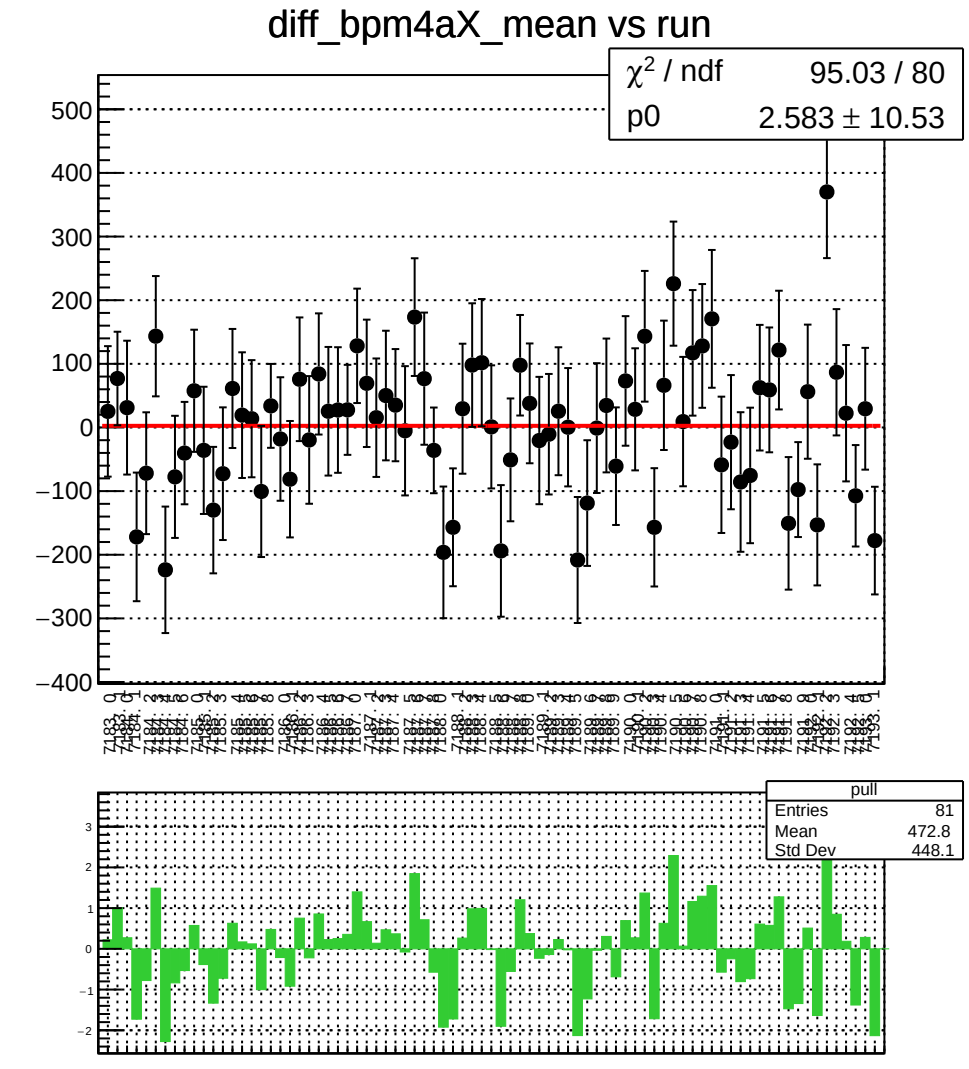
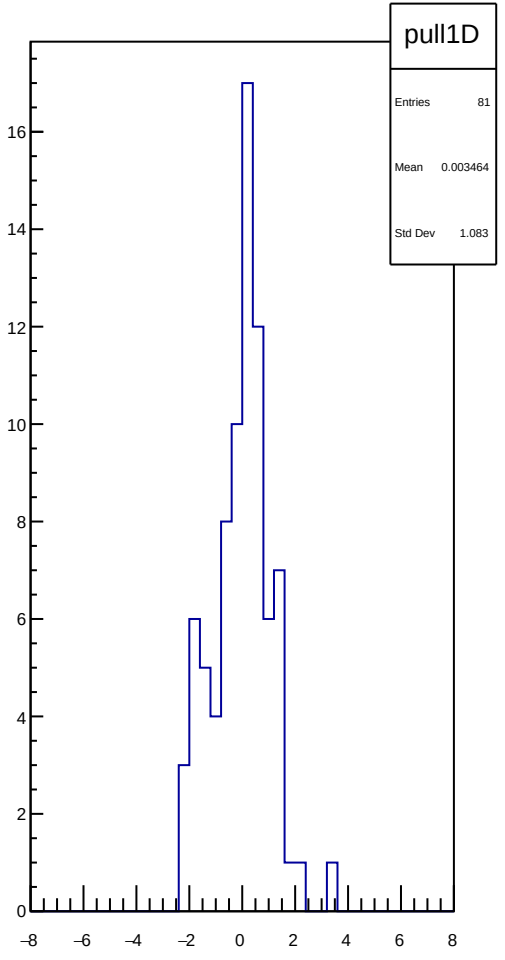
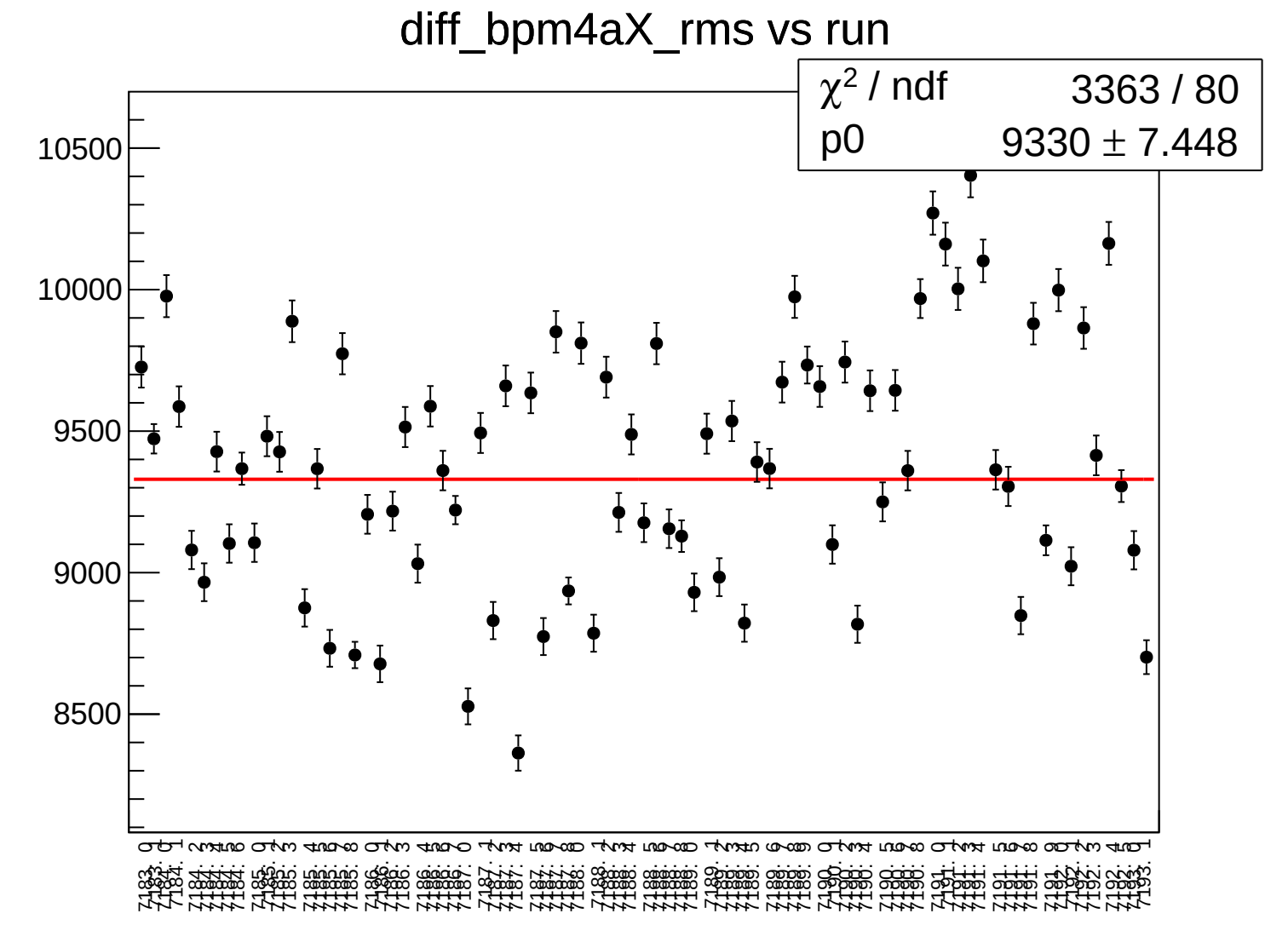
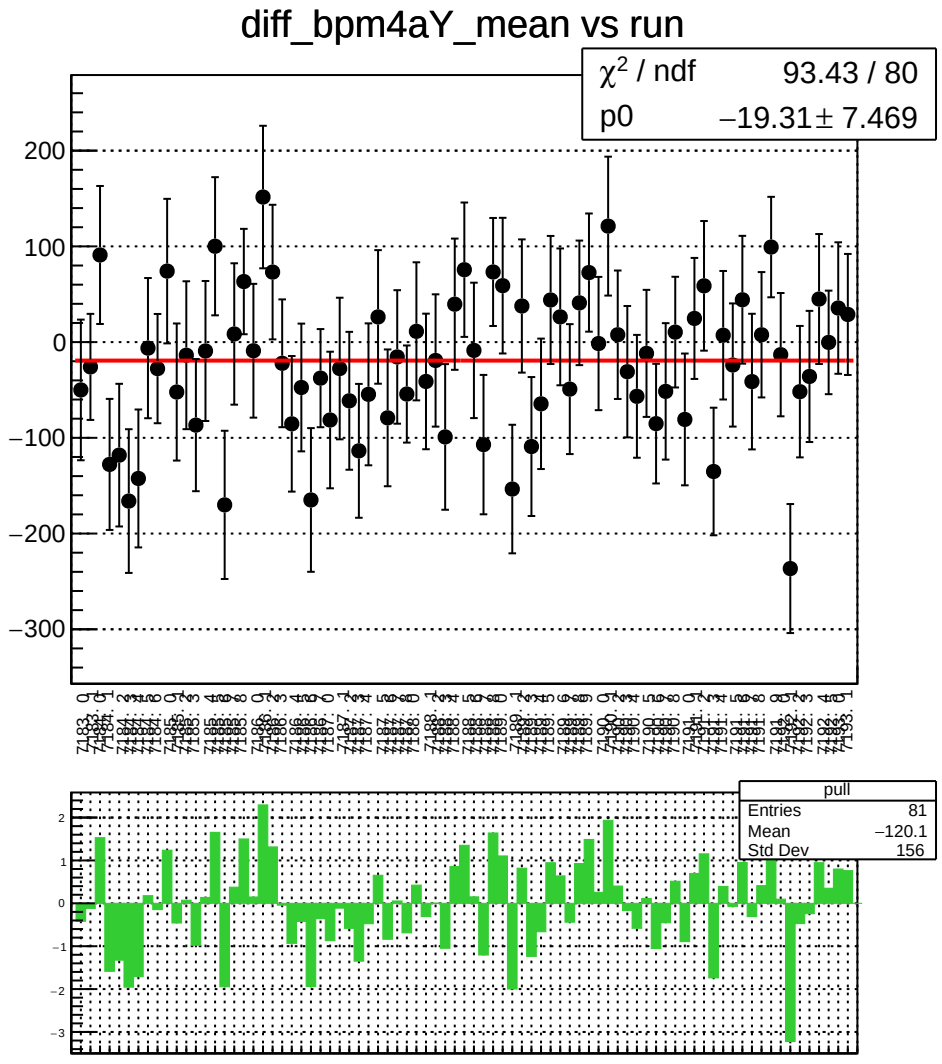
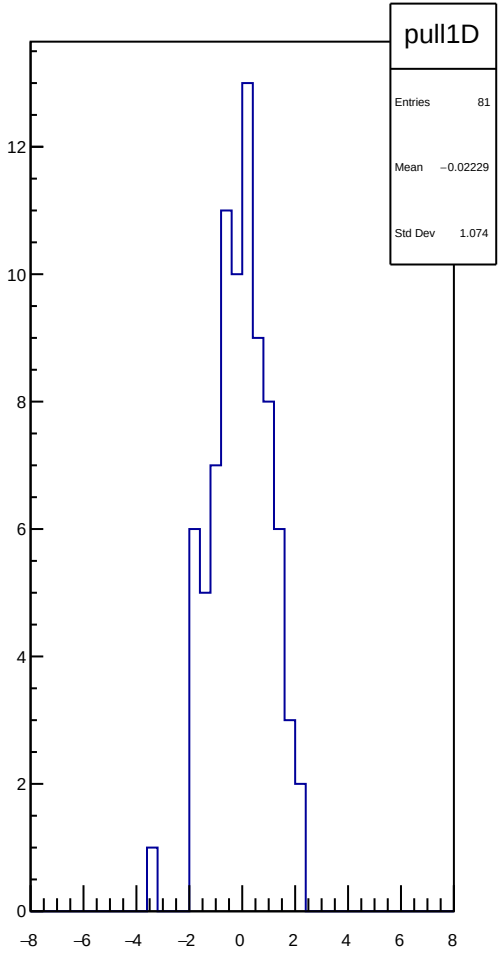
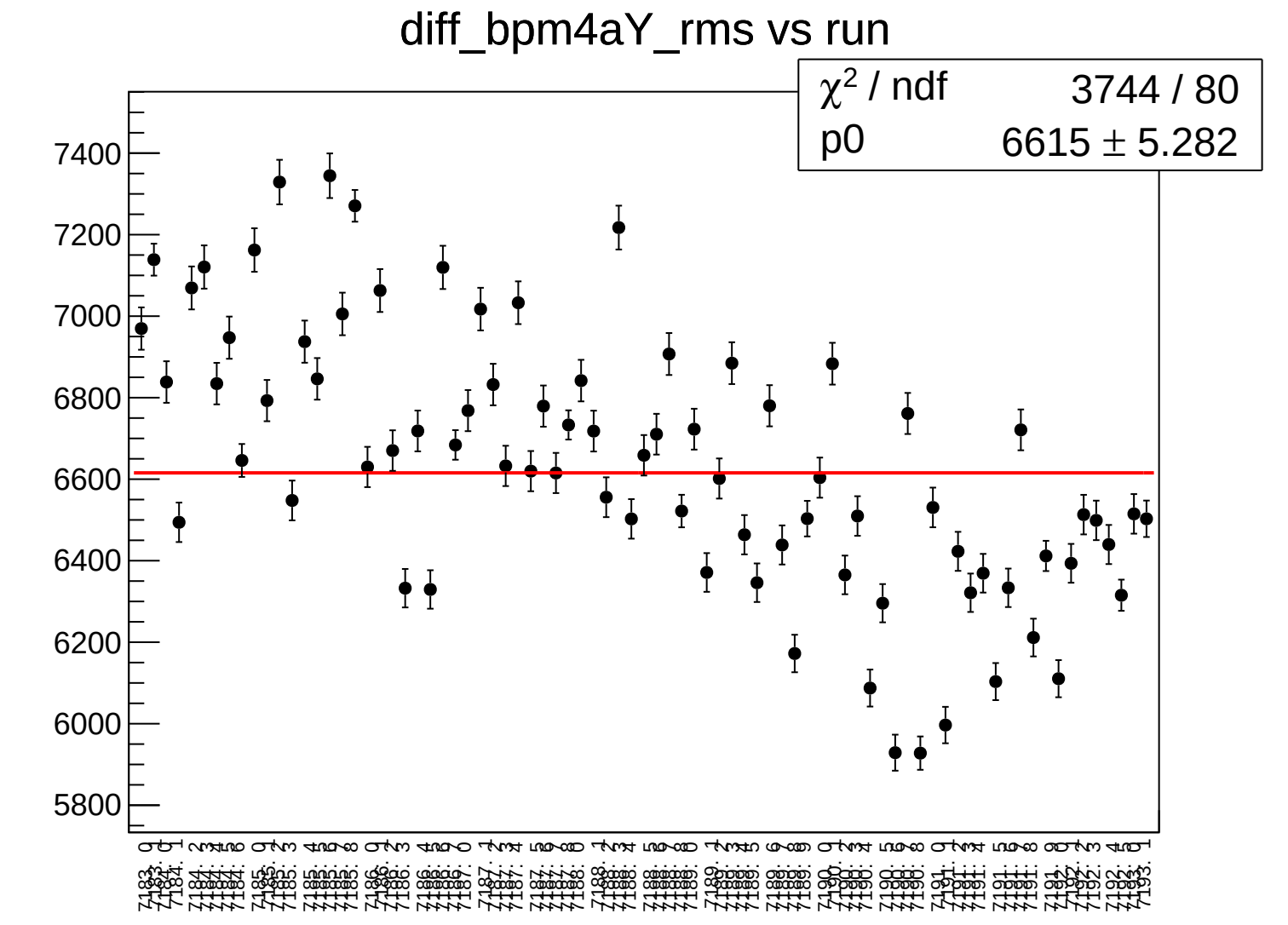

diff_bpm4aX_mean vs run
χ² / ndf 95.03 / 80
p0 2.583 ± 10.53
pull
Entries 81
Mean 472.8
Std Dev 448.1

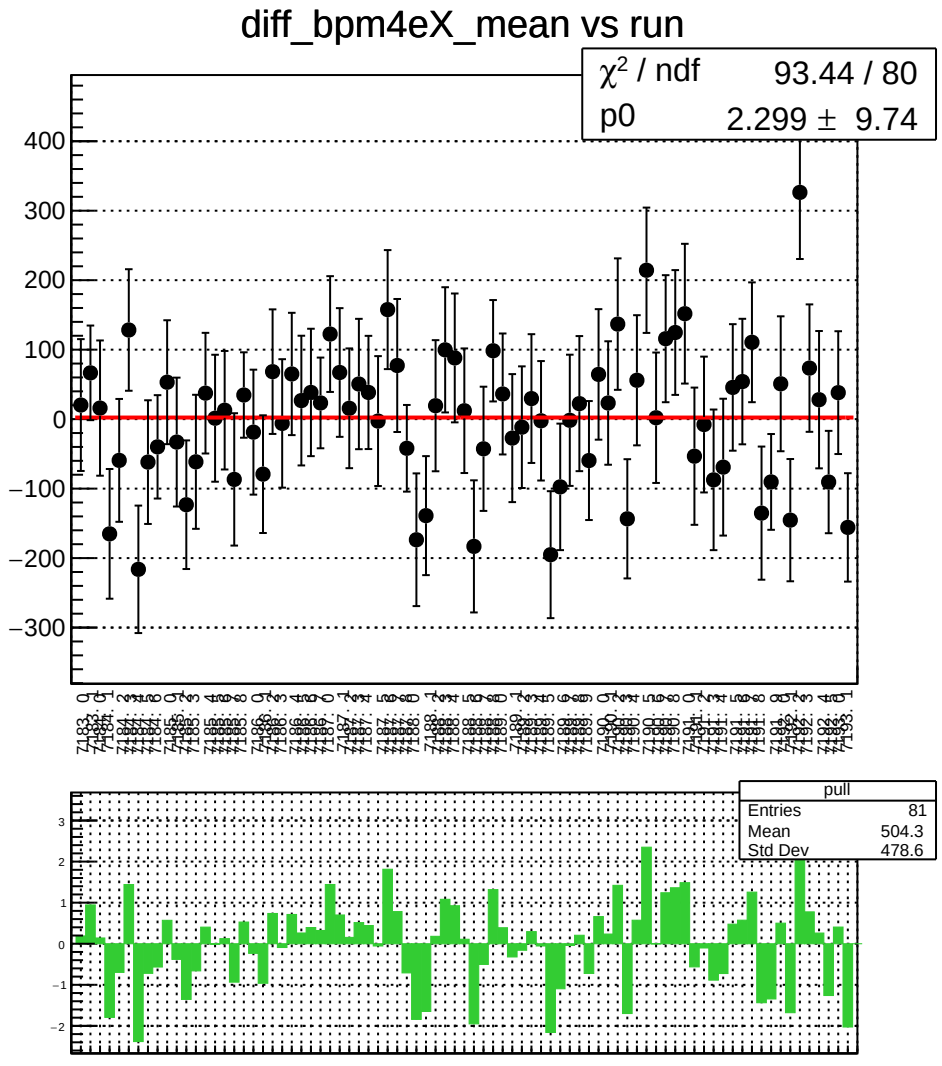

pull1D
Entries 81
Mean 0.003464
Std Dev 1.083

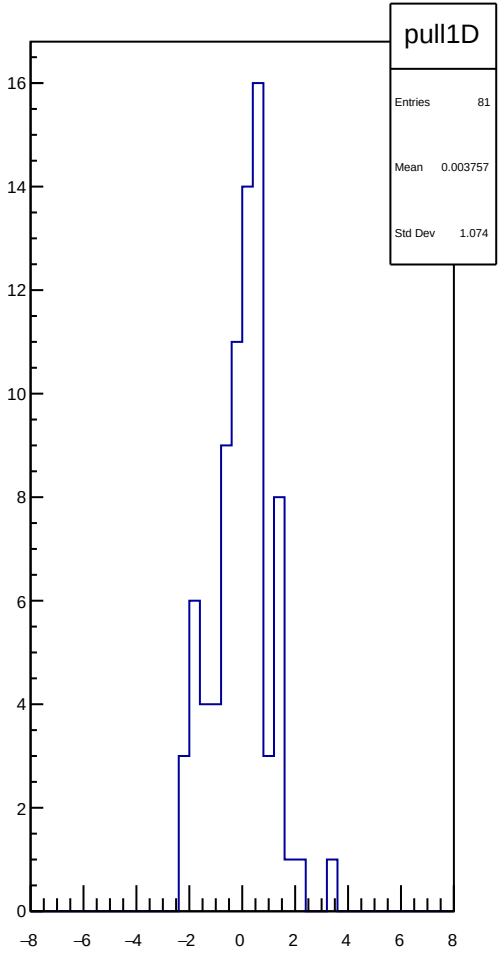

diff_bpm4aX_rms vs run
χ^2 / ndf 3363 / 80
p0 9330 ± 7.448
10500
10000
9500
9000
8500

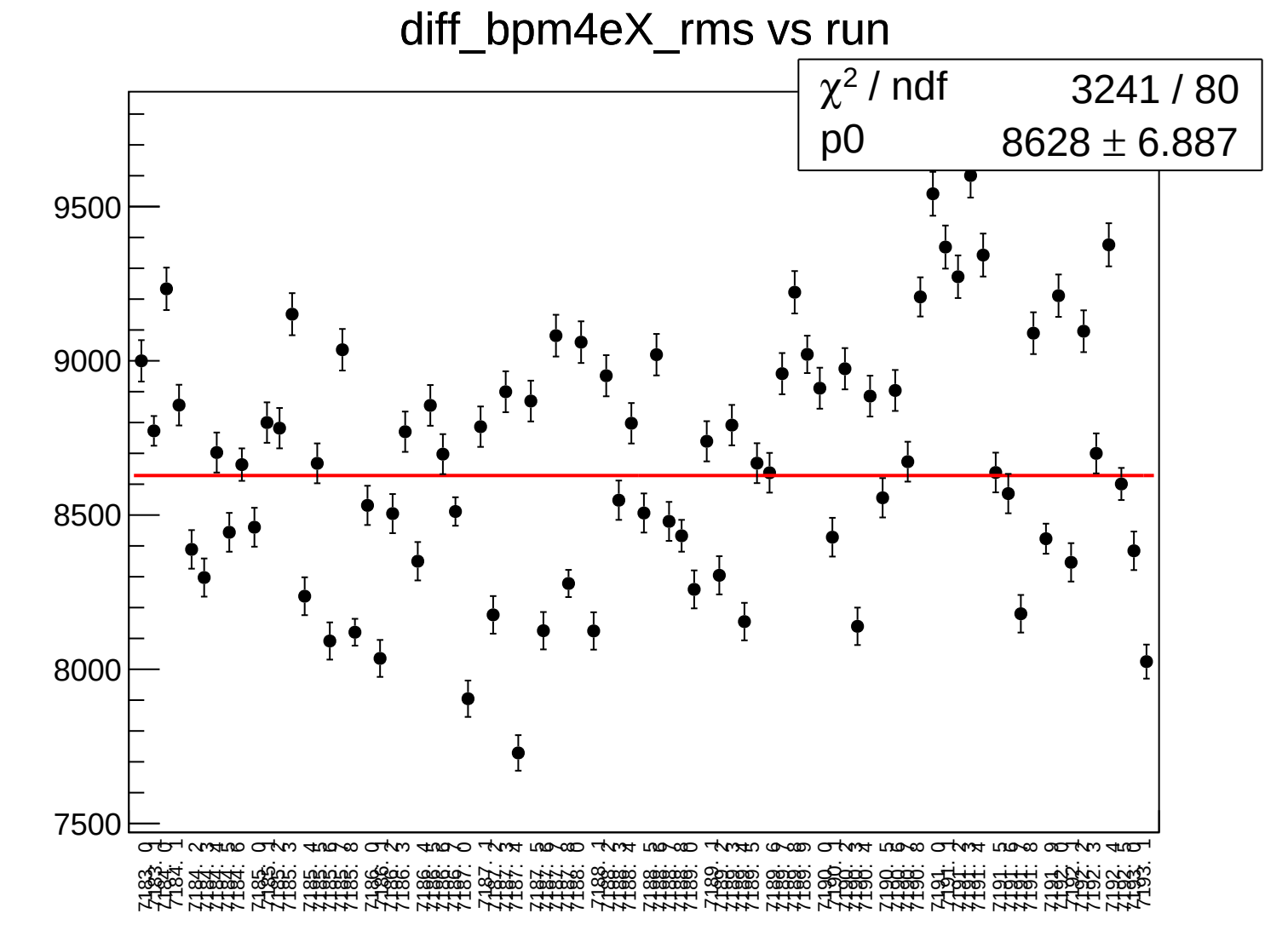

diff_bpm4aY_mean vs run
χ² / ndf 93.43 / 80
p0 −19.31± 7.469
200
100
0
−100
−200
−300
pull
Entries 81
Mean −120.1
Std Dev 156
2
1
0
−1
−2
−3

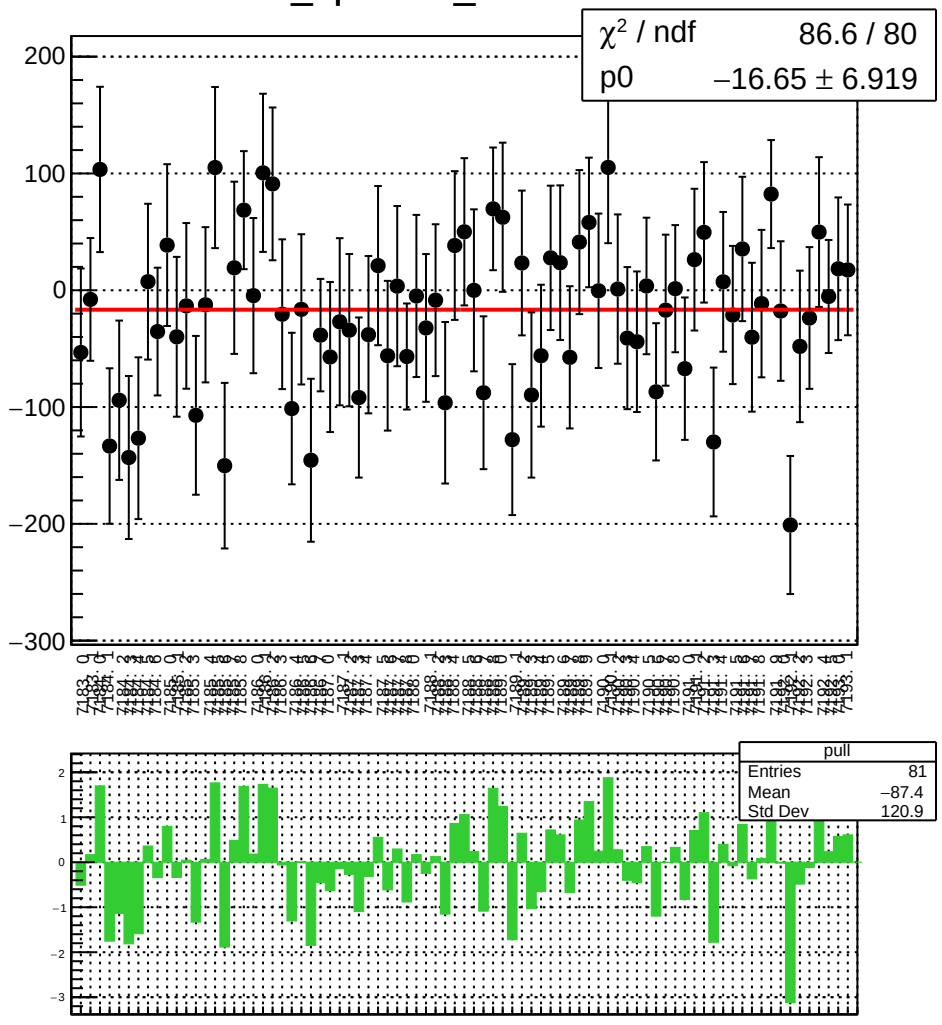

pull1D
Entries 81
Mean −0.02229
Std Dev 1.074
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

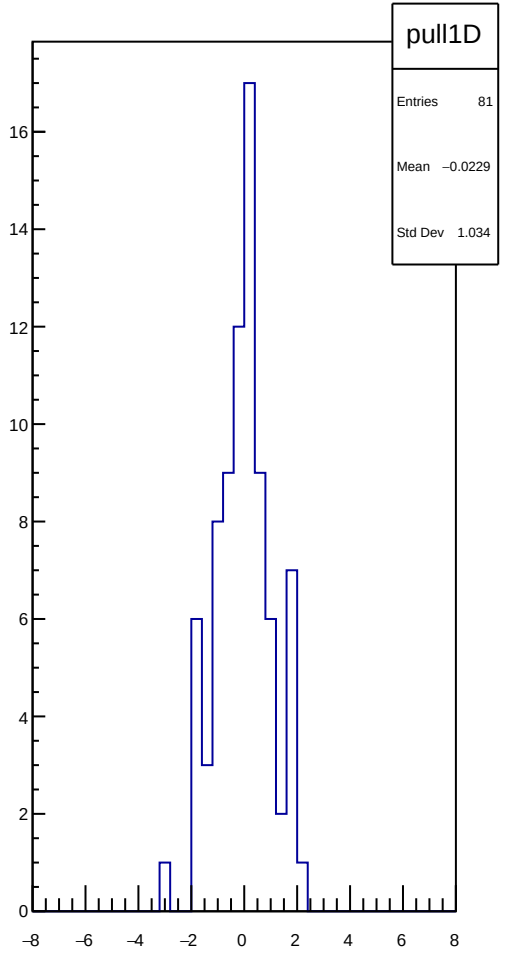

diff_bpm4aY_rms vs run
χ^2 / ndf 3744 / 80
p0 6615 ± 5.282
7400
7200
7000
6800
6600
6400
6200
6000
5800

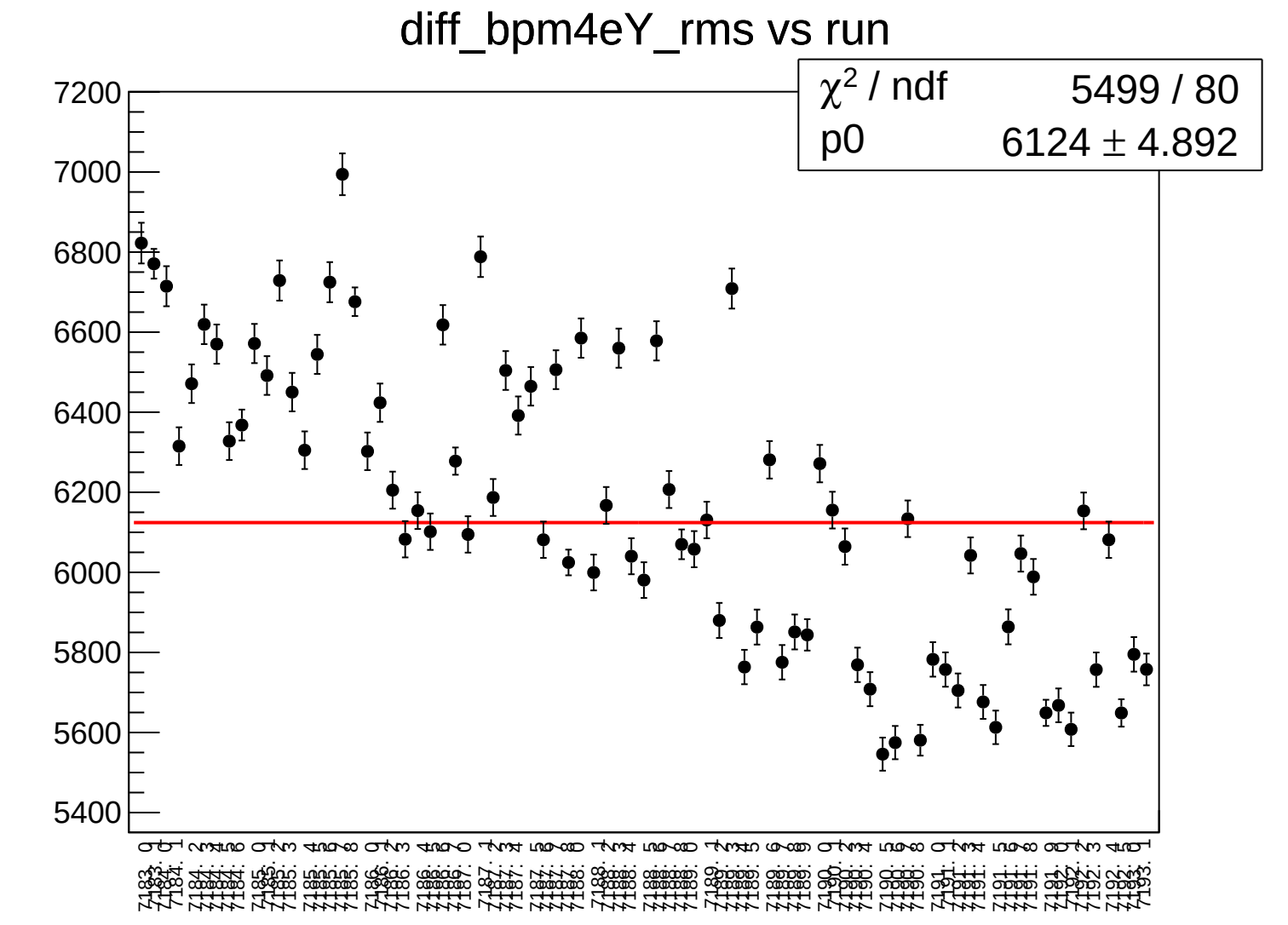

diff_bpm4eX_mean vs run
χ² / ndf 93.44 / 80
p0 2.299 ± 9.74
pull
Entries 81
Mean 504.3
Std Dev 478.6

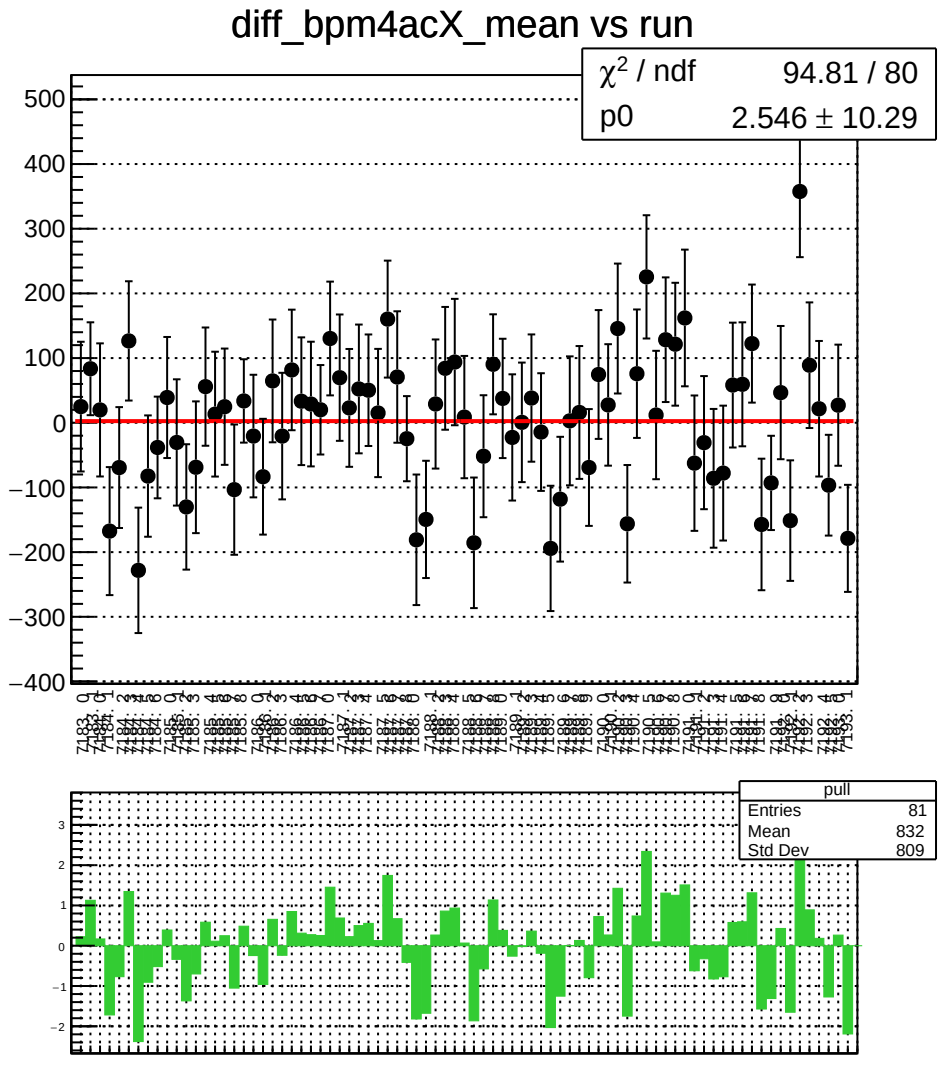

pull1D
Entries 81
Mean 0.003757
Std Dev 1.074

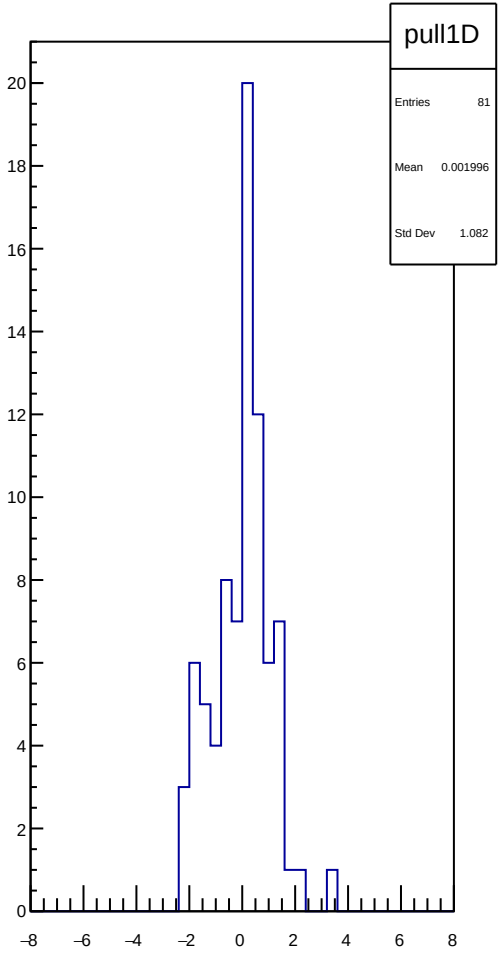

diff_bpm4eX_rms vs run
χ² / ndf 3241 / 80
p0 8628 ± 6.887
9500
9000
8500
8000
7500

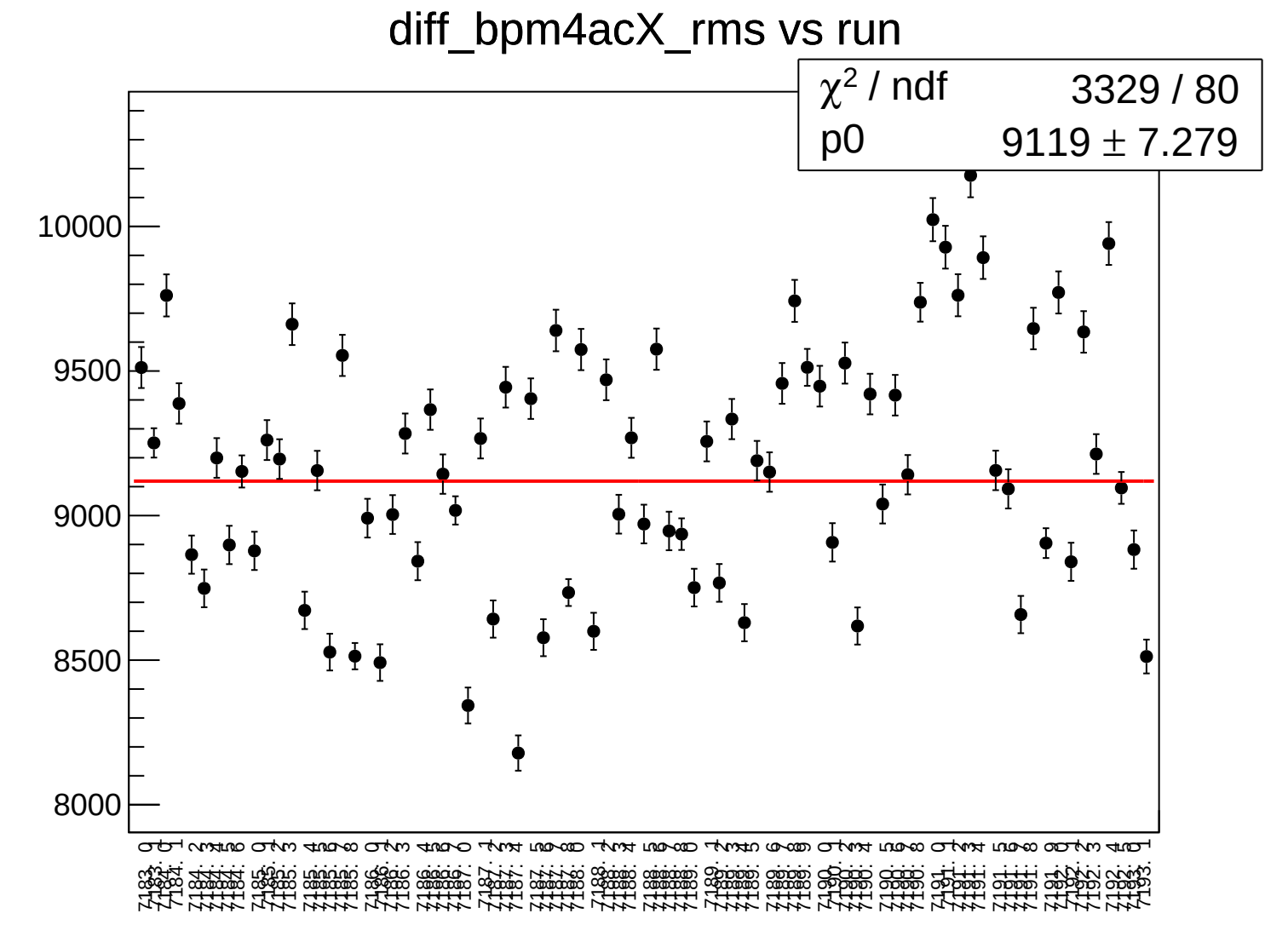

diff_bpm4eY_mean vs run
χ² / ndf 86.6 / 80
p0 −16.65 ± 6.919
pull
Entries 81
Mean −87.4
Std Dev 120.9

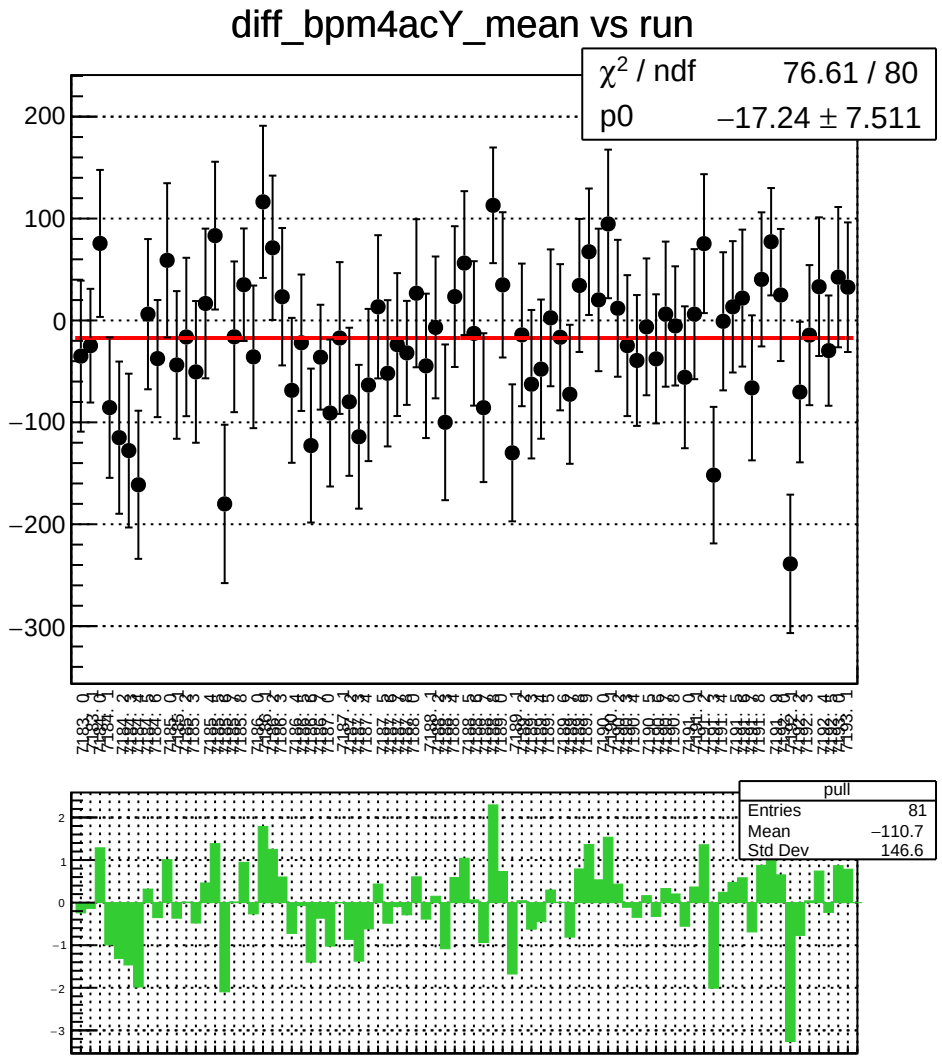

pull1D
Entries 81
Mean −0.0229
Std Dev 1.034

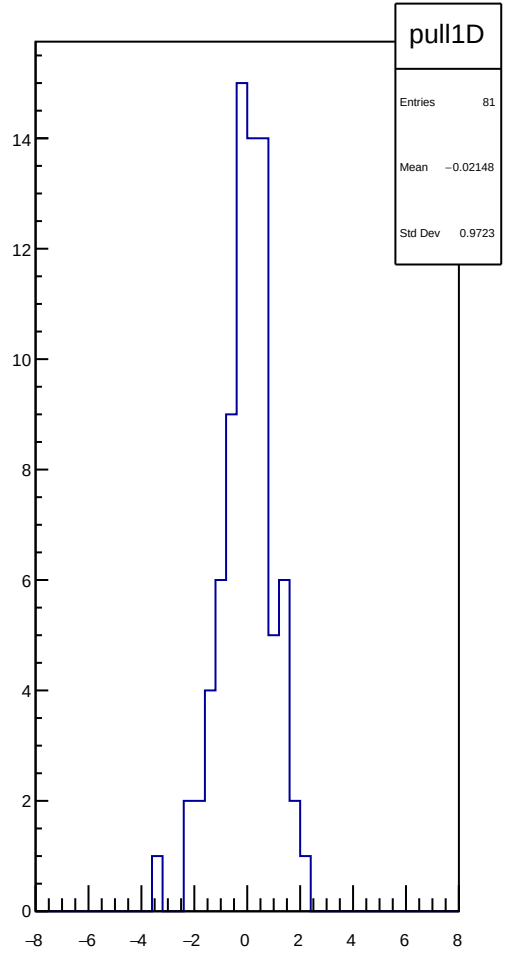

diff_bpm4eY_rms vs run
χ^2 / ndf 5499 / 80
p0 6124 ± 4.892
7200
7000
6800
6600
6400
6200
6000
5800
5600
5400

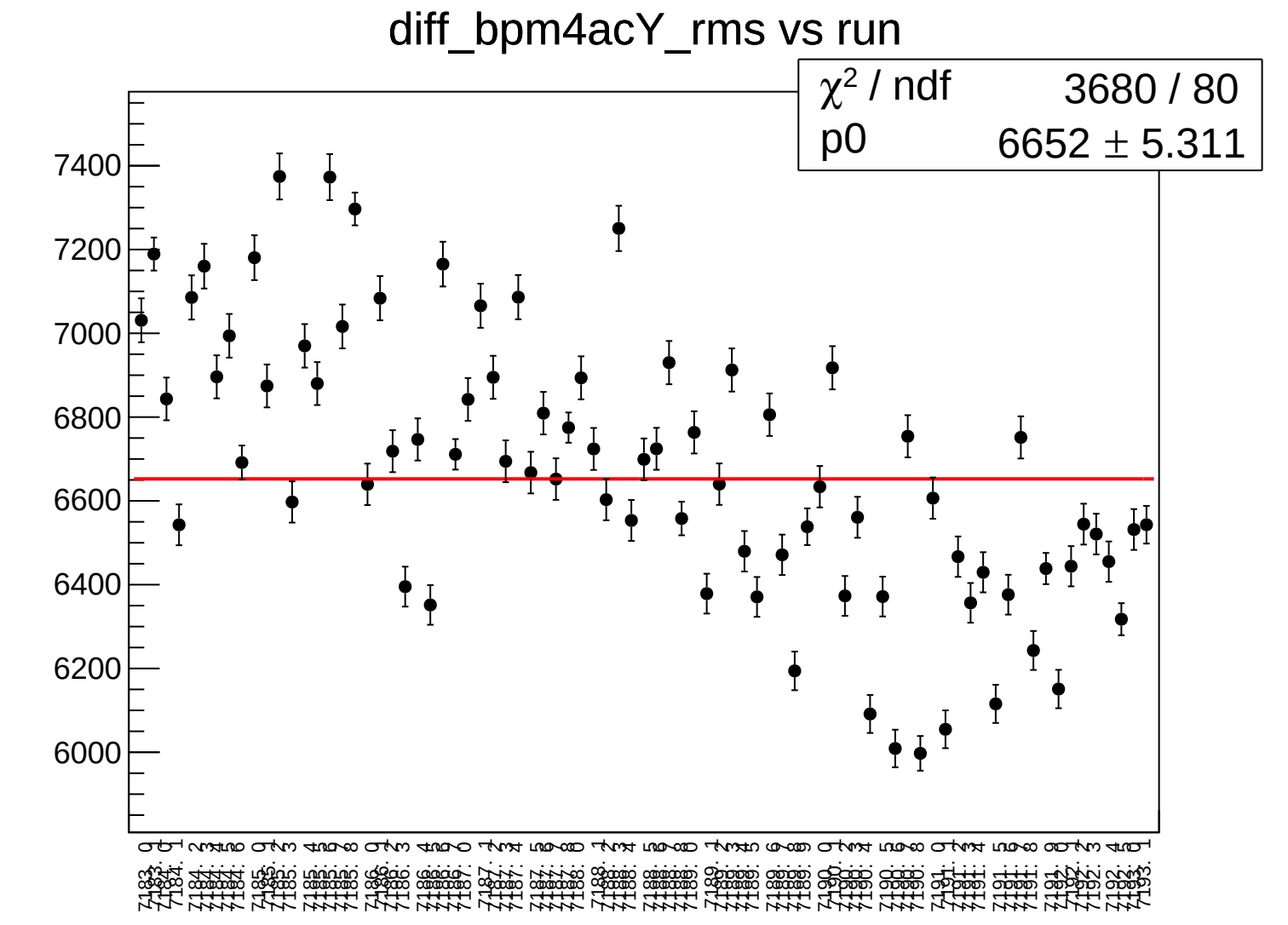

diff_bpm4acX_mean vs run
χ² / ndf 94.81 / 80
p0 2.546 ± 10.29
pull
Entries 81
Mean 832
Std Dev 809

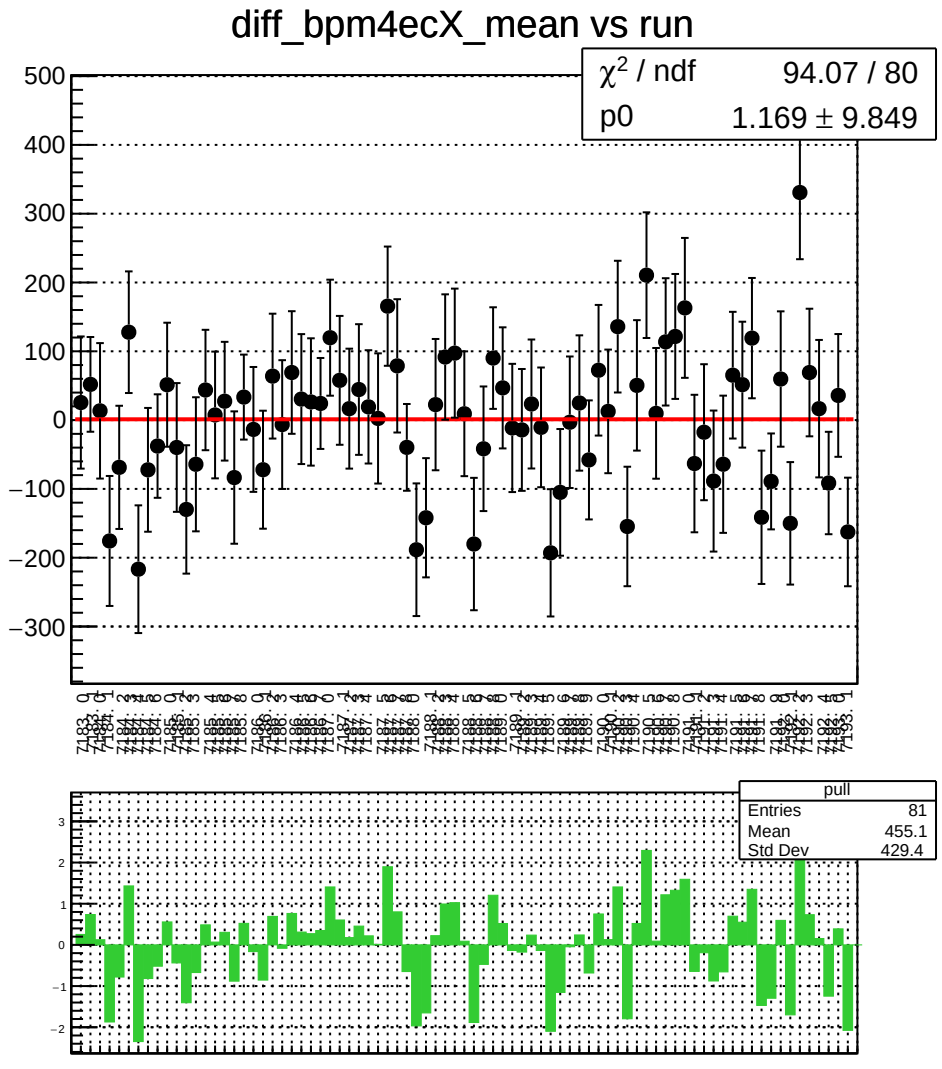

pull1D
Entries 81
Mean 0.001996
Std Dev 1.082

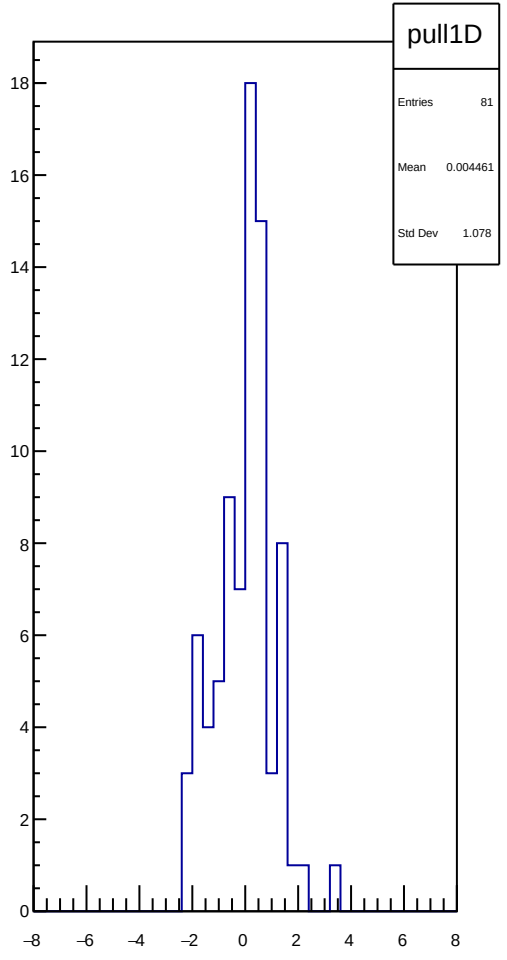

diff_bpm4acX_rms vs run
χ² / ndf 3329 / 80
p0 9119 ± 7.279
10000
9500
9000
8500
8000

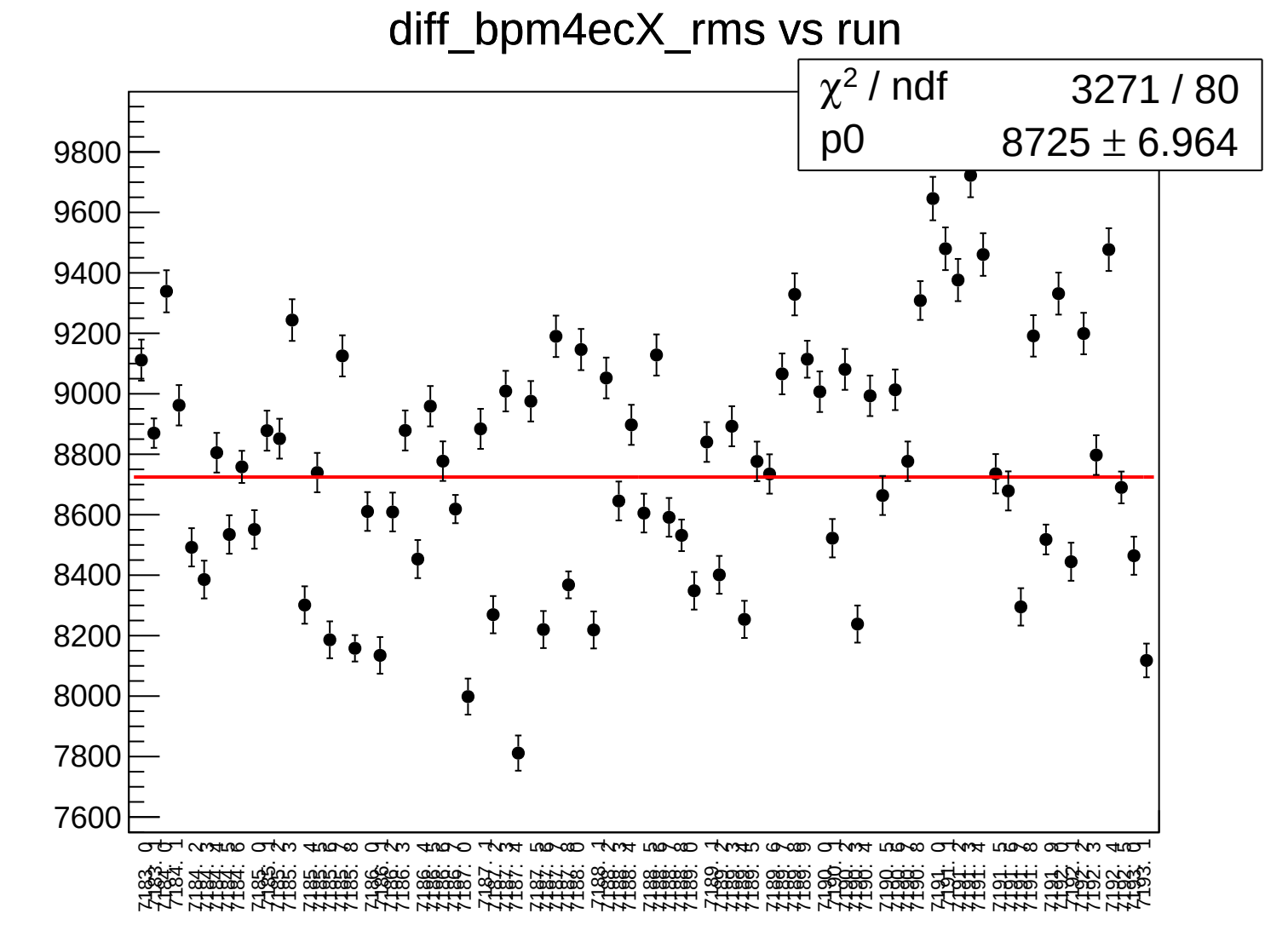

diff_bpm4acY_mean vs run
χ² / ndf 76.61 / 80
p0 −17.24 ± 7.511
200
100
0
−100
−200
−300
pull
Entries 81
Mean −110.7
Std Dev 146.6
2
1
0
−1
−2
−3

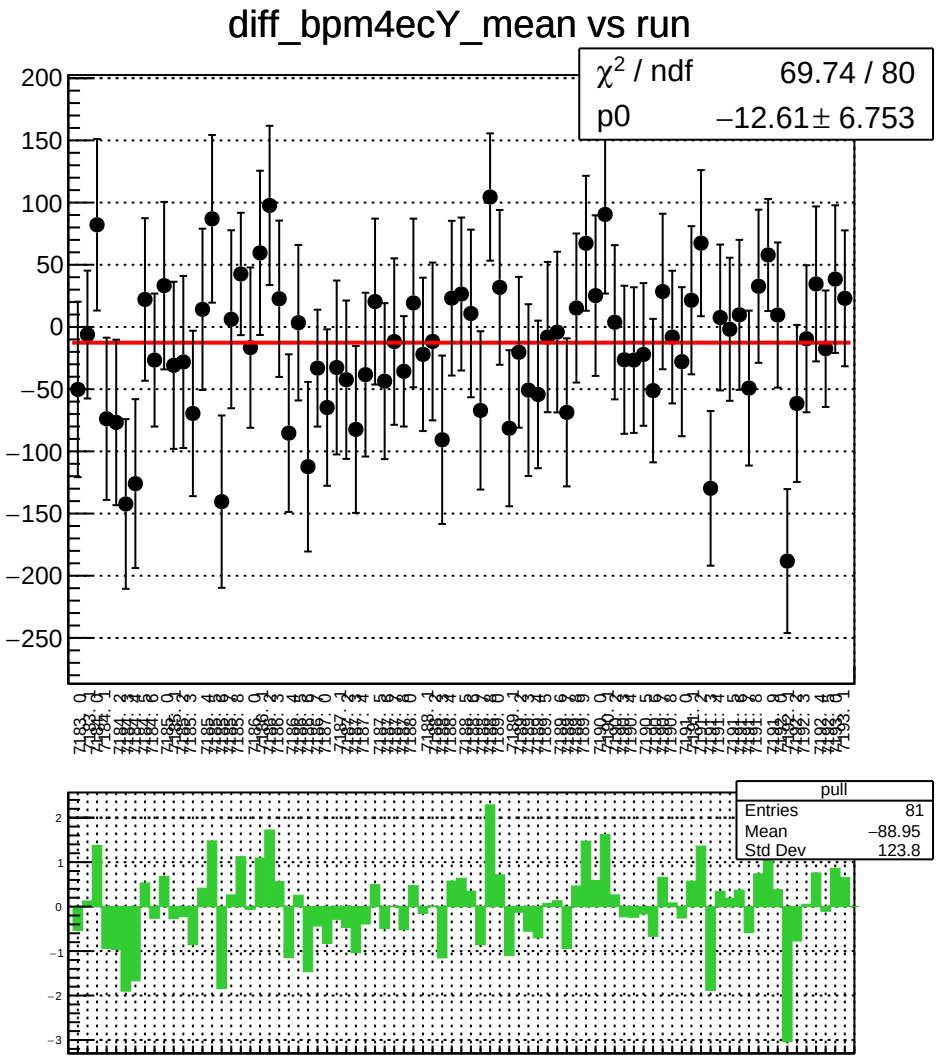

pull1D
Entries 81
Mean −0.02148
Std Dev 0.9723
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

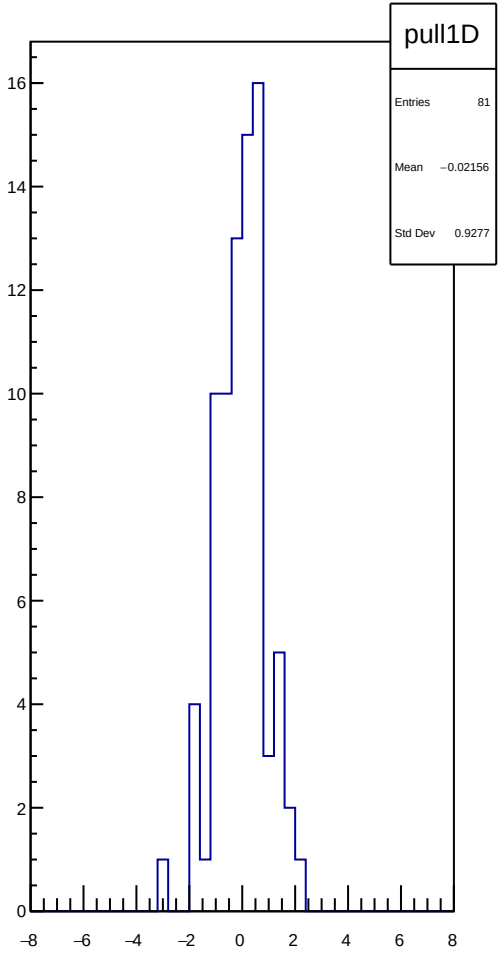

diff_bpm4acY_rms vs run
χ² / ndf 3680 / 80
p0 6652 ± 5.311
7400
7200
7000
6800
6600
6400
6200
6000

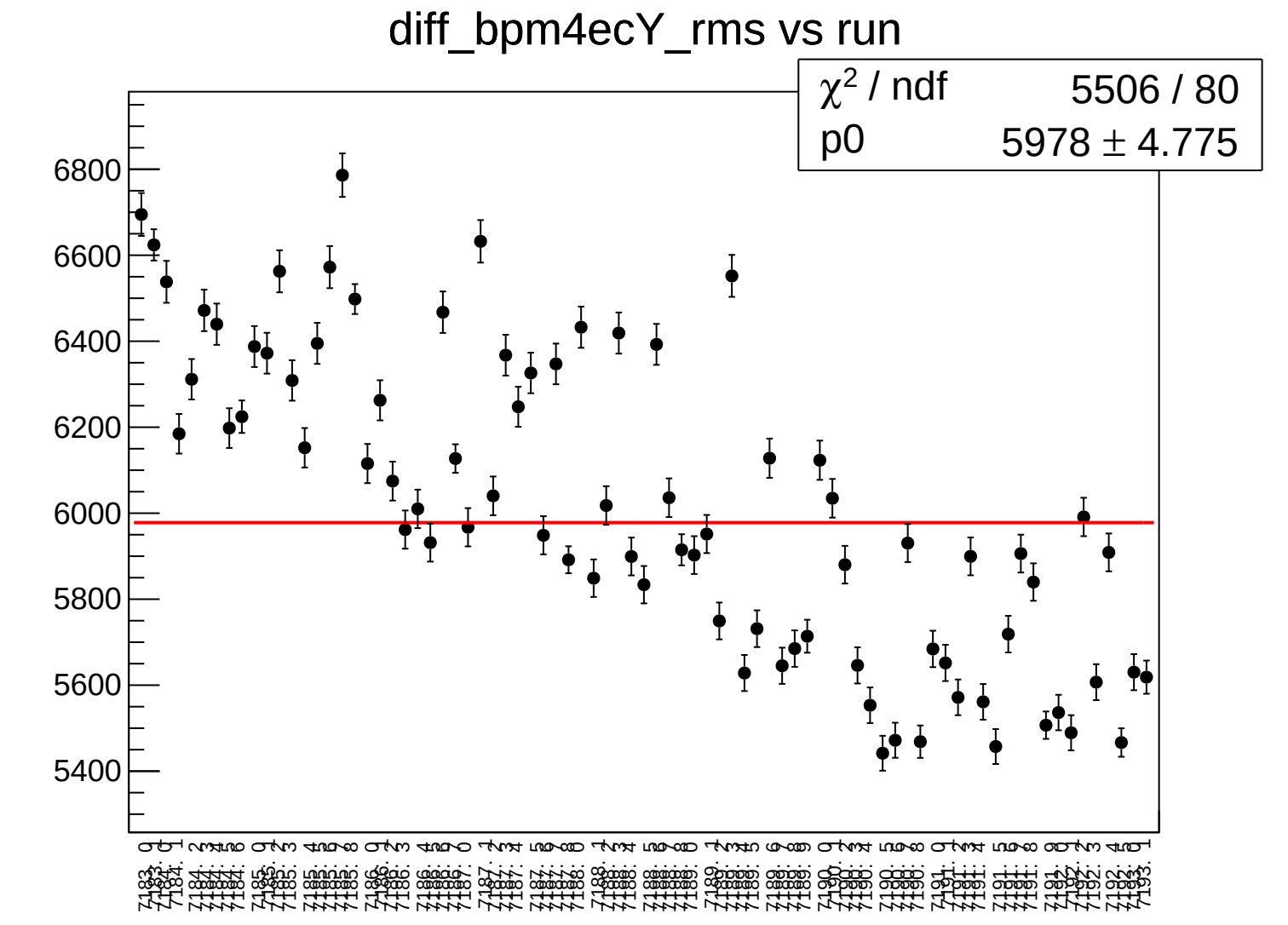

diff_bpm4ecX_mean vs run
χ² / ndf 94.07 / 80
p0 1.169 ± 9.849
pull
Entries 81
Mean 455.1
Std Dev 429.4

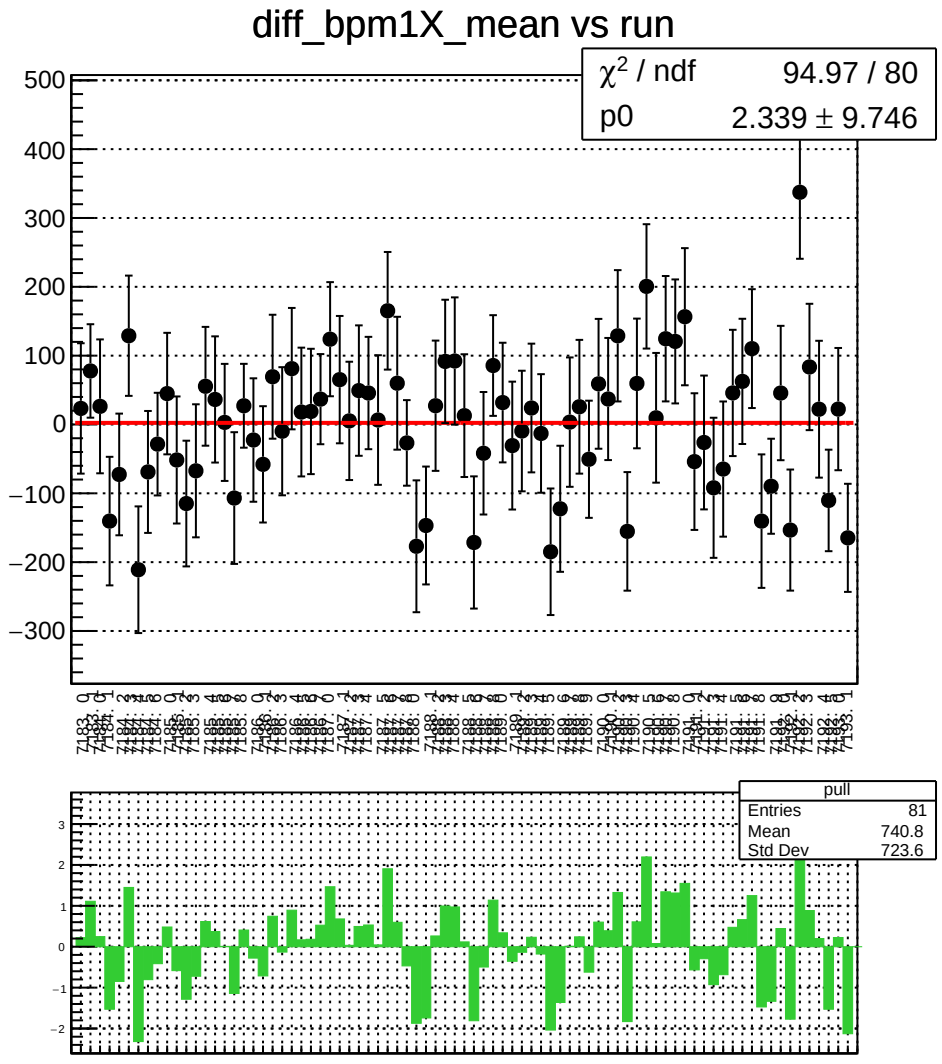

pull1D
Entries 81
Mean 0.004461
Std Dev 1.078

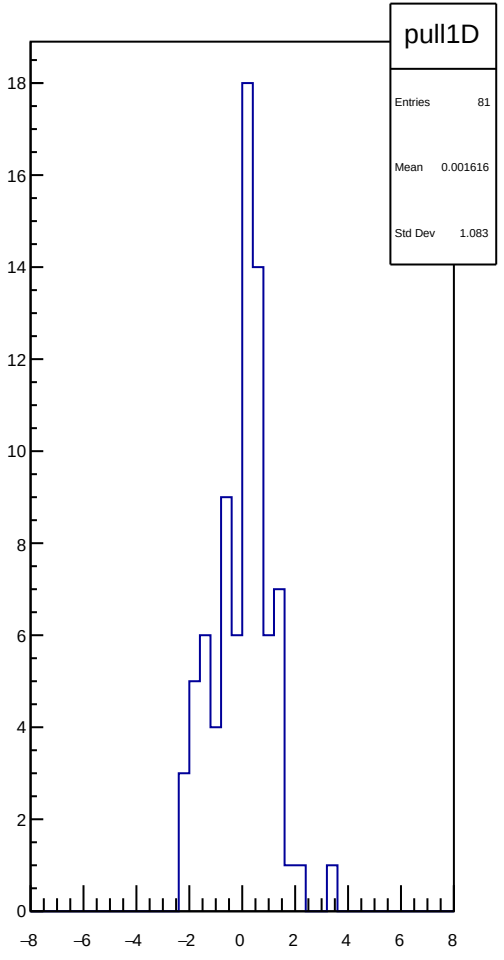

diff_bpm4ecX_rms vs run
χ^2 / ndf 3271 / 80
p0 8725 ± 6.964
9800
9600
9400
9200
9000
8800
8600
8400
8200
8000
7800
7600

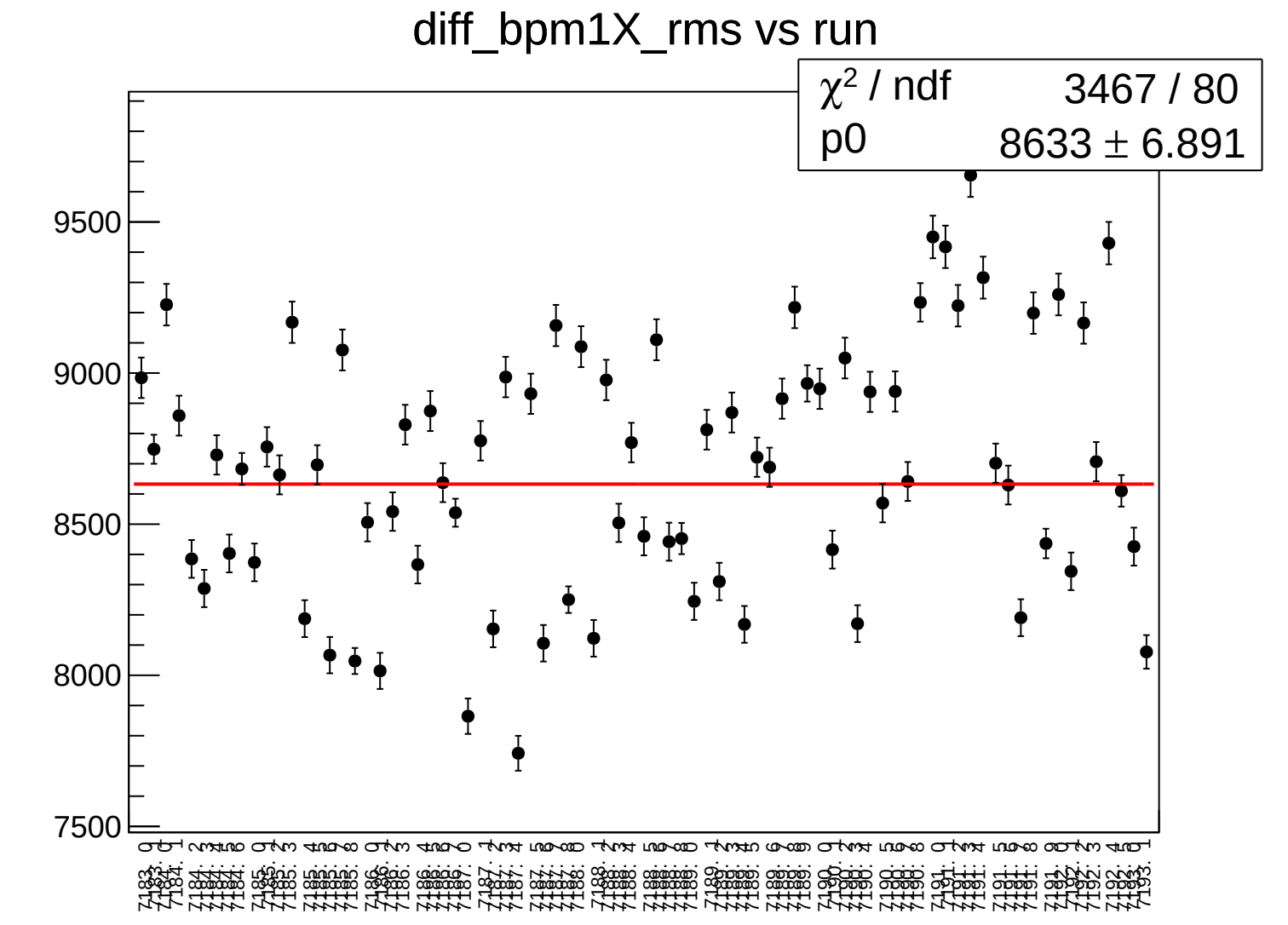

diff_bpm4ecY_mean vs run
χ^2 / ndf 69.74 / 80
p0 −12.61± 6.753
pull
Entries 81
Mean −88.95
Std Dev 123.8

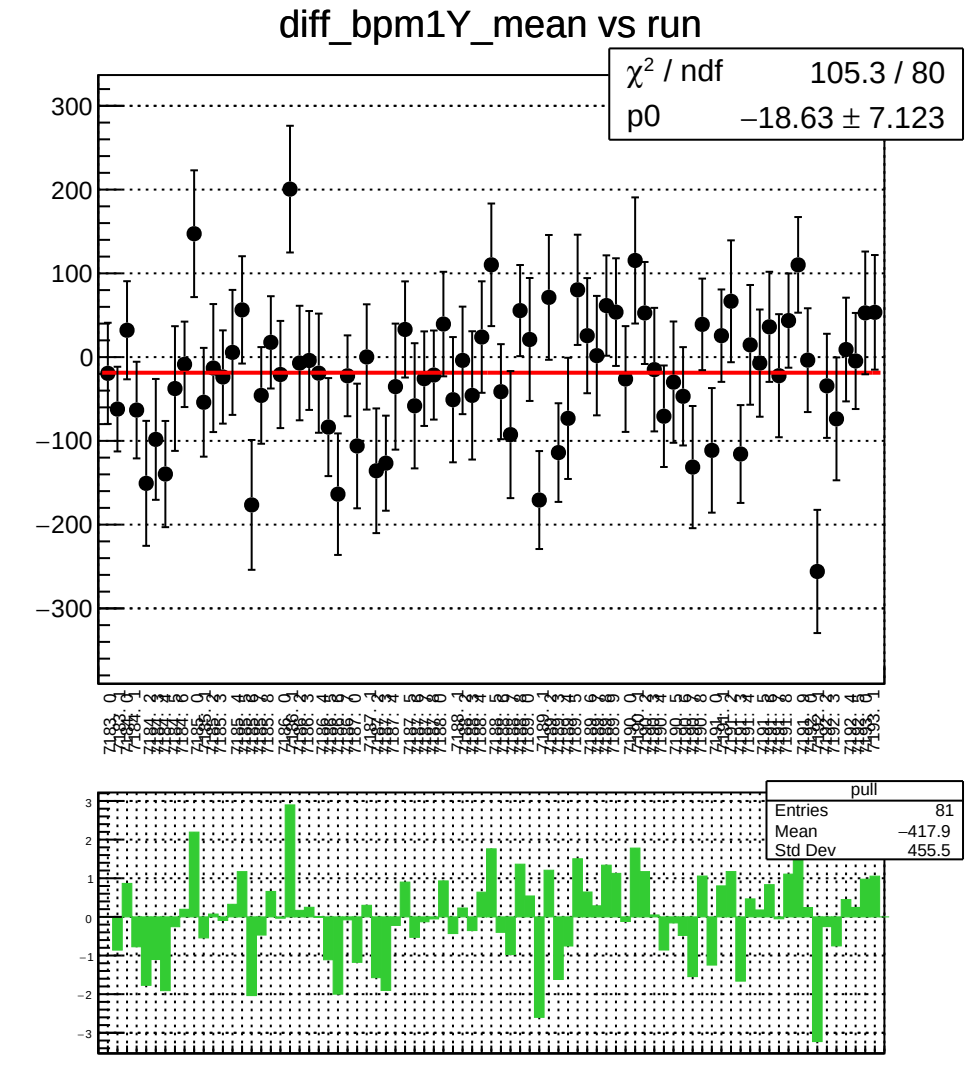

pull1D
Entries 81
Mean −0.02156
Std Dev 0.9277

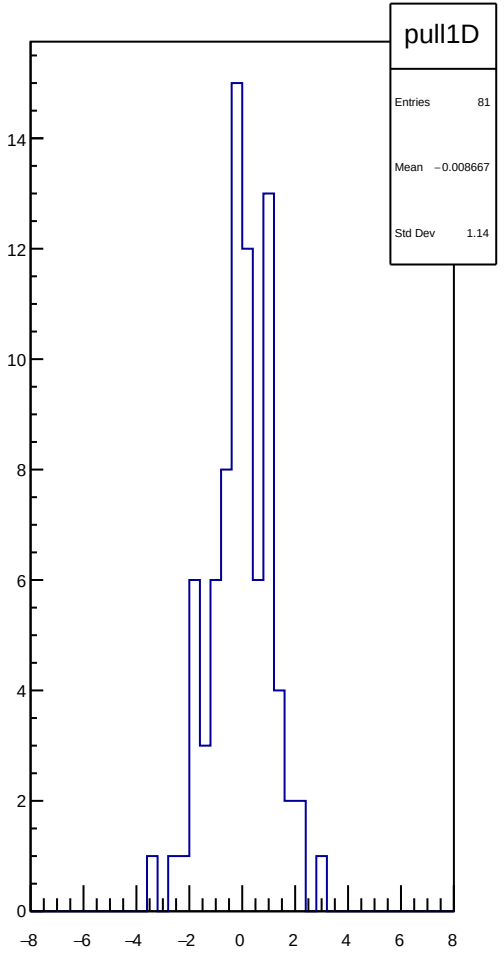

diff_bpm4ecY_rms vs run
χ² / ndf 5506 / 80
p0 5978 ± 4.775
6800
6600
6400
6200
6000
5800
5600
5400

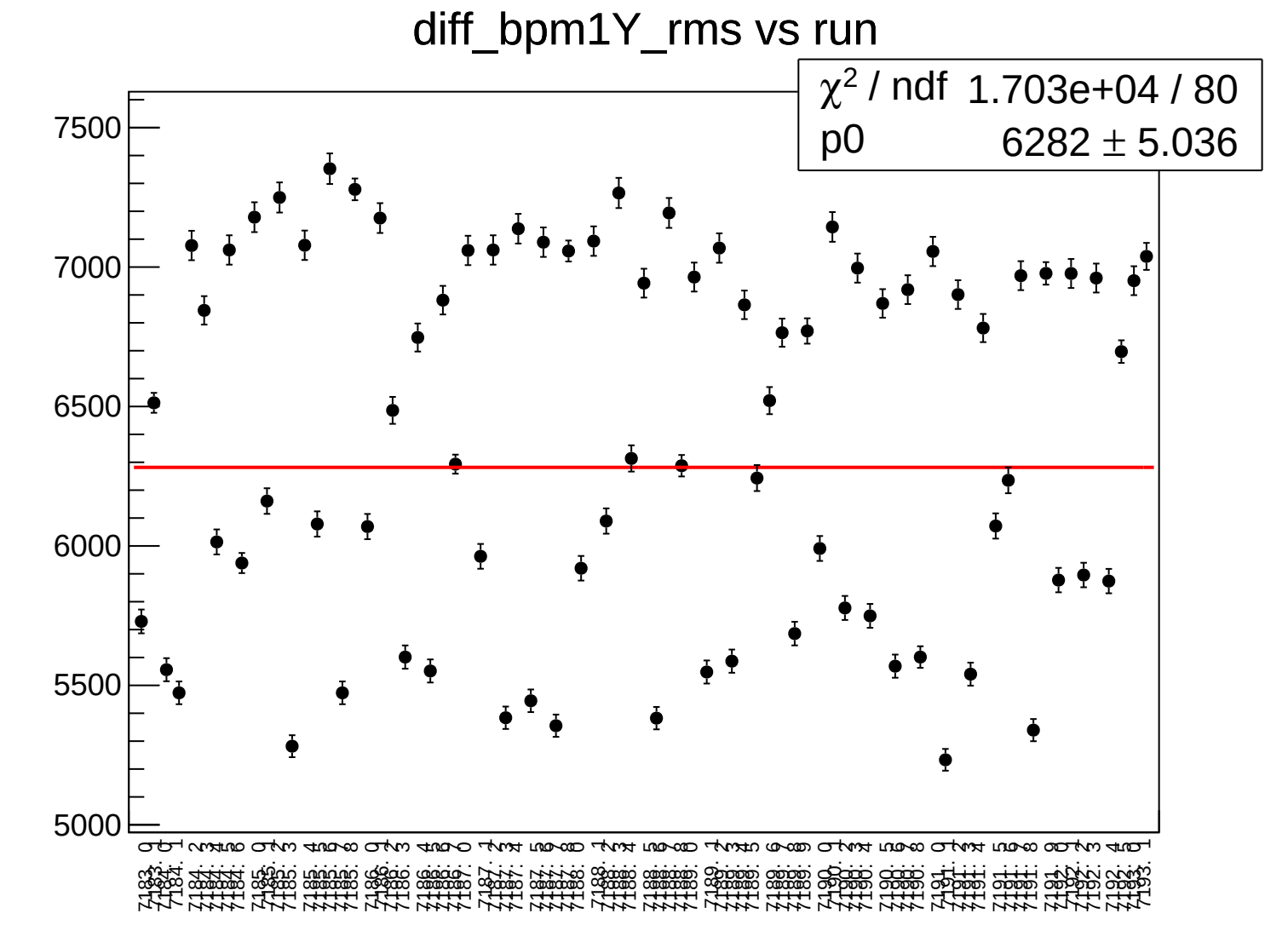

diff_bpm1X_mean vs run
χ^2 / ndf 94.97 / 80
p0 2.339 ± 9.746
pull
Entries 81
Mean 740.8
Std Dev 723.6

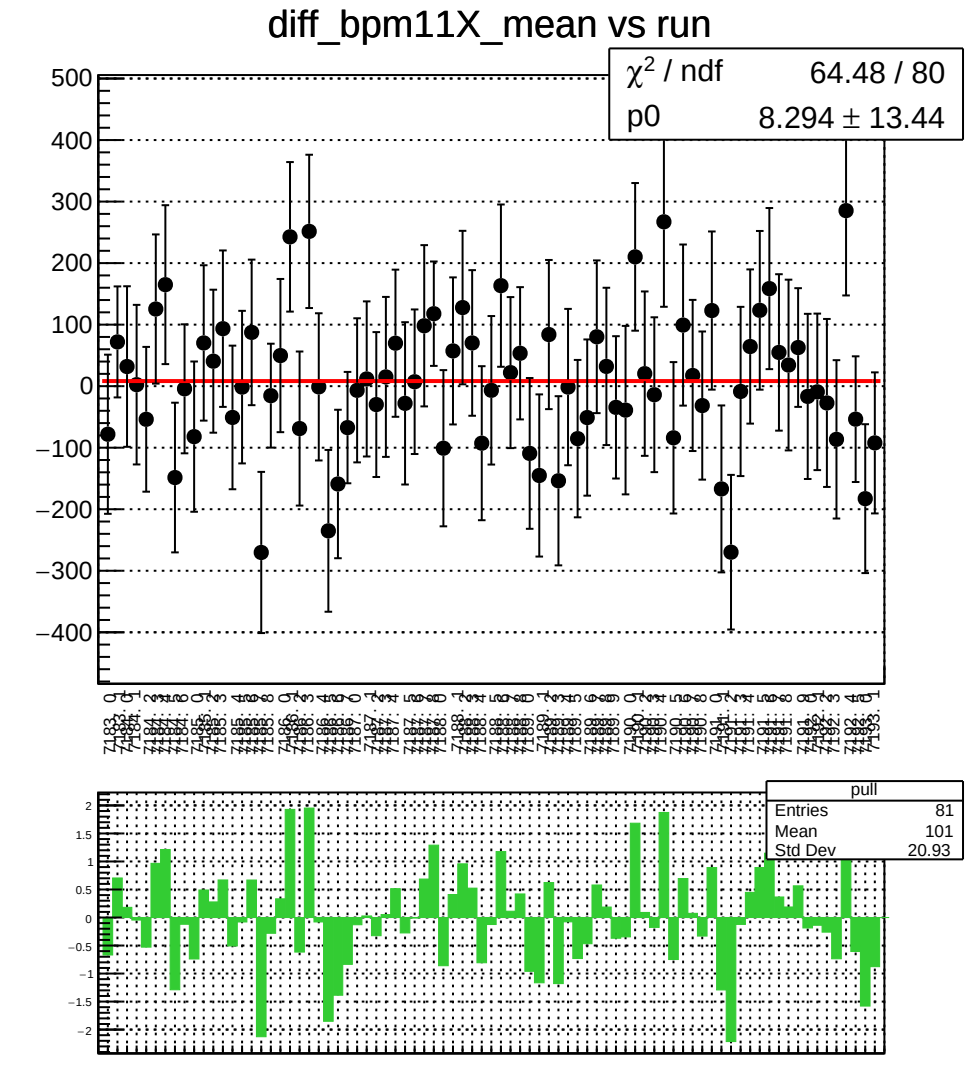

pull1D
Entries 81
Mean 0.001616
Std Dev 1.083

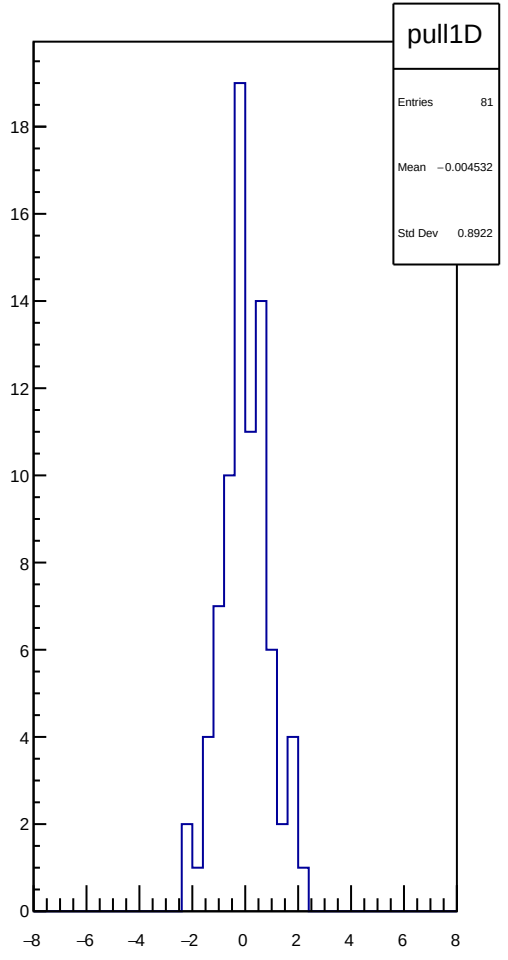

diff_bpm1X_rms vs run
χ^2 / ndf 3467 / 80
p0 8633 ± 6.891
9500
9000
8500
8000
7500

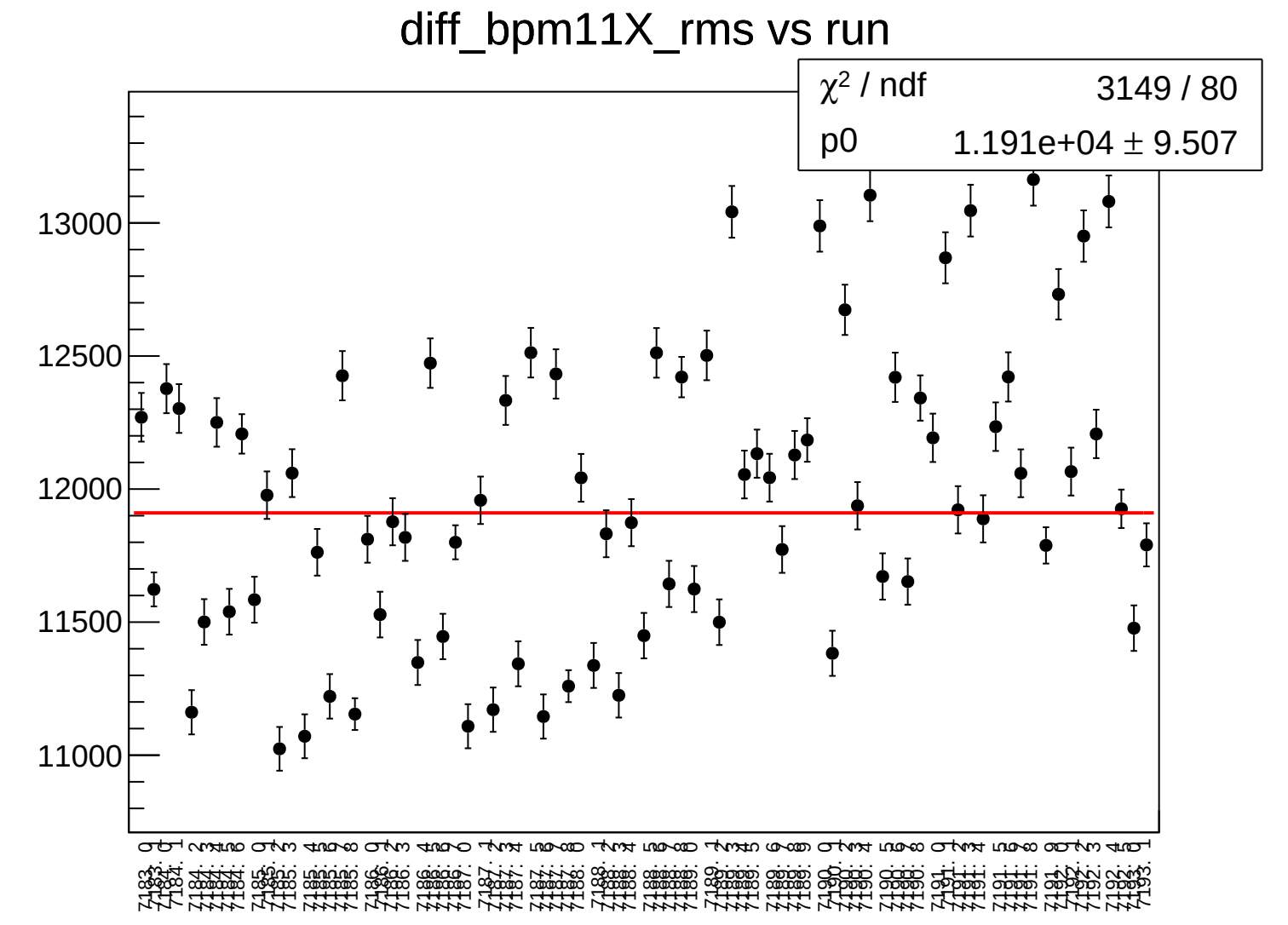

diff_bpm1Y_mean vs run
χ² / ndf 105.3 / 80
p0 −18.63 ± 7.123
pull
Entries 81
Mean −417.9
Std Dev 455.5

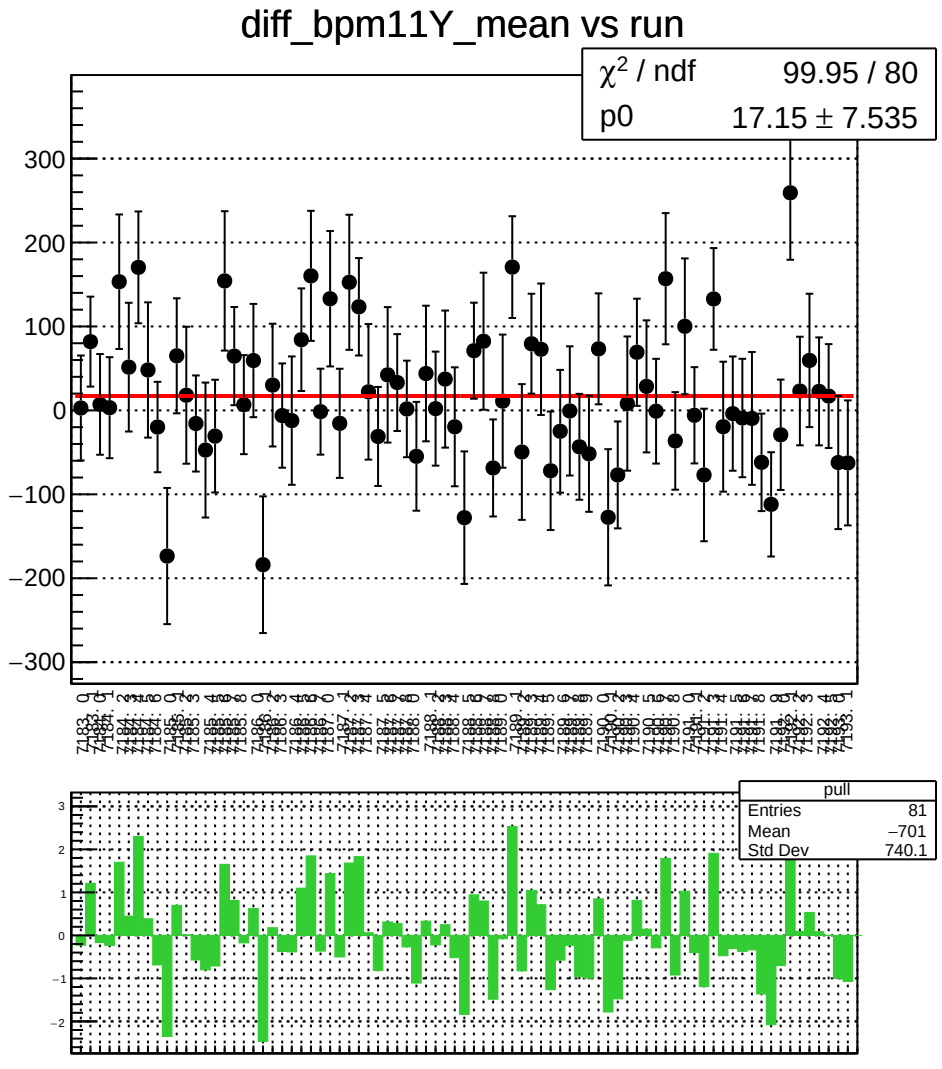

pull1D
Entries 81
Mean −0.008667
Std Dev 1.14

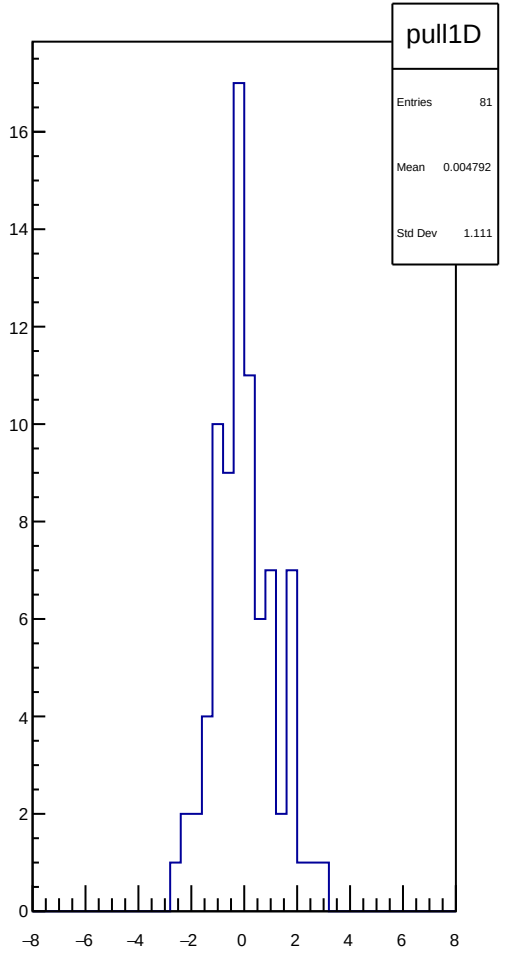

diff_bpm1Y_rms vs run
χ^2 / ndf 1.703e+04 / 80
p0 6282 ± 5.036
7500
7000
6500
6000
5500
5000

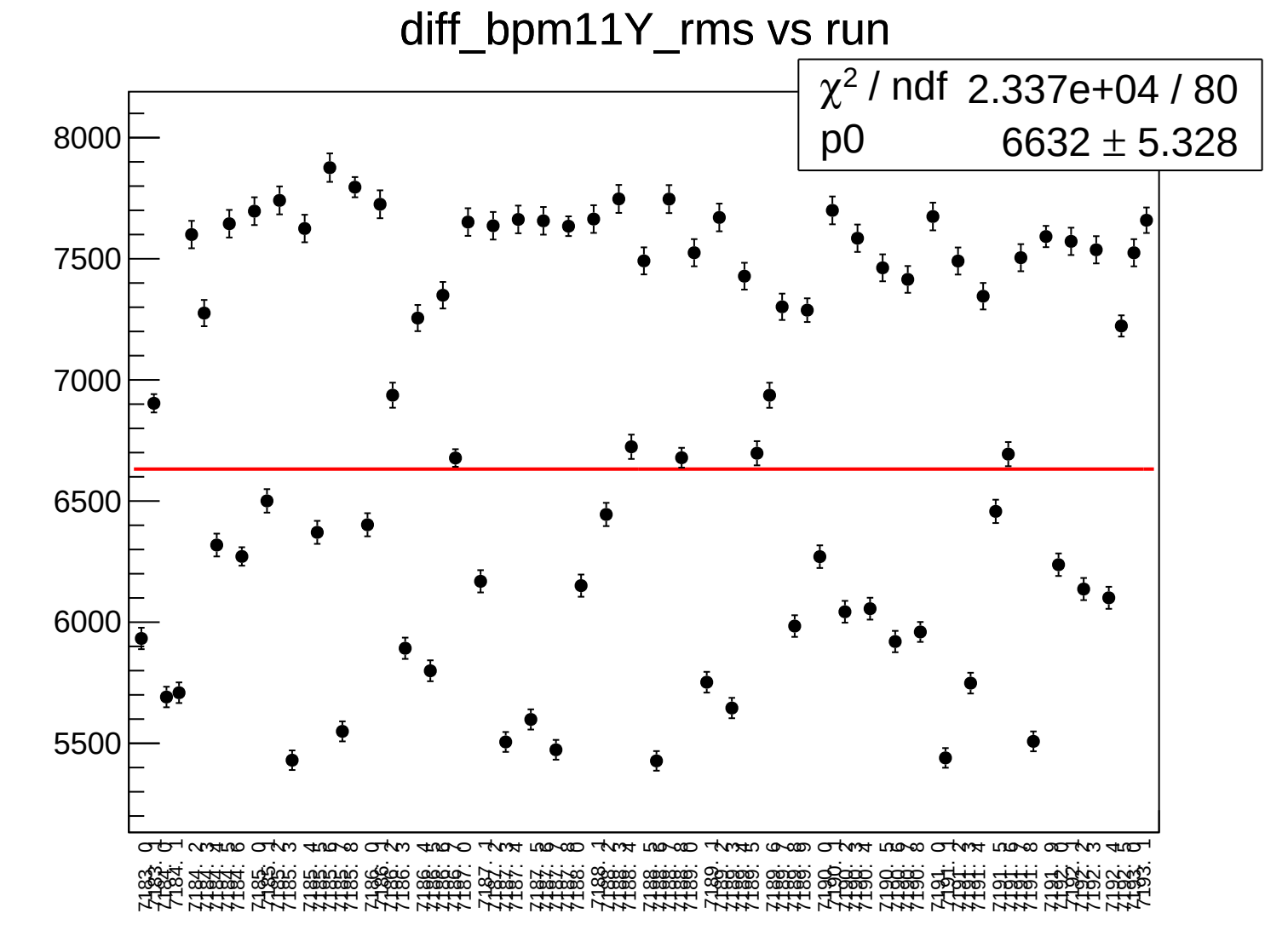

diff_bpm11X_mean vs run
χ² / ndf 64.48 / 80
p0 8.294 ± 13.44
pull
Entries 81
Mean 101
Std Dev 20.93

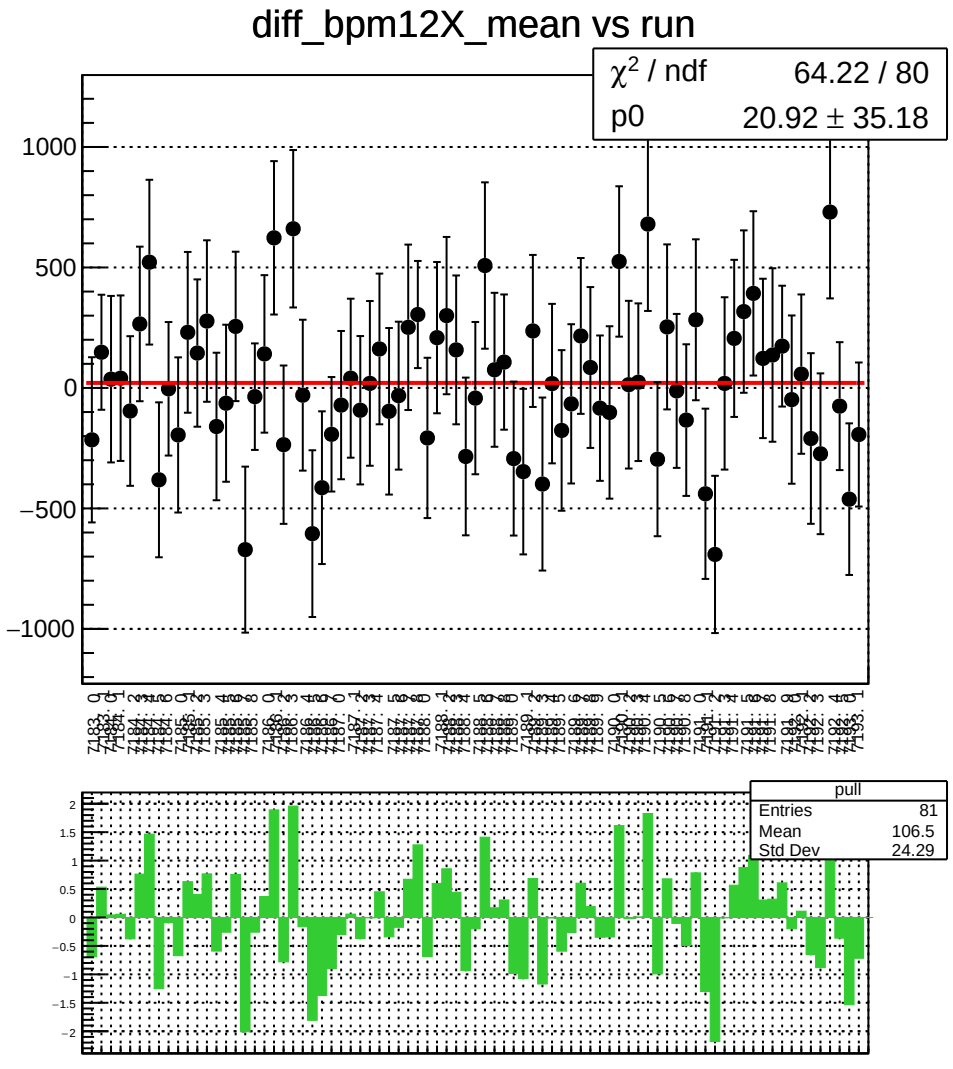

pull1D
Entries 81
Mean −0.004532
Std Dev 0.8922

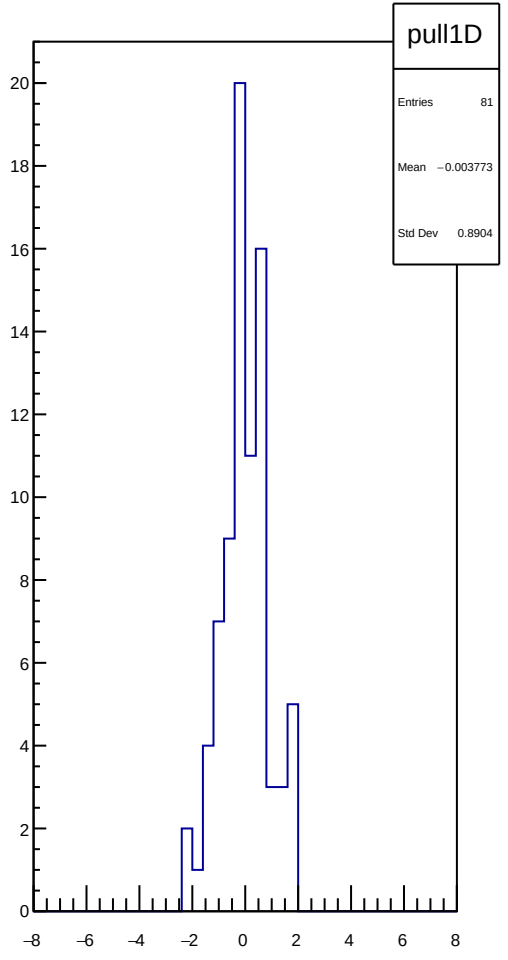

diff_bpm11X_rms vs run
χ² / ndf 3149 / 80
p0 1.191e+04 ± 9.507
13000
12500
12000
11500
11000

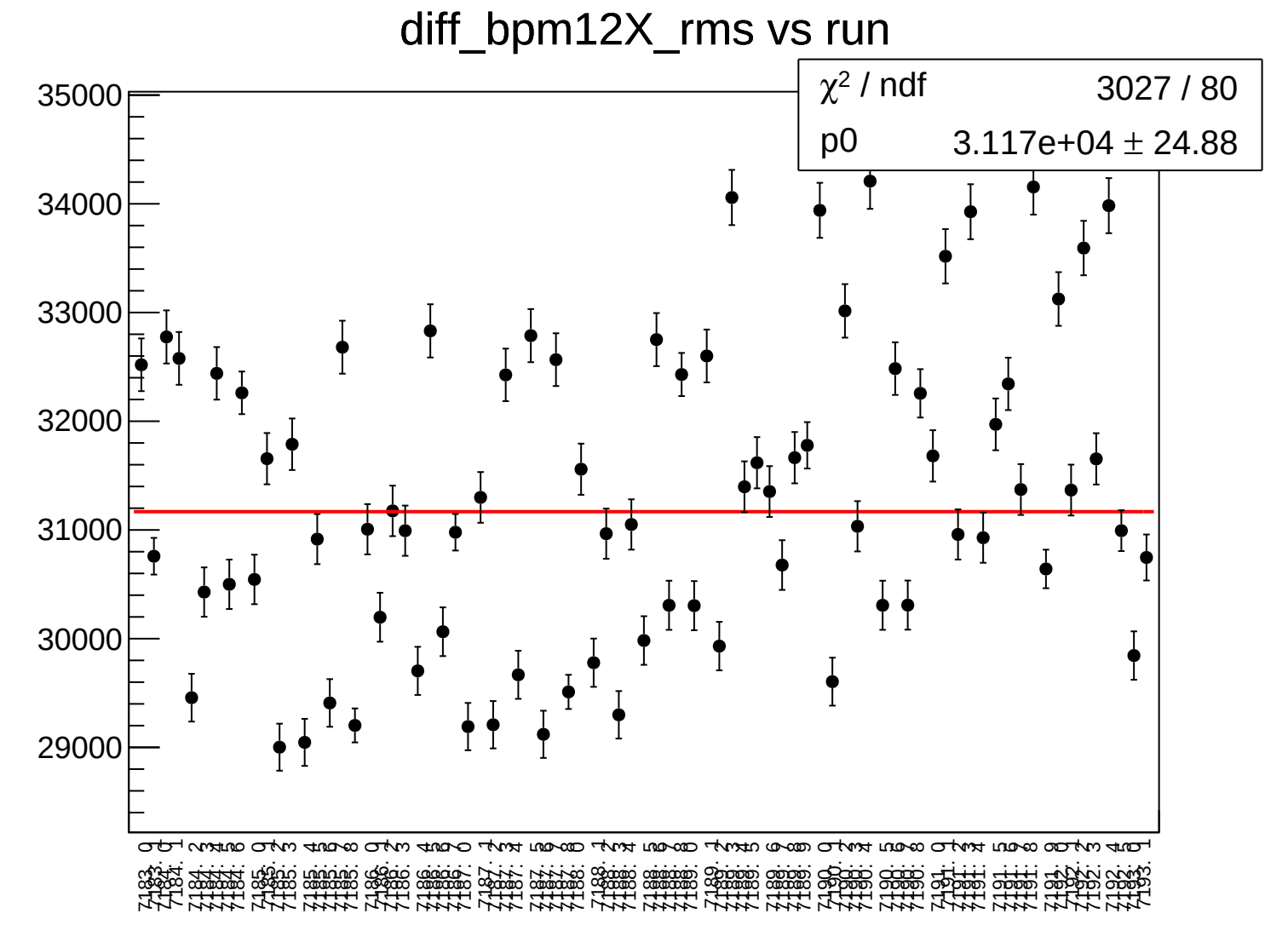

diff_bpm11Y_mean vs run
χ² / ndf 99.95 / 80
p0 17.15 ± 7.535
300
200
100
0
−100
−200
−300
pull
Entries 81
Mean −701
Std Dev 740.1
3
2
1
0
−1
−2

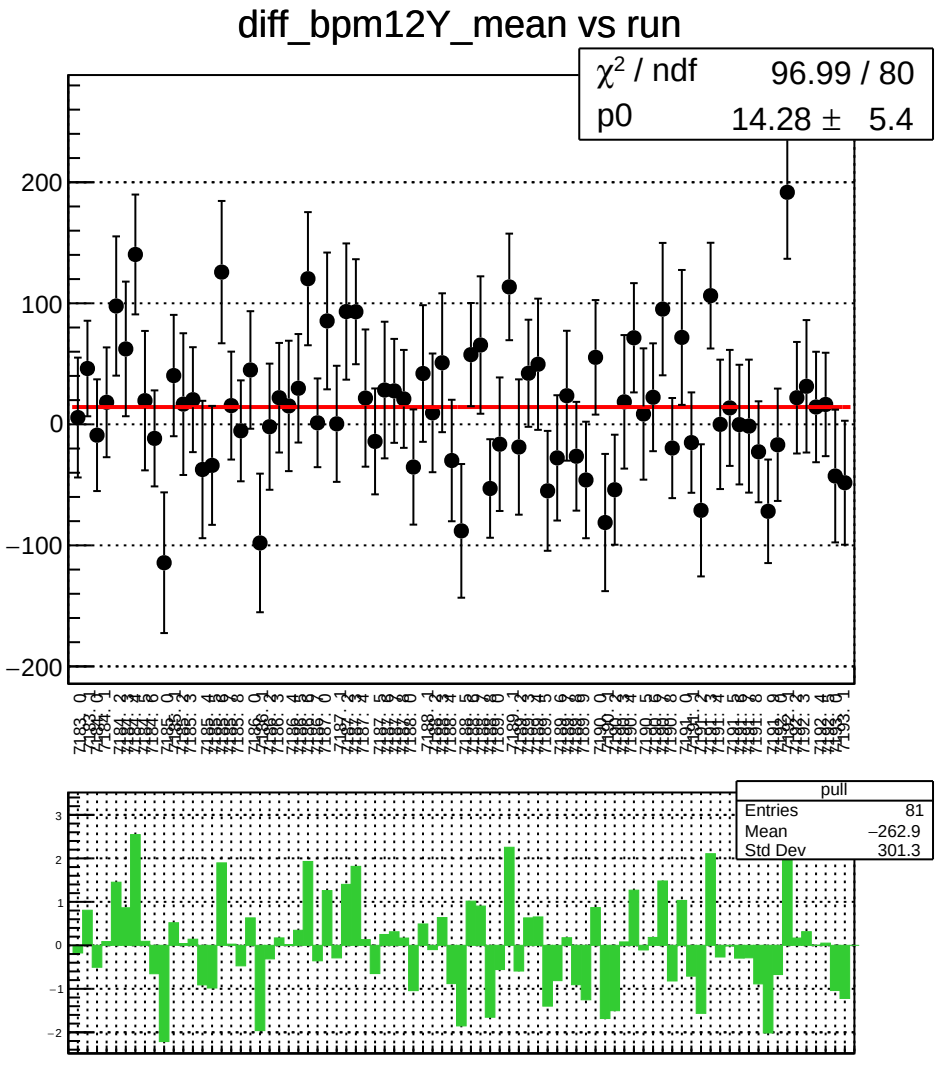

pull1D
Entries 81
Mean 0.004792
Std Dev 1.111
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

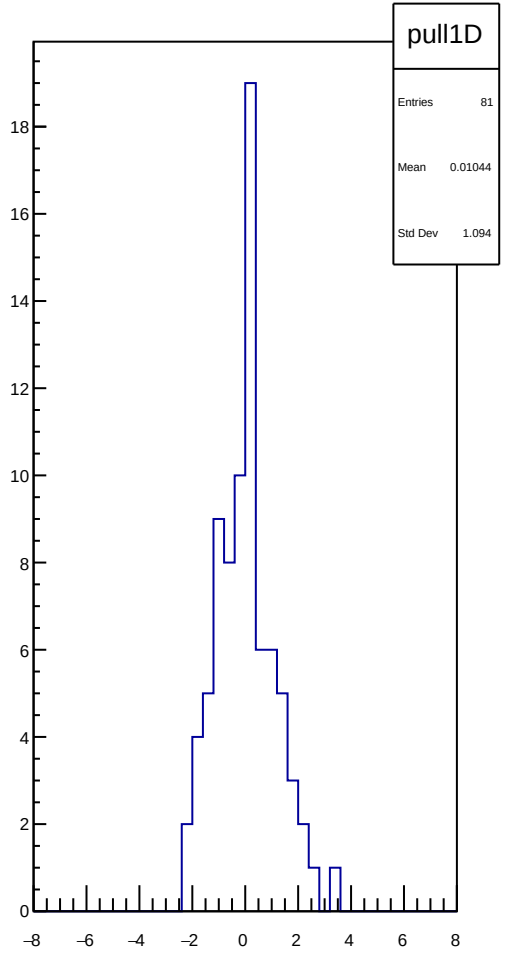

diff_bpm11Y_rms vs run
χ² / ndf 2.337e+04 / 80
p0 6632 ± 5.328
8000
7500
7000
6500
6000
5500


diff_bpm12X_mean vs run
χ² / ndf 64.22 / 80
p0 20.92 ± 35.18
1000
500
0
−500
−1000
pull
Entries 81
Mean 106.5
Std Dev 24.29
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

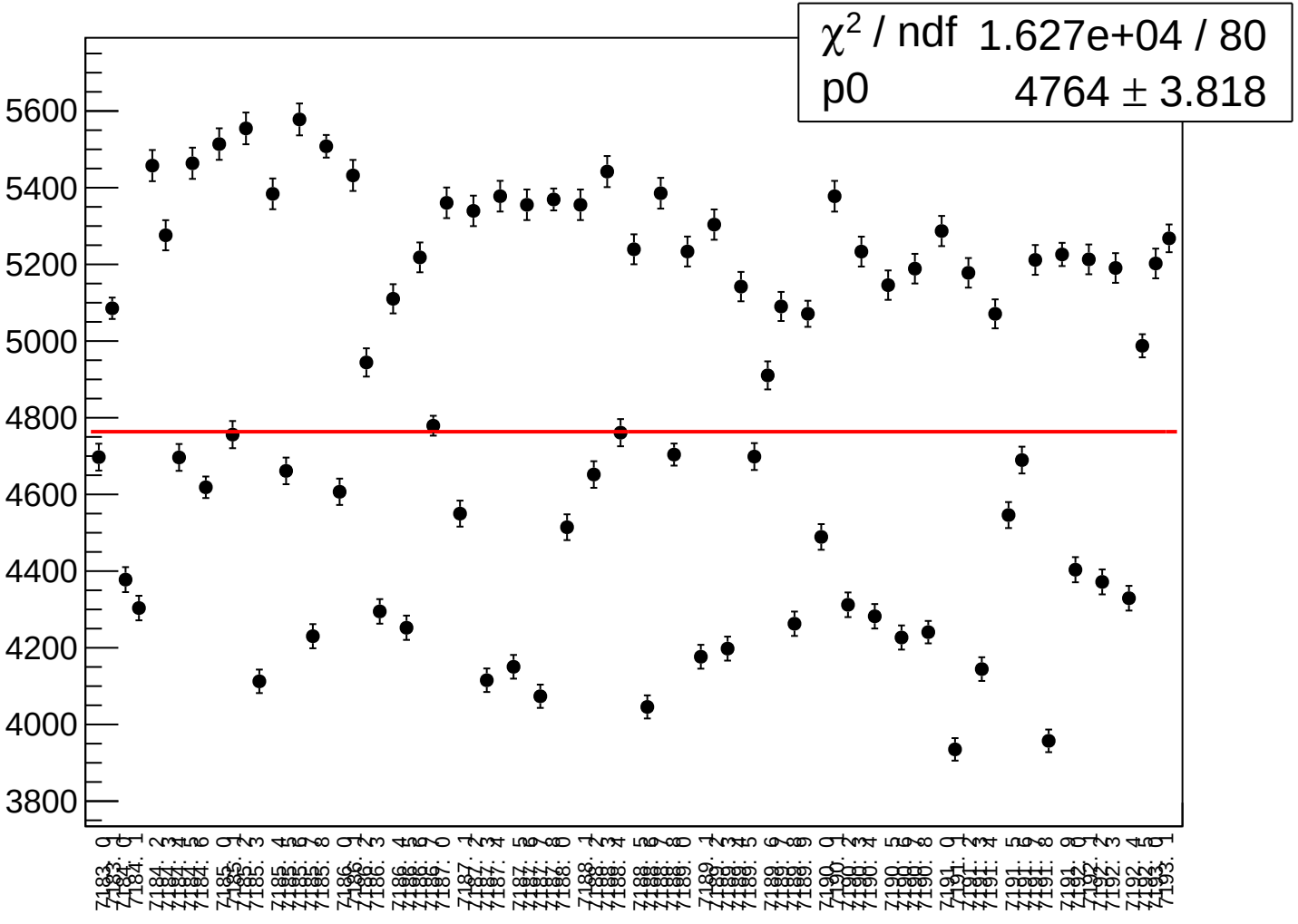

pull1D
Entries 81
Mean −0.003773
Std Dev 0.8904
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

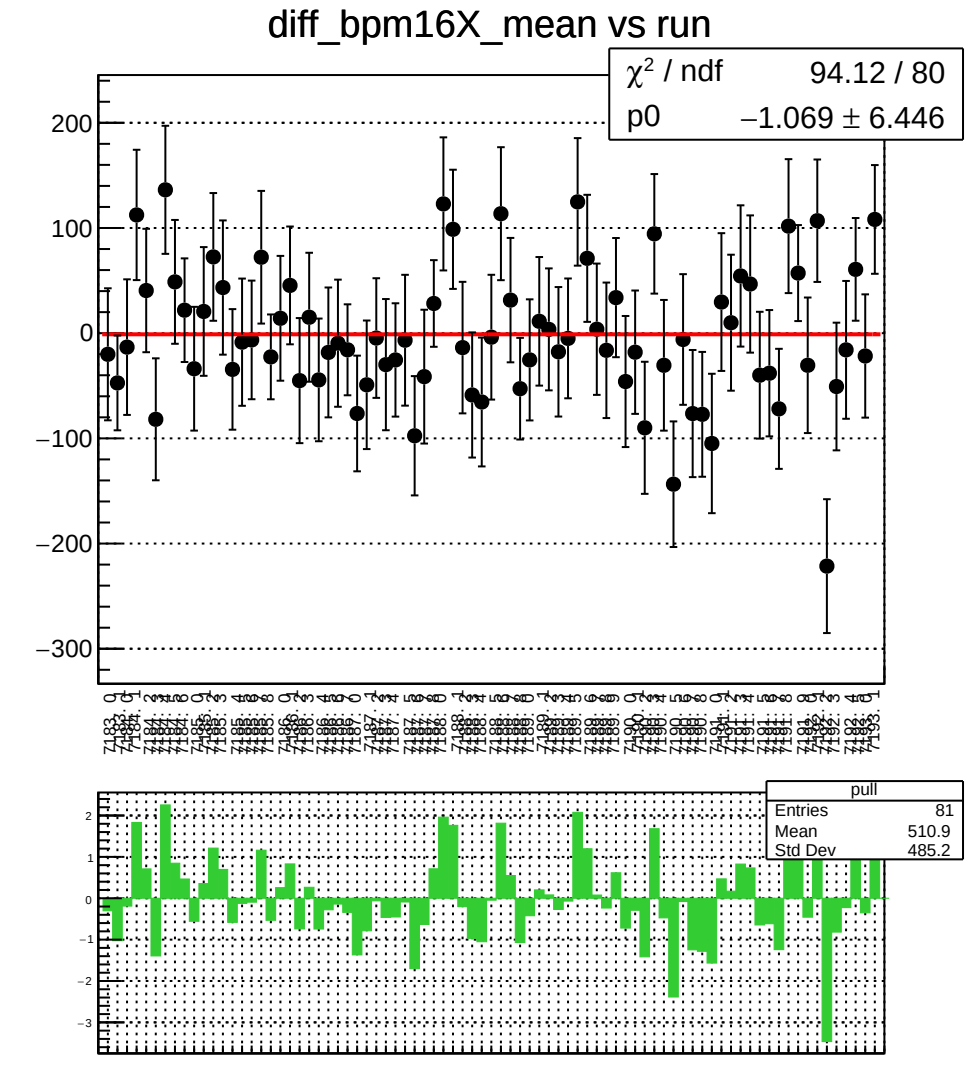

diff_bpm12X_rms vs run
χ² / ndf 3027 / 80
p0 3.117e+04 ± 24.88
35000
34000
33000
32000
31000
30000
29000

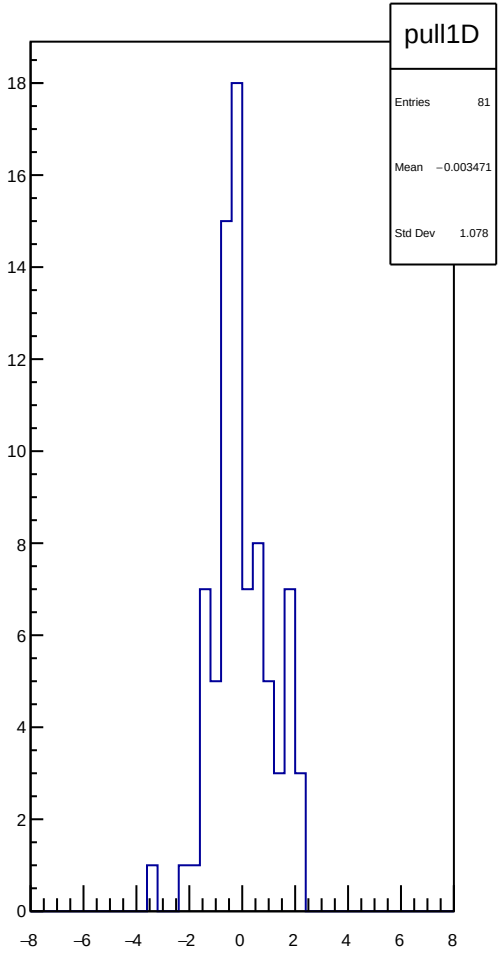

diff_bpm12Y_mean vs run
χ² / ndf 96.99 / 80
p0 14.28 ± 5.4
200
100
0
−100
−200
pull
Entries 81
Mean −262.9
Std Dev 301.3
3
2
1
0
−1
−2

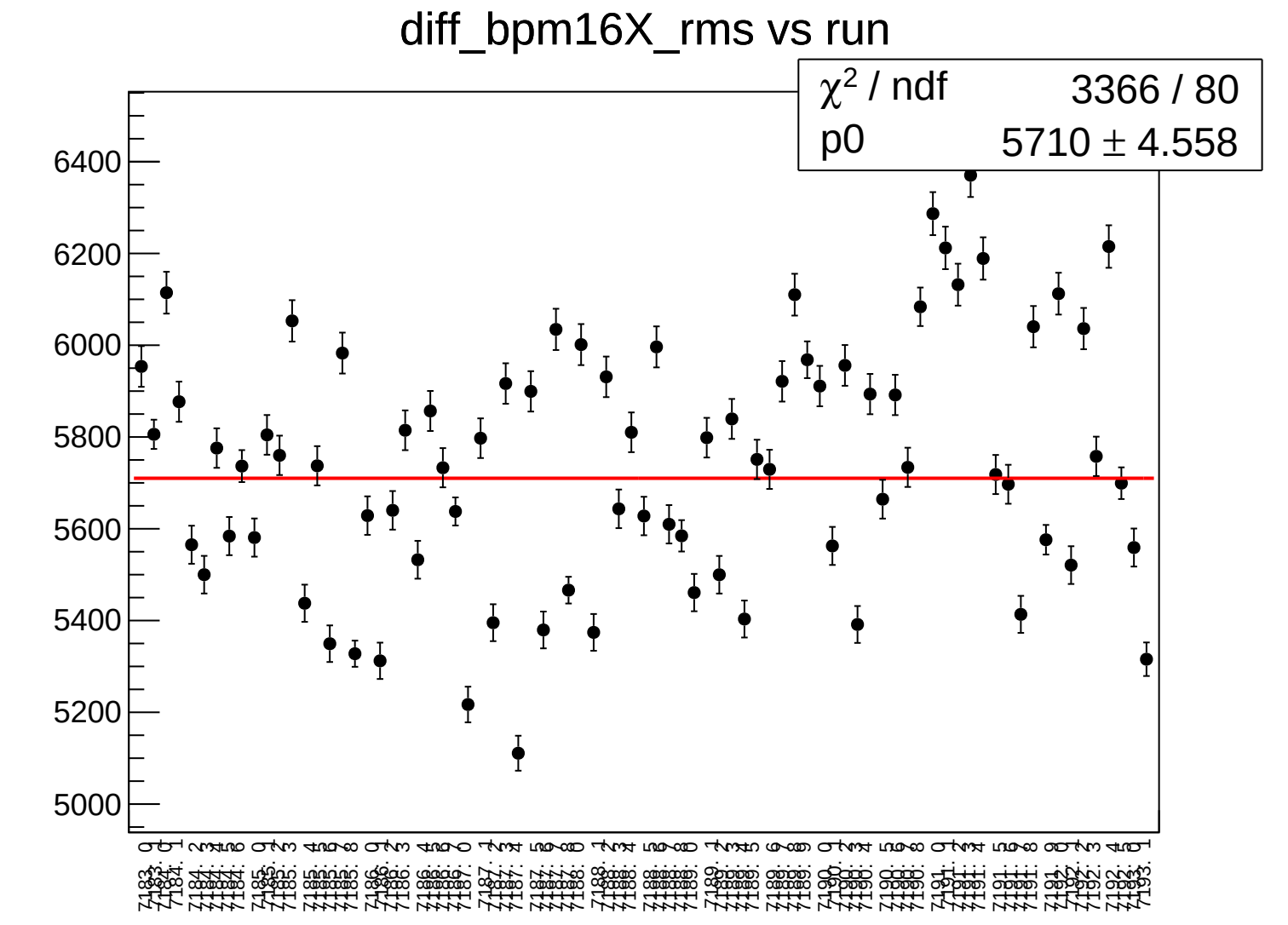

pull1D
Entries 81
Mean 0.01044
Std Dev 1.094
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

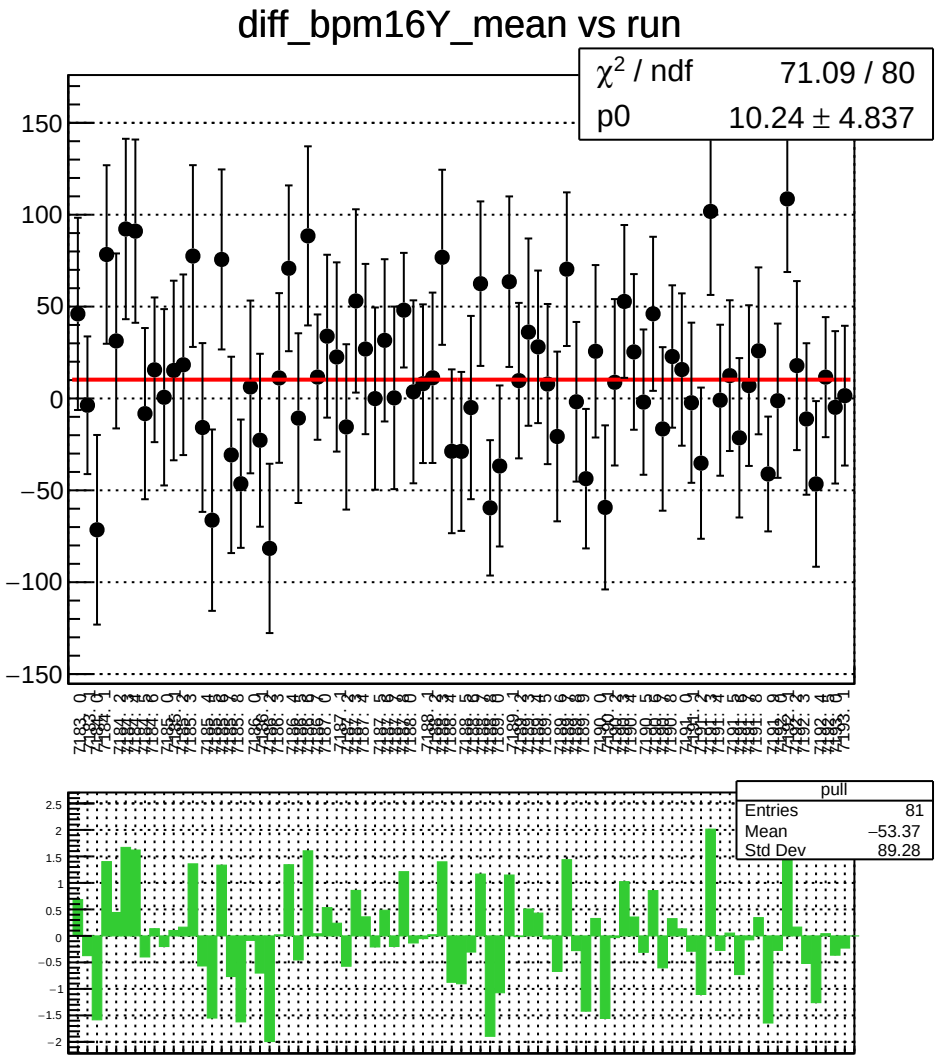
diff_bpm12Y_rms vs run

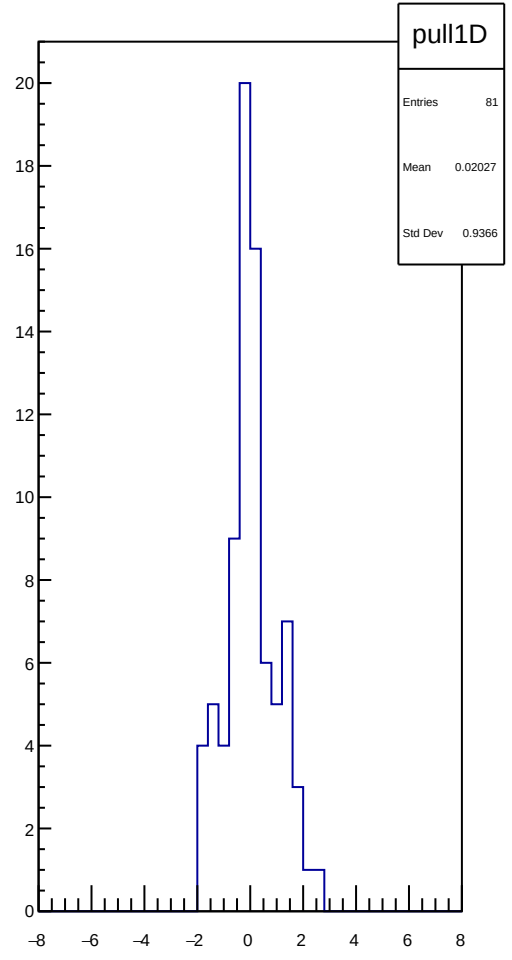


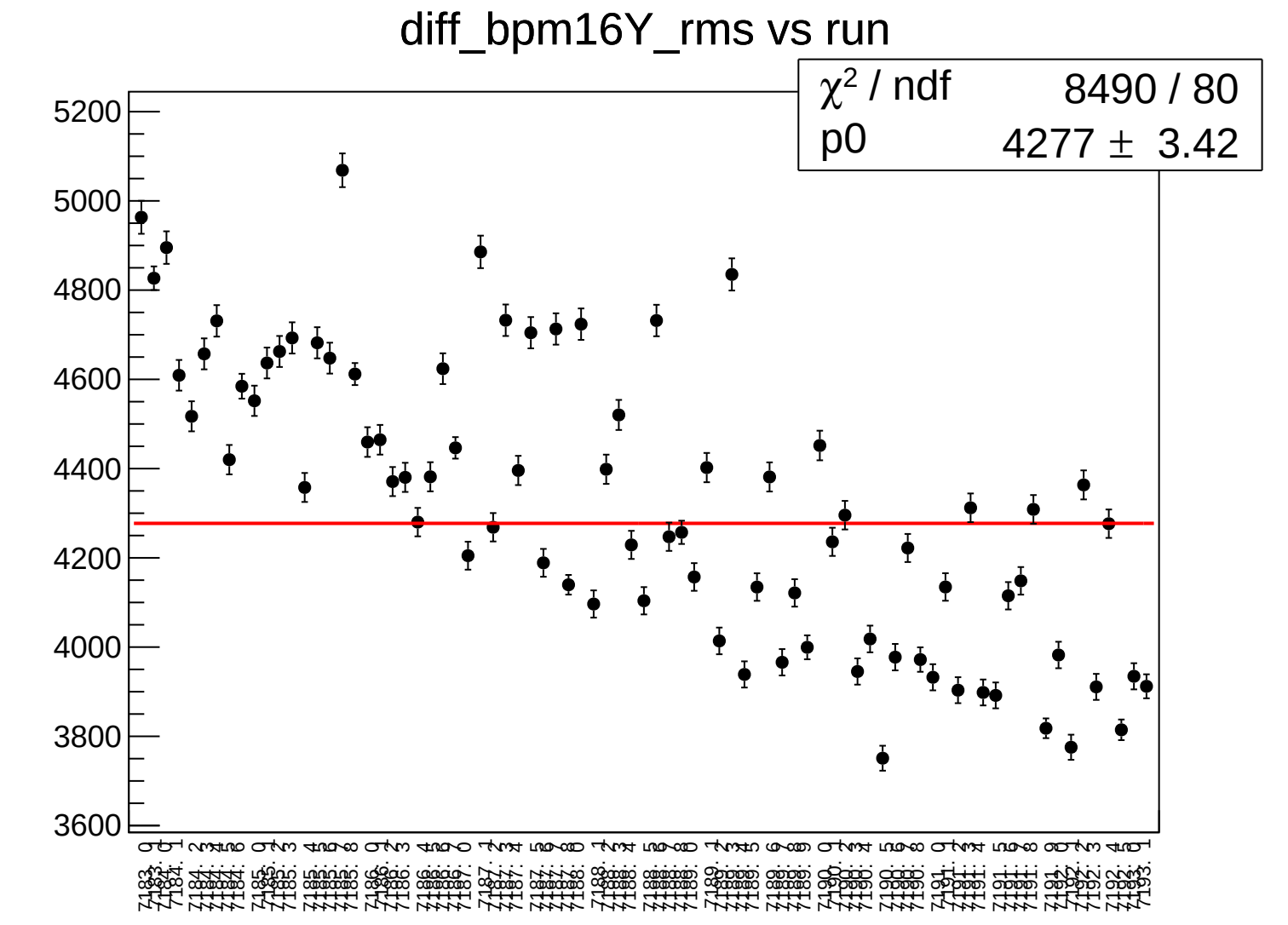

diff_bpm16X_mean vs run
χ² / ndf 94.12 / 80
p0 −1.069 ± 6.446
200
100
0
−100
−200
−300
pull
Entries 81
Mean 510.9
Std Dev 485.2
2
1
0
−1
−2
−3

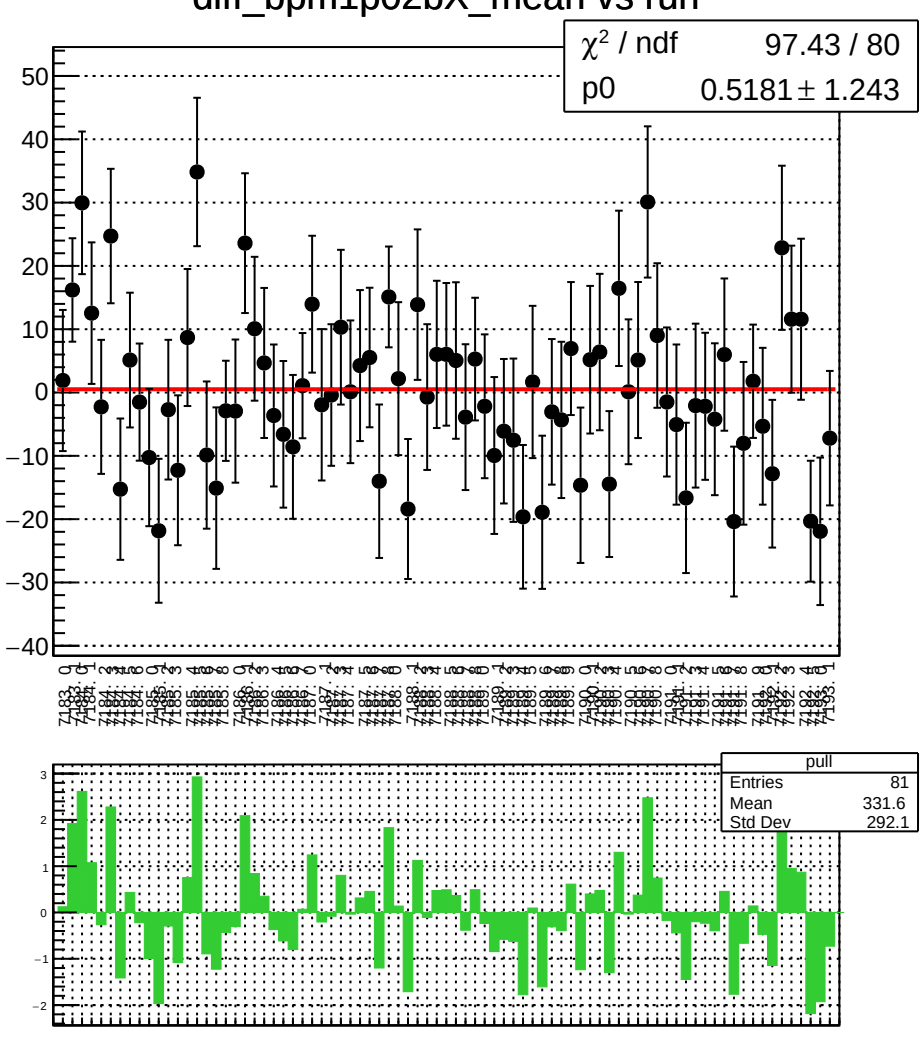

pull1D
Entries 81
Mean −0.003471
Std Dev 1.078
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

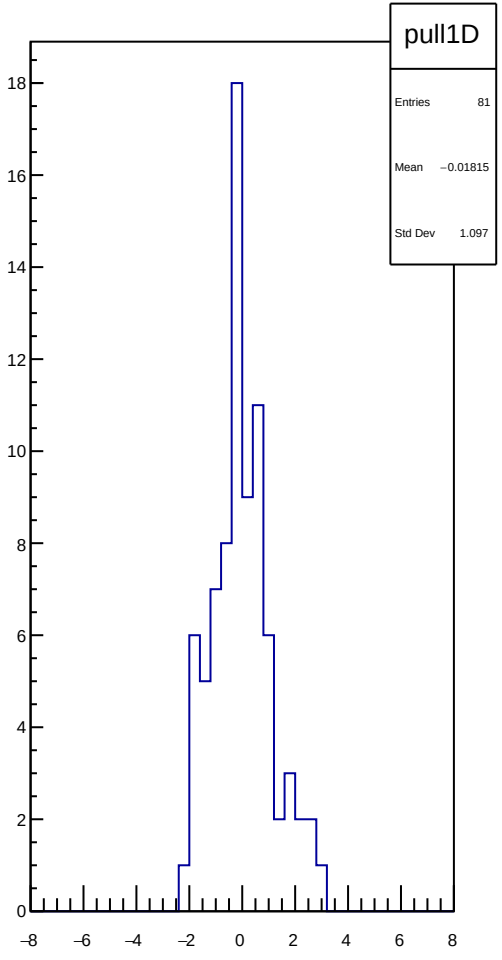

diff_bpm16X_rms vs run
χ^2 / ndf 3366 / 80
p0 5710 ± 4.558
6400
6200
6000
5800
5600
5400
5200
5000

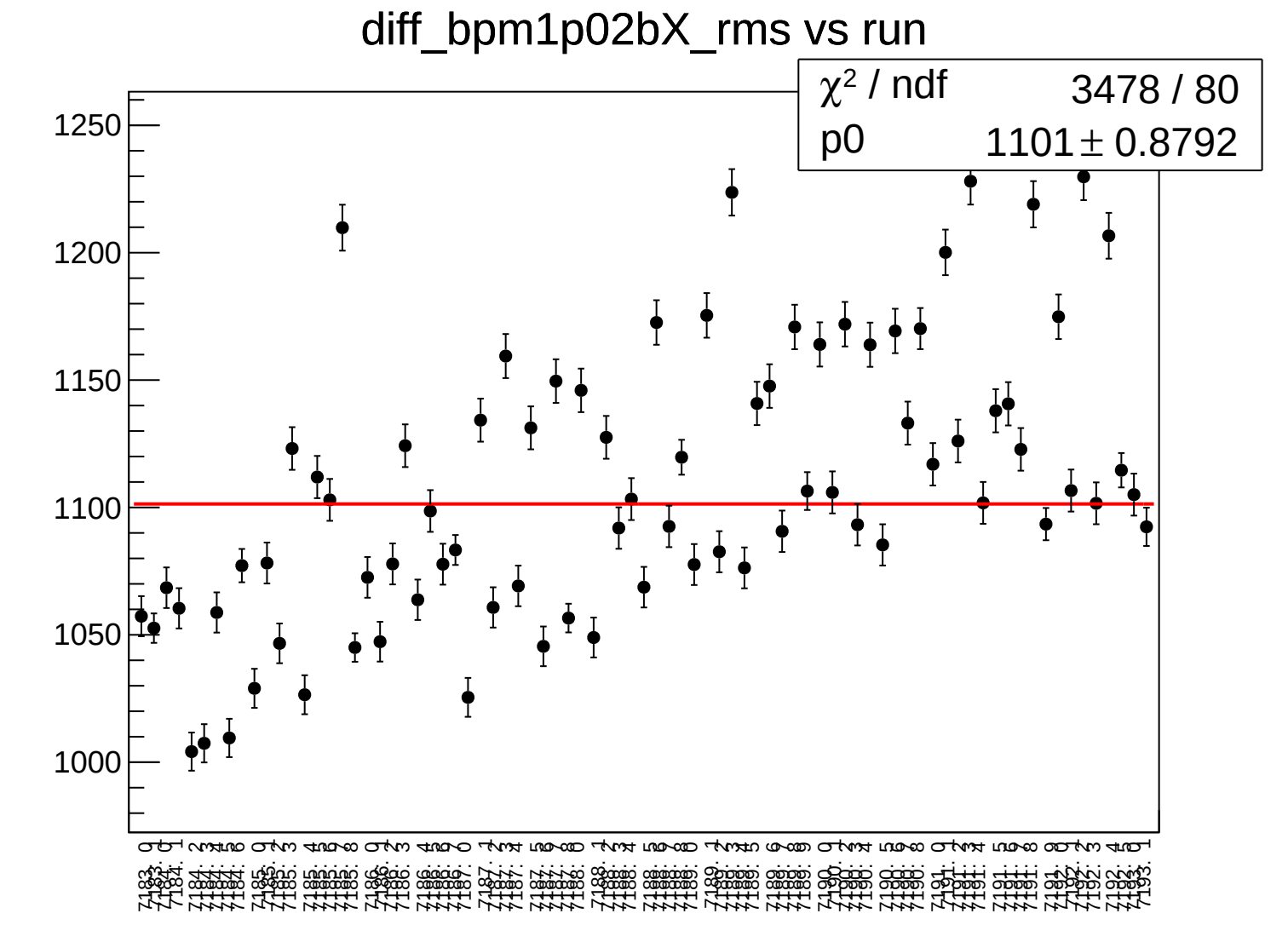

diff_bpm16Y_mean vs run
χ^2 / ndf 71.09 / 80
p0 10.24 ± 4.837
pull
Entries 81
Mean −53.37
Std Dev 89.28

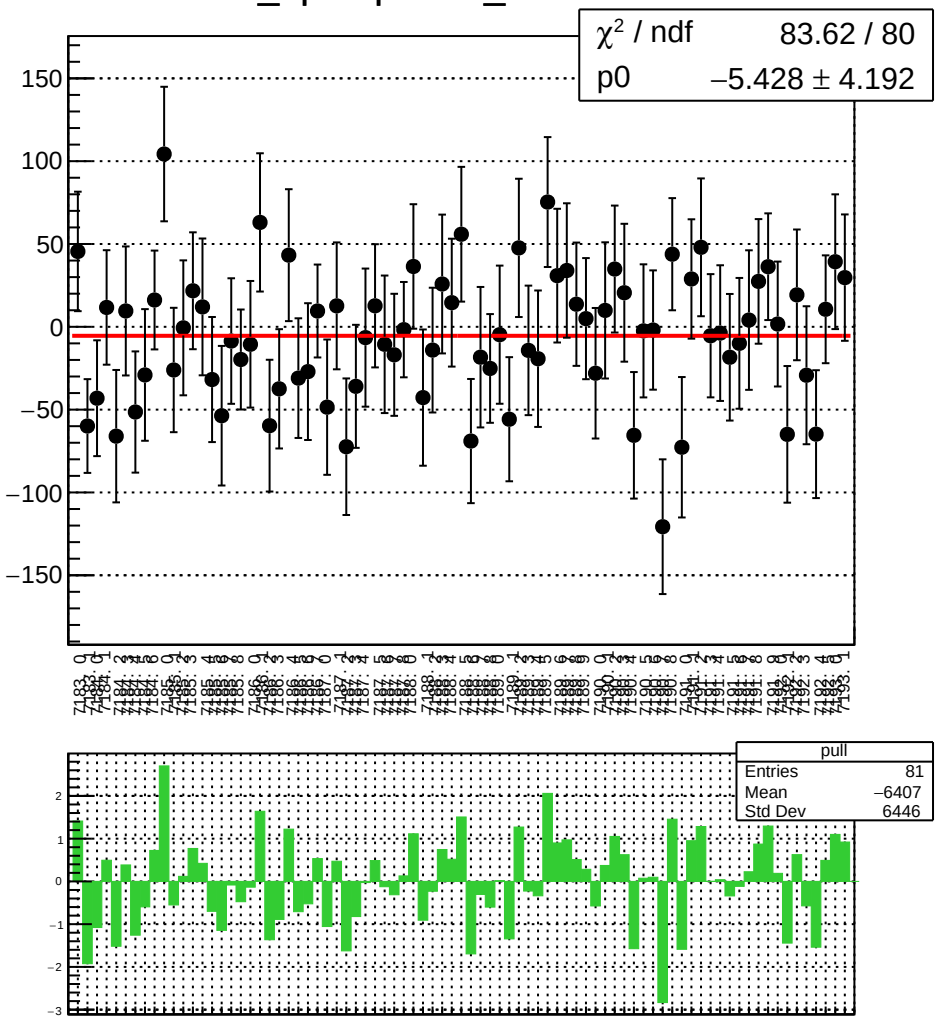

pull1D
Entries 81
Mean 0.02027
Std Dev 0.9366

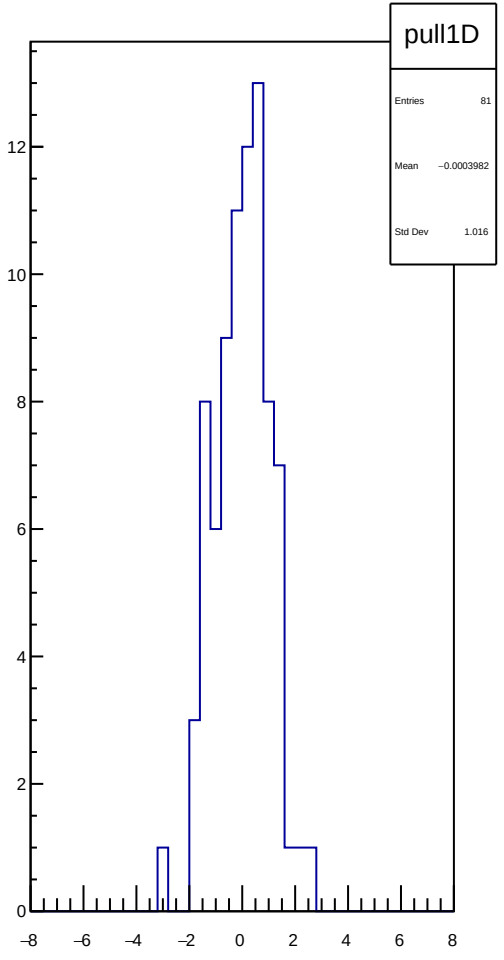

diff_bpm16Y_rms vs run
χ² / ndf 8490 / 80
p0 4277 ± 3.42
5200
5000
4800
4600
4400
4200
4000
3800
3600

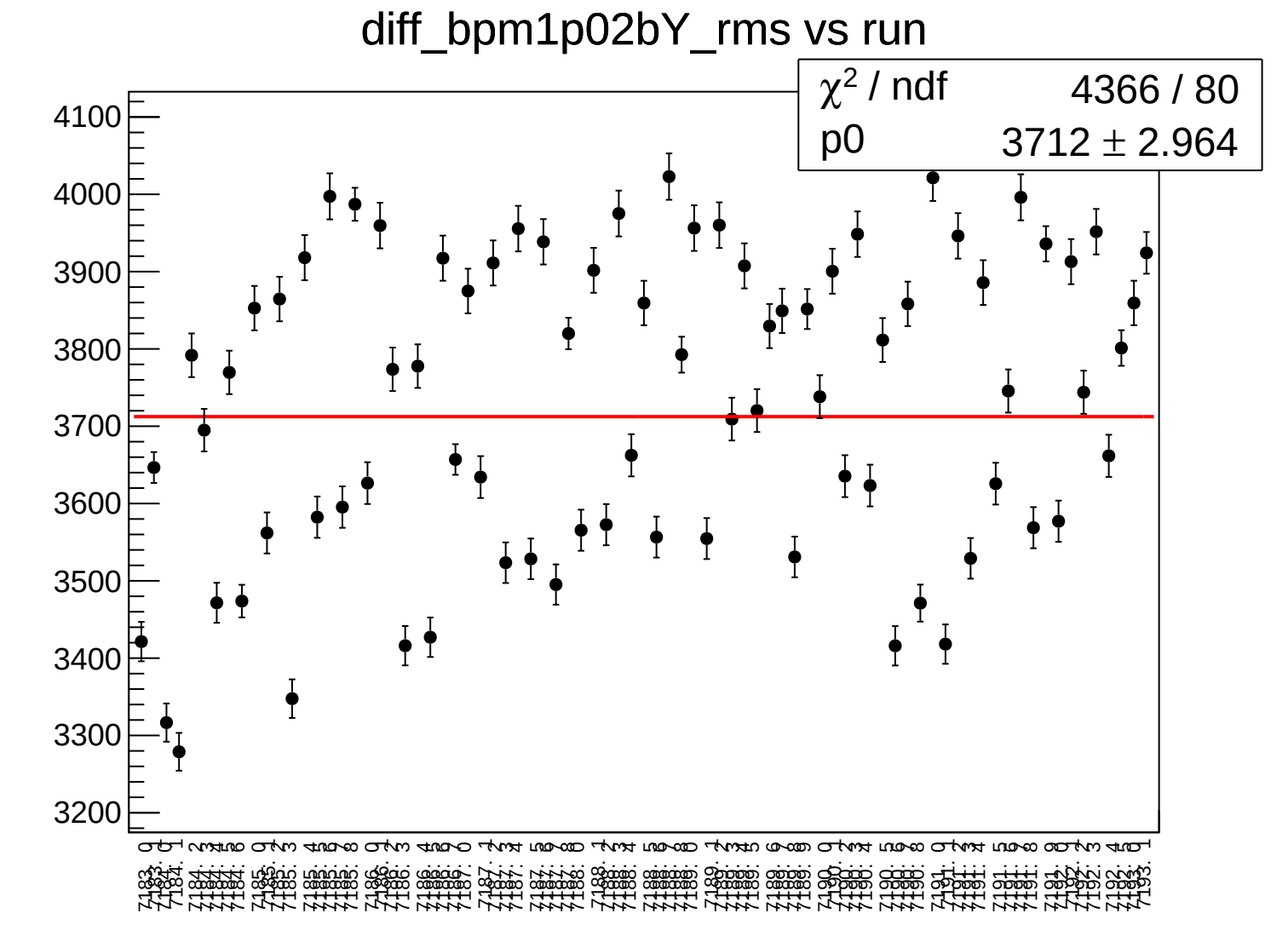

diff_bpm1p02bX_mean vs run
χ² / ndf 97.43 / 80
p0 0.5181 ± 1.243
pull
Entries 81
Mean 331.6
Std Dev 292.1

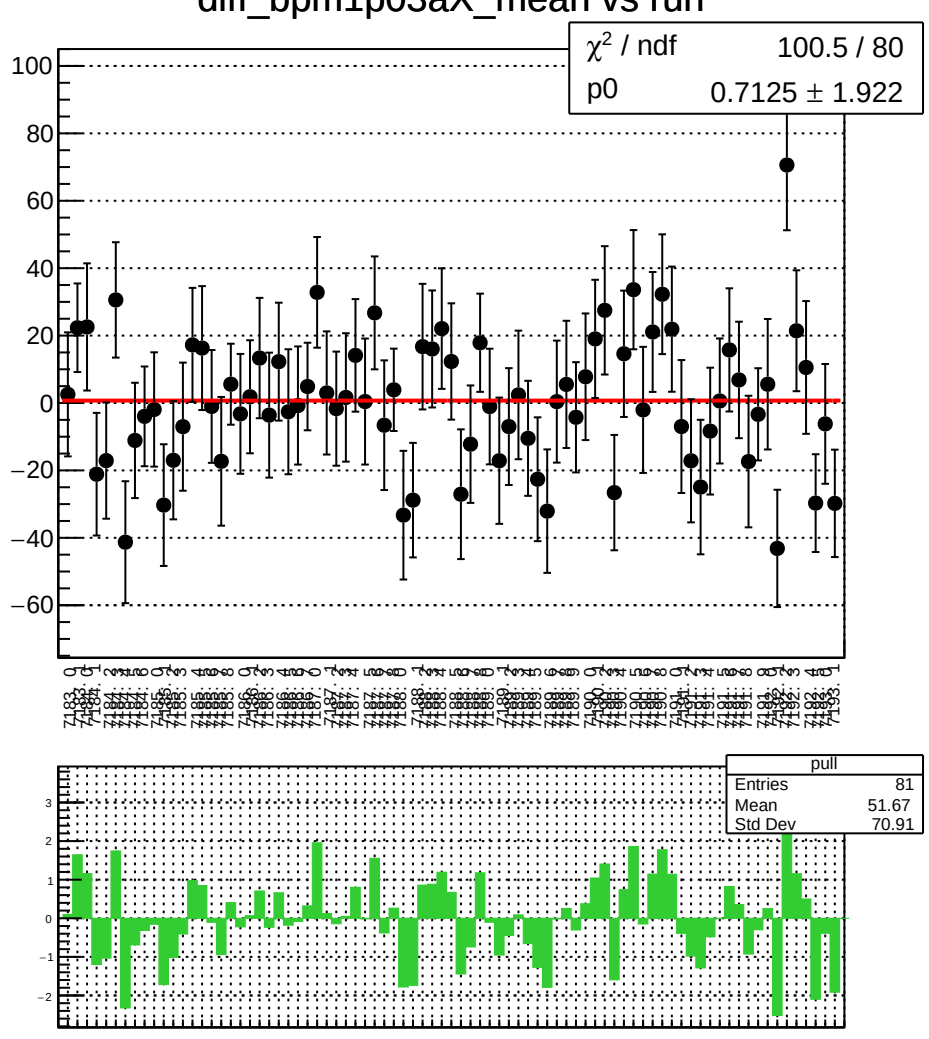

pull1D
Entries 81
Mean −0.01815
Std Dev 1.097

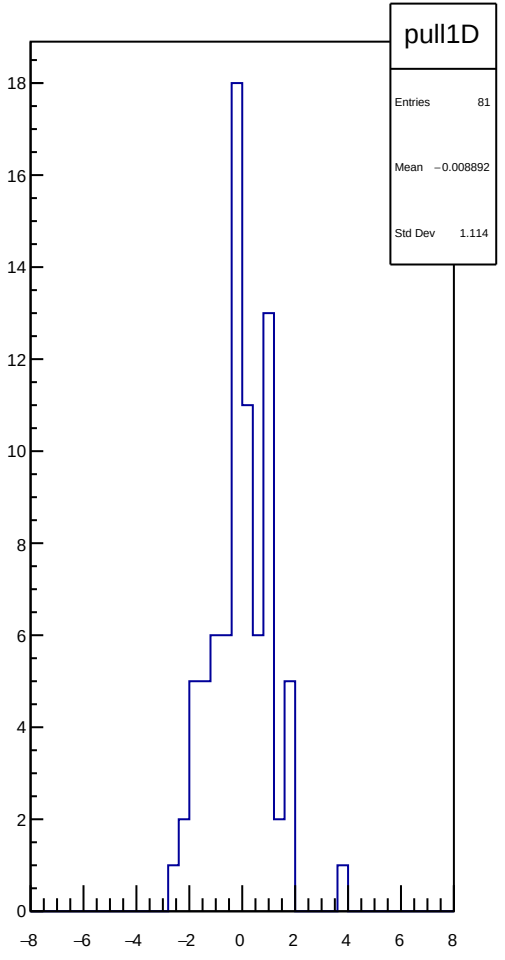

diff_bpm1p02bX_rms vs run
χ² / ndf 3478 / 80
p0 1101 ± 0.8792
1250
1200
1150
1100
1050
1000

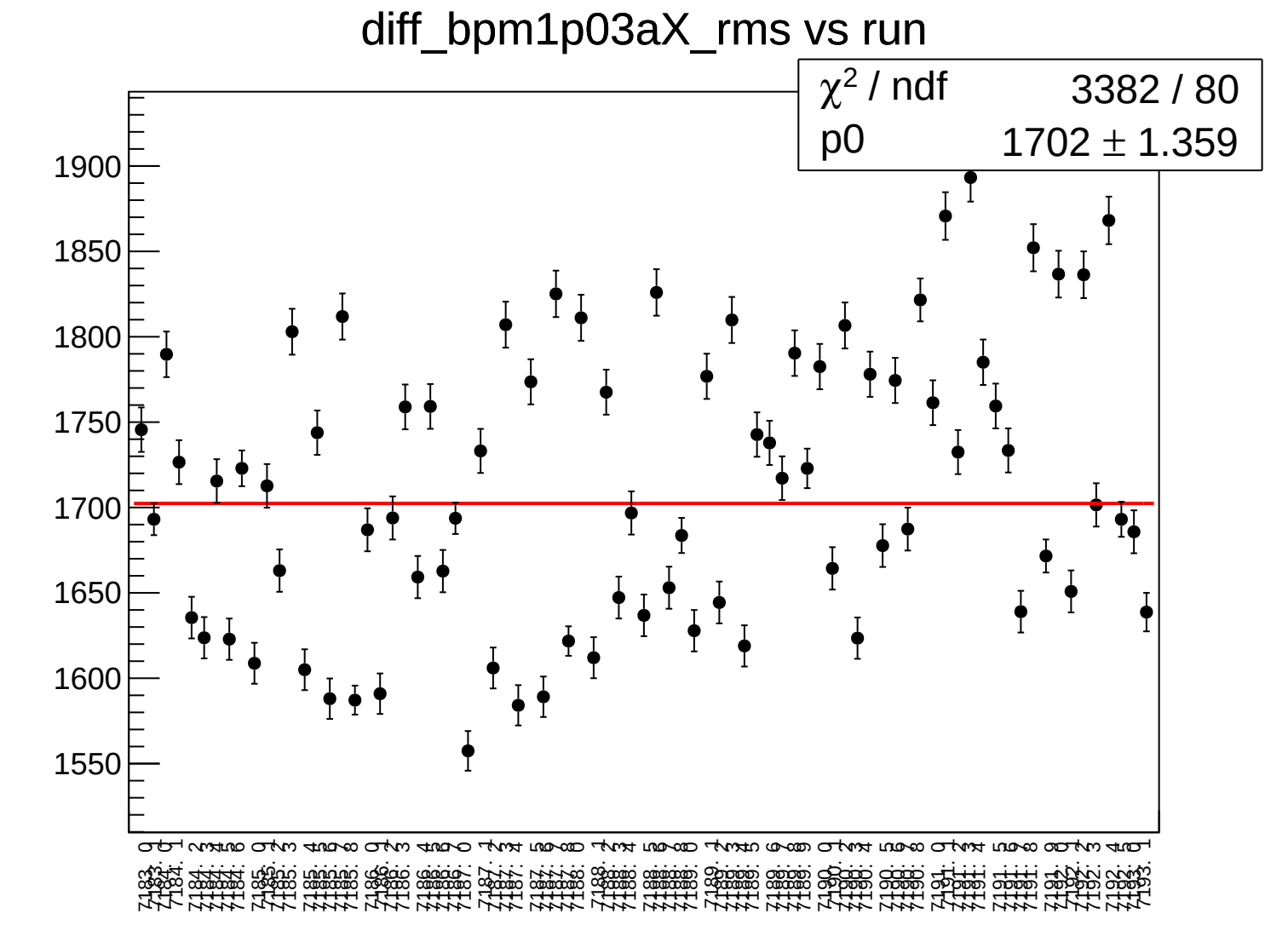

diff_bpm1p02bY_mean vs run
χ² / ndf 83.62 / 80
p0 −5.428 ± 4.192
pull
Entries 81
Mean −6407
Std Dev 6446

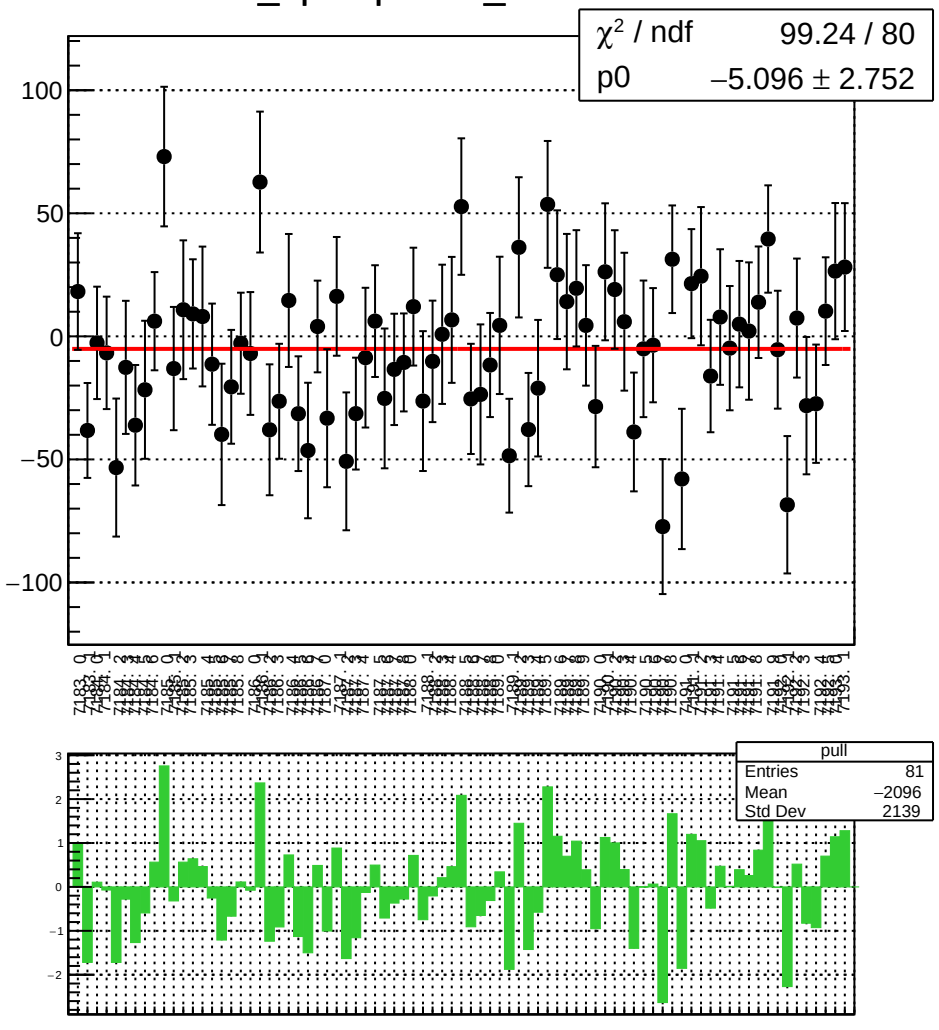

pull1D
Entries 81
Mean −0.0003982
Std Dev 1.016

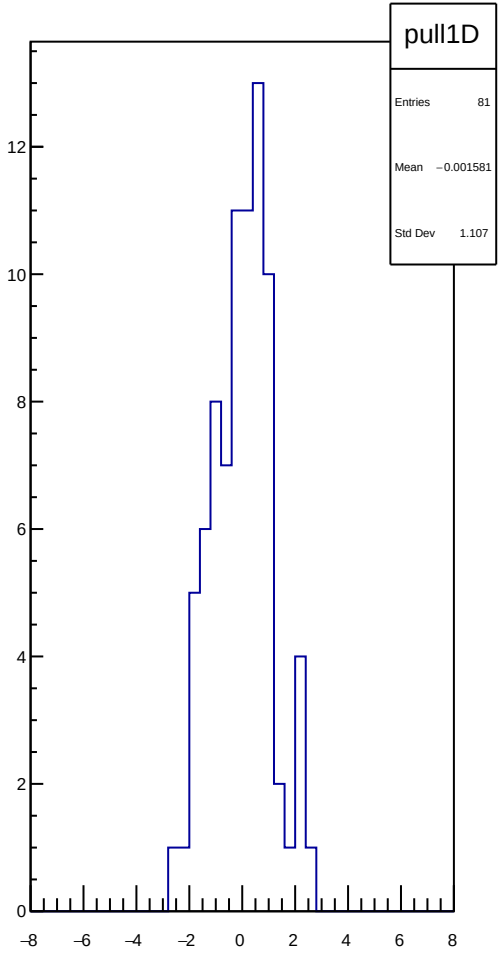

diff_bpm1p02bY_rms vs run
χ² / ndf 4366 / 80
p0 3712 ± 2.964
4100
4000
3900
3800
3700
3600
3500
3400
3300
3200

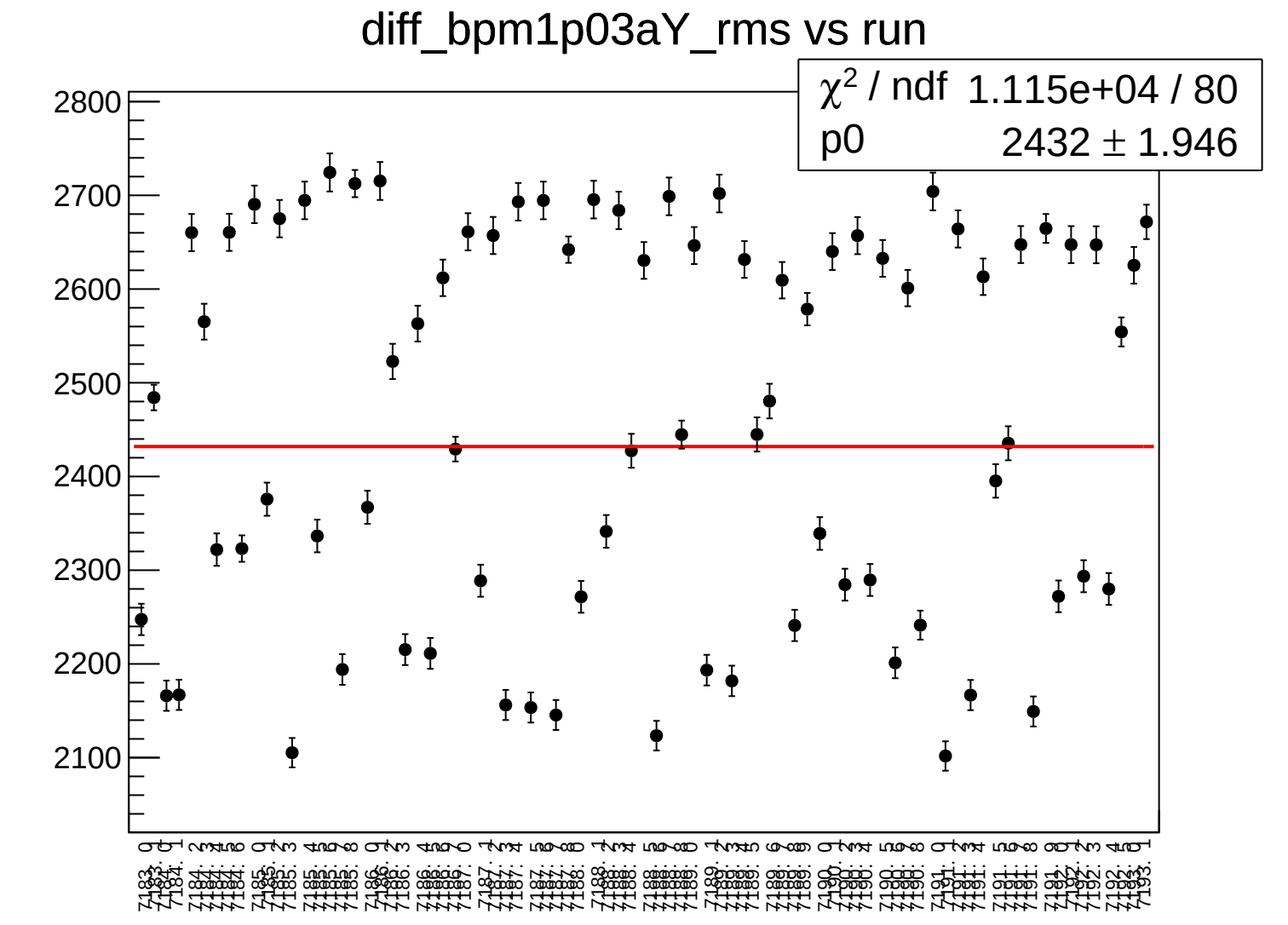

diff_bpm1p03aX_mean vs run
χ² / ndf 100.5 / 80
p0 0.7125 ± 1.922
pull
Entries 81
Mean 51.67
Std Dev 70.91

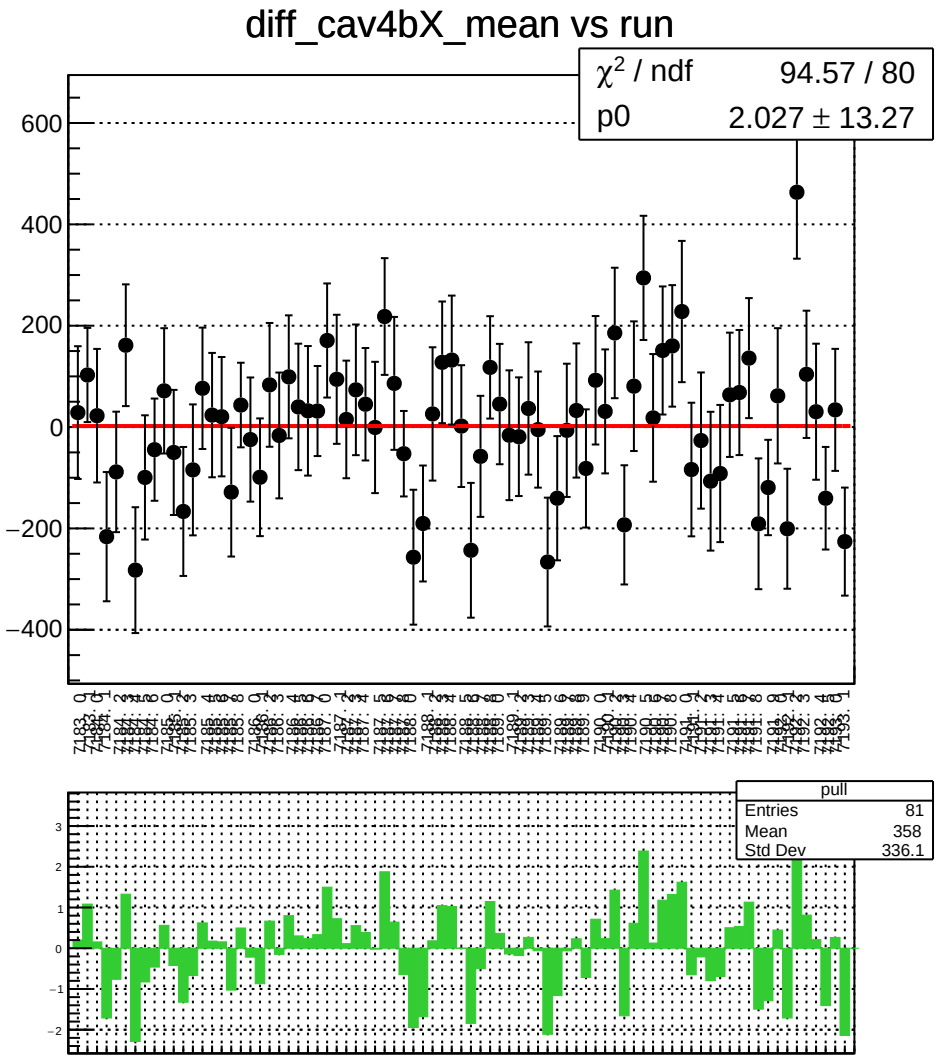

pull1D
Entries 81
Mean −0.008892
Std Dev 1.114

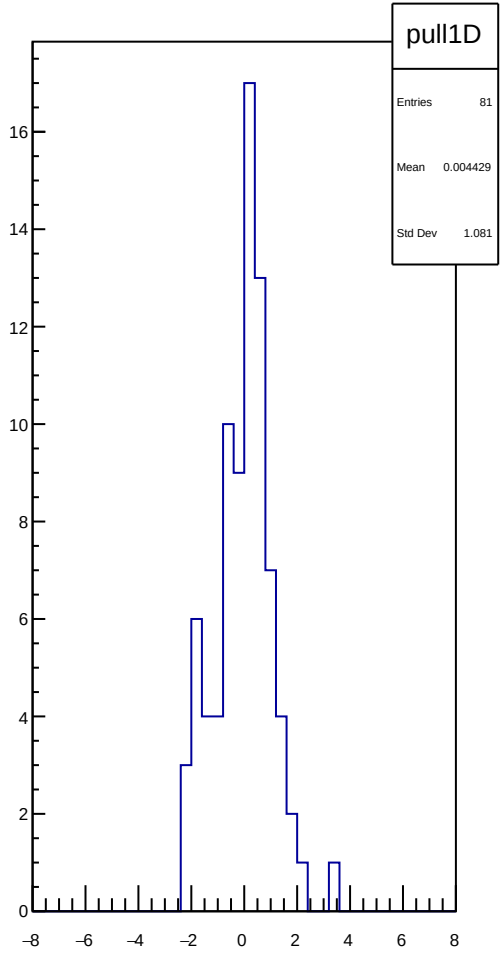

diff_bpm1p03aX_rms vs run
χ² / ndf 3382 / 80
p0 1702 ± 1.359
1900
1850
1800
1750
1700
1650
1600
1550

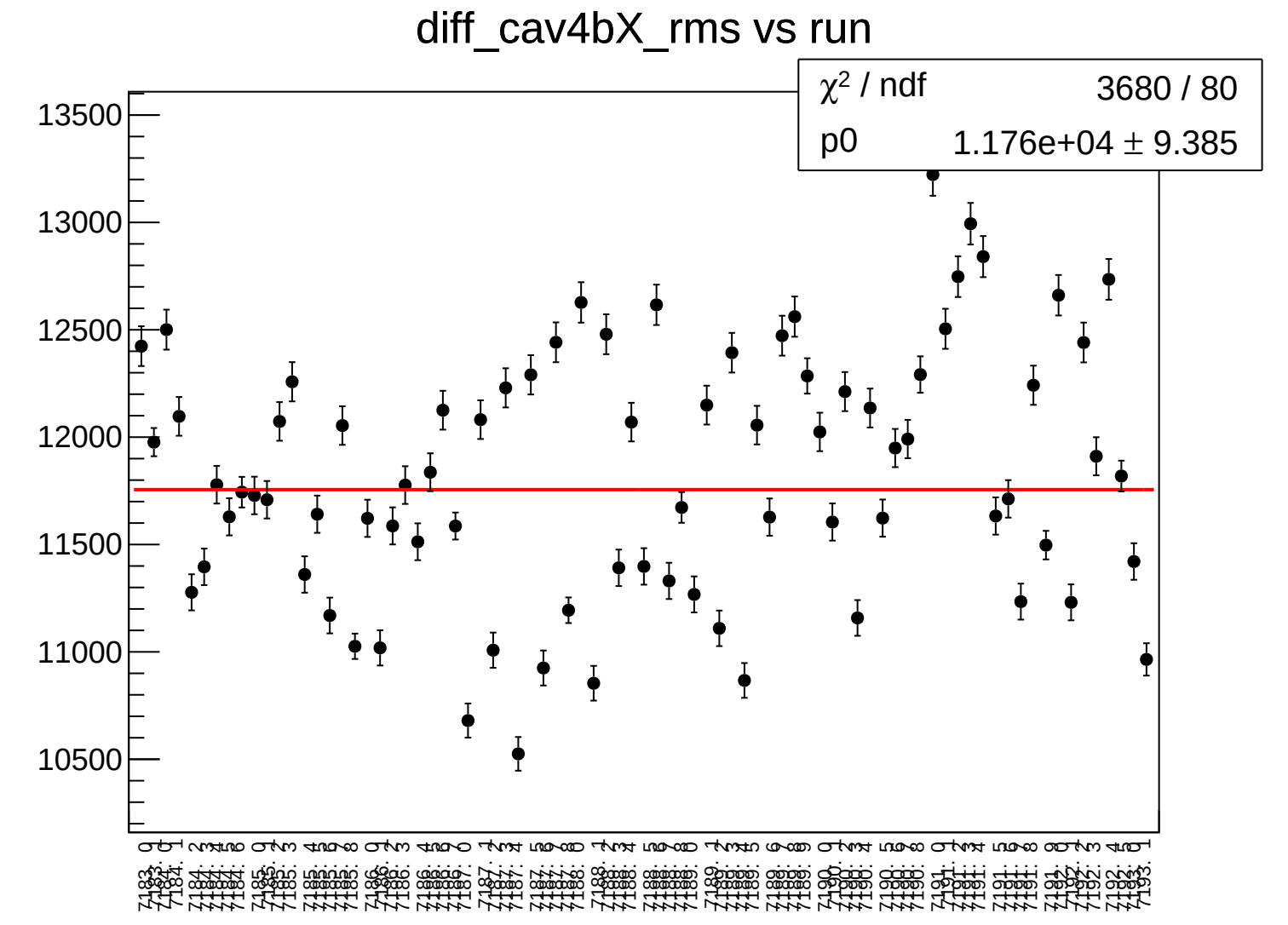

diff_bpm1p03aY_mean vs run
χ² / ndf 99.24 / 80
p0 −5.096 ± 2.752
100
50
0
−50
−100
pull
Entries 81
Mean −2096
Std Dev 2139
3
2
1
0
−1
−2

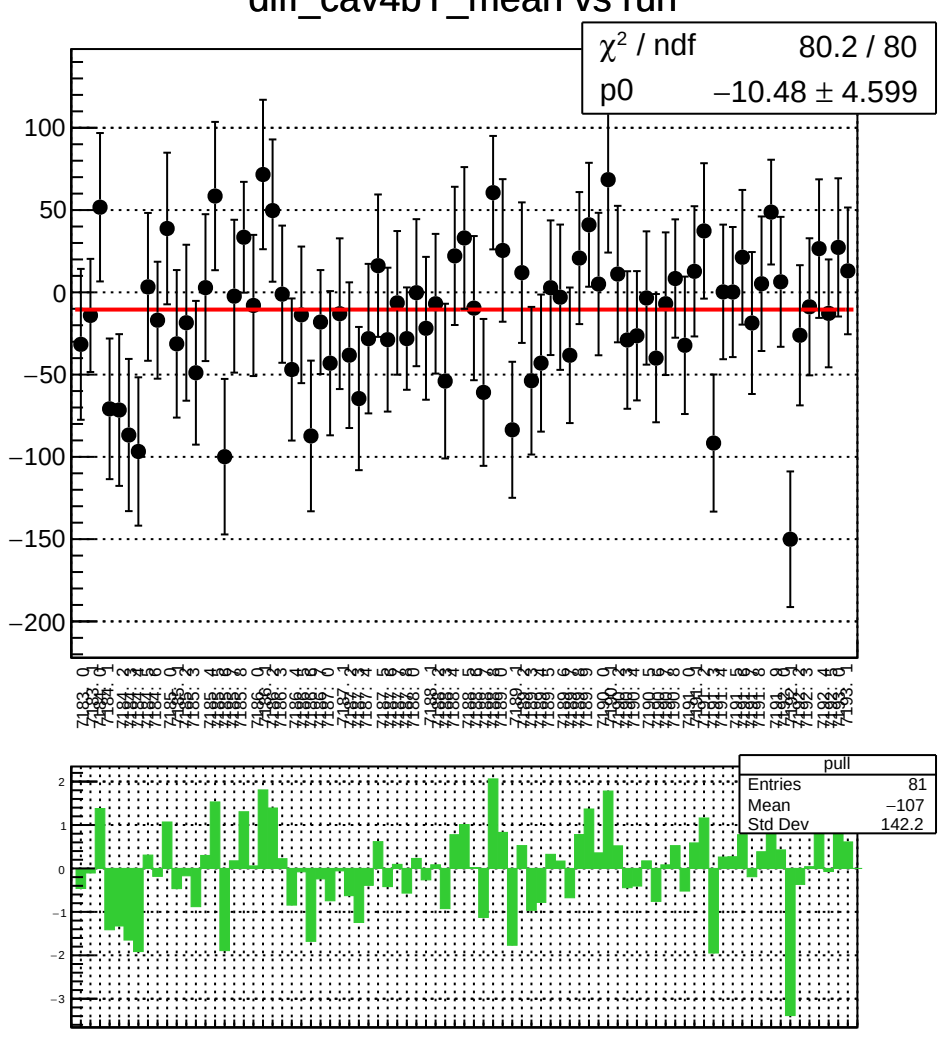

pull1D
Entries 81
Mean −0.001581
Std Dev 1.107
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

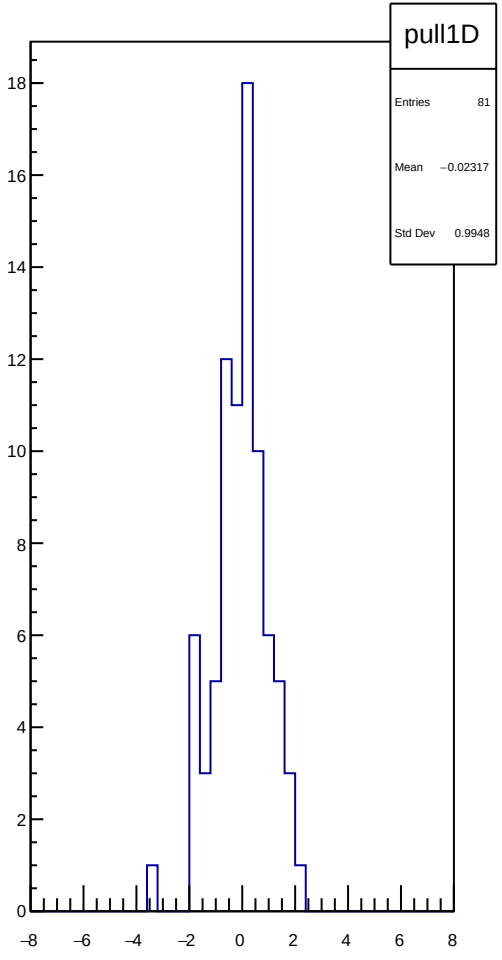

diff_bpm1p03aY_rms vs run
χ² / ndf 1.115e+04 / 80
p0 2432 ± 1.946
2800
2700
2600
2500
2400
2300
2200
2100

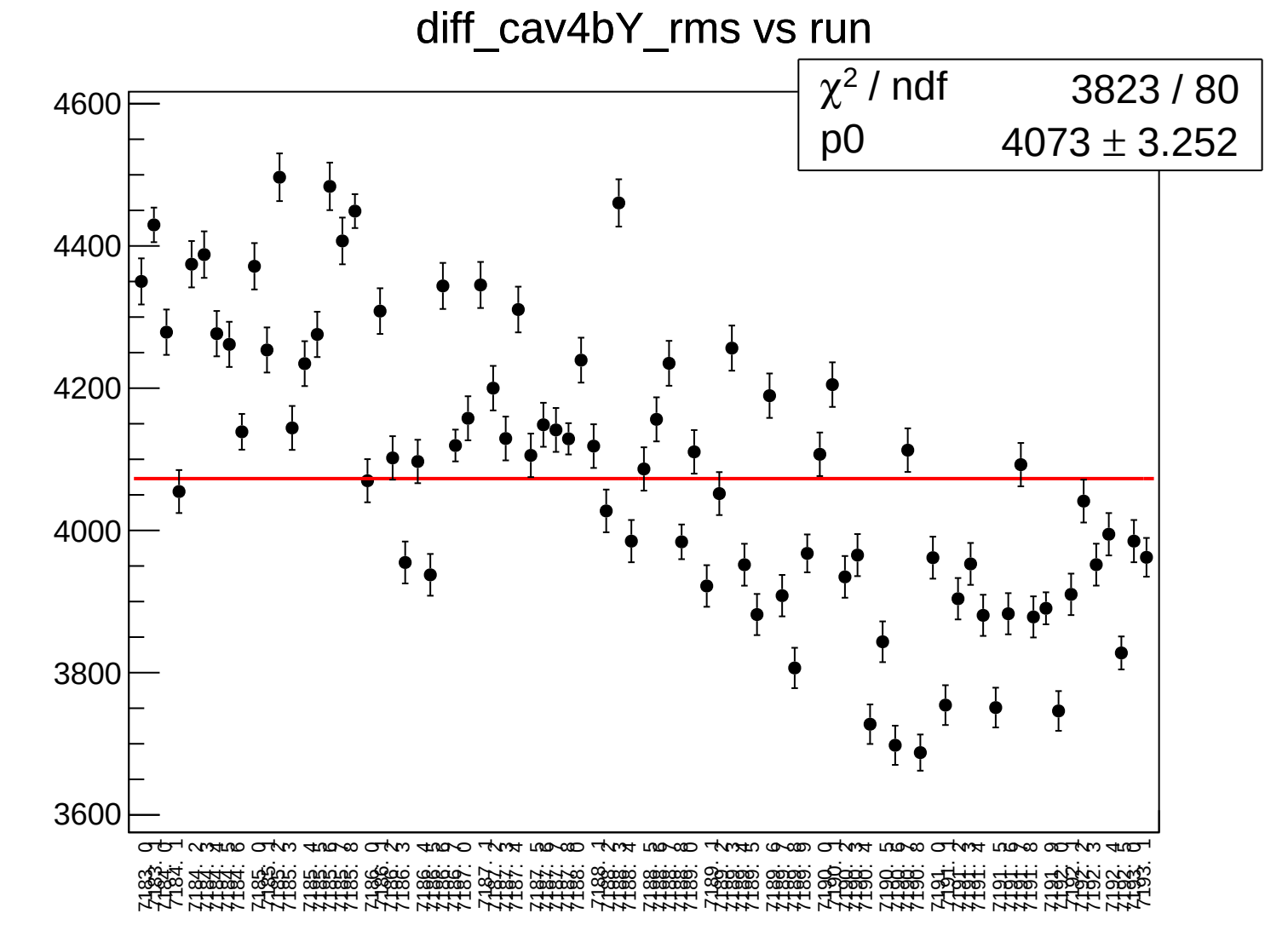

diff_cav4bX_mean vs run
χ^2 / ndf 94.57 / 80
p0 2.027 ± 13.27
600
400
200
0
−200
−400
pull
Entries 81
Mean 358
Std Dev 336.1
3
2
1
0
−1
−2

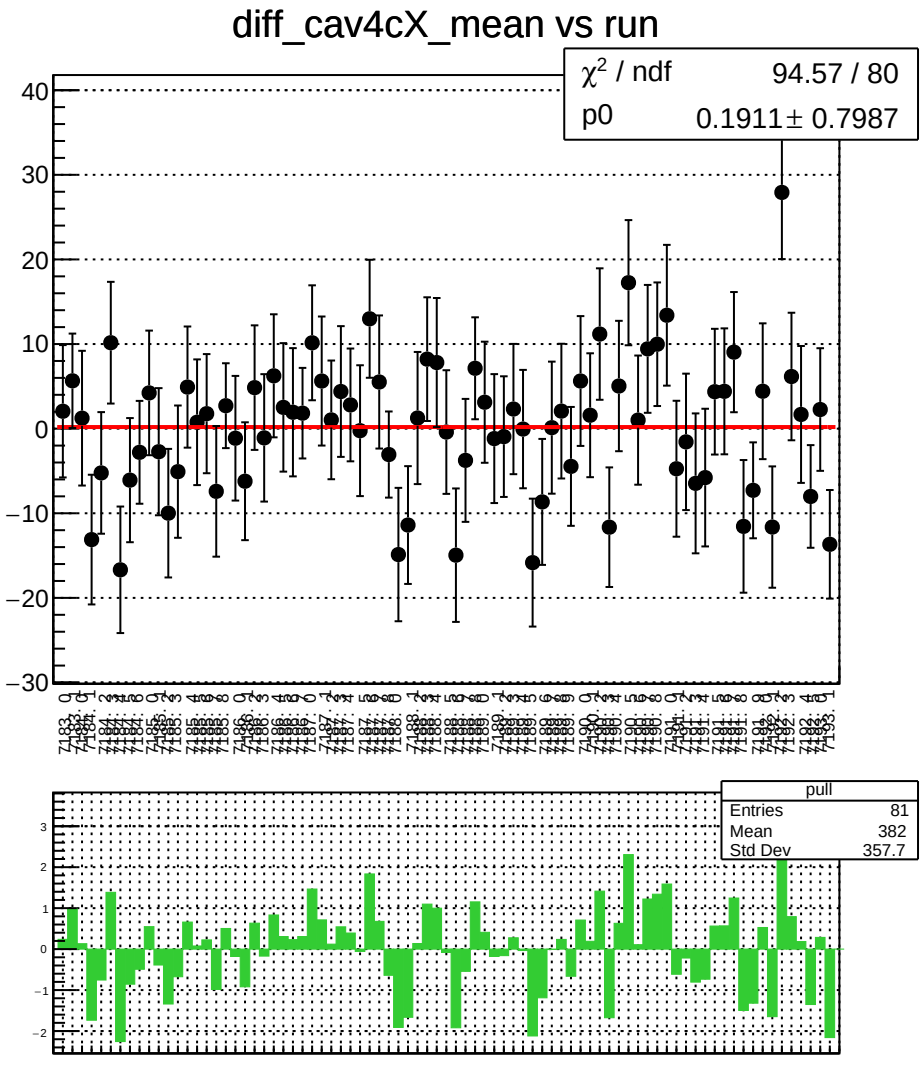

pull1D
Entries 81
Mean 0.004429
Std Dev 1.081
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

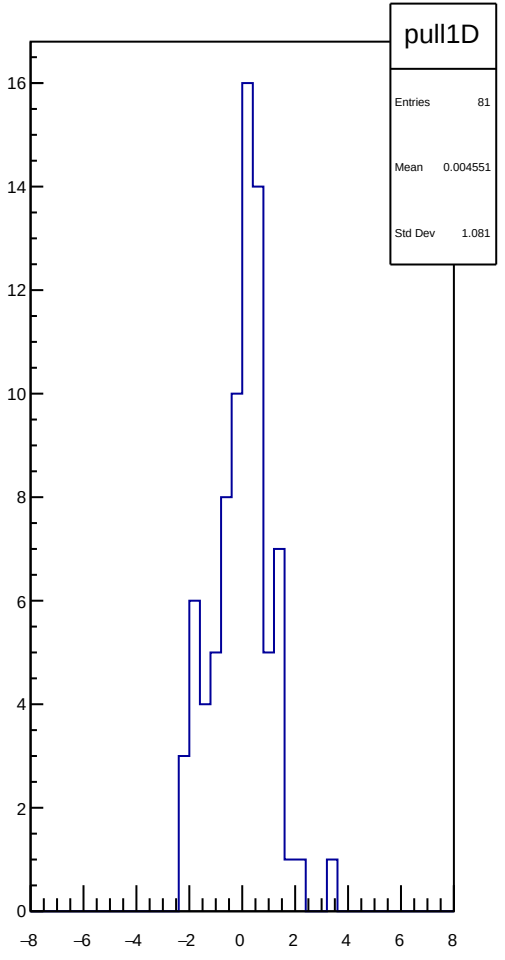

diff_cav4bX_rms vs run
χ² / ndf 3680 / 80
p0 1.176e+04 ± 9.385
13500
13000
12500
12000
11500
11000
10500

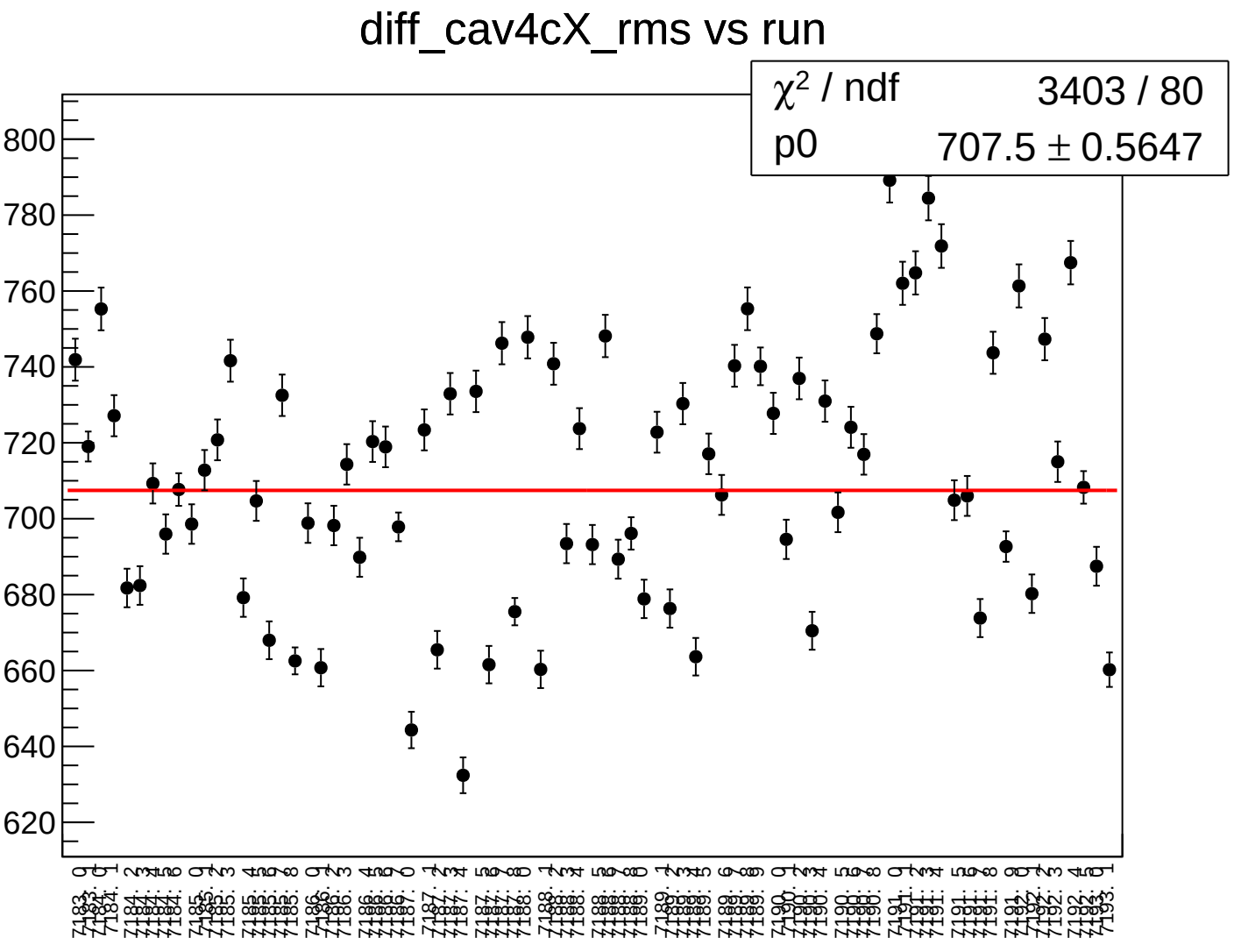

diff_cav4bY_mean vs run
χ² / ndf 80.2 / 80
p0 −10.48 ± 4.599
pull
Entries 81
Mean −107
Std Dev 142.2

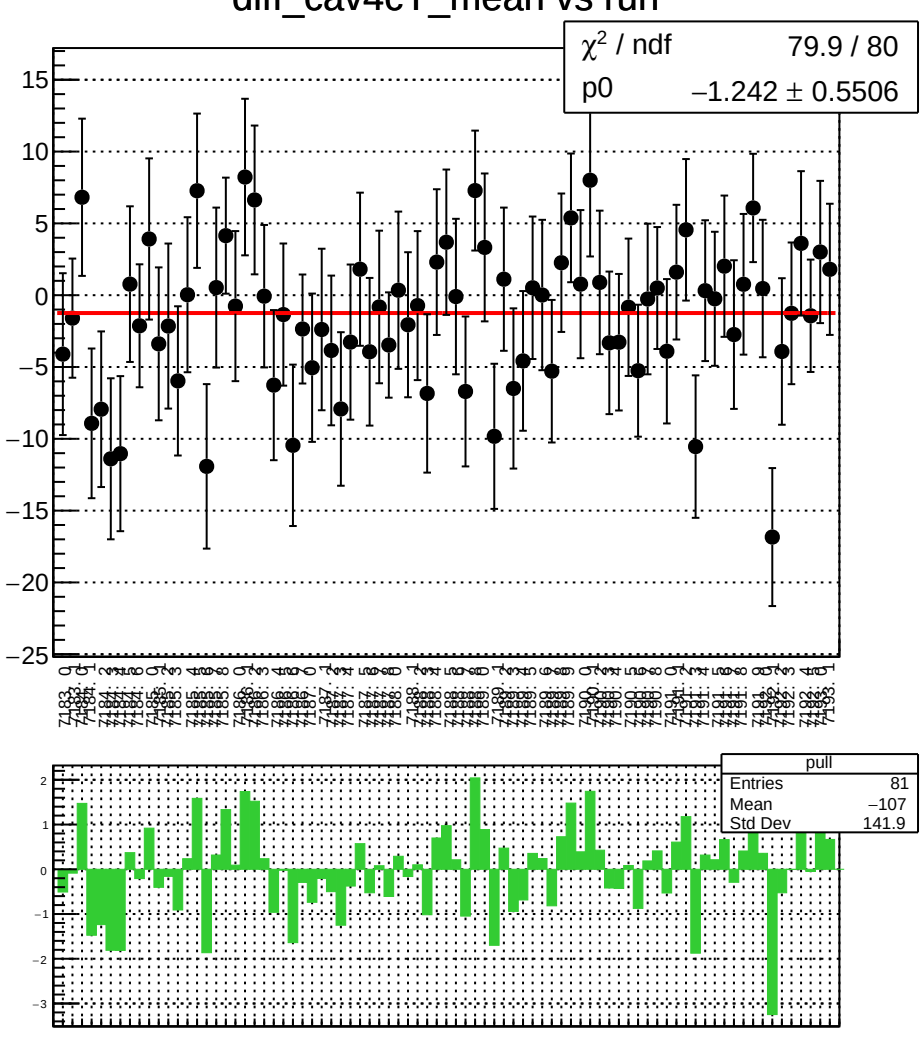

pull1D
Entries 81
Mean −0.02317
Std Dev 0.9948

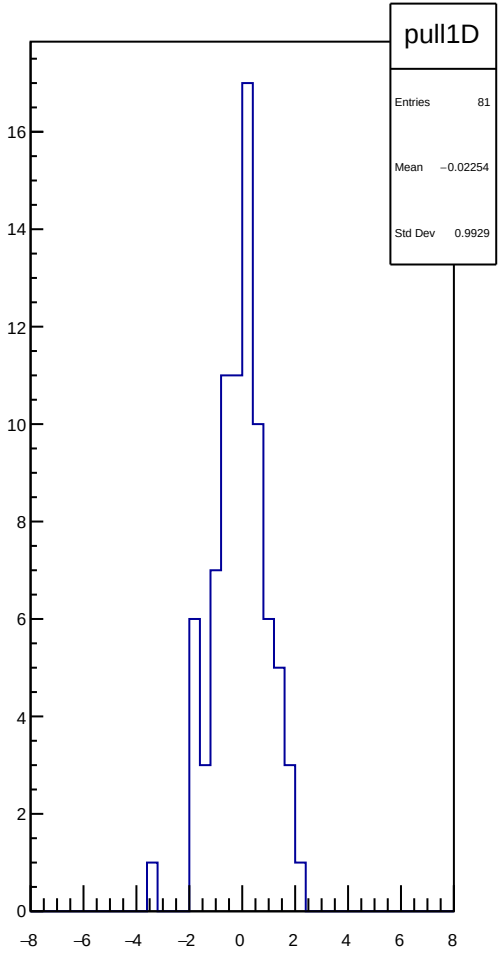

diff_cav4bY_rms vs run
χ² / ndf 3823 / 80
p0 4073 ± 3.252
4600
4400
4200
4000
3800
3600

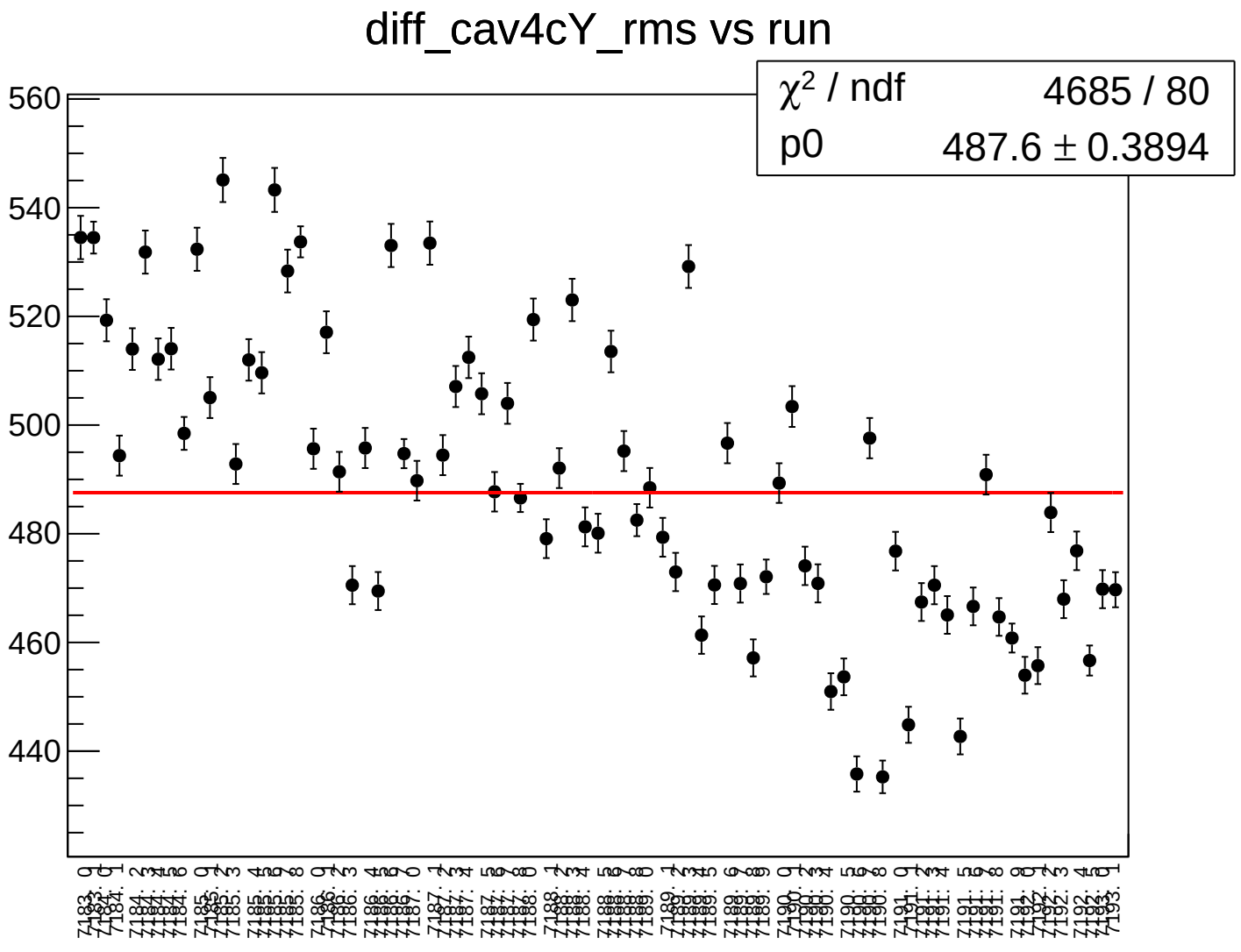

diff_cav4cX_mean vs run
χ² / ndf 94.57 / 80
p0 0.1911 ± 0.7987
pull
Entries 81
Mean 382
Std Dev 357.7

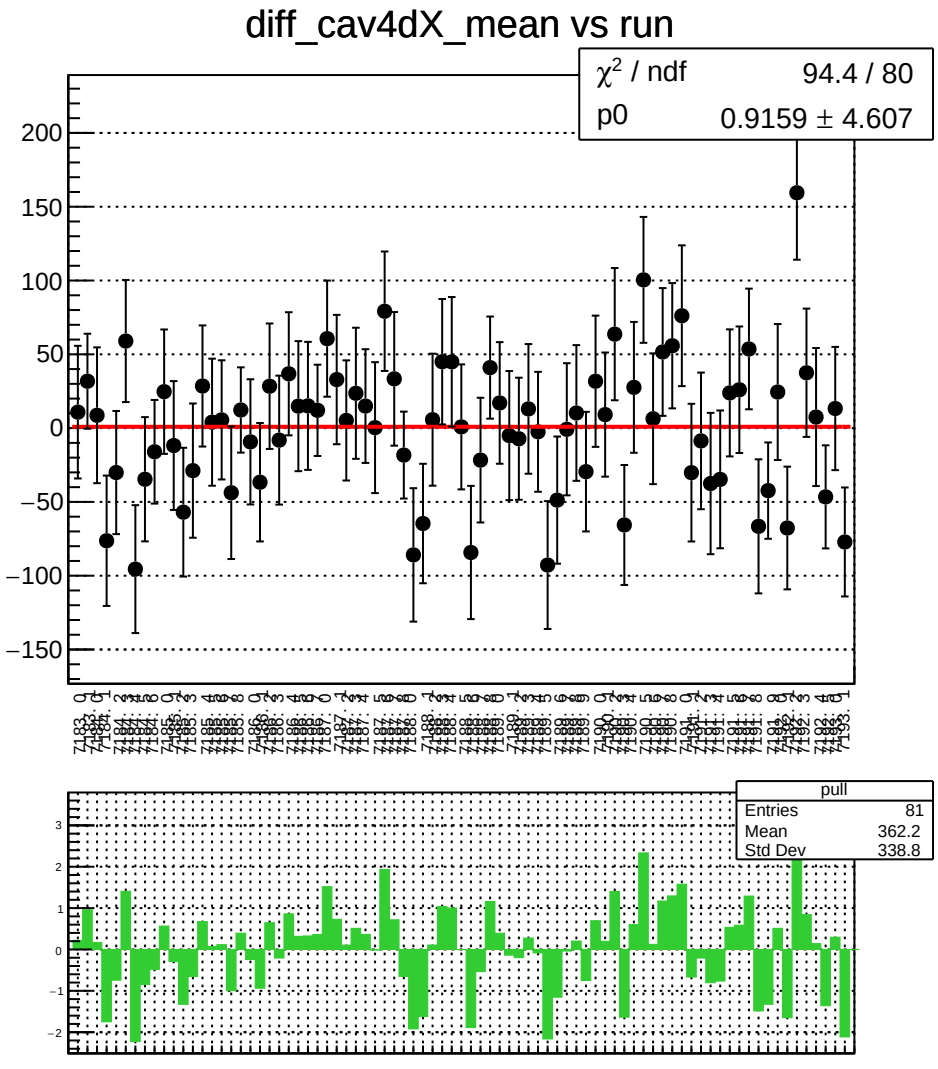

pull1D
Entries 81
Mean 0.004551
Std Dev 1.081

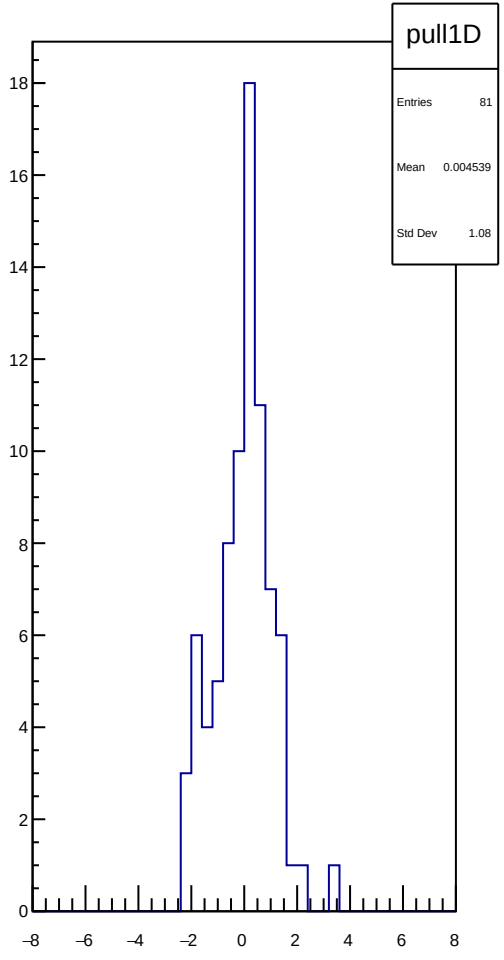

diff_cav4cX_rms vs run
χ² / ndf 3403 / 80
p0 707.5 ± 0.5647
800
780
760
740
720
700
680
660
640
620

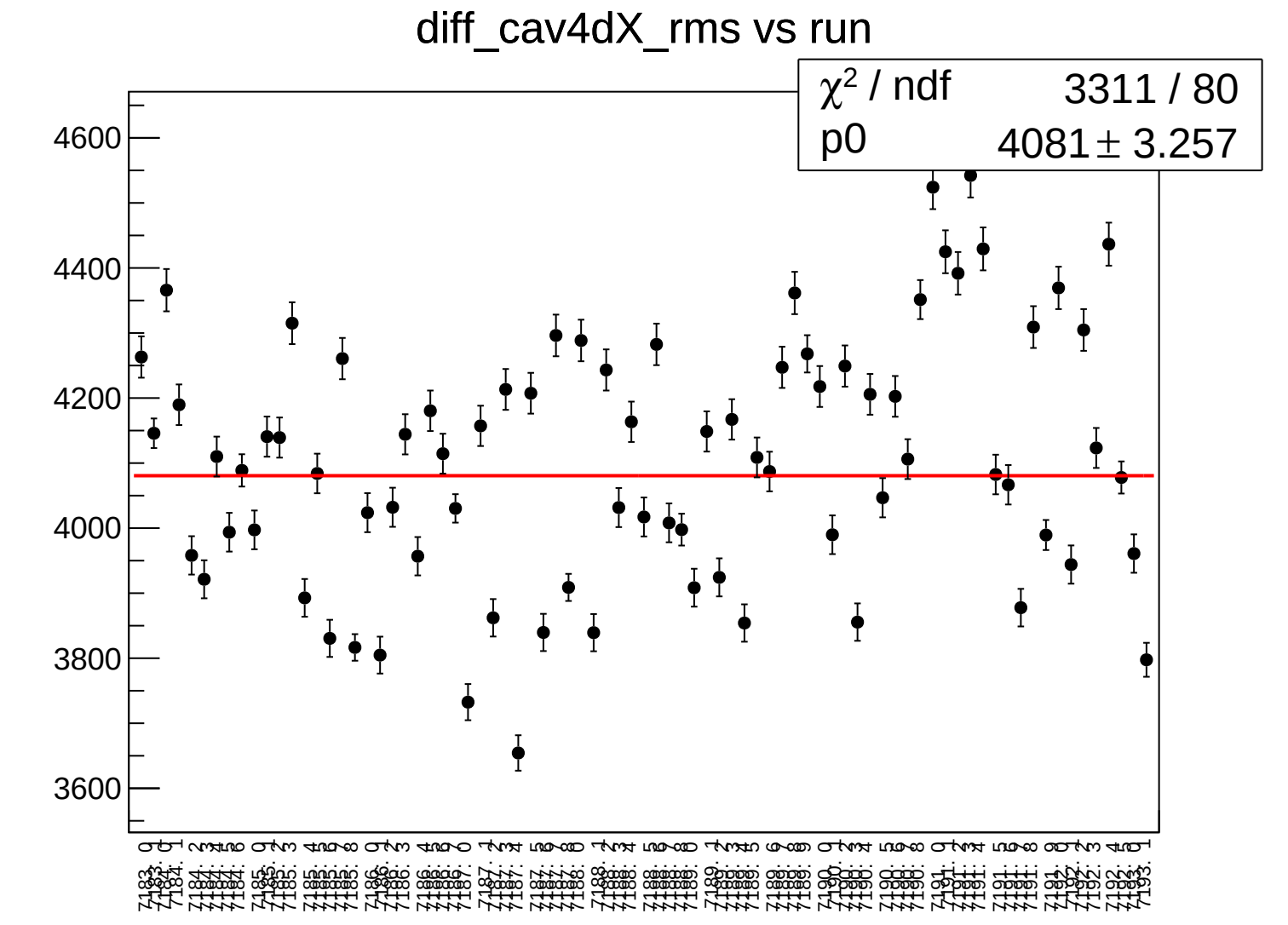

diff_cav4cY_mean vs run
χ² / ndf 79.9 / 80
p0 −1.242 ± 0.5506
pull
Entries 81
Mean −107
Std Dev 141.9

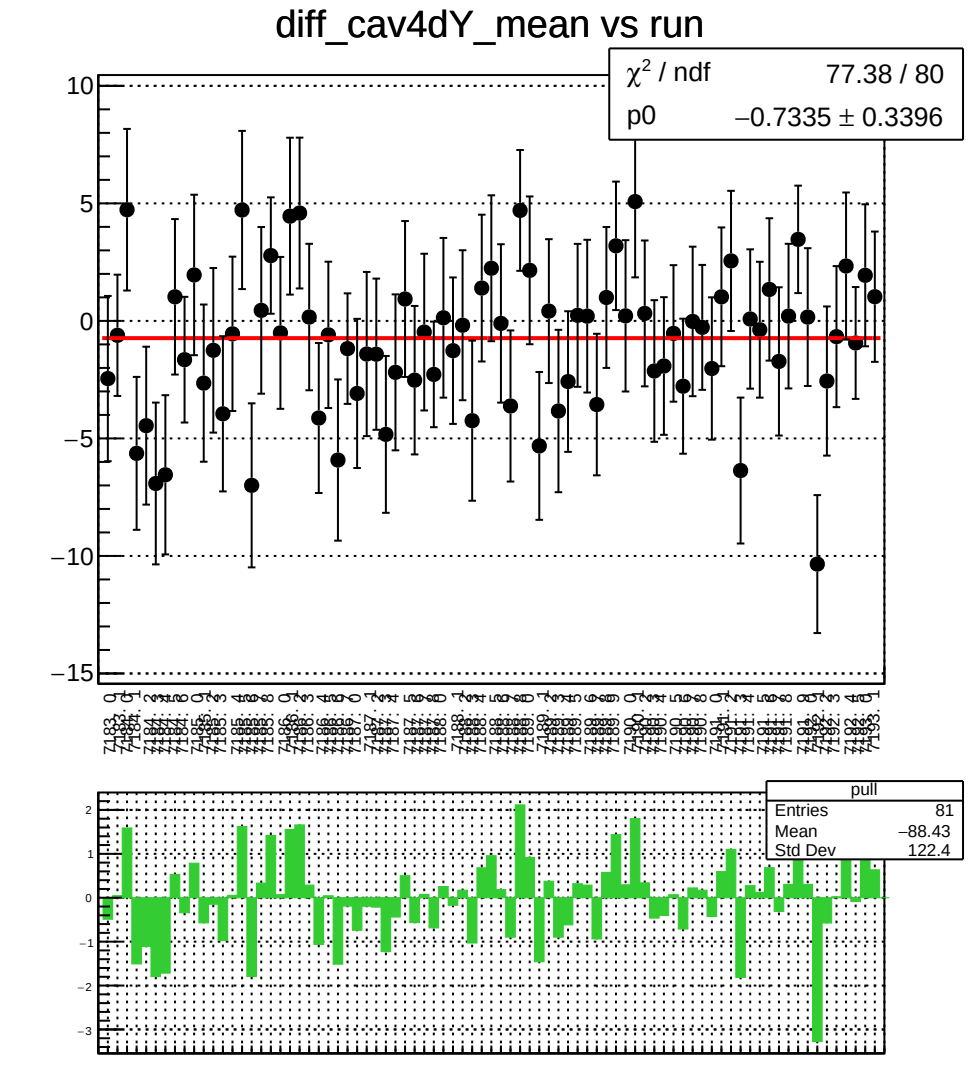

pull1D
Entries 81
Mean −0.02254
Std Dev 0.9929

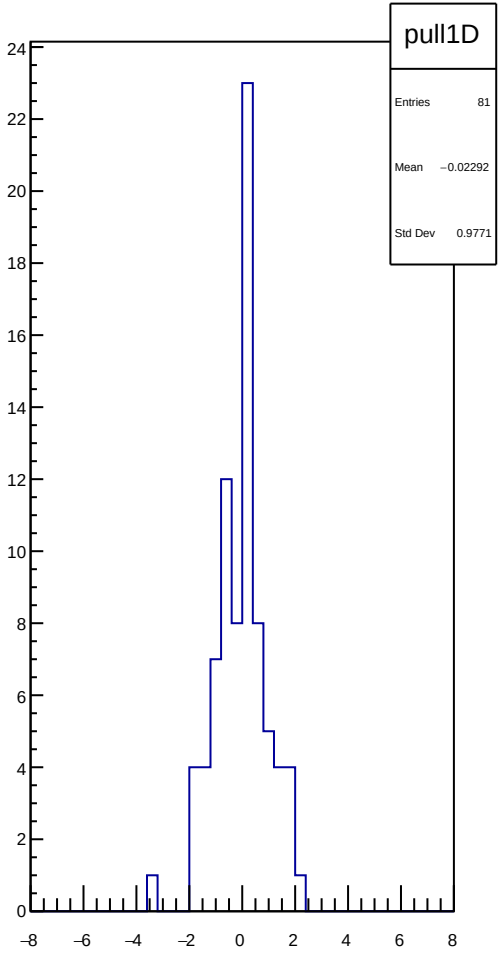

diff_cav4cY_rms vs run
χ² / ndf 4685 / 80
p0 487.6 ± 0.3894
560
540
520
500
480
460
440

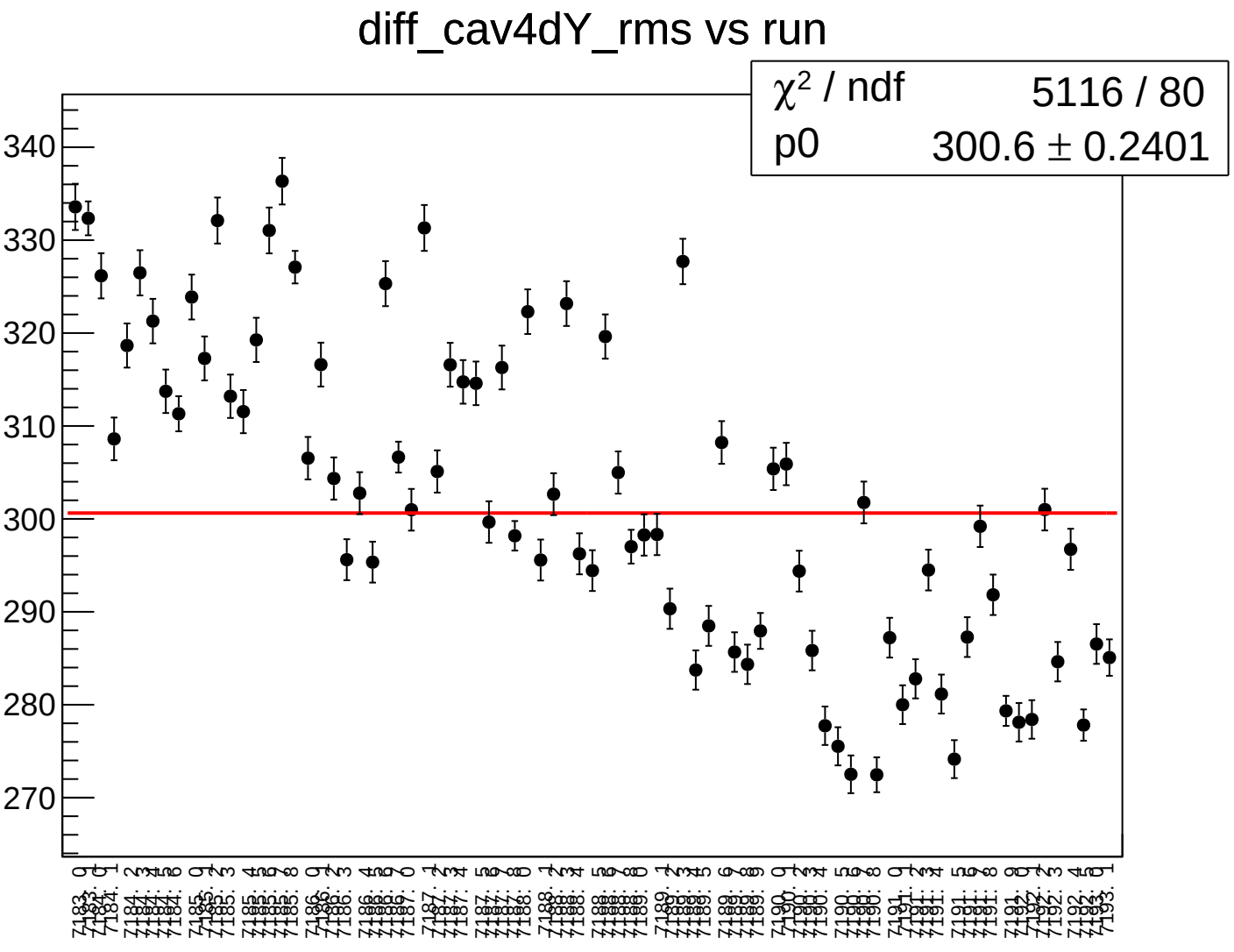

diff_cav4dX_mean vs run
χ² / ndf 94.4 / 80
p0 0.9159 ± 4.607
pull
Entries 81
Mean 362.2
Std Dev 338.8

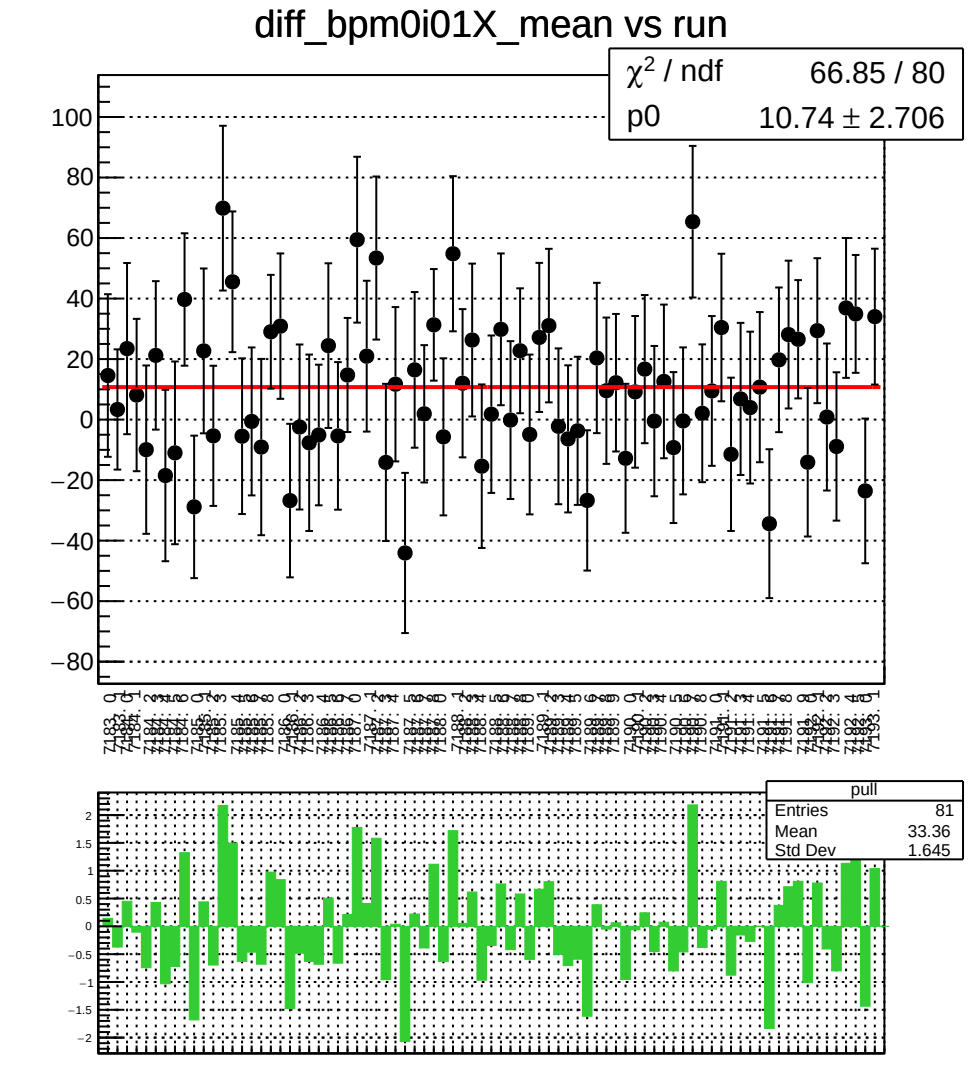

pull1D
Entries 81
Mean 0.004539
Std Dev 1.08

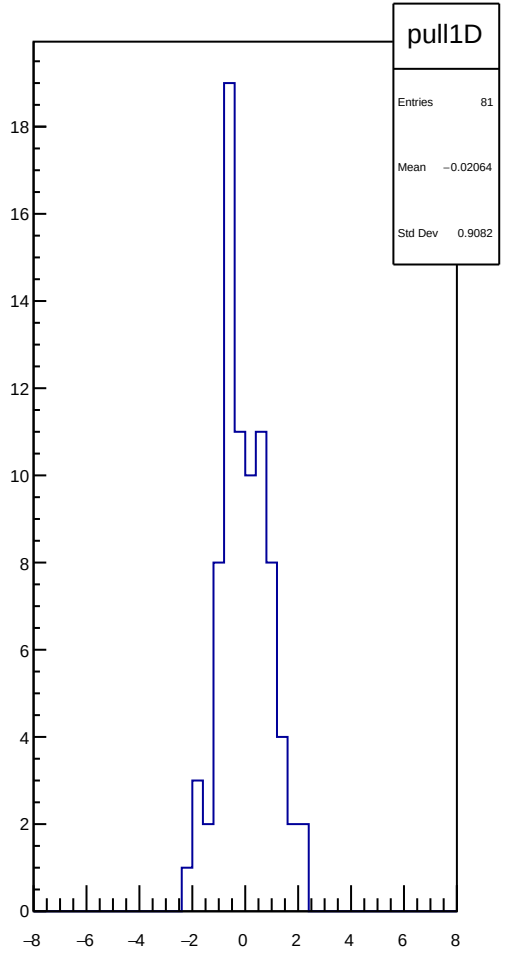

diff_cav4dX_rms vs run
χ² / ndf 3311 / 80
p0 4081 ± 3.257
4600
4400
4200
4000
3800
3600


diff_cav4dY_mean vs run
χ² / ndf 77.38 / 80
p0 −0.7335 ± 0.3396
pull
Entries 81
Mean −88.43
Std Dev 122.4

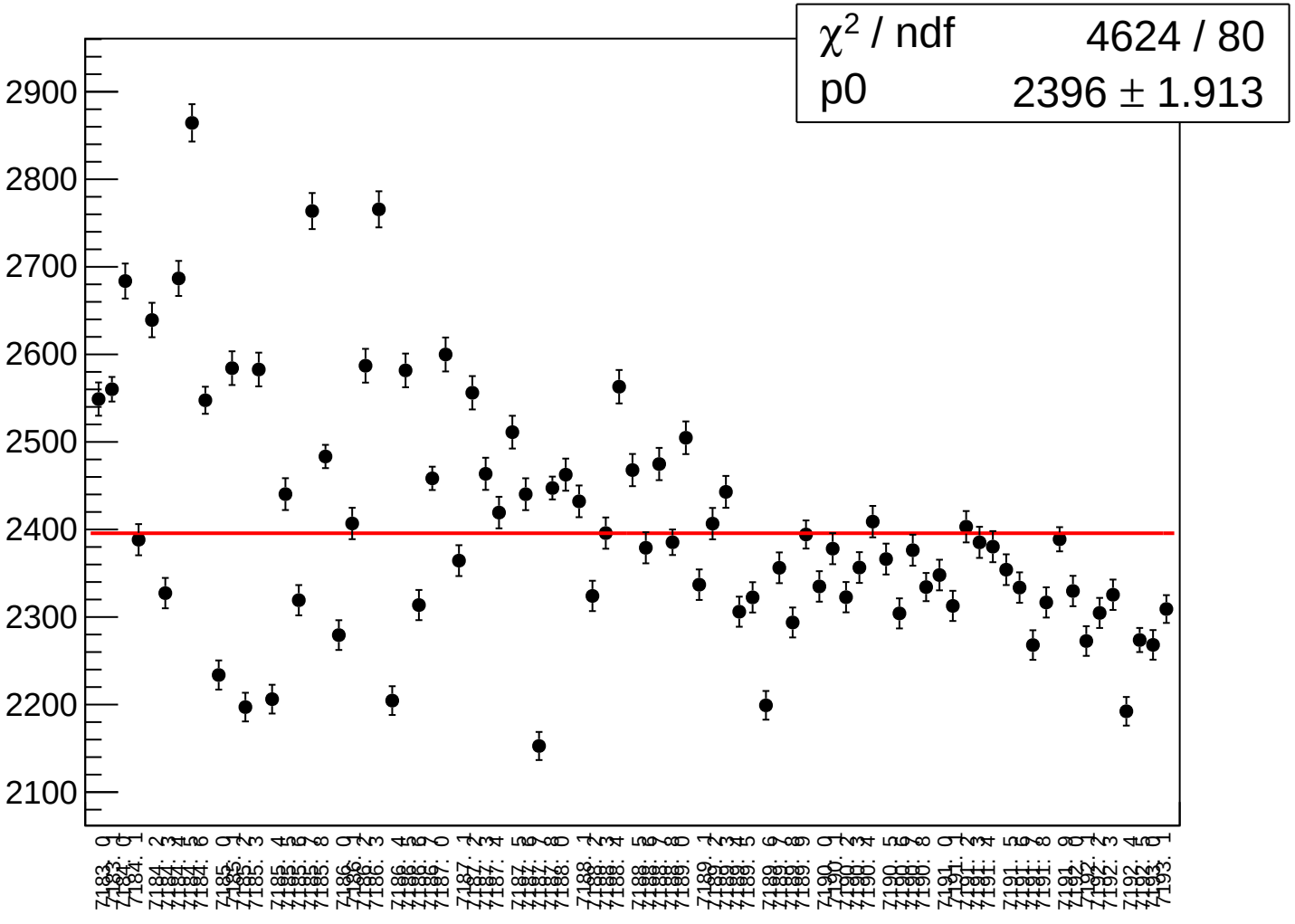

pull1D
Entries 81
Mean −0.02292
Std Dev 0.9771

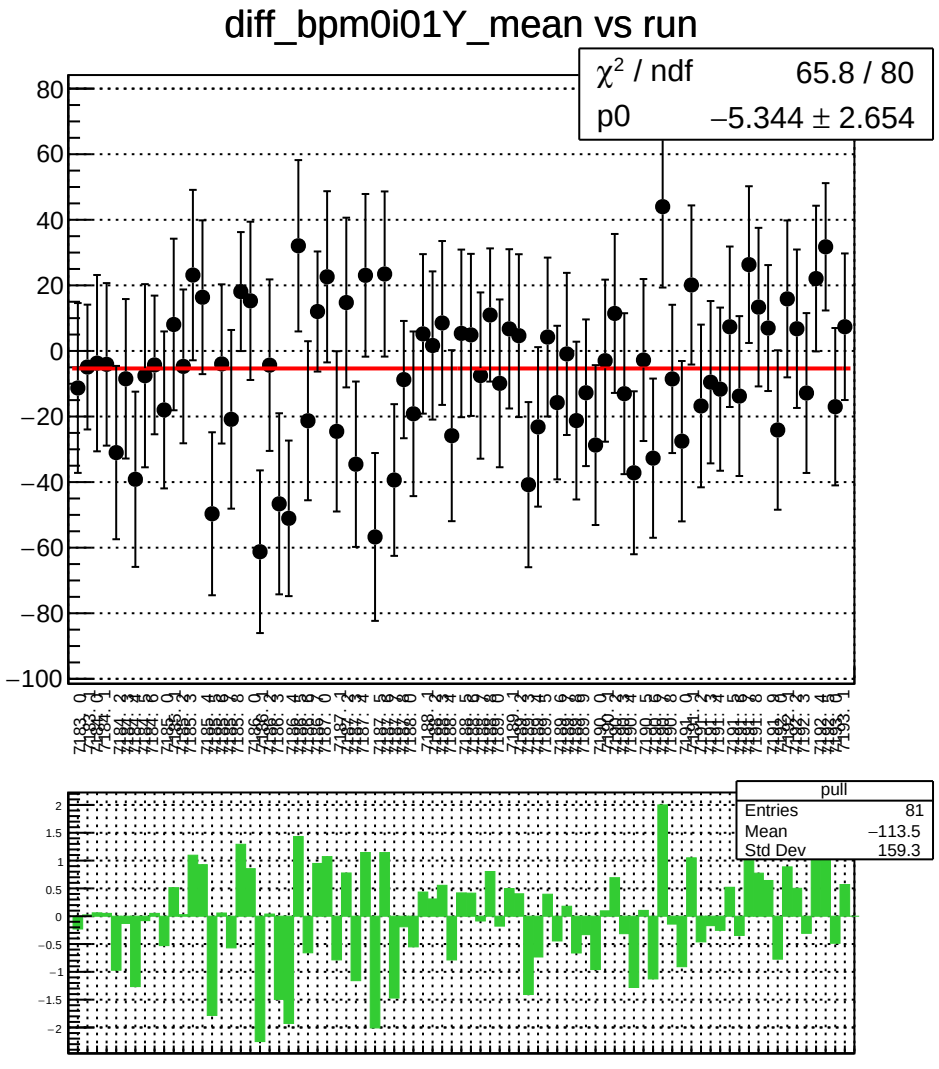

diff_cav4dY_rms vs run
χ² / ndf 5116 / 80
p0 300.6 ± 0.2401
340
330
320
310
300
290
280
270

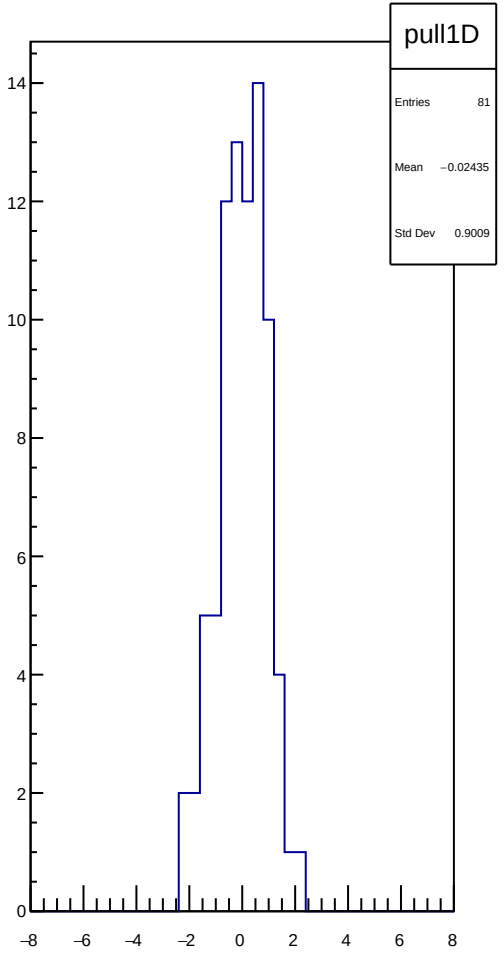

diff_bpm0i01X_mean vs run
χ² / ndf 66.85 / 80
p0 10.74 ± 2.706
pull
Entries 81
Mean 33.36
Std Dev 1.645

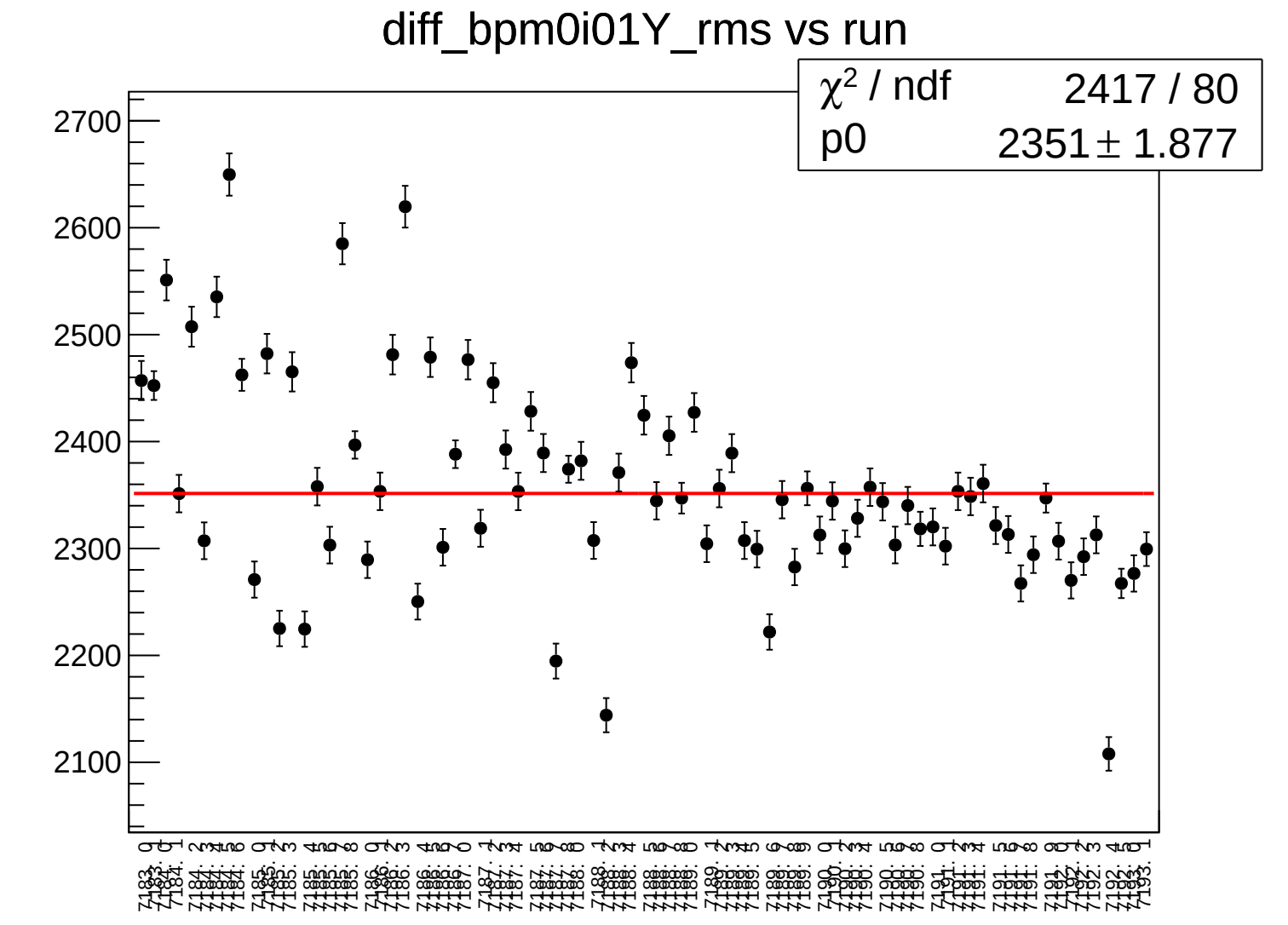

pull1D
Entries 81
Mean −0.02064
Std Dev 0.9082

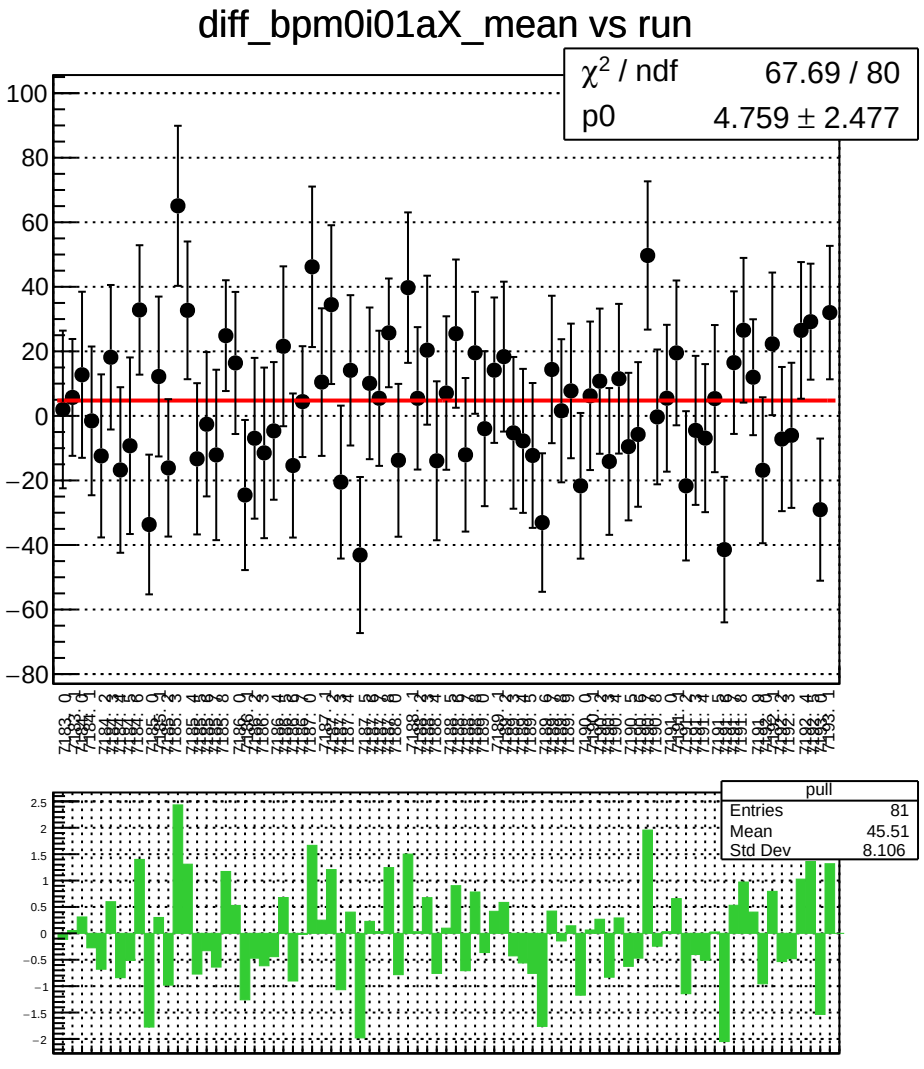
diff_bpm0i01X_rms vs run

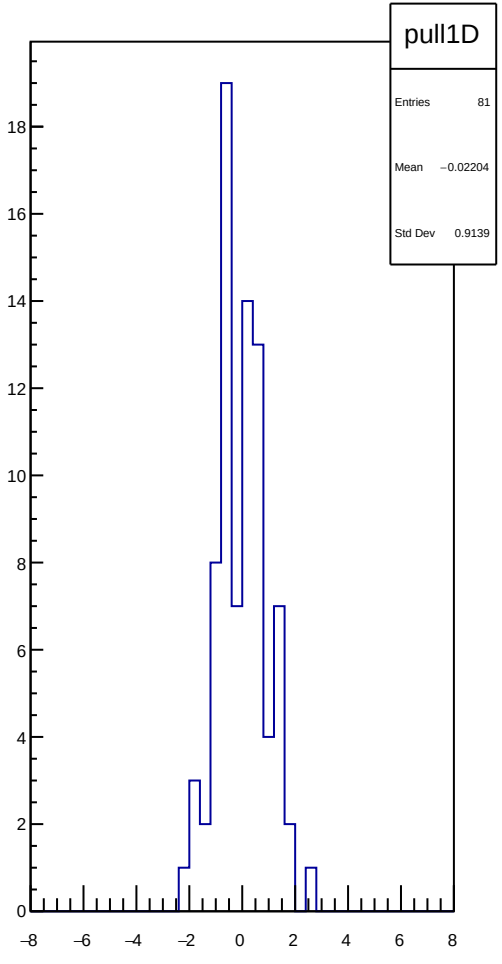


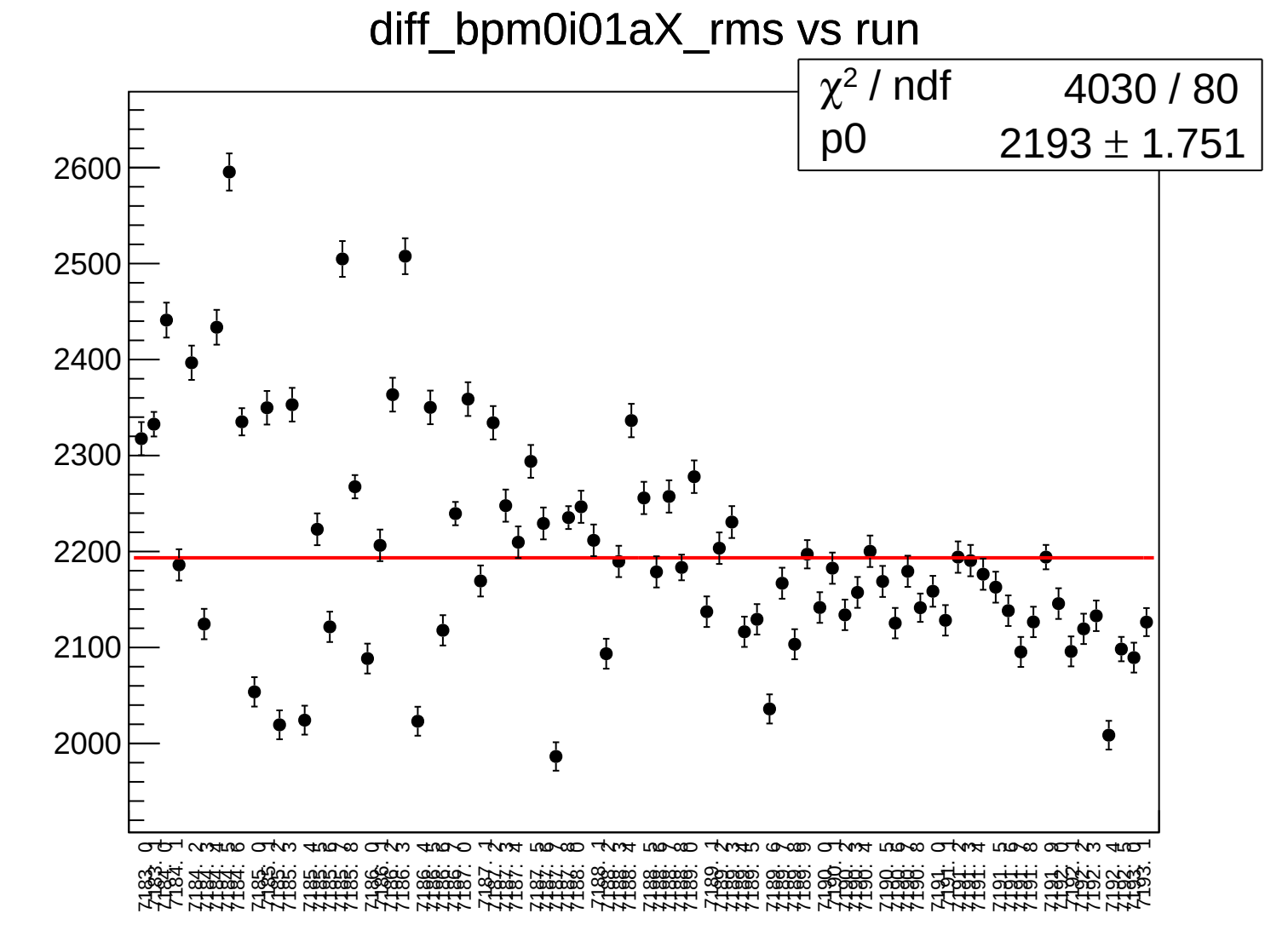

diff_bpm0i01Y_mean vs run
χ² / ndf 65.8 / 80
p0 −5.344 ± 2.654
pull
Entries 81
Mean −113.5
Std Dev 159.3

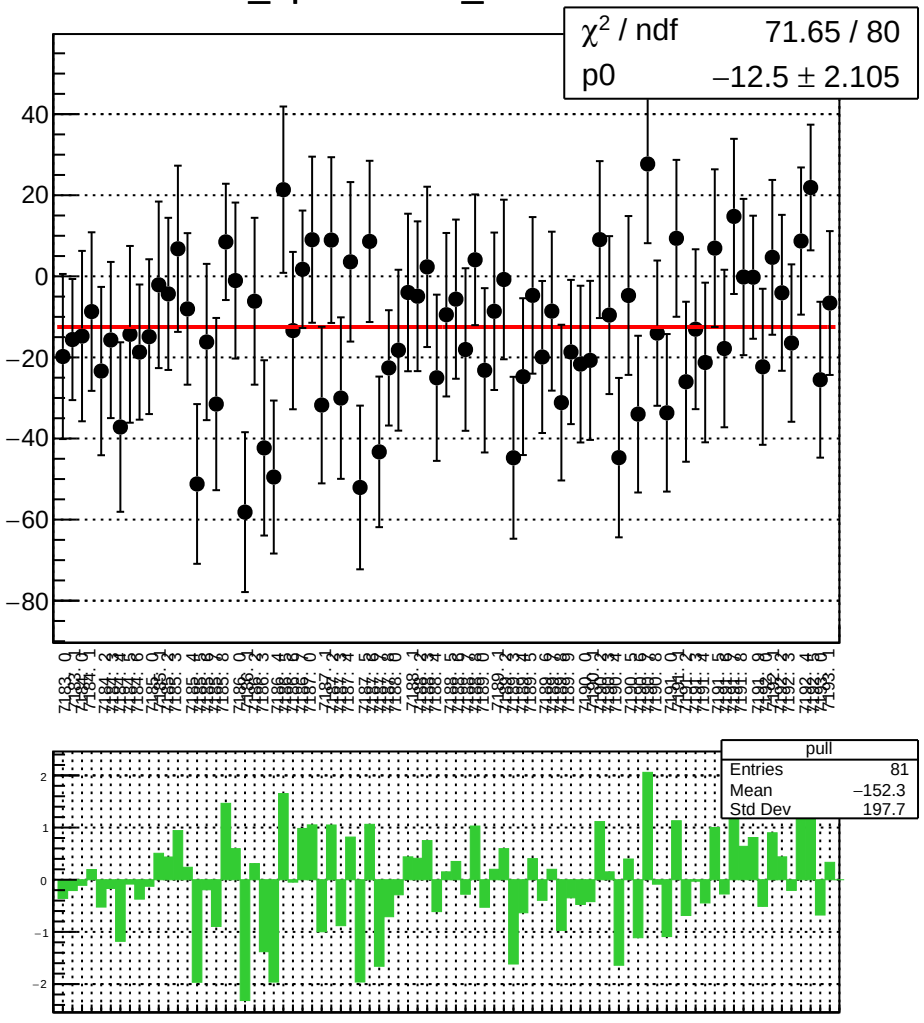

pull1D
Entries 81
Mean −0.02435
Std Dev 0.9009

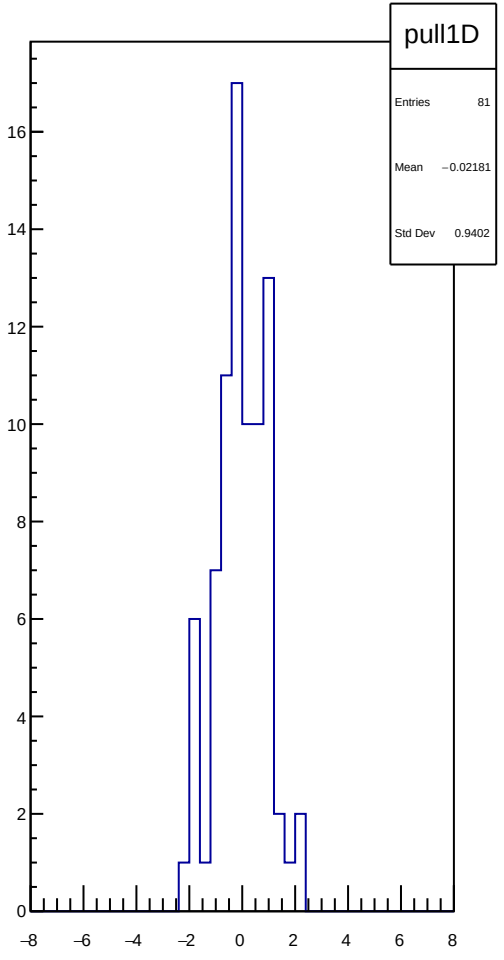

diff_bpm0i01Y_rms vs run
χ^2 / ndf 2417 / 80
p0 2351 ± 1.877
2700
2600
2500
2400
2300
2200
2100

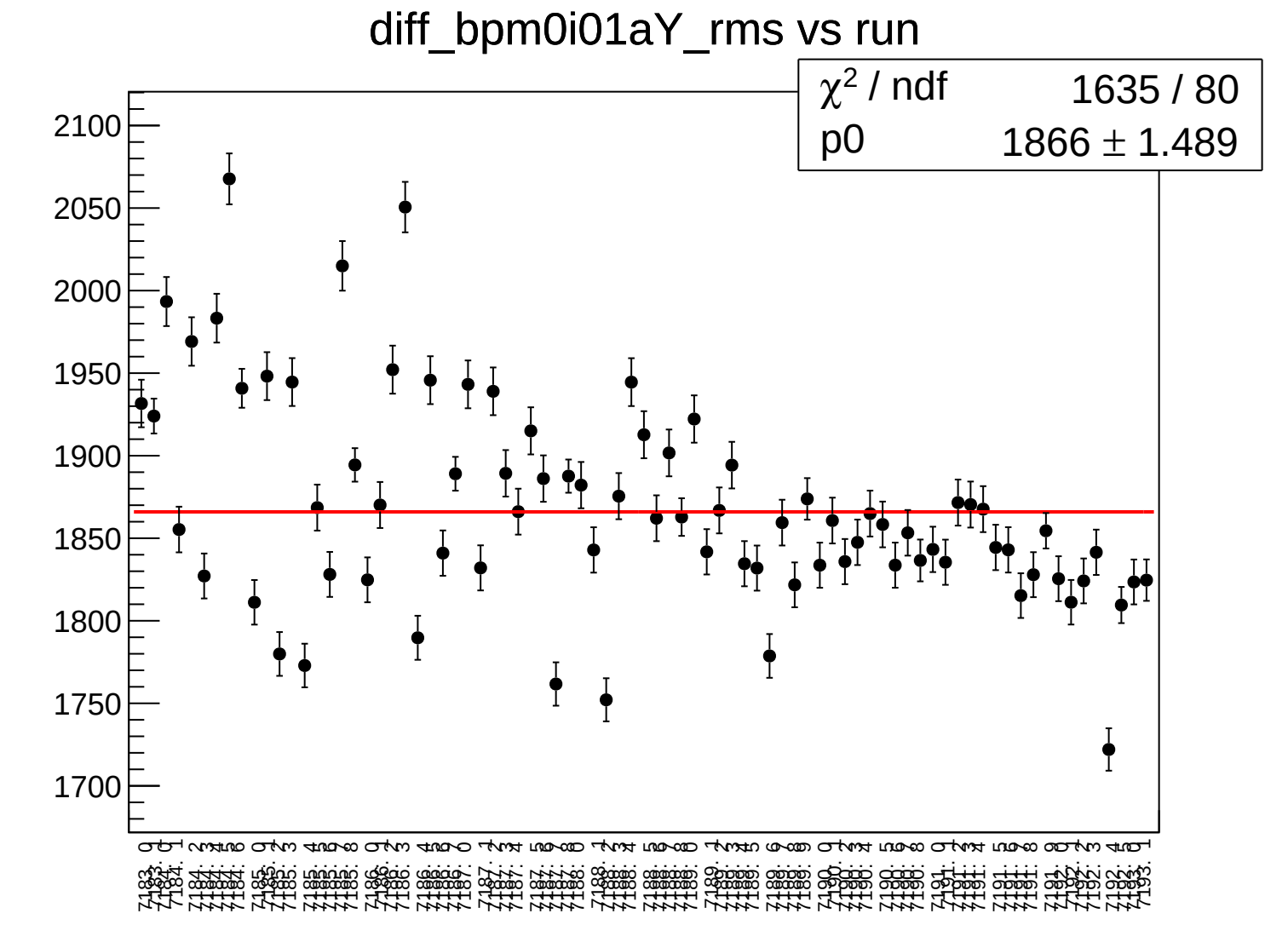

diff_bpm0i01aX_mean vs run
χ^2 / ndf 67.69 / 80
p0 4.759 ± 2.477
pull
Entries 81
Mean 45.51
Std Dev 8.106

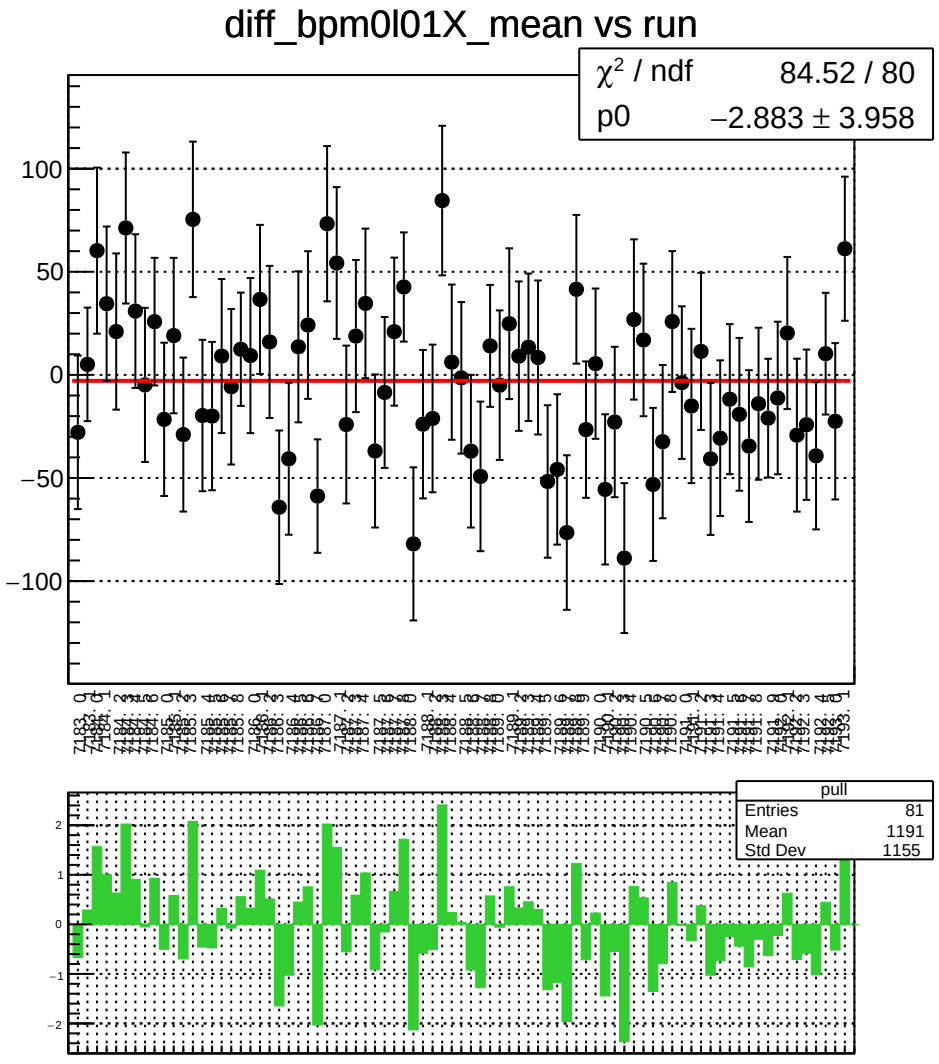

pull1D
Entries 81
Mean −0.02204
Std Dev 0.9139

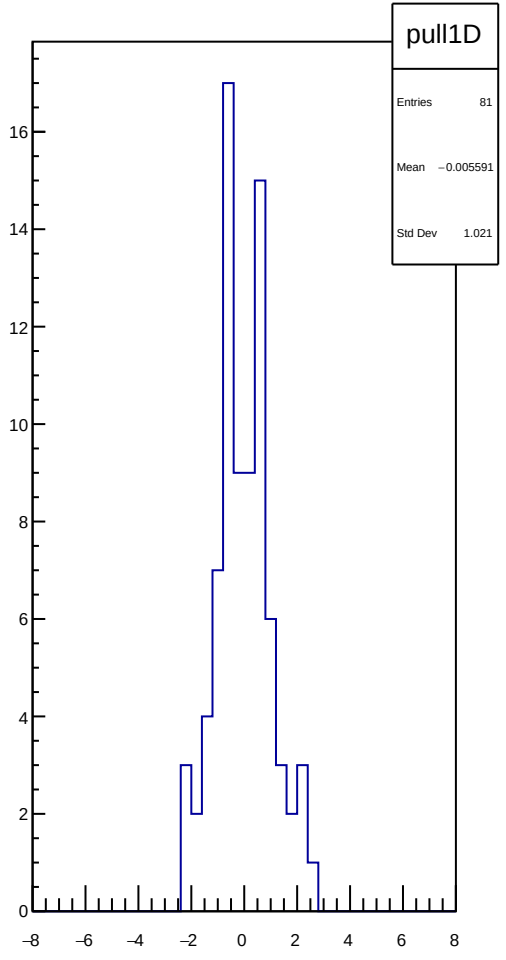

diff_bpm0i01aX_rms vs run
χ^2 / ndf 4030 / 80
p0 2193 ± 1.751
2600
2500
2400
2300
2200
2100
2000

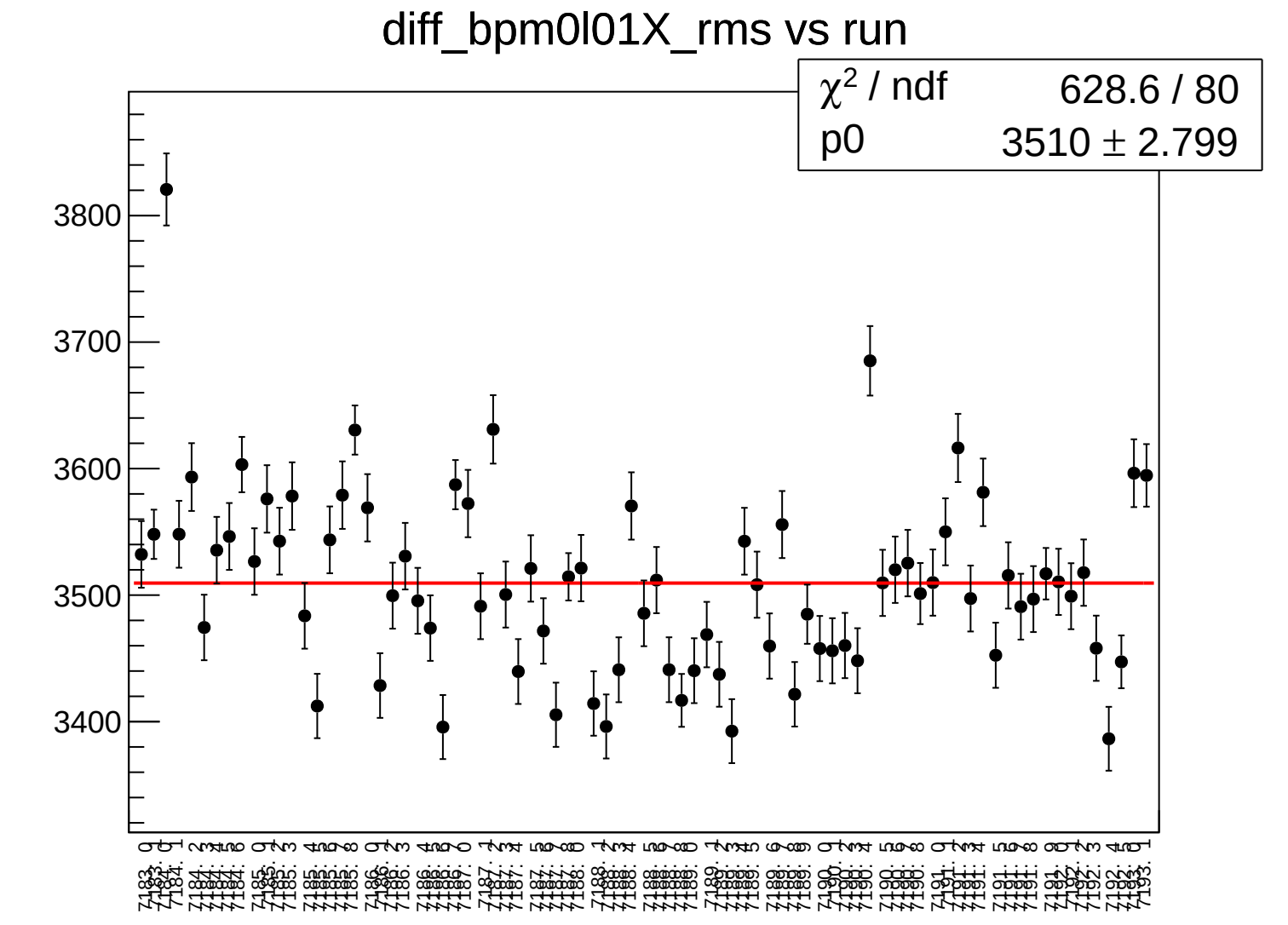

diff_bpm0i01aY_mean vs run
χ² / ndf 71.65 / 80
p0 −12.5 ± 2.105
pull
Entries 81
Mean −152.3
Std Dev 197.7

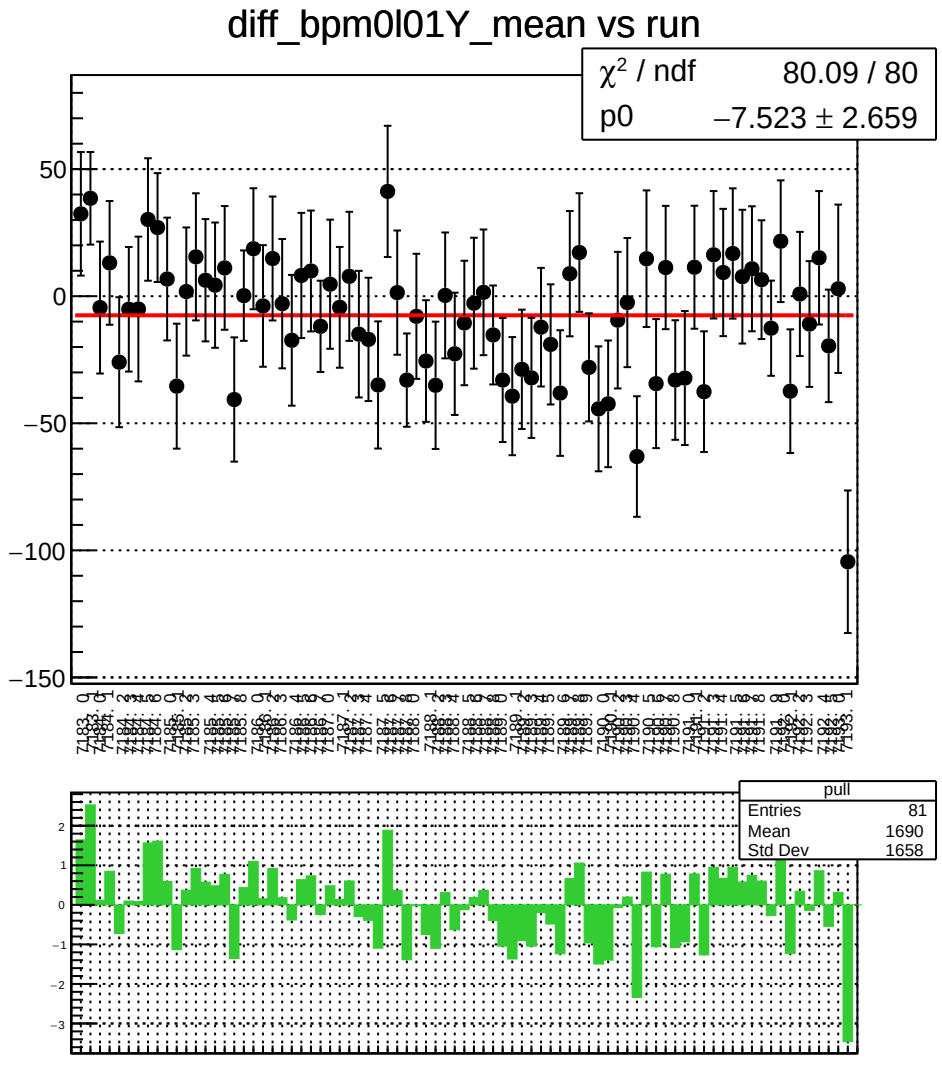

pull1D
Entries 81
Mean −0.02181
Std Dev 0.9402

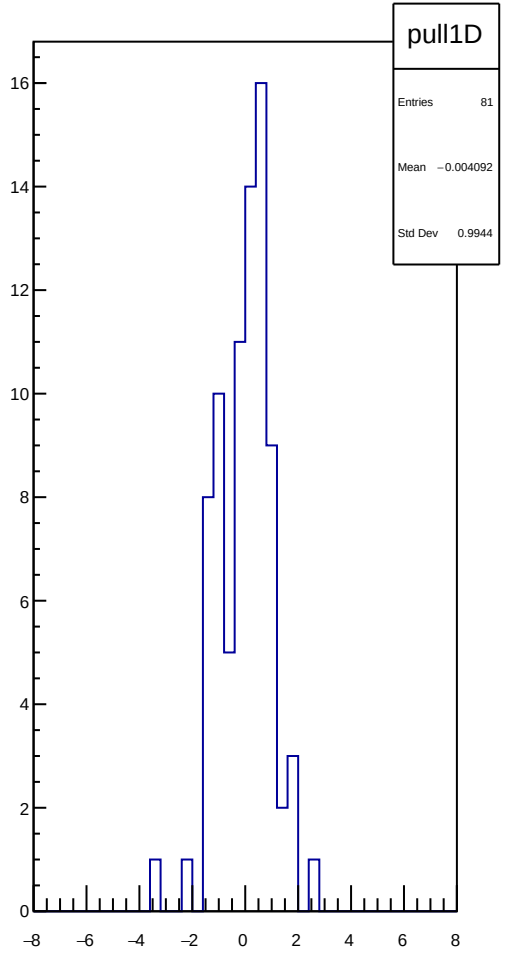

diff_bpm0i01aY_rms vs run
χ^2 / ndf 1635 / 80
p0 1866 ± 1.489
2100
2050
2000
1950
1900
1850
1800
1750
1700

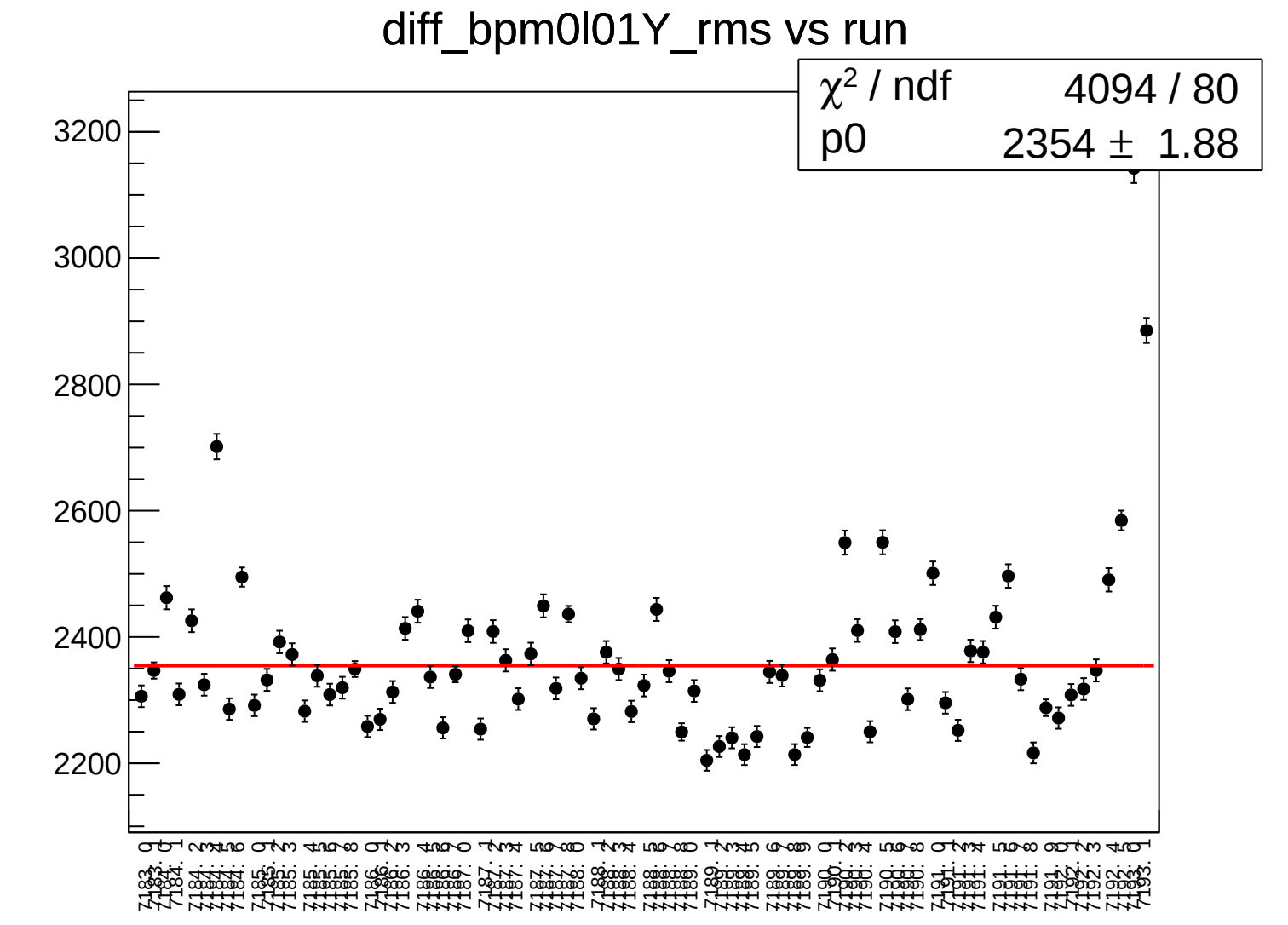

diff_bpm0l01X_mean vs run
χ² / ndf 84.52 / 80
p0 −2.883 ± 3.958
100
50
0
−50
−100
pull
Entries 81
Mean 1191
Std Dev 1155
2
1
0
−1
−2

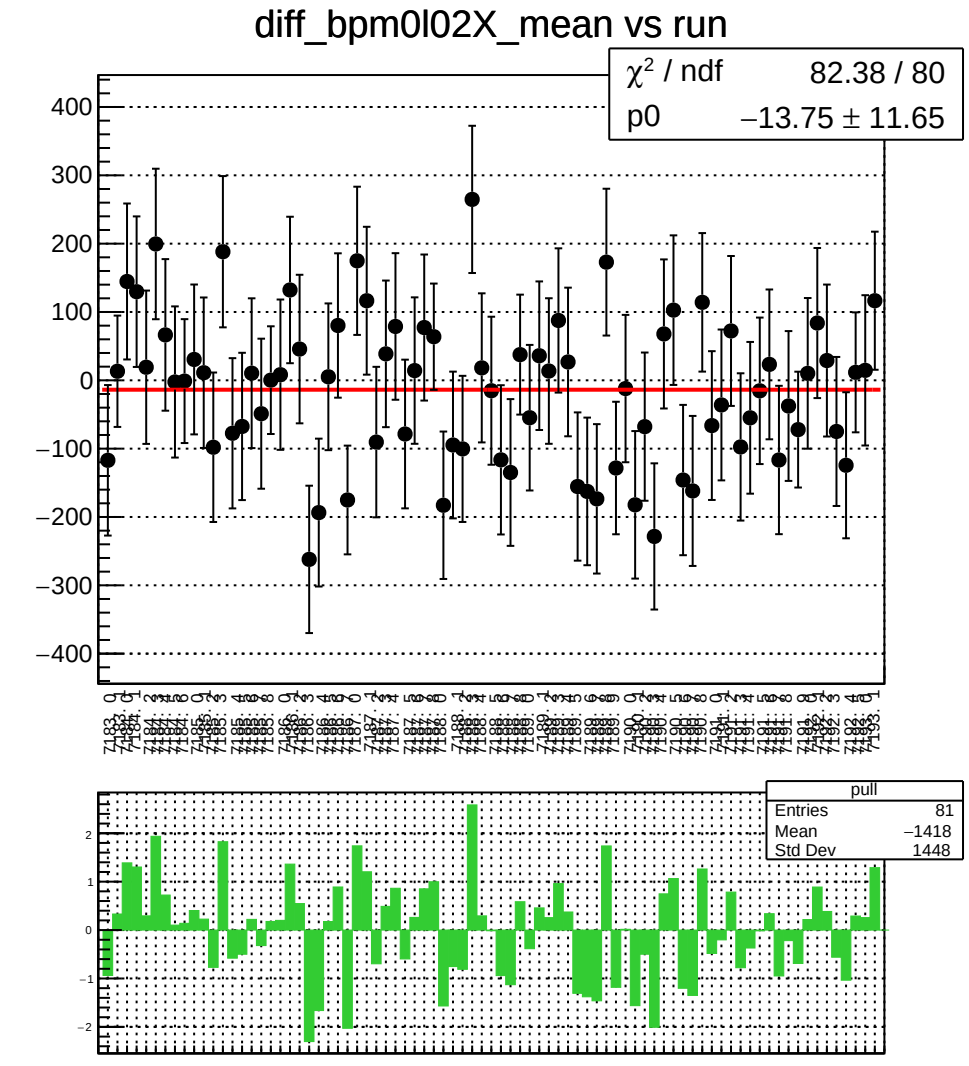

pull1D
Entries 81
Mean −0.005591
Std Dev 1.021
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

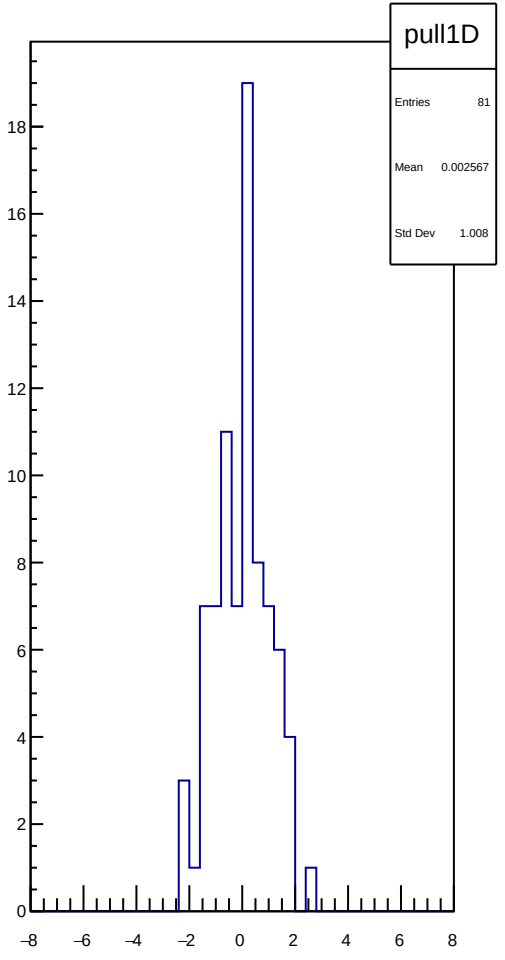

diff_bpm0l01X_rms vs run
χ² / ndf 628.6 / 80
p0 3510 ± 2.799
3800
3700
3600
3500
3400

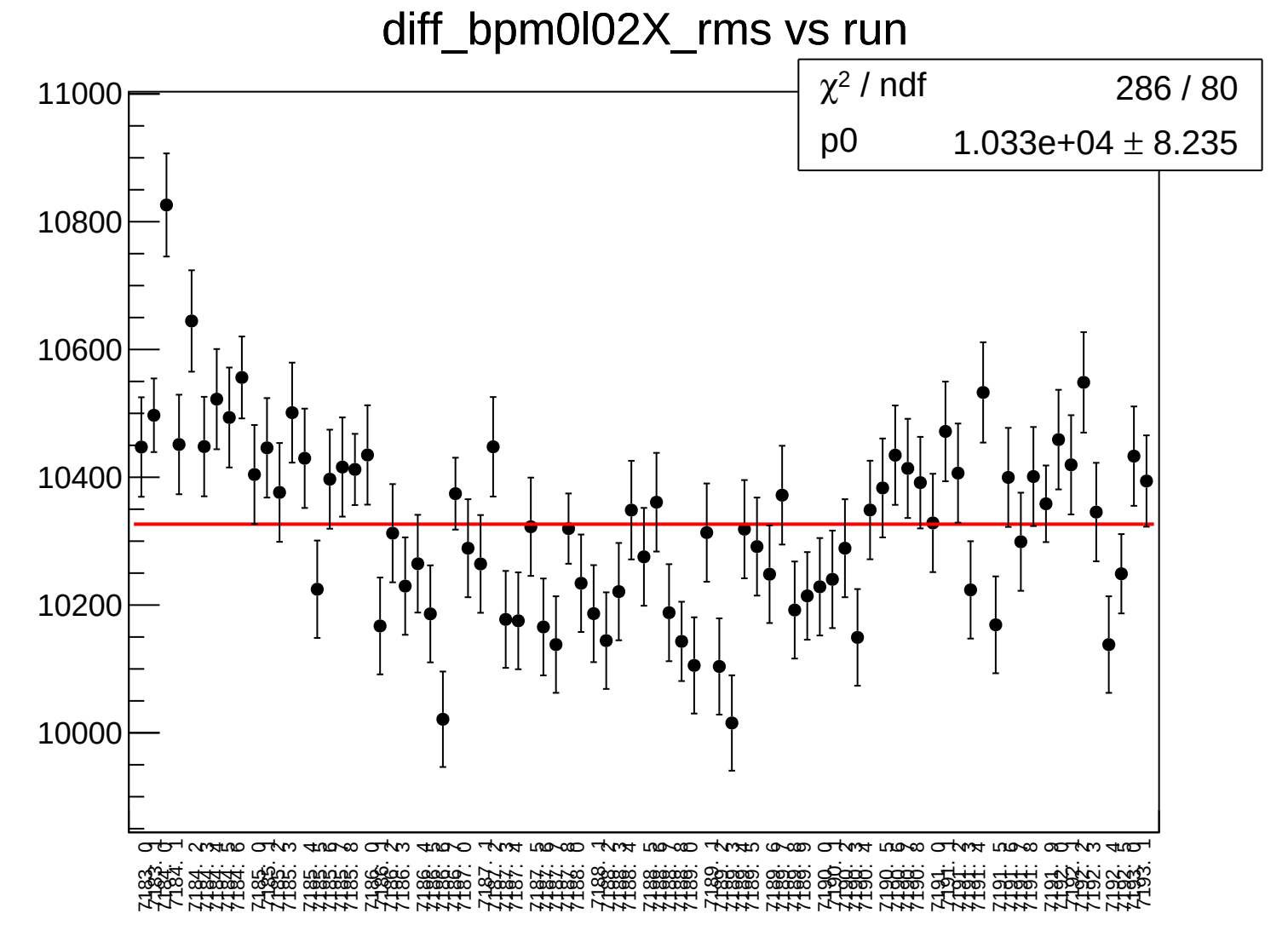

diff_bpm0l01Y_mean vs run
χ² / ndf 80.09 / 80
p0 −7.523 ± 2.659
50
0
−50
−100
−150
pull
Entries 81
Mean 1690
Std Dev 1658
2
1
0
−1
−2
−3

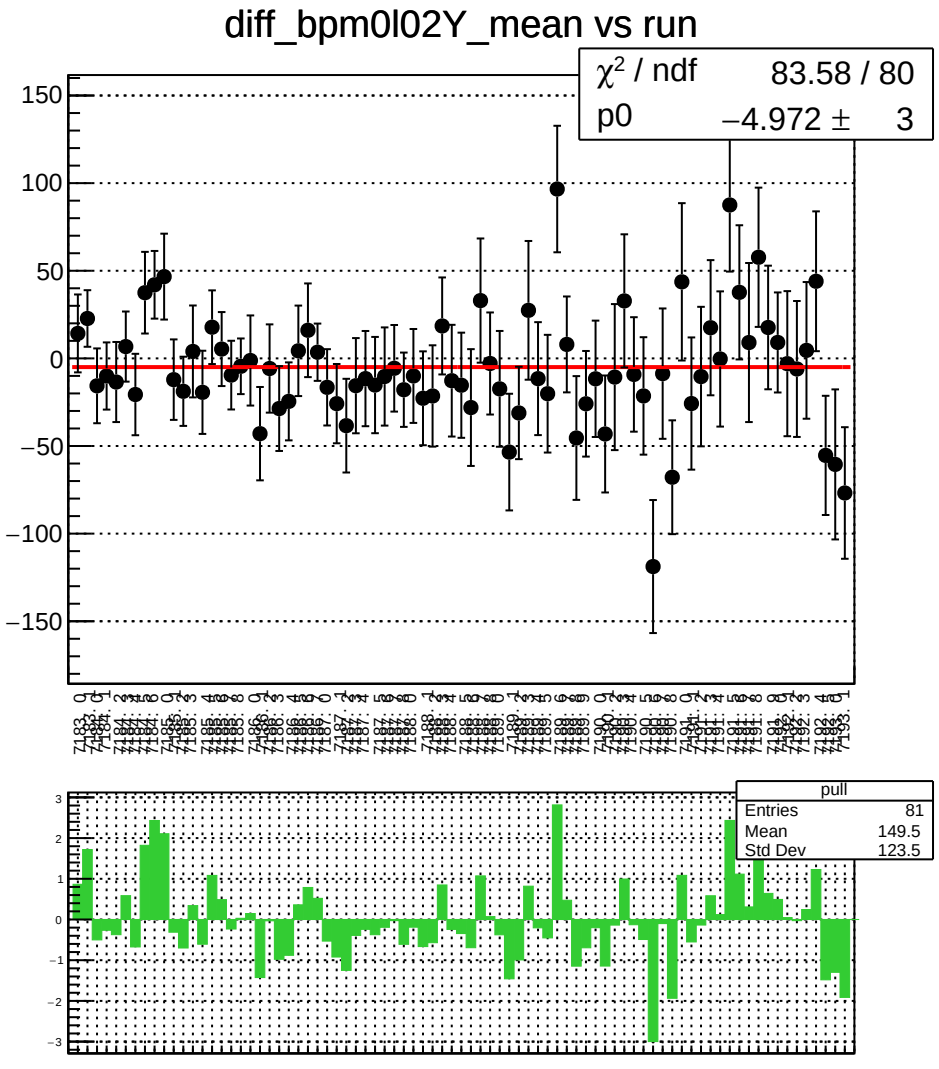

pull1D
Entries 81
Mean −0.004092
Std Dev 0.9944
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

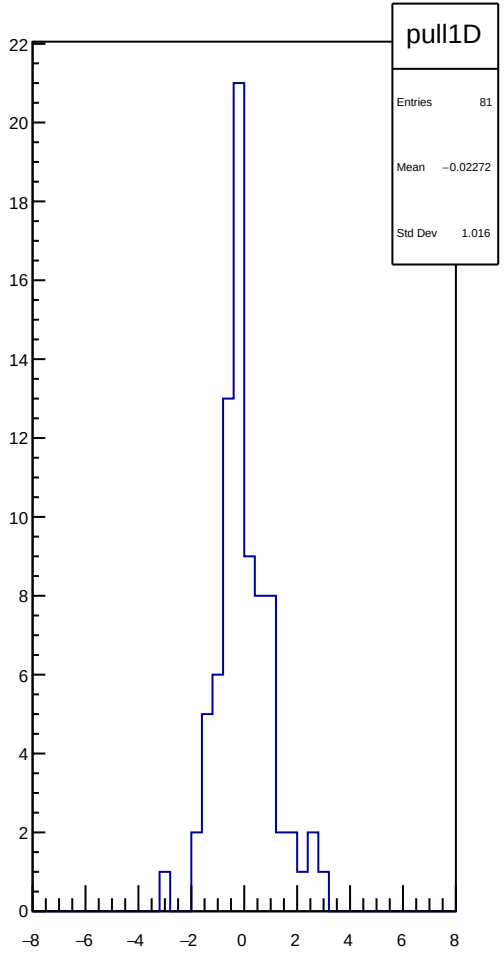

diff_bpm0l01Y_rms vs run
χ² / ndf 4094 / 80
p0 2354 ± 1.88
3200
3000
2800
2600
2400
2200

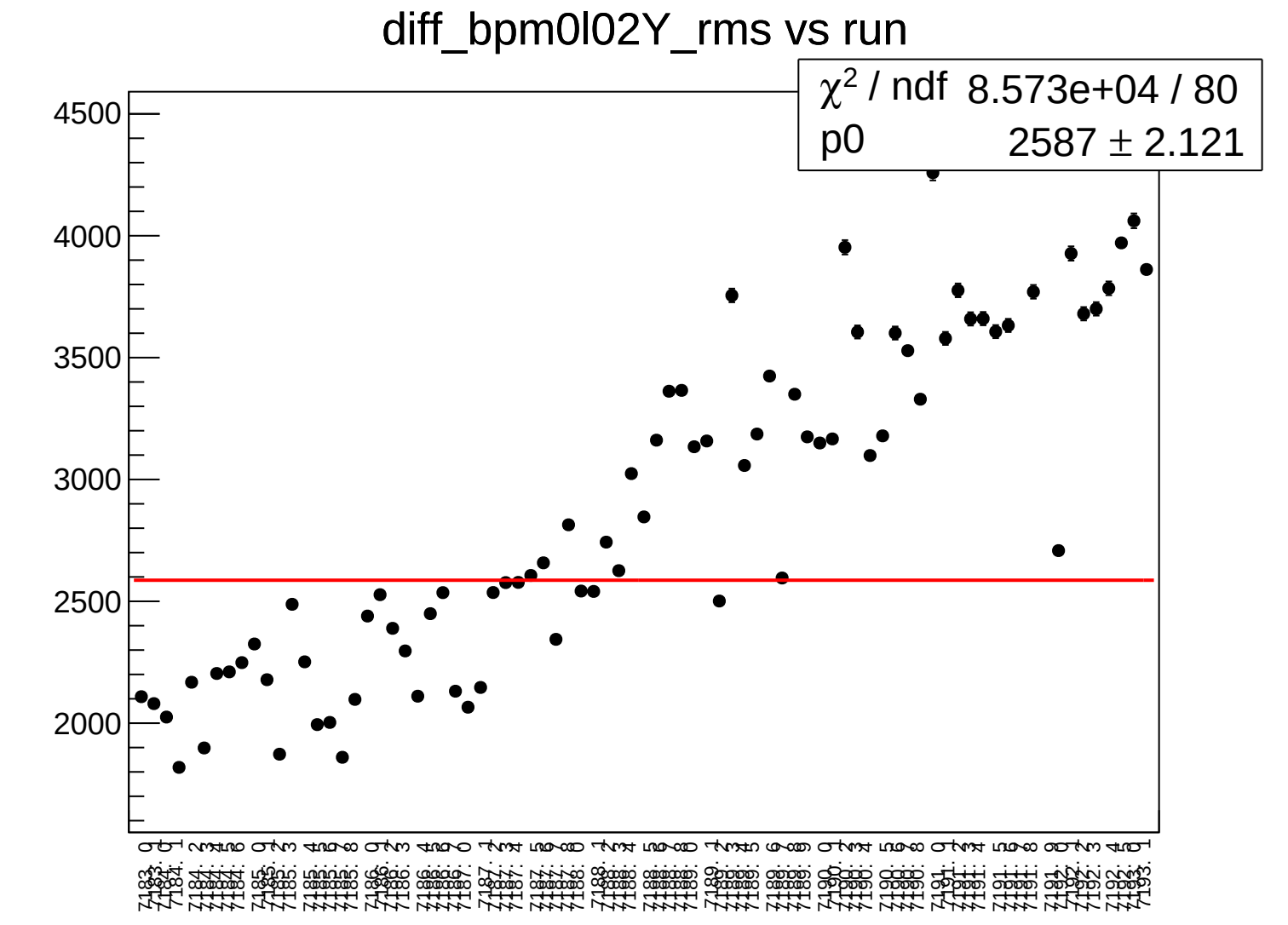

diff_bpm0l02X_mean vs run
χ² / ndf 82.38 / 80
p0 −13.75 ± 11.65
pull
Entries 81
Mean −1418
Std Dev 1448

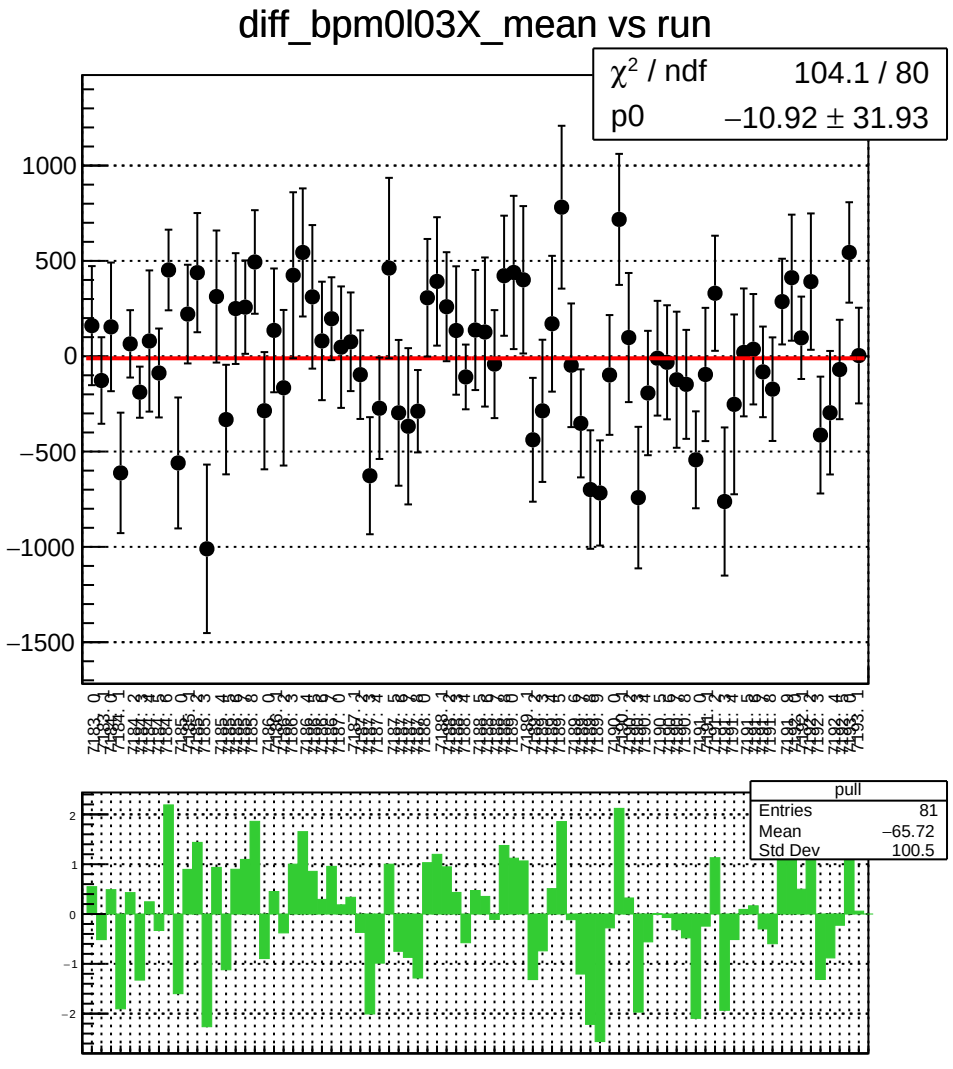

pull1D
Entries 81
Mean 0.002567
Std Dev 1.008

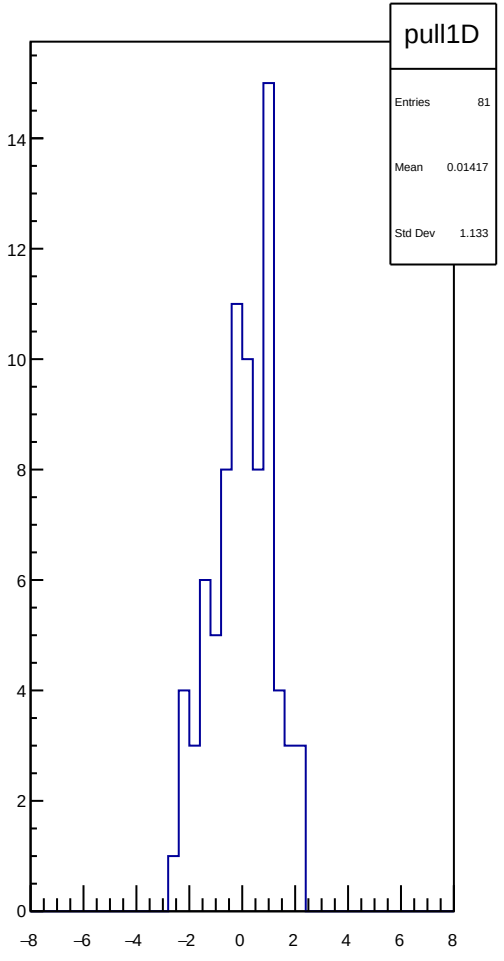

diff_bpm0l02X_rms vs run
χ² / ndf 286 / 80
p0 1.033e+04 ± 8.235
11000
10800
10600
10400
10200
10000

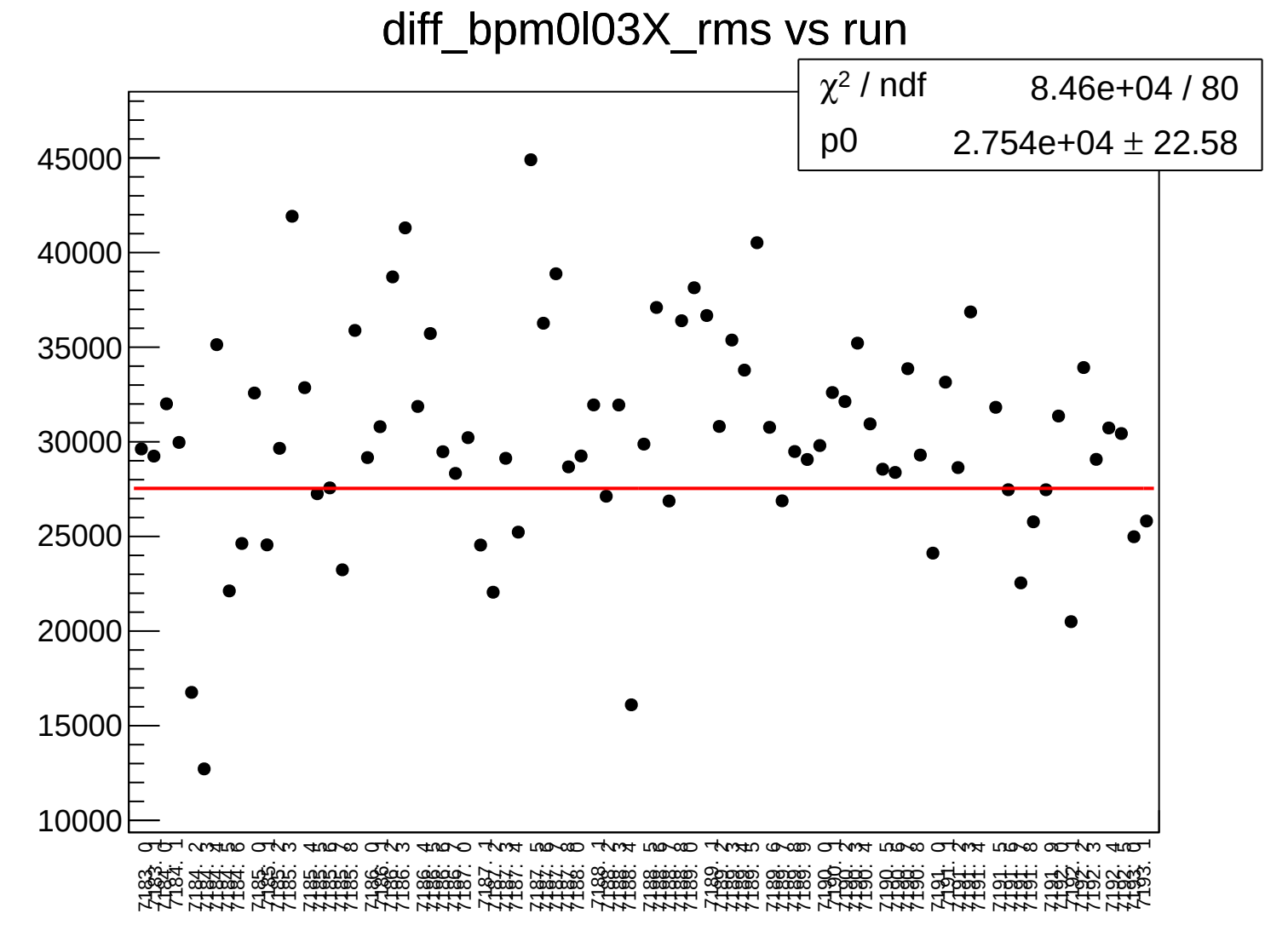

diff_bpm0l02Y_mean vs run
χ² / ndf 83.58 / 80
p0 −4.972 ± 3
150
100
50
0
−50
−100
−150
pull
Entries 81
Mean 149.5
Std Dev 123.5
3
2
1
0
−1
−2
−3

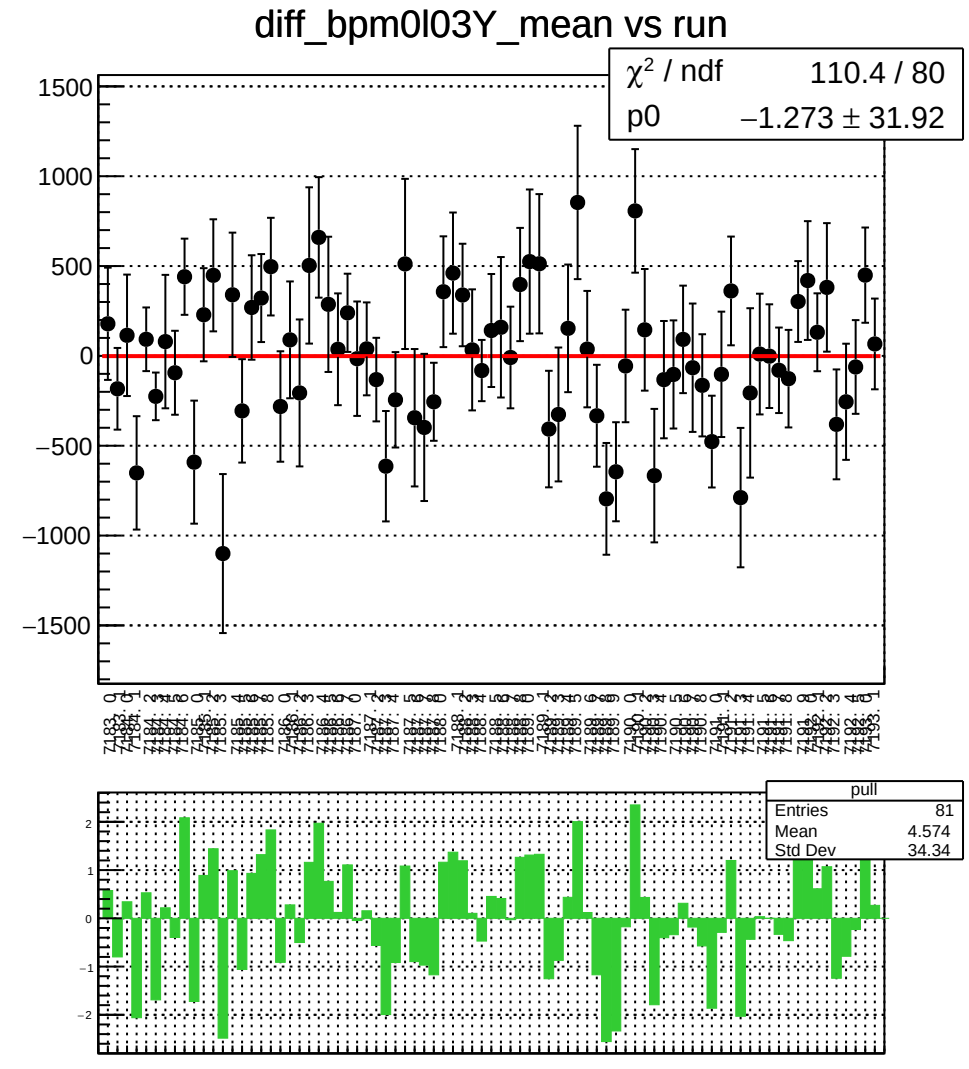

pull1D
Entries 81
Mean −0.02272
Std Dev 1.016
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

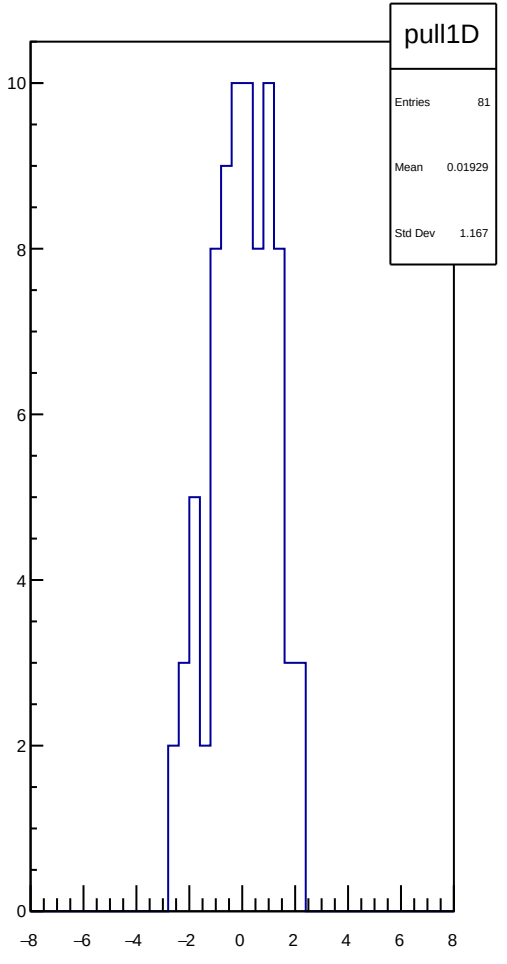

diff_bpm0l02Y_rms vs run
χ² / ndf 8.573e+04 / 80
p0 2587 ± 2.121
4500
4000
3500
3000
2500
2000

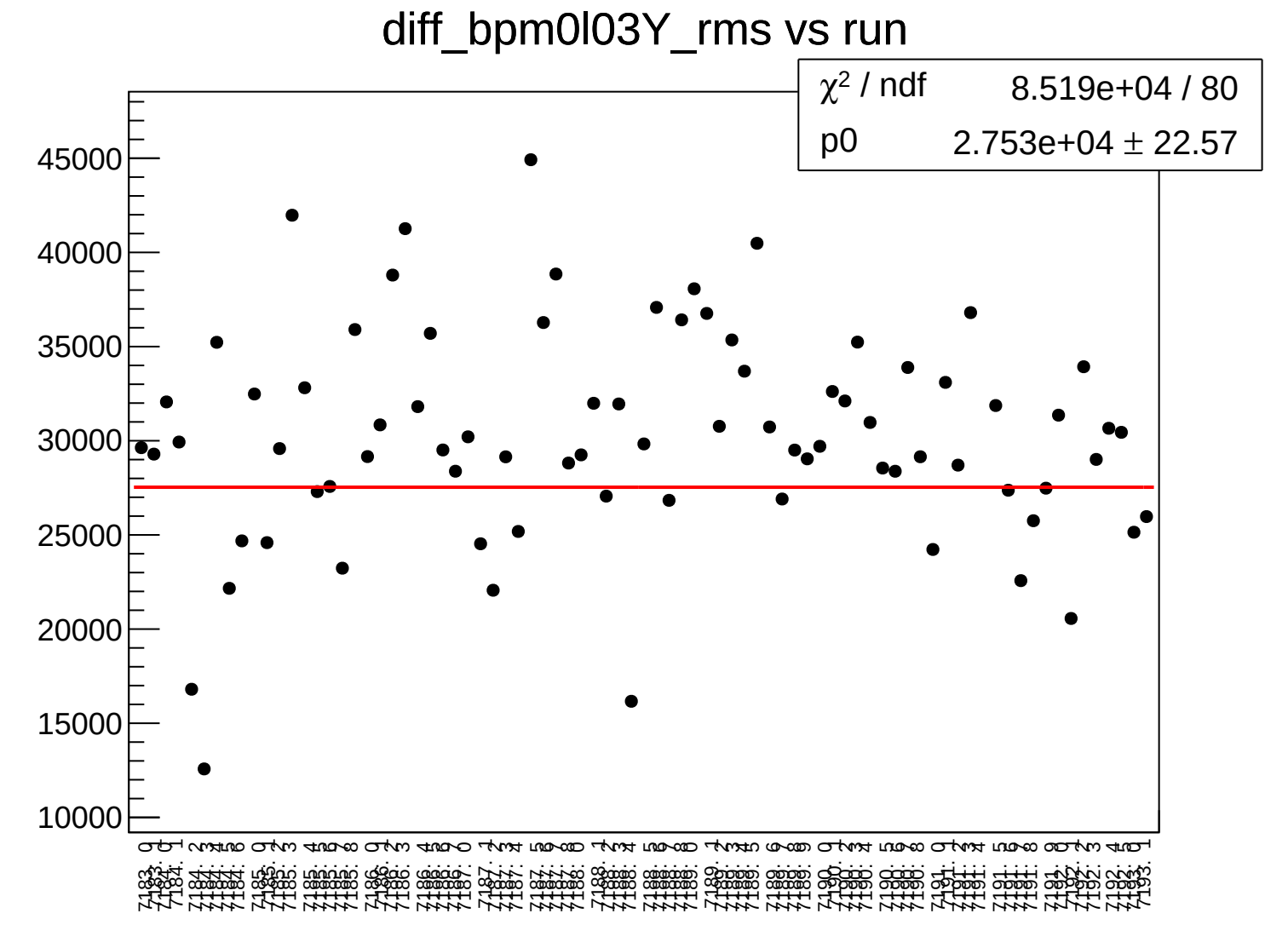

diff_bpm0l03X_mean vs run
χ^2 / ndf 104.1 / 80
p0 −10.92 ± 31.93
1000
500
0
−500
−1000
−1500
pull
Entries 81
Mean −65.72
Std Dev 100.5
2
1
0
−1
−2

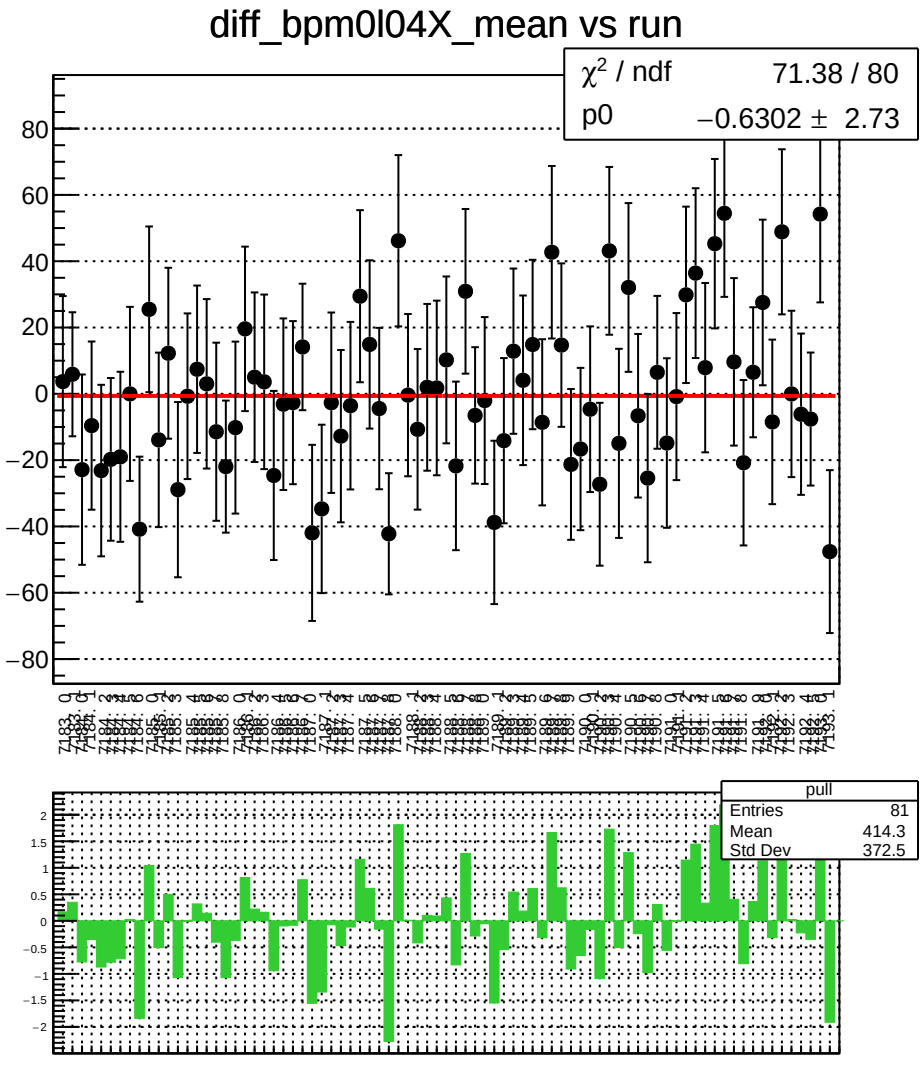

pull1D
Entries 81
Mean 0.01417
Std Dev 1.133
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

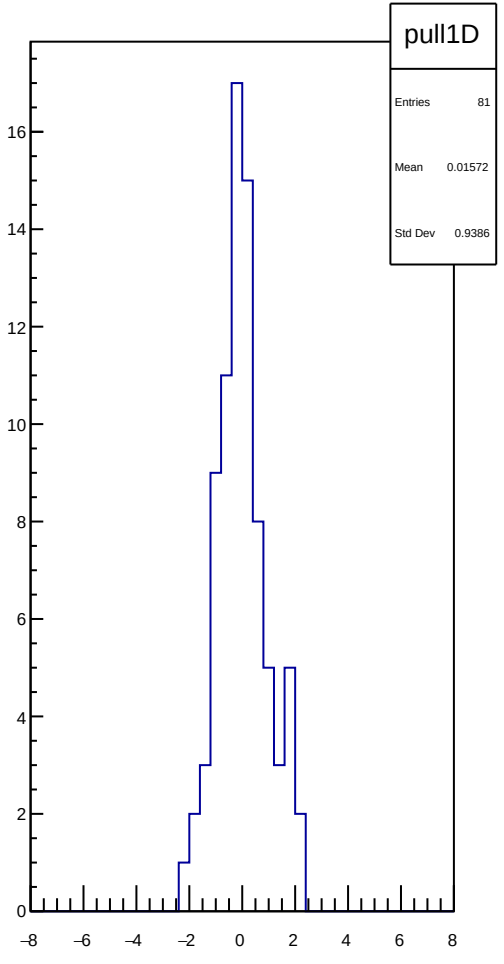

diff_bpm0l03X_rms vs run
χ² / ndf 8.46e+04 / 80
p0 2.754e+04 ± 22.58
45000
40000
35000
30000
25000
20000
15000
10000


diff_bpm0l03Y_mean vs run
χ² / ndf 110.4 / 80
p0 −1.273 ± 31.92
1500
1000
500
0
−500
−1000
−1500
pull
Entries 81
Mean 4.574
Std Dev 34.34
2
1
0
−1
−2

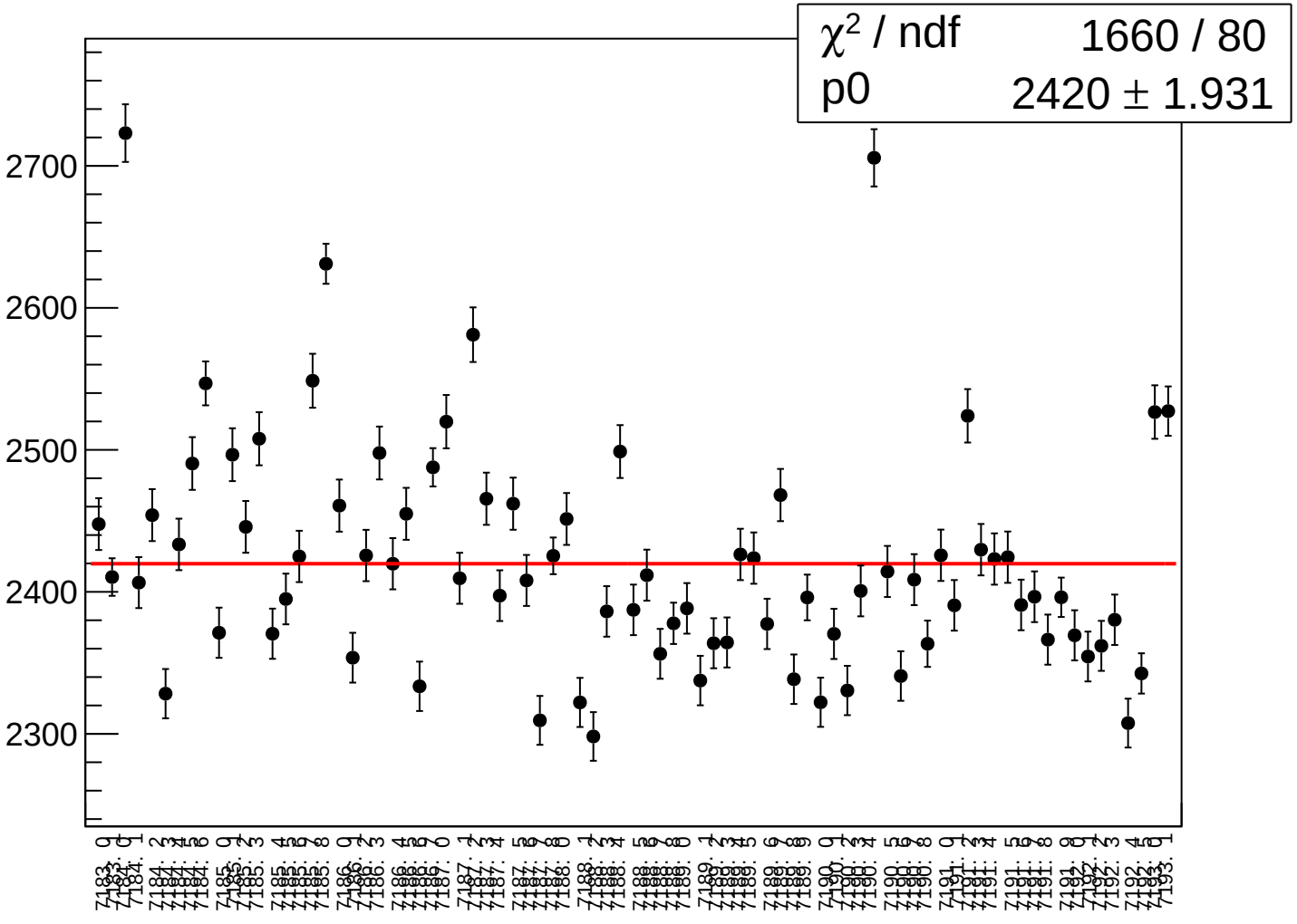

pull1D
Entries 81
Mean 0.01929
Std Dev 1.167
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

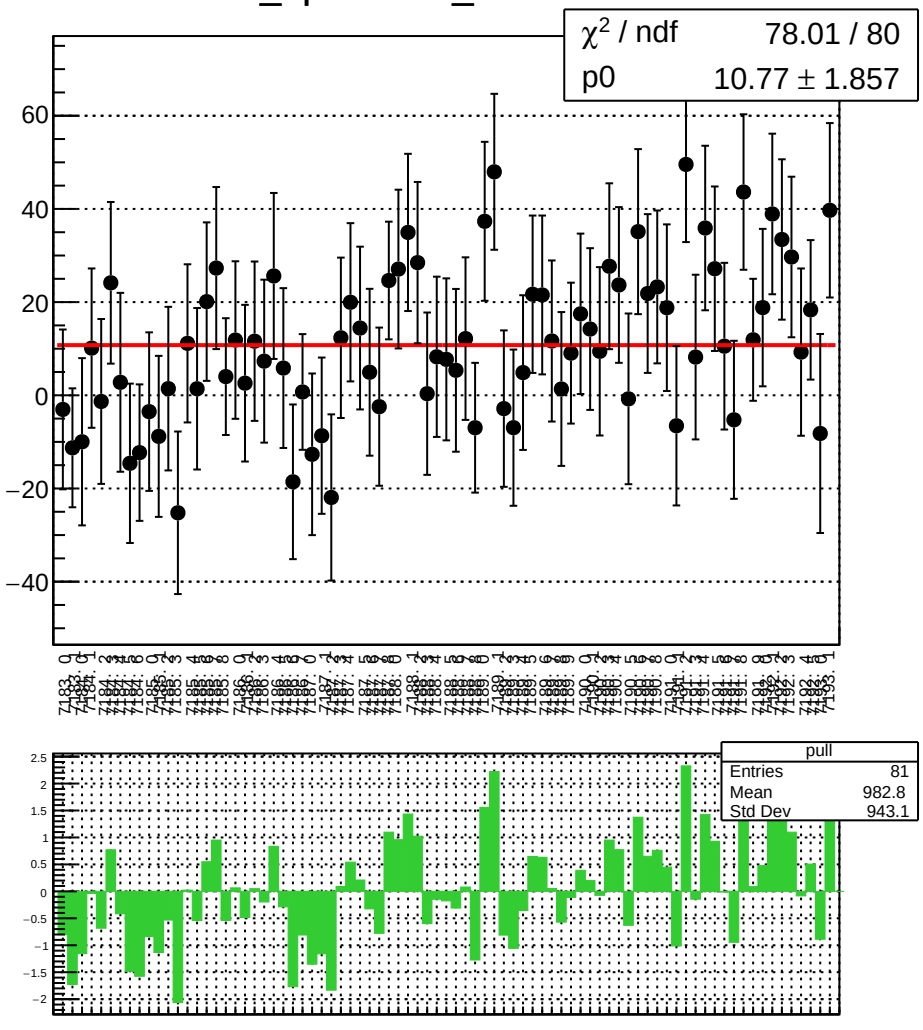

diff_bpm0l03Y_rms vs run
χ² / ndf 8.519e+04 / 80
p0 2.753e+04 ± 22.57
45000
40000
35000
30000
25000
20000
15000
10000

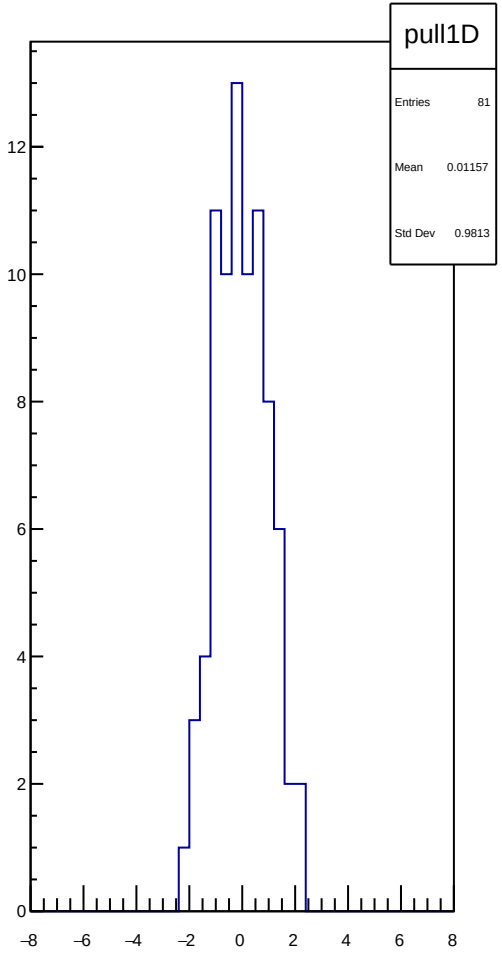

diff_bpm0l04X_mean vs run
χ² / ndf 71.38 / 80
p0 −0.6302 ± 2.73
pull
Entries 81
Mean 414.3
Std Dev 372.5

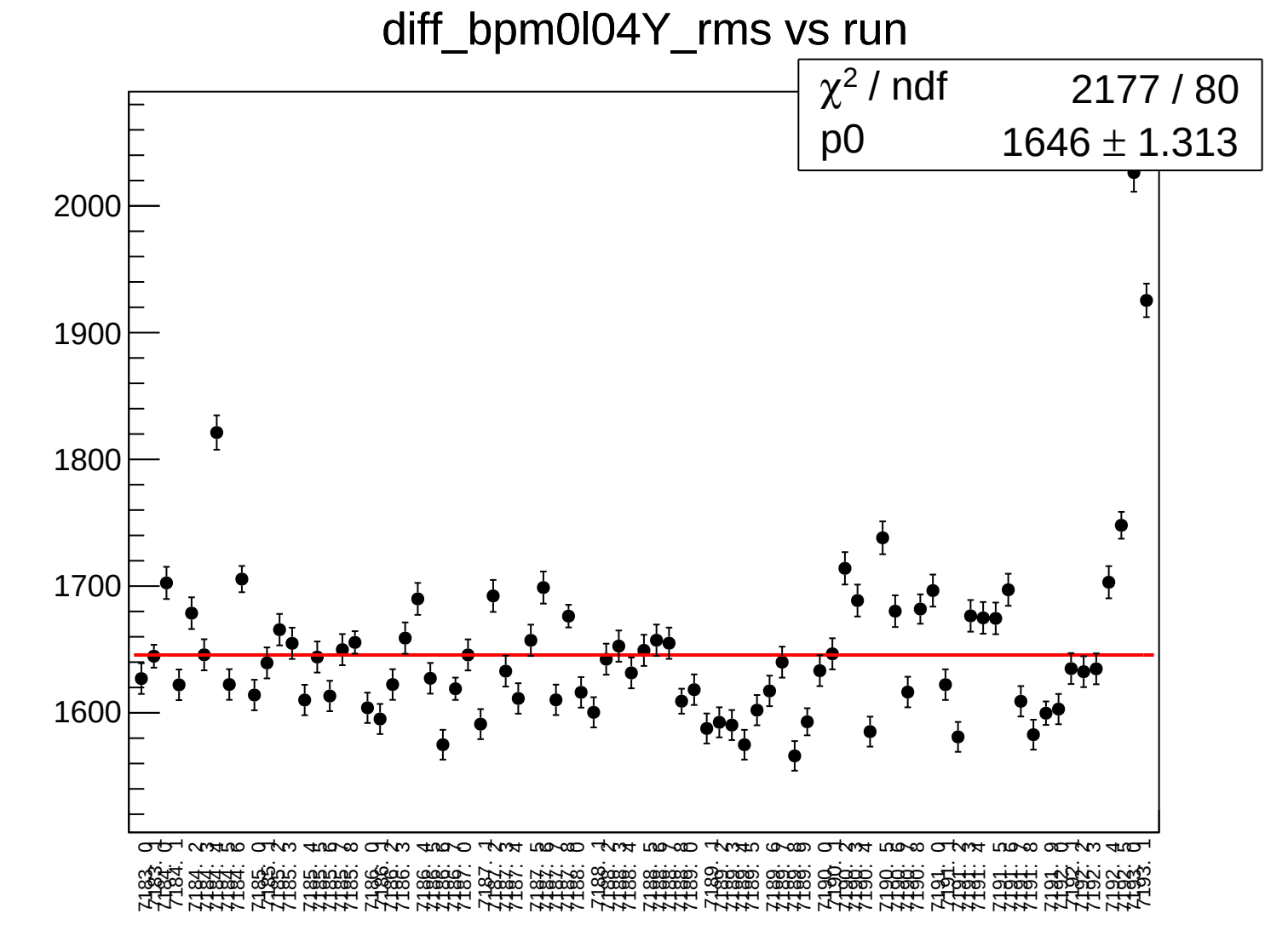

pull1D
Entries 81
Mean 0.01572
Std Dev 0.9386

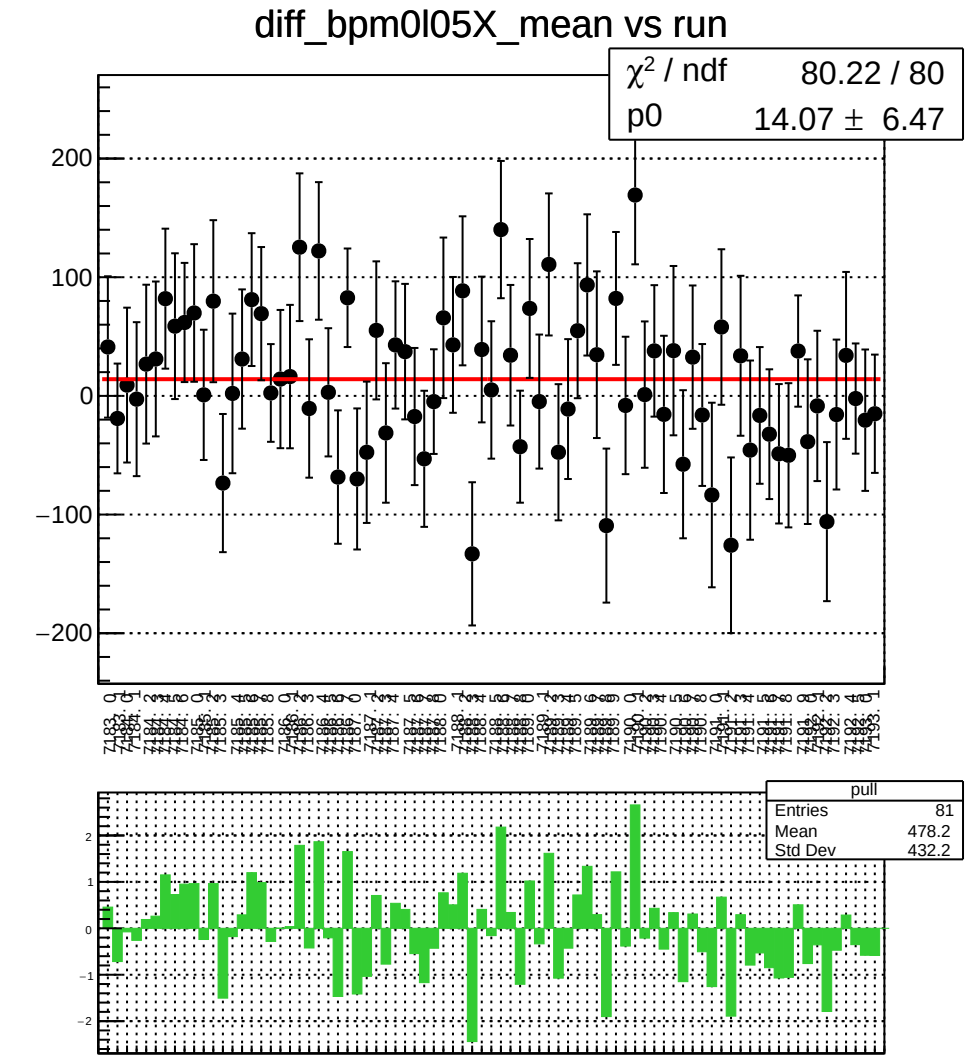
diff_bpm0l04X_rms vs run

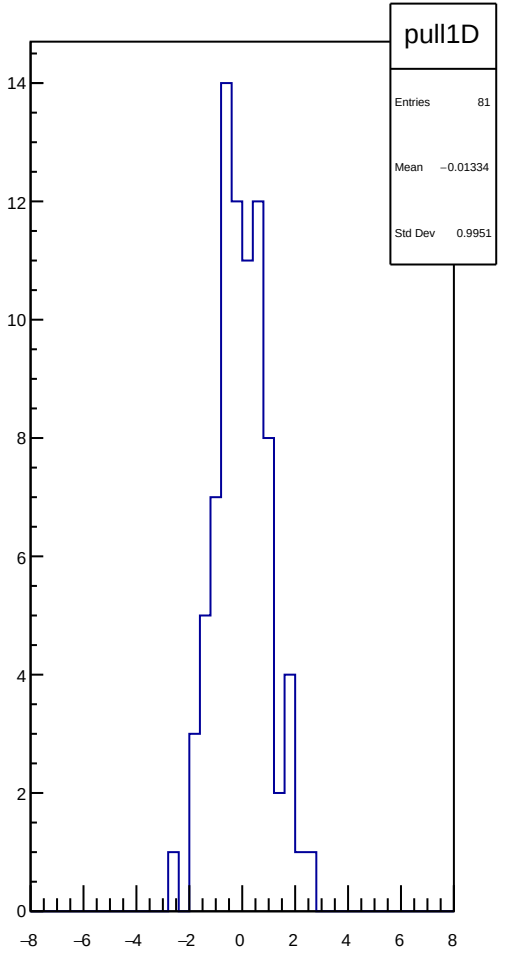


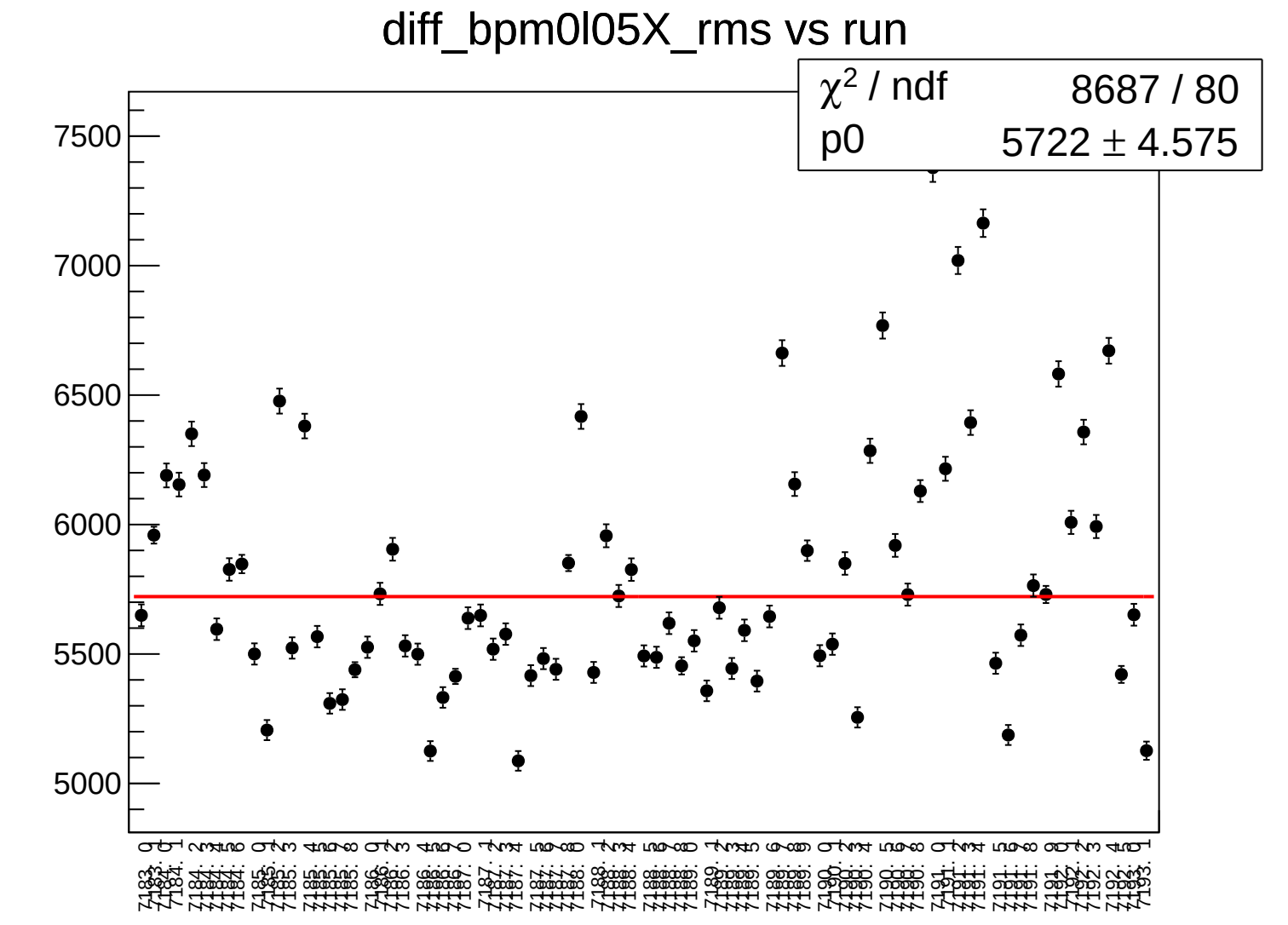

diff_bpm0l04Y_mean vs run
χ^2 / ndf 78.01 / 80
p0 10.77 ± 1.857
pull
Entries 81
Mean 982.8
Std Dev 943.1

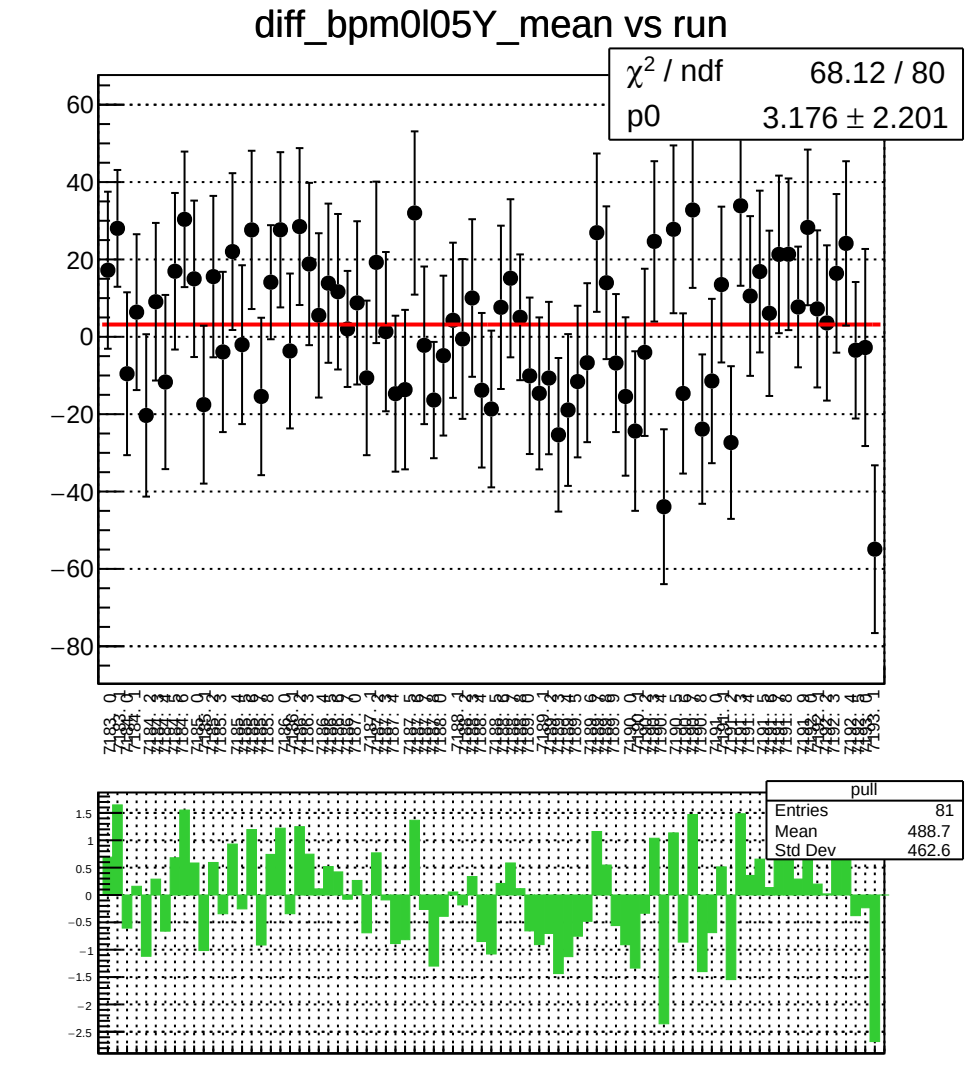

pull1D
Entries 81
Mean 0.01157
Std Dev 0.9813

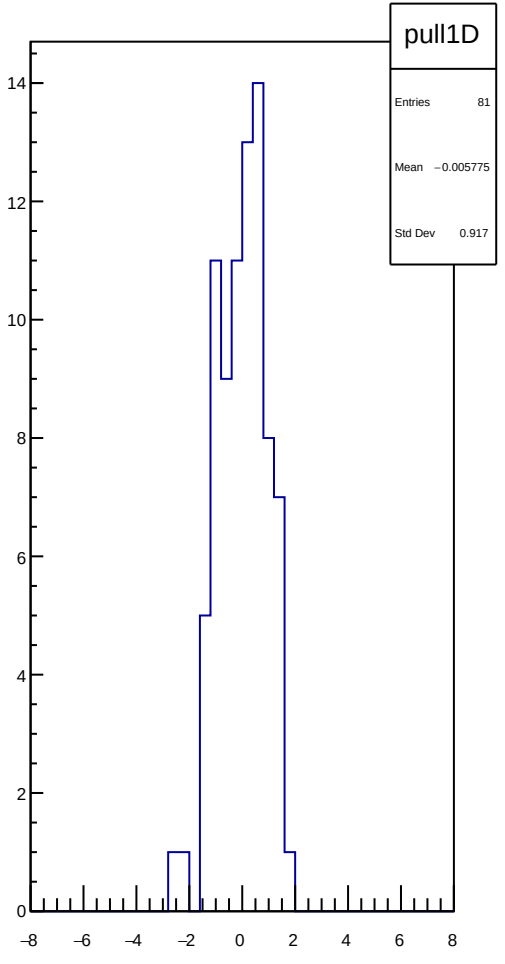

diff_bpm0l04Y_rms vs run
χ² / ndf 2177 / 80
p0 1646 ± 1.313
2000
1900
1800
1700
1600

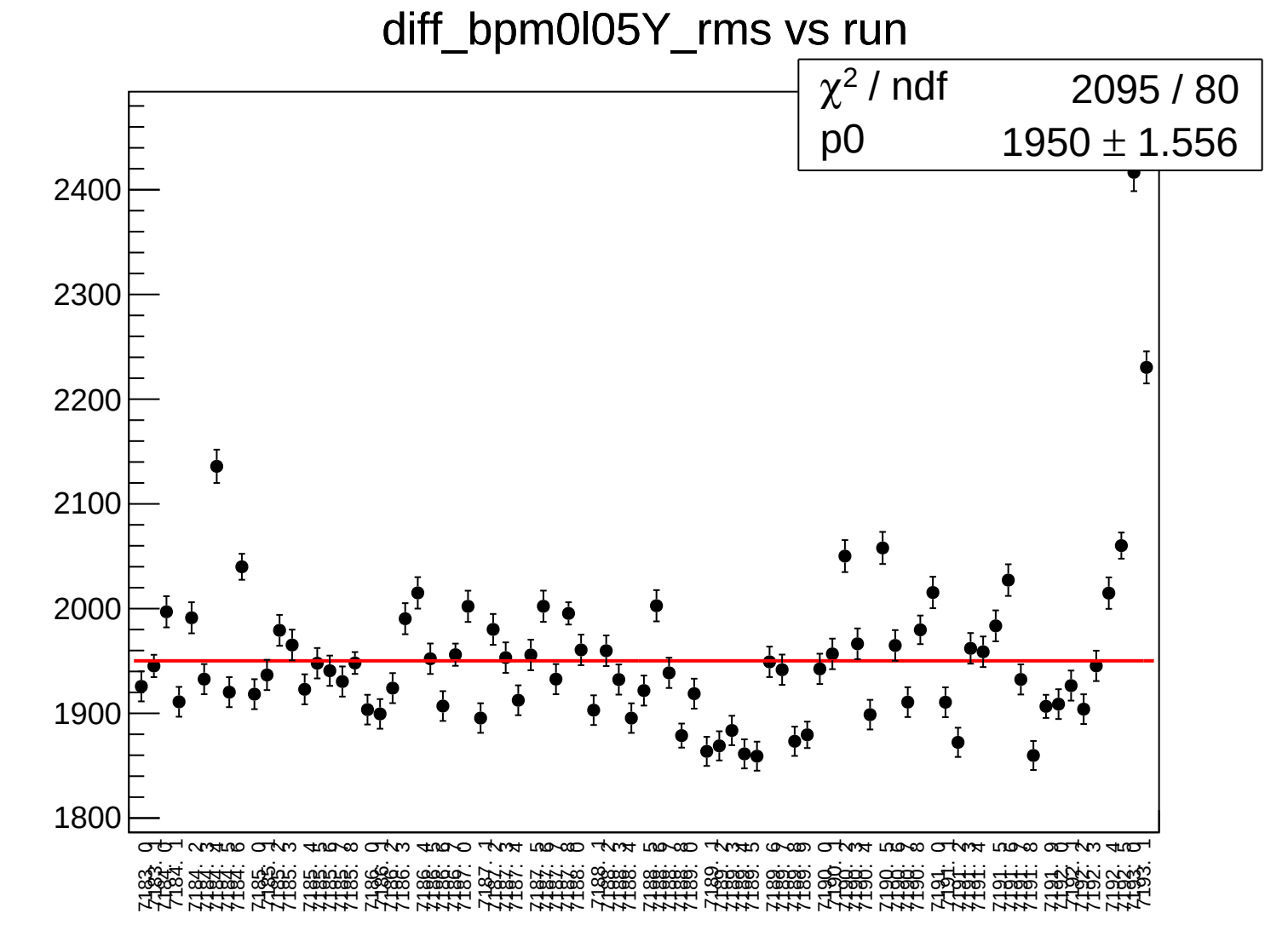

diff_bpm0l05X_mean vs run
χ² / ndf 80.22 / 80
p0 14.07 ± 6.47
200
100
0
−100
−200
pull
Entries 81
Mean 478.2
Std Dev 432.2
2
1
0
−1
−2

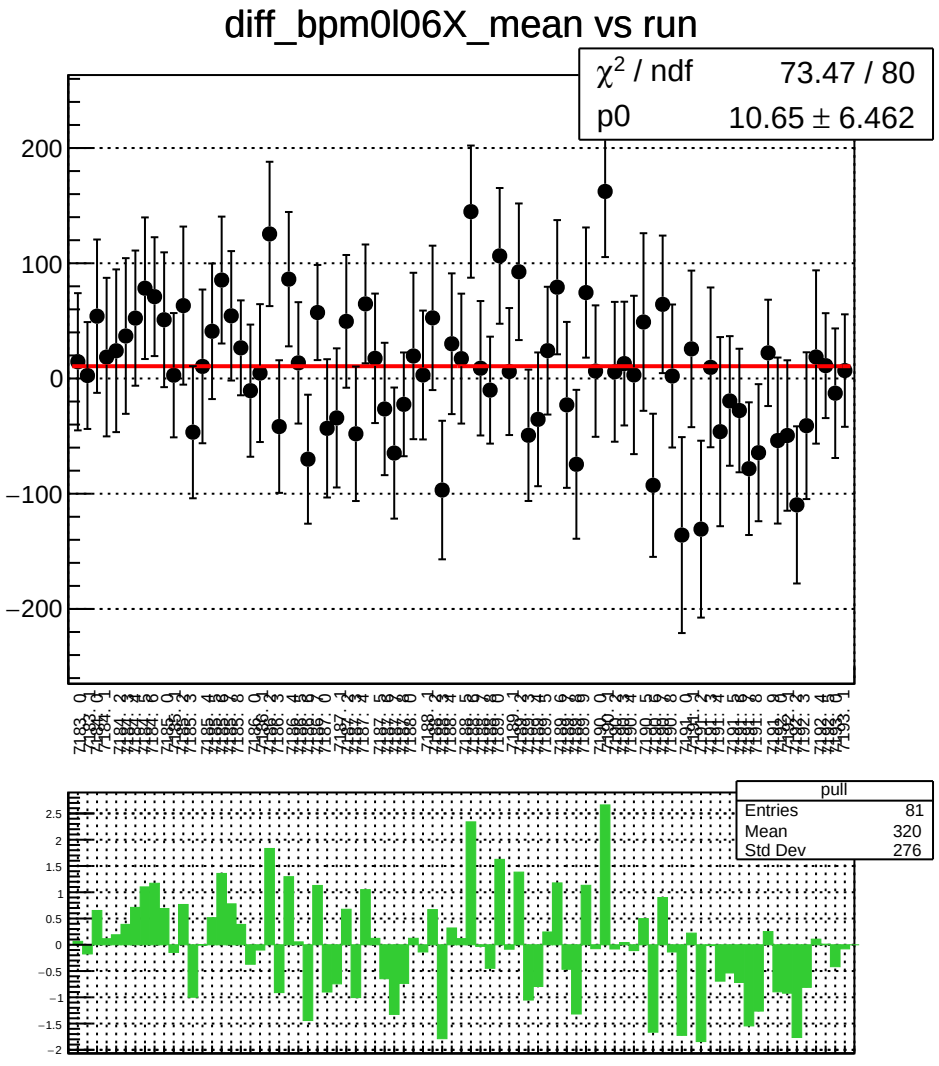

pull1D
Entries 81
Mean −0.01334
Std Dev 0.9951
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

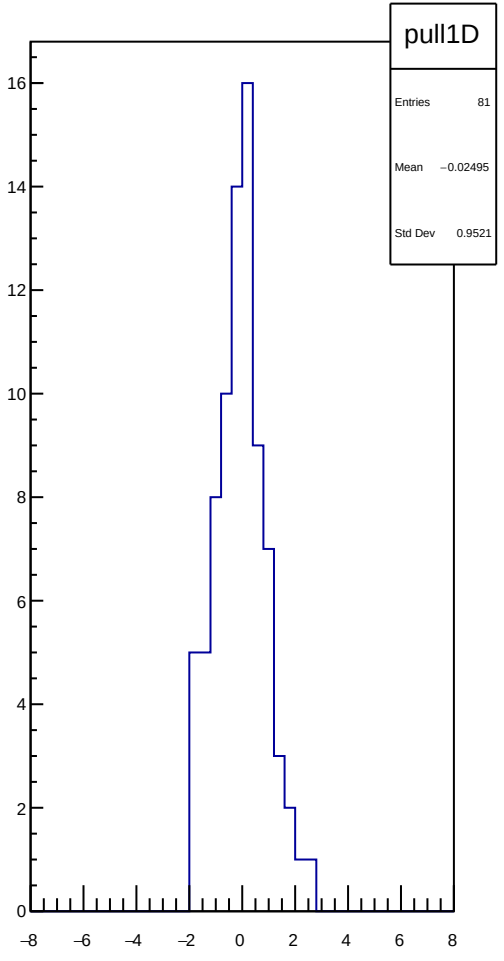

diff_bpm0l05X_rms vs run
χ^2 / ndf 8687 / 80
p0 5722 ± 4.575
7500
7000
6500
6000
5500
5000

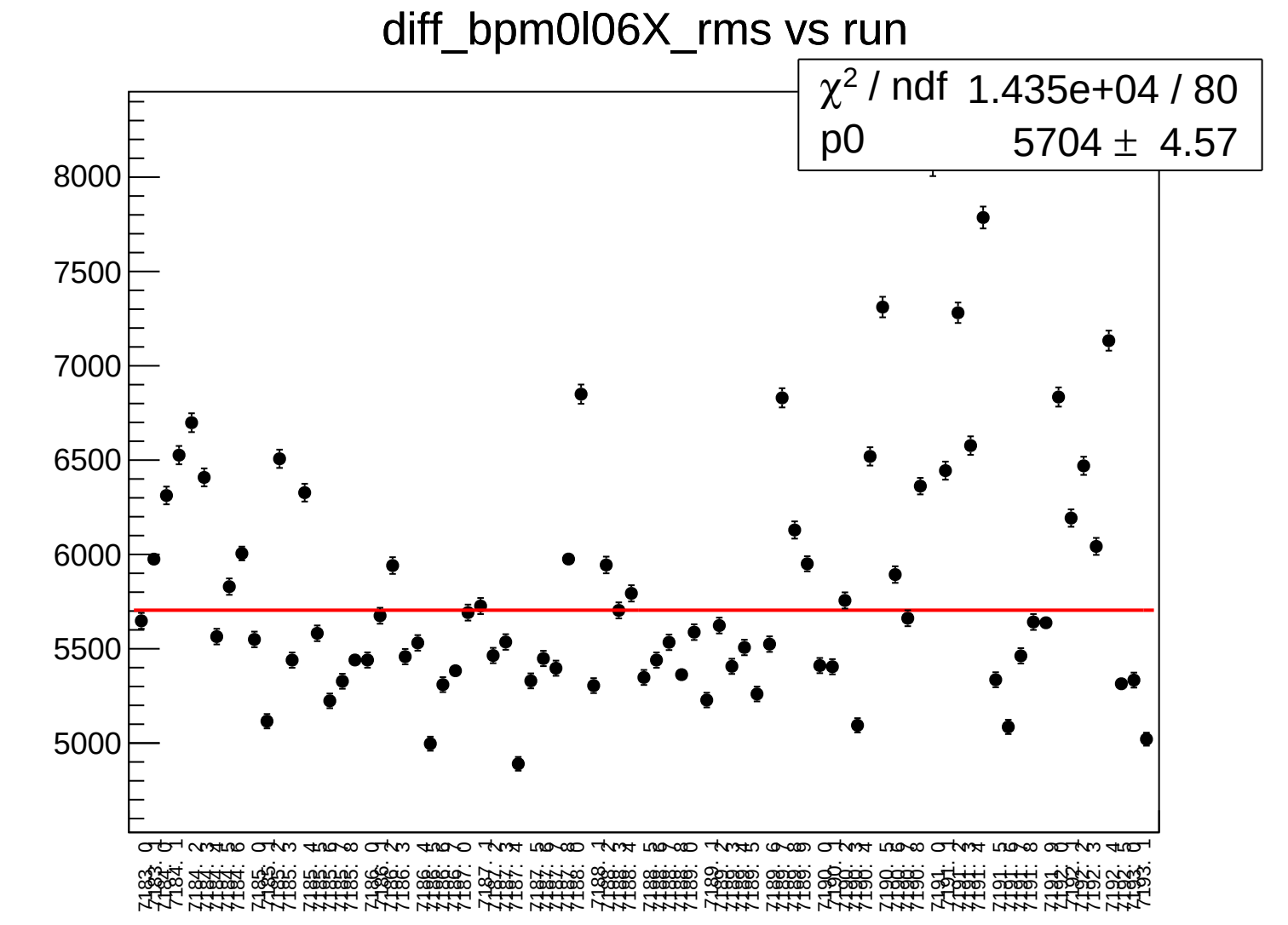

diff_bpm0l05Y_mean vs run
χ² / ndf 68.12 / 80
p0 3.176 ± 2.201
pull
Entries 81
Mean 488.7
Std Dev 462.6

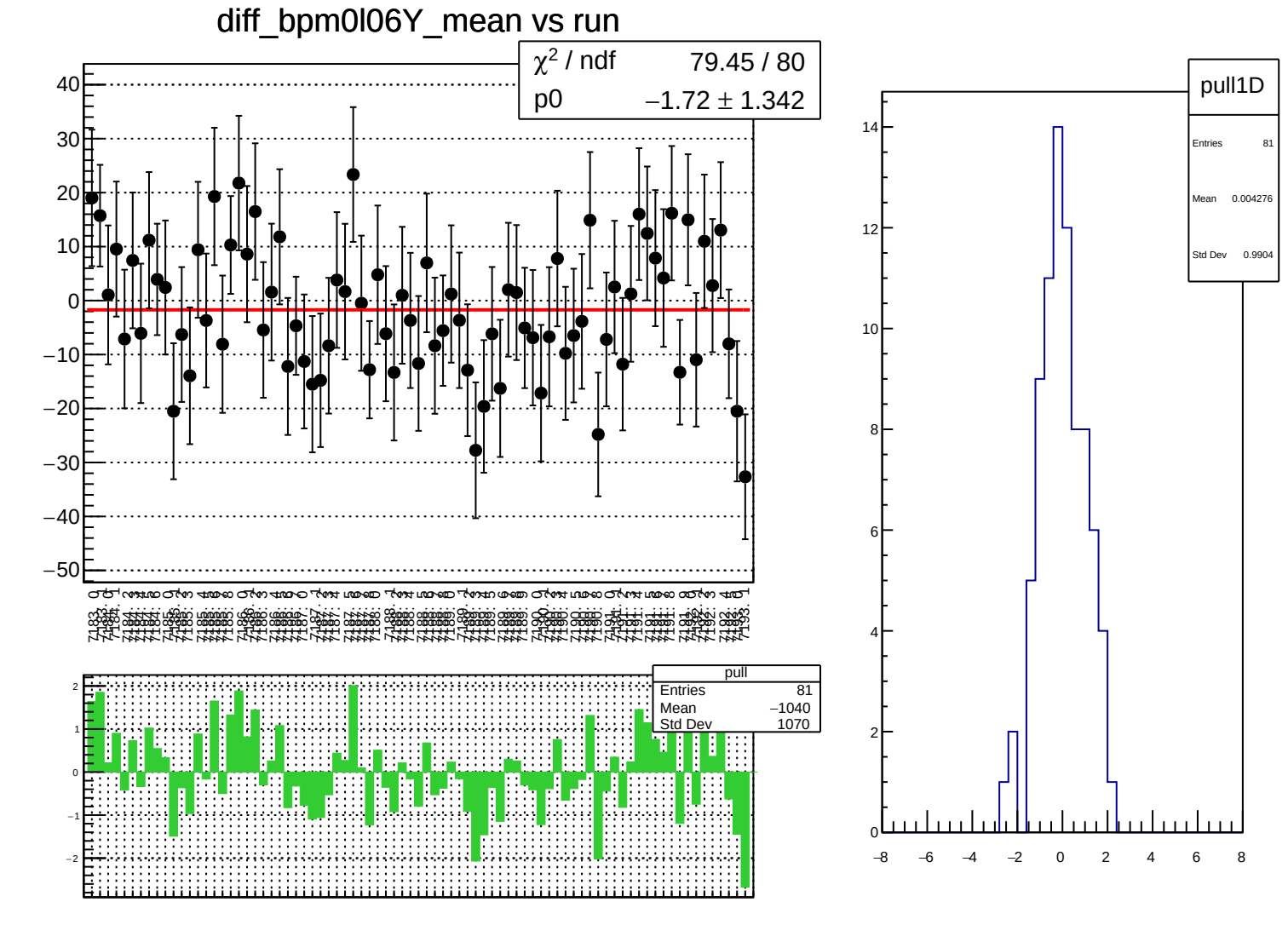

pull1D
Entries 81
Mean −0.005775
Std Dev 0.917

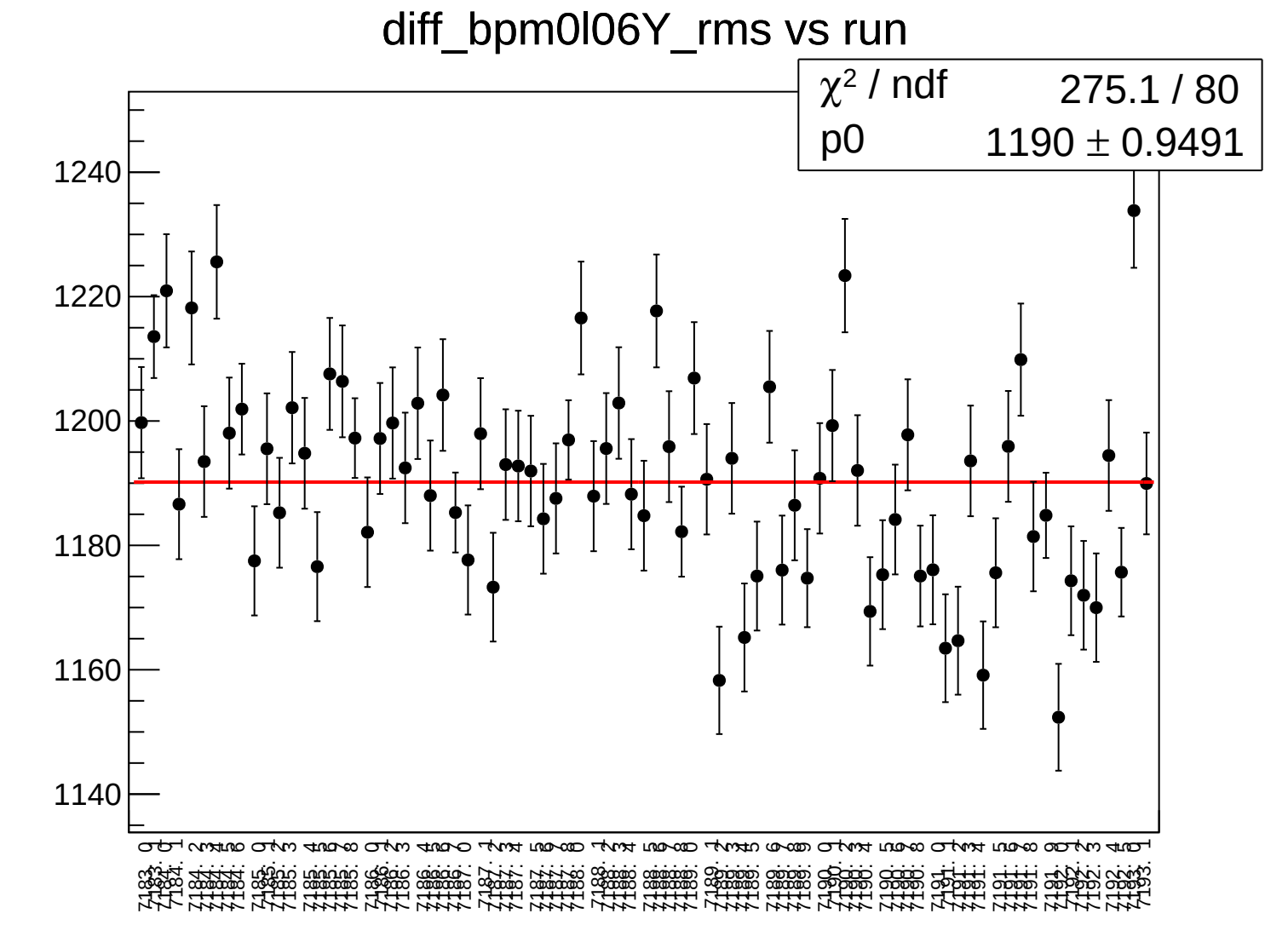

diff_bpm0l05Y_rms vs run
χ² / ndf 2095 / 80
p0 1950 ± 1.556
2400
2300
2200
2100
2000
1900
1800

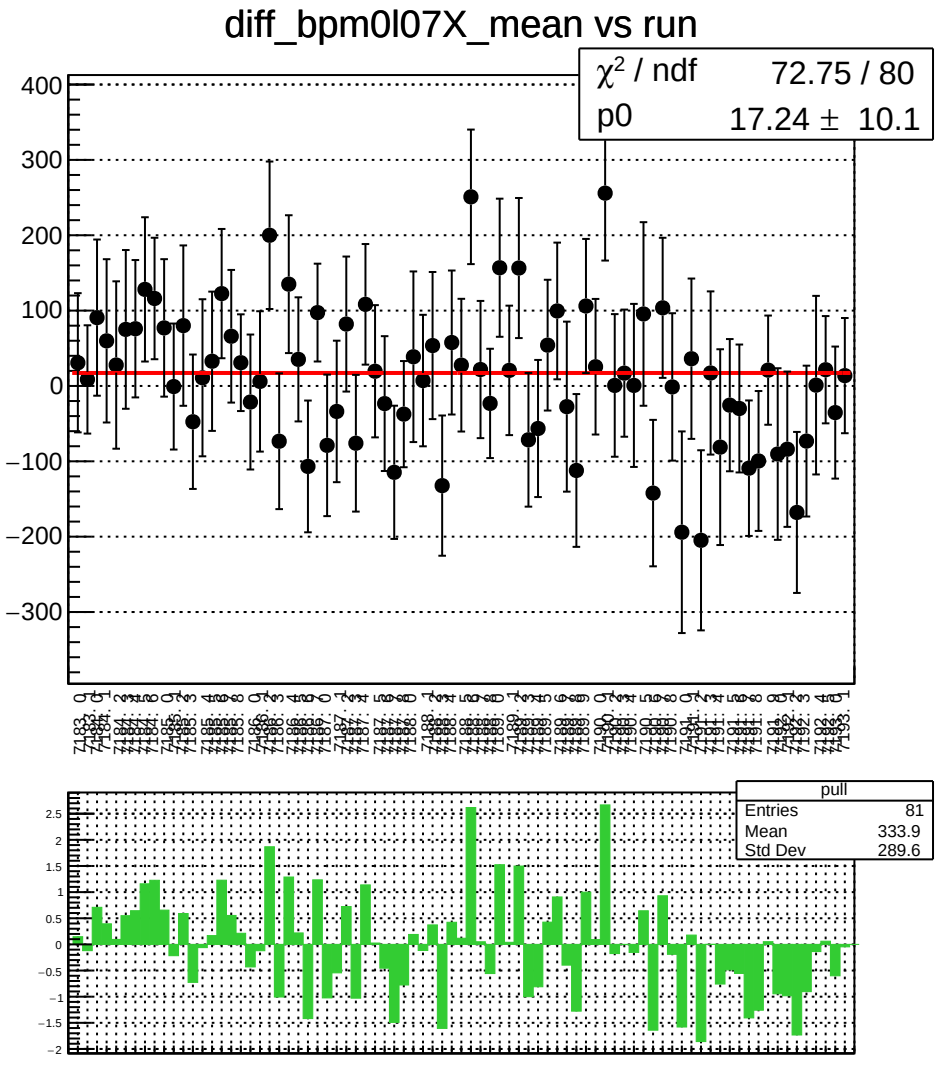

diff_bpm0l06X_mean vs run
χ^2 / ndf 73.47 / 80
p0 10.65 ± 6.462
pull
Entries 81
Mean 320
Std Dev 276

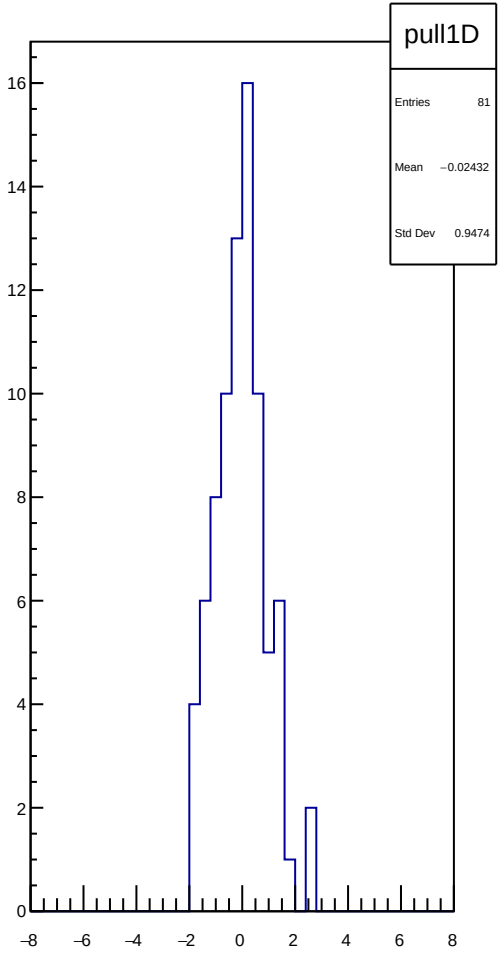

pull1D
Entries 81
Mean −0.02495
Std Dev 0.9521

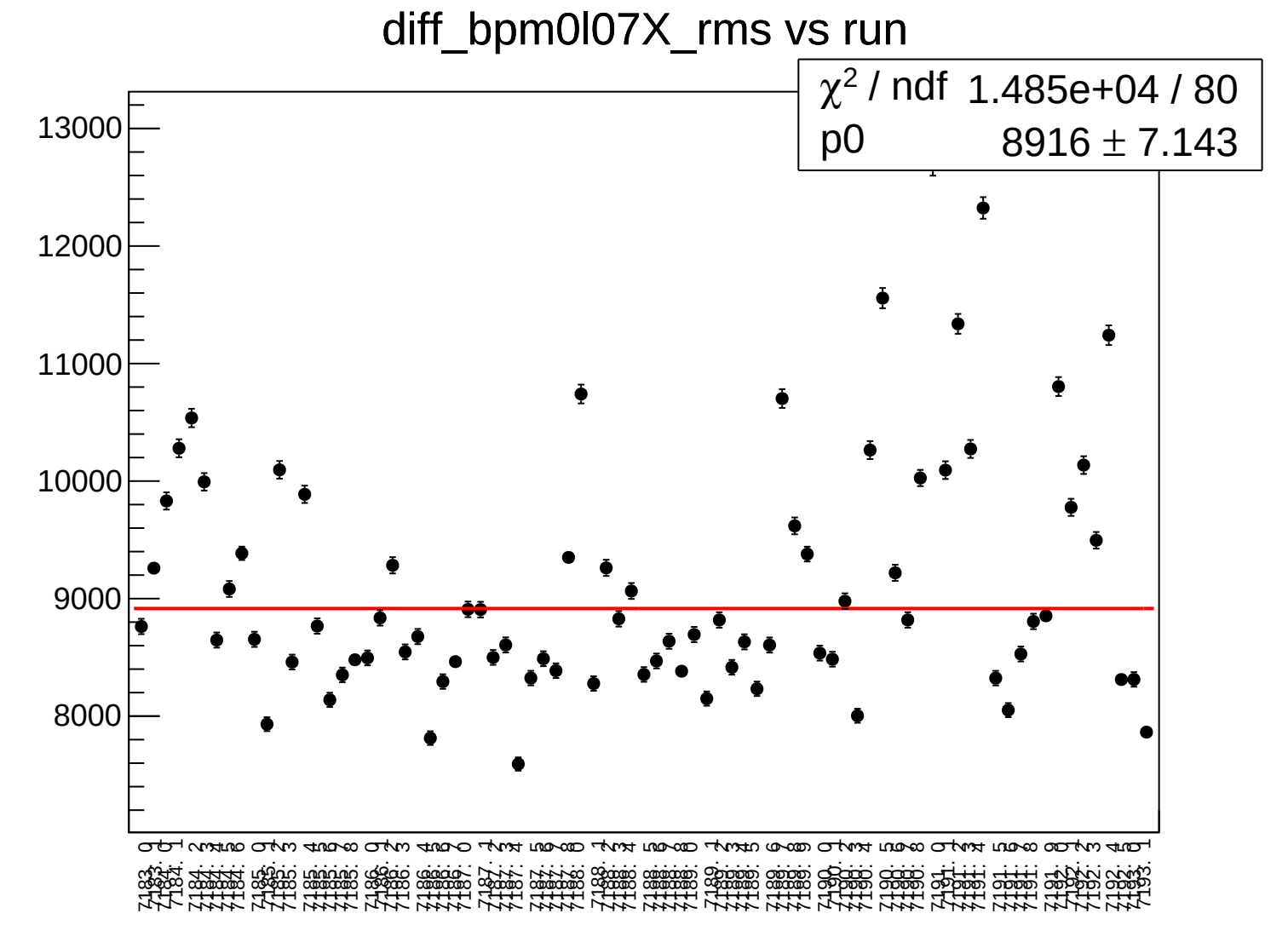

diff_bpm0l06X_rms vs run
χ^2 / ndf 1.435e+04 / 80
p0 5704 ± 4.57
8000
7500
7000
6500
6000
5500
5000

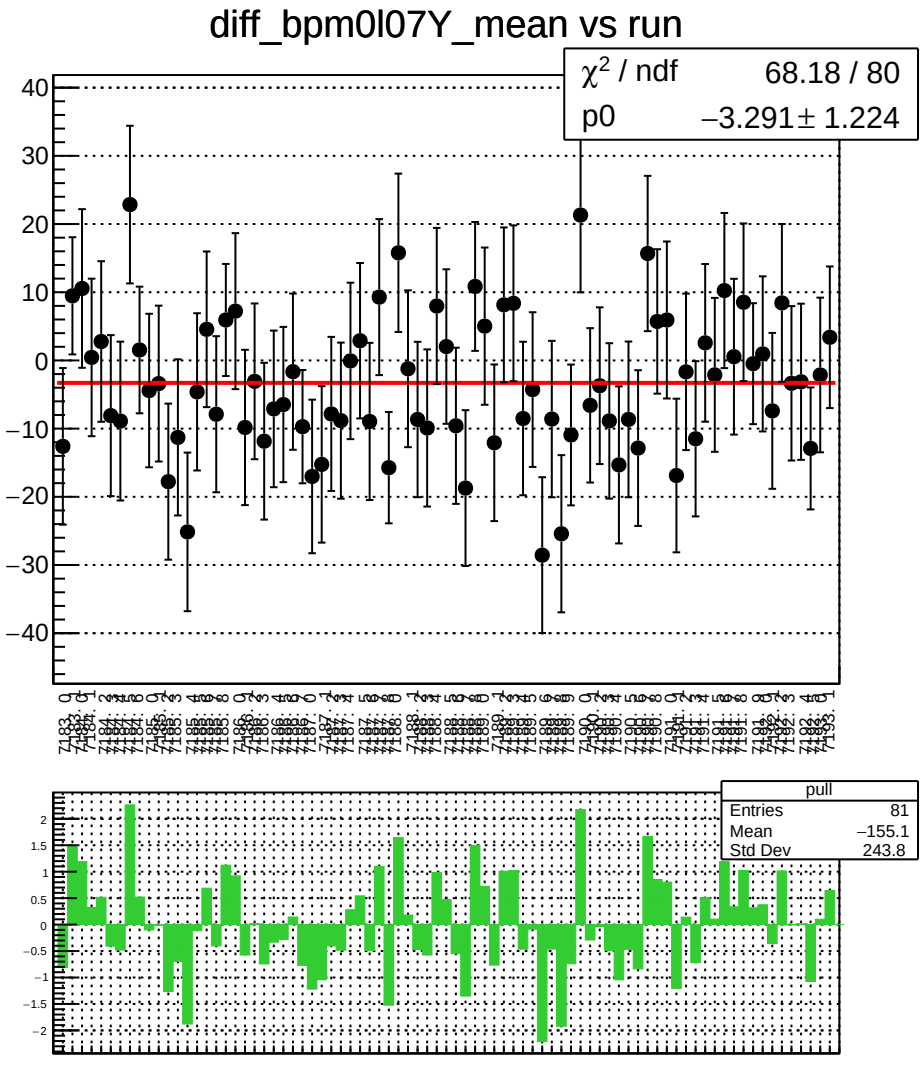

diff_bpm0l06Y_mean vs run
χ² / ndf 79.45 / 80
p0 −1.72 ± 1.342
pull
Entries 81
Mean −1040
Std Dev 1070
pull1D
Entries 81
Mean 0.004276
Std Dev 0.9904

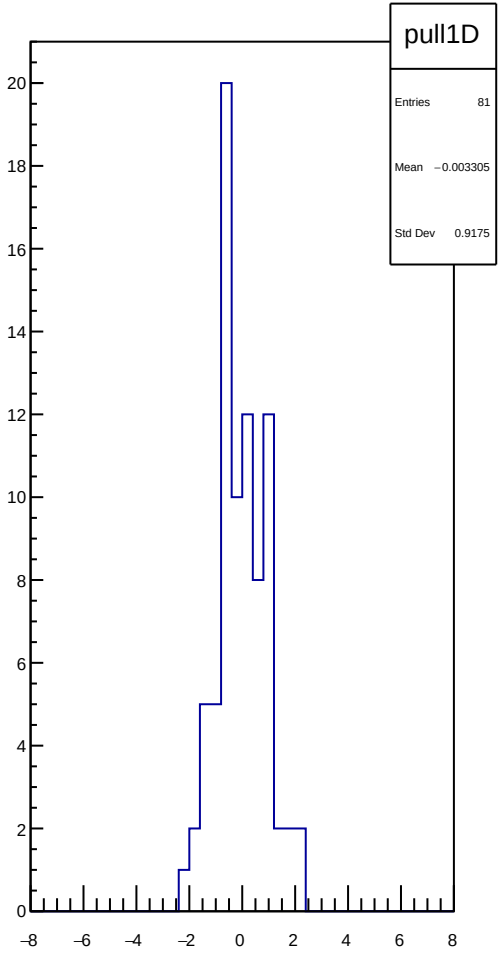

diff_bpm0l06Y_rms vs run
χ² / ndf 275.1 / 80
p0 1190 ± 0.9491
1240
1220
1200
1180
1160
1140

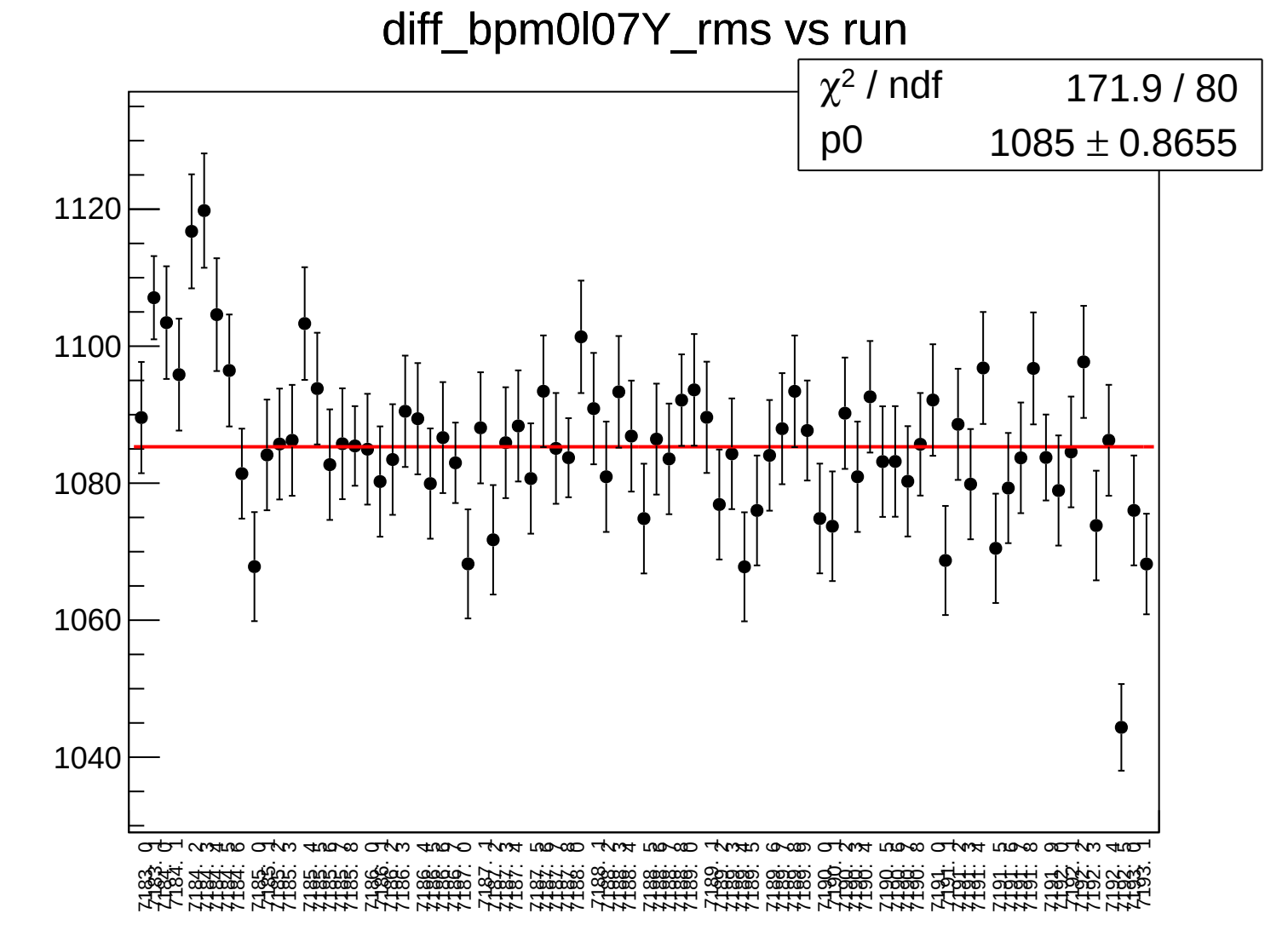

diff_bpm0l07X_mean vs run
χ² / ndf 72.75 / 80
p0 17.24 ± 10.1
pull
Entries 81
Mean 333.9
Std Dev 289.6

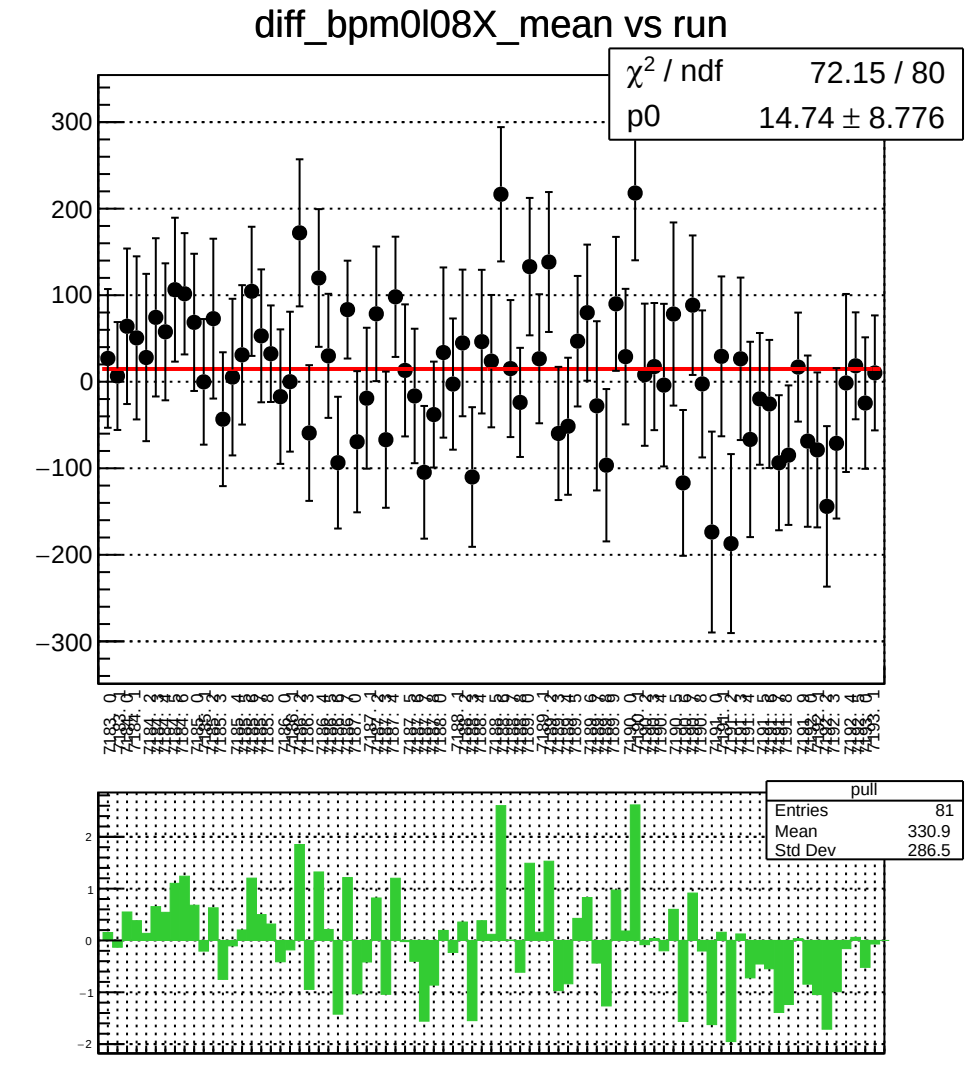

pull1D
Entries 81
Mean −0.02432
Std Dev 0.9474

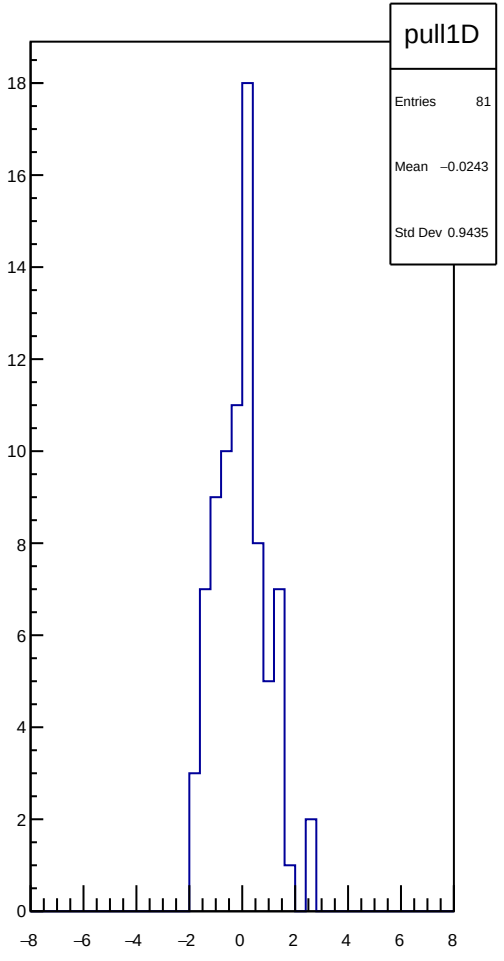

diff_bpm0l07X_rms vs run
χ² / ndf 1.485e+04 / 80
p0 8916 ± 7.143
13000
12000
11000
10000
9000
8000

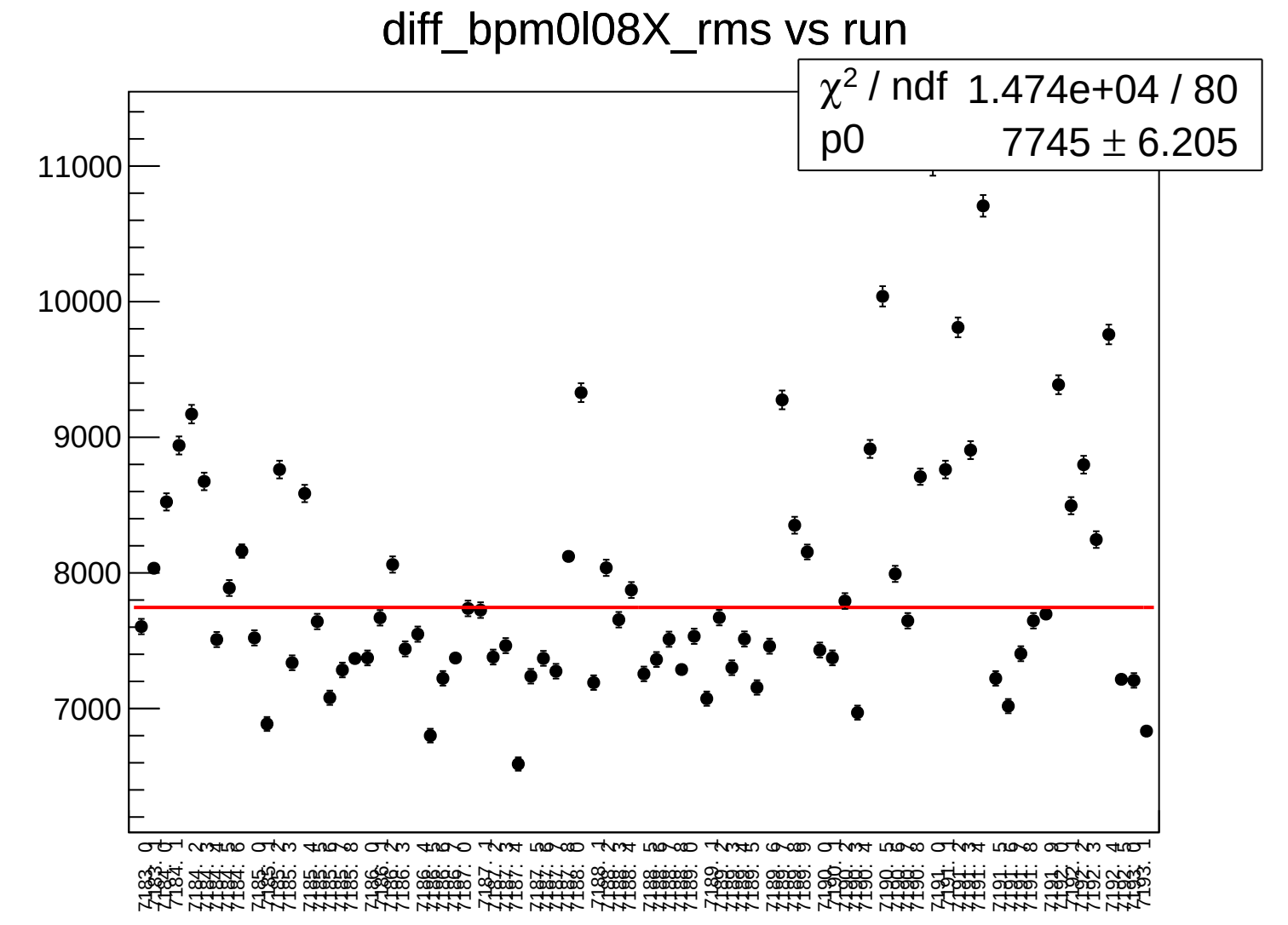

diff_bpm0l07Y_mean vs run
χ^2 / ndf 68.18 / 80
p0 −3.291± 1.224
pull
Entries 81
Mean −155.1
Std Dev 243.8

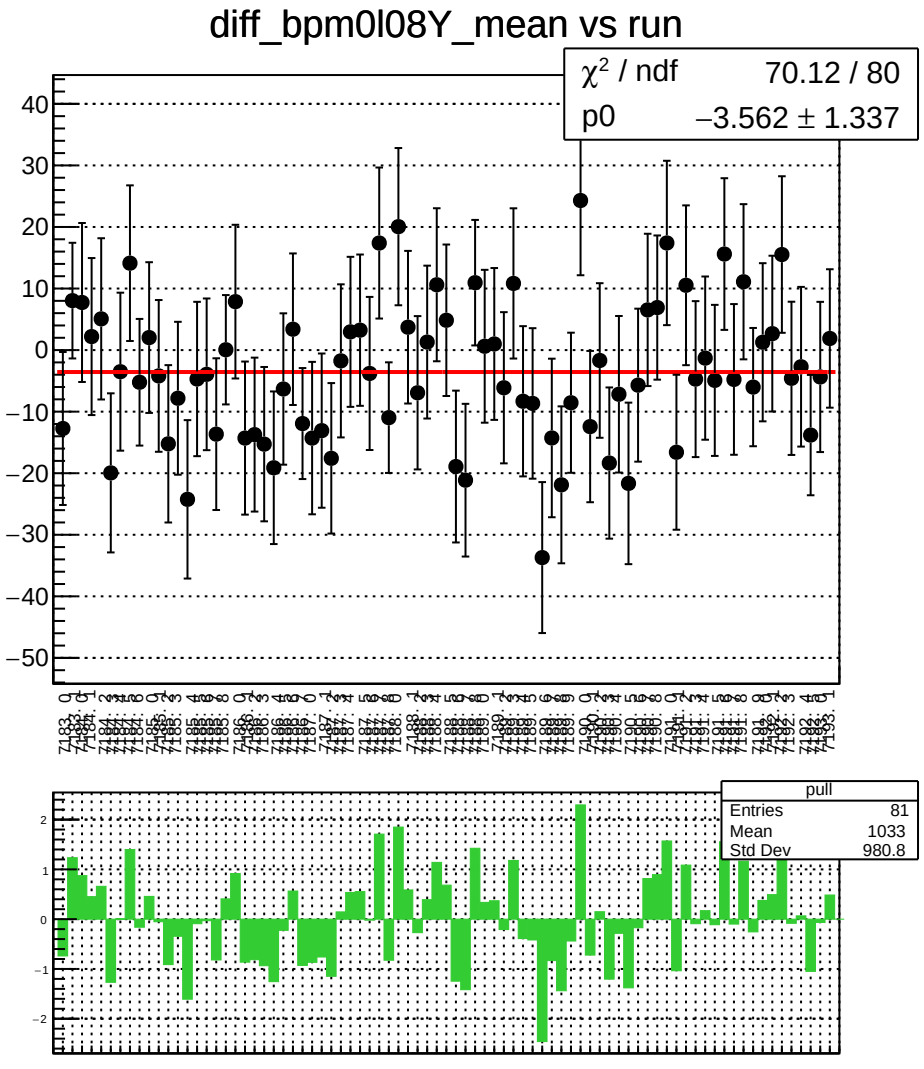

pull1D
Entries 81
Mean −0.003305
Std Dev 0.9175

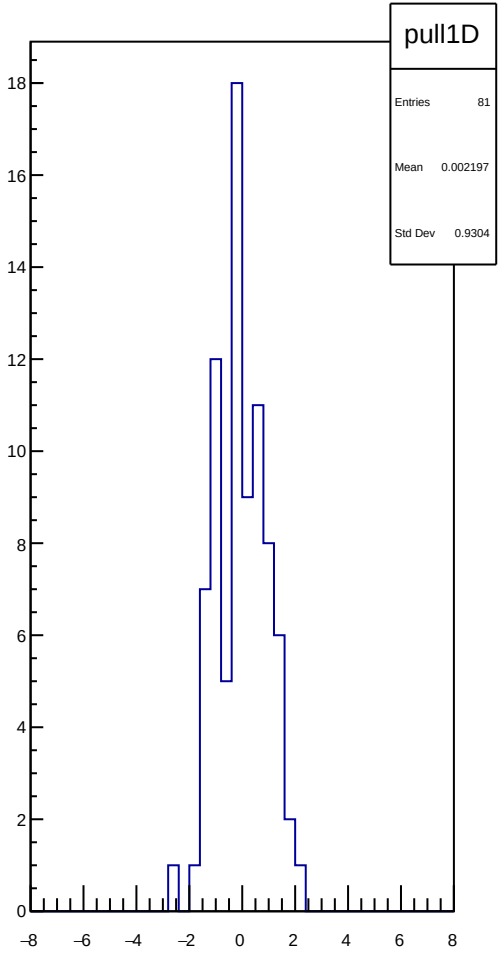

diff_bpm0l07Y_rms vs run
χ² / ndf 171.9 / 80
p0 1085 ± 0.8655
1120
1100
1080
1060
1040

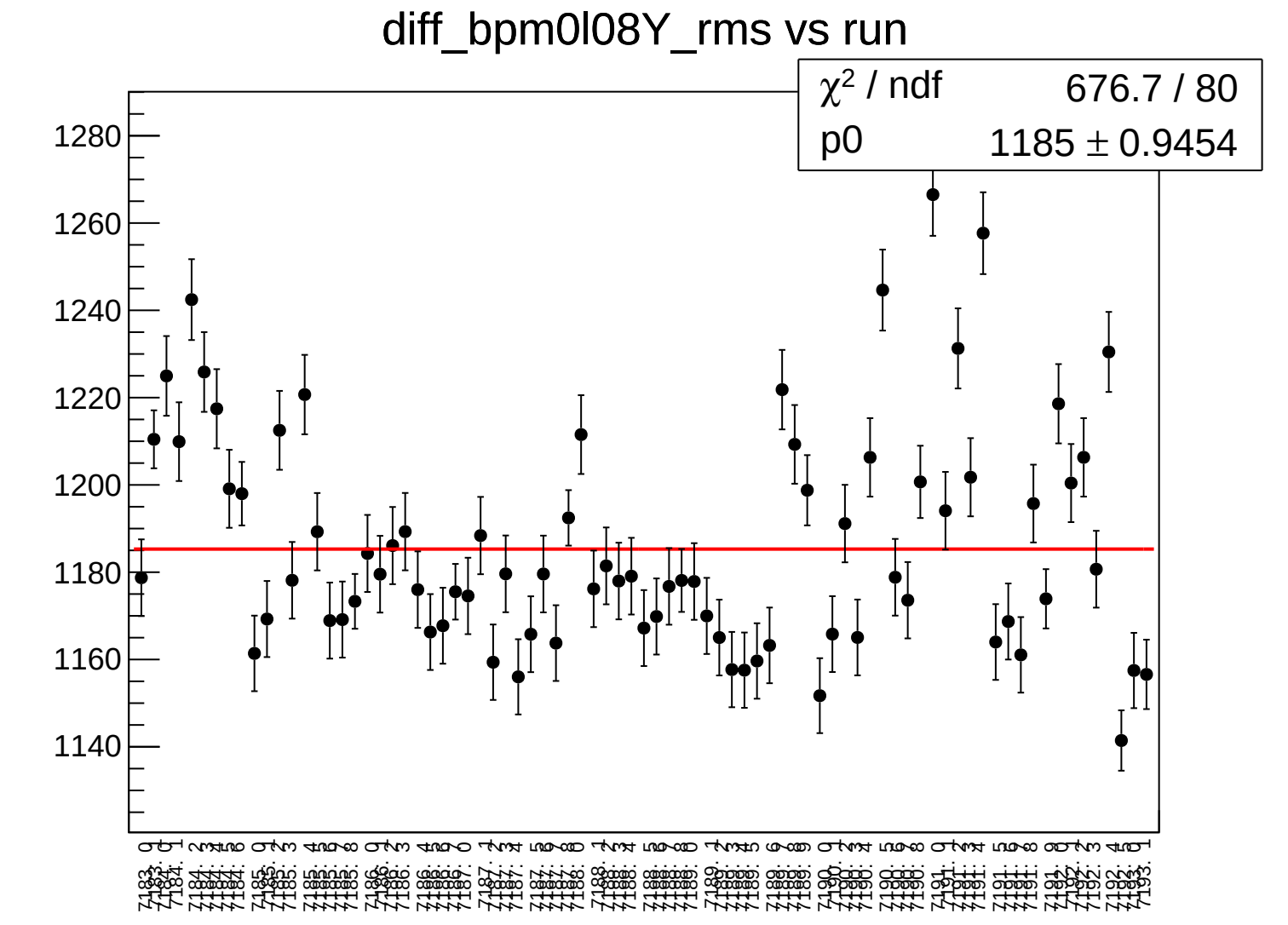

diff_bpm0l08X_mean vs run
χ² / ndf 72.15 / 80
p0 14.74 ± 8.776
pull
Entries 81
Mean 330.9
Std Dev 286.5

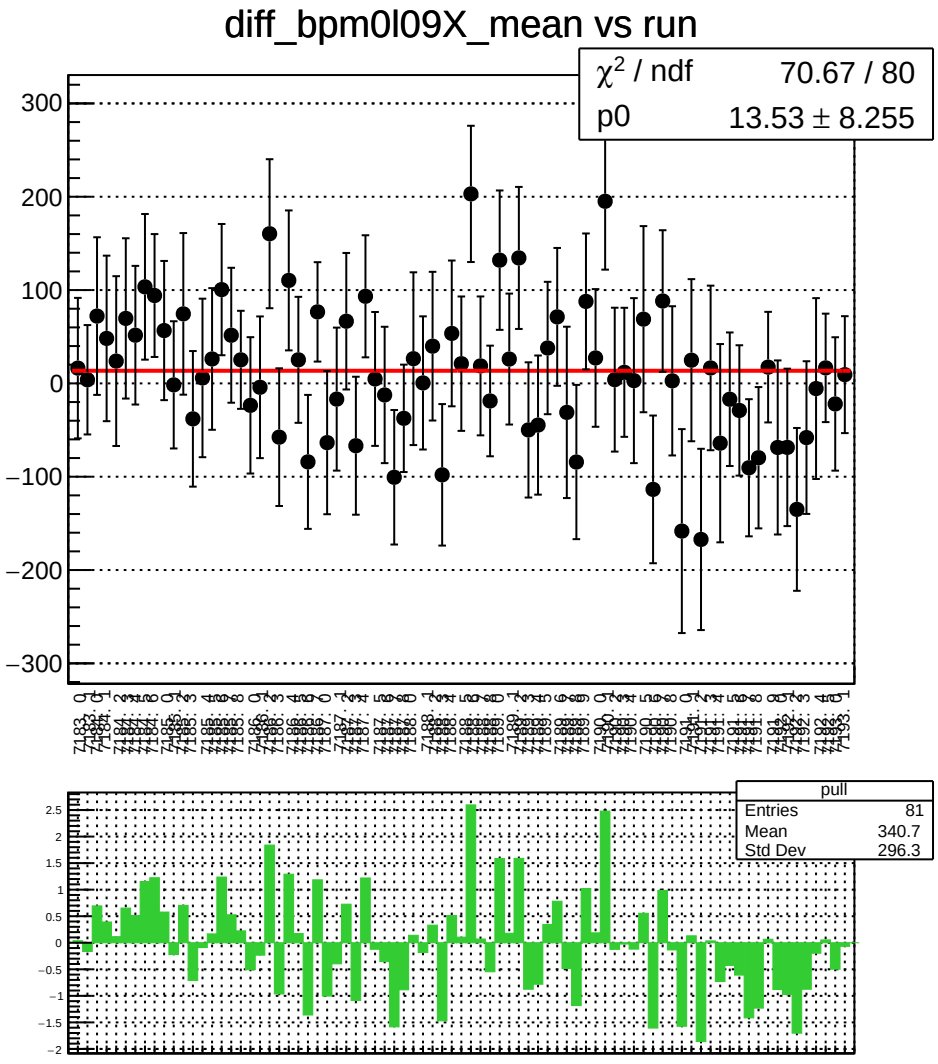

pull1D
Entries 81
Mean −0.0243
Std Dev 0.9435

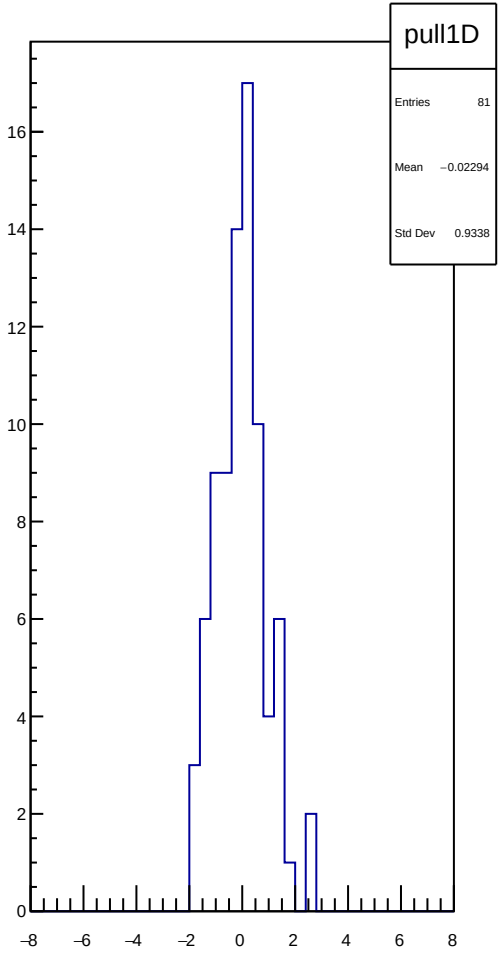

diff_bpm0l08X_rms vs run
χ² / ndf 1.474e+04 / 80
p0 7745 ± 6.205
11000
10000
9000
8000
7000

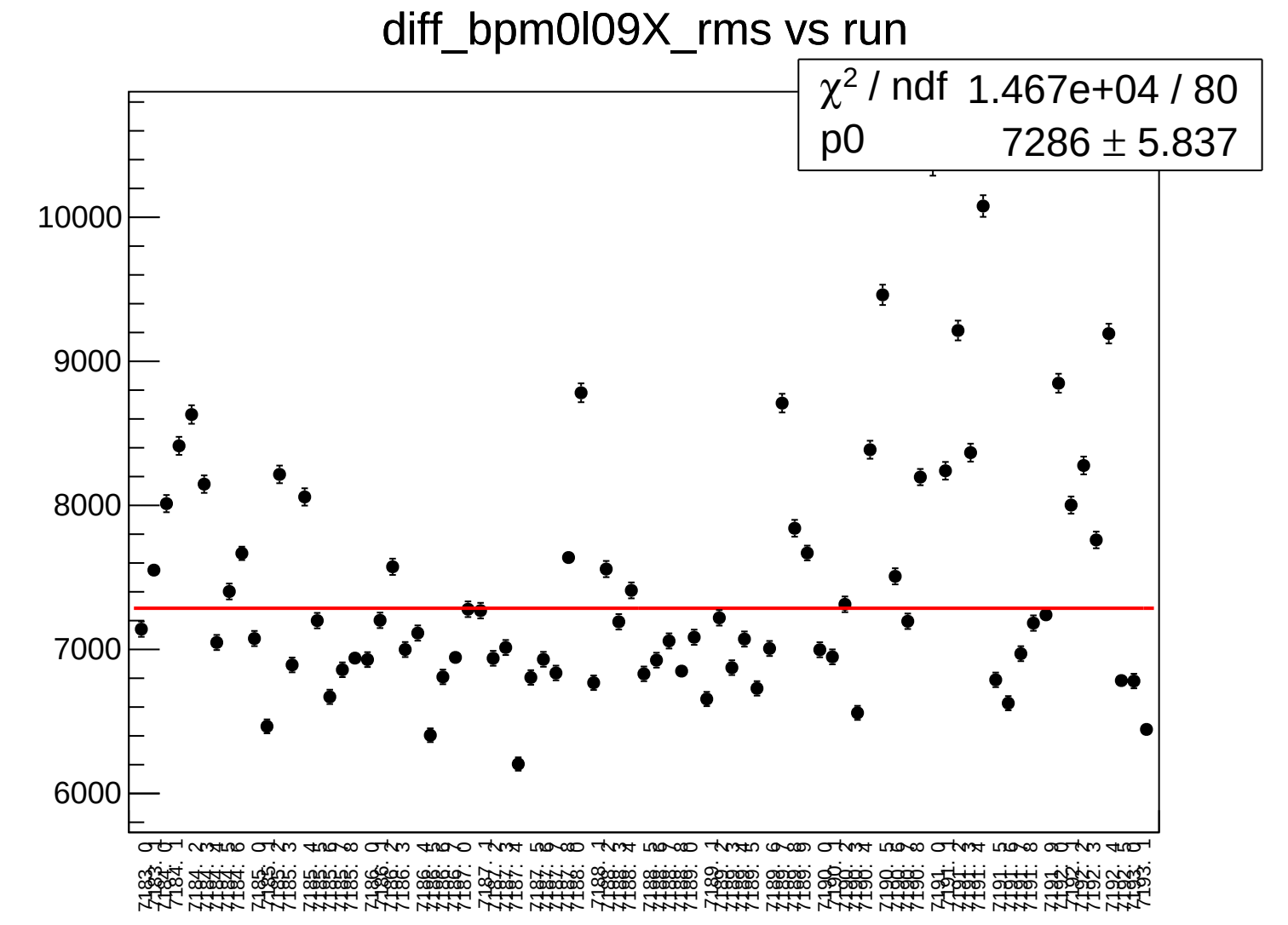

diff_bpm0l08Y_mean vs run
χ² / ndf 70.12 / 80
p0 −3.562 ± 1.337
pull
Entries 81
Mean 1033
Std Dev 980.8

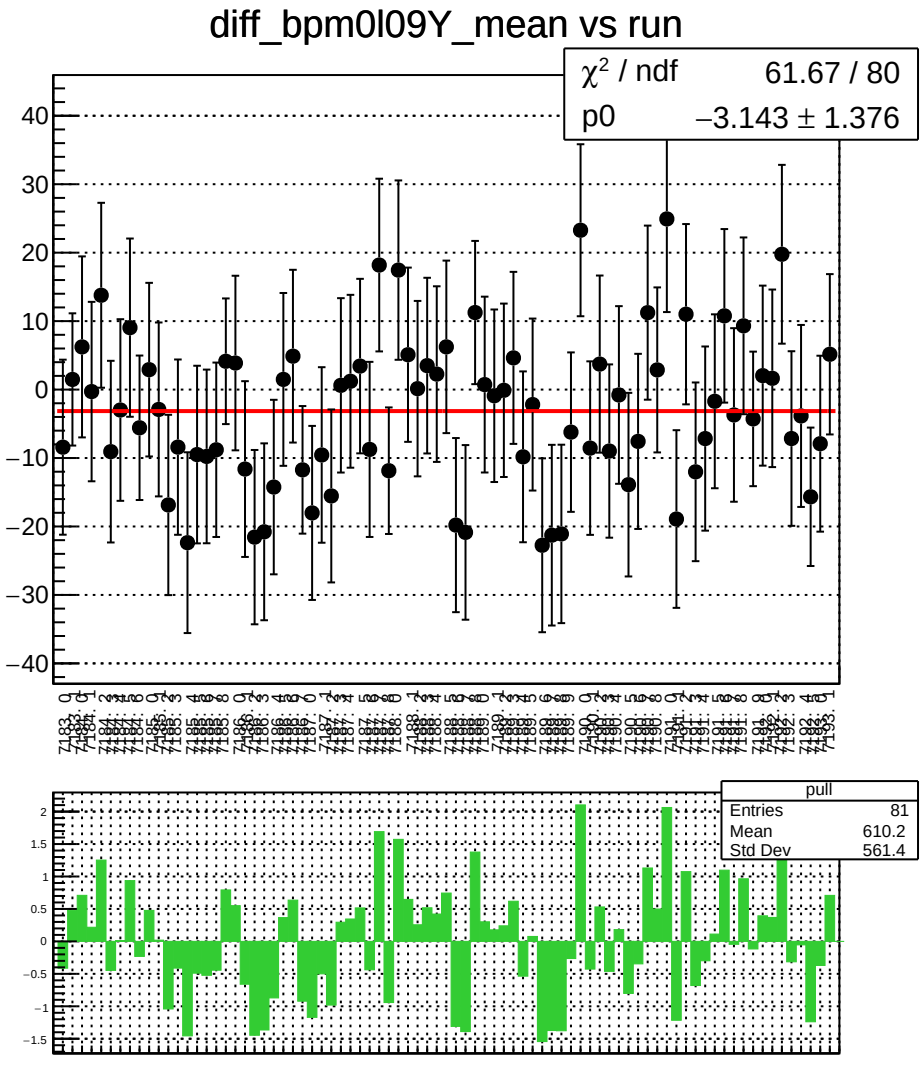

pull1D
Entries 81
Mean 0.002197
Std Dev 0.9304

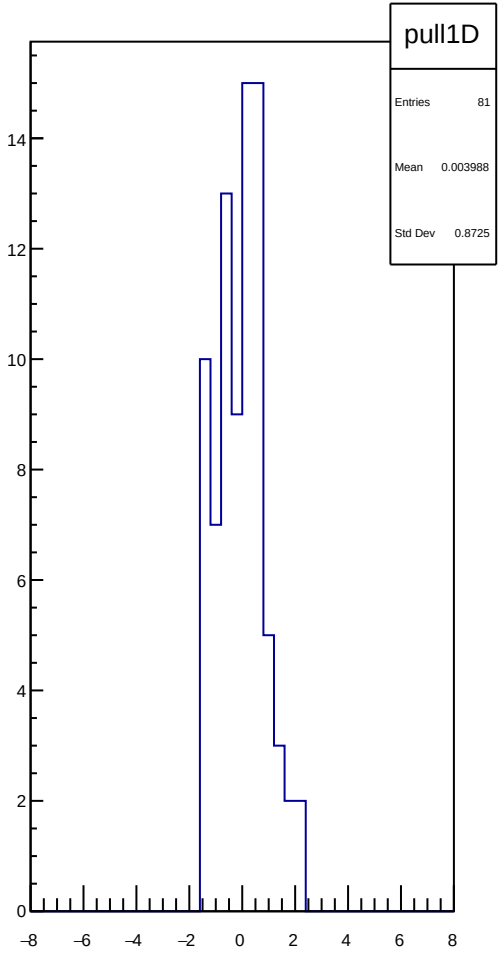

diff_bpm0l08Y_rms vs run
χ² / ndf 676.7 / 80
p0 1185 ± 0.9454
1280
1260
1240
1220
1200
1180
1160
1140

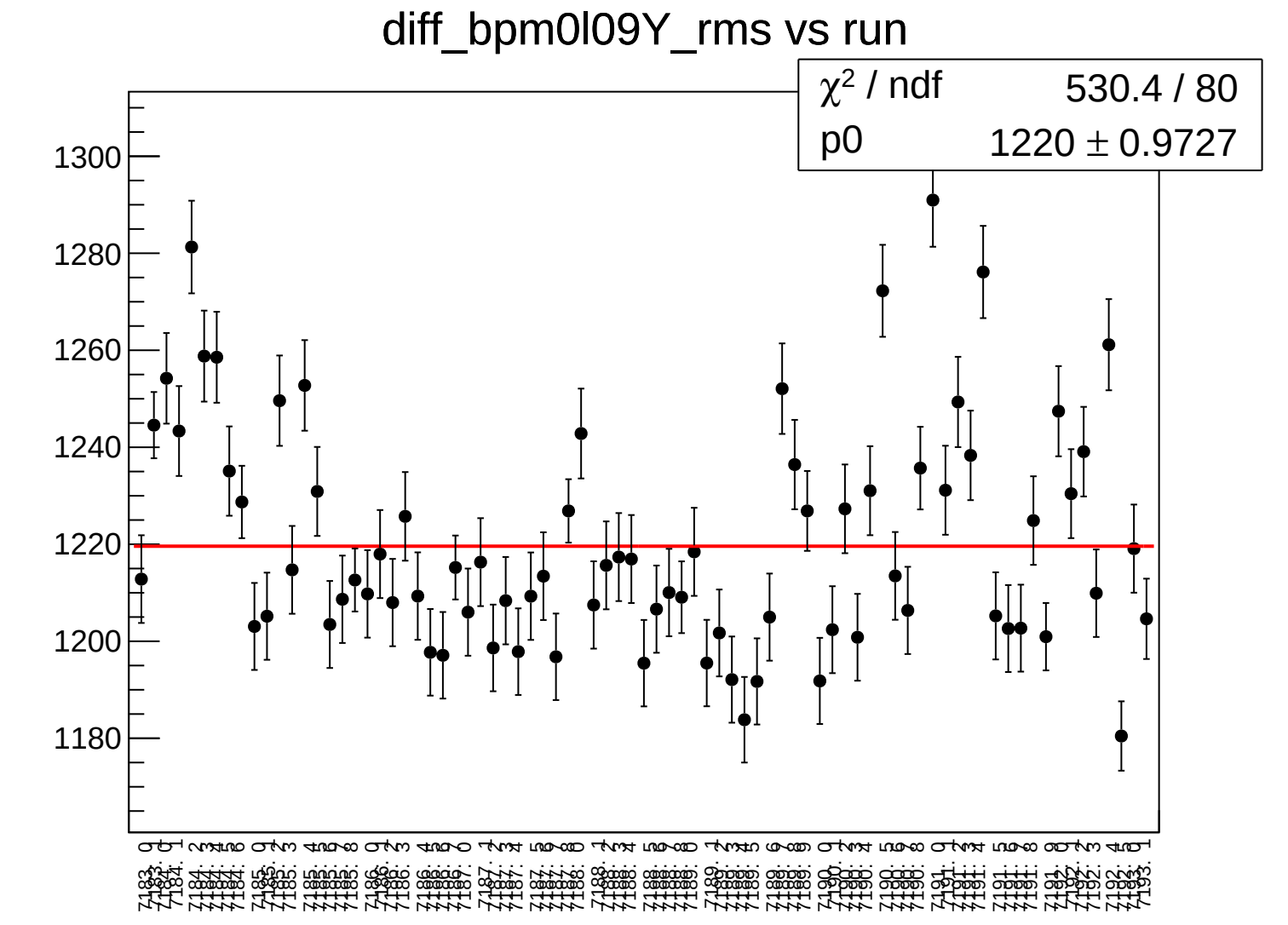

diff_bpm0l09X_mean vs run
χ² / ndf 70.67 / 80
p0 13.53 ± 8.255
pull
Entries 81
Mean 340.7
Std Dev 296.3

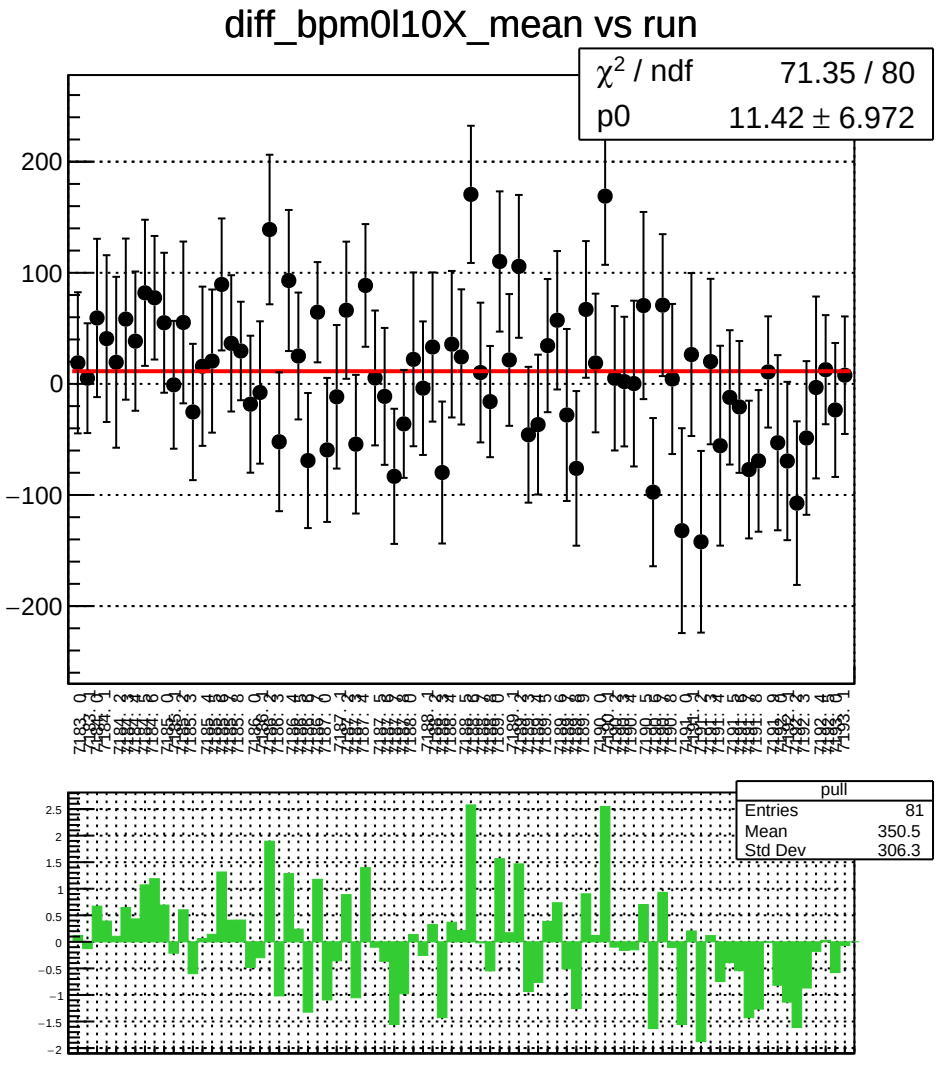

pull1D
Entries 81
Mean −0.02294
Std Dev 0.9338

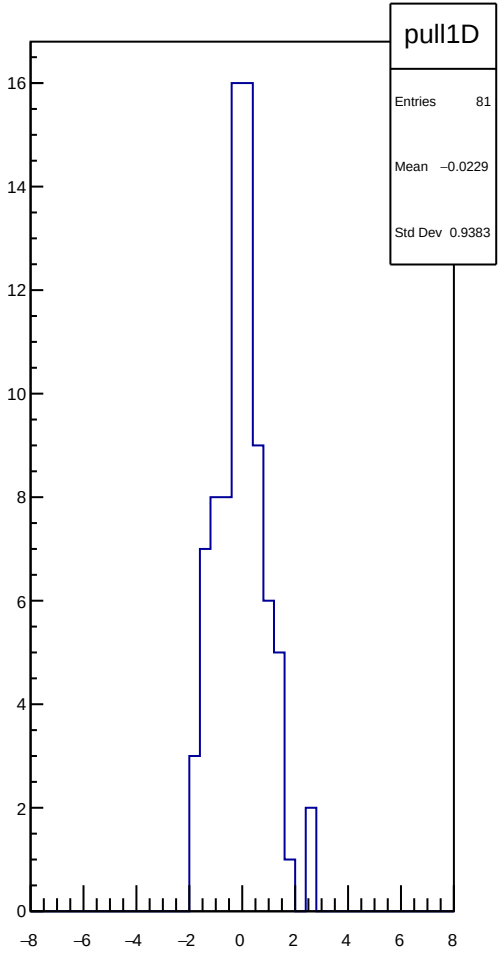

diff_bpm0l09X_rms vs run
χ^2 / ndf 1.467e+04 / 80
p0 7286 ± 5.837
10000
9000
8000
7000
6000

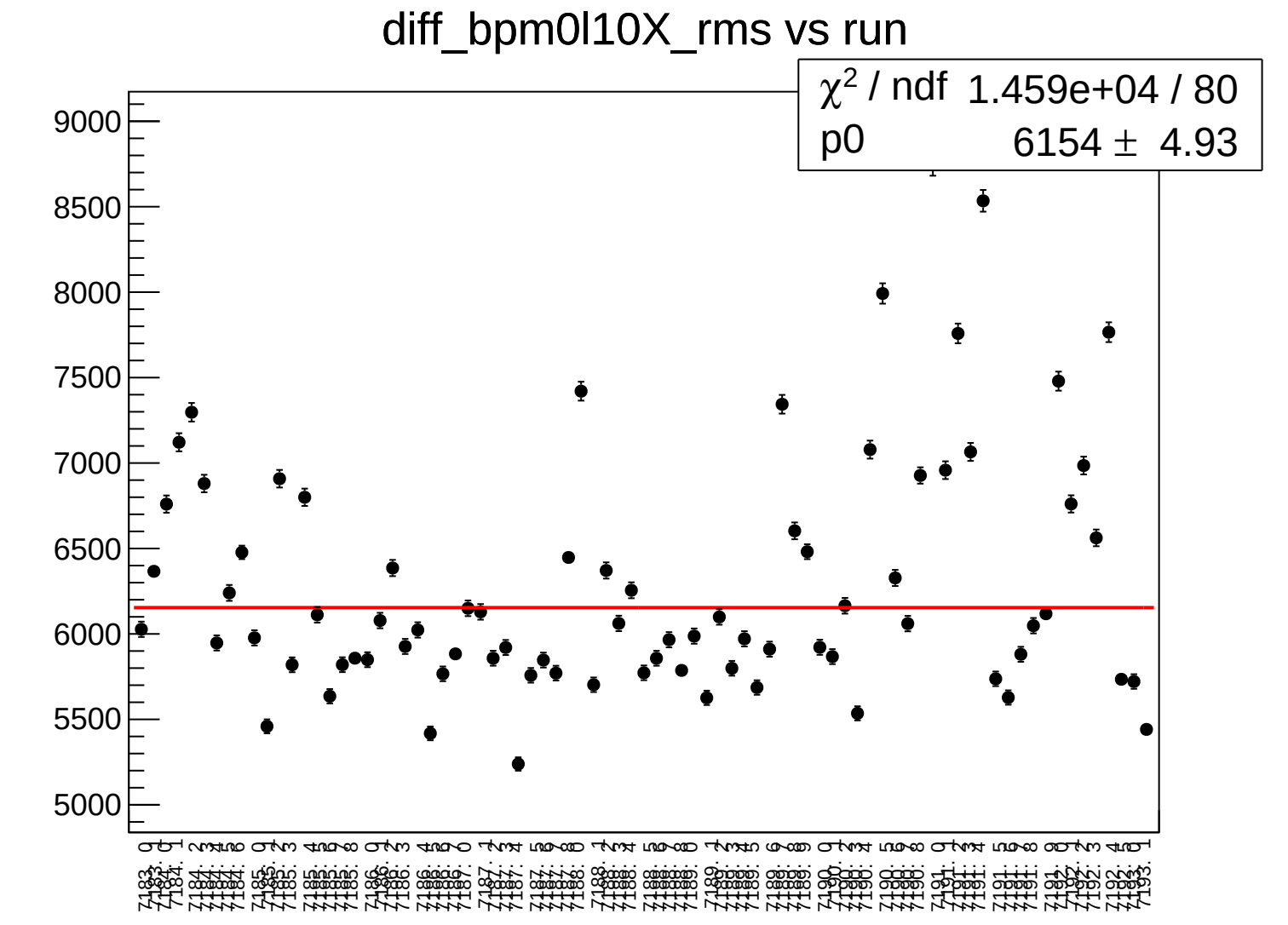

diff_bpm0l09Y_mean vs run
χ² / ndf 61.67 / 80
p0 −3.143 ± 1.376
pull
Entries 81
Mean 610.2
Std Dev 561.4

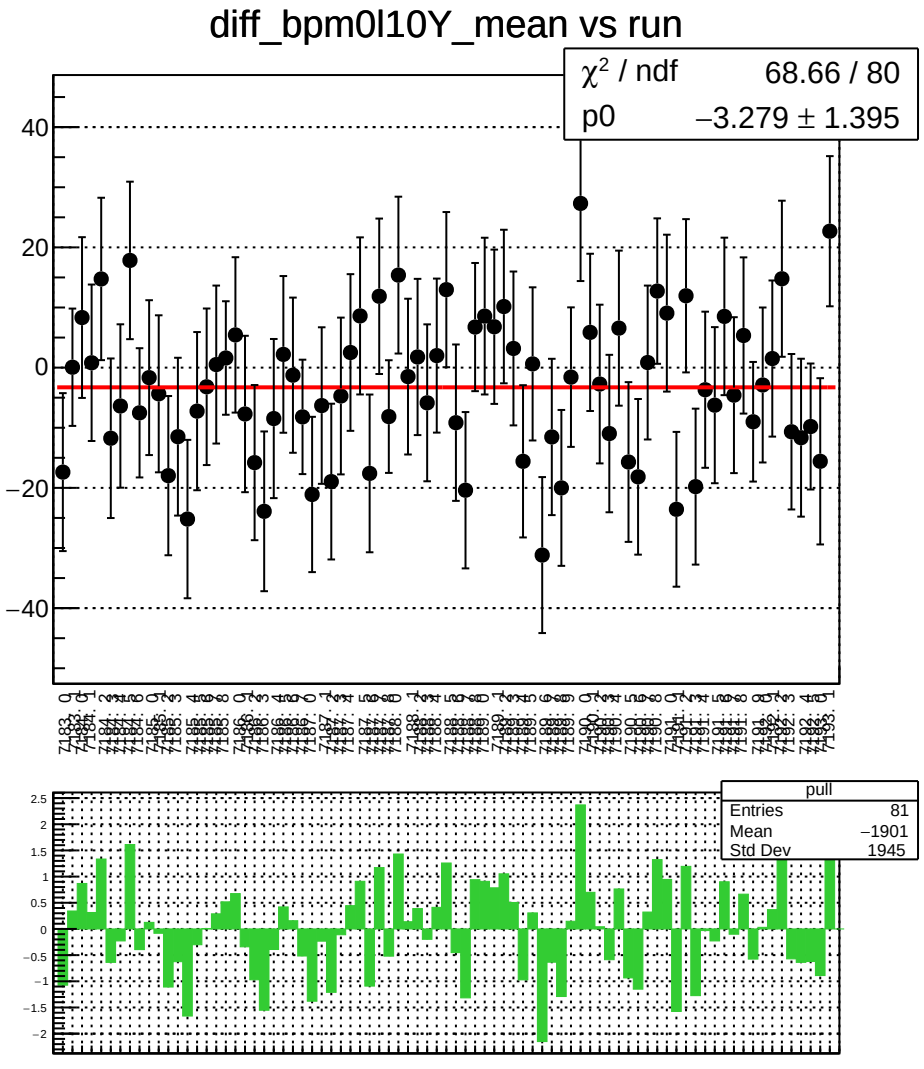

pull1D
Entries 81
Mean 0.003988
Std Dev 0.8725

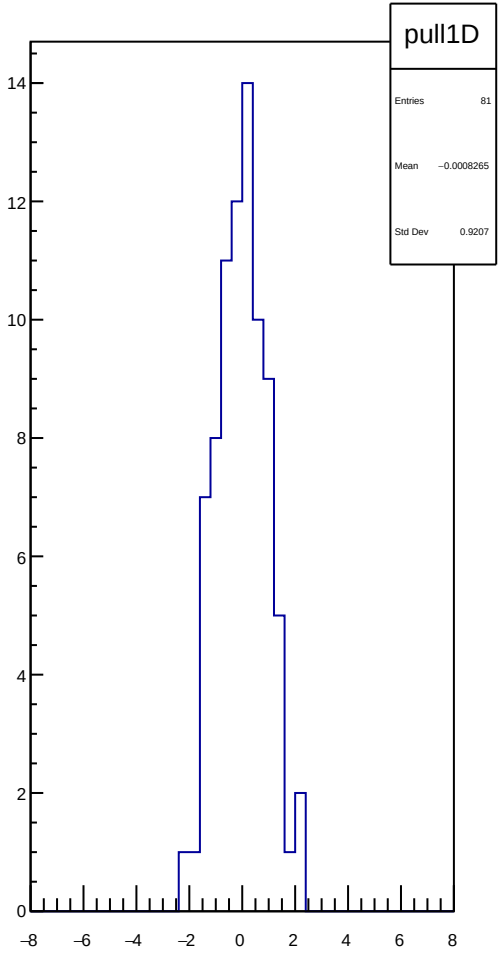

diff_bpm0l09Y_rms vs run
χ² / ndf 530.4 / 80
p0 1220 ± 0.9727
1300
1280
1260
1240
1220
1200
1180

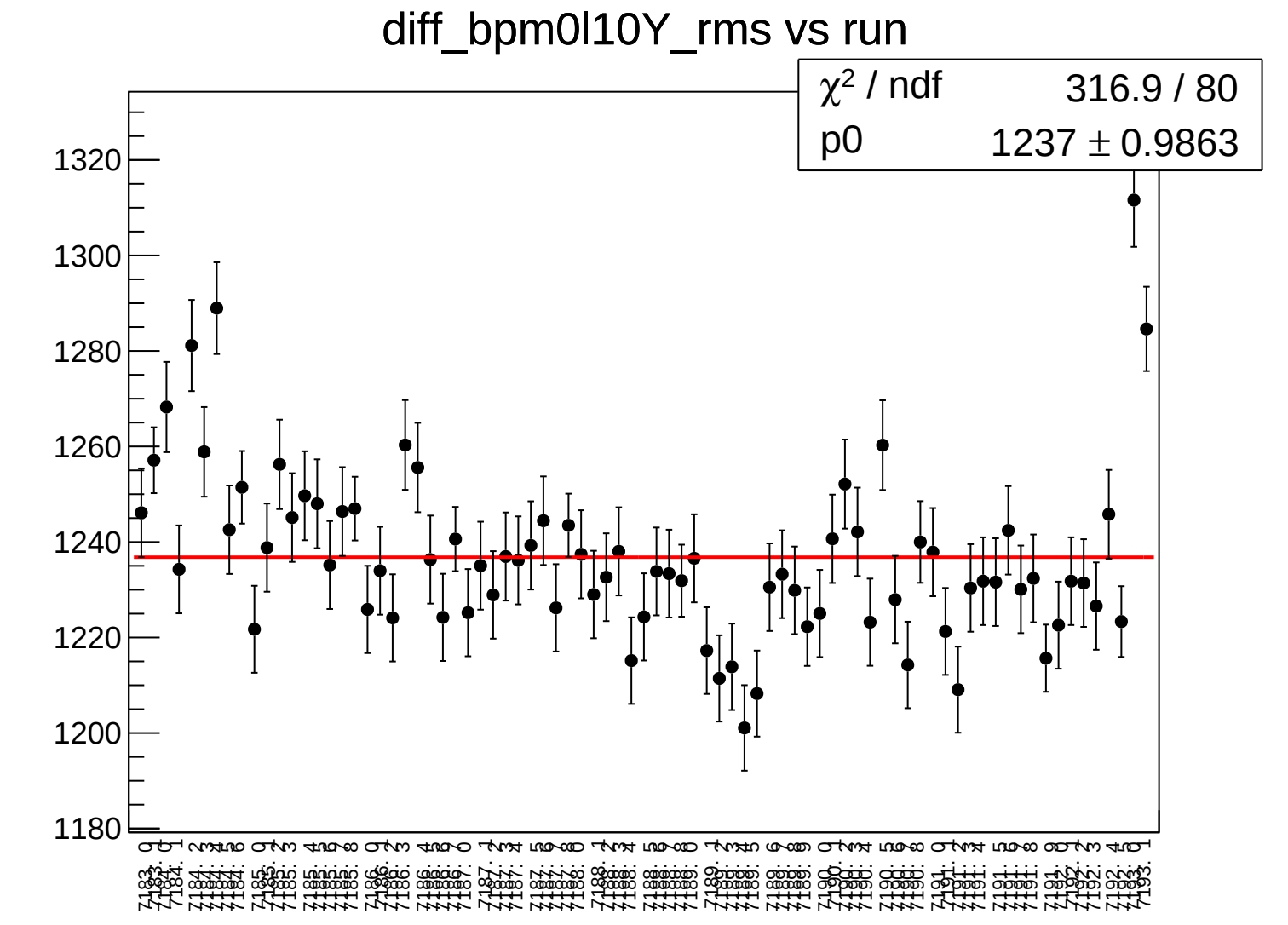

diff_bpm0l10X_mean vs run
χ² / ndf 71.35 / 80
p0 11.42 ± 6.972
200
100
0
−100
−200
pull
Entries 81
Mean 350.5
Std Dev 306.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

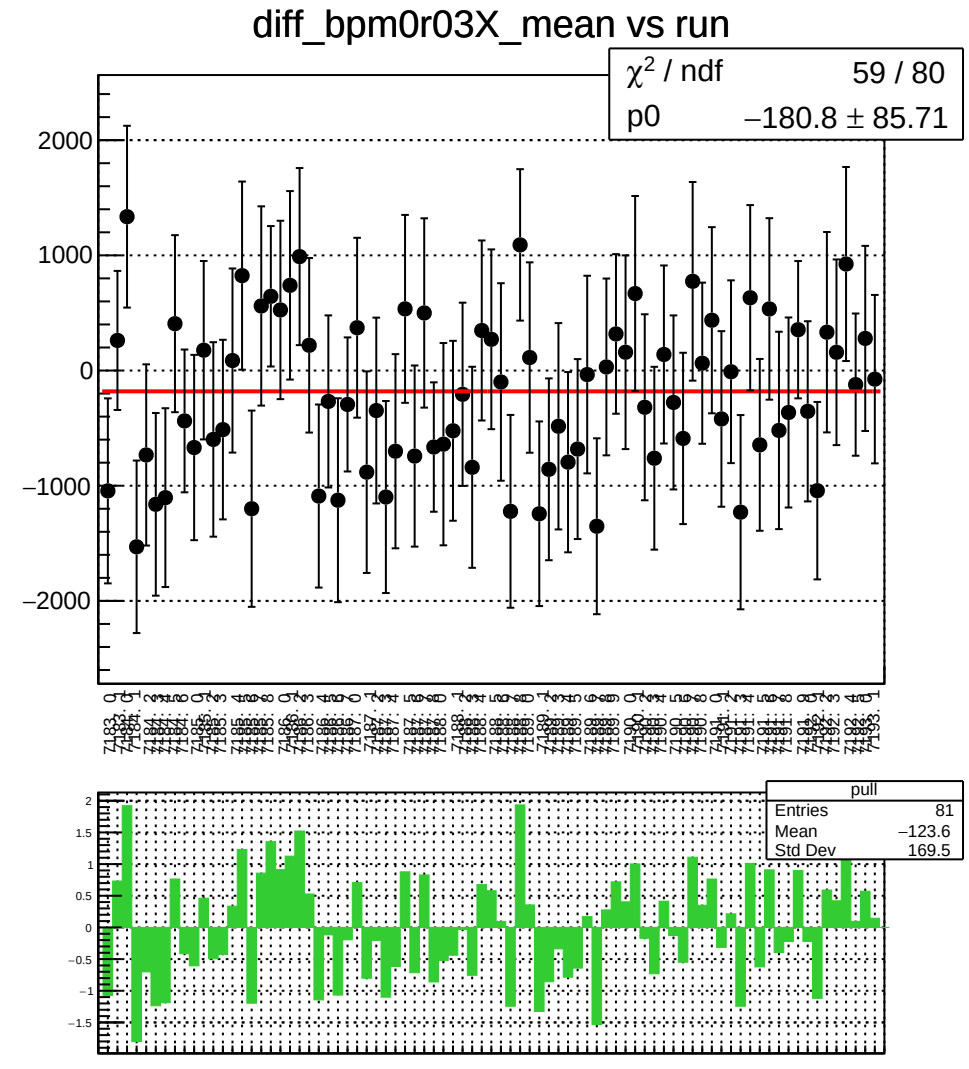

pull1D
Entries 81
Mean −0.0229
Std Dev 0.9383
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

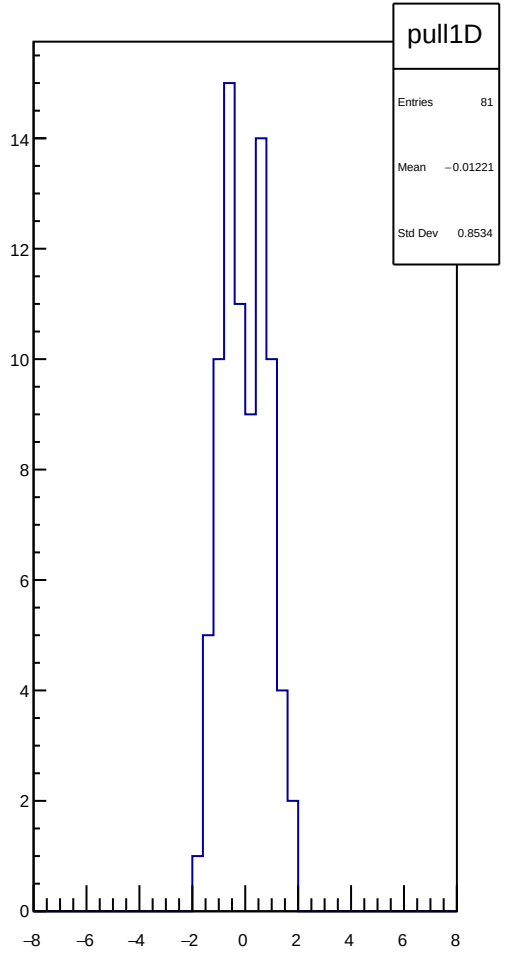

diff_bpm0l10X_rms vs run
χ^2 / ndf 1.459e+04 / 80
p0 6154 ± 4.93
9000
8500
8000
7500
7000
6500
6000
5500
5000


diff_bpm0l10Y_mean vs run
χ² / ndf 68.66 / 80
p0 −3.279 ± 1.395
pull
Entries 81
Mean −1901
Std Dev 1945

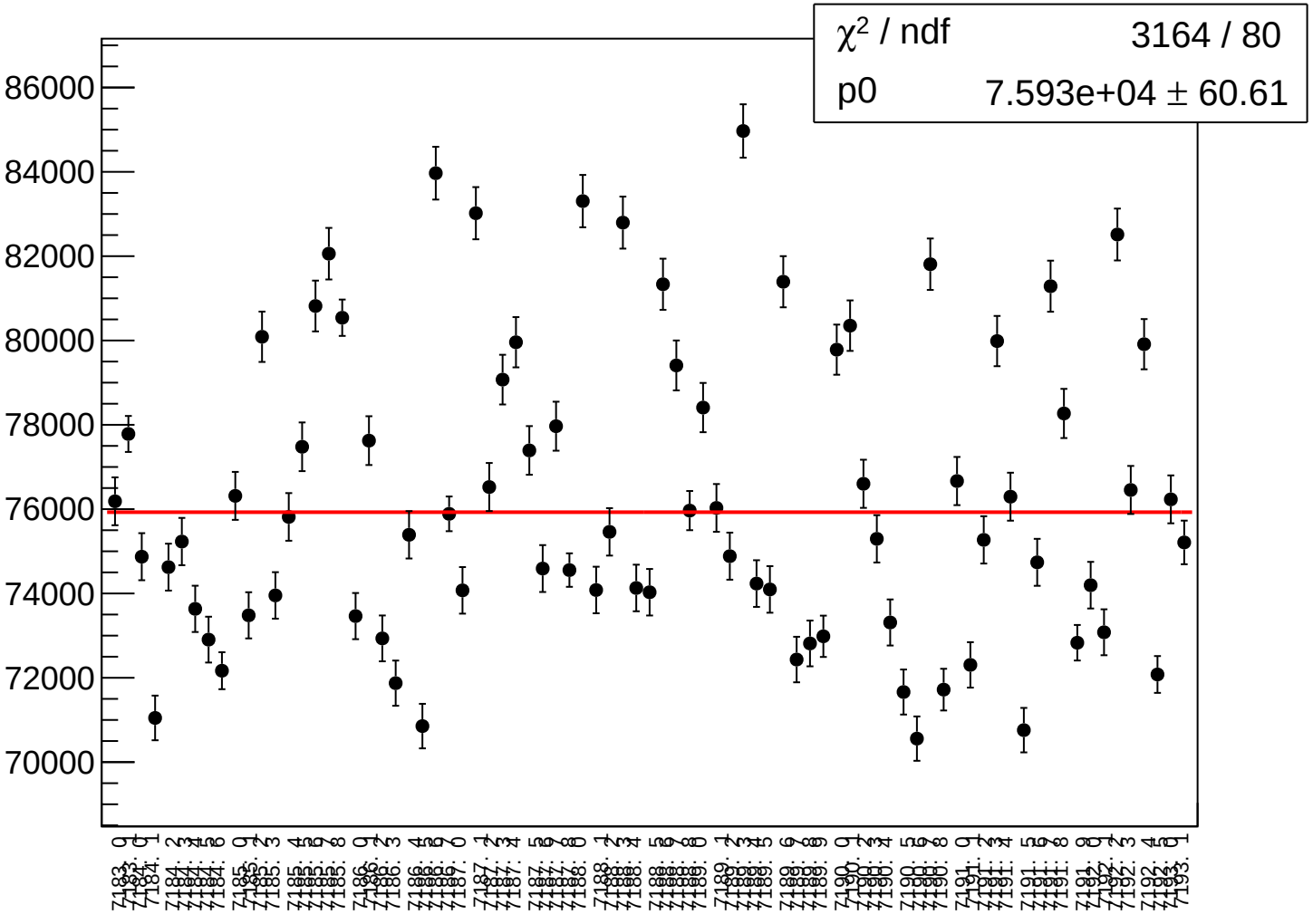

pull1D
Entries 81
Mean −0.0008265
Std Dev 0.9207

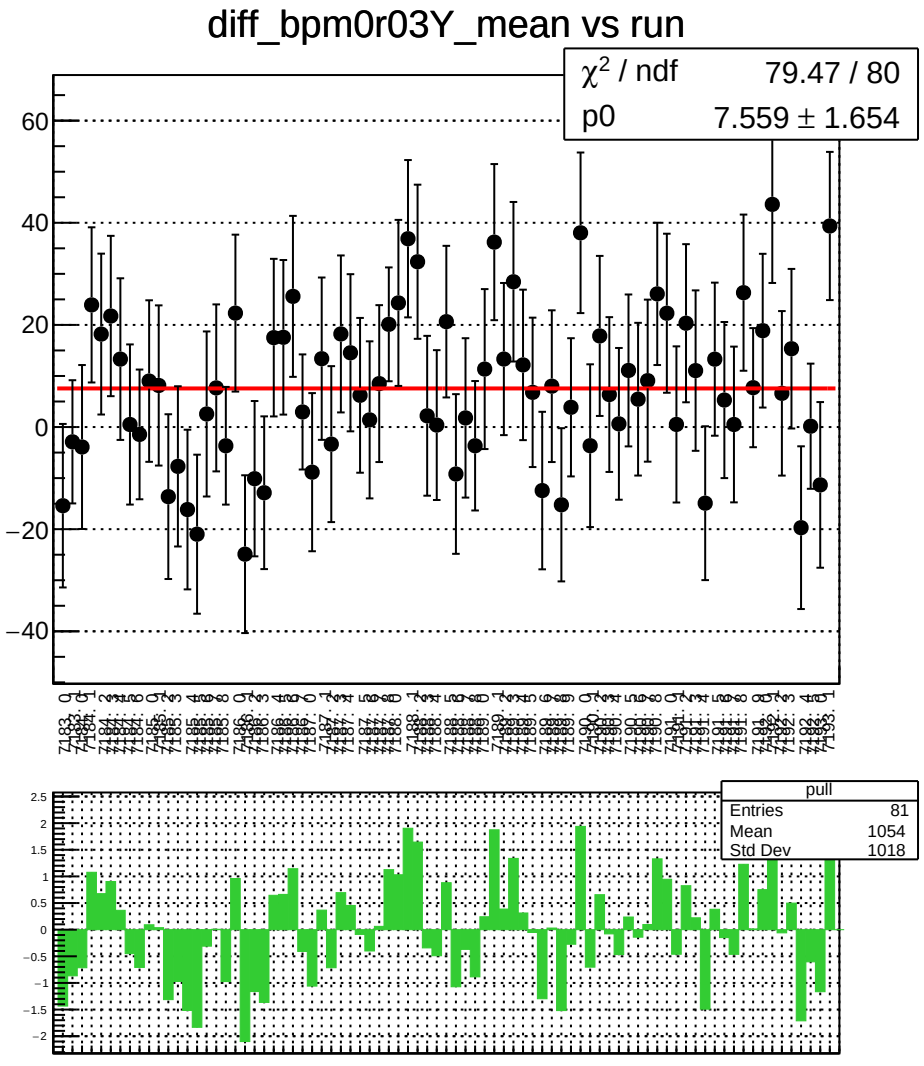

diff_bpm0l10Y_rms vs run
χ² / ndf 316.9 / 80
p0 1237 ± 0.9863
1320
1300
1280
1260
1240
1220
1200
1180

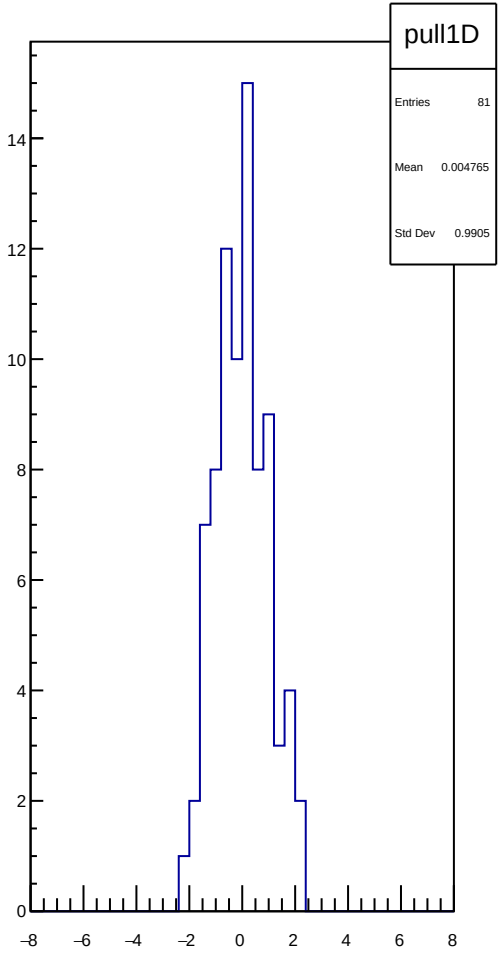

diff_bpm0r03X_mean vs run
χ² / ndf 59 / 80
p0 −180.8 ± 85.71
2000
1000
0
−1000
−2000
pull
Entries 81
Mean −123.6
Std Dev 169.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

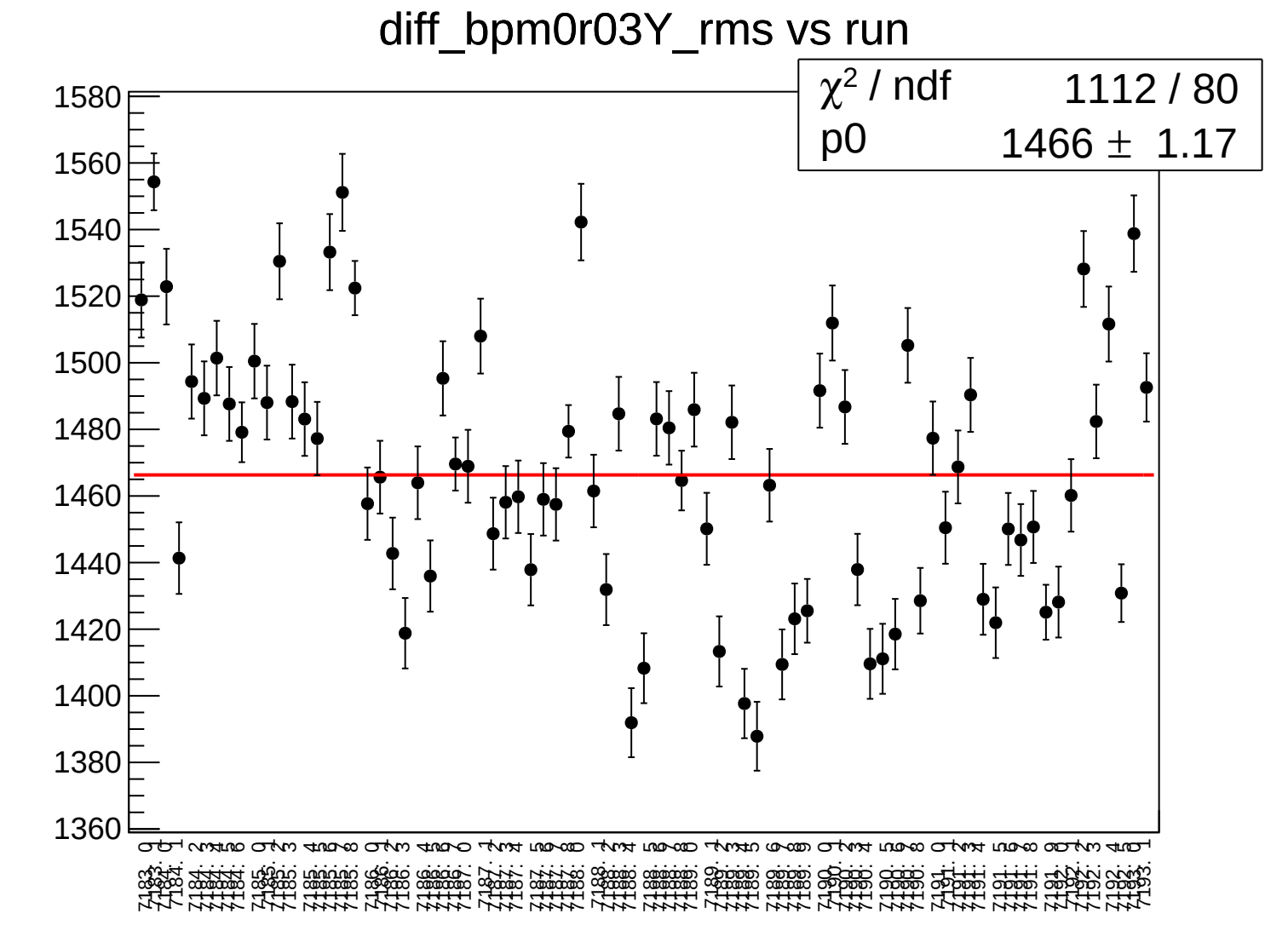

pull1D
Entries 81
Mean −0.01221
Std Dev 0.8534
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

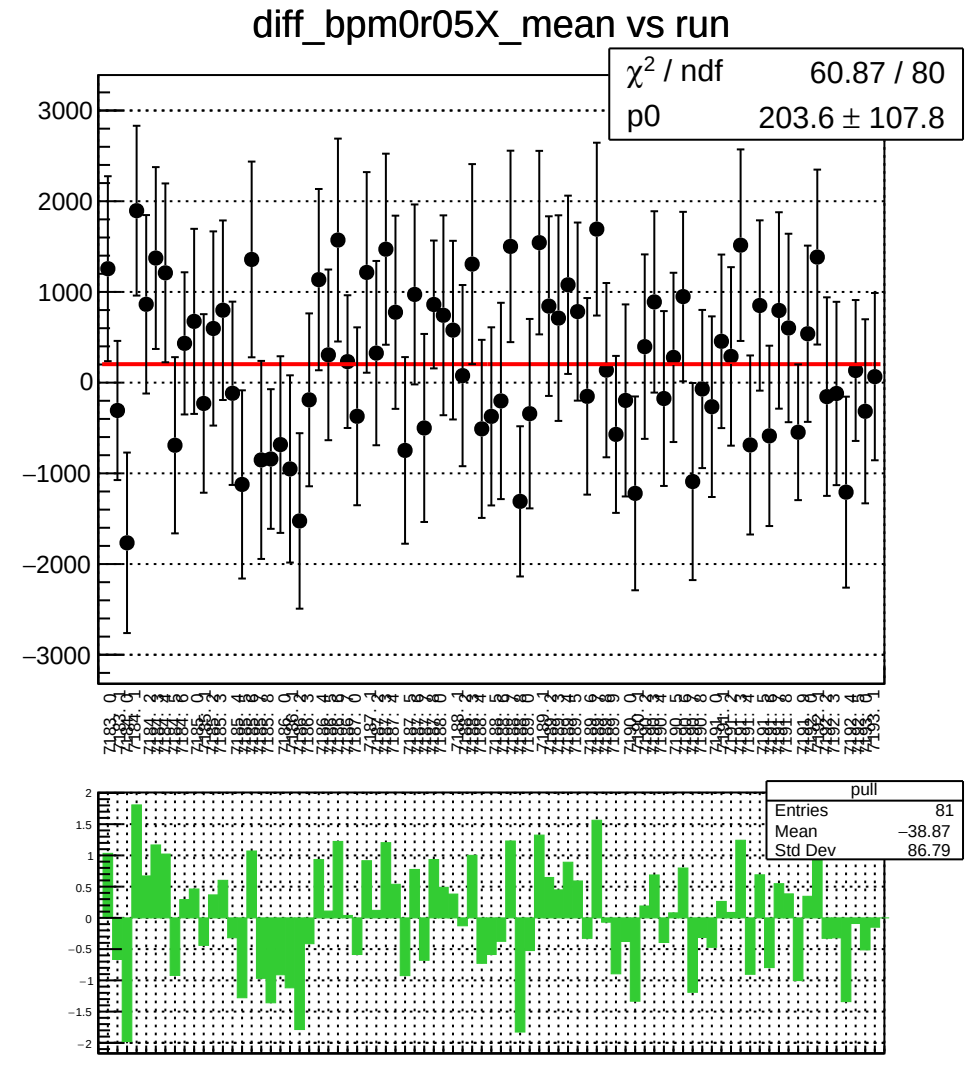
diff_bpm0r03X_rms vs run

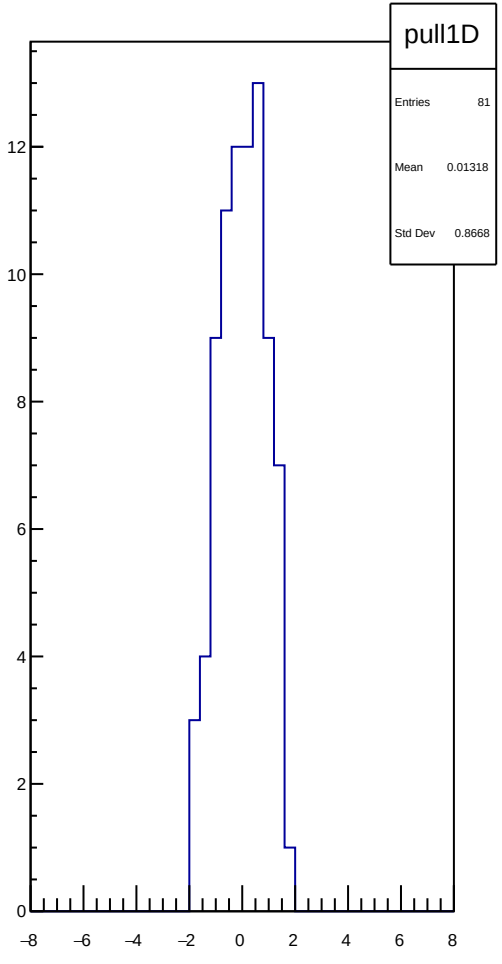


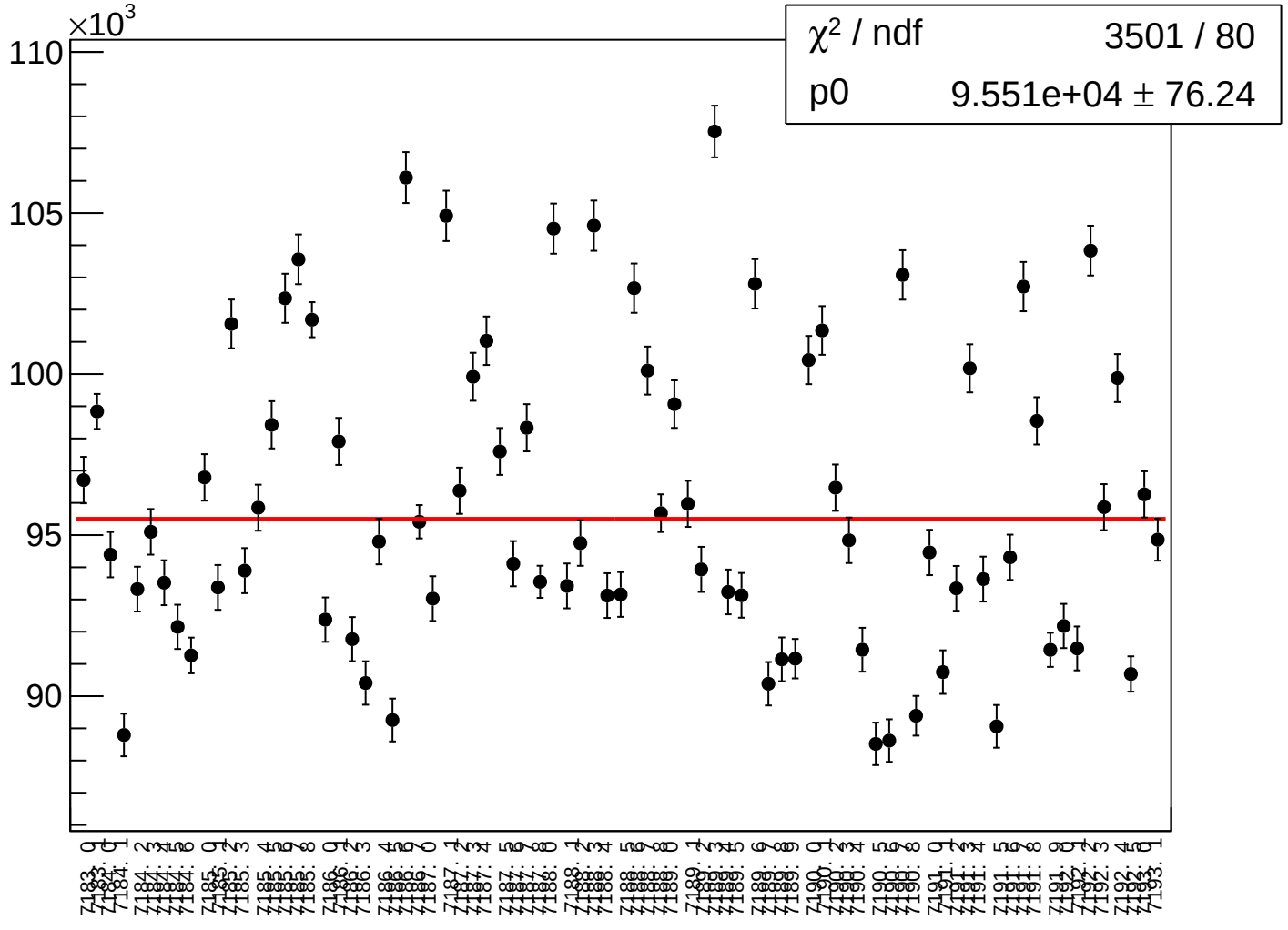

diff_bpm0r03Y_mean vs run
χ^2 / ndf 79.47 / 80
p0 7.559 ± 1.654
pull
Entries 81
Mean 1054
Std Dev 1018

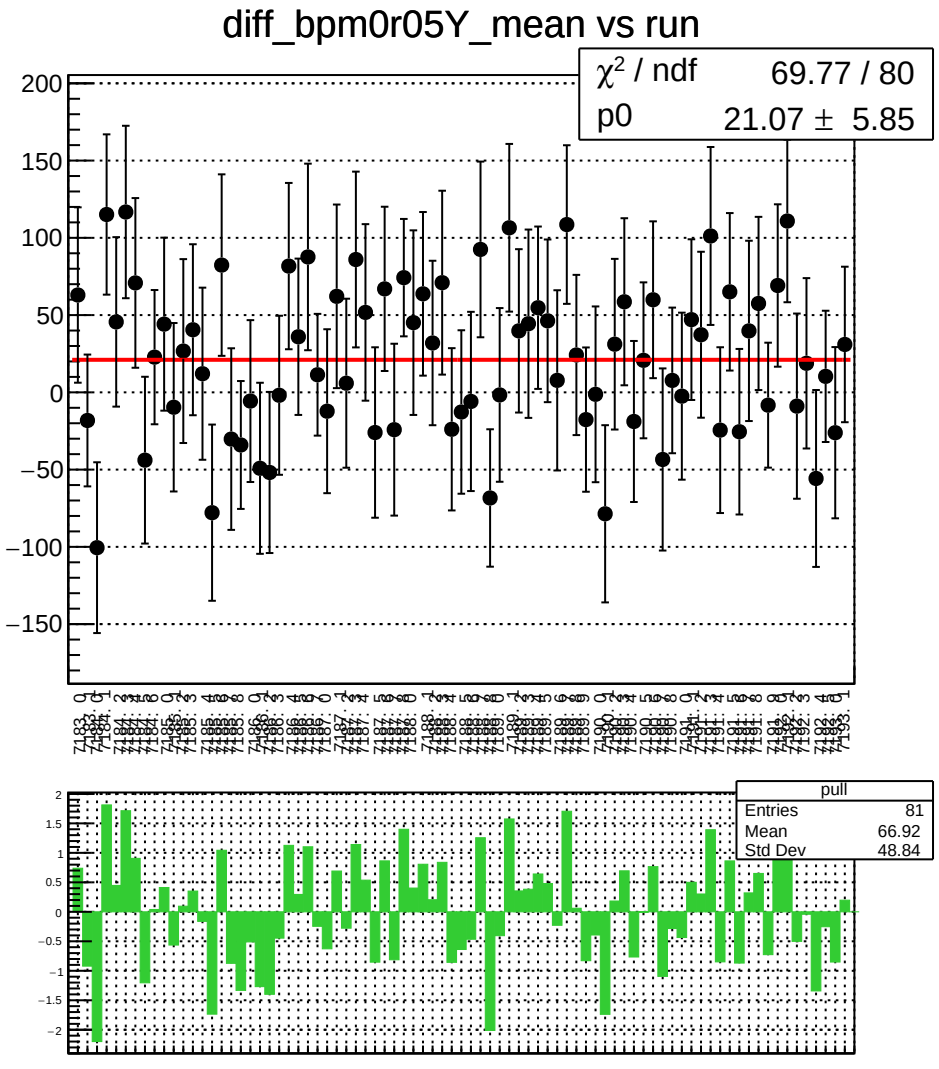

pull1D
Entries 81
Mean 0.004765
Std Dev 0.9905

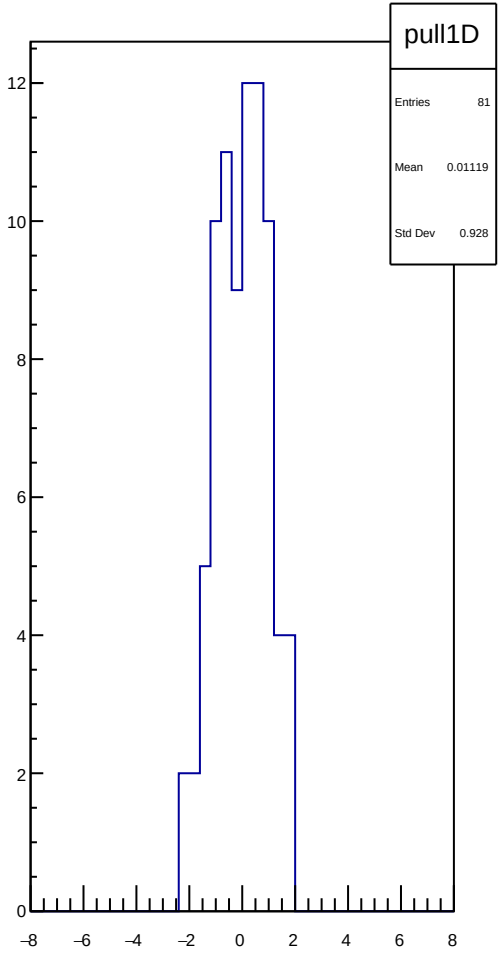

diff_bpm0r03Y_rms vs run
χ² / ndf 1112 / 80
p0 1466 ± 1.17
1580
1560
1540
1520
1500
1480
1460
1440
1420
1400
1380
1360

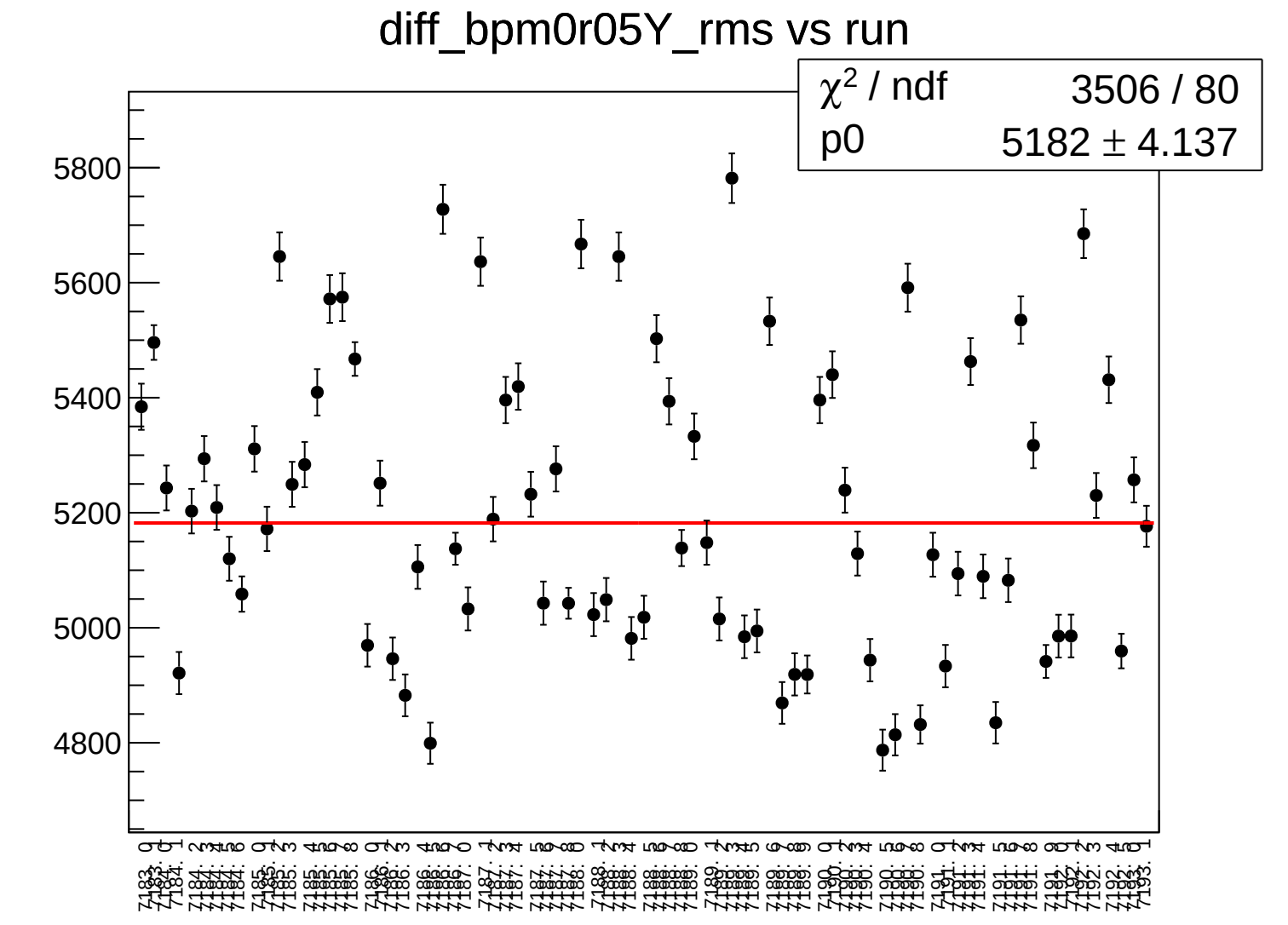

diff_bpm0r05X_mean vs run
χ^2 / ndf 60.87 / 80
p0 203.6 ± 107.8
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 81
Mean −38.87
Std Dev 86.79
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

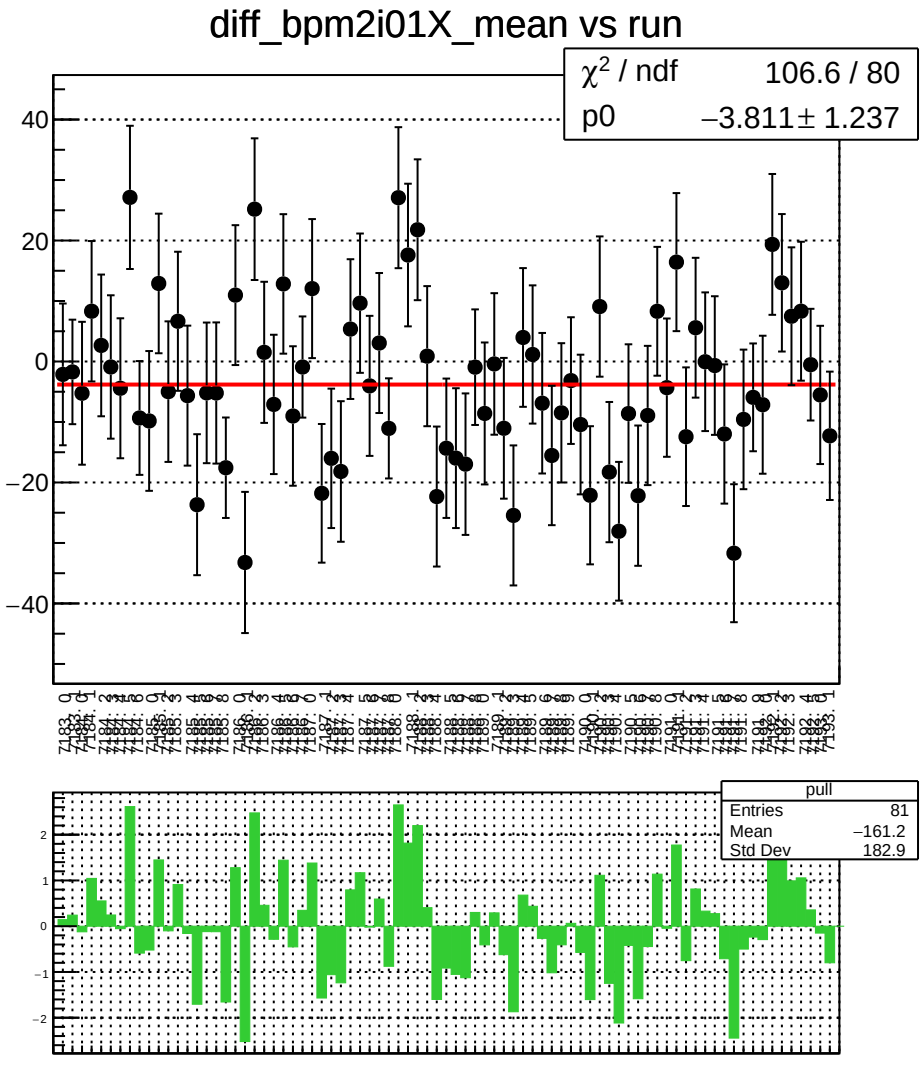

pull1D
Entries 81
Mean 0.01318
Std Dev 0.8668
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

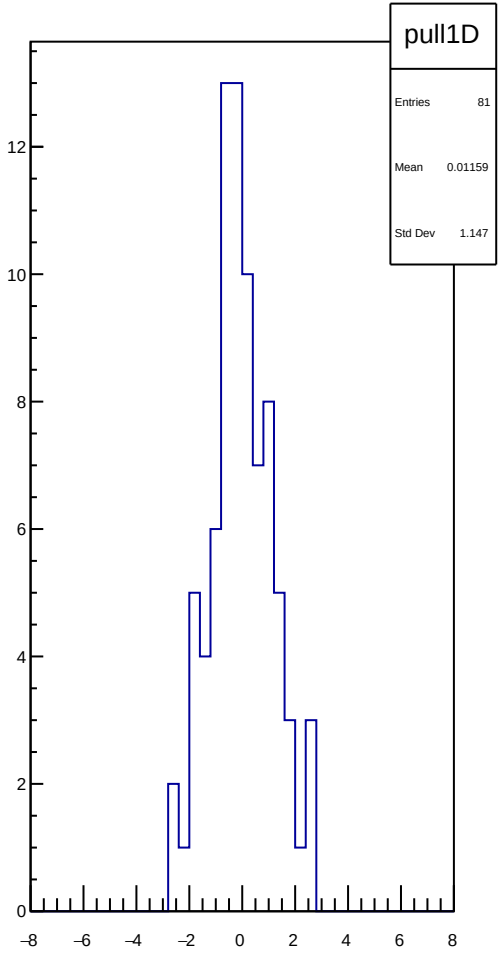

diff_bpm0r05X_rms vs run
×10^3
110
105
100
95
90
χ² / ndf 3501 / 80
p0 9.551e+04 ± 76.24

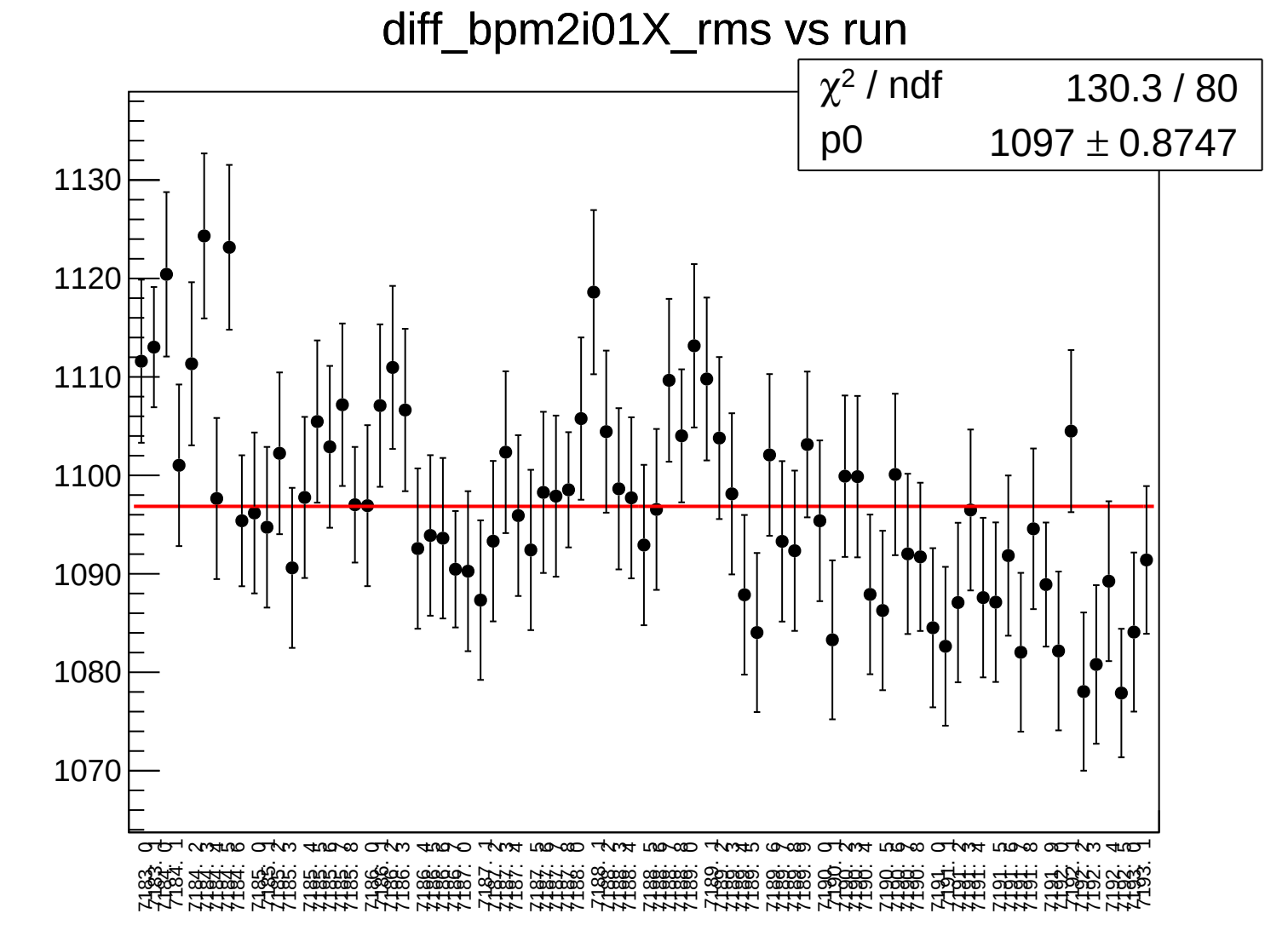

diff_bpm0r05Y_mean vs run
χ² / ndf 69.77 / 80
p0 21.07 ± 5.85
pull
Entries 81
Mean 66.92
Std Dev 48.84

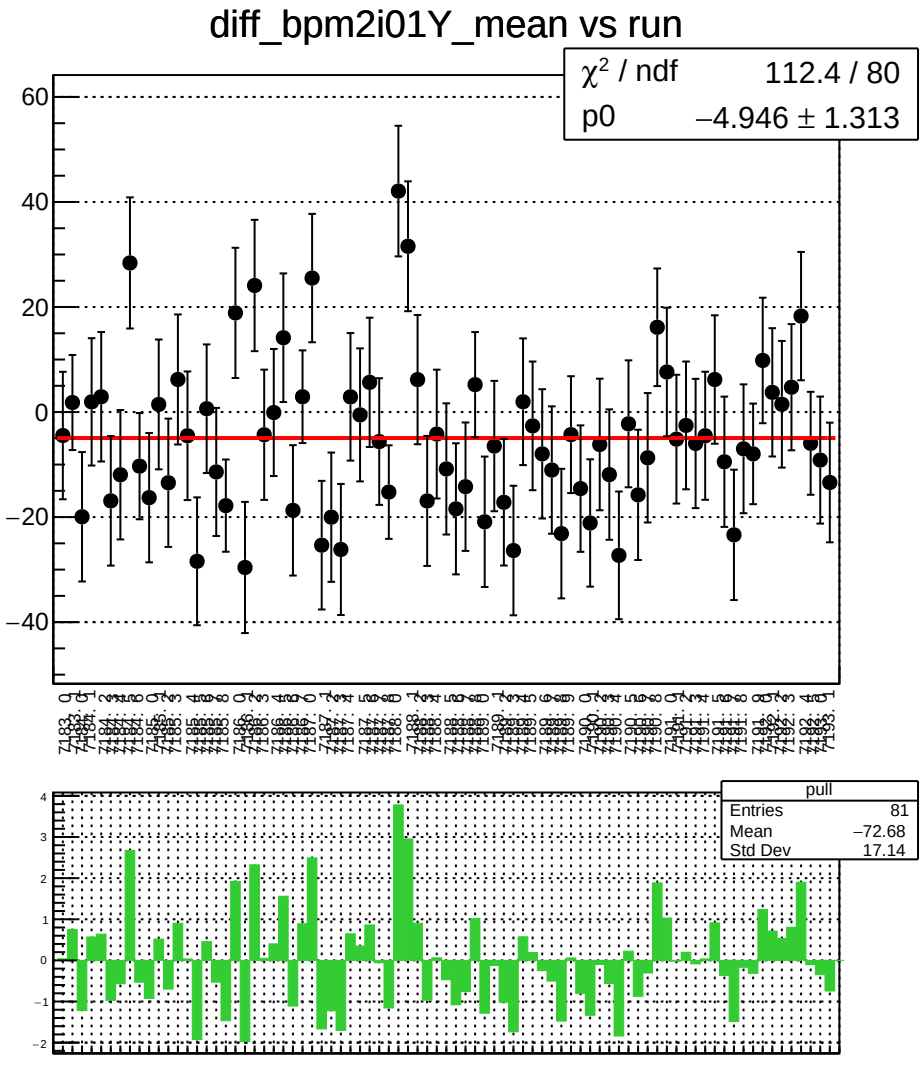

pull1D
Entries 81
Mean 0.01119
Std Dev 0.928

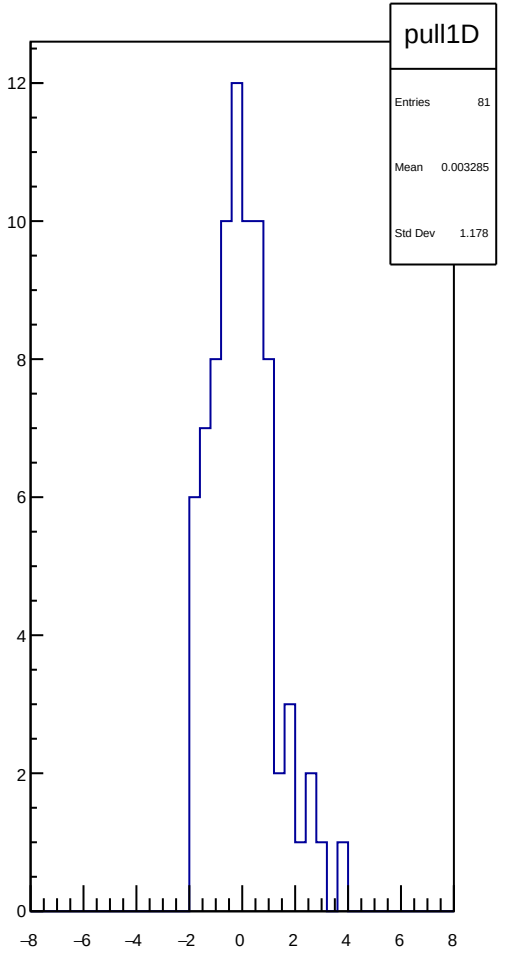

diff_bpm0r05Y_rms vs run
χ² / ndf 3506 / 80
p0 5182 ± 4.137
5800
5600
5400
5200
5000
4800

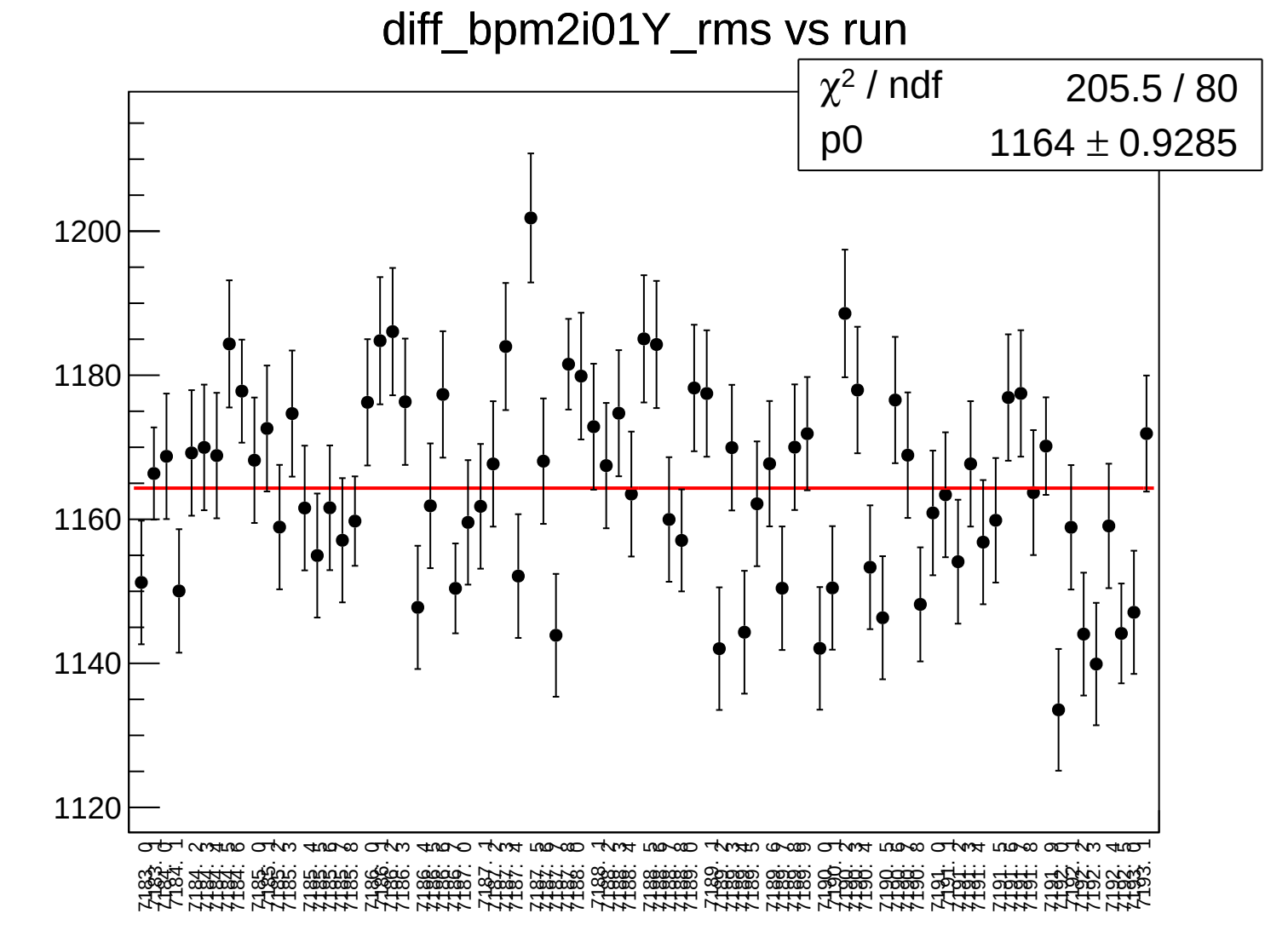

diff_bpm2i01X_mean vs run
χ^2 / ndf 106.6 / 80
p0 −3.811± 1.237
pull
Entries 81
Mean −161.2
Std Dev 182.9

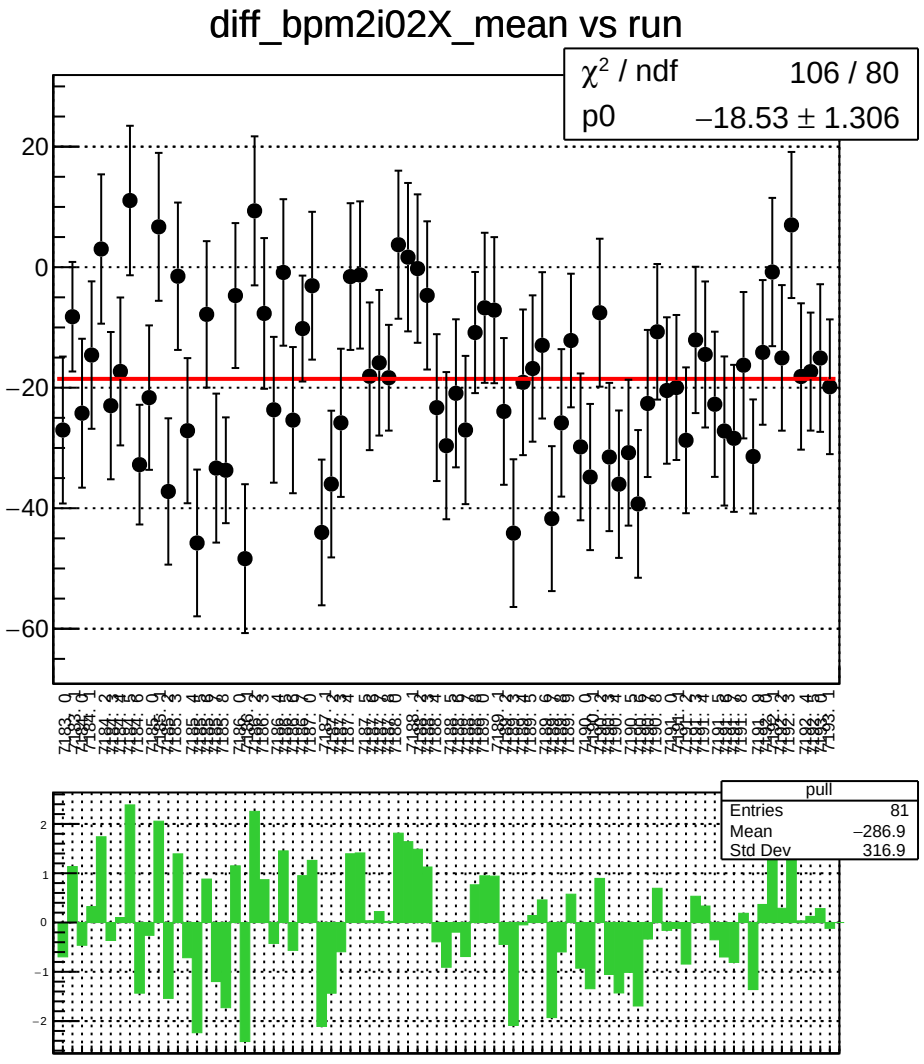

pull1D
Entries 81
Mean 0.01159
Std Dev 1.147

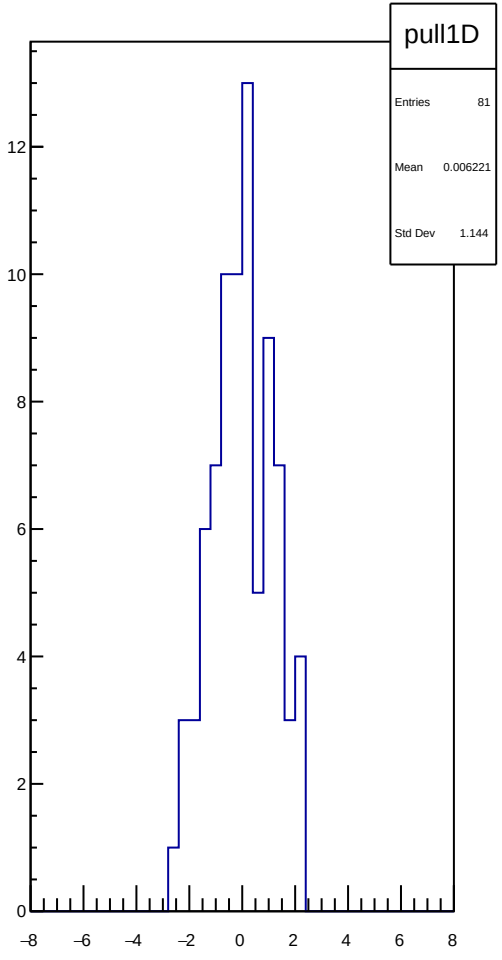

diff_bpm2i01X_rms vs run
χ² / ndf 130.3 / 80
p0 1097 ± 0.8747
1130
1120
1110
1100
1090
1080
1070


diff_bpm2i01Y_mean vs run
χ² / ndf 112.4 / 80
p0 −4.946 ± 1.313
pull
Entries 81
Mean −72.68
Std Dev 17.14

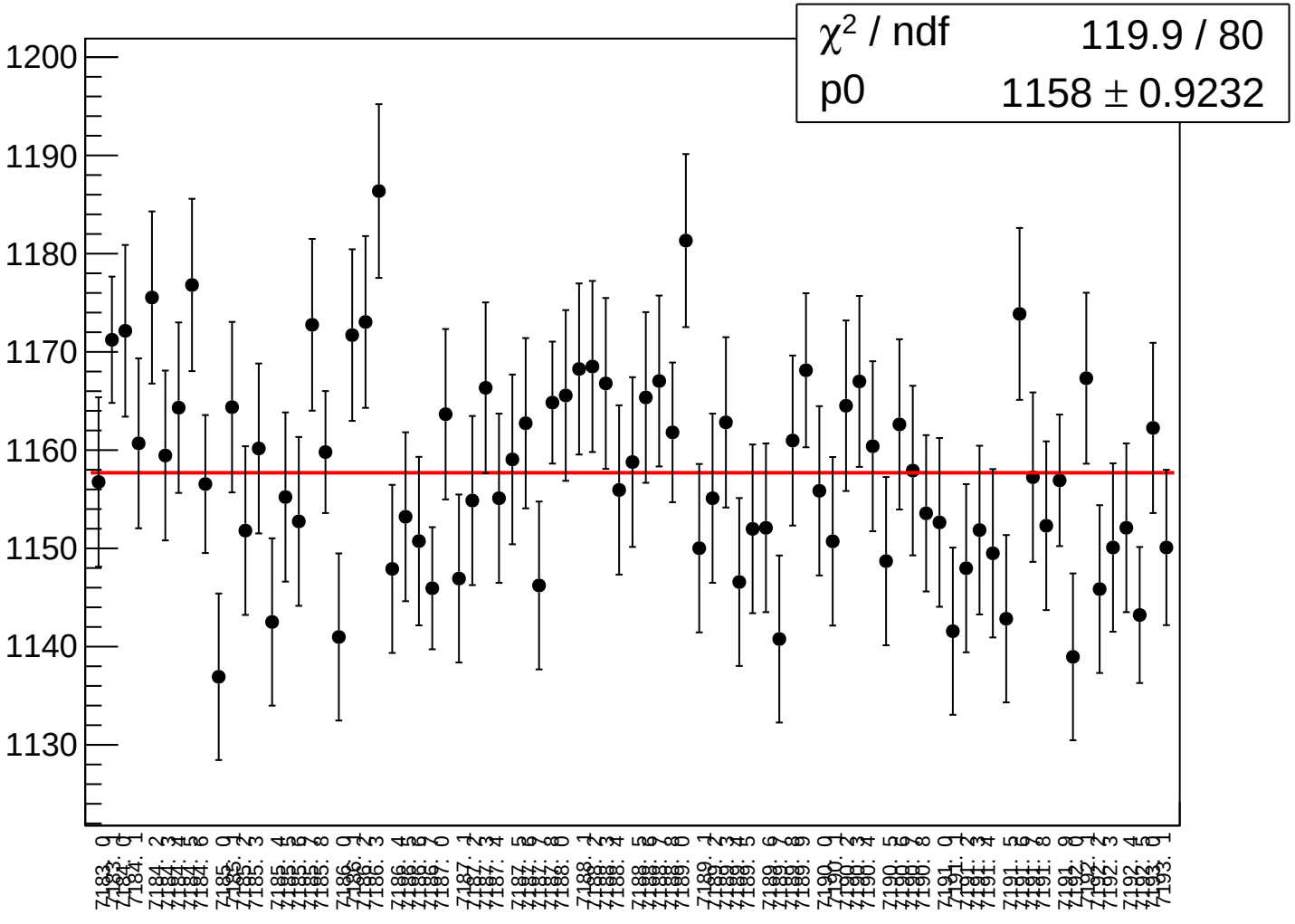

pull1D
Entries 81
Mean 0.003285
Std Dev 1.178

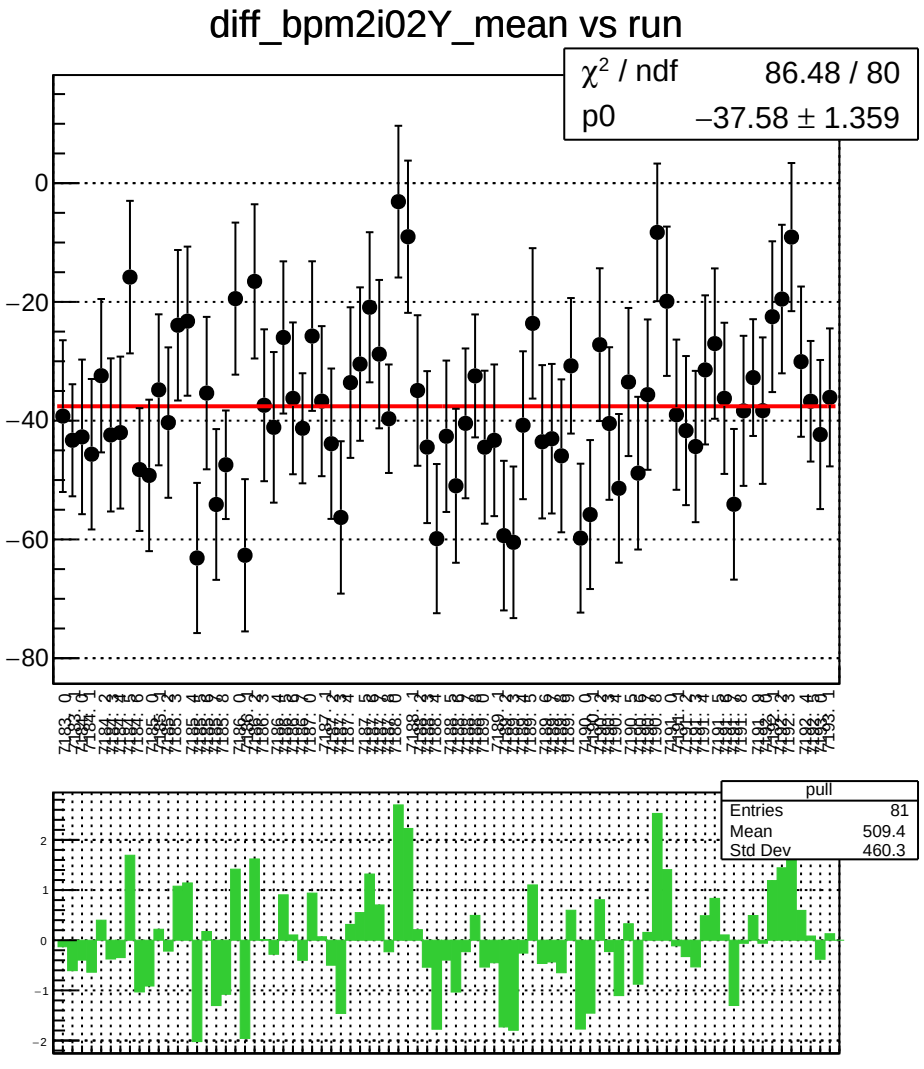

diff_bpm2i01Y_rms vs run
χ² / ndf 205.5 / 80
p0 1164 ± 0.9285
1200
1180
1160
1140
1120

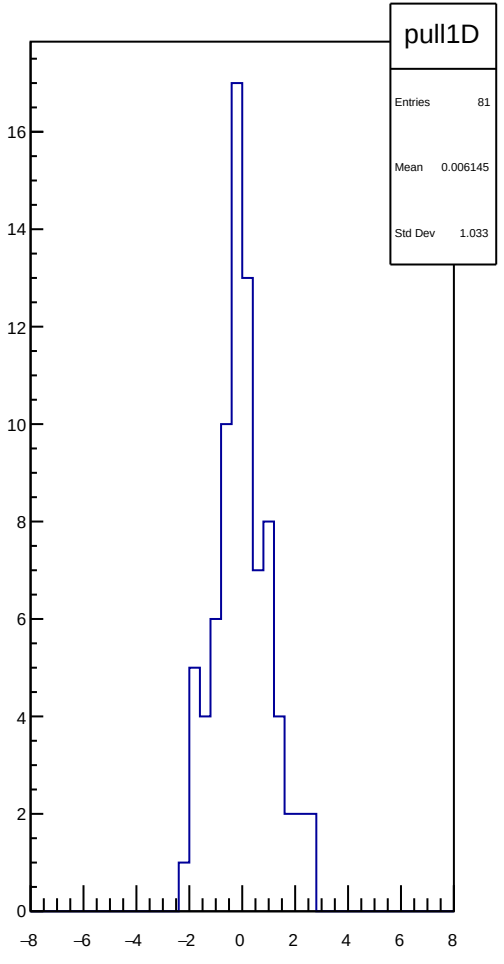

diff_bpm2i02X_mean vs run
χ² / ndf 106 / 80
p0 −18.53 ± 1.306
20
0
−20
−40
−60
pull
Entries 81
Mean −286.9
Std Dev 316.9
2
1
0
−1
−2

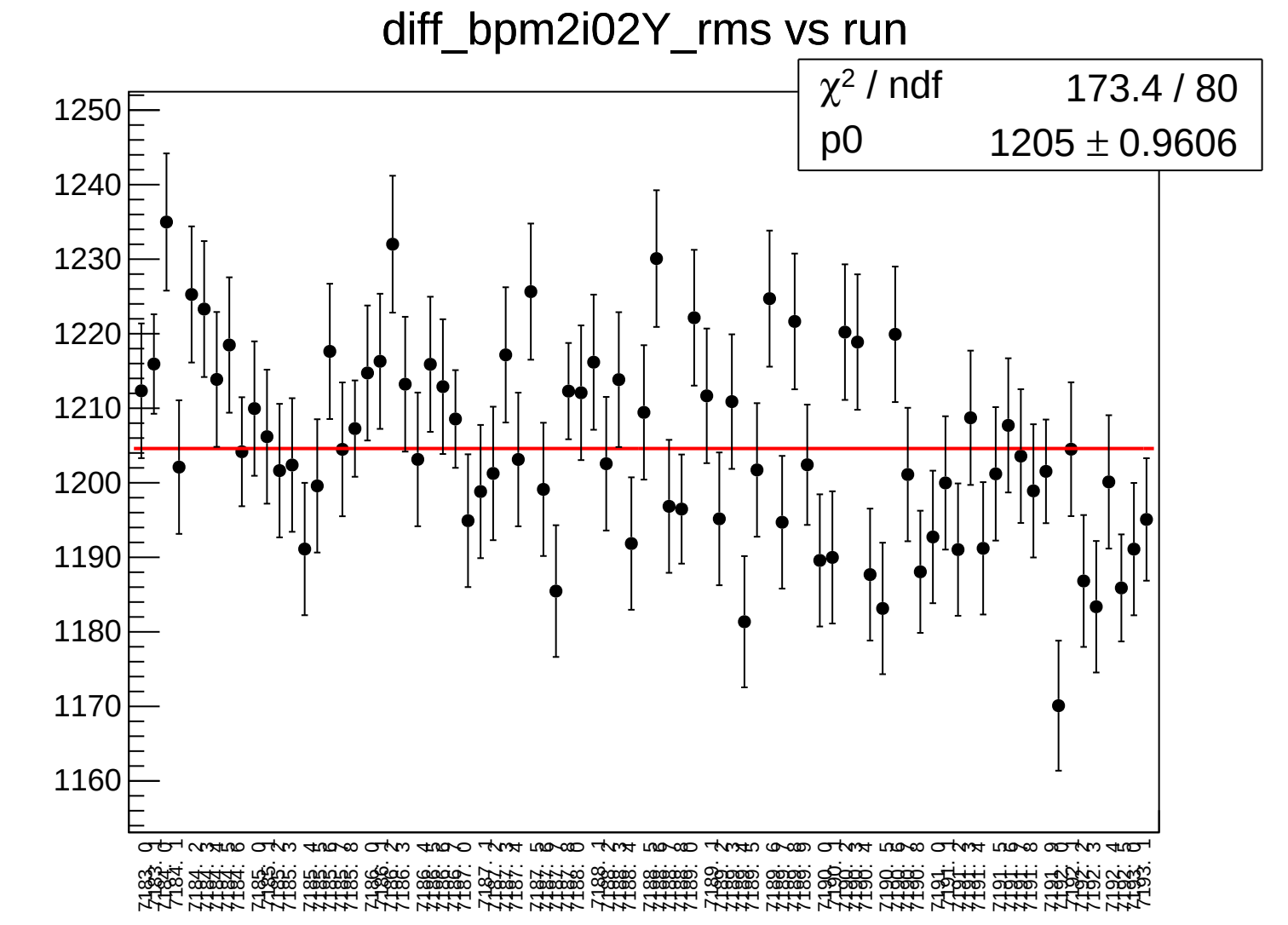

pull1D
Entries 81
Mean 0.006221
Std Dev 1.144
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

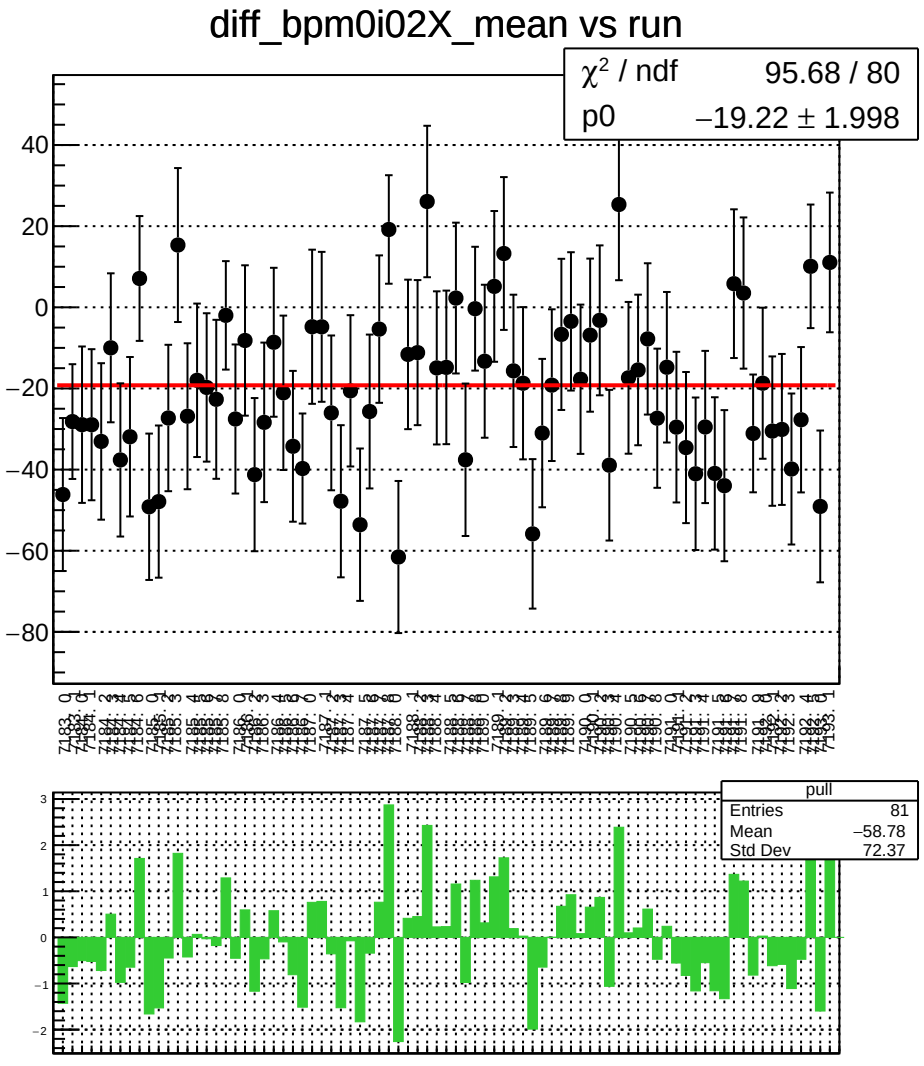
diff_bpm2i02X_rms vs run

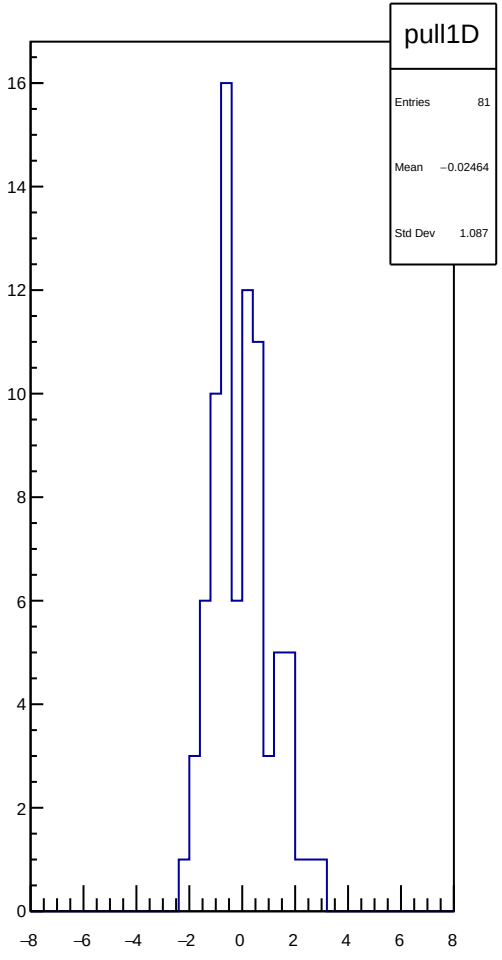



diff_bpm2i02Y_mean vs run
χ² / ndf 86.48 / 80
p0 −37.58 ± 1.359
0
−20
−40
−60
−80
pull
Entries 81
Mean 509.4
Std Dev 460.3
2
1
0
−1
−2

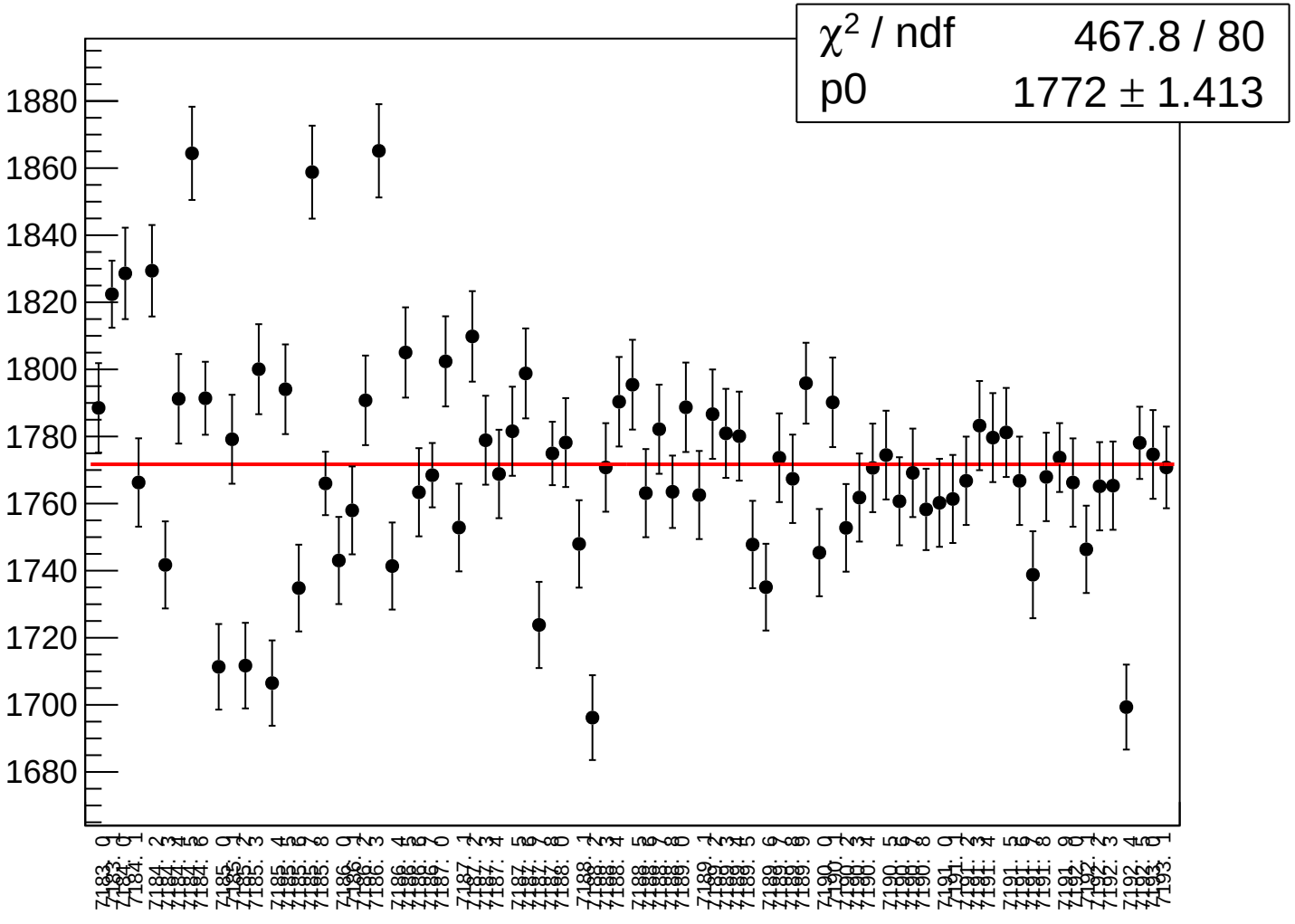

pull1D
Entries 81
Mean 0.006145
Std Dev 1.033
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

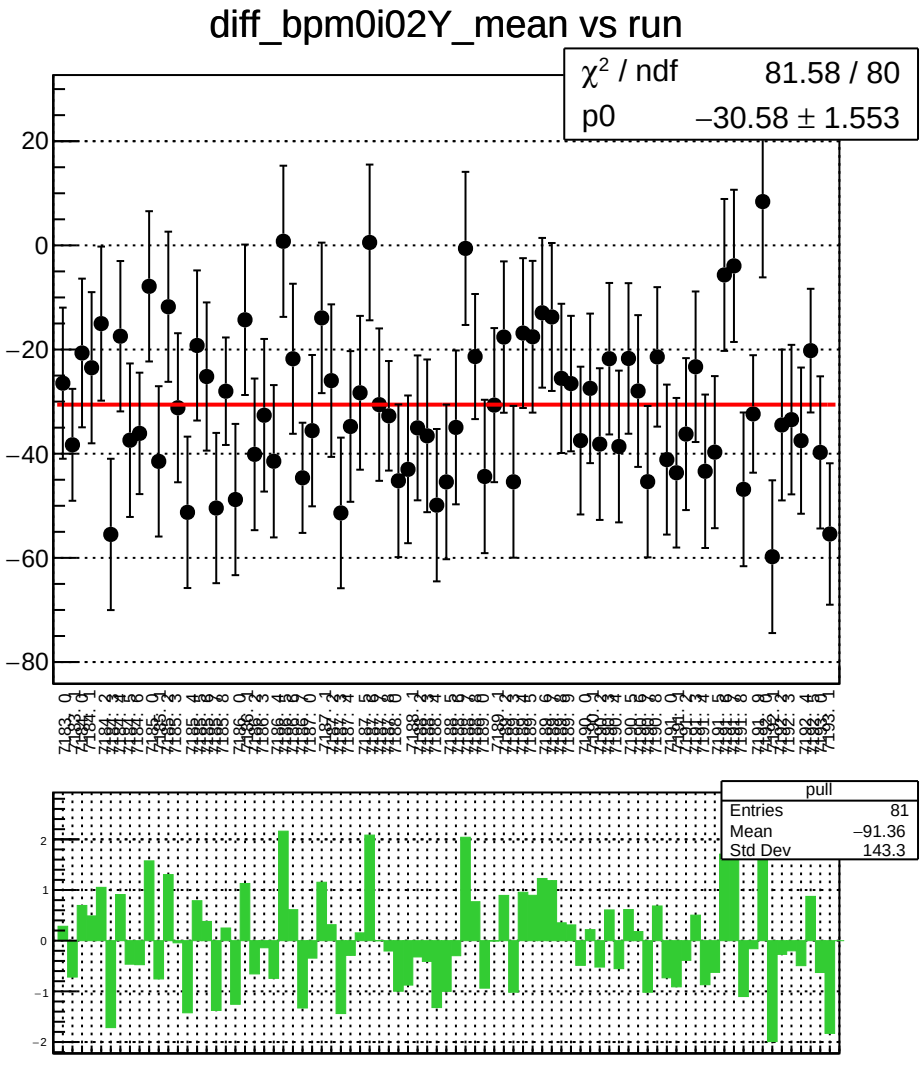

diff_bpm2i02Y_rms vs run
χ² / ndf 173.4 / 80
p0 1205 ± 0.9606
1250
1240
1230
1220
1210
1200
1190
1180
1170
1160

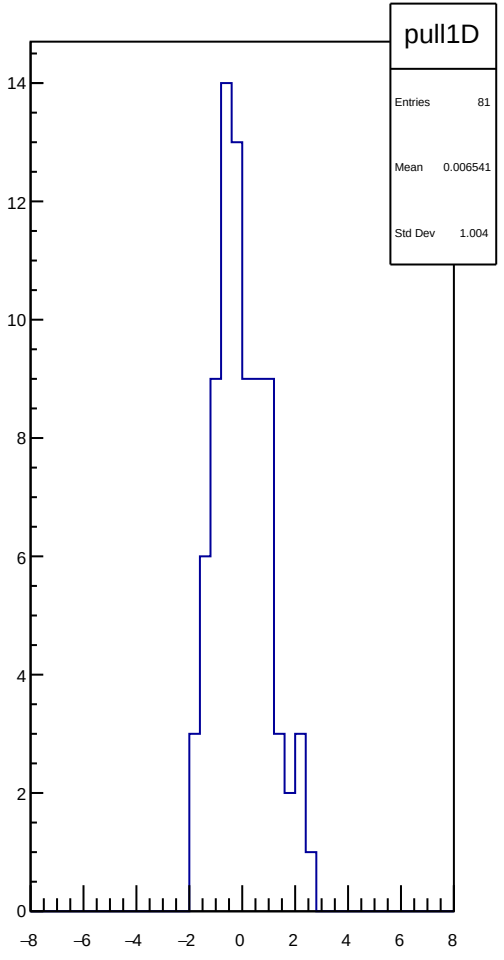

diff_bpm0i02X_mean vs run
χ^2 / ndf 95.68 / 80
p0 −19.22 ± 1.998
pull
Entries 81
Mean −58.78
Std Dev 72.37

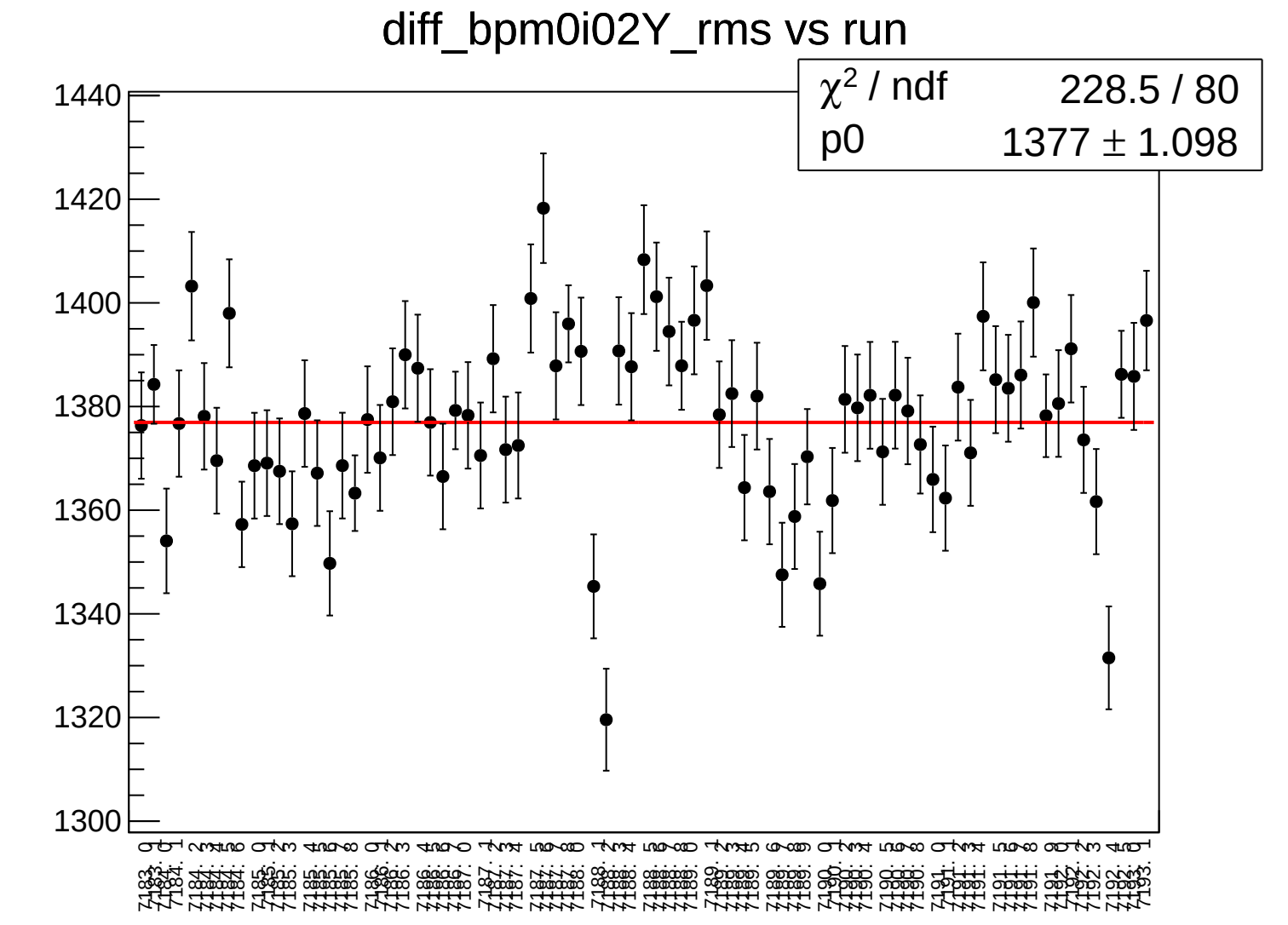

pull1D
Entries 81
Mean −0.02464
Std Dev 1.087

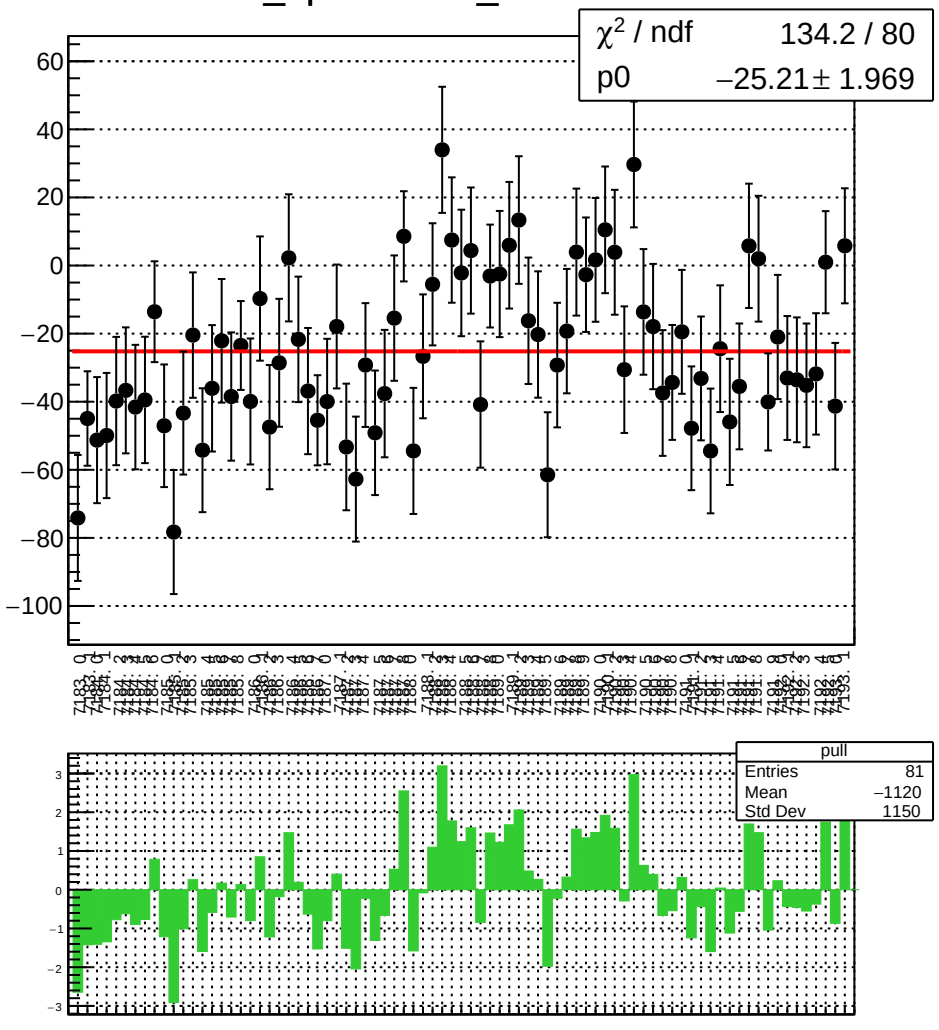
diff_bpm0i02X_rms vs run

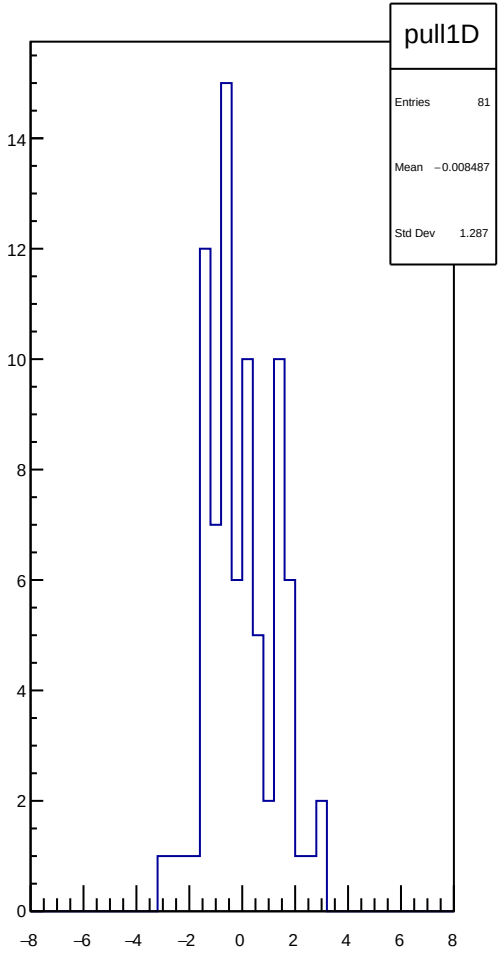


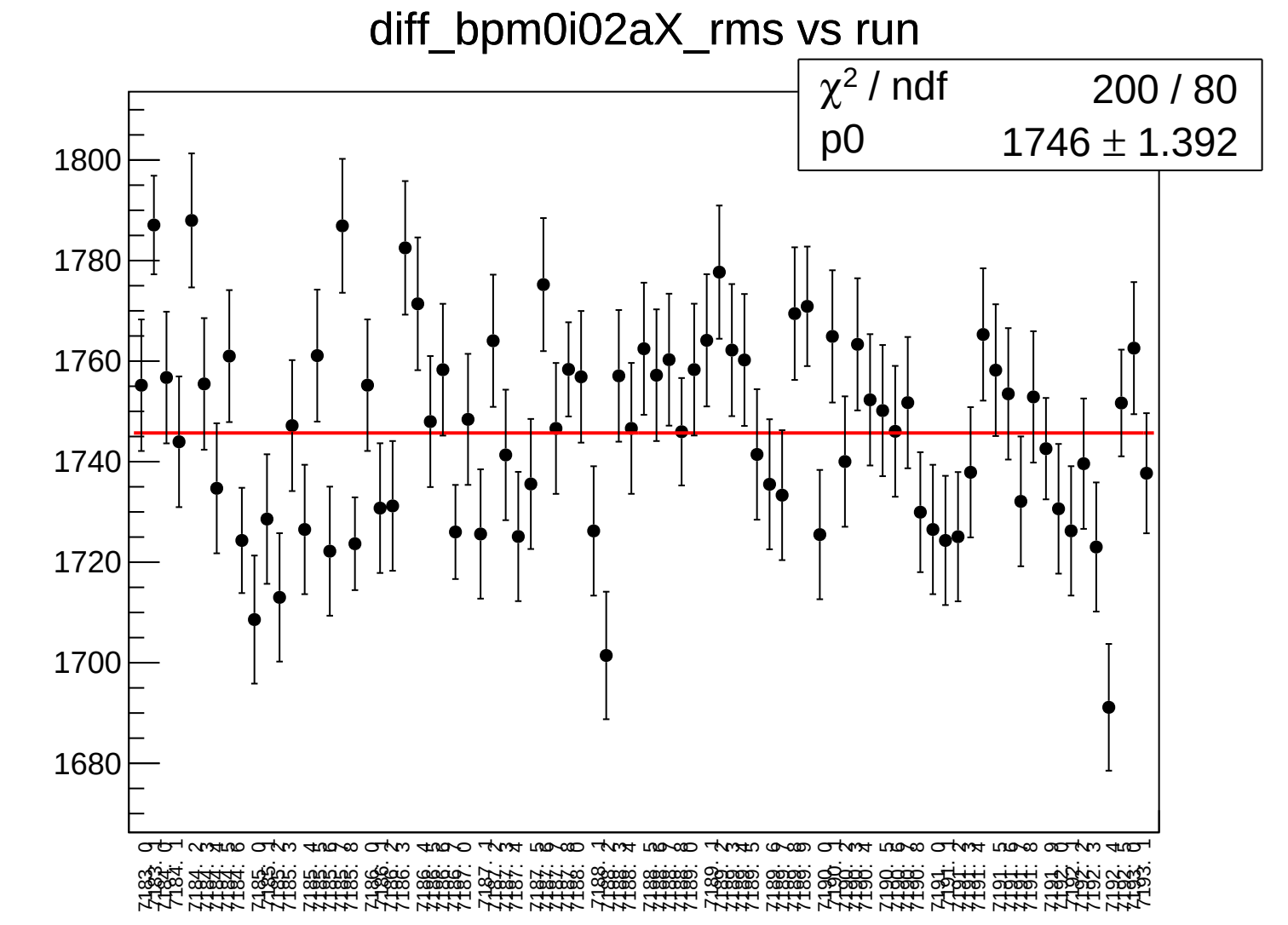

diff_bpm0i02Y_mean vs run
χ² / ndf 81.58 / 80
p0 −30.58 ± 1.553
pull
Entries 81
Mean −91.36
Std Dev 143.3

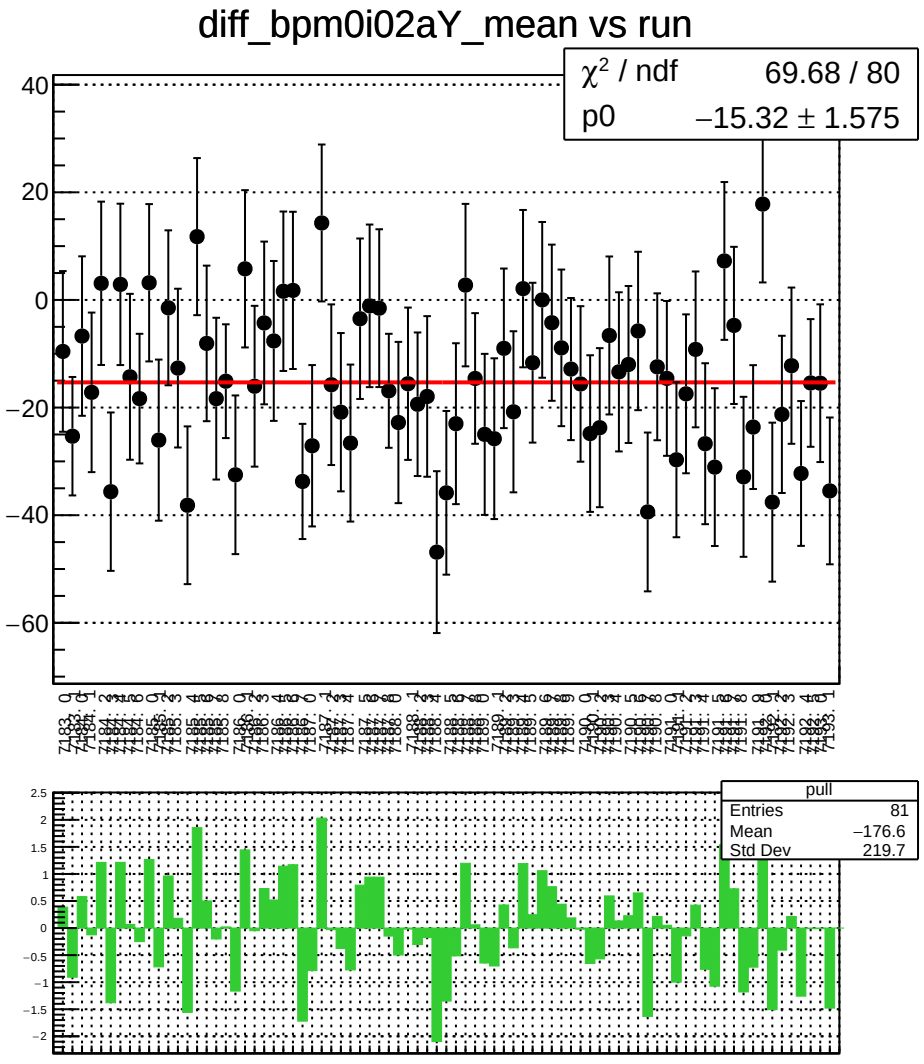

pull1D
Entries 81
Mean 0.006541
Std Dev 1.004

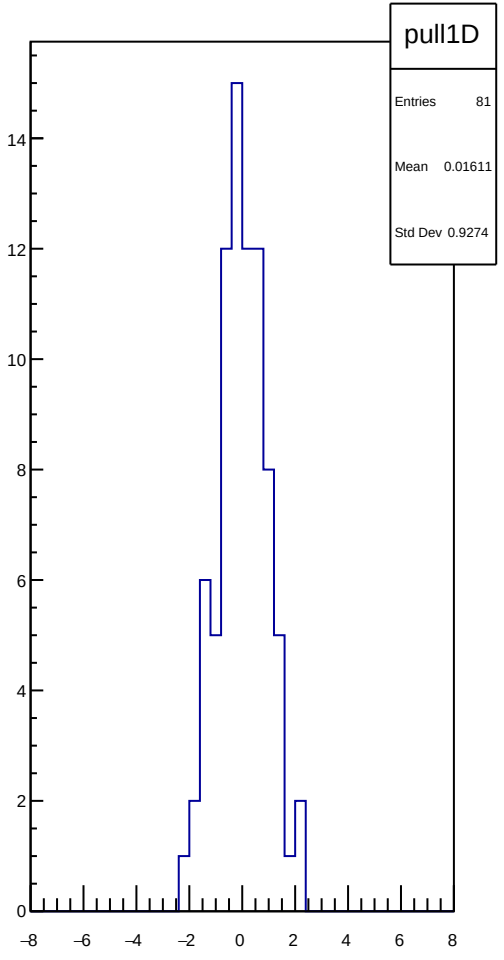

diff_bpm0i02Y_rms vs run
χ² / ndf 228.5 / 80
p0 1377 ± 1.098
1440
1420
1400
1380
1360
1340
1320
1300

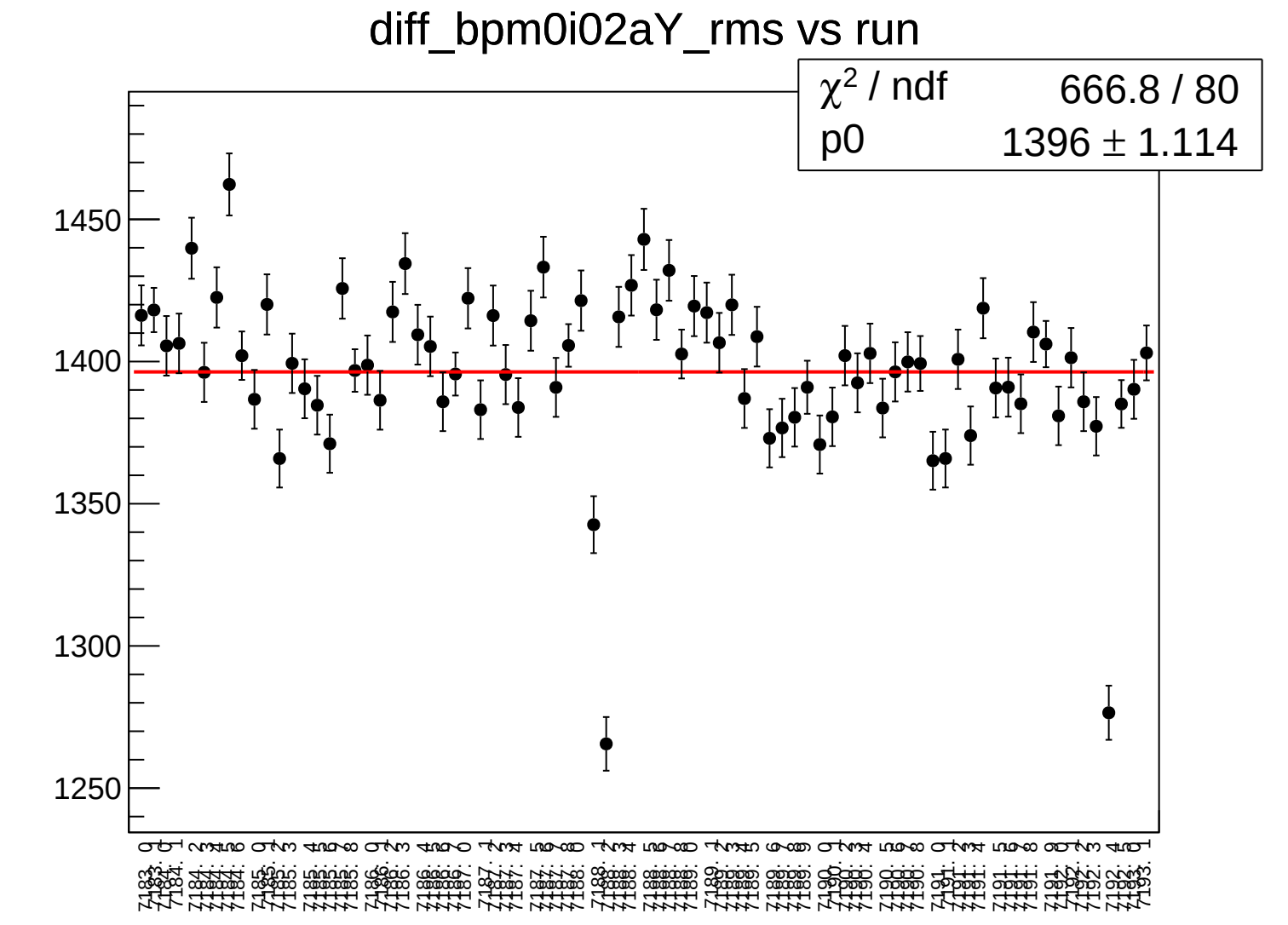

diff_bpm0i02aX_mean vs run
χ^2 / ndf 134.2 / 80
p0 −25.21± 1.969
pull
Entries 81
Mean −1120
Std Dev 1150

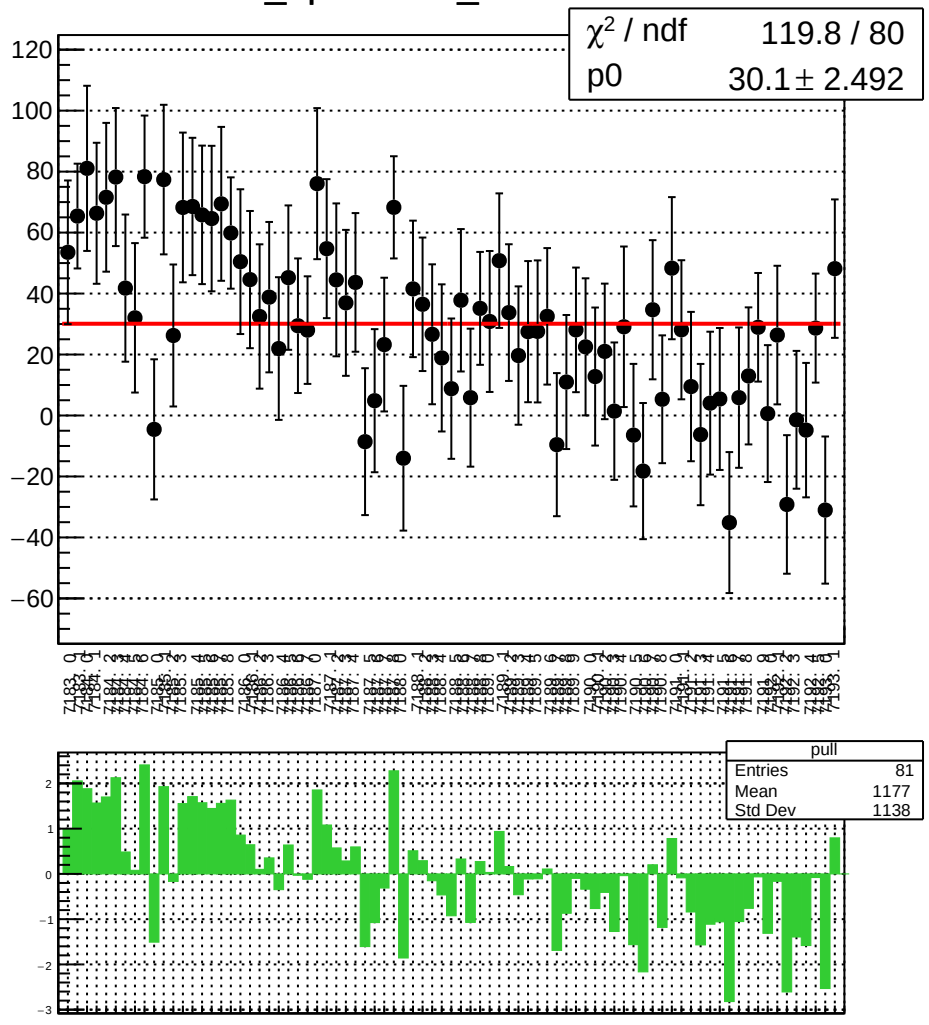

pull1D
Entries 81
Mean −0.008487
Std Dev 1.287

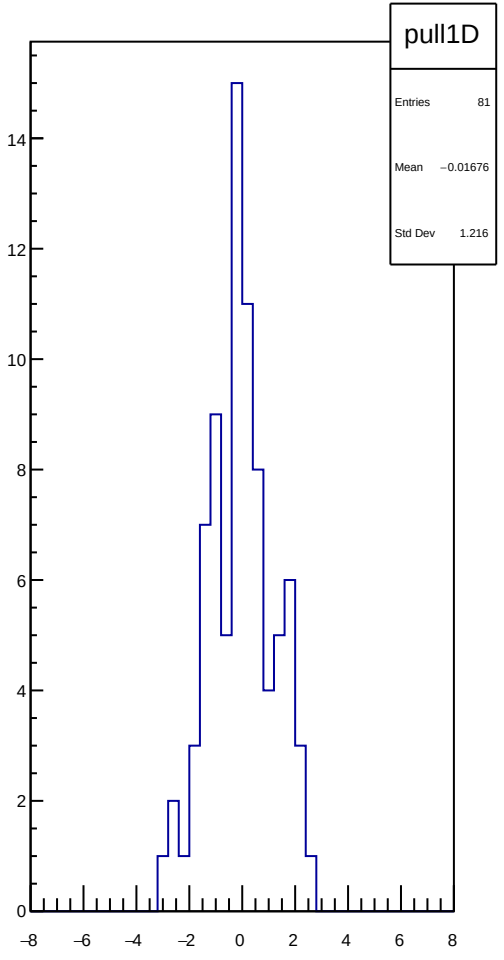

diff_bpm0i02aX_rms vs run
χ² / ndf 200 / 80
p0 1746 ± 1.392
1800
1780
1760
1740
1720
1700
1680


diff_bpm0i02aY_mean vs run
χ² / ndf 69.68 / 80
p0 −15.32 ± 1.575
pull
Entries 81
Mean −176.6
Std Dev 219.7

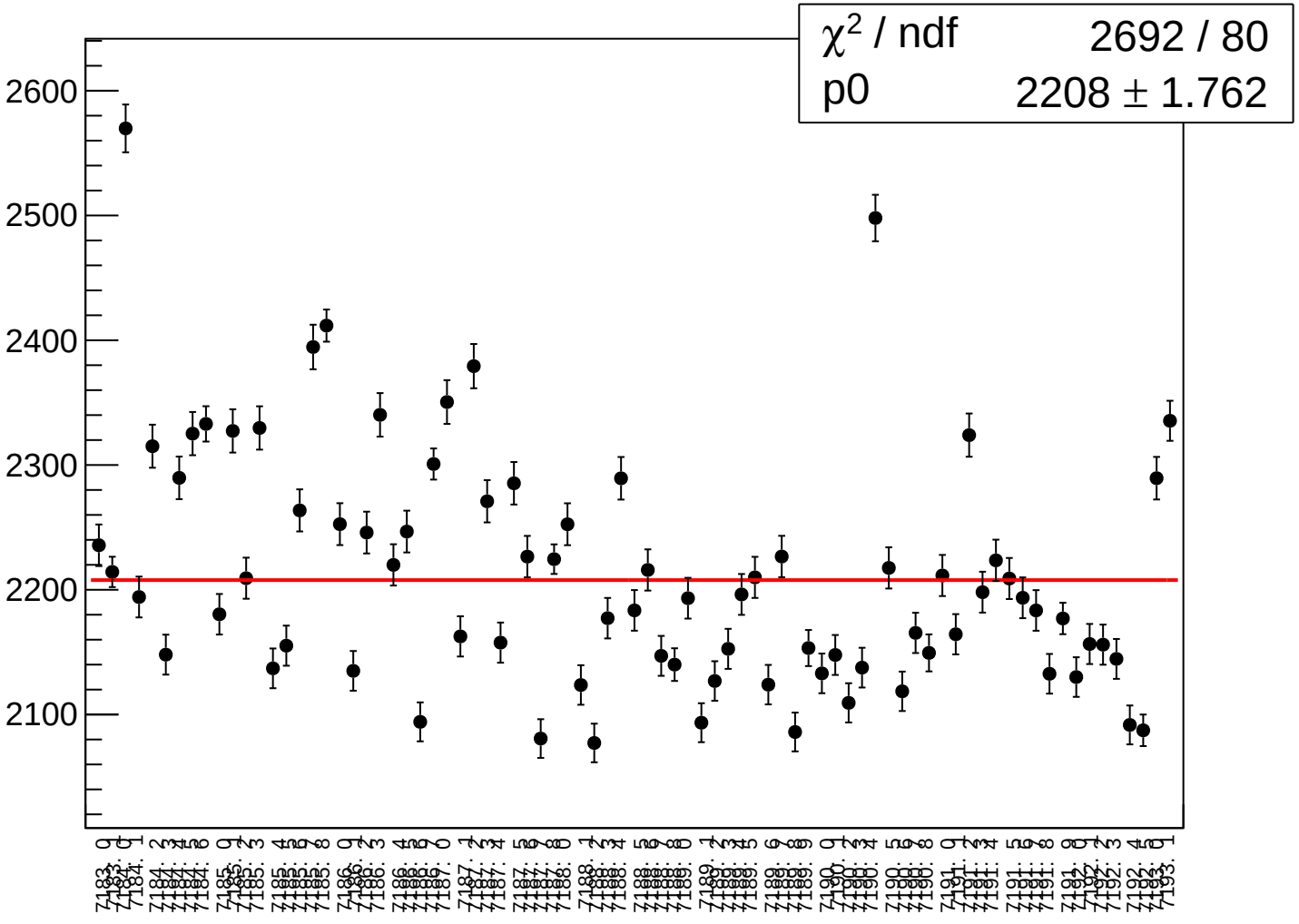

pull1D
Entries 81
Mean 0.01611
Std Dev 0.9274

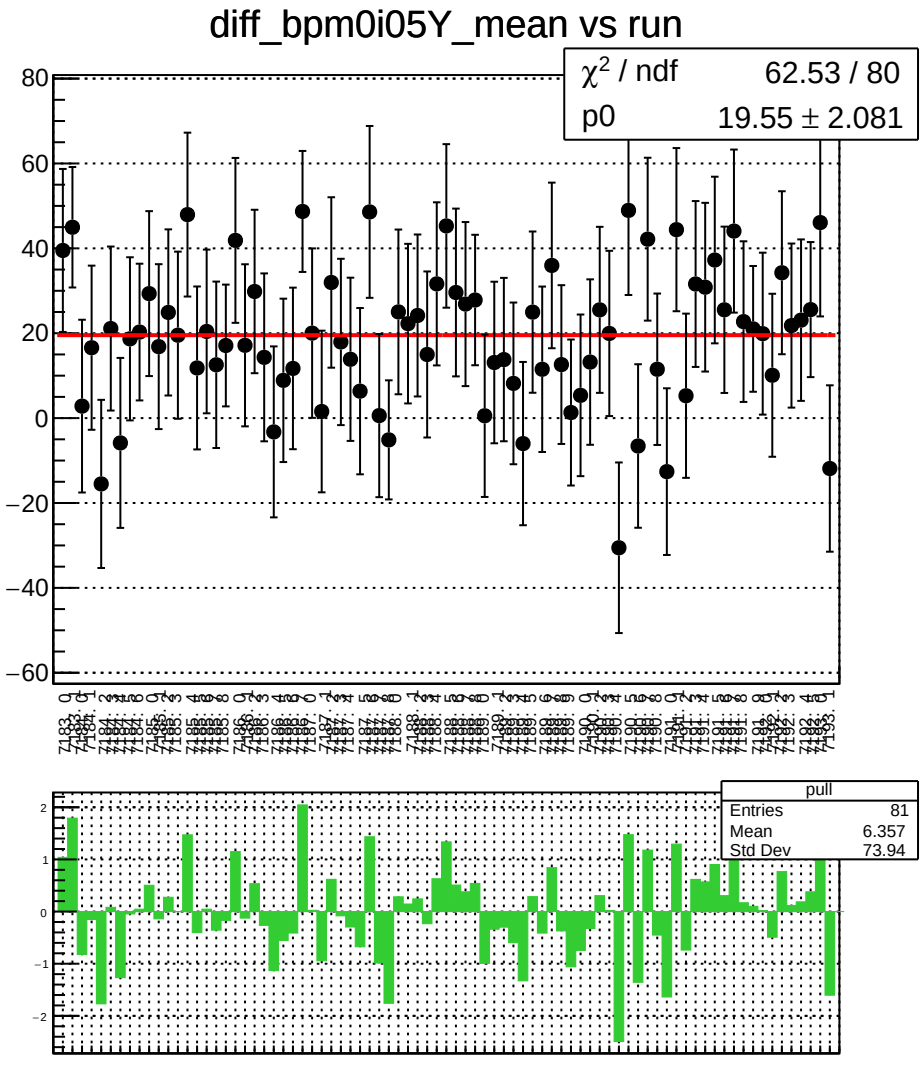

diff_bpm0i02aY_rms vs run
χ² / ndf 666.8 / 80
p0 1396 ± 1.114
1450
1400
1350
1300
1250

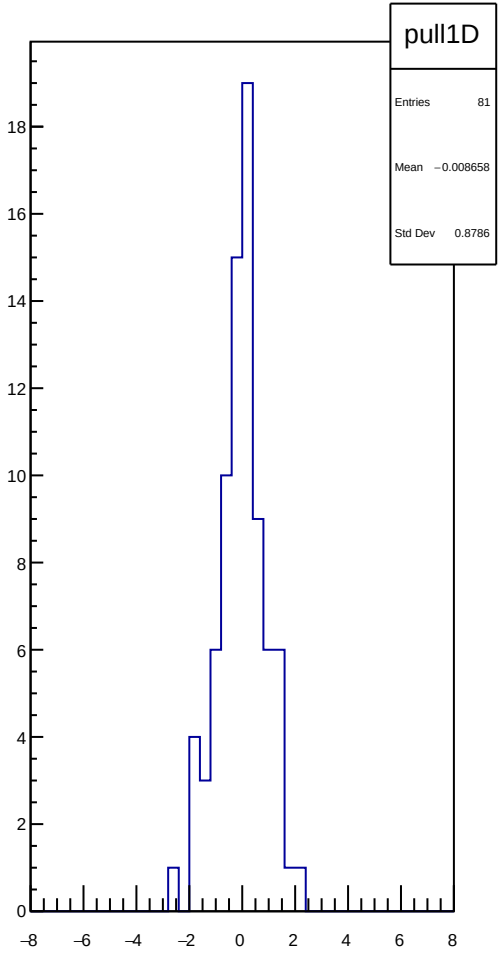

diff_bpm0i05X_mean vs run
χ^2 / ndf 119.8 / 80
p0 30.1 ± 2.492
pull
Entries 81
Mean 1177
Std Dev 1138

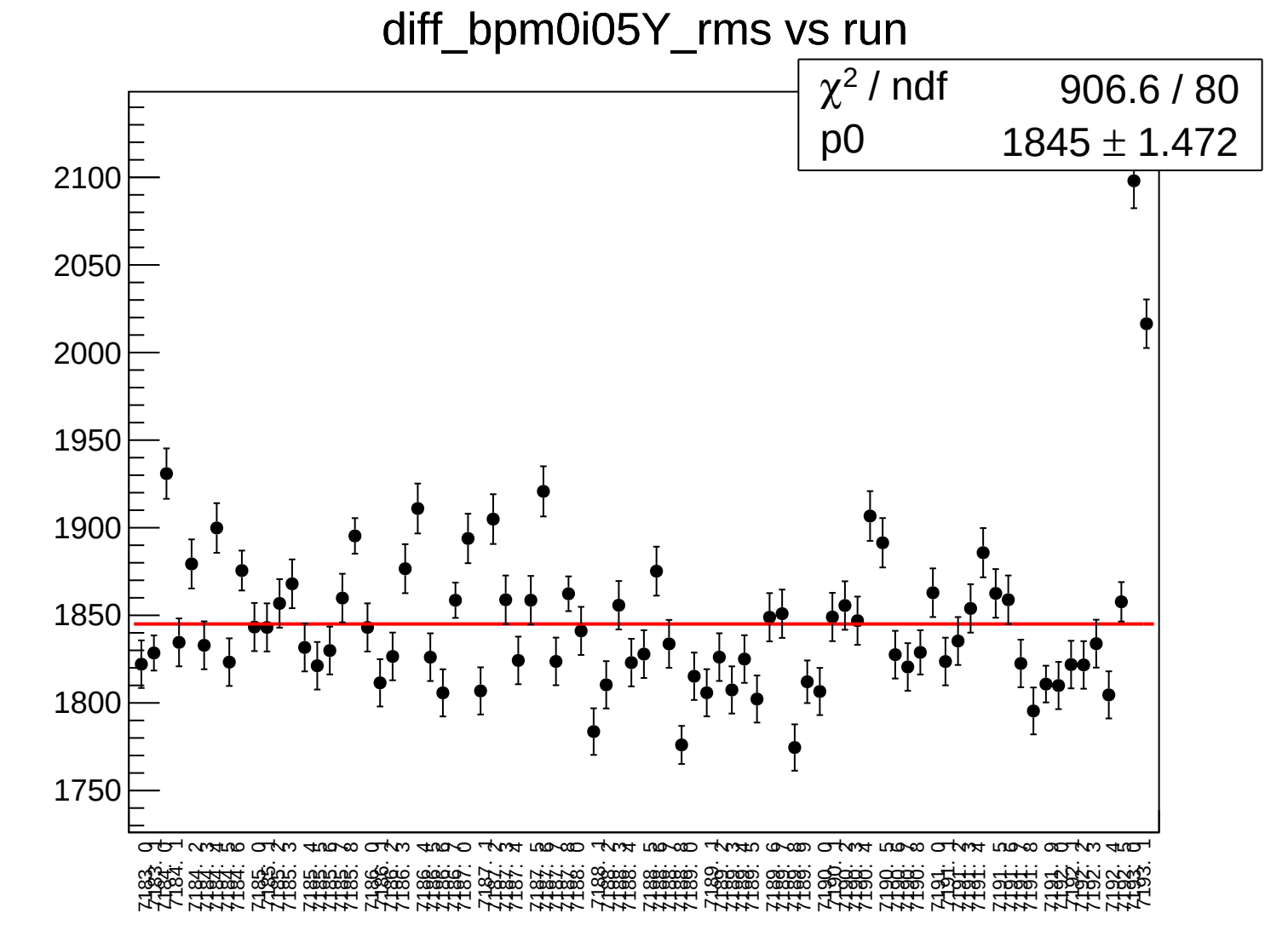

pull1D
Entries 81
Mean −0.01676
Std Dev 1.216

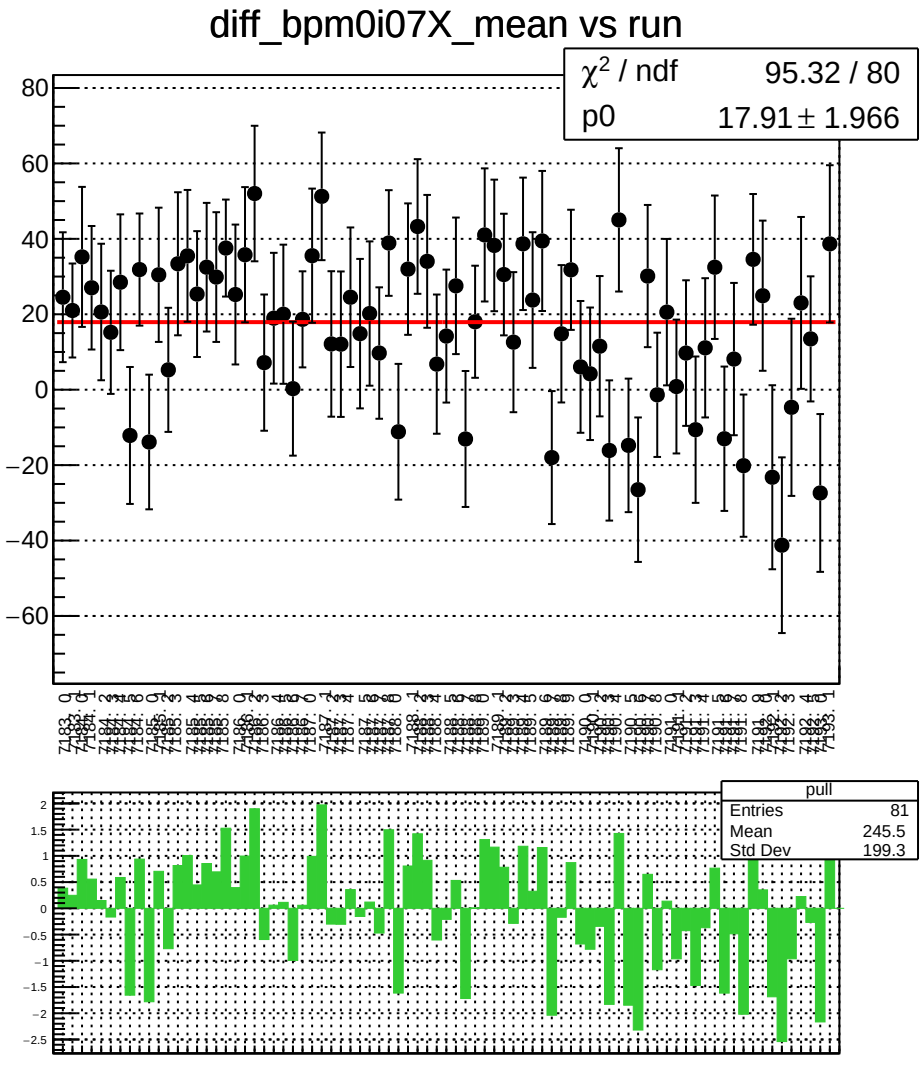
diff_bpm0i05X_rms vs run

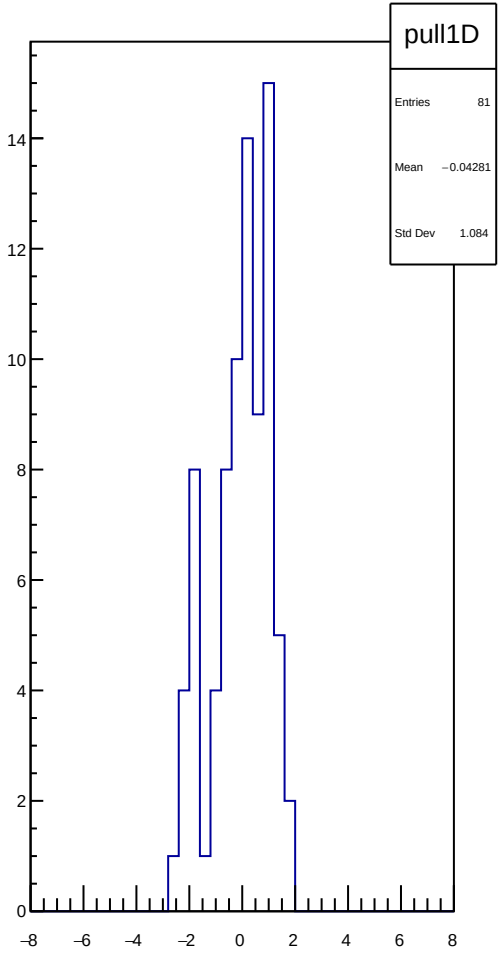


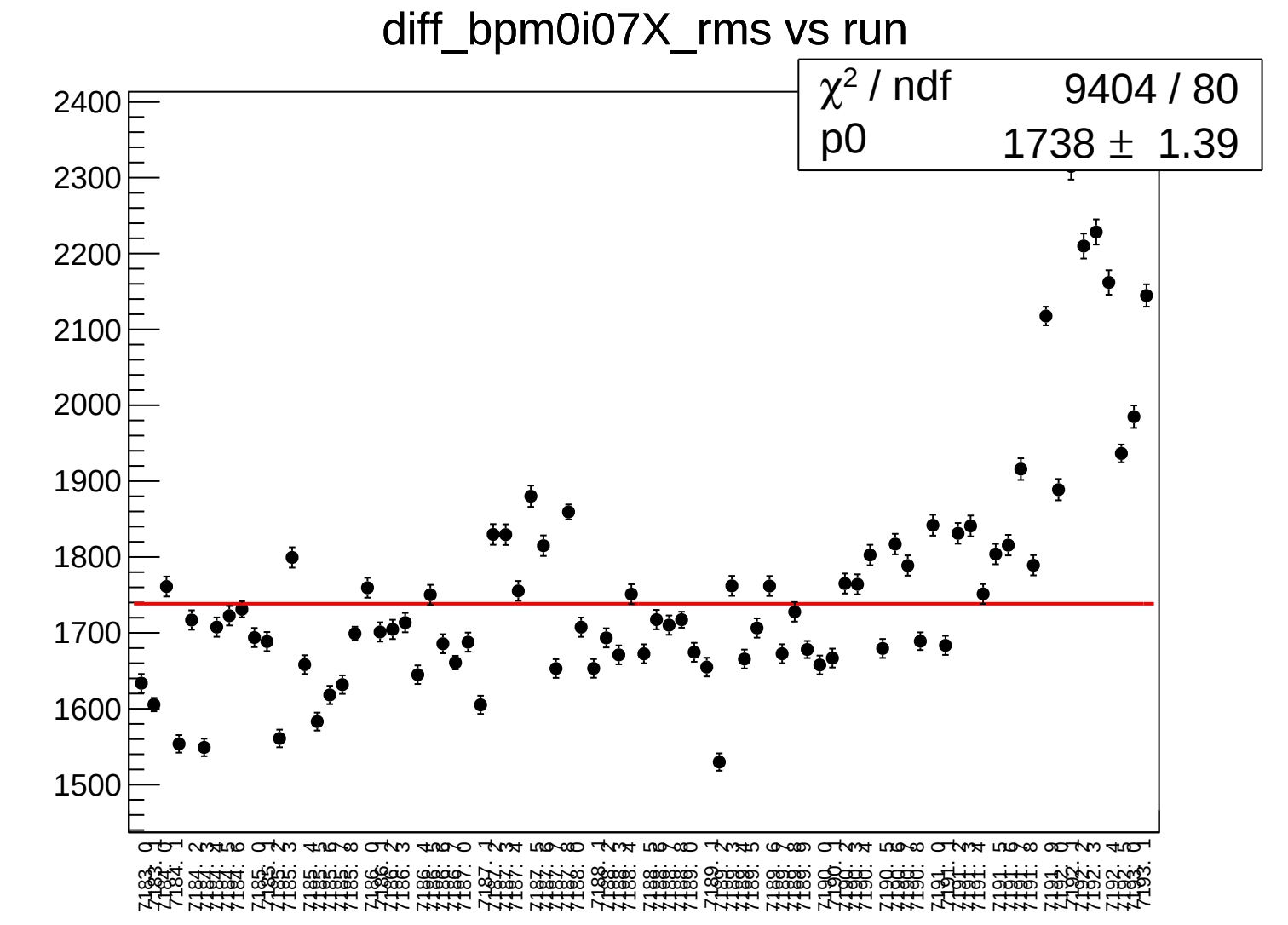

diff_bpm0i05Y_mean vs run
χ^2 / ndf 62.53 / 80
p0 19.55 ± 2.081
pull
Entries 81
Mean 6.357
Std Dev 73.94

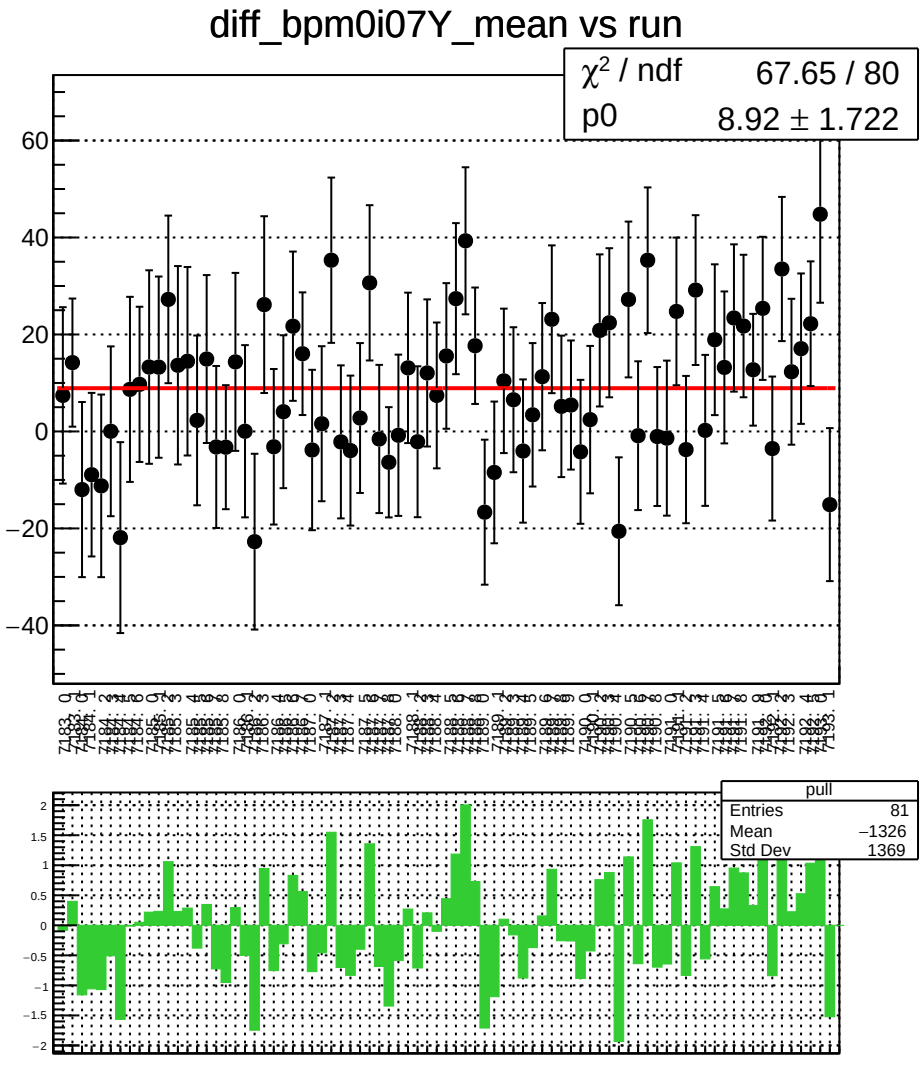

pull1D
Entries 81
Mean −0.008658
Std Dev 0.8786

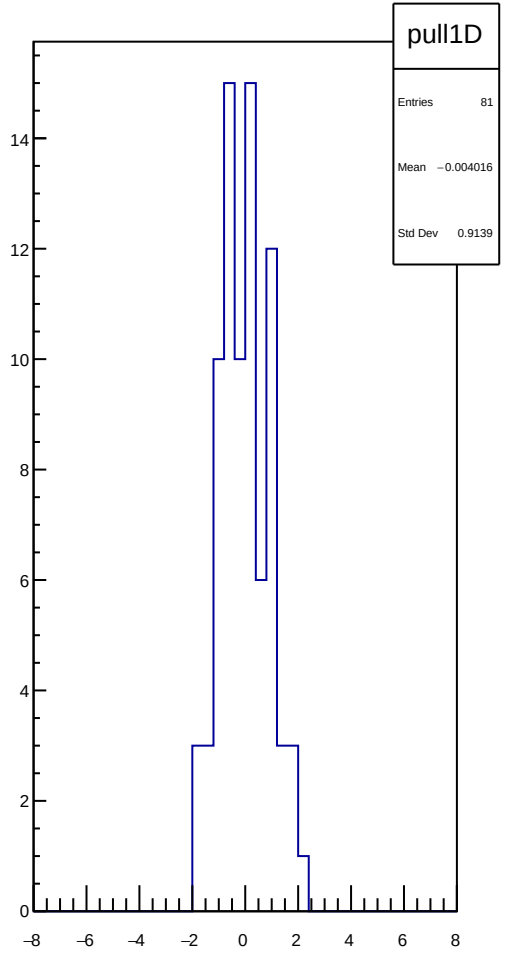

diff_bpm0i05Y_rms vs run
χ² / ndf 906.6 / 80
p0 1845 ± 1.472
2100
2050
2000
1950
1900
1850
1800
1750

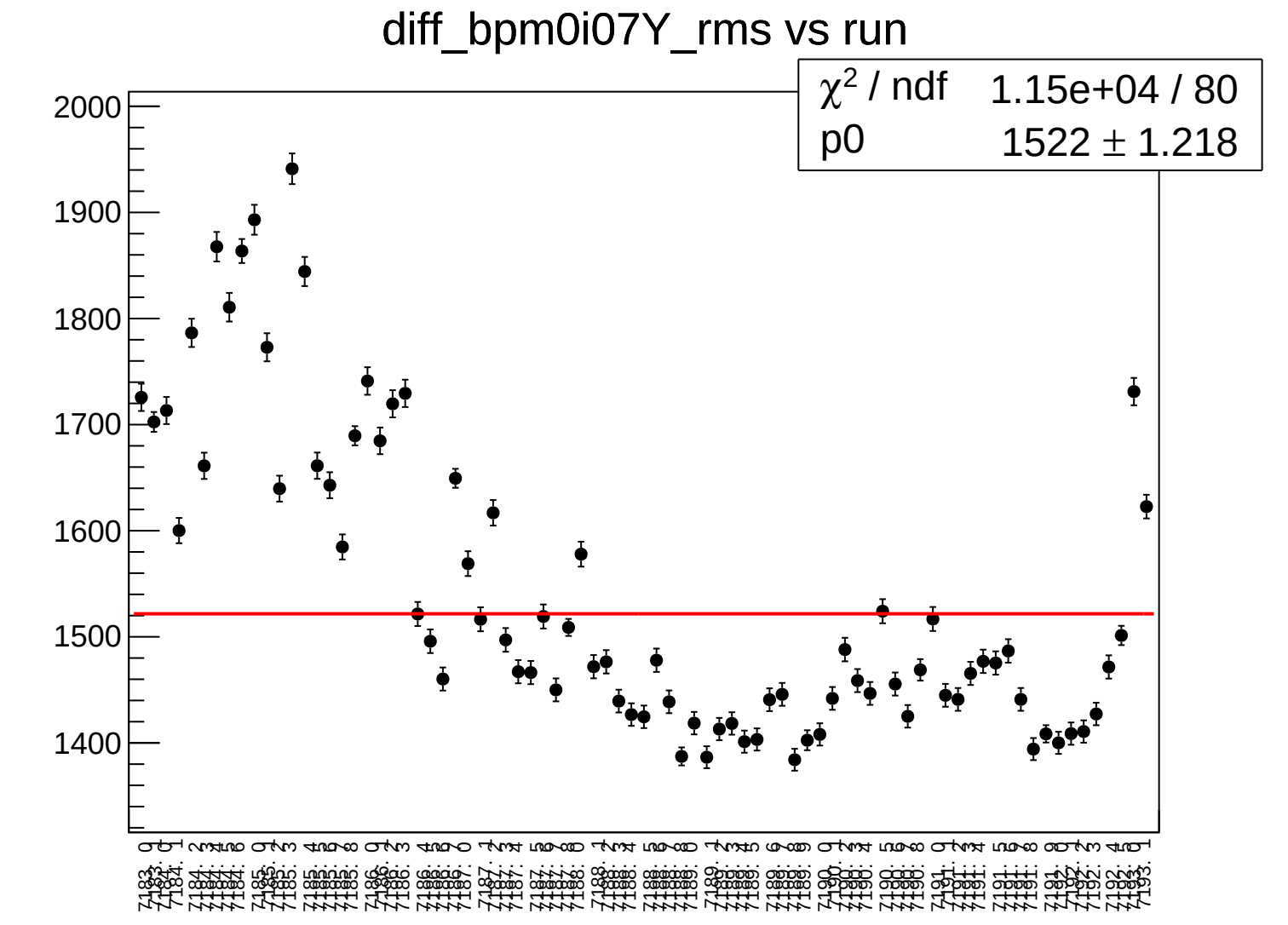

diff_bpm0i07X_mean vs run
χ² / ndf 95.32 / 80
p0 17.91 ± 1.966
pull
Entries 81
Mean 245.5
Std Dev 199.3

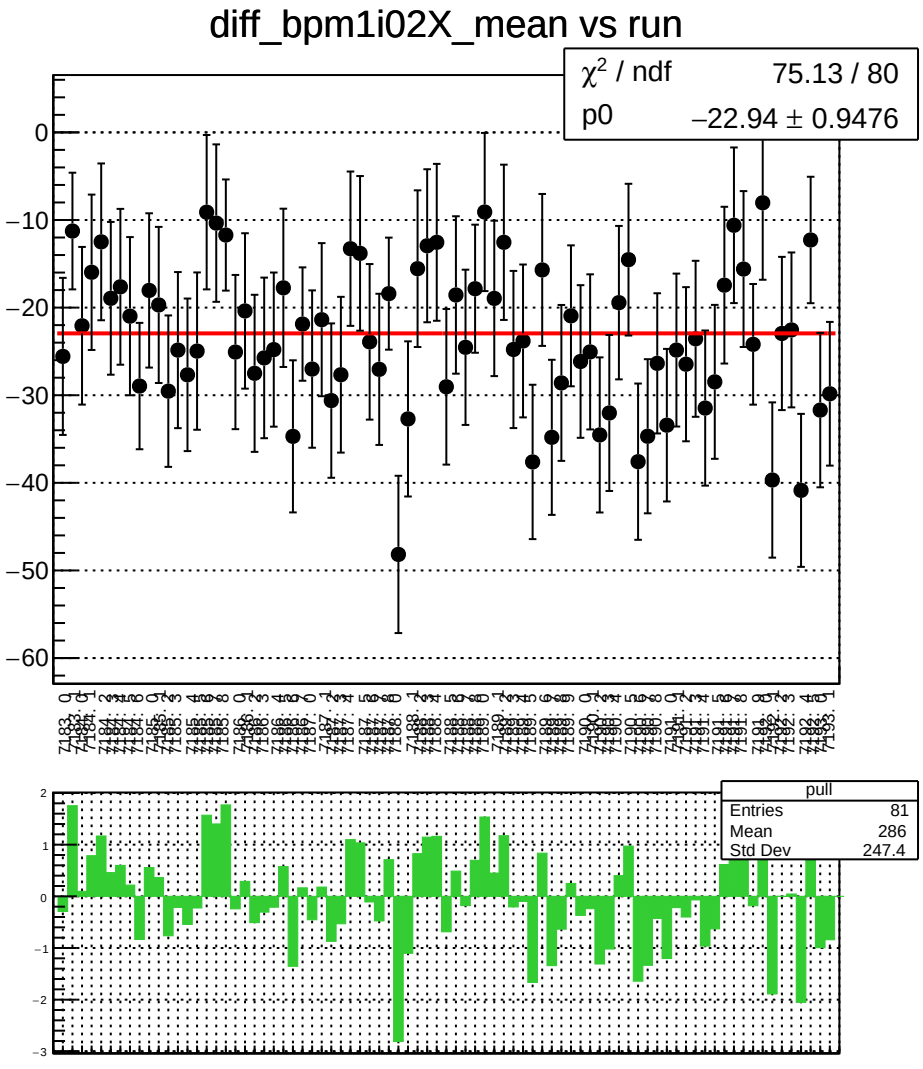

pull1D
Entries 81
Mean −0.04281
Std Dev 1.084

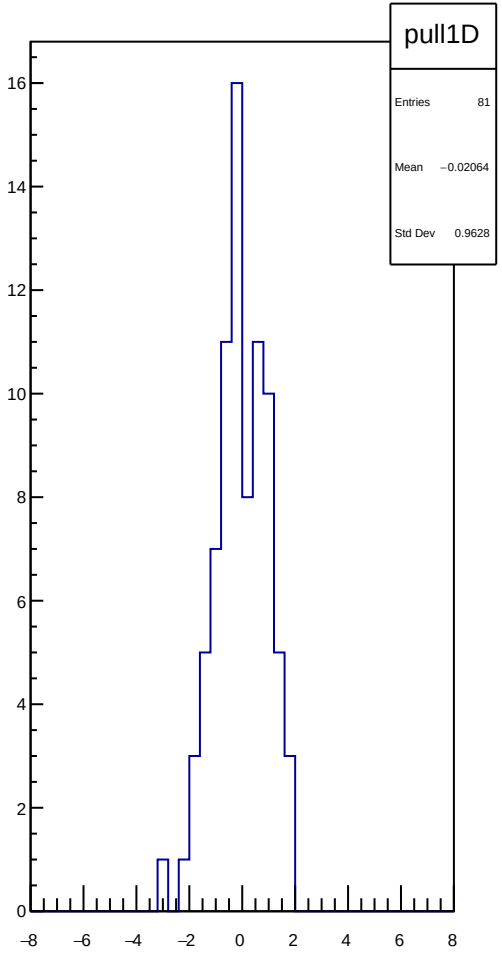

diff_bpm0i07X_rms vs run
χ^2 / ndf 9404 / 80
p0 1738 ± 1.39
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500

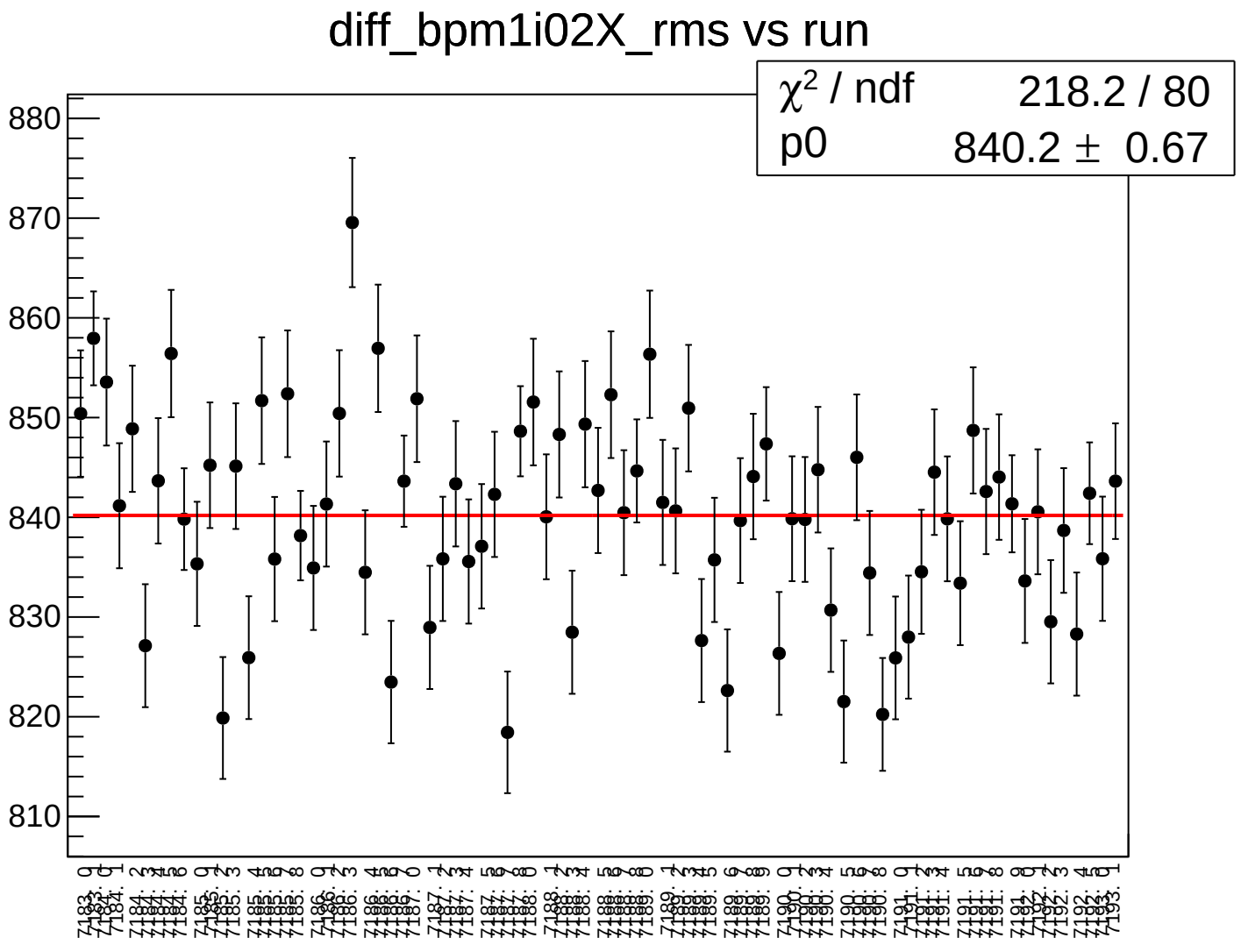

diff_bpm0i07Y_mean vs run
χ^2 / ndf 67.65 / 80
p0 8.92 ± 1.722
pull
Entries 81
Mean −1326
Std Dev 1369

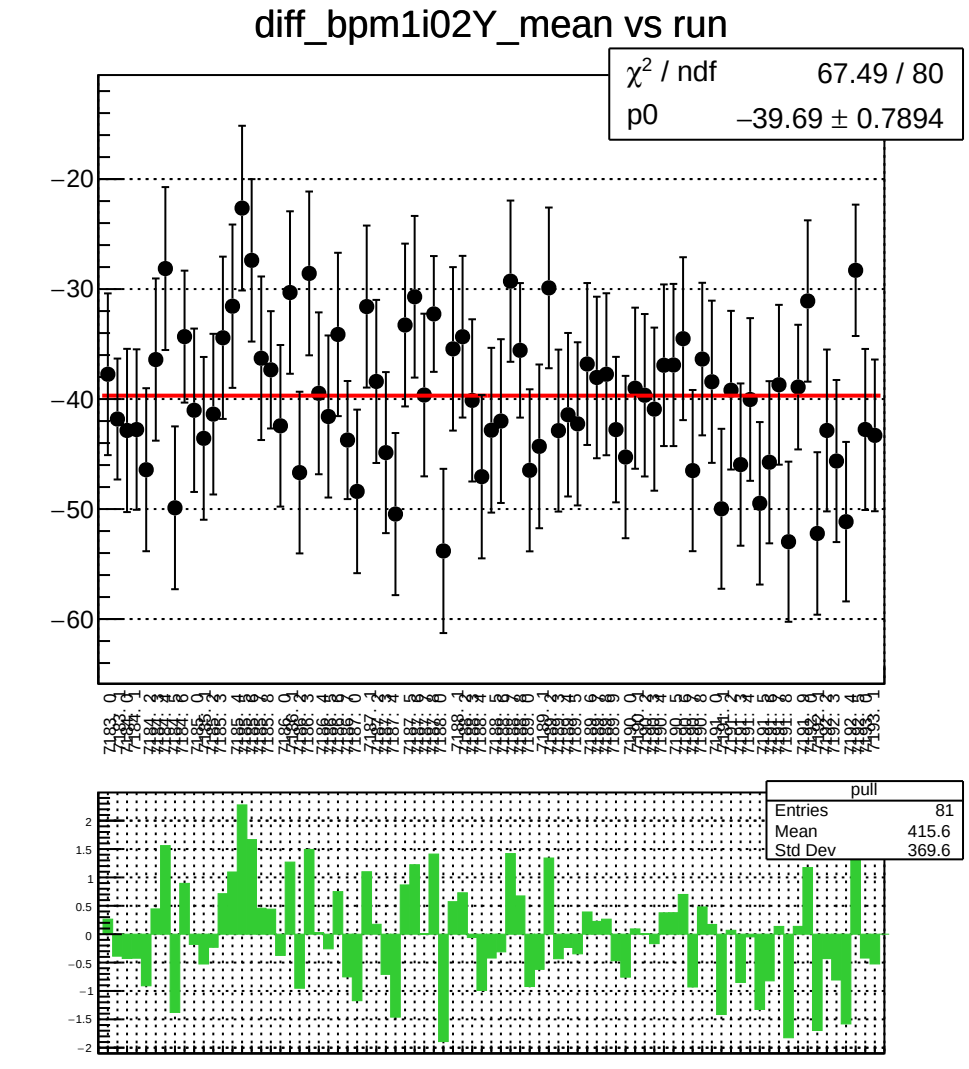

pull1D
Entries 81
Mean −0.004016
Std Dev 0.9139

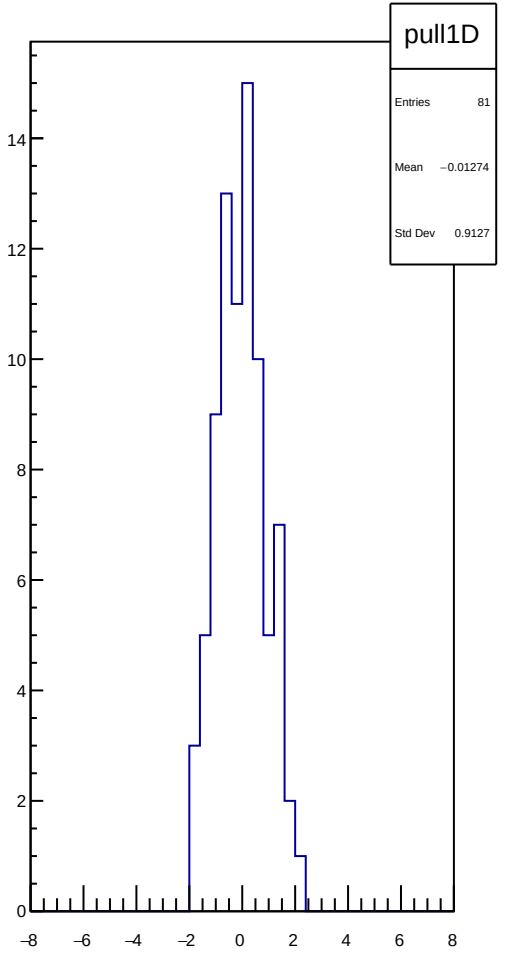

diff_bpm0i07Y_rms vs run
χ² / ndf 1.15e+04 / 80
p0 1522 ± 1.218
2000
1900
1800
1700
1600
1500
1400

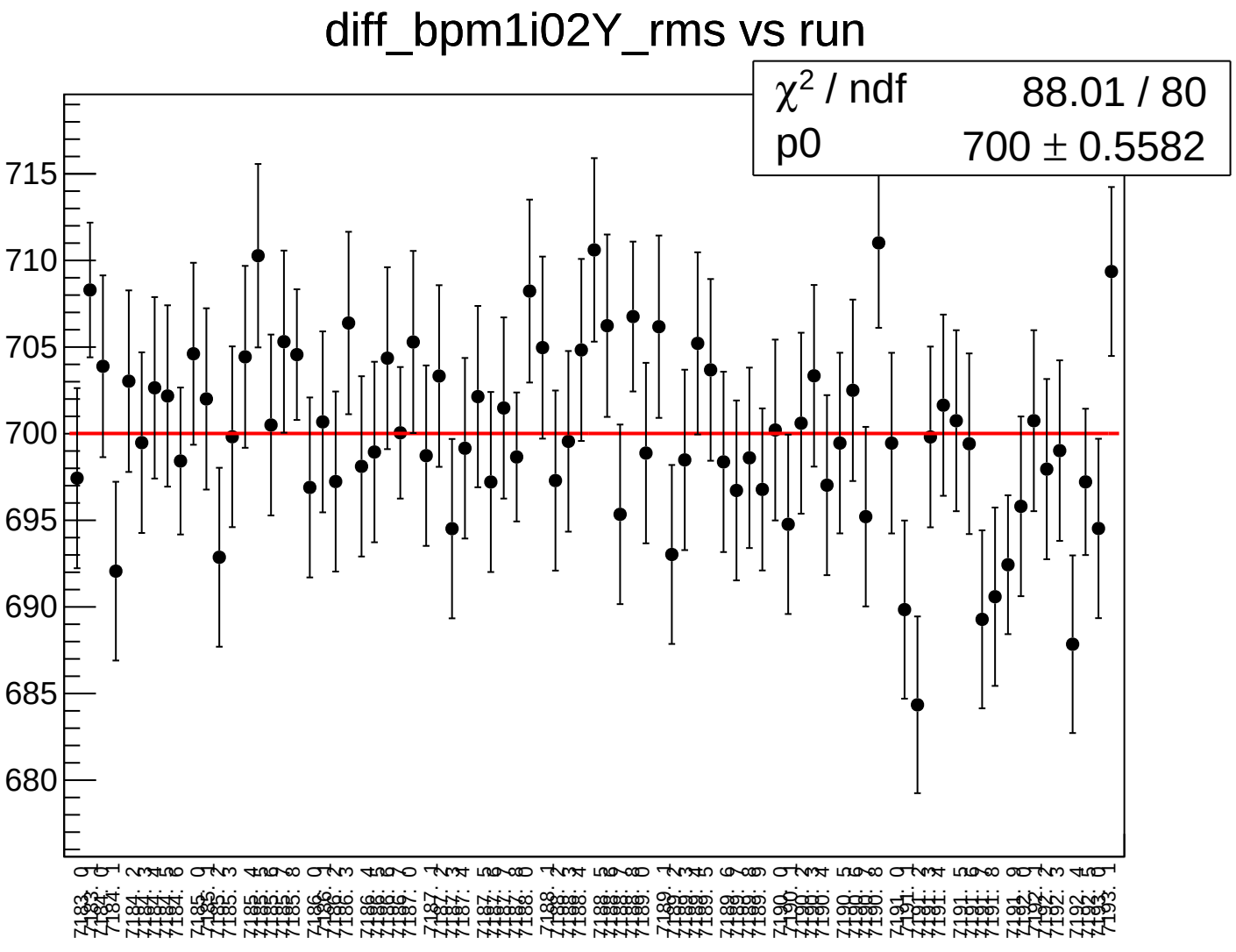

diff_bpm1i02X_mean vs run
χ² / ndf 75.13 / 80
p0 −22.94 ± 0.9476
pull
Entries 81
Mean 286
Std Dev 247.4

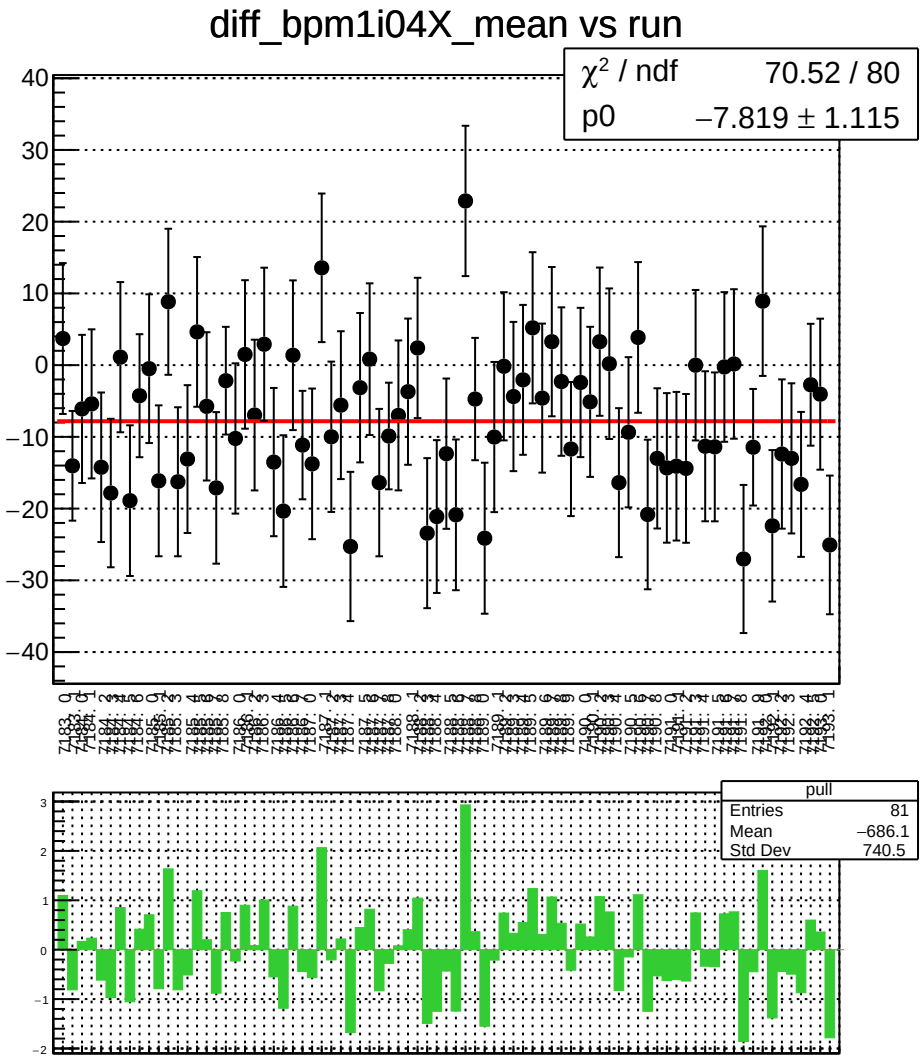

pull1D
Entries 81
Mean −0.02064
Std Dev 0.9628

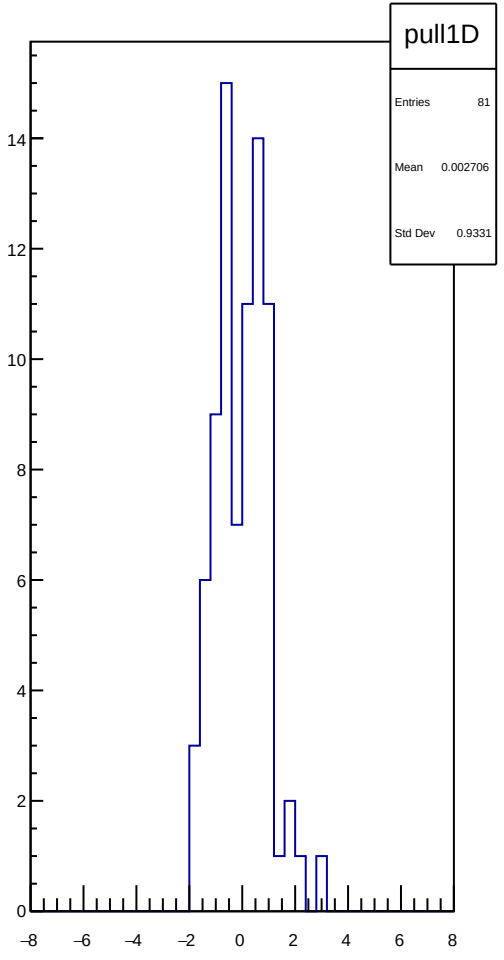

diff_bpm1i02X_rms vs run
χ² / ndf 218.2 / 80
p0 840.2 ± 0.67
880
870
860
850
840
830
820
810

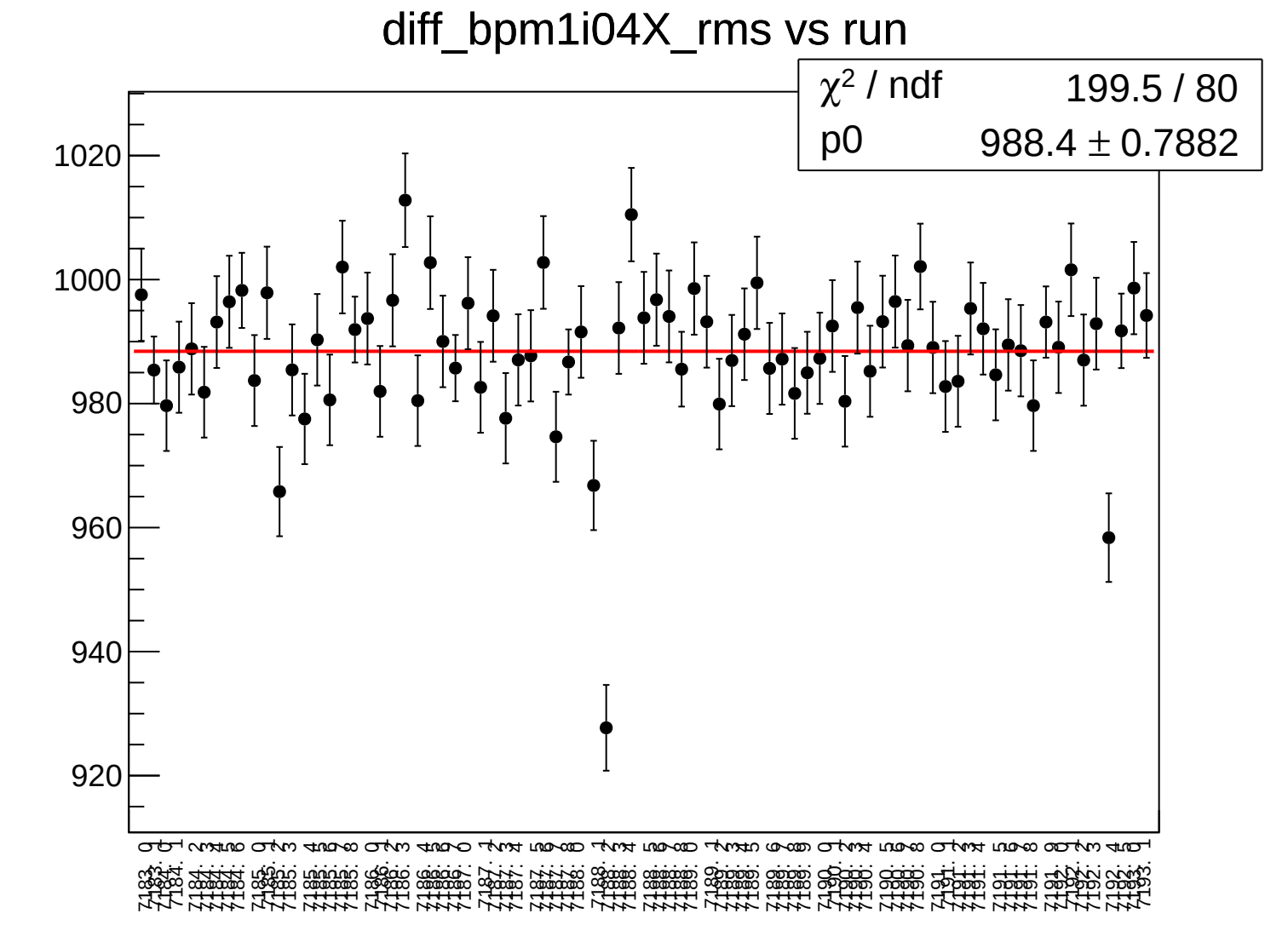

diff_bpm1i02Y_mean vs run
χ² / ndf 67.49 / 80
p0 −39.69 ± 0.7894
pull
Entries 81
Mean 415.6
Std Dev 369.6

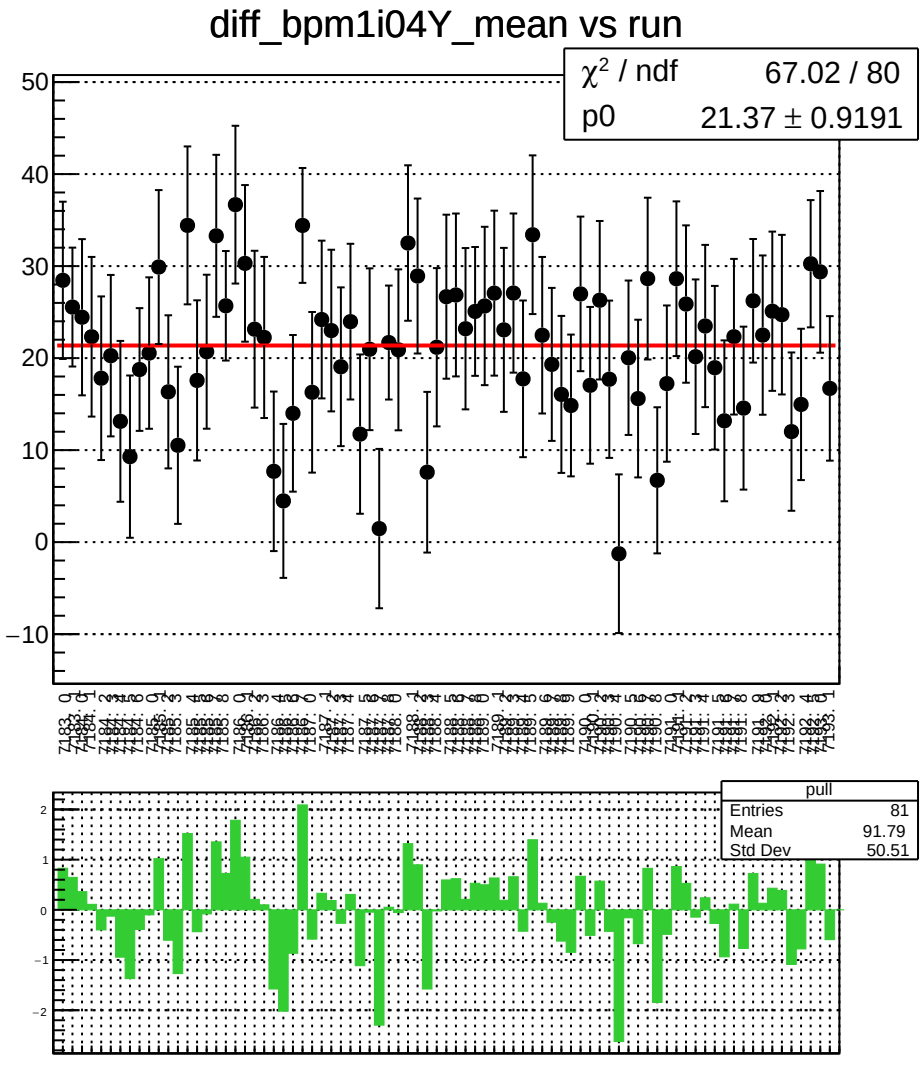

pull1D
Entries 81
Mean −0.01274
Std Dev 0.9127

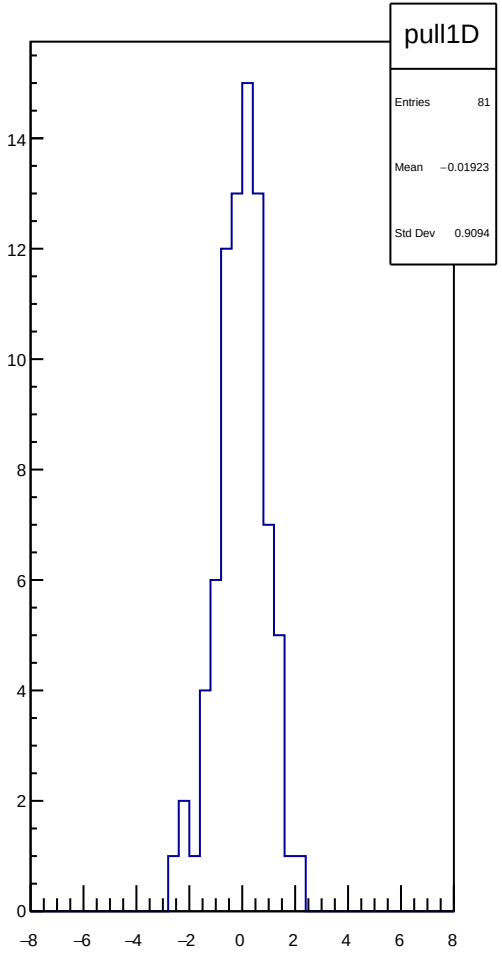

diff_bpm1i02Y_rms vs run
χ^2 / ndf 88.01 / 80
p0 700 ± 0.5582
715
710
705
700
695
690
685
680

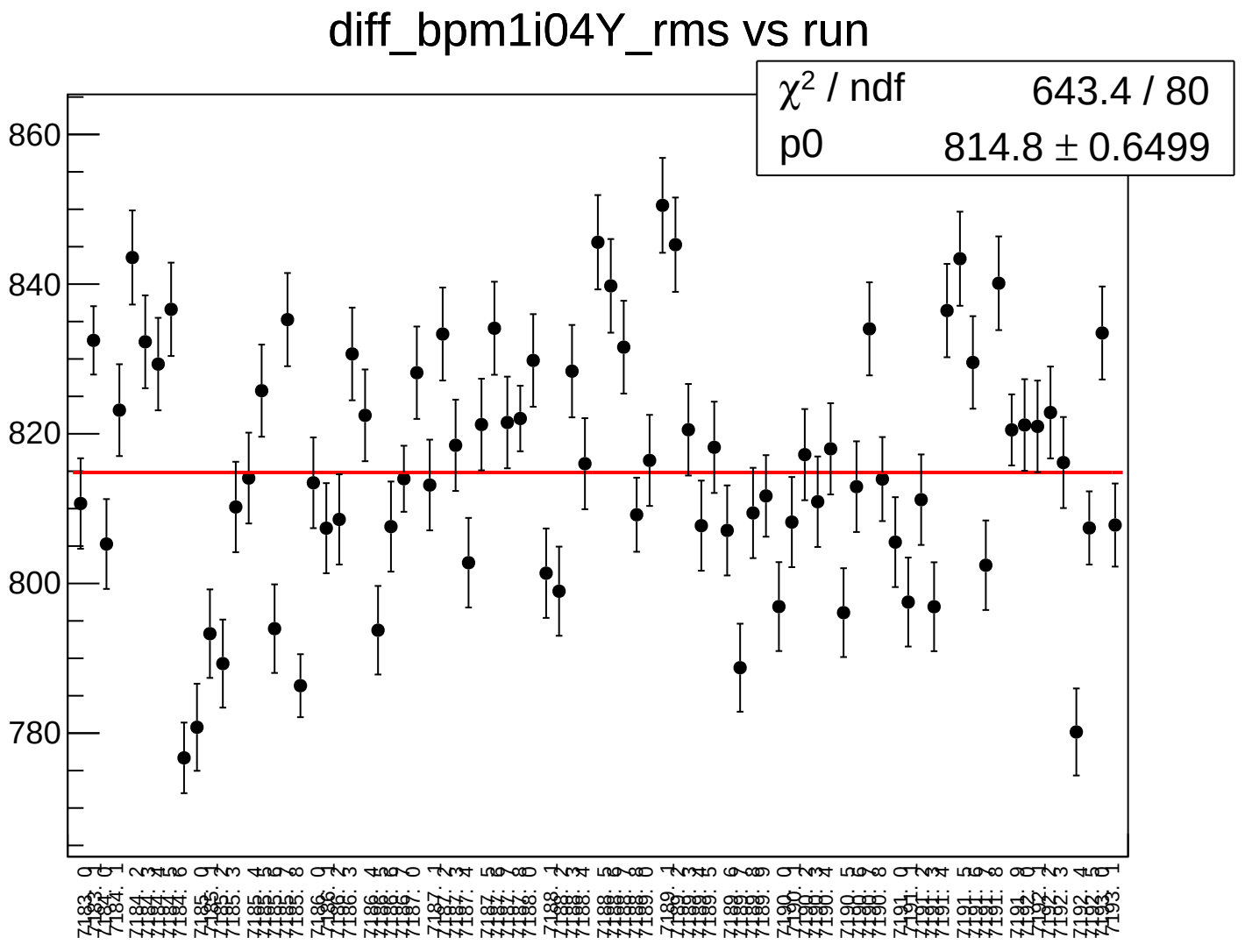

diff_bpm1i04X_mean vs run
χ² / ndf 70.52 / 80
p0 −7.819 ± 1.115
pull
Entries 81
Mean −686.1
Std Dev 740.5

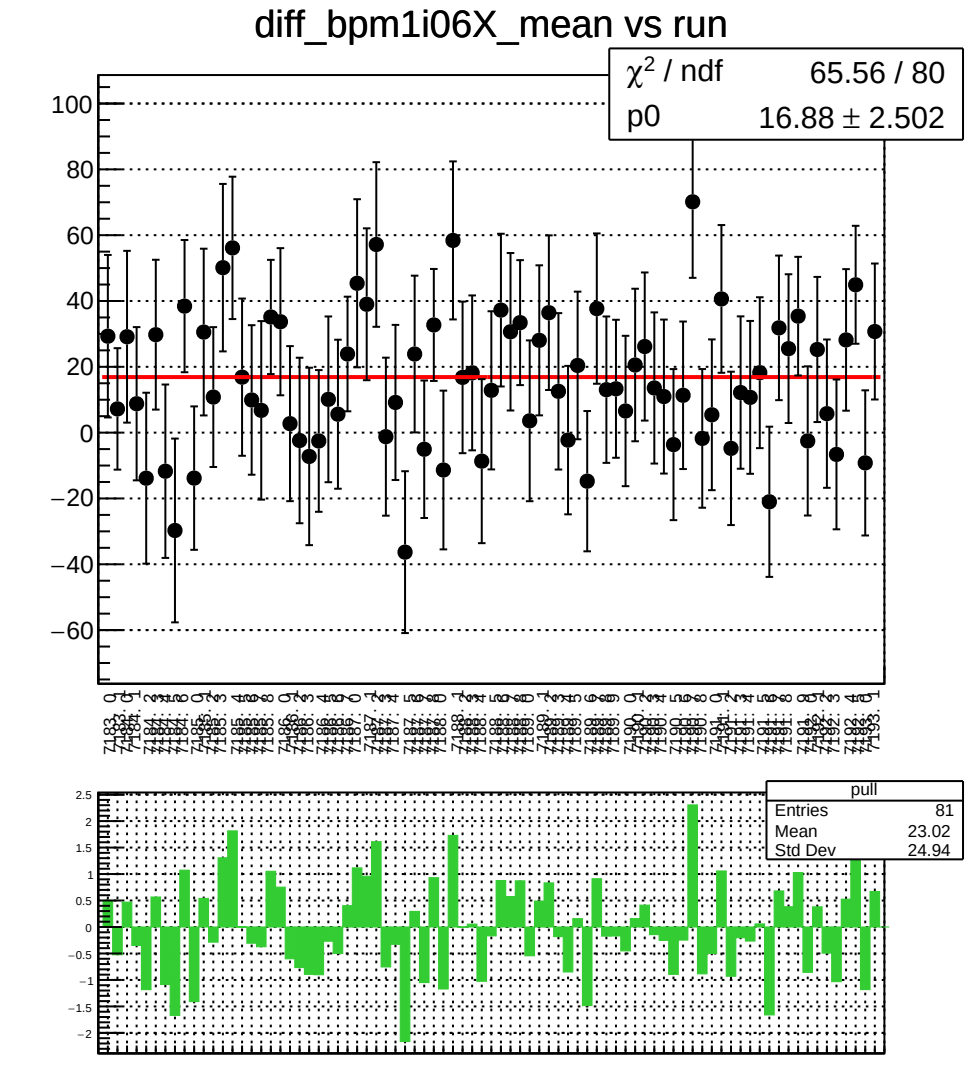

pull1D
Entries 81
Mean 0.002706
Std Dev 0.9331

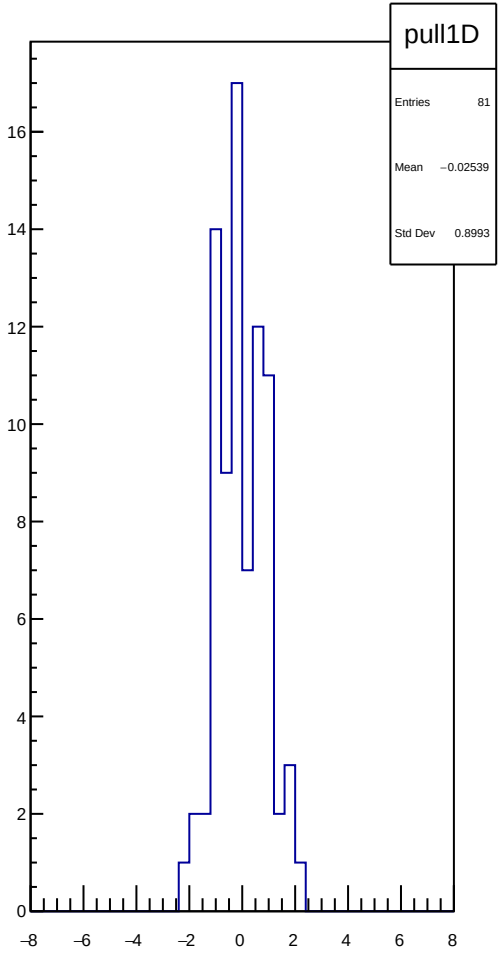

diff_bpm1i04X_rms vs run
χ^2 / ndf 199.5 / 80
p0 988.4 ± 0.7882
1020
1000
980
960
940
920

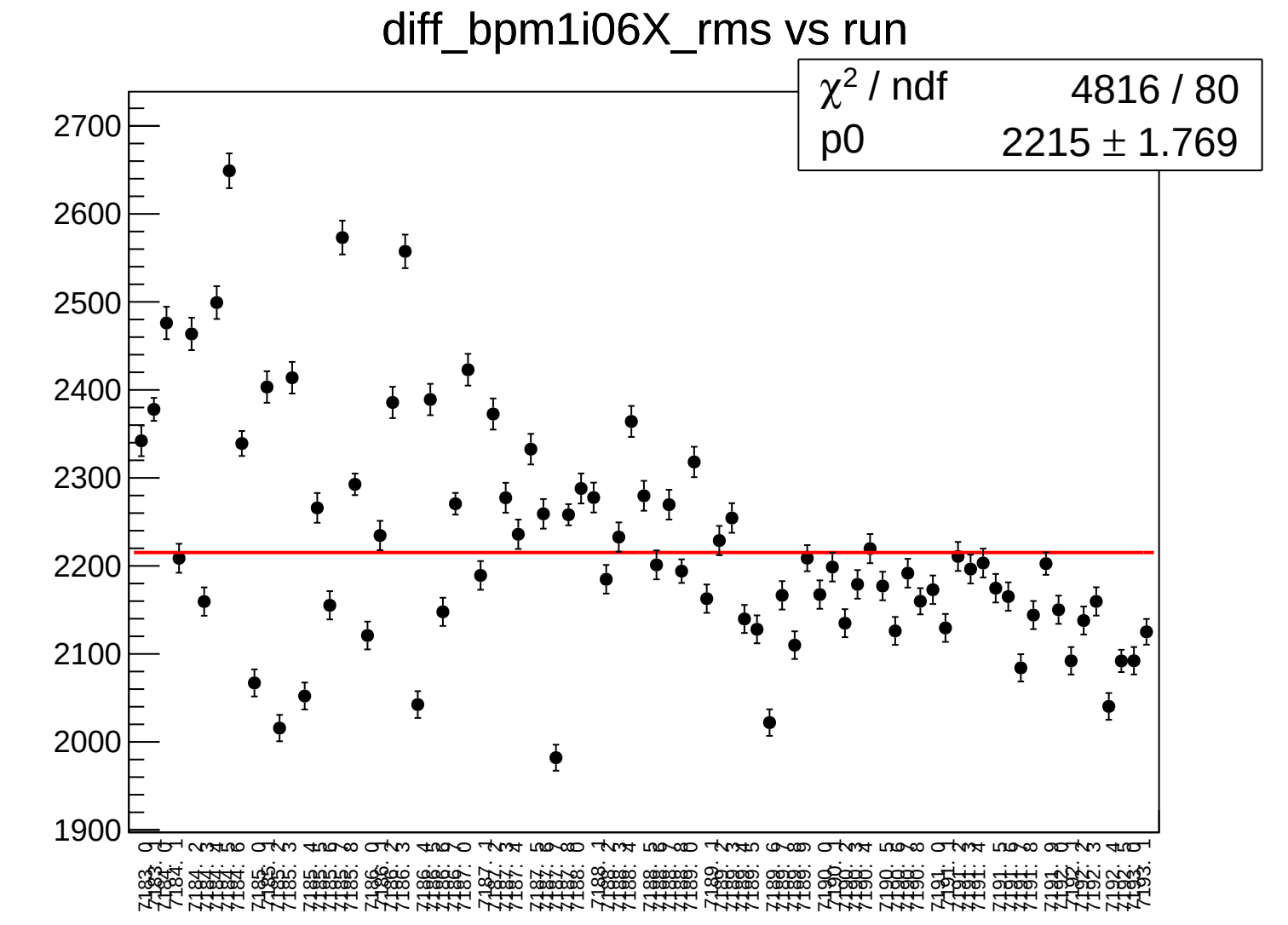

diff_bpm1i04Y_mean vs run
χ^2 / ndf 67.02 / 80
p0 21.37 ± 0.9191
pull
Entries 81
Mean 91.79
Std Dev 50.51

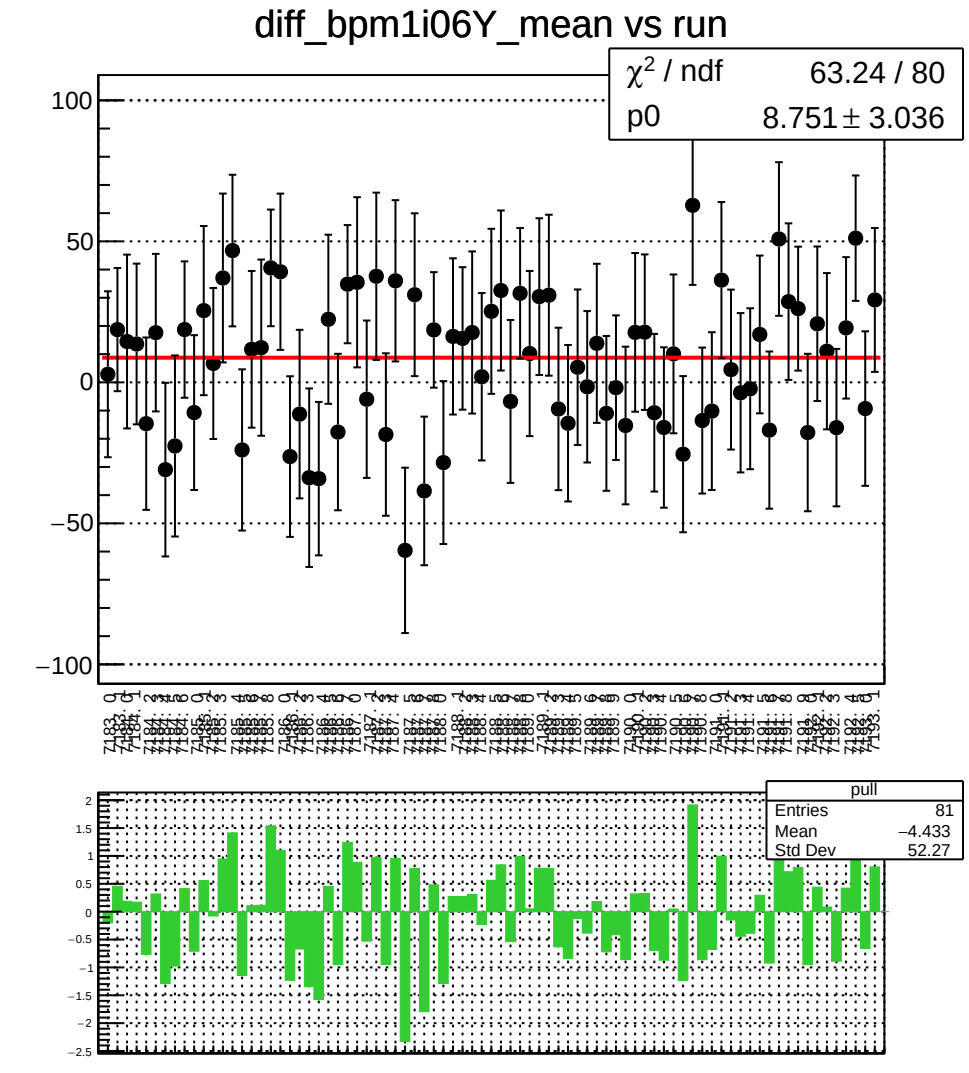

pull1D
Entries 81
Mean −0.01923
Std Dev 0.9094

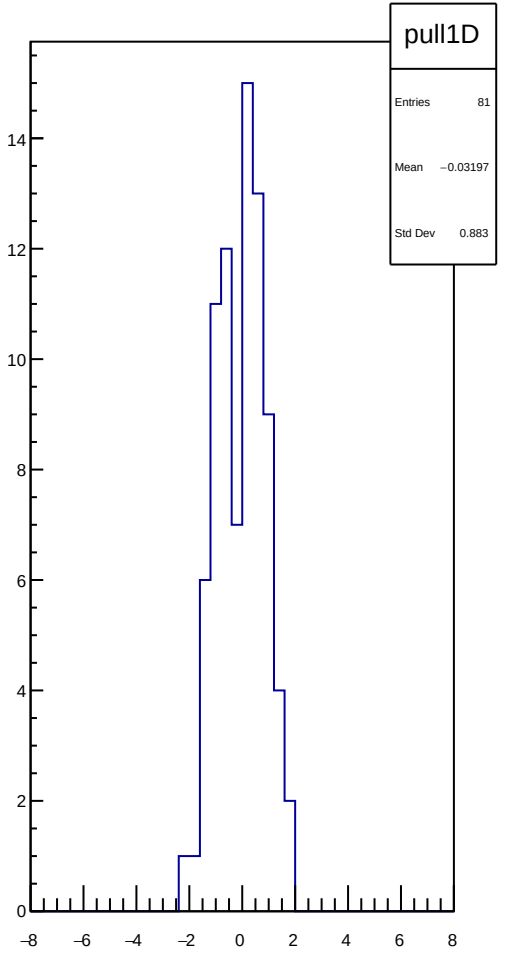

diff_bpm1i04Y_rms vs run
χ² / ndf 643.4 / 80
p0 814.8 ± 0.6499
860
840
820
800
780

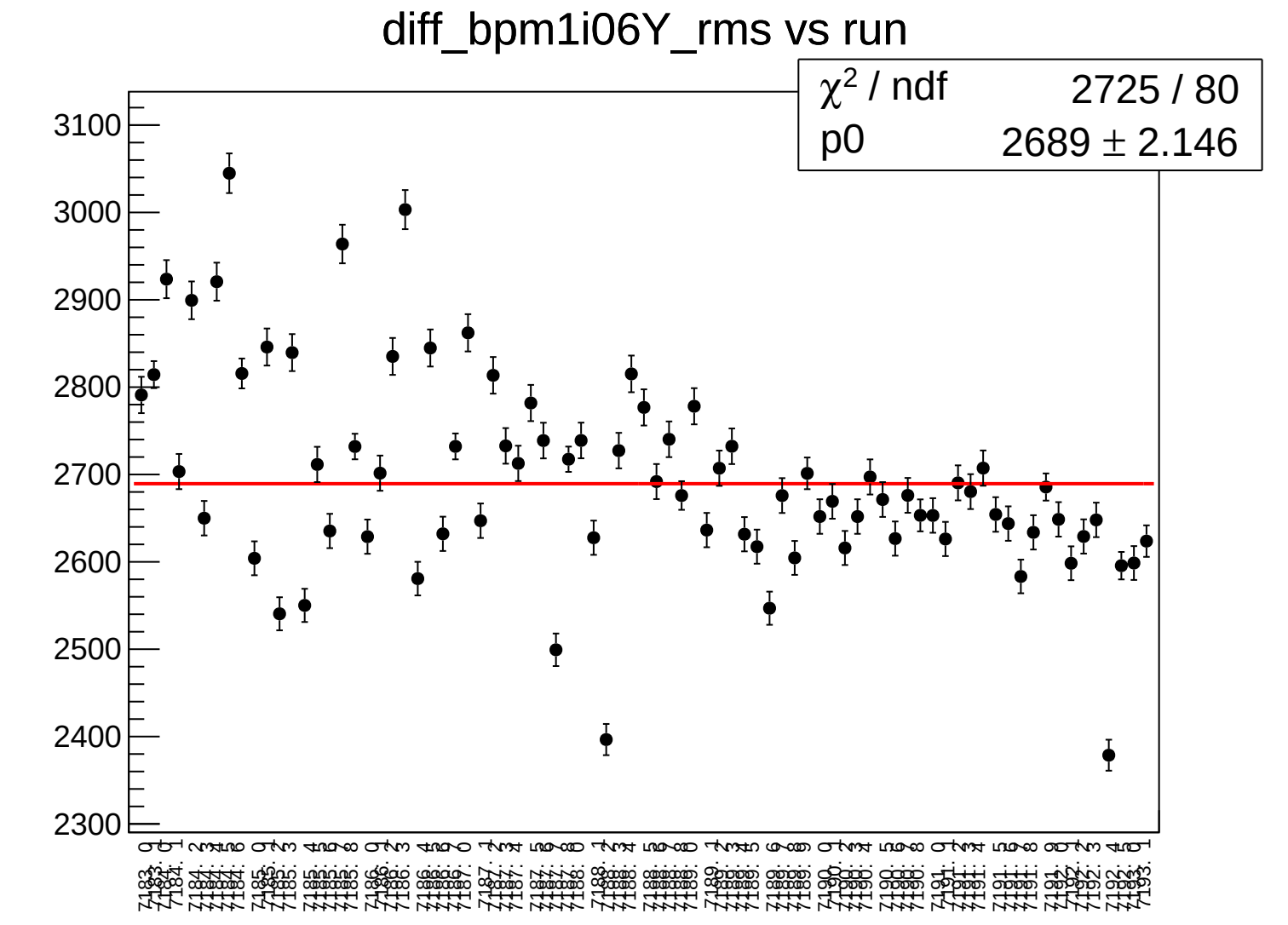

diff_bpm1i06X_mean vs run
χ^2 / ndf 65.56 / 80
p0 16.88 ± 2.502
pull
Entries 81
Mean 23.02
Std Dev 24.94

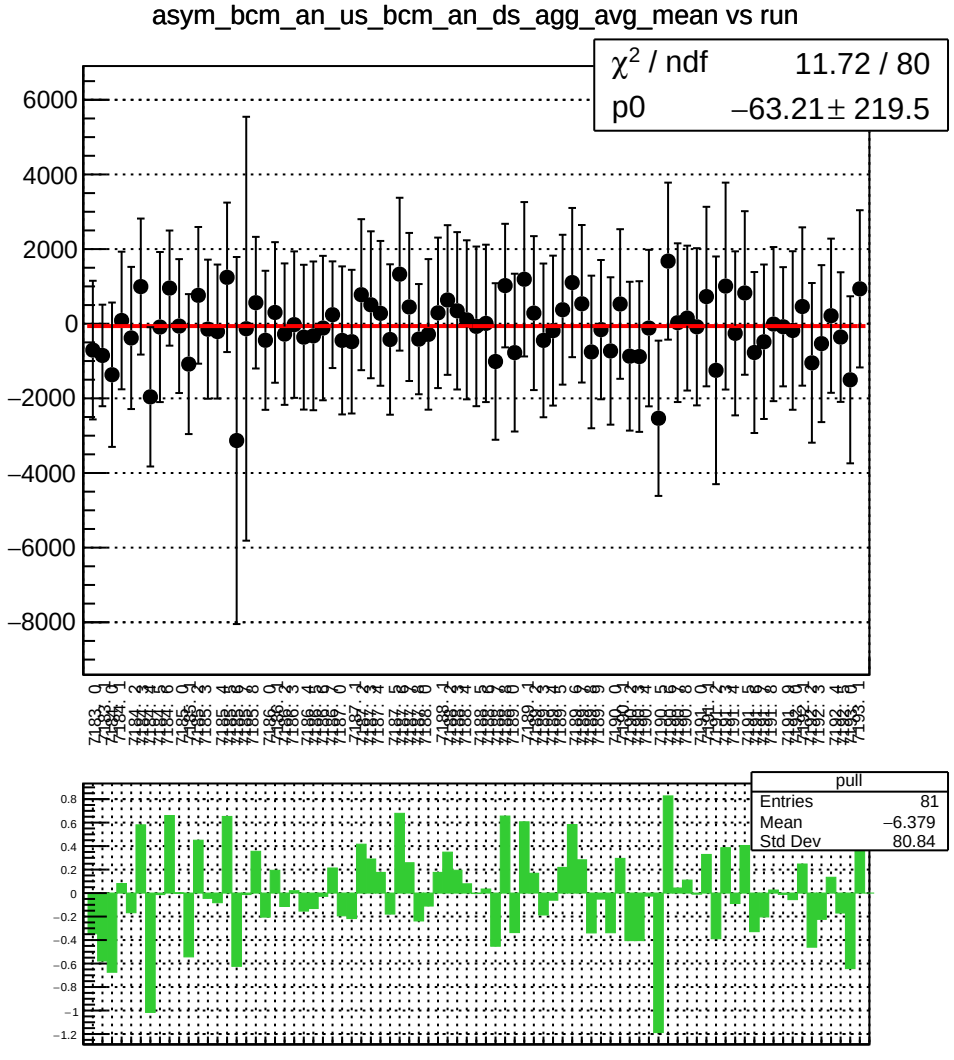

pull1D
Entries 81
Mean −0.02539
Std Dev 0.8993

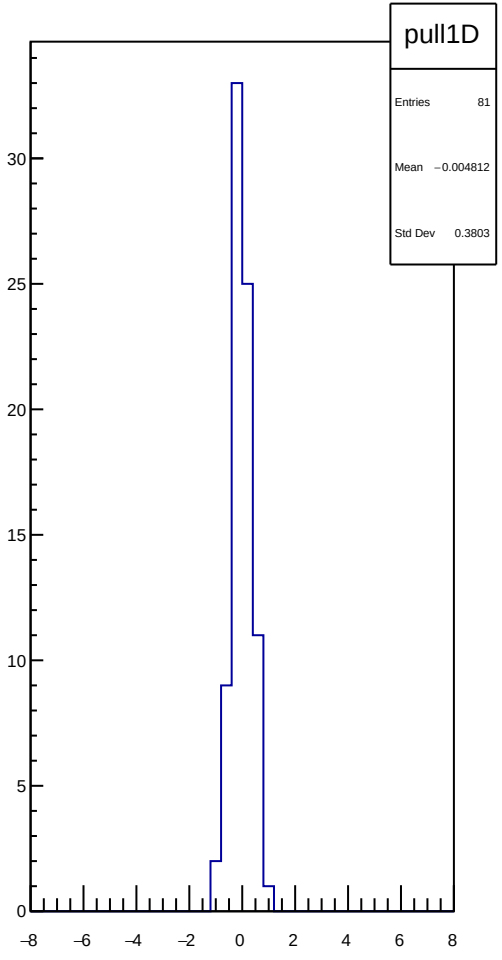

diff_bpm1i06X_rms vs run
χ² / ndf 4816 / 80
p0 2215 ± 1.769
2700
2600
2500
2400
2300
2200
2100
2000
1900

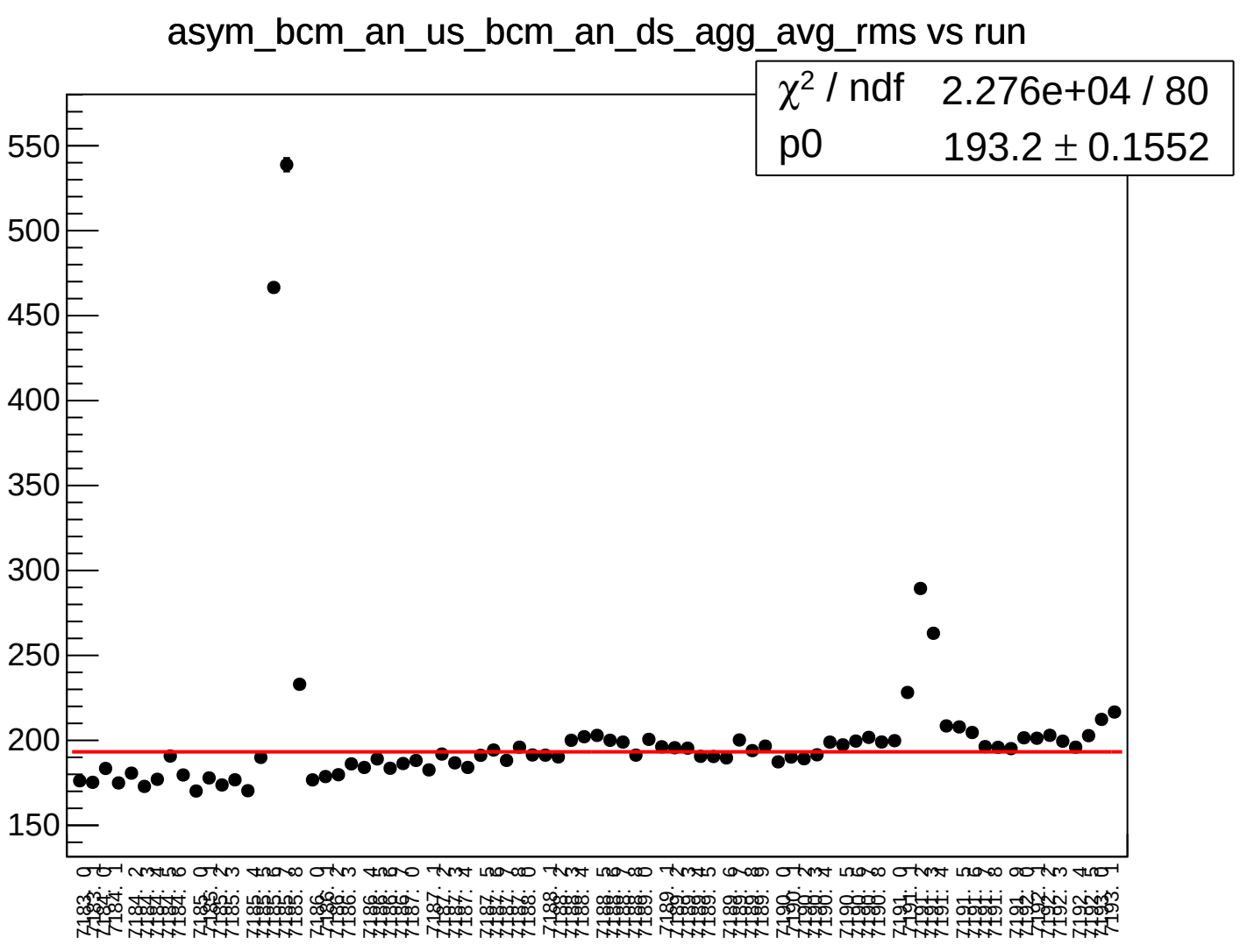

diff_bpm1i06Y_mean vs run
χ² / ndf 63.24 / 80
p0 8.751 ± 3.036
pull
Entries 81
Mean −4.433
Std Dev 52.27

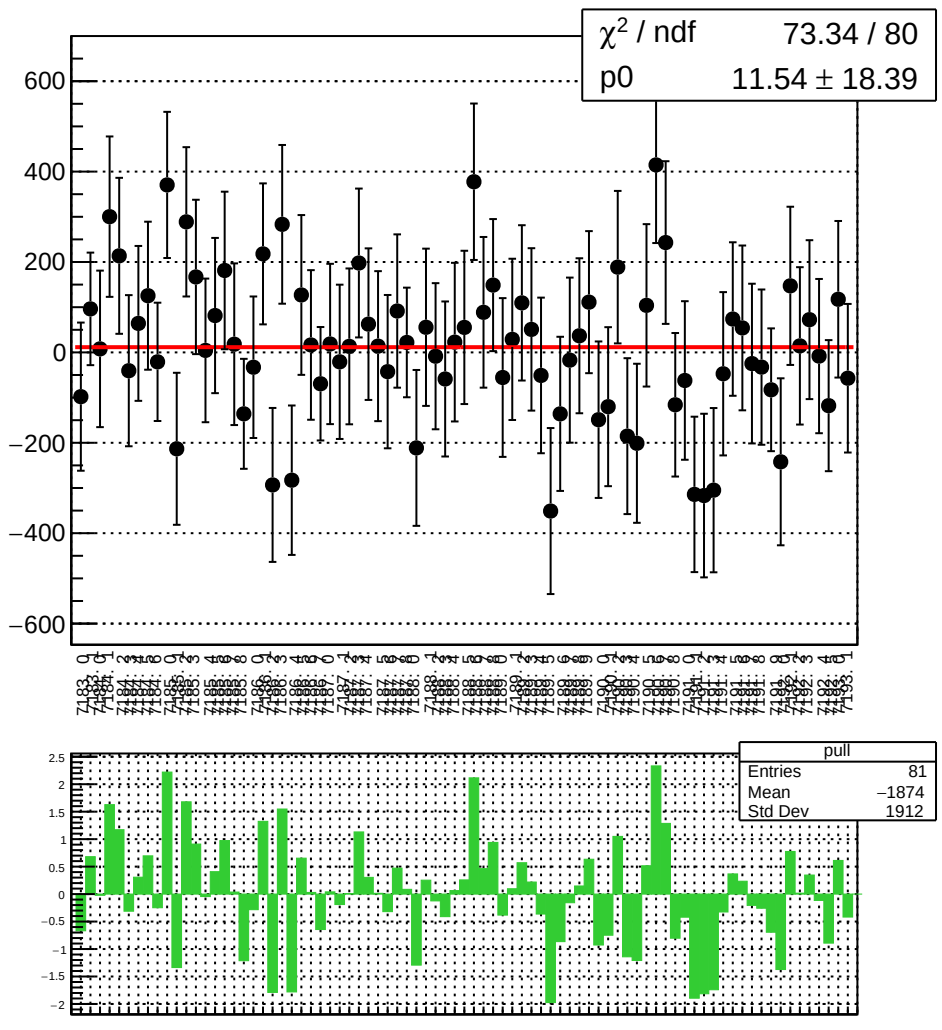

pull1D
Entries 81
Mean −0.03197
Std Dev 0.883

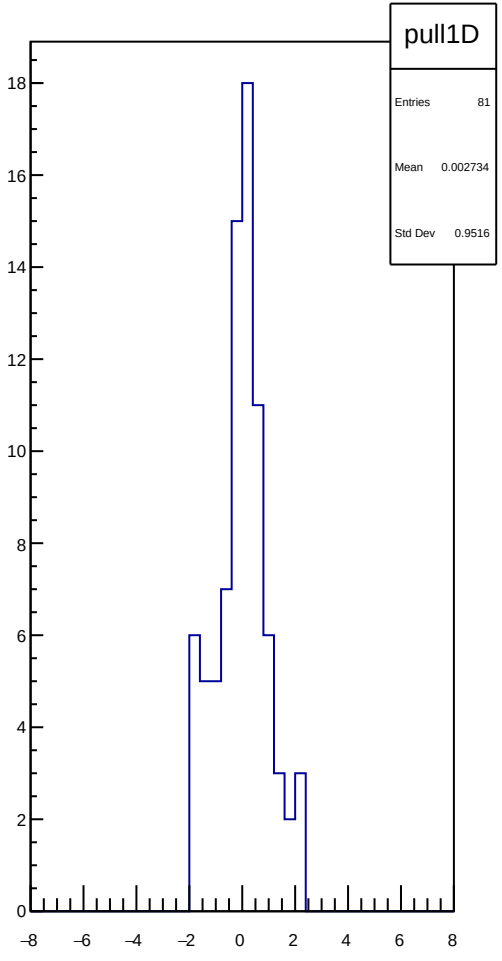

diff_bpm1i06Y_rms vs run
χ^2 / ndf 2725 / 80
p0 2689 ± 2.146
3100
3000
2900
2800
2700
2600
2500
2400
2300

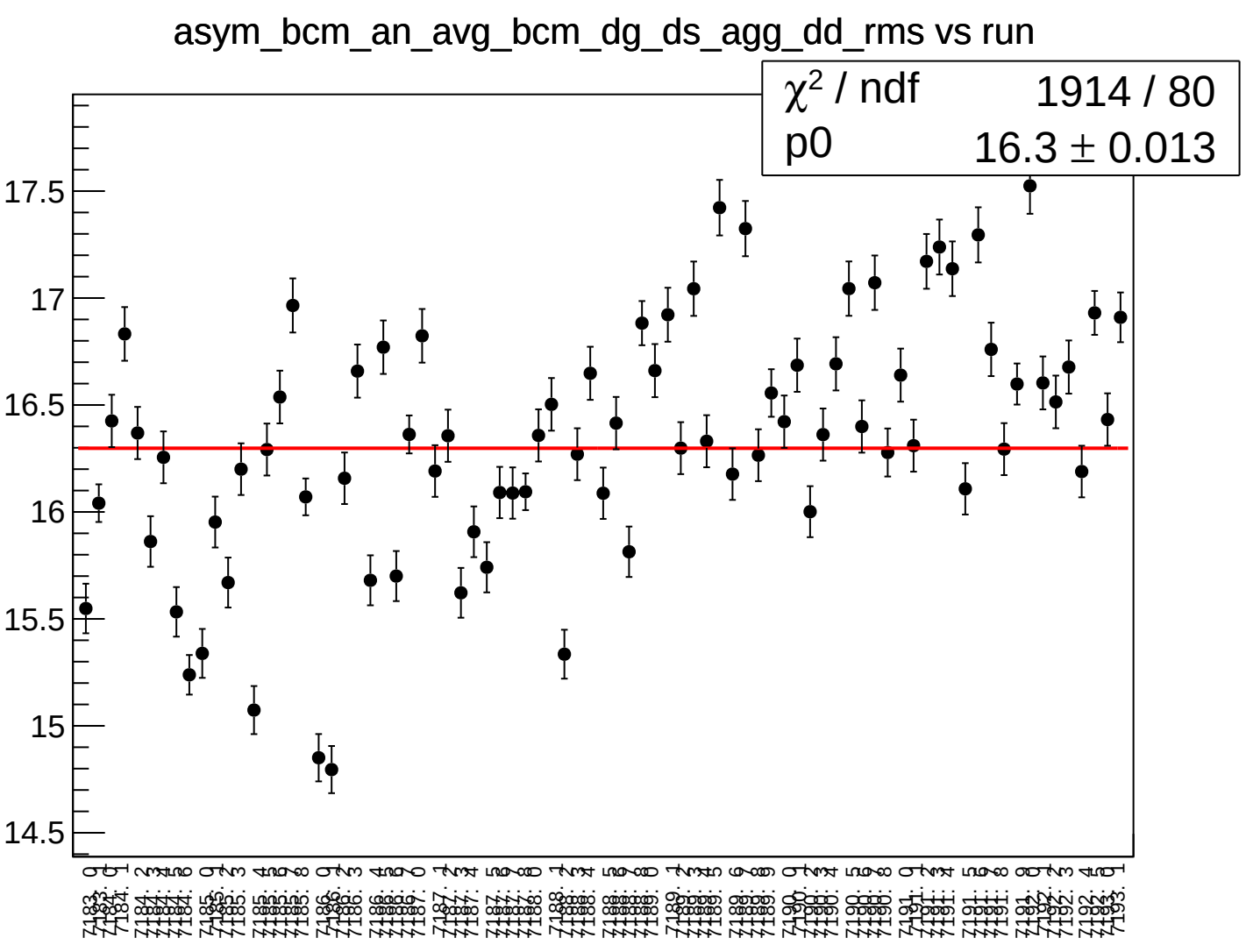

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.72 / 80
p0 −63.21 ± 219.5
pull
Entries 81
Mean −6.379
Std Dev 80.84

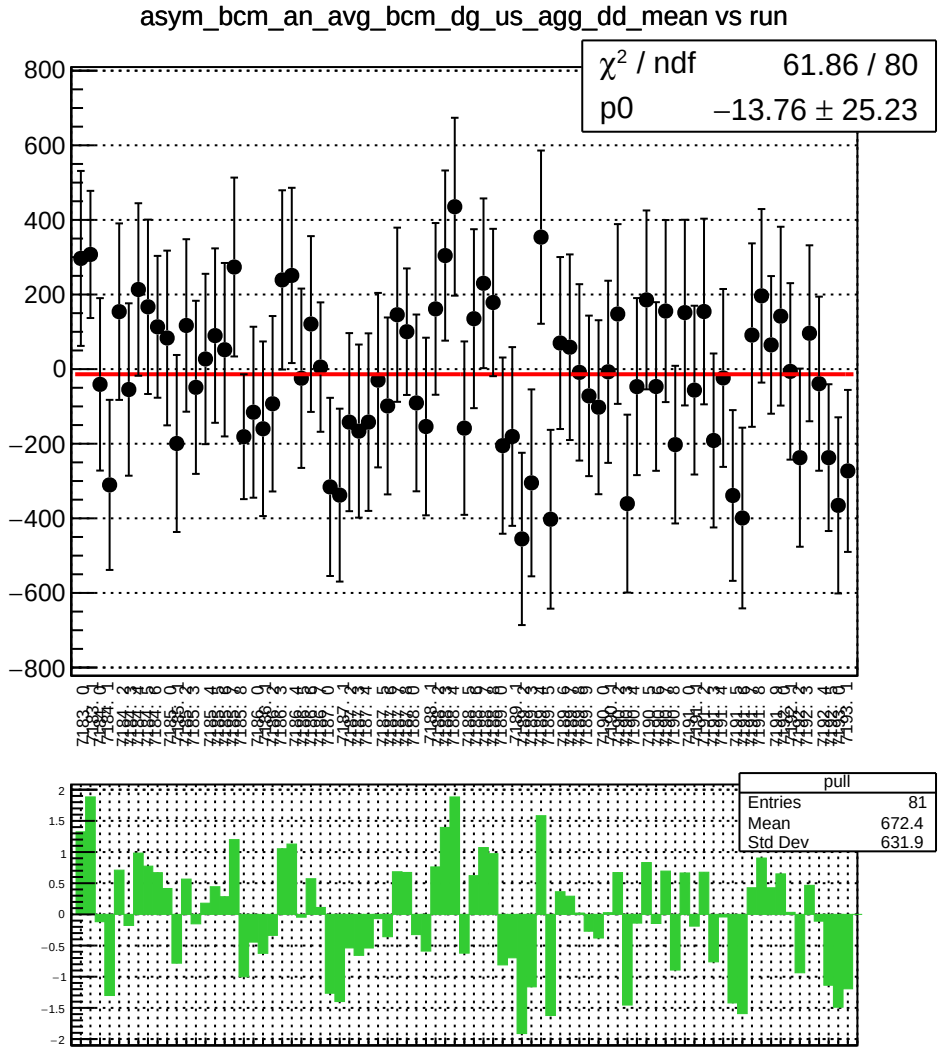

pull1D
Entries 81
Mean −0.004812
Std Dev 0.3803

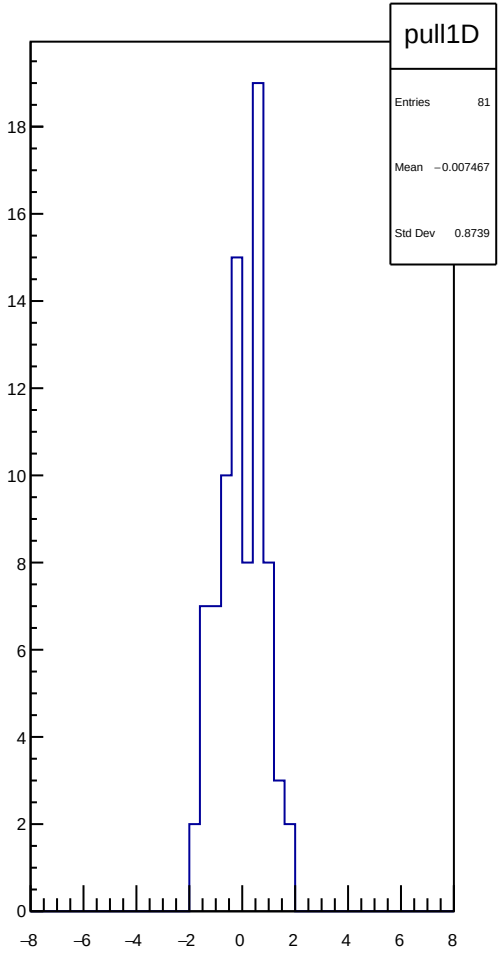

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.276e+04 / 80
p0 193.2 ± 0.1552
550
500
450
400
350
300
250
200
150

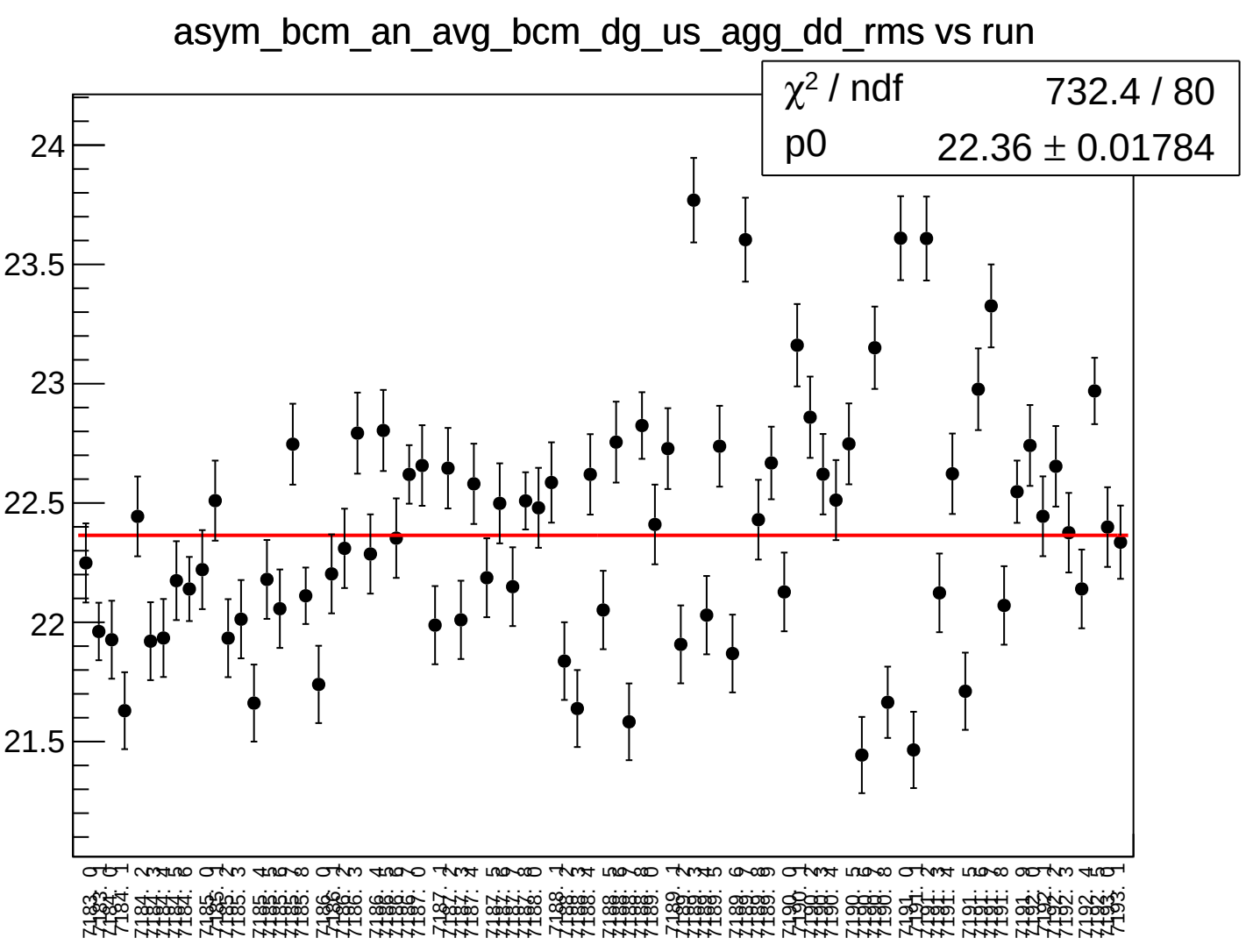

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 73.34 / 80
p0 11.54 ± 18.39
pull
Entries 81
Mean −1874
Std Dev 1912

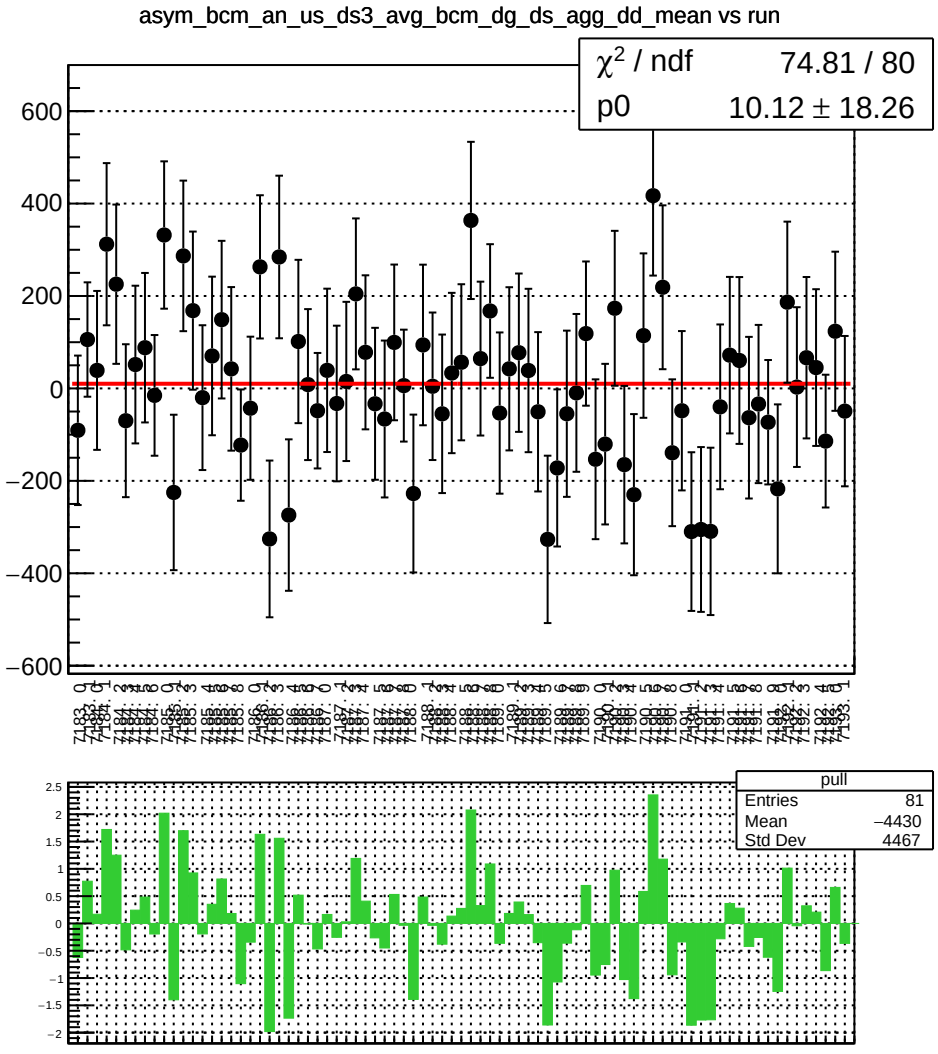

pull1D
Entries 81
Mean 0.002734
Std Dev 0.9516

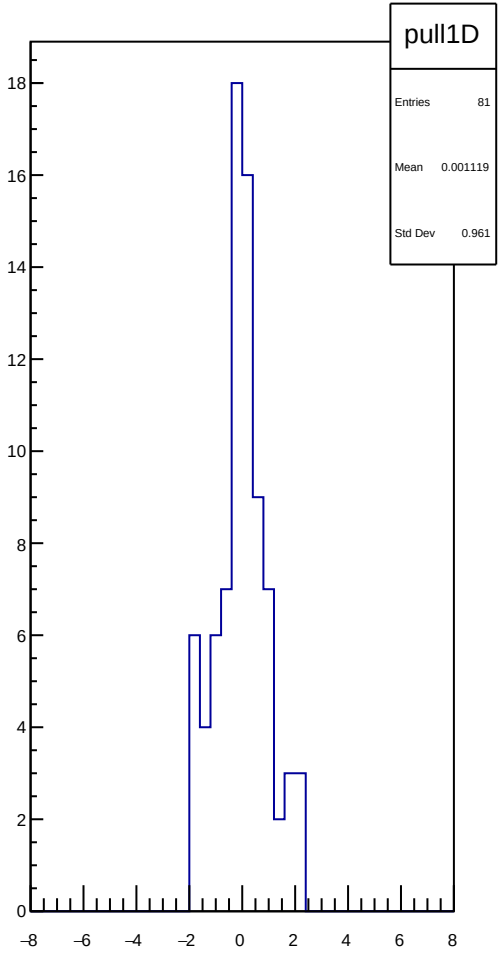

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1914 / 80
p0 16.3 ± 0.013
17.5
17
16.5
16
15.5
15
14.5

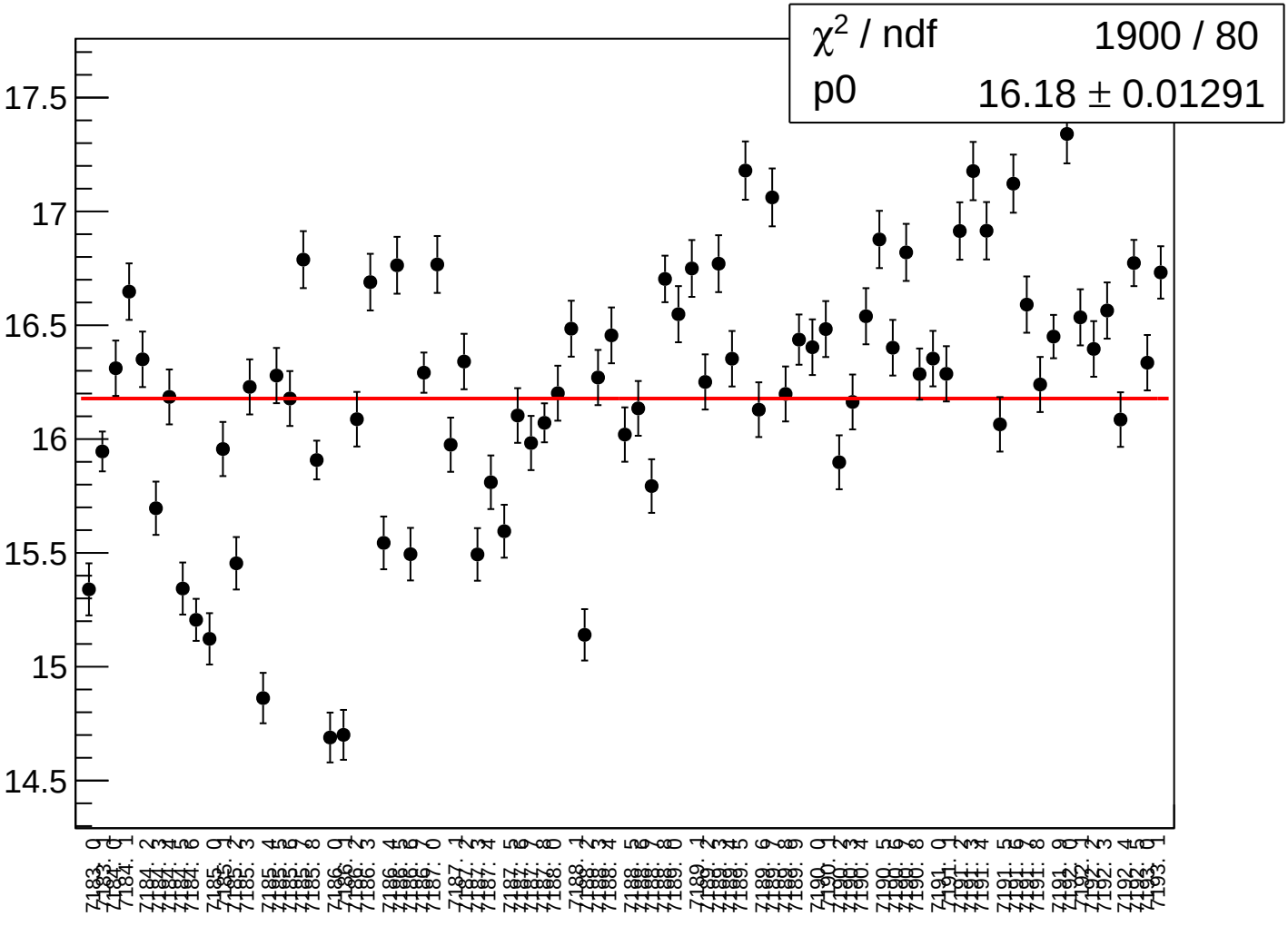

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 61.86 / 80
p0 −13.76 ± 25.23
pull
Entries 81
Mean 672.4
Std Dev 631.9

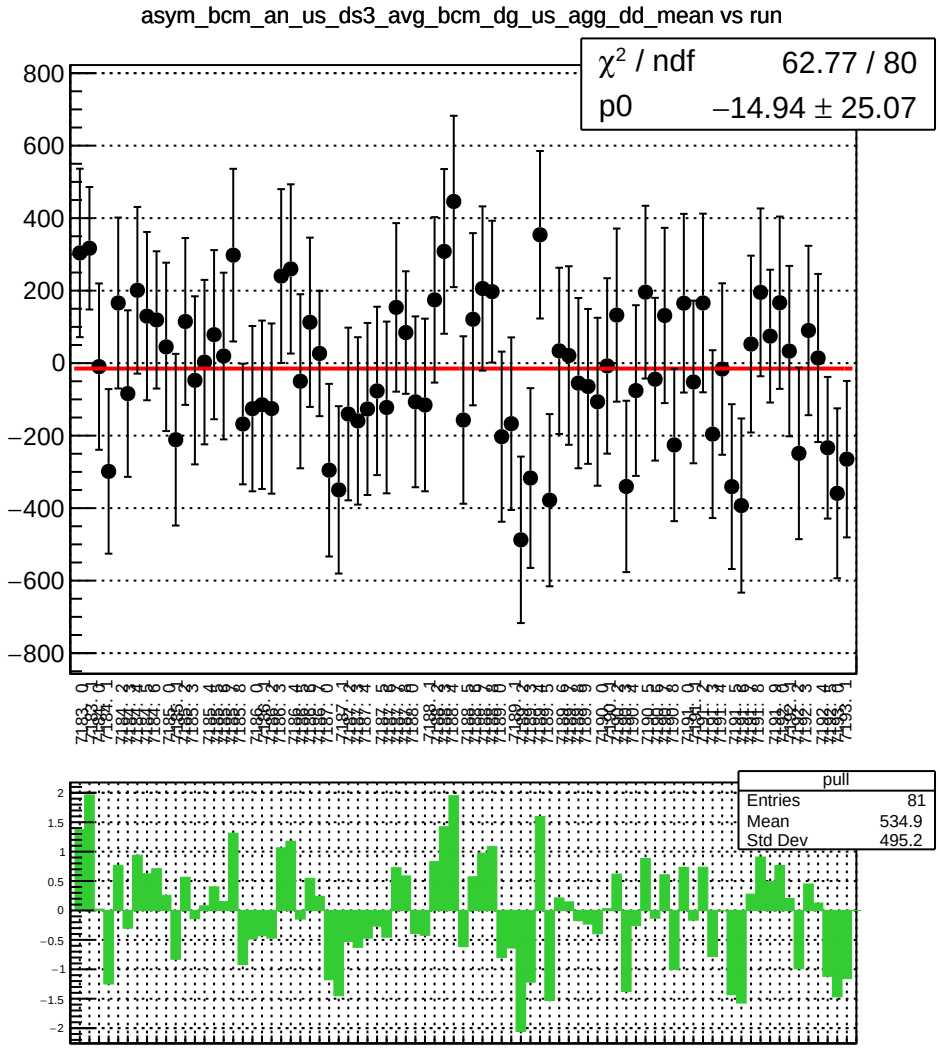

pull1D
Entries 81
Mean −0.007467
Std Dev 0.8739

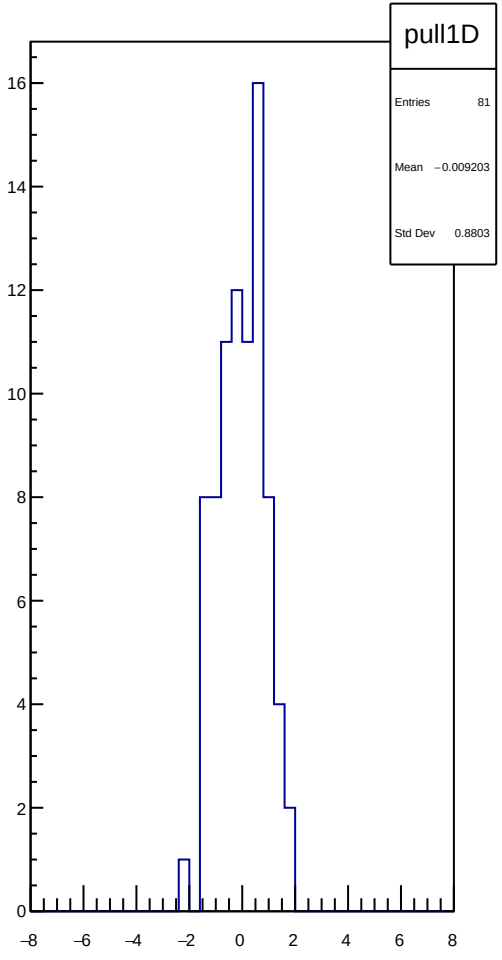

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 732.4 / 80
p0 22.36 ± 0.01784
24
23.5
23
22.5
22
21.5

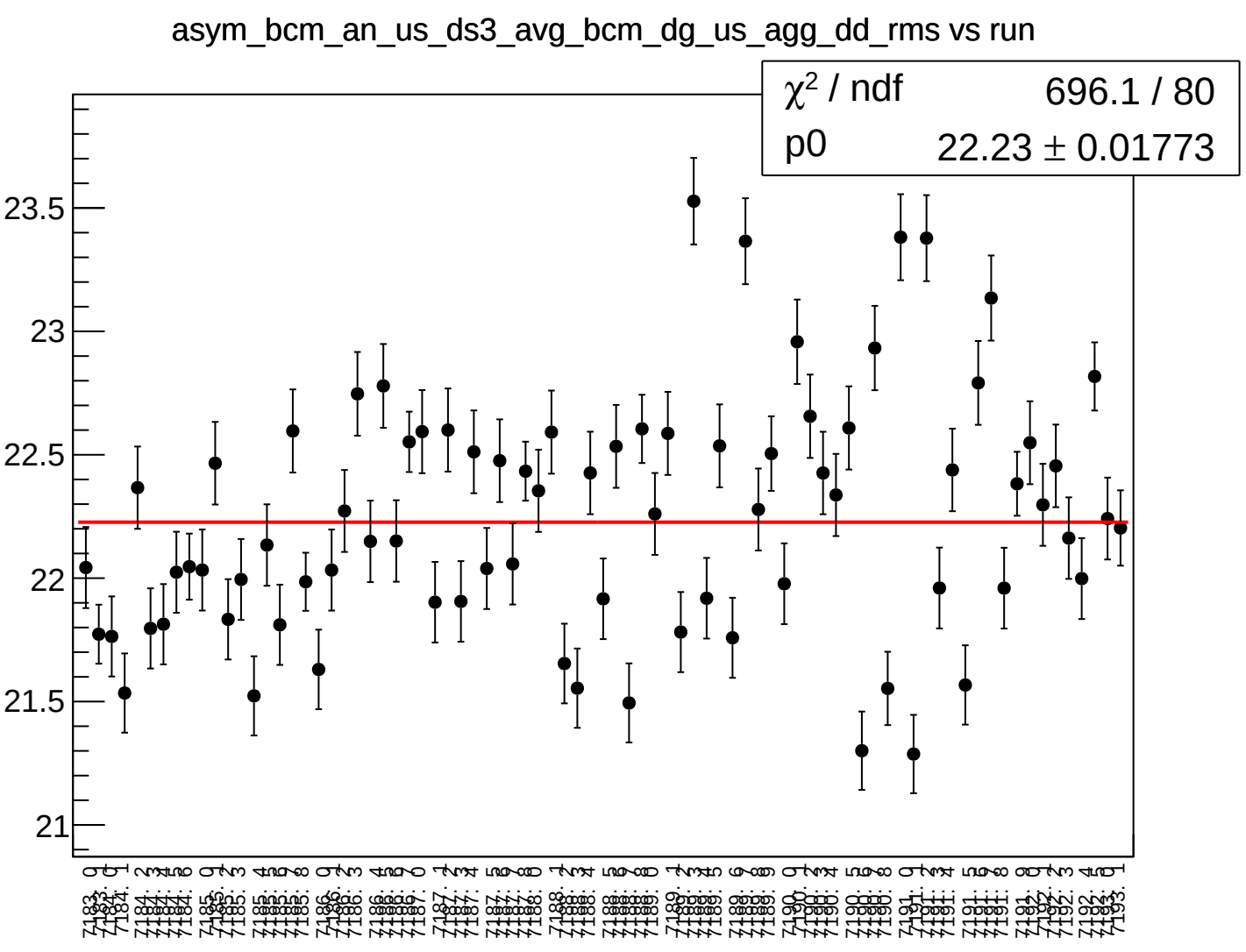

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 74.81 / 80
p0 10.12 ± 18.26
pull
Entries 81
Mean −4430
Std Dev 4467

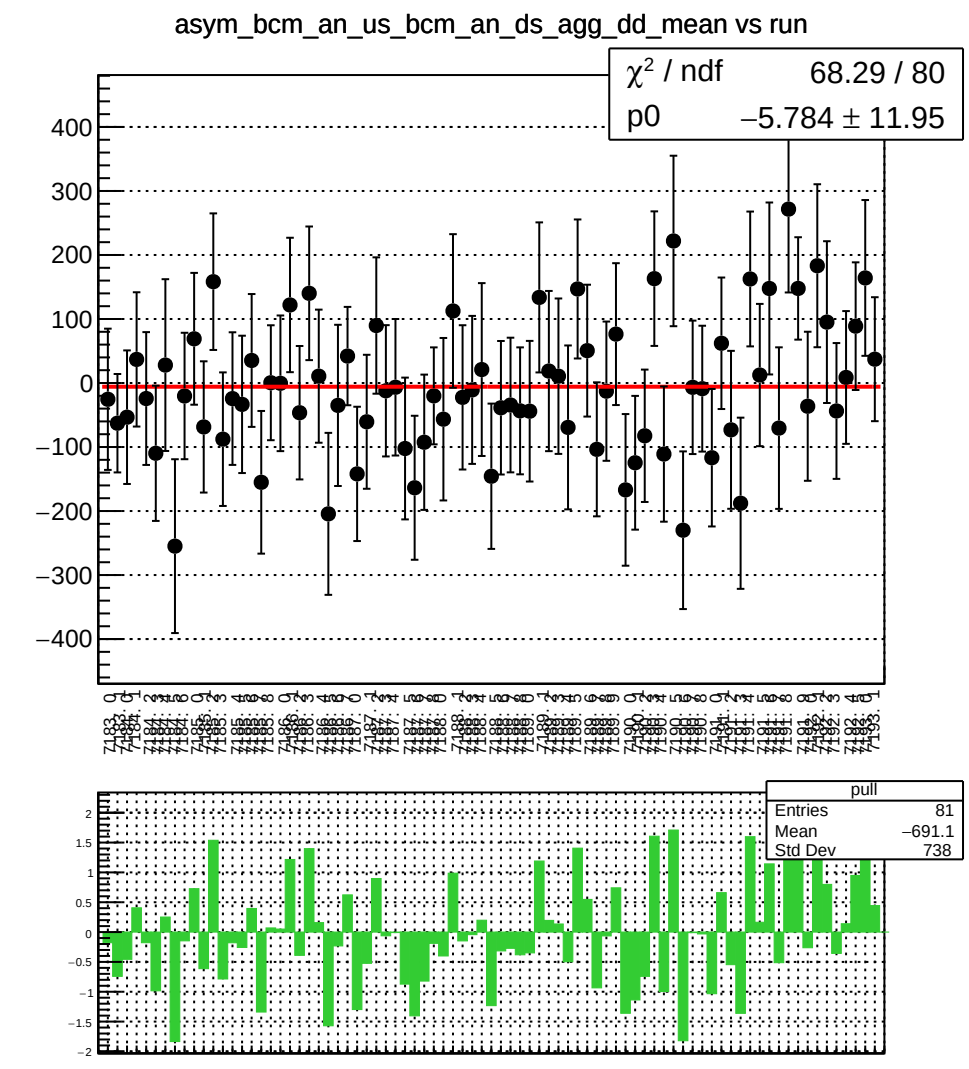

pull1D
Entries 81
Mean 0.001119
Std Dev 0.961

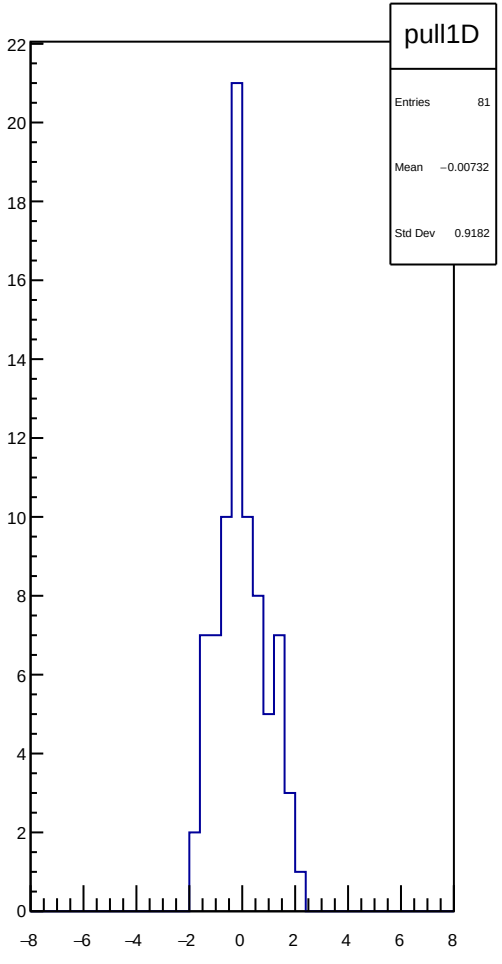

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1900 / 80
p0 16.18 ± 0.01291
17.5
17
16.5
16
15.5
15
14.5

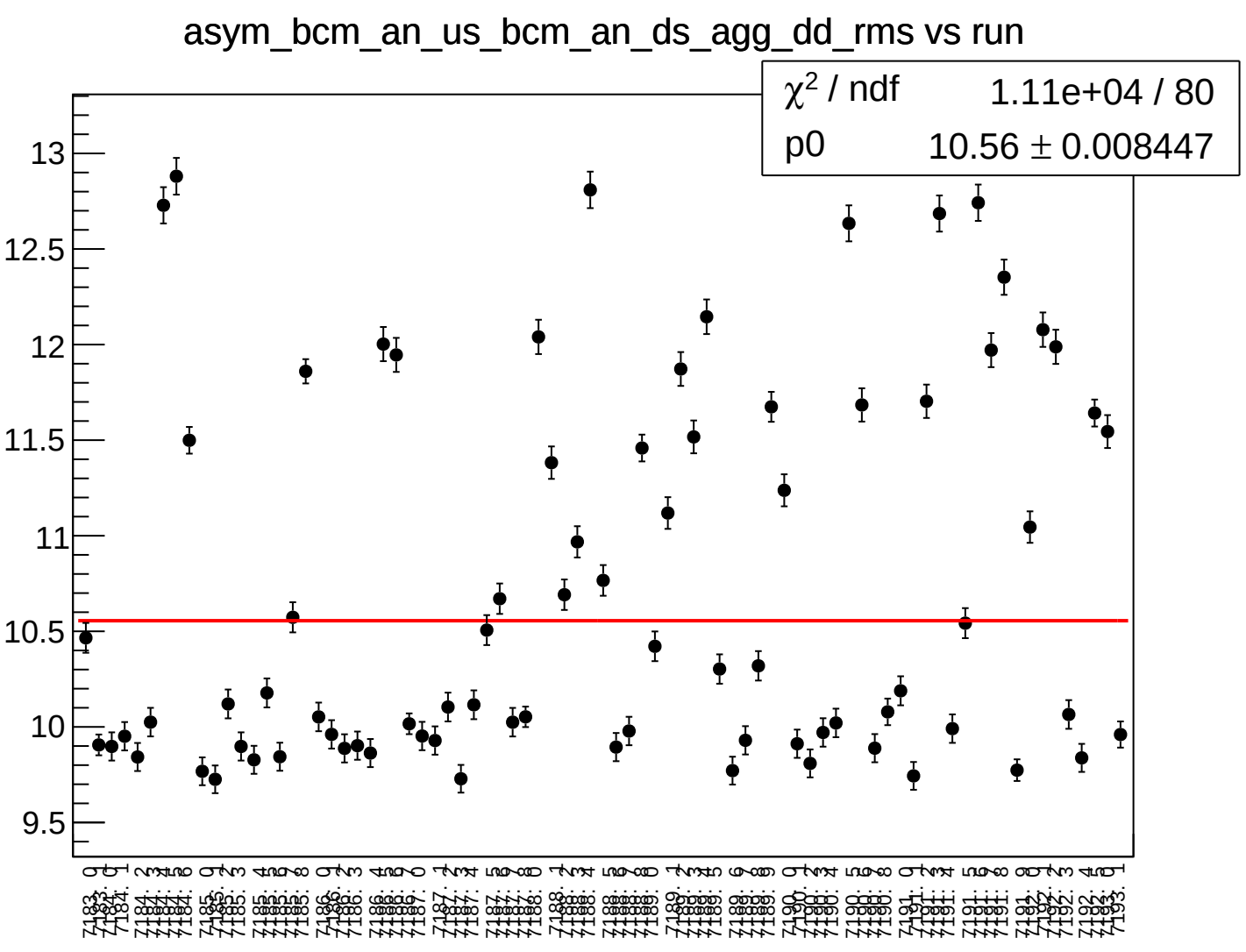

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 62.77 / 80
p0 −14.94 ± 25.07
pull
Entries 81
Mean 534.9
Std Dev 495.2

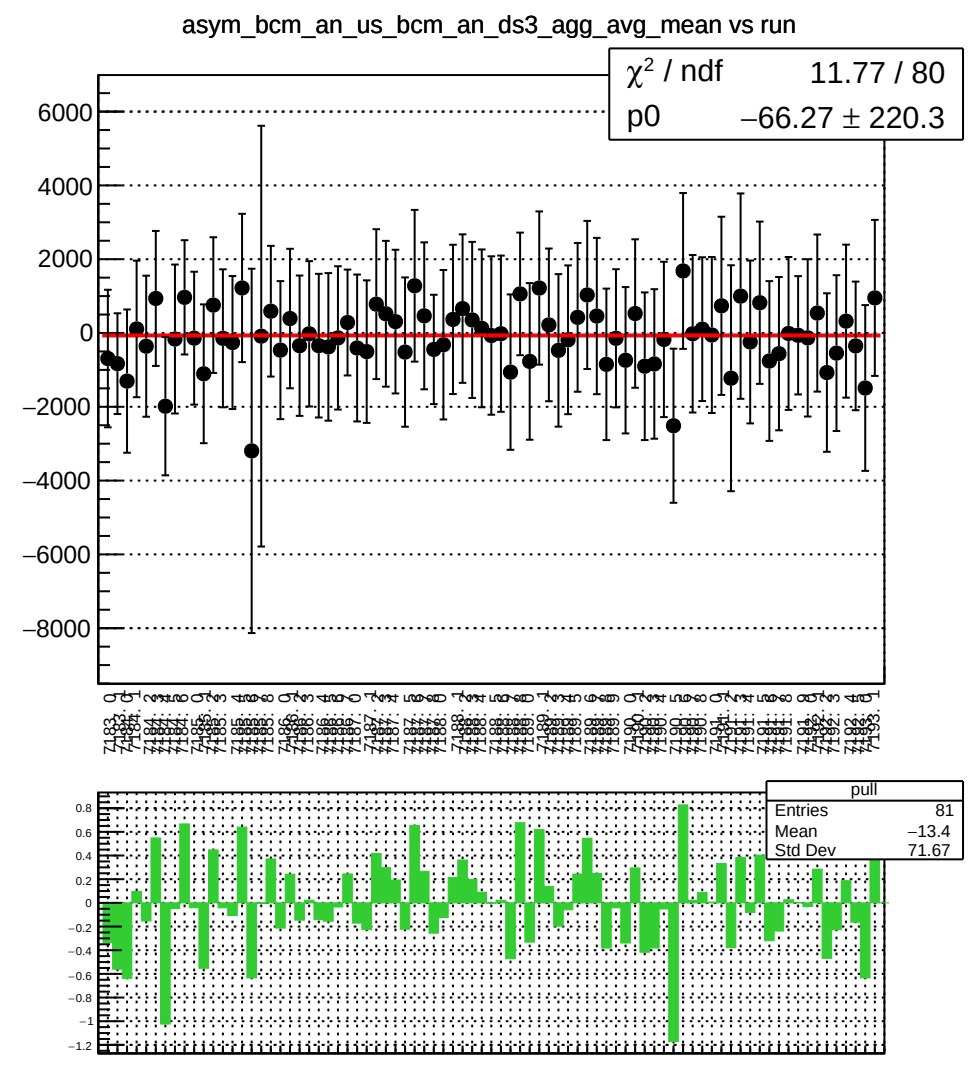

pull1D
Entries 81
Mean −0.009203
Std Dev 0.8803

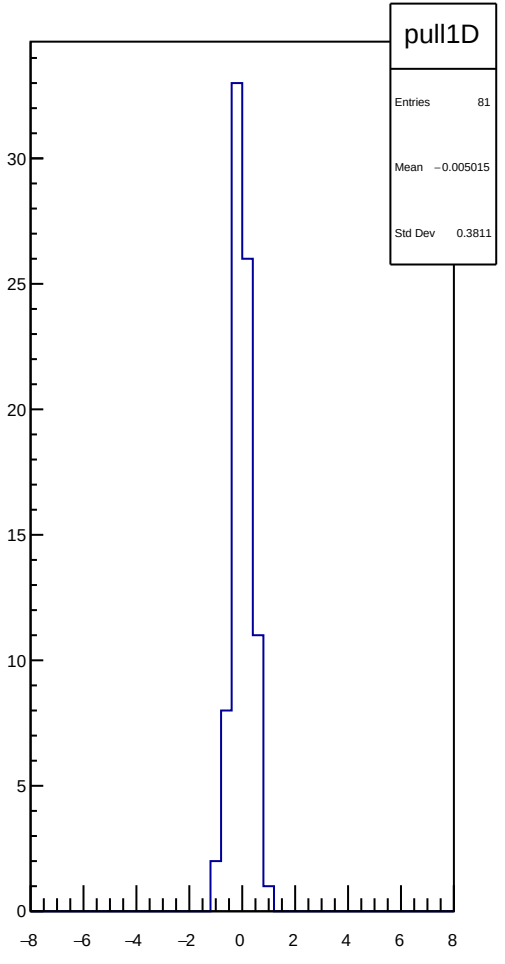

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 696.1 / 80
p0 22.23 ± 0.01773
23.5
23
22.5
22
21.5
21

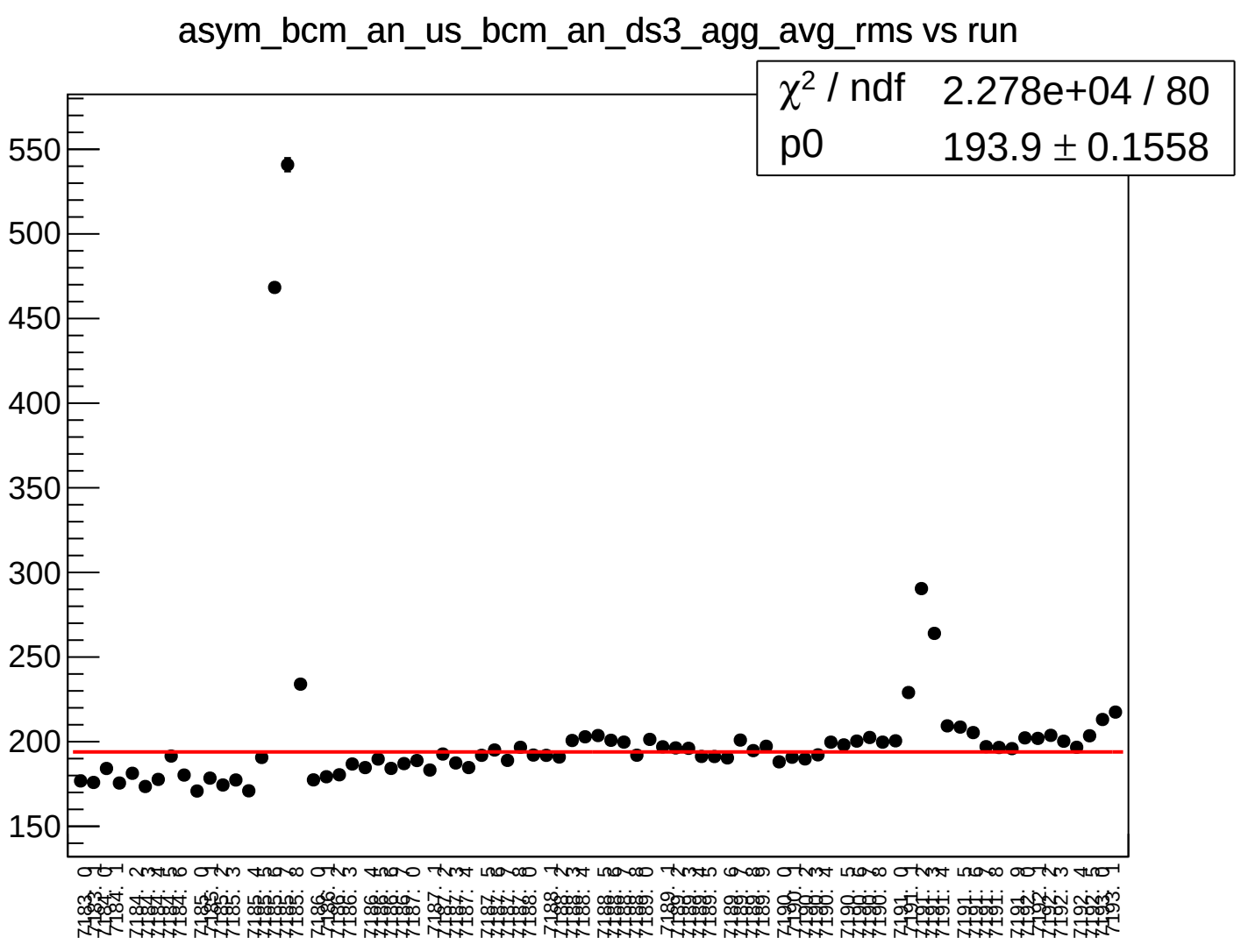

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.29 / 80
p0 −5.784 ± 11.95
pull
Entries 81
Mean −691.1
Std Dev 738

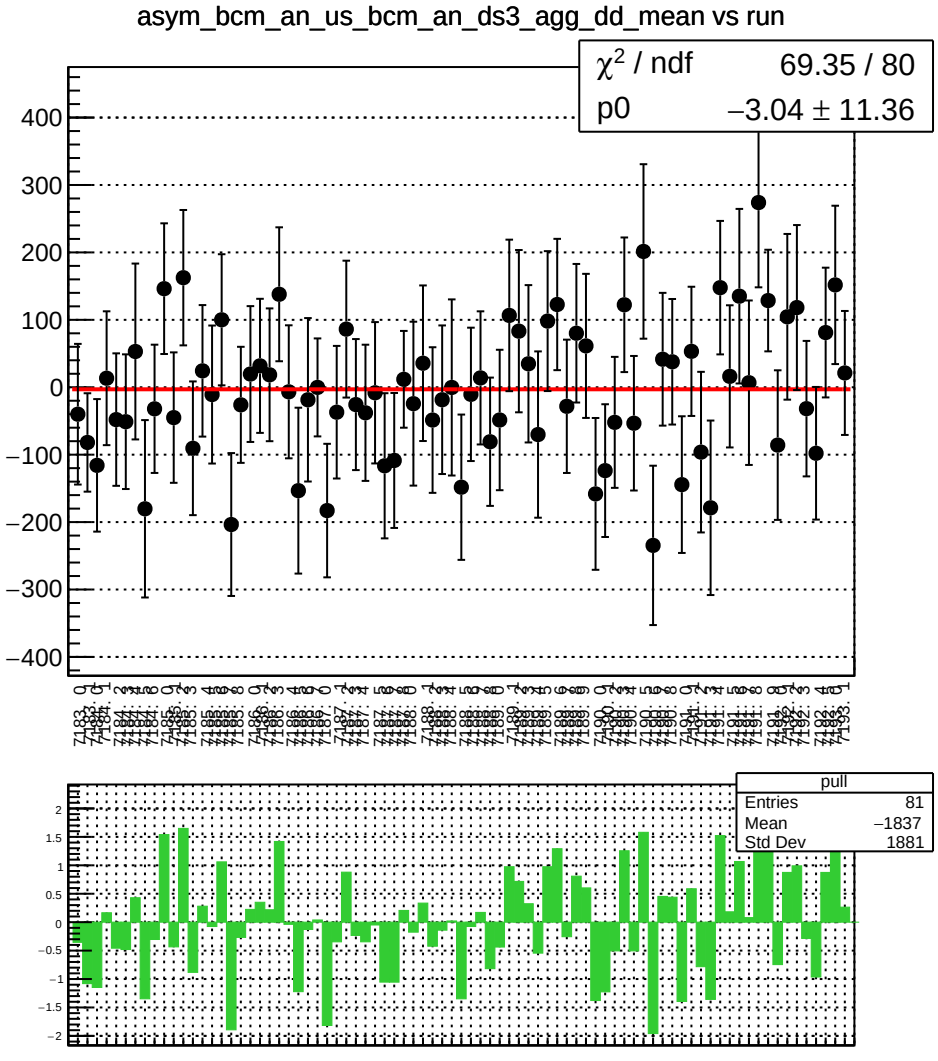

pull1D
Entries 81
Mean −0.00732
Std Dev 0.9182

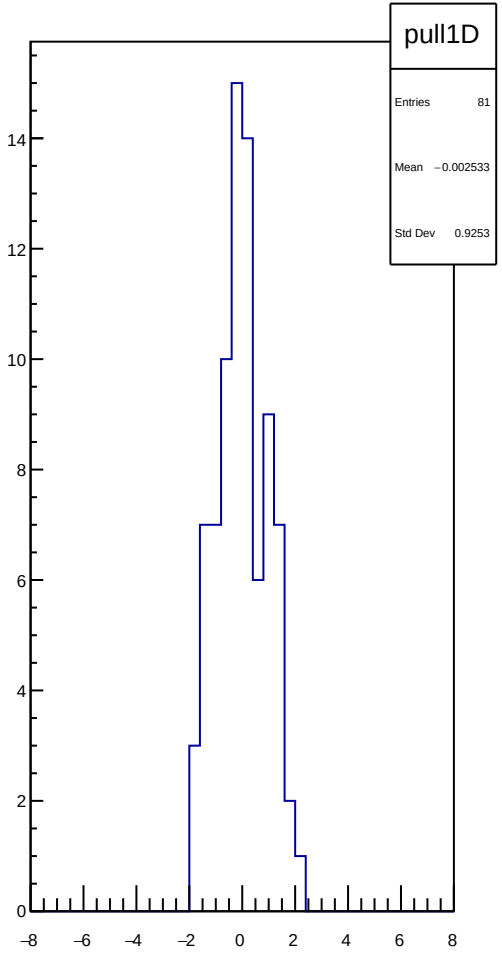

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.11e+04 / 80
p0 10.56 ± 0.008447
13
12.5
12
11.5
11
10.5
10
9.5

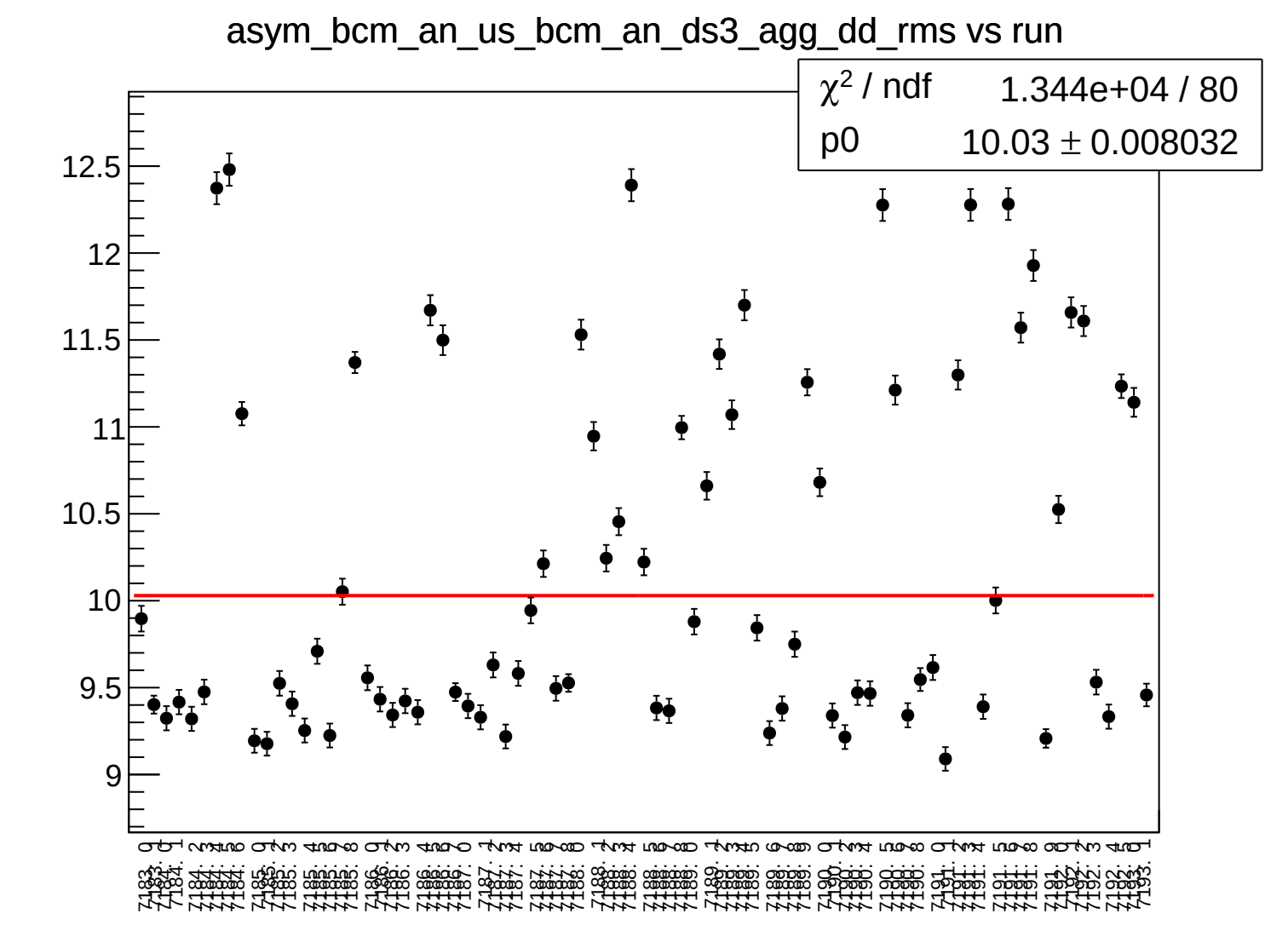

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 11.77 / 80
p0 −66.27 ± 220.3
pull
Entries 81
Mean −13.4
Std Dev 71.67

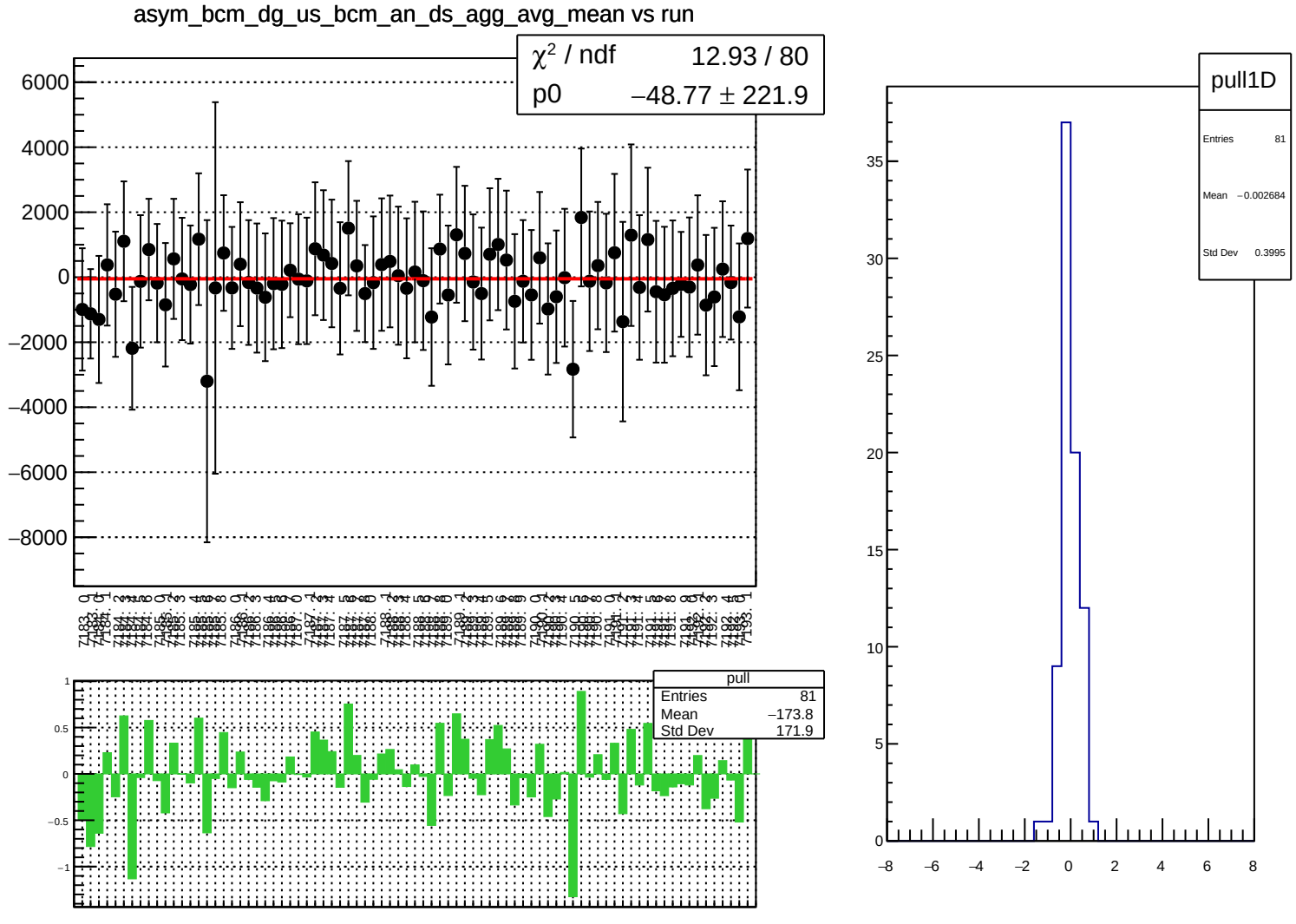

pull1D
Entries 81
Mean −0.005015
Std Dev 0.3811

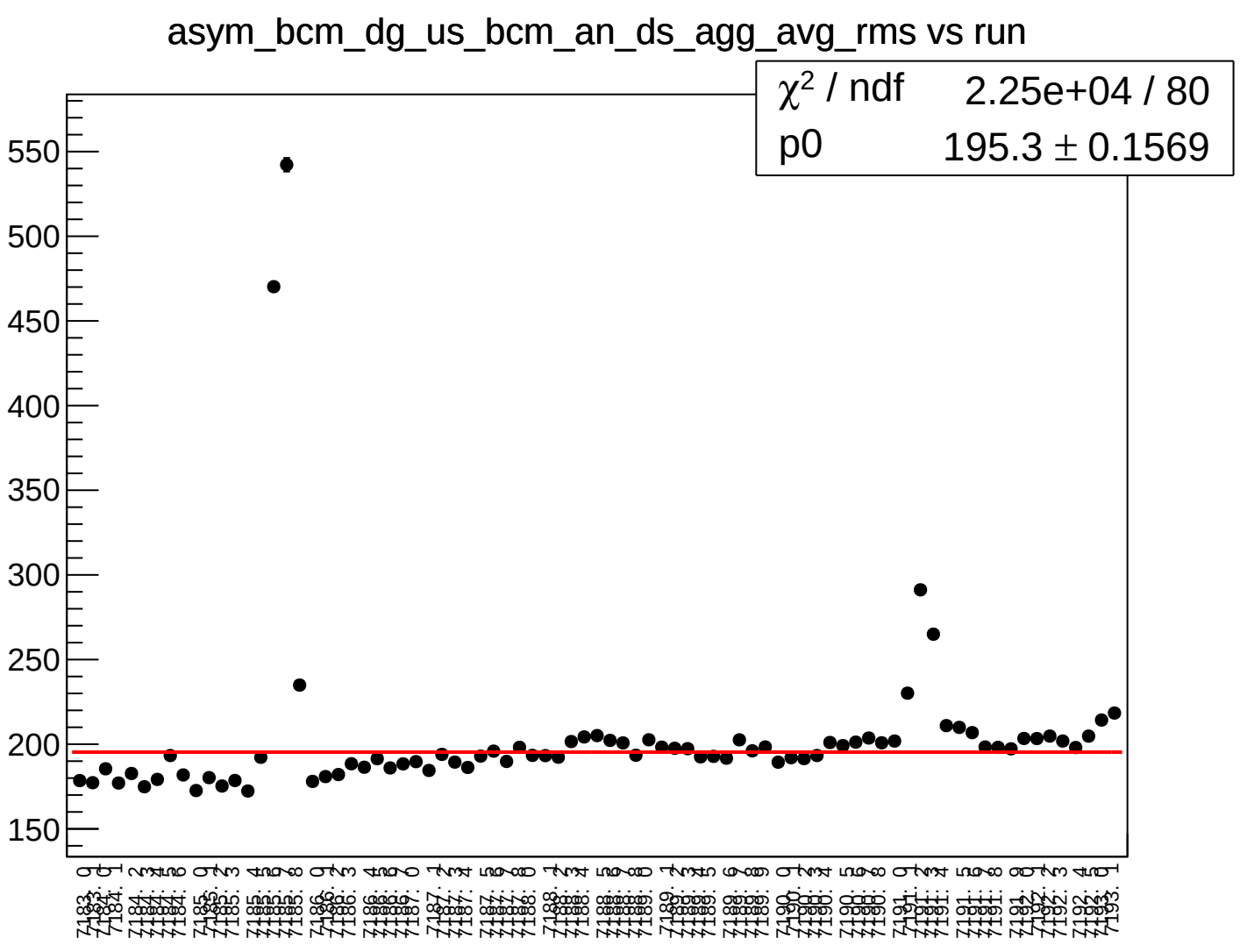

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2.278e+04 / 80
p0 193.9 ± 0.1558
550
500
450
400
350
300
250
200
150

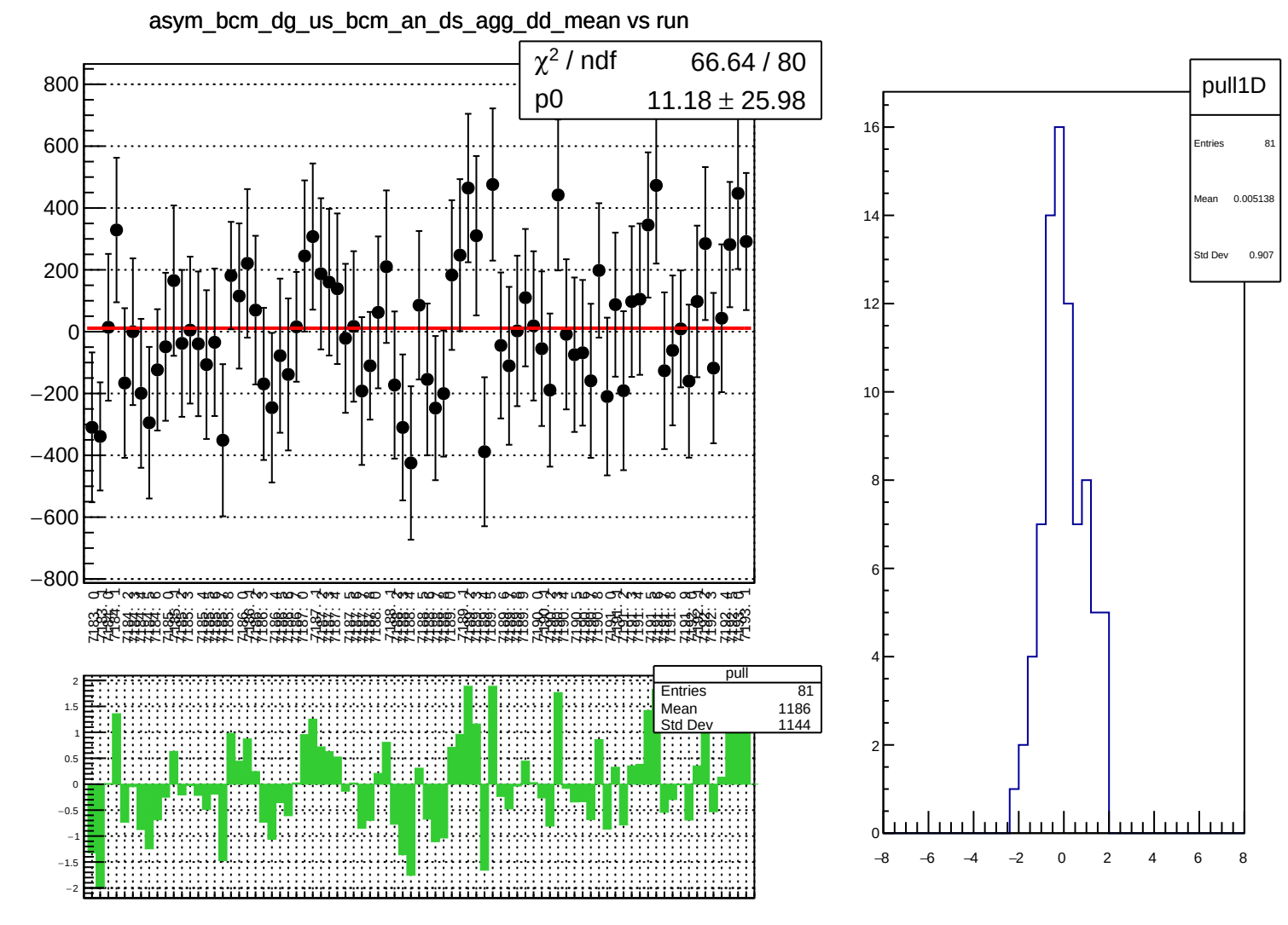

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 69.35 / 80
p0 −3.04 ± 11.36
pull
Entries 81
Mean −1837
Std Dev 1881

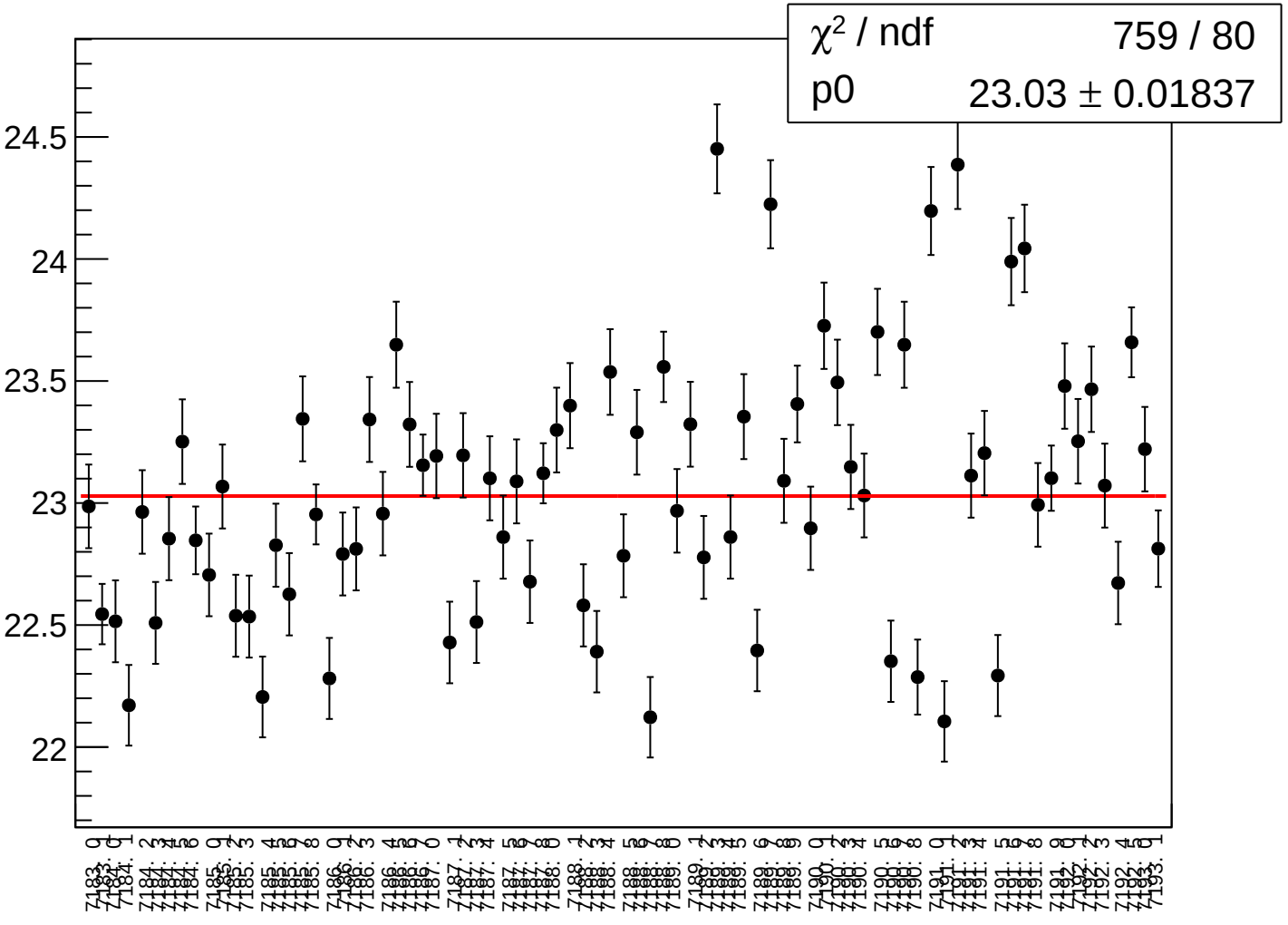

pull1D
Entries 81
Mean −0.002533
Std Dev 0.9253

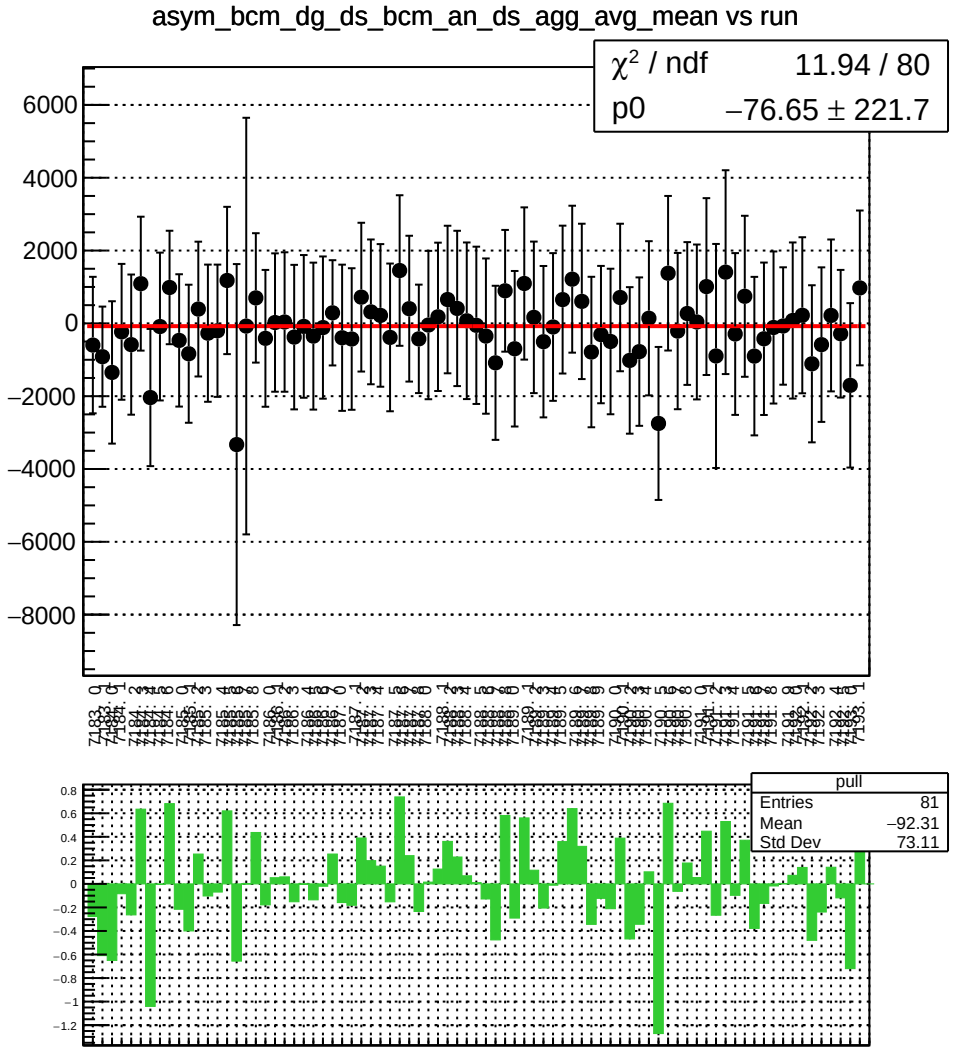

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1.344e+04 / 80
p0 10.03 ± 0.008032
12.5
12
11.5
11
10.5
10
9.5
9

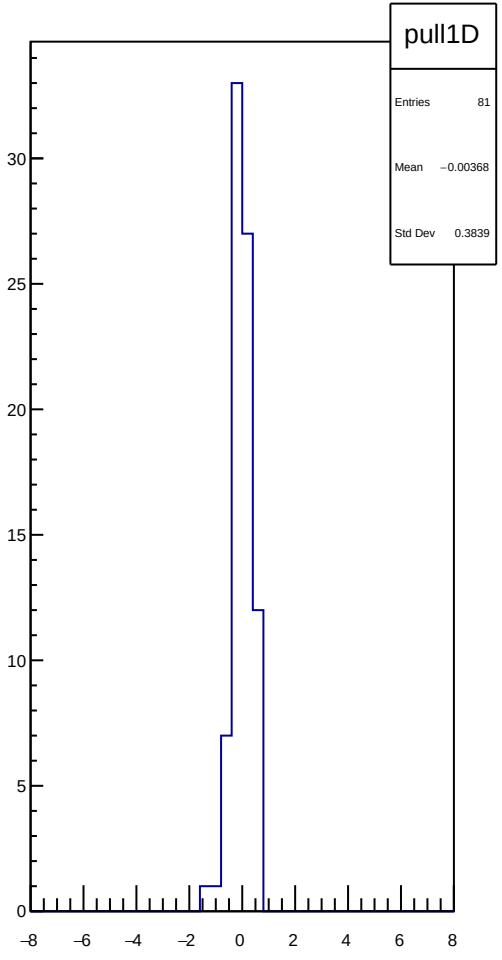

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 12.93 / 80
p0 −48.77 ± 221.9
pull
Entries 81
Mean −173.8
Std Dev 171.9
pull1D
Entries 81
Mean −0.002684
Std Dev 0.3995

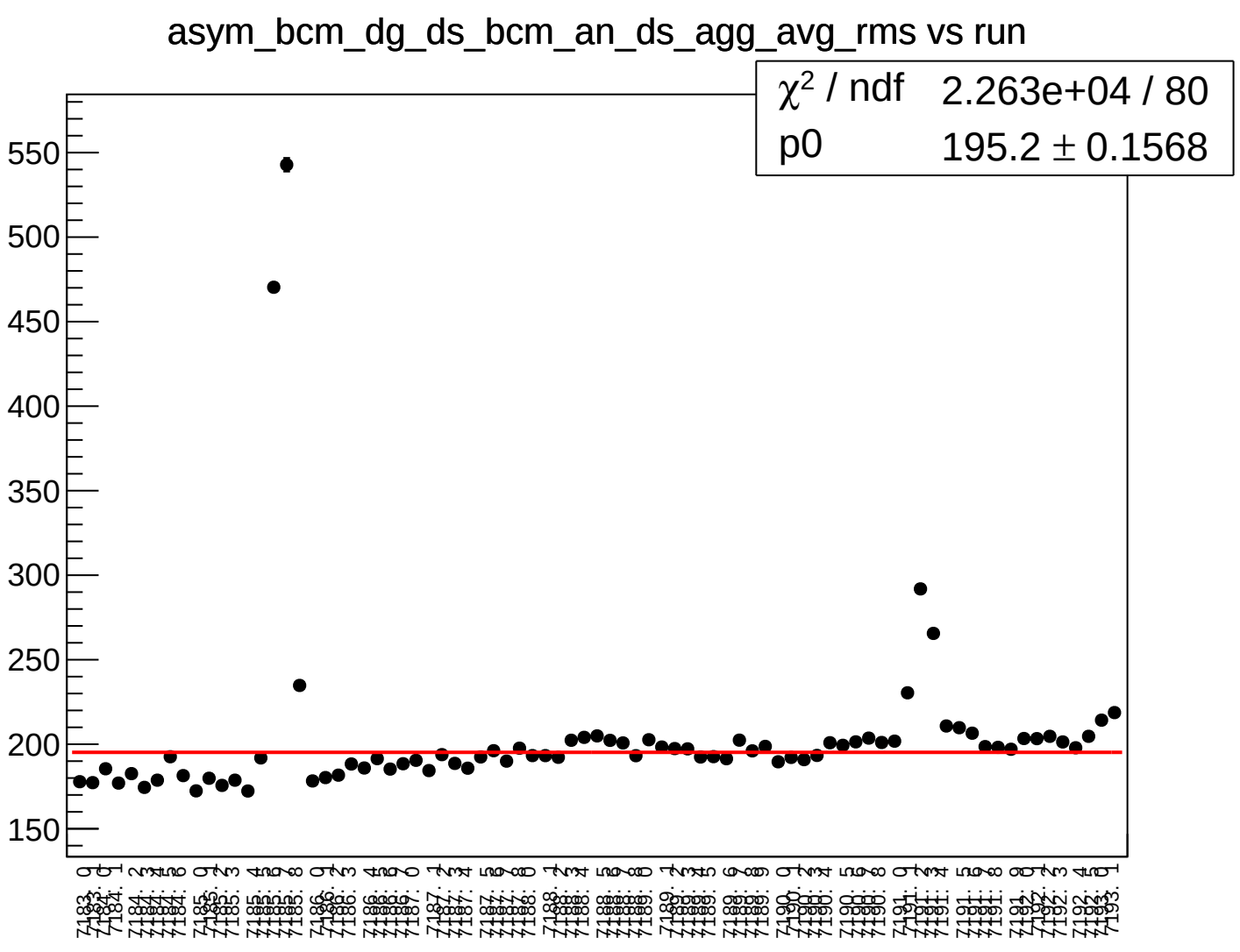

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.25e+04 / 80
p0 195.3 ± 0.1569
550
500
450
400
350
300
250
200
150

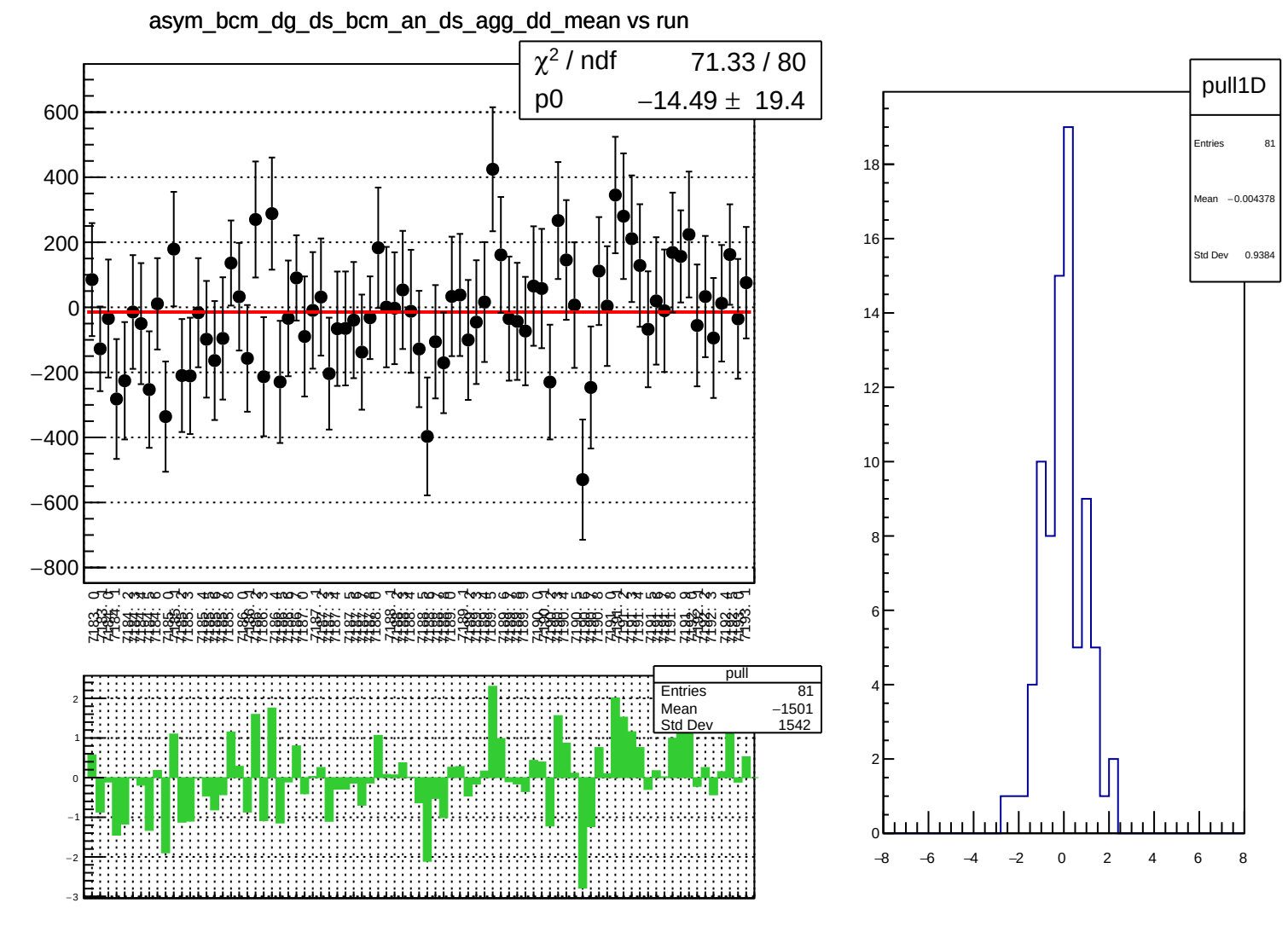

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 66.64 / 80
p0 11.18 ± 25.98
pull
Entries 81
Mean 1186
Std Dev 1144
pull1D
Entries 81
Mean 0.005138
Std Dev 0.907

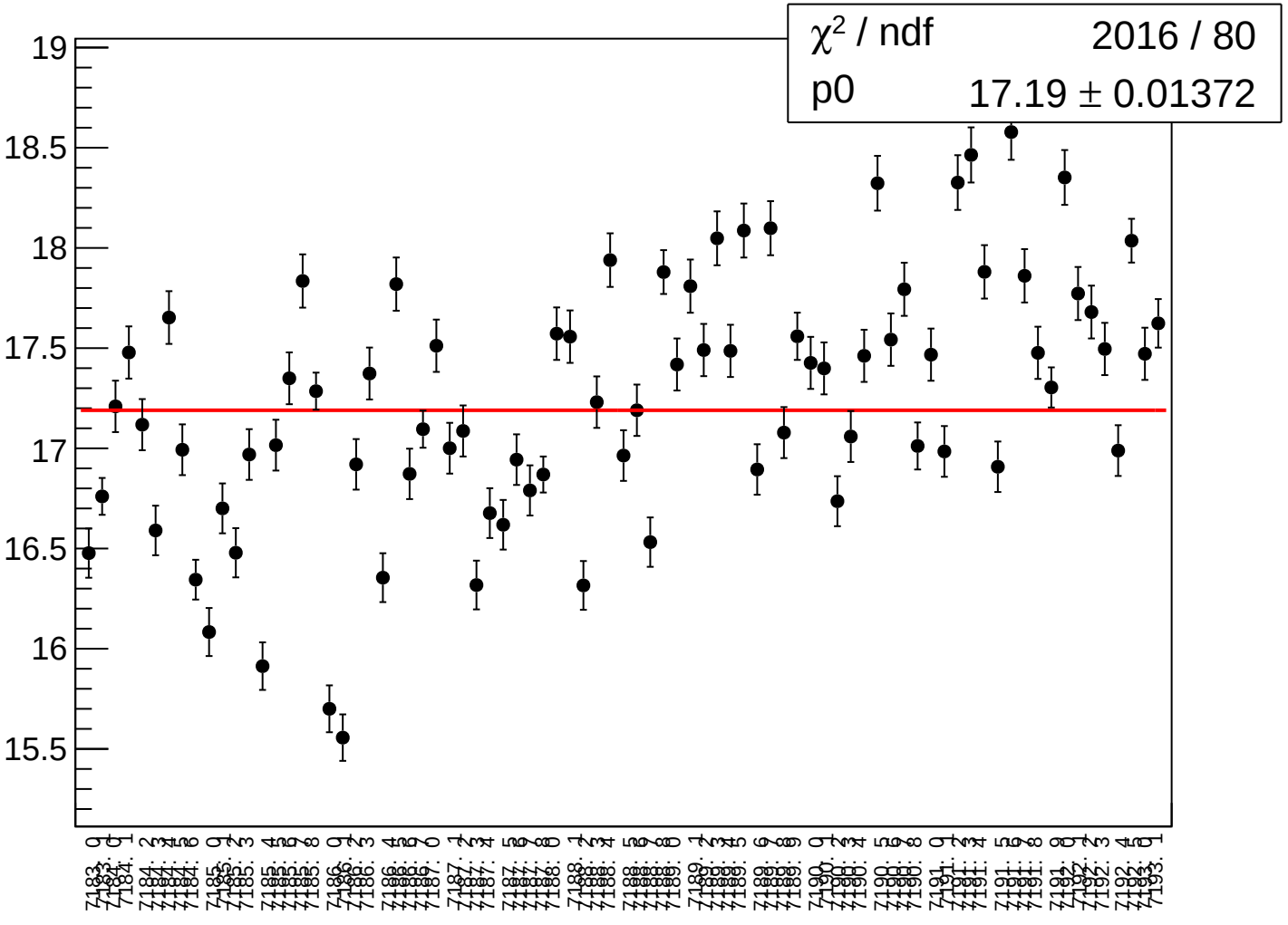

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 759 / 80
p0 23.03 ± 0.01837
24.5
24
23.5
23
22.5
22

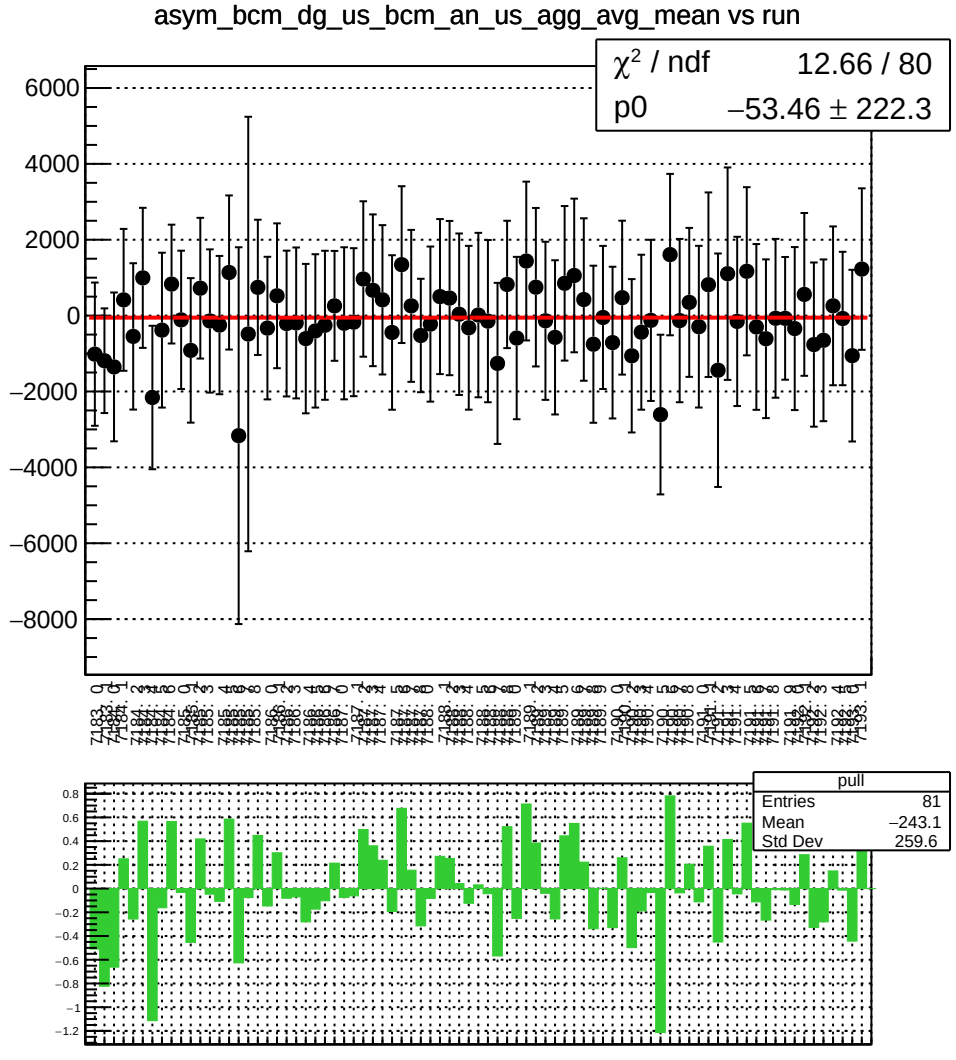

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.94 / 80
p0 −76.65 ± 221.7
pull
Entries 81
Mean −92.31
Std Dev 73.11

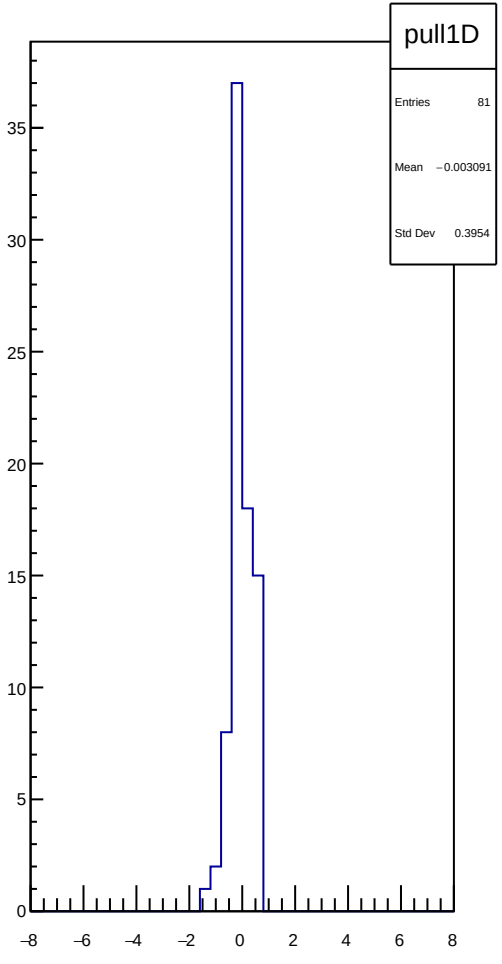

pull1D
Entries 81
Mean −0.00368
Std Dev 0.3839

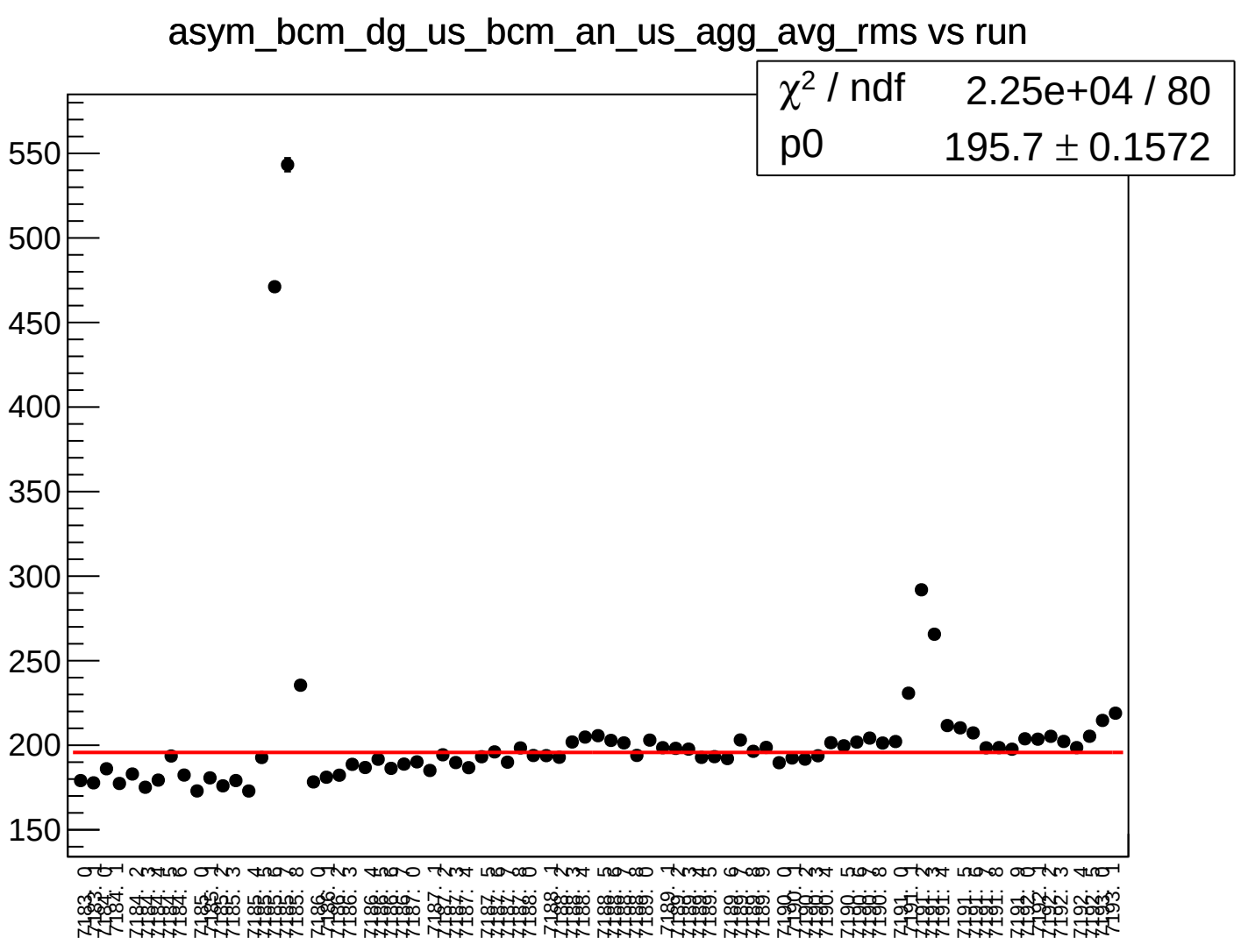

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.263e+04 / 80
p0 195.2 ± 0.1568
550
500
450
400
350
300
250
200
150

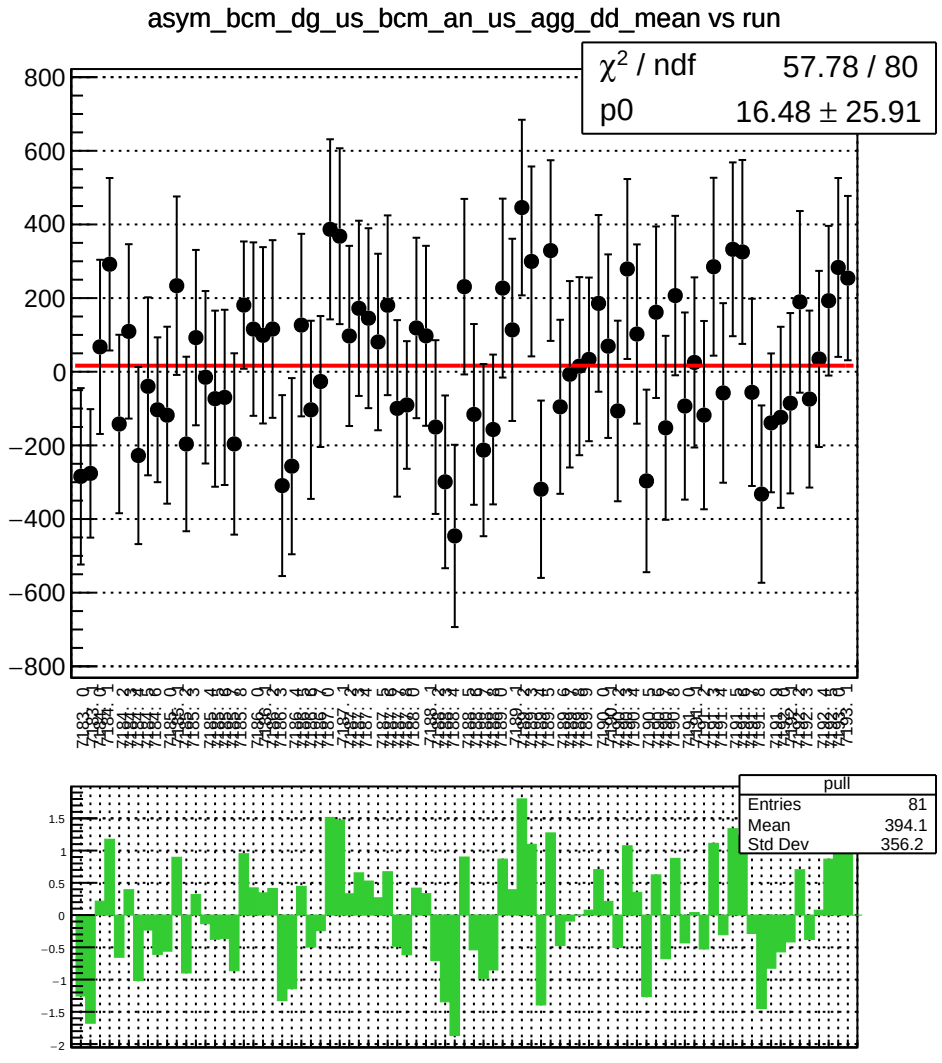

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 71.33 / 80
p0 −14.49 ± 19.4
pull
Entries 81
Mean −1501
Std Dev 1542
pull1D
Entries 81
Mean −0.004378
Std Dev 0.9384

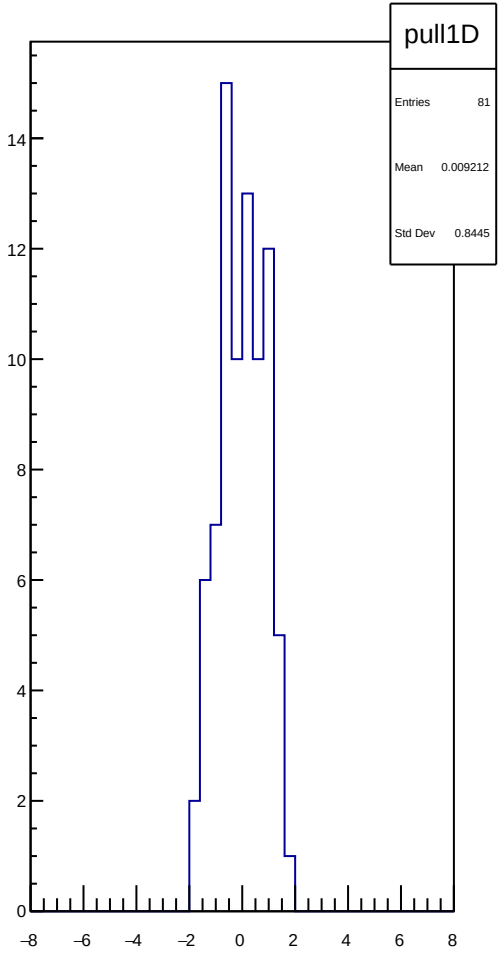

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2016 / 80
p0 17.19 ± 0.01372
19
18.5
18
17.5
17
16.5
16
15.5

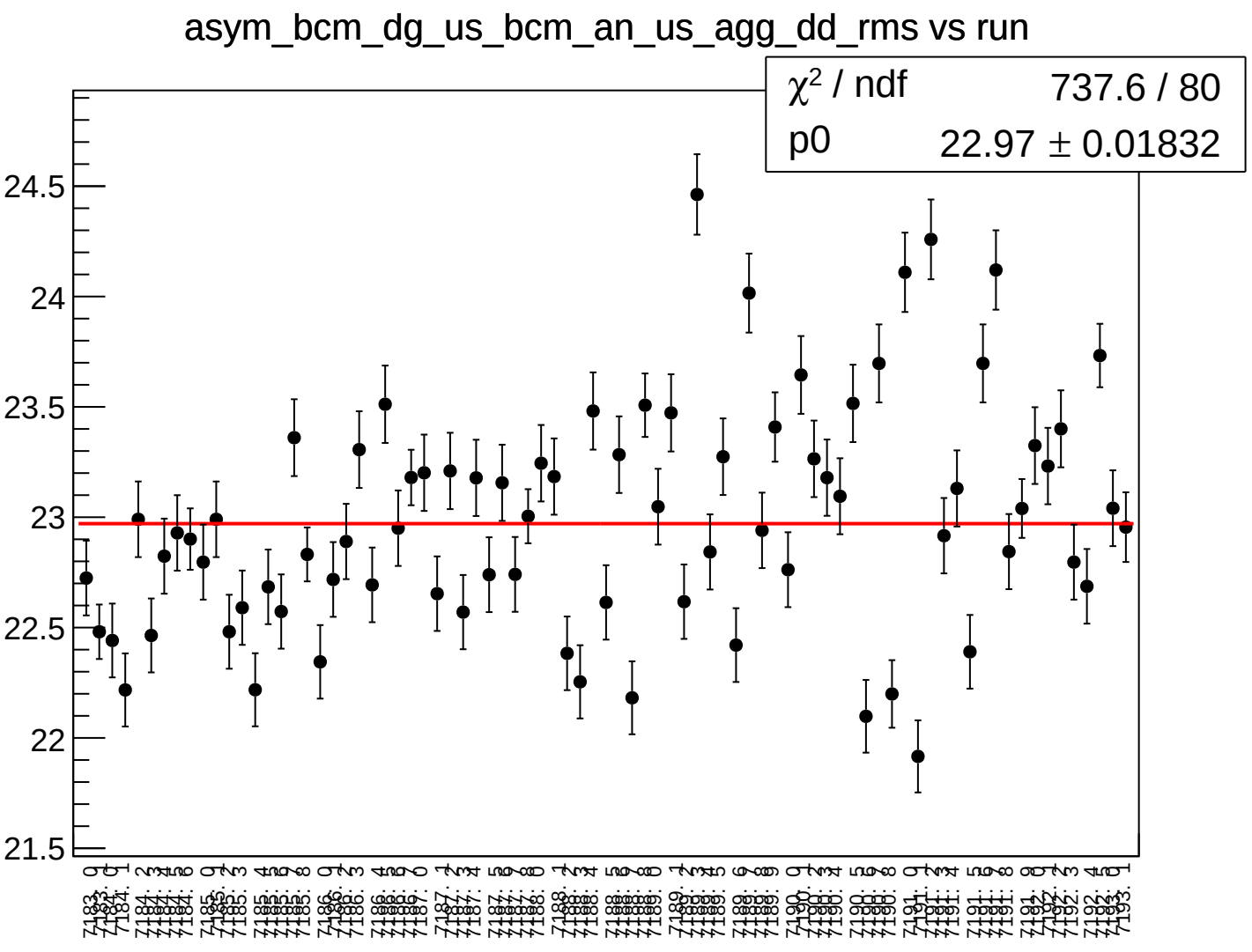

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 12.66 / 80
p0 −53.46 ± 222.3
pull
Entries 81
Mean −243.1
Std Dev 259.6

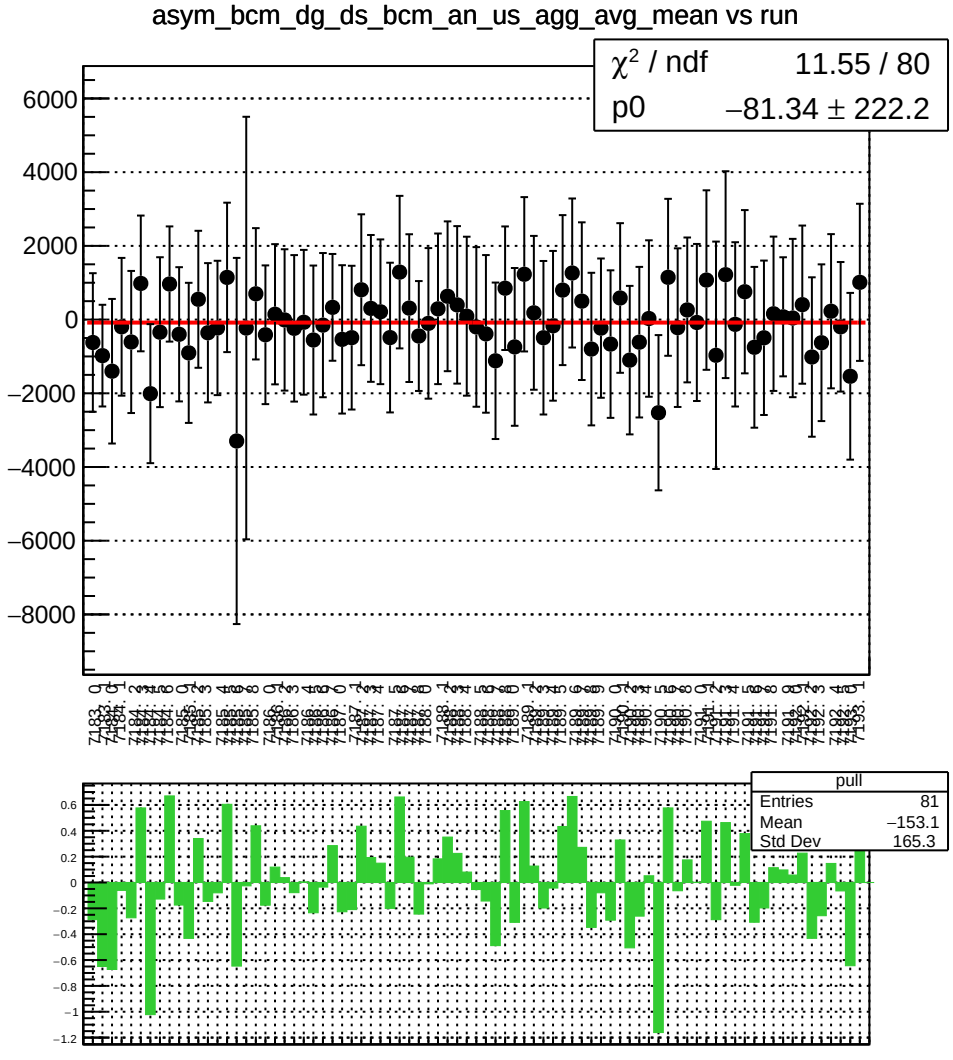

pull1D
Entries 81
Mean −0.003091
Std Dev 0.3954

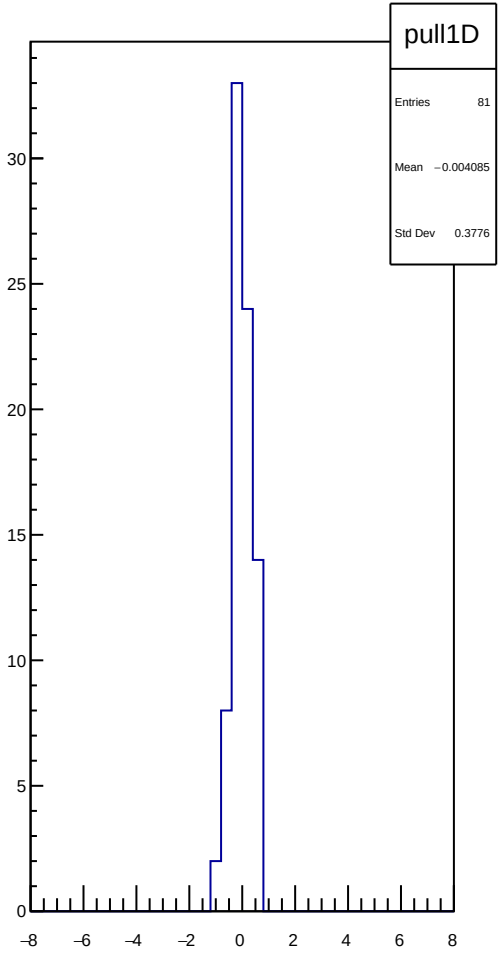

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.25e+04 / 80
p0 195.7 ± 0.1572
550
500
450
400
350
300
250
200
150

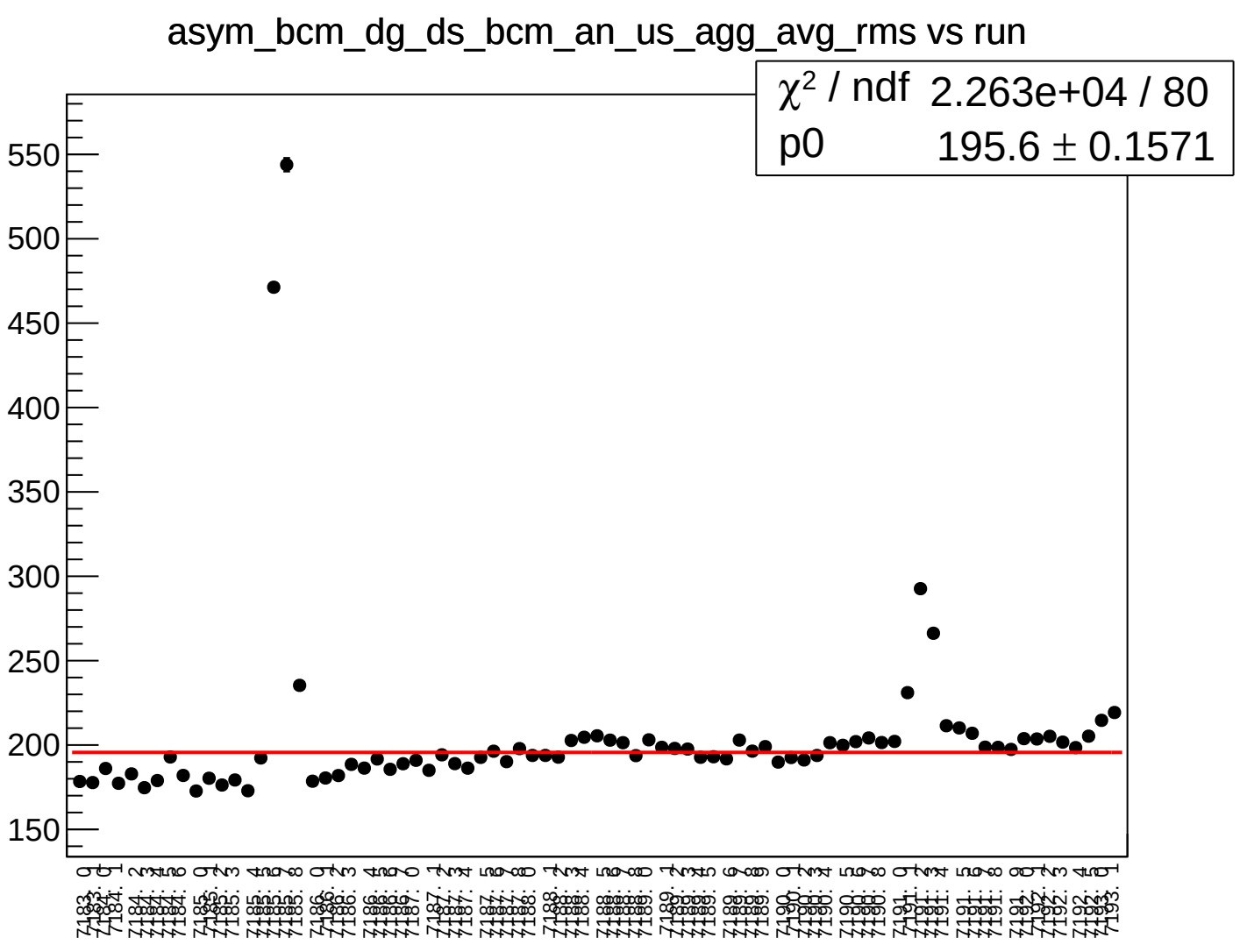

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 57.78 / 80
p0 16.48 ± 25.91
pull
Entries 81
Mean 394.1
Std Dev 356.2

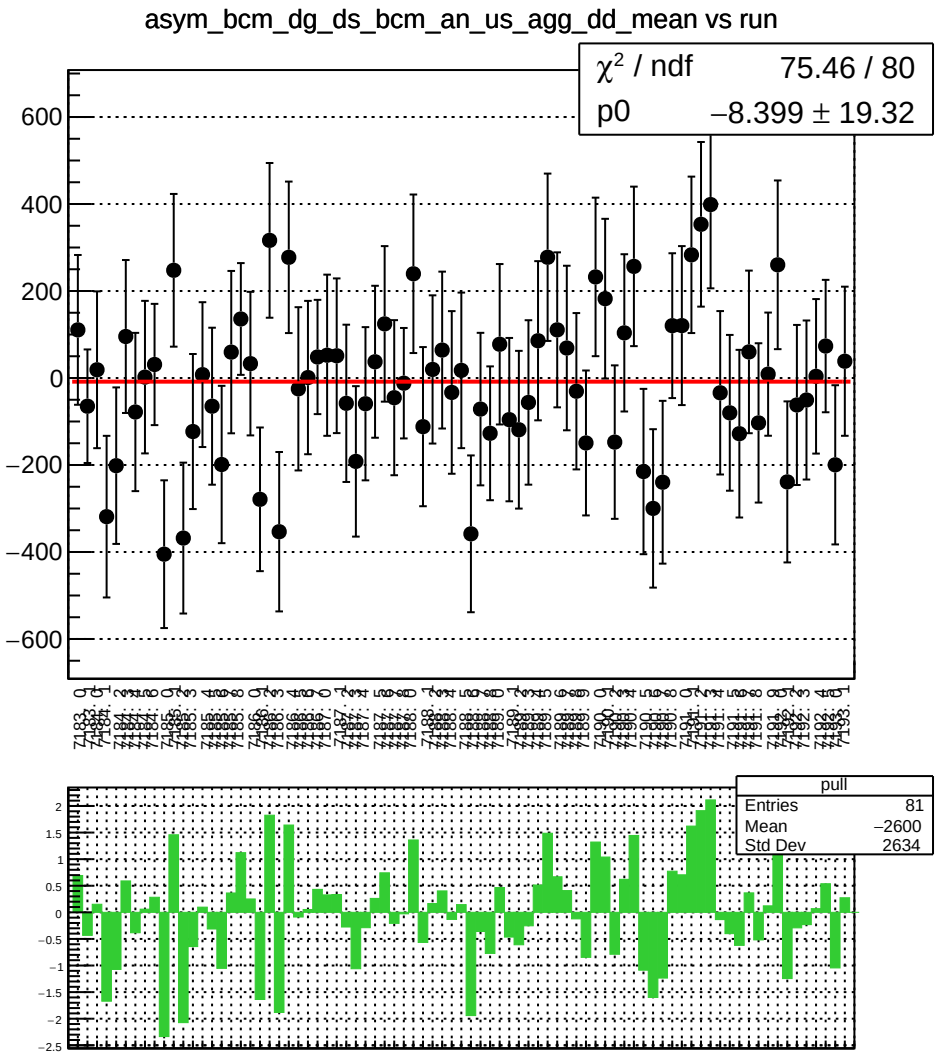

pull1D
Entries 81
Mean 0.009212
Std Dev 0.8445

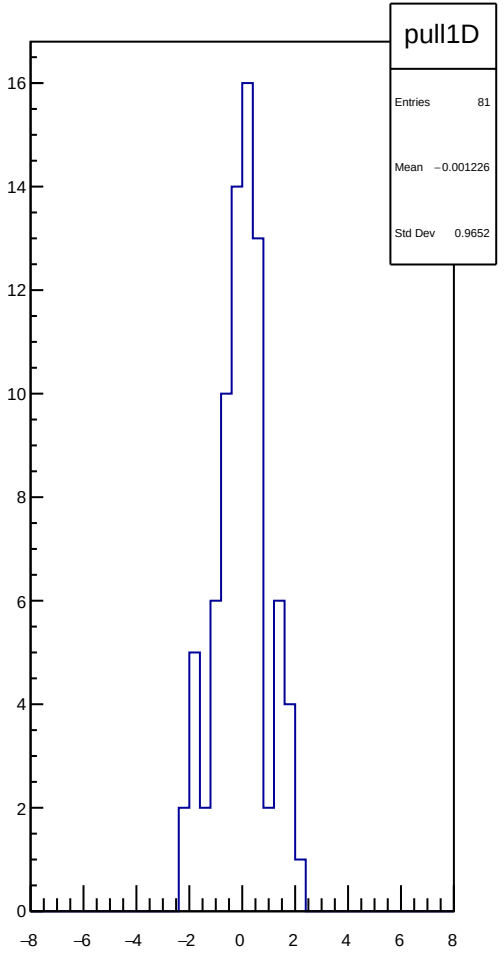

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 737.6 / 80
p0 22.97 ± 0.01832
24.5
24
23.5
23
22.5
22
21.5

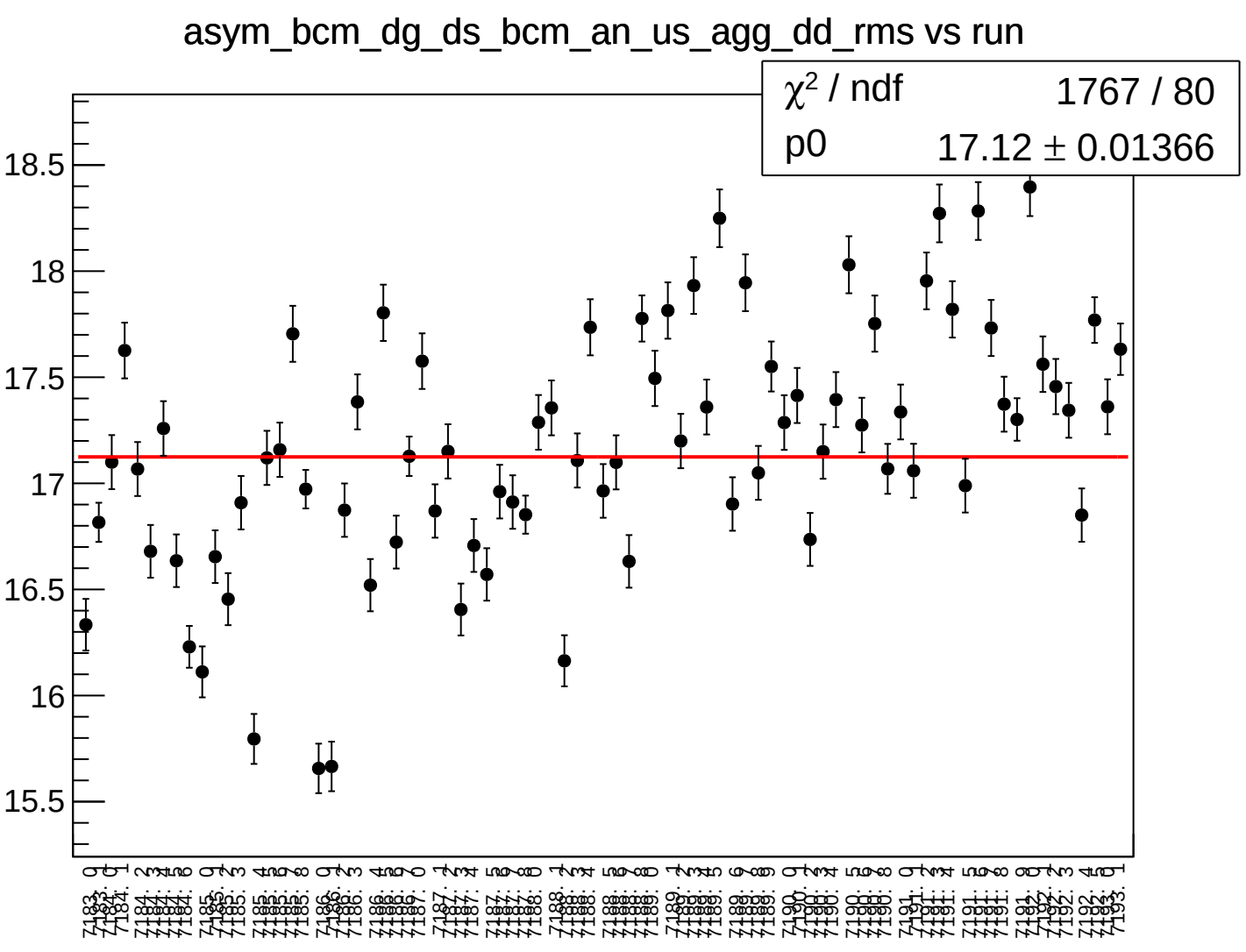

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 11.55 / 80
p0 −81.34 ± 222.2
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean −153.1
Std Dev 165.3
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

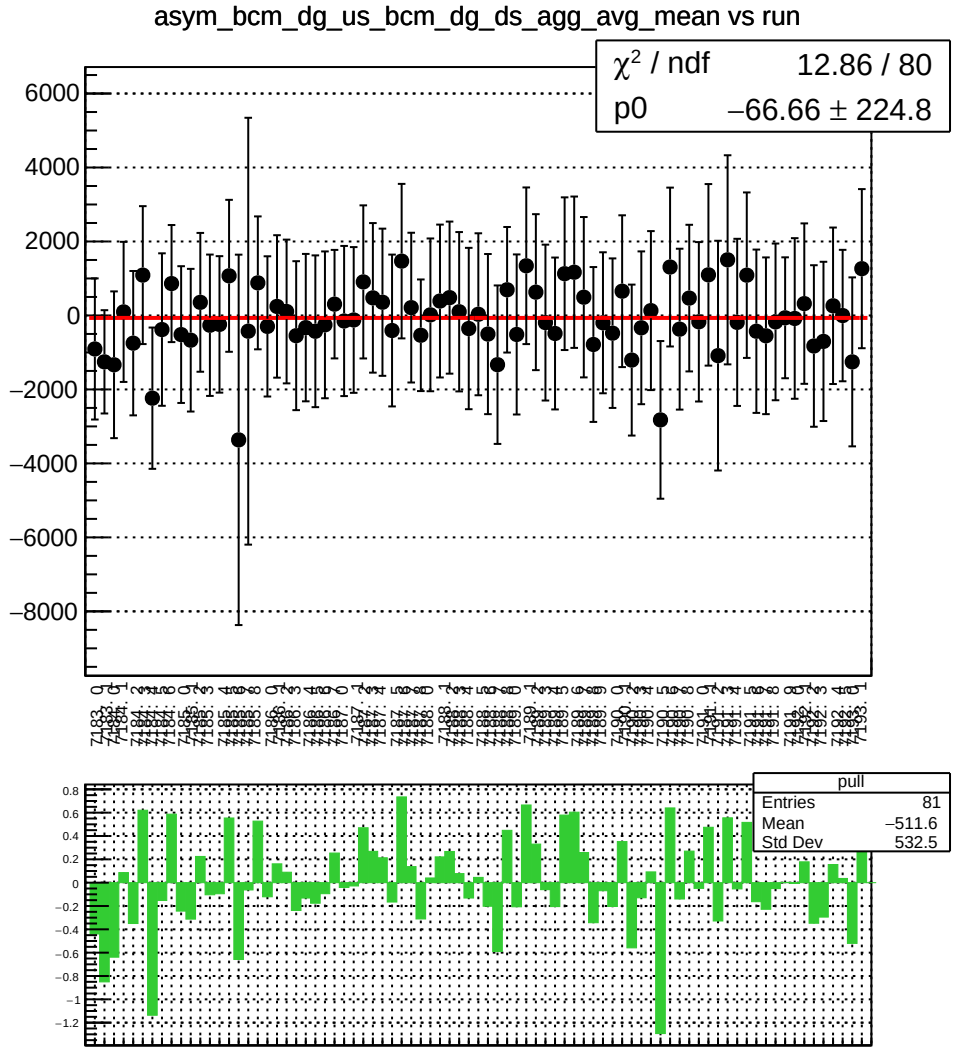

pull1D
Entries 81
Mean −0.004085
Std Dev 0.3776
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

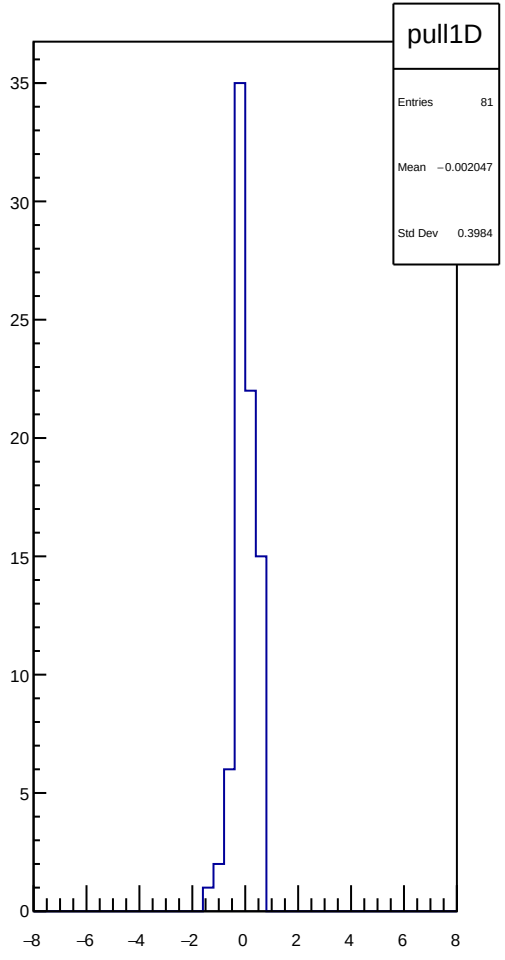

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.263e+04 / 80
p0 195.6 ± 0.1571
550
500
450
400
350
300
250
200
150

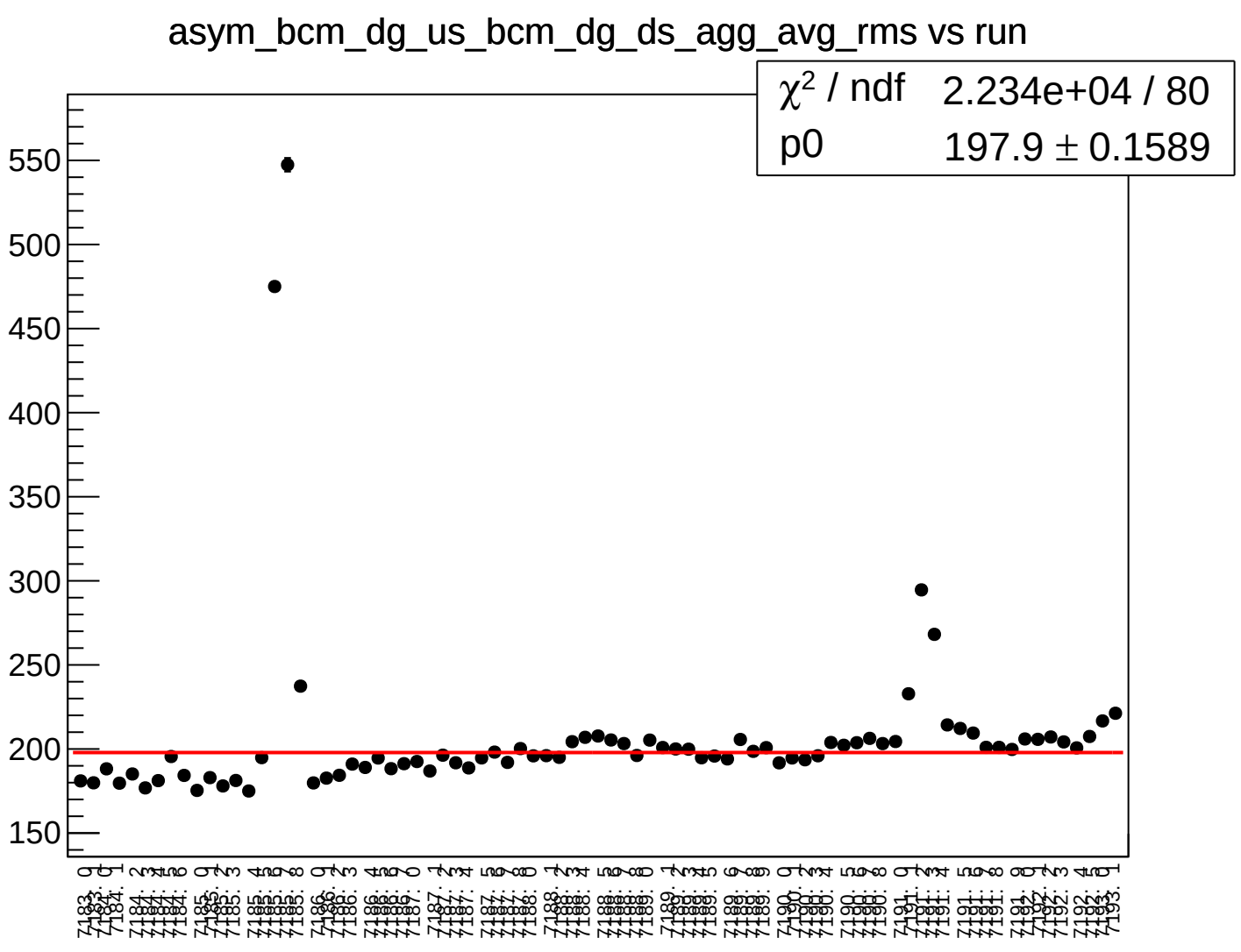

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 75.46 / 80
p0 −8.399 ± 19.32
pull
Entries 81
Mean −2600
Std Dev 2634

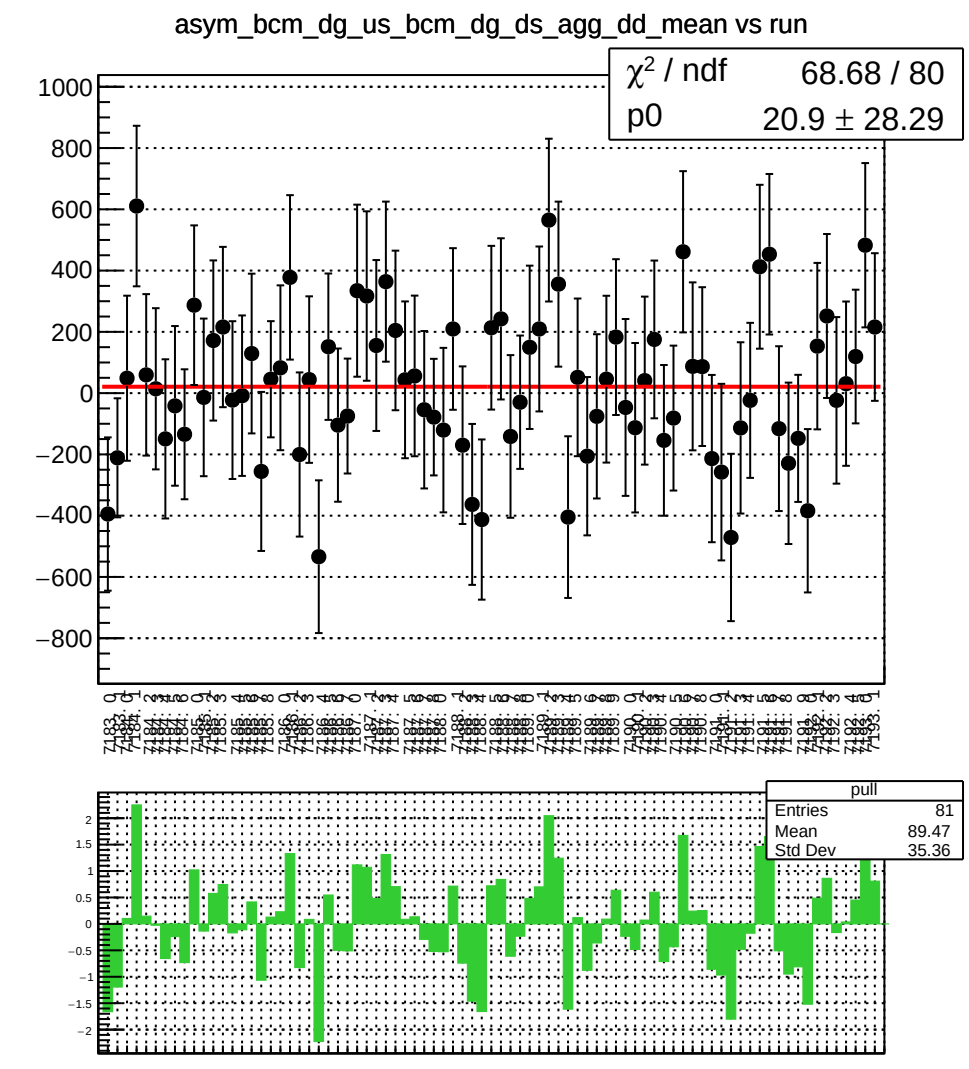

pull1D
Entries 81
Mean −0.001226
Std Dev 0.9652

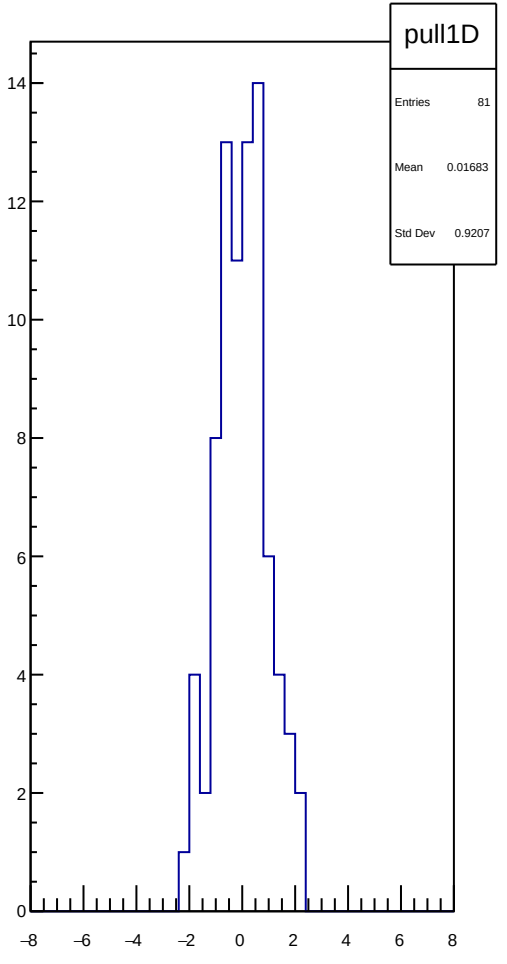

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1767 / 80
p0 17.12 ± 0.01366
18.5
18
17.5
17
16.5
16
15.5

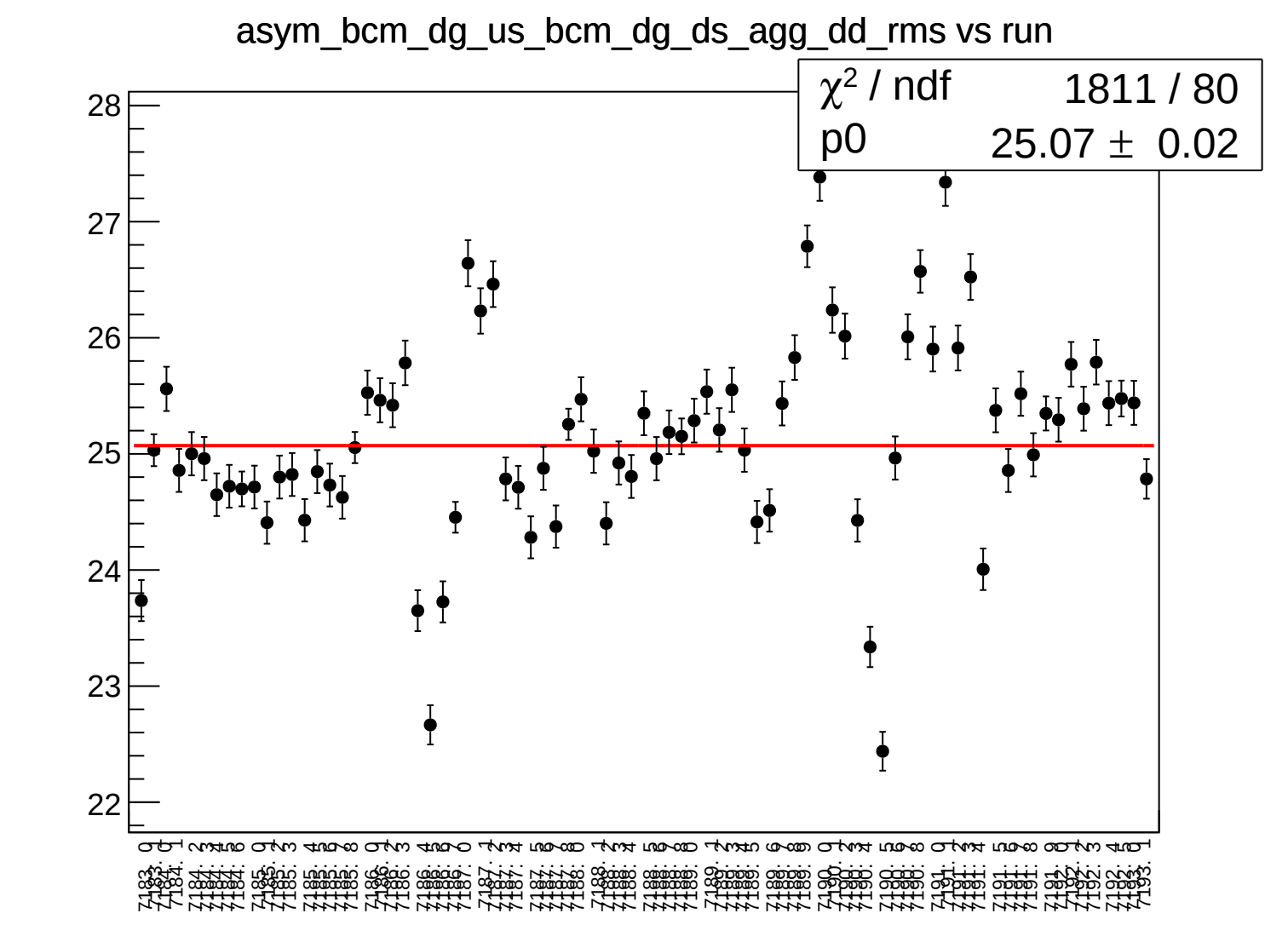

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 12.86 / 80
p0 −66.66 ± 224.8
pull
Entries 81
Mean −511.6
Std Dev 532.5

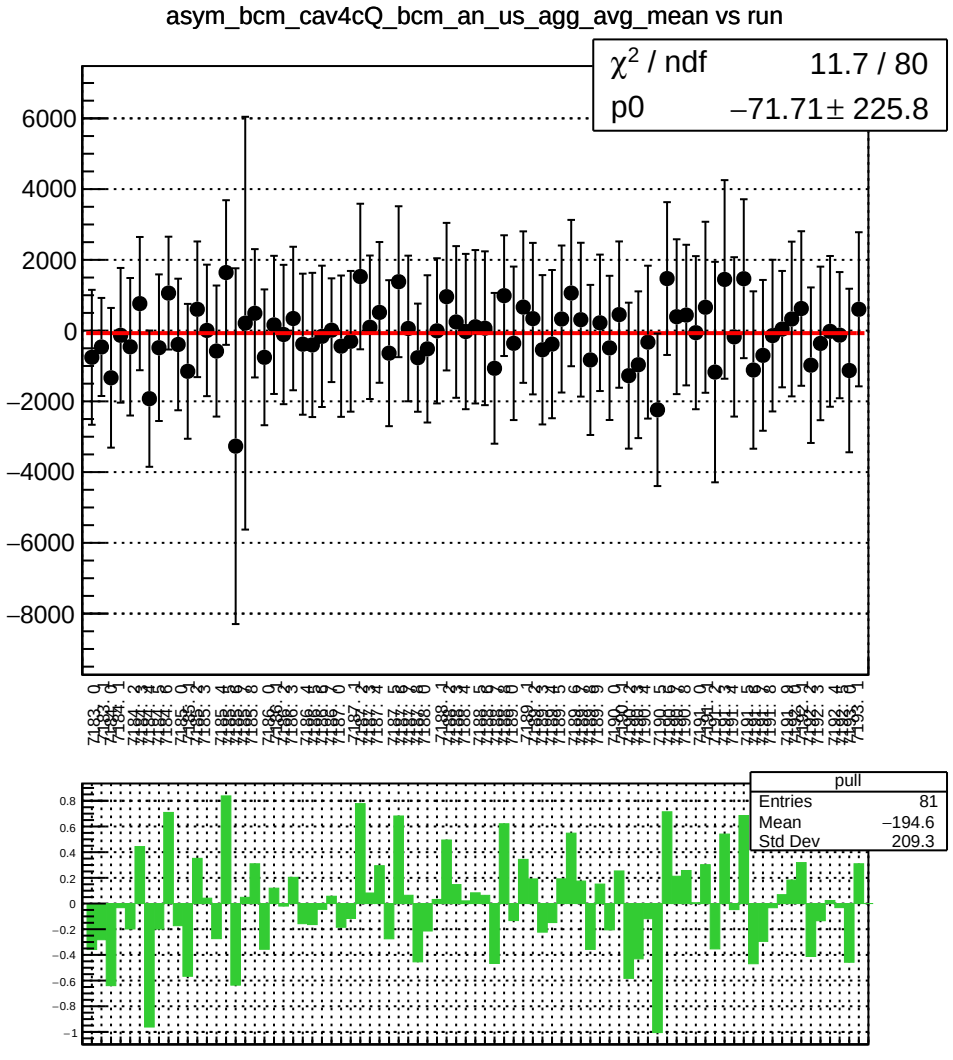

pull1D
Entries 81
Mean −0.002047
Std Dev 0.3984

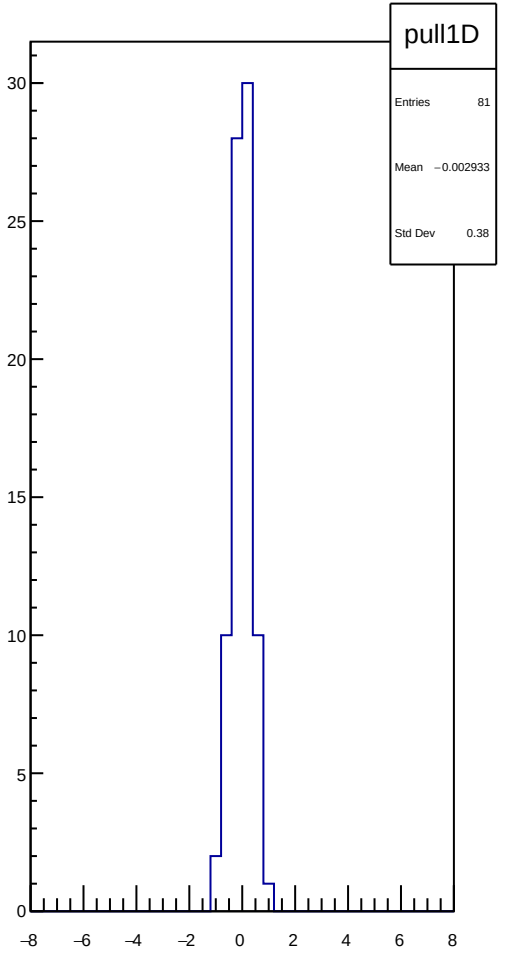

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.234e+04 / 80
p0 197.9 ± 0.1589
550
500
450
400
350
300
250
200
150

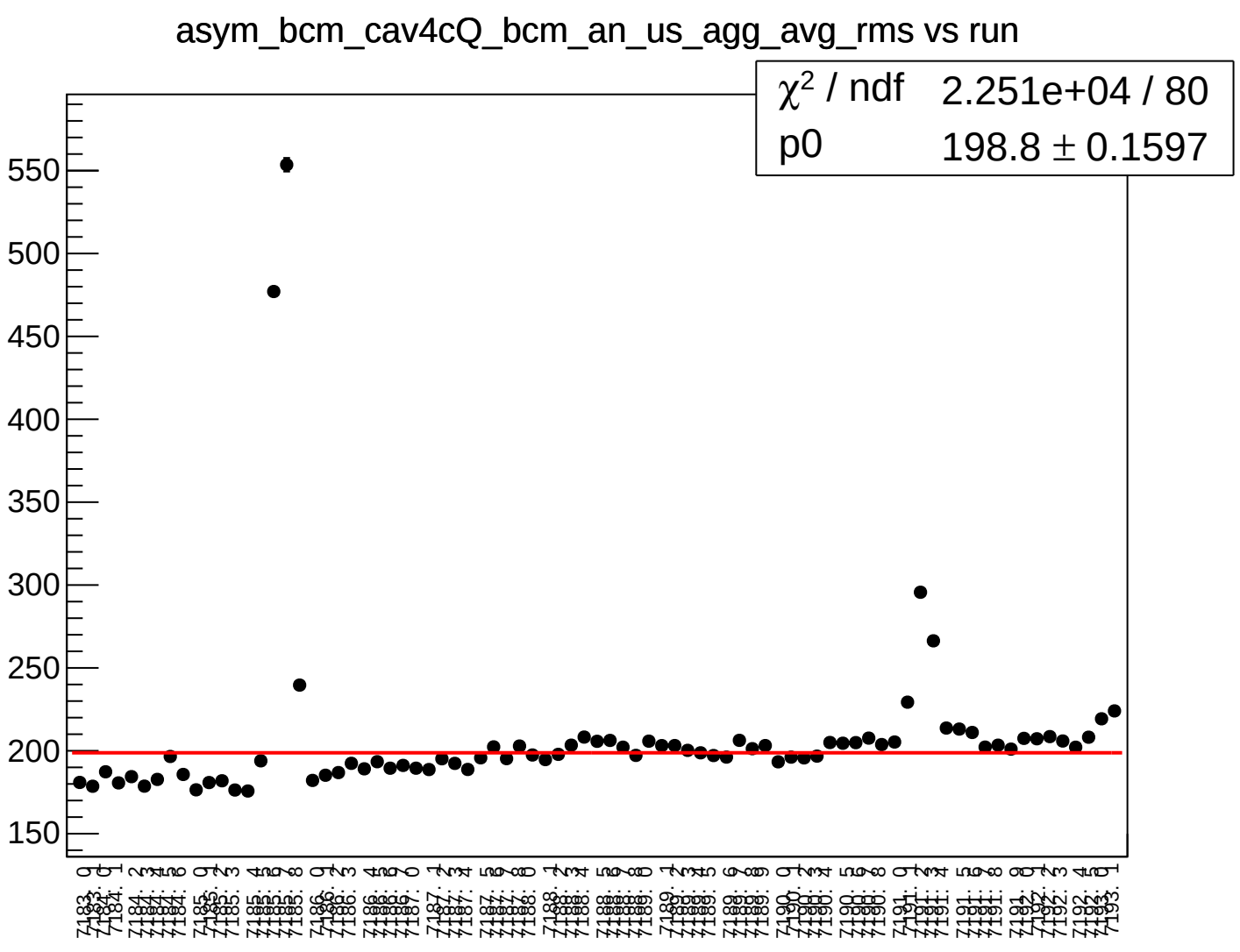

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 68.68 / 80
p0 20.9 ± 28.29
pull
Entries 81
Mean 89.47
Std Dev 35.36

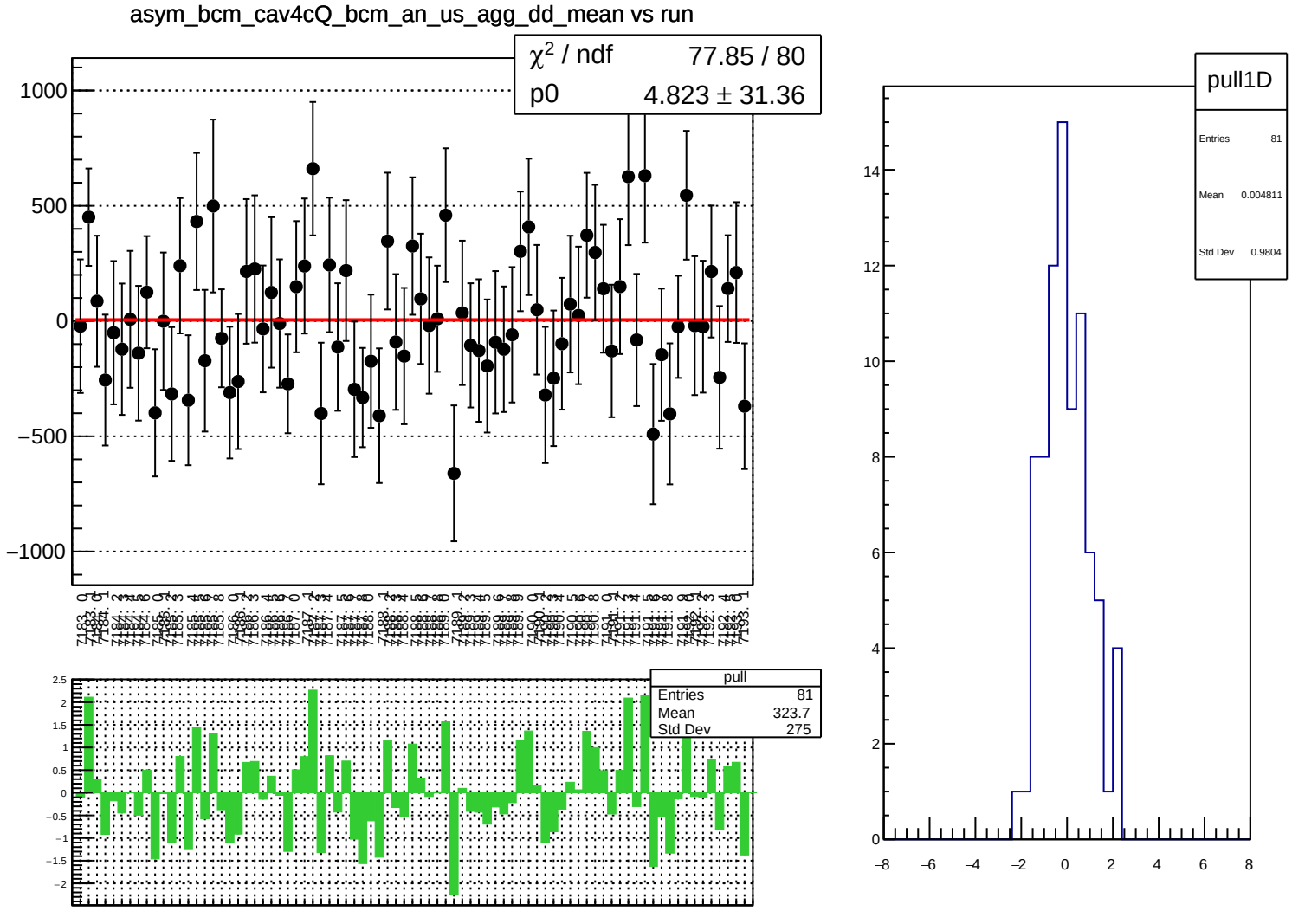

pull1D
Entries 81
Mean 0.01683
Std Dev 0.9207

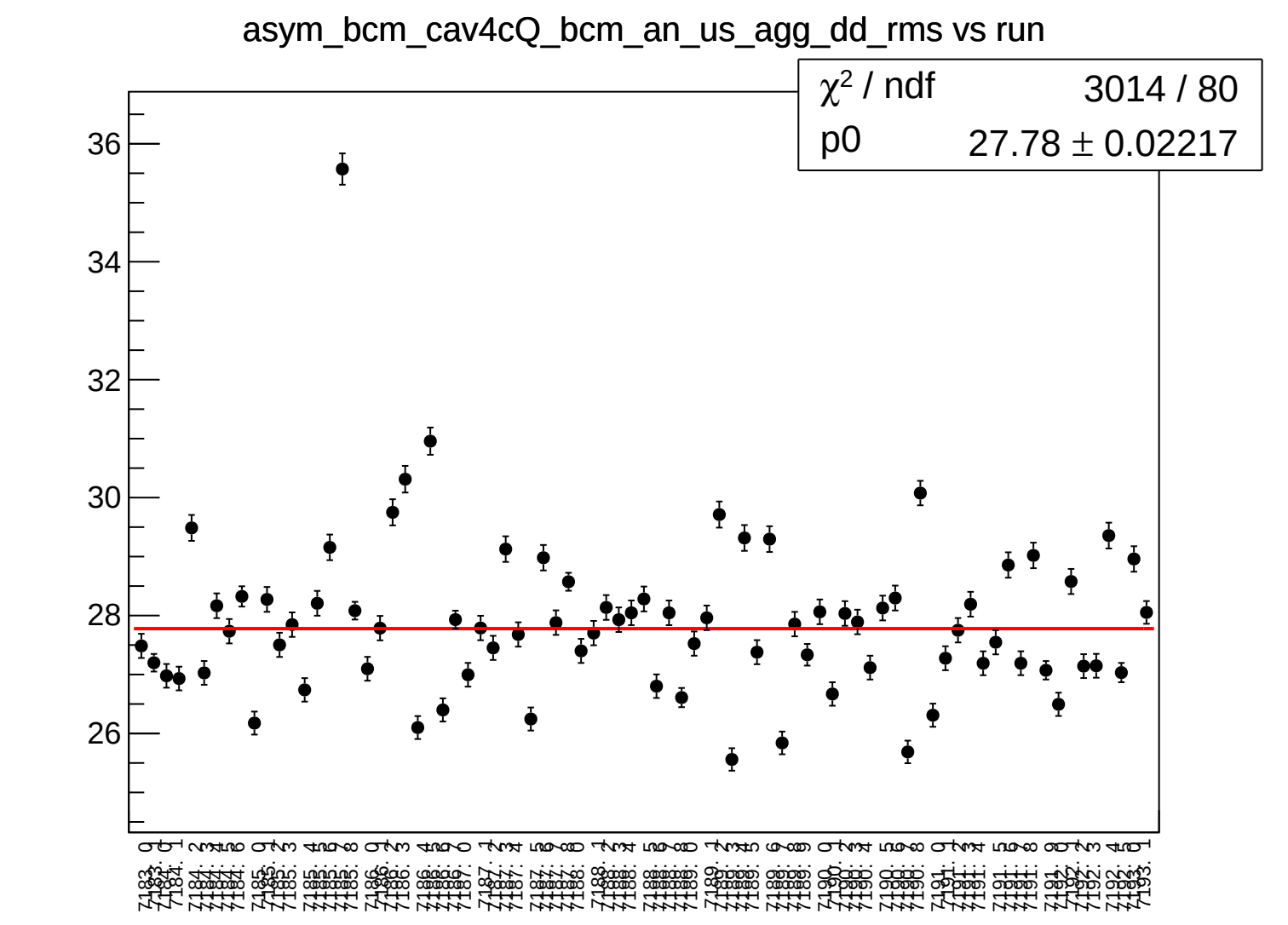

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1811 / 80
p0 25.07 ± 0.02
28
27
26
25
24
23
22

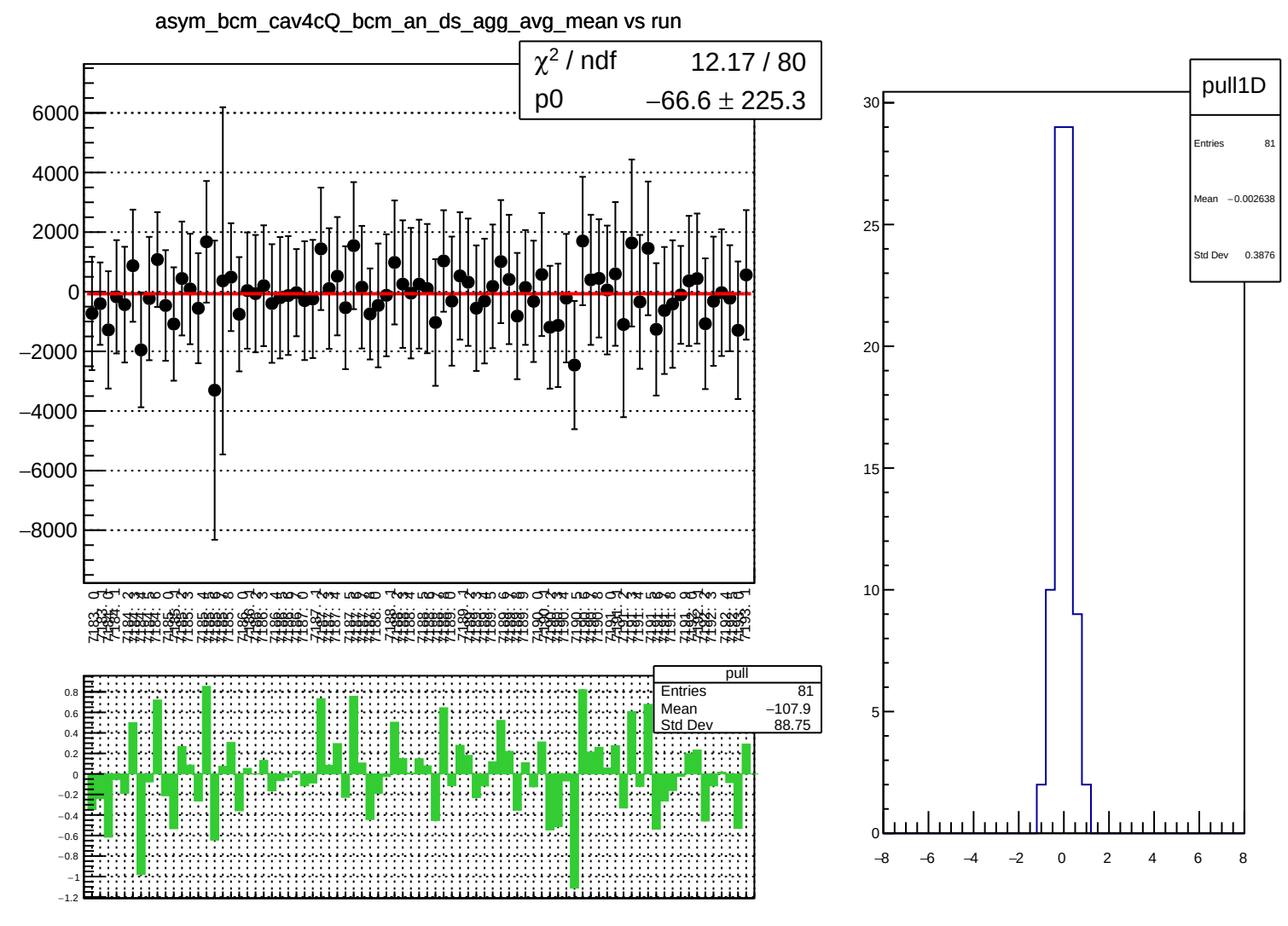

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 11.7 / 80
p0 −71.71± 225.8
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean −194.6
Std Dev 209.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

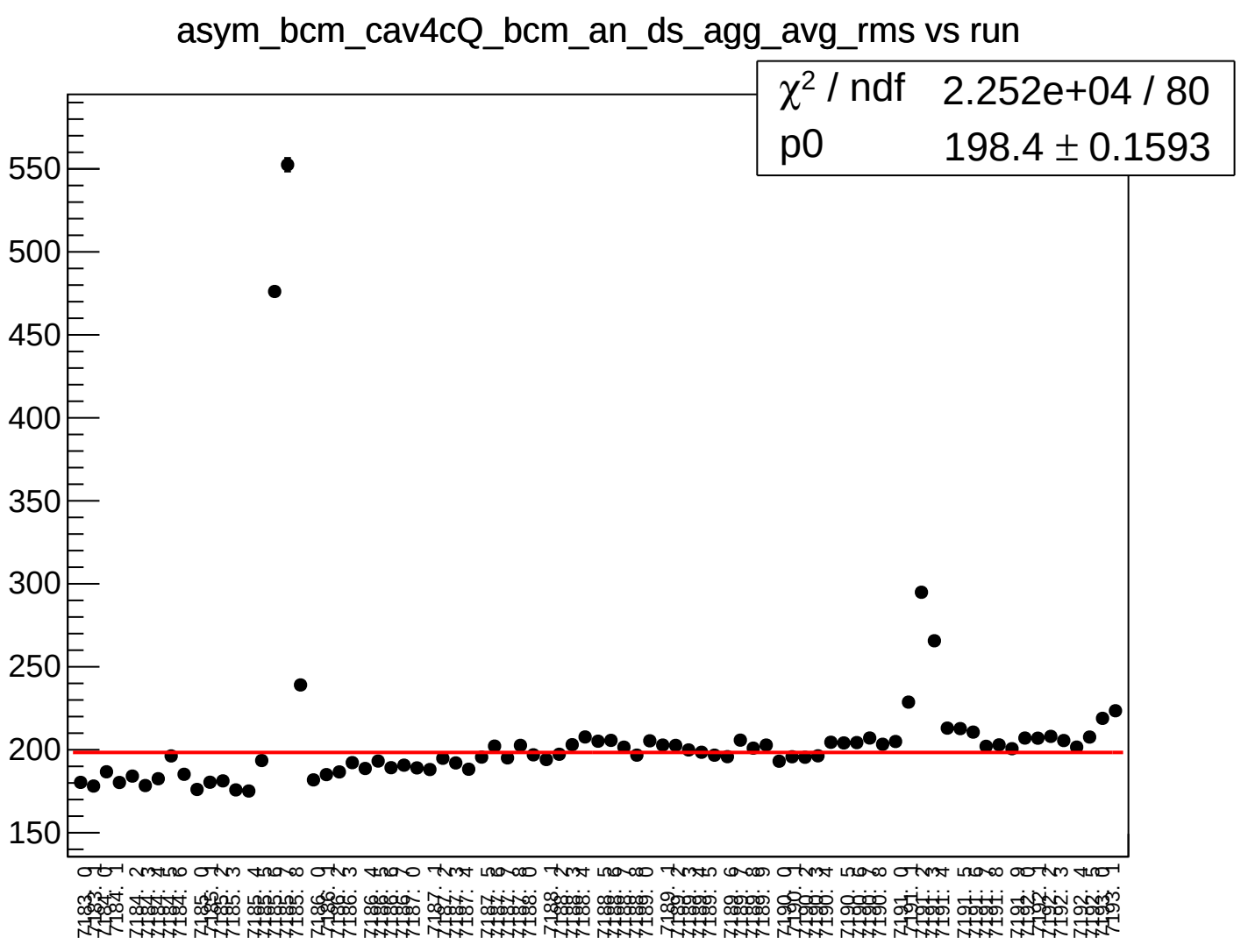

pull1D
Entries 81
Mean −0.002933
Std Dev 0.38
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

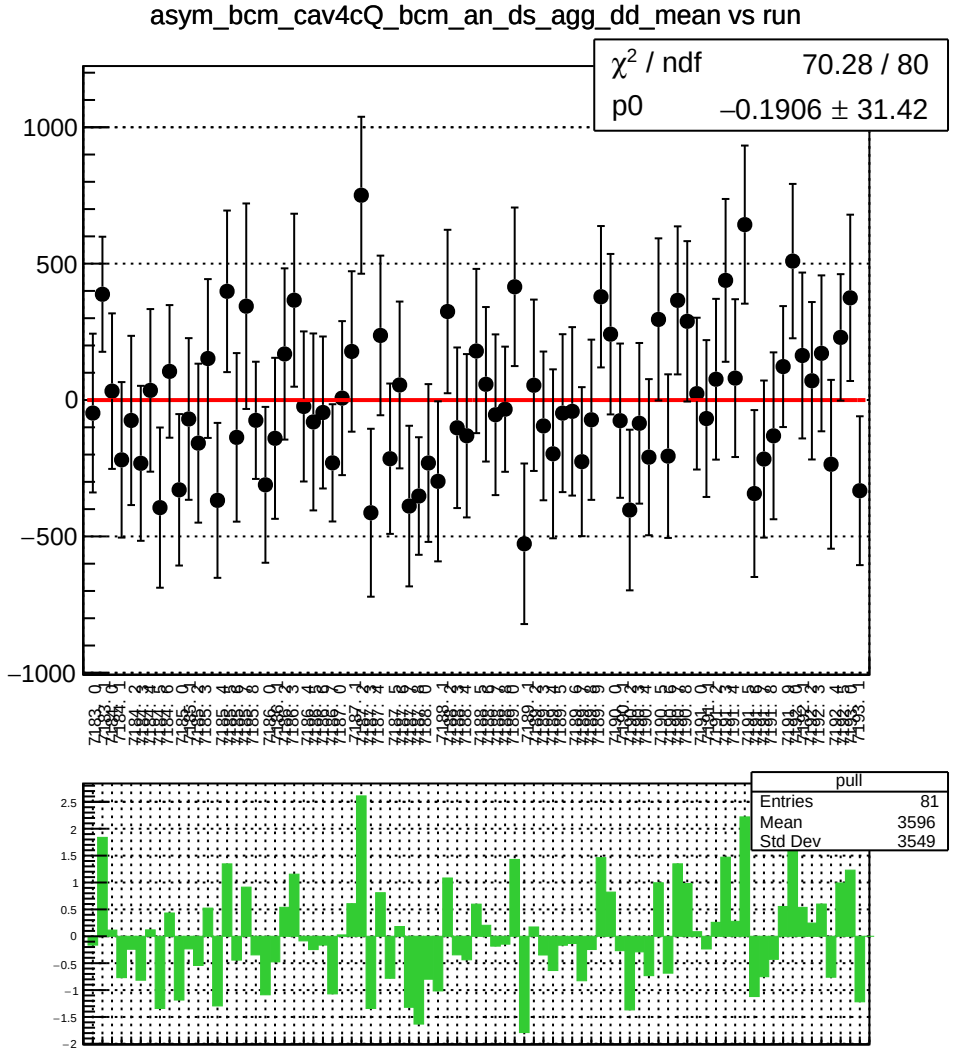

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.251e+04 / 80
p0 198.8 ± 0.1597
550
500
450
400
350
300
250
200
150

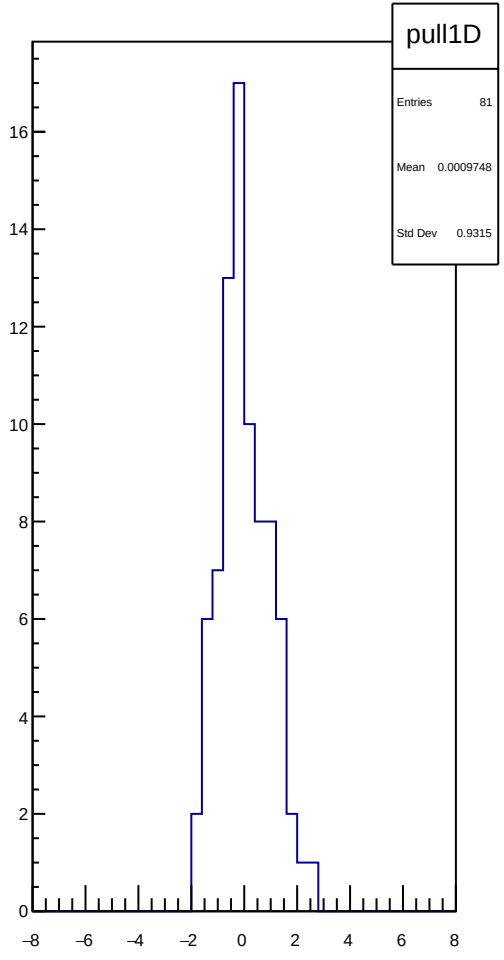

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 77.85 / 80
p0 4.823 ± 31.36
1000
500
0
−500
−1000
pull
Entries 81
Mean 323.7
Std Dev 275
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 81
Mean 0.004811
Std Dev 0.9804
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

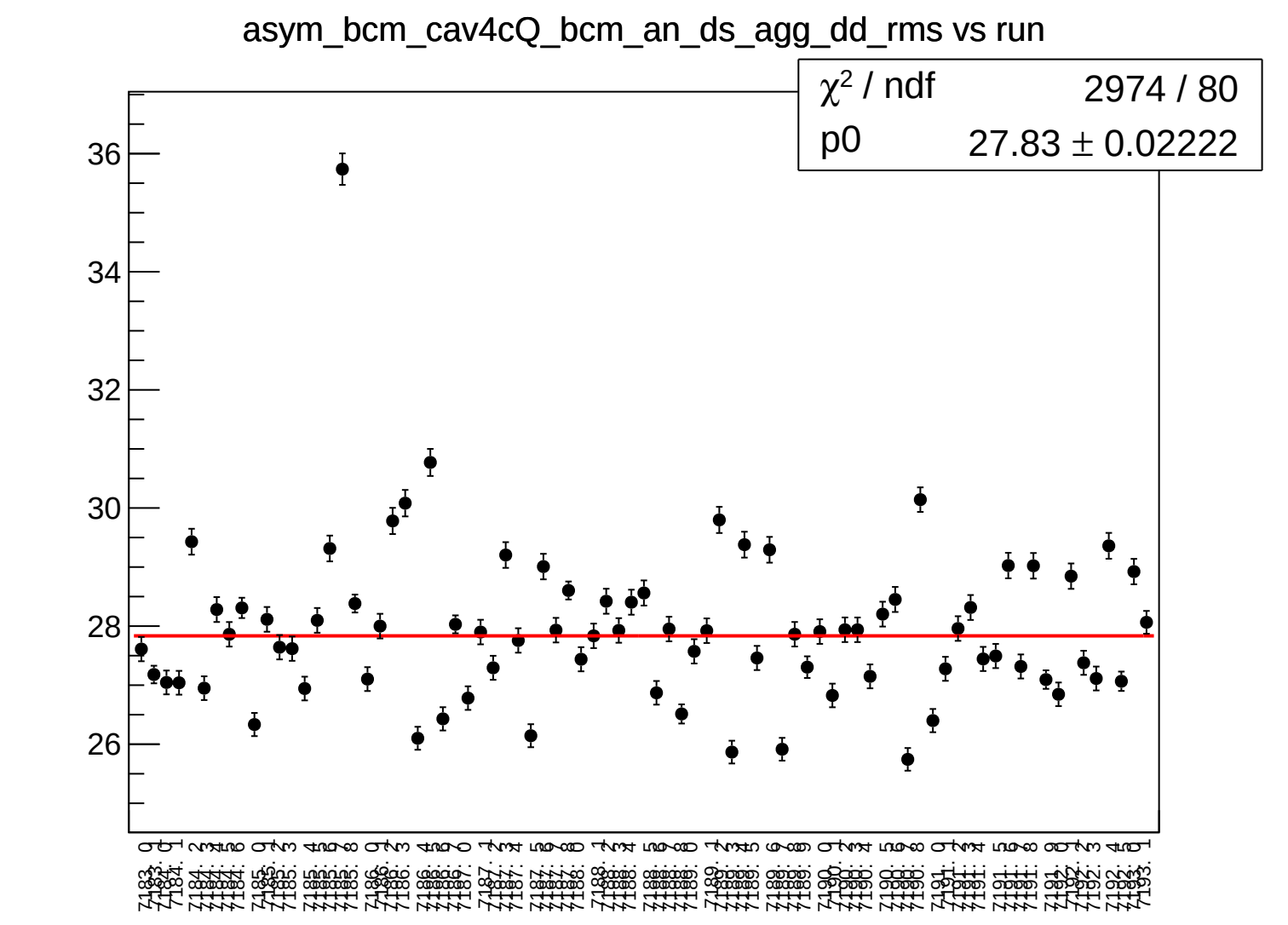

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3014 / 80
p0 27.78 ± 0.02217
36
34
32
30
28
26

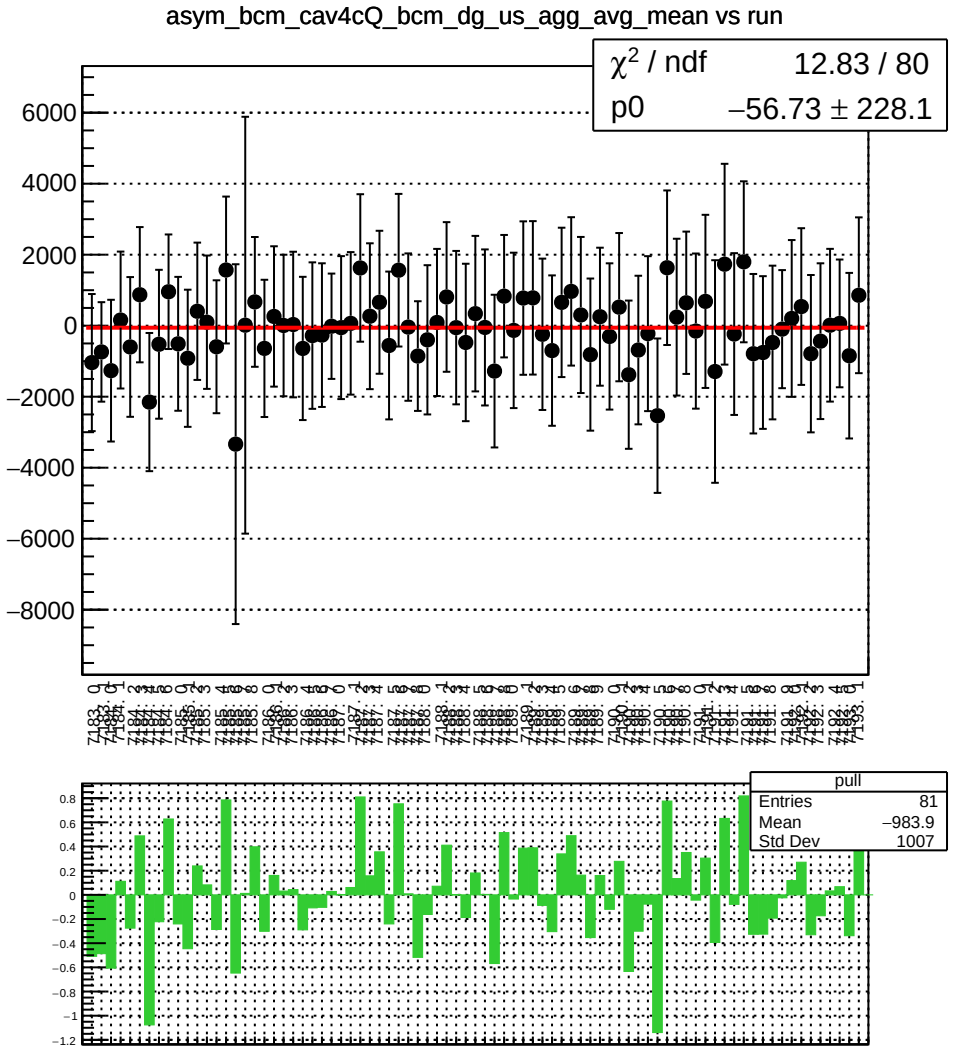

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 12.17 / 80
p0 −66.6 ± 225.3
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean −107.9
Std Dev 88.75
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull1D
Entries 81
Mean −0.002638
Std Dev 0.3876
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

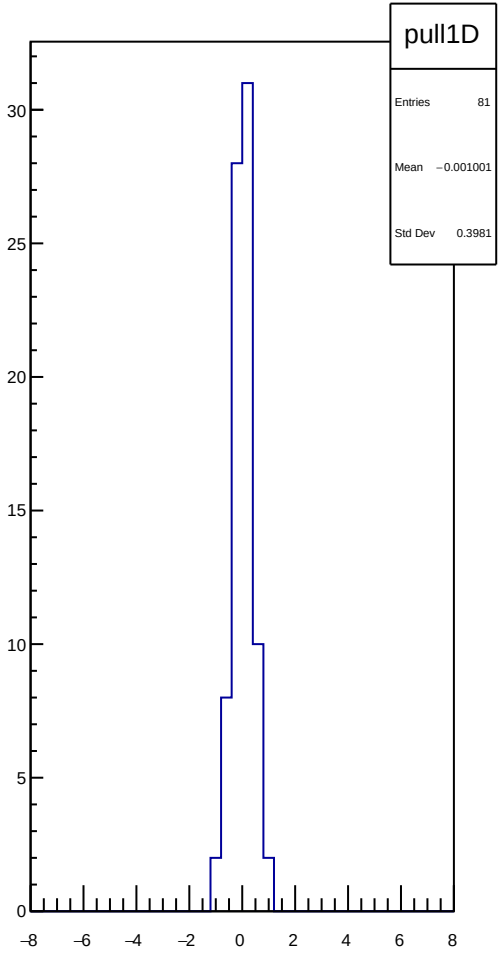

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.252e+04 / 80
p0 198.4 ± 0.1593
550
500
450
400
350
300
250
200
150

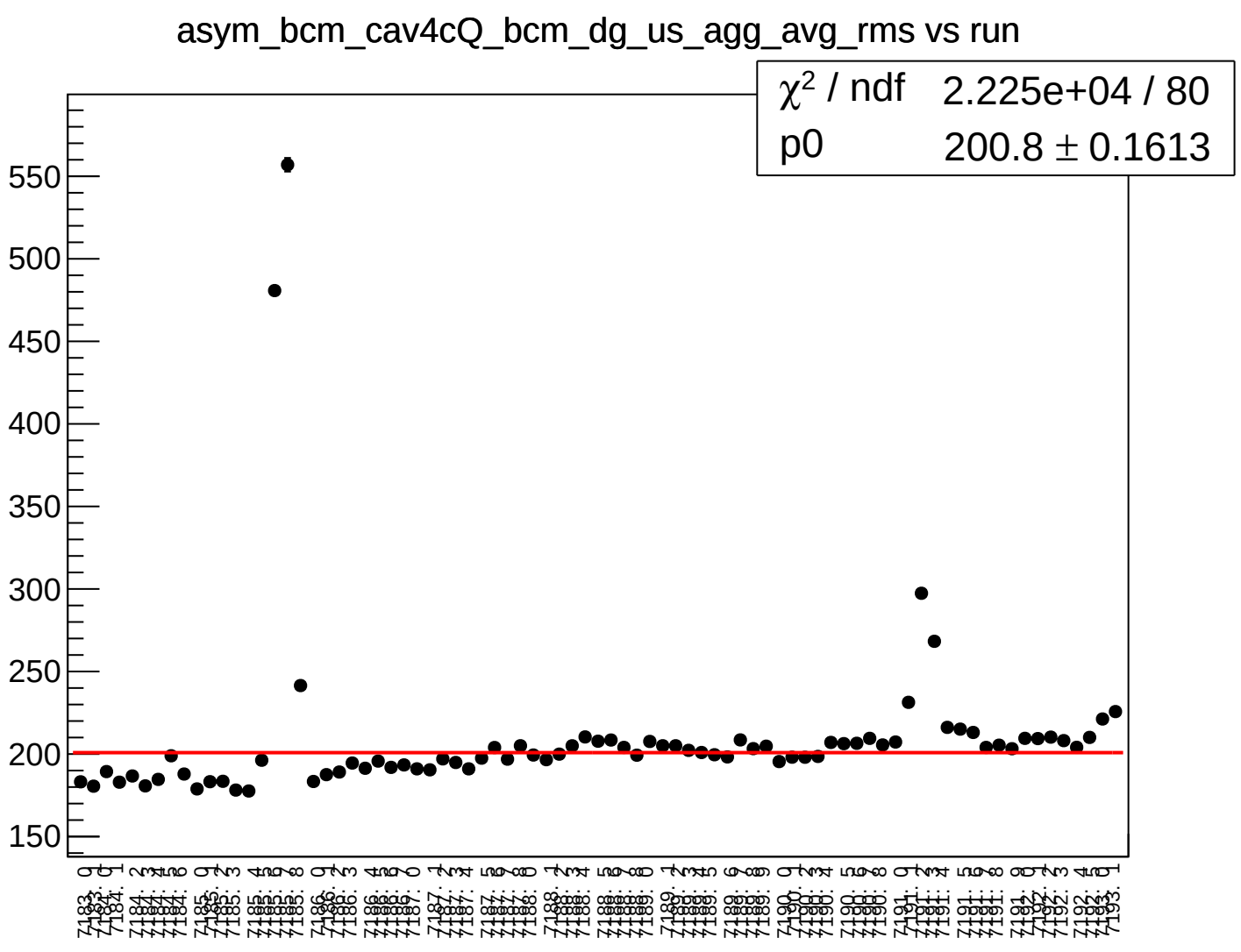

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 70.28 / 80
p0 −0.1906 ± 31.42
pull
Entries 81
Mean 3596
Std Dev 3549

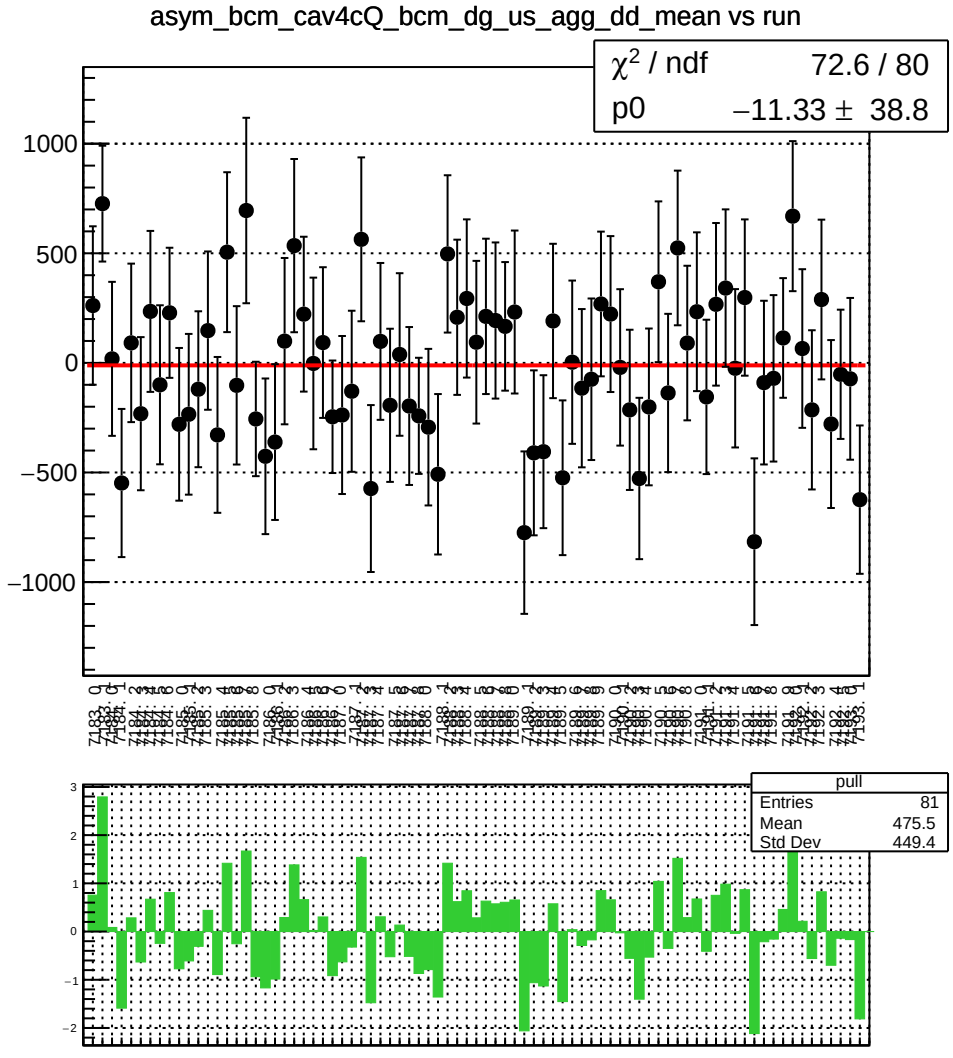

pull1D
Entries 81
Mean 0.0009748
Std Dev 0.9315

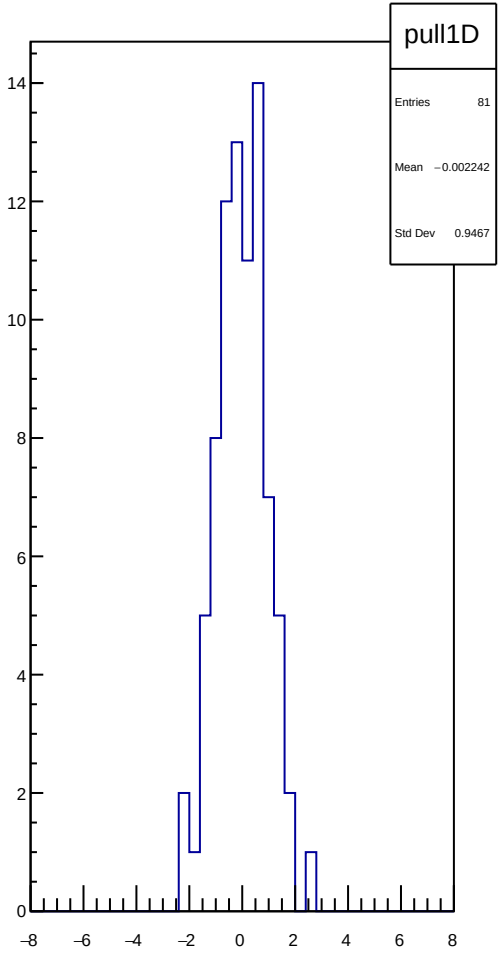

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2974 / 80
p0 27.83 ± 0.02222
36
34
32
30
28
26

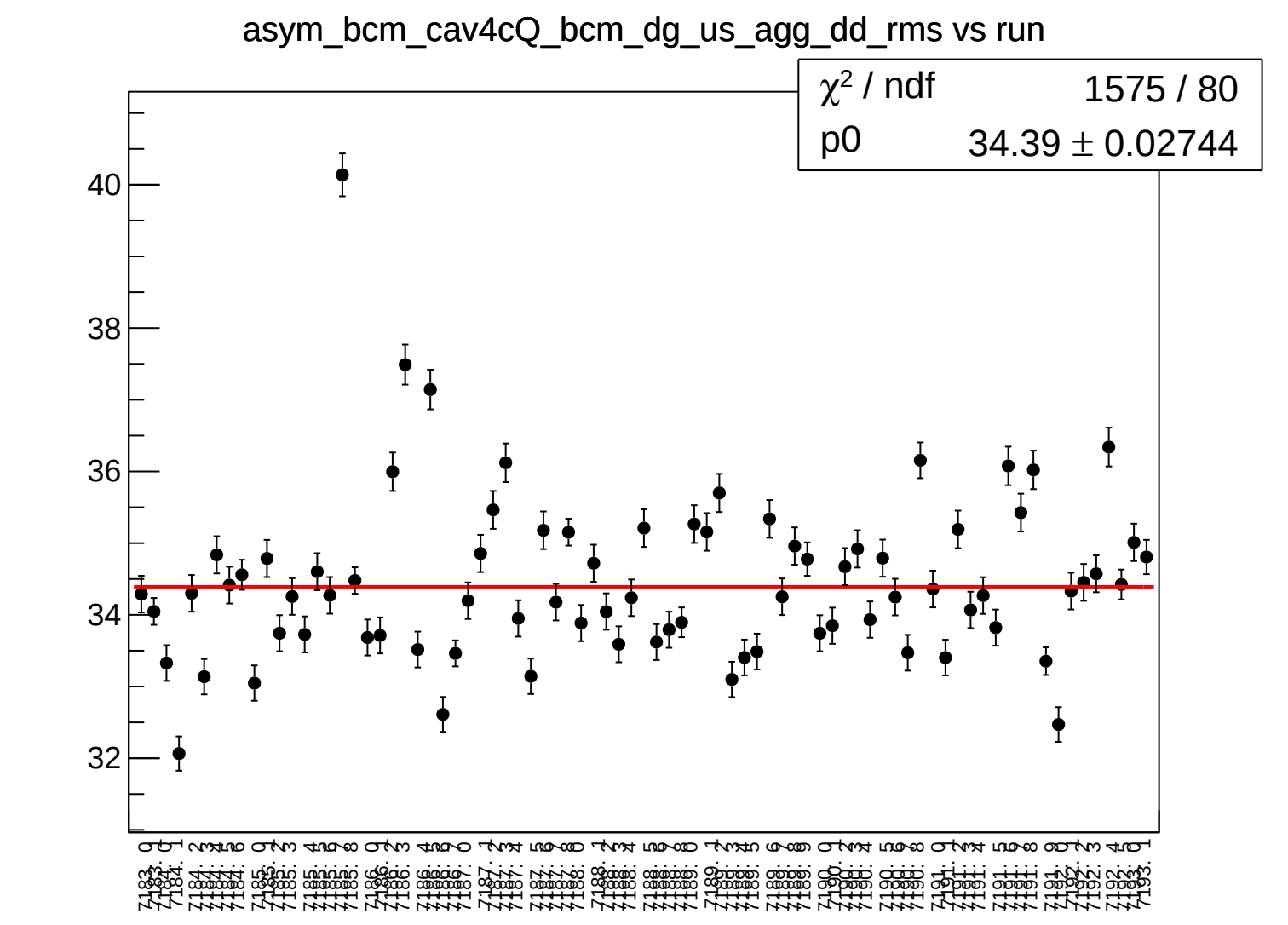

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 12.83 / 80
p0 −56.73 ± 228.1
pull
Entries 81
Mean −983.9
Std Dev 1007

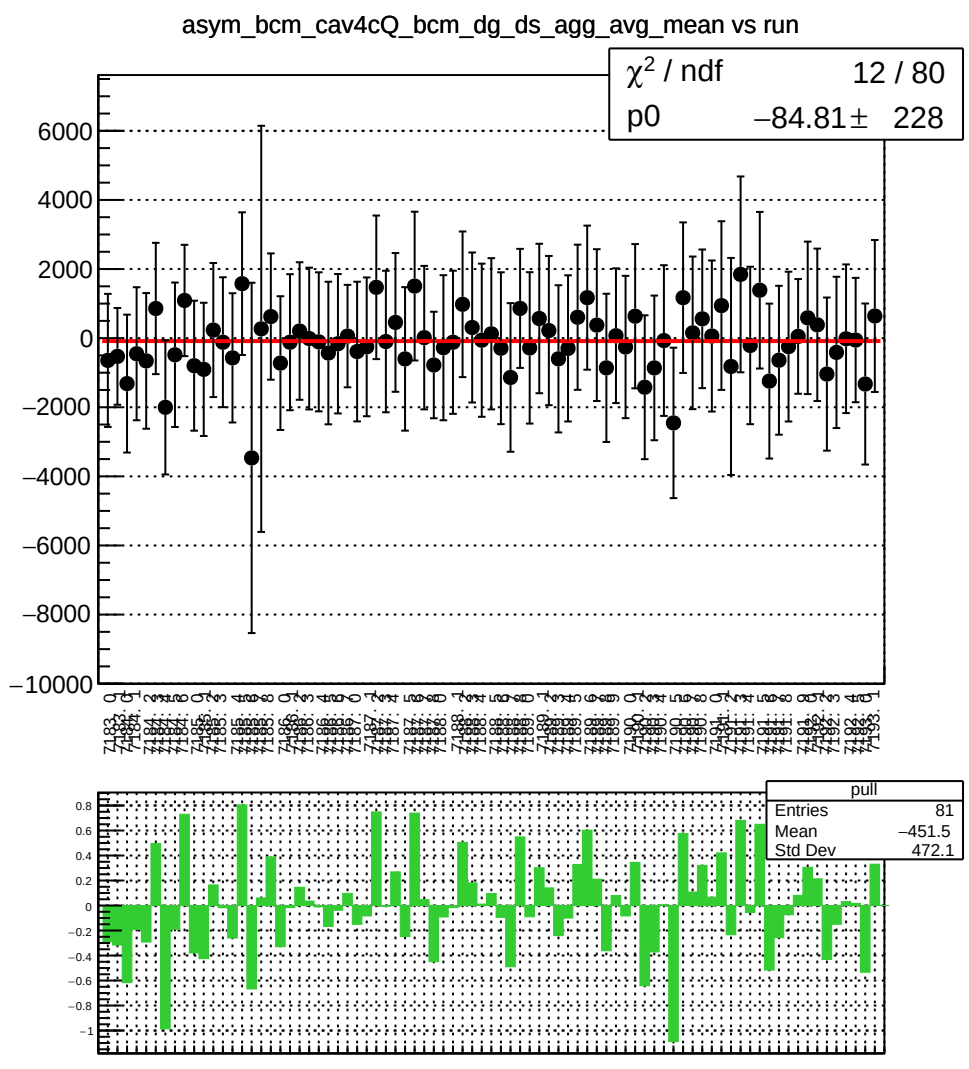

pull1D
Entries 81
Mean −0.001001
Std Dev 0.3981

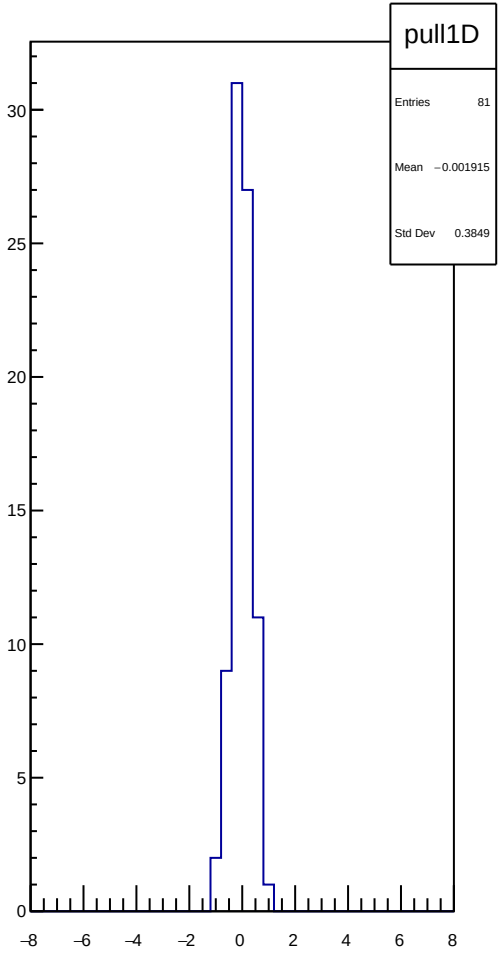

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2.225e+04 / 80
p0 200.8 ± 0.1613
550
500
450
400
350
300
250
200
150

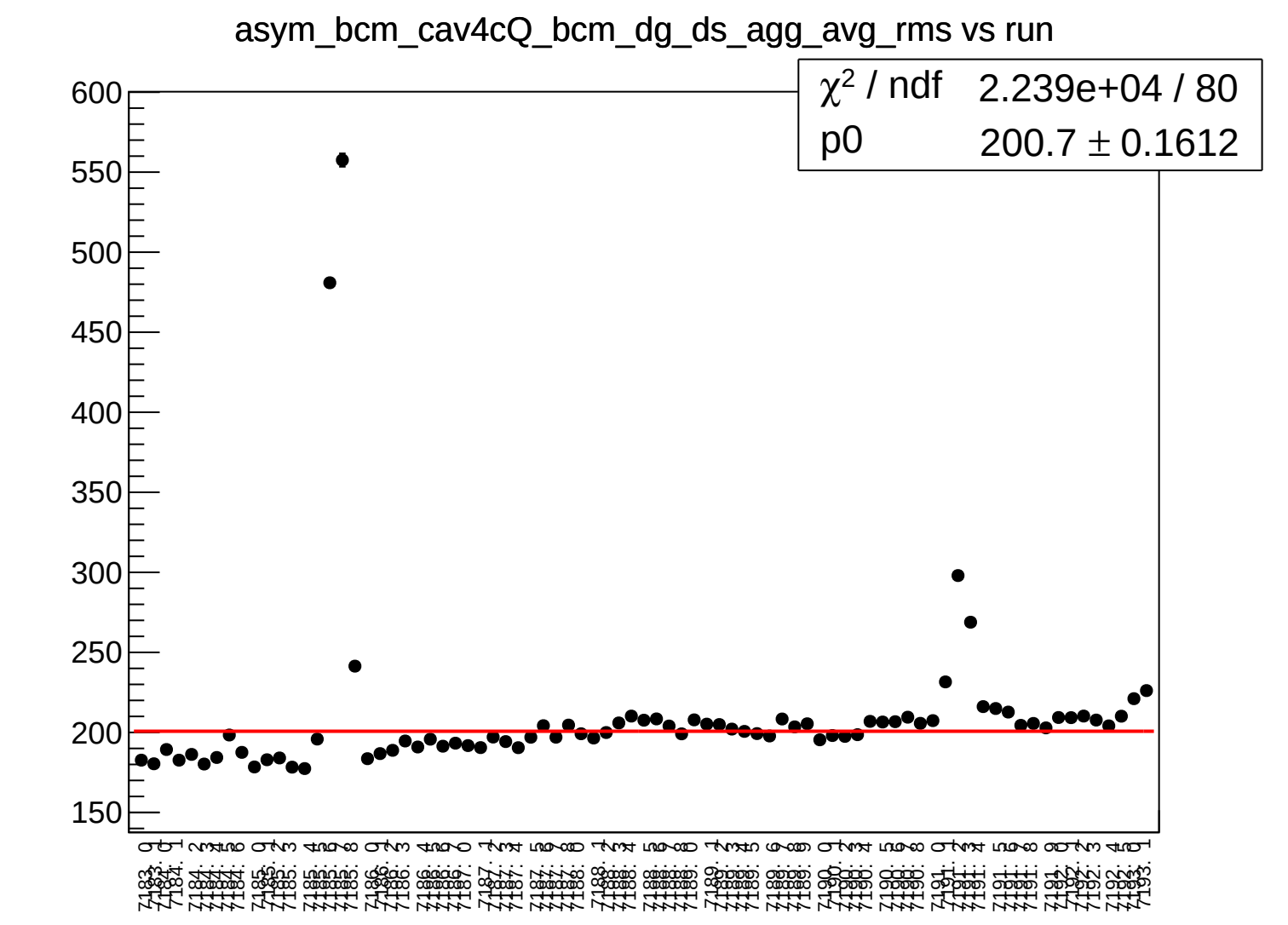

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 72.6 / 80
p0 −11.33 ± 38.8
1000
500
0
−500
−1000
pull
Entries 81
Mean 475.5
Std Dev 449.4
3
2
1
0
−1
−2

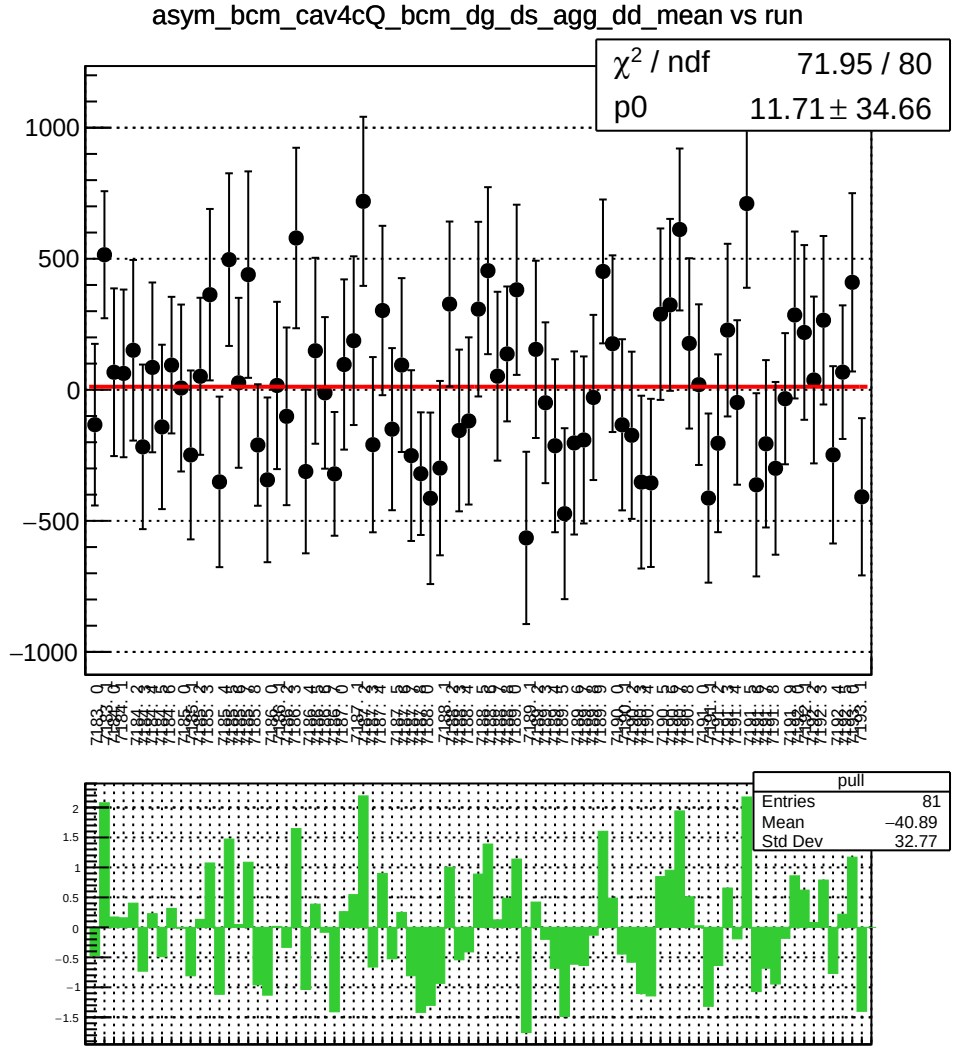

pull1D
Entries 81
Mean −0.002242
Std Dev 0.9467
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

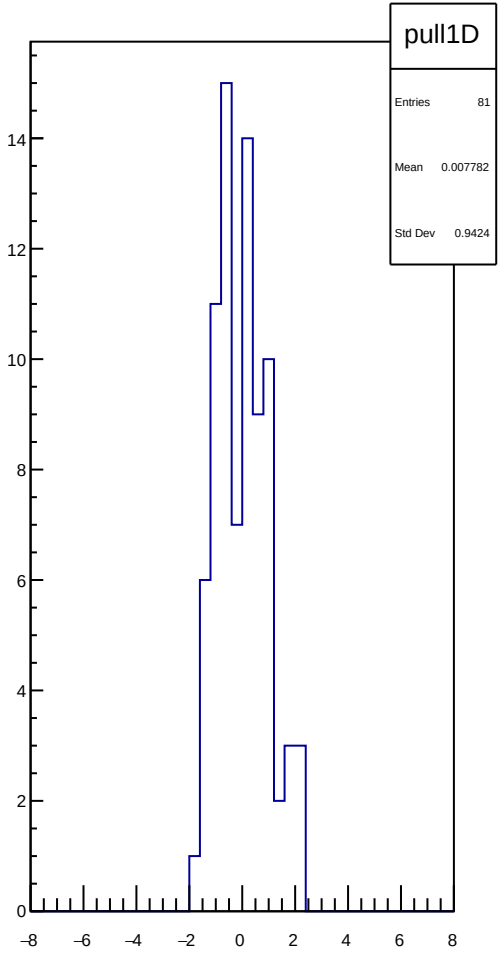

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1575 / 80
p0 34.39 ± 0.02744
40
38
36
34
32

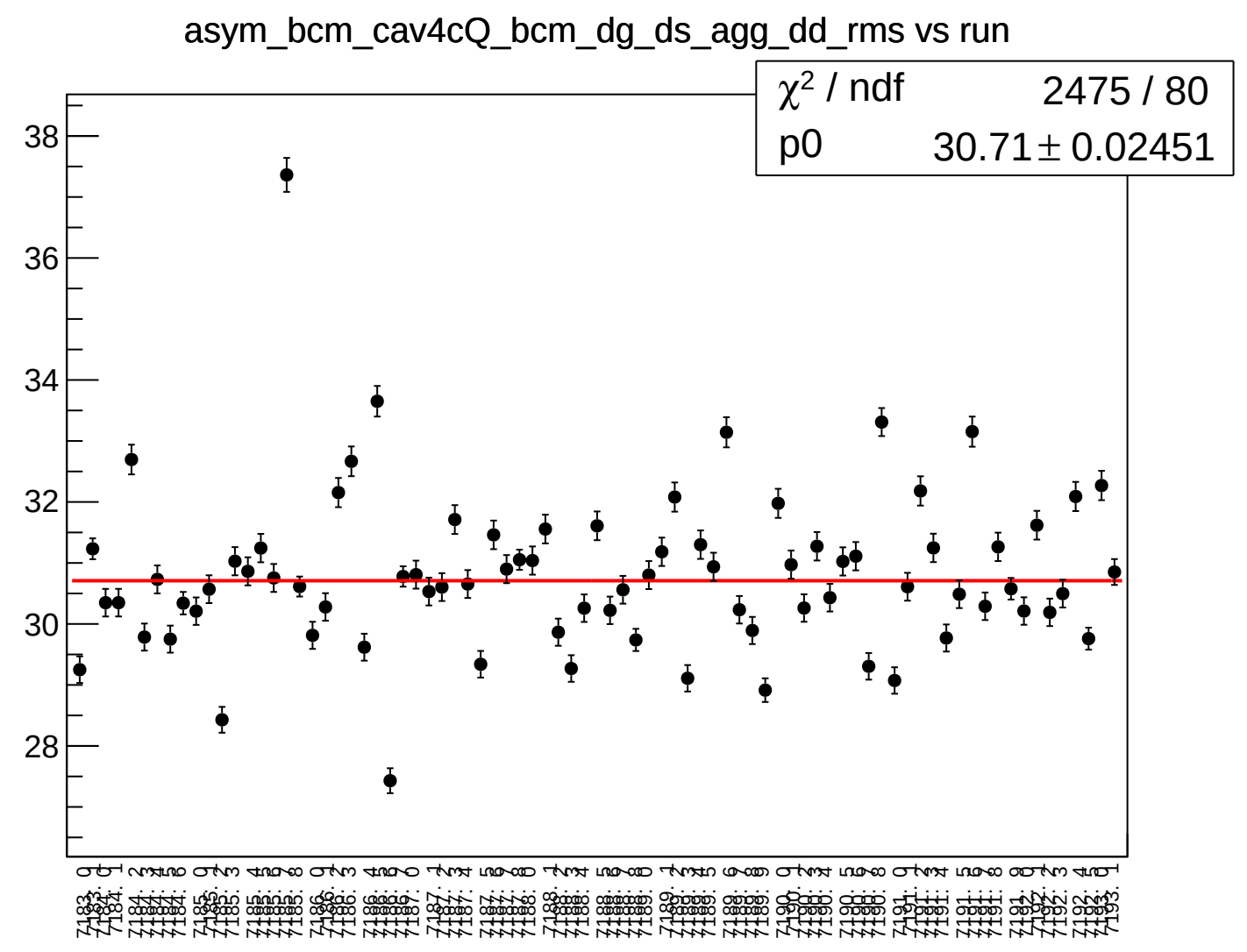

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 12 / 80
p0 −84.81 ± 228
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
pull
Entries 81
Mean −451.5
Std Dev 472.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

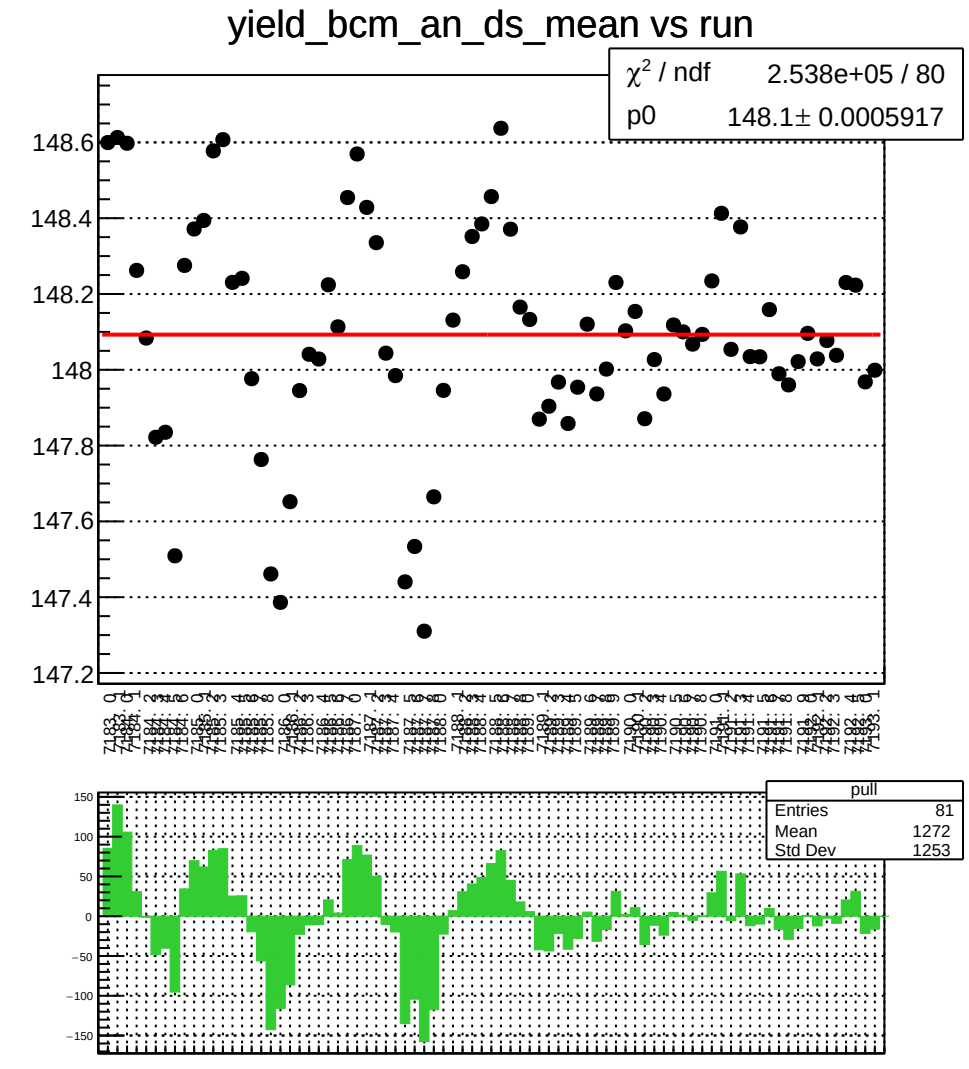

pull1D
Entries 81
Mean −0.001915
Std Dev 0.3849
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

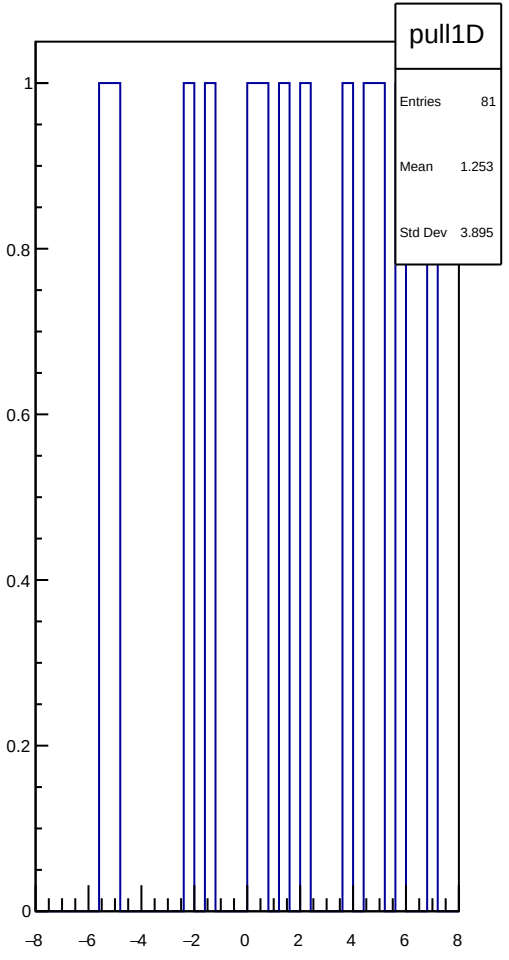

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.239e+04 / 80
p0 200.7 ± 0.1612
600
550
500
450
400
350
300
250
200
150

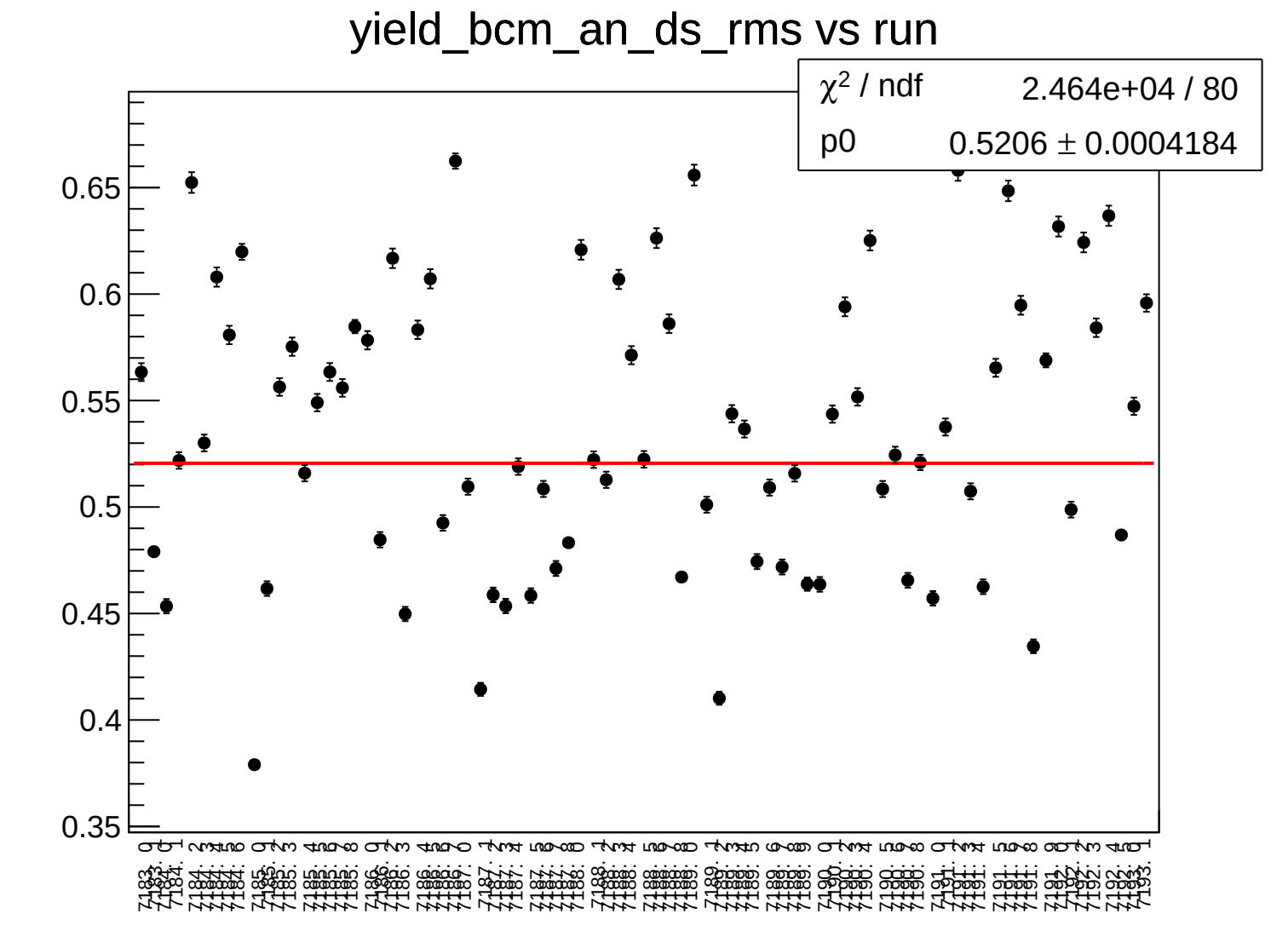

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 71.95 / 80
p0 11.71 ± 34.66
1000
500
0
−500
−1000
pull
Entries 81
Mean −40.89
Std Dev 32.77
2
1.5
1
0.5
0
−0.5
−1
−1.5

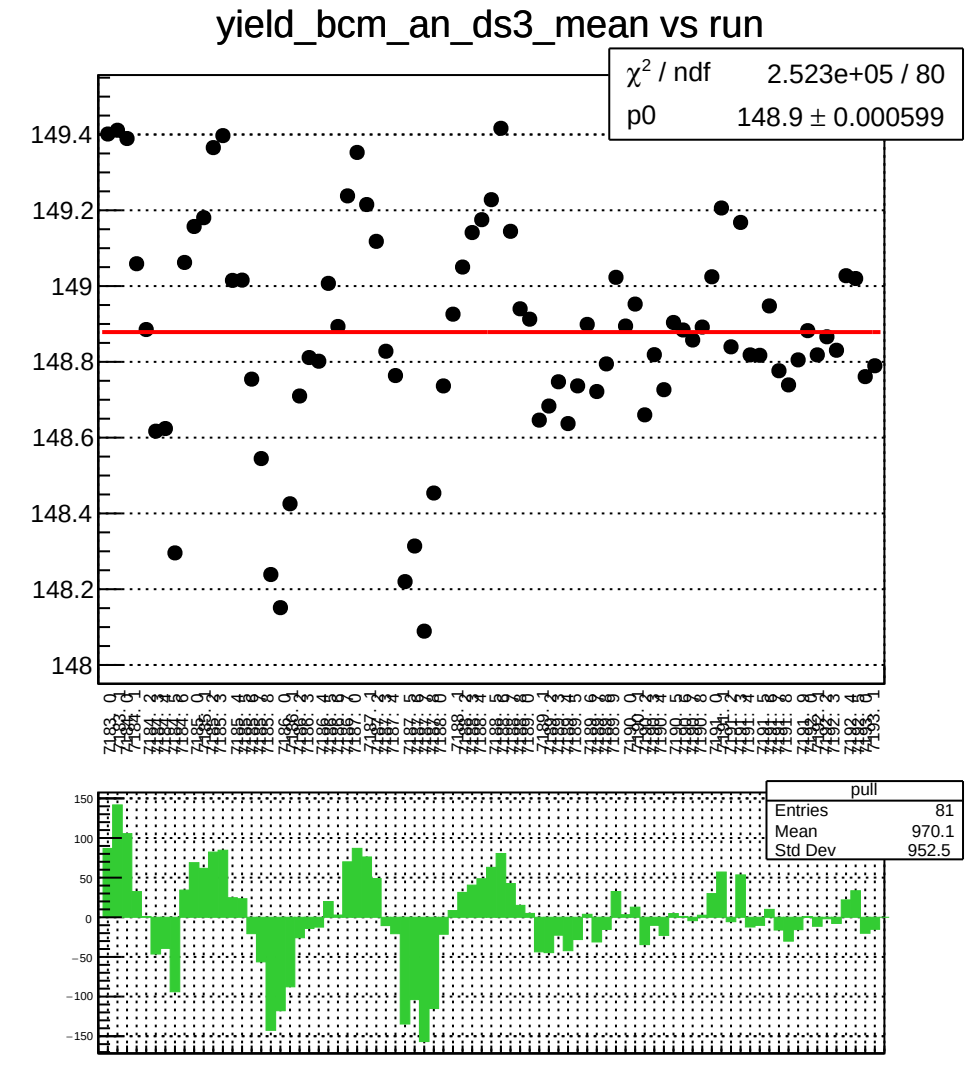

pull1D
Entries 81
Mean 0.007782
Std Dev 0.9424
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

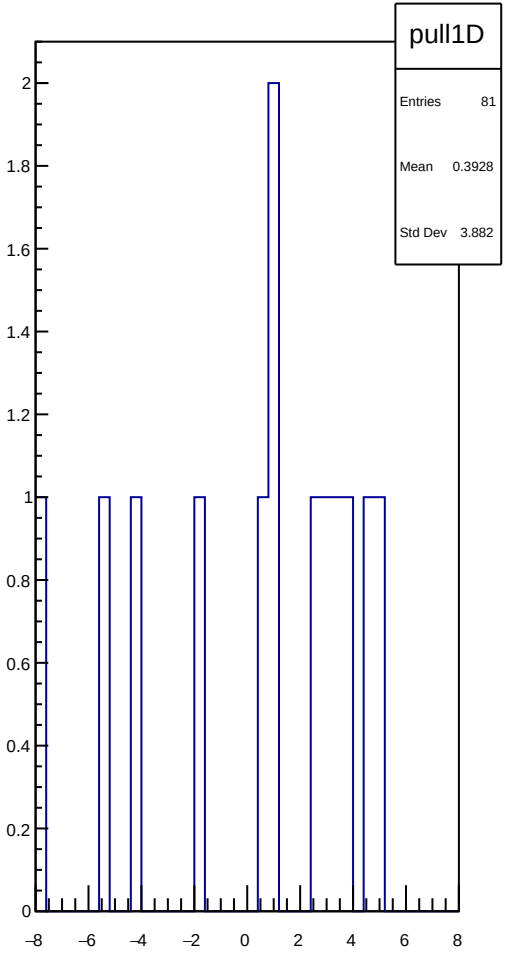

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2475 / 80
p0 30.71 ± 0.02451
38
36
34
32
30
28

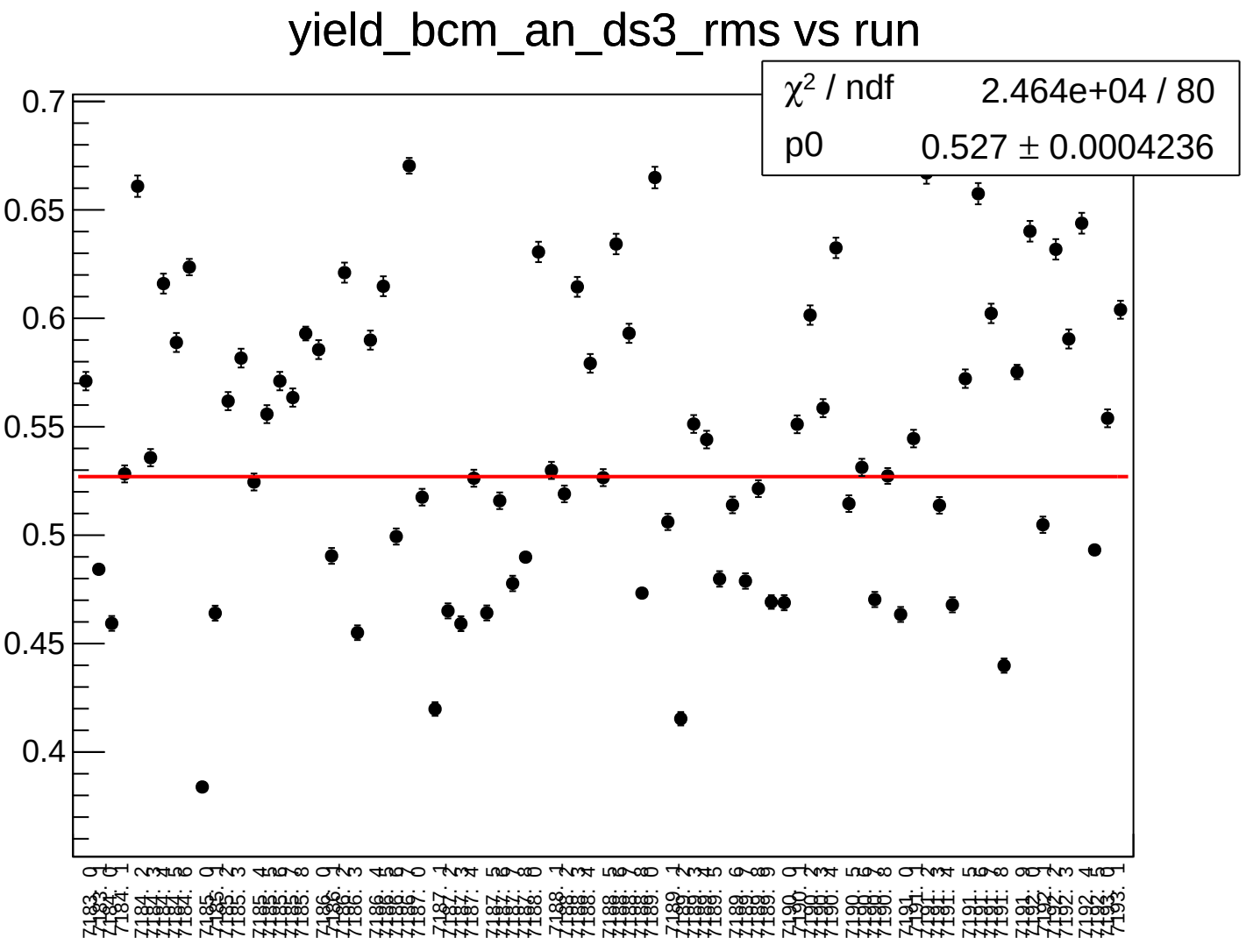

yield_bcm_an_ds_mean vs run
χ² / ndf 2.538e+05 / 80
p0 148.1± 0.0005917
148.6
148.4
148.2
148
147.8
147.6
147.4
147.2
pull
Entries 81
Mean 1272
Std Dev 1253
150
100
50
0
−50
−100
−150

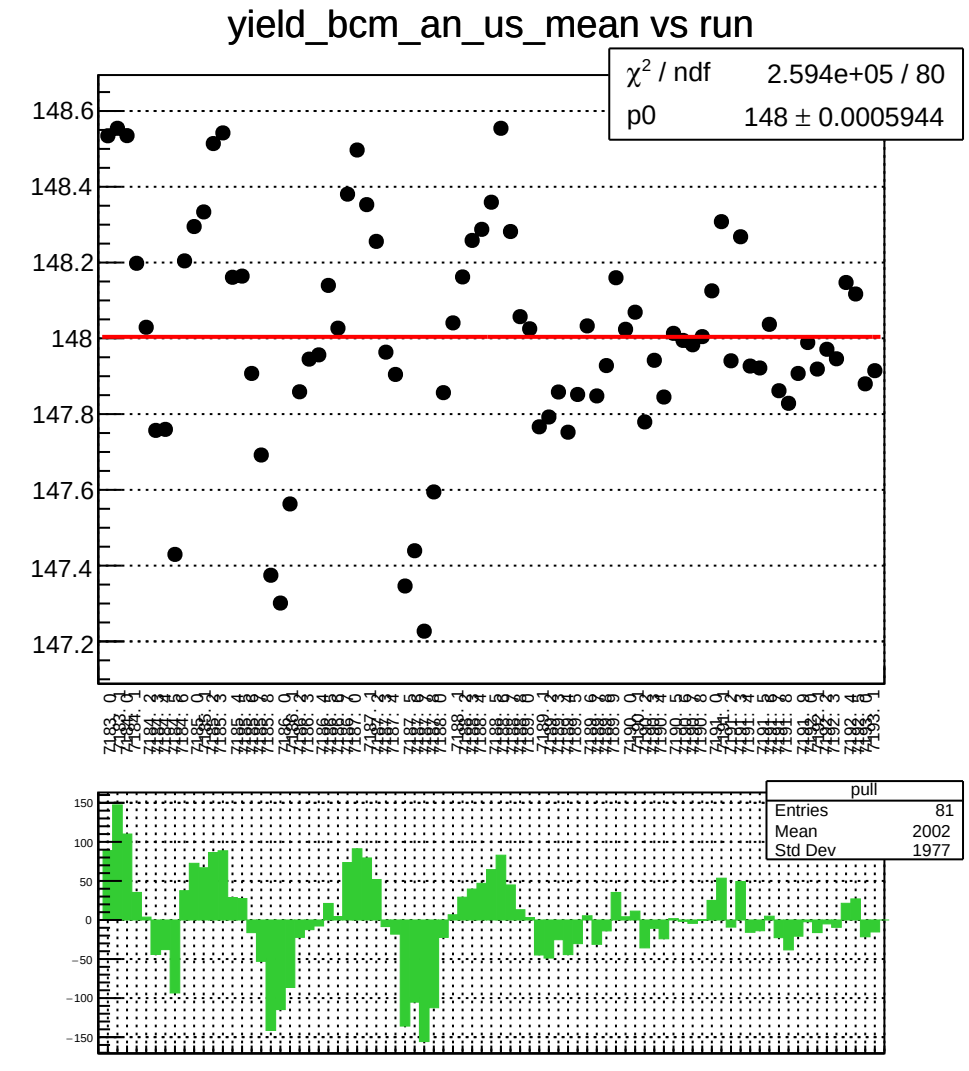

pull1D
Entries 81
Mean 1.253
Std Dev 3.895
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

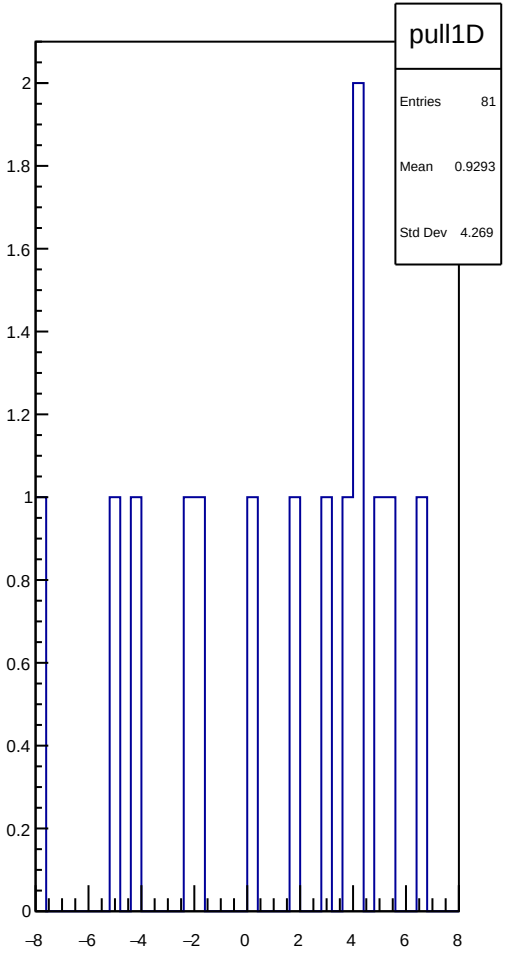

yield_bcm_an_ds_rms vs run
χ² / ndf 2.464e+04 / 80
p0 0.5206 ± 0.0004184
0.65
0.6
0.55
0.5
0.45
0.4
0.35

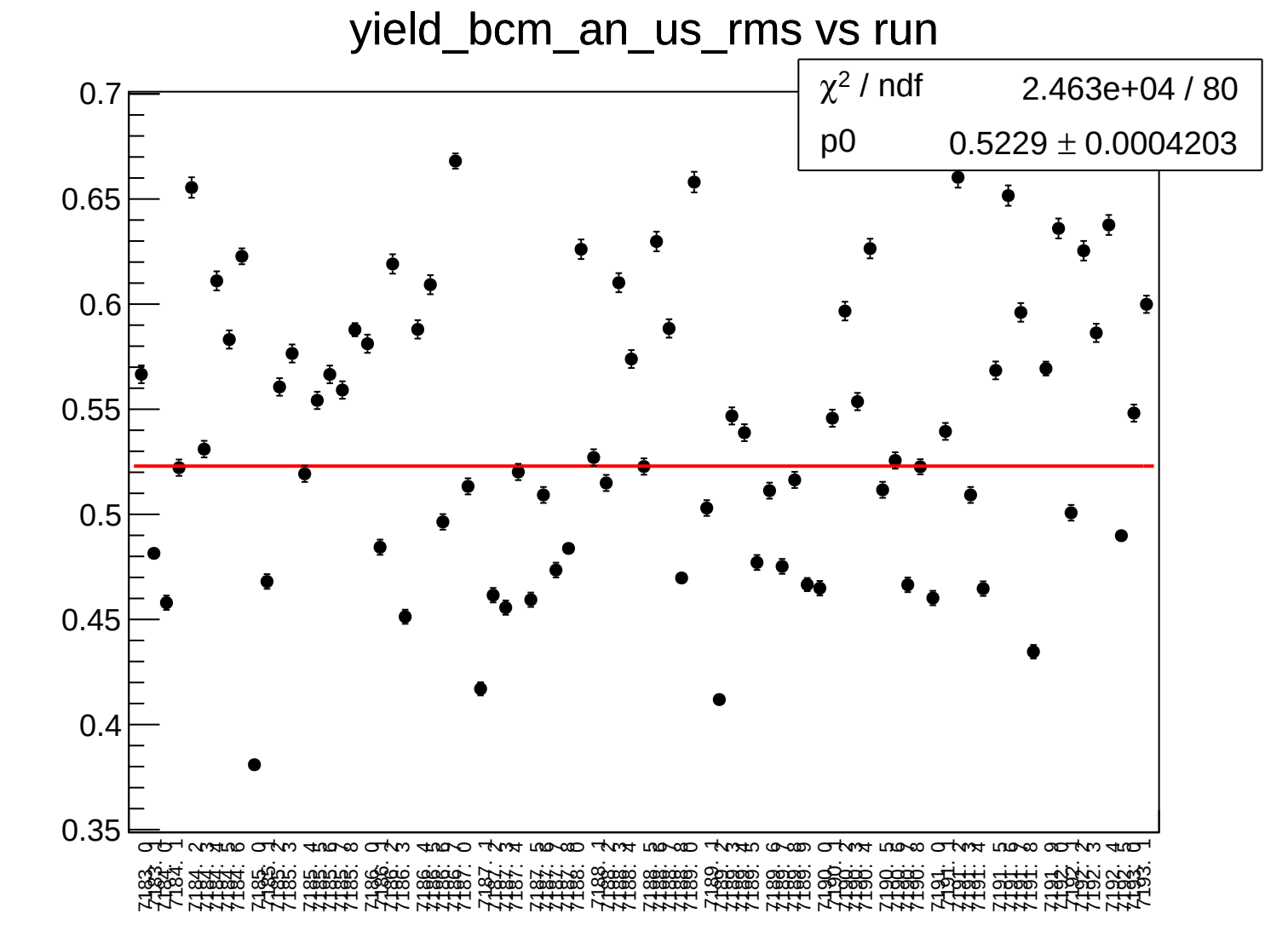

yield_bcm_an_ds3_mean vs run
χ² / ndf 2.523e+05 / 80
p0 148.9 ± 0.000599
149.4
149.2
149
148.8
148.6
148.4
148.2
148
pull
Entries 81
Mean 970.1
Std Dev 952.5
150
100
50
0
−50
−100
−150

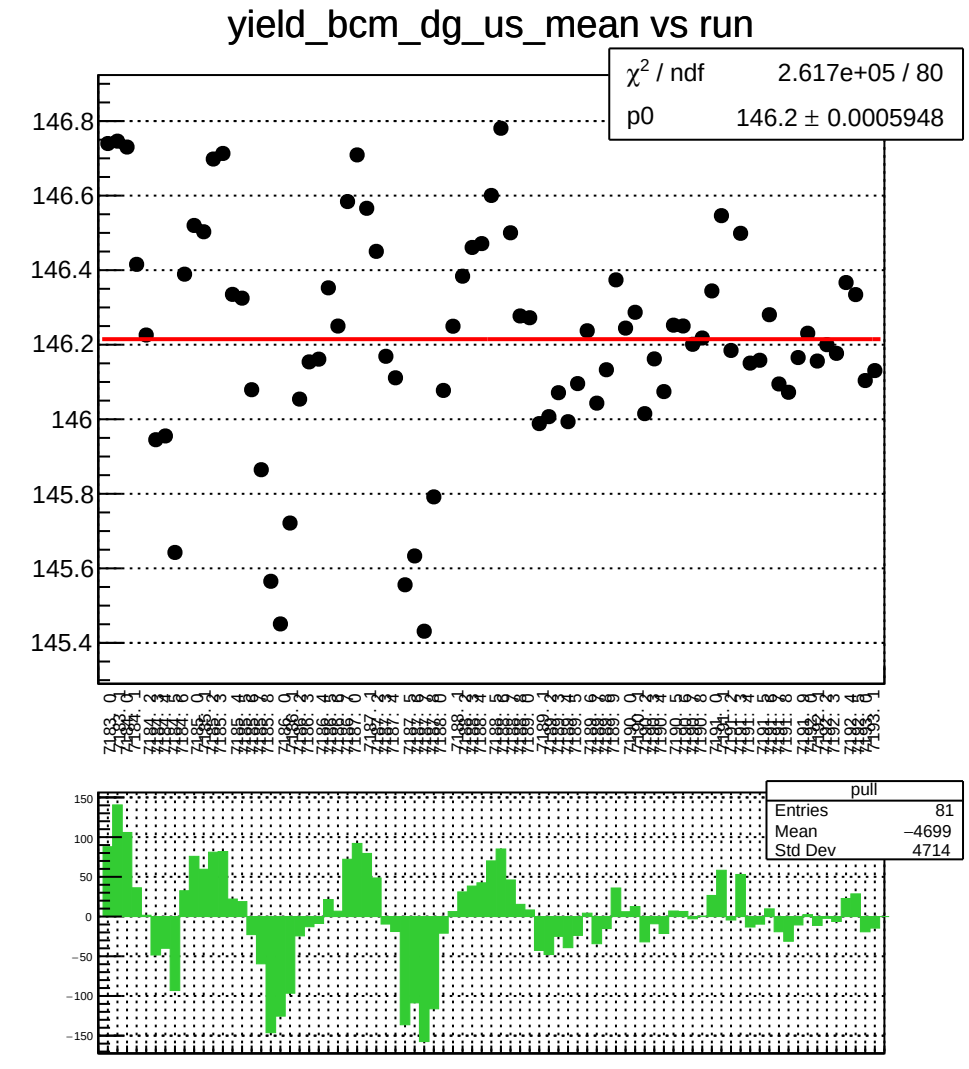

pull1D
Entries 81
Mean 0.3928
Std Dev 3.882
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

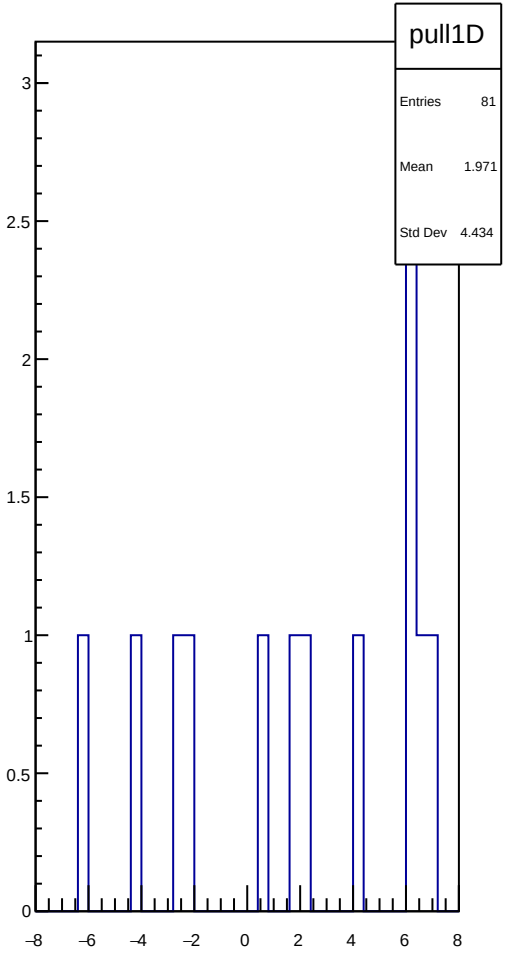

yield_bcm_an_ds3_rms vs run
χ² / ndf 2.464e+04 / 80
p0 0.527 ± 0.0004236
0.7
0.65
0.6
0.55
0.5
0.45
0.4

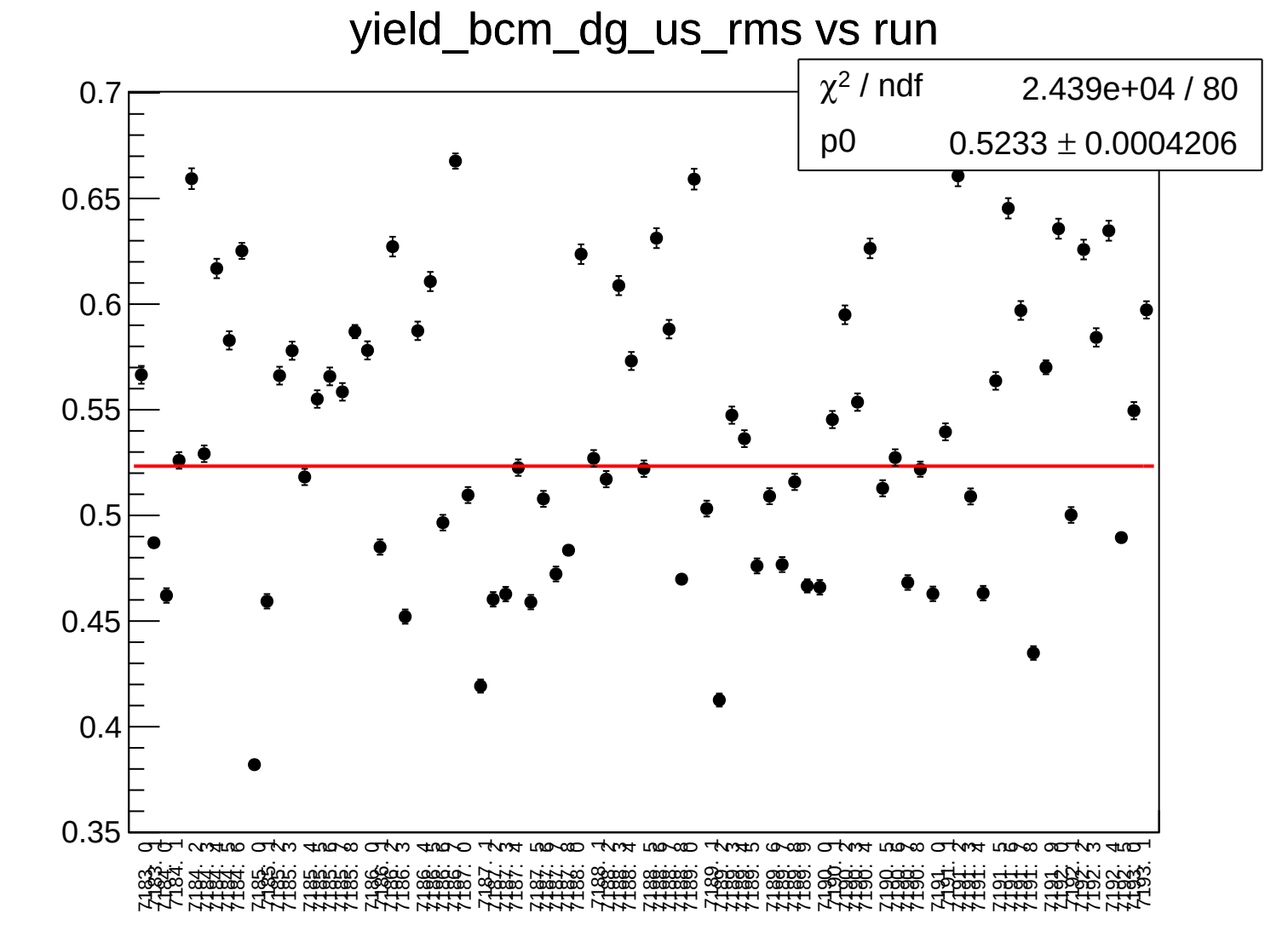

yield_bcm_an_us_mean vs run
χ² / ndf 2.594e+05 / 80
p0 148 ± 0.0005944
148.6
148.4
148.2
148
147.8
147.6
147.4
147.2
pull
Entries 81
Mean 2002
Std Dev 1977
150
100
50
0
−50
−100
−150

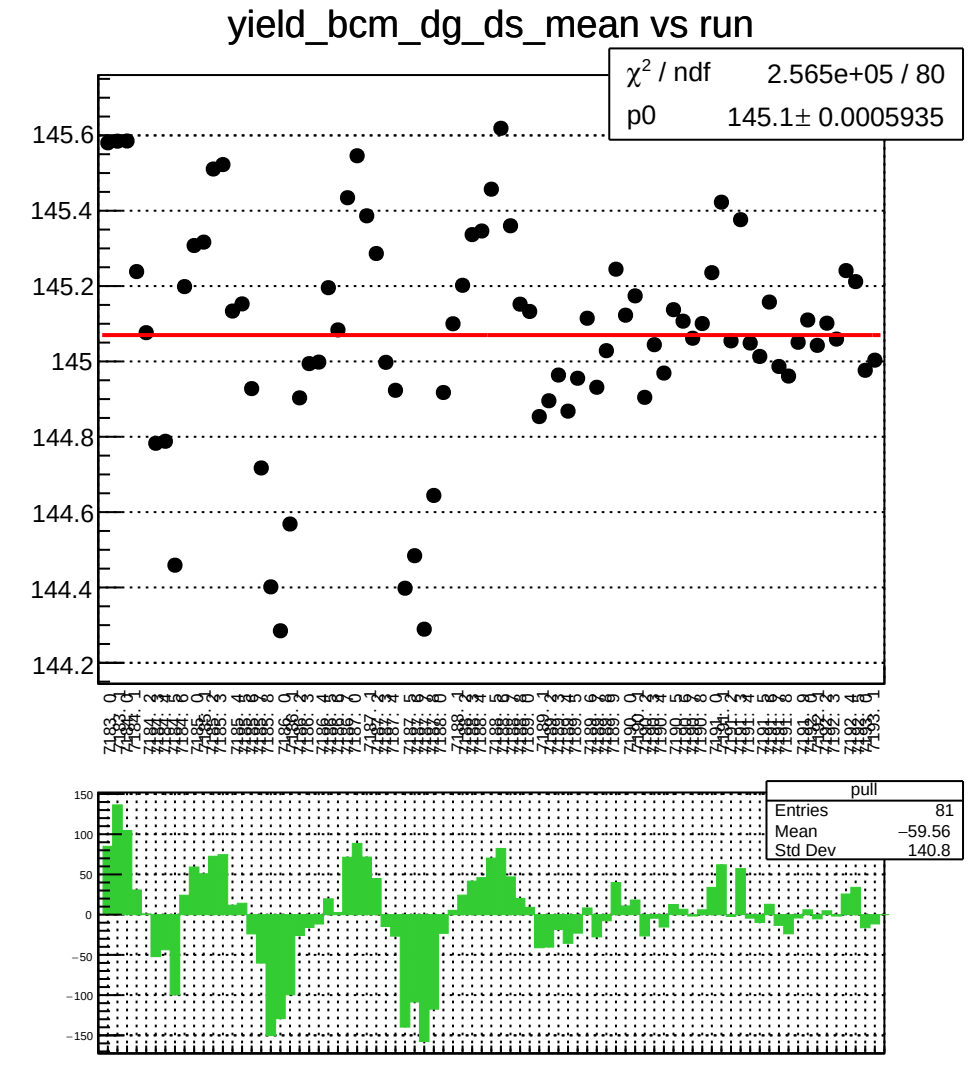

pull1D
Entries 81
Mean 0.9293
Std Dev 4.269
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

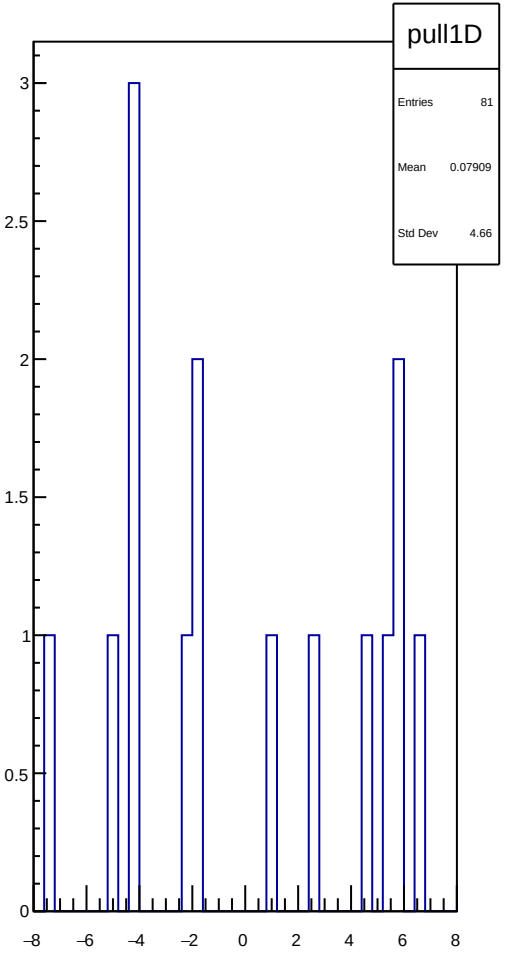

yield_bcm_an_us_rms vs run
χ² / ndf 2.463e+04 / 80
p0 0.5229 ± 0.0004203
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

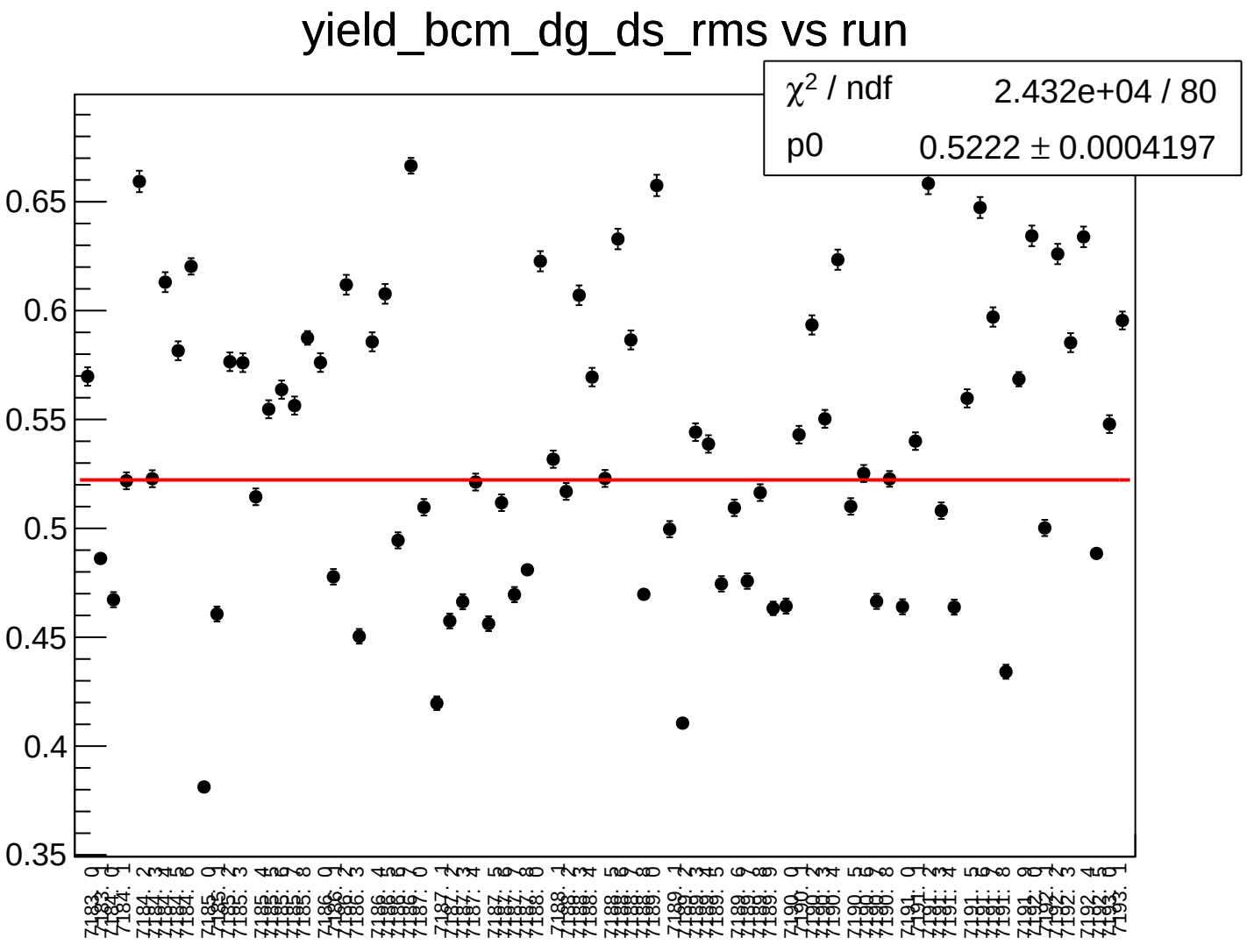

yield_bcm_dg_us_mean vs run
χ² / ndf 2.617e+05 / 80
p0 146.2 ± 0.0005948
146.8
146.6
146.4
146.2
146
145.8
145.6
145.4
pull
Entries 81
Mean −4699
Std Dev 4714
150
100
50
0
−50
−100
−150

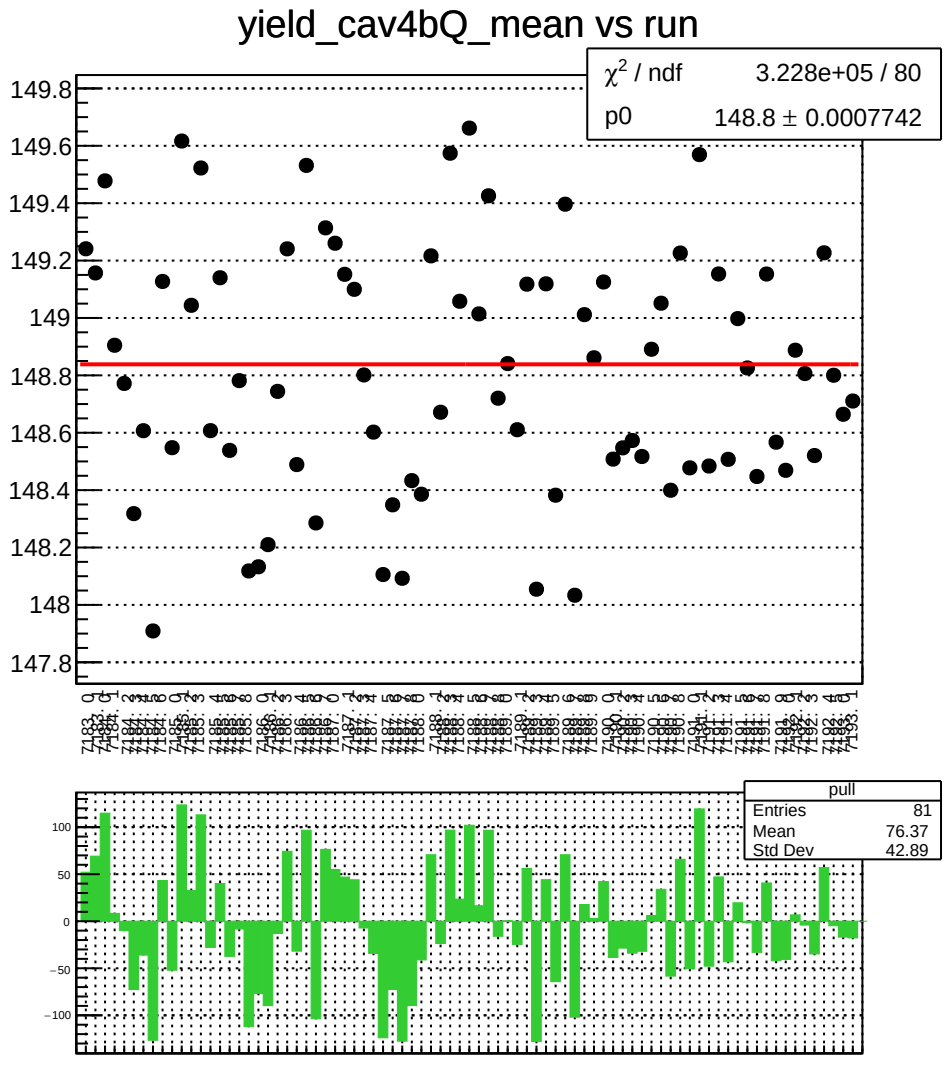

pull1D
Entries 81
Mean 1.971
Std Dev 4.434
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

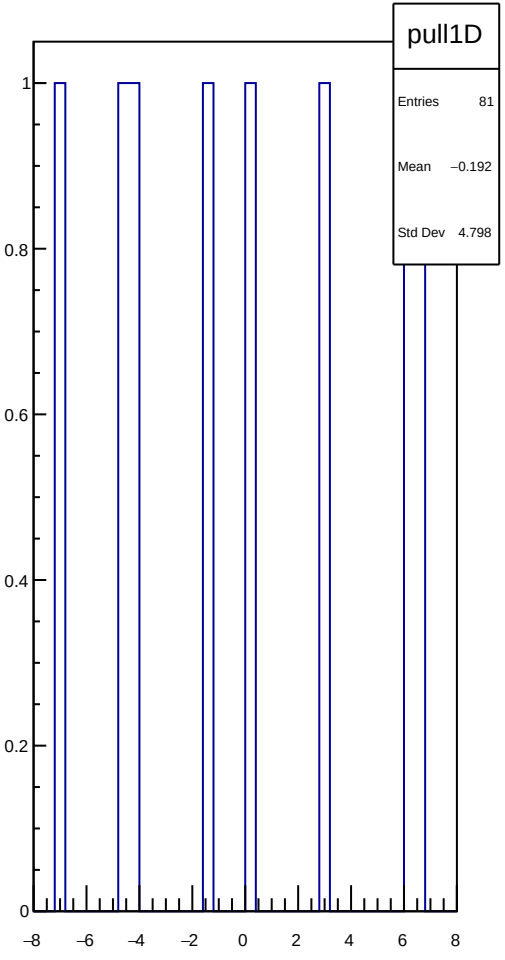

yield_bcm_dg_us_rms vs run
χ² / ndf 2.439e+04 / 80
p0 0.5233 ± 0.0004206
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

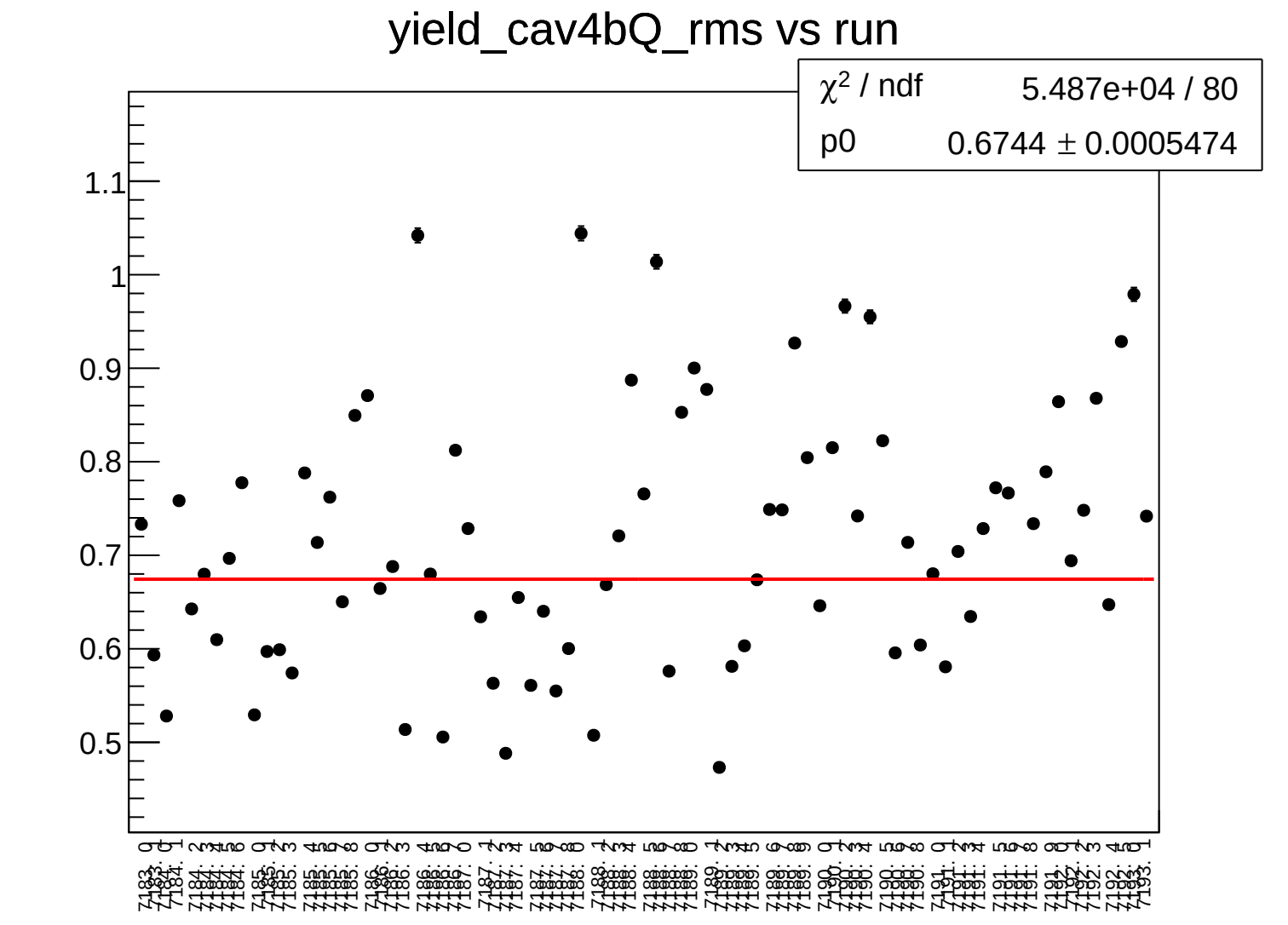

yield_bcm_dg_ds_mean vs run
χ² / ndf 2.565e+05 / 80
p0 145.1± 0.0005935
145.6
145.4
145.2
145
144.8
144.6
144.4
144.2
pull
Entries 81
Mean −59.56
Std Dev 140.8
150
100
50
0
−50
−100
−150

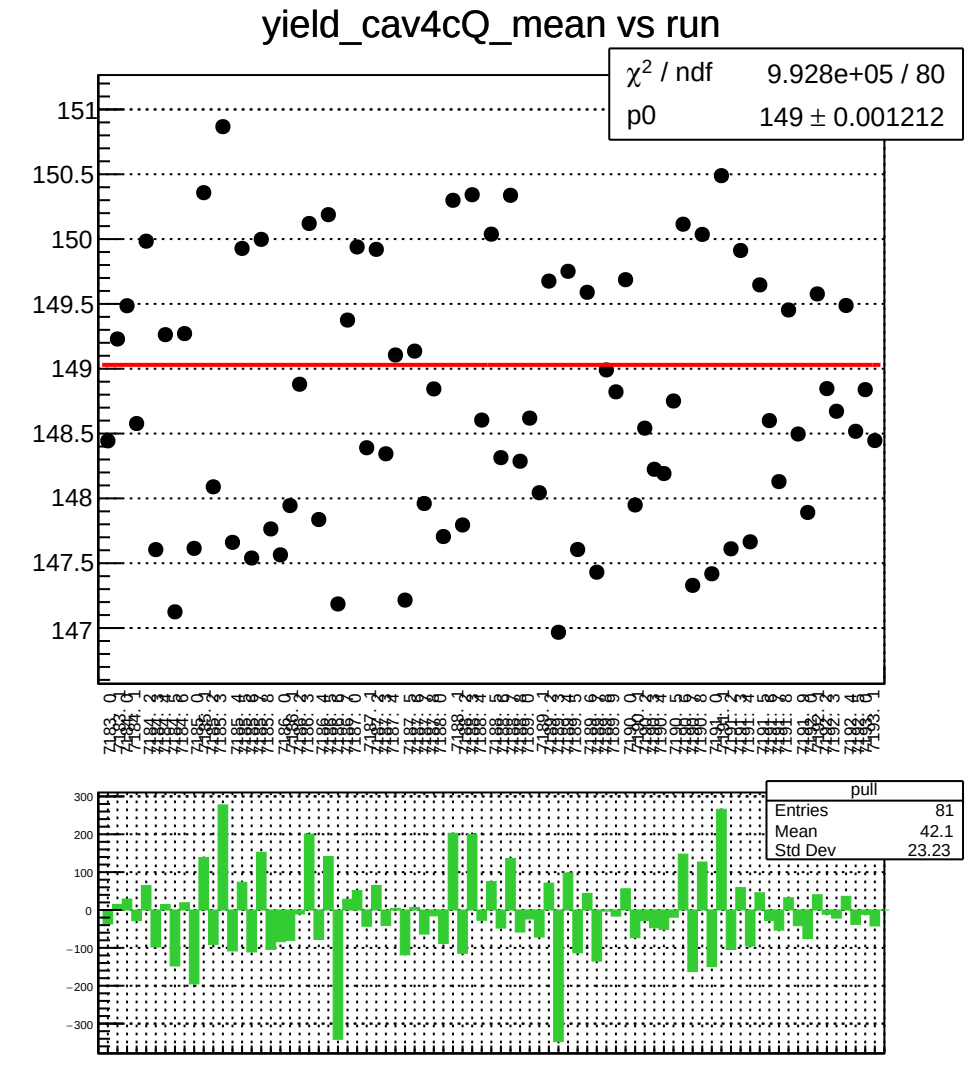

pull1D
Entries 81
Mean 0.07909
Std Dev 4.66
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

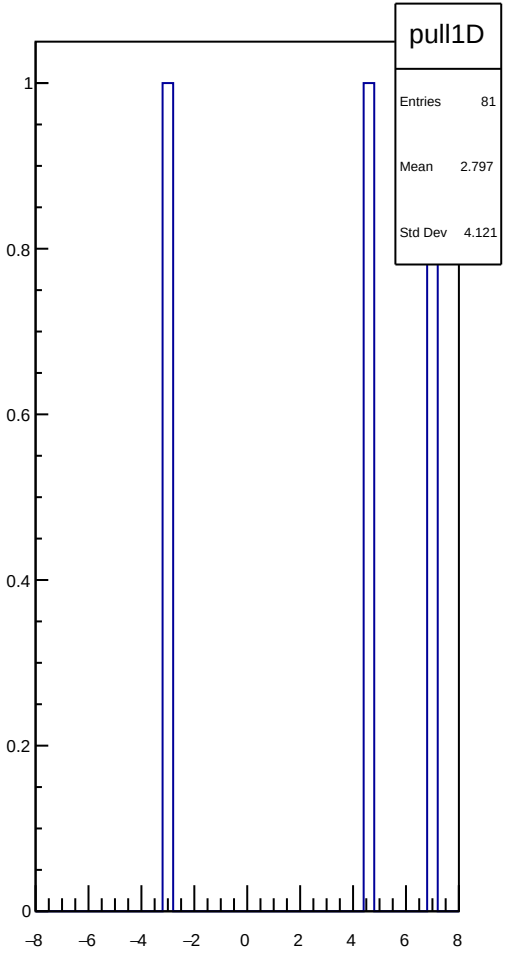

yield_bcm_dg_ds_rms vs run
χ² / ndf 2.432e+04 / 80
p0 0.5222 ± 0.0004197
0.65
0.6
0.55
0.5
0.45
0.4
0.35

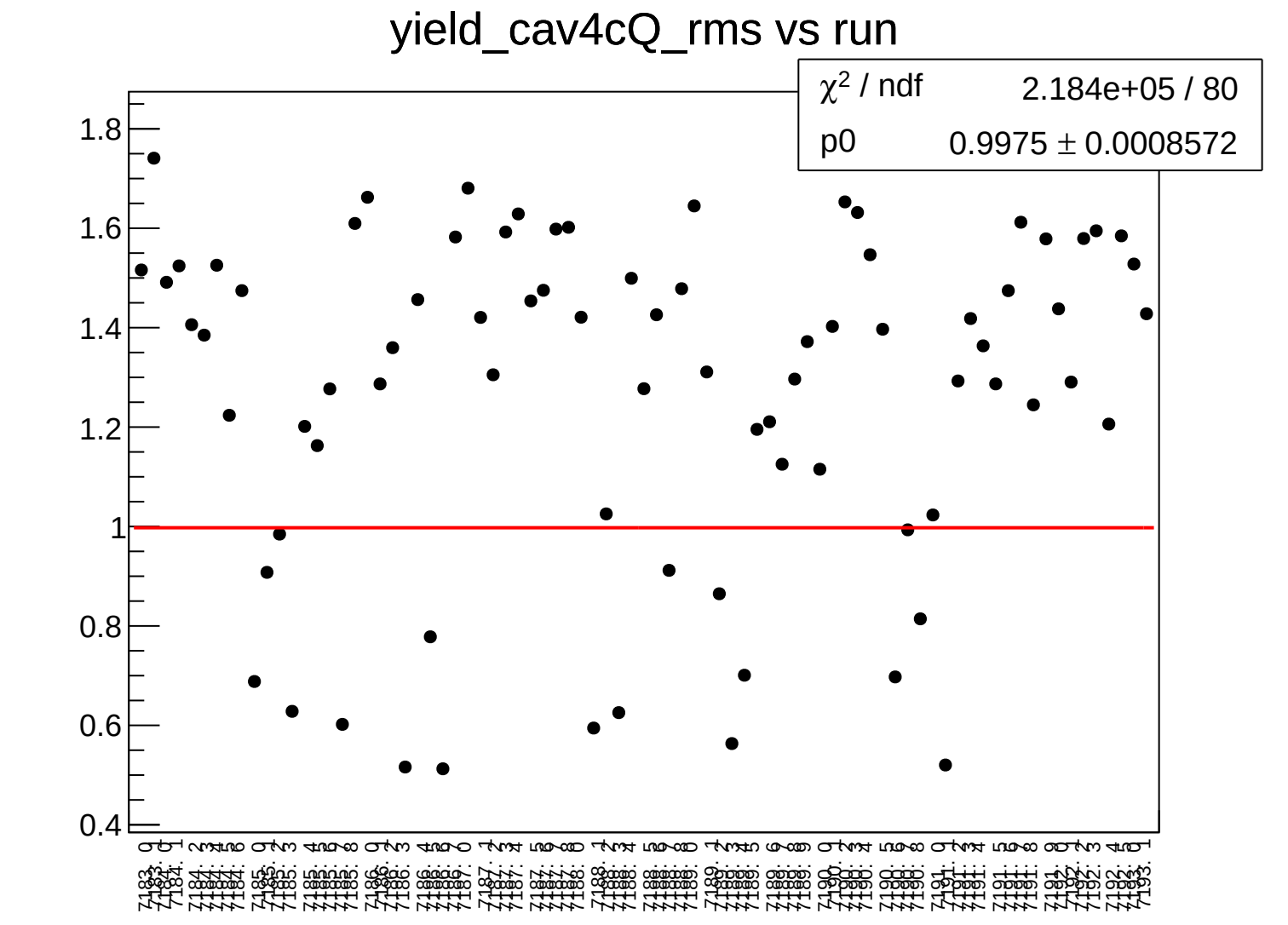

yield_cav4bQ_mean vs run
χ² / ndf 3.228e+05 / 80
p0 148.8 ± 0.0007742
149.8
149.6
149.4
149.2
149
148.8
148.6
148.4
148.2
148
147.8
pull
Entries 81
Mean 76.37
Std Dev 42.89
100
50
0
−50
−100

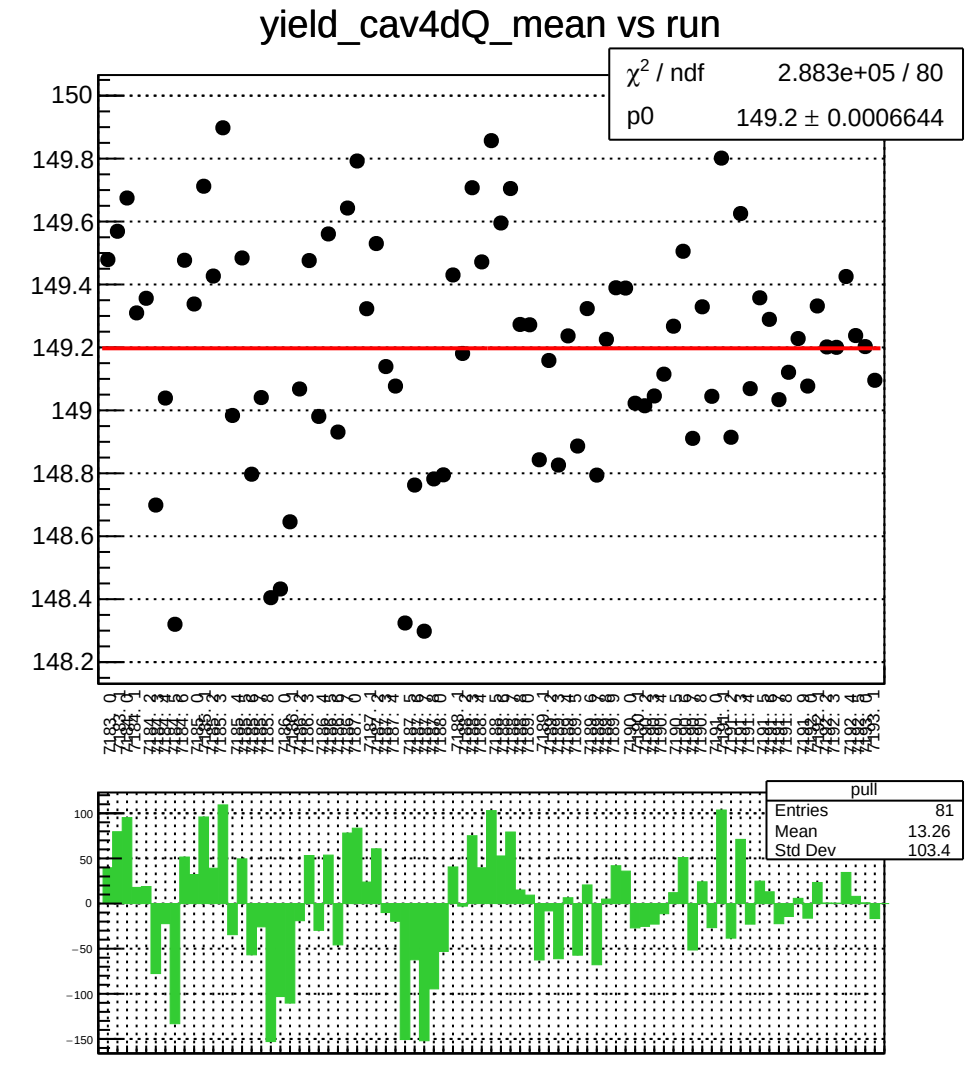

pull1D
Entries 81
Mean −0.192
Std Dev 4.798
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

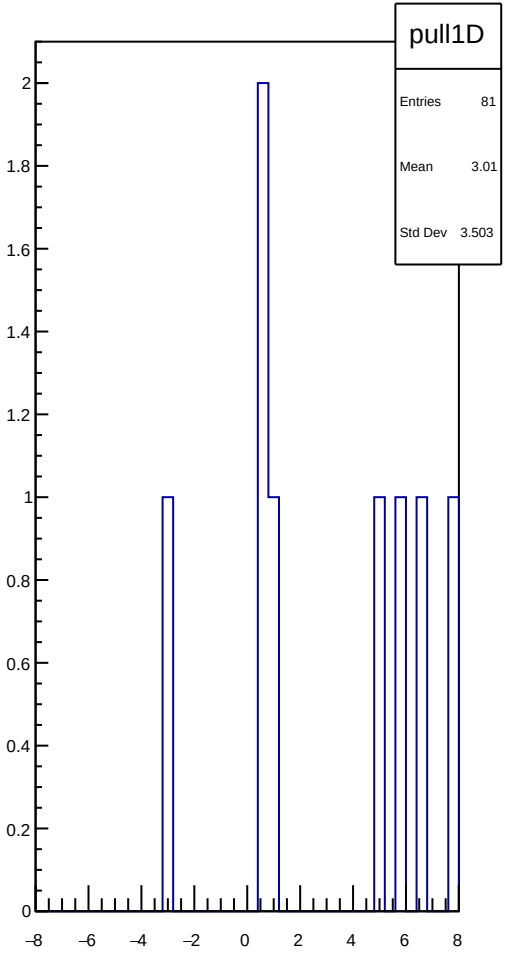

yield_cav4bQ_rms vs run
χ² / ndf 5.487e+04 / 80
p0 0.6744 ± 0.0005474
1.1
1
0.9
0.8
0.7
0.6
0.5

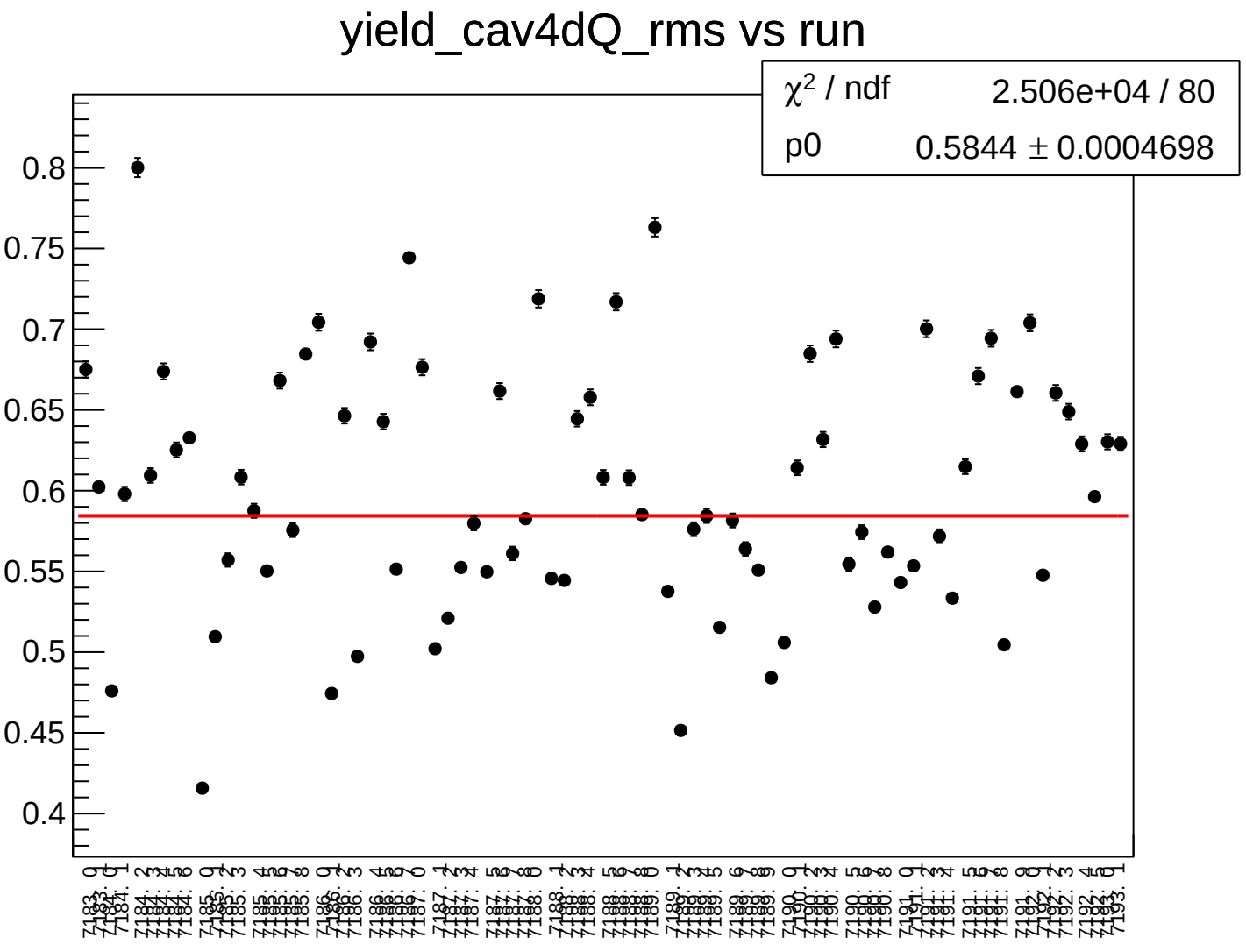

yield_cav4cQ_mean vs run
χ² / ndf 9.928e+05 / 80
p0 149 ± 0.001212
151
150.5
150
149.5
149
148.5
148
147.5
147
pull
Entries 81
Mean 42.1
Std Dev 23.23
300
200
100
0
−100
−200
−300

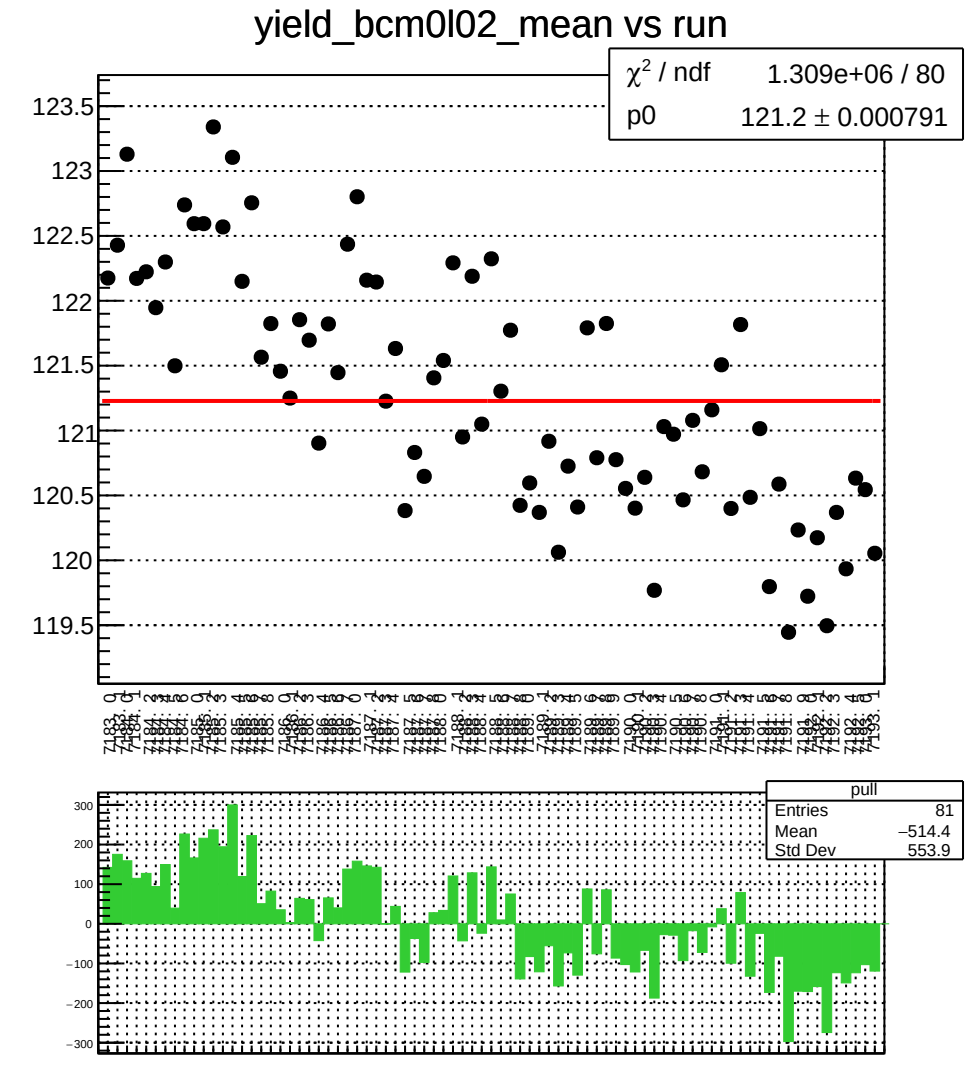

pull1D
Entries 81
Mean 2.797
Std Dev 4.121
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

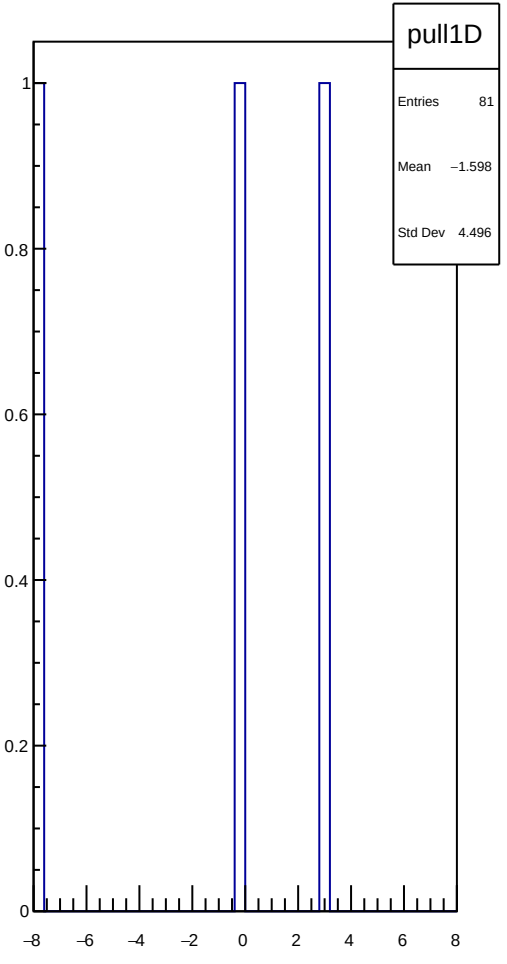

yield_cav4cQ_rms vs run
χ² / ndf 2.184e+05 / 80
p0 0.9975 ± 0.0008572
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4

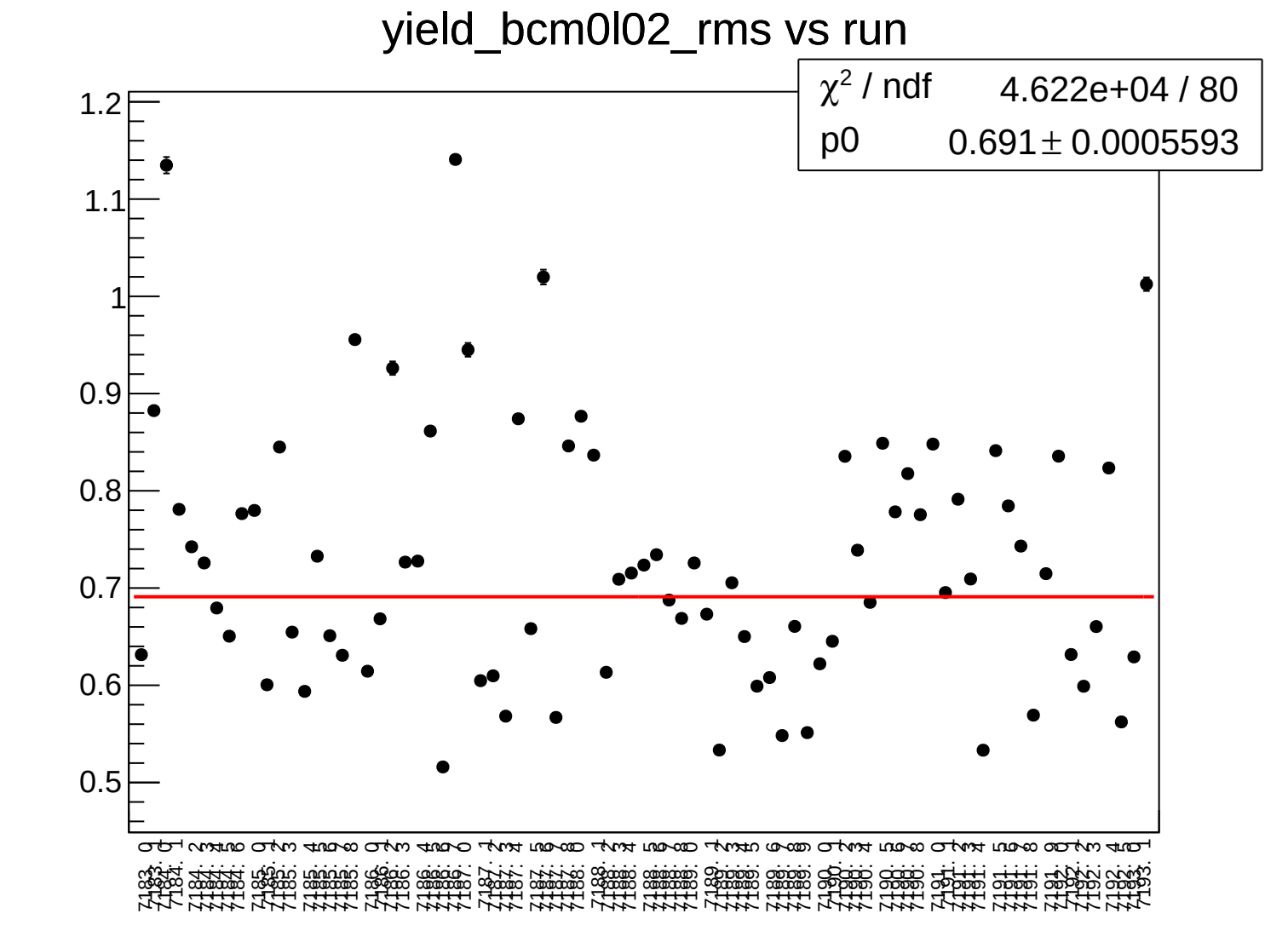

yield_cav4dQ_mean vs run
χ² / ndf 2.883e+05 / 80
p0 149.2 ± 0.0006644
150
149.8
149.6
149.4
149.2
149
148.8
148.6
148.4
148.2
pull
Entries 81
Mean 13.26
Std Dev 103.4
100
50
0
−50
−100
−150

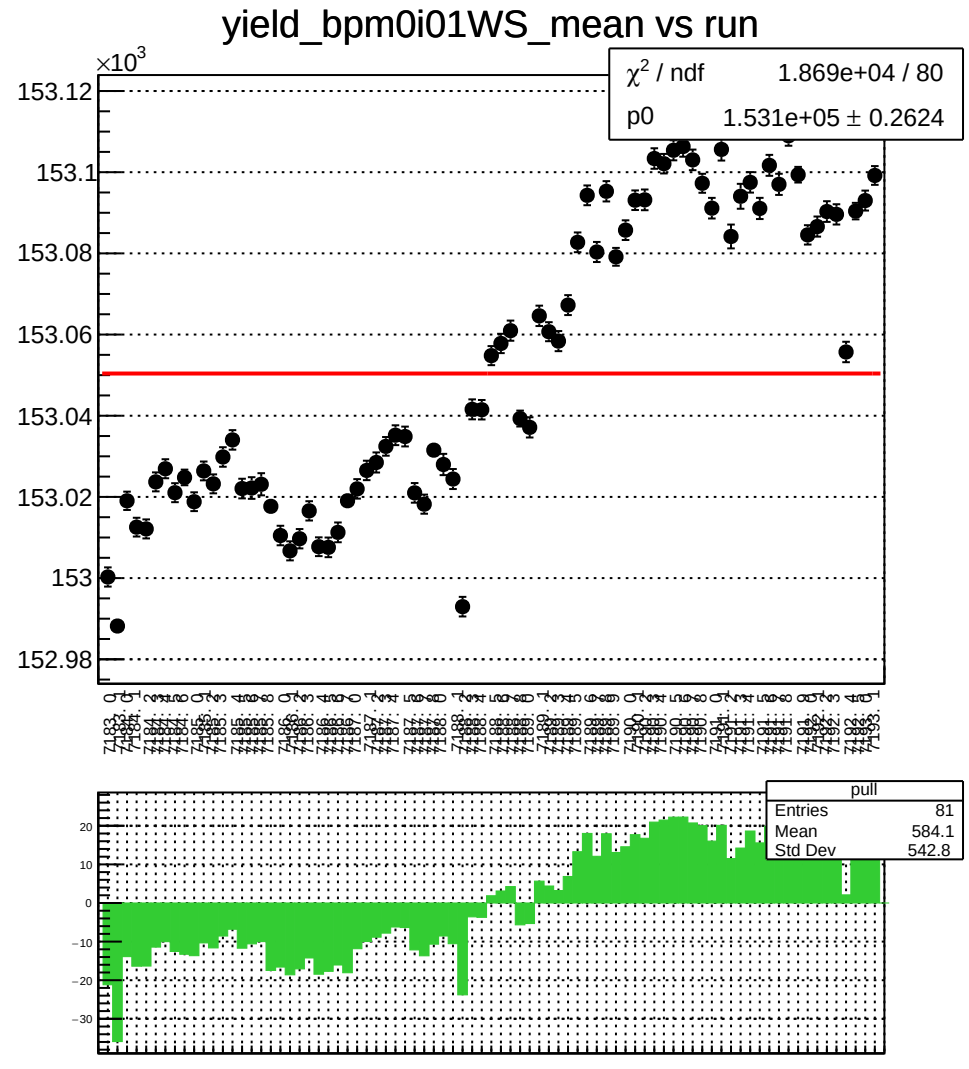

pull1D
Entries 81
Mean 3.01
Std Dev 3.503
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

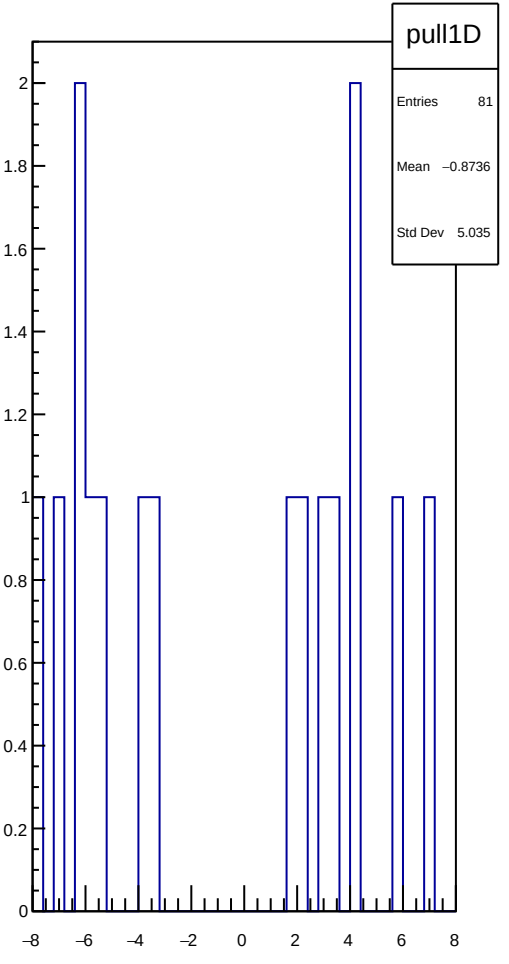

yield_cav4dQ_rms vs run
χ² / ndf 2.506e+04 / 80
p0 0.5844 ± 0.0004698
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

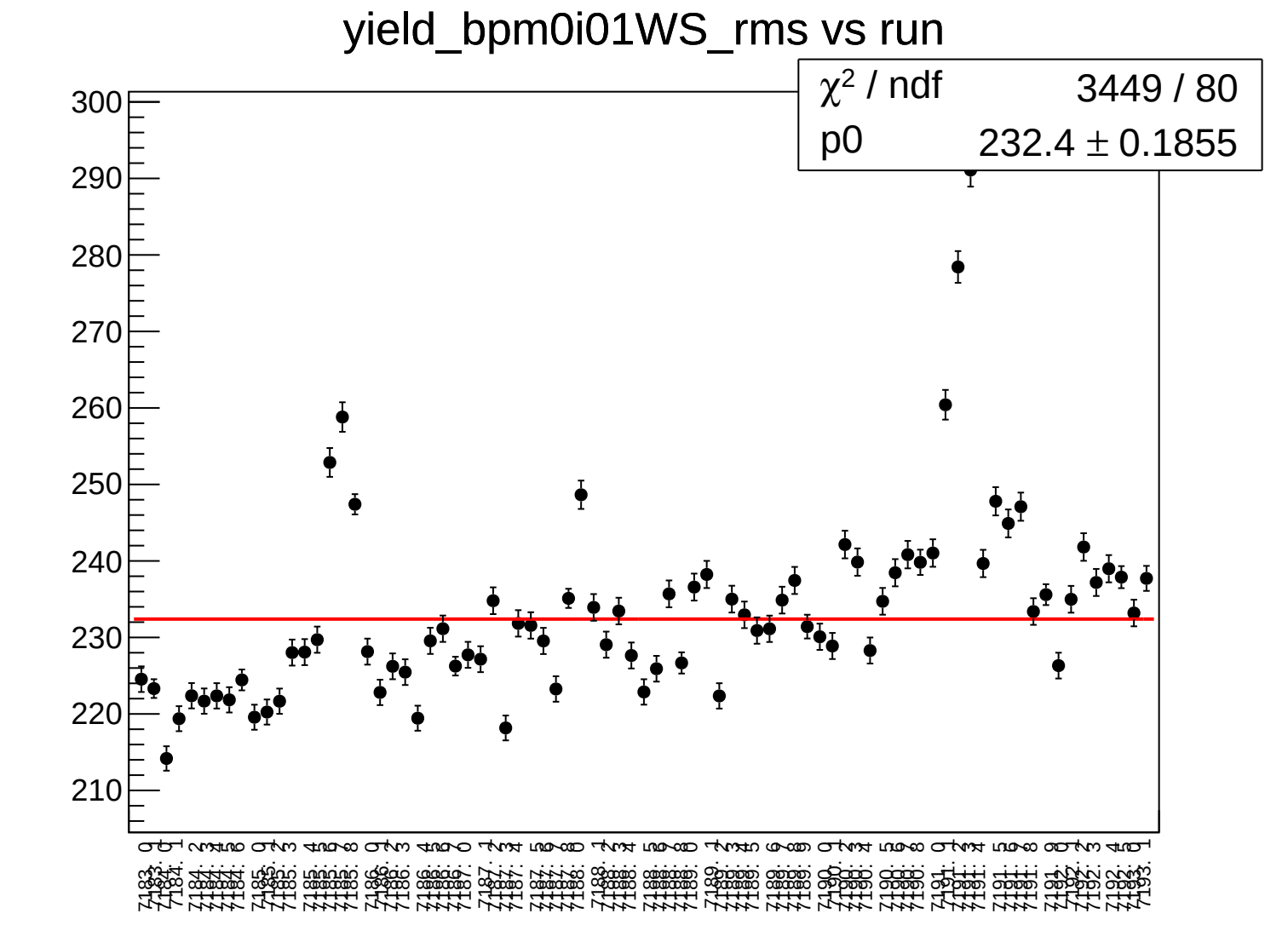

yield_bcm0l02_mean vs run
χ² / ndf 1.309e+06 / 80
p0 121.2 ± 0.000791
123.5
123
122.5
122
121.5
121
120.5
120
119.5
pull
Entries 81
Mean −514.4
Std Dev 553.9
300
200
100
0
−100
−200
−300

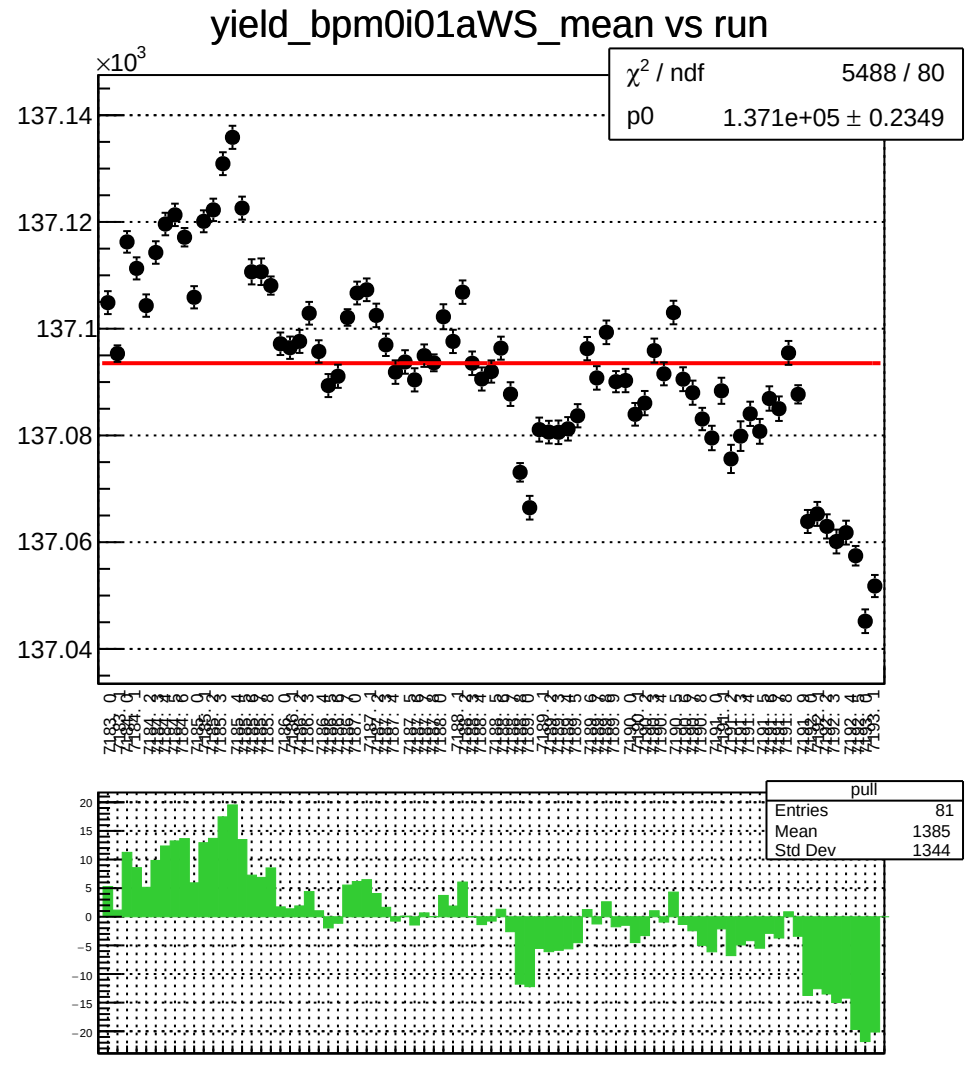

pull1D
Entries 81
Mean −1.598
Std Dev 4.496
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

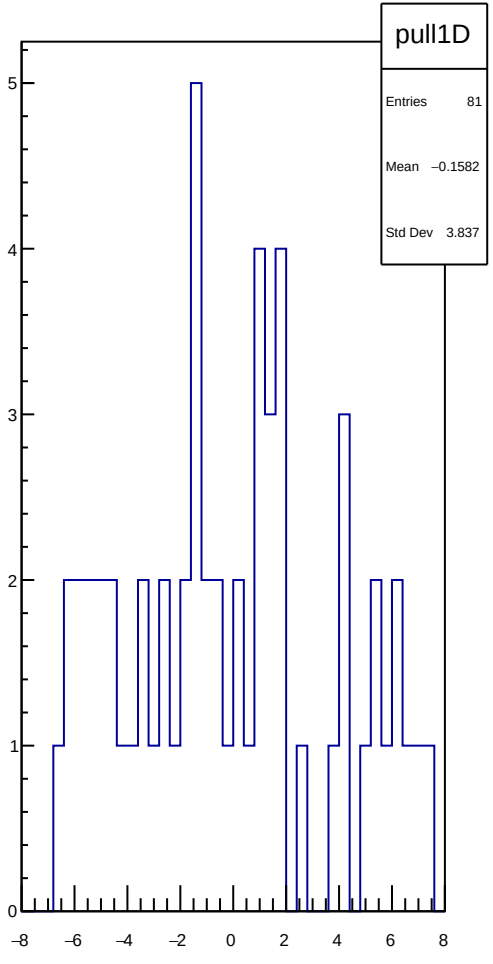

yield_bcm0l02_rms vs run
χ² / ndf 4.622e+04 / 80
p0 0.691 ± 0.0005593
1.2
1.1
1
0.9
0.8
0.7
0.6
0.5

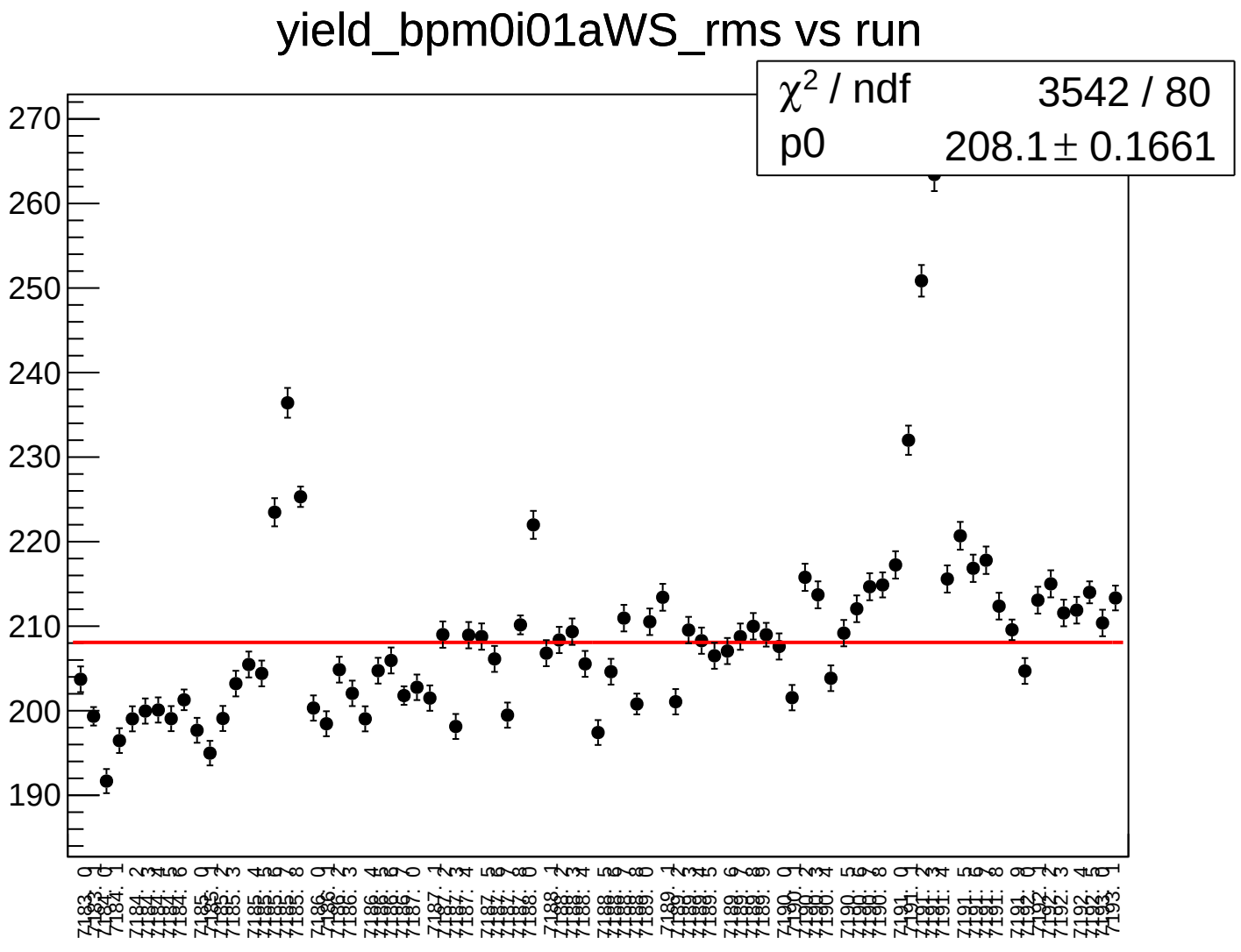

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 1.869e+04 / 80
p0 1.531e+05 ± 0.2624
153.12
153.1
153.08
153.06
153.04
153.02
153
152.98
pull
Entries 81
Mean 584.1
Std Dev 542.8
20
10
0
−10
−20
−30

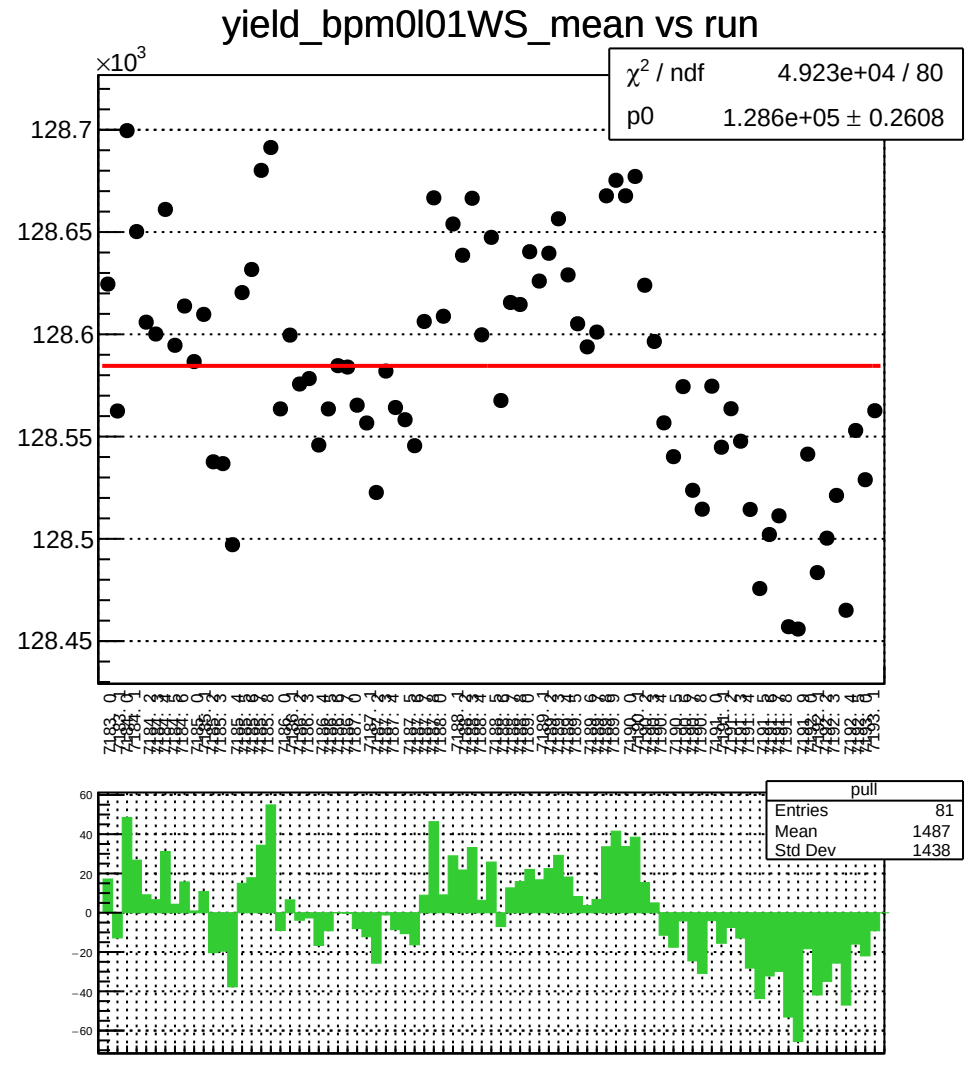

pull1D
Entries 81
Mean −0.8736
Std Dev 5.035
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

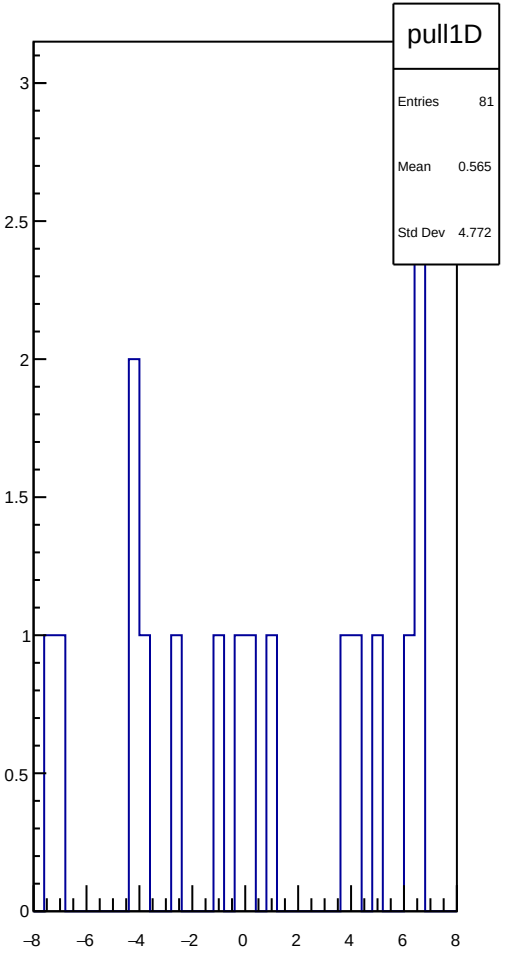

yield_bpm0i01WS_rms vs run
χ² / ndf 3449 / 80
p0 232.4 ± 0.1855
300
290
280
270
260
250
240
230
220
210

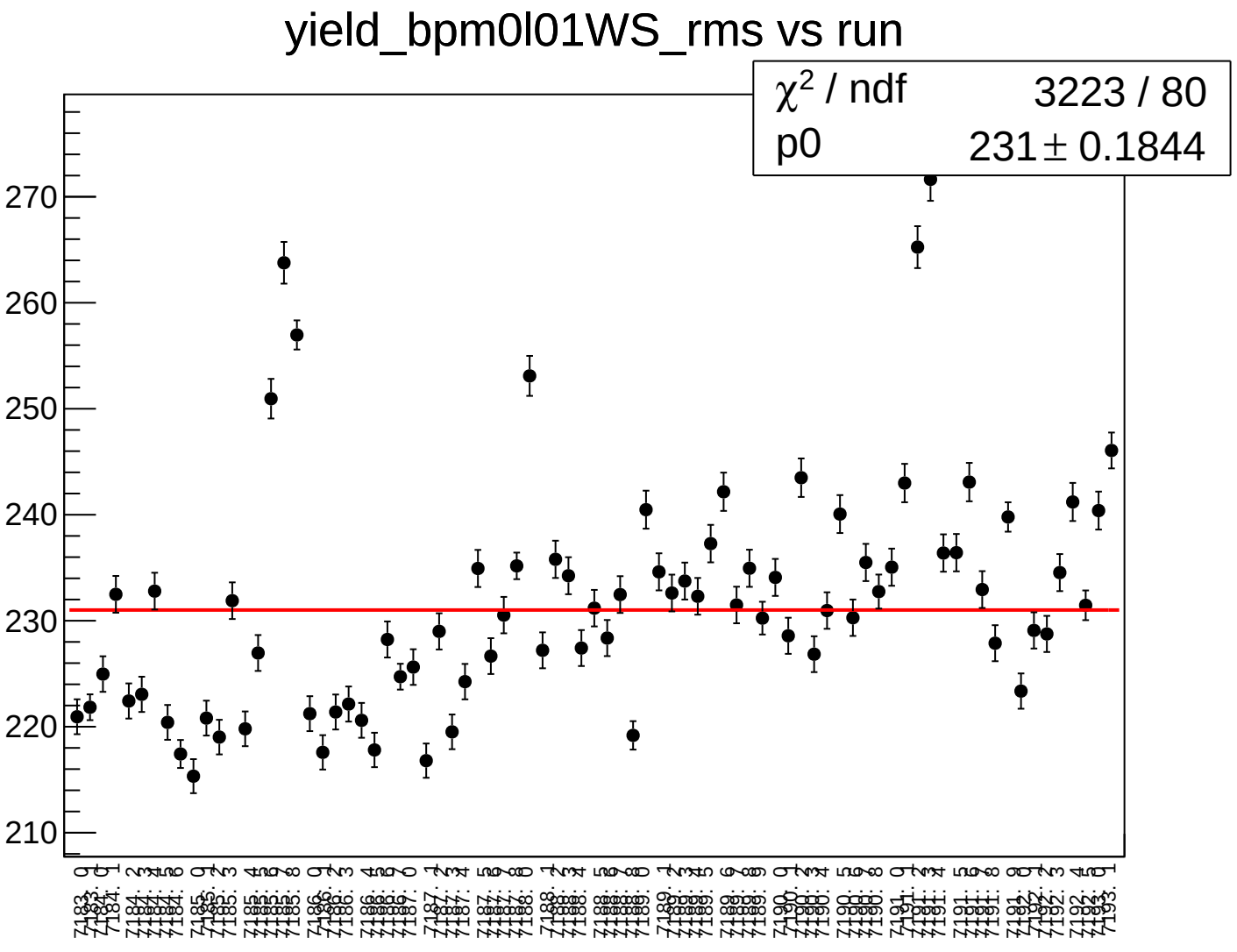

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 5488 / 80
p0 1.371e+05 ± 0.2349
137.14
137.12
137.1
137.08
137.06
137.04
pull
Entries 81
Mean 1385
Std Dev 1344
20
15
10
5
0
−5
−10
−15
−20

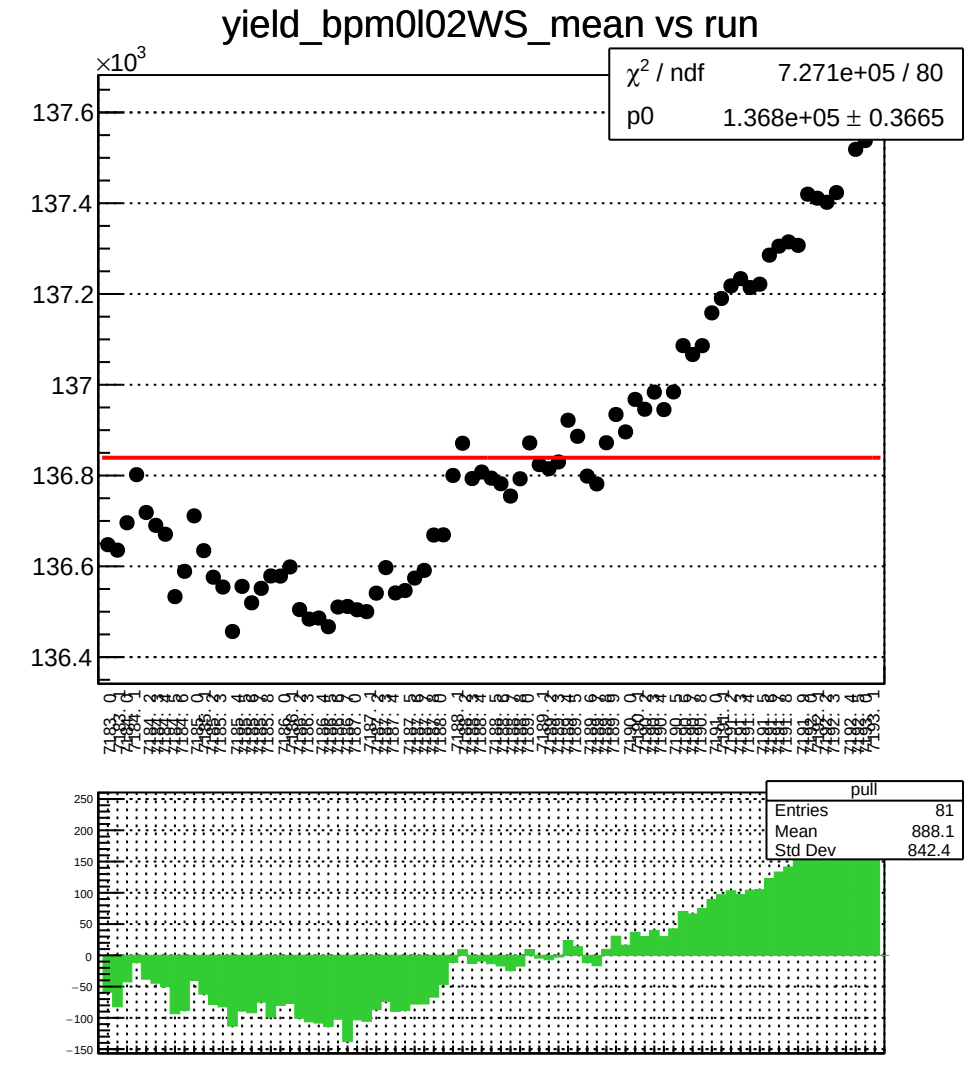

pull1D
Entries 81
Mean −0.1582
Std Dev 3.837
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

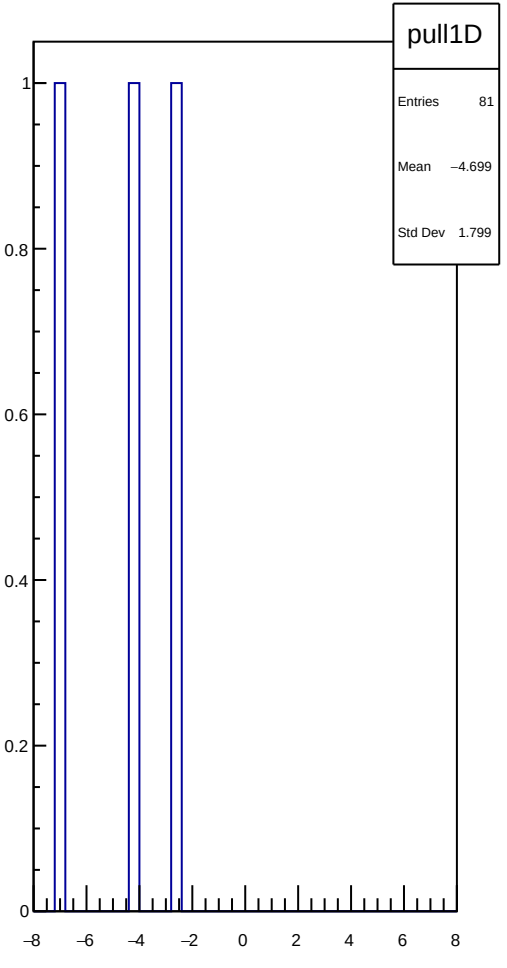

yield_bpm0i01aWS_rms vs run
χ² / ndf 3542 / 80
p0 208.1 ± 0.1661
270
260
250
240
230
220
210
200
190

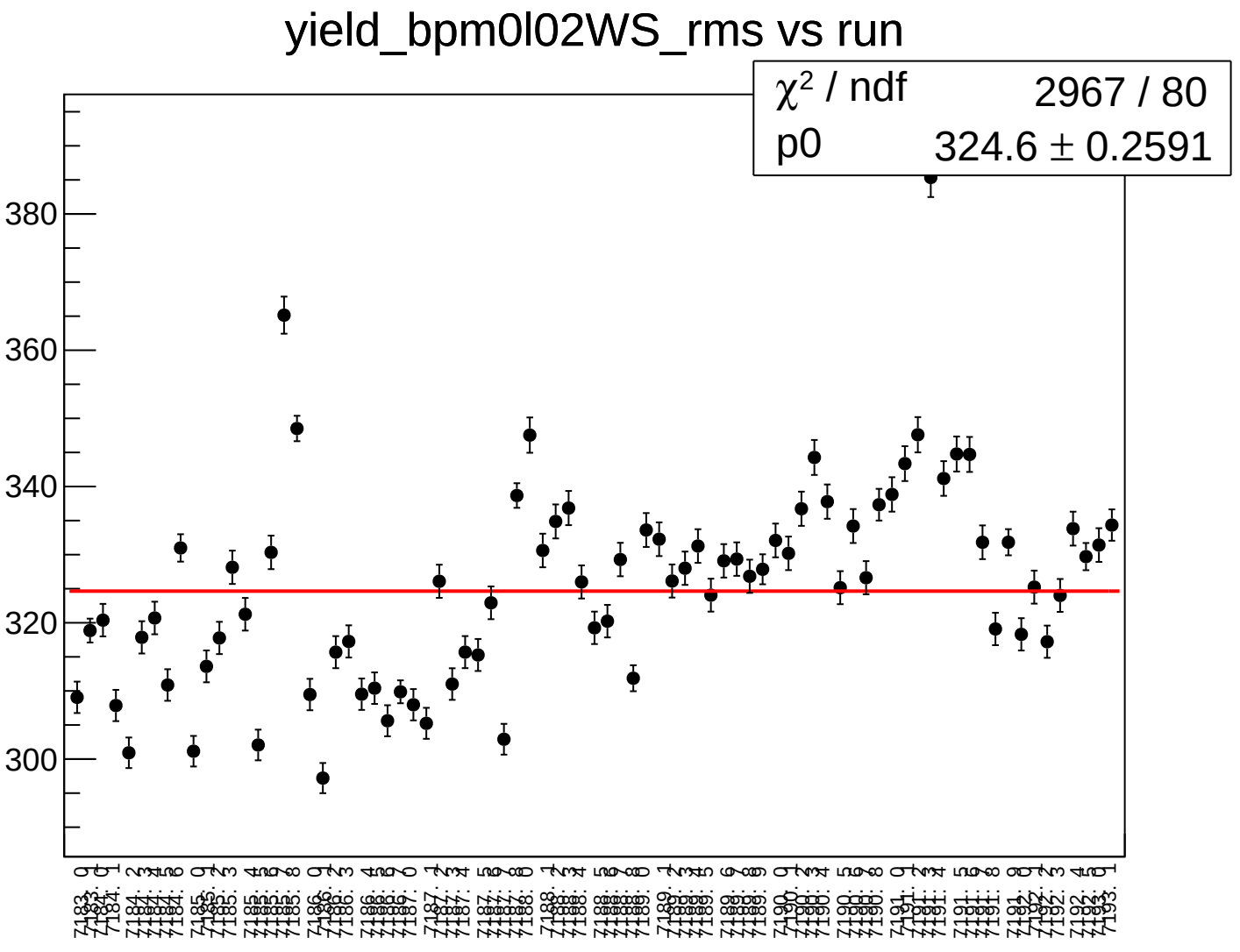

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 4.923e+04 / 80
p0 1.286e+05 ± 0.2608
128.7
128.65
128.6
128.55
128.5
128.45
pull
Entries 81
Mean 1487
Std Dev 1438
60
40
20
0
−20
−40
−60

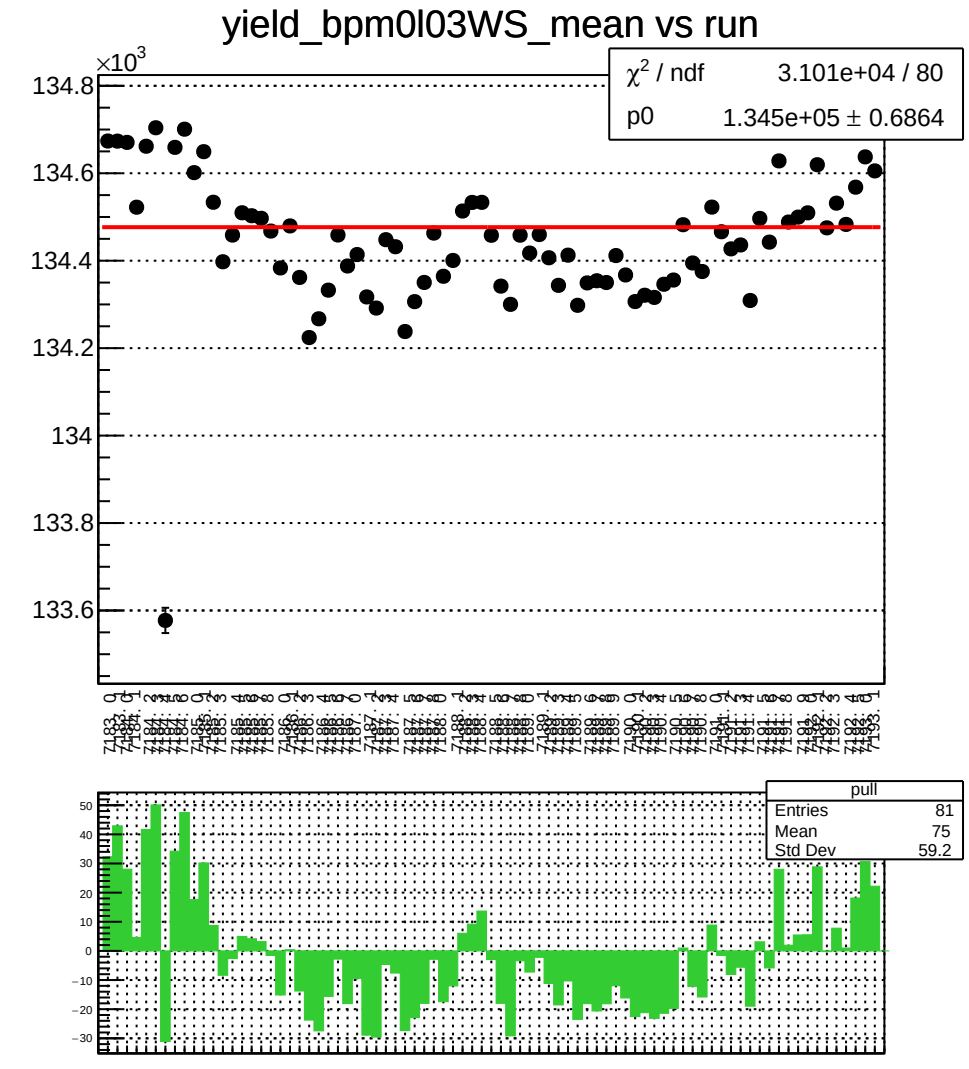

pull1D
Entries 81
Mean 0.565
Std Dev 4.772
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

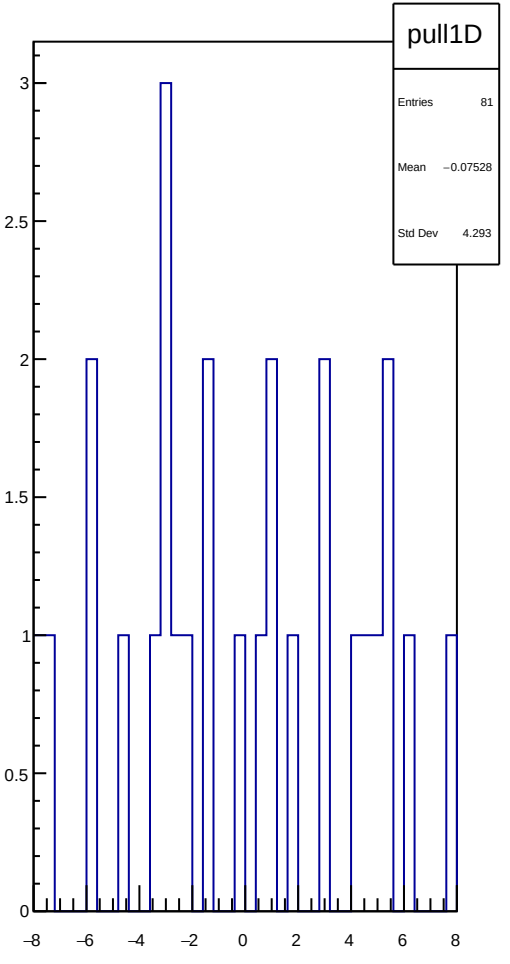

yield_bpm0l01WS_rms vs run
χ² / ndf 3223 / 80
p0 231 ± 0.1844
270
260
250
240
230
220
210

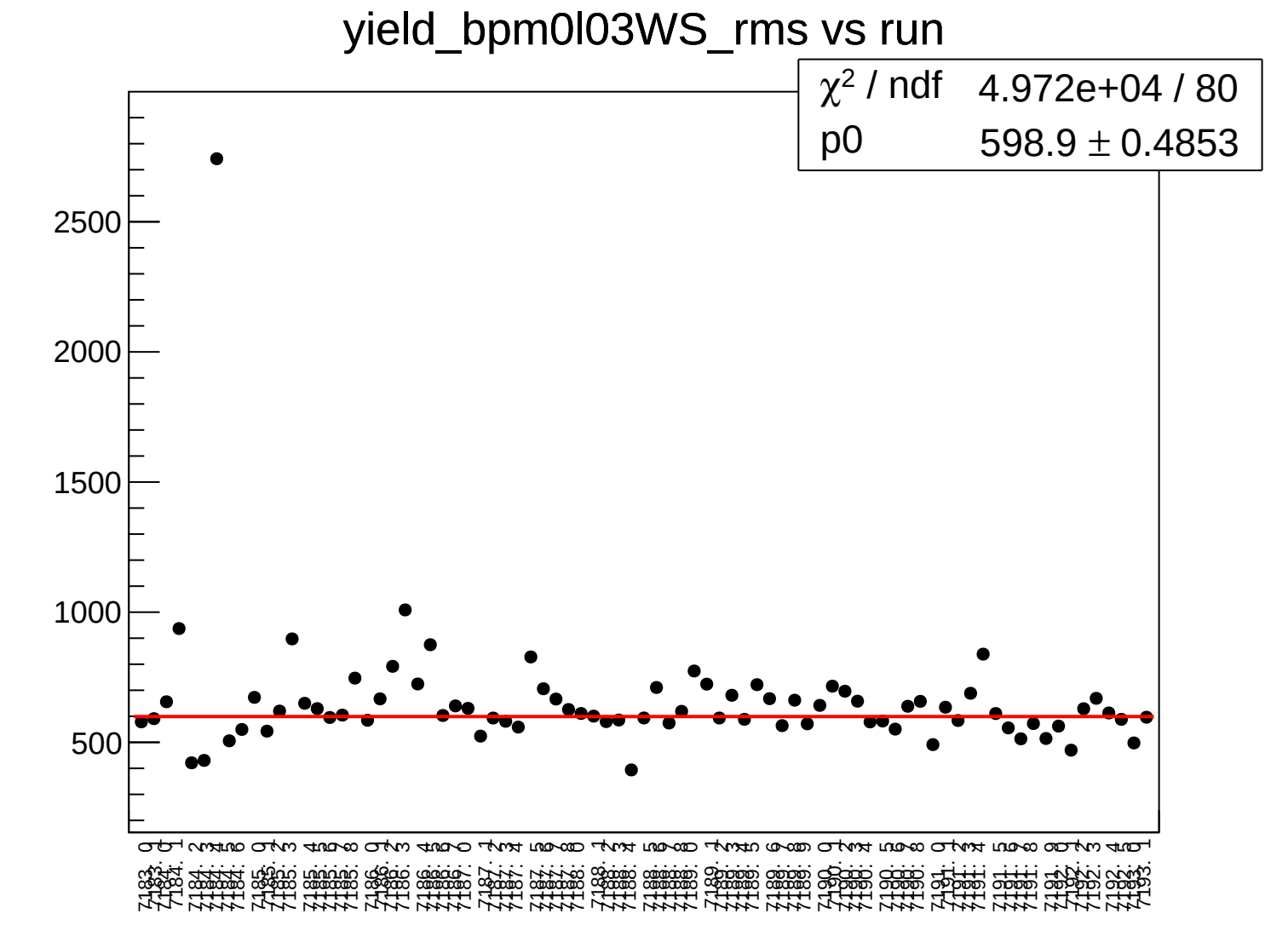

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 7.271e+05 / 80
p0 1.368e+05 ± 0.3665
137.6
137.4
137.2
137
136.8
136.6
136.4
pull
Entries 81
Mean 888.1
Std Dev 842.4
250
200
150
100
50
0
−50
−100
−150

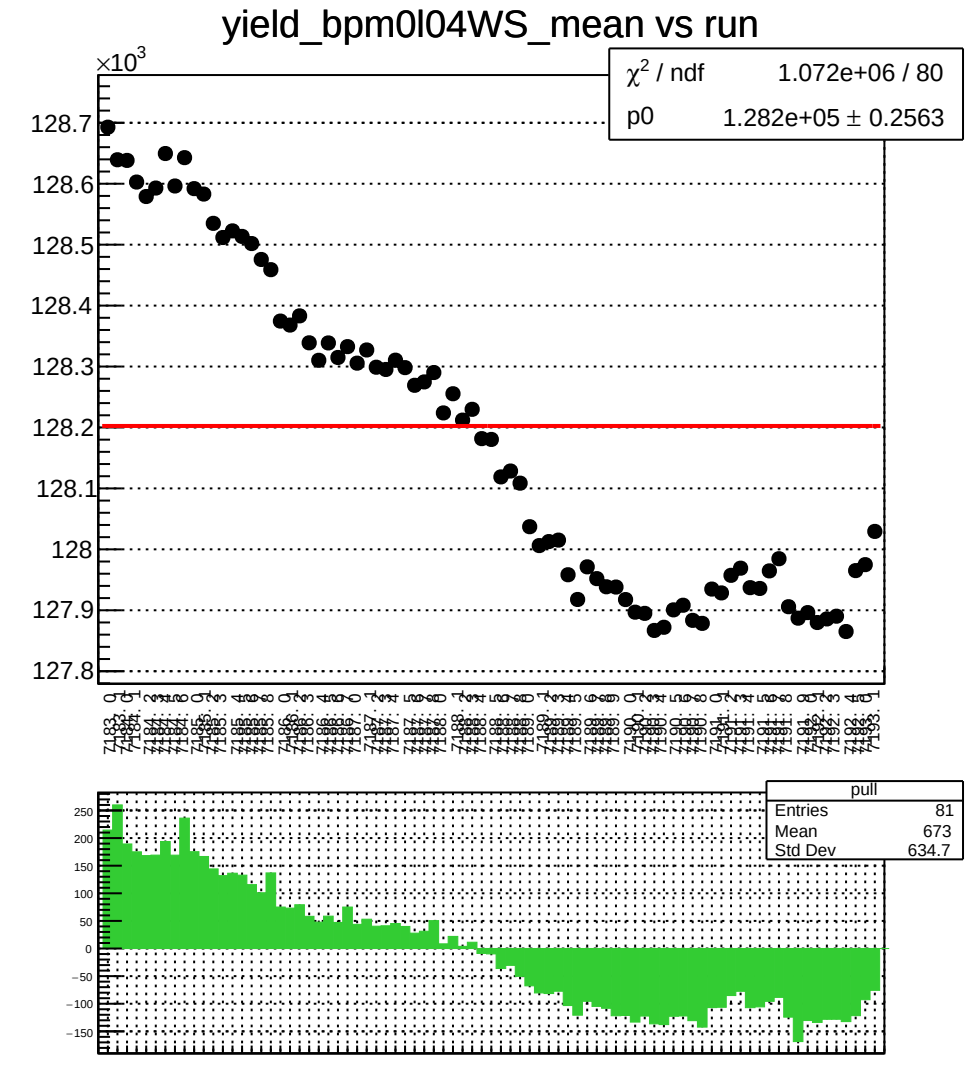

pull1D
Entries 81
Mean −4.699
Std Dev 1.799
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

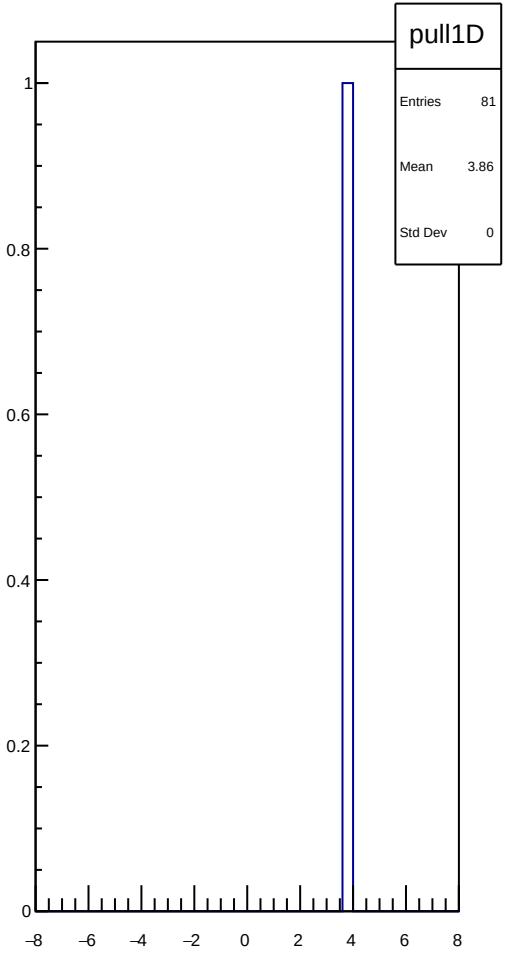

yield_bpm0l02WS_rms vs run
χ² / ndf 2967 / 80
p0 324.6 ± 0.2591
380
360
340
320
300

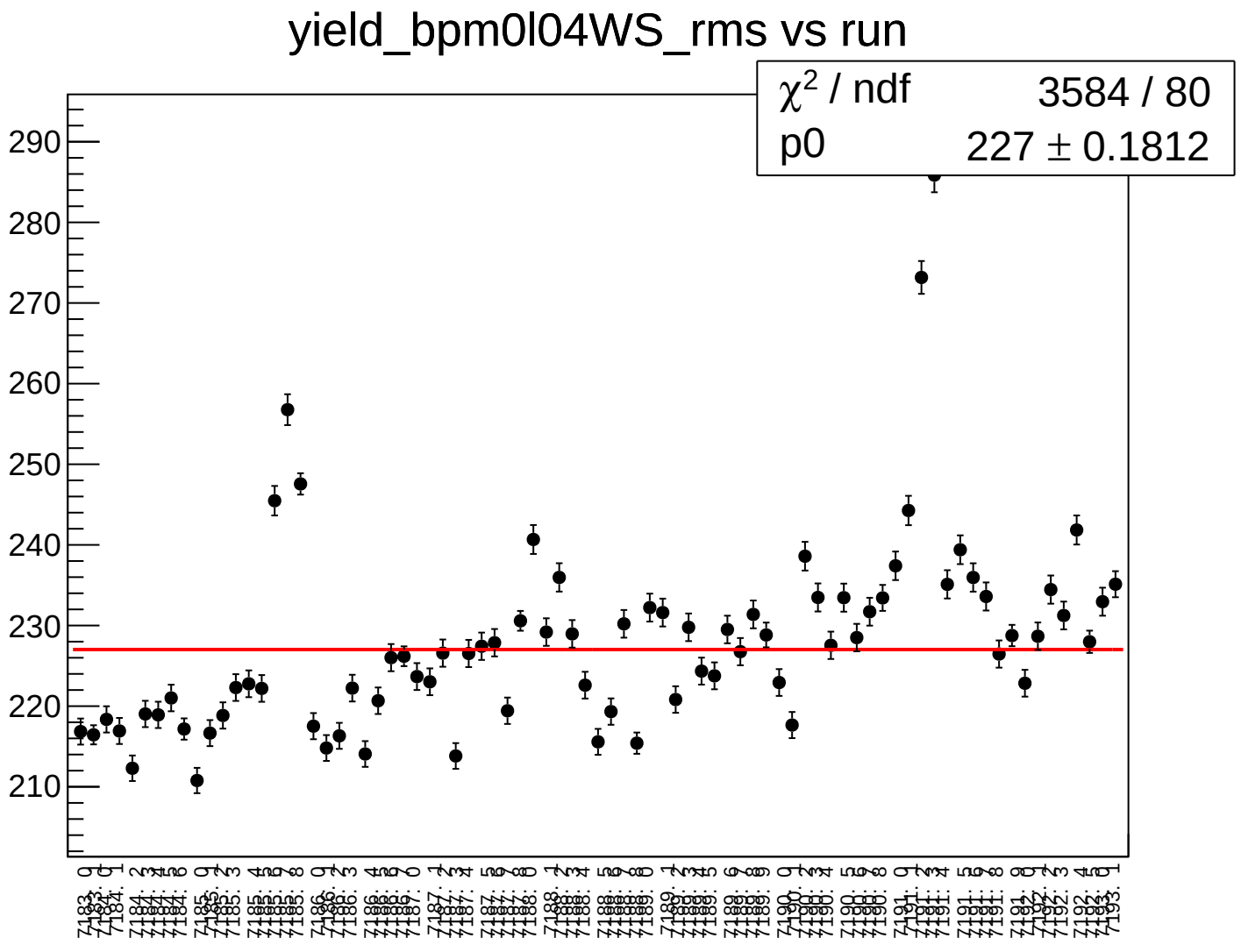

yield_bpm0l03WS_mean vs run
×10^3
134.8
134.6
134.4
134.2
134
133.8
133.6
χ² / ndf 3.101e+04 / 80
p0 1.345e+05 ± 0.6864
pull
Entries 81
Mean 75
Std Dev 59.2
50
40
30
20
10
0
−10
−20
−30

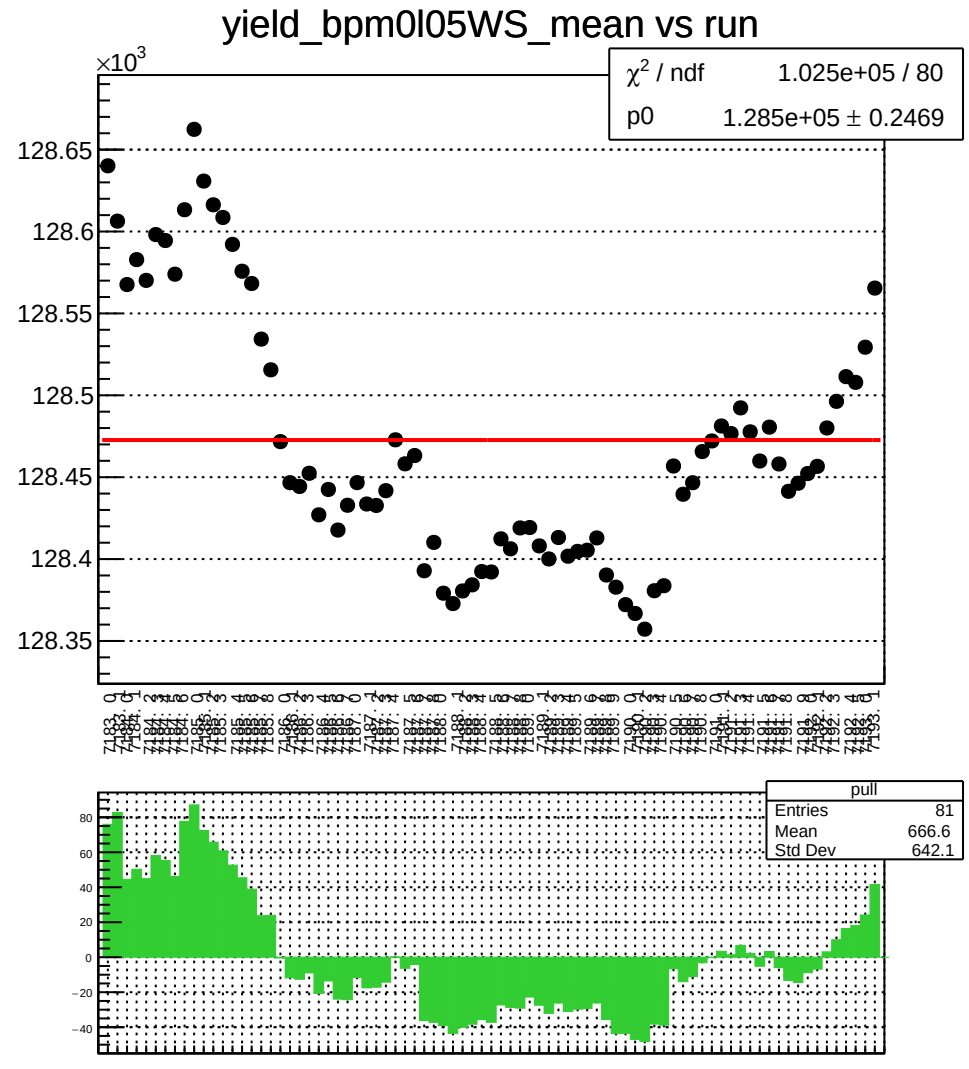

pull1D
Entries 81
Mean −0.07528
Std Dev 4.293
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

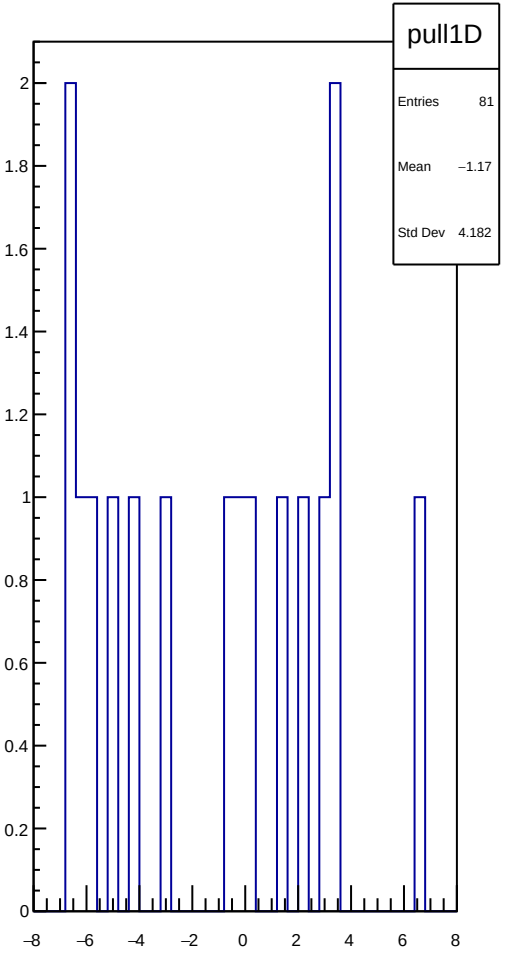

yield_bpm0l03WS_rms vs run
χ² / ndf 4.972e+04 / 80
p0 598.9 ± 0.4853
2500
2000
1500
1000
500

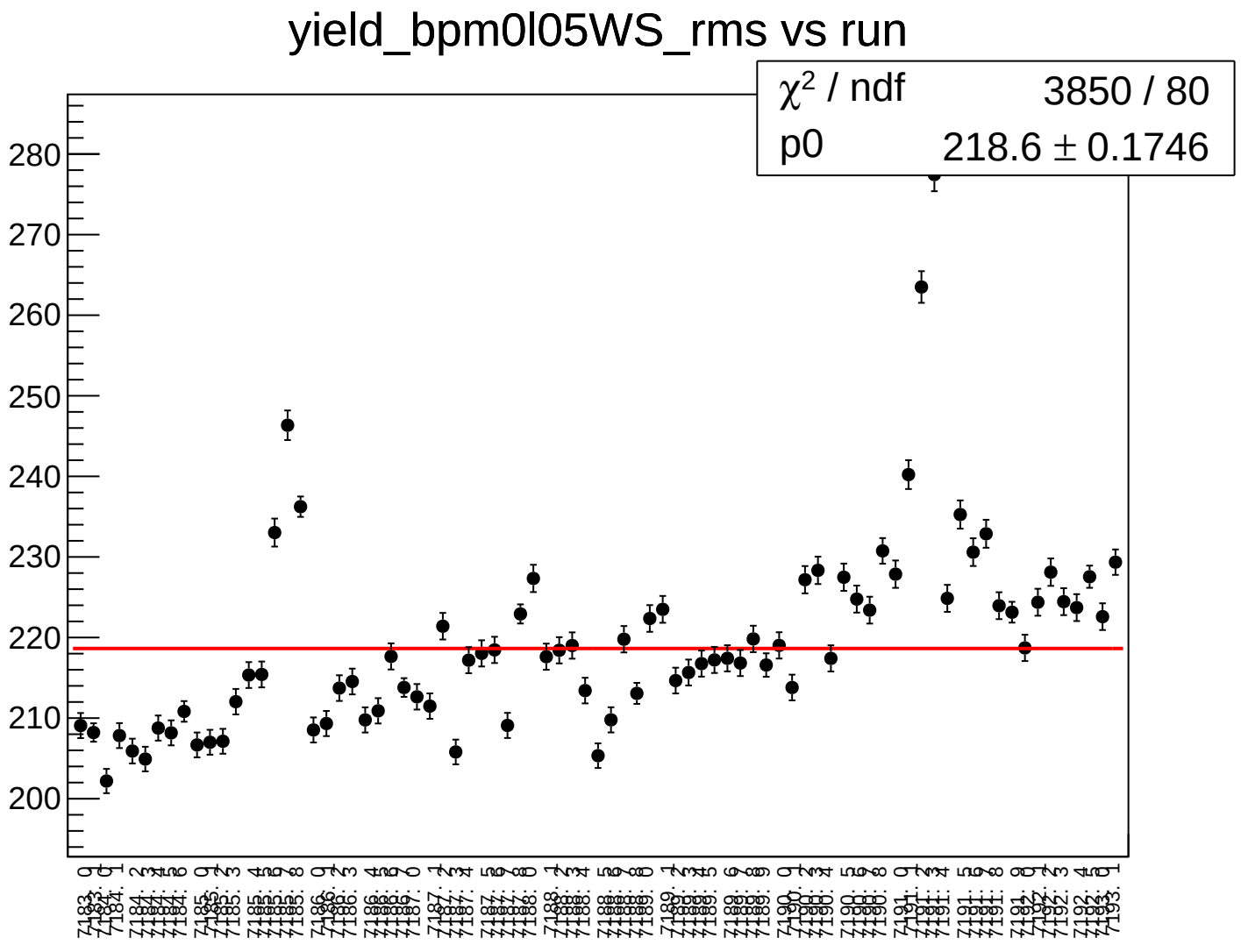

yield_bpm0l04WS_mean vs run
×10^3
χ^2 / ndf 1.072e+06 / 80
p0 1.282e+05 ± 0.2563
128.7
128.6
128.5
128.4
128.3
128.2
128.1
128
127.9
127.8
pull
Entries 81
Mean 673
Std Dev 634.7
250
200
150
100
50
0
−50
−100
−150

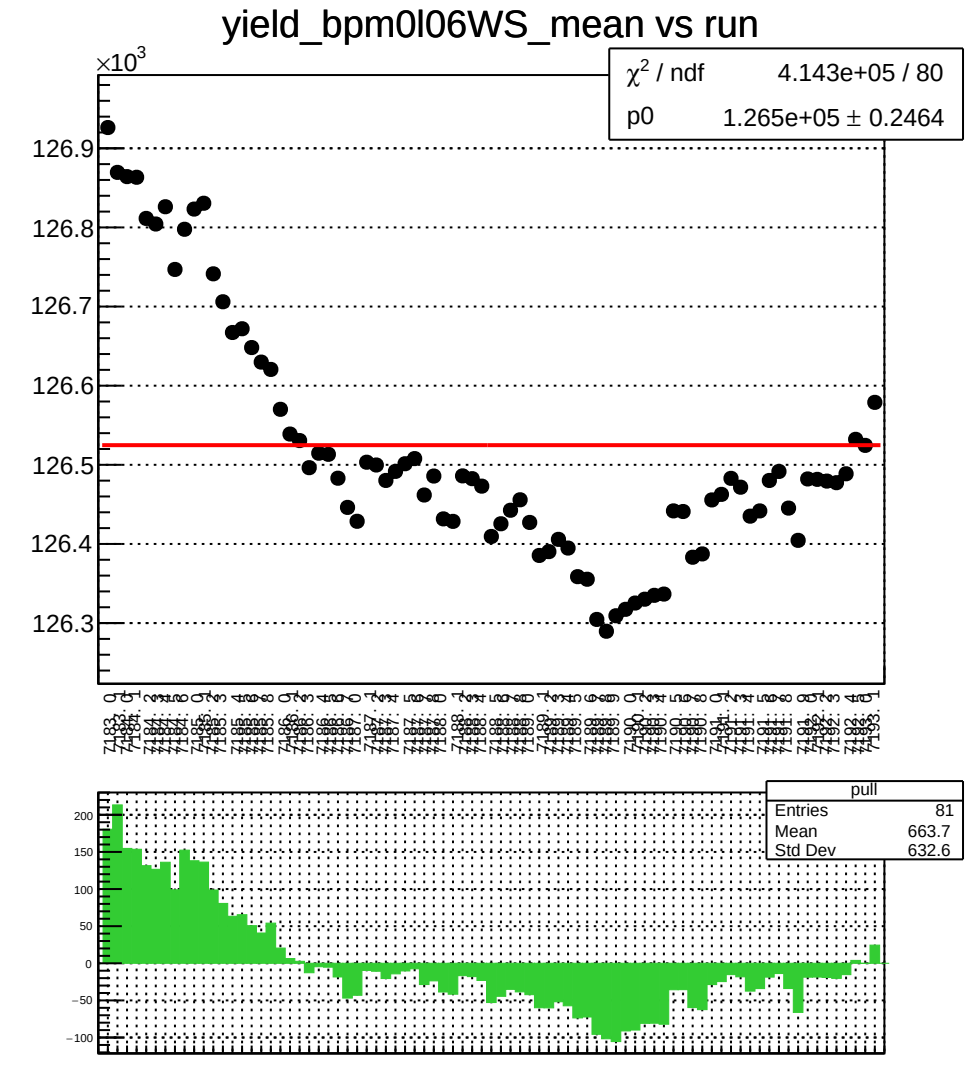

pull1D
Entries 81
Mean 3.86
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

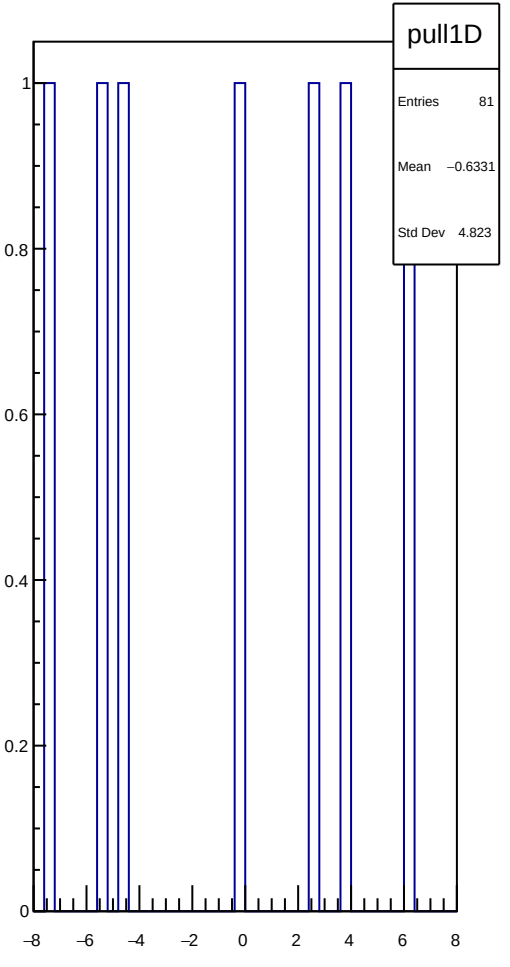

yield_bpm0l04WS_rms vs run
χ² / ndf 3584 / 80
p0 227 ± 0.1812
290
280
270
260
250
240
230
220
210

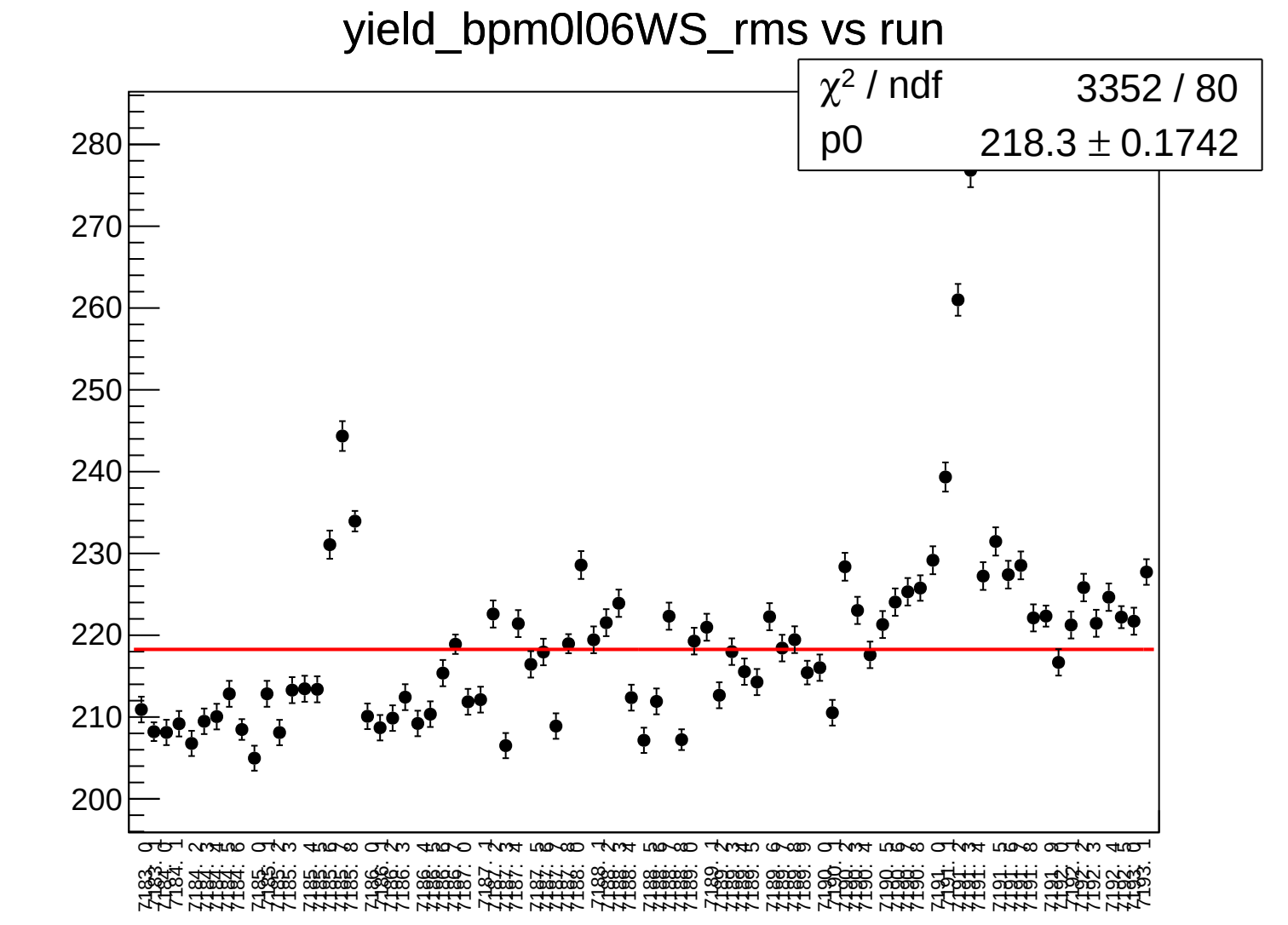

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 1.025e+05 / 80
p0 1.285e+05 ± 0.2469
128.65
128.6
128.55
128.5
128.45
128.4
128.35
pull
Entries 81
Mean 666.6
Std Dev 642.1
80
60
40
20
0
−20
−40

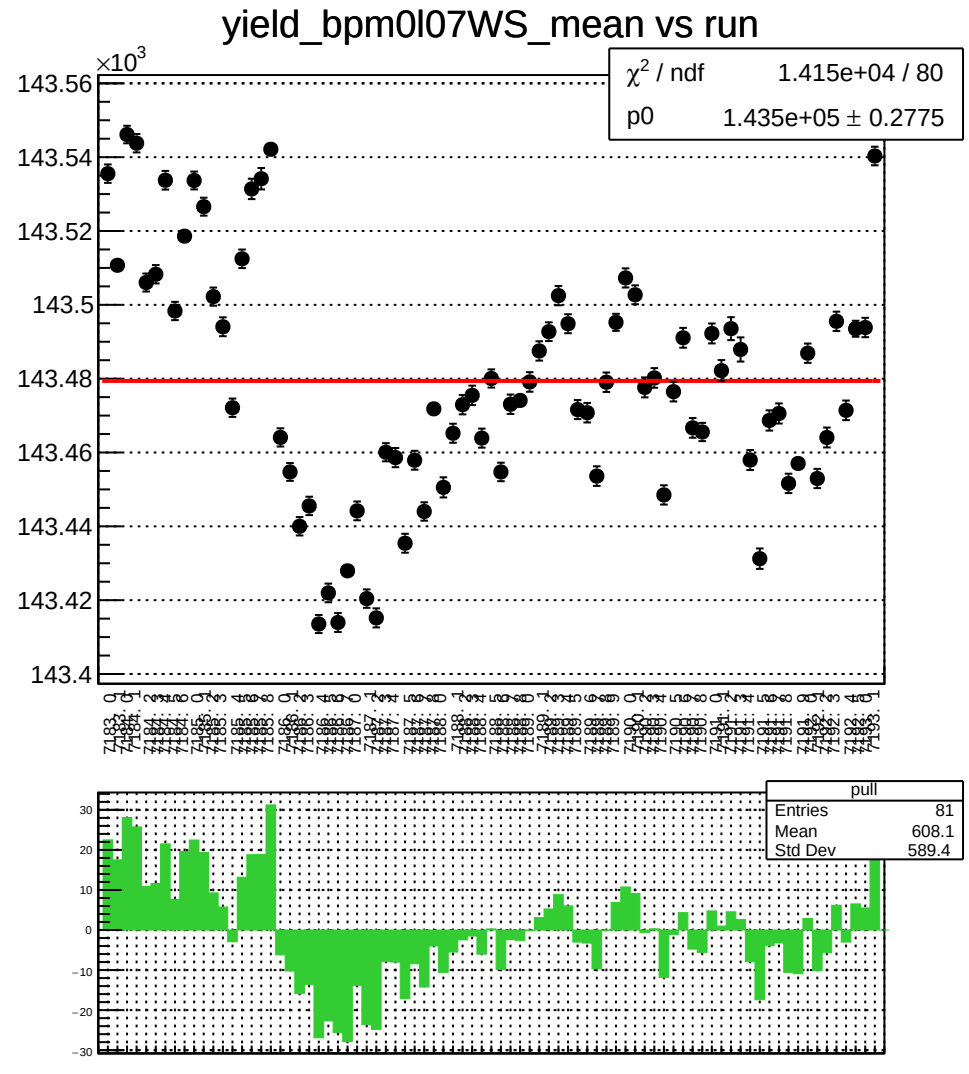

pull1D
Entries 81
Mean −1.17
Std Dev 4.182
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

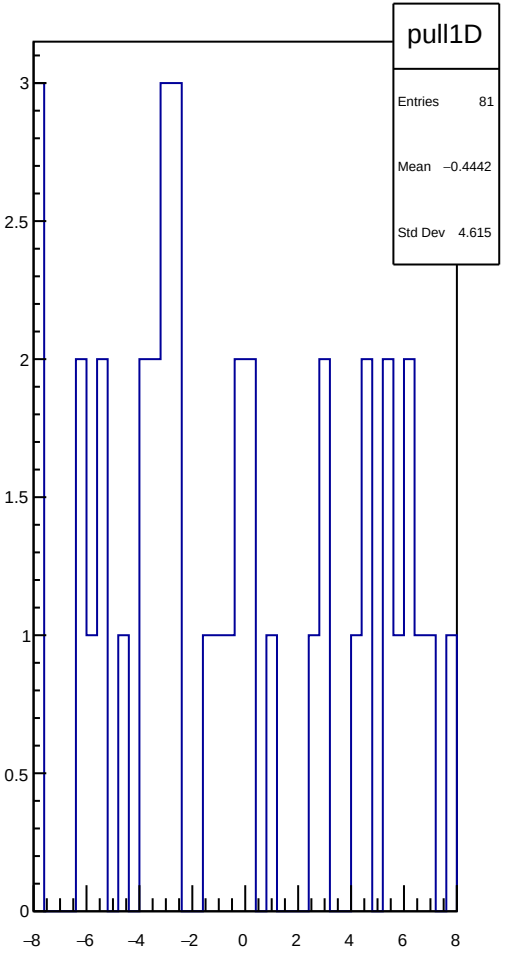

yield_bpm0l05WS_rms vs run
χ² / ndf 3850 / 80
p0 218.6 ± 0.1746
280
270
260
250
240
230
220
210
200

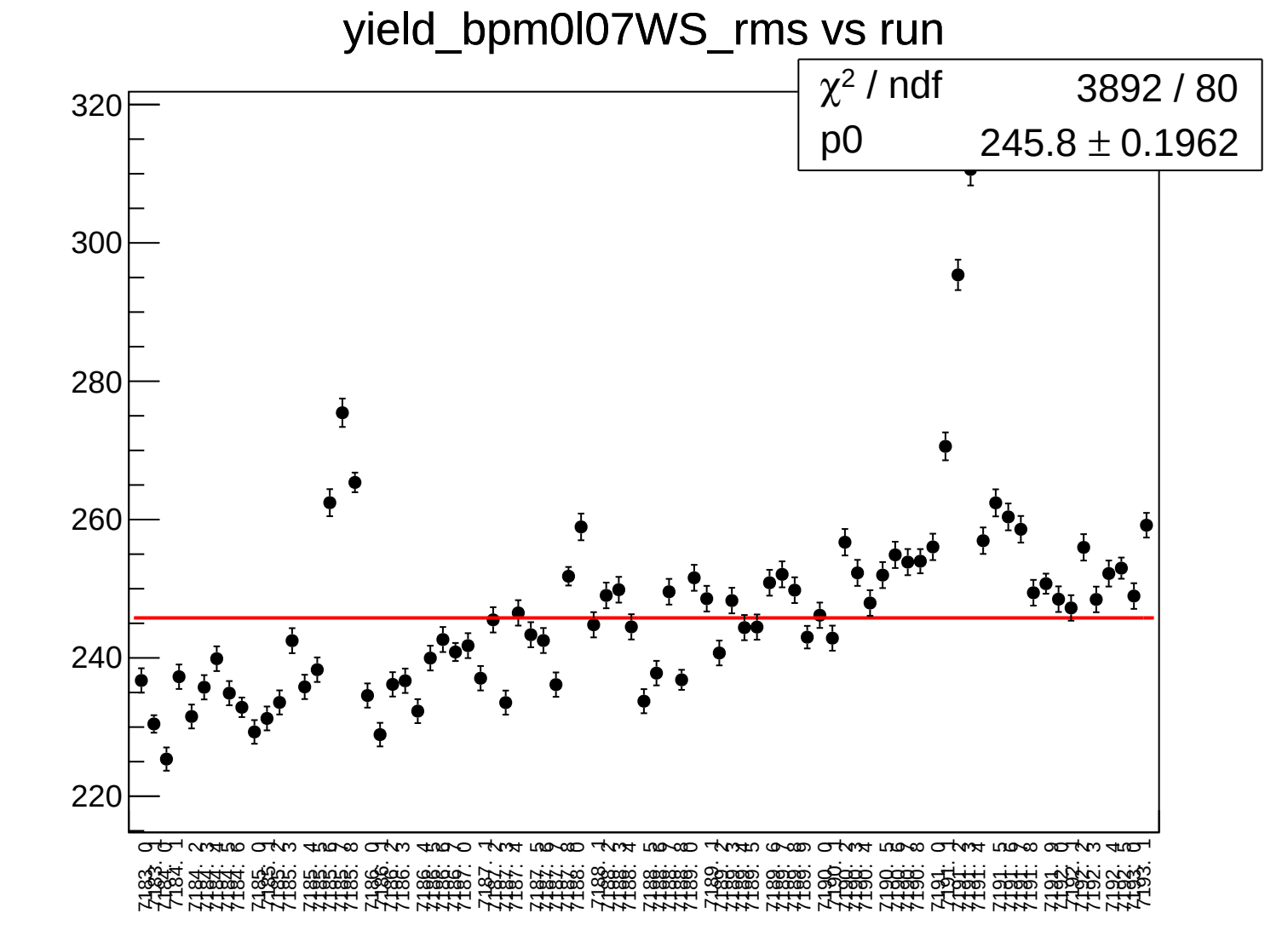

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 4.143e+05 / 80
p0 1.265e+05 ± 0.2464
126.9
126.8
126.7
126.6
126.5
126.4
126.3
pull
Entries 81
Mean 663.7
Std Dev 632.6
200
150
100
50
0
−50
−100

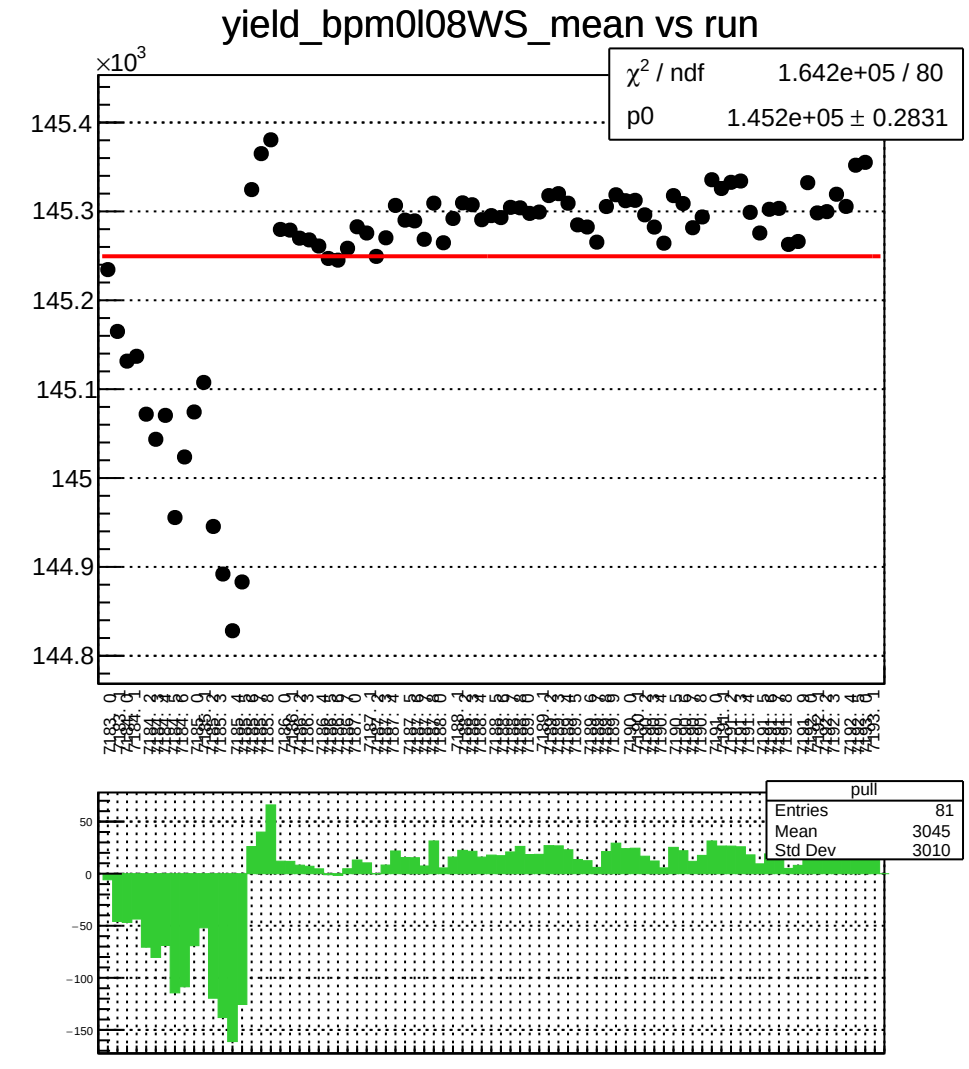

pull1D
Entries 81
Mean −0.6331
Std Dev 4.823
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

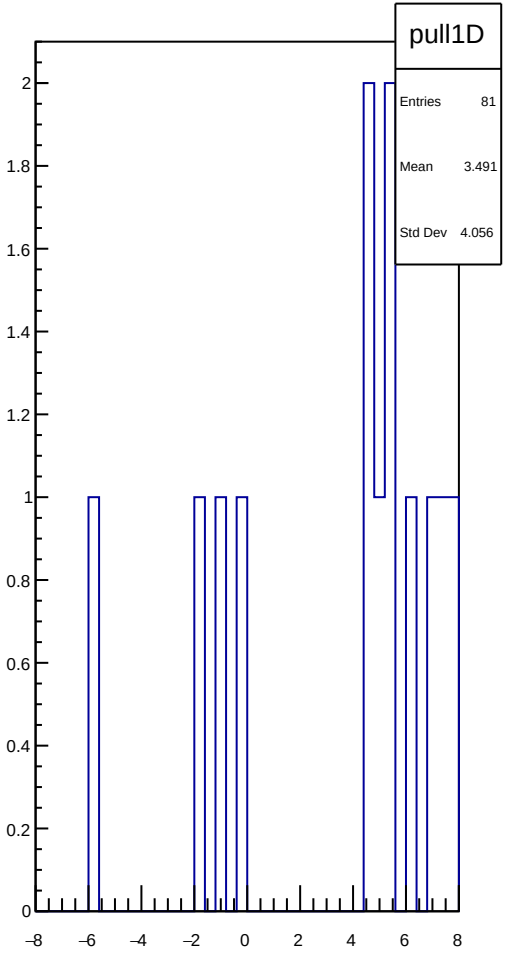

yield_bpm0l06WS_rms vs run
χ² / ndf 3352 / 80
p0 218.3 ± 0.1742
280
270
260
250
240
230
220
210
200

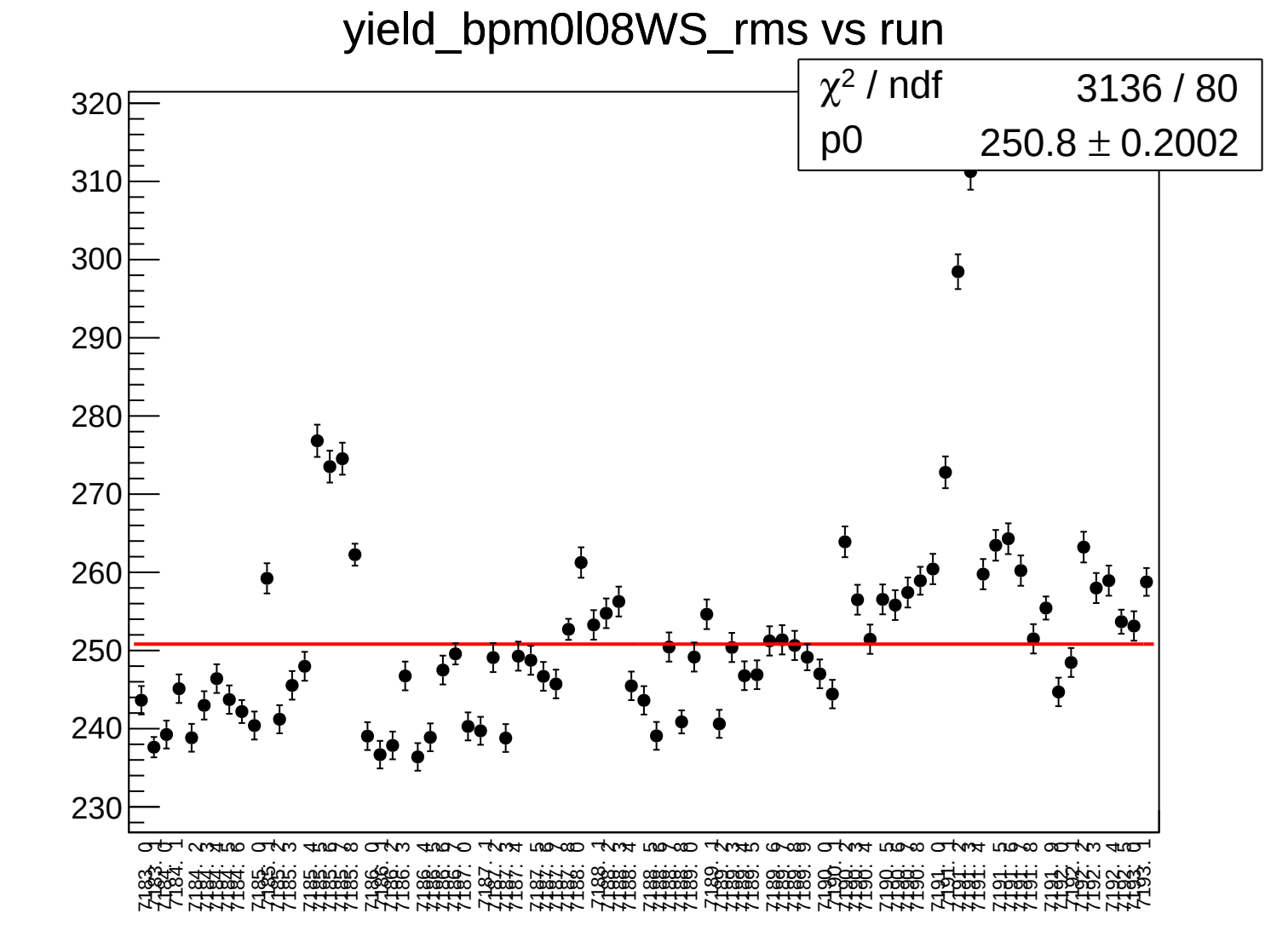

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 1.415e+04 / 80
p0 1.435e+05 ± 0.2775
143.56
143.54
143.52
143.5
143.48
143.46
143.44
143.42
143.4
pull
Entries 81
Mean 608.1
Std Dev 589.4
30
20
10
0
−10
−20
−30

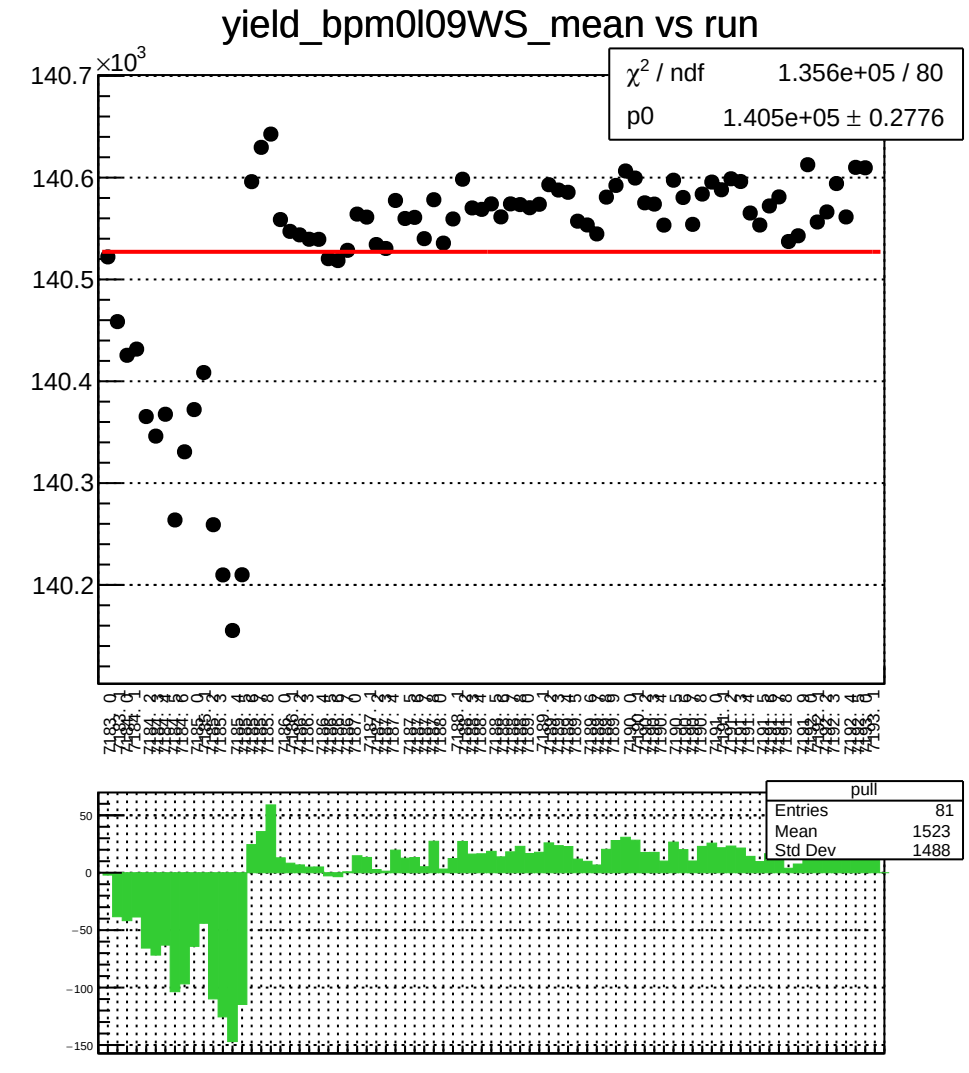

pull1D
Entries 81
Mean −0.4442
Std Dev 4.615
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

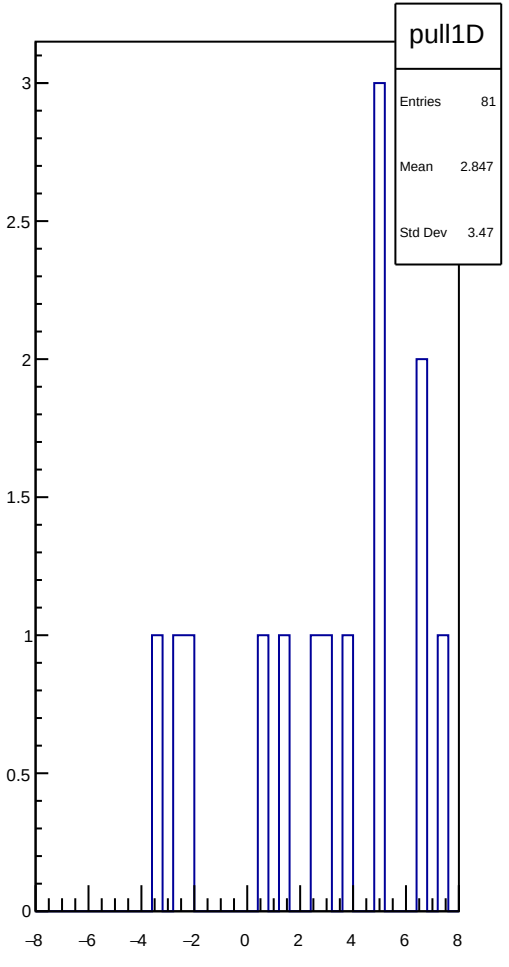

yield_bpm0l07WS_rms vs run
χ² / ndf 3892 / 80
p0 245.8 ± 0.1962
320
300
280
260
240
220

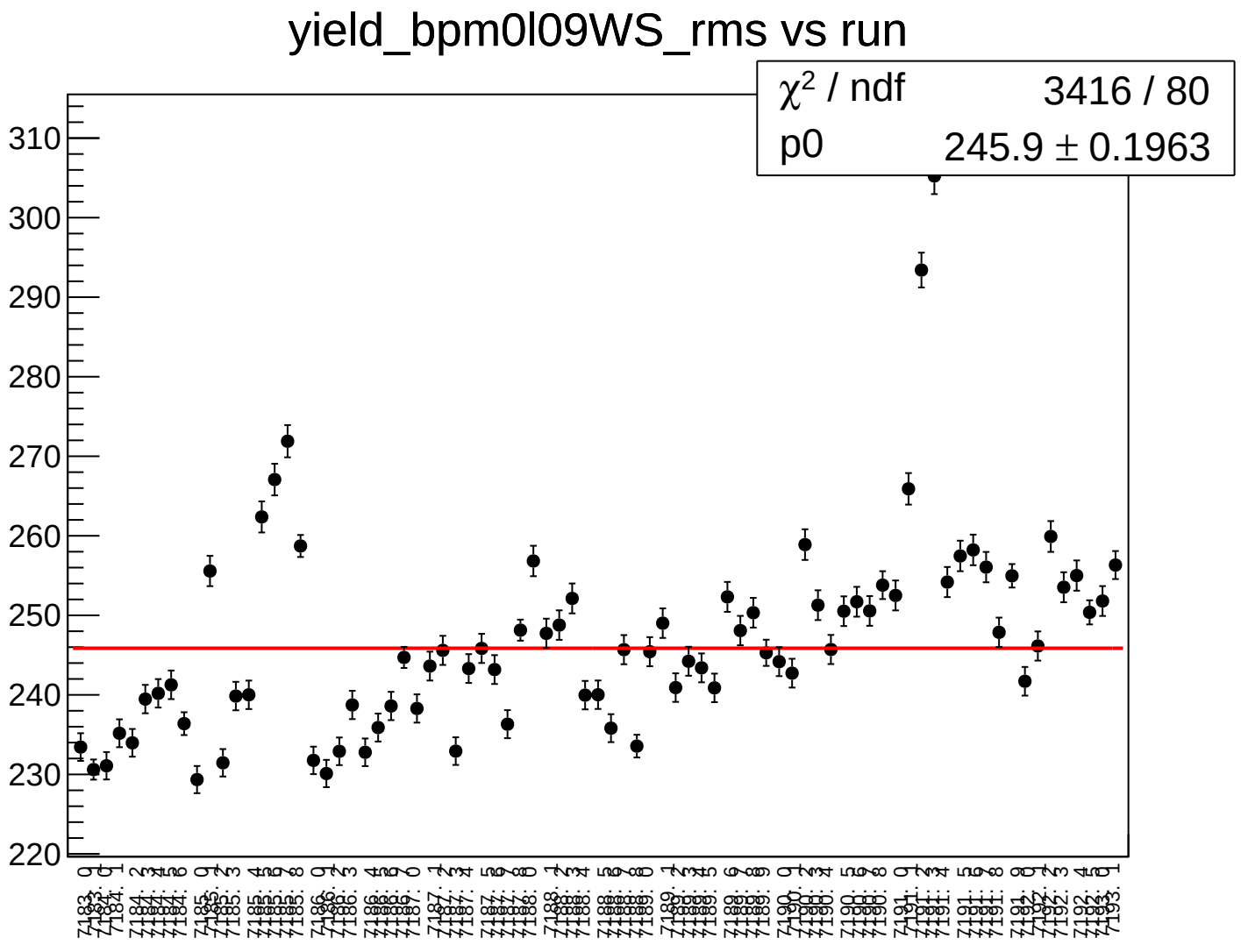

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 1.642e+05 / 80
p0 1.452e+05 ± 0.2831
145.4
145.3
145.2
145.1
145
144.9
144.8
pull
Entries 81
Mean 3045
Std Dev 3010
50
0
−50
−100
−150

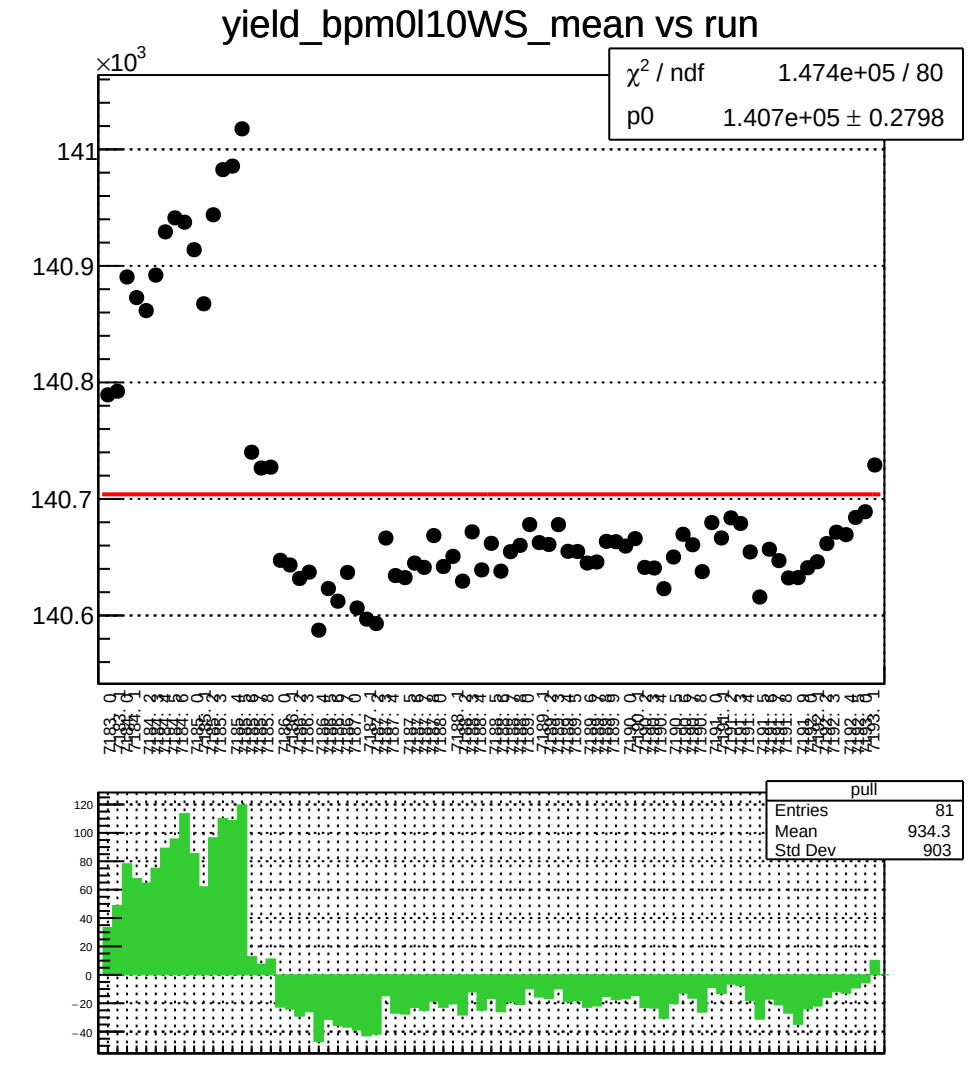

pull1D
Entries 81
Mean 3.491
Std Dev 4.056
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

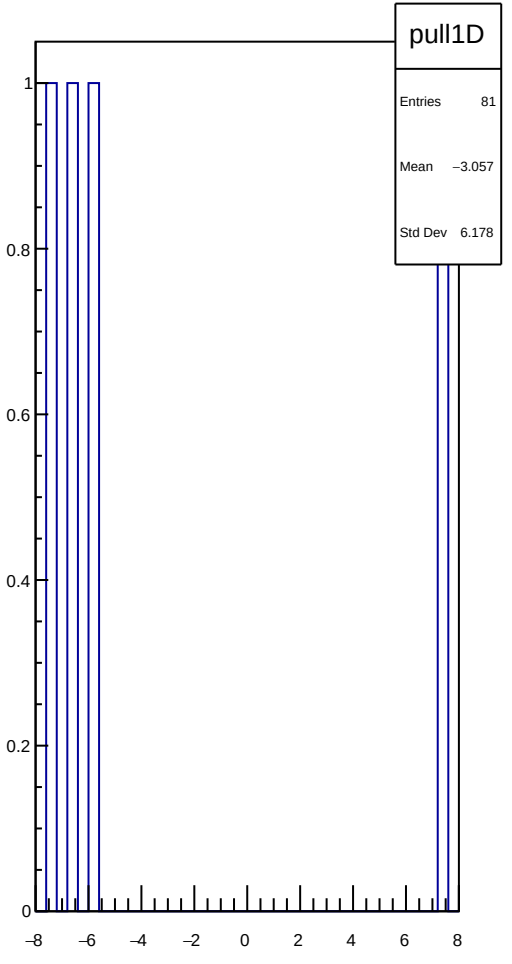

yield_bpm0l08WS_rms vs run
χ² / ndf 3136 / 80
p0 250.8 ± 0.2002
320
310
300
290
280
270
260
250
240
230

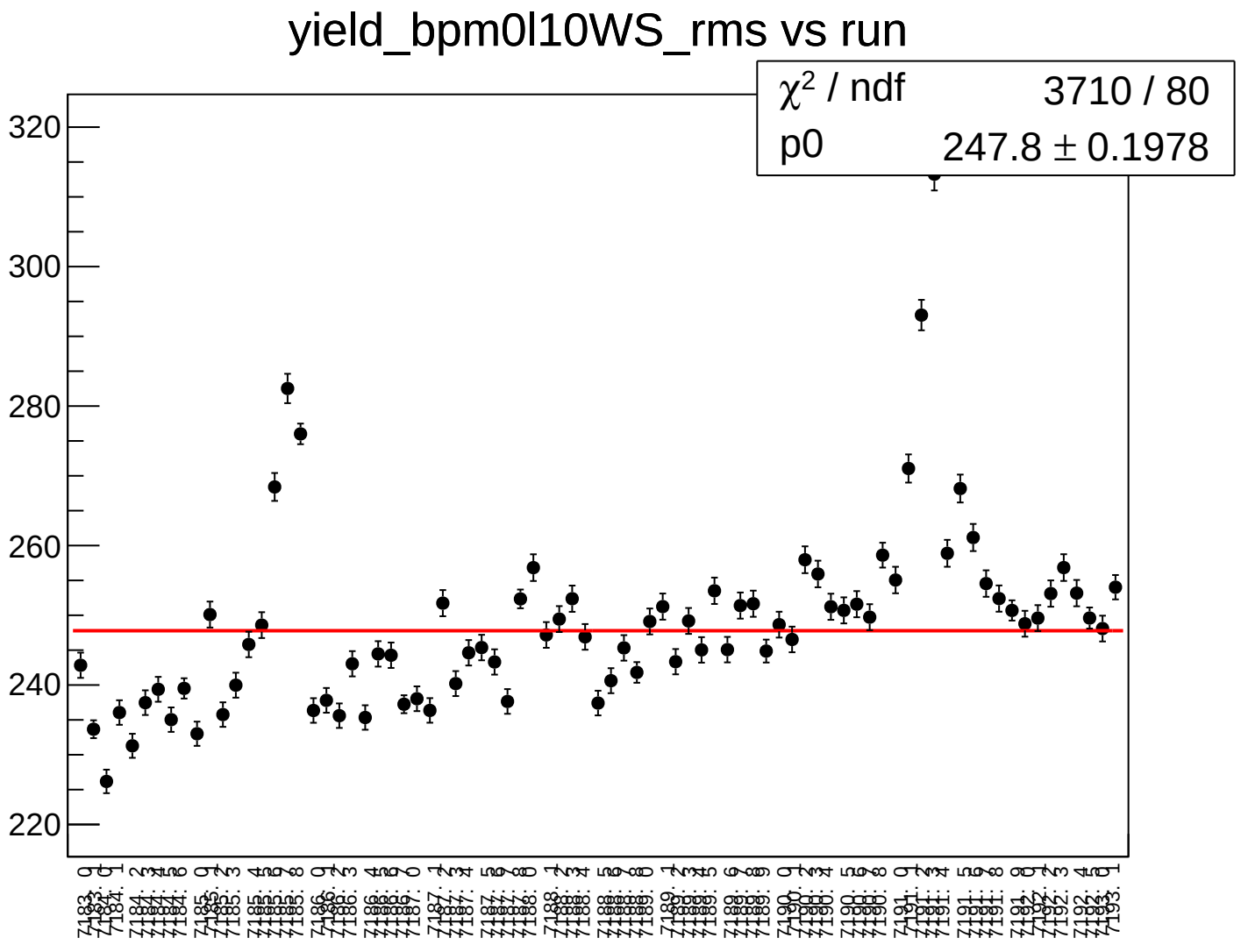

yield_bpm0l09WS_mean vs run
χ² / ndf 1.356e+05 / 80
p0 1.405e+05 ± 0.2776
×10³
140.7
140.6
140.5
140.4
140.3
140.2
pull
Entries 81
Mean 1523
Std Dev 1488
50
0
−50
−100
−150

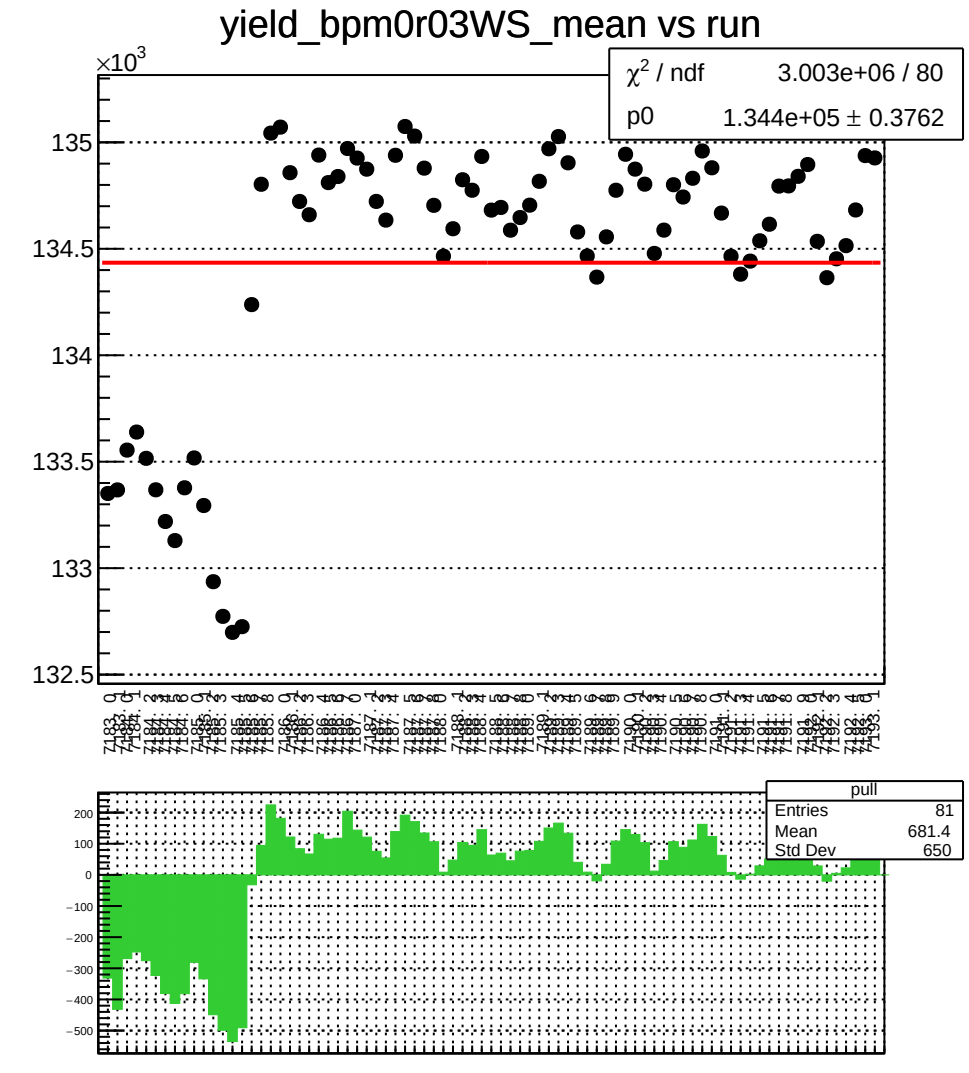

pull1D
Entries 81
Mean 2.847
Std Dev 3.47
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

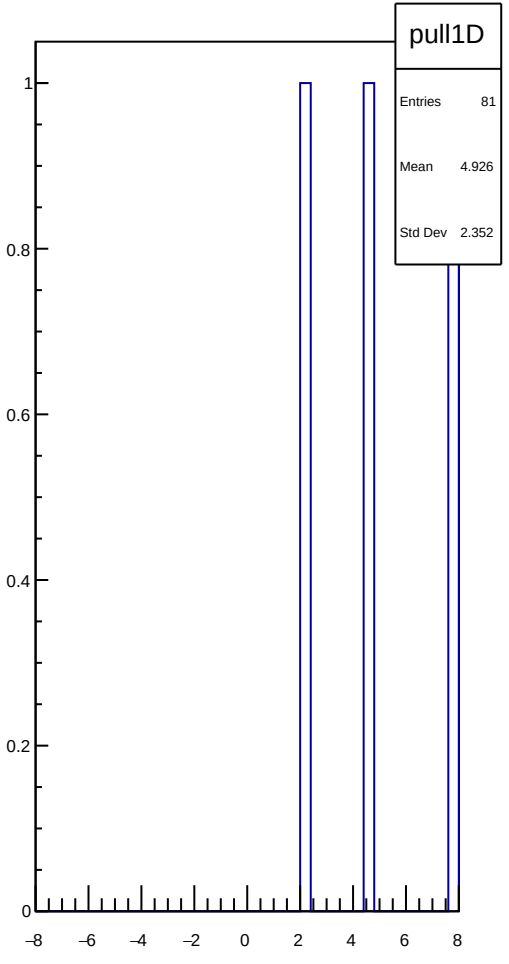

yield_bpm0l09WS_rms vs run
χ² / ndf 3416 / 80
p0 245.9 ± 0.1963
310
300
290
280
270
260
250
240
230
220

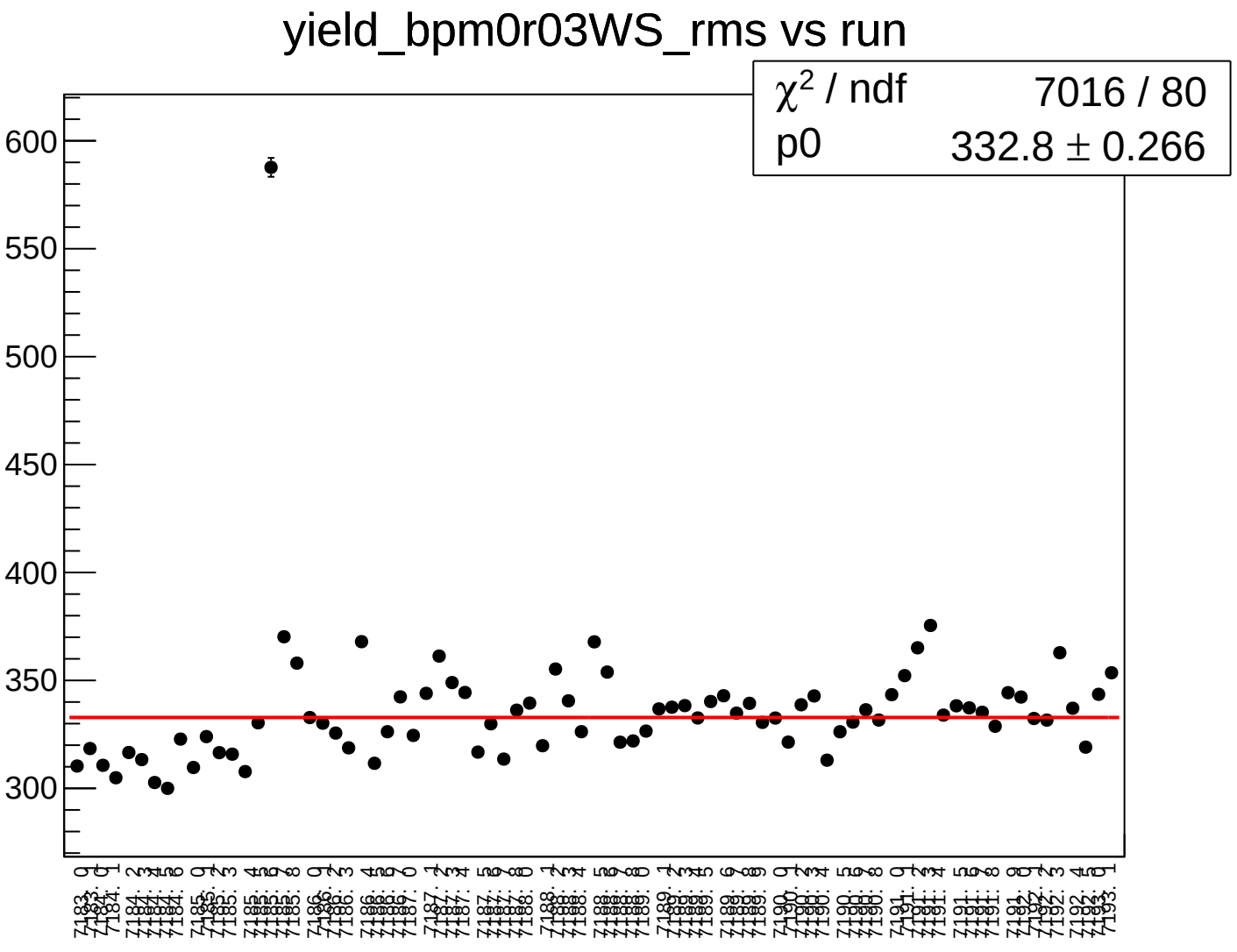

yield_bpm0l10WS_mean vs run
χ² / ndf 1.474e+05 / 80
p0 1.407e+05 ± 0.2798
×10³
141
140.9
140.8
140.7
140.6
pull
Entries 81
Mean 934.3
Std Dev 903
120
100
80
60
40
20
0
−20
−40

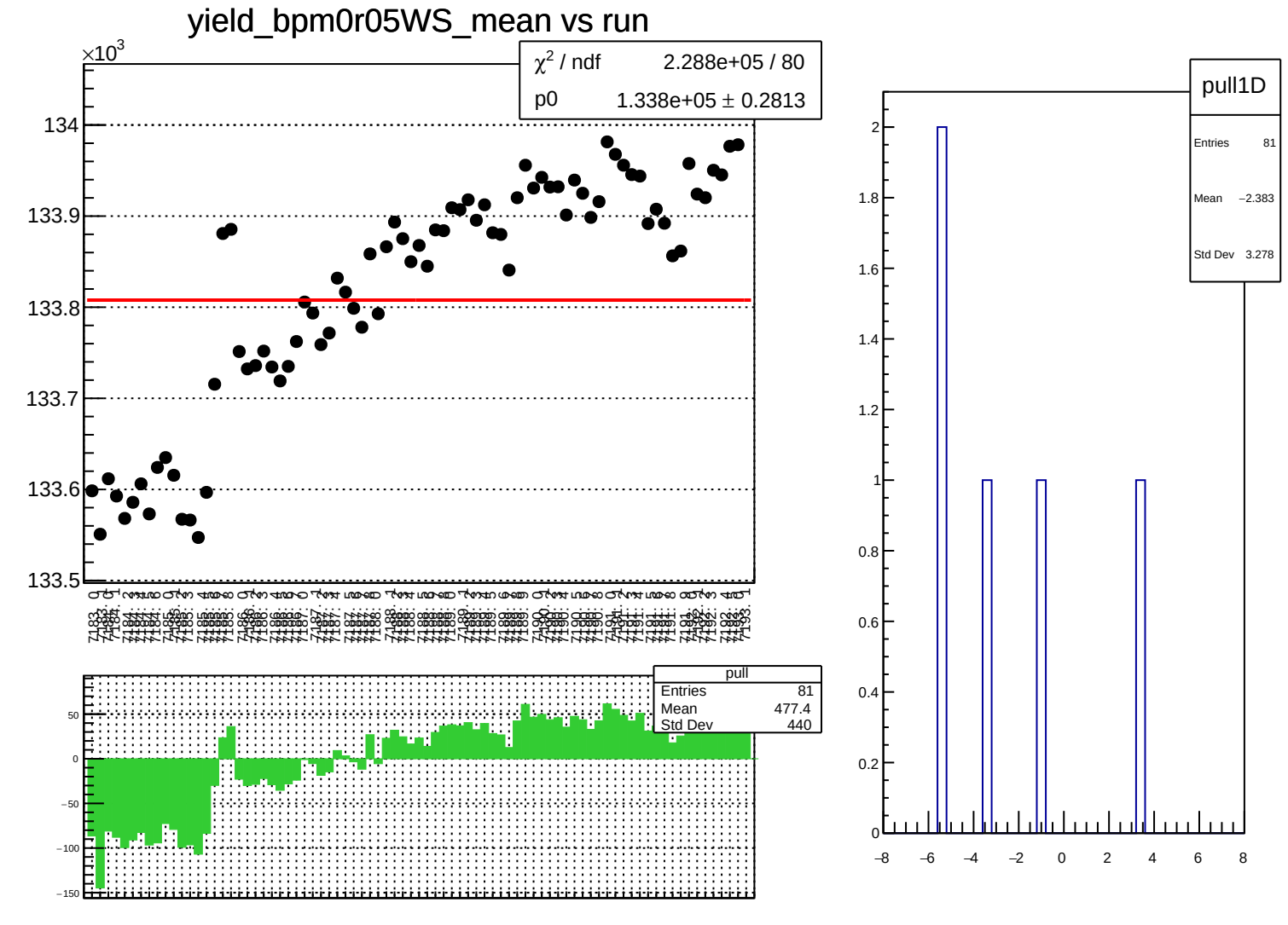

pull1D
Entries 81
Mean −3.057
Std Dev 6.178
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

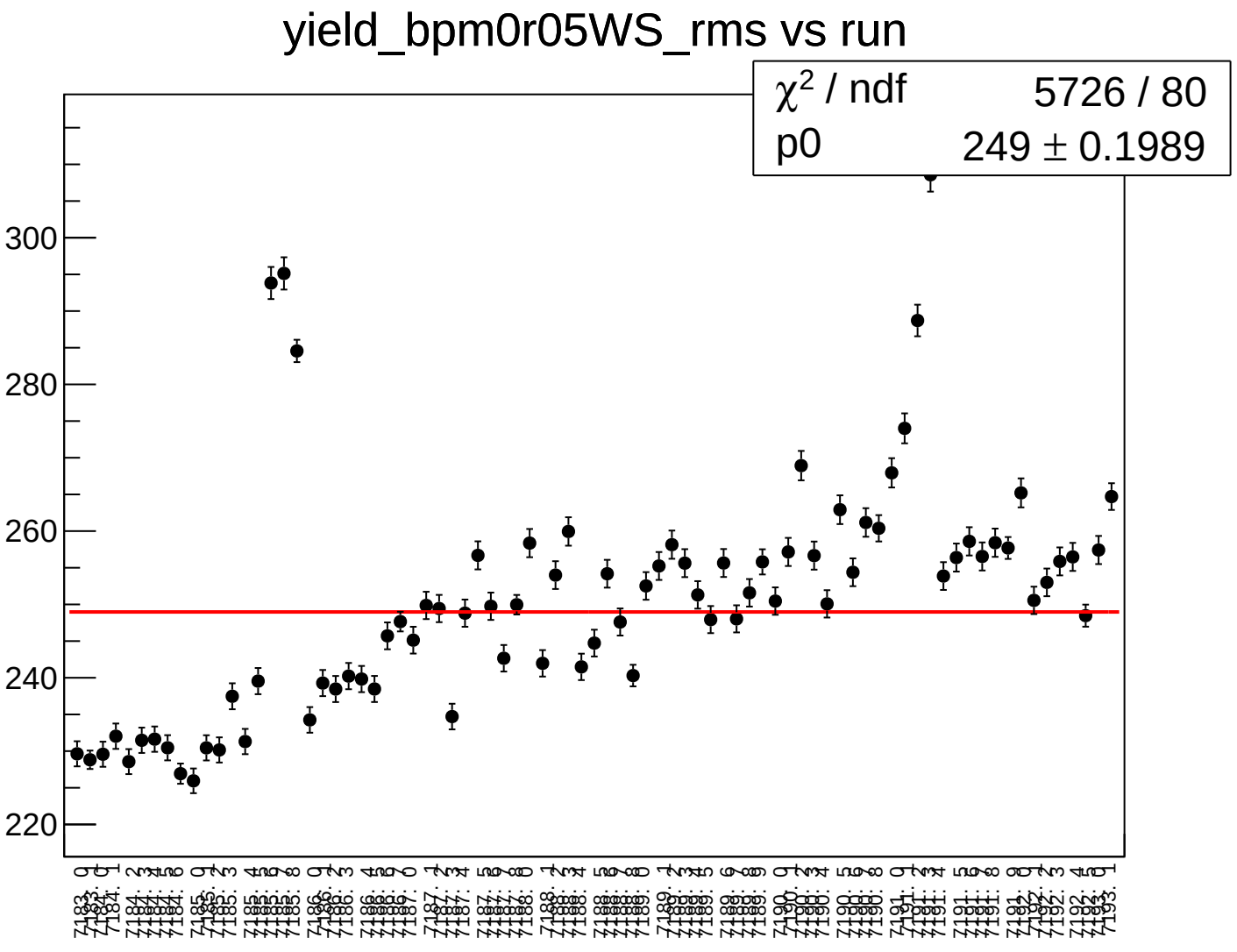

yield_bpm0l10WS_rms vs run
χ² / ndf 3710 / 80
p0 247.8 ± 0.1978
320
300
280
260
240
220

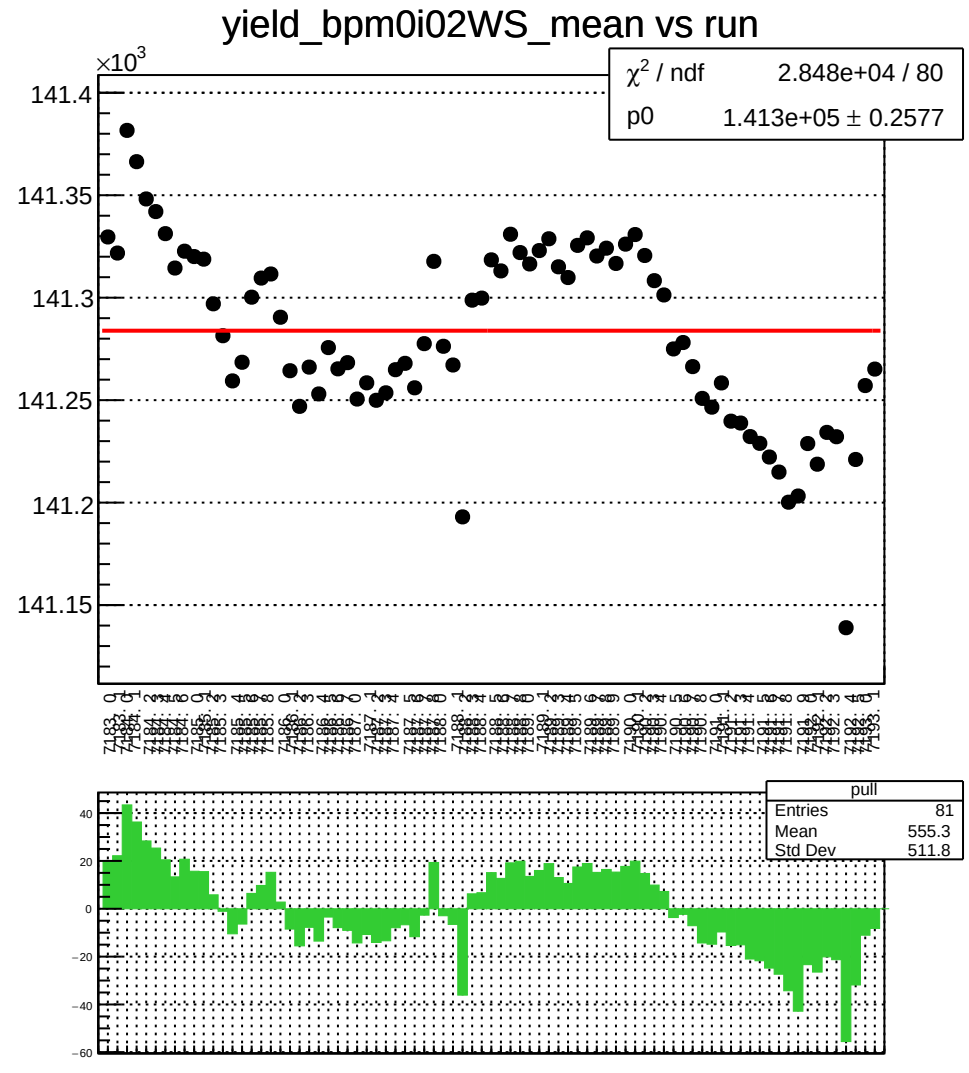

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 3.003e+06 / 80
p0 1.344e+05 ± 0.3762
135
134.5
134
133.5
133
132.5
pull
Entries 81
Mean 681.4
Std Dev 650
200
100
0
−100
−200
−300
−400
−500

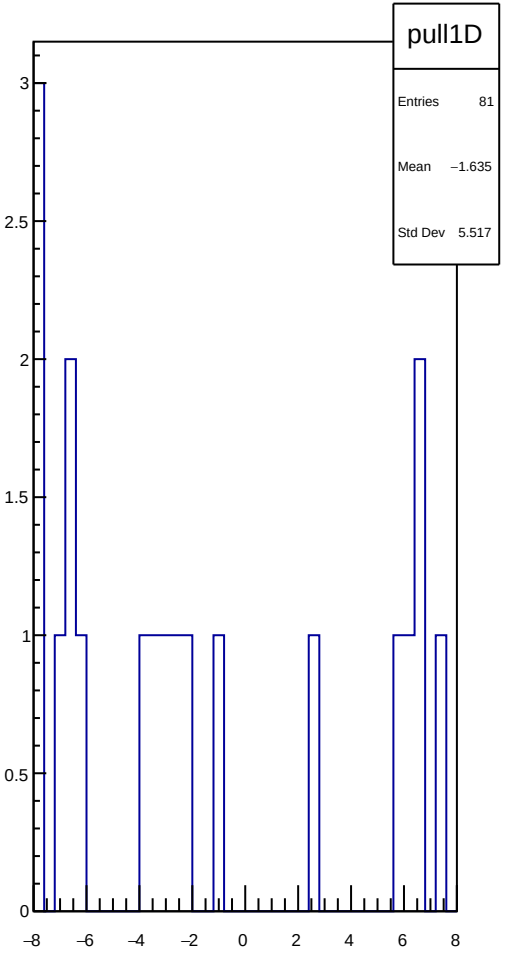

pull1D
Entries 81
Mean 4.926
Std Dev 2.352
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

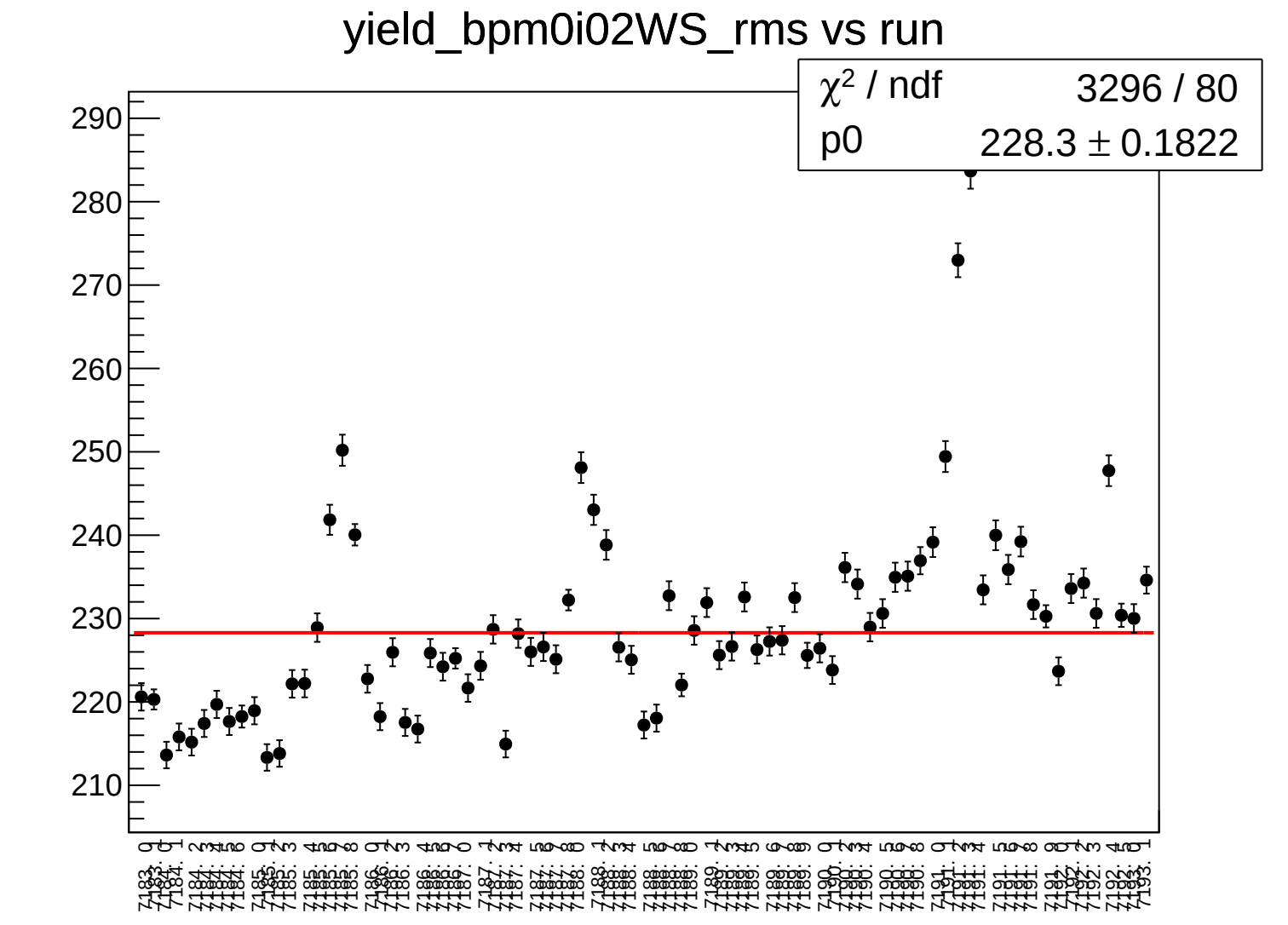

yield_bpm0r03WS_rms vs run
χ^2 / ndf 7016 / 80
p0 332.8 ± 0.266
600
550
500
450
400
350
300

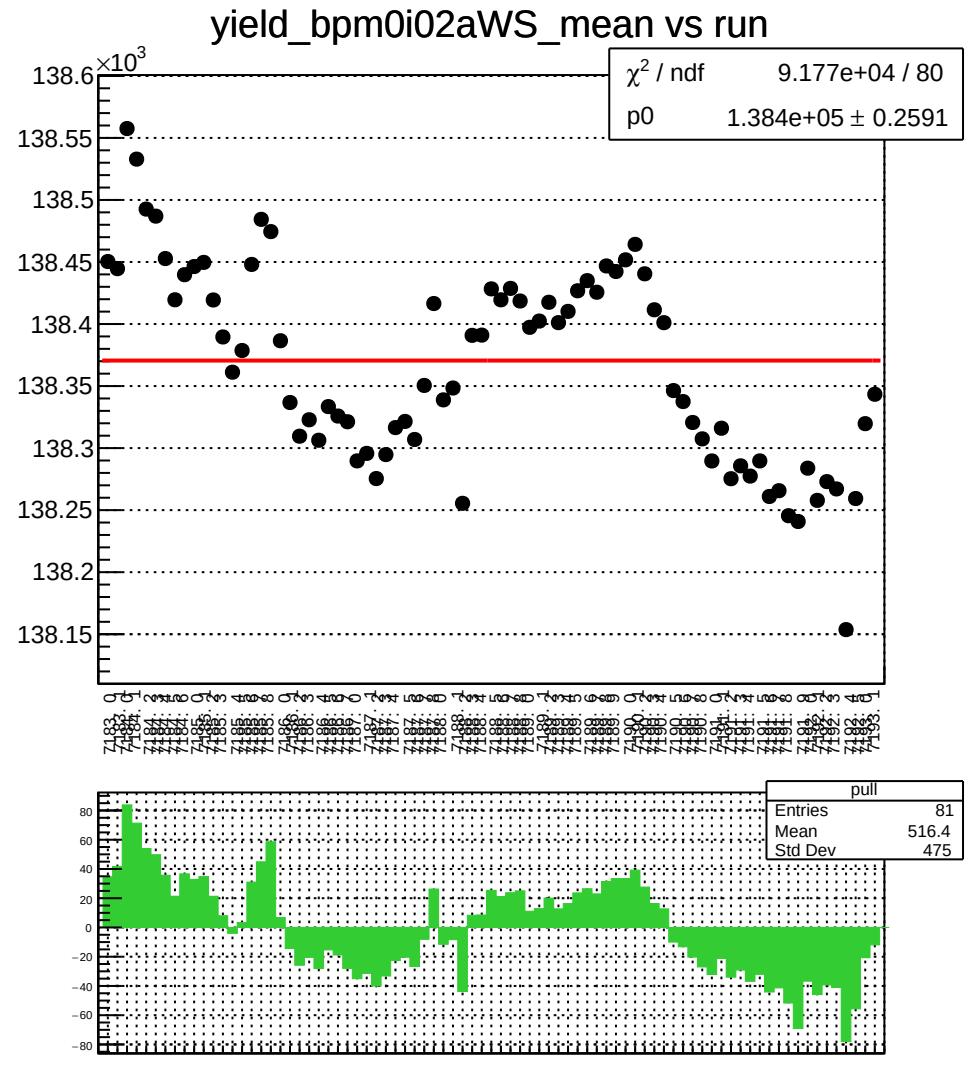

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 2.288e+05 / 80
p0 1.338e+05 ± 0.2813
134
133.9
133.8
133.7
133.6
133.5
pull
Entries 81
Mean 477.4
Std Dev 440
50
0
−50
−100
−150
pull1D
Entries 81
Mean −2.383
Std Dev 3.278
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

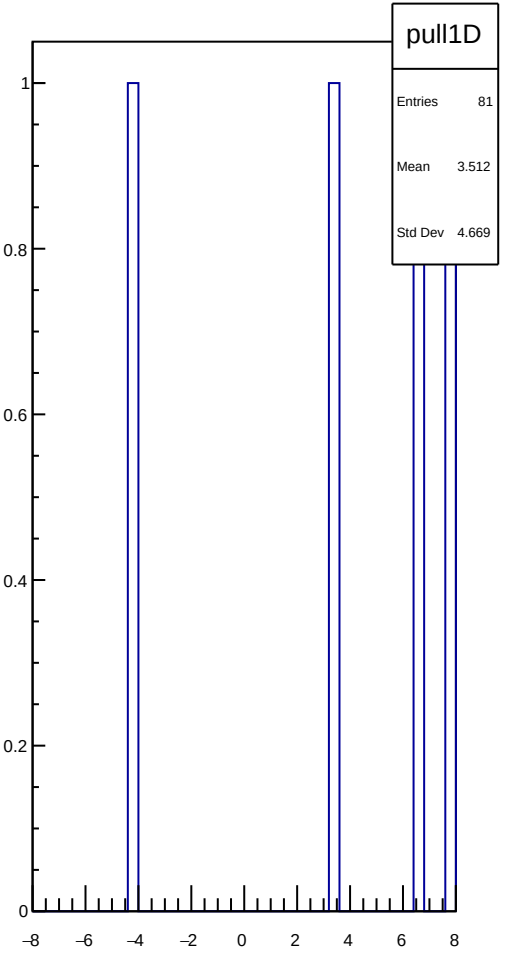

yield_bpm0r05WS_rms vs run
χ² / ndf 5726 / 80
p0 249 ± 0.1989
300
280
260
240
220

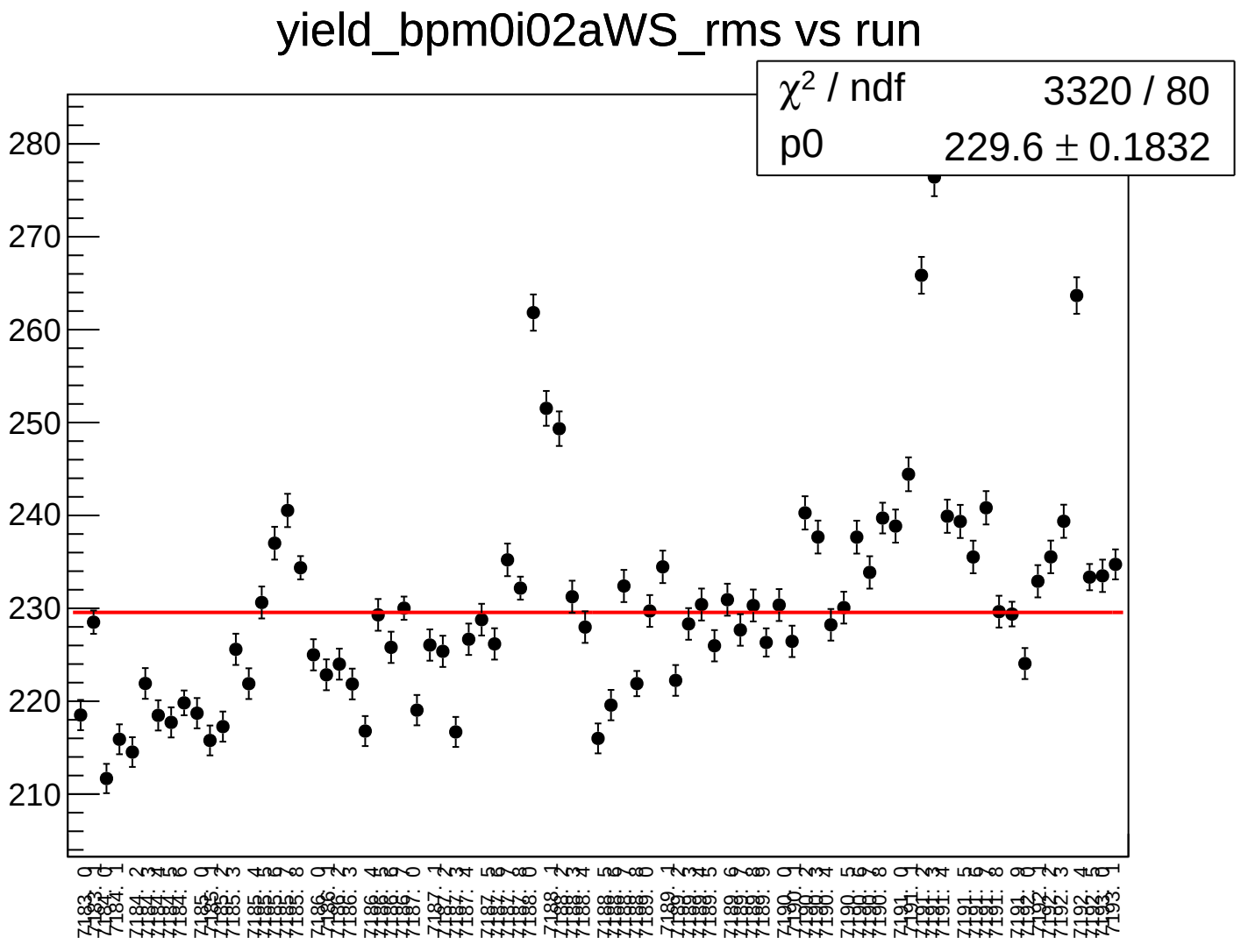

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 2.848e+04 / 80
p0 1.413e+05 ± 0.2577
141.4
141.35
141.3
141.25
141.2
141.15
pull
Entries 81
Mean 555.3
Std Dev 511.8
40
20
0
−20
−40
−60

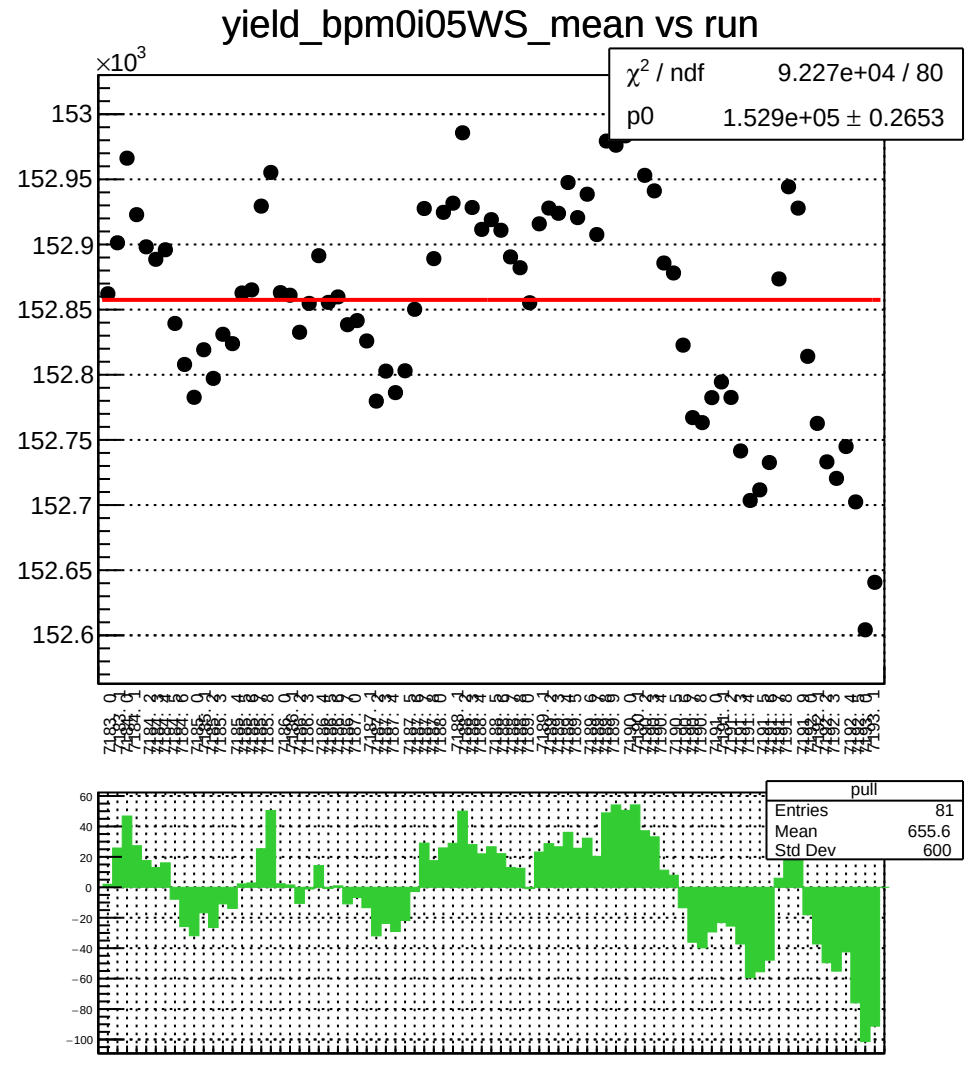

pull1D
Entries 81
Mean −1.635
Std Dev 5.517
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

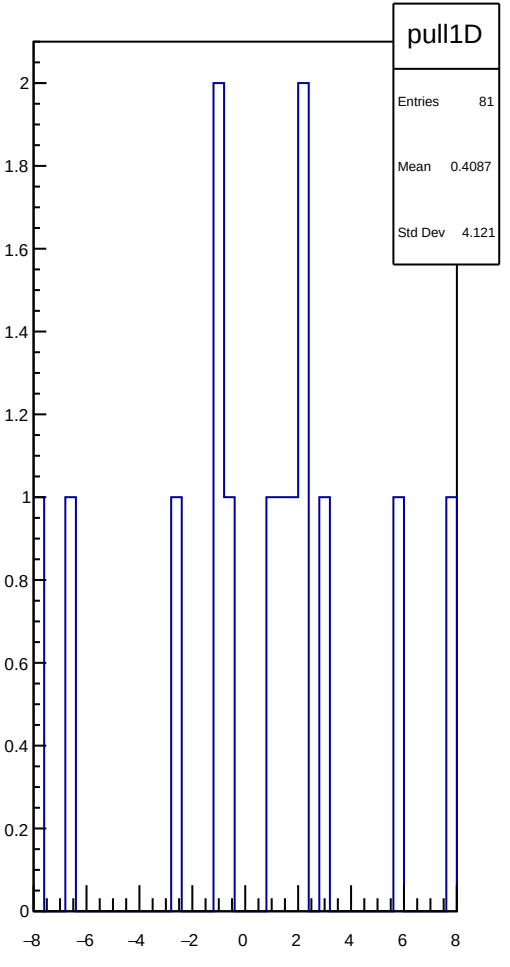

yield_bpm0i02WS_rms vs run
χ² / ndf 3296 / 80
p0 228.3 ± 0.1822
290
280
270
260
250
240
230
220
210

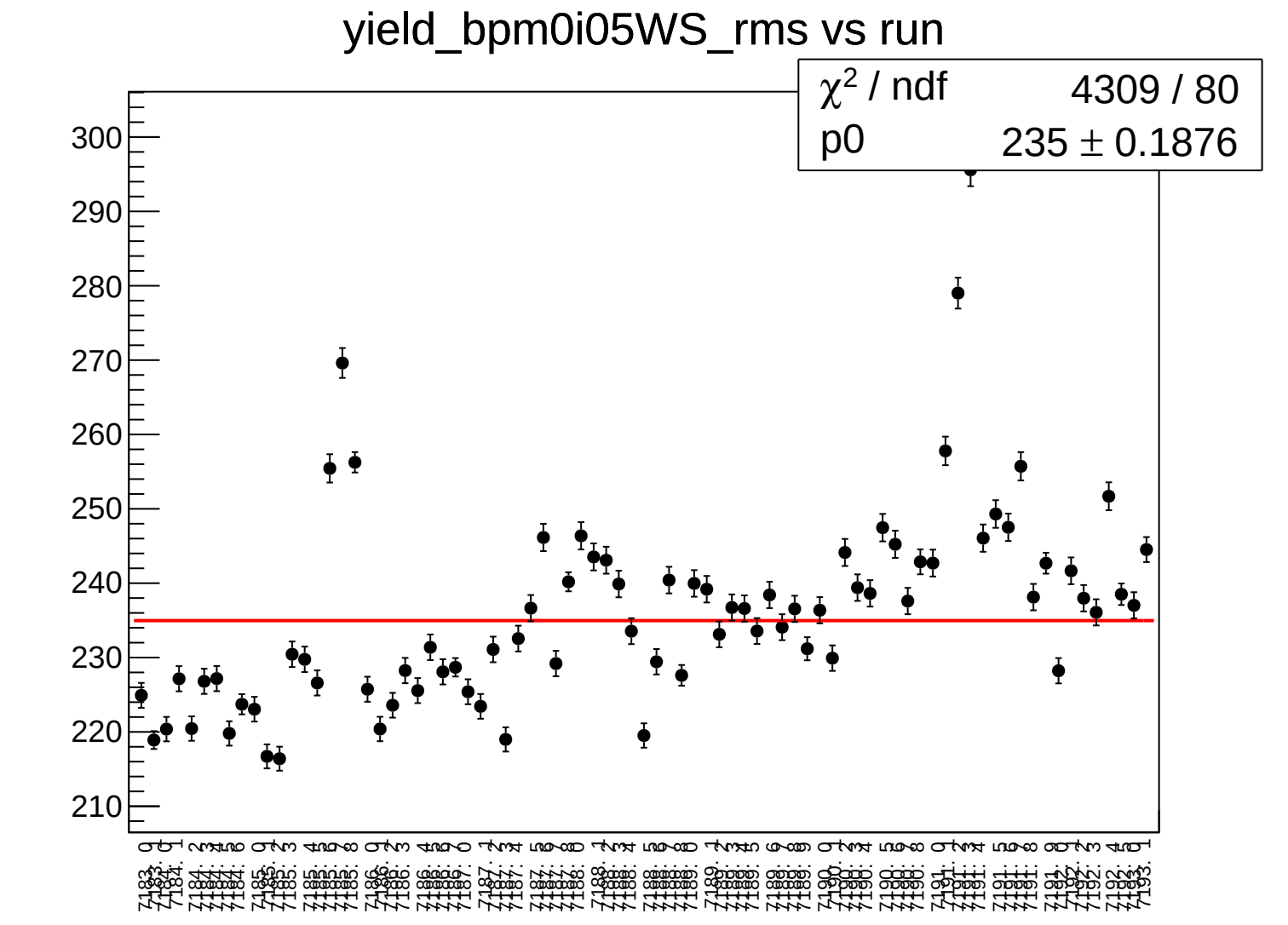

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 9.177e+04 / 80
p0 1.384e+05 ± 0.2591
138.6
138.55
138.5
138.45
138.4
138.35
138.3
138.25
138.2
138.15
pull
Entries 81
Mean 516.4
Std Dev 475
80
60
40
20
0
−20
−40
−60
−80

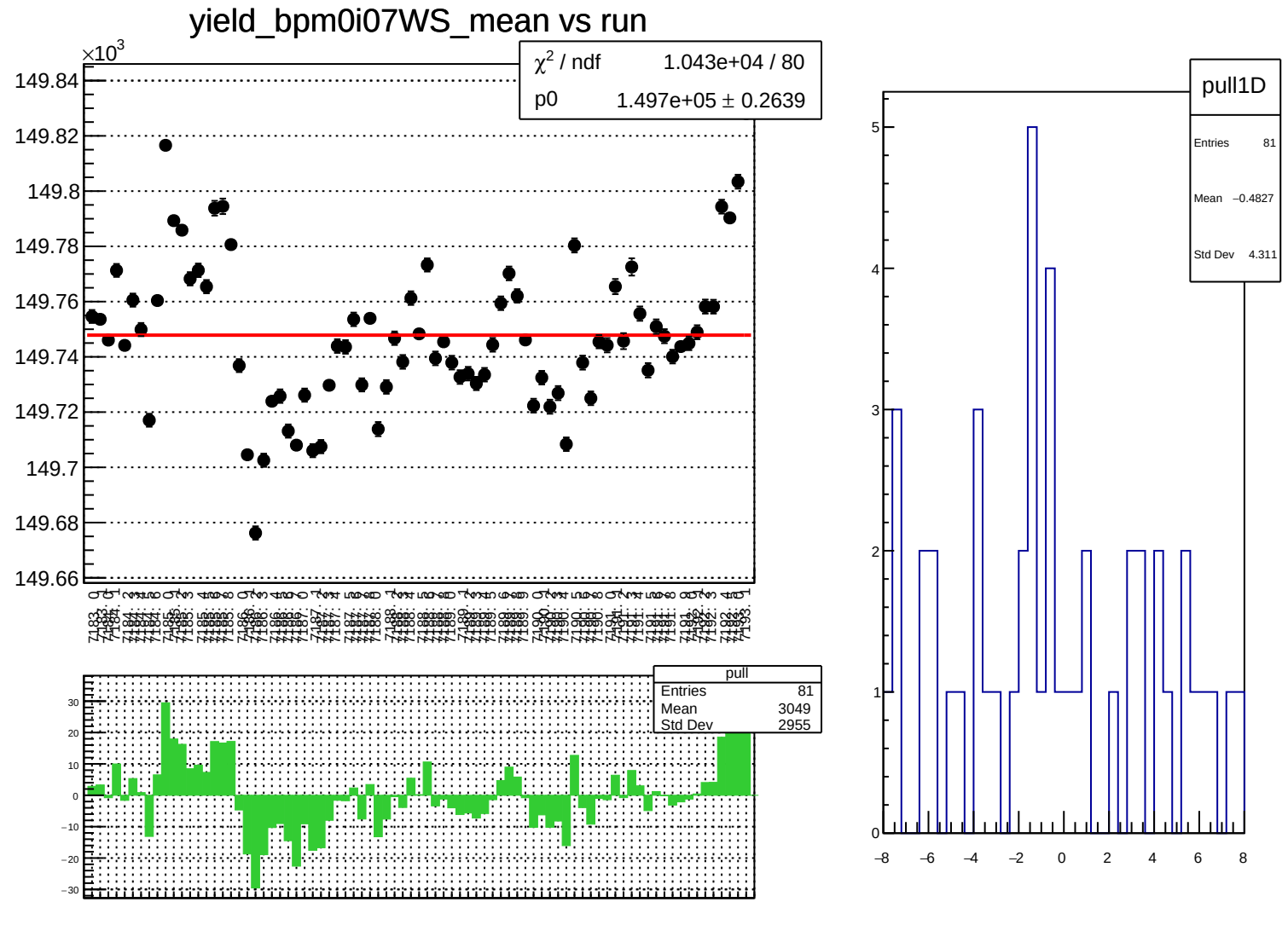

pull1D
Entries 81
Mean 3.512
Std Dev 4.669
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

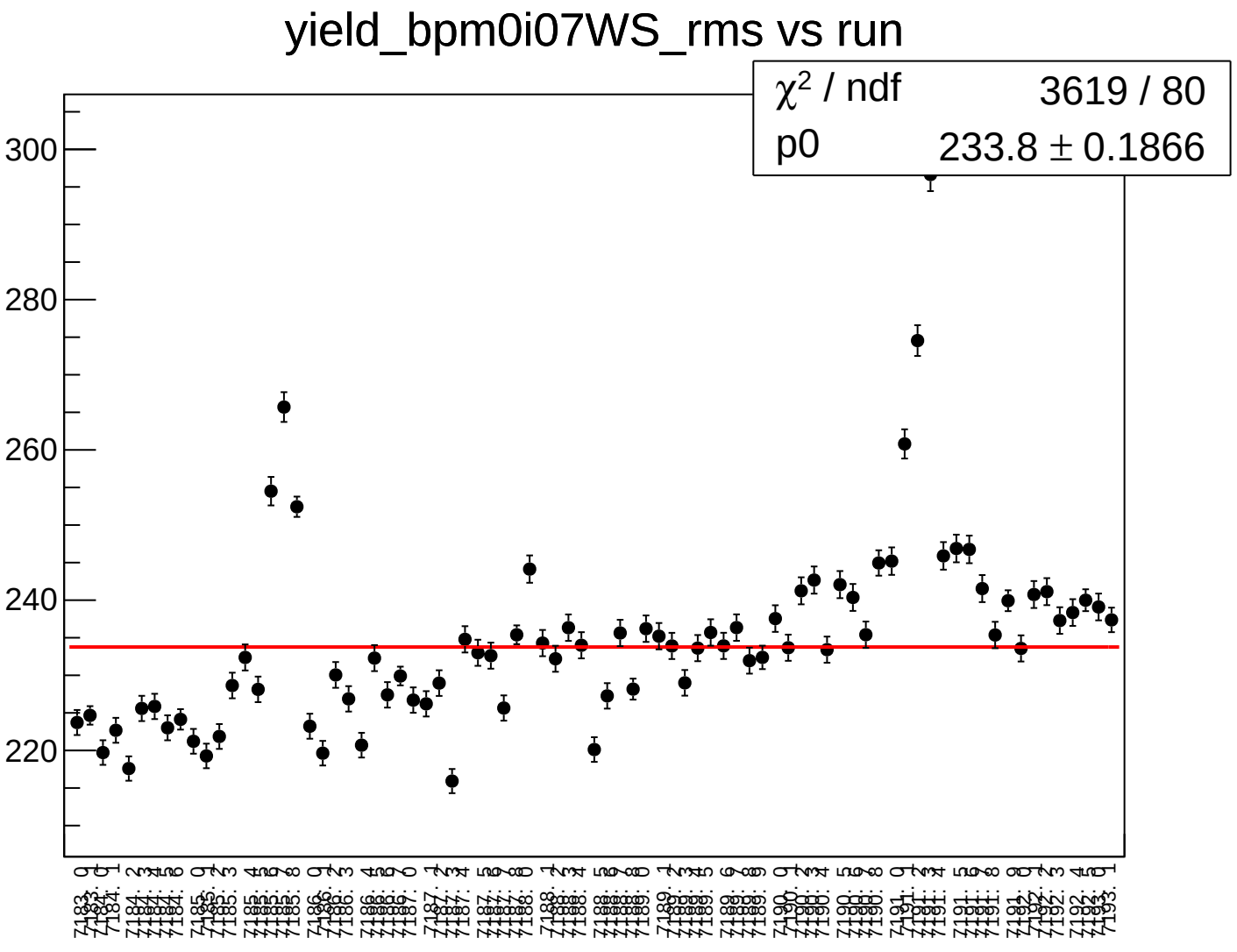

yield_bpm0i02aWS_rms vs run
χ² / ndf 3320 / 80
p0 229.6 ± 0.1832
280
270
260
250
240
230
220
210

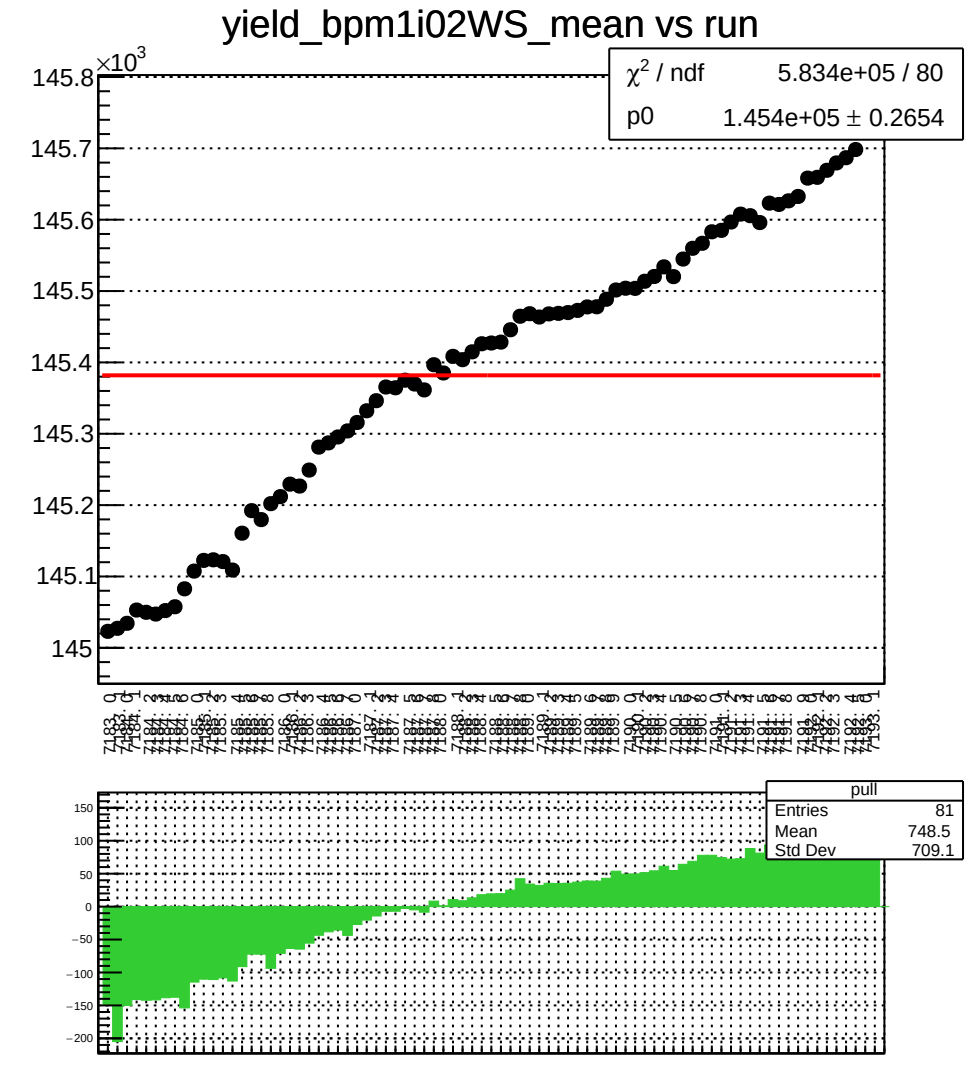

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 9.227e+04 / 80
p0 1.529e+05 ± 0.2653
153
152.95
152.9
152.85
152.8
152.75
152.7
152.65
152.6
pull
Entries 81
Mean 655.6
Std Dev 600
60
40
20
0
−20
−40
−60
−80
−100

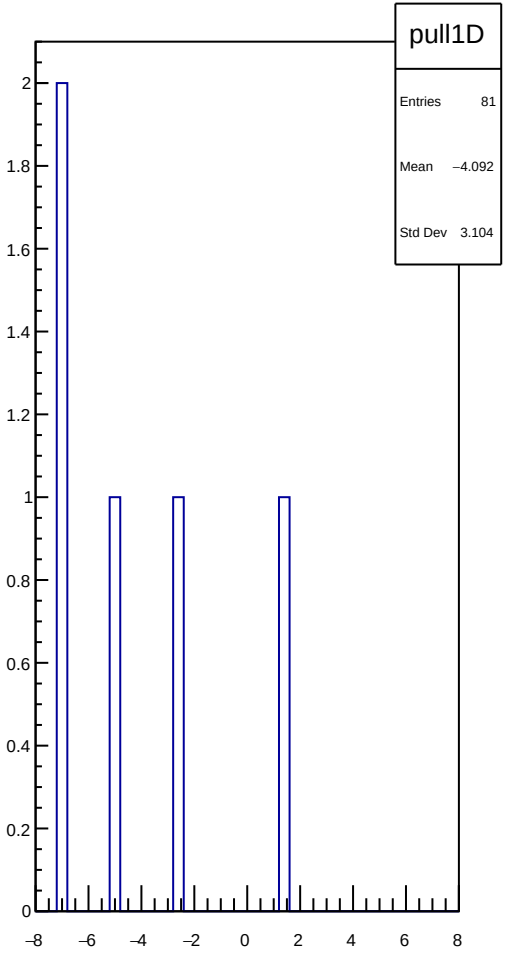

pull1D
Entries 81
Mean 0.4087
Std Dev 4.121
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

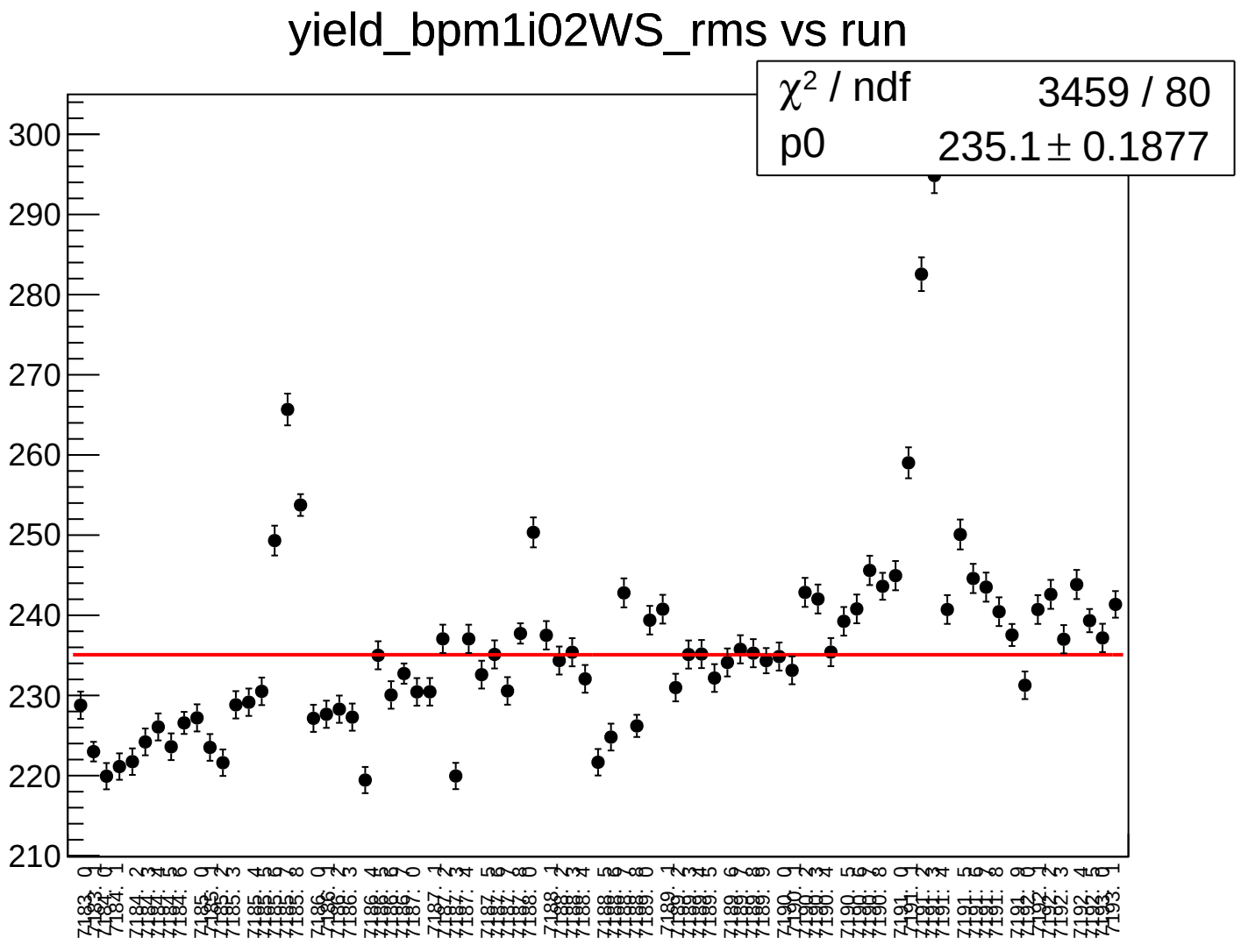

yield_bpm0i05WS_rms vs run
χ² / ndf 4309 / 80
p0 235 ± 0.1876
300
290
280
270
260
250
240
230
220
210

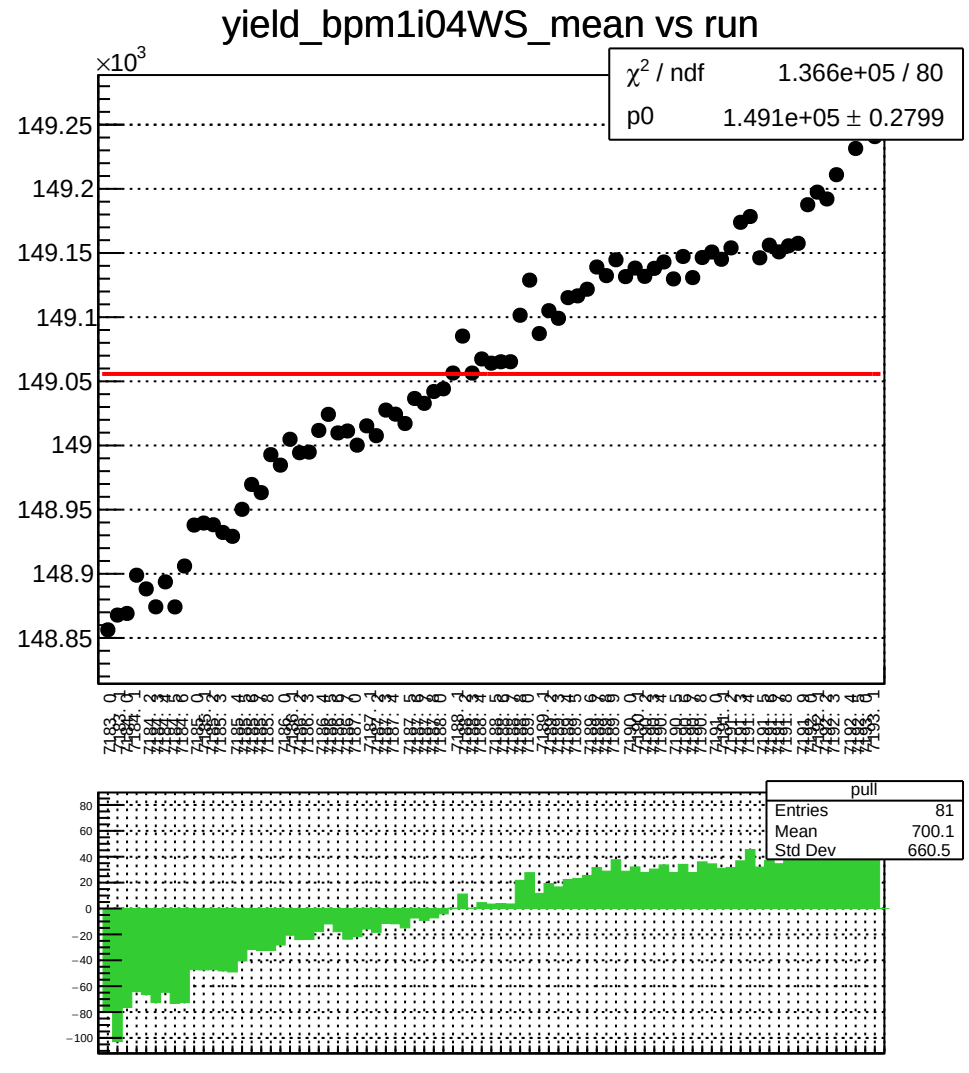

yield_bpm0i07WS_mean vs run
×10^3
χ^2 / ndf 1.043e+04 / 80
p0 1.497e+05 ± 0.2639
149.84
149.82
149.8
149.78
149.76
149.74
149.72
149.7
149.68
149.66
pull
Entries 81
Mean 3049
Std Dev 2955
30
20
10
0
−10
−20
−30
pull1D
Entries 81
Mean −0.4827
Std Dev 4.311
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

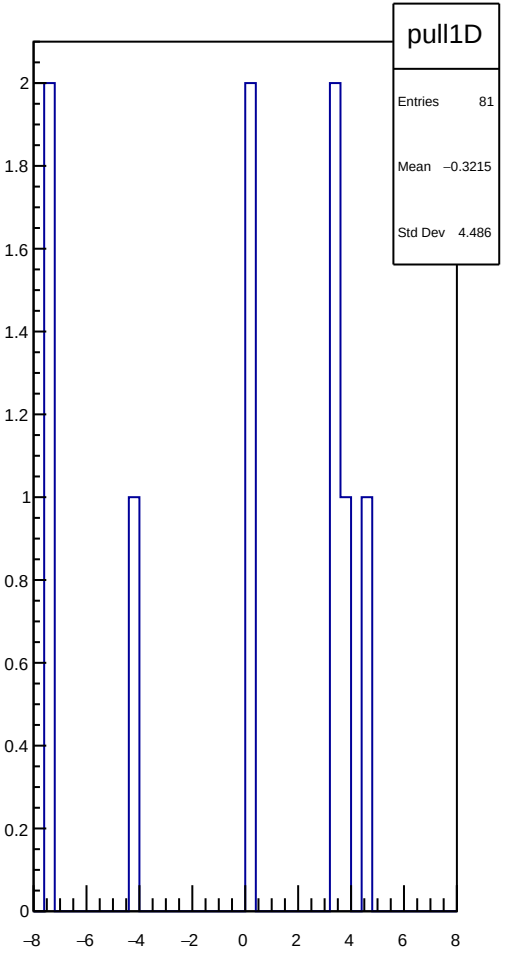

yield_bpm0i07WS_rms vs run
χ² / ndf 3619 / 80
p0 233.8 ± 0.1866
300
280
260
240
220

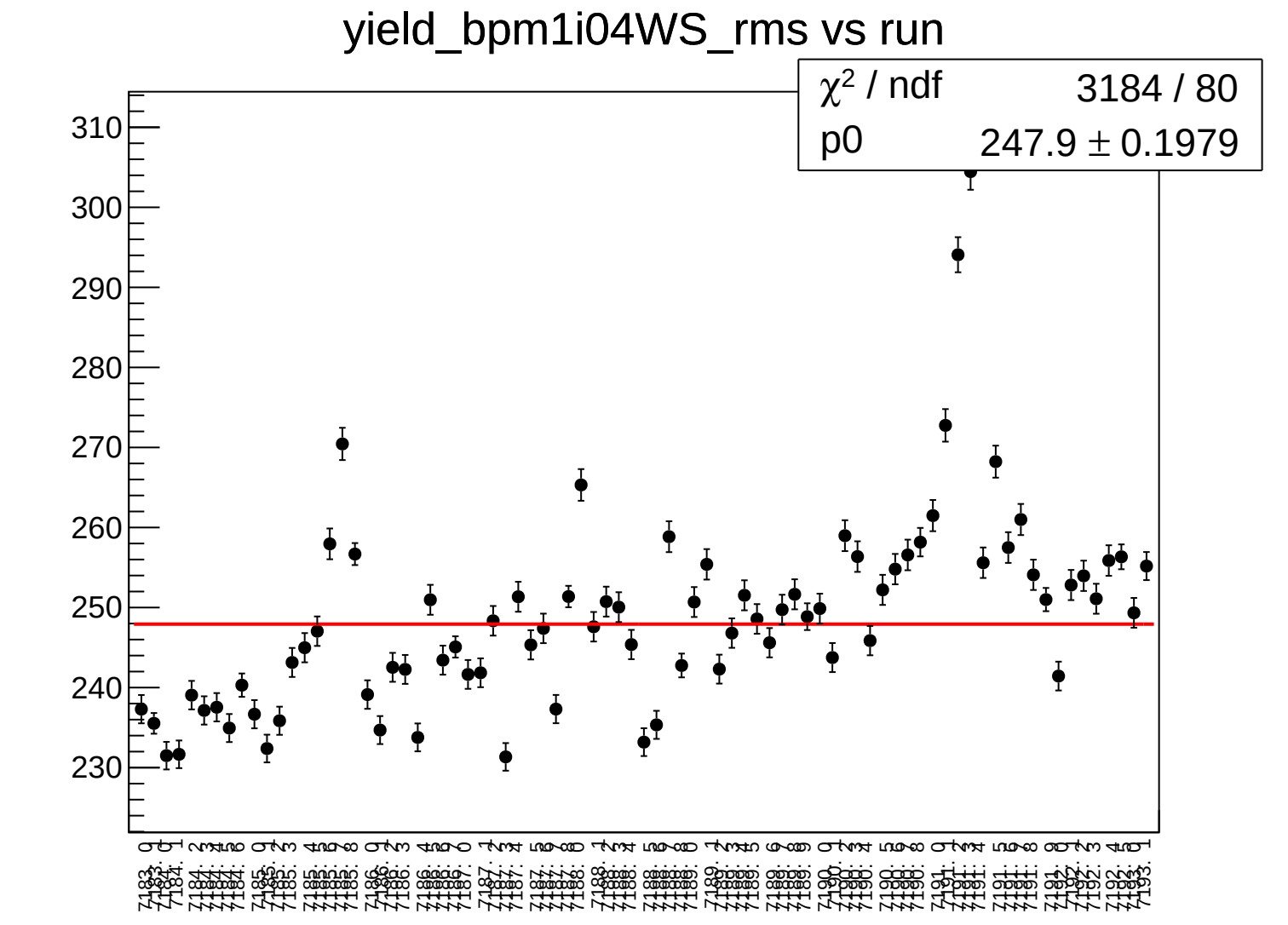

yield_bpm1i02WS_mean vs run
χ² / ndf 5.834e+05 / 80
p0 1.454e+05 ± 0.2654
×10³
145.8
145.7
145.6
145.5
145.4
145.3
145.2
145.1
145
pull
Entries 81
Mean 748.5
Std Dev 709.1
150
100
50
0
−50
−100
−150
−200

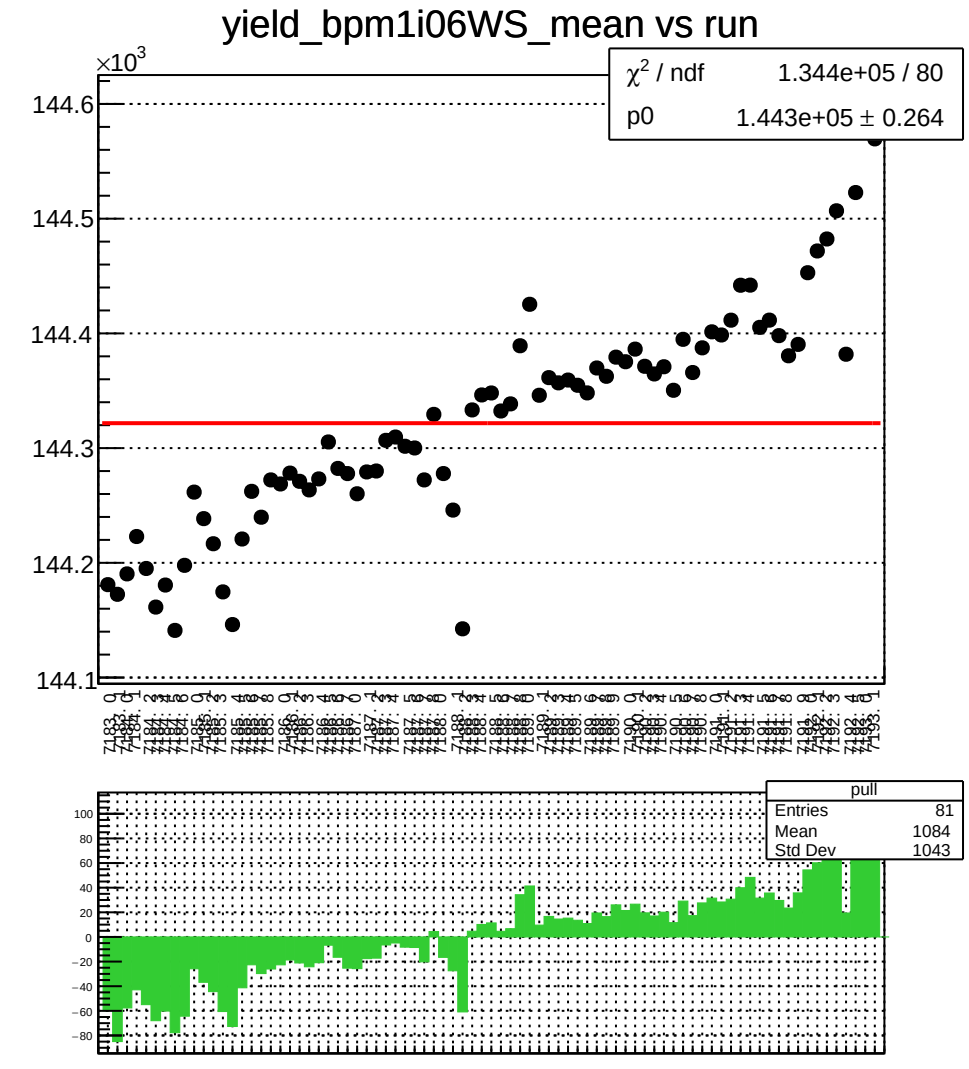

pull1D
Entries 81
Mean −4.092
Std Dev 3.104
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

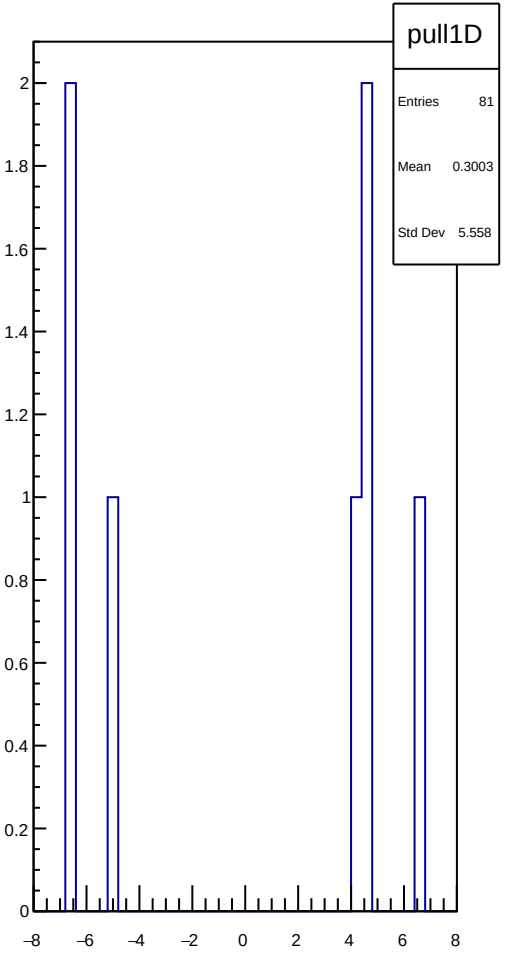

yield_bpm1i02WS_rms vs run
χ² / ndf 3459 / 80
p0 235.1 ± 0.1877
300
290
280
270
260
250
240
230
220
210

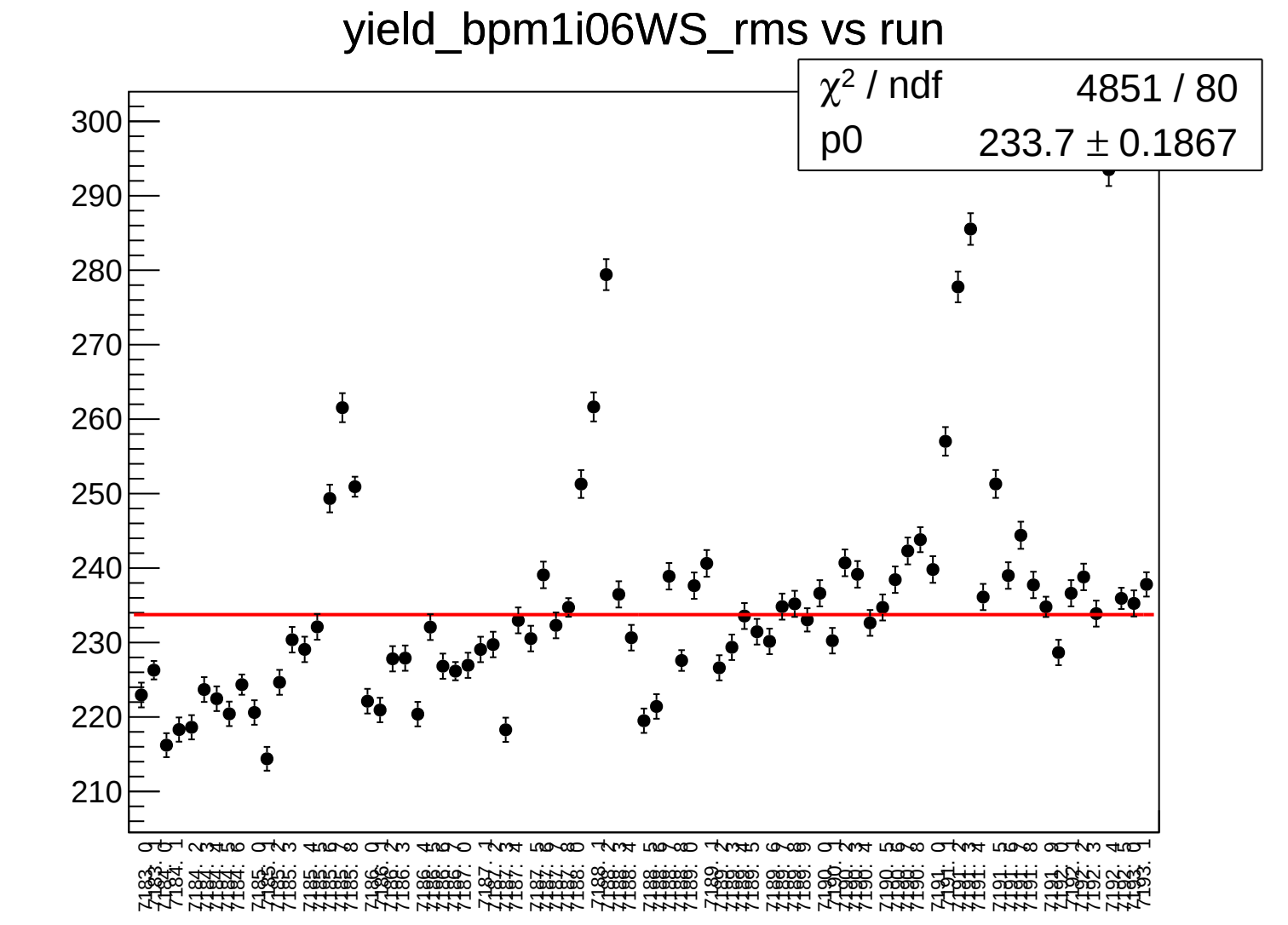

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 1.366e+05 / 80
p0 1.491e+05 ± 0.2799
149.25
149.2
149.15
149.1
149.05
149
148.95
148.9
148.85
pull
Entries 81
Mean 700.1
Std Dev 660.5
80
60
40
20
0
−20
−40
−60
−80
−100

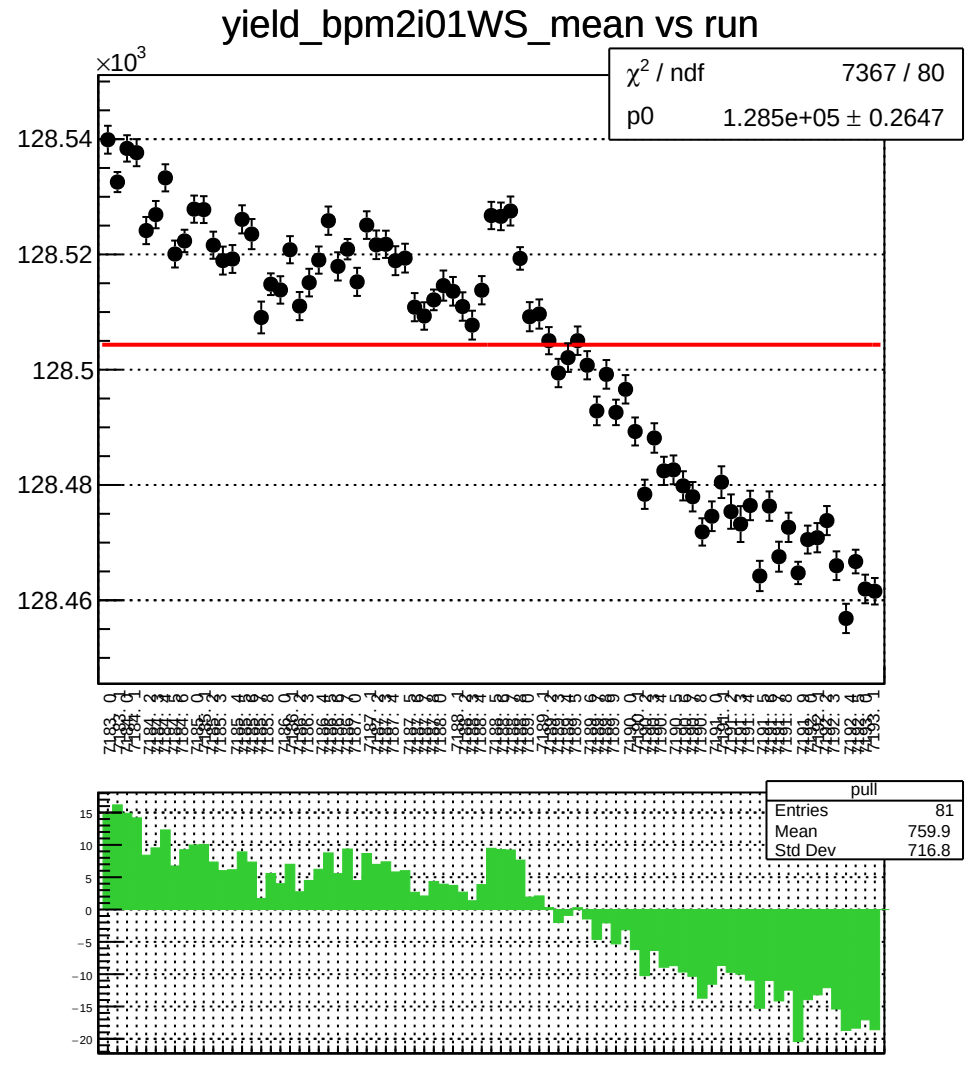

pull1D
Entries 81
Mean −0.3215
Std Dev 4.486
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

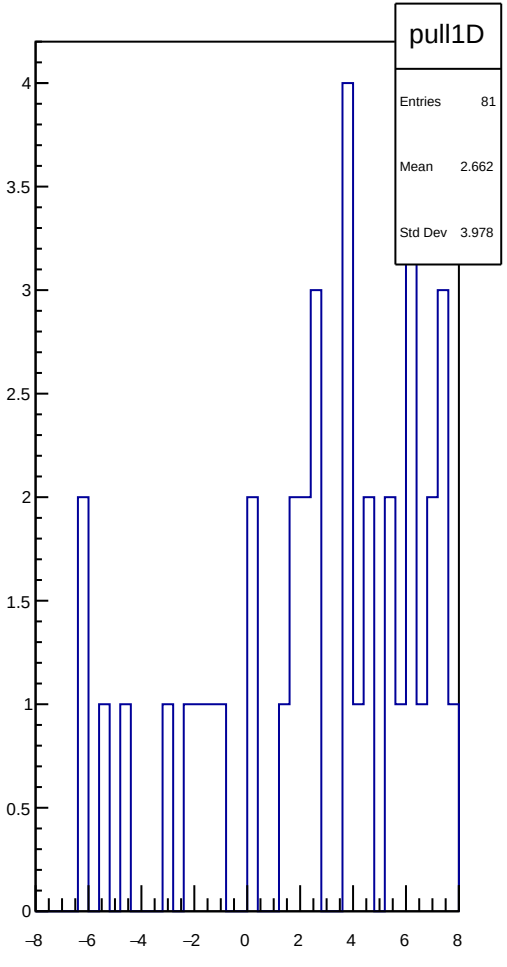

yield_bpm1i04WS_rms vs run
χ² / ndf 3184 / 80
p0 247.9 ± 0.1979
310
300
290
280
270
260
250
240
230

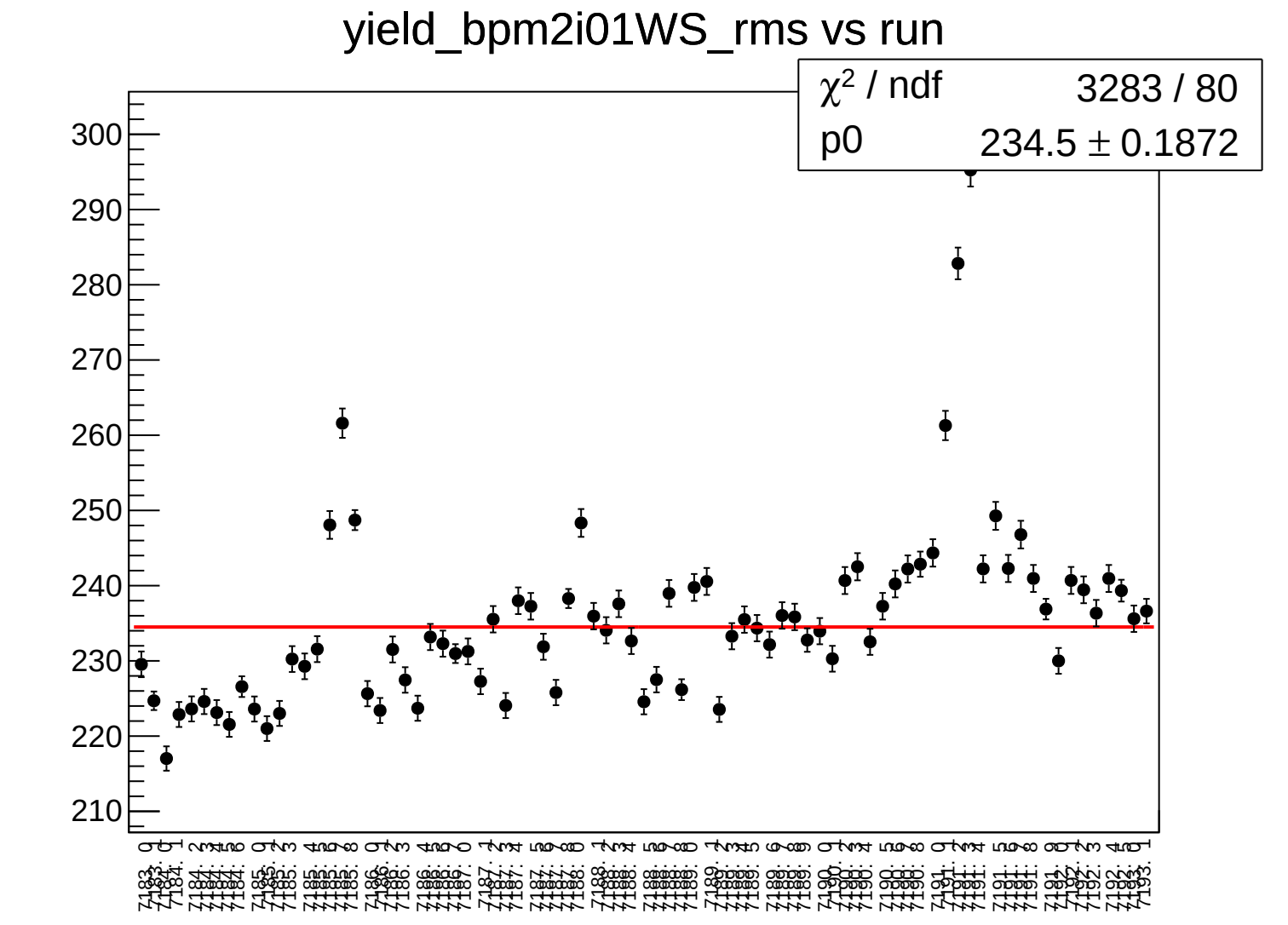

yield_bpm1i06WS_mean vs run
×10^3
χ^2 / ndf 1.344e+05 / 80
p0 1.443e+05 ± 0.264
144.6
144.5
144.4
144.3
144.2
144.1
pull
Entries 81
Mean 1084
Std Dev 1043
100
80
60
40
20
0
−20
−40
−60
−80

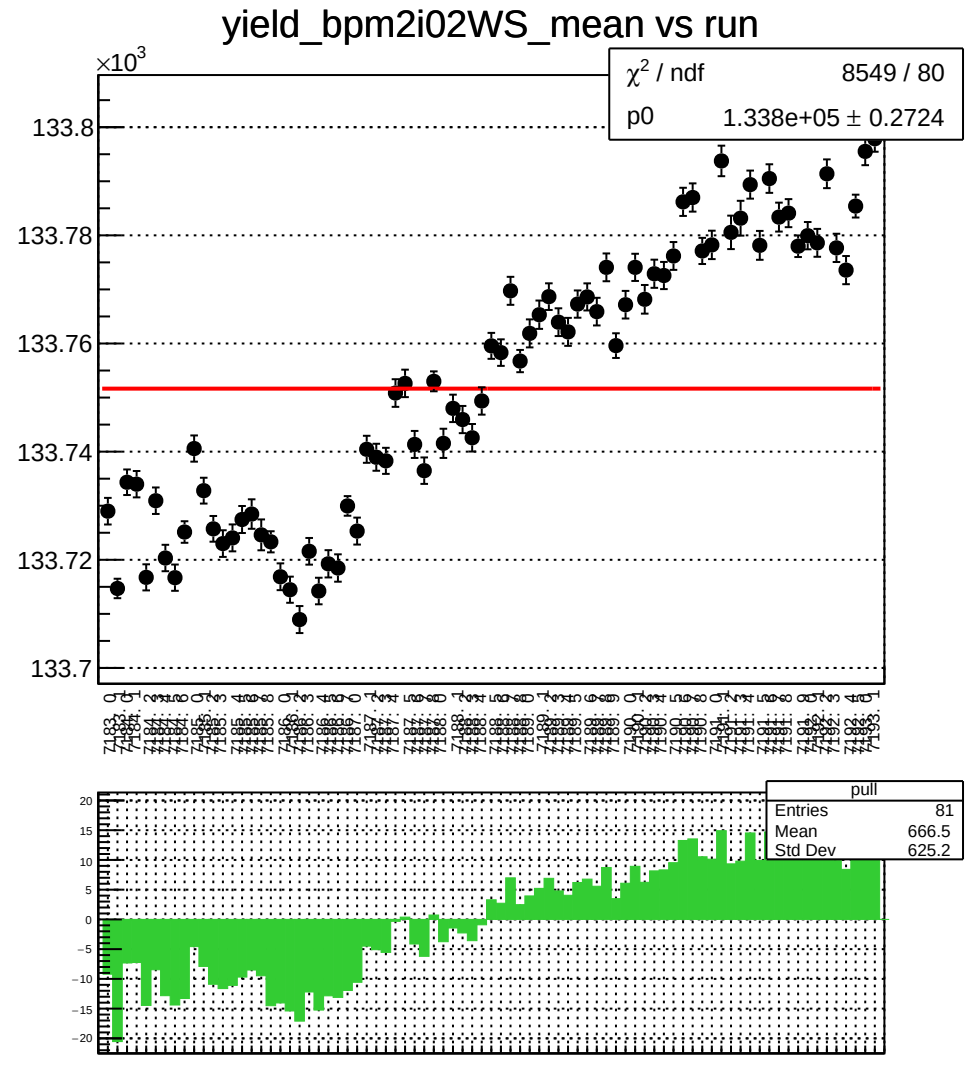

pull1D
Entries 81
Mean 0.3003
Std Dev 5.558
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

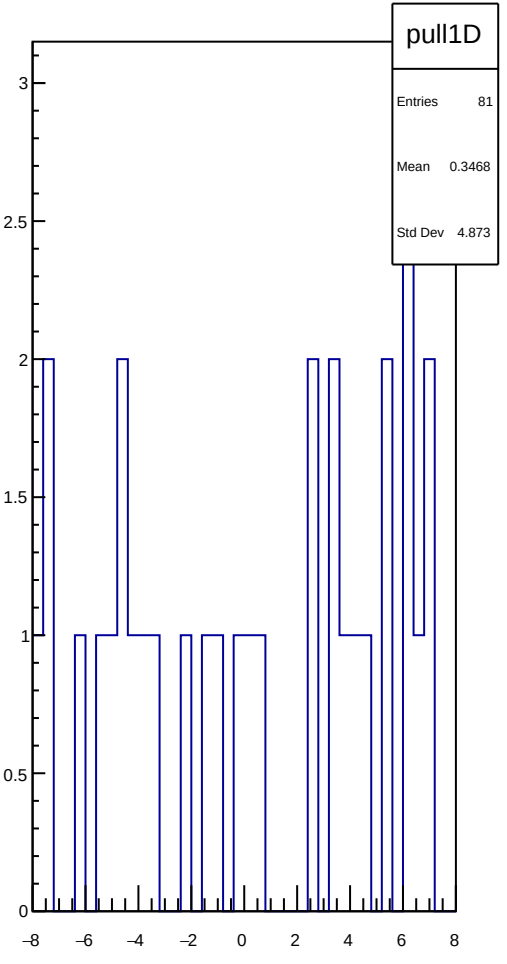

yield_bpm1i06WS_rms vs run
χ² / ndf 4851 / 80
p0 233.7 ± 0.1867
300
290
280
270
260
250
240
230
220
210

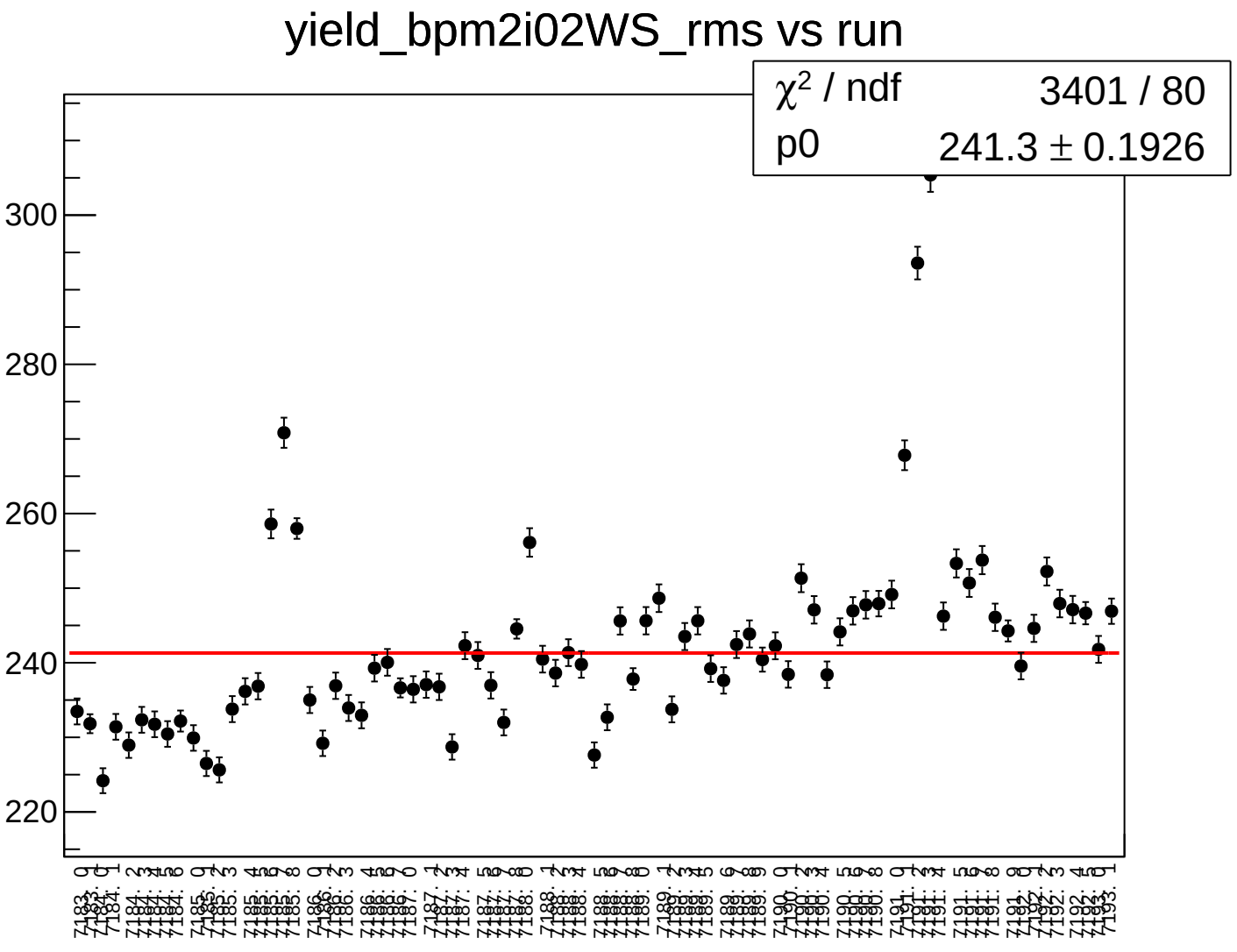

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 7367 / 80
p0 1.285e+05 ± 0.2647
128.54
128.52
128.5
128.48
128.46
pull
Entries 81
Mean 759.9
Std Dev 716.8
15
10
5
0
−5
−10
−15
−20

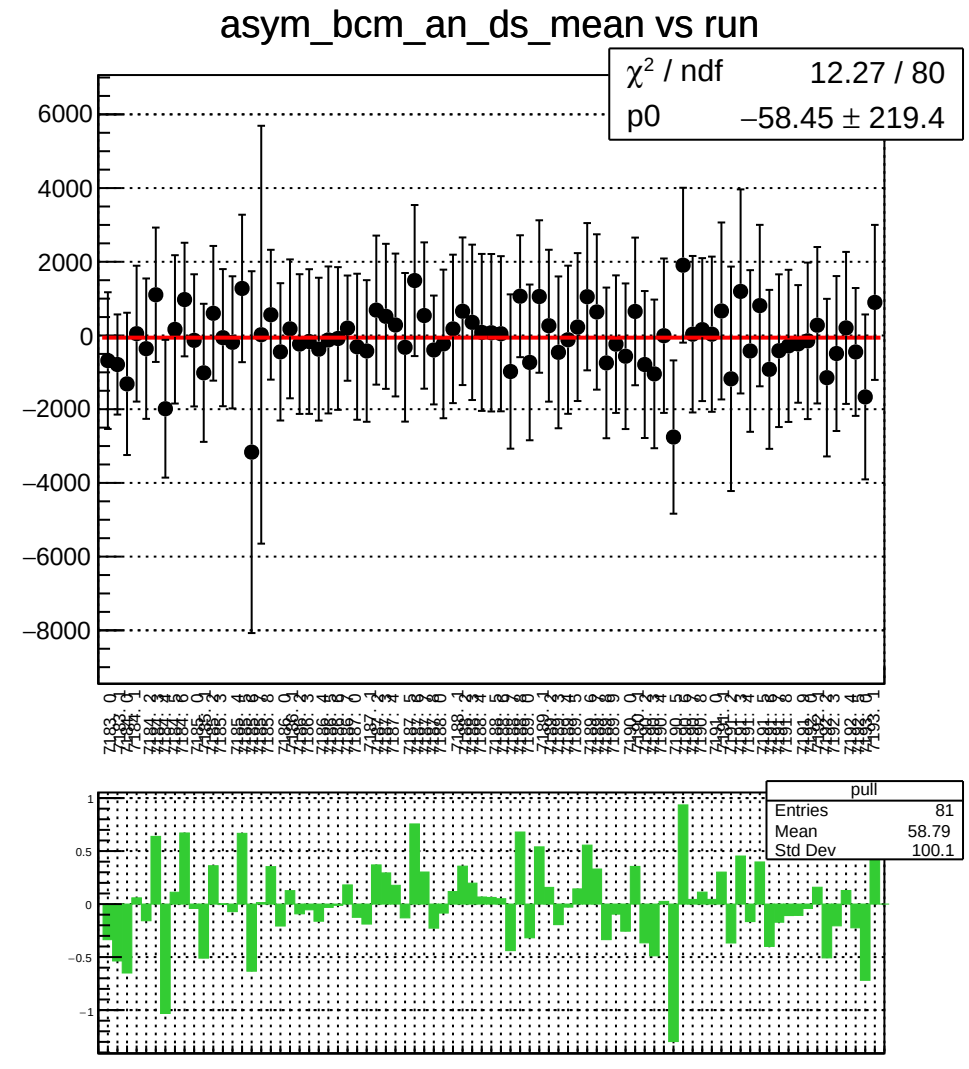

pull1D
Entries 81
Mean 2.662
Std Dev 3.978
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

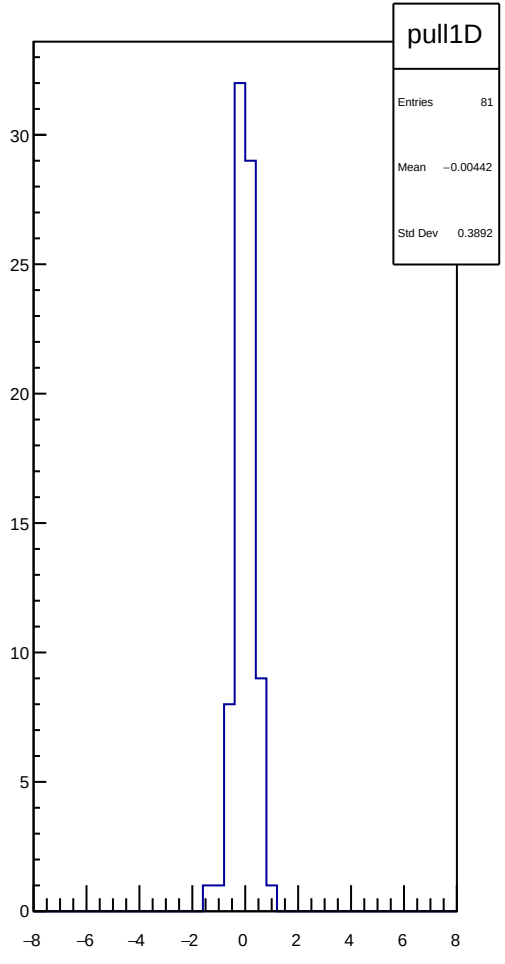

yield_bpm2i01WS_rms vs run
χ² / ndf 3283 / 80
p0 234.5 ± 0.1872
300
290
280
270
260
250
240
230
220
210

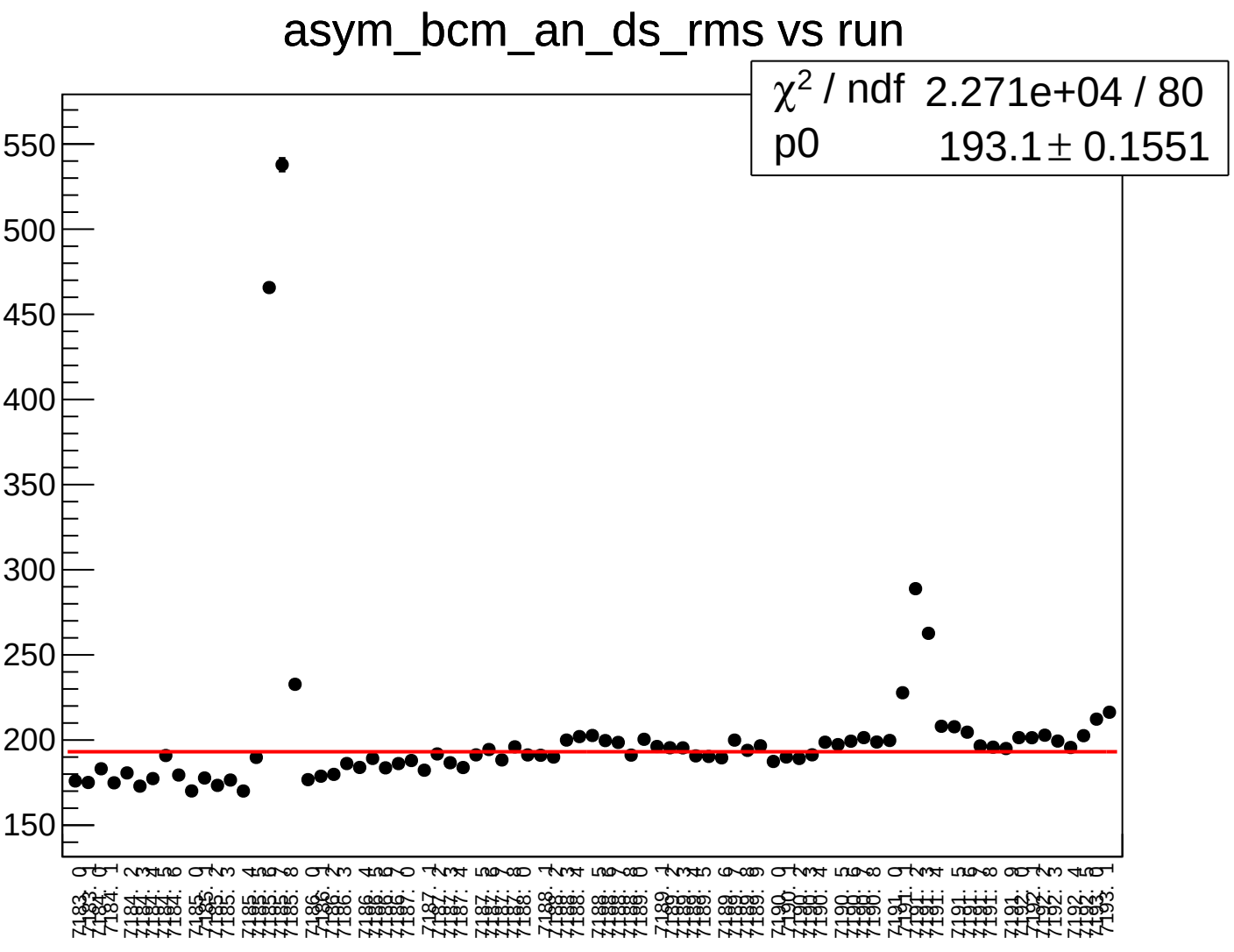

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 8549 / 80
p0 1.338e+05 ± 0.2724
133.8
133.78
133.76
133.74
133.72
133.7
pull
Entries 81
Mean 666.5
Std Dev 625.2
20
15
10
5
0
−5
−10
−15
−20

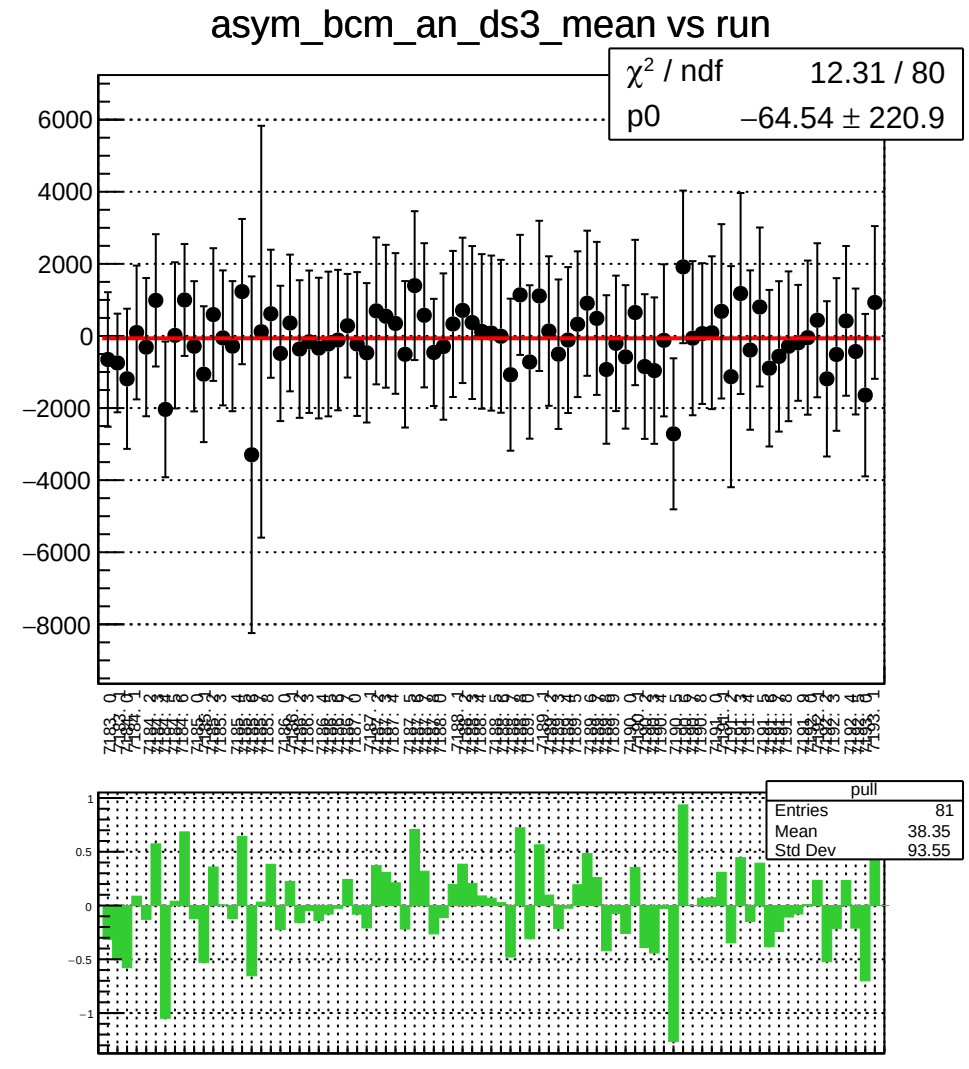

pull1D
Entries 81
Mean 0.3468
Std Dev 4.873
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

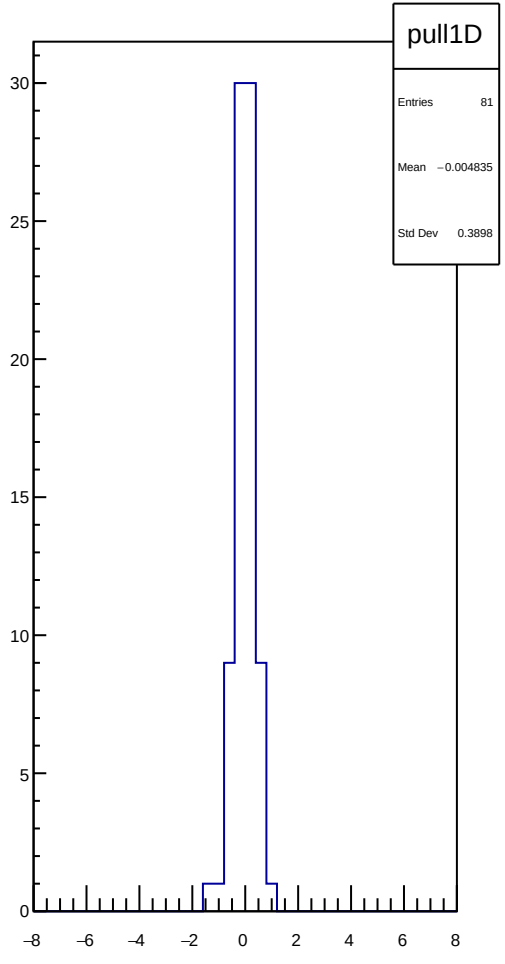

yield_bpm2i02WS_rms vs run
χ² / ndf 3401 / 80
p0 241.3 ± 0.1926
300
280
260
240
220

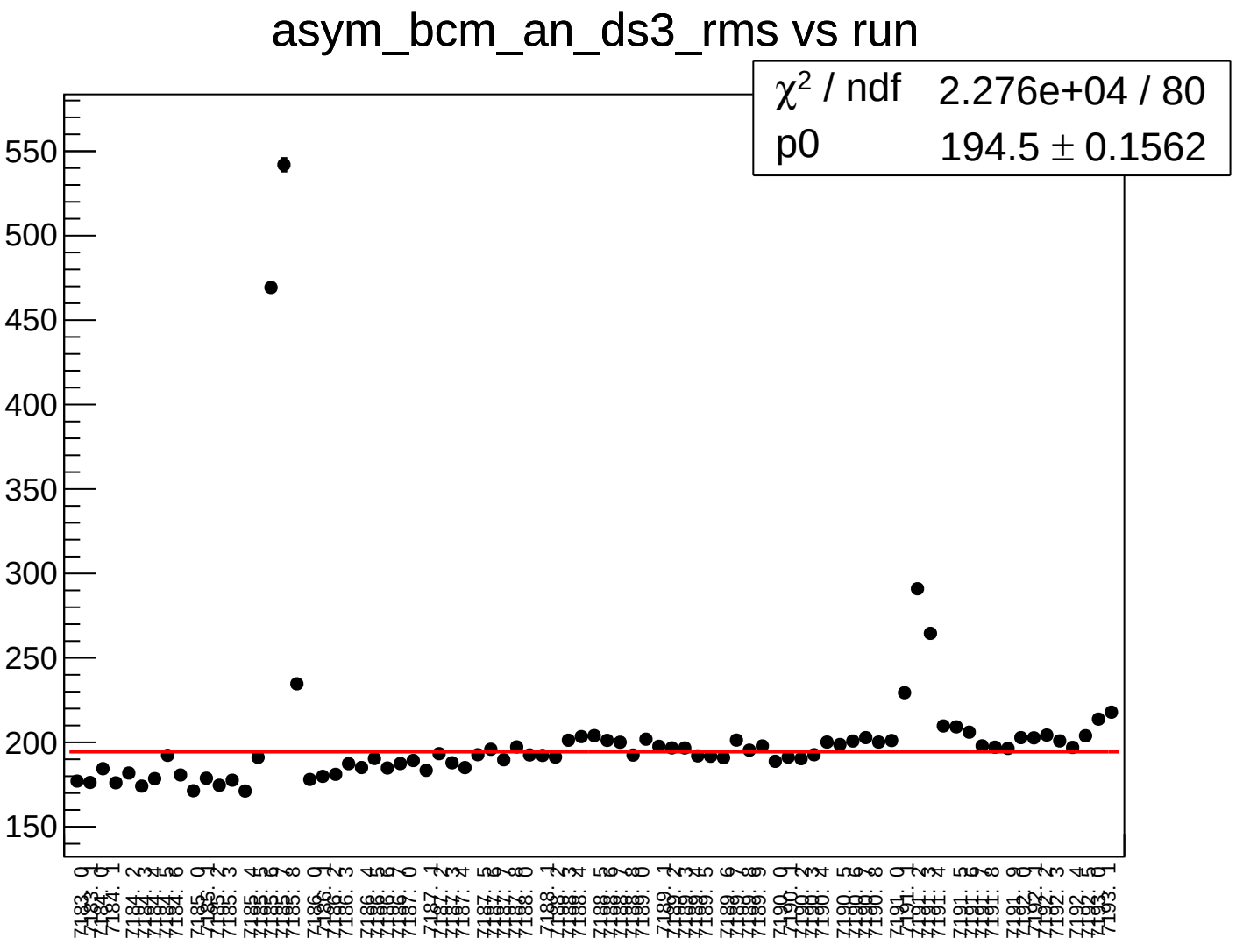

asym_bcm_an_ds_mean vs run
χ² / ndf 12.27 / 80
p0 −58.45 ± 219.4
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean 58.79
Std Dev 100.1
1
0.5
0
−0.5
−1

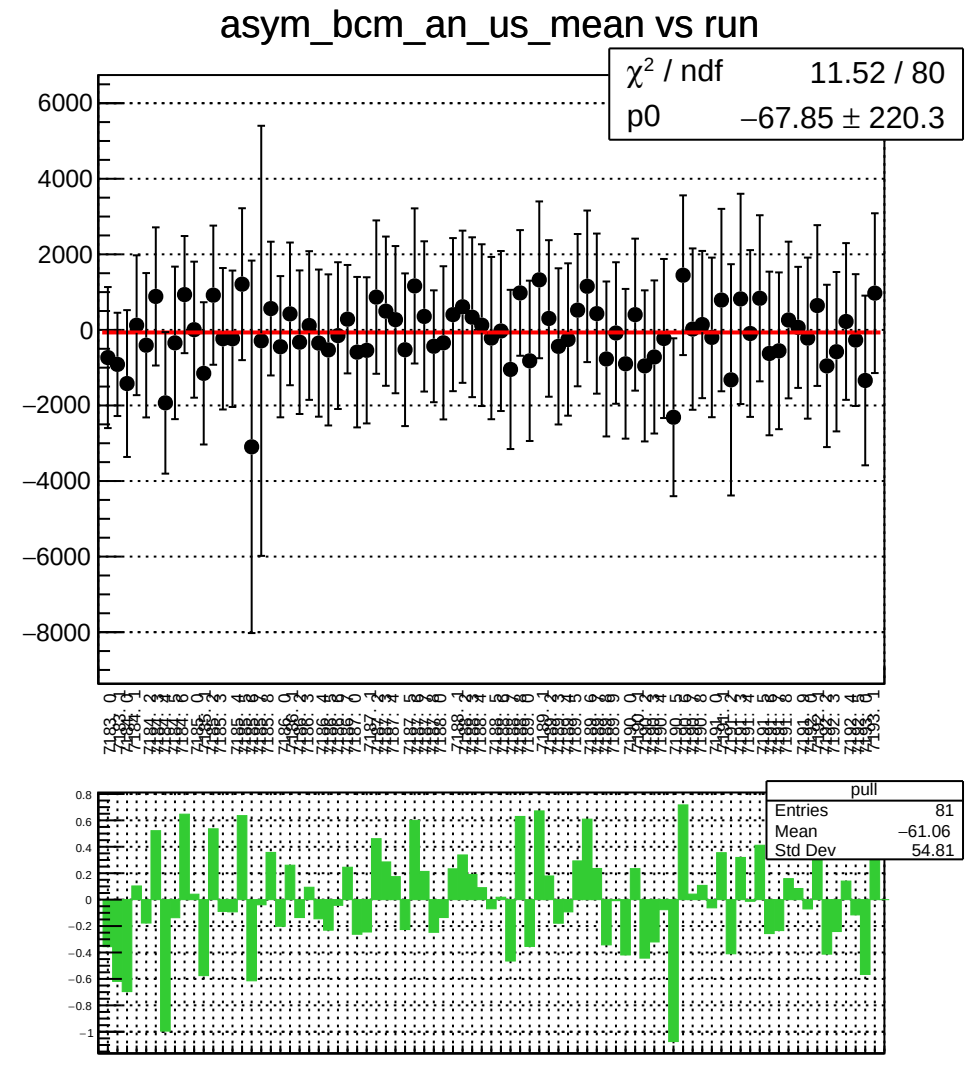

pull1D
Entries 81
Mean −0.00442
Std Dev 0.3892
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

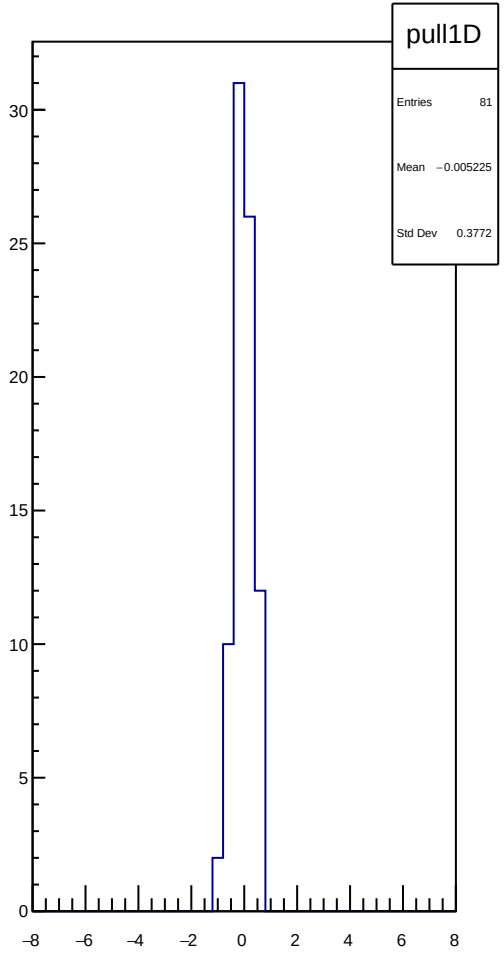

asym_bcm_an_ds_rms vs run
χ^2 / ndf 2.271e+04 / 80
p0 193.1 ± 0.1551
550
500
450
400
350
300
250
200
150

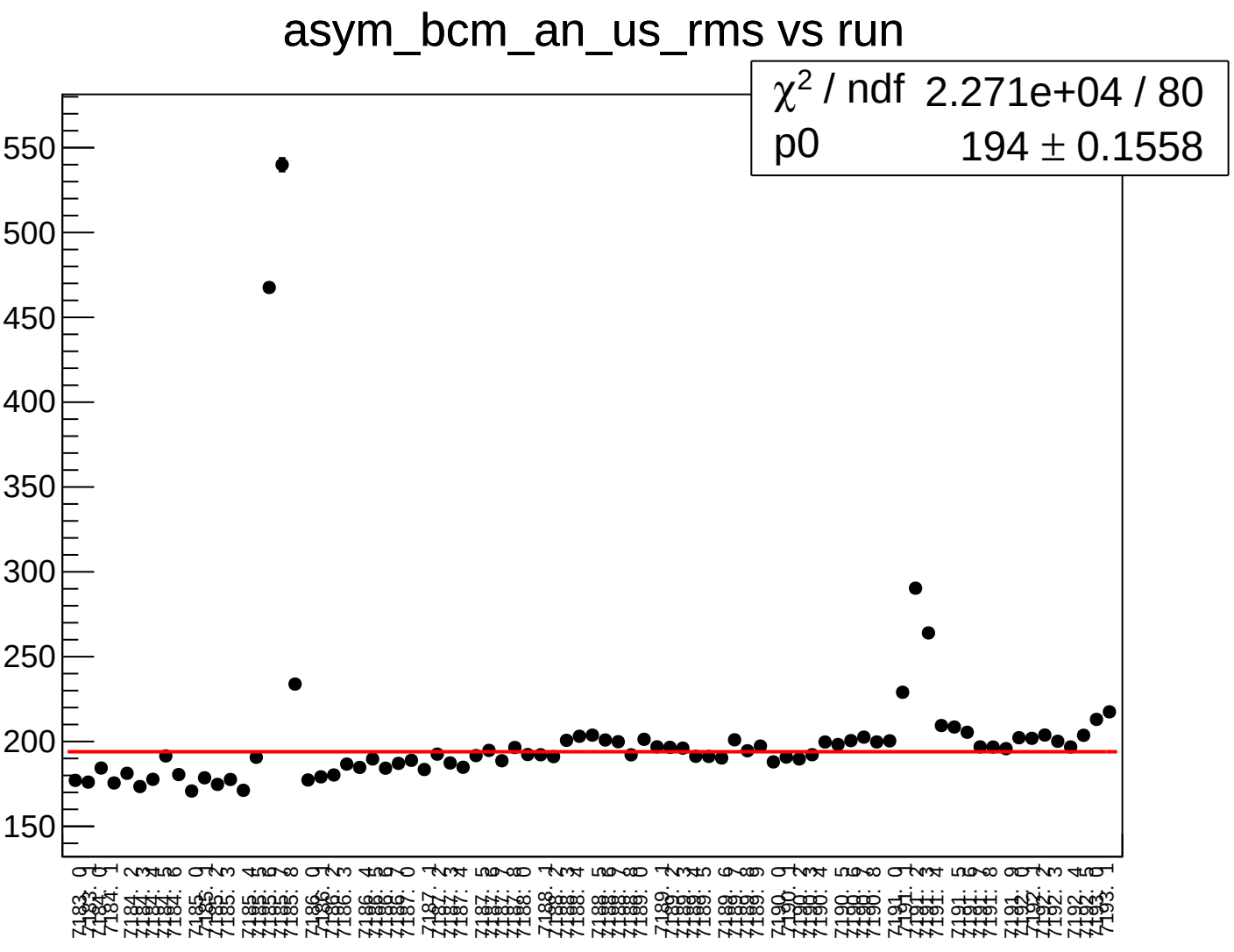

asym_bcm_an_ds3_mean vs run
χ² / ndf 12.31 / 80
p0 −64.54 ± 220.9
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean 38.35
Std Dev 93.55
1
0.5
0
−0.5
−1

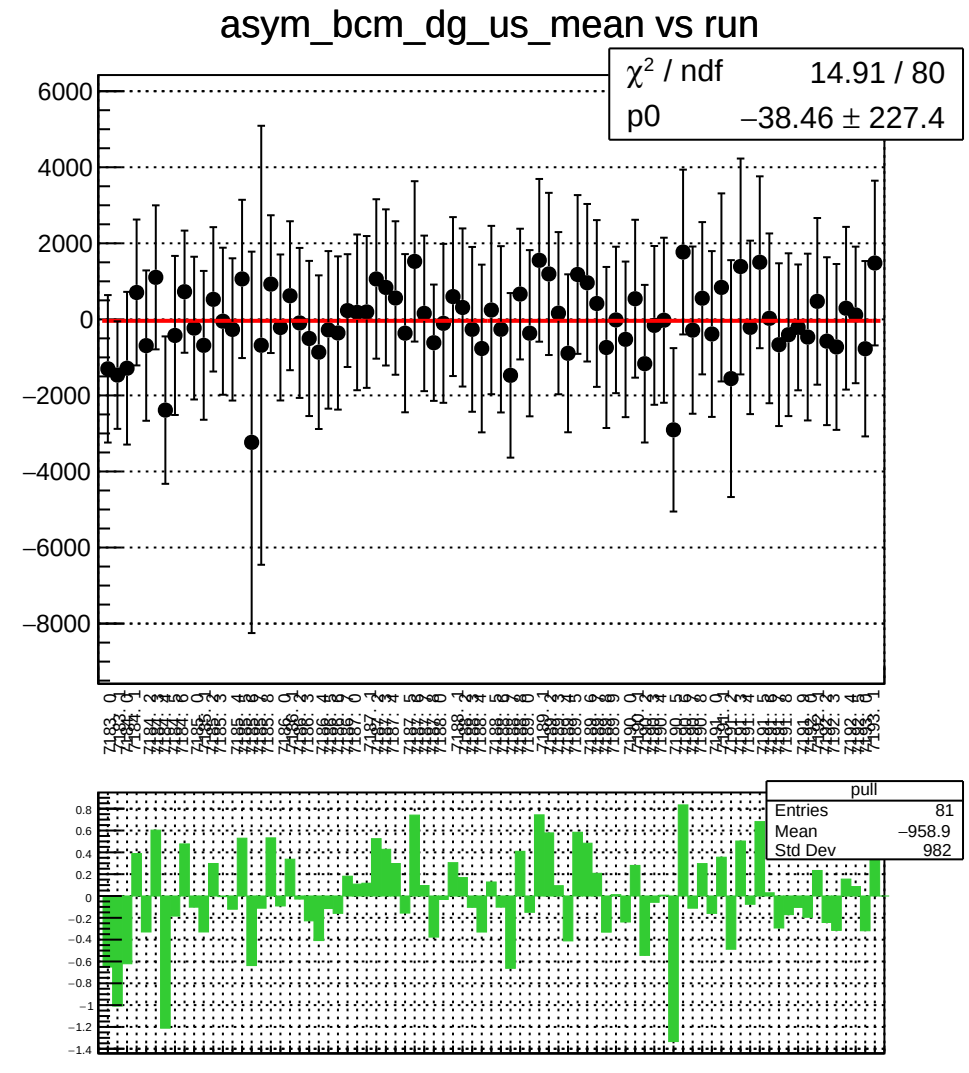

pull1D
Entries 81
Mean −0.004835
Std Dev 0.3898
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

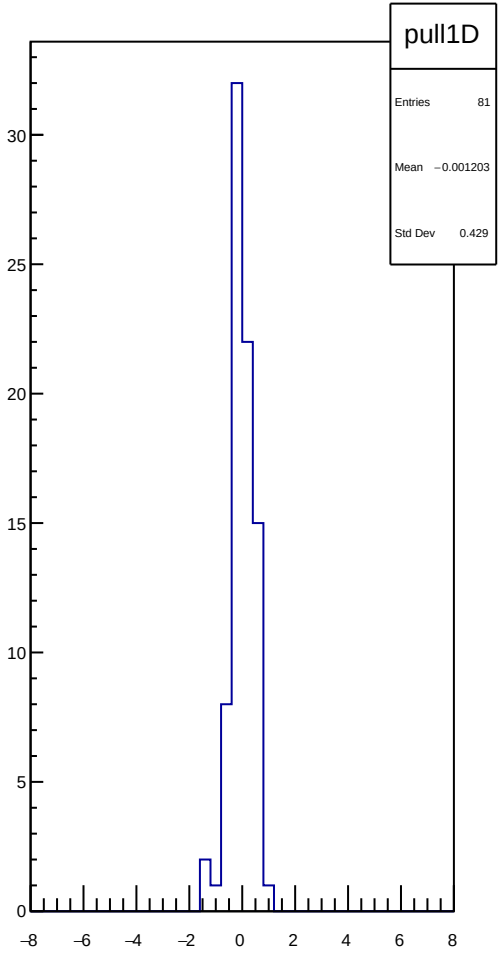

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 2.276e+04 / 80
p0 194.5 ± 0.1562
550
500
450
400
350
300
250
200
150

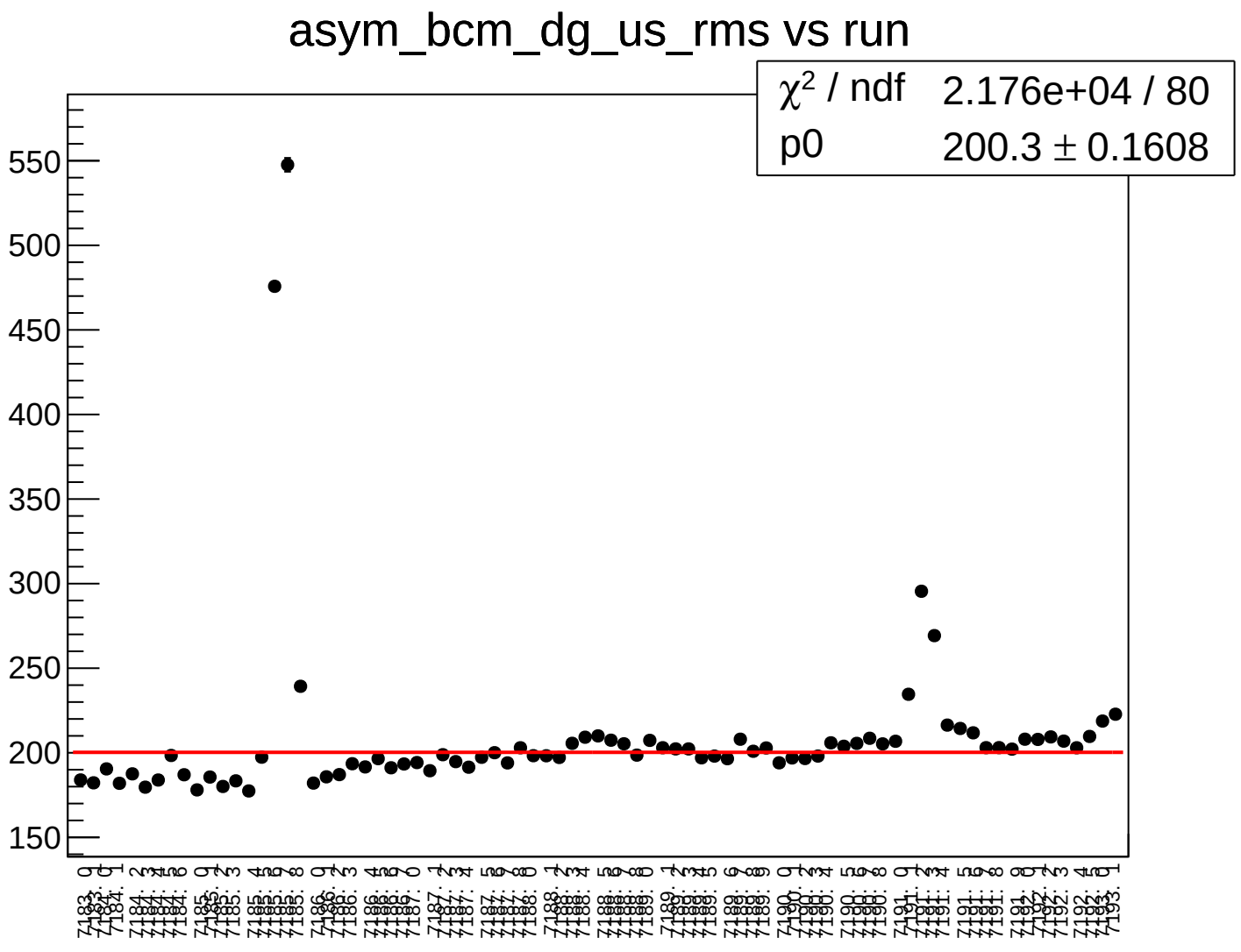

asym_bcm_an_us_mean vs run
χ² / ndf 11.52 / 80
p0 −67.85 ± 220.3
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean −61.06
Std Dev 54.81
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

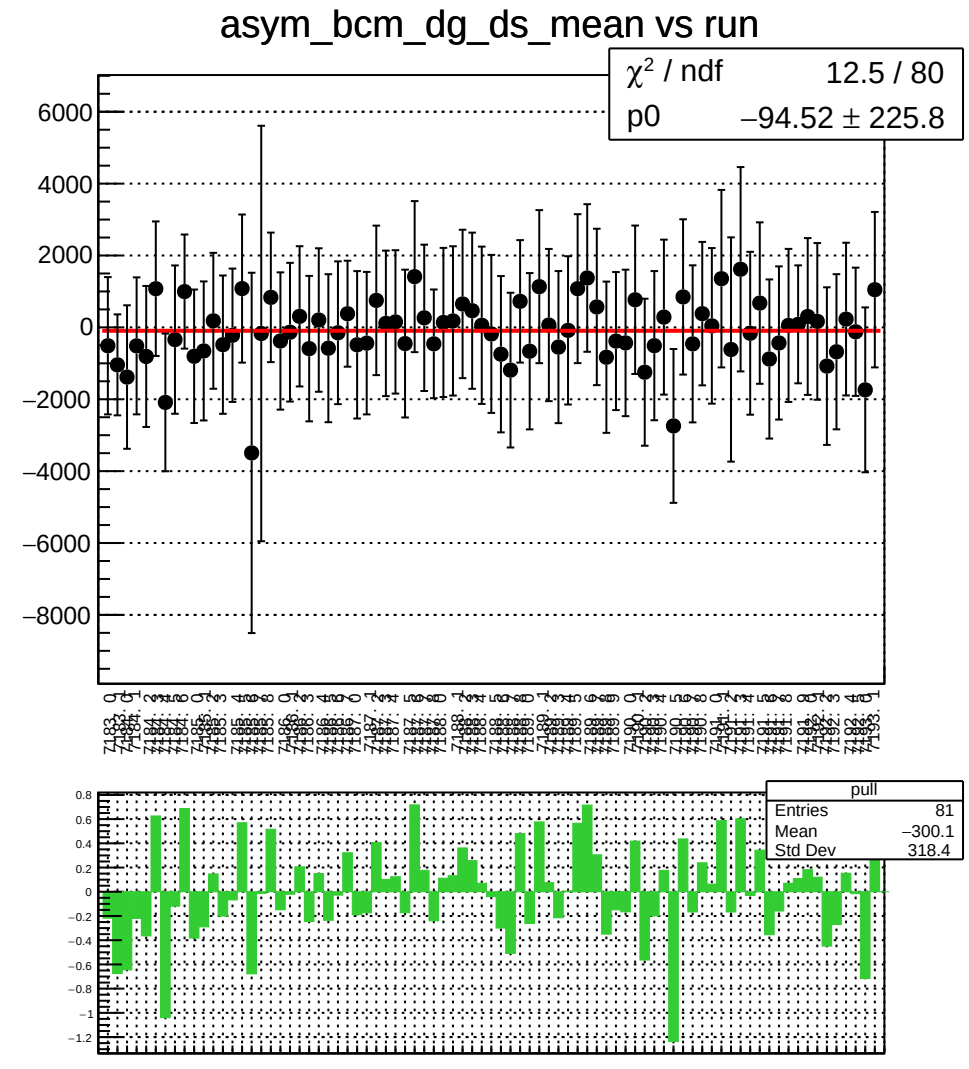

pull1D
Entries 81
Mean −0.005225
Std Dev 0.3772
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

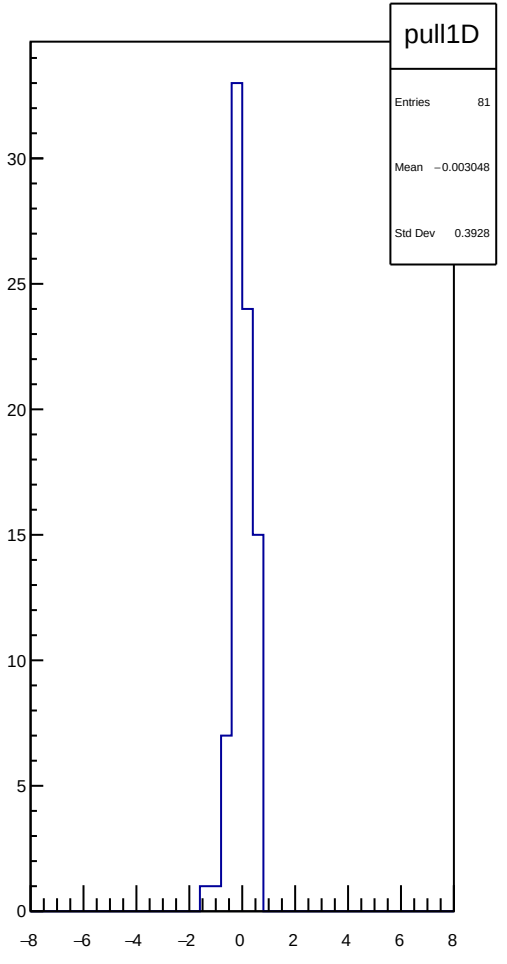

asym_bcm_an_us_rms vs run
χ^2 / ndf 2.271e+04 / 80
p0 194 ± 0.1558
550
500
450
400
350
300
250
200
150

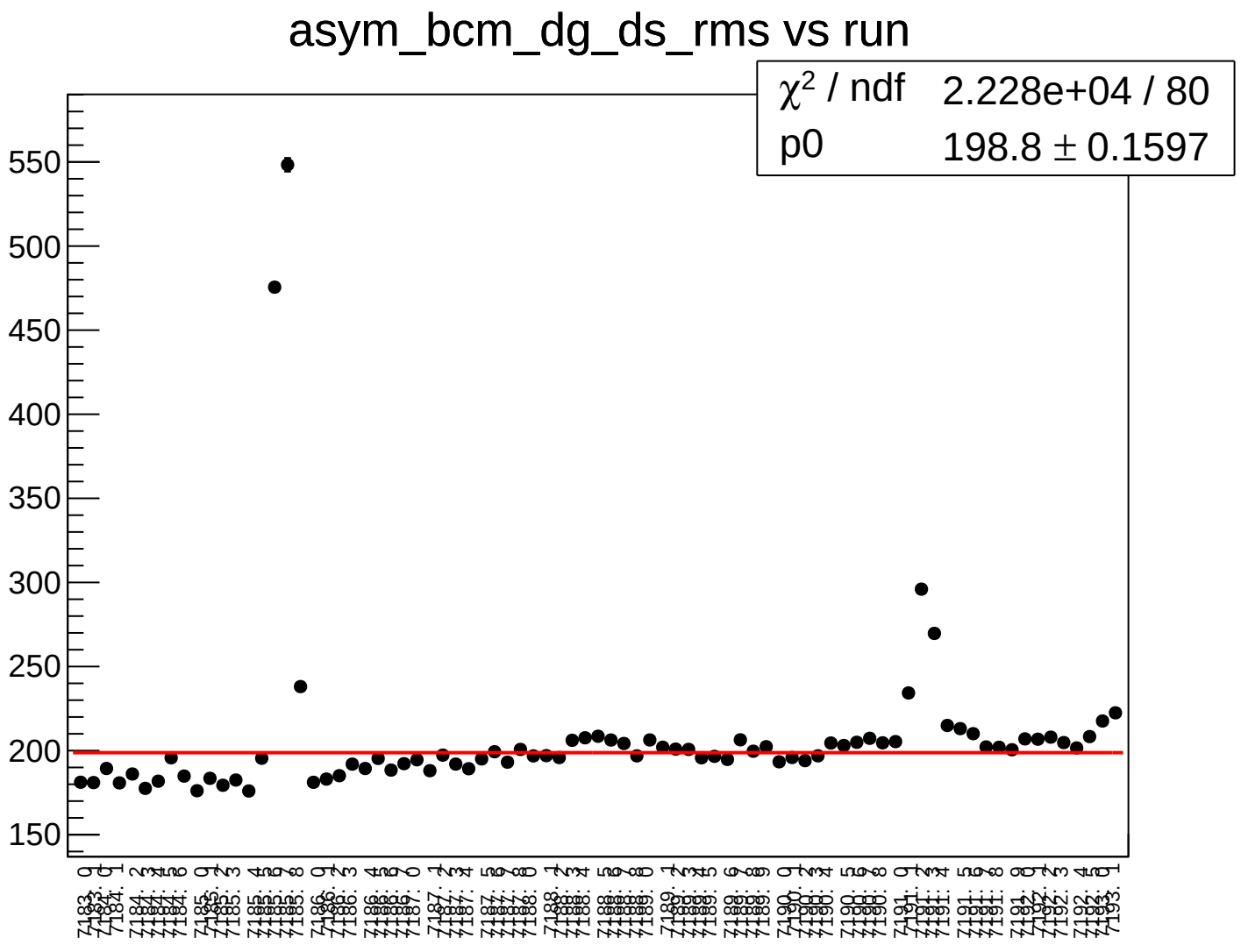

asym_bcm_dg_us_mean vs run
χ² / ndf 14.91 / 80
p0 −38.46 ± 227.4
pull
Entries 81
Mean −958.9
Std Dev 982

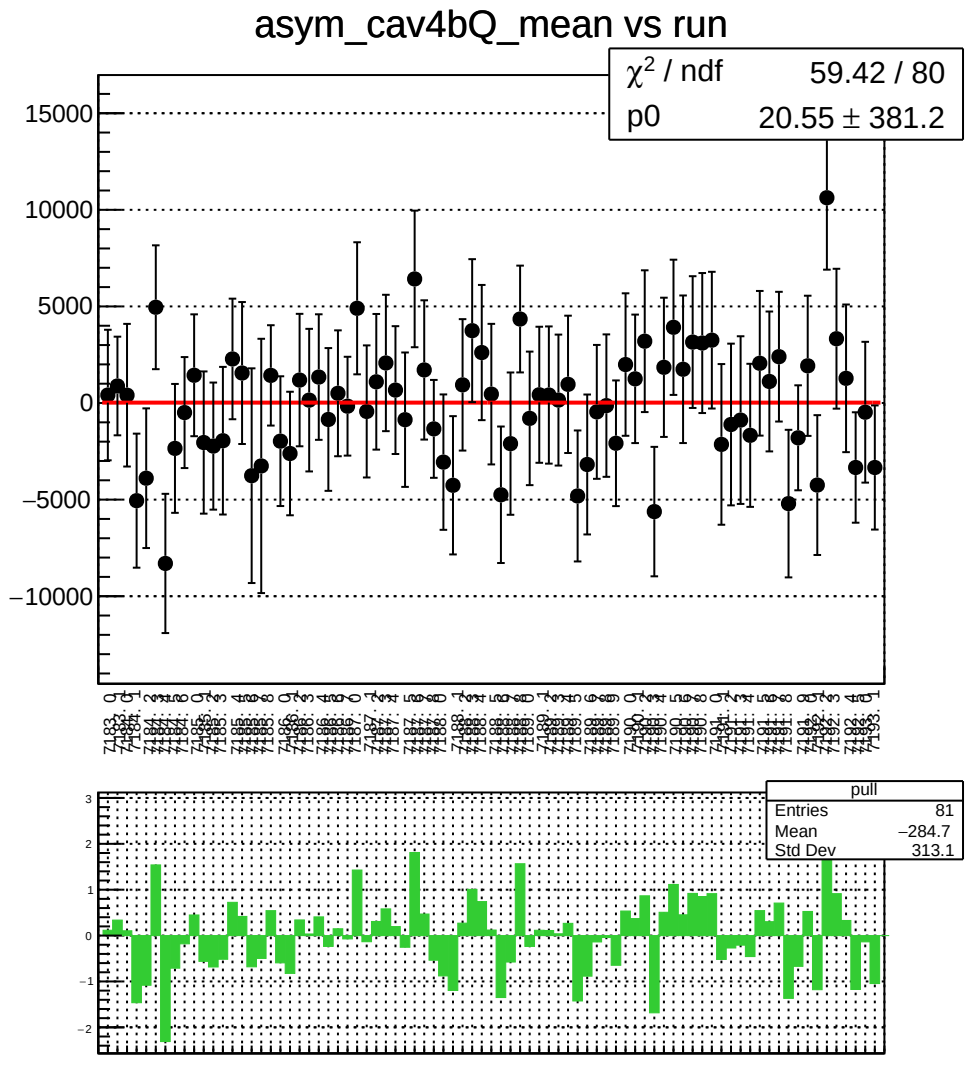

pull1D
Entries 81
Mean −0.001203
Std Dev 0.429

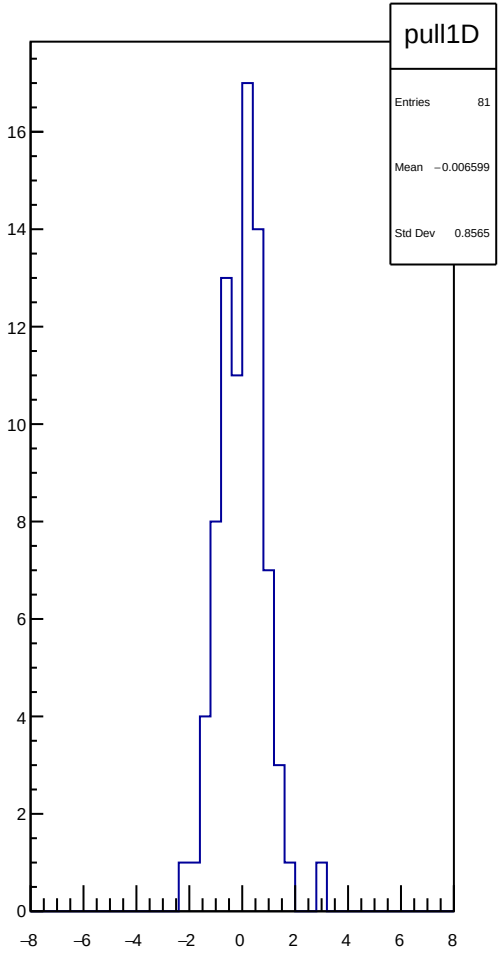

asym_bcm_dg_us_rms vs run
χ^2 / ndf 2.176e+04 / 80
p0 200.3 ± 0.1608
550
500
450
400
350
300
250
200
150

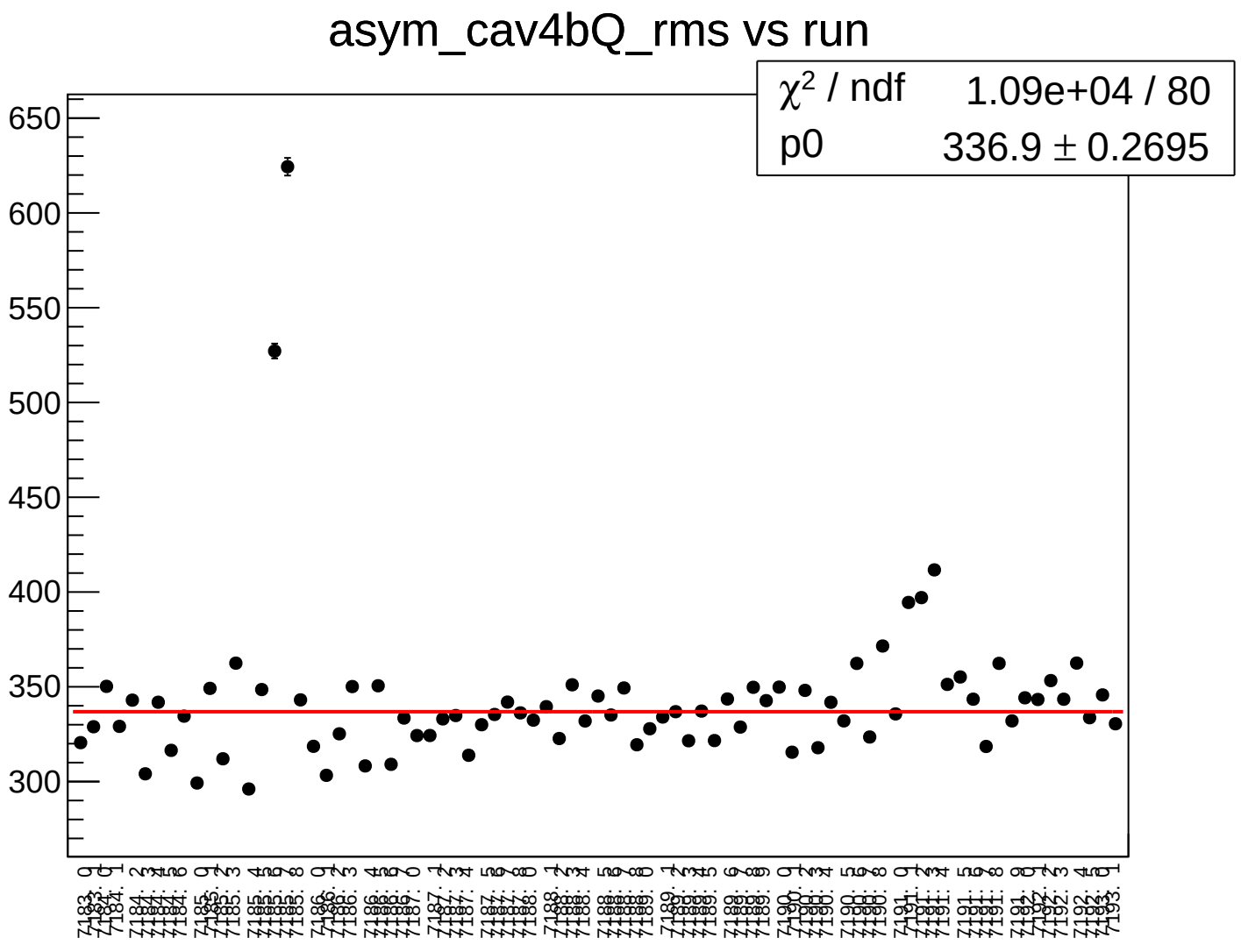

asym_bcm_dg_ds_mean vs run
χ² / ndf 12.5 / 80
p0 −94.52 ± 225.8
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean −300.1
Std Dev 318.4
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

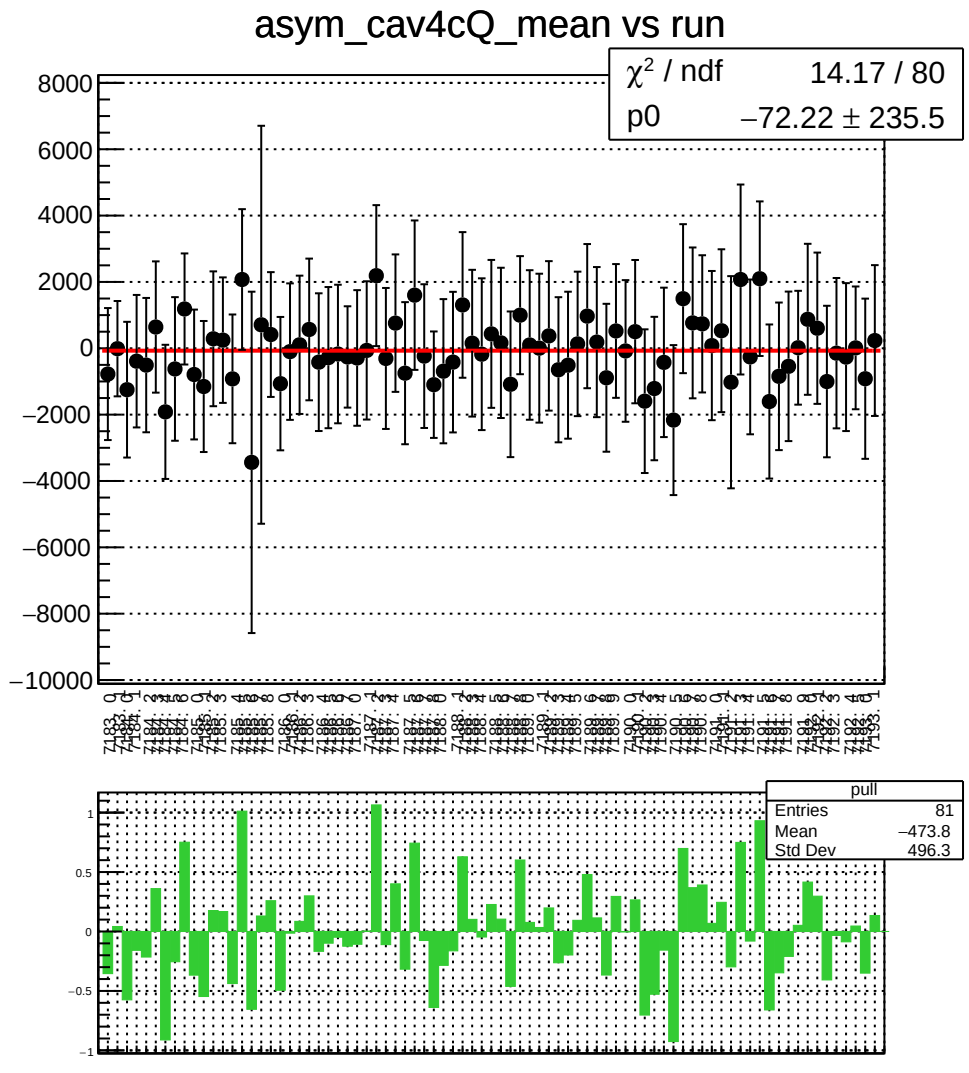

pull1D
Entries 81
Mean −0.003048
Std Dev 0.3928
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

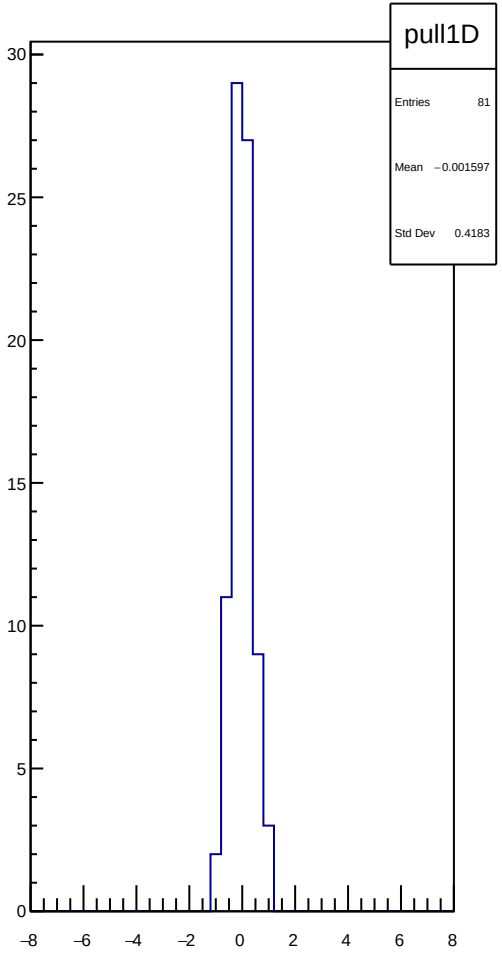

asym_bcm_dg_ds_rms vs run
χ^2 / ndf 2.228e+04 / 80
p0 198.8 ± 0.1597
550
500
450
400
350
300
250
200
150

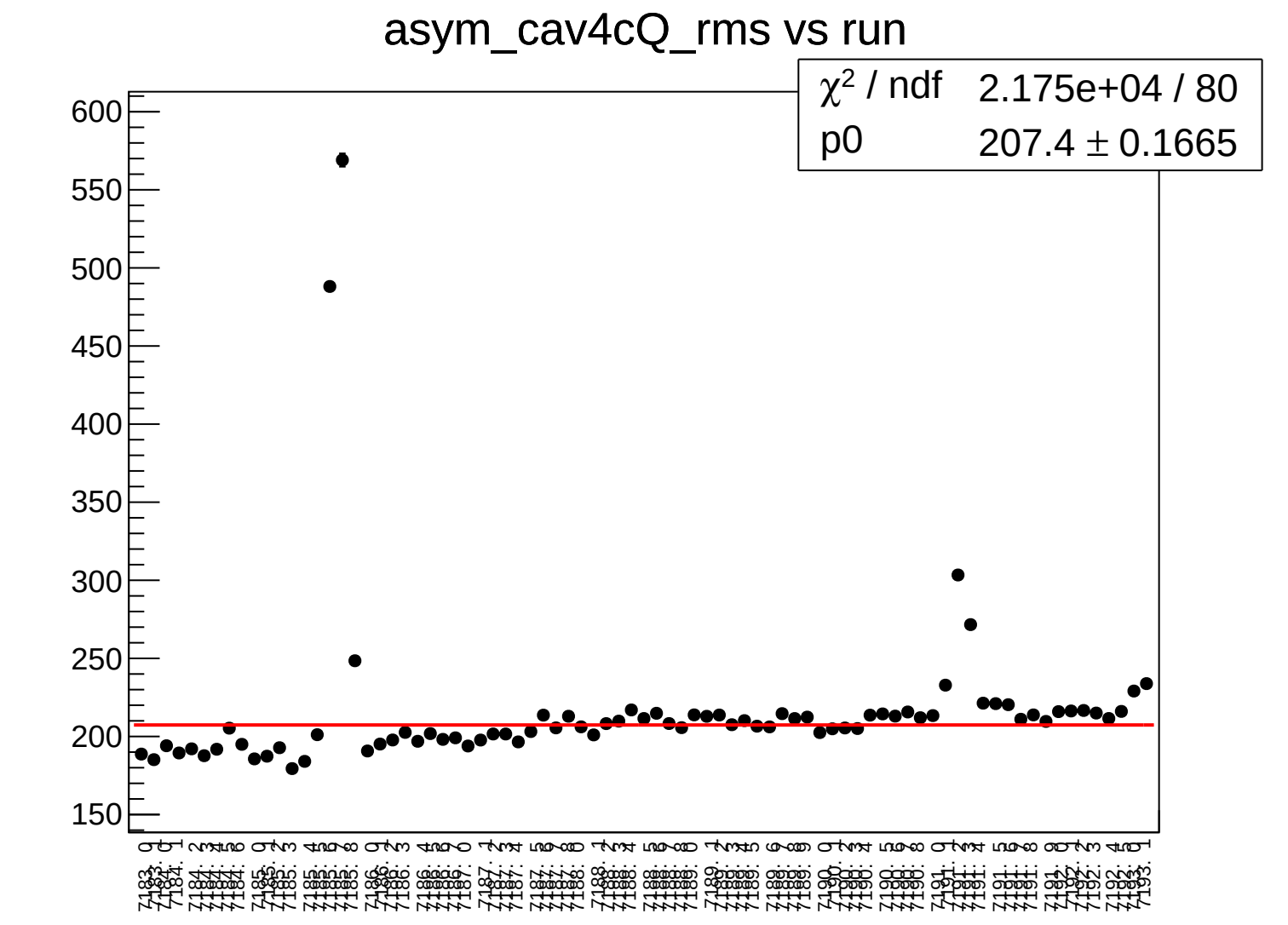

asym_cav4bQ_mean vs run
χ² / ndf 59.42 / 80
p0 20.55 ± 381.2
15000
10000
5000
0
−5000
−10000
pull
Entries 81
Mean −284.7
Std Dev 313.1
3
2
1
0
−1
−2

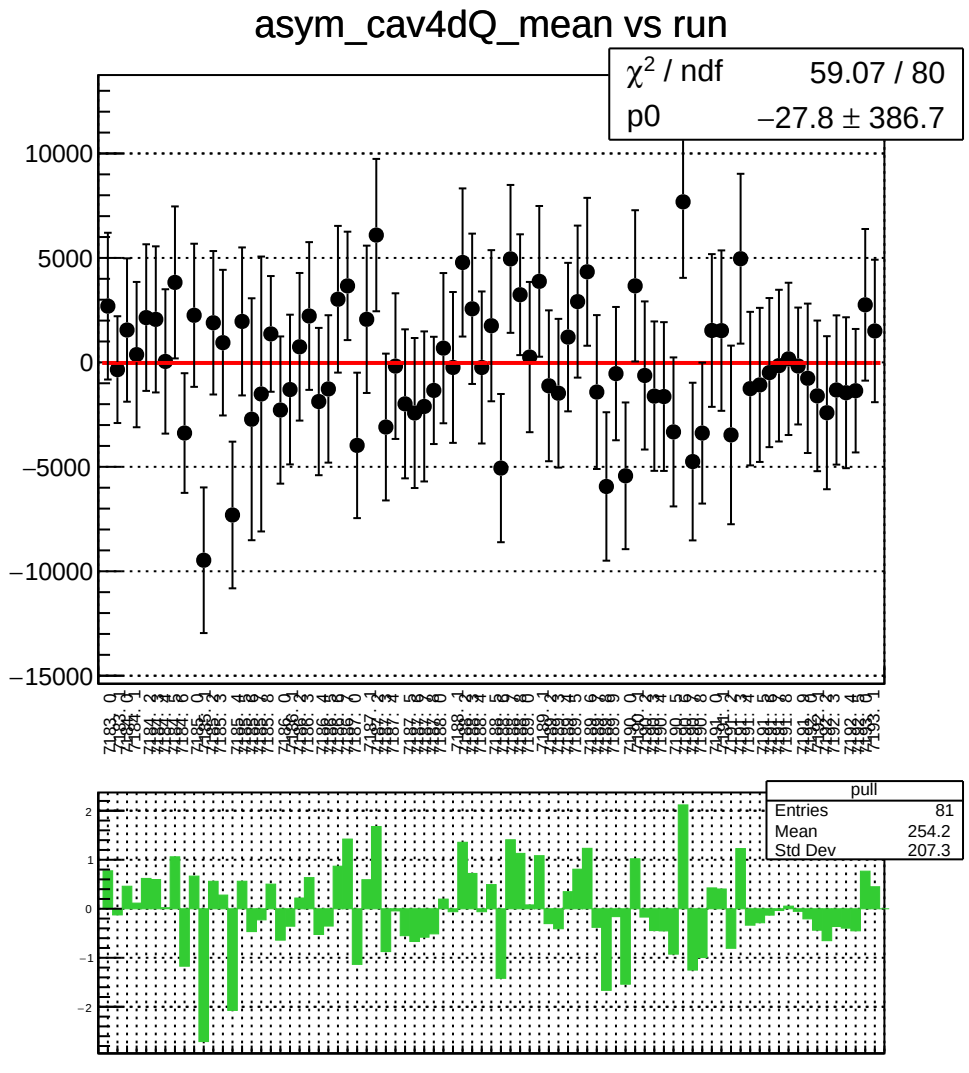

pull1D
Entries 81
Mean −0.006599
Std Dev 0.8565
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

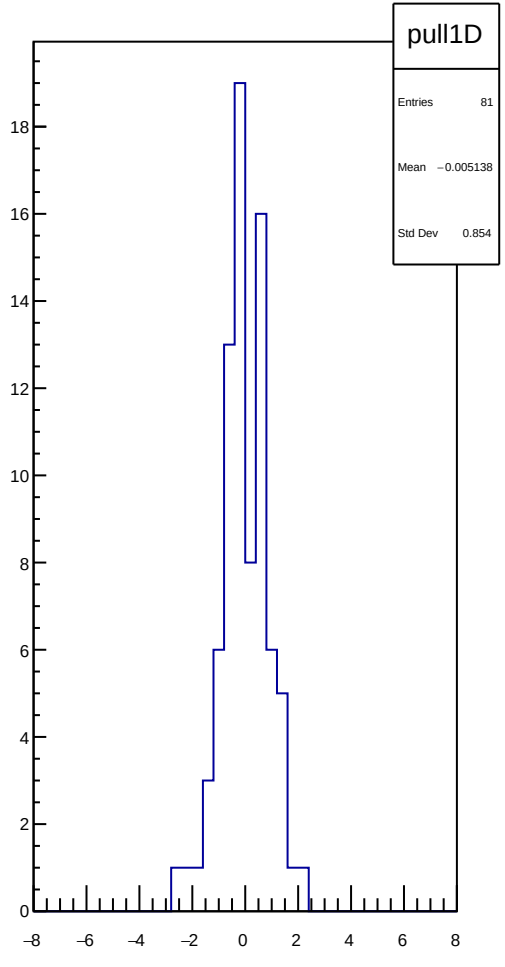

asym_cav4bQ_rms vs run
χ² / ndf 1.09e+04 / 80
p0 336.9 ± 0.2695
650
600
550
500
450
400
350
300

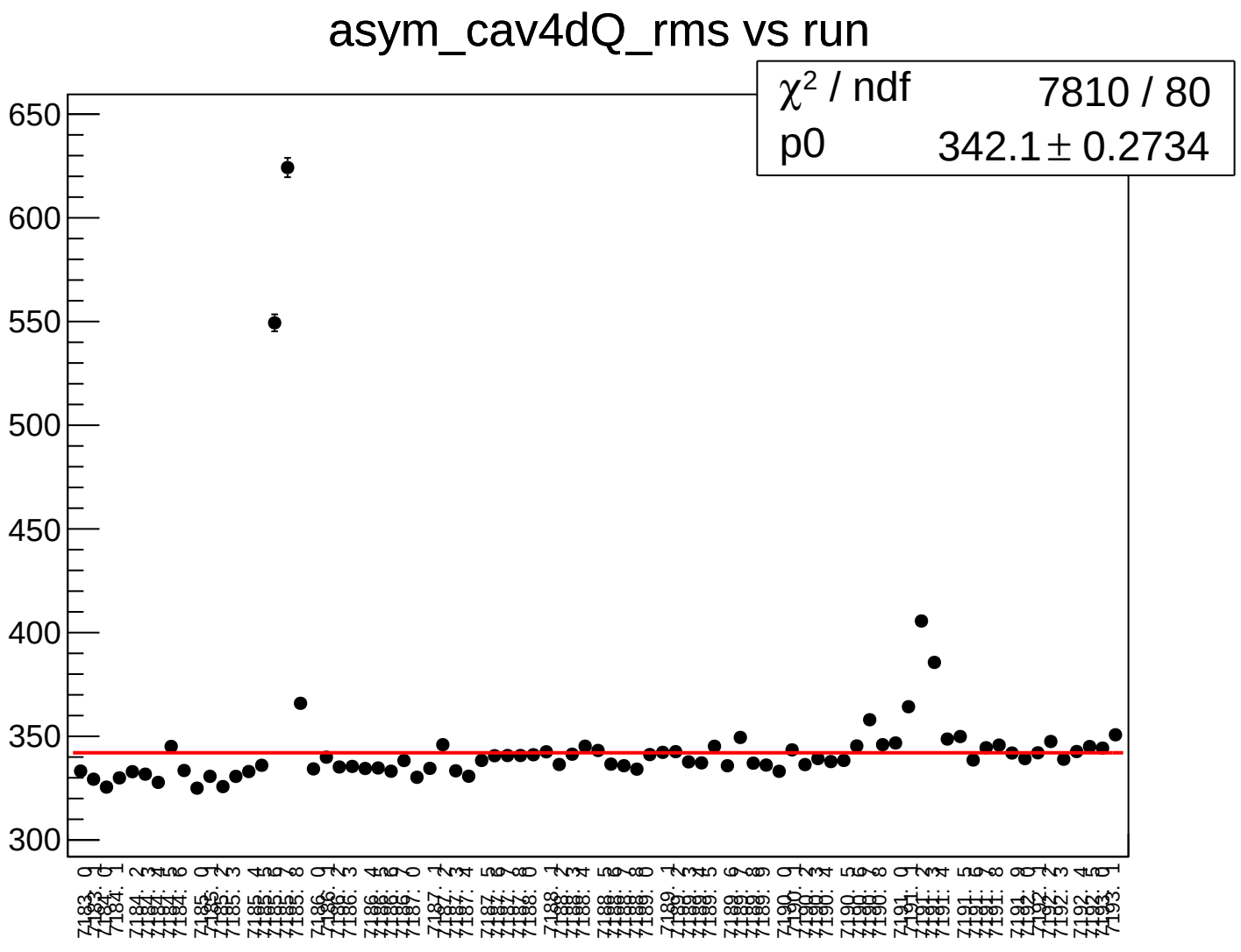

asym_cav4cQ_mean vs run
χ² / ndf 14.17 / 80
p0 −72.22 ± 235.5
pull
Entries 81
Mean −473.8
Std Dev 496.3

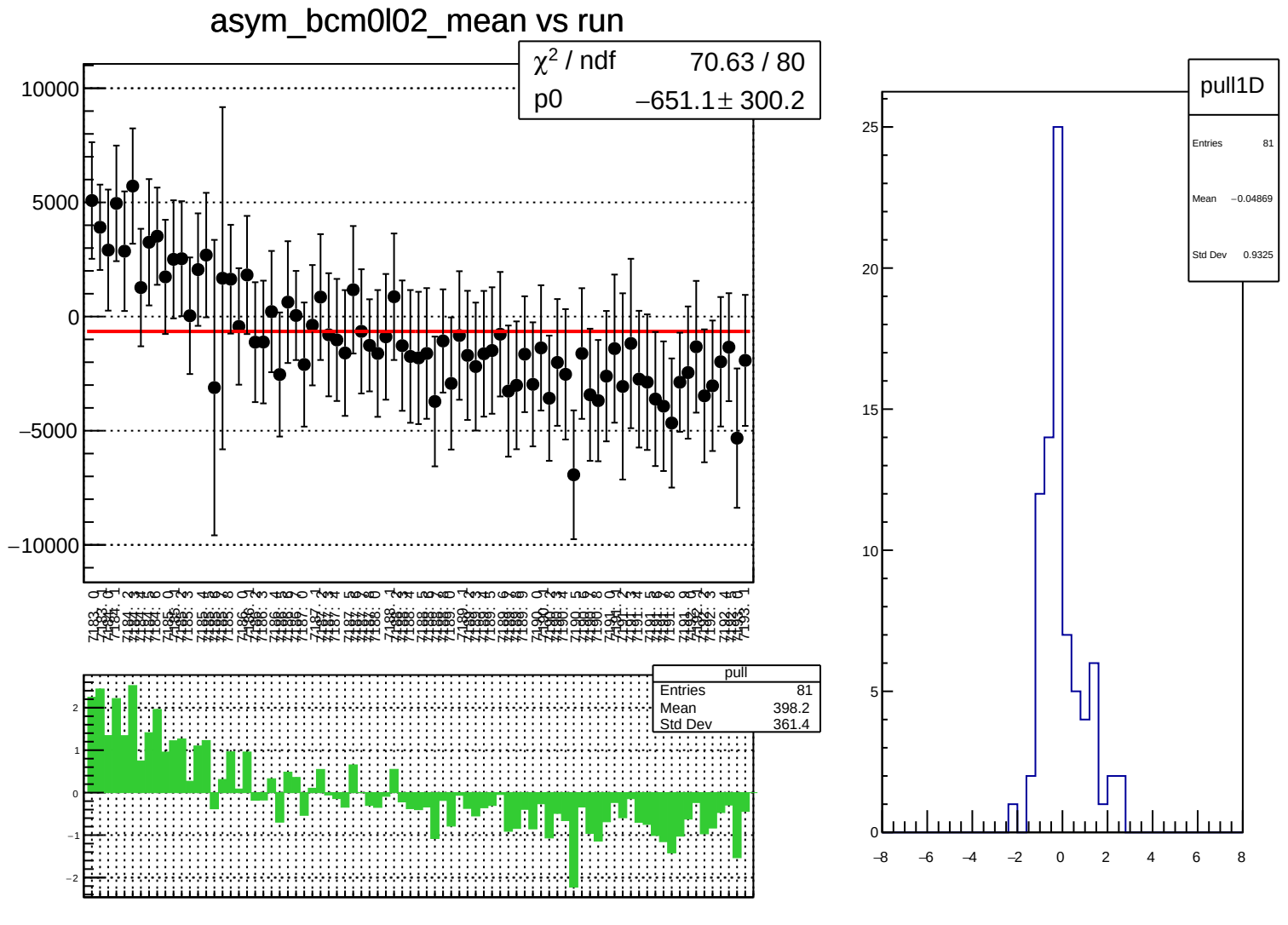

pull1D
Entries 81
Mean −0.001597
Std Dev 0.4183

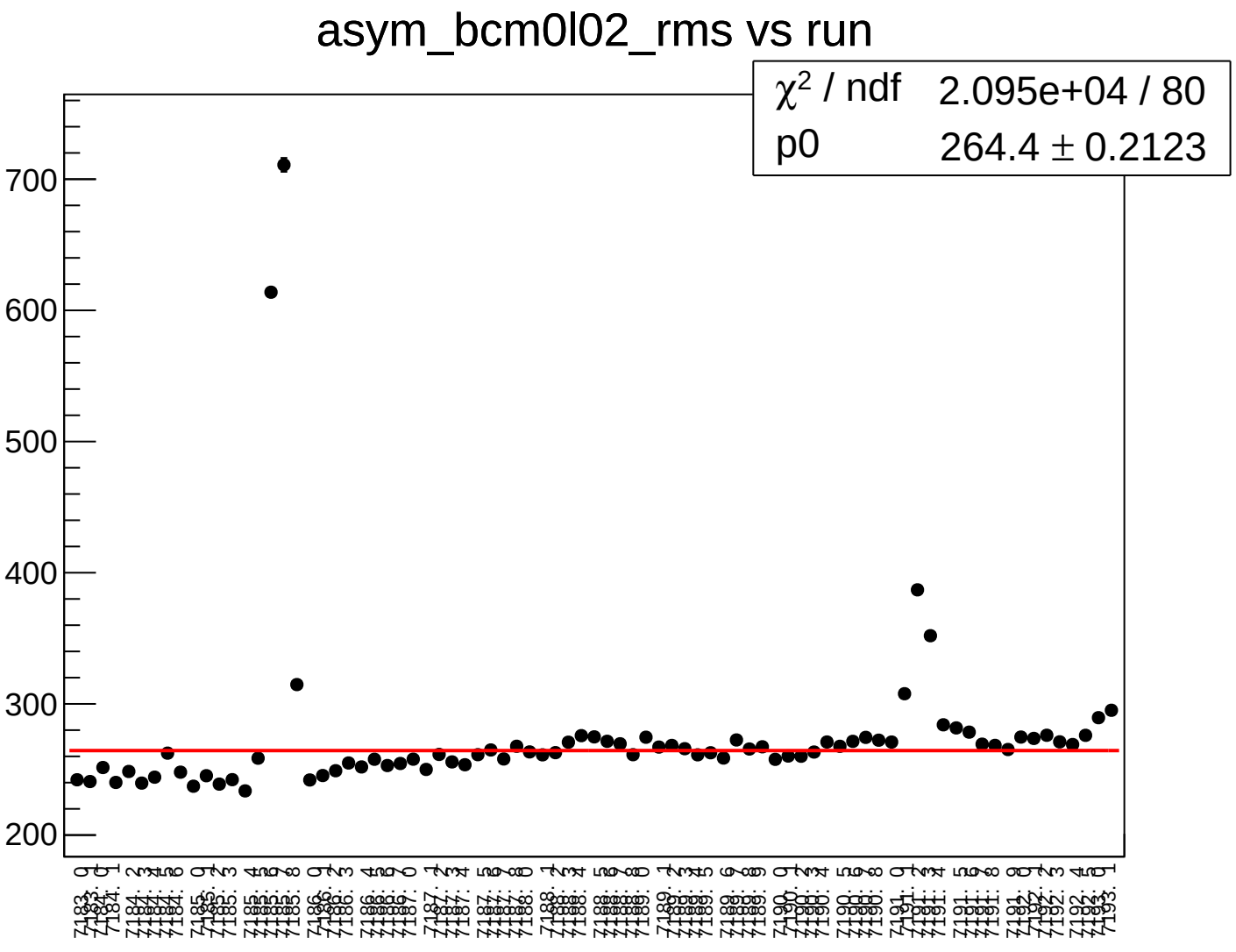

asym_cav4cQ_rms vs run
χ² / ndf 2.175e+04 / 80
p0 207.4 ± 0.1665
600
550
500
450
400
350
300
250
200
150

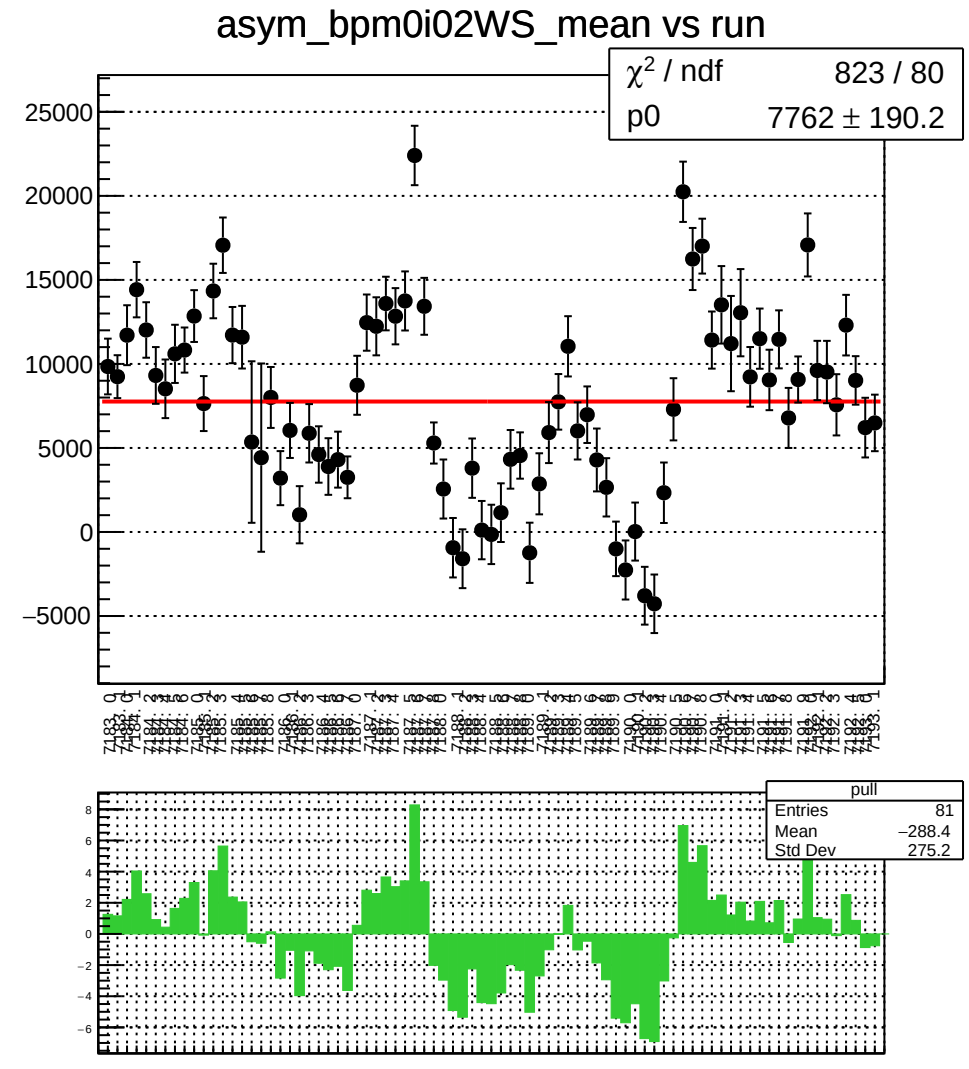

asym_cav4dQ_mean vs run
χ² / ndf 59.07 / 80
p0 −27.8 ± 386.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 81
Mean 254.2
Std Dev 207.3
2
1
0
−1
−2

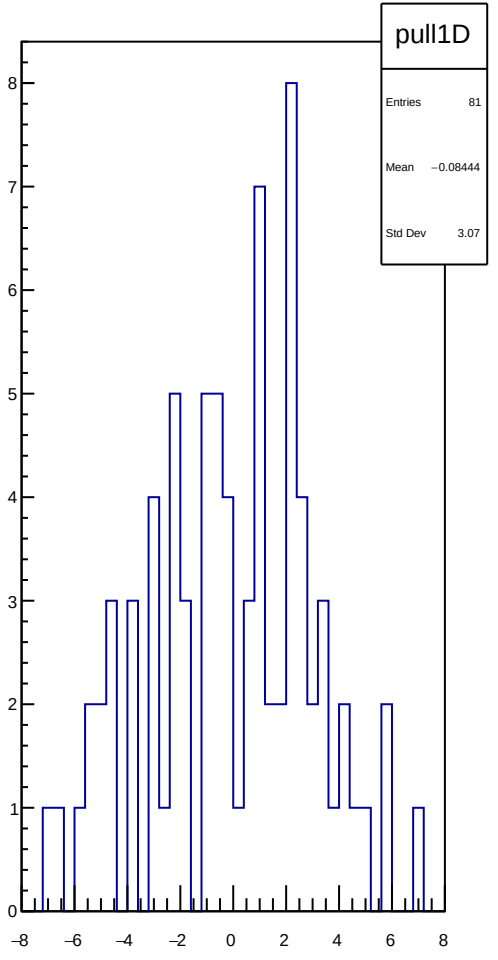

pull1D
Entries 81
Mean −0.005138
Std Dev 0.854
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

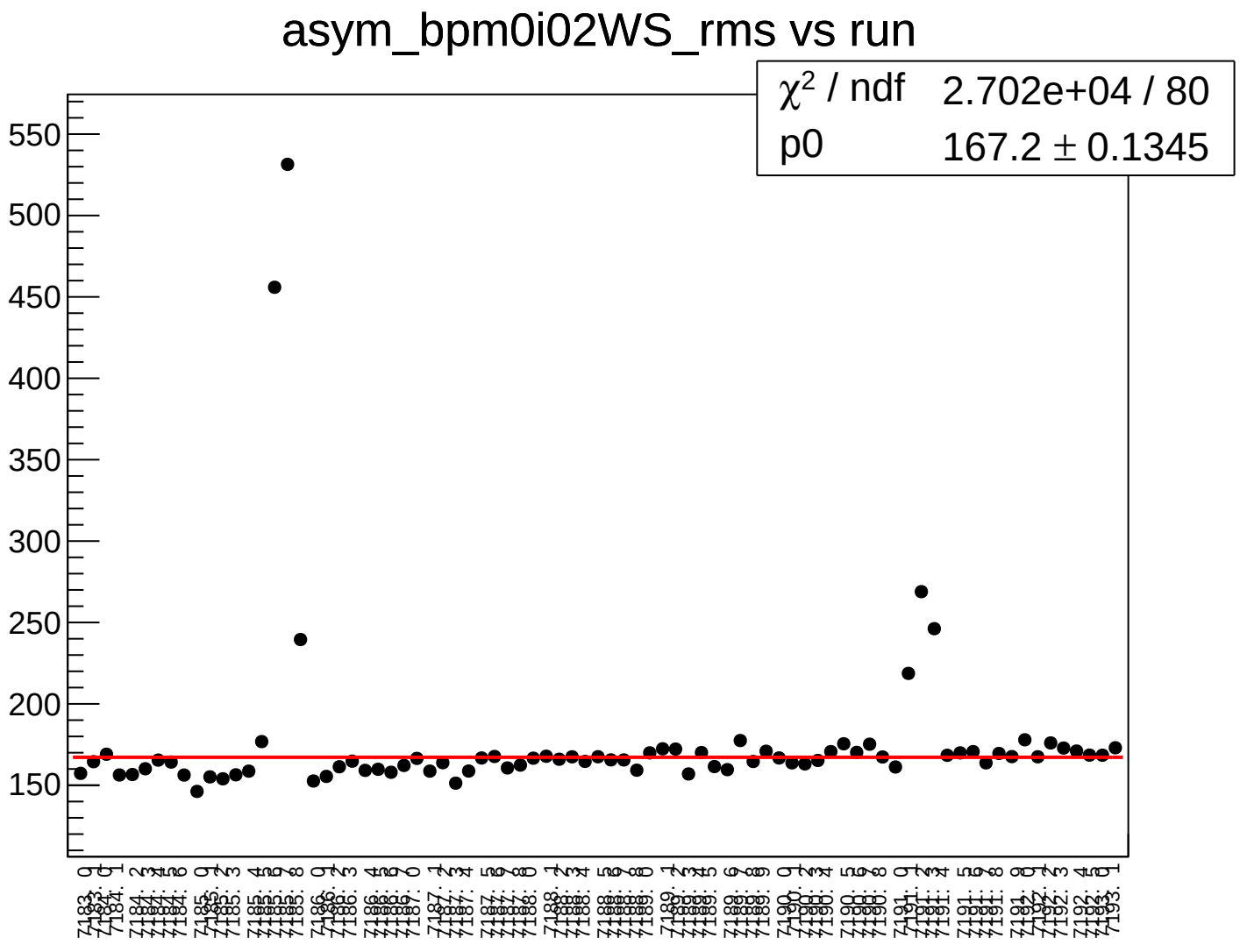

asym_cav4dQ_rms vs run
χ² / ndf 7810 / 80
p0 342.1 ± 0.2734
650
600
550
500
450
400
350
300

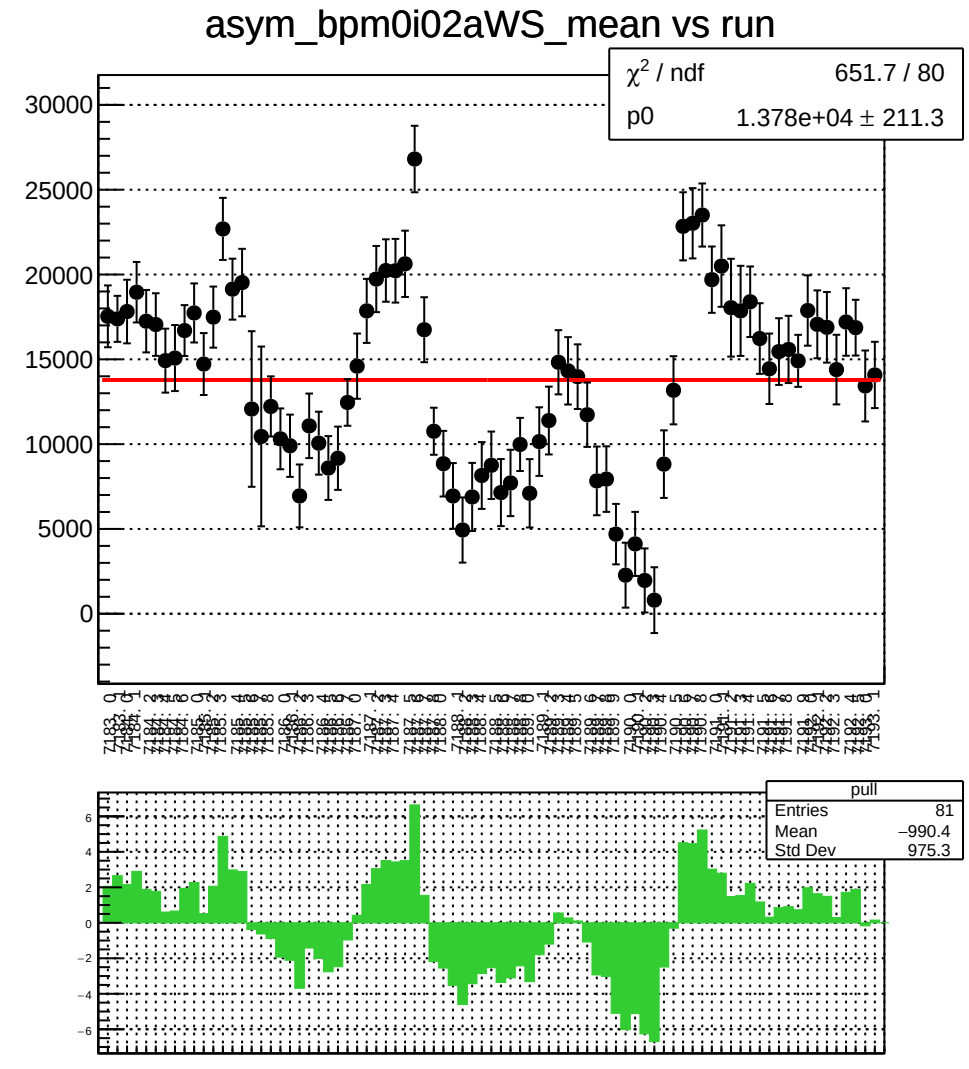

asym_bcm0l02_mean vs run
χ² / ndf 70.63 / 80
p0 −651.1 ± 300.2
10000
5000
0
−5000
−10000
pull
Entries 81
Mean 398.2
Std Dev 361.4
2
1
0
−1
−2
pull1D
Entries 81
Mean −0.04869
Std Dev 0.9325
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

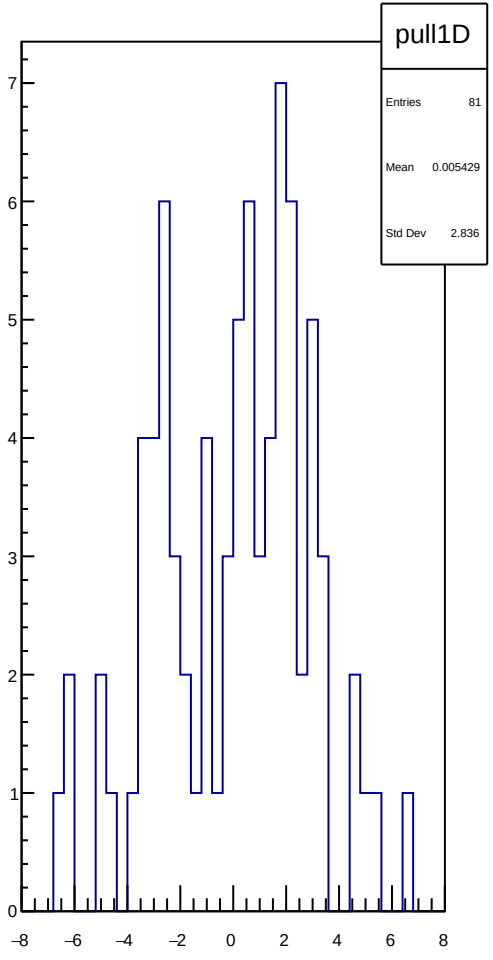

asym_bcm0l02_rms vs run
χ² / ndf 2.095e+04 / 80
p0 264.4 ± 0.2123
700
600
500
400
300
200

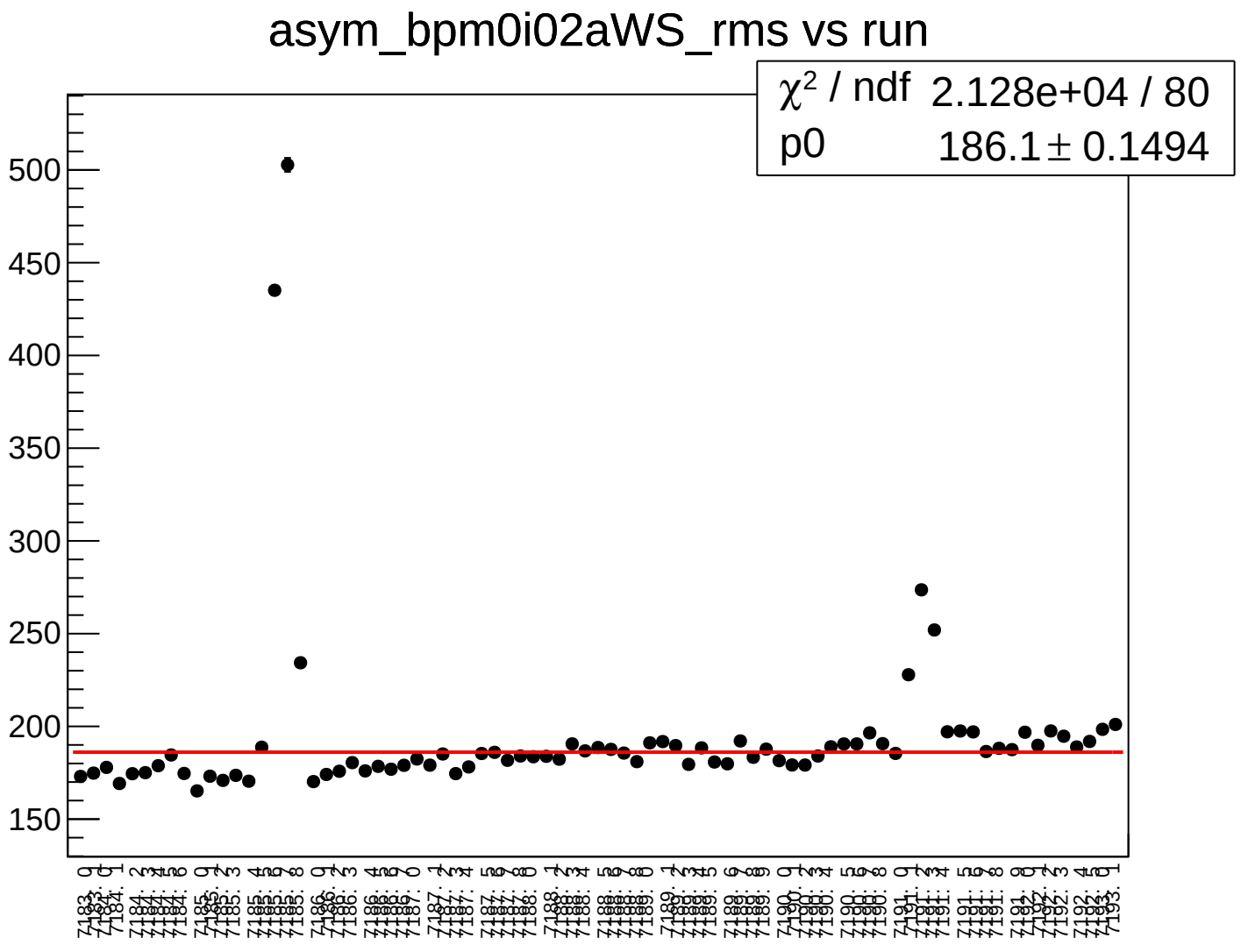

asym_bpm0i02WS_mean vs run
χ² / ndf 823 / 80
p0 7762 ± 190.2
pull
Entries 81
Mean −288.4
Std Dev 275.2

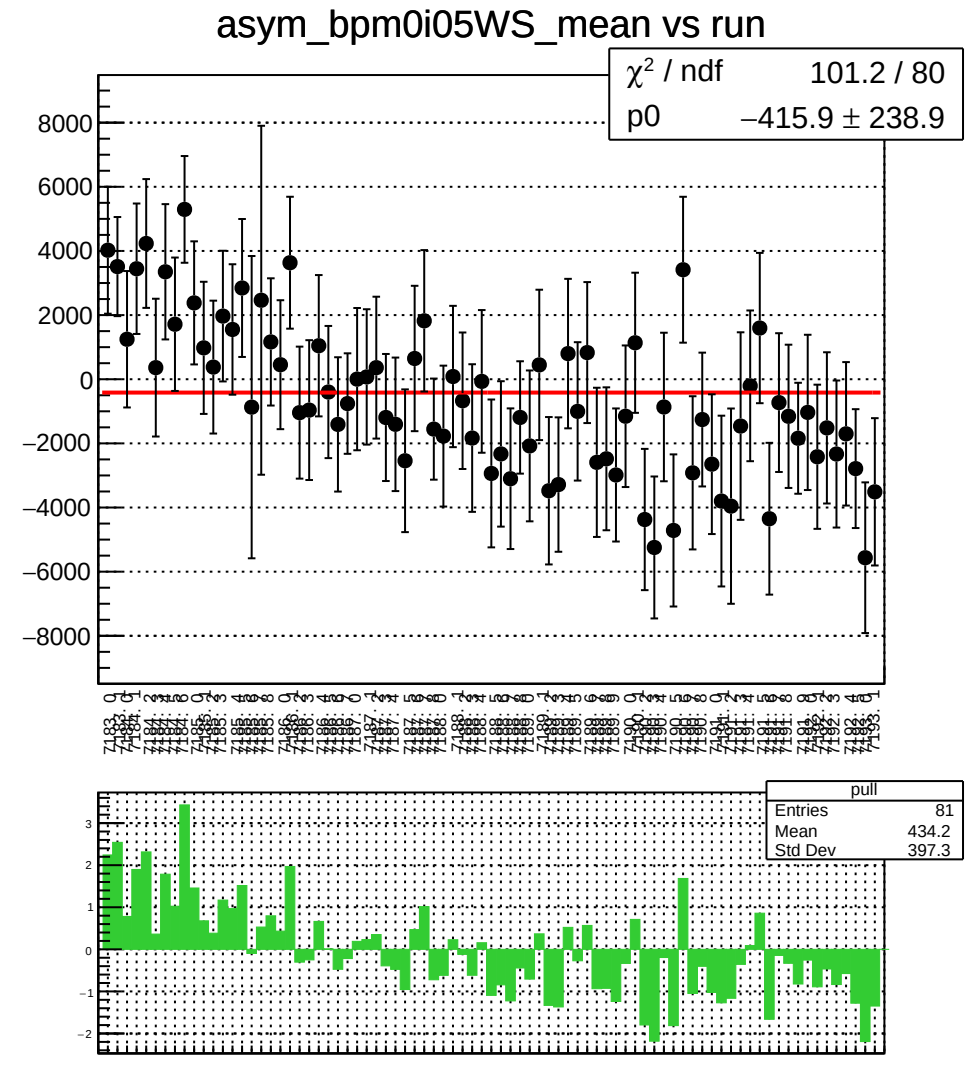

pull1D
Entries 81
Mean −0.08444
Std Dev 3.07

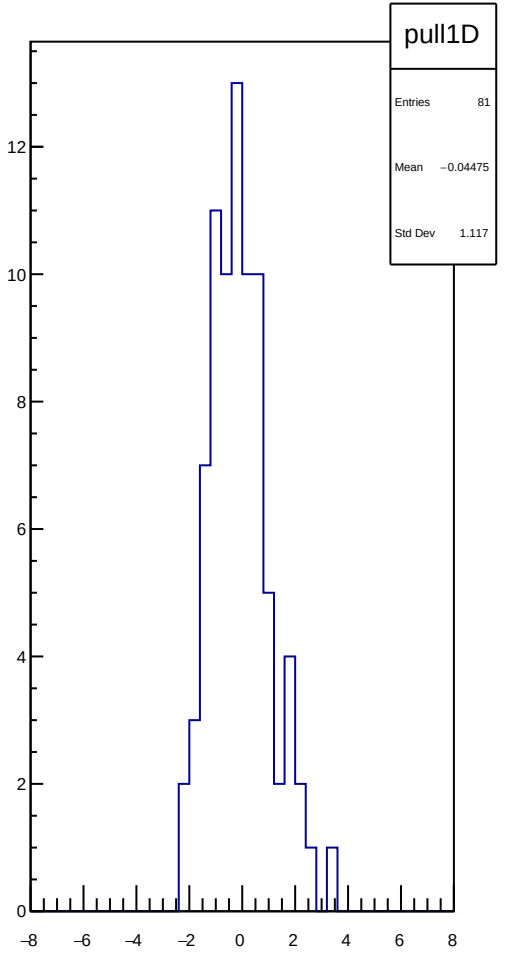

asym_bpm0i02WS_rms vs run
χ^2 / ndf 2.702e+04 / 80
p0 167.2 ± 0.1345
550
500
450
400
350
300
250
200
150

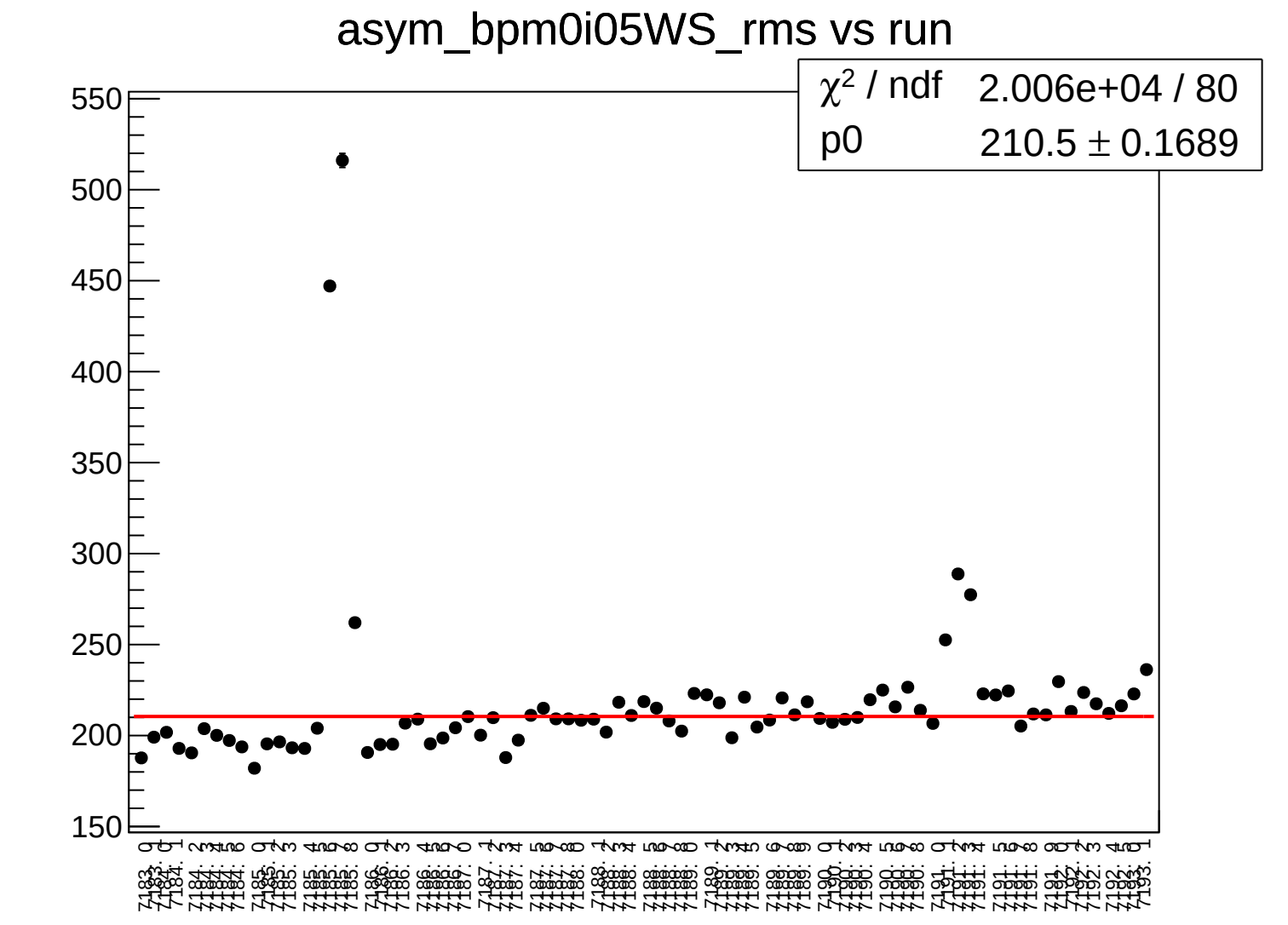

asym_bpm0i02aWS_mean vs run
χ² / ndf 651.7 / 80
p0 1.378e+04 ± 211.3
30000
25000
20000
15000
10000
5000
0
pull
Entries 81
Mean −990.4
Std Dev 975.3
6
4
2
0
−2
−4
−6

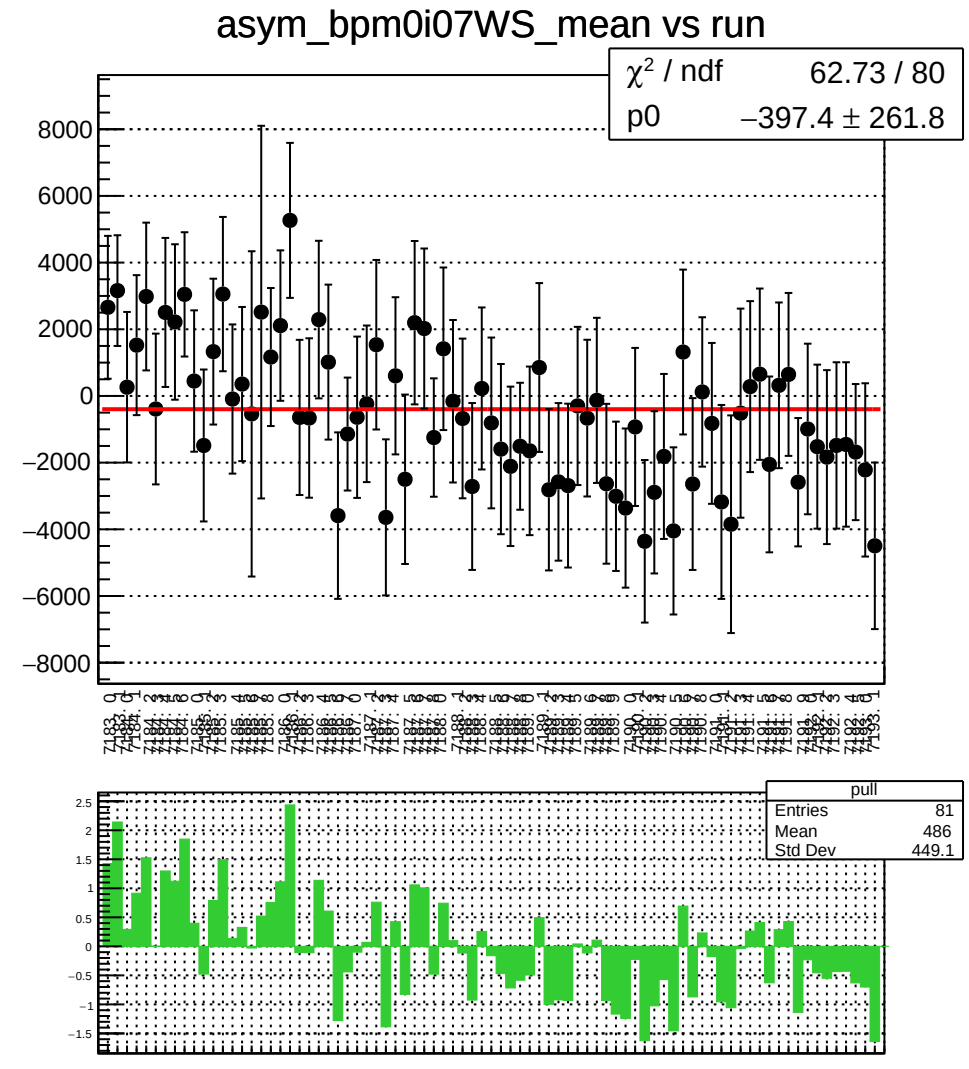

pull1D
Entries 81
Mean 0.005429
Std Dev 2.836
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

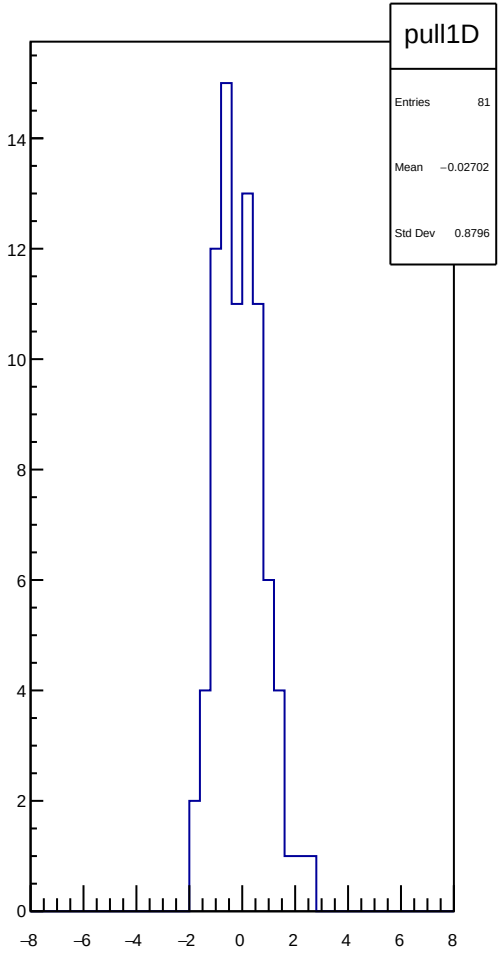

asym_bpm0i02aWS_rms vs run
χ² / ndf 2.128e+04 / 80
p0 186.1 ± 0.1494
500
450
400
350
300
250
200
150

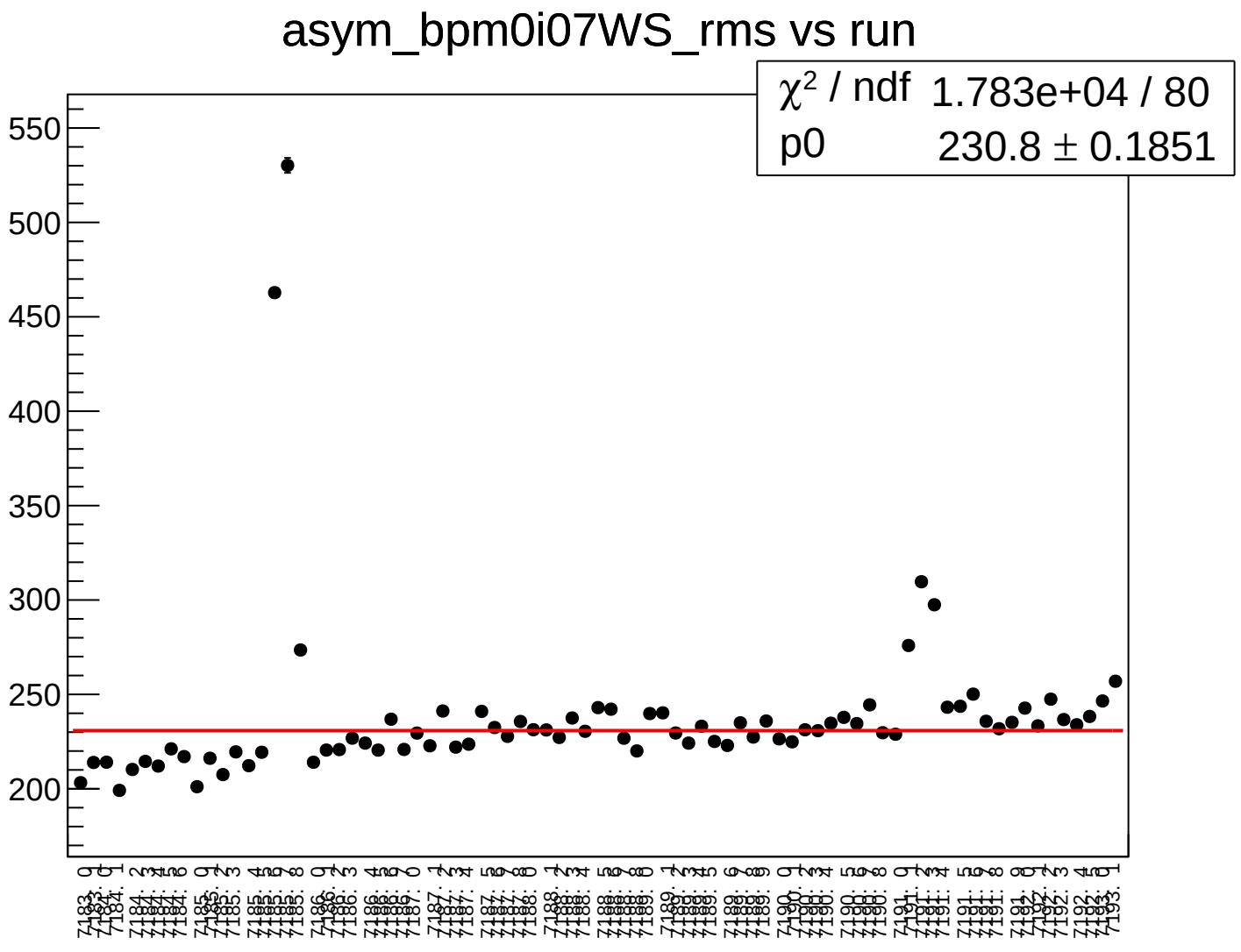

asym_bpm0i05WS_mean vs run
χ² / ndf 101.2 / 80
p0 −415.9 ± 238.9
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean 434.2
Std Dev 397.3
3
2
1
0
−1
−2

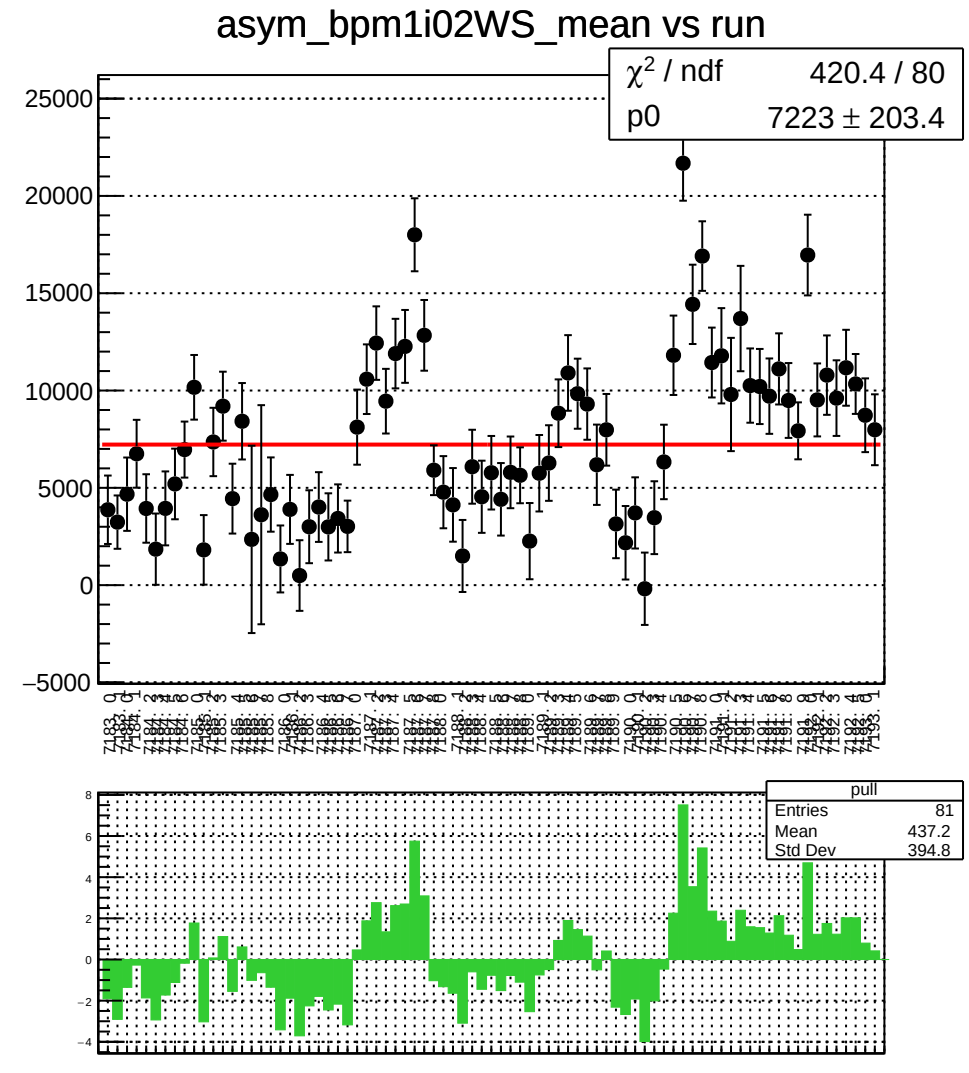

pull1D
Entries 81
Mean −0.04475
Std Dev 1.117
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

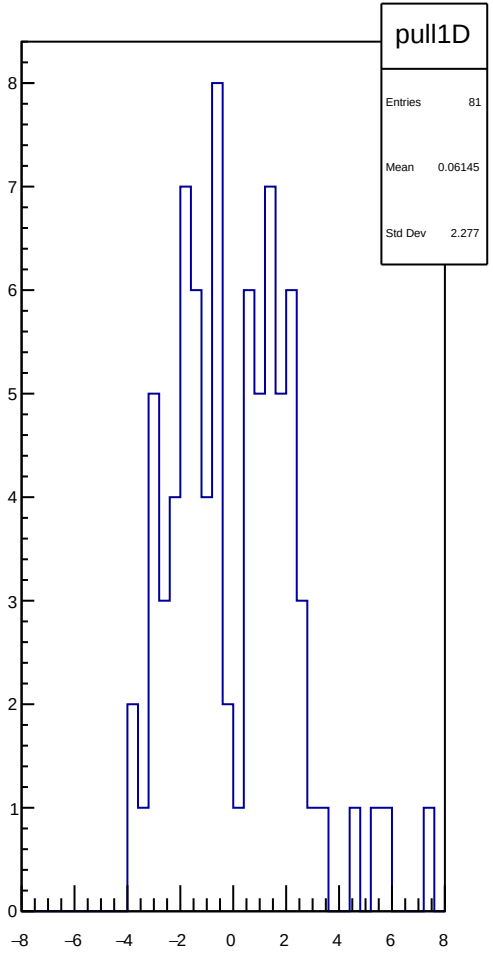

asym_bpm0i05WS_rms vs run
χ^2 / ndf 2.006e+04 / 80
p0 210.5 ± 0.1689
550
500
450
400
350
300
250
200
150

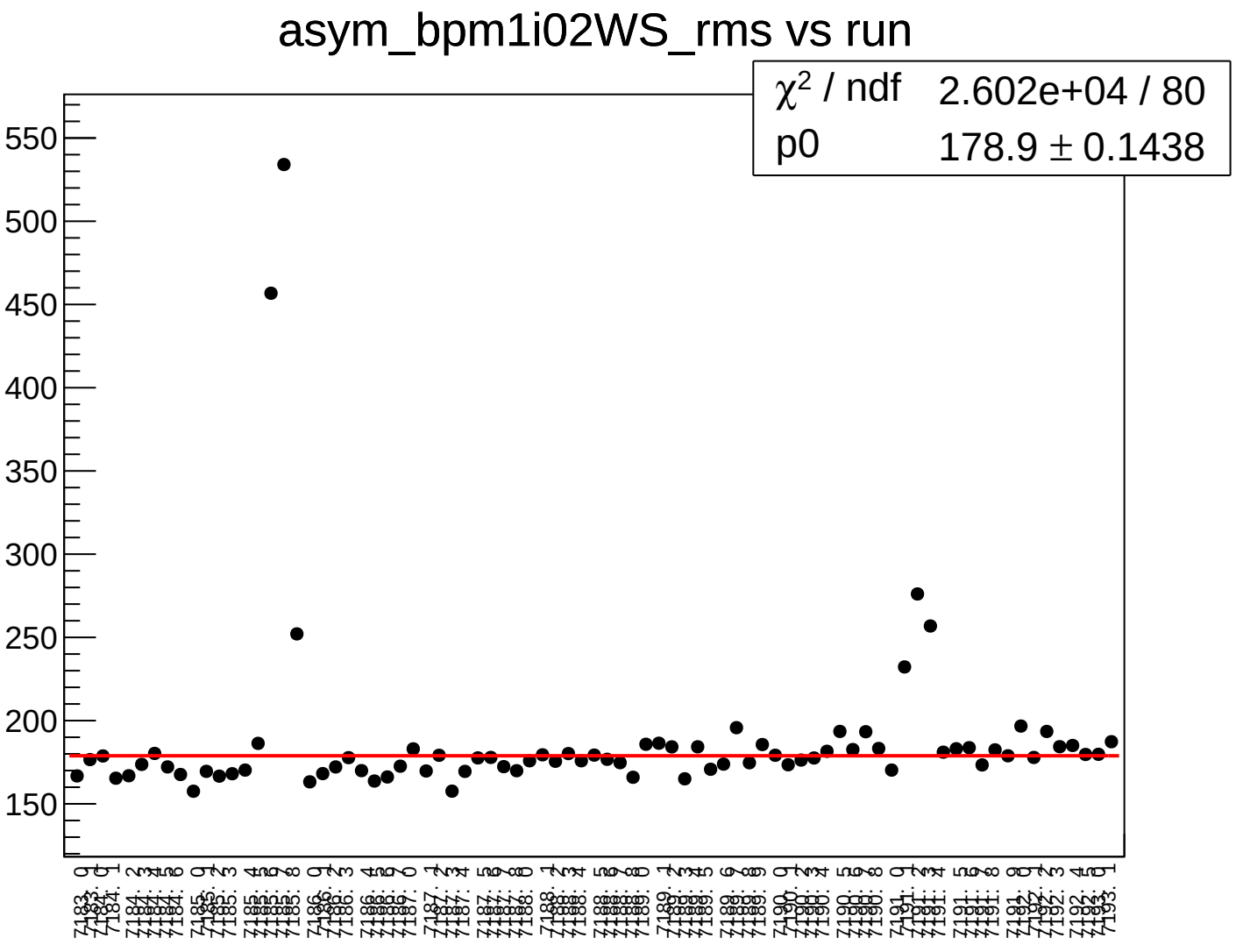

asym_bpm0i07WS_mean vs run
χ² / ndf 62.73 / 80
p0 −397.4 ± 261.8
pull
Entries 81
Mean 486
Std Dev 449.1

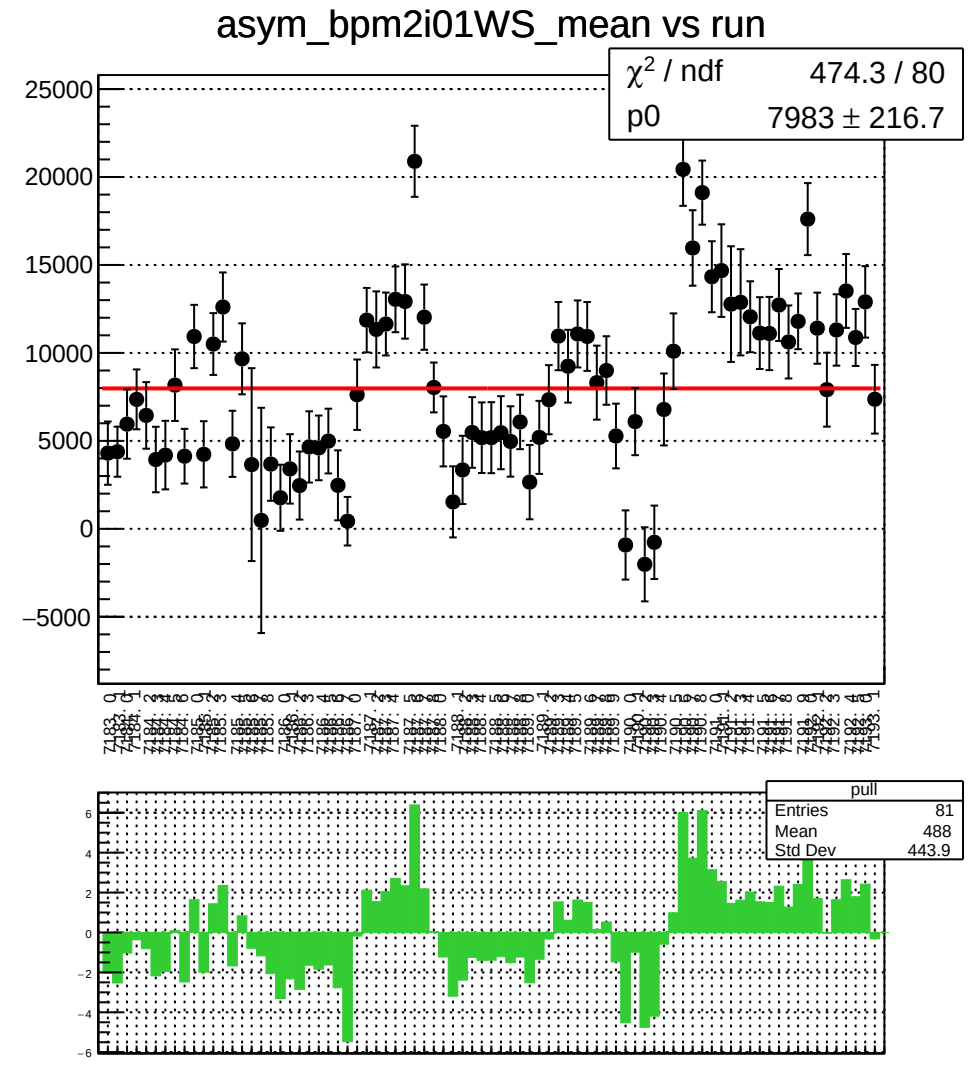

pull1D
Entries 81
Mean −0.02702
Std Dev 0.8796

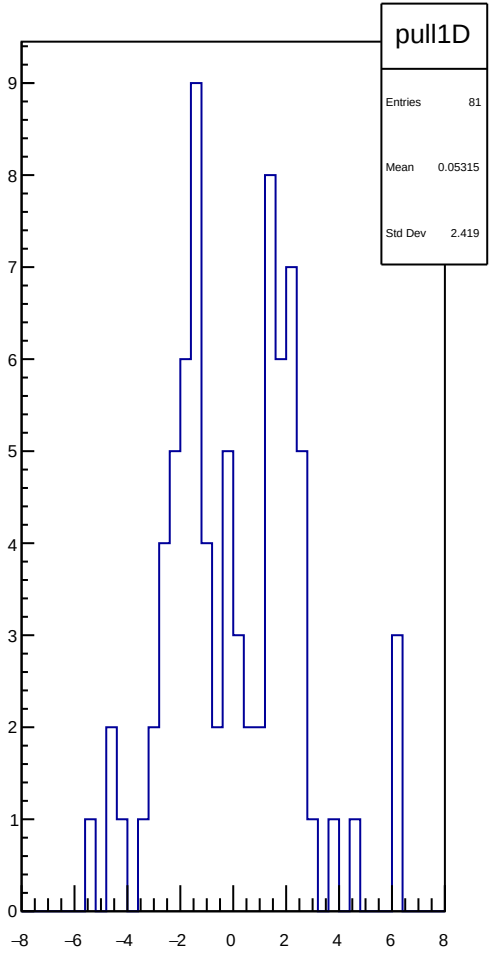

asym_bpm0i07WS_rms vs run
χ² / ndf 1.783e+04 / 80
p0 230.8 ± 0.1851
550
500
450
400
350
300
250
200

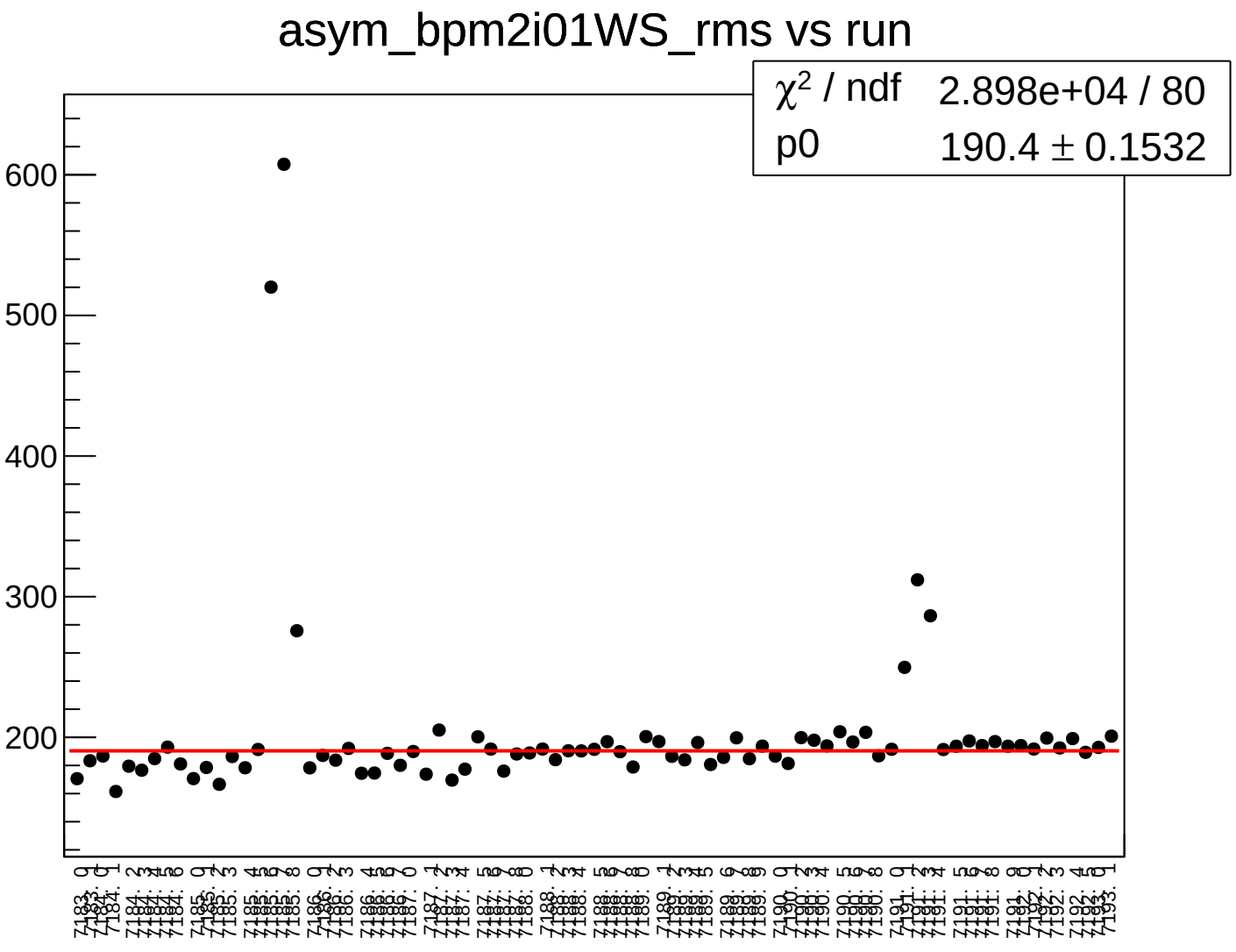

asym_bpm1i02WS_mean vs run
χ² / ndf 420.4 / 80
p0 7223 ± 203.4
pull
Entries 81
Mean 437.2
Std Dev 394.8

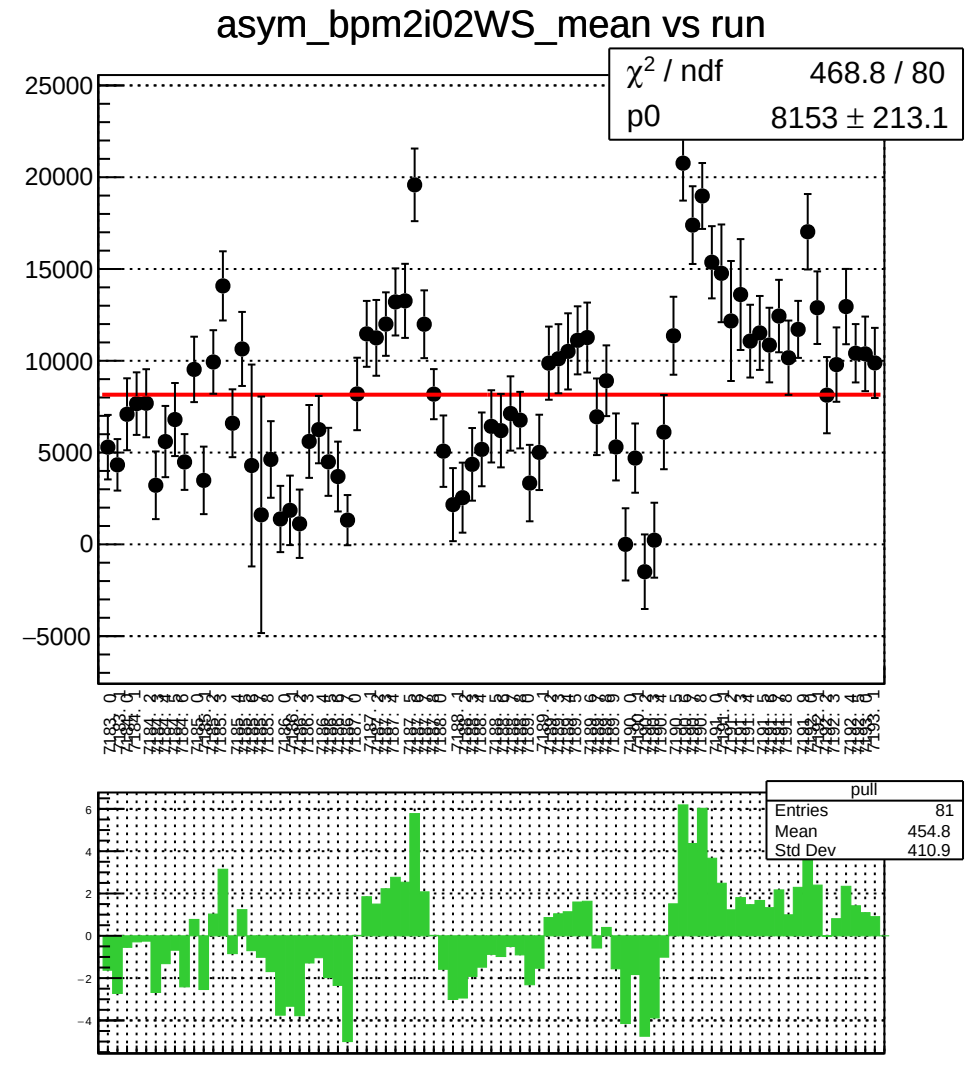

pull1D
Entries 81
Mean 0.06145
Std Dev 2.277

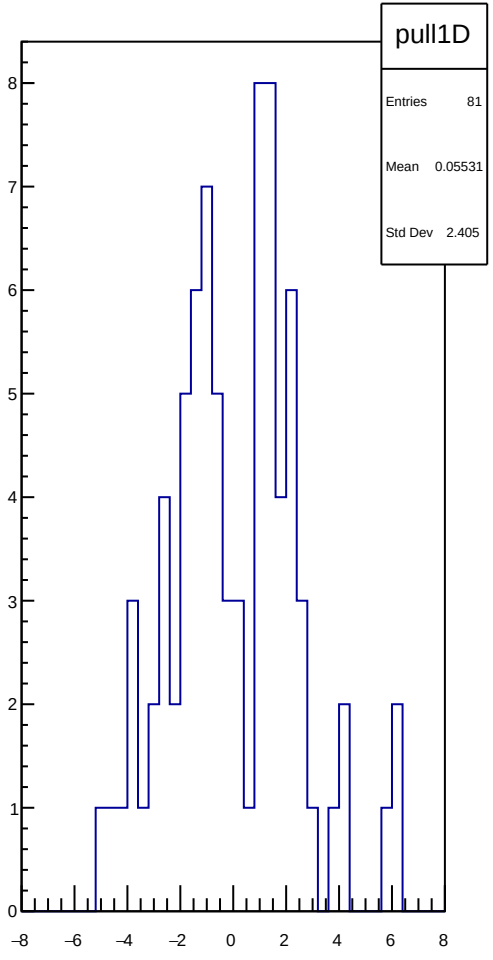

asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.602e+04 / 80
p0 178.9 ± 0.1438
550
500
450
400
350
300
250
200
150

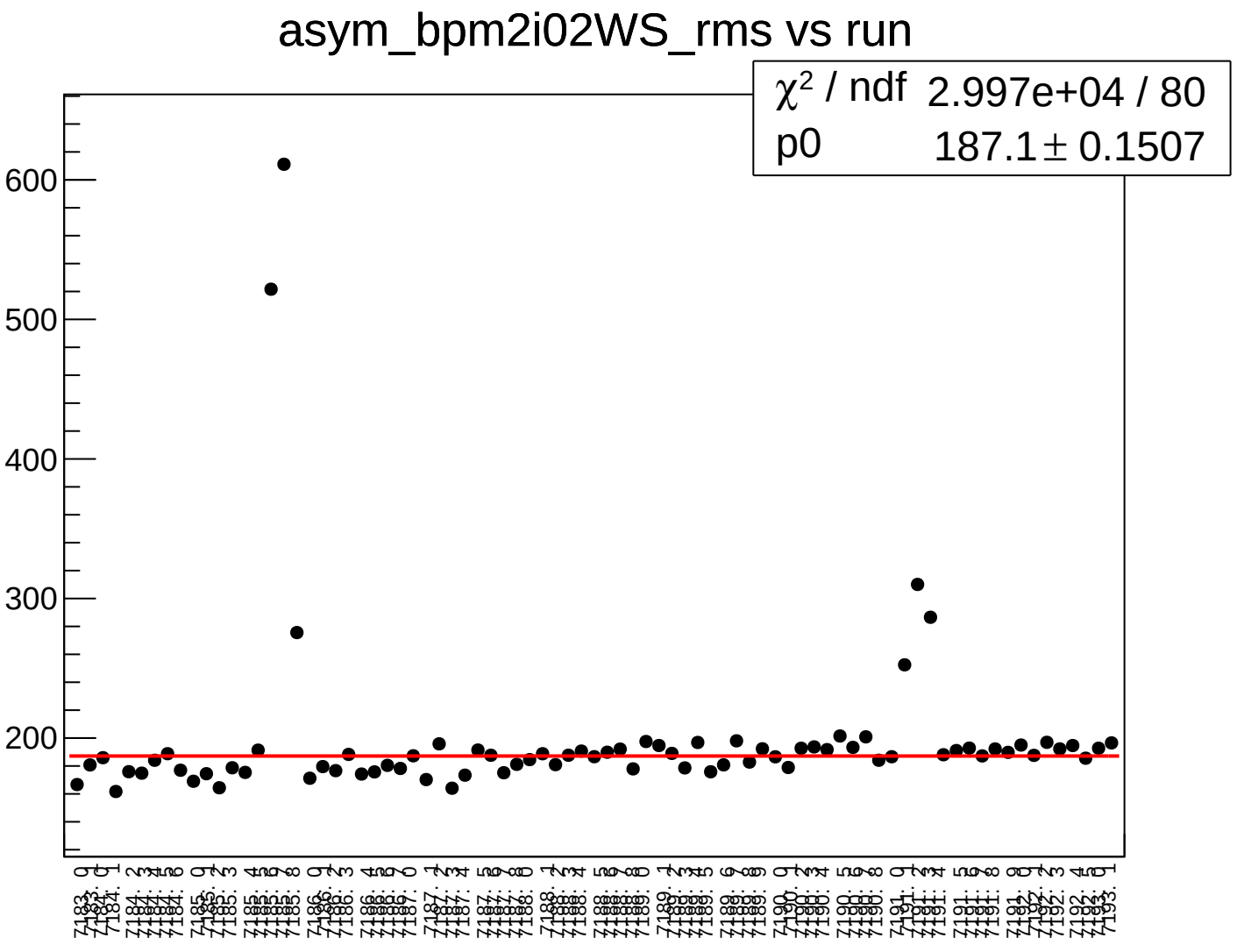

asym_bpm2i01WS_mean vs run
χ² / ndf 474.3 / 80
p0 7983 ± 216.7
25000
20000
15000
10000
5000
0
−5000
pull
Entries 81
Mean 488
Std Dev 443.9
6
4
2
0
−2
−4
−6

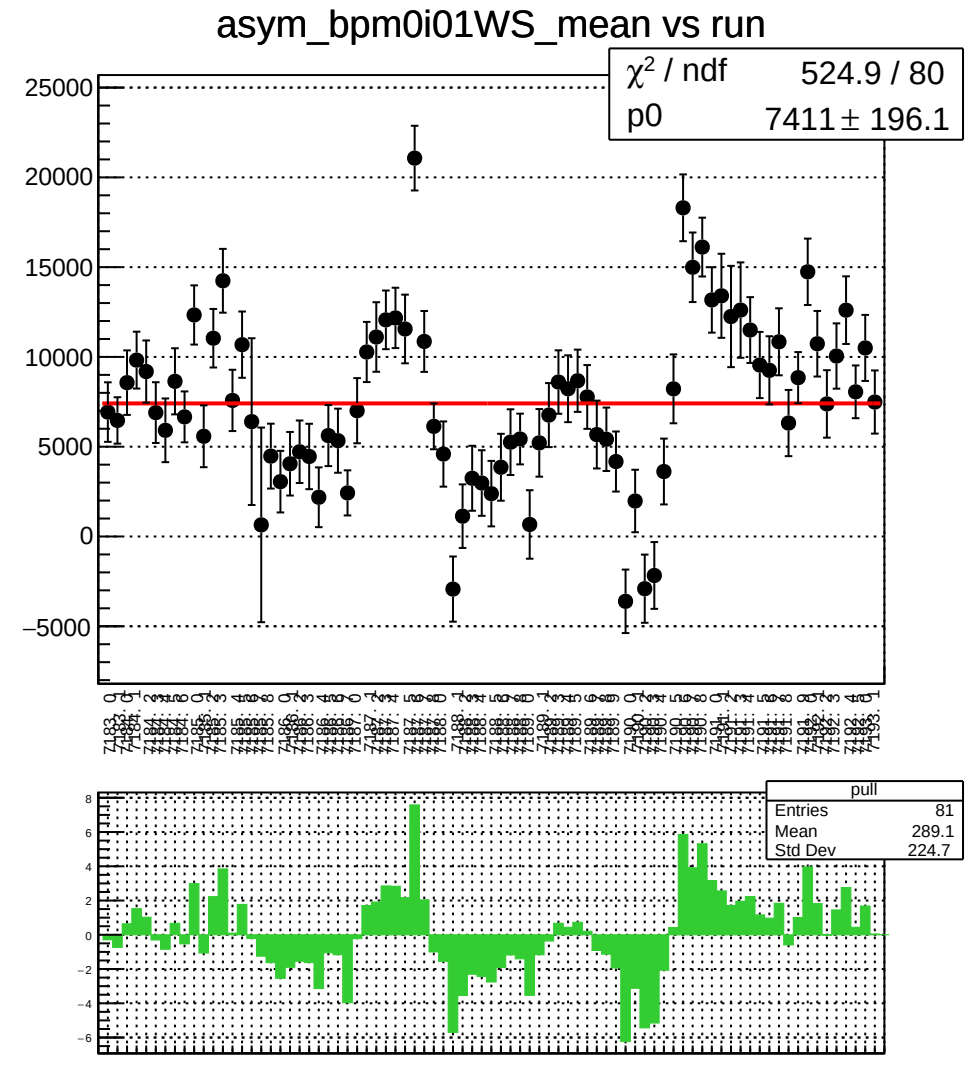

pull1D
Entries 81
Mean 0.05315
Std Dev 2.419
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

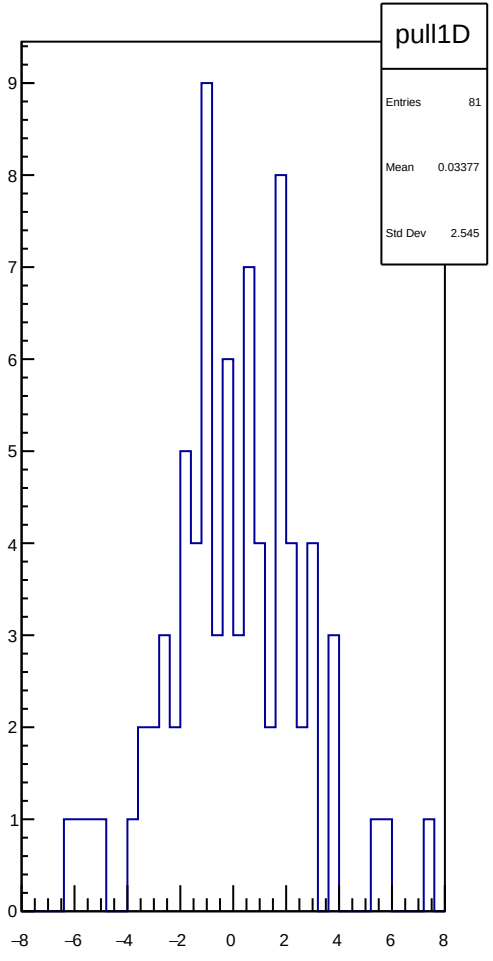

asym_bpm2i01WS_rms vs run
χ^2 / ndf 2.898e+04 / 80
p0 190.4 ± 0.1532
600
500
400
300
200

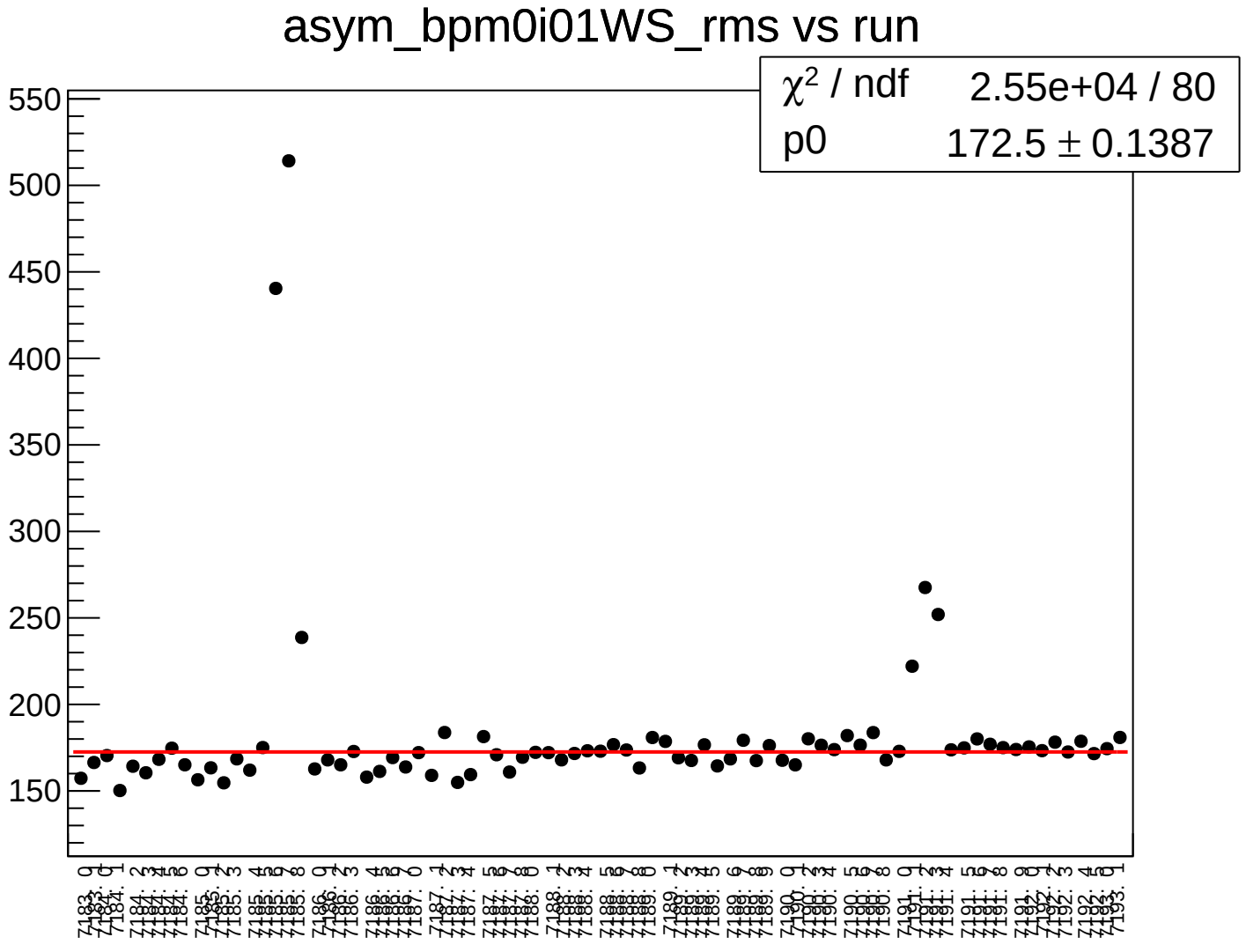

asym_bpm2i02WS_mean vs run
χ² / ndf 468.8 / 80
p0 8153 ± 213.1
pull
Entries 81
Mean 454.8
Std Dev 410.9

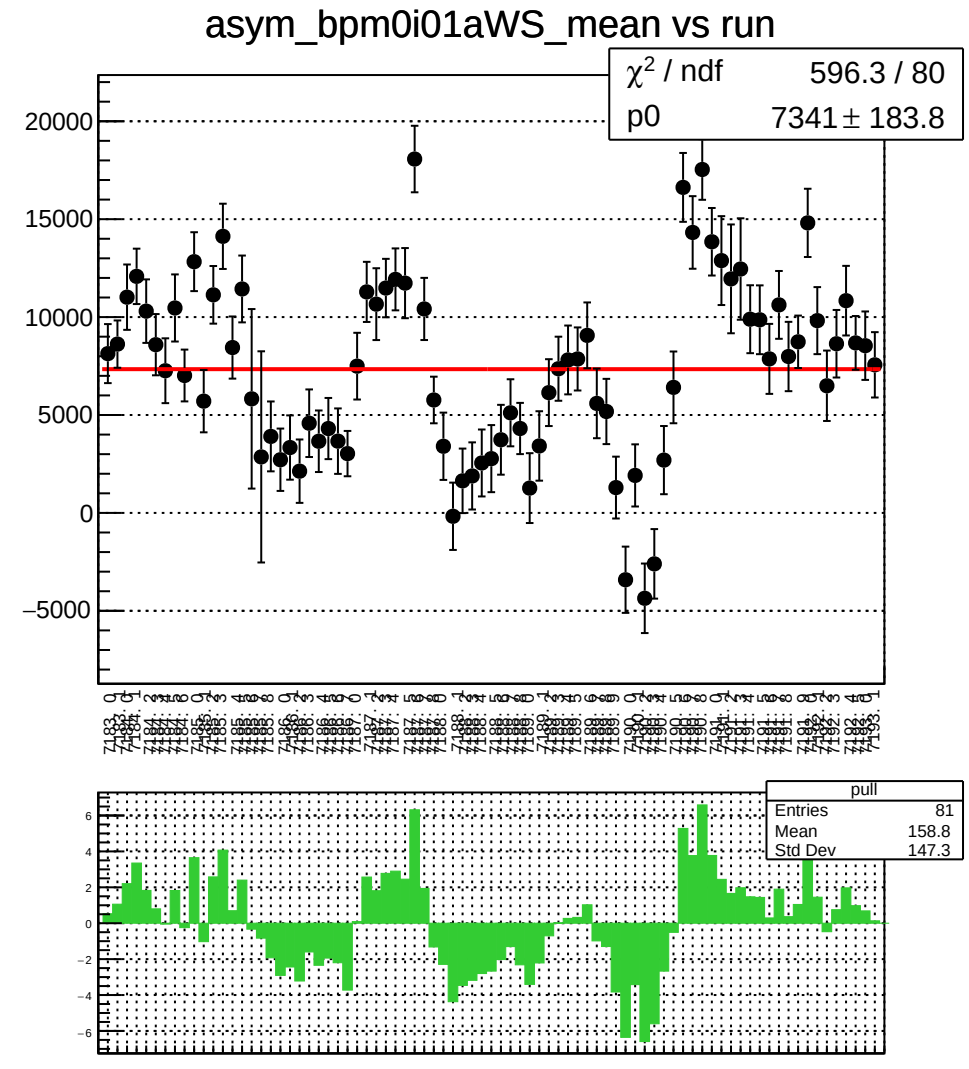

pull1D
Entries 81
Mean 0.05531
Std Dev 2.405

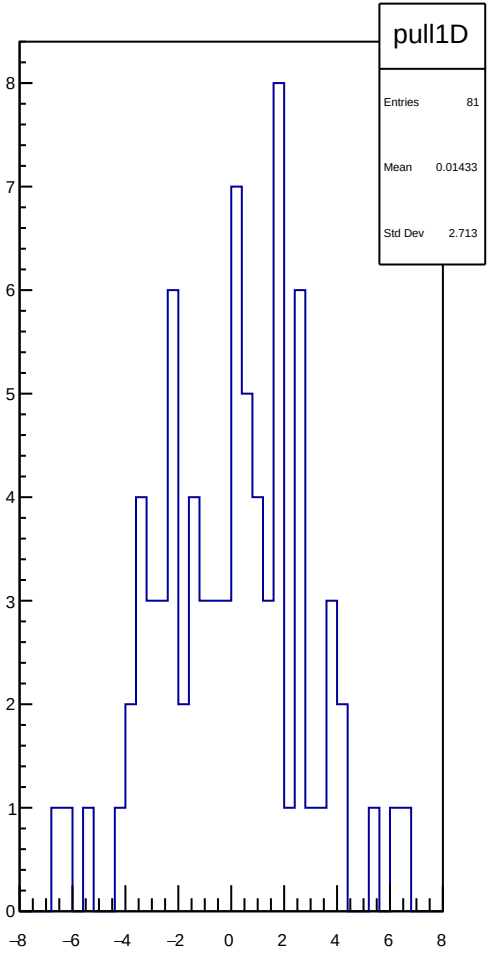

asym_bpm2i02WS_rms vs run
χ² / ndf 2.997e+04 / 80
p0 187.1 ± 0.1507
600
500
400
300
200

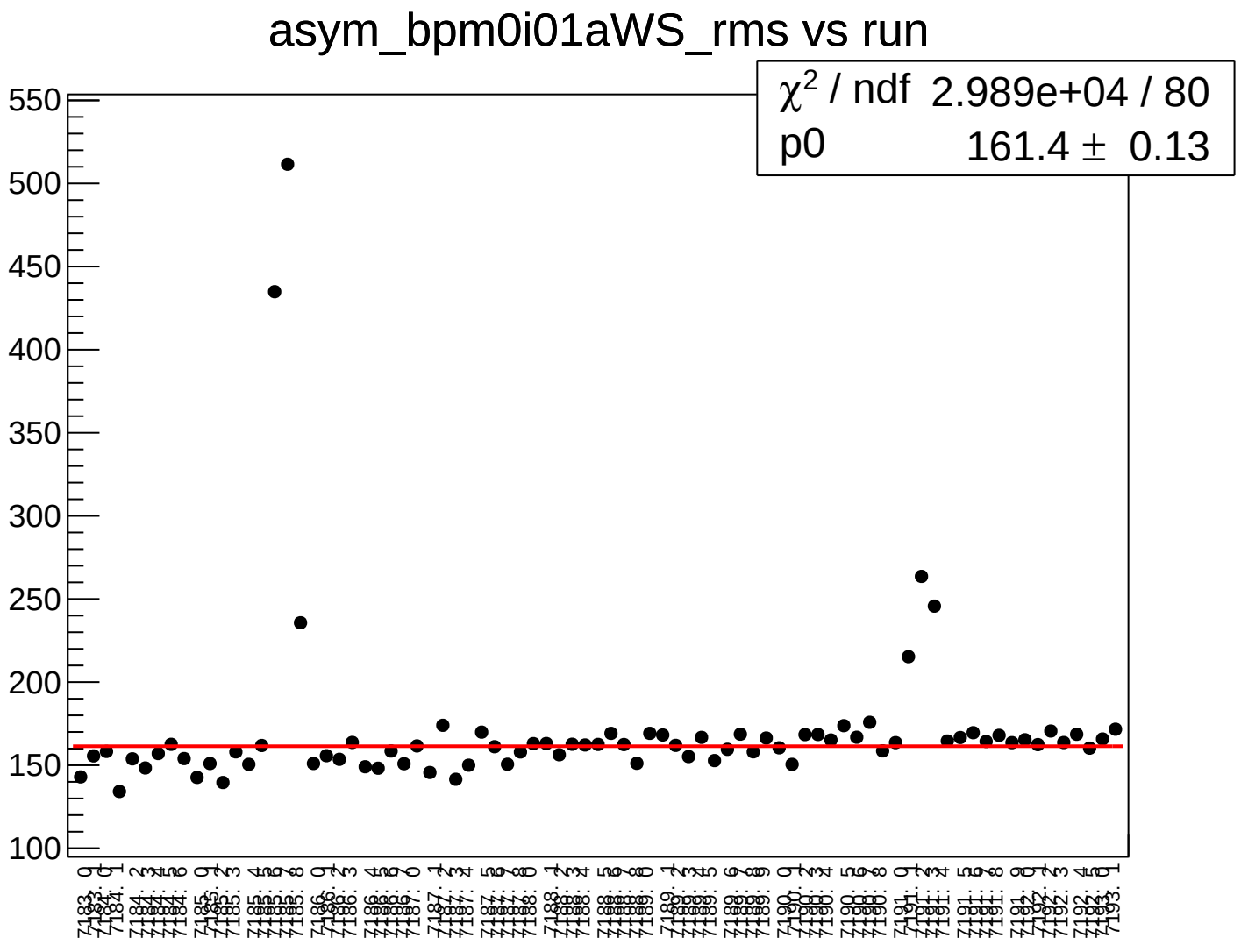

asym_bpm0i01WS_mean vs run
χ² / ndf 524.9 / 80
p0 7411 ± 196.1
pull
Entries 81
Mean 289.1
Std Dev 224.7

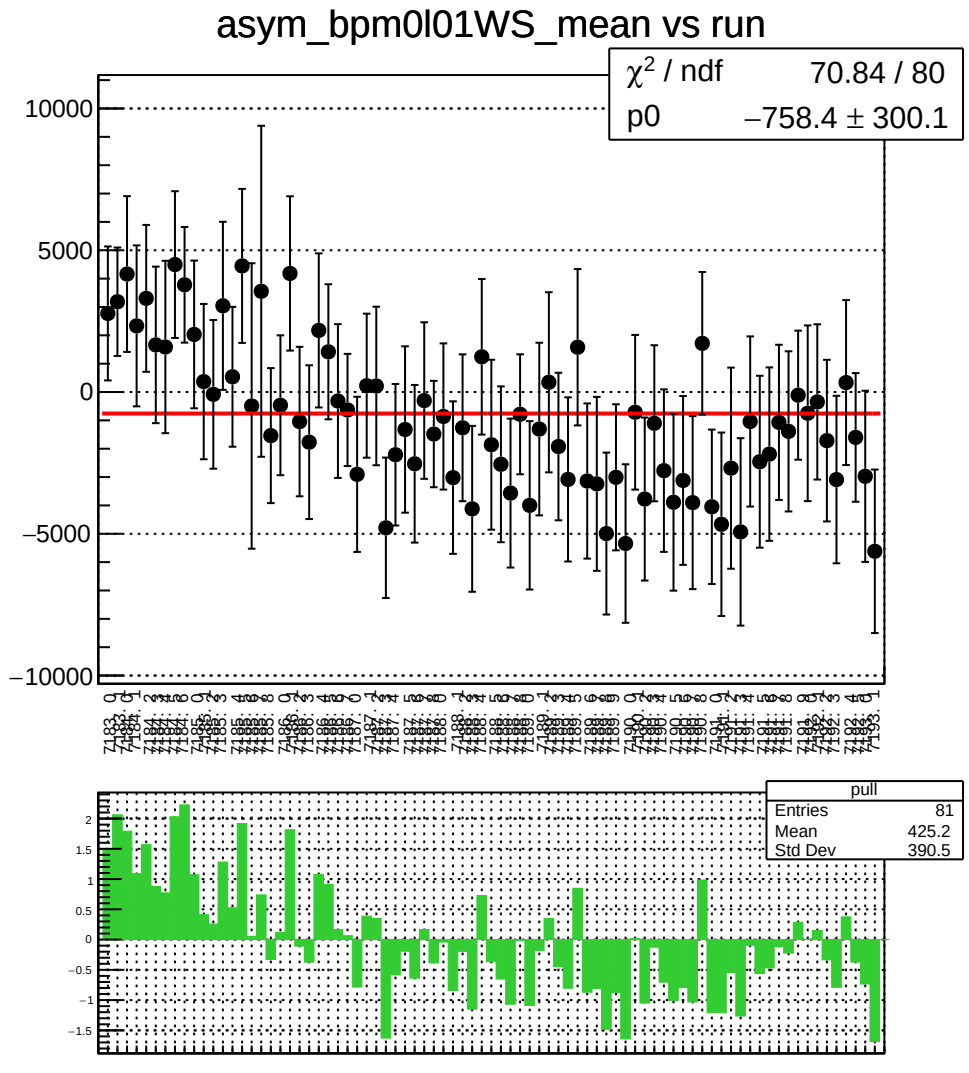

pull1D
Entries 81
Mean 0.03377
Std Dev 2.545

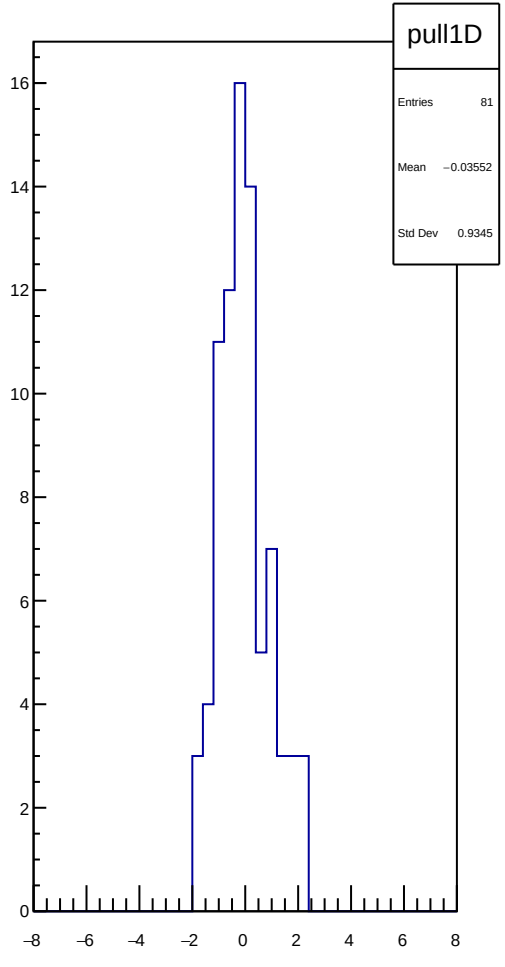

asym_bpm0i01WS_rms vs run
χ² / ndf 2.55e+04 / 80
p0 172.5 ± 0.1387
550
500
450
400
350
300
250
200
150

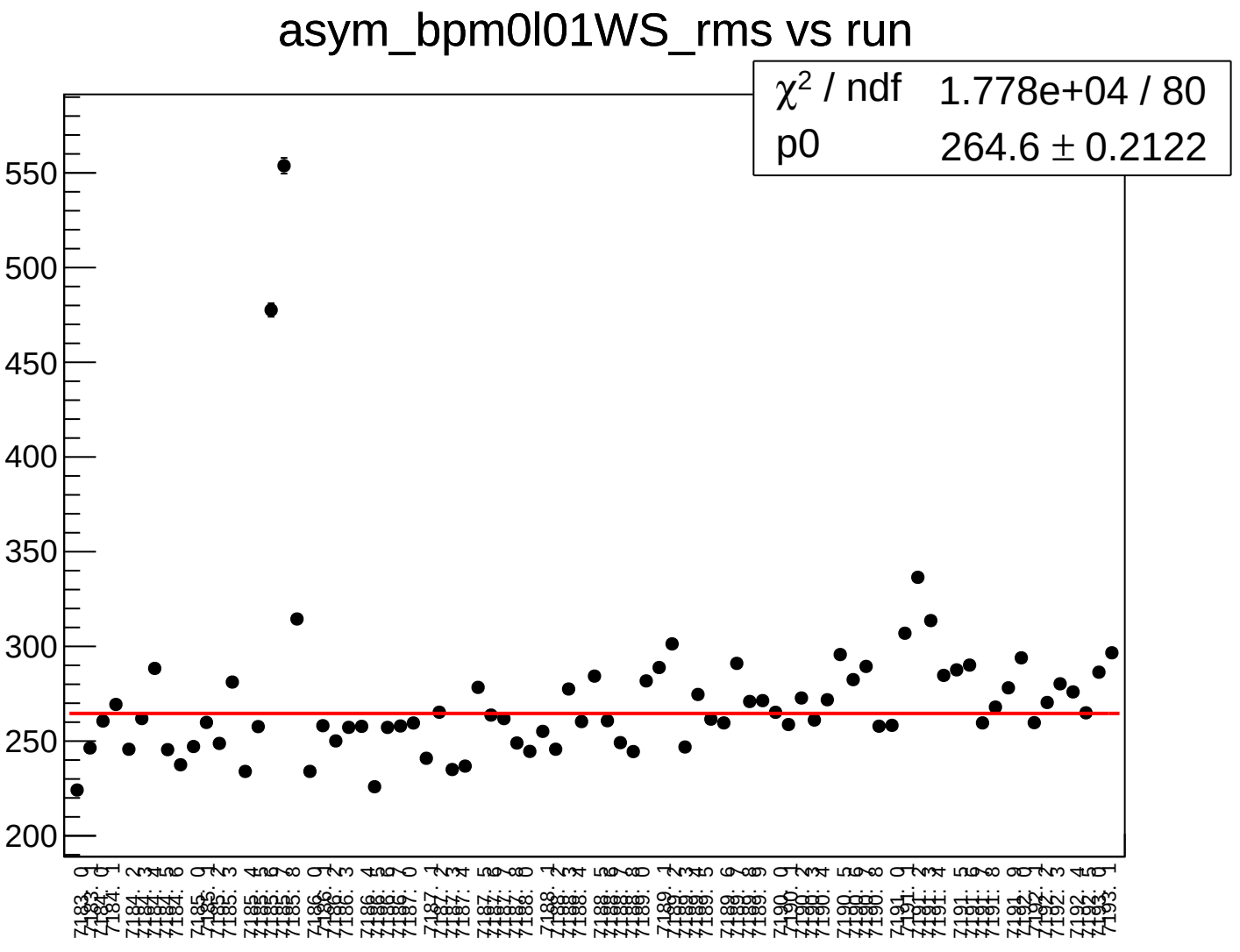

asym_bpm0i01aWS_mean vs run
χ² / ndf 596.3 / 80
p0 7341 ± 183.8
20000
15000
10000
5000
0
−5000
pull
Entries 81
Mean 158.8
Std Dev 147.3
6
4
2
0
−2
−4
−6

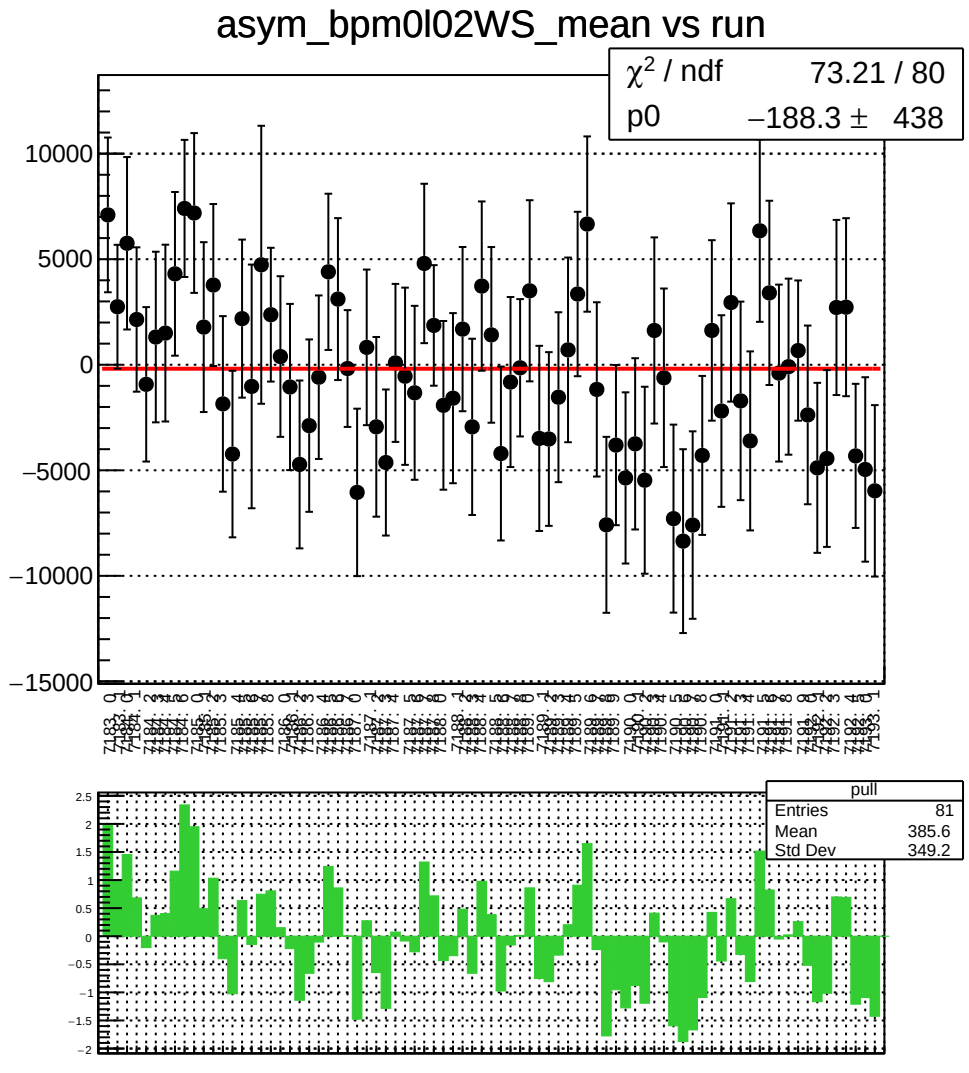

pull1D
Entries 81
Mean 0.01433
Std Dev 2.713
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

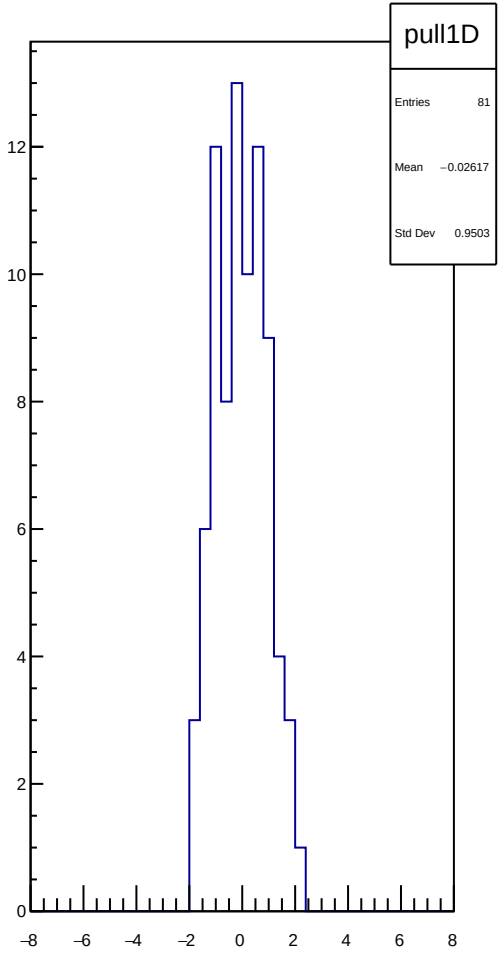

asym_bpm0i01aWS_rms vs run
χ² / ndf 2.989e+04 / 80
p0 161.4 ± 0.13
550
500
450
400
350
300
250
200
150
100

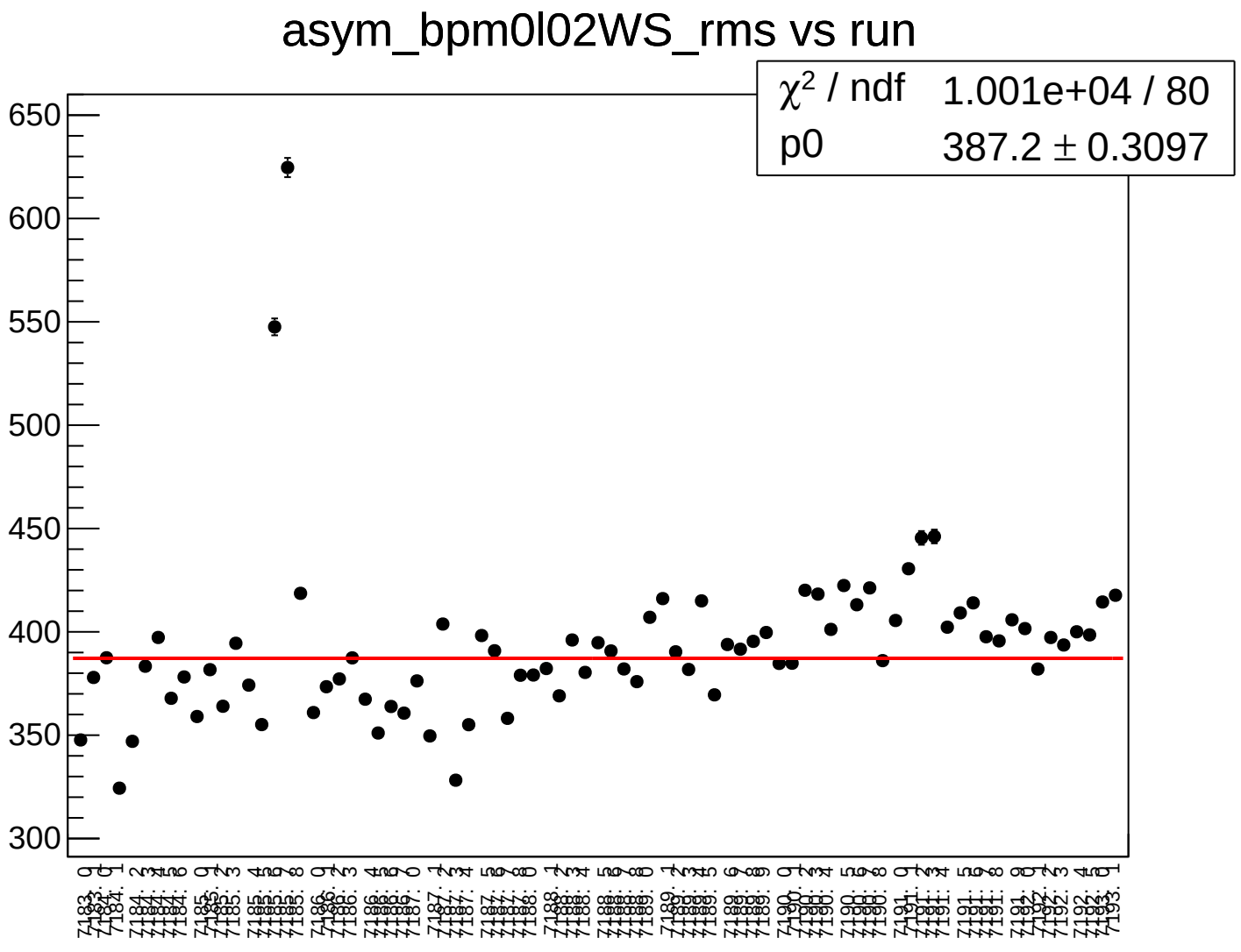

asym_bpm0l01WS_mean vs run
χ² / ndf 70.84 / 80
p0 −758.4 ± 300.1
10000
5000
0
−5000
−10000
pull
Entries 81
Mean 425.2
Std Dev 390.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

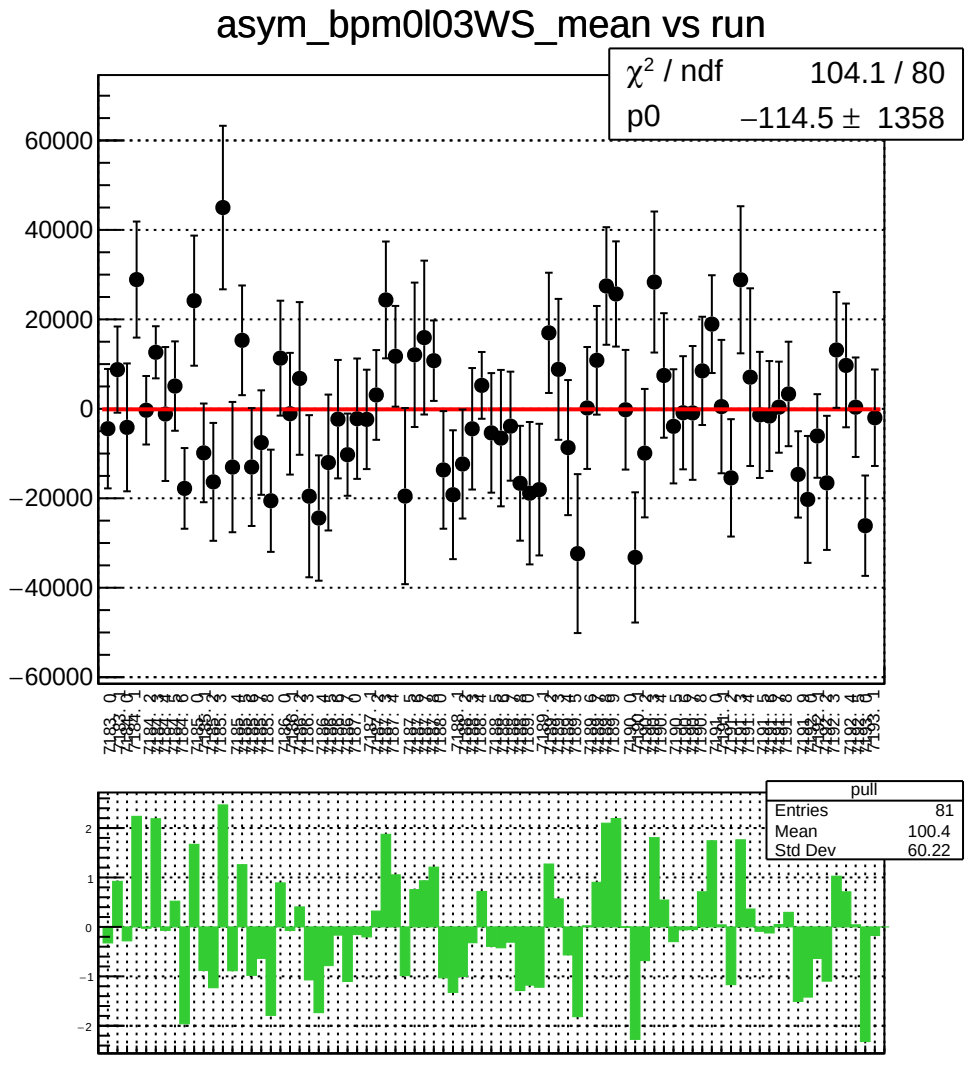

pull1D
Entries 81
Mean −0.03552
Std Dev 0.9345
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

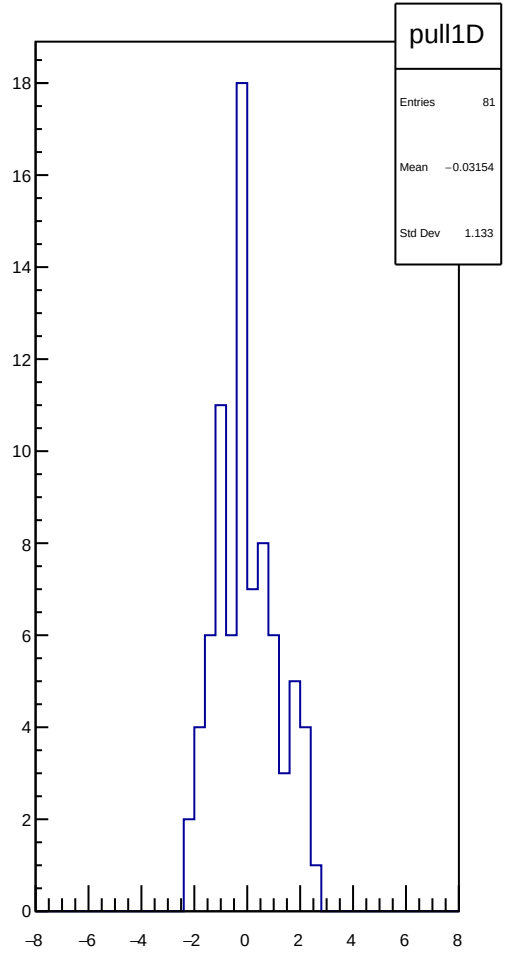

asym_bpm0l01WS_rms vs run
χ² / ndf 1.778e+04 / 80
p0 264.6 ± 0.2122
550
500
450
400
350
300
250
200

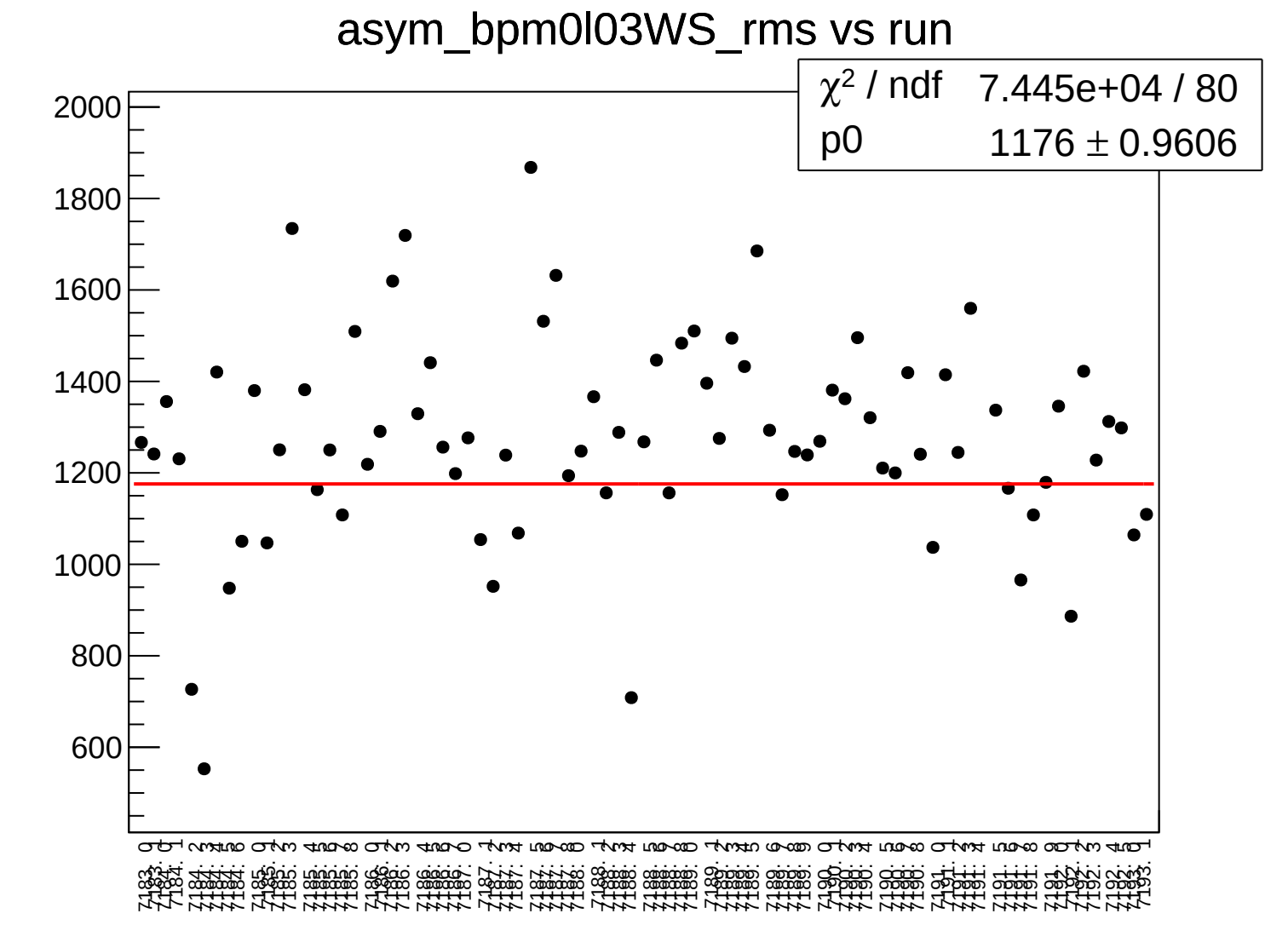

asym_bpm0l02WS_mean vs run
χ² / ndf 73.21 / 80
p0 −188.3 ± 438
pull
Entries 81
Mean 385.6
Std Dev 349.2

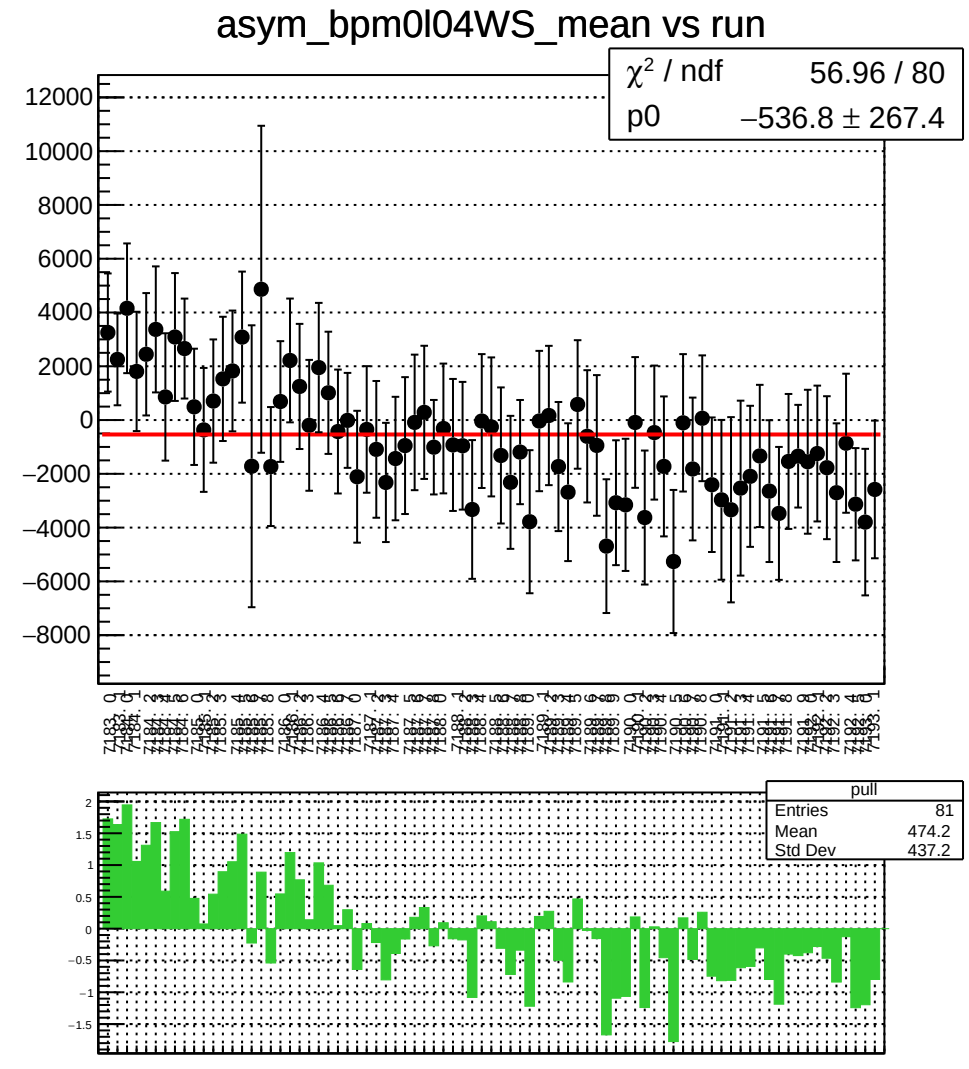

pull1D
Entries 81
Mean −0.02617
Std Dev 0.9503

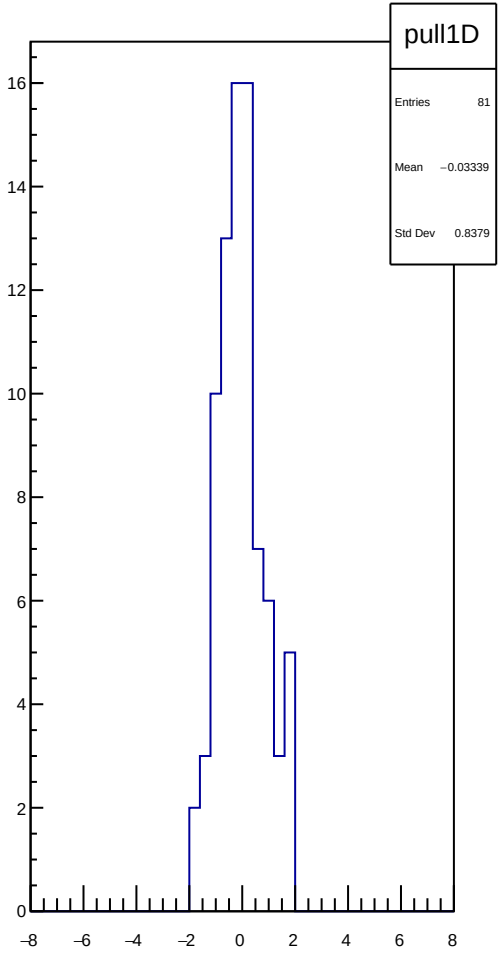

asym_bpm0l02WS_rms vs run
χ² / ndf 1.001e+04 / 80
p0 387.2 ± 0.3097
650
600
550
500
450
400
350
300

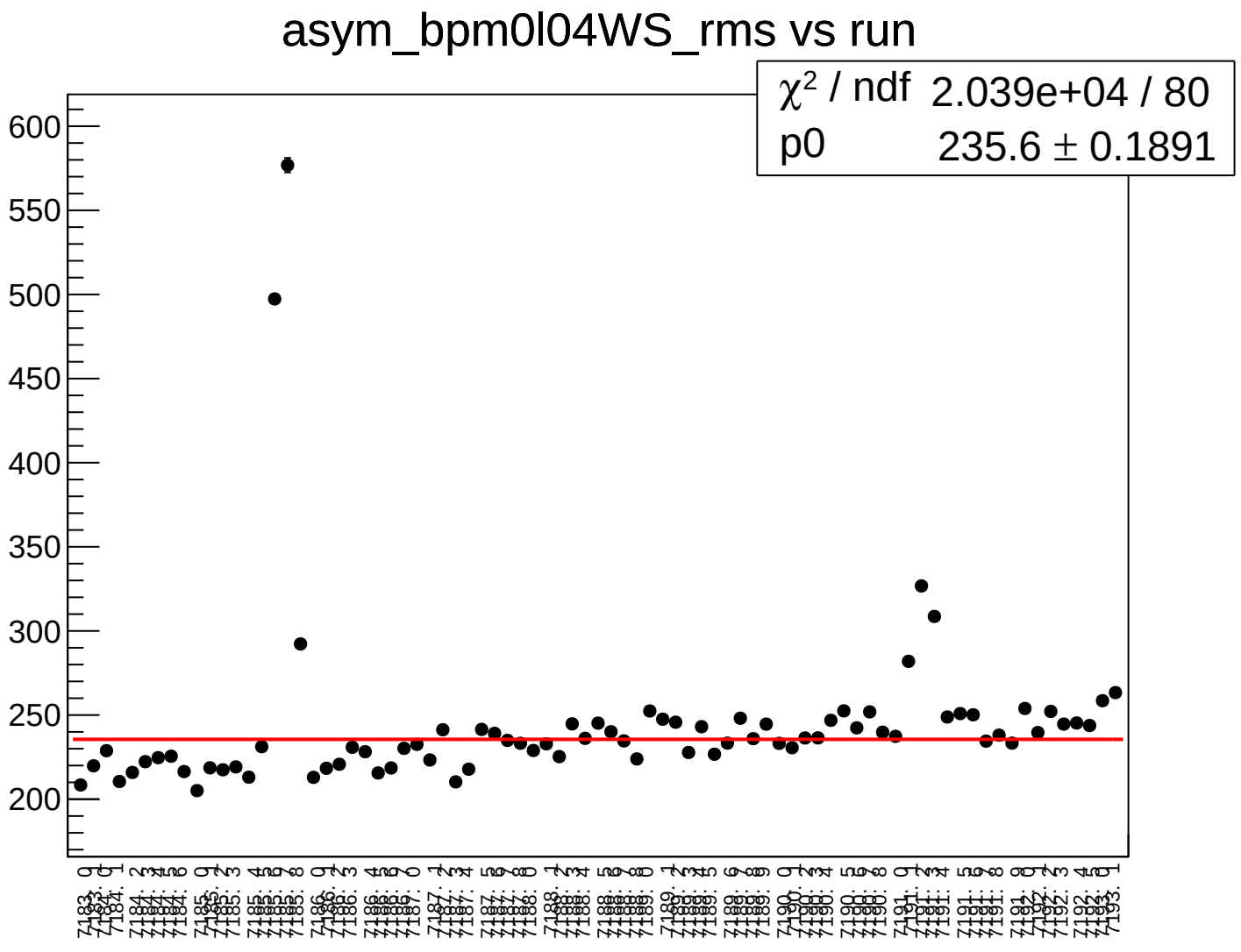

asym_bpm0l03WS_mean vs run
χ² / ndf 104.1 / 80
p0 −114.5 ± 1358
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 81
Mean 100.4
Std Dev 60.22
2
1
0
−1
−2

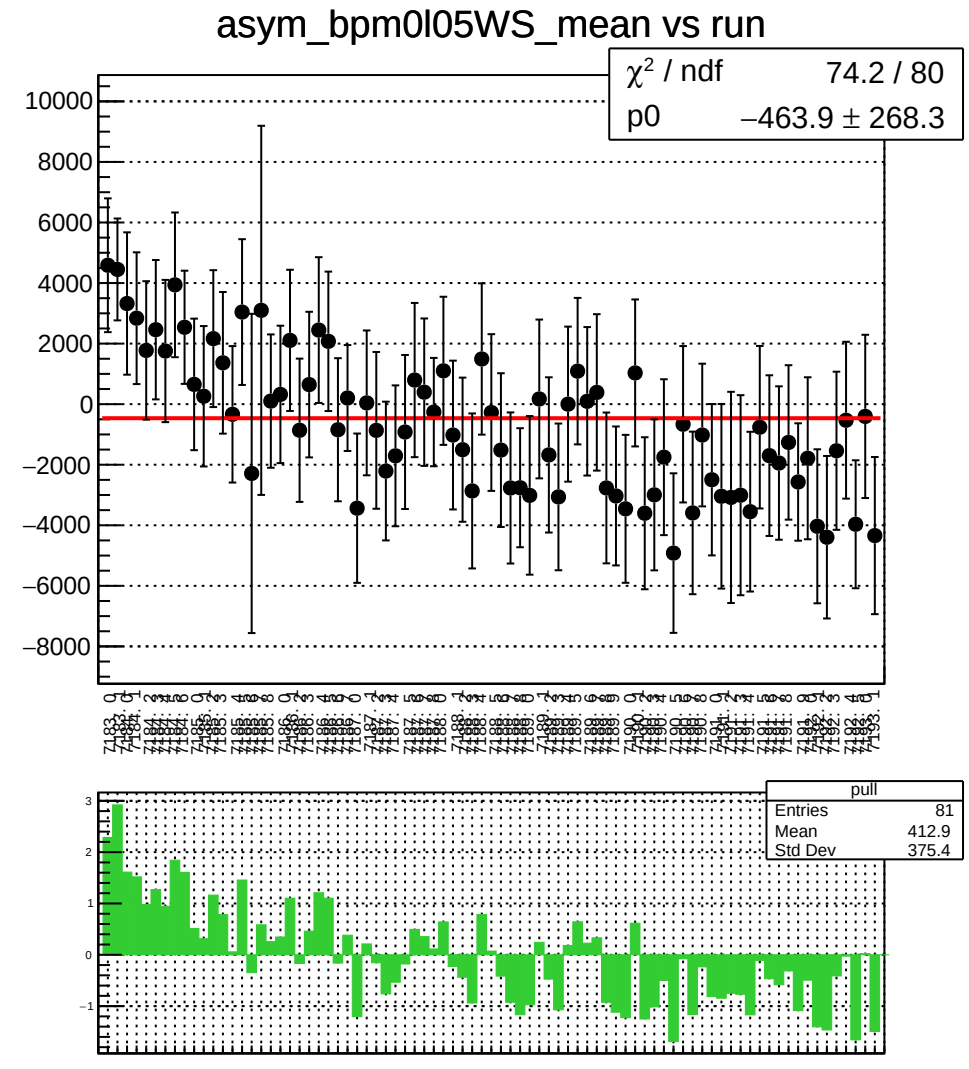

pull1D
Entries 81
Mean −0.03154
Std Dev 1.133
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

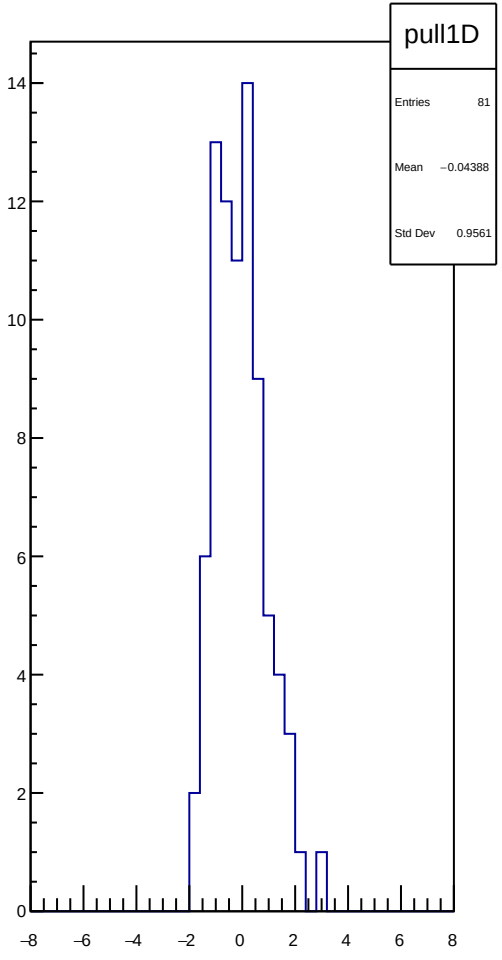

asym_bpm0l03WS_rms vs run
χ^2 / ndf 7.445e+04 / 80
p0 1176 ± 0.9606
2000
1800
1600
1400
1200
1000
800
600

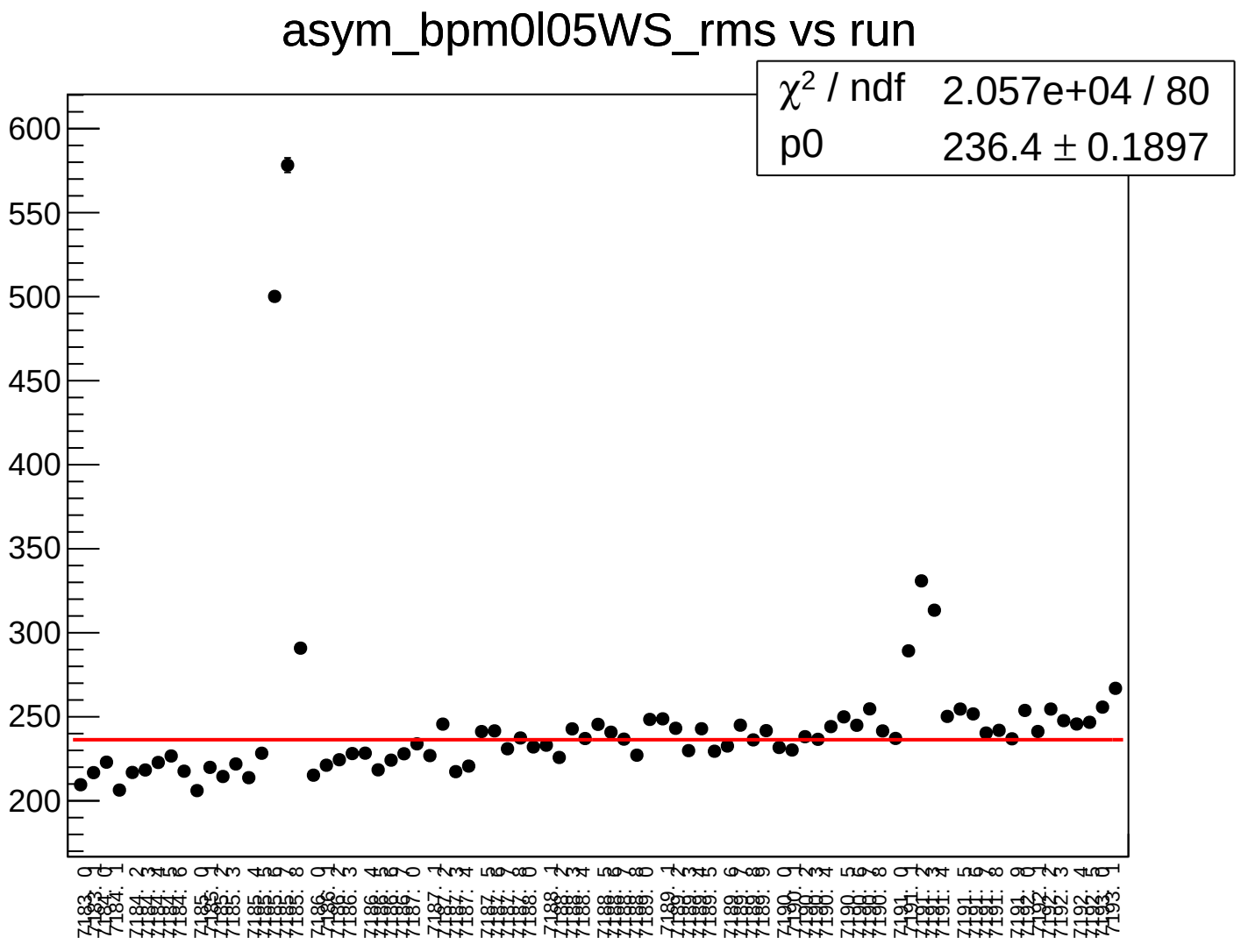

asym_bpm0l04WS_mean vs run
χ² / ndf 56.96 / 80
p0 −536.8 ± 267.4
pull
Entries 81
Mean 474.2
Std Dev 437.2

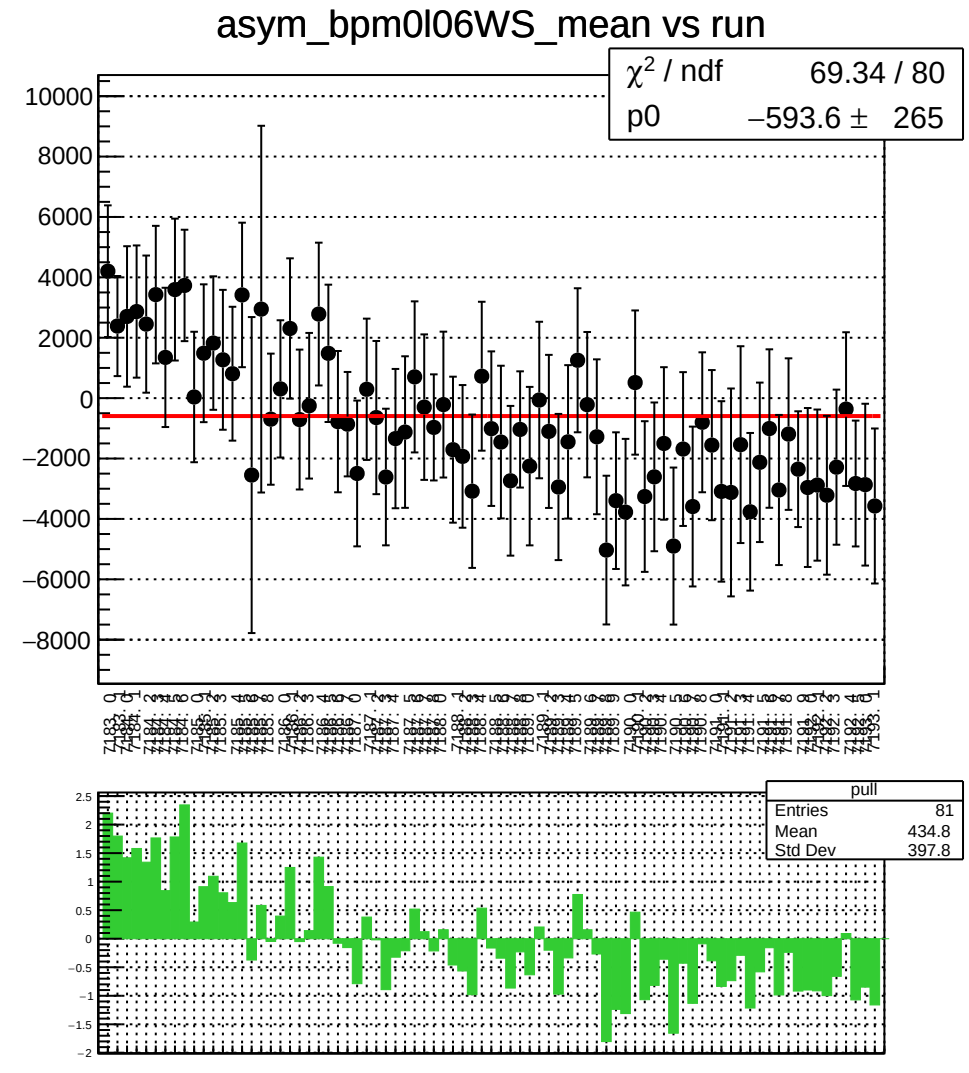

pull1D
Entries 81
Mean −0.03339
Std Dev 0.8379

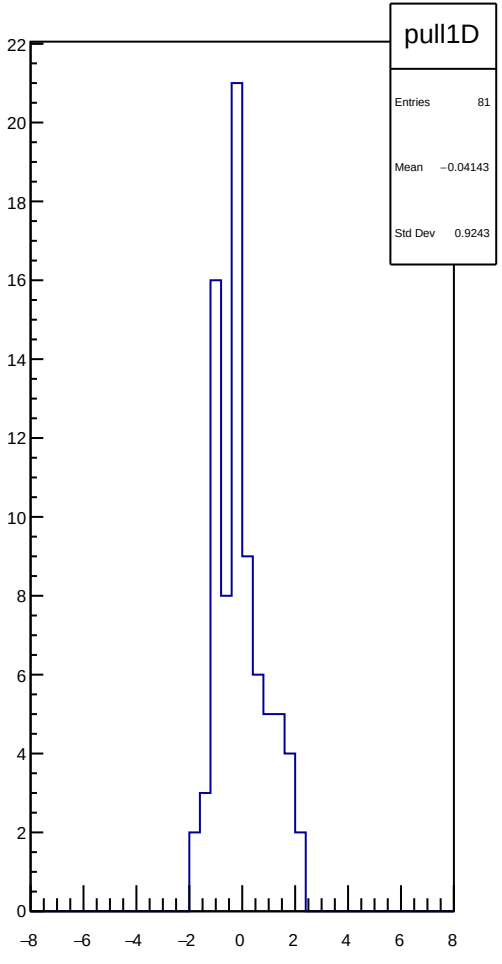

asym_bpm0l04WS_rms vs run
χ^2 / ndf 2.039e+04 / 80
p0 235.6 ± 0.1891
600
550
500
450
400
350
300
250
200

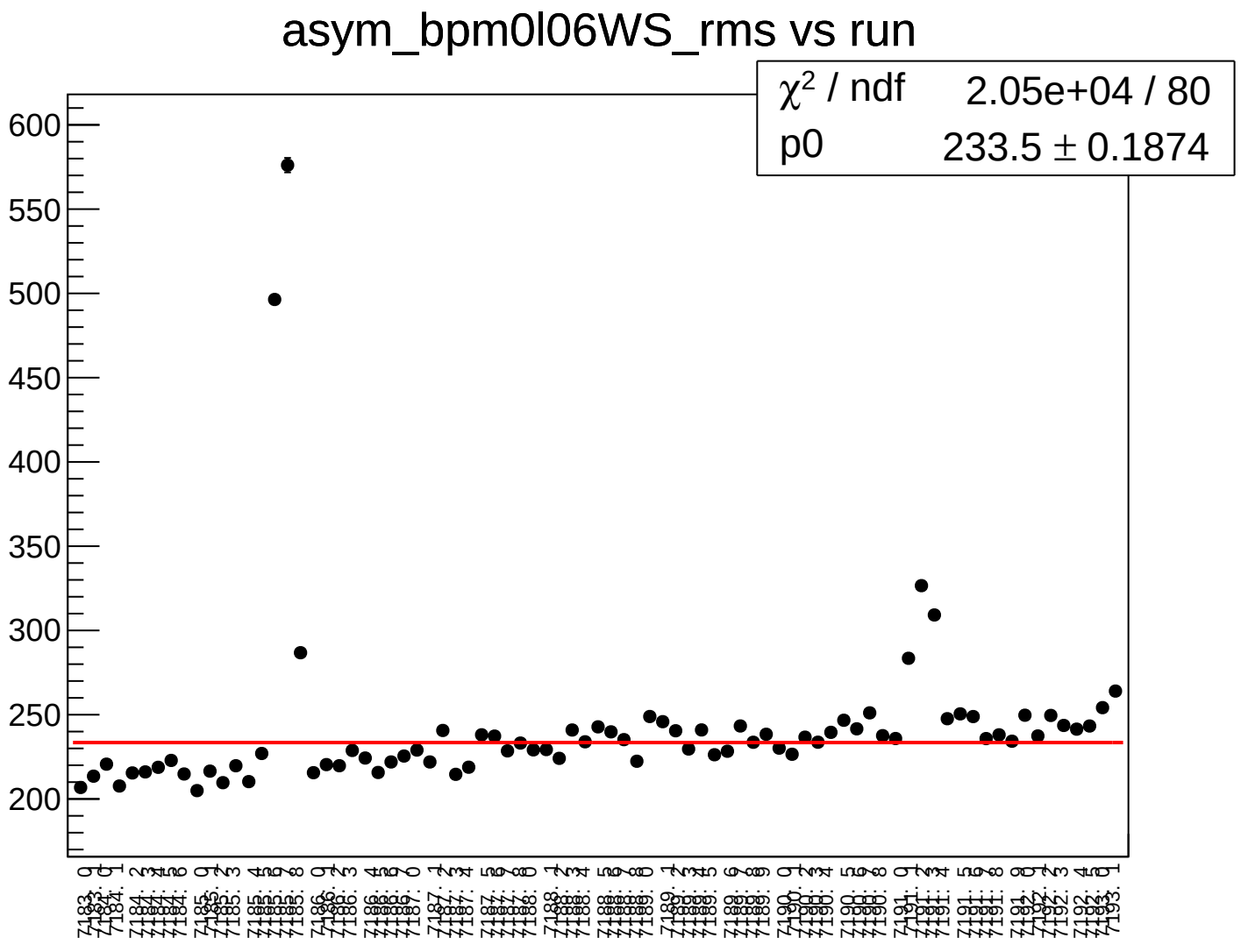

asym_bpm0l05WS_mean vs run
χ² / ndf 74.2 / 80
p0 −463.9 ± 268.3
pull
Entries 81
Mean 412.9
Std Dev 375.4

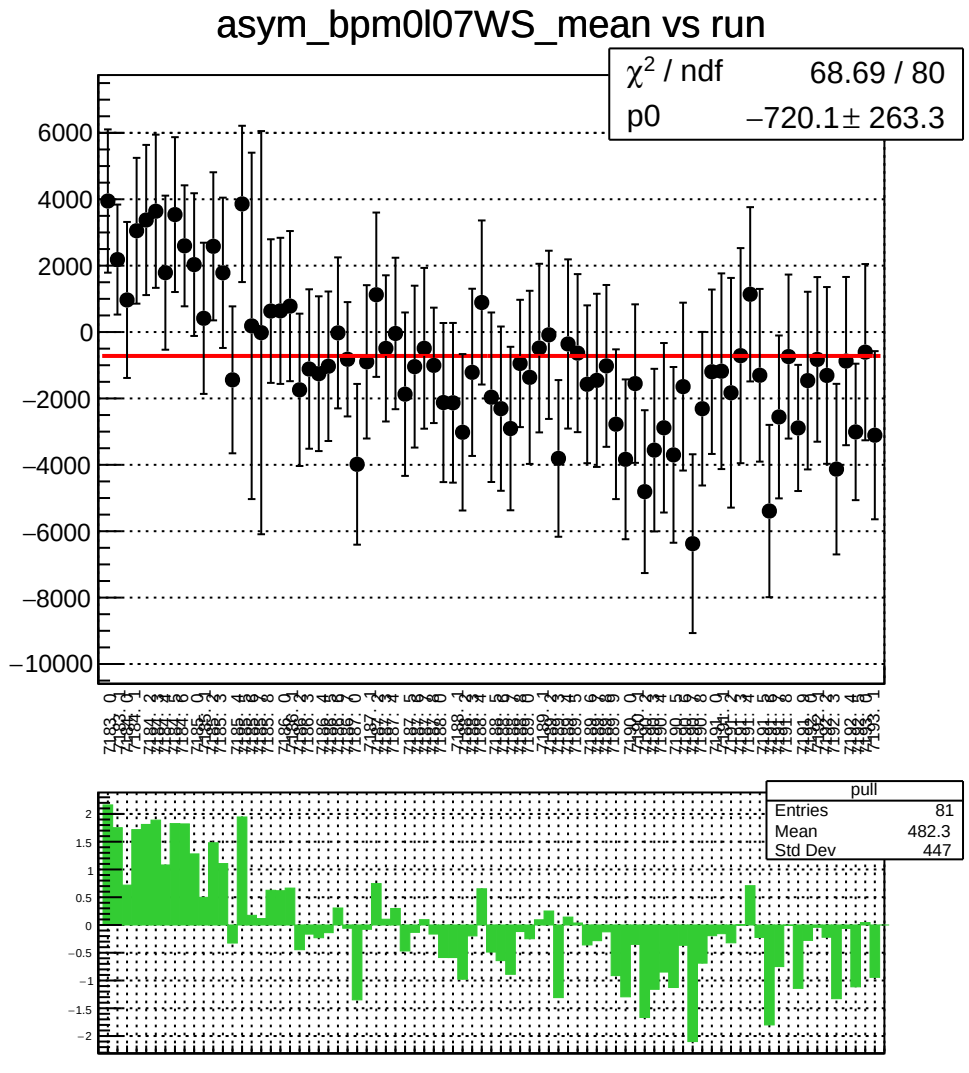

pull1D
Entries 81
Mean −0.04388
Std Dev 0.9561

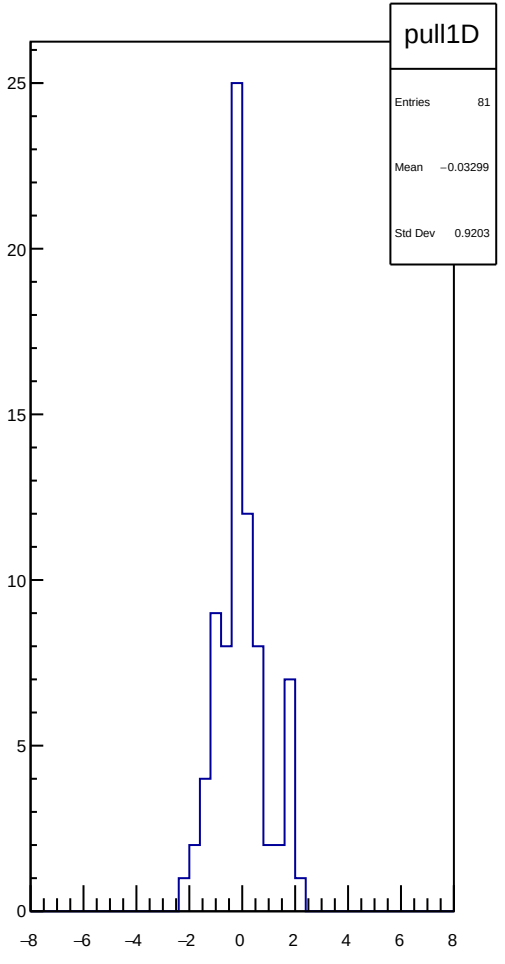

asym_bpm0l05WS_rms vs run
χ^2 / ndf 2.057e+04 / 80
p0 236.4 ± 0.1897
600
550
500
450
400
350
300
250
200

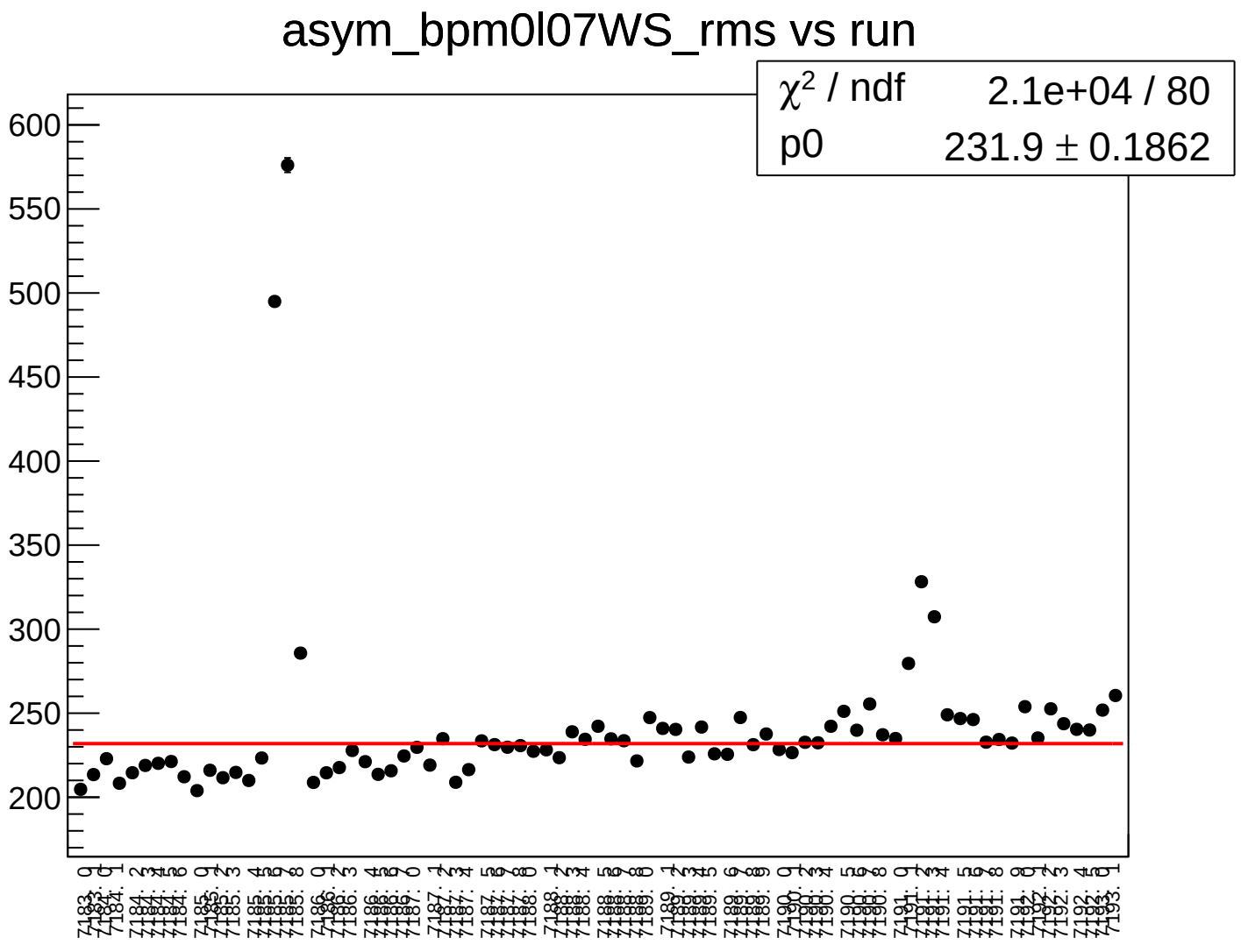

asym_bpm0l06WS_mean vs run
χ² / ndf 69.34 / 80
p0 −593.6 ± 265
pull
Entries 81
Mean 434.8
Std Dev 397.8

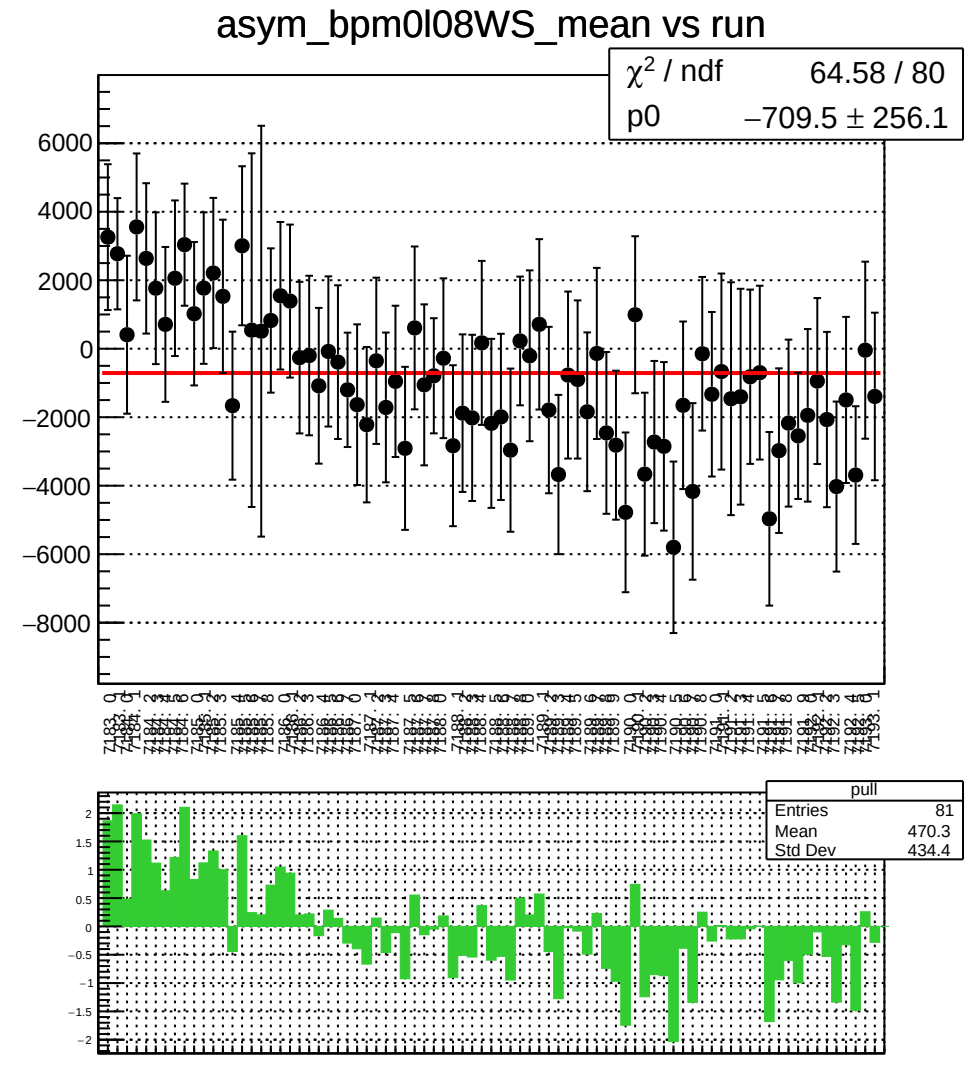

pull1D
Entries 81
Mean −0.04143
Std Dev 0.9243

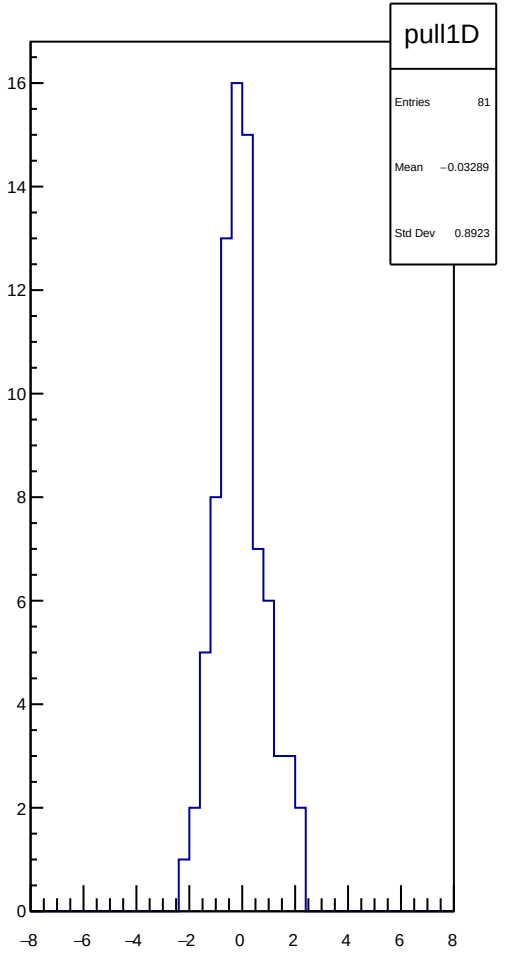

asym_bpm0l06WS_rms vs run
χ² / ndf 2.05e+04 / 80
p0 233.5 ± 0.1874
600
550
500
450
400
350
300
250
200

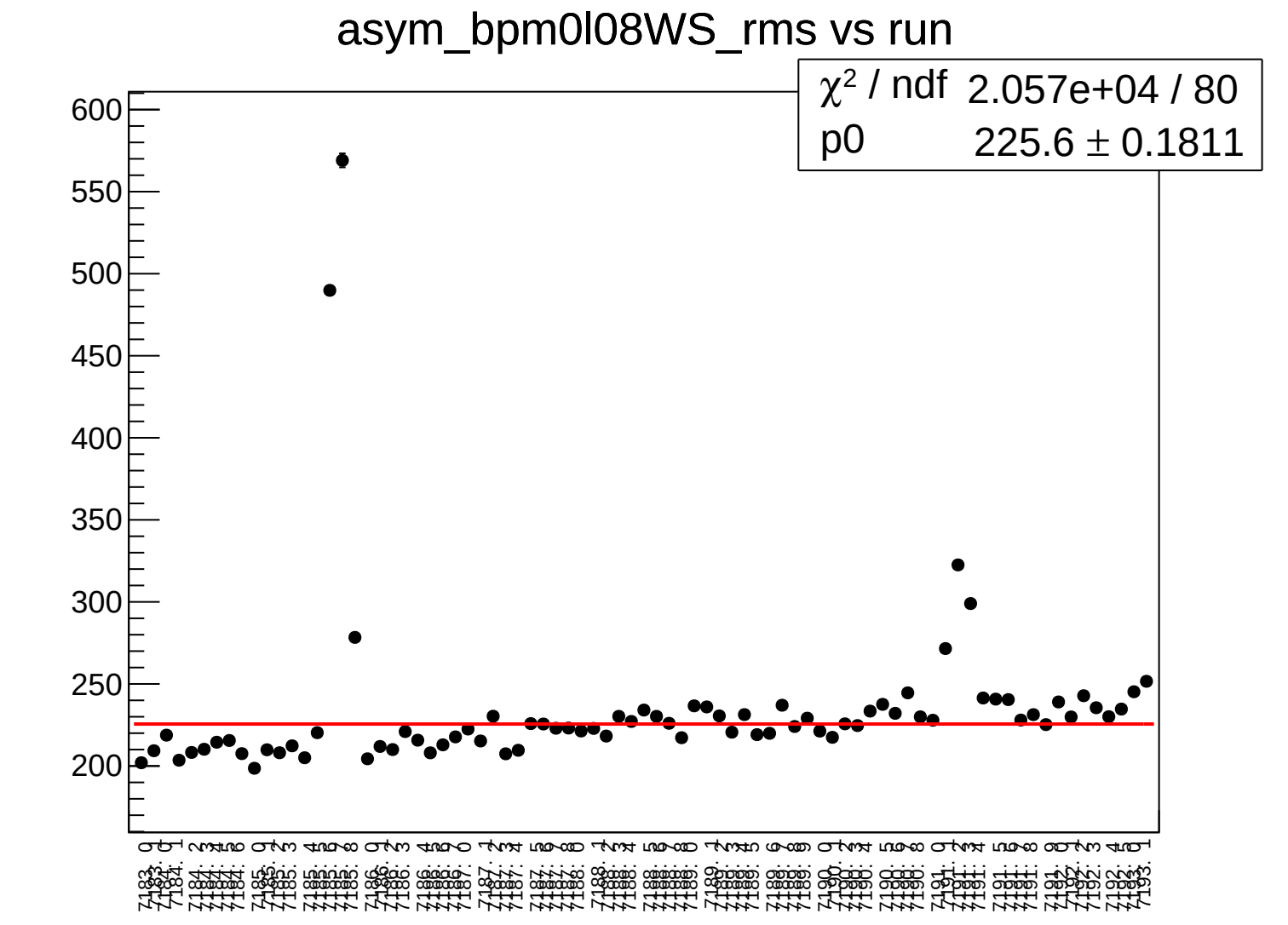

asym_bpm0l07WS_mean vs run
χ² / ndf 68.69 / 80
p0 −720.1± 263.3
pull
Entries 81
Mean 482.3
Std Dev 447

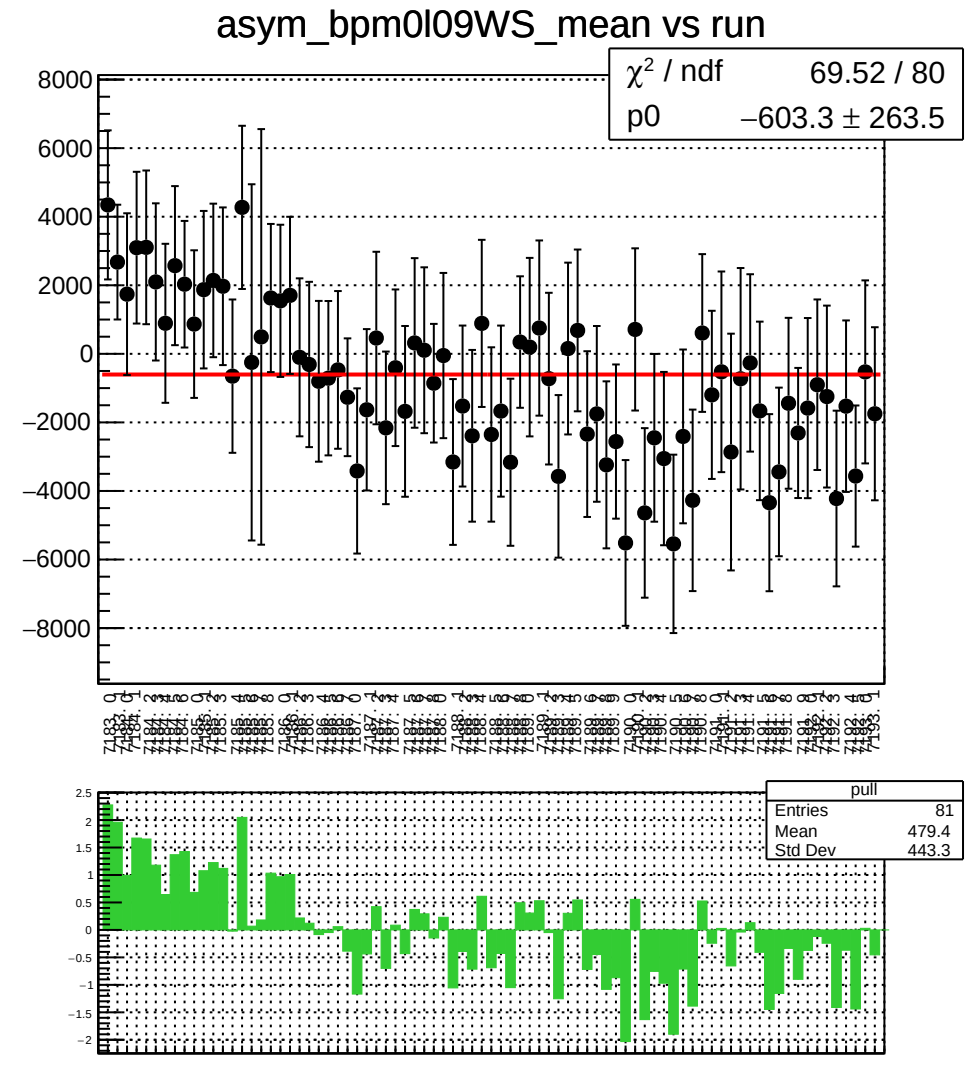

pull1D
Entries 81
Mean −0.03299
Std Dev 0.9203

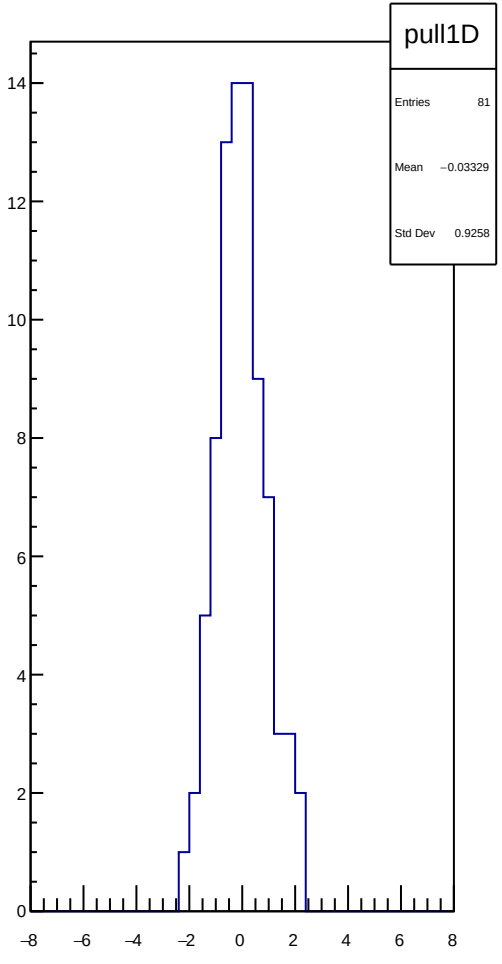

asym_bpm0l07WS_rms vs run
χ^2 / ndf 2.1e+04 / 80
p0 231.9 ± 0.1862
600
550
500
450
400
350
300
250
200

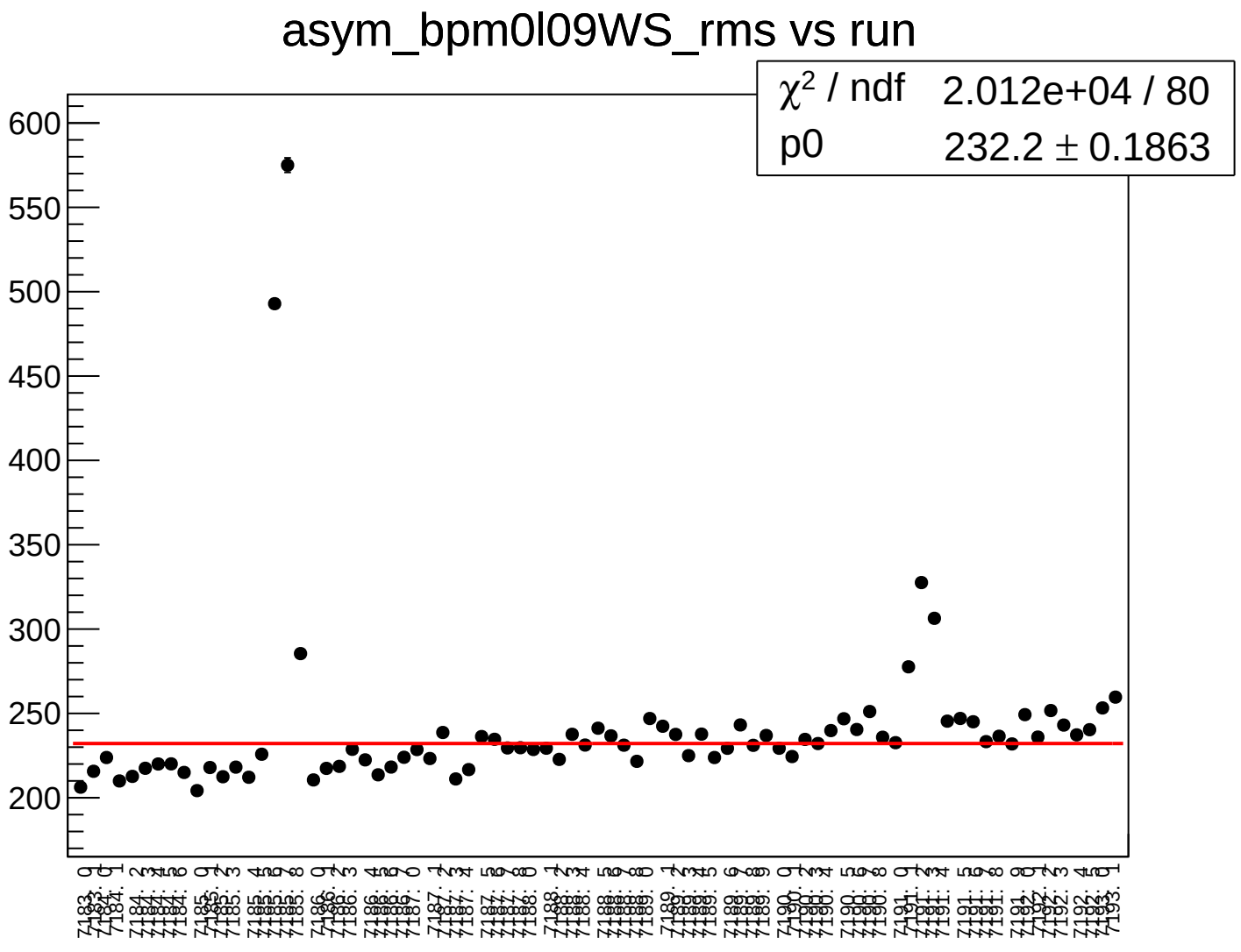

asym_bpm0l08WS_mean vs run
χ² / ndf 64.58 / 80
p0 −709.5 ± 256.1
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean 470.3
Std Dev 434.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

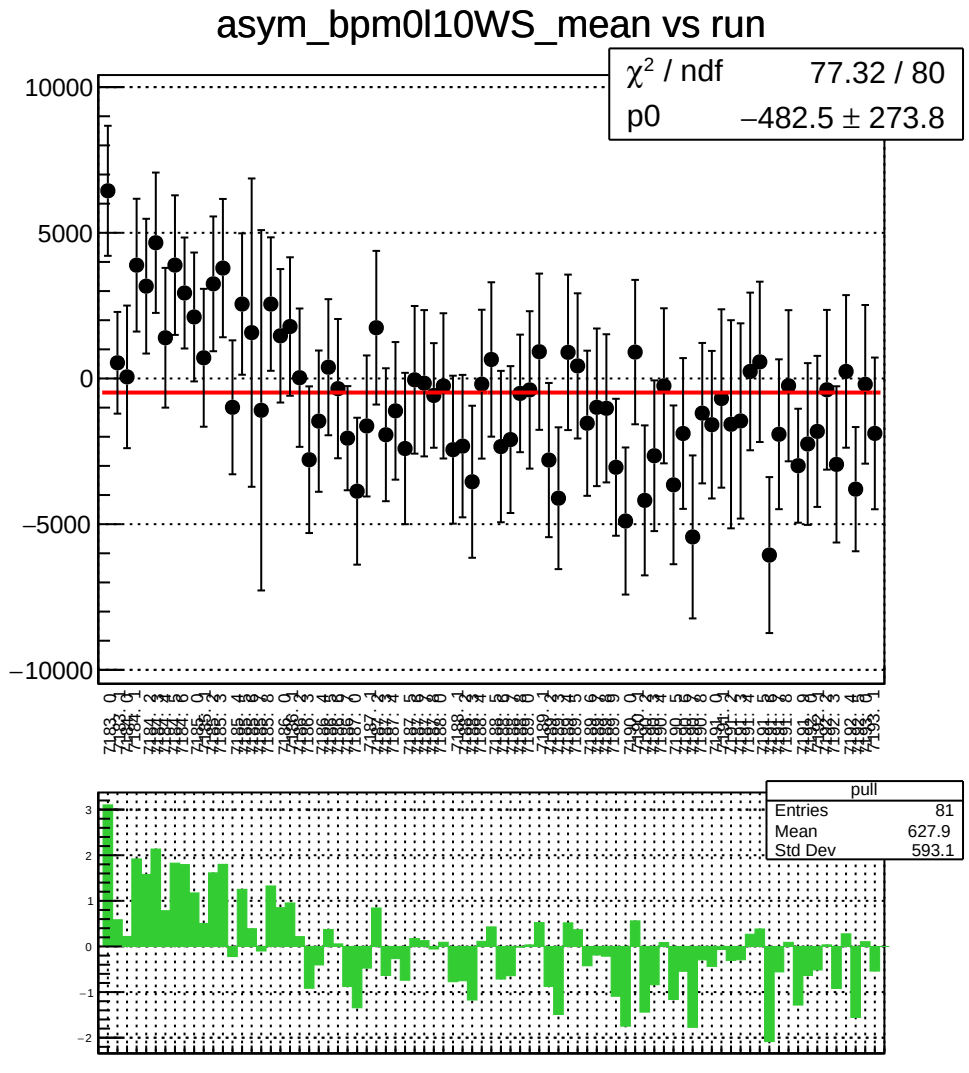

pull1D
Entries 81
Mean −0.03289
Std Dev 0.8923
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

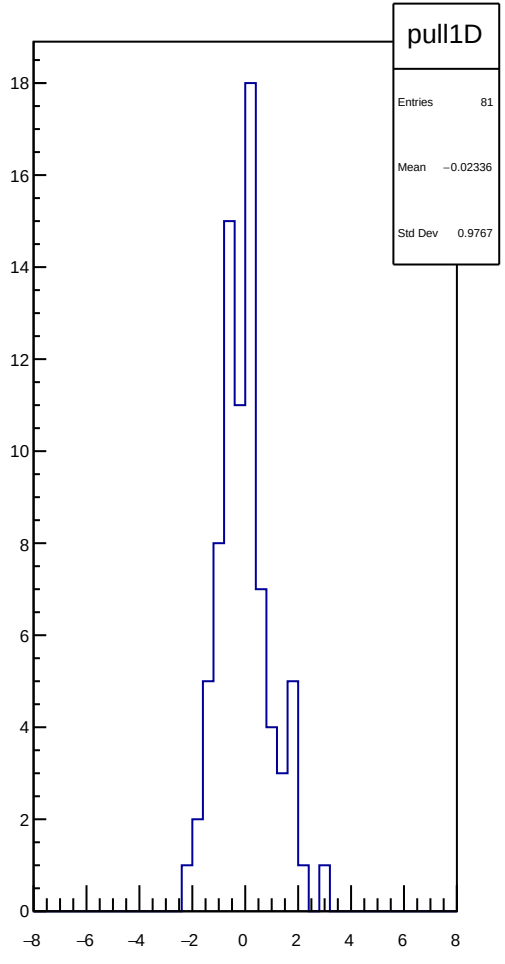

asym_bpm0l08WS_rms vs run
χ^2 / ndf 2.057e+04 / 80
p0 225.6 ± 0.1811
600
550
500
450
400
350
300
250
200

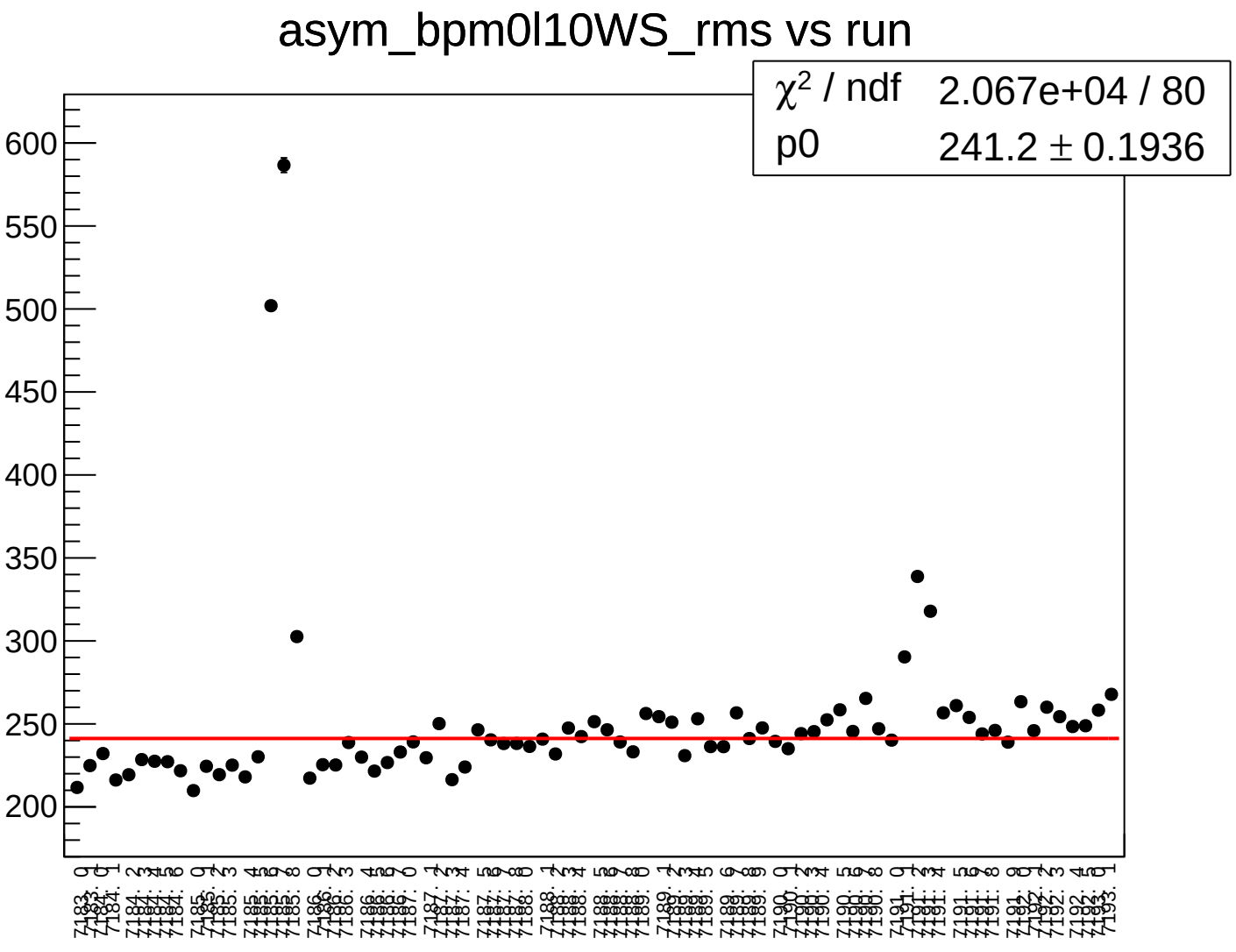

asym_bpm0l09WS_mean vs run
χ^2 / ndf 69.52 / 80
p0 −603.3 ± 263.5
pull
Entries 81
Mean 479.4
Std Dev 443.3

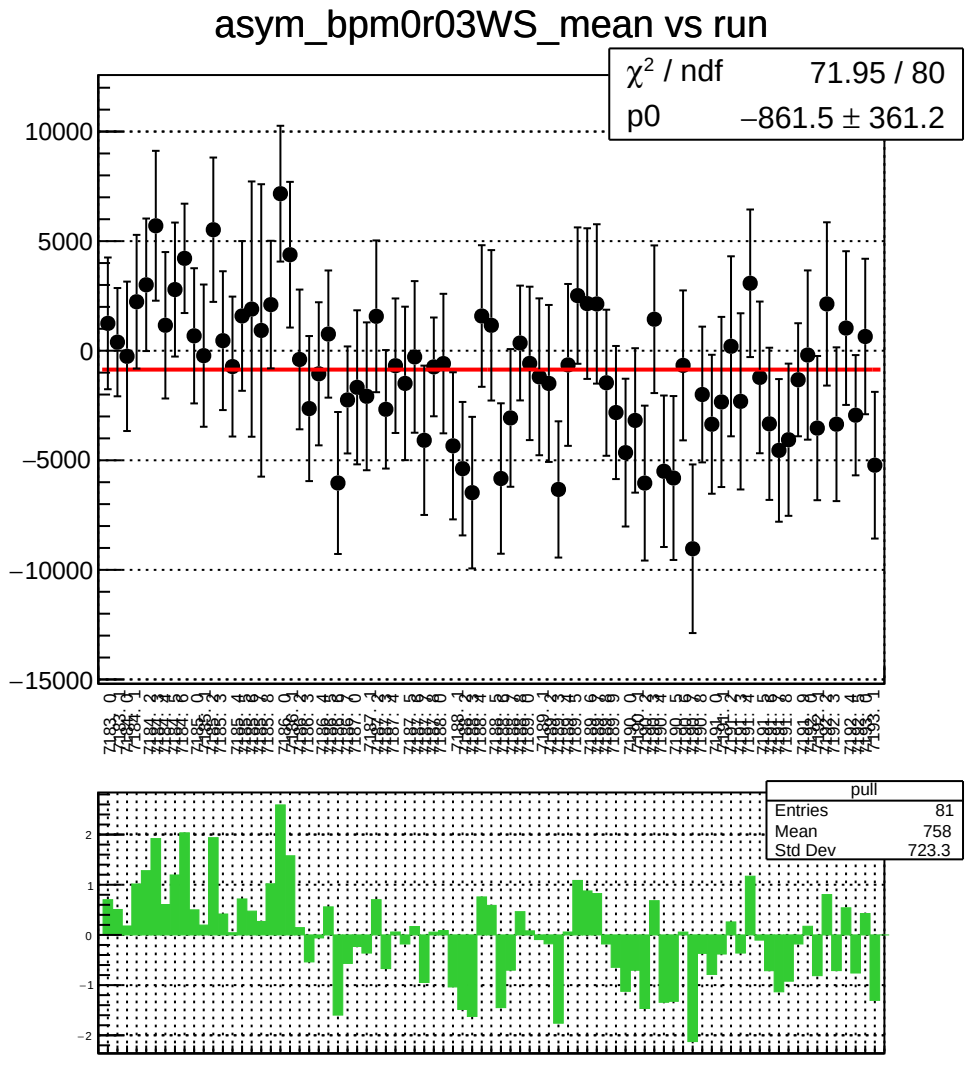

pull1D
Entries 81
Mean −0.03329
Std Dev 0.9258

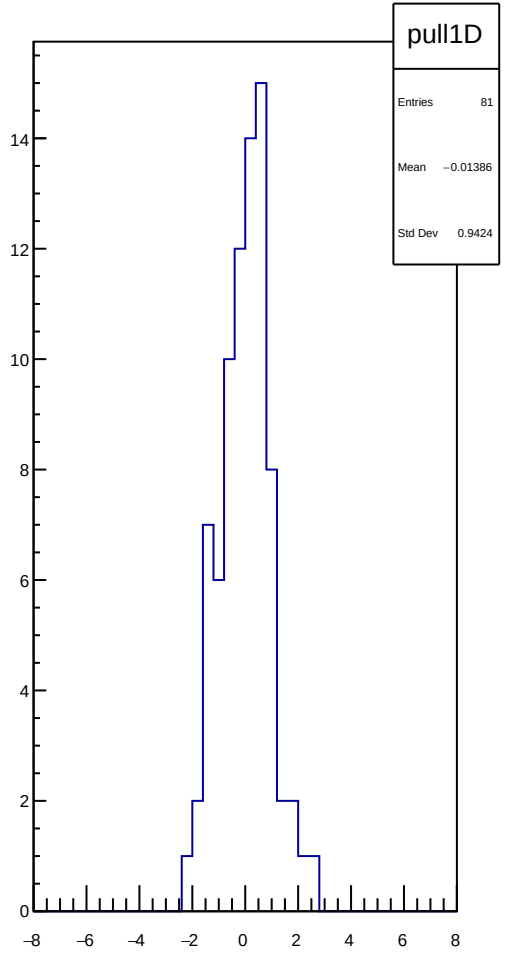

asym_bpm0l09WS_rms vs run
χ^2 / ndf 2.012e+04 / 80
p0 232.2 ± 0.1863
600
550
500
450
400
350
300
250
200

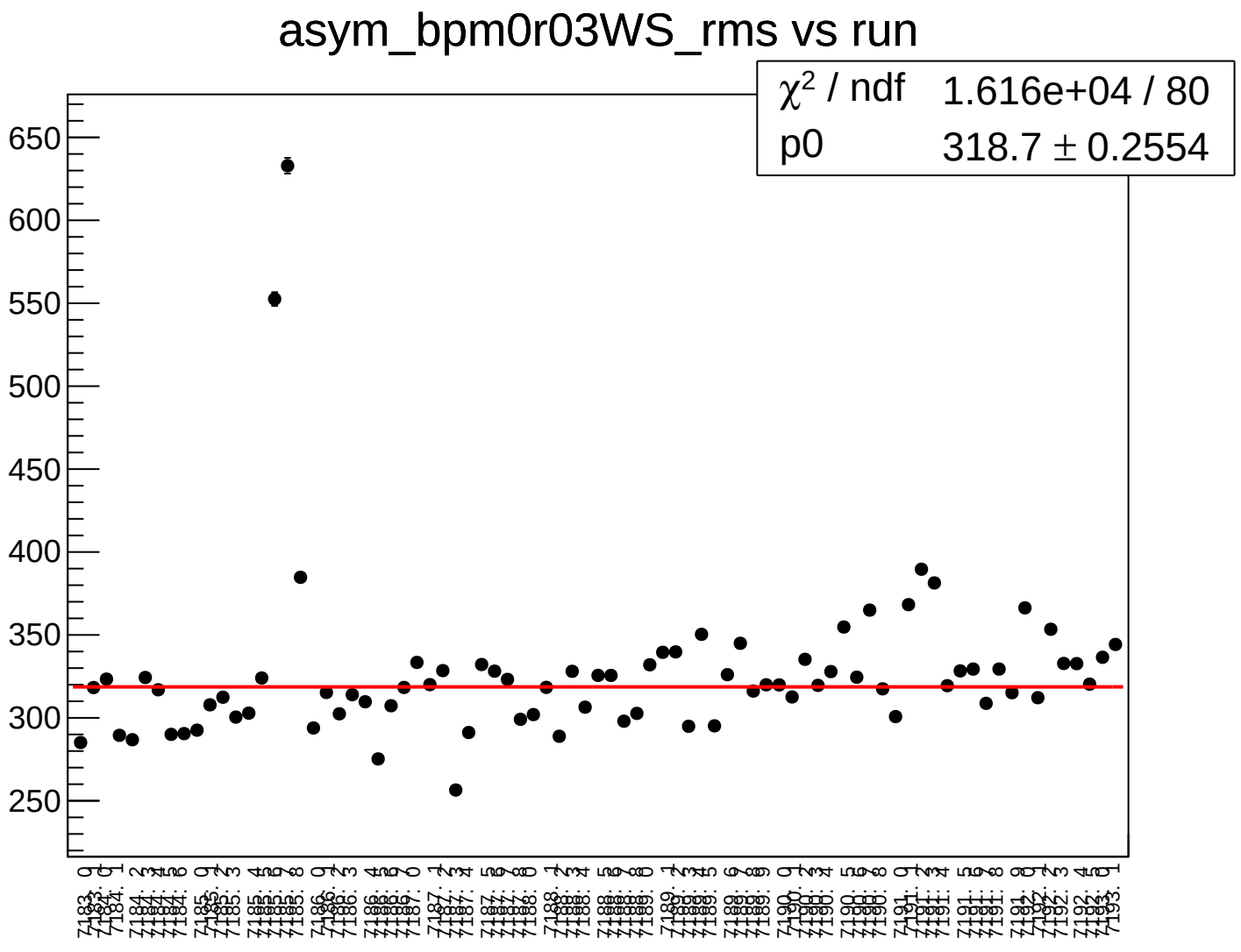

asym_bpm0l10WS_mean vs run
χ² / ndf 77.32 / 80
p0 −482.5 ± 273.8
10000
5000
0
−5000
−10000
pull
Entries 81
Mean 627.9
Std Dev 593.1
3
2
1
0
−1
−2

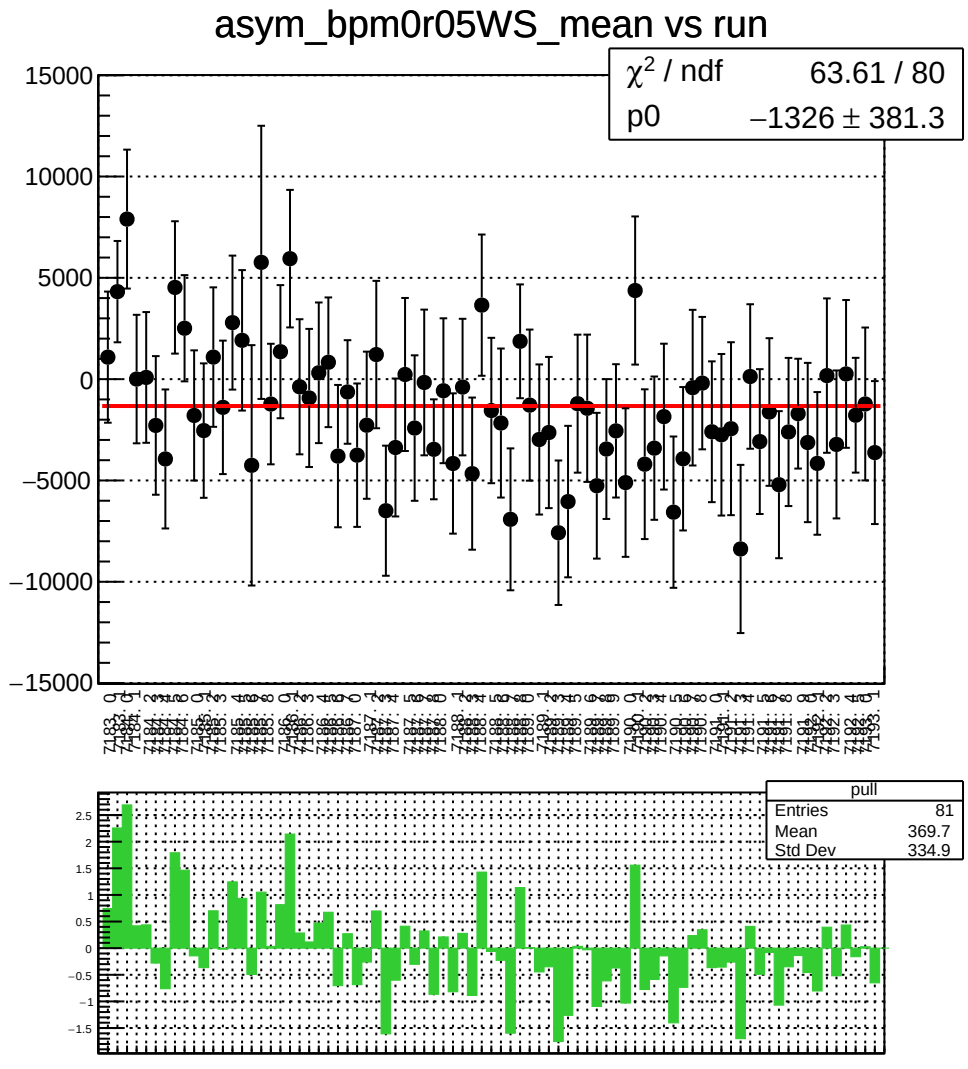

pull1D
Entries 81
Mean −0.02336
Std Dev 0.9767
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

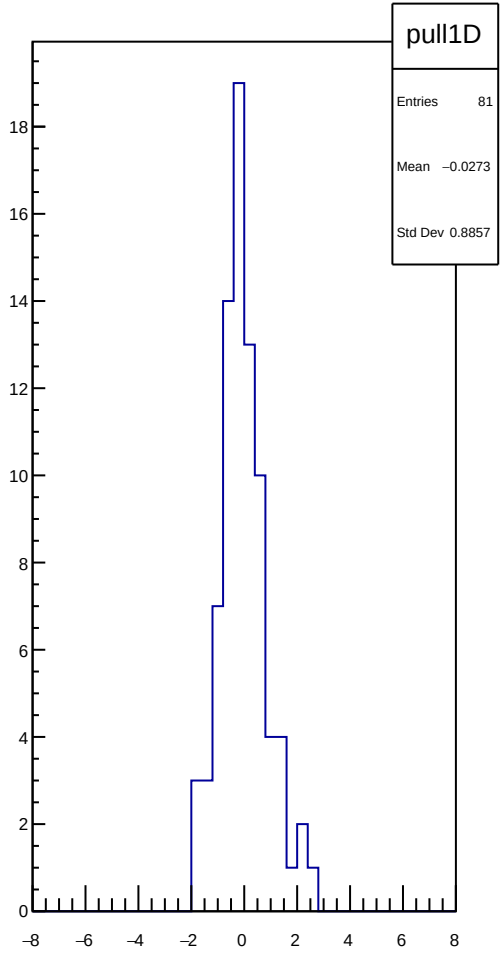

asym_bpm0l10WS_rms vs run
χ^2 / ndf 2.067e+04 / 80
p0 241.2 ± 0.1936
600
550
500
450
400
350
300
250
200

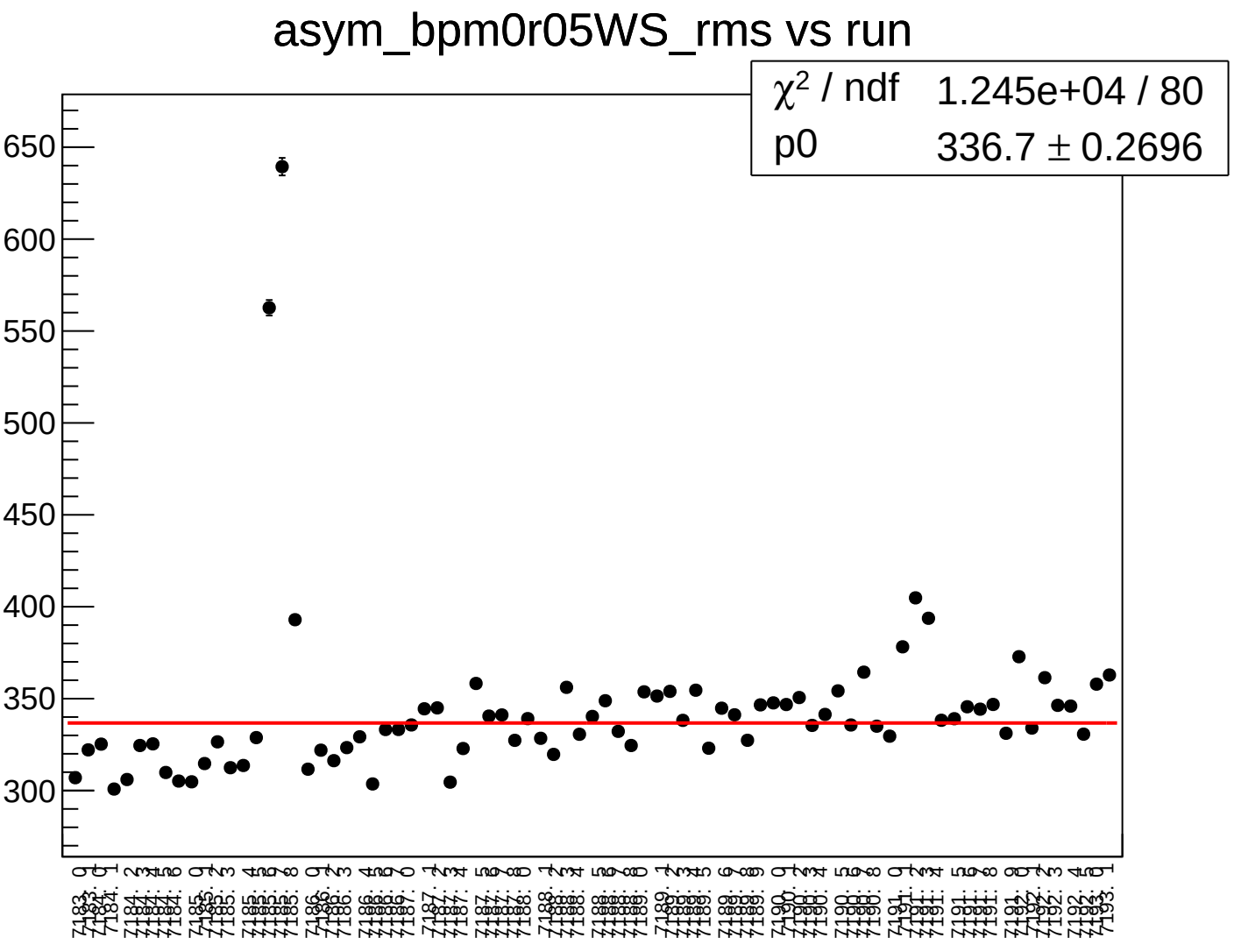

asym_bpm0r03WS_mean vs run
χ² / ndf 71.95 / 80
p0 −861.5 ± 361.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 81
Mean 758
Std Dev 723.3
2
1
0
−1
−2

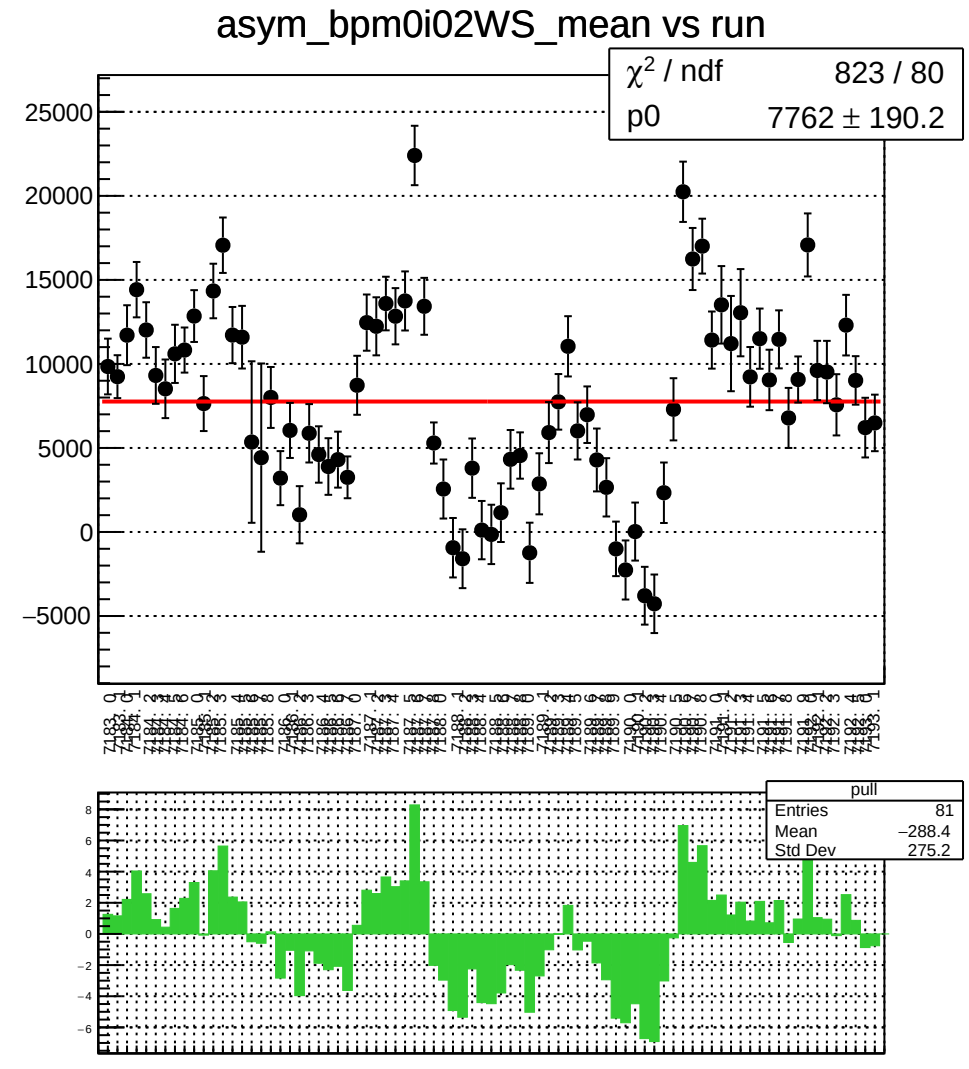

pull1D
Entries 81
Mean −0.01386
Std Dev 0.9424
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

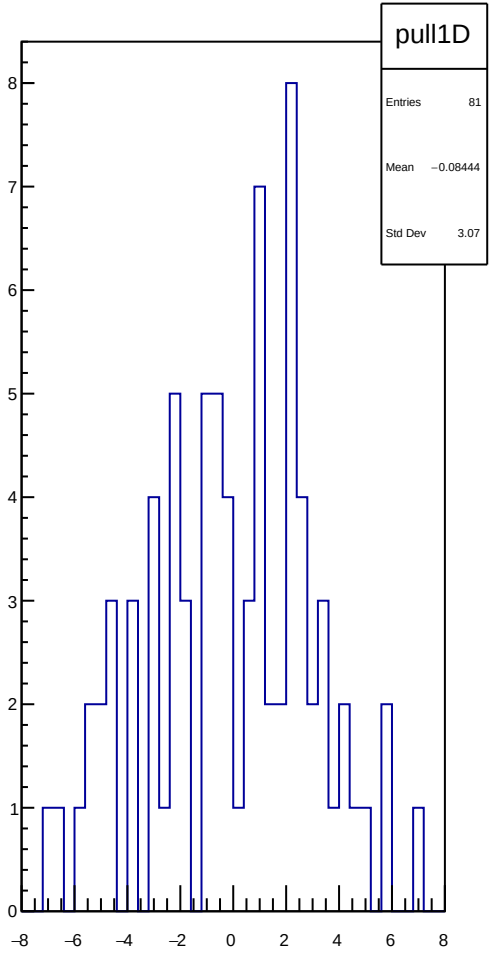

asym_bpm0r03WS_rms vs run
χ² / ndf 1.616e+04 / 80
p0 318.7 ± 0.2554
650
600
550
500
450
400
350
300
250

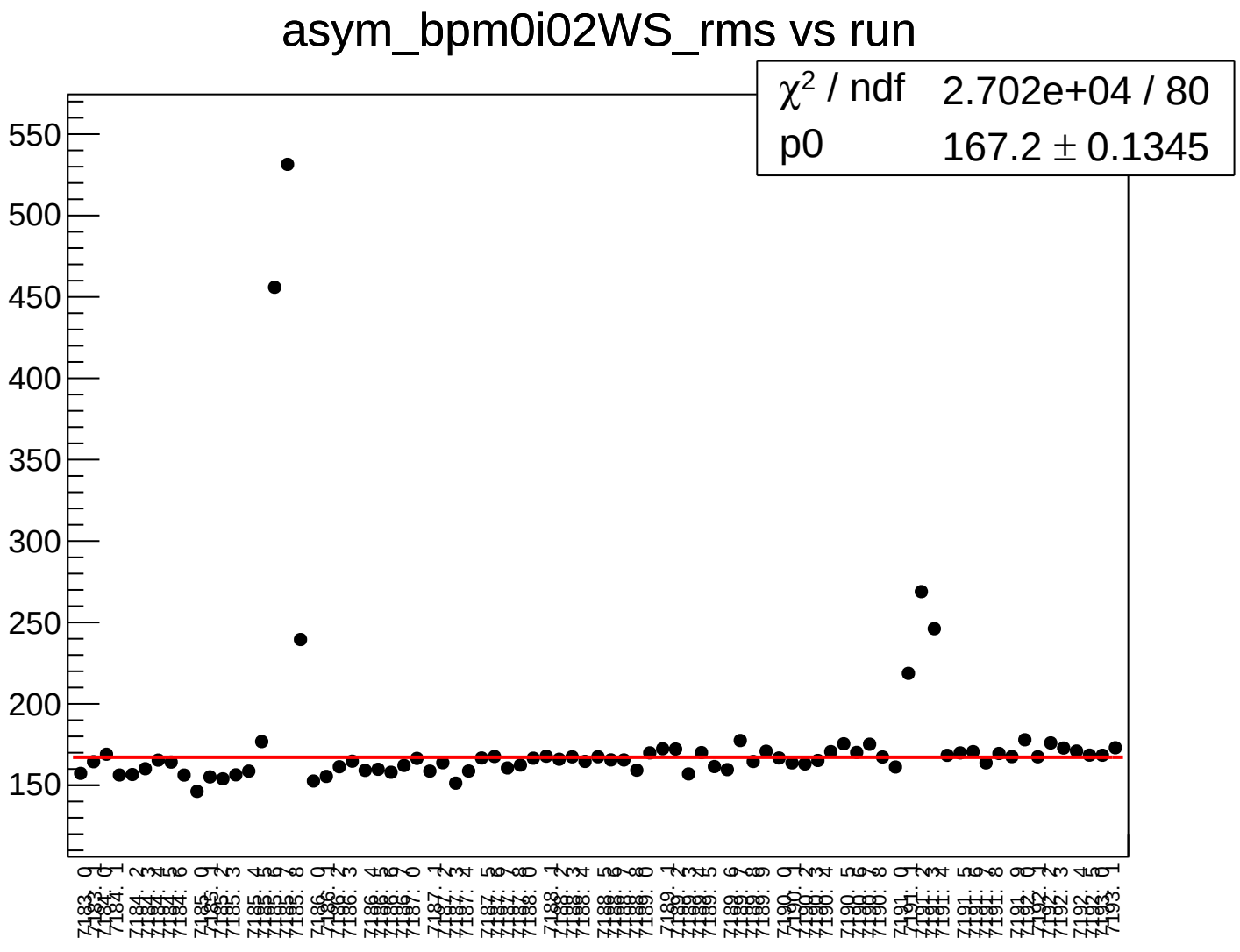

asym_bpm0r05WS_mean vs run
χ² / ndf 63.61 / 80
p0 −1326 ± 381.3
pull
Entries 81
Mean 369.7
Std Dev 334.9

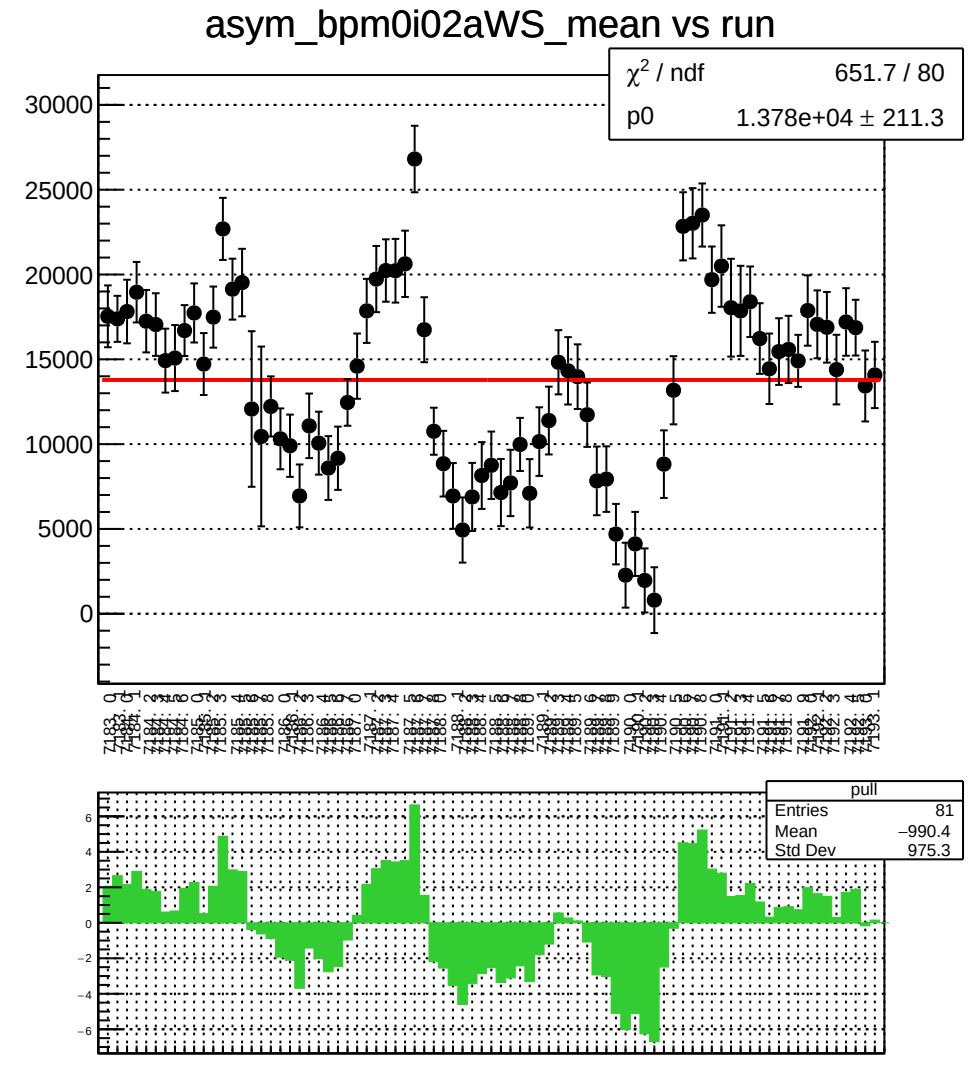

pull1D
Entries 81
Mean −0.0273
Std Dev 0.8857

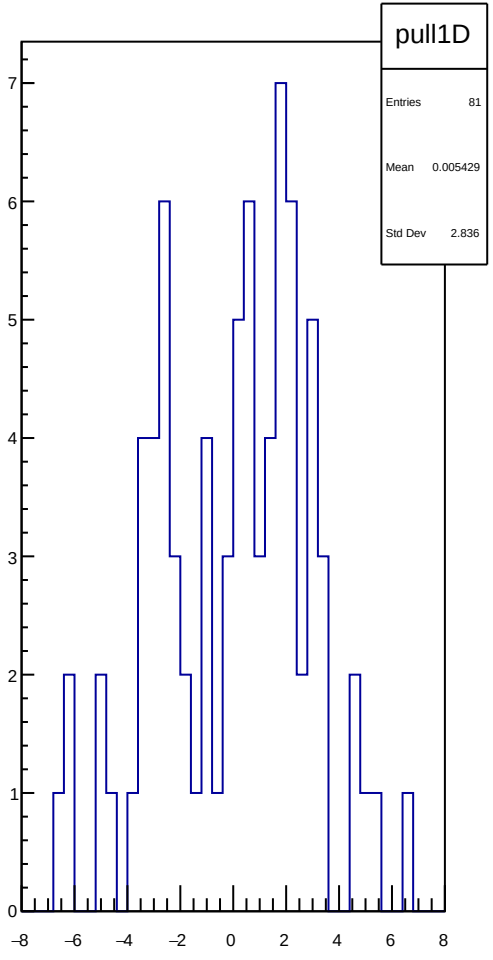

asym_bpm0r05WS_rms vs run
χ² / ndf 1.245e+04 / 80
p0 336.7 ± 0.2696
650
600
550
500
450
400
350
300

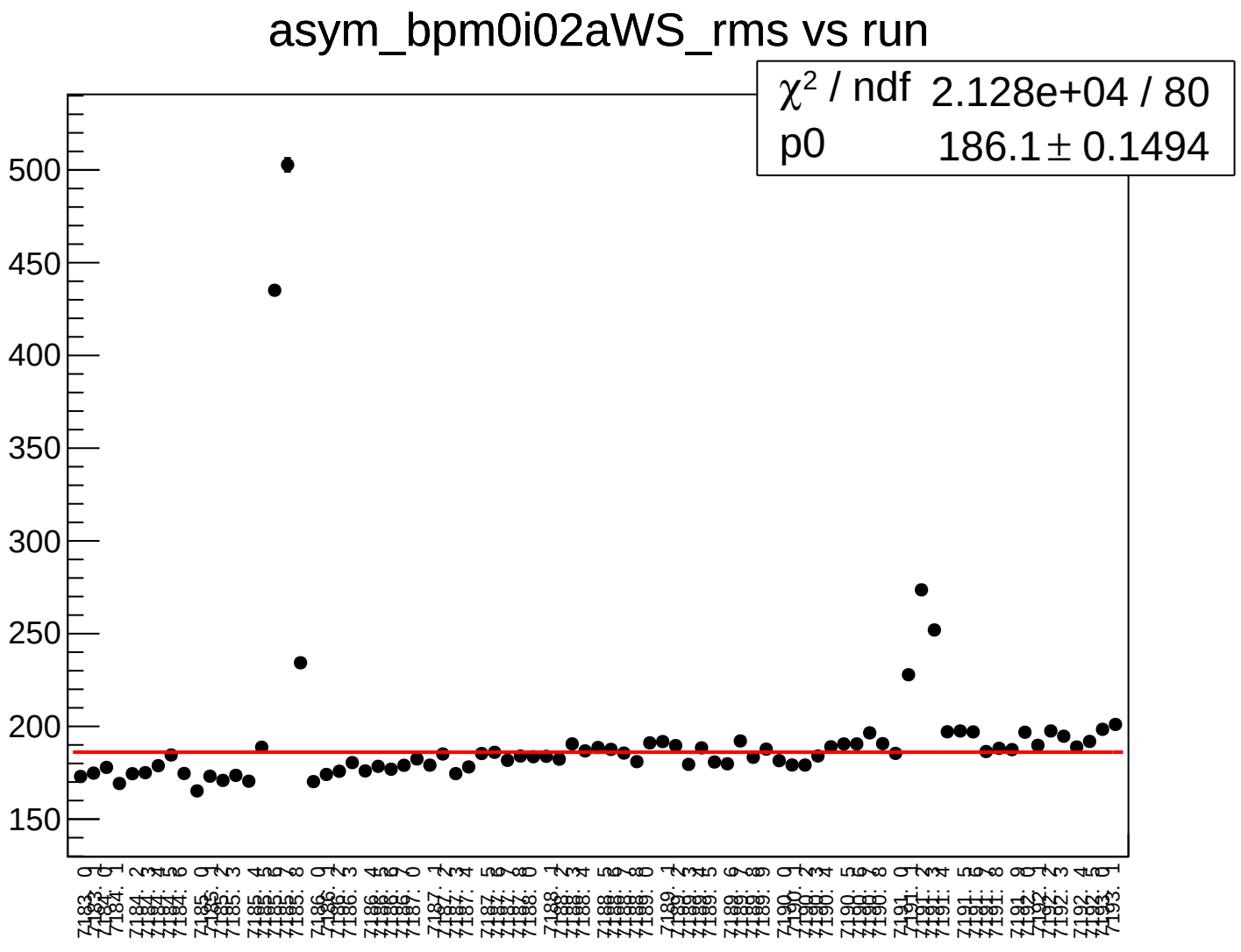

asym_bpm0i02WS_mean vs run
χ² / ndf 823 / 80
p0 7762 ± 190.2
pull
Entries 81
Mean −288.4
Std Dev 275.2

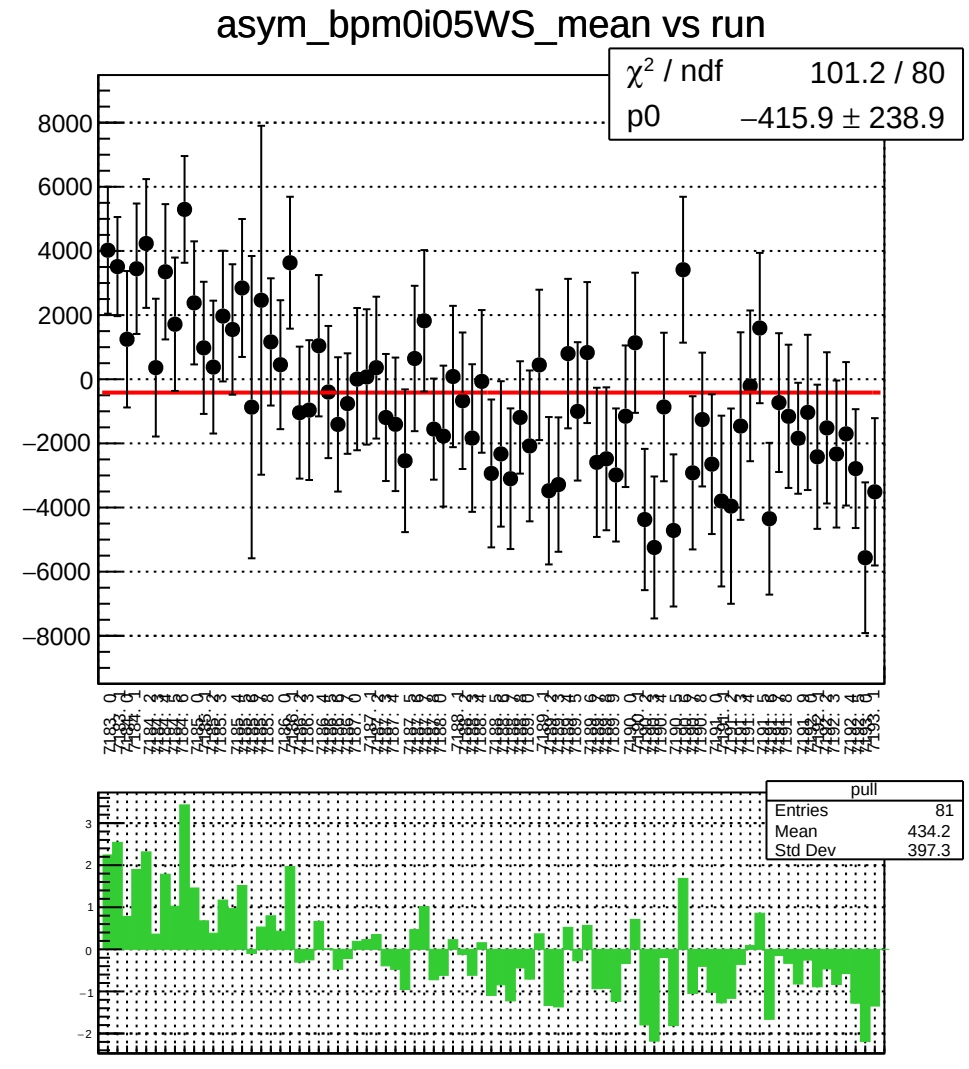

pull1D
Entries 81
Mean −0.08444
Std Dev 3.07

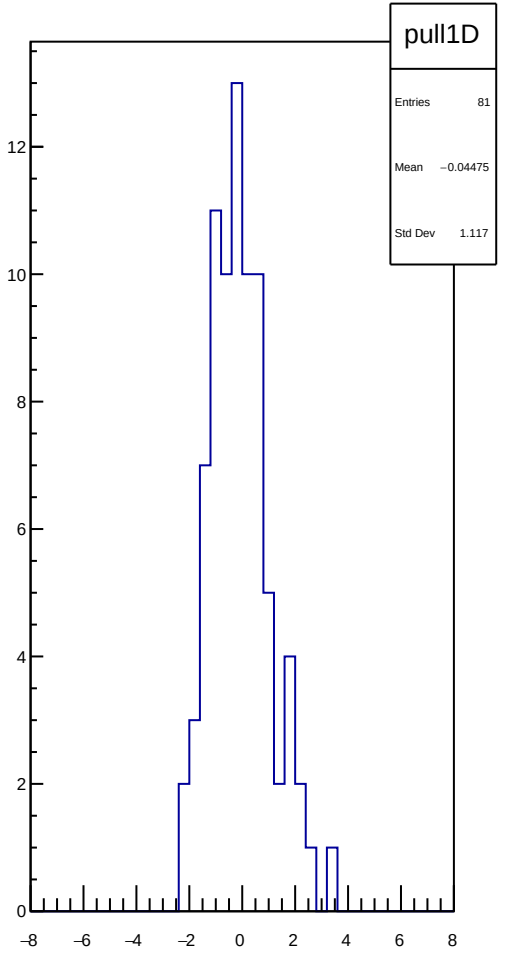

asym_bpm0i02WS_rms vs run
χ^2 / ndf 2.702e+04 / 80
p0 167.2 ± 0.1345
550
500
450
400
350
300
250
200
150

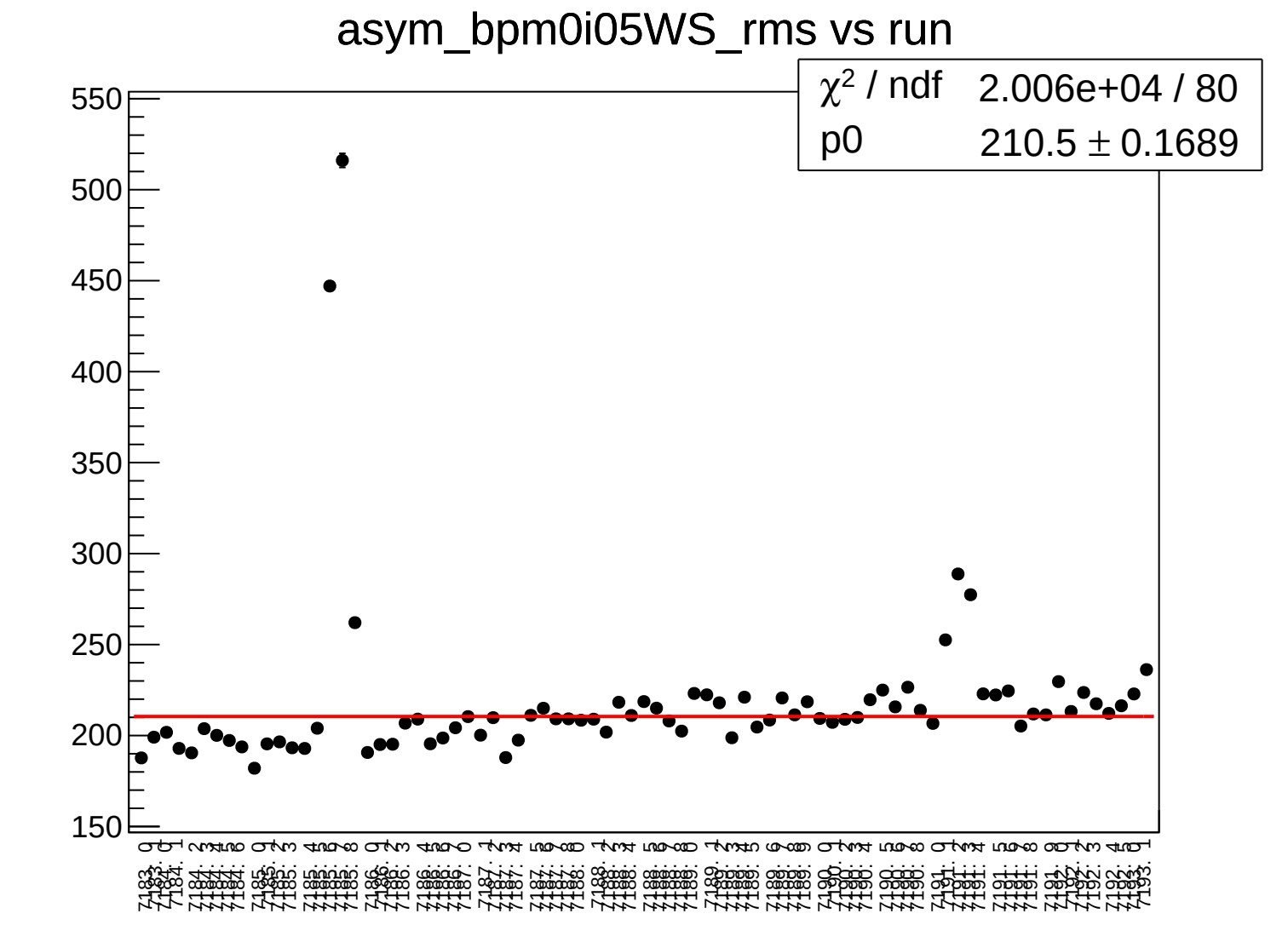

asym_bpm0i02aWS_mean vs run
χ² / ndf 651.7 / 80
p0 1.378e+04 ± 211.3
30000
25000
20000
15000
10000
5000
0
pull
Entries 81
Mean −990.4
Std Dev 975.3
6
4
2
0
−2
−4
−6

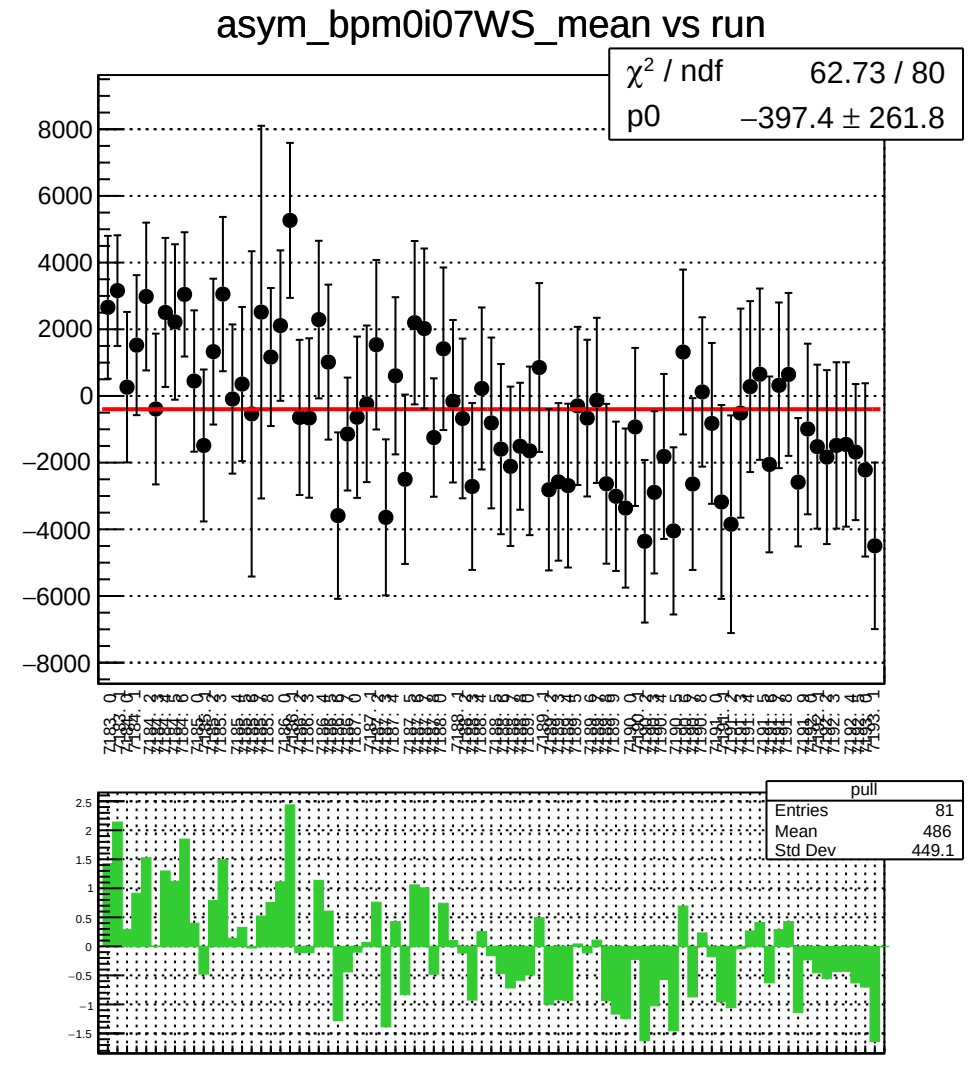

pull1D
Entries 81
Mean 0.005429
Std Dev 2.836
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

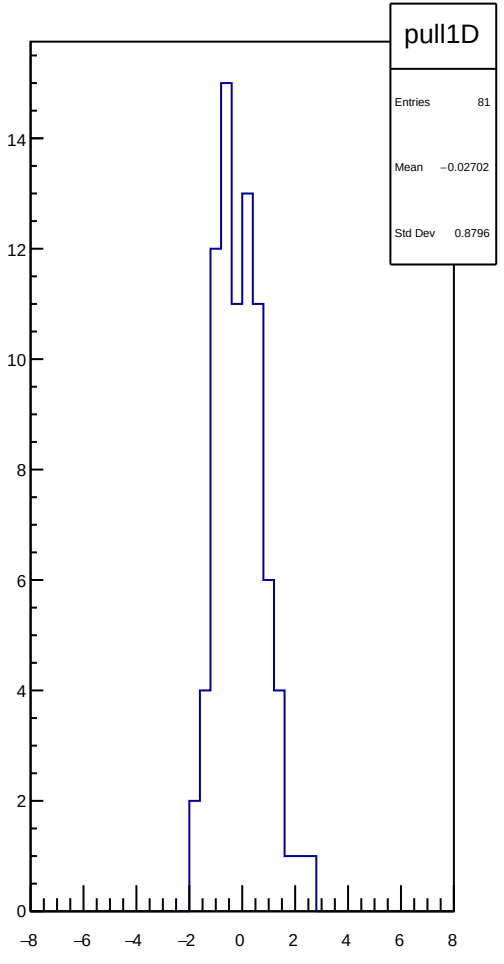

asym_bpm0i02aWS_rms vs run
χ² / ndf 2.128e+04 / 80
p0 186.1 ± 0.1494
500
450
400
350
300
250
200
150

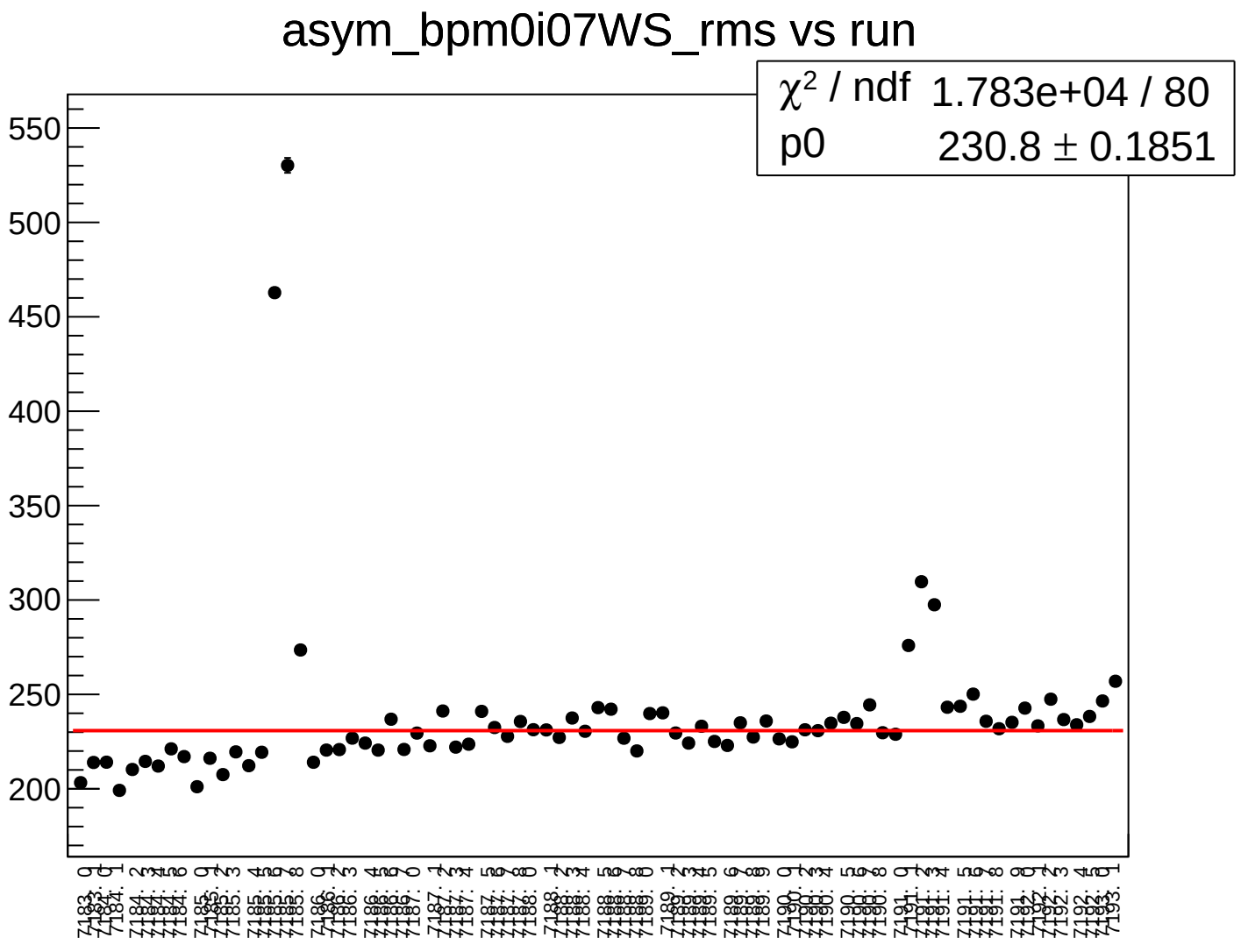

asym_bpm0i05WS_mean vs run
χ² / ndf 101.2 / 80
p0 −415.9 ± 238.9
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 81
Mean 434.2
Std Dev 397.3
3
2
1
0
−1
−2

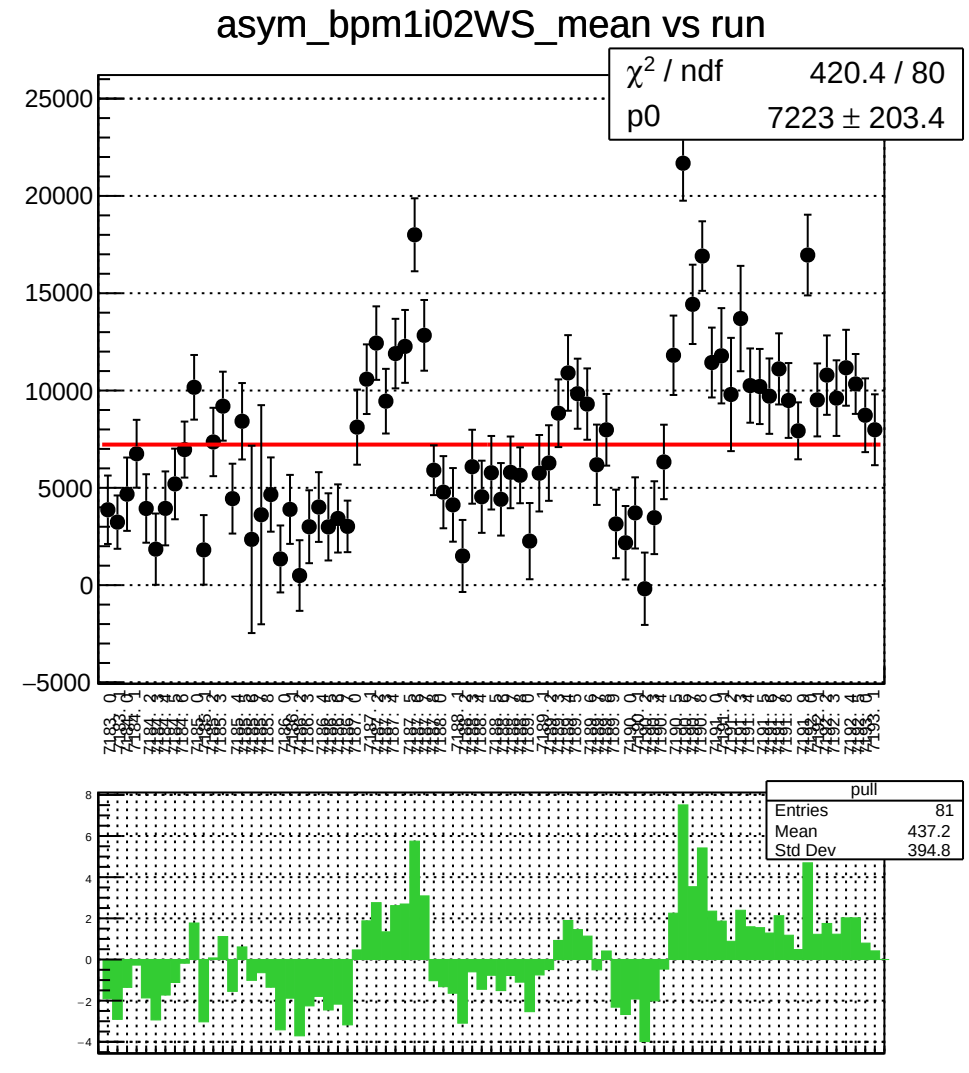

pull1D
Entries 81
Mean −0.04475
Std Dev 1.117
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

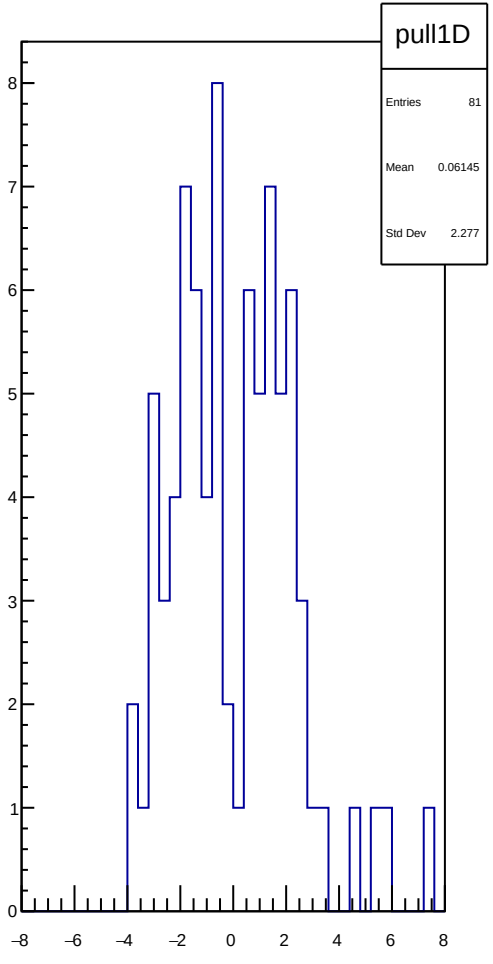

asym_bpm0i05WS_rms vs run
χ^2 / ndf 2.006e+04 / 80
p0 210.5 ± 0.1689
550
500
450
400
350
300
250
200
150

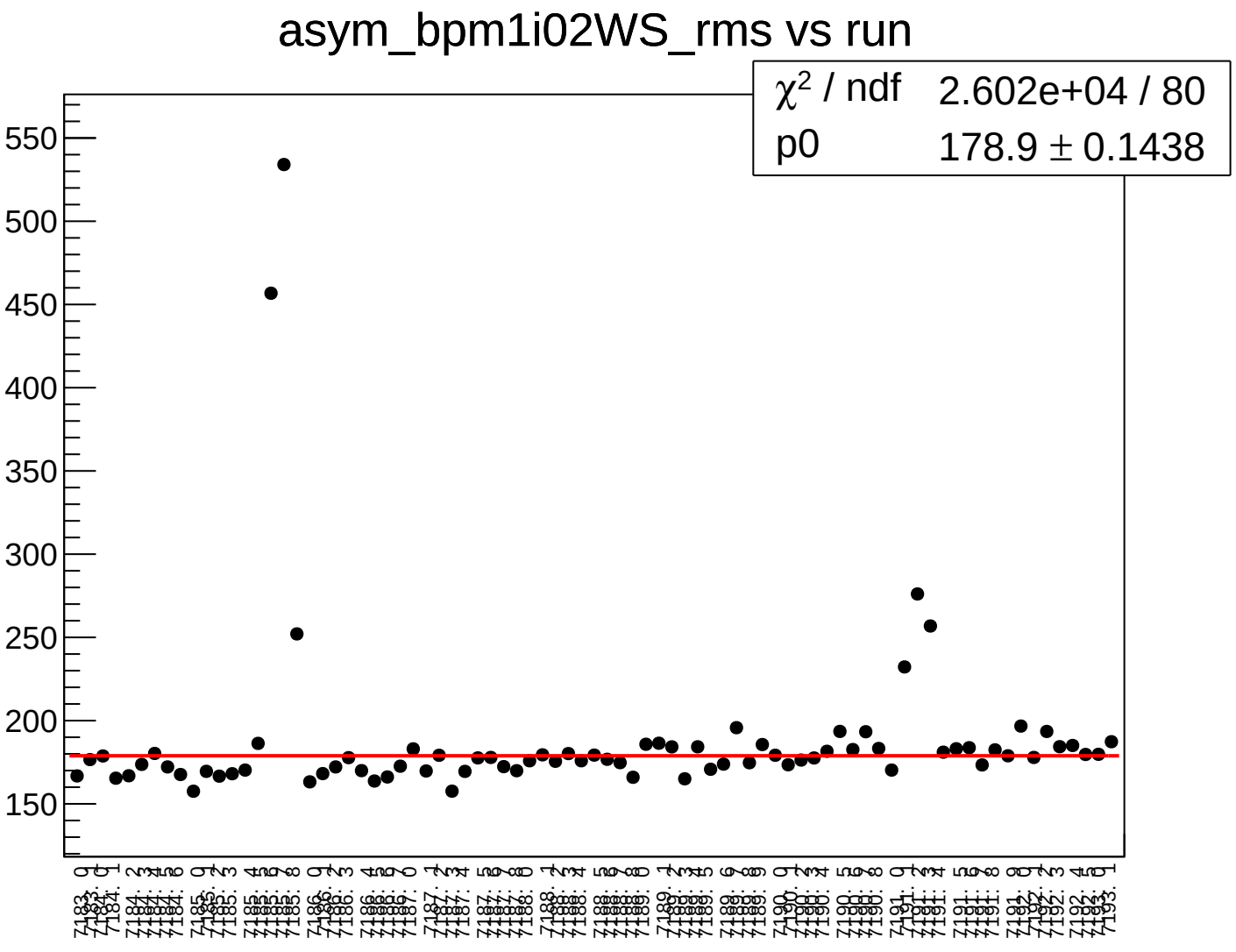

asym_bpm0i07WS_mean vs run
χ² / ndf 62.73 / 80
p0 −397.4 ± 261.8
pull
Entries 81
Mean 486
Std Dev 449.1

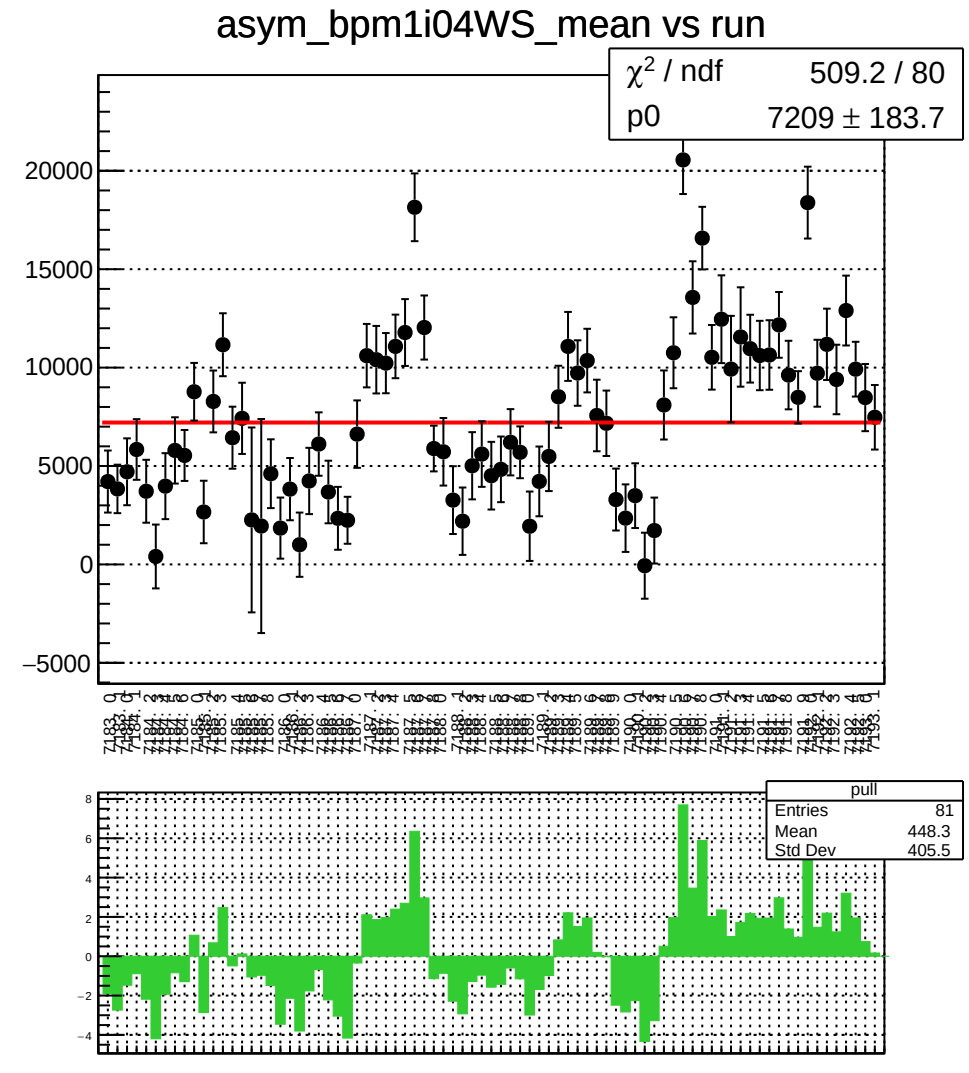

pull1D
Entries 81
Mean −0.02702
Std Dev 0.8796

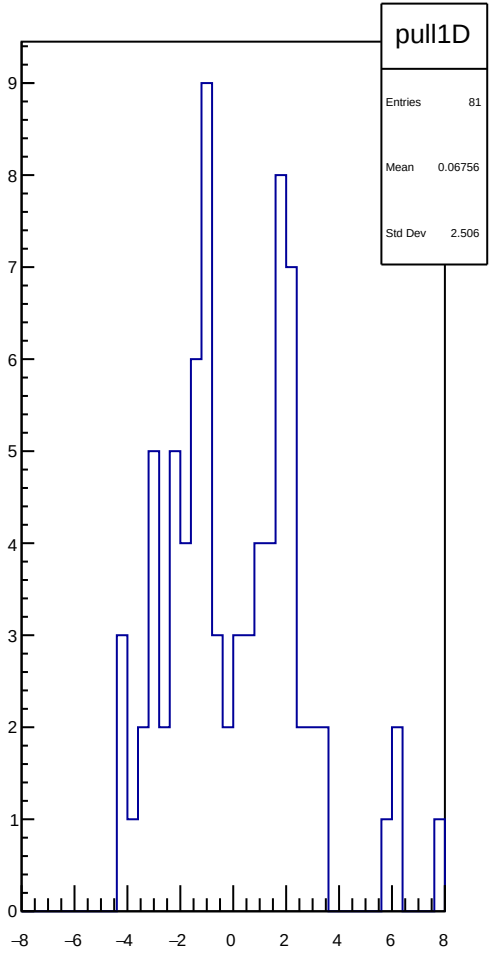

asym_bpm0i07WS_rms vs run
χ² / ndf 1.783e+04 / 80
p0 230.8 ± 0.1851
550
500
450
400
350
300
250
200

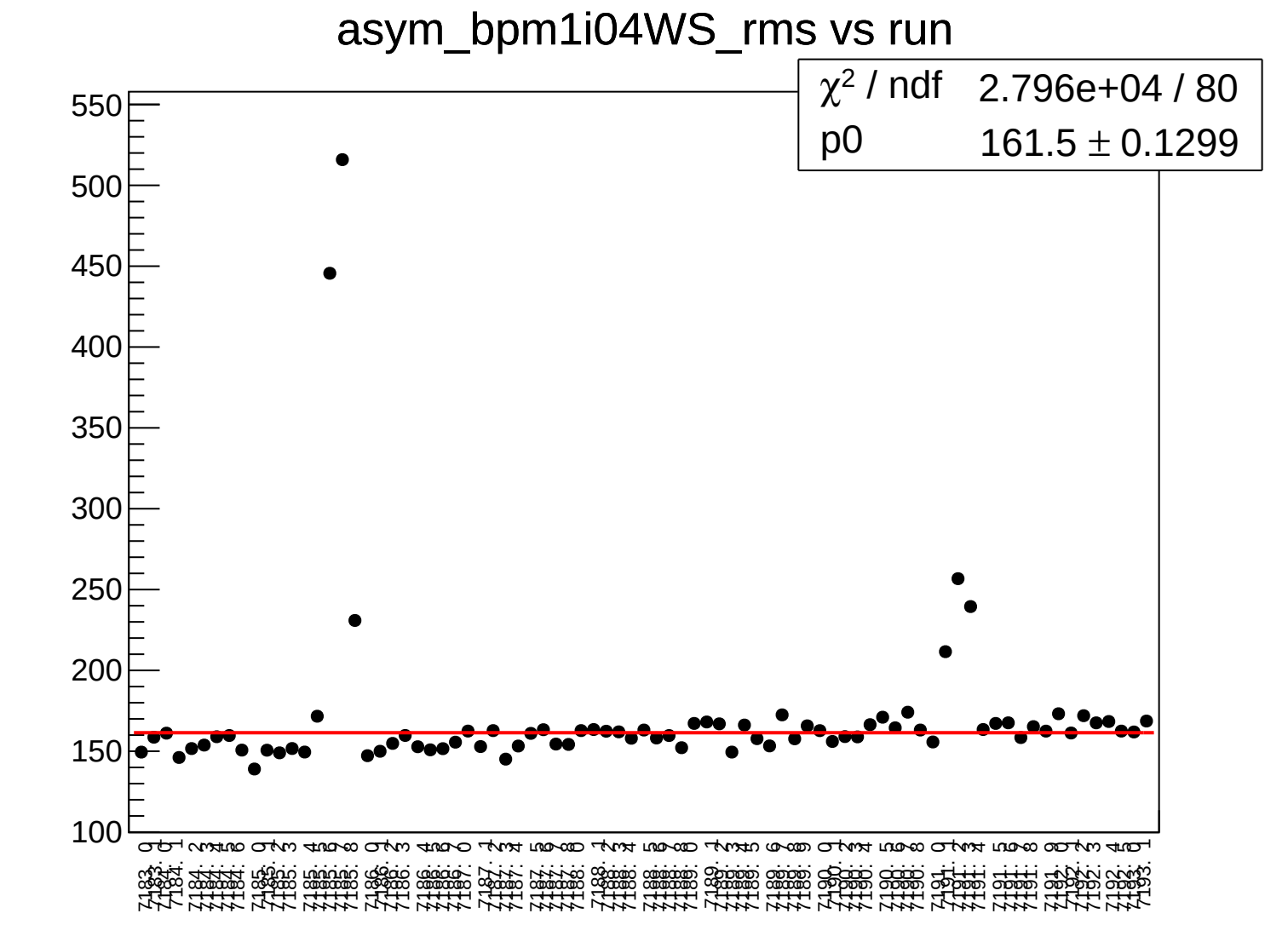

asym_bpm1i02WS_mean vs run
χ² / ndf 420.4 / 80
p0 7223 ± 203.4
pull
Entries 81
Mean 437.2
Std Dev 394.8

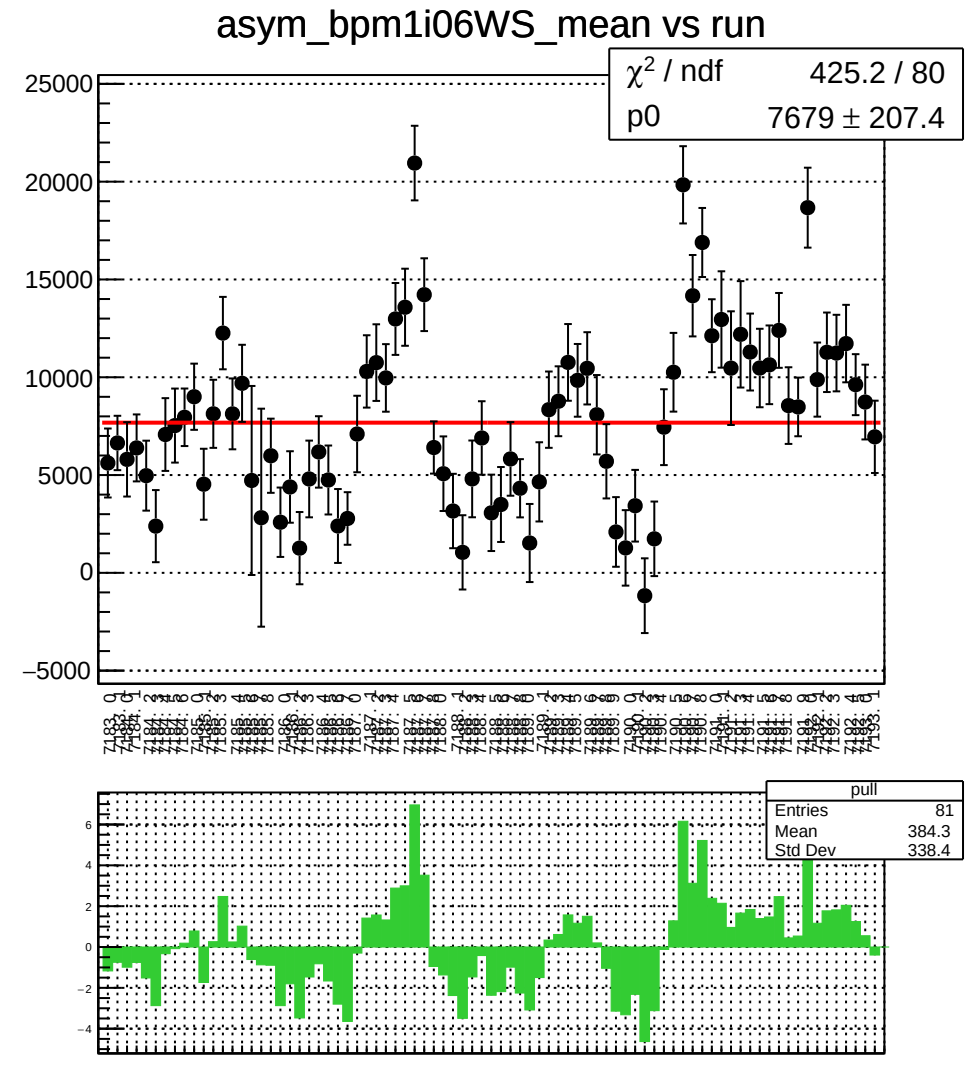

pull1D
Entries 81
Mean 0.06145
Std Dev 2.277

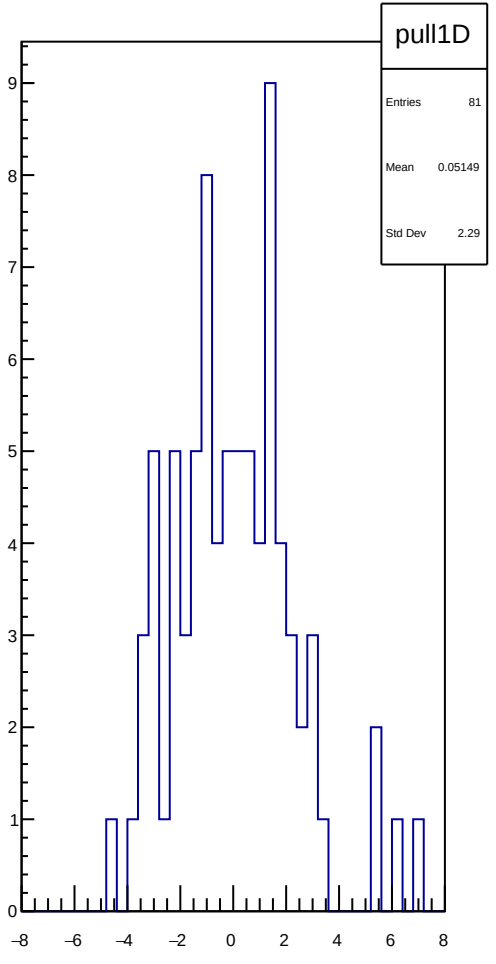

asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.602e+04 / 80
p0 178.9 ± 0.1438
550
500
450
400
350
300
250
200
150

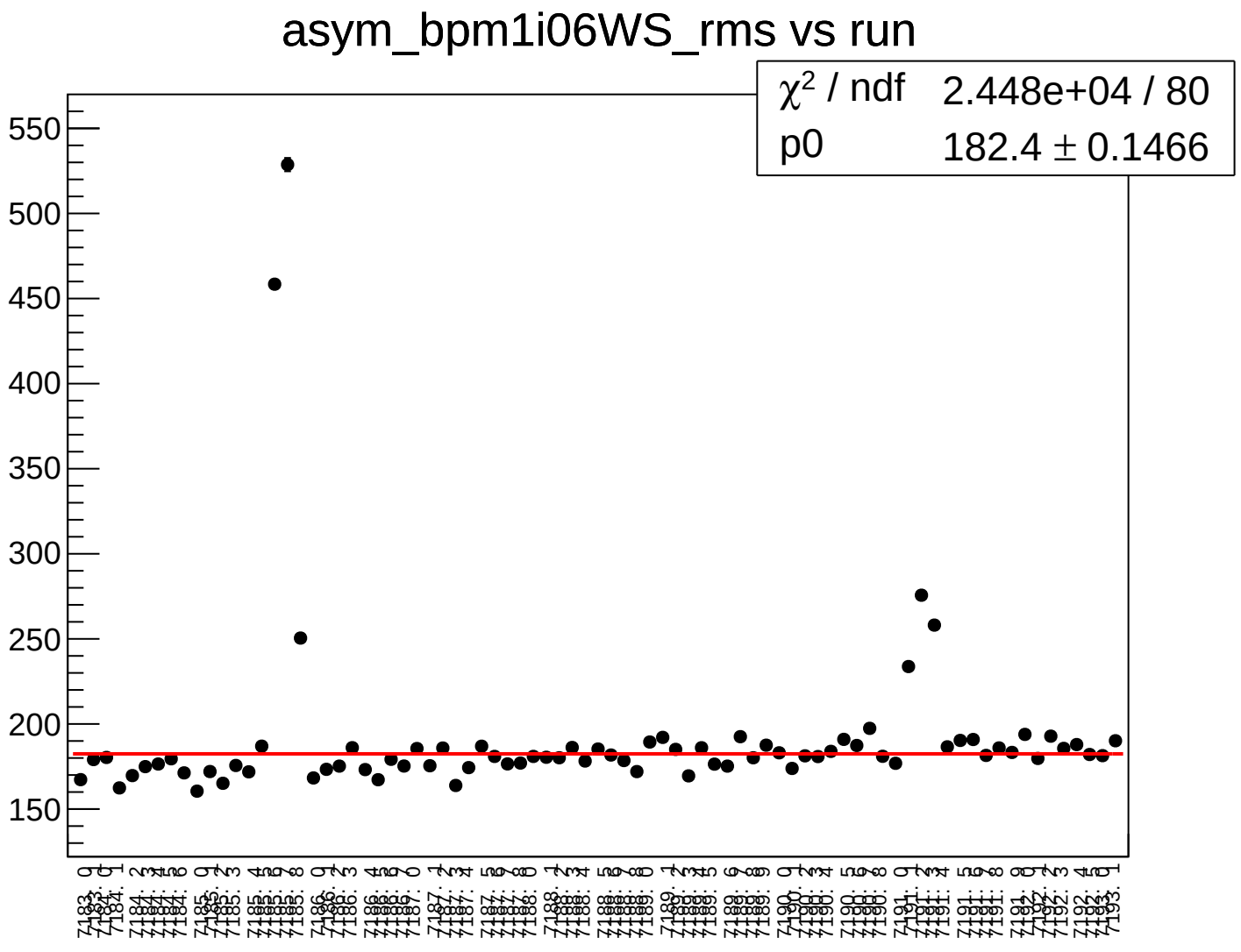

asym_bpm1i04WS_mean vs run
χ² / ndf 509.2 / 80
p0 7209 ± 183.7
20000
15000
10000
5000
0
−5000
pull
Entries 81
Mean 448.3
Std Dev 405.5
8
6
4
2
0
−2
−4

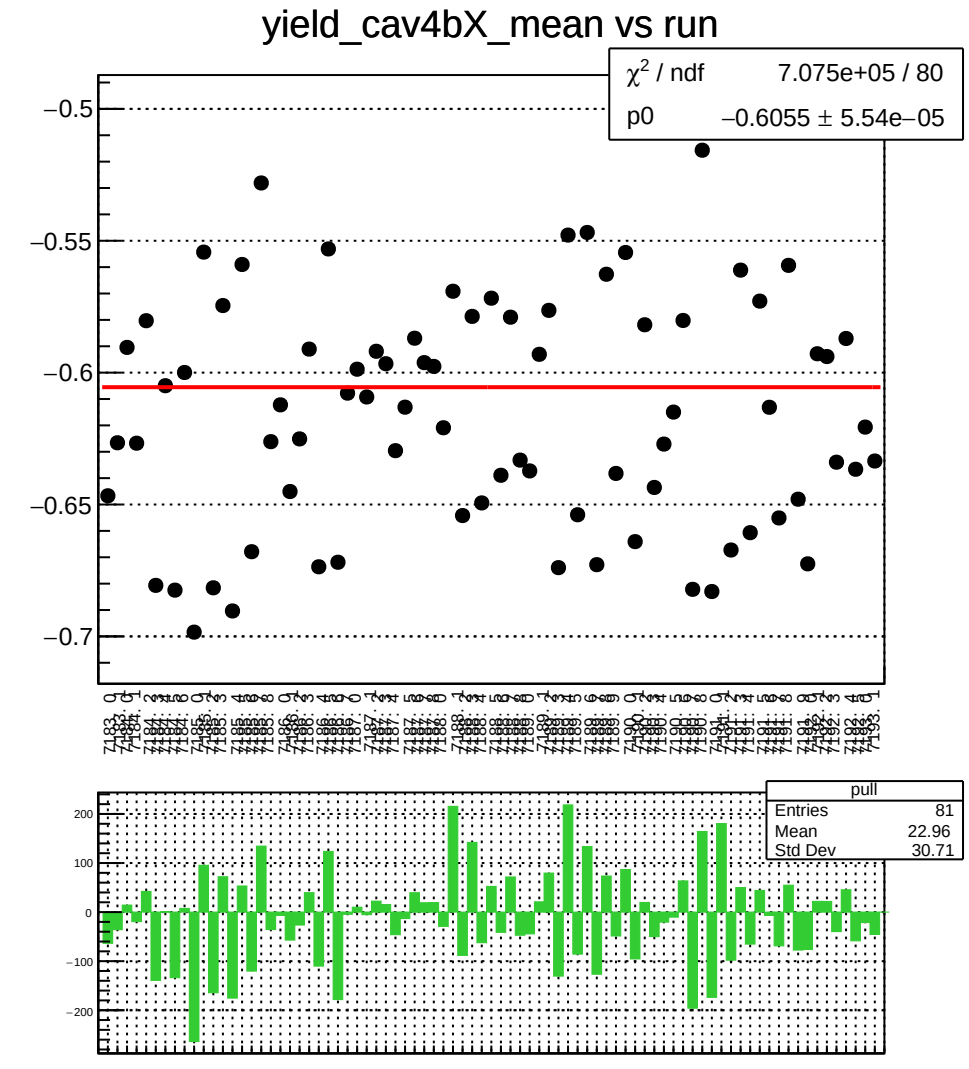

pull1D
Entries 81
Mean 0.06756
Std Dev 2.506
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

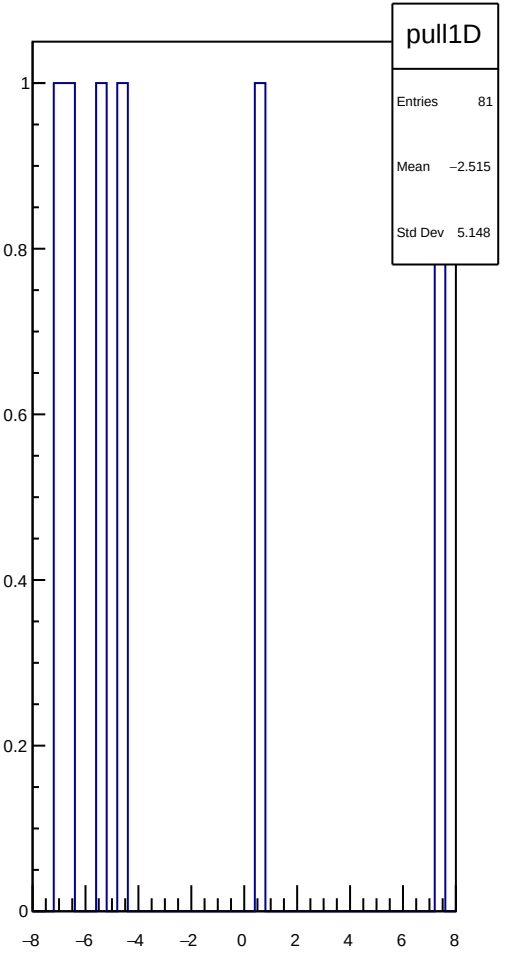

asym_bpm1i04WS_rms vs run
χ² / ndf 2.796e+04 / 80
p0 161.5 ± 0.1299
550
500
450
400
350
300
250
200
150
100

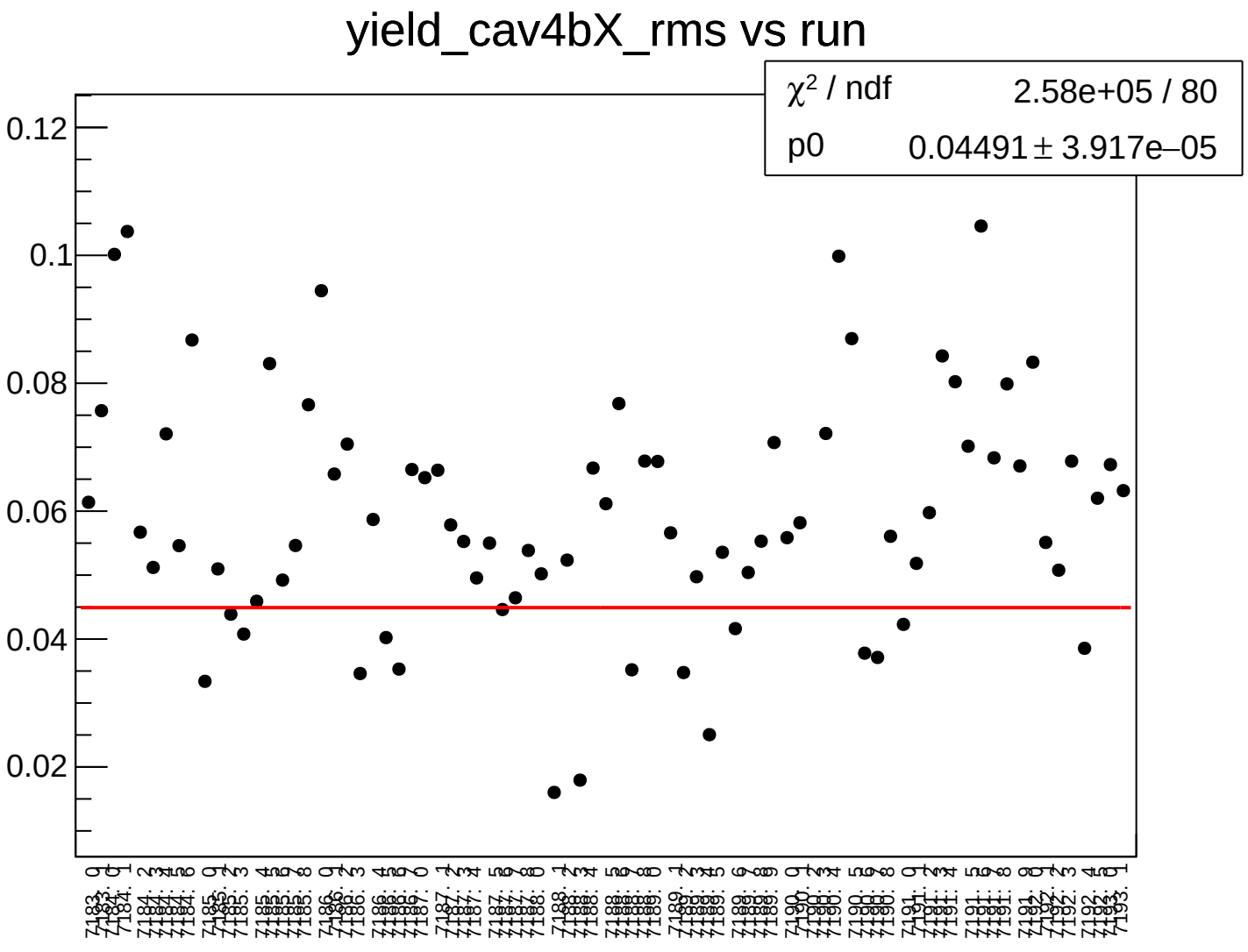

asym_bpm1i06WS_mean vs run
χ² / ndf 425.2 / 80
p0 7679 ± 207.4
pull
Entries 81
Mean 384.3
Std Dev 338.4

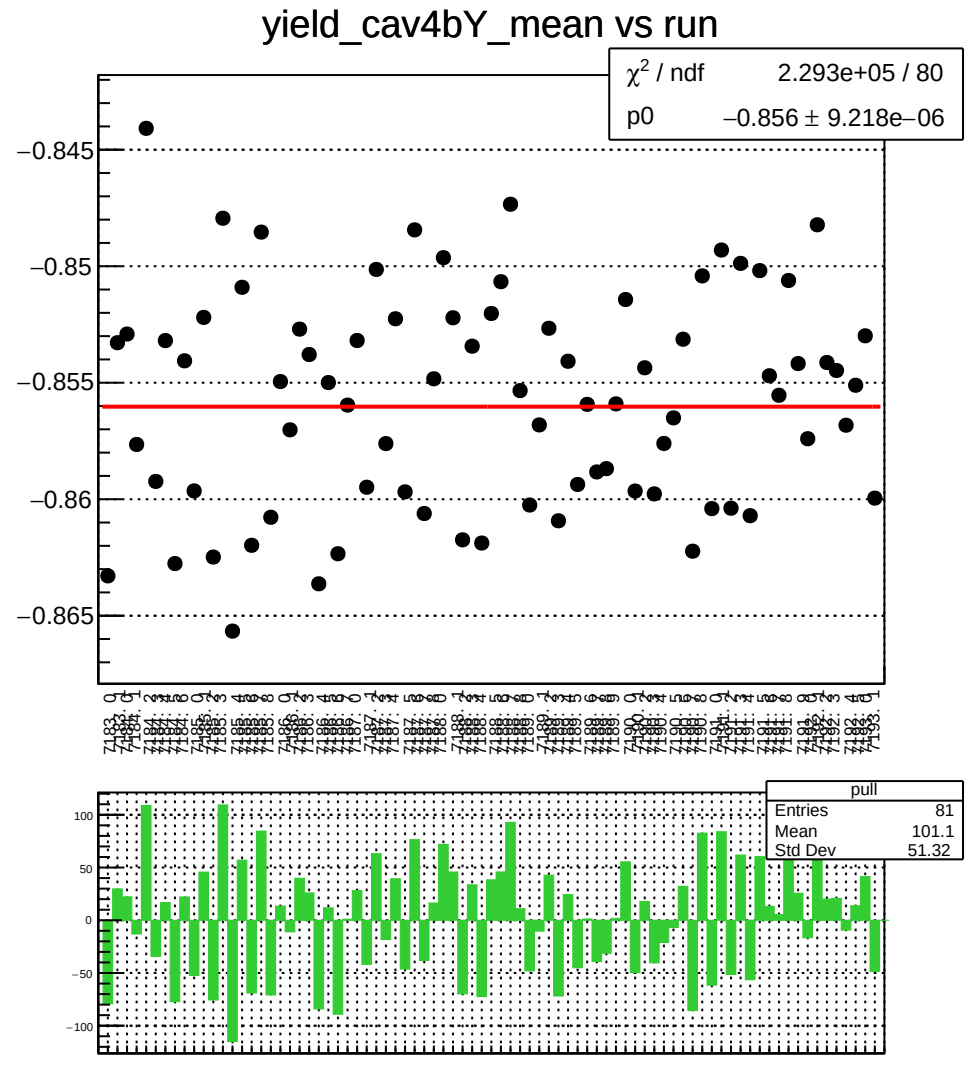

pull1D
Entries 81
Mean 0.05149
Std Dev 2.29

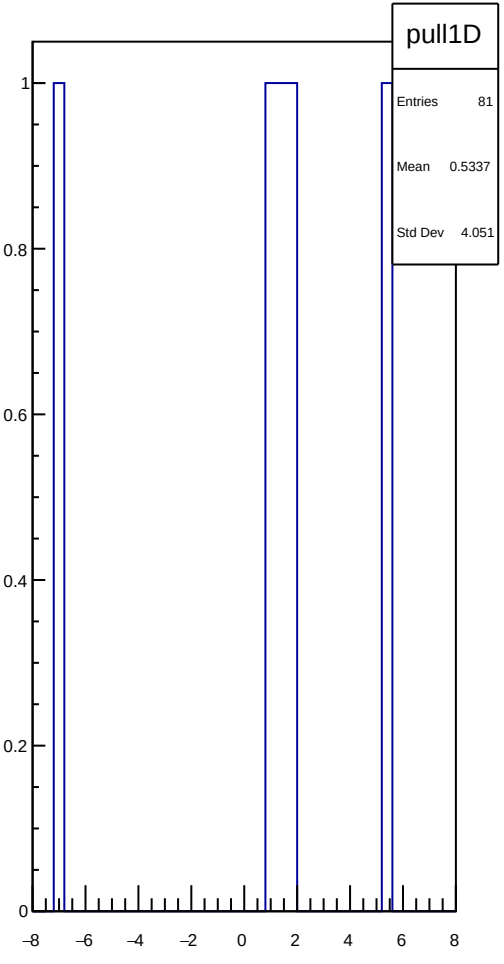

asym_bpm1i06WS_rms vs run
χ² / ndf 2.448e+04 / 80
p0 182.4 ± 0.1466
550
500
450
400
350
300
250
200
150

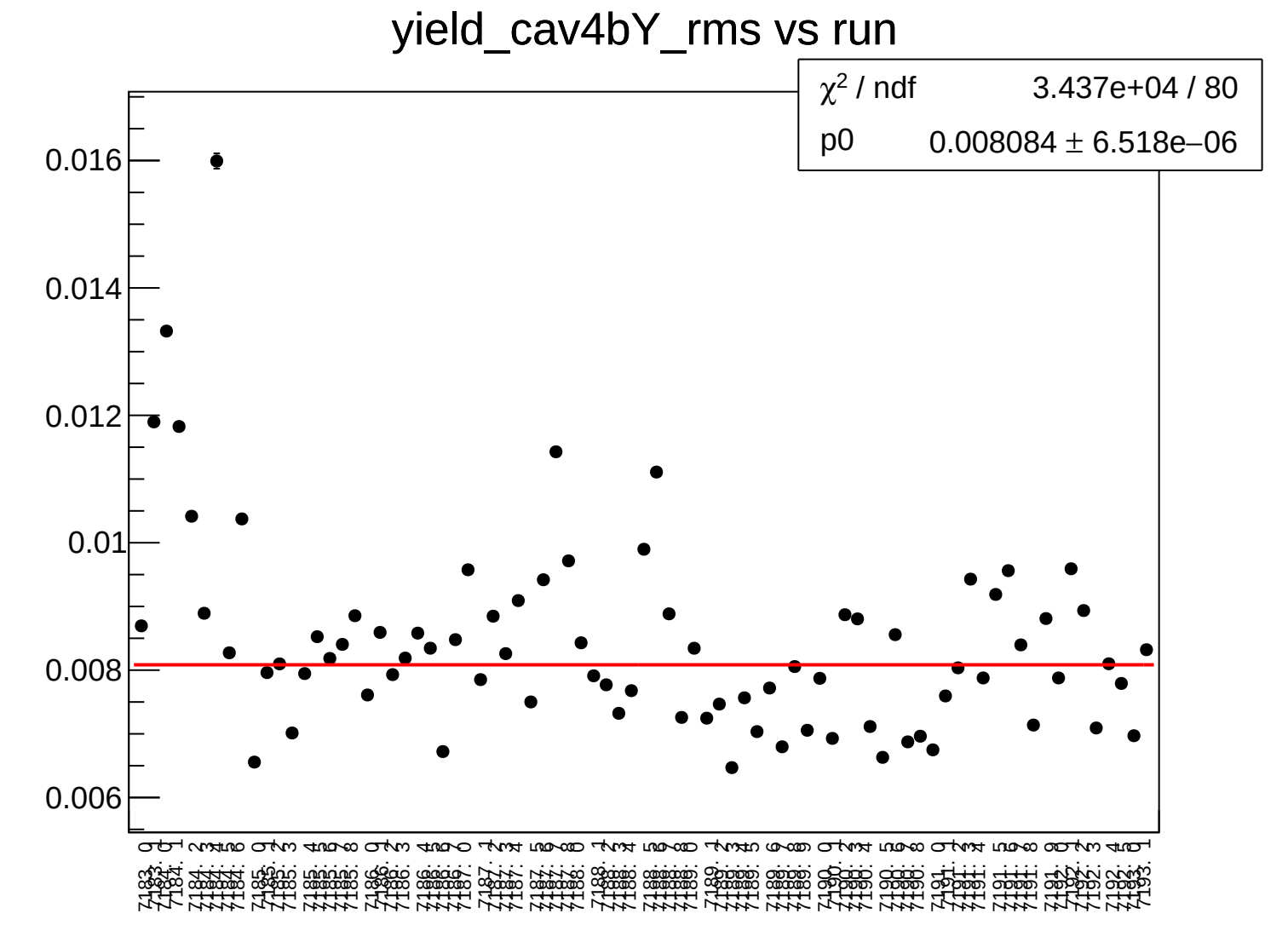

yield_cav4bX_mean vs run
χ² / ndf 7.075e+05 / 80
p0 −0.6055 ± 5.54e−05
−0.5
−0.55
−0.6
−0.65
−0.7
pull
Entries 81
Mean 22.96
Std Dev 30.71
200
100
0
−100
−200

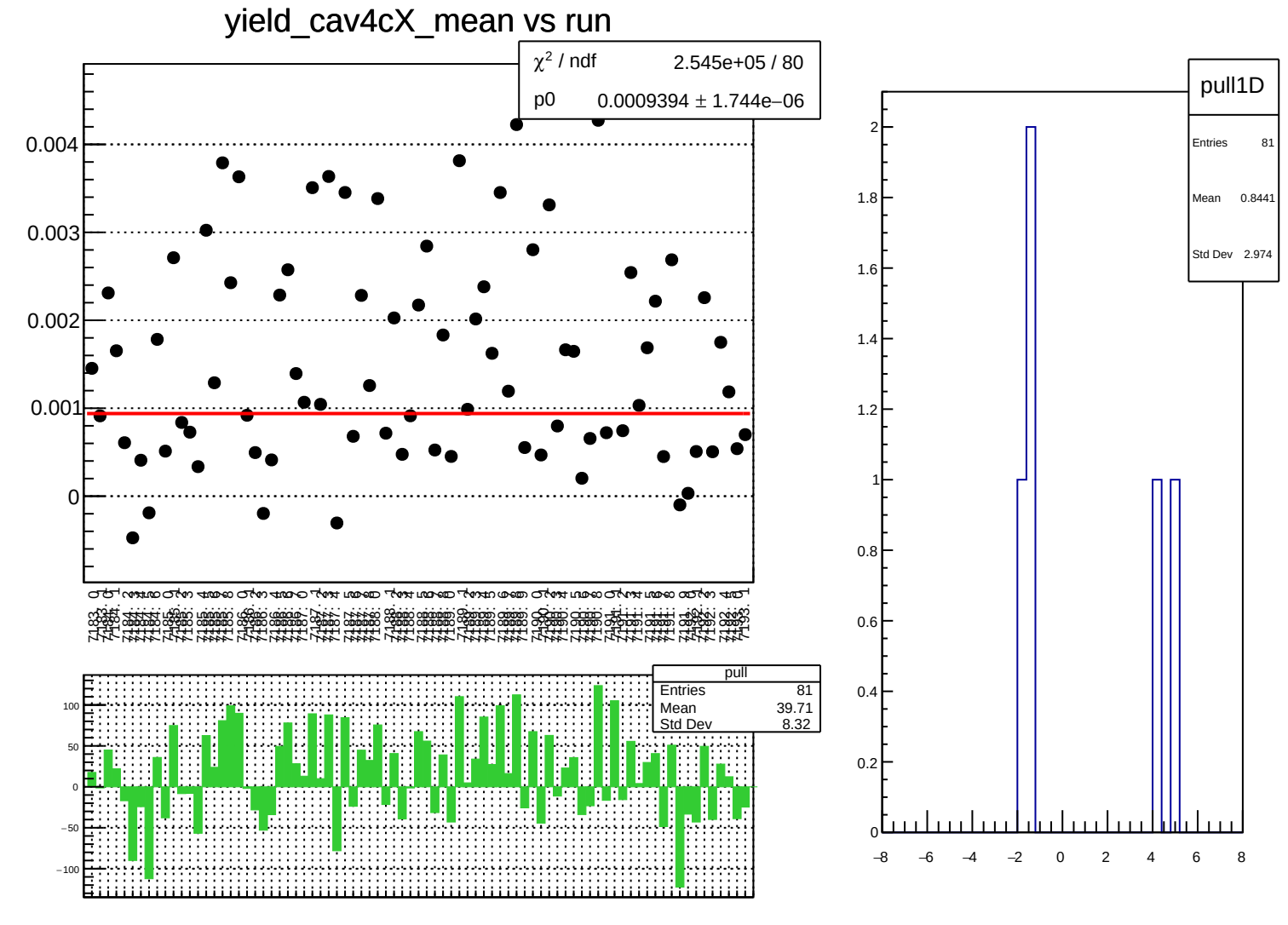

pull1D
Entries 81
Mean −2.515
Std Dev 5.148
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

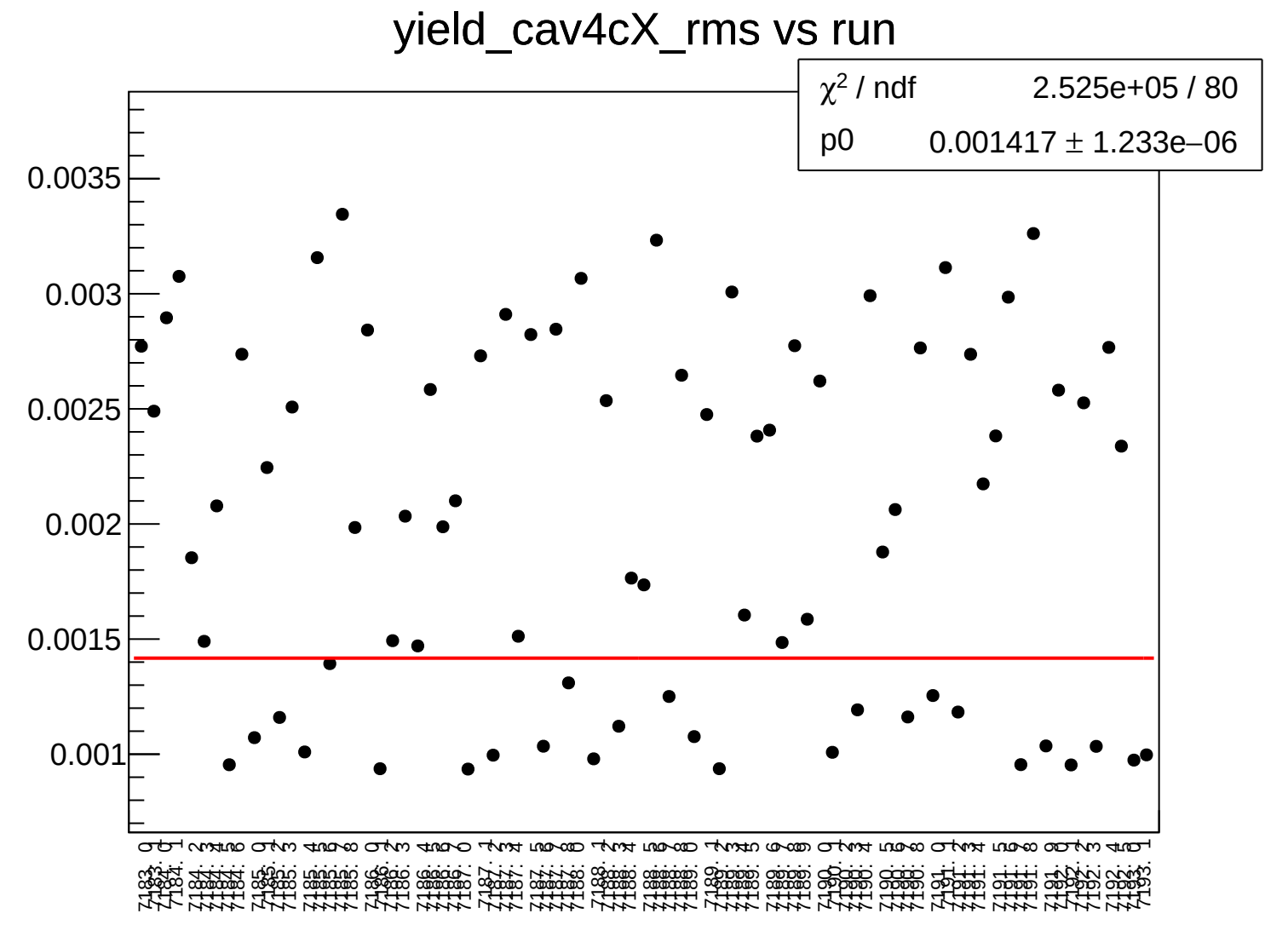

yield_cav4bX_rms vs run
χ² / ndf 2.58e+05 / 80
p0 0.04491 ± 3.917e−05
0.12
0.1
0.08
0.06
0.04
0.02

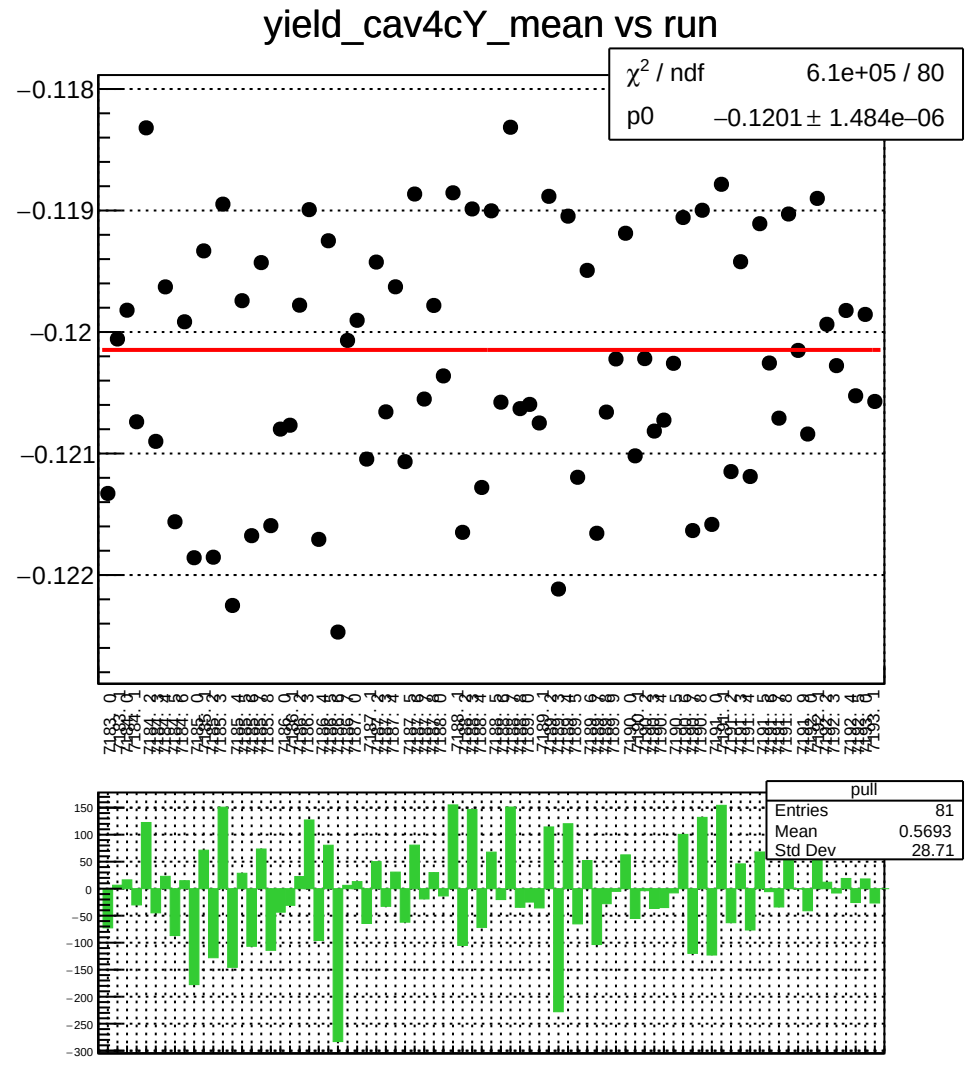

yield_cav4bY_mean vs run
χ² / ndf 2.293e+05 / 80
p0 −0.856 ± 9.218e−06
−0.845
−0.85
−0.855
−0.86
−0.865
pull
Entries 81
Mean 101.1
Std Dev 51.32
100
50
0
−50
−100

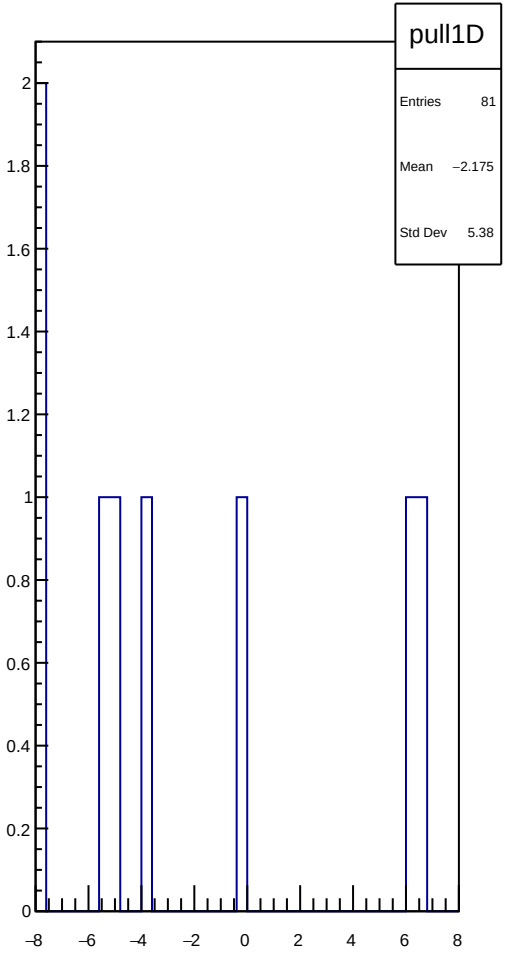

pull1D
Entries 81
Mean 0.5337
Std Dev 4.051
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

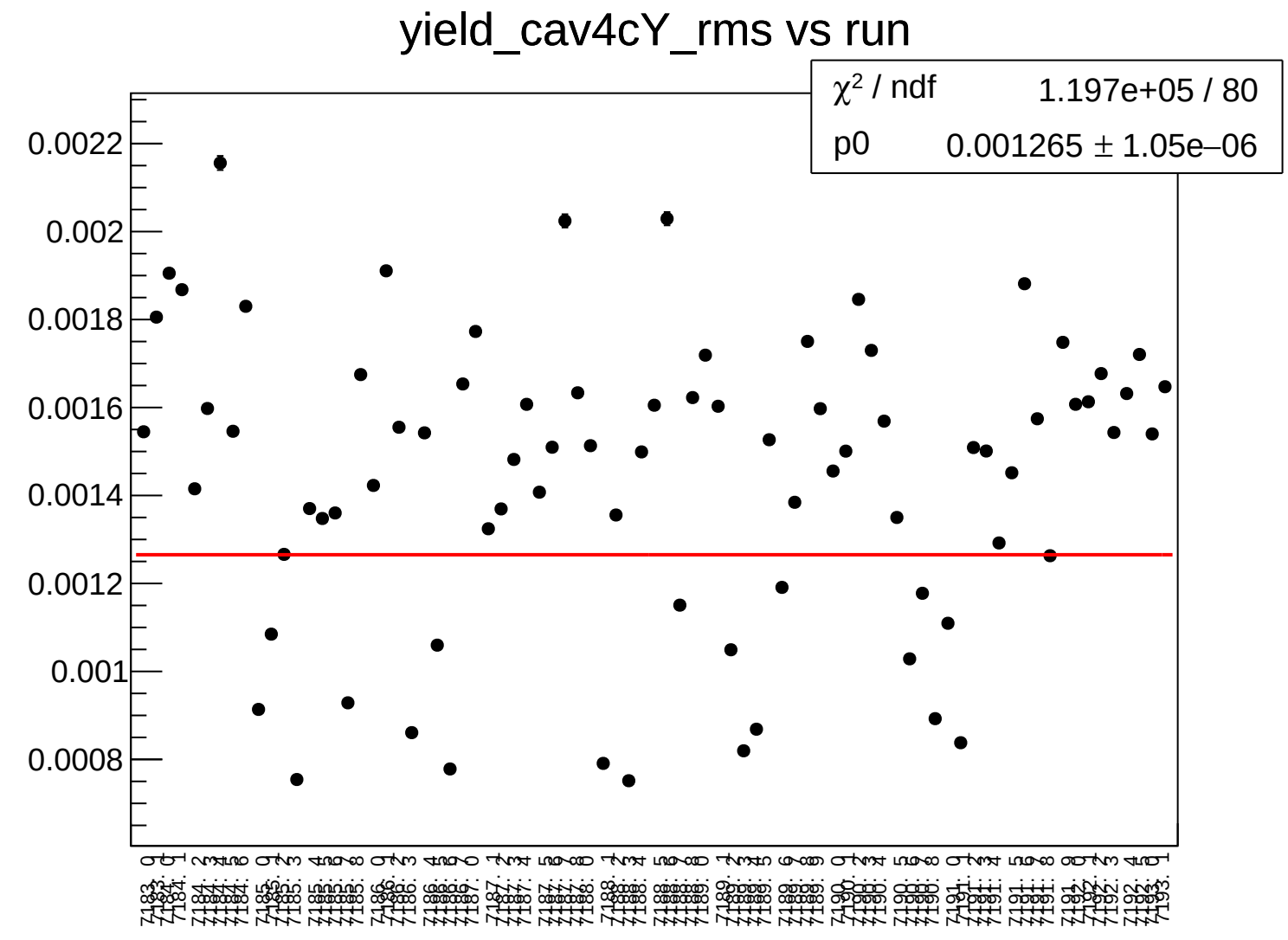

yield_cav4bY_rms vs run
χ^2 / ndf 3.437e+04 / 80
p0 0.008084 ± 6.518e−06
0.016
0.014
0.012
0.01
0.008
0.006

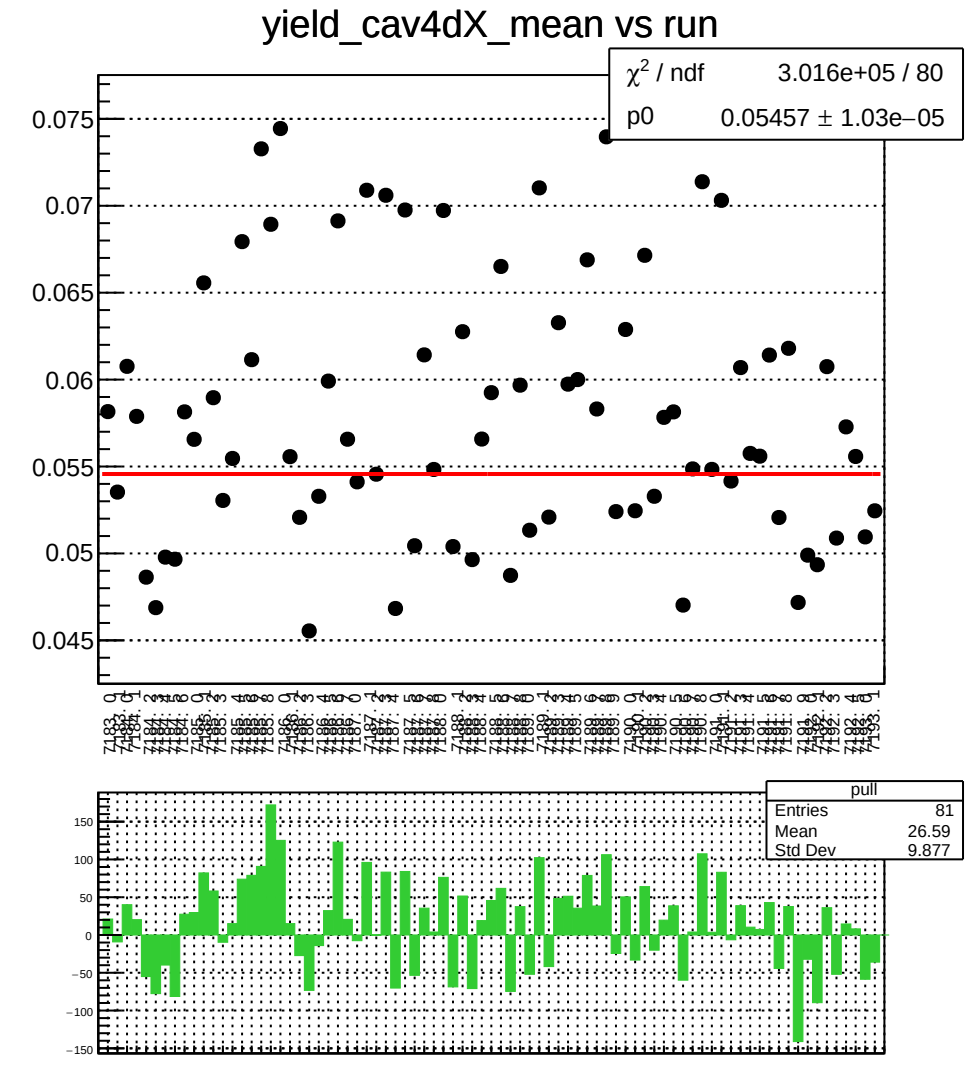

yield_cav4cX_mean vs run
χ² / ndf 2.545e+05 / 80
p0 0.0009394 ± 1.744e−06
0.004
0.003
0.002
0.001
0
pull
Entries 81
Mean 39.71
Std Dev 8.32
100
50
0
−50
−100
pull1D
Entries 81
Mean 0.8441
Std Dev 2.974
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

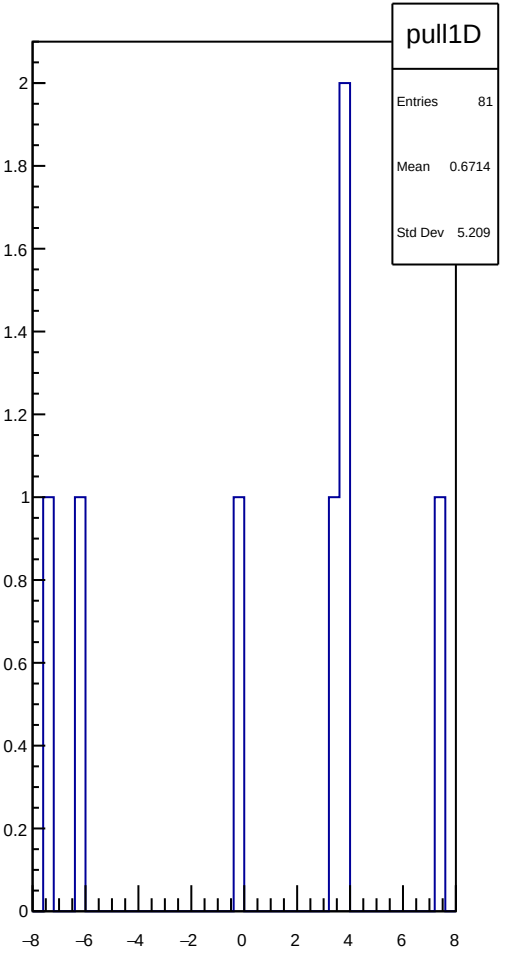

yield_cav4cX_rms vs run
χ² / ndf 2.525e+05 / 80
p0 0.001417 ± 1.233e−06
0.0035
0.003
0.0025
0.002
0.0015
0.001

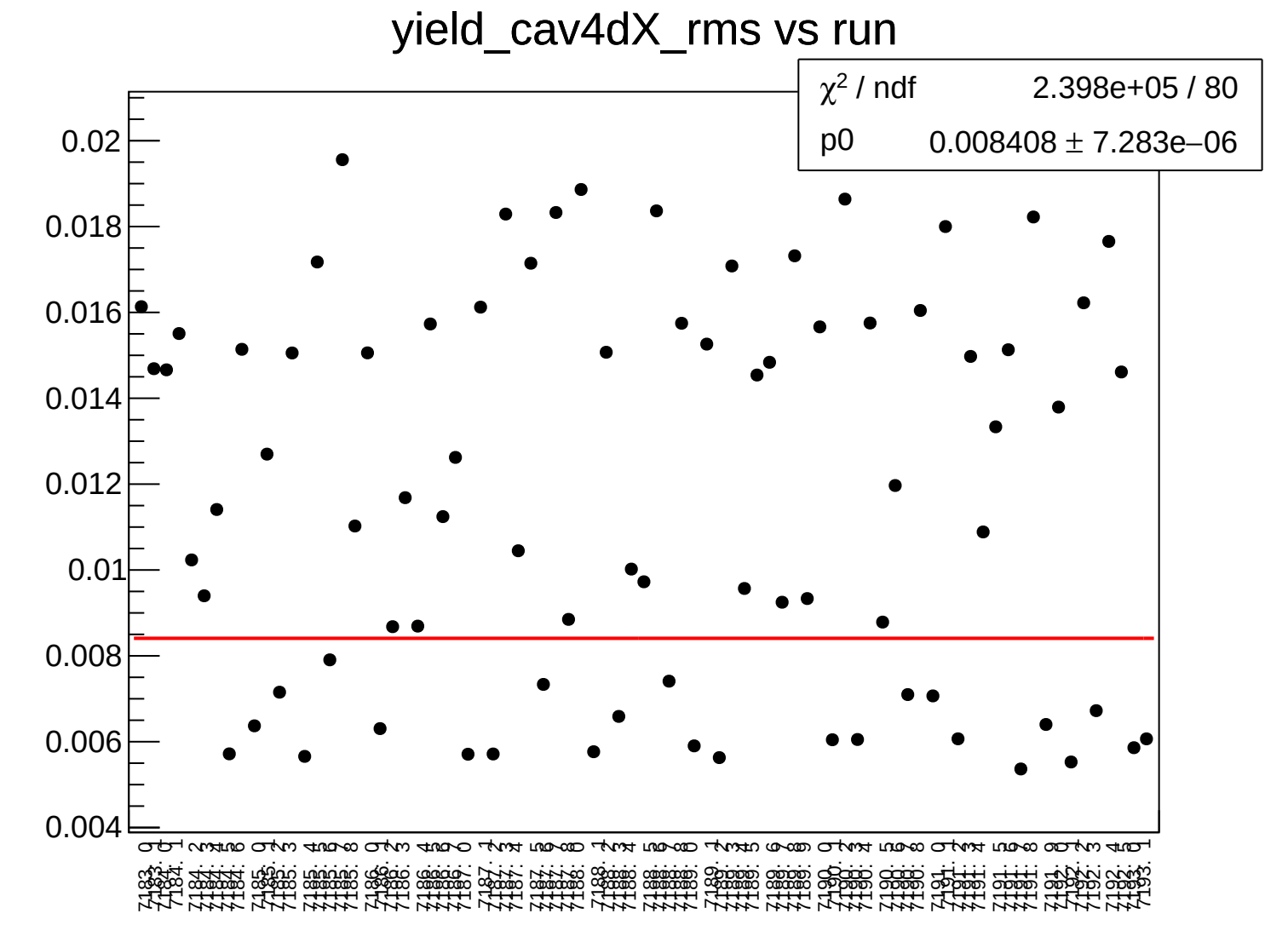

yield_cav4cY_mean vs run
χ² / ndf 6.1e+05 / 80
p0 −0.1201 ± 1.484e−06
−0.118
−0.119
−0.12
−0.121
−0.122
pull
Entries 81
Mean 0.5693
Std Dev 28.71
150
100
50
0
−50
−100
−150
−200
−250
−300

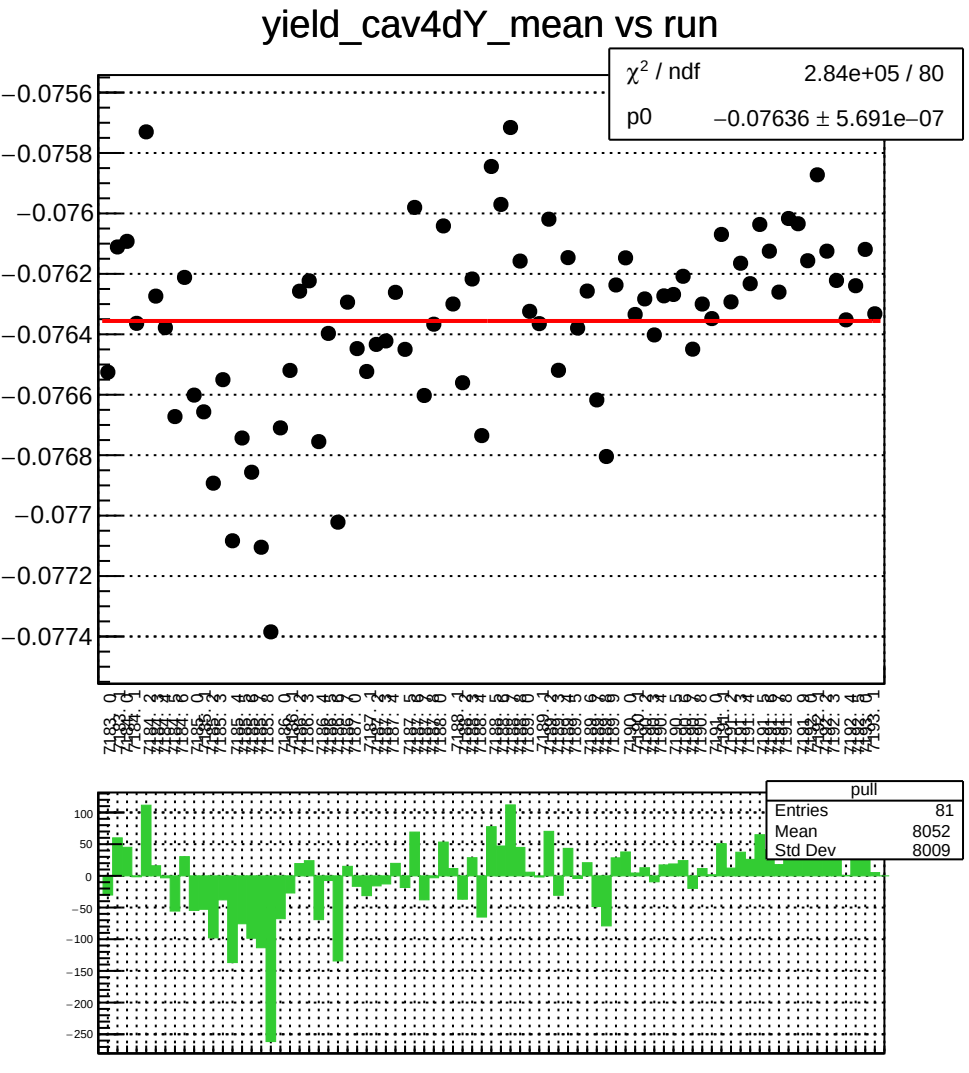

pull1D
Entries 81
Mean −2.175
Std Dev 5.38
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

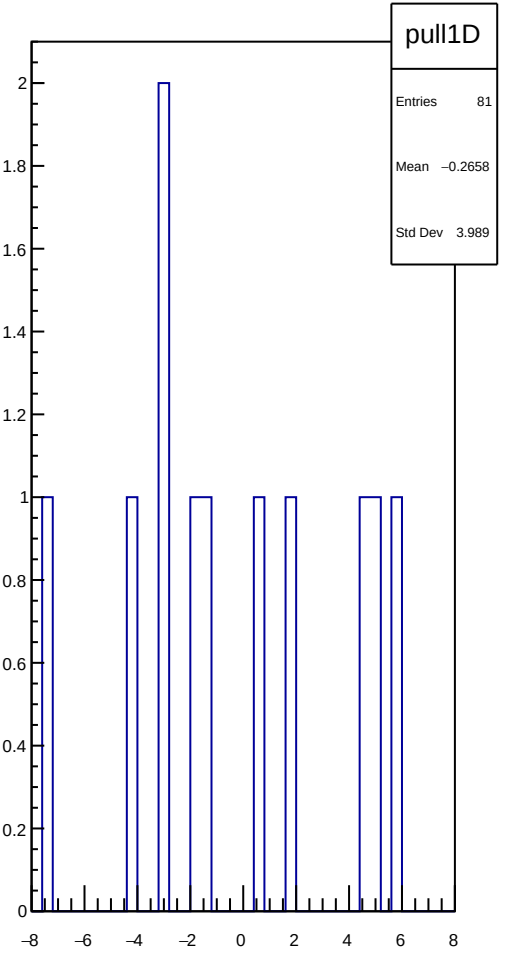

yield_cav4cY_rms vs run
χ² / ndf 1.197e+05 / 80
p0 0.001265 ± 1.05e−06
0.0022
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008

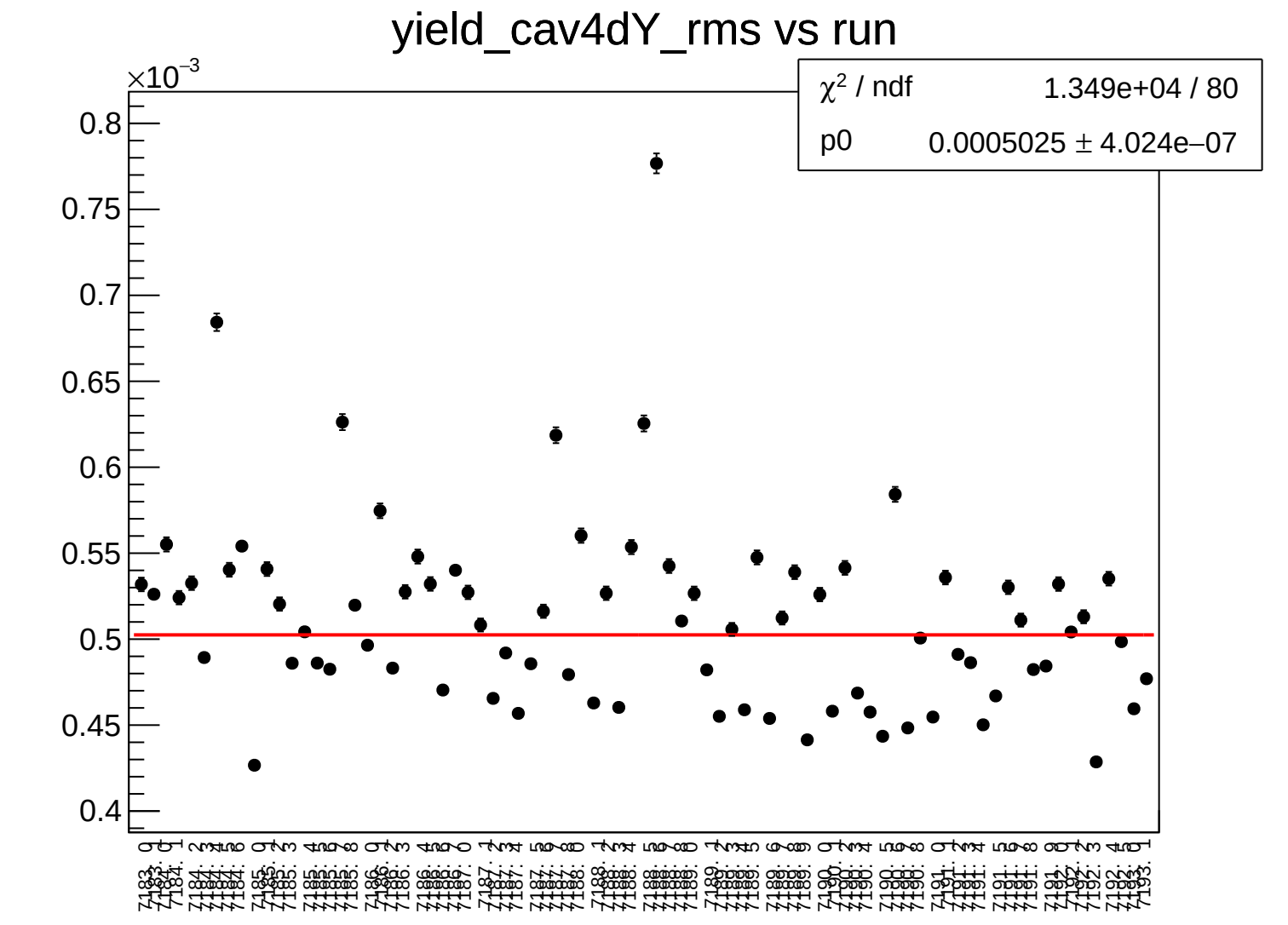

yield_cav4dX_mean vs run
χ² / ndf 3.016e+05 / 80
p0 0.05457 ± 1.03e−05
0.075
0.07
0.065
0.06
0.055
0.05
0.045
pull
Entries 81
Mean 26.59
Std Dev 9.877
150
100
50
0
−50
−100
−150

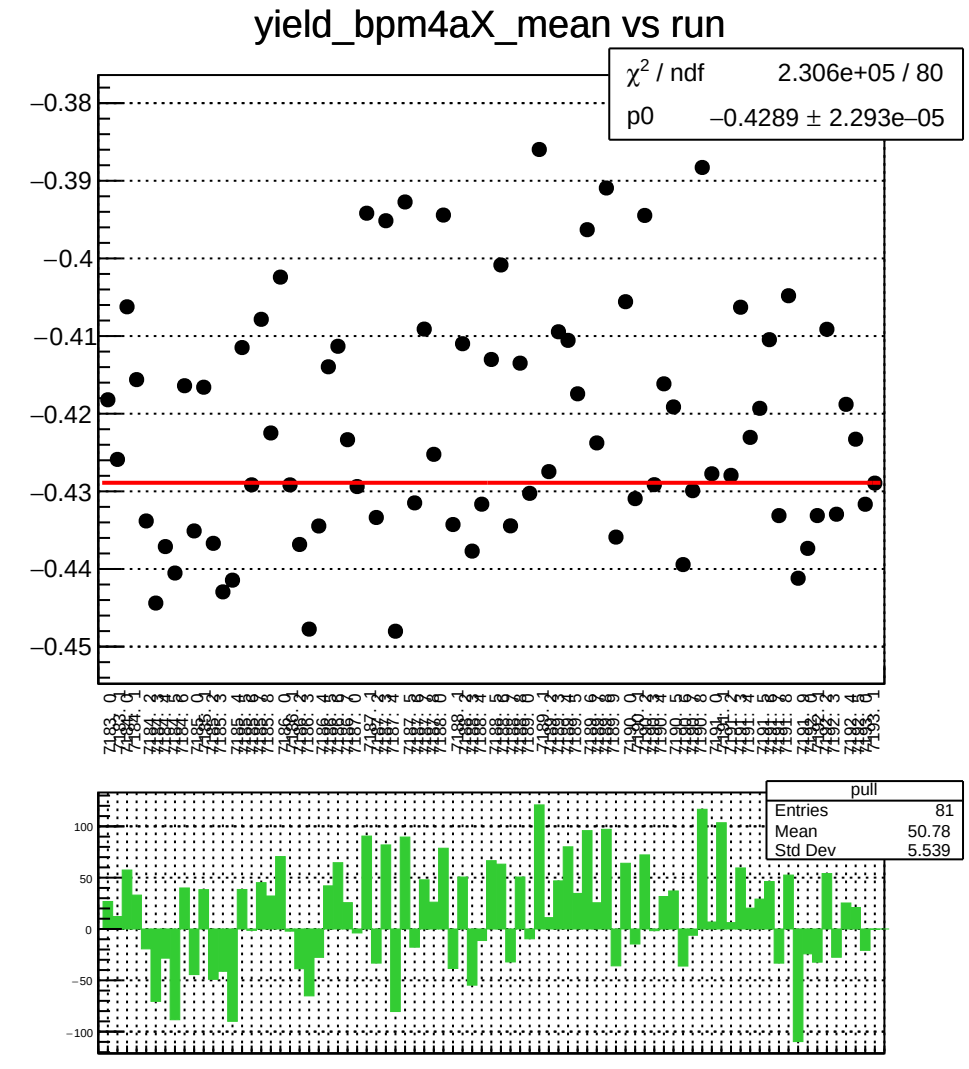

pull1D
Entries 81
Mean 0.6714
Std Dev 5.209
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

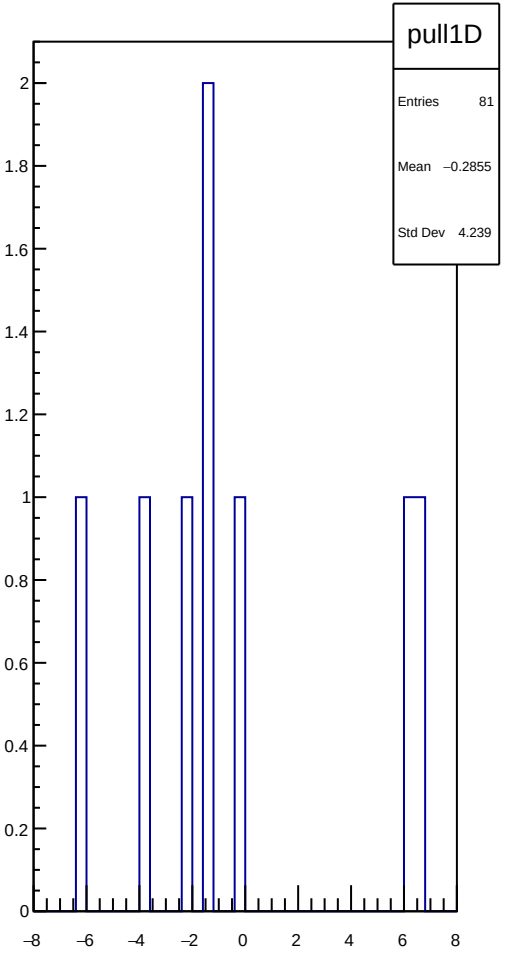

yield_cav4dX_rms vs run
χ² / ndf 2.398e+05 / 80
p0 0.008408 ± 7.283e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

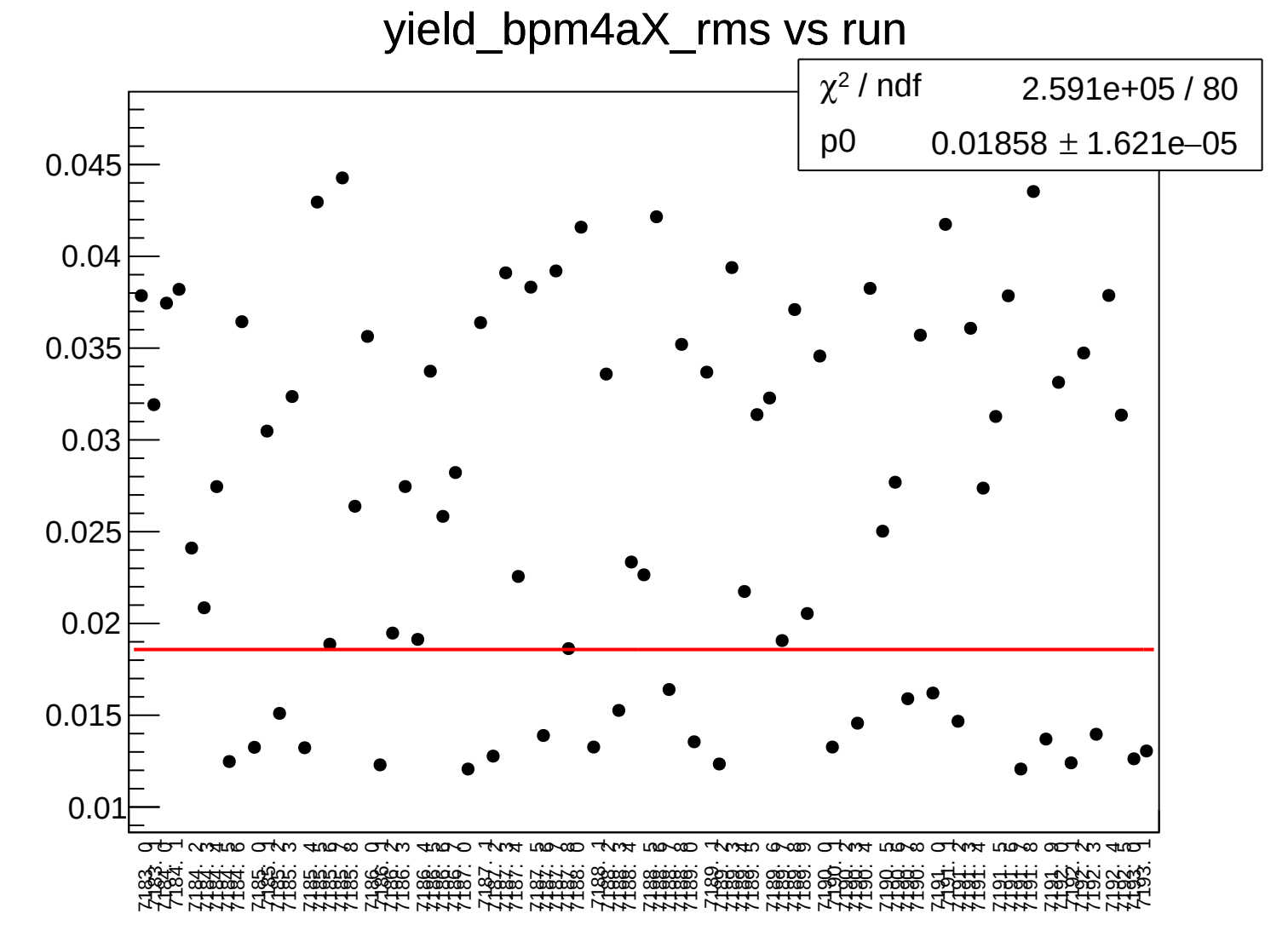

yield_cav4dY_mean vs run
χ² / ndf 2.84e+05 / 80
p0 −0.07636 ± 5.691e−07
−0.0756
−0.0758
−0.076
−0.0762
−0.0764
−0.0766
−0.0768
−0.077
−0.0772
−0.0774
pull
Entries 81
Mean 8052
Std Dev 8009
100
50
0
−50
−100
−150
−200
−250

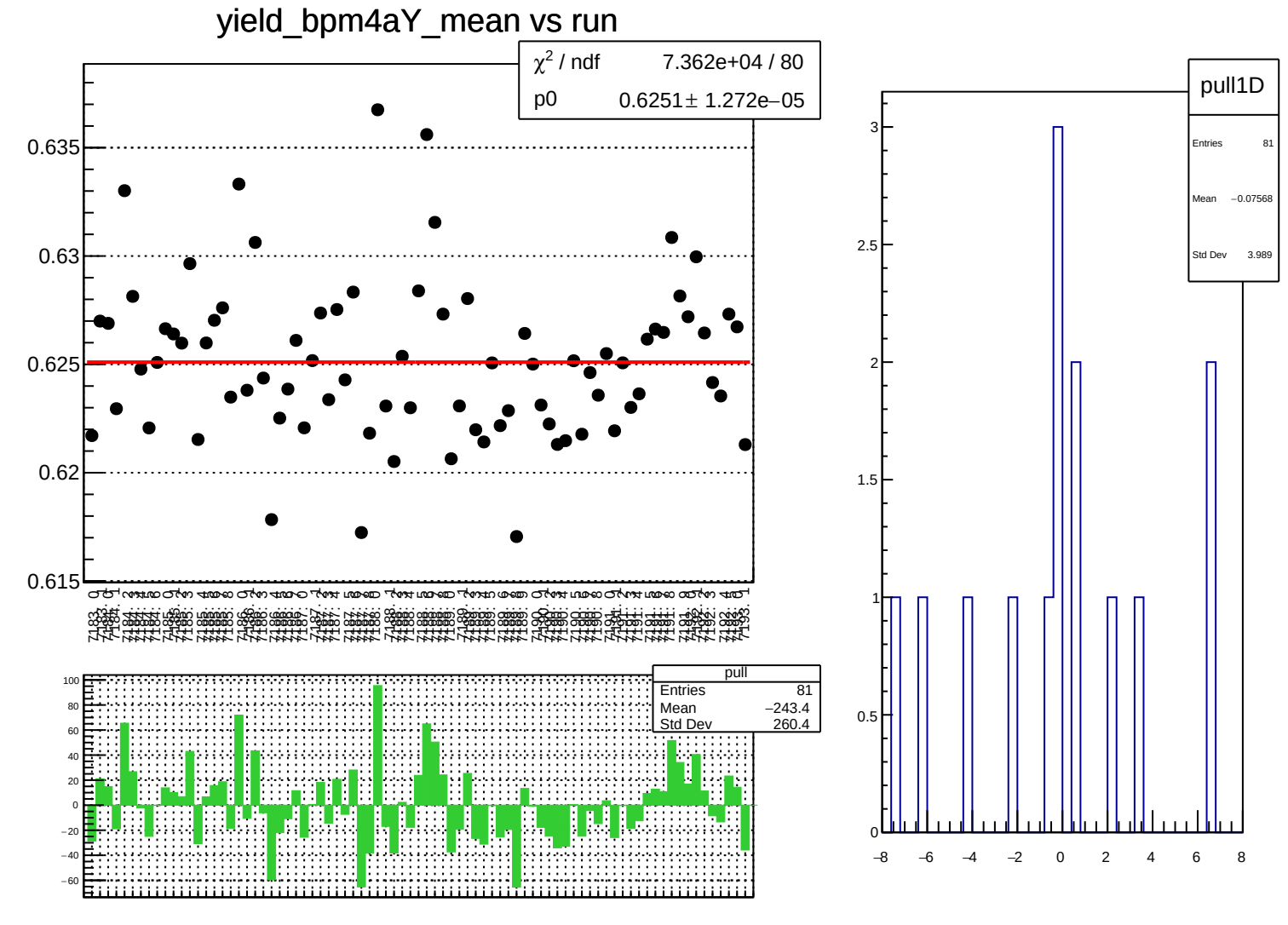

pull1D
Entries 81
Mean −0.2658
Std Dev 3.989
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

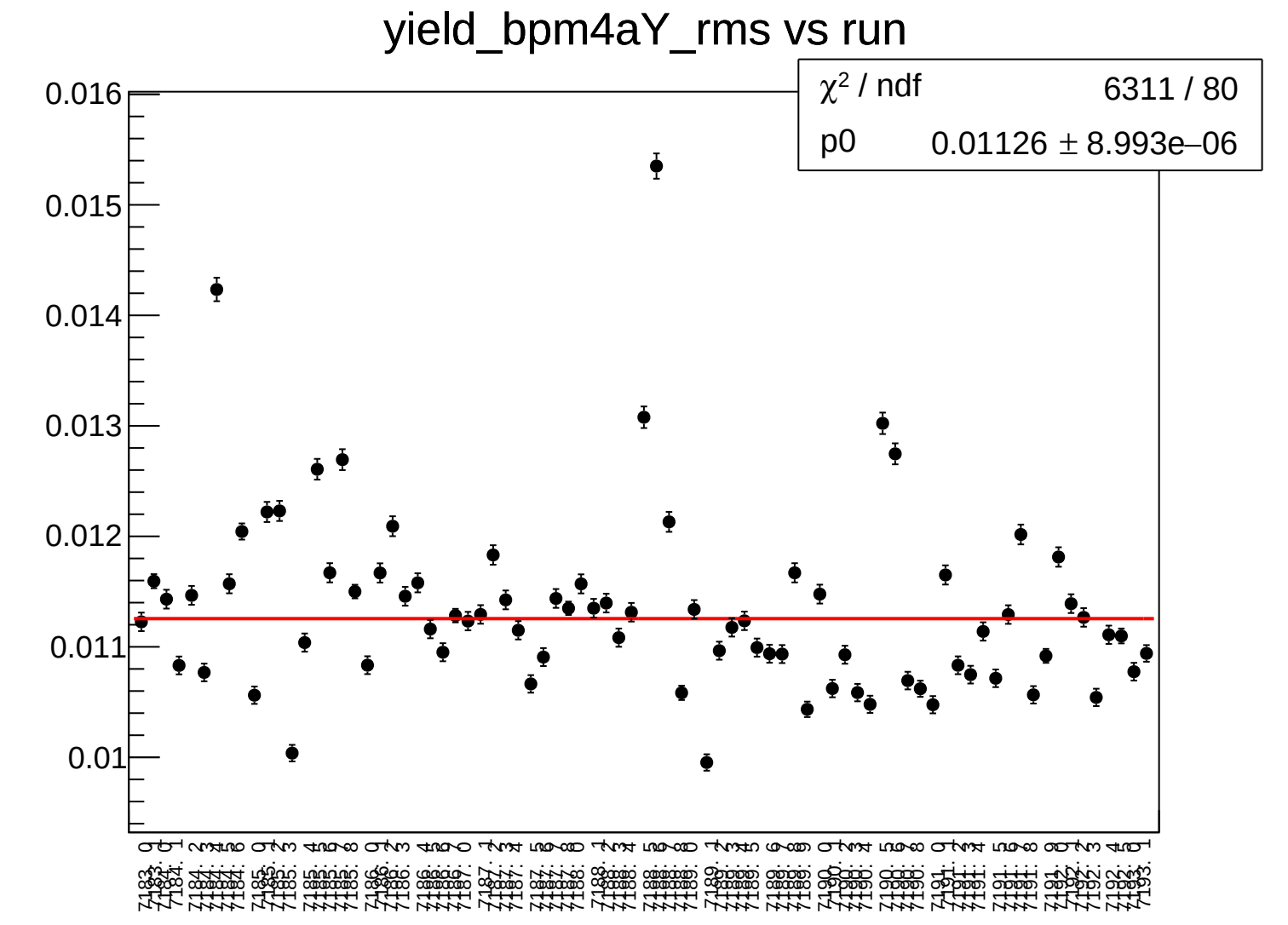

yield_cav4dY_rms vs run
×10⁻³
χ² / ndf 1.349e+04 / 80
p0 0.0005025 ± 4.024e−07
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

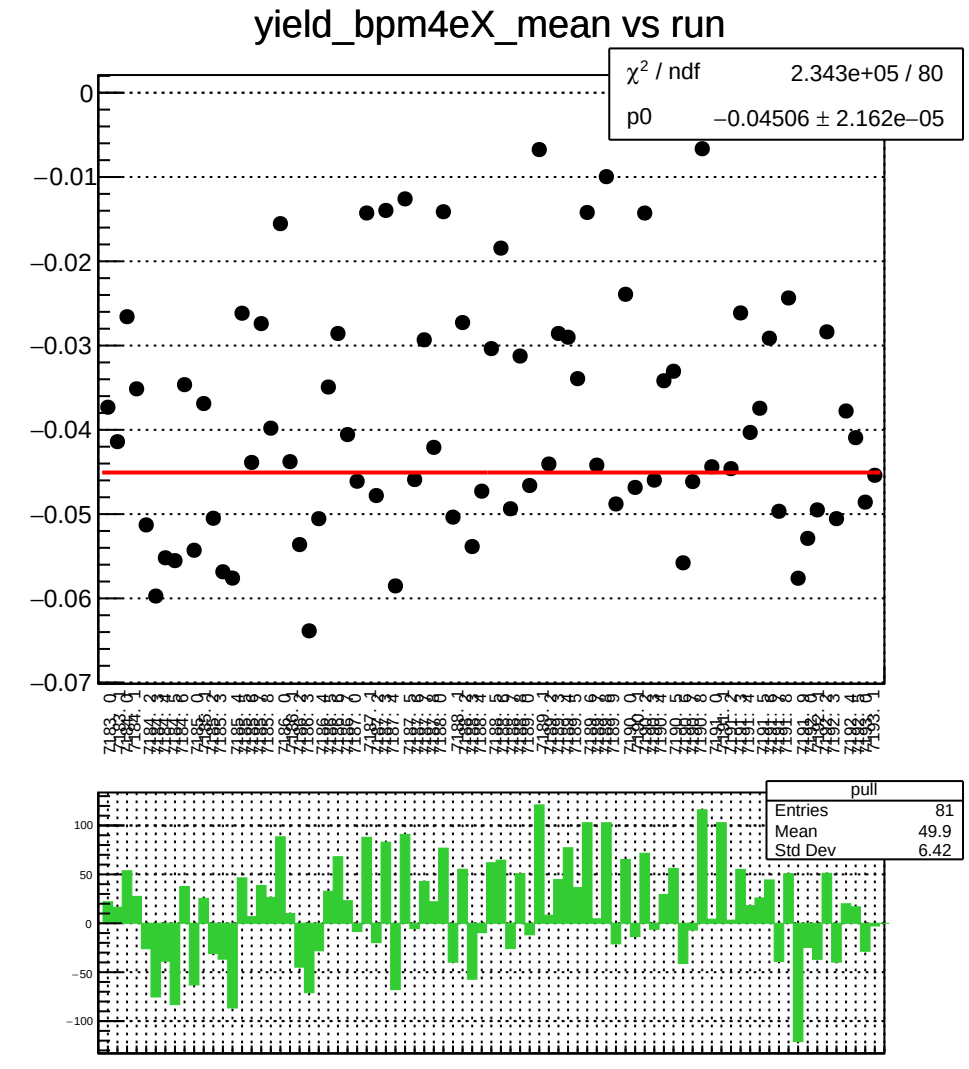

yield_bpm4aX_mean vs run
χ² / ndf 2.306e+05 / 80
p0 −0.4289 ± 2.293e−05
−0.38
−0.39
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
pull
Entries 81
Mean 50.78
Std Dev 5.539
100
50
0
−50
−100

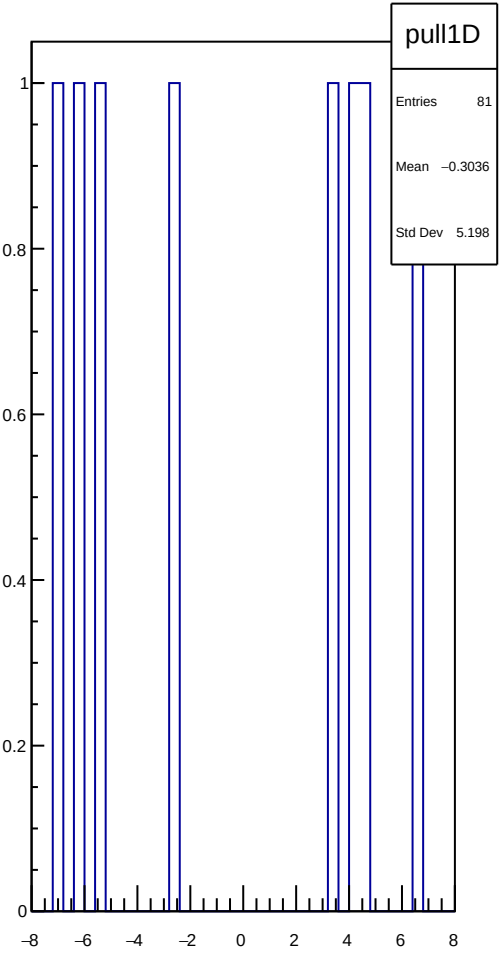

pull1D
Entries 81
Mean −0.2855
Std Dev 4.239
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

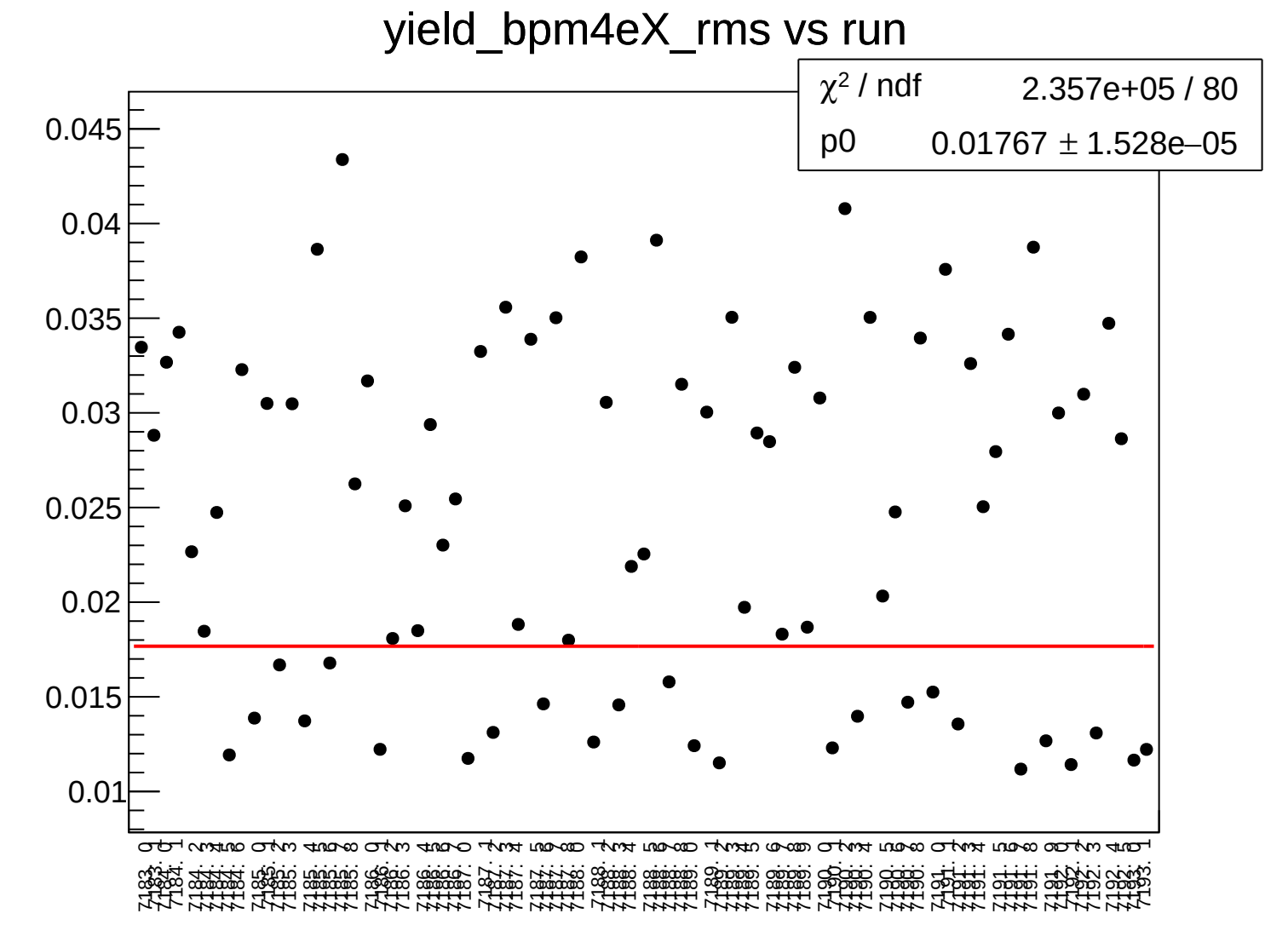

yield_bpm4aX_rms vs run
χ² / ndf 2.591e+05 / 80
p0 0.01858 ± 1.621e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

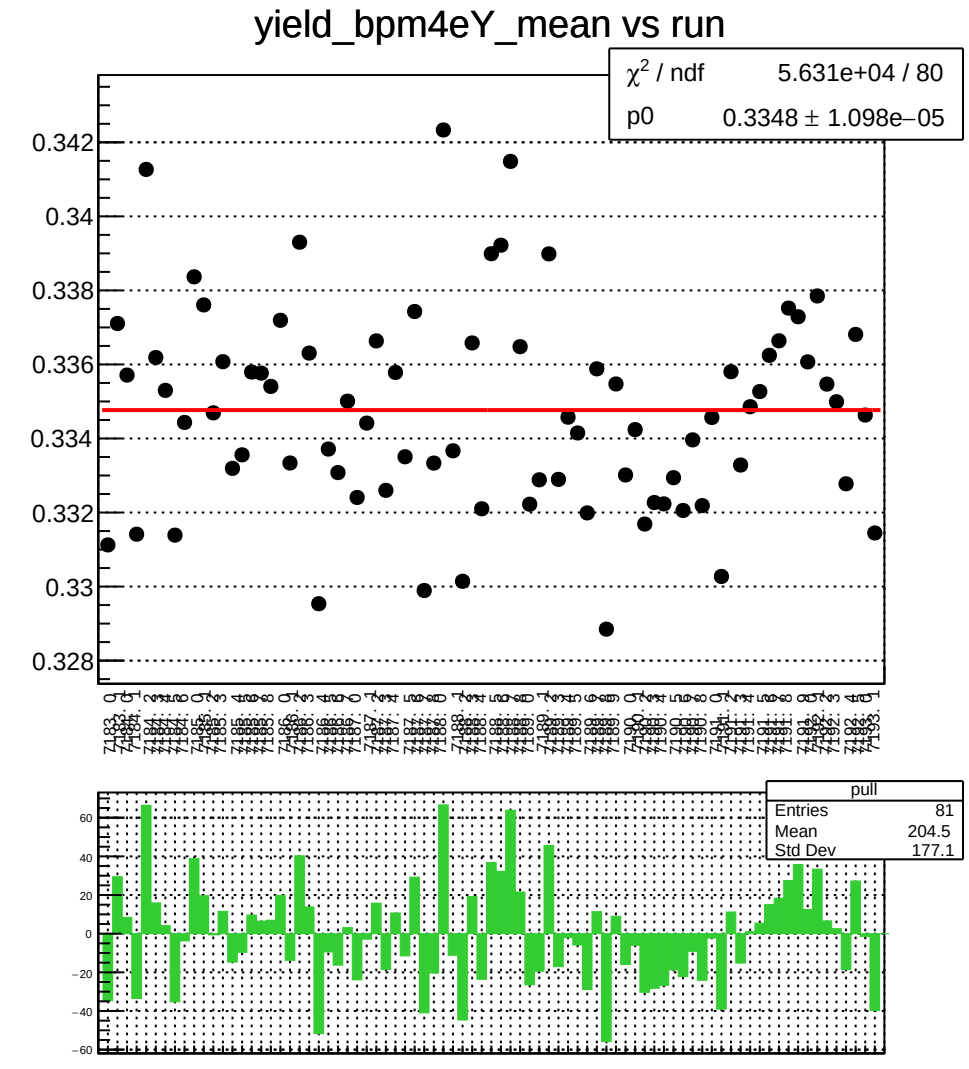

yield_bpm4aY_mean vs run
χ² / ndf 7.362e+04 / 80
p0 0.6251 ± 1.272e−05
0.635
0.63
0.625
0.62
0.615
pull
Entries 81
Mean −243.4
Std Dev 260.4
100
80
60
40
20
0
−20
−40
−60
pull1D
Entries 81
Mean −0.07568
Std Dev 3.989
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

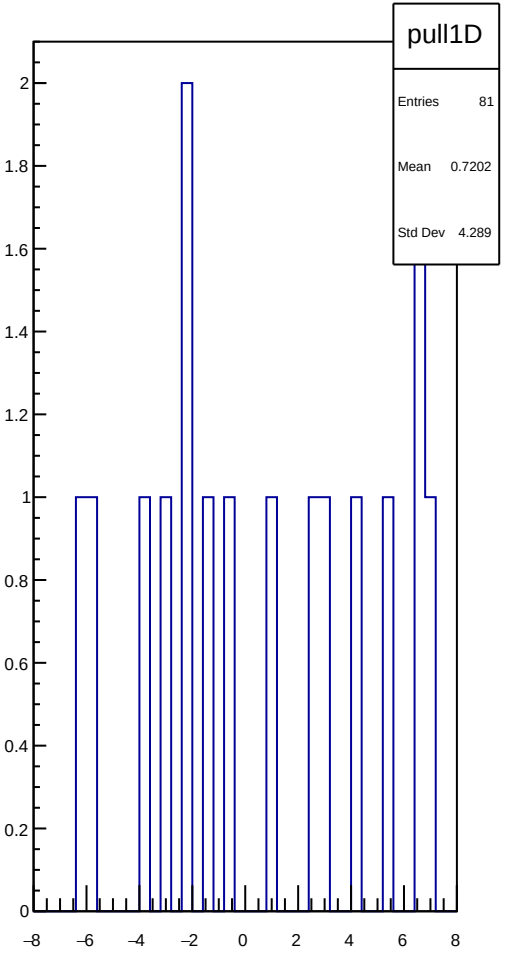

yield_bpm4aY_rms vs run
χ² / ndf 6311 / 80
p0 0.01126 ± 8.993e–06
0.016
0.015
0.014
0.013
0.012
0.011
0.01

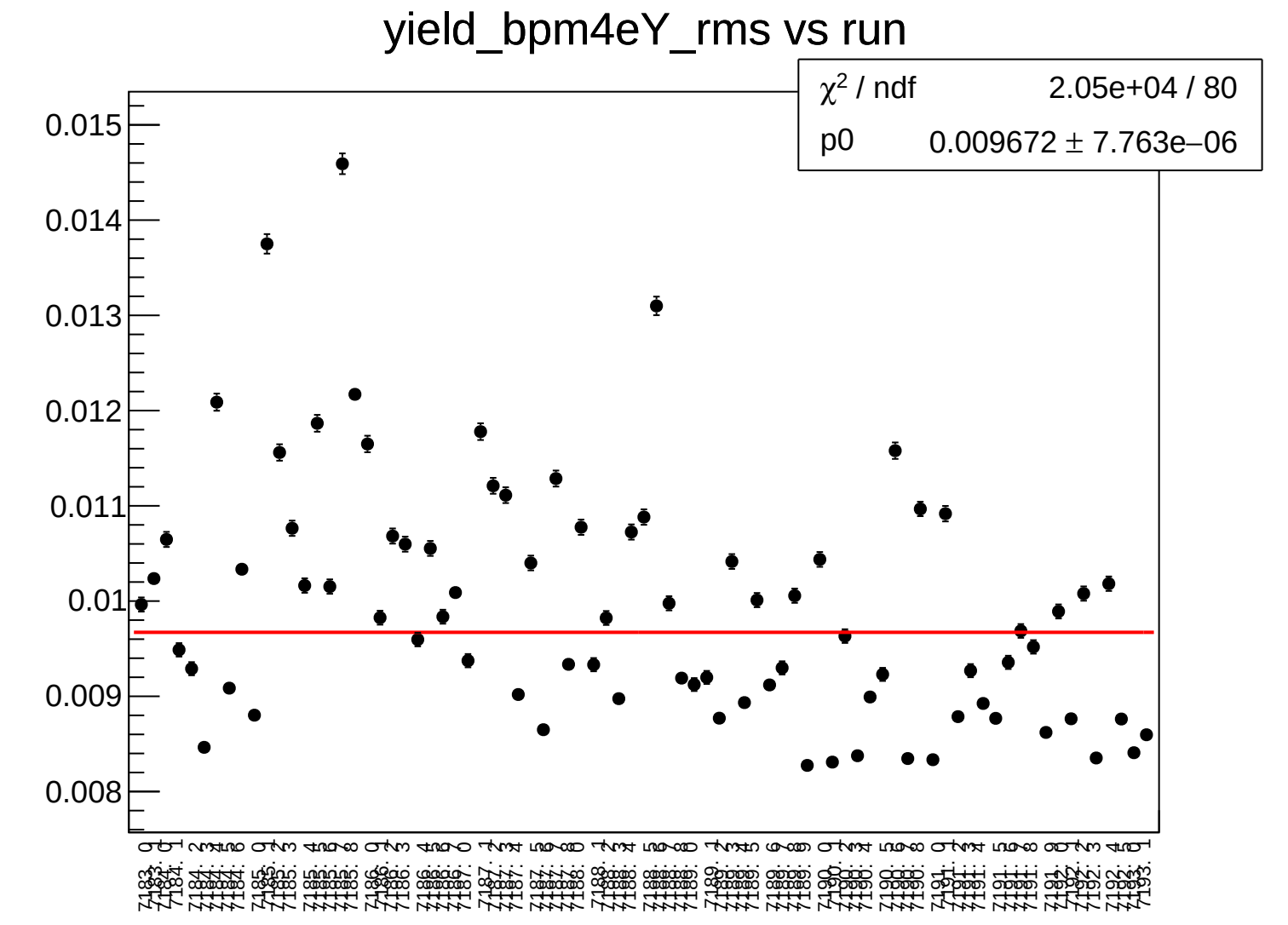

yield_bpm4eX_mean vs run
χ² / ndf 2.343e+05 / 80
p0 −0.04506 ± 2.162e−05
pull
Entries 81
Mean 49.9
Std Dev 6.42

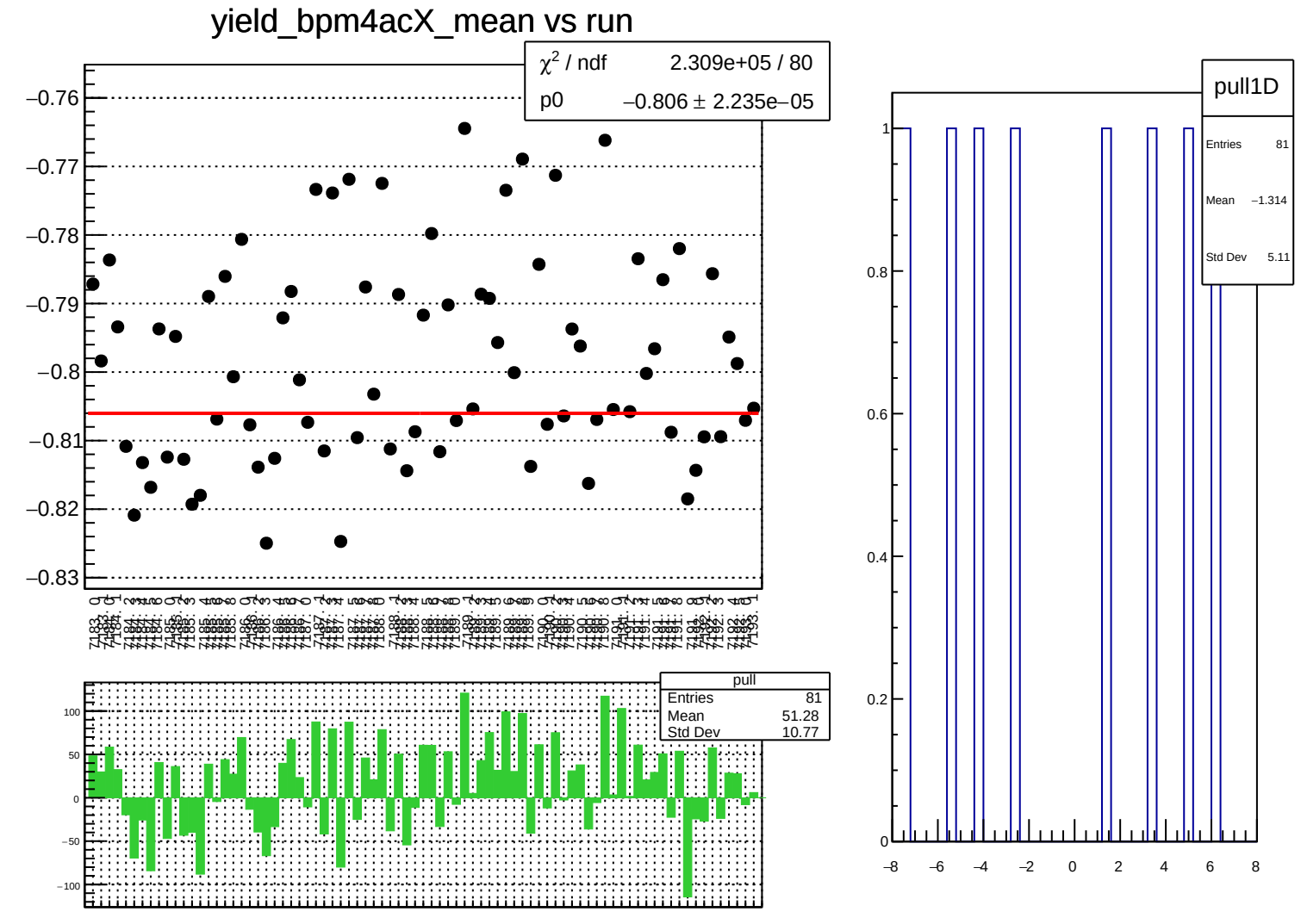

pull1D
Entries 81
Mean −0.3036
Std Dev 5.198

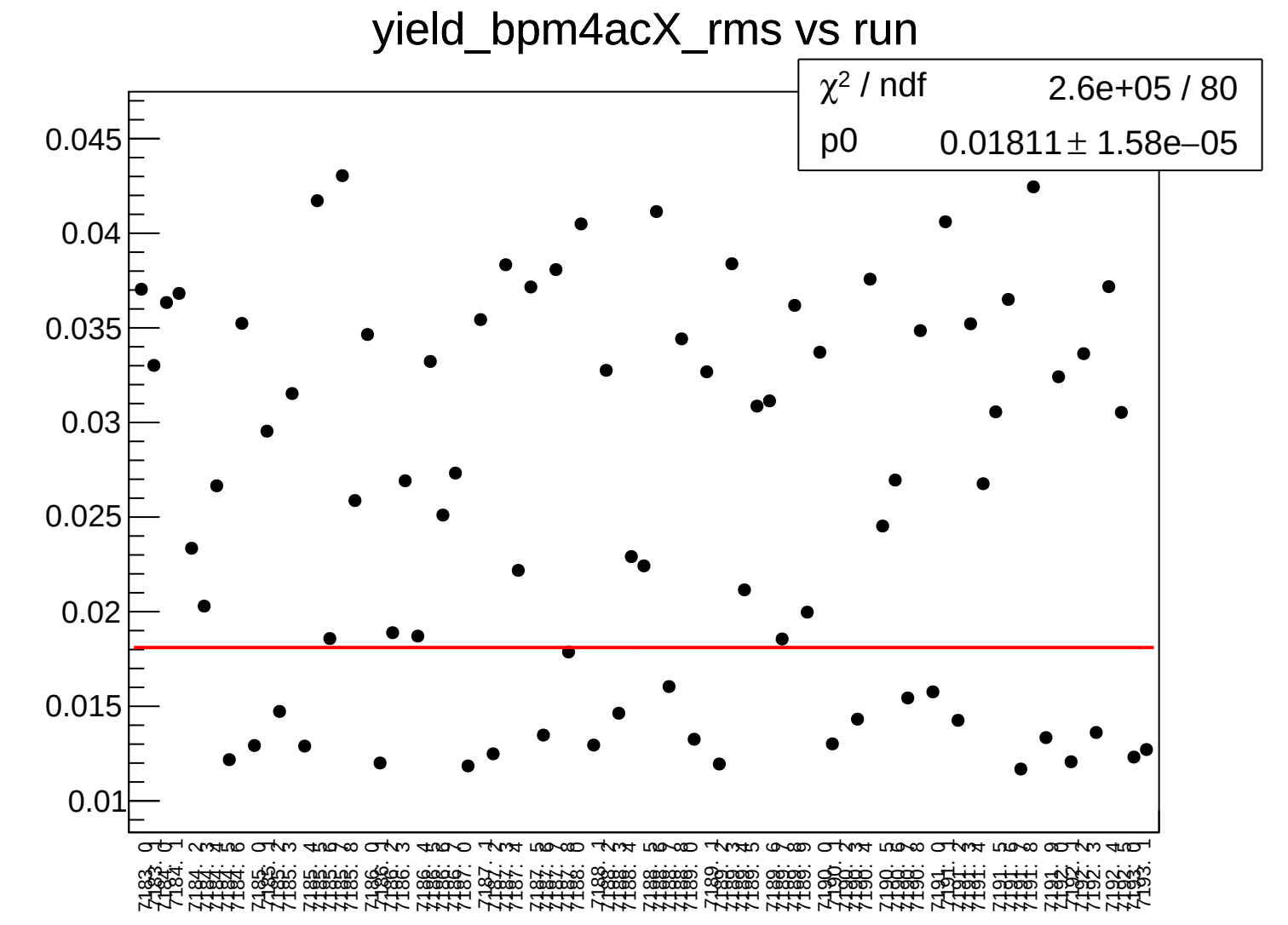

yield_bpm4eX_rms vs run
χ² / ndf 2.357e+05 / 80
p0 0.01767 ± 1.528e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

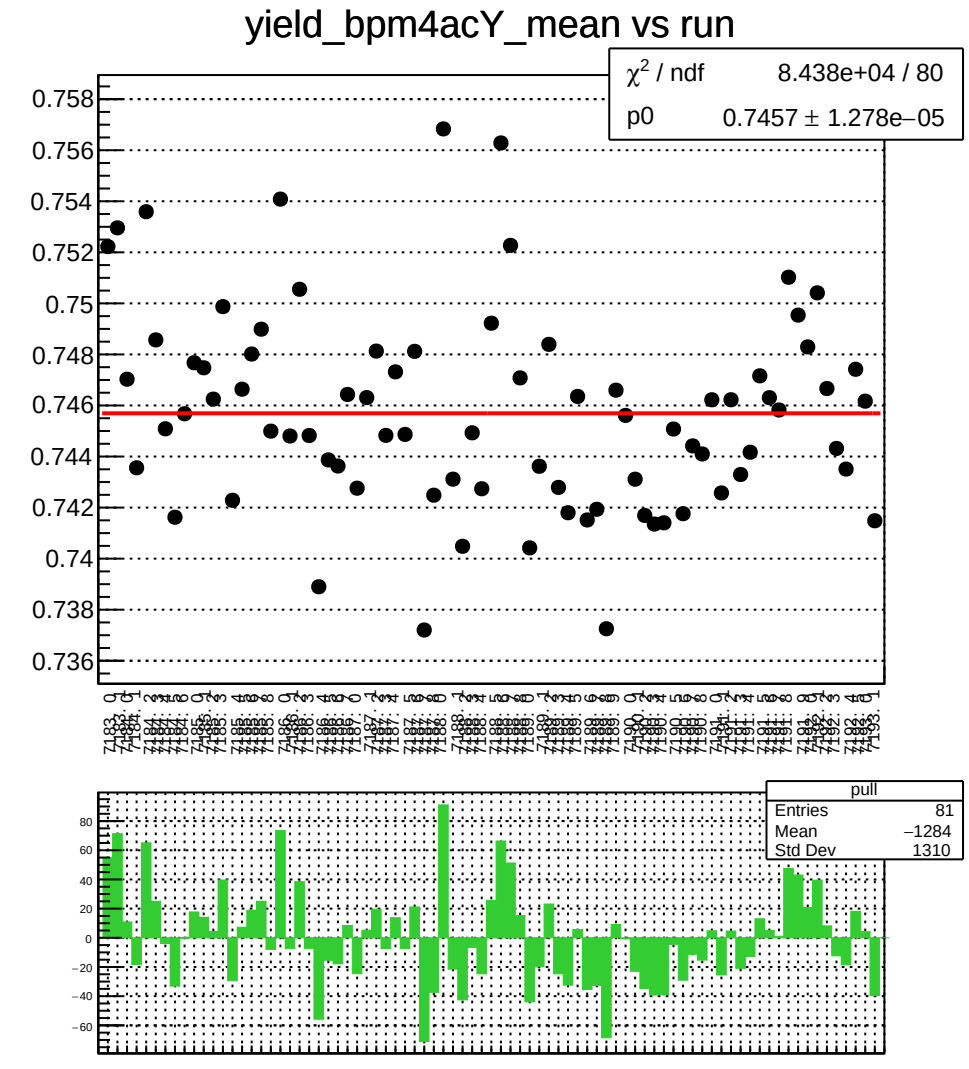

yield_bpm4eY_mean vs run
χ² / ndf 5.631e+04 / 80
p0 0.3348 ± 1.098e−05
0.342
0.34
0.338
0.336
0.334
0.332
0.33
0.328
pull
Entries 81
Mean 204.5
Std Dev 177.1
60
40
20
0
−20
−40
−60

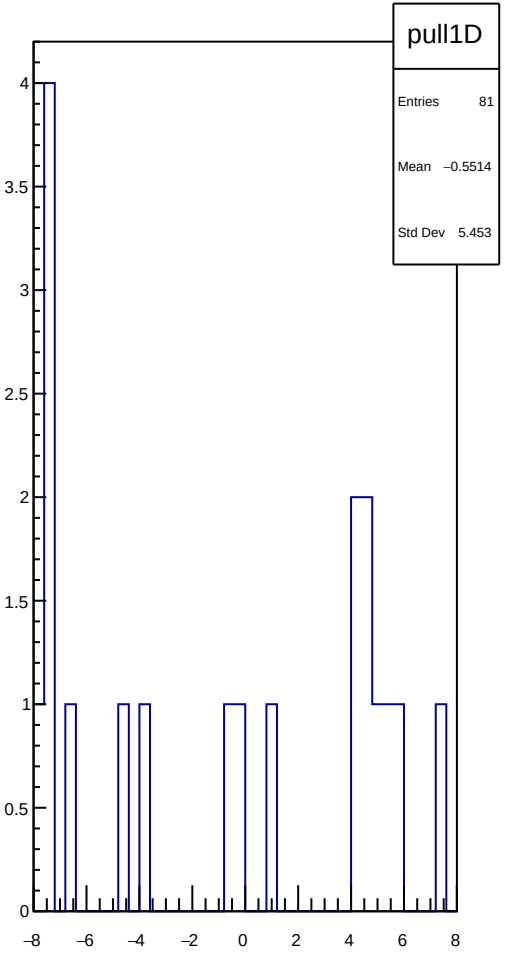

pull1D
Entries 81
Mean 0.7202
Std Dev 4.289
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

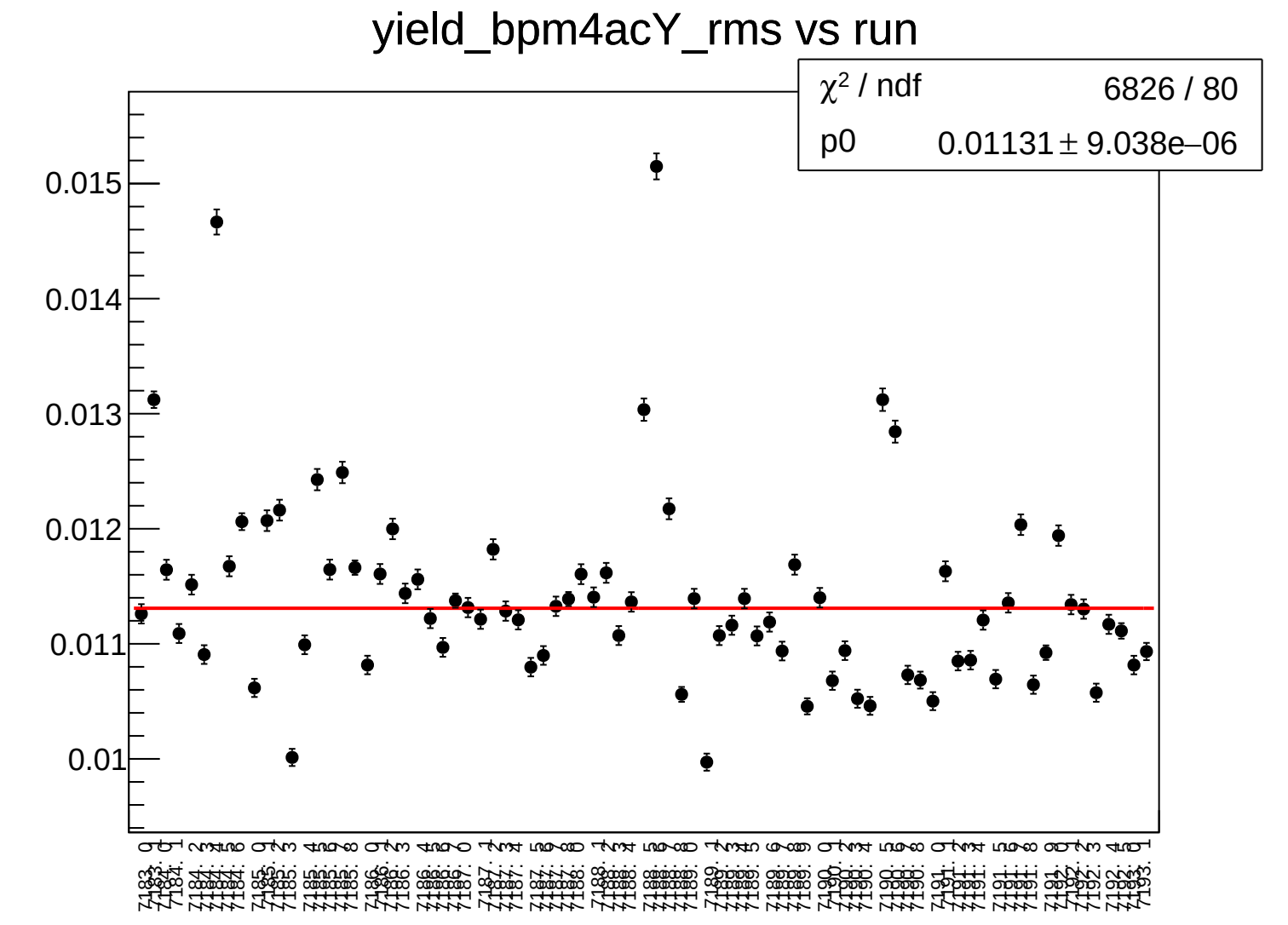

yield_bpm4eY_rms vs run
χ² / ndf 2.05e+04 / 80
p0 0.009672 ± 7.763e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

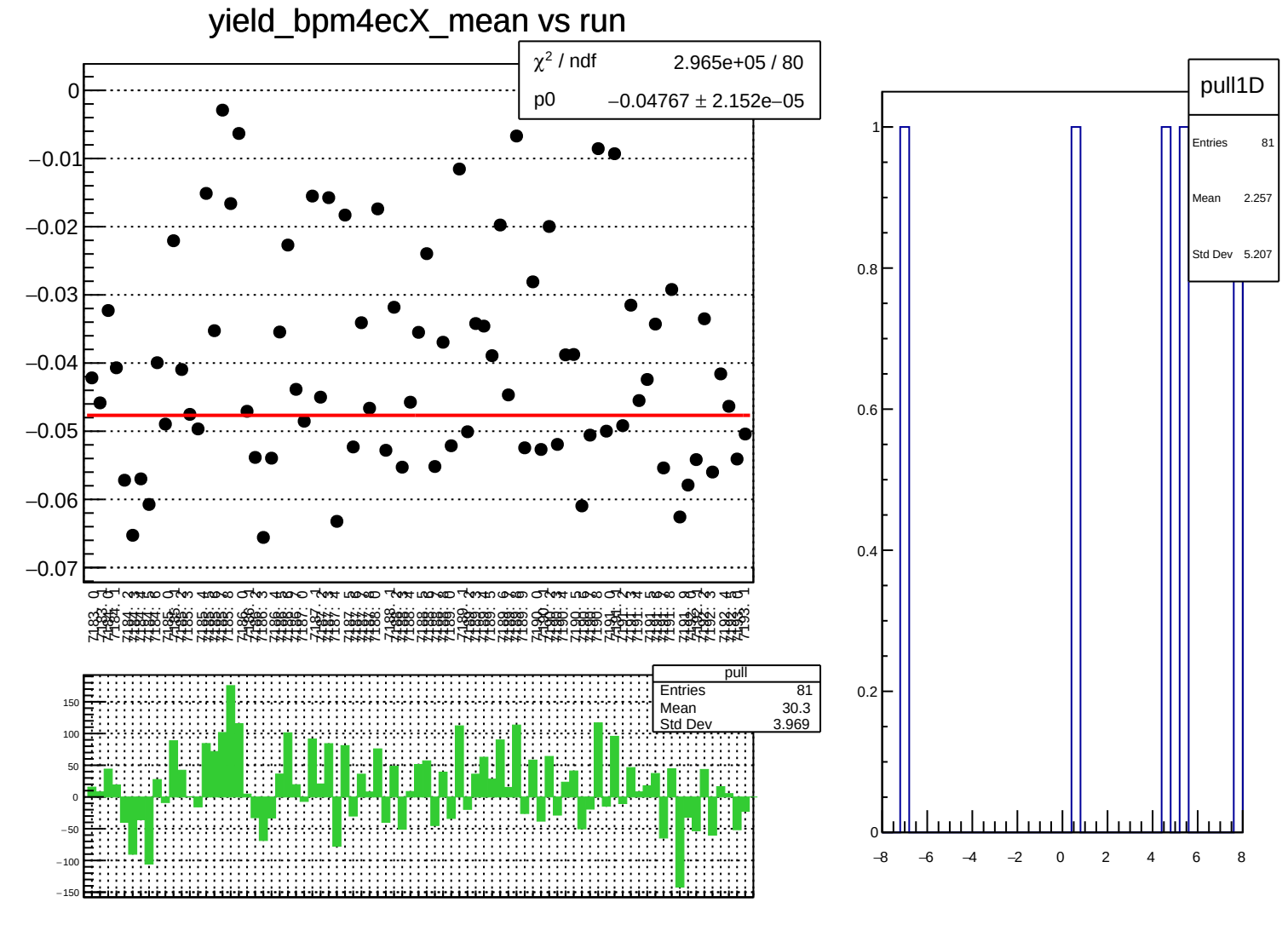

yield_bpm4acX_mean vs run
χ² / ndf 2.309e+05 / 80
p0 −0.806 ± 2.235e−05
−0.76
−0.77
−0.78
−0.79
−0.8
−0.81
−0.82
−0.83
pull
Entries 81
Mean 51.28
Std Dev 10.77
100
50
0
−50
−100
pull1D
Entries 81
Mean −1.314
Std Dev 5.11
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

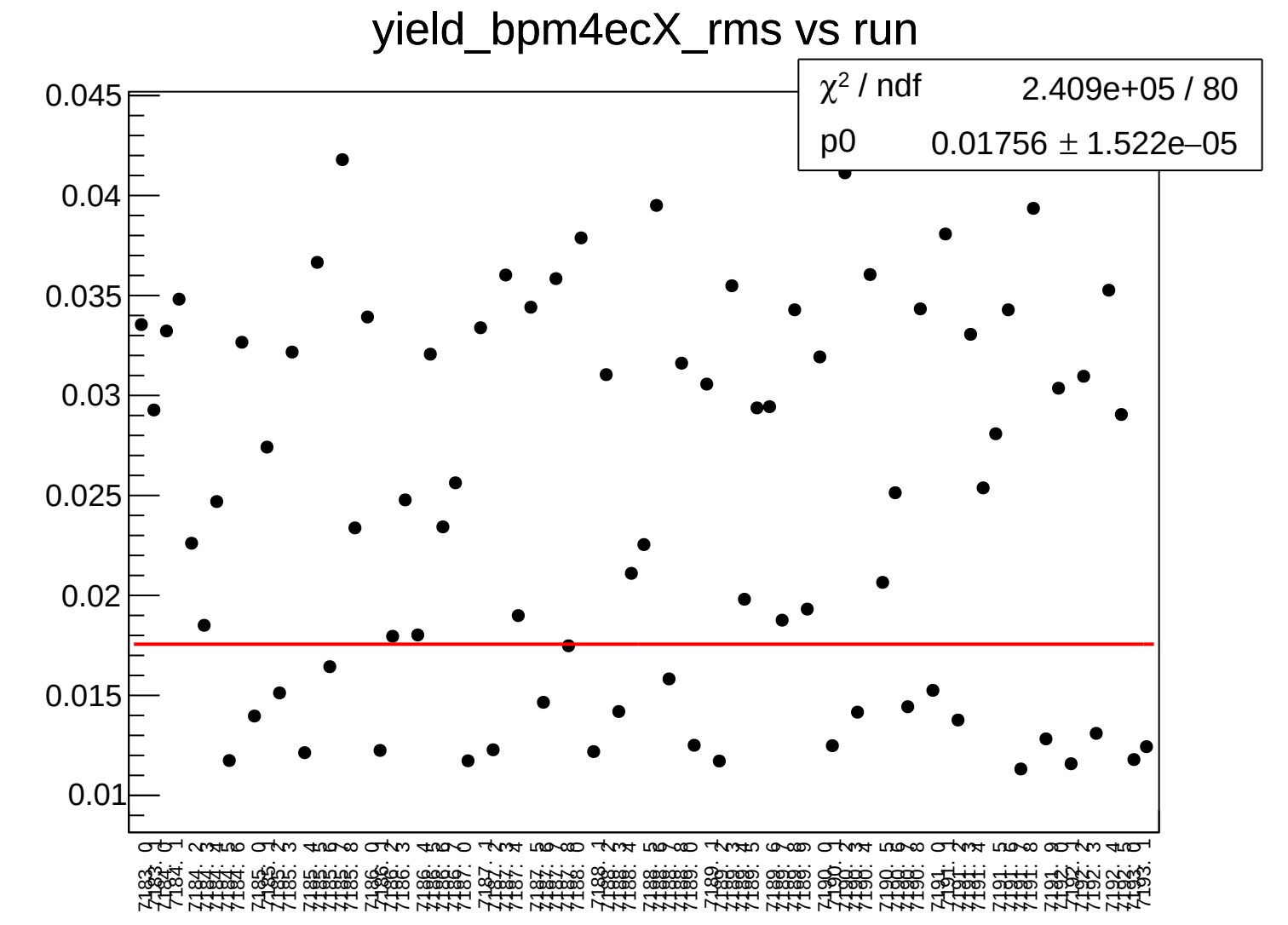

yield_bpm4acX_rms vs run
χ² / ndf 2.6e+05 / 80
p0 0.01811 ± 1.58e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

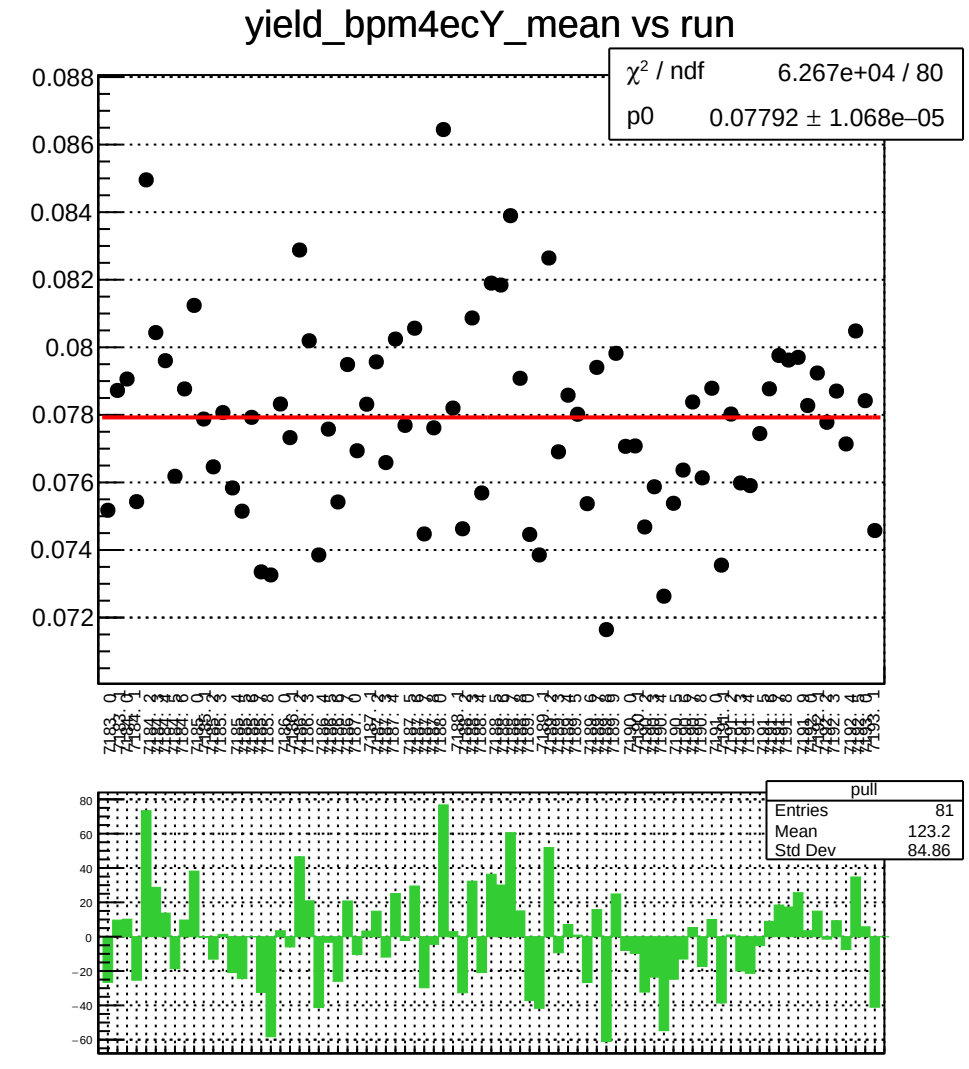

yield_bpm4acY_mean vs run
χ² / ndf 8.438e+04 / 80
p0 0.7457 ± 1.278e−05
0.758
0.756
0.754
0.752
0.75
0.748
0.746
0.744
0.742
0.74
0.738
0.736
pull
Entries 81
Mean −1284
Std Dev 1310
80
60
40
20
0
−20
−40
−60

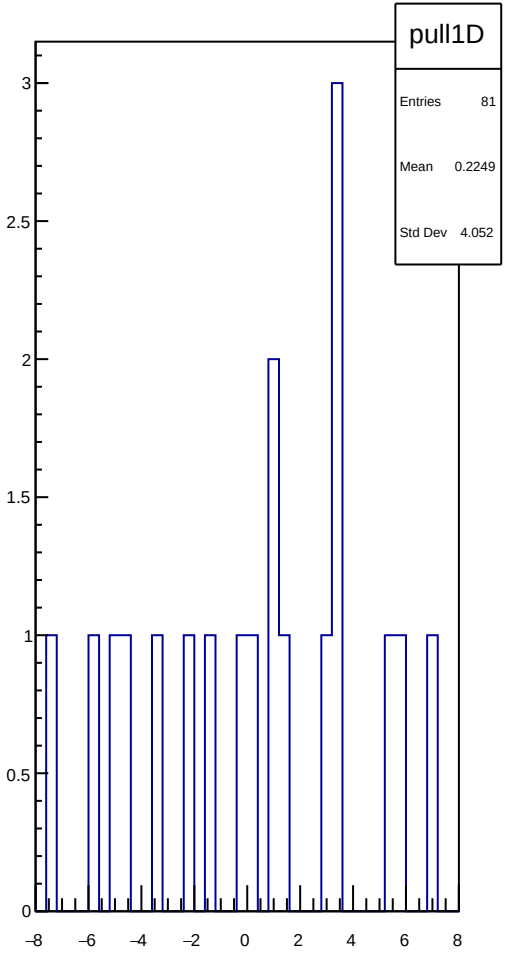

pull1D
Entries 81
Mean −0.5514
Std Dev 5.453
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

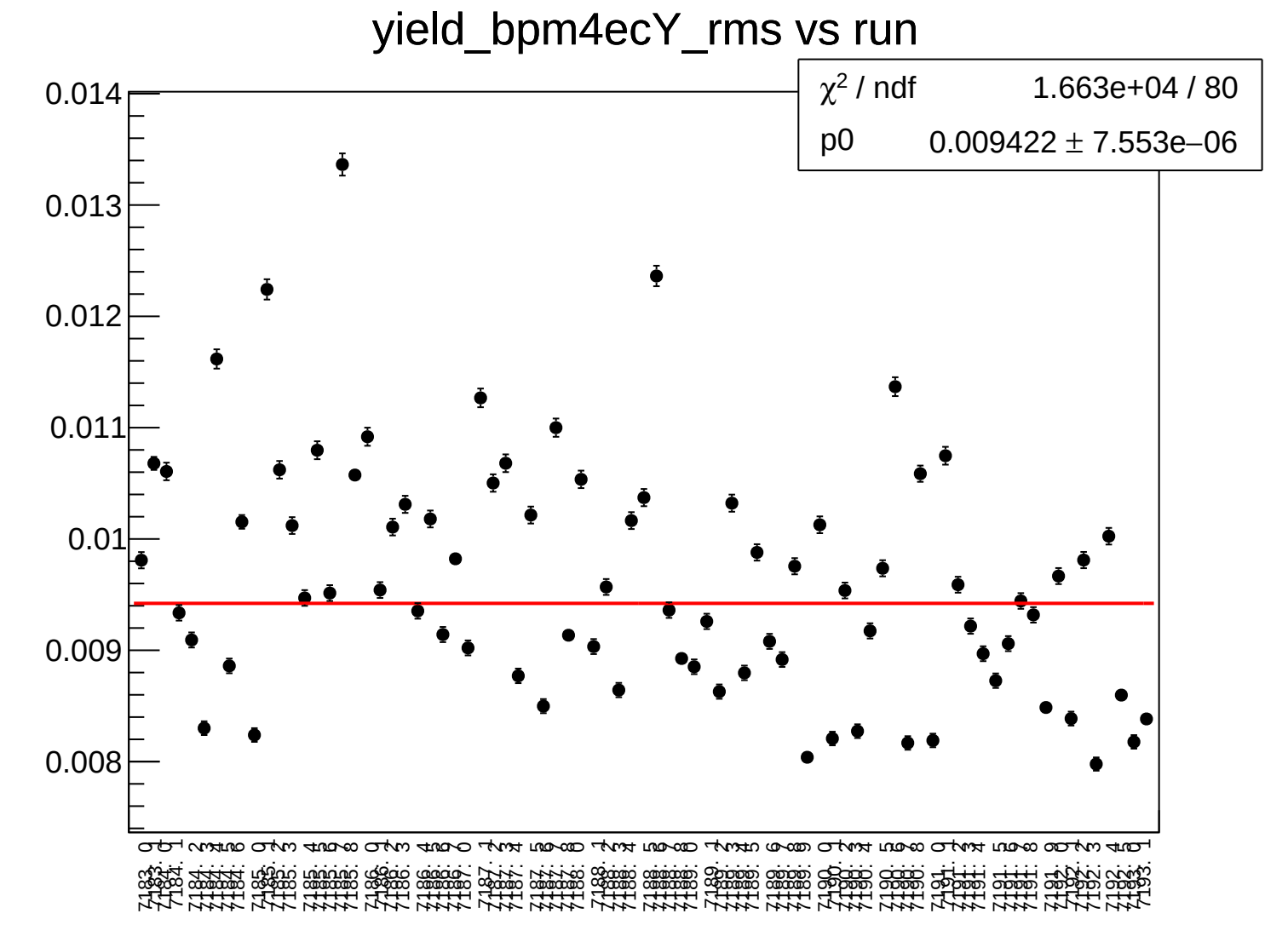

yield_bpm4acY_rms vs run
χ² / ndf 6826 / 80
p0 0.01131 ± 9.038e–06
0.015
0.014
0.013
0.012
0.011
0.01

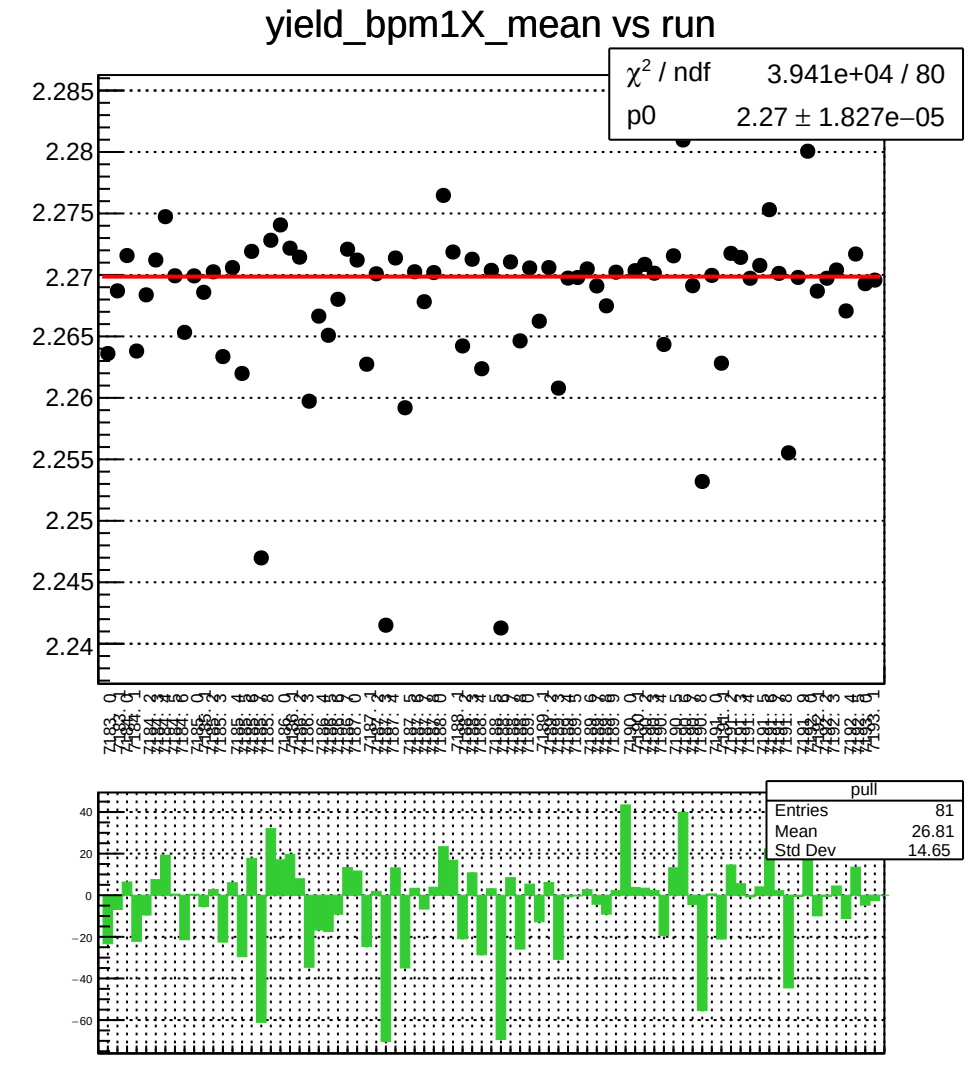

yield_bpm4ecX_mean vs run
χ² / ndf 2.965e+05 / 80
p0 −0.04767 ± 2.152e−05
0
−0.01
−0.02
−0.03
−0.04
−0.05
−0.06
−0.07
pull
Entries 81
Mean 30.3
Std Dev 3.969
150
100
50
0
−50
−100
−150
pull1D
Entries 81
Mean 2.257
Std Dev 5.207
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

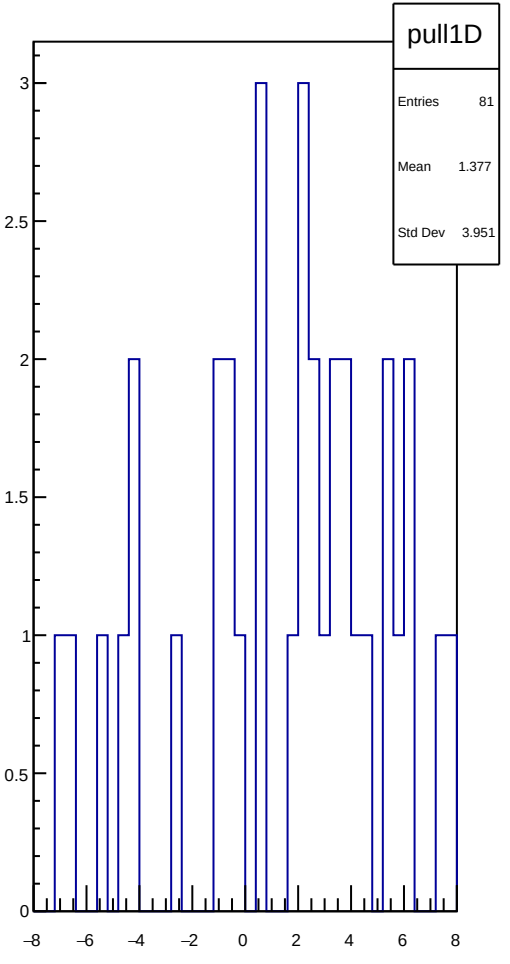

yield_bpm4ecX_rms vs run
χ² / ndf 2.409e+05 / 80
p0 0.01756 ± 1.522e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

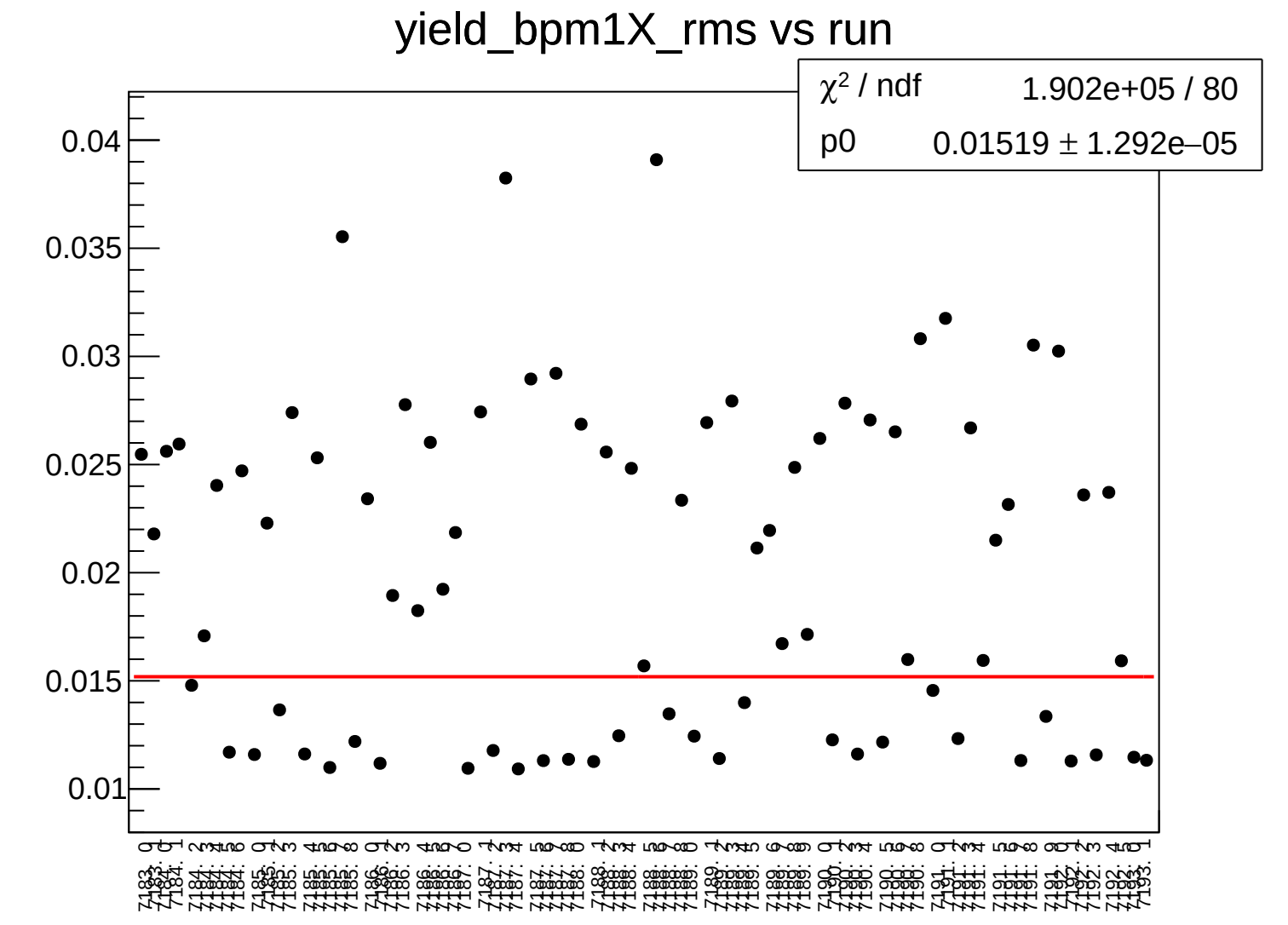

yield_bpm4ecY_mean vs run
χ² / ndf 6.267e+04 / 80
p0 0.07792 ± 1.068e−05
0.088
0.086
0.084
0.082
0.08
0.078
0.076
0.074
0.072
pull
Entries 81
Mean 123.2
Std Dev 84.86
80
60
40
20
0
−20
−40
−60

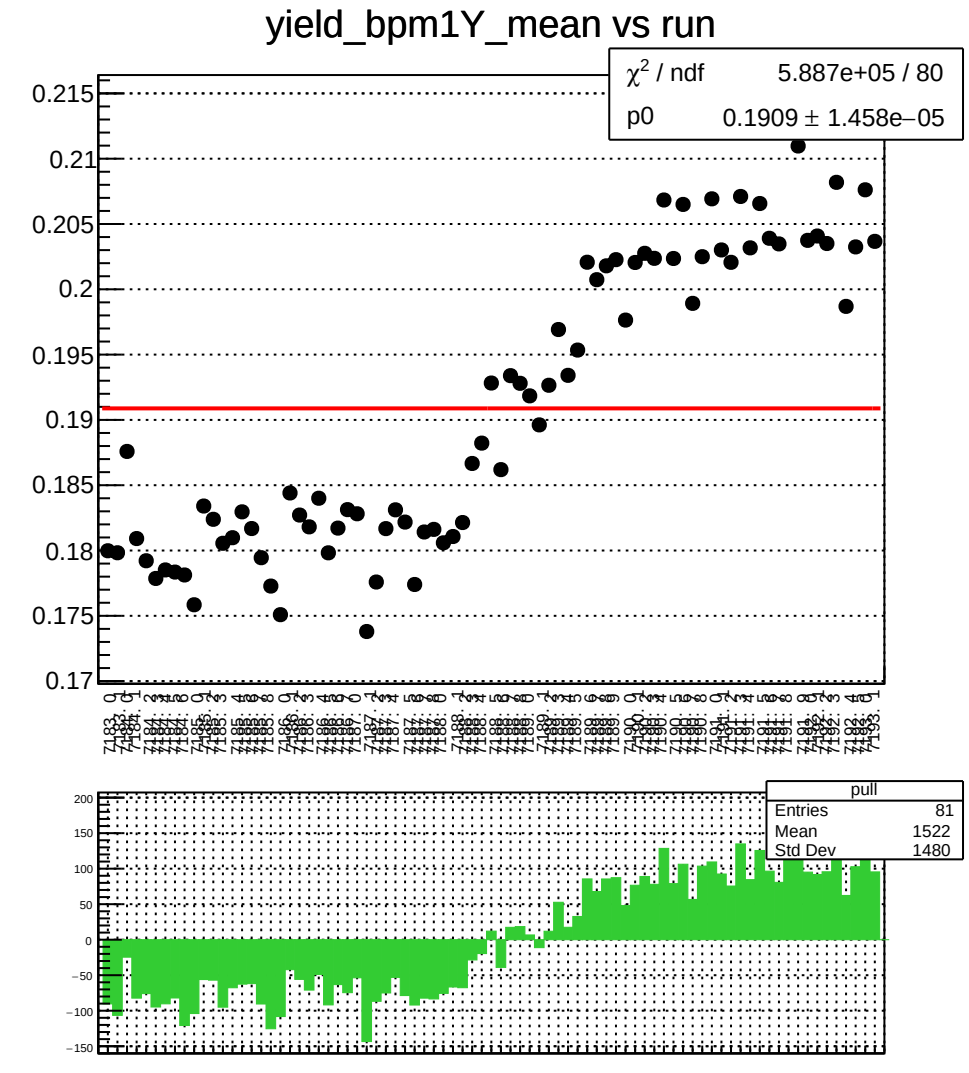

pull1D
Entries 81
Mean 0.2249
Std Dev 4.052
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

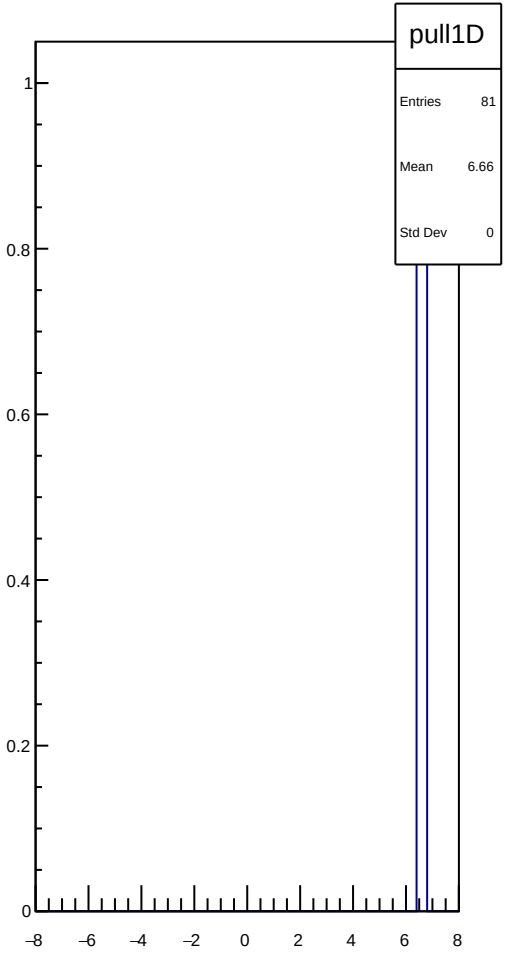

yield_bpm4ecY_rms vs run
χ² / ndf 1.663e+04 / 80
p0 0.009422 ± 7.553e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008

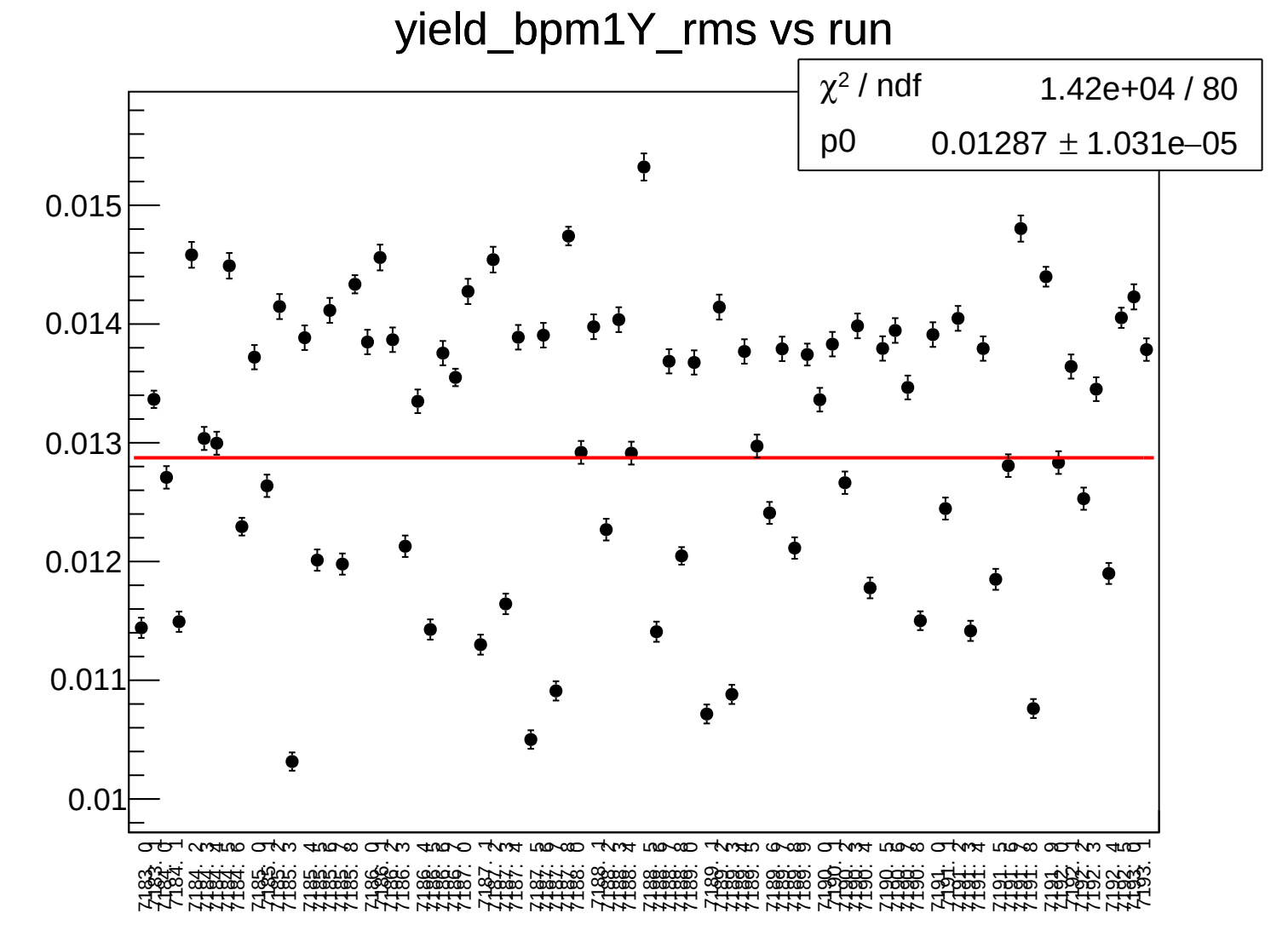

yield_bpm1X_mean vs run
χ² / ndf 3.941e+04 / 80
p0 2.27 ± 1.827e−05
2.285
2.28
2.275
2.27
2.265
2.26
2.255
2.25
2.245
2.24
pull
Entries 81
Mean 26.81
Std Dev 14.65
40
20
0
−20
−40
−60

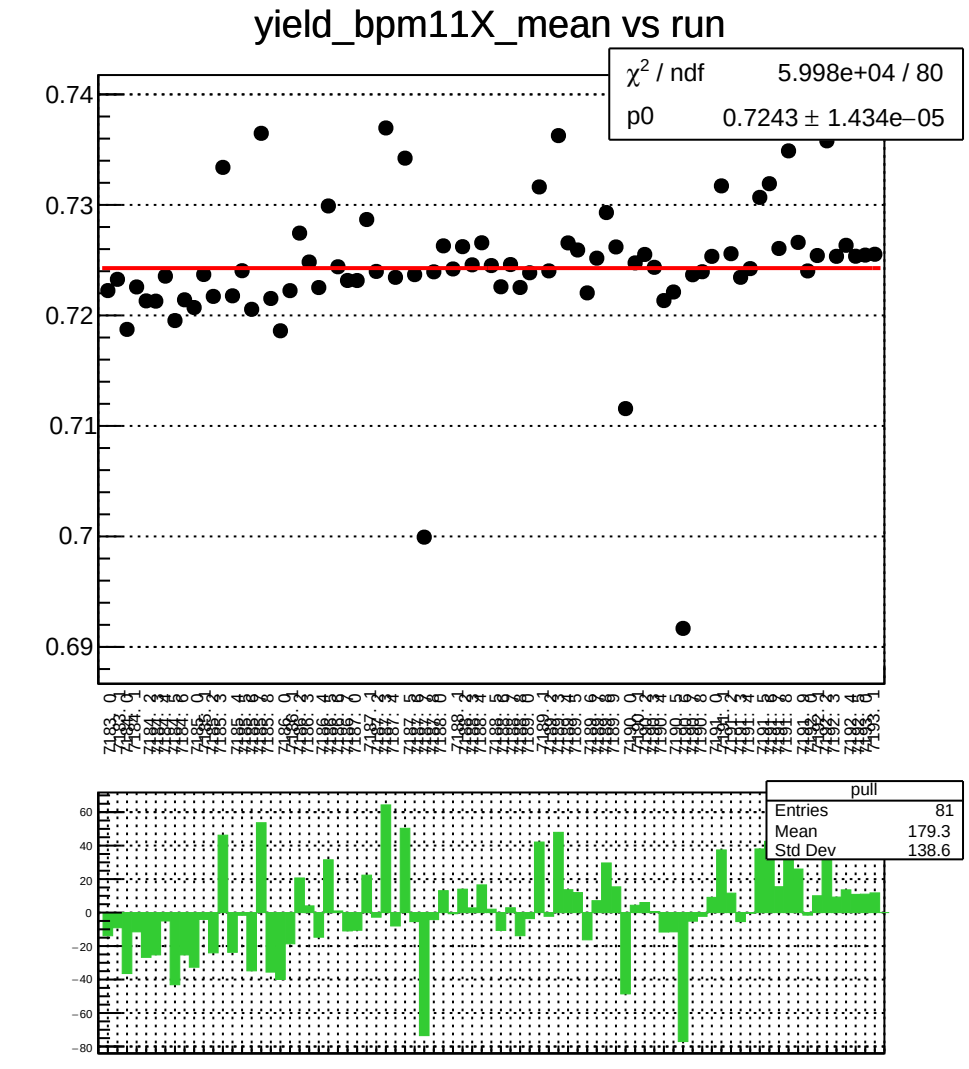

pull1D
Entries 81
Mean 1.377
Std Dev 3.951
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

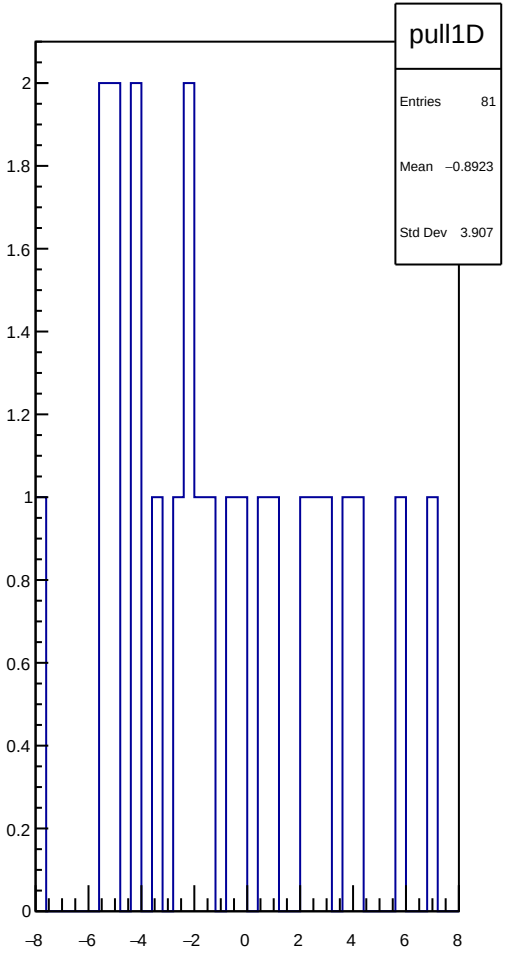

yield_bpm1X_rms vs run
χ² / ndf 1.902e+05 / 80
p0 0.01519 ± 1.292e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

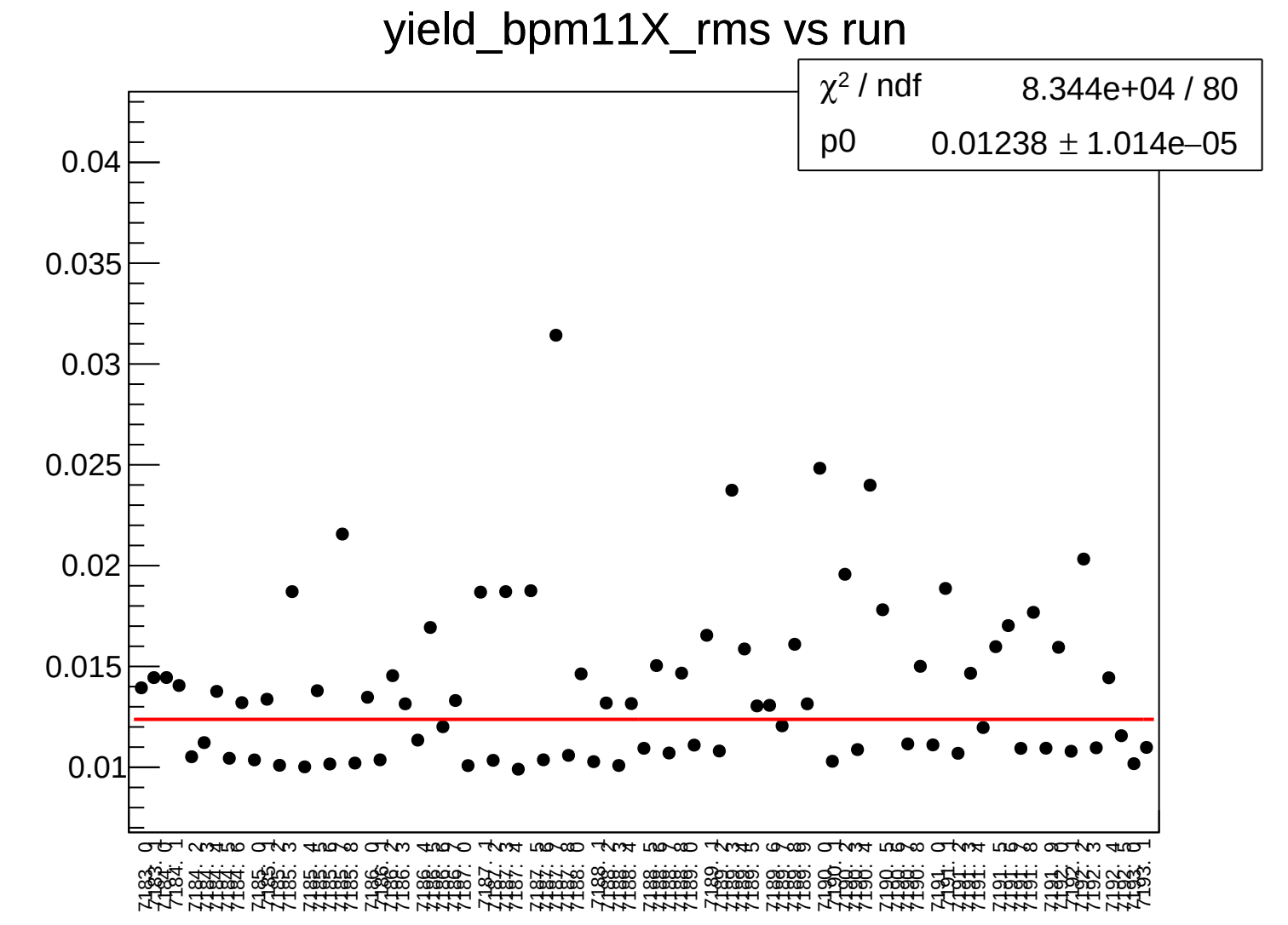

yield_bpm1Y_mean vs run
χ² / ndf 5.887e+05 / 80
p0 0.1909 ± 1.458e−05
0.215
0.21
0.205
0.2
0.195
0.19
0.185
0.18
0.175
0.17
pull
Entries 81
Mean 1522
Std Dev 1480
200
150
100
50
0
−50
−100
−150

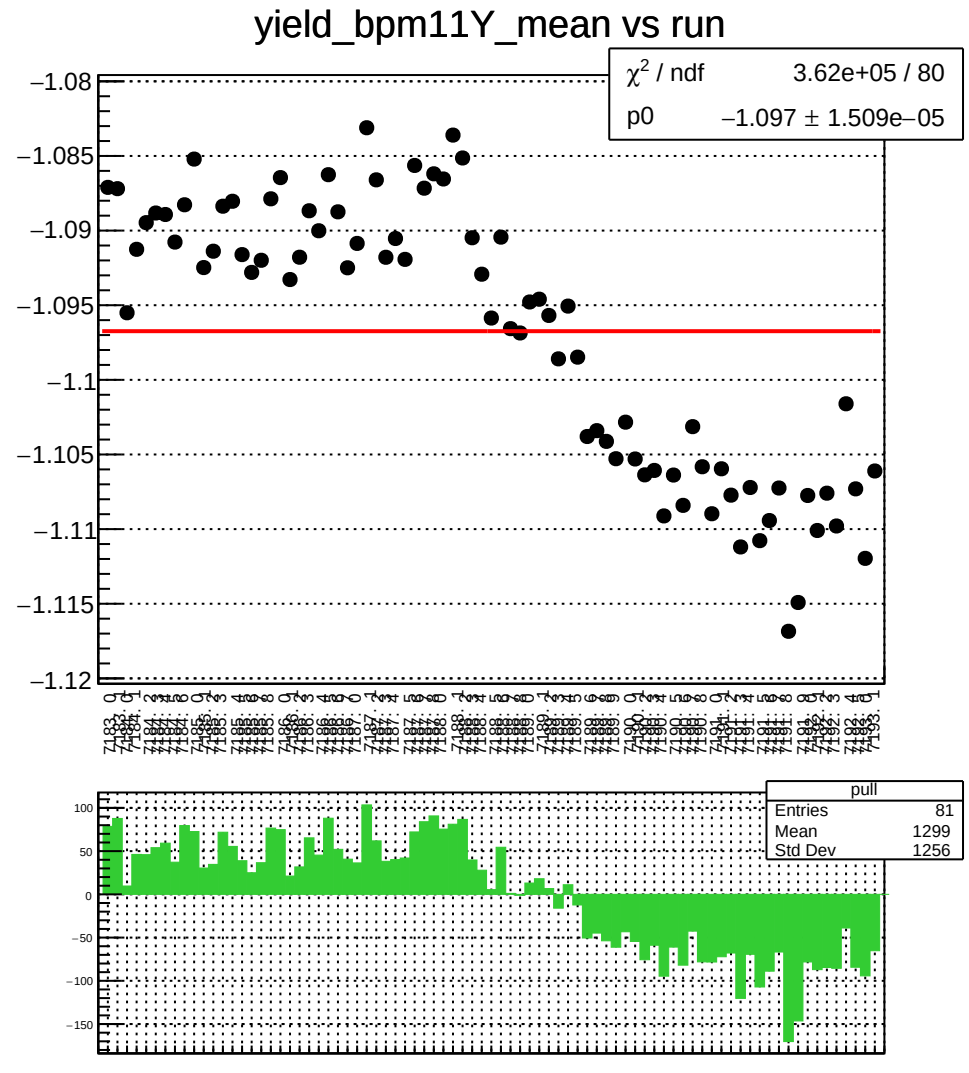

pull1D
Entries 81
Mean 6.66
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

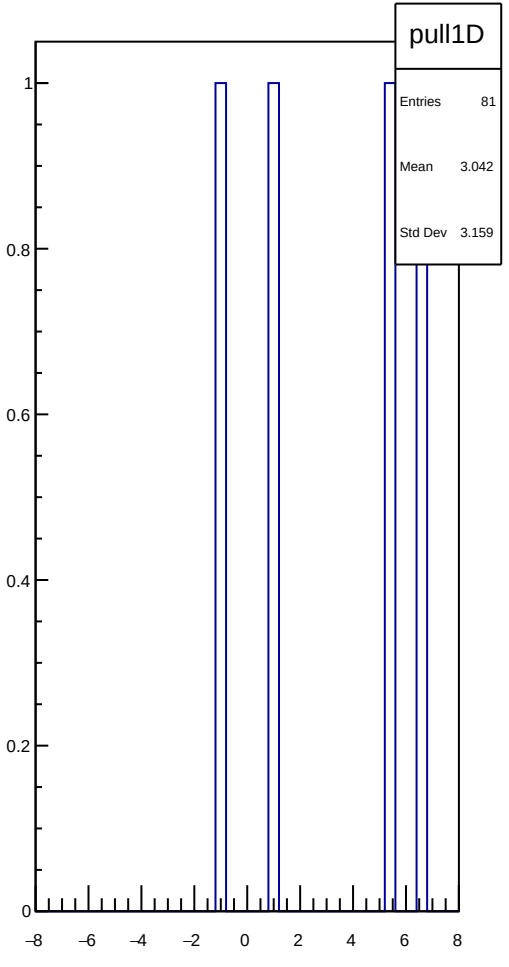

yield_bpm1Y_rms vs run
χ² / ndf 1.42e+04 / 80
p0 0.01287 ± 1.031e−05
0.015
0.014
0.013
0.012
0.011
0.01

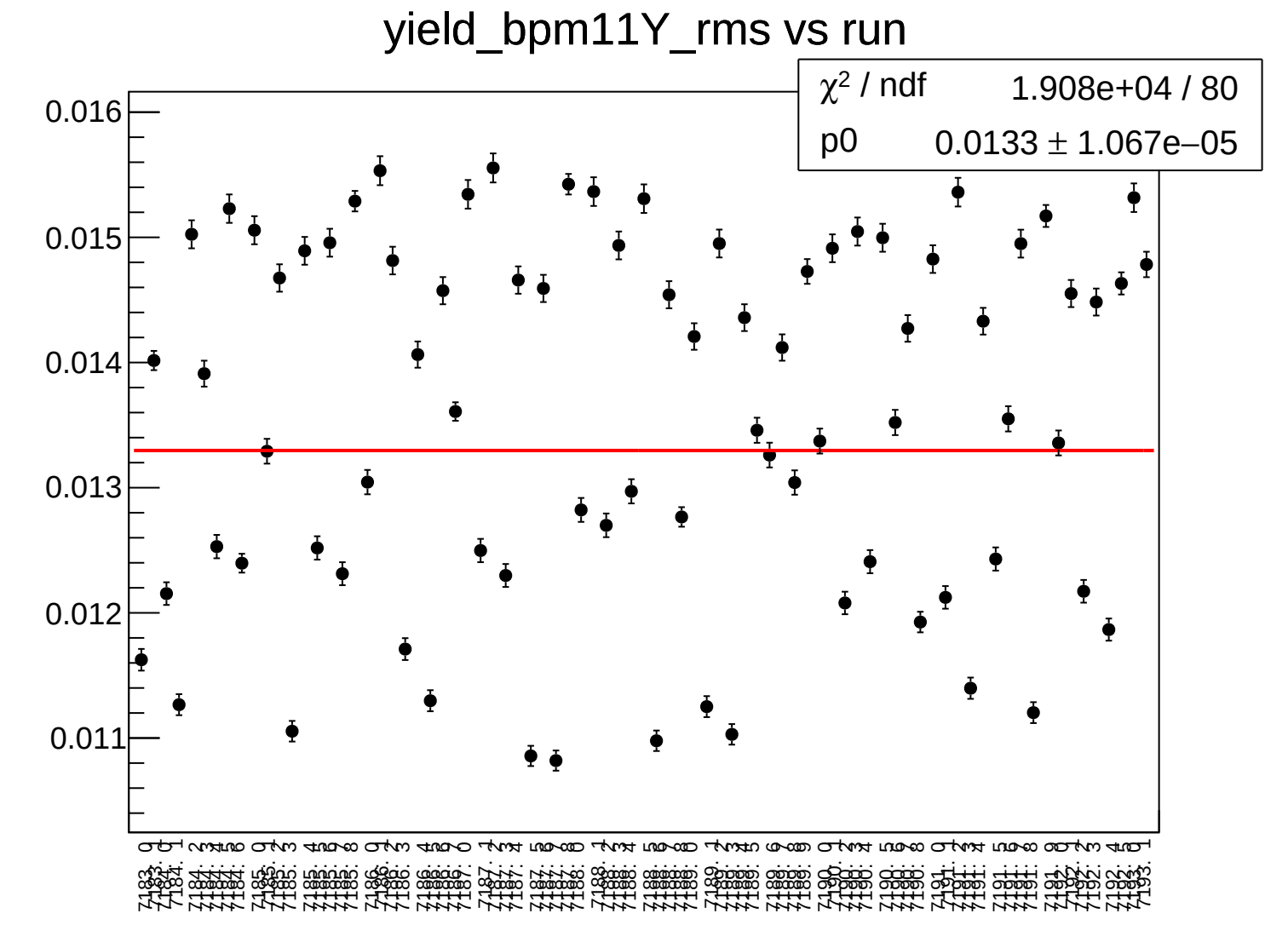

yield_bpm11X_mean vs run
χ² / ndf 5.998e+04 / 80
p0 0.7243 ± 1.434e−05
0.74
0.73
0.72
0.71
0.7
0.69
pull
Entries 81
Mean 179.3
Std Dev 138.6
60
40
20
0
−20
−40
−60
−80

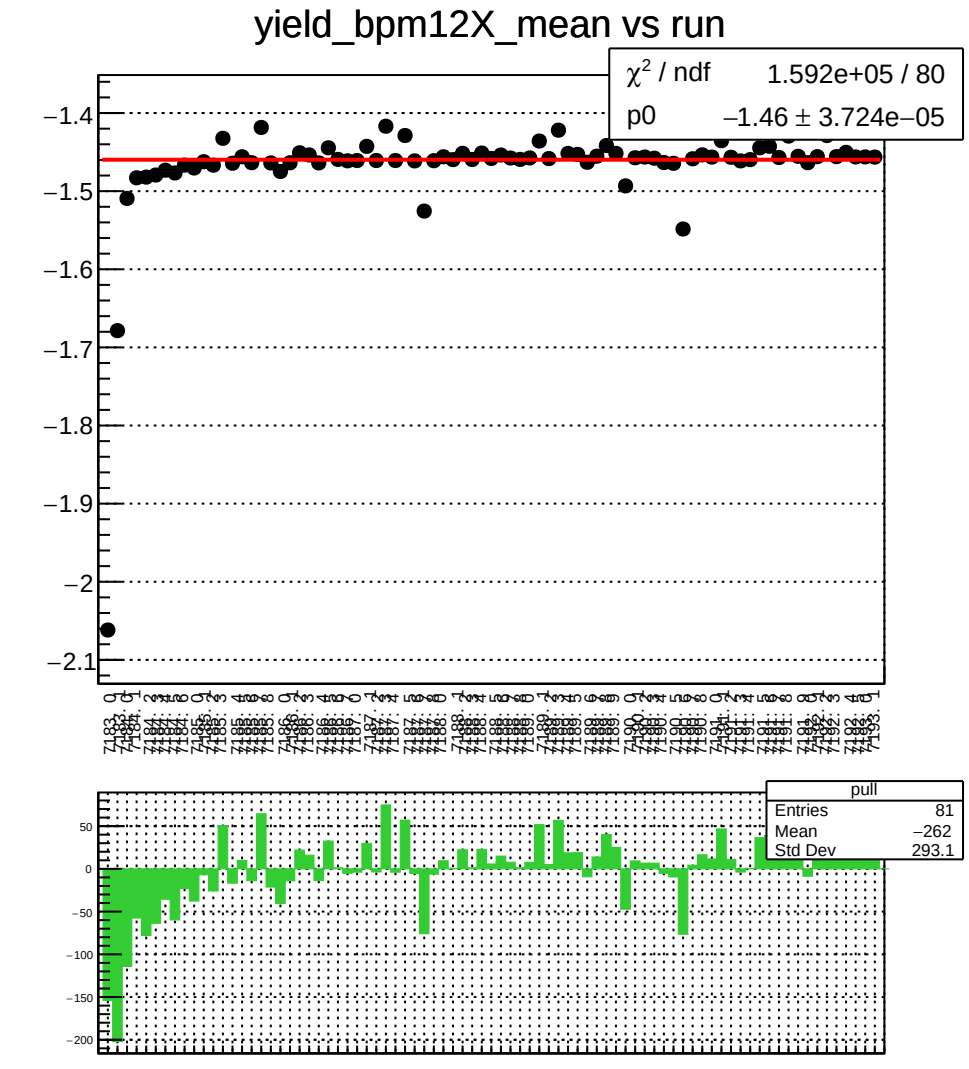

pull1D
Entries 81
Mean −0.8923
Std Dev 3.907
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

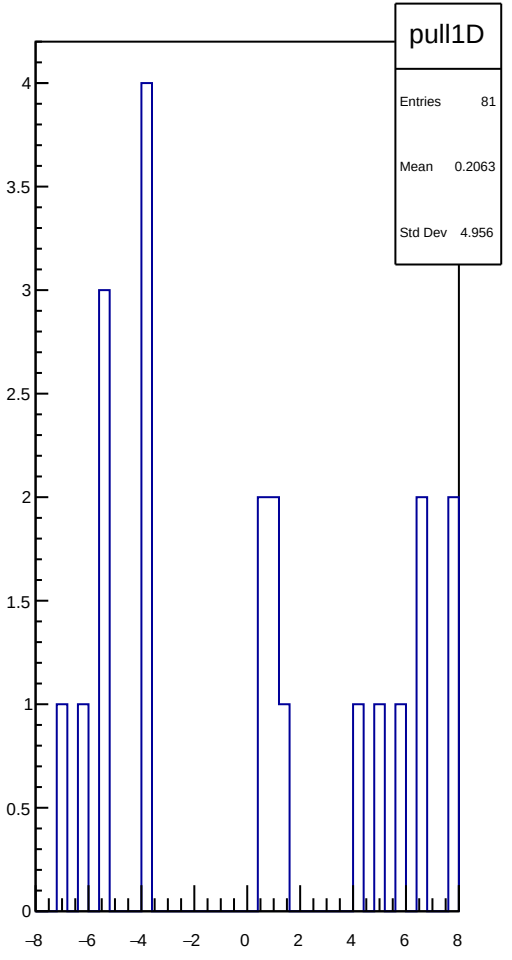

yield_bpm11X_rms vs run
χ² / ndf 8.344e+04 / 80
p0 0.01238 ± 1.014e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

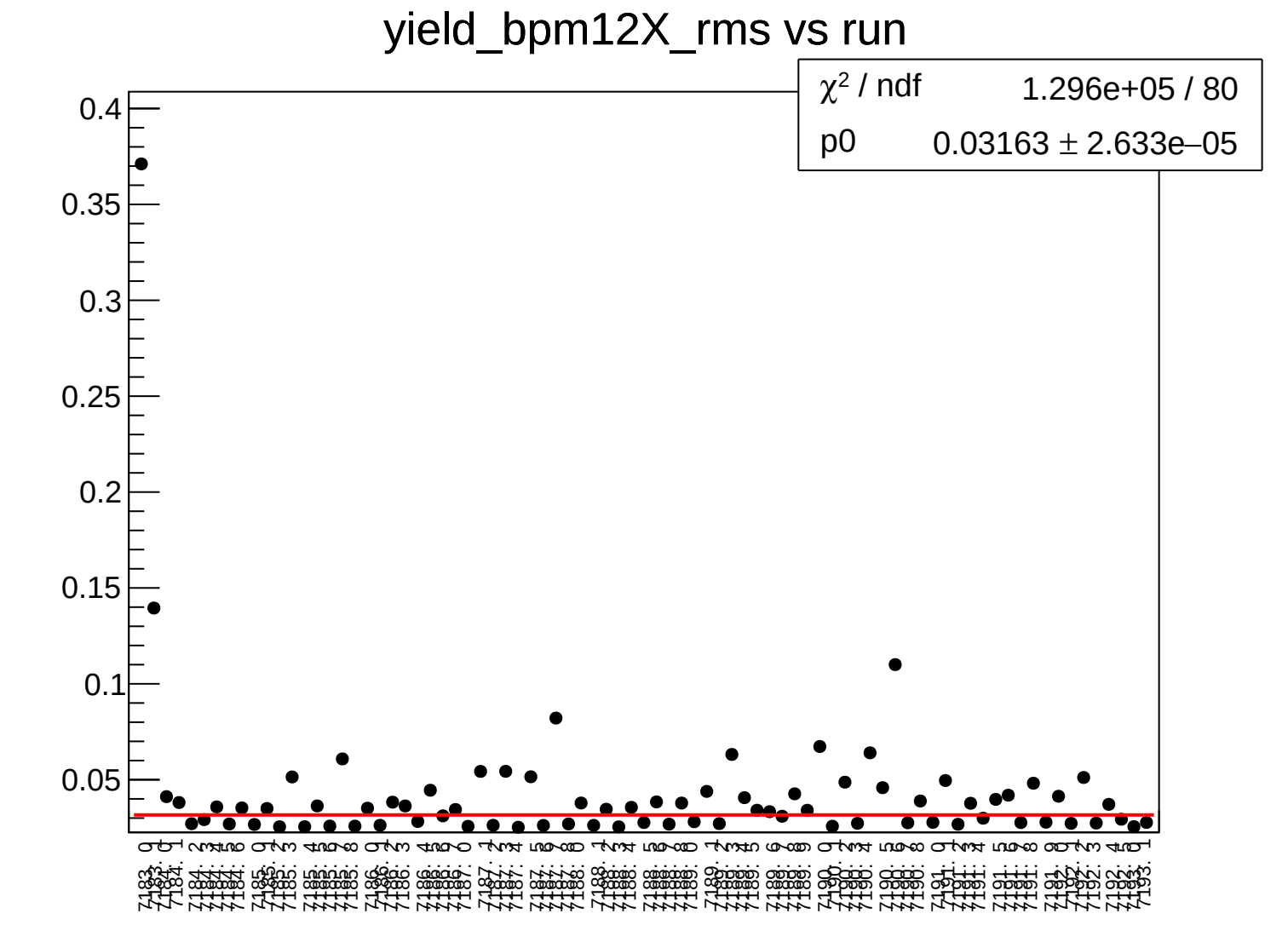

yield_bpm11Y_mean vs run
χ² / ndf 3.62e+05 / 80
p0 −1.097 ± 1.509e−05
−1.08
−1.085
−1.09
−1.095
−1.1
−1.105
−1.11
−1.115
−1.12
pull
Entries 81
Mean 1299
Std Dev 1256
100
50
0
−50
−100
−150

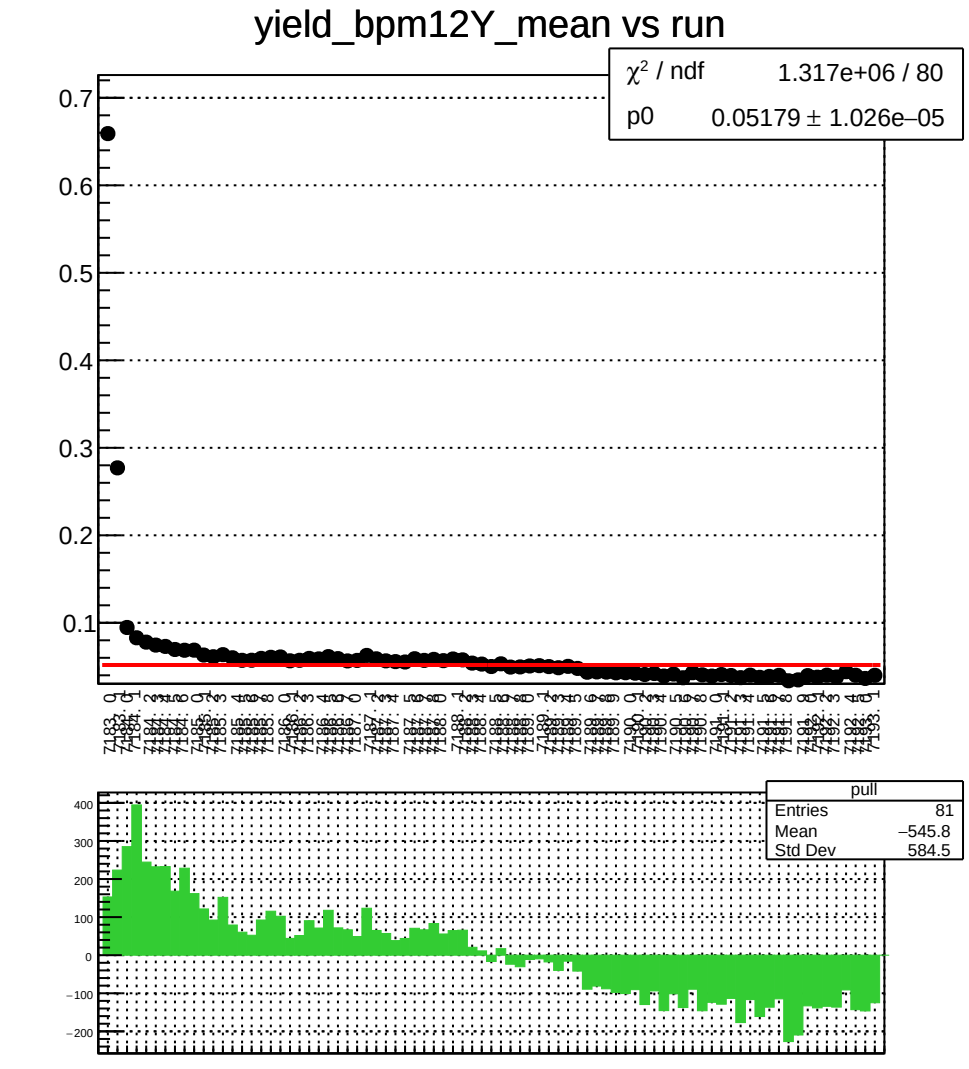

pull1D
Entries 81
Mean 3.042
Std Dev 3.159
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

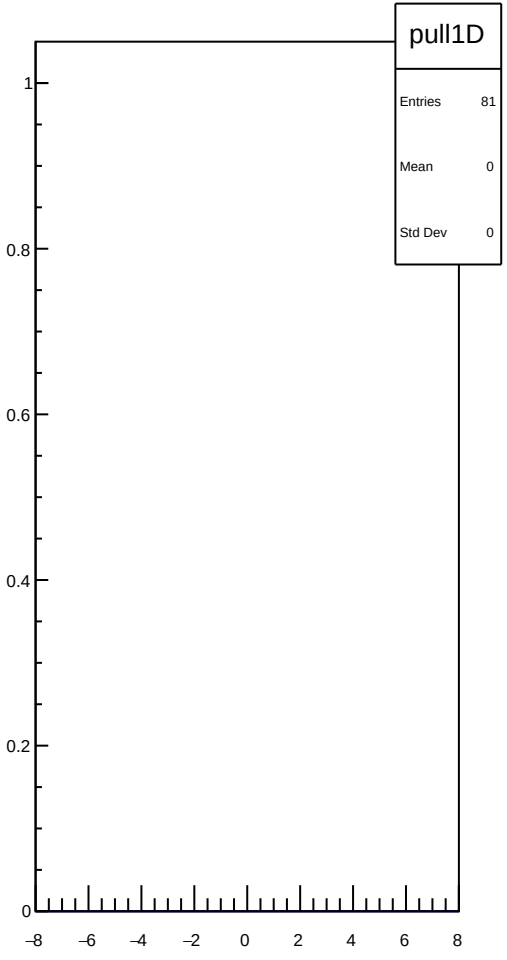

yield_bpm11Y_rms vs run
χ² / ndf 1.908e+04 / 80
p0 0.0133 ± 1.067e−05
0.016
0.015
0.014
0.013
0.012
0.011

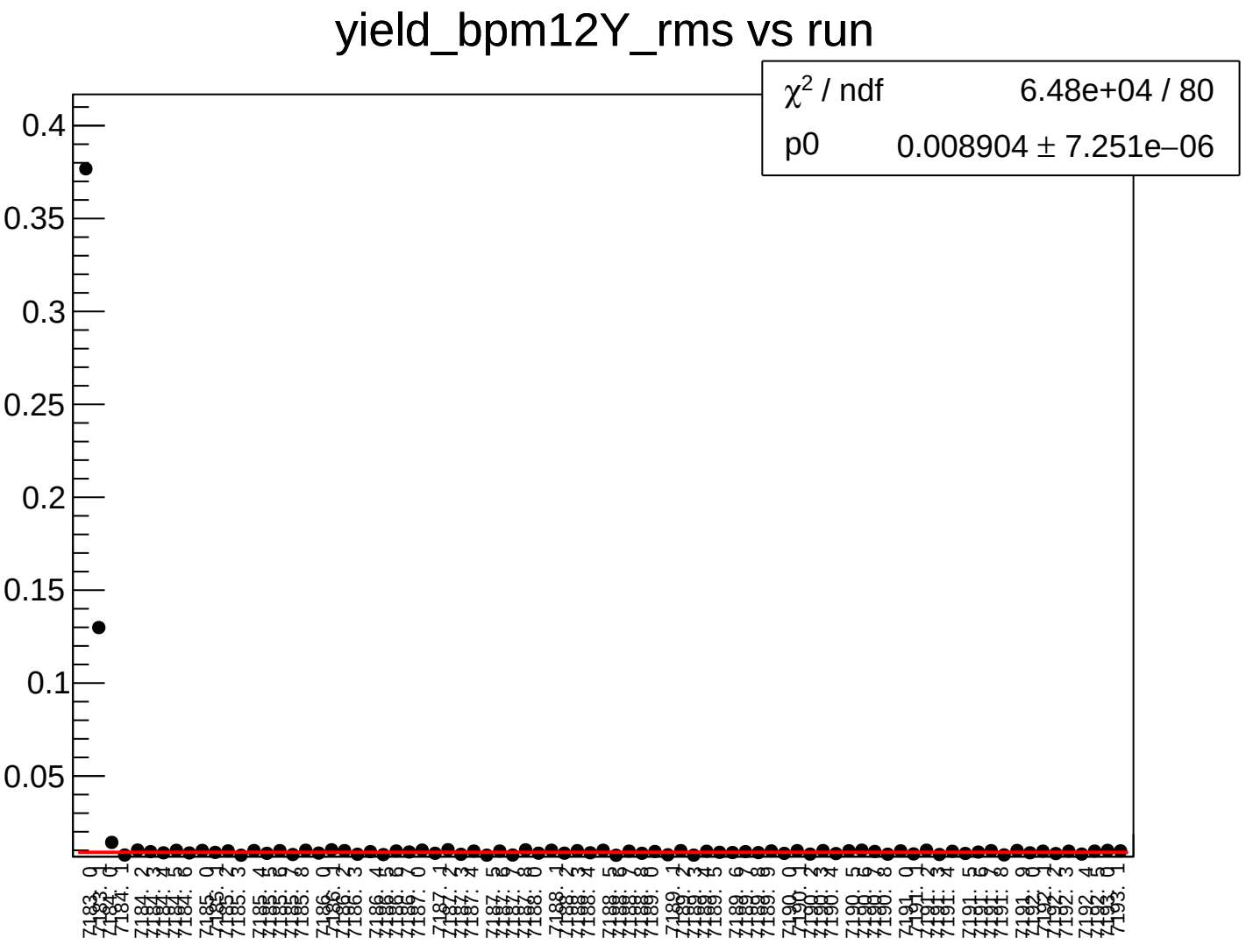

yield_bpm12X_mean vs run
χ² / ndf 1.592e+05 / 80
p0 −1.46 ± 3.724e−05
−1.4
−1.5
−1.6
−1.7
−1.8
−1.9
−2
−2.1
pull
Entries 81
Mean −262
Std Dev 293.1
50
0
−50
−100
−150
−200

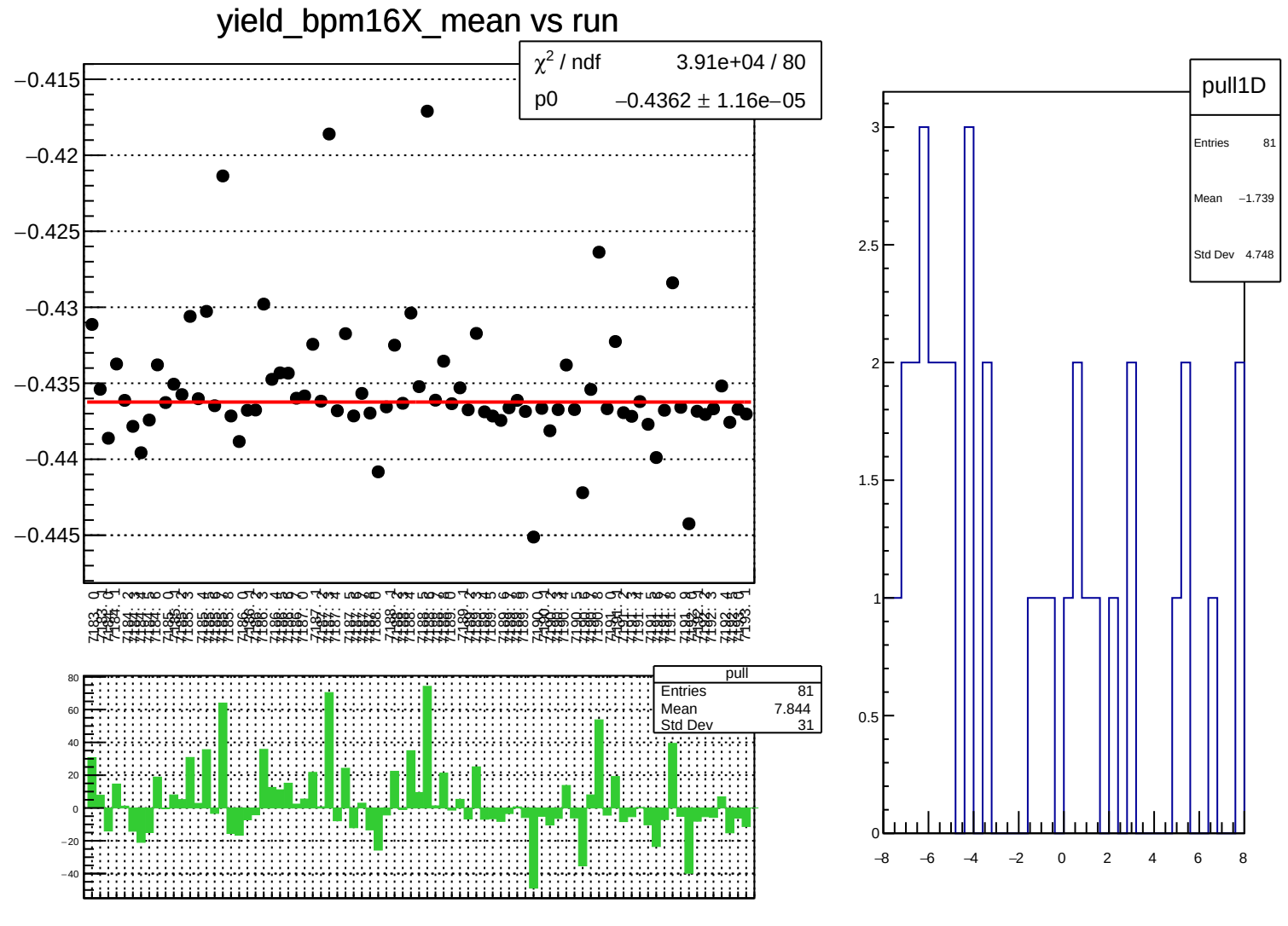

pull1D
Entries 81
Mean 0.2063
Std Dev 4.956
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

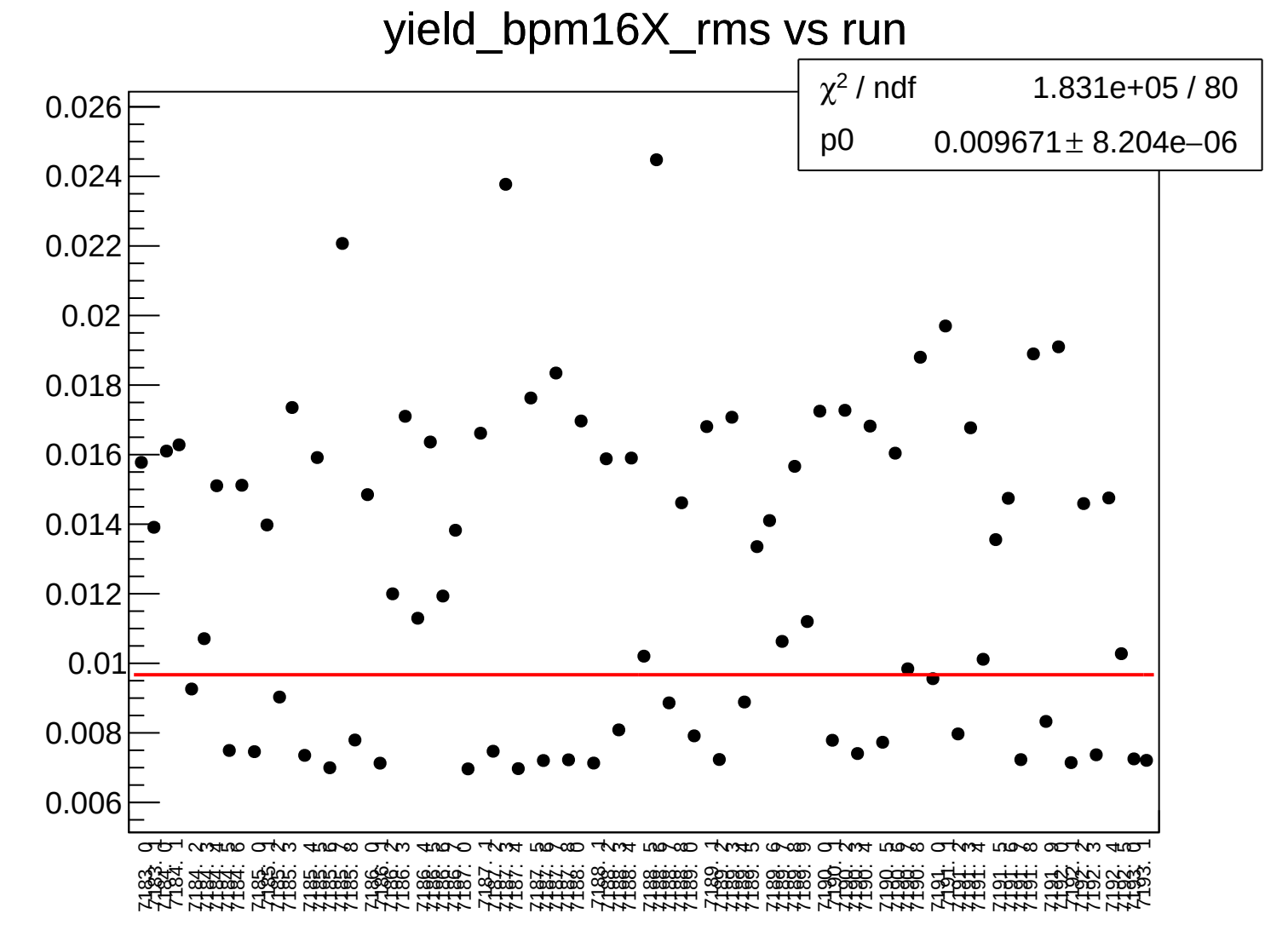

yield_bpm12X_rms vs run
χ² / ndf 1.296e+05 / 80
p0 0.03163 ± 2.633e–05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

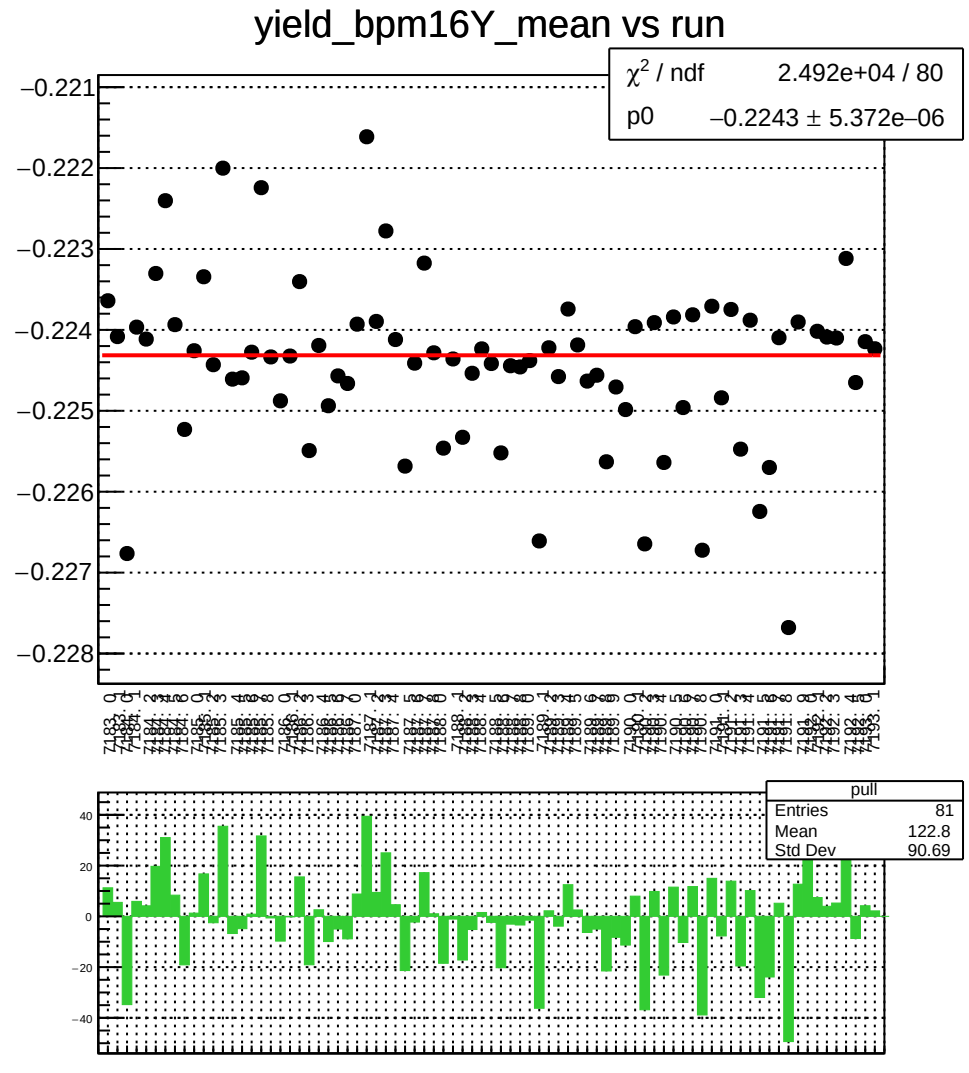

yield_bpm12Y_mean vs run
χ² / ndf 1.317e+06 / 80
p0 0.05179 ± 1.026e–05
0.7
0.6
0.5
0.4
0.3
0.2
0.1
pull
Entries 81
Mean –545.8
Std Dev 584.5
400
300
200
100
0
–100
–200

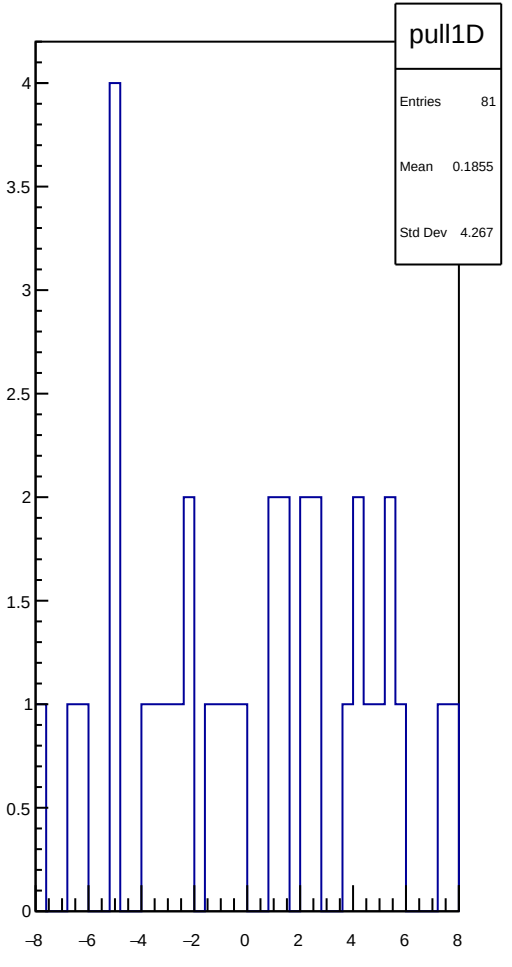

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

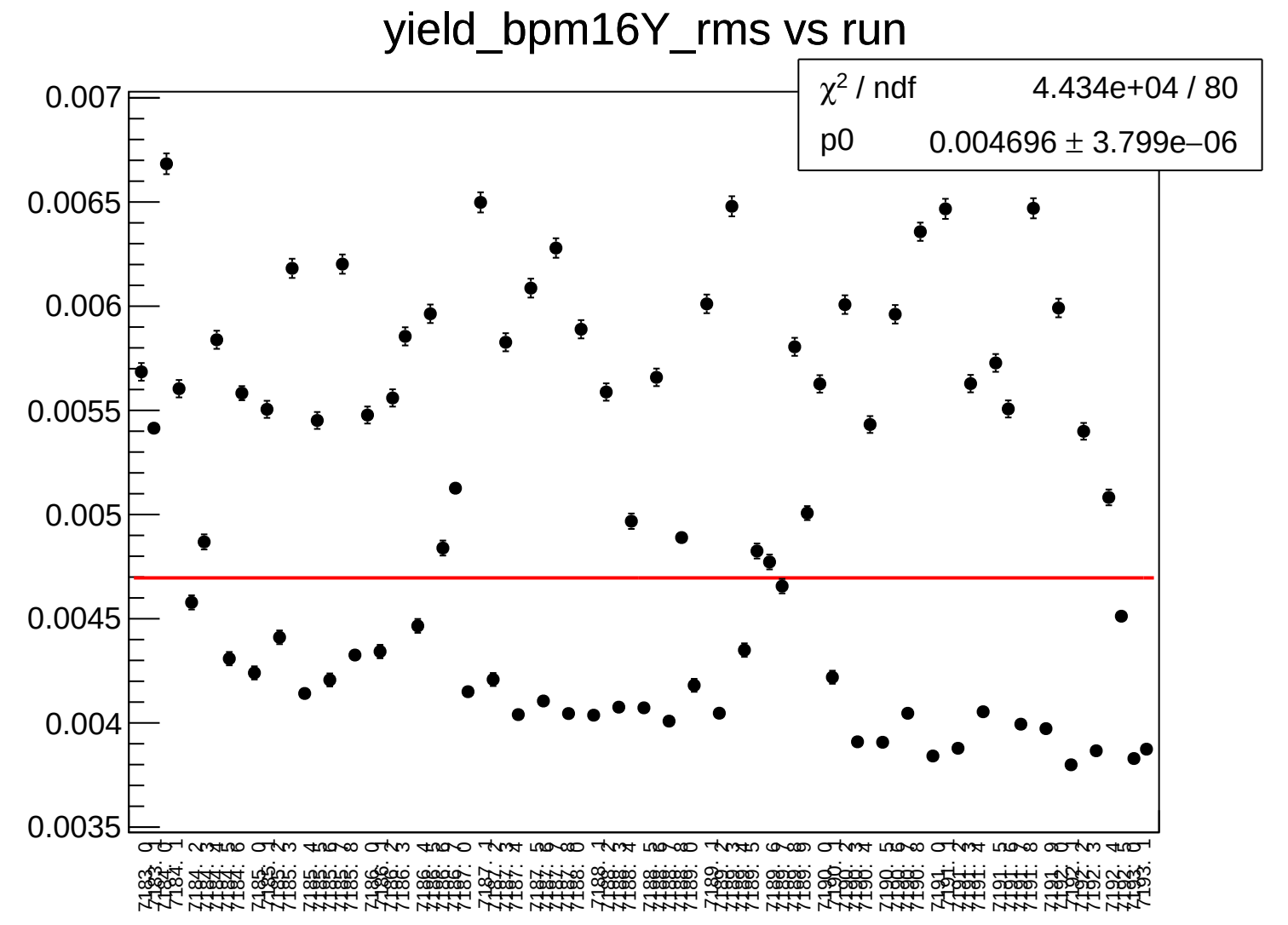

yield_bpm12Y_rms vs run
χ² / ndf 6.48e+04 / 80
p0 0.008904 ± 7.251e−06
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

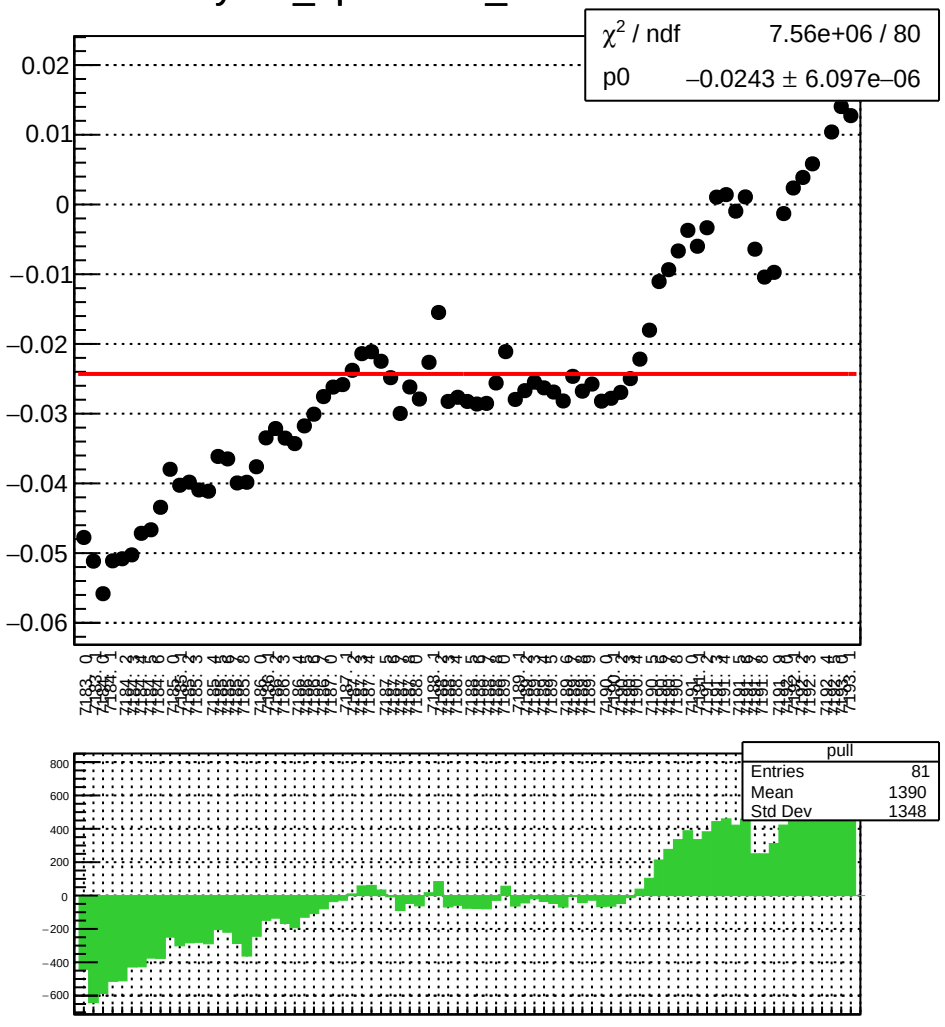

yield_bpm16X_mean vs run
χ² / ndf 3.91e+04 / 80
p0 −0.4362 ± 1.16e−05
−0.415
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
pull
Entries 81
Mean 7.844
Std Dev 31
80
60
40
20
0
−20
−40
pull1D
Entries 81
Mean −1.739
Std Dev 4.748
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

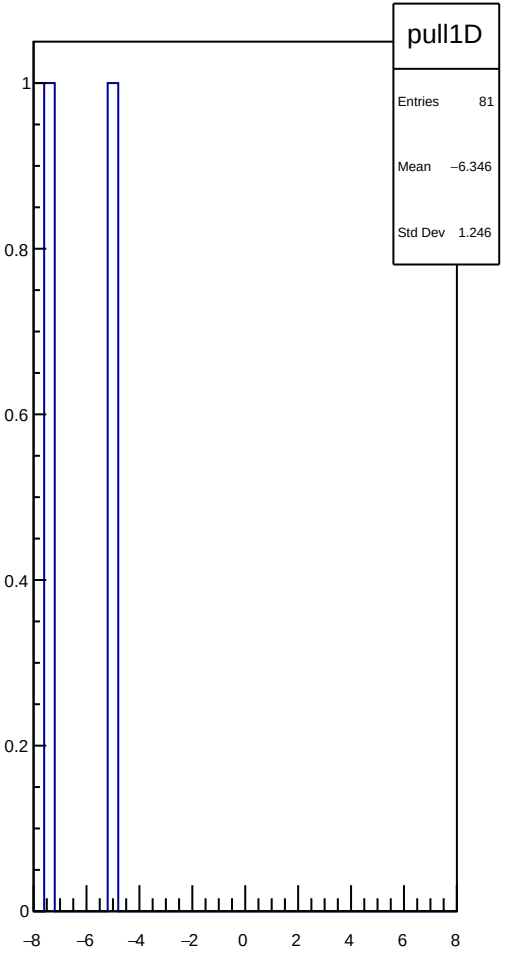

yield_bpm16X_rms vs run
χ^2 / ndf 1.831e+05 / 80
p0 0.009671 ± 8.204e−06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

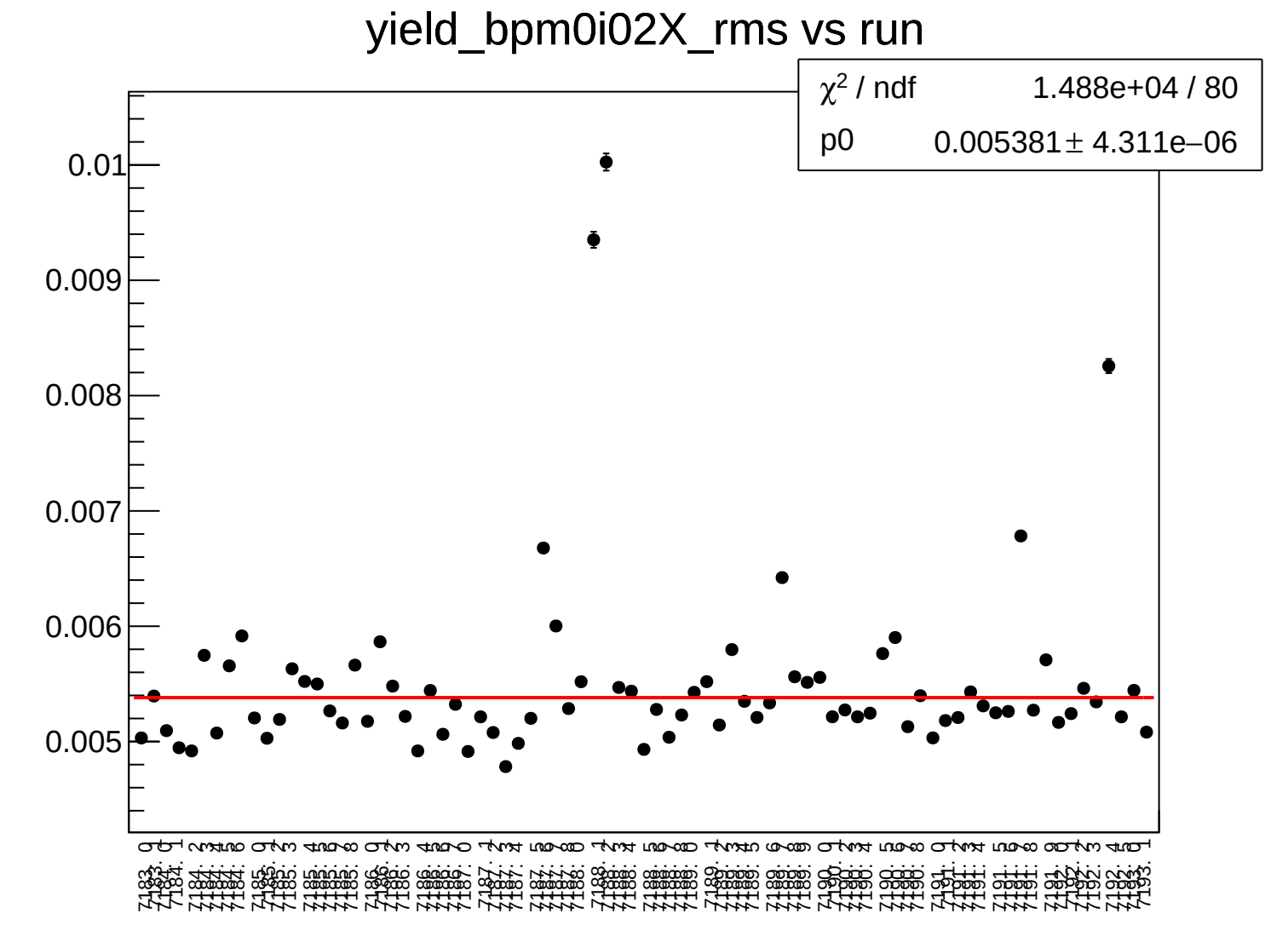

yield_bpm16Y_mean vs run
χ² / ndf 2.492e+04 / 80
p0 −0.2243 ± 5.372e−06
−0.221
−0.222
−0.223
−0.224
−0.225
−0.226
−0.227
−0.228
pull
Entries 81
Mean 122.8
Std Dev 90.69
40
20
0
−20
−40

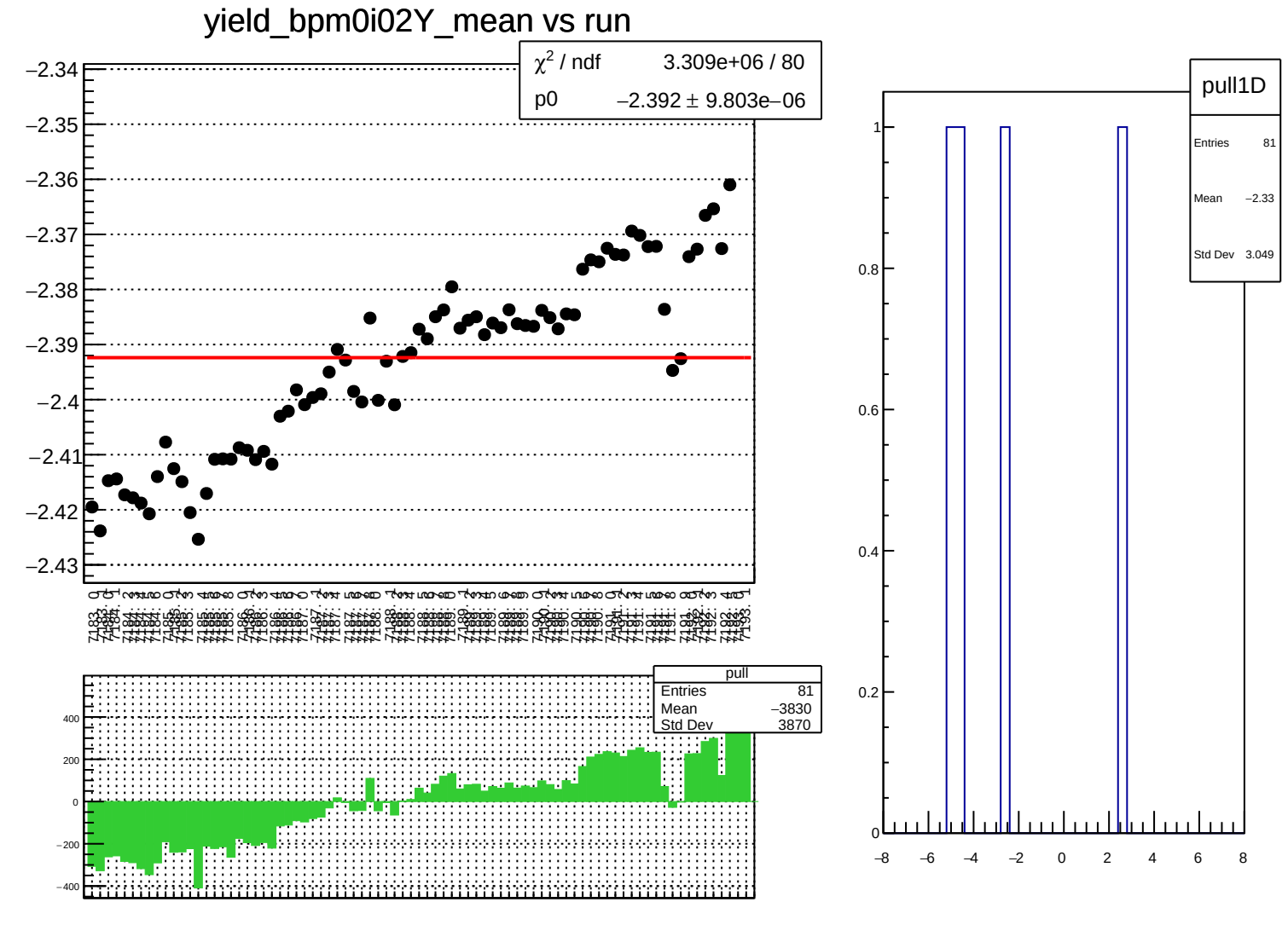

pull1D
Entries 81
Mean 0.1855
Std Dev 4.267
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

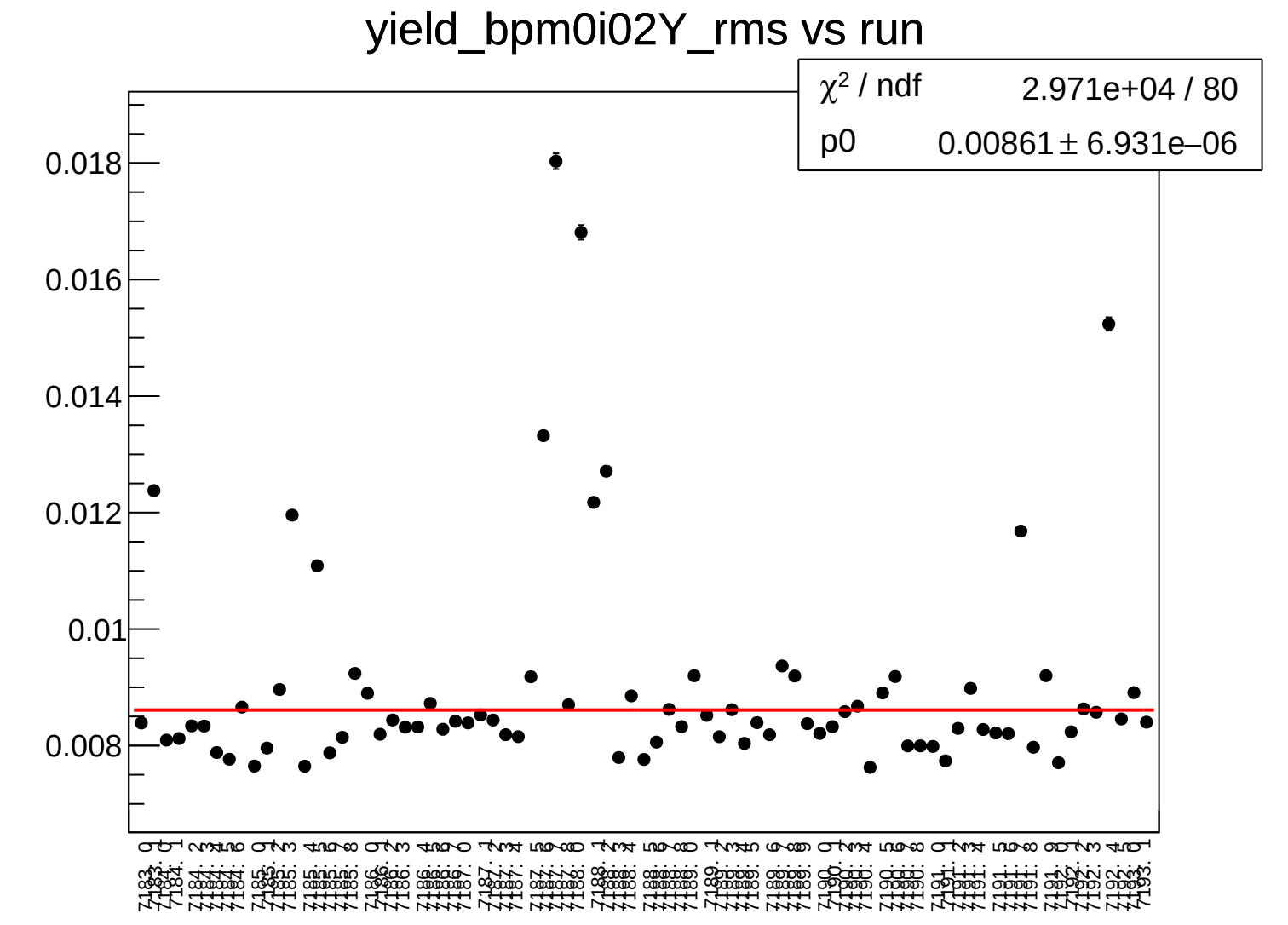

yield_bpm16Y_rms vs run
χ² / ndf 4.434e+04 / 80
p0 0.004696 ± 3.799e−06
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035

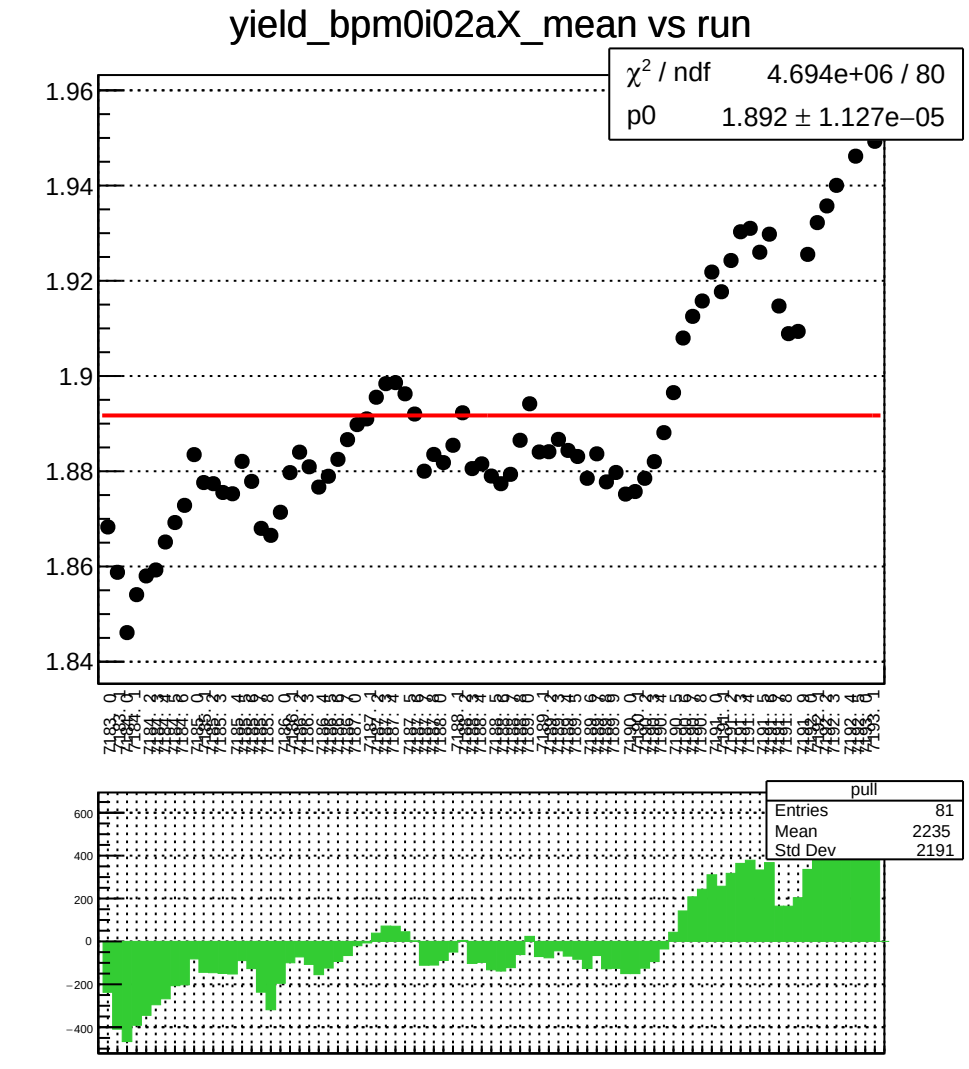

yield_bpm0i02X_mean vs run
χ² / ndf 7.56e+06 / 80
p0 −0.0243 ± 6.097e−06
pull
Entries 81
Mean 1390
Std Dev 1348

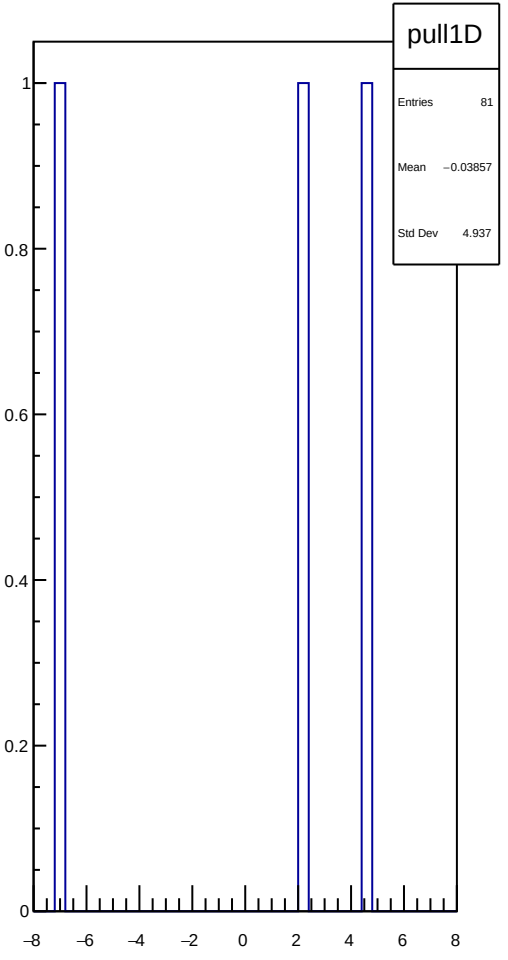

pull1D
Entries 81
Mean −6.346
Std Dev 1.246

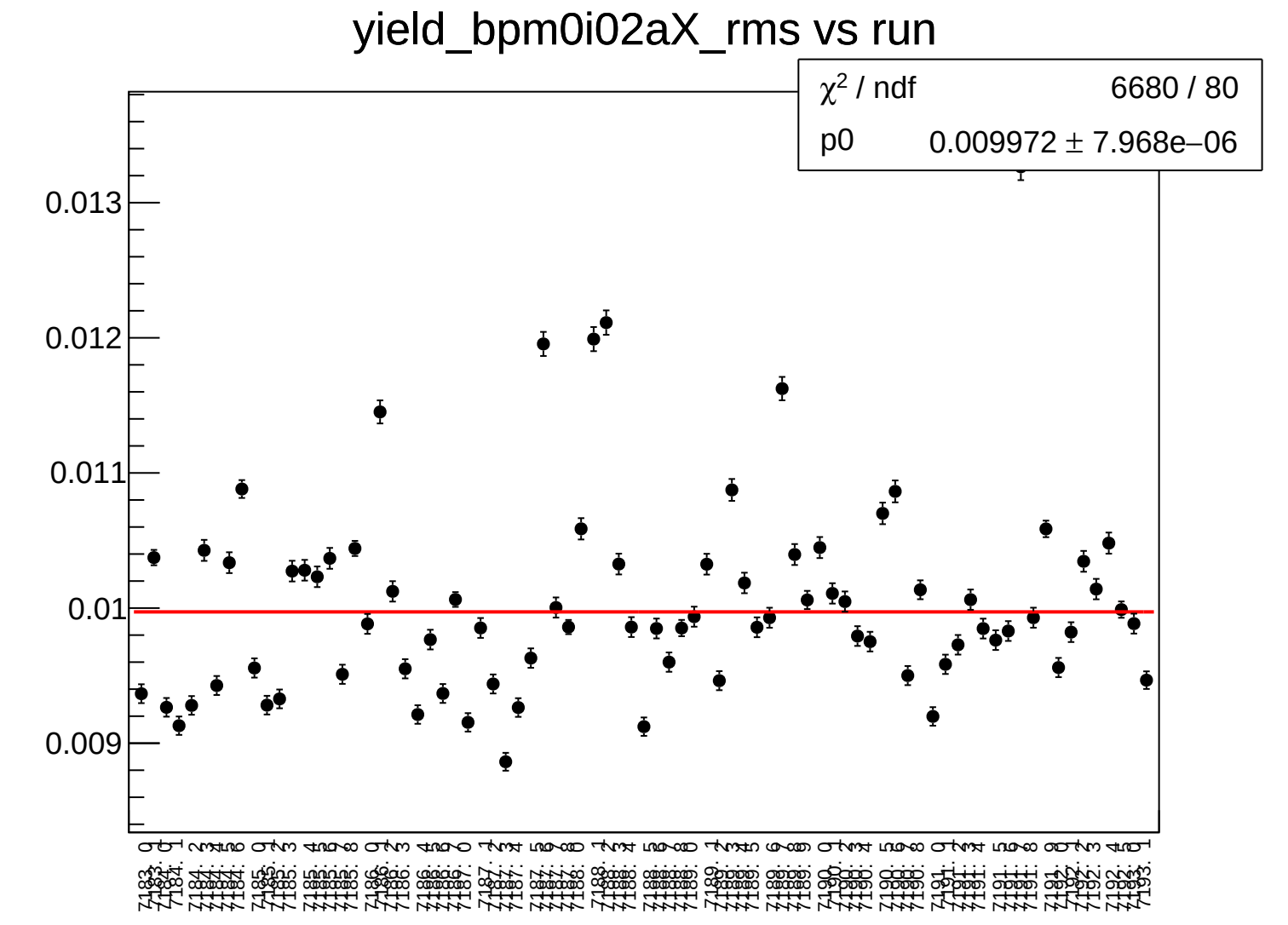

yield_bpm0i02X_rms vs run
χ² / ndf 1.488e+04 / 80
p0 0.005381 ± 4.311e−06
0.01
0.009
0.008
0.007
0.006
0.005

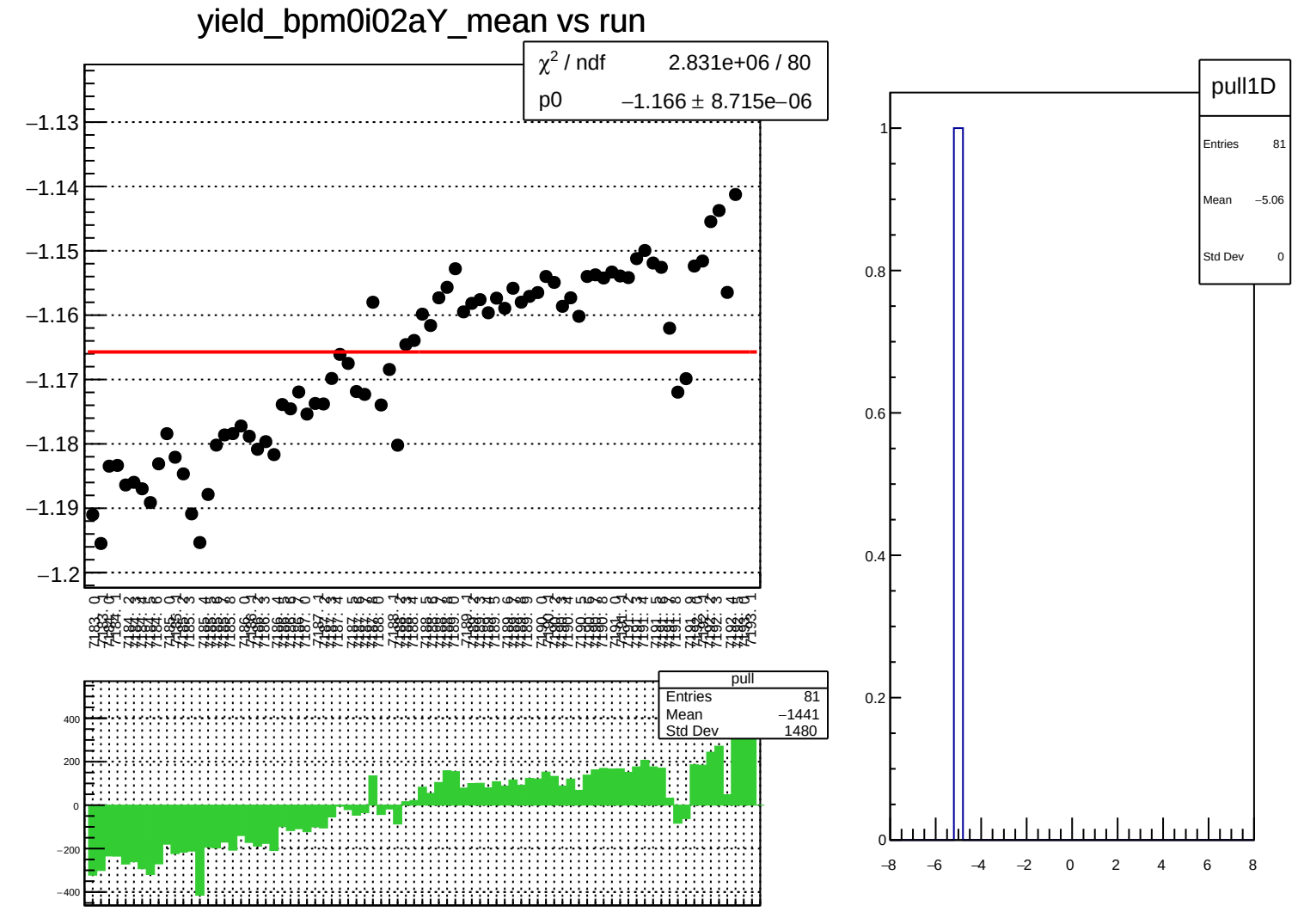

yield_bpm0i02Y_mean vs run
χ² / ndf 3.309e+06 / 80
p0 −2.392 ± 9.803e−06
−2.34
−2.35
−2.36
−2.37
−2.38
−2.39
−2.4
−2.41
−2.42
−2.43
pull
Entries 81
Mean −3830
Std Dev 3870
400
200
0
−200
−400
pull1D
Entries 81
Mean −2.33
Std Dev 3.049
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

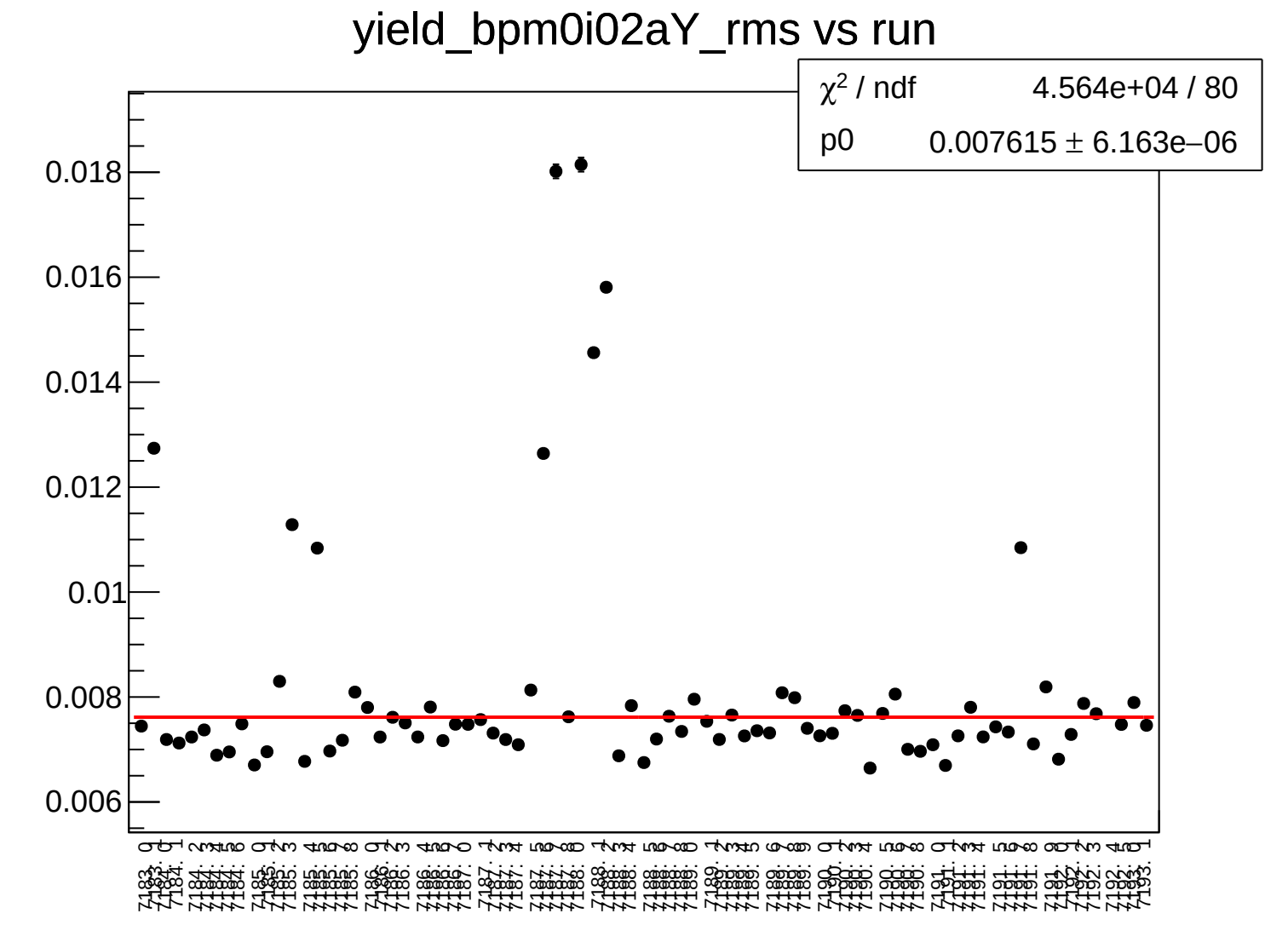

yield_bpm0i02Y_rms vs run
χ² / ndf 2.971e+04 / 80
p0 0.00861 ± 6.931e–06
0.018
0.016
0.014
0.012
0.01
0.008

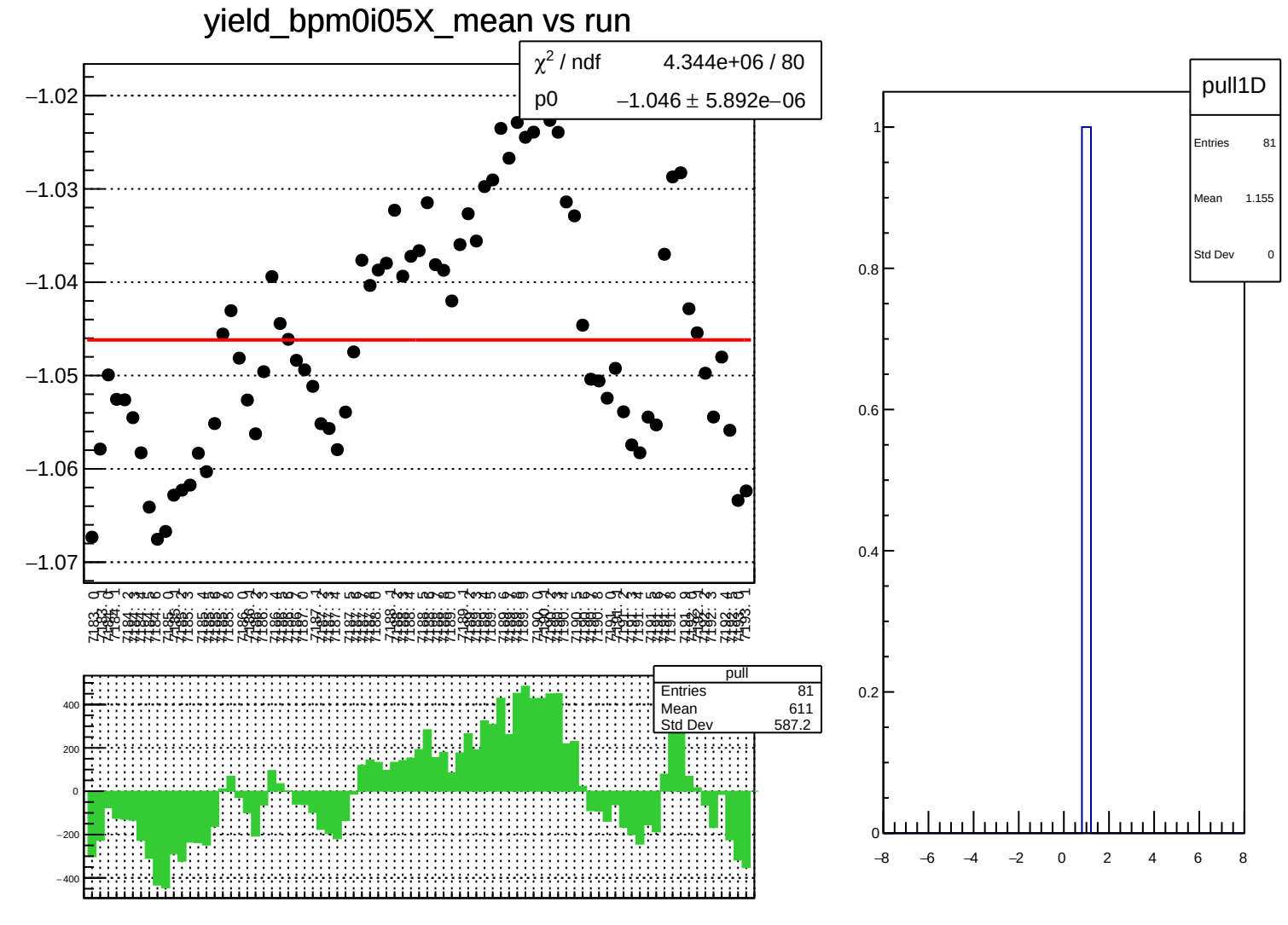

yield_bpm0i02aX_mean vs run
χ² / ndf 4.694e+06 / 80
p0 1.892 ± 1.127e−05
1.96
1.94
1.92
1.9
1.88
1.86
1.84
pull
Entries 81
Mean 2235
Std Dev 2191
600
400
200
0
−200
−400

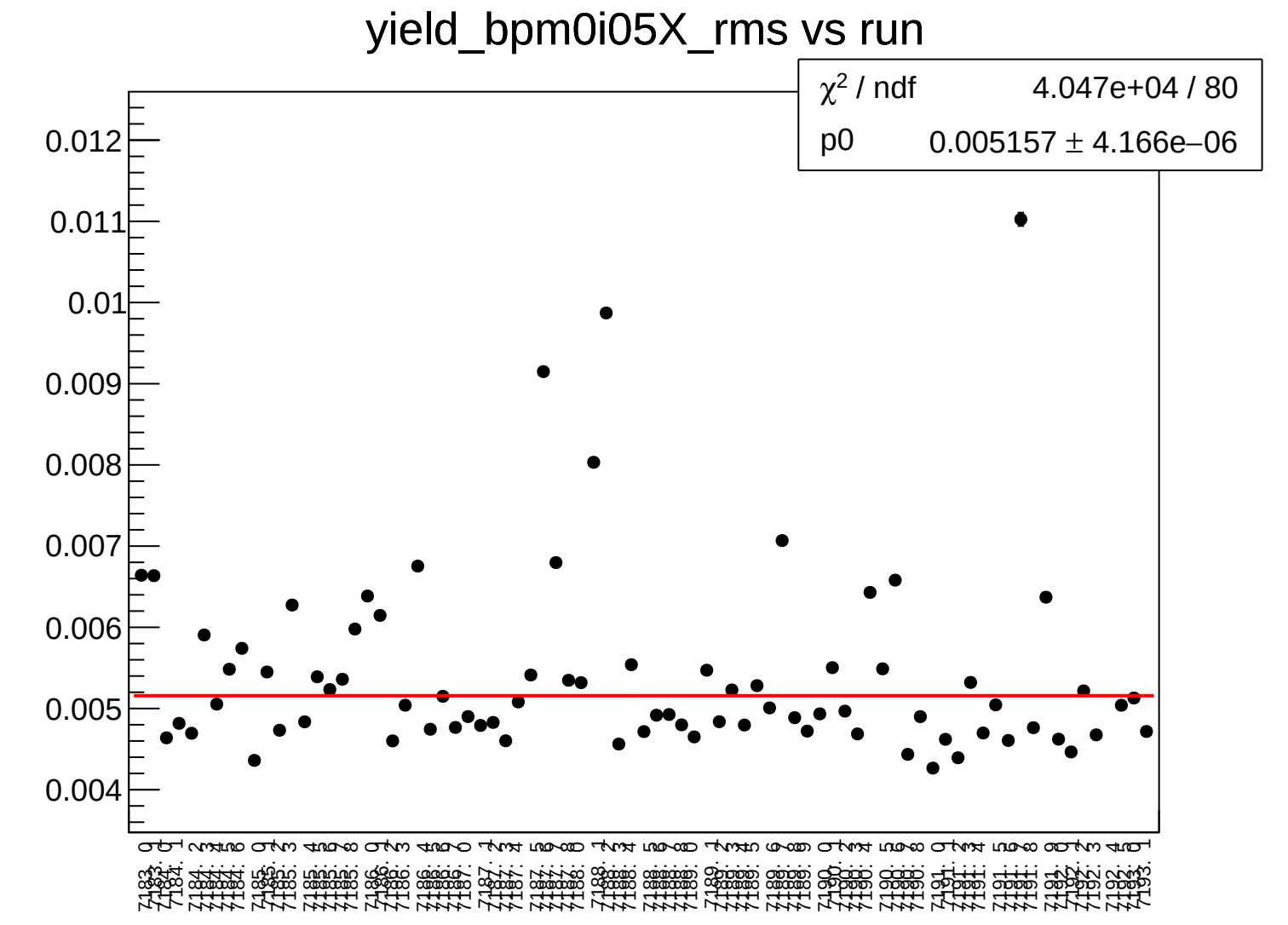

pull1D
Entries 81
Mean −0.03857
Std Dev 4.937
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

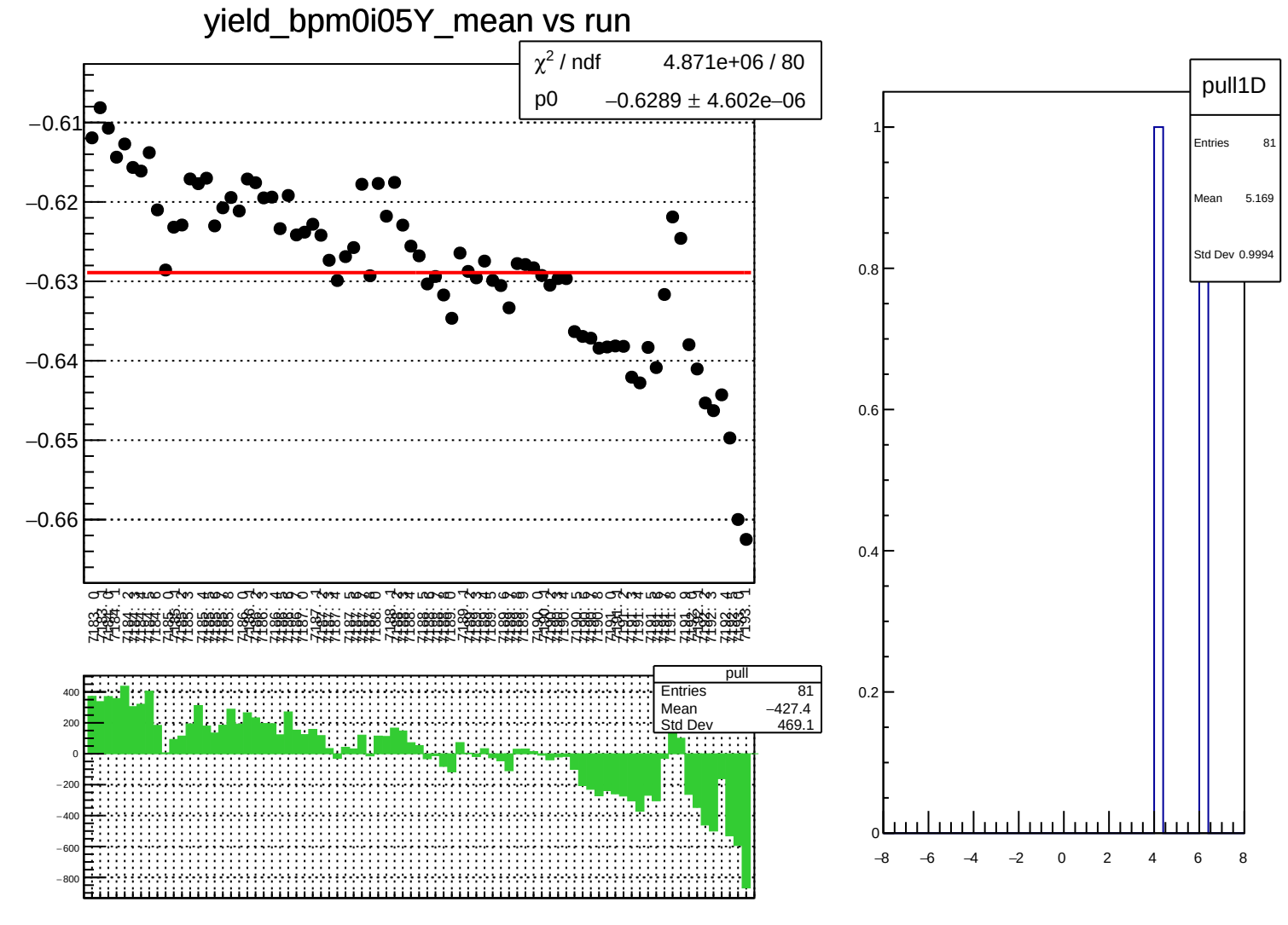

yield_bpm0i02aX_rms vs run
χ² / ndf 6680 / 80
p0 0.009972 ± 7.968e−06
0.013
0.012
0.011
0.01
0.009

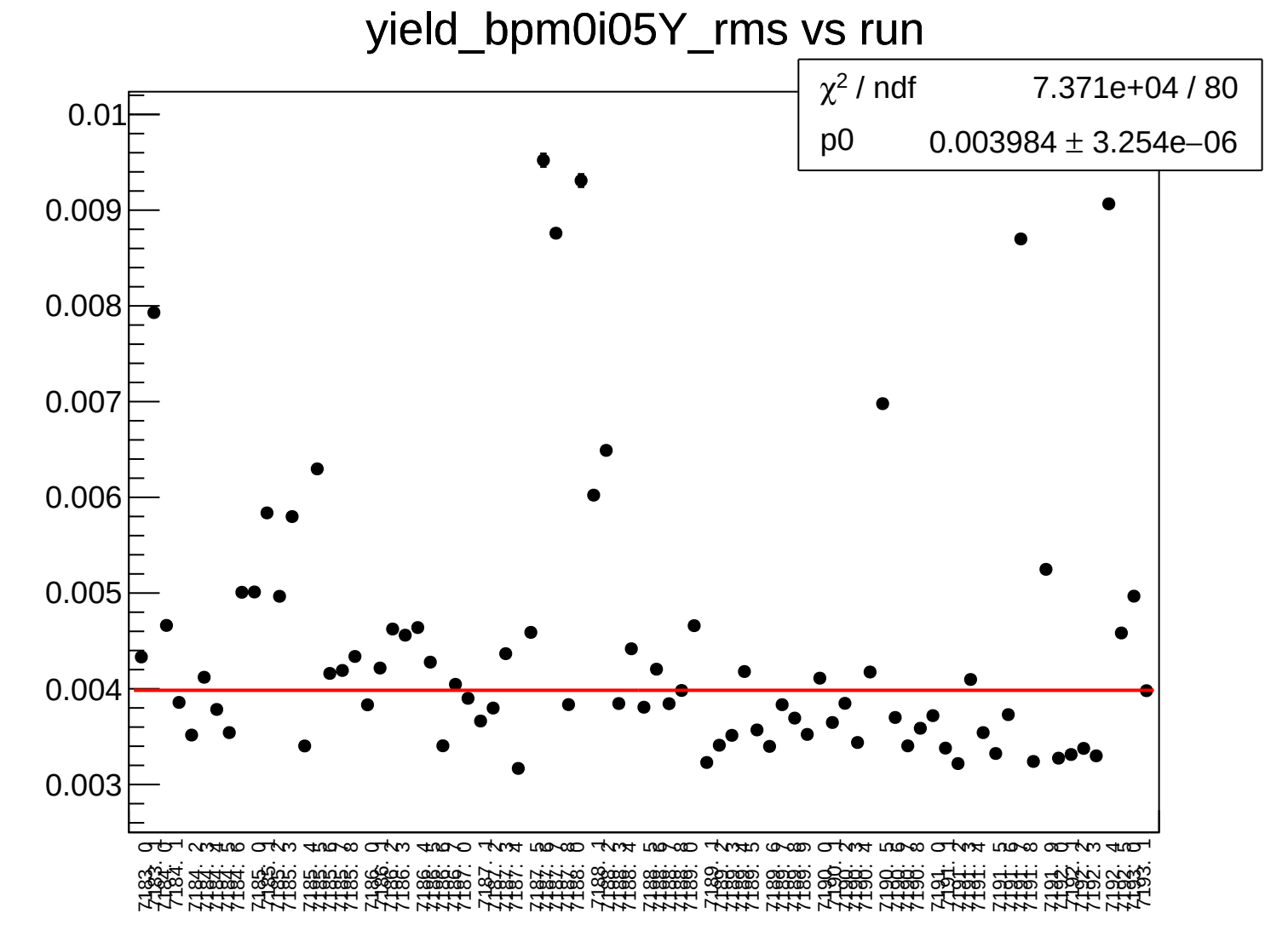

yield_bpm0i02aY_mean vs run
χ² / ndf 2.831e+06 / 80
p0 −1.166 ± 8.715e−06
−1.13
−1.14
−1.15
−1.16
−1.17
−1.18
−1.19
−1.2
pull
Entries 81
Mean −1441
Std Dev 1480
400
200
0
−200
−400
pull1D
Entries 81
Mean −5.06
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

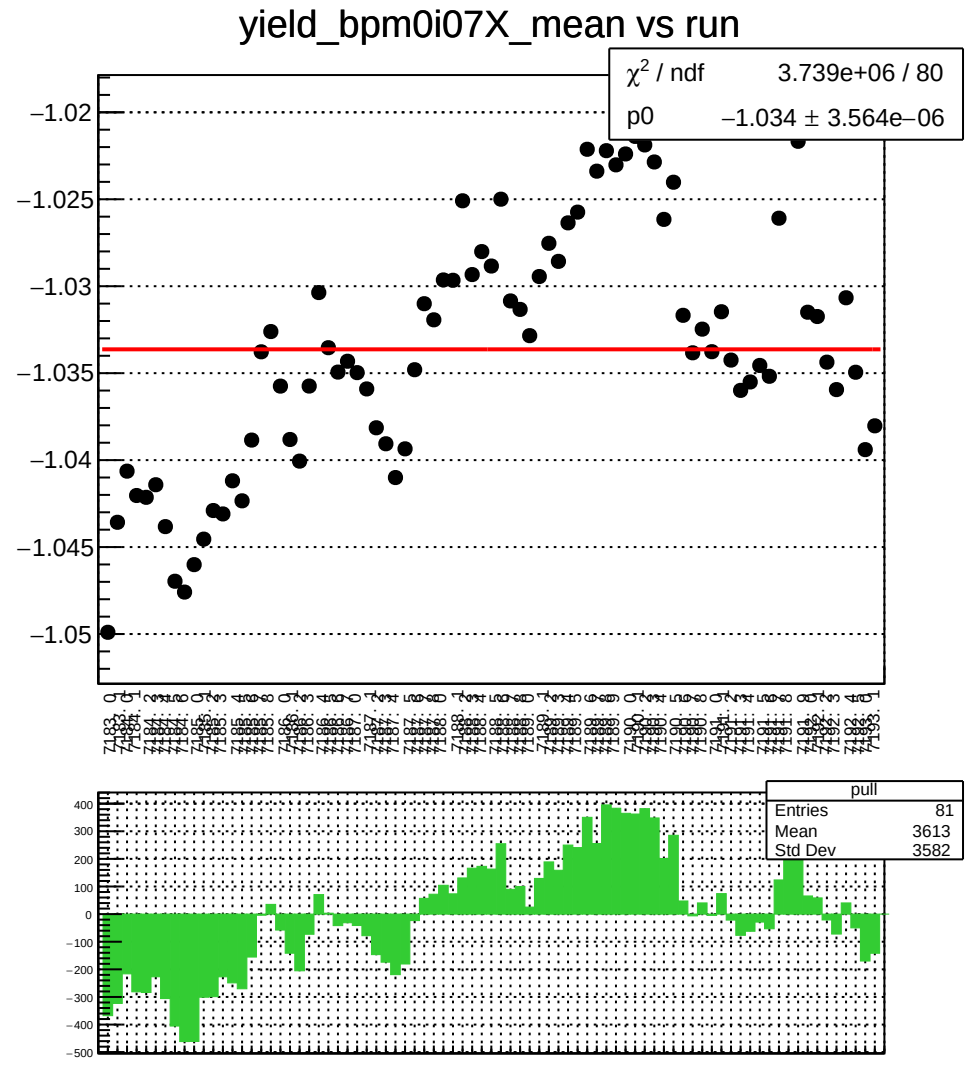

yield_bpm0i02aY_rms vs run
χ² / ndf 4.564e+04 / 80
p0 0.007615 ± 6.163e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

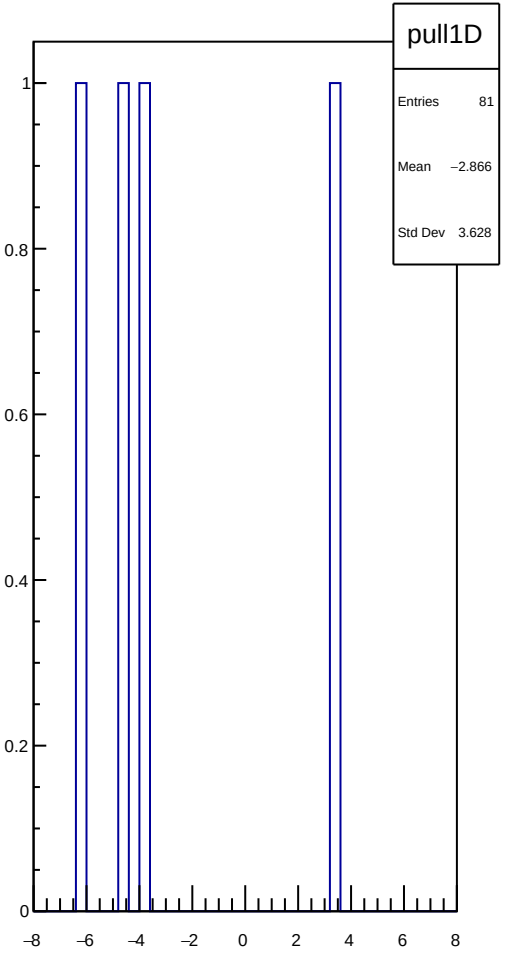

yield_bpm0i05X_mean vs run
χ² / ndf 4.344e+06 / 80
p0 −1.046 ± 5.892e−06
−1.02
−1.03
−1.04
−1.05
−1.06
−1.07
pull
Entries 81
Mean 611
Std Dev 587.2
400
200
0
−200
−400
pull1D
Entries 81
Mean 1.155
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

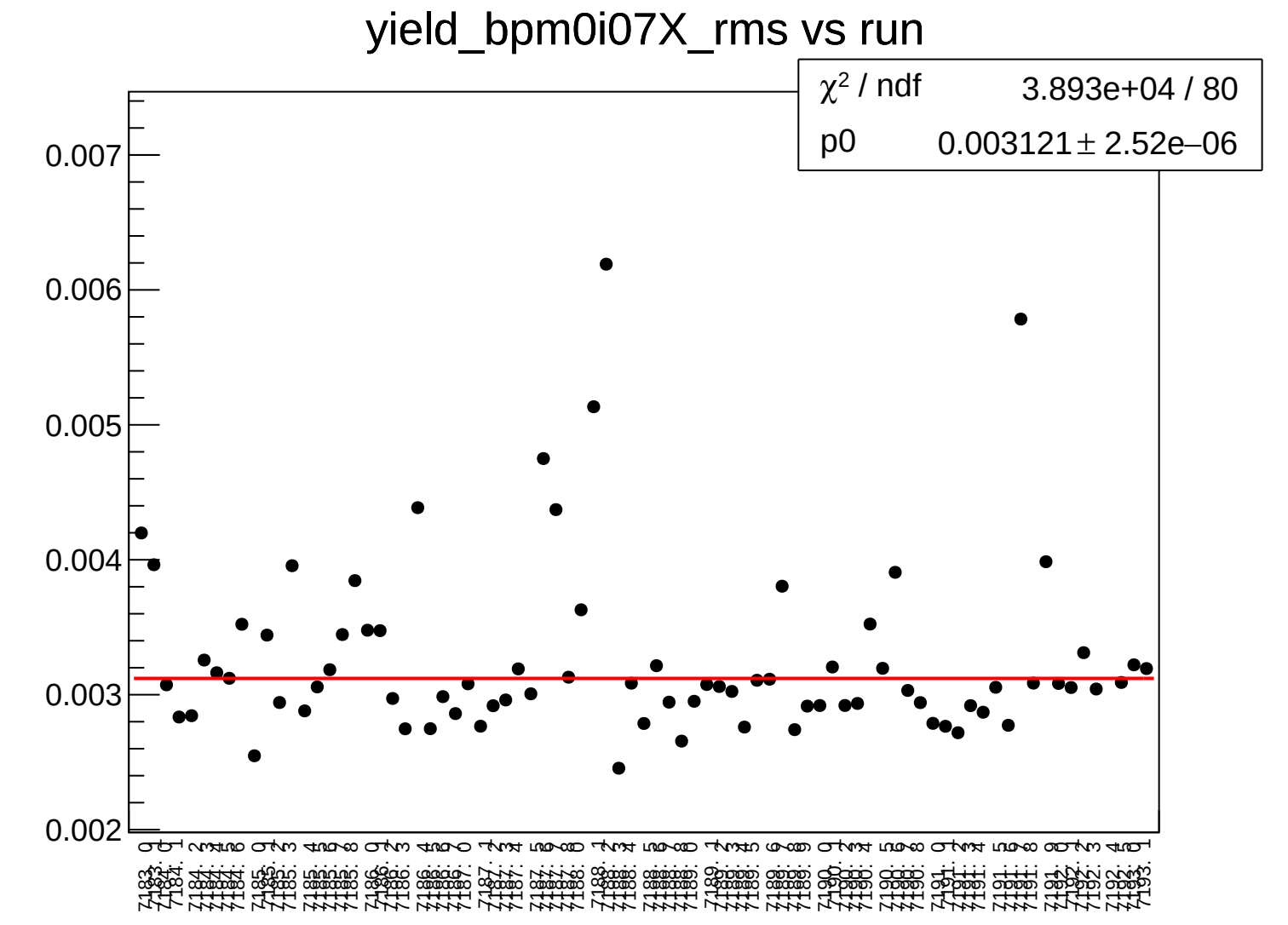

yield_bpm0i05X_rms vs run
χ^2 / ndf 4.047e+04 / 80
p0 0.005157 ± 4.166e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

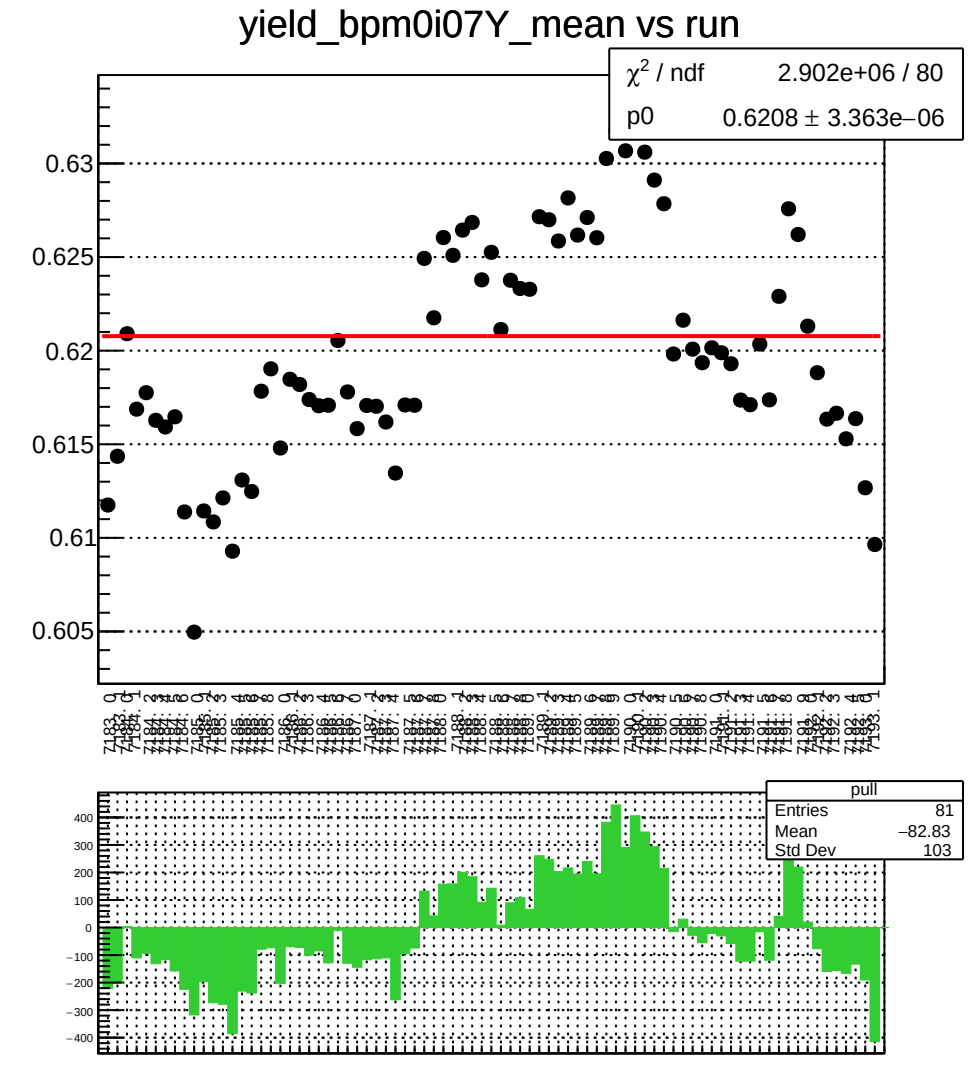

yield_bpm0i05Y_mean vs run
χ² / ndf 4.871e+06 / 80
p0 −0.6289 ± 4.602e−06
−0.61
−0.62
−0.63
−0.64
−0.65
−0.66
pull
Entries 81
Mean −427.4
Std Dev 469.1
400
200
0
−200
−400
−600
−800
pull1D
Entries 81
Mean 5.169
Std Dev 0.9994
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

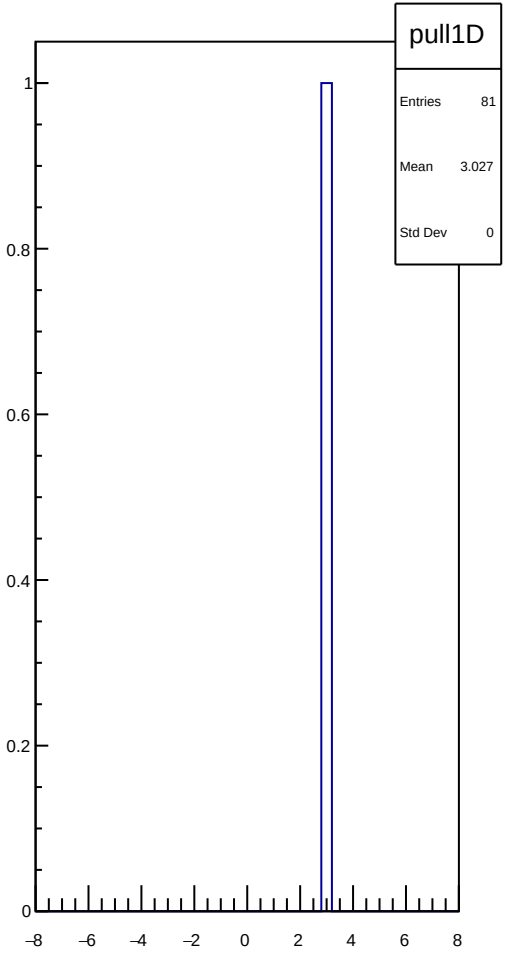

yield_bpm0i05Y_rms vs run
χ² / ndf 7.371e+04 / 80
p0 0.003984 ± 3.254e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003


yield_bpm0i07X_mean vs run
χ² / ndf 3.739e+06 / 80
p0 −1.034 ± 3.564e−06
−1.02
−1.025
−1.03
−1.035
−1.04
−1.045
−1.05
pull
Entries 81
Mean 3613
Std Dev 3582
400
300
200
100
0
−100
−200
−300
−400
−500

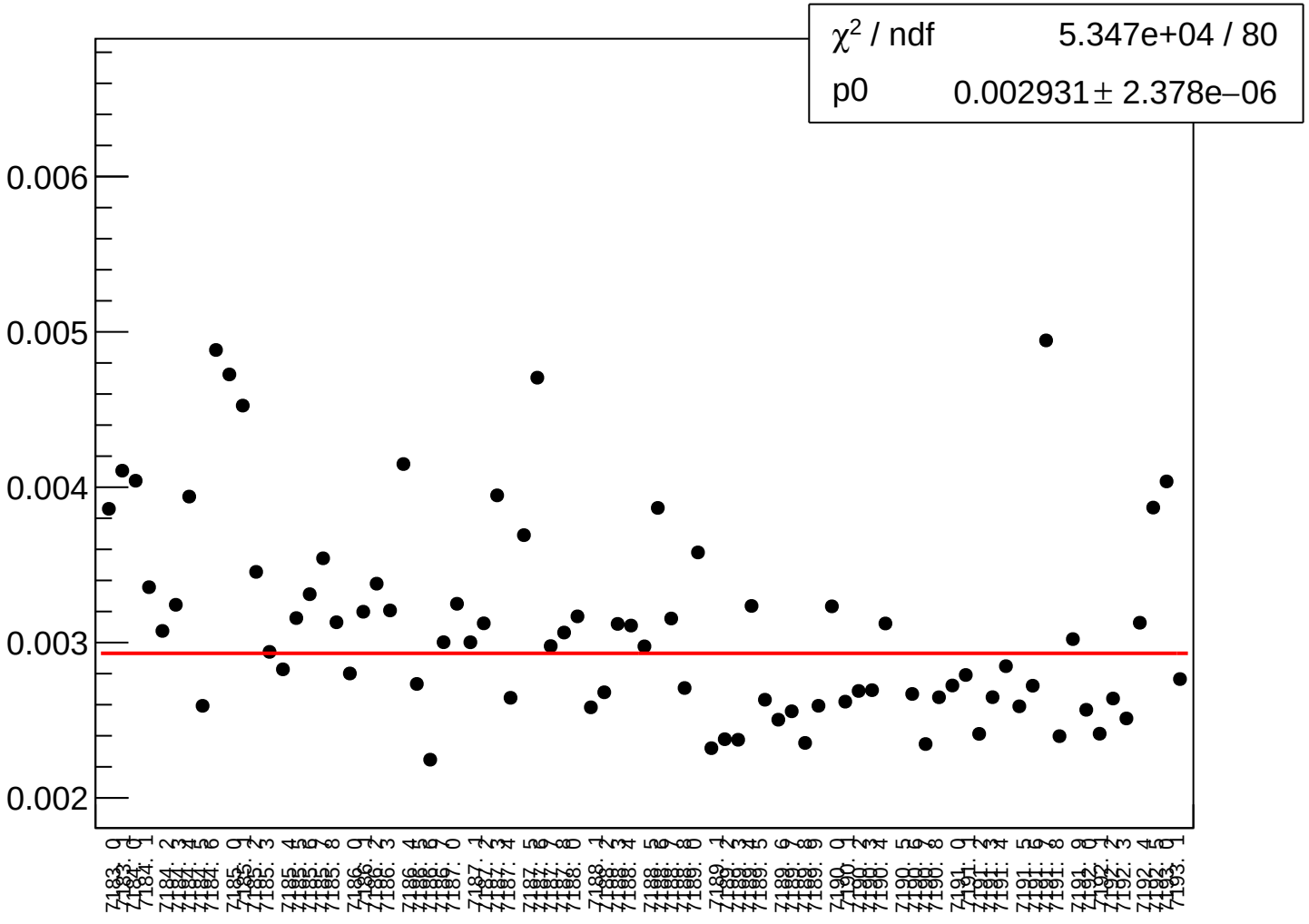

pull1D
Entries 81
Mean −2.866
Std Dev 3.628
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

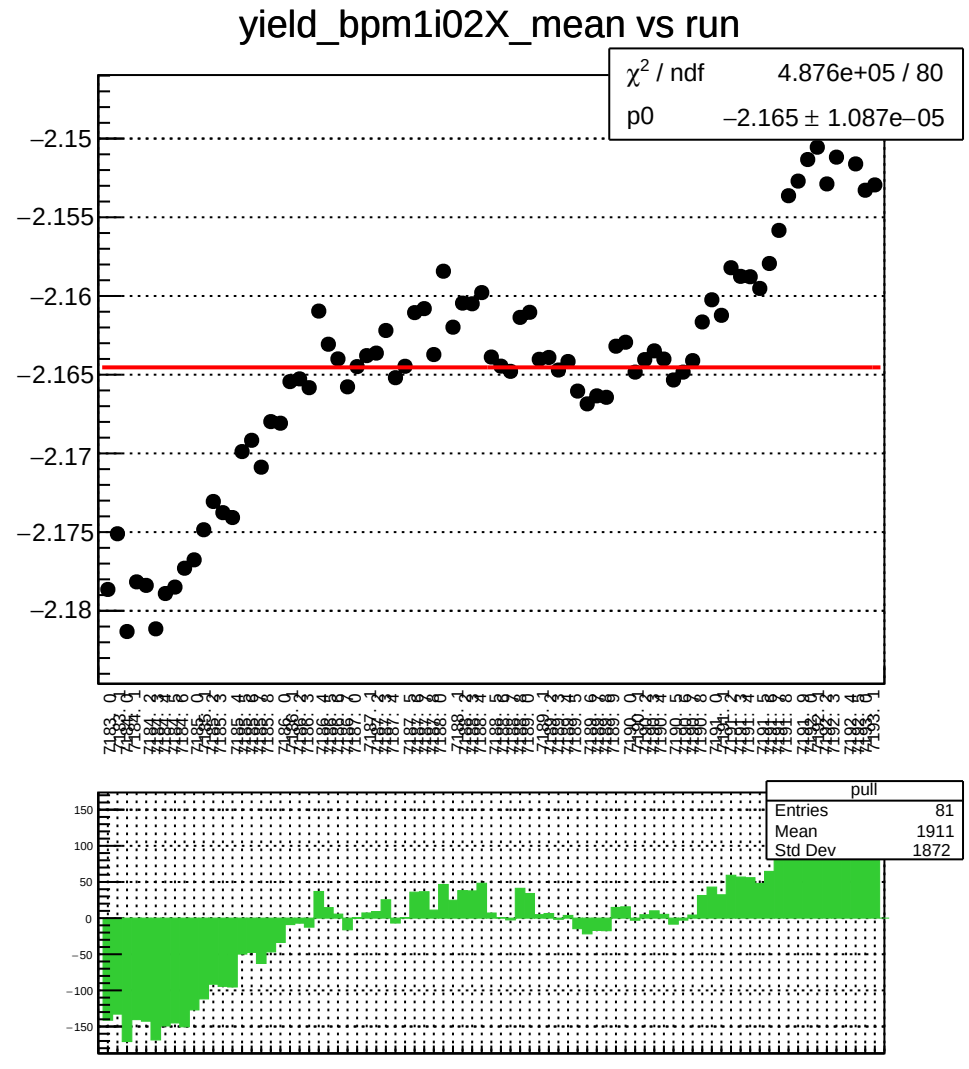

yield_bpm0i07X_rms vs run
χ² / ndf 3.893e+04 / 80
p0 0.003121 ± 2.52e–06
0.007
0.006
0.005
0.004
0.003
0.002

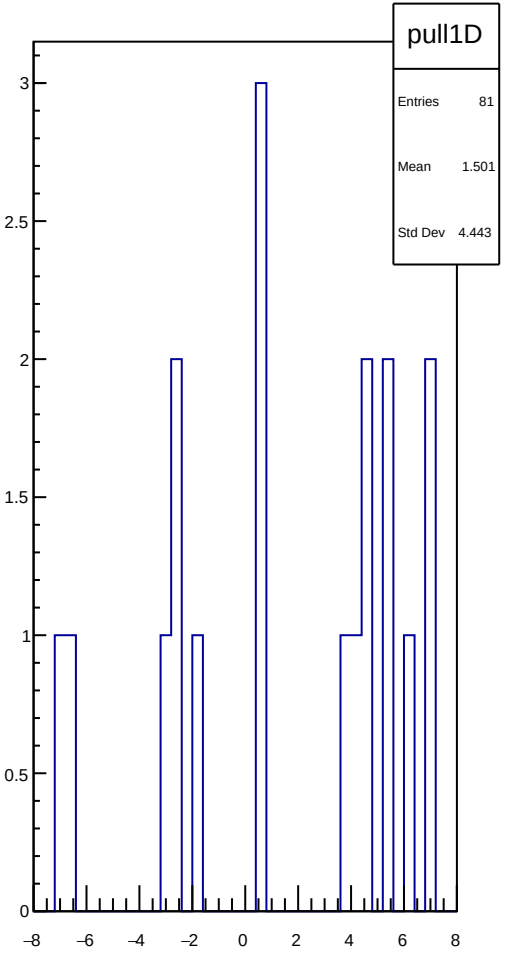

yield_bpm0i07Y_mean vs run
χ² / ndf 2.902e+06 / 80
p0 0.6208 ± 3.363e−06
0.63
0.625
0.62
0.615
0.61
0.605
pull
Entries 81
Mean −82.83
Std Dev 103
400
300
200
100
0
−100
−200
−300
−400

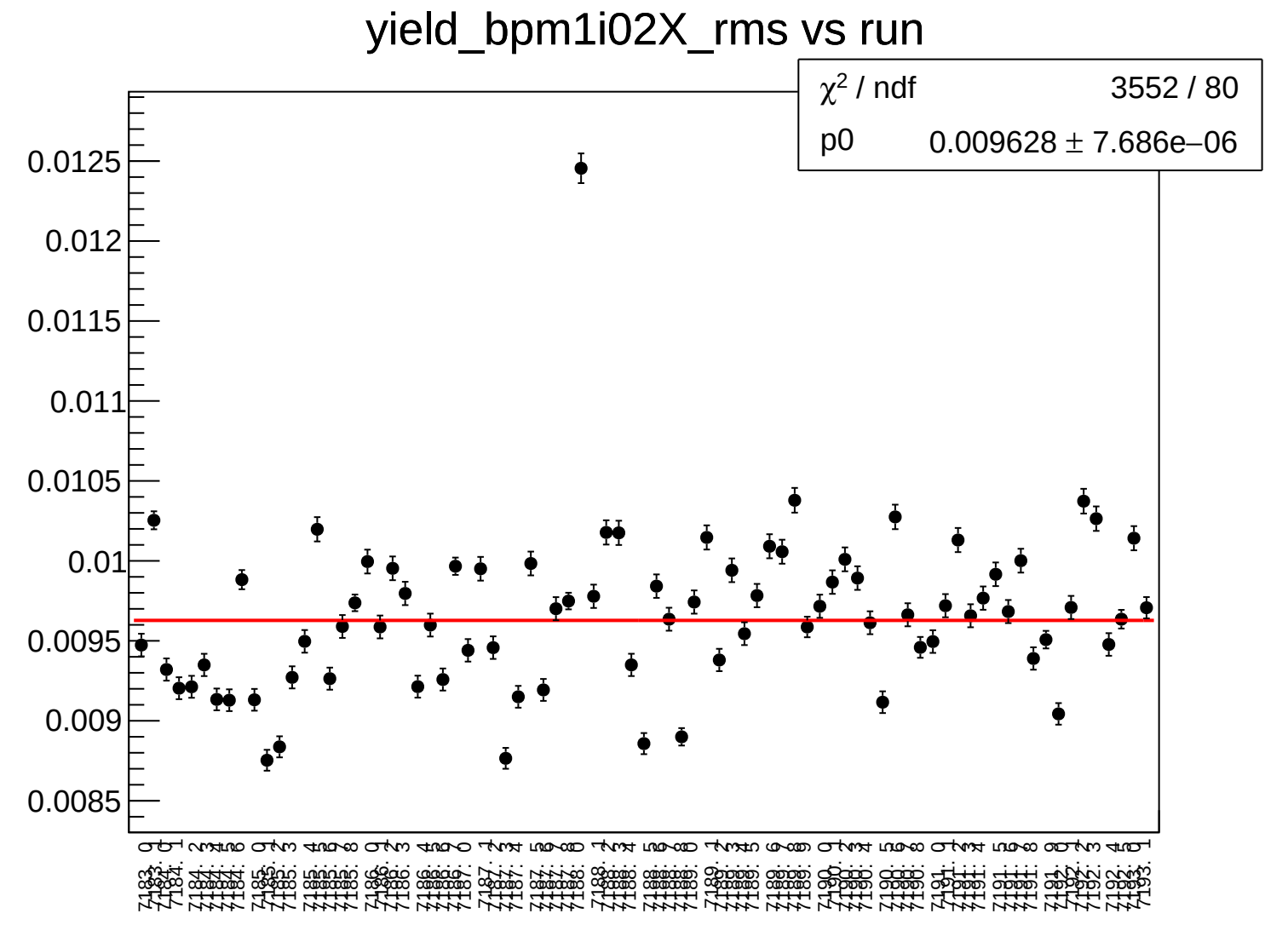

pull1D
Entries 81
Mean 3.027
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

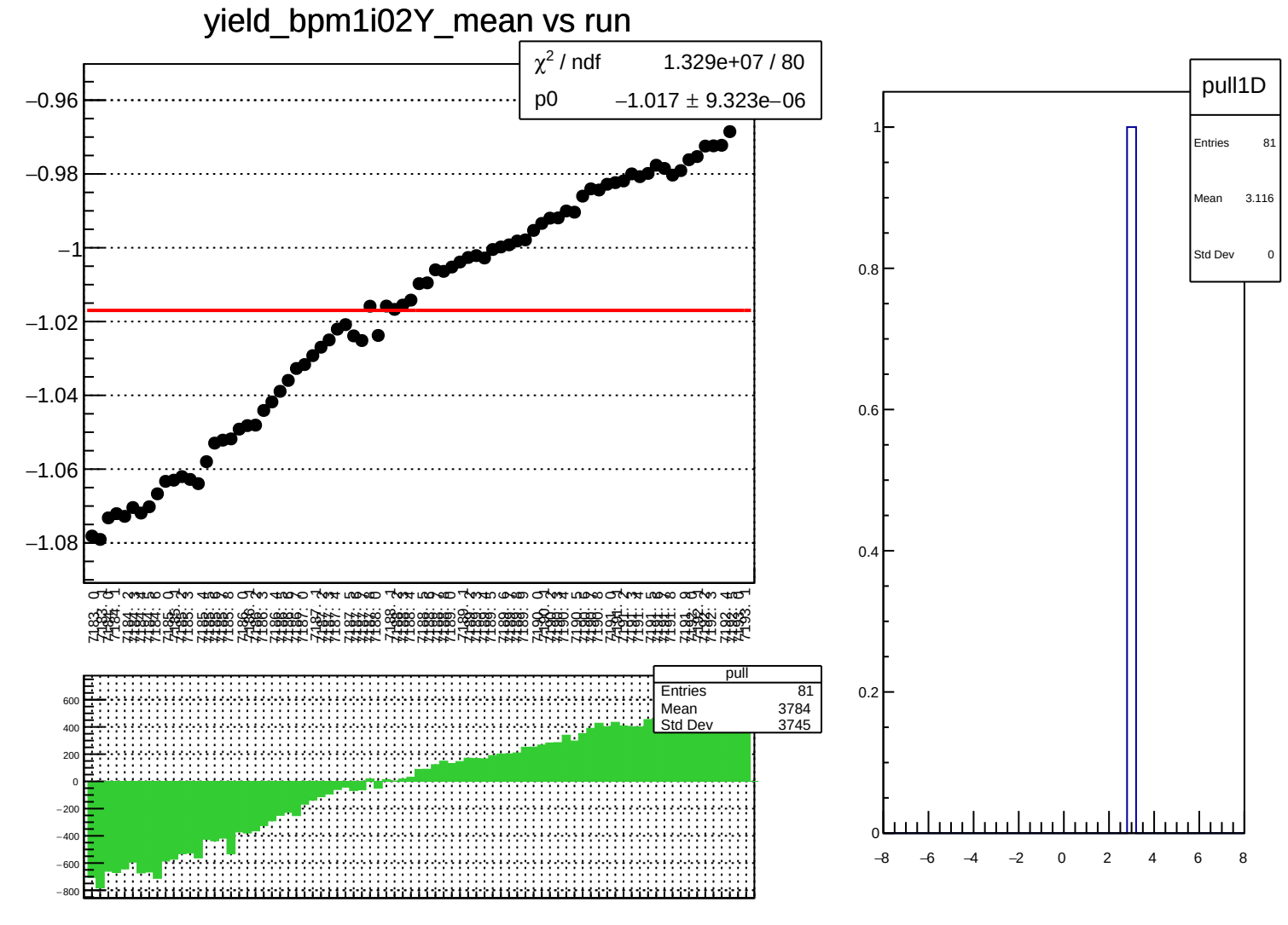
yield_bpm0i07Y_rms vs run

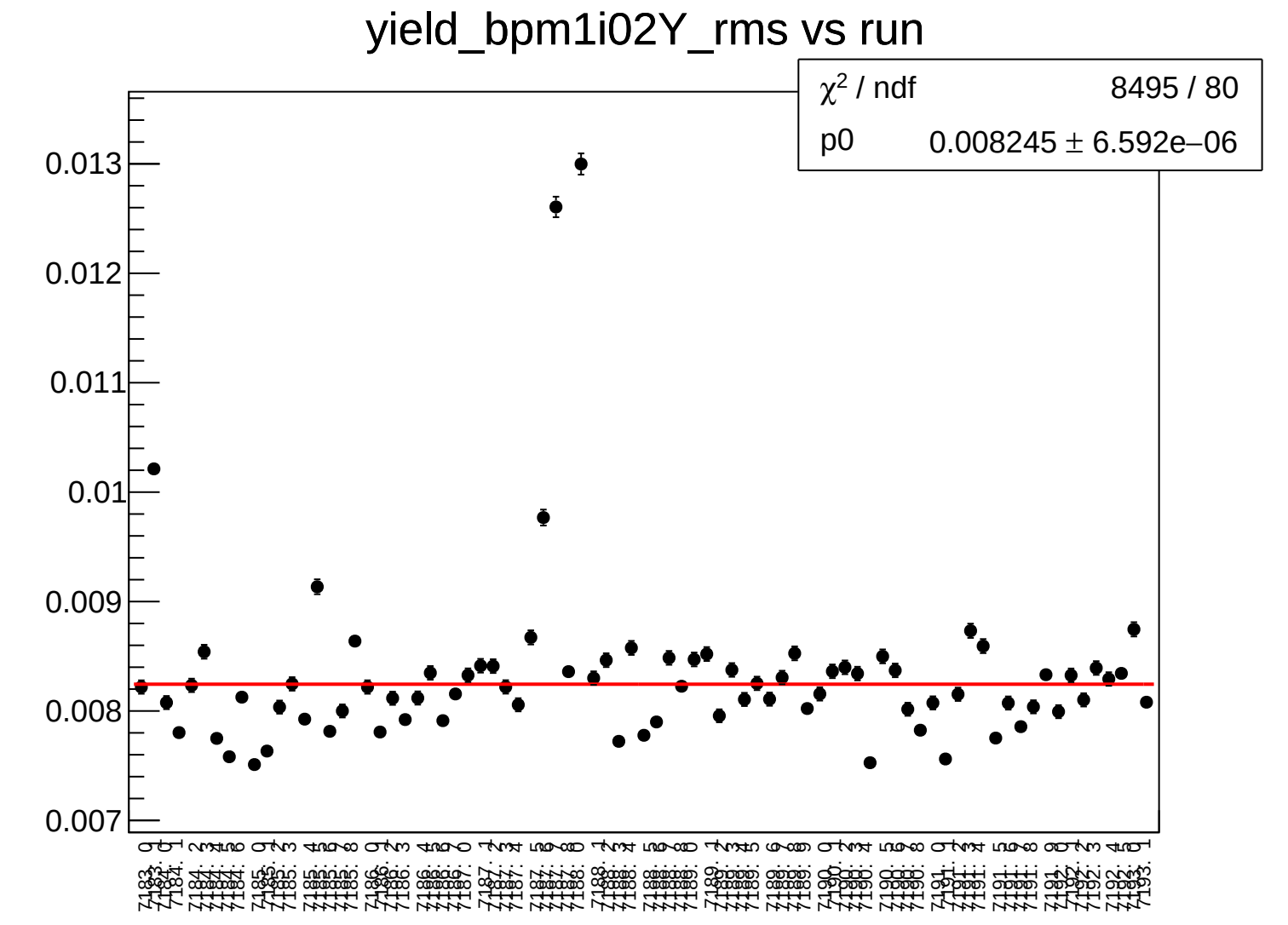


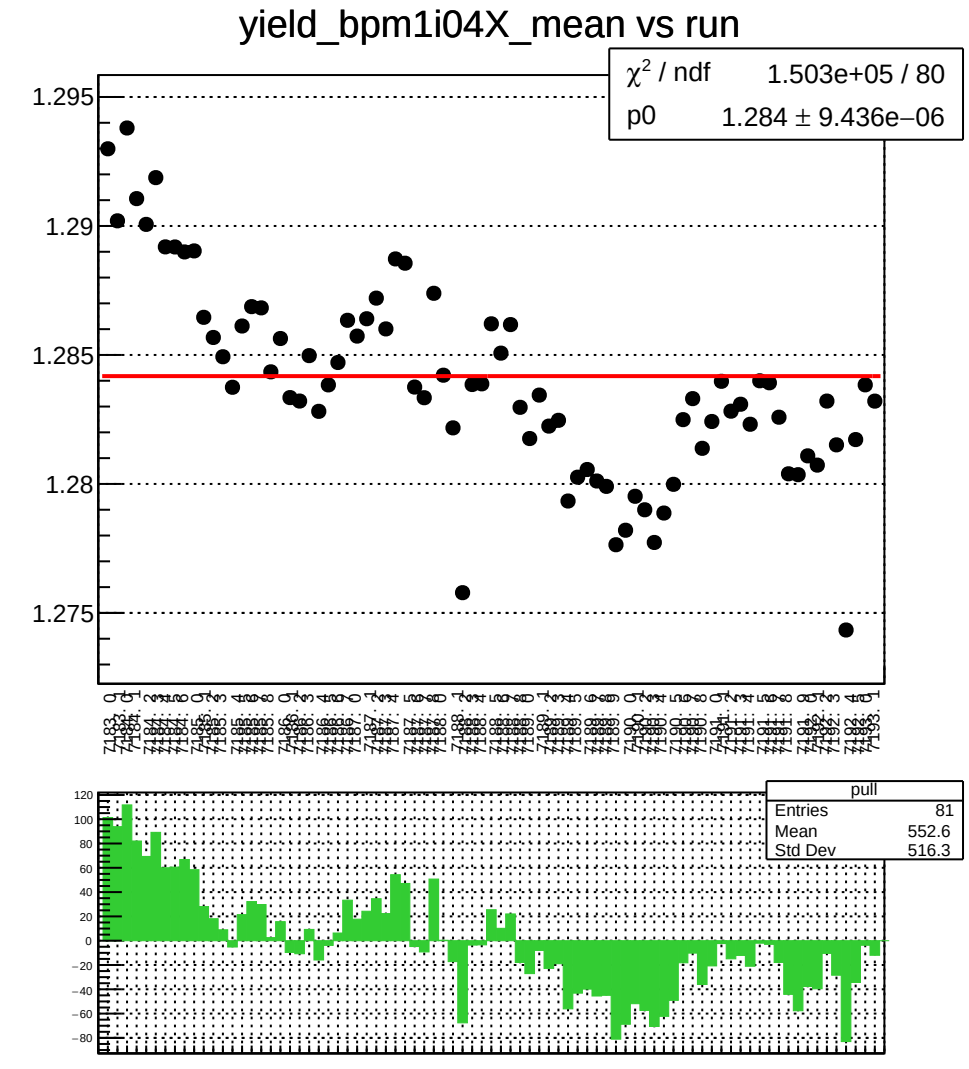

yield_bpm1i02X_mean vs run
χ² / ndf 4.876e+05 / 80
p0 −2.165 ± 1.087e−05
−2.15
−2.155
−2.16
−2.165
−2.17
−2.175
−2.18
pull
Entries 81
Mean 1911
Std Dev 1872
150
100
50
0
−50
−100
−150

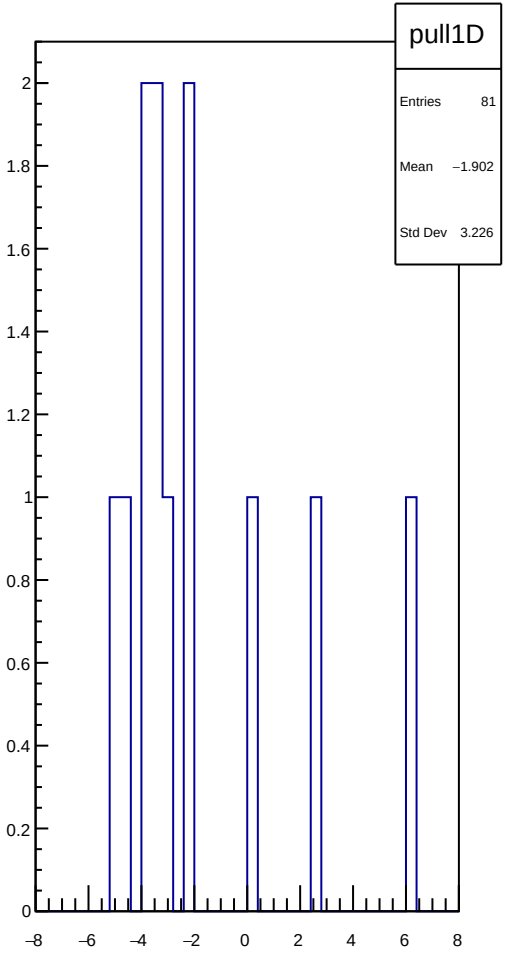

pull1D
Entries 81
Mean 1.501
Std Dev 4.443
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

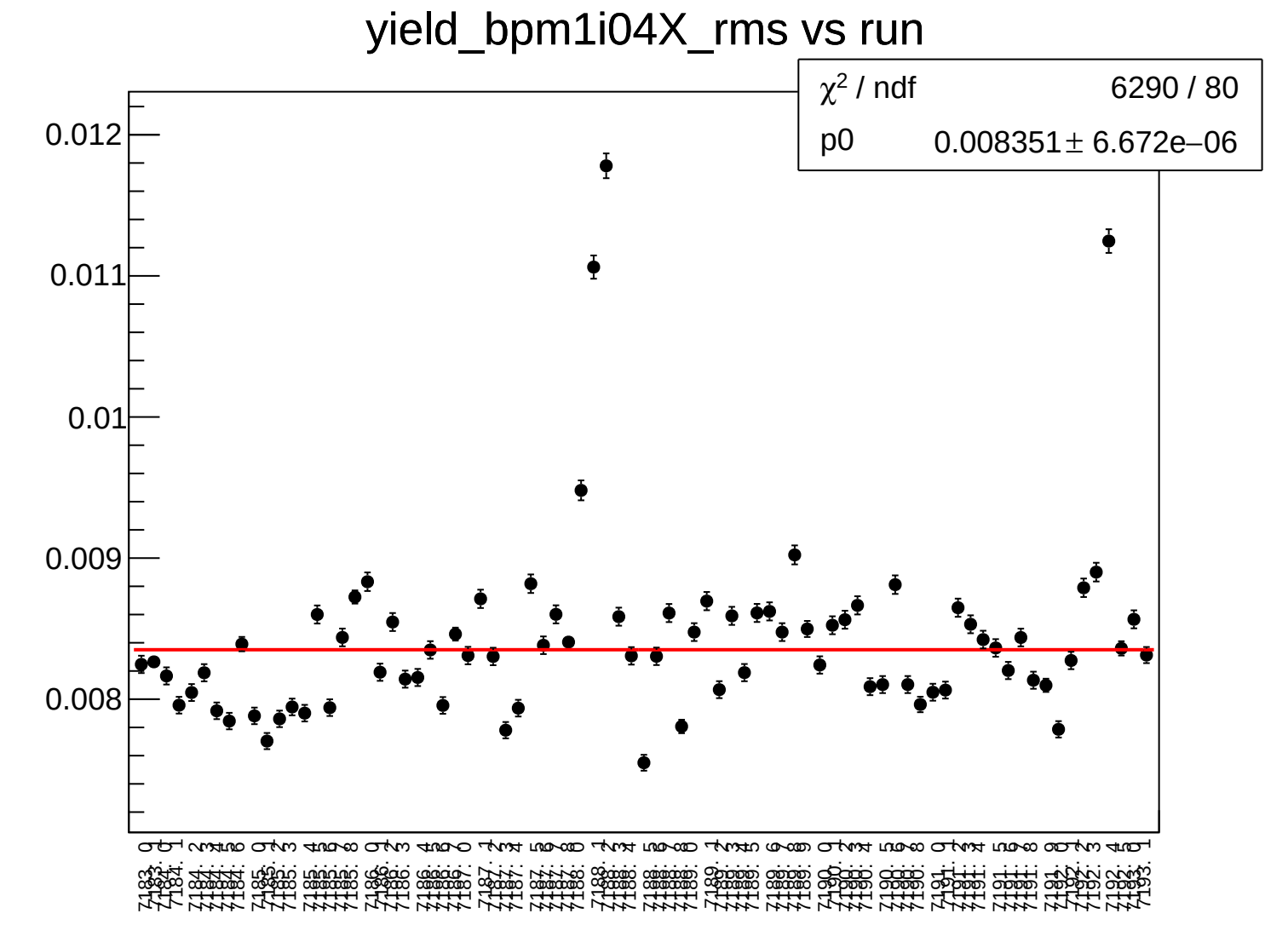

yield_bpm1i02X_rms vs run
χ² / ndf 3552 / 80
p0 0.009628 ± 7.686e−06
0.0125
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009
0.0085

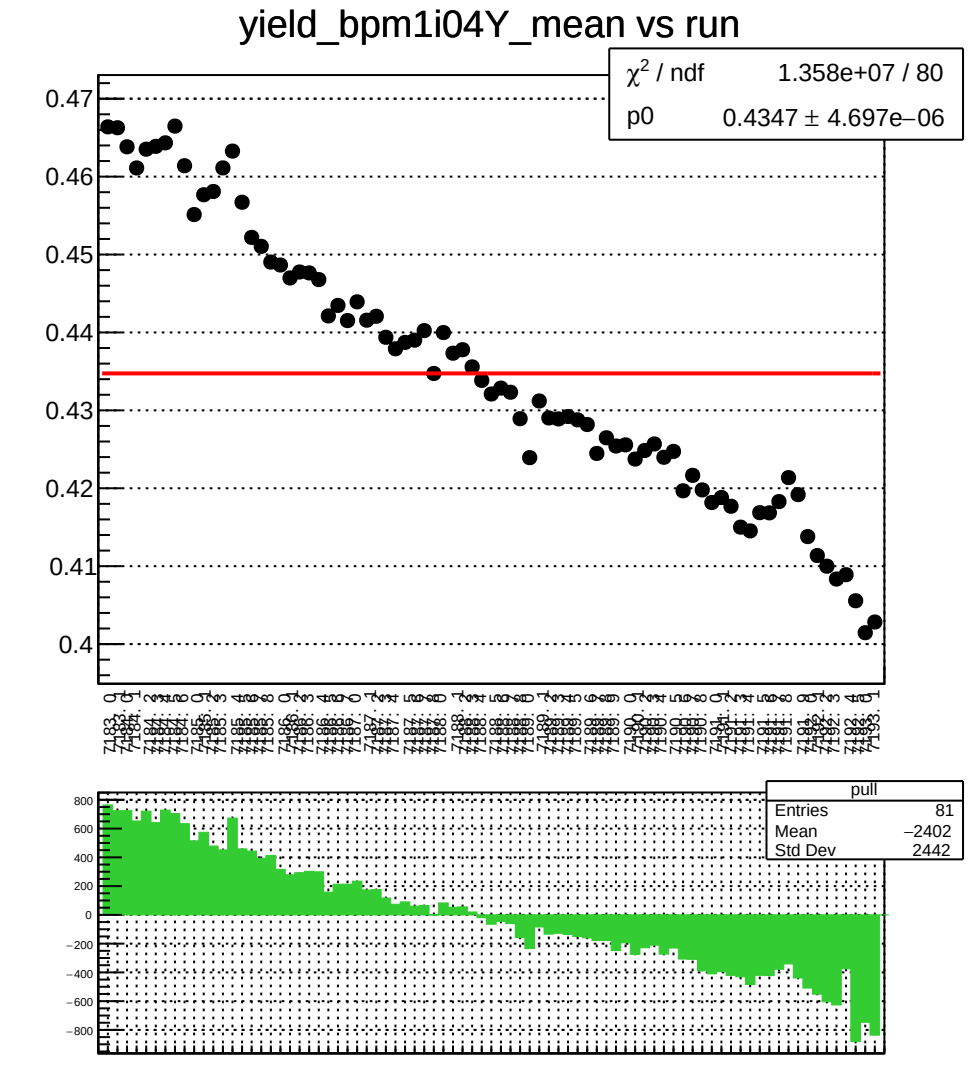

yield_bpm1i02Y_mean vs run
χ² / ndf 1.329e+07 / 80
p0 −1.017 ± 9.323e−06
−0.96
−0.98
−1
−1.02
−1.04
−1.06
−1.08
pull
Entries 81
Mean 3784
Std Dev 3745
600
400
200
0
−200
−400
−600
−800
pull1D
Entries 81
Mean 3.116
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

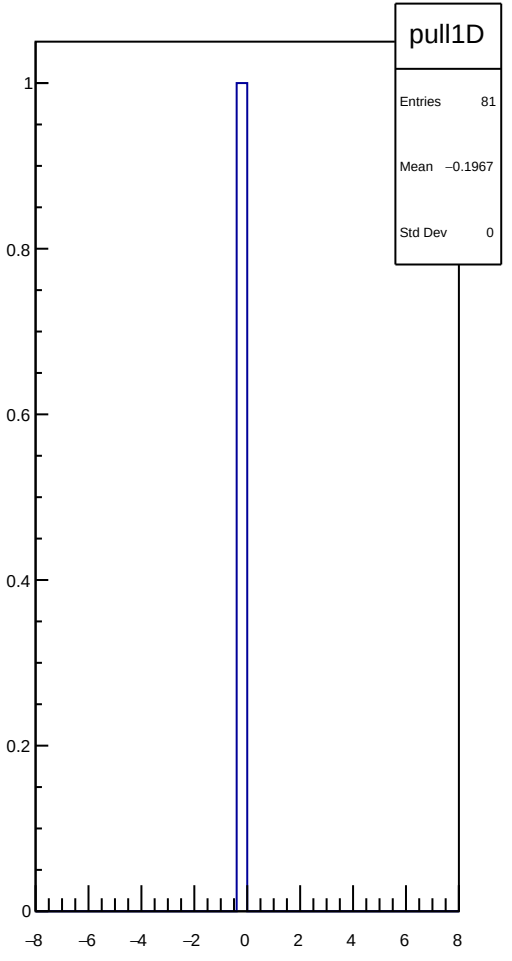

yield_bpm1i02Y_rms vs run
χ² / ndf 8495 / 80
p0 0.008245 ± 6.592e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007


yield_bpm1i04X_mean vs run
χ² / ndf 1.503e+05 / 80
p0 1.284 ± 9.436e−06
1.295
1.29
1.285
1.28
1.275
pull
Entries 81
Mean 552.6
Std Dev 516.3
120
100
80
60
40
20
0
−20
−40
−60
−80

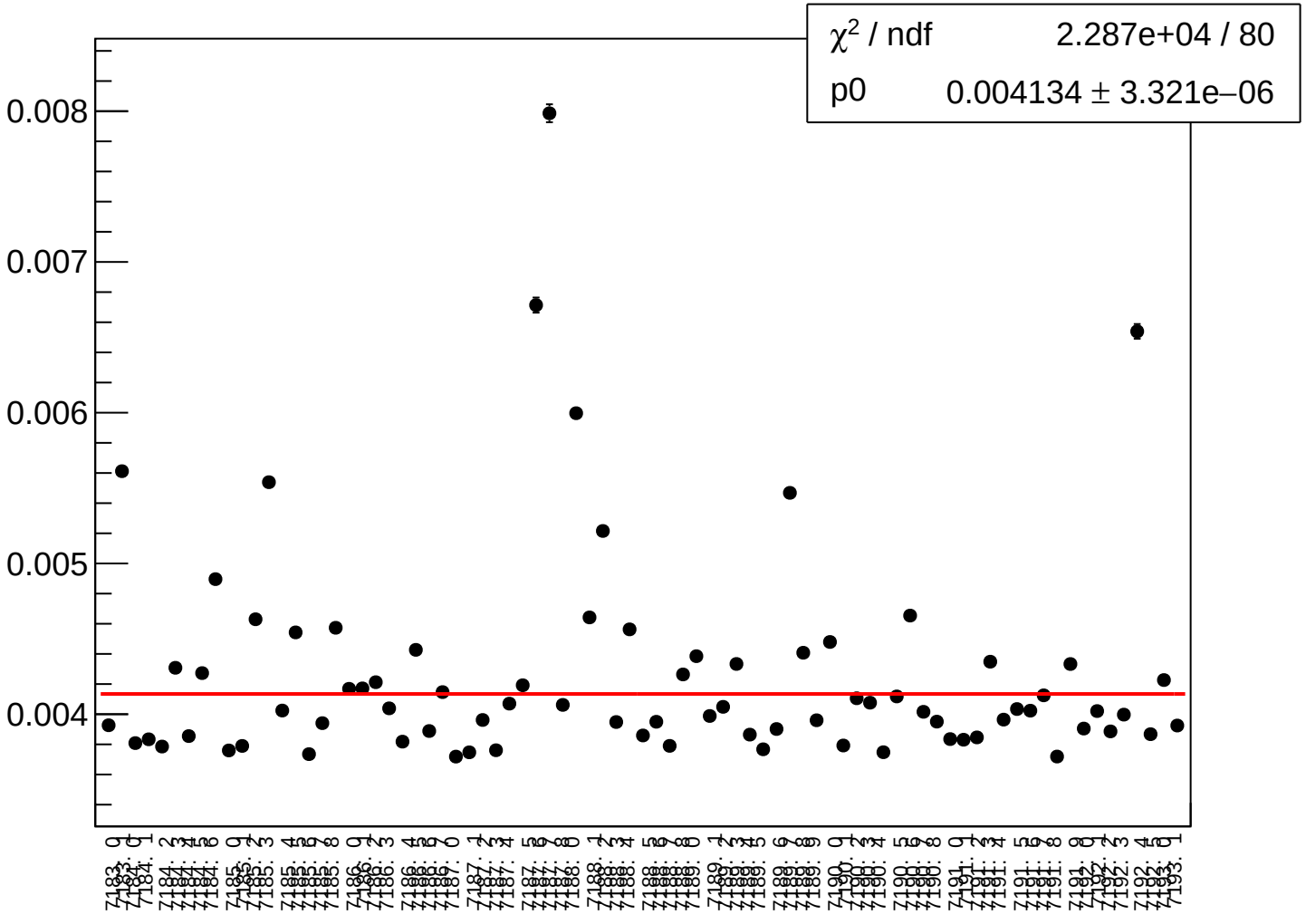

pull1D
Entries 81
Mean −1.902
Std Dev 3.226
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

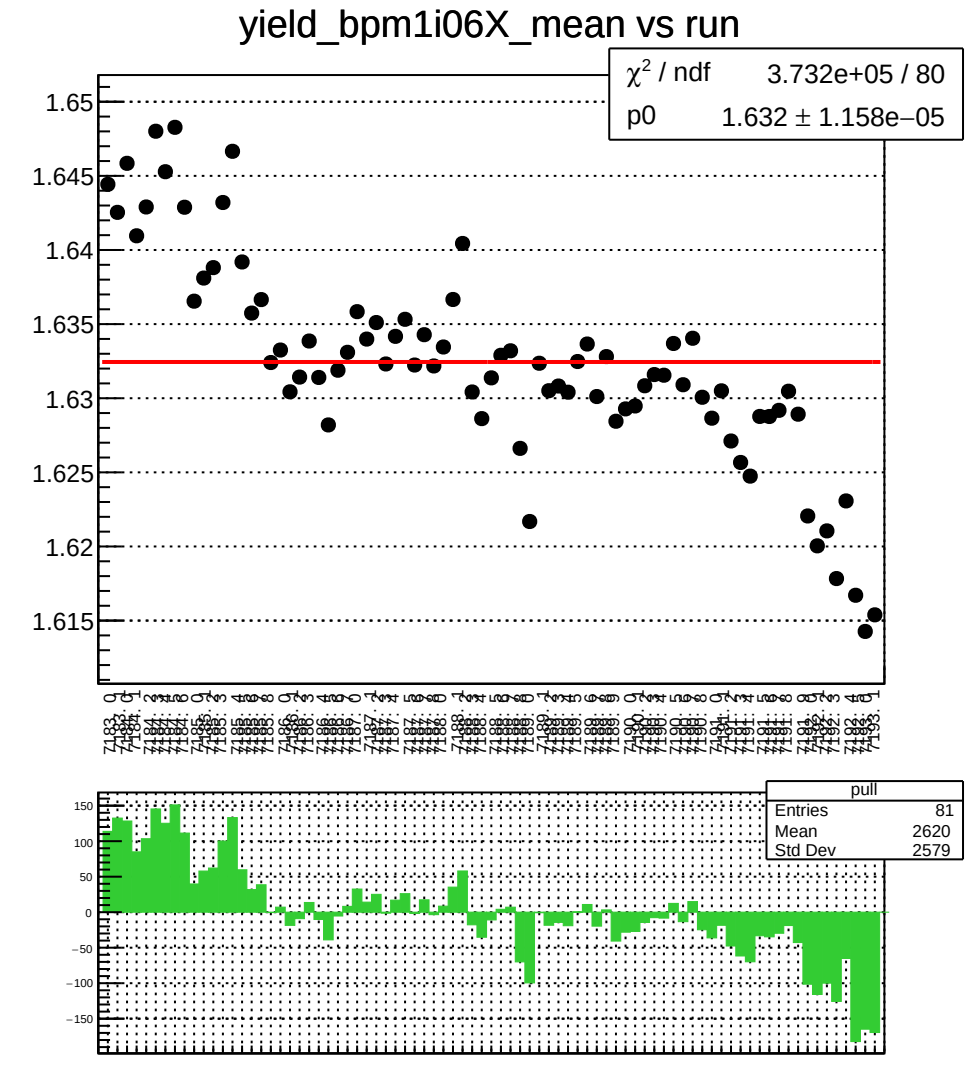

yield_bpm1i04X_rms vs run
χ² / ndf 6290 / 80
p0 0.008351 ± 6.672e−06
0.012
0.011
0.01
0.009
0.008

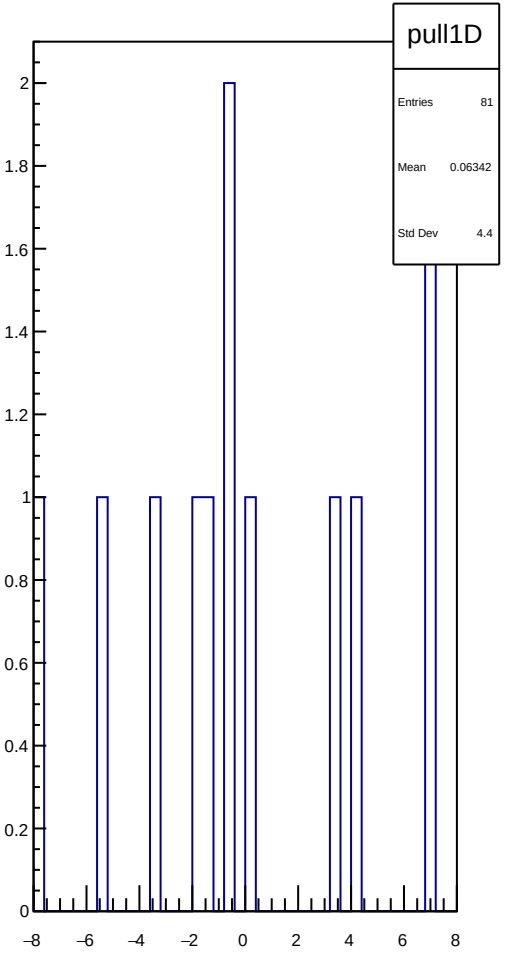

yield_bpm1i04Y_mean vs run
χ² / ndf 1.358e+07 / 80
p0 0.4347 ± 4.697e−06
0.47
0.46
0.45
0.44
0.43
0.42
0.41
0.4
pull
Entries 81
Mean −2402
Std Dev 2442
800
600
400
200
0
−200
−400
−600
−800

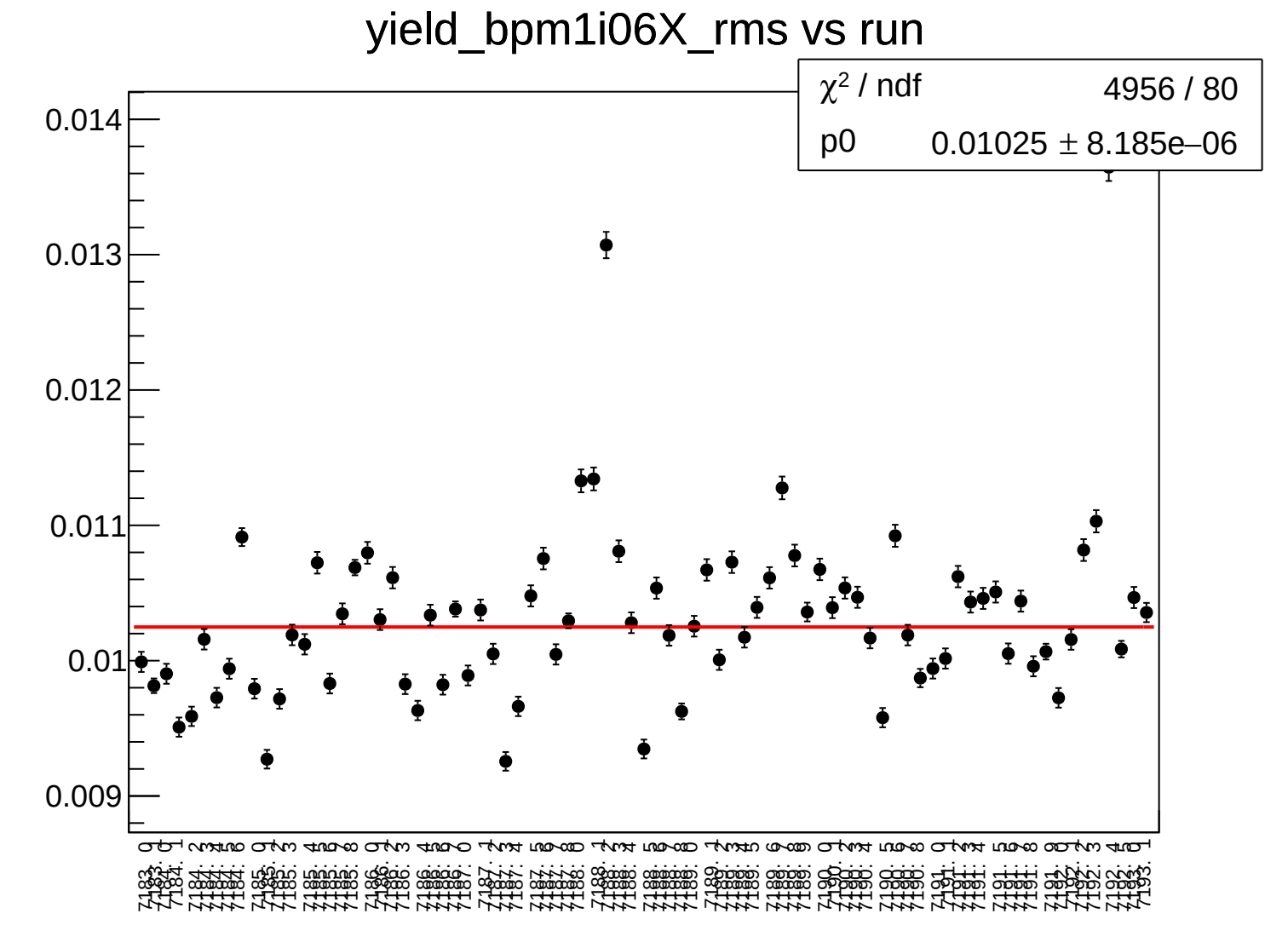

pull1D
Entries 81
Mean −0.1967
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

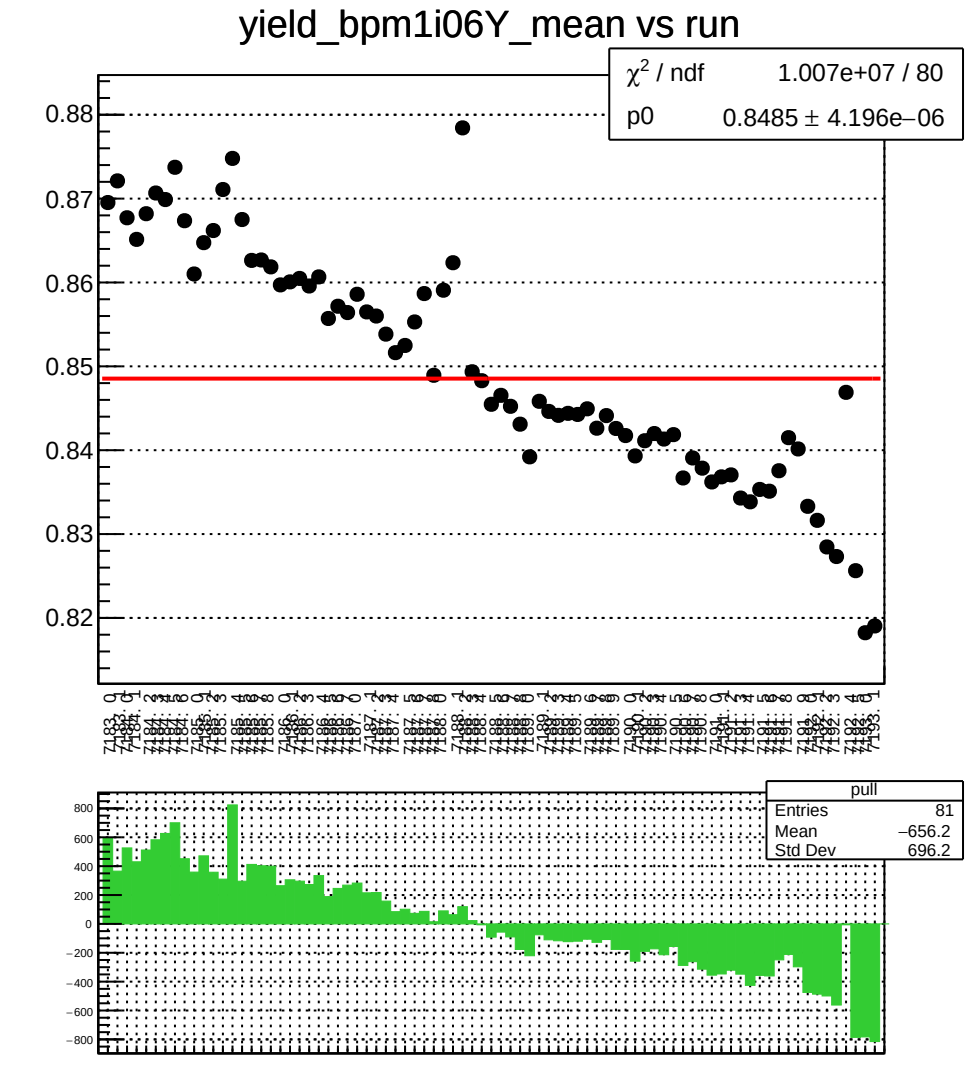
yield_bpm1i04Y_rms vs run

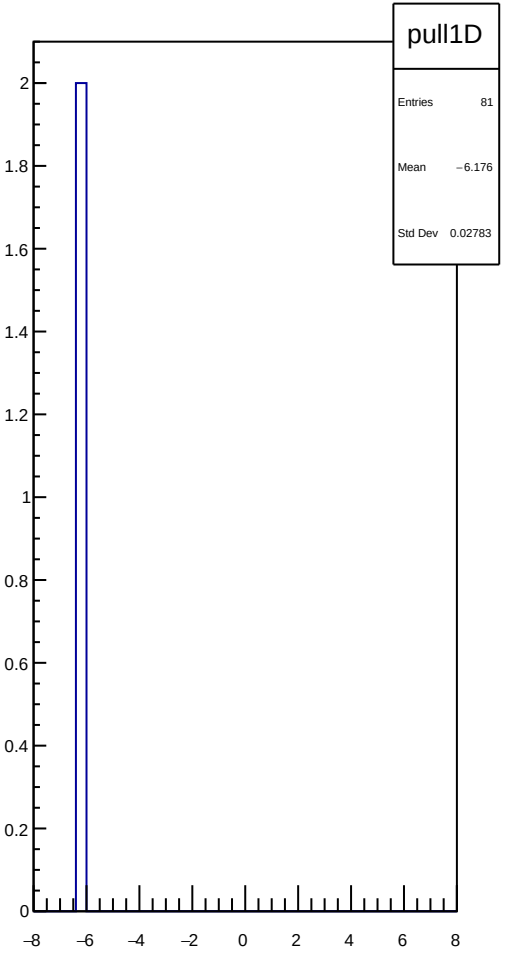


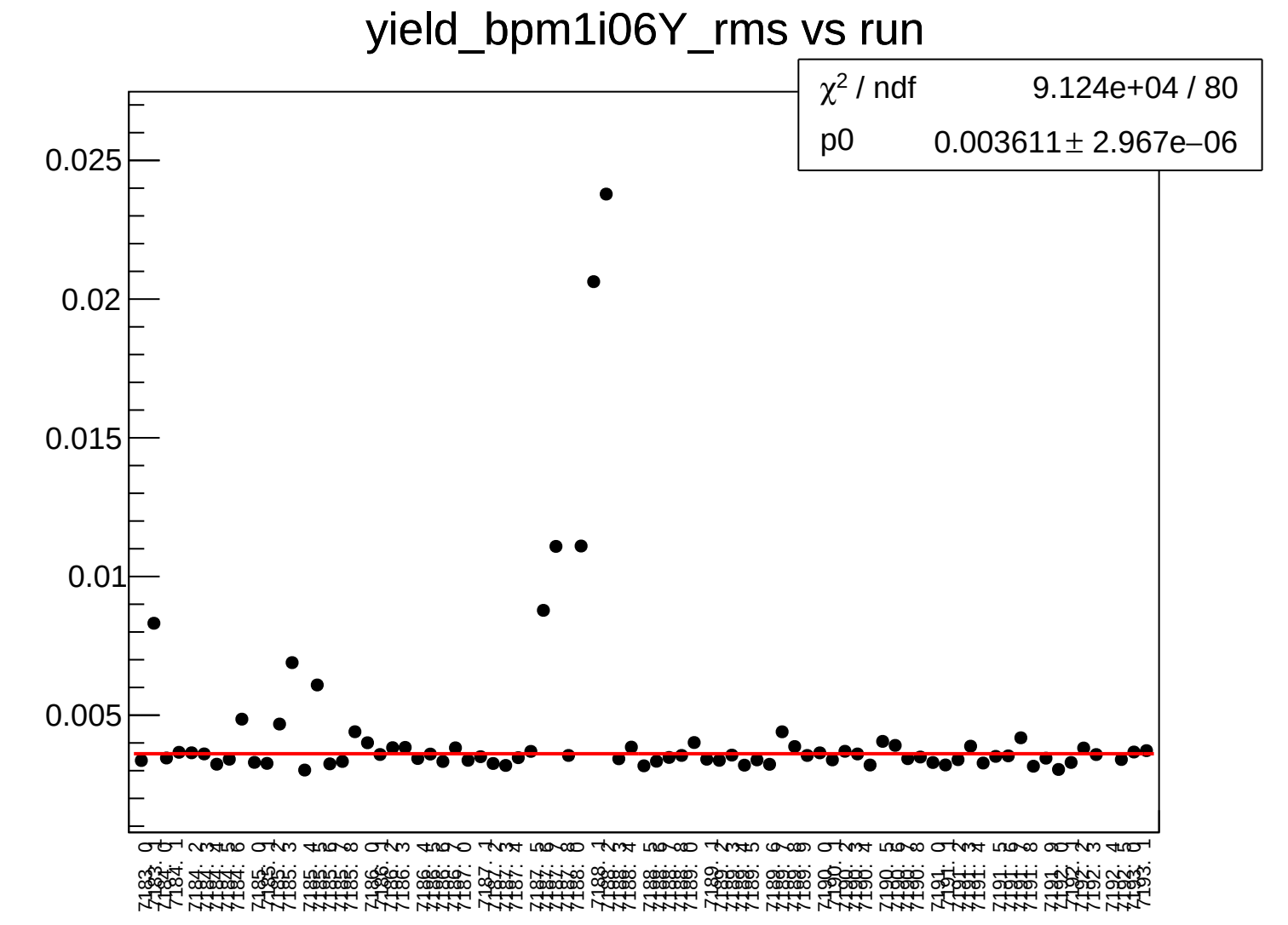

yield_bpm1i06X_mean vs run
χ² / ndf 3.732e+05 / 80
p0 1.632 ± 1.158e−05
1.65
1.645
1.64
1.635
1.63
1.625
1.62
1.615
pull
Entries 81
Mean 2620
Std Dev 2579
150
100
50
0
−50
−100
−150

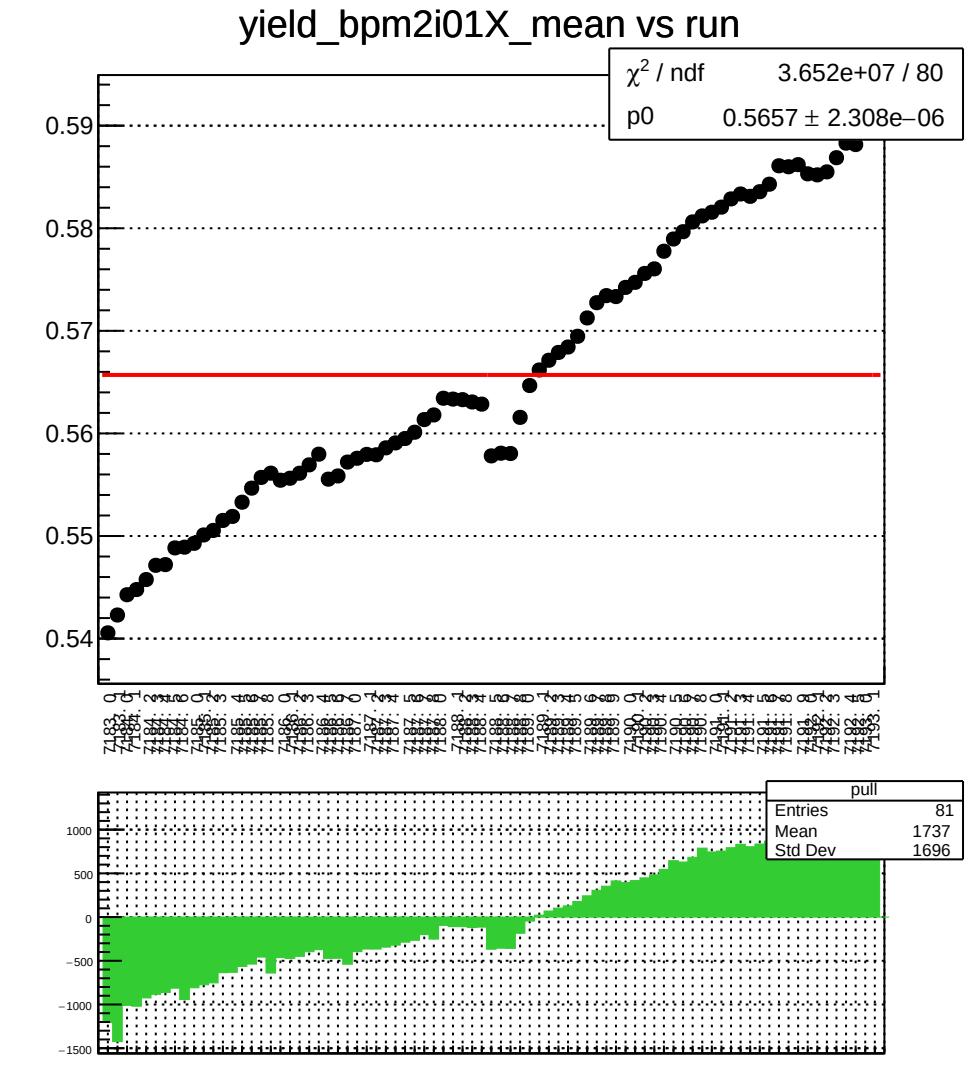

pull1D
Entries 81
Mean 0.06342
Std Dev 4.4
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

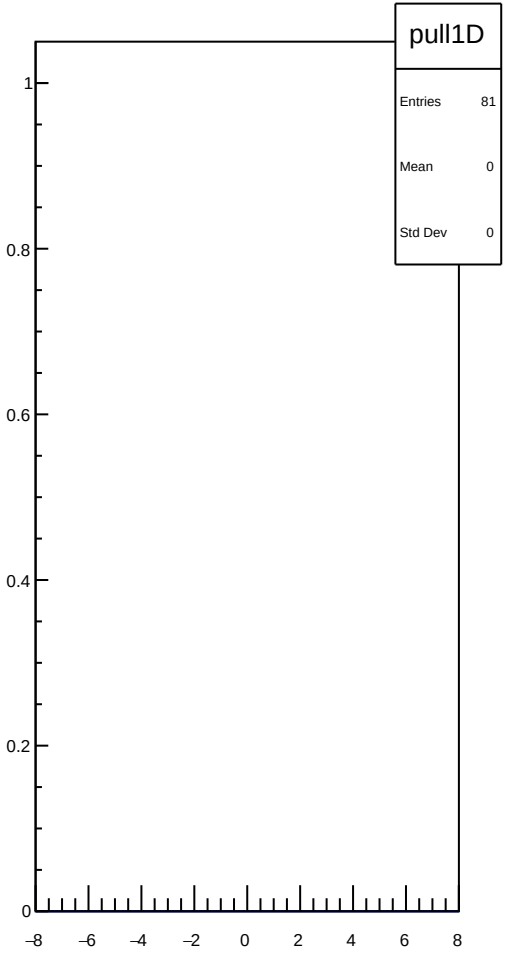

yield_bpm1i06X_rms vs run
χ² / ndf 4956 / 80
p0 0.01025 ± 8.185e–06
0.014
0.013
0.012
0.011
0.01
0.009

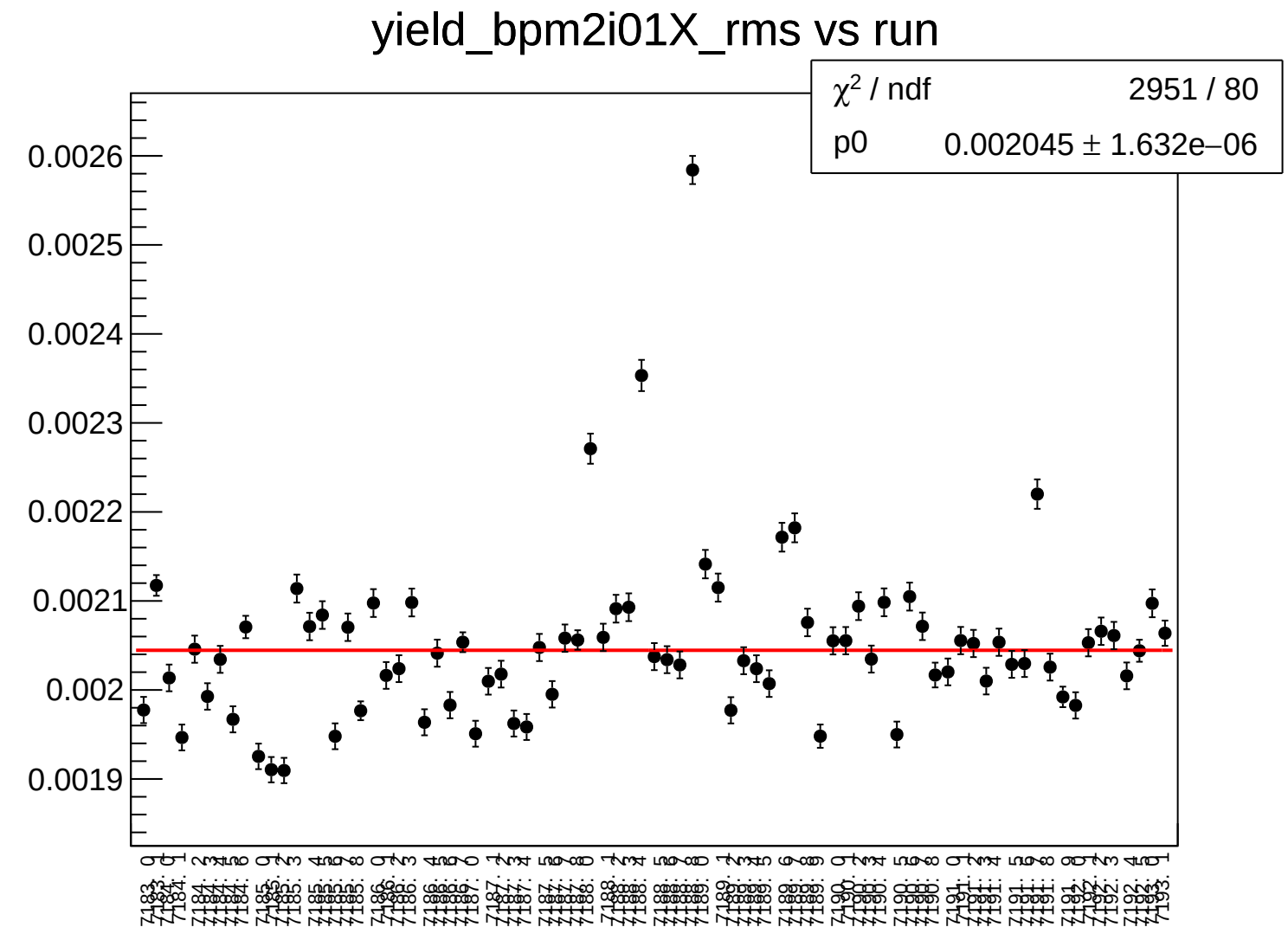

yield_bpm1i06Y_mean vs run
χ² / ndf 1.007e+07 / 80
p0 0.8485 ± 4.196e−06
0.88
0.87
0.86
0.85
0.84
0.83
0.82
pull
Entries 81
Mean −656.2
Std Dev 696.2
800
600
400
200
0
−200
−400
−600
−800

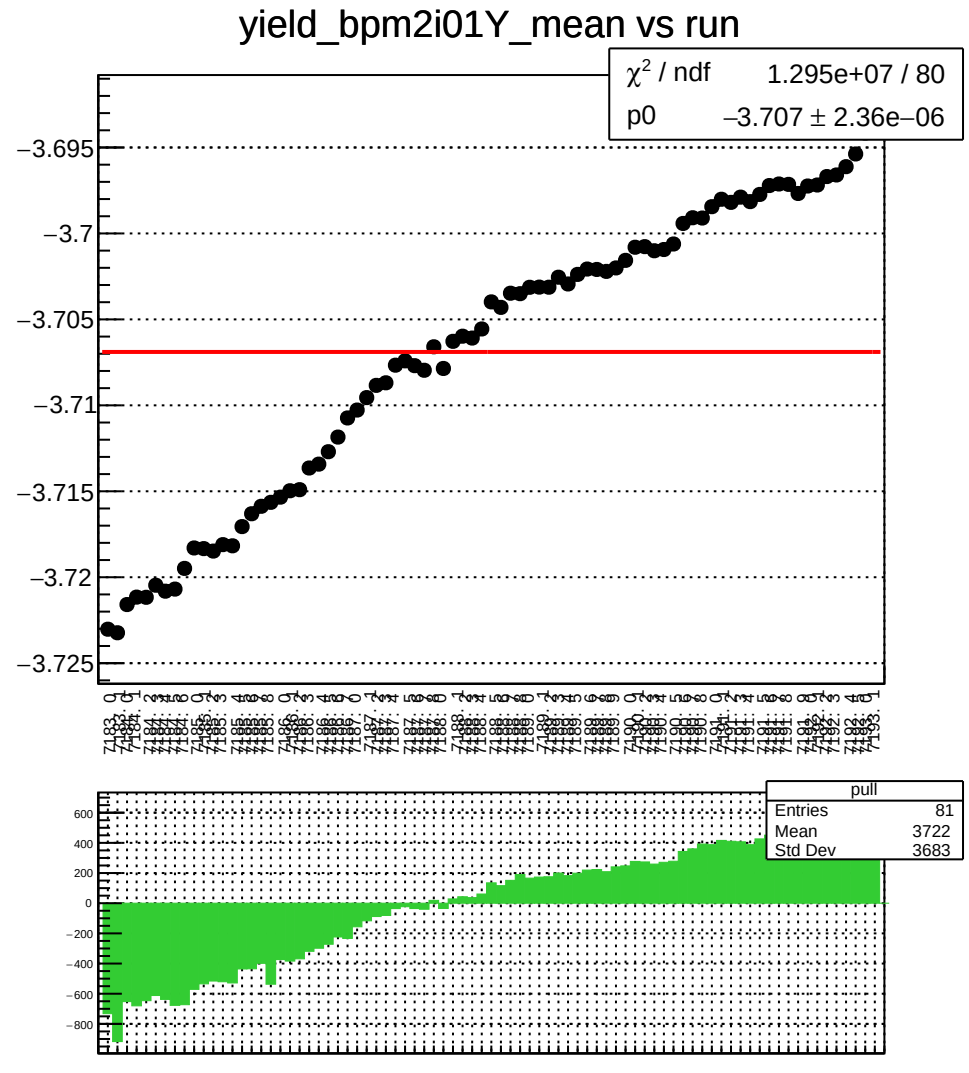

pull1D
Entries 81
Mean −6.176
Std Dev 0.02783
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

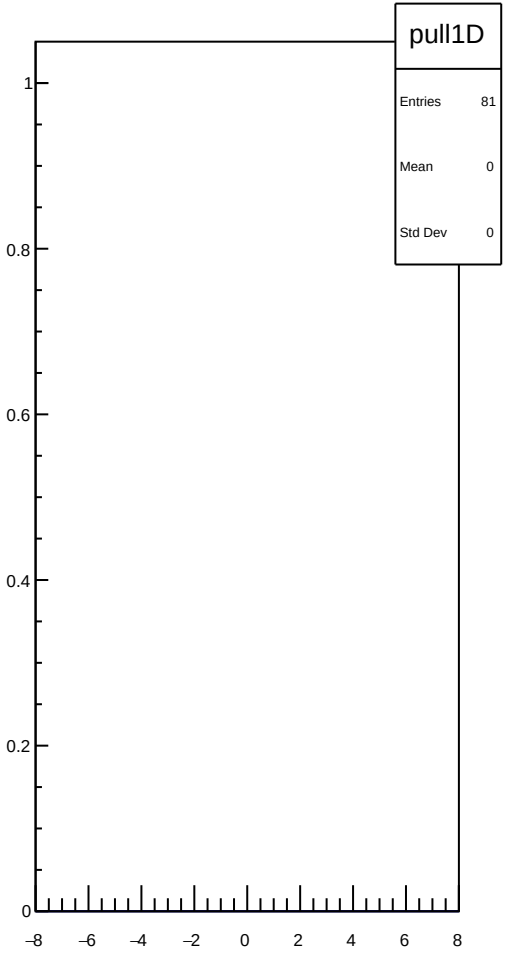

yield_bpm1i06Y_rms vs run
χ^2 / ndf 9.124e+04 / 80
p0 0.003611 ± 2.967e−06
0.025
0.02
0.015
0.01
0.005

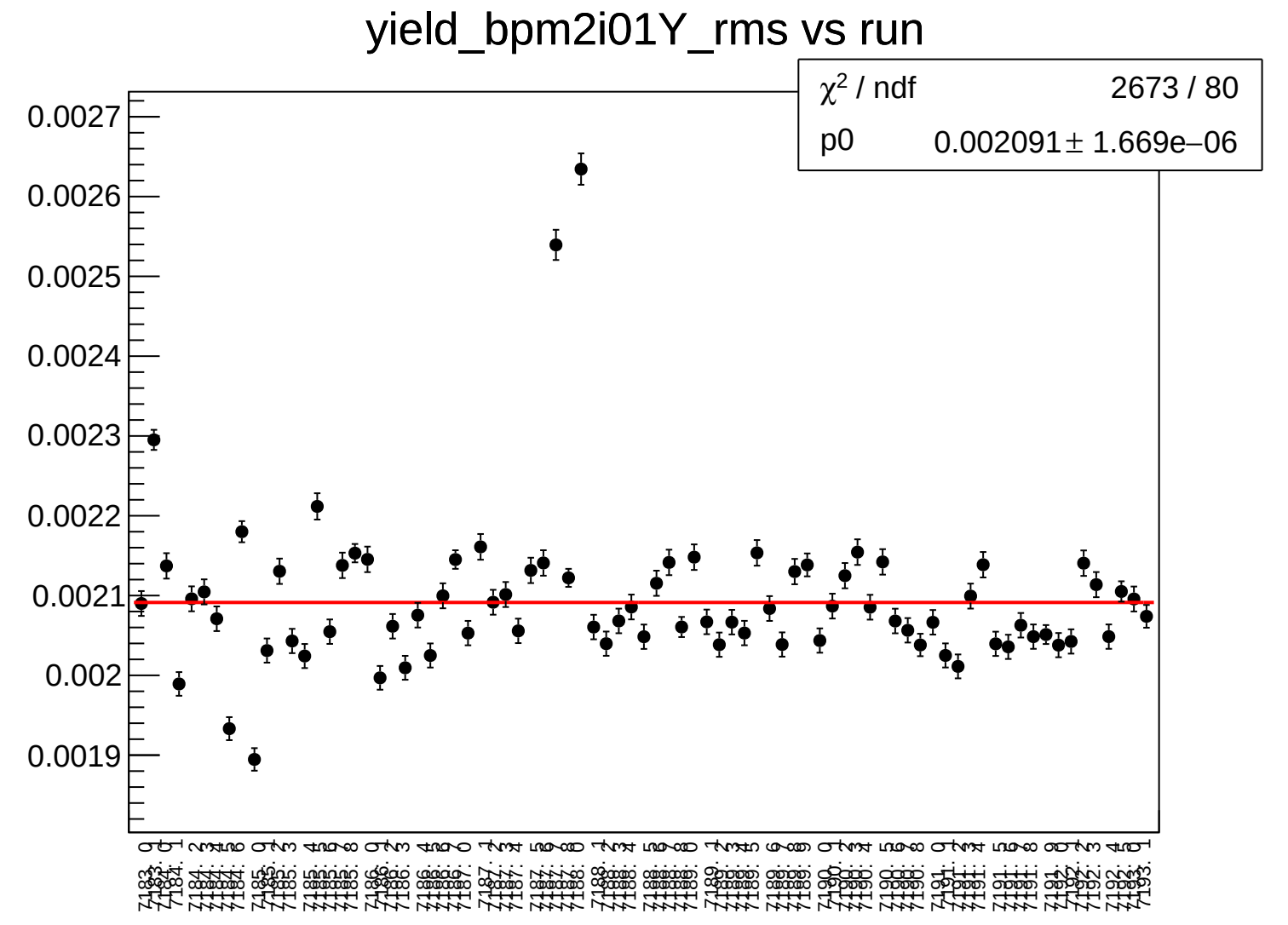

yield_bpm2i01X_mean vs run
χ² / ndf 3.652e+07 / 80
p0 0.5657 ± 2.308e−06
0.59
0.58
0.57
0.56
0.55
0.54
pull
Entries 81
Mean 1737
Std Dev 1696
1000
500
0
−500
−1000
−1500

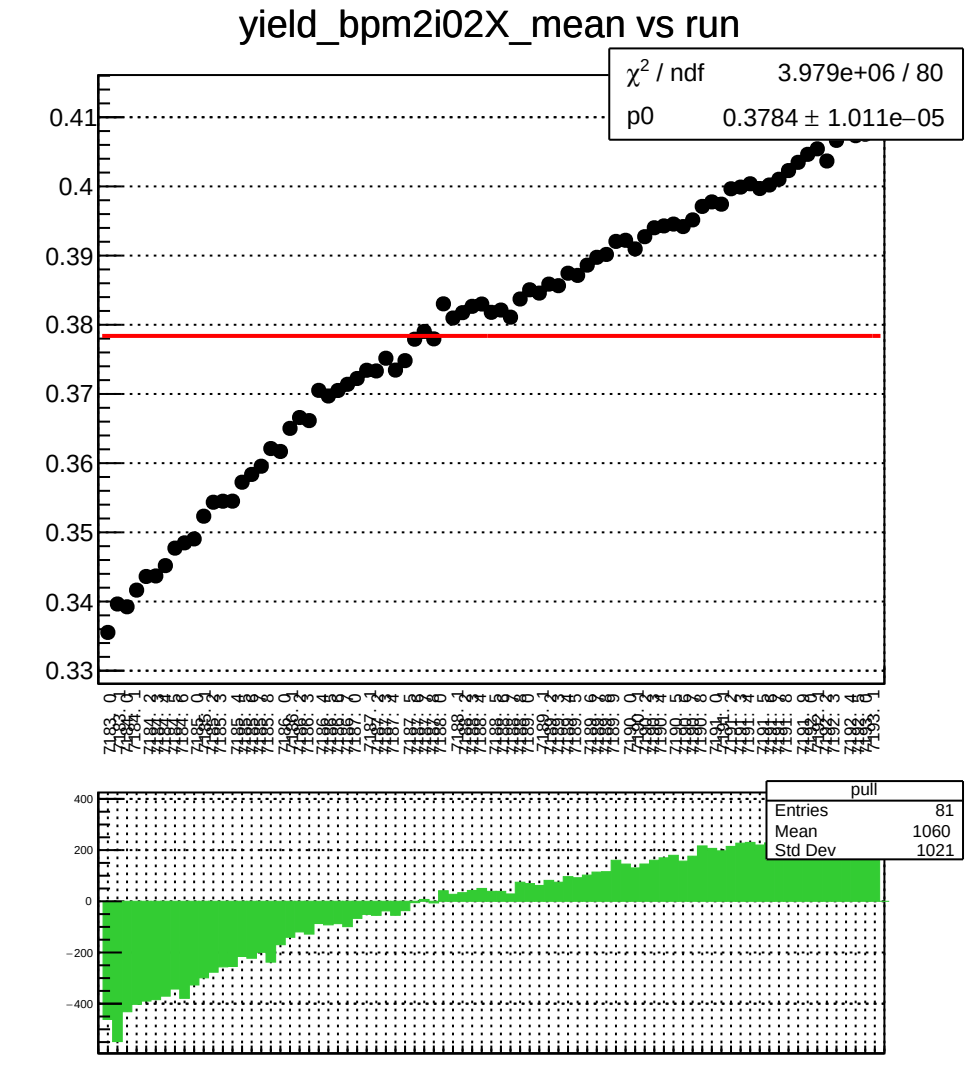

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

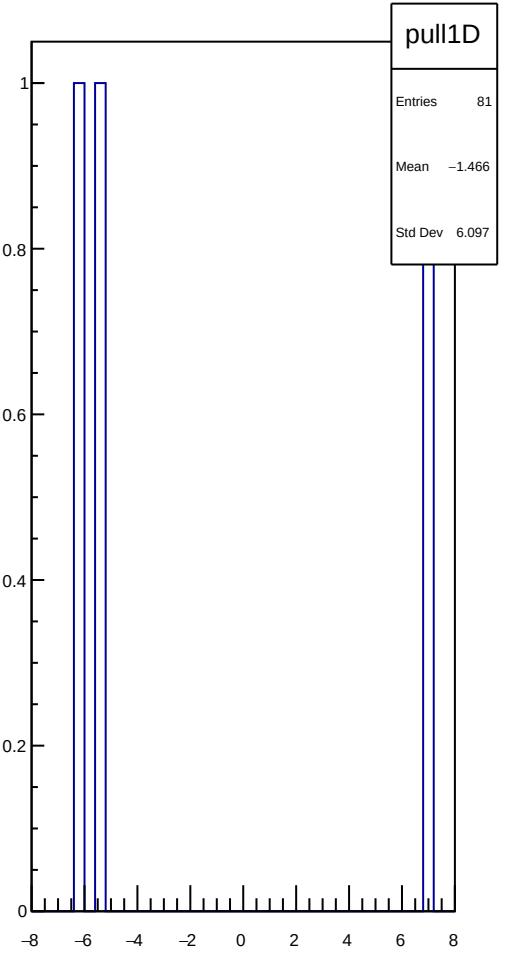

yield_bpm2i01X_rms vs run
χ² / ndf 2951 / 80
p0 0.002045 ± 1.632e−06
0.0026
0.0025
0.0024
0.0023
0.0022
0.0021
0.002
0.0019

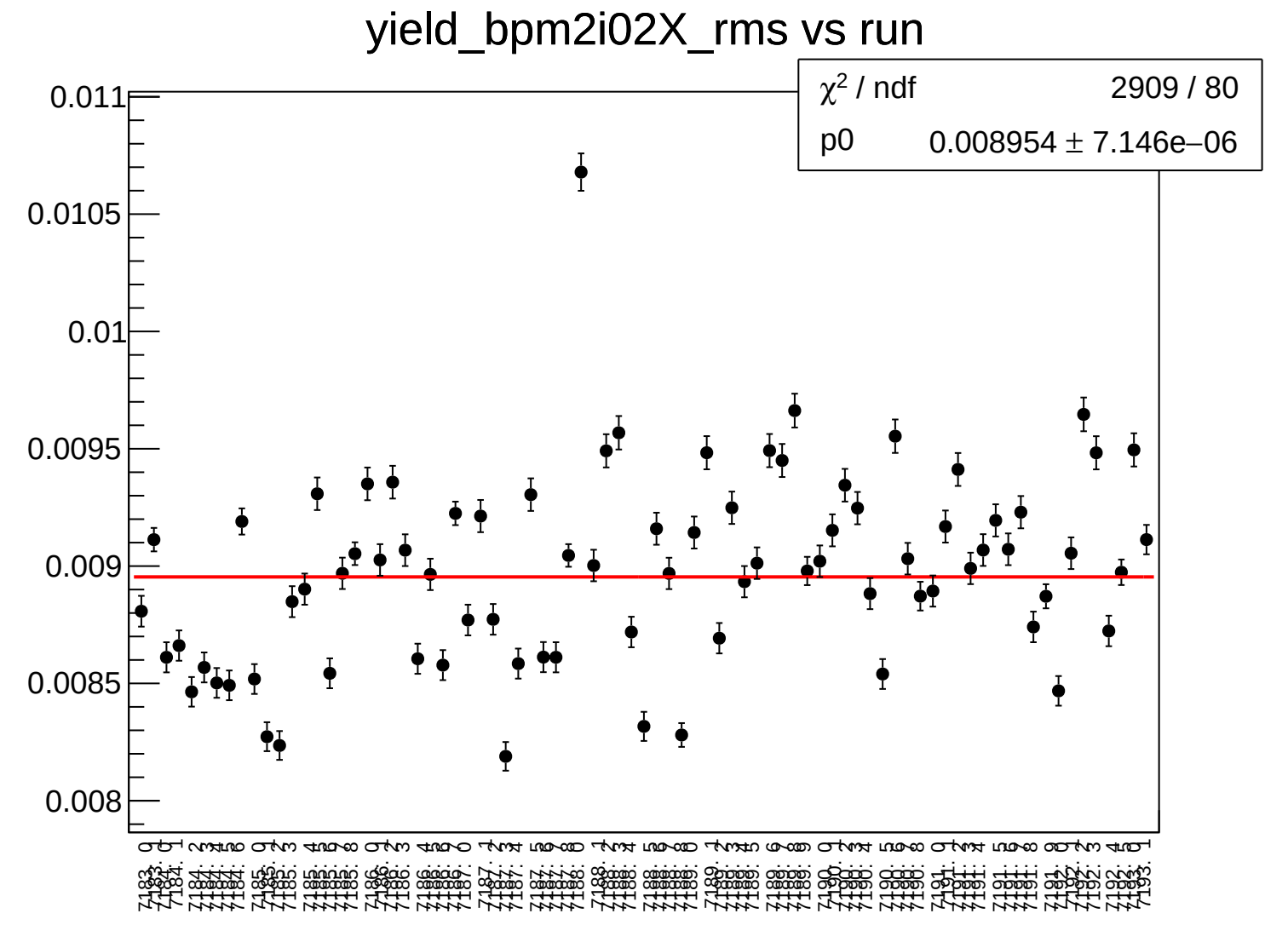

yield_bpm2i01Y_mean vs run
χ² / ndf 1.295e+07 / 80
p0 −3.707 ± 2.36e−06
−3.695
−3.7
−3.705
−3.71
−3.715
−3.72
−3.725
pull
Entries 81
Mean 3722
Std Dev 3683
600
400
200
0
−200
−400
−600
−800

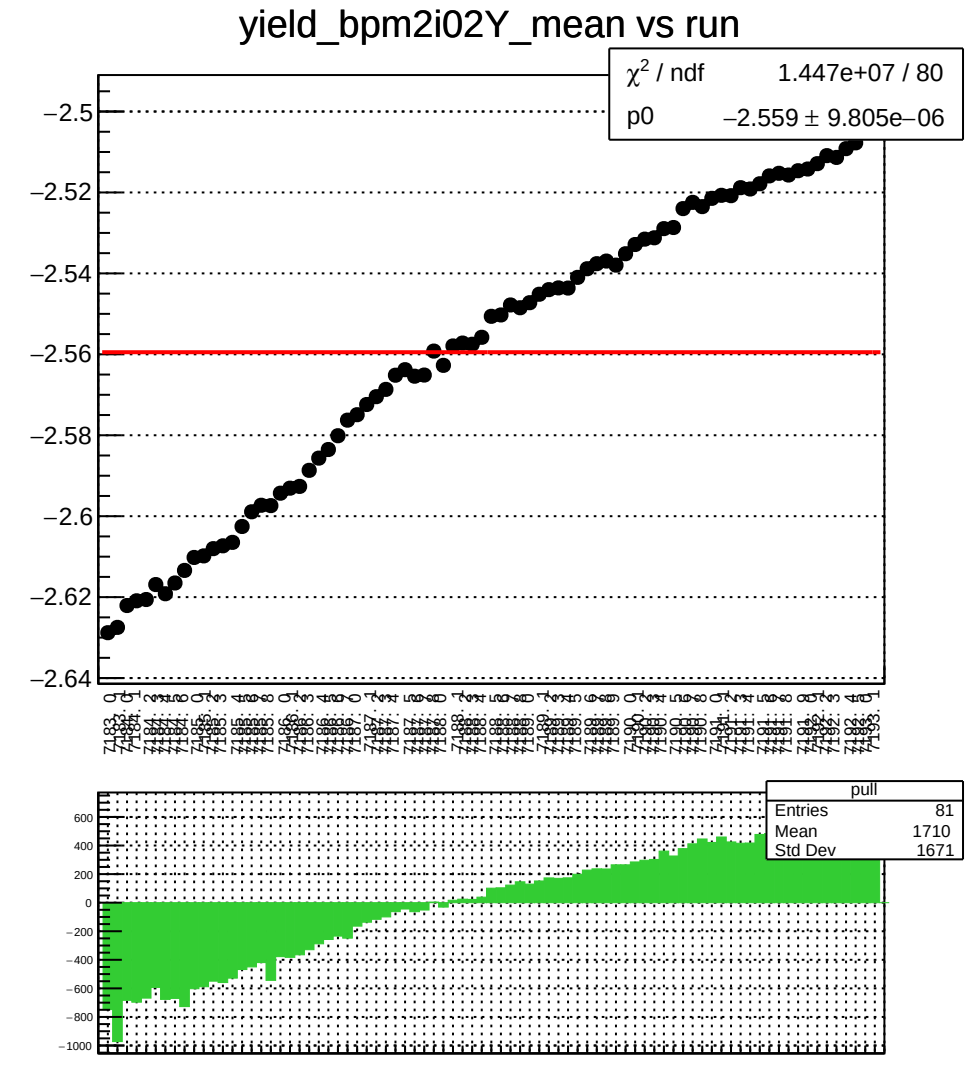

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

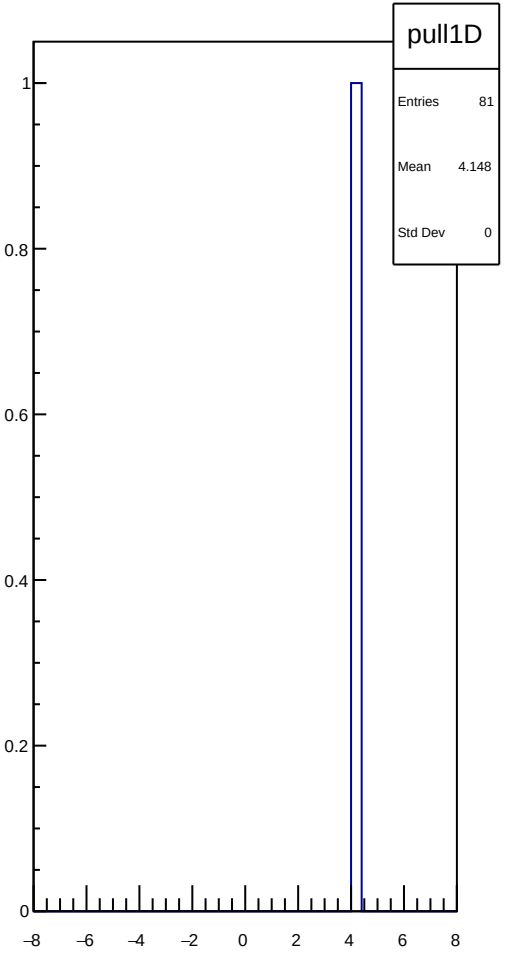

yield_bpm2i01Y_rms vs run
χ² / ndf 2673 / 80
p0 0.002091 ± 1.669e−06
0.0027
0.0026
0.0025
0.0024
0.0023
0.0022
0.0021
0.002
0.0019


yield_bpm2i02X_mean vs run
χ² / ndf 3.979e+06 / 80
p0 0.3784 ± 1.011e−05
pull
Entries 81
Mean 1060
Std Dev 1021

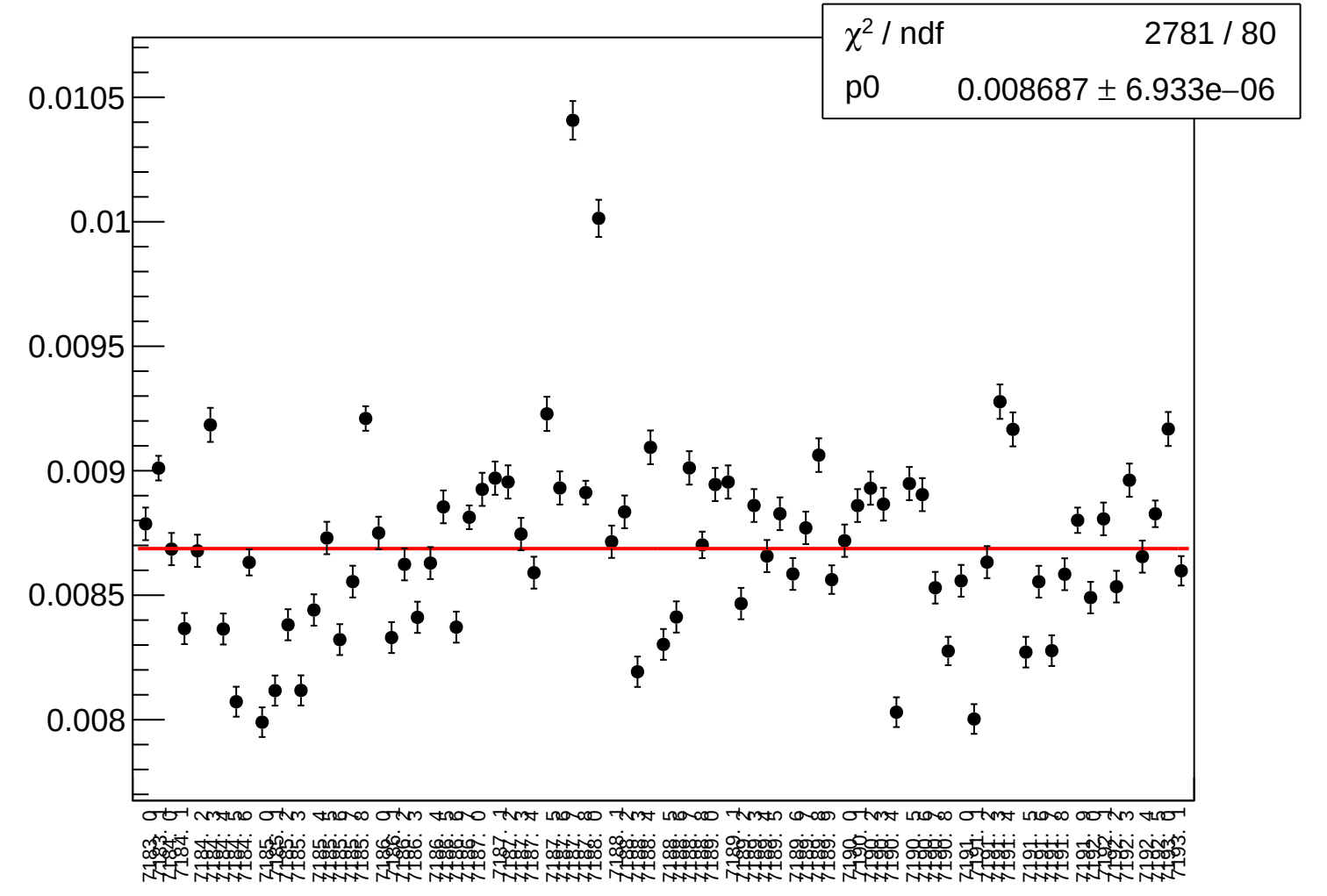

pull1D
Entries 81
Mean −1.466
Std Dev 6.097

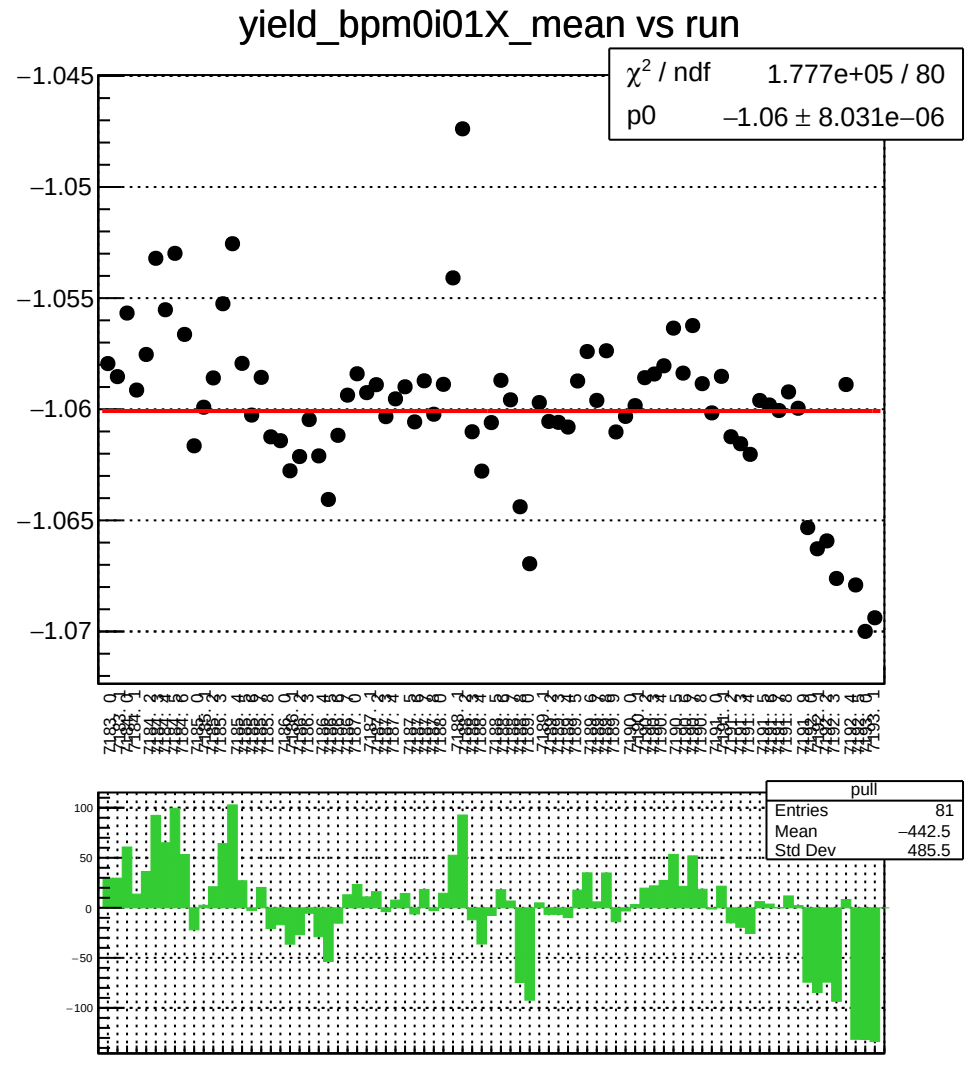

yield_bpm2i02X_rms vs run
χ² / ndf 2909 / 80
p0 0.008954 ± 7.146e−06
0.011
0.0105
0.01
0.0095
0.009
0.0085
0.008

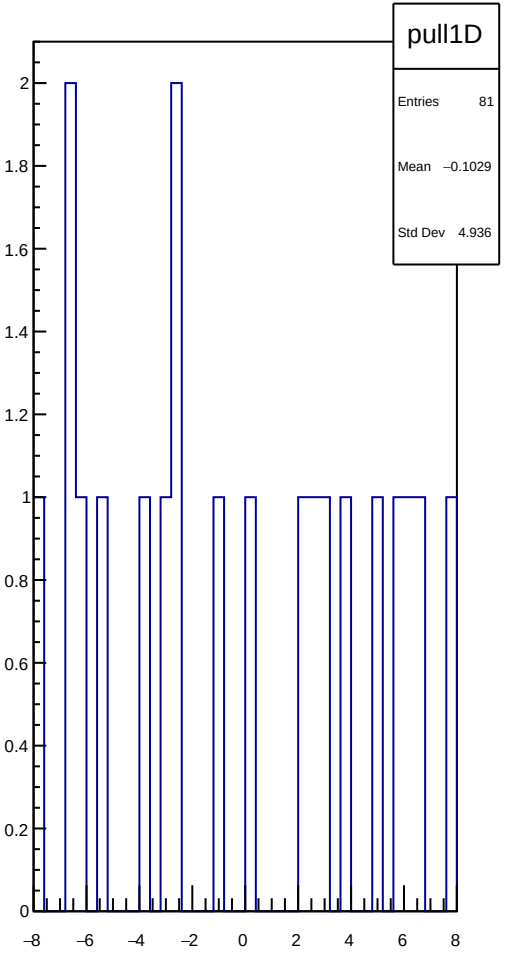

yield_bpm2i02Y_mean vs run
χ² / ndf 1.447e+07 / 80
p0 −2.559 ± 9.805e−06
pull
Entries 81
Mean 1710
Std Dev 1671

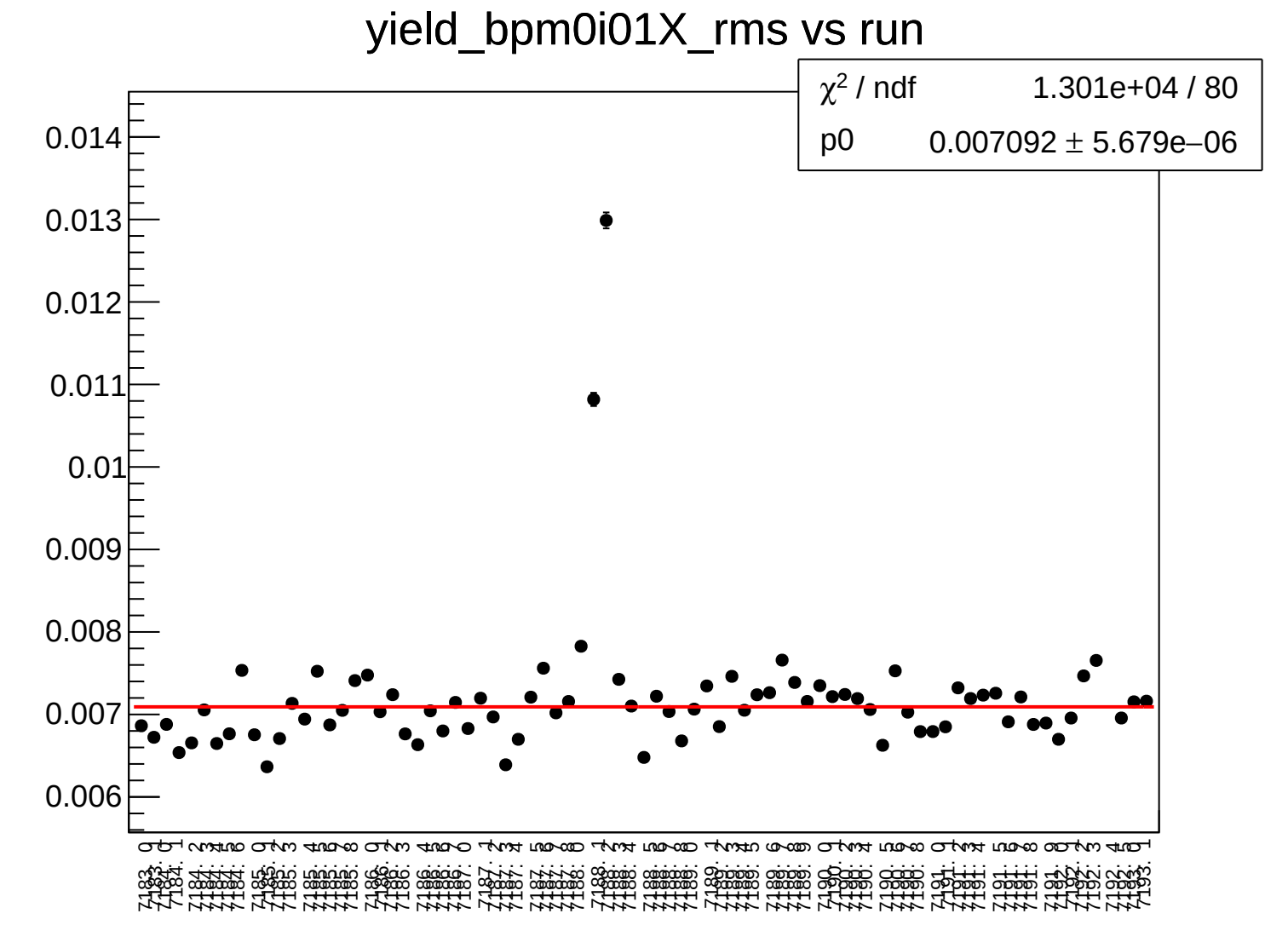

pull1D
Entries 81
Mean 4.148
Std Dev 0

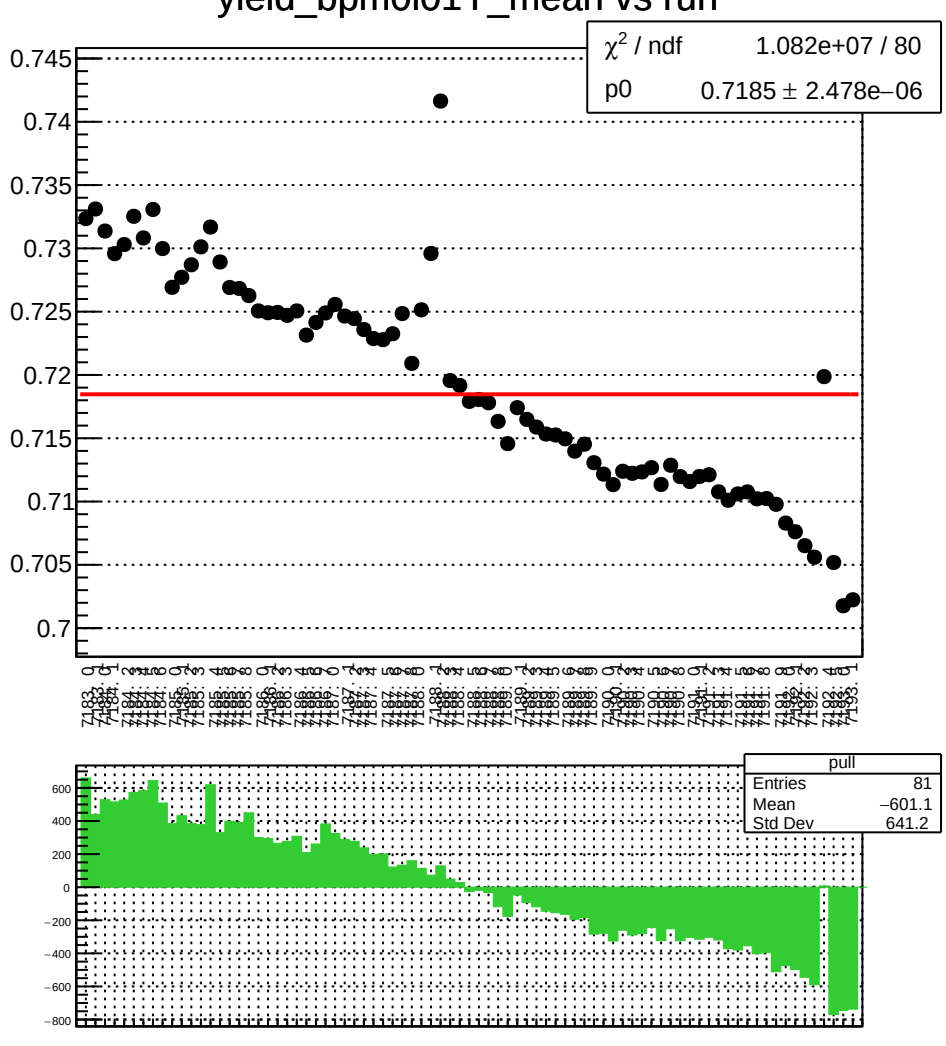
yield_bpm2i02Y_rms vs run

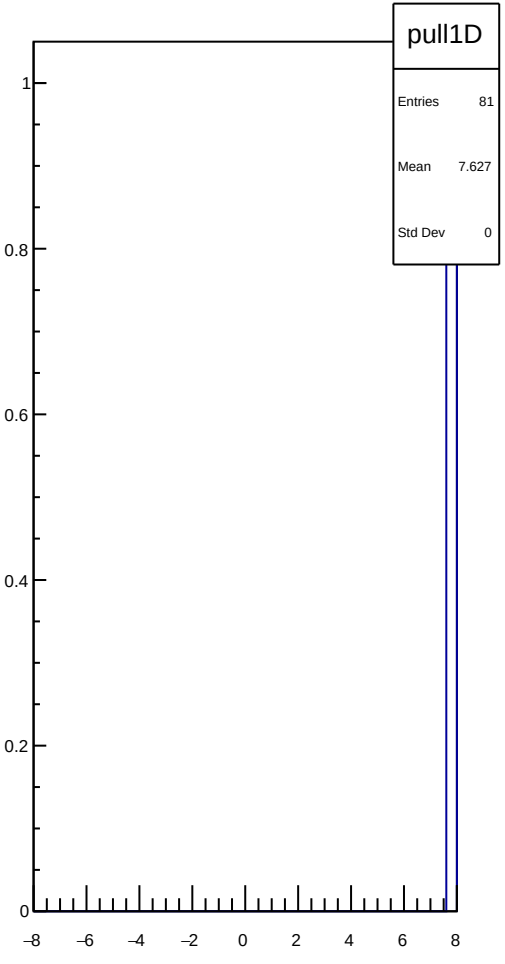


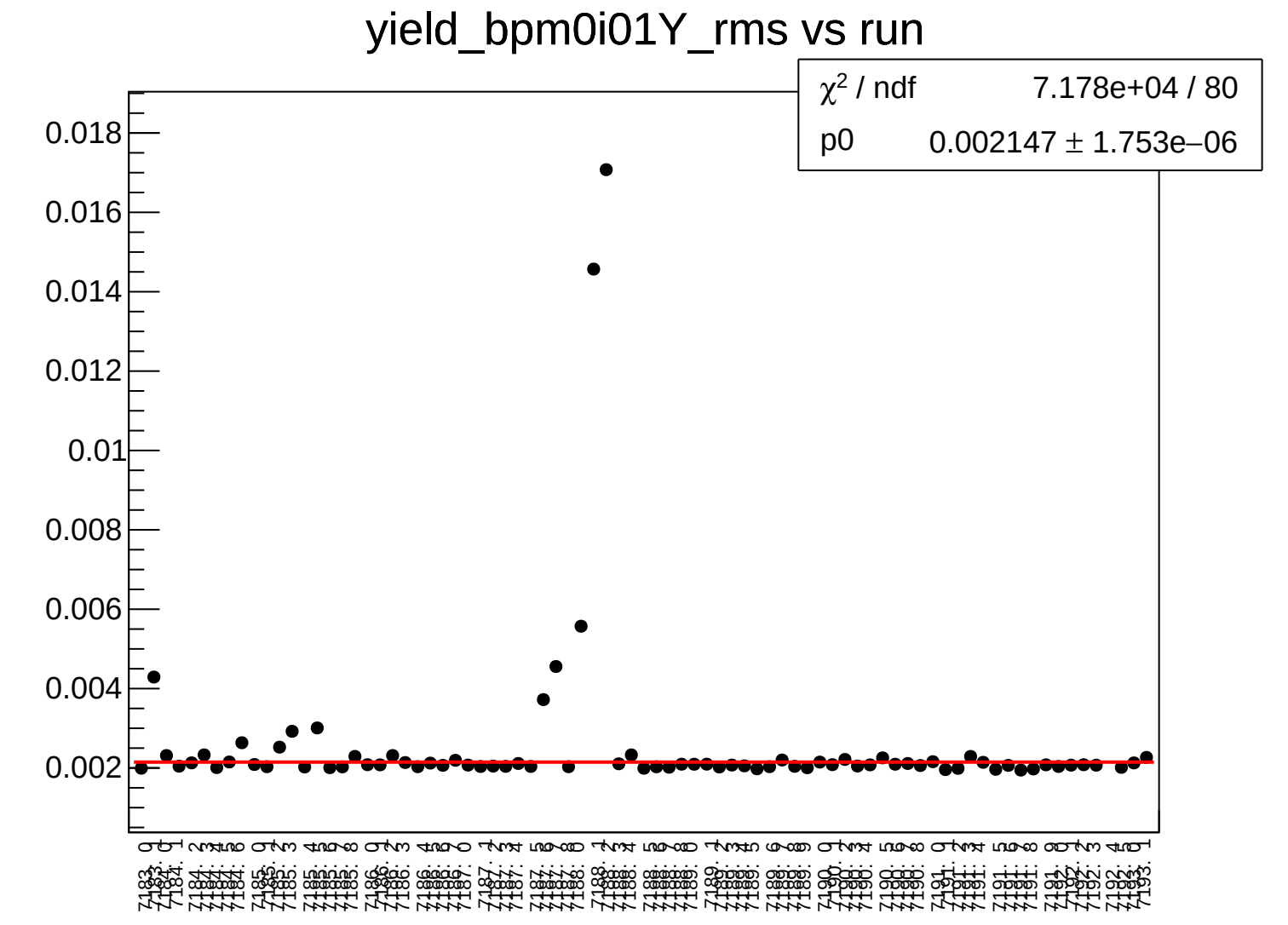

yield_bpm0i01X_mean vs run
χ² / ndf 1.777e+05 / 80
p0 −1.06 ± 8.031e−06
−1.045
−1.05
−1.055
−1.06
−1.065
−1.07
pull
Entries 81
Mean −442.5
Std Dev 485.5
100
50
0
−50
−100

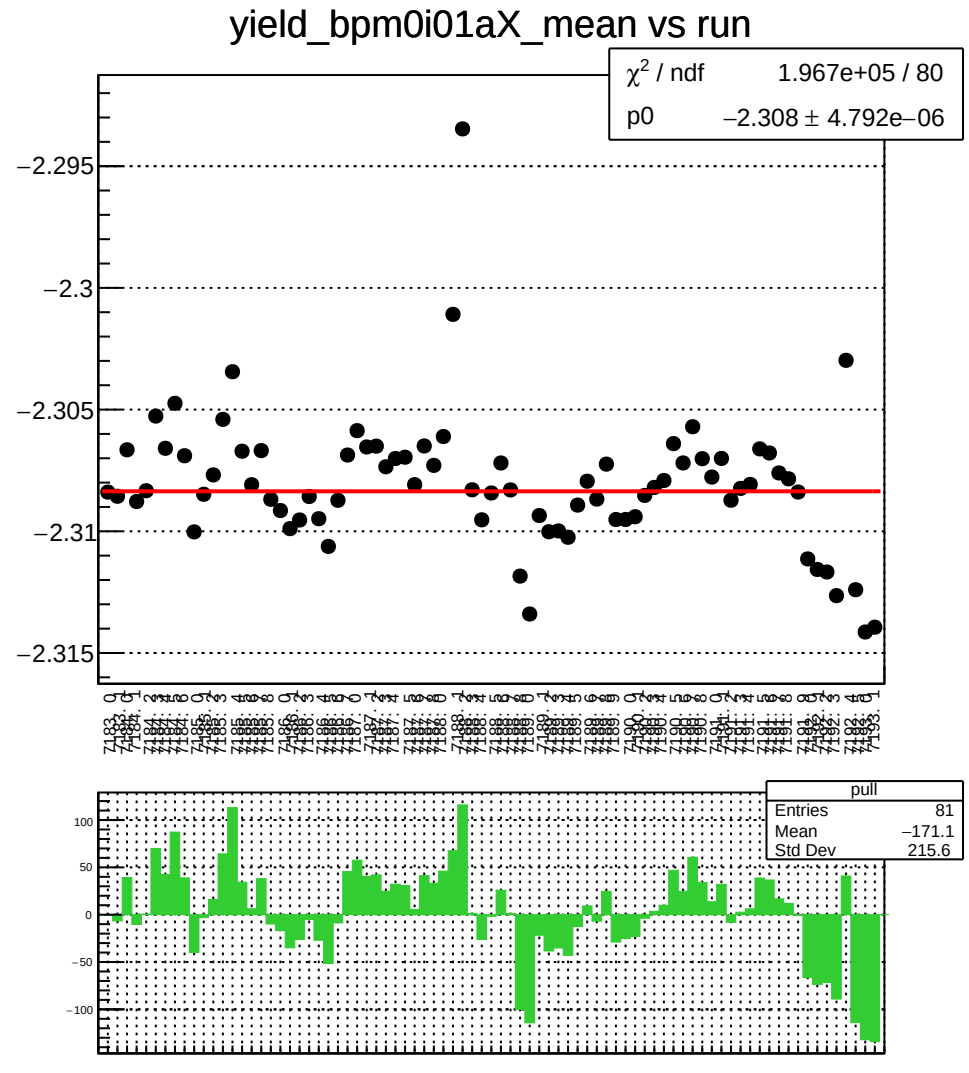

pull1D
Entries 81
Mean −0.1029
Std Dev 4.936
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

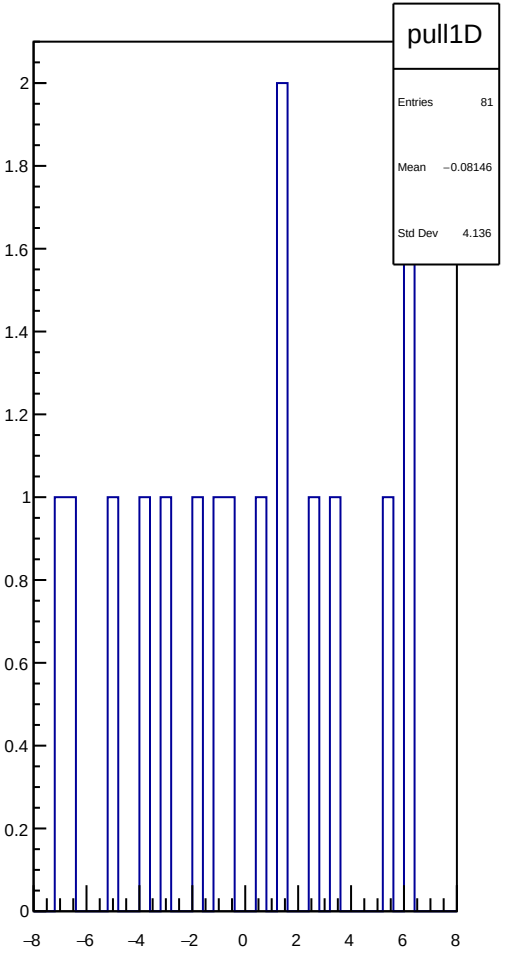

yield_bpm0i01X_rms vs run
χ^2 / ndf 1.301e+04 / 80
p0 0.007092 ± 5.679e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

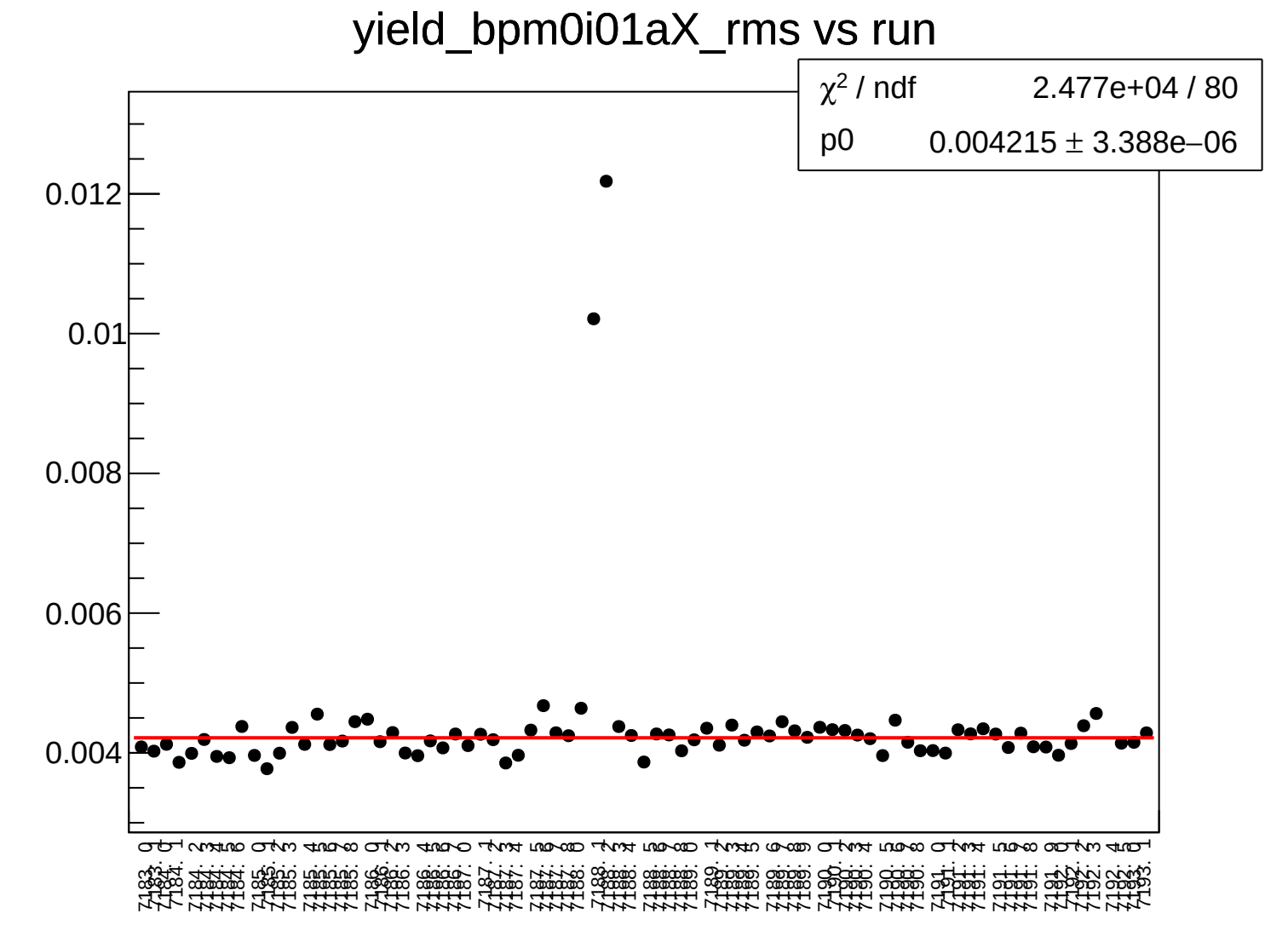

yield_bpm0i01Y_mean vs run
χ² / ndf 1.082e+07 / 80
p0 0.7185 ± 2.478e−06
0.745
0.74
0.735
0.73
0.725
0.72
0.715
0.71
0.705
0.7
pull
Entries 81
Mean −601.1
Std Dev 641.2
600
400
200
0
−200
−400
−600
−800

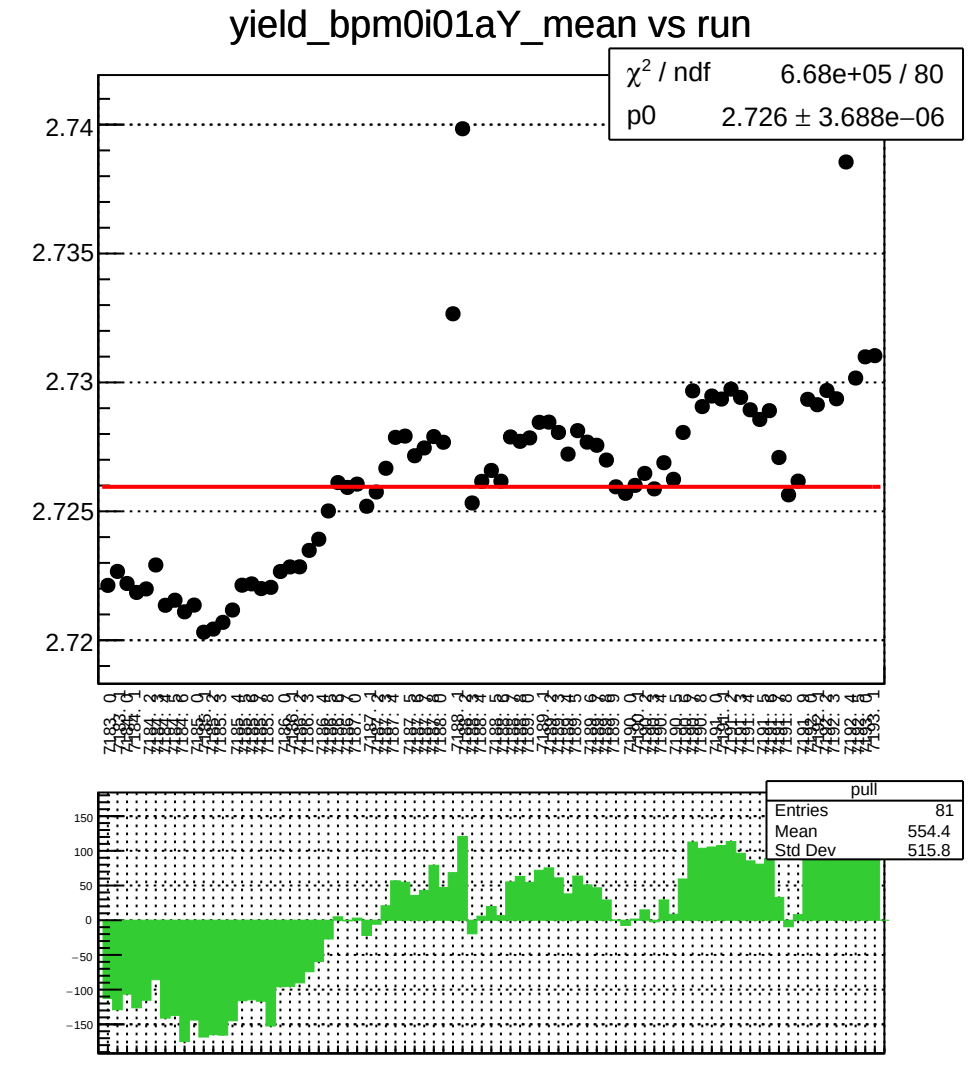

pull1D
Entries 81
Mean 7.627
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

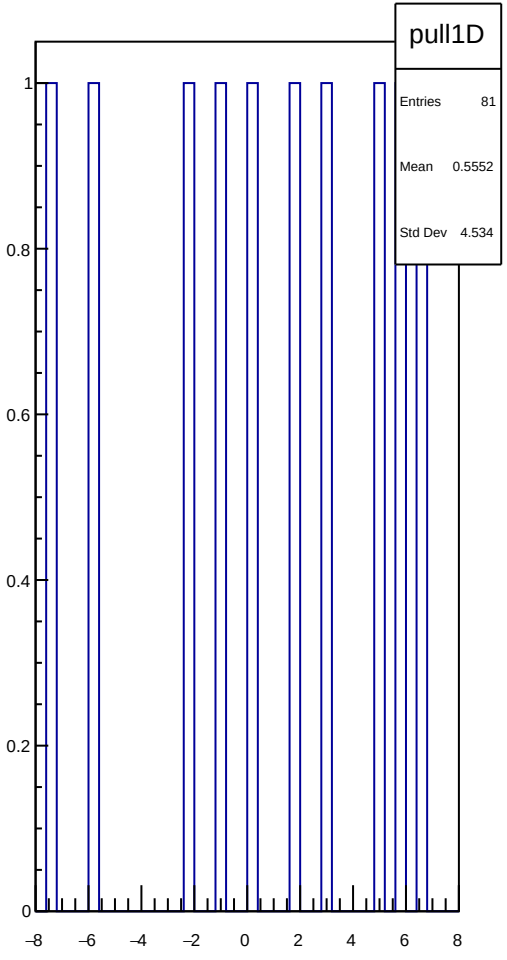

yield_bpm0i01Y_rms vs run
χ² / ndf 7.178e+04 / 80
p0 0.002147 ± 1.753e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

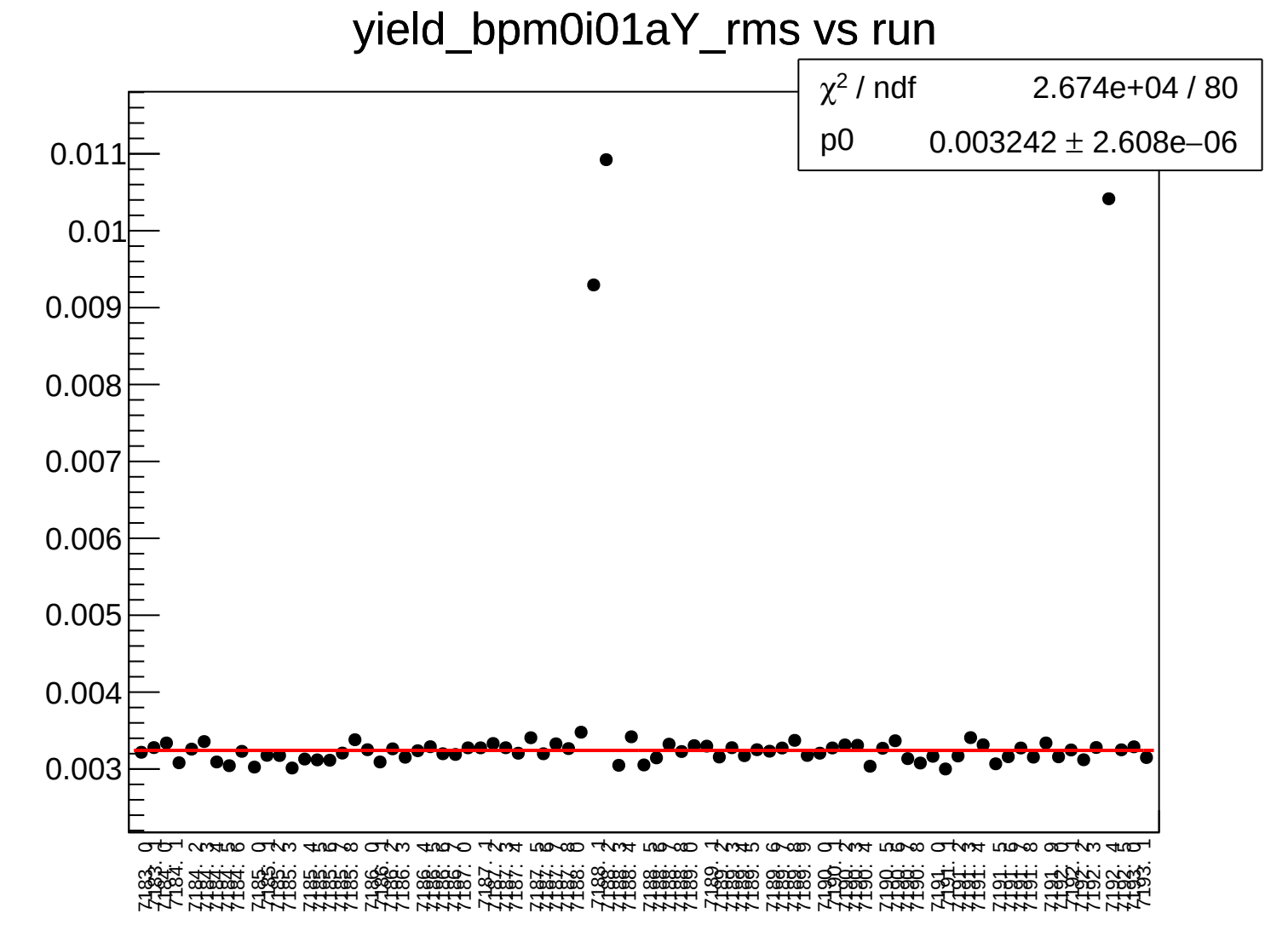

yield_bpm0i01aX_mean vs run
χ² / ndf 1.967e+05 / 80
p0 −2.308 ± 4.792e−06
−2.295
−2.3
−2.305
−2.31
−2.315
pull
Entries 81
Mean −171.1
Std Dev 215.6
100
50
0
−50
−100

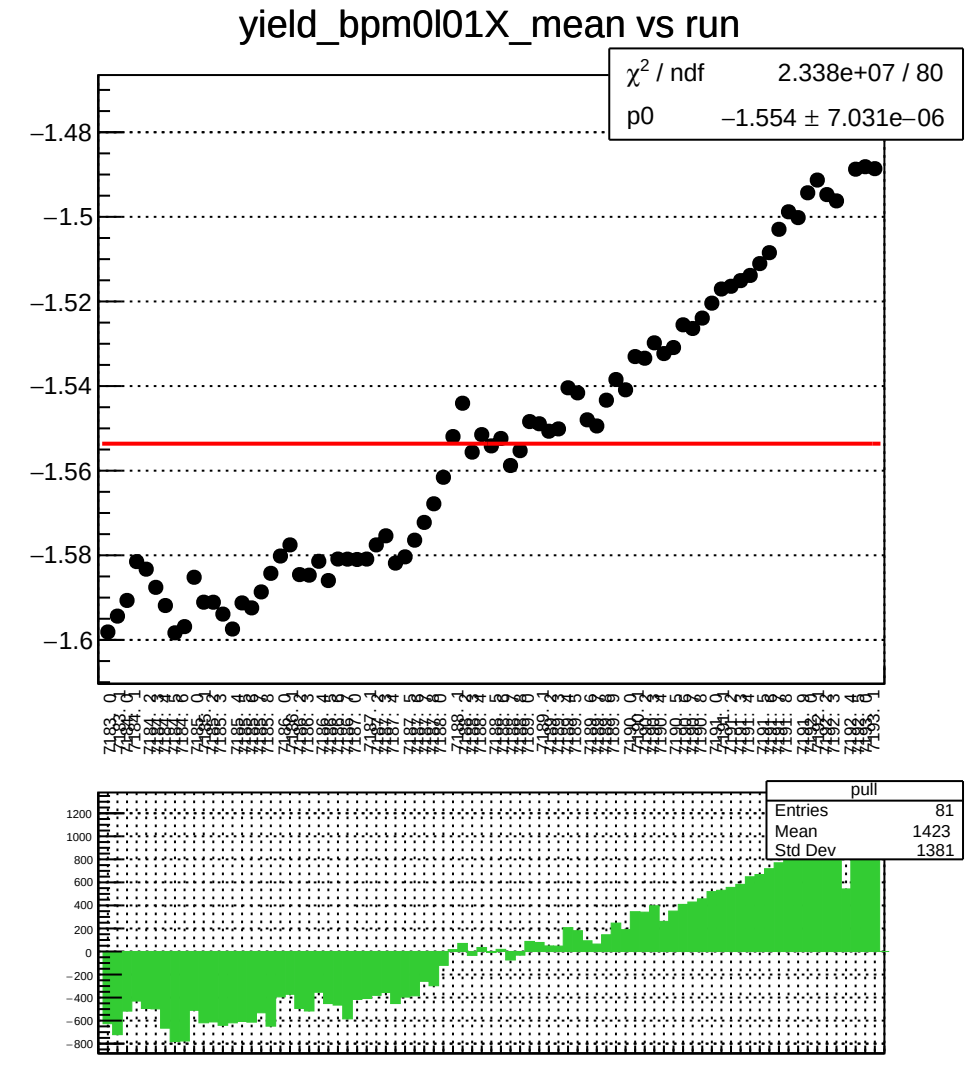

pull1D
Entries 81
Mean −0.08146
Std Dev 4.136
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

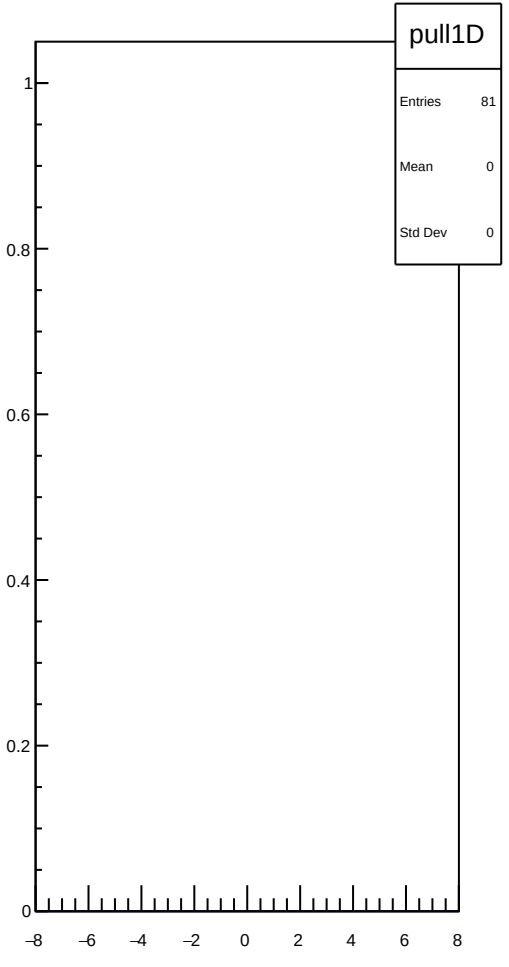

yield_bpm0i01aX_rms vs run
χ² / ndf 2.477e+04 / 80
p0 0.004215 ± 3.388e−06
0.012
0.01
0.008
0.006
0.004

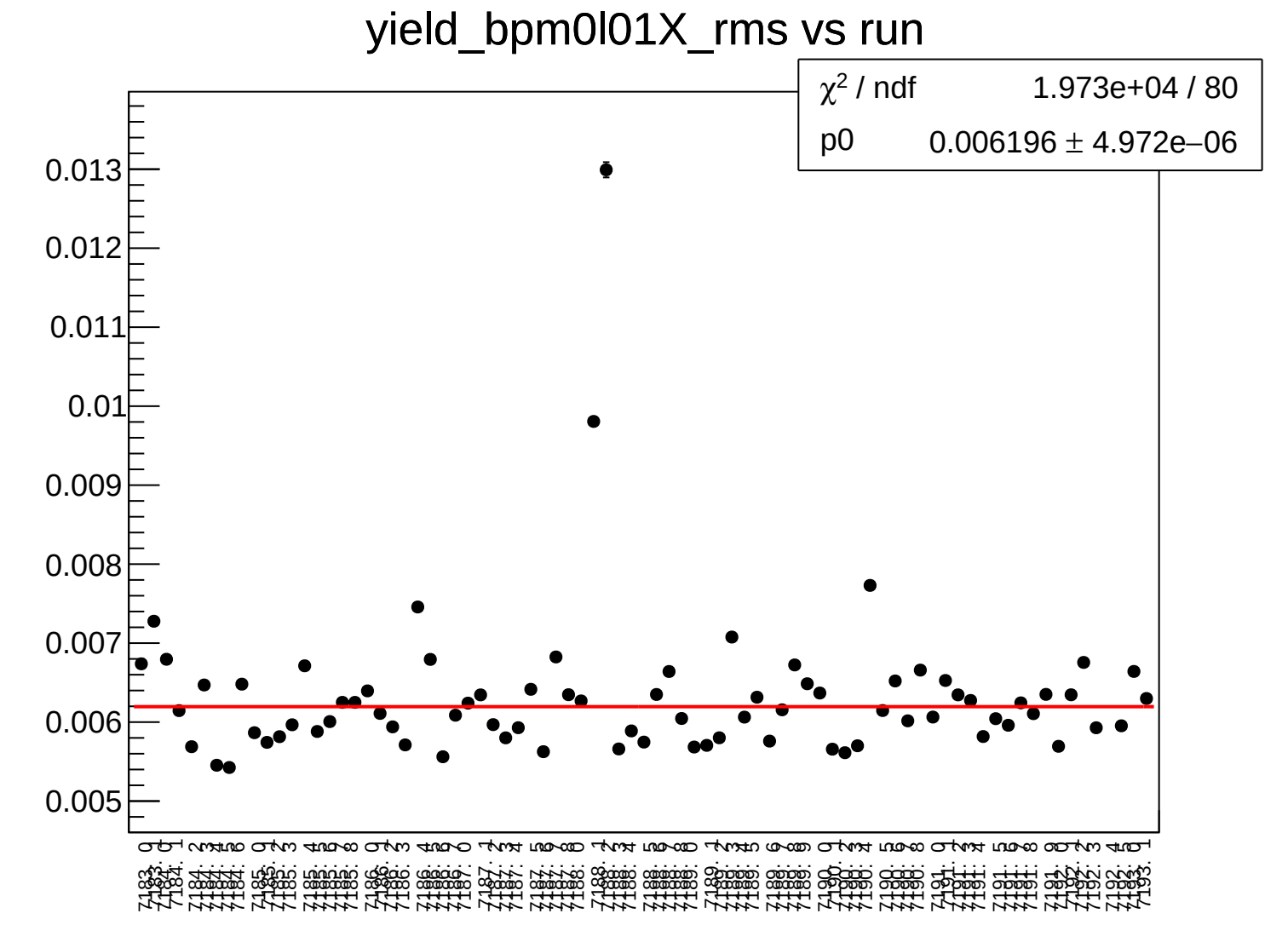

yield_bpm0i01aY_mean vs run
χ² / ndf 6.68e+05 / 80
p0 2.726 ± 3.688e−06
2.74
2.735
2.73
2.725
2.72
pull
Entries 81
Mean 554.4
Std Dev 515.8
150
100
50
0
−50
−100
−150

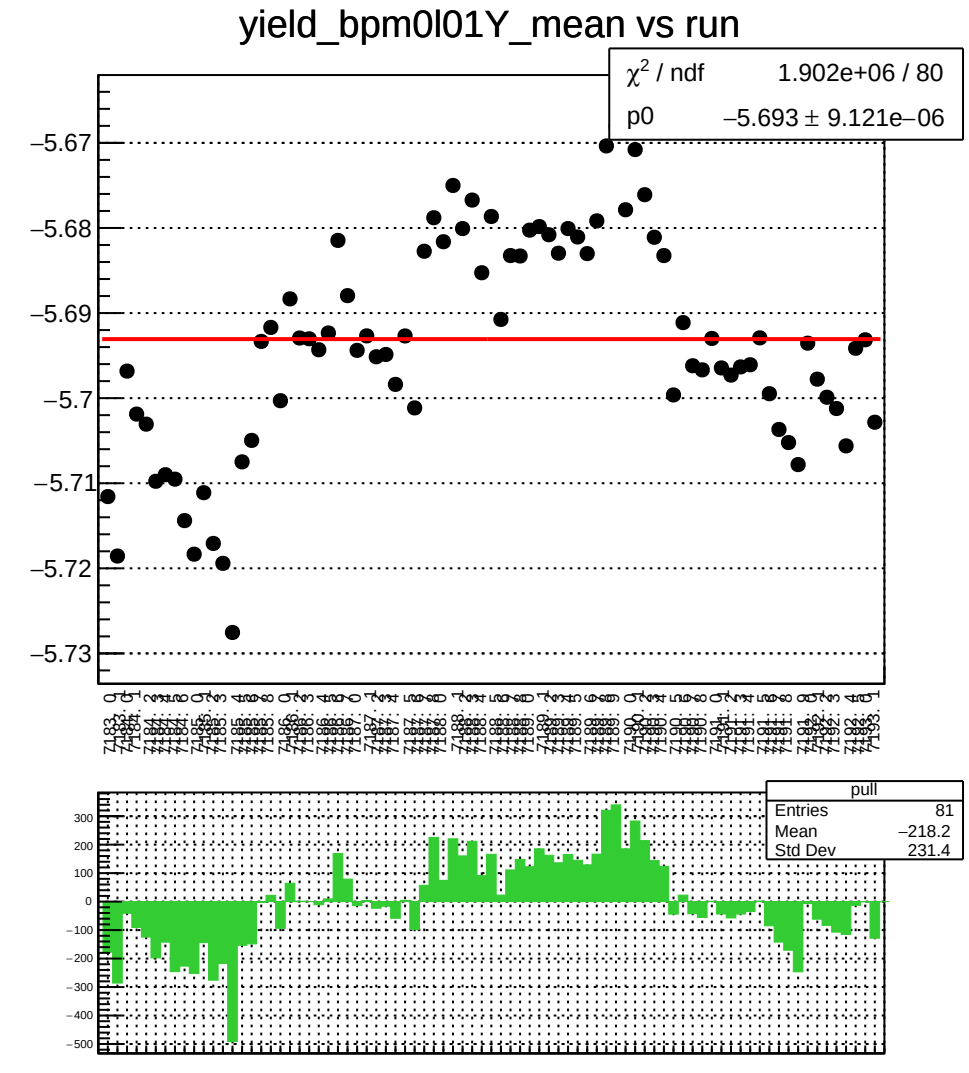

pull1D
Entries 81
Mean 0.5552
Std Dev 4.534
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

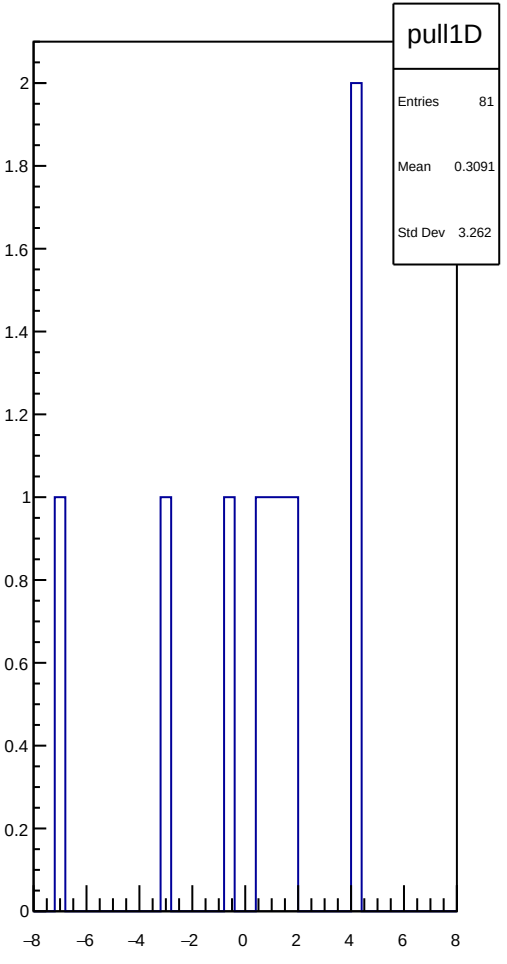

yield_bpm0i01aY_rms vs run
χ² / ndf 2.674e+04 / 80
p0 0.003242 ± 2.608e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

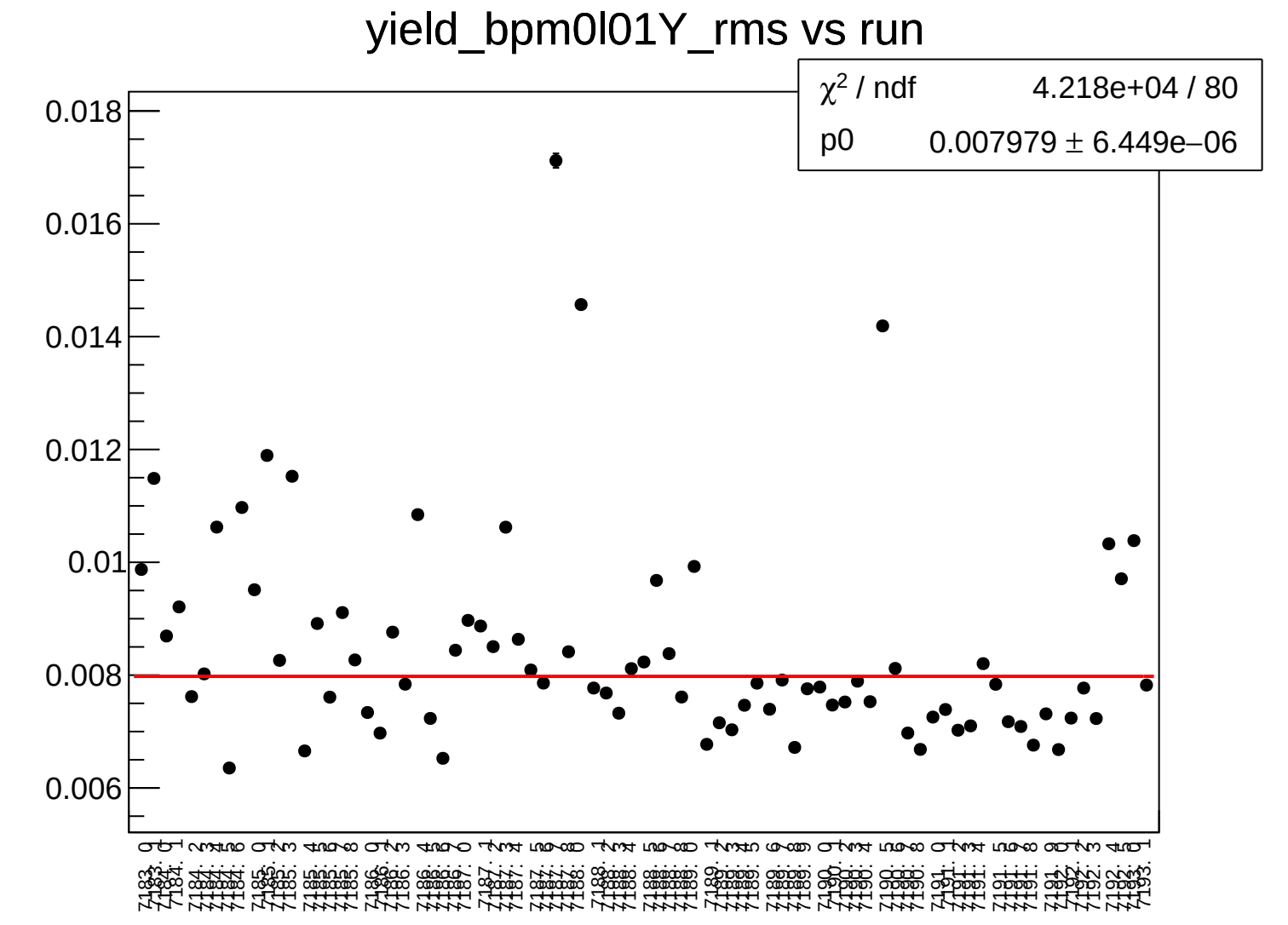

yield_bpm0l01X_mean vs run
χ² / ndf 2.338e+07 / 80
p0 −1.554 ± 7.031e−06
−1.48
−1.5
−1.52
−1.54
−1.56
−1.58
−1.6
pull
Entries 81
Mean 1423
Std Dev 1381
1200
1000
800
600
400
200
0
−200
−400
−600
−800

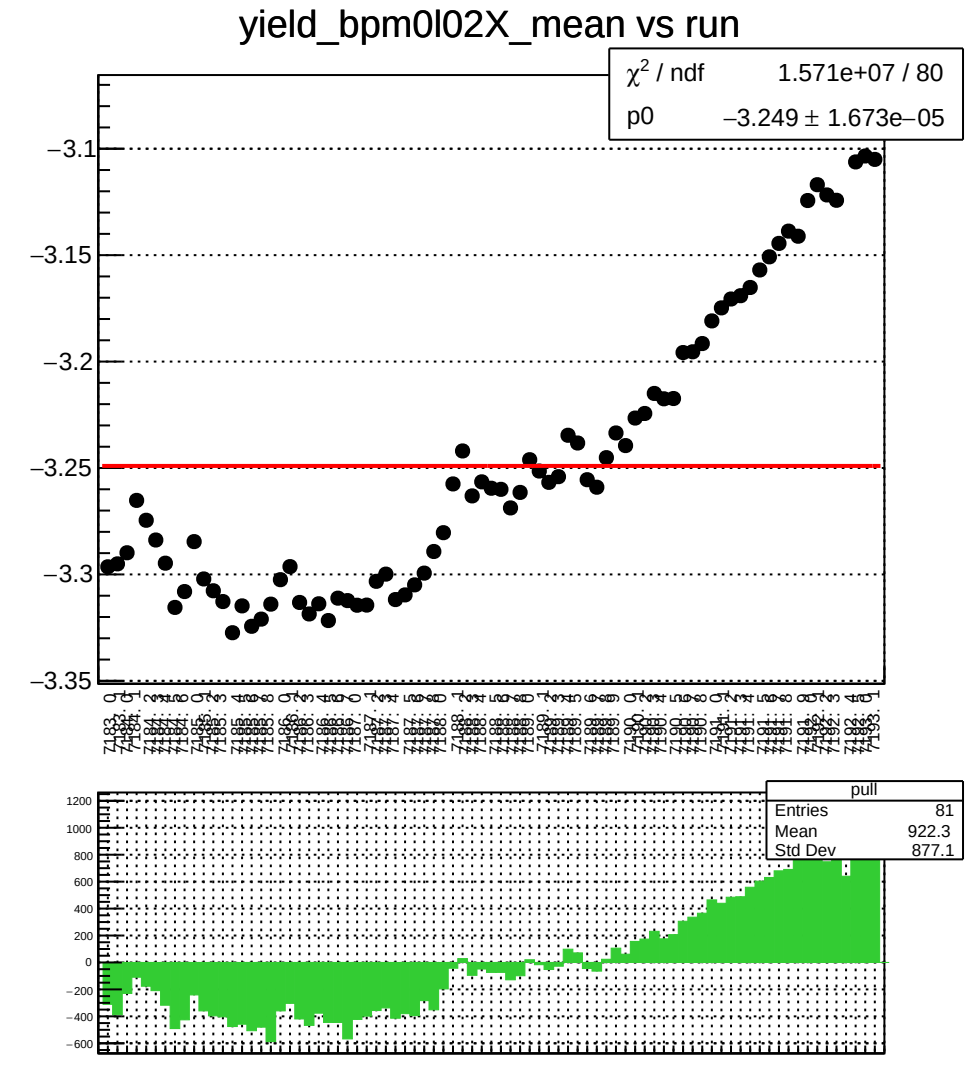

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

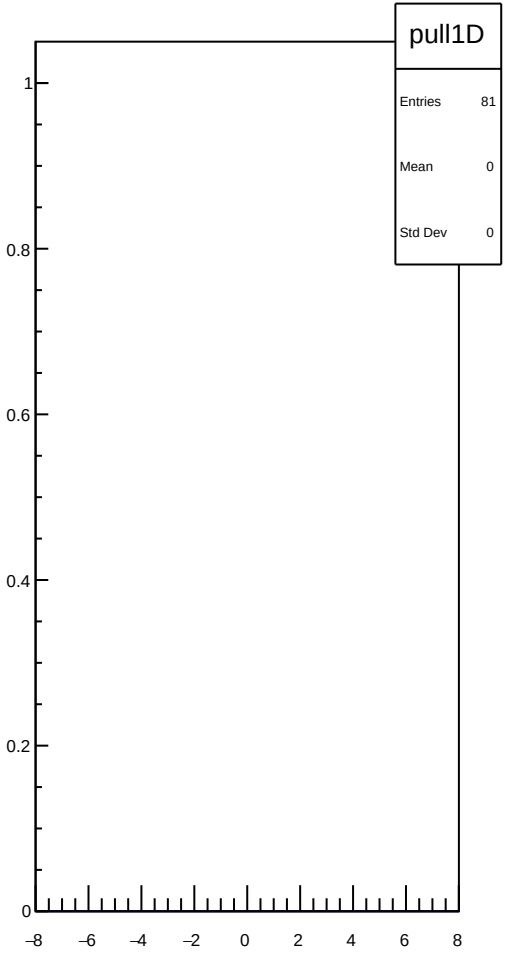

yield_bpm0l01X_rms vs run
χ² / ndf 1.973e+04 / 80
p0 0.006196 ± 4.972e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005

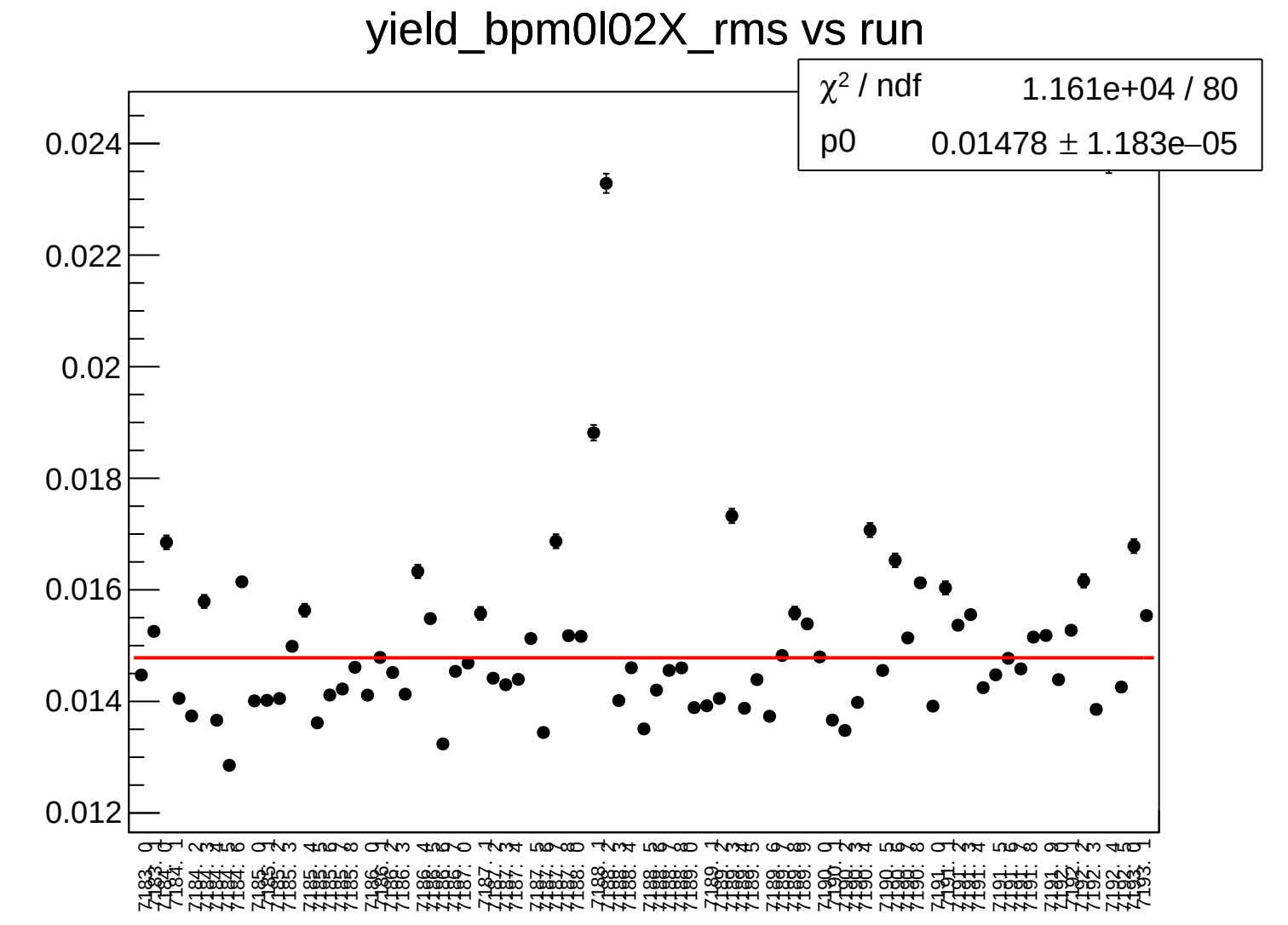

yield_bpm0l01Y_mean vs run
χ² / ndf 1.902e+06 / 80
p0 −5.693 ± 9.121e−06
−5.67
−5.68
−5.69
−5.7
−5.71
−5.72
−5.73
pull
Entries 81
Mean −218.2
Std Dev 231.4
300
200
100
0
−100
−200
−300
−400
−500

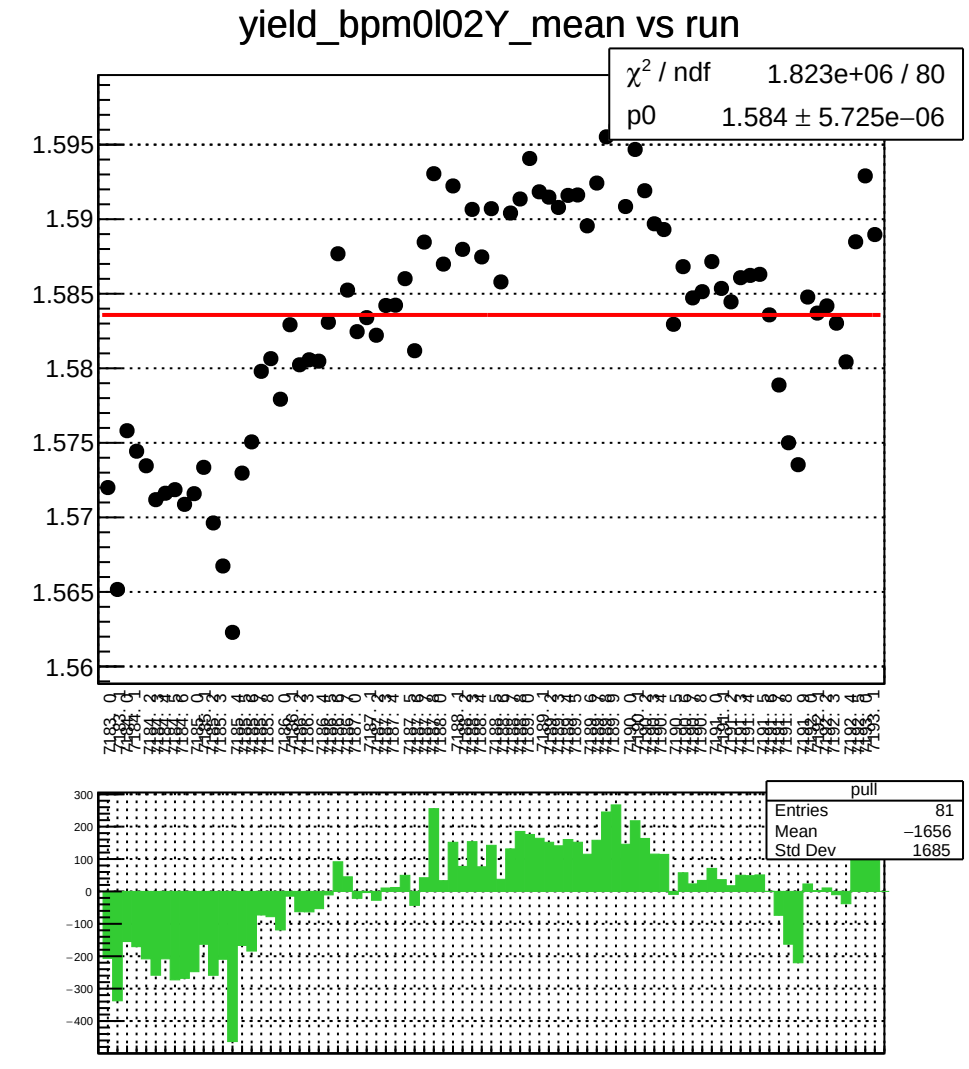

pull1D
Entries 81
Mean 0.3091
Std Dev 3.262
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

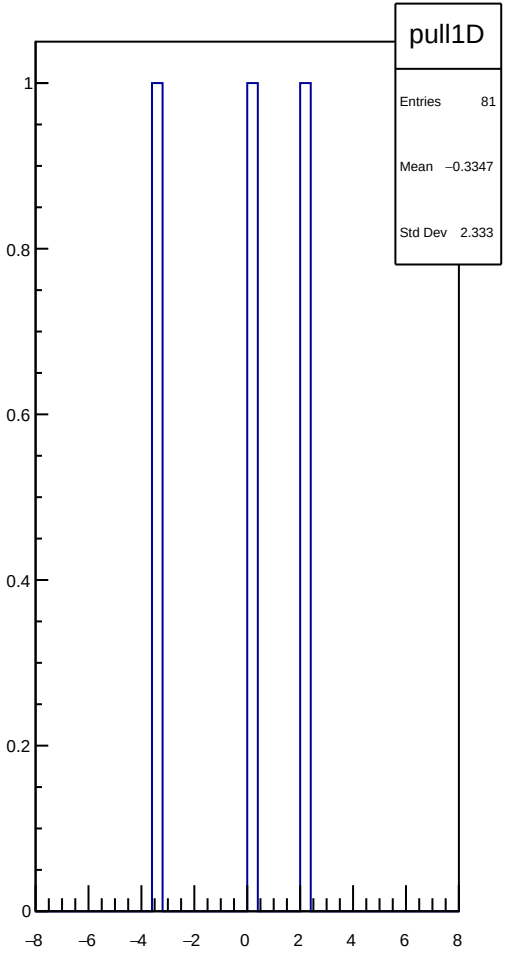

yield_bpm0l01Y_rms vs run
χ² / ndf 4.218e+04 / 80
p0 0.007979 ± 6.449e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

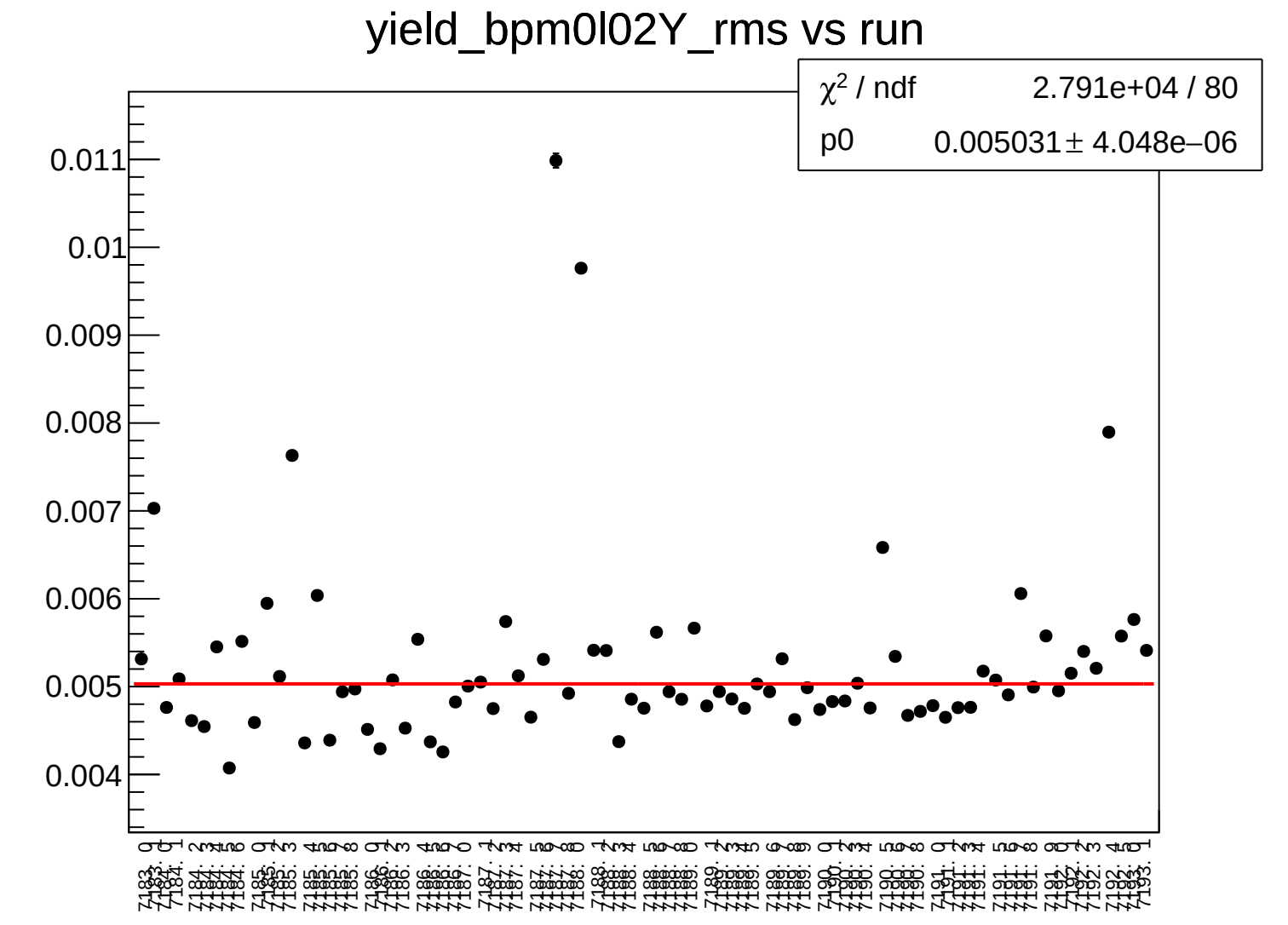

yield_bpm0l02X_mean vs run
χ² / ndf 1.571e+07 / 80
p0 −3.249 ± 1.673e−05
−3.1
−3.15
−3.2
−3.25
−3.3
−3.35
pull
Entries 81
Mean 922.3
Std Dev 877.1
1200
1000
800
600
400
200
0
−200
−400
−600

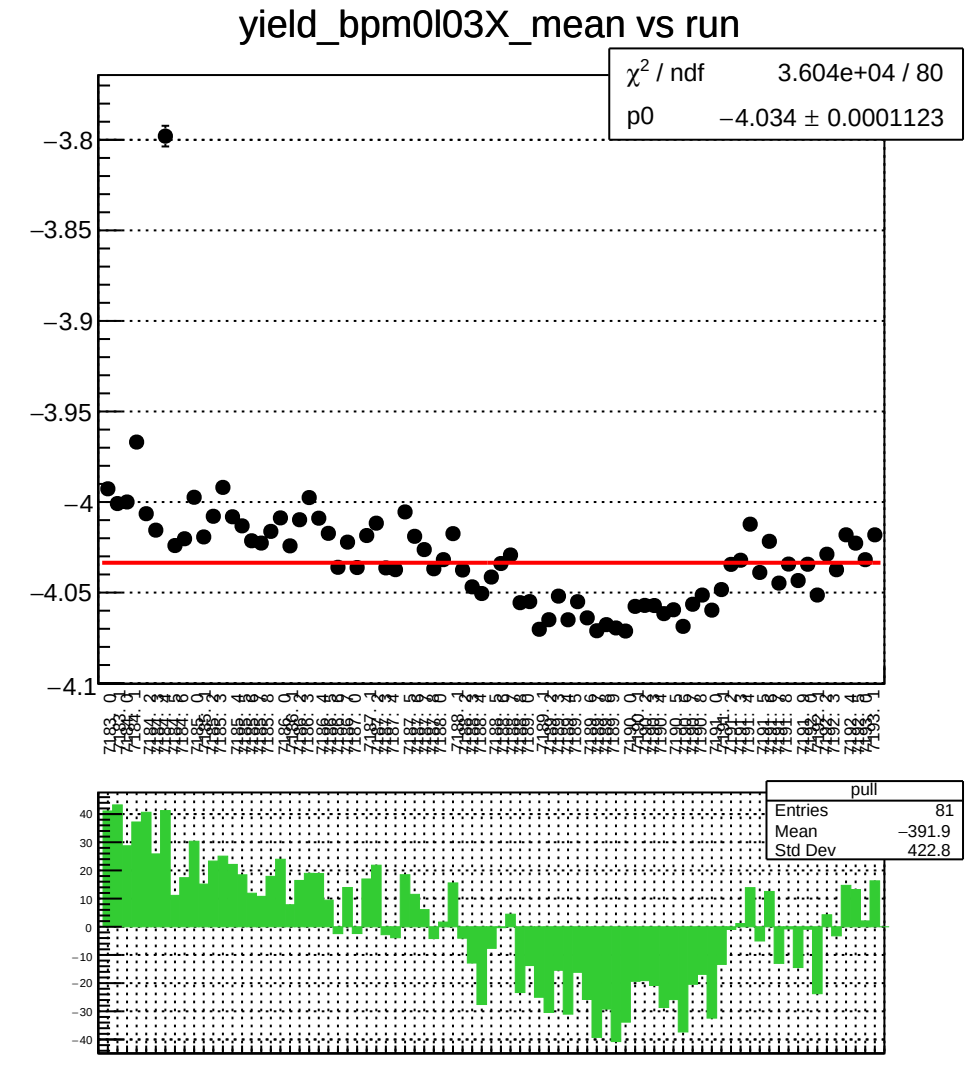

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

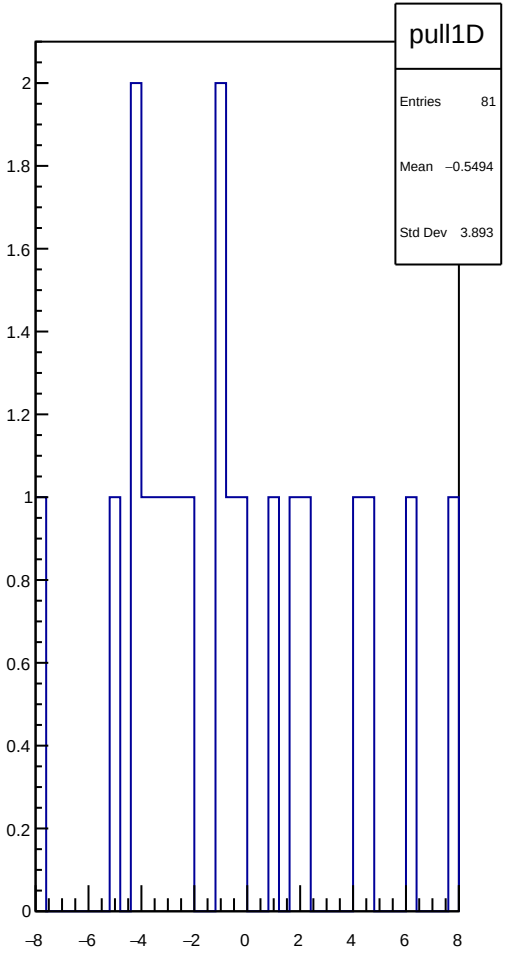

yield_bpm0l02X_rms vs run
χ² / ndf 1.161e+04 / 80
p0 0.01478 ± 1.183e–05
0.024
0.022
0.02
0.018
0.016
0.014
0.012

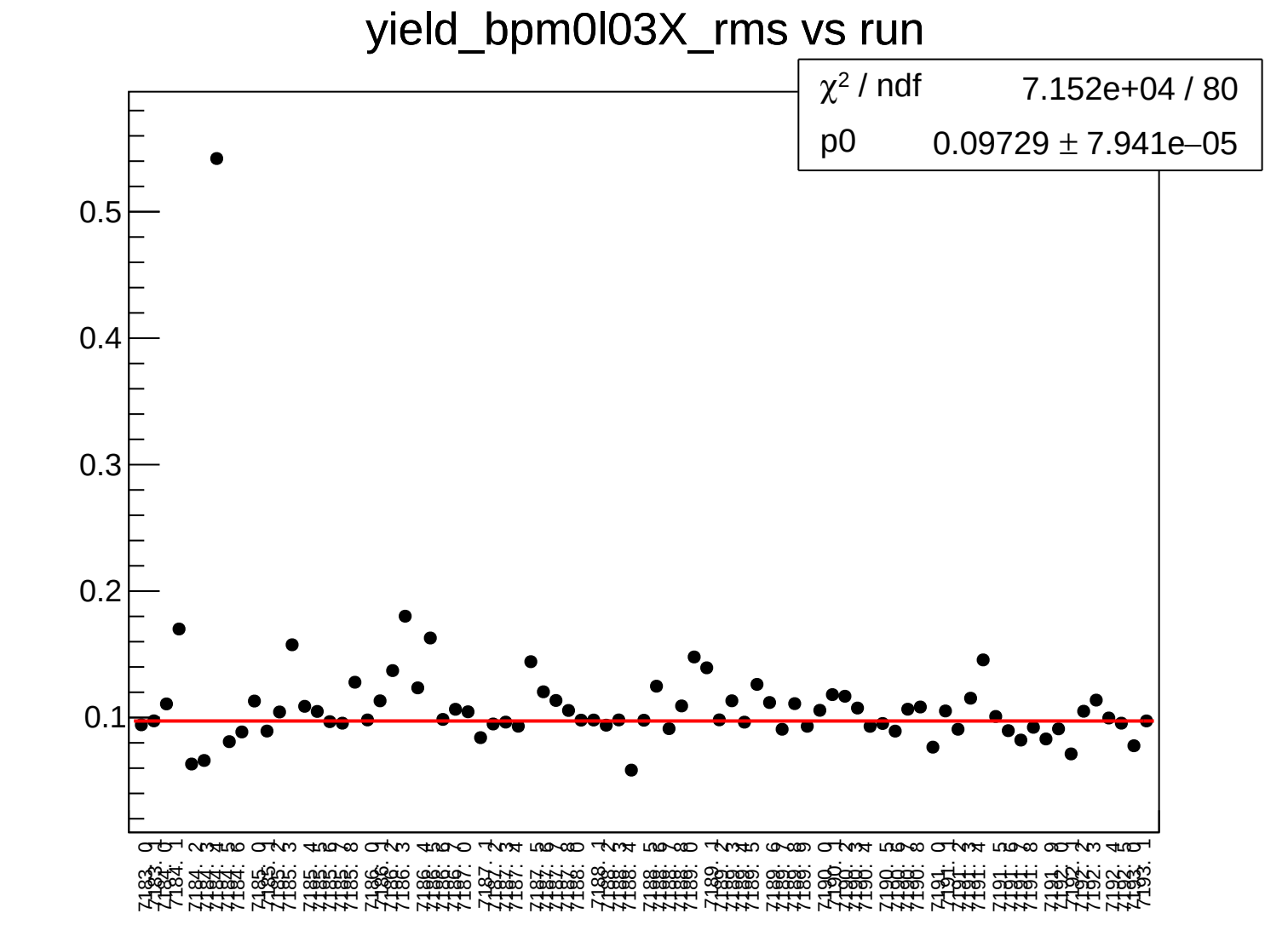

yield_bpm0l02Y_mean vs run
χ² / ndf 1.823e+06 / 80
p0 1.584 ± 5.725e−06
1.595
1.59
1.585
1.58
1.575
1.57
1.565
1.56
pull
Entries 81
Mean −1656
Std Dev 1685
300
200
100
0
−100
−200
−300
−400

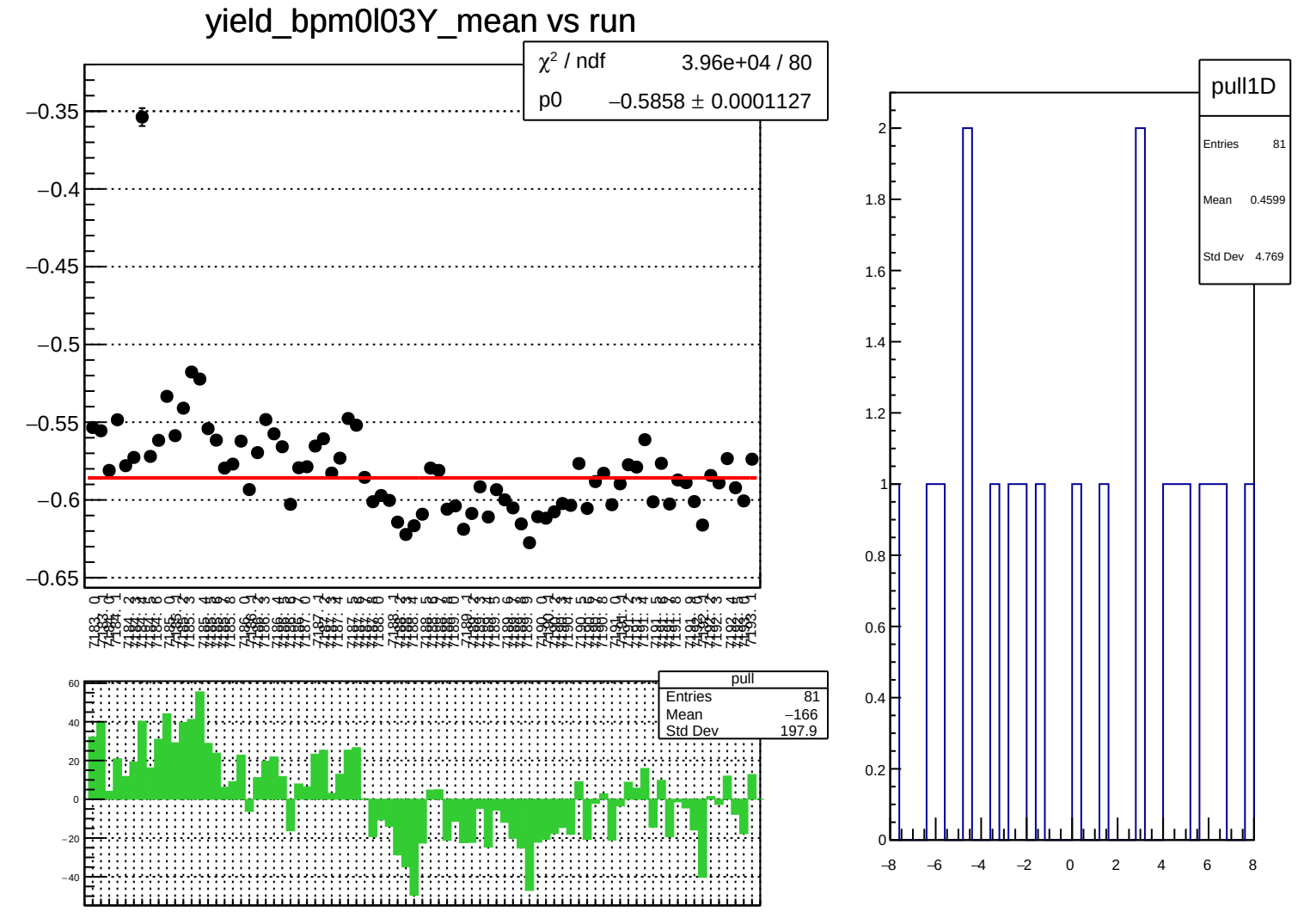

pull1D
Entries 81
Mean −0.3347
Std Dev 2.333
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

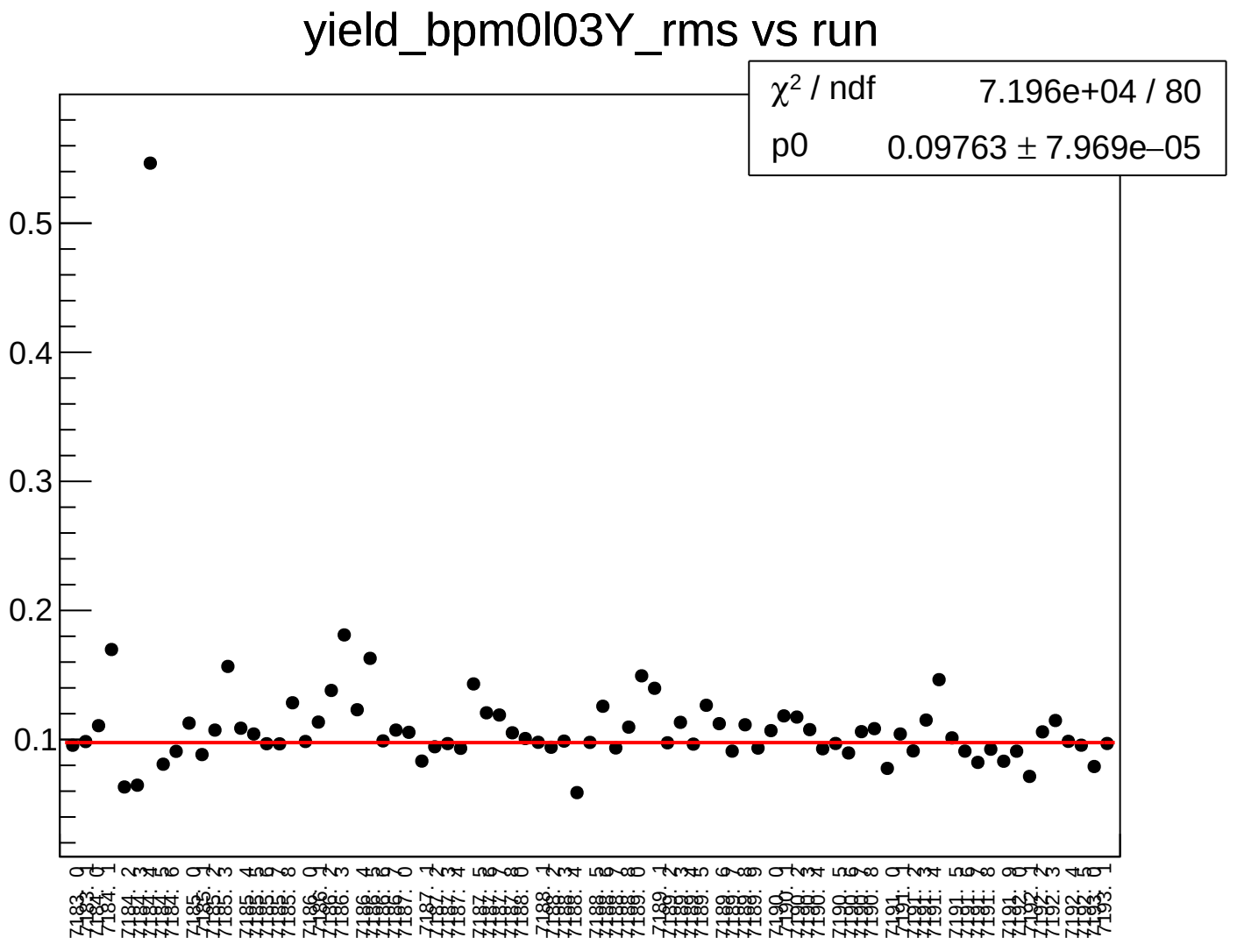

yield_bpm0l02Y_rms vs run
χ^2 / ndf 2.791e+04 / 80
p0 0.005031 ± 4.048e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

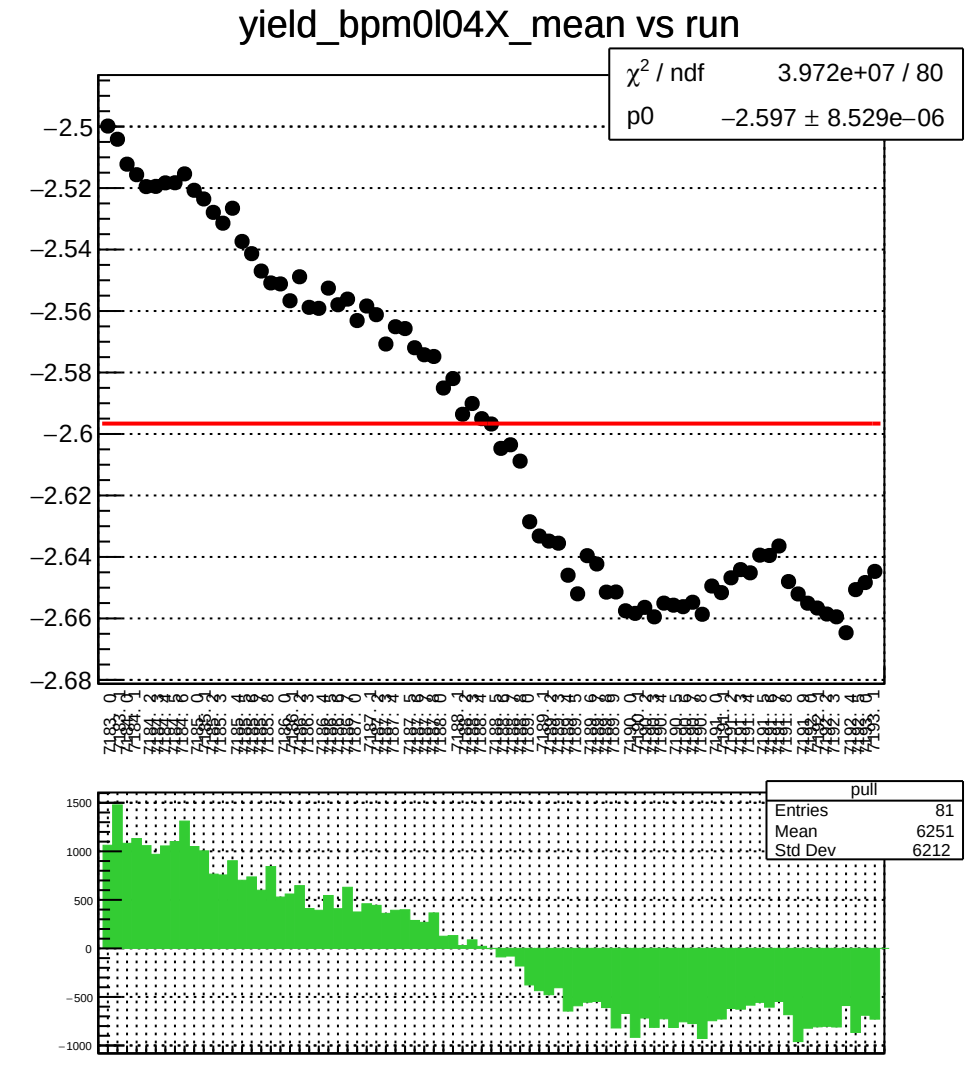

yield_bpm0l03X_mean vs run
χ² / ndf 3.604e+04 / 80
p0 −4.034 ± 0.0001123
−3.8
−3.85
−3.9
−3.95
−4
−4.05
−4.1
pull
Entries 81
Mean −391.9
Std Dev 422.8
40
30
20
10
0
−10
−20
−30
−40

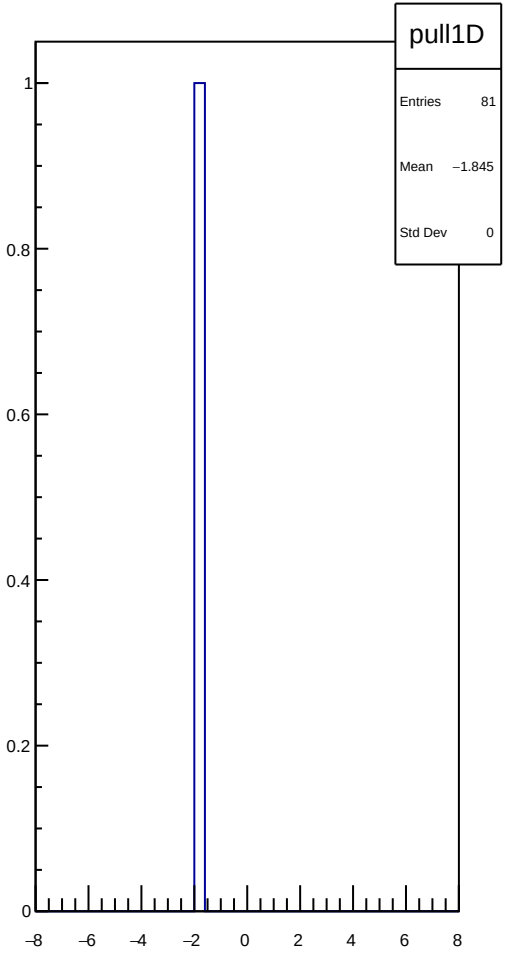

pull1D
Entries 81
Mean −0.5494
Std Dev 3.893
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

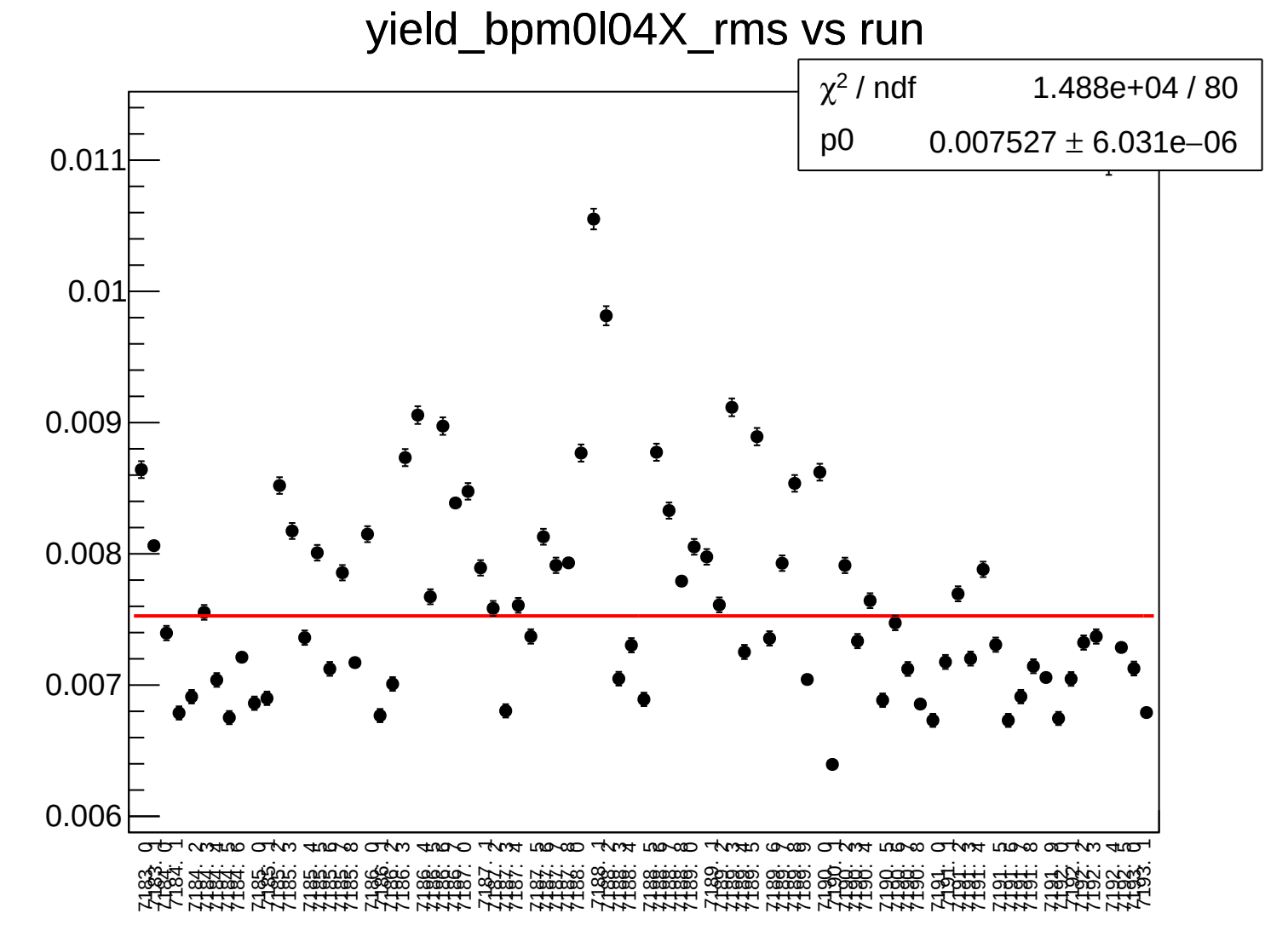

yield_bpm0l03X_rms vs run
χ² / ndf 7.152e+04 / 80
p0 0.09729 ± 7.941e−05
0.5
0.4
0.3
0.2
0.1

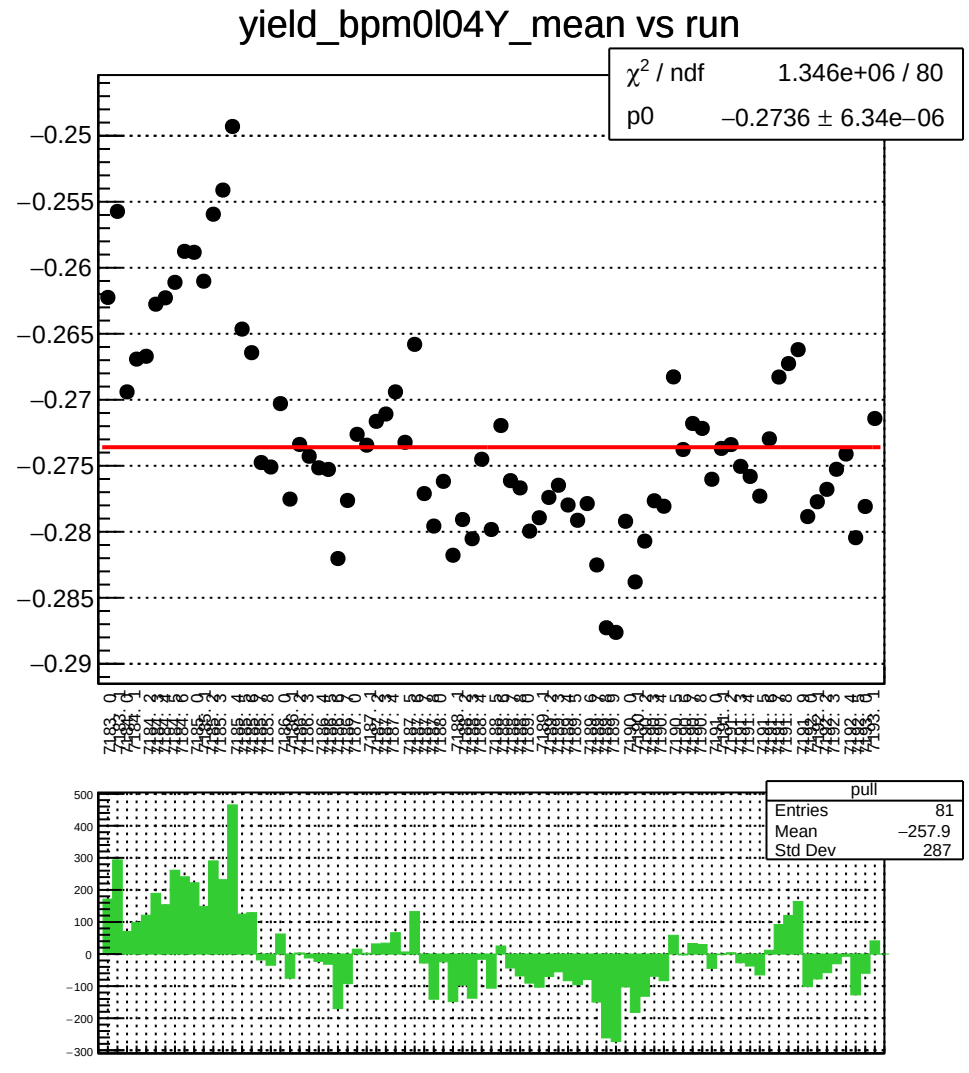

yield_bpm0l03Y_mean vs run
χ² / ndf 3.96e+04 / 80
p0 −0.5858 ± 0.0001127
−0.35
−0.4
−0.45
−0.5
−0.55
−0.6
−0.65
pull
Entries 81
Mean −166
Std Dev 197.9
60
40
20
0
−20
−40
pull1D
Entries 81
Mean 0.4599
Std Dev 4.769
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

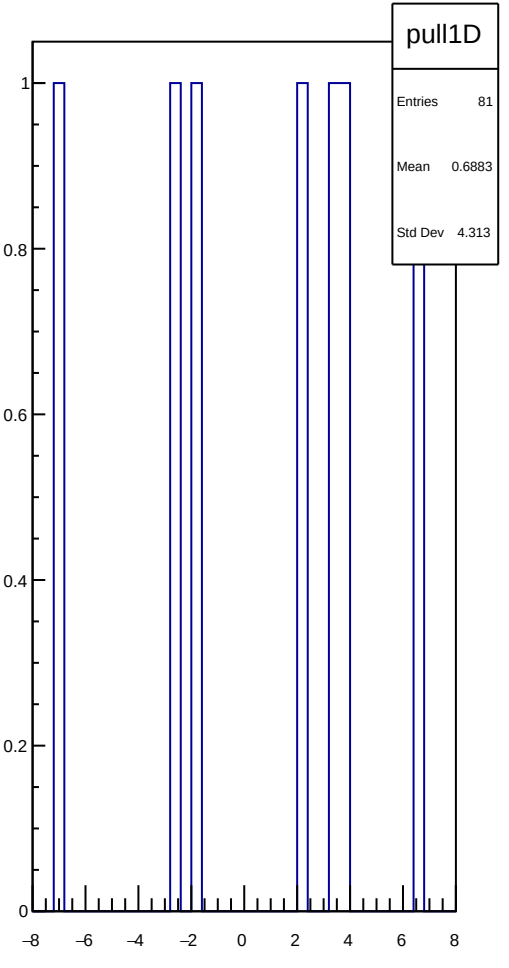

yield_bpm0l03Y_rms vs run
χ² / ndf 7.196e+04 / 80
p0 0.09763 ± 7.969e–05
0.5
0.4
0.3
0.2
0.1

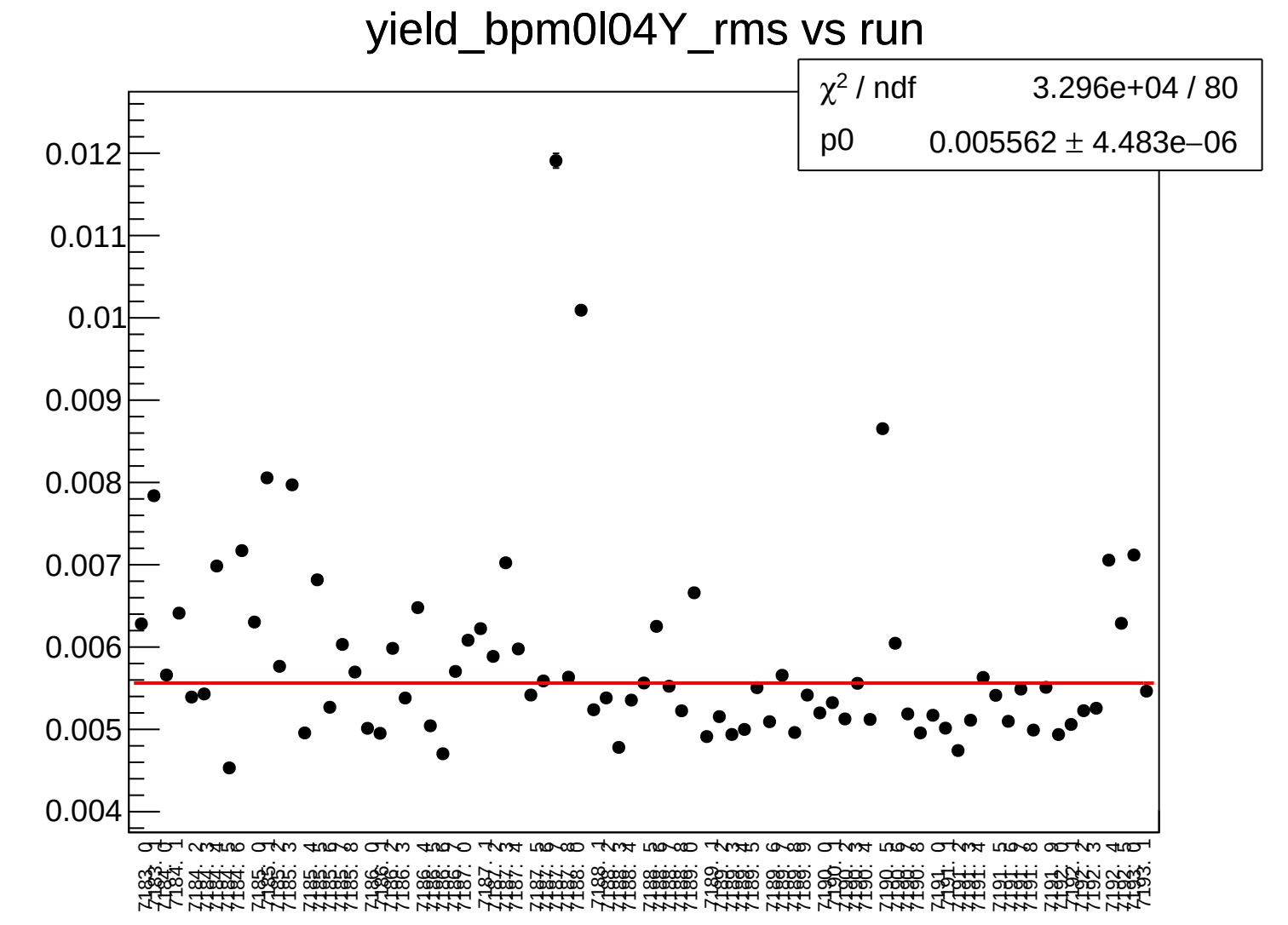

yield_bpm0l04X_mean vs run
χ² / ndf 3.972e+07 / 80
p0 −2.597 ± 8.529e−06
−2.5
−2.52
−2.54
−2.56
−2.58
−2.6
−2.62
−2.64
−2.66
−2.68
pull
Entries 81
Mean 6251
Std Dev 6212
1500
1000
500
0
−500
−1000

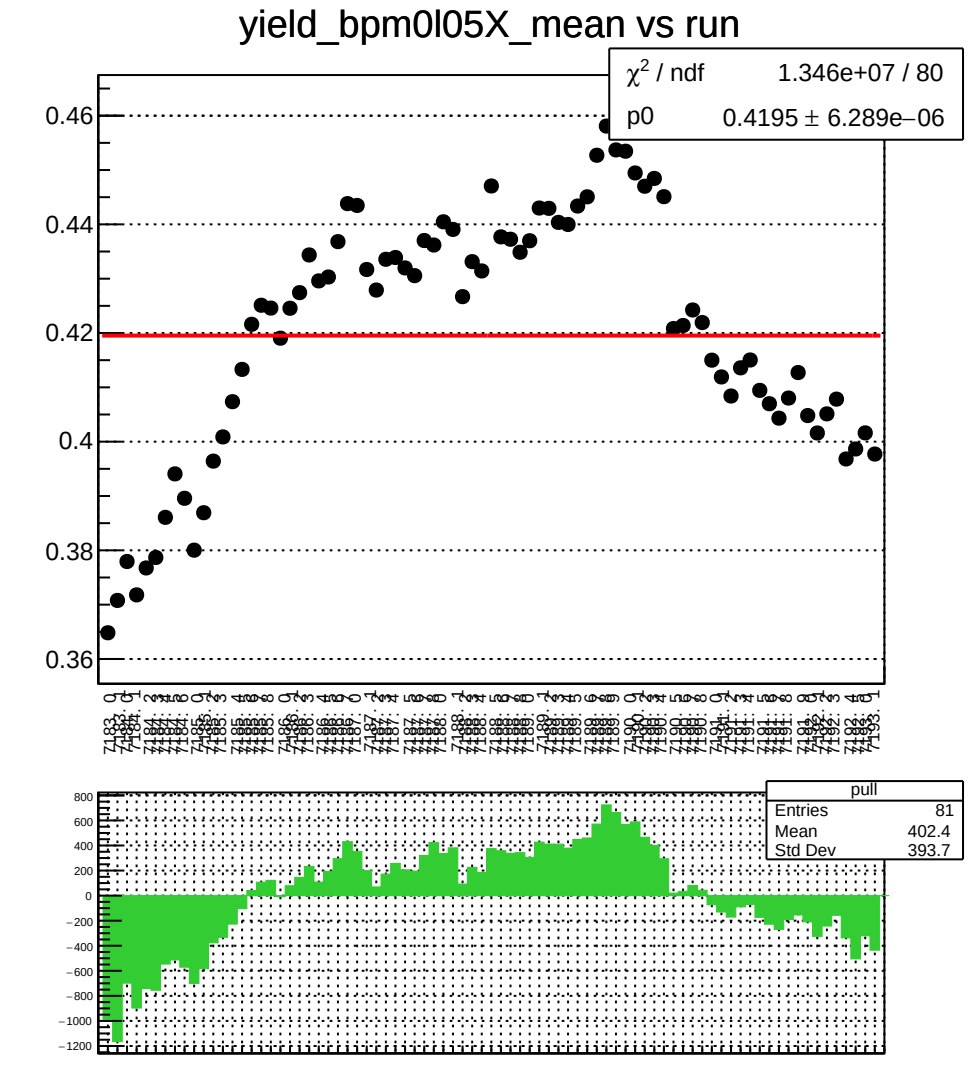

pull1D
Entries 81
Mean −1.845
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

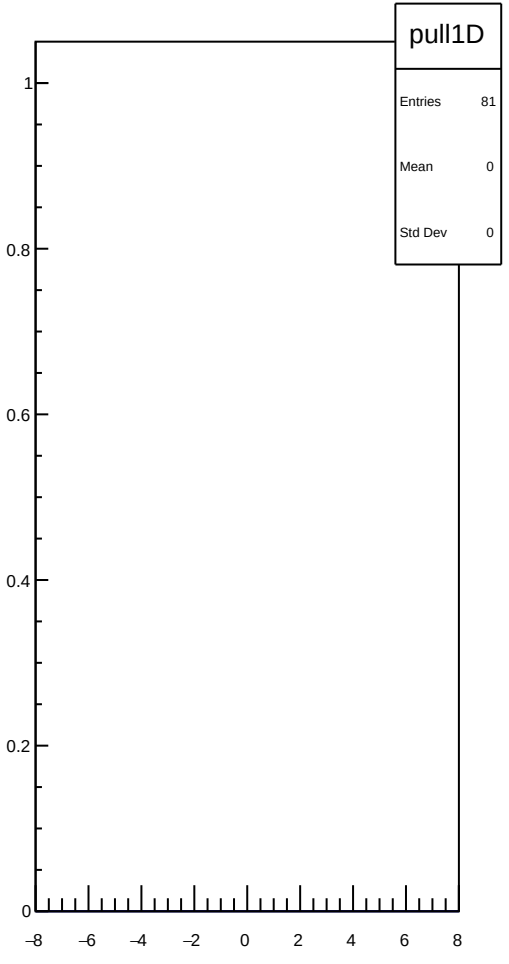

yield_bpm0l04X_rms vs run
χ² / ndf 1.488e+04 / 80
p0 0.007527 ± 6.031e−06
0.011
0.01
0.009
0.008
0.007
0.006

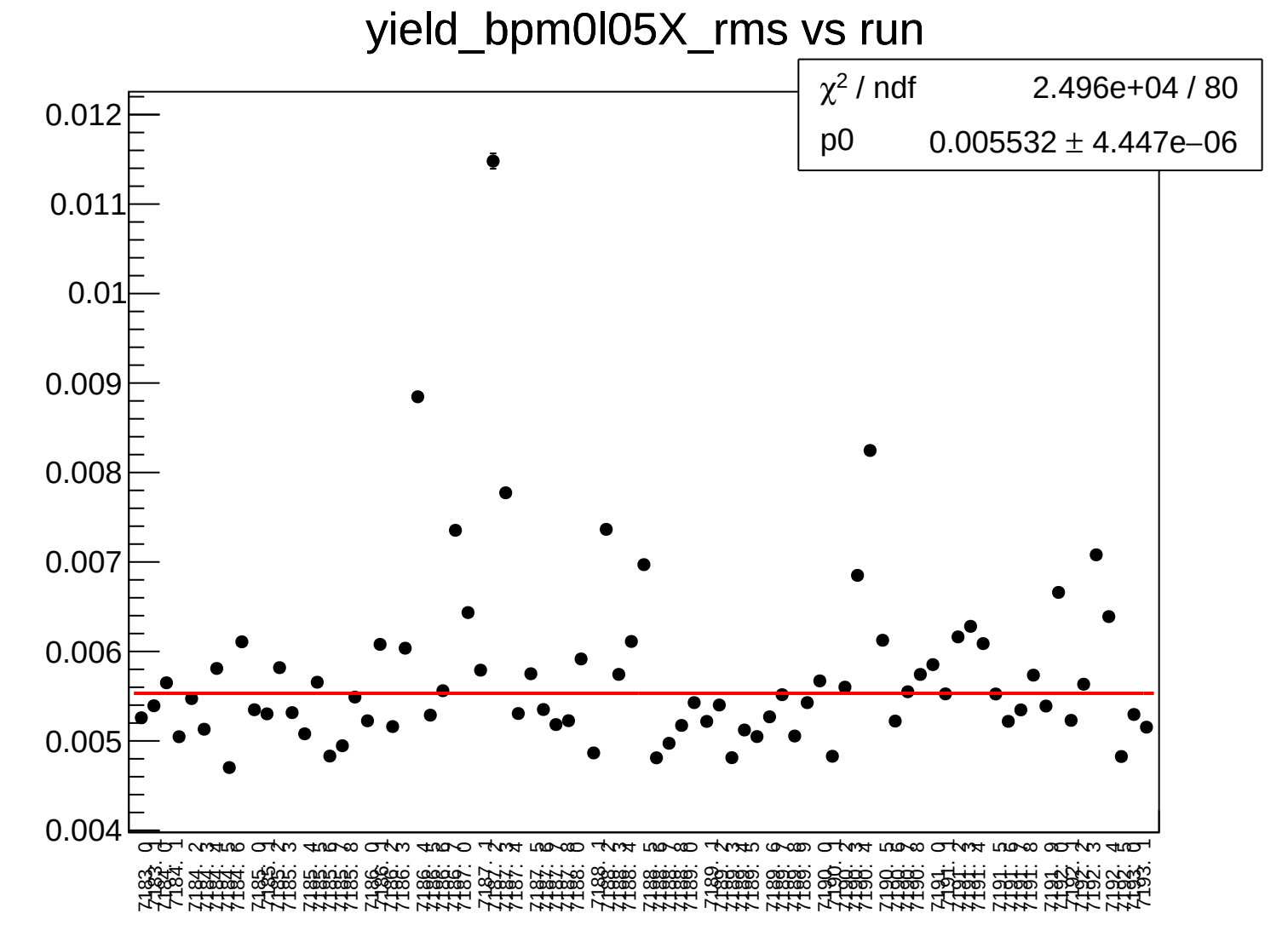

yield_bpm0l04Y_mean vs run
χ² / ndf 1.346e+06 / 80
p0 −0.2736 ± 6.34e−06
−0.25
−0.255
−0.26
−0.265
−0.27
−0.275
−0.28
−0.285
−0.29
pull
Entries 81
Mean −257.9
Std Dev 287
500
400
300
200
100
0
−100
−200
−300

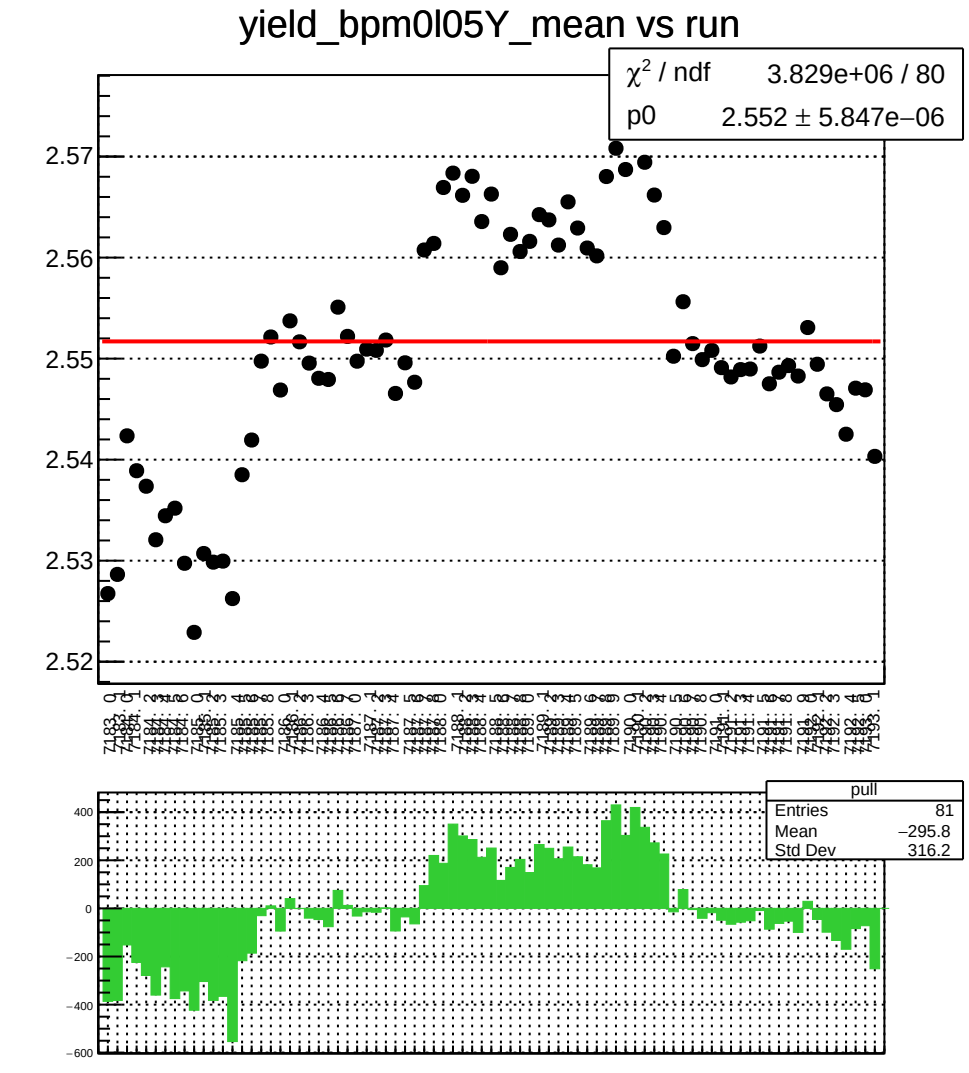

pull1D
Entries 81
Mean 0.6883
Std Dev 4.313
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

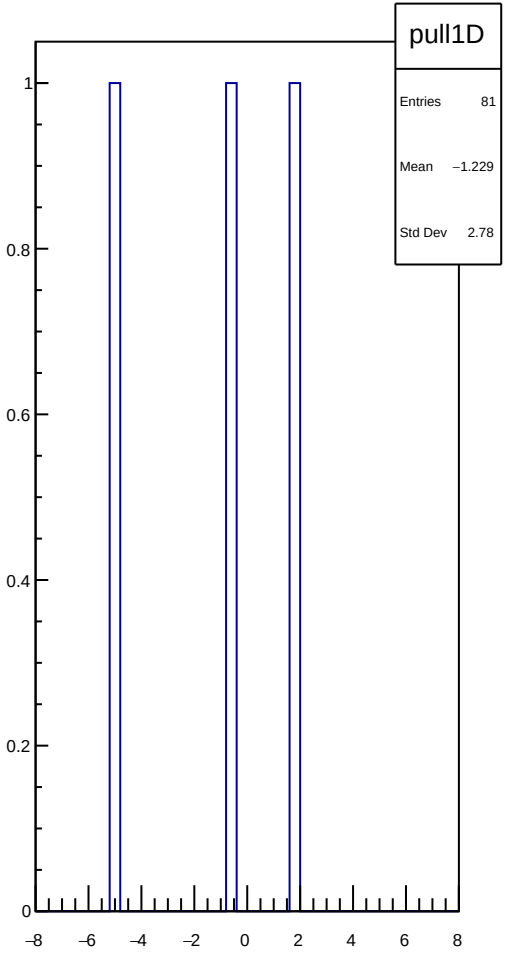

yield_bpm0l04Y_rms vs run
χ² / ndf 3.296e+04 / 80
p0 0.005562 ± 4.483e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

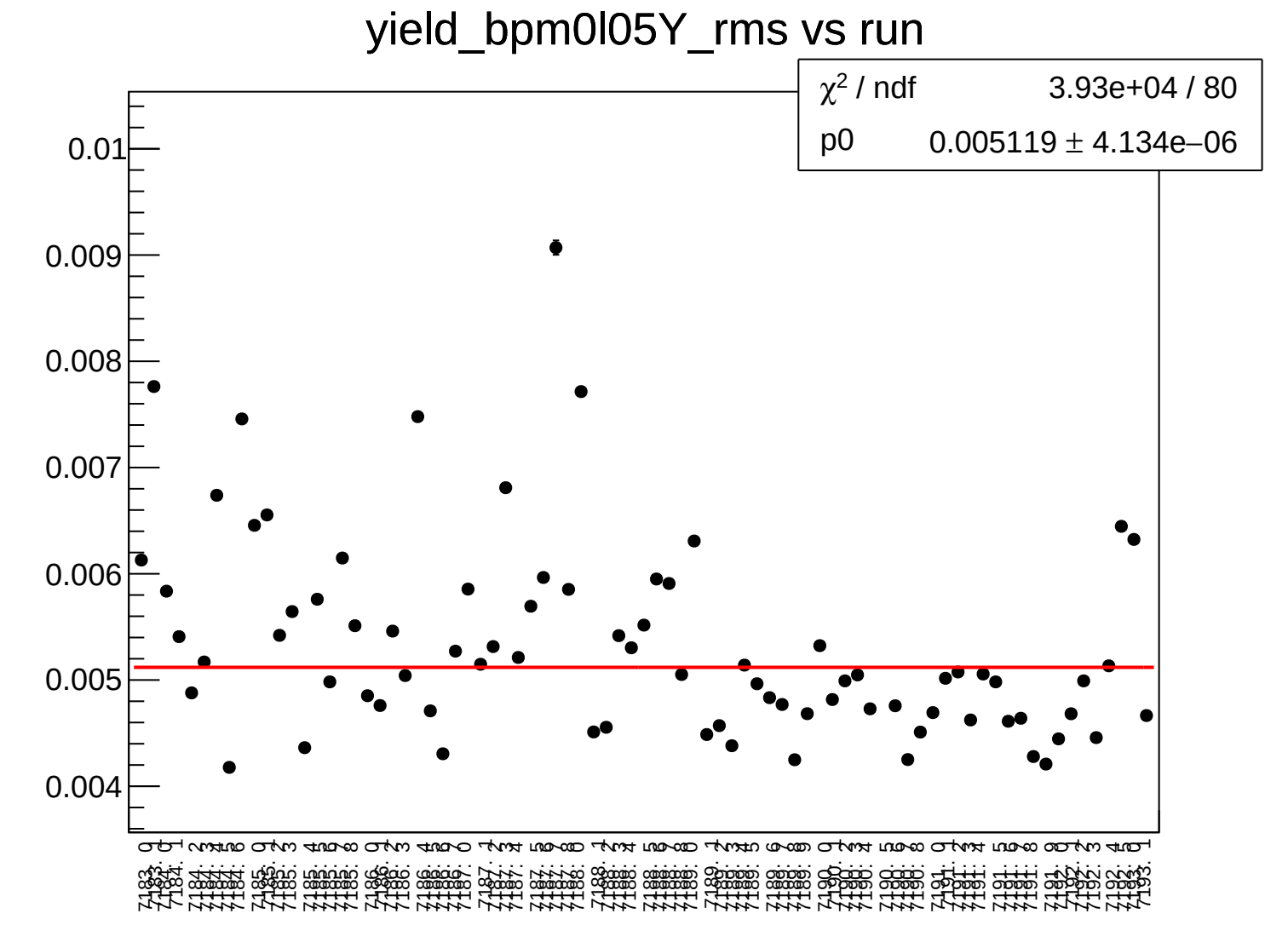

yield_bpm0l05X_mean vs run
χ² / ndf 1.346e+07 / 80
p0 0.4195 ± 6.289e−06
0.46
0.44
0.42
0.4
0.38
0.36
pull
Entries 81
Mean 402.4
Std Dev 393.7
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

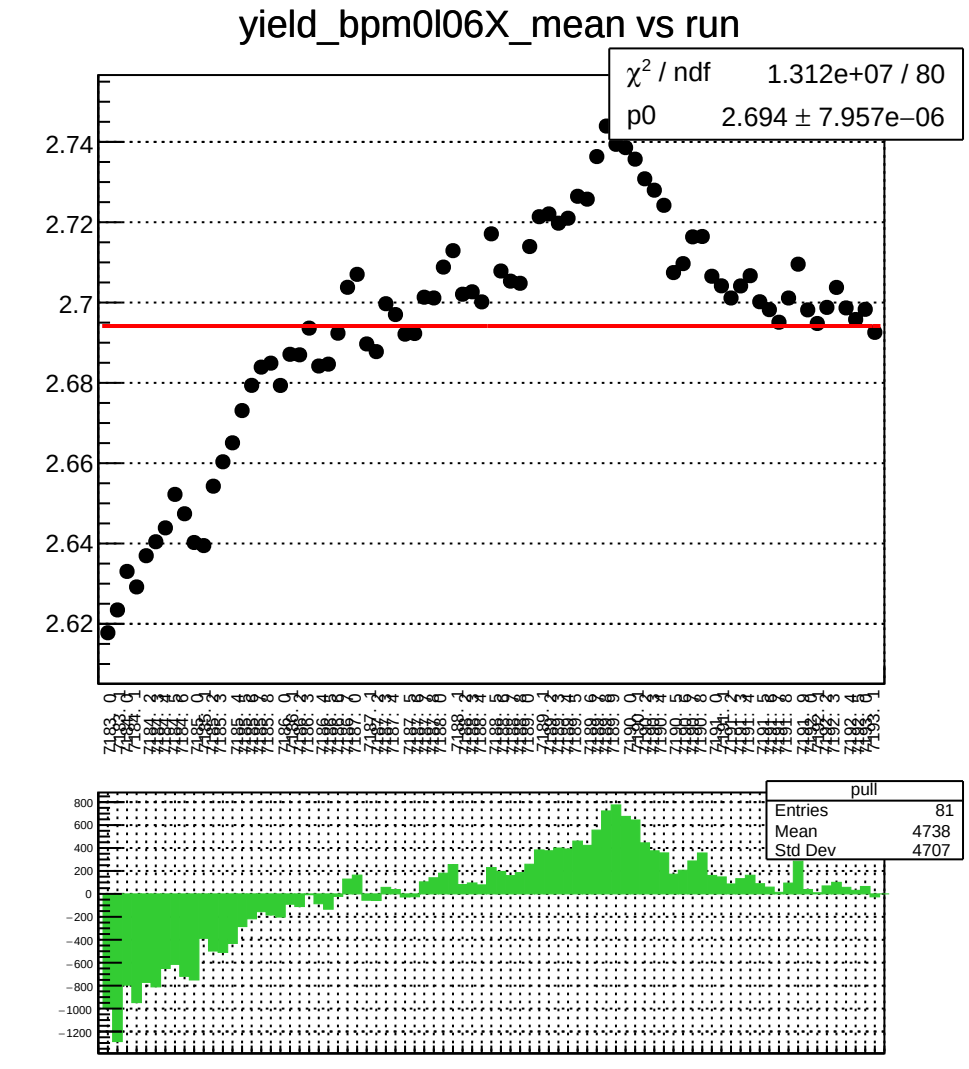

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

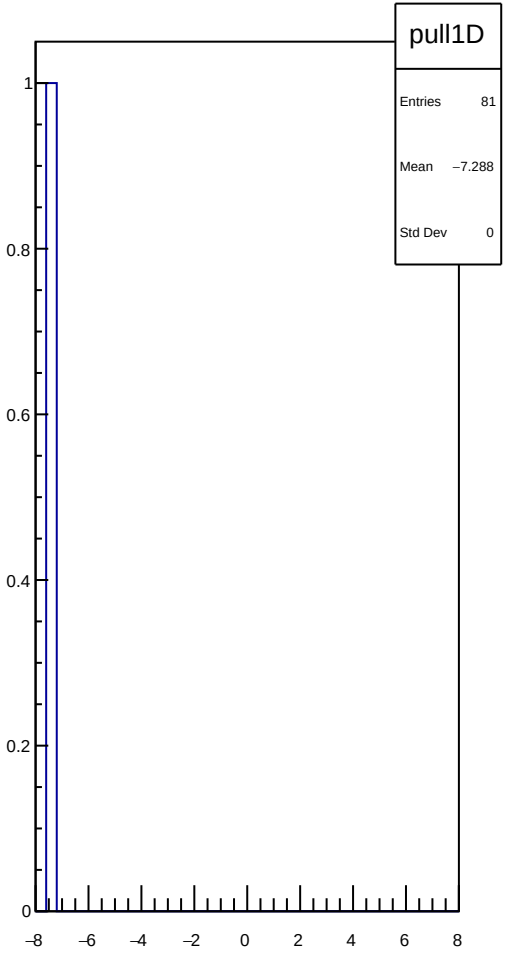

yield_bpm0l05X_rms vs run
χ^2 / ndf 2.496e+04 / 80
p0 0.005532 ± 4.447e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

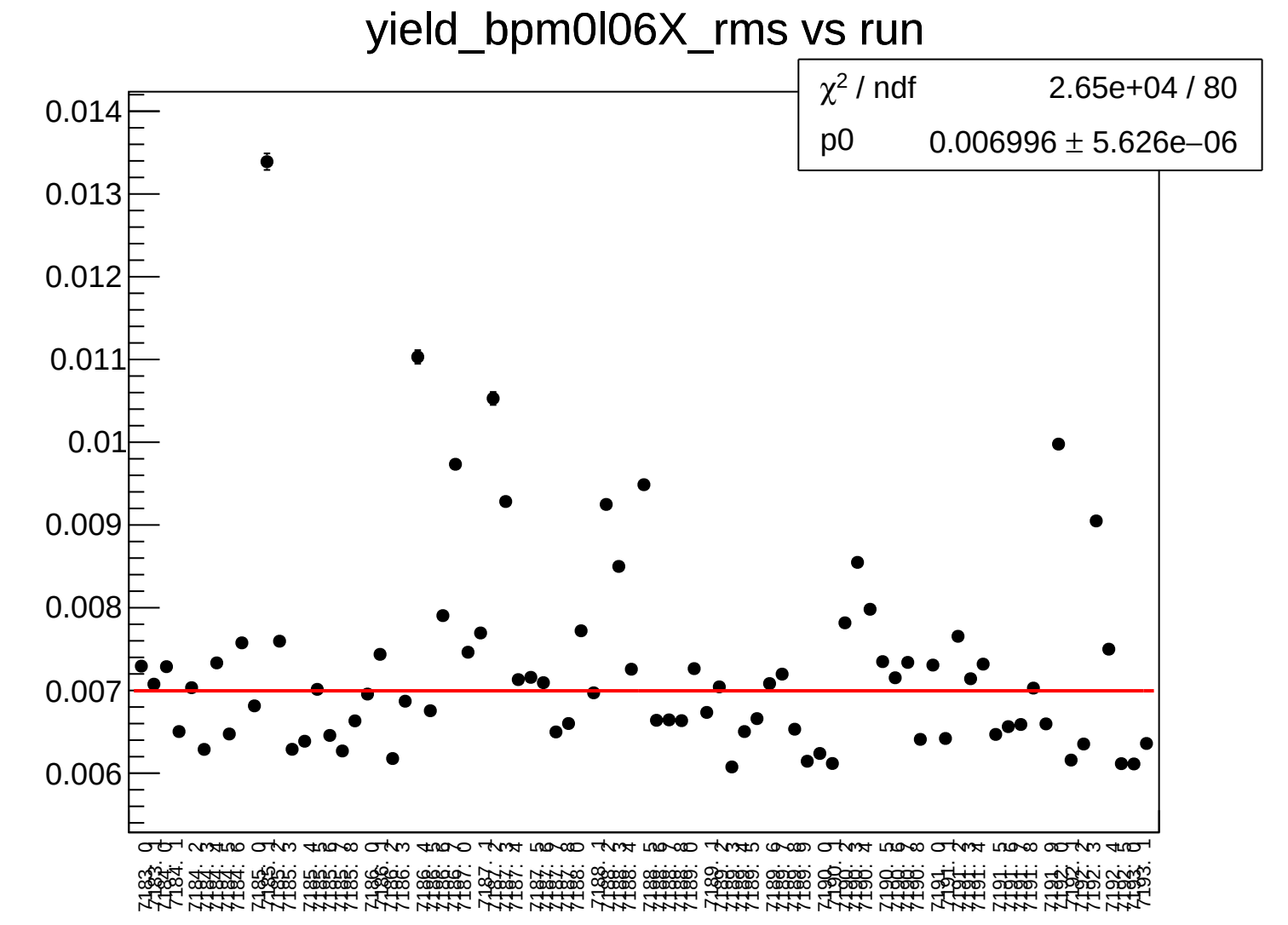

yield_bpm0l05Y_mean vs run
χ² / ndf 3.829e+06 / 80
p0 2.552 ± 5.847e−06
2.57
2.56
2.55
2.54
2.53
2.52
pull
Entries 81
Mean −295.8
Std Dev 316.2
400
200
0
−200
−400
−600

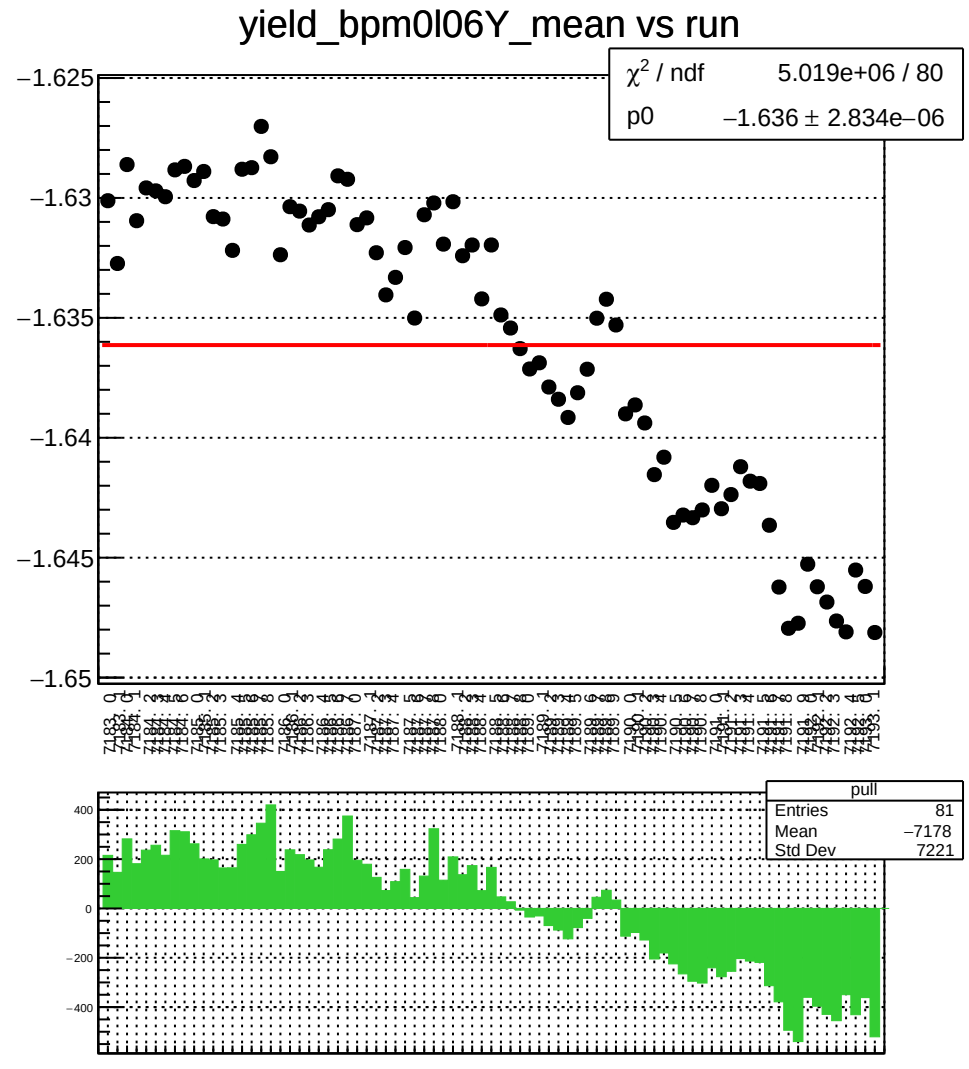

pull1D
Entries 81
Mean −1.229
Std Dev 2.78
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

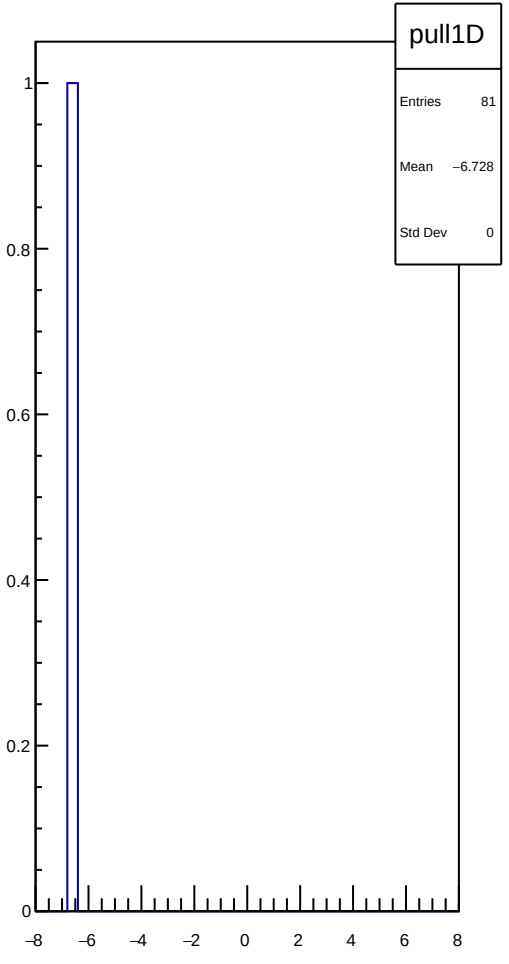

yield_bpm0l05Y_rms vs run
χ^2 / ndf 3.93e+04 / 80
p0 0.005119 ± 4.134e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004

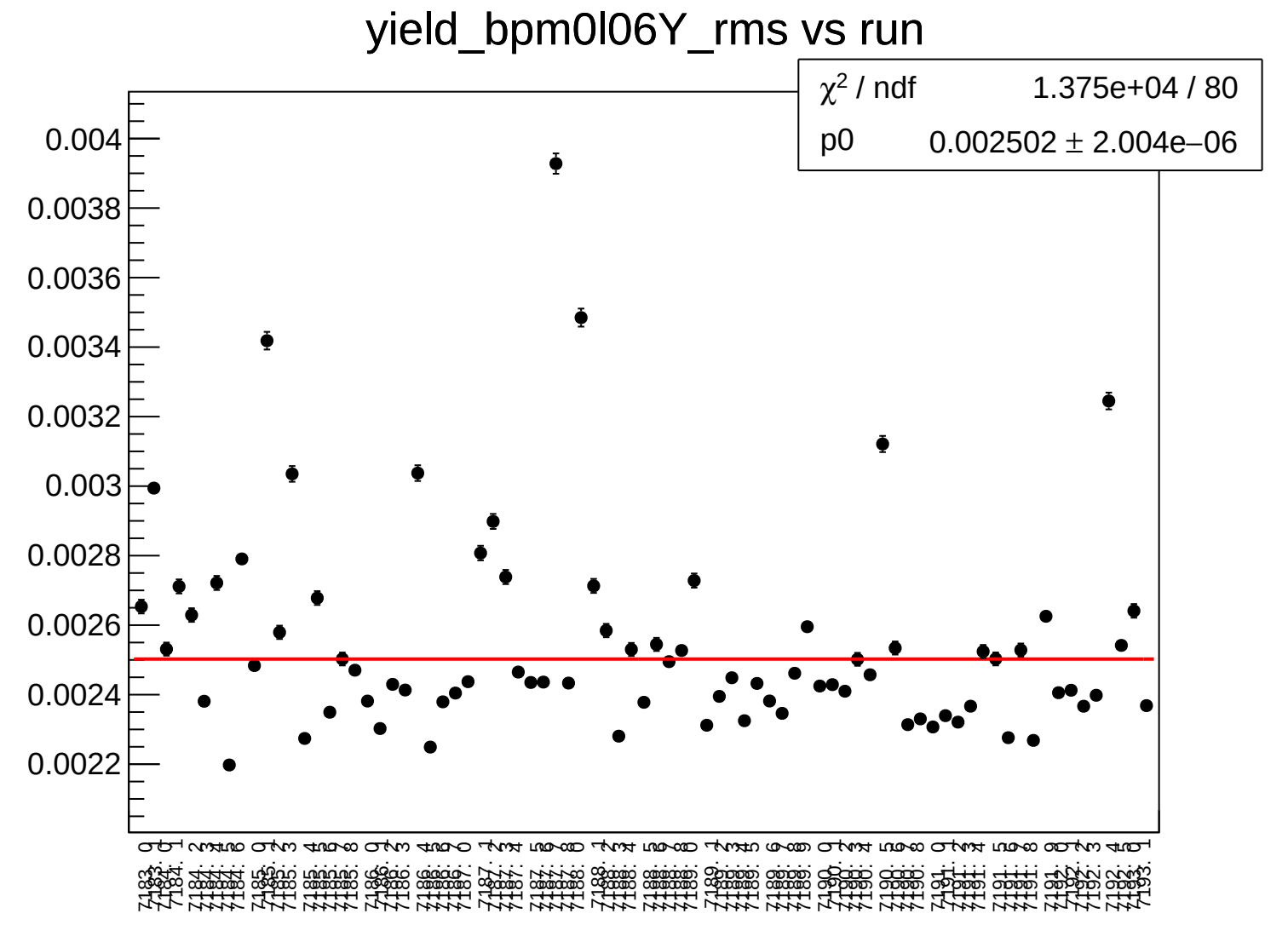

yield_bpm0l06X_mean vs run
χ² / ndf 1.312e+07 / 80
p0 2.694 ± 7.957e−06
2.74
2.72
2.7
2.68
2.66
2.64
2.62
pull
Entries 81
Mean 4738
Std Dev 4707
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

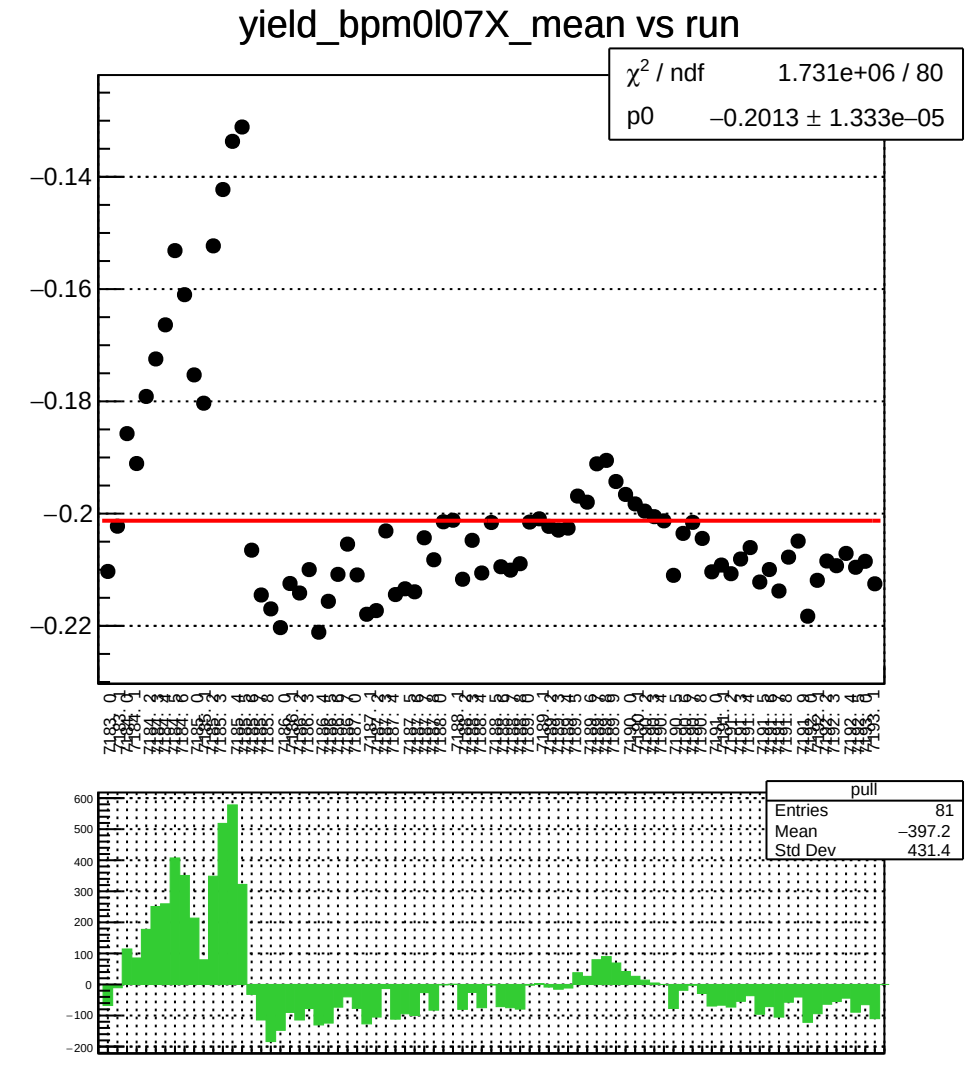

pull1D
Entries 81
Mean −7.288
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

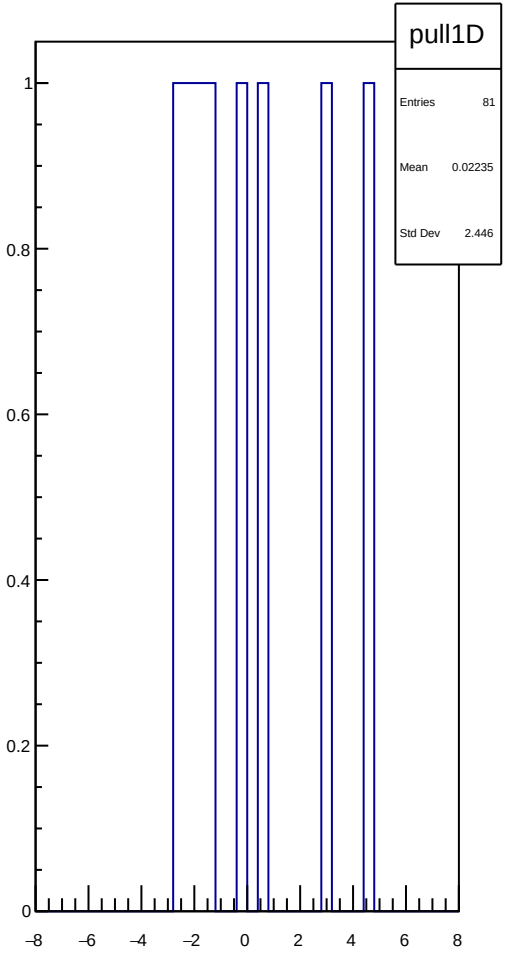

yield_bpm0l06X_rms vs run
χ² / ndf 2.65e+04 / 80
p0 0.006996 ± 5.626e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

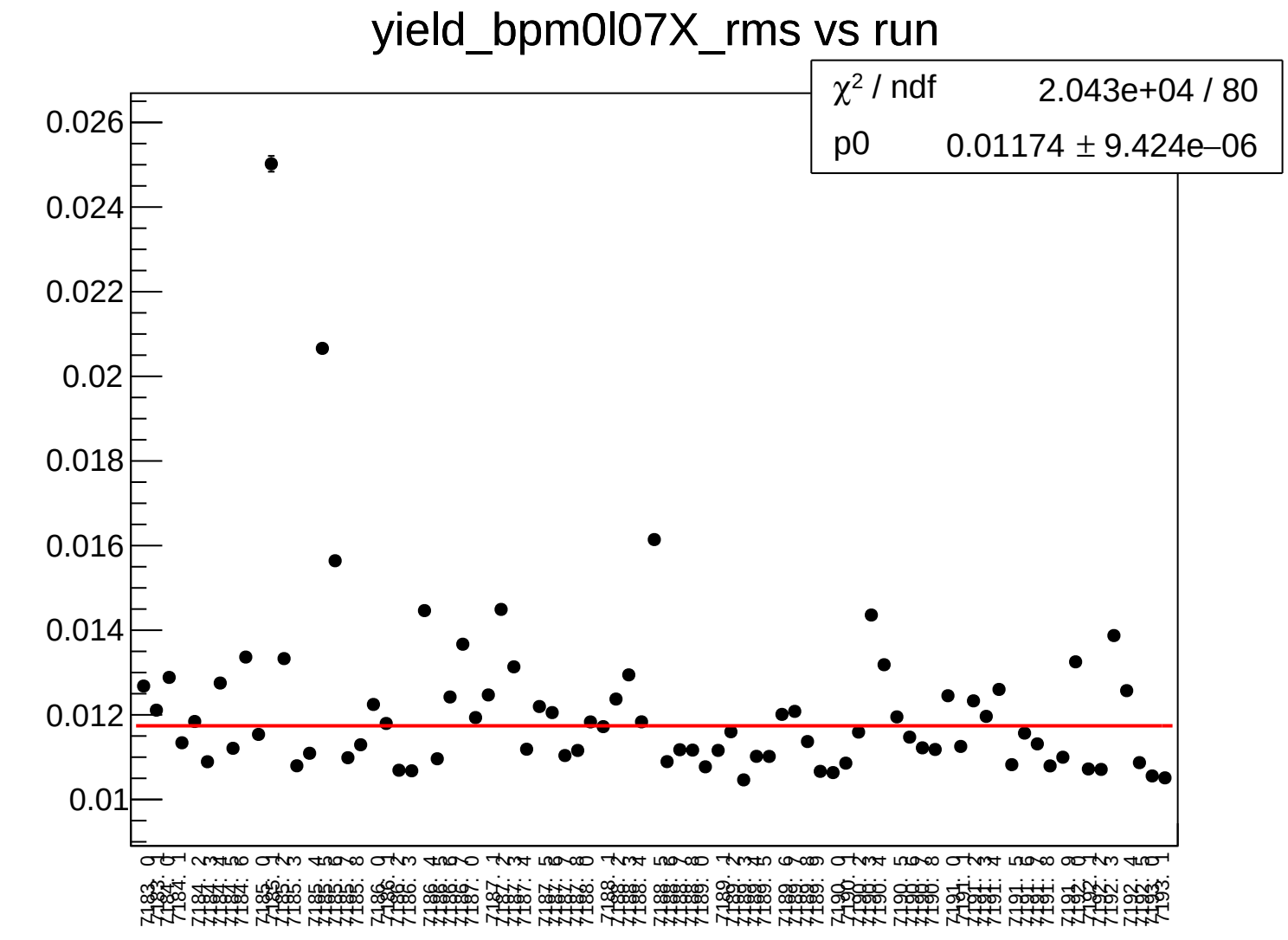

yield_bpm0l06Y_mean vs run
χ² / ndf 5.019e+06 / 80
p0 −1.636 ± 2.834e−06
−1.625
−1.63
−1.635
−1.64
−1.645
−1.65
pull
Entries 81
Mean −7178
Std Dev 7221
400
200
0
−200
−400

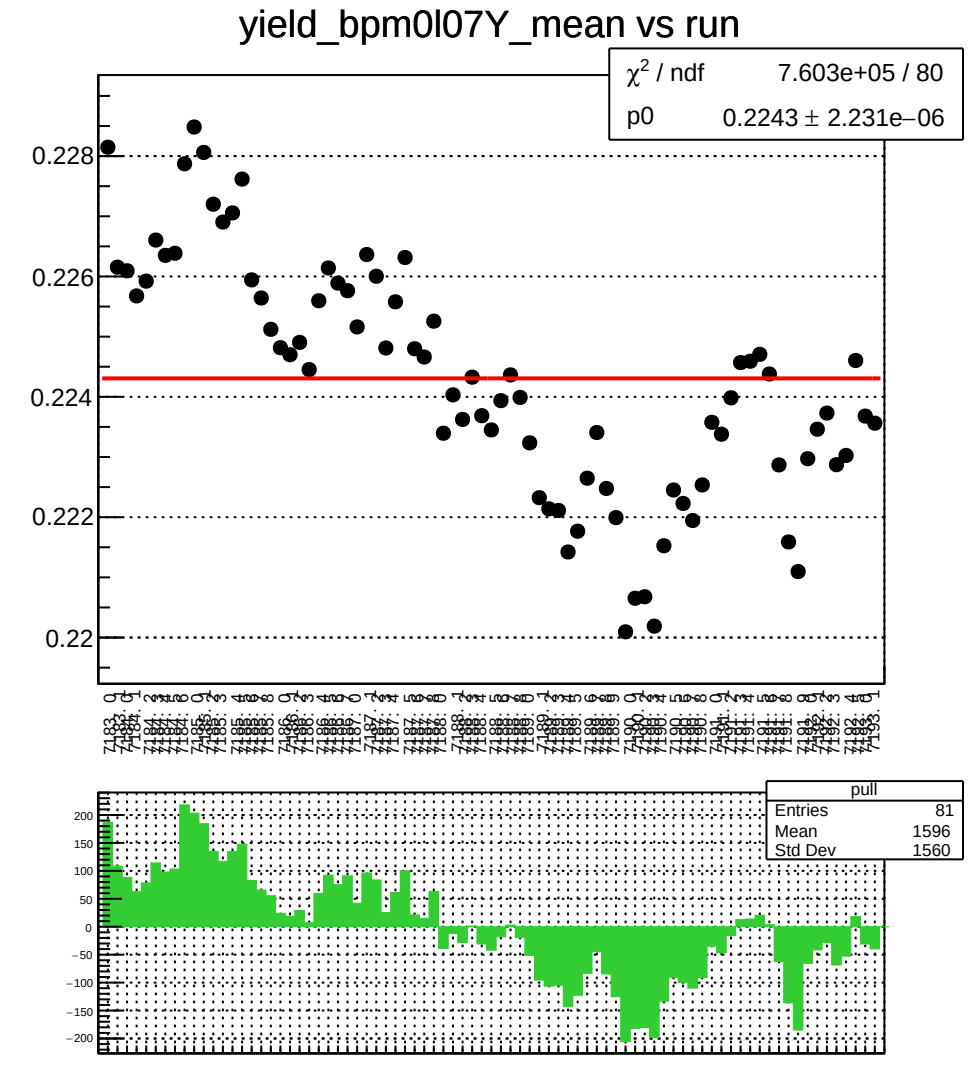

pull1D
Entries 81
Mean −6.728
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

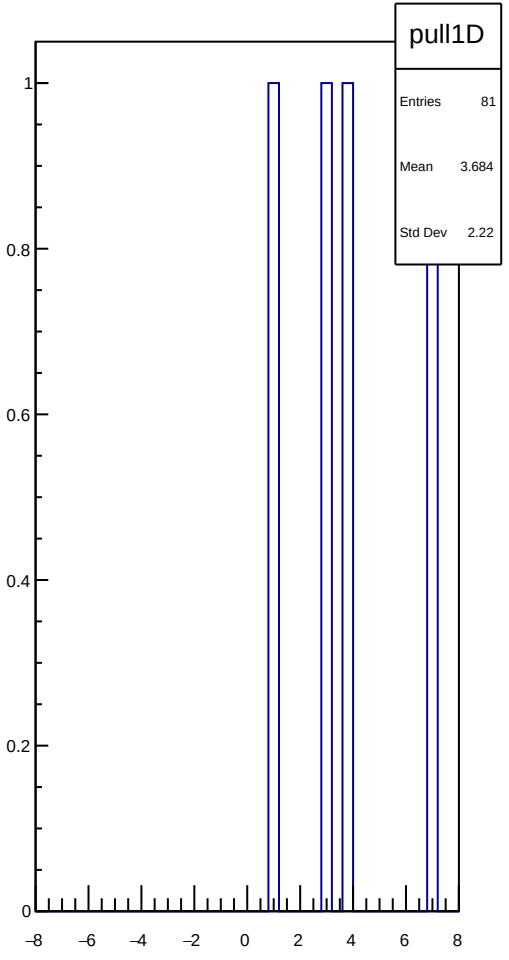

yield_bpm0l06Y_rms vs run
χ² / ndf 1.375e+04 / 80
p0 0.002502 ± 2.004e−06
0.004
0.0038
0.0036
0.0034
0.0032
0.003
0.0028
0.0026
0.0024
0.0022

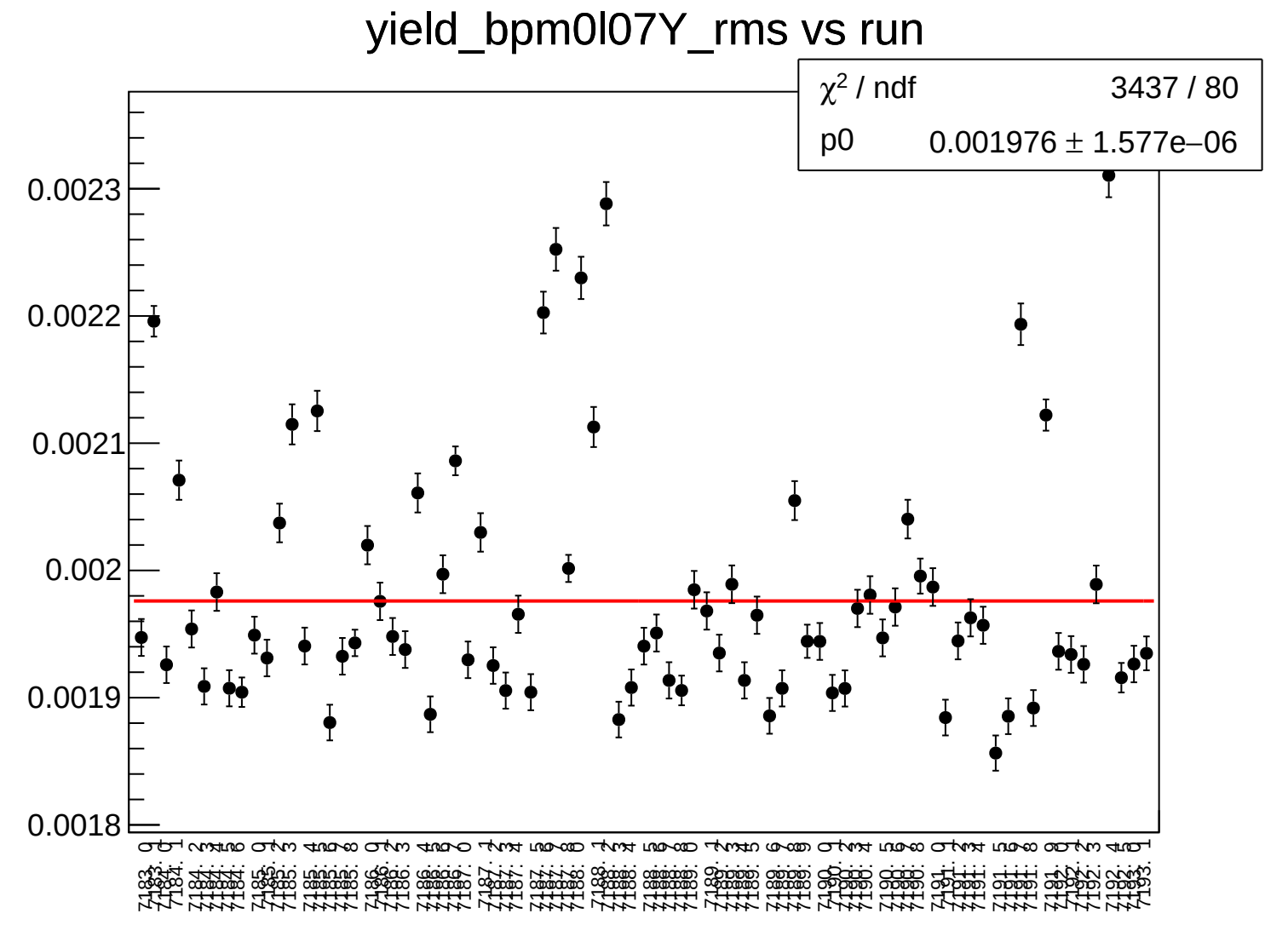

yield_bpm0l07X_mean vs run
χ² / ndf 1.731e+06 / 80
p0 −0.2013 ± 1.333e−05
−0.14
−0.16
−0.18
−0.2
−0.22
pull
Entries 81
Mean −397.2
Std Dev 431.4
600
500
400
300
200
100
0
−100
−200

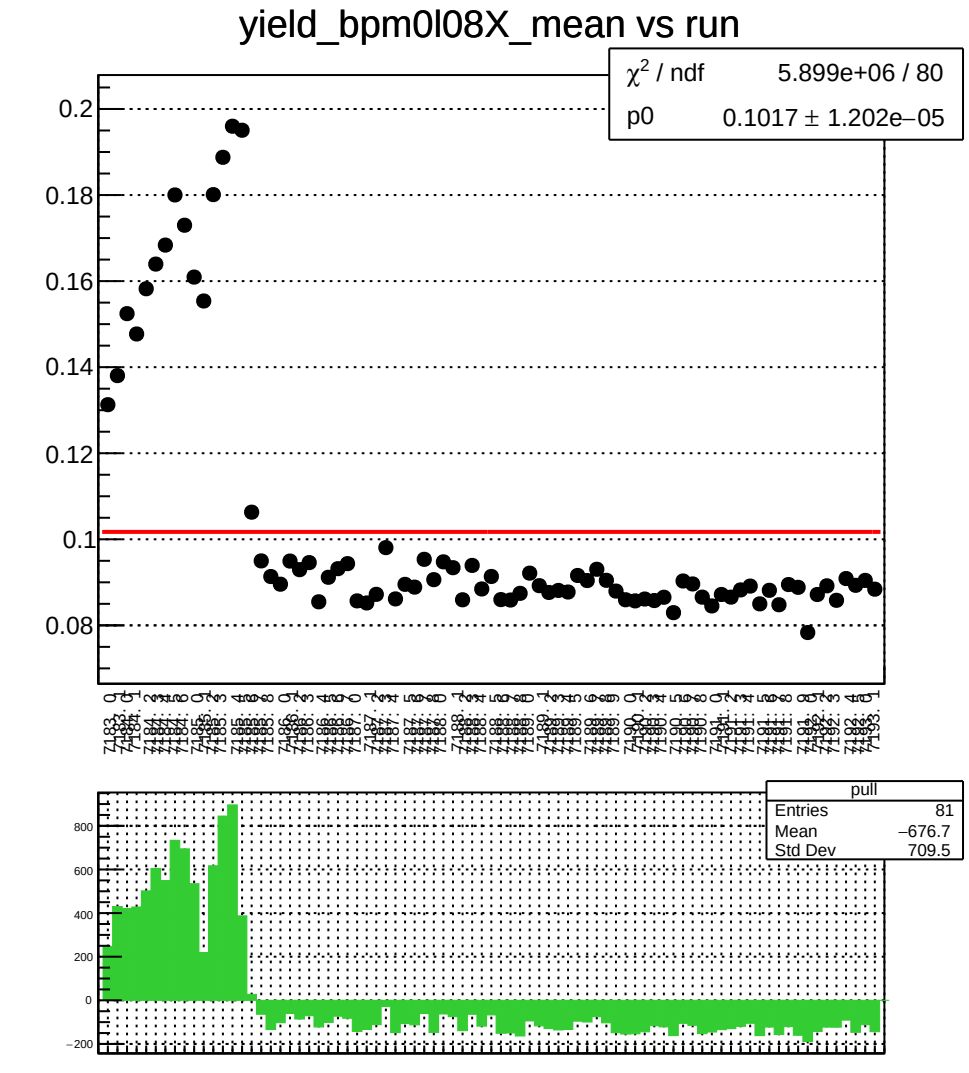

pull1D
Entries 81
Mean 0.02235
Std Dev 2.446
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

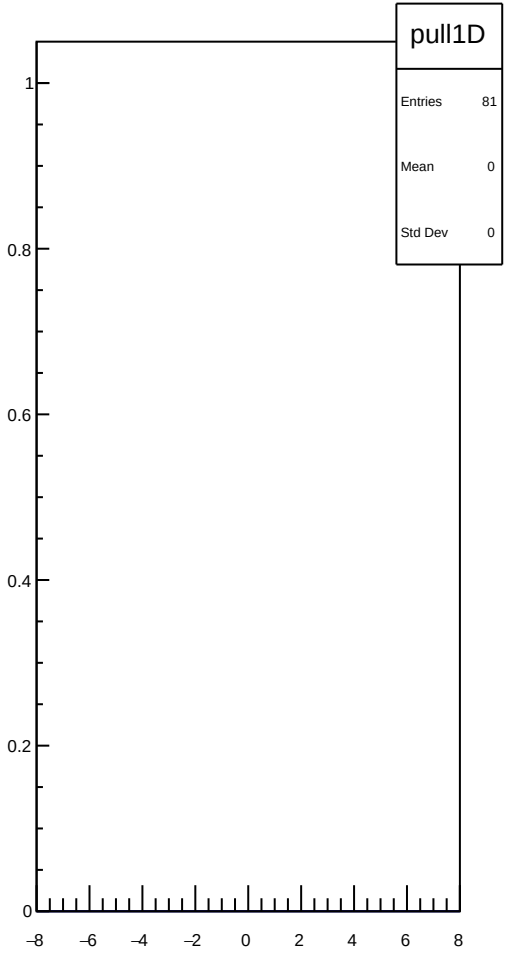

yield_bpm0l07X_rms vs run
χ² / ndf 2.043e+04 / 80
p0 0.01174 ± 9.424e–06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

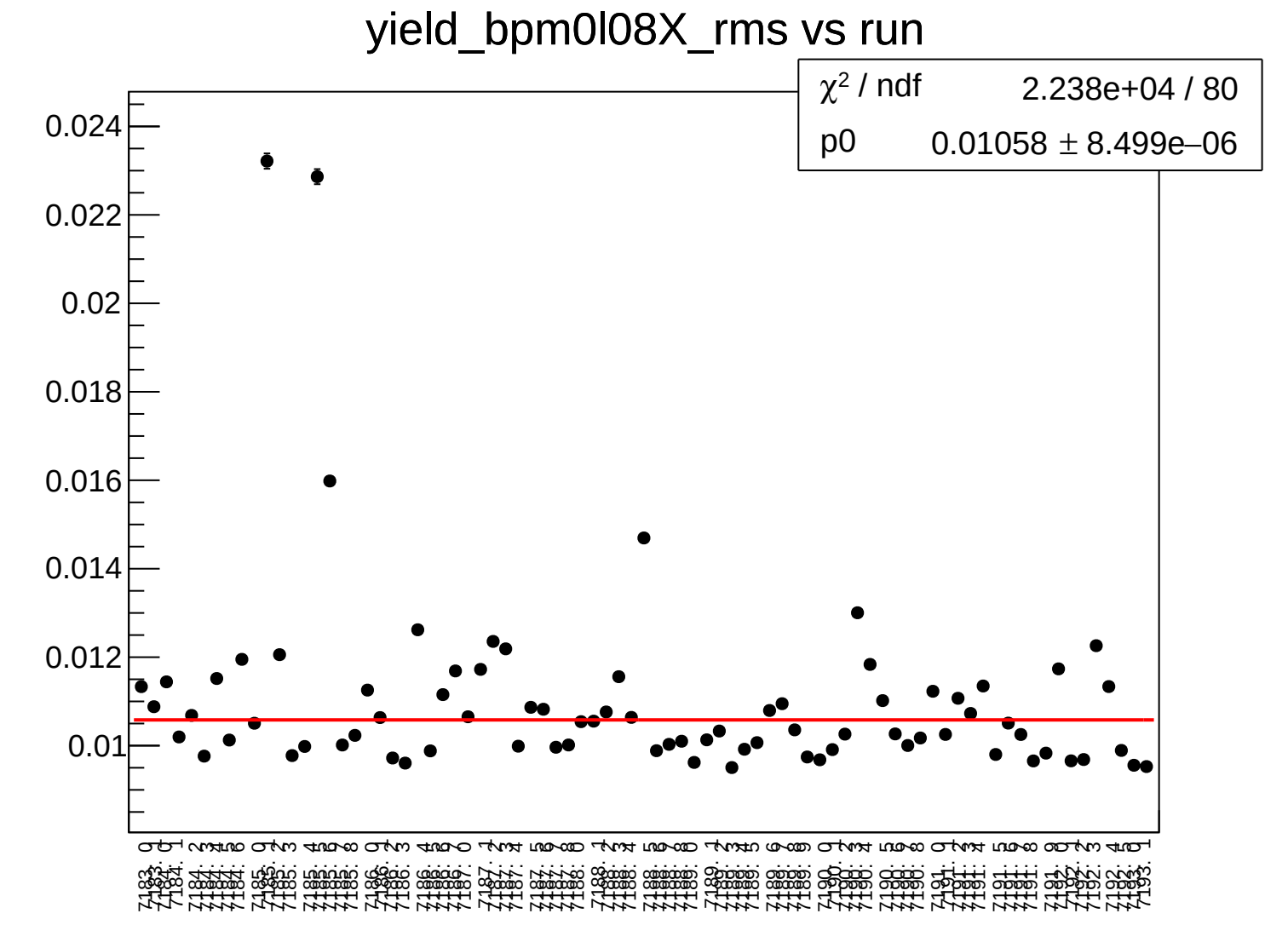

yield_bpm0l07Y_mean vs run
χ² / ndf 7.603e+05 / 80
p0 0.2243 ± 2.231e−06
0.228
0.226
0.224
0.222
0.22
pull
Entries 81
Mean 1596
Std Dev 1560
200
150
100
50
0
−50
−100
−150
−200

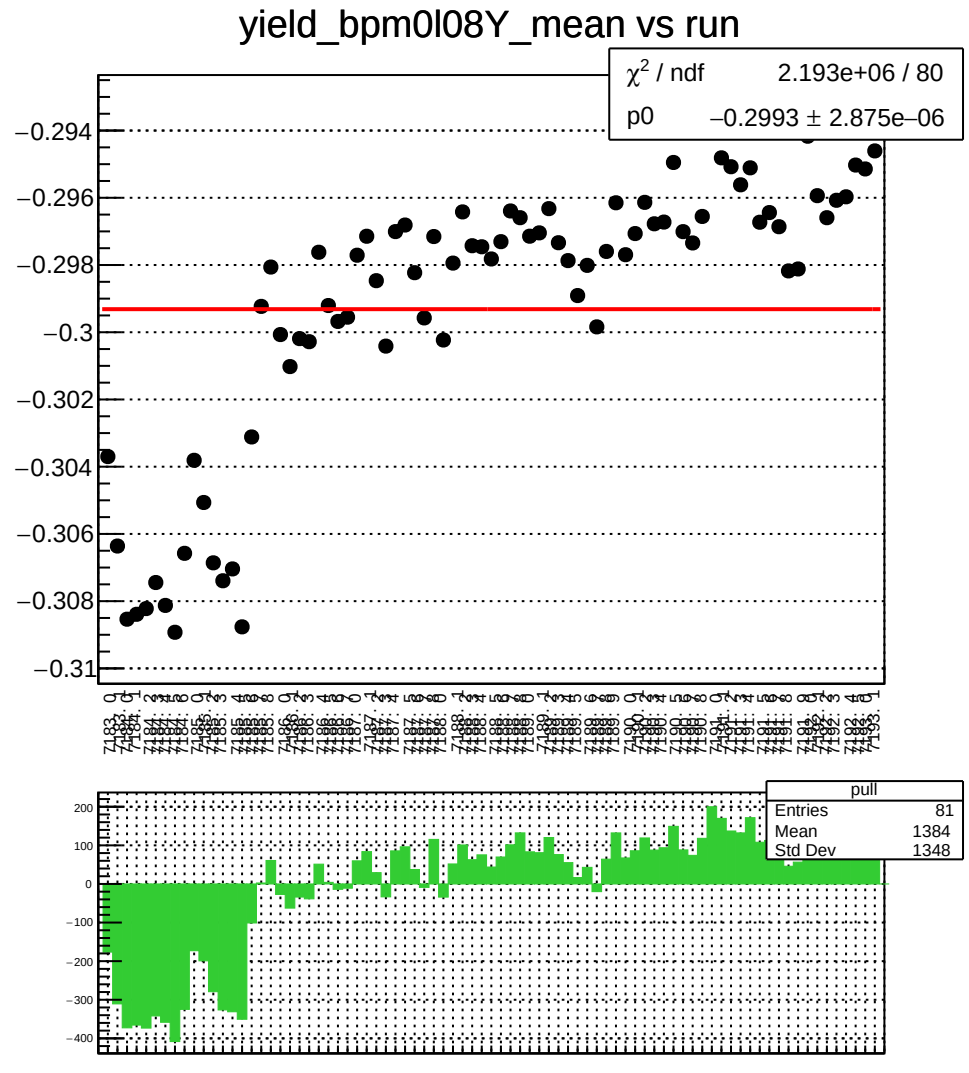

pull1D
Entries 81
Mean 3.684
Std Dev 2.22
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

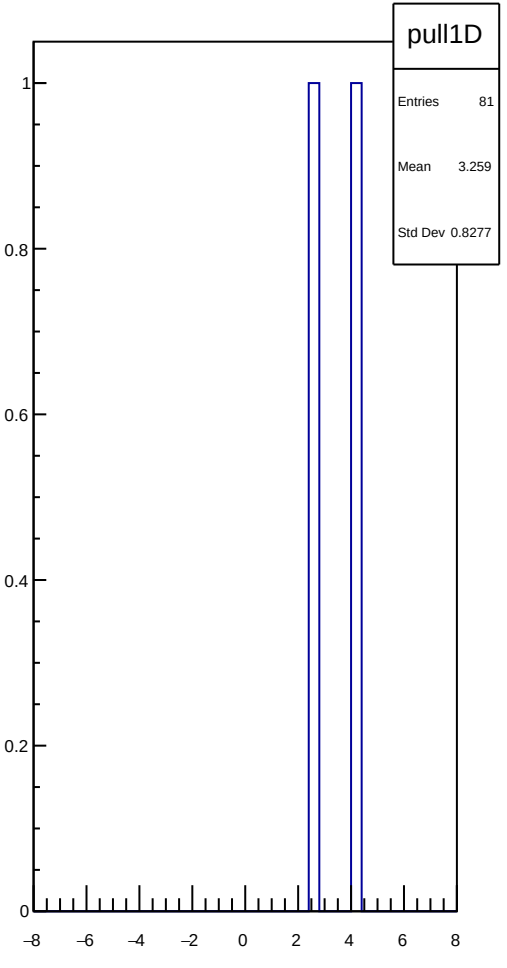

yield_bpm0l07Y_rms vs run
χ² / ndf 3437 / 80
p0 0.001976 ± 1.577e−06
0.0023
0.0022
0.0021
0.002
0.0019
0.0018


yield_bpm0l08X_mean vs run
χ² / ndf 5.899e+06 / 80
p0 0.1017 ± 1.202e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
pull
Entries 81
Mean −676.7
Std Dev 709.5
800
600
400
200
0
−200

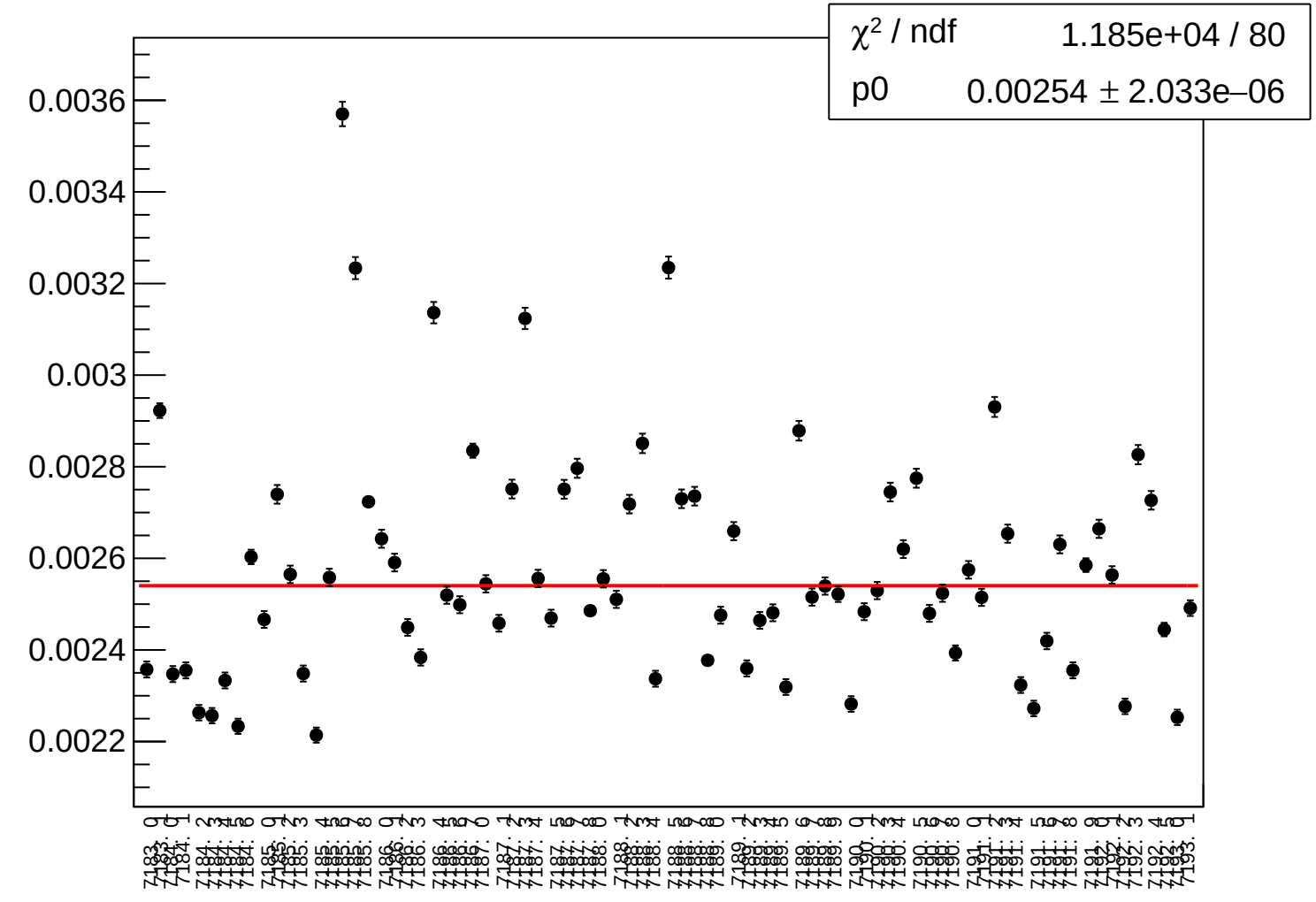

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

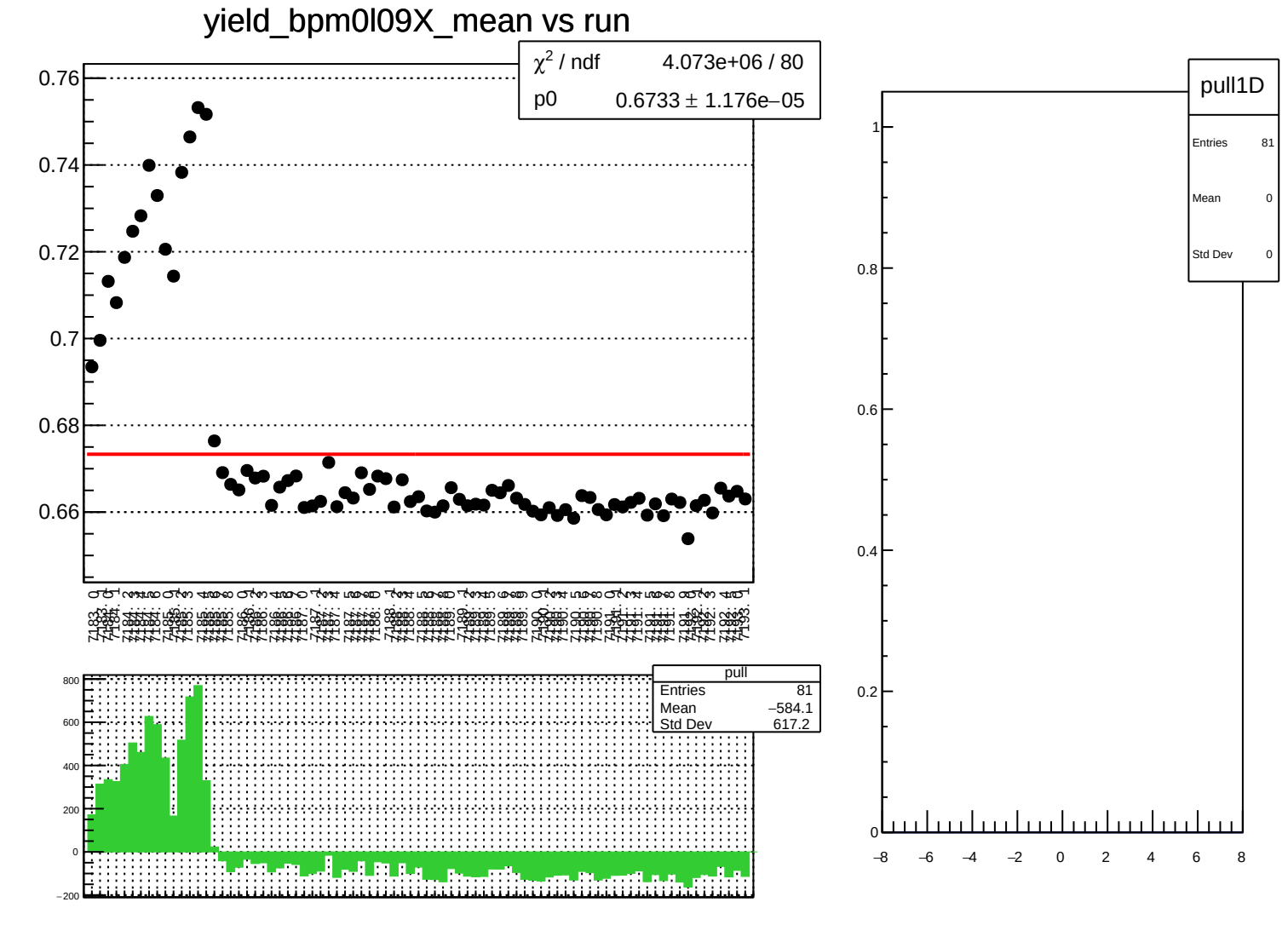

yield_bpm0l08X_rms vs run
χ² / ndf 2.238e+04 / 80
p0 0.01058 ± 8.499e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

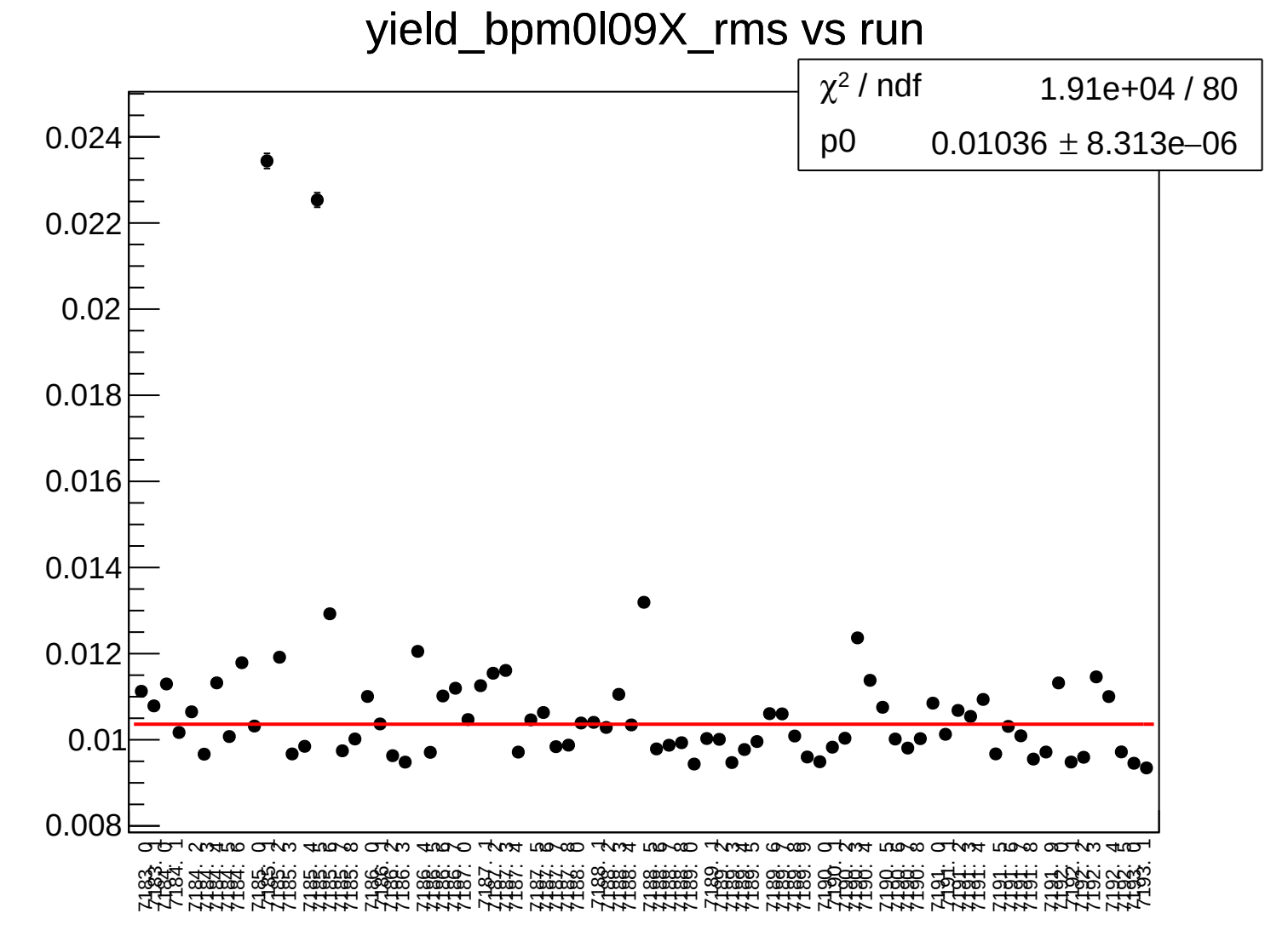

yield_bpm0l08Y_mean vs run
χ² / ndf 2.193e+06 / 80
p0 −0.2993 ± 2.875e−06
−0.294
−0.296
−0.298
−0.3
−0.302
−0.304
−0.306
−0.308
−0.31
pull
Entries 81
Mean 1384
Std Dev 1348
200
100
0
−100
−200
−300
−400

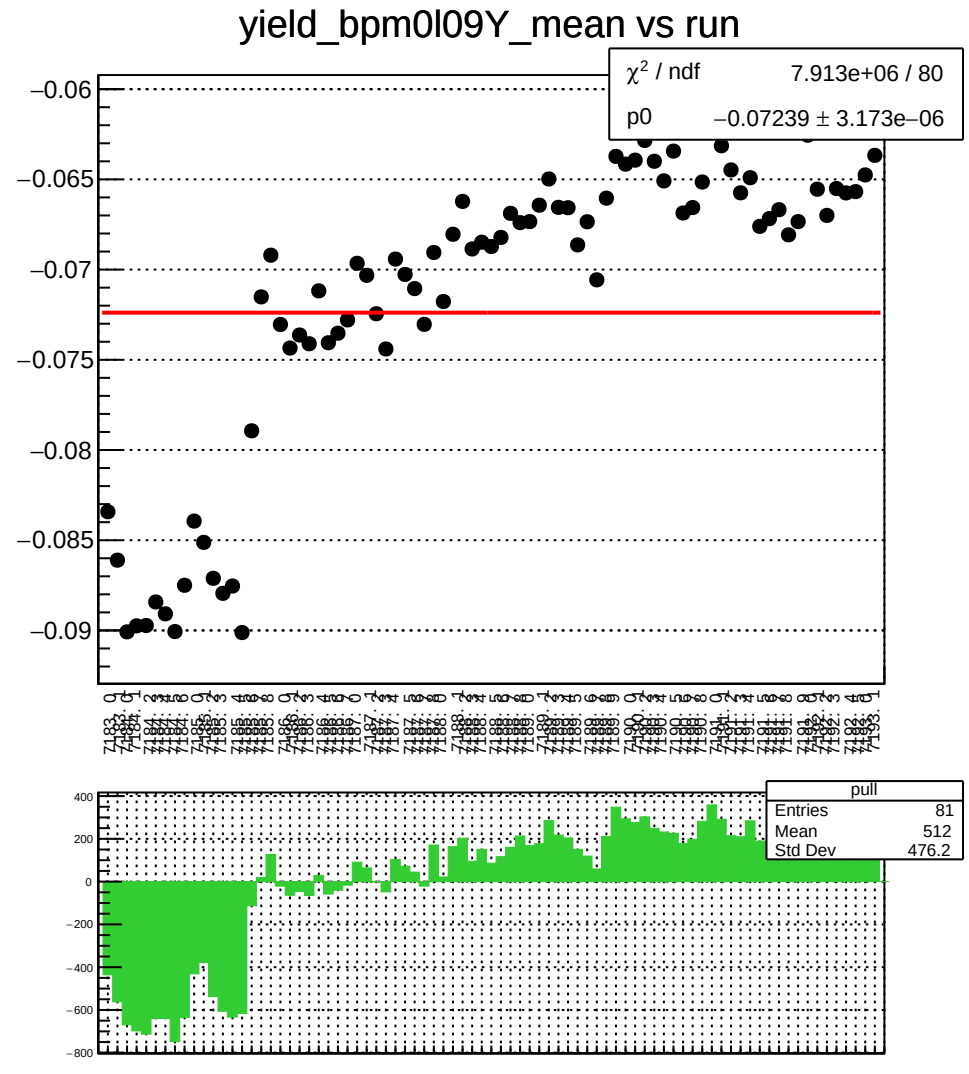

pull1D
Entries 81
Mean 3.259
Std Dev 0.8277
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

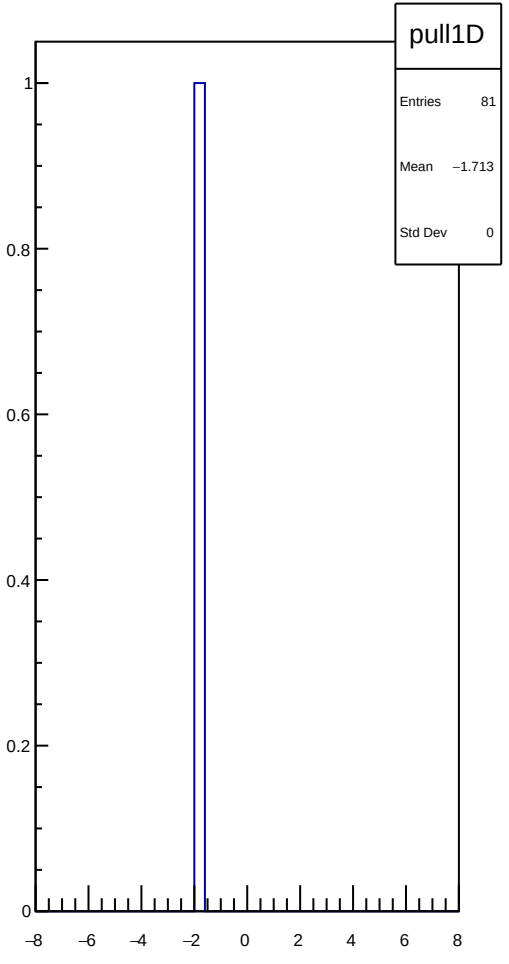
yield_bpm0l08Y_rms vs run

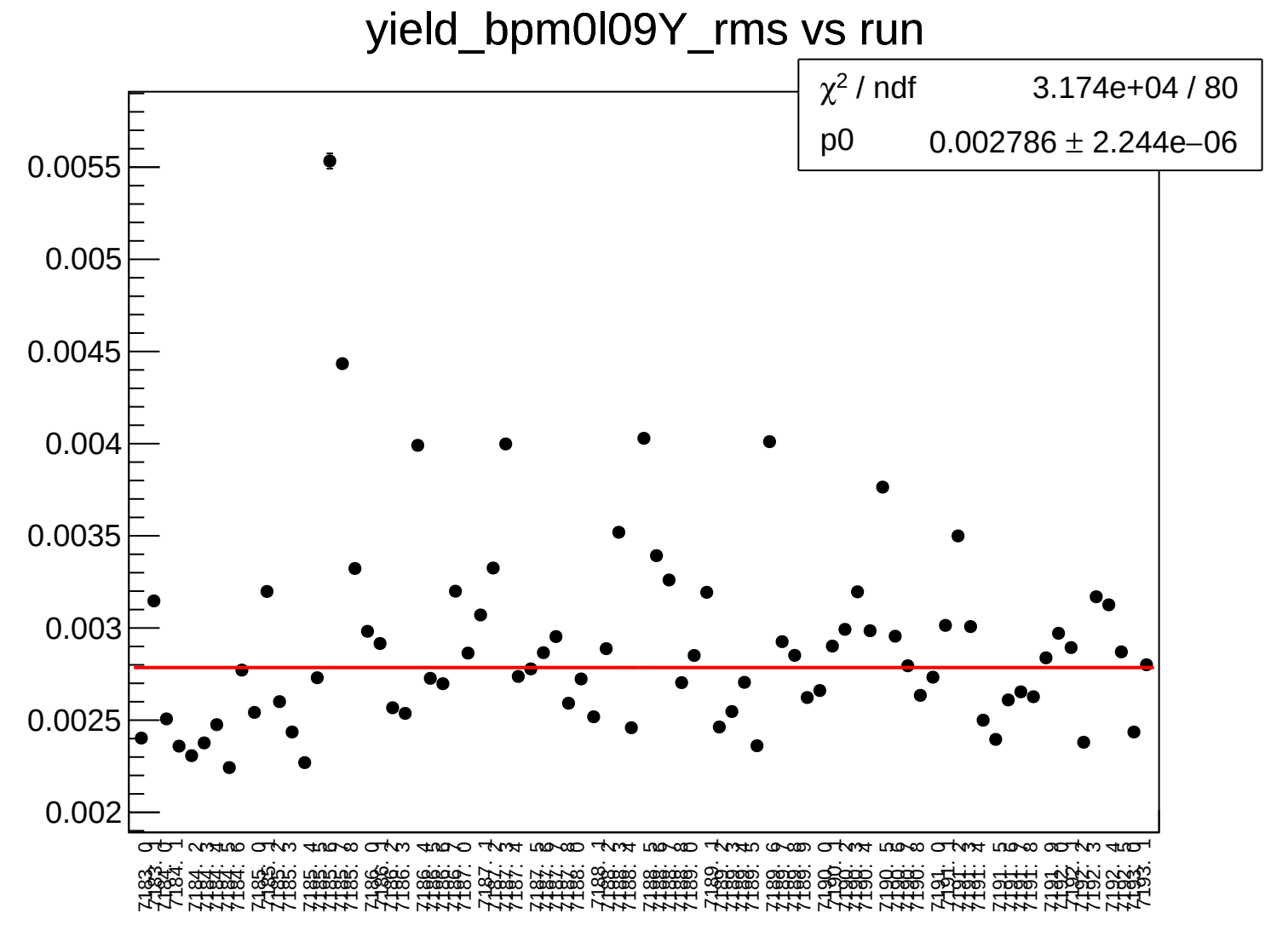


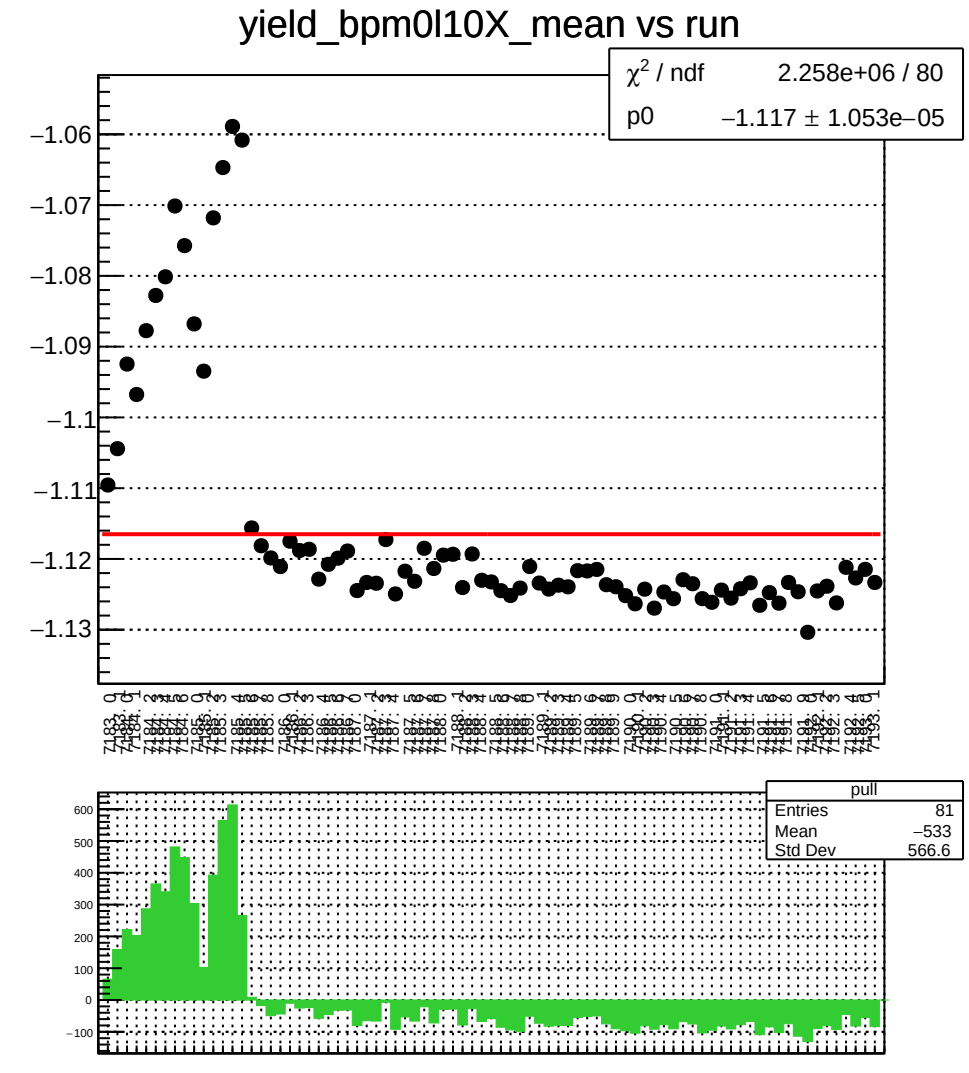

yield_bpm0l09X_mean vs run
χ² / ndf 4.073e+06 / 80
p0 0.6733 ± 1.176e−05
0.76
0.74
0.72
0.7
0.68
0.66
pull
Entries 81
Mean −584.1
Std Dev 617.2
800
600
400
200
0
−200
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

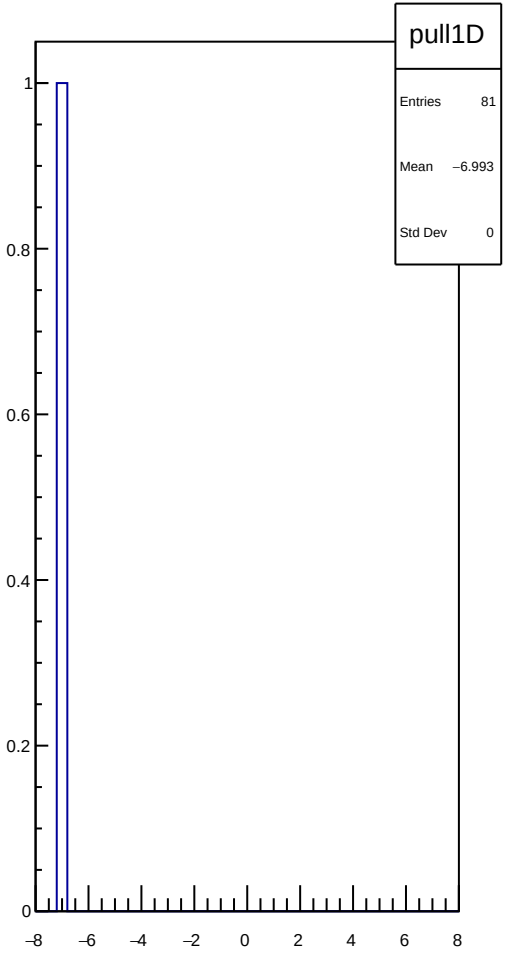

yield_bpm0l09X_rms vs run
χ² / ndf 1.91e+04 / 80
p0 0.01036 ± 8.313e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

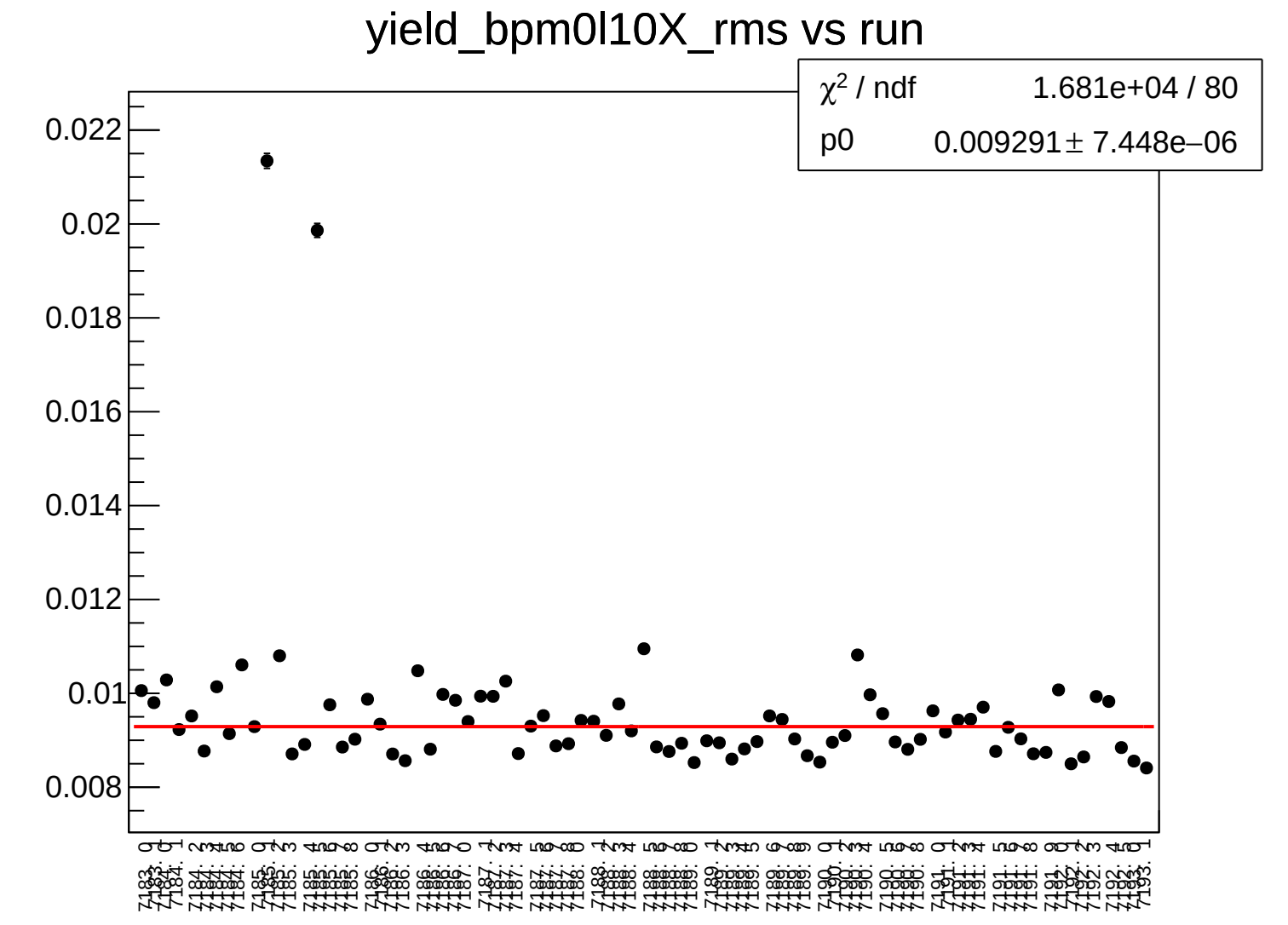

yield_bpm0l09Y_mean vs run
χ² / ndf 7.913e+06 / 80
p0 −0.07239 ± 3.173e−06
−0.06
−0.065
−0.07
−0.075
−0.08
−0.085
−0.09
pull
Entries 81
Mean 512
Std Dev 476.2
400
200
0
−200
−400
−600
−800

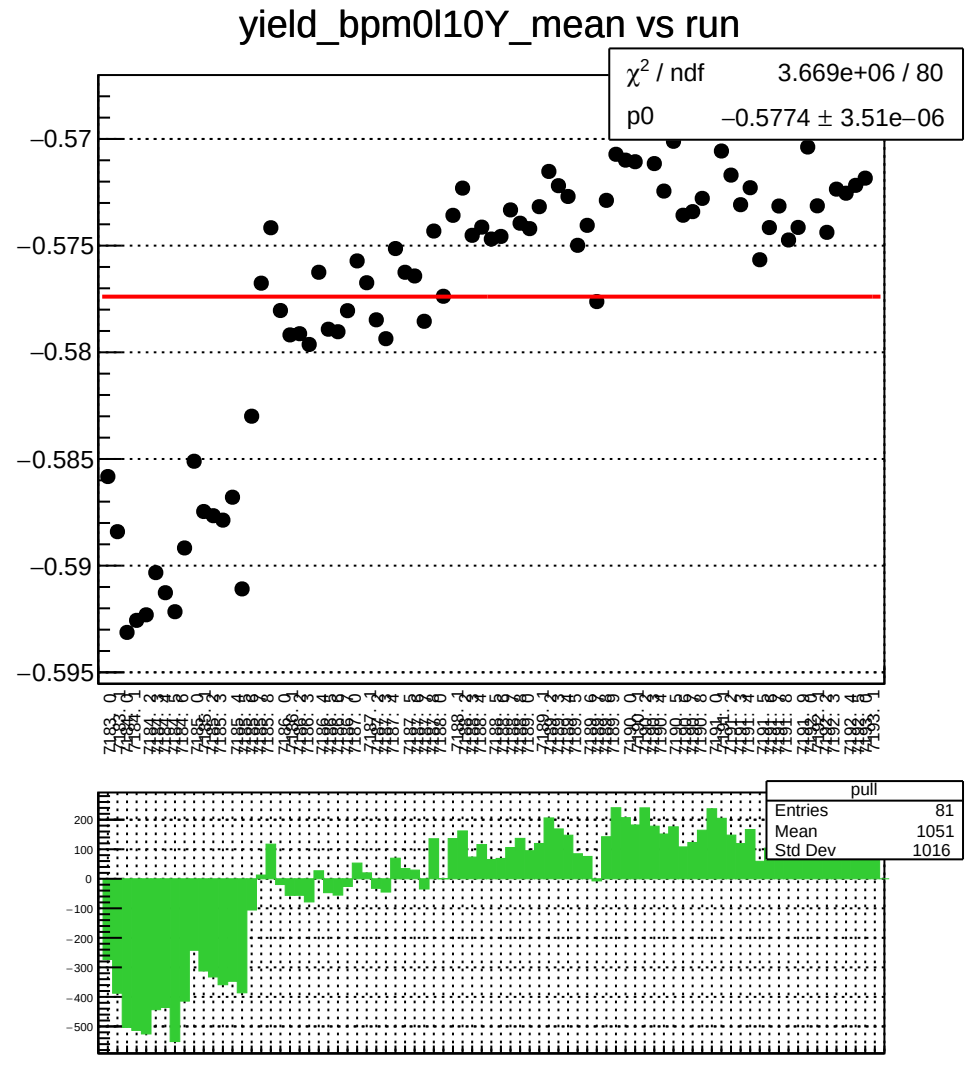

pull1D
Entries 81
Mean −1.713
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

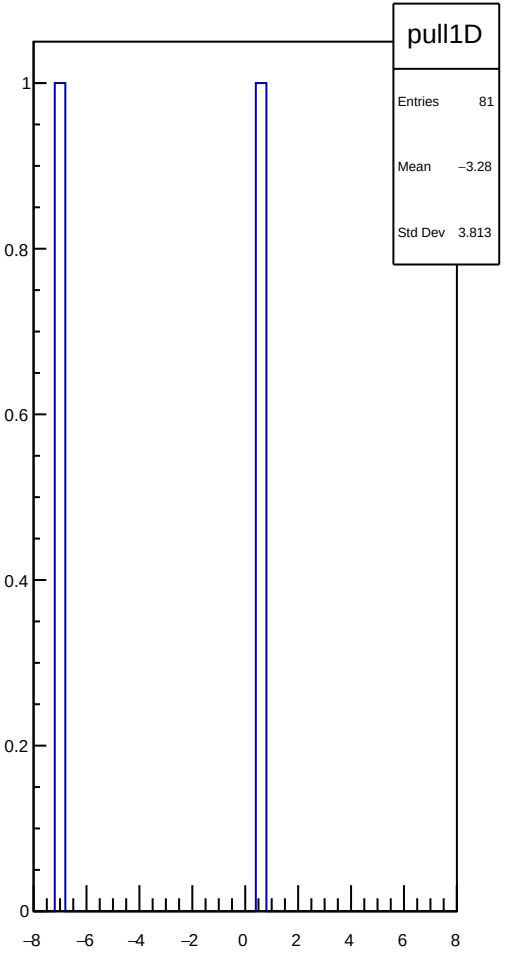

yield_bpm0l09Y_rms vs run
χ² / ndf 3.174e+04 / 80
p0 0.002786 ± 2.244e−06
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

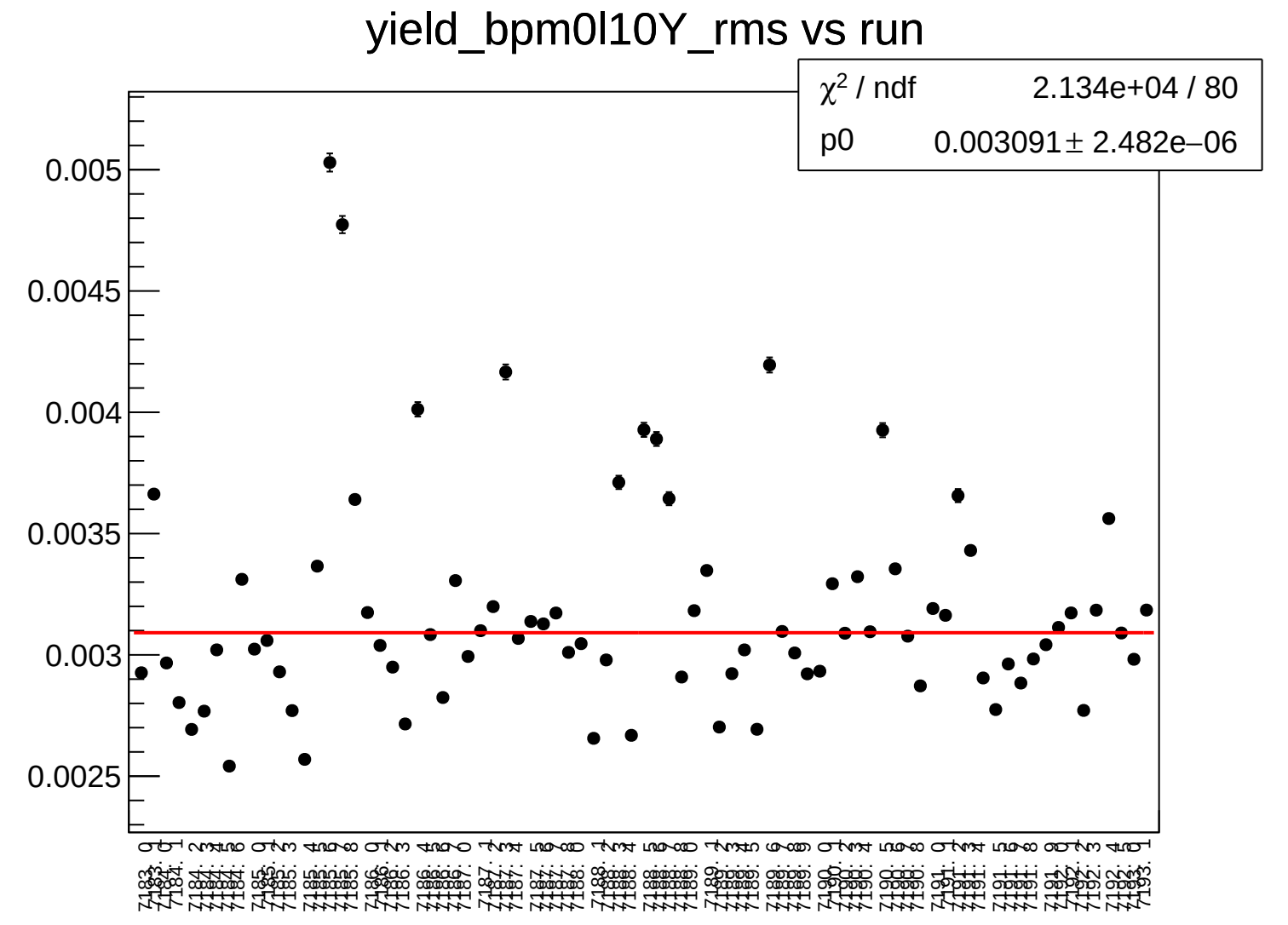

yield_bpm0l10X_mean vs run
χ² / ndf 2.258e+06 / 80
p0 −1.117 ± 1.053e−05
−1.06
−1.07
−1.08
−1.09
−1.1
−1.11
−1.12
−1.13
pull
Entries 81
Mean −533
Std Dev 566.6
600
500
400
300
200
100
0
−100

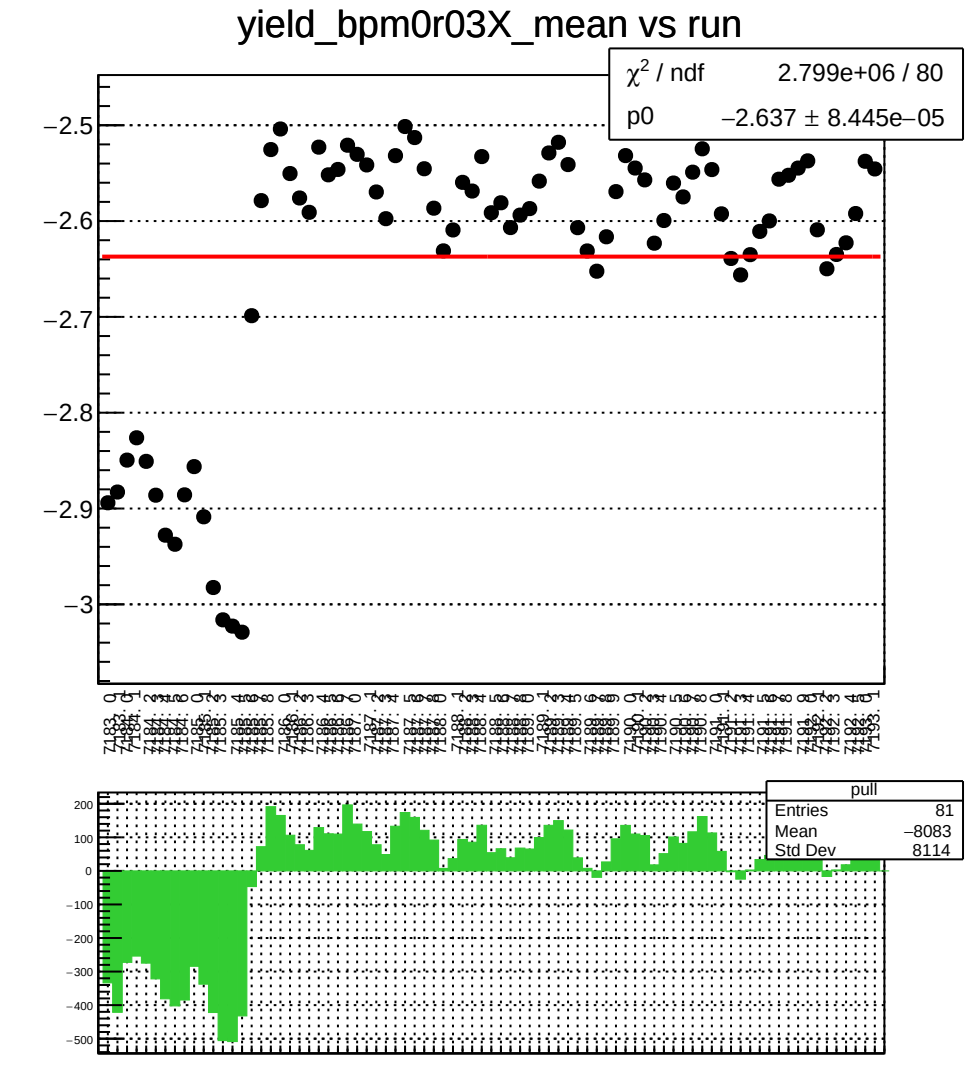

pull1D
Entries 81
Mean −6.993
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

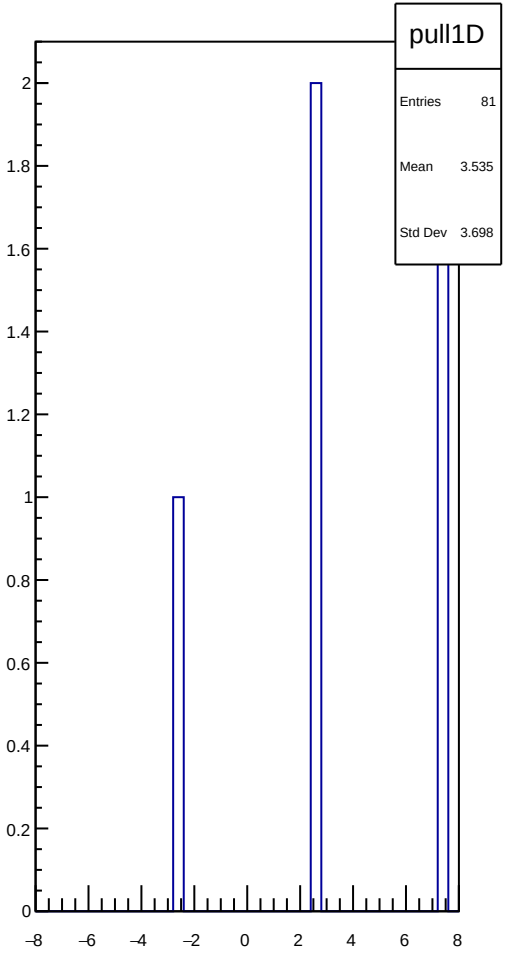

yield_bpm0l10X_rms vs run
χ² / ndf 1.681e+04 / 80
p0 0.009291 ± 7.448e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

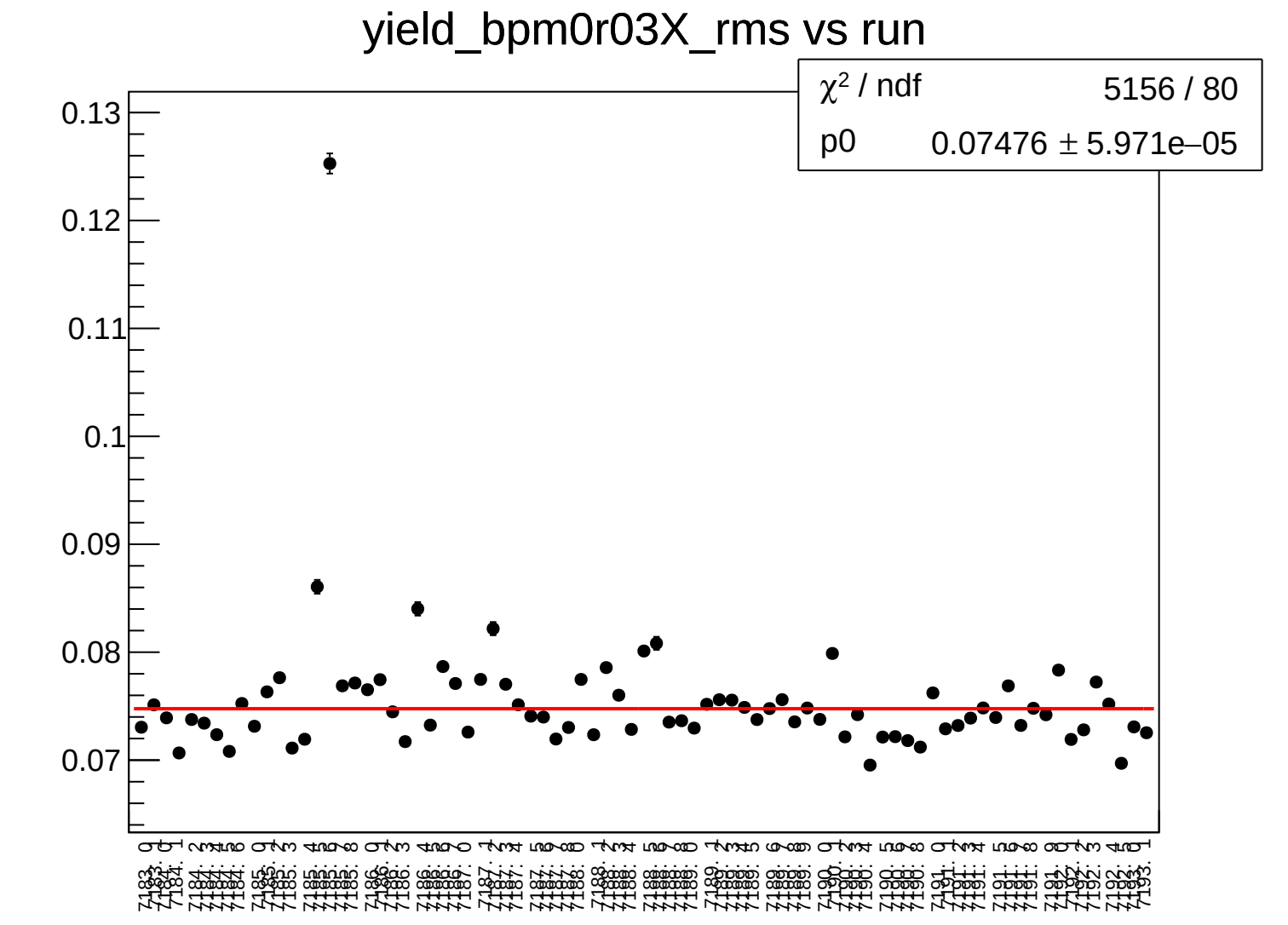

yield_bpm0l10Y_mean vs run
χ² / ndf 3.669e+06 / 80
p0 −0.5774 ± 3.51e−06
−0.57
−0.575
−0.58
−0.585
−0.59
−0.595
pull
Entries 81
Mean 1051
Std Dev 1016
200
100
0
−100
−200
−300
−400
−500

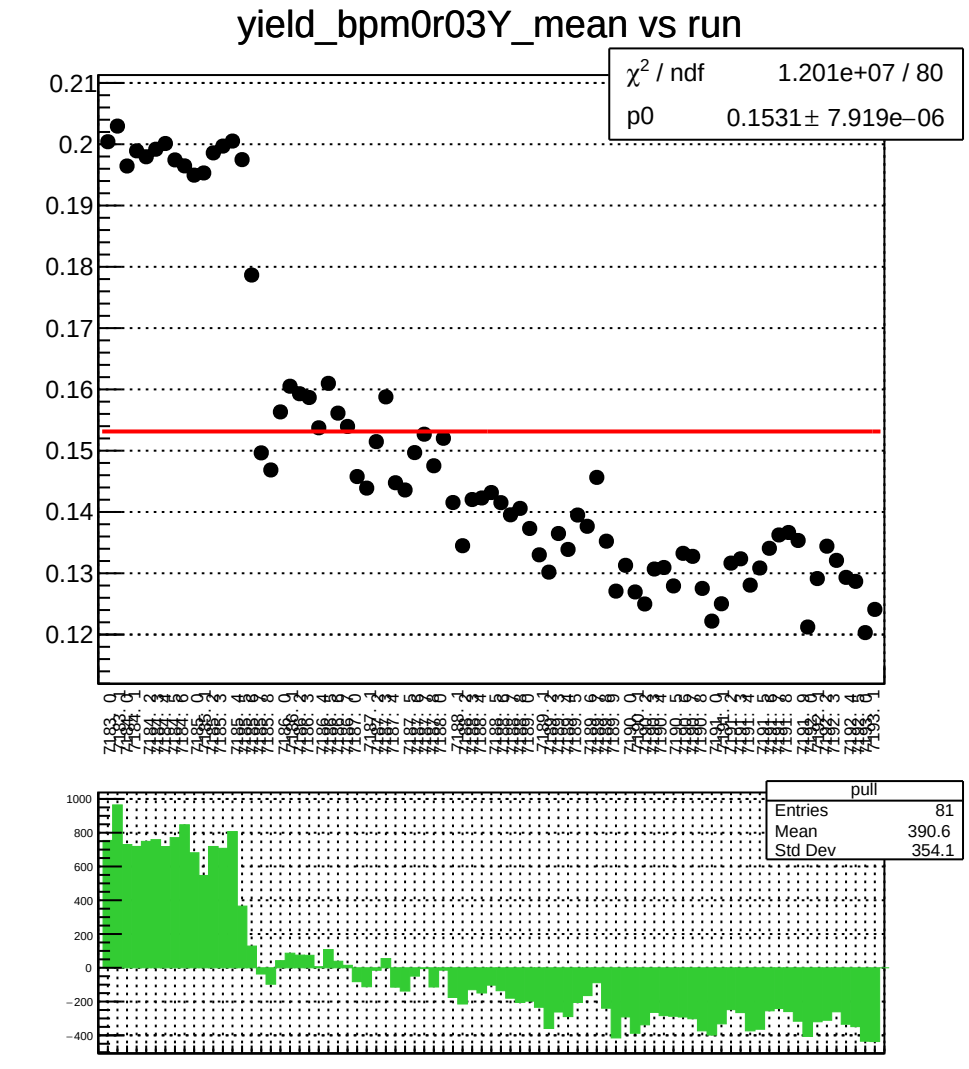

pull1D
Entries 81
Mean −3.28
Std Dev 3.813
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

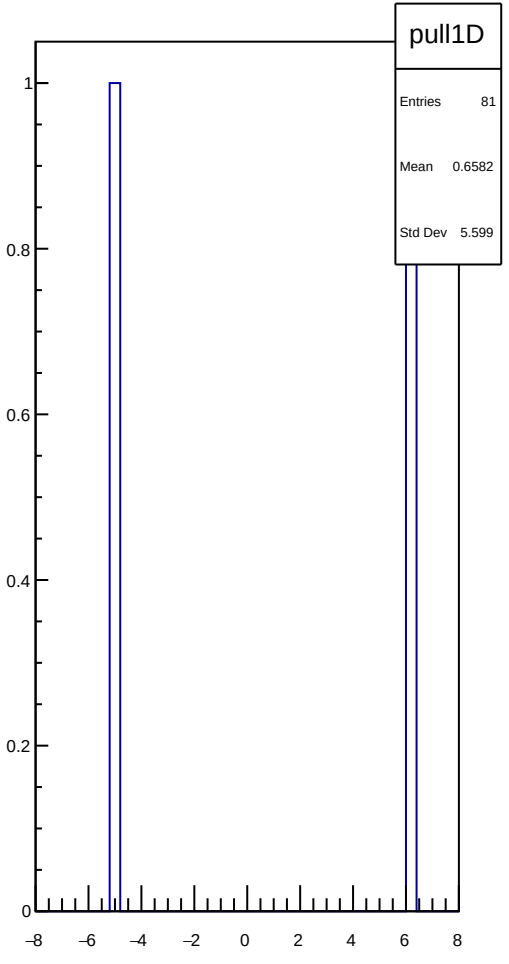

yield_bpm0l10Y_rms vs run
χ² / ndf 2.134e+04 / 80
p0 0.003091 ± 2.482e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025

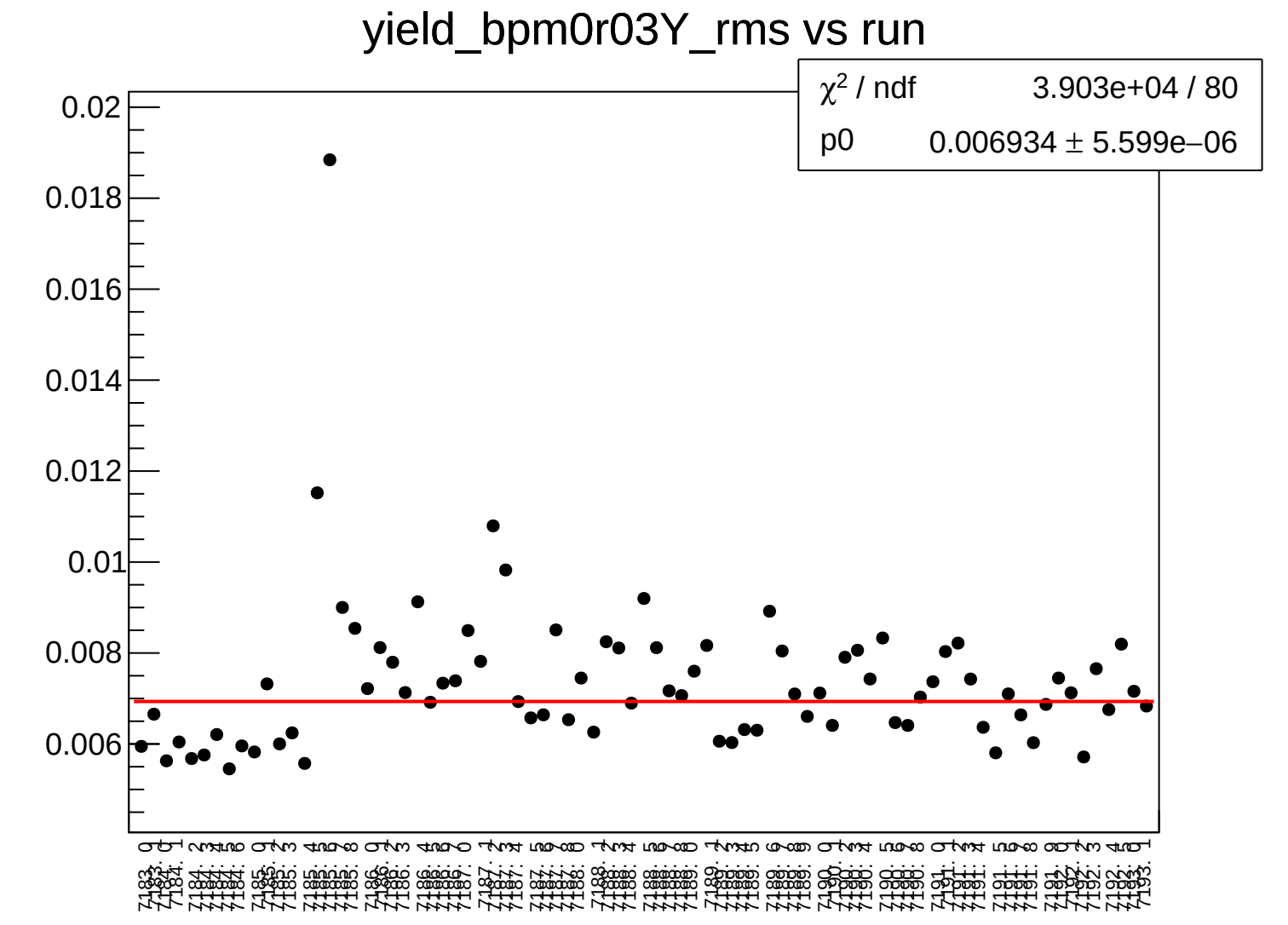

yield_bpm0r03X_mean vs run
χ² / ndf 2.799e+06 / 80
p0 −2.637 ± 8.445e−05
−2.5
−2.6
−2.7
−2.8
−2.9
−3
pull
Entries 81
Mean −8083
Std Dev 8114
200
100
0
−100
−200
−300
−400
−500

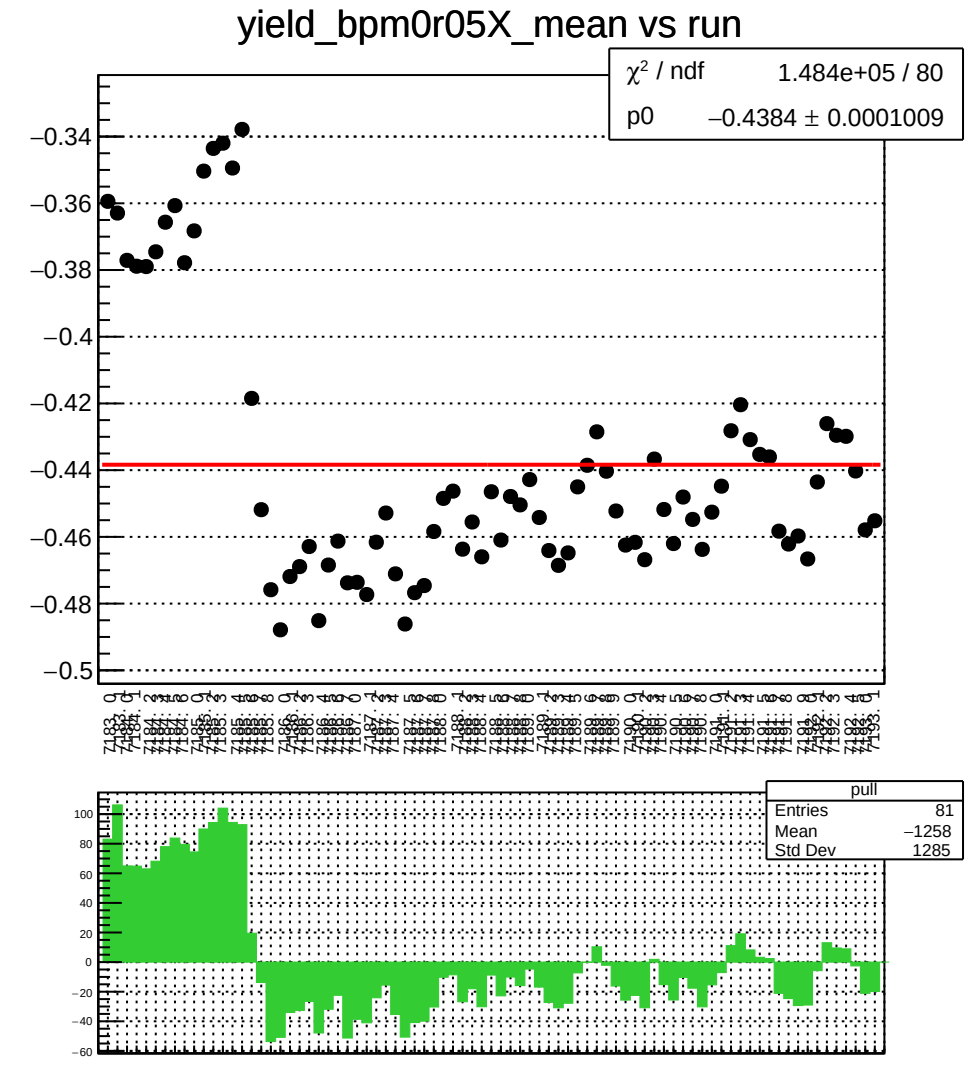

pull1D
Entries 81
Mean 3.535
Std Dev 3.698
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

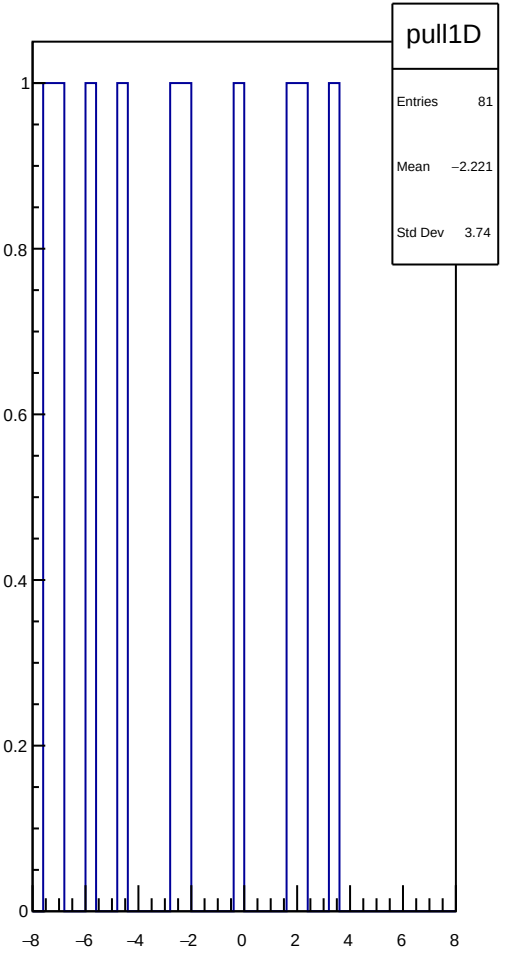

yield_bpm0r03X_rms vs run
χ² / ndf 5156 / 80
p0 0.07476 ± 5.971e−05
0.13
0.12
0.11
0.1
0.09
0.08
0.07


yield_bpm0r03Y_mean vs run
χ² / ndf 1.201e+07 / 80
p0 0.1531 ± 7.919e−06
0.21
0.2
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
pull
Entries 81
Mean 390.6
Std Dev 354.1
1000
800
600
400
200
0
−200
−400

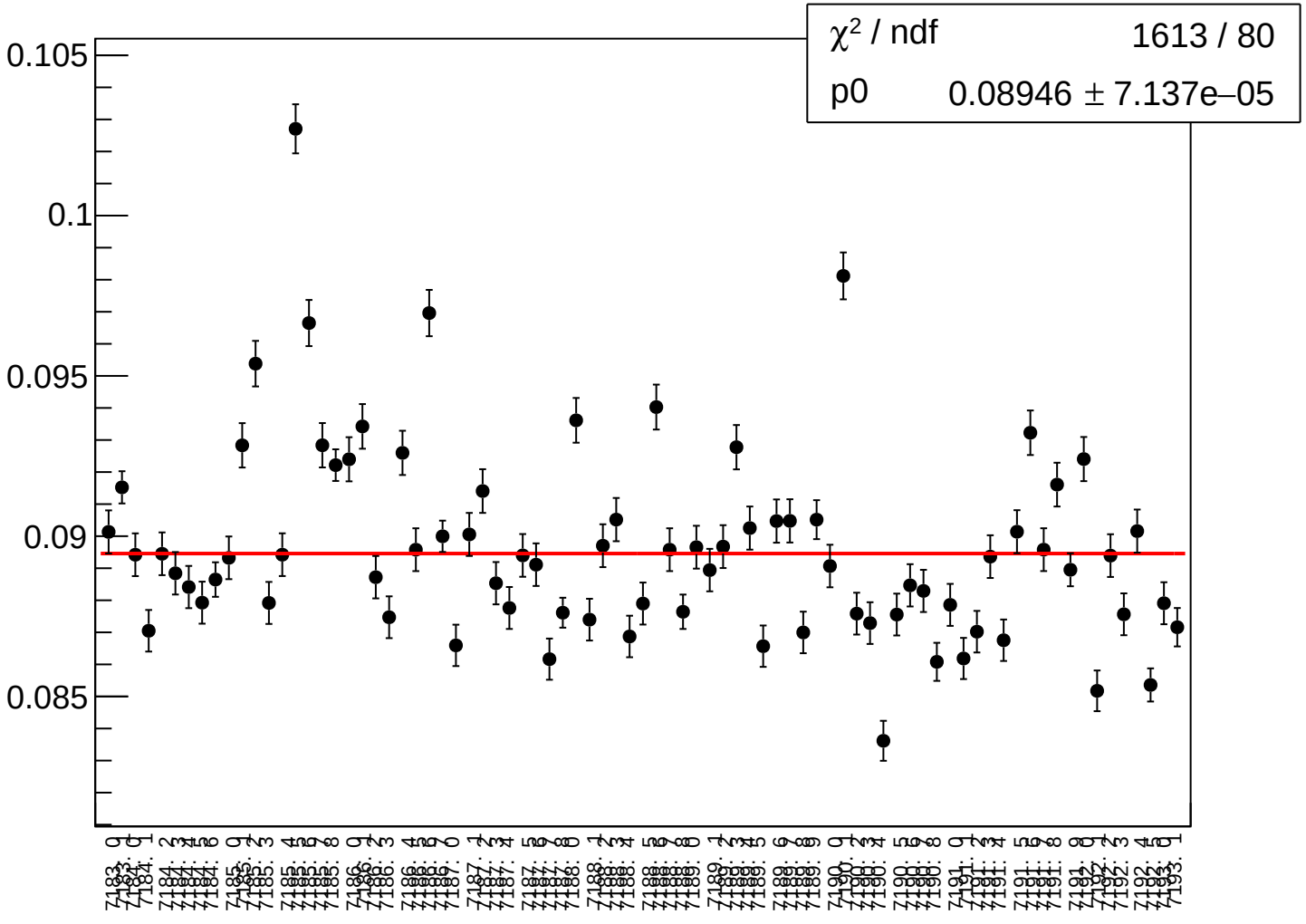

pull1D
Entries 81
Mean 0.6582
Std Dev 5.599
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

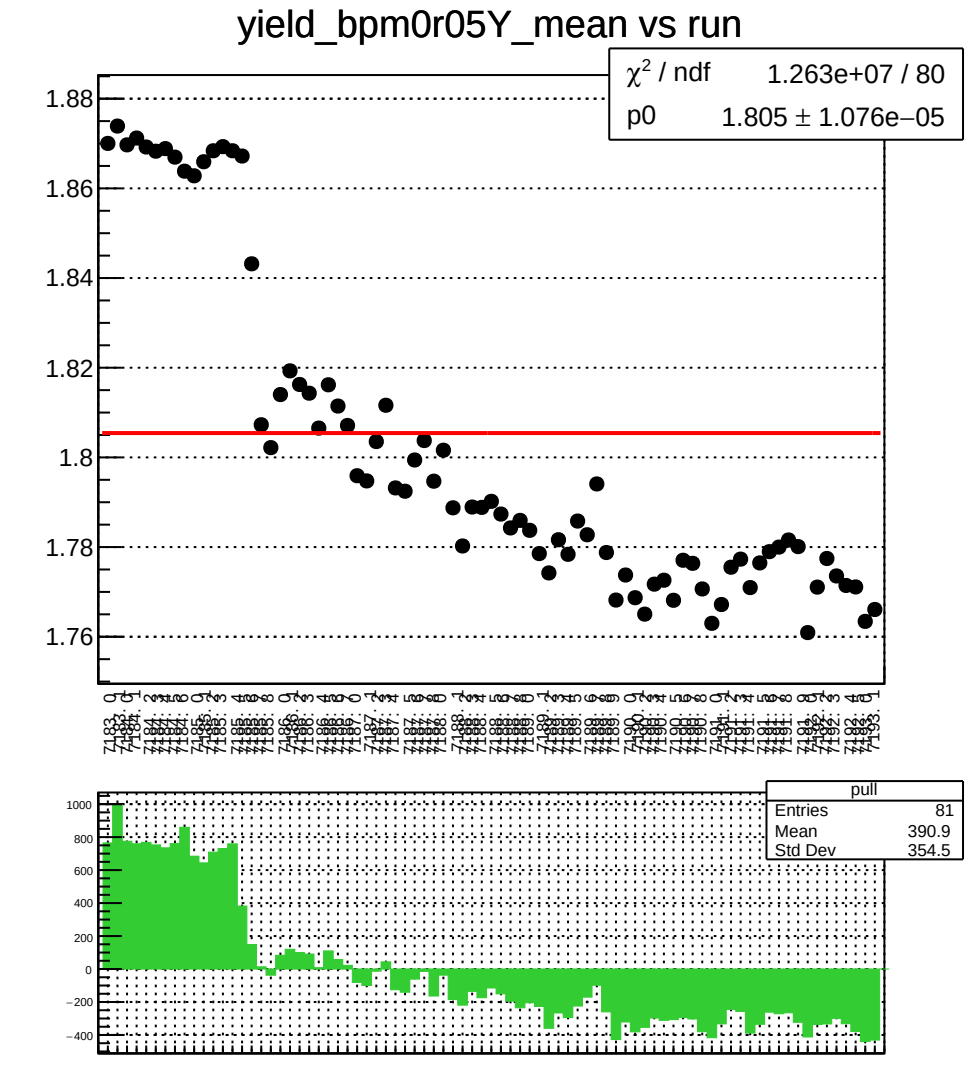

yield_bpm0r03Y_rms vs run
χ² / ndf 3.903e+04 / 80
p0 0.006934 ± 5.599e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

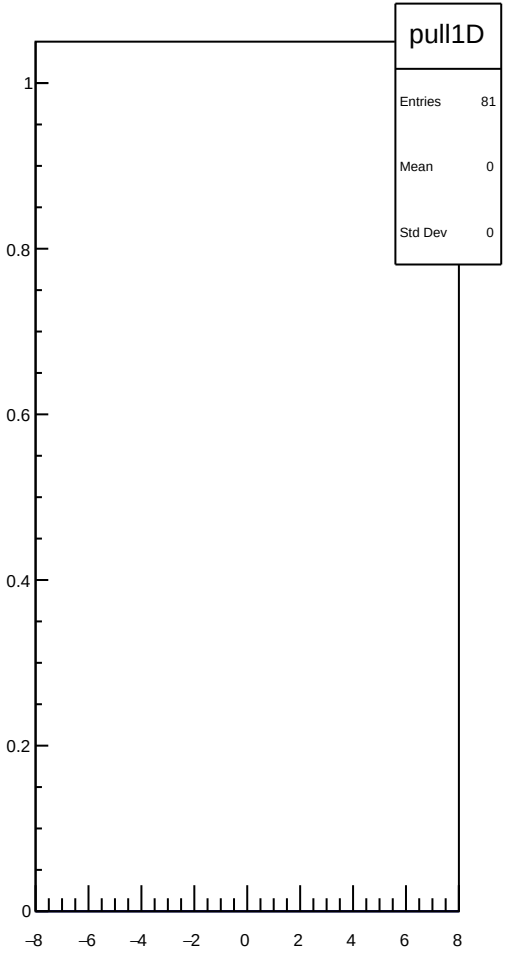

yield_bpm0r05X_mean vs run
χ² / ndf 1.484e+05 / 80
p0 −0.4384 ± 0.0001009
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
−0.46
−0.48
−0.5
pull
Entries 81
Mean −1258
Std Dev 1285
100
80
60
40
20
0
−20
−40
−60

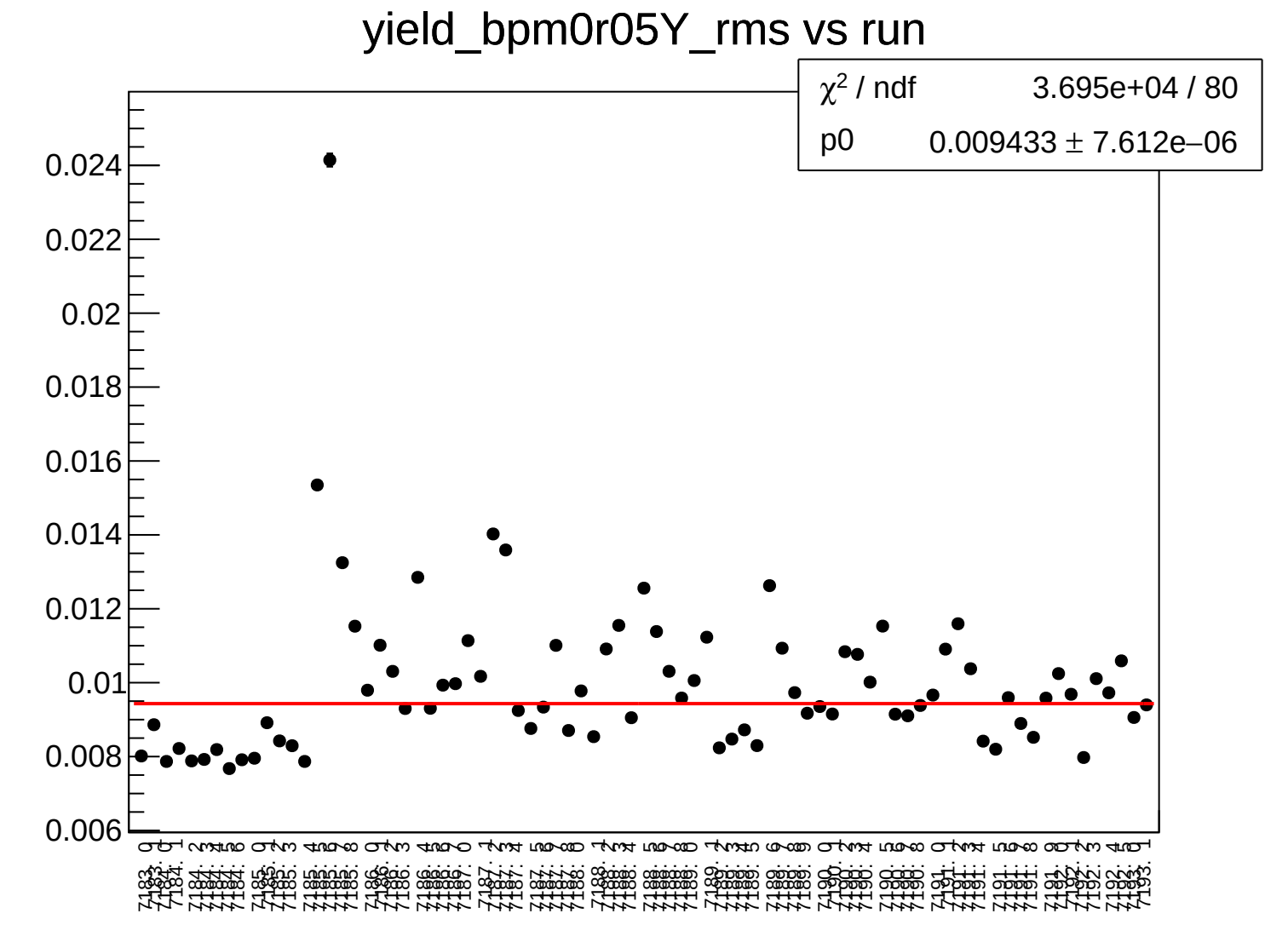

pull1D
Entries 81
Mean −2.221
Std Dev 3.74
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

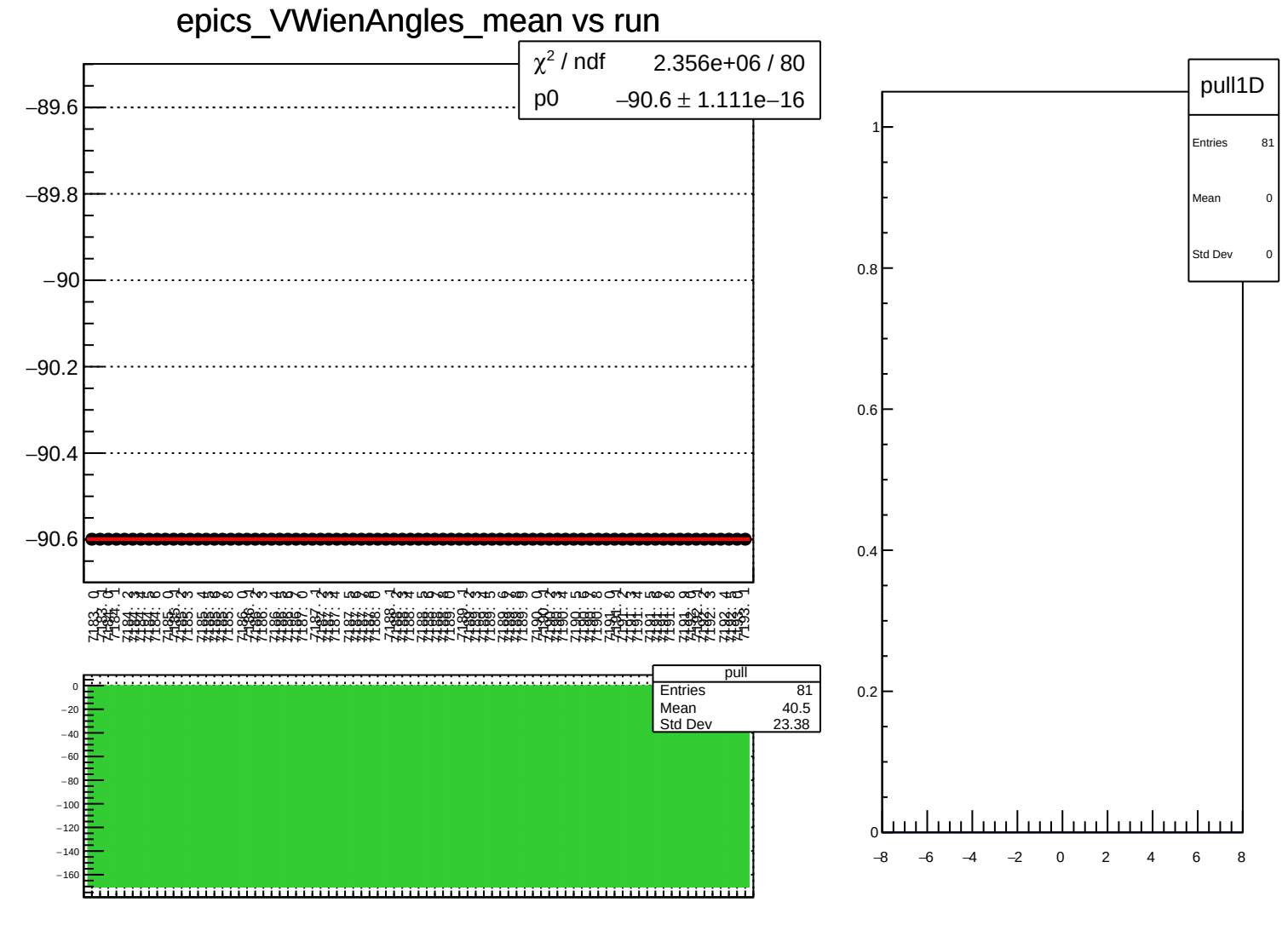
yield_bpm0r05X_rms vs run

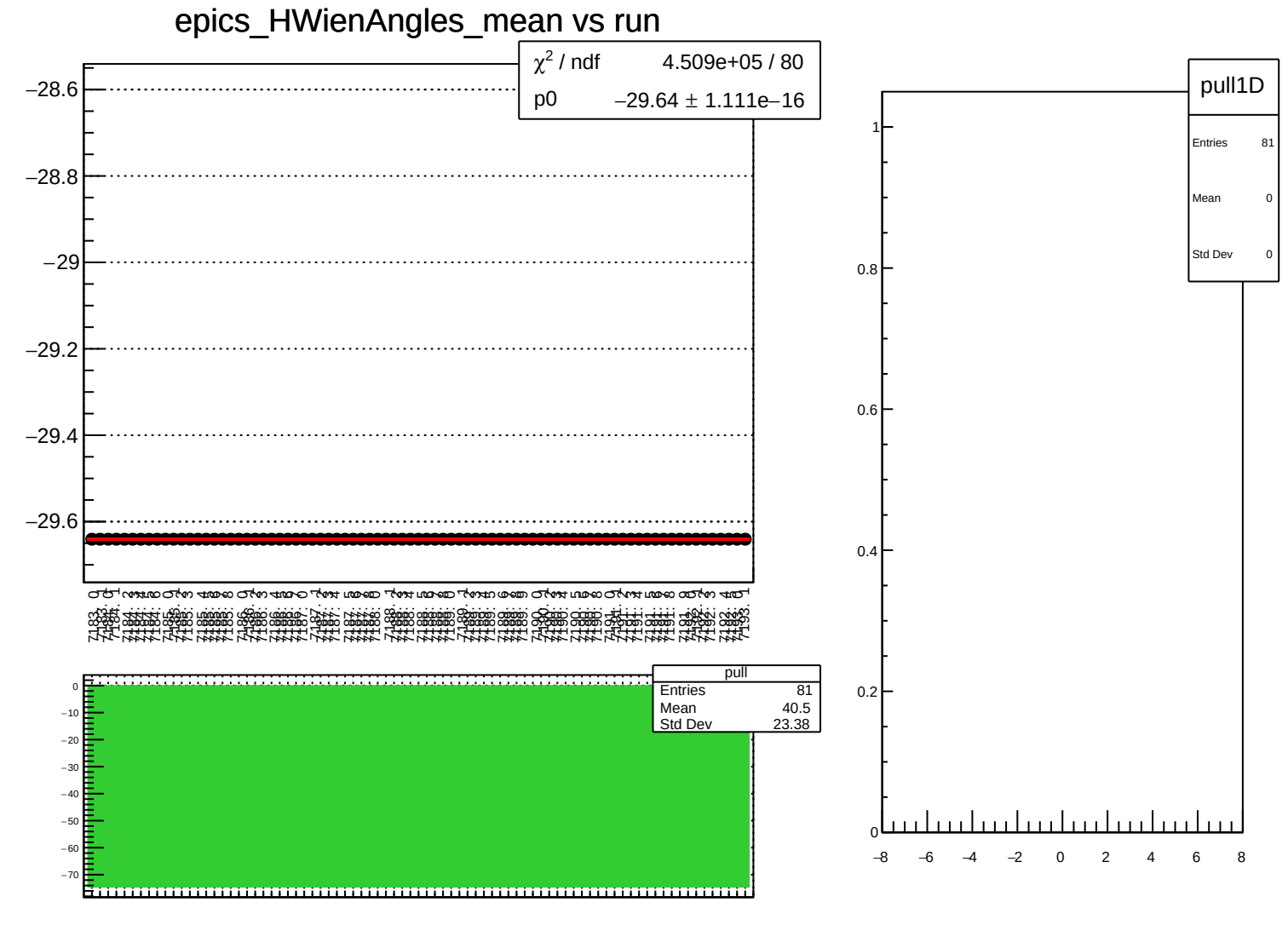


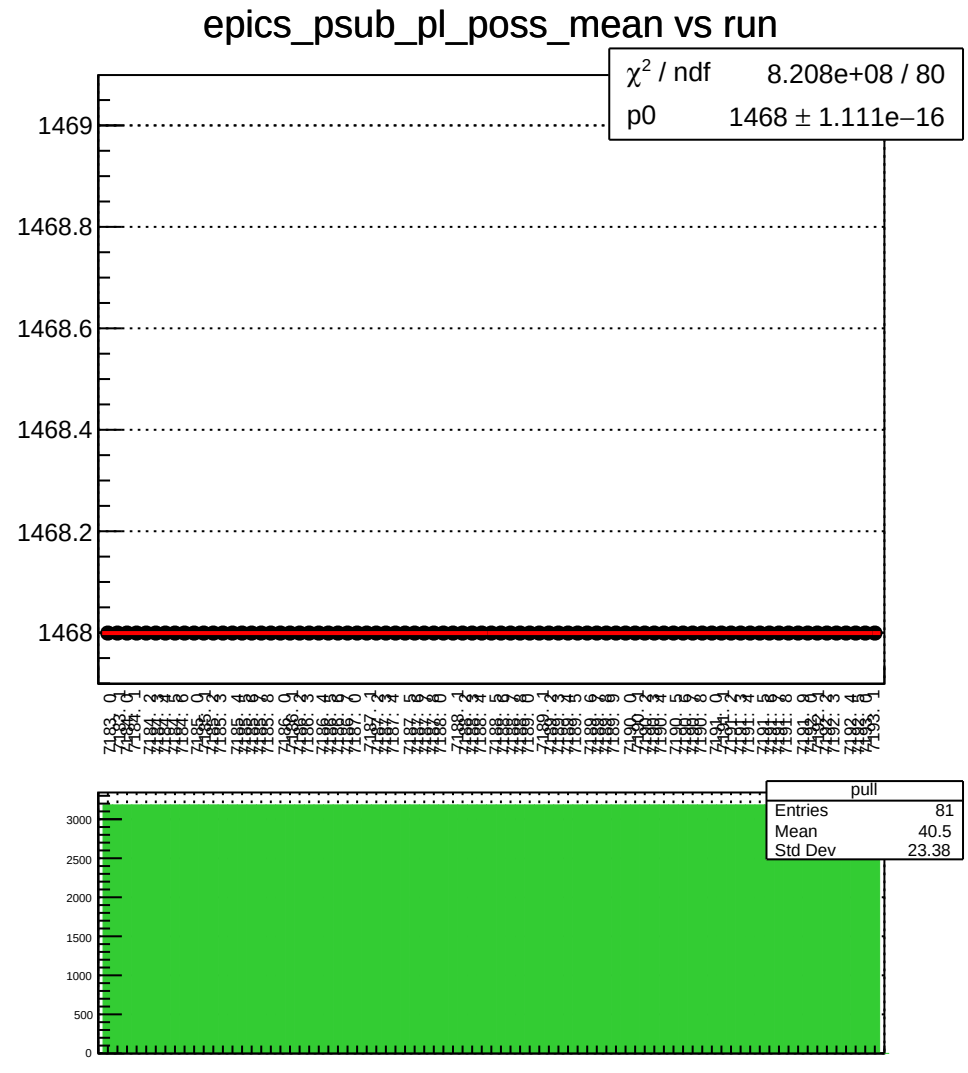

yield_bpm0r05Y_mean vs run
χ² / ndf 1.263e+07 / 80
p0 1.805 ± 1.076e−05
1.88
1.86
1.84
1.82
1.8
1.78
1.76
pull
Entries 81
Mean 390.9
Std Dev 354.5
1000
800
600
400
200
0
−200
−400

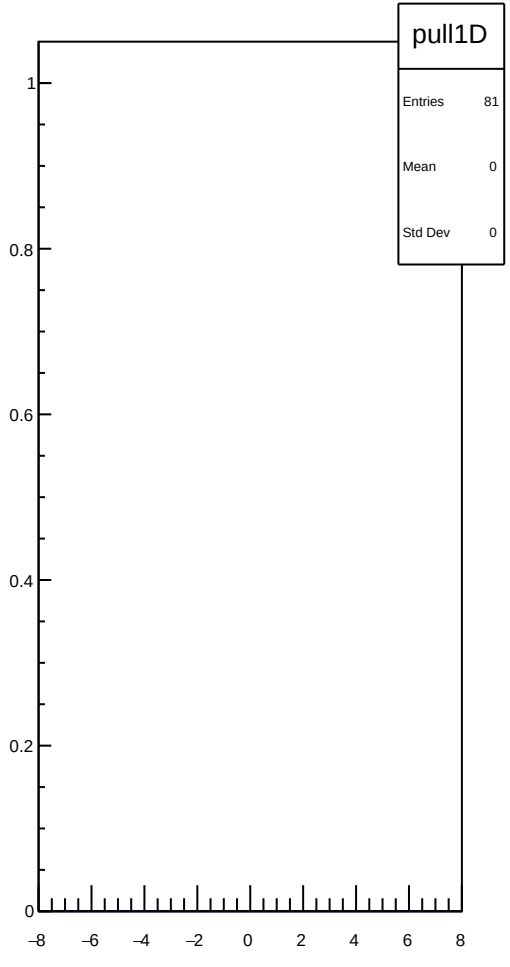

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

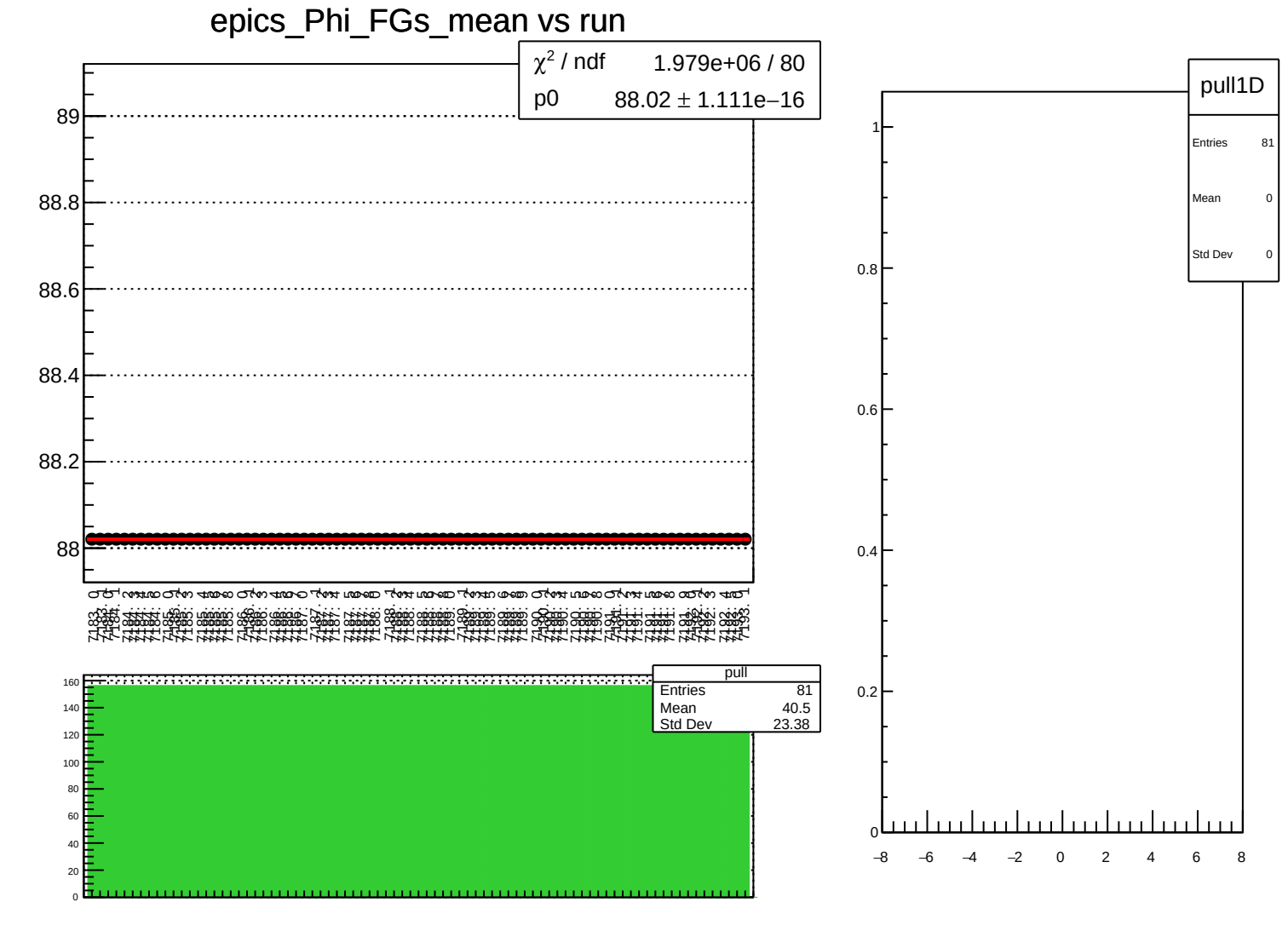

yield_bpm0r05Y_rms vs run
χ^2 / ndf 3.695e+04 / 80
p0 0.009433 ± 7.612e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

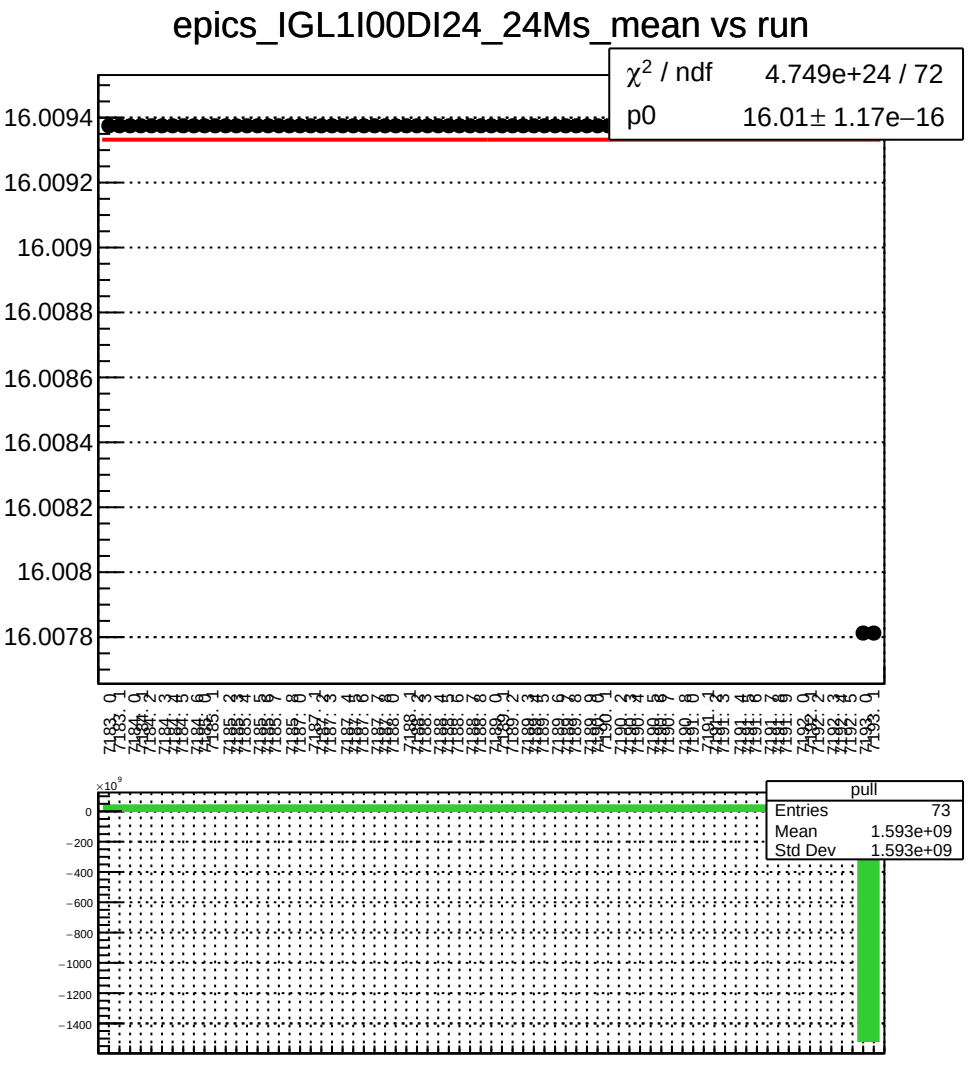

epics_VWienAngles_mean vs run
χ² / ndf 2.356e+06 / 80
p0 −90.6 ± 1.111e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 81
Mean 40.5
Std Dev 23.38
0
−20
−40
−60
−80
−100
−120
−140
−160
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

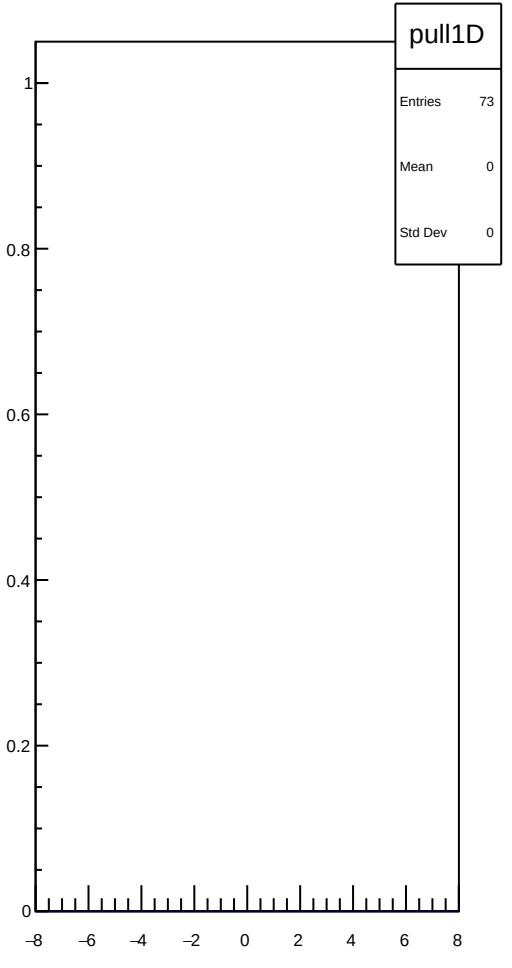

epics_HWienAngles_mean vs run
χ² / ndf 4.509e+05 / 80
p0 −29.64 ± 1.111e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 81
Mean 40.5
Std Dev 23.38
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

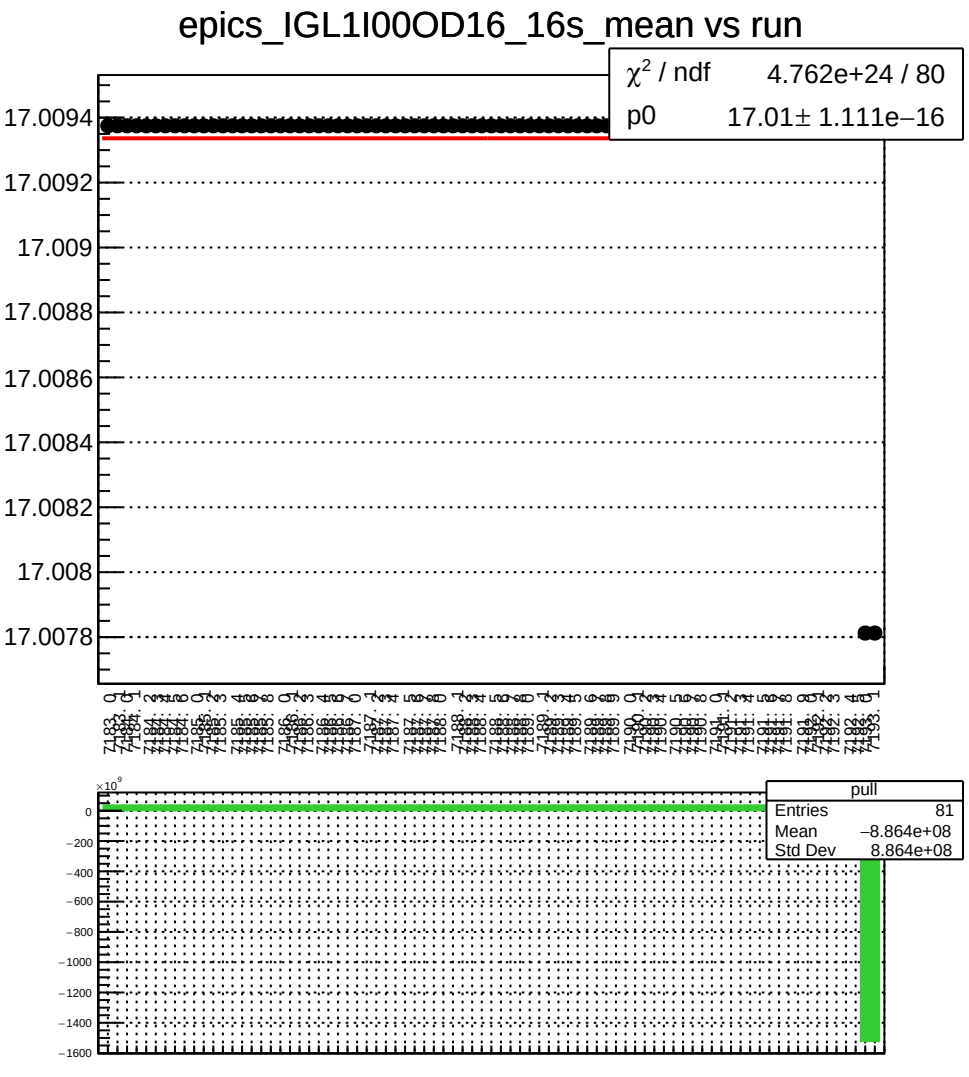

epics_psub_pl_poss_mean vs run
χ² / ndf 8.208e+08 / 80
p0 1468 ± 1.111e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 81
Mean 40.5
Std Dev 23.38
3000
2500
2000
1500
1000
500
0

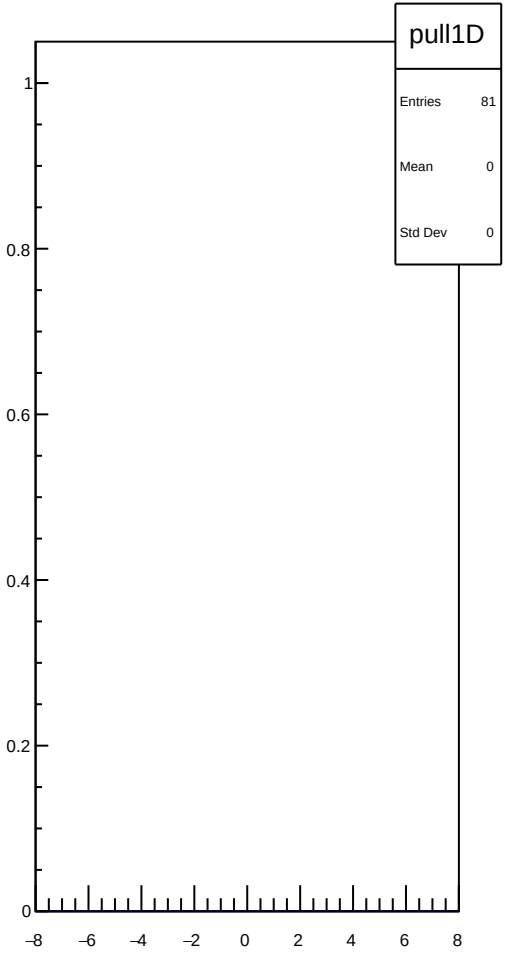

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

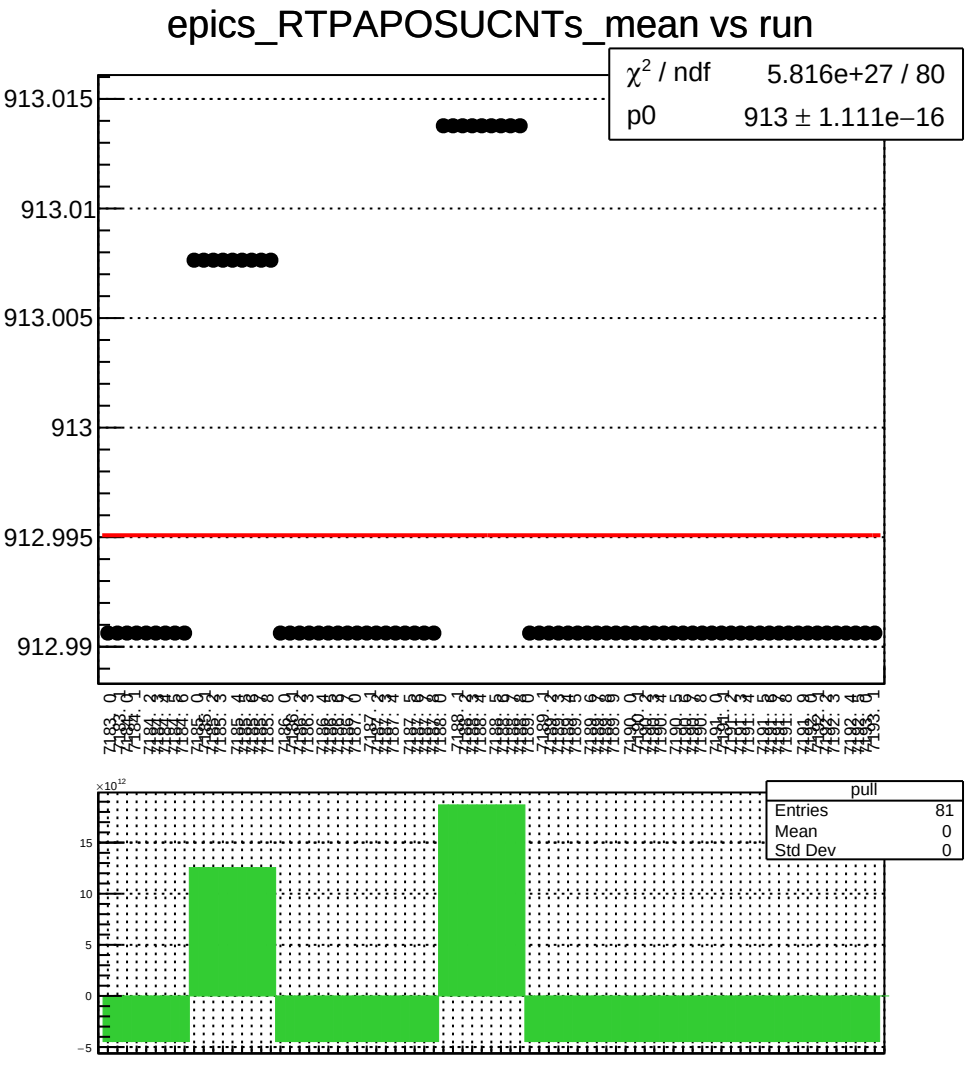

epics_Phi_FGs_mean vs run
χ² / ndf 1.979e+06 / 80
p0 88.02 ± 1.111e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 81
Mean 40.5
Std Dev 23.38
160
140
120
100
80
60
40
20
0
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

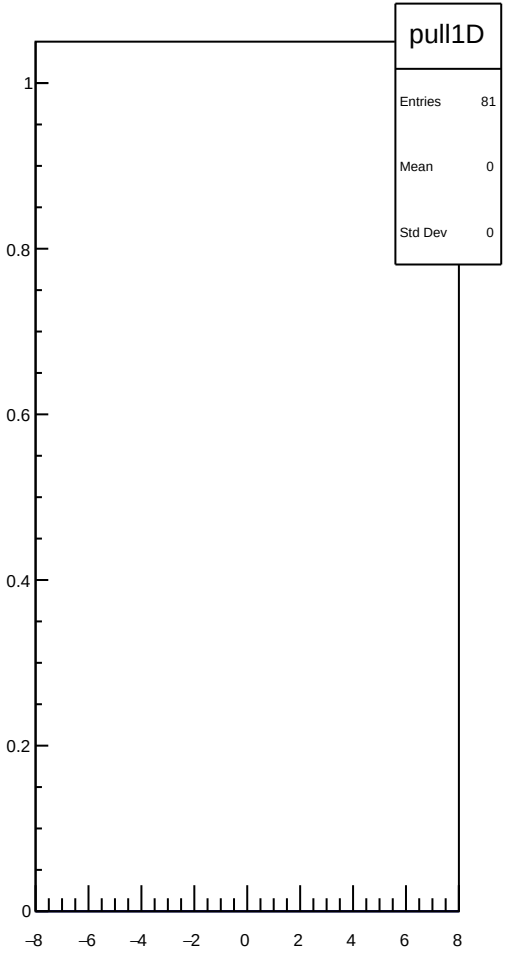

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 4.749e+24 / 72
p0 16.01± 1.17e−16
16.0094
16.0092
16.009
16.0088
16.0086
16.0084
16.0082
16.008
16.0078
pull
Entries 73
Mean 1.593e+09
Std Dev 1.593e+09
×10⁹
0
−200
−400
−600
−800
−1000
−1200
−1400

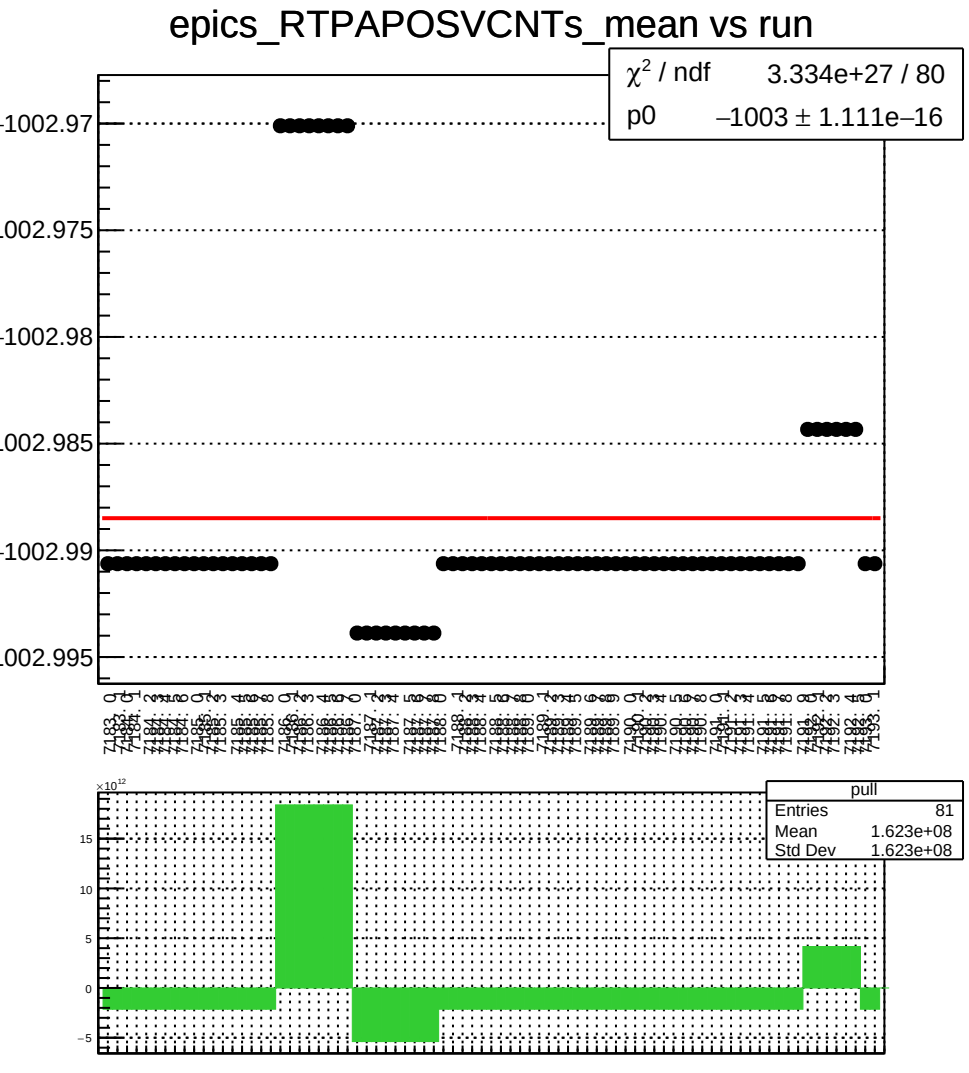

pull1D
Entries 73
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

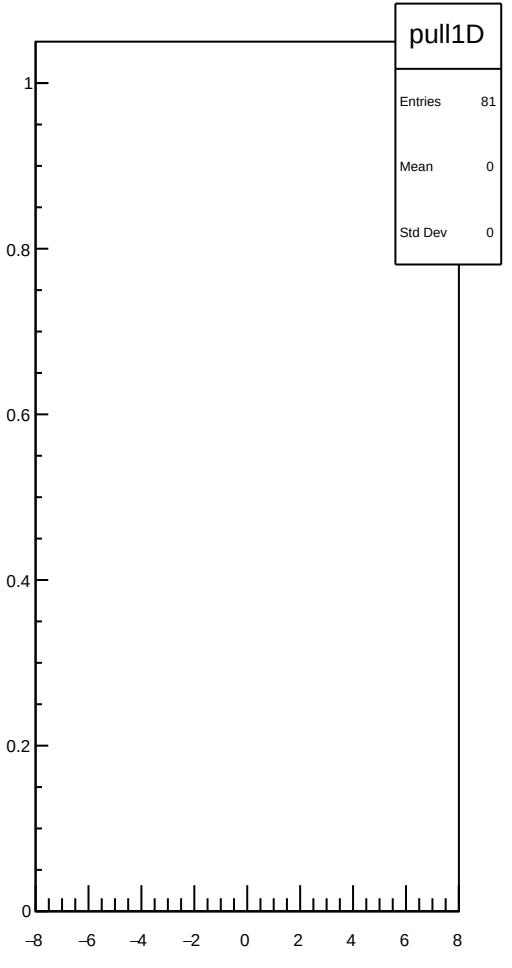

epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 4.762e+24 / 80
p0 17.01± 1.111e−16
17.0094
17.0092
17.009
17.0088
17.0086
17.0084
17.0082
17.008
17.0078
pull
Entries 81
Mean −8.864e+08
Std Dev 8.864e+08
×10⁹
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600


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


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 5.816e+27 / 80
p0 913 ± 1.111e−16
913.015
913.01
913.005
913
912.995
912.99
pull
Entries 81
Mean 0
Std Dev 0
×10¹²
15
10
5
0
−5


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


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 3.334e+27 / 80
p0 −1003 ± 1.111e−16
−1002.97
−1002.975
−1002.98
−1002.985
−1002.99
−1002.995
pull
Entries 81
Mean 1.623e+08
Std Dev 1.623e+08
×10¹²
15
10
5
0
−5


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