 2.863e+04 / 83
p0 0.007841 ± 6.266e−06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

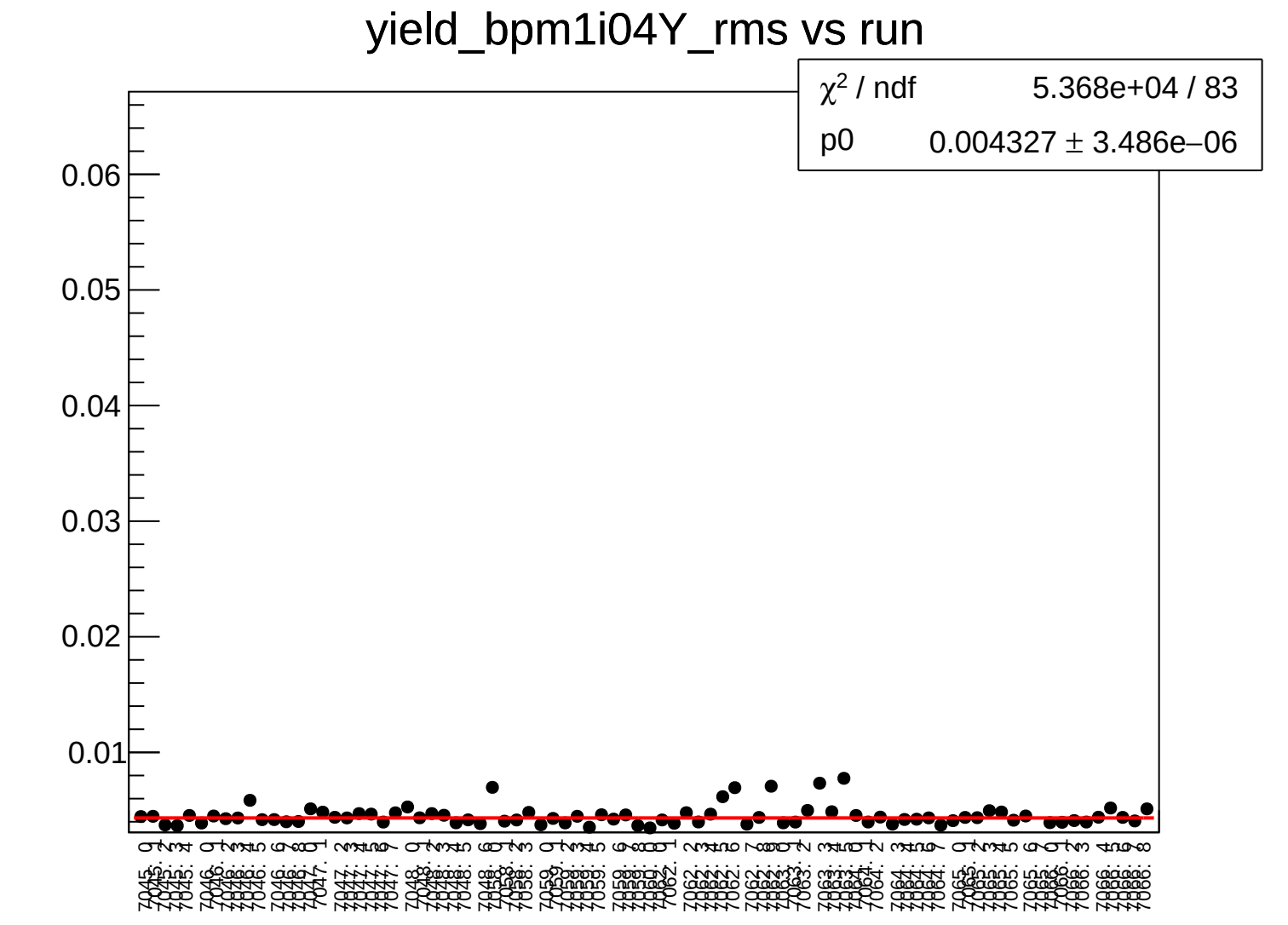

yield_bpm1i04X_mean vs run
χ² / ndf 3.722e+07 / 83
p0 1.388 ± 8.89e−06
1.46
1.44
1.42
1.4
1.38
1.36
1.34
1.32
1.3
1.28
1.26
pull
Entries 84
Mean −888.9
Std Dev 868.3
500
0
−500
−1000
−1500

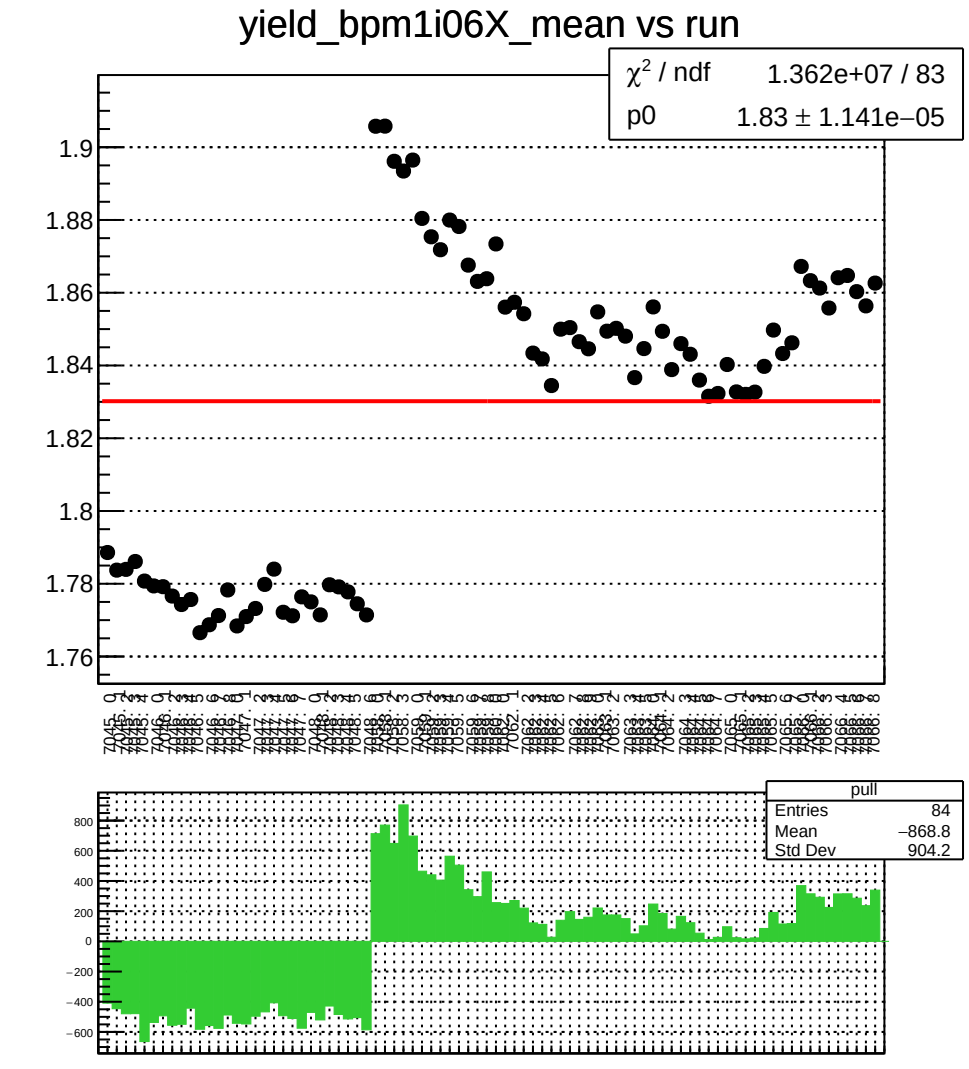

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

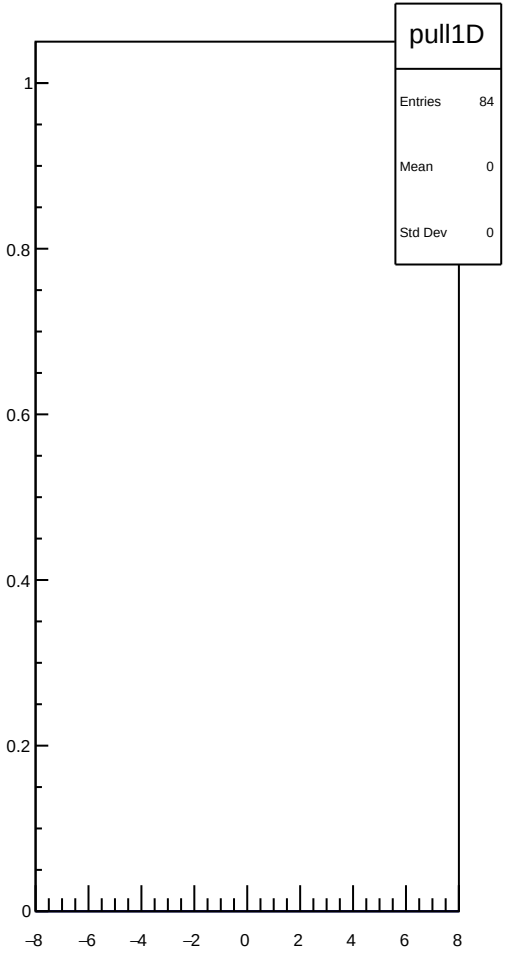

yield_bpm1i04X_rms vs run
χ² / ndf 2.879e+04 / 83
p0 0.007866 ± 6.286e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

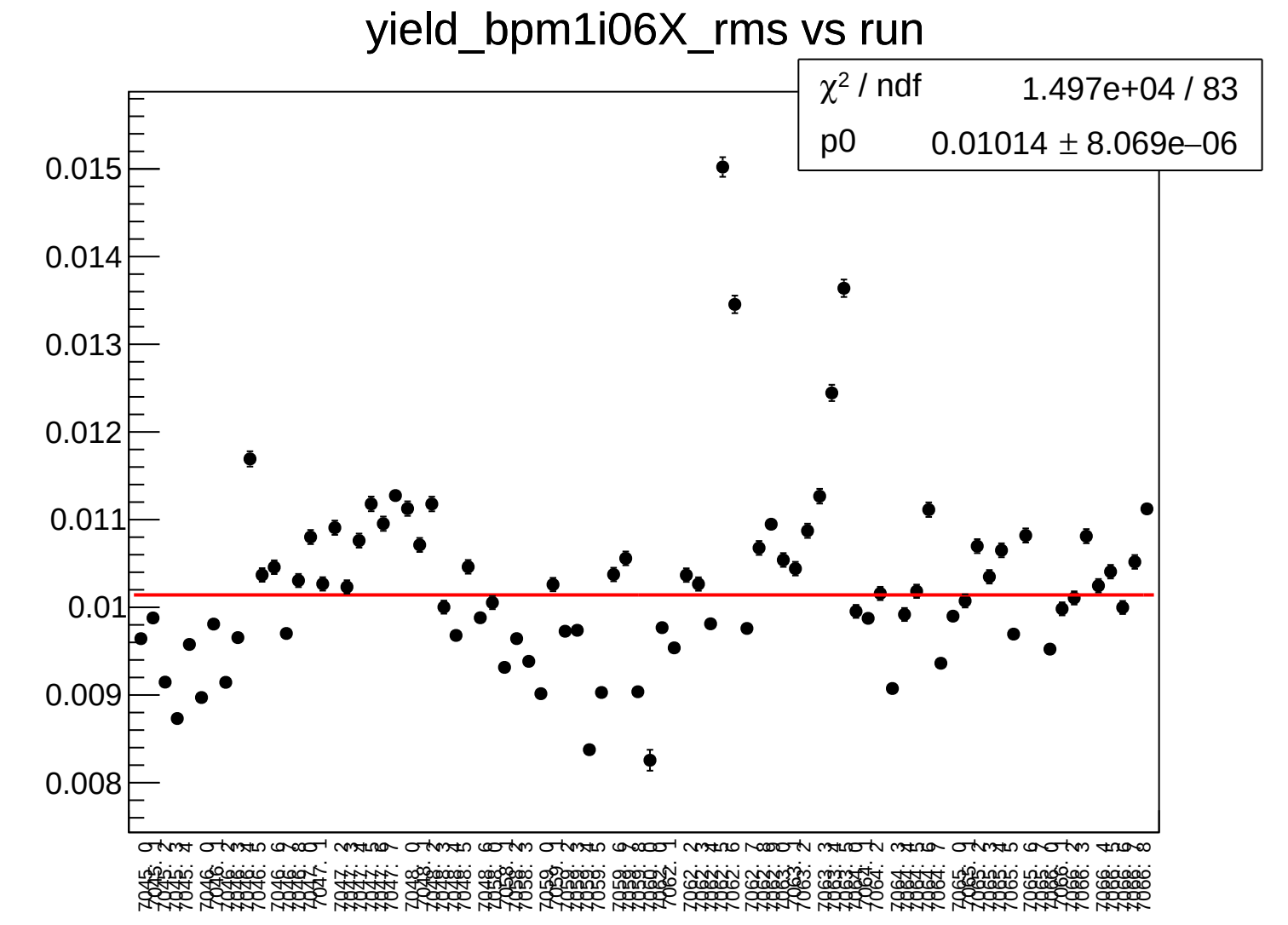

yield_bpm1i04Y_mean vs run
χ² / ndf 5.669e+07 / 83
p0 0.4046 ± 4.93e−06
0.52
0.5
0.48
0.46
0.44
0.42
0.4
0.38
pull
Entries 84
Mean −1319
Std Dev 1369
2500
2000
1500
1000
500
0
−500

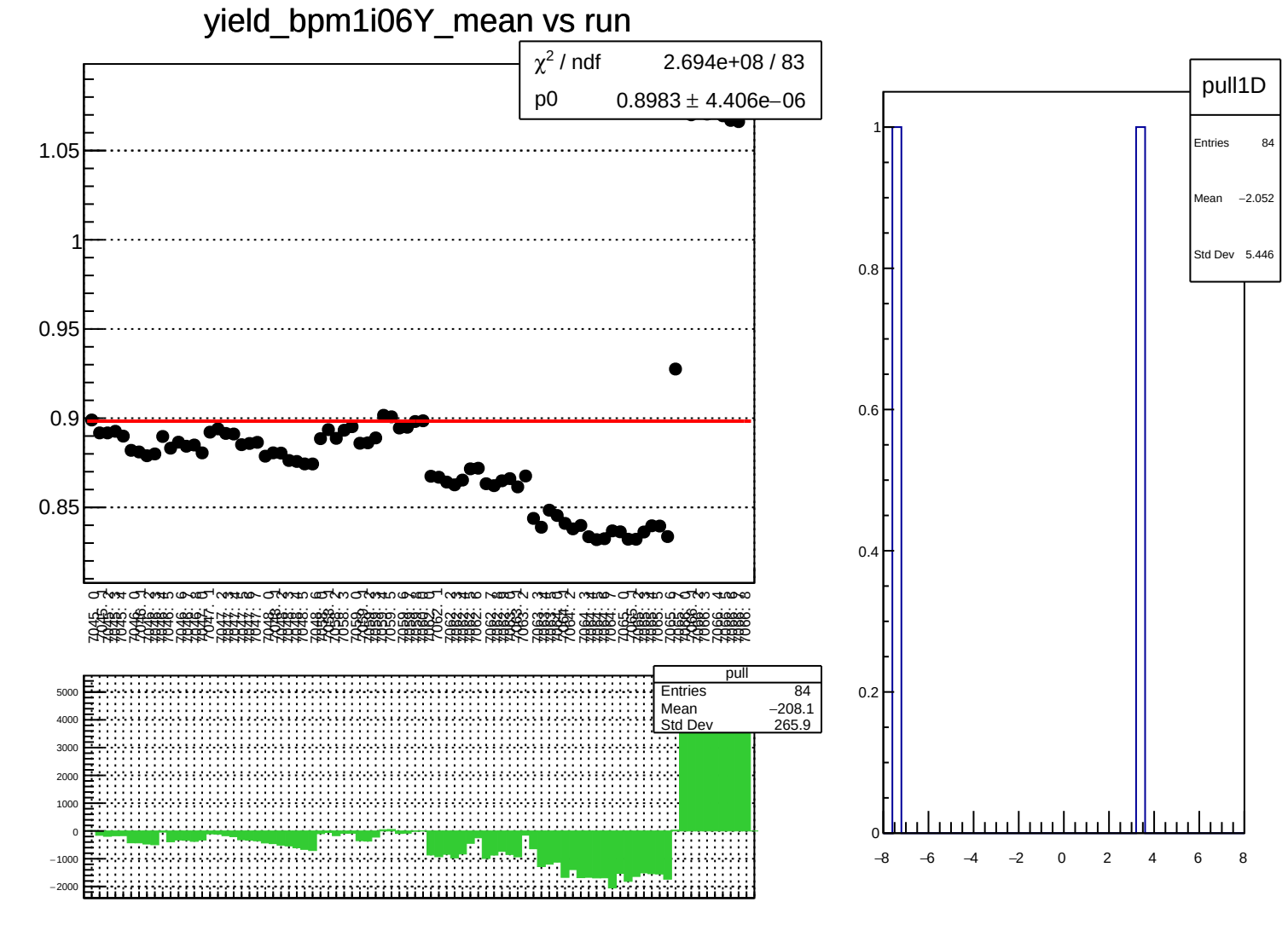

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

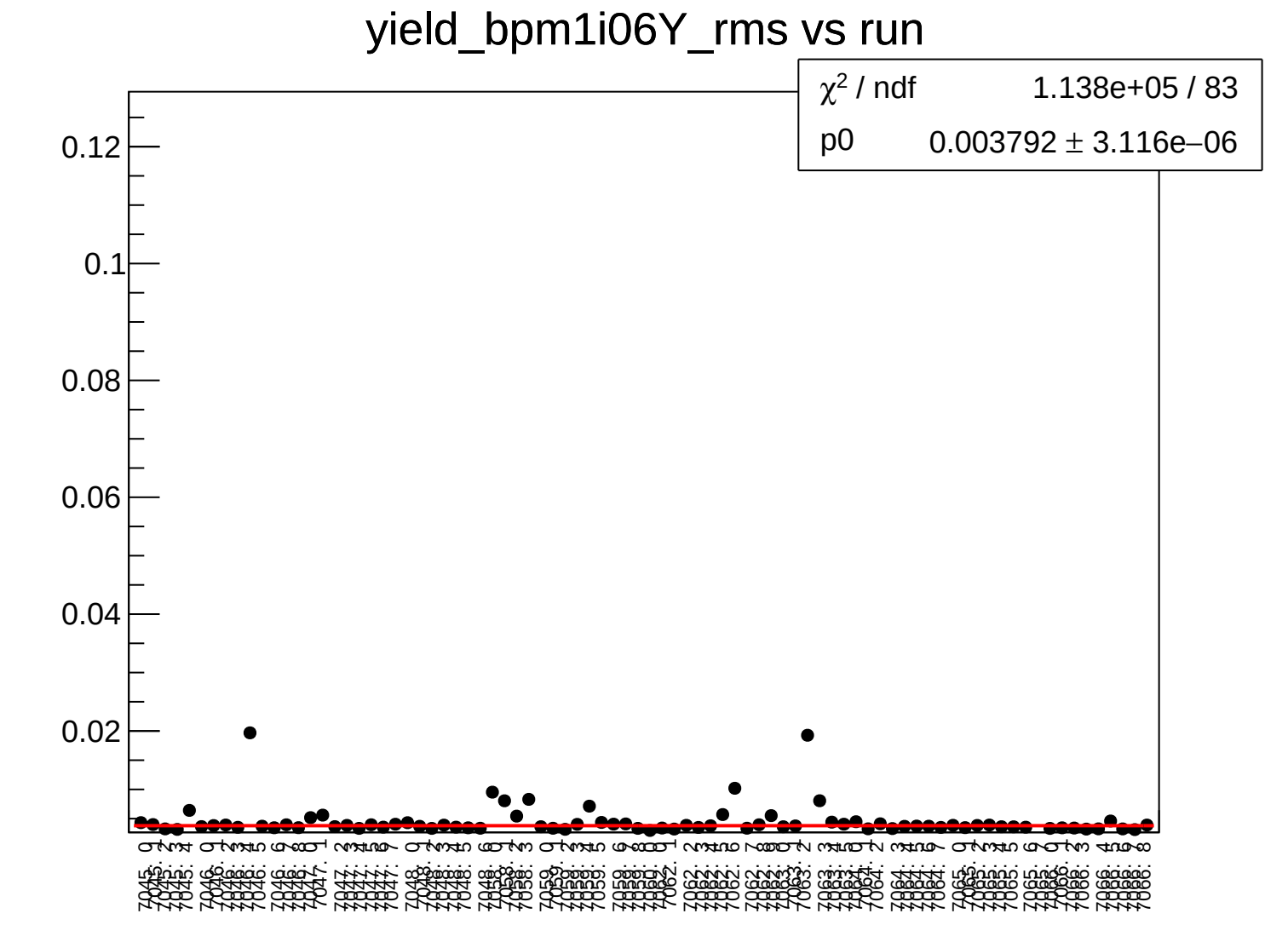

yield_bpm1i04Y_rms vs run
χ² / ndf 5.368e+04 / 83
p0 0.004327 ± 3.486e−06
0.06
0.05
0.04
0.03
0.02
0.01

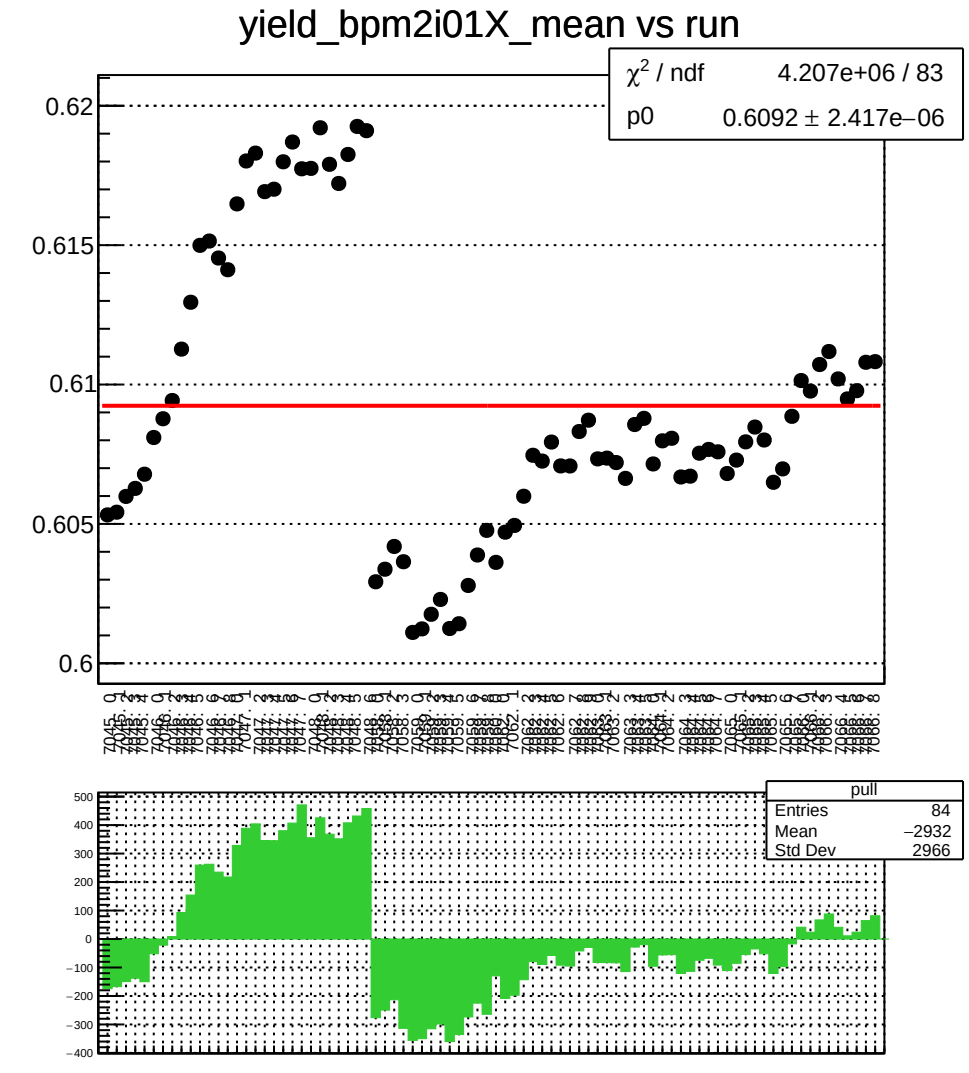

yield_bpm1i06X_mean vs run
χ² / ndf 1.362e+07 / 83
p0 1.83 ± 1.141e−05
1.9
1.88
1.86
1.84
1.82
1.8
1.78
1.76
pull
Entries 84
Mean −868.8
Std Dev 904.2
800
600
400
200
0
−200
−400
−600

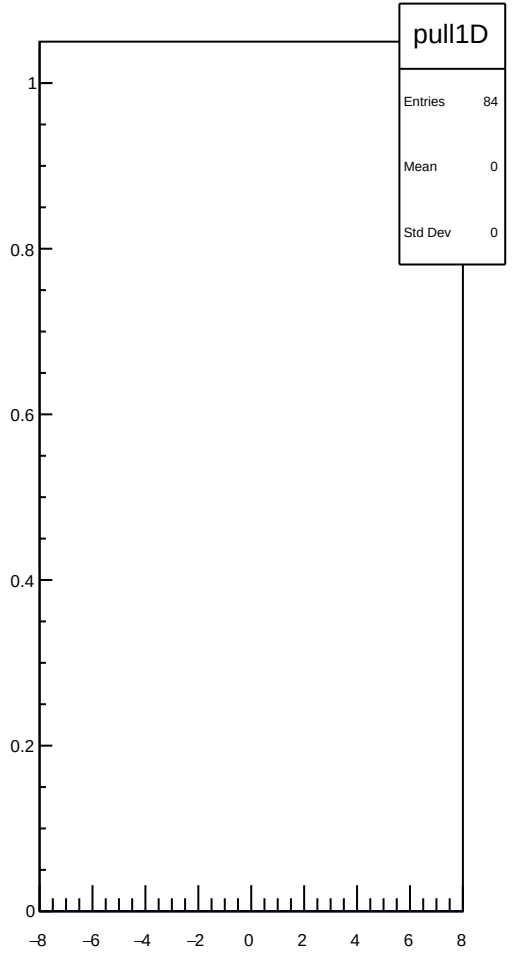

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

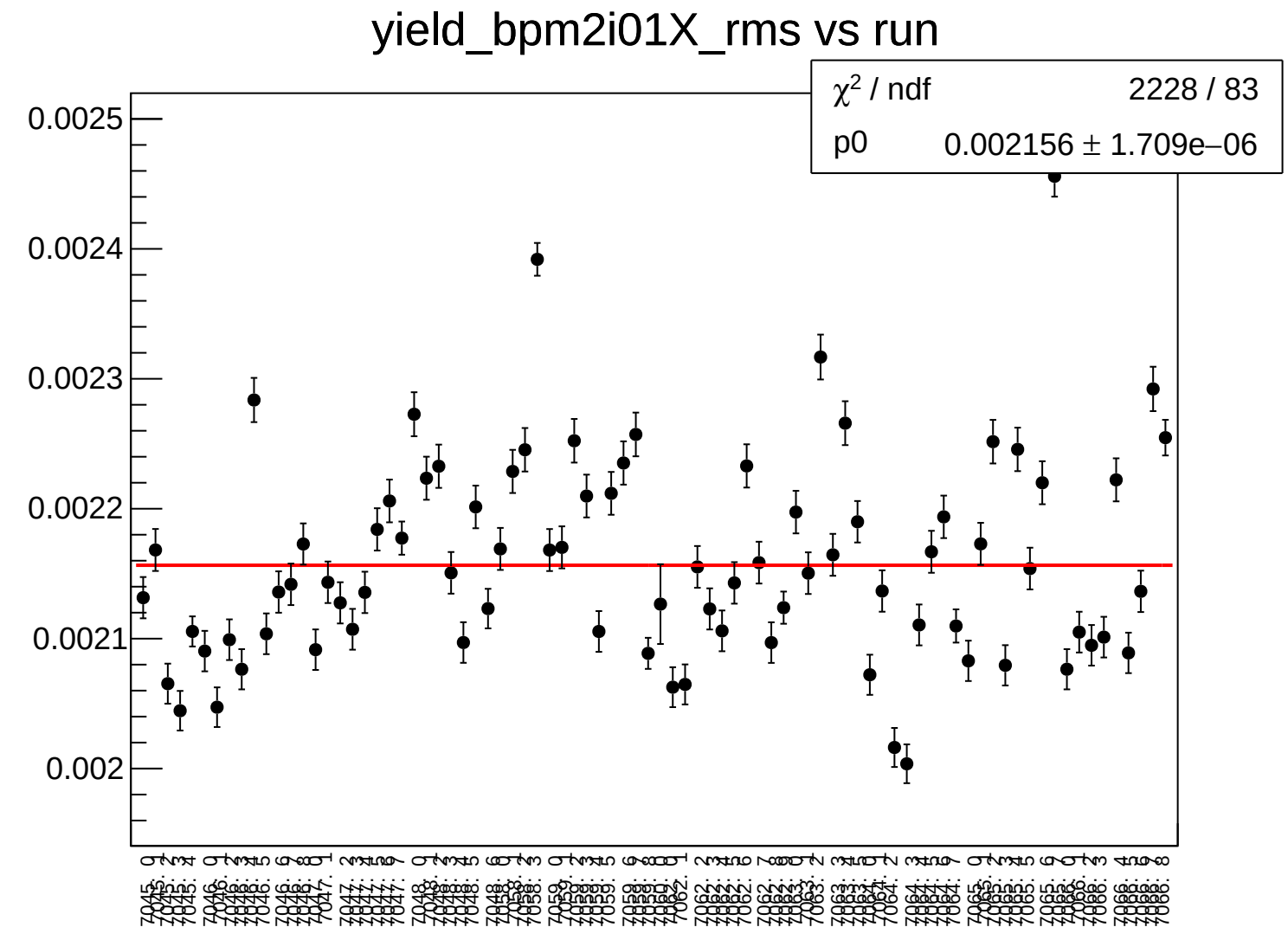

yield_bpm1i06X_rms vs run
χ² / ndf 1.497e+04 / 83
p0 0.01014 ± 8.069e–06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

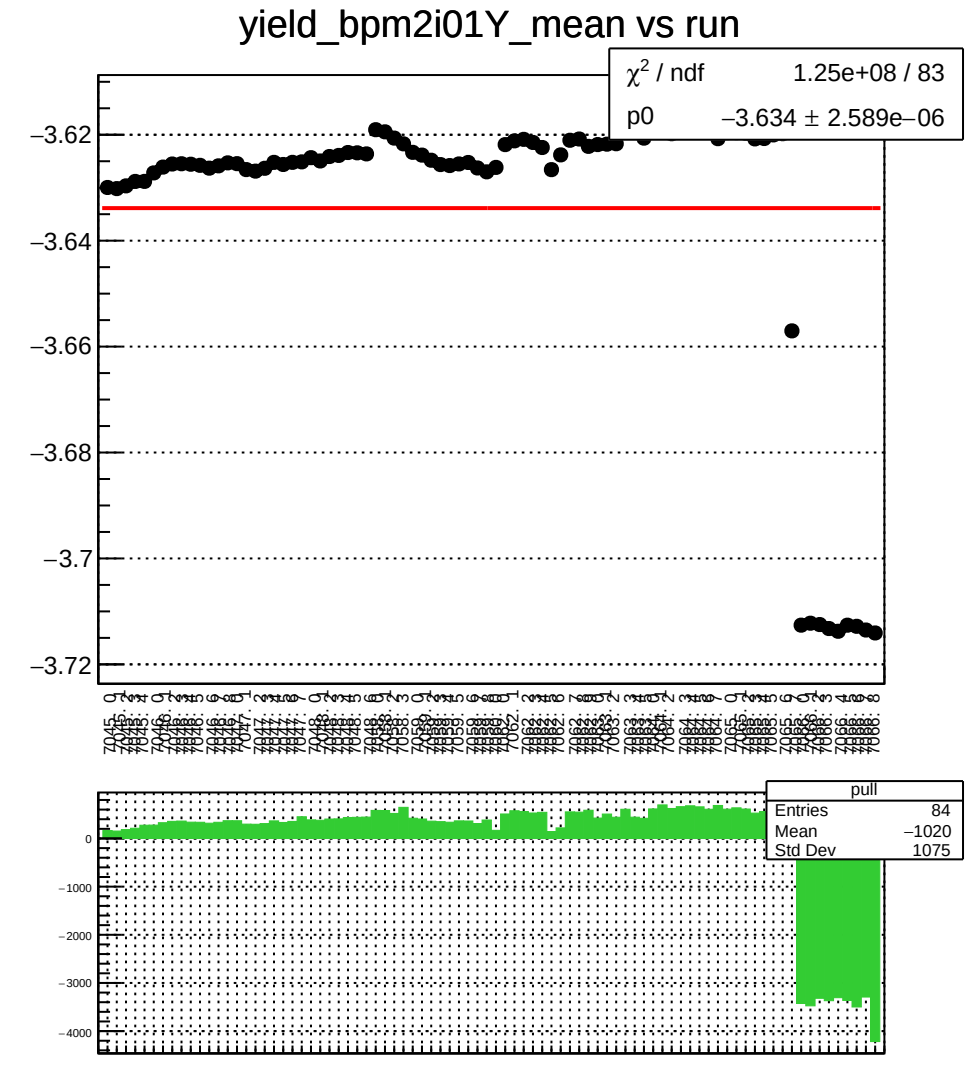

yield_bpm1i06Y_mean vs run
χ² / ndf 2.694e+08 / 83
p0 0.8983 ± 4.406e−06
1.05
1
0.95
0.9
0.85
pull
Entries 84
Mean −208.1
Std Dev 265.9
5000
4000
3000
2000
1000
0
−1000
−2000
pull1D
Entries 84
Mean −2.052
Std Dev 5.446
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

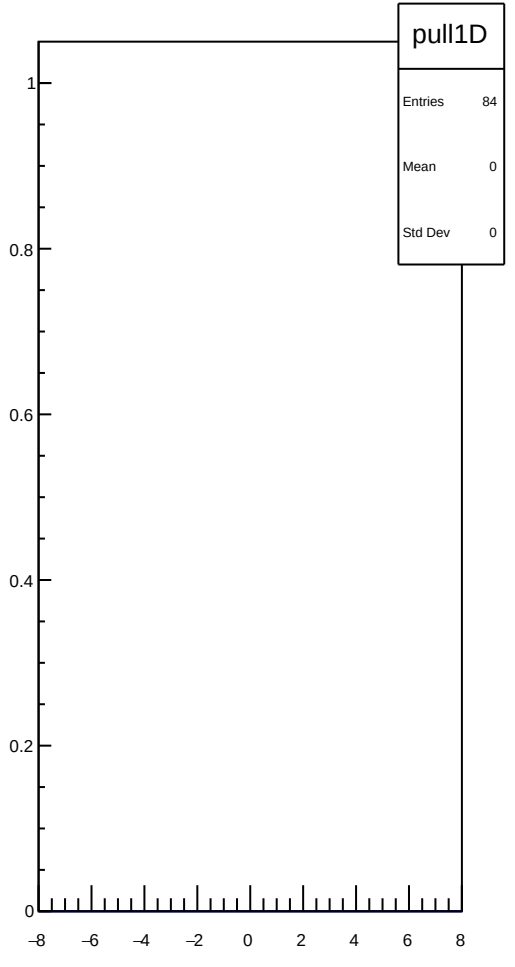

yield_bpm1i06Y_rms vs run
χ² / ndf 1.138e+05 / 83
p0 0.003792 ± 3.116e−06
0.12
0.1
0.08
0.06
0.04
0.02

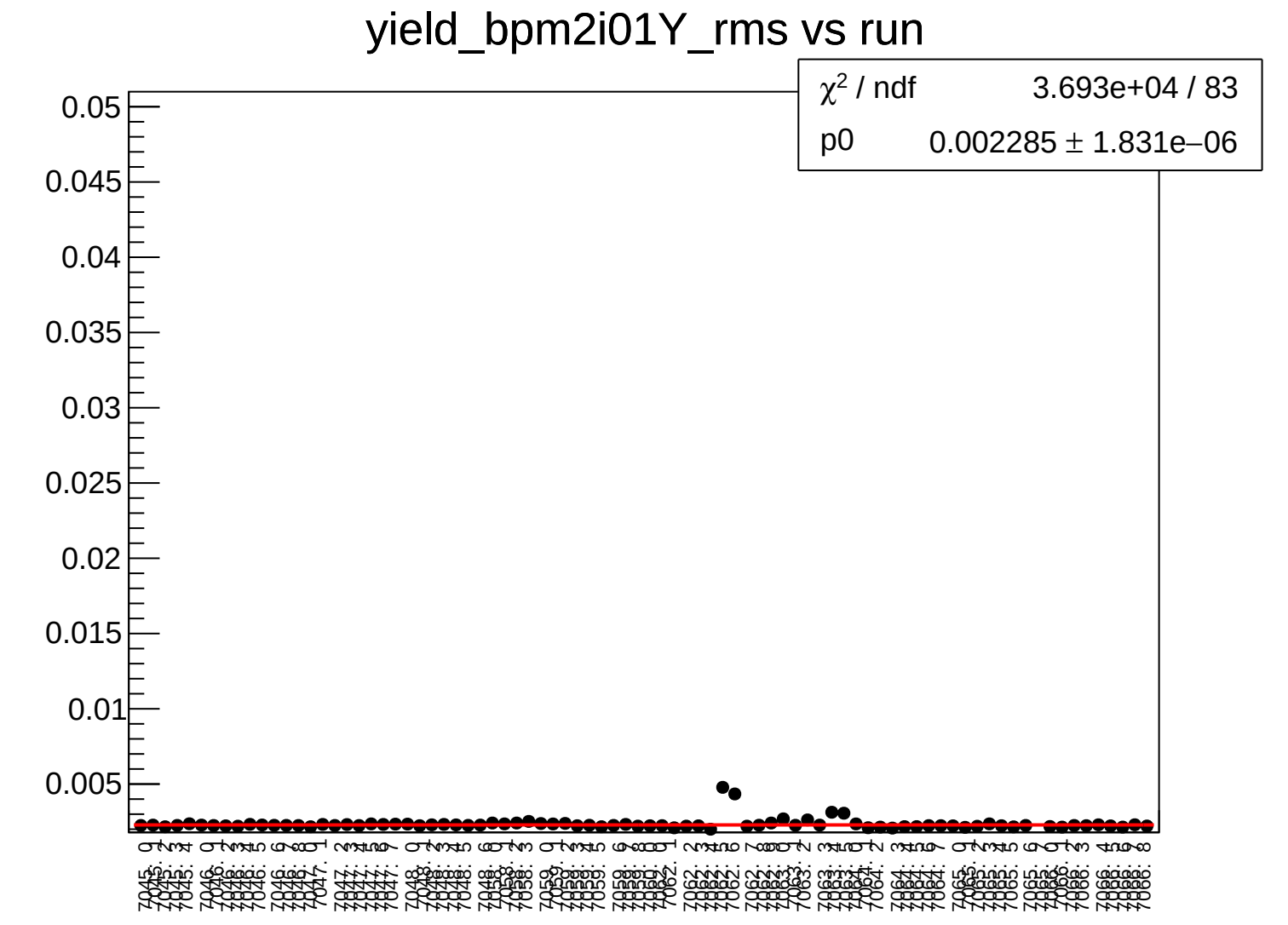

yield_bpm2i01X_mean vs run
χ² / ndf 4.207e+06 / 83
p0 0.6092 ± 2.417e−06
0.62
0.615
0.61
0.605
0.6
pull
Entries 84
Mean −2932
Std Dev 2966
500
400
300
200
100
0
−100
−200
−300
−400

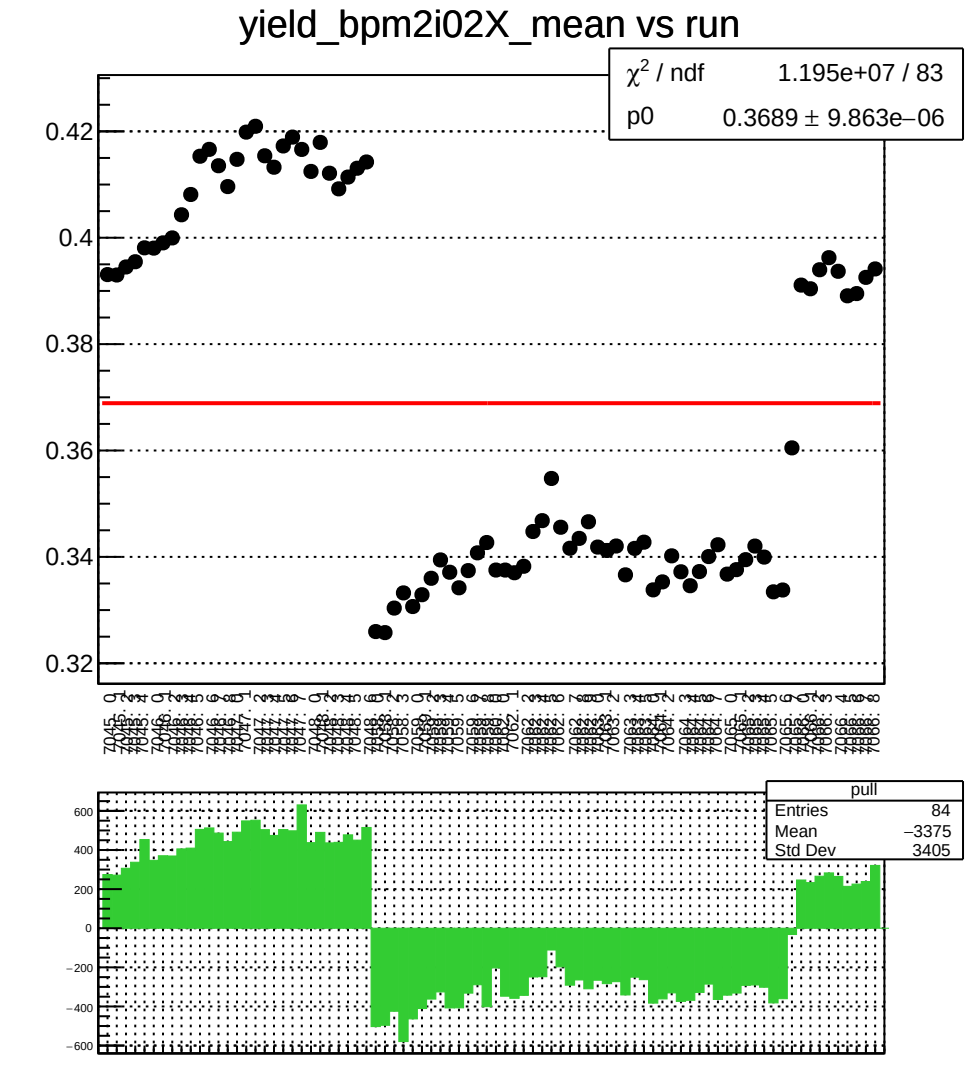

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

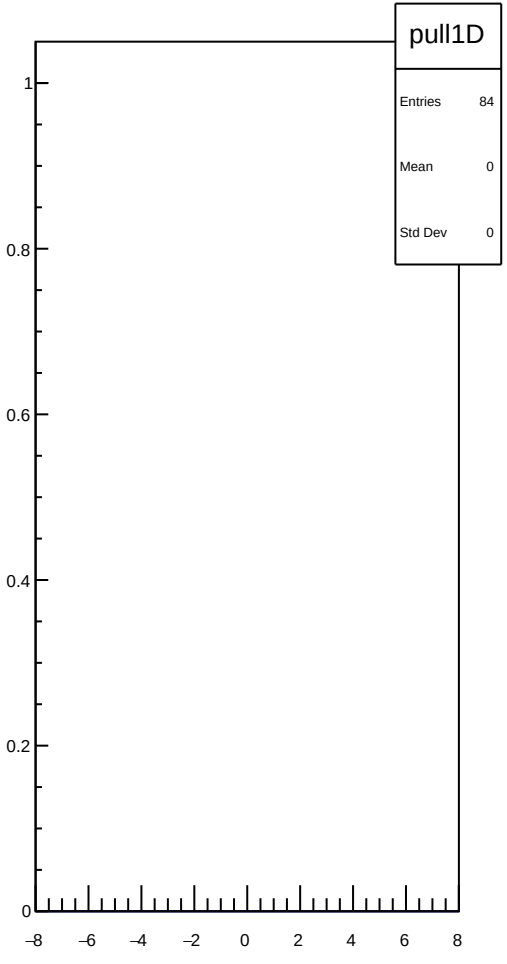

yield_bpm2i01X_rms vs run
χ² / ndf 2228 / 83
p0 0.002156 ± 1.709e−06
0.0025
0.0024
0.0023
0.0022
0.0021
0.002

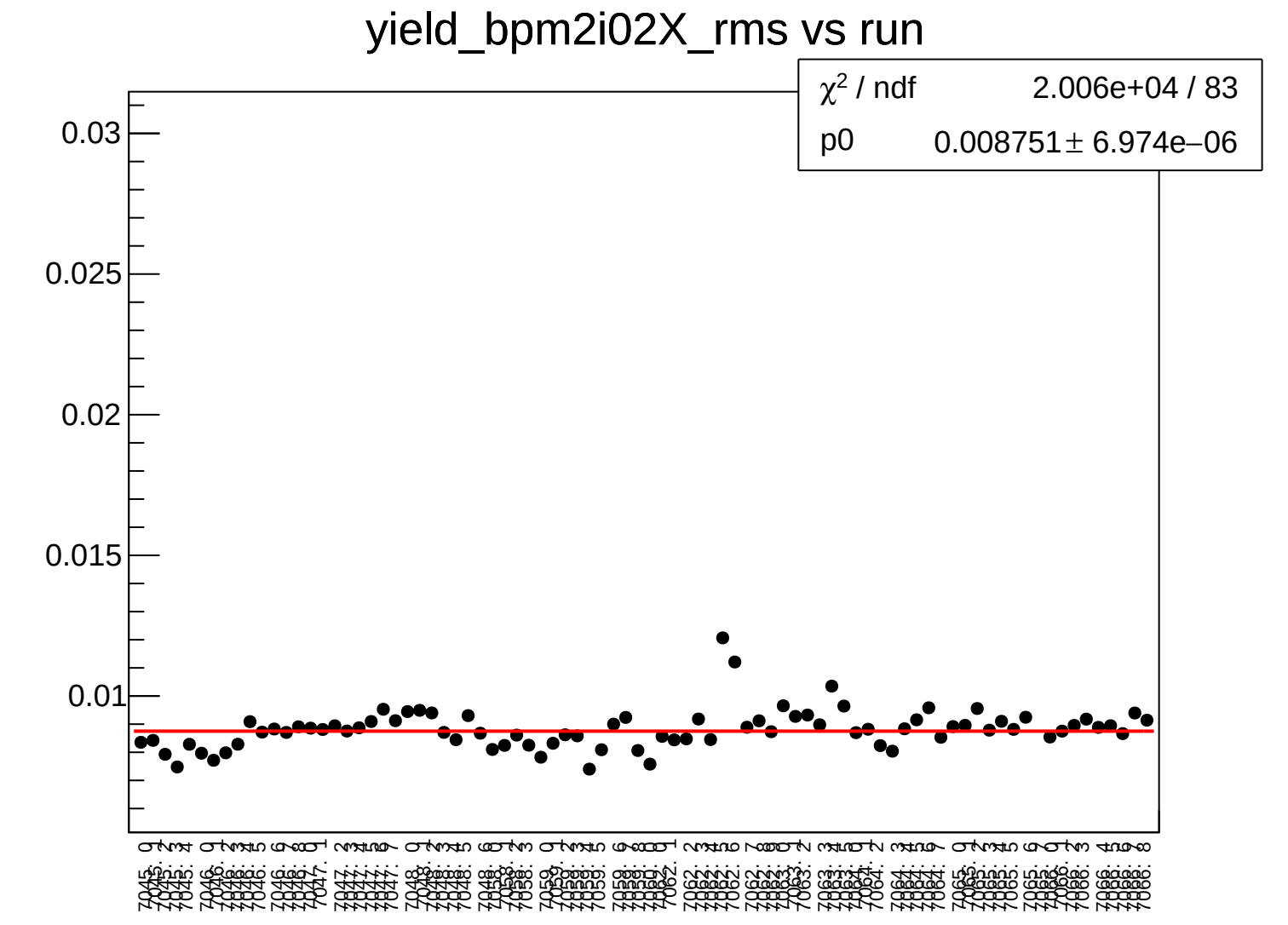

yield_bpm2i01Y_mean vs run
χ² / ndf 1.25e+08 / 83
p0 −3.634 ± 2.589e−06
−3.62
−3.64
−3.66
−3.68
−3.7
−3.72
pull
Entries 84
Mean −1020
Std Dev 1075
0
−1000
−2000
−3000
−4000

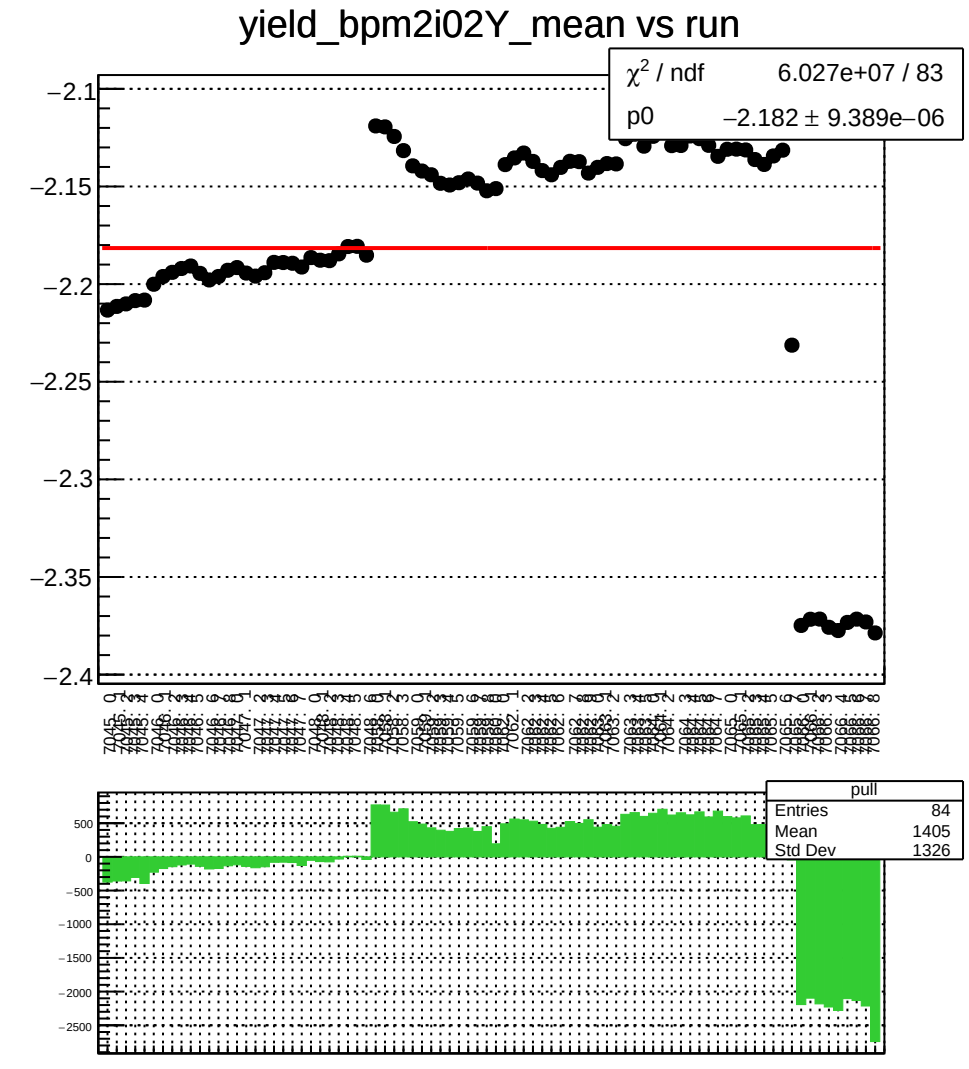

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

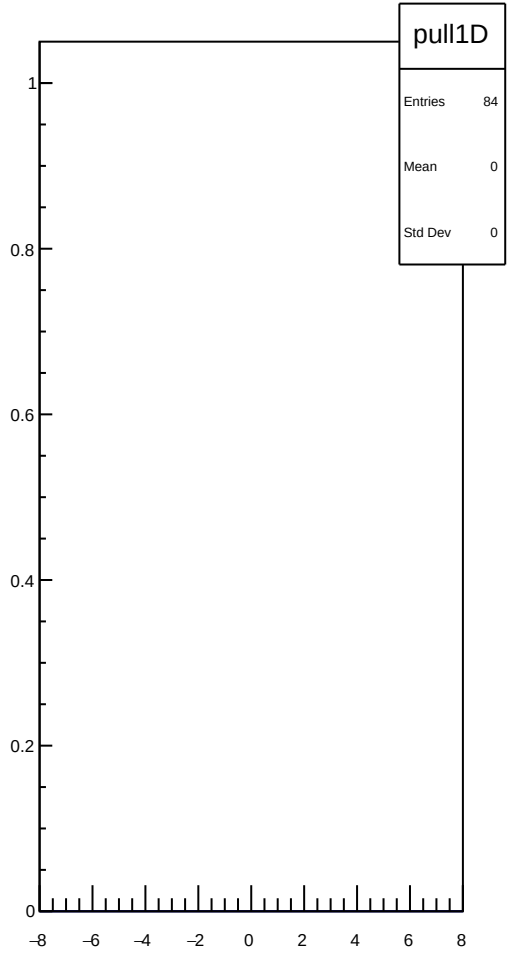

yield_bpm2i01Y_rms vs run
χ² / ndf 3.693e+04 / 83
p0 0.002285 ± 1.831e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

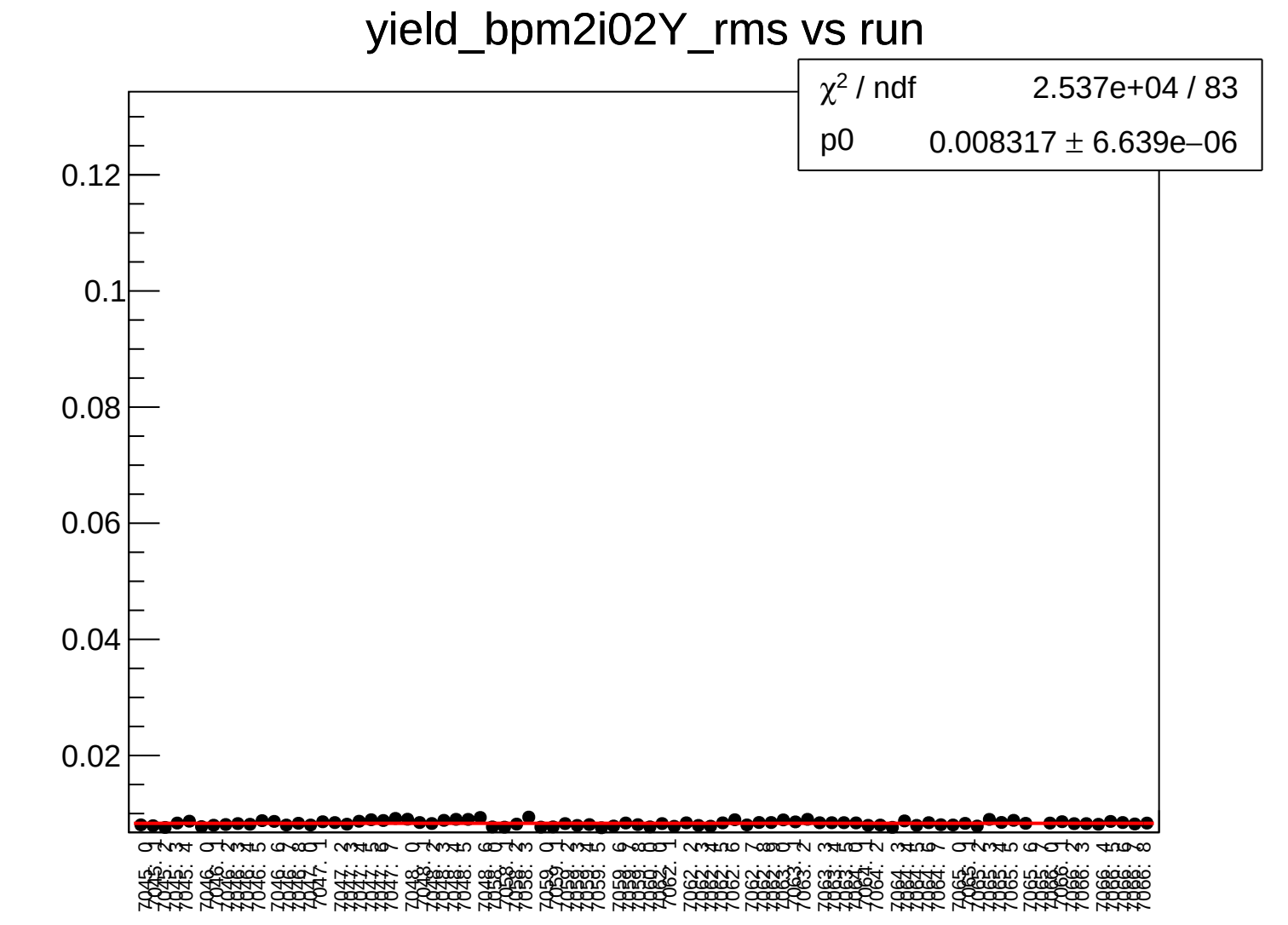

yield_bpm2i02X_mean vs run
χ² / ndf 1.195e+07 / 83
p0 0.3689 ± 9.863e−06
0.42
0.4
0.38
0.36
0.34
0.32
pull
Entries 84
Mean −3375
Std Dev 3405
600
400
200
0
−200
−400
−600

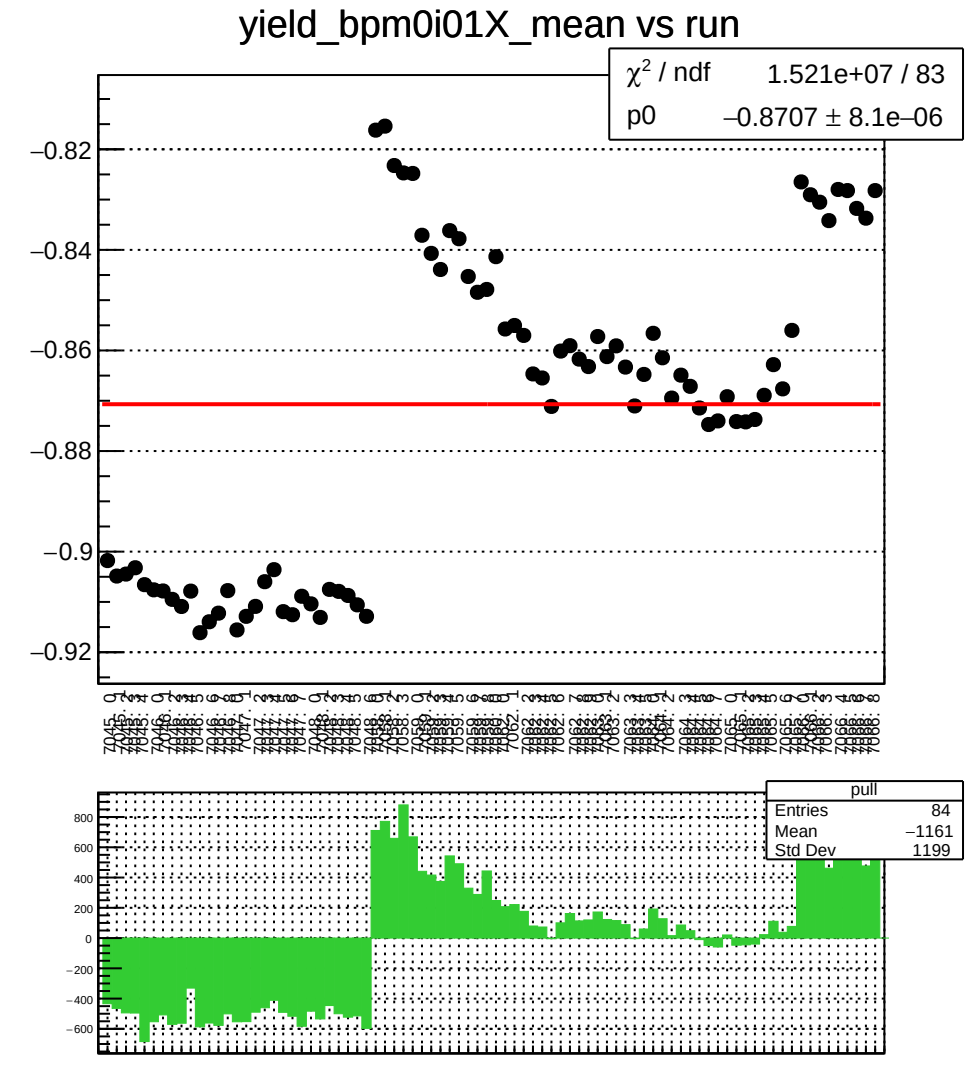

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

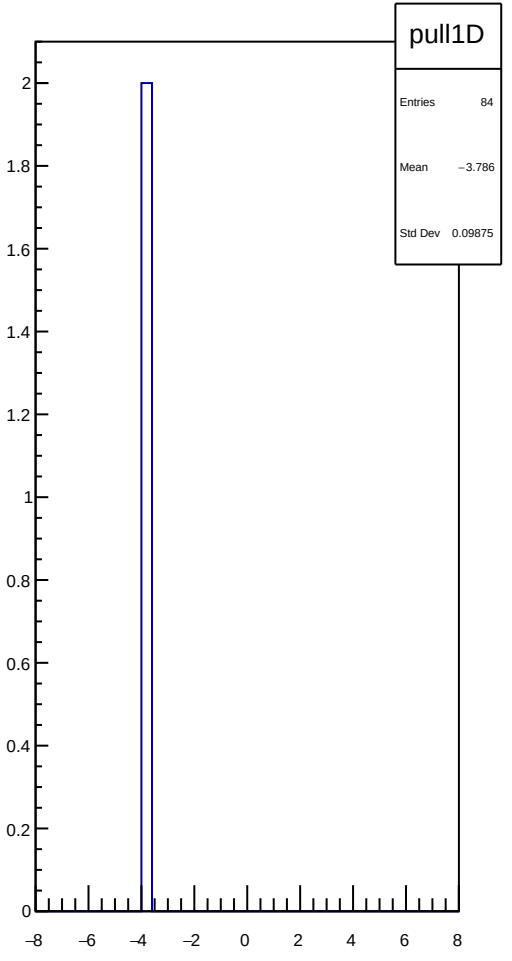

yield_bpm2i02X_rms vs run
χ² / ndf 2.006e+04 / 83
p0 0.008751 ± 6.974e−06
0.03
0.025
0.02
0.015
0.01

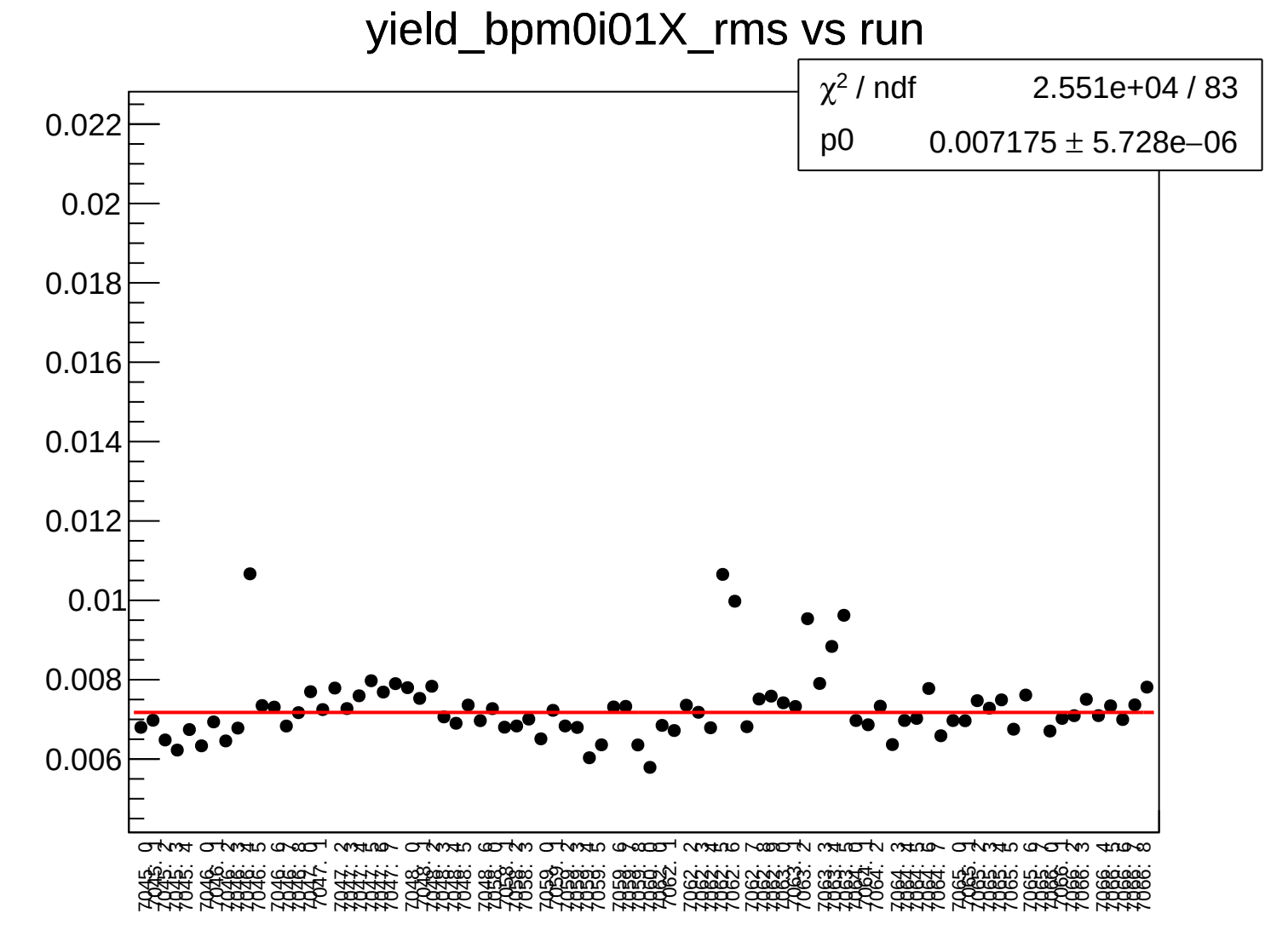

yield_bpm2i02Y_mean vs run
χ² / ndf 6.027e+07 / 83
p0 −2.182 ± 9.389e−06
−2.1
−2.15
−2.2
−2.25
−2.3
−2.35
−2.4
pull
Entries 84
Mean 1405
Std Dev 1326
500
0
−500
−1000
−1500
−2000
−2500

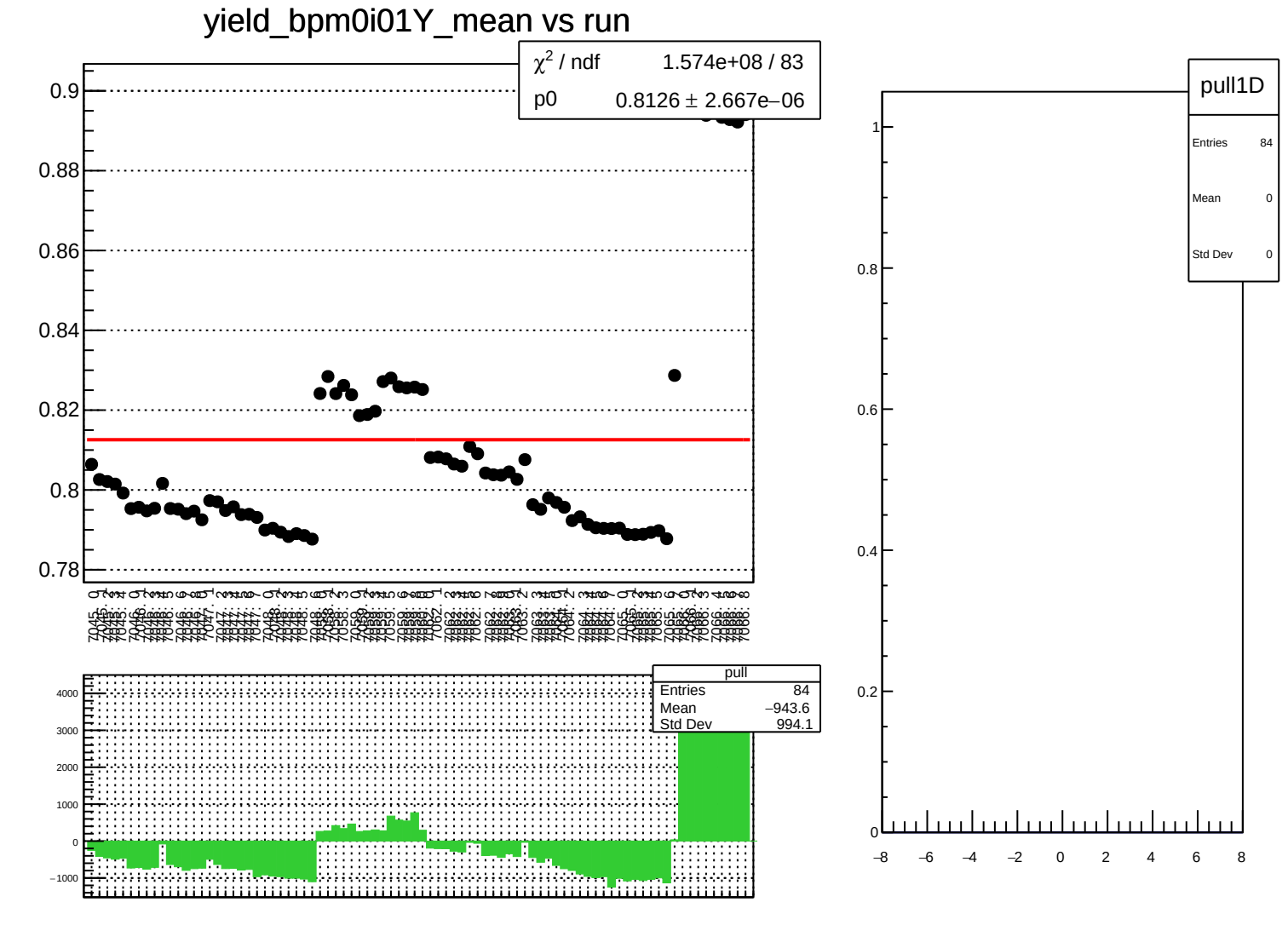

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

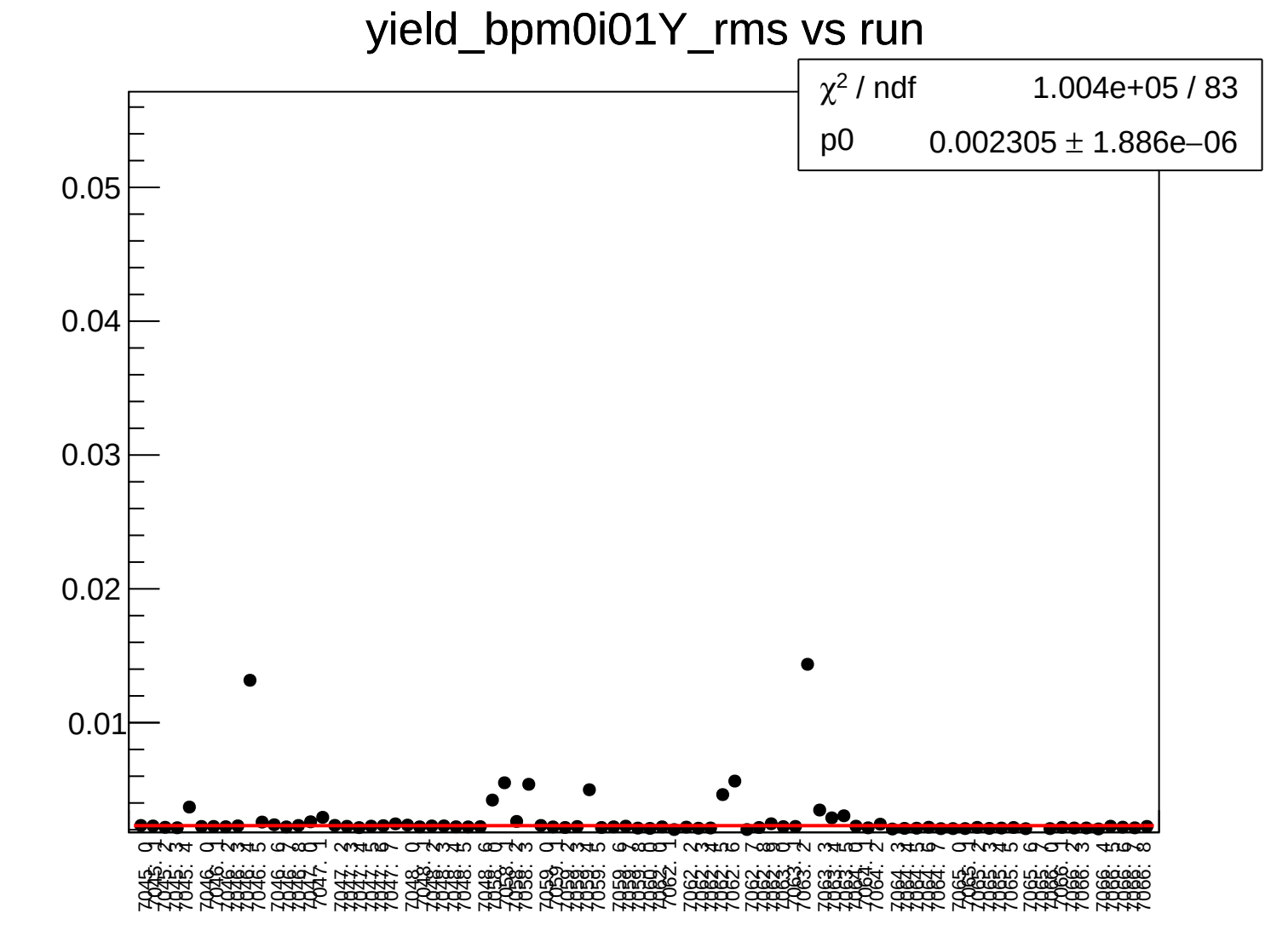

yield_bpm2i02Y_rms vs run
χ² / ndf 2.537e+04 / 83
p0 0.008317 ± 6.639e−06
0.12
0.1
0.08
0.06
0.04
0.02

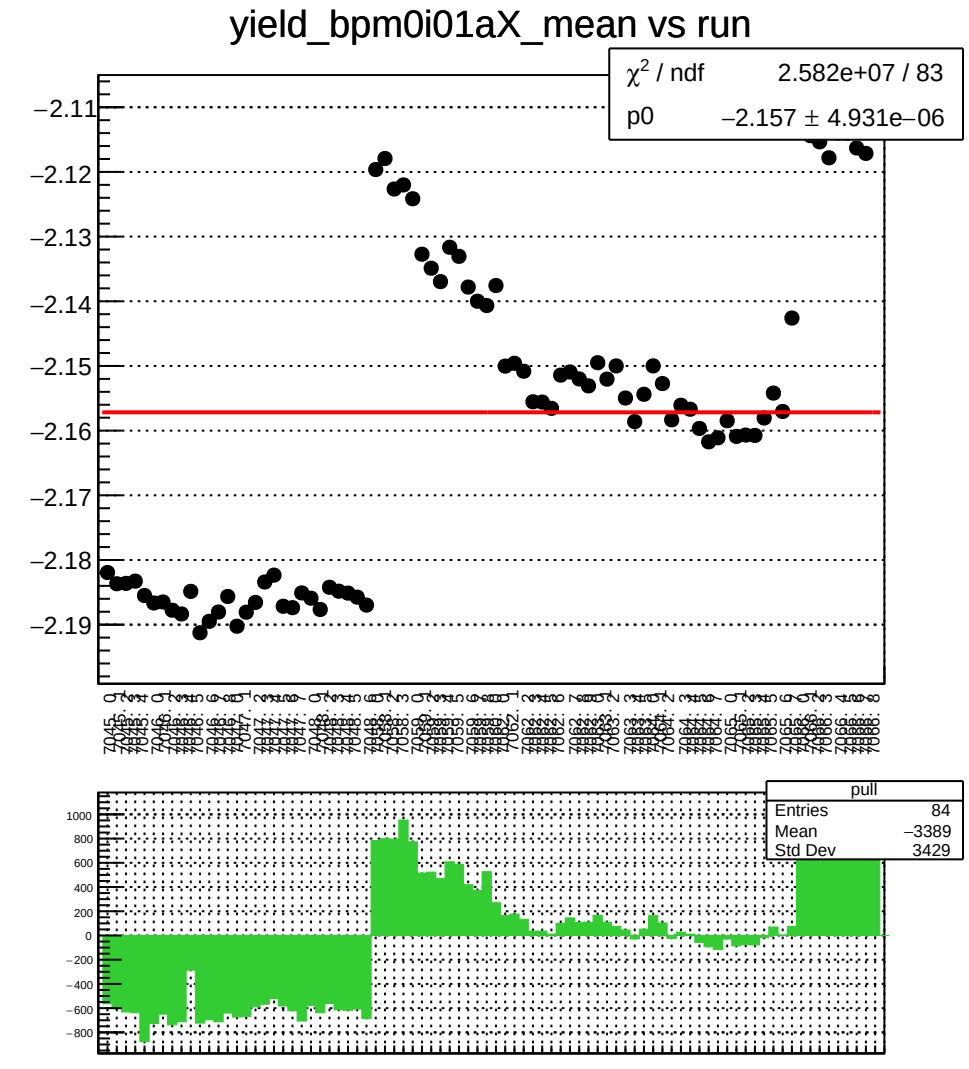

yield_bpm0i01X_mean vs run
χ² / ndf 1.521e+07 / 83
p0 −0.8707 ± 8.1e−06
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
pull
Entries 84
Mean −1161
Std Dev 1199
800
600
400
200
0
−200
−400
−600

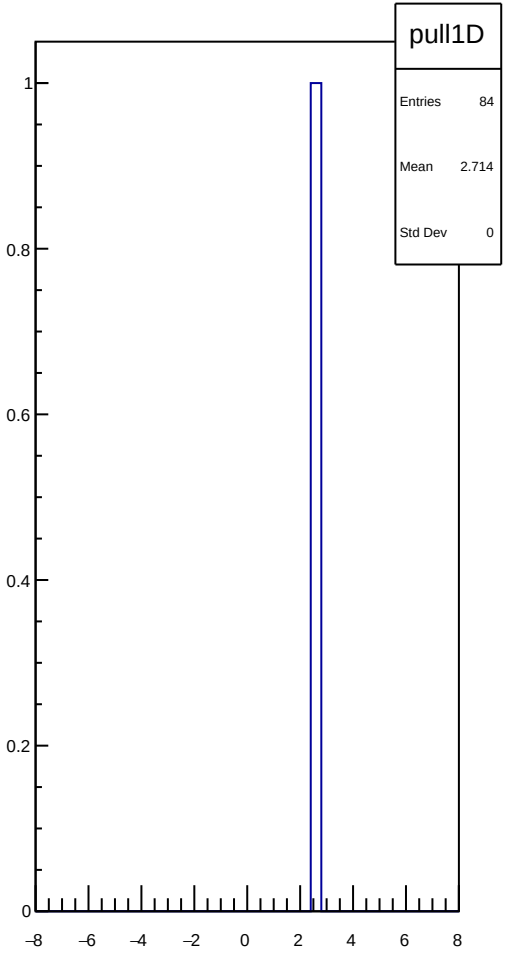

pull1D
Entries 84
Mean −3.786
Std Dev 0.09875
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

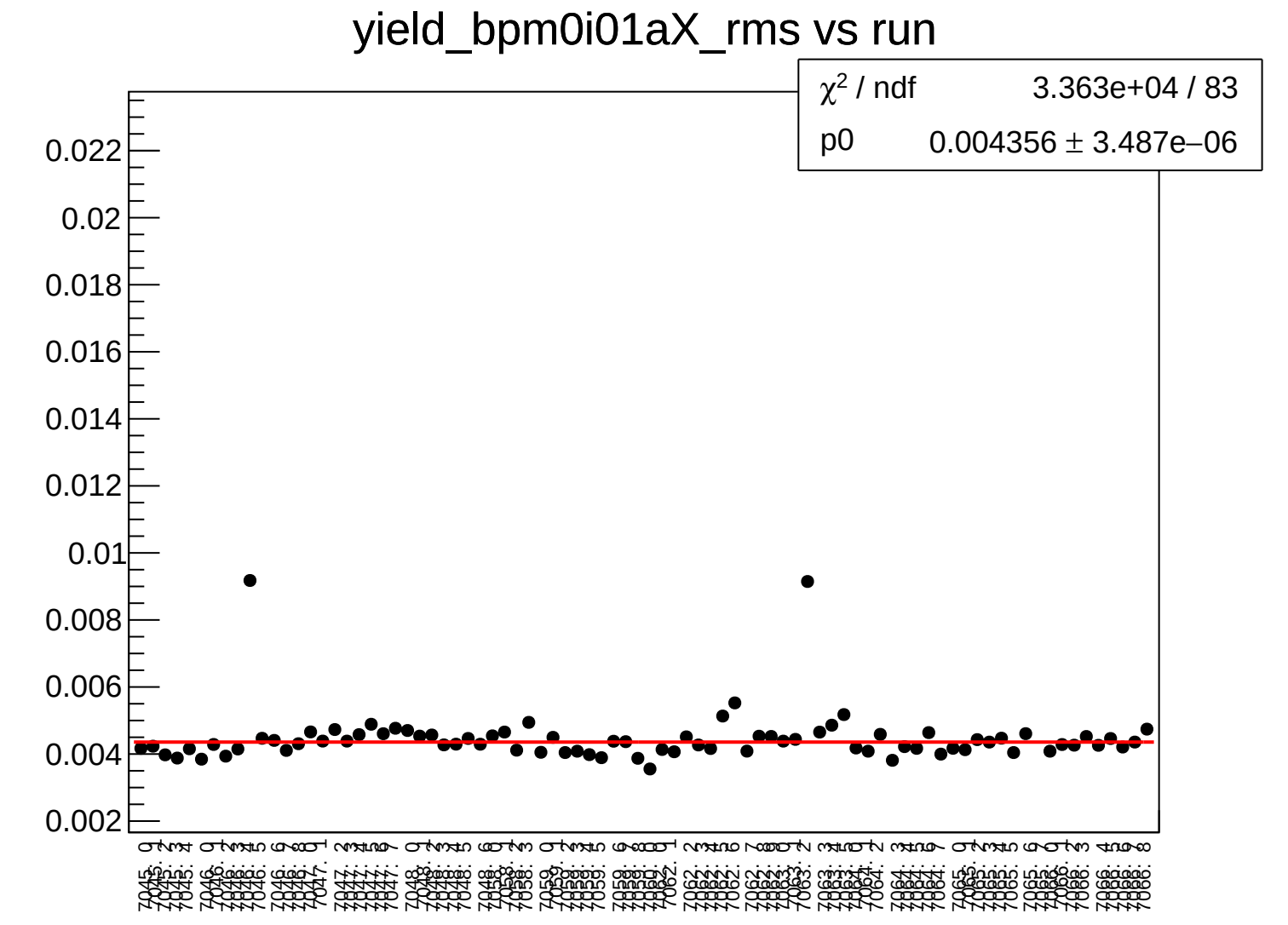

yield_bpm0i01X_rms vs run
χ^2 / ndf 2.551e+04 / 83
p0 0.007175 ± 5.728e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

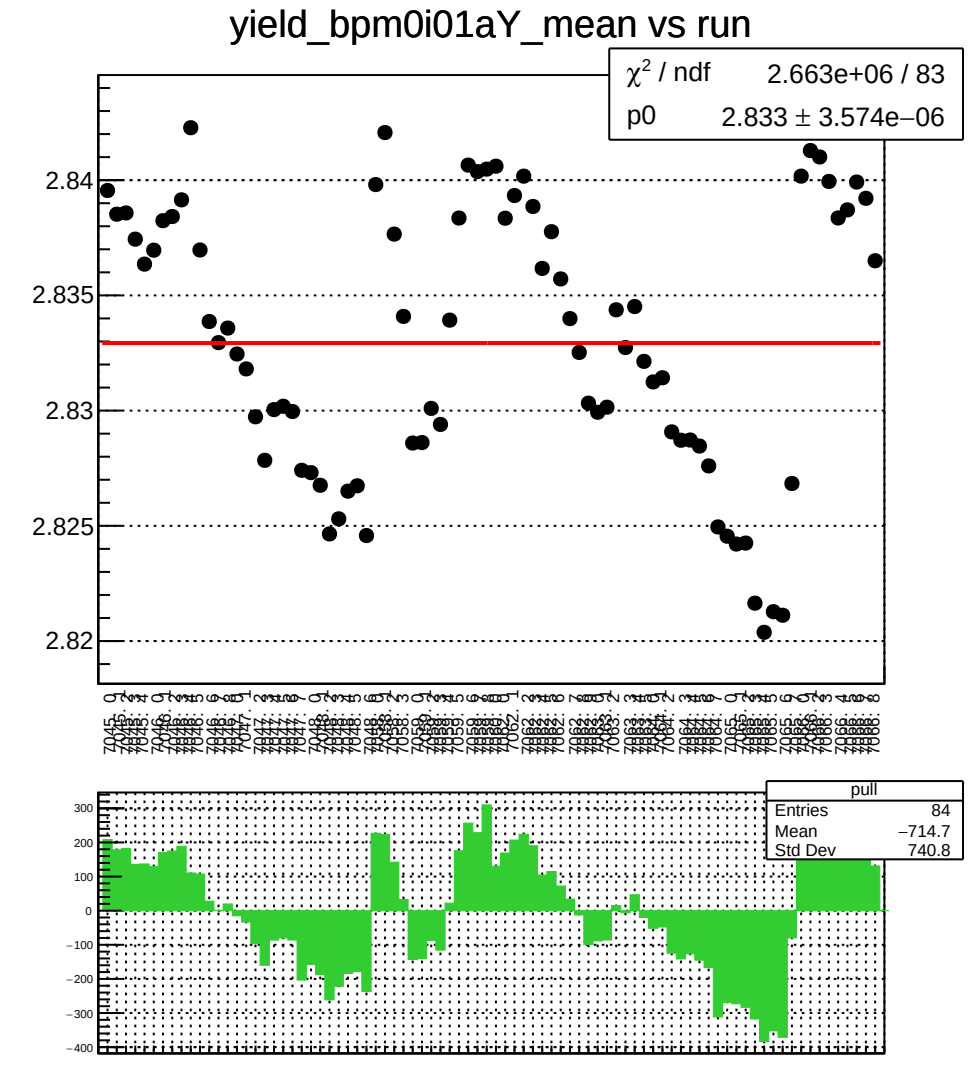

yield_bpm0i01Y_mean vs run
χ² / ndf 1.574e+08 / 83
p0 0.8126 ± 2.667e−06
0.9
0.88
0.86
0.84
0.82
0.8
0.78
pull
Entries 84
Mean −943.6
Std Dev 994.1
4000
3000
2000
1000
0
−1000
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

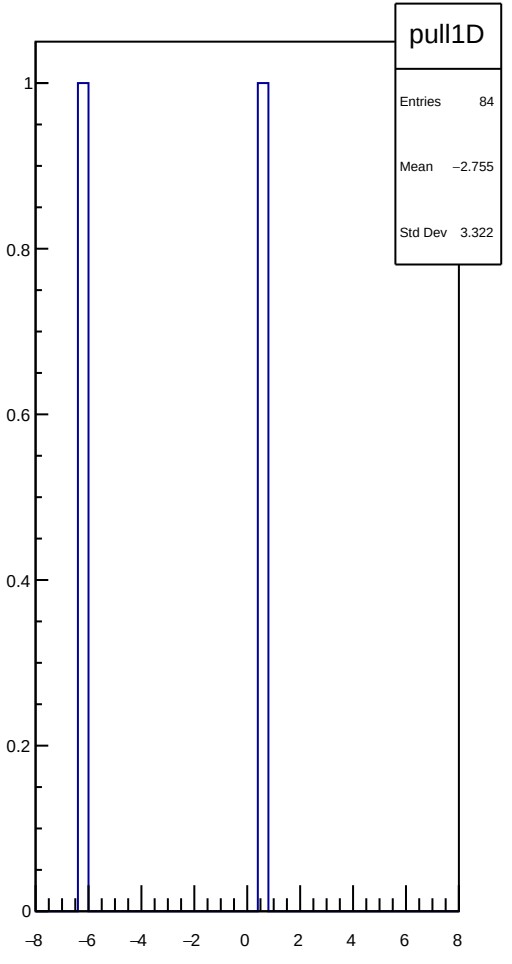

yield_bpm0i01Y_rms vs run
χ² / ndf 1.004e+05 / 83
p0 0.002305 ± 1.886e−06
0.05
0.04
0.03
0.02
0.01

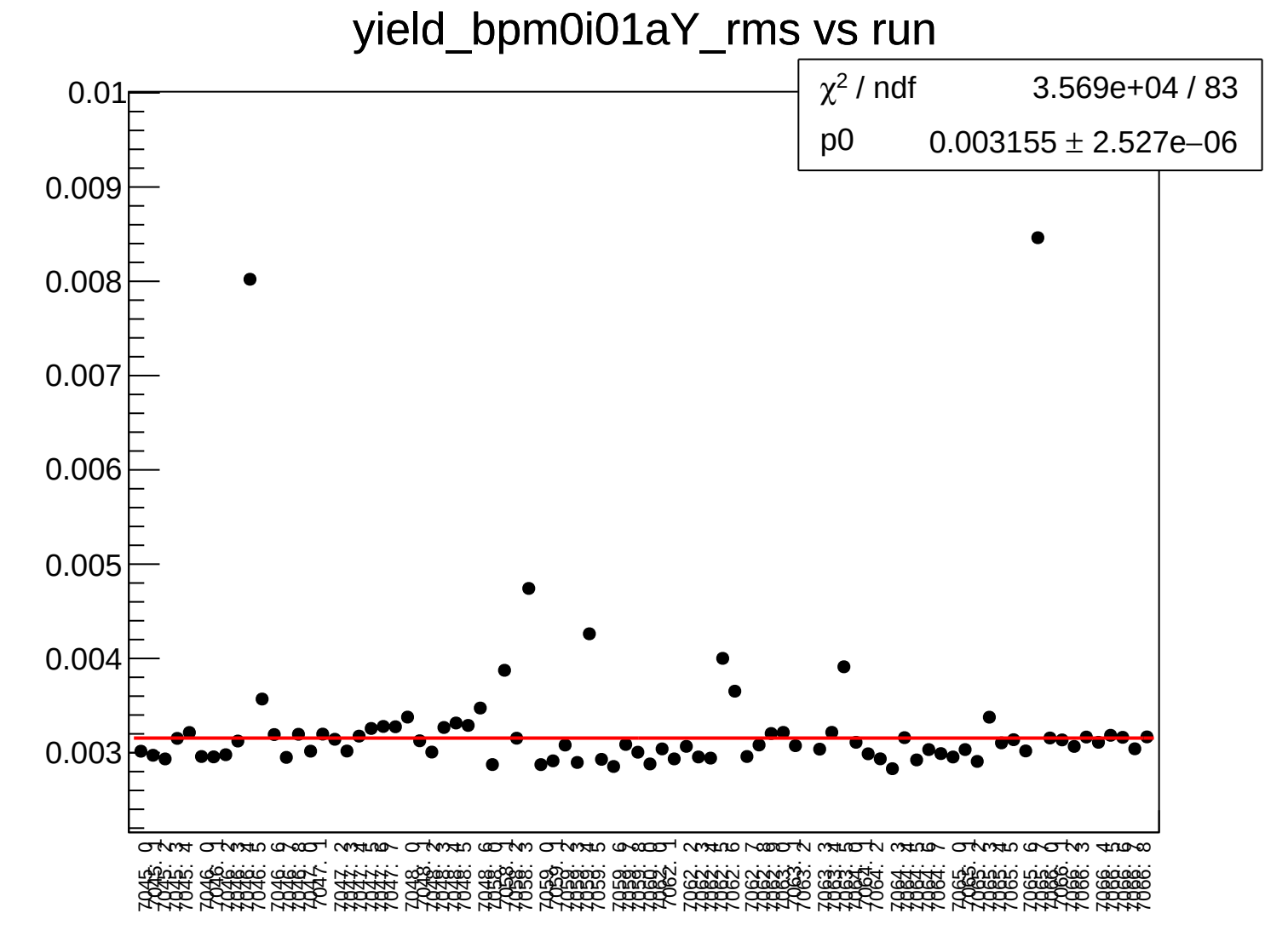

yield_bpm0i01aX_mean vs run
χ² / ndf 2.582e+07 / 83
p0 −2.157 ± 4.931e−06
−2.11
−2.12
−2.13
−2.14
−2.15
−2.16
−2.17
−2.18
−2.19
pull
Entries 84
Mean −3389
Std Dev 3429
1000
800
600
400
200
0
−200
−400
−600
−800

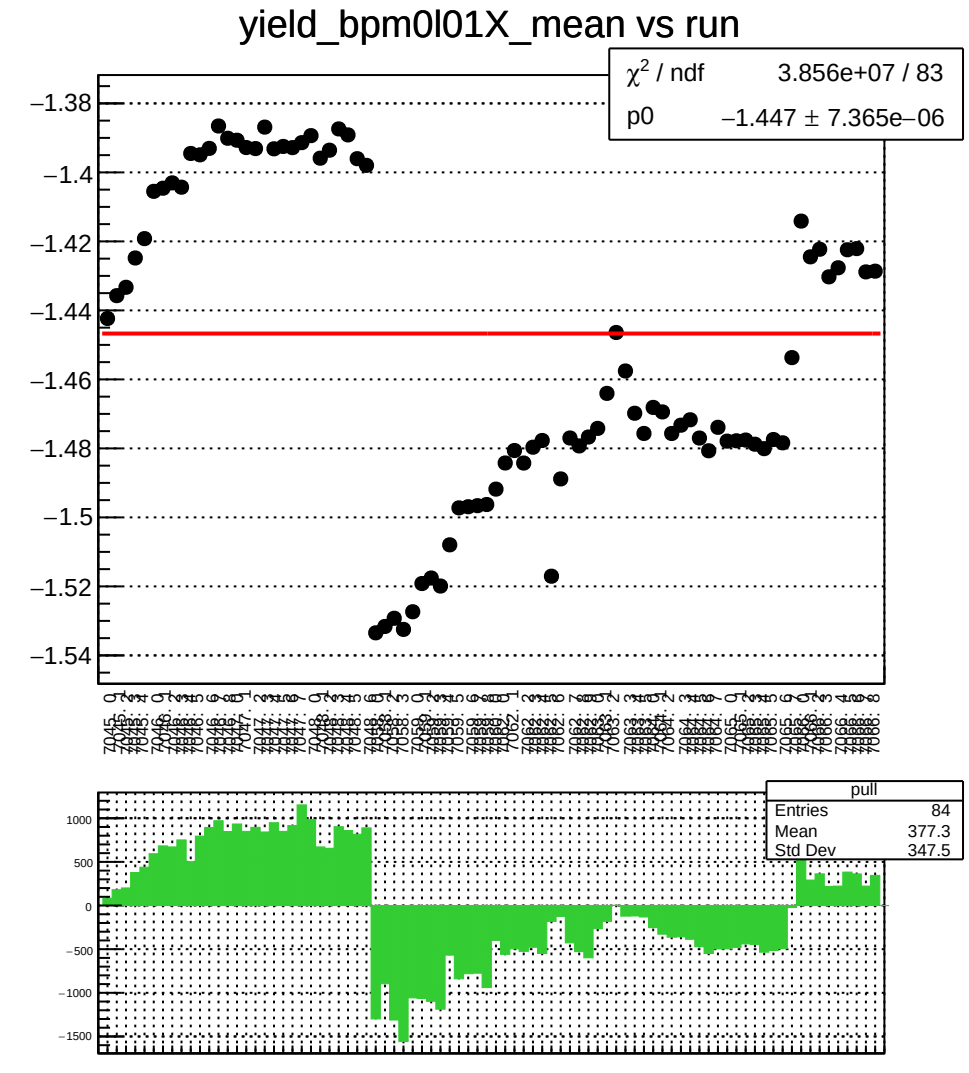

pull1D
Entries 84
Mean 2.714
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

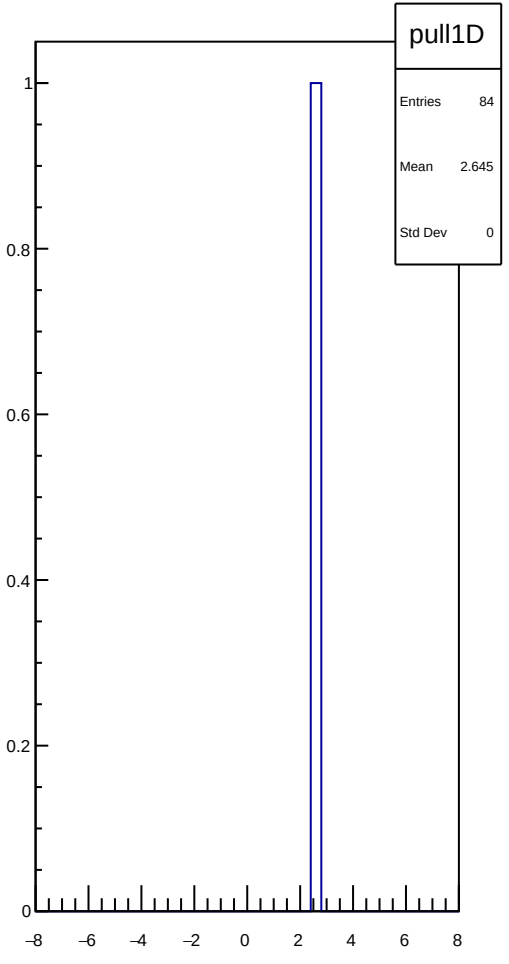

yield_bpm0i01aX_rms vs run
χ² / ndf 3.363e+04 / 83
p0 0.004356 ± 3.487e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

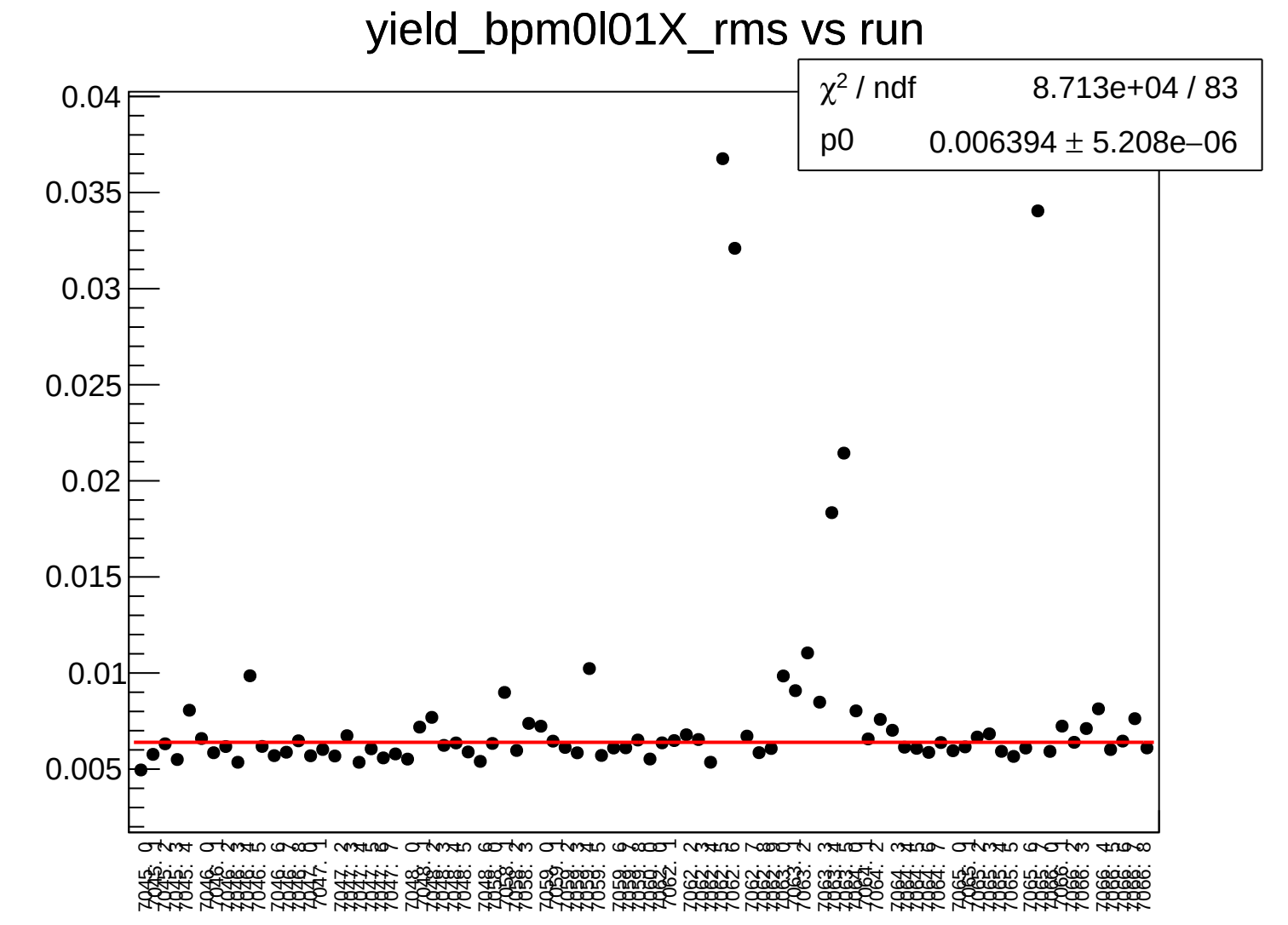

yield_bpm0i01aY_mean vs run
χ² / ndf 2.663e+06 / 83
p0 2.833 ± 3.574e−06
2.84
2.835
2.83
2.825
2.82
pull
Entries 84
Mean −714.7
Std Dev 740.8
300
200
100
0
−100
−200
−300
−400

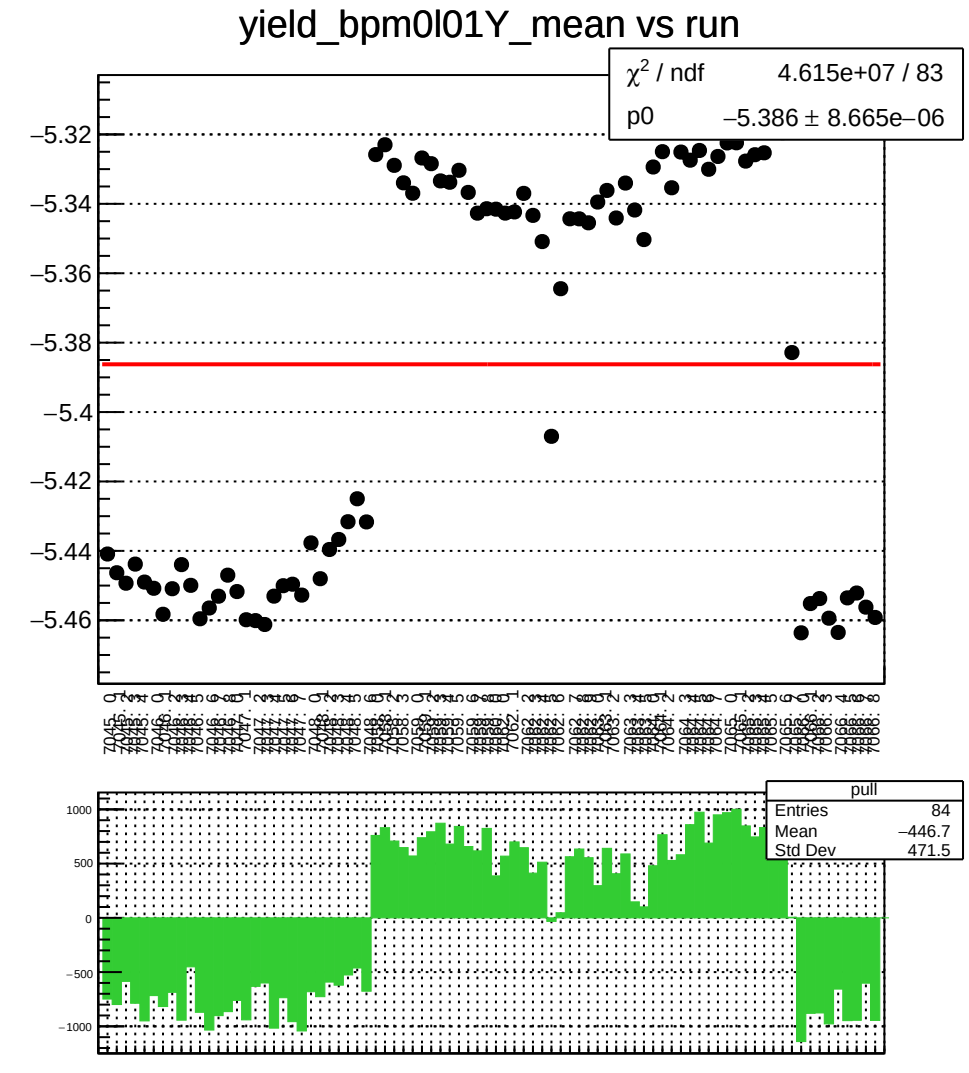

pull1D
Entries 84
Mean −2.755
Std Dev 3.322
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

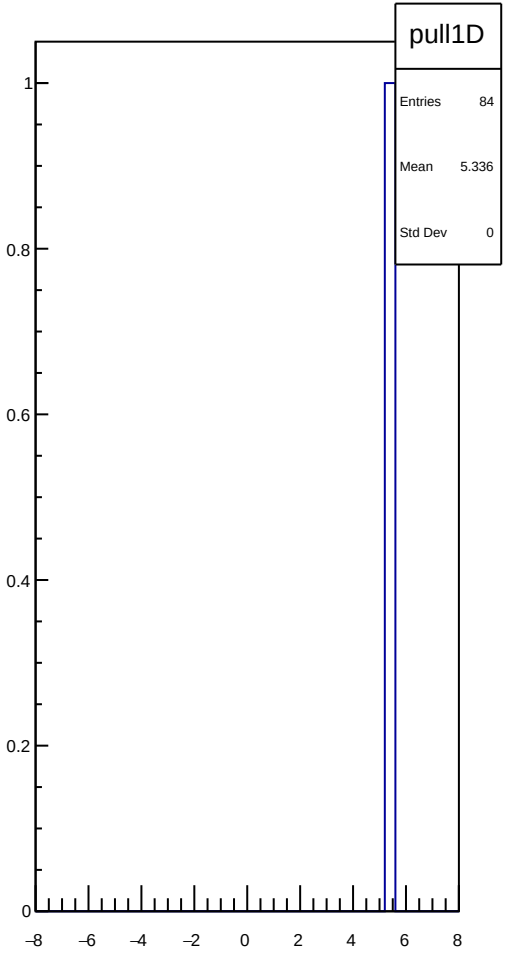

yield_bpm0i01aY_rms vs run
χ^2 / ndf 3.569e+04 / 83
p0 0.003155 ± 2.527e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

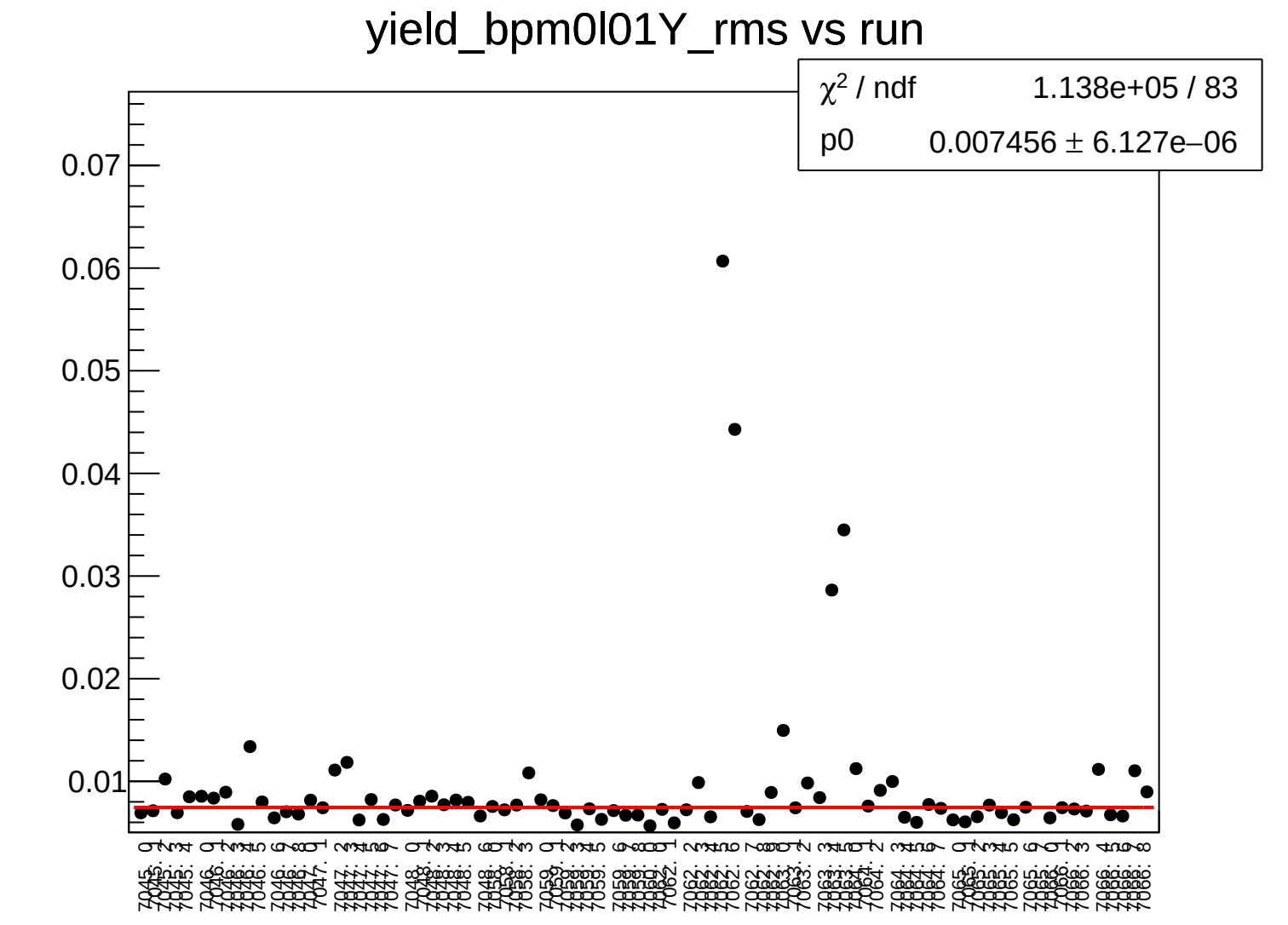

yield_bpm0l01X_mean vs run
χ² / ndf 3.856e+07 / 83
p0 −1.447 ± 7.365e−06
−1.38
−1.4
−1.42
−1.44
−1.46
−1.48
−1.5
−1.52
−1.54
pull
Entries 84
Mean 377.3
Std Dev 347.5
1000
500
0
−500
−1000
−1500

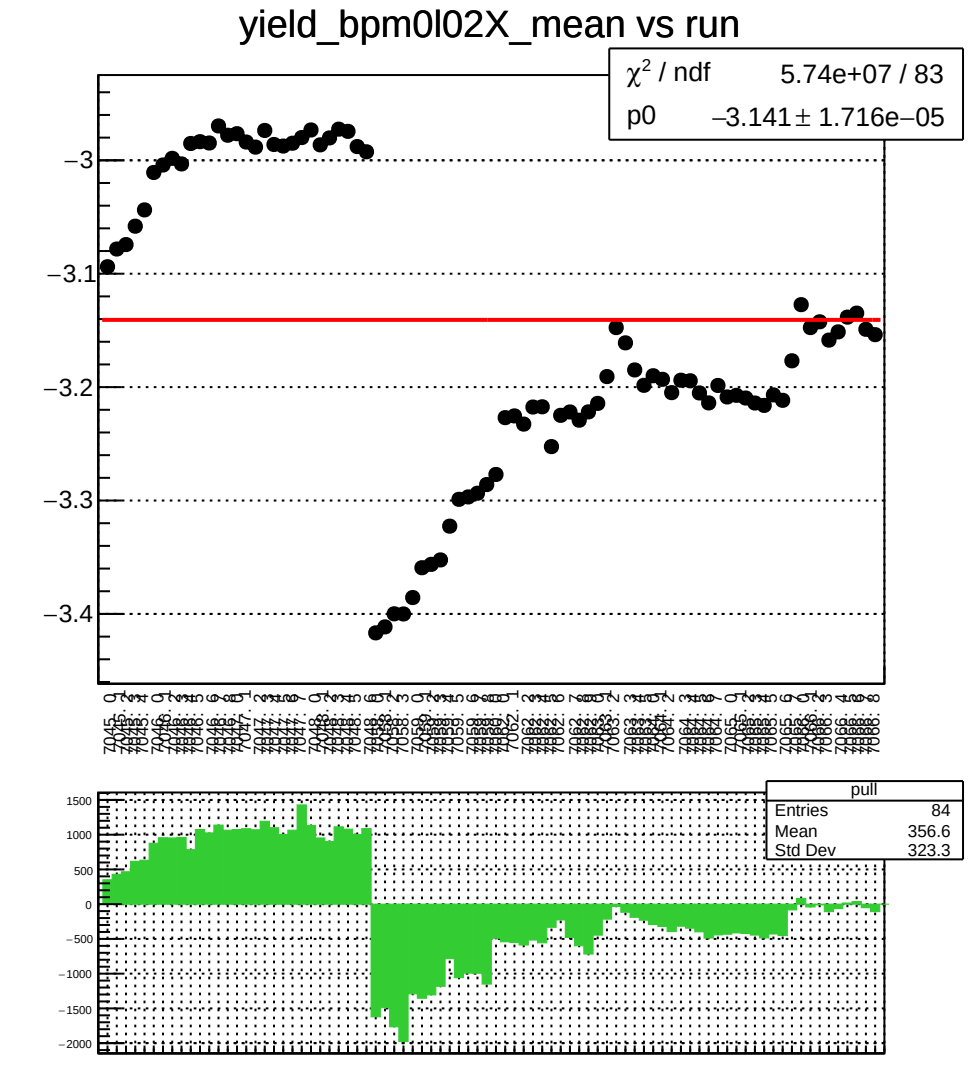

pull1D
Entries 84
Mean 2.645
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

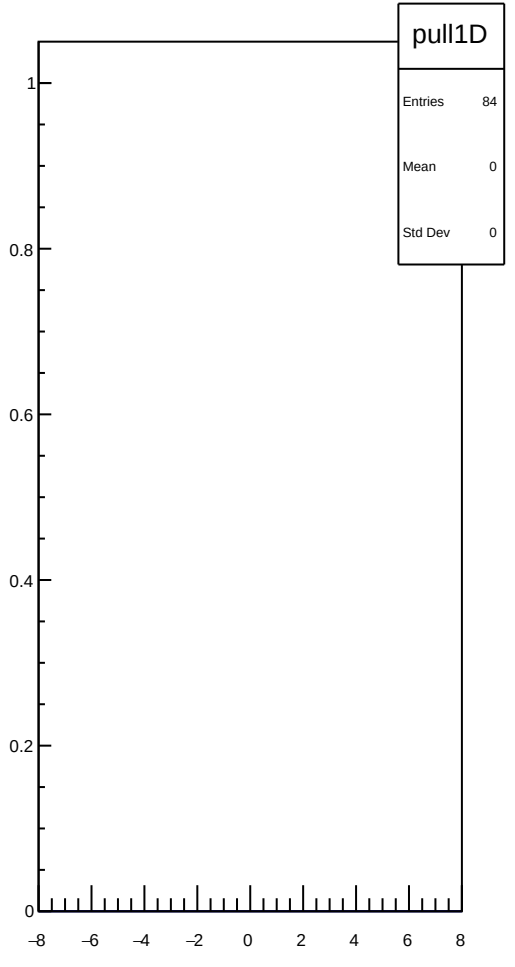

yield_bpm0l01X_rms vs run
χ² / ndf 8.713e+04 / 83
p0 0.006394 ± 5.208e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

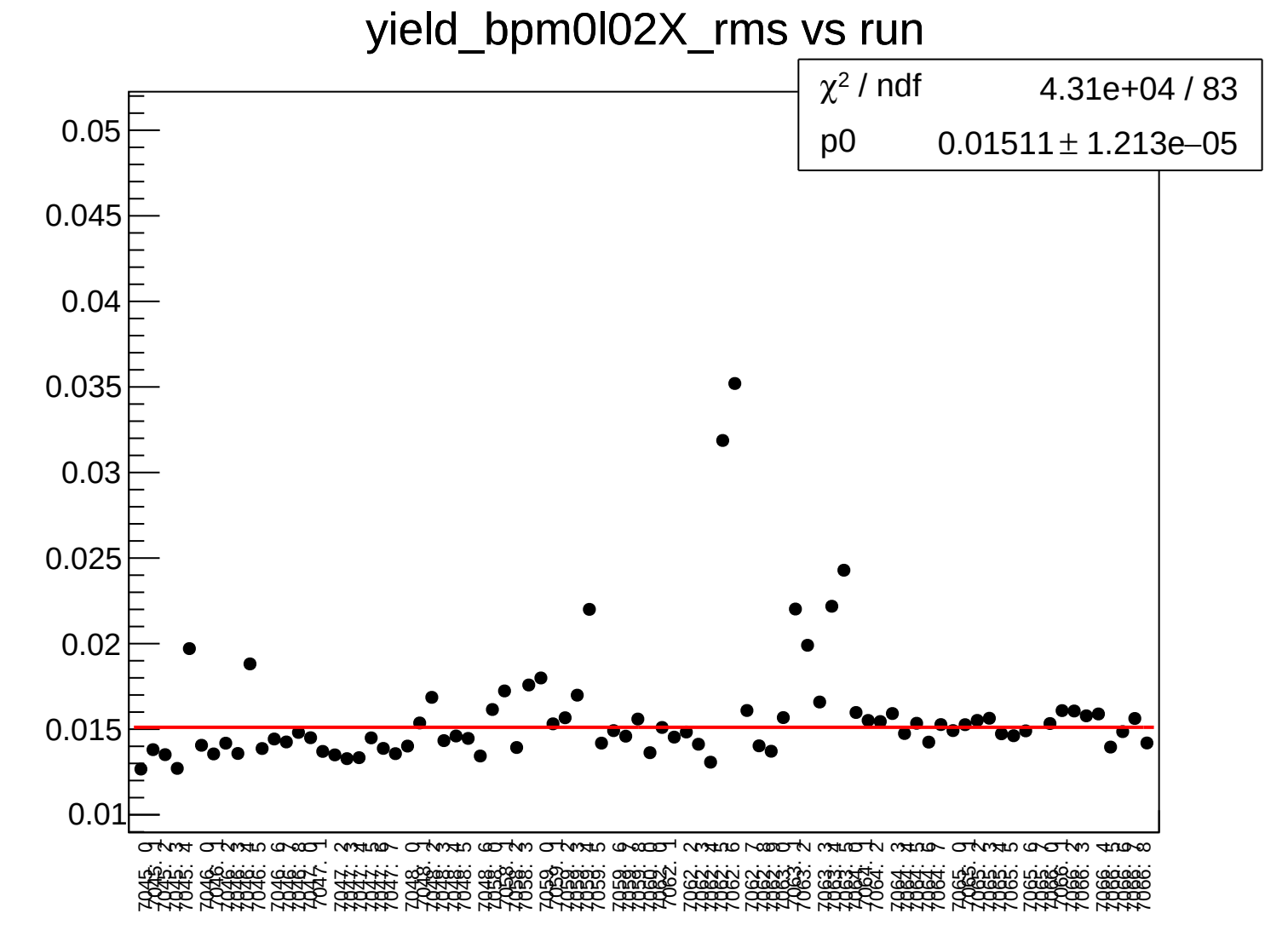

yield_bpm0l01Y_mean vs run
χ² / ndf 4.615e+07 / 83
p0 −5.386 ± 8.665e−06
−5.32
−5.34
−5.36
−5.38
−5.4
−5.42
−5.44
−5.46
pull
Entries 84
Mean −446.7
Std Dev 471.5
1000
500
0
−500
−1000

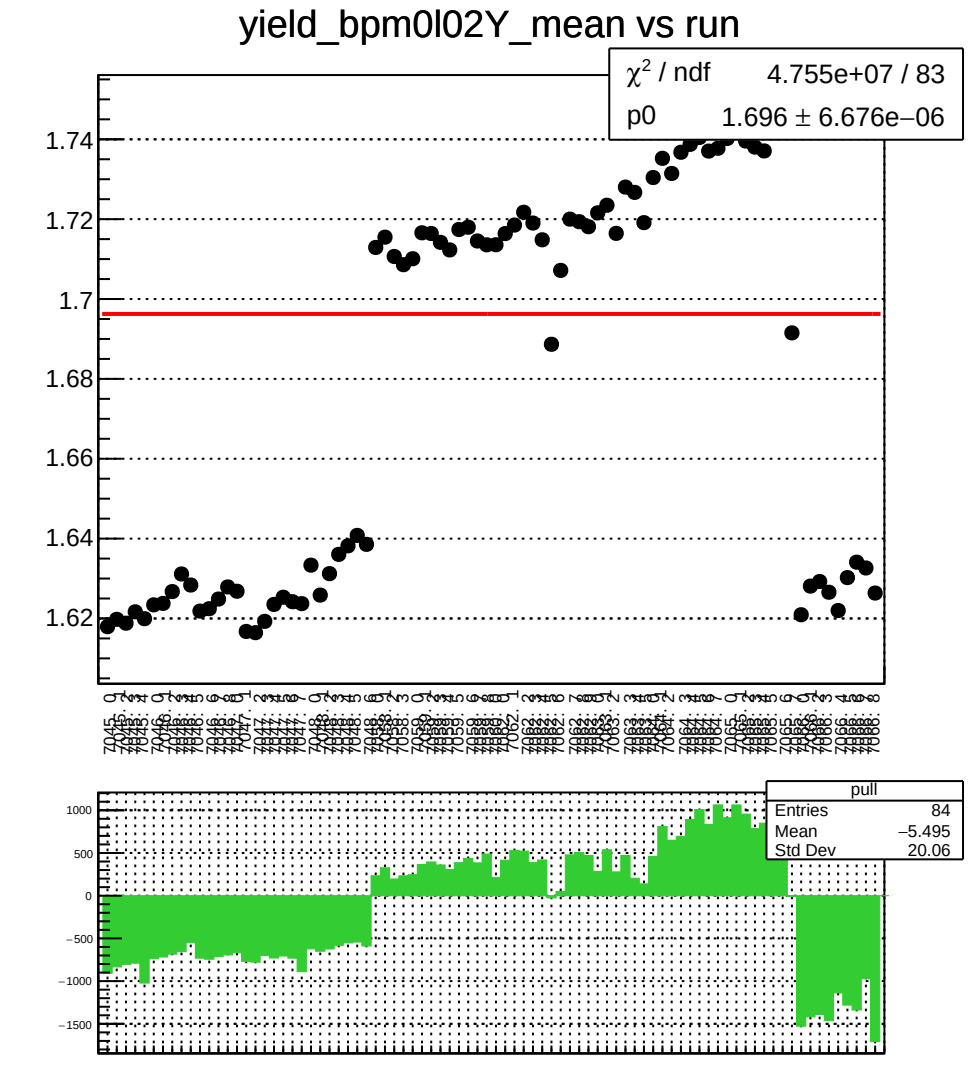

pull1D
Entries 84
Mean 5.336
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

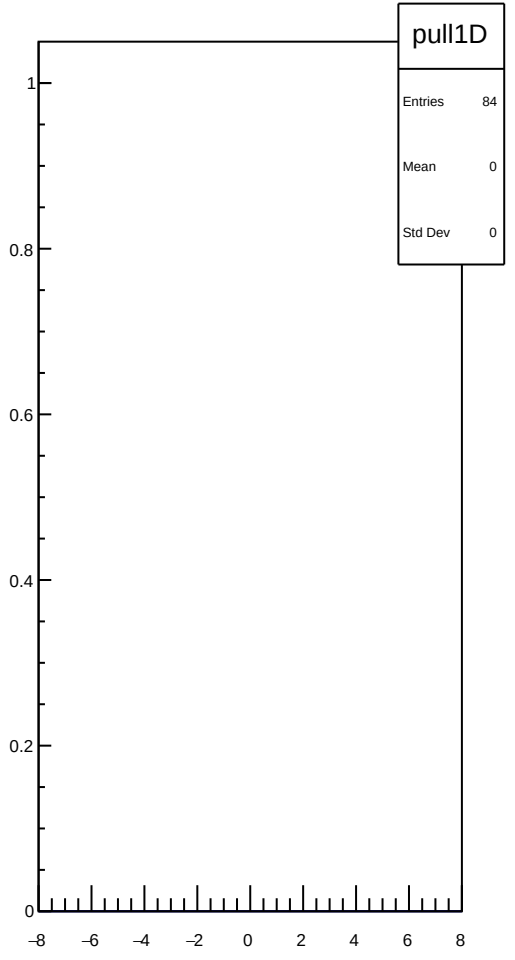

yield_bpm0l01Y_rms vs run
χ² / ndf 1.138e+05 / 83
p0 0.007456 ± 6.127e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

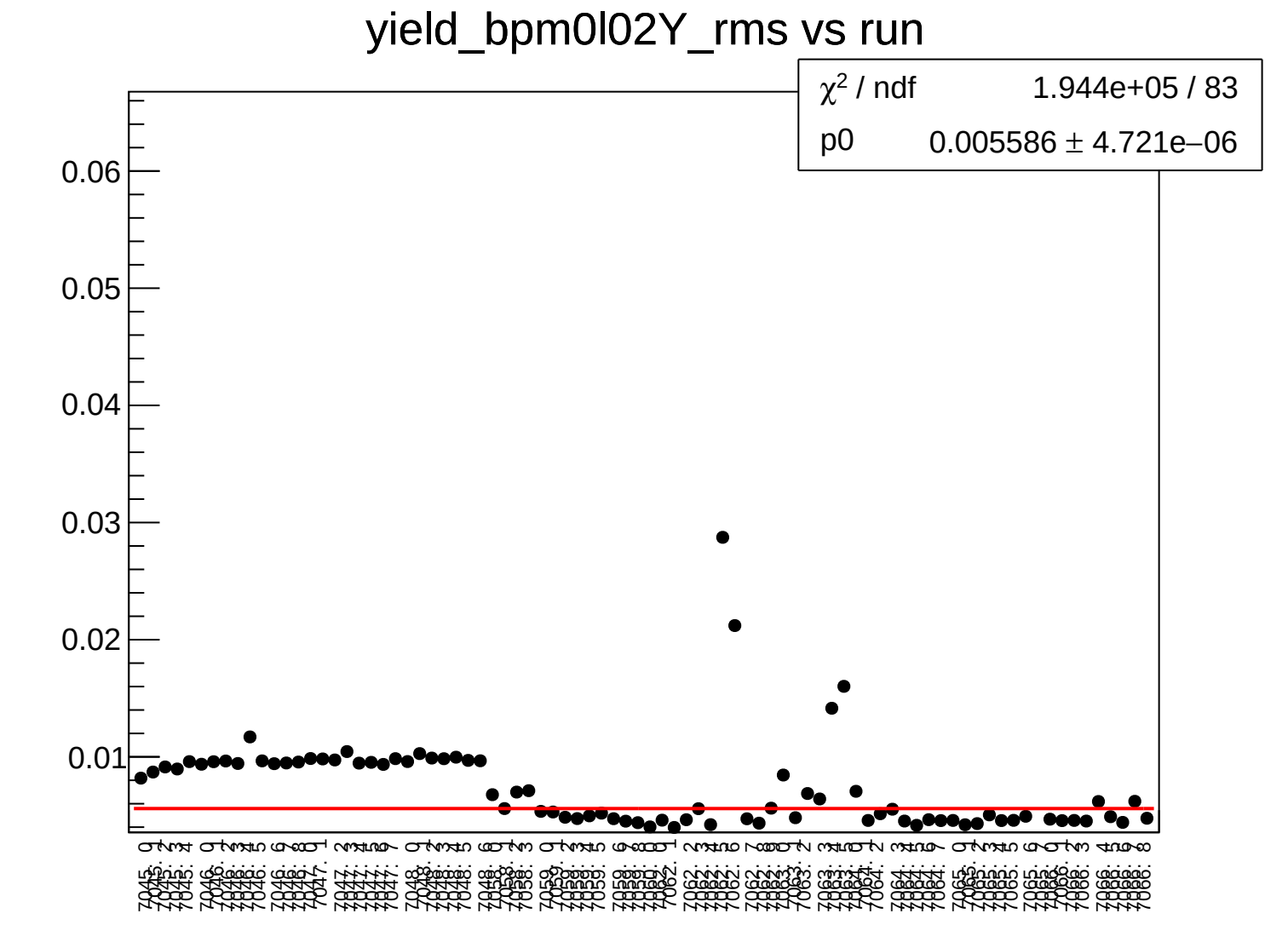

yield_bpm0l02X_mean vs run
χ² / ndf 5.74e+07 / 83
p0 −3.141 ± 1.716e−05
−3
−3.1
−3.2
−3.3
−3.4
pull
Entries 84
Mean 356.6
Std Dev 323.3
1500
1000
500
0
−500
−1000
−1500
−2000

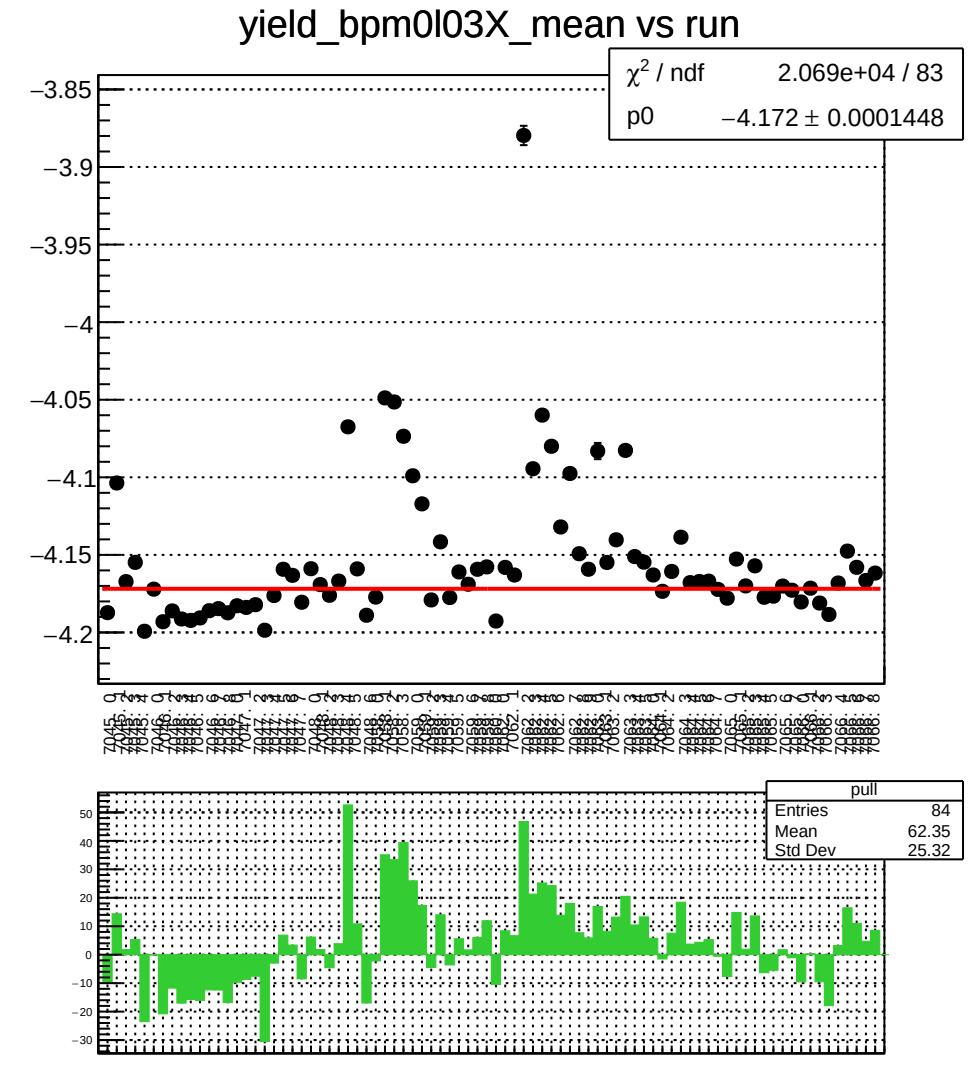

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

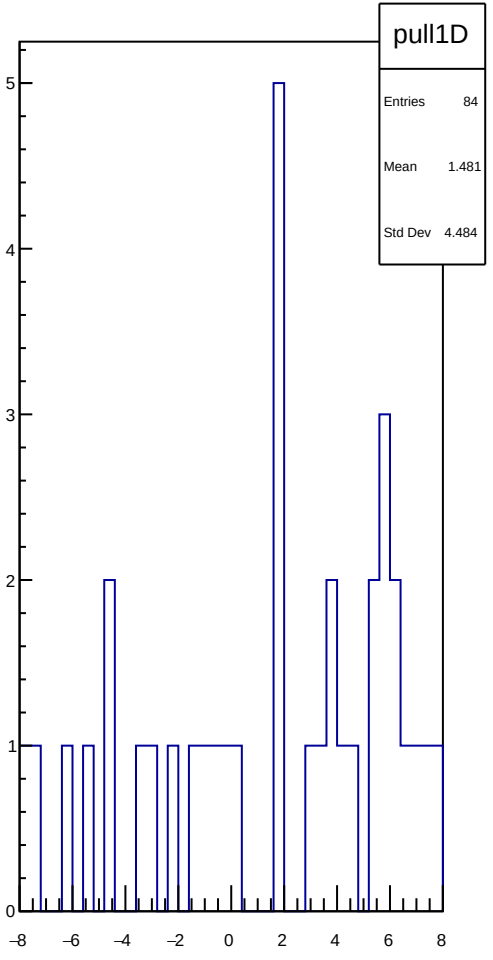

yield_bpm0l02X_rms vs run
χ² / ndf 4.31e+04 / 83
p0 0.01511 ± 1.213e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

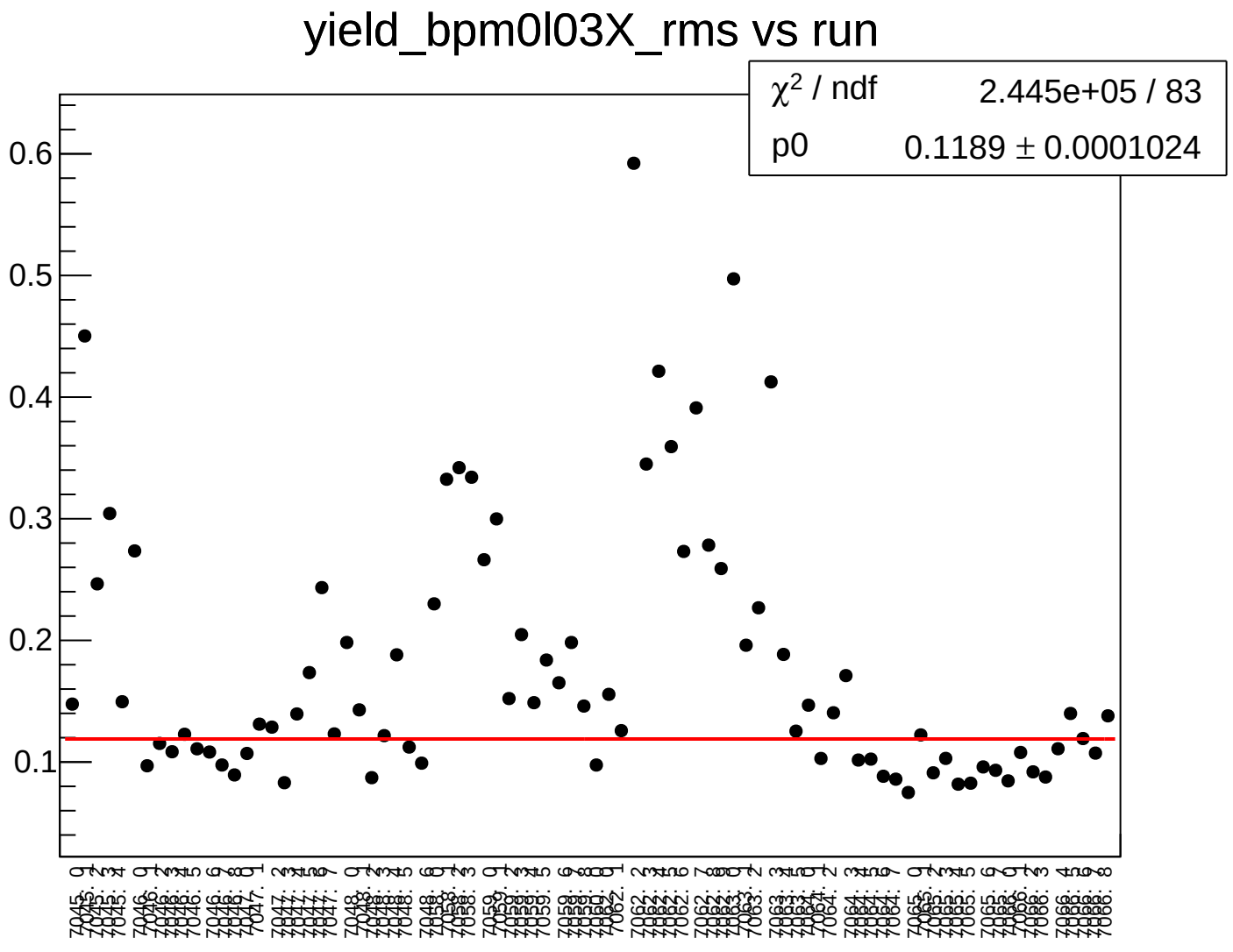

yield_bpm0l02Y_mean vs run
χ² / ndf 4.755e+07 / 83
p0 1.696 ± 6.676e−06
1.74
1.72
1.7
1.68
1.66
1.64
1.62
pull
Entries 84
Mean −5.495
Std Dev 20.06
1000
500
0
−500
−1000
−1500

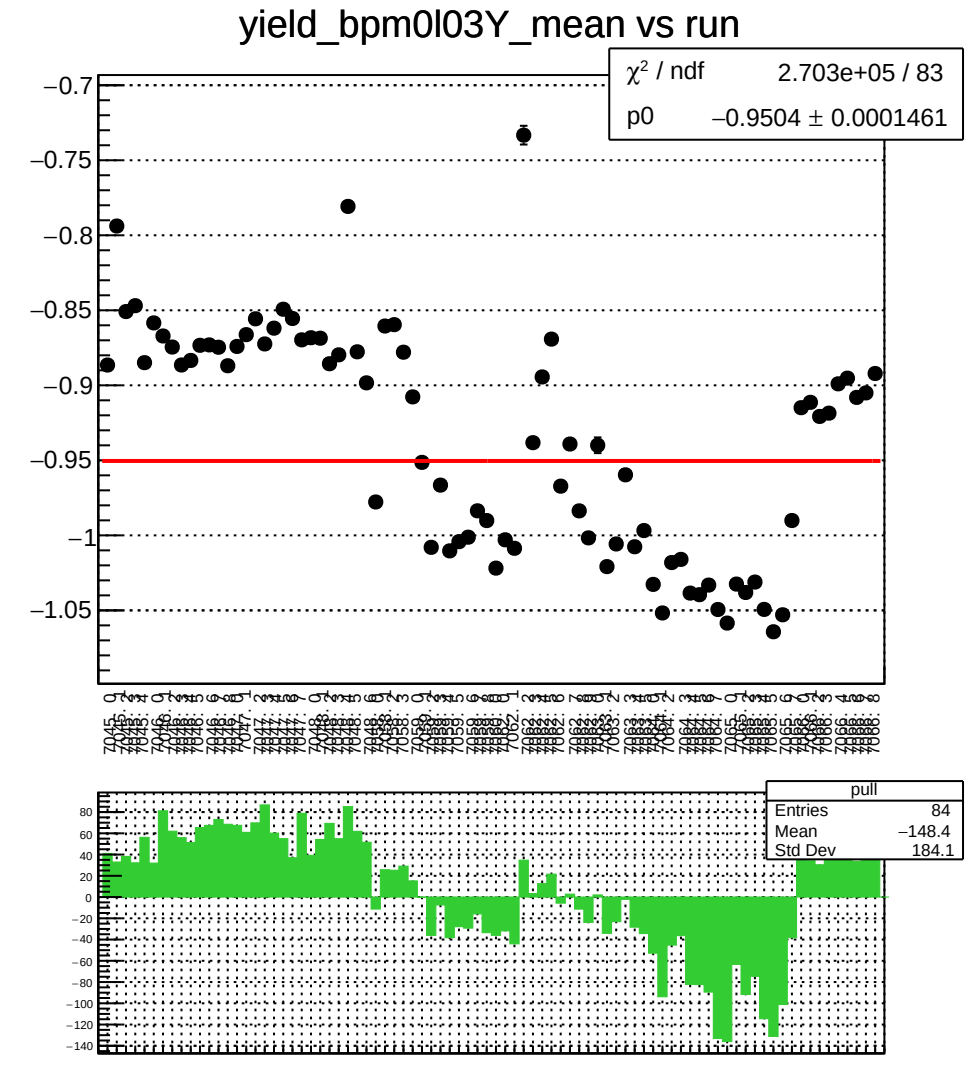

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

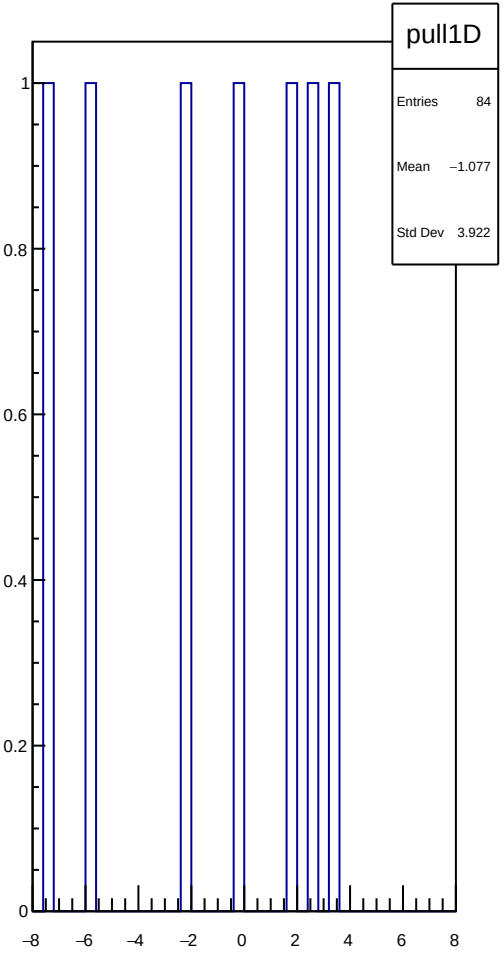

yield_bpm0l02Y_rms vs run
χ² / ndf 1.944e+05 / 83
p0 0.005586 ± 4.721e−06
0.06
0.05
0.04
0.03
0.02
0.01

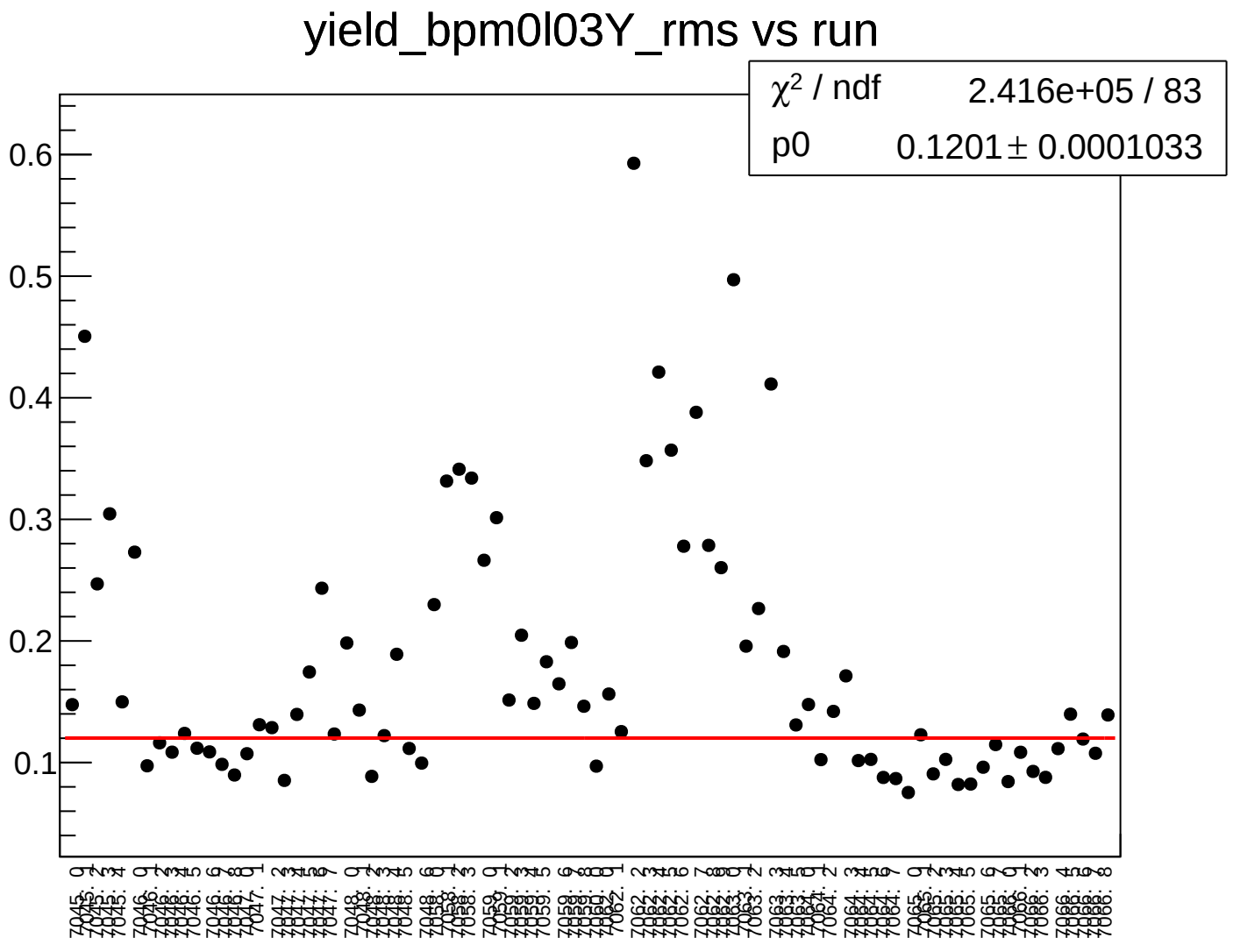

yield_bpm0l03X_mean vs run
χ² / ndf 2.069e+04 / 83
p0 −4.172 ± 0.0001448
−3.85
−3.9
−3.95
−4
−4.05
−4.1
−4.15
−4.2
pull
Entries 84
Mean 62.35
Std Dev 25.32
50
40
30
20
10
0
−10
−20
−30

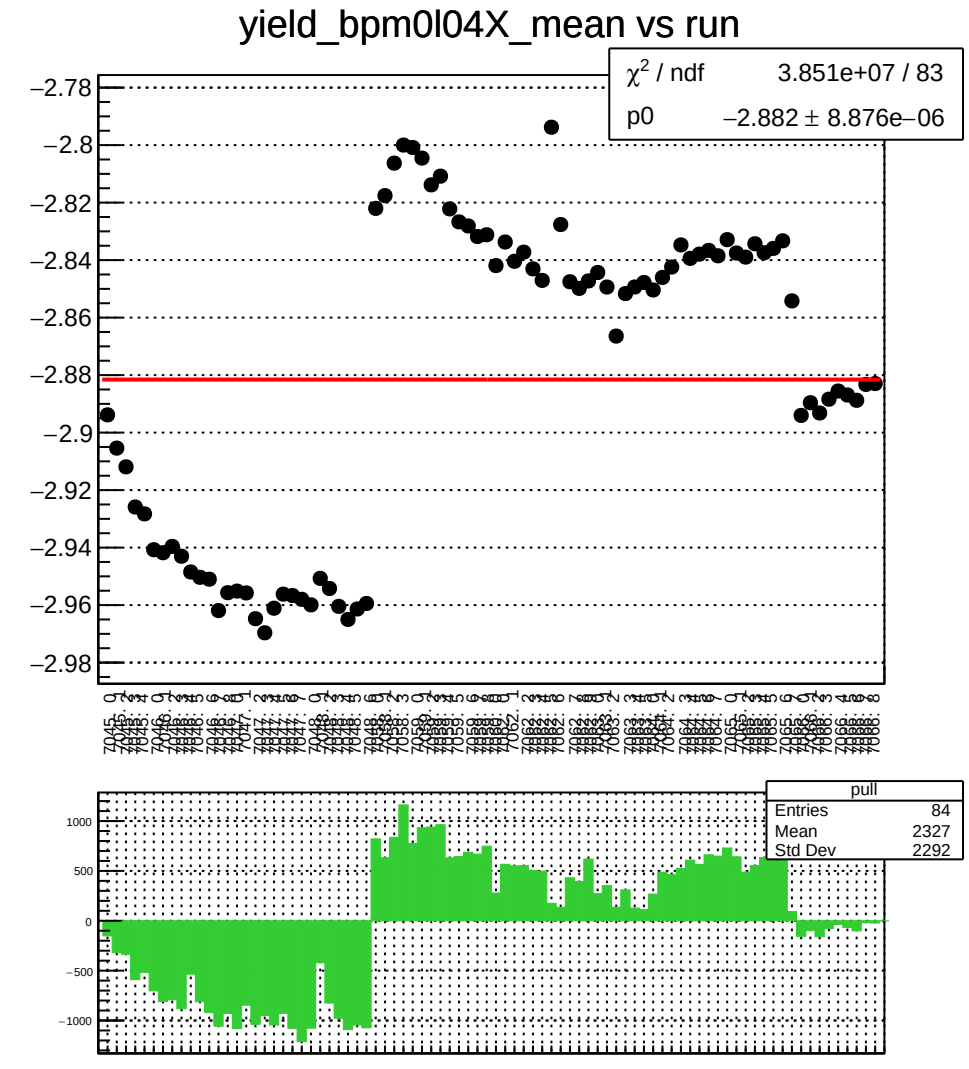

pull1D
Entries 84
Mean 1.481
Std Dev 4.484
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

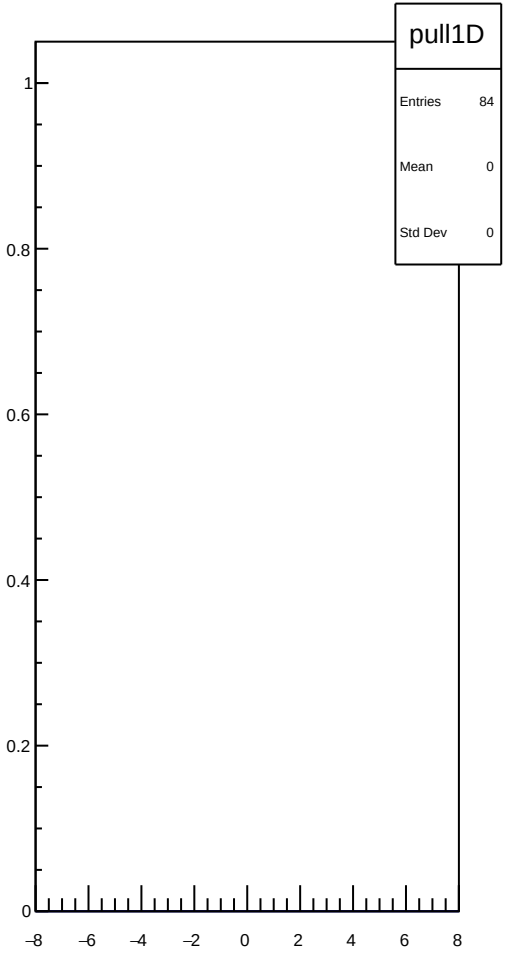

yield_bpm0l03X_rms vs run
χ² / ndf 2.445e+05 / 83
p0 0.1189 ± 0.0001024
0.6
0.5
0.4
0.3
0.2
0.1

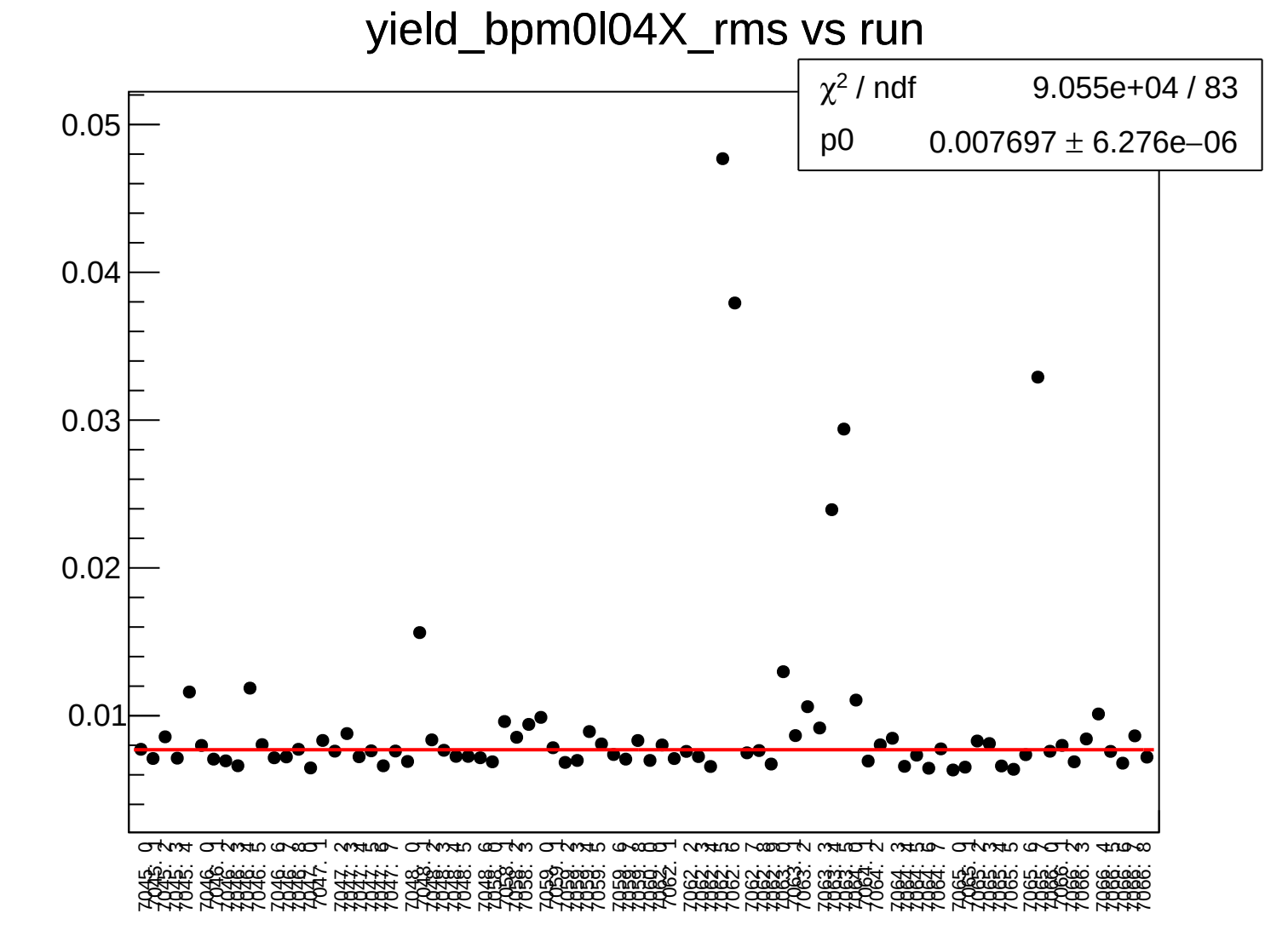

yield_bpm0l03Y_mean vs run
χ² / ndf 2.703e+05 / 83
p0 −0.9504 ± 0.0001461
−0.7
−0.75
−0.8
−0.85
−0.9
−0.95
−1
−1.05
pull
Entries 84
Mean −148.4
Std Dev 184.1
80
60
40
20
0
−20
−40
−60
−80
−100
−120
−140

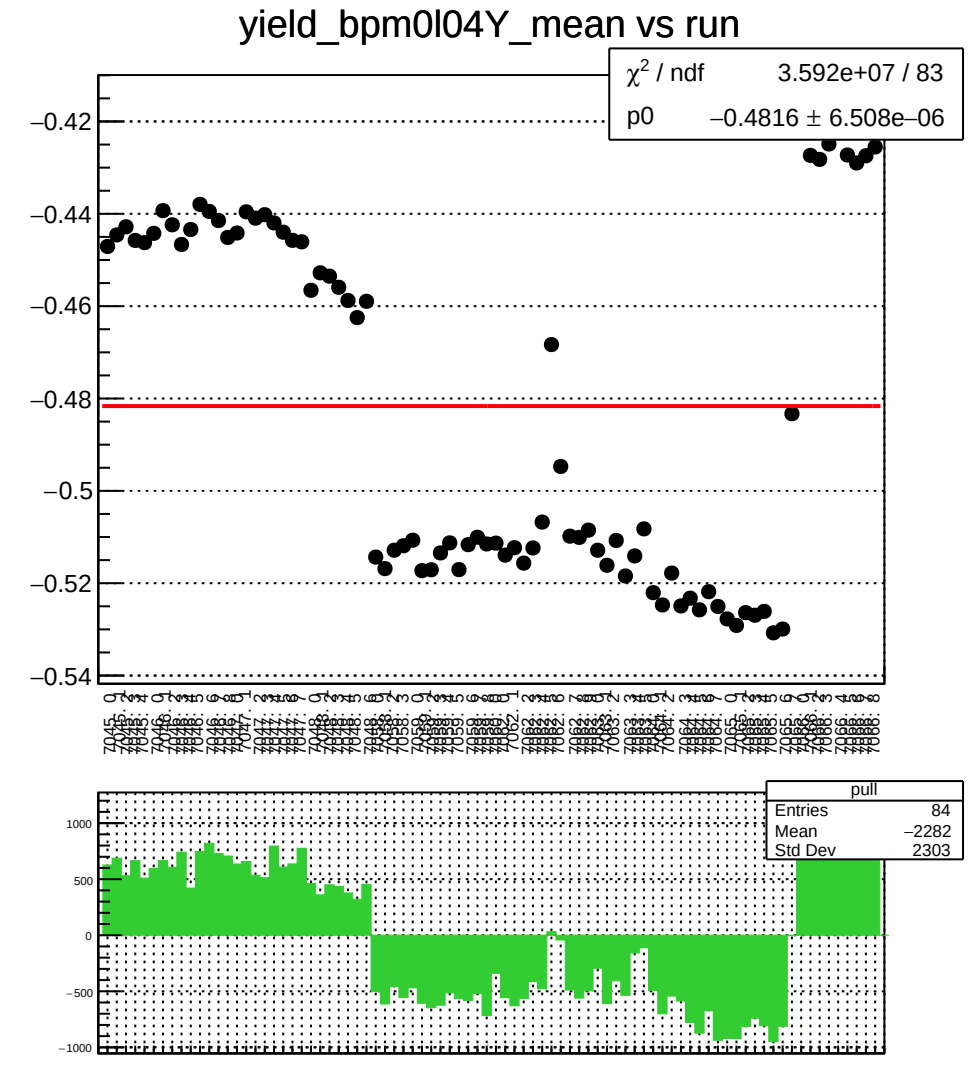

pull1D
Entries 84
Mean −1.077
Std Dev 3.922
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

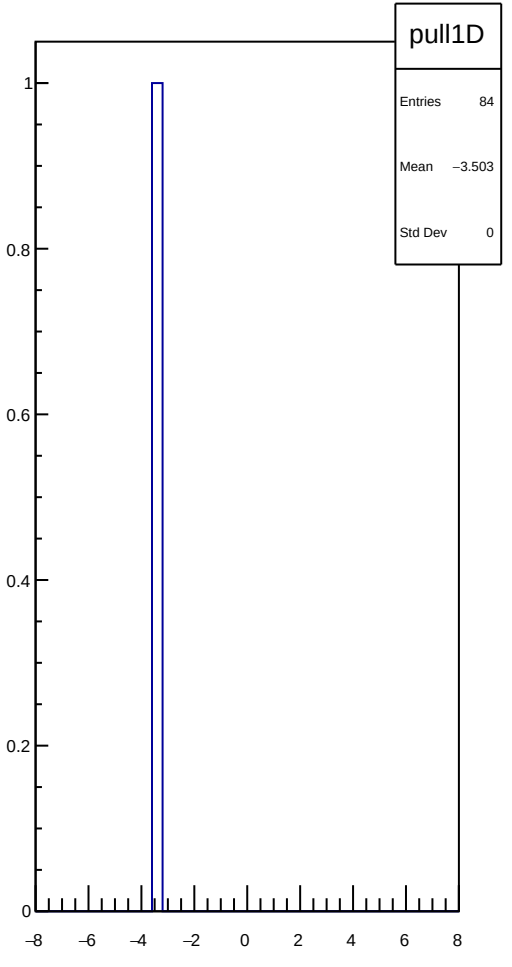

yield_bpm0l03Y_rms vs run
χ² / ndf 2.416e+05 / 83
p0 0.1201 ± 0.0001033
0.6
0.5
0.4
0.3
0.2
0.1

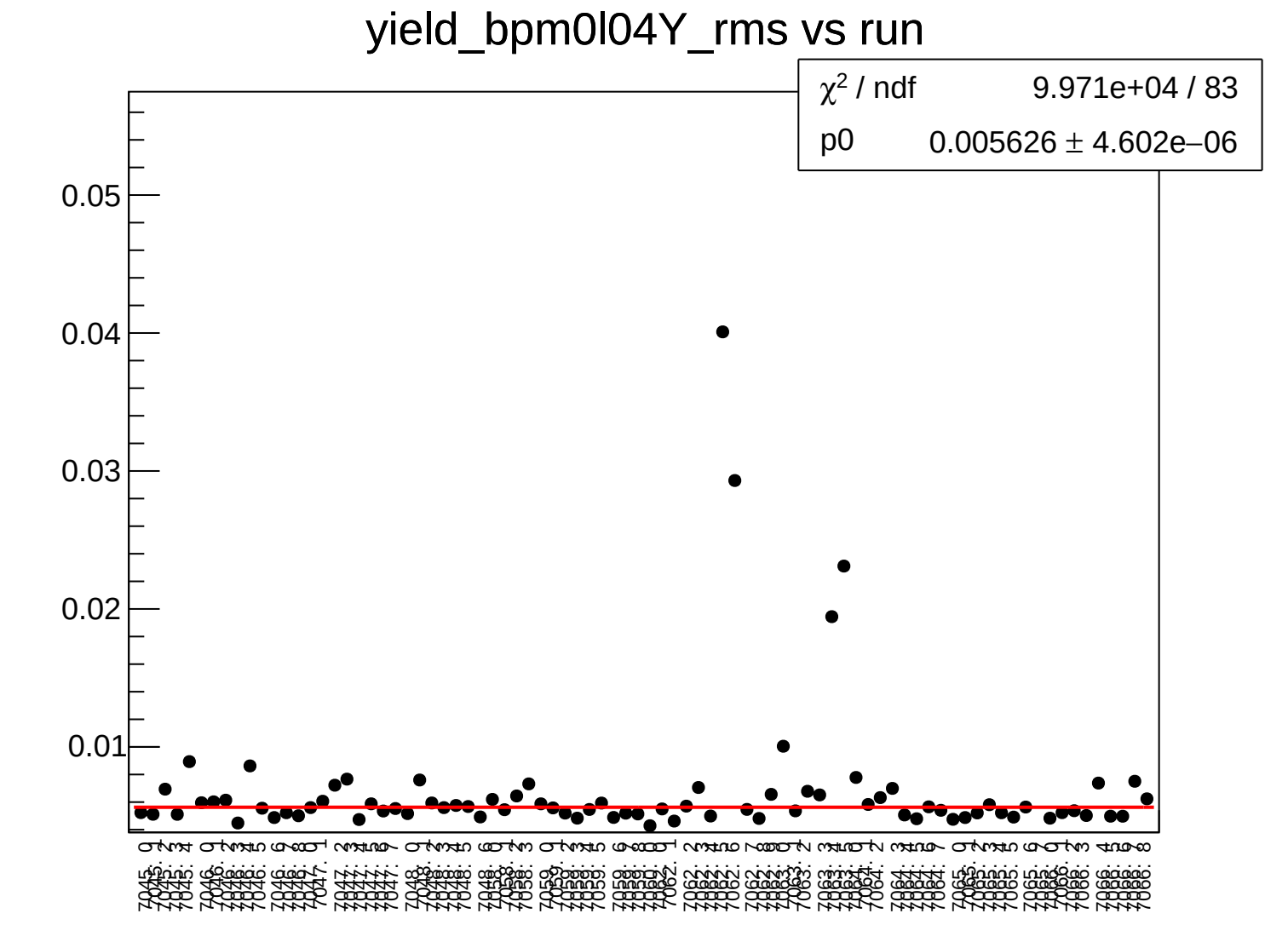

yield_bpm0l04X_mean vs run
χ² / ndf 3.851e+07 / 83
p0 −2.882 ± 8.876e−06
−2.78
−2.8
−2.82
−2.84
−2.86
−2.88
−2.9
−2.92
−2.94
−2.96
−2.98
pull
Entries 84
Mean 2327
Std Dev 2292
1000
500
0
−500
−1000

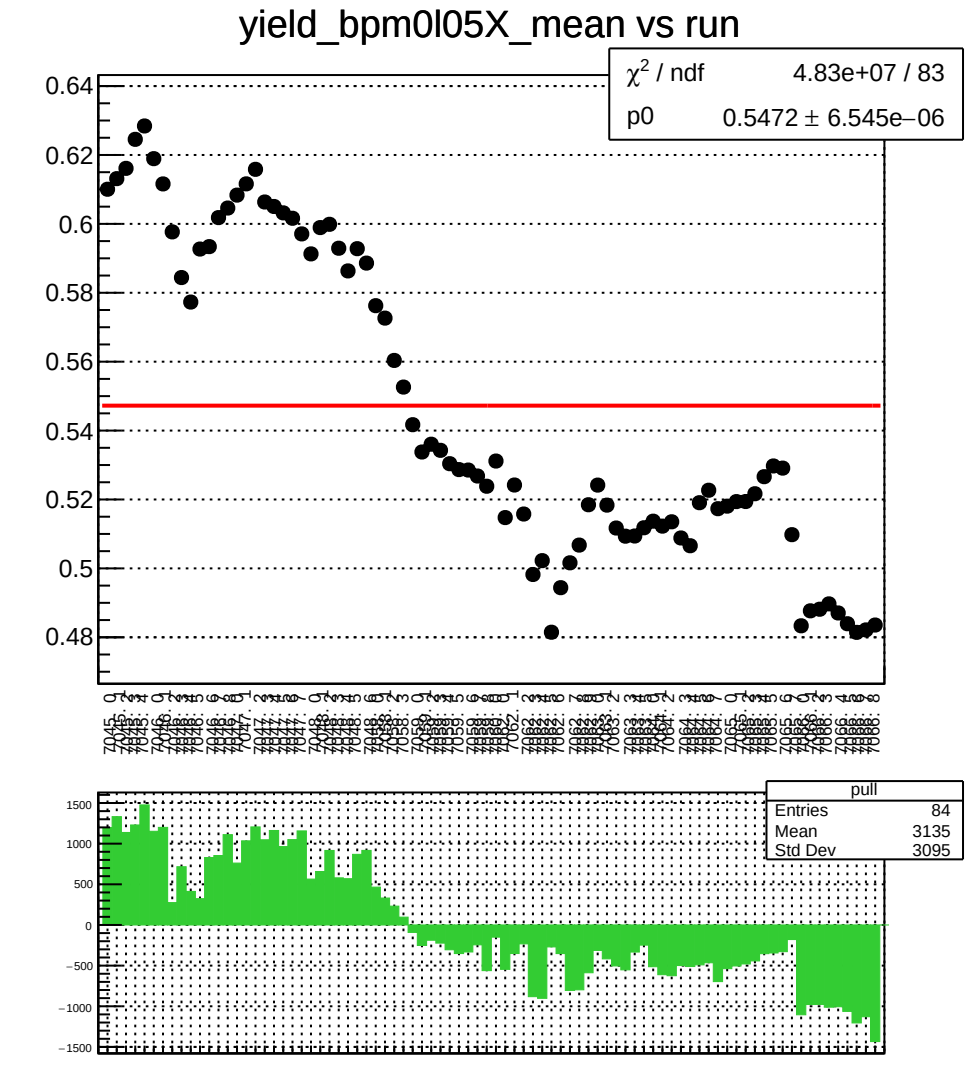

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

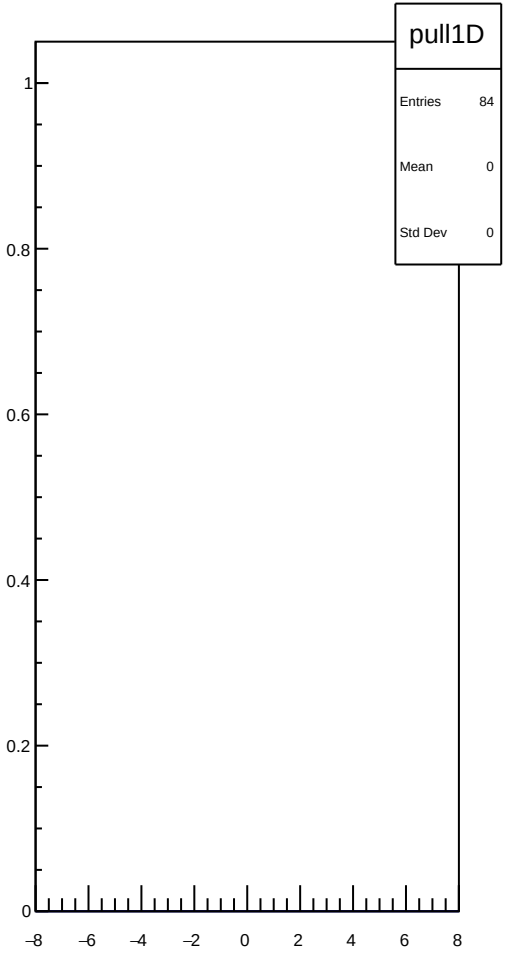

yield_bpm0l04X_rms vs run
χ^2 / ndf 9.055e+04 / 83
p0 0.007697 ± 6.276e−06
0.05
0.04
0.03
0.02
0.01

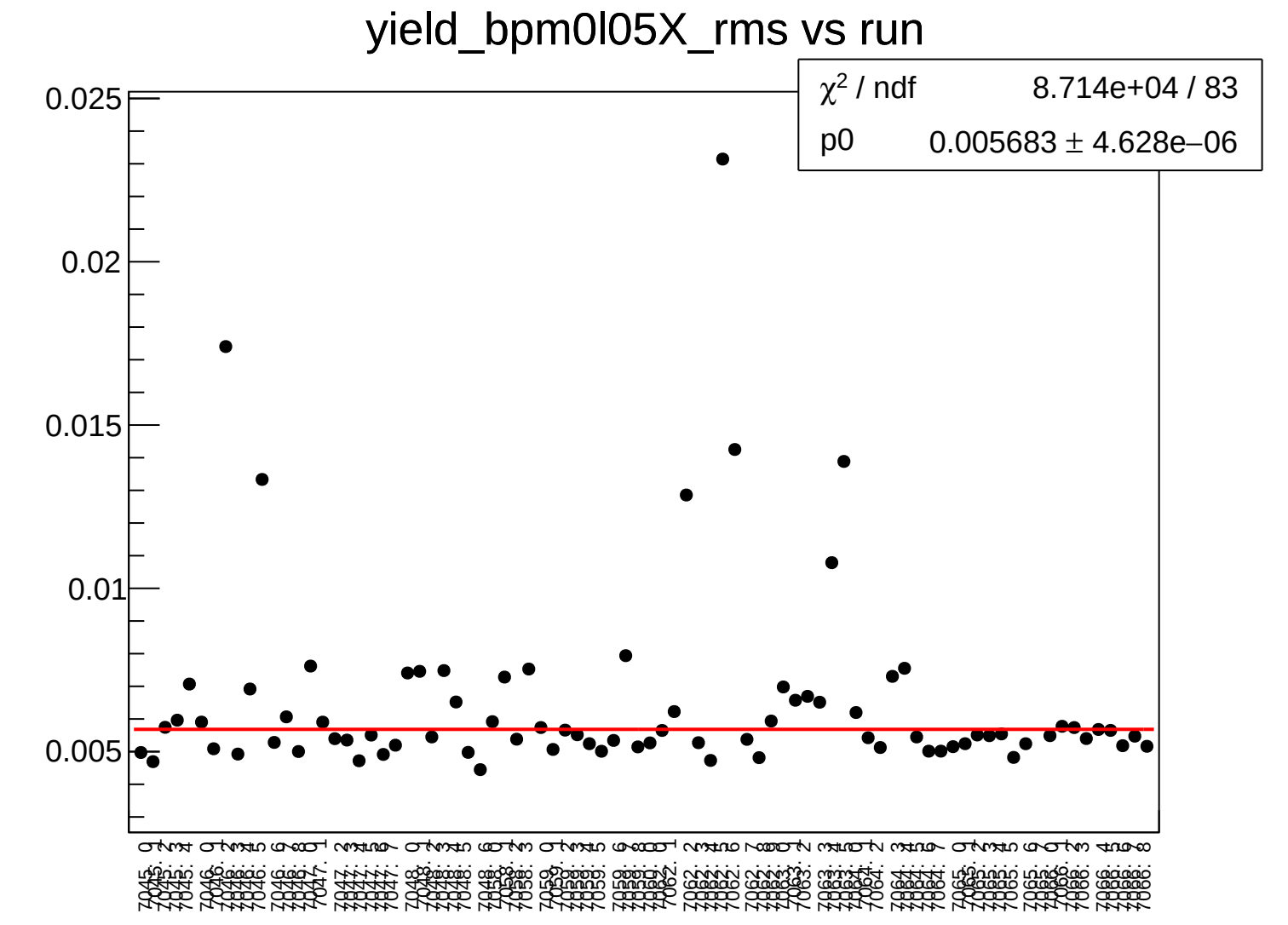

yield_bpm0l04Y_mean vs run
χ² / ndf 3.592e+07 / 83
p0 −0.4816 ± 6.508e−06
−0.42
−0.44
−0.46
−0.48
−0.5
−0.52
−0.54
pull
Entries 84
Mean −2282
Std Dev 2303
1000
500
0
−500
−1000

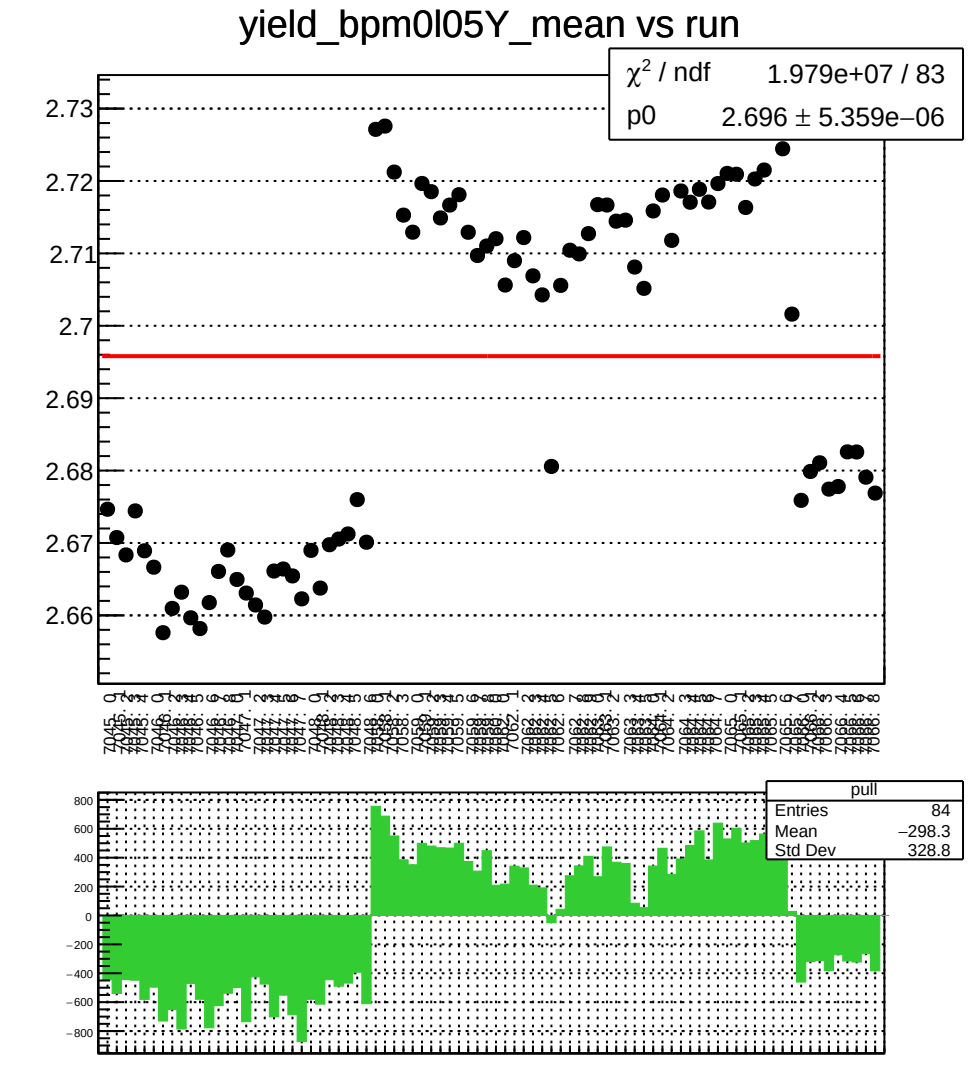

pull1D
Entries 84
Mean −3.503
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

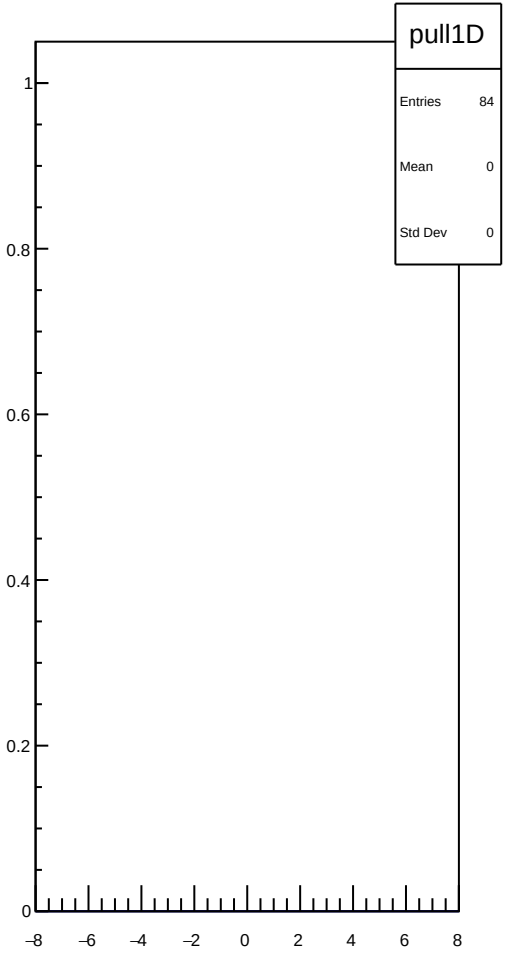

yield_bpm0l04Y_rms vs run
χ^2 / ndf 9.971e+04 / 83
p0 0.005626 ± 4.602e−06
0.05
0.04
0.03
0.02
0.01

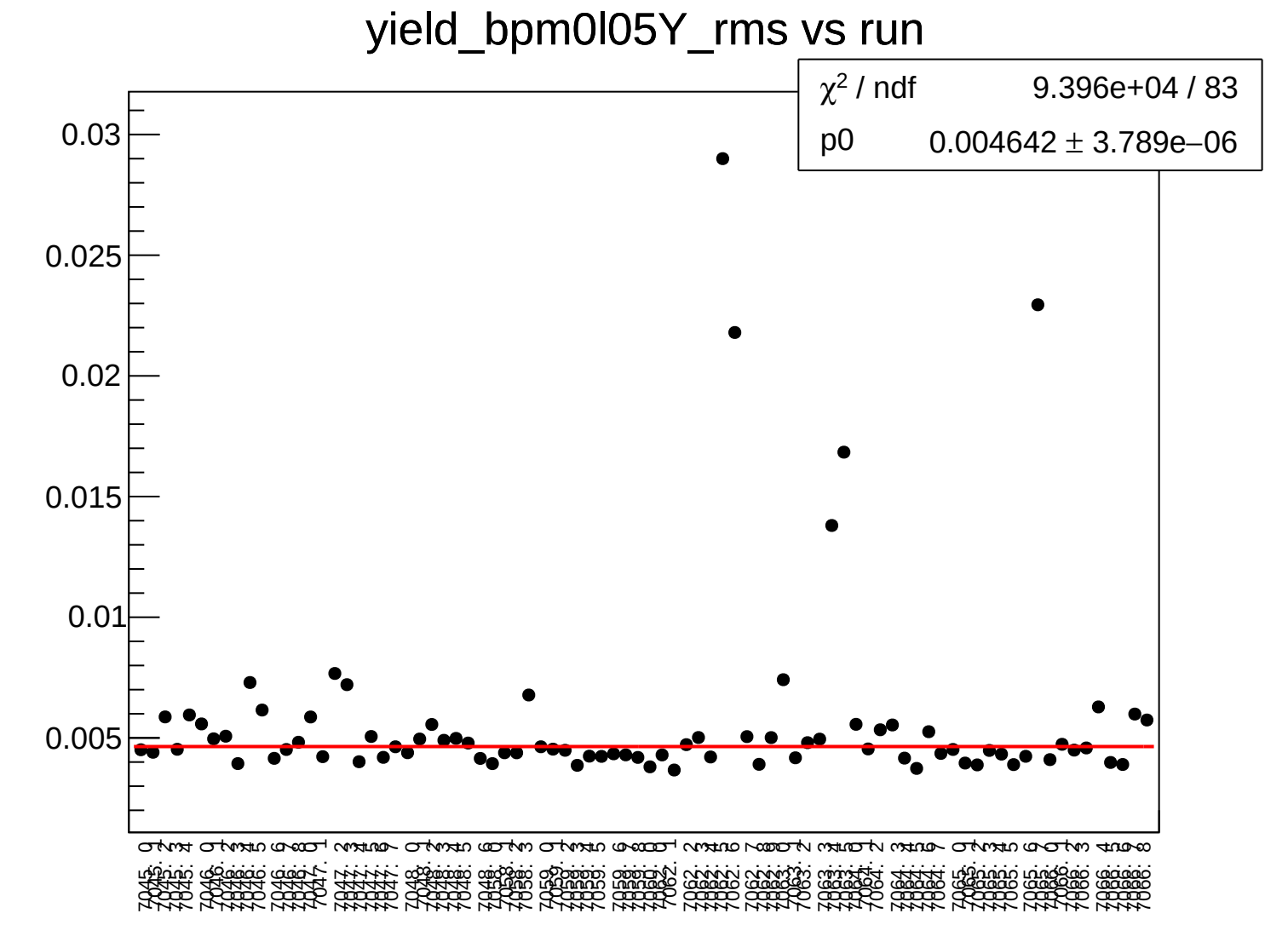

yield_bpm0l05X_mean vs run
χ² / ndf 4.83e+07 / 83
p0 0.5472 ± 6.545e−06
0.64
0.62
0.6
0.58
0.56
0.54
0.52
0.5
0.48
pull
Entries 84
Mean 3135
Std Dev 3095
1500
1000
500
0
−500
−1000
−1500

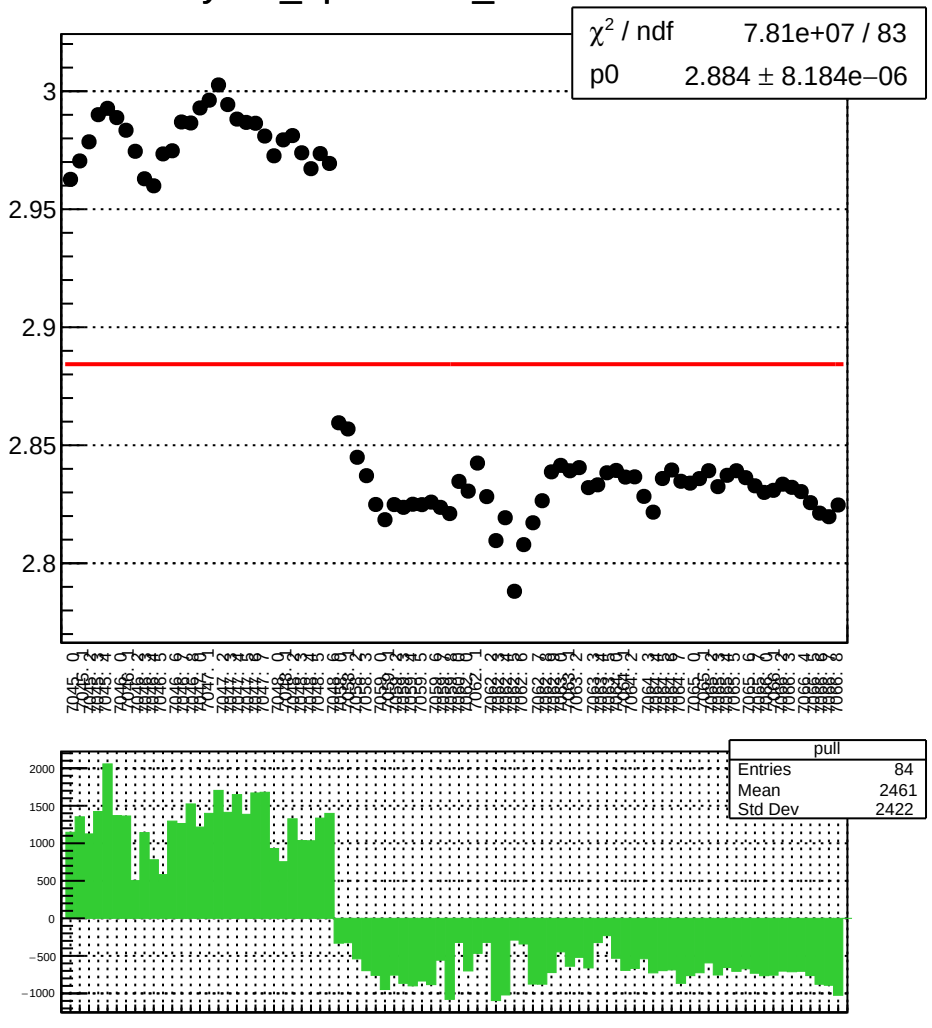

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

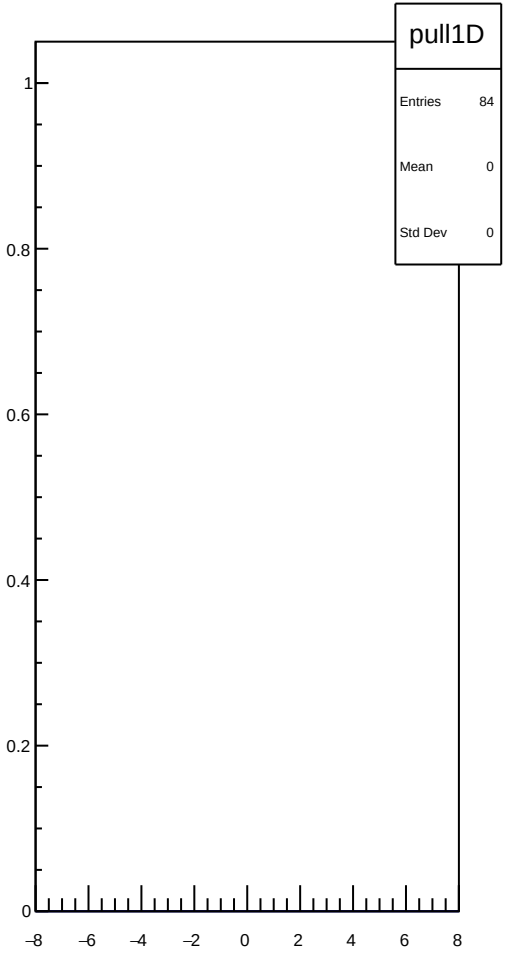

yield_bpm0l05X_rms vs run
χ² / ndf 8.714e+04 / 83
p0 0.005683 ± 4.628e−06
0.025
0.02
0.015
0.01
0.005

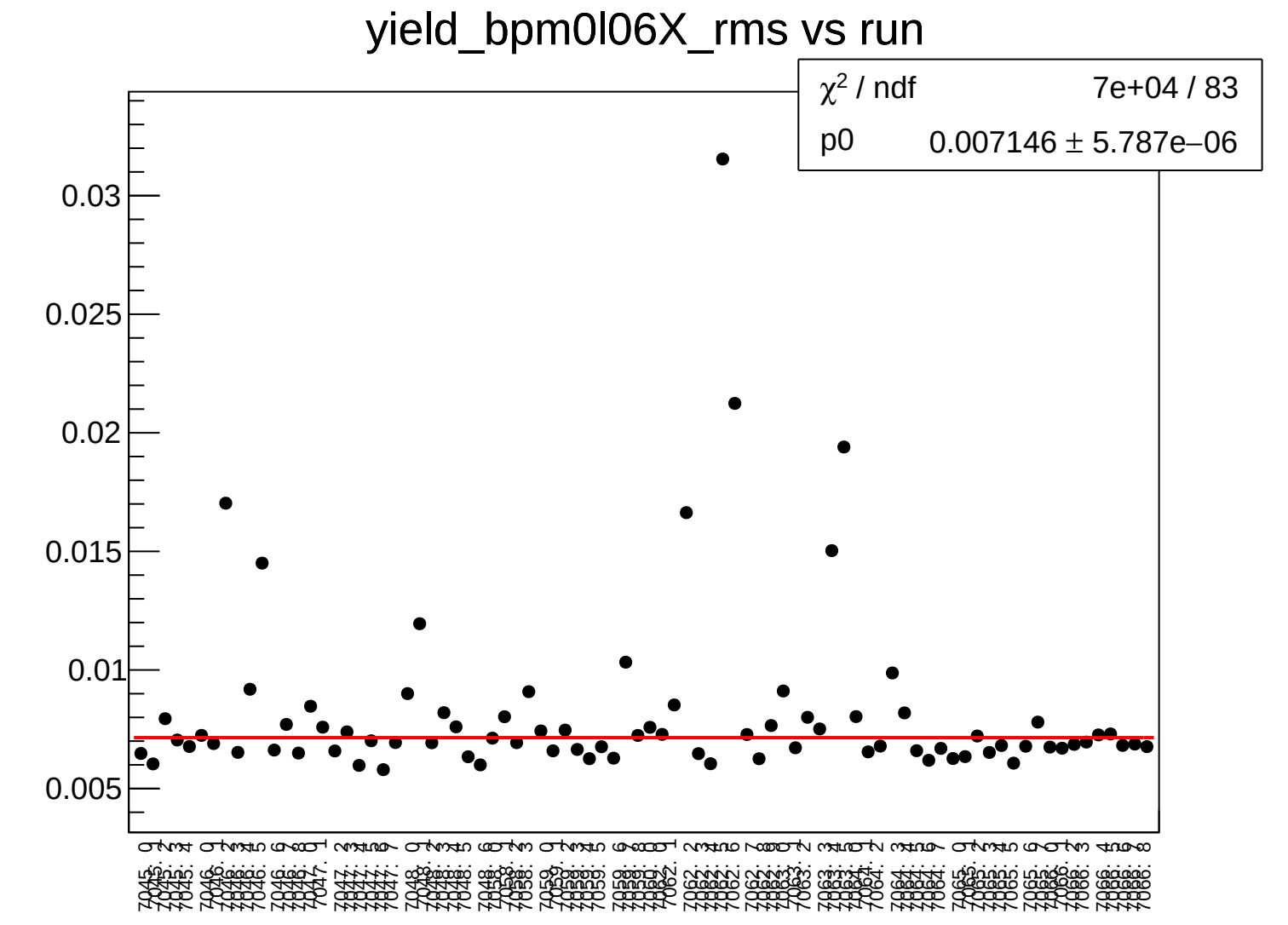

yield_bpm0l05Y_mean vs run
χ² / ndf 1.979e+07 / 83
p0 2.696 ± 5.359e−06
2.73
2.72
2.71
2.7
2.69
2.68
2.67
2.66
pull
Entries 84
Mean −298.3
Std Dev 328.8
800
600
400
200
0
−200
−400
−600
−800

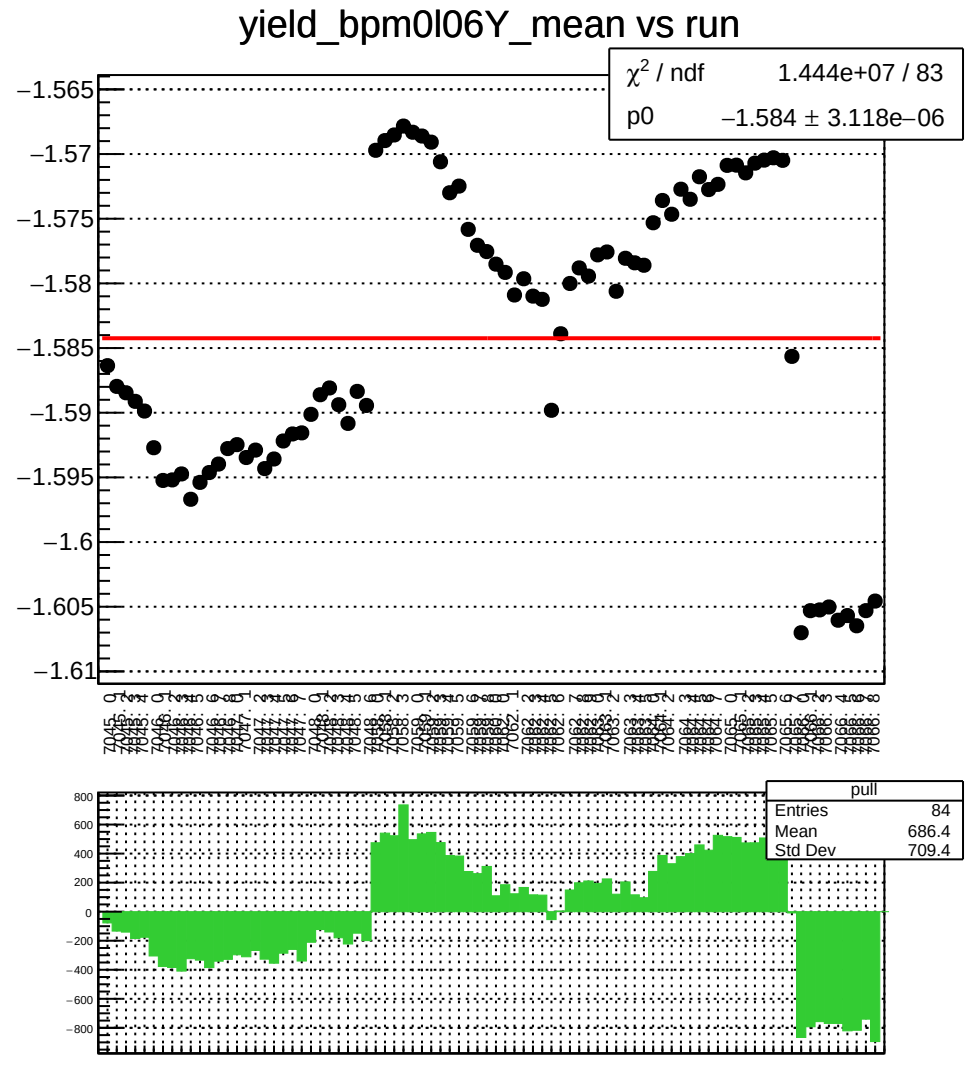

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

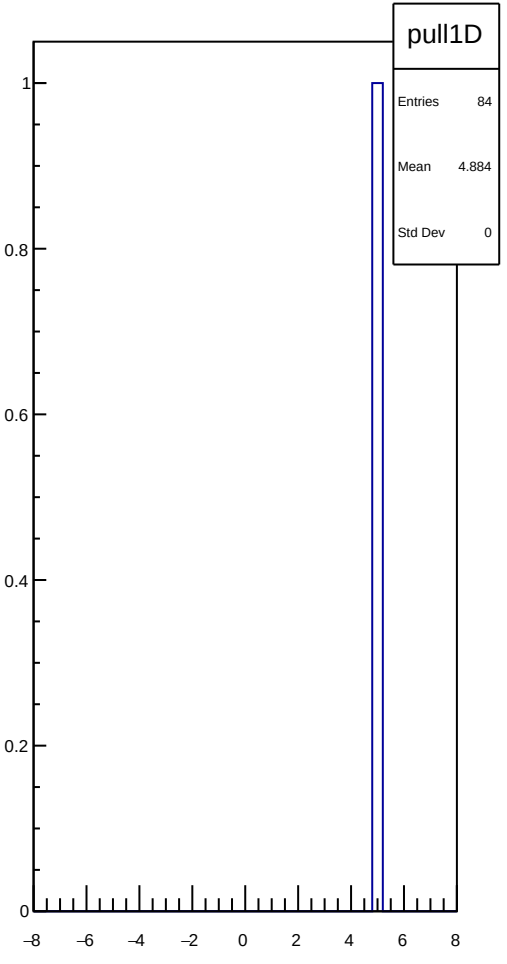

yield_bpm0l05Y_rms vs run
χ^2 / ndf 9.396e+04 / 83
p0 0.004642 ± 3.789e−06
0.03
0.025
0.02
0.015
0.01
0.005

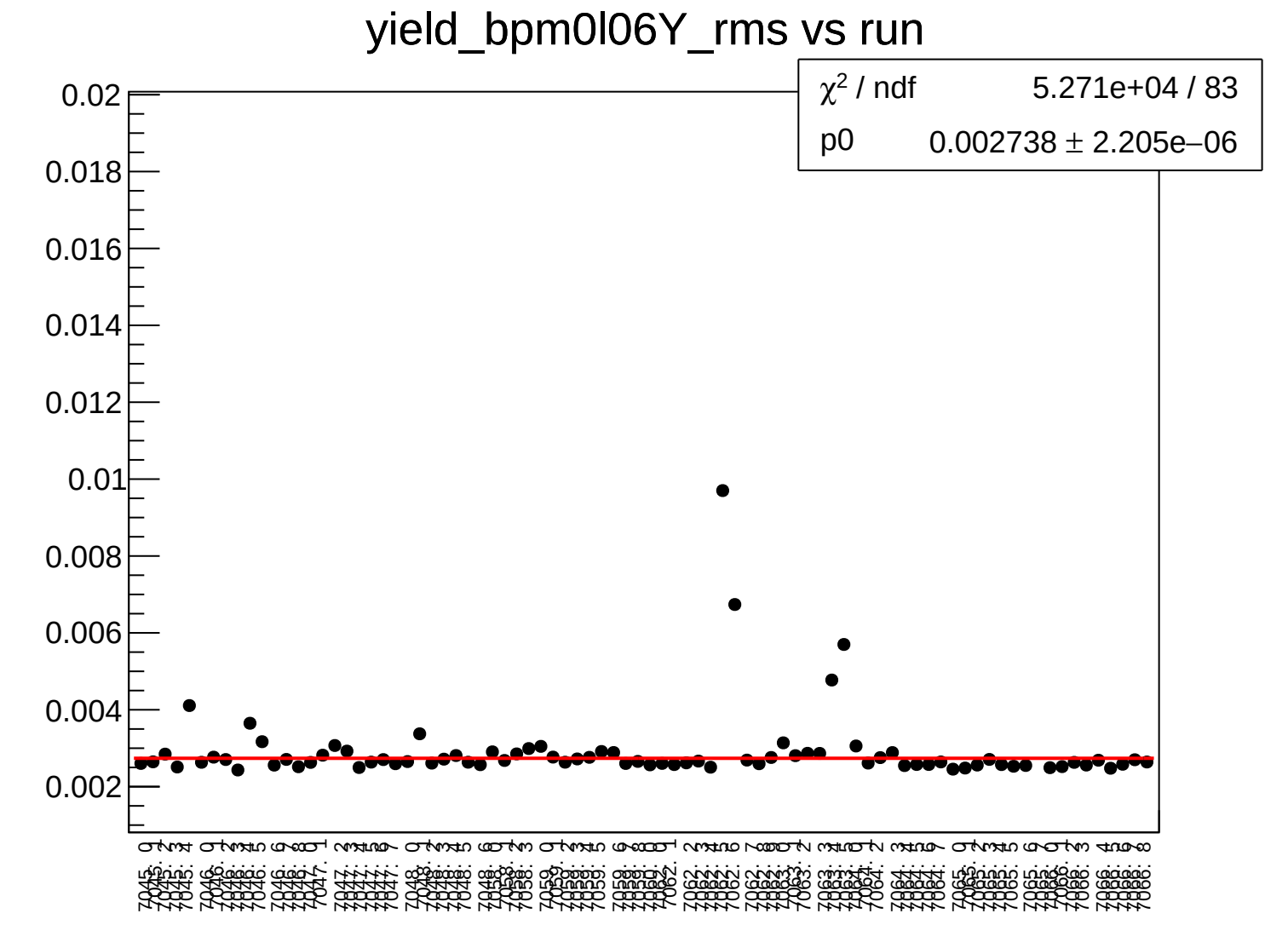

yield_bpm0l06X_mean vs run
χ² / ndf 7.81e+07 / 83
p0 2.884 ± 8.184e−06
3
2.95
2.9
2.85
2.8
pull
Entries 84
Mean 2461
Std Dev 2422
2000
1500
1000
500
0
−500
−1000

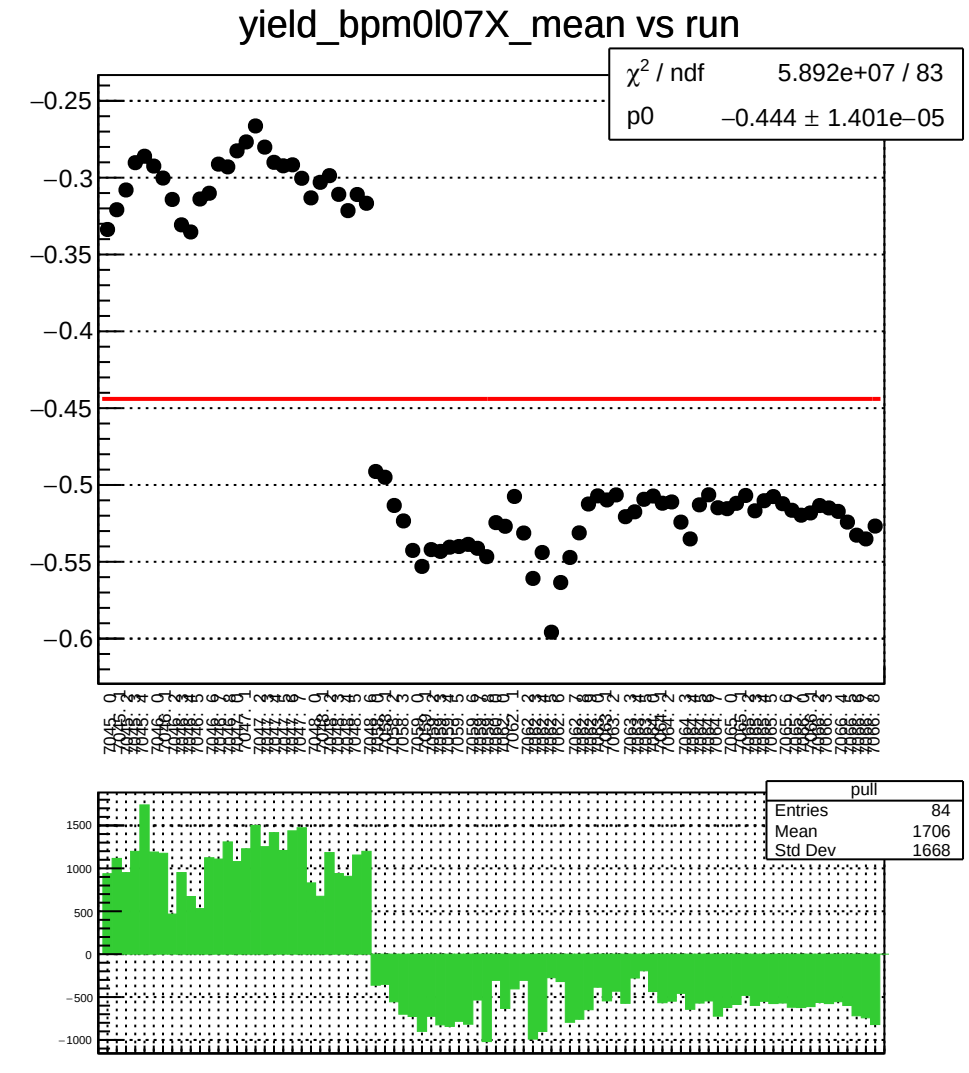

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

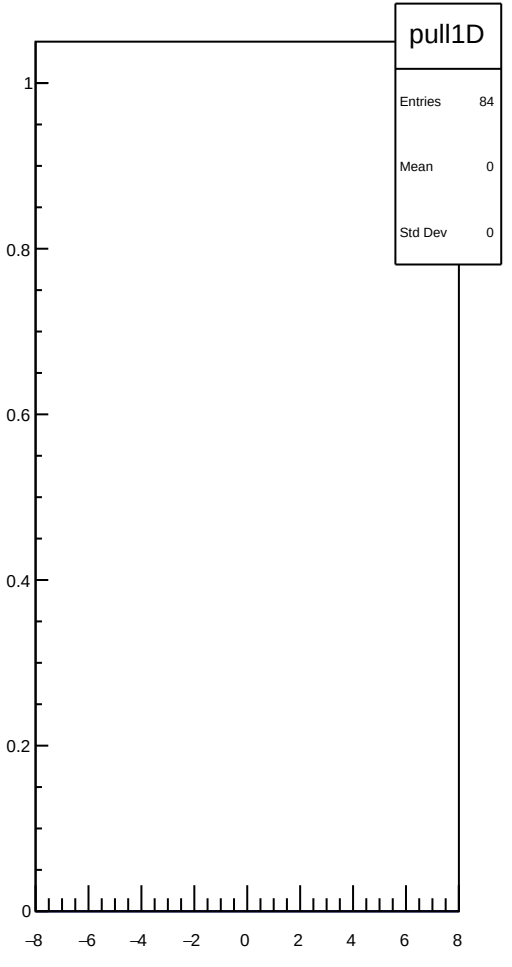

yield_bpm0l06X_rms vs run
χ² / ndf 7e+04 / 83
p0 0.007146 ± 5.787e−06
0.03
0.025
0.02
0.015
0.01
0.005

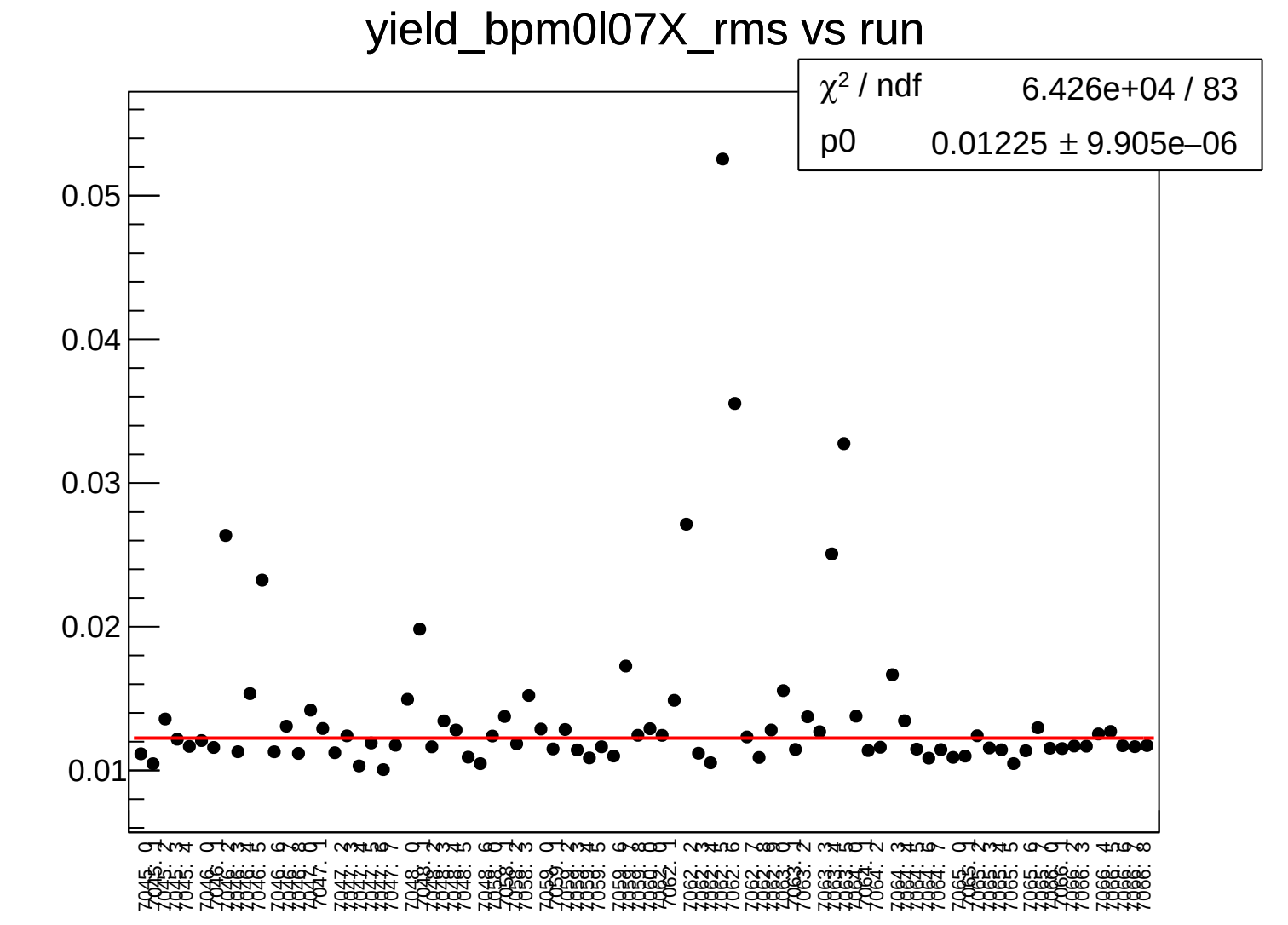

yield_bpm0l06Y_mean vs run
χ² / ndf 1.444e+07 / 83
p0 −1.584 ± 3.118e−06
−1.565
−1.57
−1.575
−1.58
−1.585
−1.59
−1.595
−1.6
−1.605
−1.61
pull
Entries 84
Mean 686.4
Std Dev 709.4
800
600
400
200
0
−200
−400
−600
−800

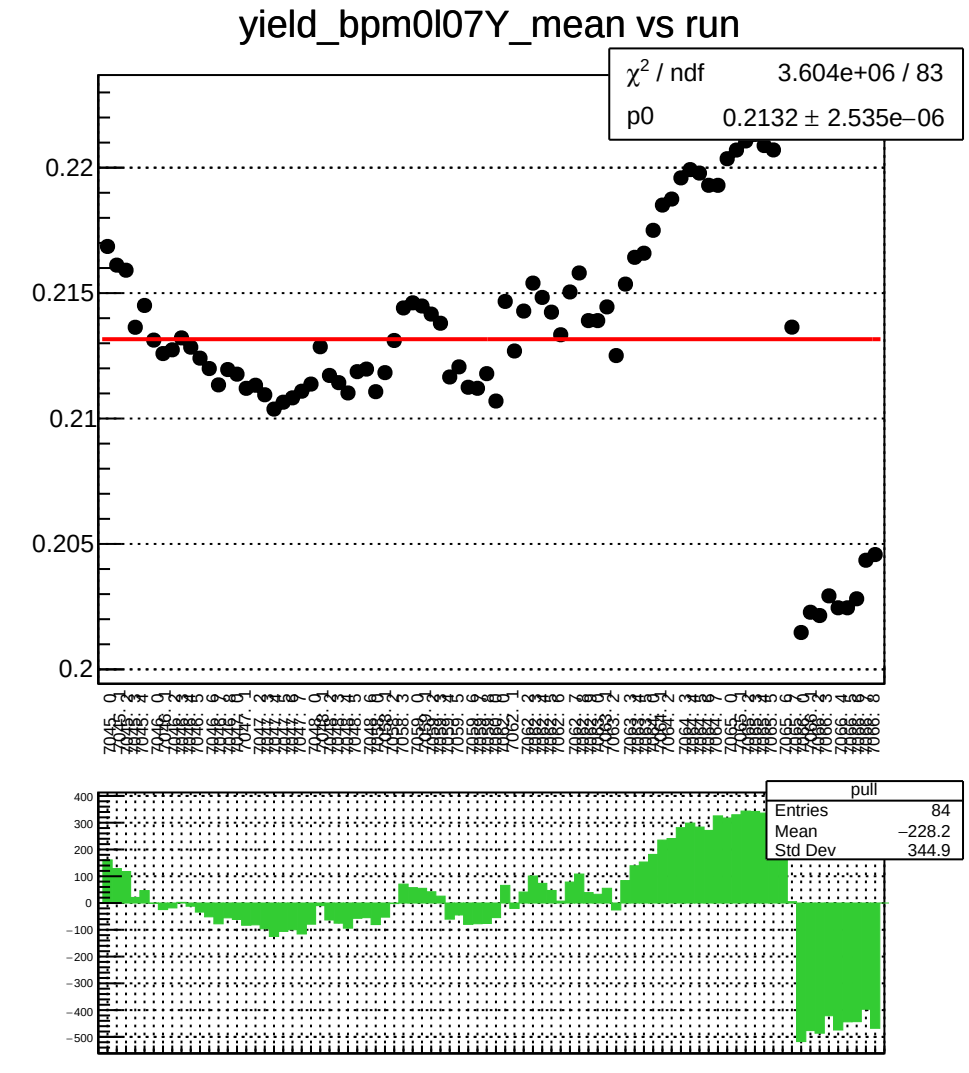

pull1D
Entries 84
Mean 4.884
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

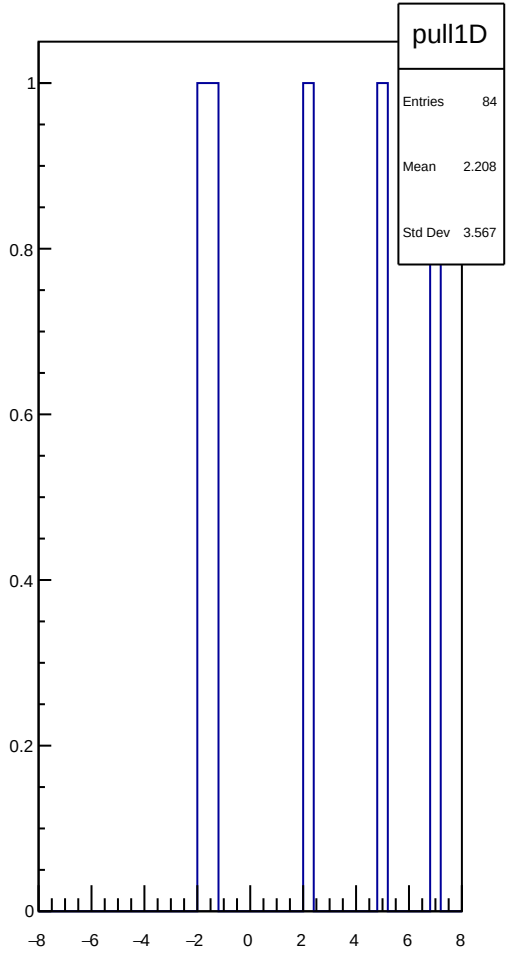

yield_bpm0l06Y_rms vs run
χ^2 / ndf 5.271e+04 / 83
p0 0.002738 ± 2.205e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

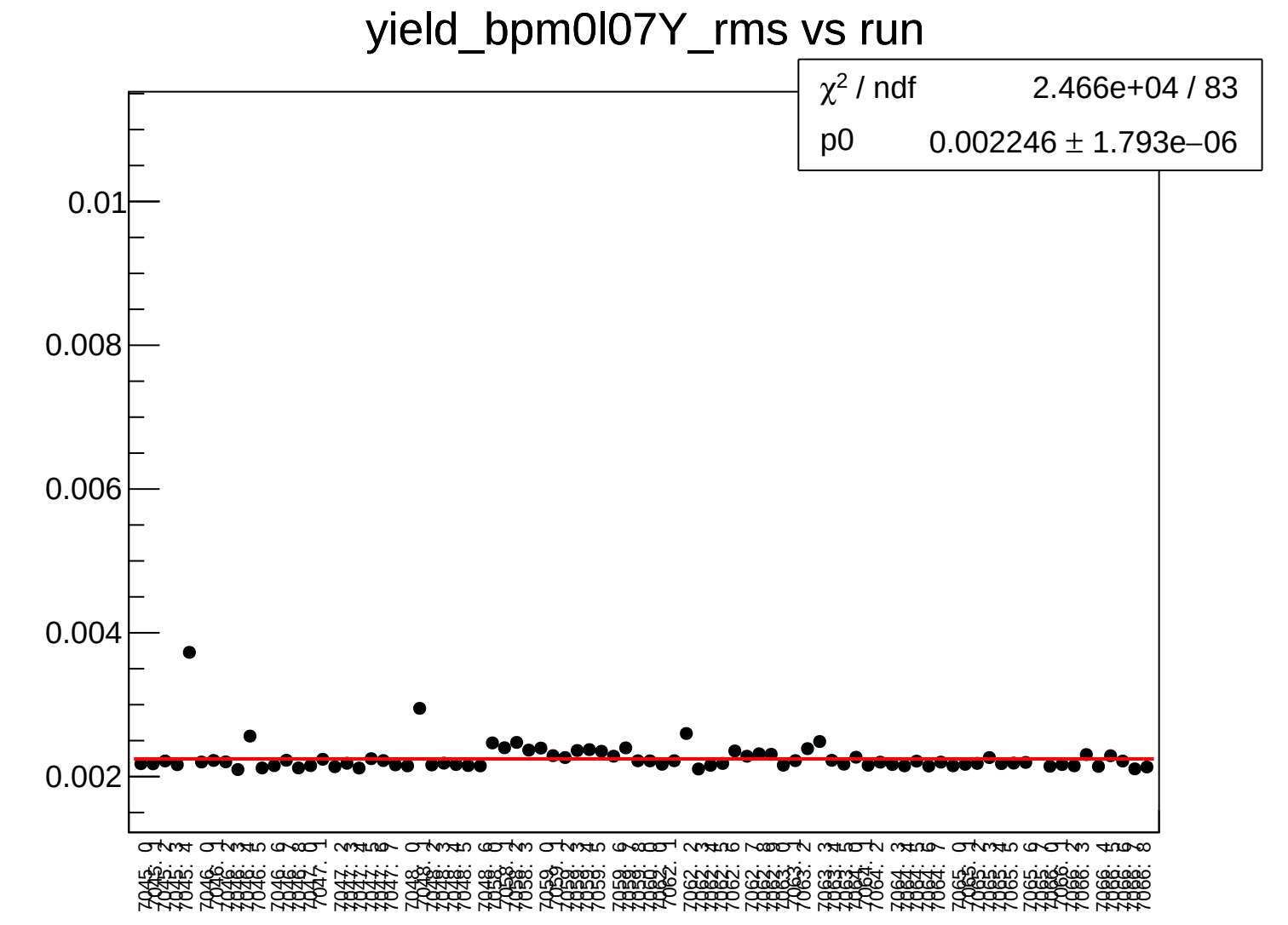

yield_bpm0l07X_mean vs run
χ² / ndf 5.892e+07 / 83
p0 −0.444 ± 1.401e−05
−0.25
−0.3
−0.35
−0.4
−0.45
−0.5
−0.55
−0.6
pull
Entries 84
Mean 1706
Std Dev 1668
1500
1000
500
0
−500
−1000

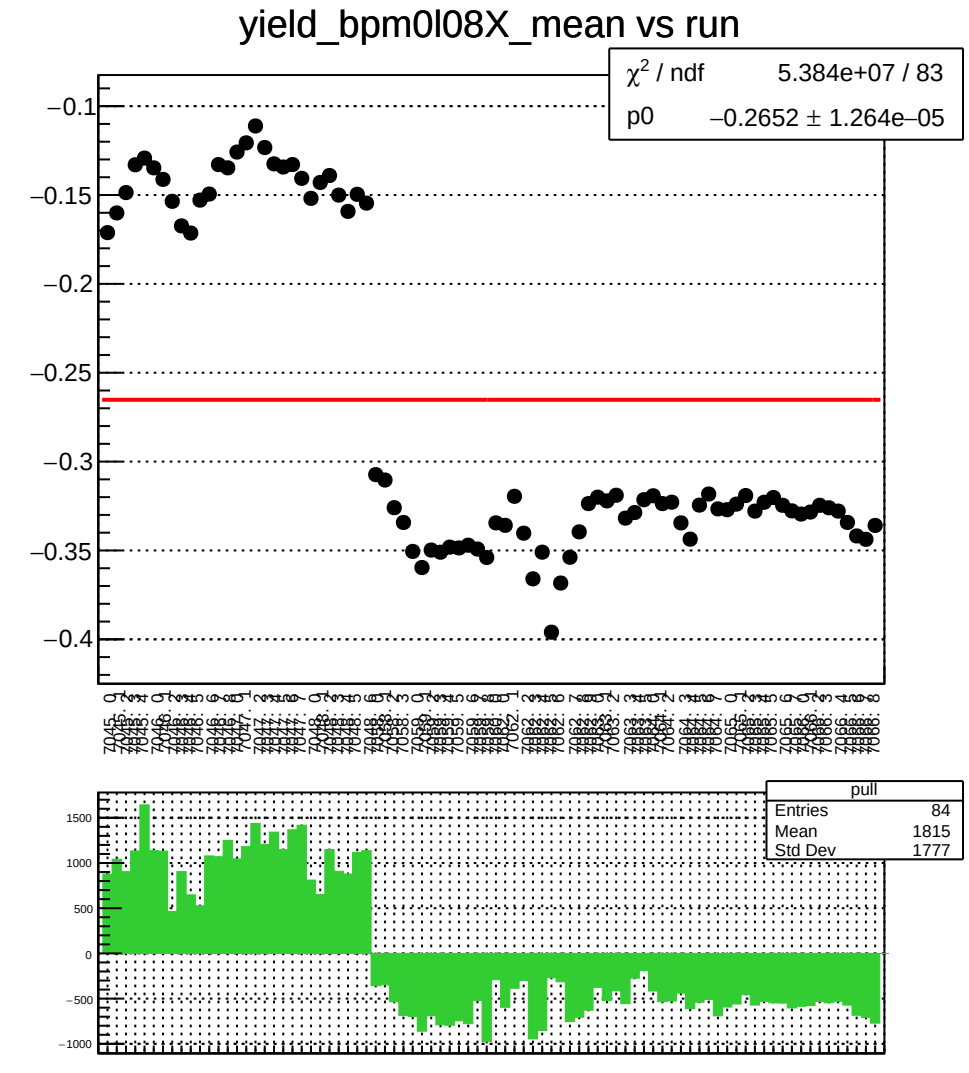

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

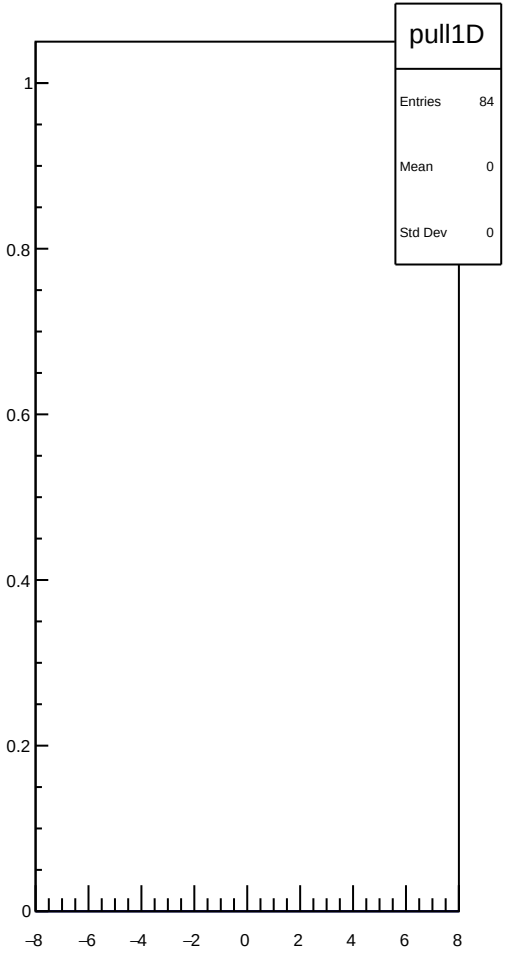

yield_bpm0l07X_rms vs run
χ² / ndf 6.426e+04 / 83
p0 0.01225 ± 9.905e–06
0.05
0.04
0.03
0.02
0.01

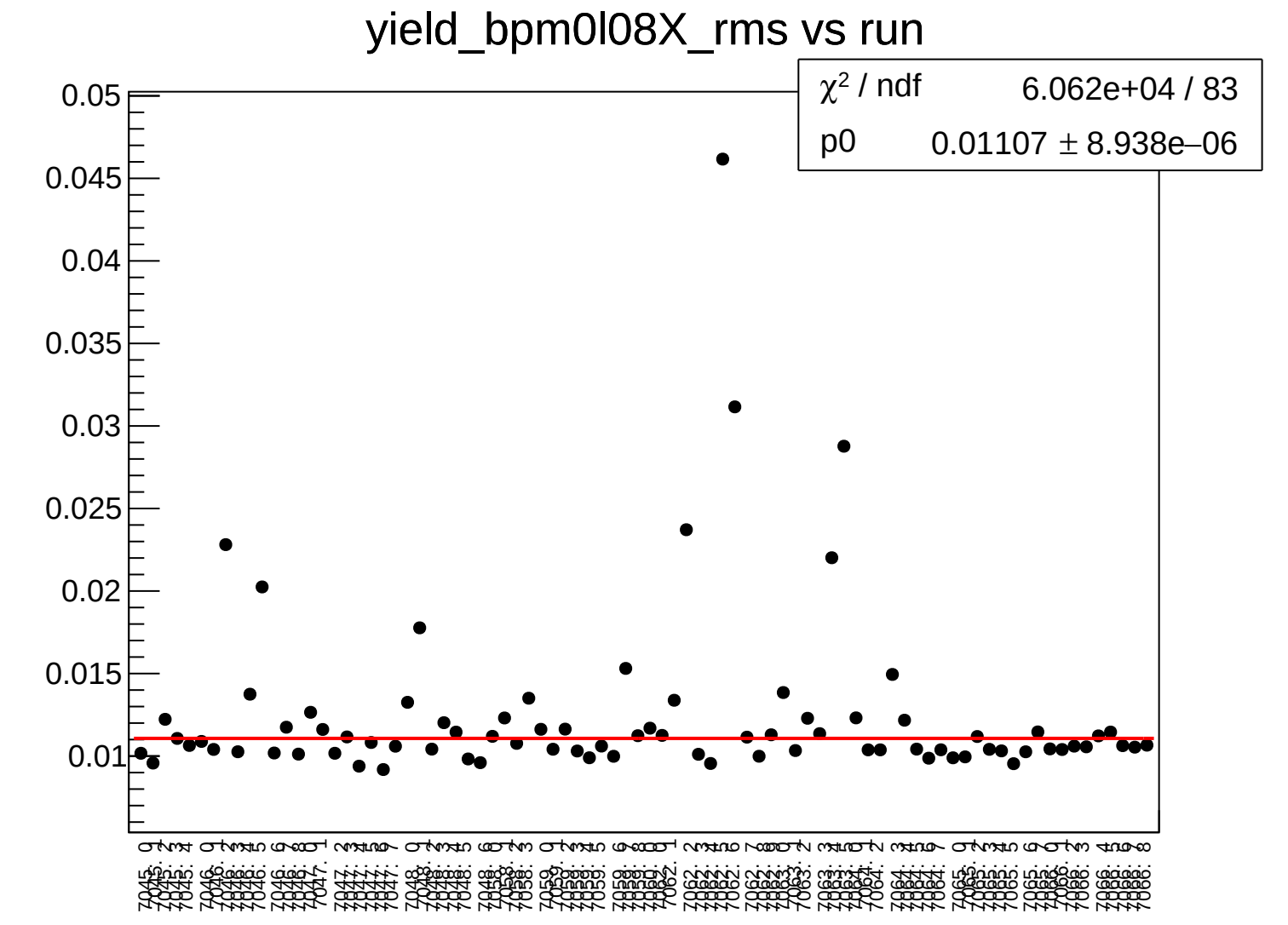

yield_bpm0l07Y_mean vs run
χ² / ndf 3.604e+06 / 83
p0 0.2132 ± 2.535e−06
0.22
0.215
0.21
0.205
0.2
pull
Entries 84
Mean −228.2
Std Dev 344.9
400
300
200
100
0
−100
−200
−300
−400
−500

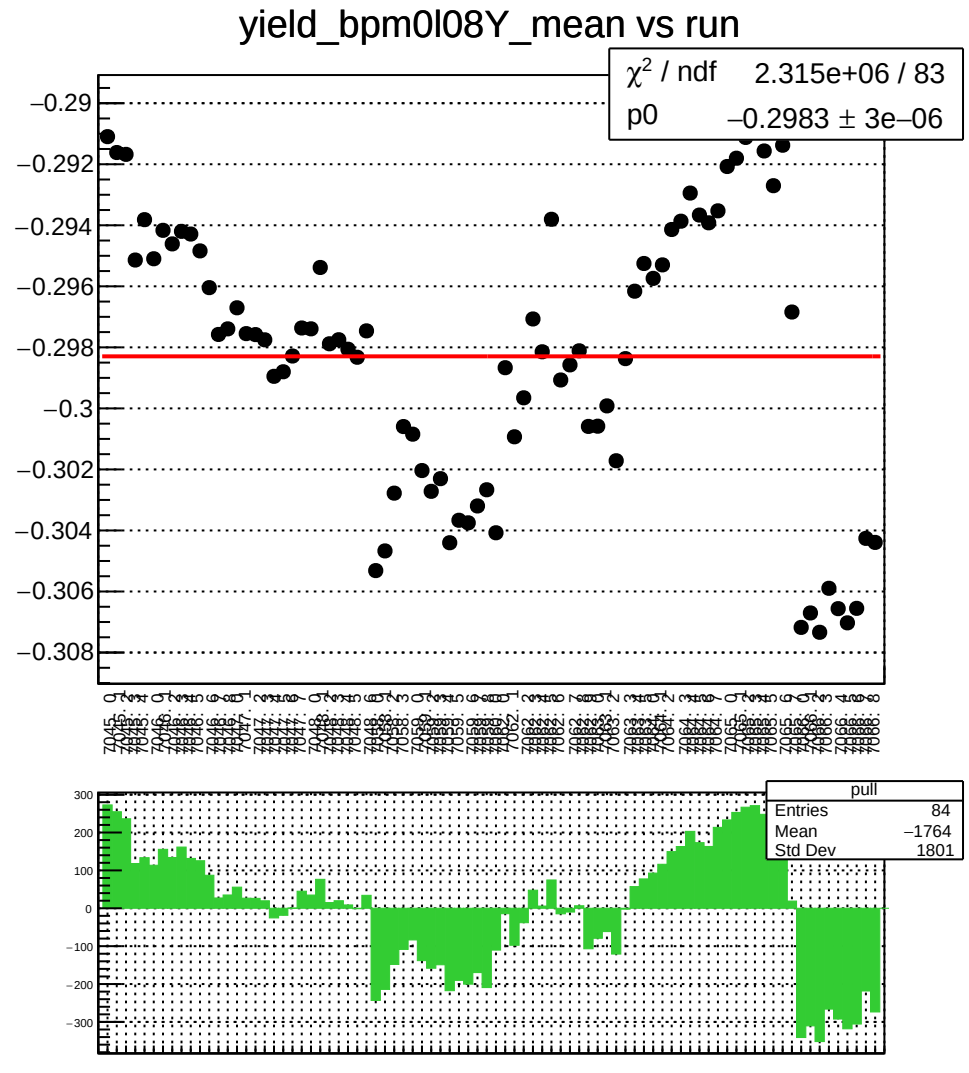

pull1D
Entries 84
Mean 2.208
Std Dev 3.567
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

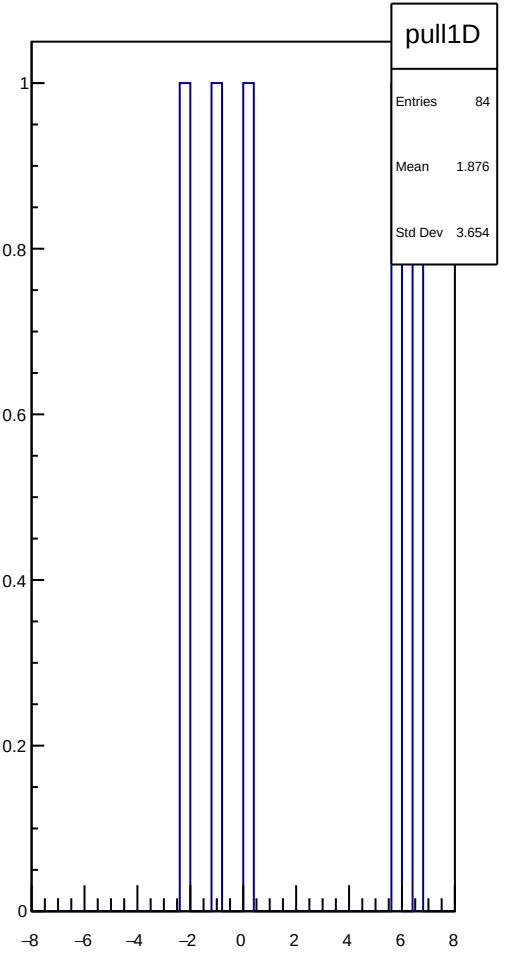

yield_bpm0l07Y_rms vs run
χ² / ndf 2.466e+04 / 83
p0 0.002246 ± 1.793e−06
0.01
0.008
0.006
0.004
0.002

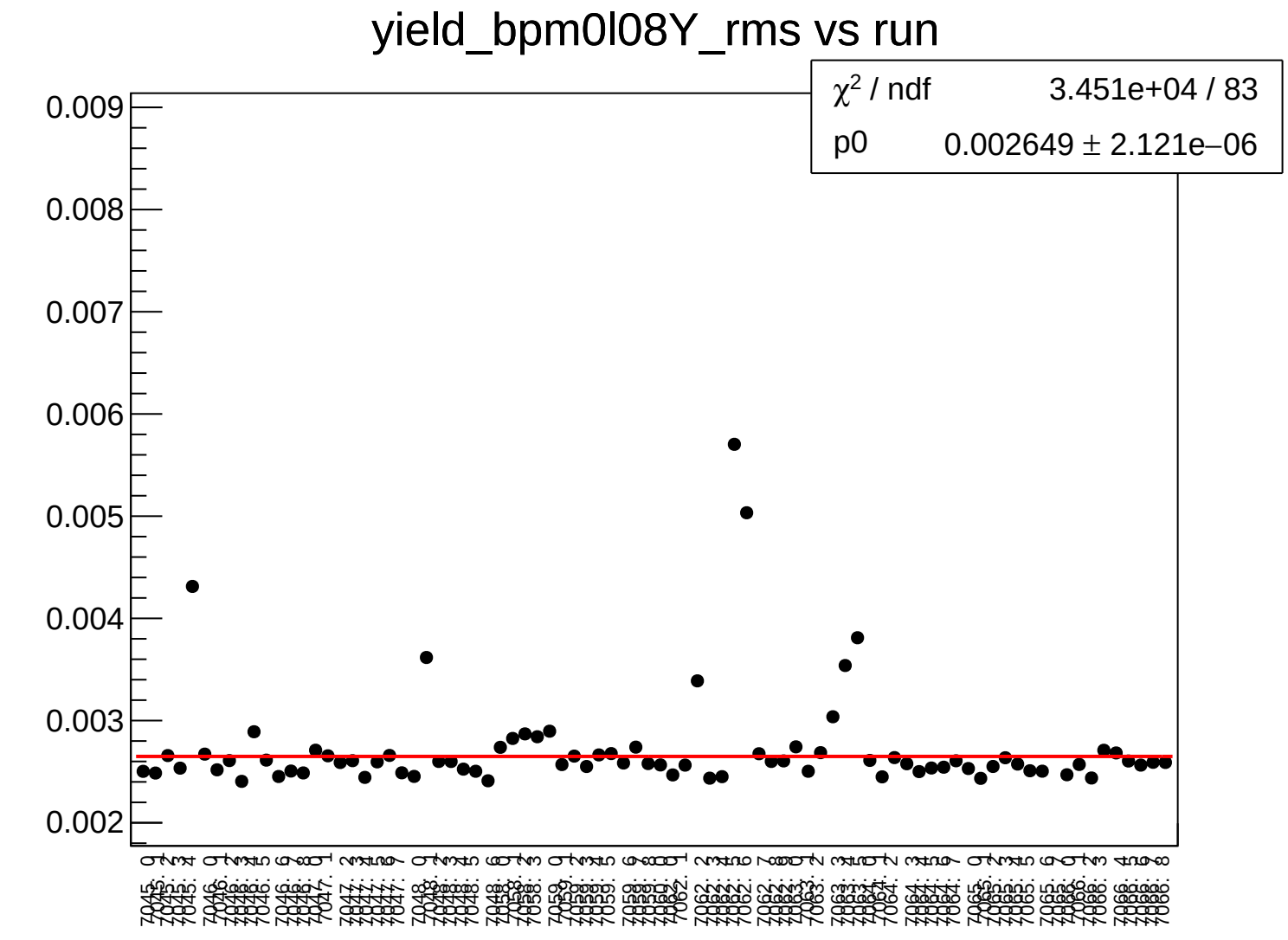

yield_bpm0l08X_mean vs run
χ² / ndf 5.384e+07 / 83
p0 −0.2652 ± 1.264e−05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
−0.4
pull
Entries 84
Mean 1815
Std Dev 1777
1500
1000
500
0
−500
−1000

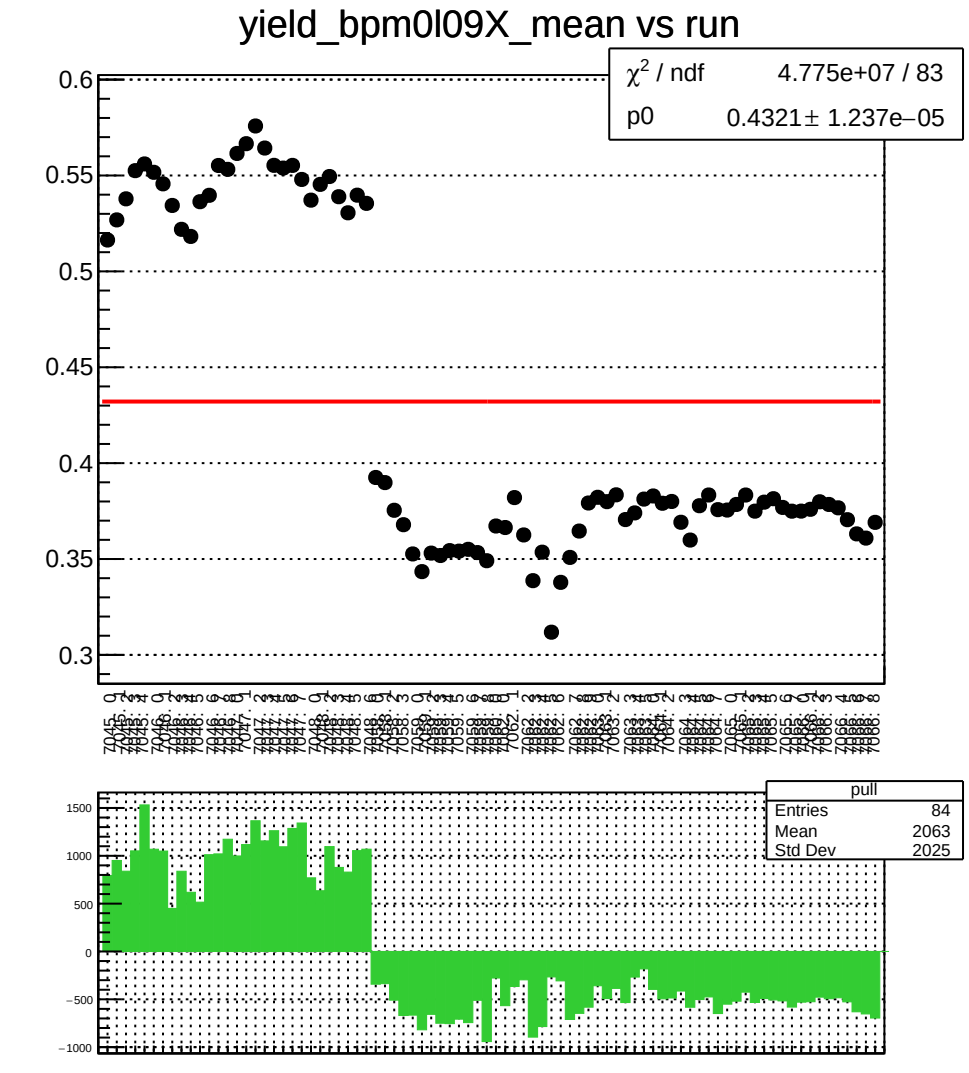

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

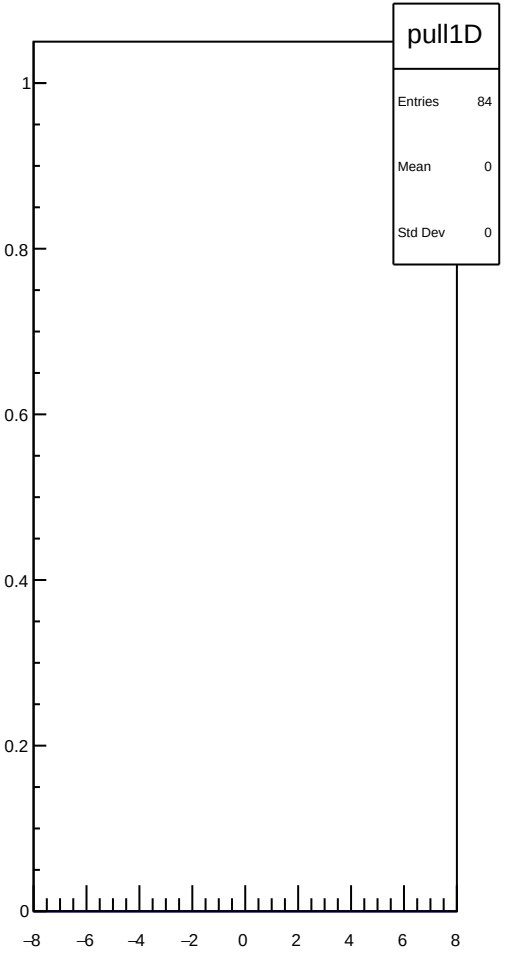

yield_bpm0l08X_rms vs run
χ² / ndf 6.062e+04 / 83
p0 0.01107 ± 8.938e–06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

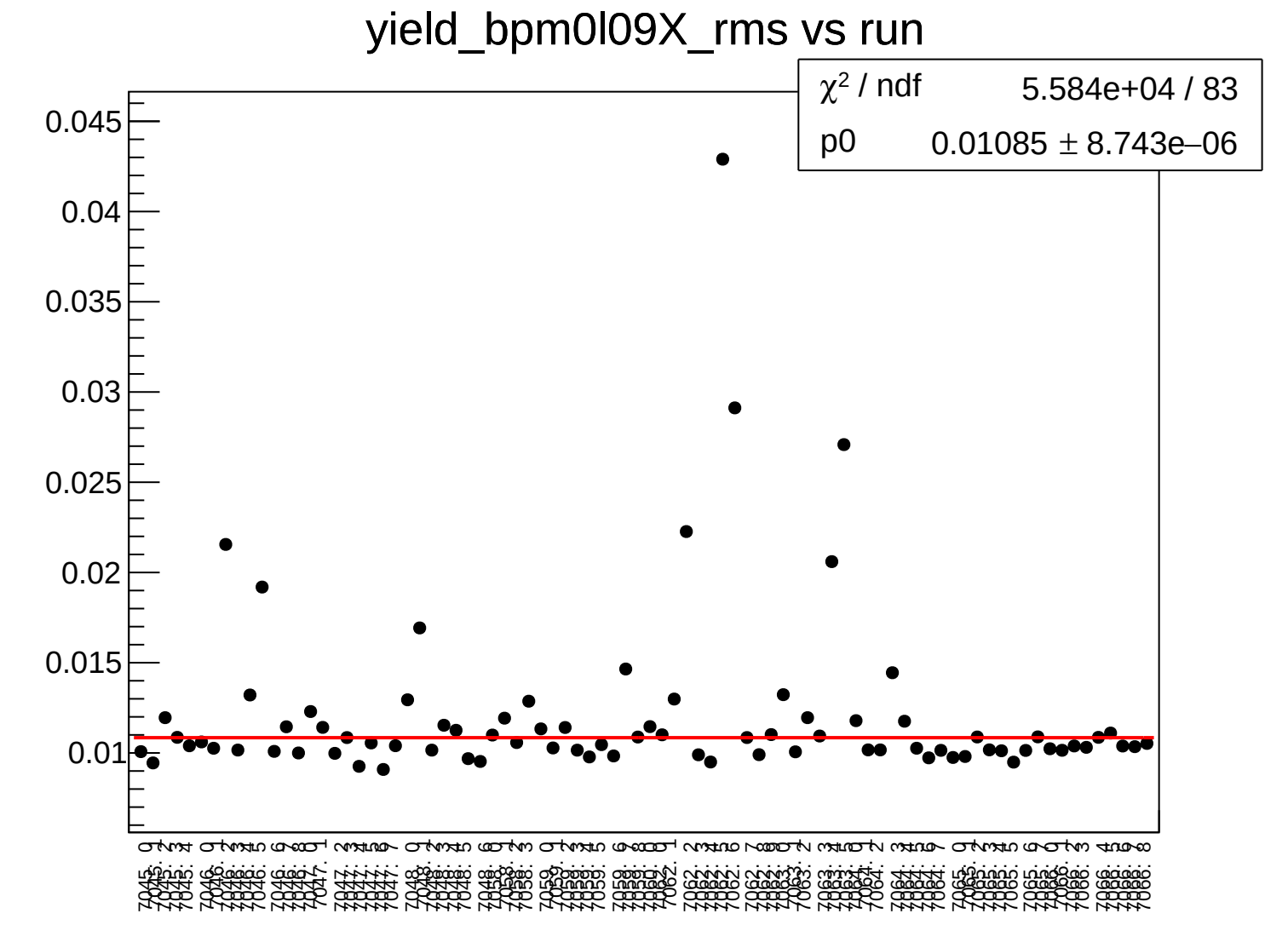

yield_bpm0l08Y_mean vs run
χ² / ndf 2.315e+06 / 83
p0 −0.2983 ± 3e−06
−0.29
−0.292
−0.294
−0.296
−0.298
−0.3
−0.302
−0.304
−0.306
−0.308
pull
Entries 84
Mean −1764
Std Dev 1801
300
200
100
0
−100
−200
−300

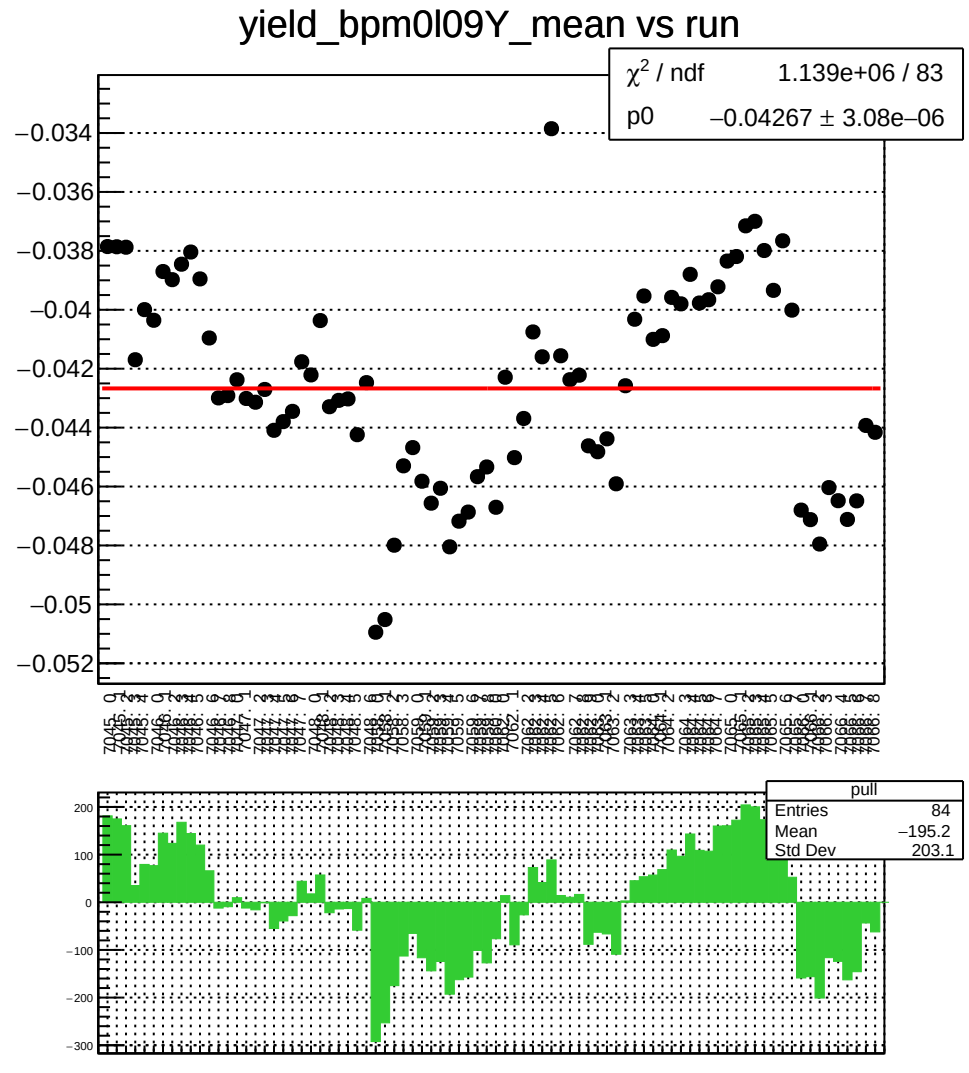

pull1D
Entries 84
Mean 1.876
Std Dev 3.654
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

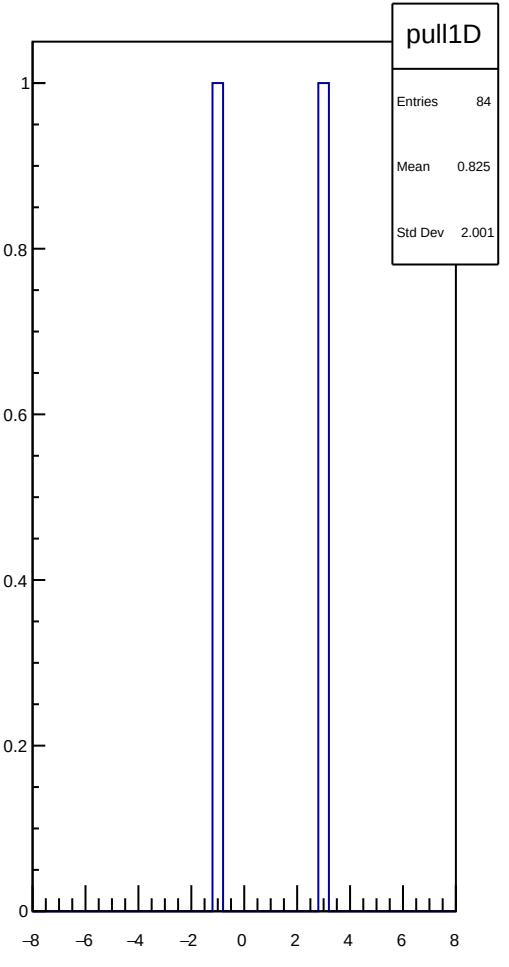

yield_bpm0l08Y_rms vs run
χ² / ndf 3.451e+04 / 83
p0 0.002649 ± 2.121e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

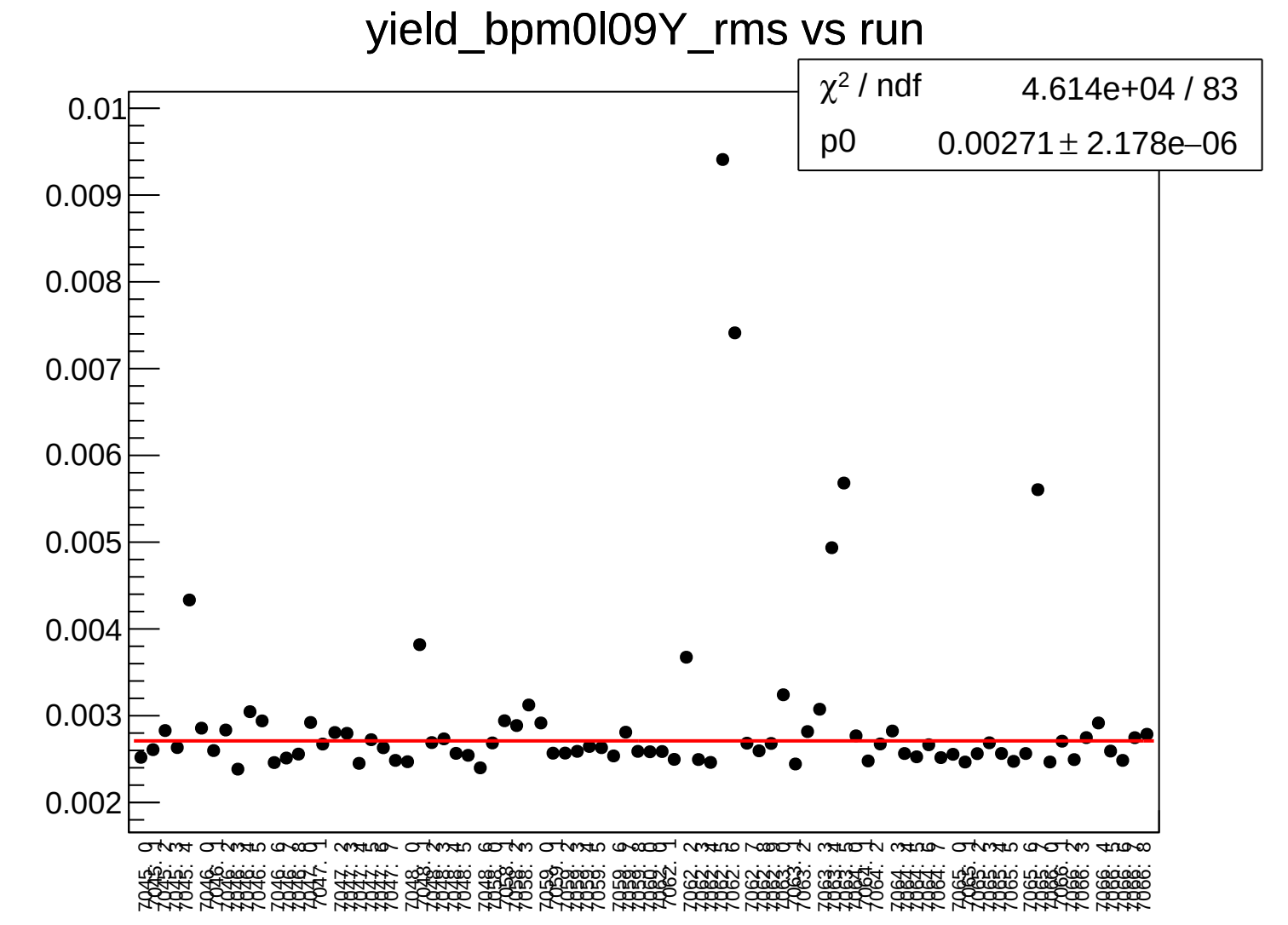

yield_bpm0l09X_mean vs run
χ² / ndf 4.775e+07 / 83
p0 0.4321 ± 1.237e−05
pull
Entries 84
Mean 2063
Std Dev 2025

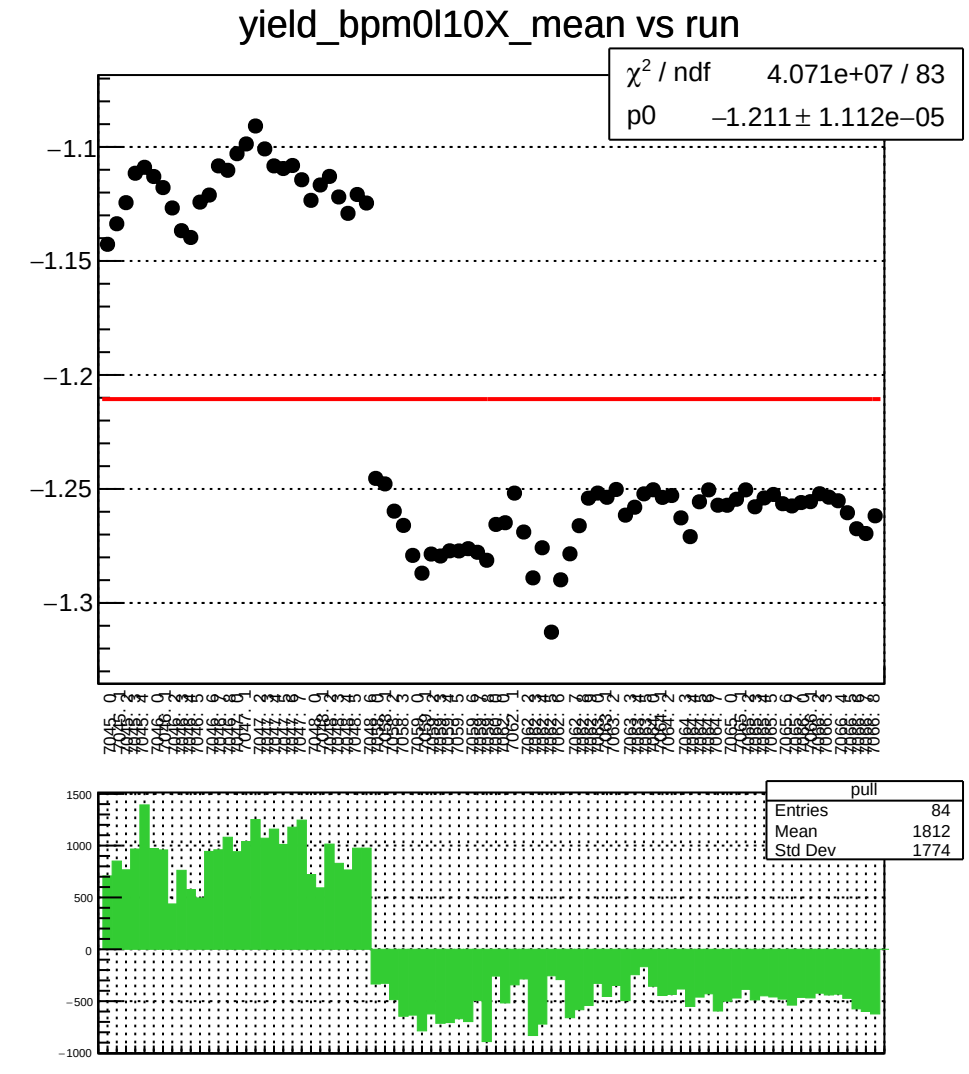

pull1D
Entries 84
Mean 0
Std Dev 0

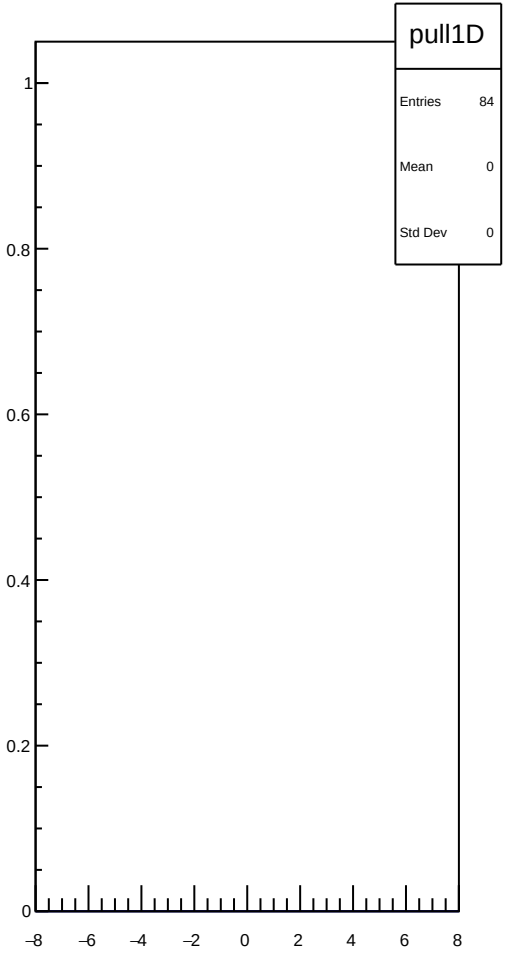

yield_bpm0l09X_rms vs run
χ² / ndf 5.584e+04 / 83
p0 0.01085 ± 8.743e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

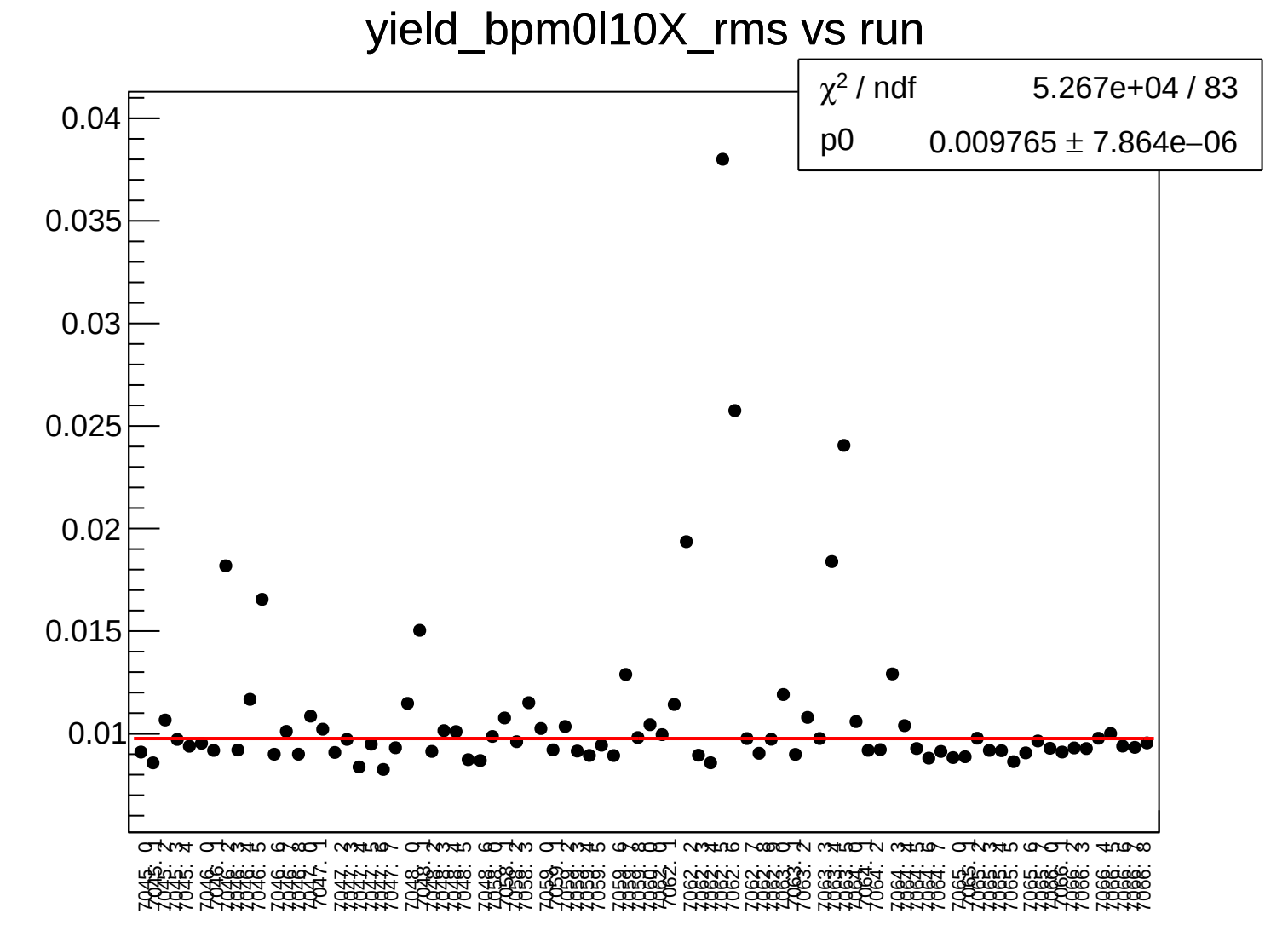

yield_bpm0l09Y_mean vs run
χ² / ndf 1.139e+06 / 83
p0 −0.04267 ± 3.08e−06
−0.034
−0.036
−0.038
−0.04
−0.042
−0.044
−0.046
−0.048
−0.05
−0.052
pull
Entries 84
Mean −195.2
Std Dev 203.1
200
100
0
−100
−200
−300

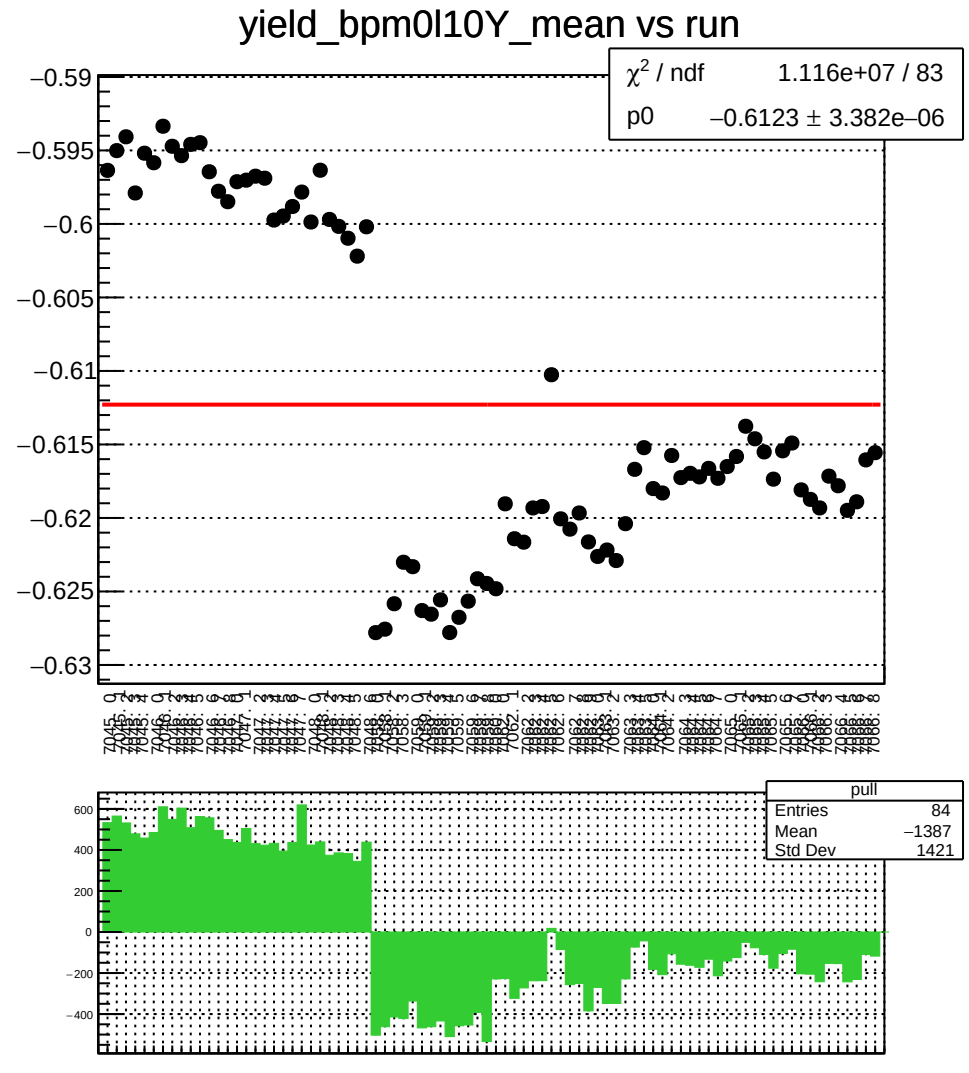

pull1D
Entries 84
Mean 0.825
Std Dev 2.001
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

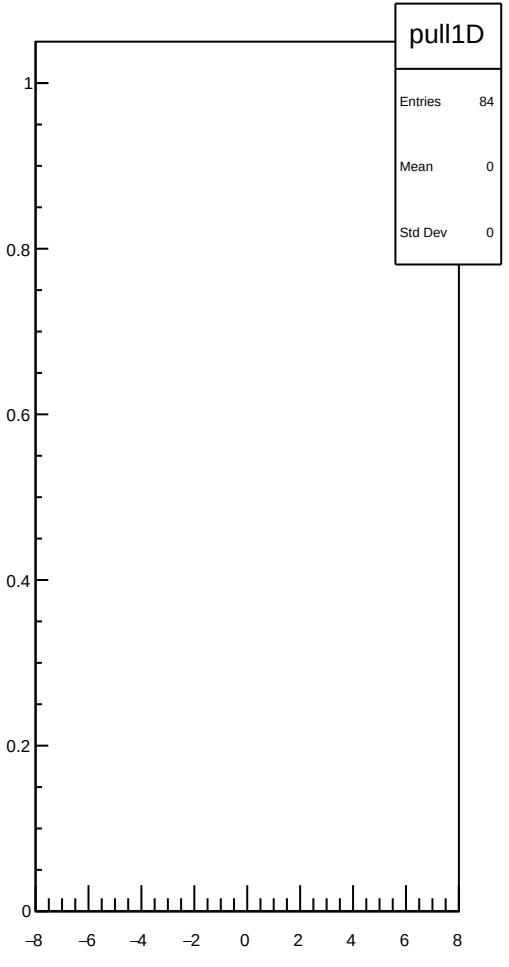

yield_bpm0l09Y_rms vs run
χ² / ndf 4.614e+04 / 83
p0 0.00271 ± 2.178e–06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

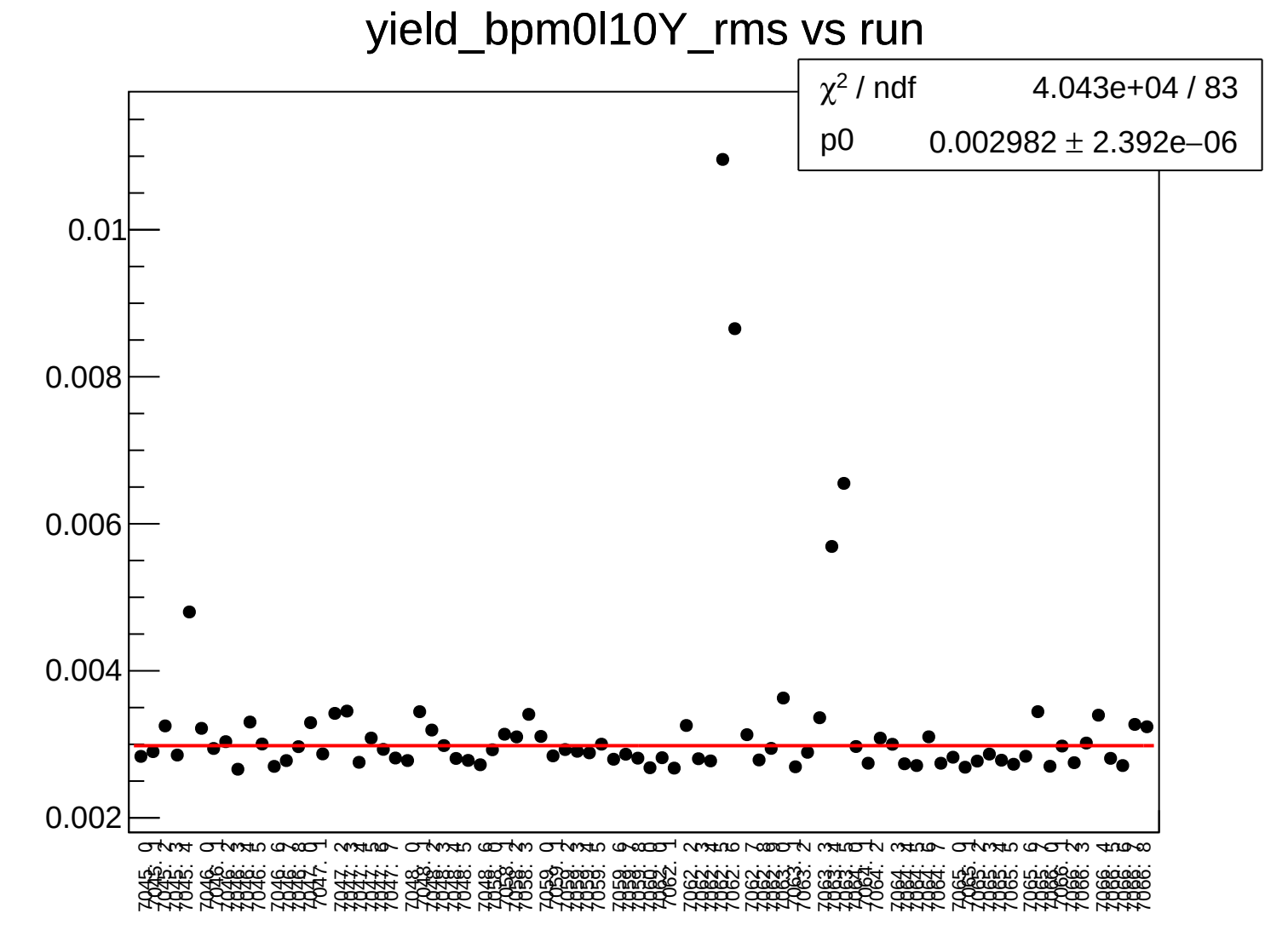

yield_bpm0l10X_mean vs run
χ² / ndf 4.071e+07 / 83
p0 −1.211 ± 1.112e−05
−1.1
−1.15
−1.2
−1.25
−1.3
pull
Entries 84
Mean 1812
Std Dev 1774
1500
1000
500
0
−500
−1000

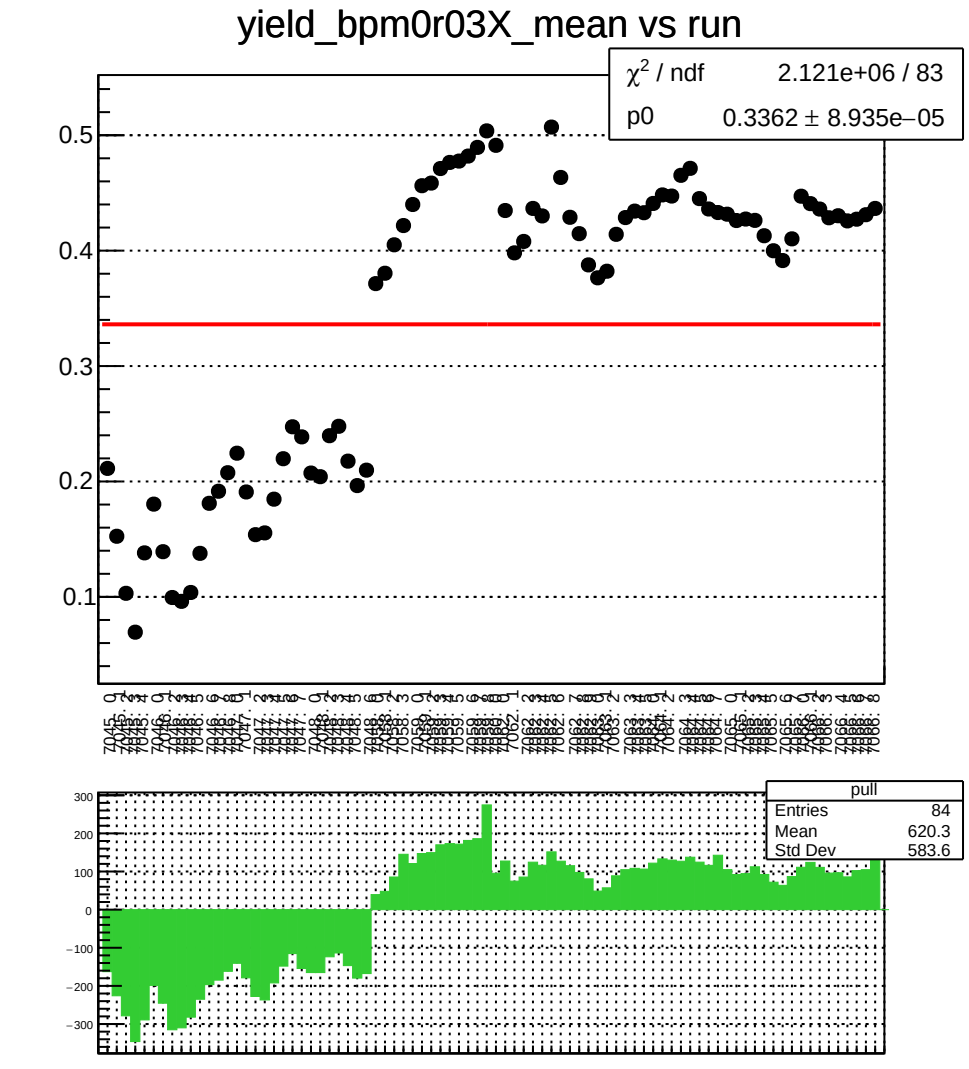

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

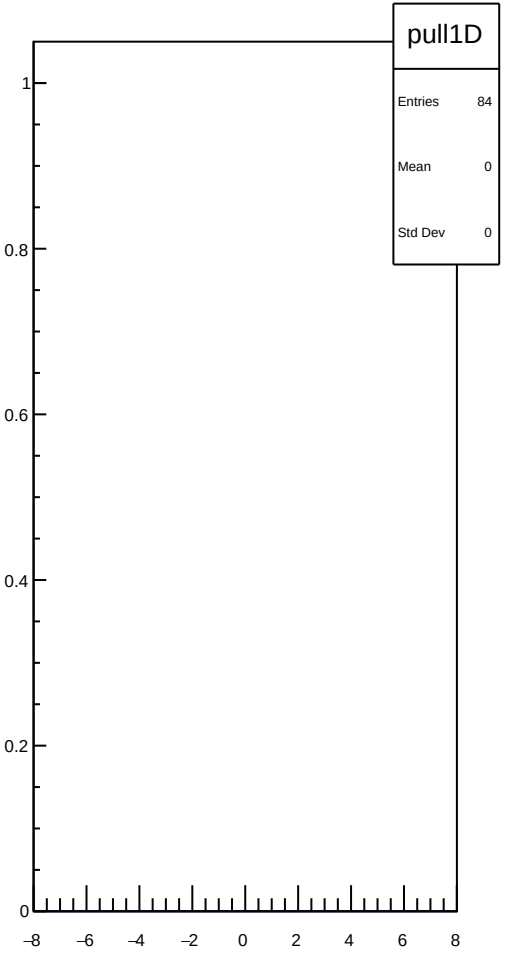

yield_bpm0l10X_rms vs run
χ^2 / ndf 5.267e+04 / 83
p0 0.009765 ± 7.864e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

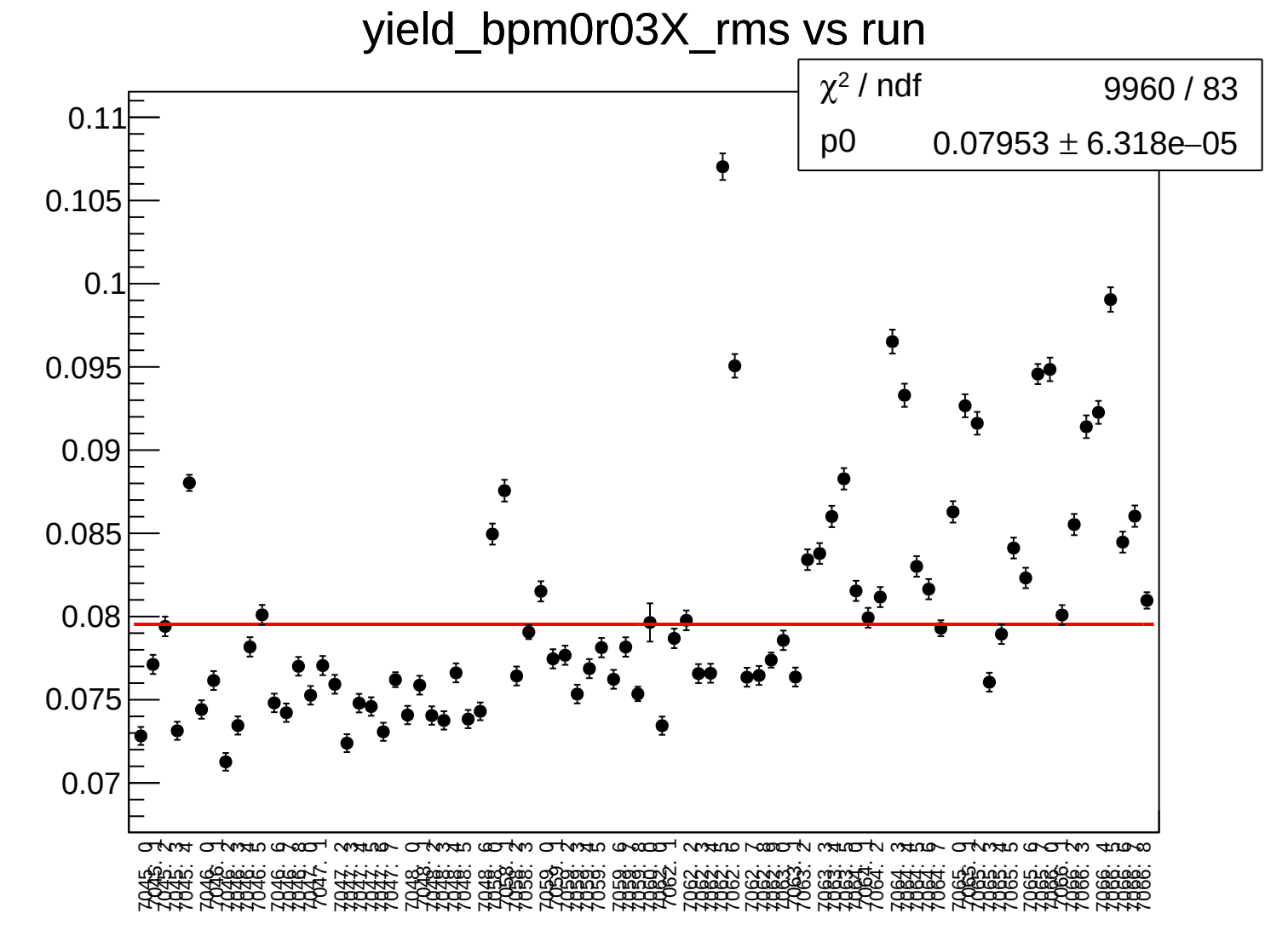

yield_bpm0l10Y_mean vs run
χ² / ndf 1.116e+07 / 83
p0 −0.6123 ± 3.382e−06
−0.59
−0.595
−0.6
−0.605
−0.61
−0.615
−0.62
−0.625
−0.63
pull
Entries 84
Mean −1387
Std Dev 1421
600
400
200
0
−200
−400

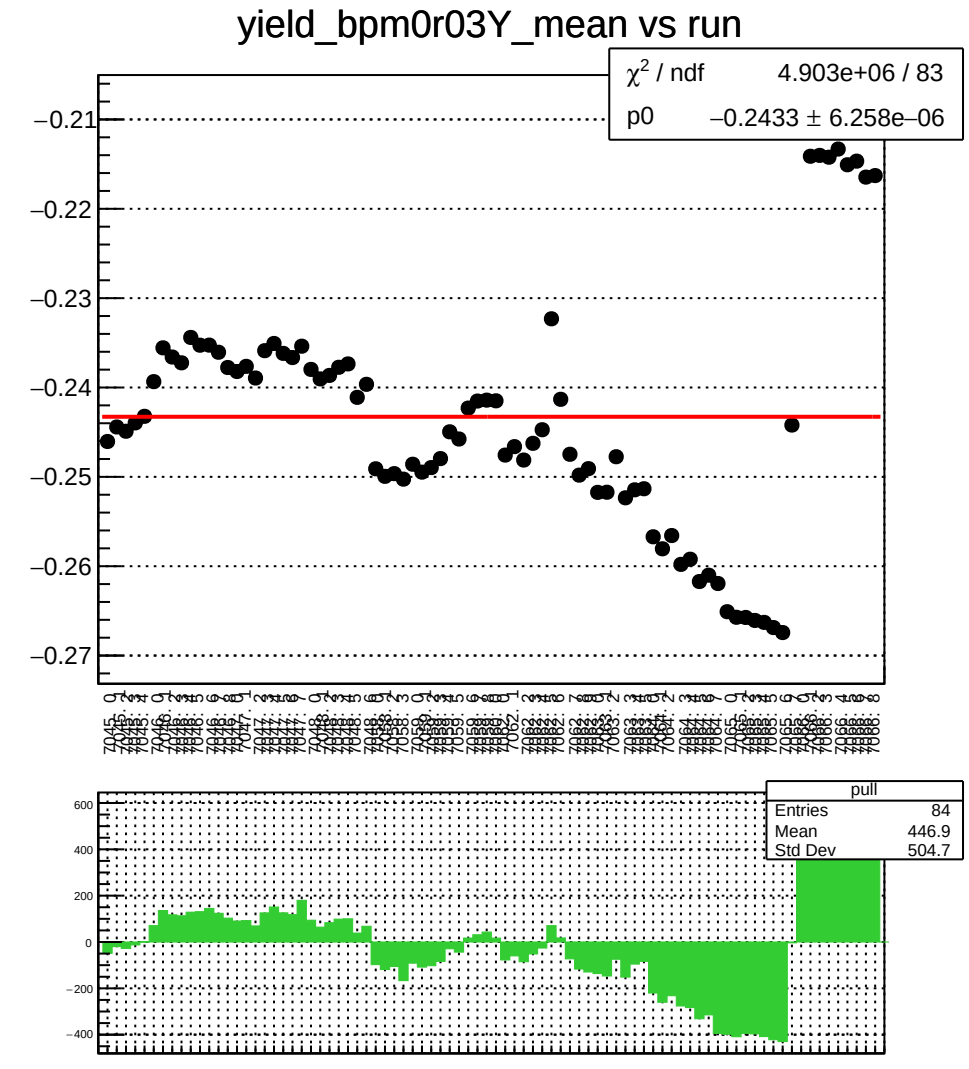

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

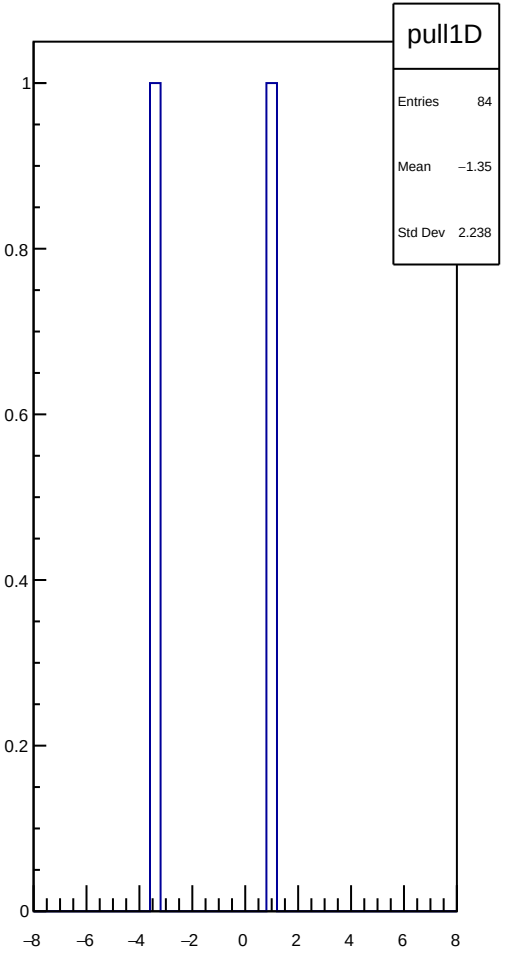

yield_bpm0l10Y_rms vs run
χ^2 / ndf 4.043e+04 / 83
p0 0.002982 ± 2.392e−06
0.01
0.008
0.006
0.004
0.002

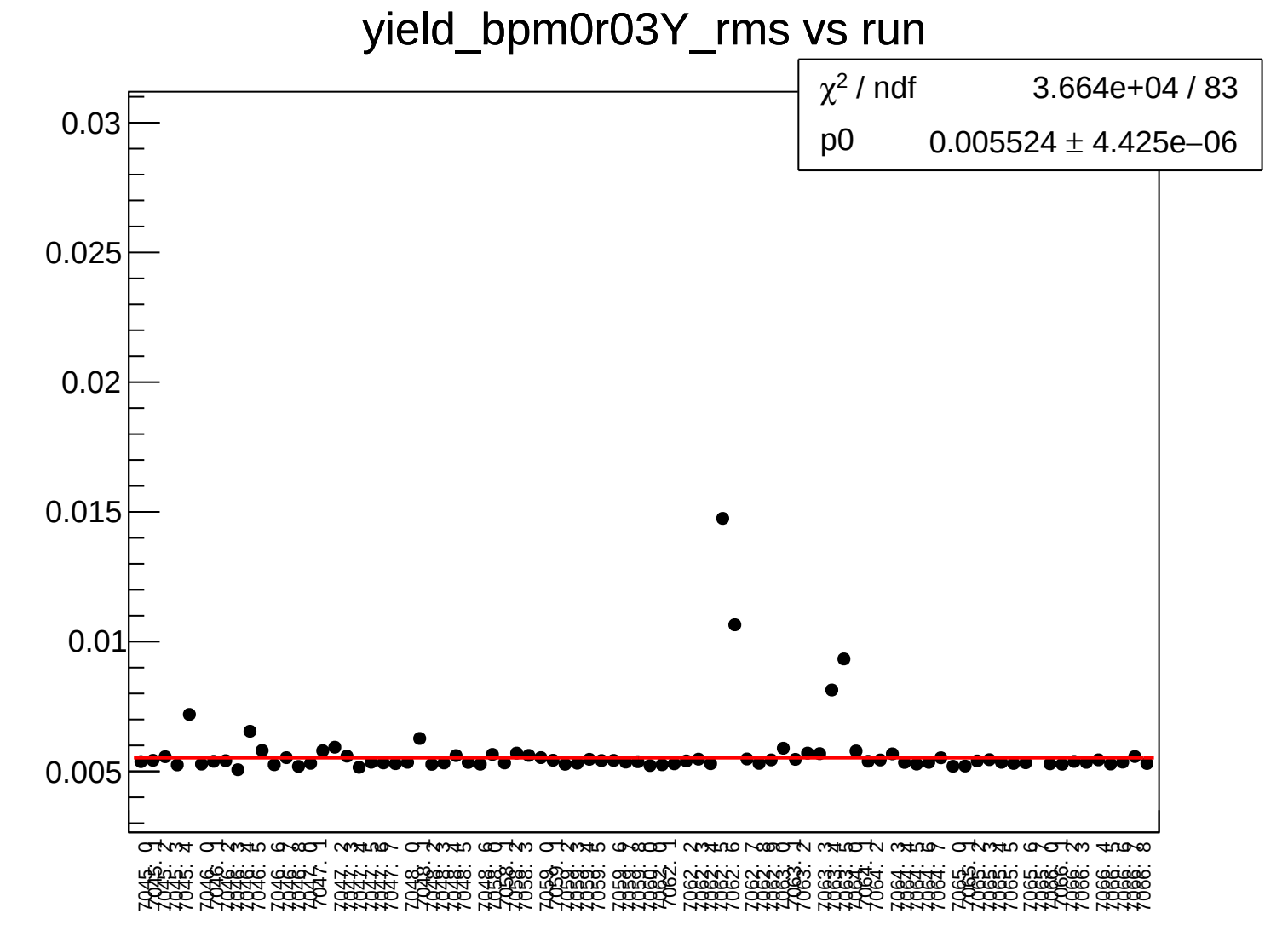

yield_bpm0r03X_mean vs run
χ² / ndf 2.121e+06 / 83
p0 0.3362 ± 8.935e−05
0.5
0.4
0.3
0.2
0.1
pull
Entries 84
Mean 620.3
Std Dev 583.6
300
200
100
0
−100
−200
−300

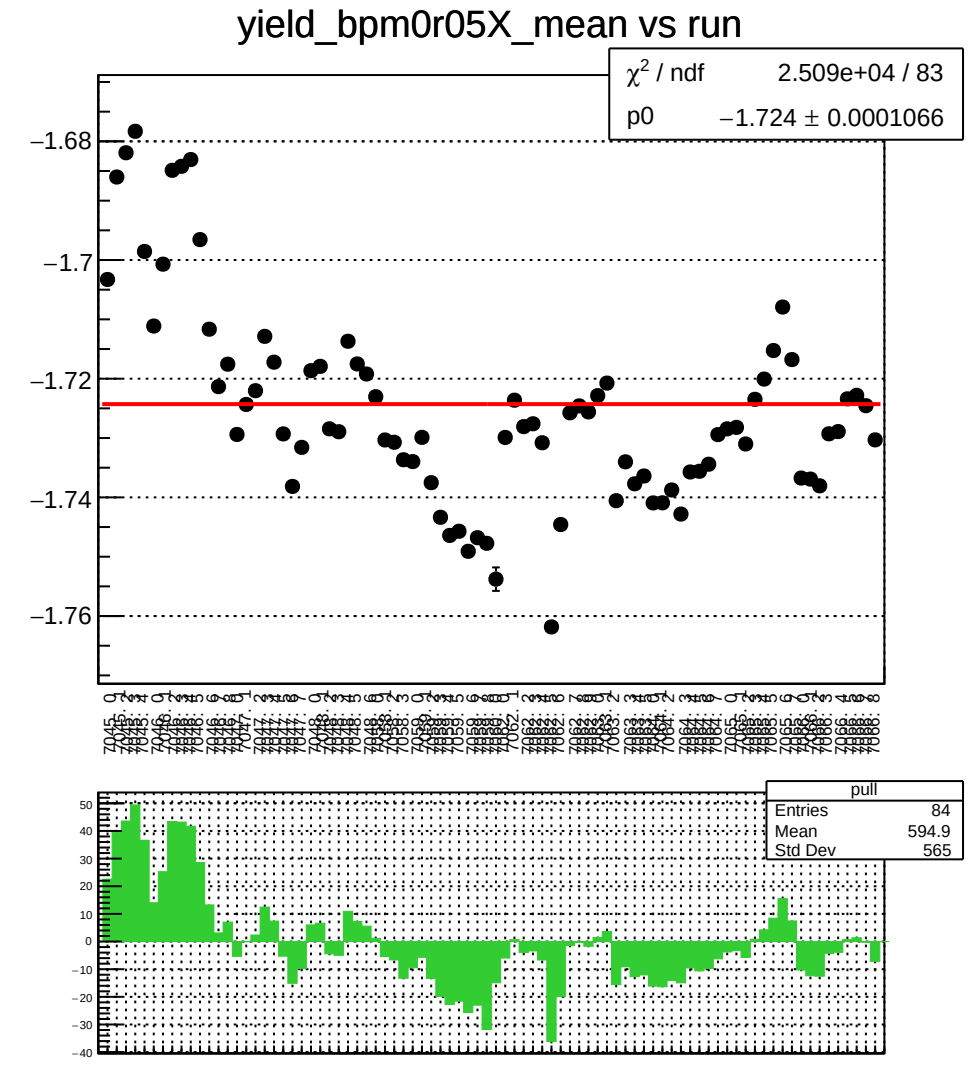

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

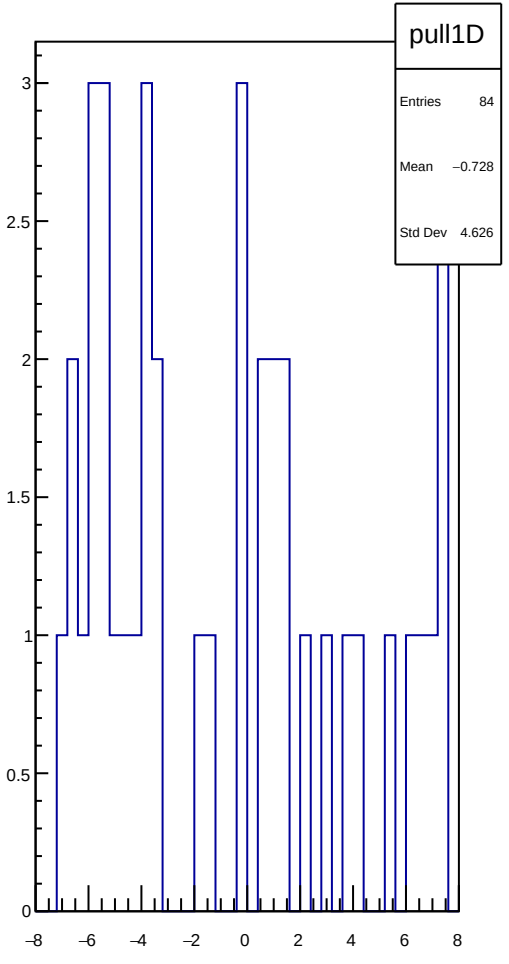

yield_bpm0r03X_rms vs run
χ^2 / ndf 9960 / 83
p0 0.07953 ± 6.318e−05
0.11
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07

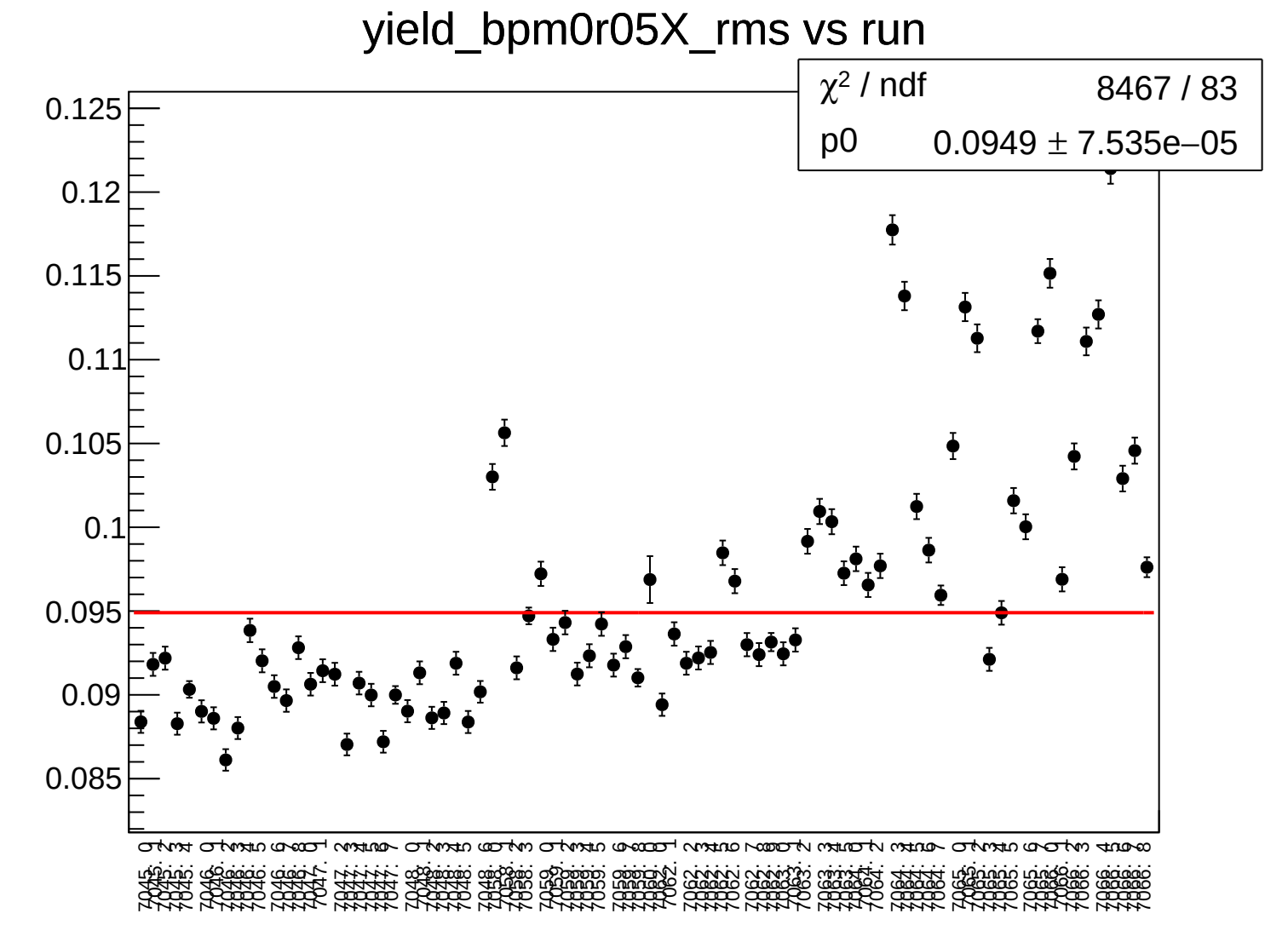

yield_bpm0r03Y_mean vs run
χ² / ndf 4.903e+06 / 83
p0 −0.2433 ± 6.258e−06
−0.21
−0.22
−0.23
−0.24
−0.25
−0.26
−0.27
pull
Entries 84
Mean 446.9
Std Dev 504.7
600
400
200
0
−200
−400

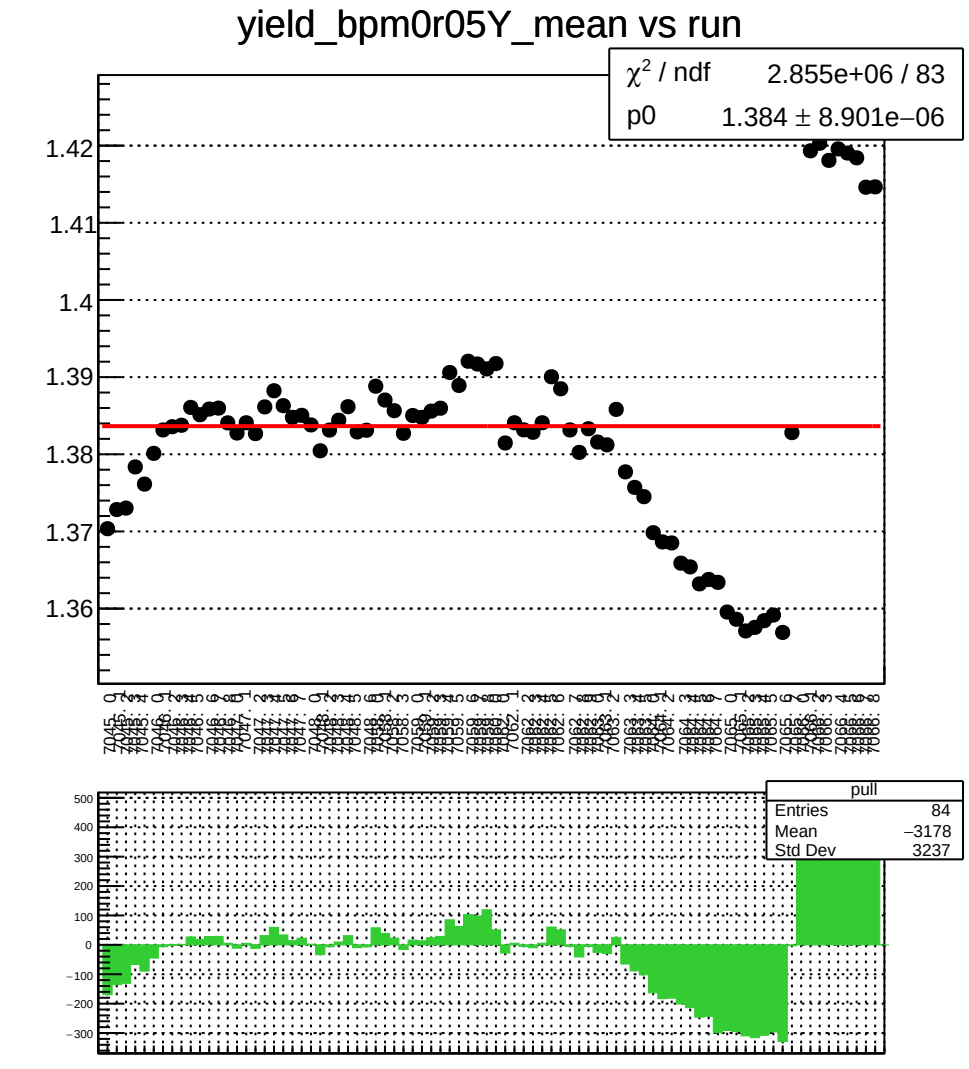

pull1D
Entries 84
Mean −1.35
Std Dev 2.238
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

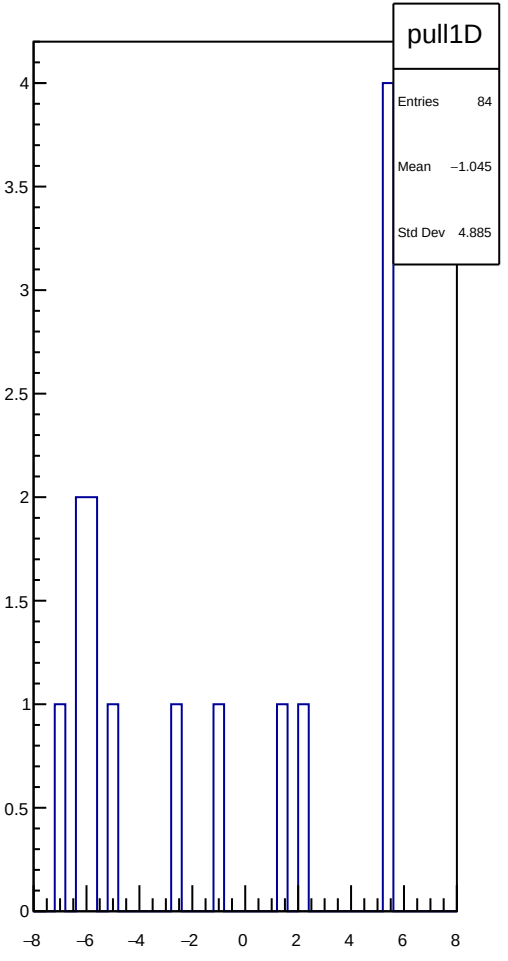

yield_bpm0r03Y_rms vs run
χ² / ndf 3.664e+04 / 83
p0 0.005524 ± 4.425e−06
0.03
0.025
0.02
0.015
0.01
0.005

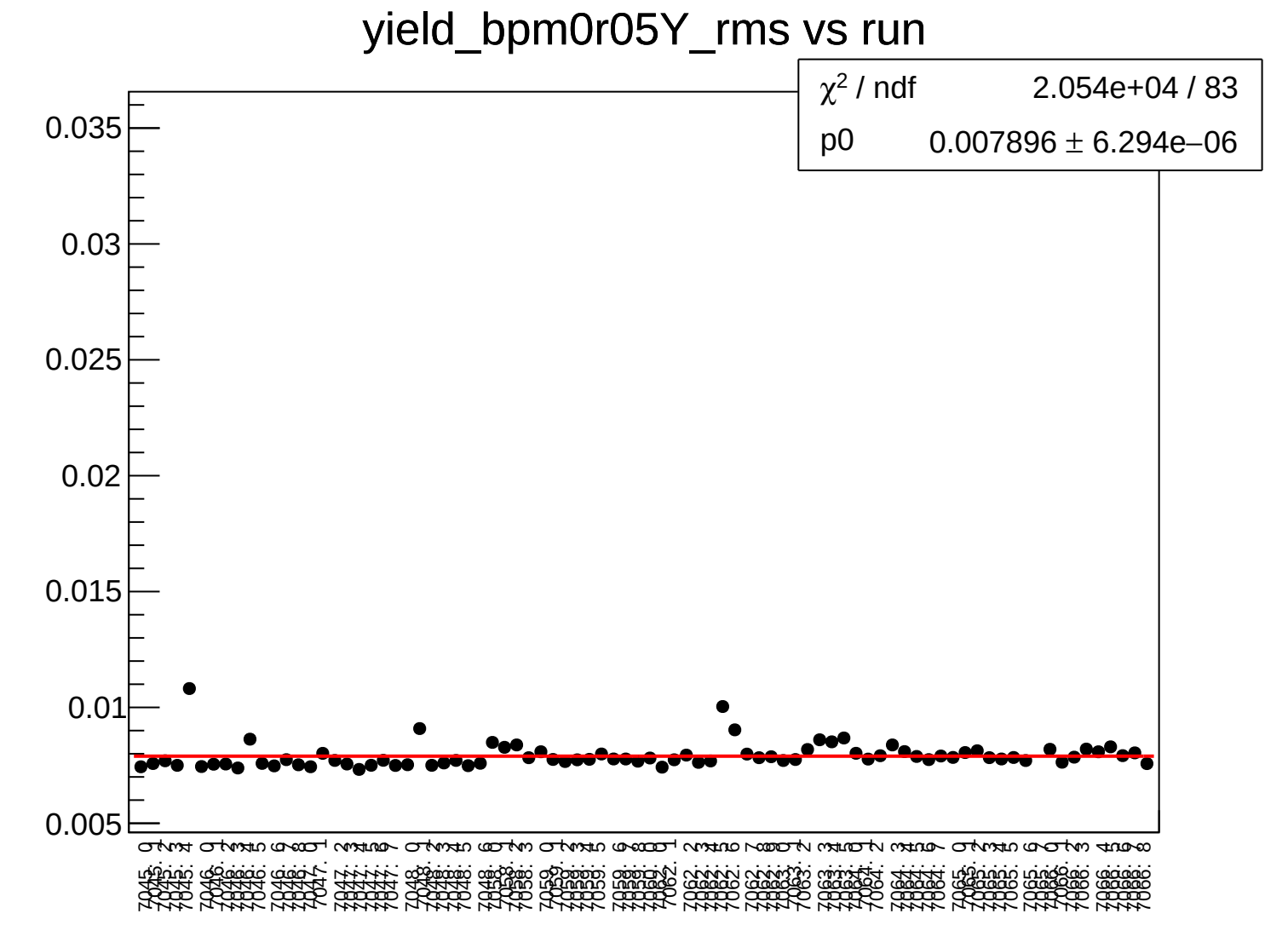

yield_bpm0r05X_mean vs run
χ² / ndf 2.509e+04 / 83
p0 −1.724 ± 0.0001066
−1.68
−1.7
−1.72
−1.74
−1.76
pull
Entries 84
Mean 594.9
Std Dev 565
50
40
30
20
10
0
−10
−20
−30
−40

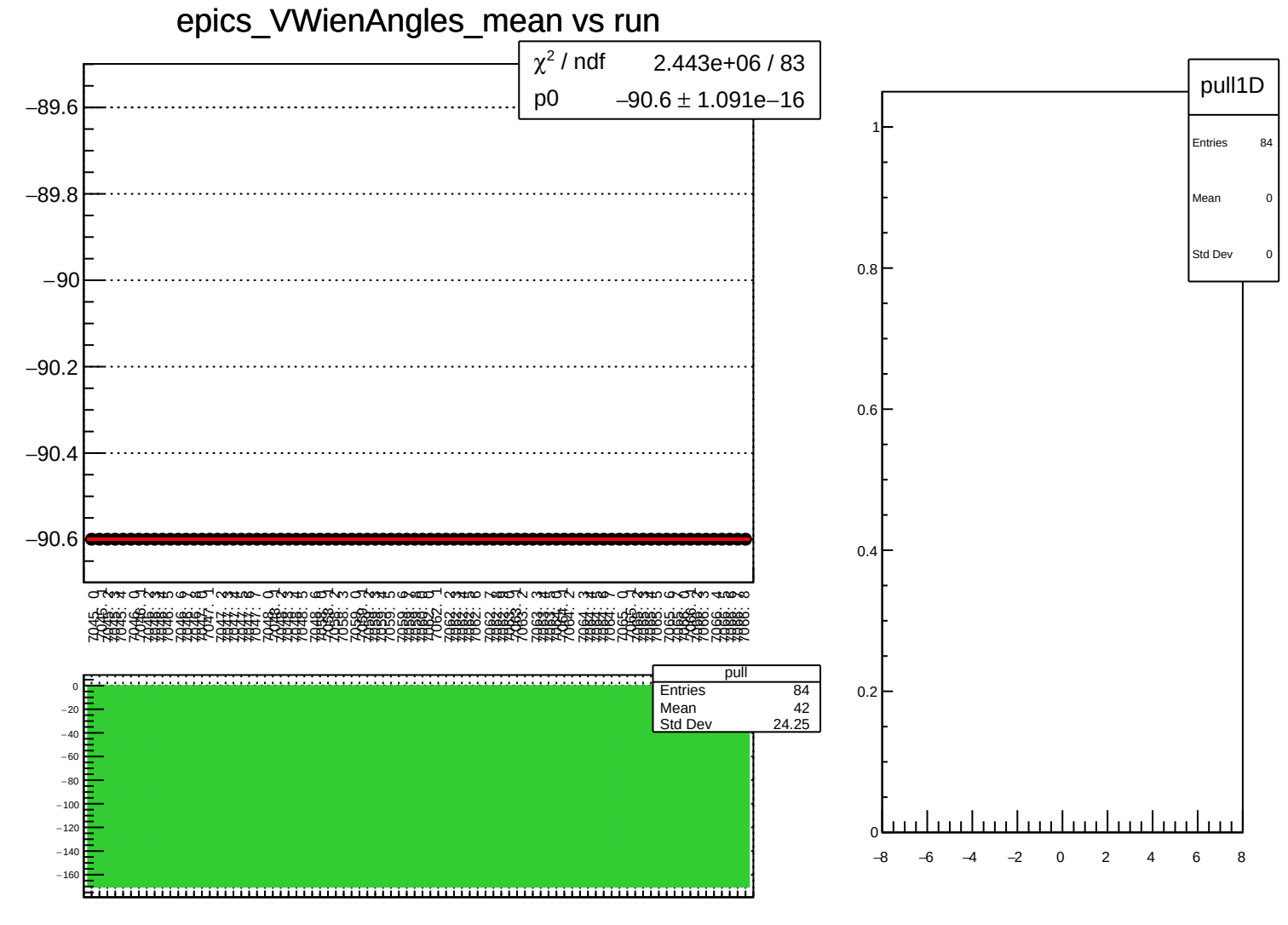

pull1D
Entries 84
Mean −0.728
Std Dev 4.626
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

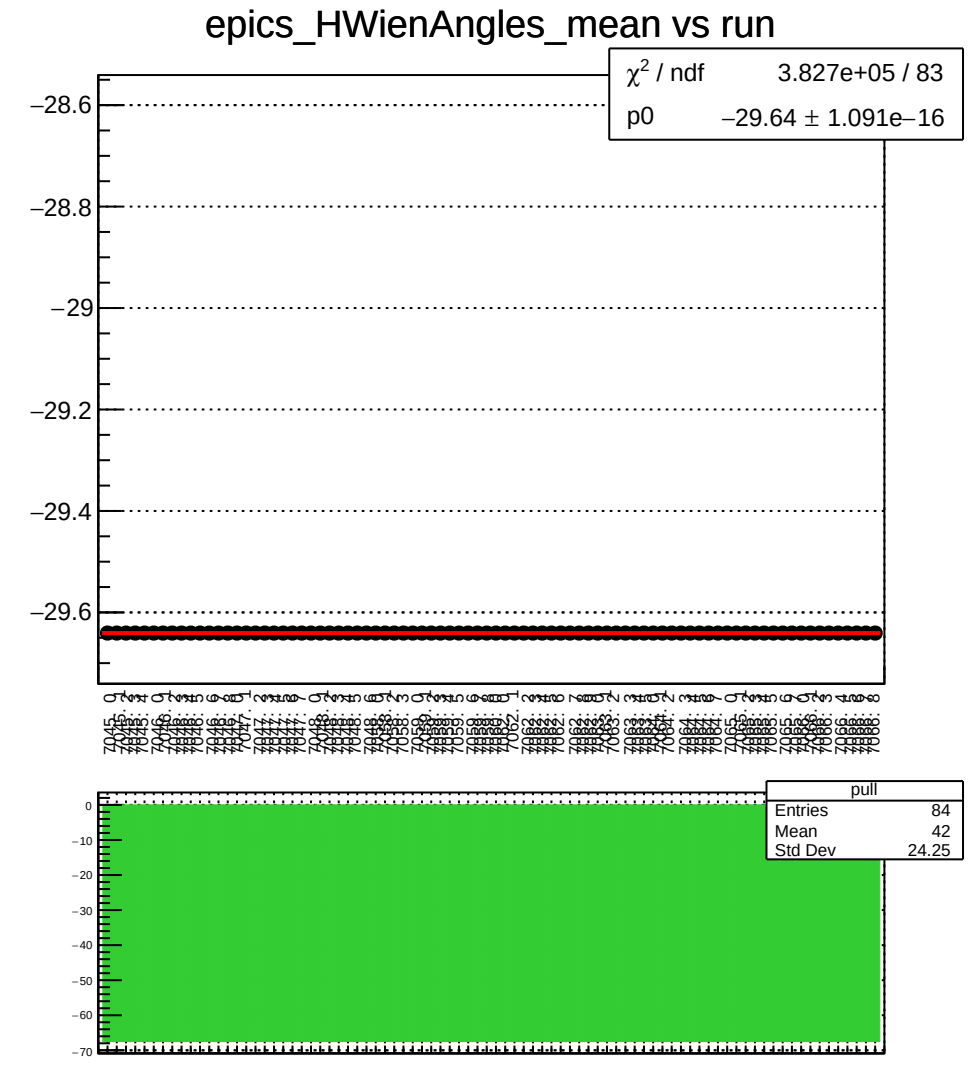

yield_bpm0r05X_rms vs run
χ² / ndf 8467 / 83
p0 0.0949 ± 7.535e−05
0.125
0.12
0.115
0.11
0.105
0.1
0.095
0.09
0.085

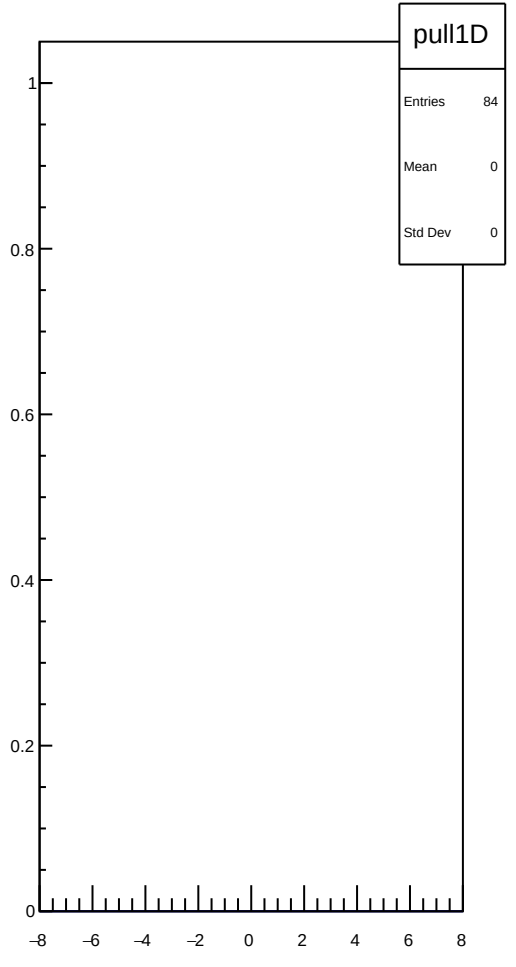

yield_bpm0r05Y_mean vs run
χ² / ndf 2.855e+06 / 83
p0 1.384 ± 8.901e−06
1.42
1.41
1.4
1.39
1.38
1.37
1.36
pull
Entries 84
Mean −3178
Std Dev 3237
500
400
300
200
100
0
−100
−200
−300

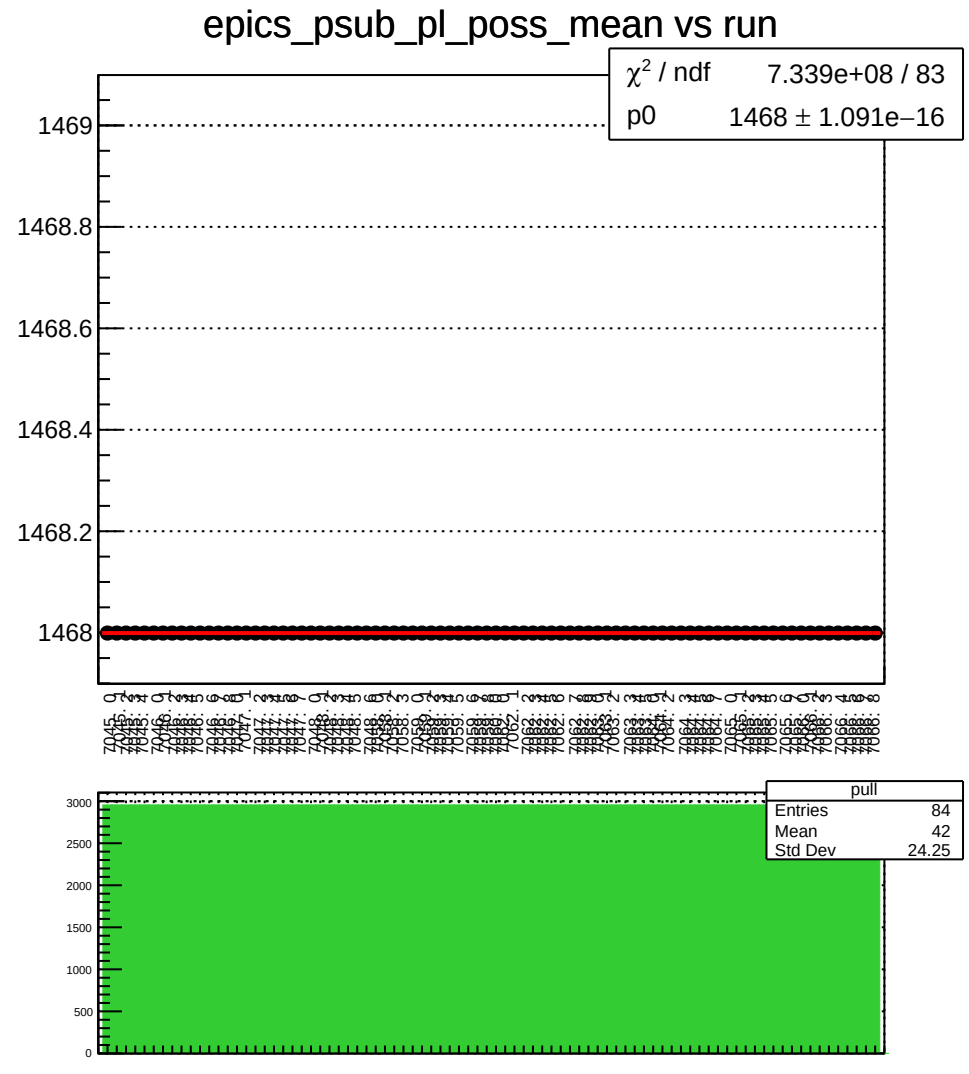

pull1D
Entries 84
Mean −1.045
Std Dev 4.885
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

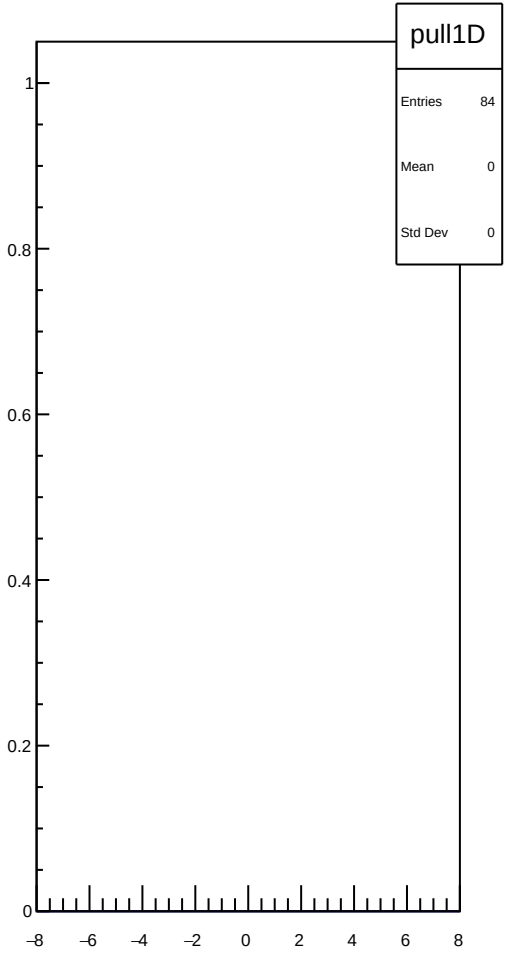

yield_bpm0r05Y_rms vs run
χ² / ndf 2.054e+04 / 83
p0 0.007896 ± 6.294e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

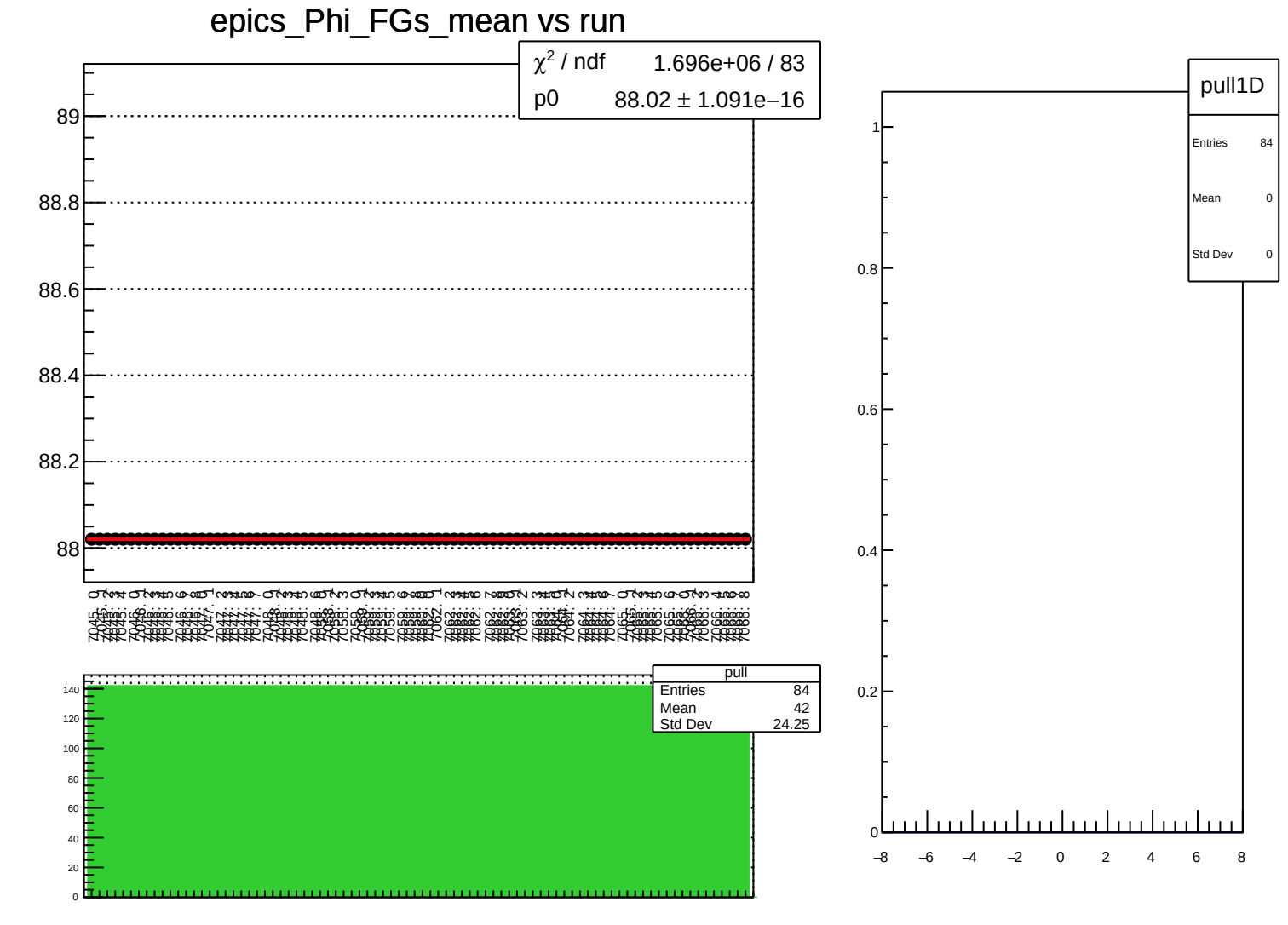

epics_VWienAngles_mean vs run
χ² / ndf 2.443e+06 / 83
p0 −90.6 ± 1.091e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 84
Mean 42
Std Dev 24.25
0
−20
−40
−60
−80
−100
−120
−140
−160
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

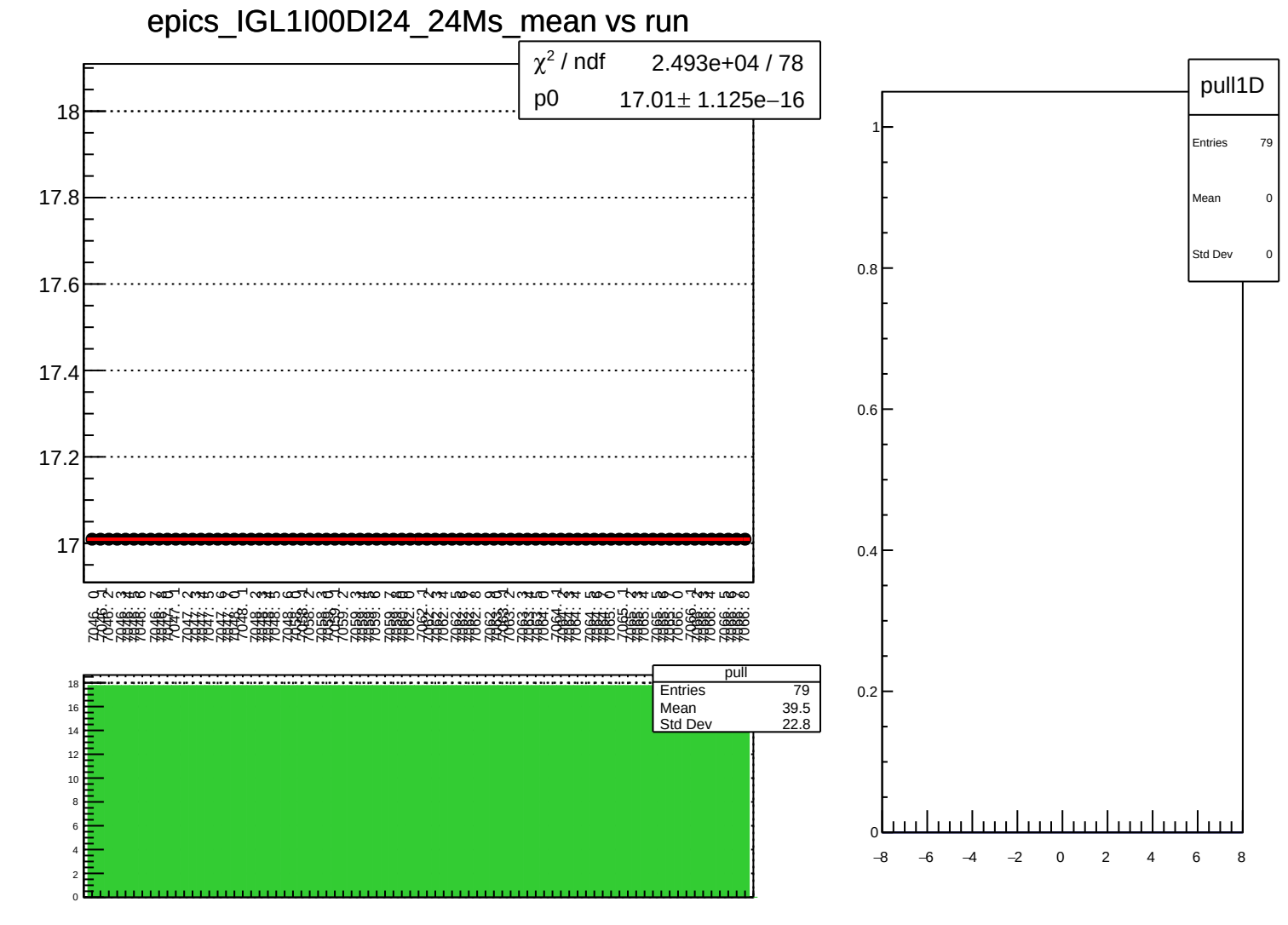

epics_HWienAngles_mean vs run
χ² / ndf 3.827e+05 / 83
p0 −29.64 ± 1.091e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 84
Mean 42
Std Dev 24.25
0
−10
−20
−30
−40
−50
−60
−70

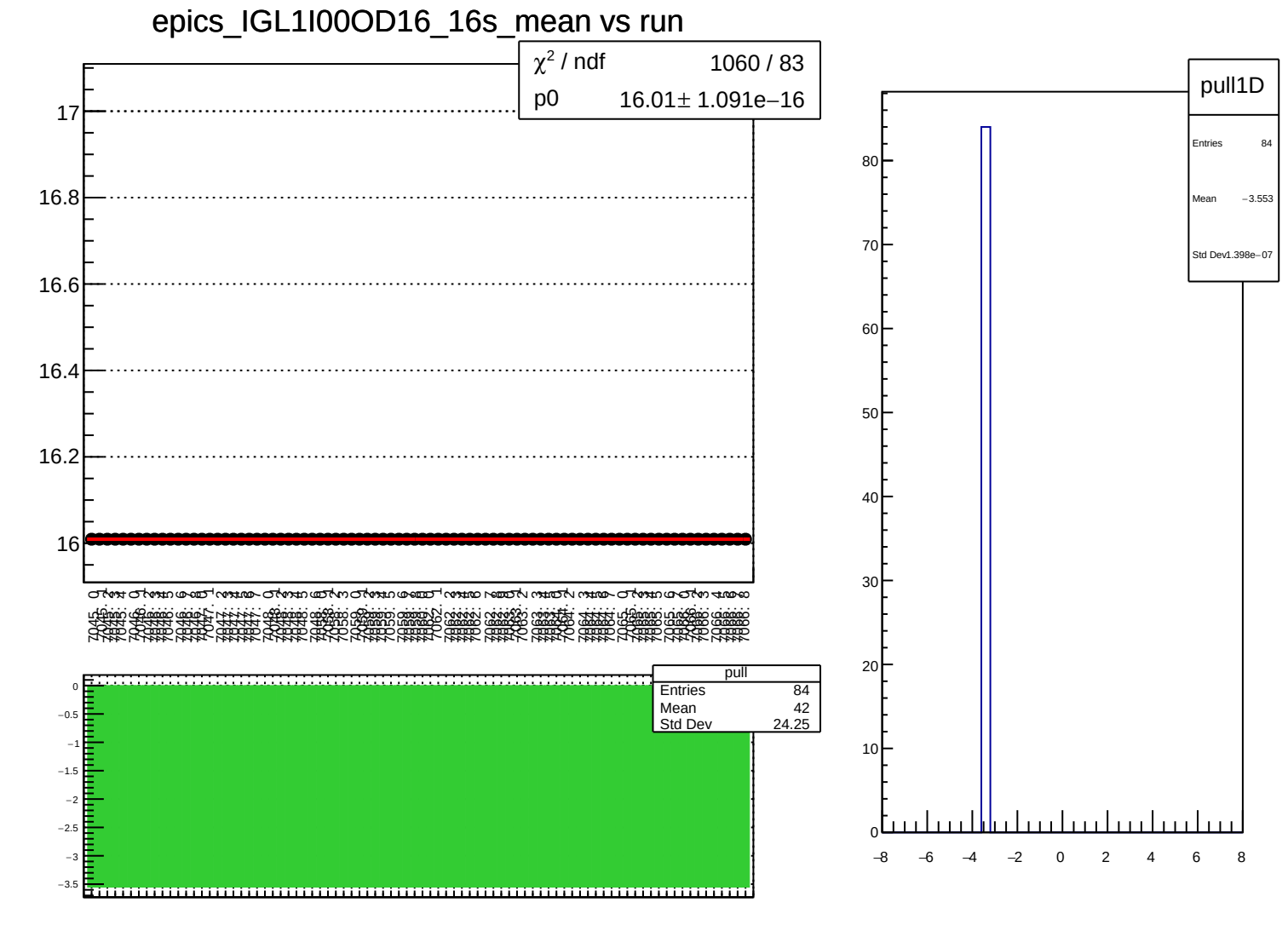

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

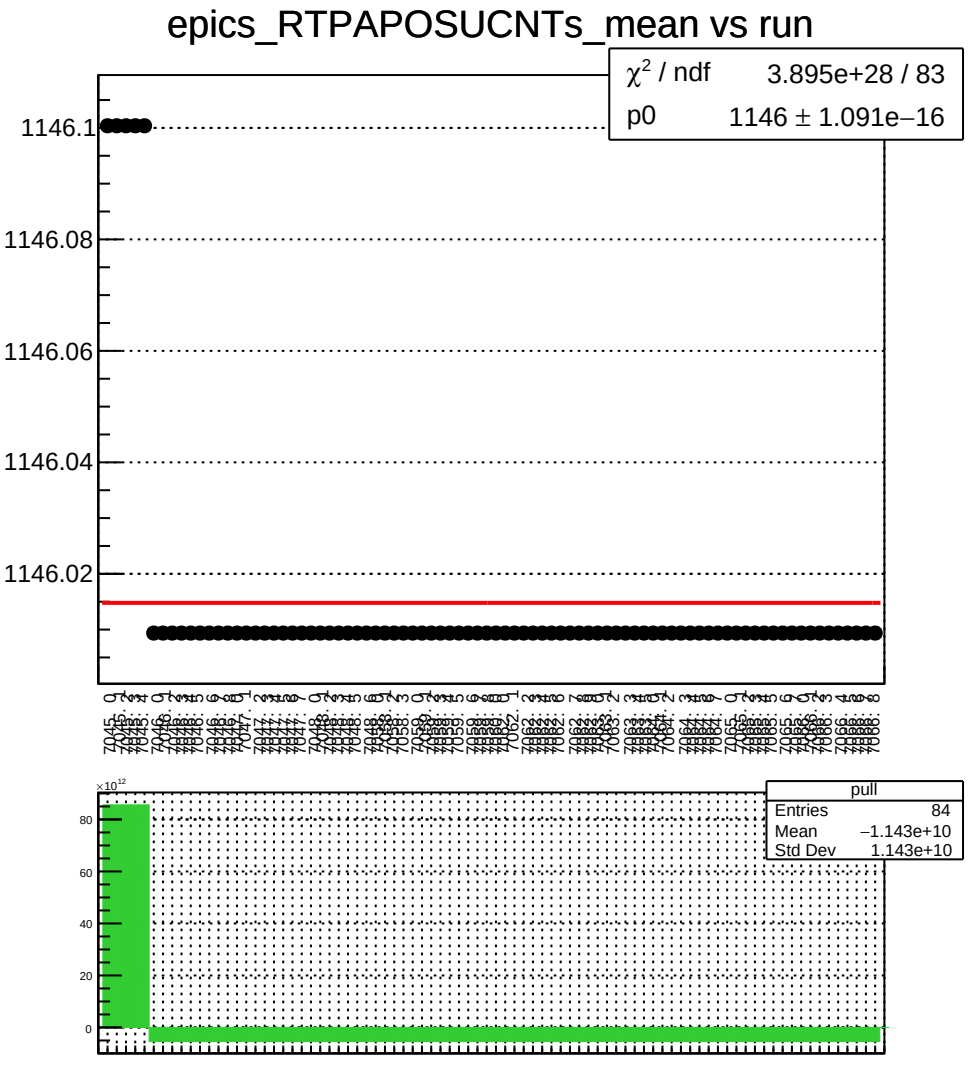

epics_psub_pl_poss_mean vs run
χ² / ndf 7.339e+08 / 83
p0 1468 ± 1.091e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 84
Mean 42
Std Dev 24.25
3000
2500
2000
1500
1000
500
0

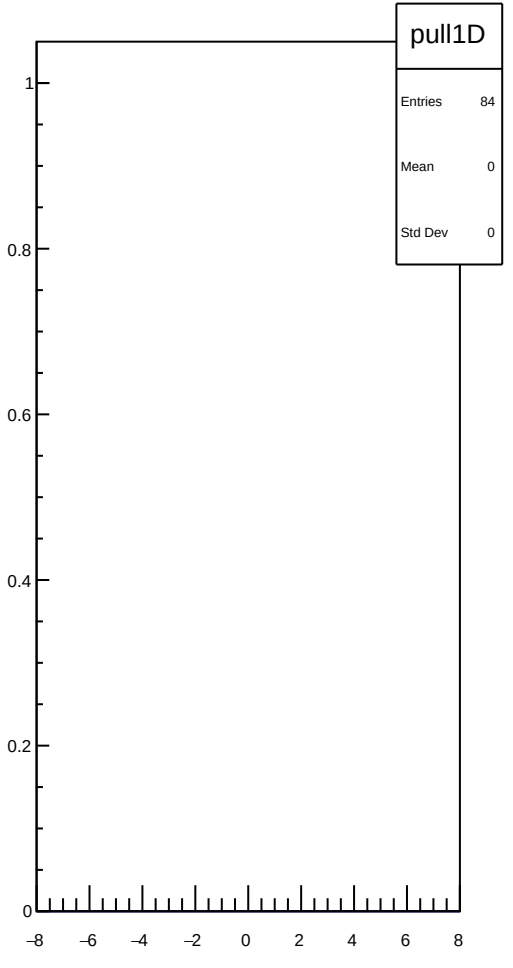

pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

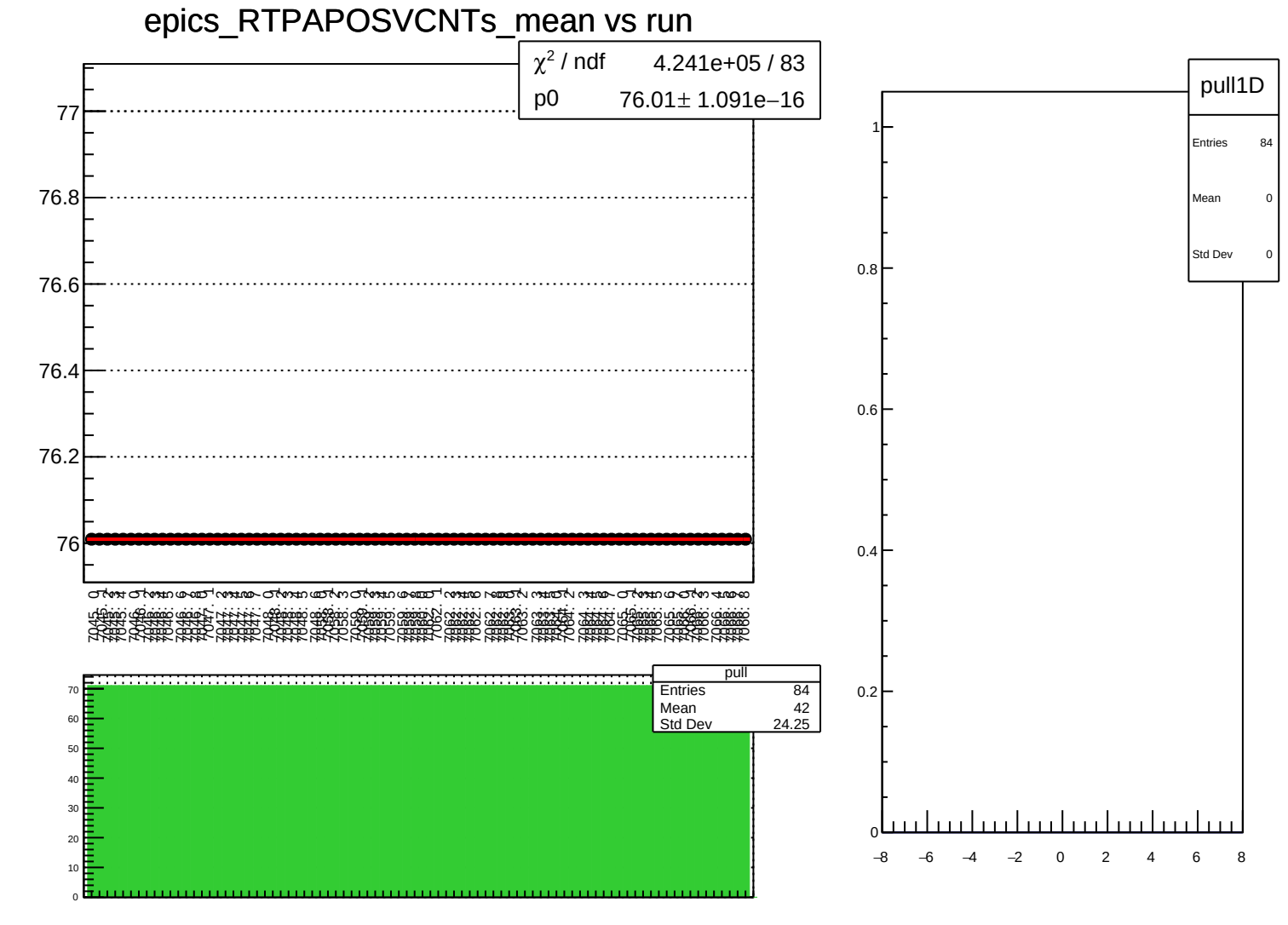

epics_Phi_FGs_mean vs run
χ² / ndf 1.696e+06 / 83
p0 88.02 ± 1.091e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 84
Mean 42
Std Dev 24.25
140
120
100
80
60
40
20
0
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 2.493e+04 / 78
p0 17.01± 1.125e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 79
Mean 39.5
Std Dev 22.8
pull1D
Entries 79
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 1060 / 83
p0 16.01± 1.091e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 84
Mean 42
Std Dev 24.25
0
−0.5
−1
−1.5
−2
−2.5
−3
−3.5
pull1D
Entries 84
Mean −3.553
Std Dev1.398e−07
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 3.895e+28 / 83
p0 1146 ± 1.091e−16
1146.1
1146.08
1146.06
1146.04
1146.02
×10¹²
80
60
40
20
0
pull
Entries 84
Mean −1.143e+10
Std Dev 1.143e+10


pull1D
Entries 84
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 4.241e+05 / 83
p0 76.01± 1.091e−16
77
76.8
76.6
76.4
76.2
76
pull
Entries 84
Mean 42
Std Dev 24.25
70
60
50
40
30
20
10
0
pull1D
Entries 84
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8