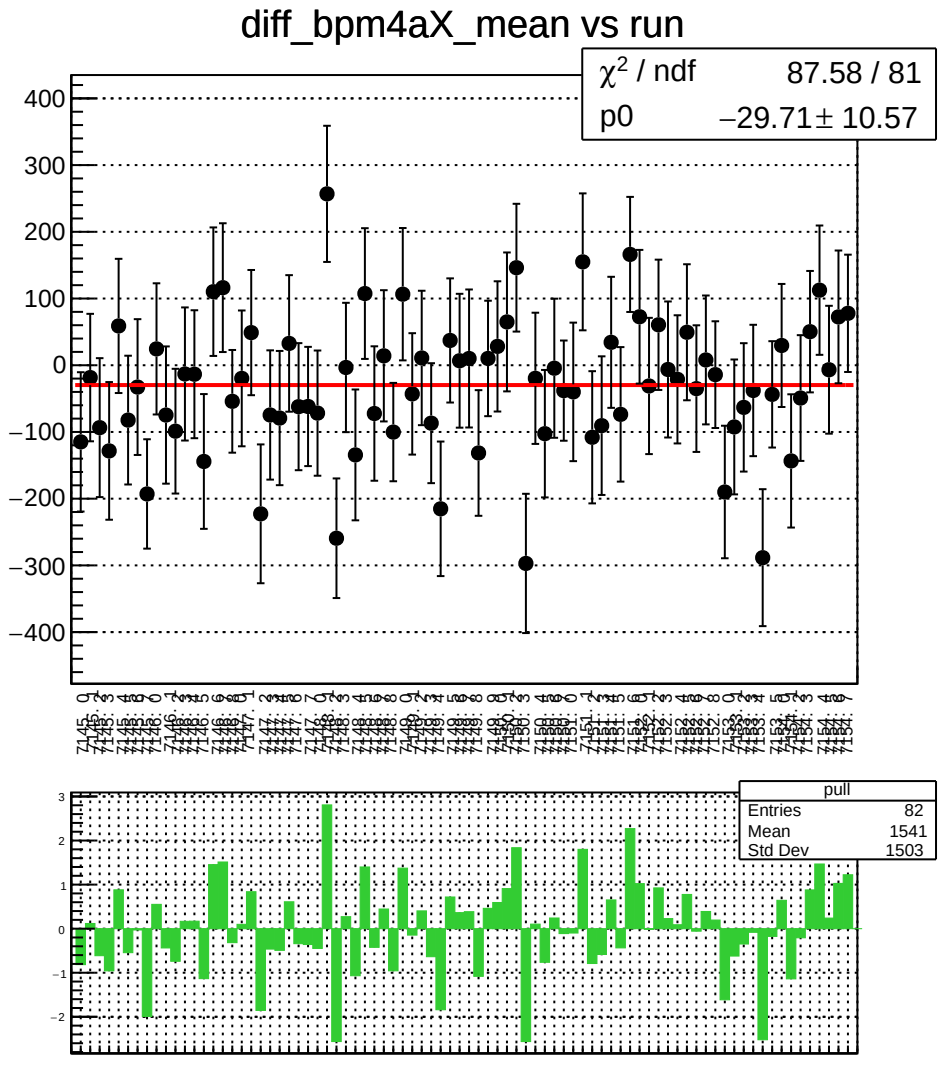
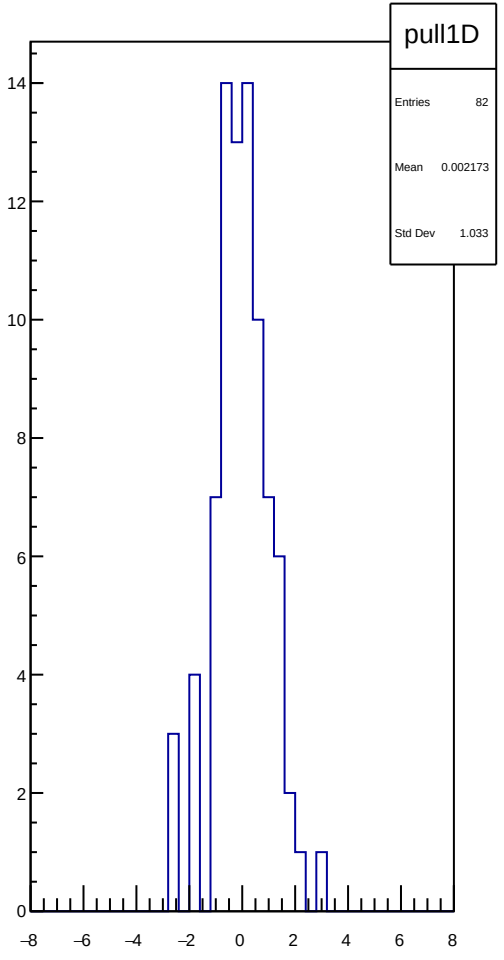
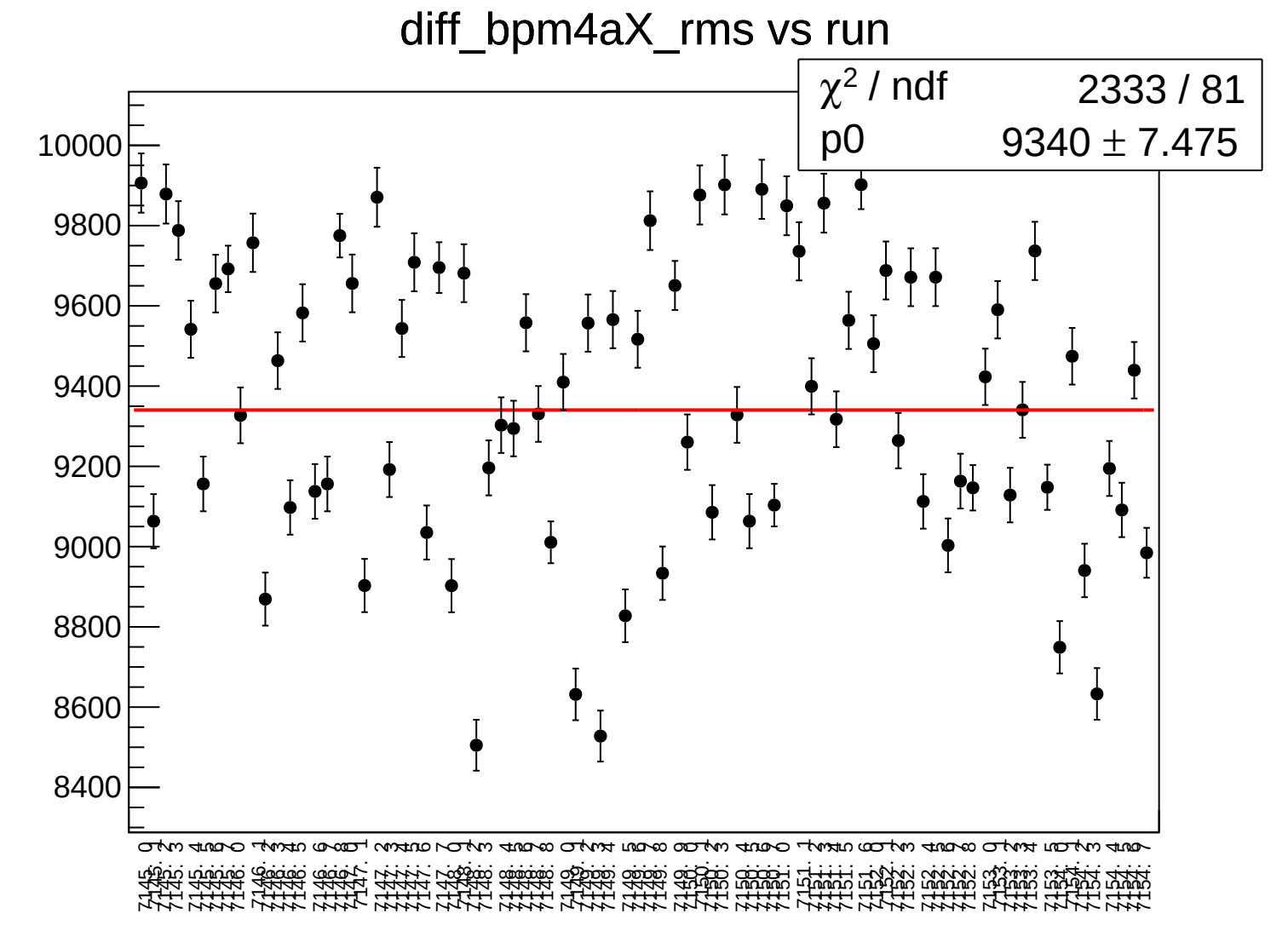
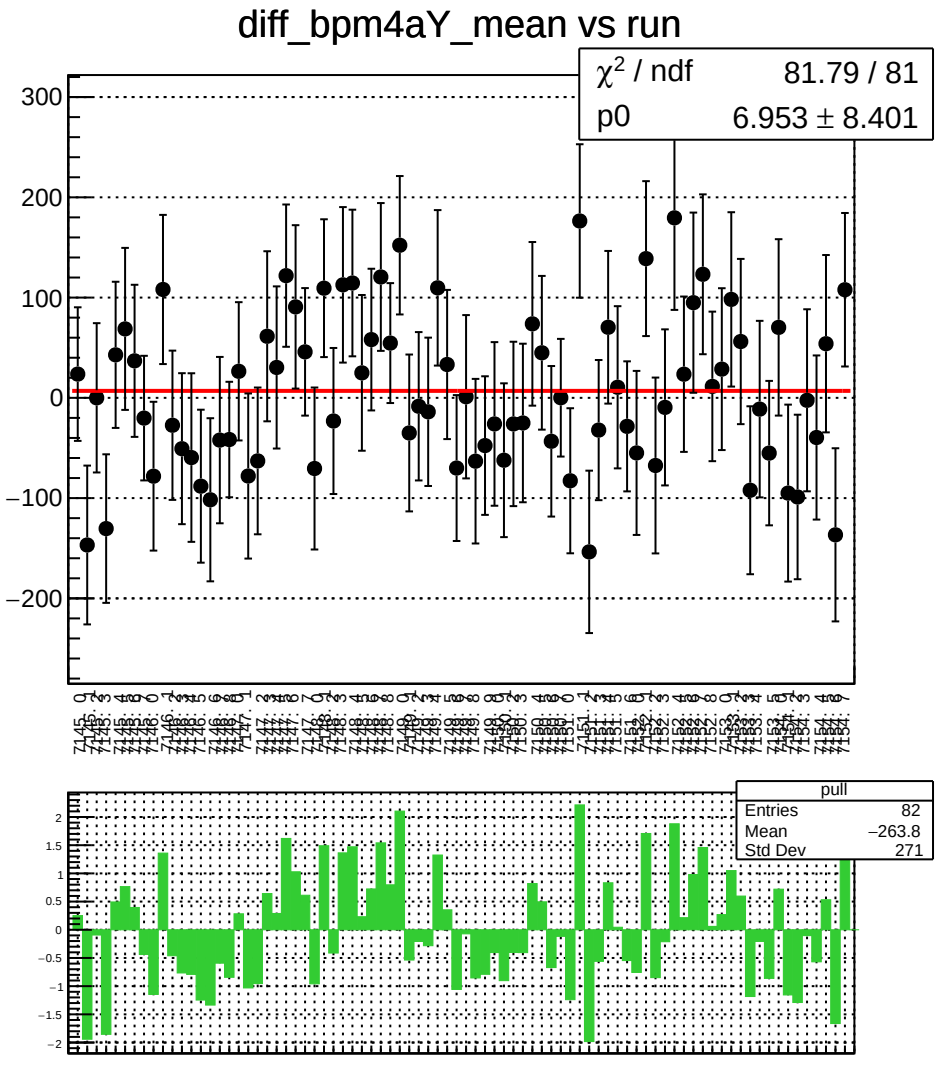
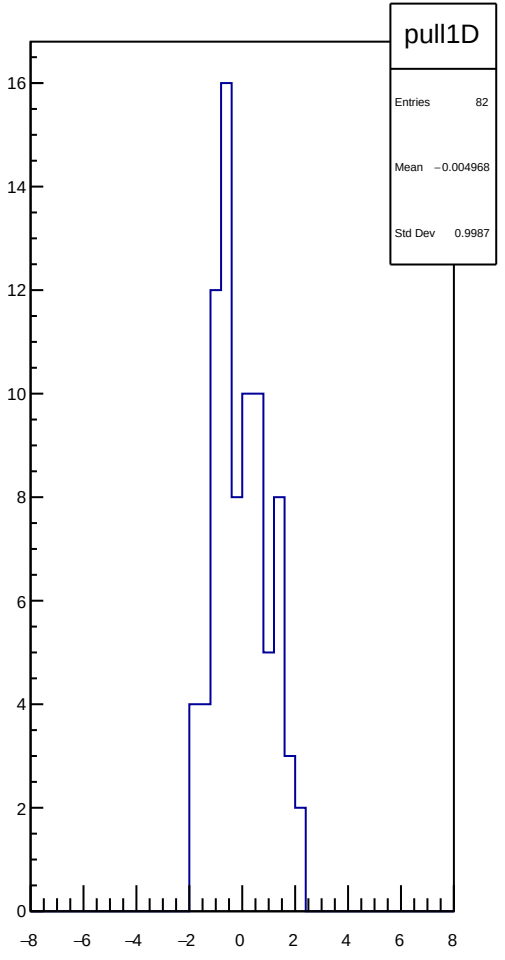
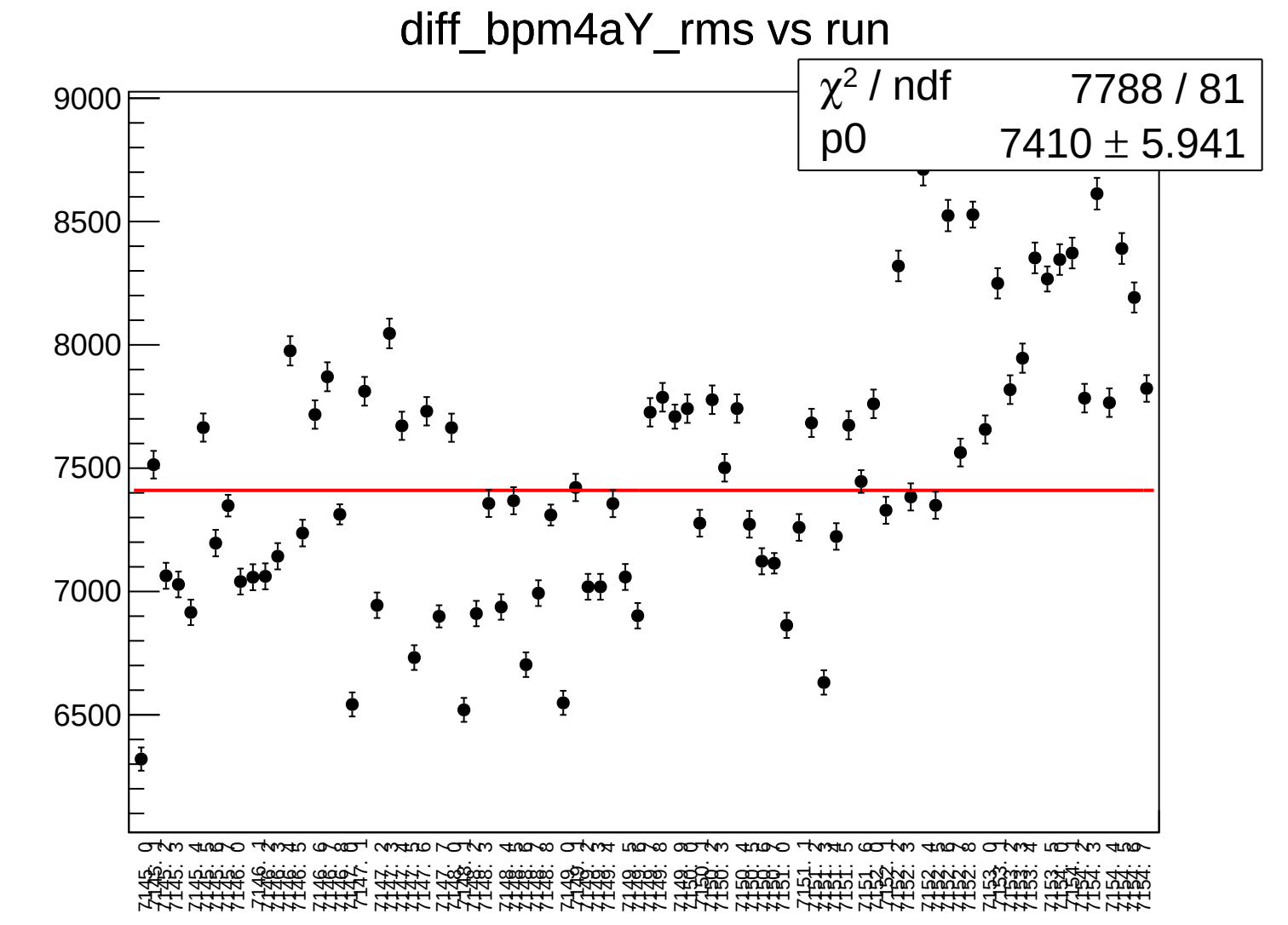

diff_bpm4aX_mean vs run
χ² / ndf 87.58 / 81
p0 −29.71± 10.57
pull
Entries 82
Mean 1541
Std Dev 1503

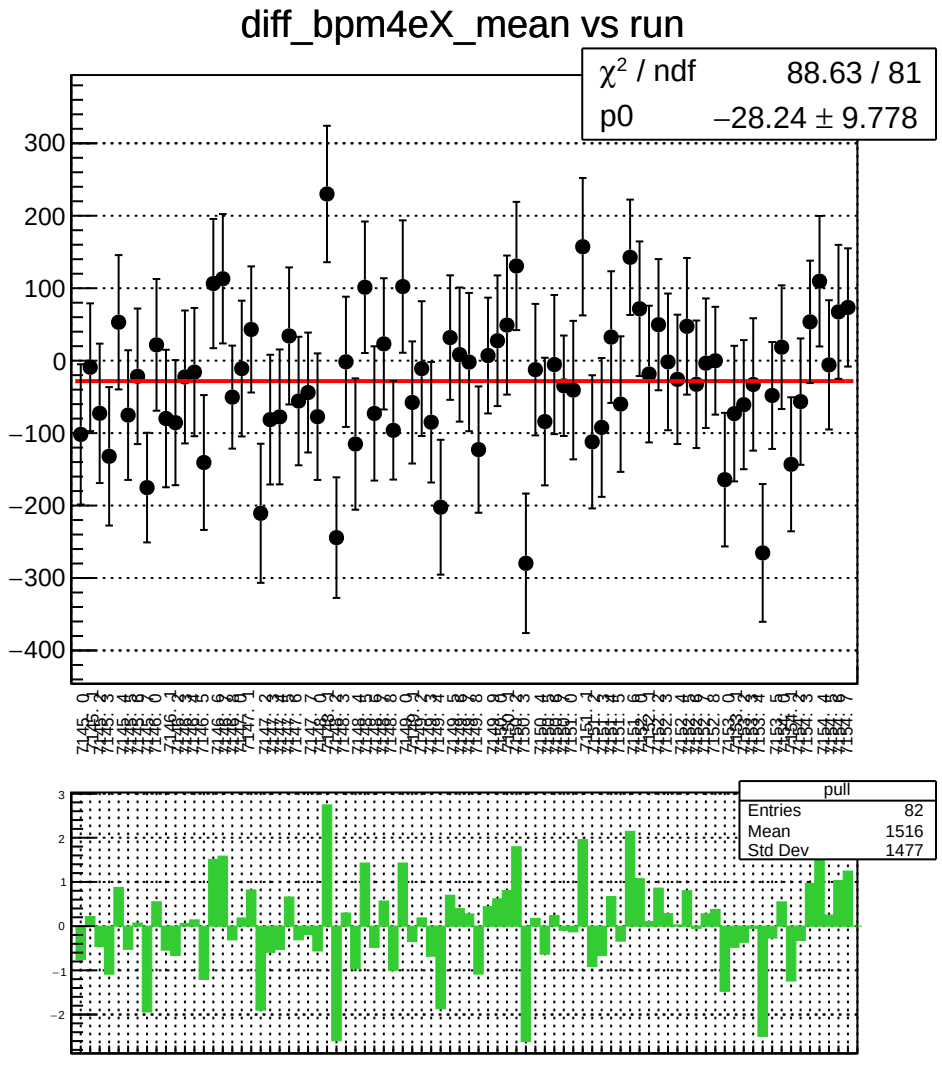

pull1D
Entries 82
Mean 0.002173
Std Dev 1.033

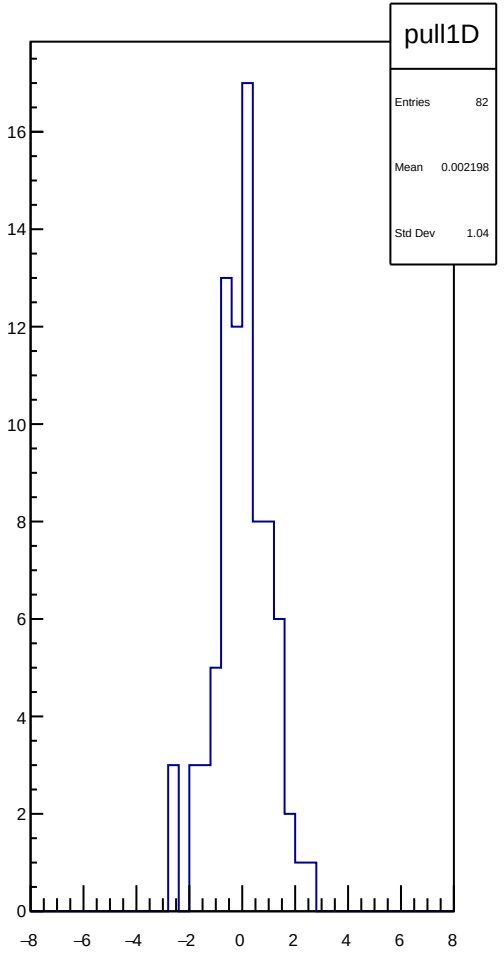

diff_bpm4aX_rms vs run
χ^2 / ndf 2333 / 81
p0 9340 ± 7.475
10000
9800
9600
9400
9200
9000
8800
8600
8400

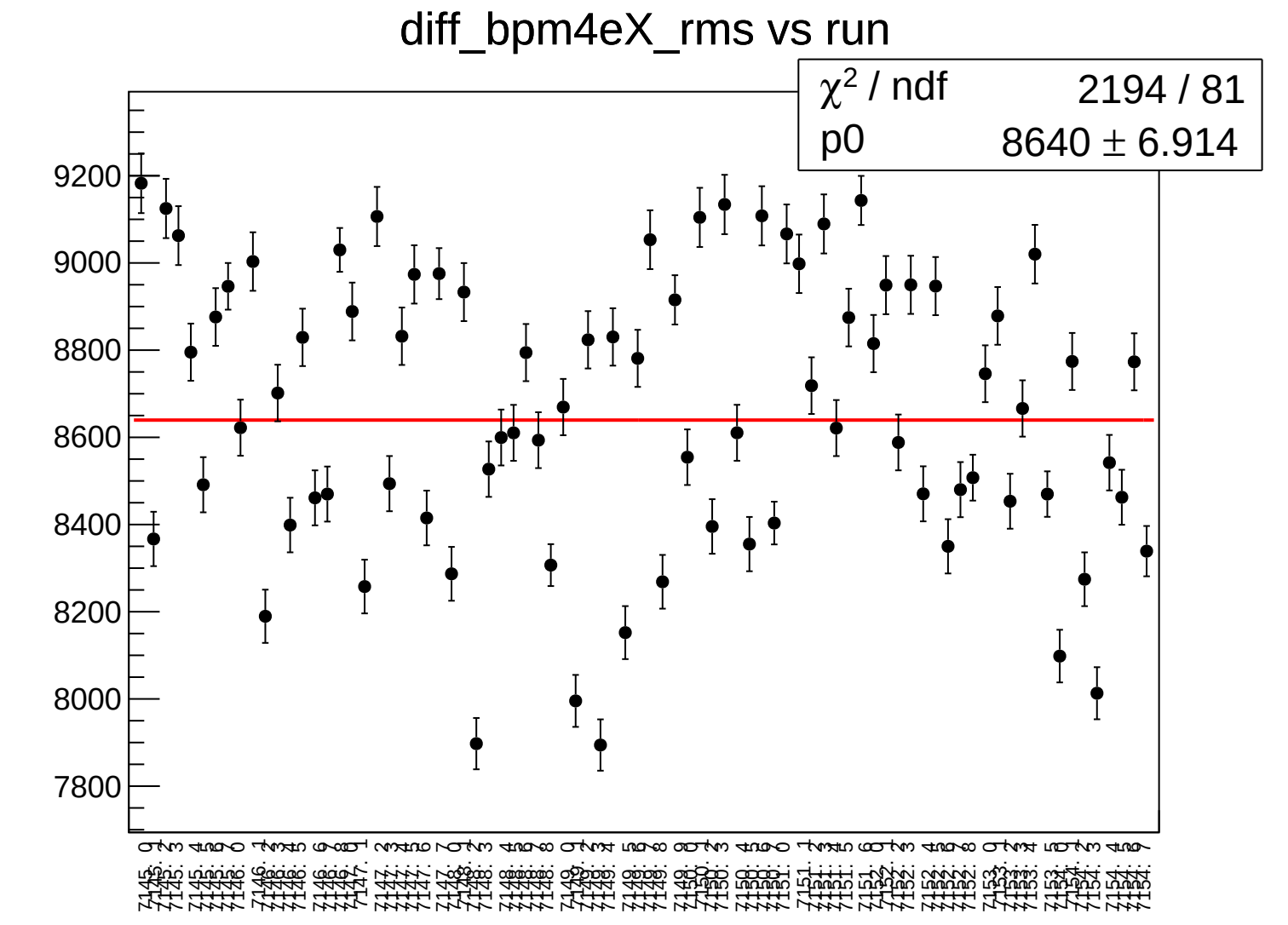

diff_bpm4aY_mean vs run
χ² / ndf 81.79 / 81
p0 6.953 ± 8.401
pull
Entries 82
Mean −263.8
Std Dev 271

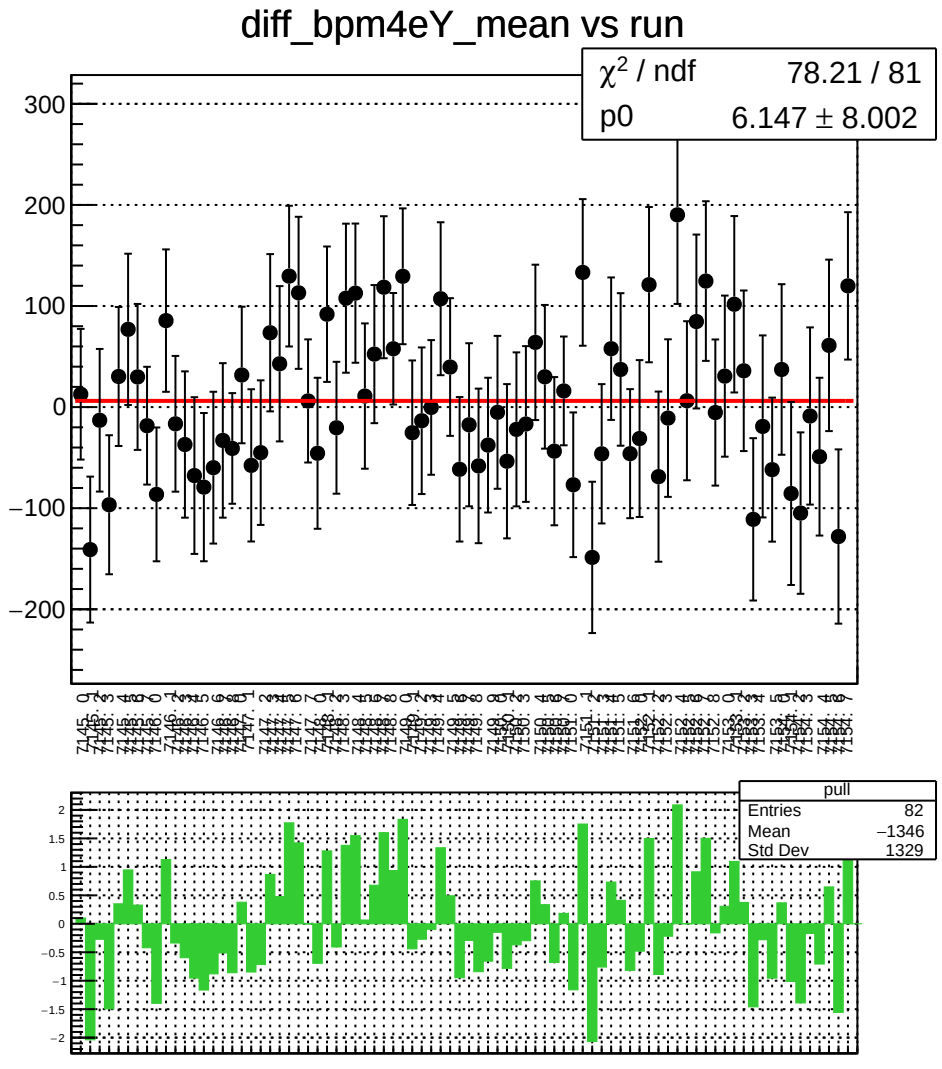

pull1D
Entries 82
Mean −0.004968
Std Dev 0.9987

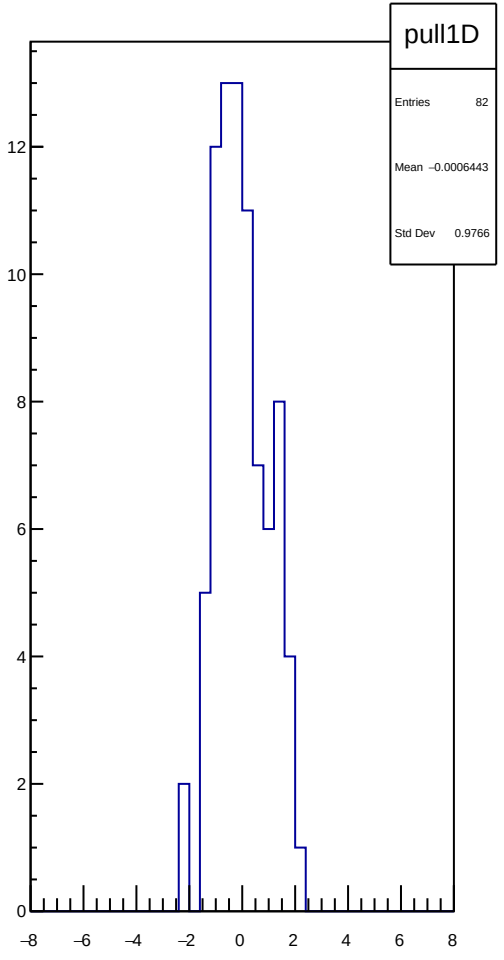

diff_bpm4aY_rms vs run
χ² / ndf 7788 / 81
p0 7410 ± 5.941
9000
8500
8000
7500
7000
6500

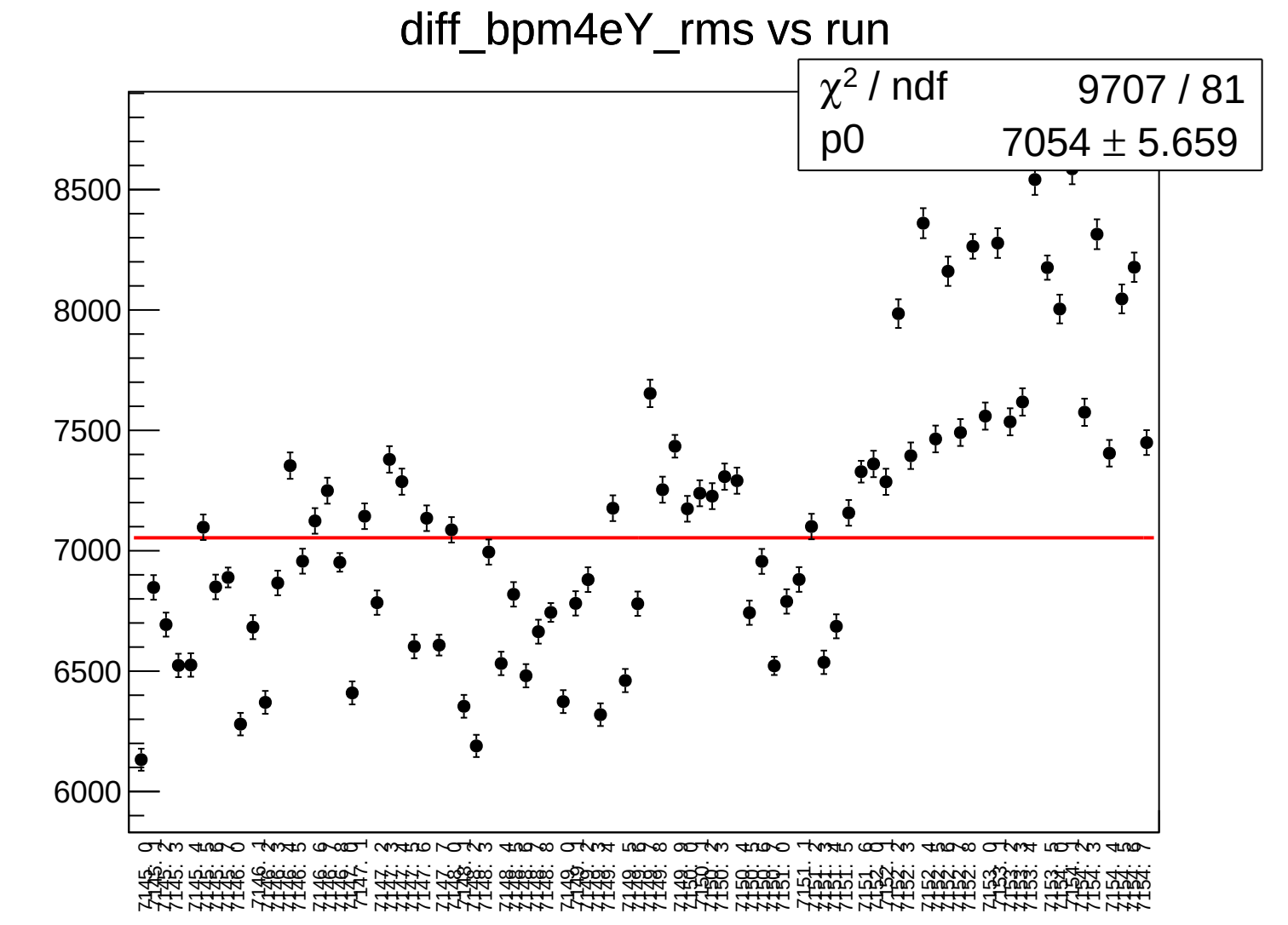

diff_bpm4eX_mean vs run
χ² / ndf 88.63 / 81
p0 −28.24 ± 9.778
pull
Entries 82
Mean 1516
Std Dev 1477

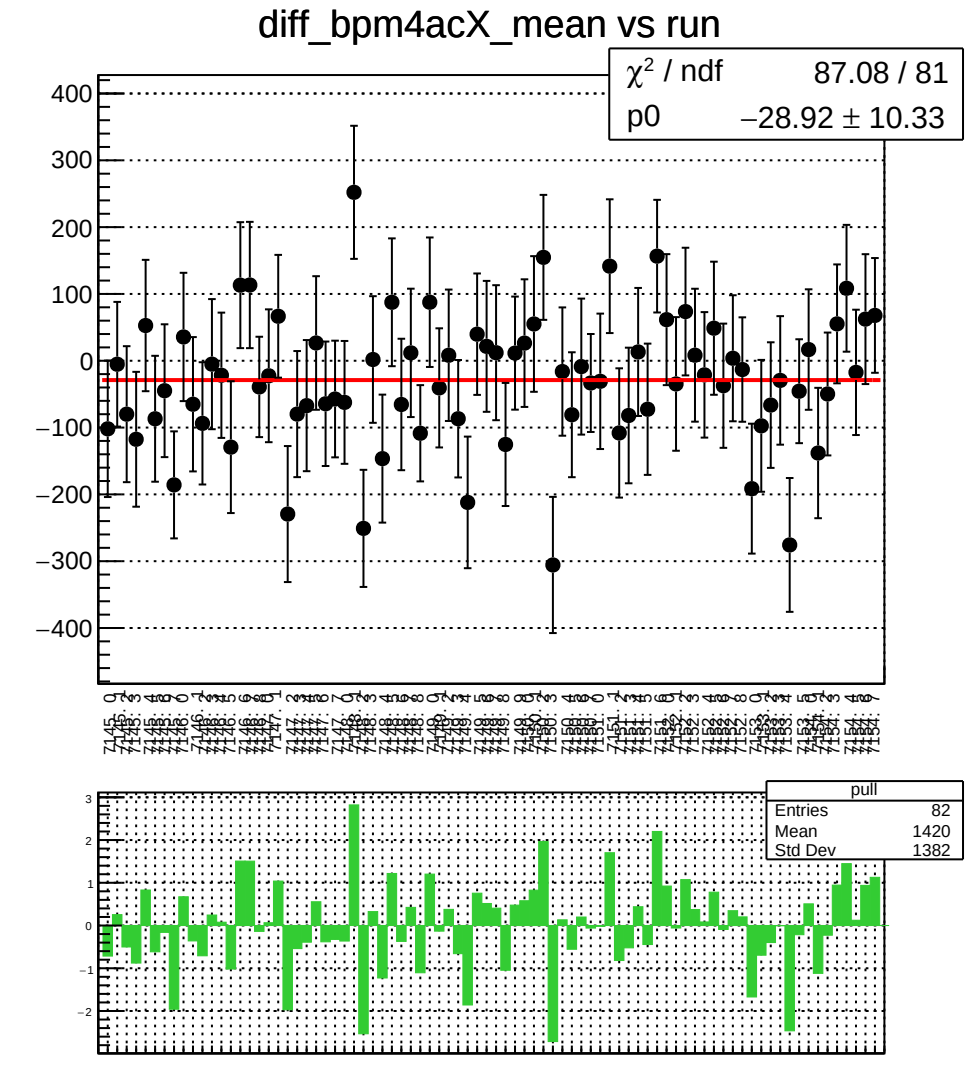

pull1D
Entries 82
Mean 0.002198
Std Dev 1.04

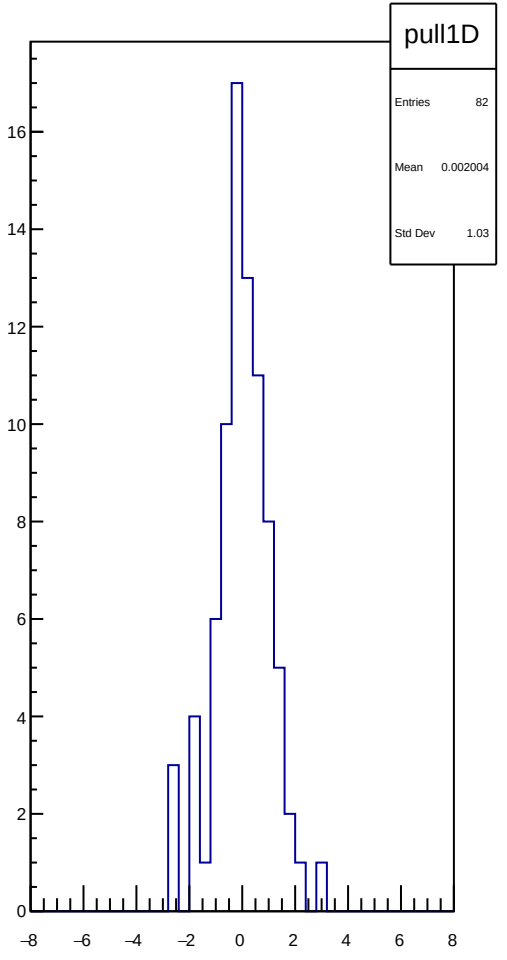

diff_bpm4eX_rms vs run
χ^2 / ndf 2194 / 81
p0 8640 ± 6.914
9200
9000
8800
8600
8400
8200
8000
7800

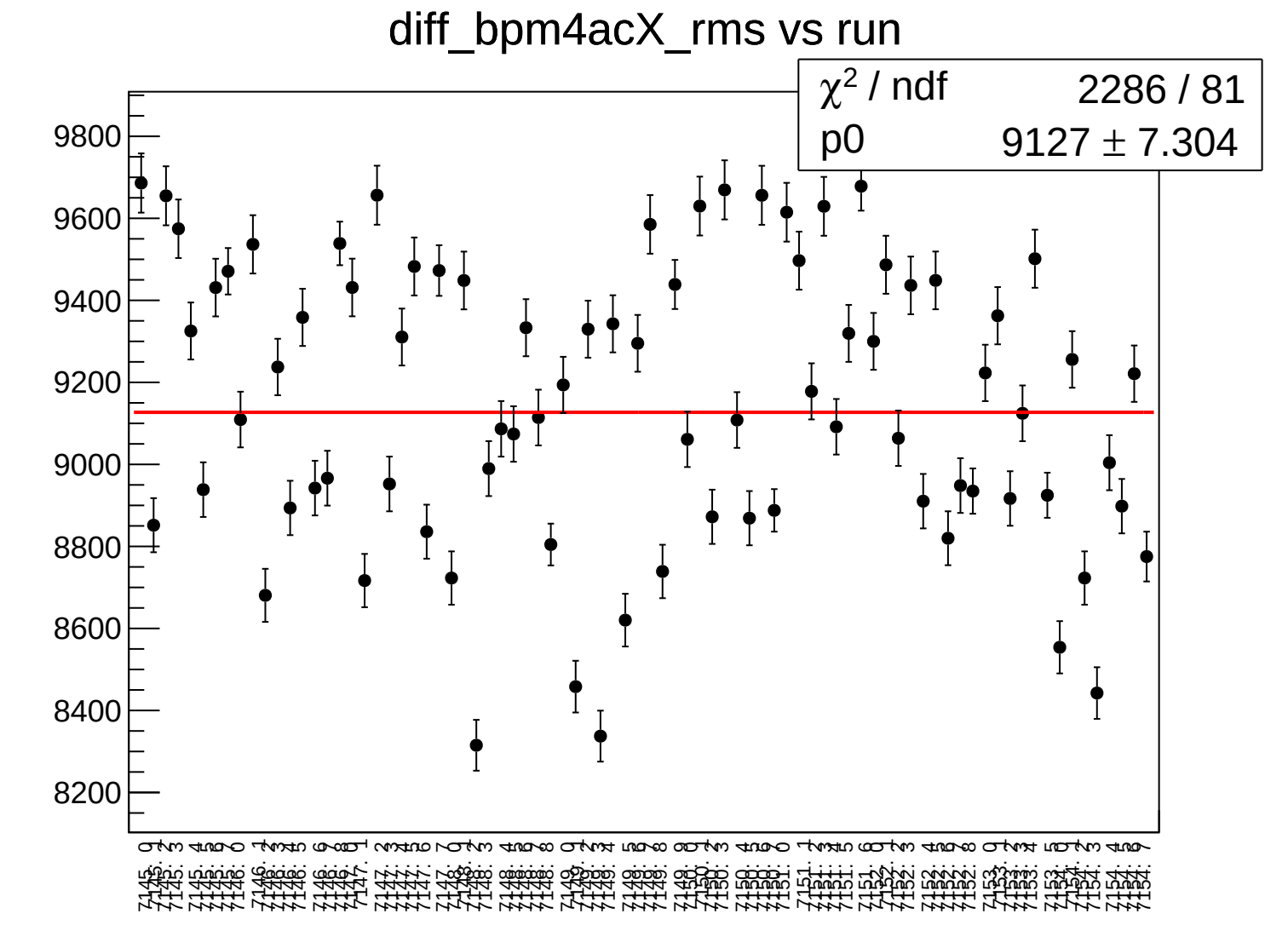

diff_bpm4eY_mean vs run
χ² / ndf 78.21 / 81
p0 6.147 ± 8.002
pull
Entries 82
Mean −1346
Std Dev 1329

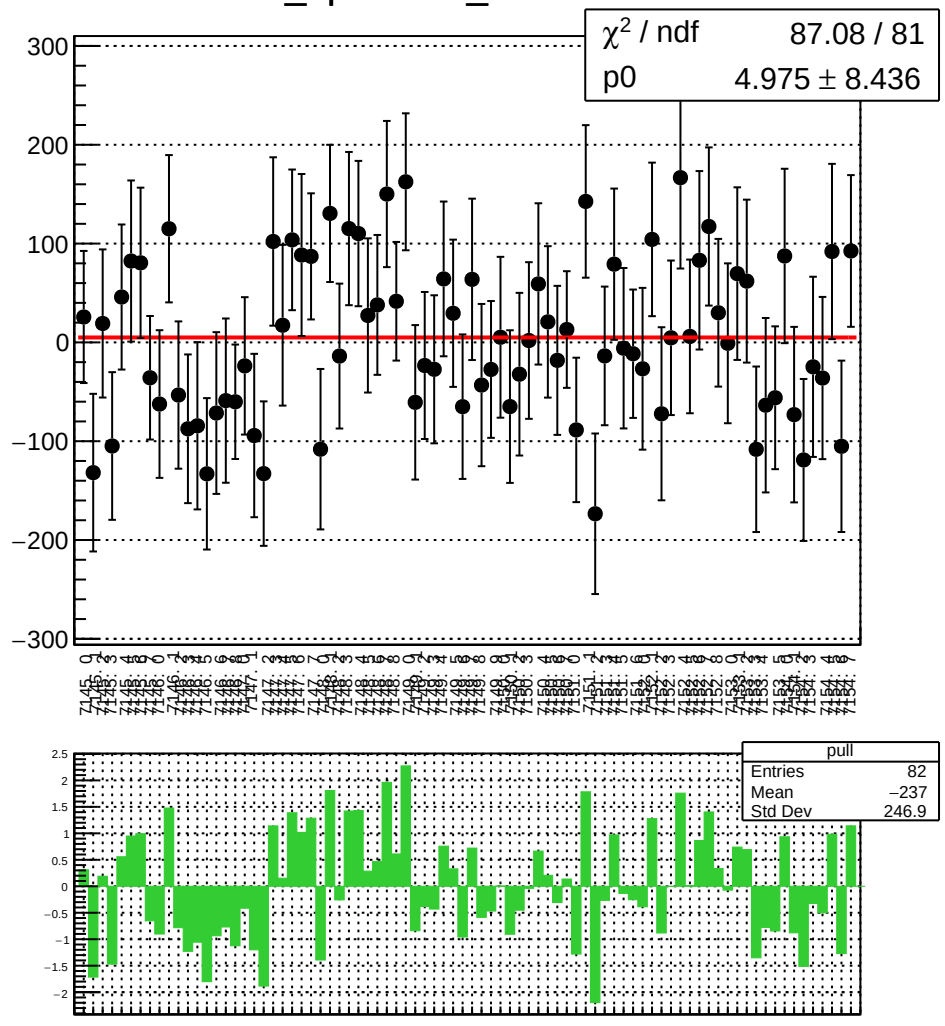

pull1D
Entries 82
Mean −0.0006443
Std Dev 0.9766

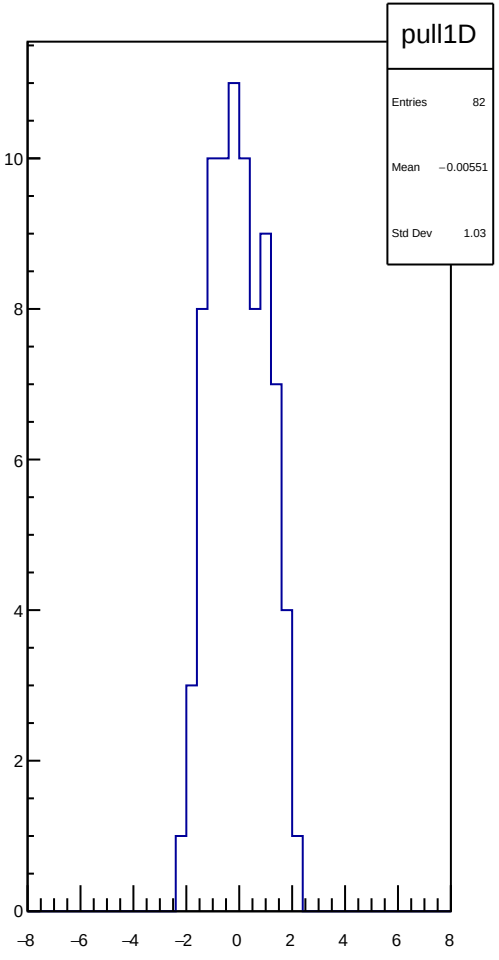

diff_bpm4eY_rms vs run
χ² / ndf 9707 / 81
p0 7054 ± 5.659
8500
8000
7500
7000
6500
6000

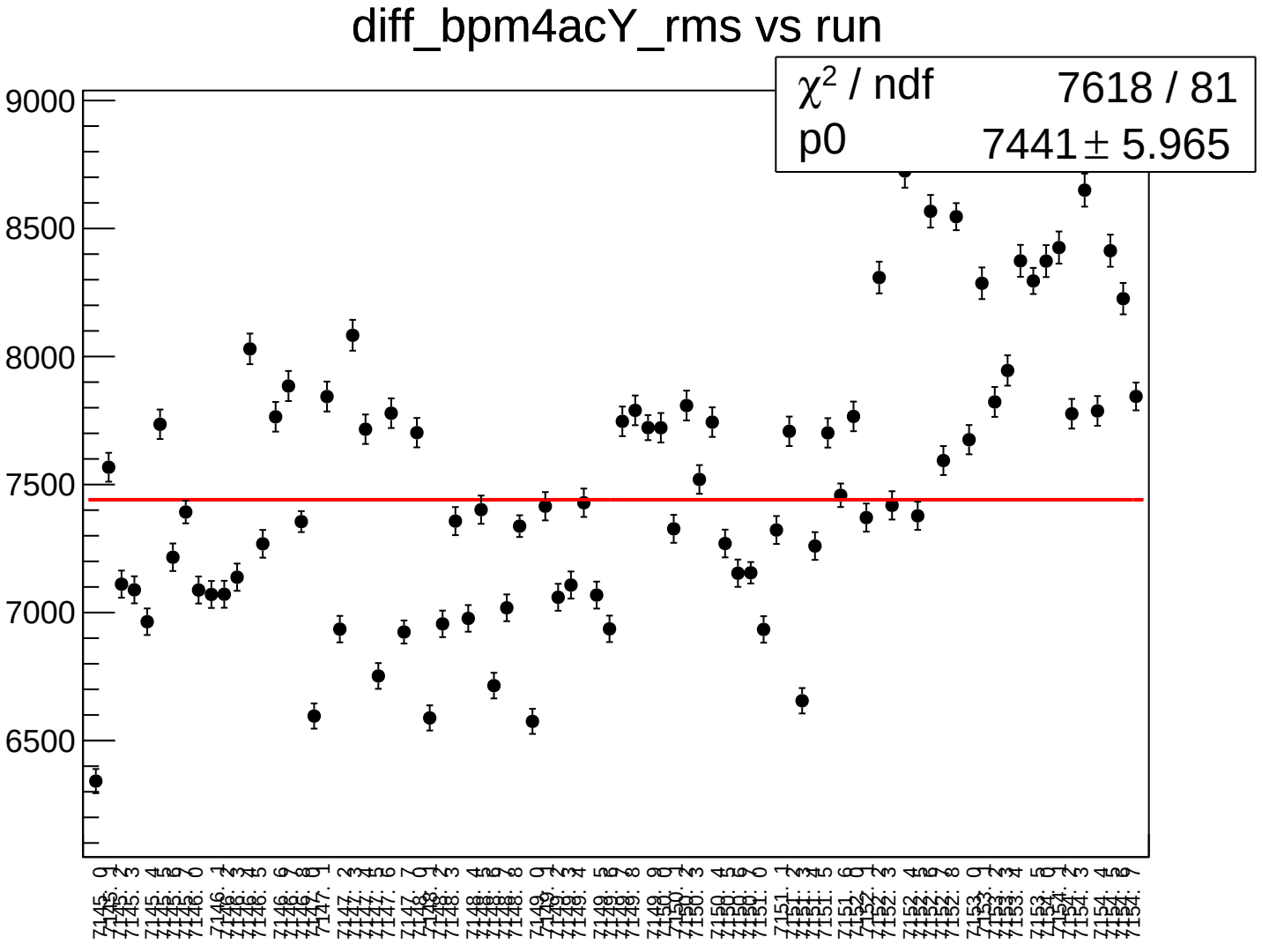

diff_bpm4acX_mean vs run
χ² / ndf 87.08 / 81
p0 −28.92 ± 10.33
pull
Entries 82
Mean 1420
Std Dev 1382

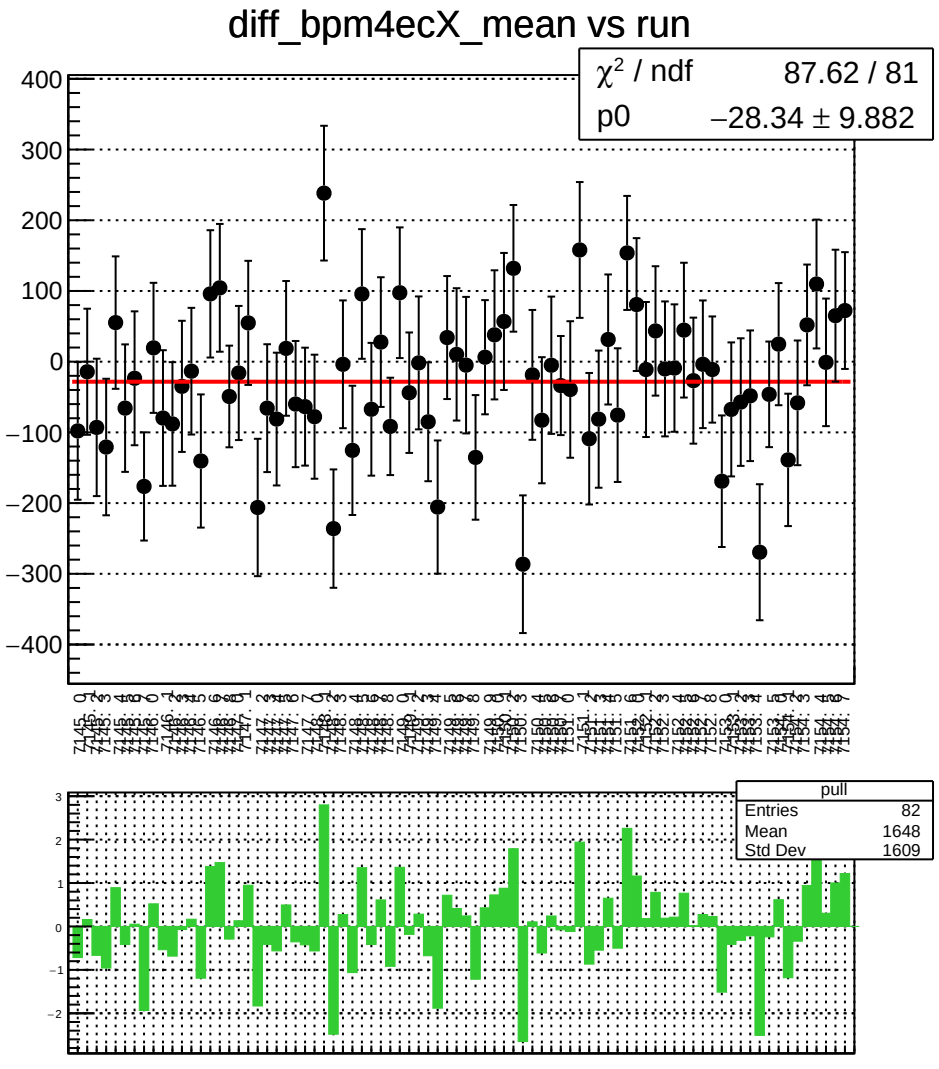

pull1D
Entries 82
Mean 0.002004
Std Dev 1.03

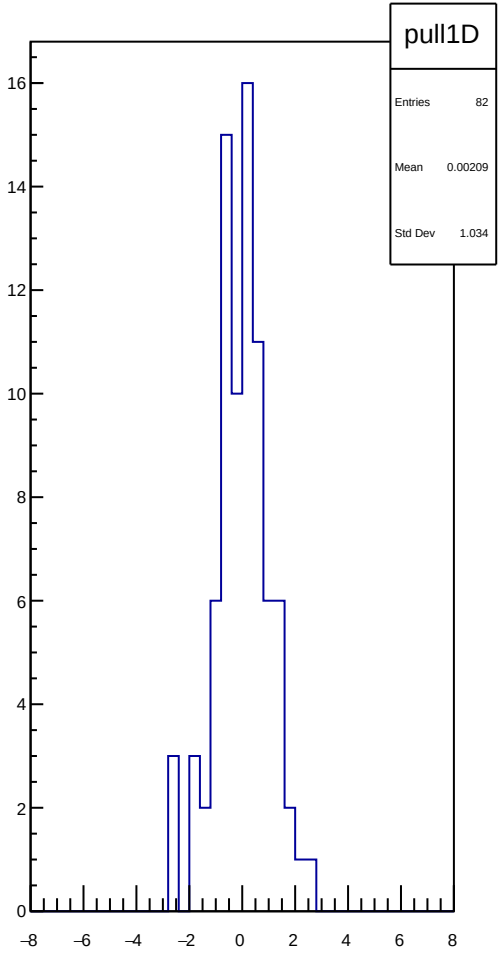

diff_bpm4acX_rms vs run
χ² / ndf 2286 / 81
p0 9127 ± 7.304
9800
9600
9400
9200
9000
8800
8600
8400
8200

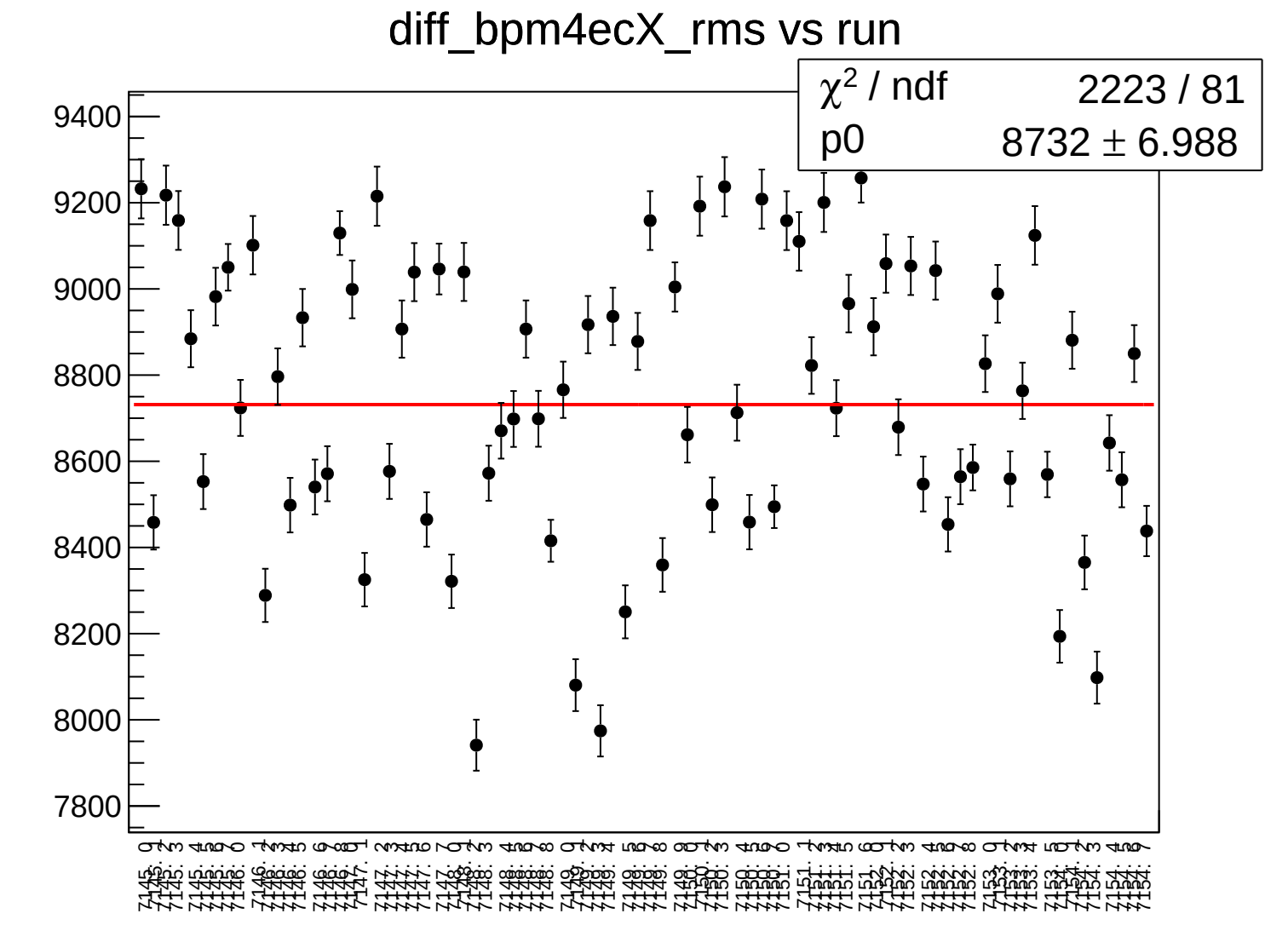

diff_bpm4acY_mean vs run
χ^2 / ndf 87.08 / 81
p0 4.975 ± 8.436
pull
Entries 82
Mean −237
Std Dev 246.9

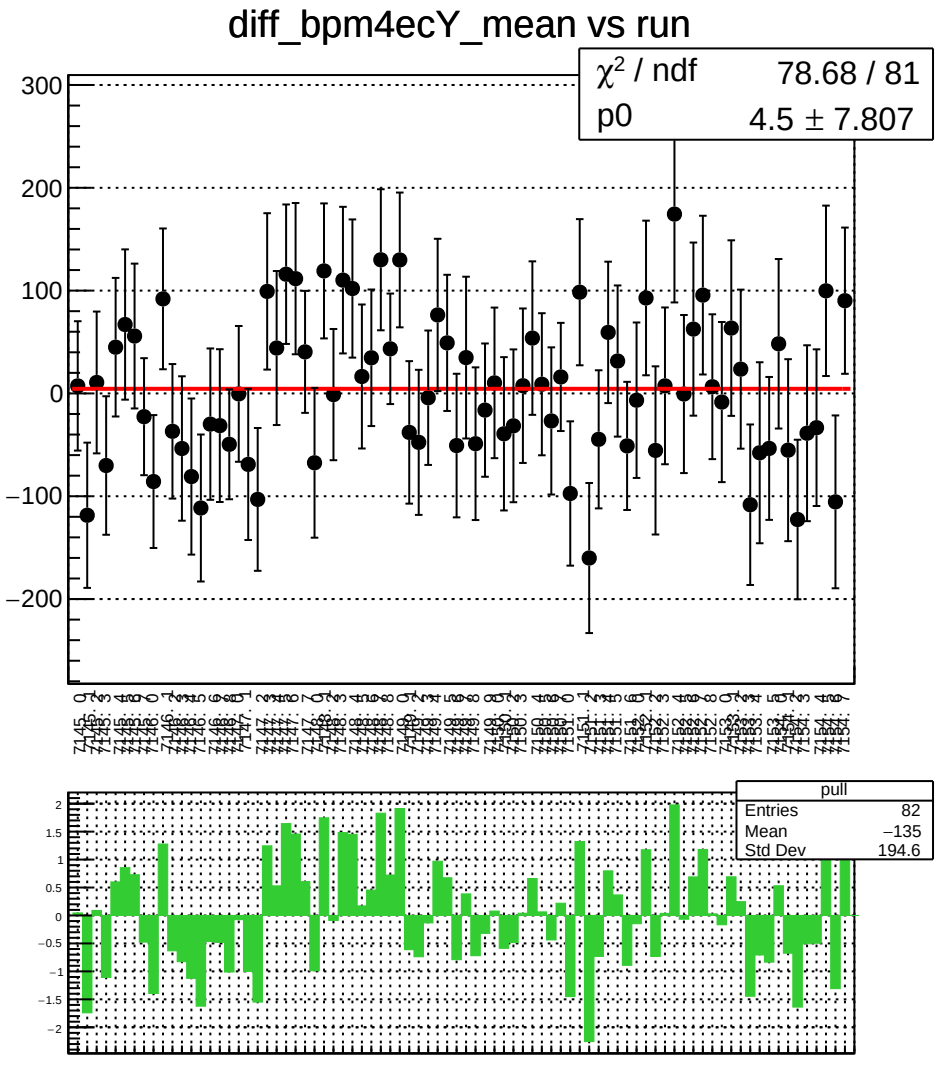

pull1D
Entries 82
Mean −0.00551
Std Dev 1.03

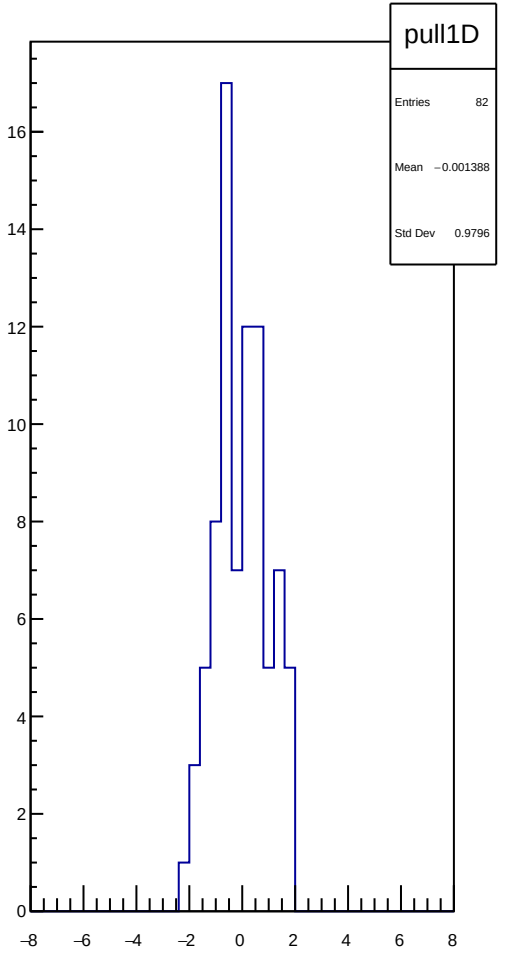

diff_bpm4acY_rms vs run
χ² / ndf 7618 / 81
p0 7441 ± 5.965
9000
8500
8000
7500
7000
6500

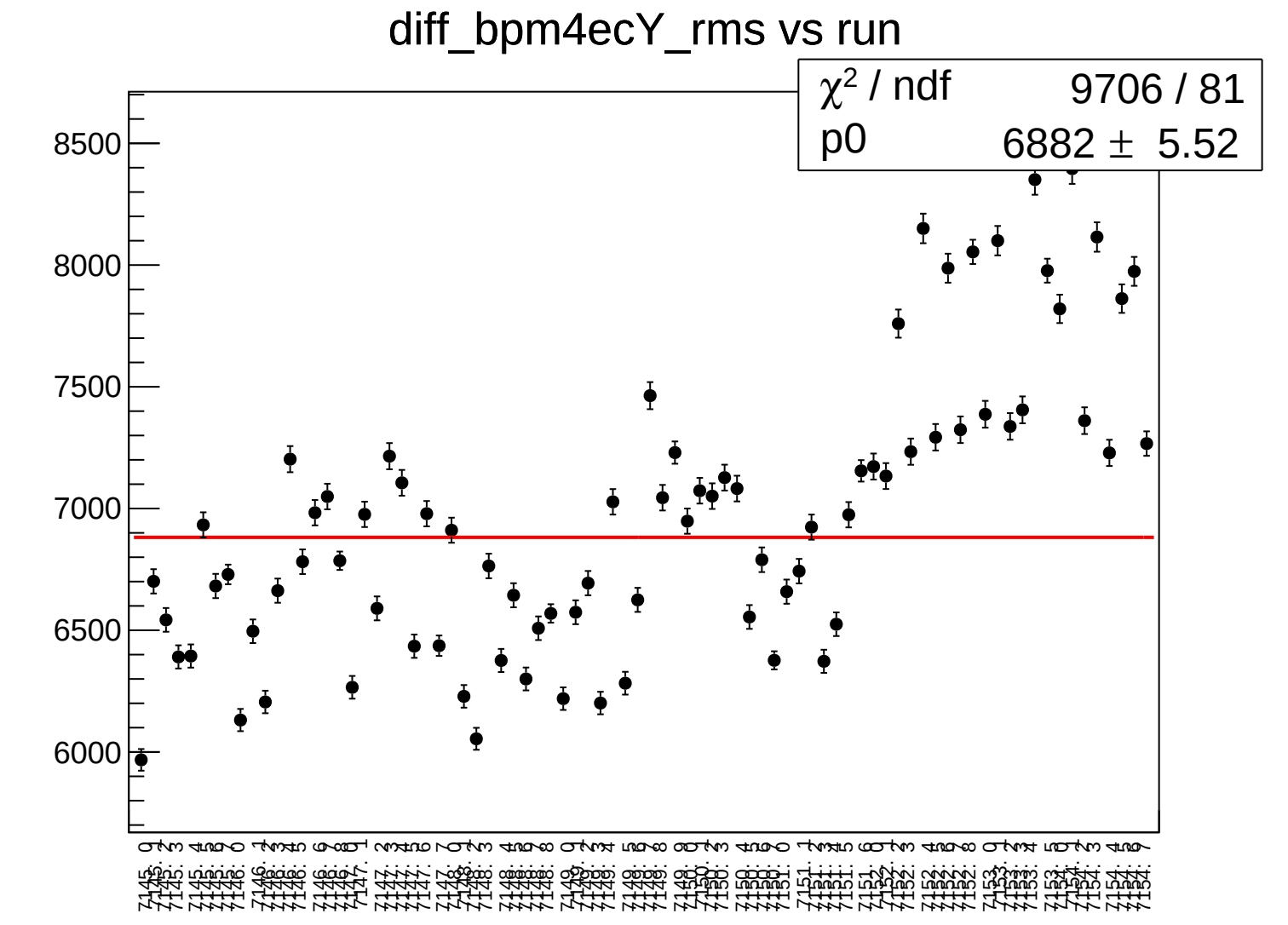

diff_bpm4ecX_mean vs run
χ² / ndf 87.62 / 81
p0 −28.34 ± 9.882
pull
Entries 82
Mean 1648
Std Dev 1609

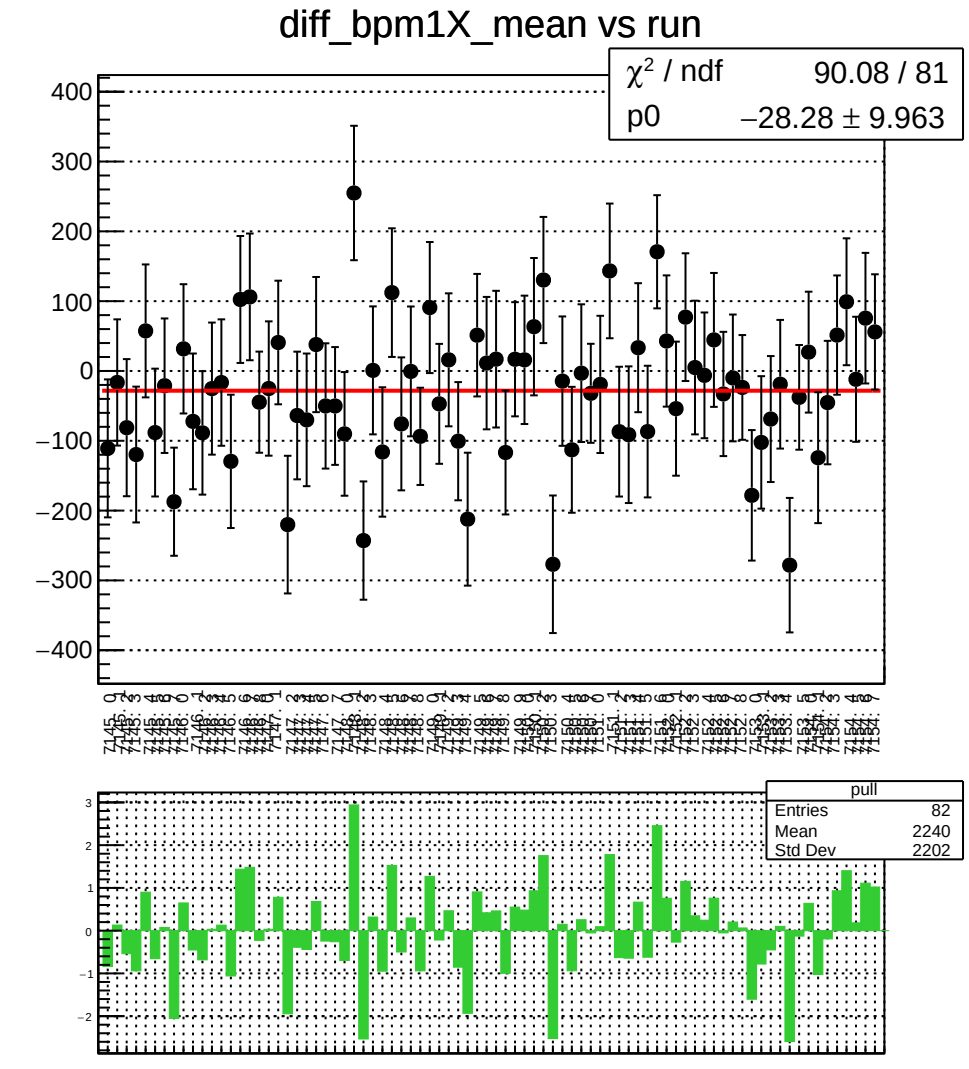

pull1D
Entries 82
Mean 0.00209
Std Dev 1.034

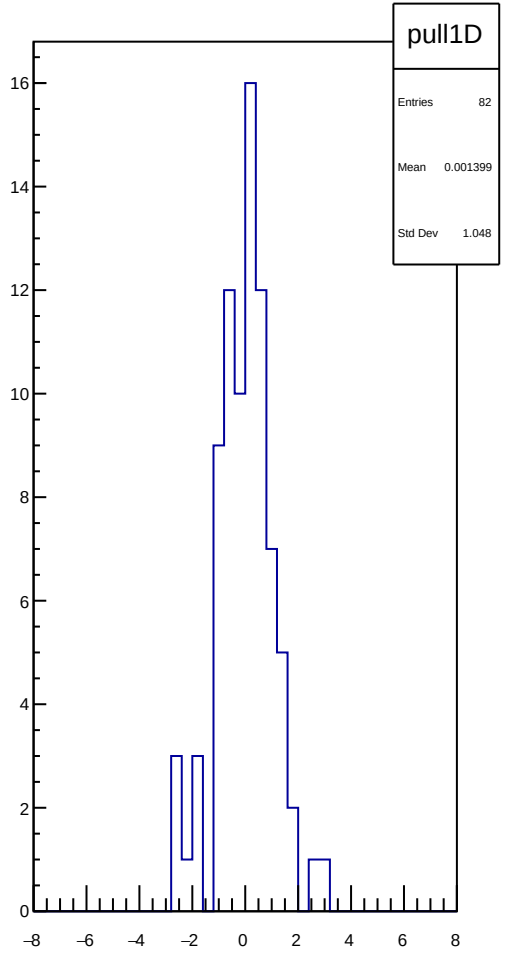

diff_bpm4ecX_rms vs run
χ² / ndf 2223 / 81
p0 8732 ± 6.988
9400
9200
9000
8800
8600
8400
8200
8000
7800

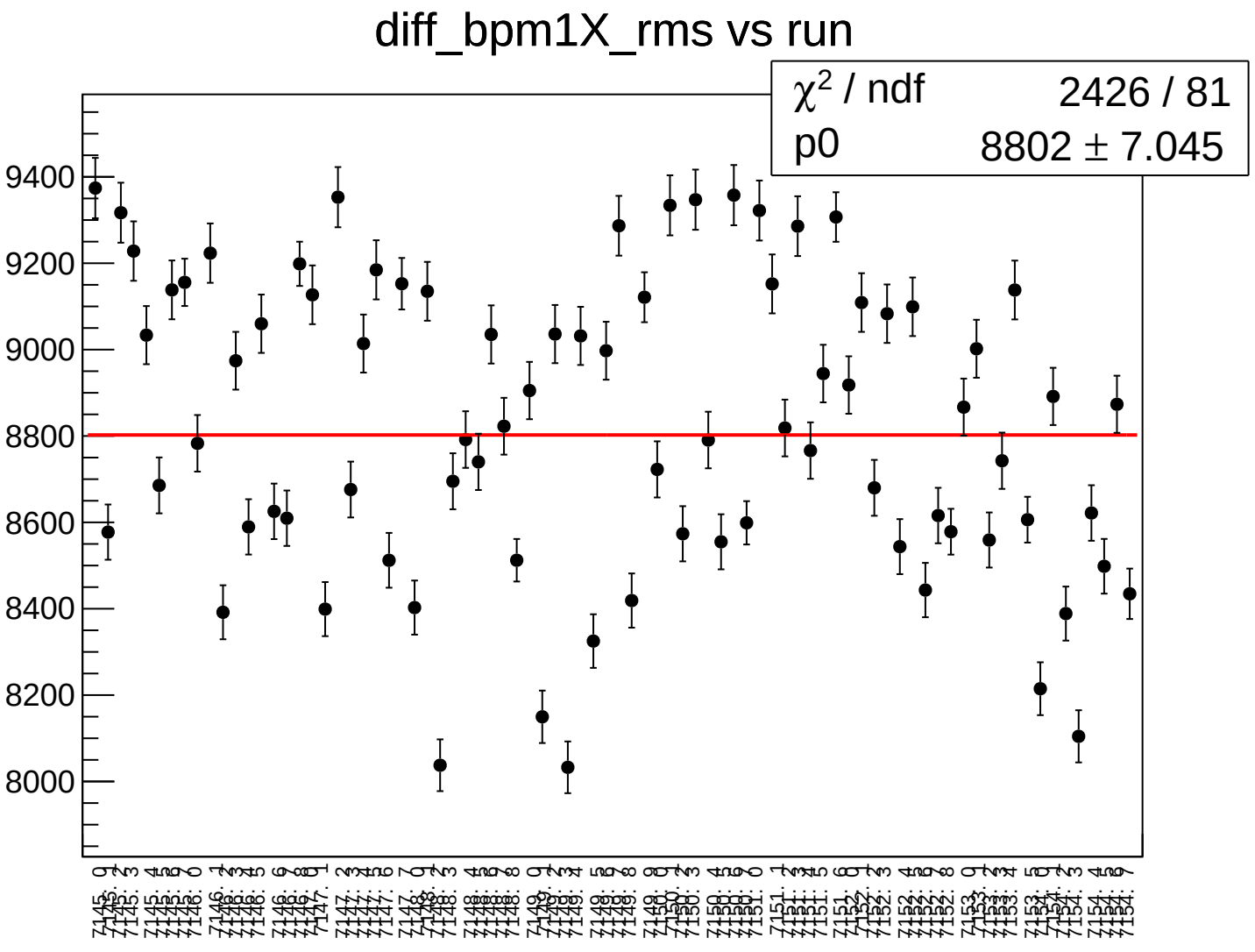

diff_bpm4ecY_mean vs run
χ² / ndf 78.68 / 81
p0 4.5 ± 7.807
300
200
100
0
−100
−200
pull
Entries 82
Mean −135
Std Dev 194.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

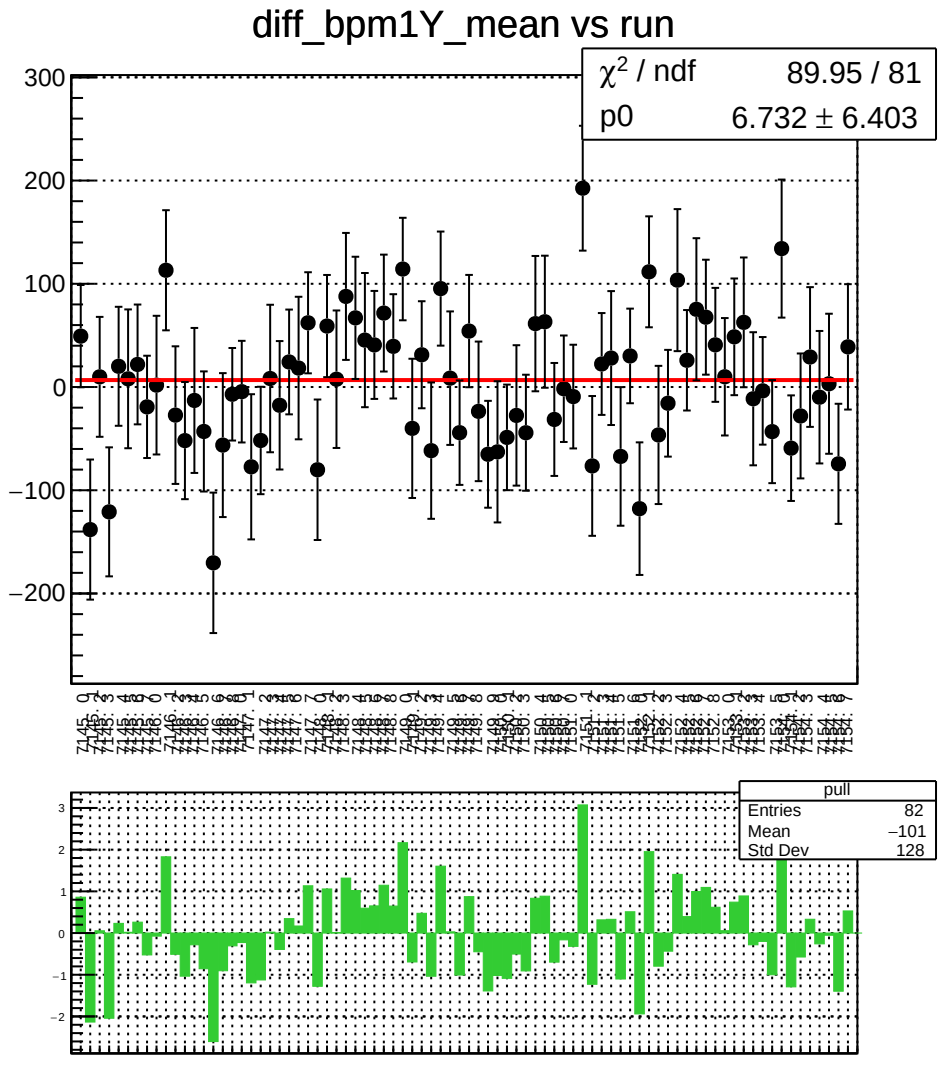

pull1D
Entries 82
Mean −0.001388
Std Dev 0.9796
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

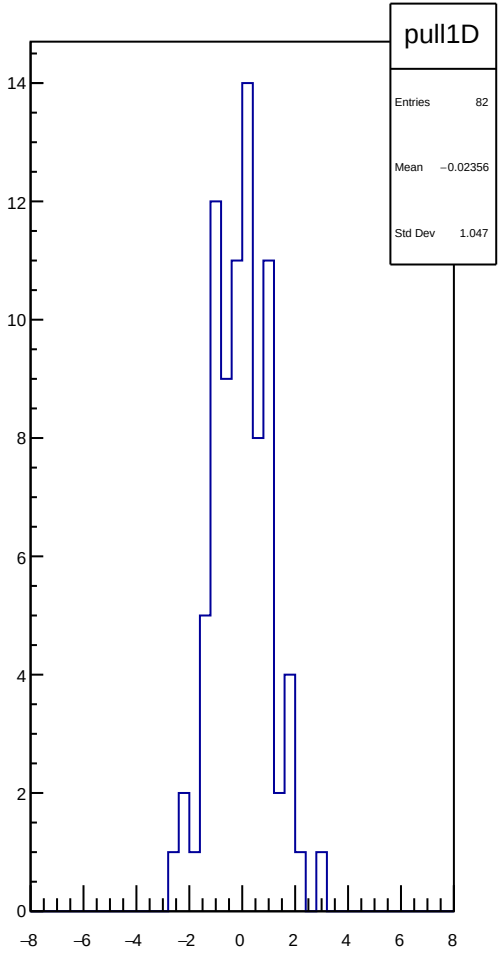

diff_bpm4ecY_rms vs run
χ² / ndf 9706 / 81
p0 6882 ± 5.52
8500
8000
7500
7000
6500
6000

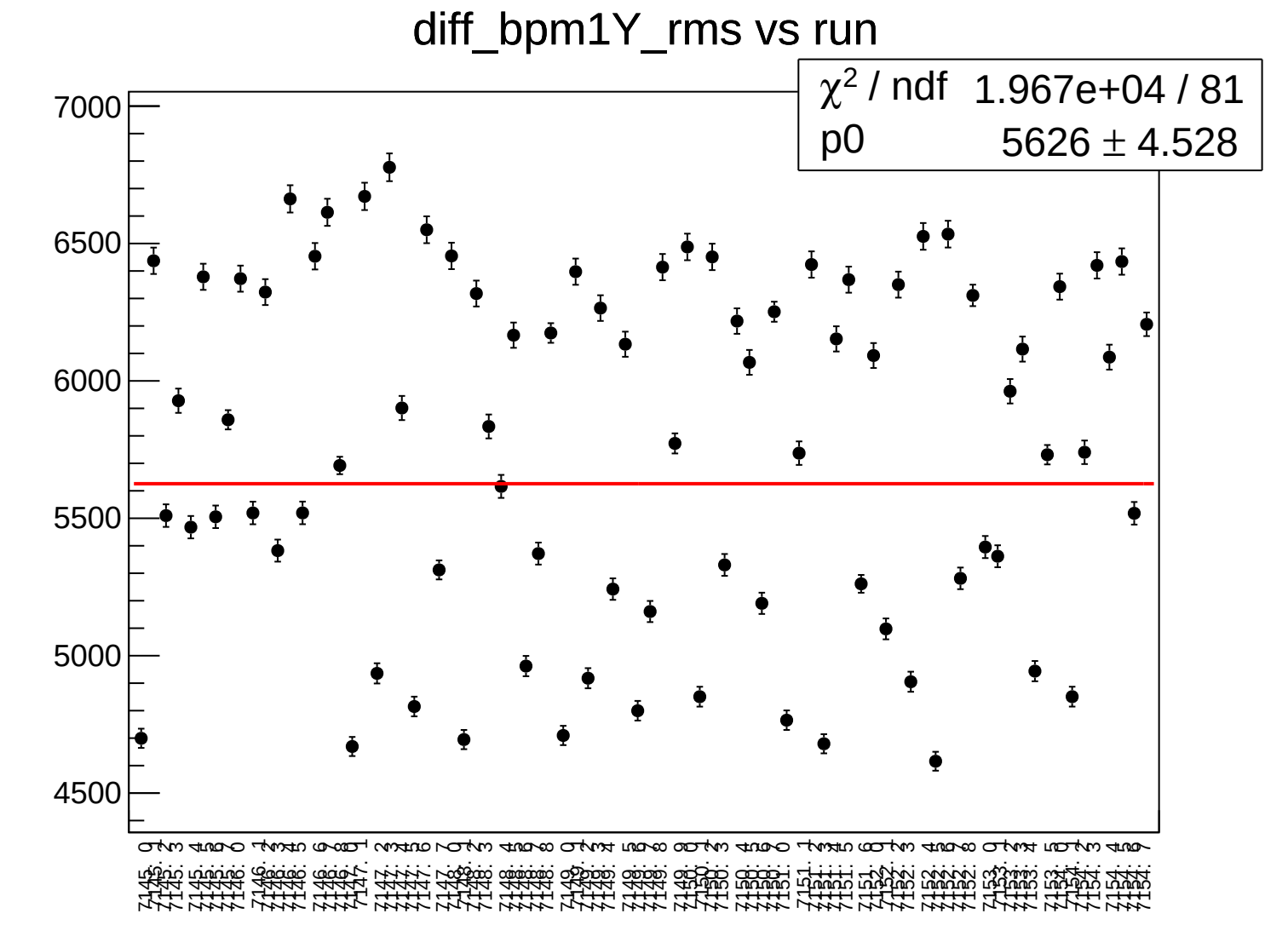

diff_bpm1X_mean vs run
χ² / ndf 90.08 / 81
p0 −28.28 ± 9.963
pull
Entries 82
Mean 2240
Std Dev 2202

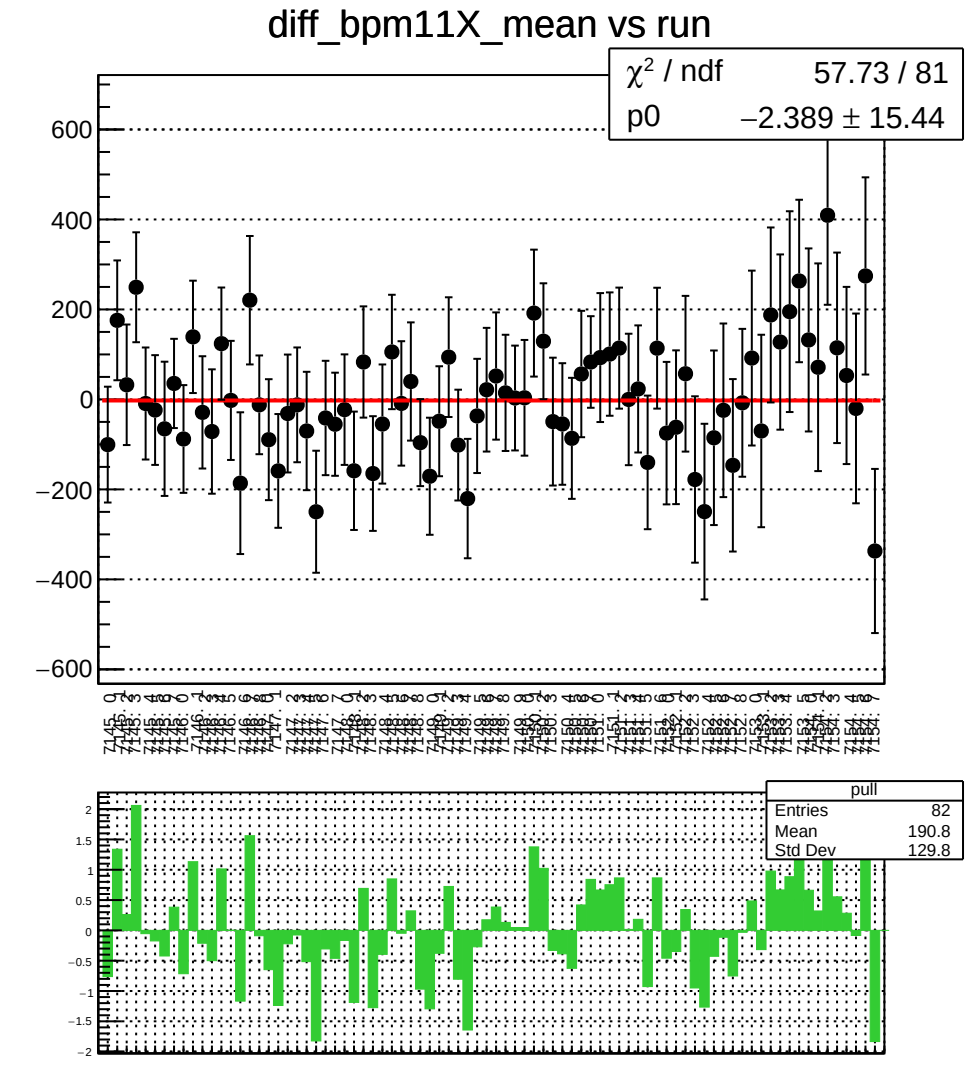

pull1D
Entries 82
Mean 0.001399
Std Dev 1.048

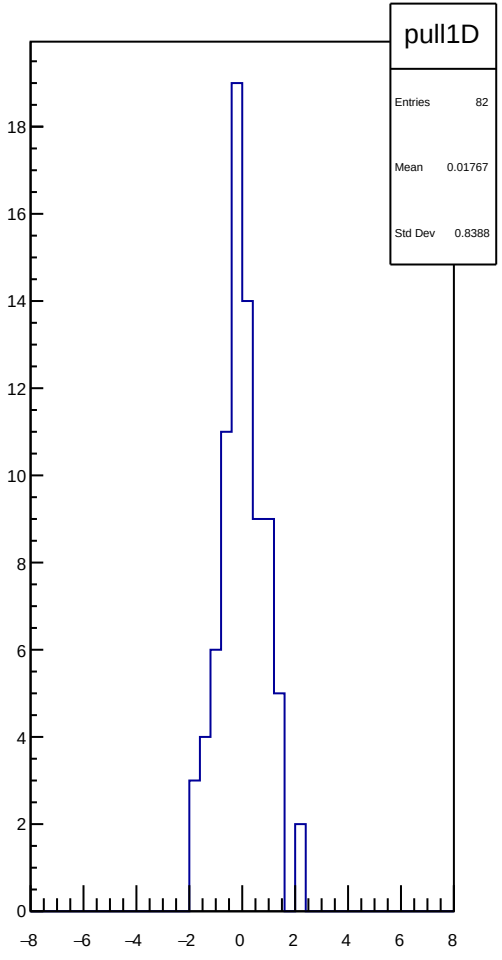

diff_bpm1X_rms vs run
χ² / ndf 2426 / 81
p0 8802 ± 7.045
9400
9200
9000
8800
8600
8400
8200
8000

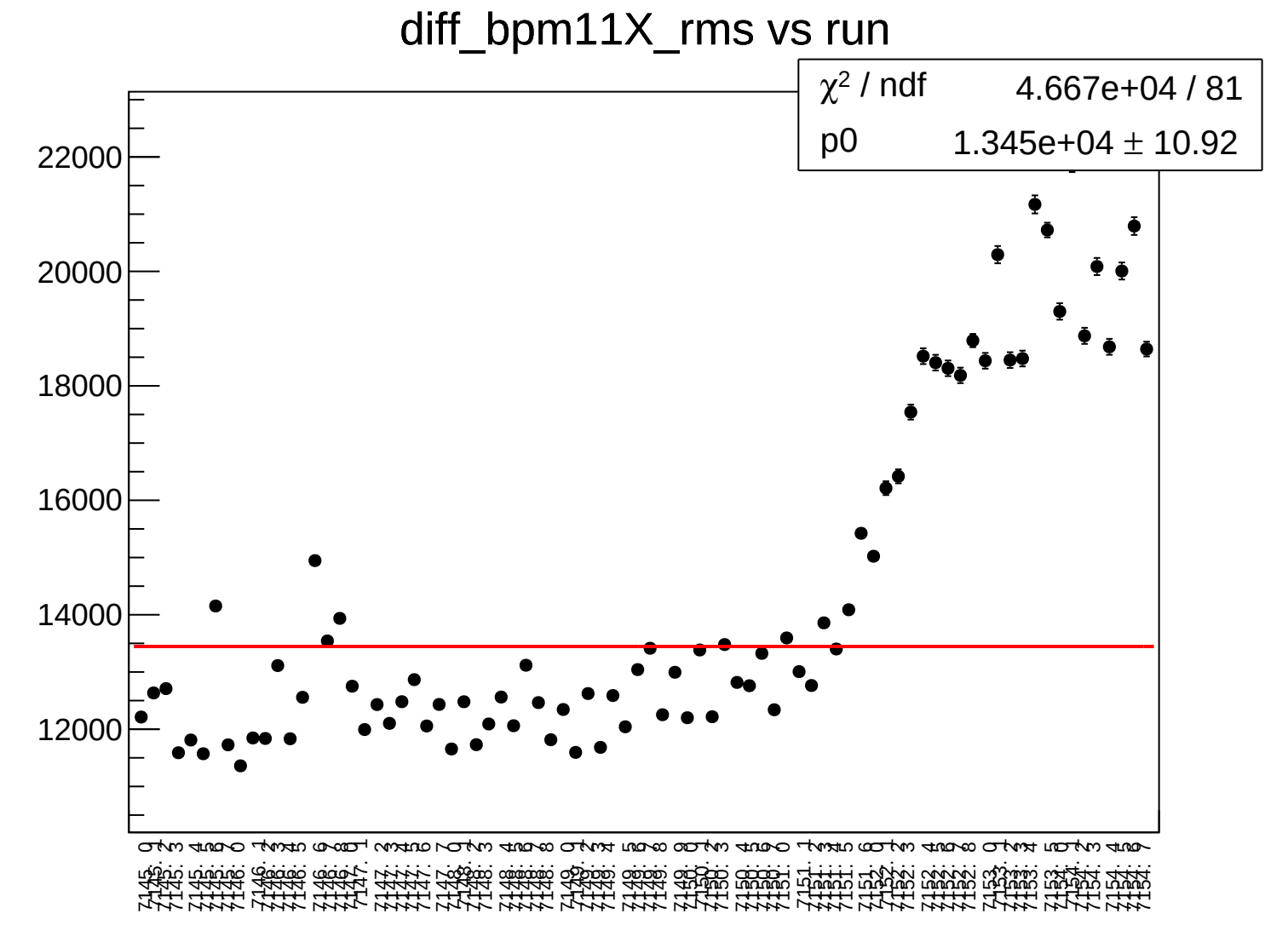

diff_bpm1Y_mean vs run
χ^2 / ndf 89.95 / 81
p0 6.732 ± 6.403
pull
Entries 82
Mean −101
Std Dev 128

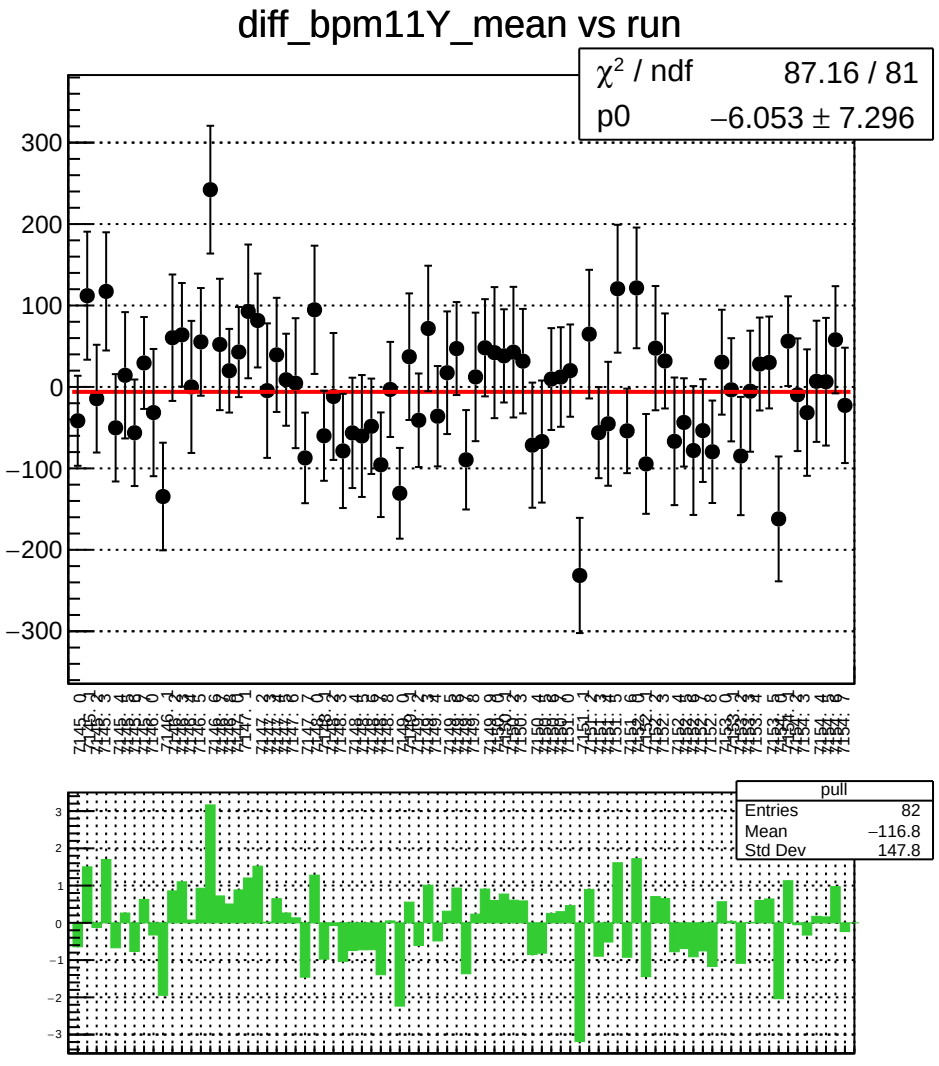

pull1D
Entries 82
Mean −0.02356
Std Dev 1.047

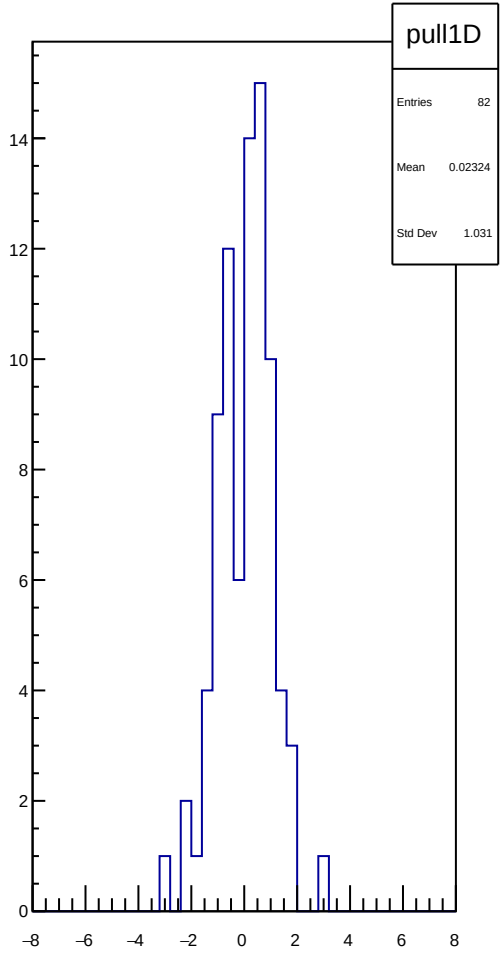

diff_bpm1Y_rms vs run
χ² / ndf 1.967e+04 / 81
p0 5626 ± 4.528
7000
6500
6000
5500
5000
4500

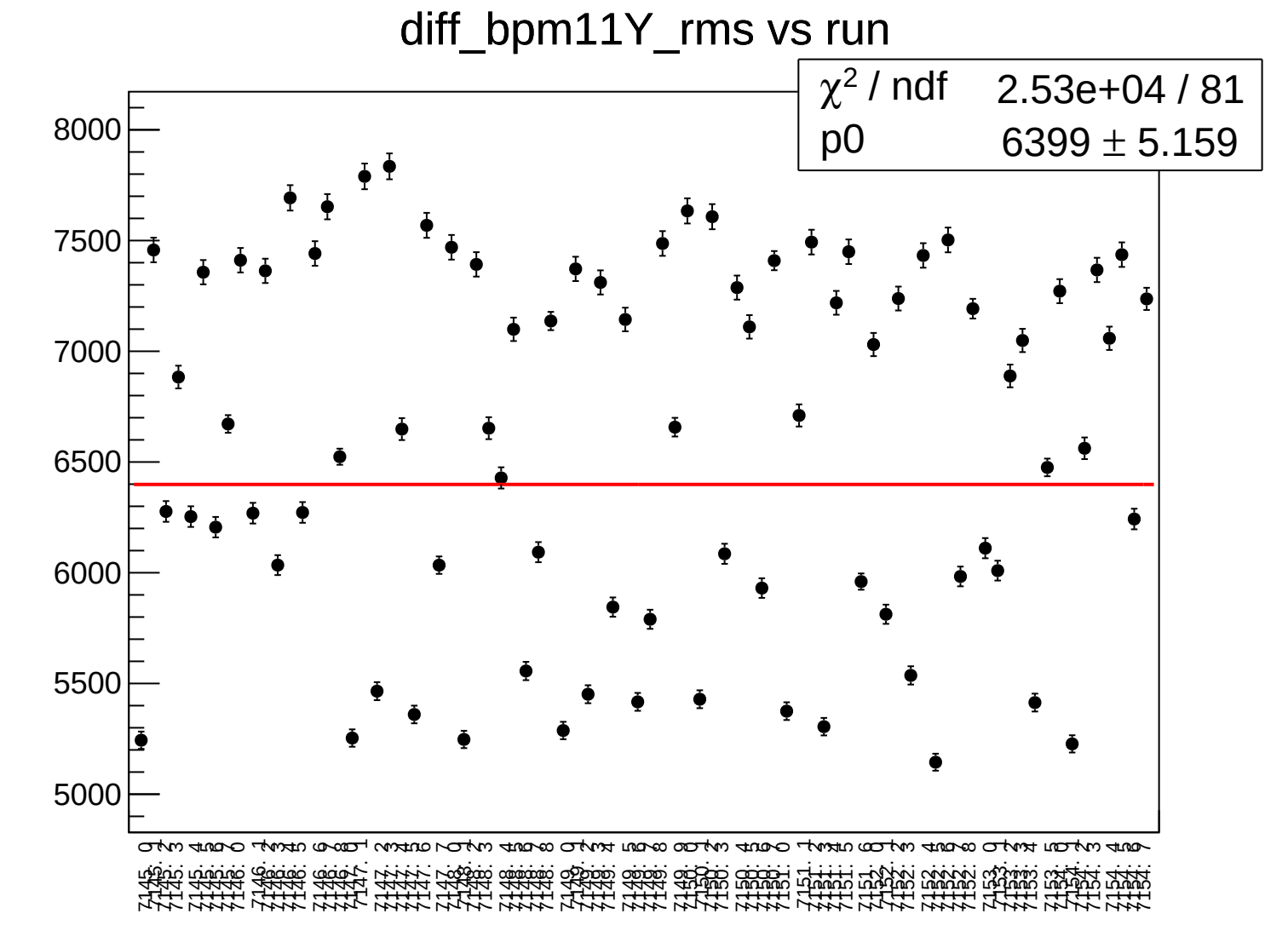

diff_bpm11X_mean vs run
χ² / ndf 57.73 / 81
p0 −2.389 ± 15.44
pull
Entries 82
Mean 190.8
Std Dev 129.8

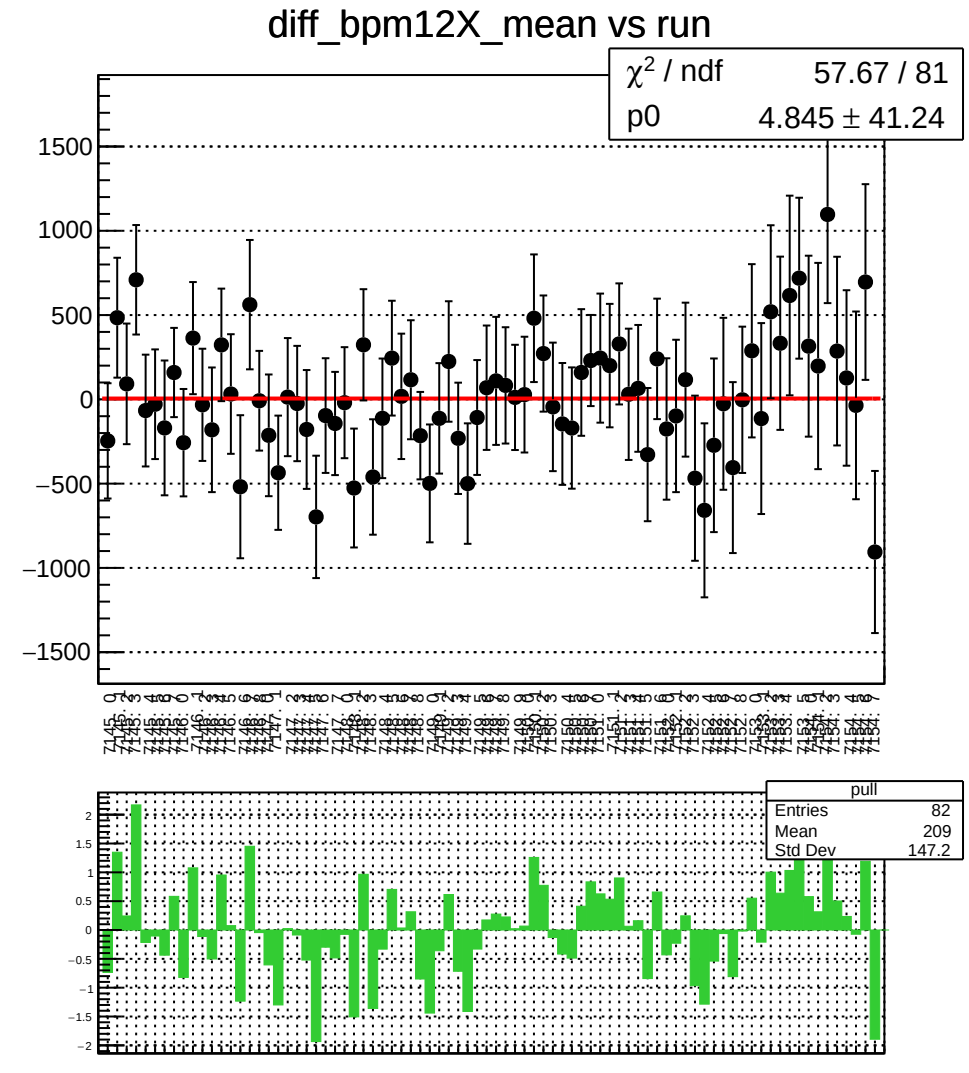

pull1D
Entries 82
Mean 0.01767
Std Dev 0.8388

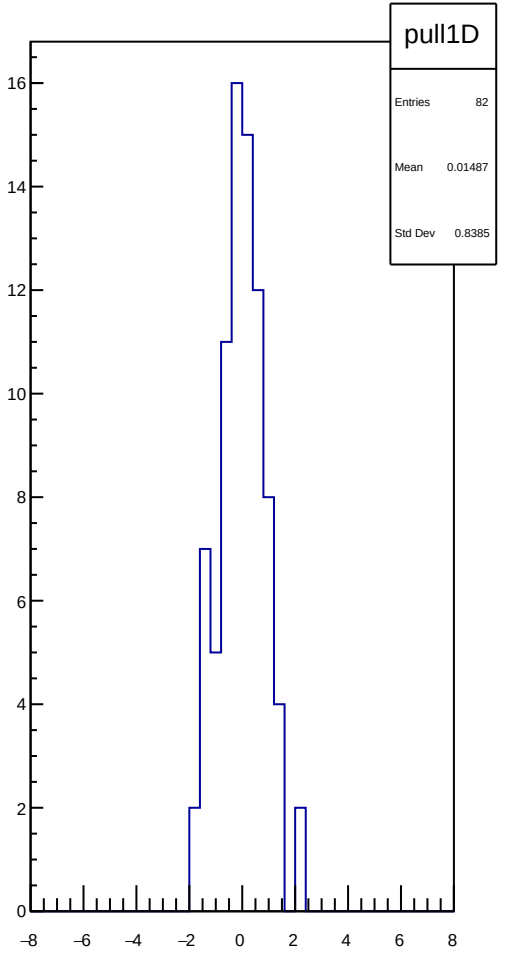

diff_bpm11X_rms vs run
χ² / ndf 4.667e+04 / 81
p0 1.345e+04 ± 10.92
22000
20000
18000
16000
14000
12000

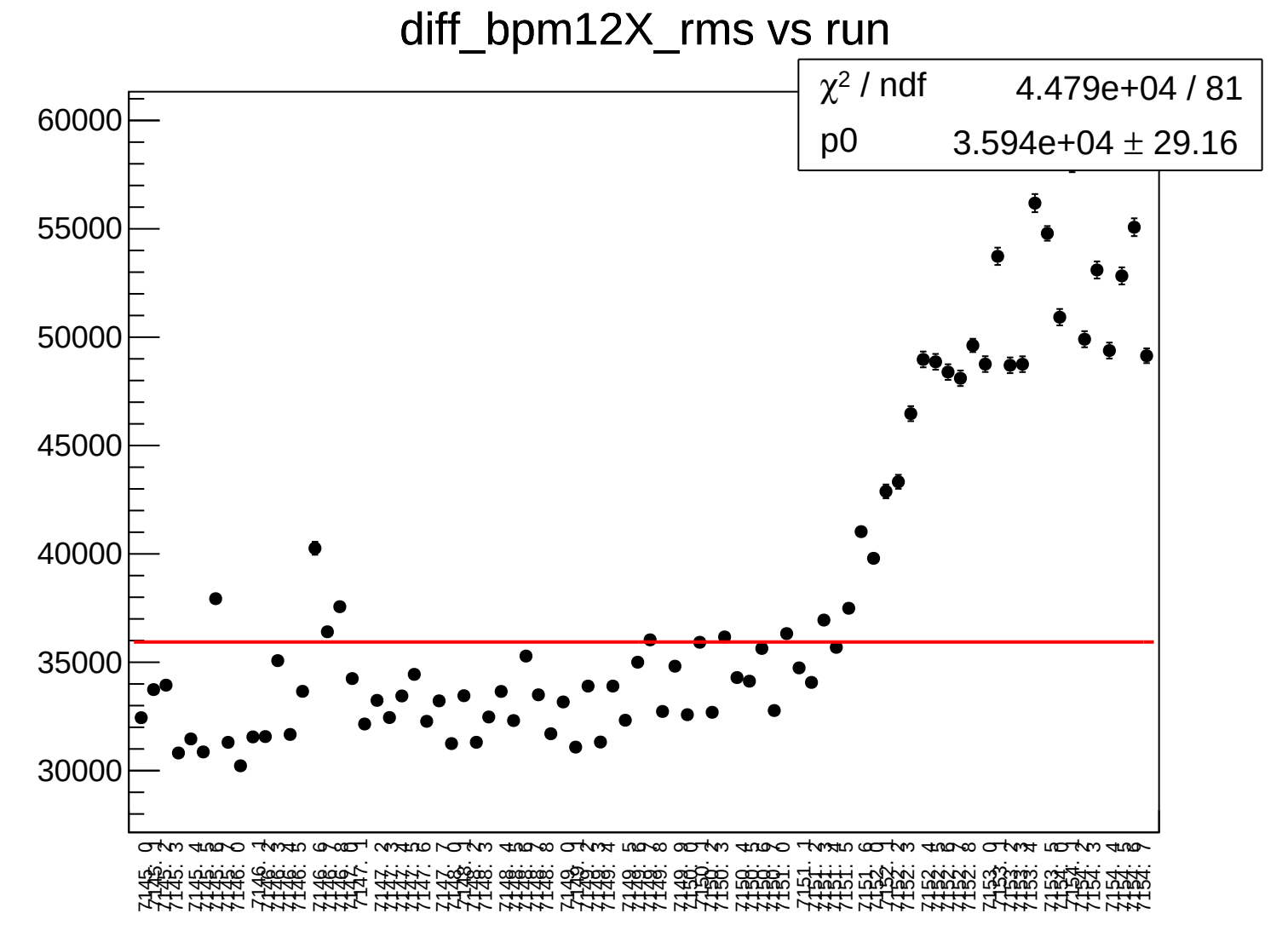

diff_bpm11Y_mean vs run
χ² / ndf 87.16 / 81
p0 −6.053 ± 7.296
pull
Entries 82
Mean −116.8
Std Dev 147.8

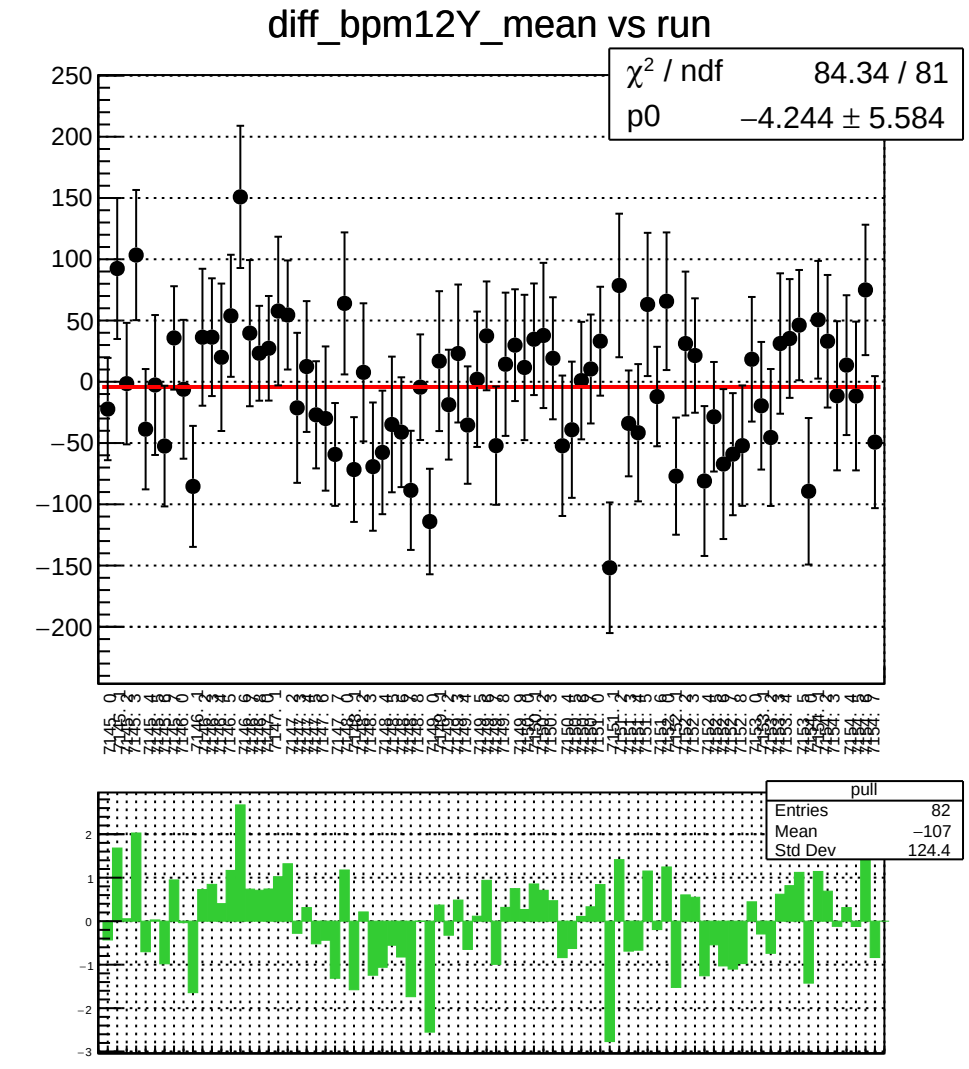

pull1D
Entries 82
Mean 0.02324
Std Dev 1.031

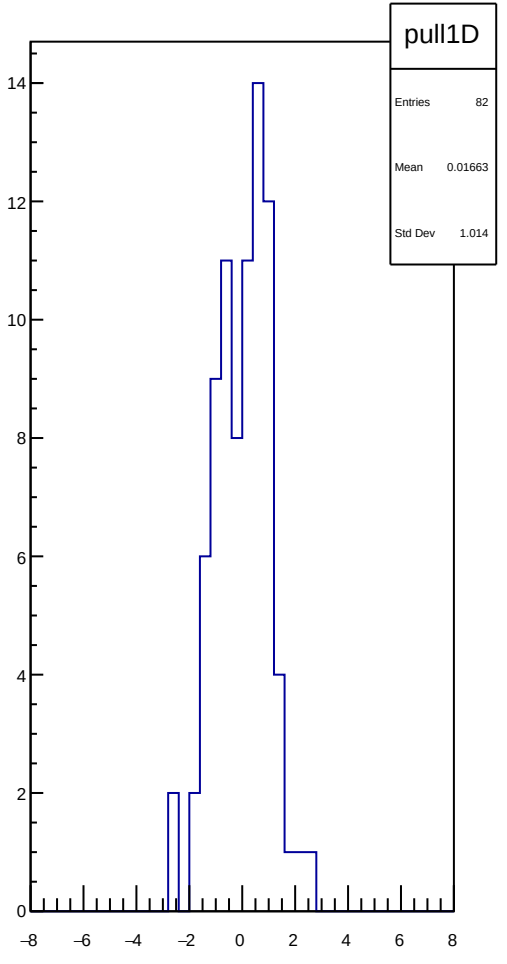

diff_bpm11Y_rms vs run
χ² / ndf 2.53e+04 / 81
p0 6399 ± 5.159
8000
7500
7000
6500
6000
5500
5000

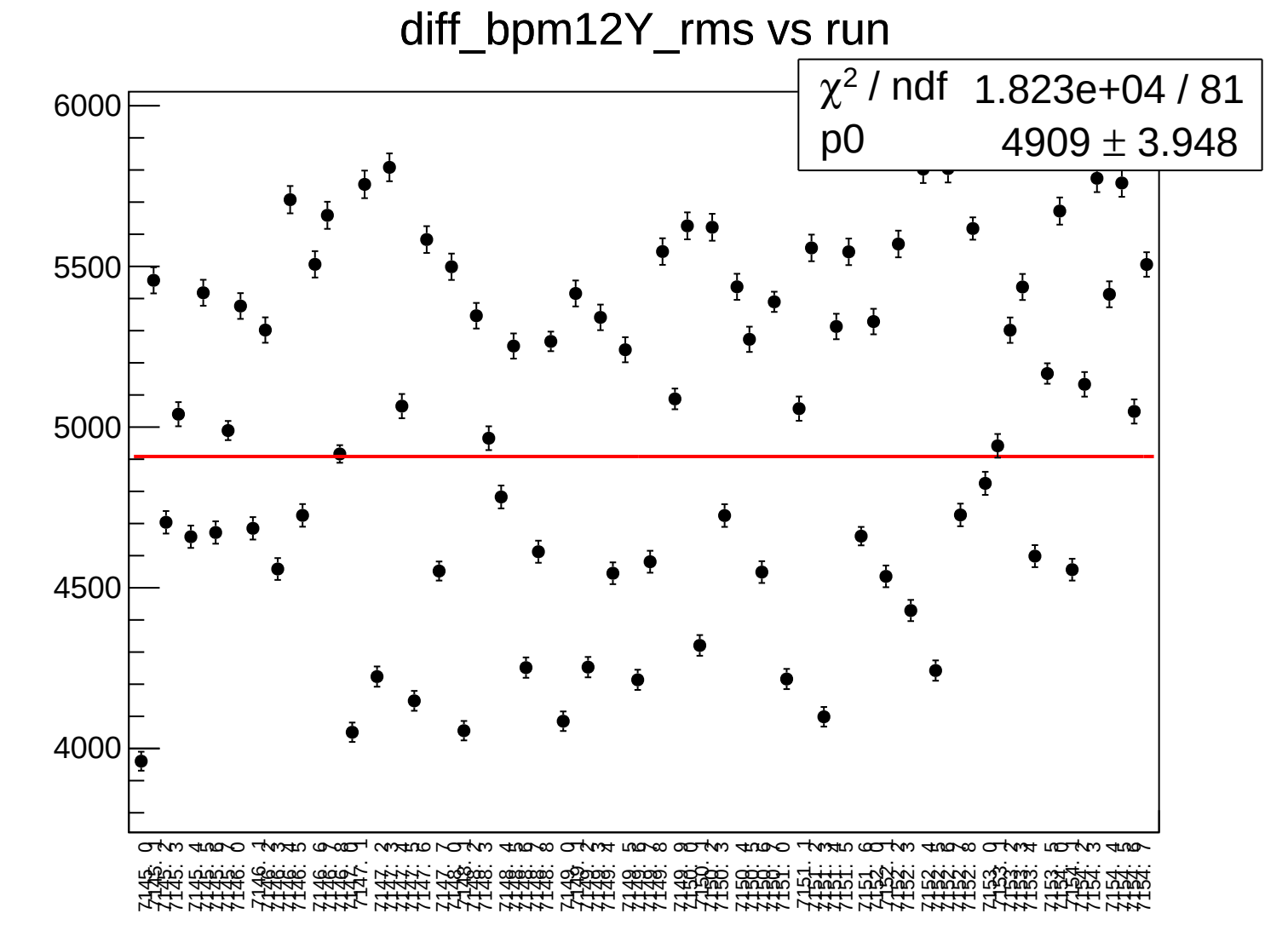

diff_bpm12X_mean vs run
χ² / ndf 57.67 / 81
p0 4.845 ± 41.24
pull
Entries 82
Mean 209
Std Dev 147.2

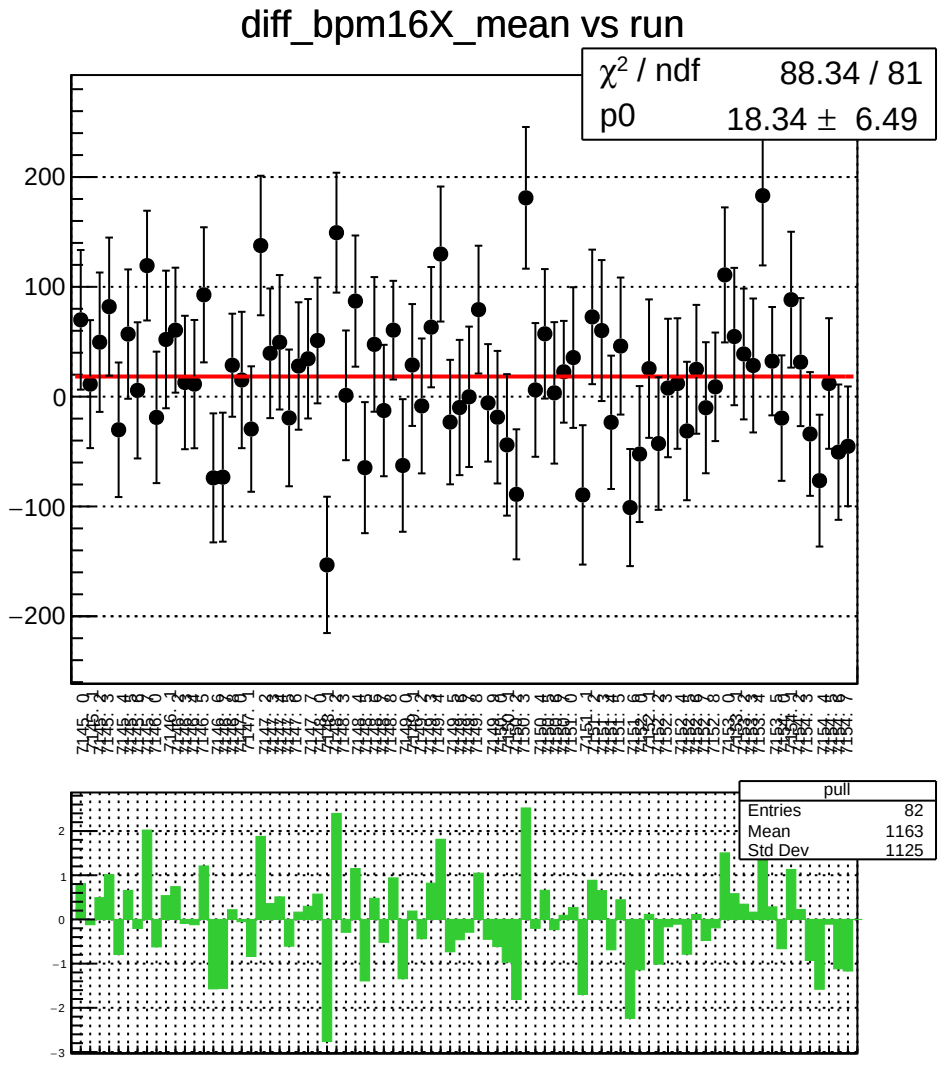

pull1D
Entries 82
Mean 0.01487
Std Dev 0.8385

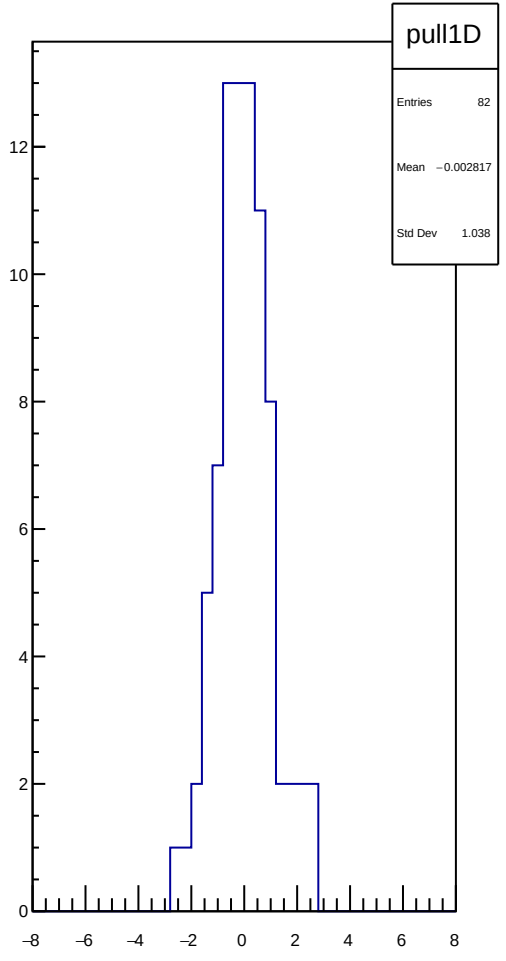

diff_bpm12X_rms vs run
χ² / ndf 4.479e+04 / 81
p0 3.594e+04 ± 29.16
60000
55000
50000
45000
40000
35000
30000

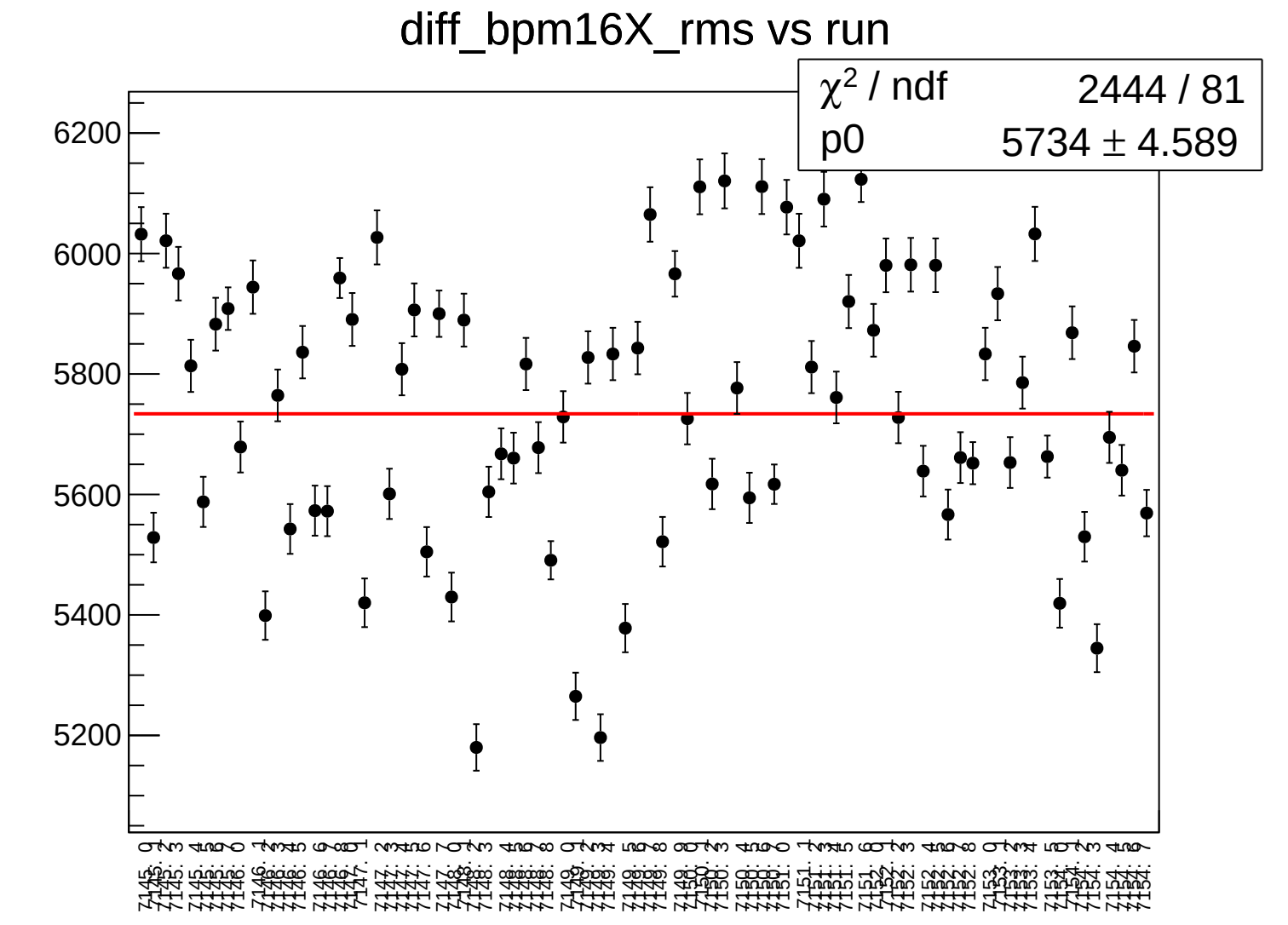

diff_bpm12Y_mean vs run
χ² / ndf 84.34 / 81
p0 −4.244 ± 5.584
pull
Entries 82
Mean −107
Std Dev 124.4

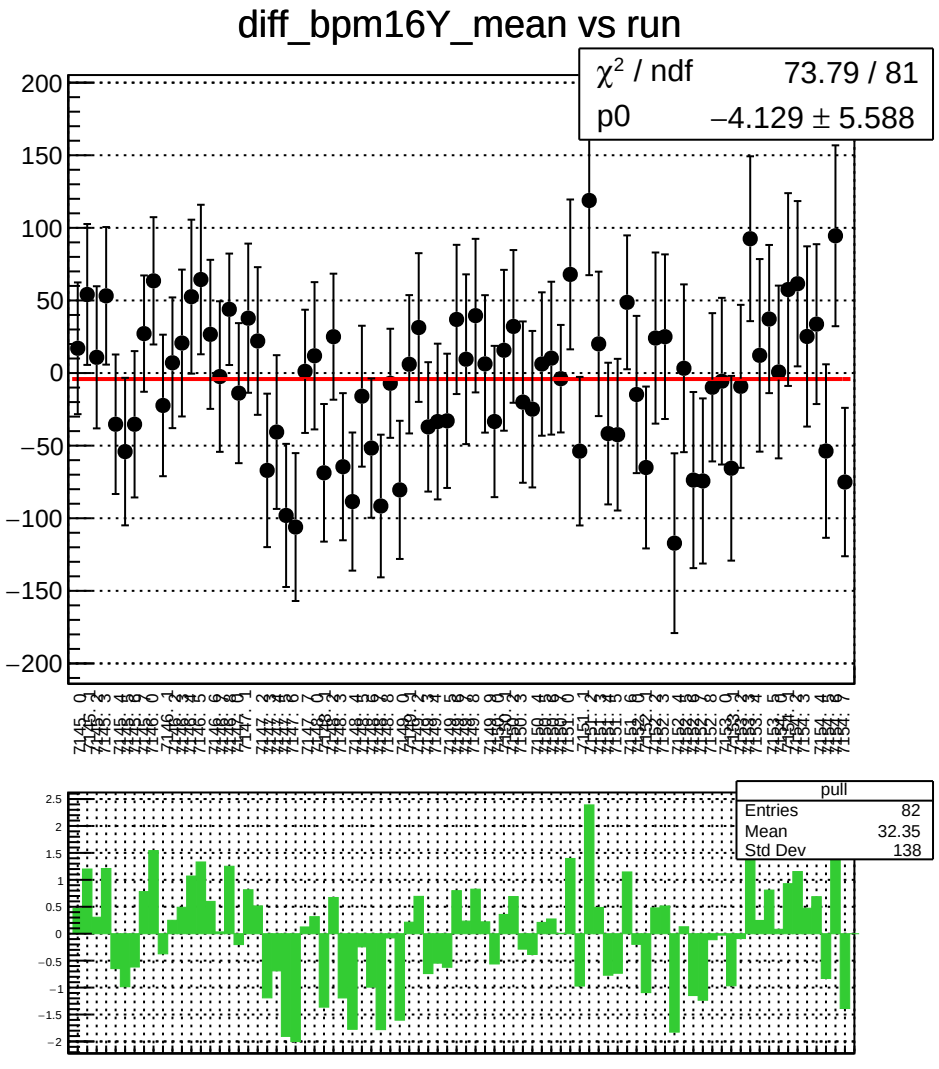

pull1D
Entries 82
Mean 0.01663
Std Dev 1.014

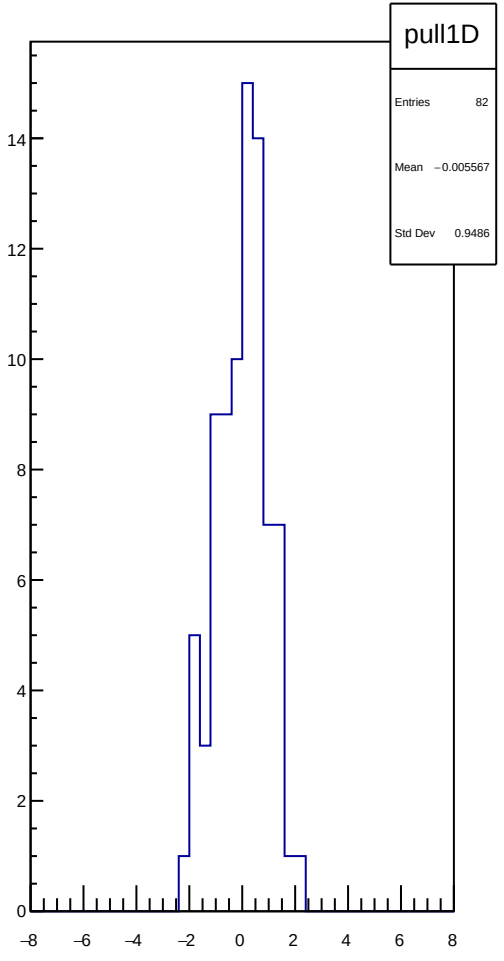

diff_bpm12Y_rms vs run
χ² / ndf 1.823e+04 / 81
p0 4909 ± 3.948
6000
5500
5000
4500
4000

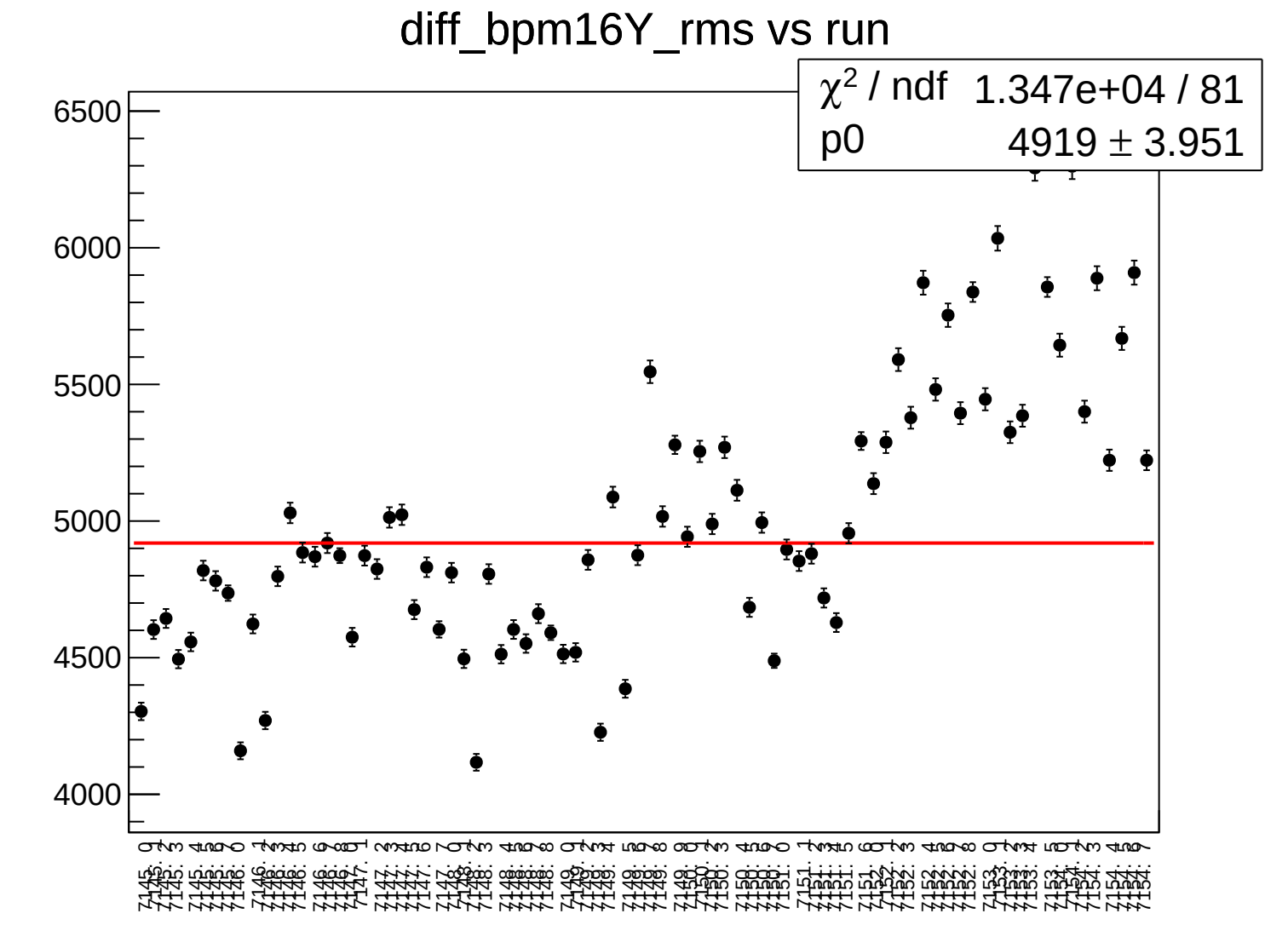

diff_bpm16X_mean vs run
χ² / ndf 88.34 / 81
p0 18.34 ± 6.49
200
100
0
−100
−200
pull
Entries 82
Mean 1163
Std Dev 1125
2
1
0
−1
−2
−3

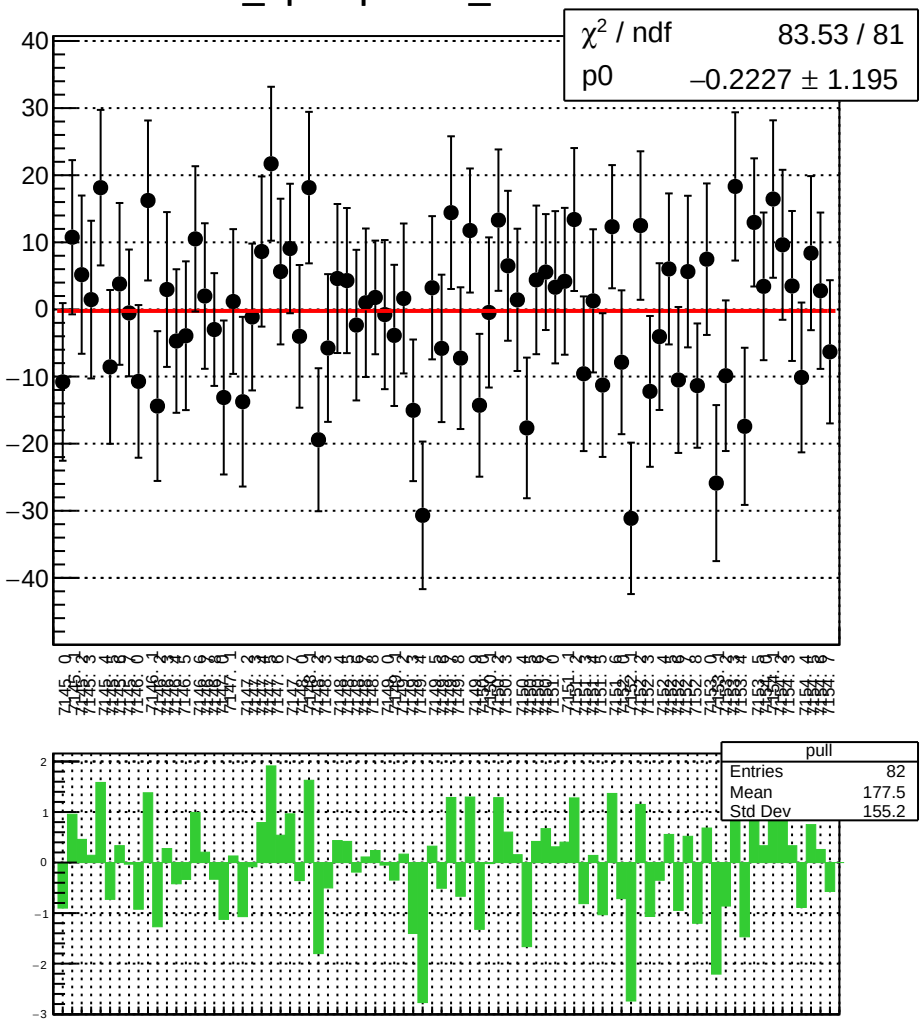

pull1D
Entries 82
Mean −0.002817
Std Dev 1.038
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

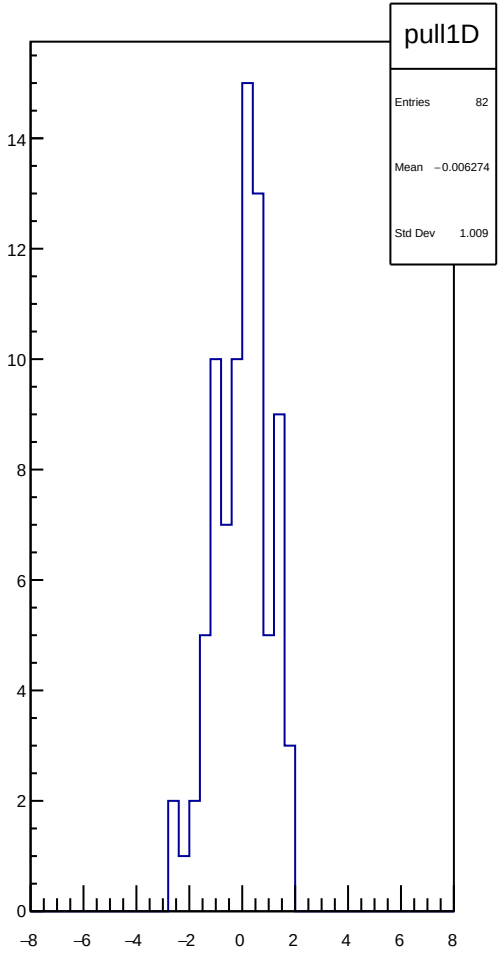

diff_bpm16X_rms vs run
χ² / ndf 2444 / 81
p0 5734 ± 4.589
6200
6000
5800
5600
5400
5200

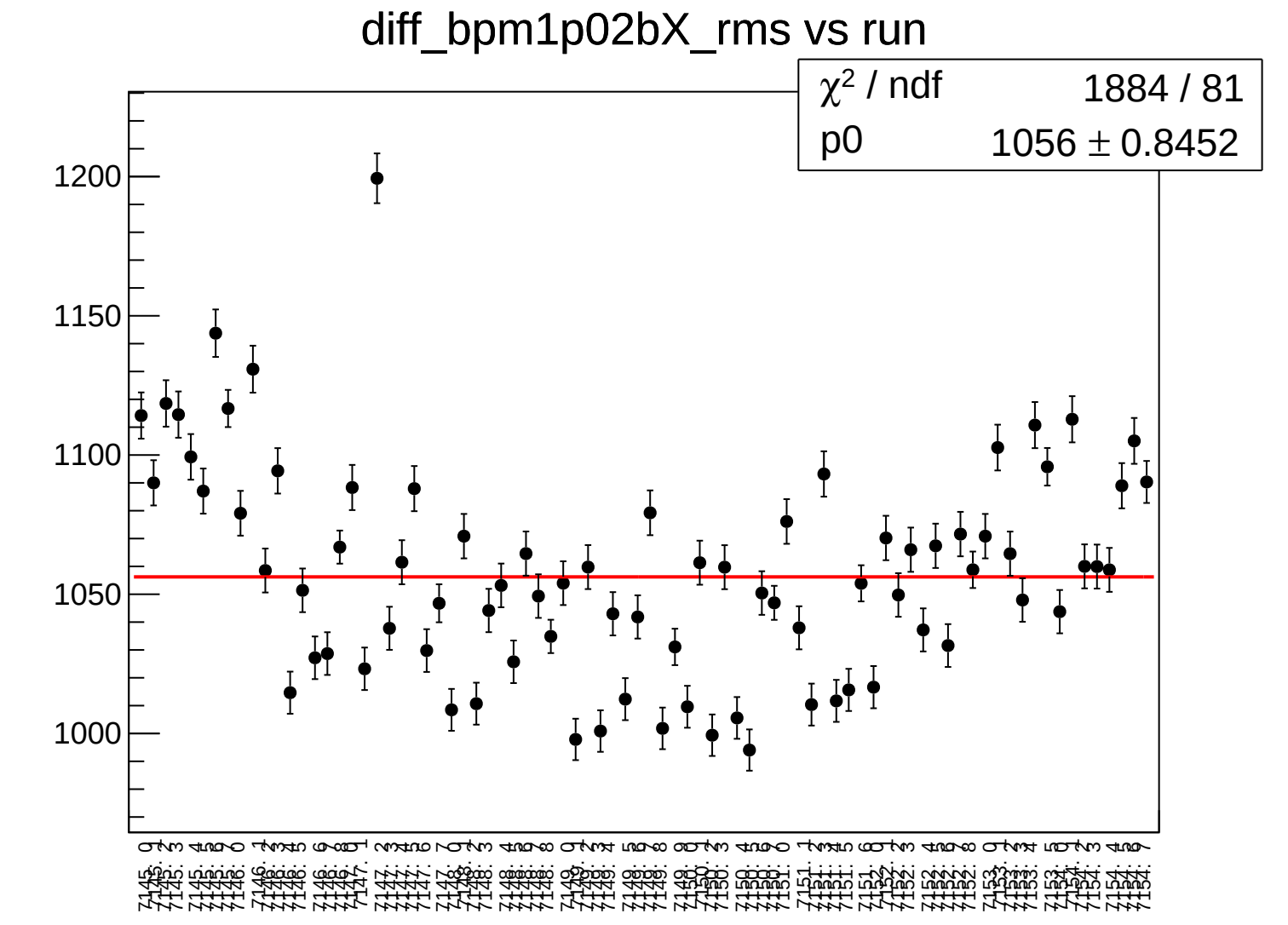

diff_bpm16Y_mean vs run
χ² / ndf 73.79 / 81
p0 −4.129 ± 5.588
pull
Entries 82
Mean 32.35
Std Dev 138

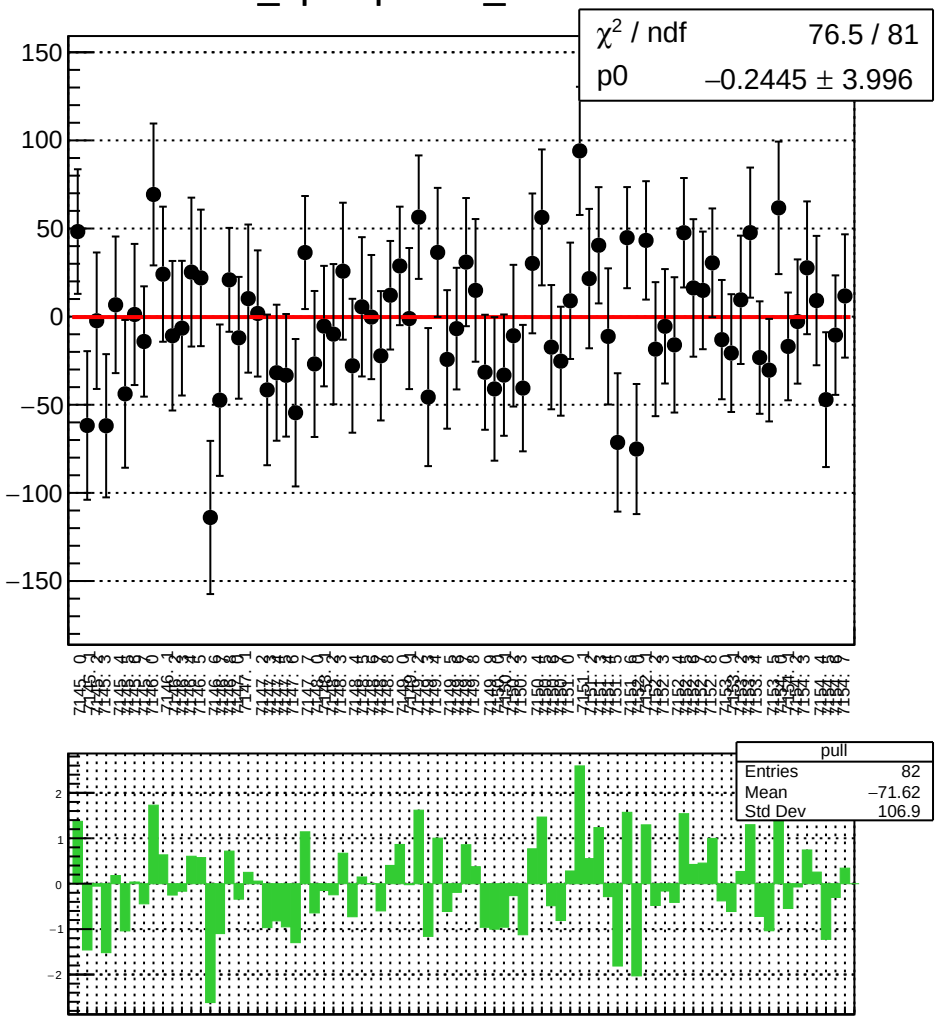

pull1D
Entries 82
Mean −0.005567
Std Dev 0.9486

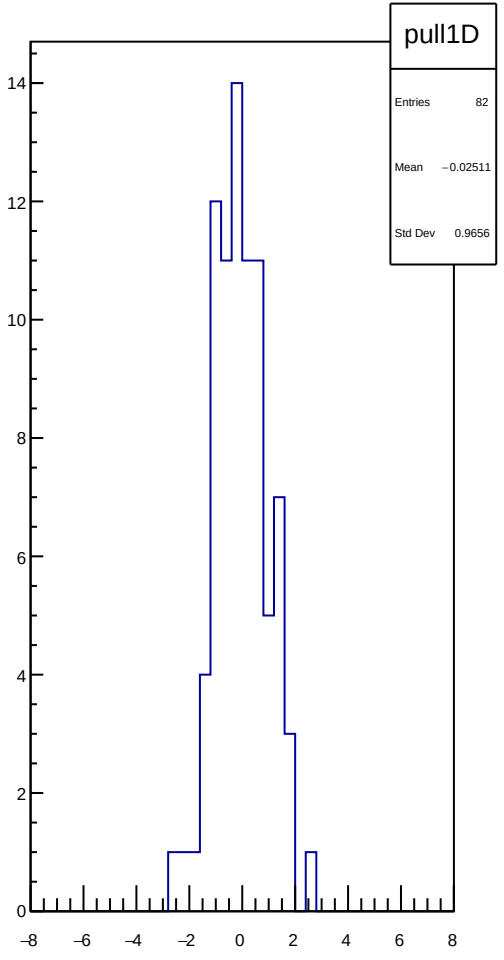

diff_bpm16Y_rms vs run
χ² / ndf 1.347e+04 / 81
p0 4919 ± 3.951
6500
6000
5500
5000
4500
4000

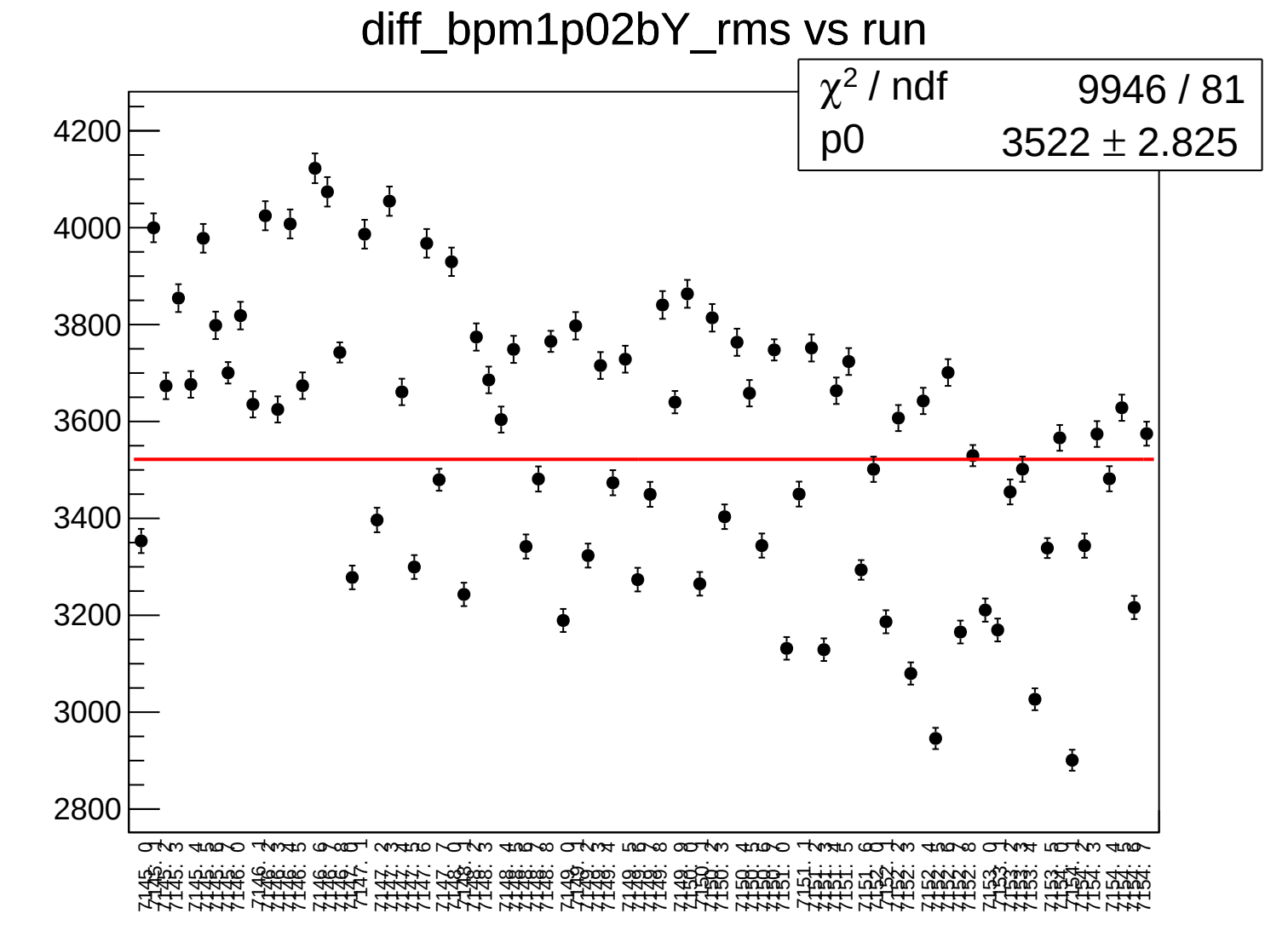

diff_bpm1p02bX_mean vs run
χ² / ndf 83.53 / 81
p0 −0.2227 ± 1.195
pull
Entries 82
Mean 177.5
Std Dev 155.2

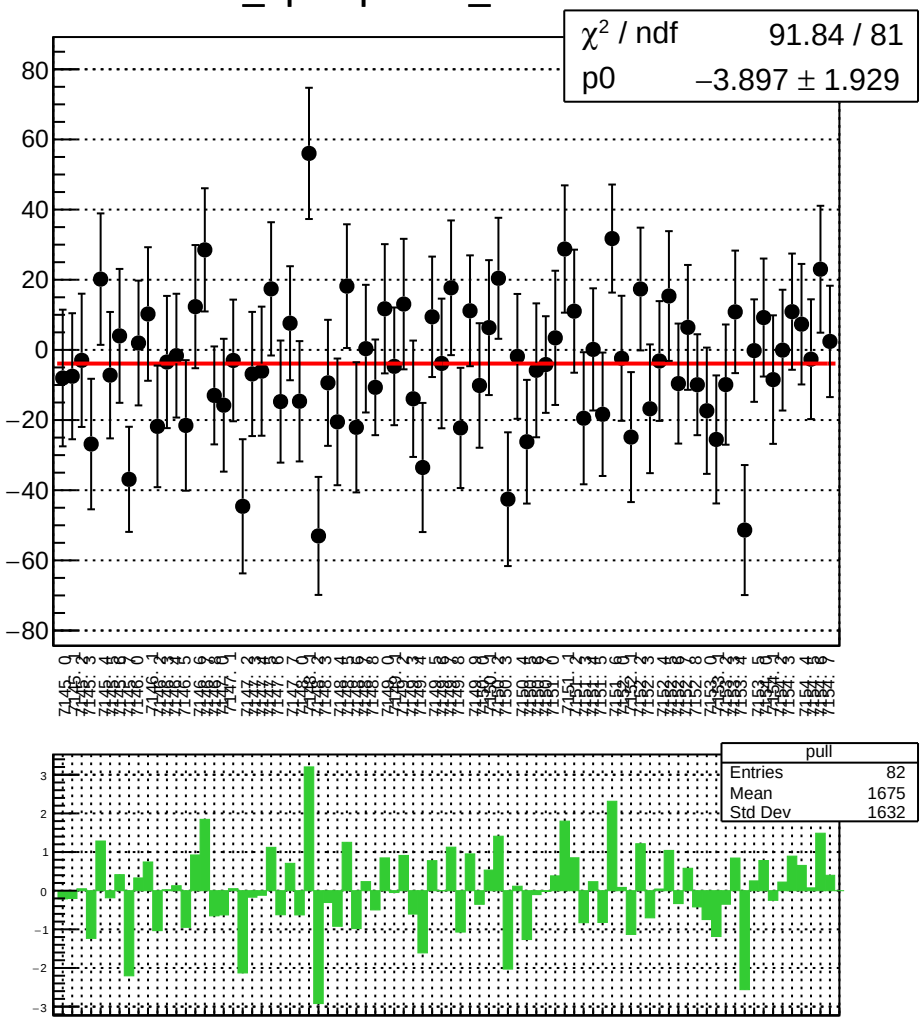

pull1D
Entries 82
Mean −0.006274
Std Dev 1.009

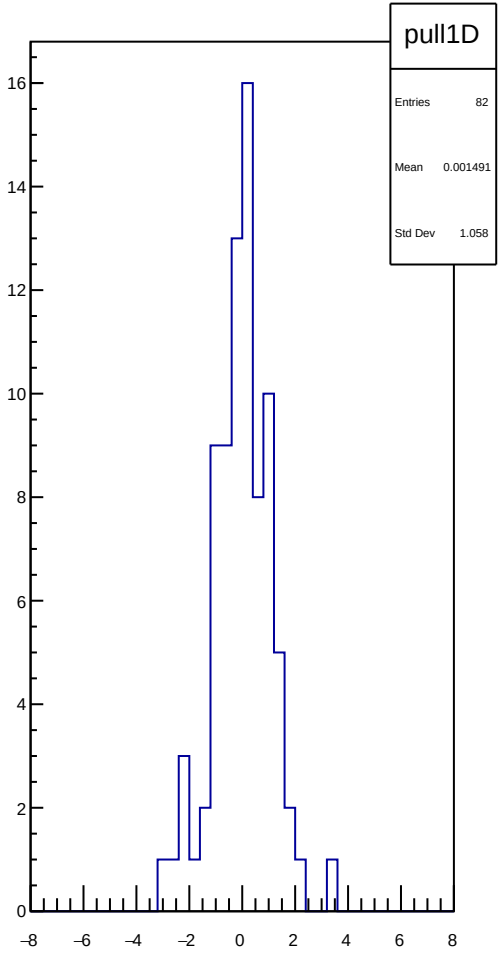

diff_bpm1p02bX_rms vs run
χ² / ndf 1884 / 81
p0 1056 ± 0.8452
1200
1150
1100
1050
1000

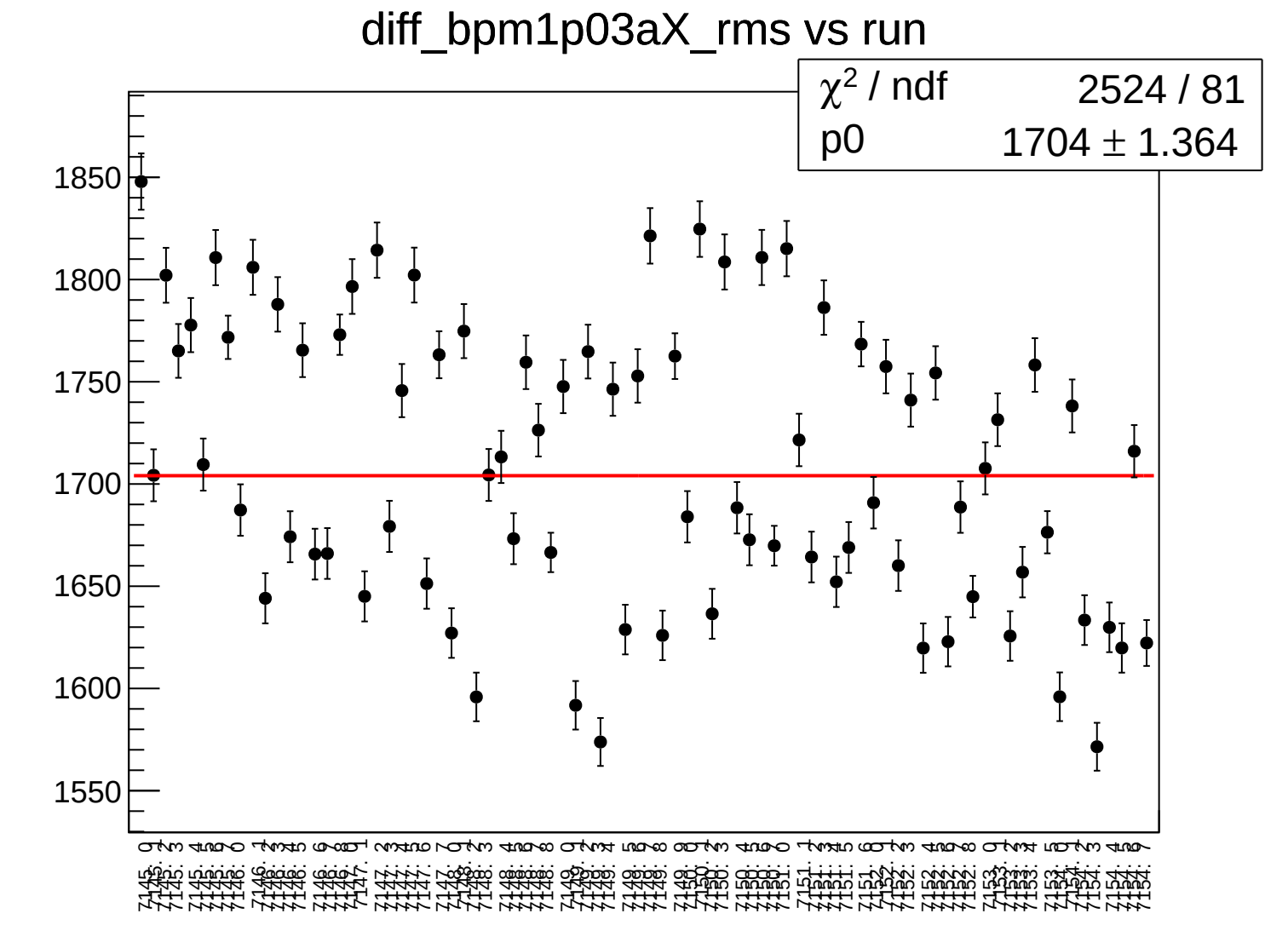

diff_bpm1p02bY_mean vs run
χ² / ndf 76.5 / 81
p0 −0.2445 ± 3.996
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean −71.62
Std Dev 106.9
2
1
0
−1
−2

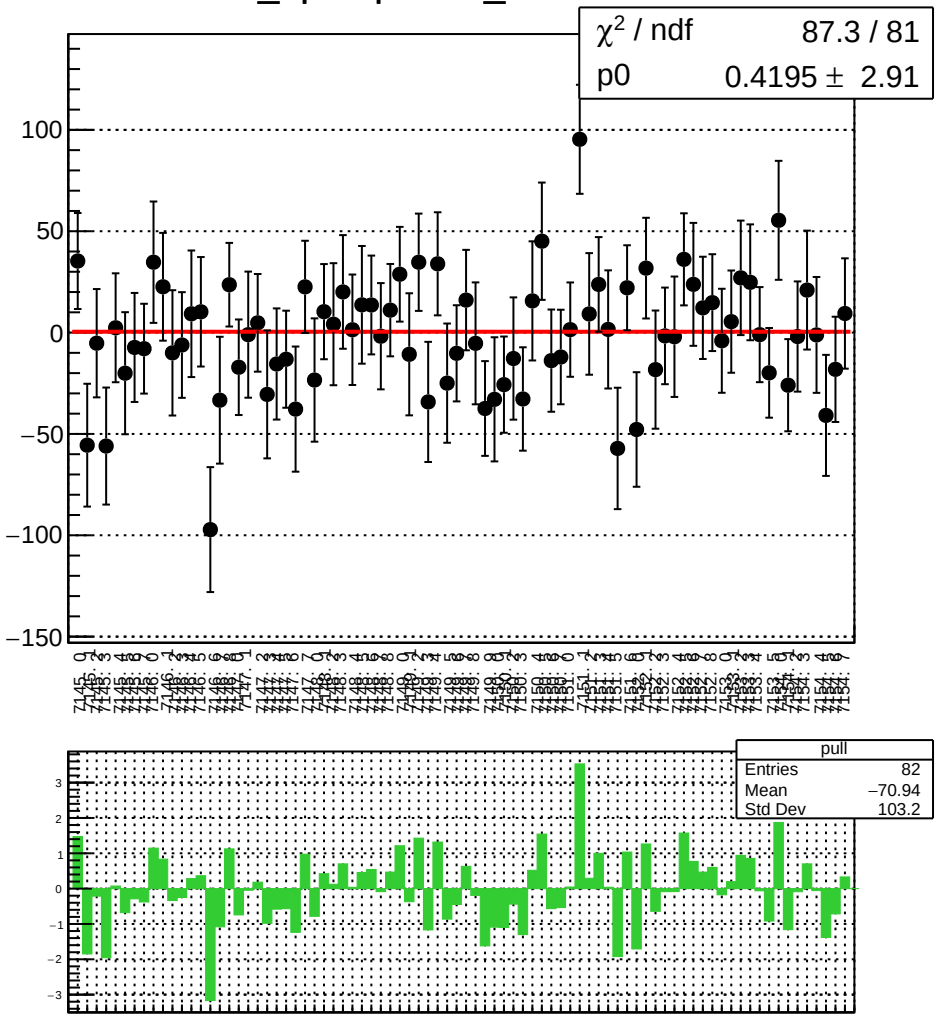

pull1D
Entries 82
Mean −0.02511
Std Dev 0.9656
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

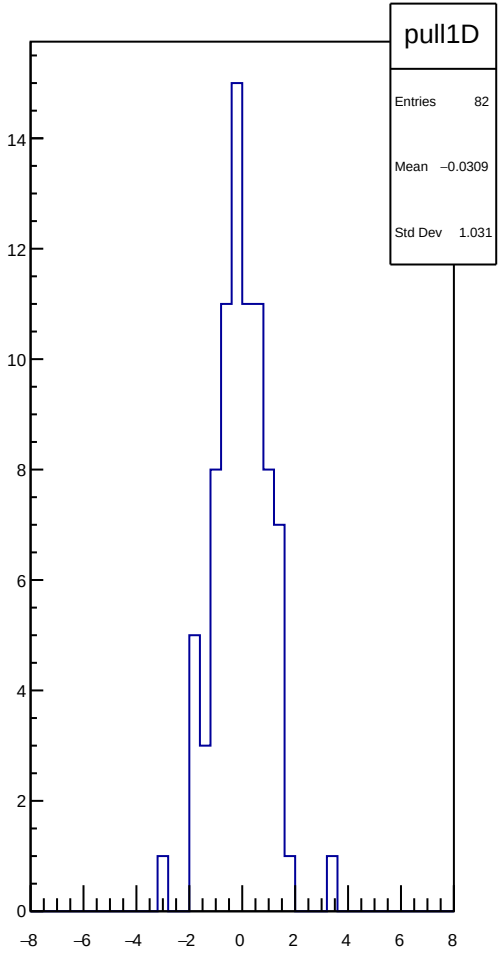

diff_bpm1p02bY_rms vs run
χ² / ndf 9946 / 81
p0 3522 ± 2.825
4200
4000
3800
3600
3400
3200
3000
2800

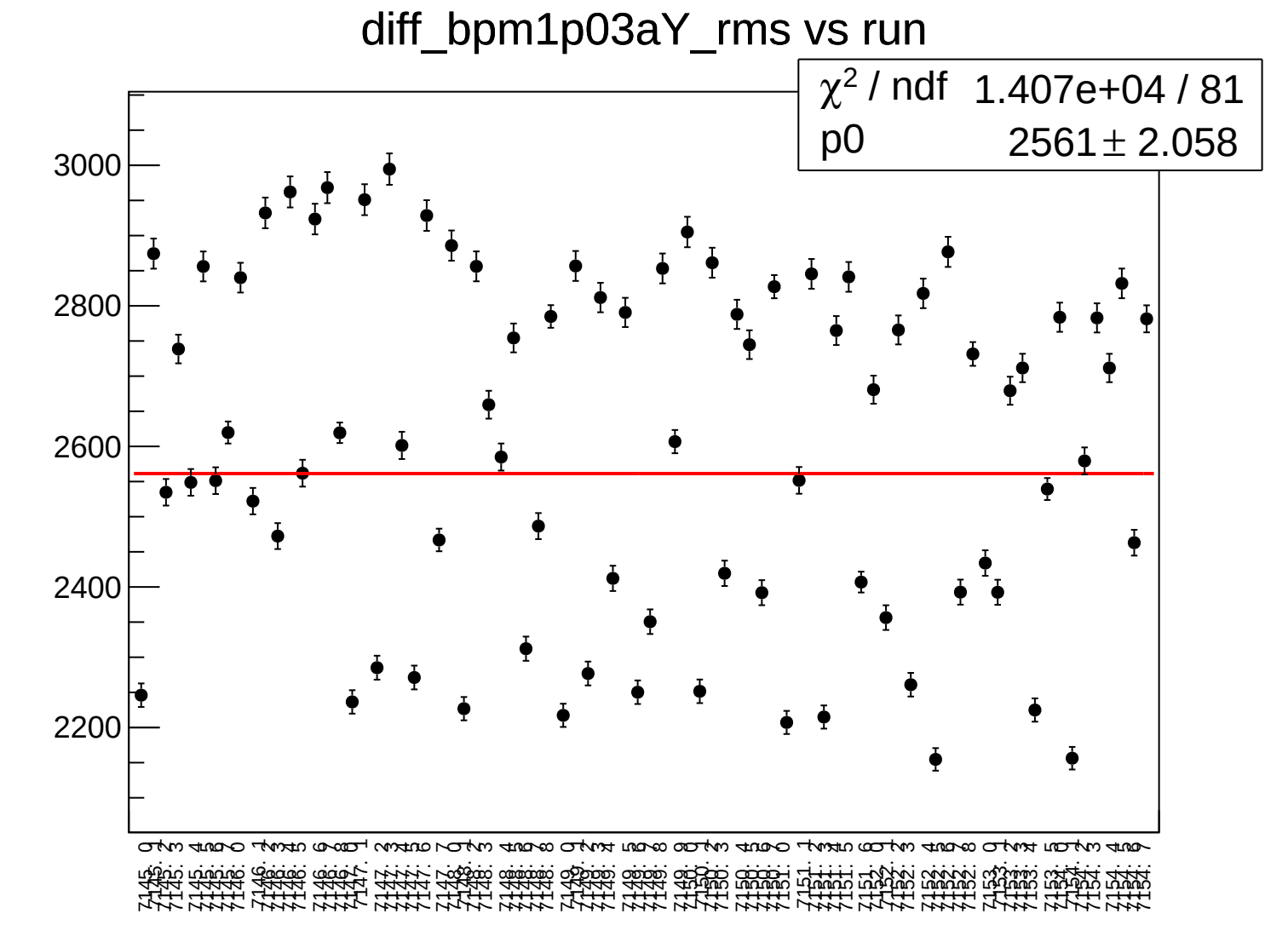

diff_bpm1p03aX_mean vs run
χ² / ndf 91.84 / 81
p0 −3.897 ± 1.929
pull
Entries 82
Mean 1675
Std Dev 1632

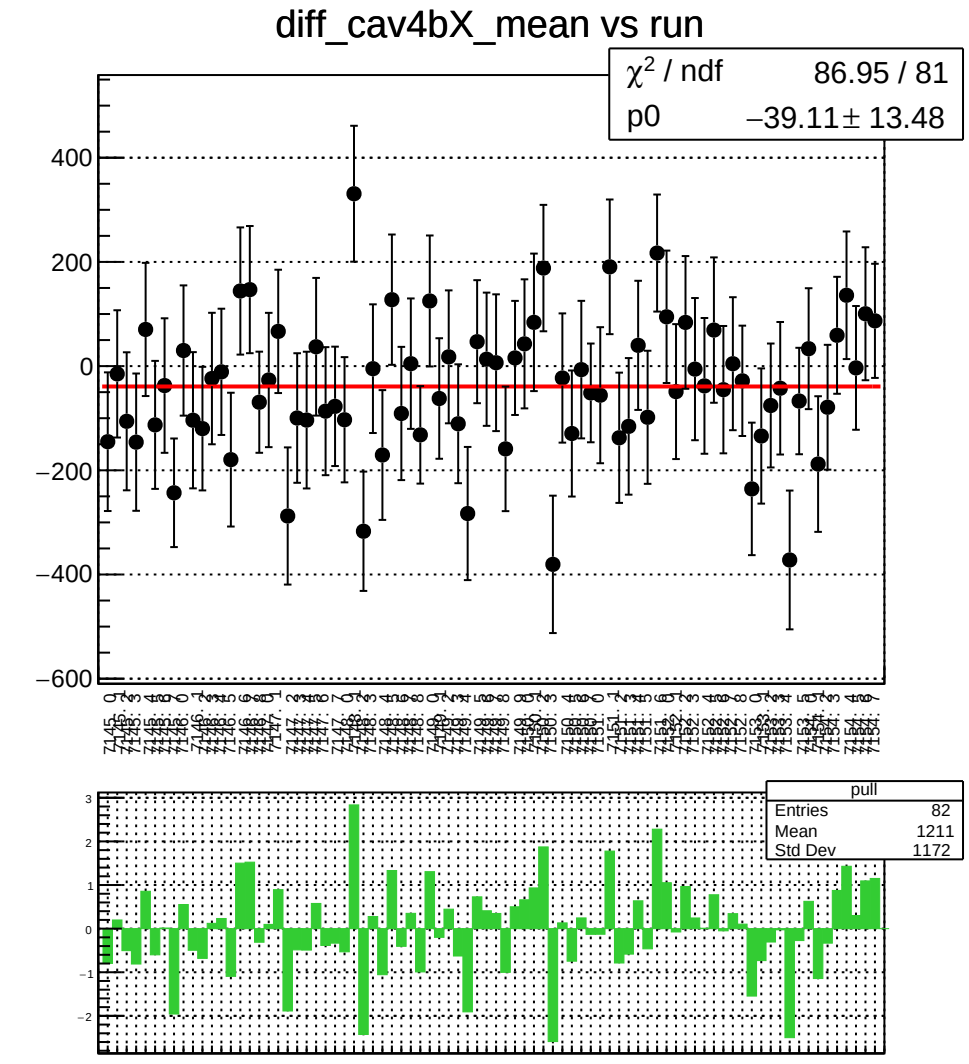

pull1D
Entries 82
Mean 0.001491
Std Dev 1.058

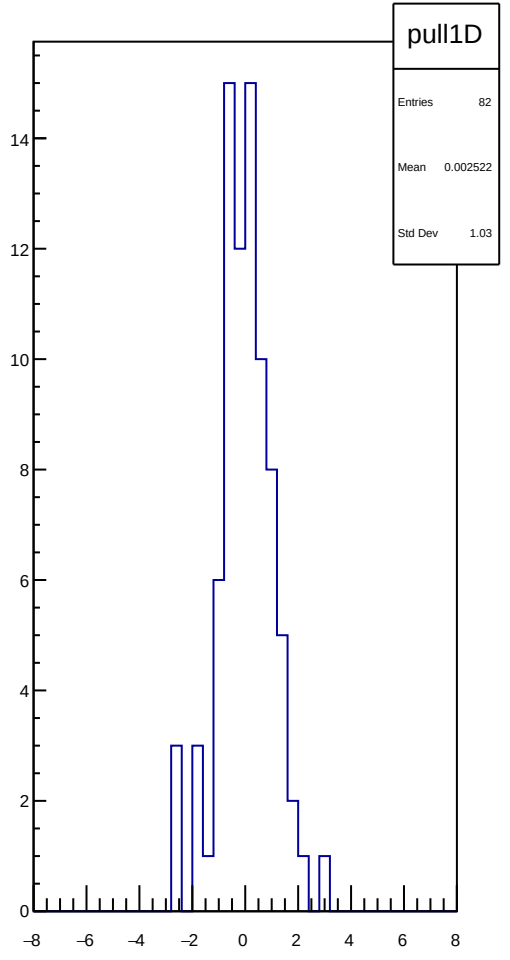

diff_bpm1p03aX_rms vs run
χ² / ndf 2524 / 81
p0 1704 ± 1.364
1850
1800
1750
1700
1650
1600
1550

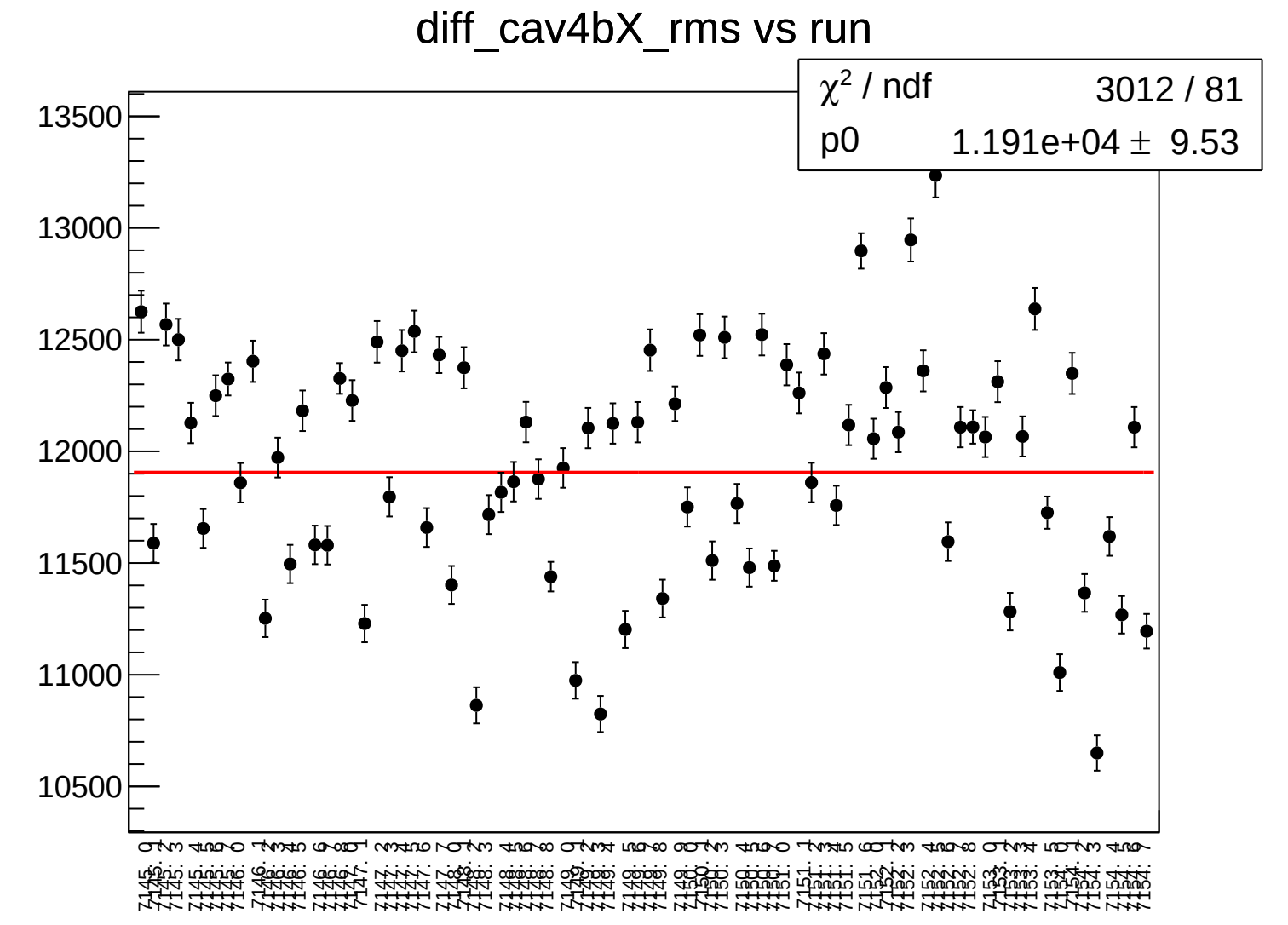

diff_bpm1p03aY_mean vs run
χ² / ndf 87.3 / 81
p0 0.4195 ± 2.91
pull
Entries 82
Mean −70.94
Std Dev 103.2

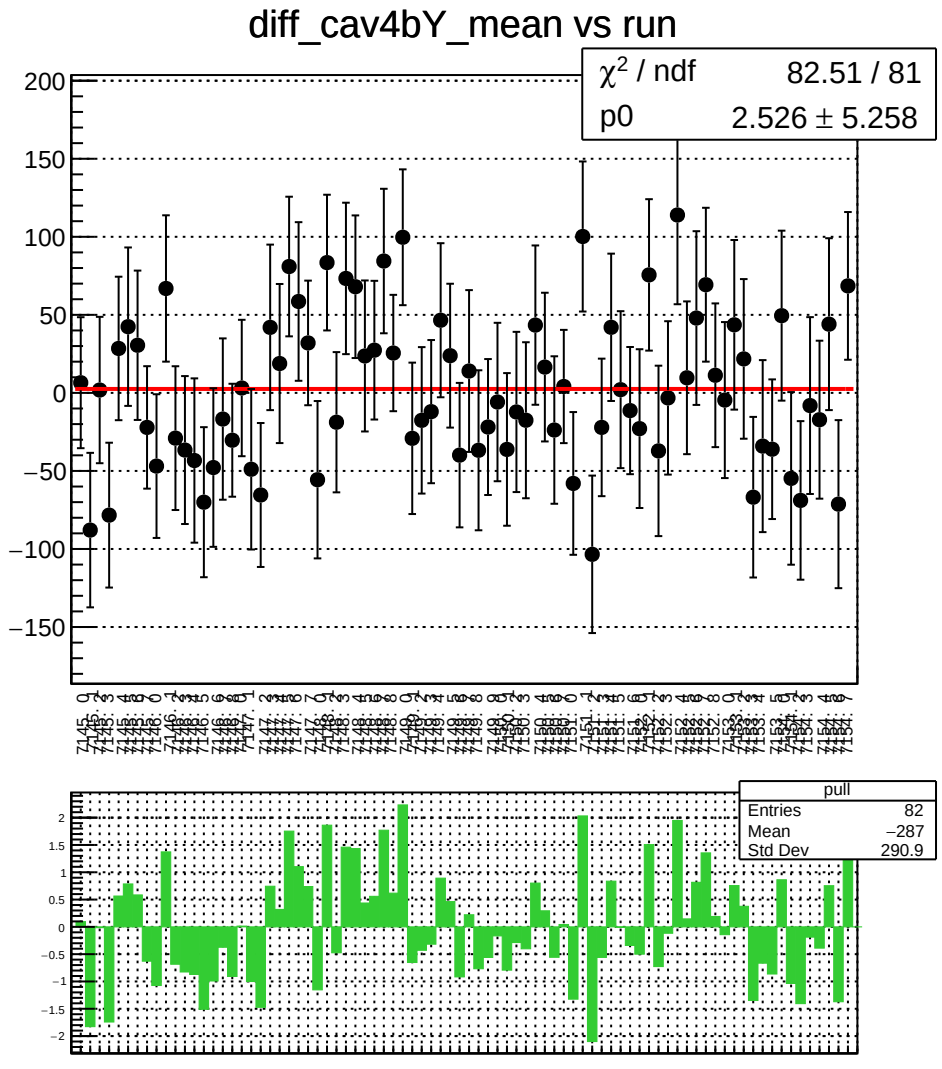

pull1D
Entries 82
Mean −0.0309
Std Dev 1.031

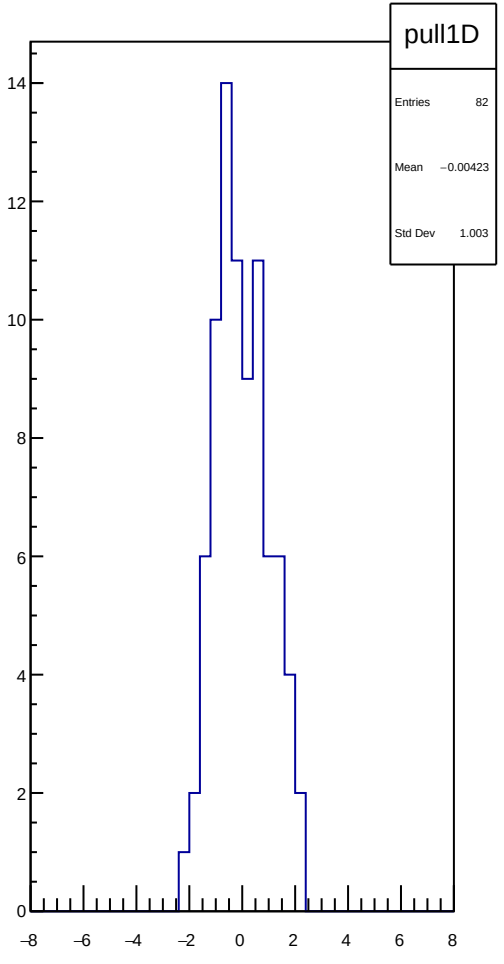

diff_bpm1p03aY_rms vs run
χ² / ndf 1.407e+04 / 81
p0 2561 ± 2.058
3000
2800
2600
2400
2200

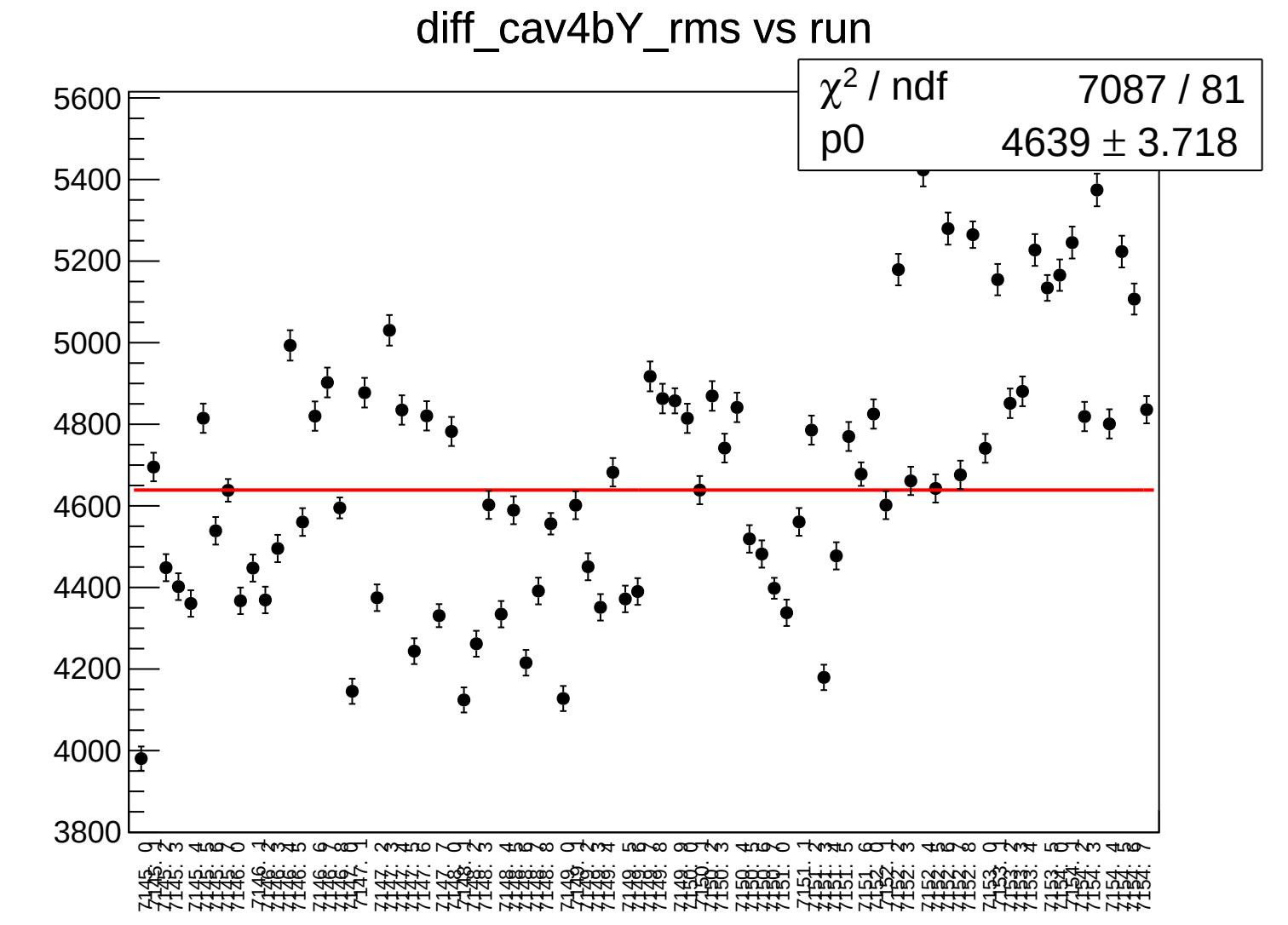

diff_cav4bX_mean vs run
χ² / ndf 86.95 / 81
p0 −39.11 ± 13.48
pull
Entries 82
Mean 1211
Std Dev 1172

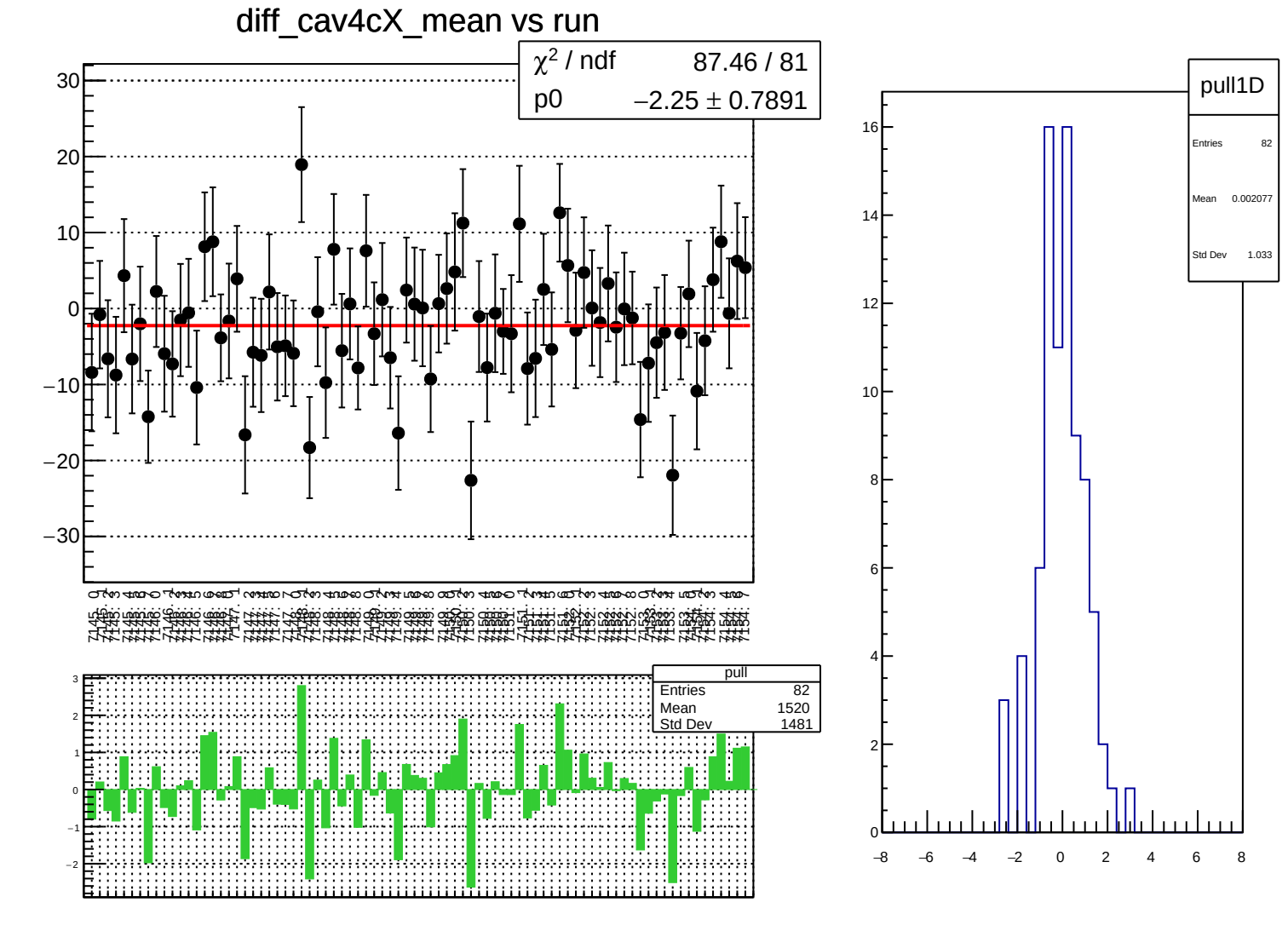

pull1D
Entries 82
Mean 0.002522
Std Dev 1.03

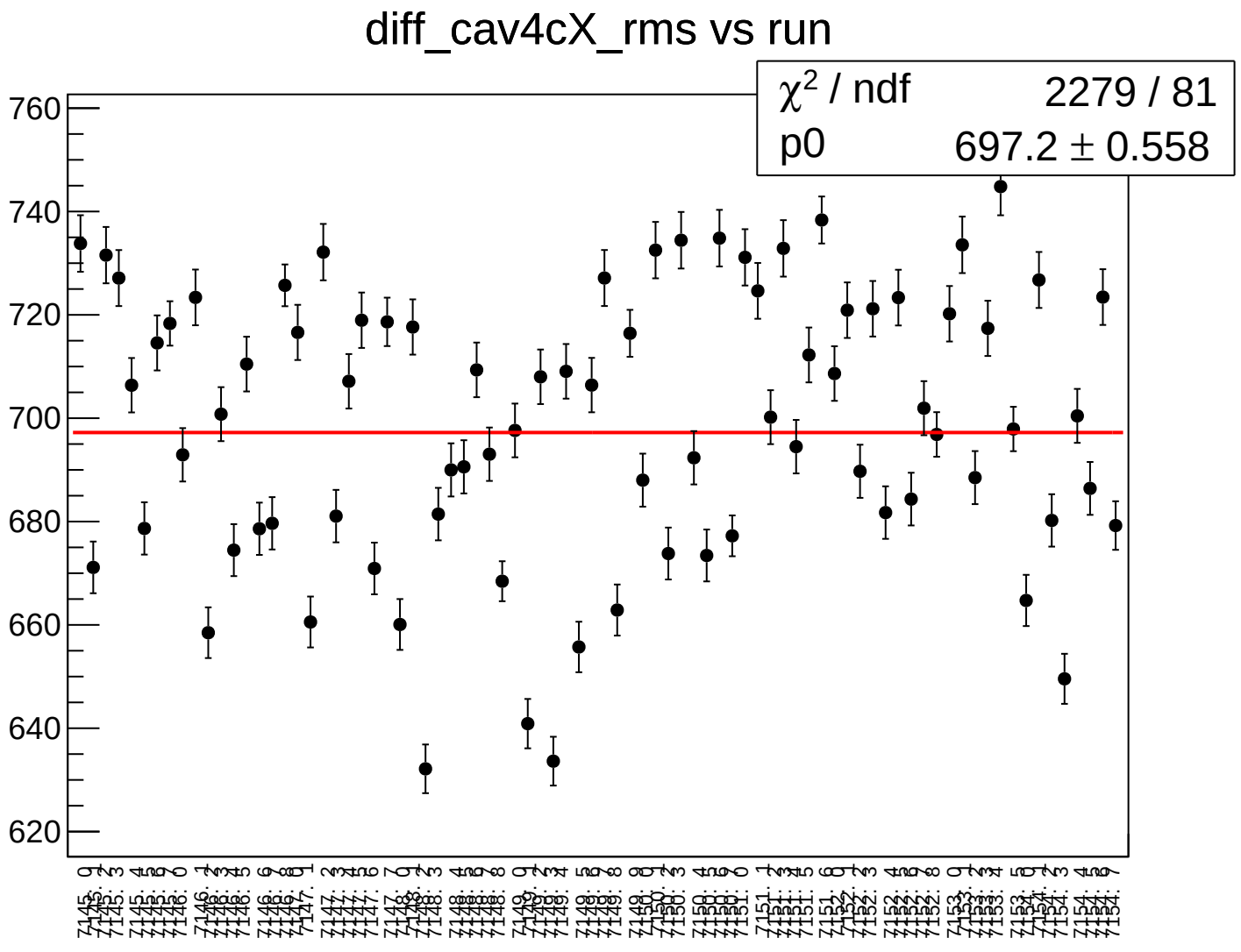

diff_cav4bX_rms vs run
χ² / ndf 3012 / 81
p0 1.191e+04 ± 9.53
13500
13000
12500
12000
11500
11000
10500

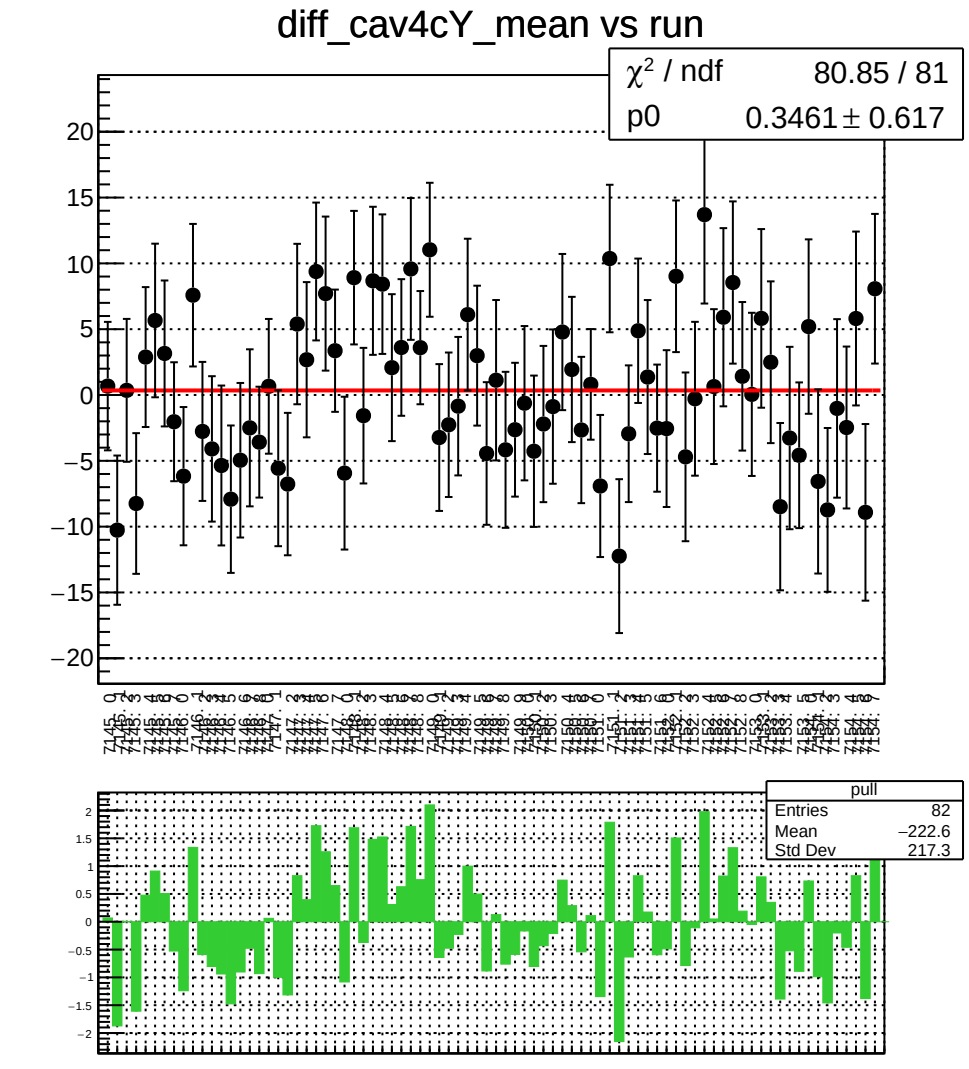

diff_cav4bY_mean vs run
χ^2 / ndf 82.51 / 81
p0 2.526 ± 5.258
pull
Entries 82
Mean −287
Std Dev 290.9

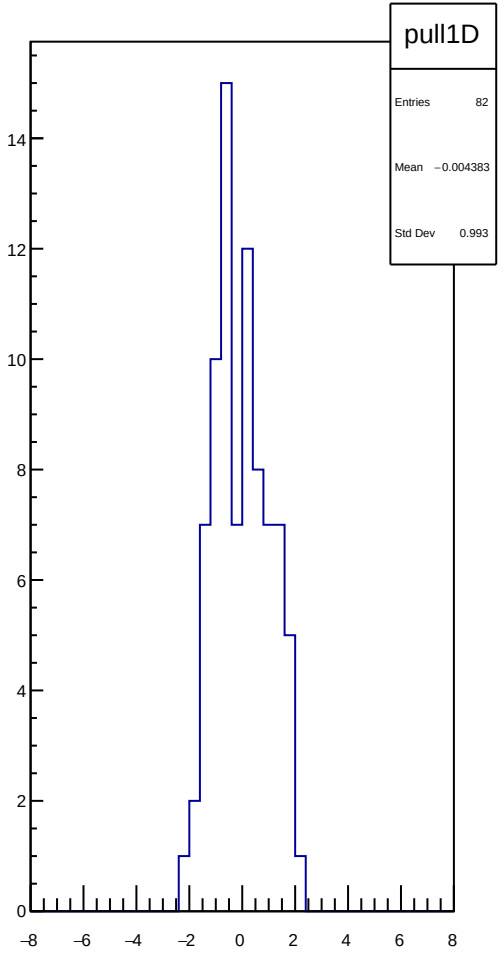

pull1D
Entries 82
Mean −0.00423
Std Dev 1.003

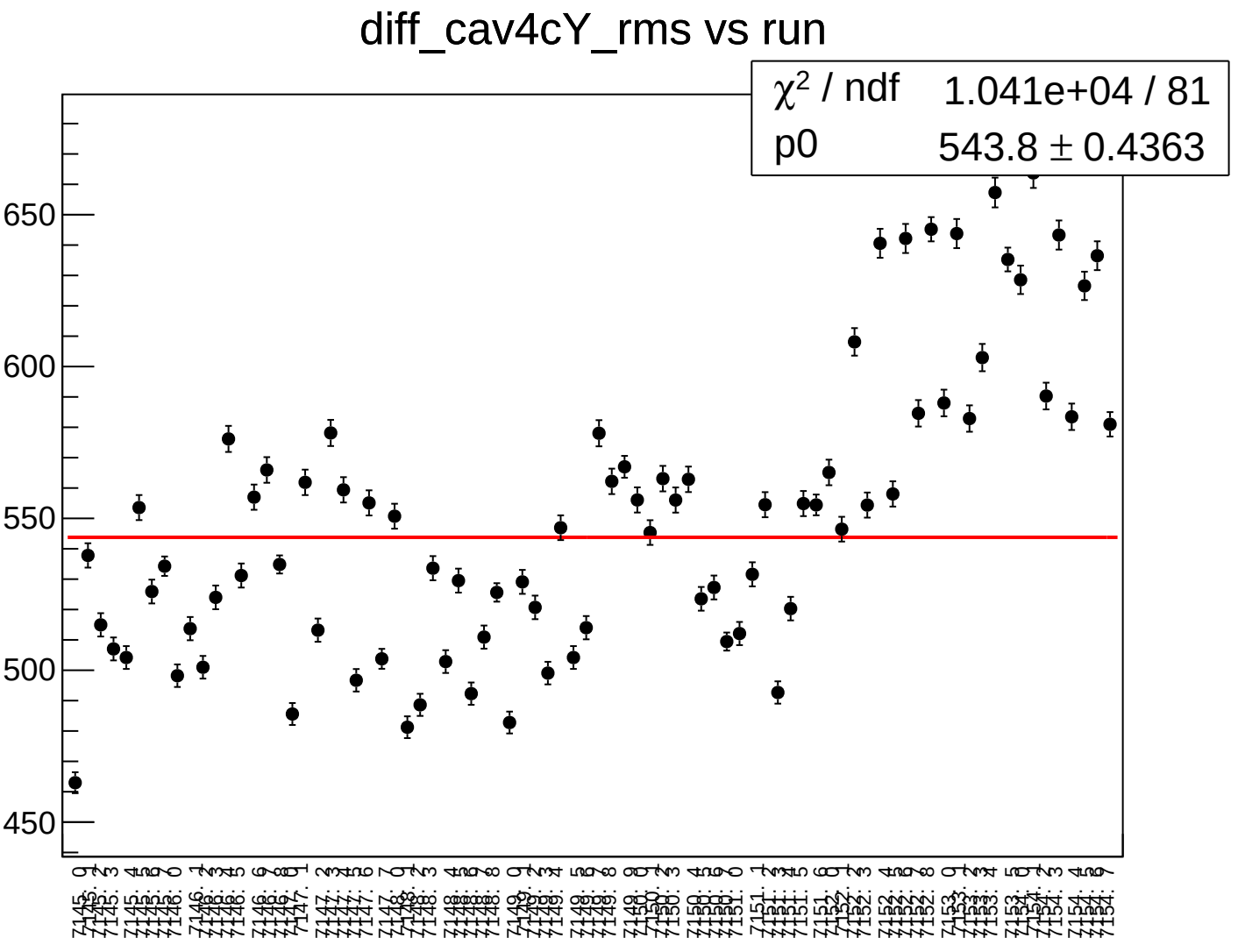

diff_cav4bY_rms vs run
χ² / ndf 7087 / 81
p0 4639 ± 3.718
5600
5400
5200
5000
4800
4600
4400
4200
4000
3800

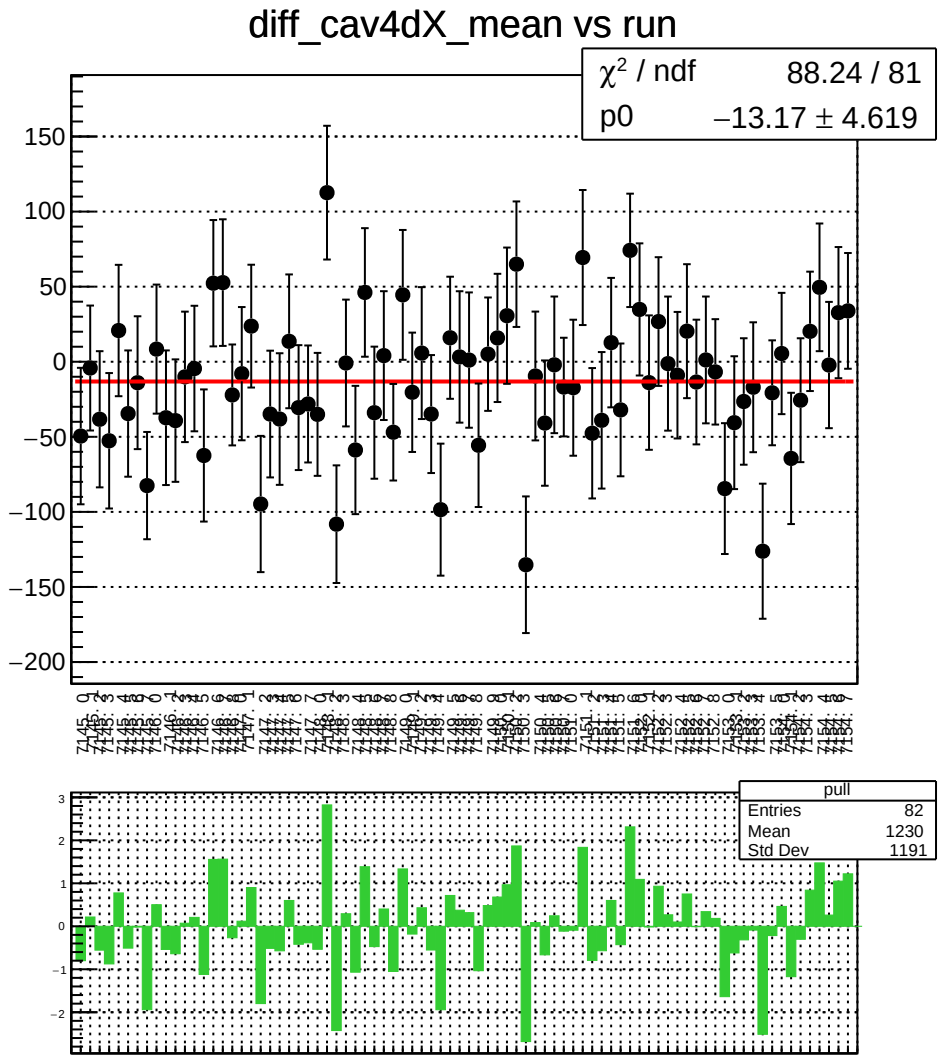

diff_cav4cX_mean vs run
χ² / ndf 87.46 / 81
p0 −2.25 ± 0.7891
pull
Entries 82
Mean 1520
Std Dev 1481
pull1D
Entries 82
Mean 0.002077
Std Dev 1.033

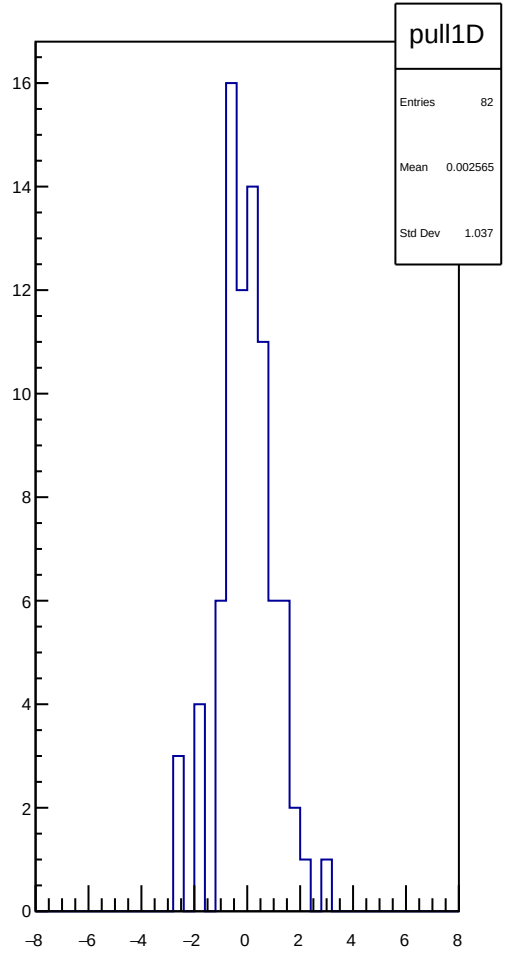

diff_cav4cX_rms vs run
χ² / ndf 2279 / 81
p0 697.2 ± 0.558
760
740
720
700
680
660
640
620

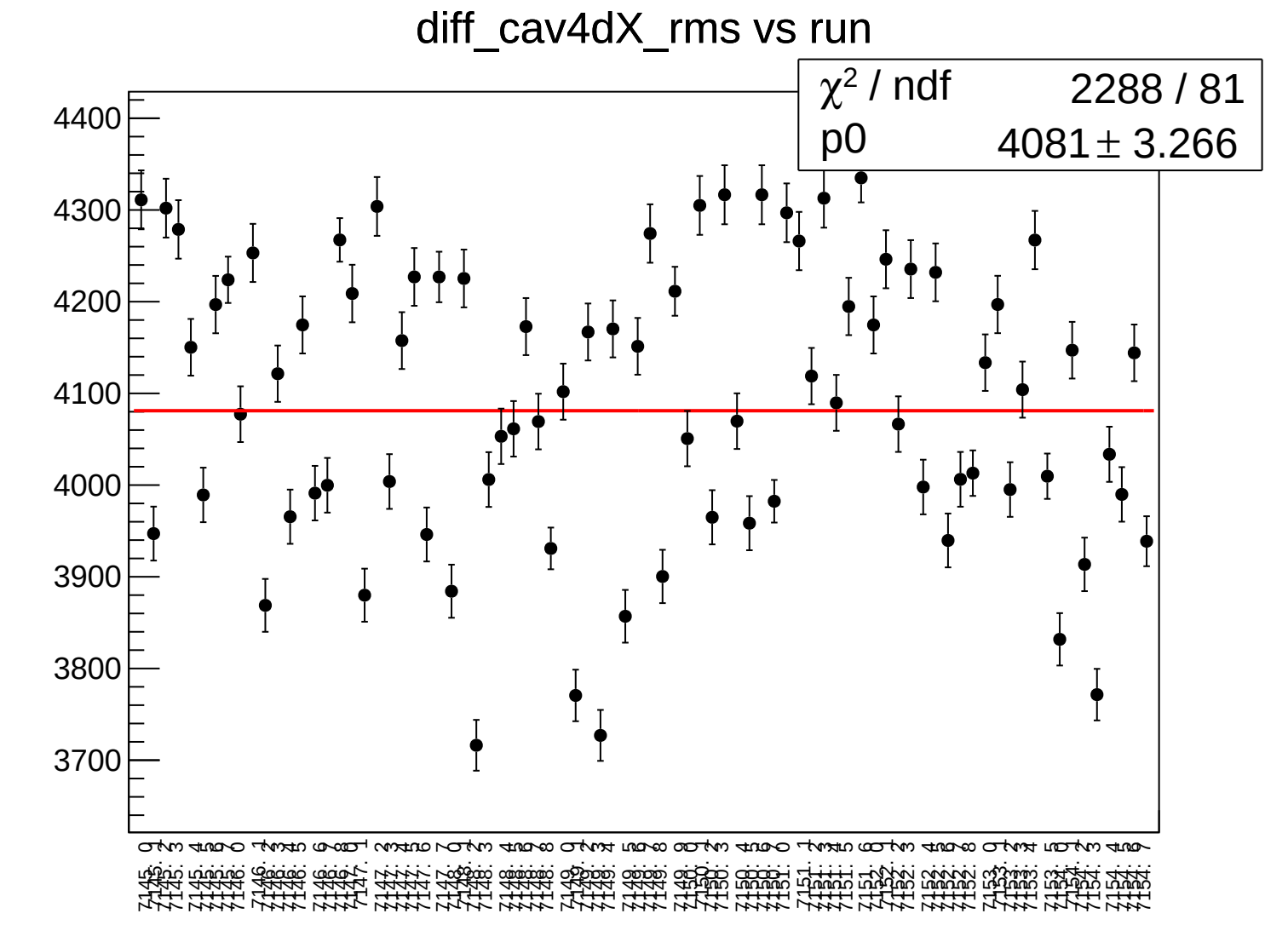

diff_cav4cY_mean vs run
χ^2 / ndf 80.85 / 81
p0 0.3461 ± 0.617
pull
Entries 82
Mean −222.6
Std Dev 217.3

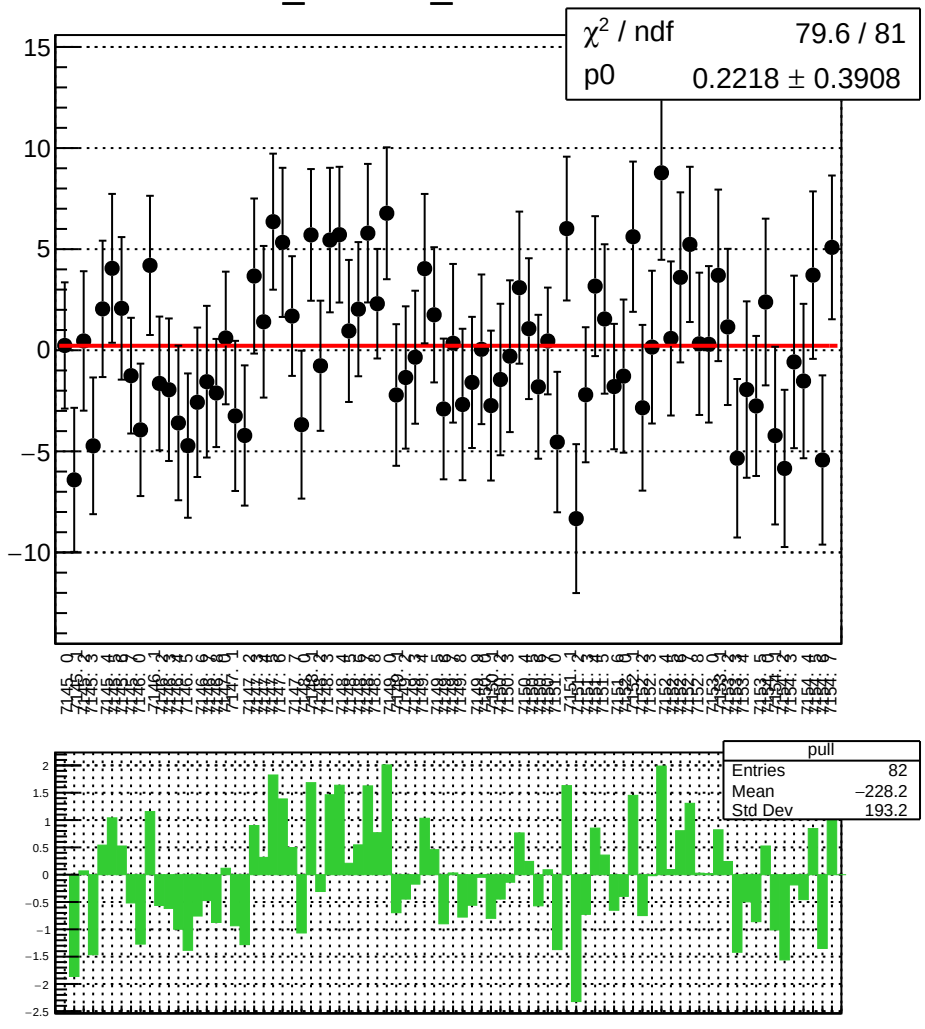

pull1D
Entries 82
Mean −0.004383
Std Dev 0.993

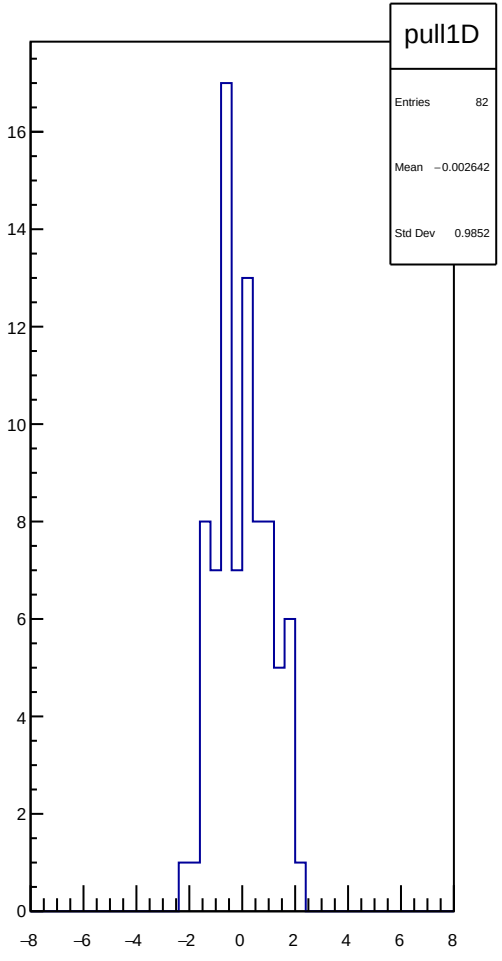

diff_cav4cY_rms vs run
χ² / ndf 1.041e+04 / 81
p0 543.8 ± 0.4363
650
600
550
500
450

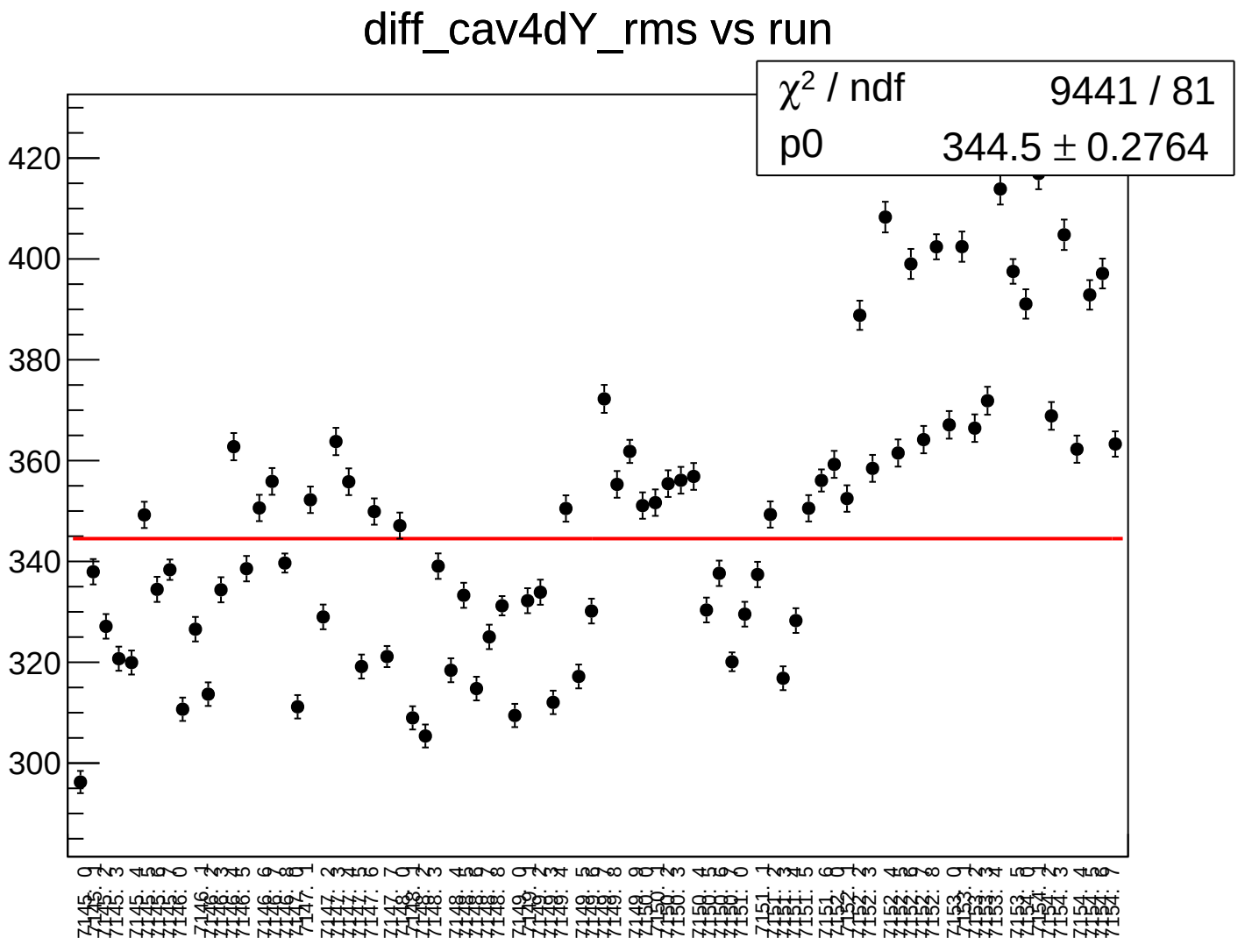

diff_cav4dX_mean vs run
χ² / ndf 88.24 / 81
p0 −13.17 ± 4.619
150
100
50
0
−50
−100
−150
−200
pull
Entries 82
Mean 1230
Std Dev 1191
3
2
1
0
−1
−2

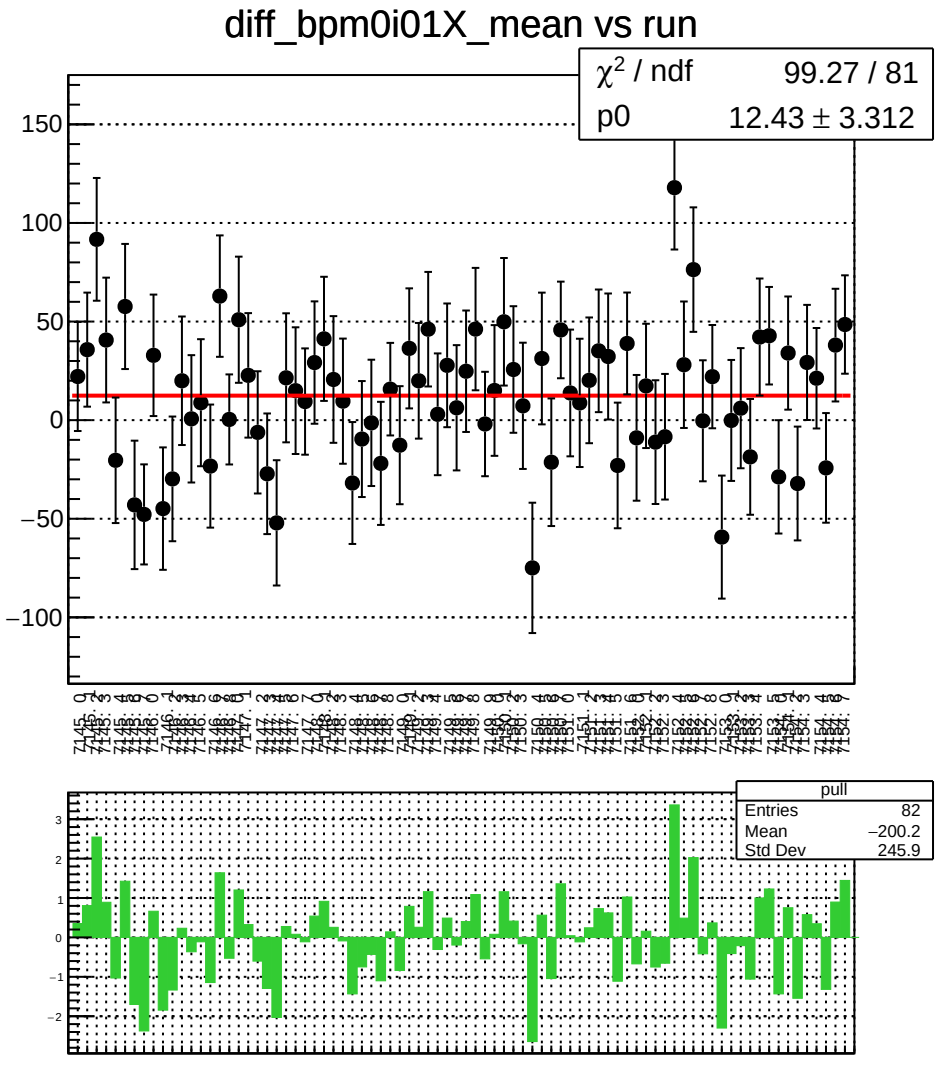

pull1D
Entries 82
Mean 0.002565
Std Dev 1.037
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

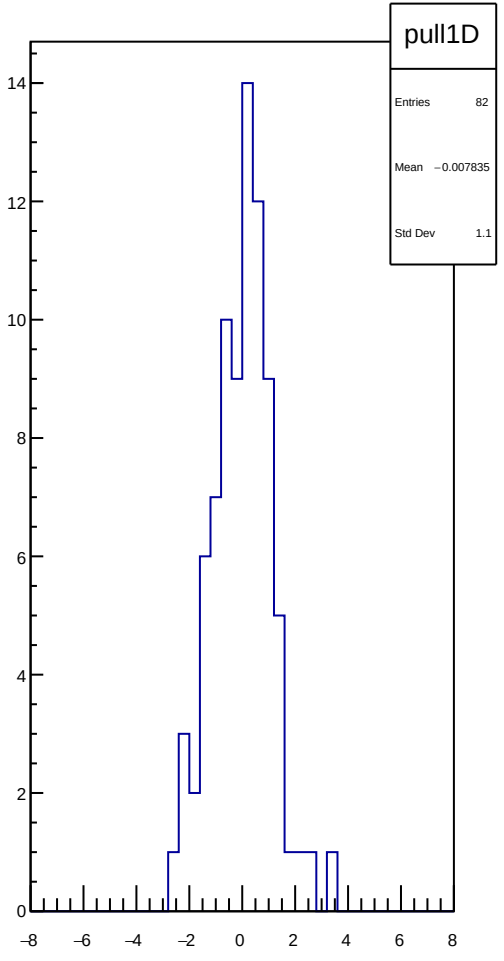

diff_cav4dX_rms vs run
χ² / ndf 2288 / 81
p0 4081 ± 3.266
4400
4300
4200
4100
4000
3900
3800
3700

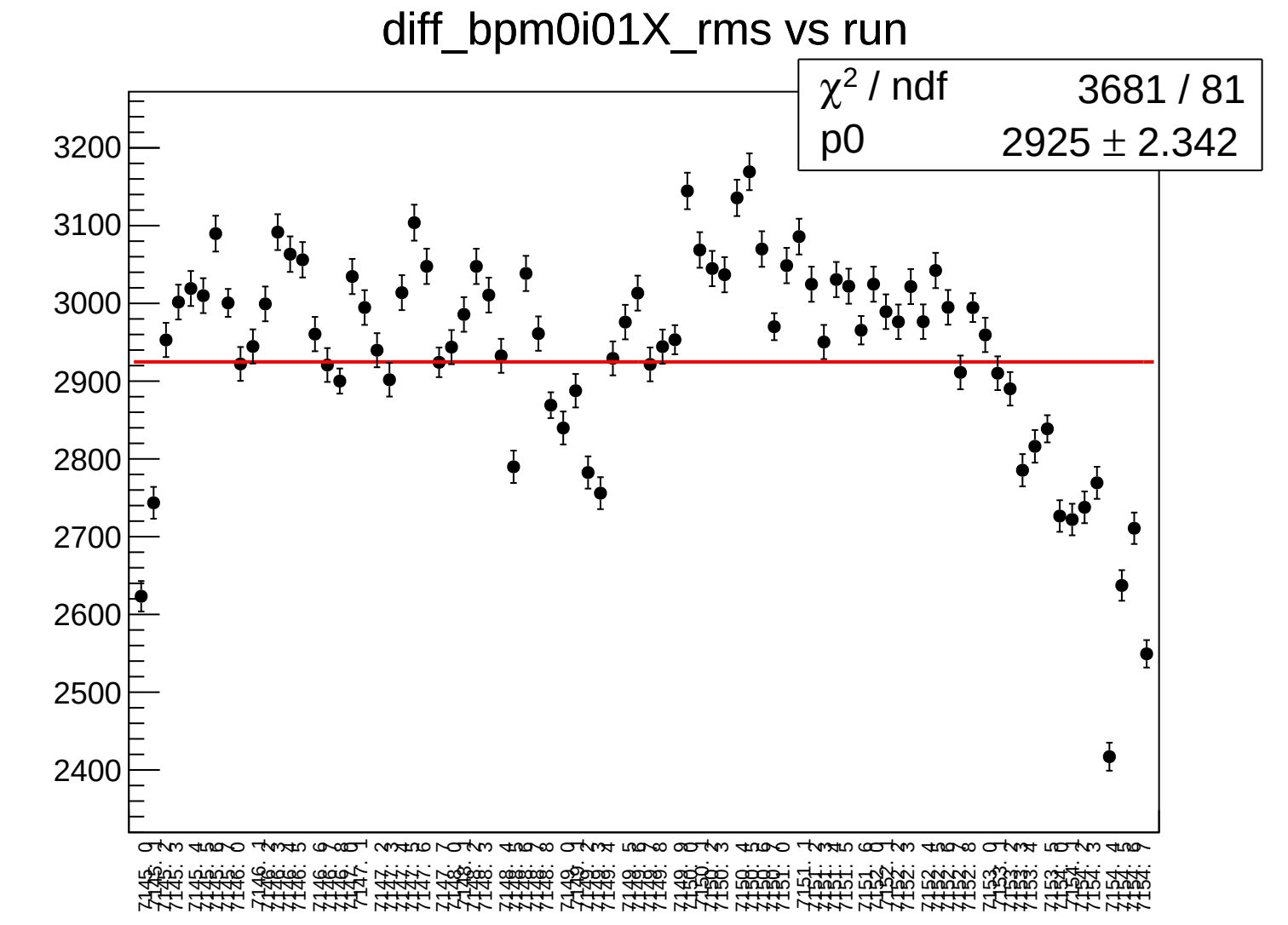

diff_cav4dY_mean vs run
χ² / ndf 79.6 / 81
p0 0.2218 ± 0.3908
pull
Entries 82
Mean −228.2
Std Dev 193.2

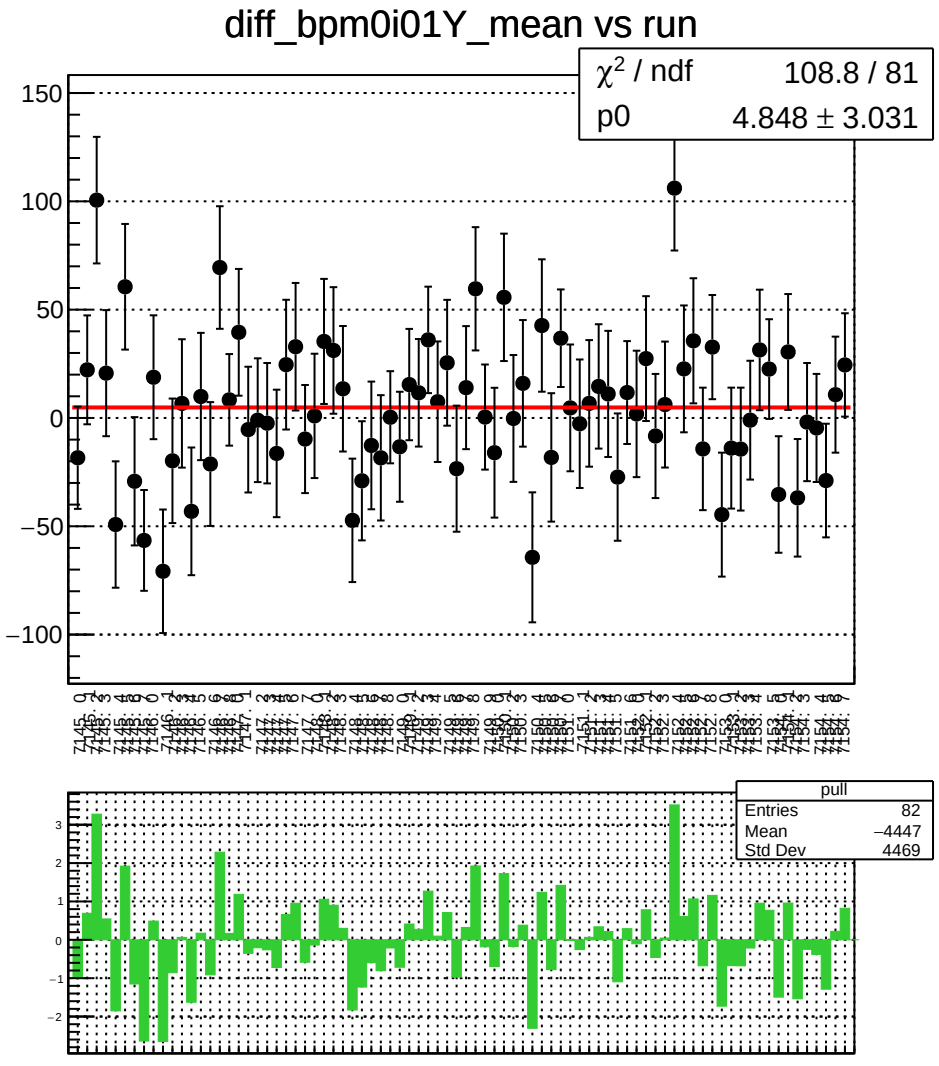

pull1D
Entries 82
Mean −0.002642
Std Dev 0.9852

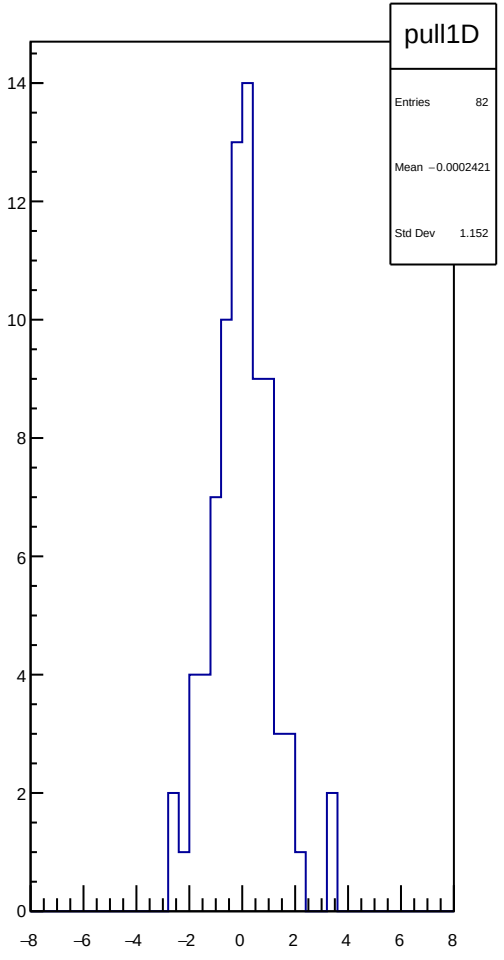

diff_cav4dY_rms vs run
χ² / ndf 9441 / 81
p0 344.5 ± 0.2764
420
400
380
360
340
320
300

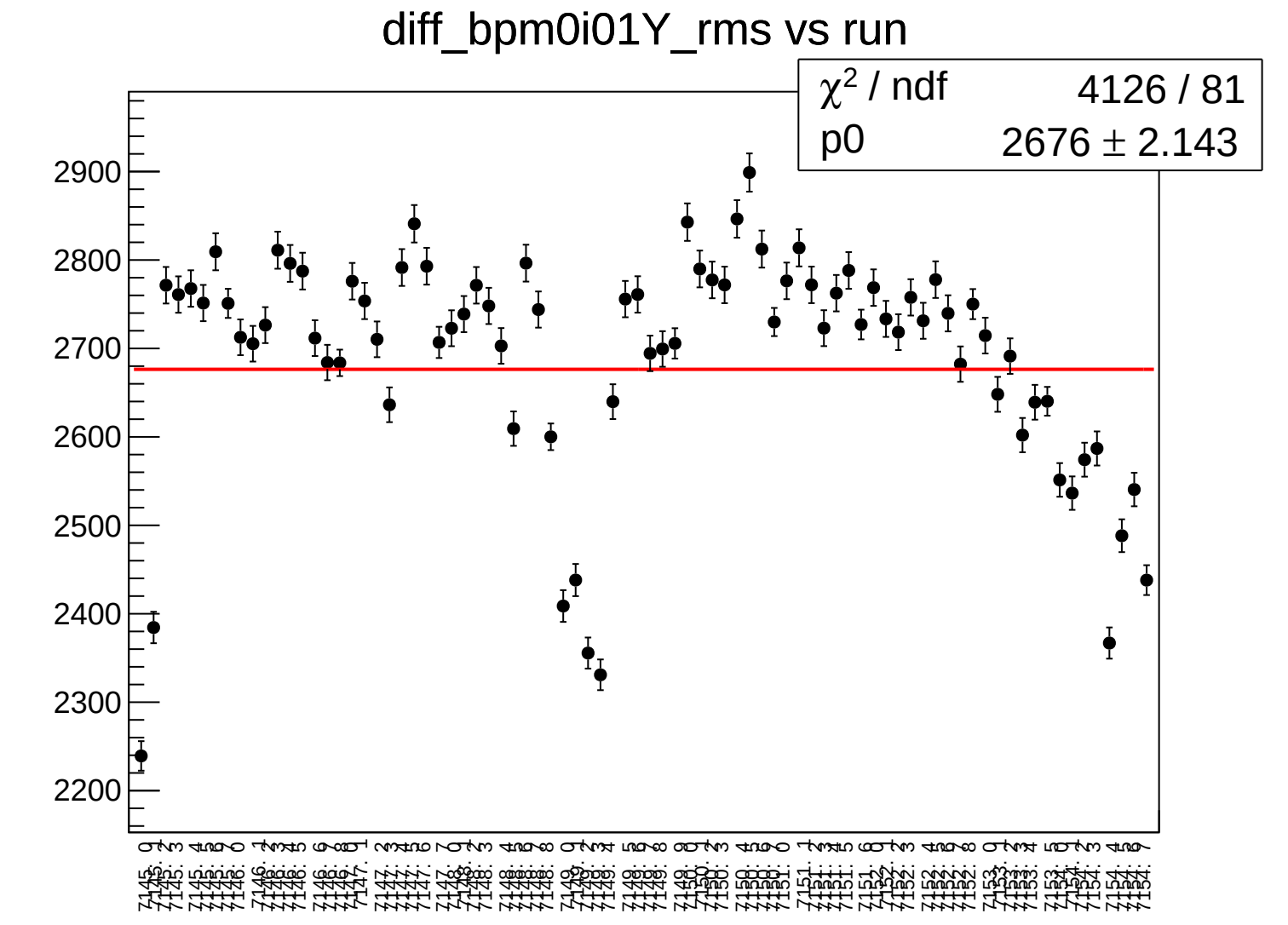

diff_bpm0i01X_mean vs run
χ^2 / ndf 99.27 / 81
p0 12.43 ± 3.312
150
100
50
0
−50
−100
pull
Entries 82
Mean −200.2
Std Dev 245.9
3
2
1
0
−1
−2

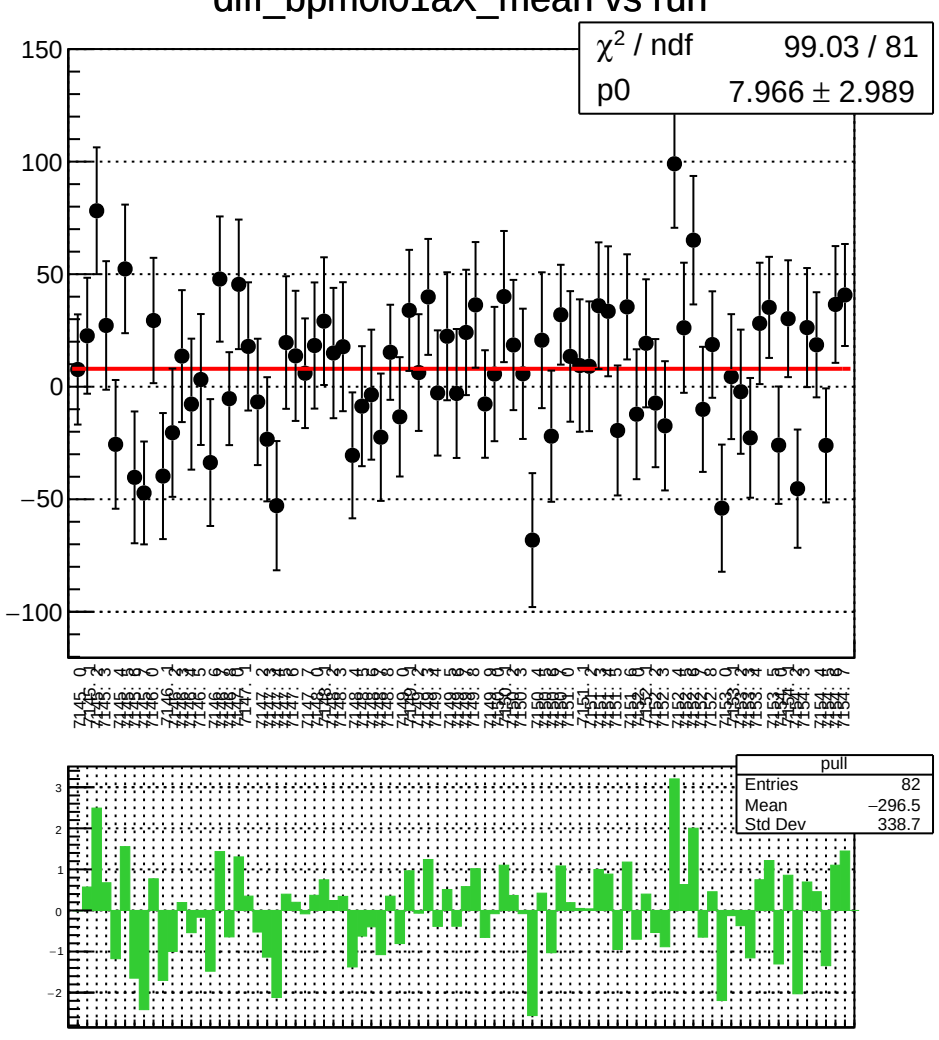

pull1D
Entries 82
Mean −0.007835
Std Dev 1.1
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

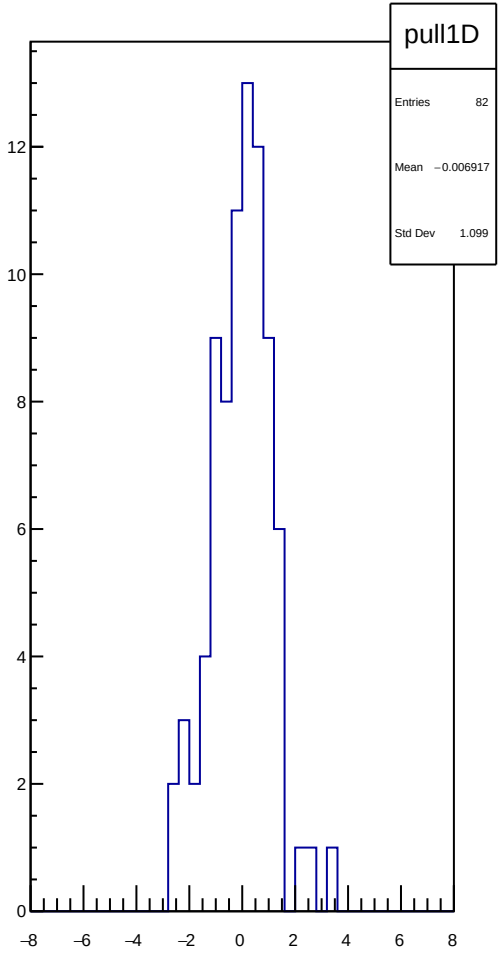

diff_bpm0i01X_rms vs run
χ² / ndf 3681 / 81
p0 2925 ± 2.342
3200
3100
3000
2900
2800
2700
2600
2500
2400

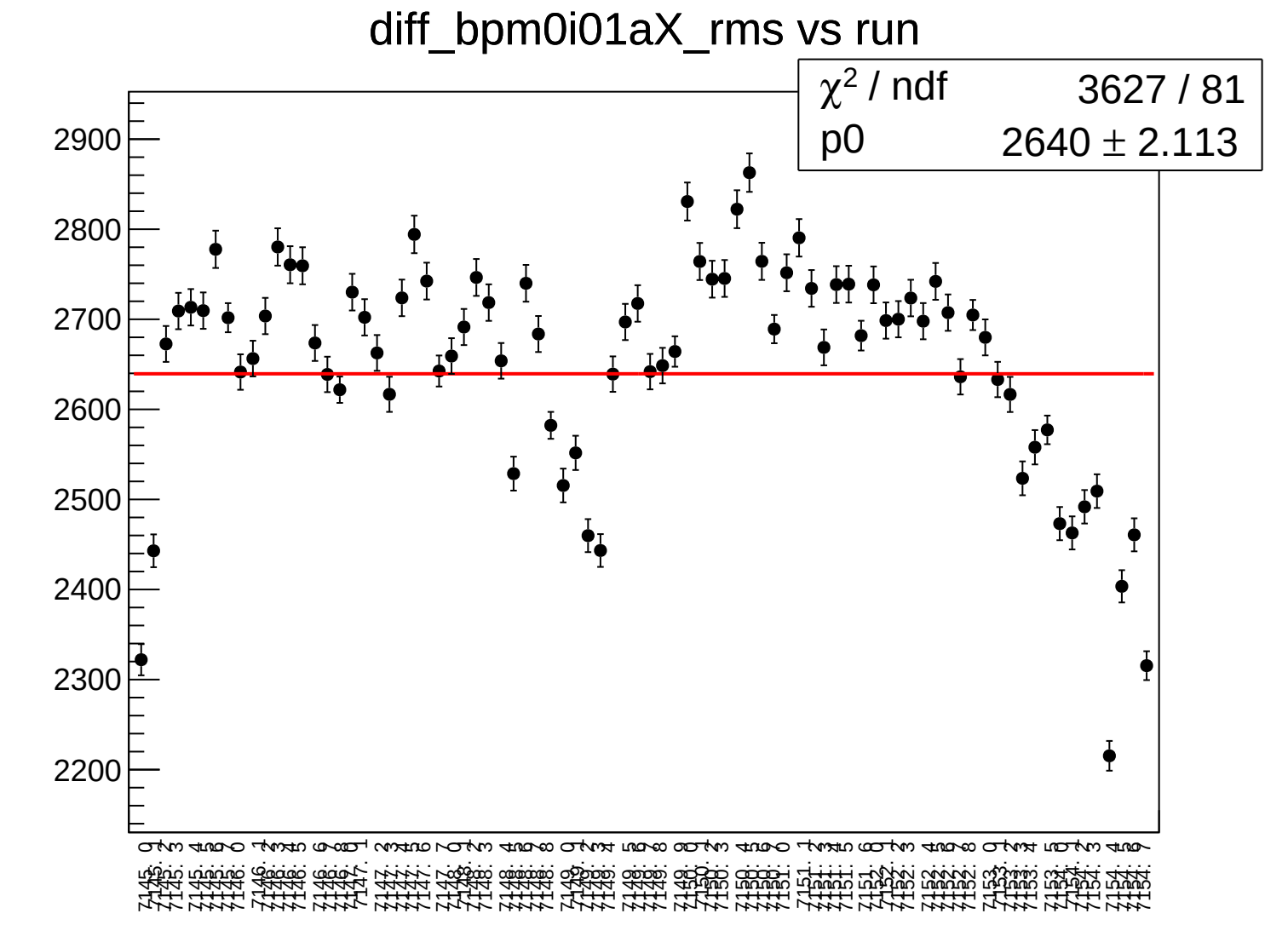

diff_bpm0i01Y_mean vs run
χ² / ndf 108.8 / 81
p0 4.848 ± 3.031
pull
Entries 82
Mean −4447
Std Dev 4469

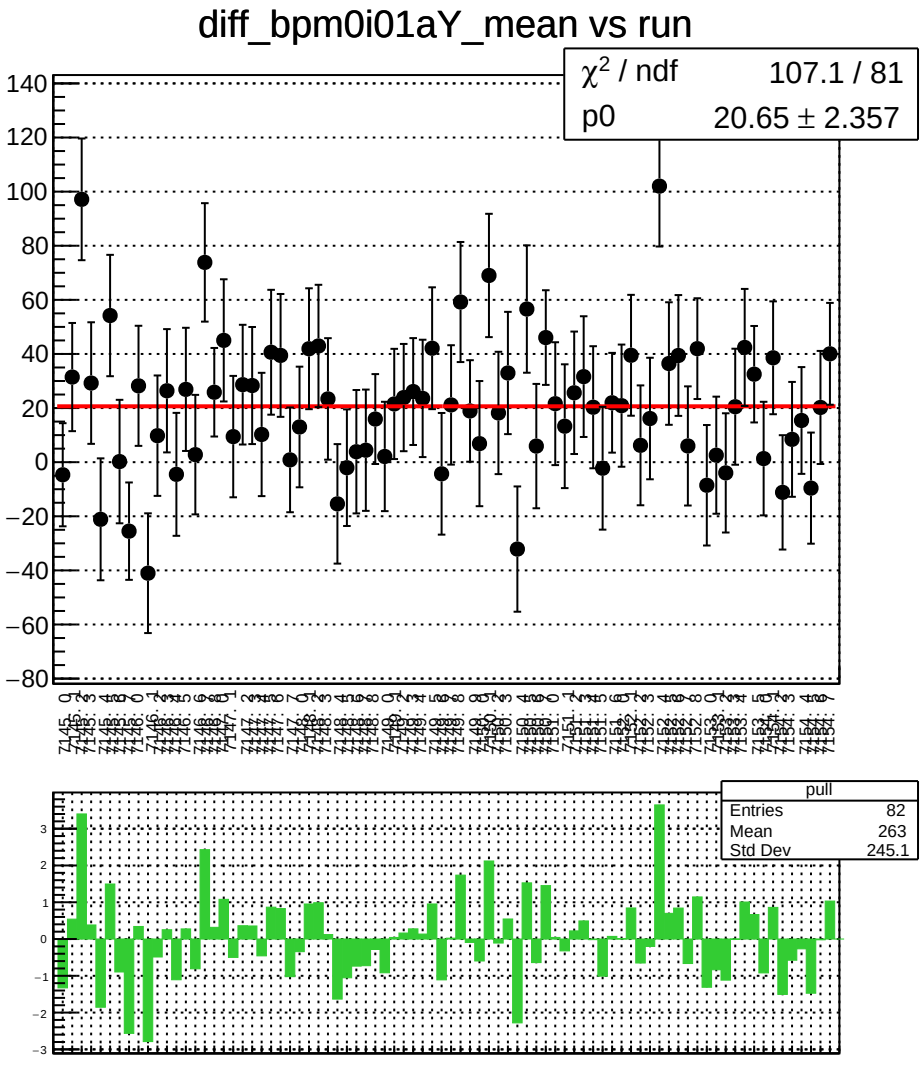

pull1D
Entries 82
Mean −0.0002421
Std Dev 1.152

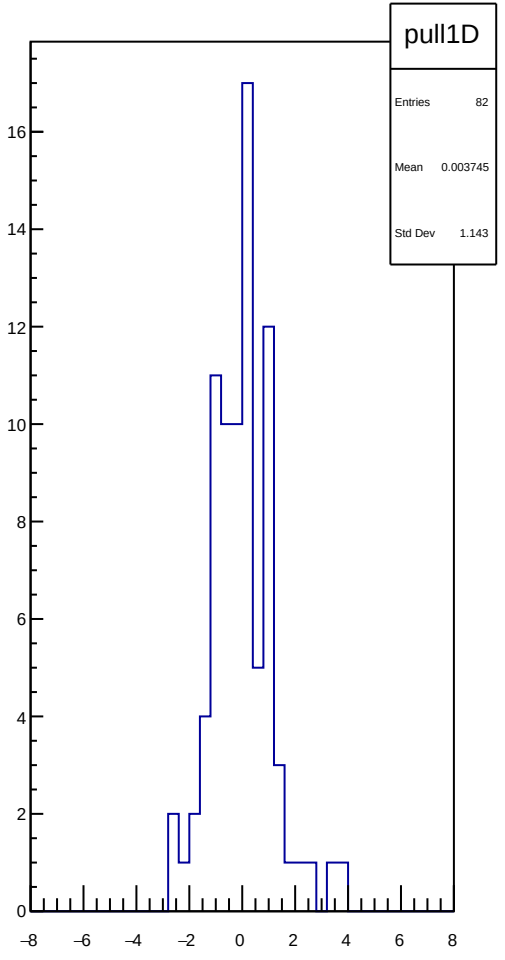

diff_bpm0i01Y_rms vs run
χ² / ndf 4126 / 81
p0 2676 ± 2.143
2900
2800
2700
2600
2500
2400
2300
2200

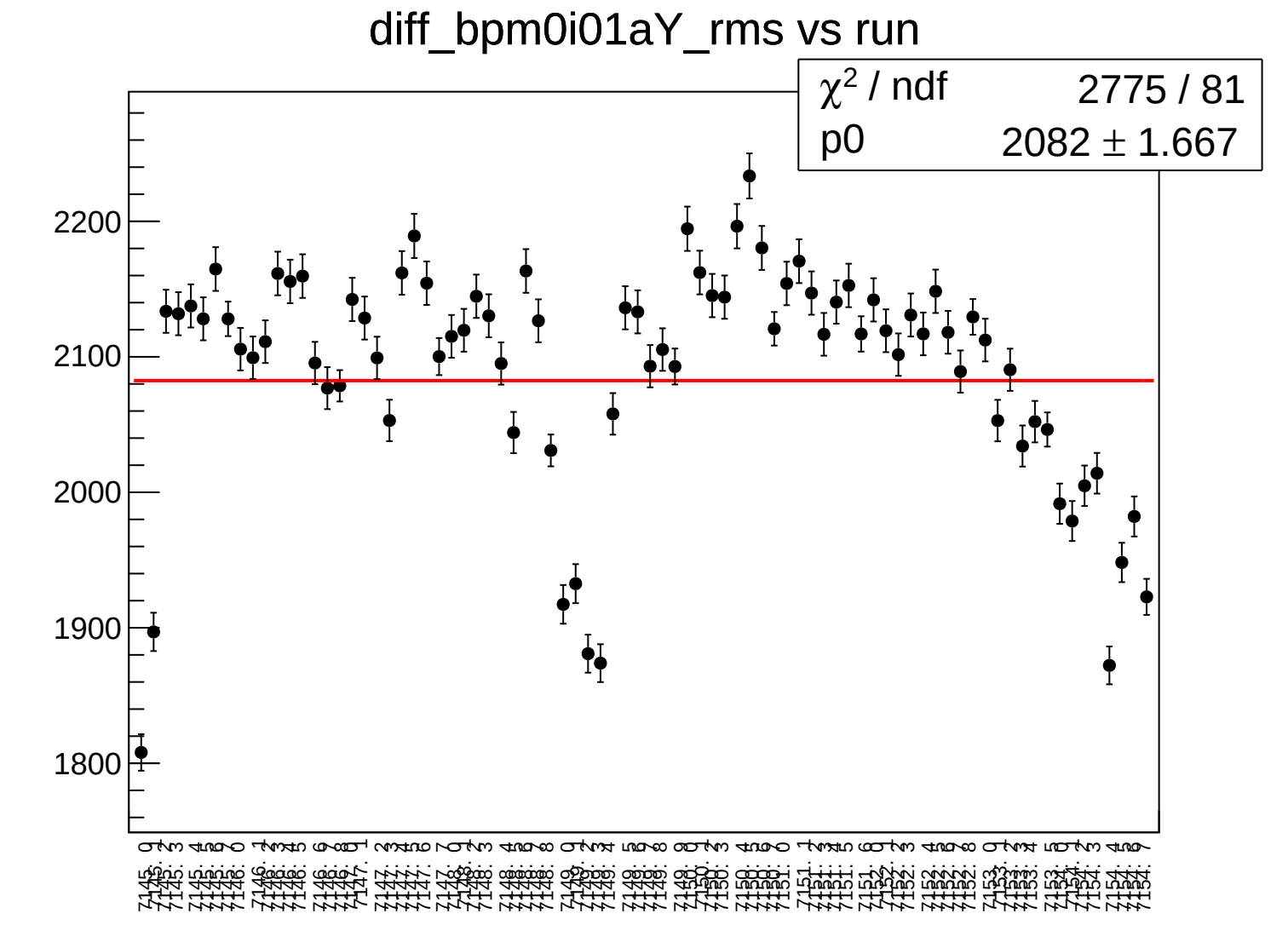

diff_bpm0i01aX_mean vs run
χ^2 / ndf 99.03 / 81
p0 7.966 ± 2.989
150
100
50
0
−50
−100
pull
Entries 82
Mean −296.5
Std Dev 338.7
3
2
1
0
−1
−2

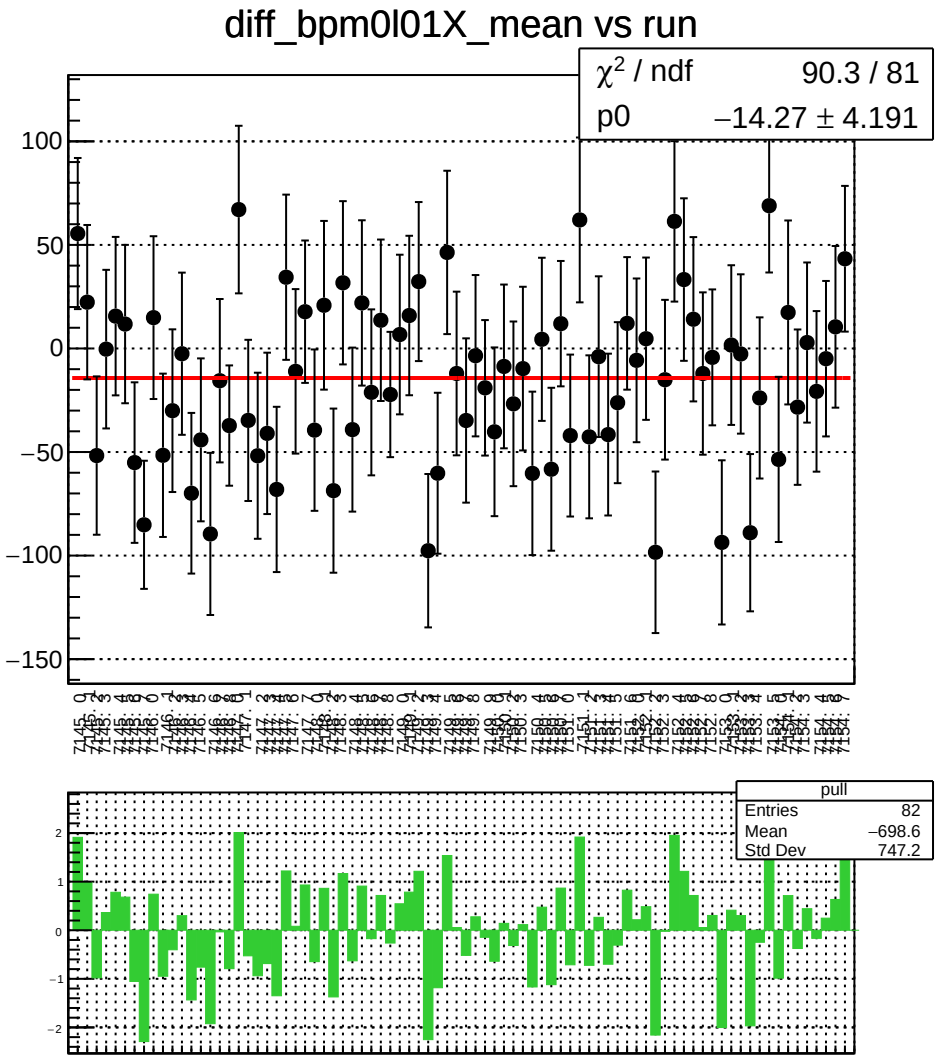

pull1D
Entries 82
Mean −0.006917
Std Dev 1.099
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

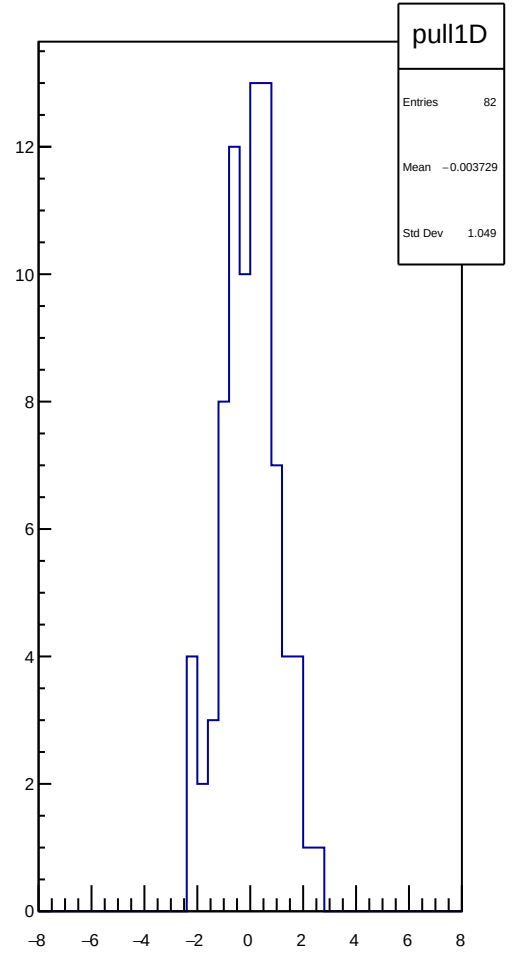

diff_bpm0i01aX_rms vs run
χ² / ndf 3627 / 81
p0 2640 ± 2.113
2900
2800
2700
2600
2500
2400
2300
2200

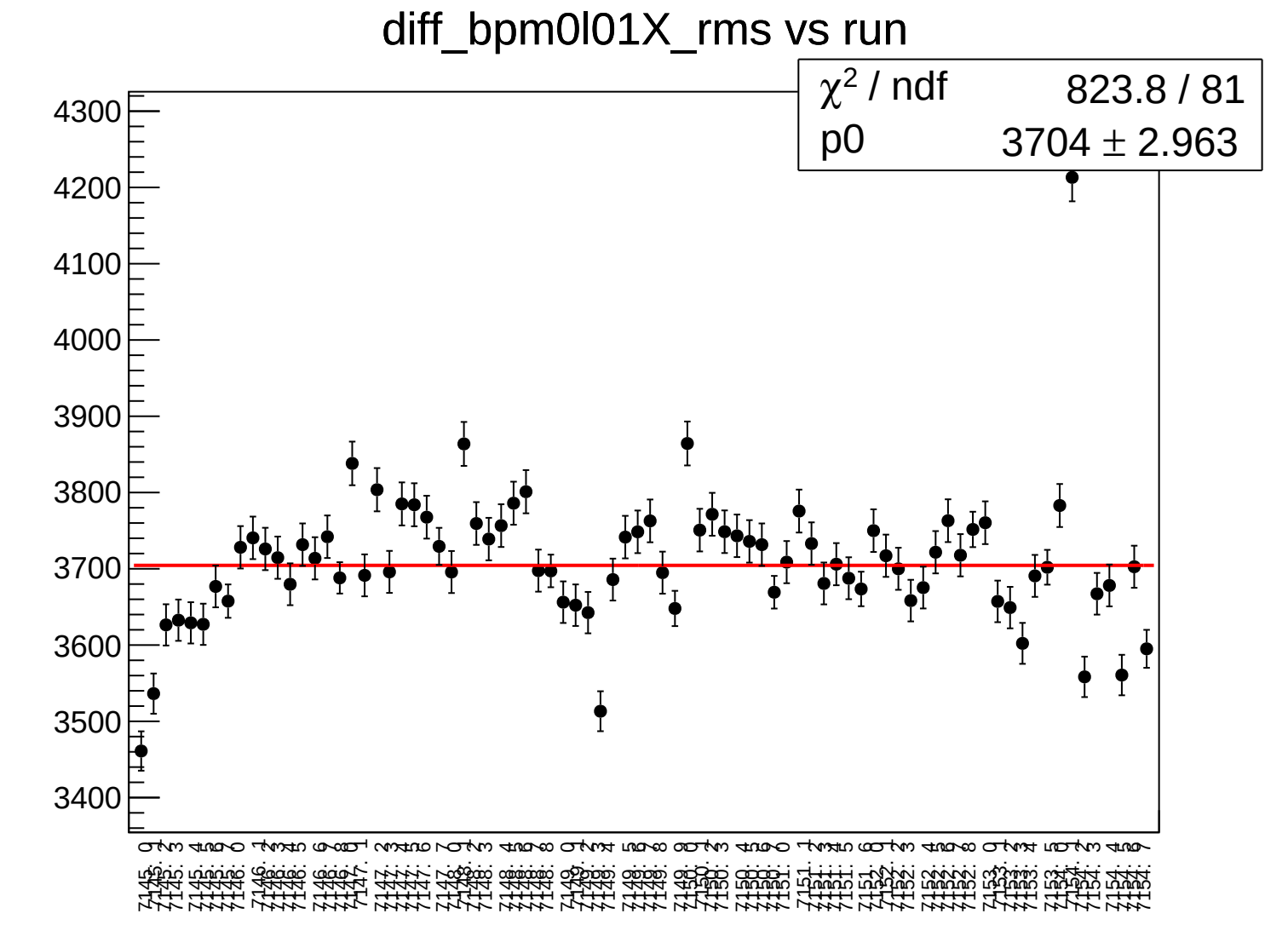

diff_bpm0i01aY_mean vs run
χ² / ndf 107.1 / 81
p0 20.65 ± 2.357
pull
Entries 82
Mean 263
Std Dev 245.1

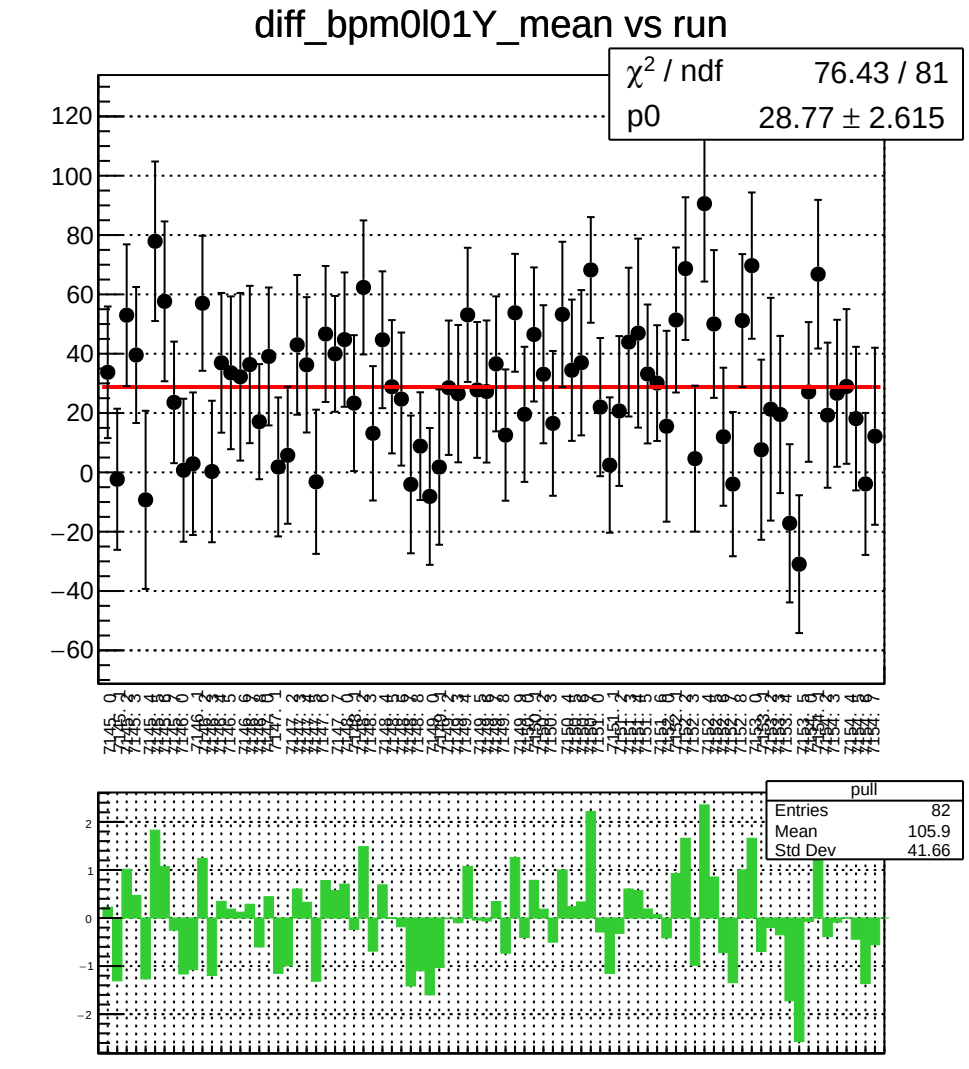

pull1D
Entries 82
Mean 0.003745
Std Dev 1.143

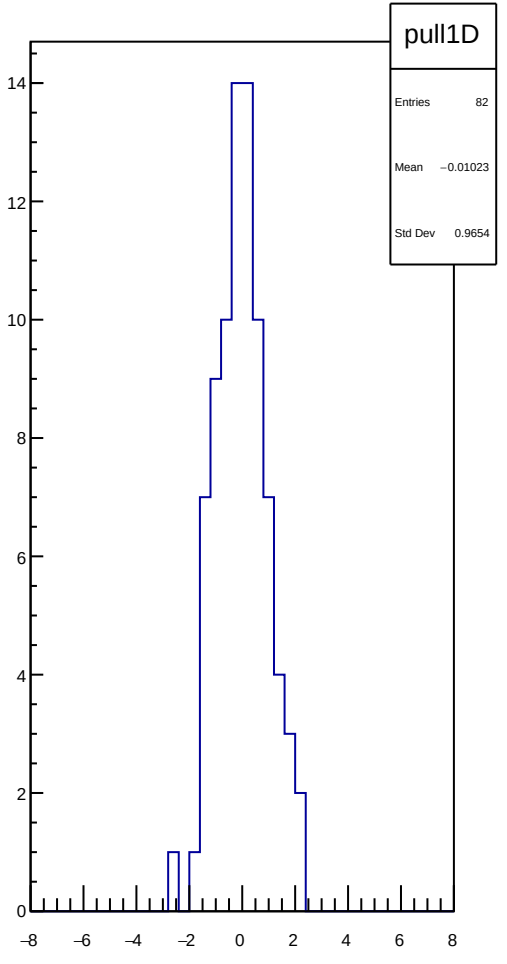

diff_bpm0i01aY_rms vs run
χ² / ndf 2775 / 81
p0 2082 ± 1.667
2200
2100
2000
1900
1800

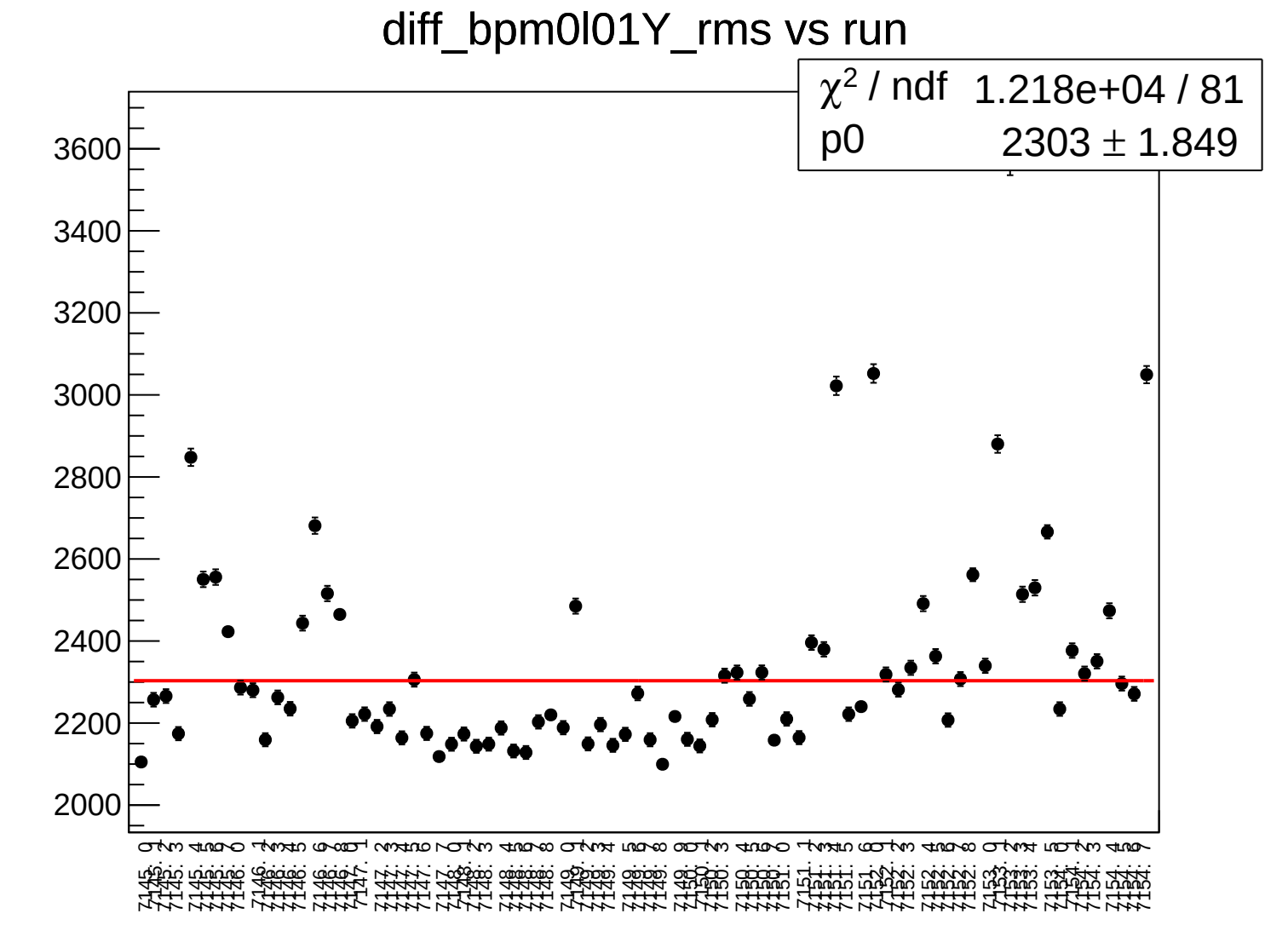

diff_bpm0l01X_mean vs run
χ² / ndf 90.3 / 81
p0 −14.27 ± 4.191
100
50
0
−50
−100
−150
pull
Entries 82
Mean −698.6
Std Dev 747.2
2
1
0
−1
−2

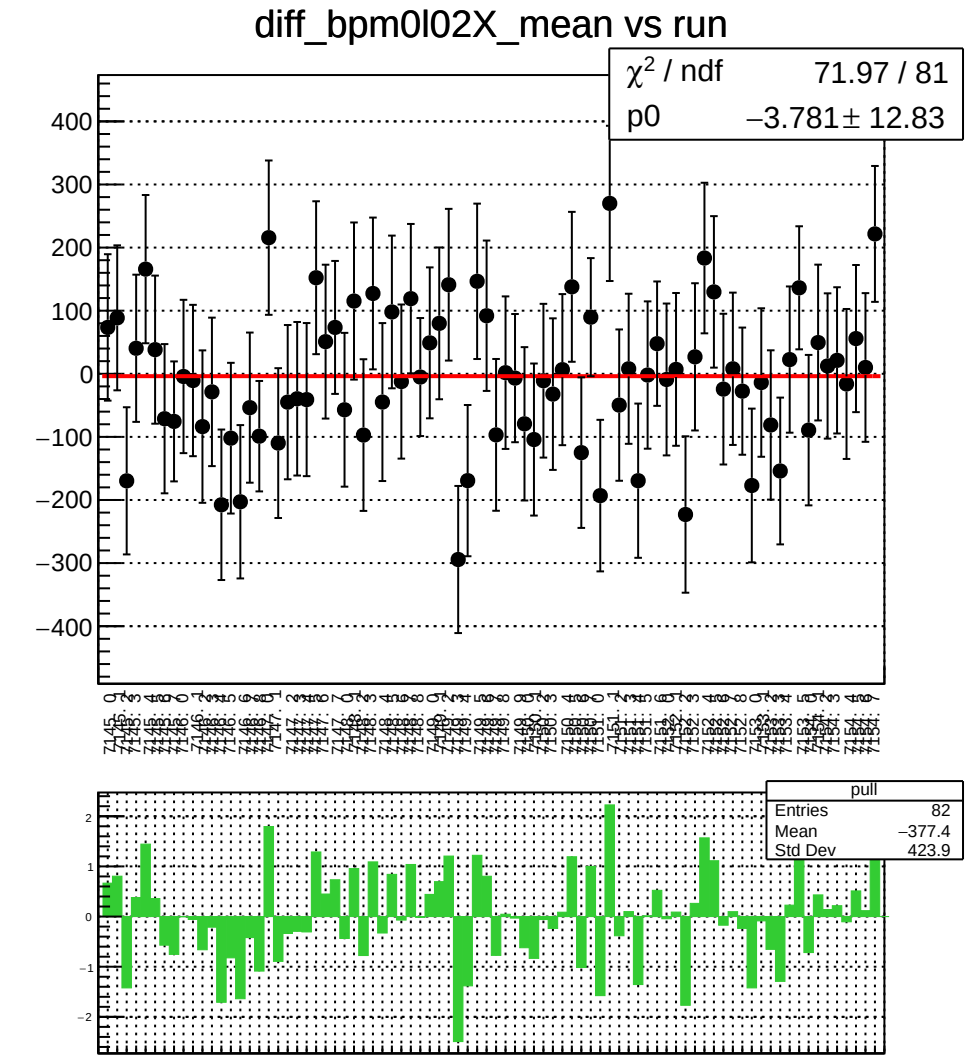

pull1D
Entries 82
Mean −0.003729
Std Dev 1.049
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

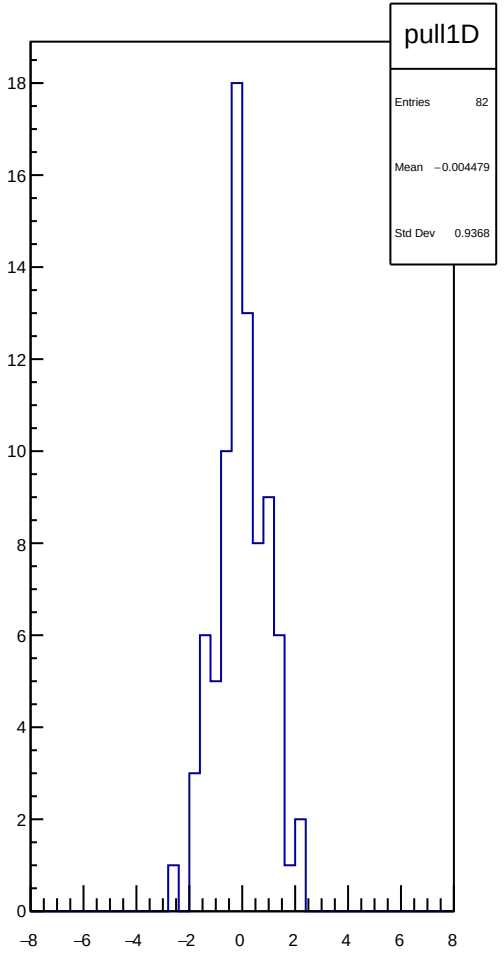

diff_bpm0l01X_rms vs run
χ² / ndf 823.8 / 81
p0 3704 ± 2.963
4300
4200
4100
4000
3900
3800
3700
3600
3500
3400

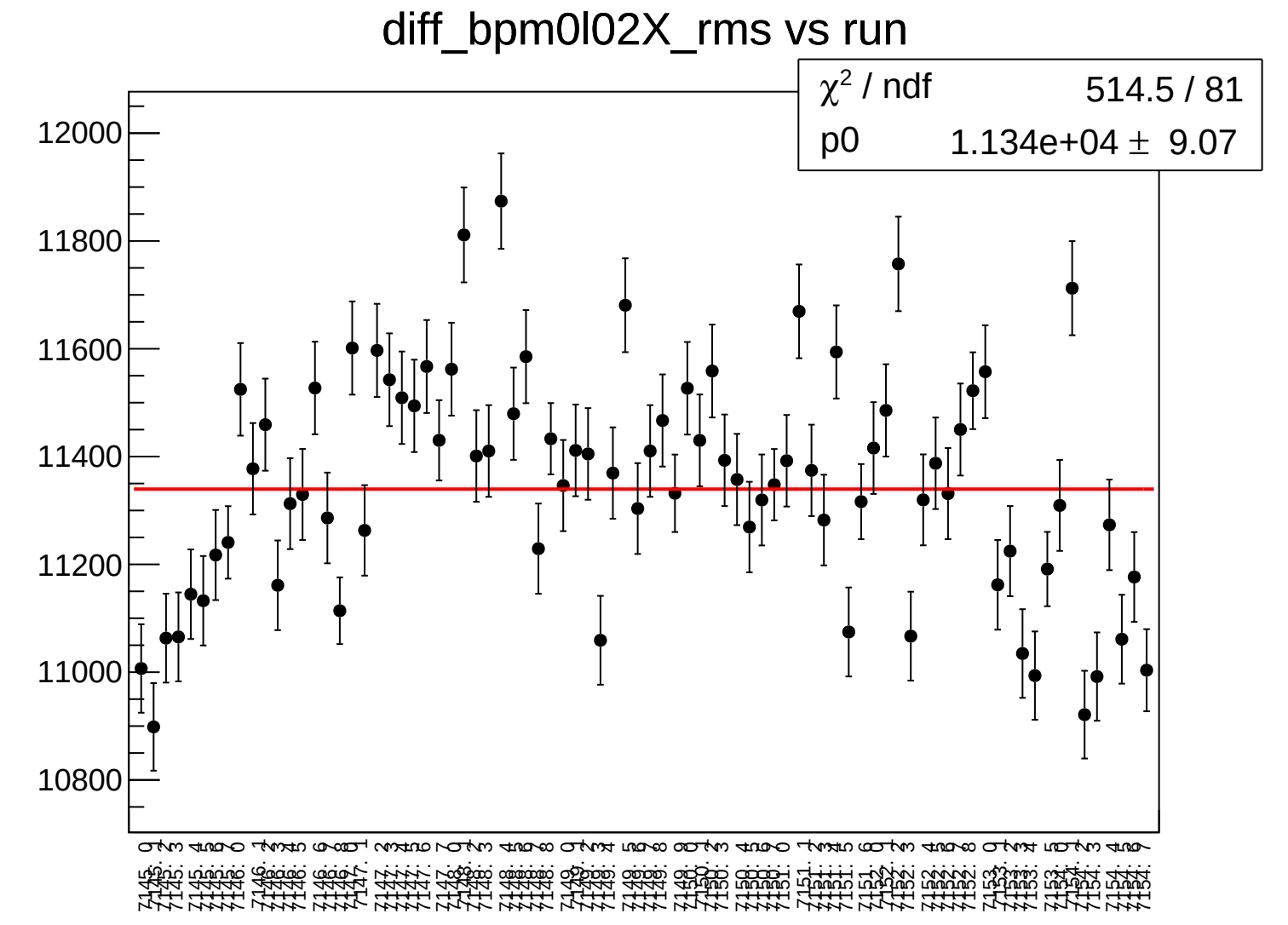

diff_bpm0l01Y_mean vs run
χ² / ndf 76.43 / 81
p0 28.77 ± 2.615
pull
Entries 82
Mean 105.9
Std Dev 41.66

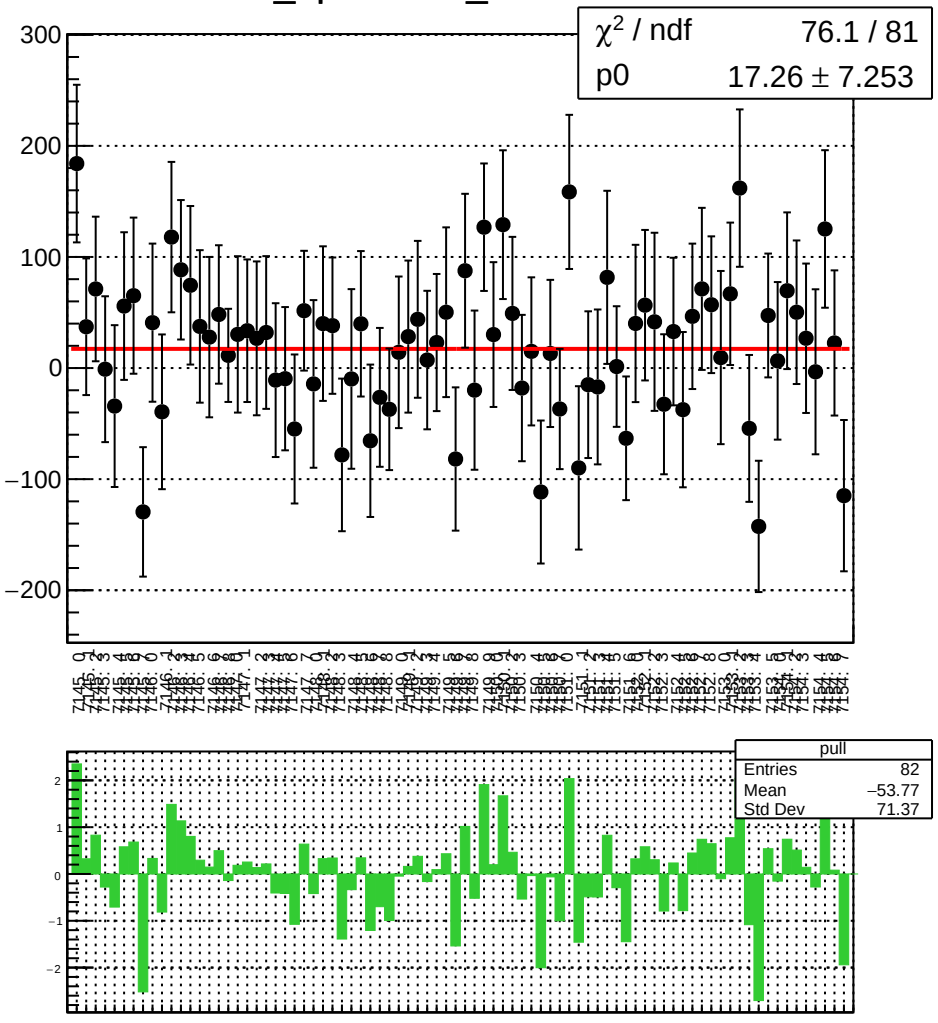

pull1D
Entries 82
Mean −0.01023
Std Dev 0.9654

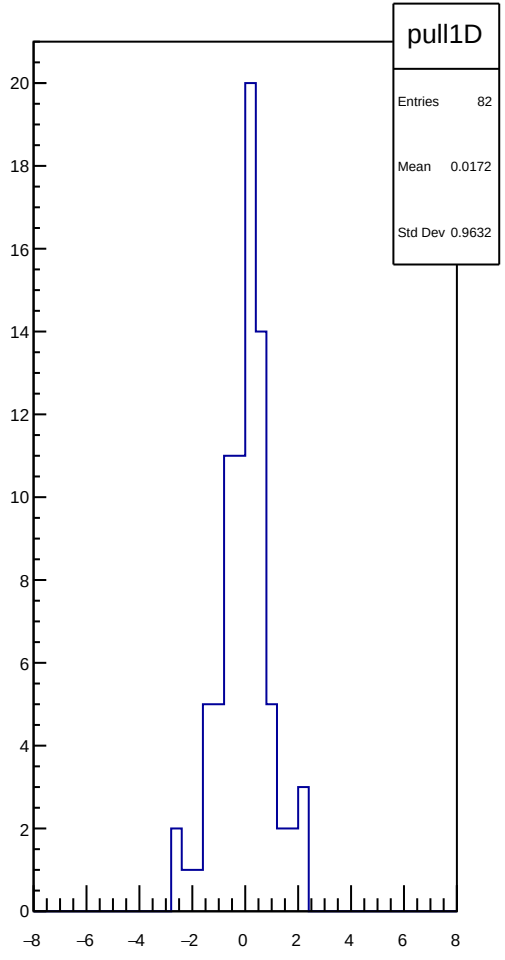

diff_bpm0l01Y_rms vs run
χ² / ndf 1.218e+04 / 81
p0 2303 ± 1.849
3600
3400
3200
3000
2800
2600
2400
2200
2000

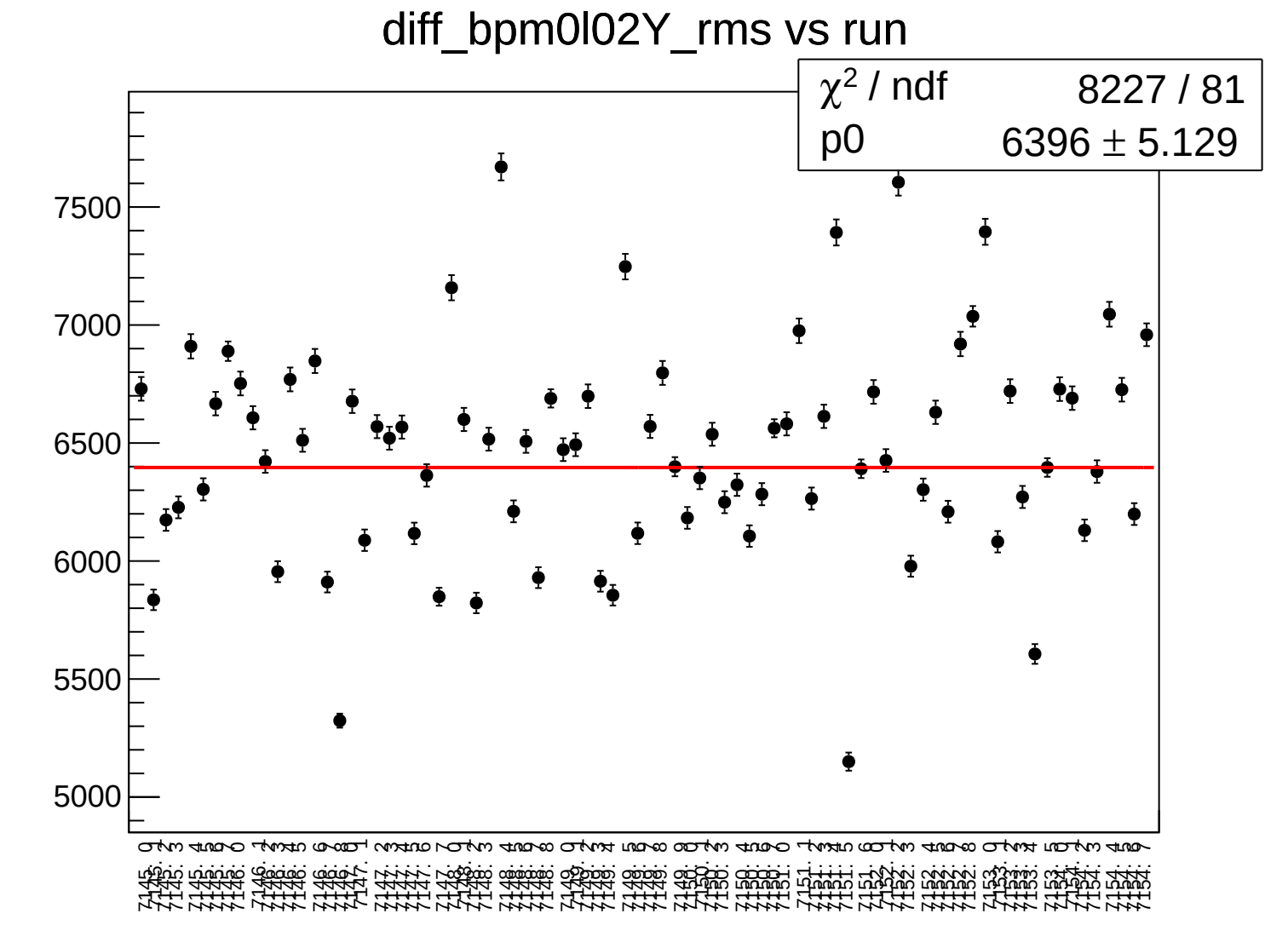

diff_bpm0l02X_mean vs run
χ^2 / ndf 71.97 / 81
p0 −3.781± 12.83
pull
Entries 82
Mean −377.4
Std Dev 423.9

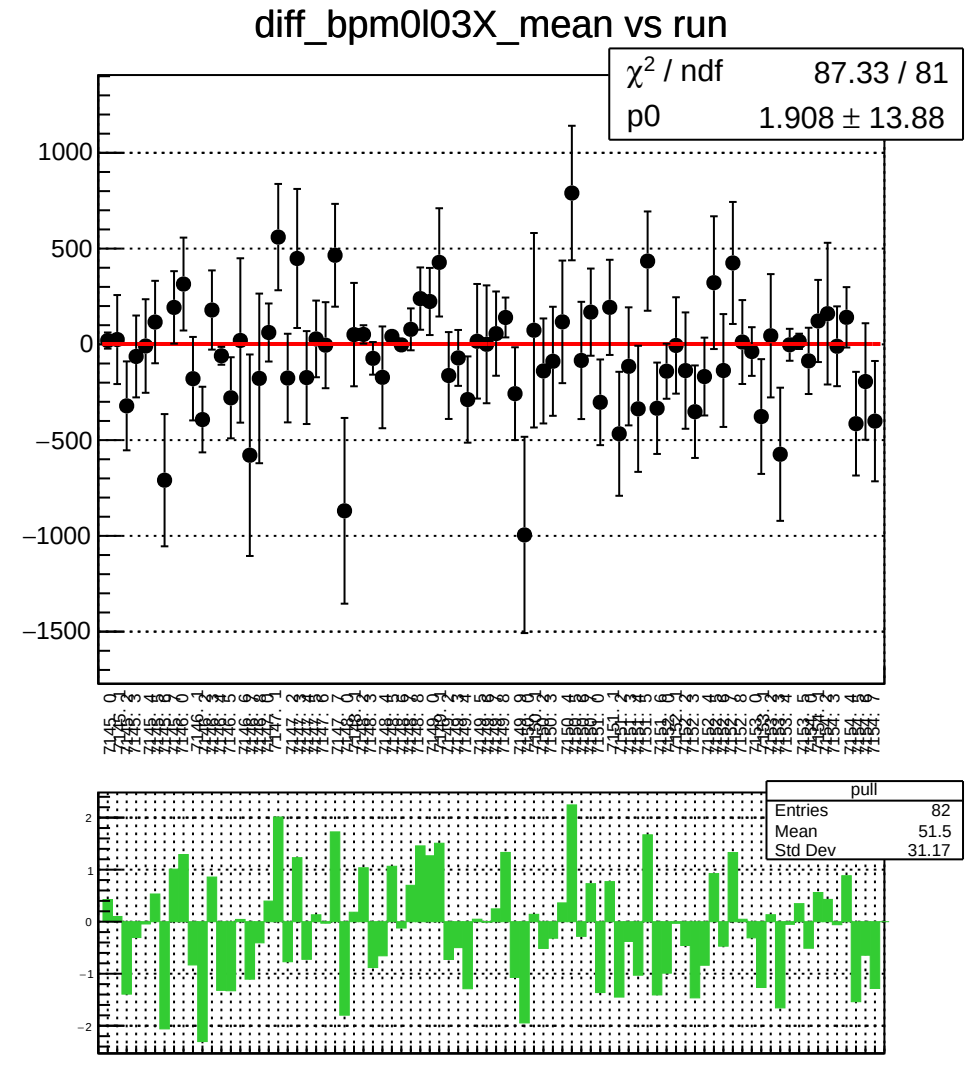

pull1D
Entries 82
Mean −0.004479
Std Dev 0.9368

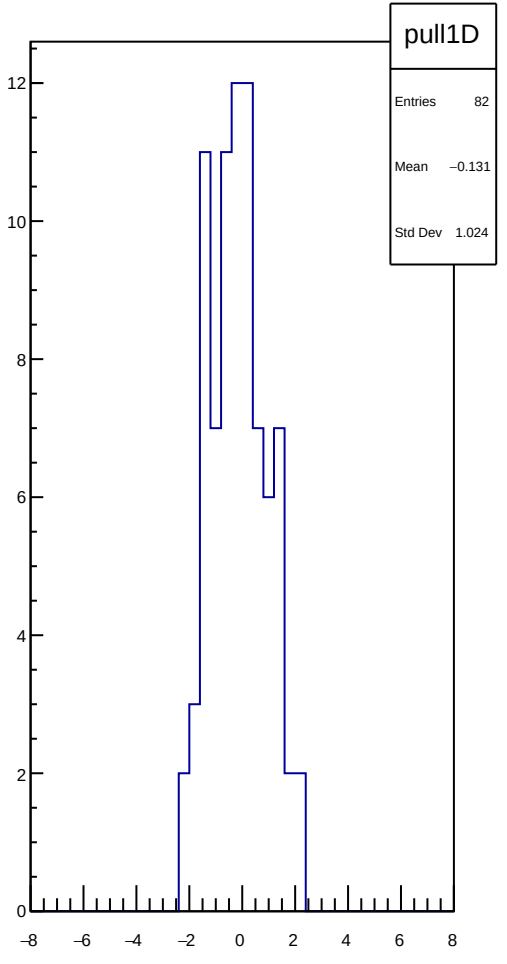

diff_bpm0l02X_rms vs run
χ² / ndf 514.5 / 81
p0 1.134e+04 ± 9.07
12000
11800
11600
11400
11200
11000
10800

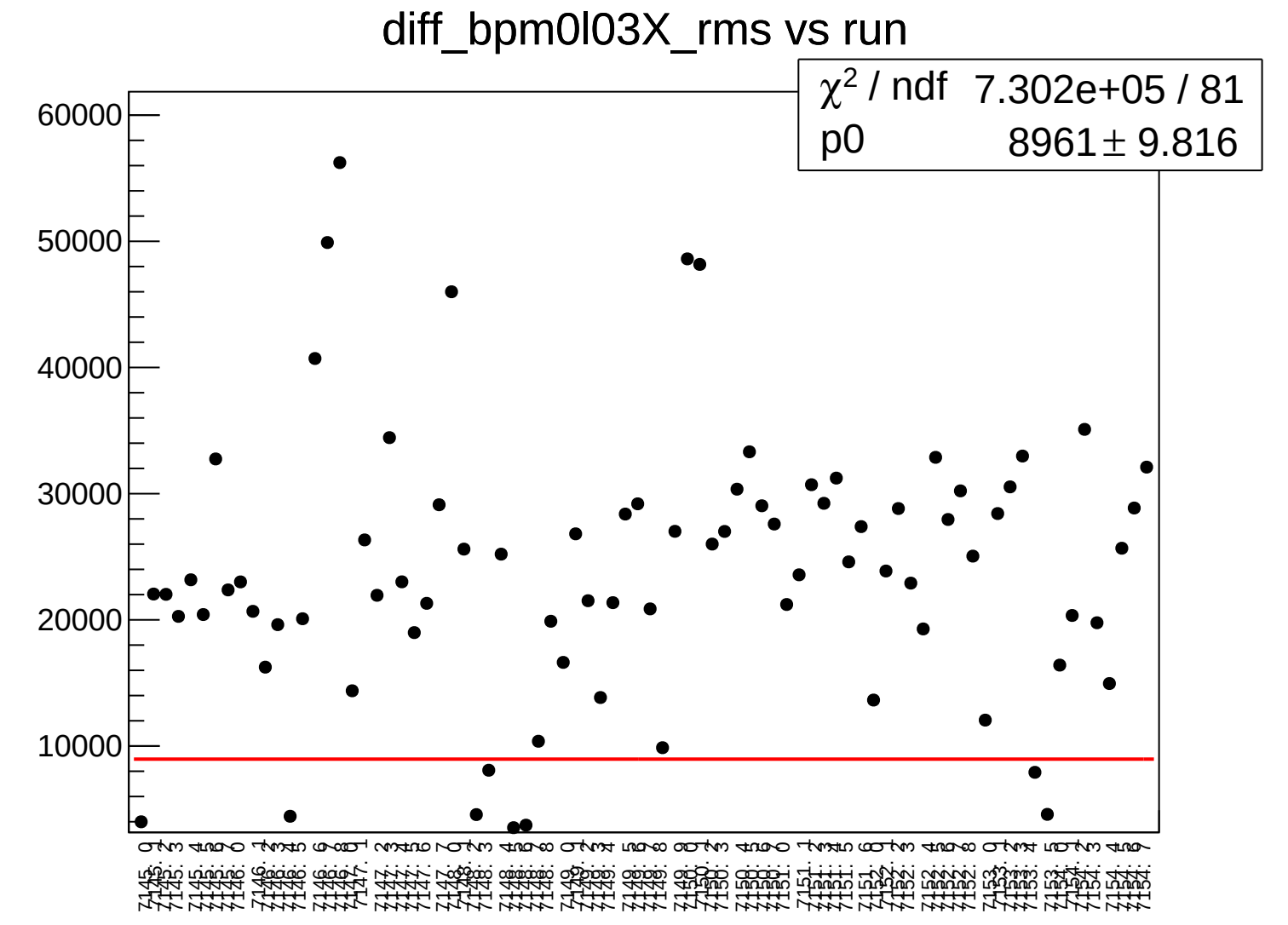

diff_bpm0l02Y_mean vs run
χ² / ndf 76.1 / 81
p0 17.26 ± 7.253
pull
Entries 82
Mean −53.77
Std Dev 71.37

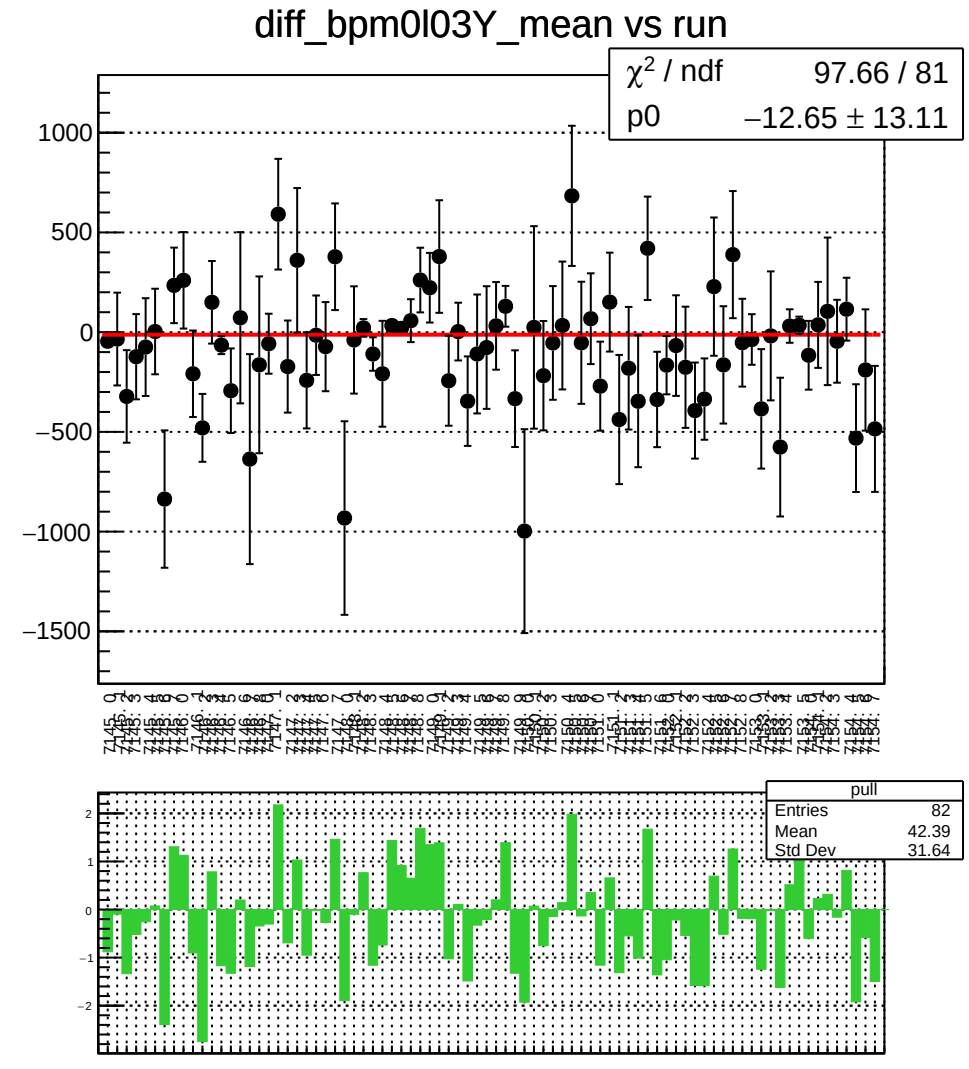

pull1D
Entries 82
Mean 0.0172
Std Dev 0.9632

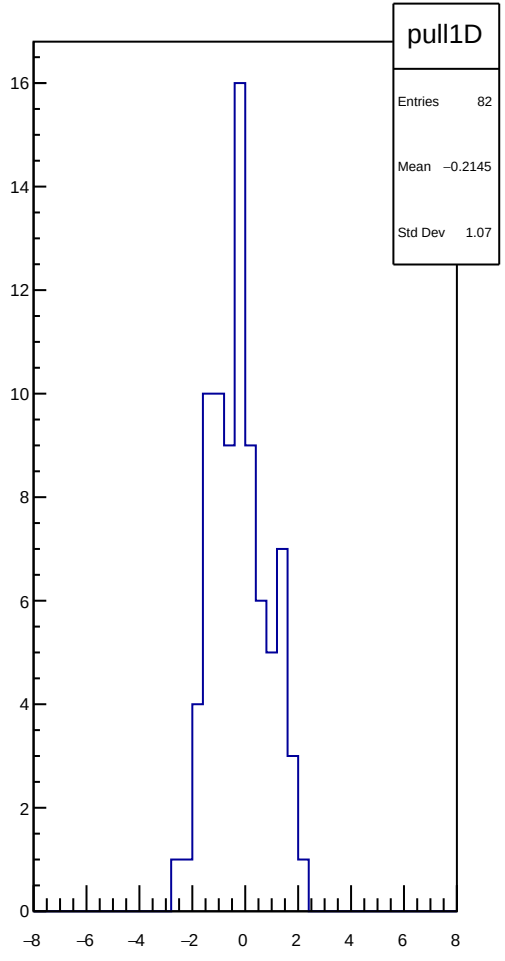

diff_bpm0l02Y_rms vs run
χ² / ndf 8227 / 81
p0 6396 ± 5.129
7500
7000
6500
6000
5500
5000

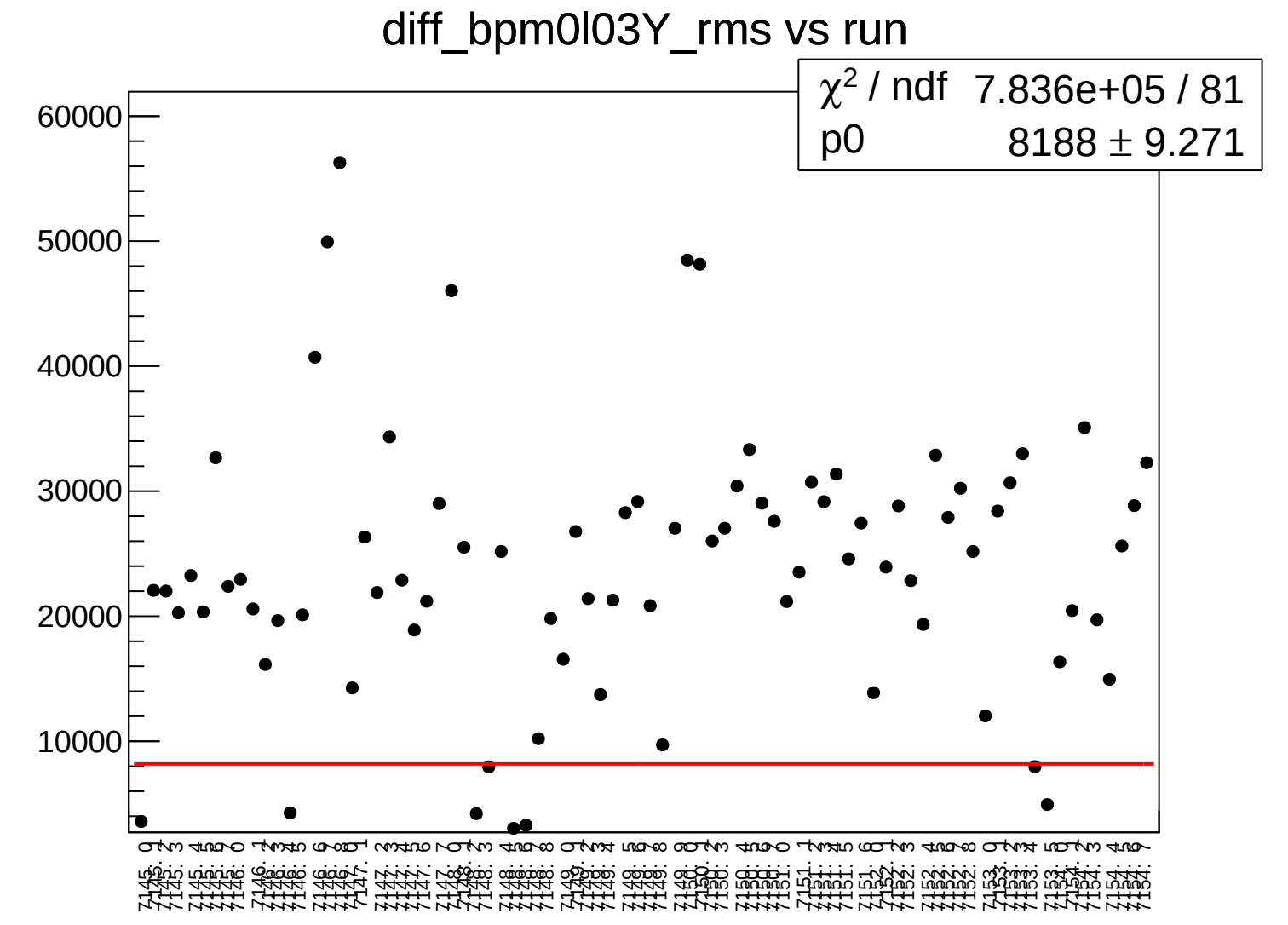

diff_bpm0l03X_mean vs run
χ² / ndf 87.33 / 81
p0 1.908 ± 13.88
1000
500
0
−500
−1000
−1500
pull
Entries 82
Mean 51.5
Std Dev 31.17
2
1
0
−1
−2

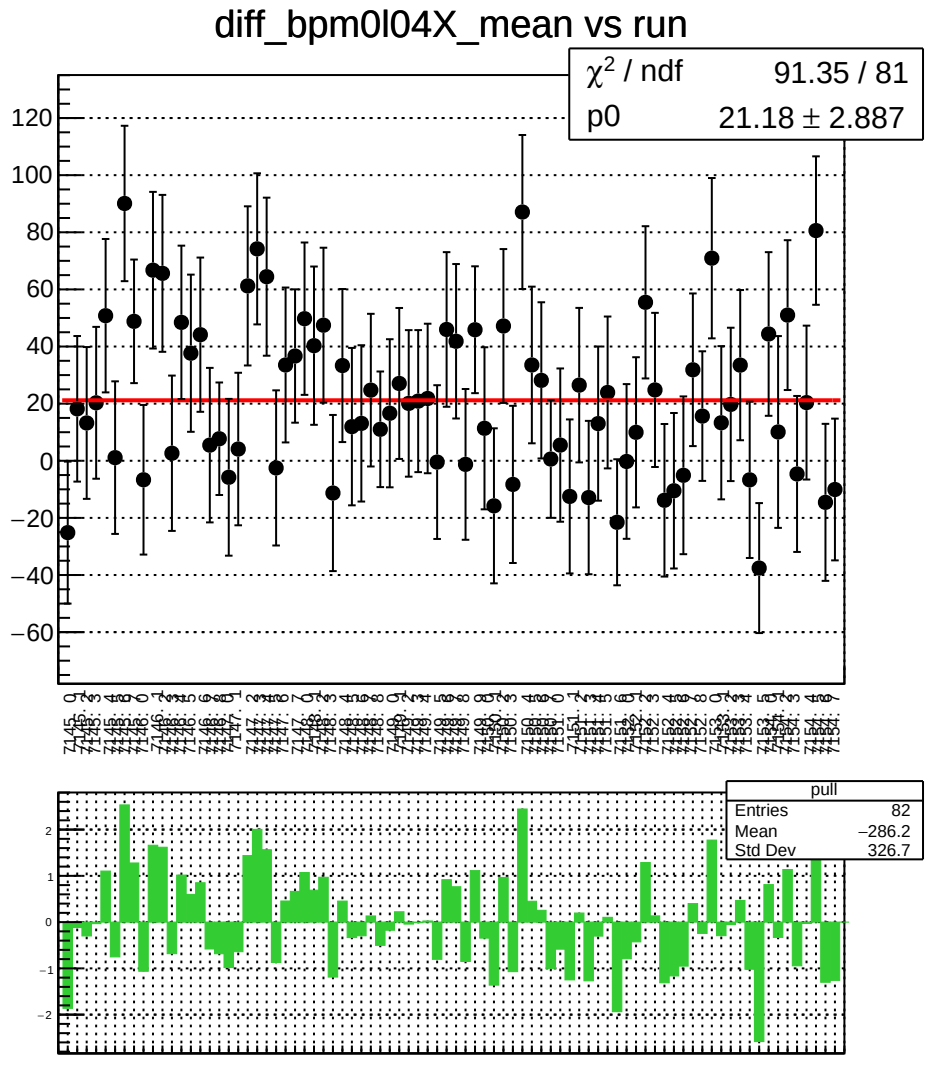

pull1D
Entries 82
Mean −0.131
Std Dev 1.024
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

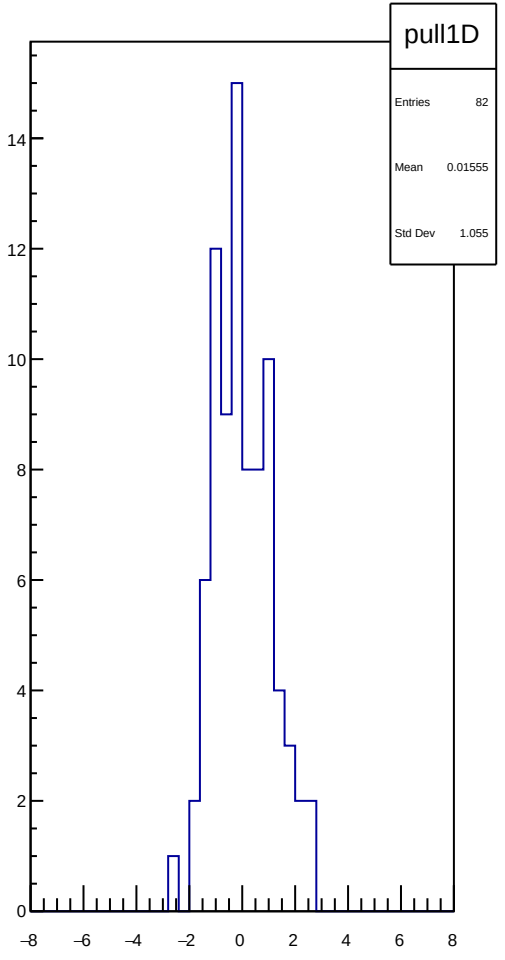

diff_bpm0l03X_rms vs run
χ^2 / ndf 7.302e+05 / 81
p0 8961 ± 9.816
60000
50000
40000
30000
20000
10000

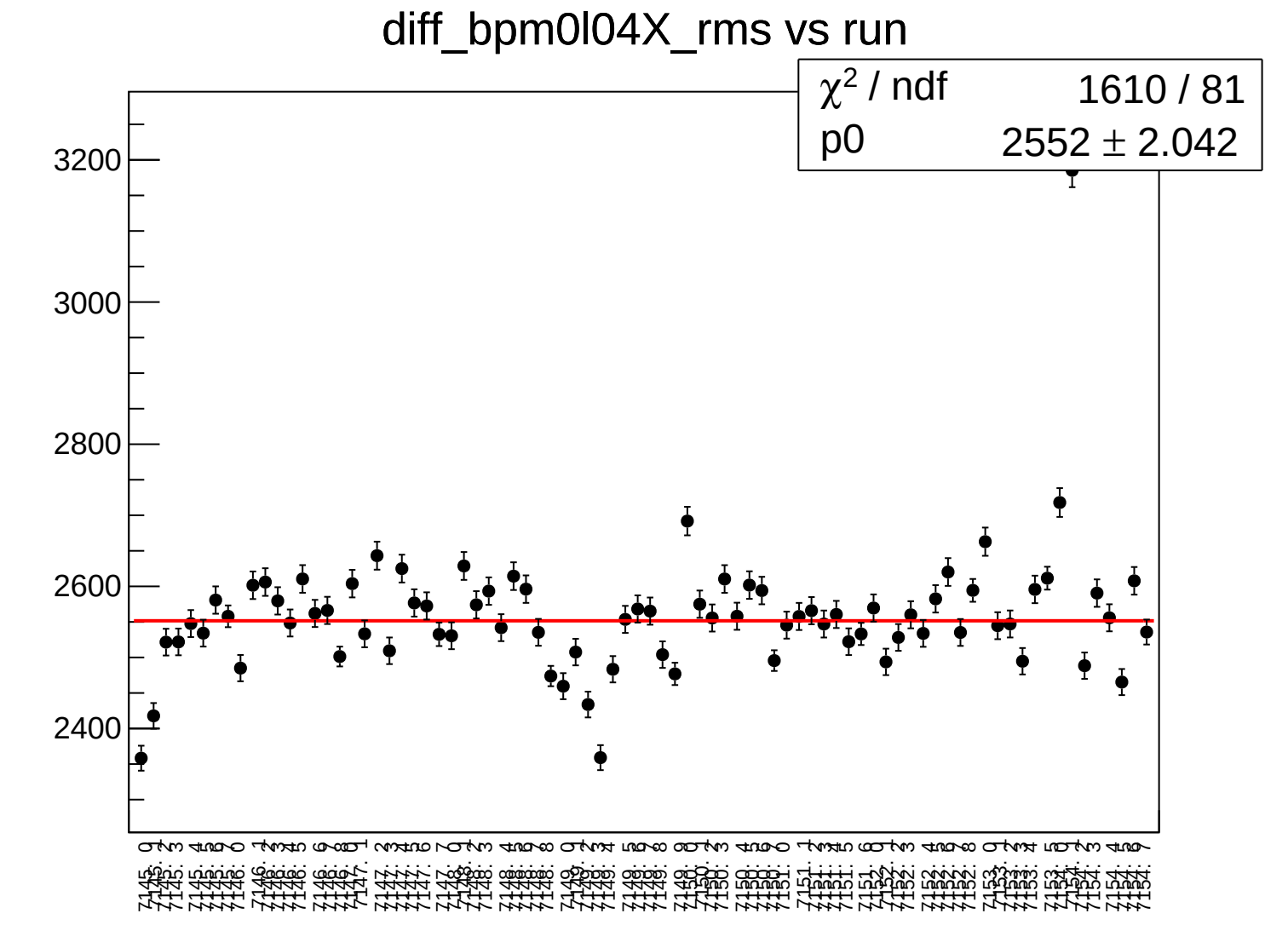

diff_bpm0l03Y_mean vs run
χ² / ndf 97.66 / 81
p0 −12.65 ± 13.11
1000
500
0
−500
−1000
−1500
pull
Entries 82
Mean 42.39
Std Dev 31.64
2
1
0
−1
−2

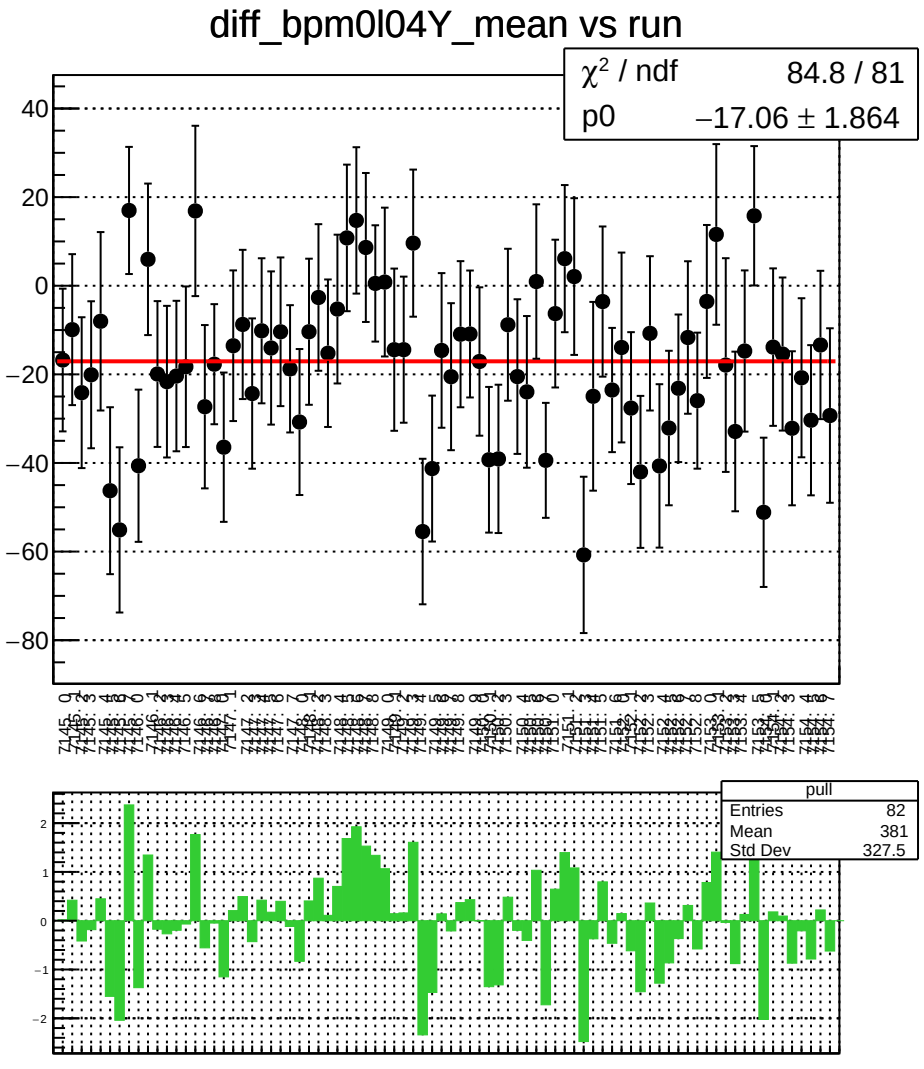

pull1D
Entries 82
Mean −0.2145
Std Dev 1.07
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

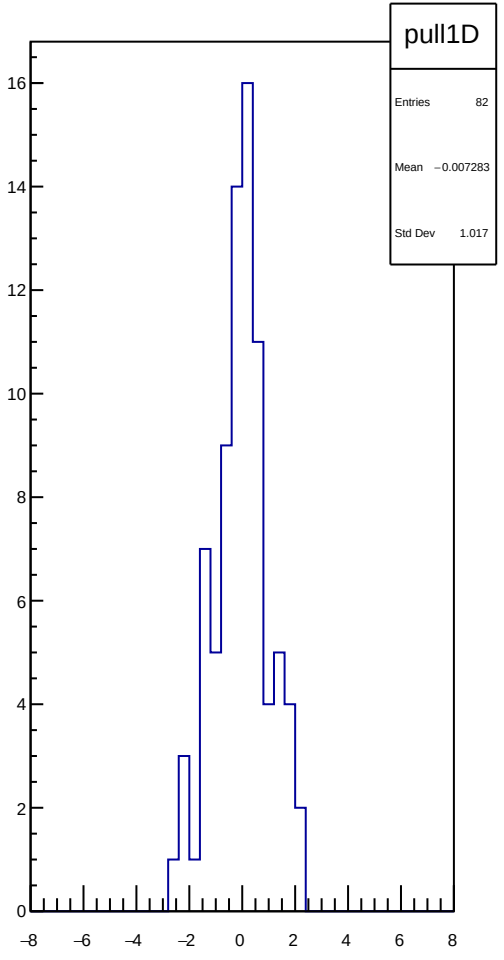

diff_bpm0l03Y_rms vs run
χ² / ndf 7.836e+05 / 81
p0 8188 ± 9.271
60000
50000
40000
30000
20000
10000

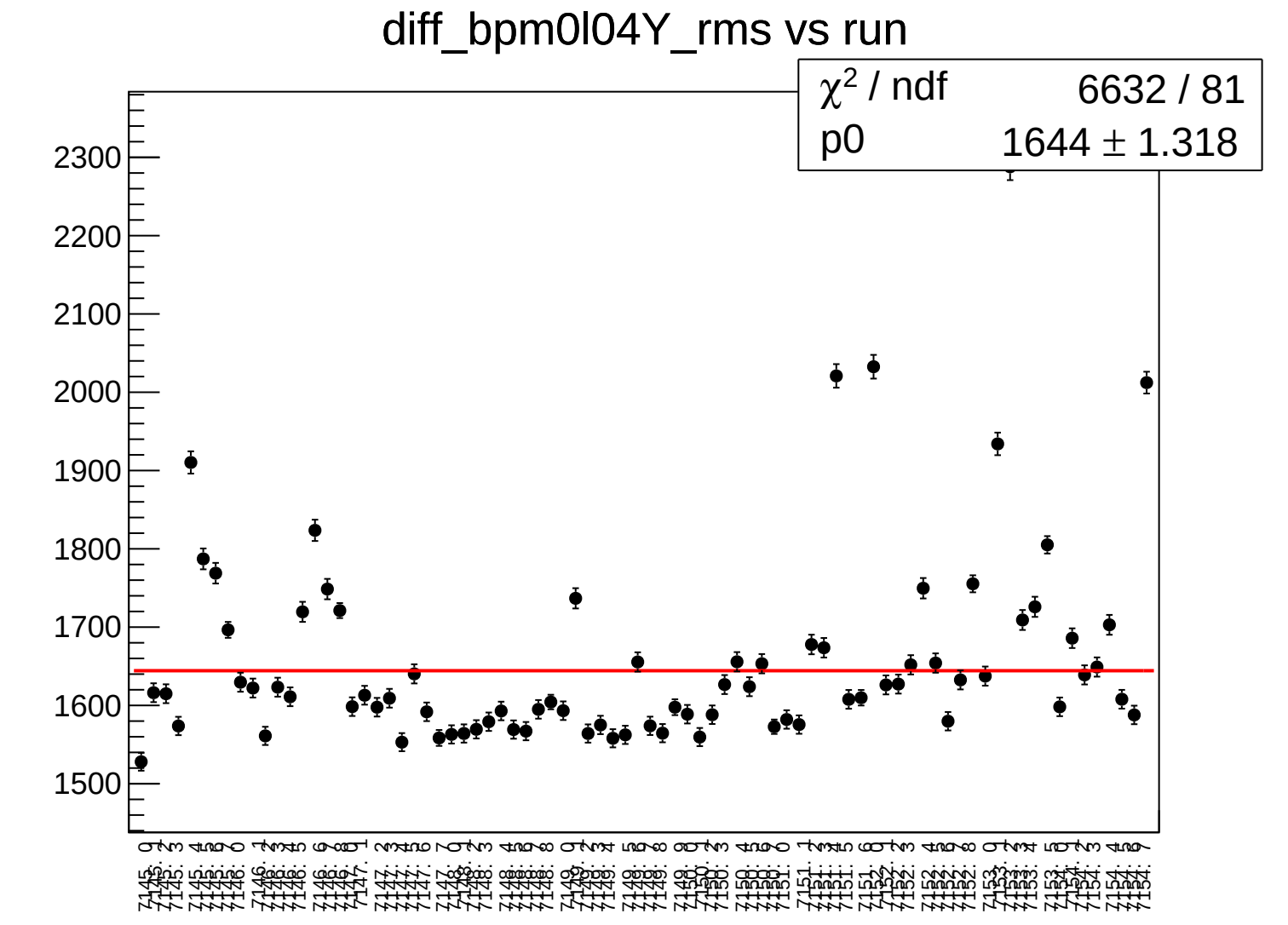

diff_bpm0l04X_mean vs run
χ^2 / ndf 91.35 / 81
p0 21.18 ± 2.887
pull
Entries 82
Mean −286.2
Std Dev 326.7

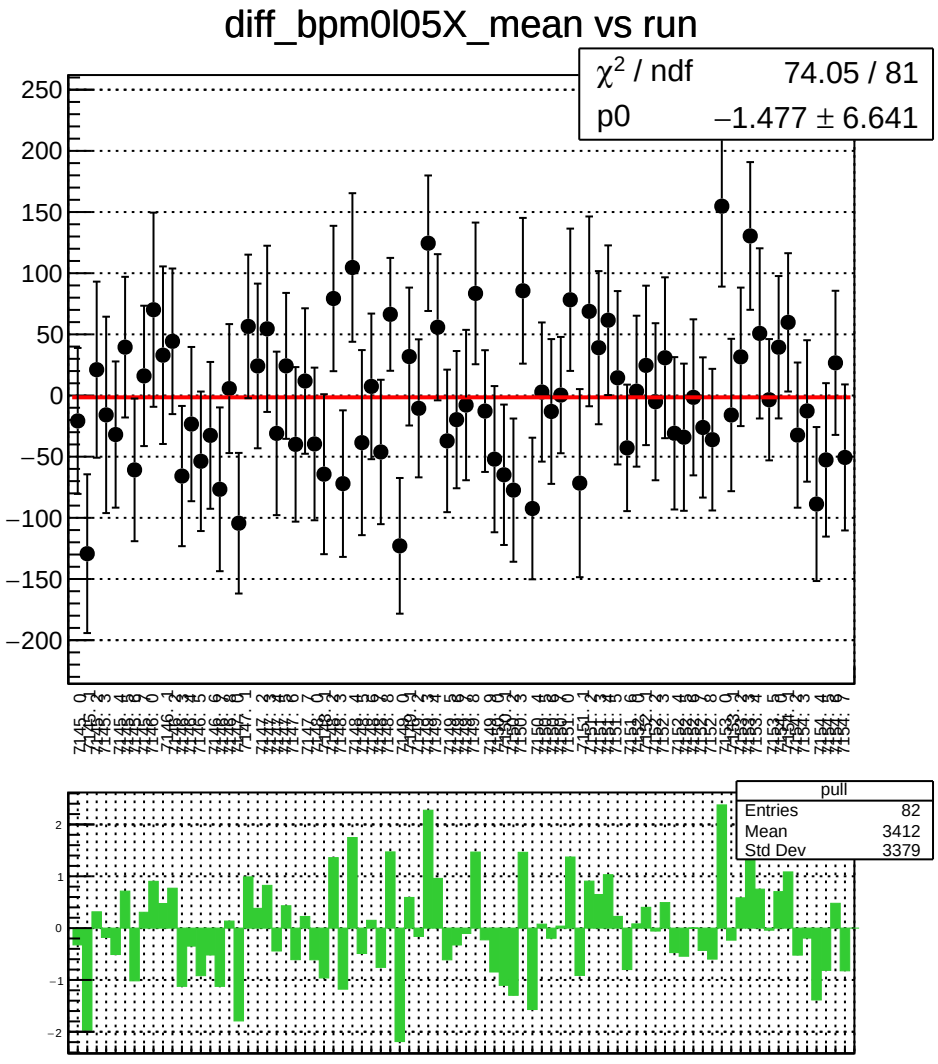

pull1D
Entries 82
Mean 0.01555
Std Dev 1.055

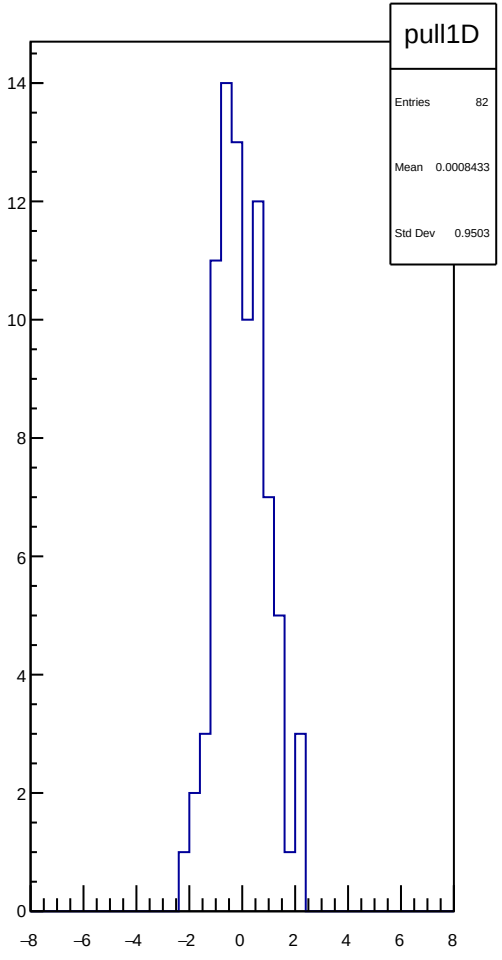

diff_bpm0l04X_rms vs run
χ² / ndf 1610 / 81
p0 2552 ± 2.042
3200
3000
2800
2600
2400

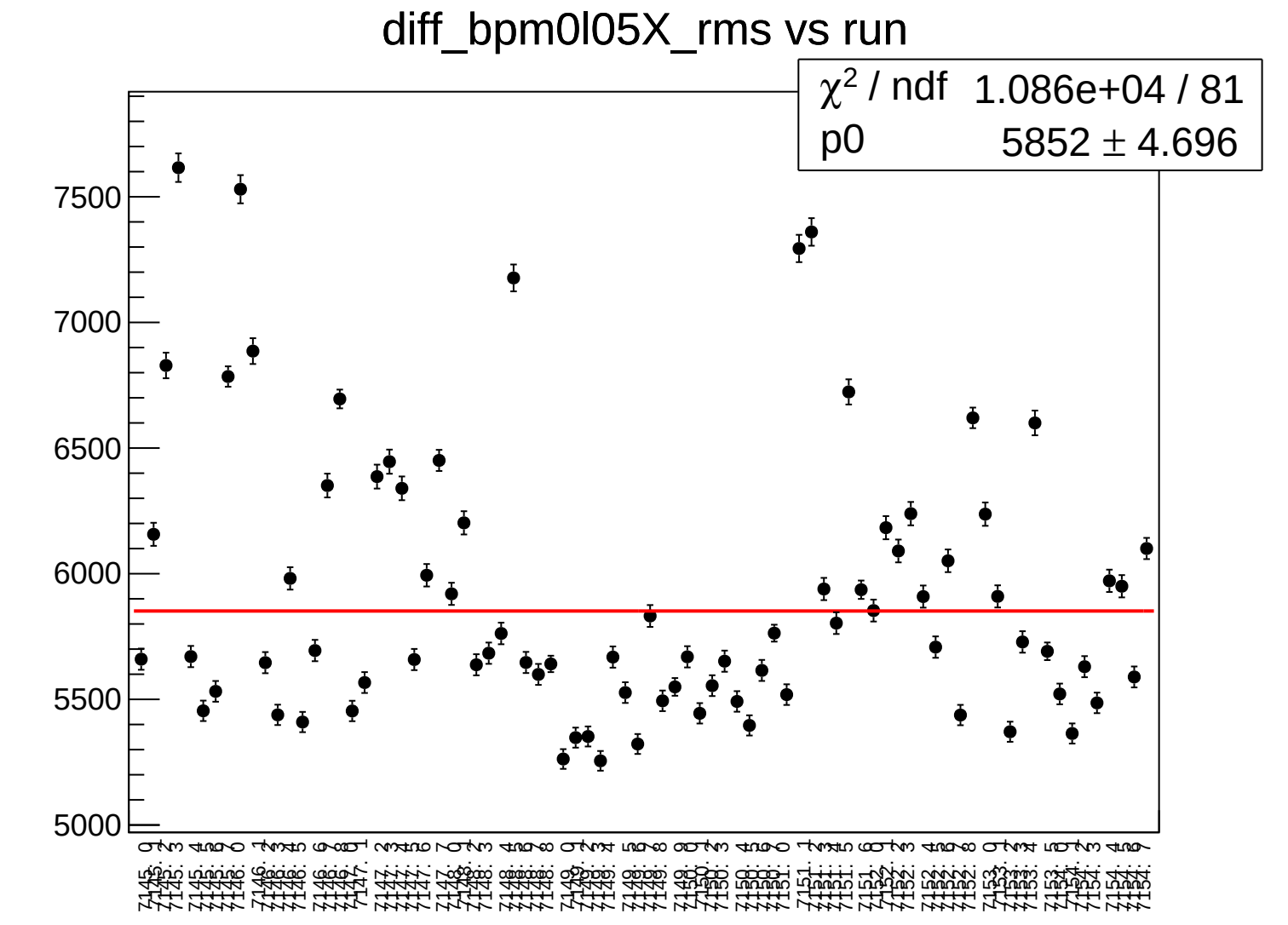

diff_bpm0l04Y_mean vs run
χ² / ndf 84.8 / 81
p0 −17.06 ± 1.864
pull
Entries 82
Mean 381
Std Dev 327.5

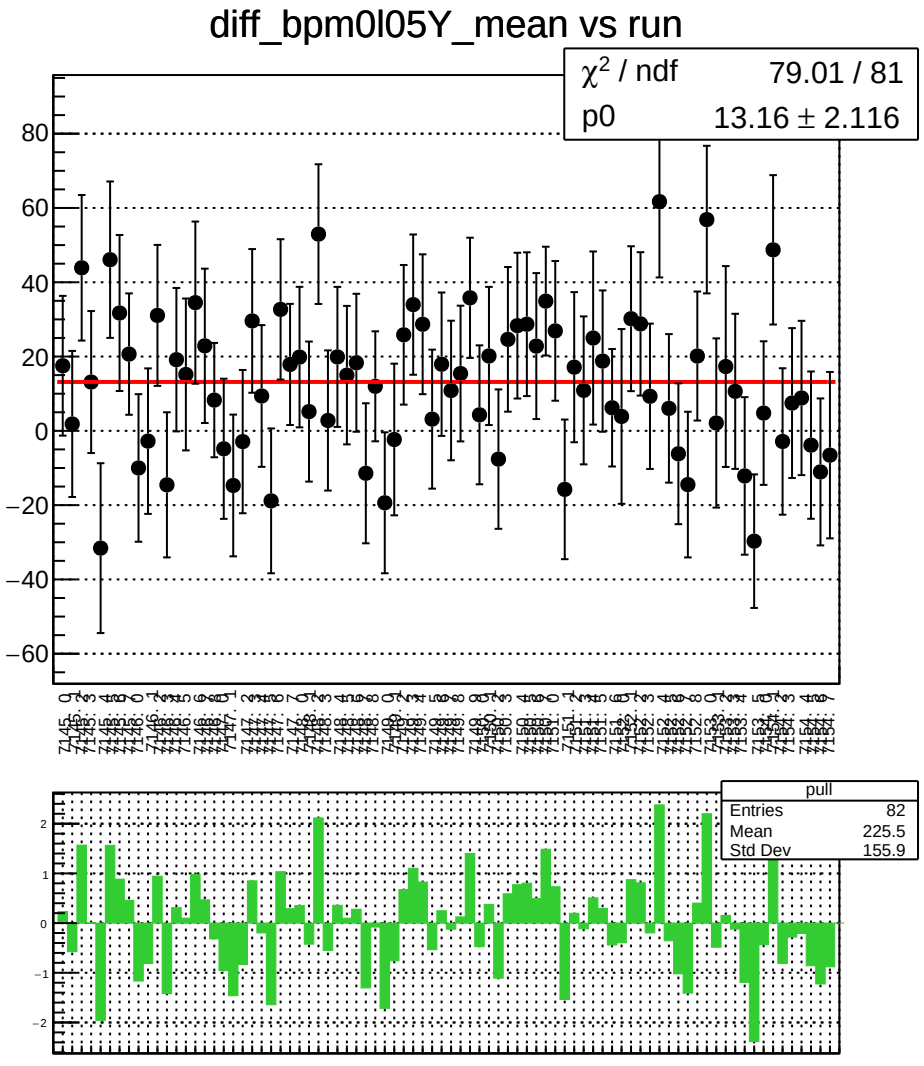

pull1D
Entries 82
Mean −0.007283
Std Dev 1.017

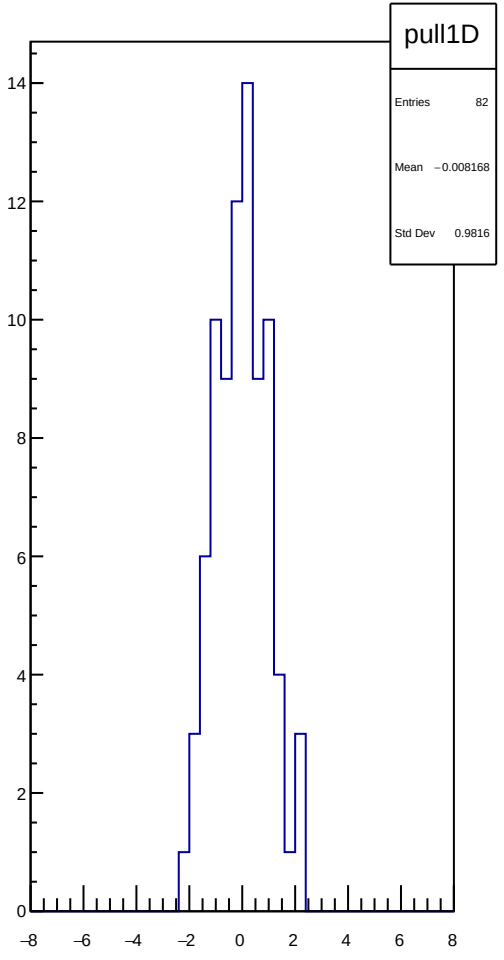

diff_bpm0l04Y_rms vs run
χ² / ndf 6632 / 81
p0 1644 ± 1.318
2300
2200
2100
2000
1900
1800
1700
1600
1500

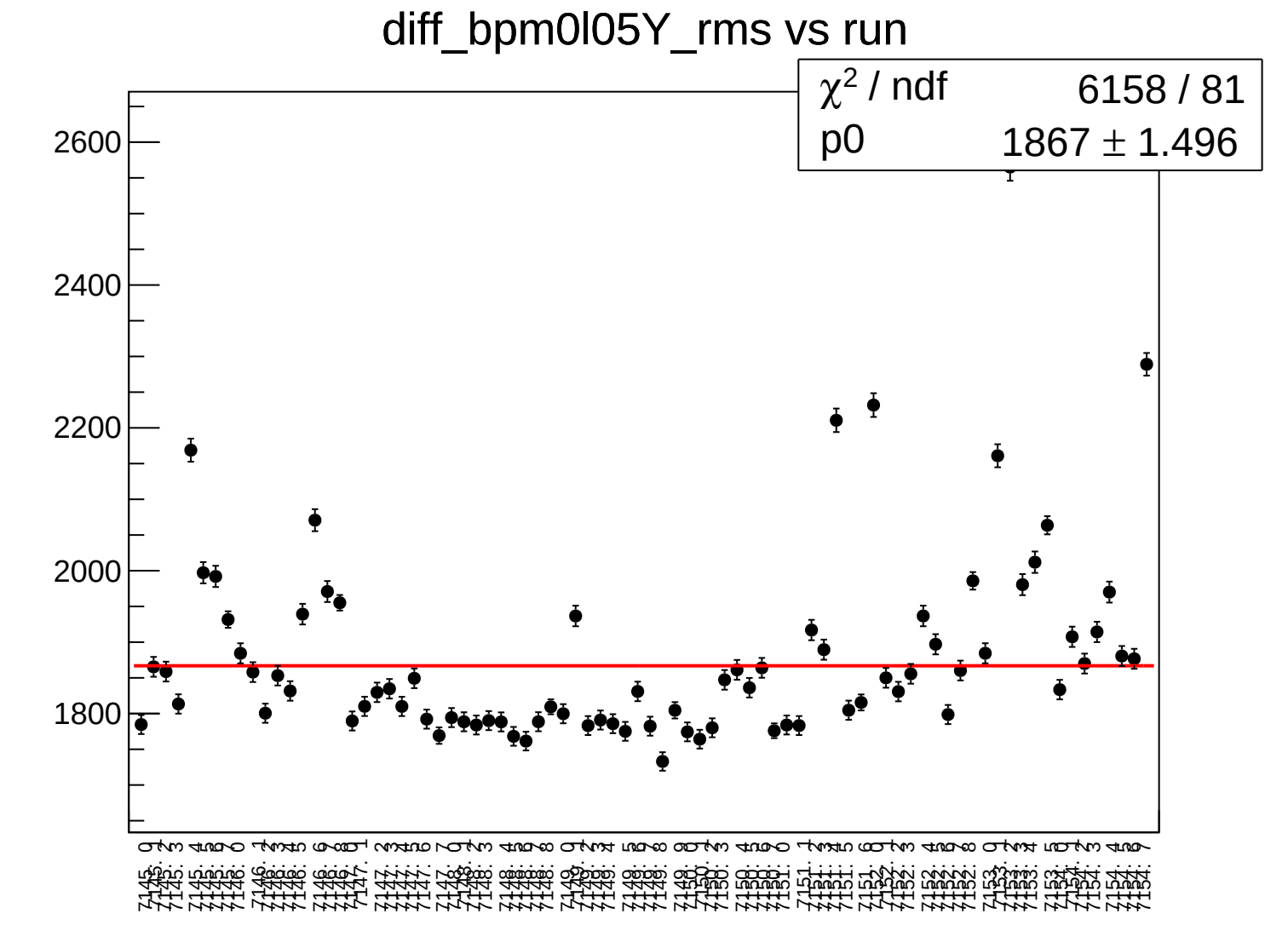

diff_bpm0l05X_mean vs run
χ² / ndf 74.05 / 81
p0 −1.477 ± 6.641
pull
Entries 82
Mean 3412
Std Dev 3379

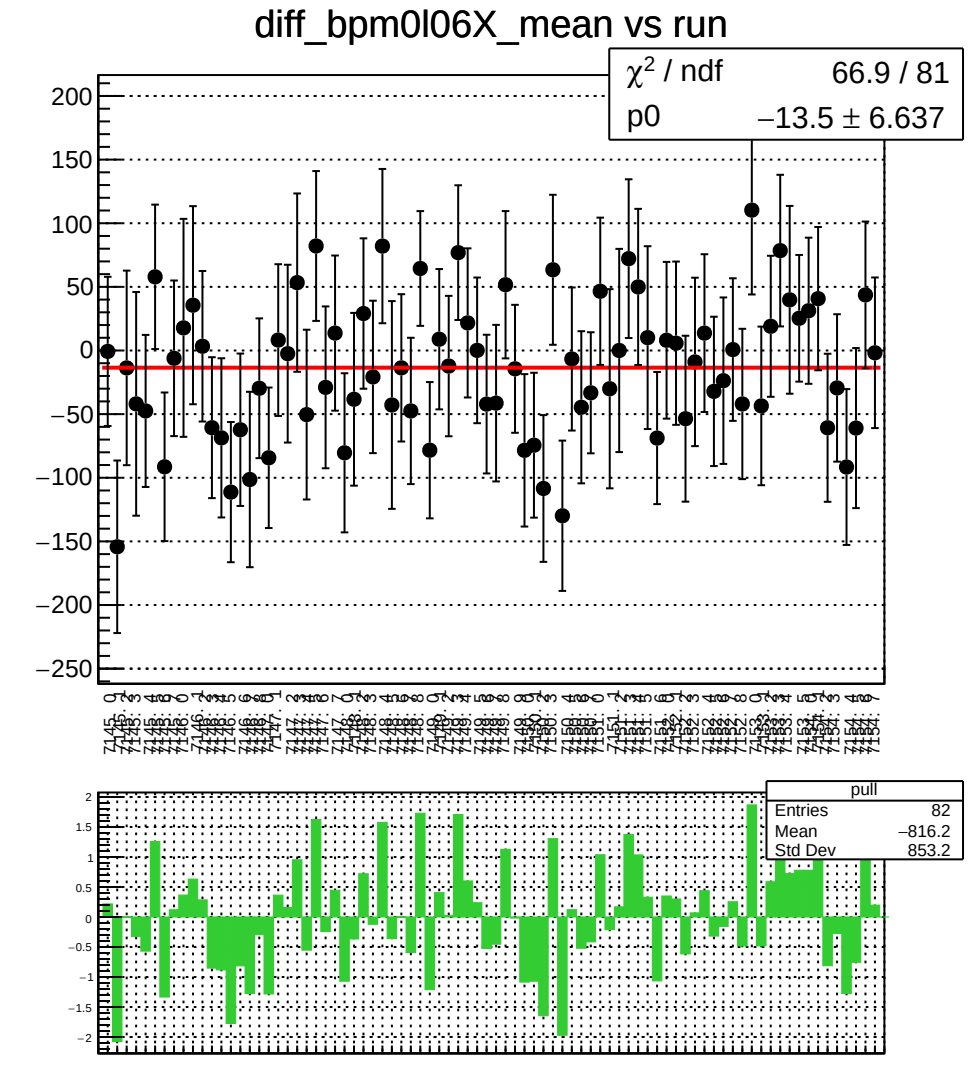

pull1D
Entries 82
Mean 0.0008433
Std Dev 0.9503

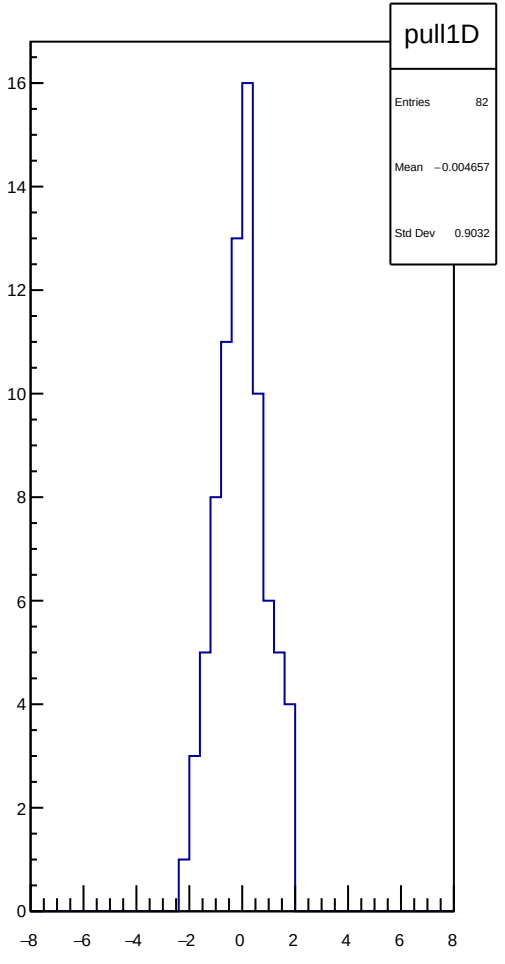

diff_bpm0l05X_rms vs run
χ² / ndf 1.086e+04 / 81
p0 5852 ± 4.696
7500
7000
6500
6000
5500
5000

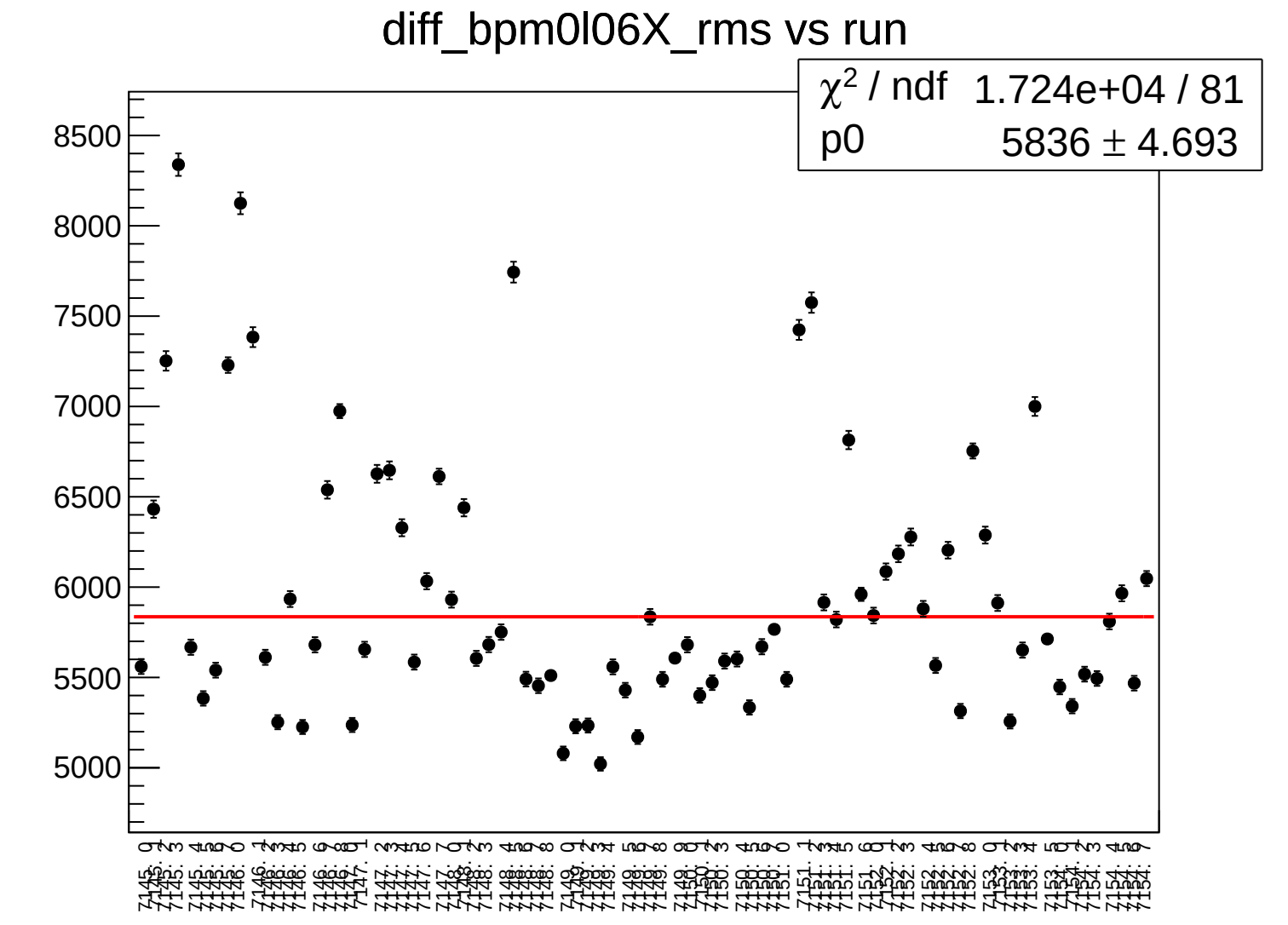

diff_bpm0l05Y_mean vs run
χ² / ndf 79.01 / 81
p0 13.16 ± 2.116
pull
Entries 82
Mean 225.5
Std Dev 155.9

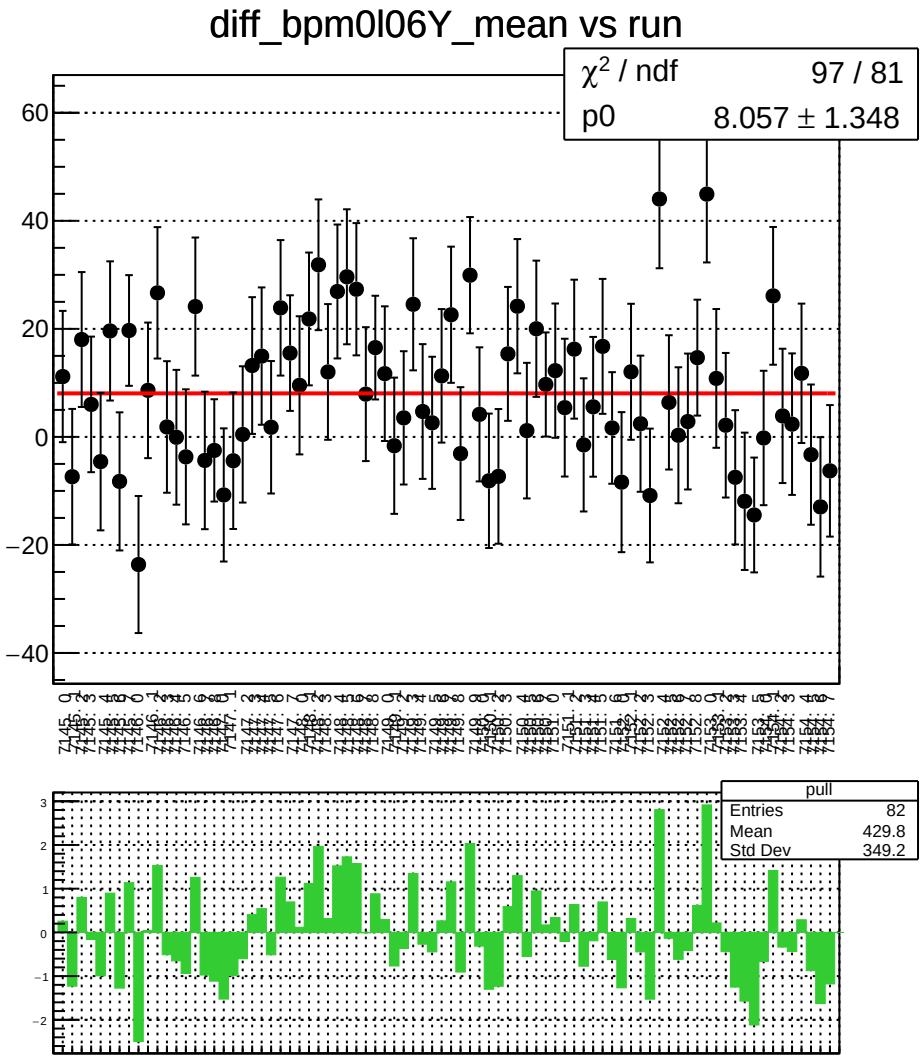

pull1D
Entries 82
Mean −0.008168
Std Dev 0.9816

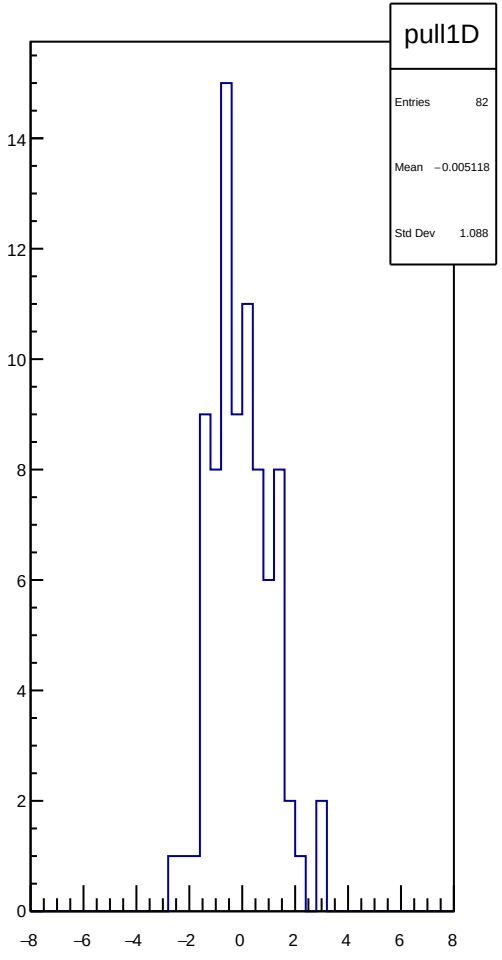

diff_bpm0l05Y_rms vs run
χ² / ndf 6158 / 81
p0 1867 ± 1.496
2600
2400
2200
2000
1800

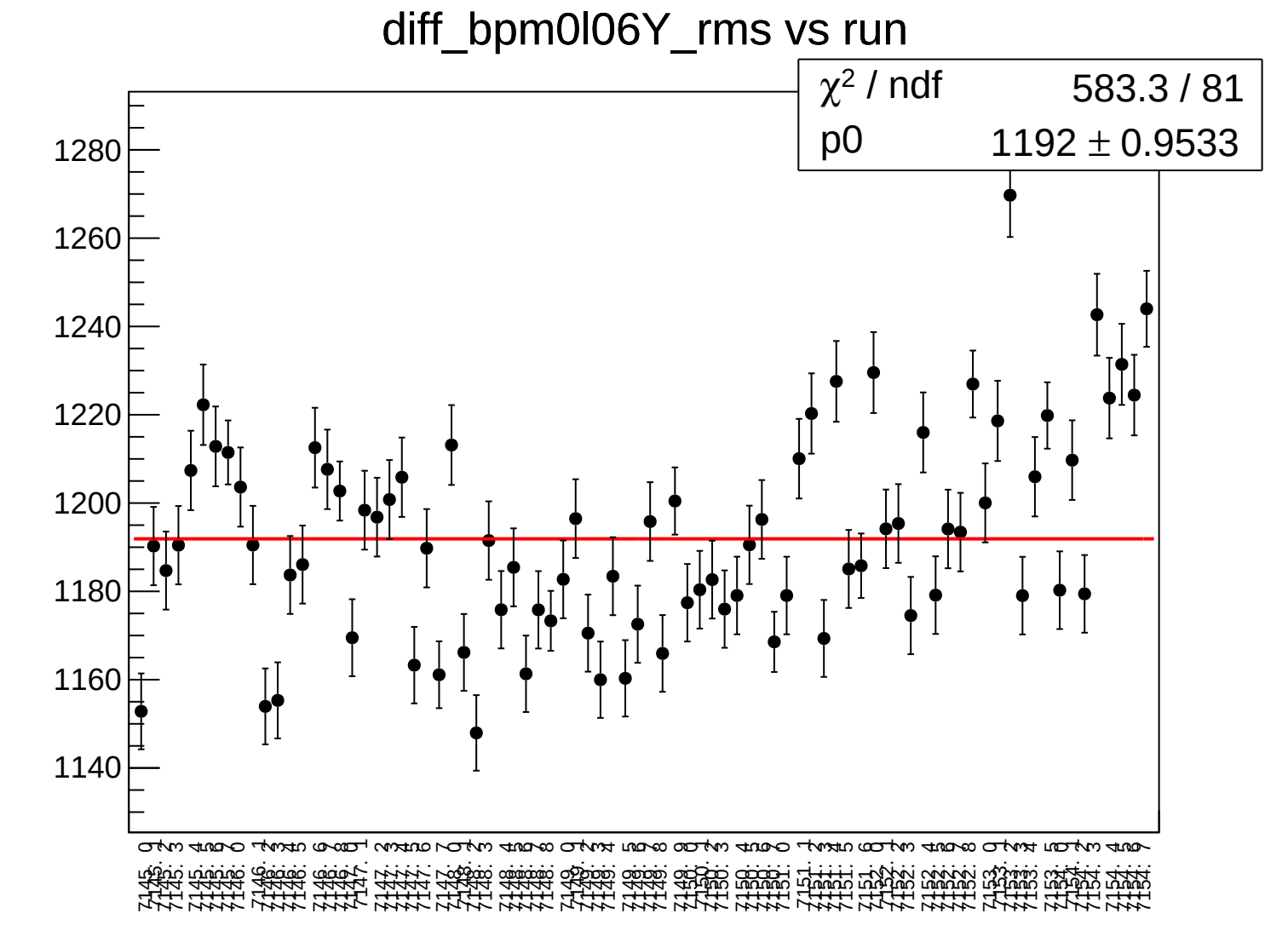

diff_bpm0l06X_mean vs run
χ² / ndf 66.9 / 81
p0 −13.5 ± 6.637
pull
Entries 82
Mean −816.2
Std Dev 853.2

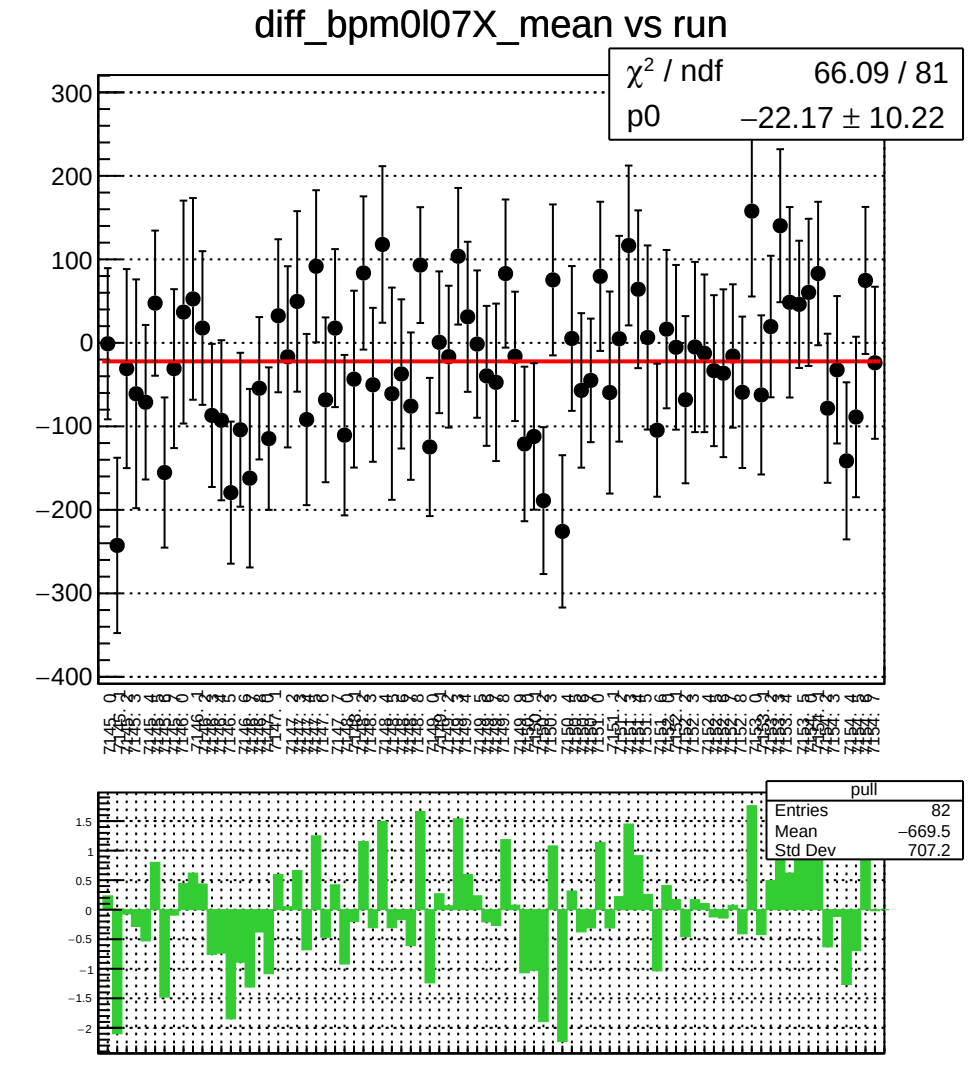

pull1D
Entries 82
Mean −0.004657
Std Dev 0.9032

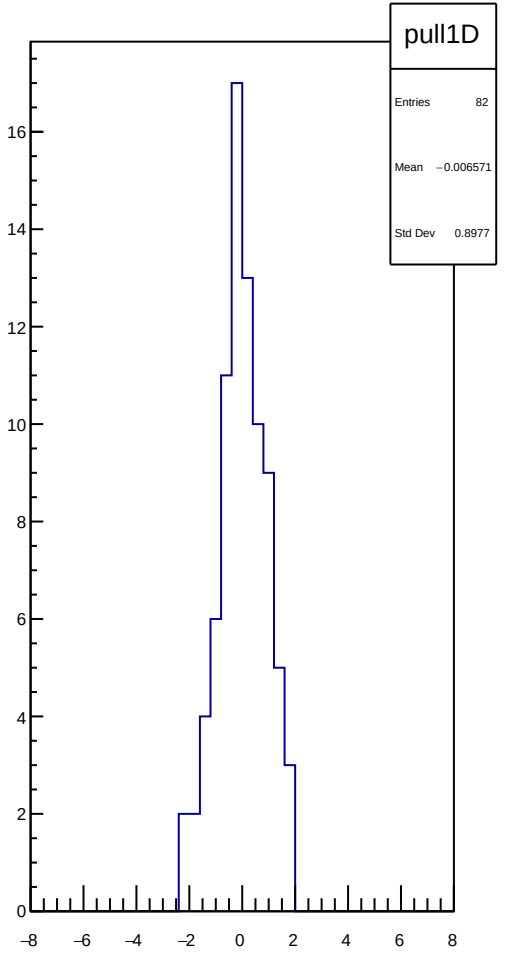

diff_bpm0l06X_rms vs run
χ² / ndf 1.724e+04 / 81
p0 5836 ± 4.693
8500
8000
7500
7000
6500
6000
5500
5000

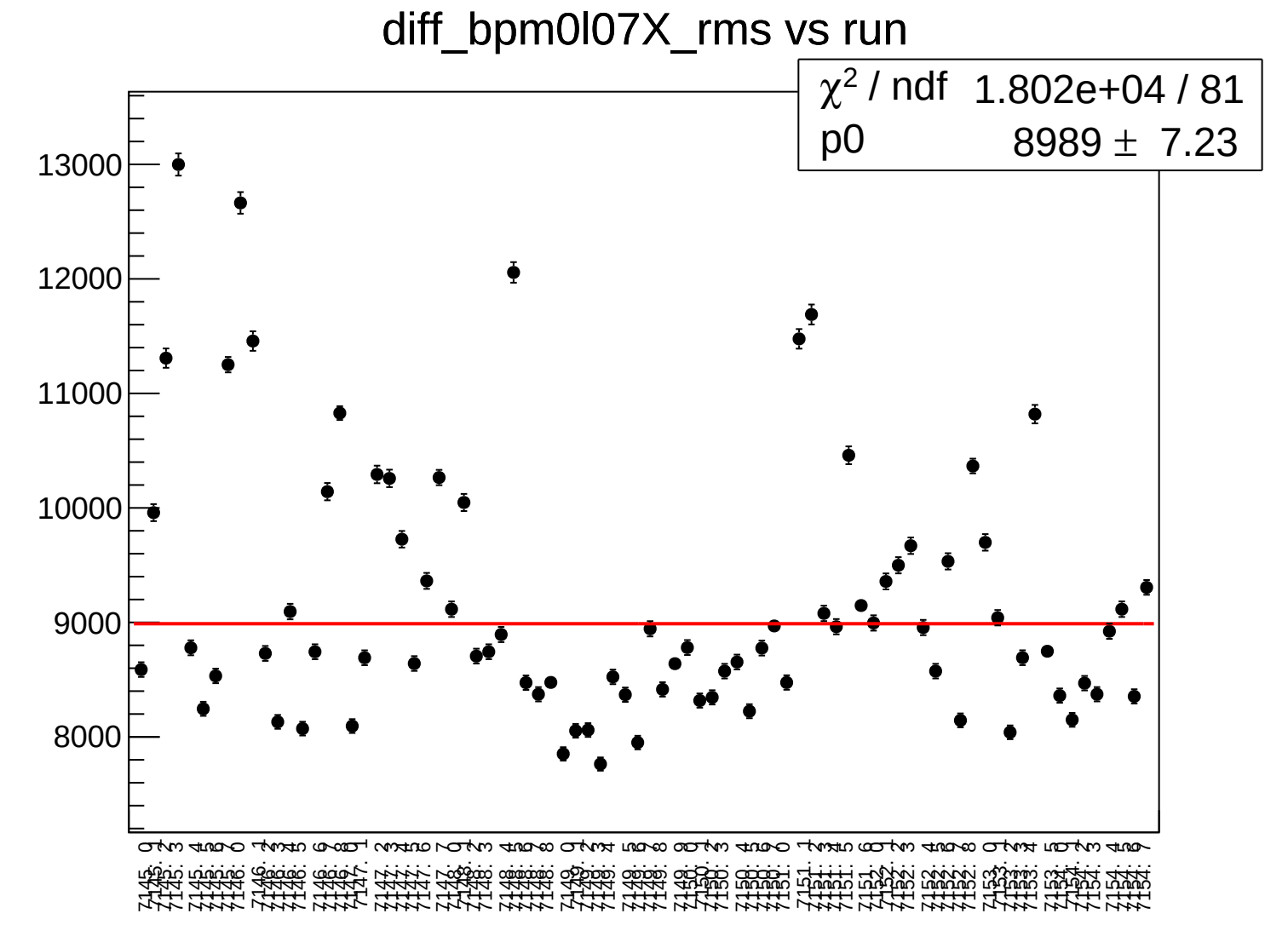

diff_bpm0l06Y_mean vs run
χ² / ndf 97 / 81
p0 8.057 ± 1.348
pull
Entries 82
Mean 429.8
Std Dev 349.2

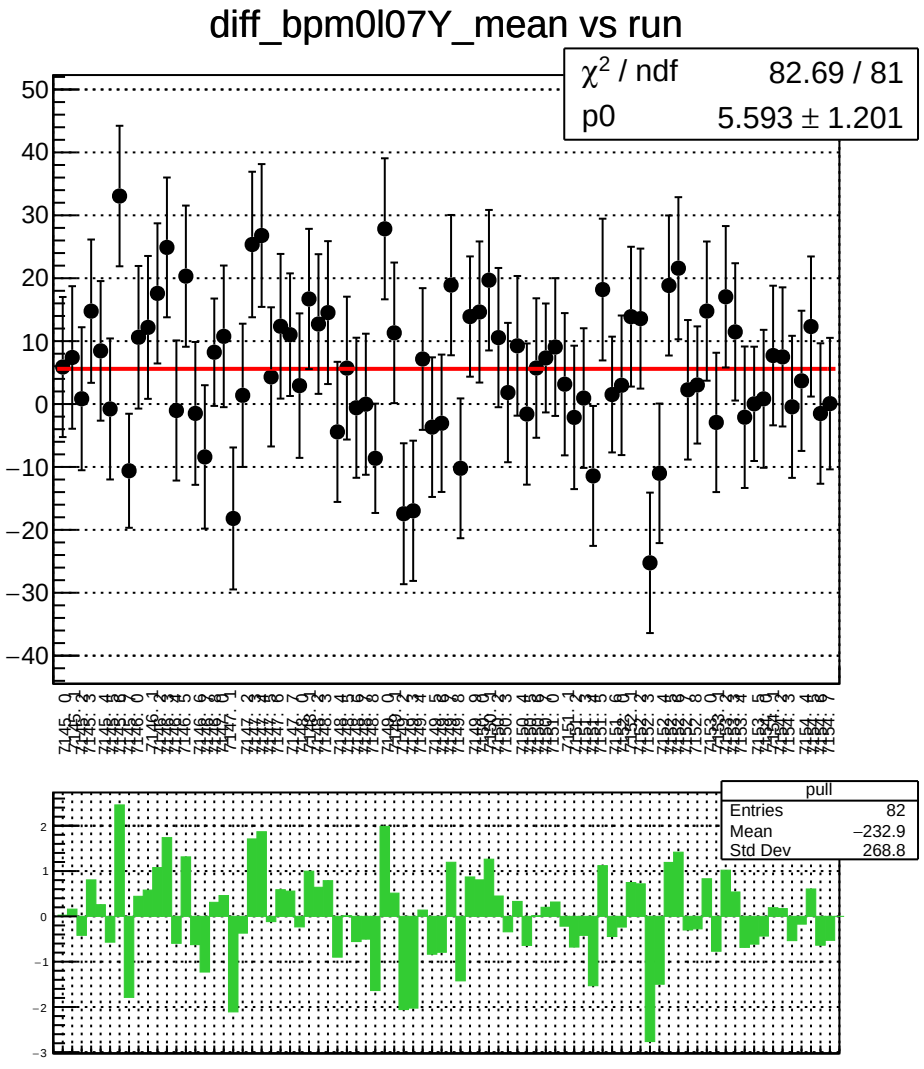

pull1D
Entries 82
Mean −0.005118
Std Dev 1.088

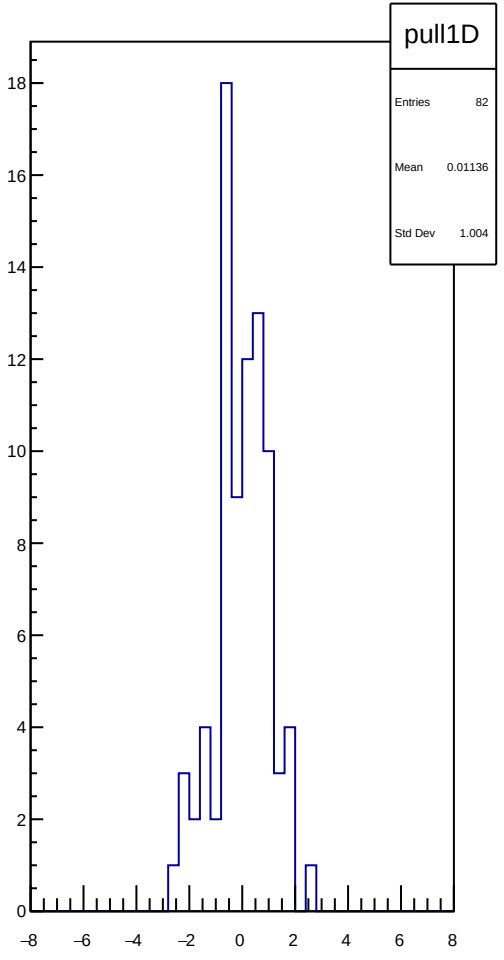

diff_bpm0l06Y_rms vs run
χ² / ndf 583.3 / 81
p0 1192 ± 0.9533
1280
1260
1240
1220
1200
1180
1160
1140

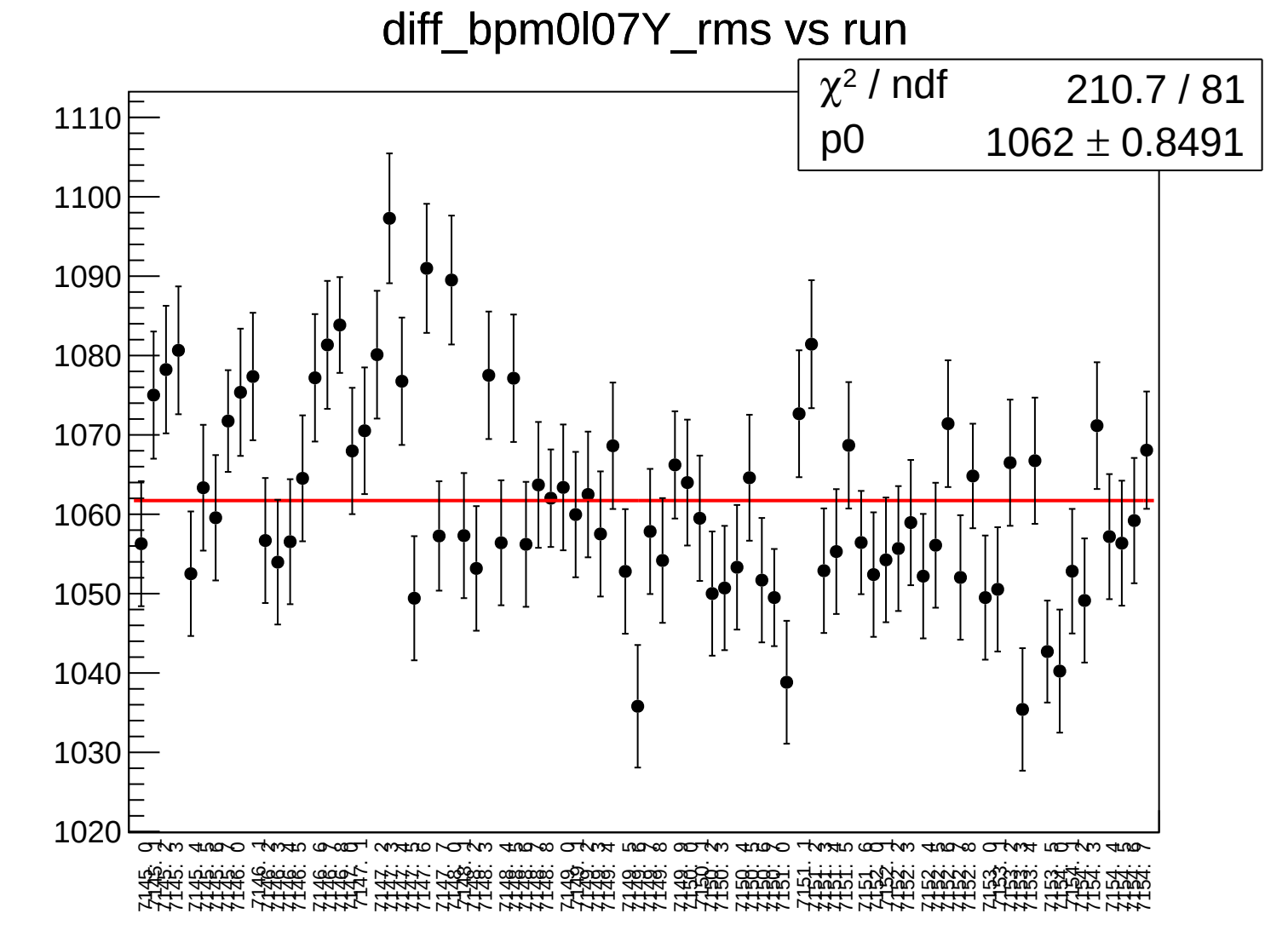

diff_bpm0l07X_mean vs run
χ² / ndf 66.09 / 81
p0 −22.17 ± 10.22
pull
Entries 82
Mean −669.5
Std Dev 707.2

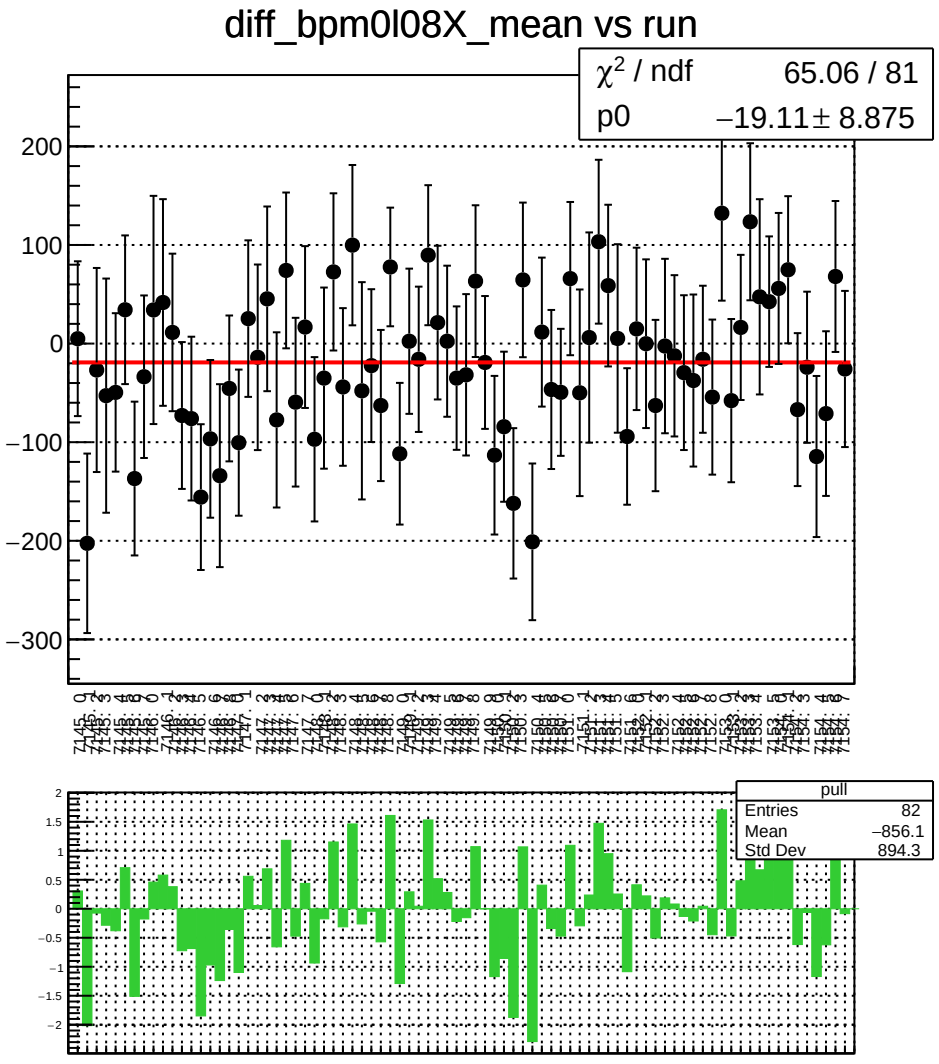

pull1D
Entries 82
Mean −0.006571
Std Dev 0.8977

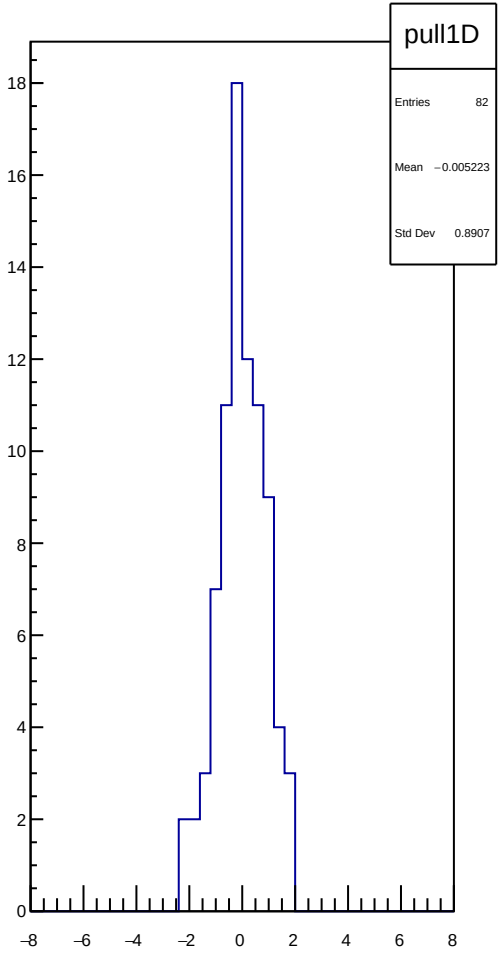

diff_bpm0l07X_rms vs run
χ² / ndf 1.802e+04 / 81
p0 8989 ± 7.23
13000
12000
11000
10000
9000
8000

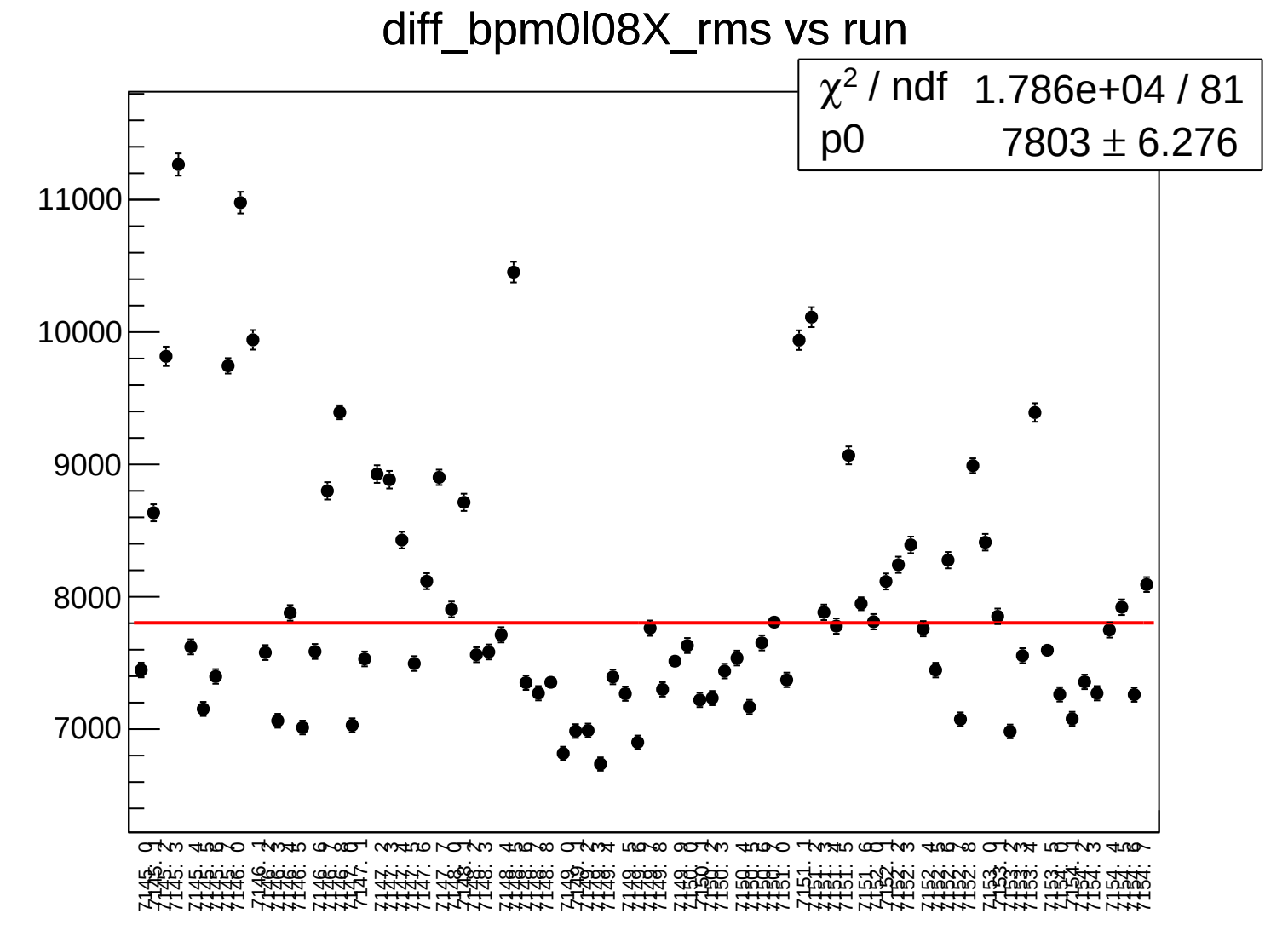

diff_bpm0l07Y_mean vs run
χ² / ndf 82.69 / 81
p0 5.593 ± 1.201
pull
Entries 82
Mean −232.9
Std Dev 268.8

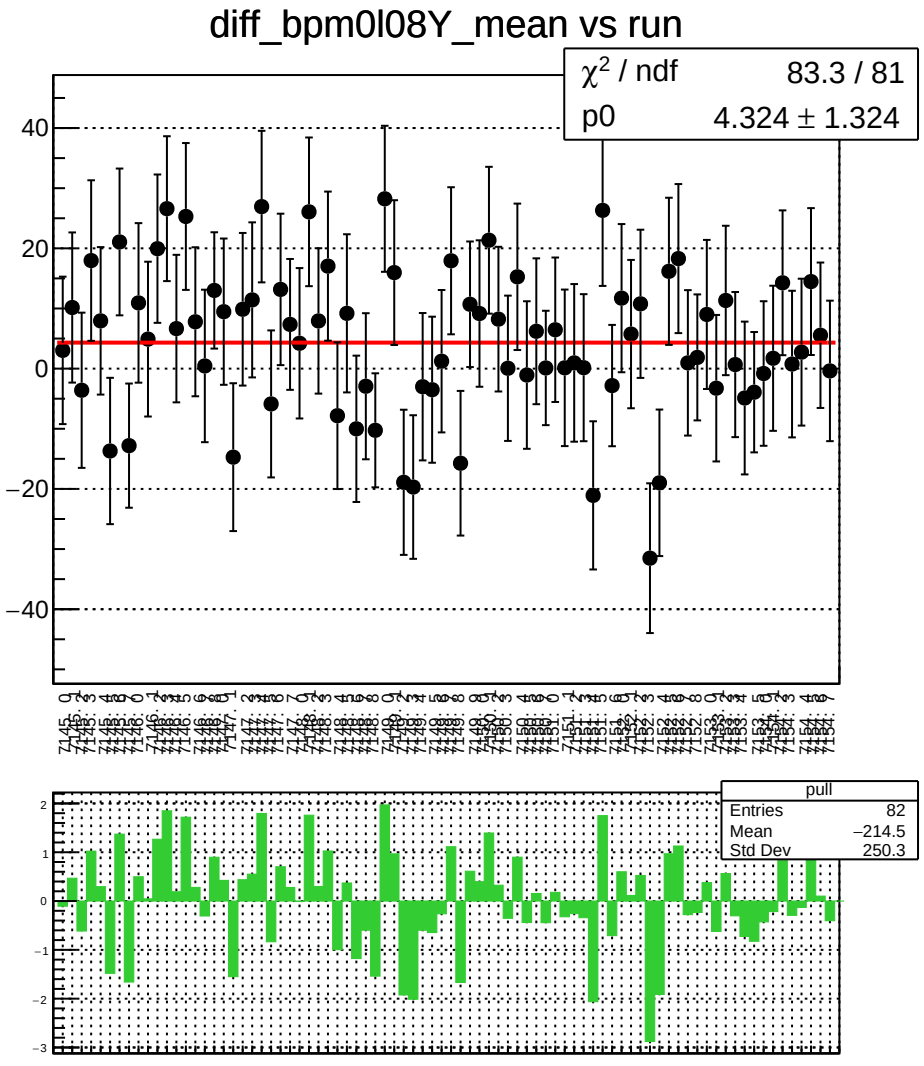

pull1D
Entries 82
Mean 0.01136
Std Dev 1.004

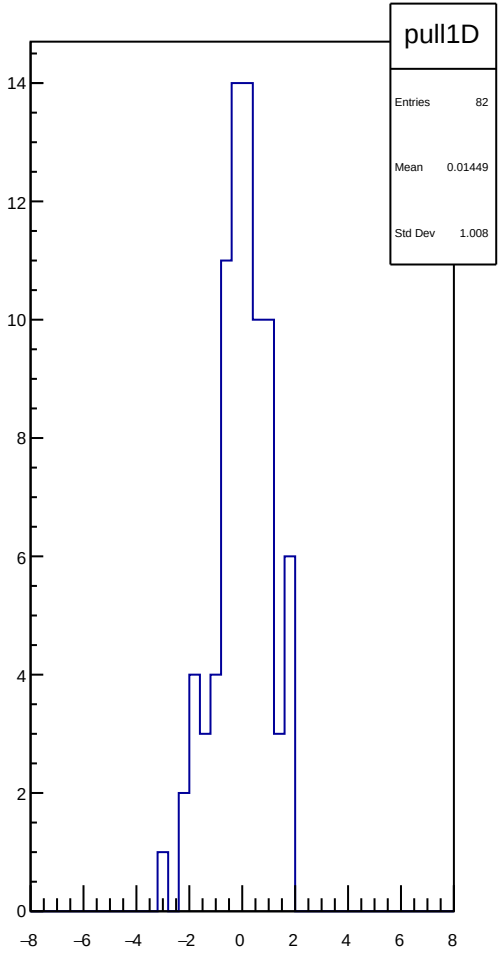

diff_bpm0l07Y_rms vs run
χ² / ndf 210.7 / 81
p0 1062 ± 0.8491
1110
1100
1090
1080
1070
1060
1050
1040
1030
1020

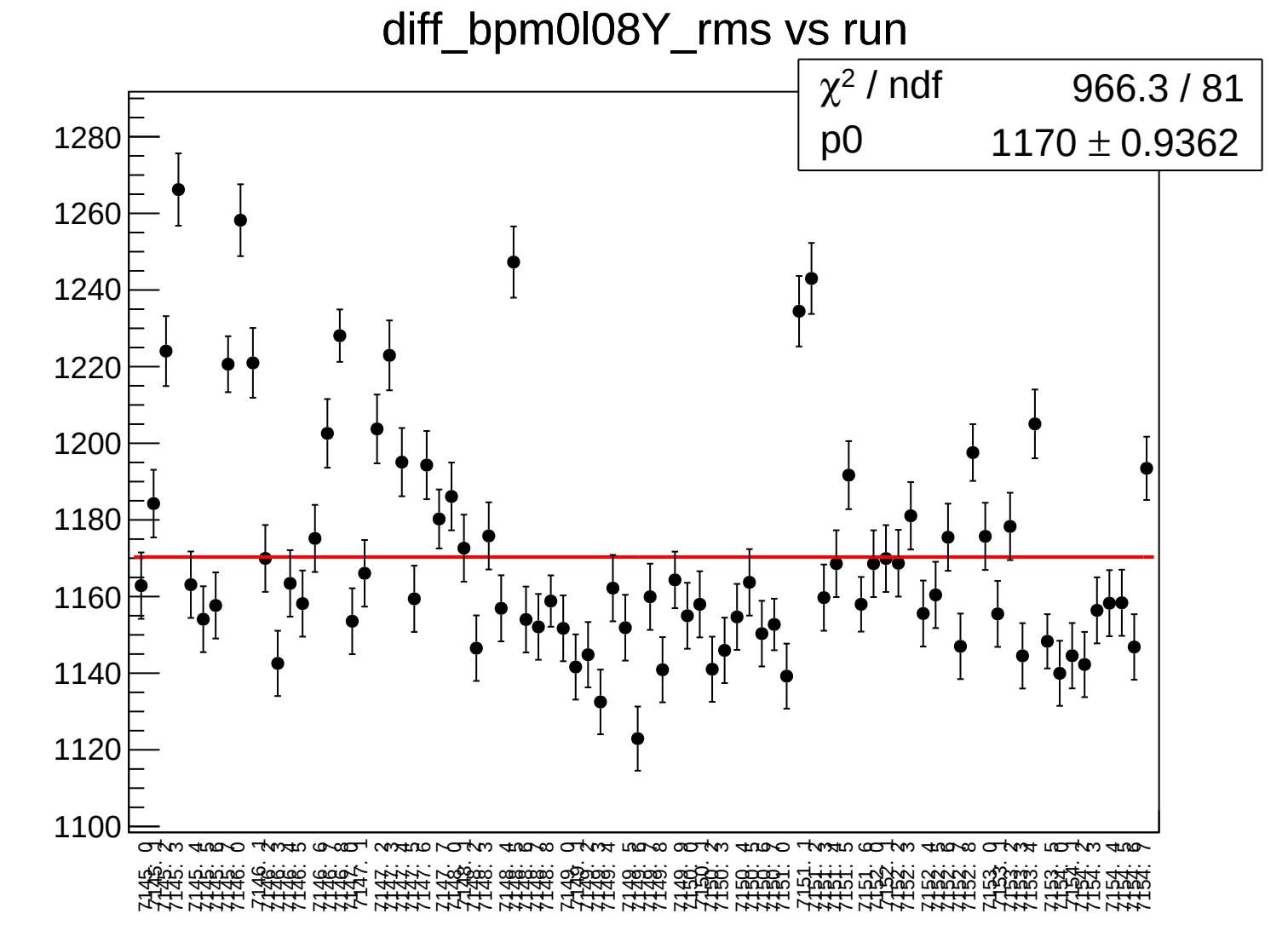

diff_bpm0l08X_mean vs run
χ² / ndf 65.06 / 81
p0 −19.11 ± 8.875
pull
Entries 82
Mean −856.1
Std Dev 894.3

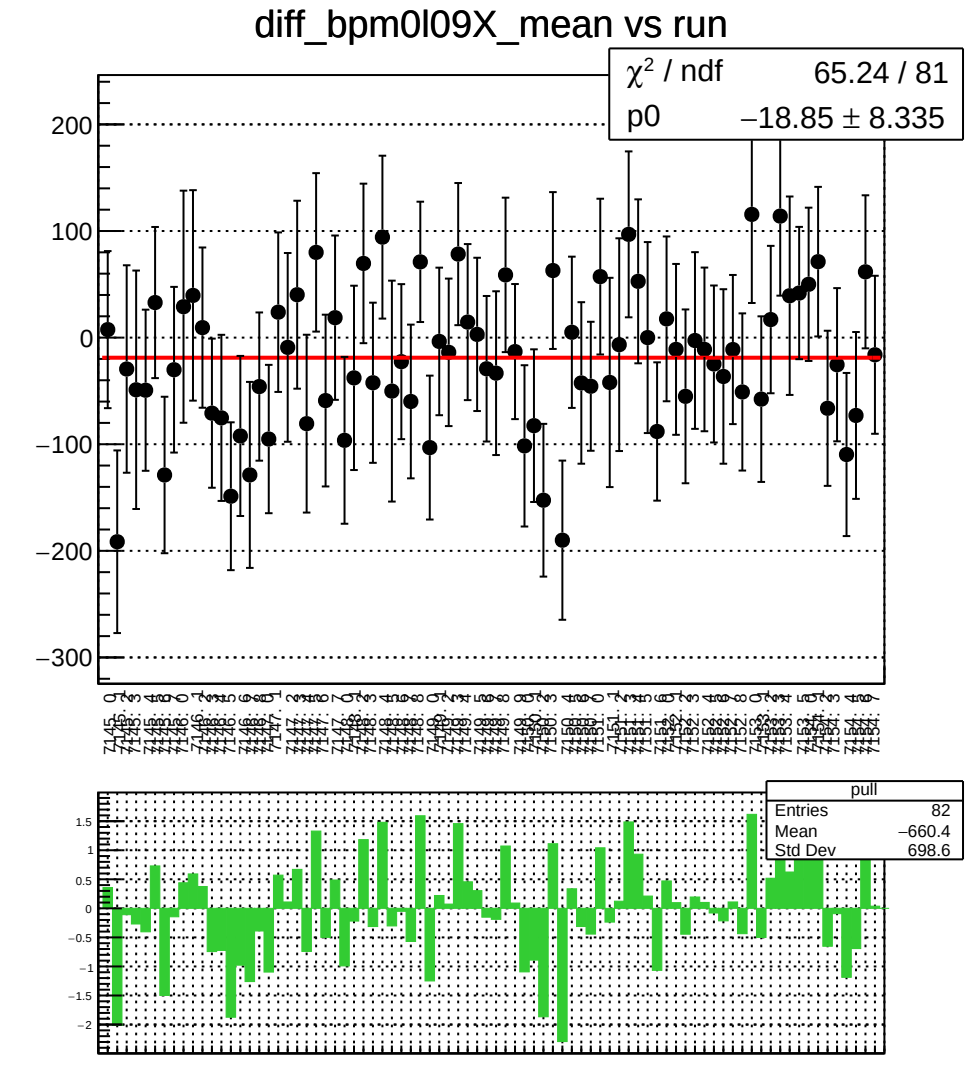

pull1D
Entries 82
Mean −0.005223
Std Dev 0.8907

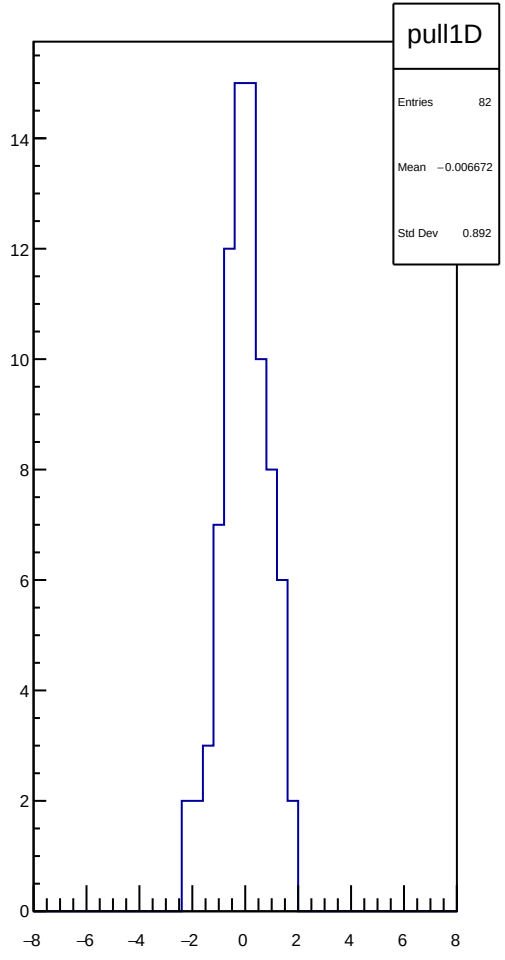

diff_bpm0l08X_rms vs run
χ² / ndf 1.786e+04 / 81
p0 7803 ± 6.276
11000
10000
9000
8000
7000

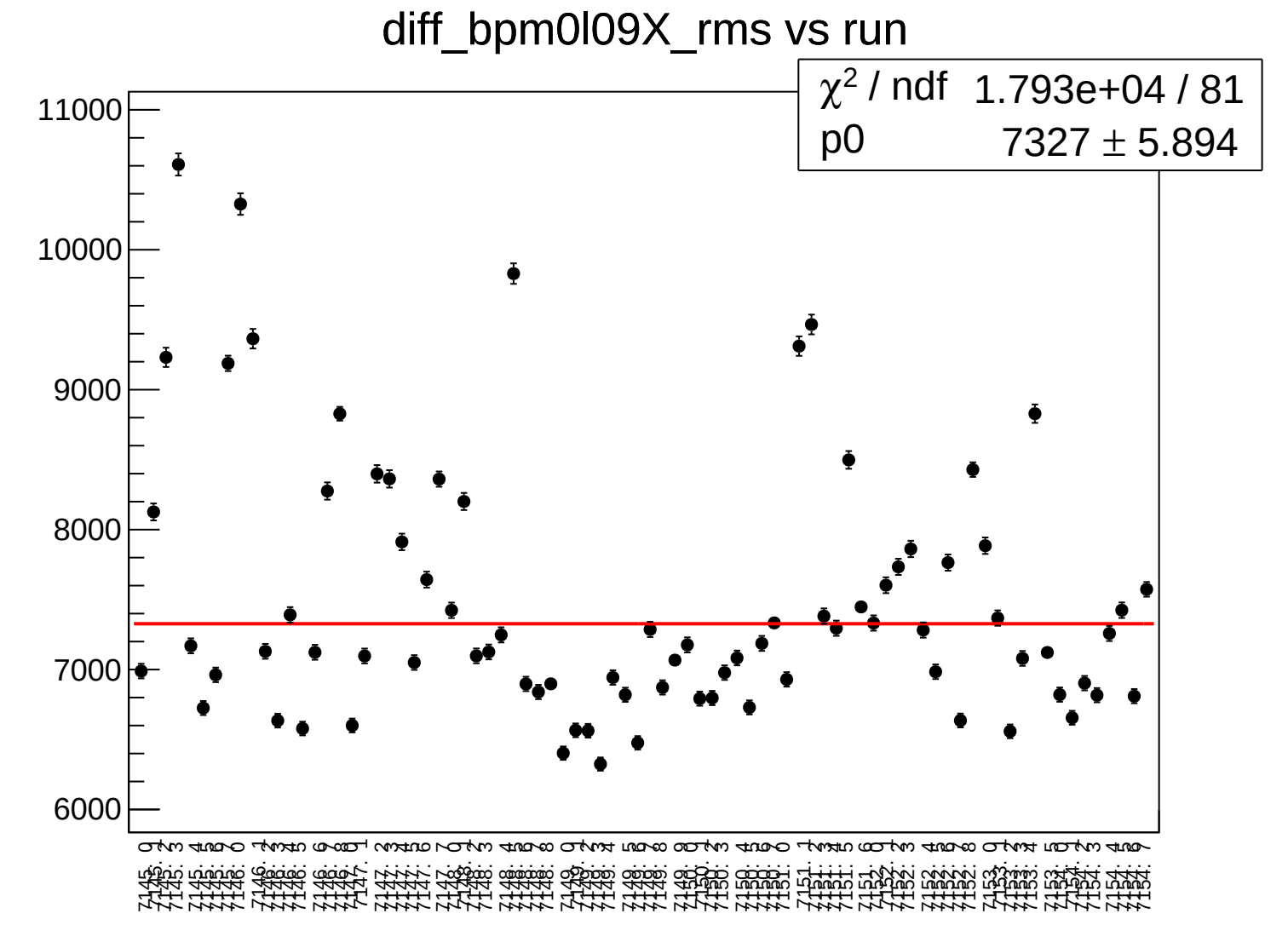

diff_bpm0l08Y_mean vs run
χ^2 / ndf 83.3 / 81
p0 4.324 ± 1.324
pull
Entries 82
Mean −214.5
Std Dev 250.3

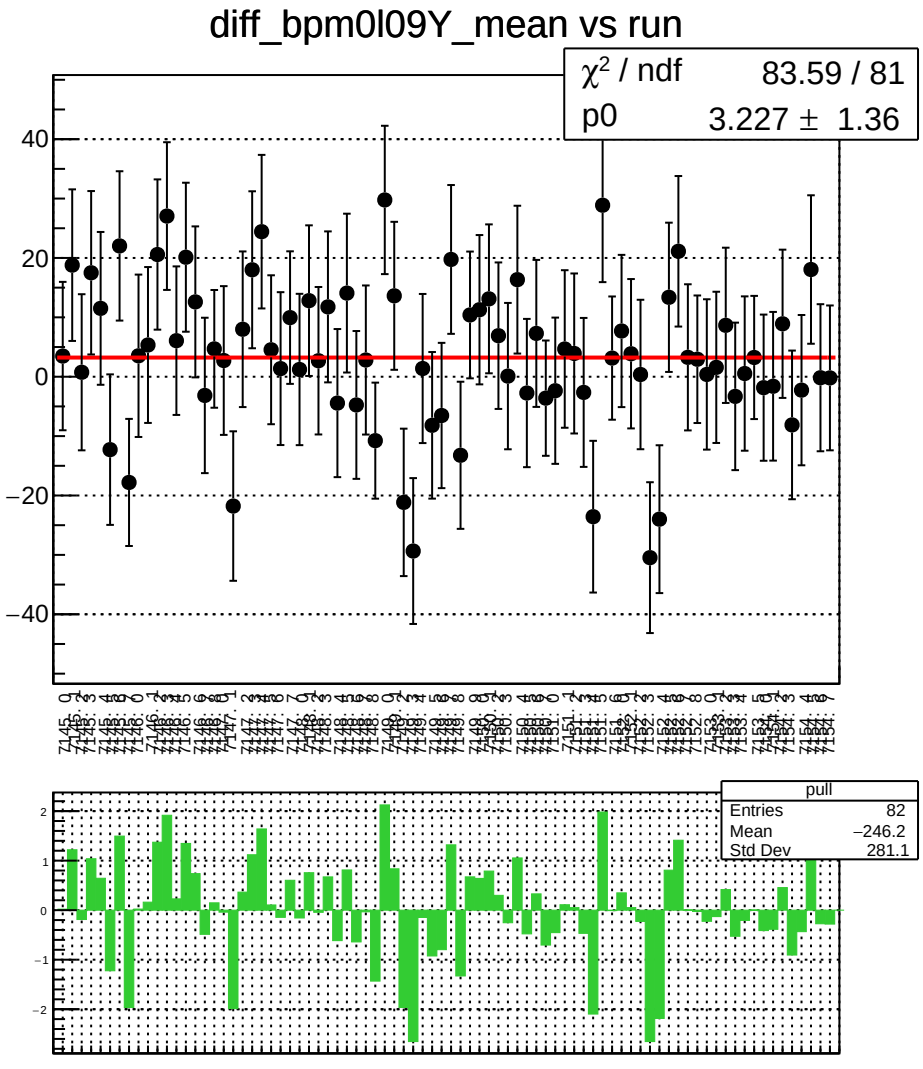

pull1D
Entries 82
Mean 0.01449
Std Dev 1.008

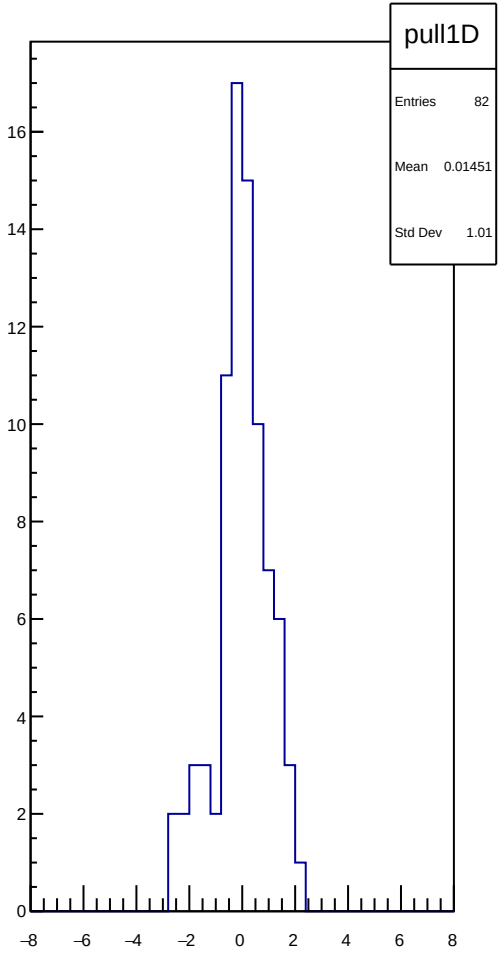

diff_bpm0l08Y_rms vs run
χ² / ndf 966.3 / 81
p0 1170 ± 0.9362
1280
1260
1240
1220
1200
1180
1160
1140
1120
1100

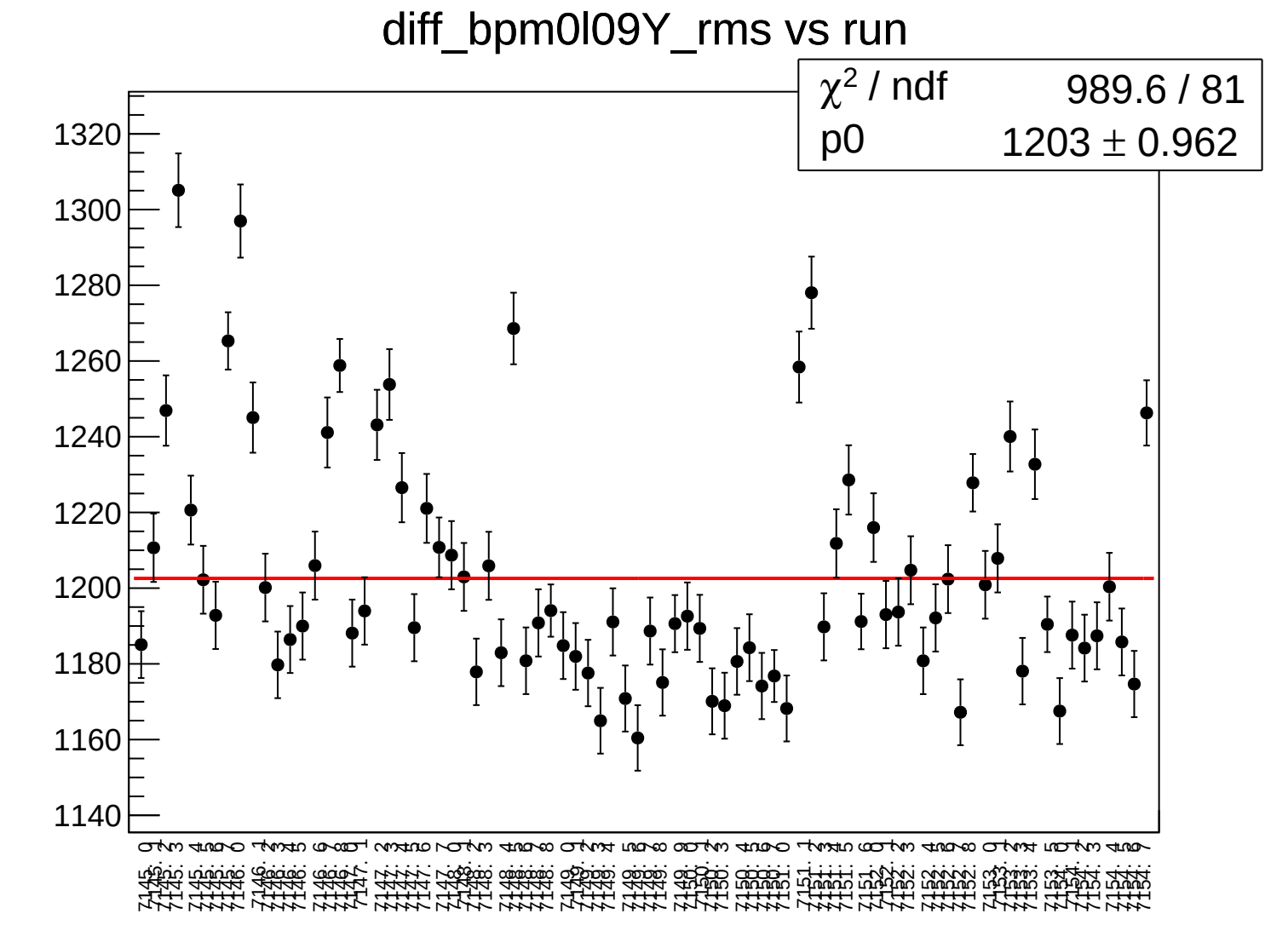

diff_bpm0l09X_mean vs run
χ² / ndf 65.24 / 81
p0 −18.85 ± 8.335
pull
Entries 82
Mean −660.4
Std Dev 698.6

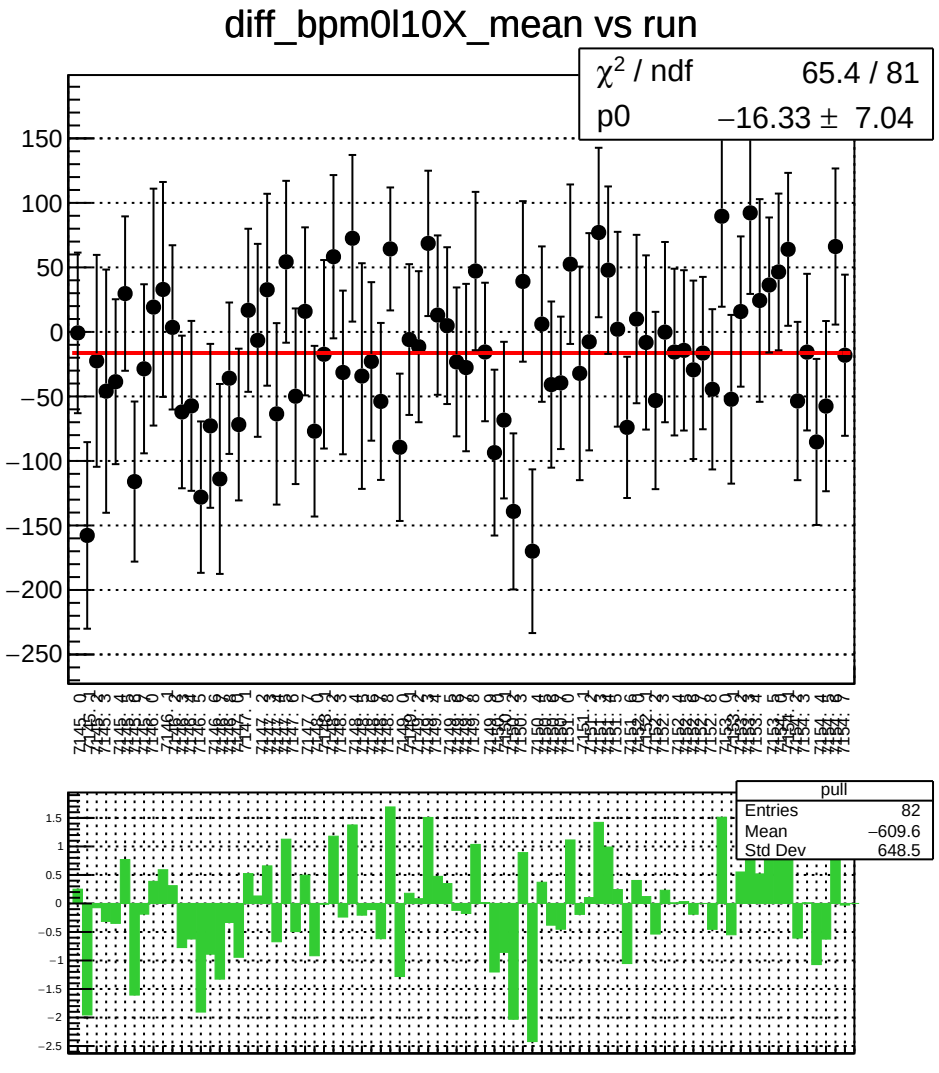

pull1D
Entries 82
Mean −0.006672
Std Dev 0.892

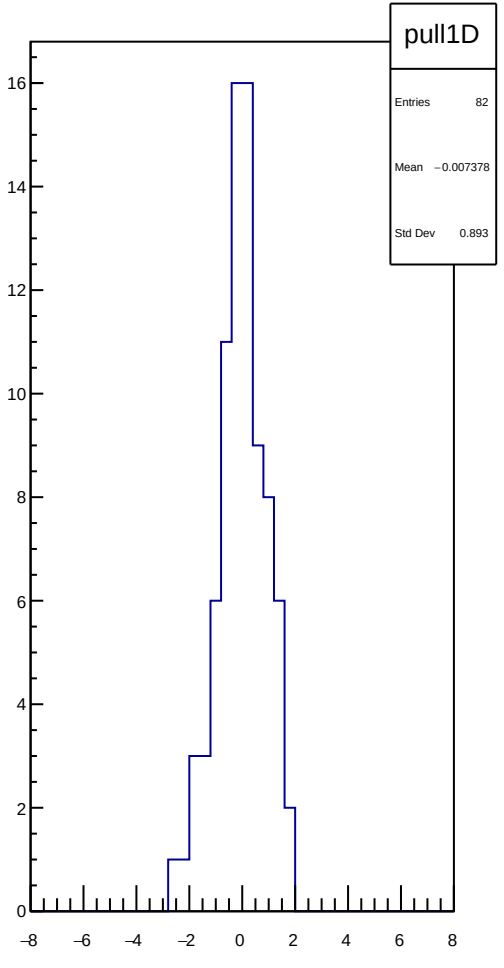

diff_bpm0l09X_rms vs run
χ² / ndf 1.793e+04 / 81
p0 7327 ± 5.894
11000
10000
9000
8000
7000
6000

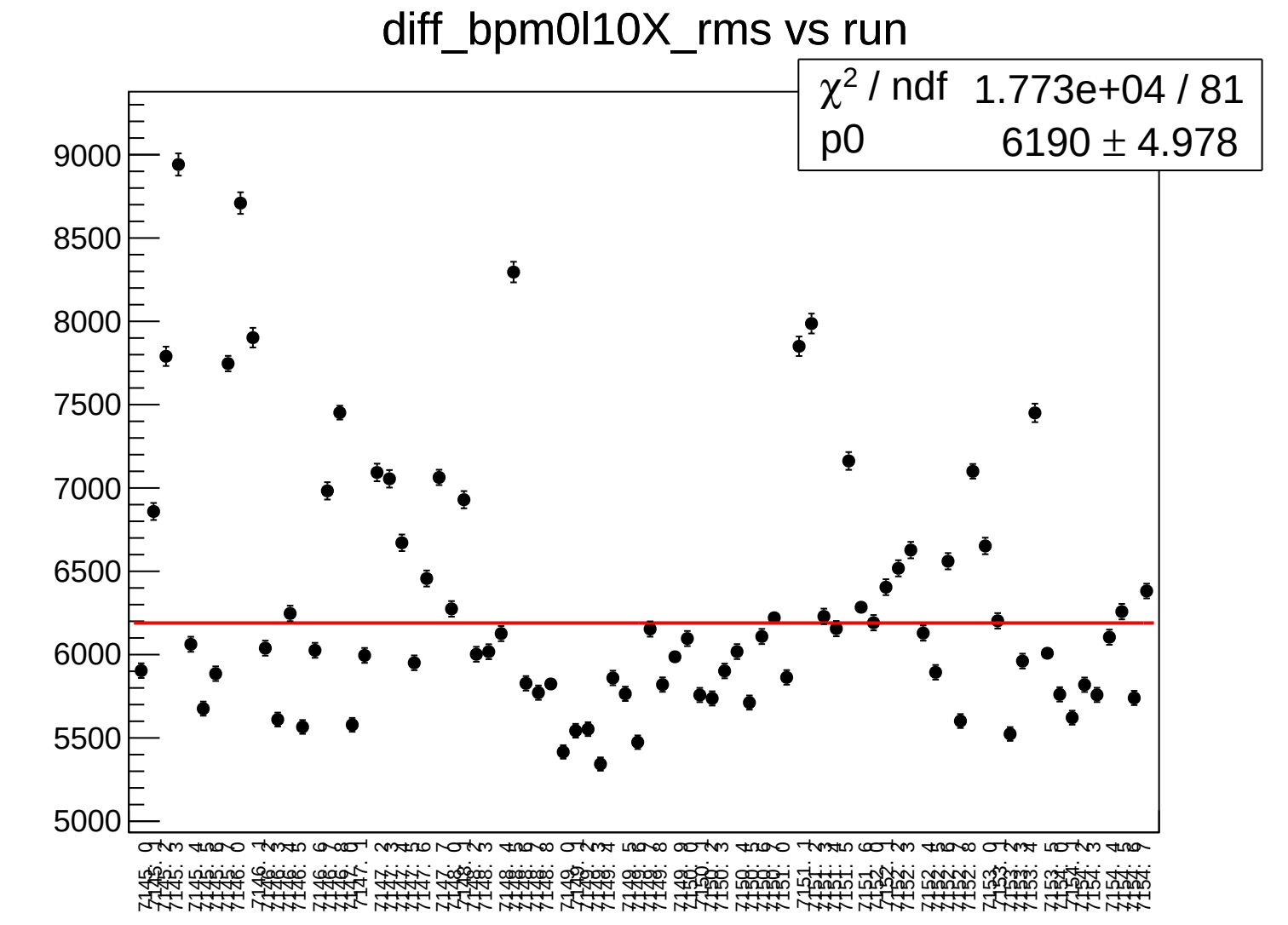

diff_bpm0l09Y_mean vs run
χ^2 / ndf 83.59 / 81
p0 3.227 ± 1.36
pull
Entries 82
Mean −246.2
Std Dev 281.1

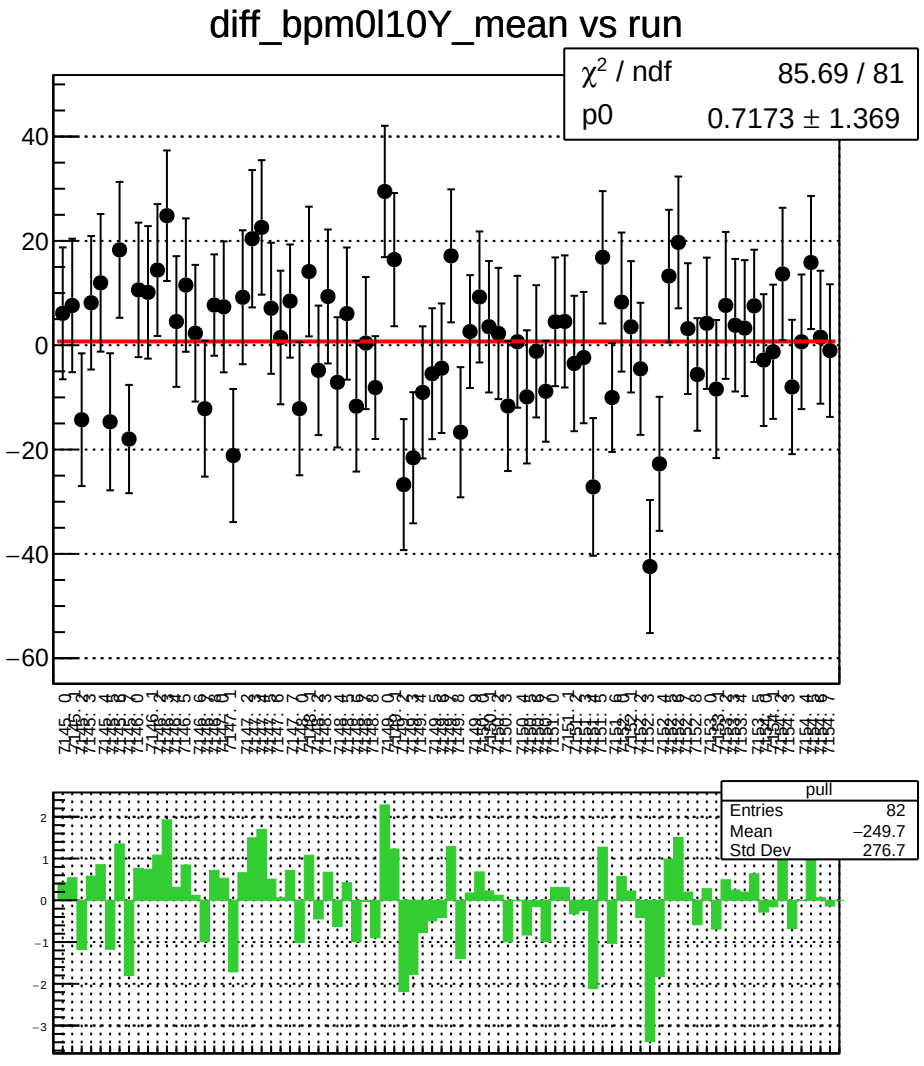

pull1D
Entries 82
Mean 0.01451
Std Dev 1.01

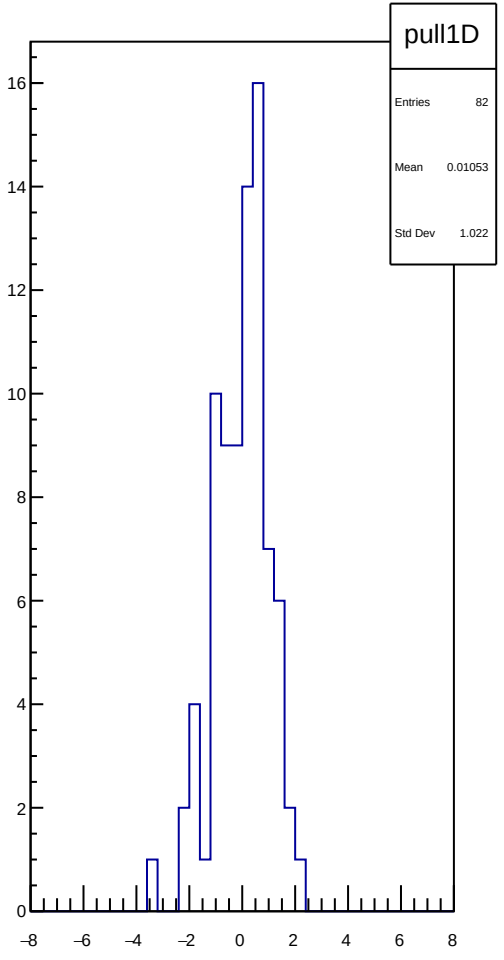

diff_bpm0l09Y_rms vs run
χ² / ndf 989.6 / 81
p0 1203 ± 0.962
1320
1300
1280
1260
1240
1220
1200
1180
1160
1140

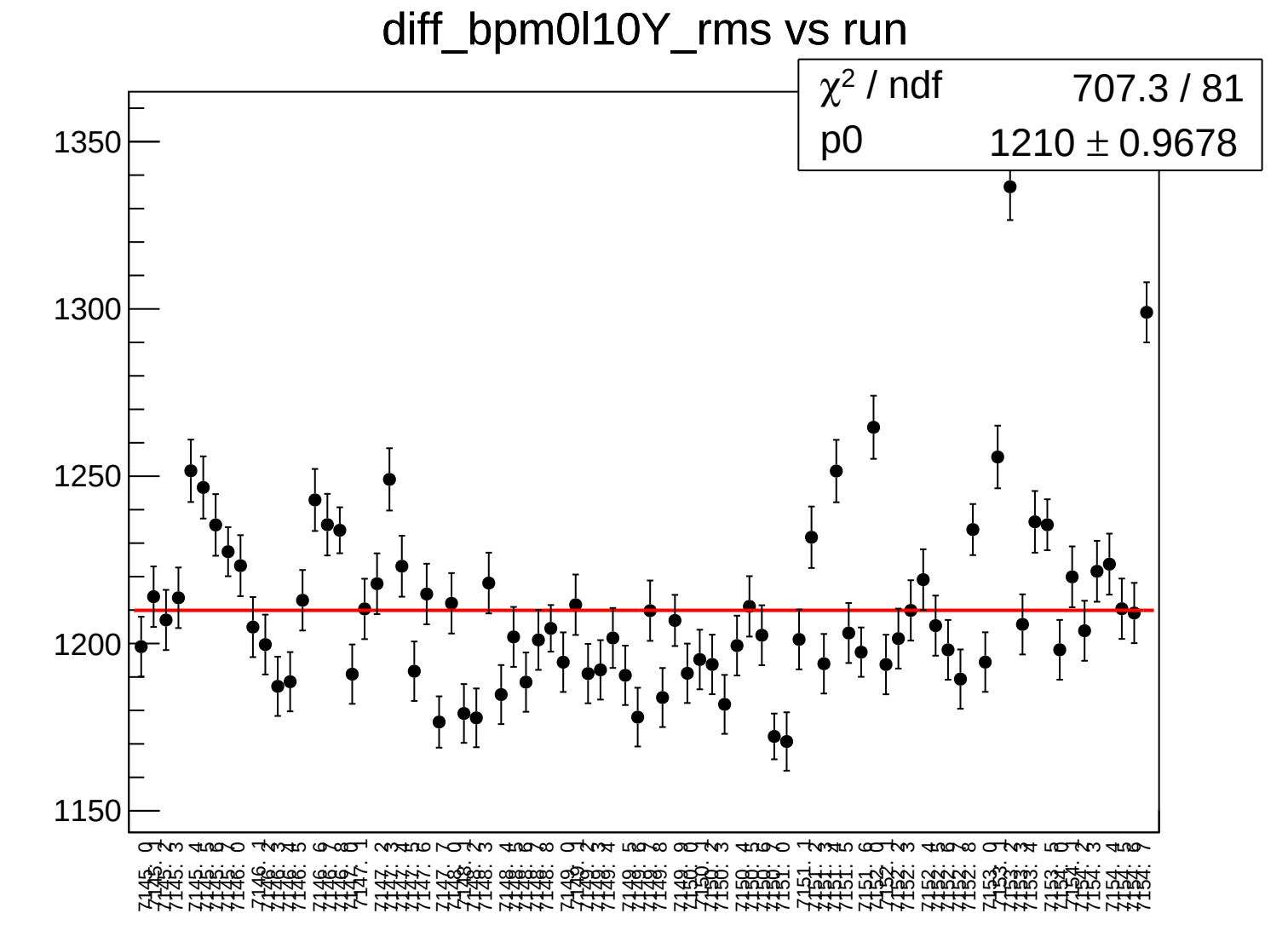

diff_bpm0l10X_mean vs run
χ² / ndf 65.4 / 81
p0 −16.33 ± 7.04
pull
Entries 82
Mean −609.6
Std Dev 648.5

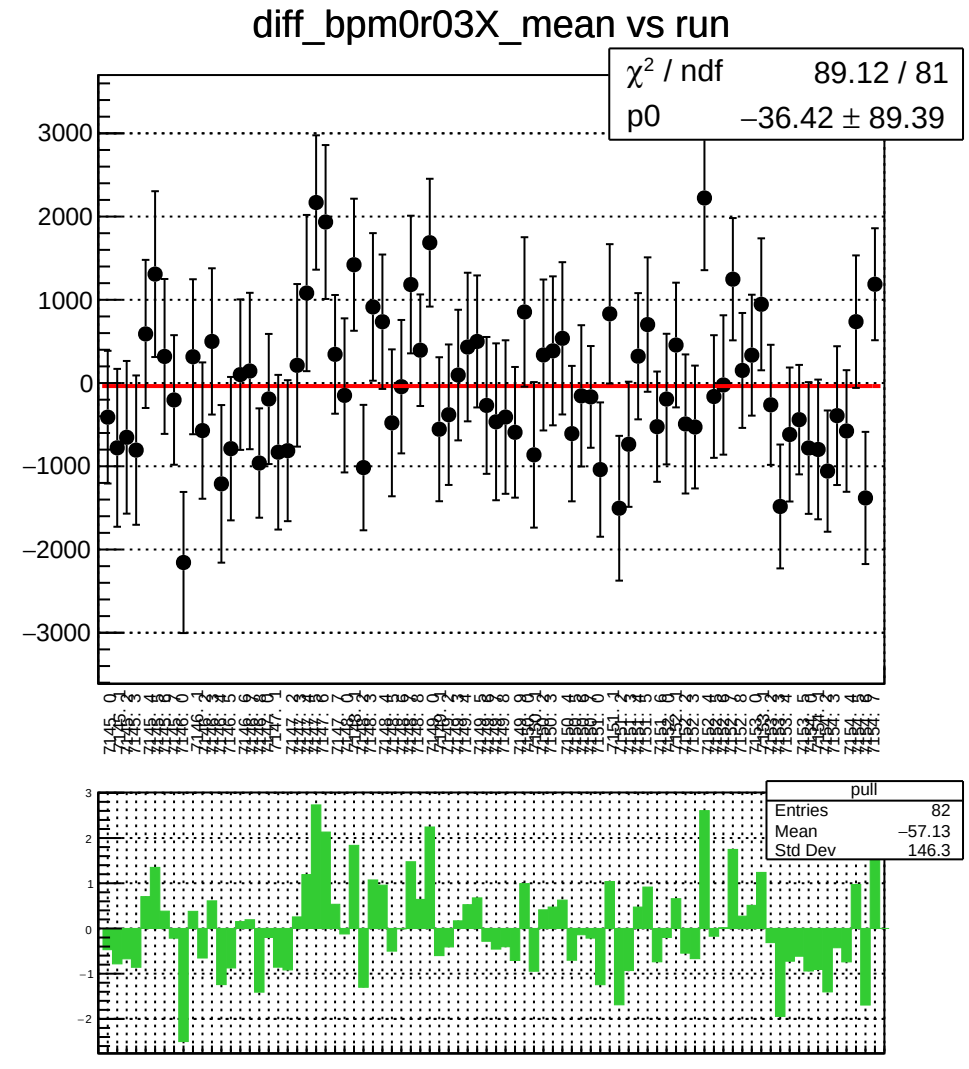

pull1D
Entries 82
Mean −0.007378
Std Dev 0.893

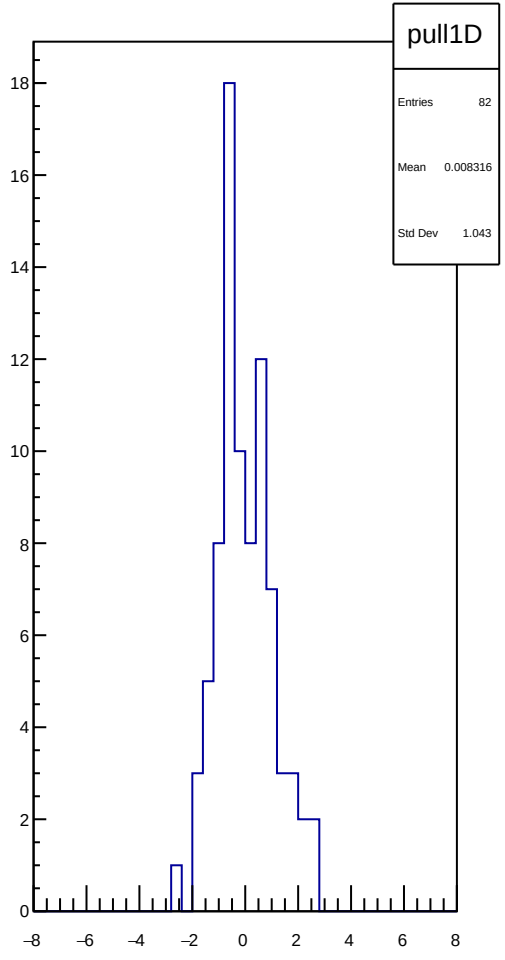

diff_bpm0l10X_rms vs run
χ² / ndf 1.773e+04 / 81
p0 6190 ± 4.978
9000
8500
8000
7500
7000
6500
6000
5500
5000

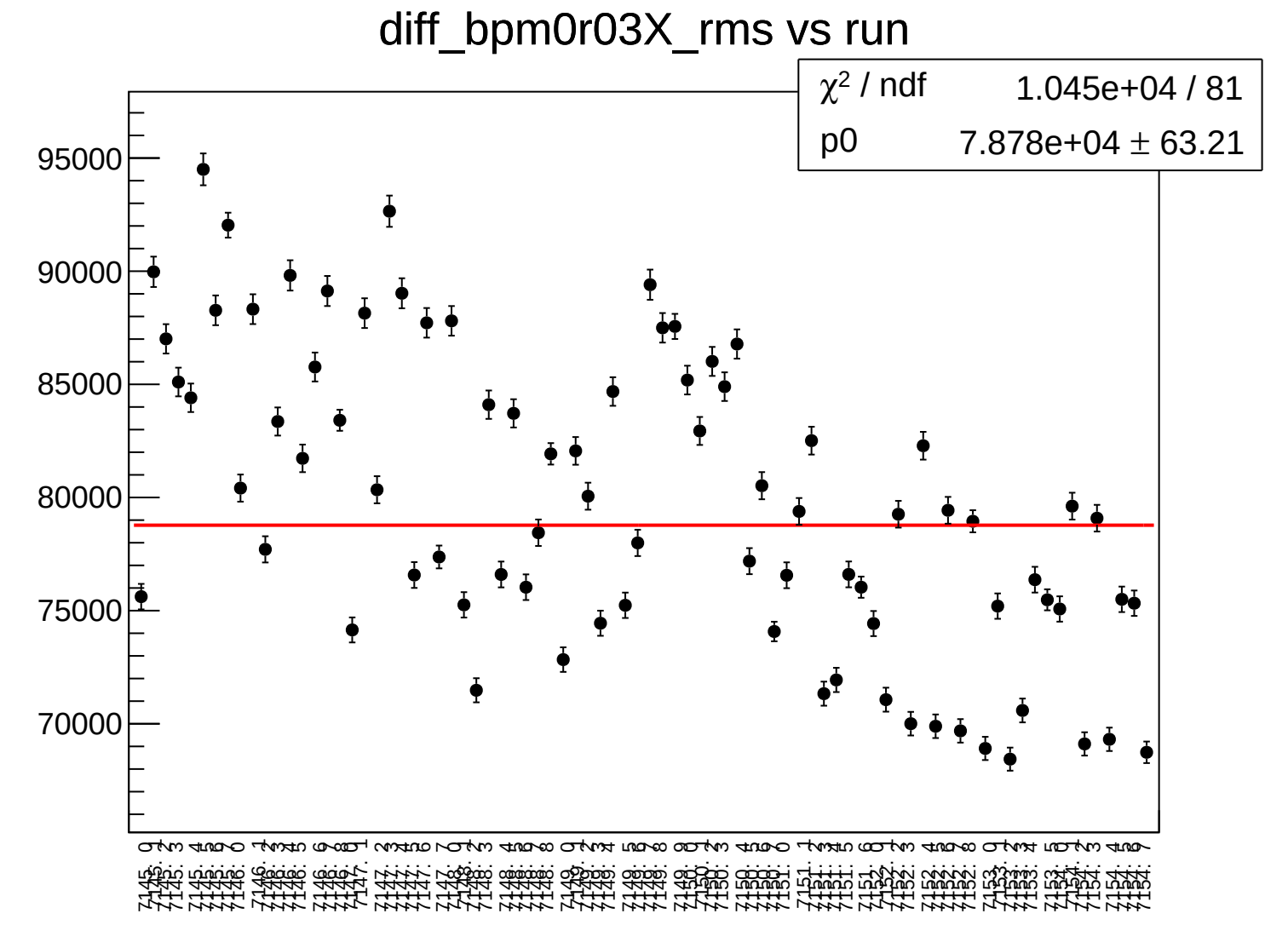

diff_bpm0l10Y_mean vs run
χ^2 / ndf 85.69 / 81
p0 0.7173 ± 1.369
pull
Entries 82
Mean −249.7
Std Dev 276.7

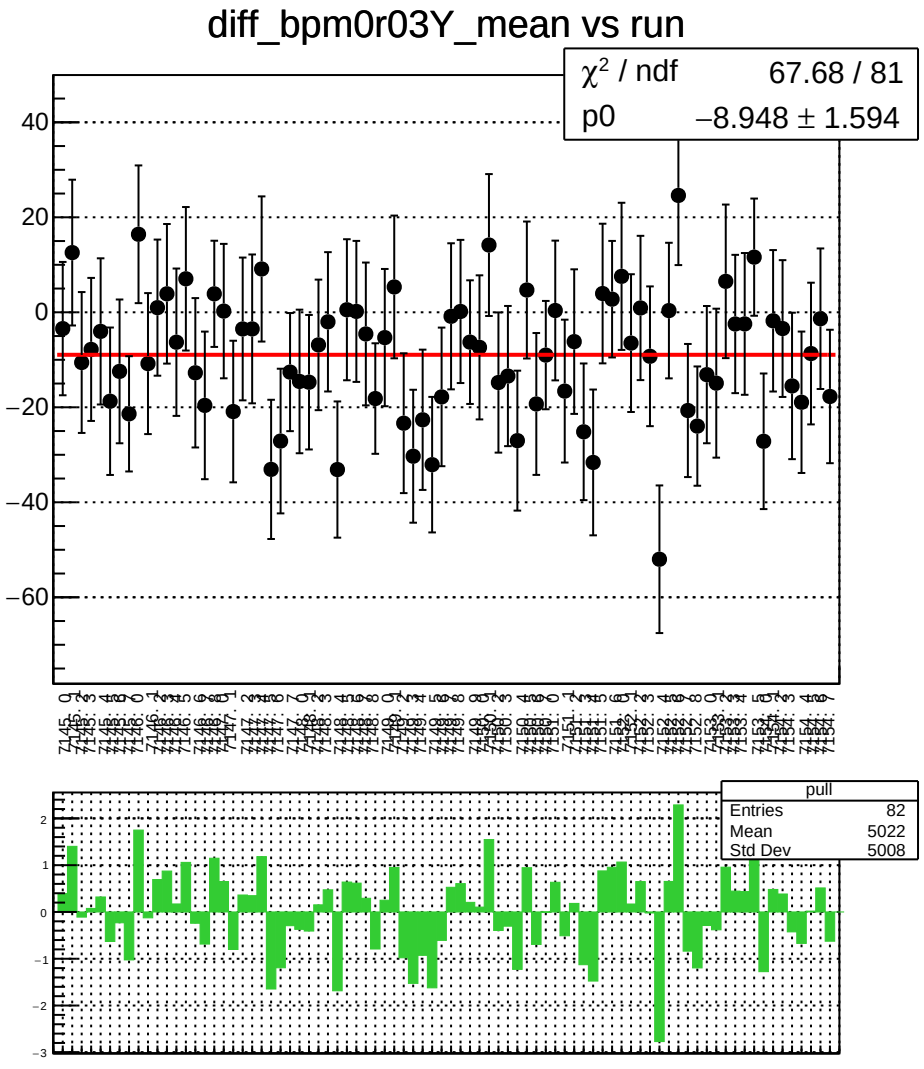

pull1D
Entries 82
Mean 0.01053
Std Dev 1.022

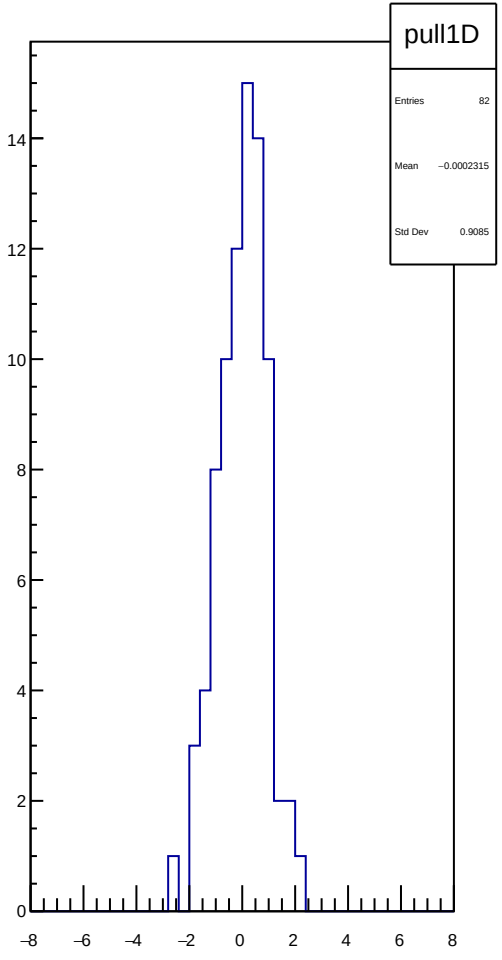

diff_bpm0l10Y_rms vs run
χ² / ndf 707.3 / 81
p0 1210 ± 0.9678
1350
1300
1250
1200
1150

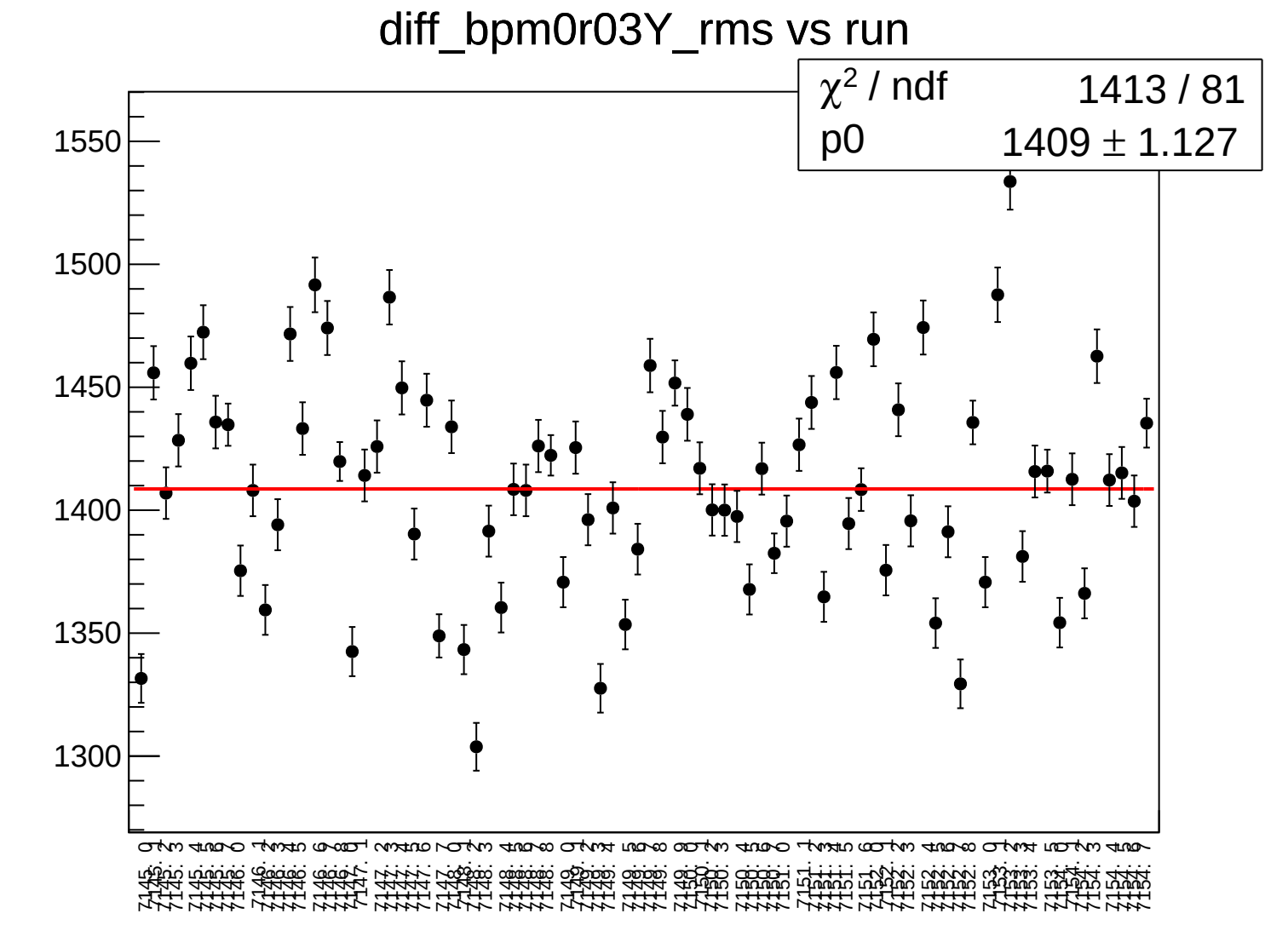

diff_bpm0r03X_mean vs run
χ² / ndf 89.12 / 81
p0 −36.42 ± 89.39
pull
Entries 82
Mean −57.13
Std Dev 146.3

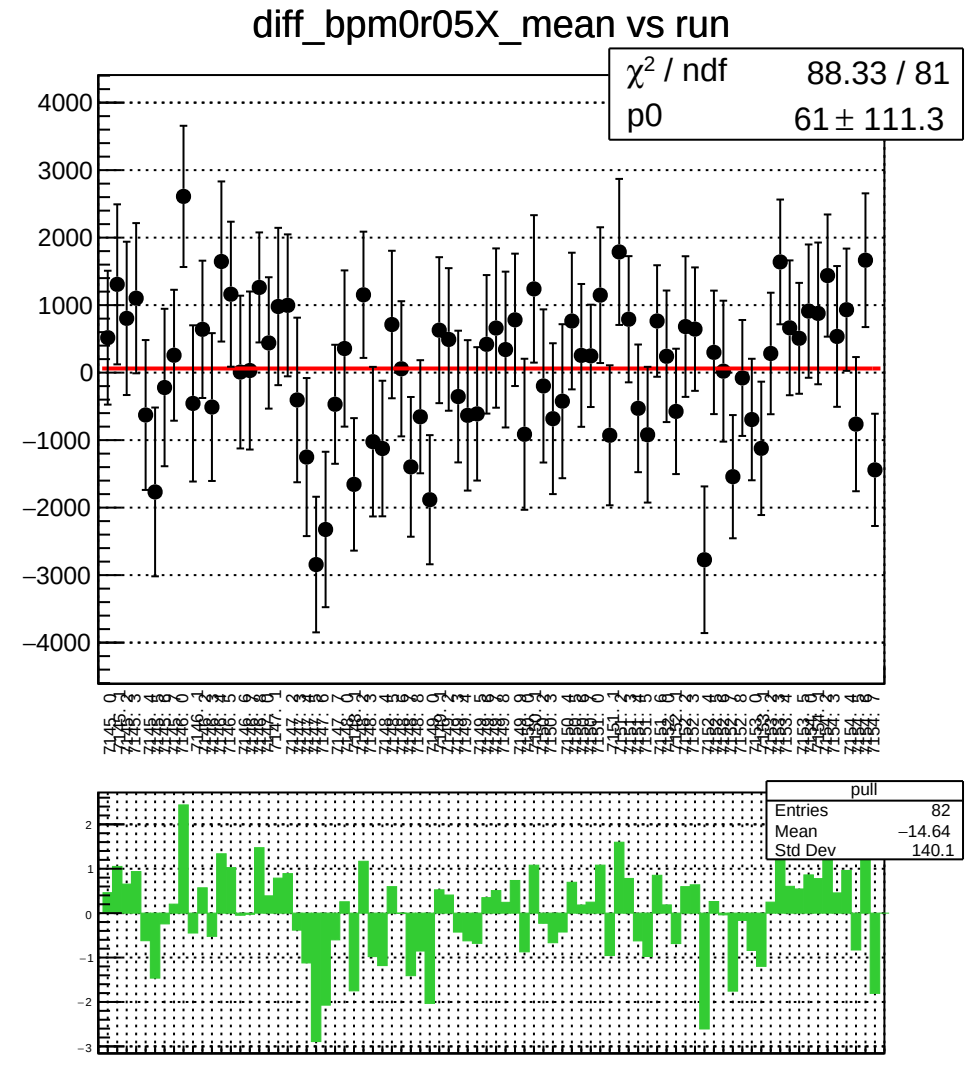

pull1D
Entries 82
Mean 0.008316
Std Dev 1.043

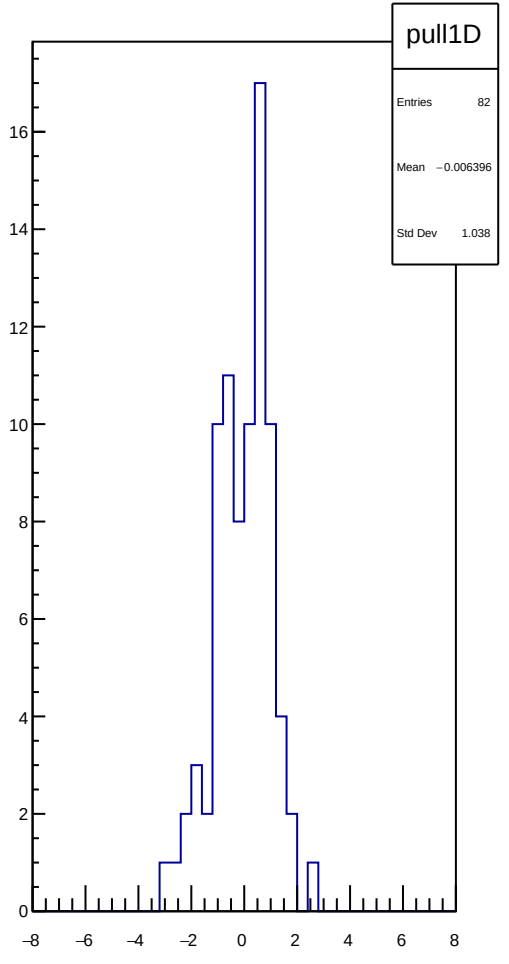

diff_bpm0r03X_rms vs run
χ² / ndf 1.045e+04 / 81
p0 7.878e+04 ± 63.21
95000
90000
85000
80000
75000
70000

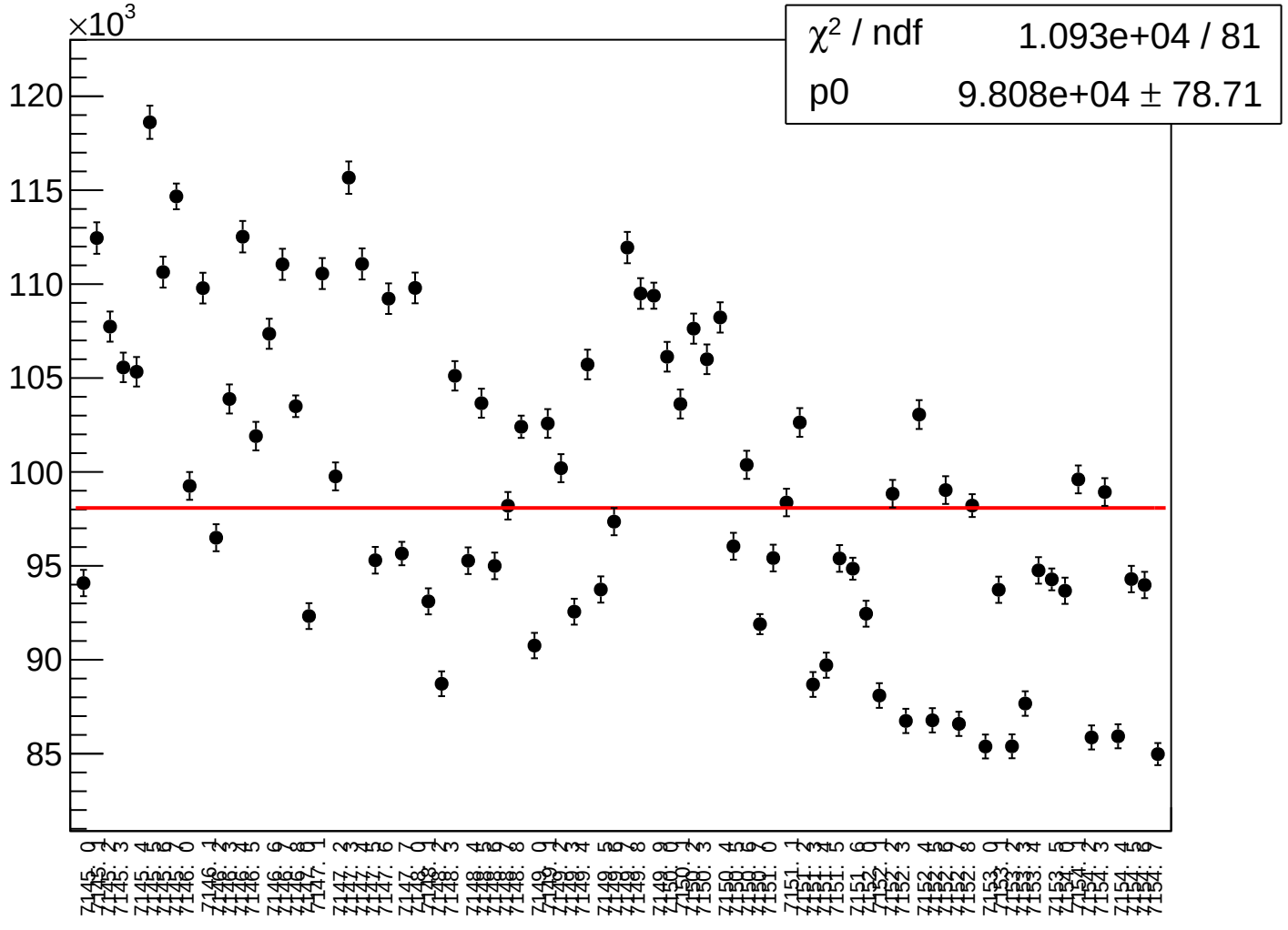

diff_bpm0r03Y_mean vs run
χ² / ndf 67.68 / 81
p0 −8.948 ± 1.594
pull
Entries 82
Mean 5022
Std Dev 5008

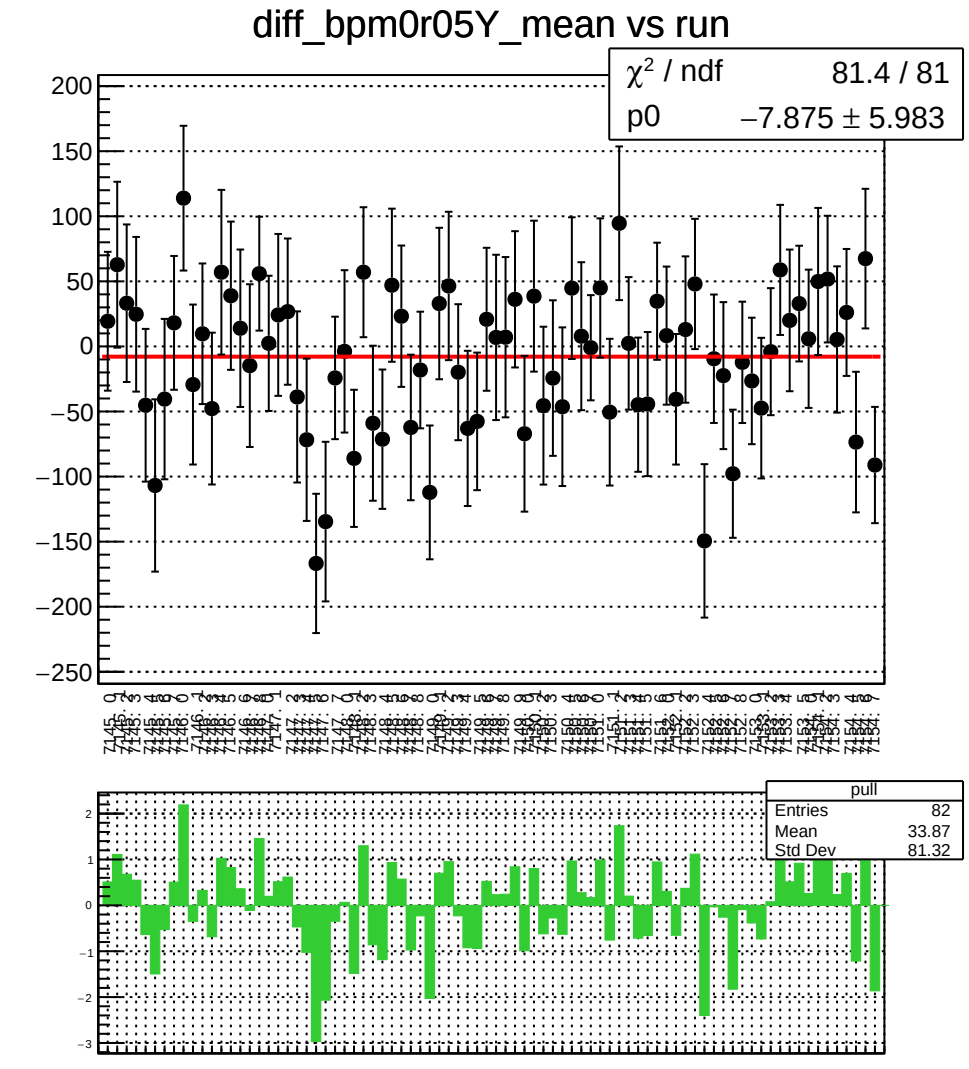

pull1D
Entries 82
Mean −0.0002315
Std Dev 0.9085

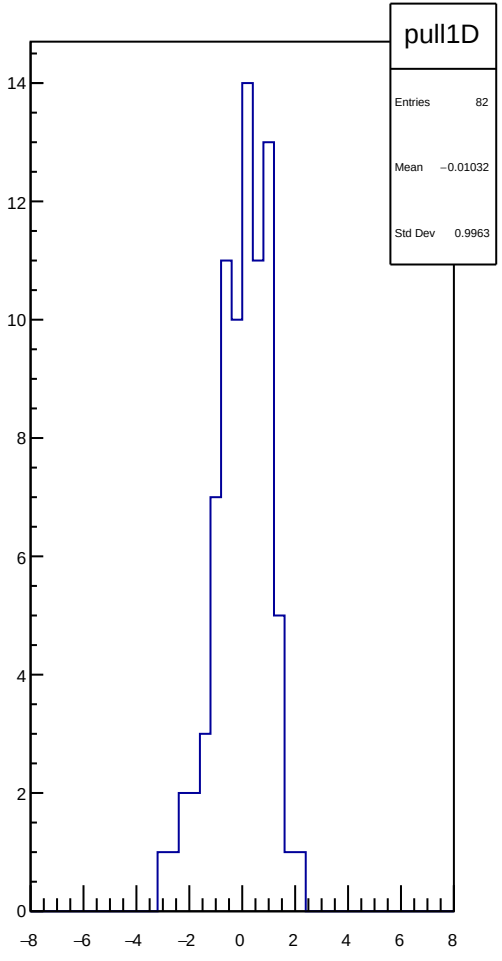

diff_bpm0r03Y_rms vs run
χ^2 / ndf 1413 / 81
p0 1409 ± 1.127
1550
1500
1450
1400
1350
1300

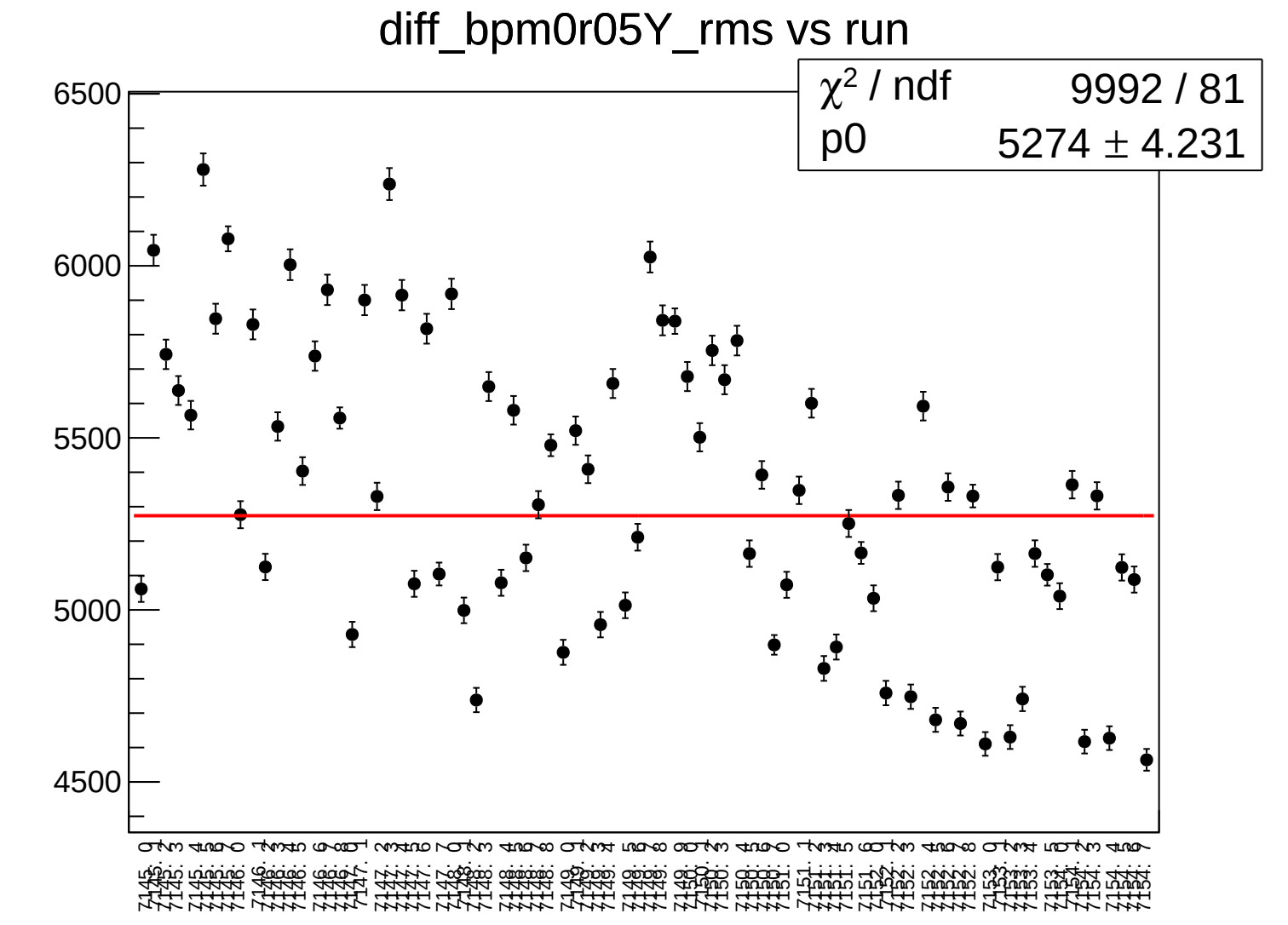

diff_bpm0r05X_mean vs run
χ² / ndf 88.33 / 81
p0 61 ± 111.3
pull
Entries 82
Mean −14.64
Std Dev 140.1

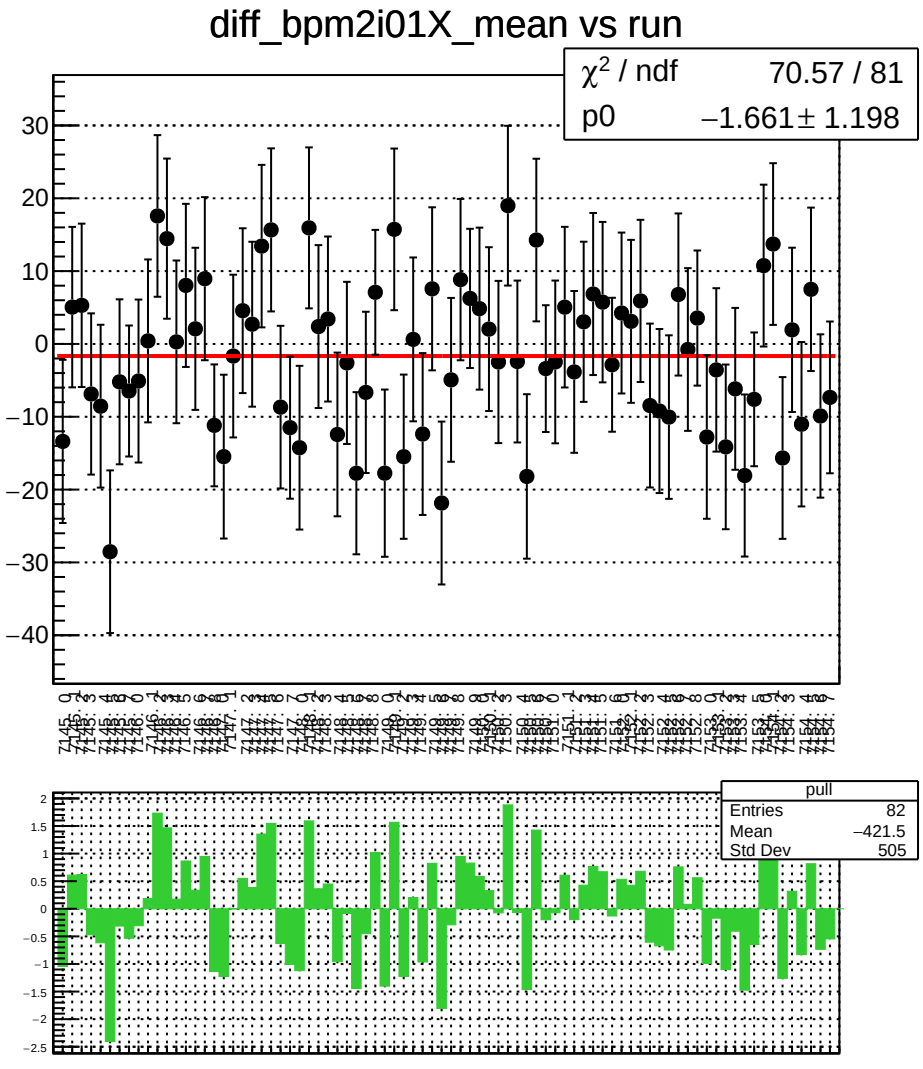

pull1D
Entries 82
Mean −0.006396
Std Dev 1.038

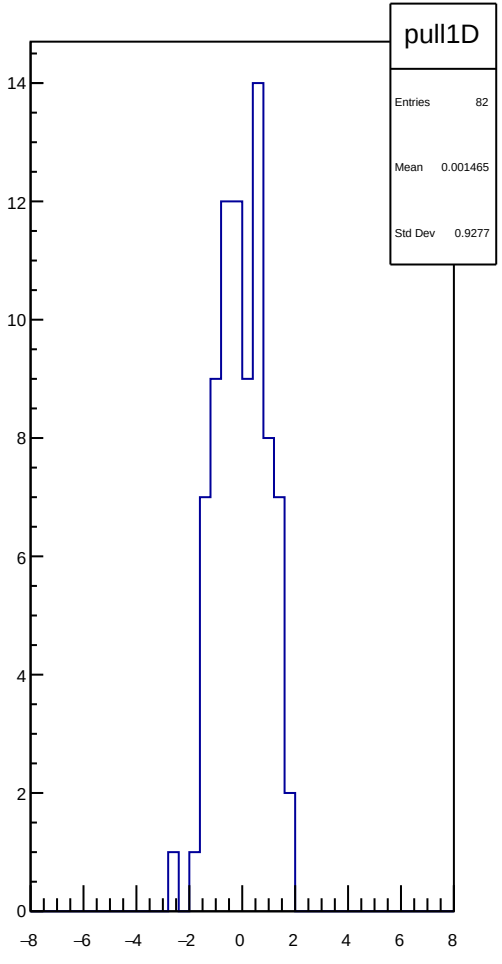

diff_bpm0r05X_rms vs run
×10^3
120
115
110
105
100
95
90
85
χ² / ndf 1.093e+04 / 81
p0 9.808e+04 ± 78.71

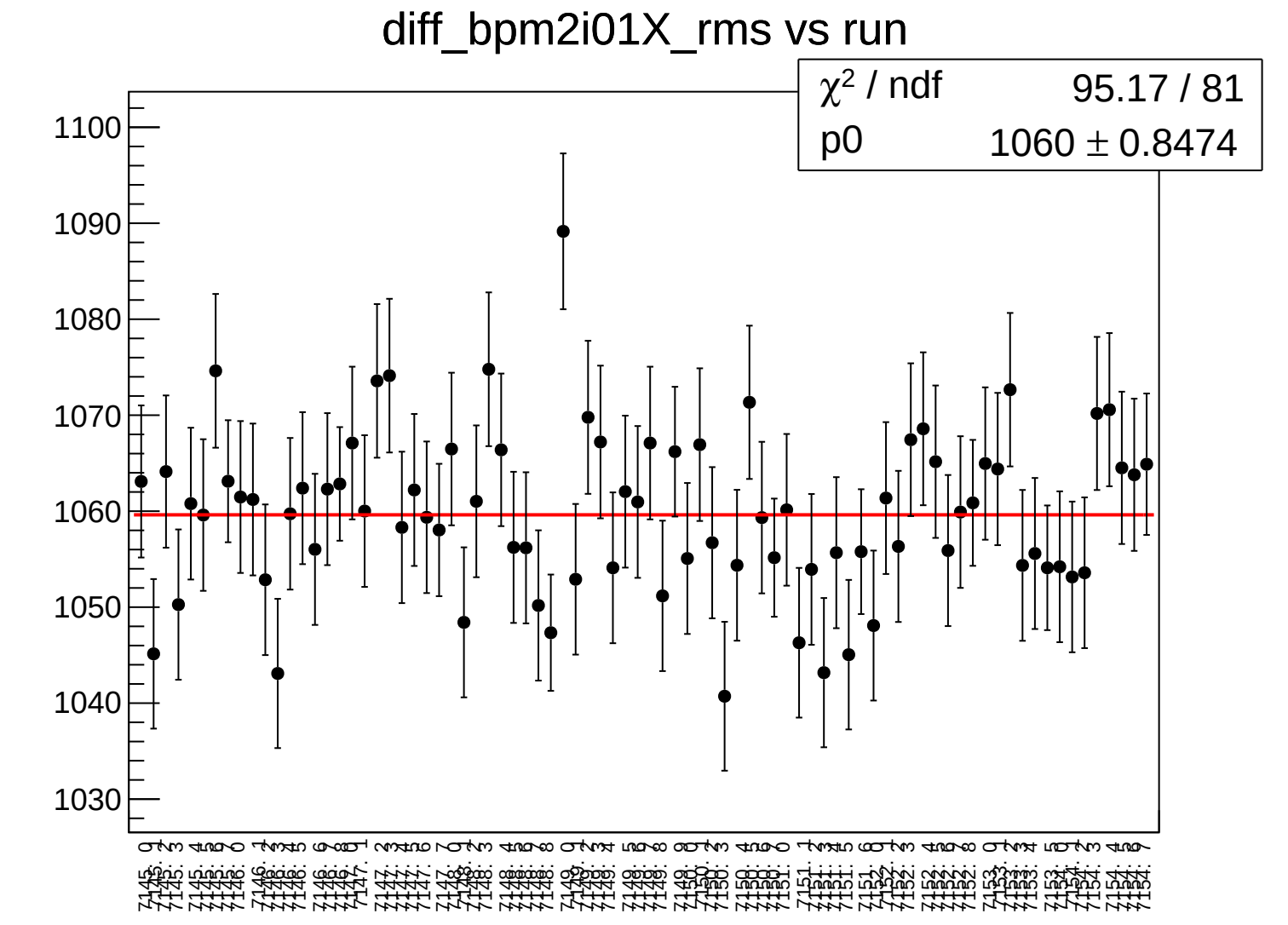

diff_bpm0r05Y_mean vs run
χ² / ndf 81.4 / 81
p0 −7.875 ± 5.983
pull
Entries 82
Mean 33.87
Std Dev 81.32

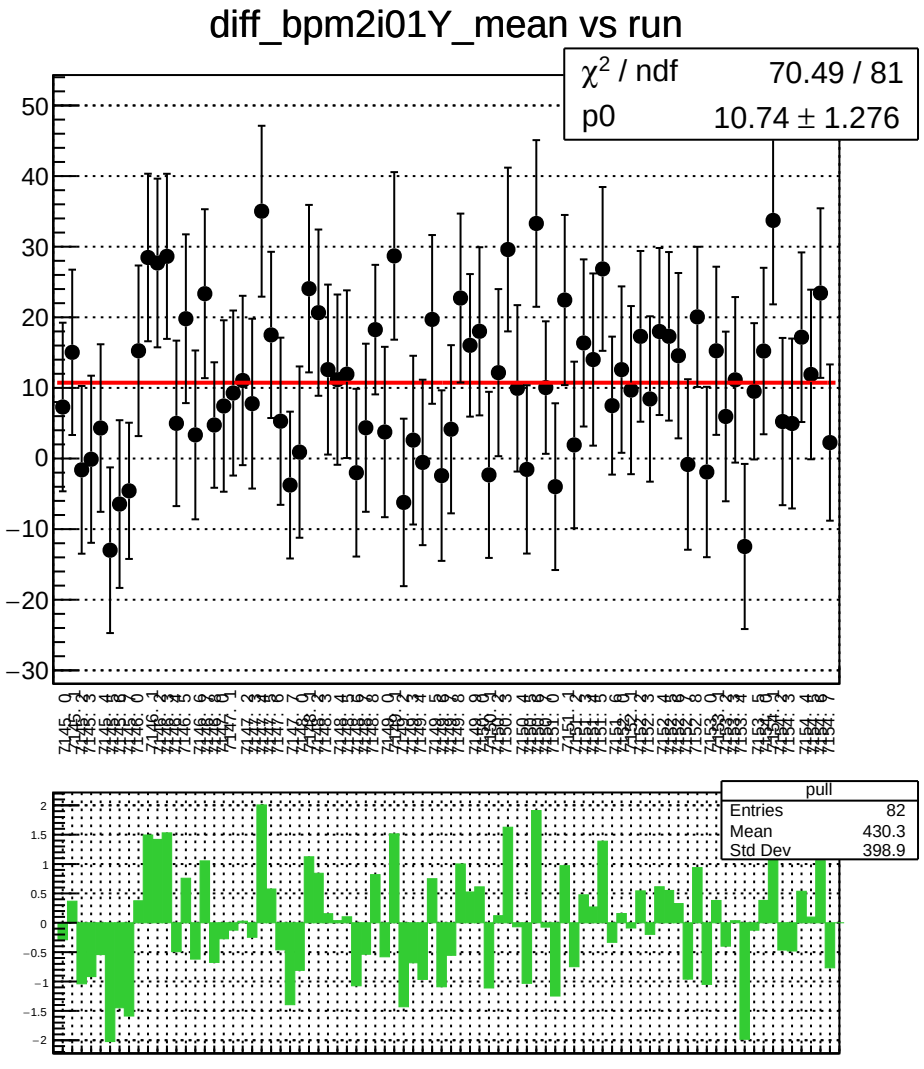

pull1D
Entries 82
Mean −0.01032
Std Dev 0.9963

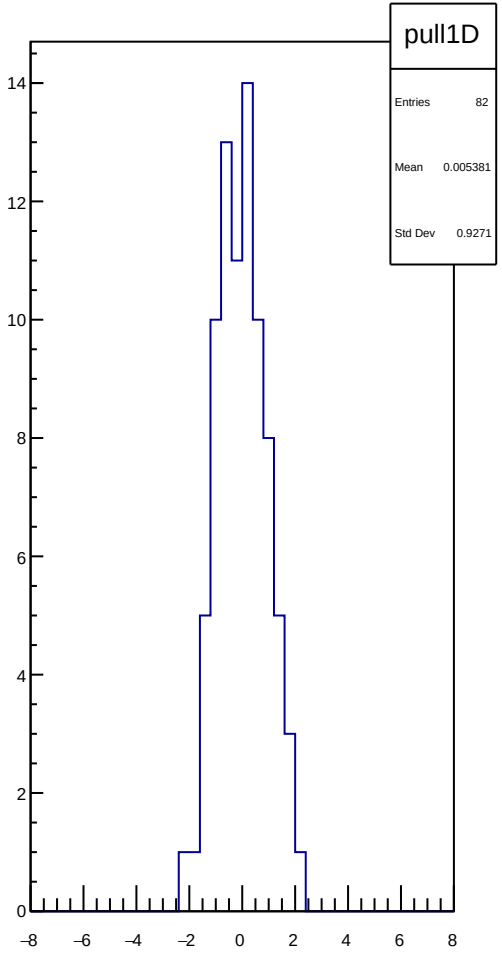

diff_bpm0r05Y_rms vs run
χ² / ndf 9992 / 81
p0 5274 ± 4.231
6500
6000
5500
5000
4500

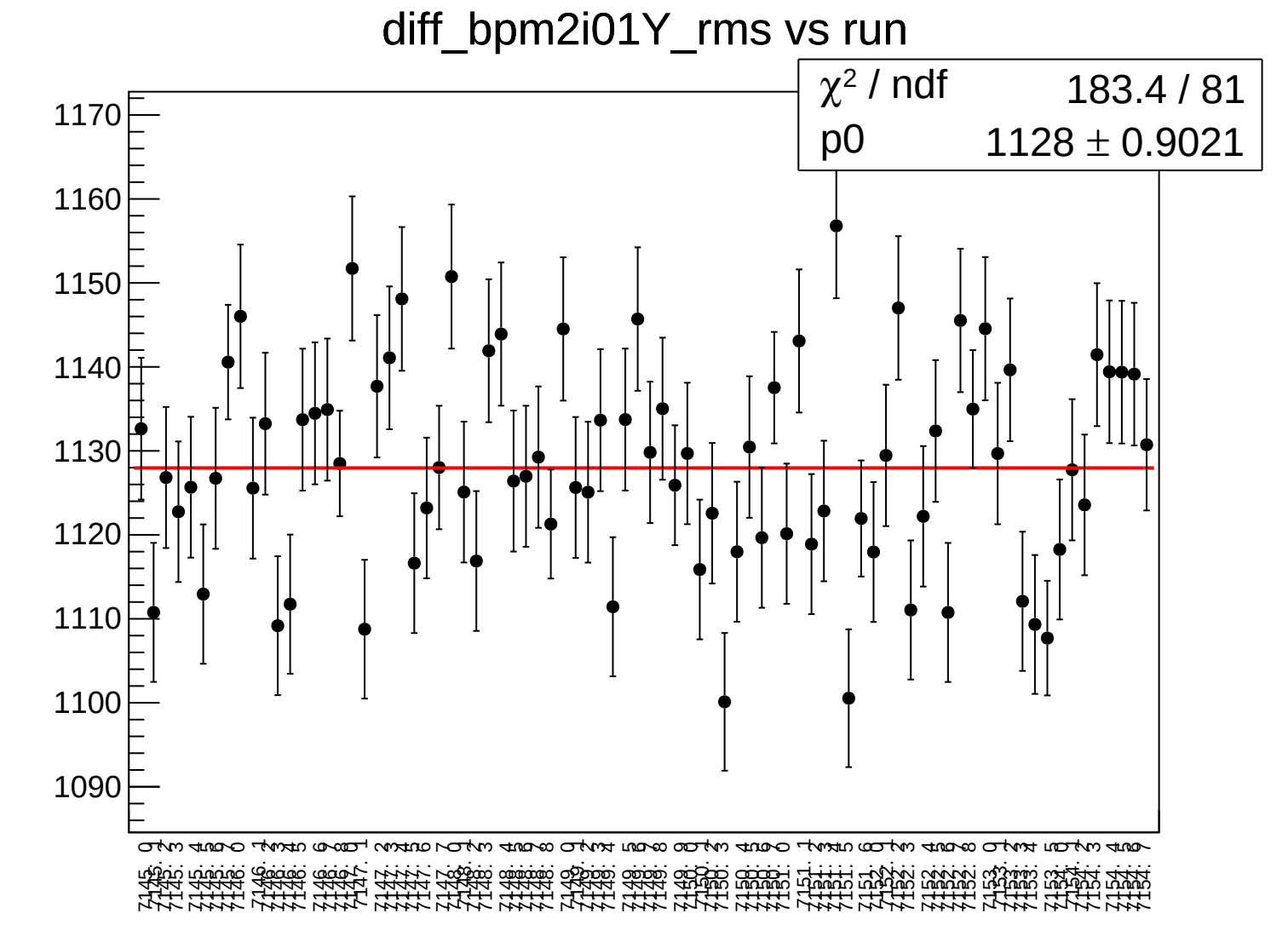

diff_bpm2i01X_mean vs run
χ^2 / ndf 70.57 / 81
p0 −1.661± 1.198
pull
Entries 82
Mean −421.5
Std Dev 505

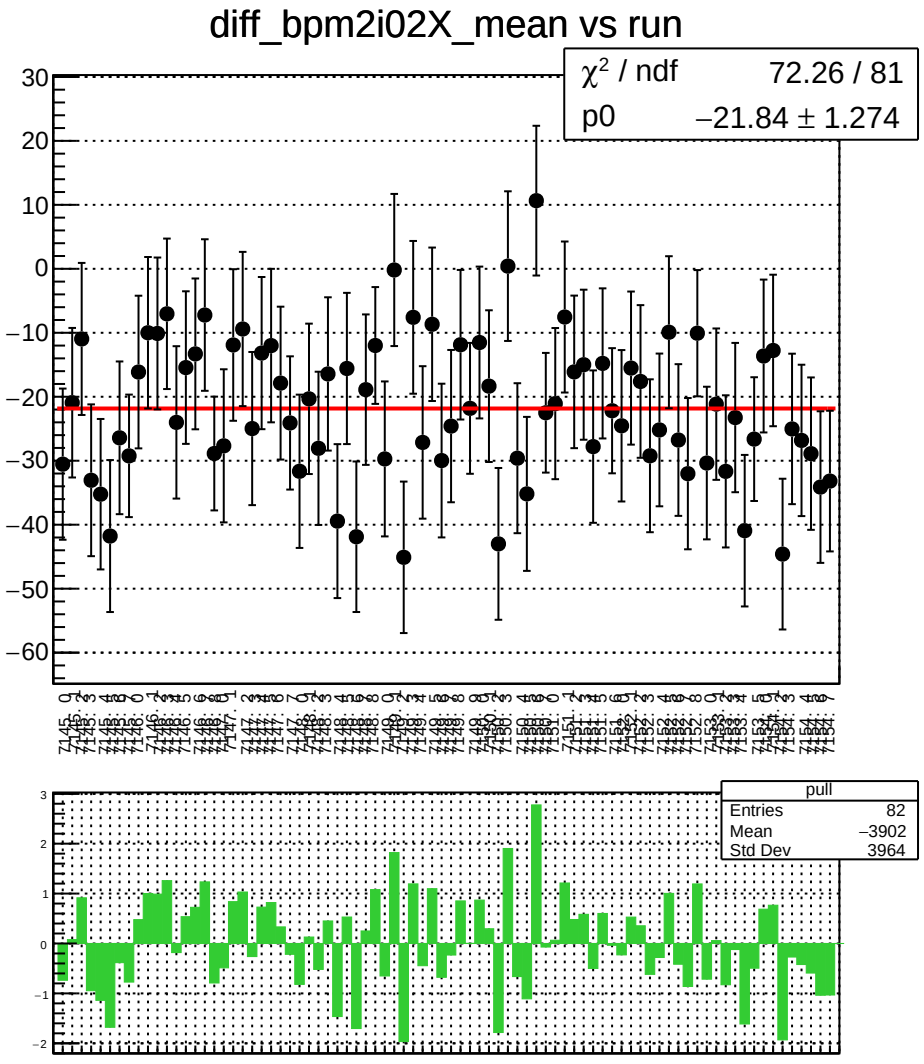

pull1D
Entries 82
Mean 0.001465
Std Dev 0.9277

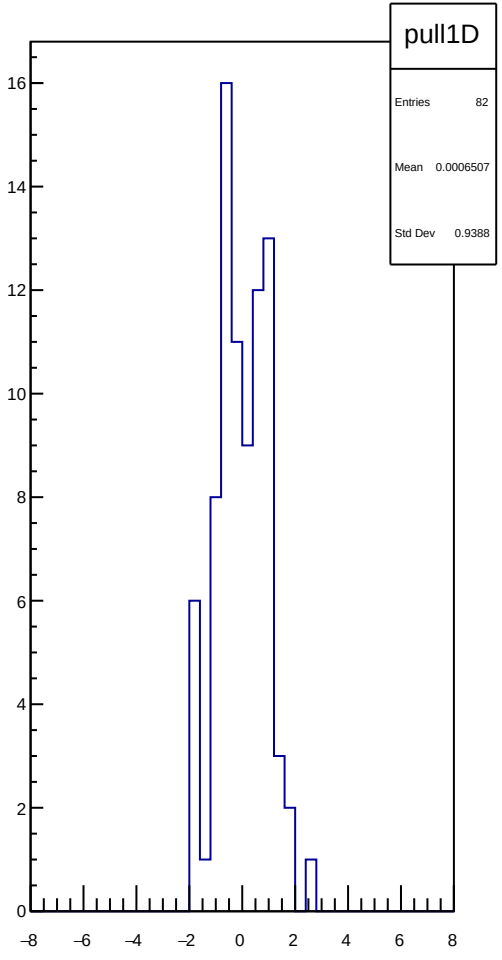

diff_bpm2i01X_rms vs run
χ² / ndf 95.17 / 81
p0 1060 ± 0.8474
1100
1090
1080
1070
1060
1050
1040
1030

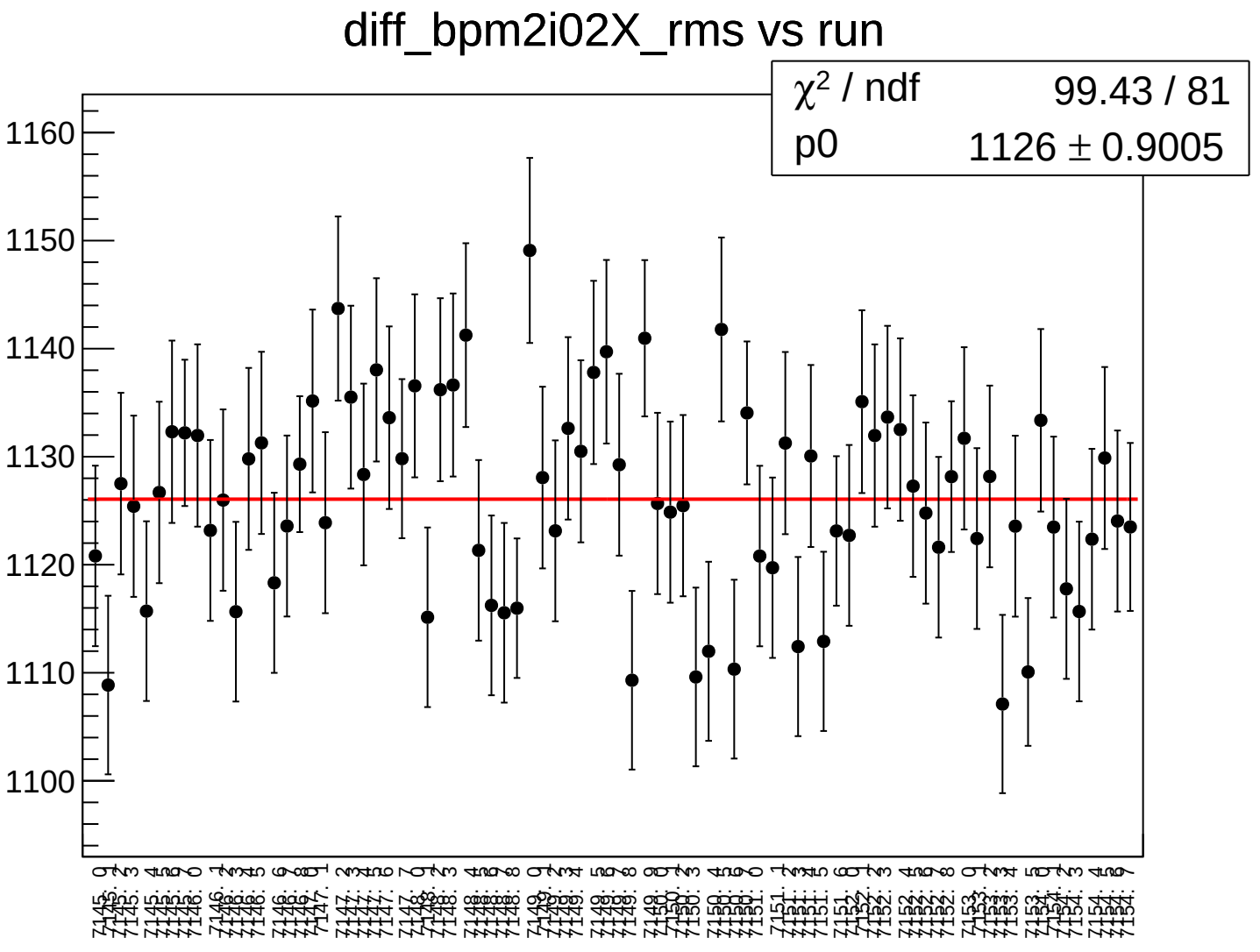

diff_bpm2i01Y_mean vs run
χ² / ndf 70.49 / 81
p0 10.74 ± 1.276
pull
Entries 82
Mean 430.3
Std Dev 398.9

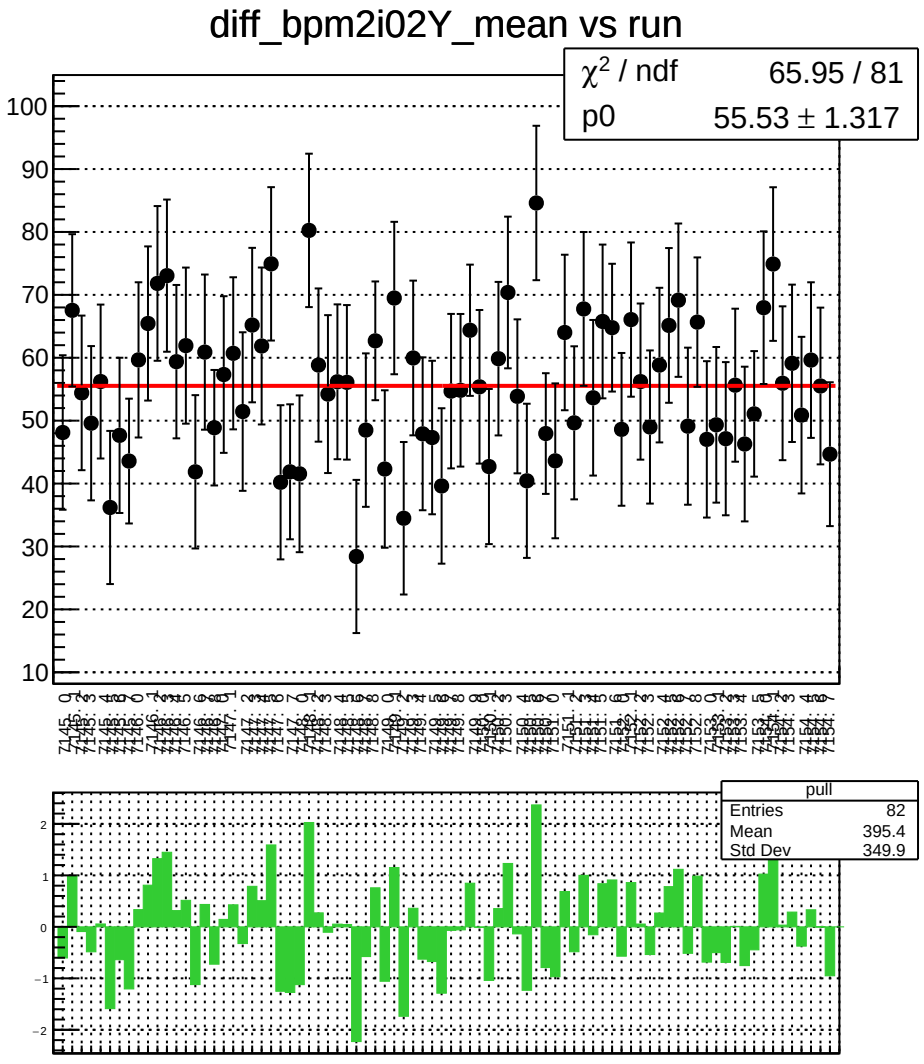

pull1D
Entries 82
Mean 0.005381
Std Dev 0.9271

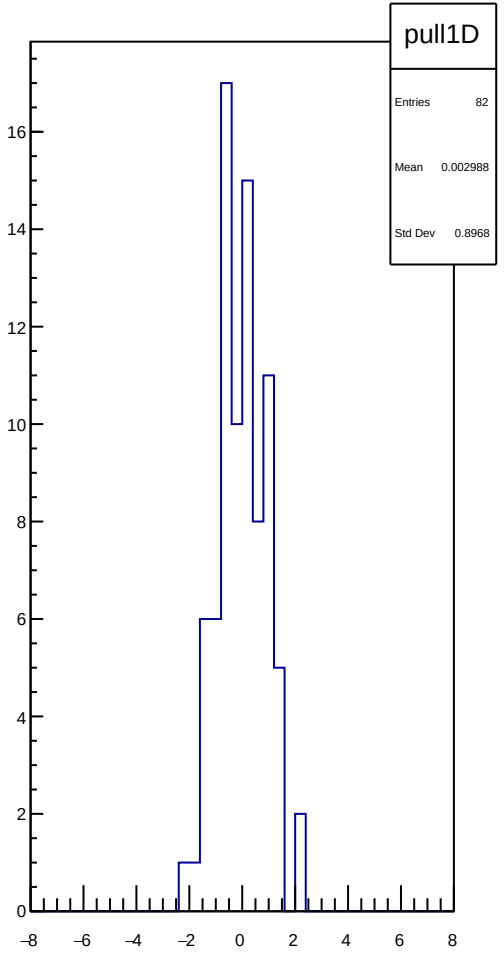

diff_bpm2i01Y_rms vs run
χ² / ndf 183.4 / 81
p0 1128 ± 0.9021
1170
1160
1150
1140
1130
1120
1110
1100
1090

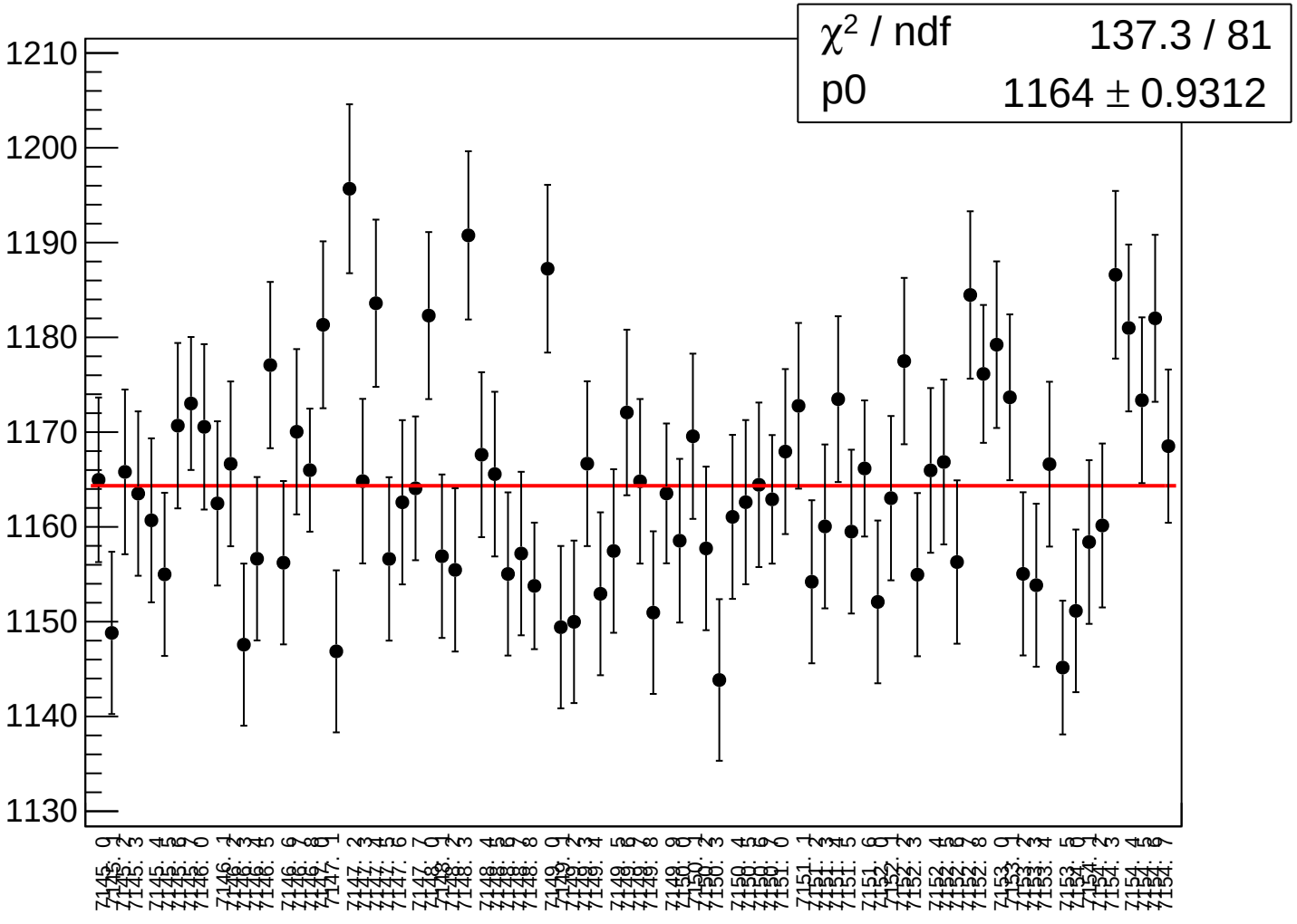

diff_bpm2i02X_mean vs run
χ² / ndf 72.26 / 81
p0 −21.84 ± 1.274
pull
Entries 82
Mean −3902
Std Dev 3964

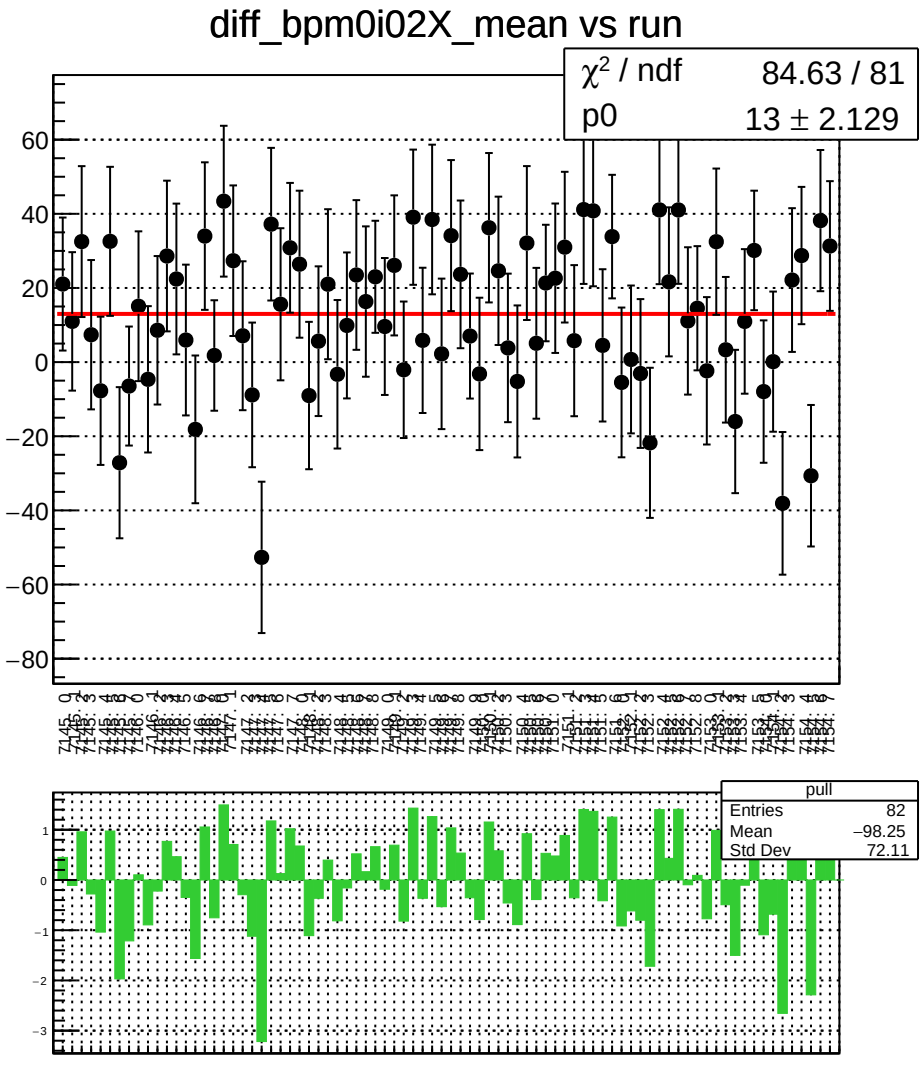

pull1D
Entries 82
Mean 0.0006507
Std Dev 0.9388

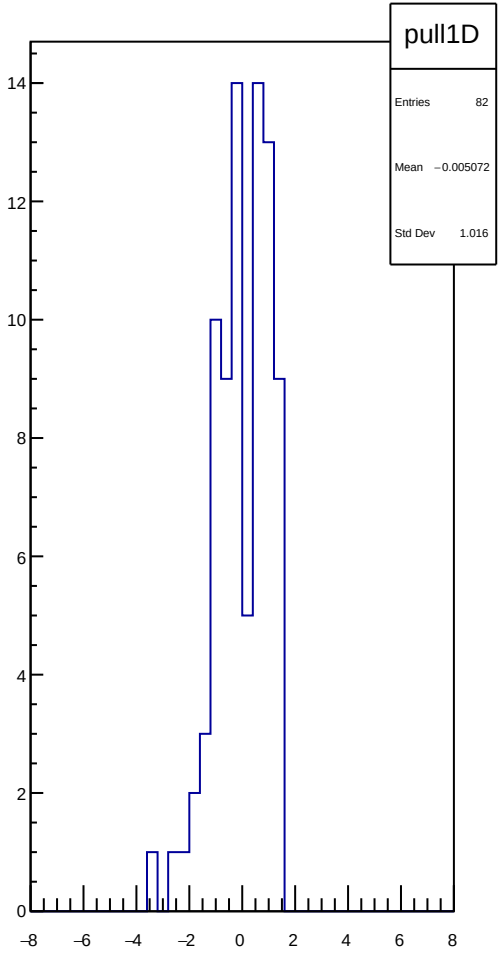

diff_bpm2i02X_rms vs run
χ² / ndf 99.43 / 81
p0 1126 ± 0.9005
1160
1150
1140
1130
1120
1110
1100

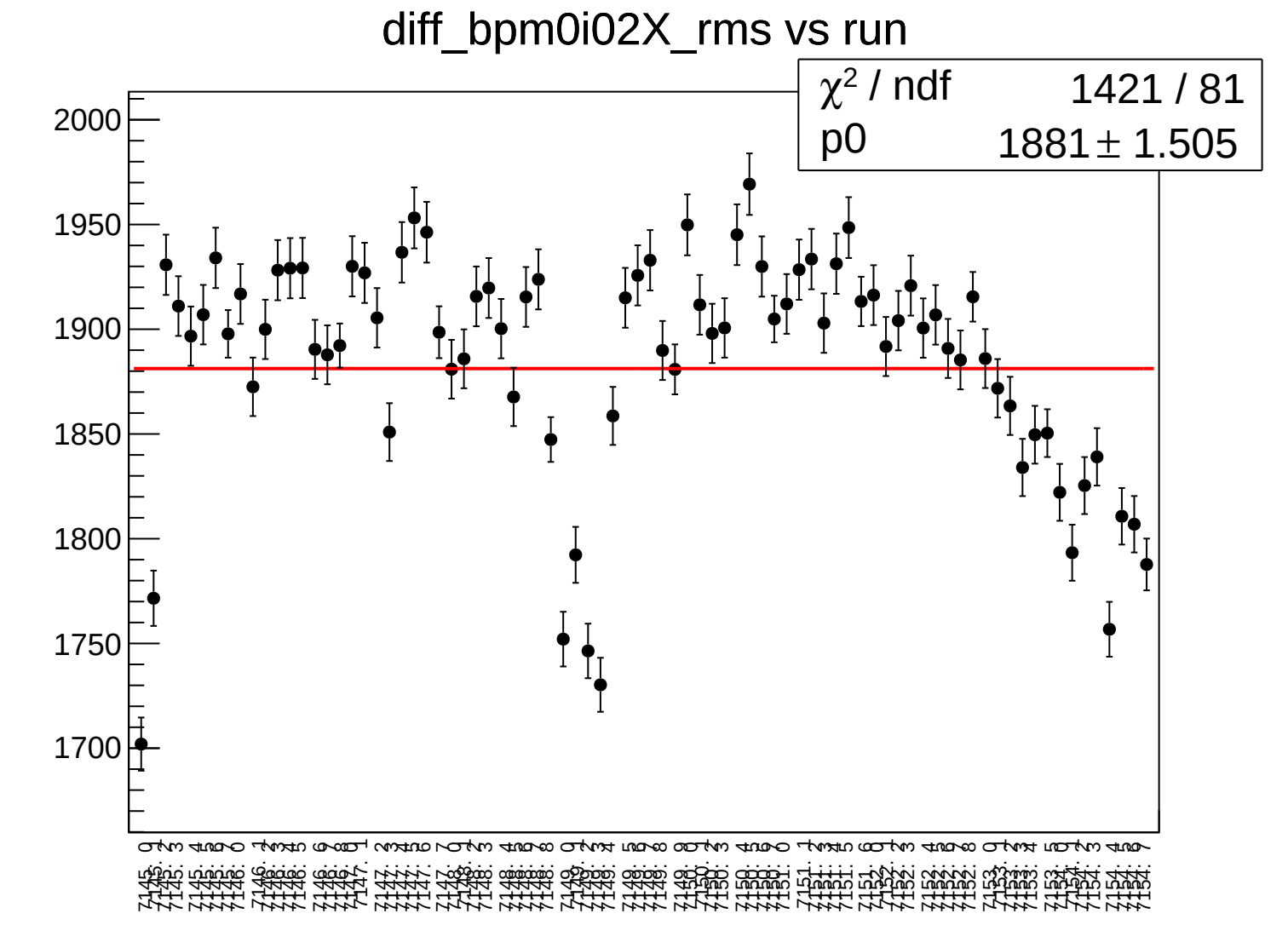

diff_bpm2i02Y_mean vs run
χ² / ndf 65.95 / 81
p0 55.53 ± 1.317
pull
Entries 82
Mean 395.4
Std Dev 349.9

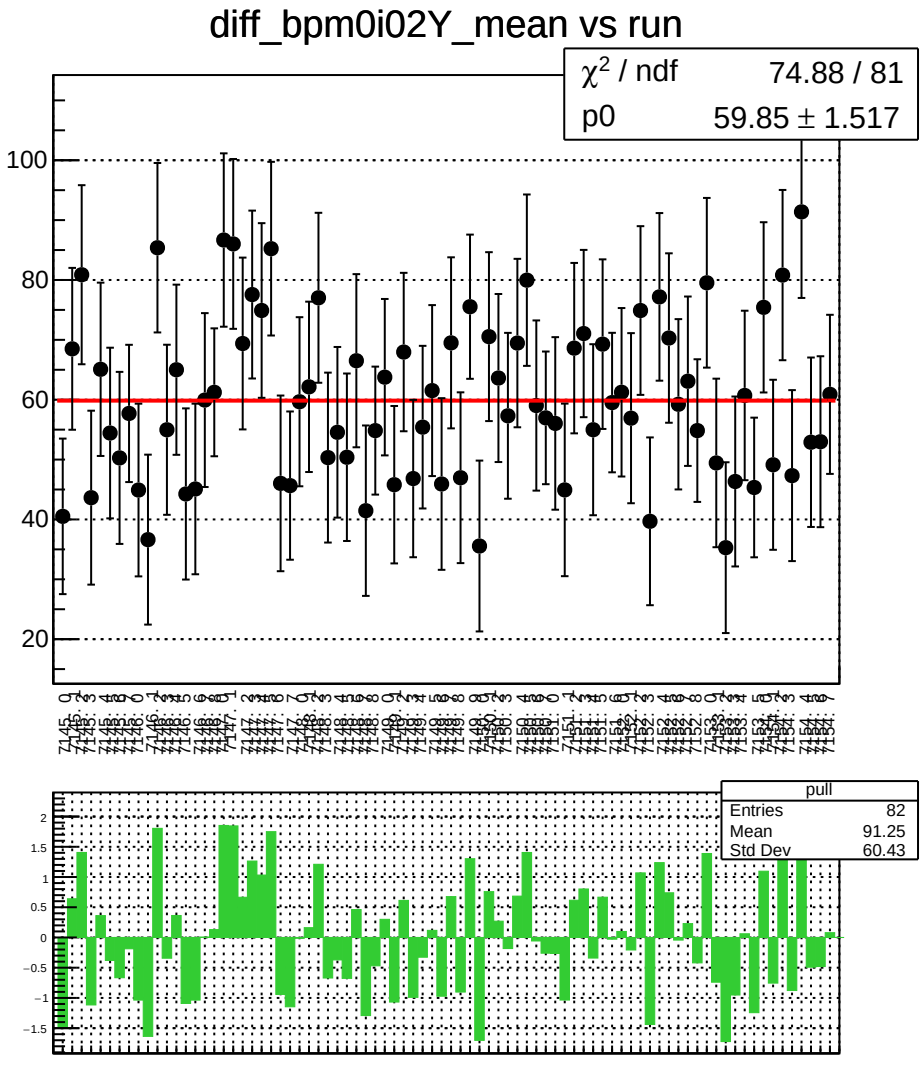

pull1D
Entries 82
Mean 0.002988
Std Dev 0.8968

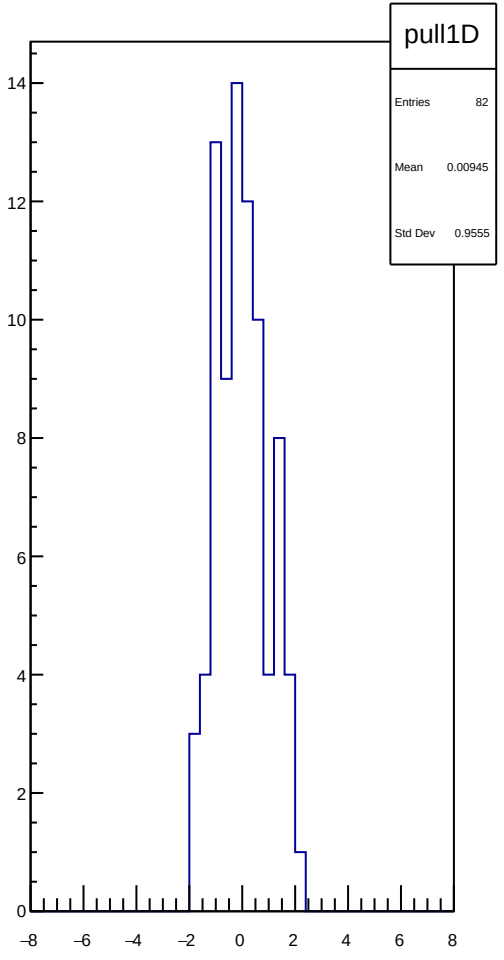

diff_bpm2i02Y_rms vs run
χ² / ndf 137.3 / 81
p0 1164 ± 0.9312
1210
1200
1190
1180
1170
1160
1150
1140
1130

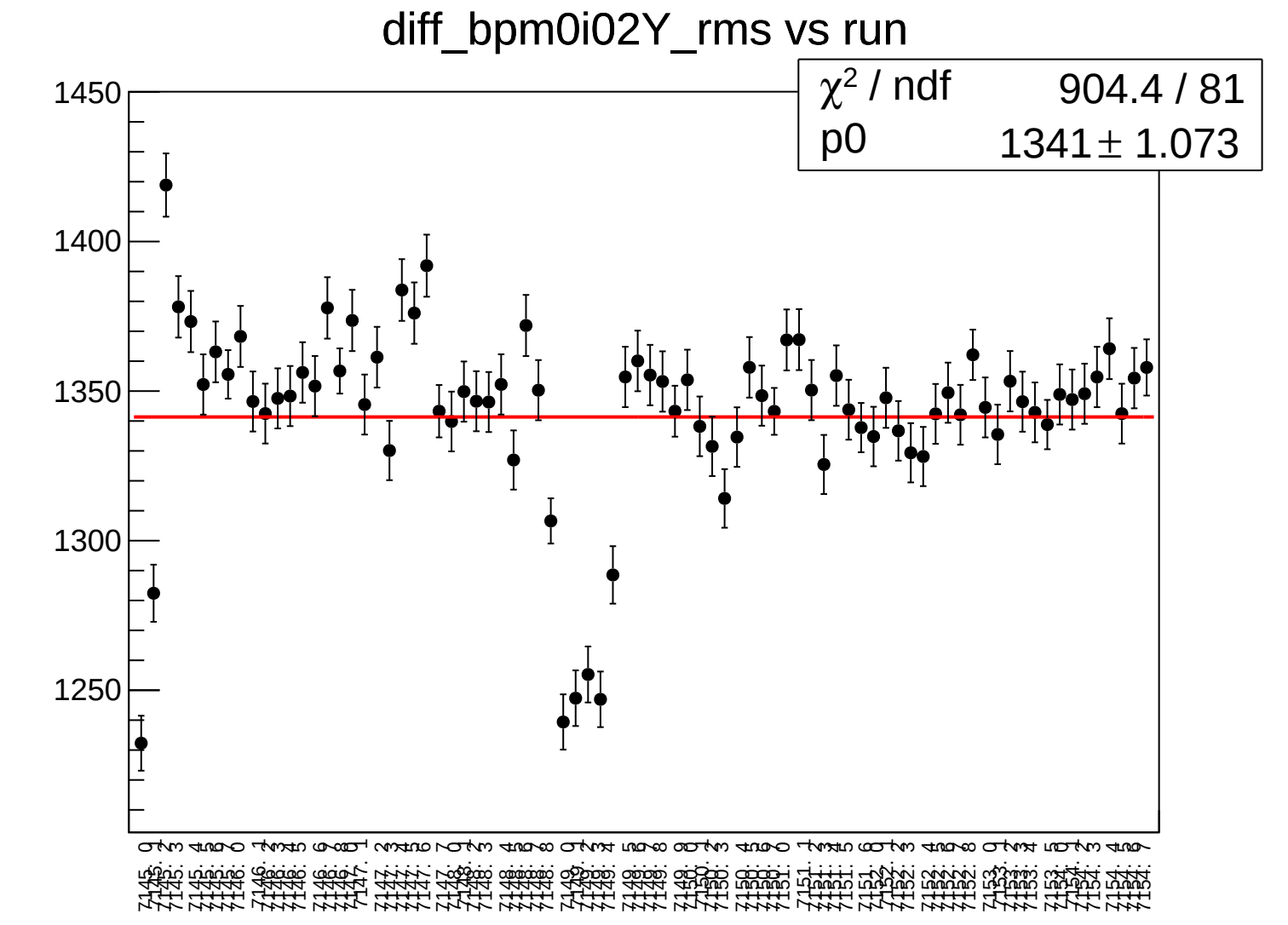

diff_bpm0i02X_mean vs run
χ² / ndf 84.63 / 81
p0 13 ± 2.129
pull
Entries 82
Mean −98.25
Std Dev 72.11

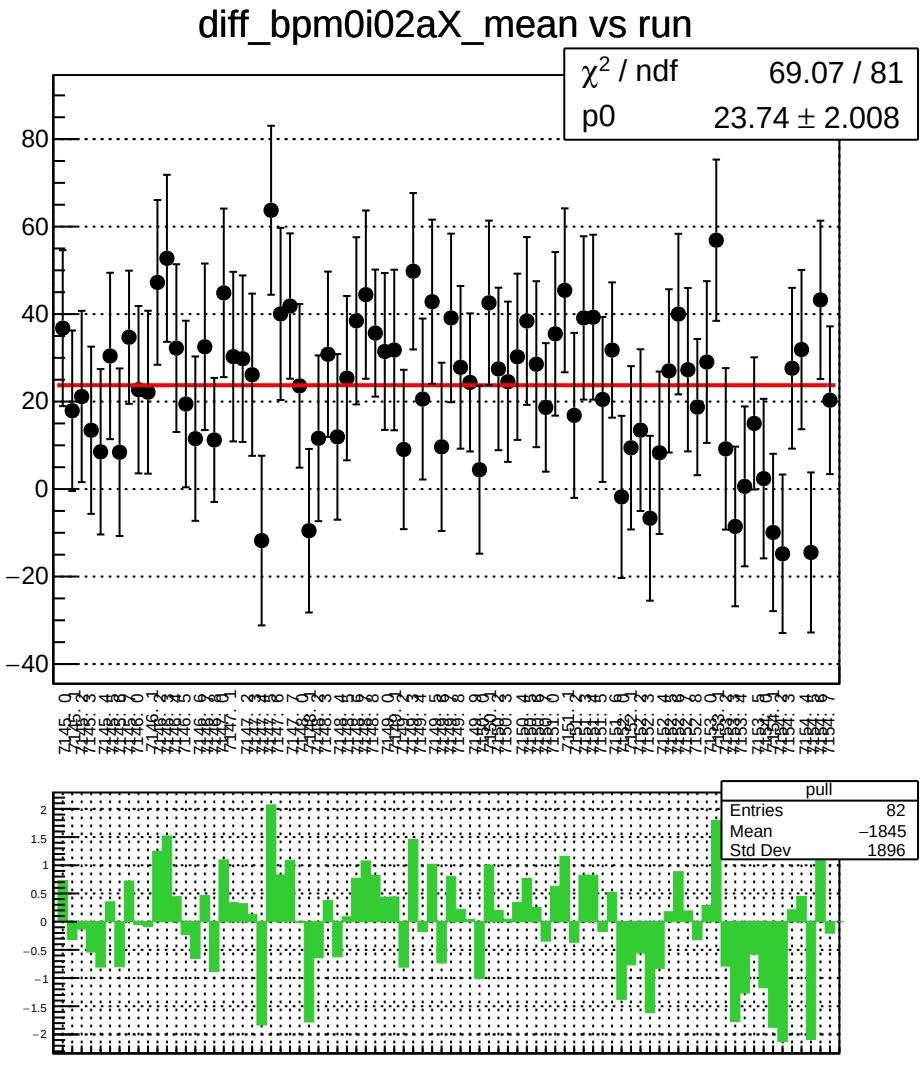

pull1D
Entries 82
Mean −0.005072
Std Dev 1.016

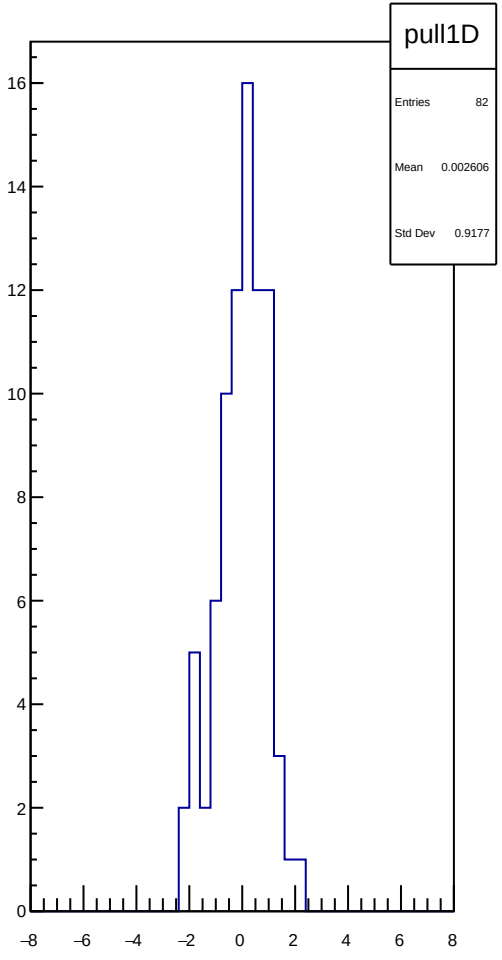

diff_bpm0i02X_rms vs run
χ² / ndf 1421 / 81
p0 1881 ± 1.505
2000
1950
1900
1850
1800
1750
1700

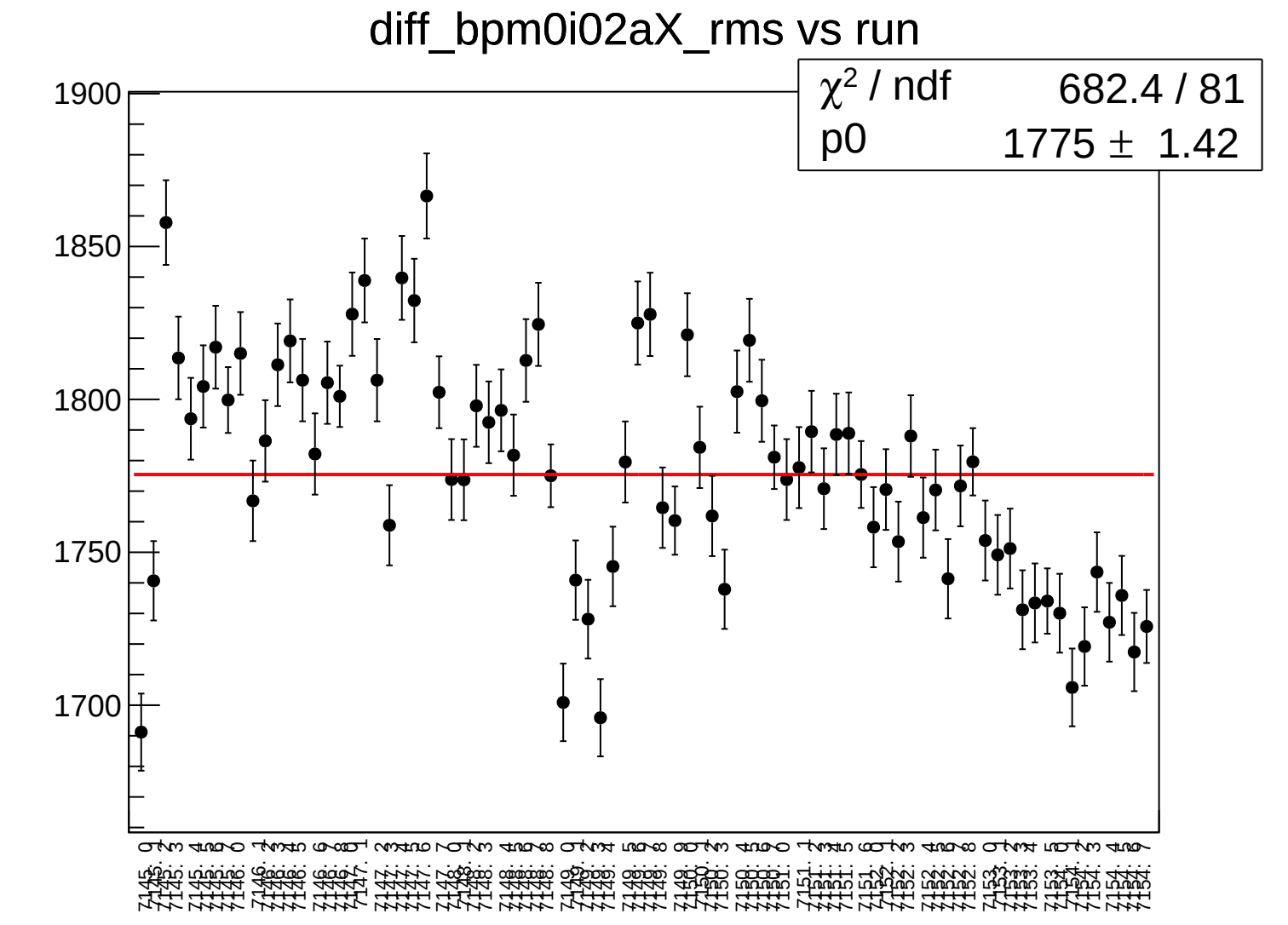

diff_bpm0i02Y_mean vs run
χ^2 / ndf 74.88 / 81
p0 59.85 ± 1.517
pull
Entries 82
Mean 91.25
Std Dev 60.43

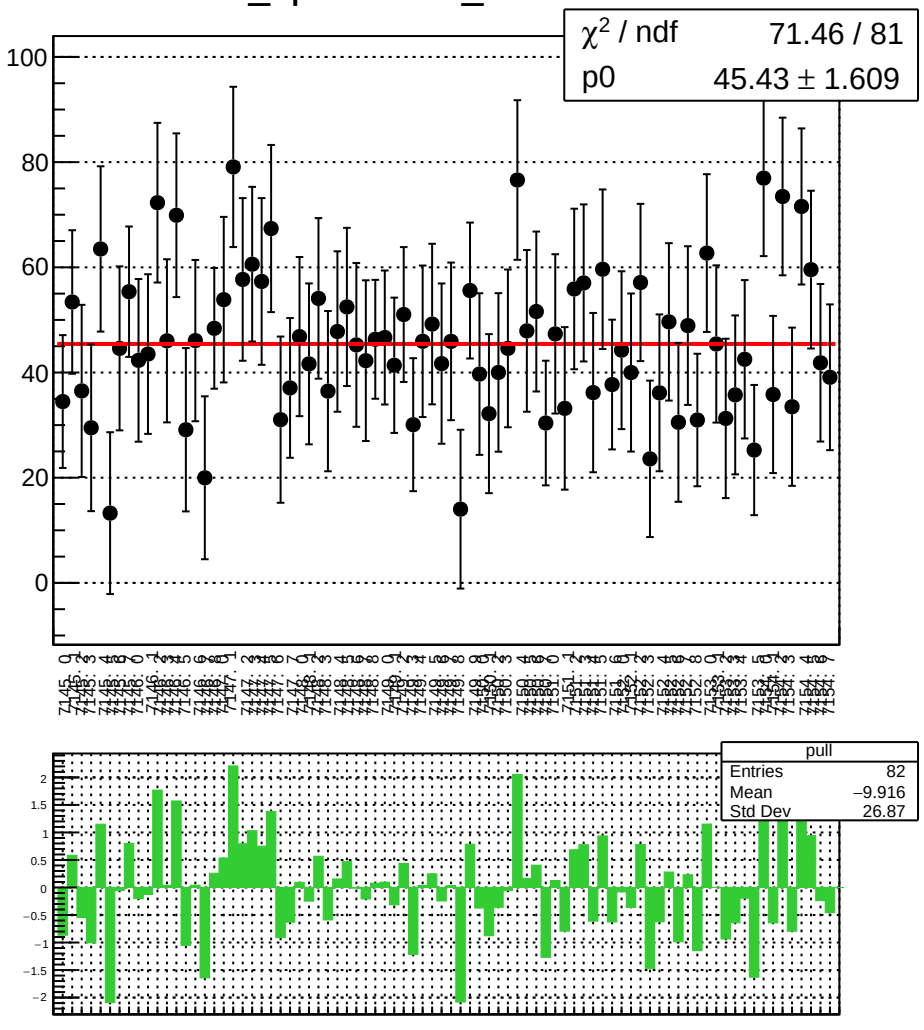

pull1D
Entries 82
Mean 0.00945
Std Dev 0.9555

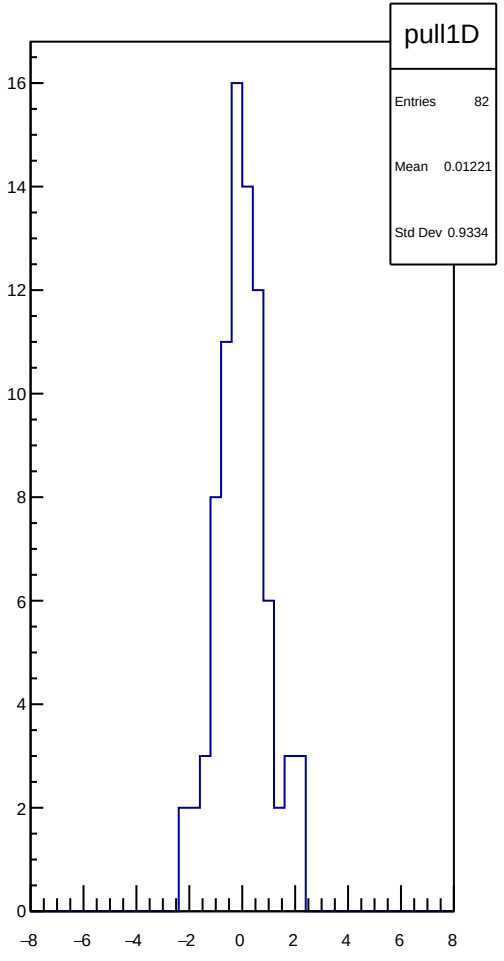

diff_bpm0i02Y_rms vs run
χ² / ndf 904.4 / 81
p0 1341 ± 1.073
1450
1400
1350
1300
1250

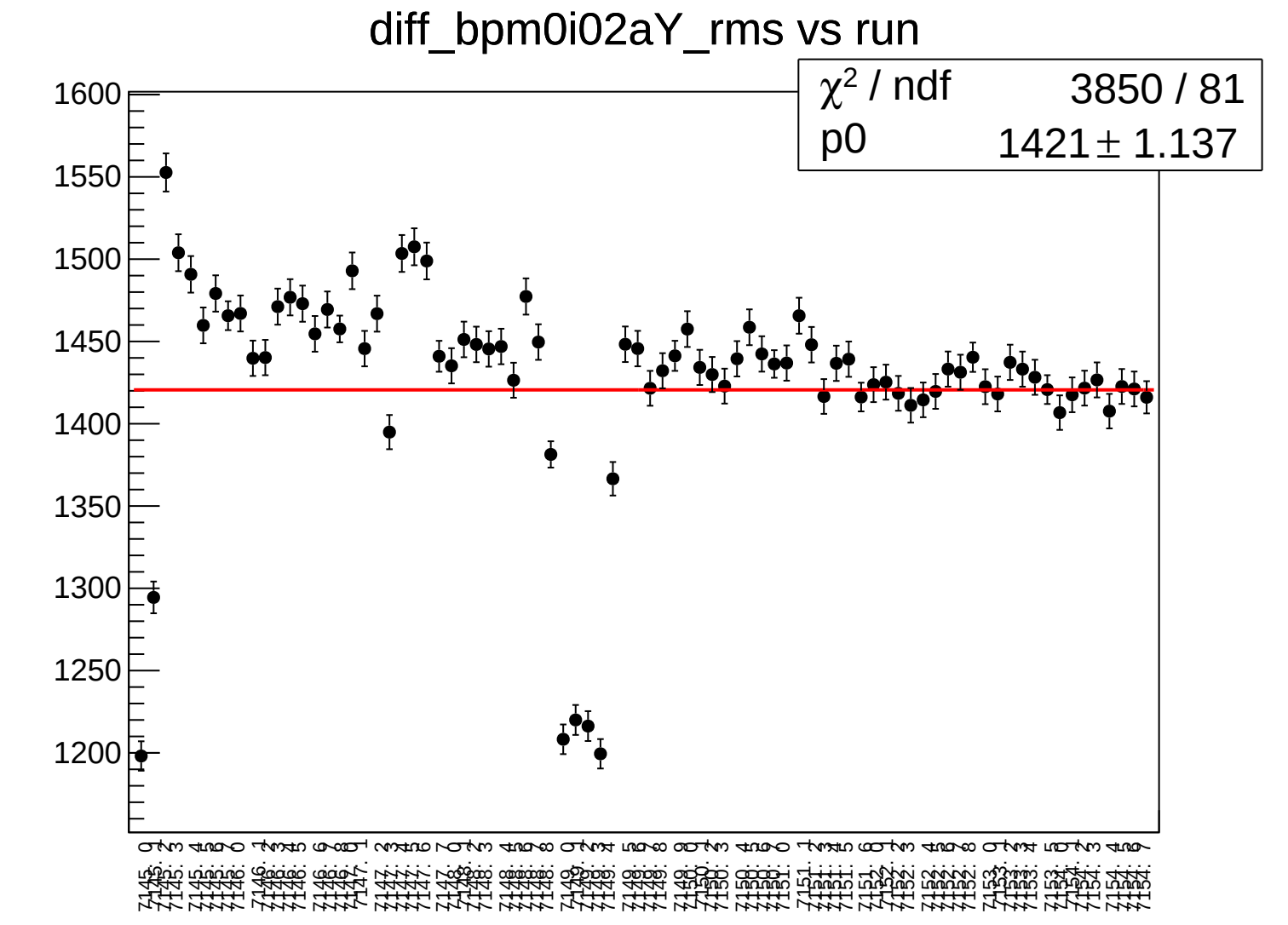

diff_bpm0i02aX_mean vs run
χ^2 / ndf 69.07 / 81
p0 23.74 ± 2.008
pull
Entries 82
Mean −1845
Std Dev 1896

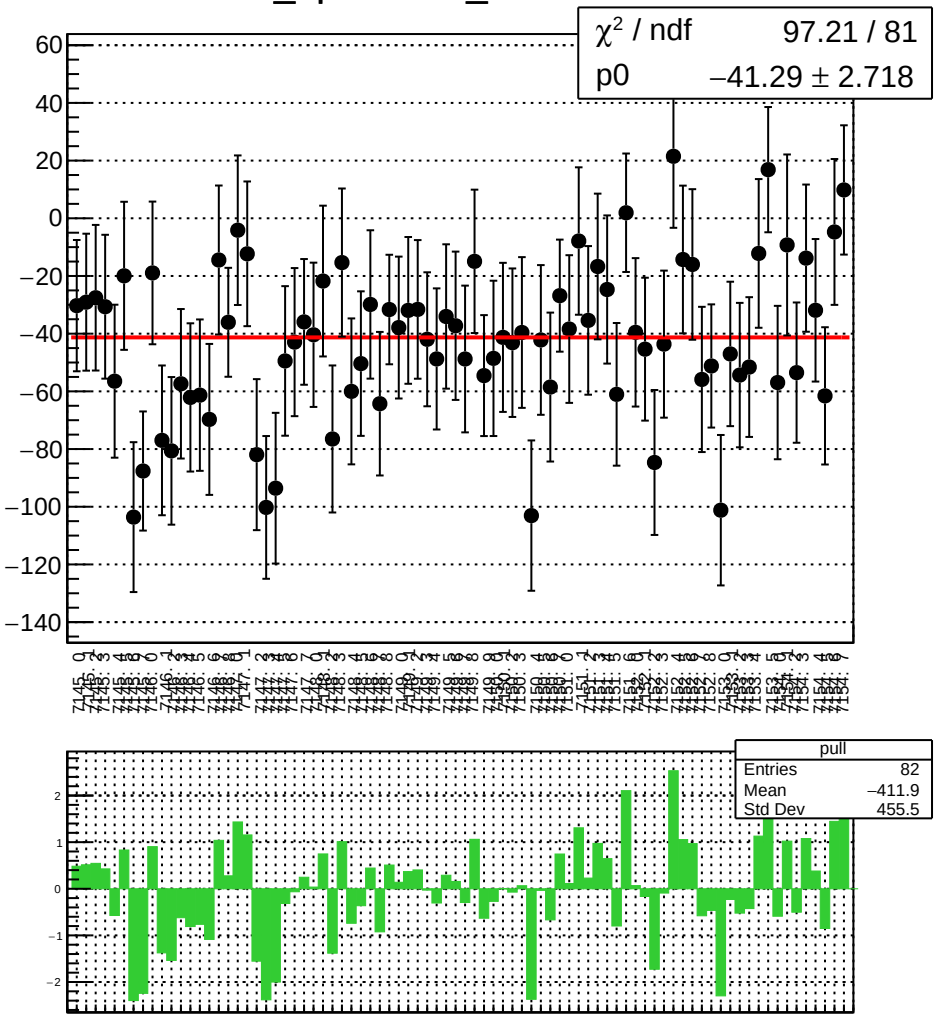

pull1D
Entries 82
Mean 0.002606
Std Dev 0.9177

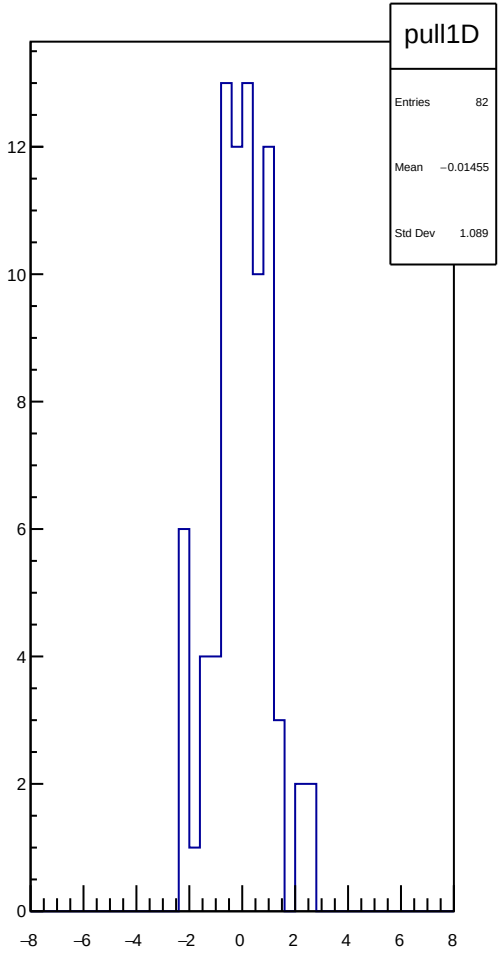

diff_bpm0i02aX_rms vs run
χ² / ndf 682.4 / 81
p0 1775 ± 1.42
1900
1850
1800
1750
1700

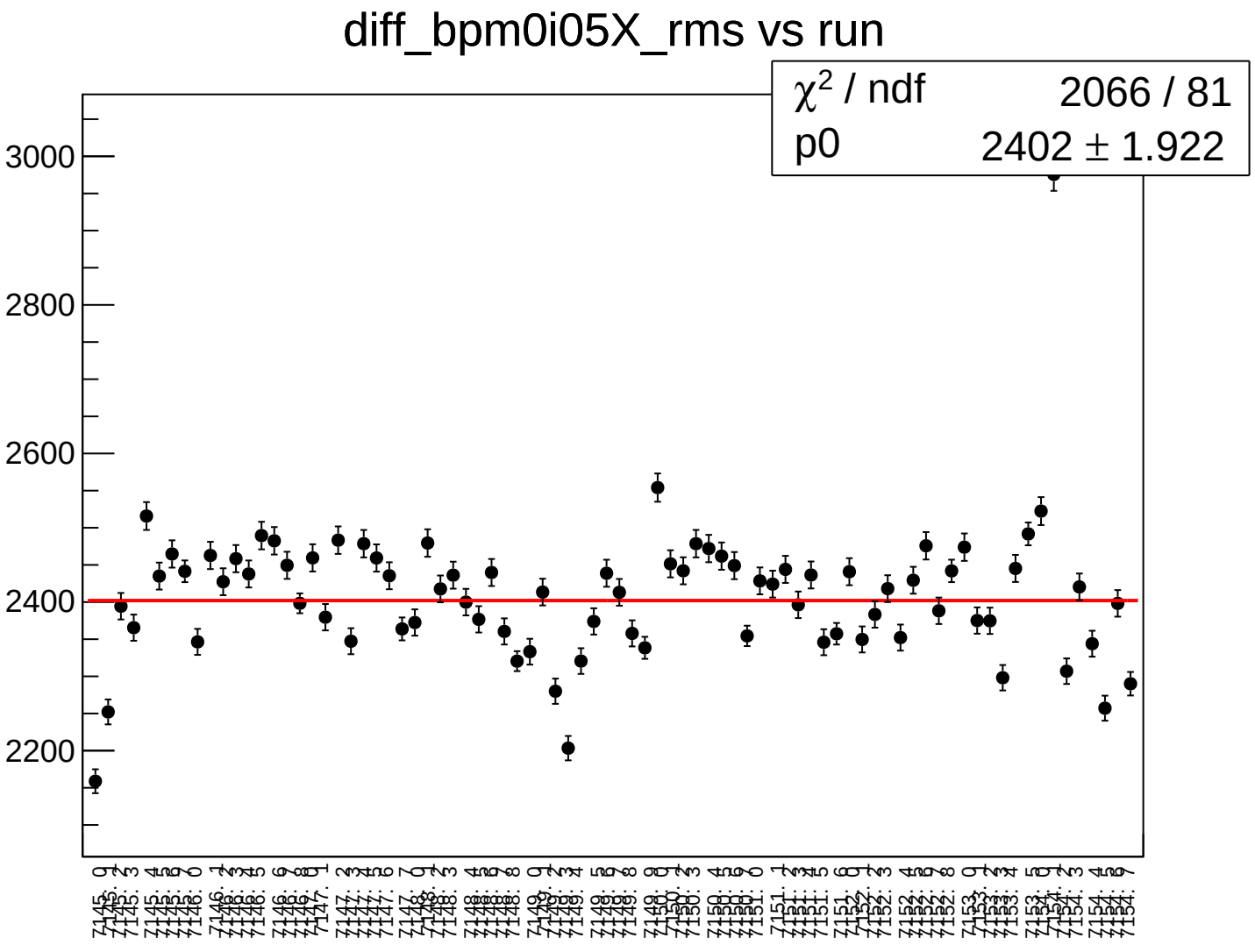

diff_bpm0i02aY_mean vs run
χ^2 / ndf 71.46 / 81
p0 45.43 ± 1.609
pull
Entries 82
Mean −9.916
Std Dev 26.87

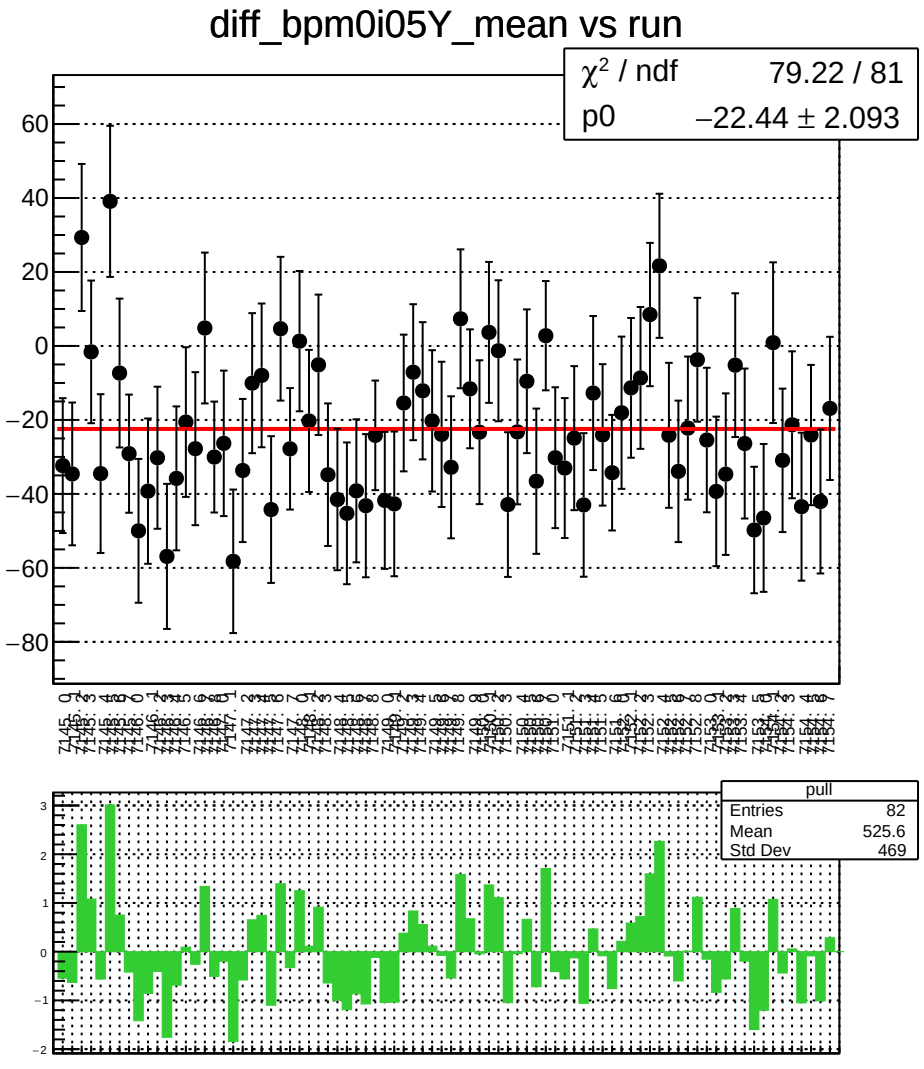

pull1D
Entries 82
Mean 0.01221
Std Dev 0.9334

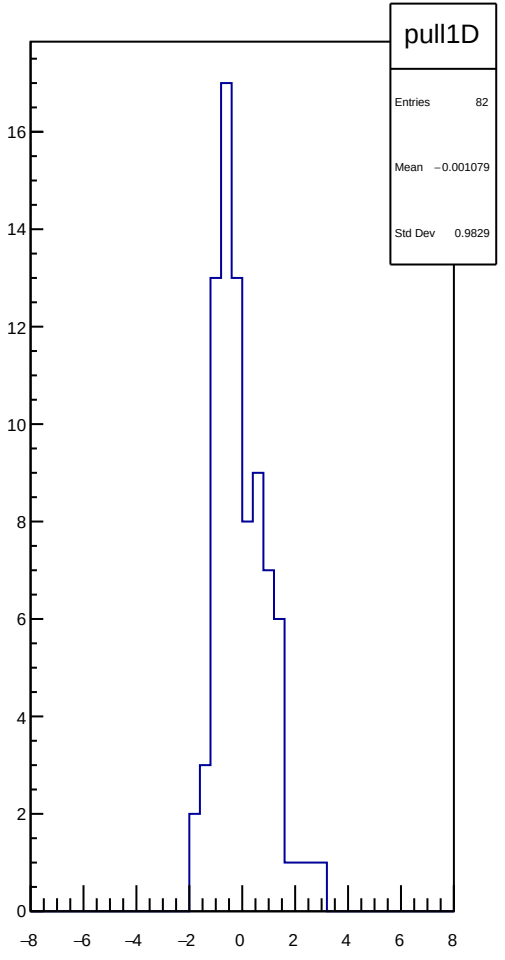

diff_bpm0i02aY_rms vs run
χ² / ndf 3850 / 81
p0 1421 ± 1.137
1600
1550
1500
1450
1400
1350
1300
1250
1200

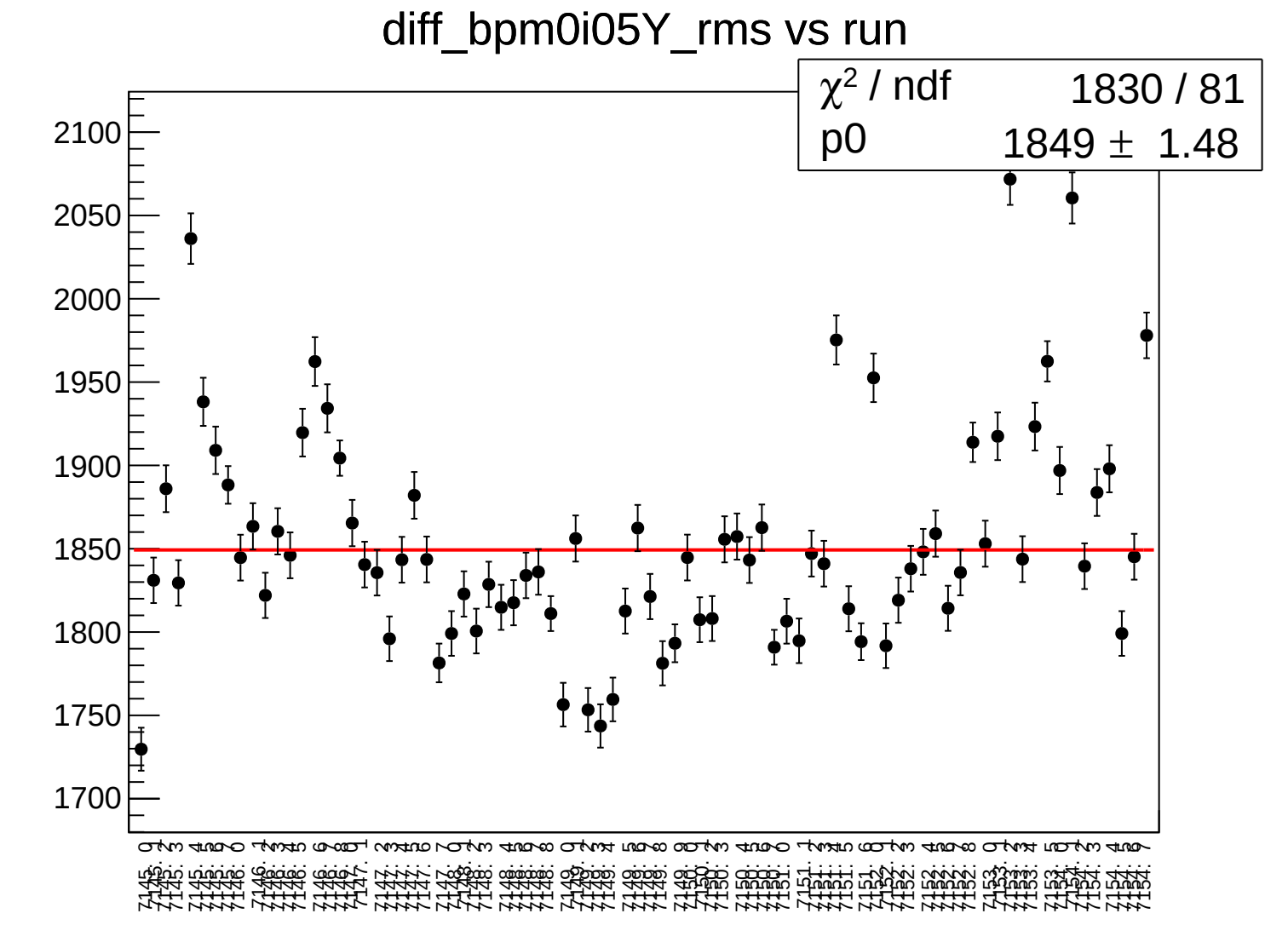

diff_bpm0i05X_mean vs run
χ² / ndf 97.21 / 81
p0 −41.29 ± 2.718
pull
Entries 82
Mean −411.9
Std Dev 455.5

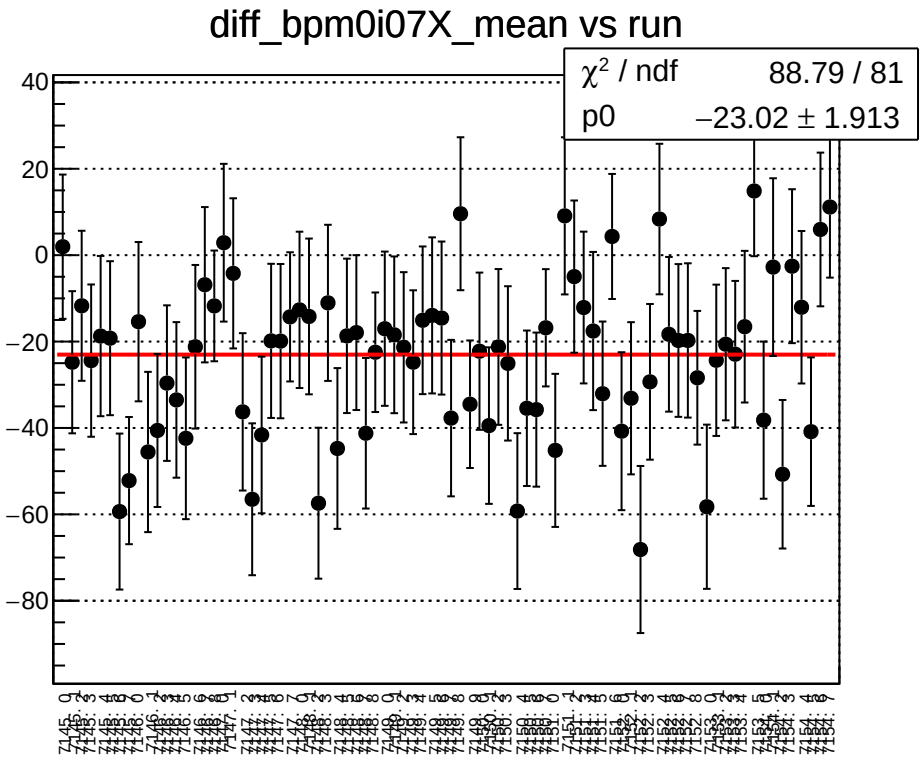

pull1D
Entries 82
Mean −0.01455
Std Dev 1.089

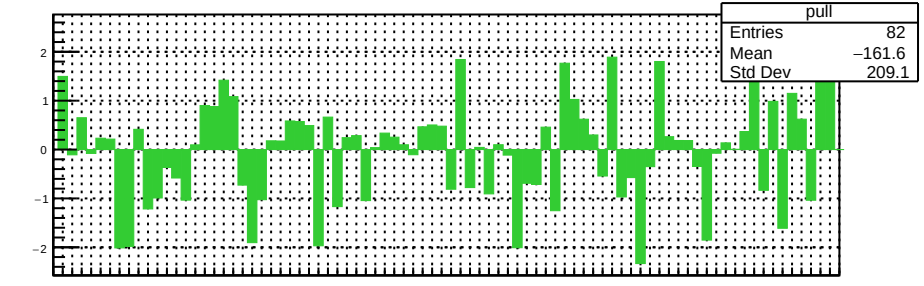

diff_bpm0i05X_rms vs run
χ² / ndf 2066 / 81
p0 2402 ± 1.922
3000
2800
2600
2400
2200

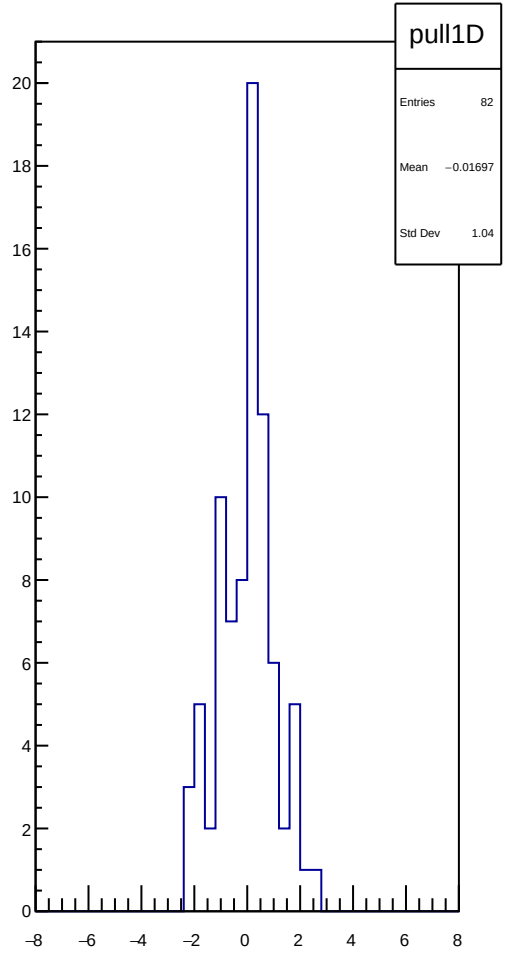

diff_bpm0i05Y_mean vs run
χ² / ndf 79.22 / 81
p0 −22.44 ± 2.093
pull
Entries 82
Mean 525.6
Std Dev 469

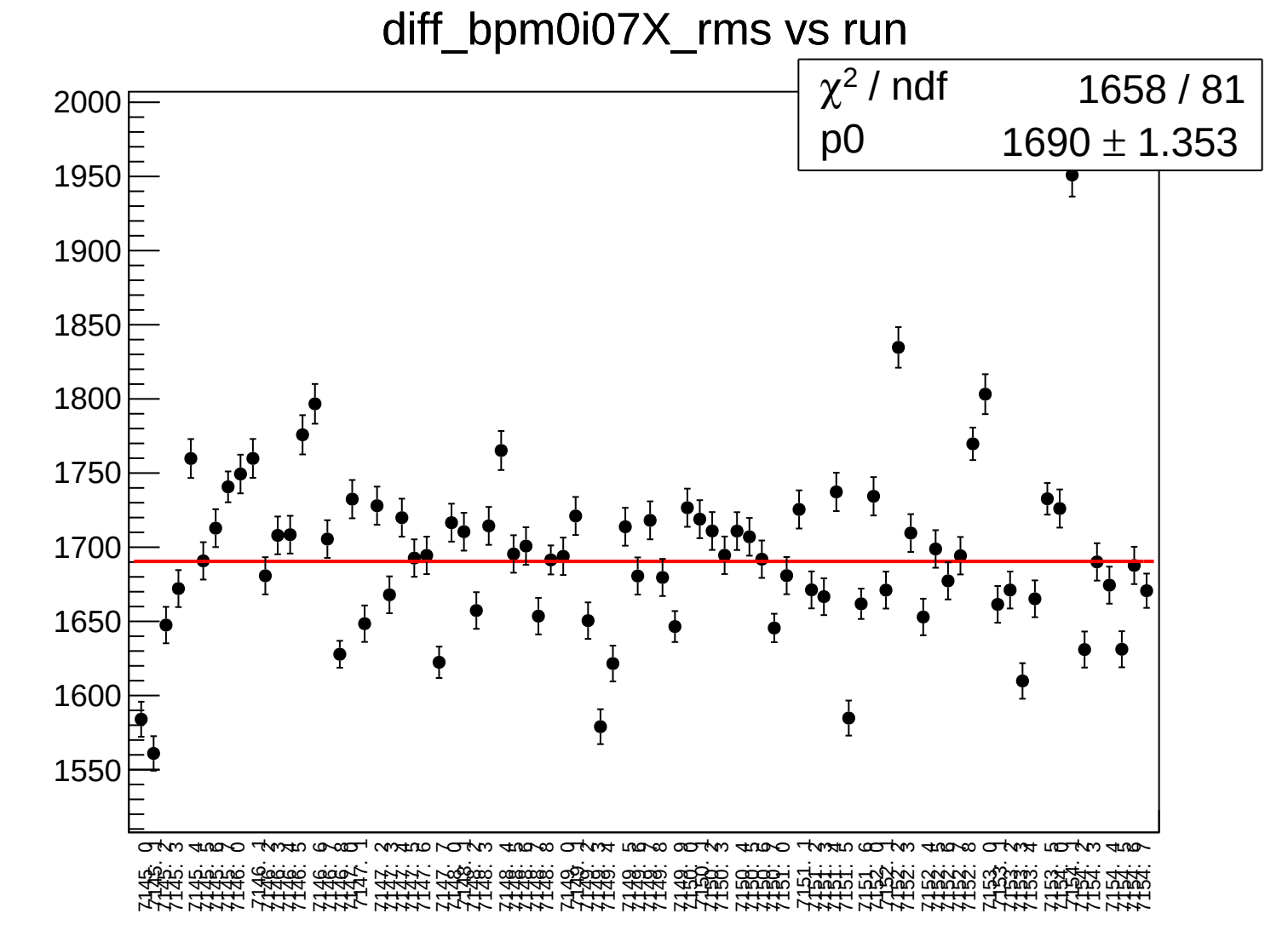

pull1D
Entries 82
Mean −0.001079
Std Dev 0.9829

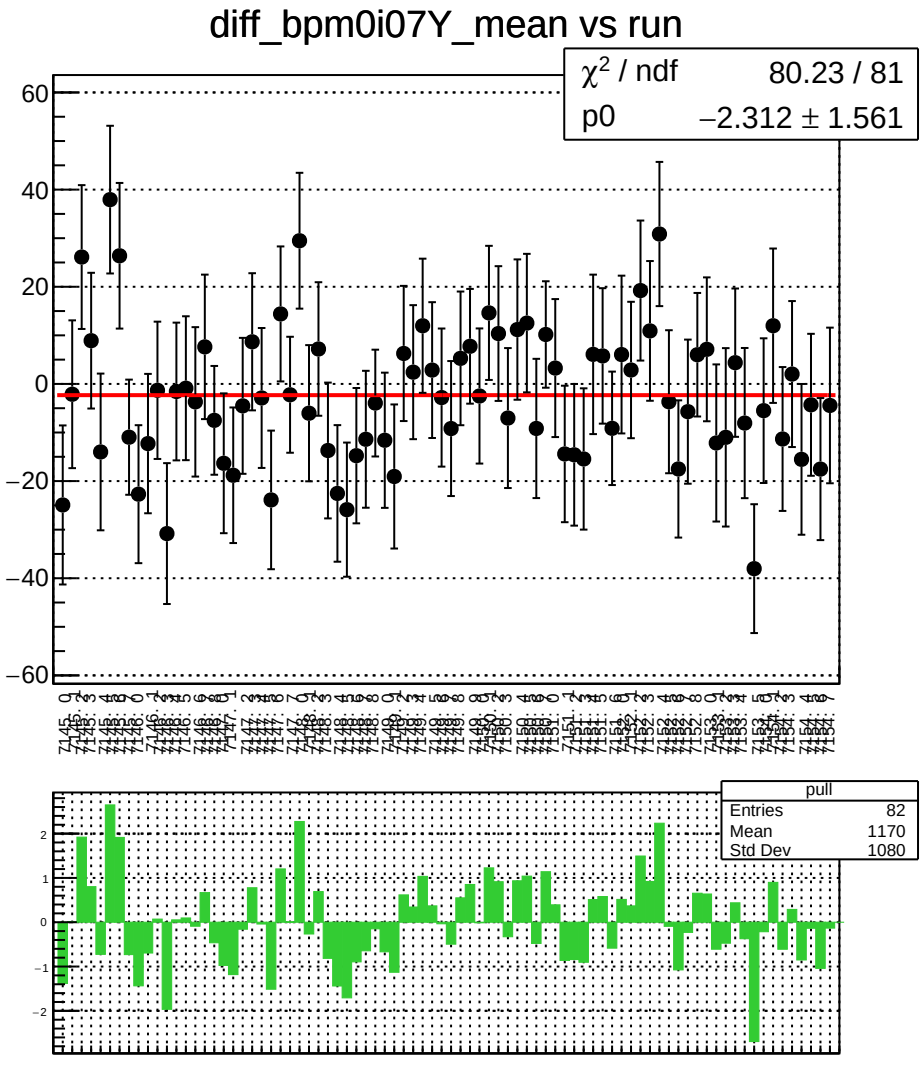

diff_bpm0i05Y_rms vs run
χ² / ndf 1830 / 81
p0 1849 ± 1.48
2100
2050
2000
1950
1900
1850
1800
1750
1700

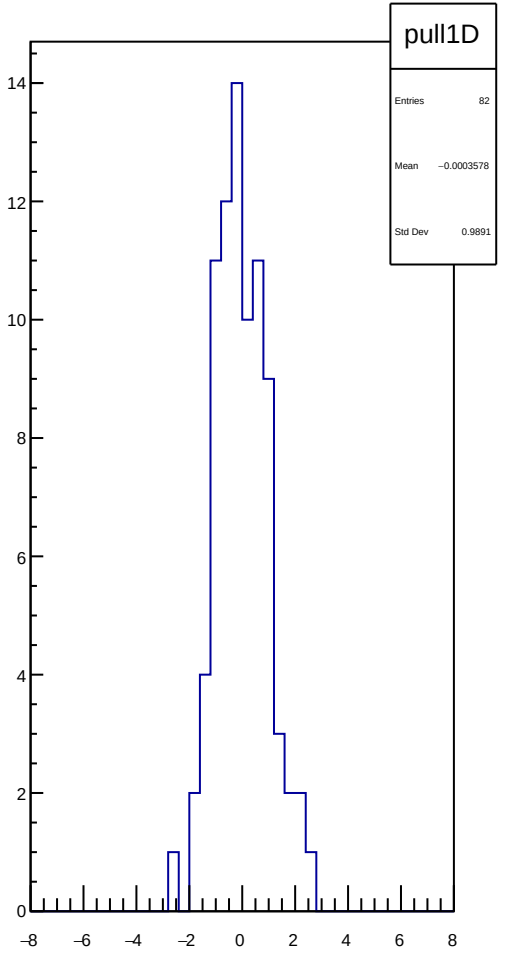

diff_bpm0i07X_mean vs run
χ² / ndf 88.79 / 81
p0 −23.02 ± 1.913
40
20
0
−20
−40
−60
−80

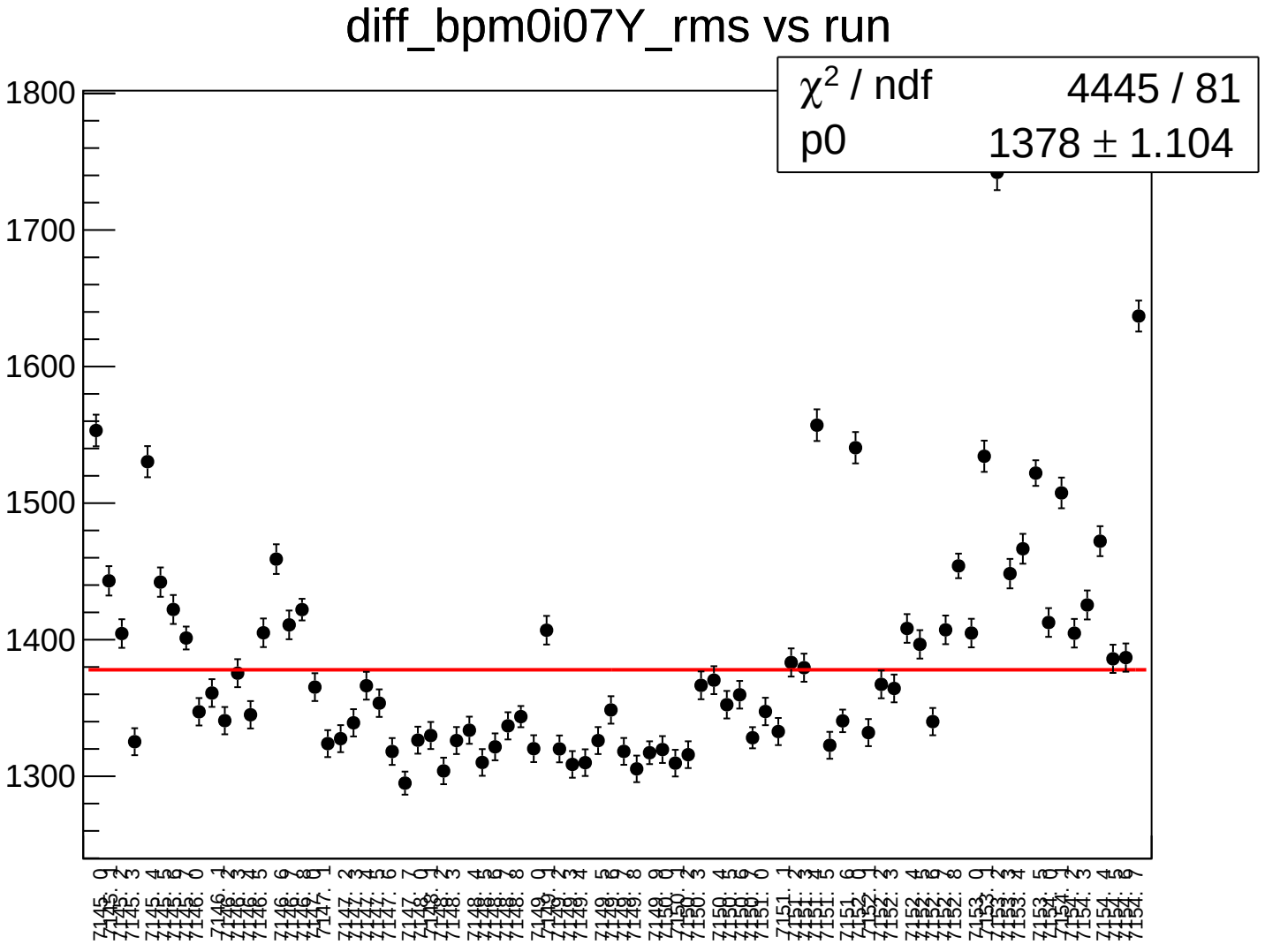

pull
Entries 82
Mean −161.6
Std Dev 209.1
2
1
0
−1
−2

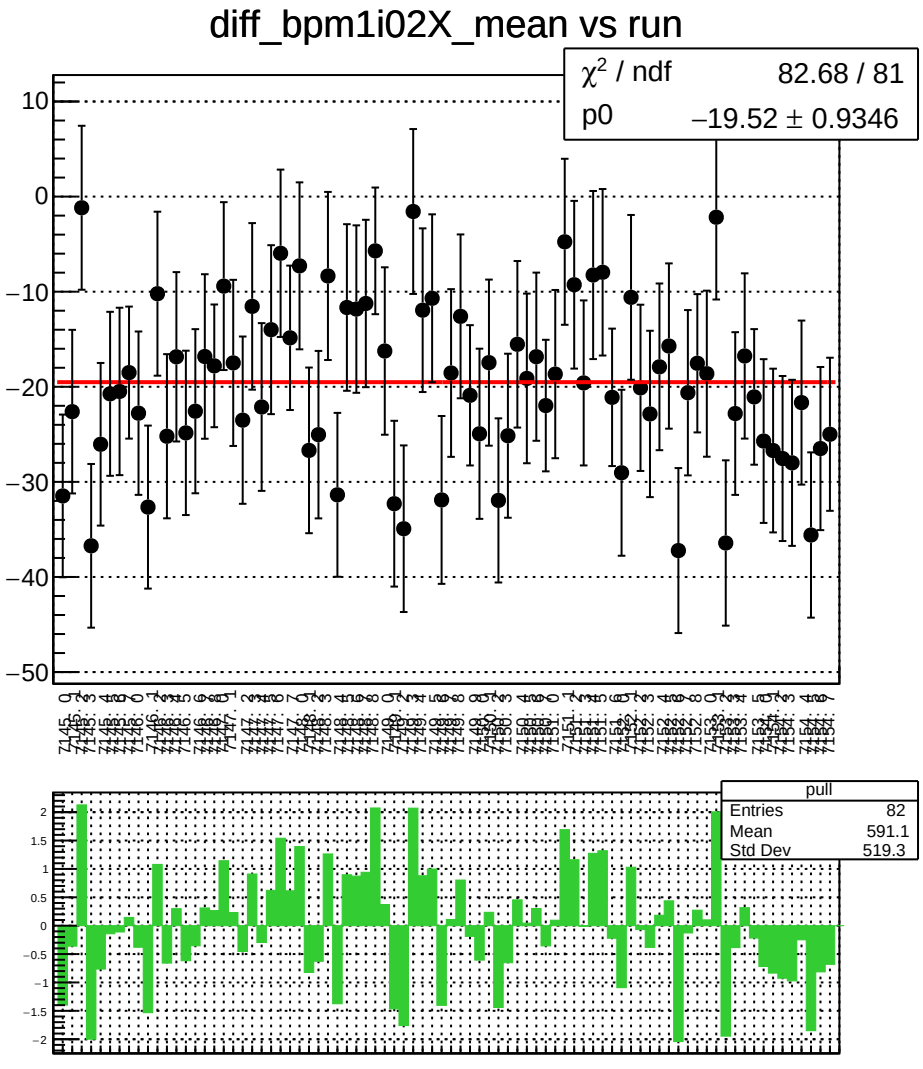

pull1D
Entries 82
Mean −0.01697
Std Dev 1.04
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

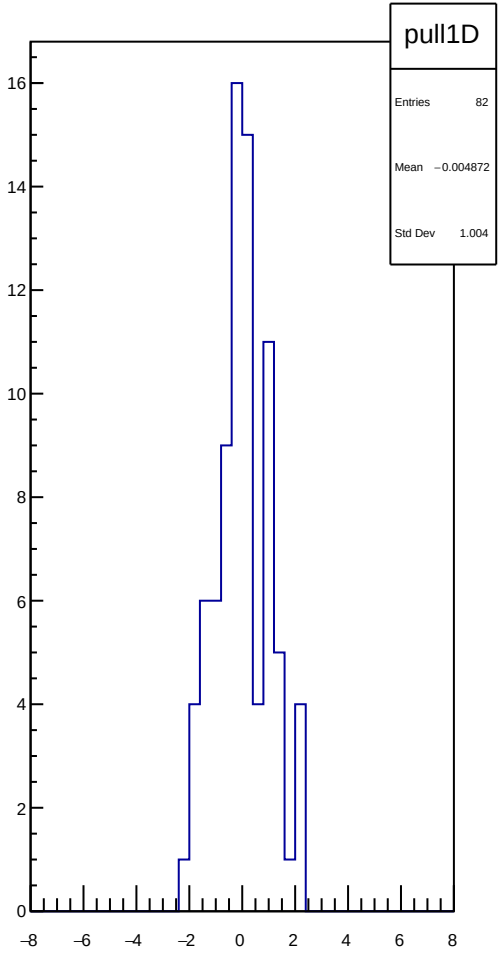

diff_bpm0i07X_rms vs run
χ² / ndf 1658 / 81
p0 1690 ± 1.353
2000
1950
1900
1850
1800
1750
1700
1650
1600
1550

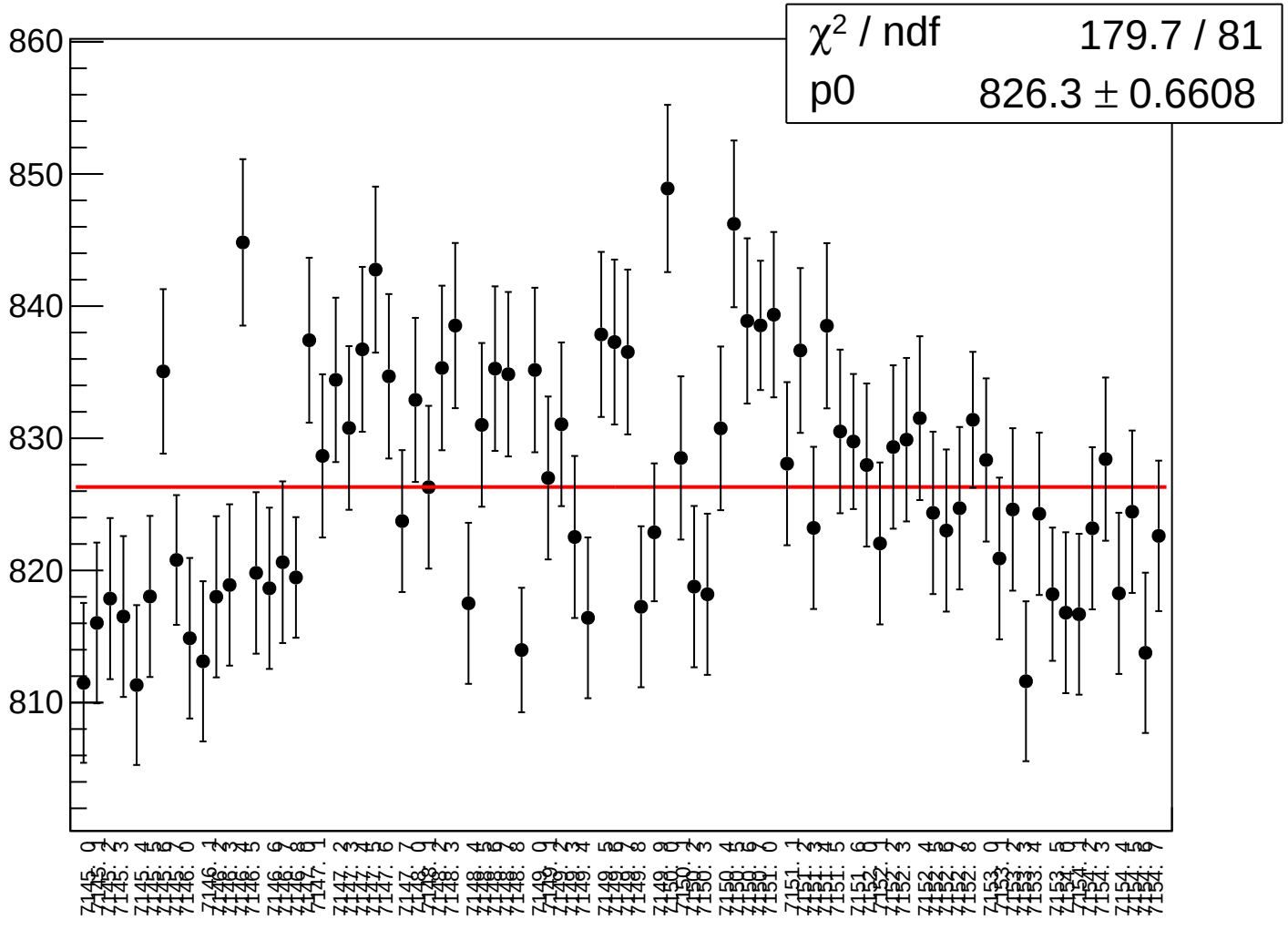

diff_bpm0i07Y_mean vs run
χ² / ndf 80.23 / 81
p0 −2.312 ± 1.561
pull
Entries 82
Mean 1170
Std Dev 1080

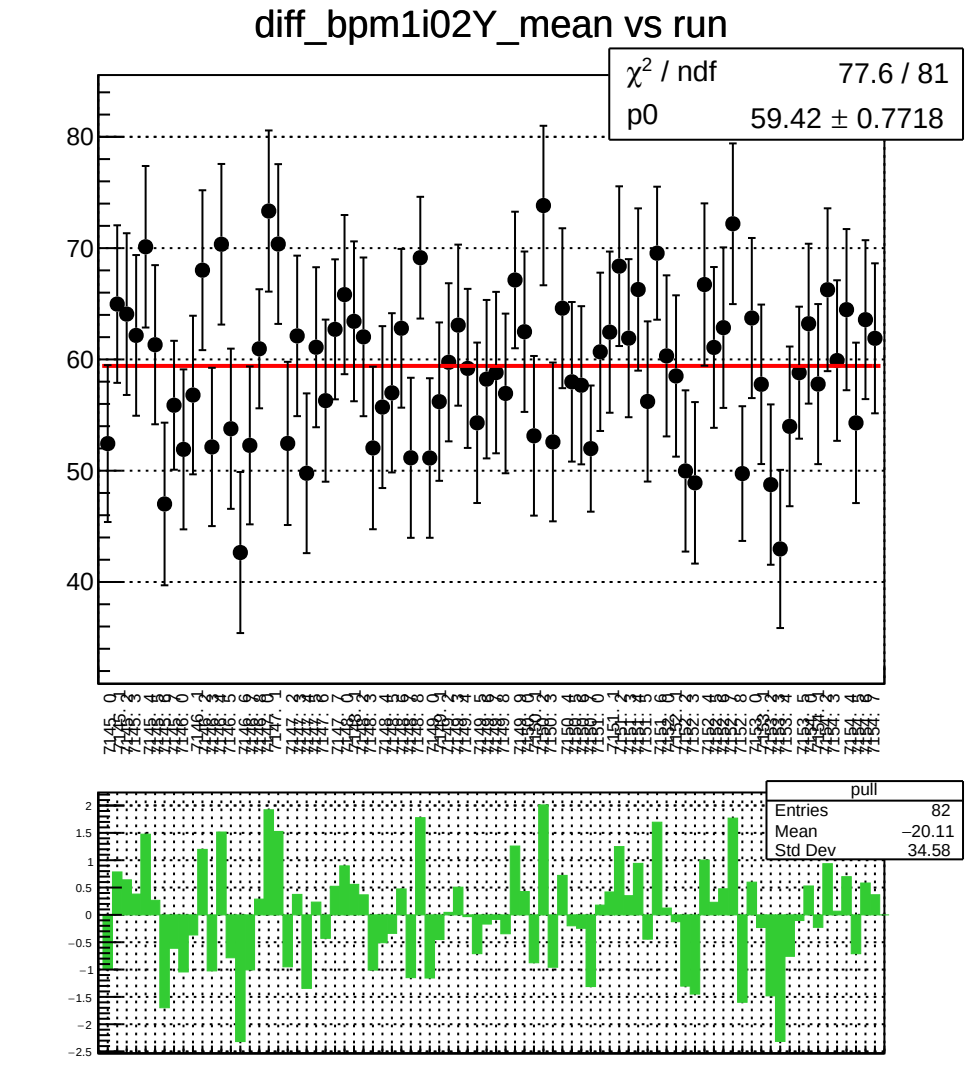

pull1D
Entries 82
Mean −0.0003578
Std Dev 0.9891

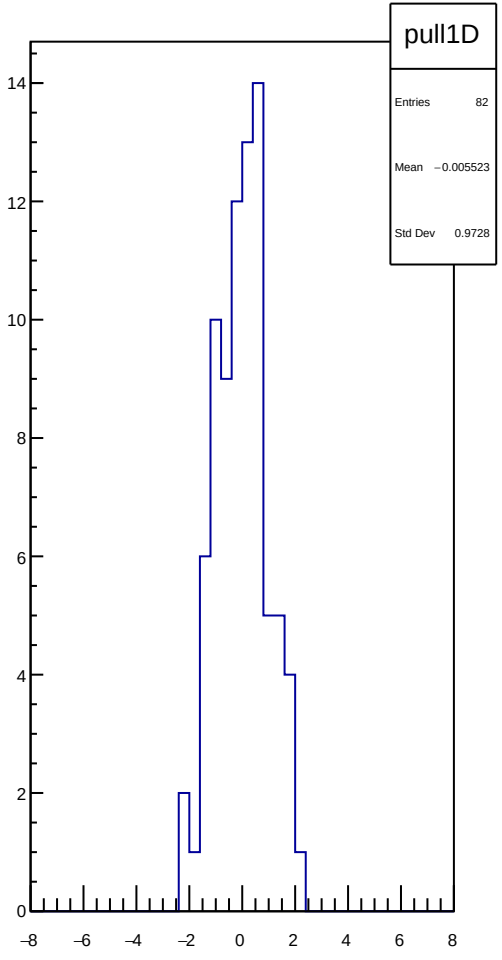

diff_bpm0i07Y_rms vs run
χ² / ndf 4445 / 81
p0 1378 ± 1.104
1800
1700
1600
1500
1400
1300

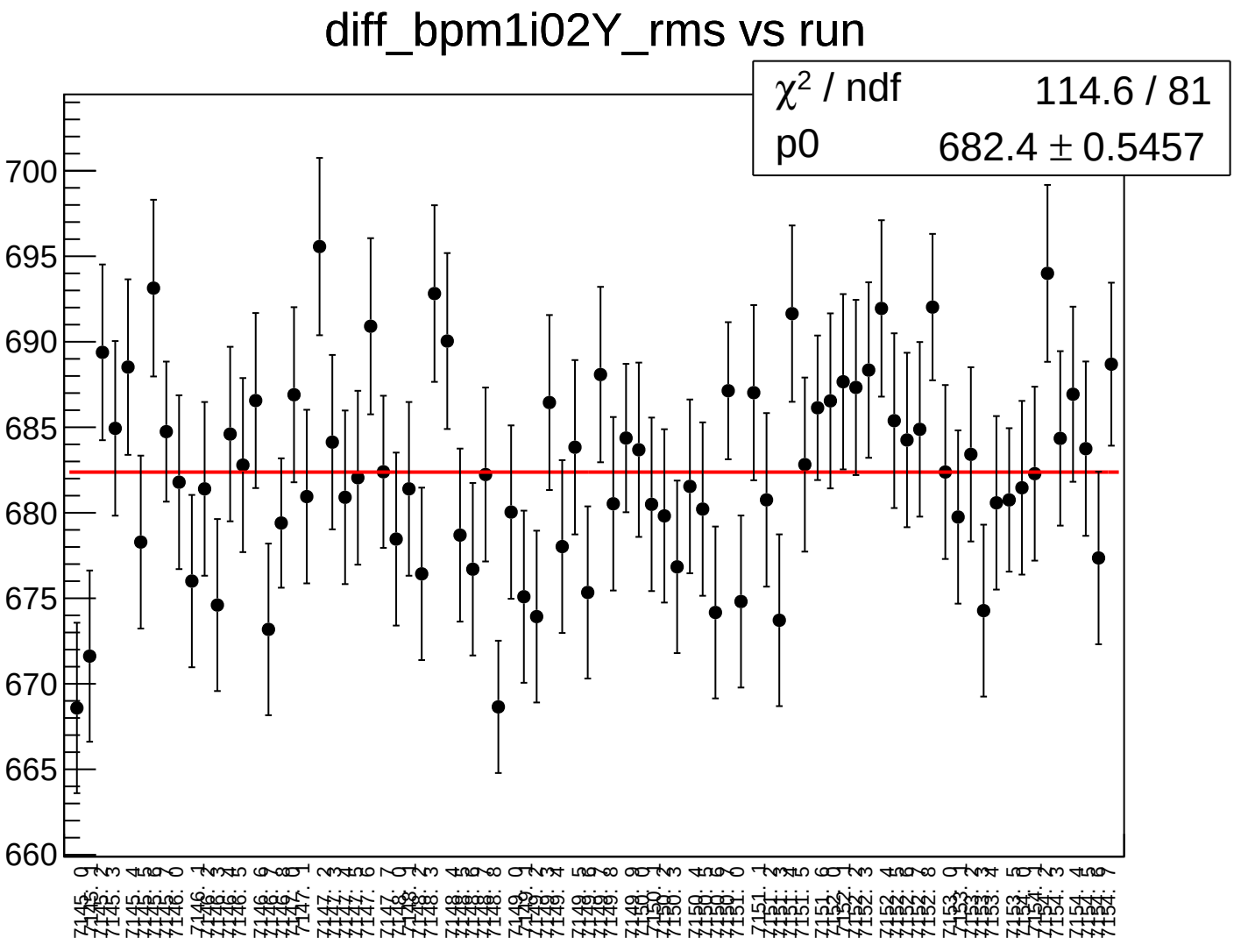

diff_bpm1i02X_mean vs run
χ² / ndf 82.68 / 81
p0 −19.52 ± 0.9346
pull
Entries 82
Mean 591.1
Std Dev 519.3

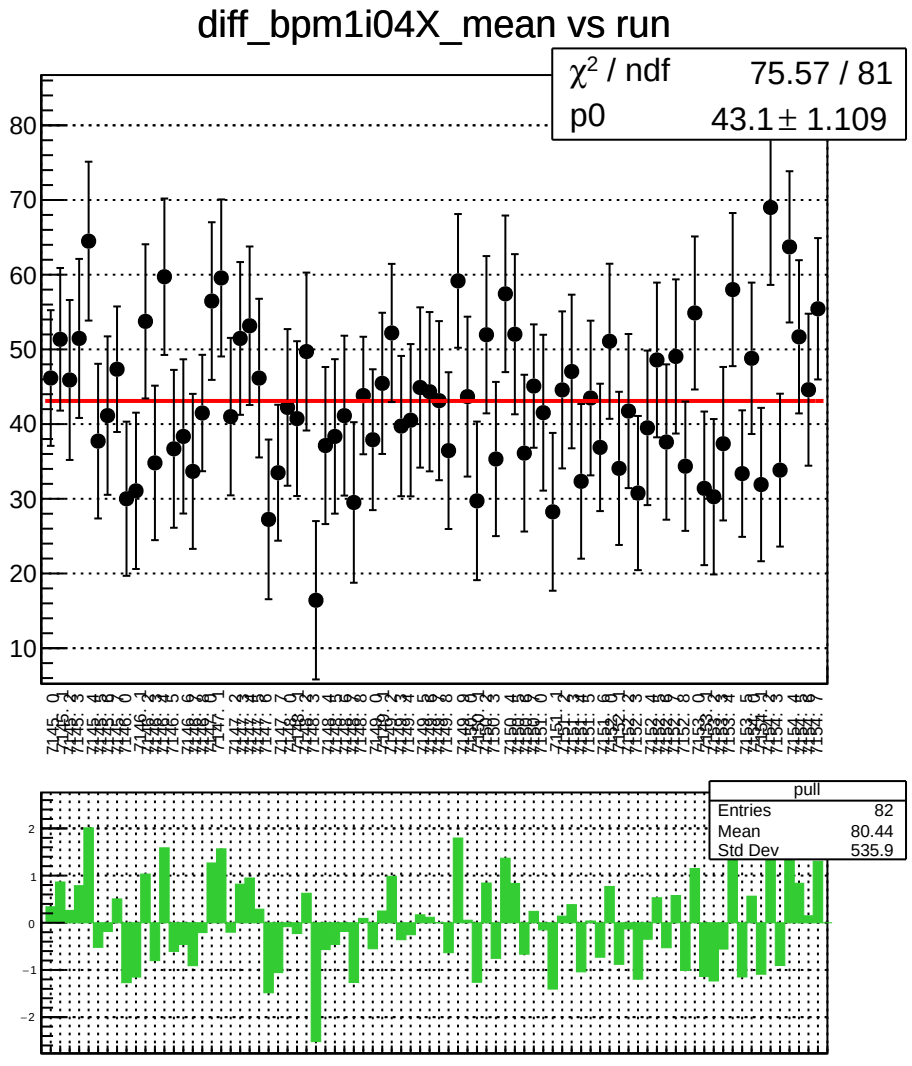

pull1D
Entries 82
Mean −0.004872
Std Dev 1.004

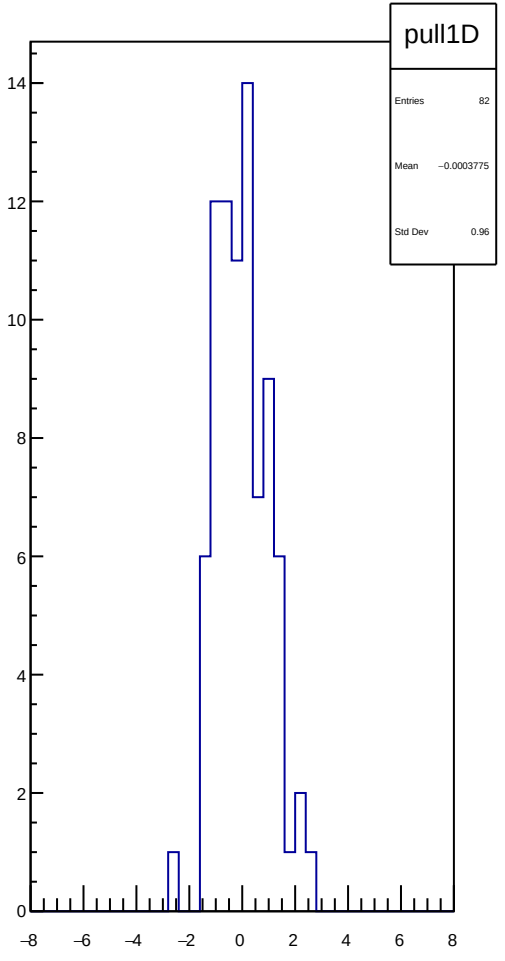

diff_bpm1i02X_rms vs run
χ² / ndf 179.7 / 81
p0 826.3 ± 0.6608
860
850
840
830
820
810

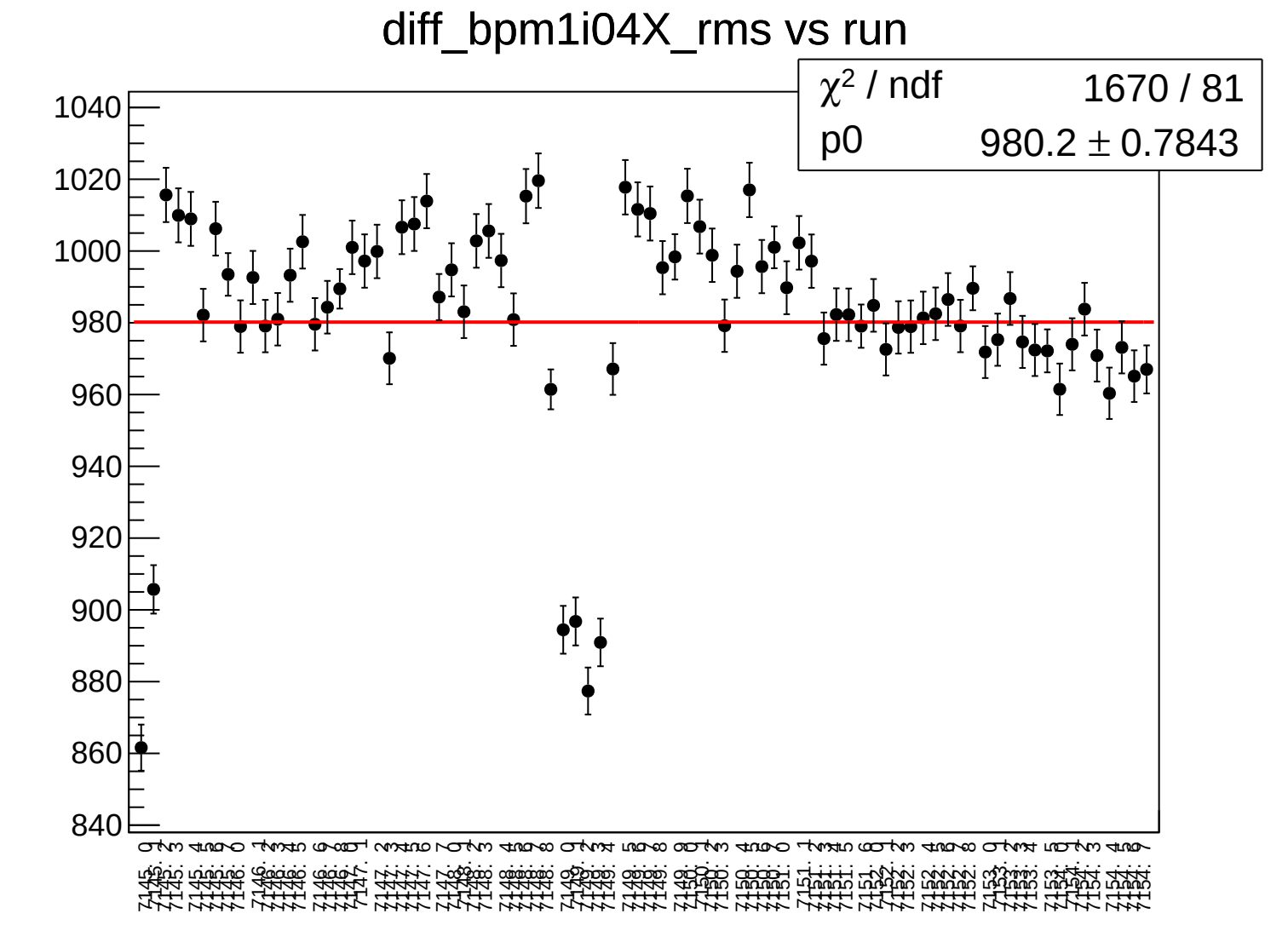

diff_bpm1i02Y_mean vs run
χ^2 / ndf 77.6 / 81
p0 59.42 ± 0.7718
pull
Entries 82
Mean −20.11
Std Dev 34.58

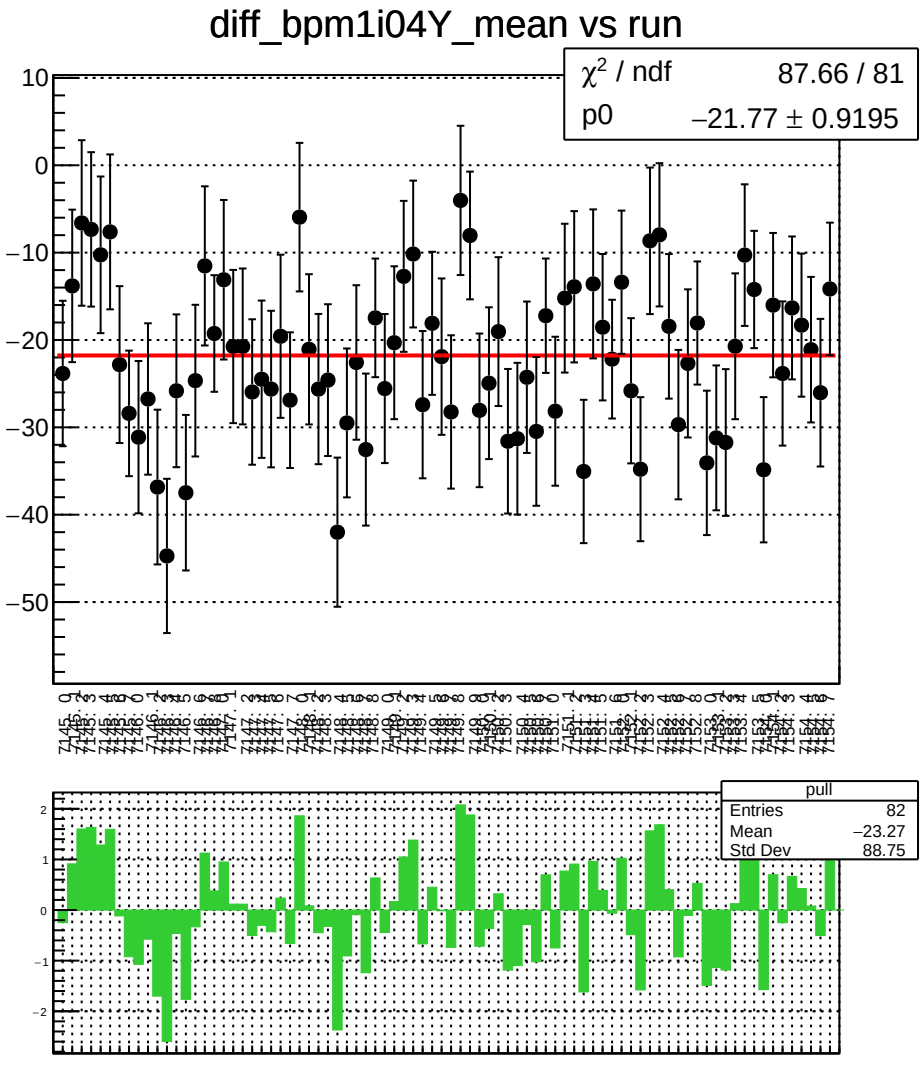

pull1D
Entries 82
Mean −0.005523
Std Dev 0.9728

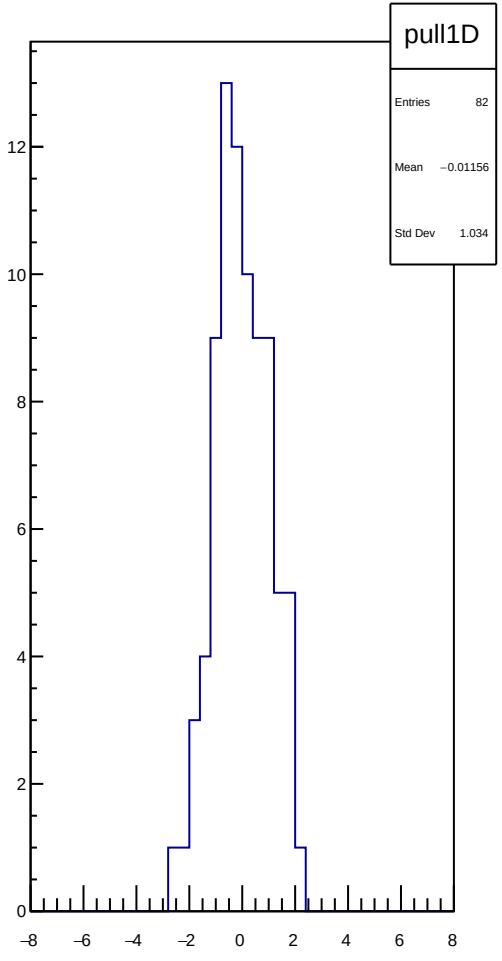

diff_bpm1i02Y_rms vs run
χ² / ndf 114.6 / 81
p0 682.4 ± 0.5457
700
695
690
685
680
675
670
665
660

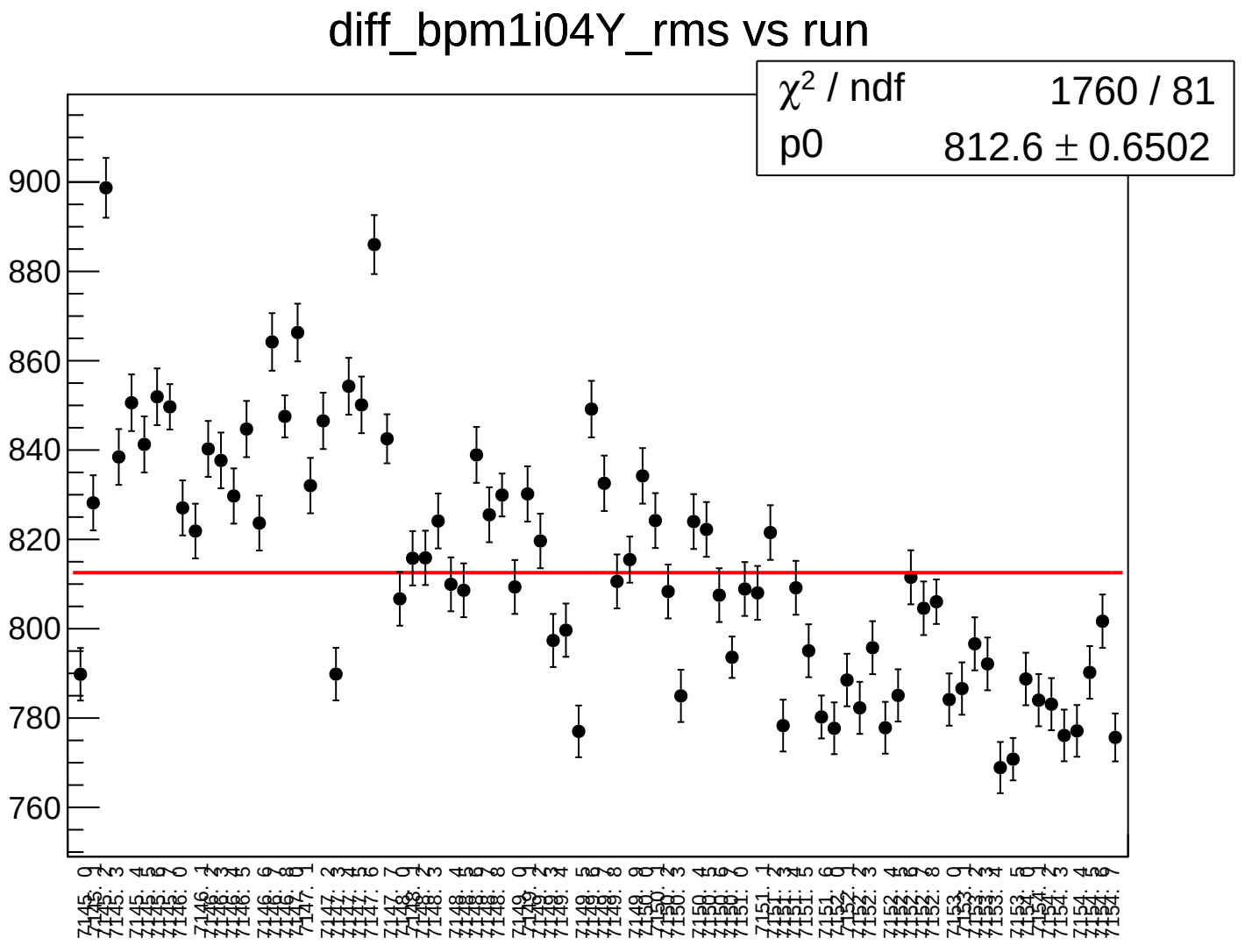

diff_bpm1i04X_mean vs run
χ^2 / ndf 75.57 / 81
p0 43.1 ± 1.109
pull
Entries 82
Mean 80.44
Std Dev 535.9

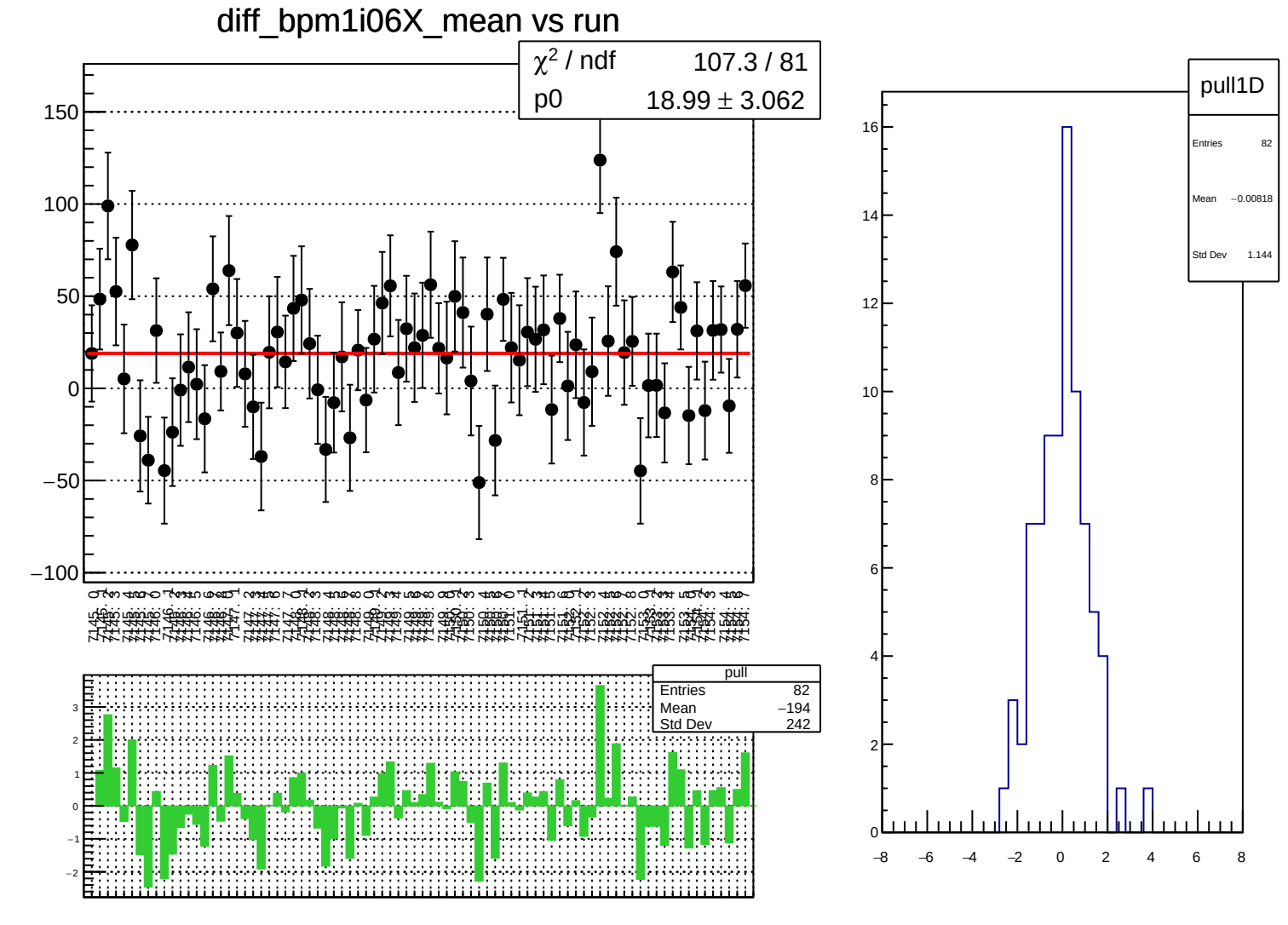

pull1D
Entries 82
Mean −0.0003775
Std Dev 0.96

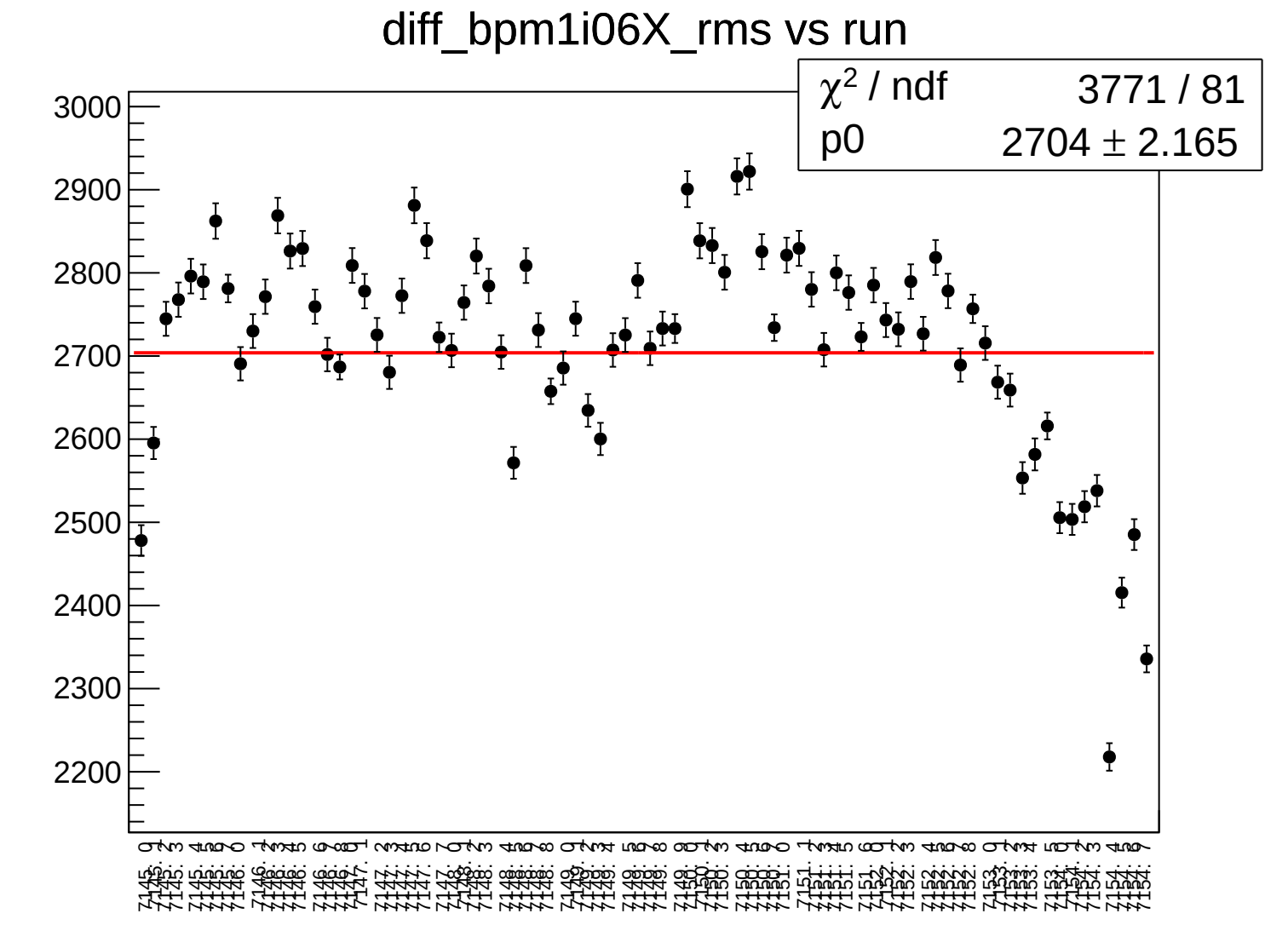

diff_bpm1i04X_rms vs run
χ² / ndf 1670 / 81
p0 980.2 ± 0.7843
1040
1020
1000
980
960
940
920
900
880
860
840

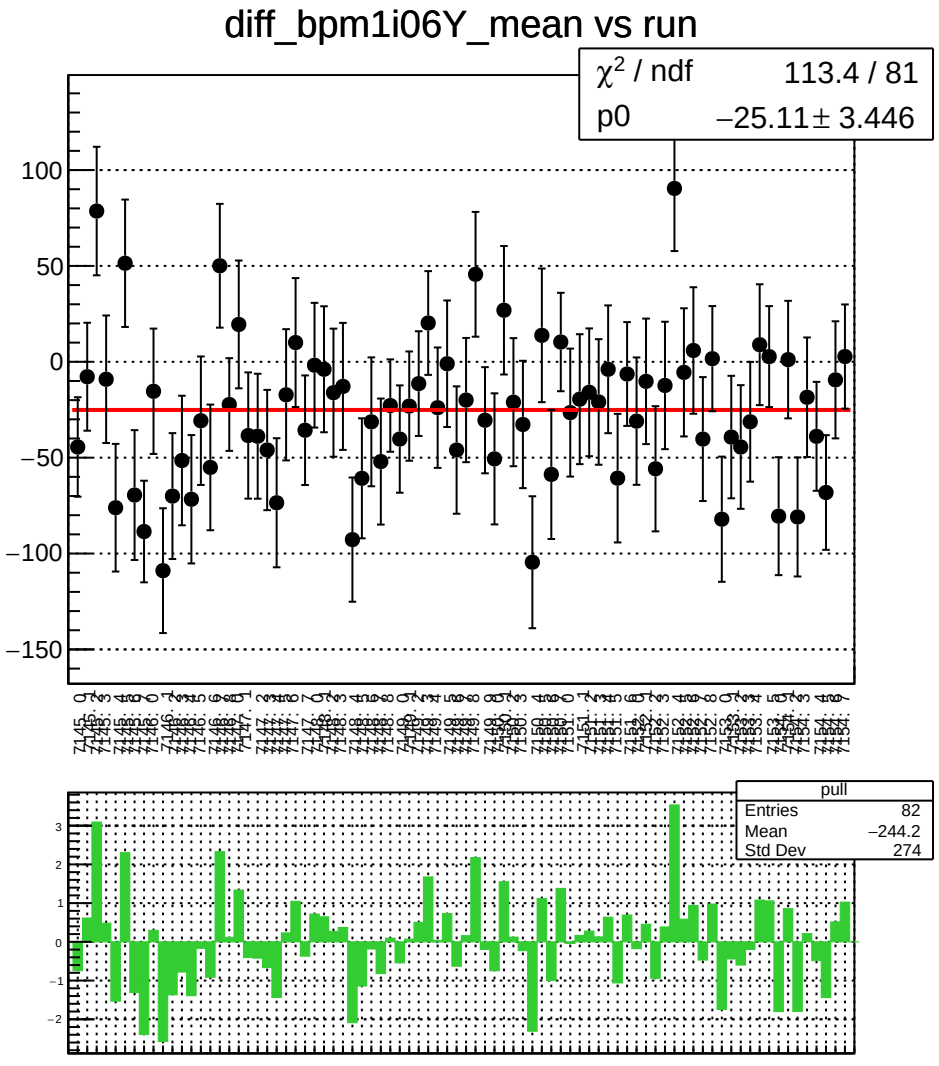

diff_bpm1i04Y_mean vs run
χ² / ndf 87.66 / 81
p0 −21.77 ± 0.9195
pull
Entries 82
Mean −23.27
Std Dev 88.75

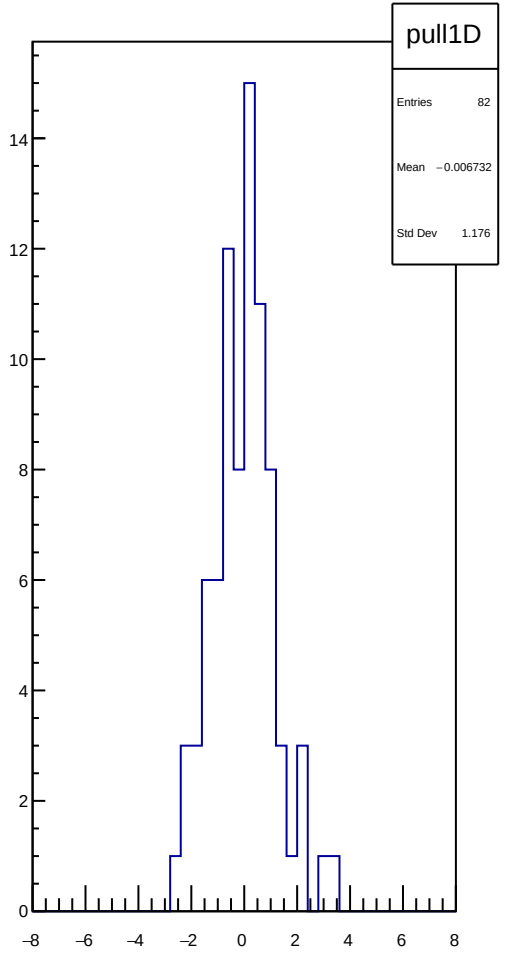

pull1D
Entries 82
Mean −0.01156
Std Dev 1.034

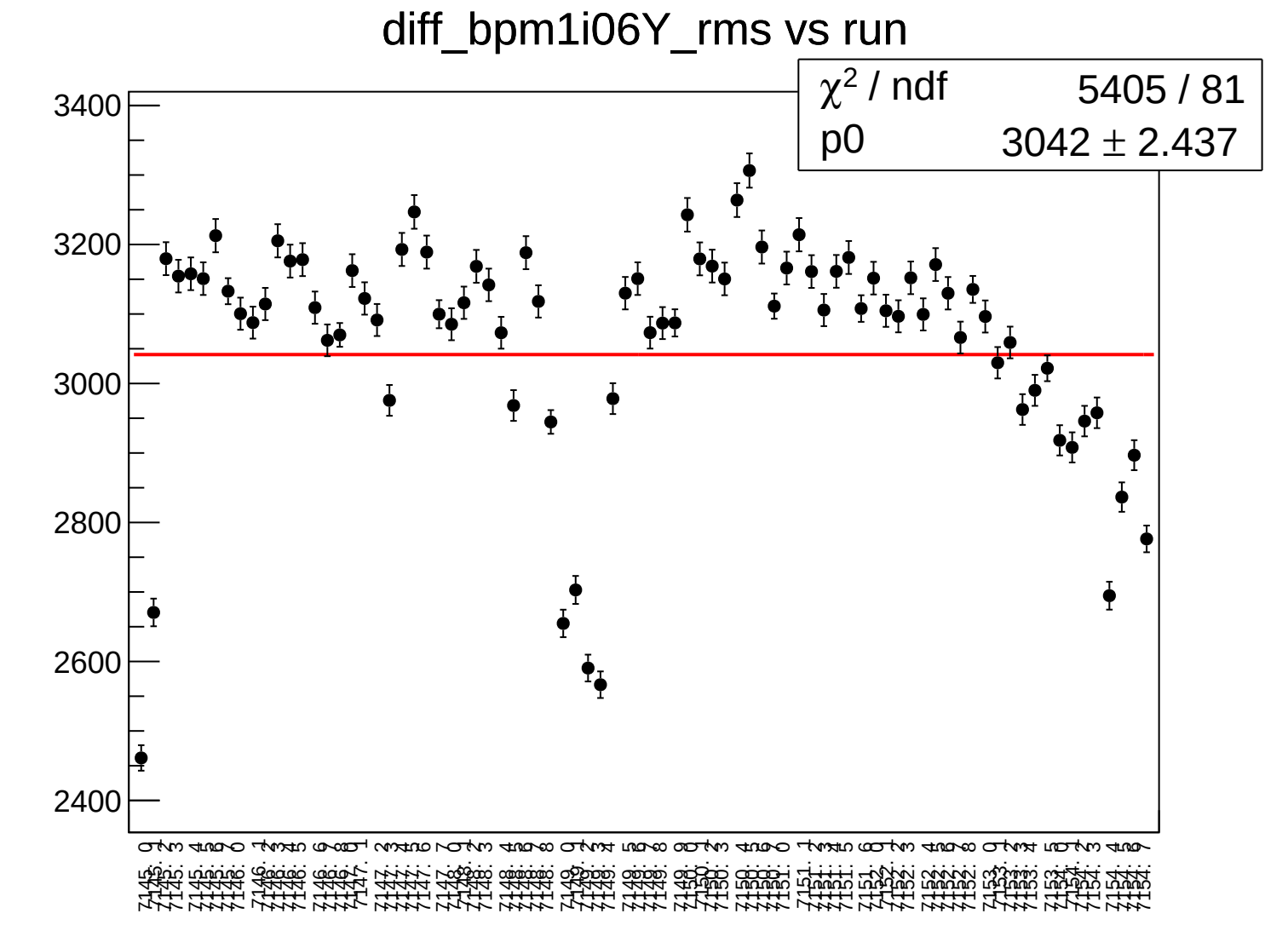

diff_bpm1i04Y_rms vs run
χ² / ndf 1760 / 81
p0 812.6 ± 0.6502
900
880
860
840
820
800
780
760

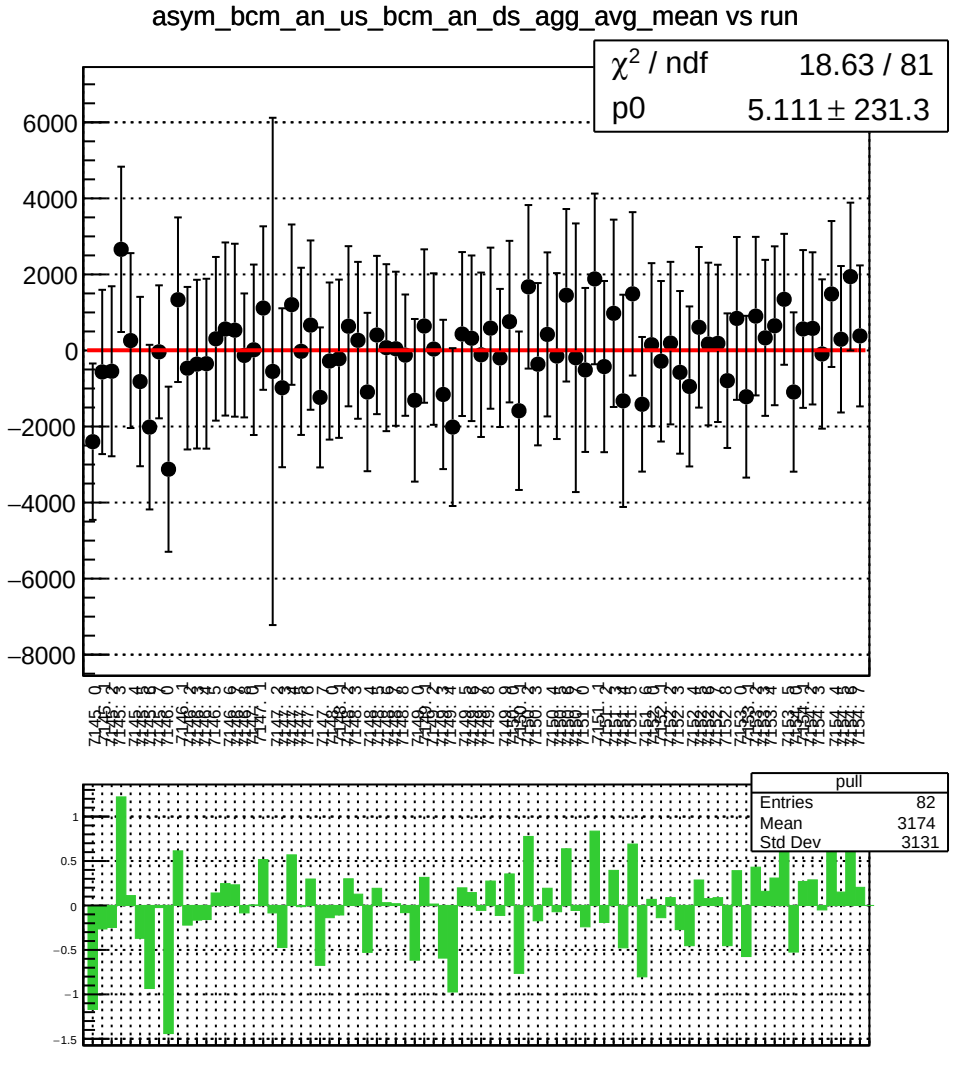

diff_bpm1i06X_mean vs run
χ^2 / ndf 107.3 / 81
p0 18.99 ± 3.062
pull
Entries 82
Mean −194
Std Dev 242
pull1D
Entries 82
Mean −0.00818
Std Dev 1.144

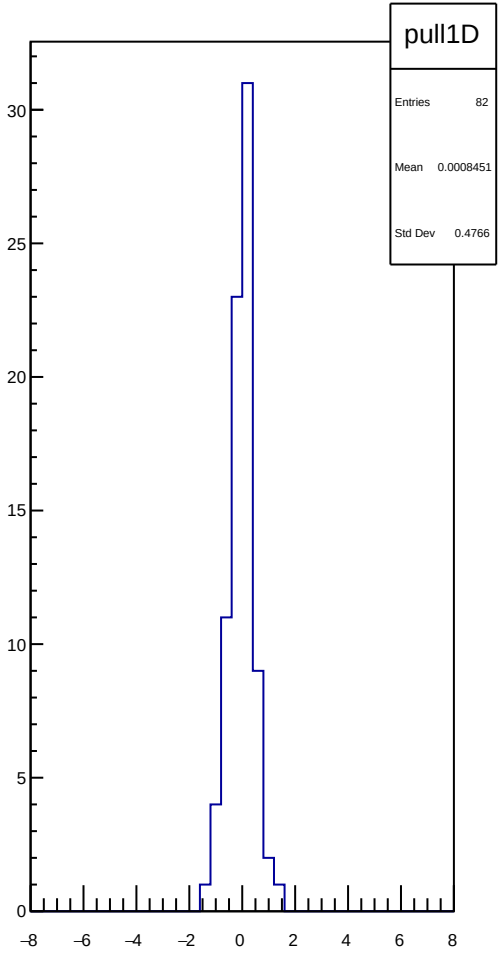

diff_bpm1i06X_rms vs run
χ^2 / ndf 3771 / 81
p0 2704 ± 2.165
3000
2900
2800
2700
2600
2500
2400
2300
2200

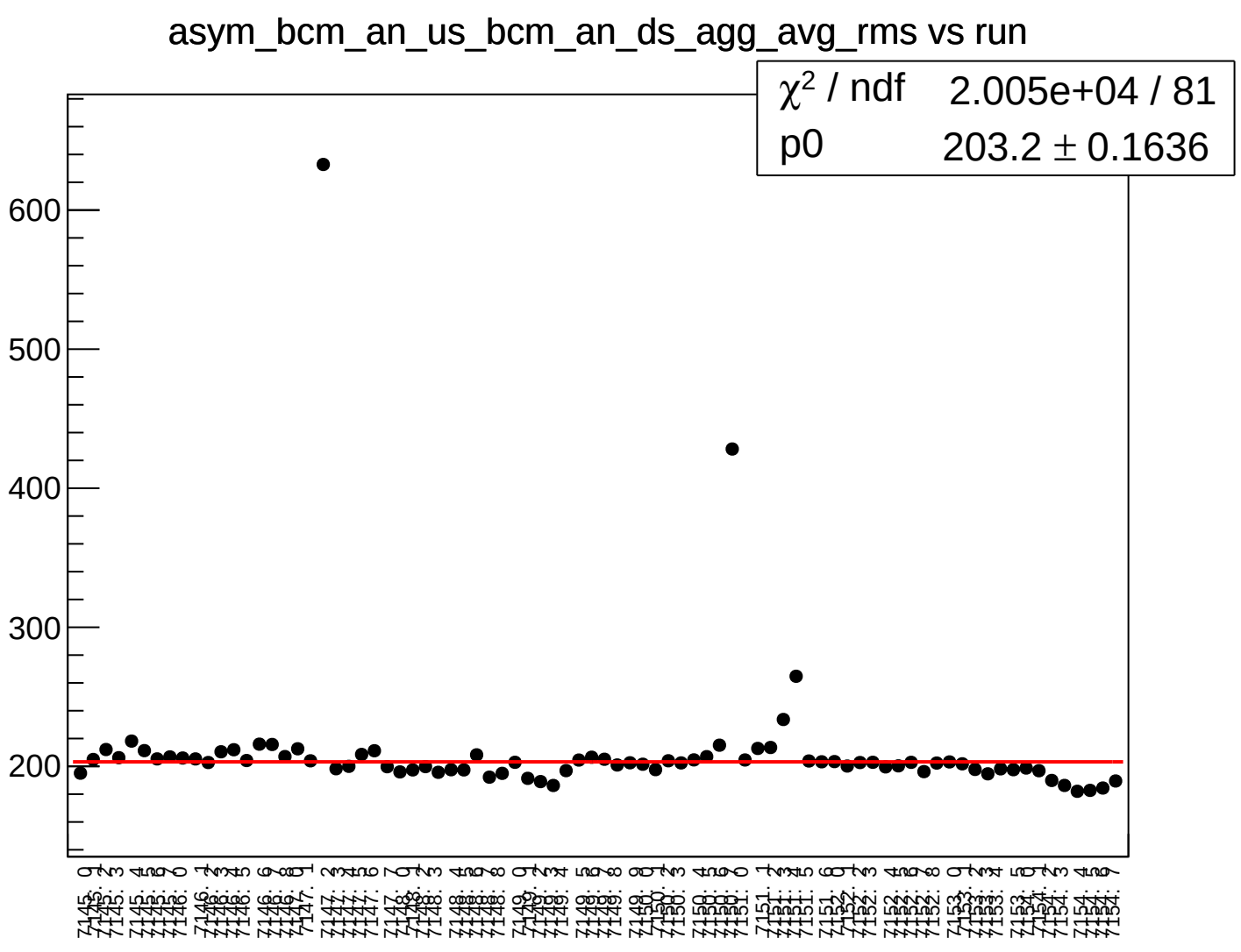

diff_bpm1i06Y_mean vs run
χ² / ndf 113.4 / 81
p0 −25.11 ± 3.446
100
50
0
−50
−100
−150
pull
Entries 82
Mean −244.2
Std Dev 274
3
2
1
0
−1
−2

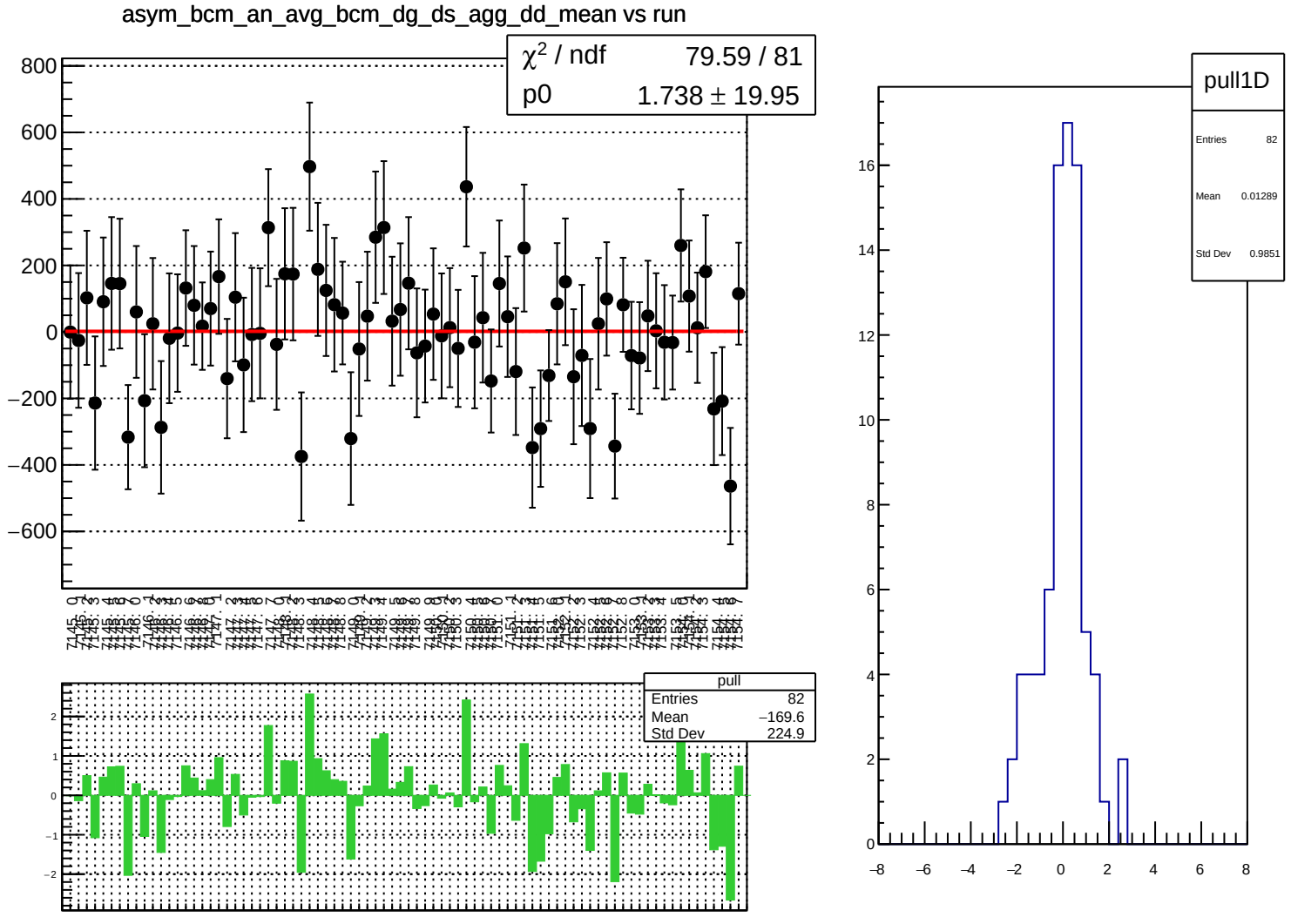

pull1D
Entries 82
Mean −0.006732
Std Dev 1.176
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

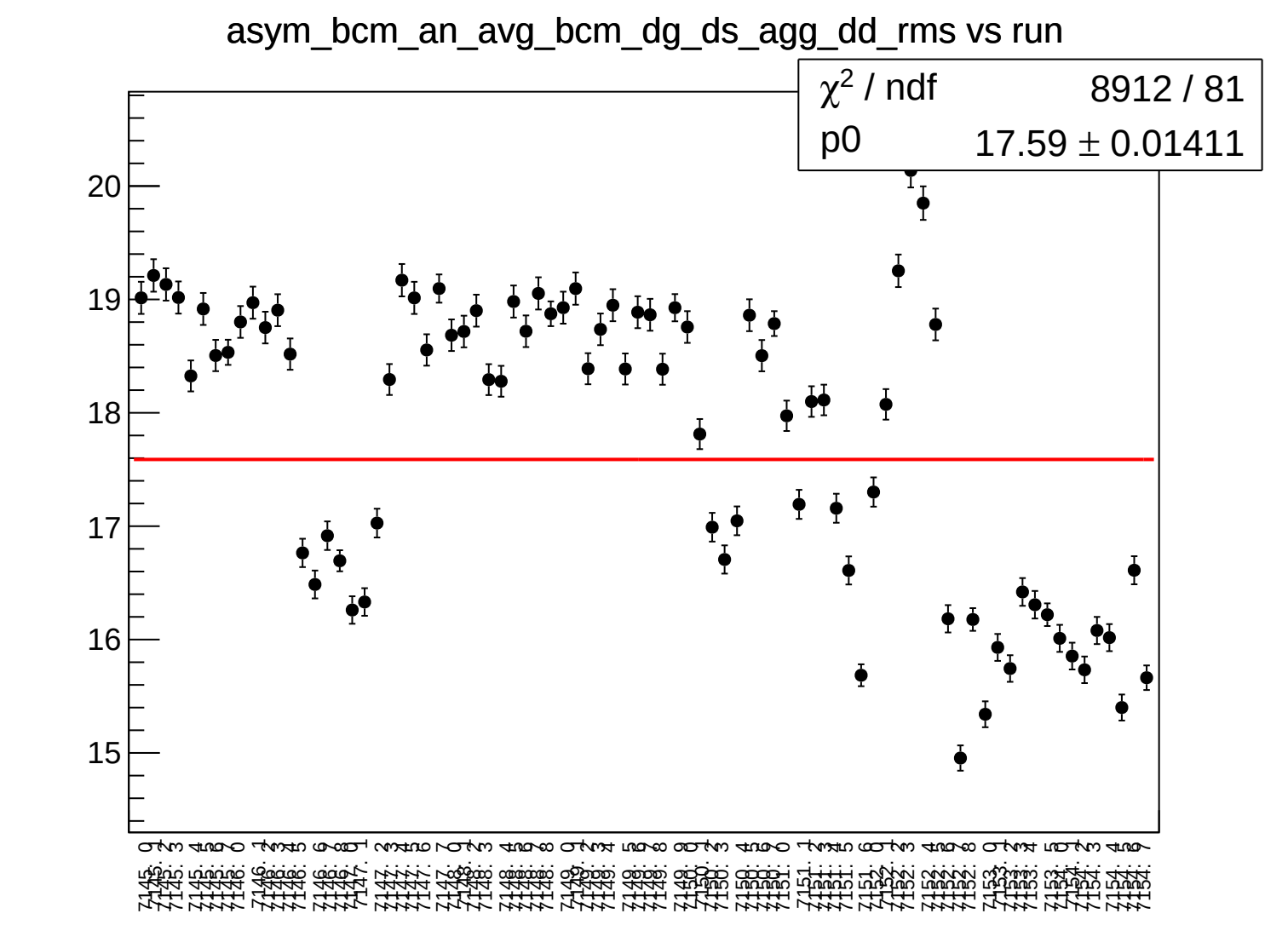

diff_bpm1i06Y_rms vs run
χ² / ndf 5405 / 81
p0 3042 ± 2.437
3400
3200
3000
2800
2600
2400

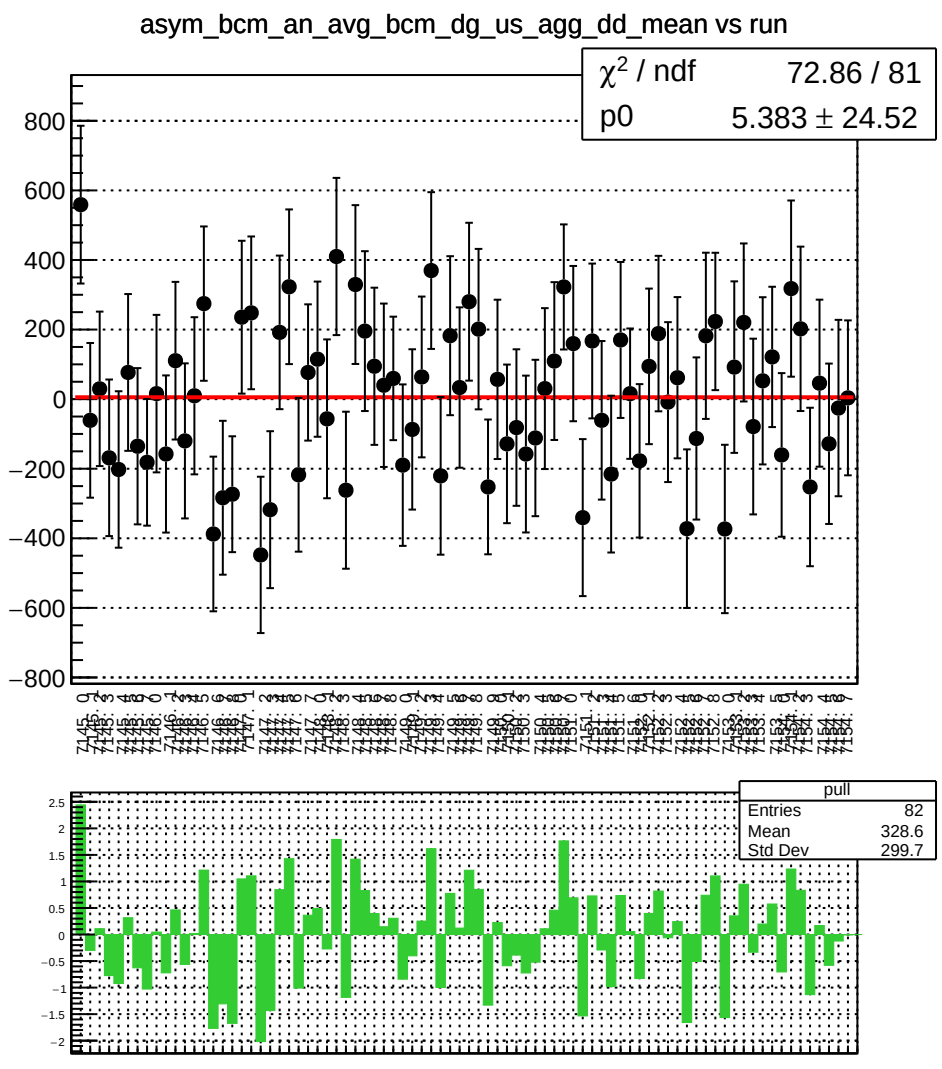

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.63 / 81
p0 5.111 ± 231.3
pull
Entries 82
Mean 3174
Std Dev 3131

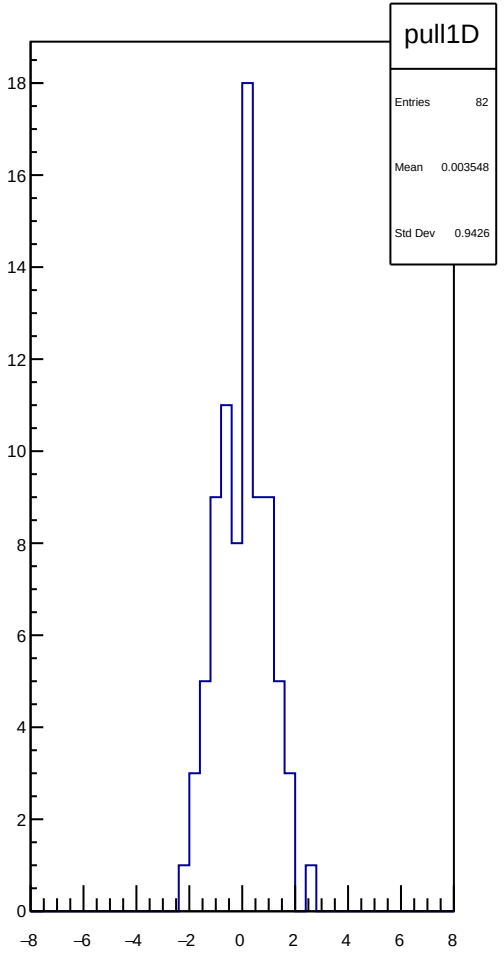

pull1D
Entries 82
Mean 0.0008451
Std Dev 0.4766

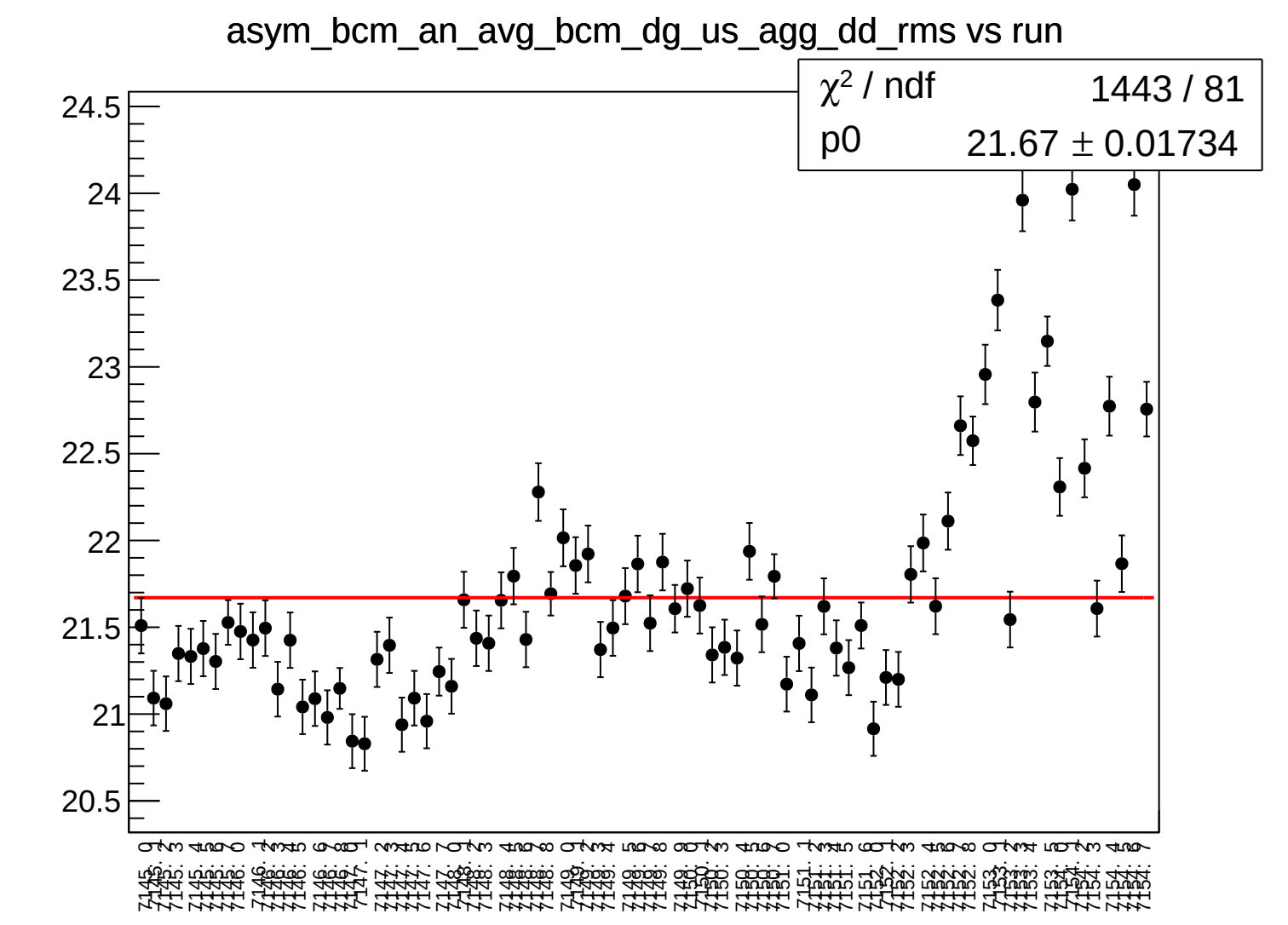

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.005e+04 / 81
p0 203.2 ± 0.1636
600
500
400
300
200

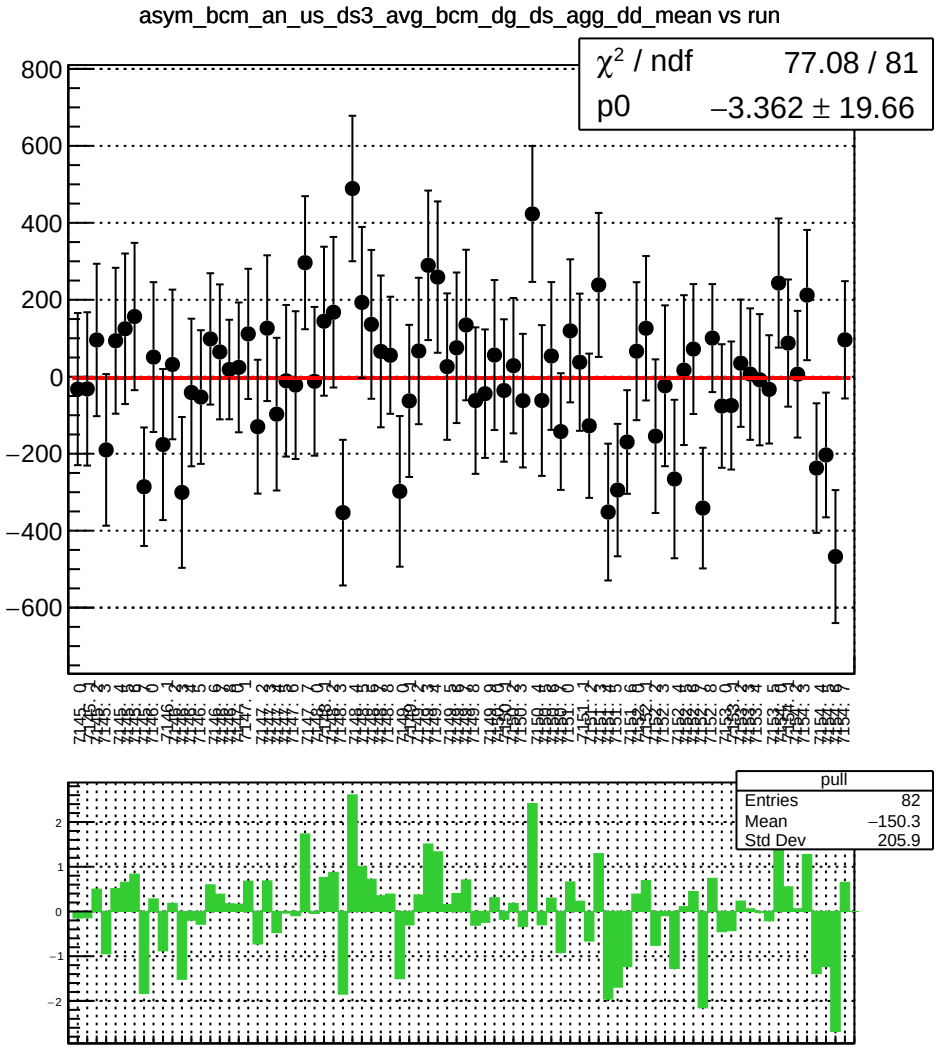

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 79.59 / 81
p0 1.738 ± 19.95
pull
Entries 82
Mean −169.6
Std Dev 224.9
pull1D
Entries 82
Mean 0.01289
Std Dev 0.9851

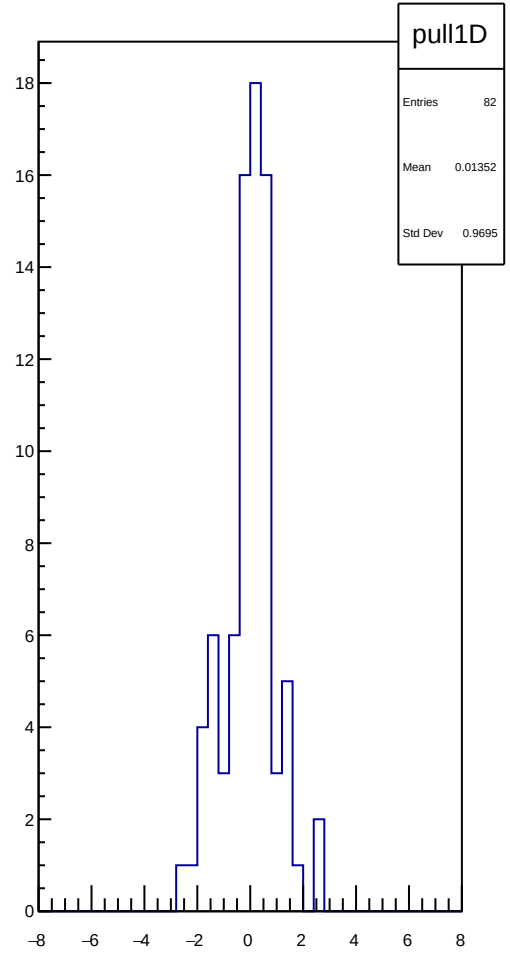

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 8912 / 81
p0 17.59 ± 0.01411
20
19
18
17
16
15

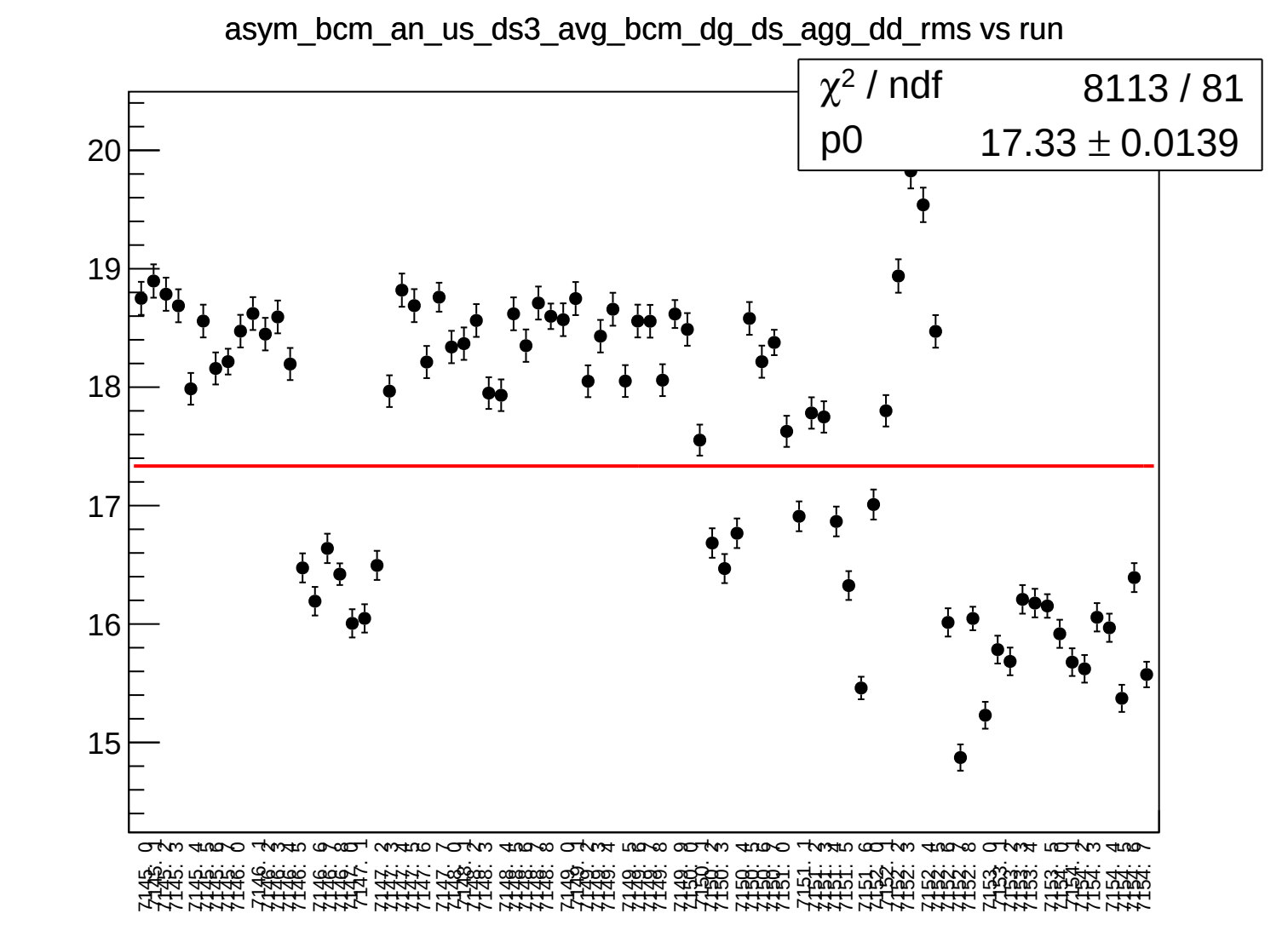

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 72.86 / 81
p0 5.383 ± 24.52
pull
Entries 82
Mean 328.6
Std Dev 299.7

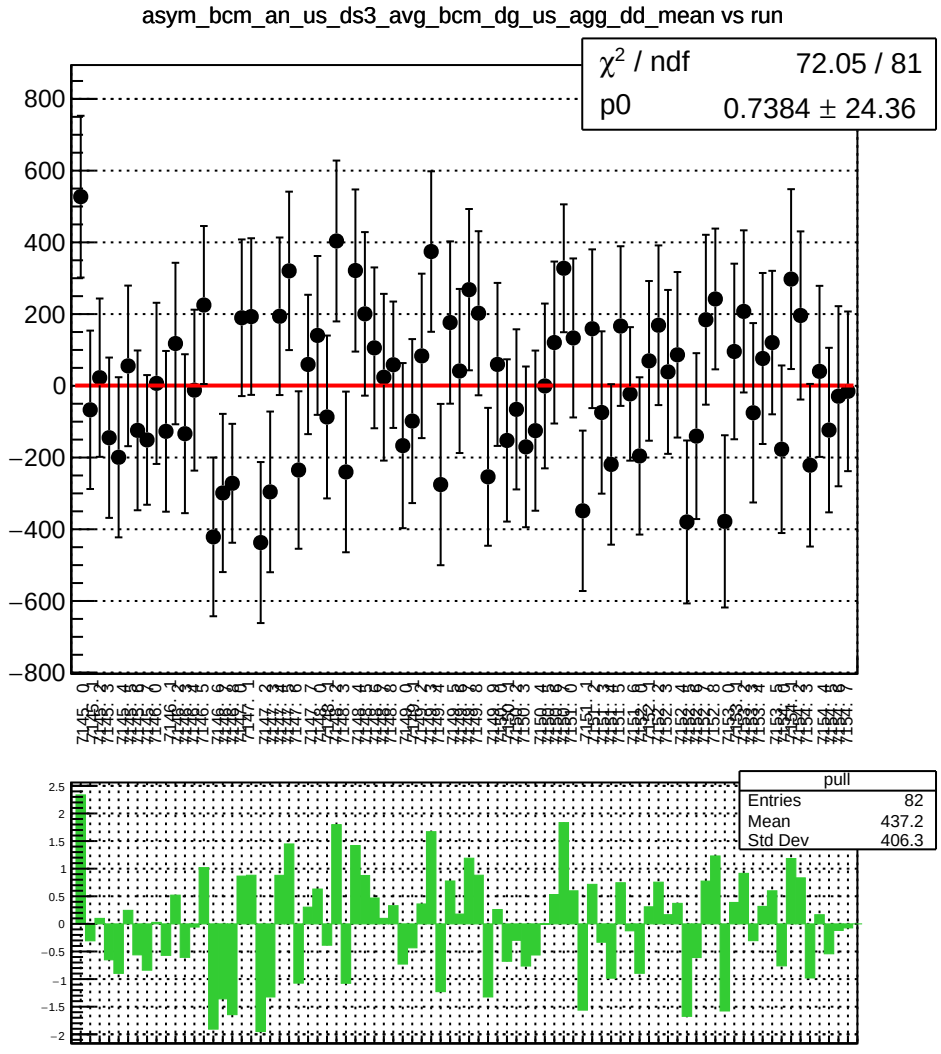

pull1D
Entries 82
Mean 0.003548
Std Dev 0.9426

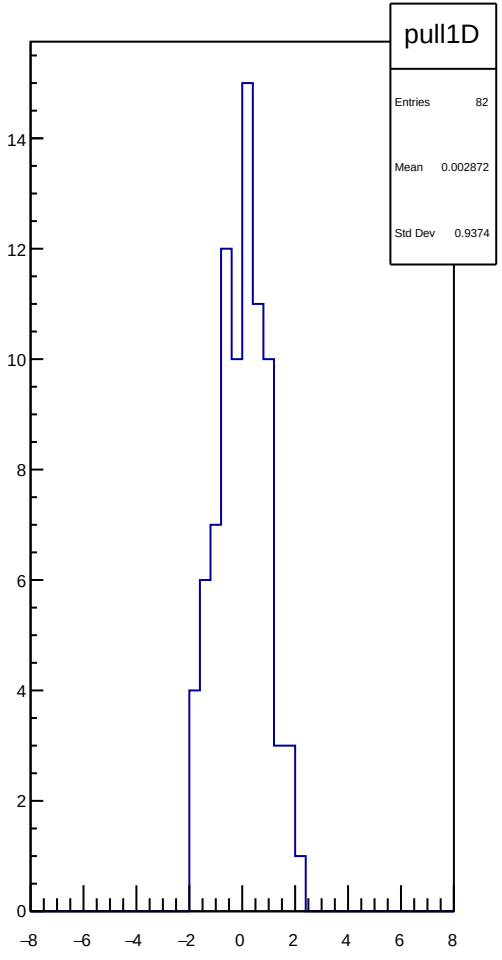

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1443 / 81
p0 21.67 ± 0.01734
24.5
24
23.5
23
22.5
22
21.5
21
20.5

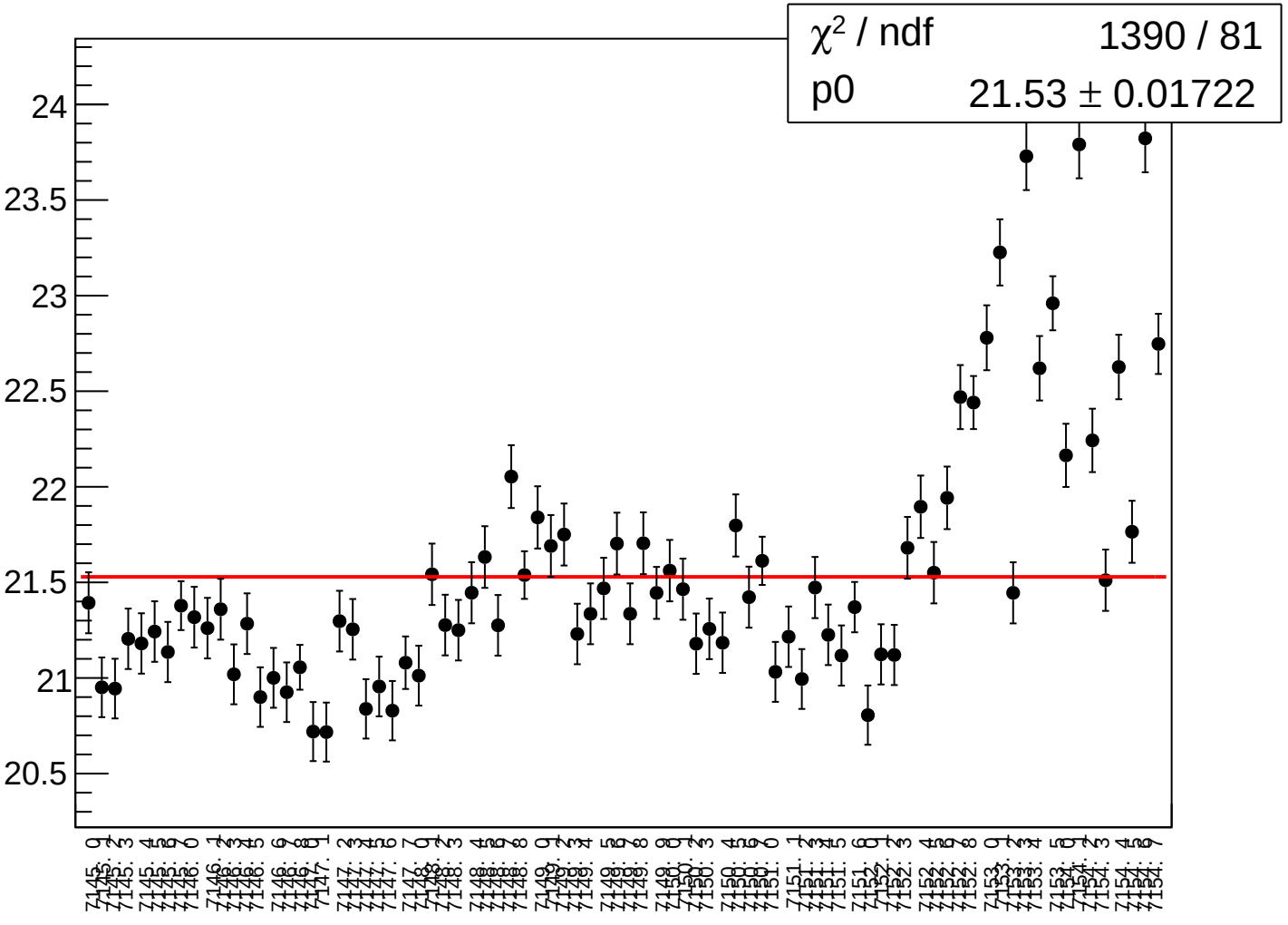

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 77.08 / 81
p0 −3.362 ± 19.66
pull
Entries 82
Mean −150.3
Std Dev 205.9

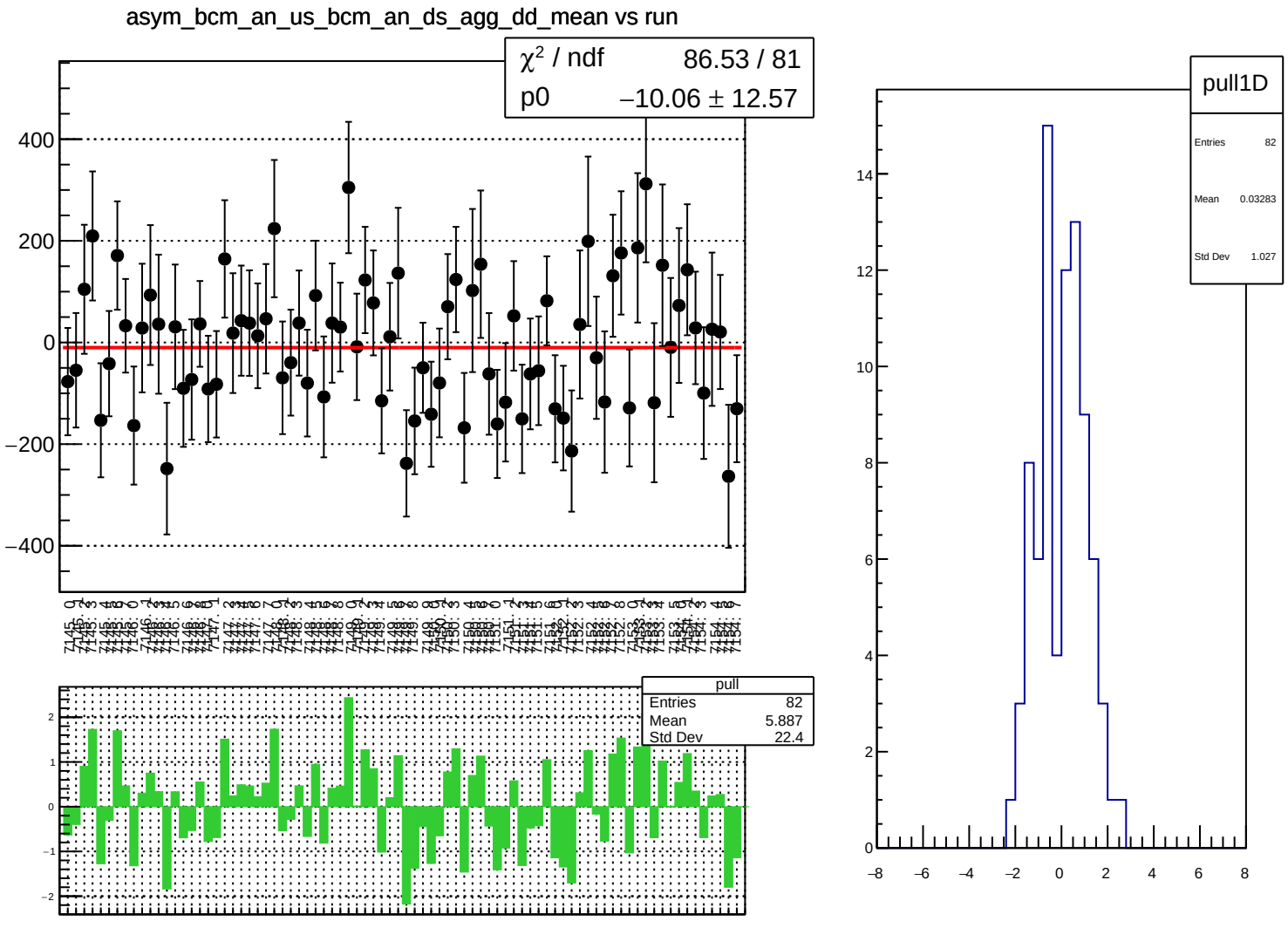

pull1D
Entries 82
Mean 0.01352
Std Dev 0.9695

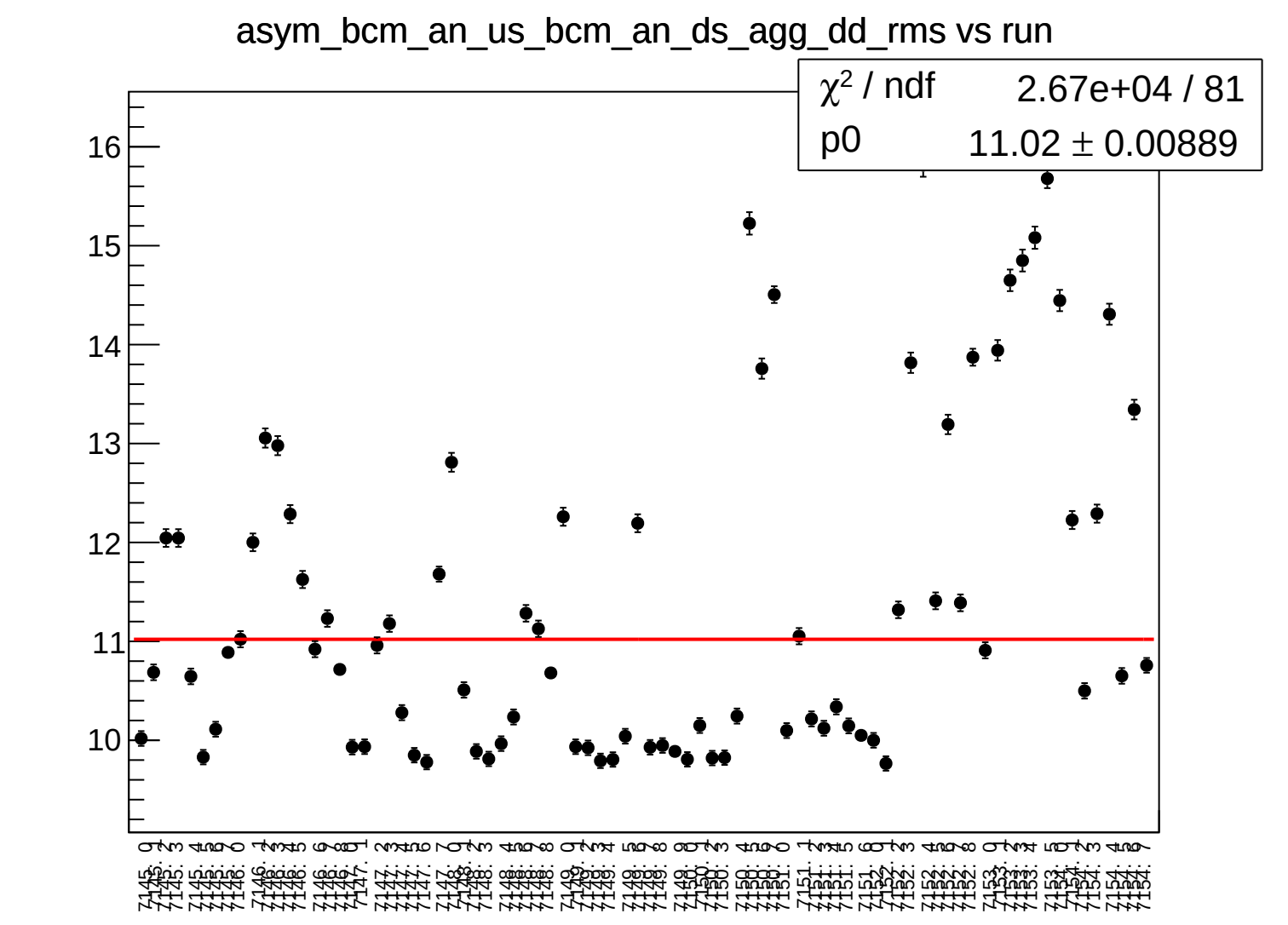

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 8113 / 81
p0 17.33 ± 0.0139
20
19
18
17
16
15

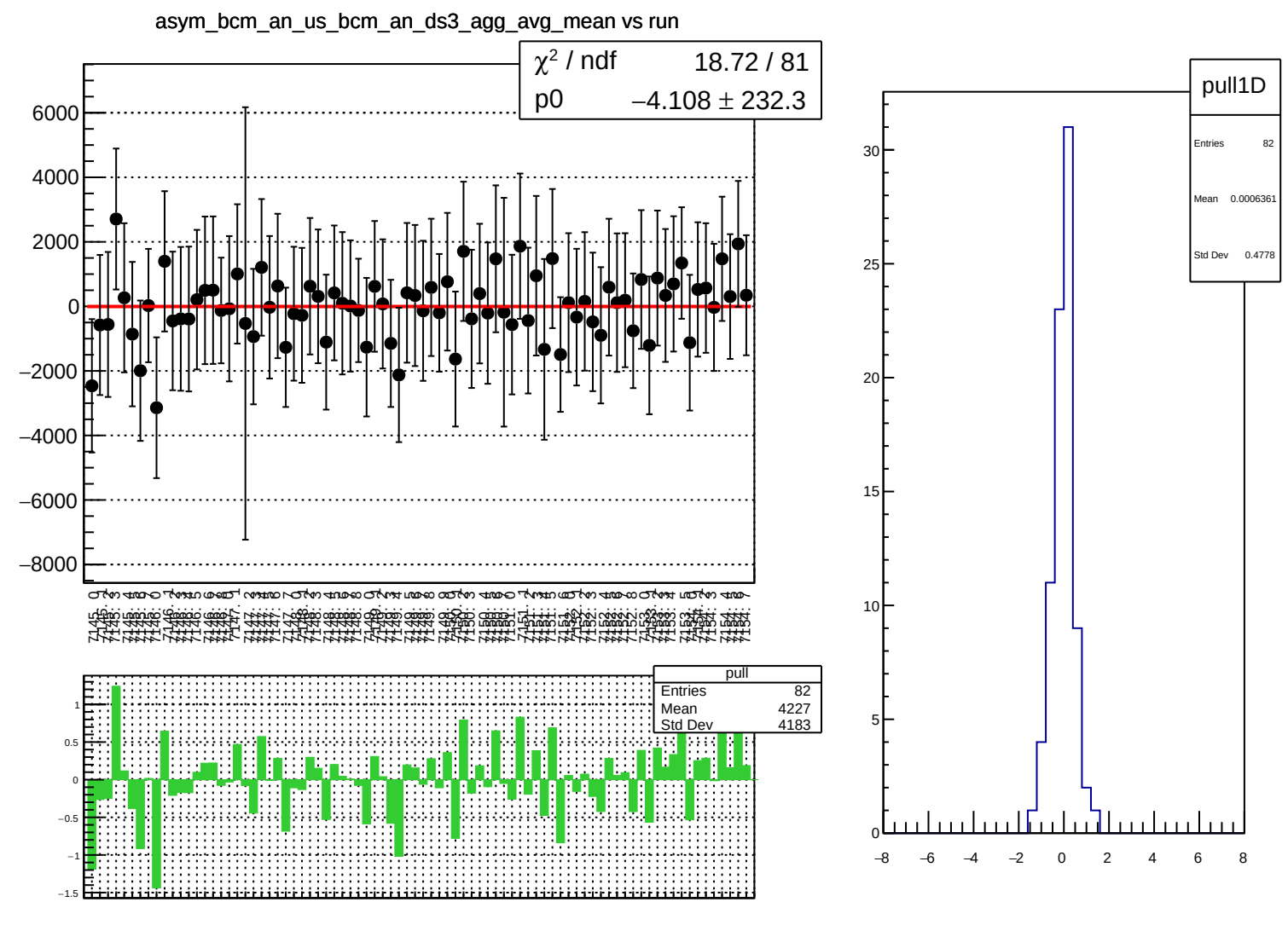

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 72.05 / 81
p0 0.7384 ± 24.36
pull
Entries 82
Mean 437.2
Std Dev 406.3

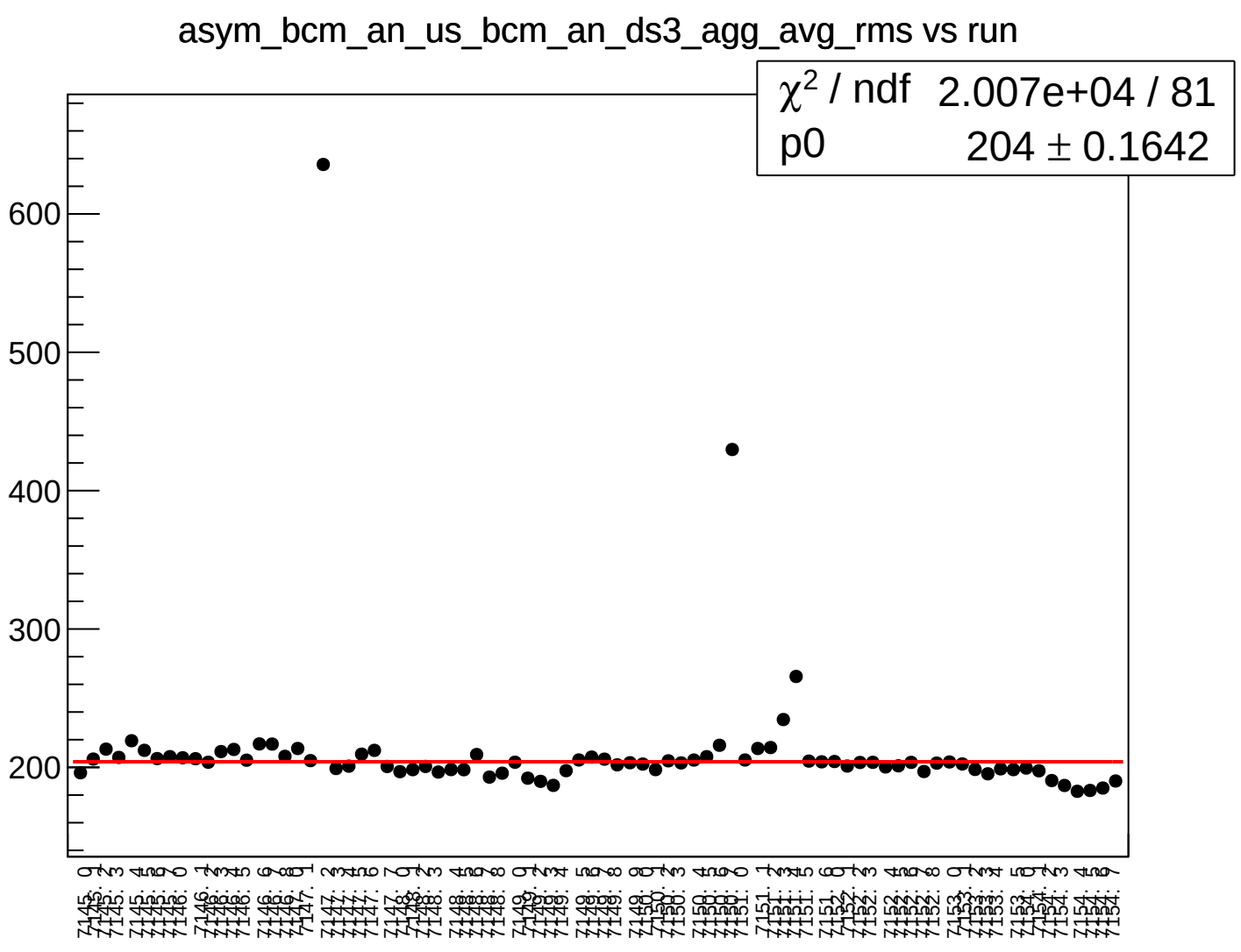

pull1D
Entries 82
Mean 0.002872
Std Dev 0.9374

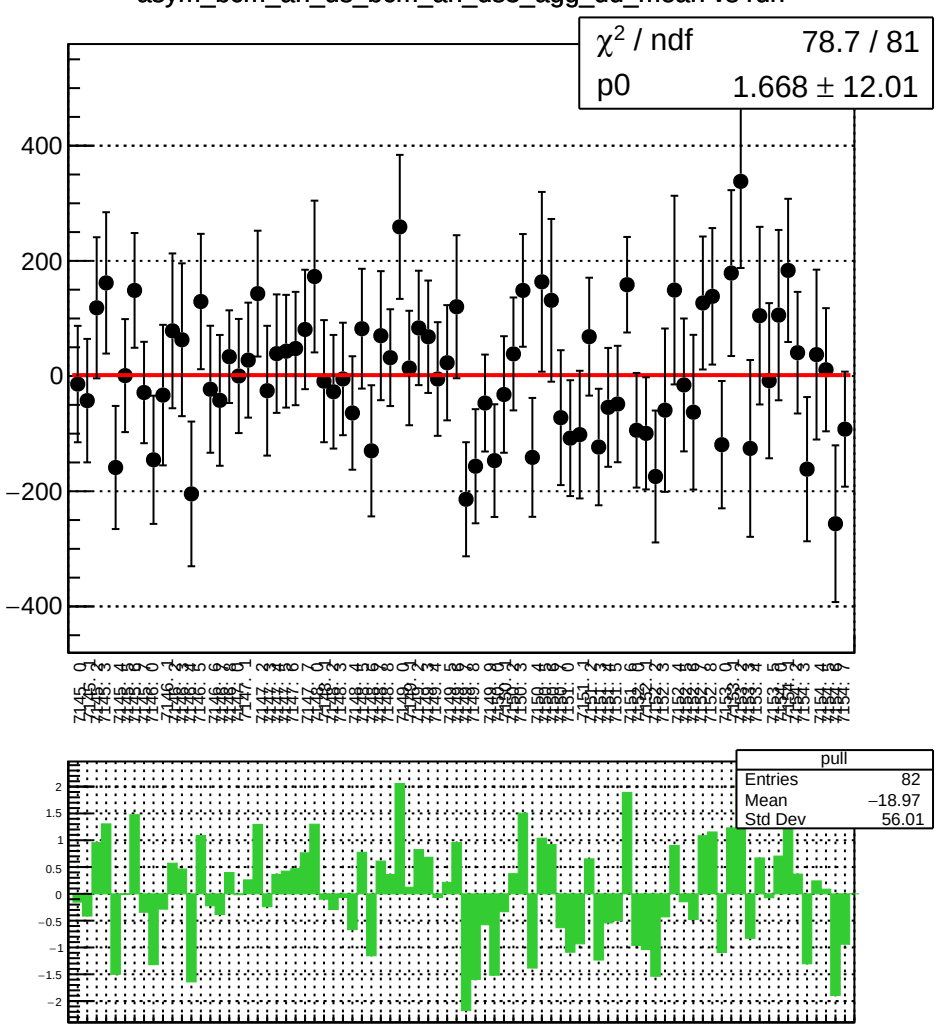

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1390 / 81
p0 21.53 ± 0.01722
24
23.5
23
22.5
22
21.5
21
20.5

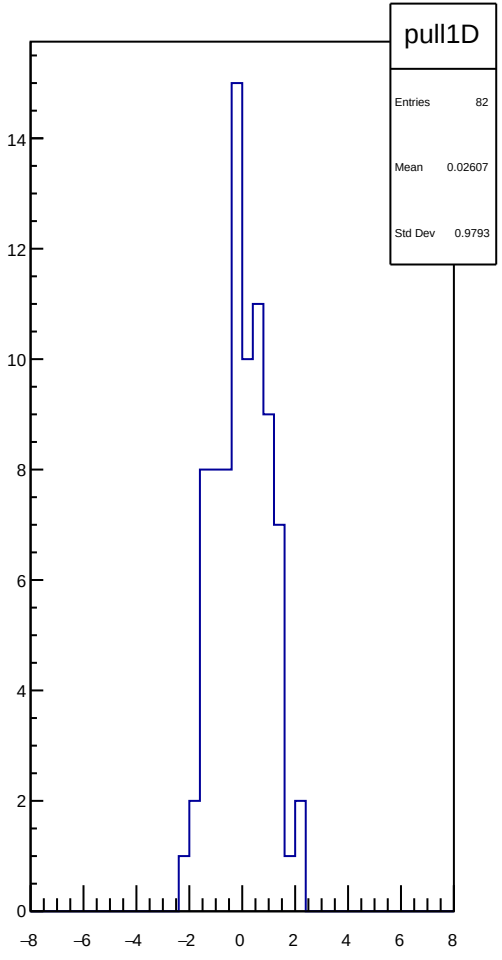

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 86.53 / 81
p0 −10.06 ± 12.57
400
200
0
−200
−400
pull
Entries 82
Mean 5.887
Std Dev 22.4
2
1
0
−1
−2
pull1D
Entries 82
Mean 0.03283
Std Dev 1.027
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

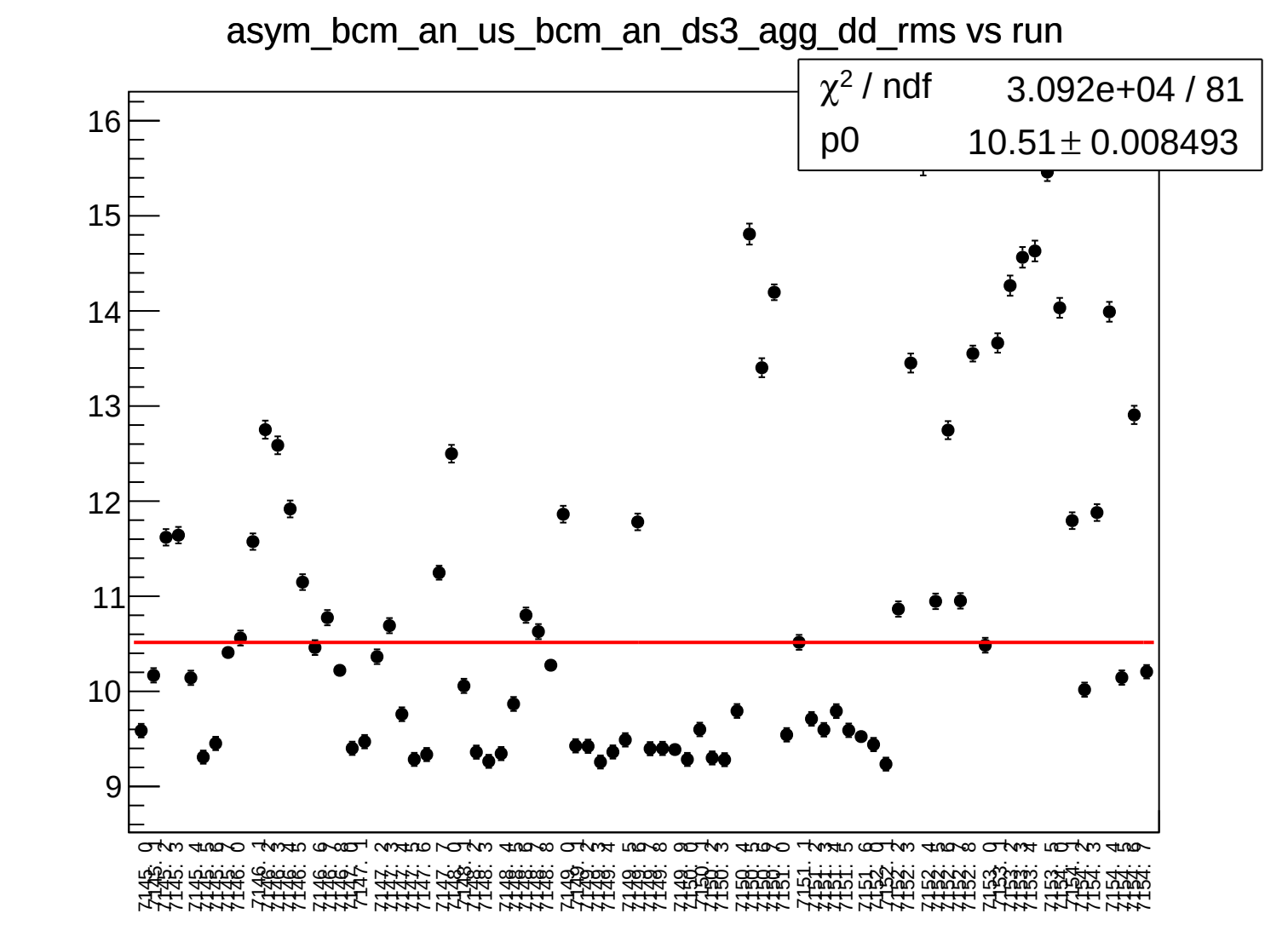

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2.67e+04 / 81
p0 11.02 ± 0.00889
16
15
14
13
12
11
10

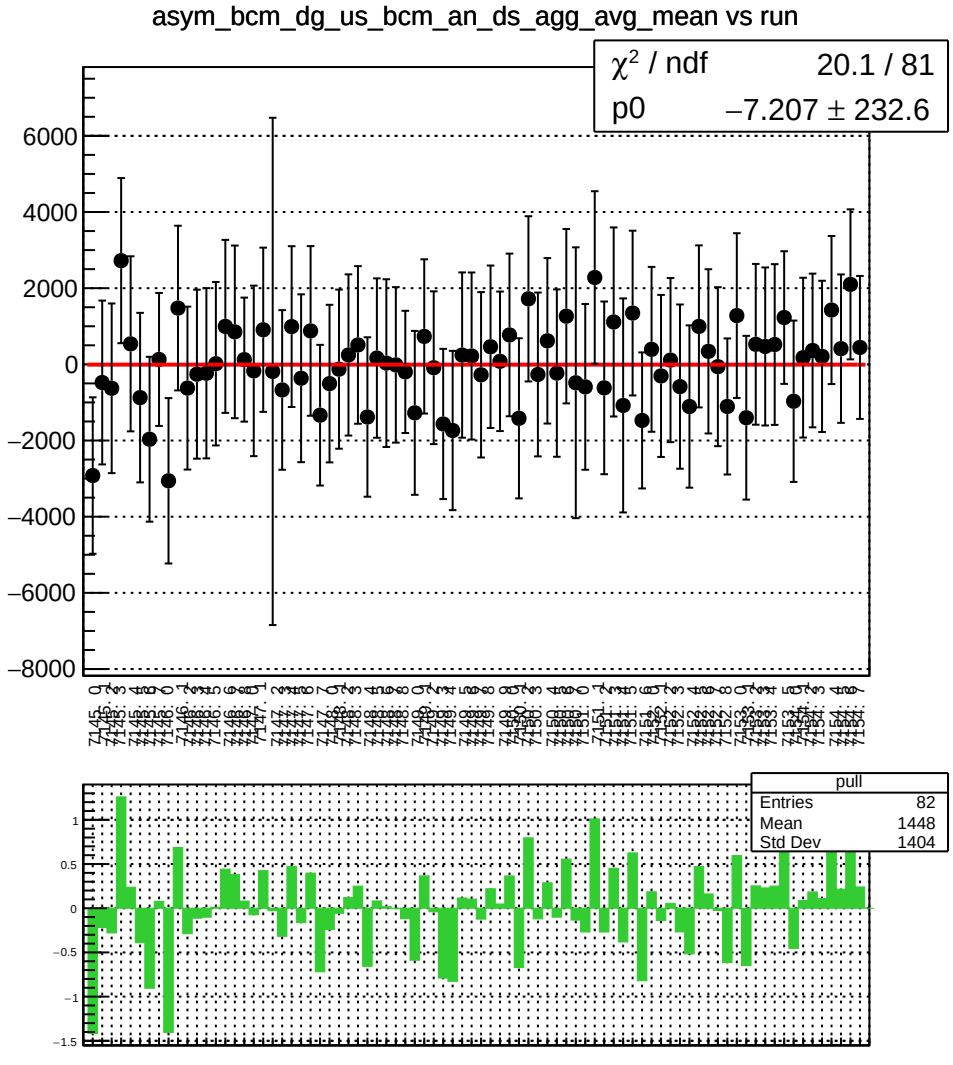

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 18.72 / 81
p0 −4.108 ± 232.3
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 82
Mean 4227
Std Dev 4183
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 82
Mean 0.0006361
Std Dev 0.4778
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

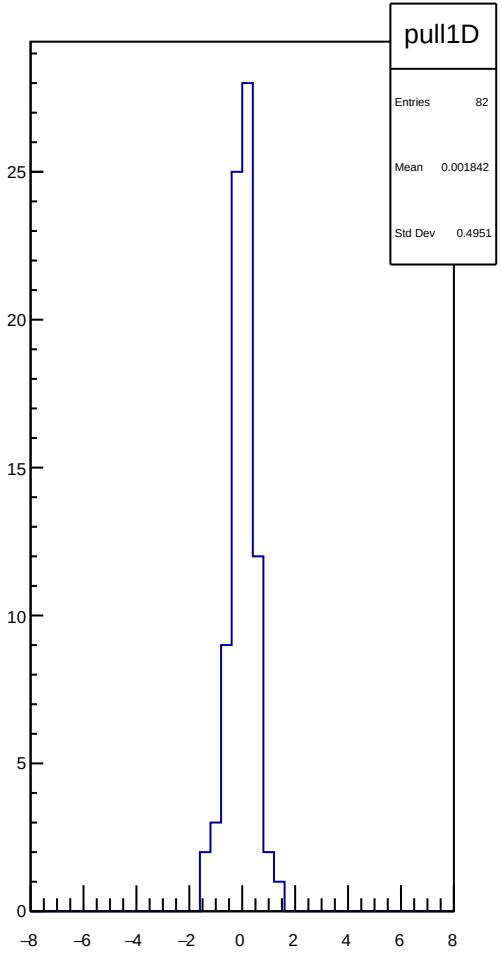

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2.007e+04 / 81
p0 204 ± 0.1642
600
500
400
300
200

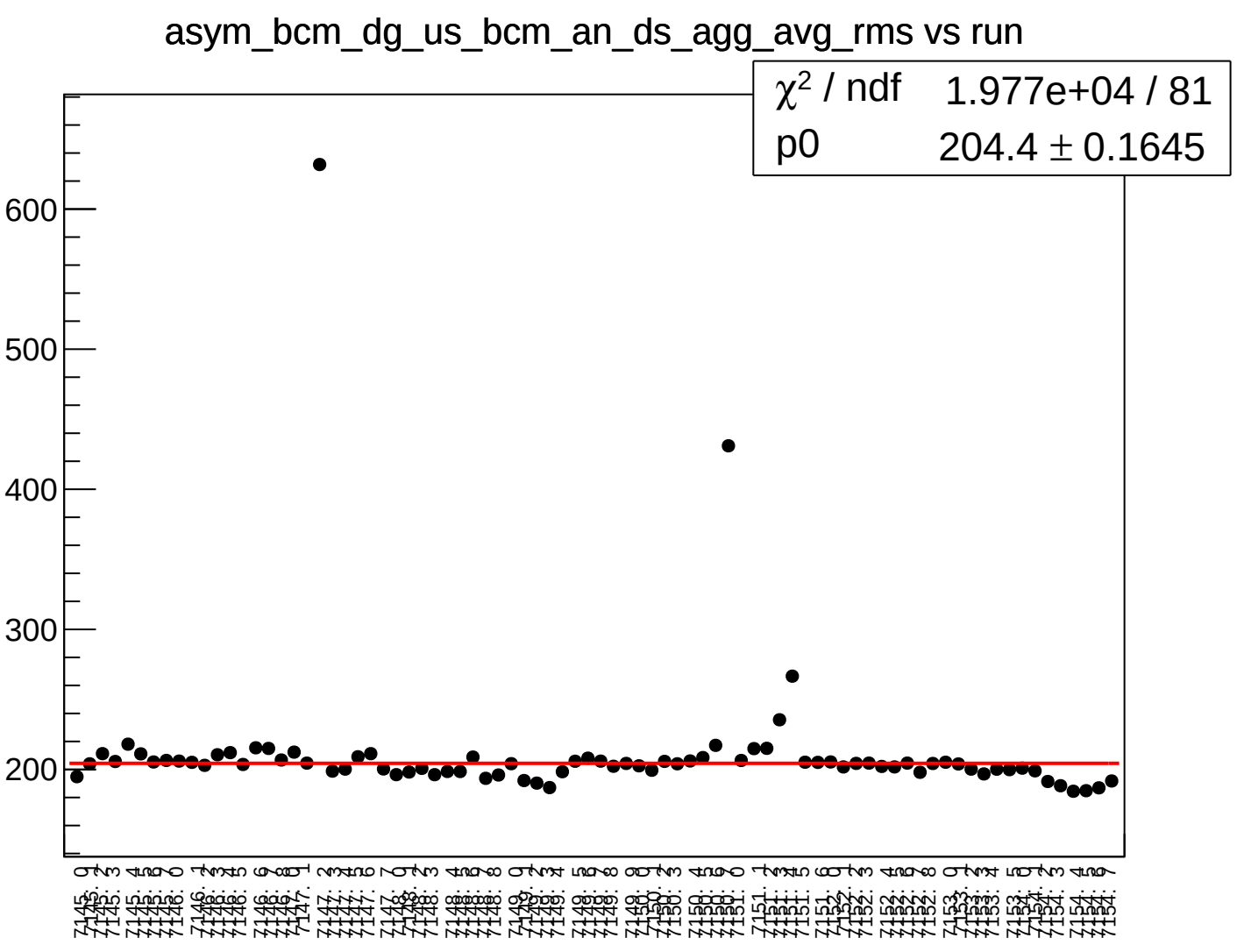

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 78.7 / 81
p0 1.668 ± 12.01
pull
Entries 82
Mean −18.97
Std Dev 56.01

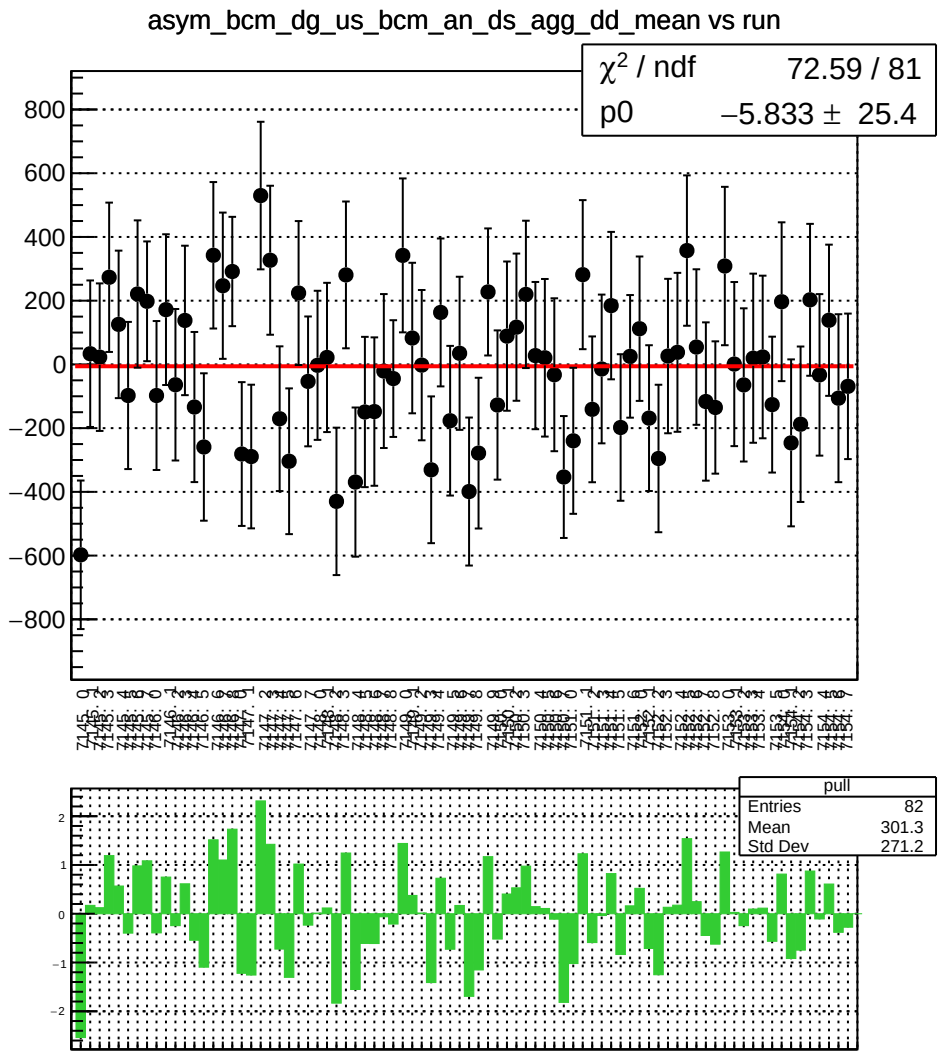

pull1D
Entries 82
Mean 0.02607
Std Dev 0.9793

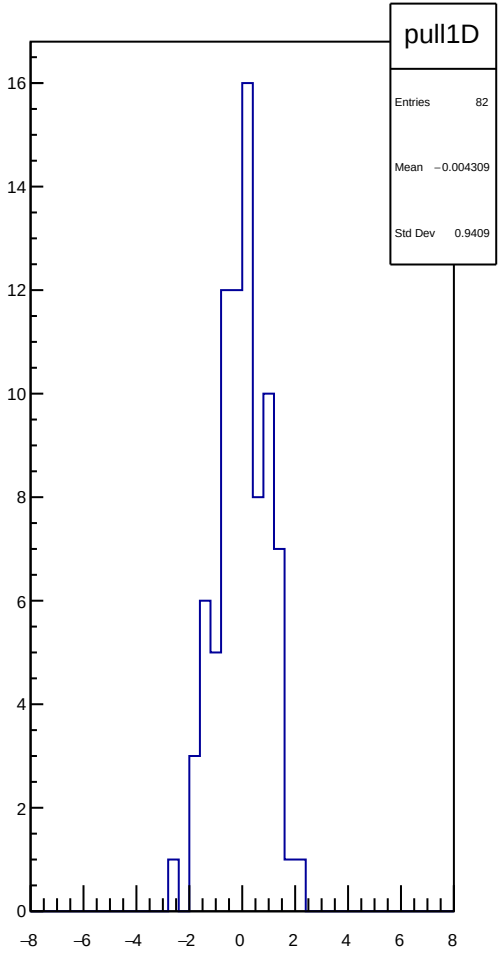

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 3.092e+04 / 81
p0 10.51 ± 0.008493
16
15
14
13
12
11
10
9

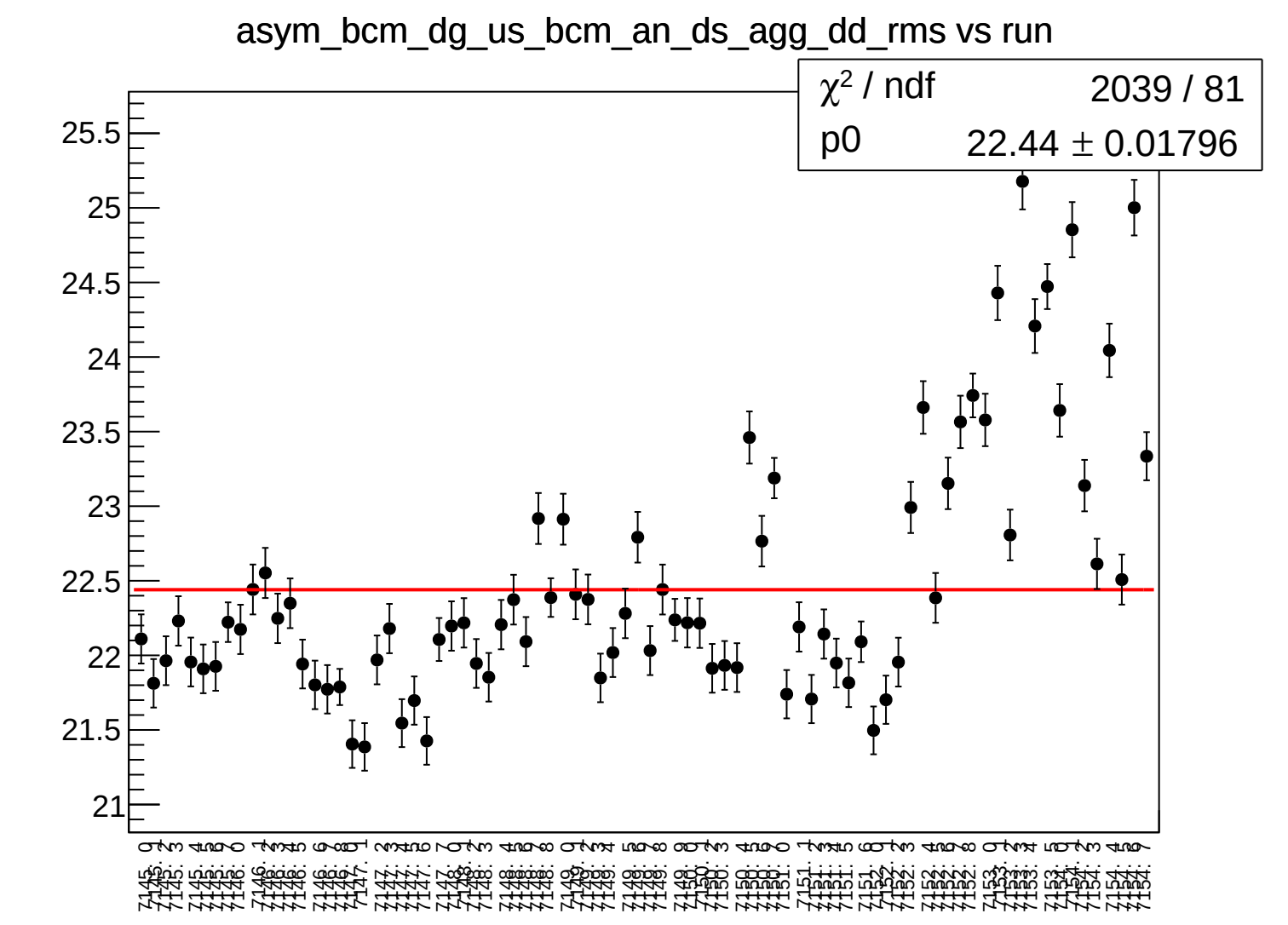

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 20.1 / 81
p0 −7.207 ± 232.6
pull
Entries 82
Mean 1448
Std Dev 1404

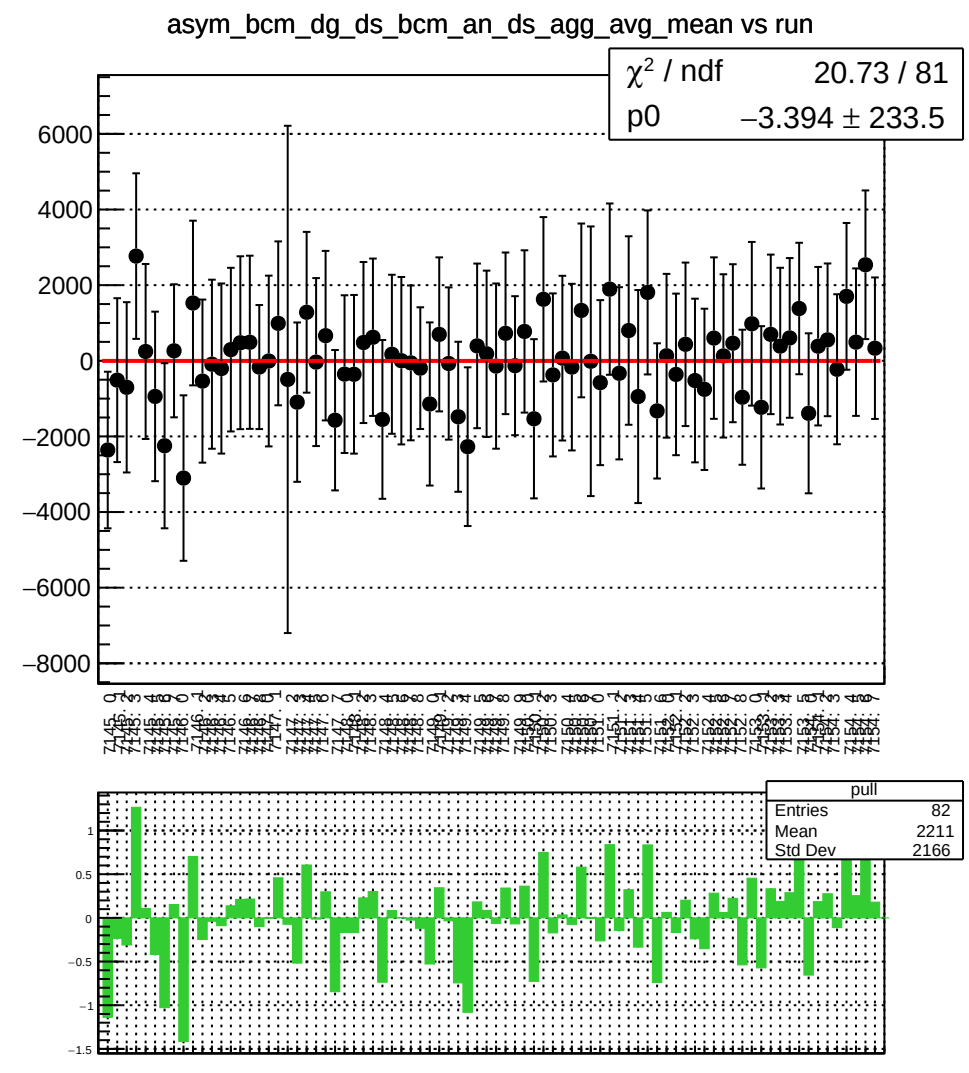

pull1D
Entries 82
Mean 0.001842
Std Dev 0.4951

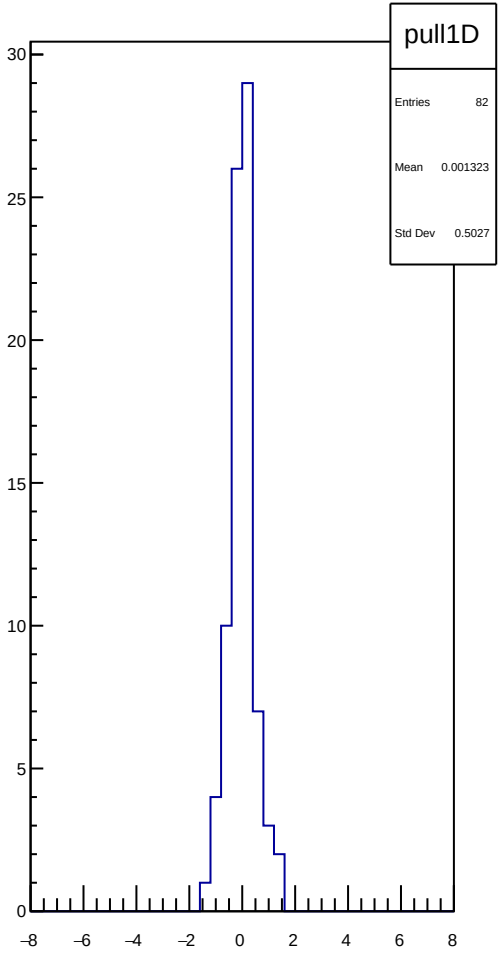

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.977e+04 / 81
p0 204.4 ± 0.1645
600
500
400
300
200

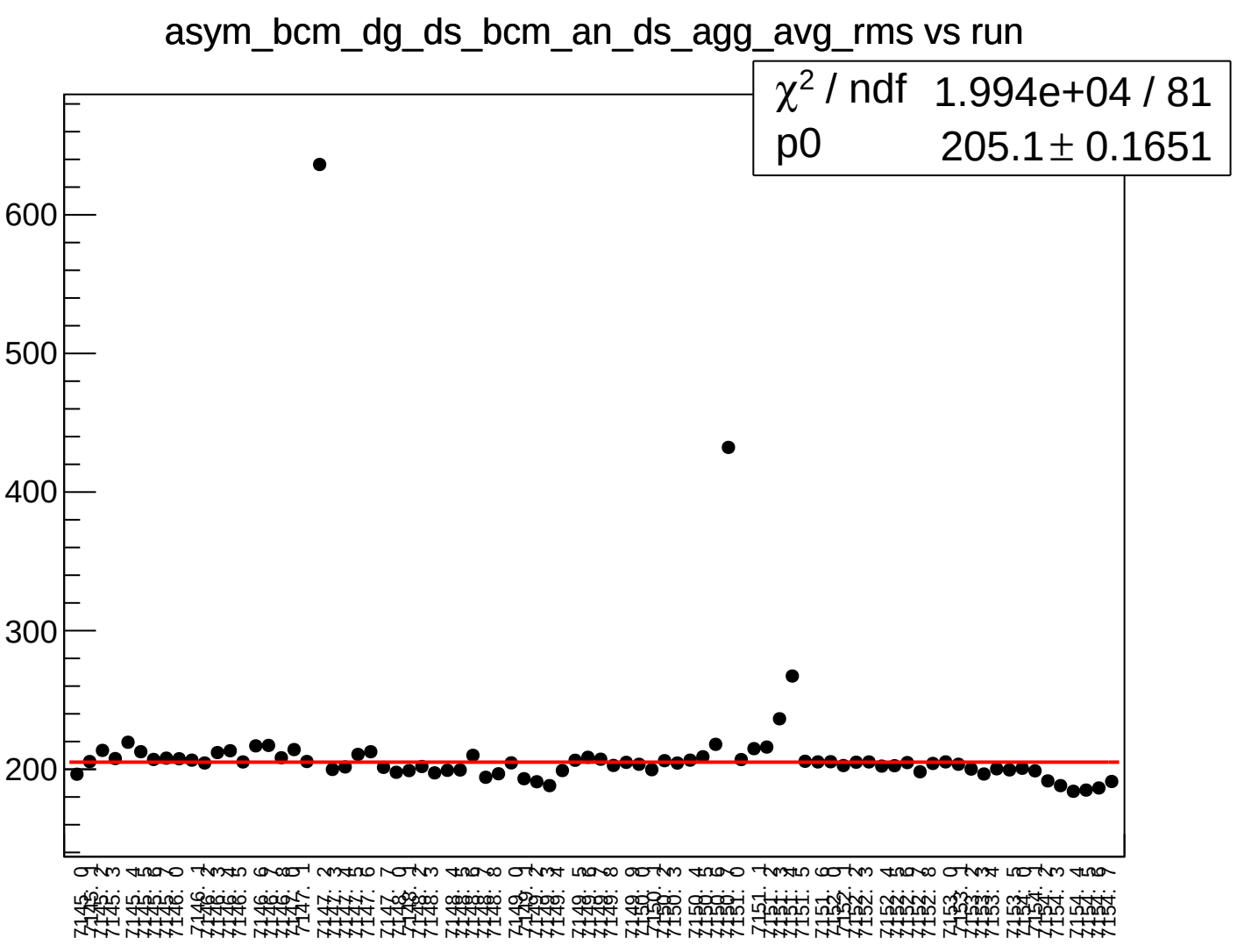

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 72.59 / 81
p0 −5.833 ± 25.4
pull
Entries 82
Mean 301.3
Std Dev 271.2

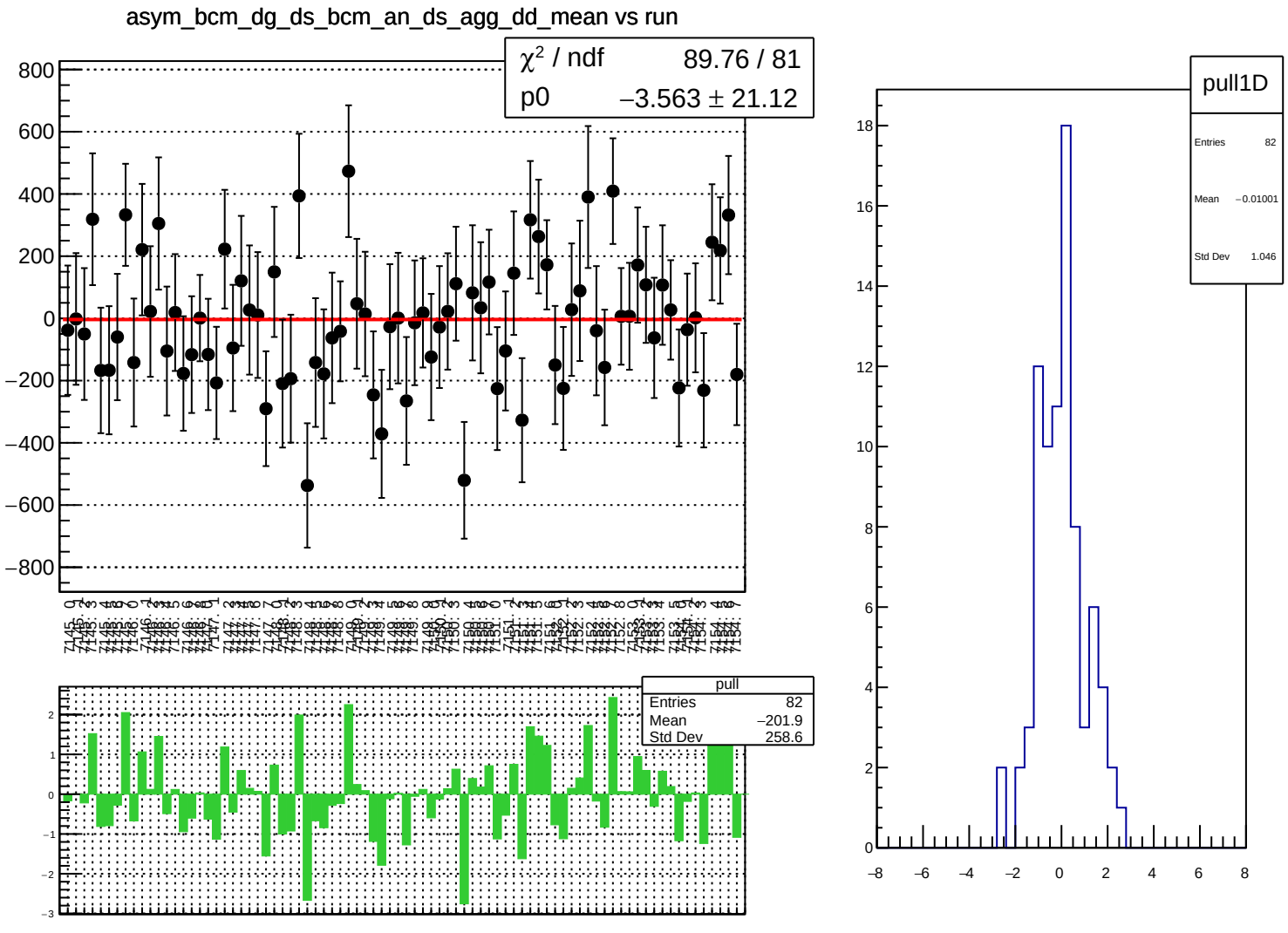

pull1D
Entries 82
Mean −0.004309
Std Dev 0.9409

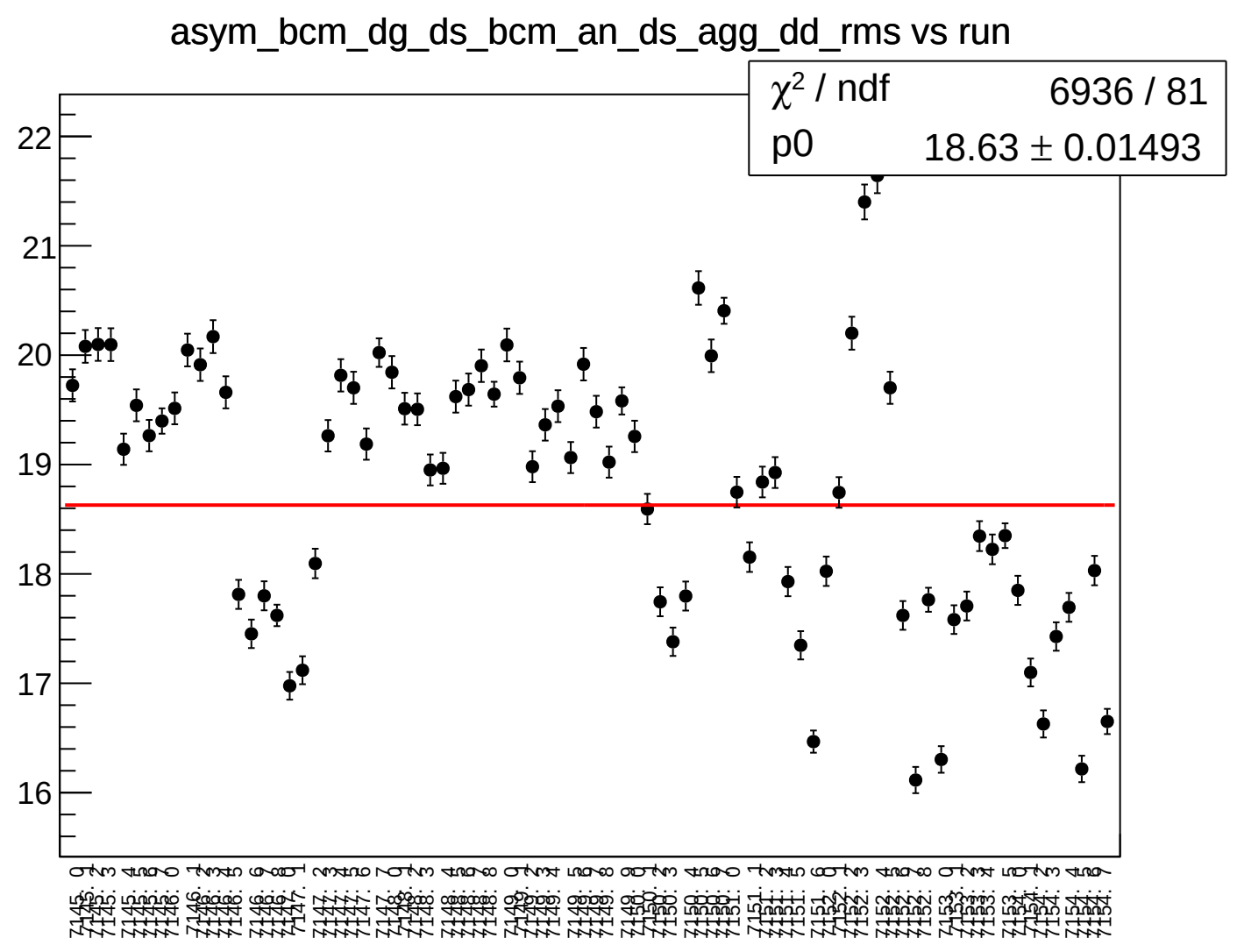

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2039 / 81
p0 22.44 ± 0.01796
25.5
25
24.5
24
23.5
23
22.5
22
21.5
21

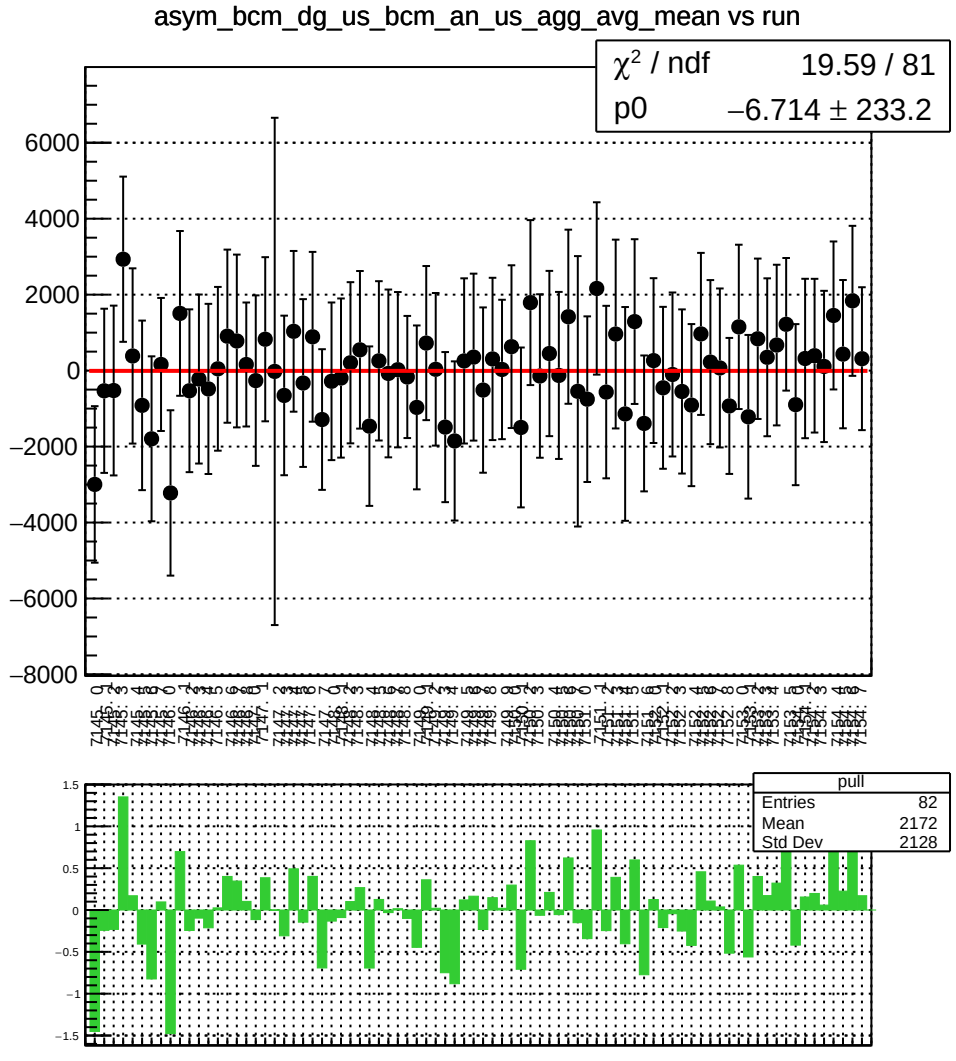

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 20.73 / 81
p0 −3.394 ± 233.5
pull
Entries 82
Mean 2211
Std Dev 2166

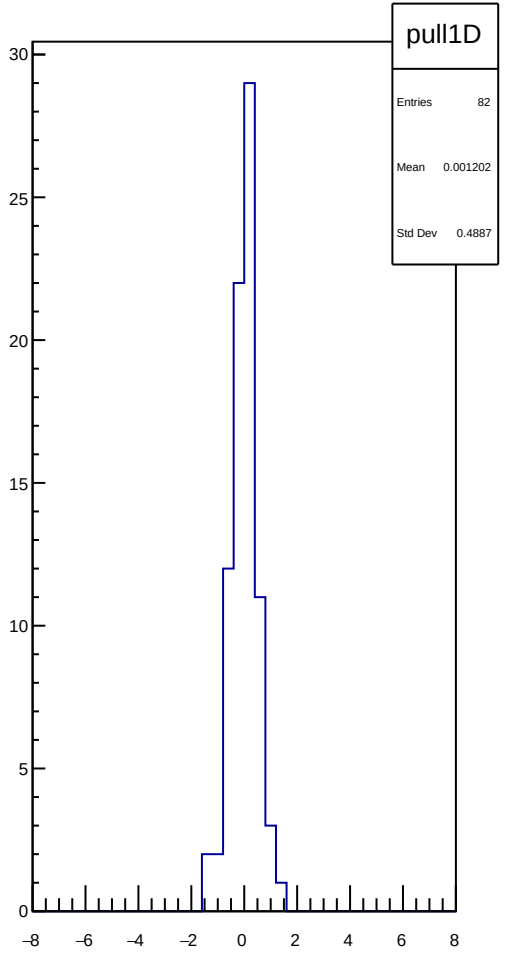

pull1D
Entries 82
Mean 0.001323
Std Dev 0.5027

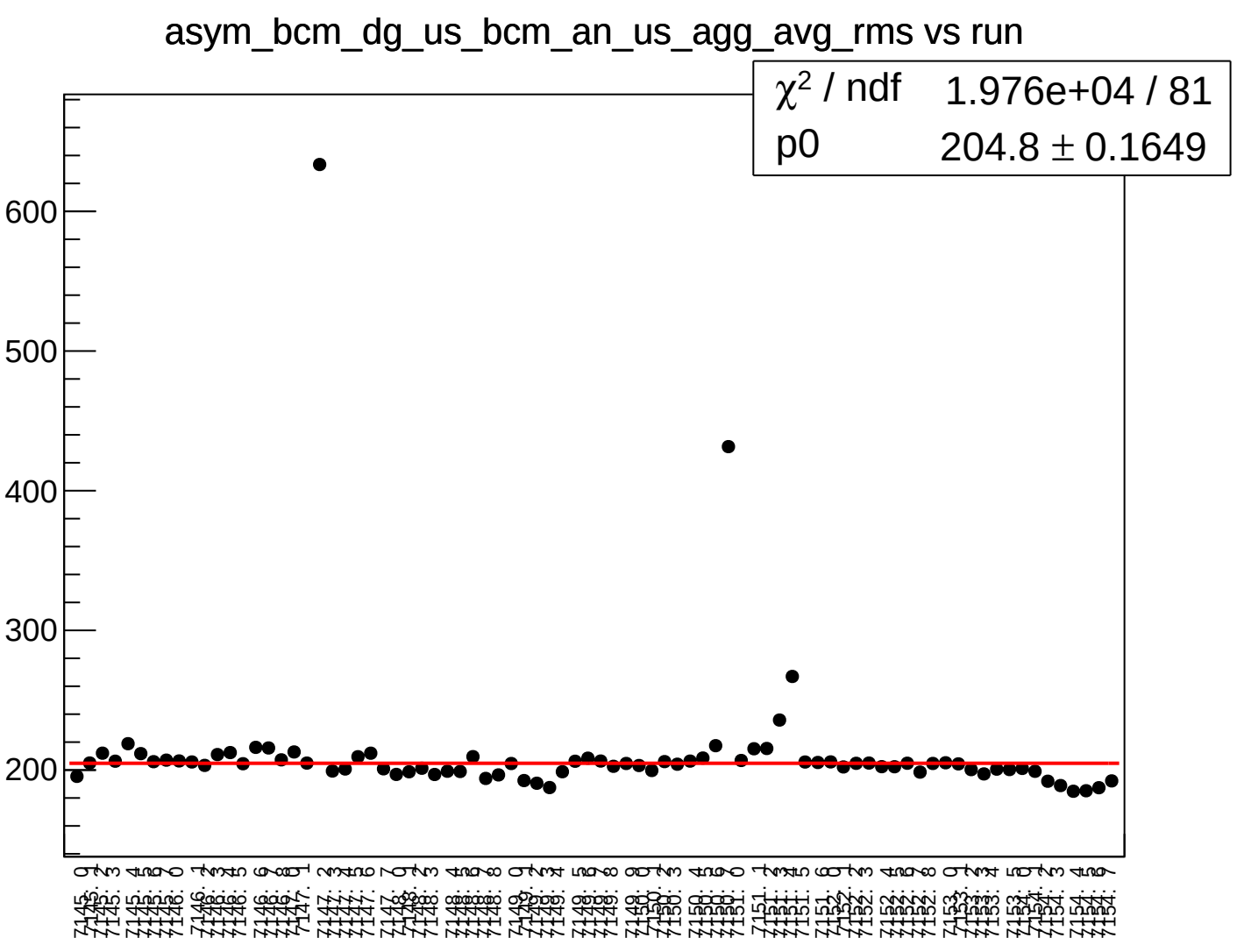

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.994e+04 / 81
p0 205.1 ± 0.1651
600
500
400
300
200

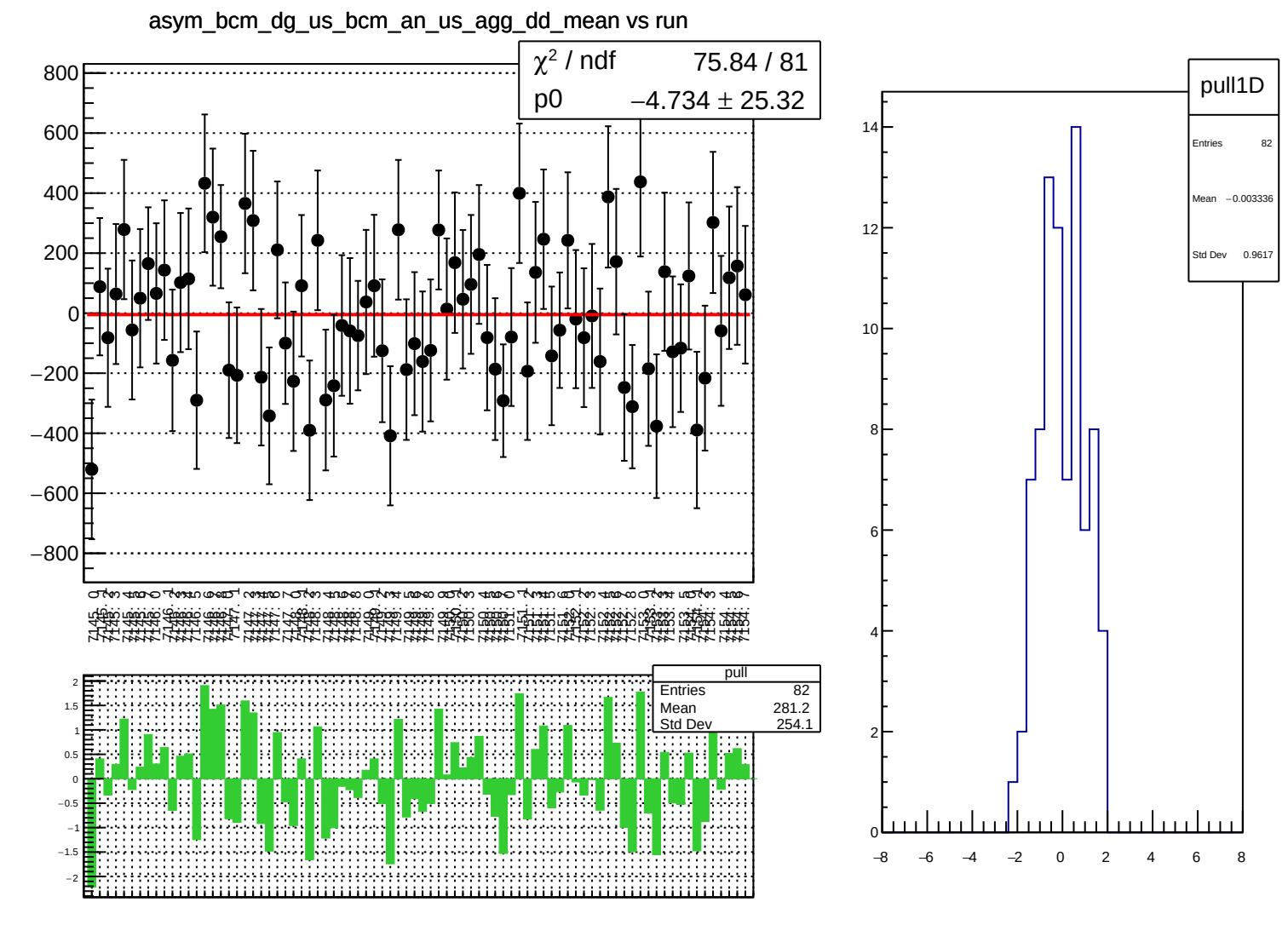

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 89.76 / 81
p0 −3.563 ± 21.12
pull
Entries 82
Mean −201.9
Std Dev 258.6
pull1D
Entries 82
Mean −0.01001
Std Dev 1.046

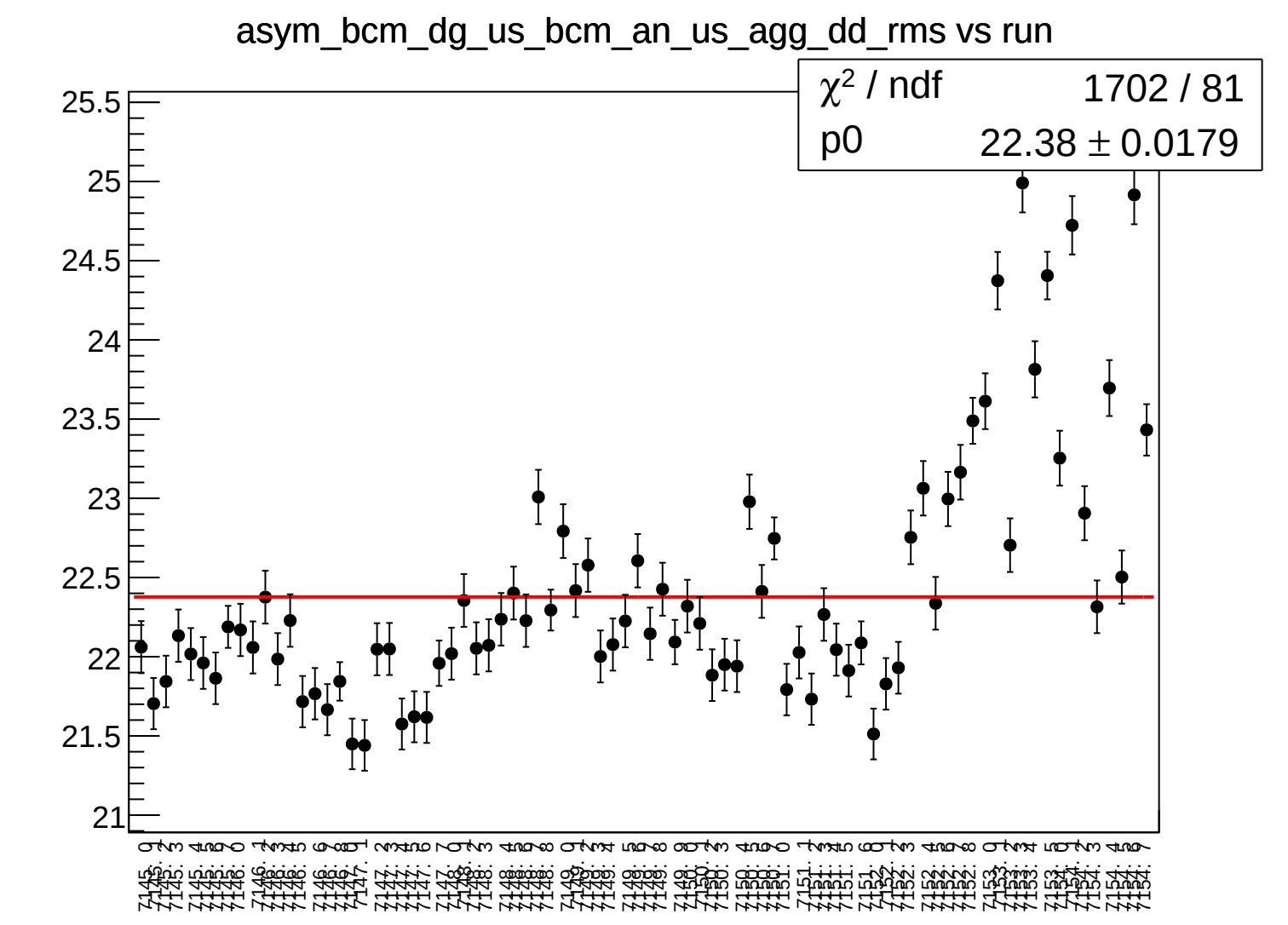

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 6936 / 81
p0 18.63 ± 0.01493
22
21
20
19
18
17
16

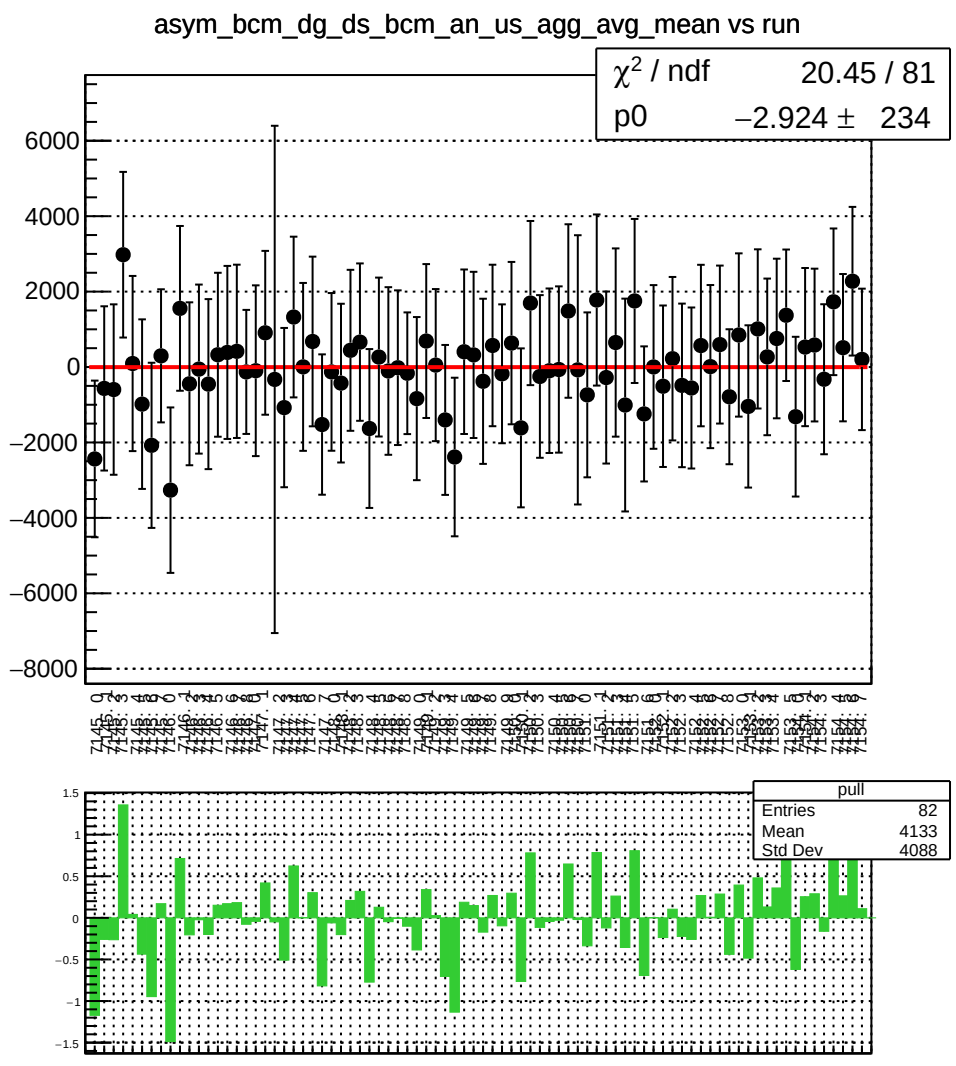

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 19.59 / 81
p0 −6.714 ± 233.2
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 82
Mean 2172
Std Dev 2128
1.5
1
0.5
0
−0.5
−1
−1.5

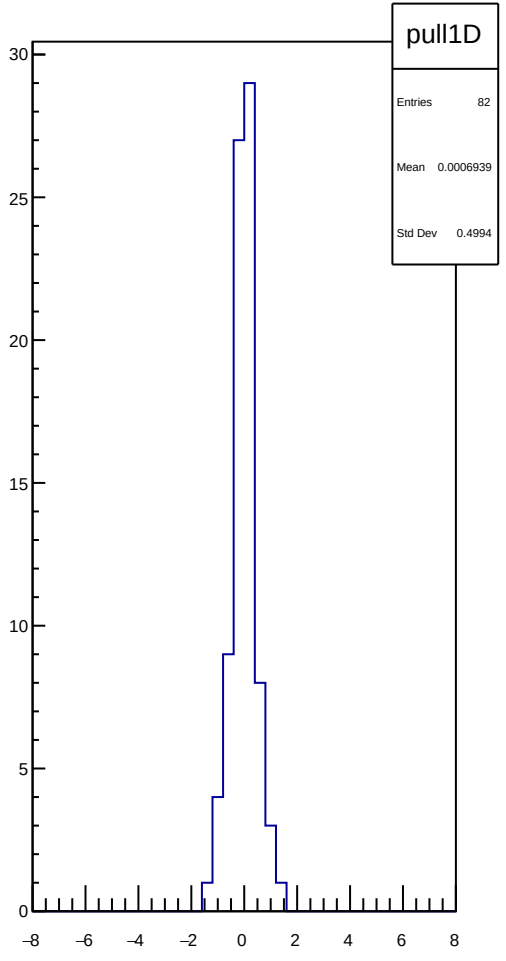

pull1D
Entries 82
Mean 0.001202
Std Dev 0.4887
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

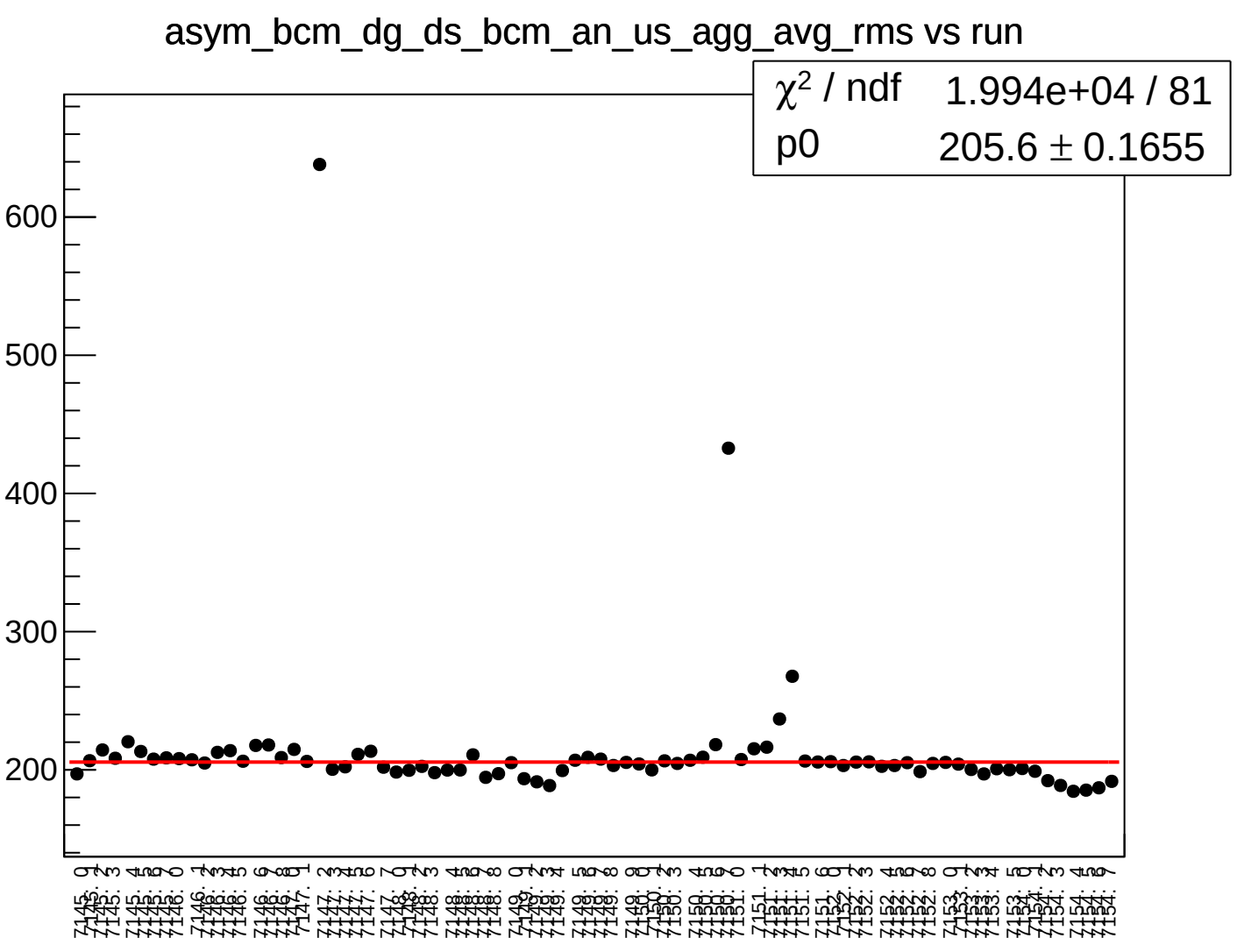

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.976e+04 / 81
p0 204.8 ± 0.1649
600
500
400
300
200

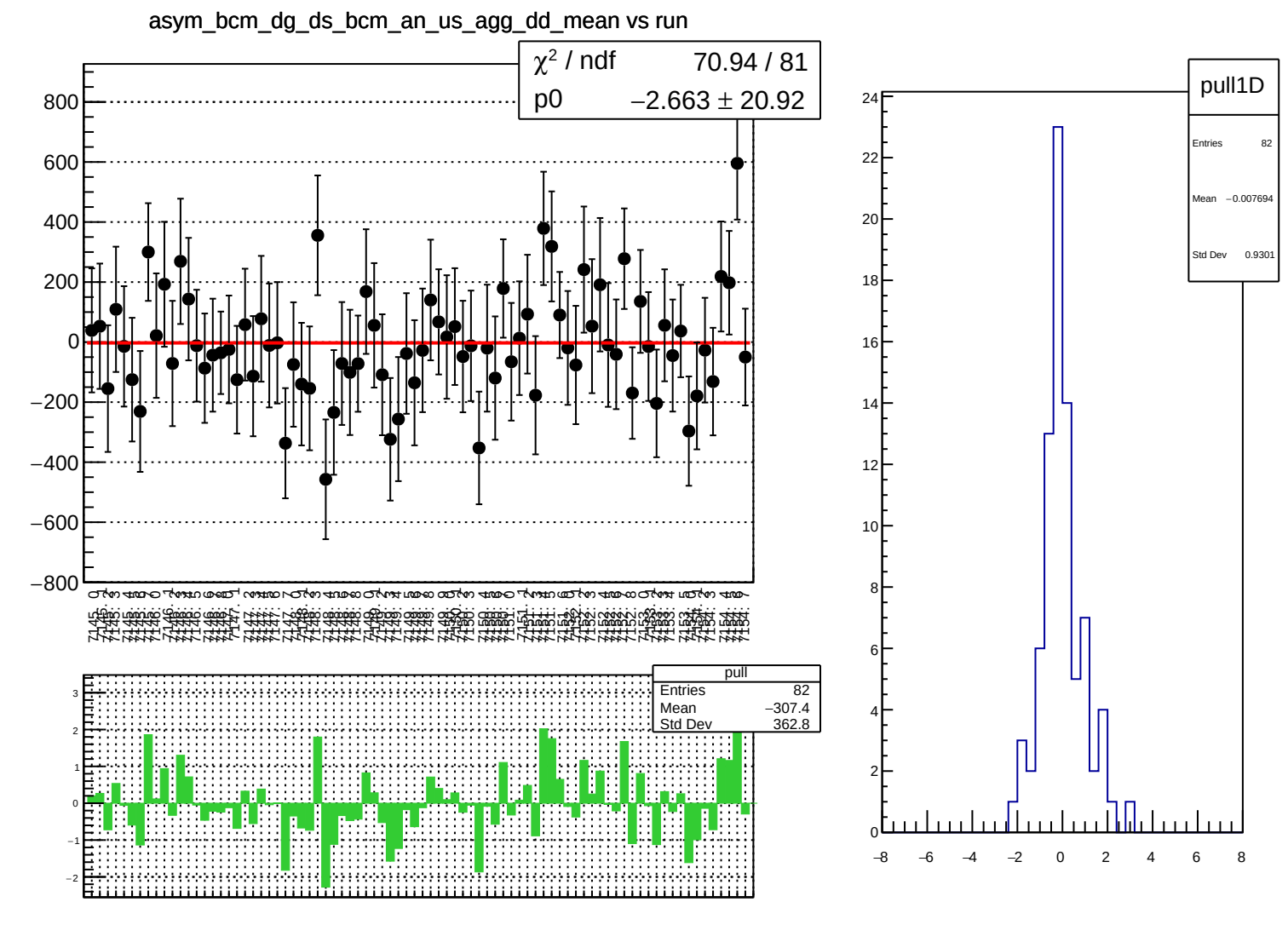

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 75.84 / 81
p0 −4.734 ± 25.32
pull
Entries 82
Mean 281.2
Std Dev 254.1
pull1D
Entries 82
Mean −0.003336
Std Dev 0.9617

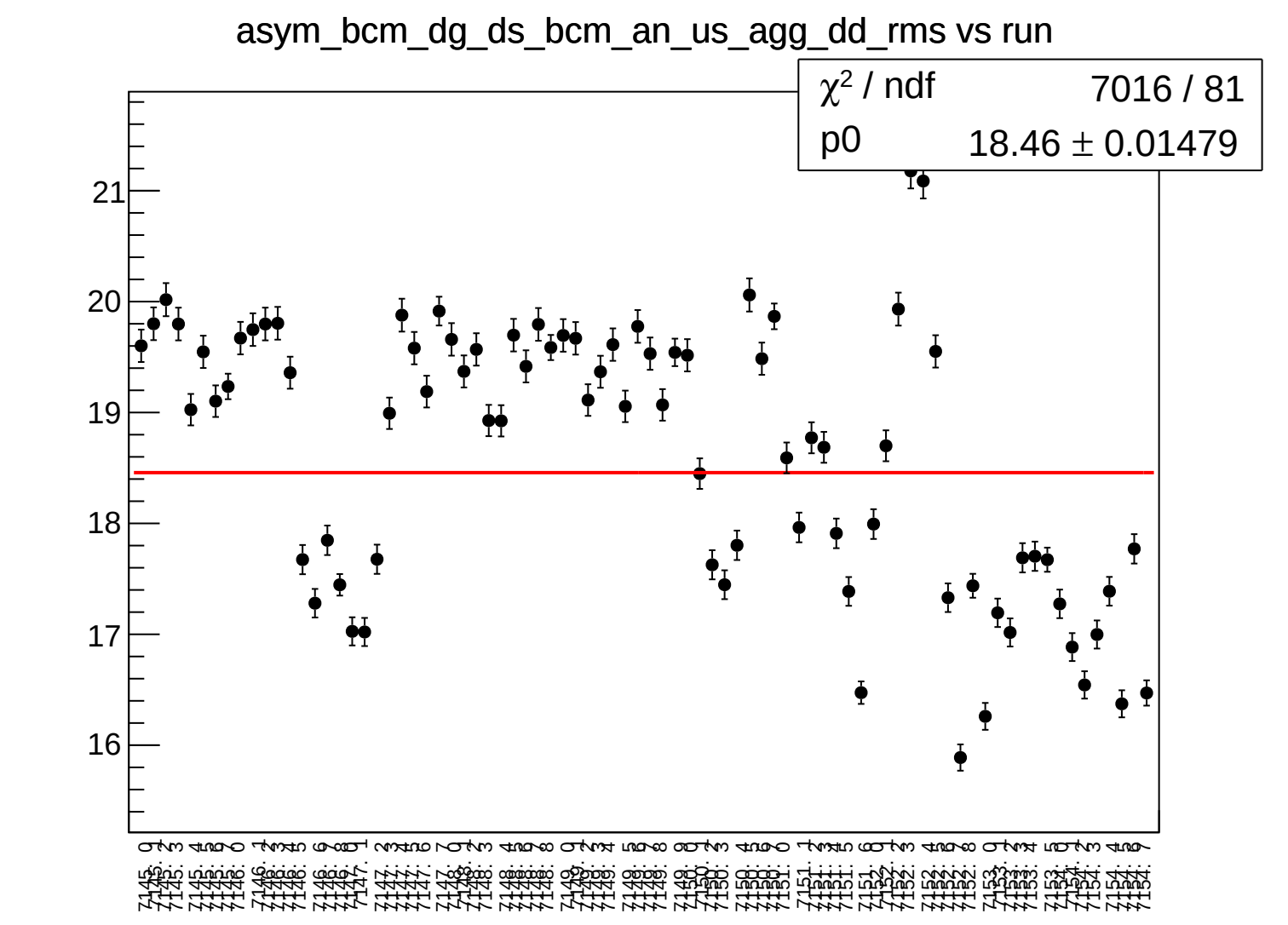

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1702 / 81
p0 22.38 ± 0.0179
25.5
25
24.5
24
23.5
23
22.5
22
21.5
21

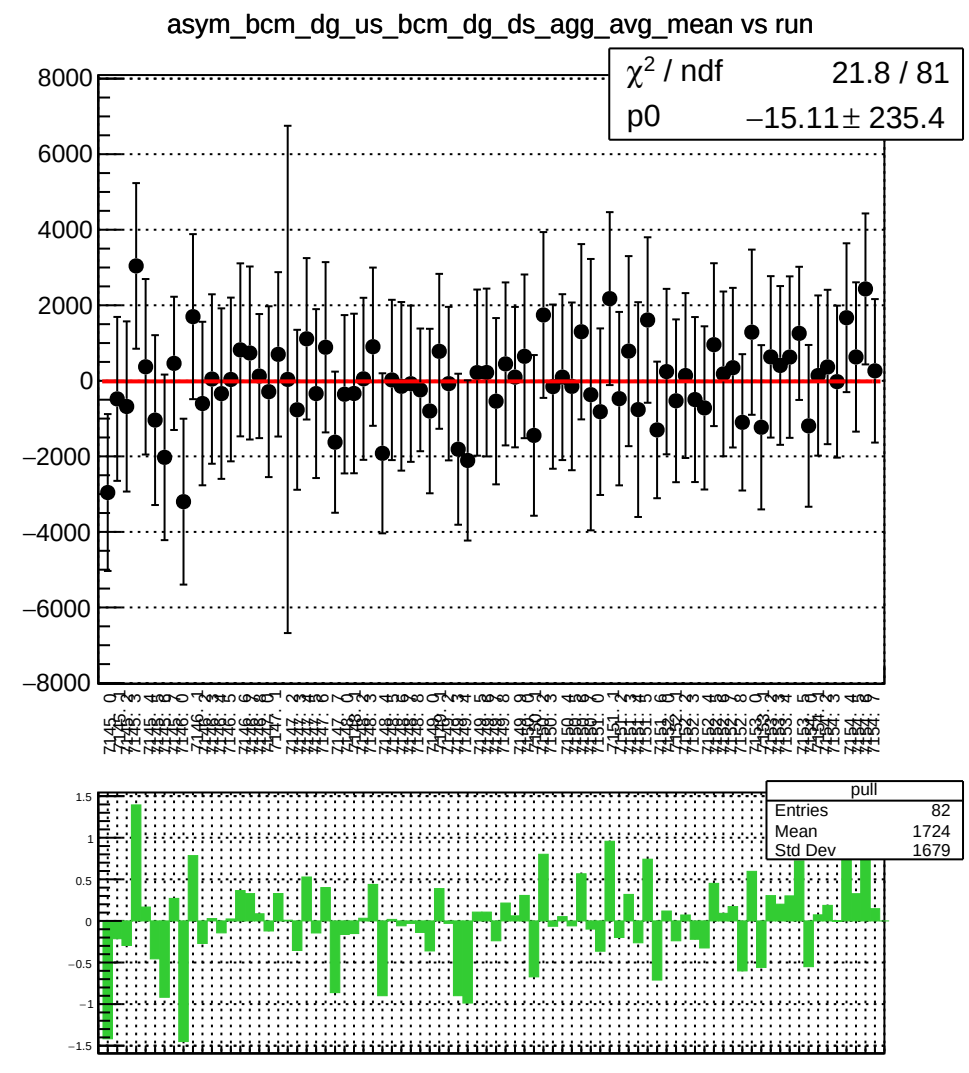

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 20.45 / 81
p0 −2.924 ± 234
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 82
Mean 4133
Std Dev 4088
1.5
1
0.5
0
−0.5
−1
−1.5

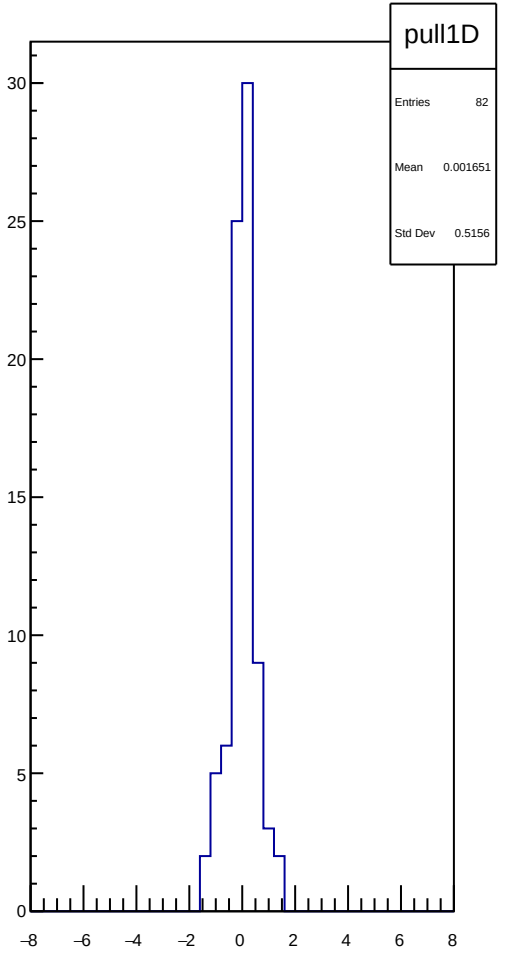

pull1D
Entries 82
Mean 0.0006939
Std Dev 0.4994
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

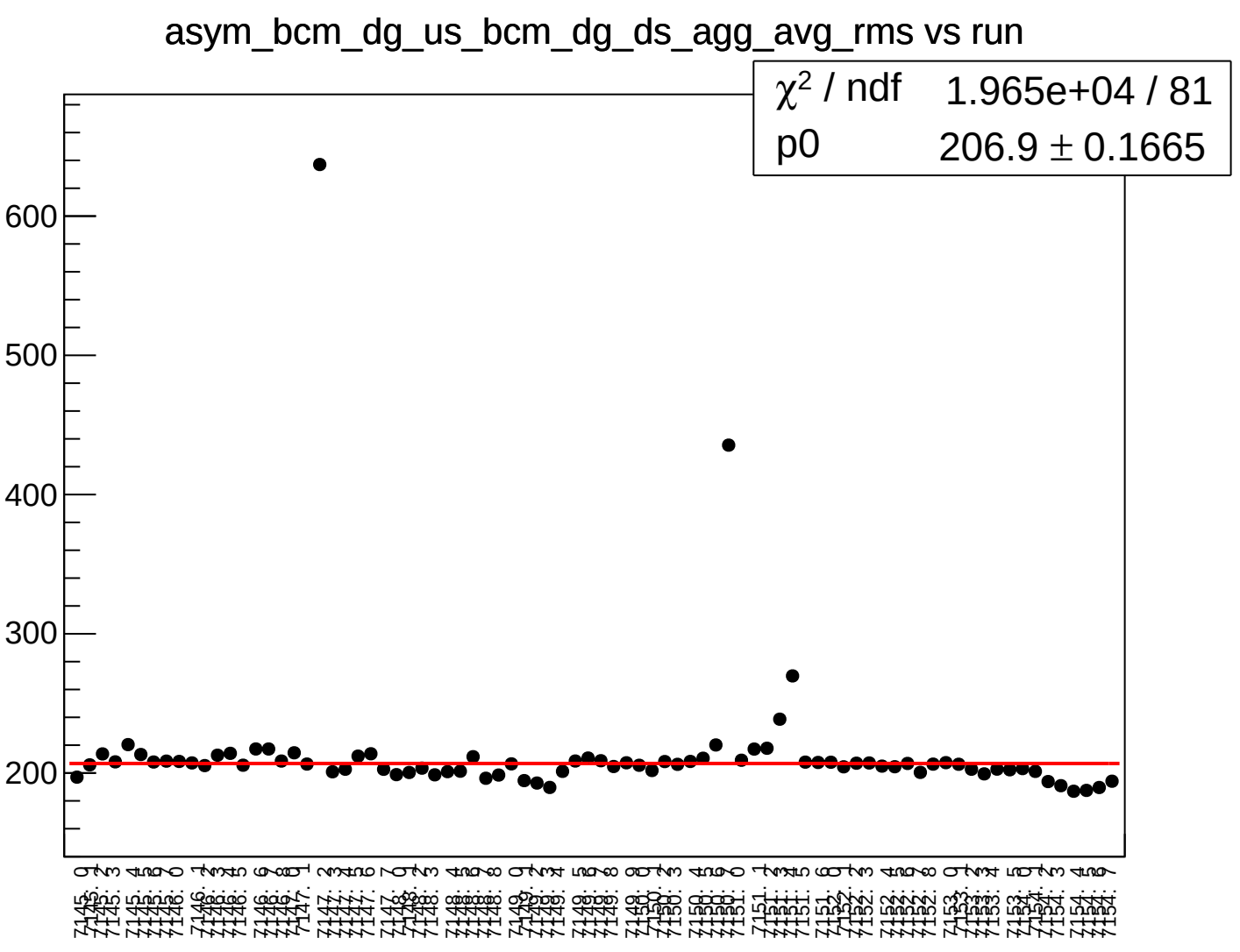

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.994e+04 / 81
p0 205.6 ± 0.1655
600
500
400
300
200

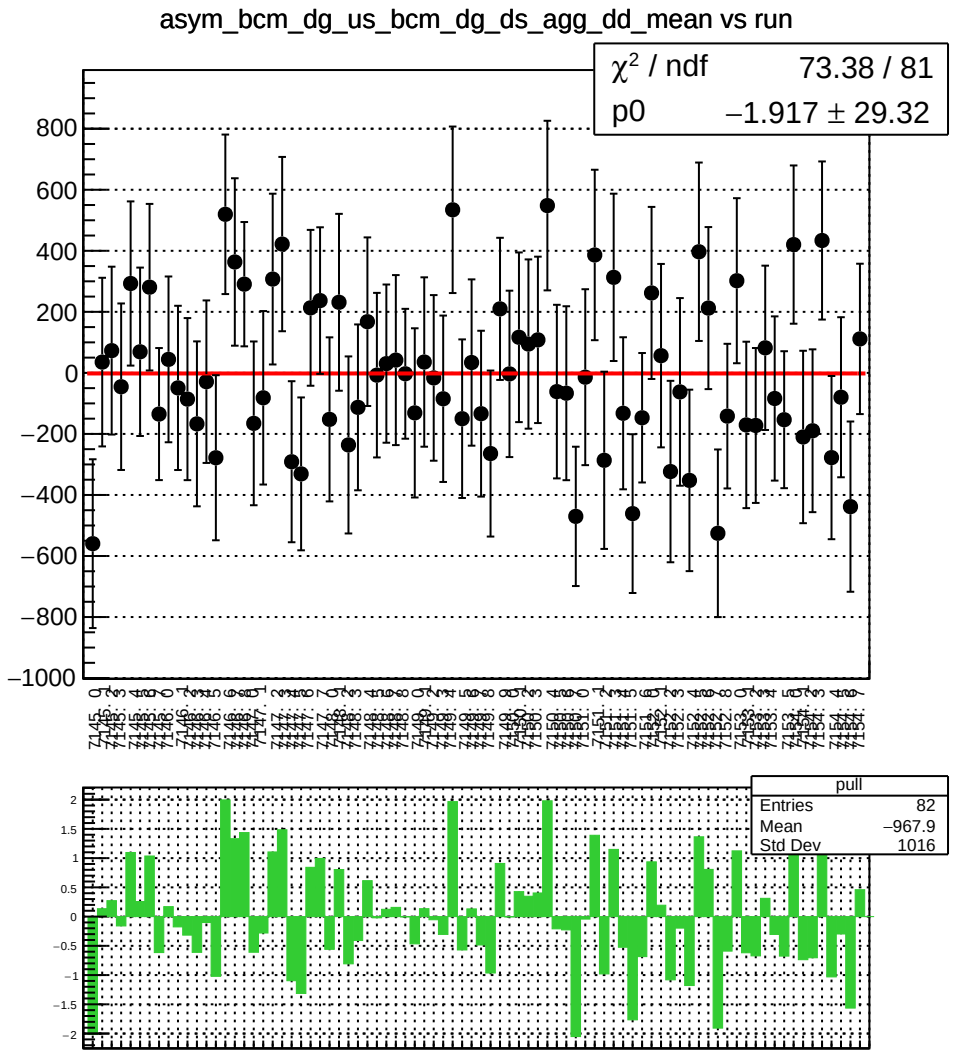

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 70.94 / 81
p0 −2.663 ± 20.92
pull
Entries 82
Mean −307.4
Std Dev 362.8
pull1D
Entries 82
Mean −0.007694
Std Dev 0.9301

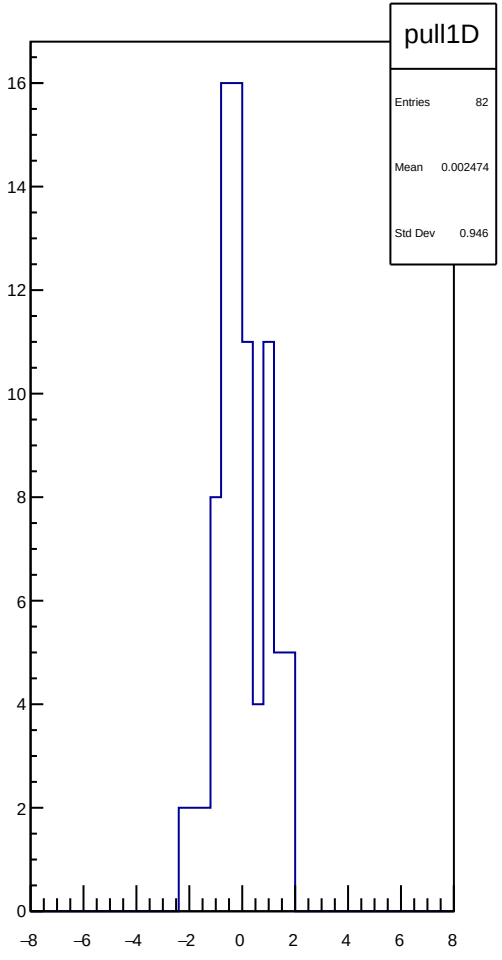

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 7016 / 81
p0 18.46 ± 0.01479
21
20
19
18
17
16

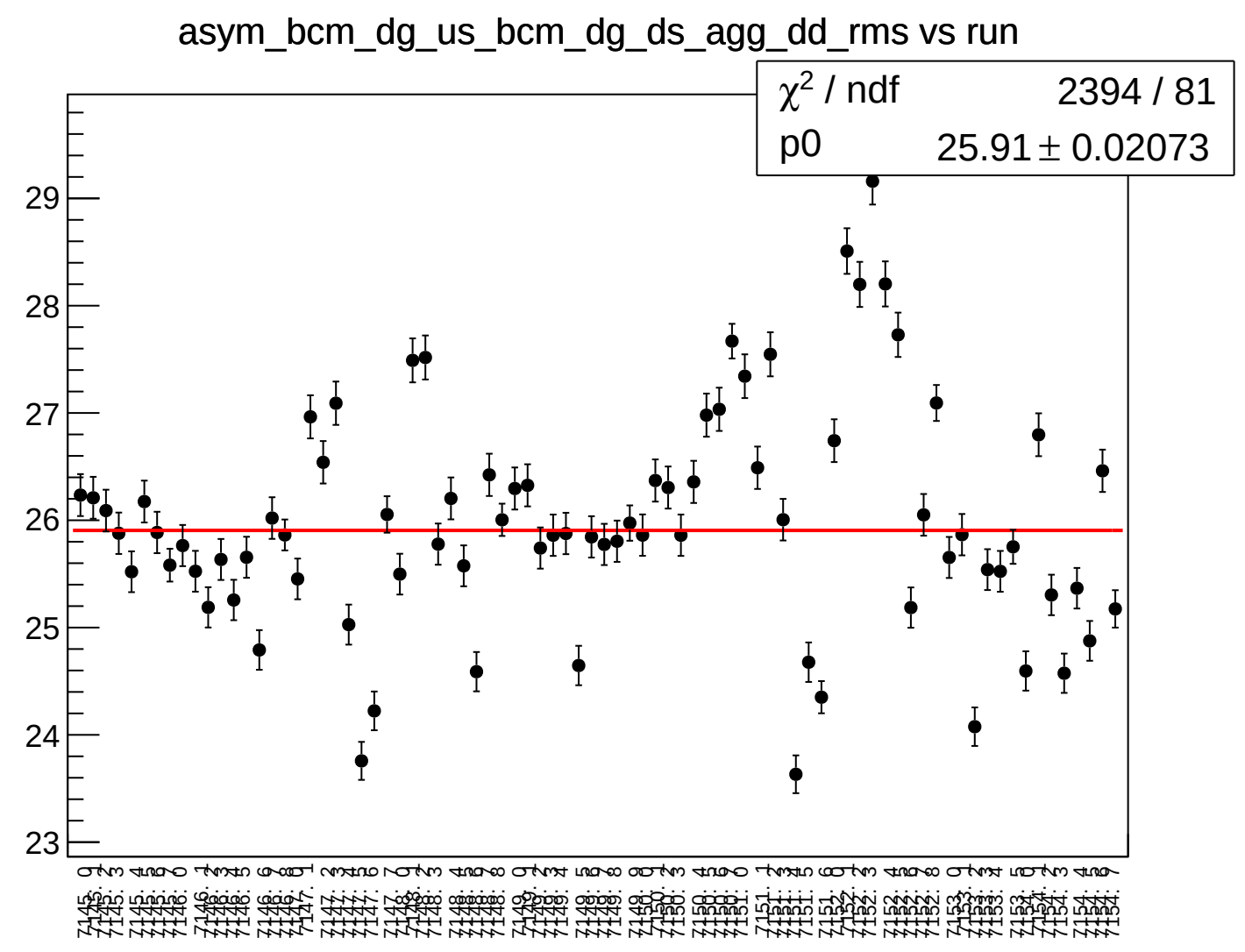

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 21.8 / 81
p0 −15.11± 235.4
pull
Entries 82
Mean 1724
Std Dev 1679

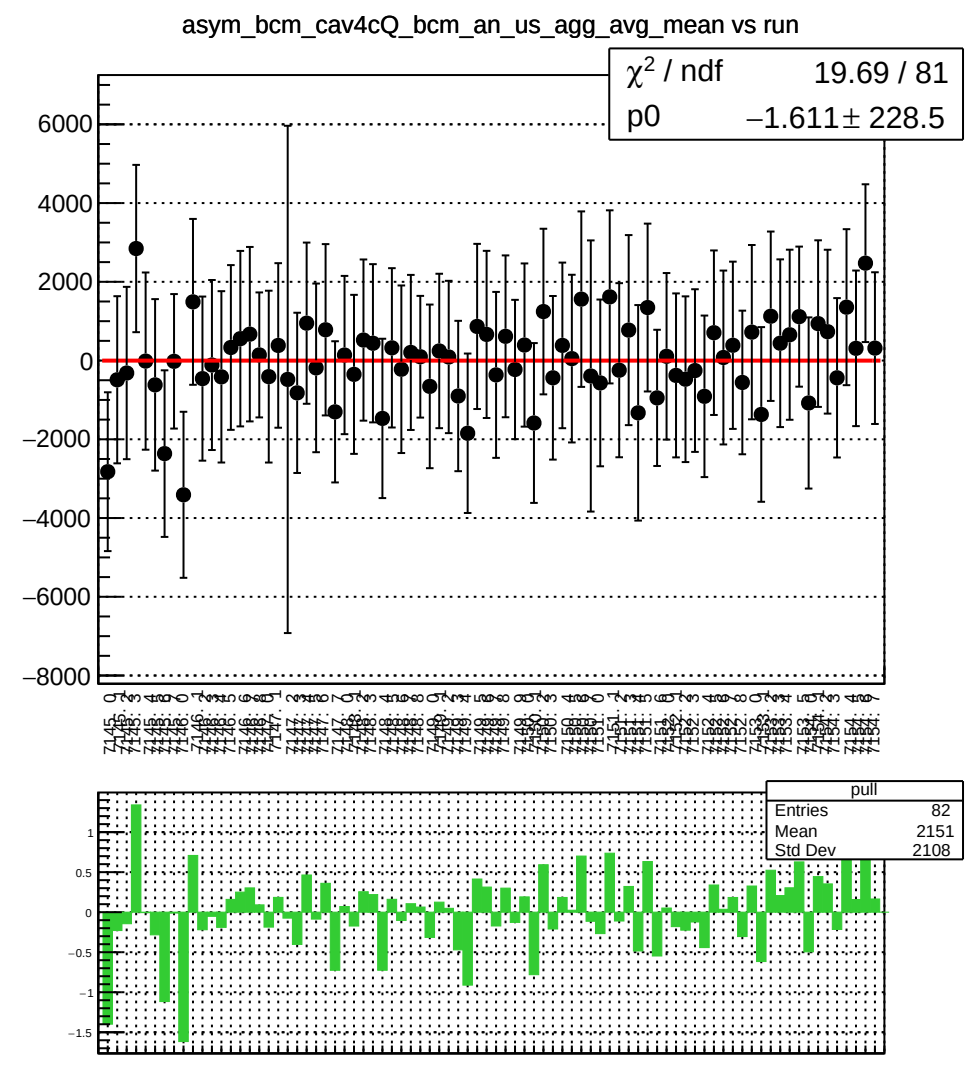

pull1D
Entries 82
Mean 0.001651
Std Dev 0.5156

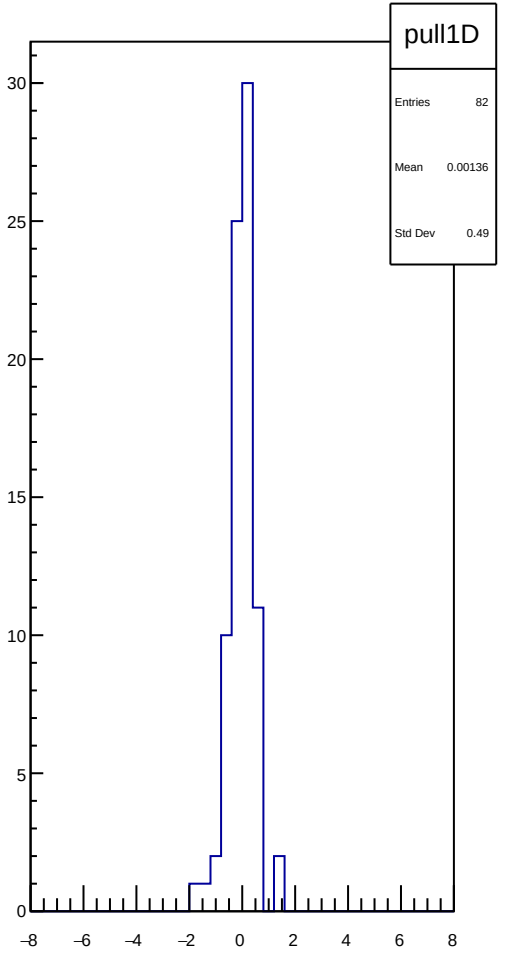

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.965e+04 / 81
p0 206.9 ± 0.1665
600
500
400
300
200

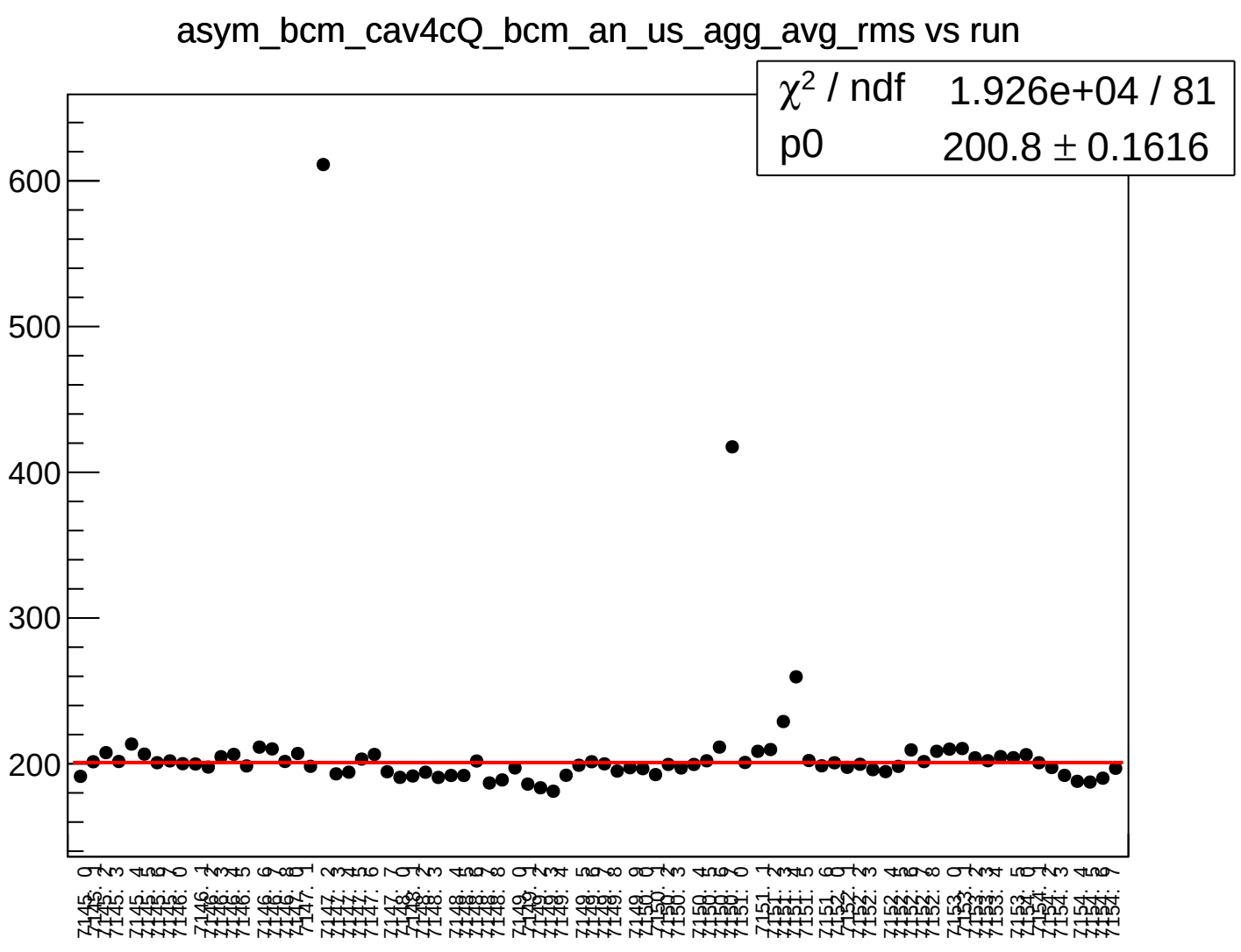

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 73.38 / 81
p0 −1.917 ± 29.32
pull
Entries 82
Mean −967.9
Std Dev 1016

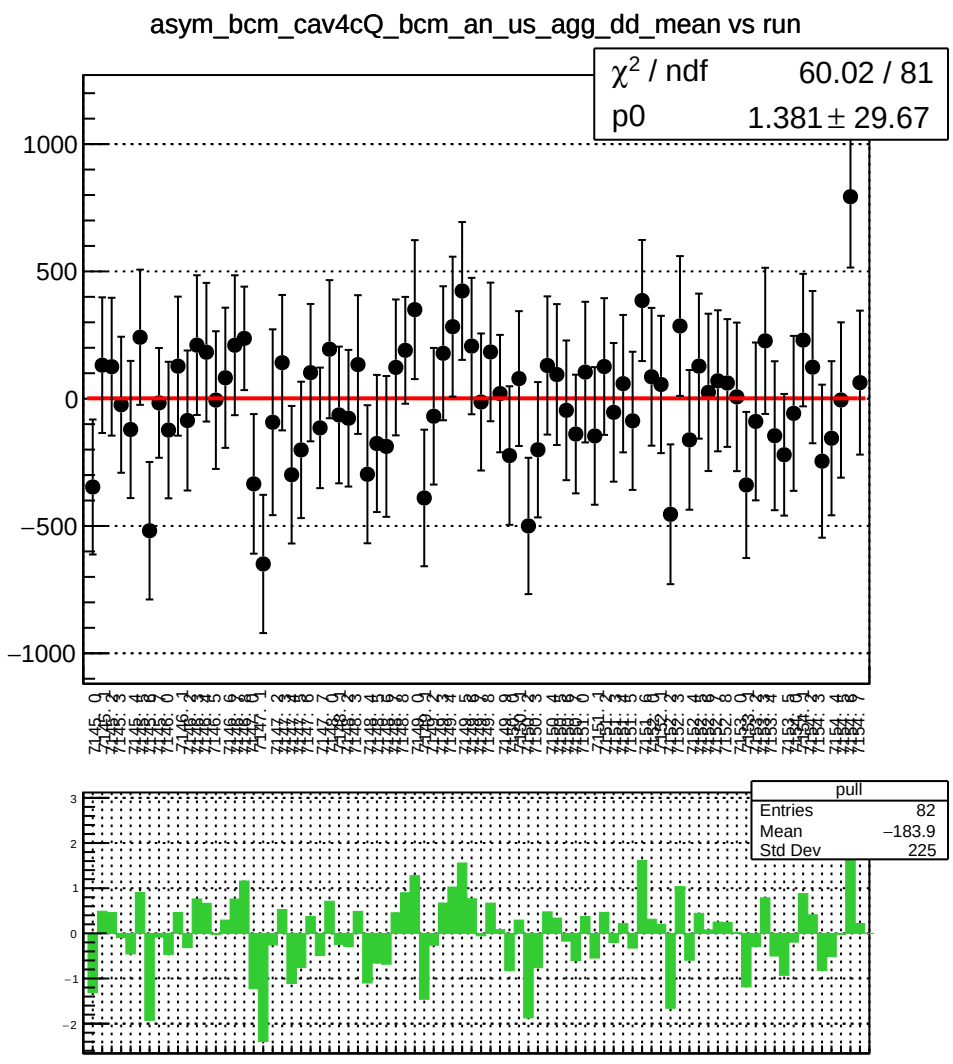

pull1D
Entries 82
Mean 0.002474
Std Dev 0.946

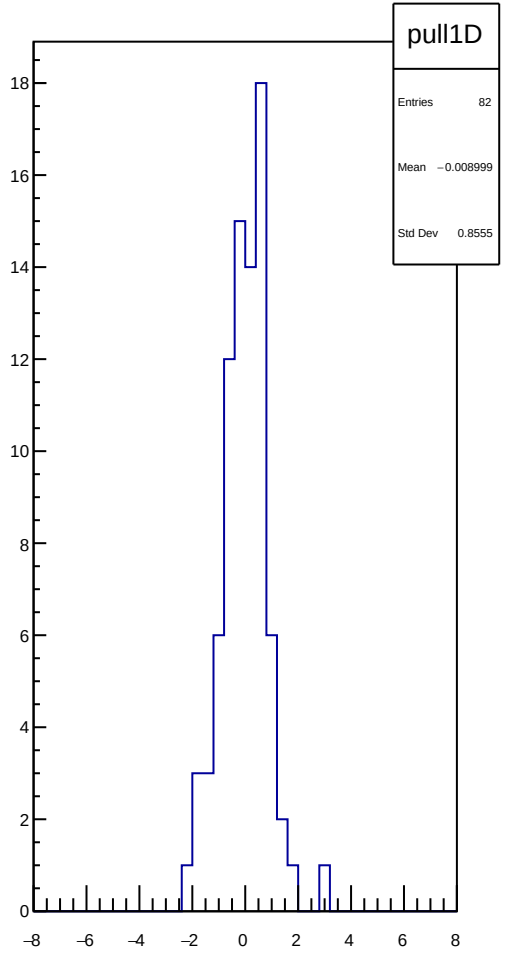

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2394 / 81
p0 25.91 ± 0.02073
29
28
27
26
25
24
23

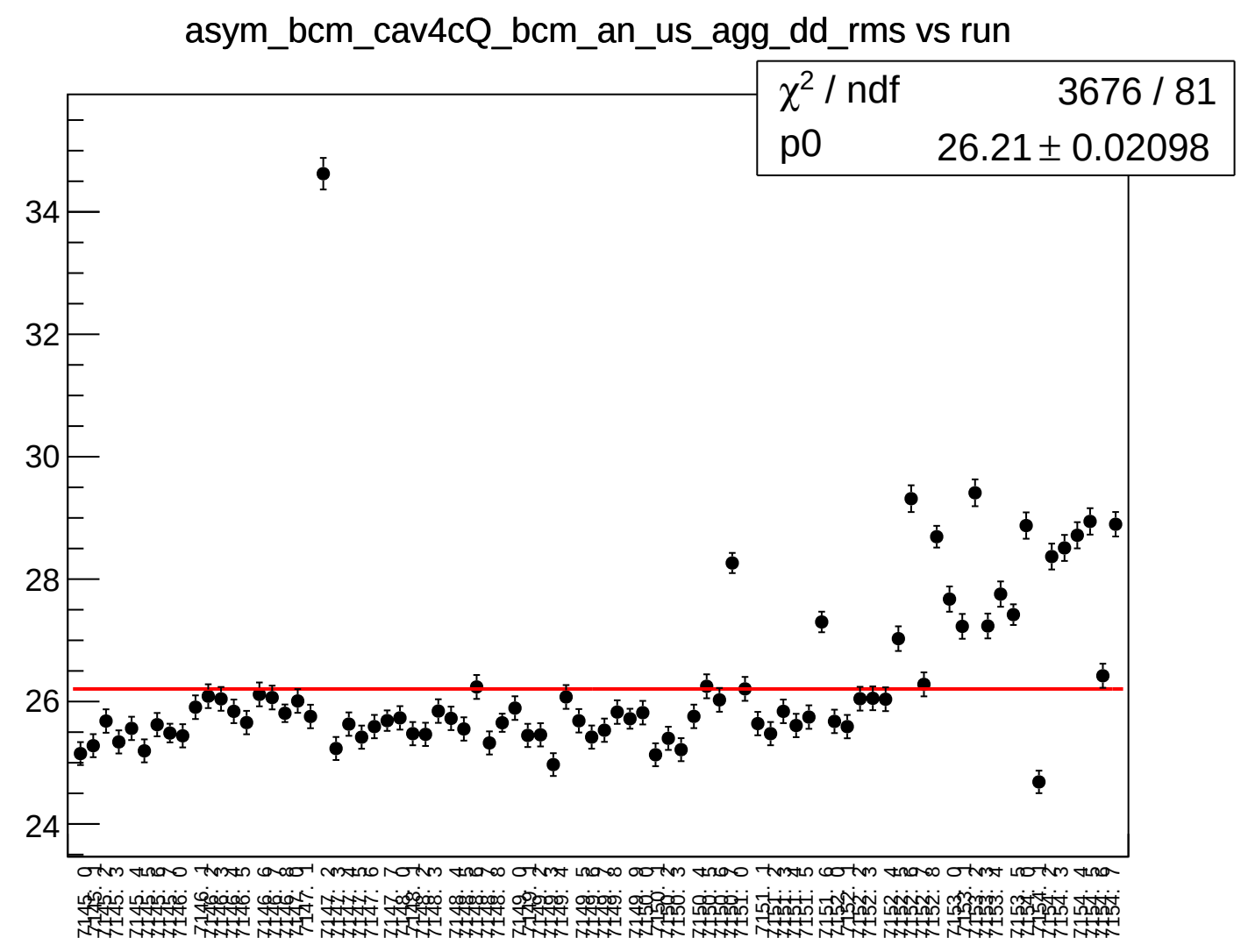

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 19.69 / 81
p0 −1.611± 228.5
pull
Entries 82
Mean 2151
Std Dev 2108

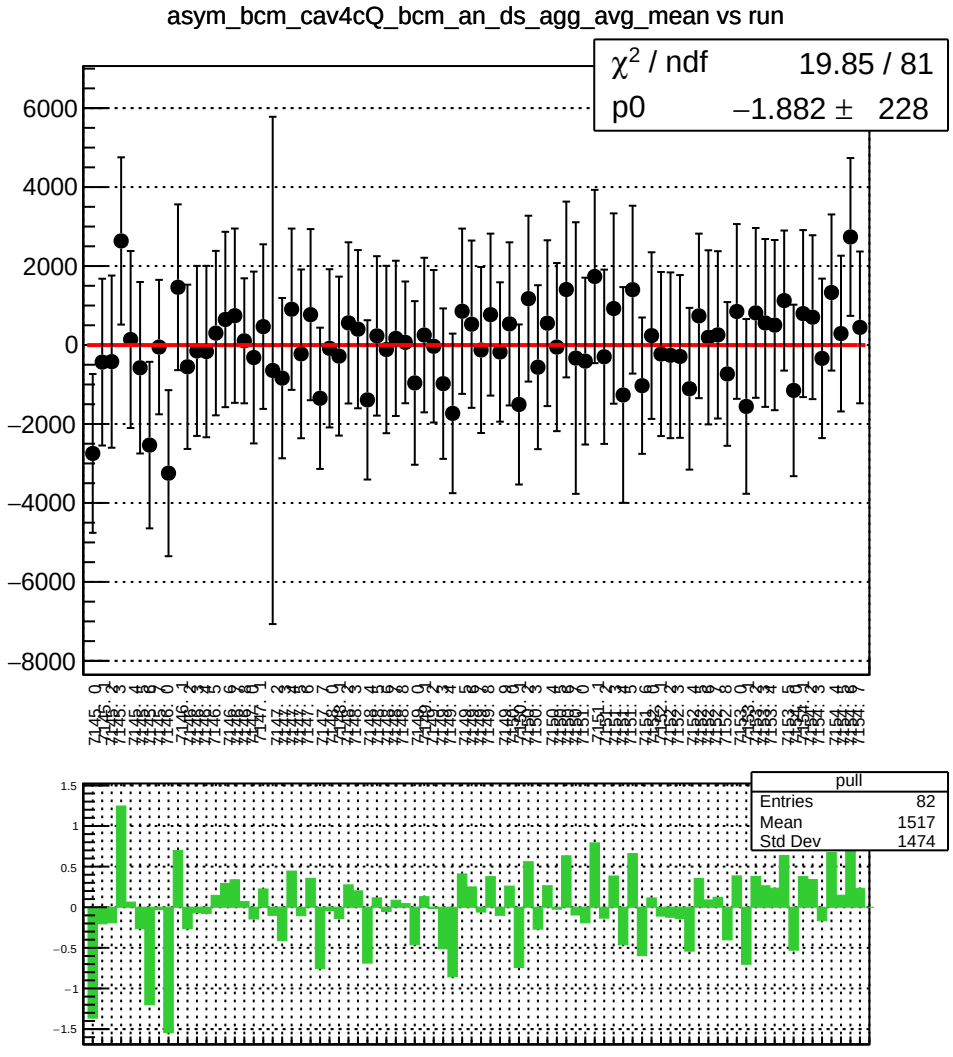

pull1D
Entries 82
Mean 0.00136
Std Dev 0.49

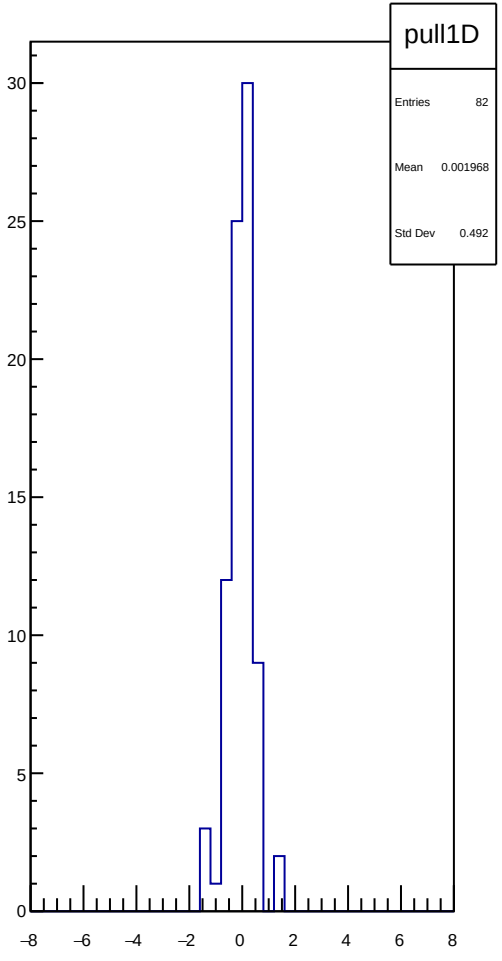

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.926e+04 / 81
p0 200.8 ± 0.1616
600
500
400
300
200

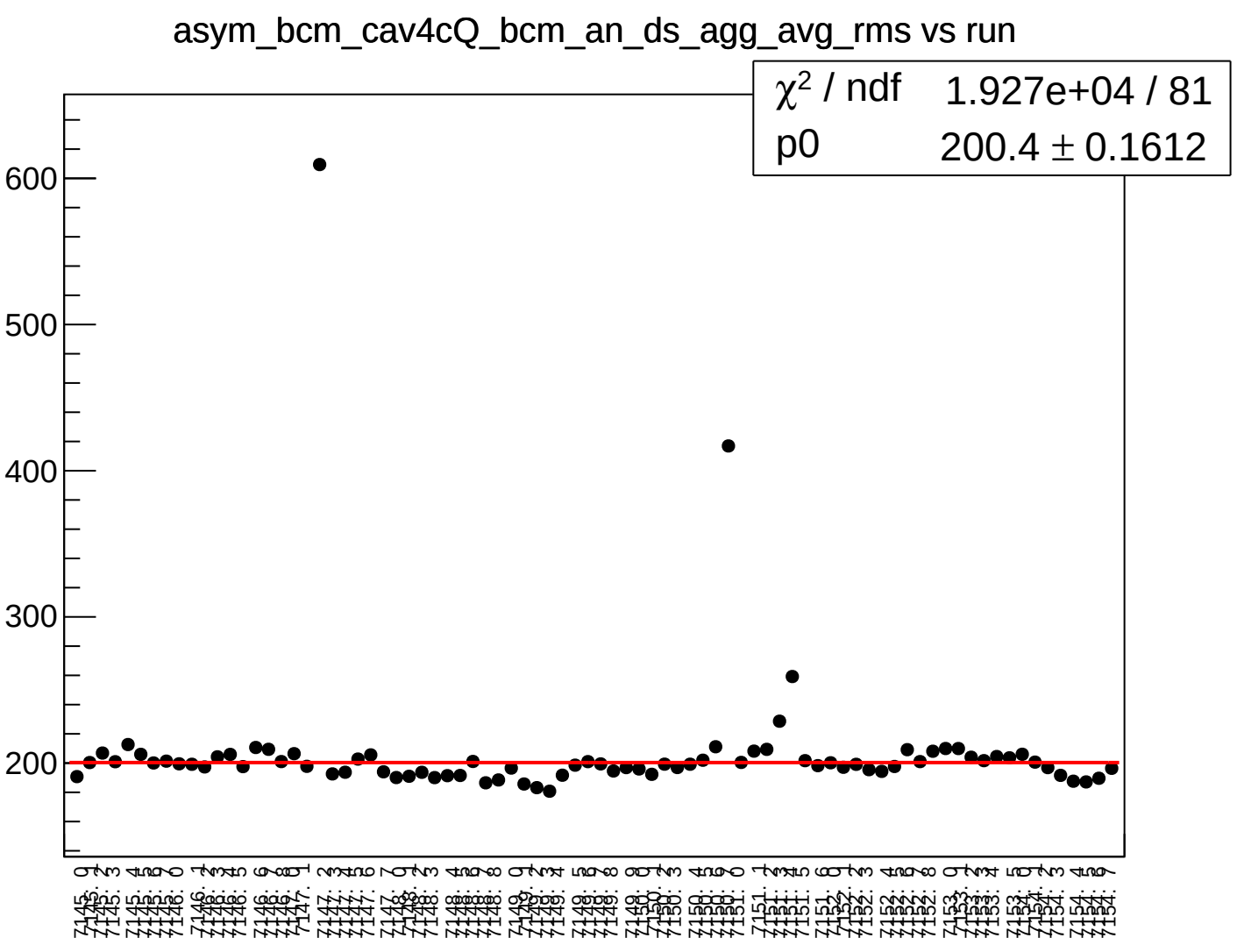

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 60.02 / 81
p0 1.381 ± 29.67
1000
500
0
−500
−1000
pull
Entries 82
Mean −183.9
Std Dev 225
3
2
1
0
−1
−2

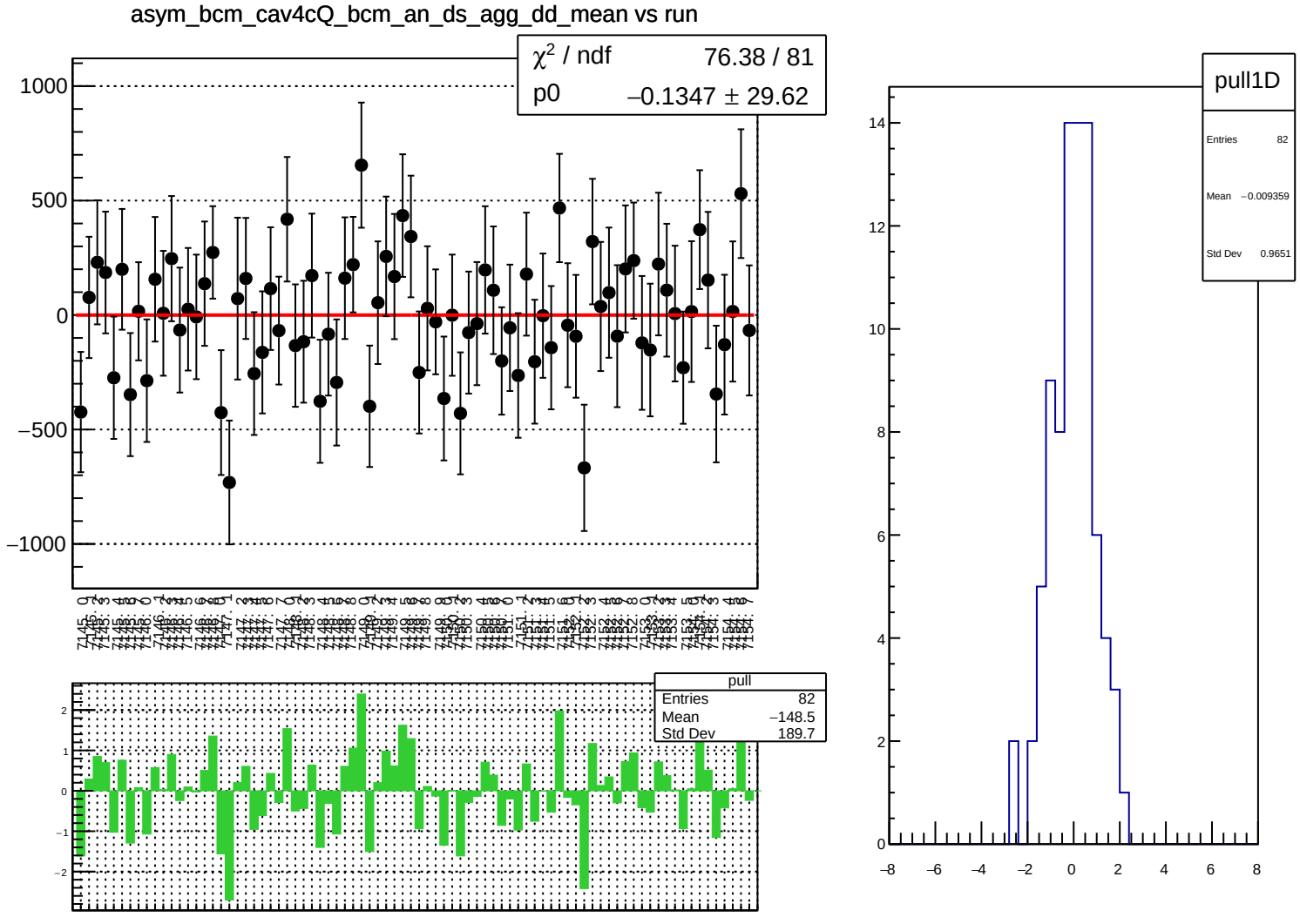

pull1D
Entries 82
Mean −0.008999
Std Dev 0.8555
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

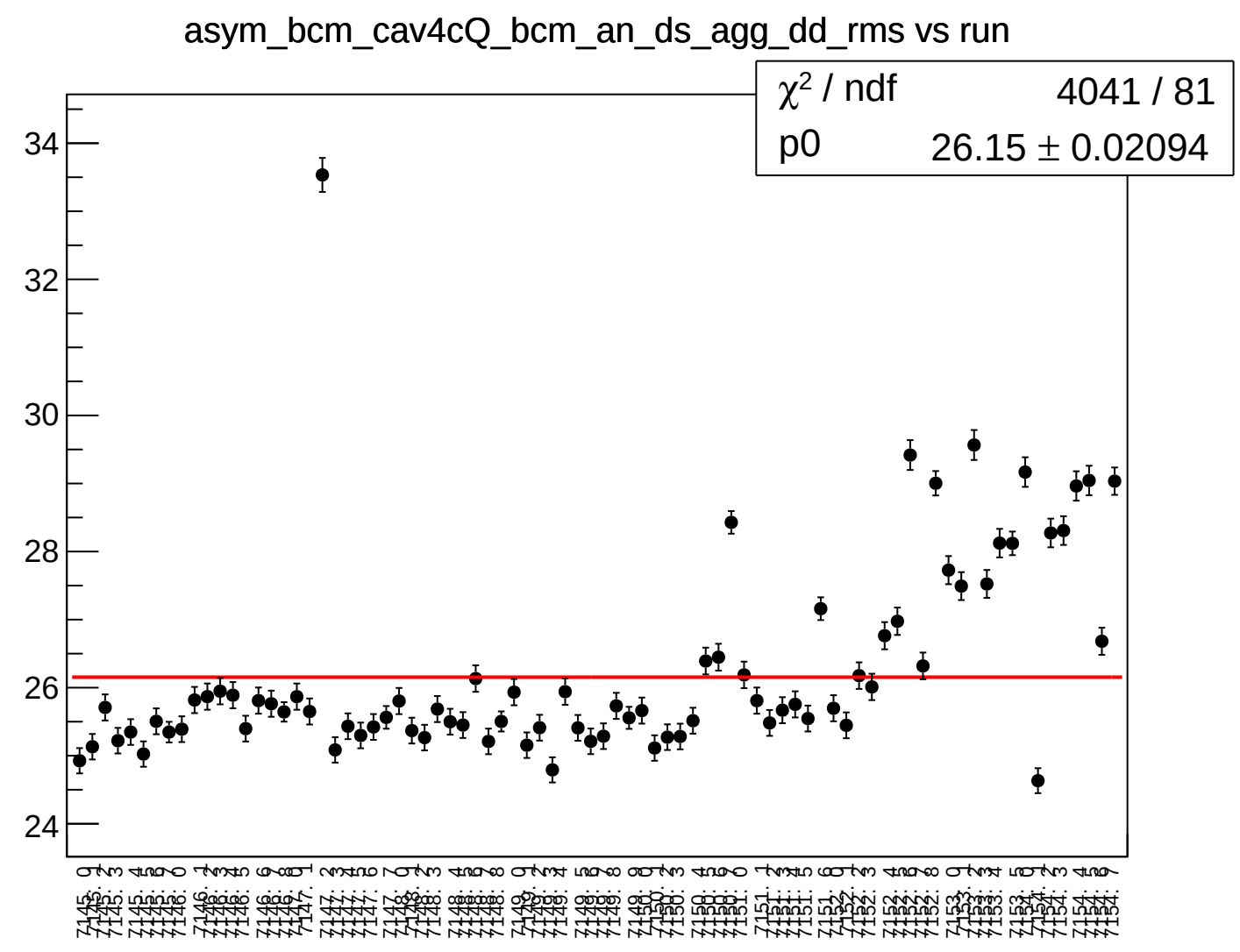

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3676 / 81
p0 26.21 ± 0.02098
34
32
30
28
26
24

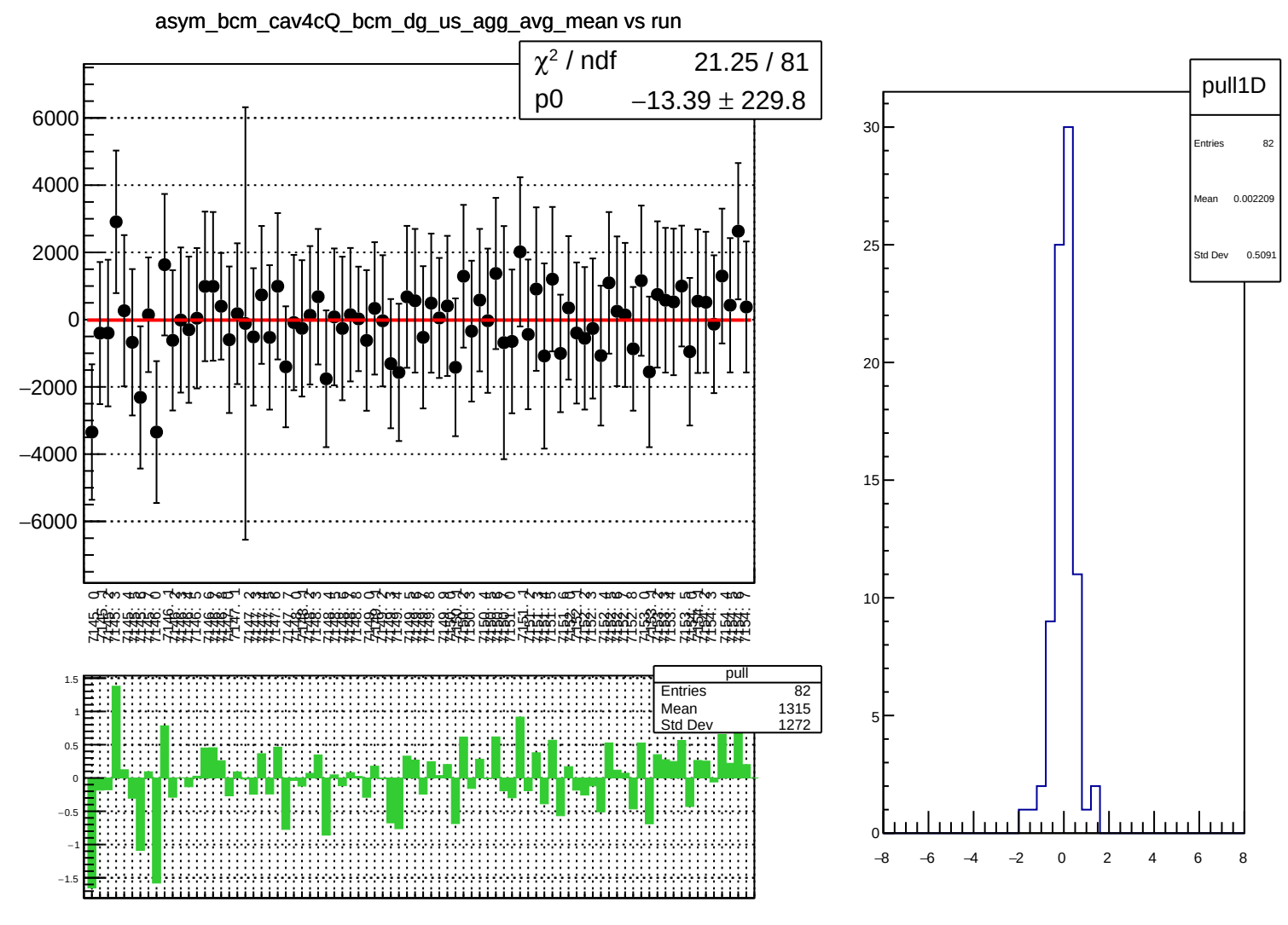

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.85 / 81
p0 −1.882 ± 228
pull
Entries 82
Mean 1517
Std Dev 1474

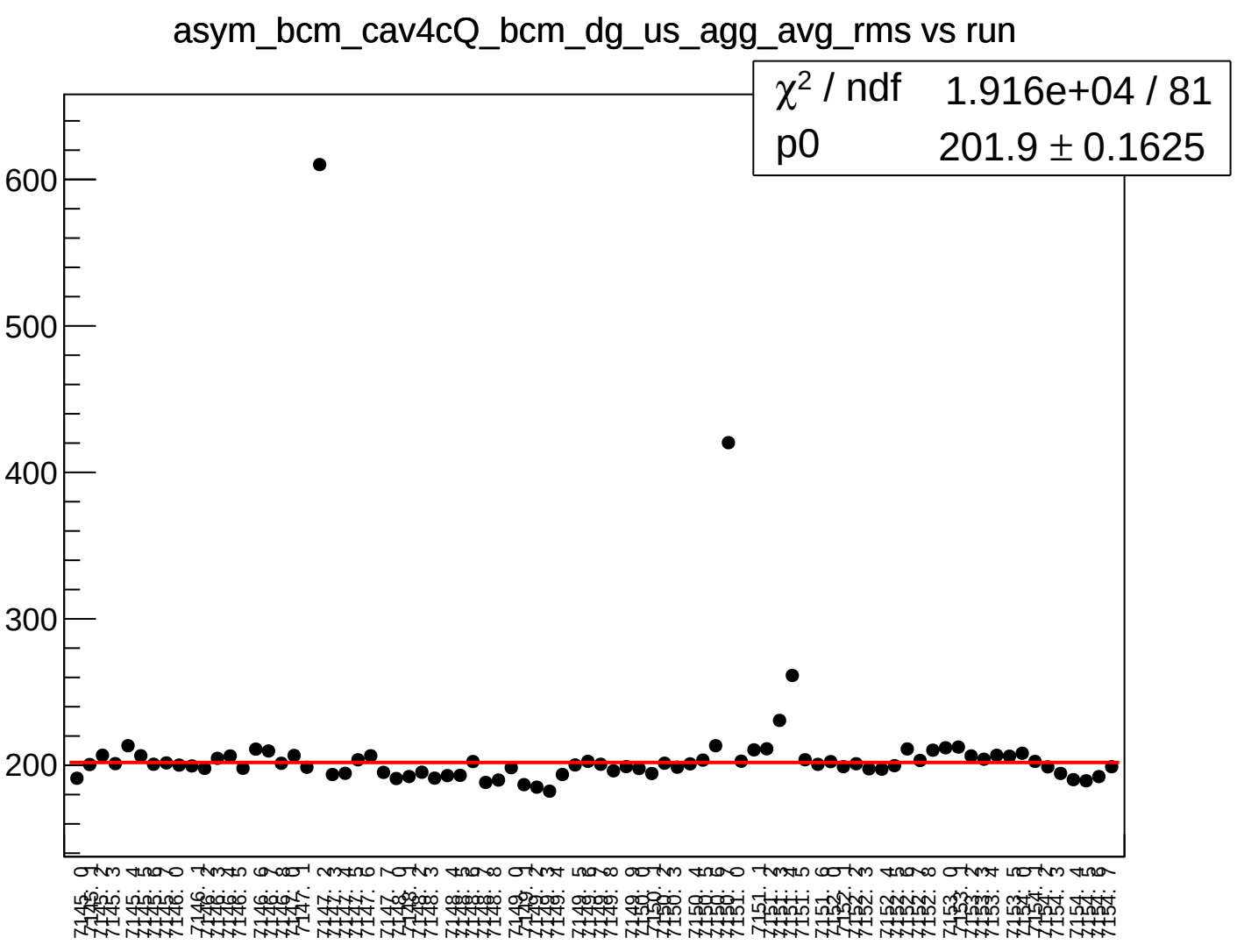

pull1D
Entries 82
Mean 0.001968
Std Dev 0.492

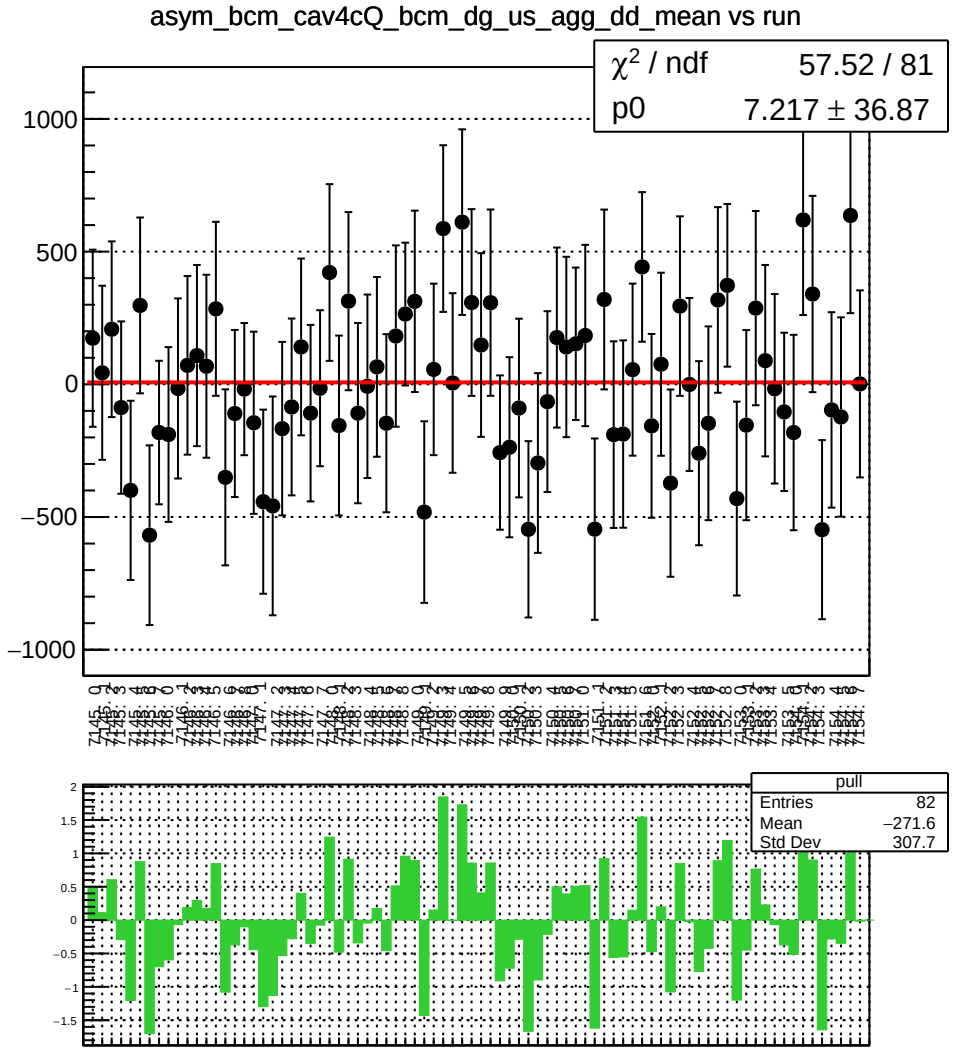

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.927e+04 / 81
p0 200.4 ± 0.1612
600
500
400
300
200

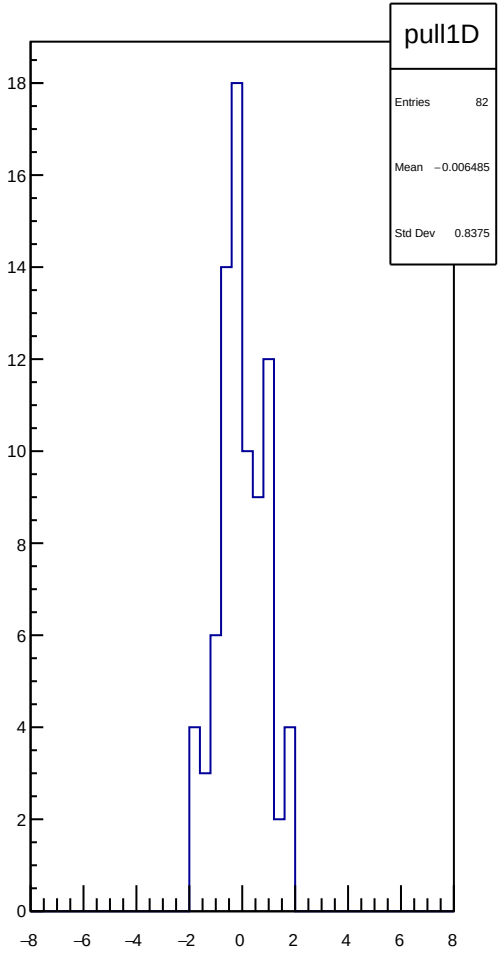

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 76.38 / 81
p0 −0.1347 ± 29.62
1000
500
0
−500
−1000
pull
Entries 82
Mean −148.5
Std Dev 189.7
2
1
0
−1
−2
pull1D
Entries 82
Mean −0.009359
Std Dev 0.9651
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

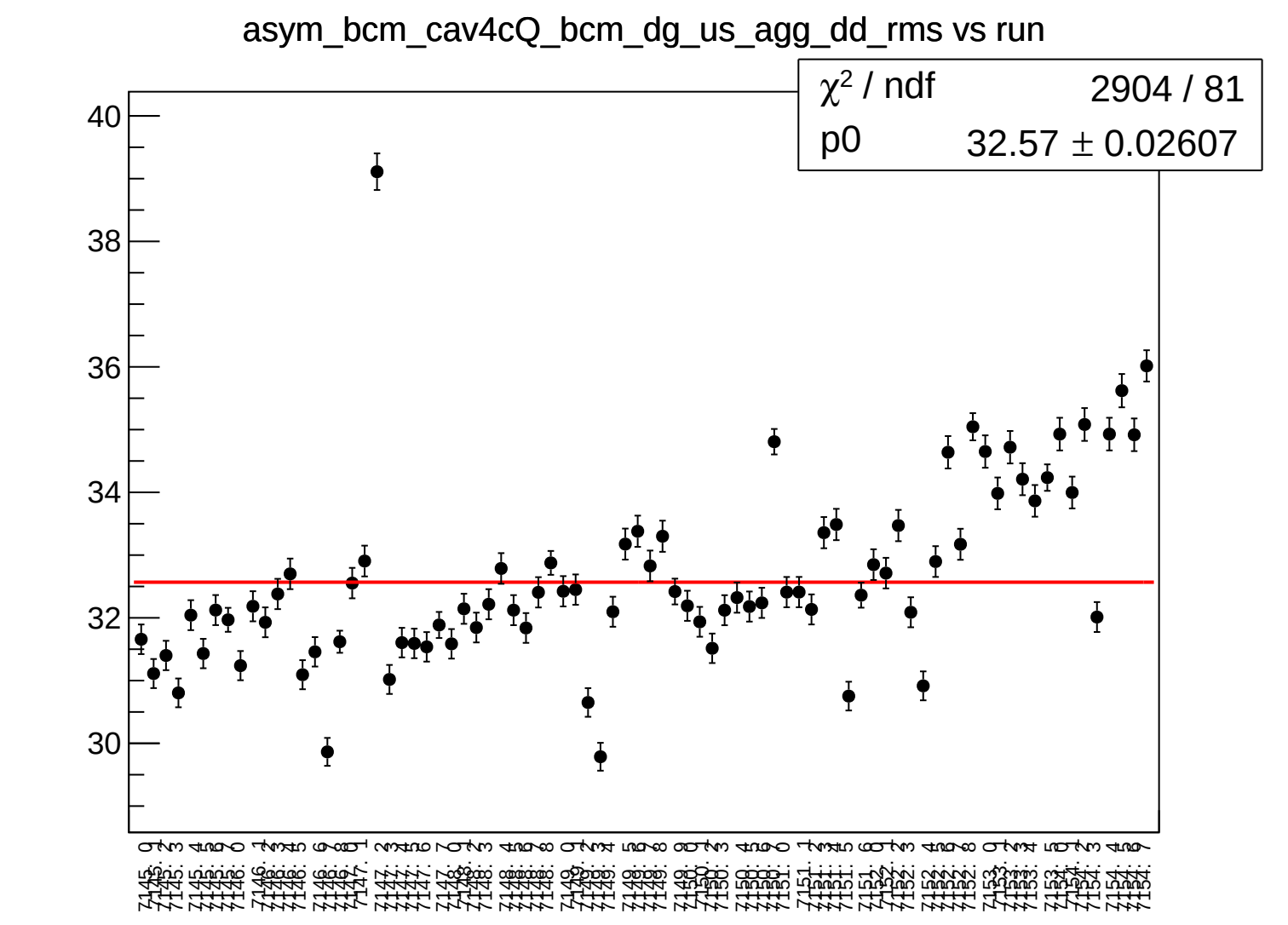

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4041 / 81
p0 26.15 ± 0.02094
34
32
30
28
26
24

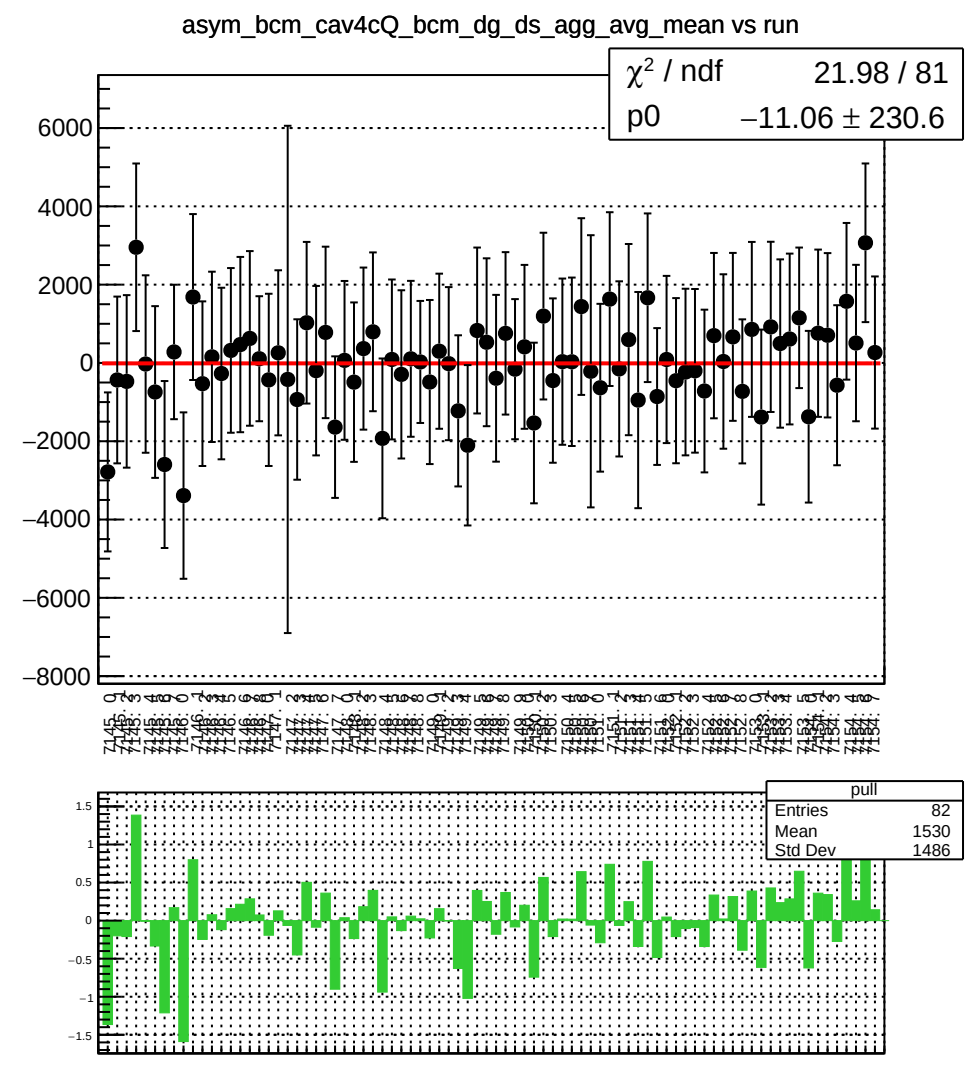

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 21.25 / 81
p0 −13.39 ± 229.8
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 82
Mean 1315
Std Dev 1272
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 82
Mean 0.002209
Std Dev 0.5091
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

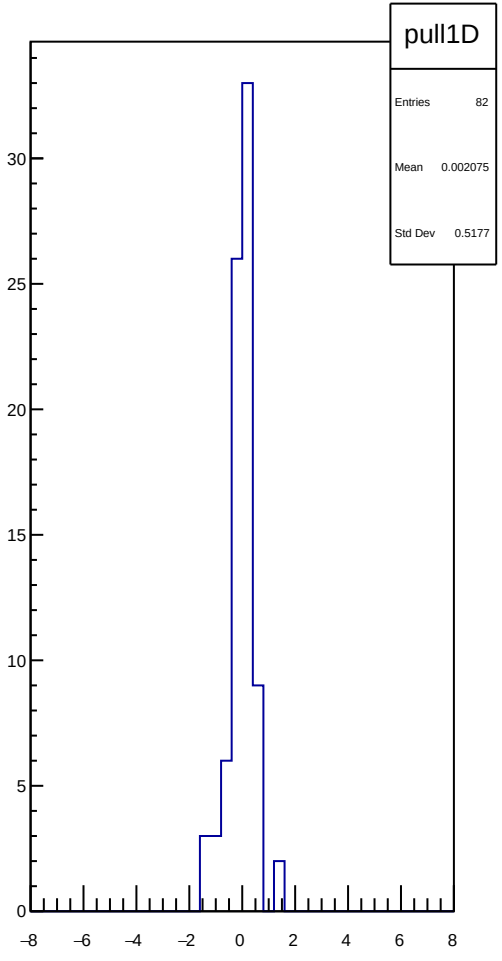

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.916e+04 / 81
p0 201.9 ± 0.1625
600
500
400
300
200

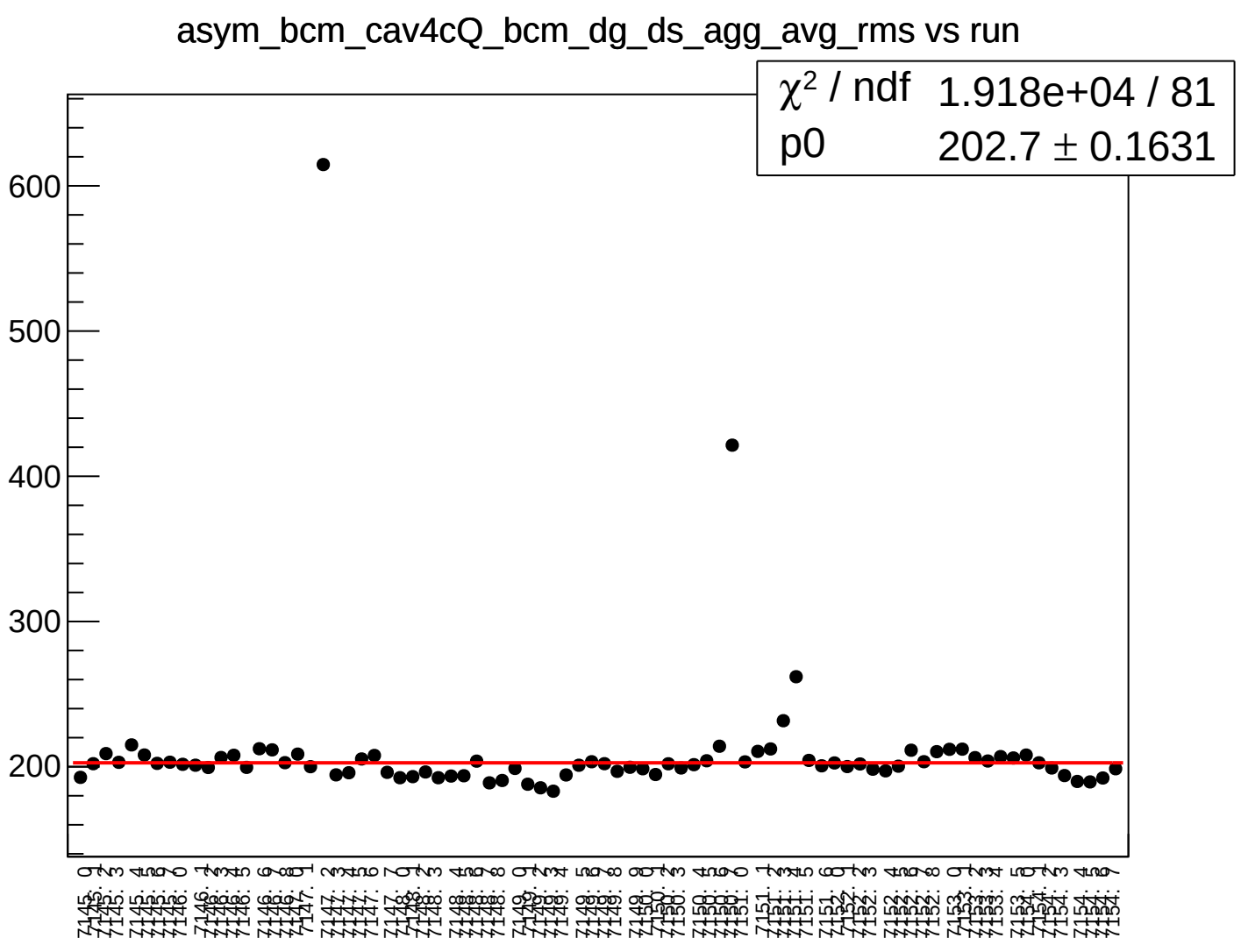

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 57.52 / 81
p0 7.217 ± 36.87
1000
500
0
−500
−1000
pull
Entries 82
Mean −271.6
Std Dev 307.7
2
1.5
1
0.5
0
−0.5
−1
−1.5

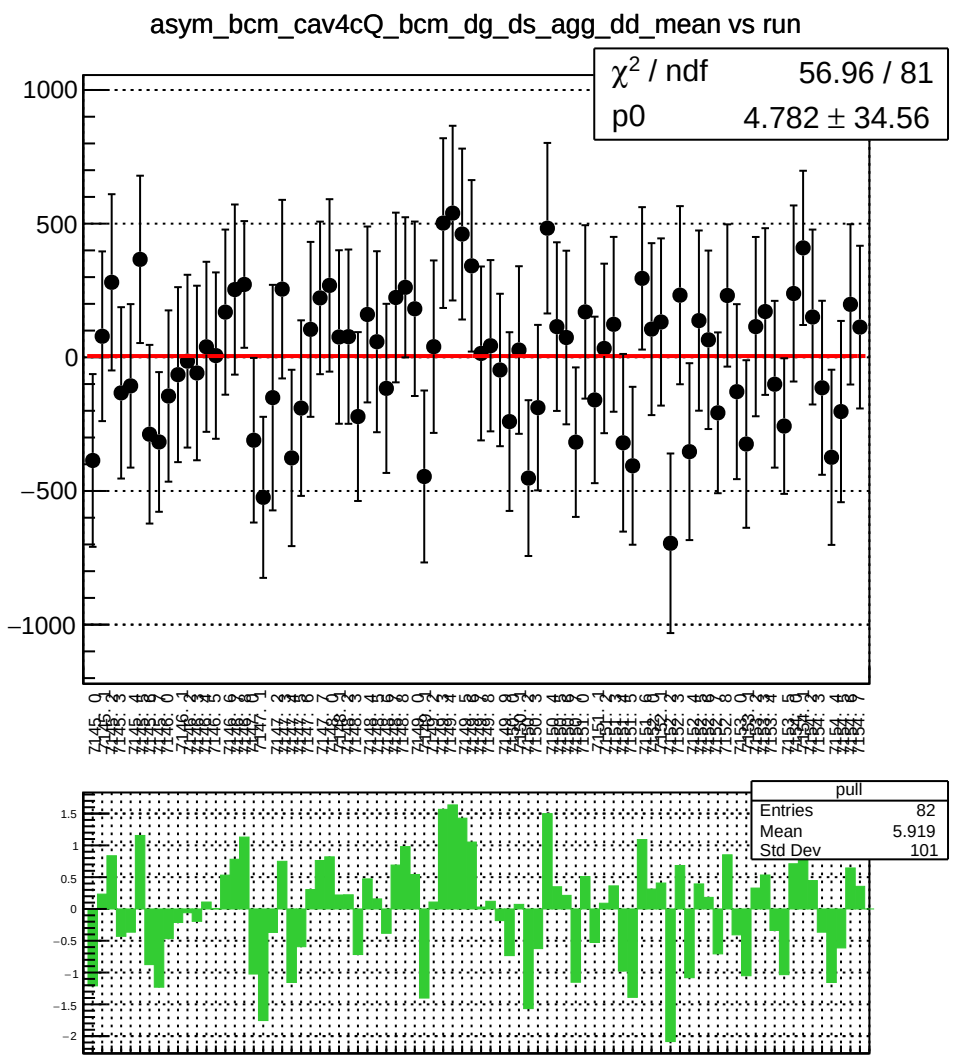

pull1D
Entries 82
Mean −0.006485
Std Dev 0.8375
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

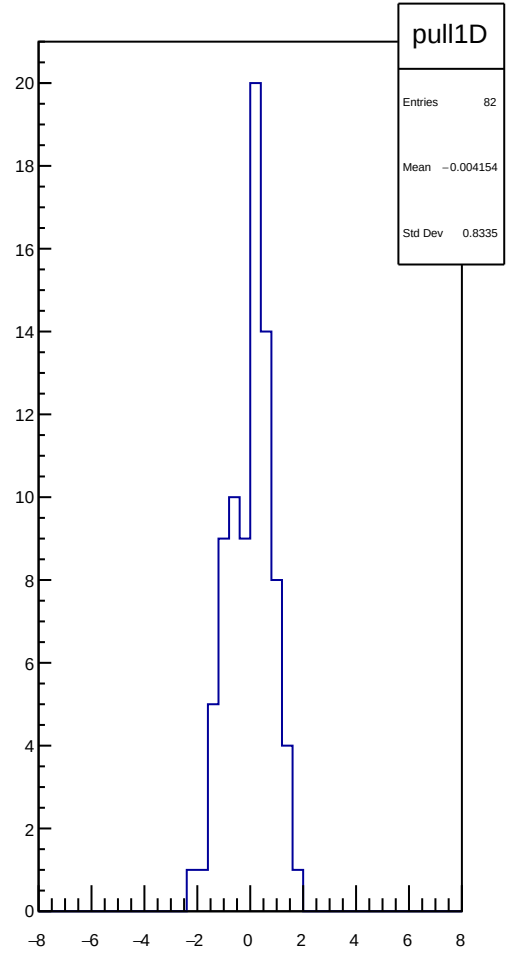

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 2904 / 81
p0 32.57 ± 0.02607
40
38
36
34
32
30

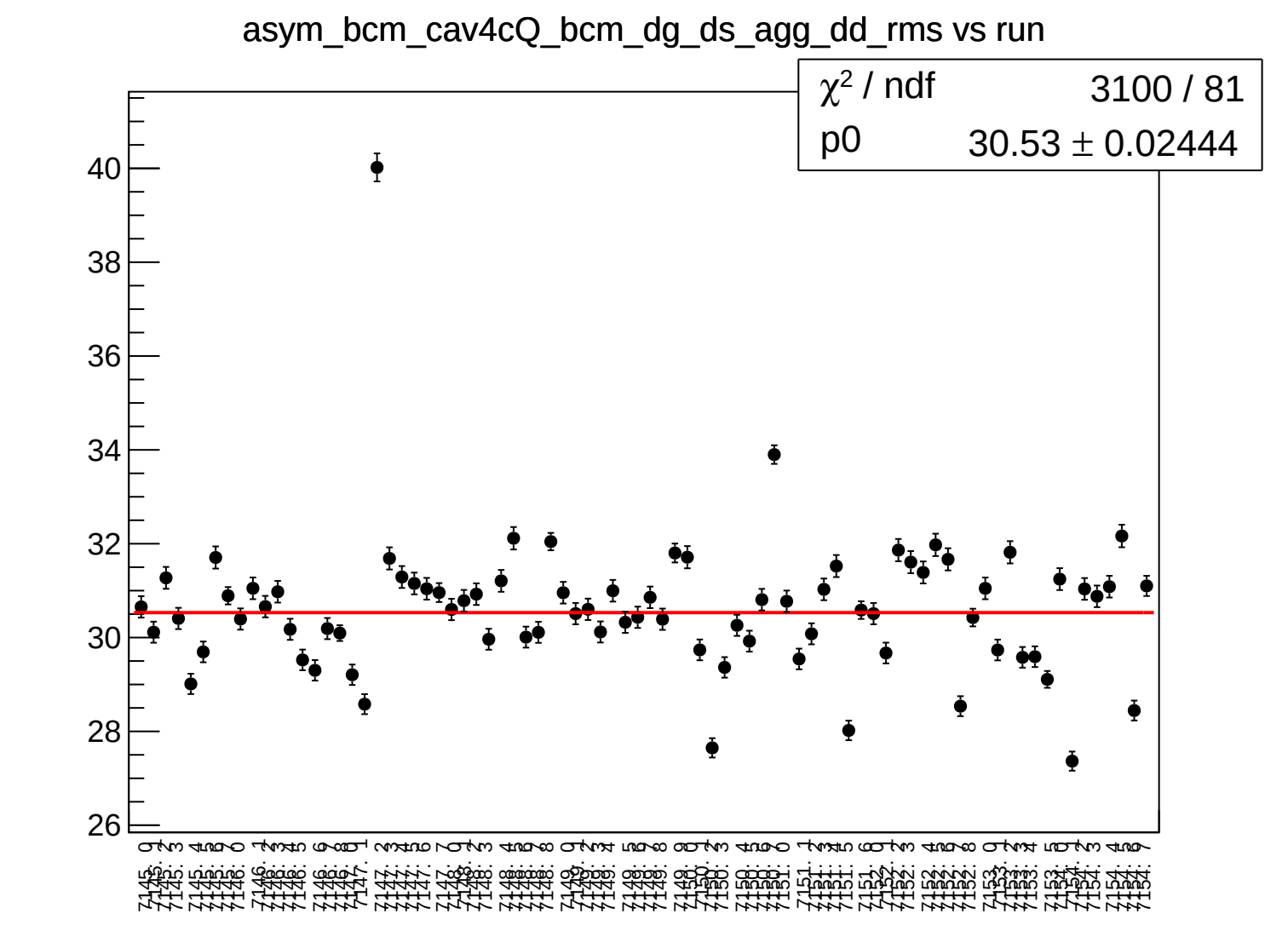

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 21.98 / 81
p0 −11.06 ± 230.6
pull
Entries 82
Mean 1530
Std Dev 1486

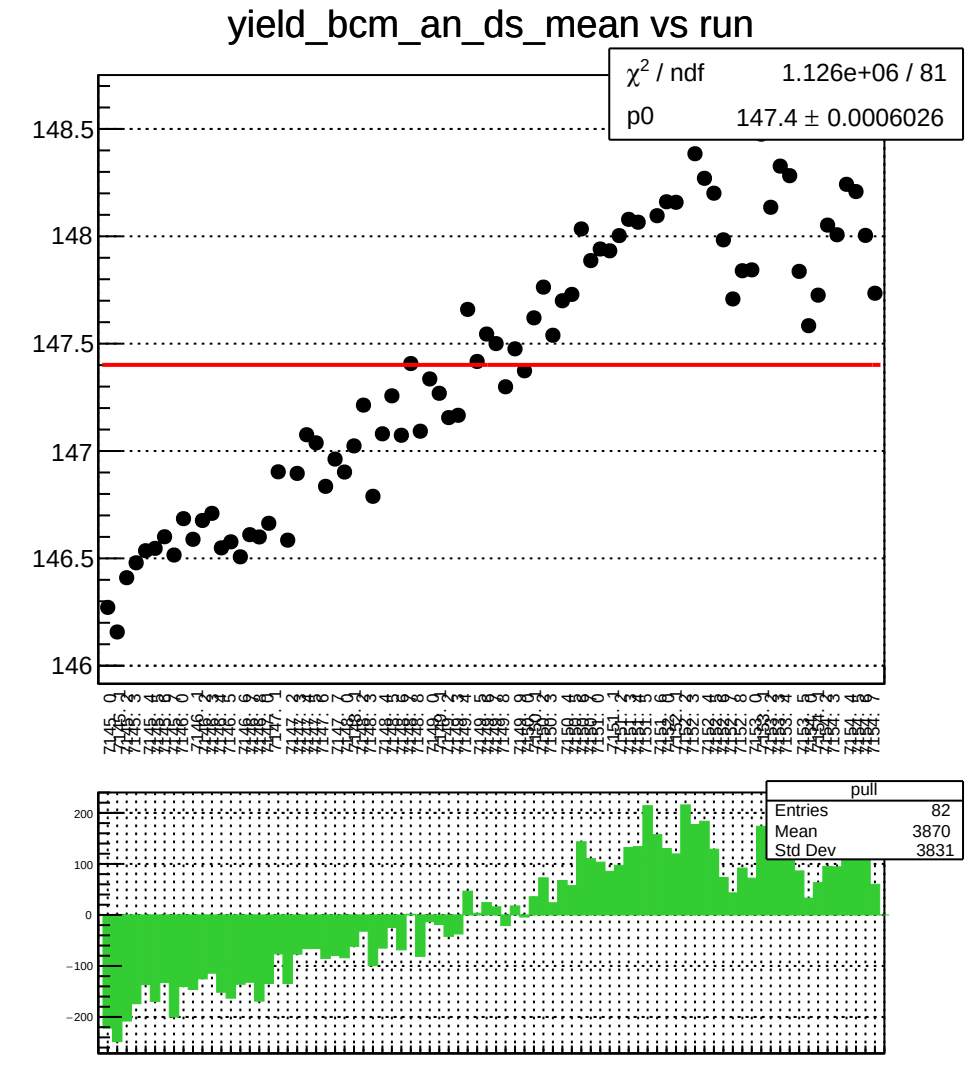

pull1D
Entries 82
Mean 0.002075
Std Dev 0.5177

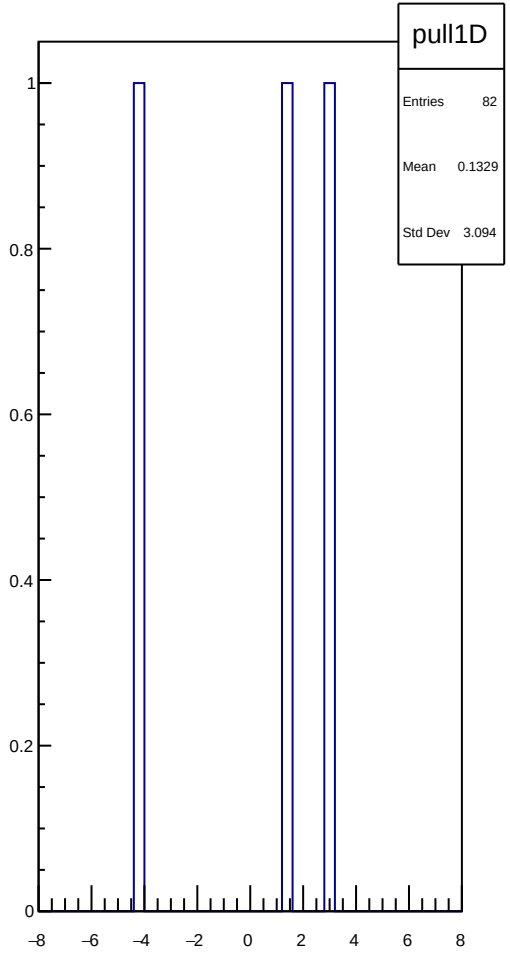

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.918e+04 / 81
p0 202.7 ± 0.1631
600
500
400
300
200

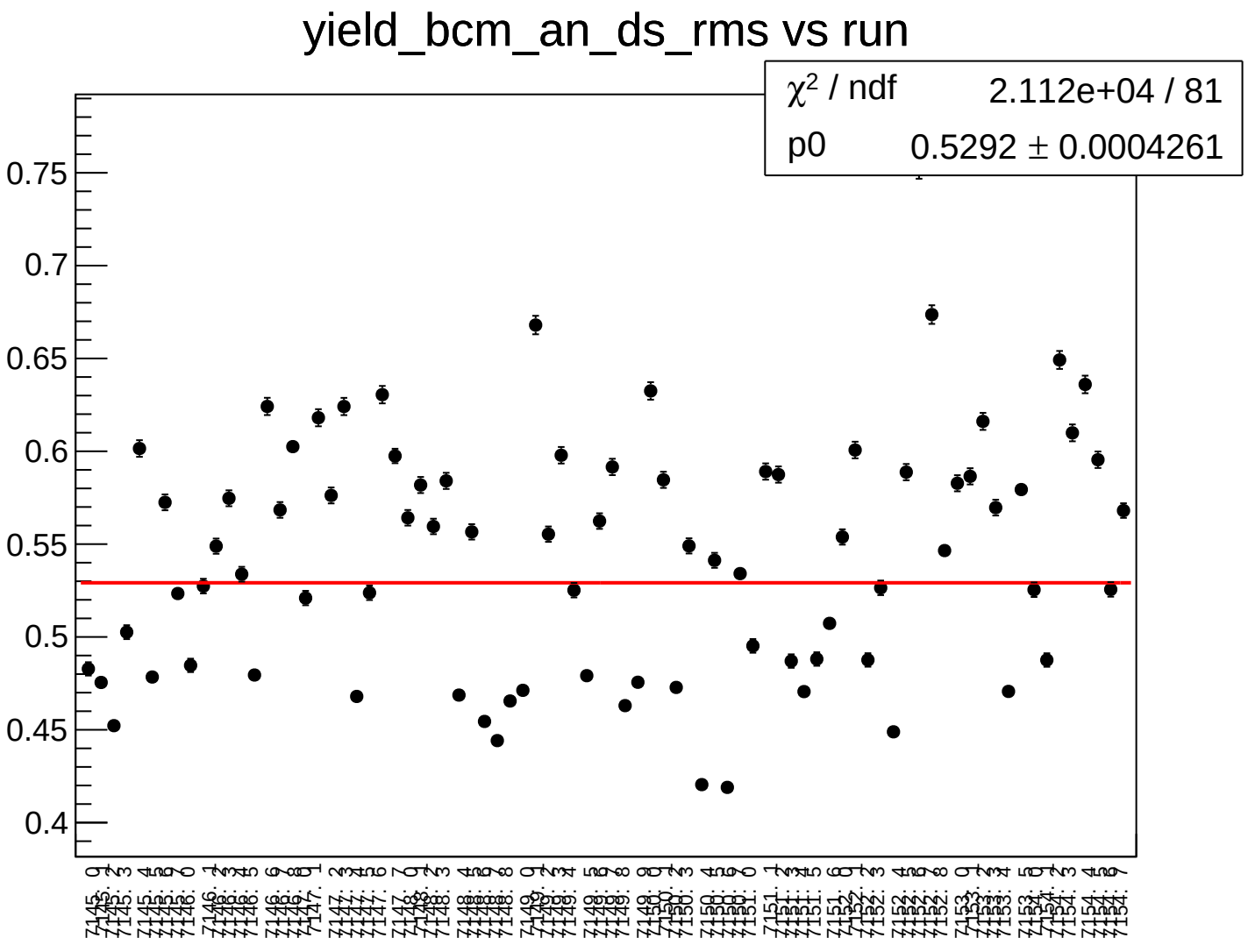

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 56.96 / 81
p0 4.782 ± 34.56
1000
500
0
−500
−1000
pull
Entries 82
Mean 5.919
Std Dev 101
1.5
1
0.5
0
−0.5
−1
−1.5
−2

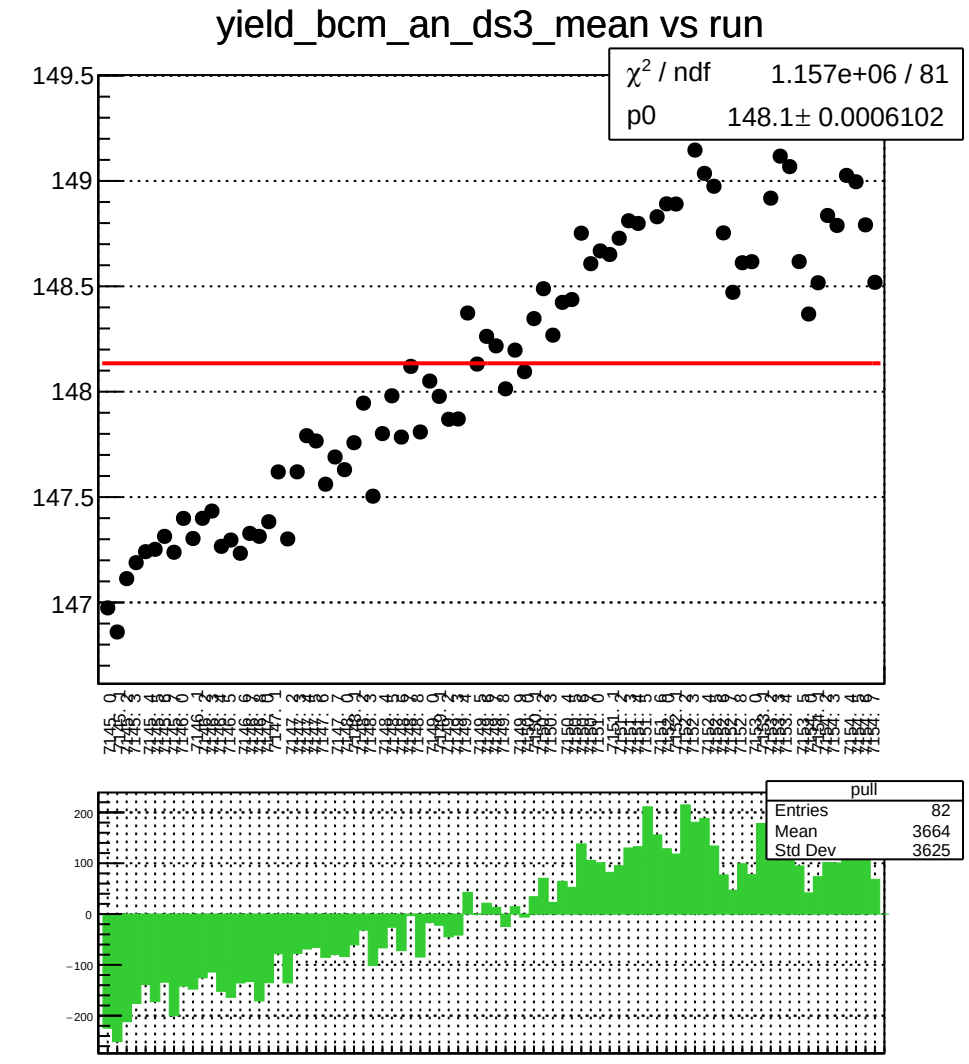

pull1D
Entries 82
Mean −0.004154
Std Dev 0.8335
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

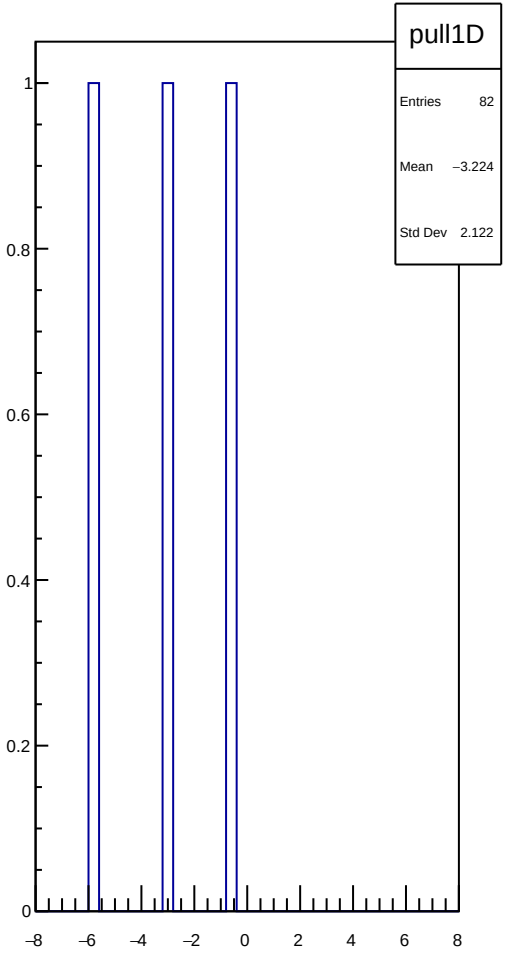

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3100 / 81
p0 30.53 ± 0.02444
40
38
36
34
32
30
28
26

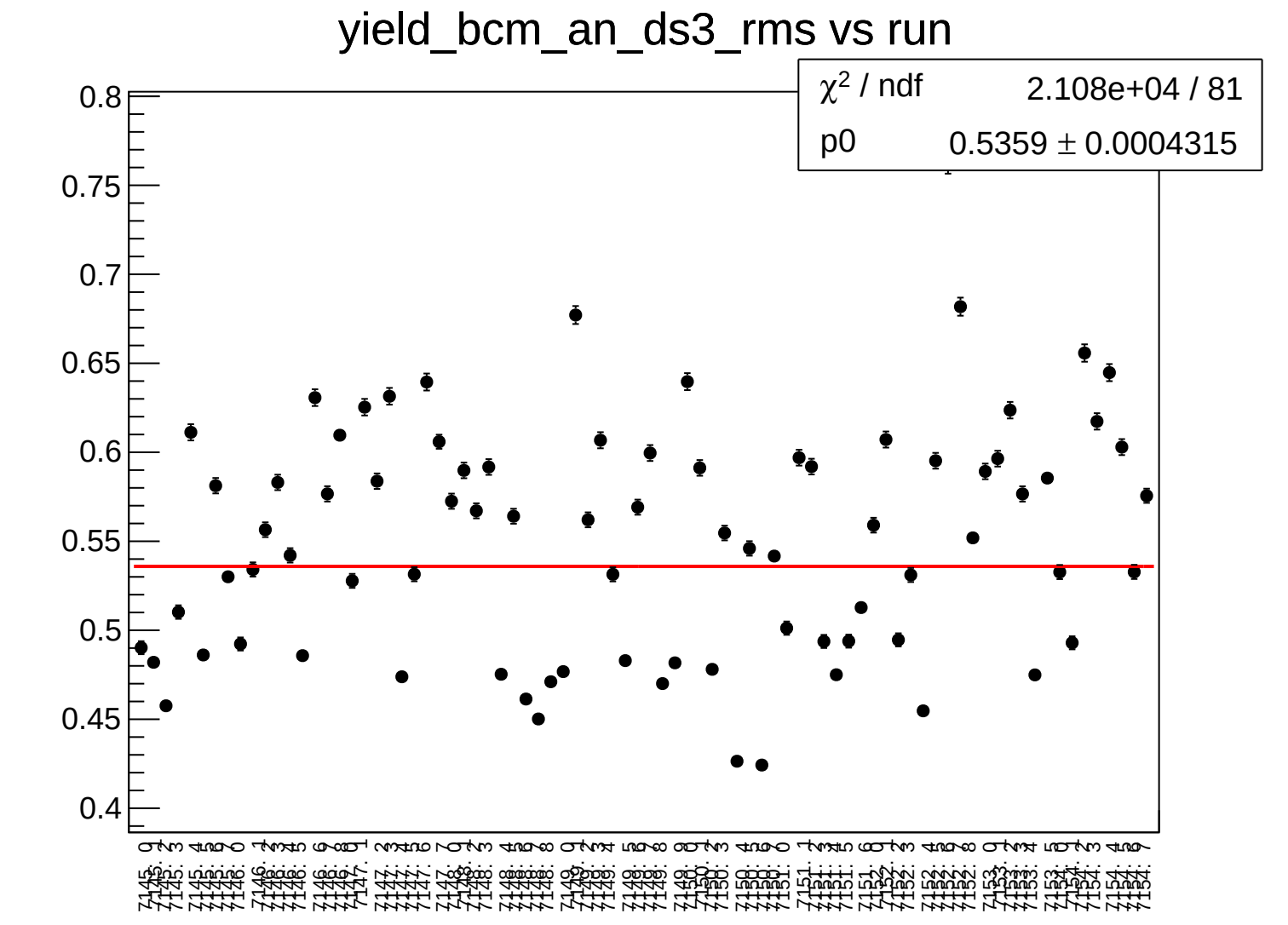

yield_bcm_an_ds_mean vs run
χ² / ndf 1.126e+06 / 81
p0 147.4 ± 0.0006026
148.5
148
147.5
147
146.5
146
pull
Entries 82
Mean 3870
Std Dev 3831
200
100
0
−100
−200

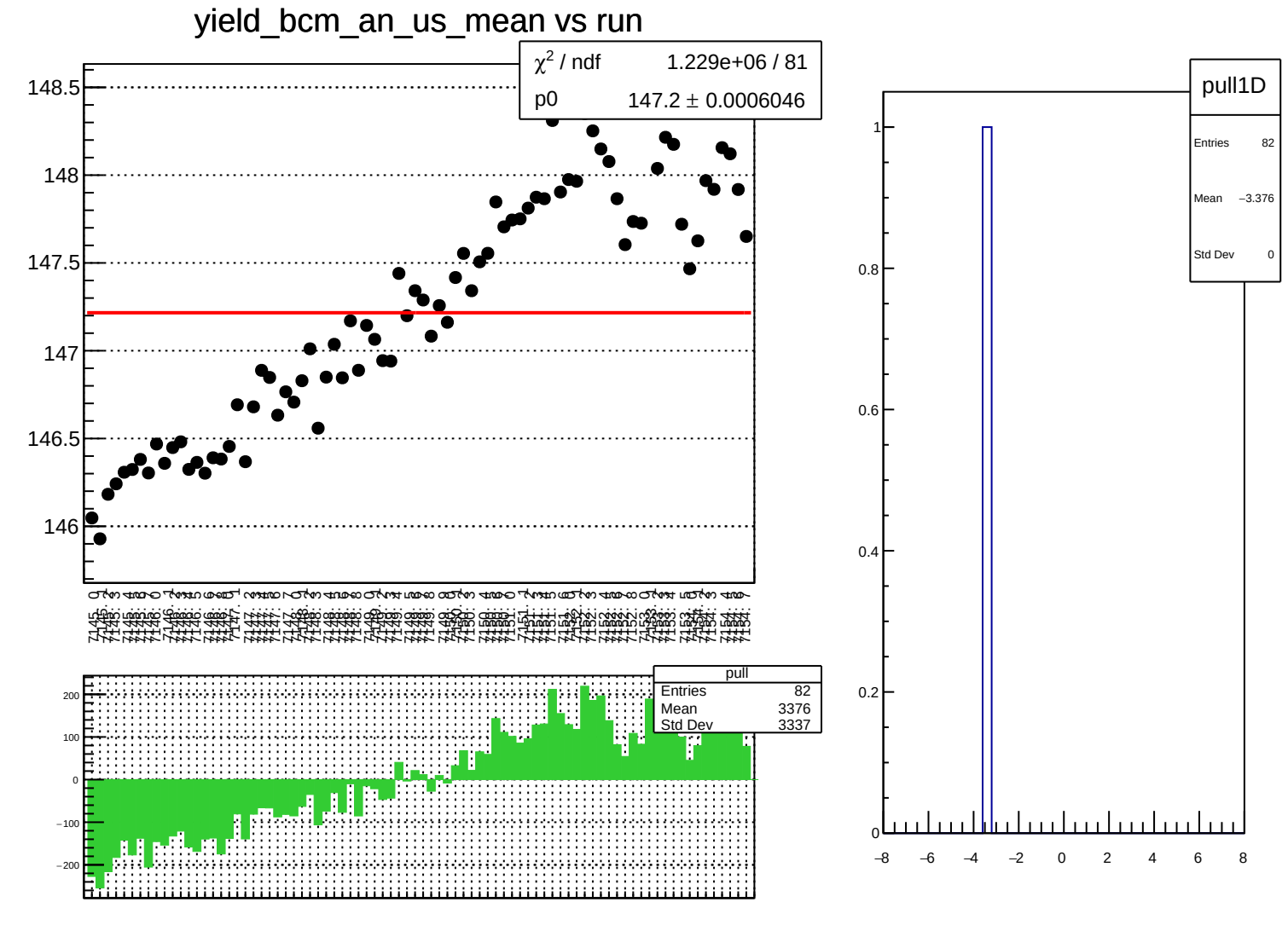

pull1D
Entries 82
Mean 0.1329
Std Dev 3.094
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

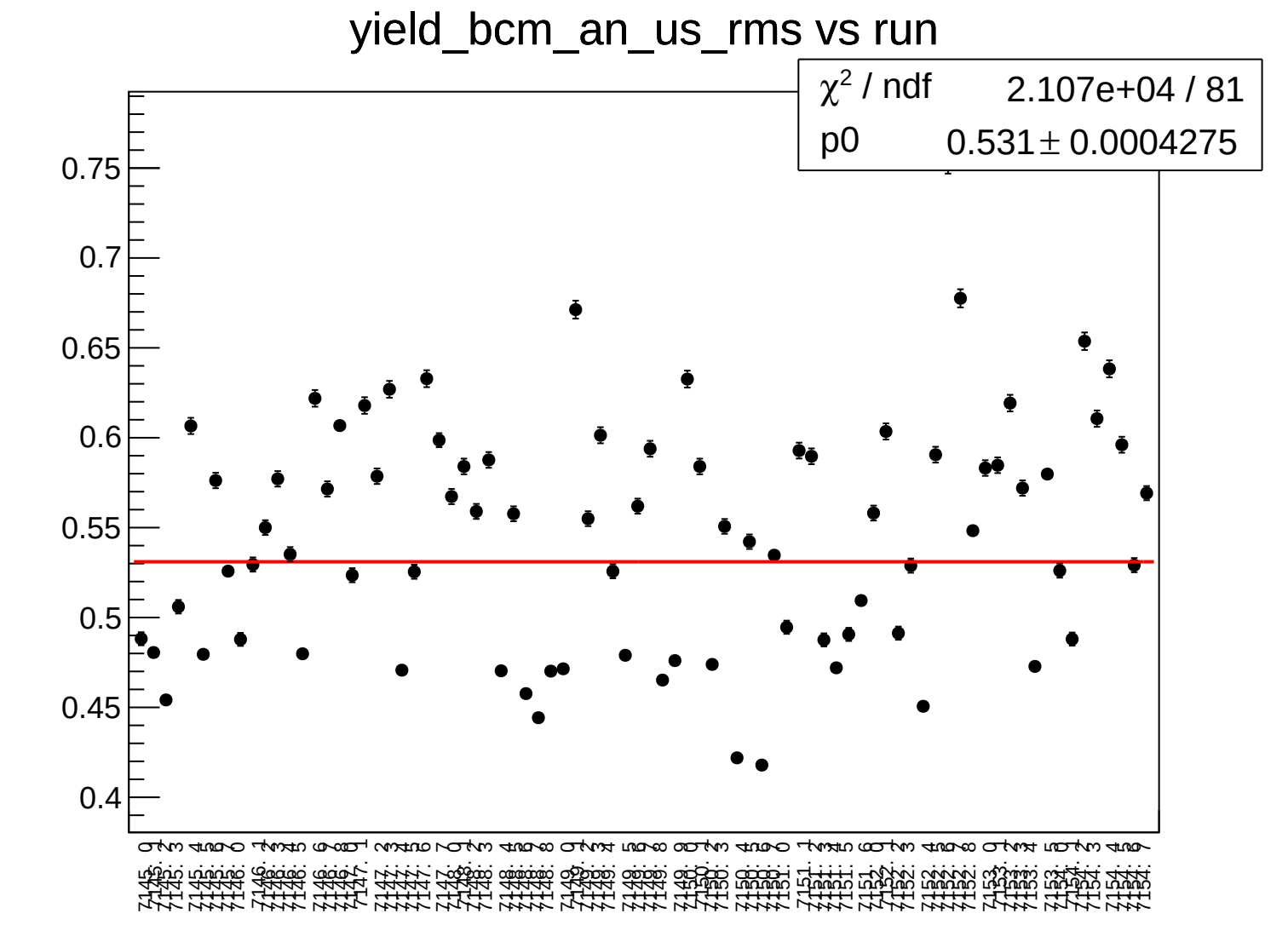

yield_bcm_an_ds_rms vs run
χ² / ndf 2.112e+04 / 81
p0 0.5292 ± 0.0004261
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

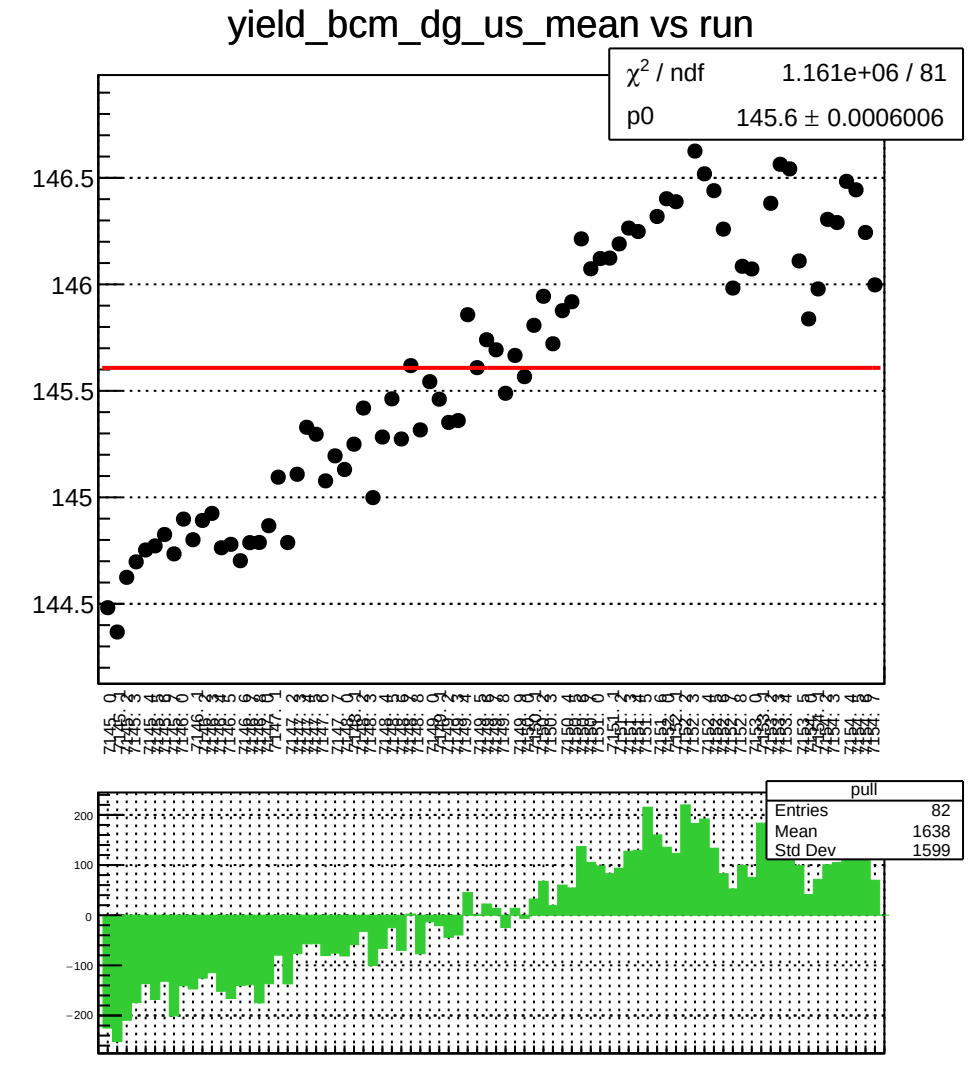

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.157e+06 / 81
p0 148.1± 0.0006102
149.5
149
148.5
148
147.5
147
pull
Entries 82
Mean 3664
Std Dev 3625
200
100
0
−100
−200

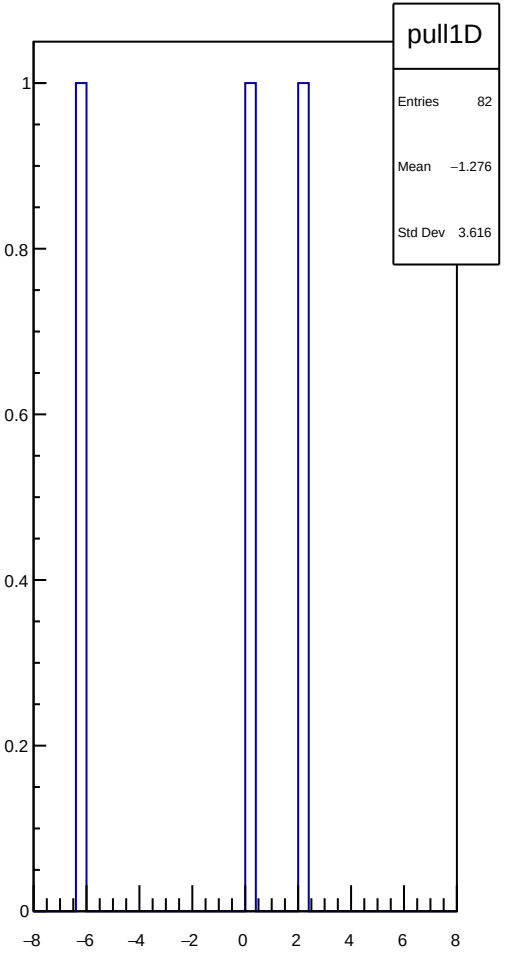

pull1D
Entries 82
Mean −3.224
Std Dev 2.122
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

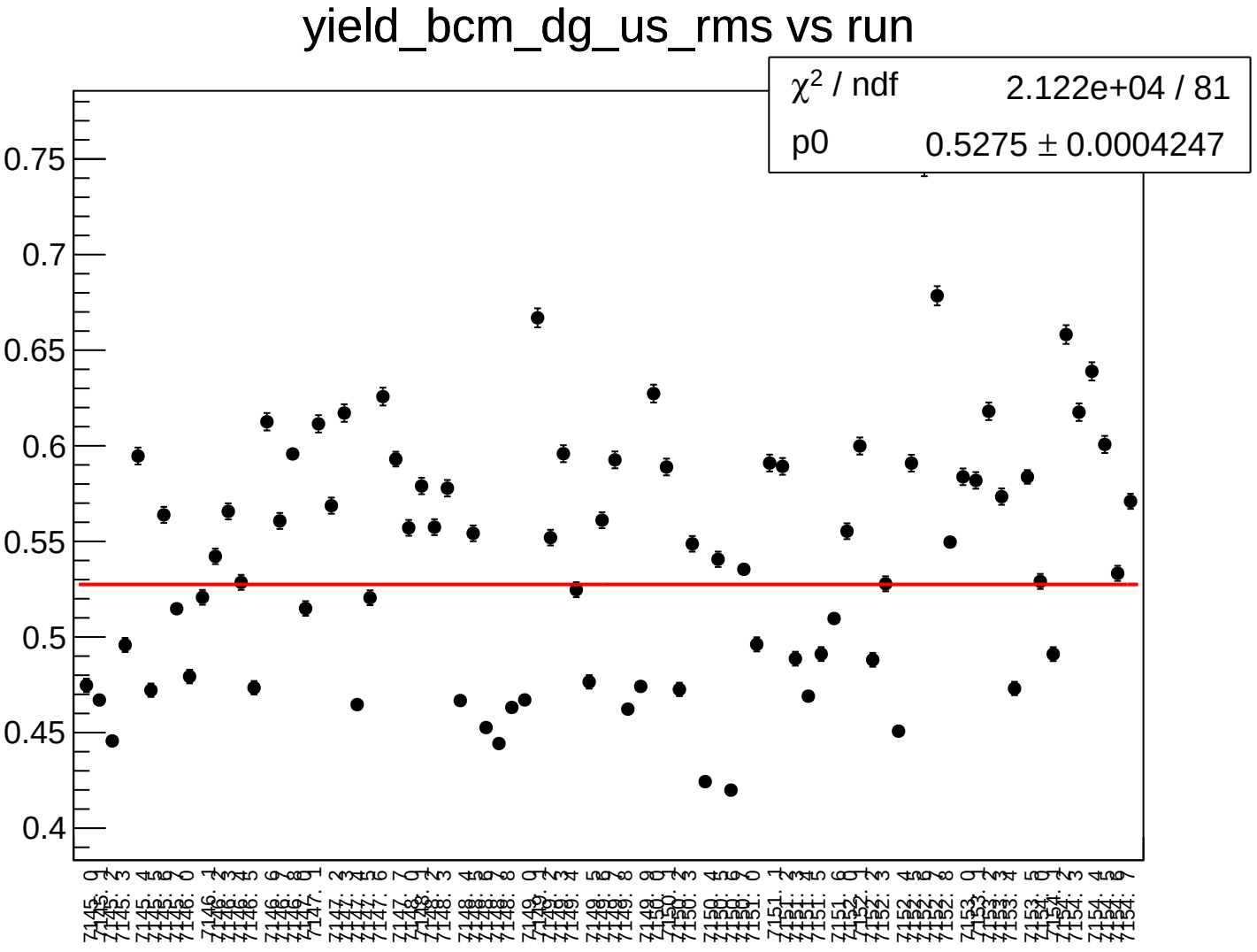

yield_bcm_an_ds3_rms vs run
χ² / ndf 2.108e+04 / 81
p0 0.5359 ± 0.0004315
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

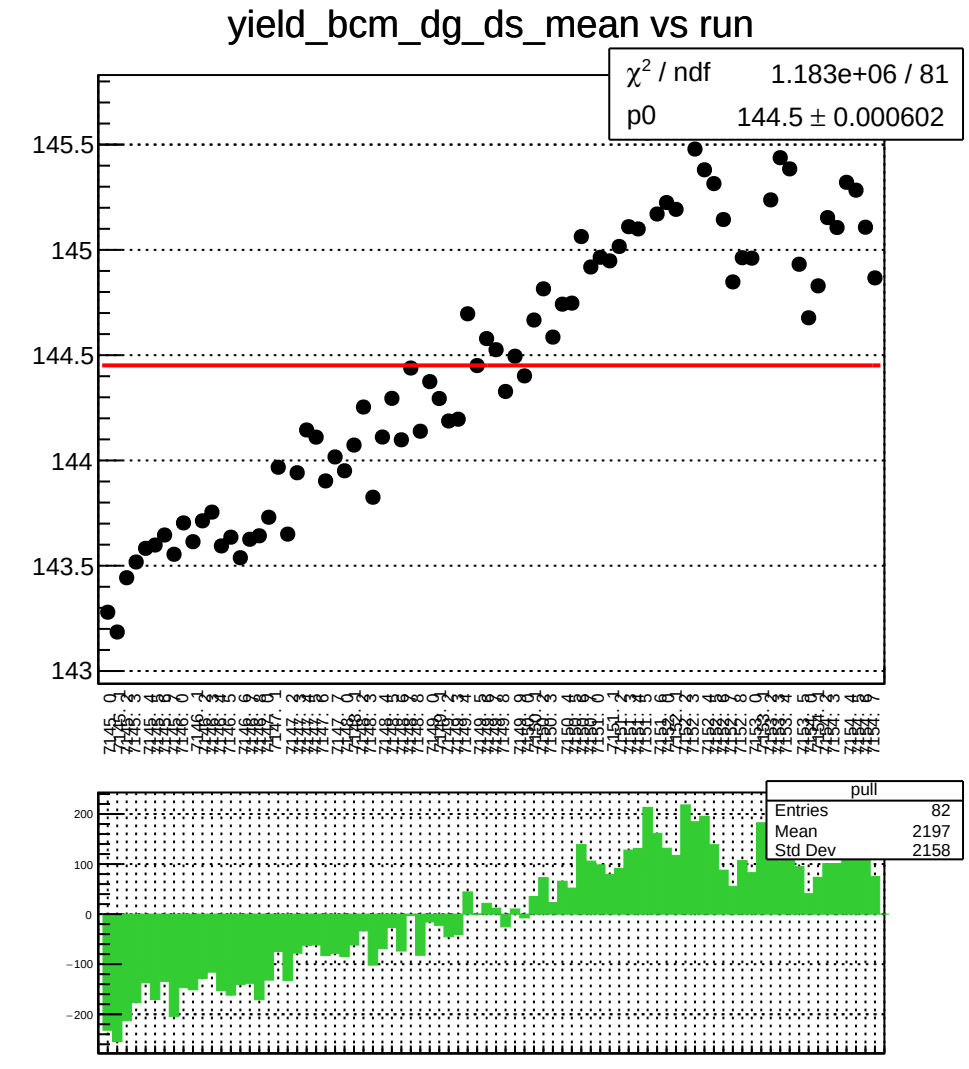

yield_bcm_an_us_mean vs run
χ² / ndf 1.229e+06 / 81
p0 147.2 ± 0.0006046
148.5
148
147.5
147
146.5
146
pull
Entries 82
Mean 3376
Std Dev 3337
200
100
0
−100
−200
pull1D
Entries 82
Mean −3.376
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

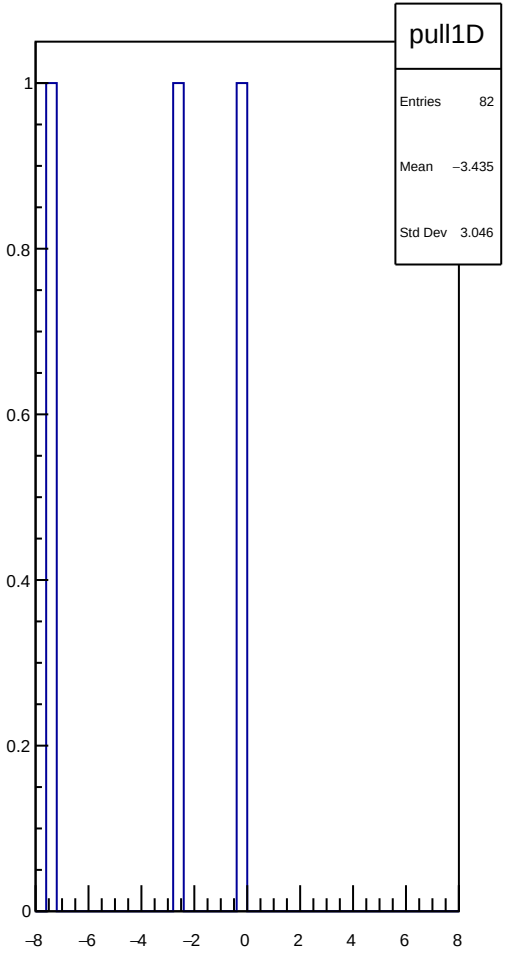

yield_bcm_an_us_rms vs run
χ^2 / ndf 2.107e+04 / 81
p0 0.531 ± 0.0004275
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

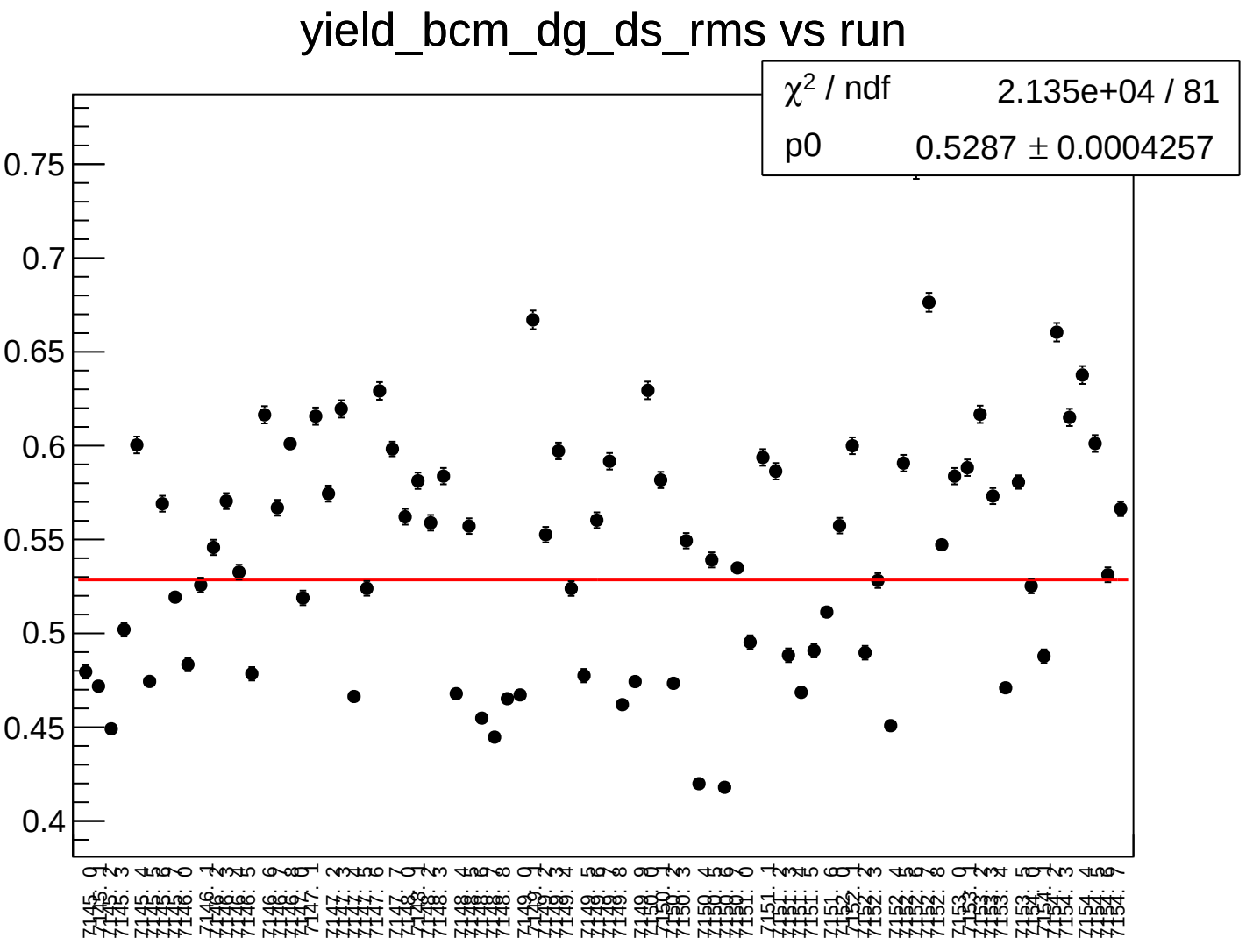

yield_bcm_dg_us_mean vs run
χ² / ndf 1.161e+06 / 81
p0 145.6 ± 0.0006006
146.5
146
145.5
145
144.5
pull
Entries 82
Mean 1638
Std Dev 1599
200
100
0
−100
−200

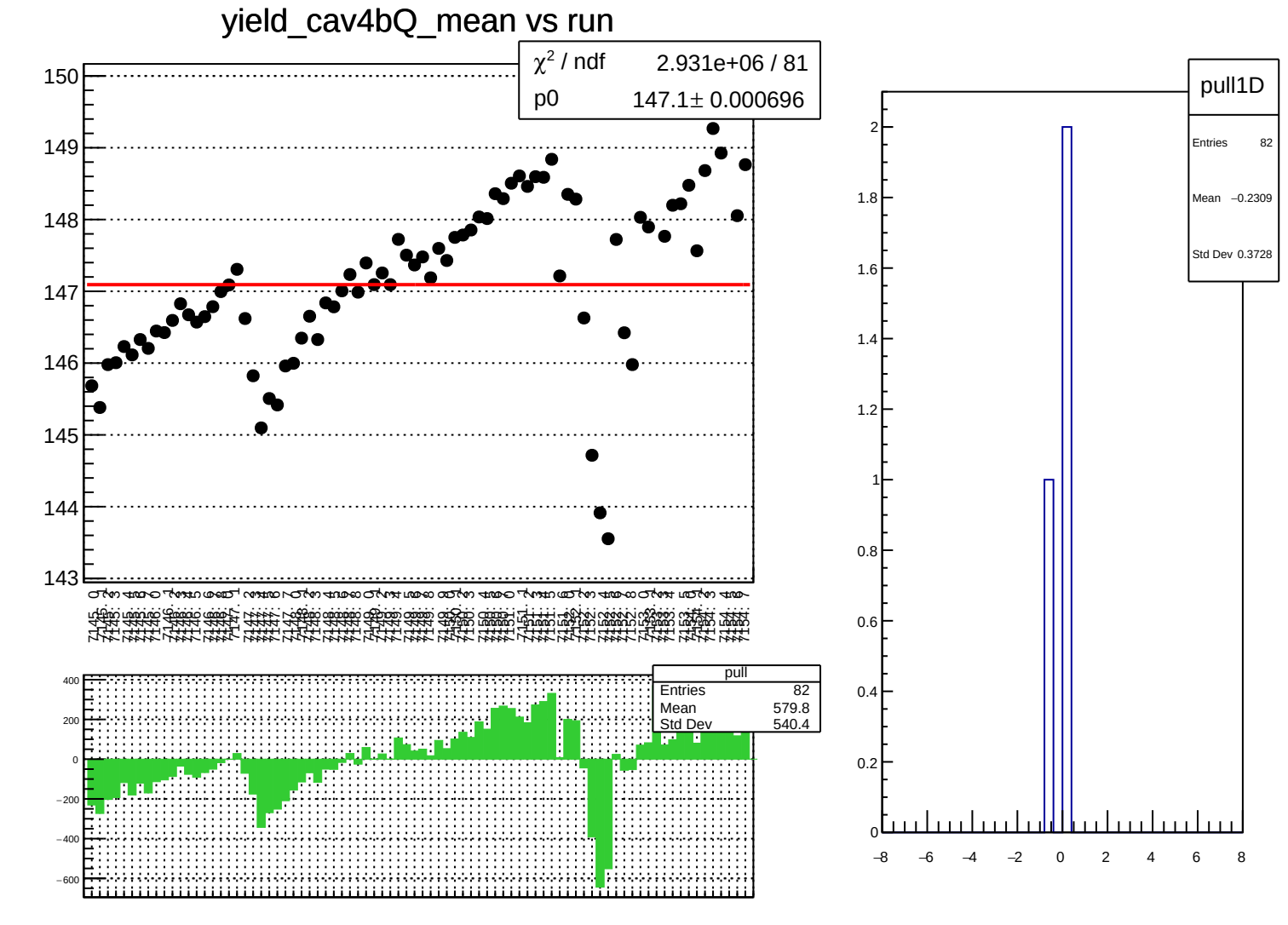

pull1D
Entries 82
Mean −1.276
Std Dev 3.616
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

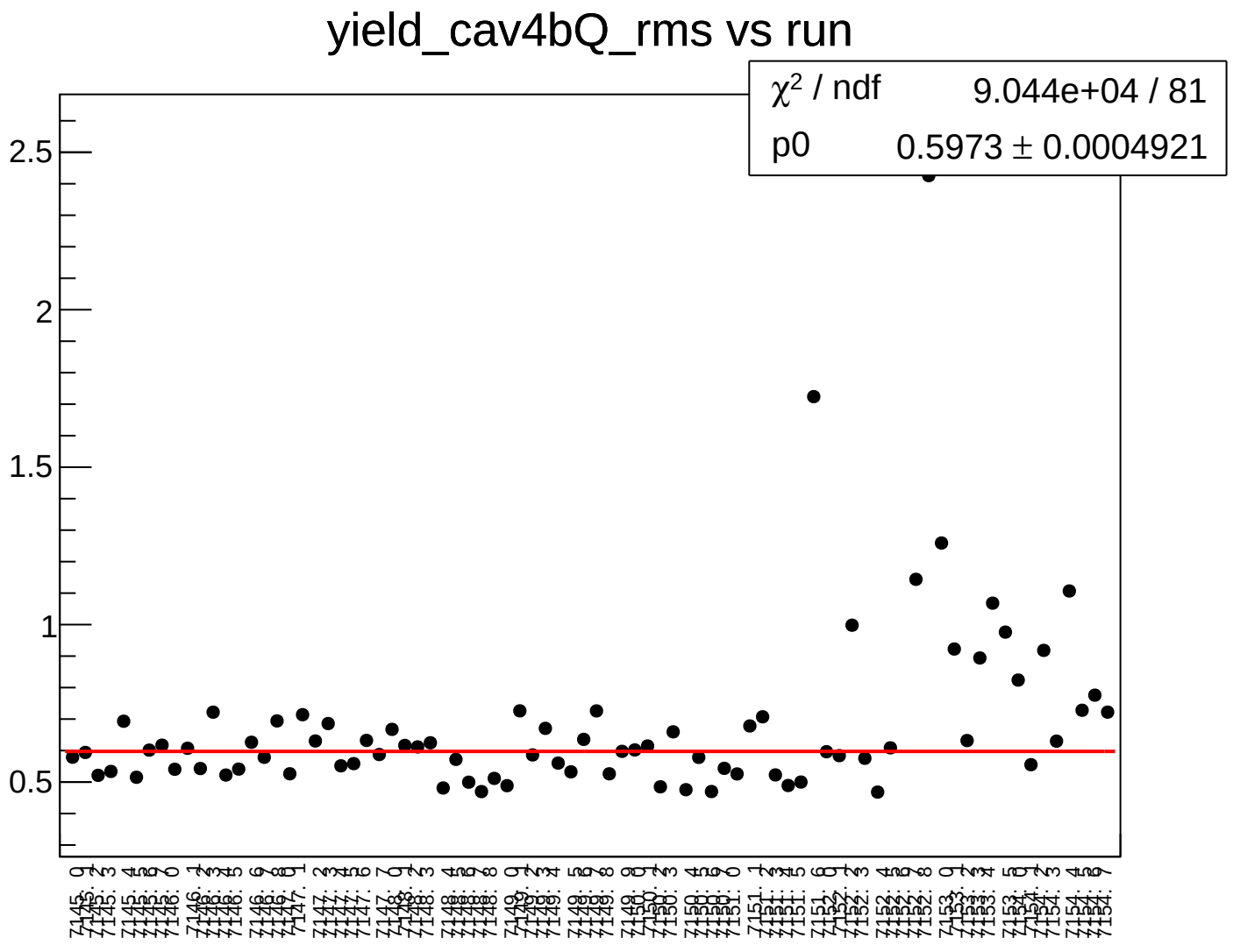

yield_bcm_dg_us_rms vs run
χ² / ndf 2.122e+04 / 81
p0 0.5275 ± 0.0004247
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

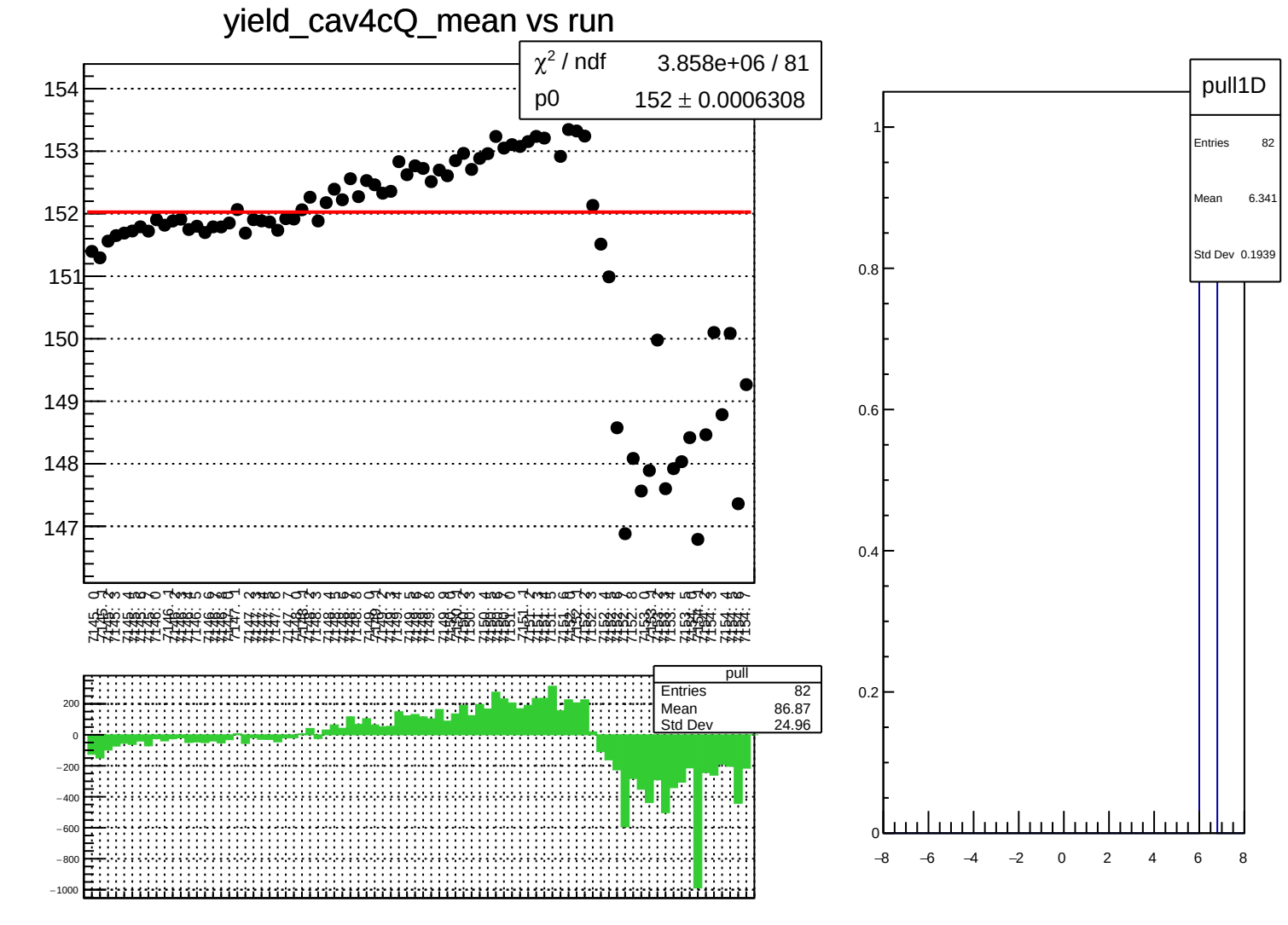

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.183e+06 / 81
p0 144.5 ± 0.000602
145.5
145
144.5
144
143.5
143
pull
Entries 82
Mean 2197
Std Dev 2158
200
100
0
−100
−200

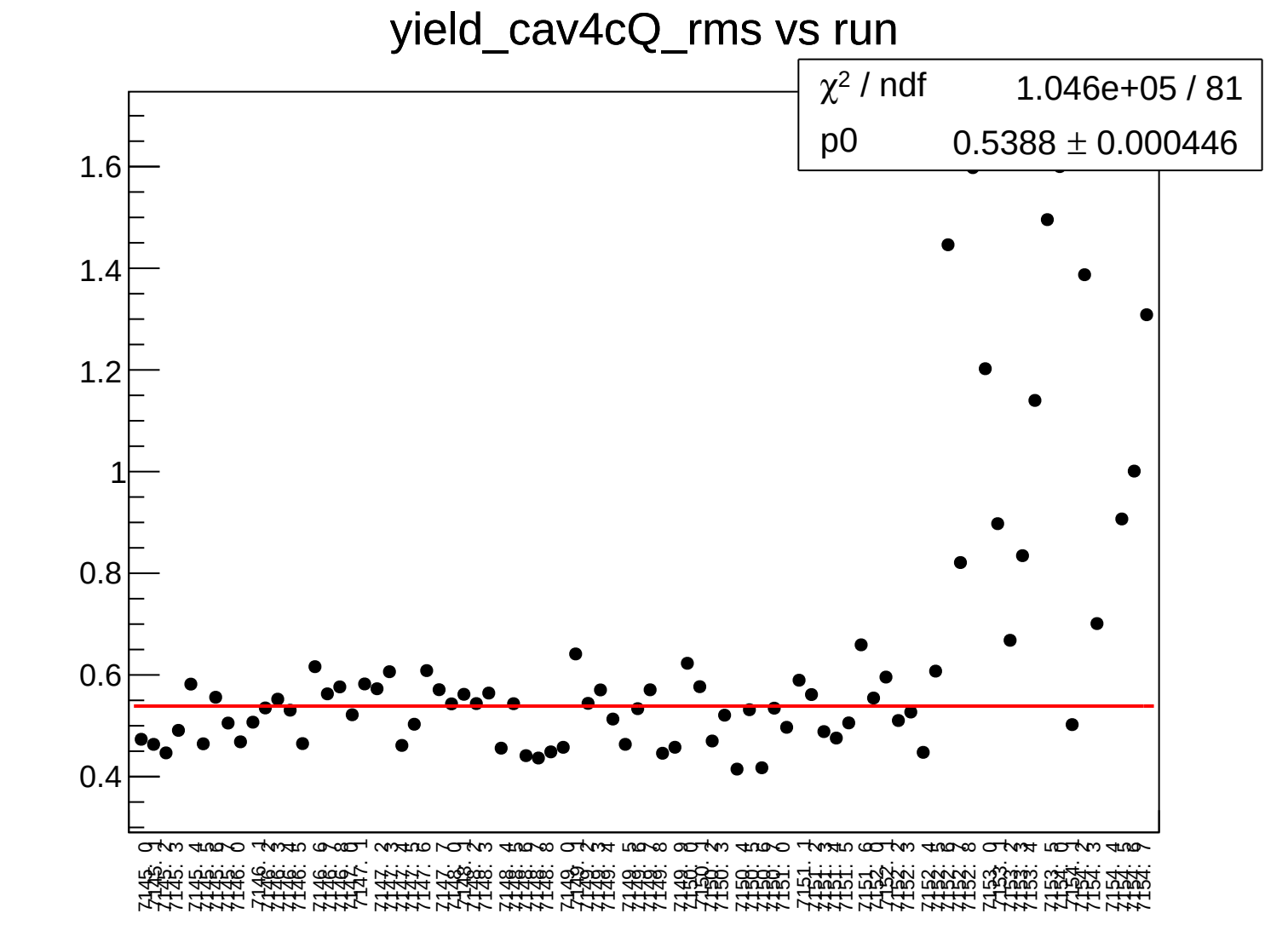

pull1D
Entries 82
Mean −3.435
Std Dev 3.046
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

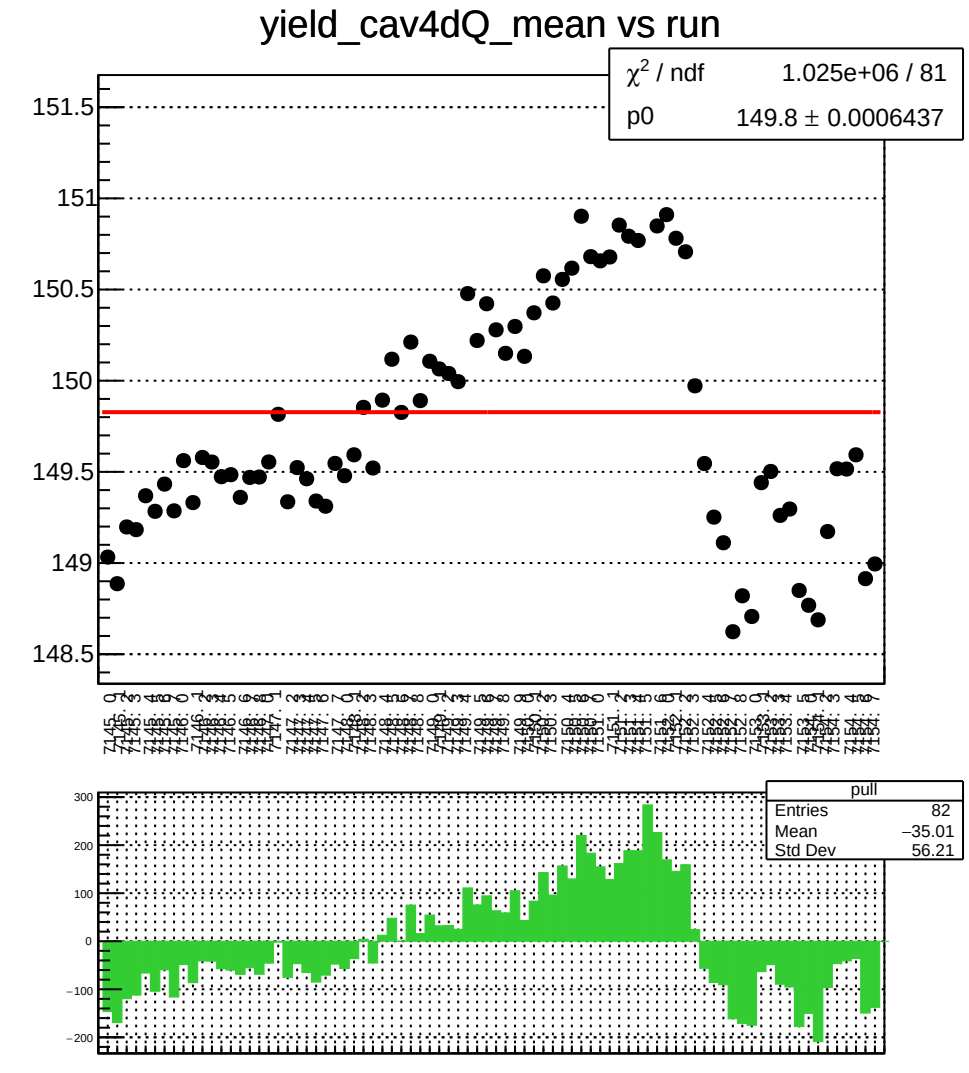

yield_bcm_dg_ds_rms vs run
χ² / ndf 2.135e+04 / 81
p0 0.5287 ± 0.0004257
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4

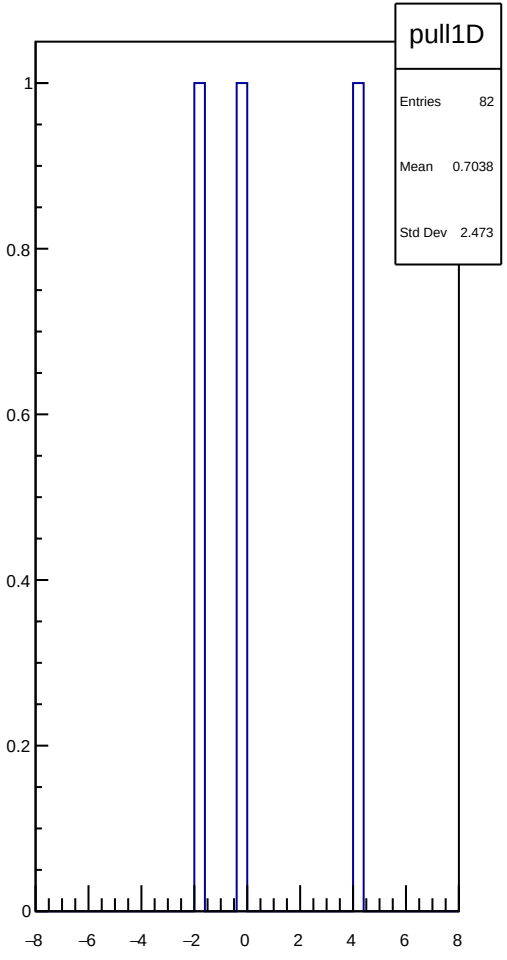

yield_cav4bQ_mean vs run
χ² / ndf 2.931e+06 / 81
p0 147.1± 0.000696
150
149
148
147
146
145
144
143
pull
Entries 82
Mean 579.8
Std Dev 540.4
400
200
0
−200
−400
−600
pull1D
Entries 82
Mean −0.2309
Std Dev 0.3728
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

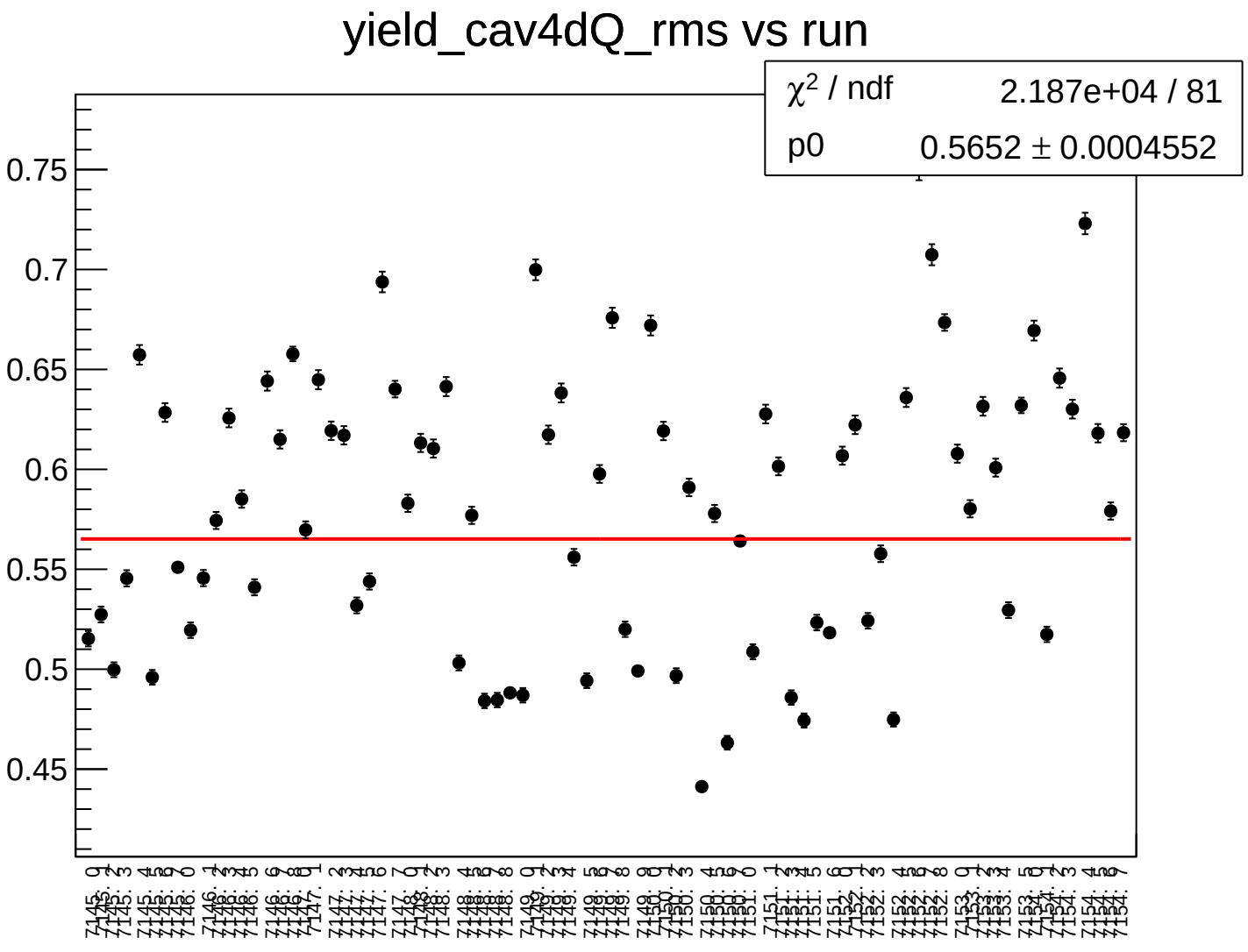

yield_cav4bQ_rms vs run
χ^2 / ndf 9.044e+04 / 81
p0 0.5973 ± 0.0004921
2.5
2
1.5
1
0.5

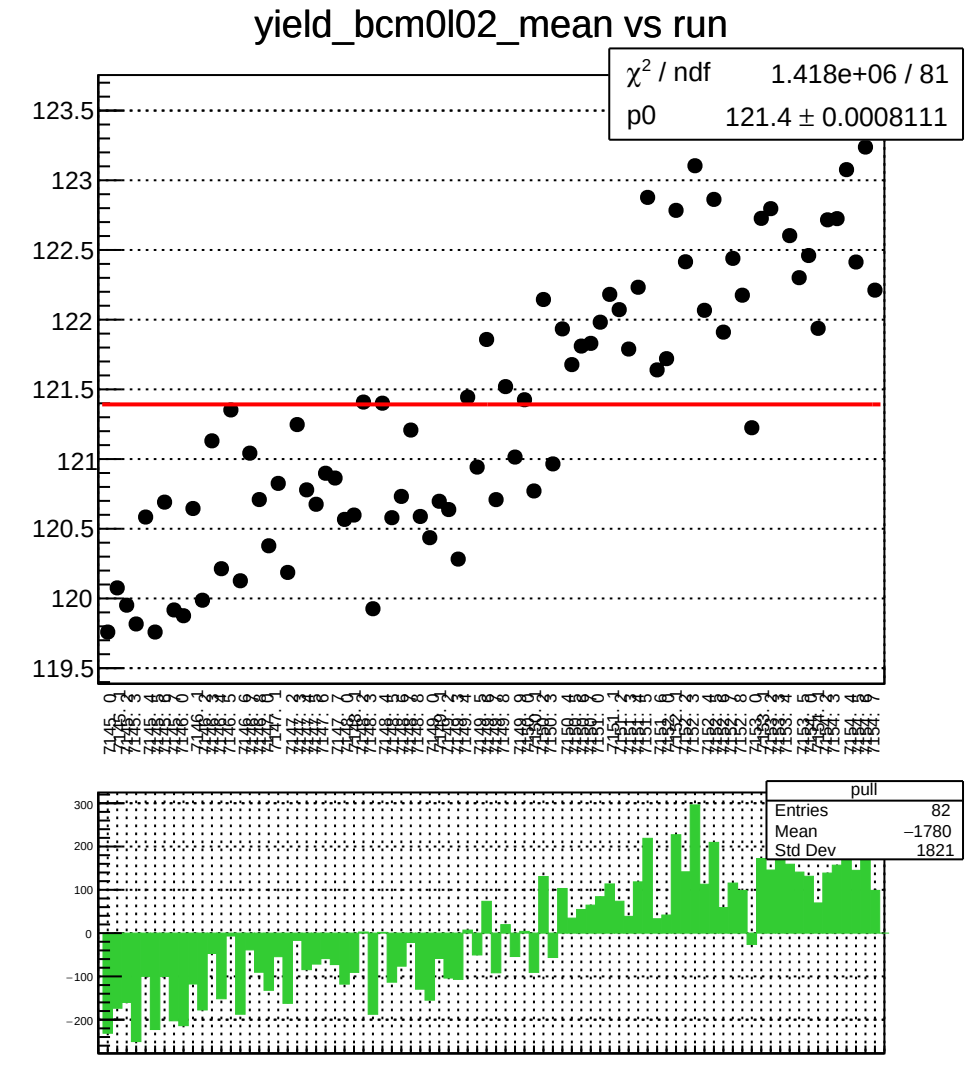

yield_cav4cQ_mean vs run
χ² / ndf 3.858e+06 / 81
p0 152 ± 0.0006308
154
153
152
151
150
149
148
147
pull
Entries 82
Mean 86.87
Std Dev 24.96
200
0
−200
−400
−600
−800
−1000
pull1D
Entries 82
Mean 6.341
Std Dev 0.1939
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

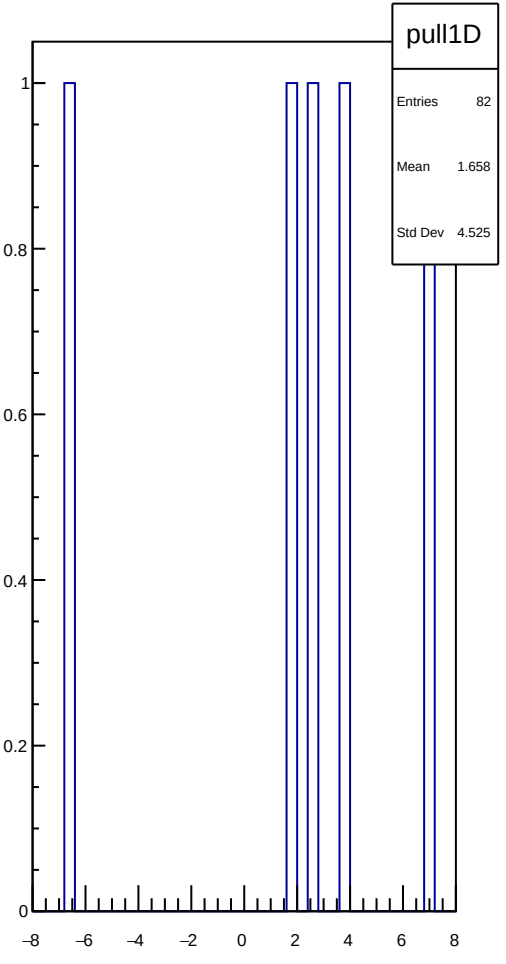

yield_cav4cQ_rms vs run
χ² / ndf 1.046e+05 / 81
p0 0.5388 ± 0.000446
1.6
1.4
1.2
1
0.8
0.6
0.4

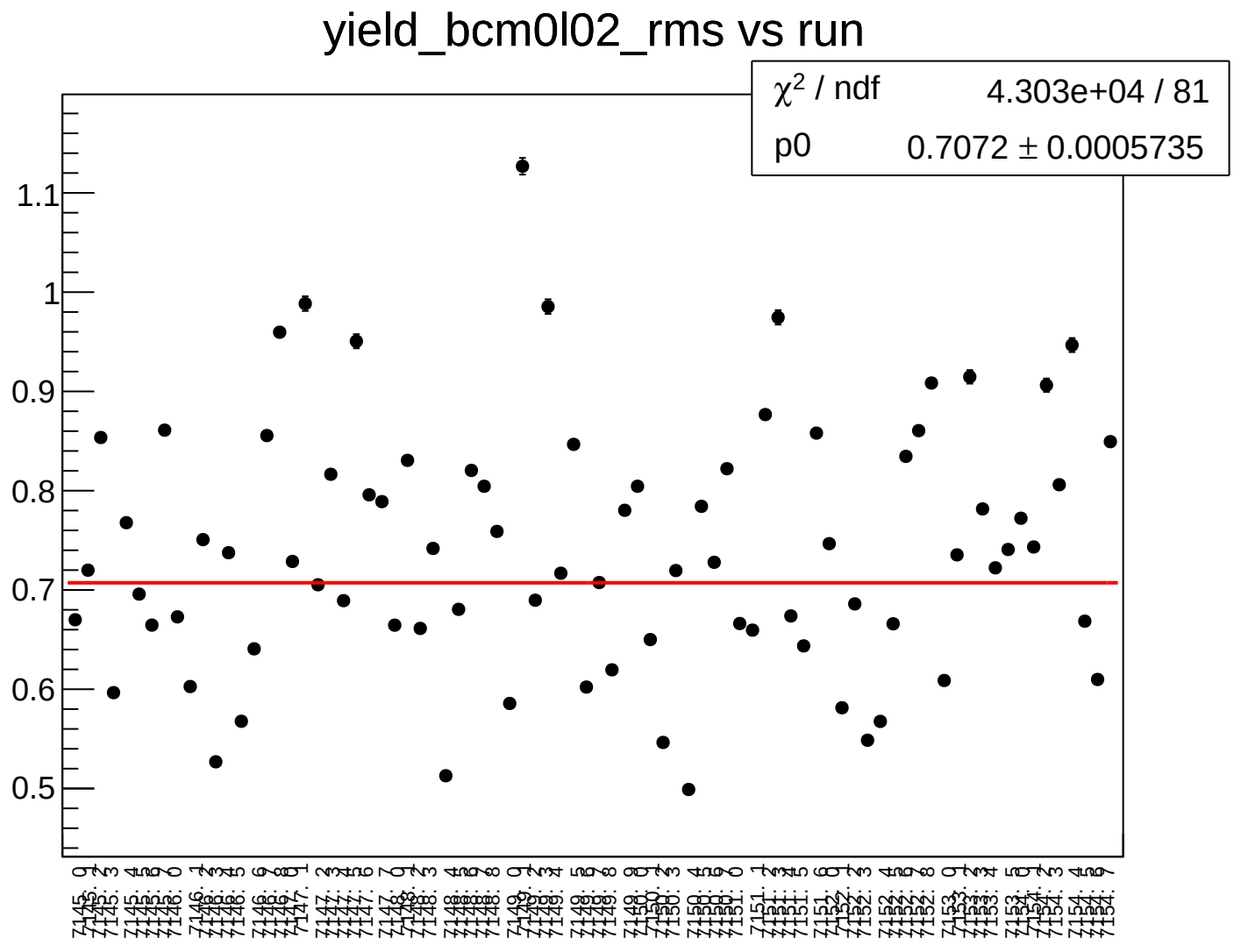

yield_cav4dQ_mean vs run
χ² / ndf 1.025e+06 / 81
p0 149.8 ± 0.0006437
151.5
151
150.5
150
149.5
149
148.5
pull
Entries 82
Mean −35.01
Std Dev 56.21
300
200
100
0
−100
−200

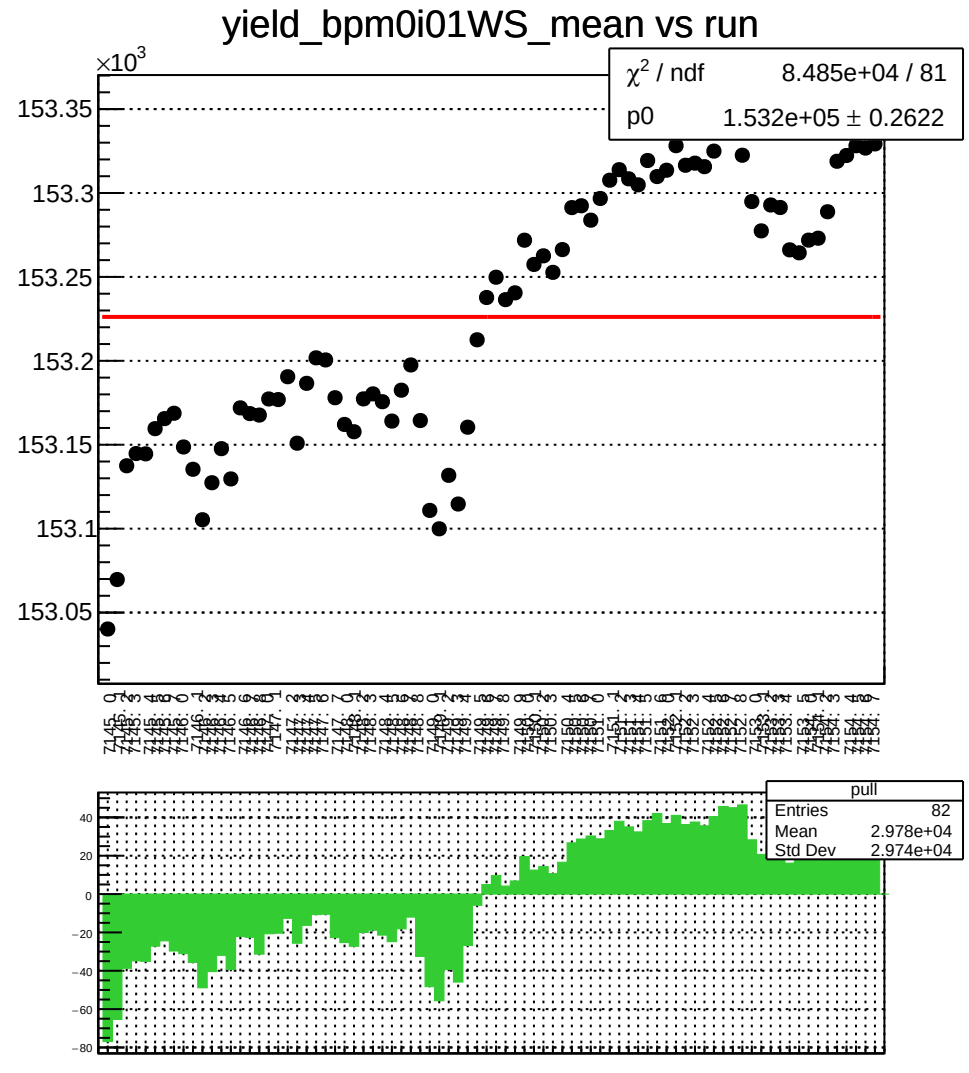

pull1D
Entries 82
Mean 0.7038
Std Dev 2.473
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

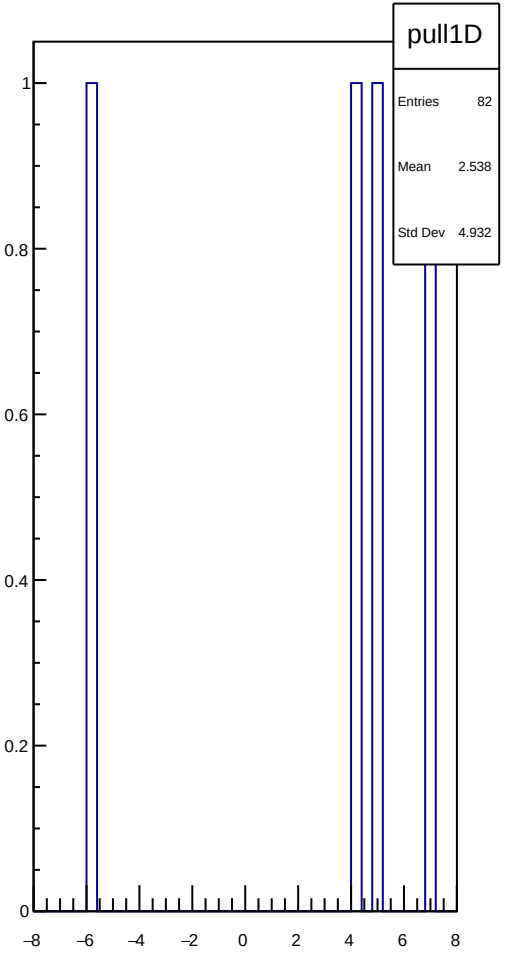

yield_cav4dQ_rms vs run
χ² / ndf 2.187e+04 / 81
p0 0.5652 ± 0.0004552
0.75
0.7
0.65
0.6
0.55
0.5
0.45

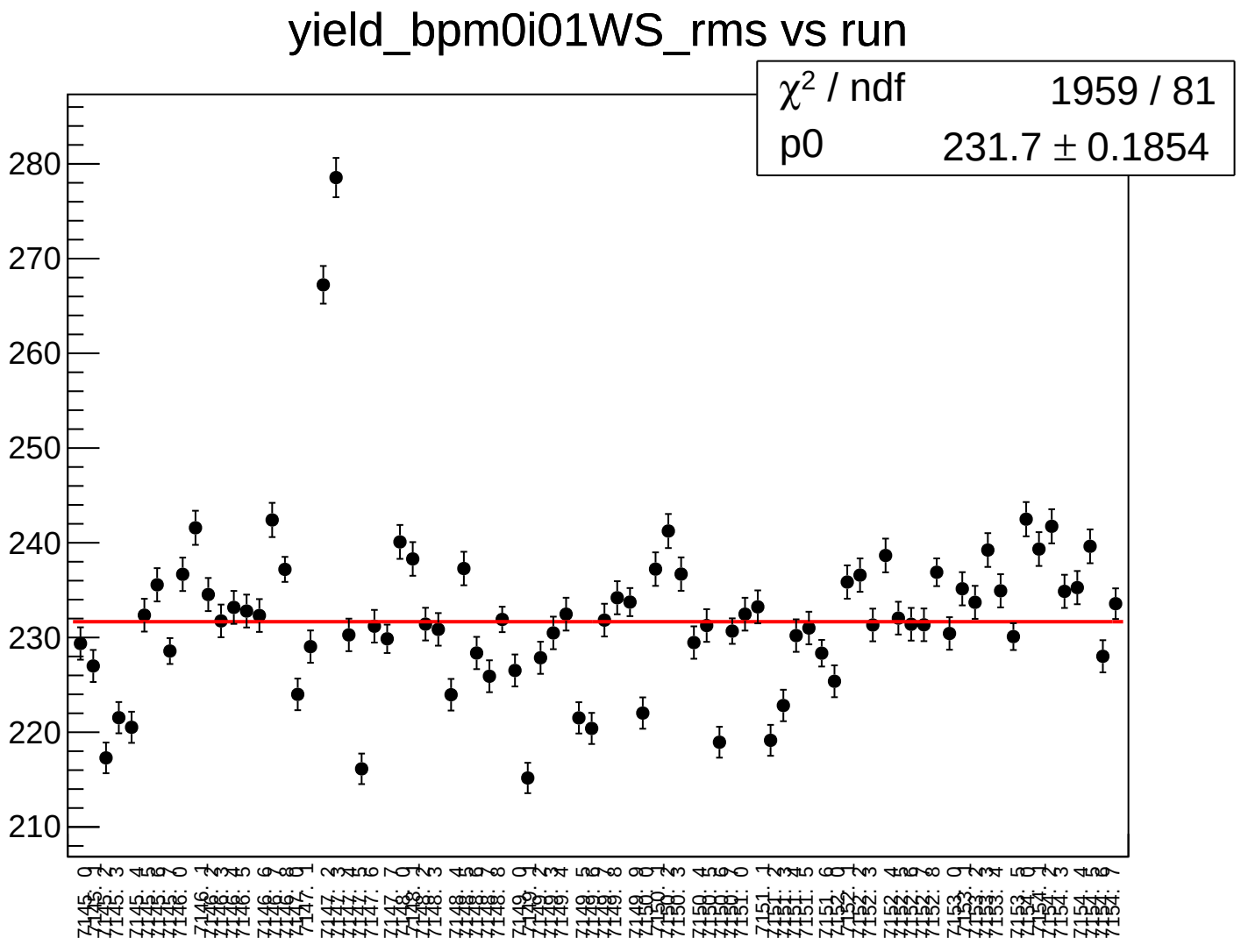

yield_bcm0l02_mean vs run
χ² / ndf 1.418e+06 / 81
p0 121.4 ± 0.0008111
123.5
123
122.5
122
121.5
121
120.5
120
119.5
pull
Entries 82
Mean −1780
Std Dev 1821
300
200
100
0
−100
−200

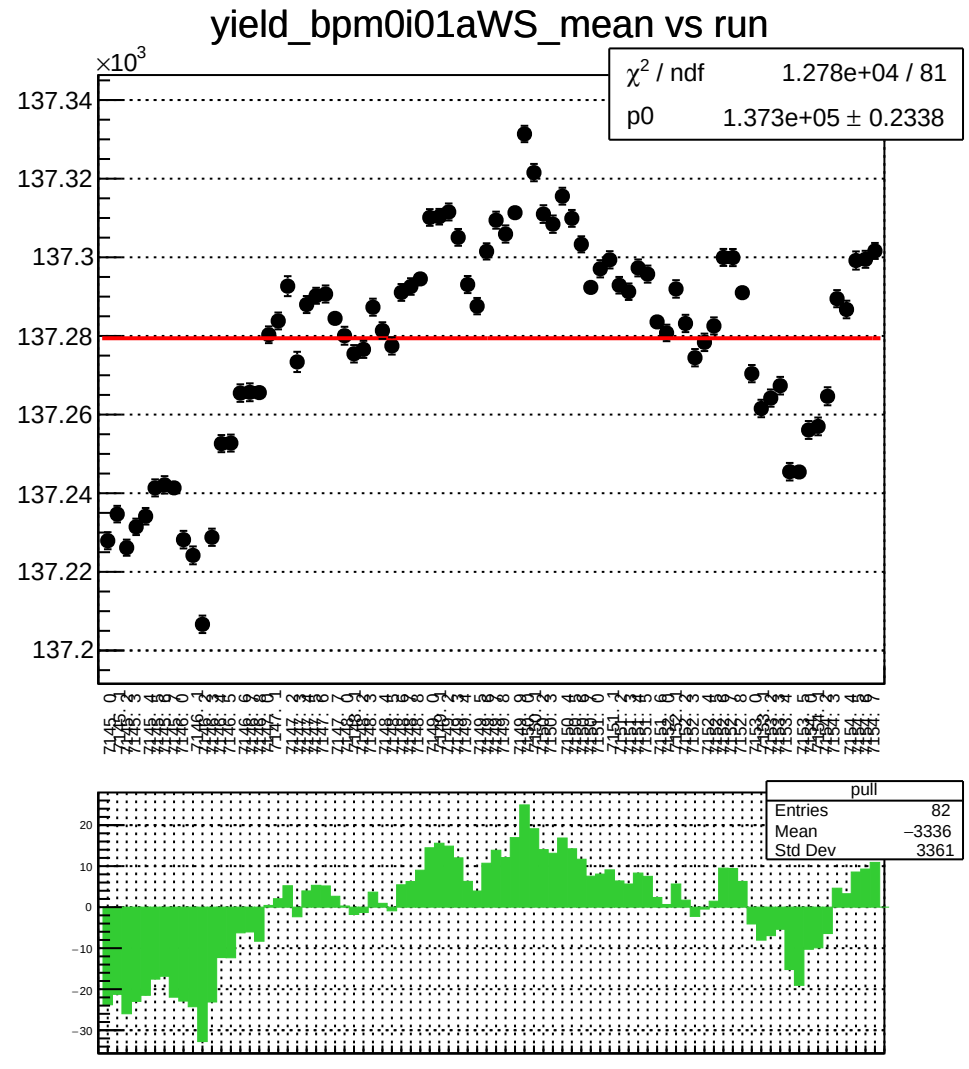

pull1D
Entries 82
Mean 1.658
Std Dev 4.525
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

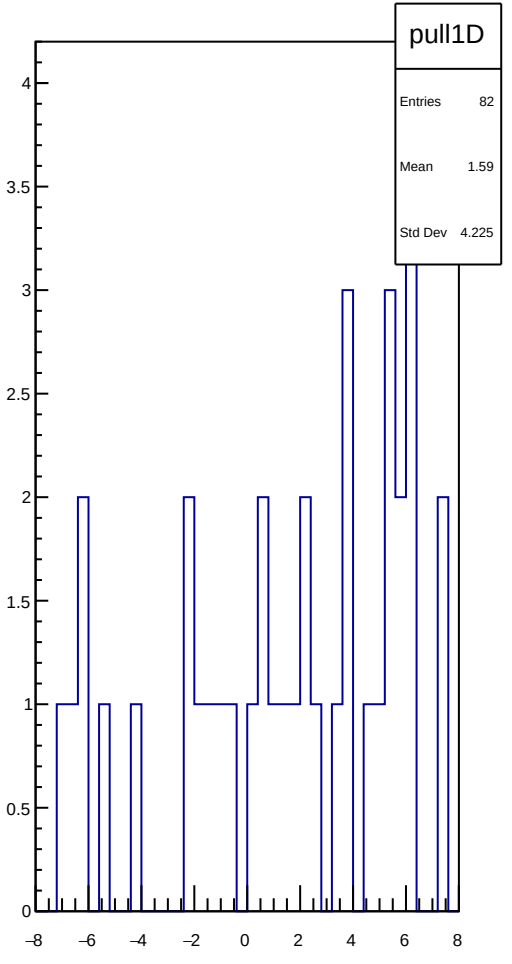

yield_bcm0l02_rms vs run
χ² / ndf 4.303e+04 / 81
p0 0.7072 ± 0.0005735
1.1
1
0.9
0.8
0.7
0.6
0.5

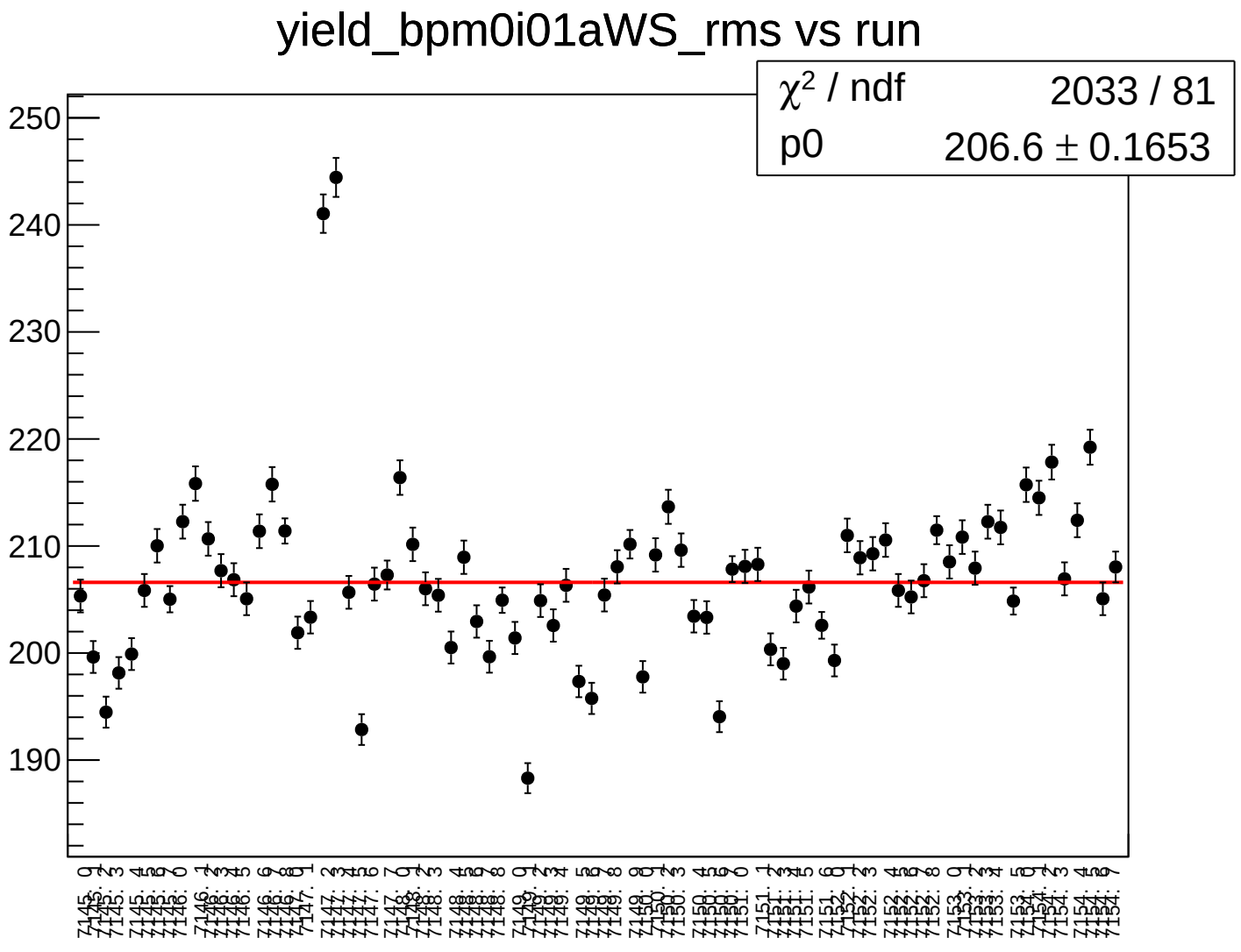

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 8.485e+04 / 81
p0 1.532e+05 ± 0.2622
153.35
153.3
153.25
153.2
153.15
153.1
153.05
pull
Entries 82
Mean 2.978e+04
Std Dev 2.974e+04
40
20
0
−20
−40
−60
−80

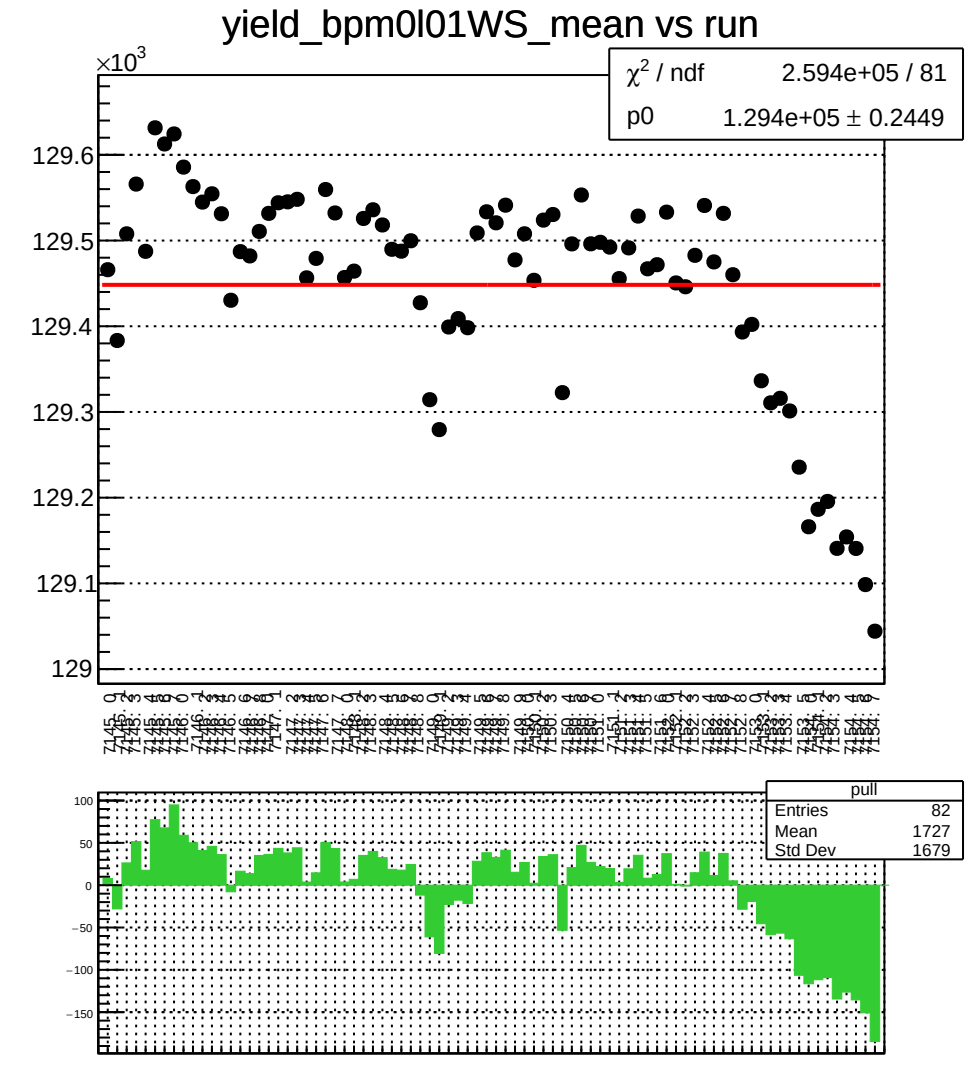

pull1D
Entries 82
Mean 2.538
Std Dev 4.932
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

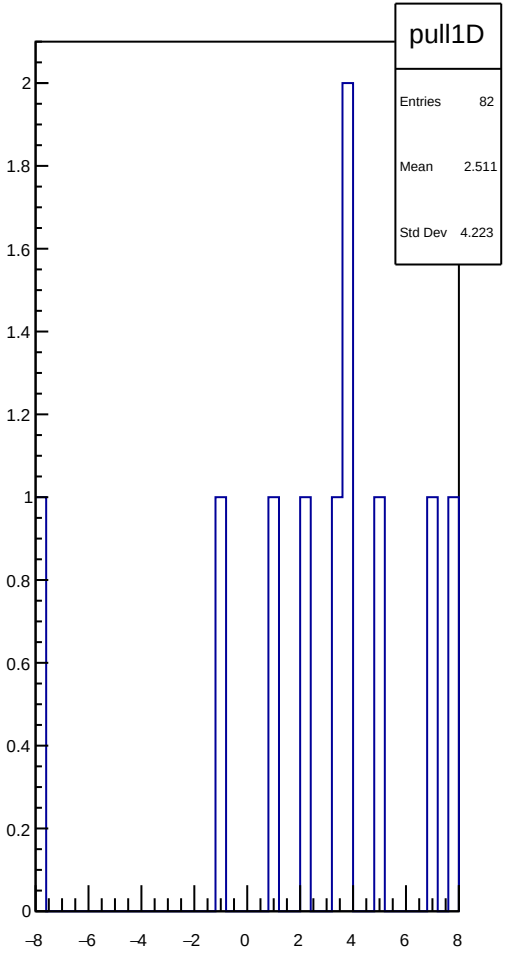

yield_bpm0i01WS_rms vs run
χ² / ndf 1959 / 81
p0 231.7 ± 0.1854
280
270
260
250
240
230
220
210

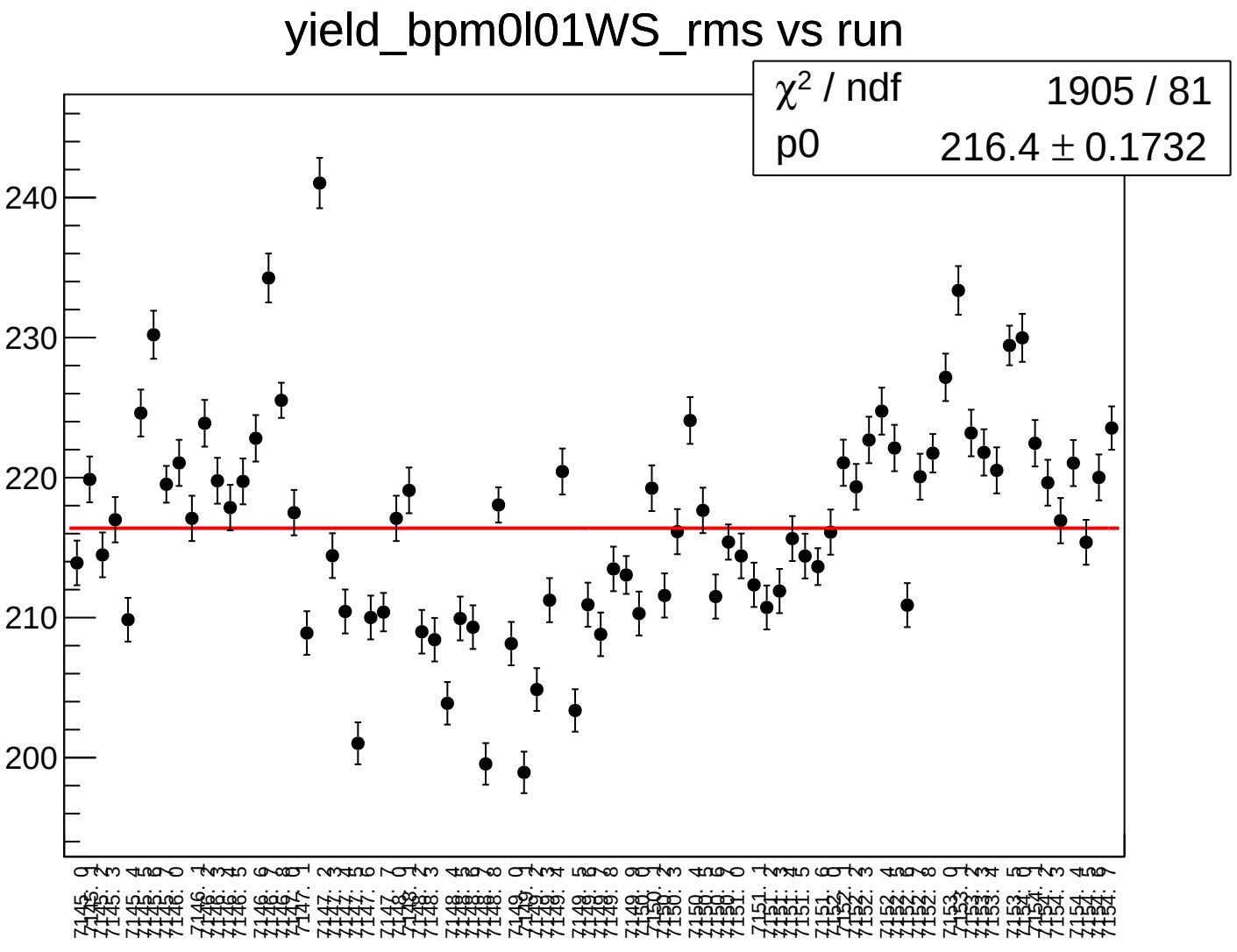

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 1.278e+04 / 81
p0 1.373e+05 ± 0.2338
137.34
137.32
137.3
137.28
137.26
137.24
137.22
137.2
pull
Entries 82
Mean −3336
Std Dev 3361
20
10
0
−10
−20
−30

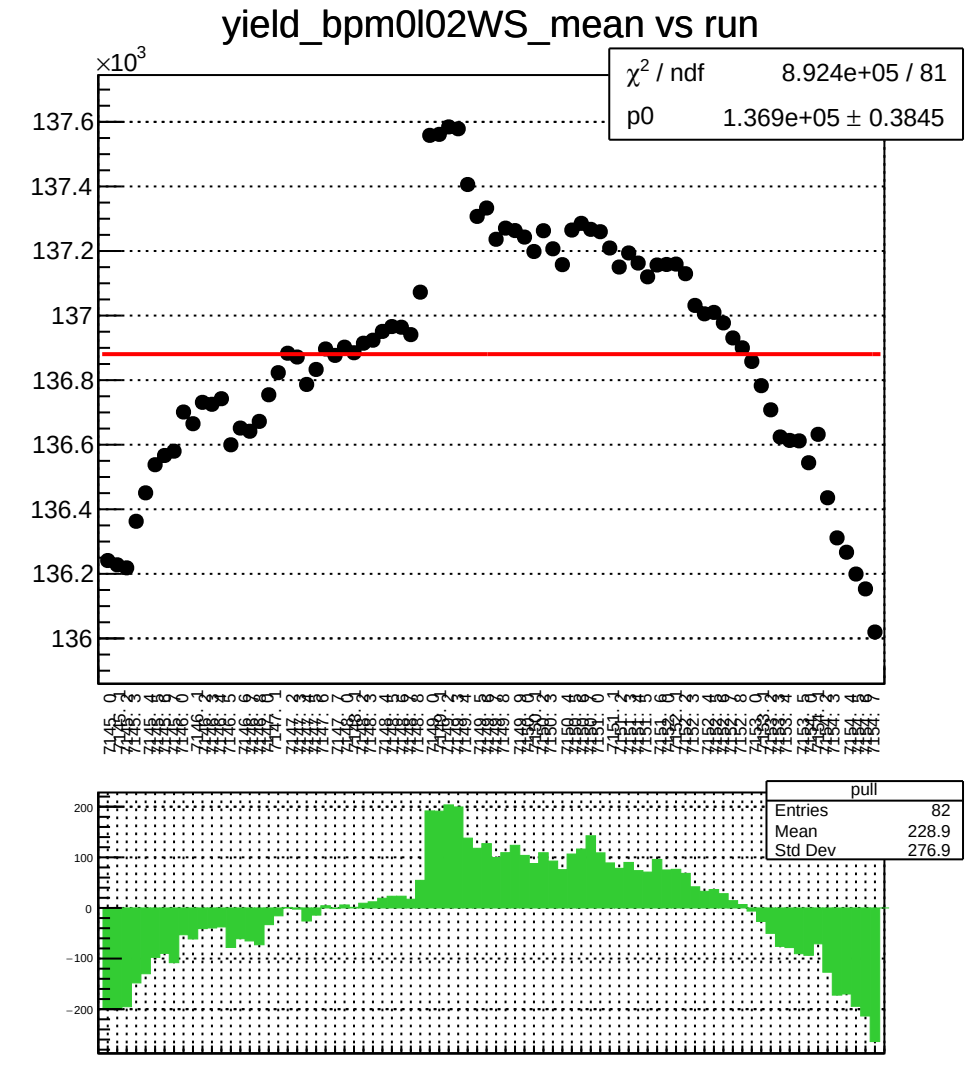

pull1D
Entries 82
Mean 1.59
Std Dev 4.225
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

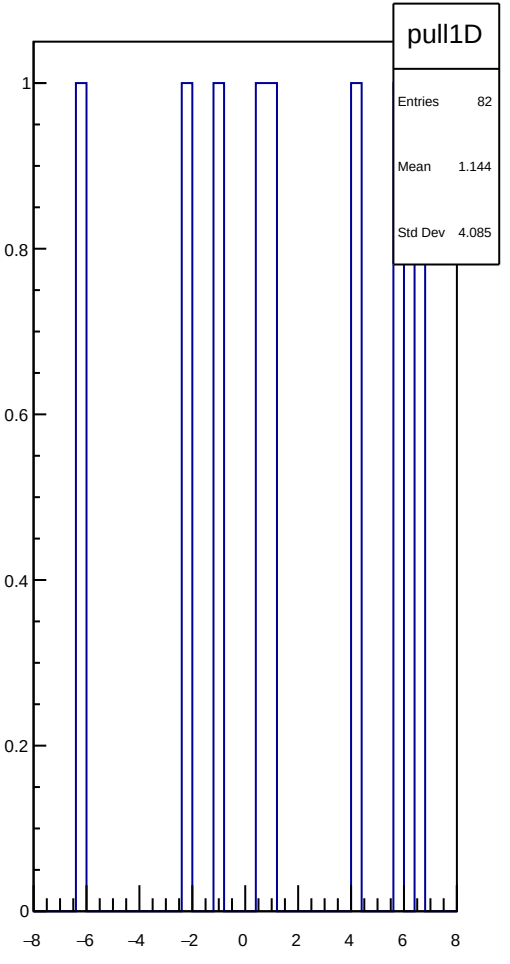

yield_bpm0i01aWS_rms vs run
χ² / ndf 2033 / 81
p0 206.6 ± 0.1653
250
240
230
220
210
200
190

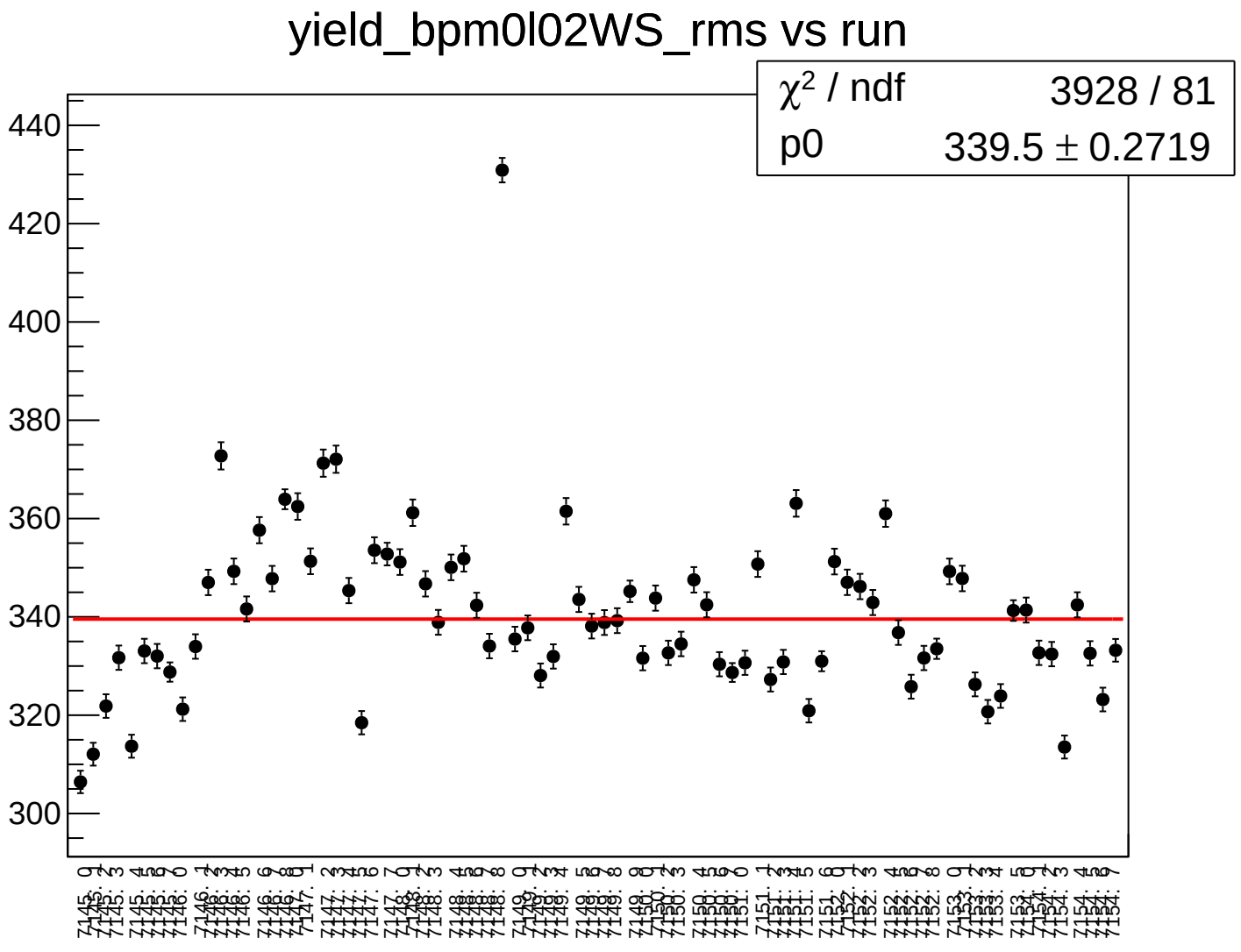

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 2.594e+05 / 81
p0 1.294e+05 ± 0.2449
129.6
129.5
129.4
129.3
129.2
129.1
129
pull
Entries 82
Mean 1727
Std Dev 1679
100
50
0
−50
−100
−150

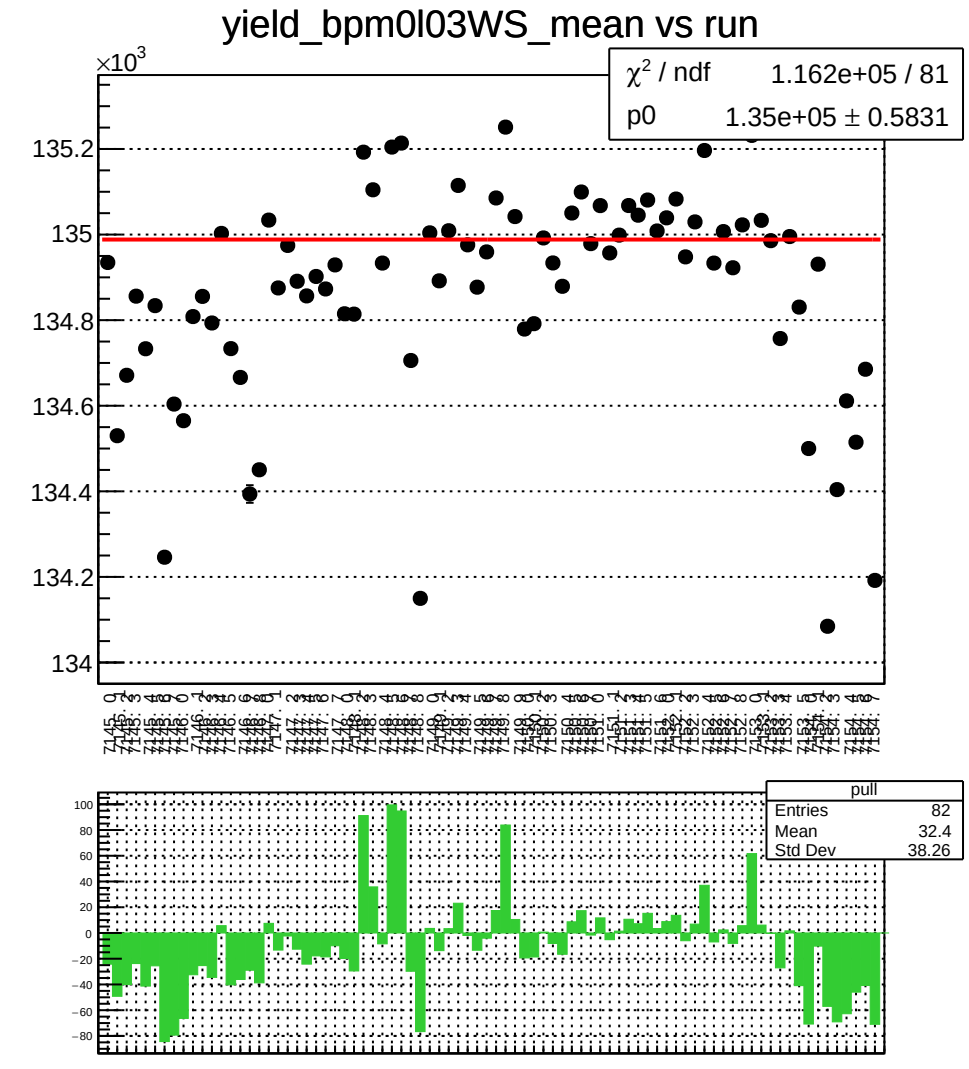

pull1D
Entries 82
Mean 2.511
Std Dev 4.223
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

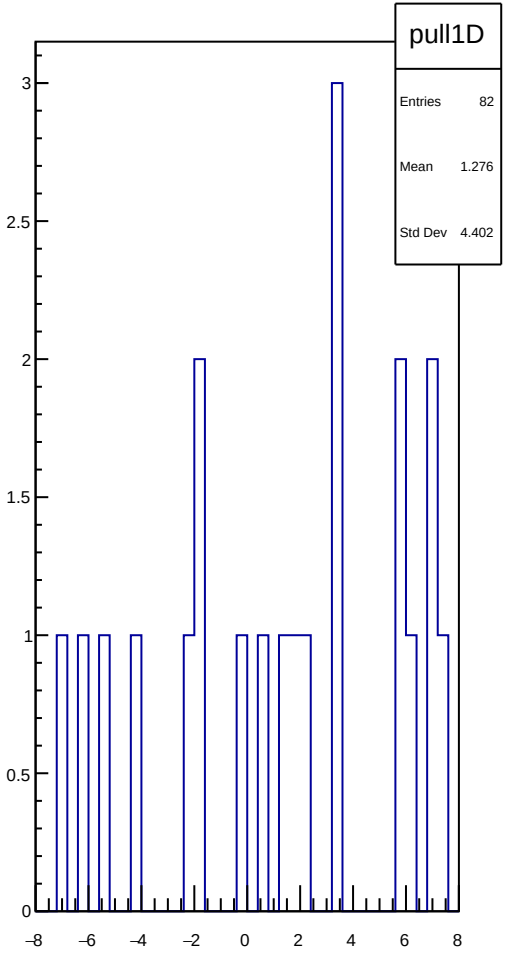

yield_bpm0l01WS_rms vs run
χ² / ndf 1905 / 81
p0 216.4 ± 0.1732
240
230
220
210
200

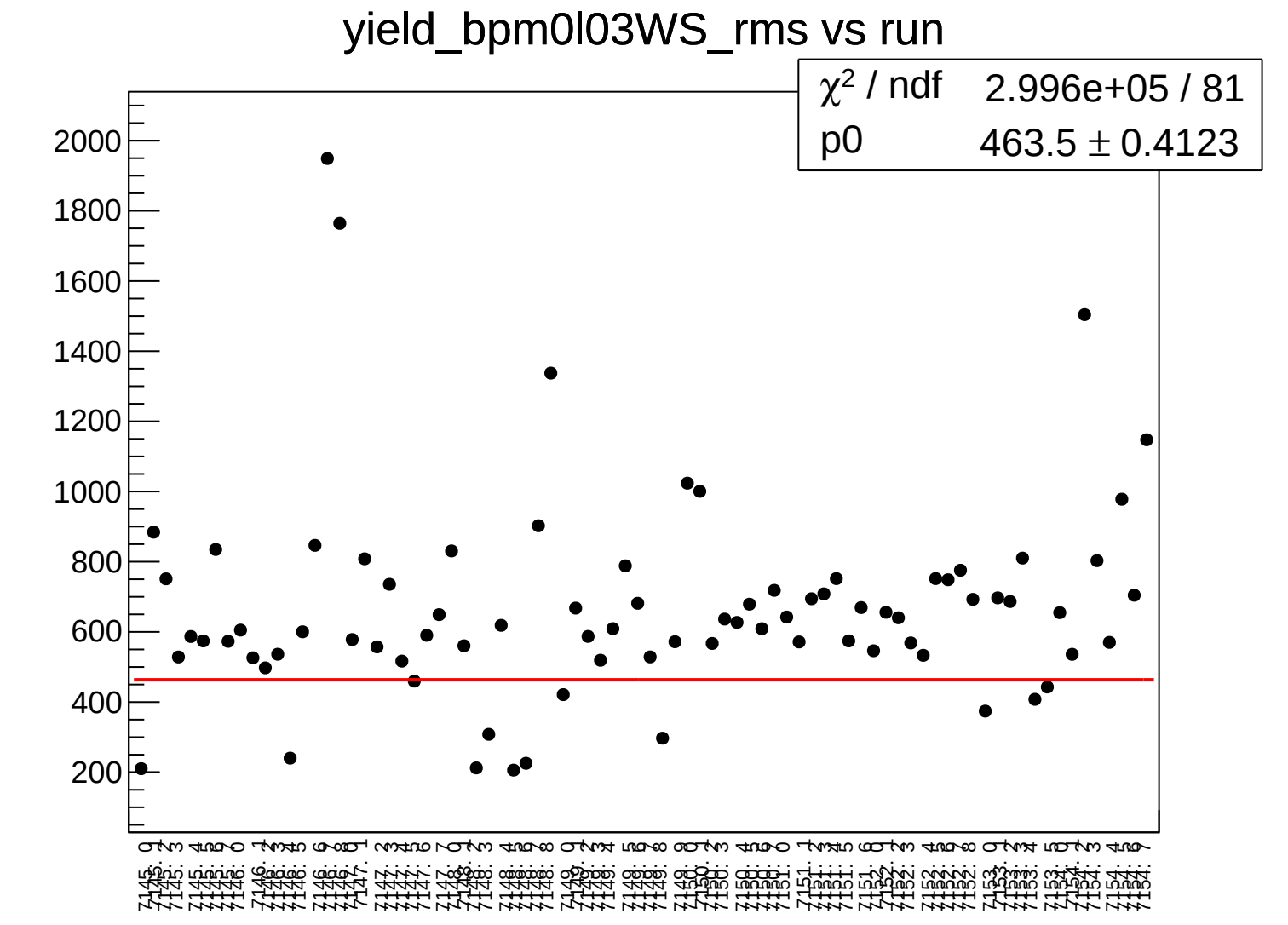

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 8.924e+05 / 81
p0 1.369e+05 ± 0.3845
137.6
137.4
137.2
137
136.8
136.6
136.4
136.2
136
pull
Entries 82
Mean 228.9
Std Dev 276.9
200
100
0
−100
−200

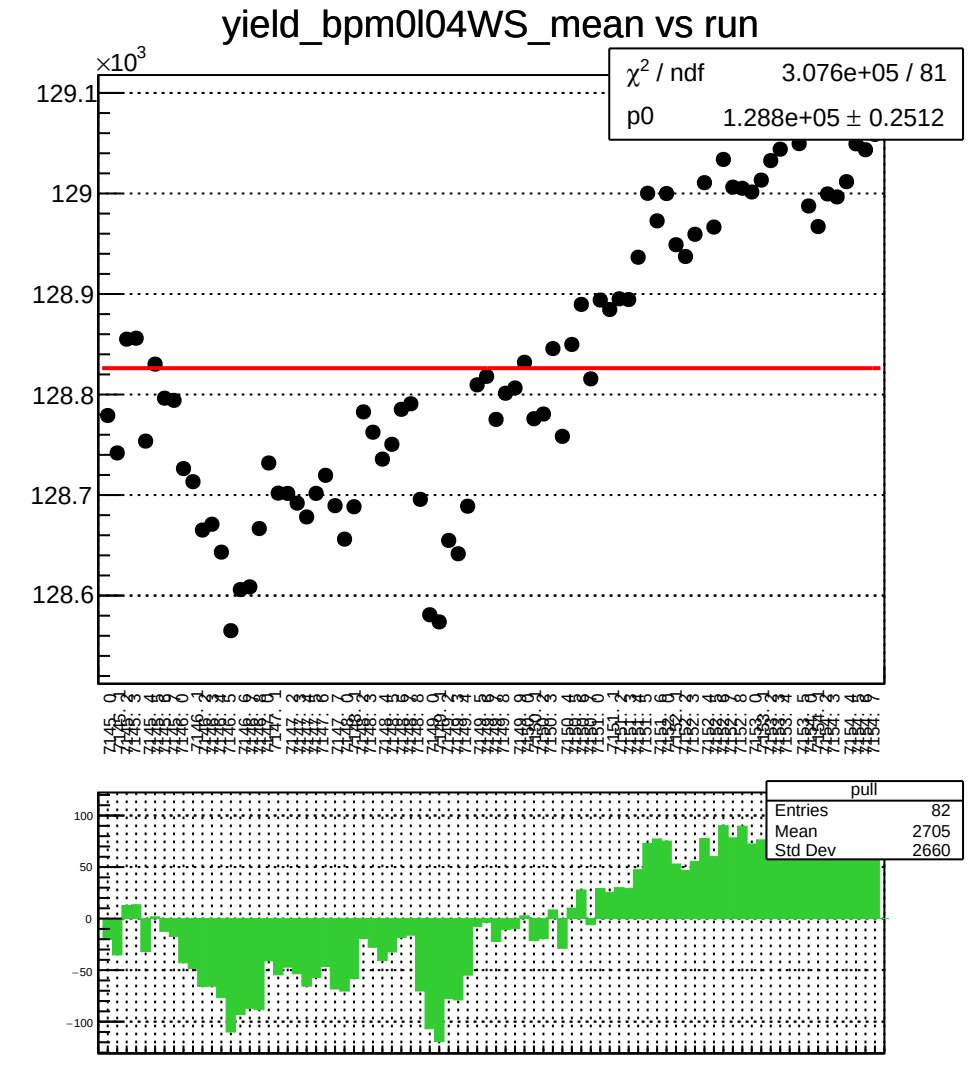

pull1D
Entries 82
Mean 1.144
Std Dev 4.085
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

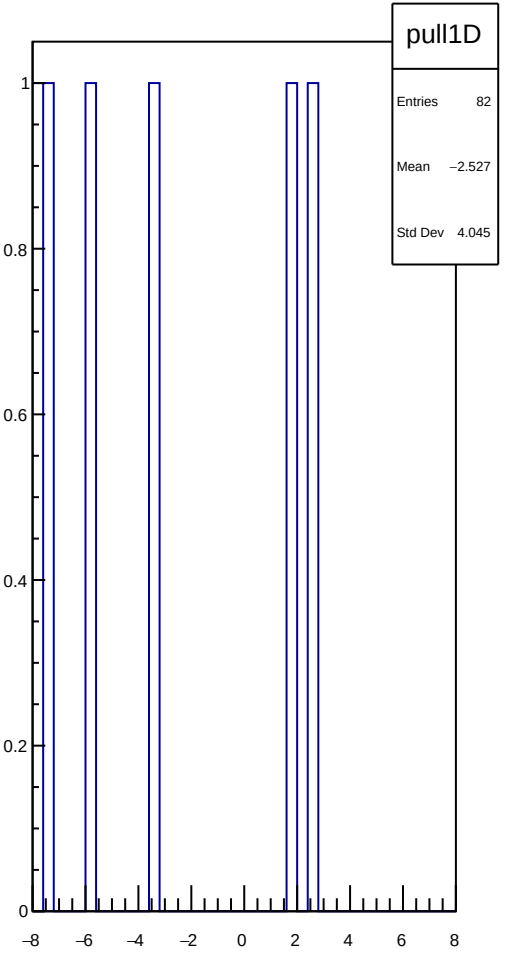

yield_bpm0l02WS_rms vs run
χ² / ndf 3928 / 81
p0 339.5 ± 0.2719
440
420
400
380
360
340
320
300

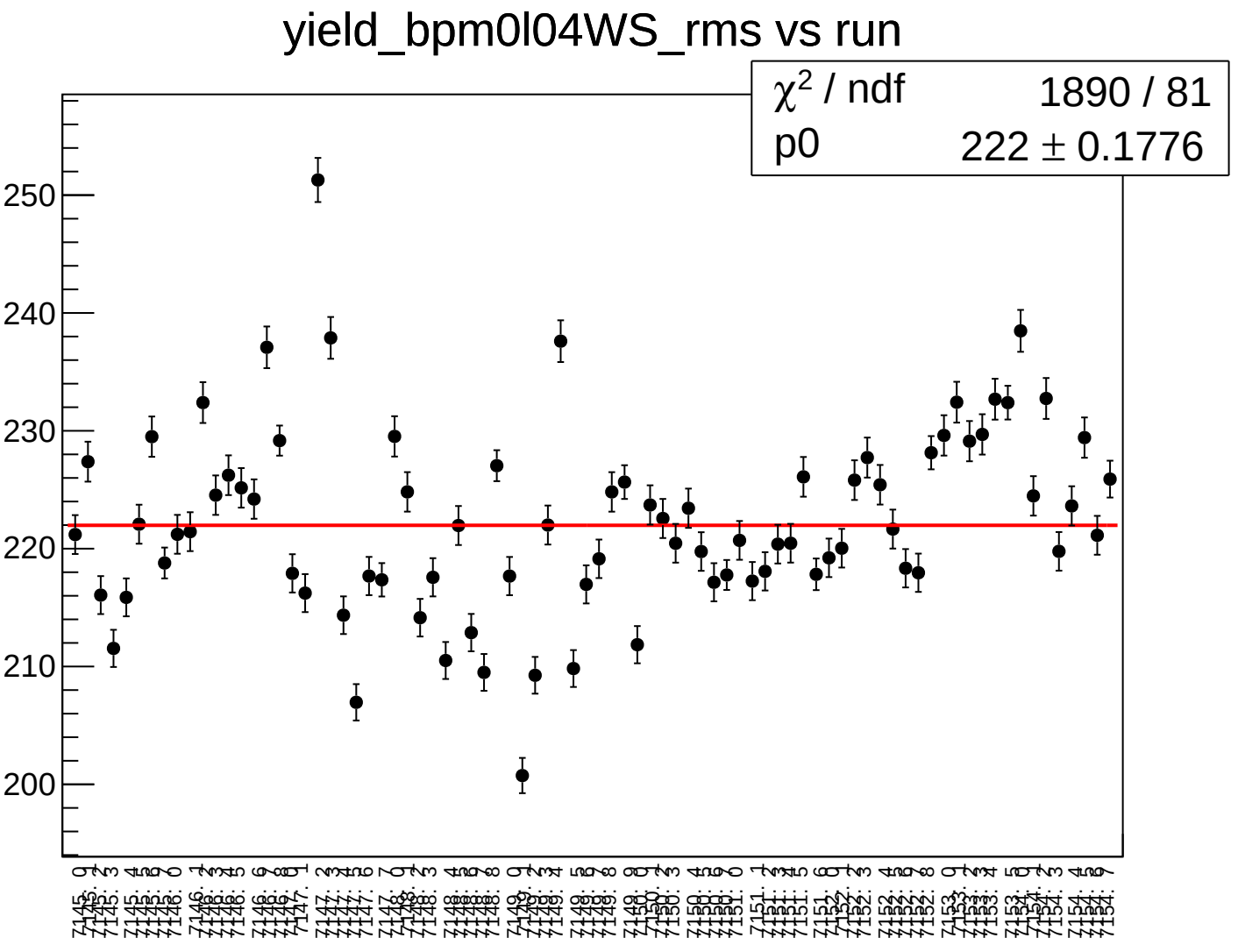

yield_bpm0l03WS_mean vs run
χ² / ndf 1.162e+05 / 81
p0 1.35e+05 ± 0.5831
×10³
135.2
135
134.8
134.6
134.4
134.2
134
pull
Entries 82
Mean 32.4
Std Dev 38.26
100
80
60
40
20
0
−20
−40
−60
−80

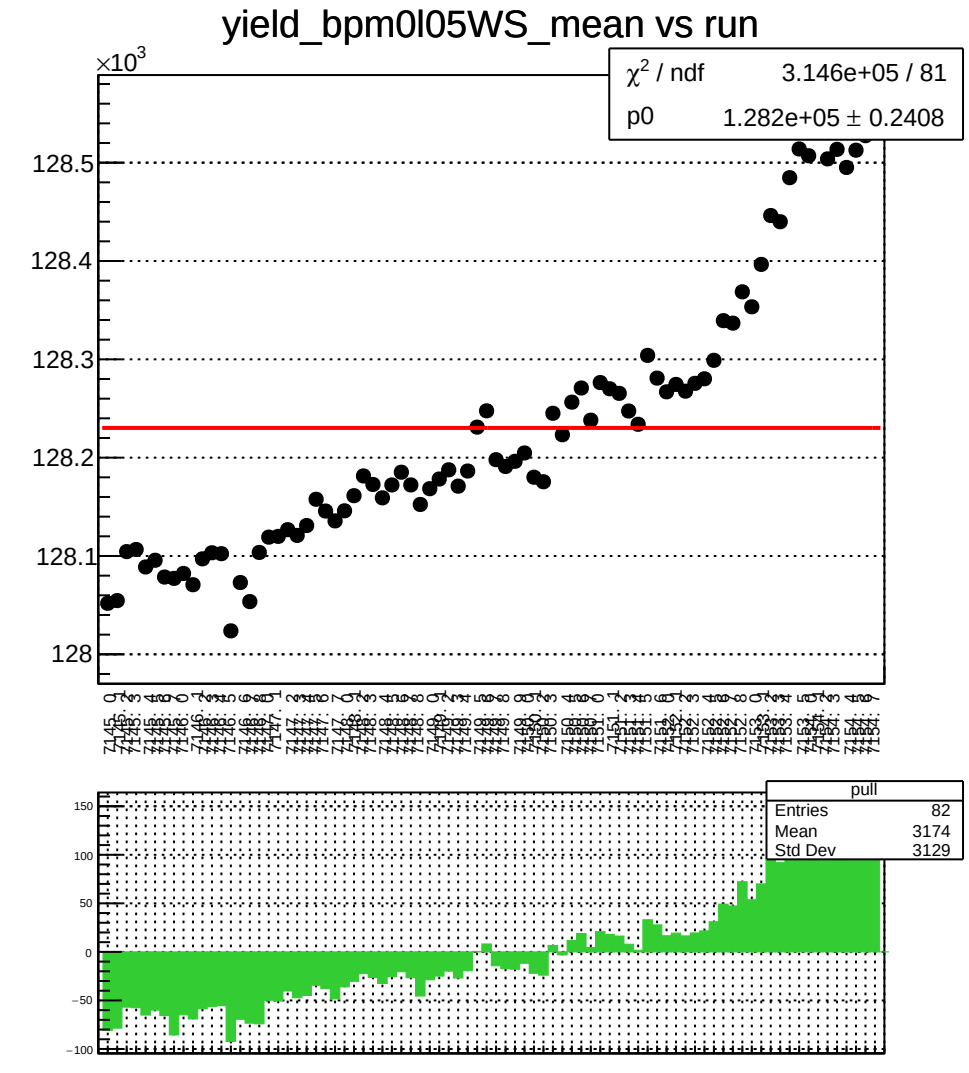

pull1D
Entries 82
Mean 1.276
Std Dev 4.402
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

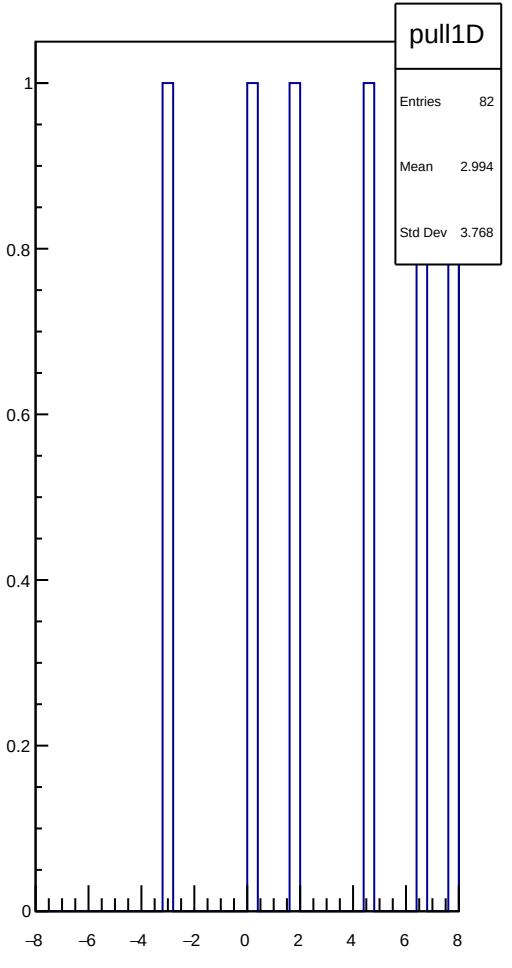

yield_bpm0l03WS_rms vs run
χ² / ndf 2.996e+05 / 81
p0 463.5 ± 0.4123
2000
1800
1600
1400
1200
1000
800
600
400
200

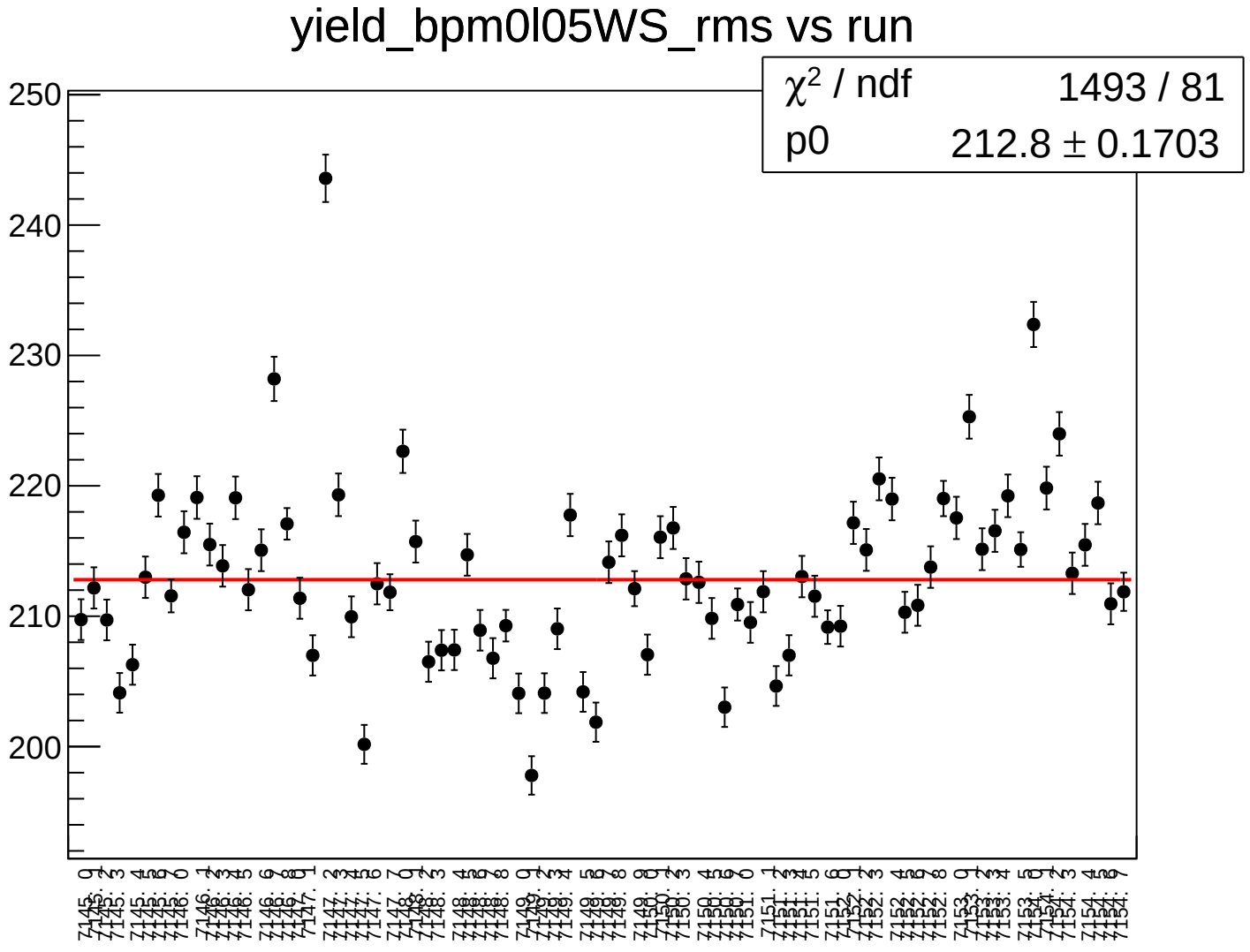

yield_bpm0l04WS_mean vs run
×10^3
129.1
129
128.9
128.8
128.7
128.6
χ² / ndf 3.076e+05 / 81
p0 1.288e+05 ± 0.2512
pull
Entries 82
Mean 2705
Std Dev 2660
100
50
0
−50
−100

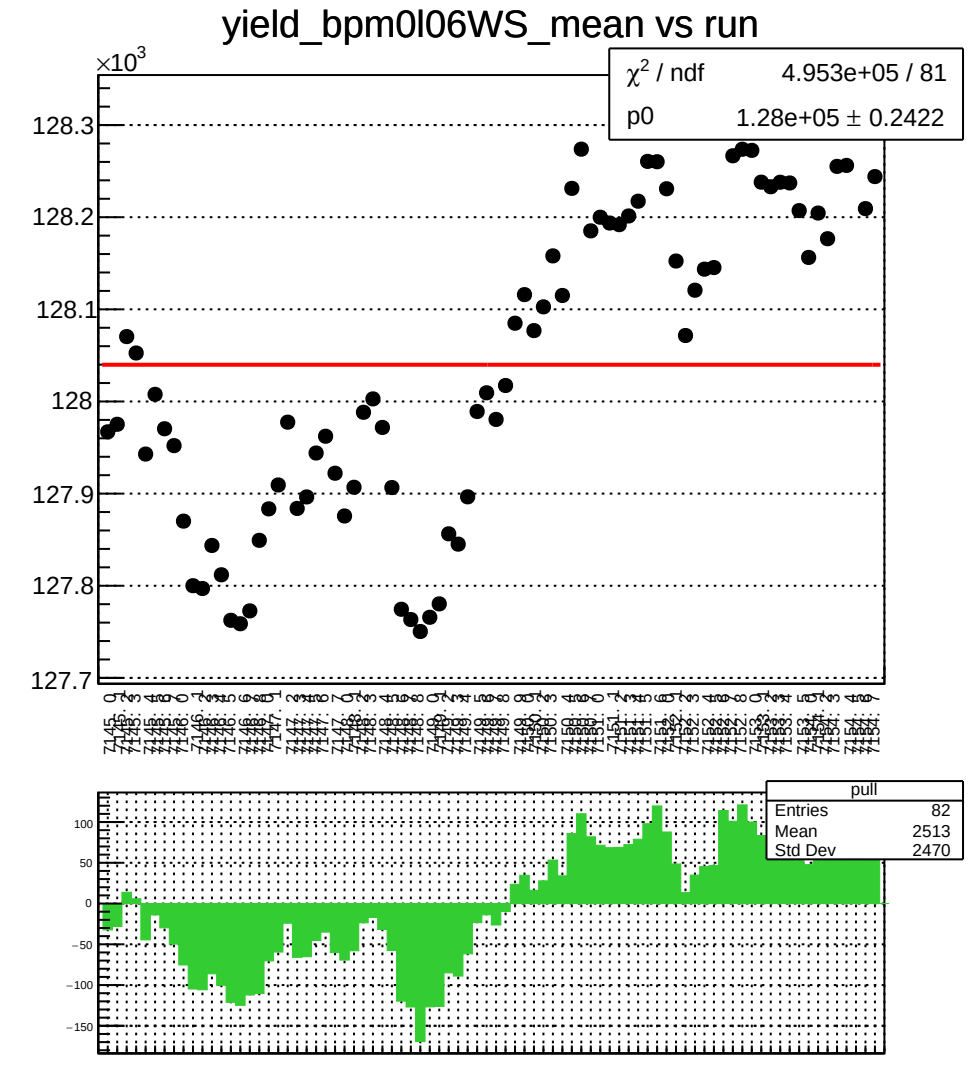

pull1D
Entries 82
Mean −2.527
Std Dev 4.045
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

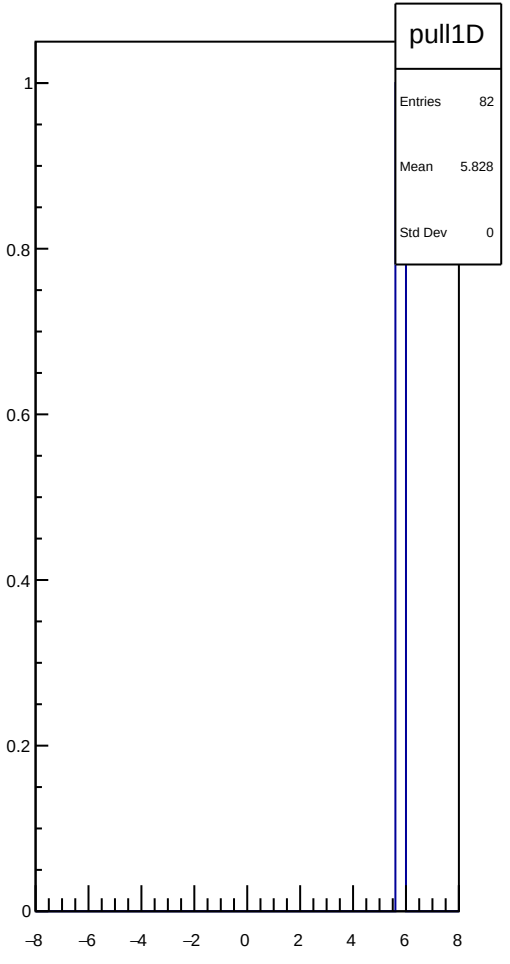

yield_bpm0l04WS_rms vs run
χ² / ndf 1890 / 81
p0 222 ± 0.1776
250
240
230
220
210
200

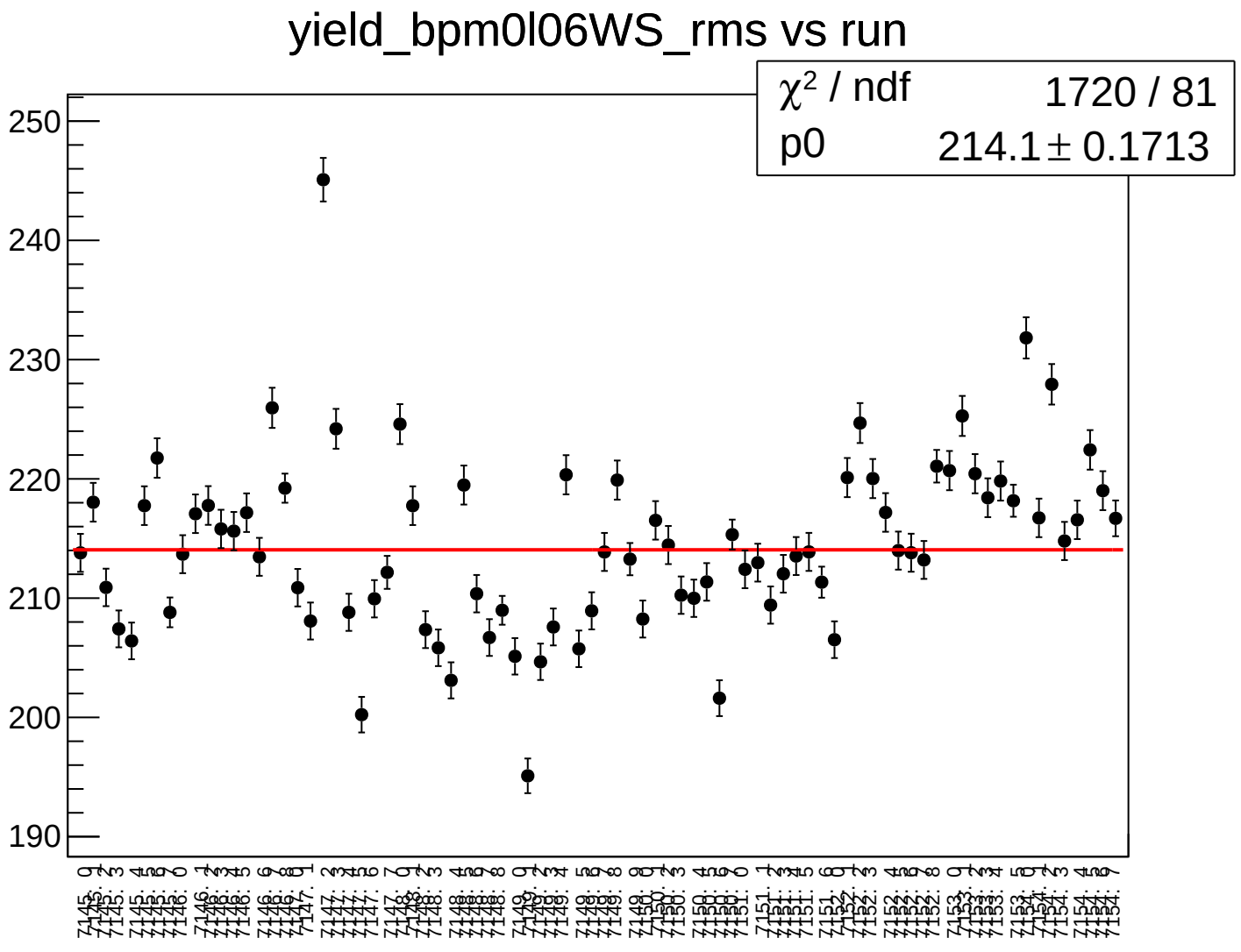

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 3.146e+05 / 81
p0 1.282e+05 ± 0.2408
128.5
128.4
128.3
128.2
128.1
128
pull
Entries 82
Mean 3174
Std Dev 3129
150
100
50
0
−50
−100

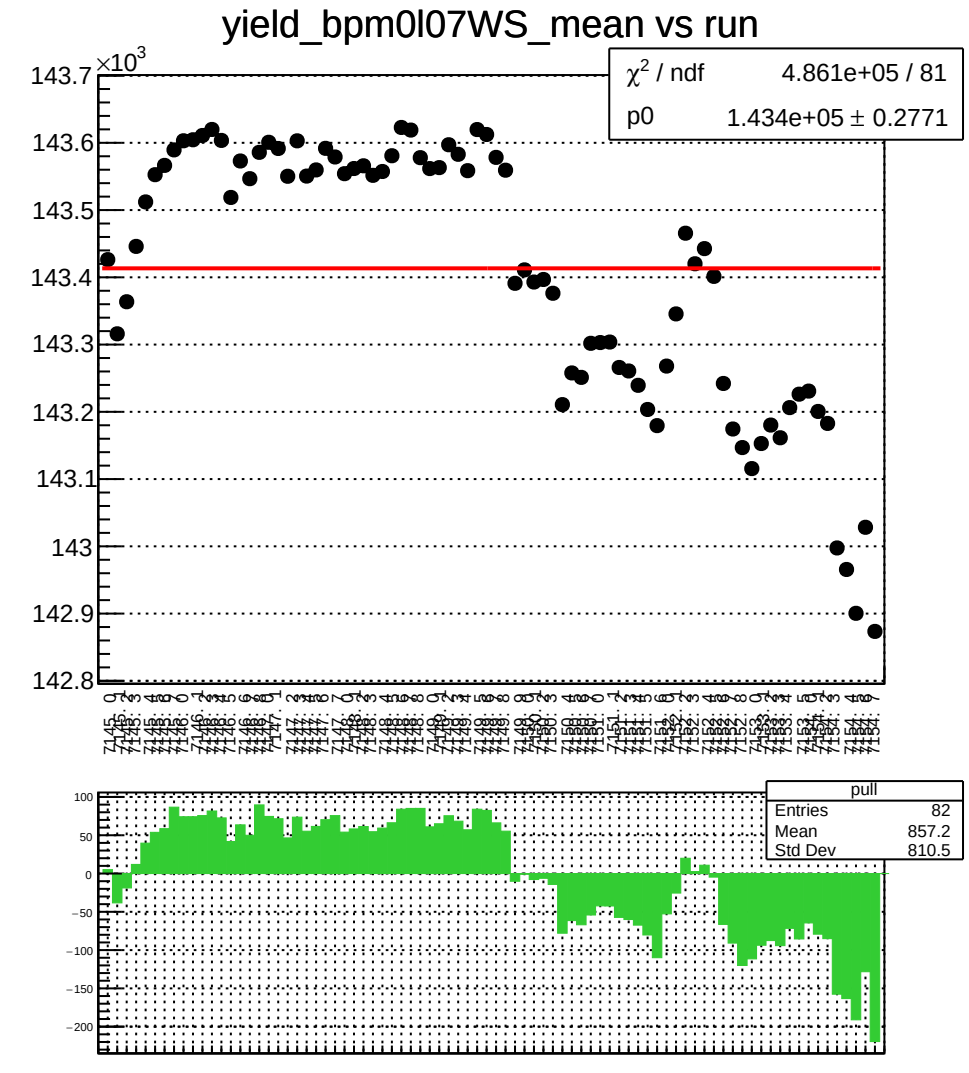

pull1D
Entries 82
Mean 2.994
Std Dev 3.768
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

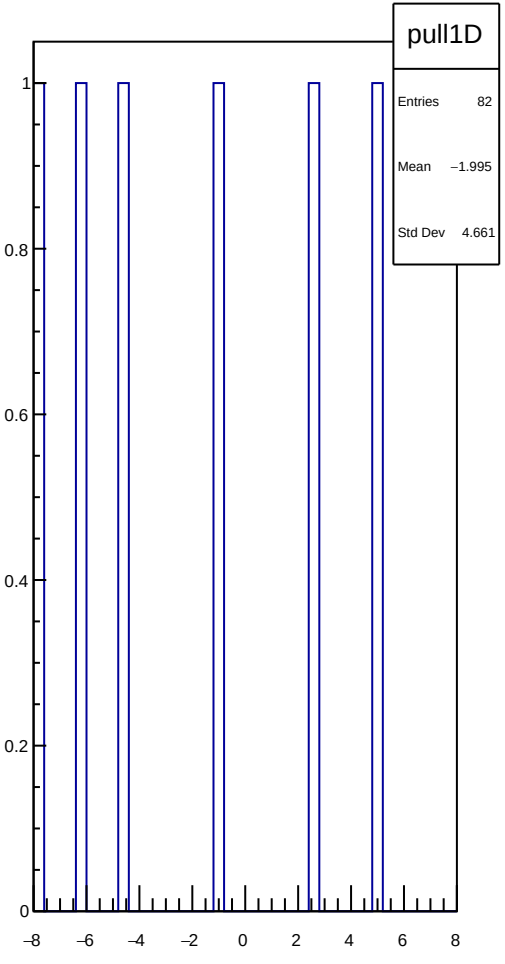

yield_bpm0l05WS_rms vs run
χ² / ndf 1493 / 81
p0 212.8 ± 0.1703
250
240
230
220
210
200

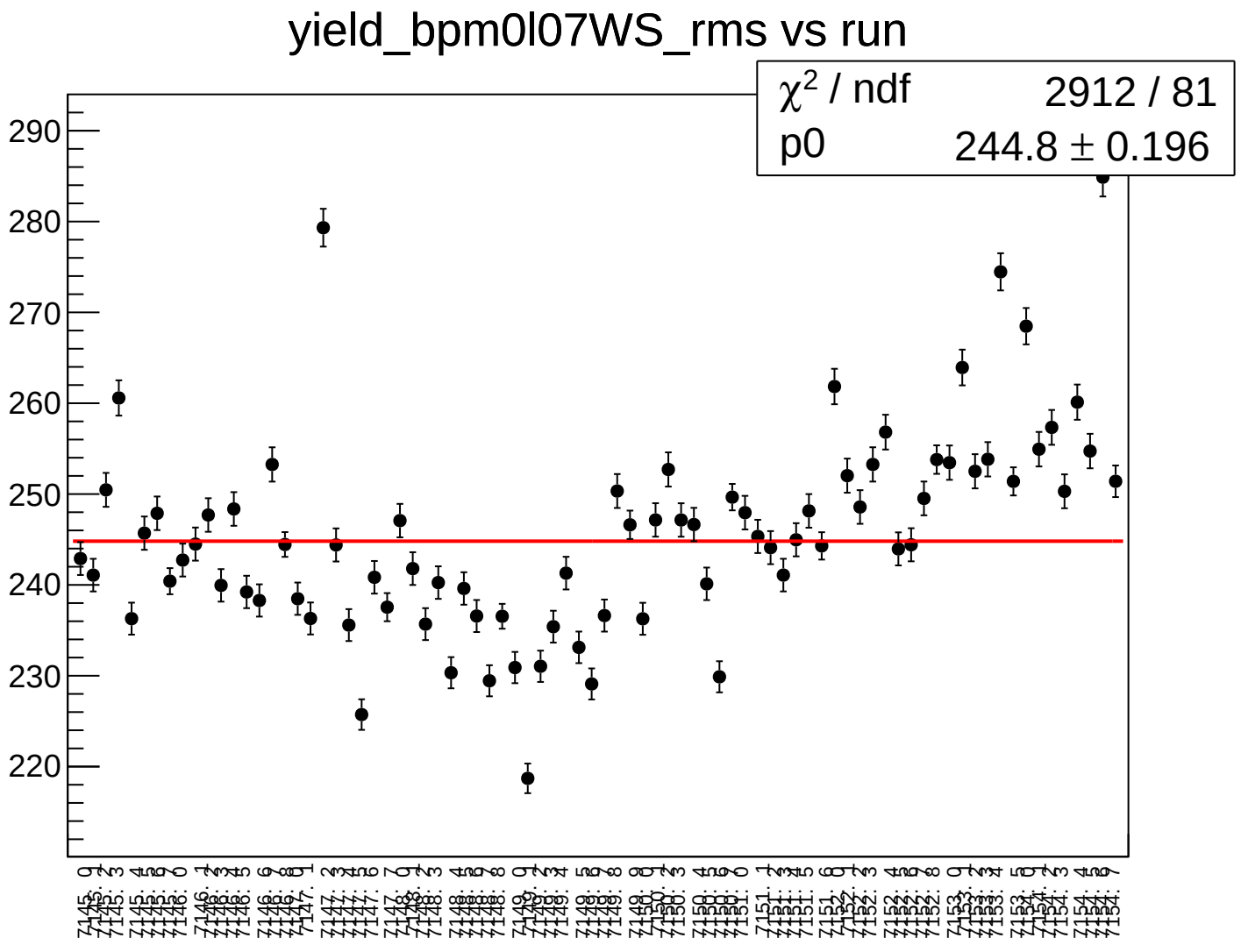

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 4.953e+05 / 81
p0 1.28e+05 ± 0.2422
128.3
128.2
128.1
128
127.9
127.8
127.7
pull
Entries 82
Mean 2513
Std Dev 2470
100
50
0
−50
−100
−150

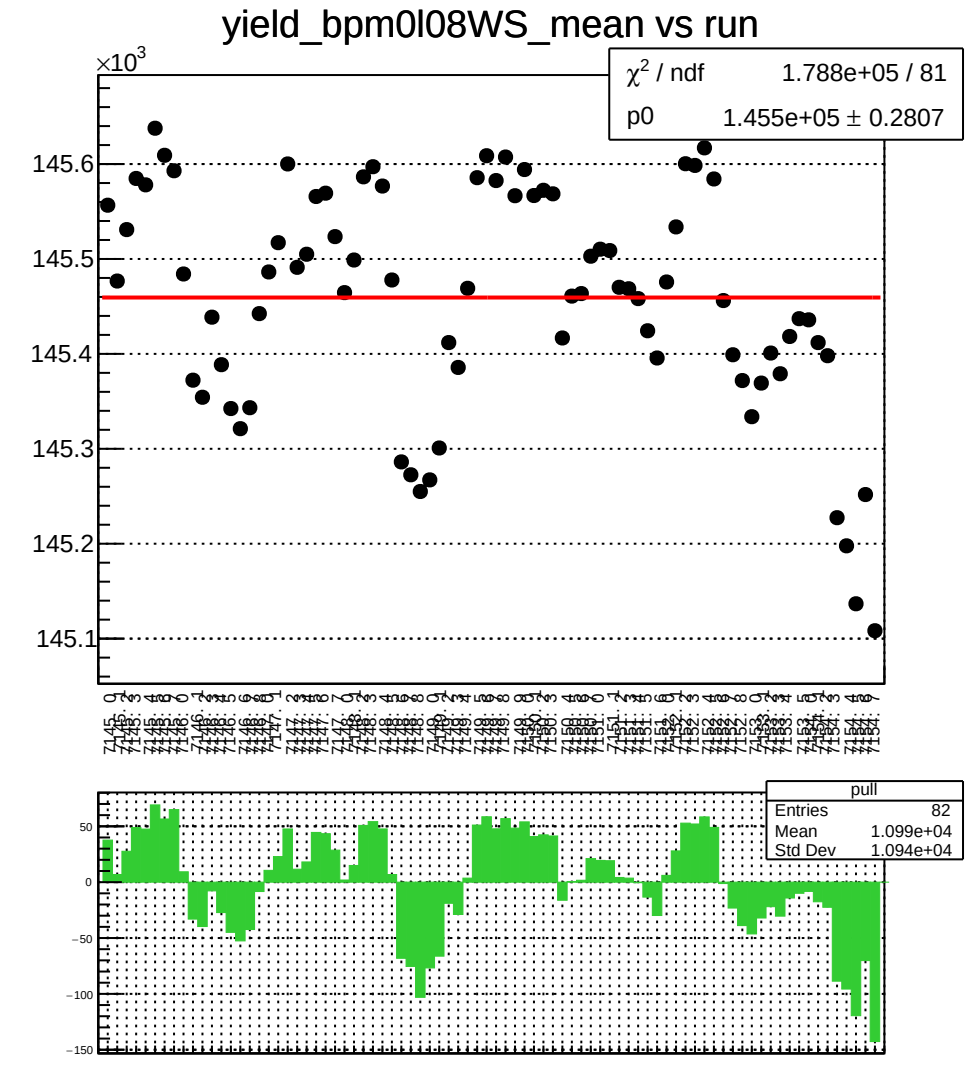

pull1D
Entries 82
Mean 5.828
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

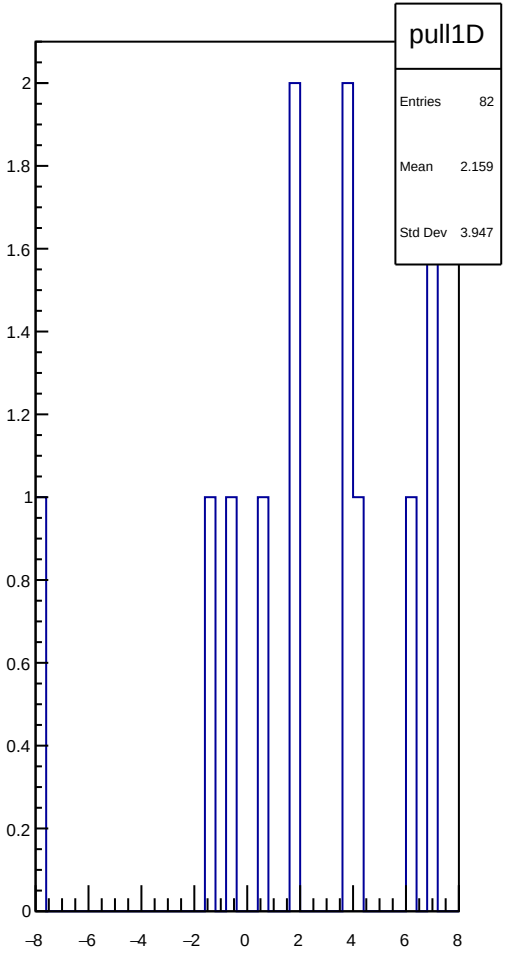

yield_bpm0l06WS_rms vs run
χ² / ndf 1720 / 81
p0 214.1 ± 0.1713
250
240
230
220
210
200
190

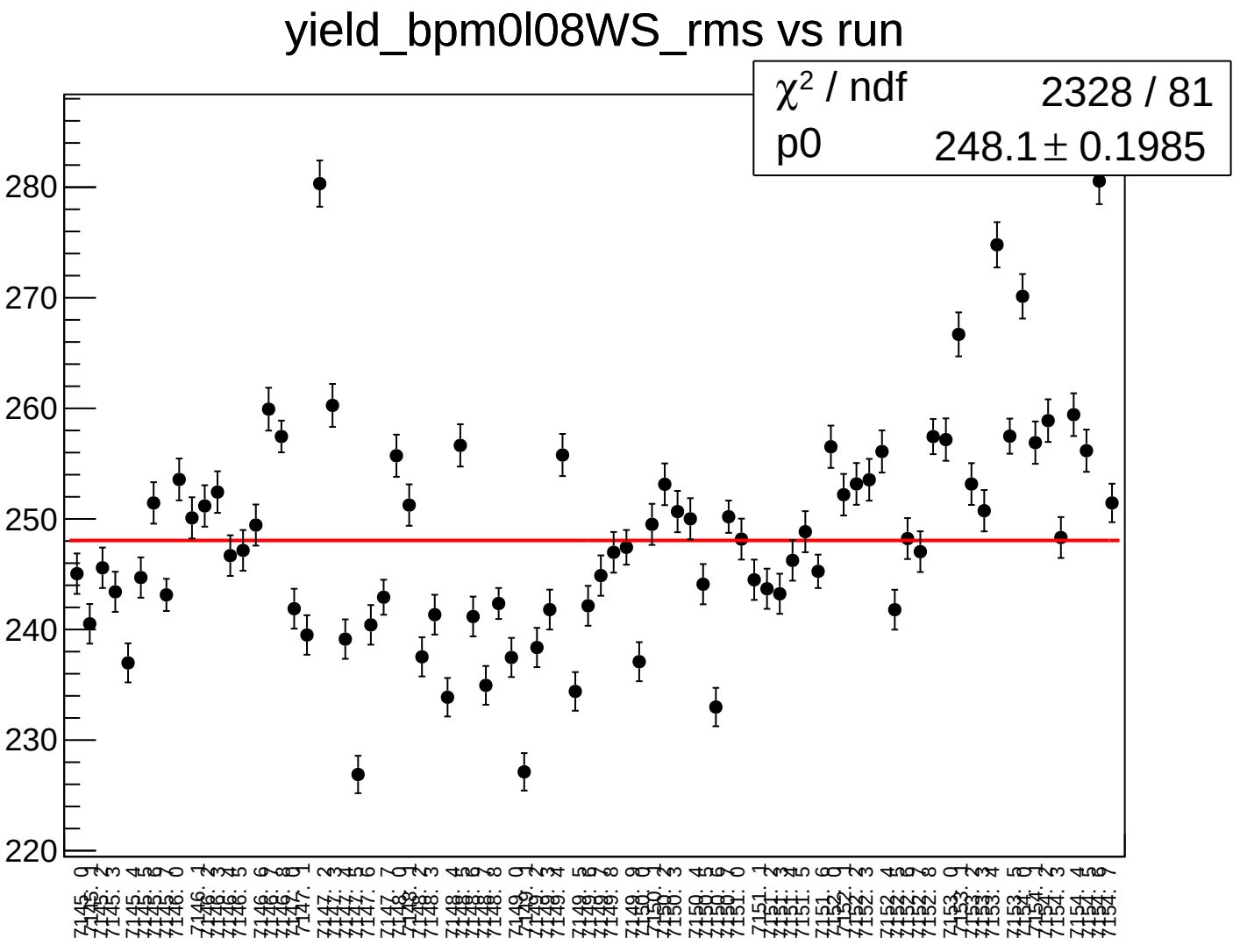

yield_bpm0l07WS_mean vs run
χ² / ndf 4.861e+05 / 81
p0 1.434e+05 ± 0.2771
×10³
143.7
143.6
143.5
143.4
143.3
143.2
143.1
143
142.9
142.8
pull
Entries 82
Mean 857.2
Std Dev 810.5
100
50
0
−50
−100
−150
−200

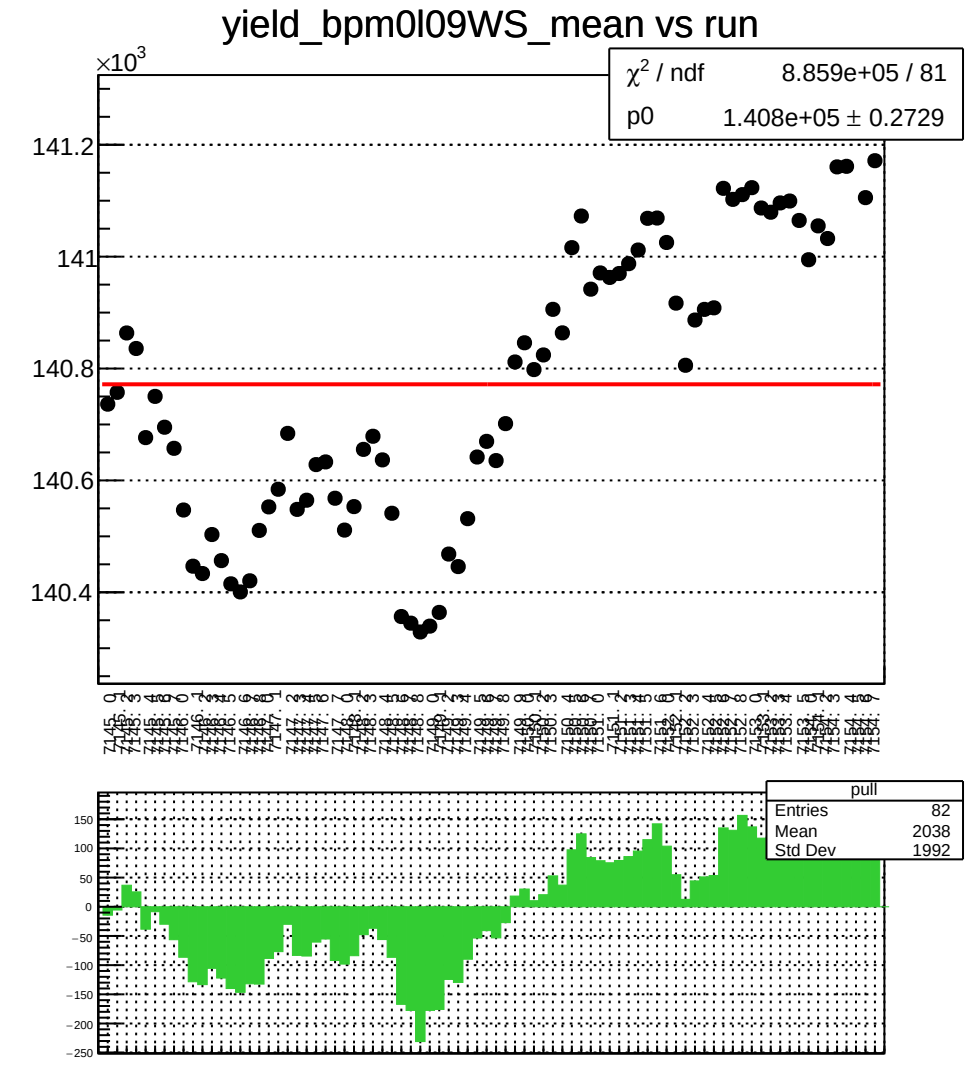

pull1D
Entries 82
Mean −1.995
Std Dev 4.661
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

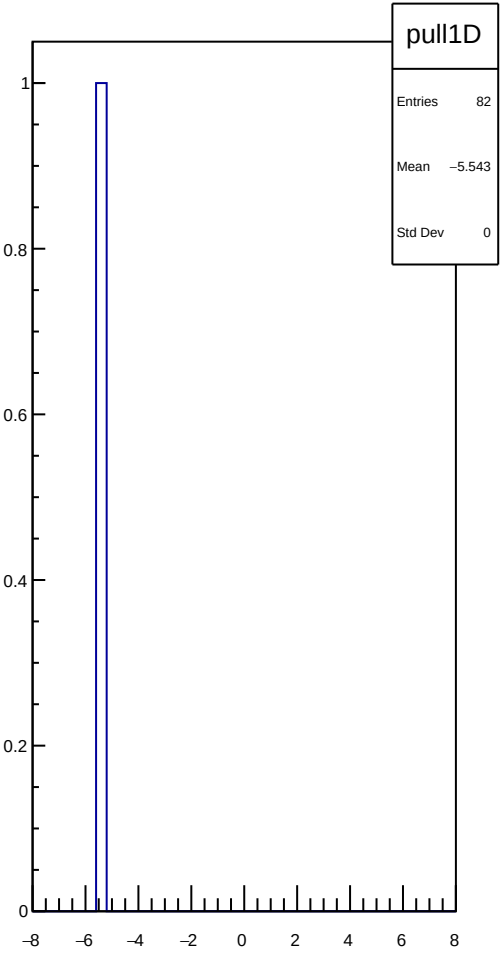

yield_bpm0l07WS_rms vs run
χ² / ndf 2912 / 81
p0 244.8 ± 0.196
290
280
270
260
250
240
230
220

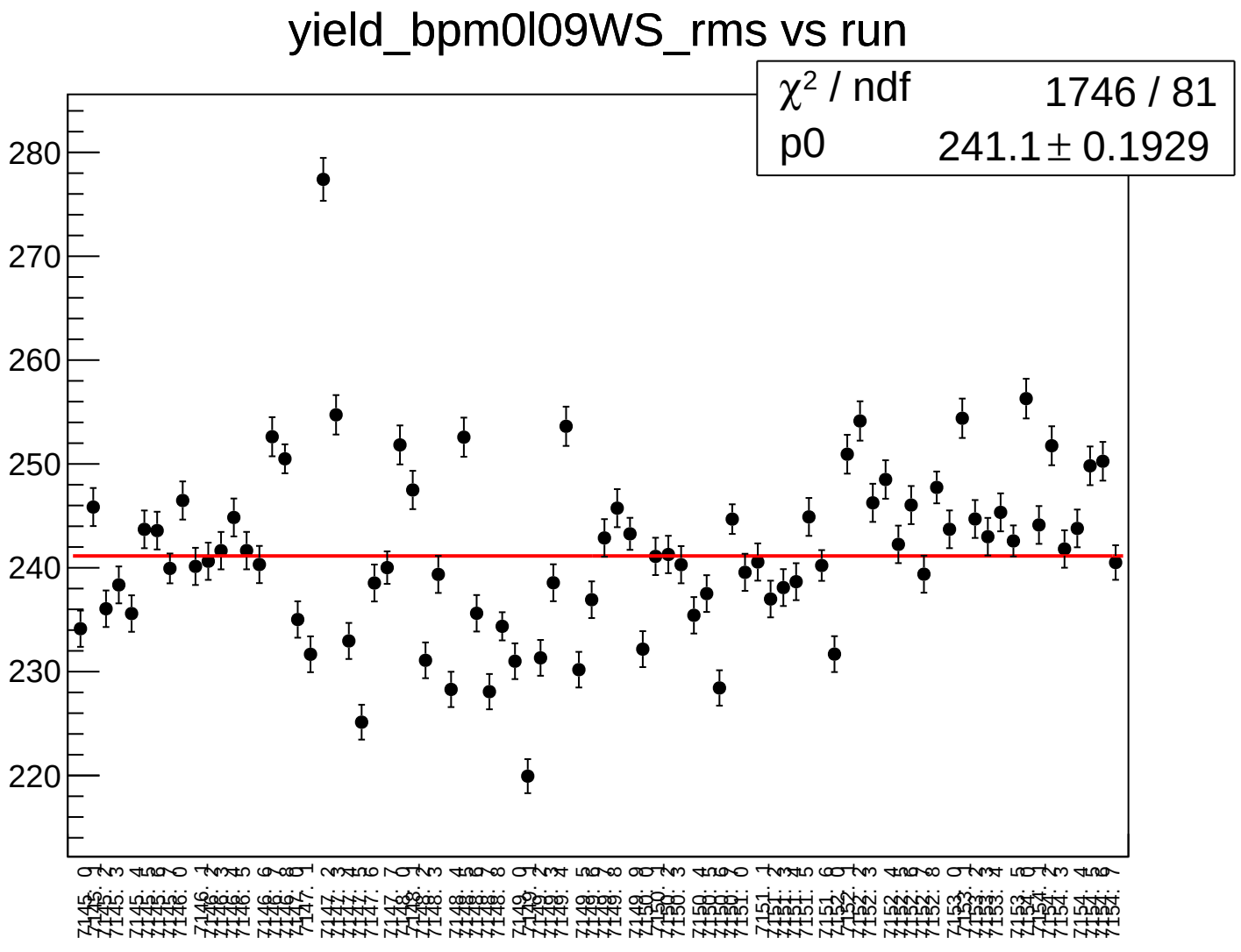

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 1.788e+05 / 81
p0 1.455e+05 ± 0.2807
145.6
145.5
145.4
145.3
145.2
145.1
pull
Entries 82
Mean 1.099e+04
Std Dev 1.094e+04
50
0
−50
−100
−150

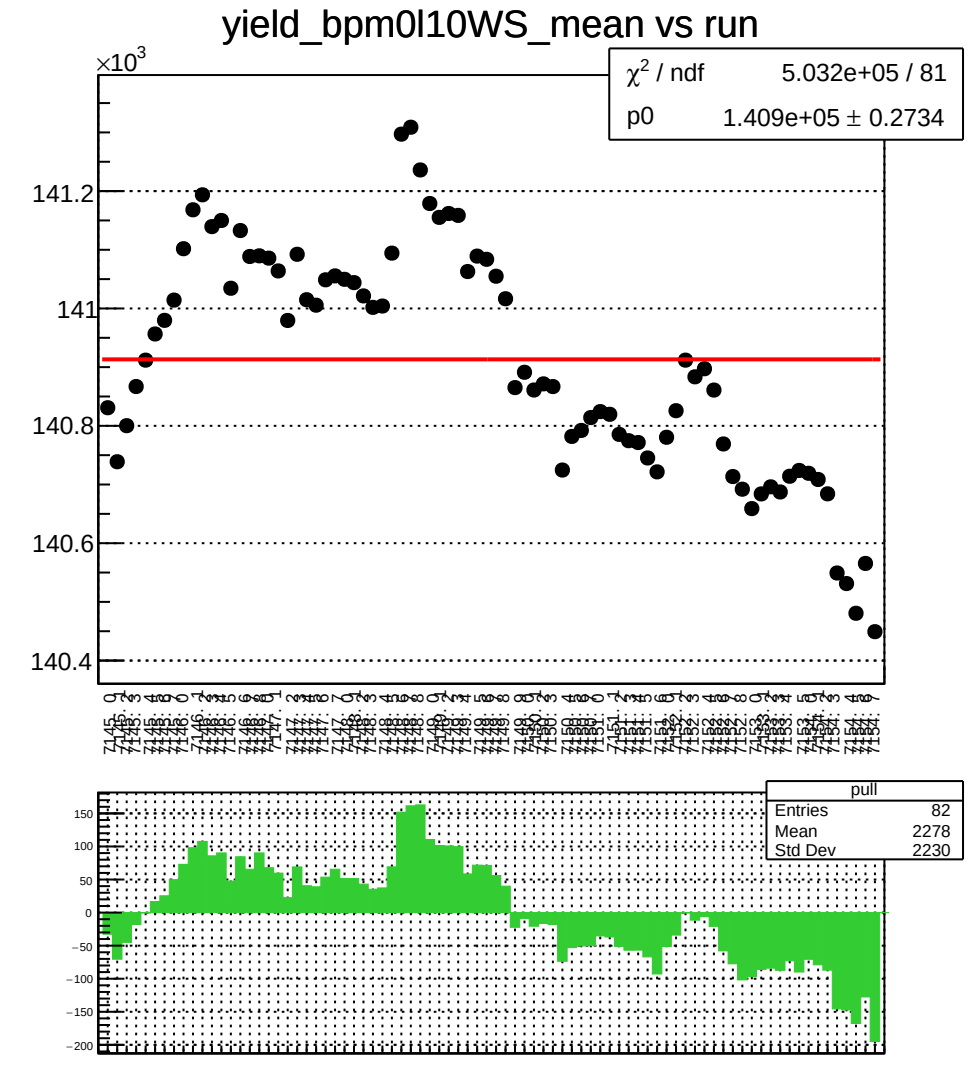

pull1D
Entries 82
Mean 2.159
Std Dev 3.947
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

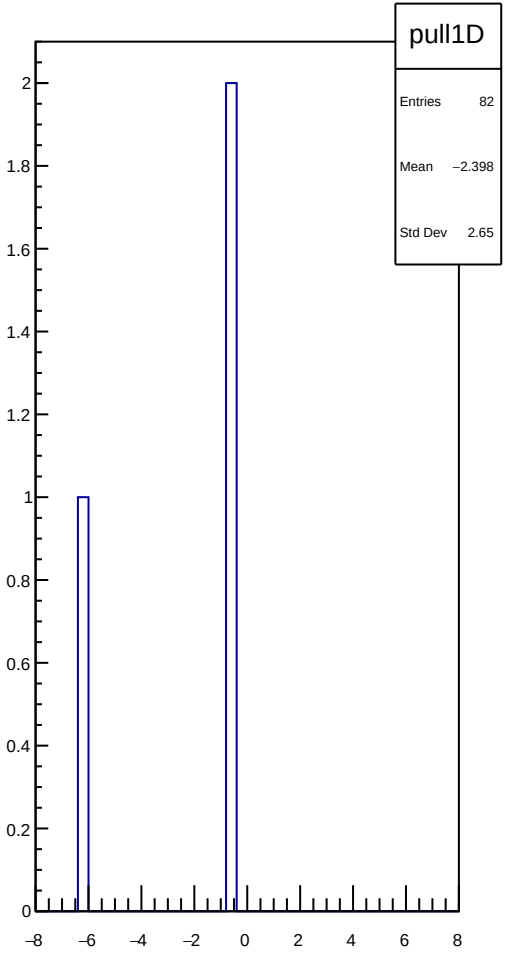

yield_bpm0l08WS_rms vs run
χ² / ndf 2328 / 81
p0 248.1 ± 0.1985
280
270
260
250
240
230
220

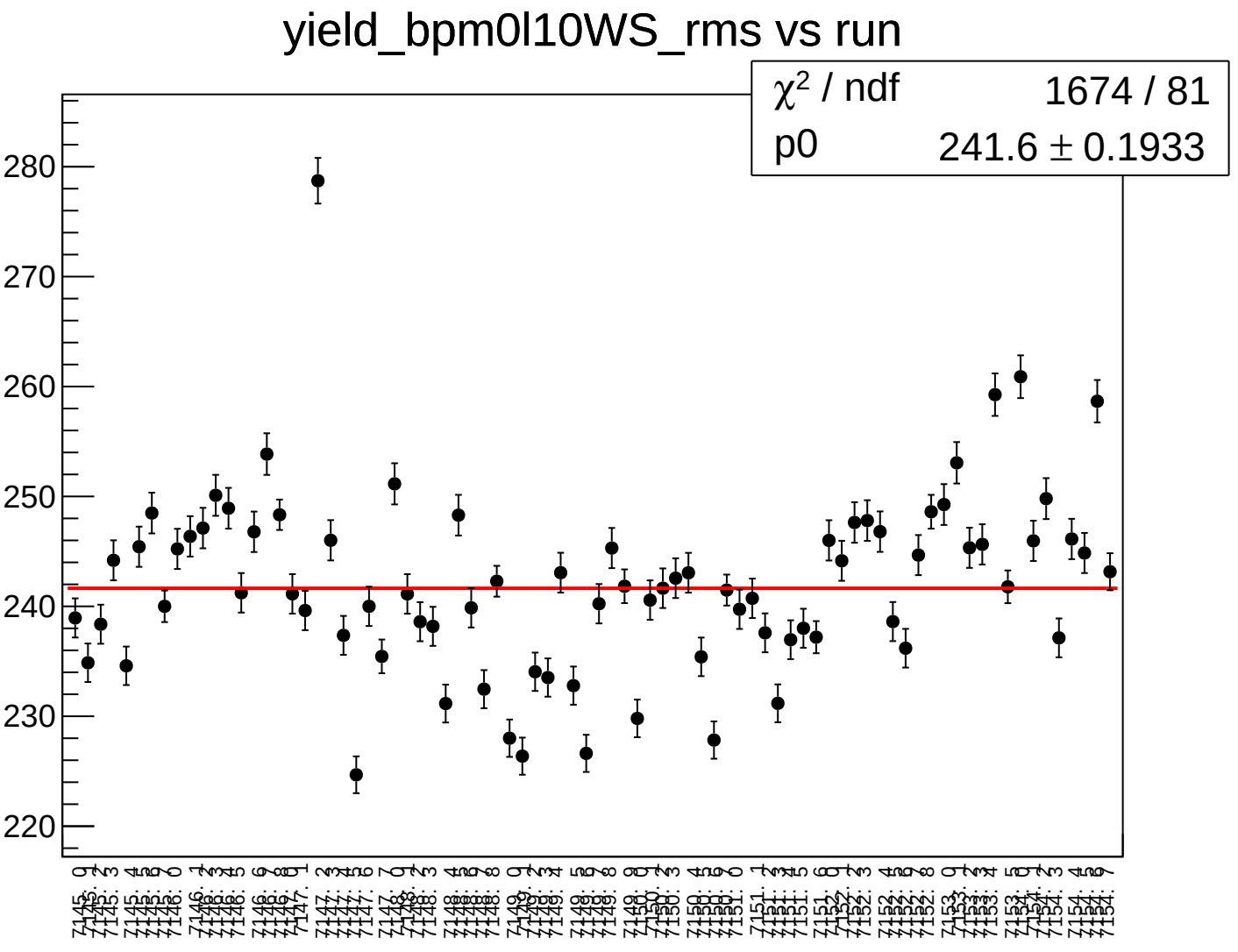

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 8.859e+05 / 81
p0 1.408e+05 ± 0.2729
141.2
141
140.8
140.6
140.4
pull
Entries 82
Mean 2038
Std Dev 1992
150
100
50
0
−50
−100
−150
−200
−250

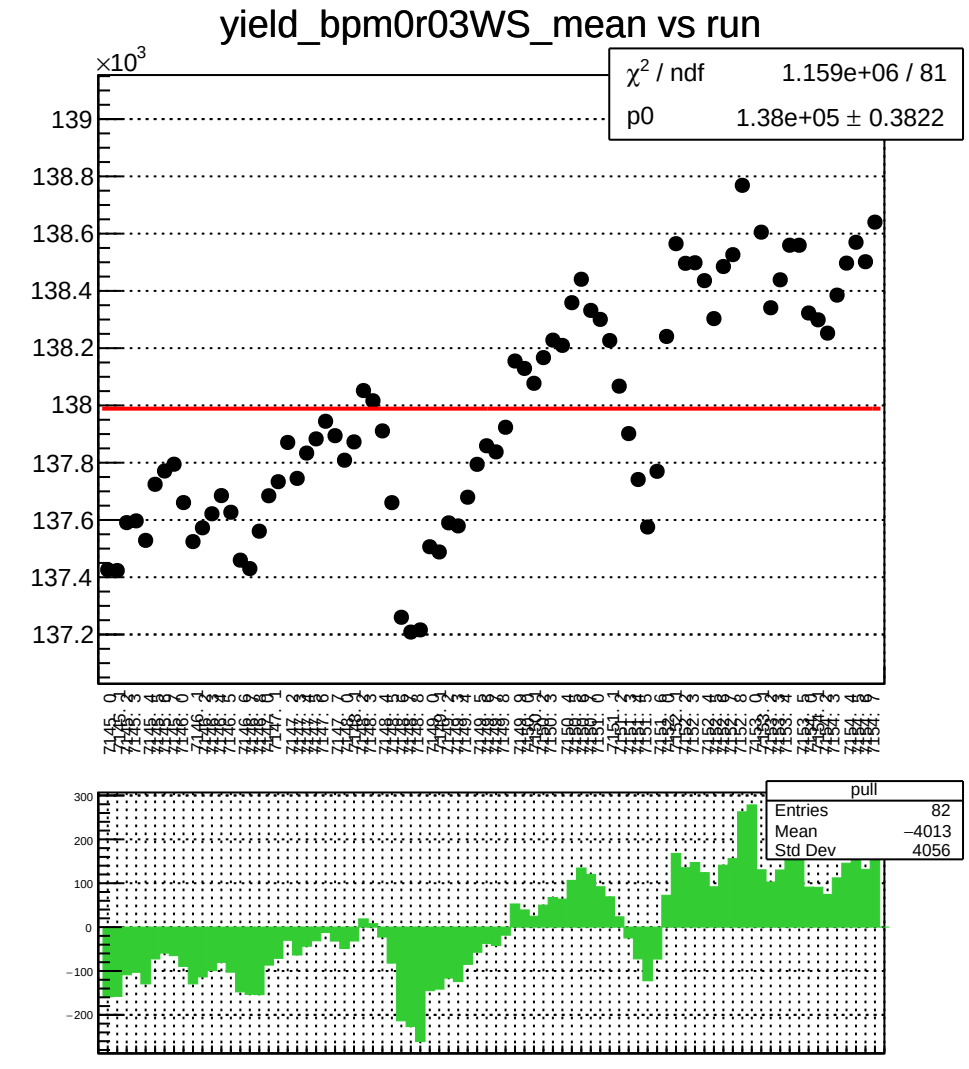

pull1D
Entries 82
Mean −5.543
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

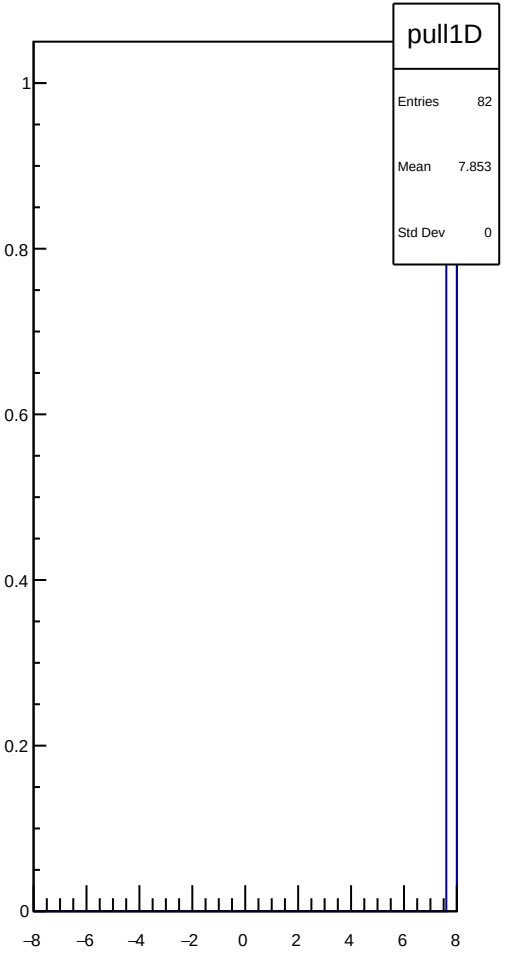

yield_bpm0l09WS_rms vs run
χ² / ndf 1746 / 81
p0 241.1 ± 0.1929
280
270
260
250
240
230
220

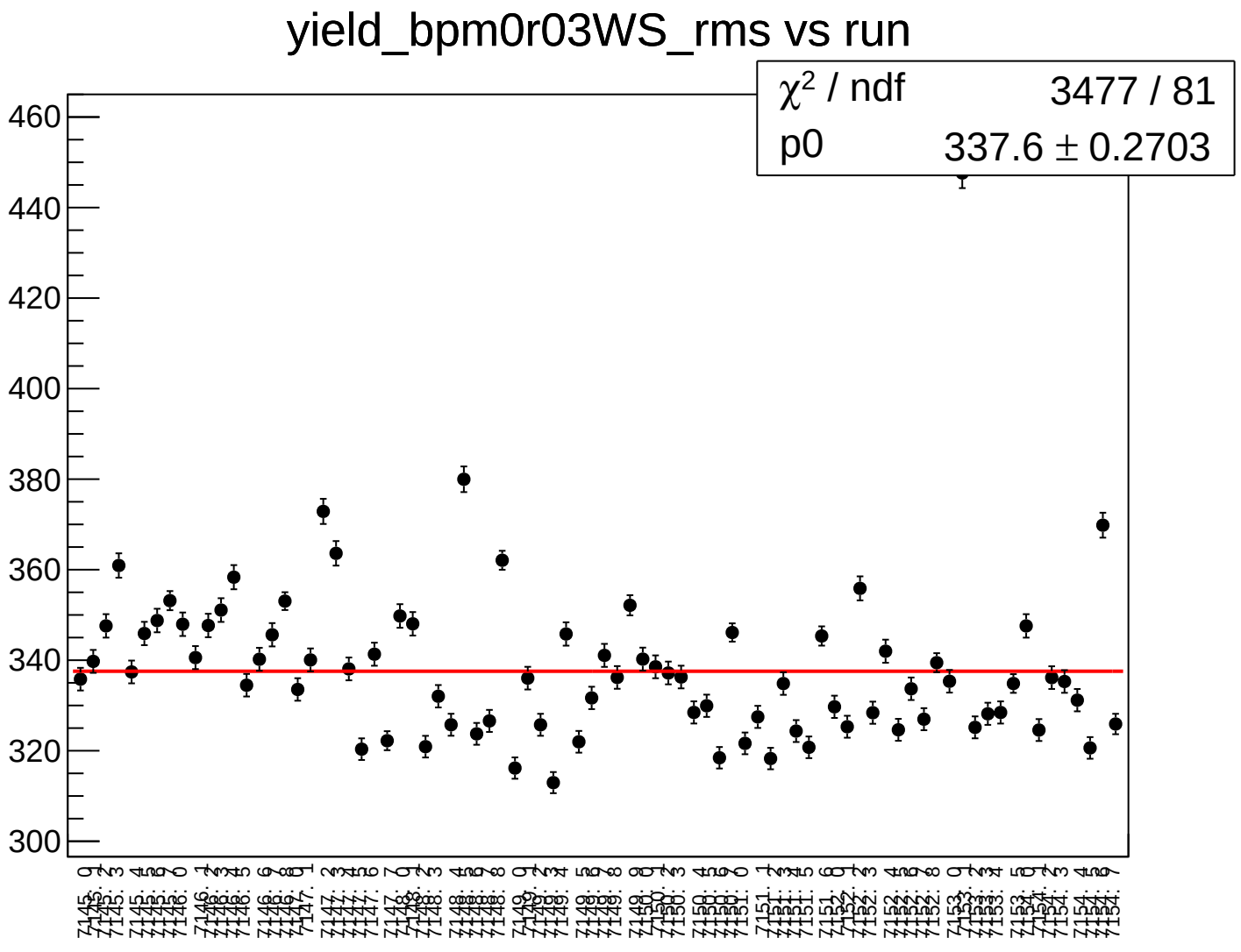

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 5.032e+05 / 81
p0 1.409e+05 ± 0.2734
141.2
141
140.8
140.6
140.4
pull
Entries 82
Mean 2278
Std Dev 2230
150
100
50
0
−50
−100
−150
−200

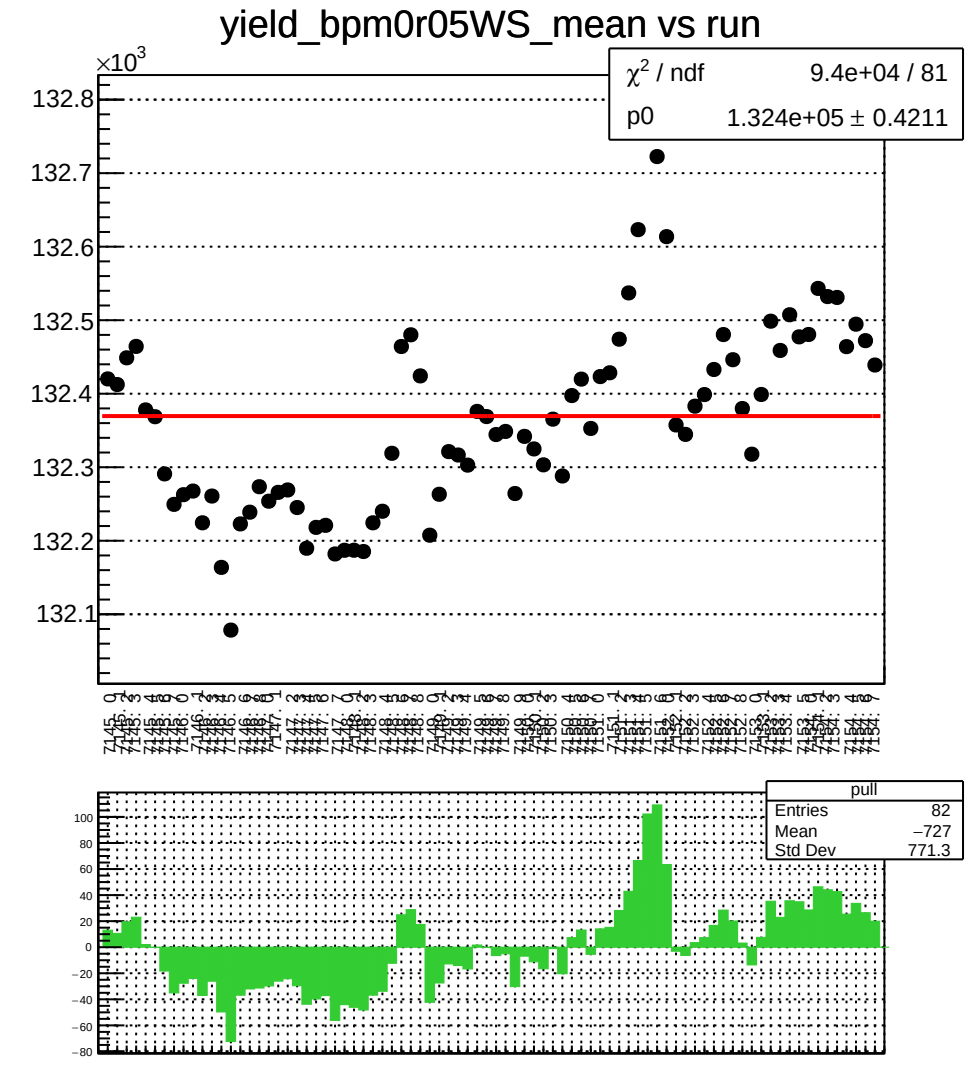

pull1D
Entries 82
Mean −2.398
Std Dev 2.65
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

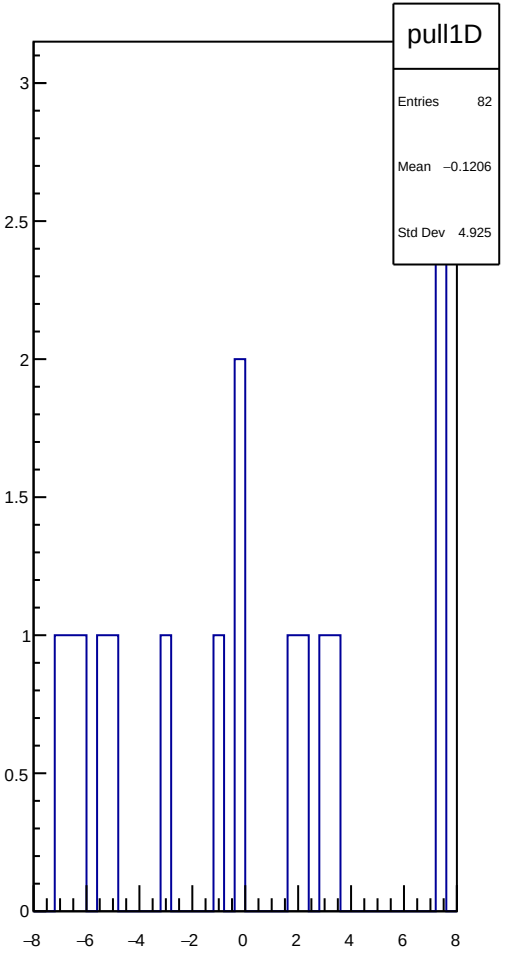

yield_bpm0l10WS_rms vs run
χ² / ndf 1674 / 81
p0 241.6 ± 0.1933
280
270
260
250
240
230
220

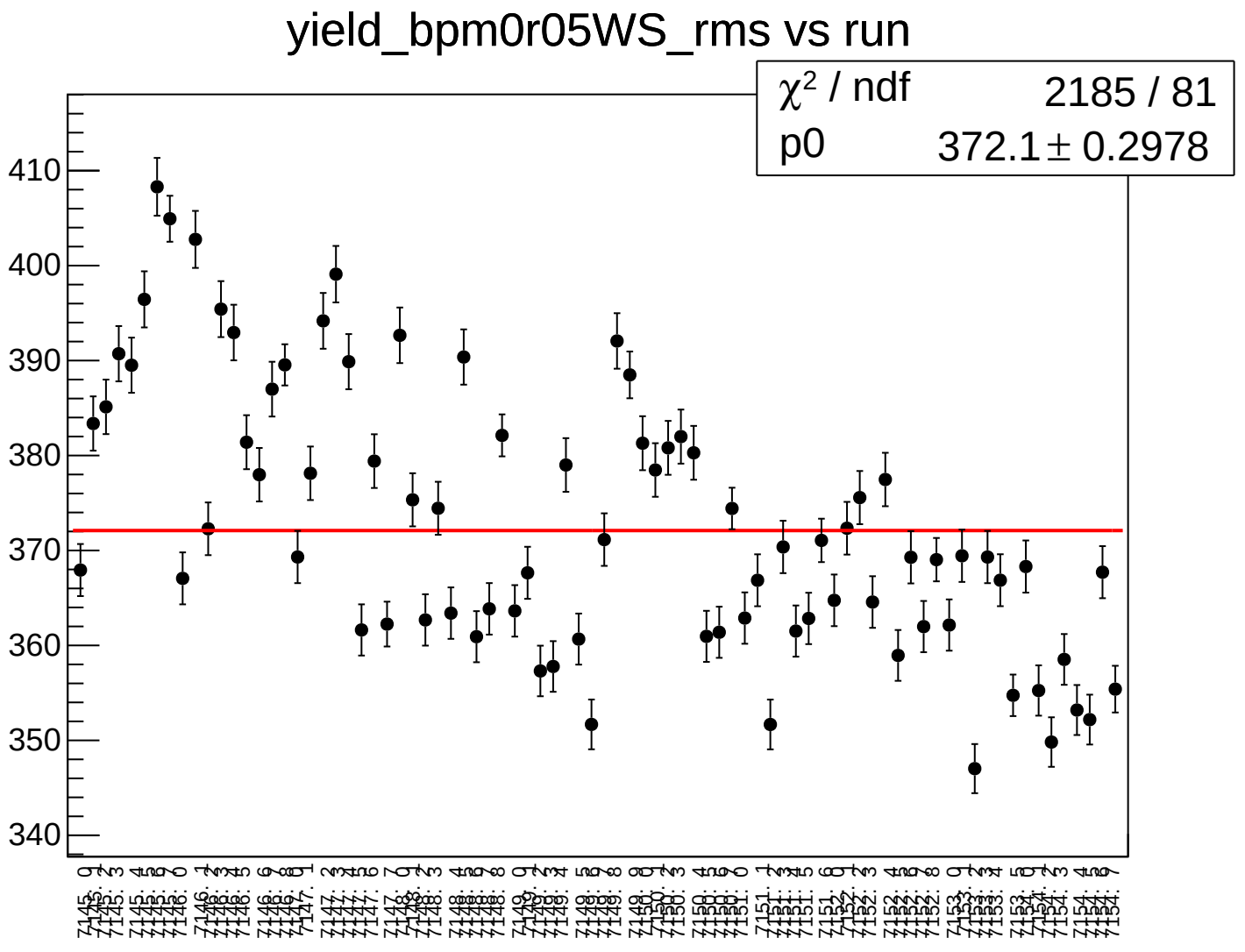

yield_bpm0r03WS_mean vs run
×10^3
χ^2 / ndf 1.159e+06 / 81
p0 1.38e+05 ± 0.3822
139
138.8
138.6
138.4
138.2
138
137.8
137.6
137.4
137.2
pull
Entries 82
Mean −4013
Std Dev 4056
300
200
100
0
−100
−200

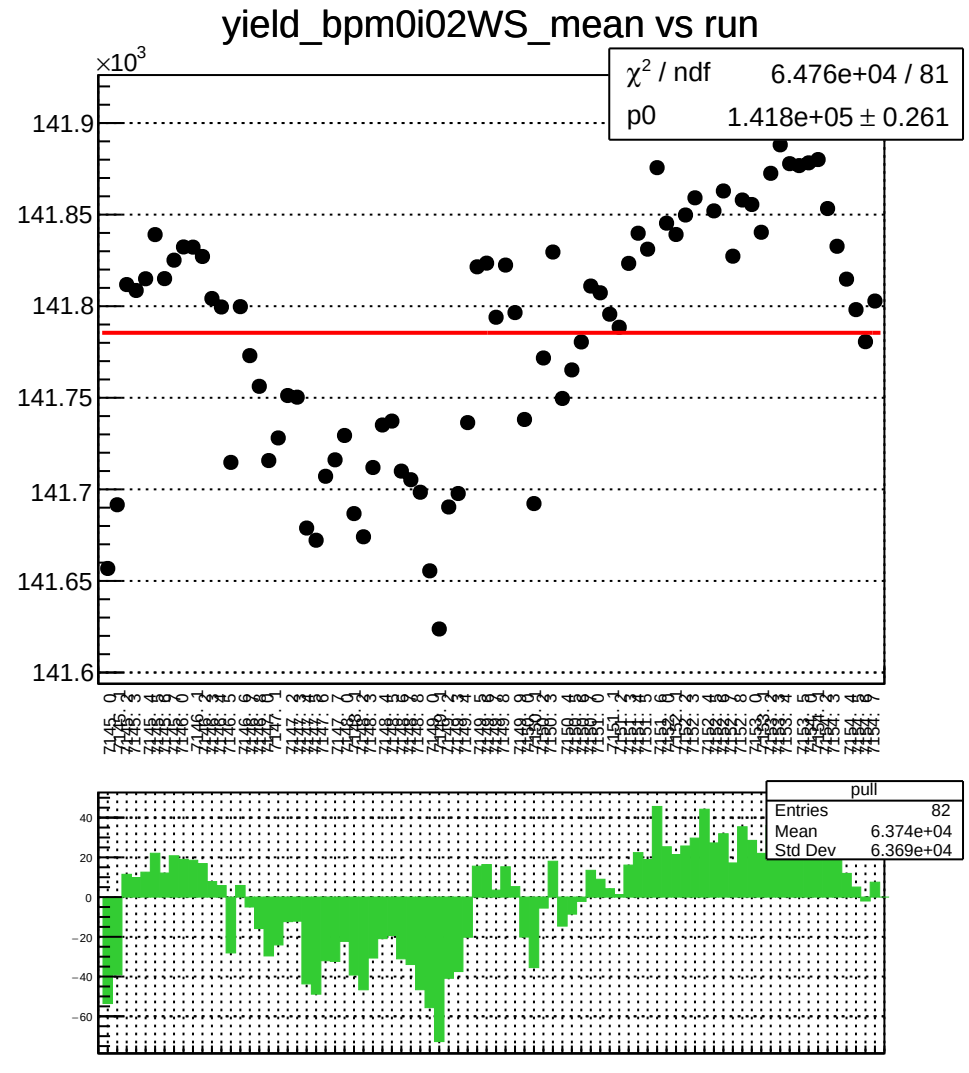

pull1D
Entries 82
Mean 7.853
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

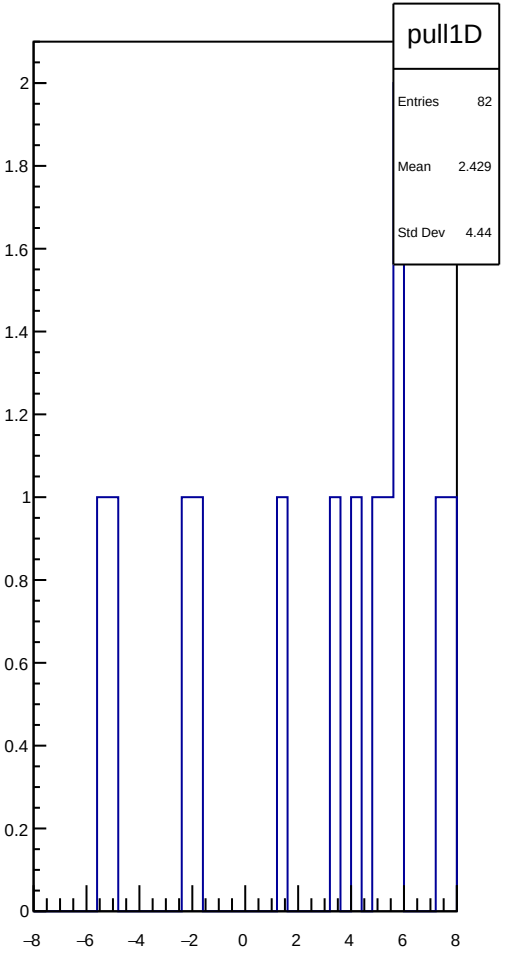

yield_bpm0r03WS_rms vs run
χ² / ndf 3477 / 81
p0 337.6 ± 0.2703
460
440
420
400
380
360
340
320
300

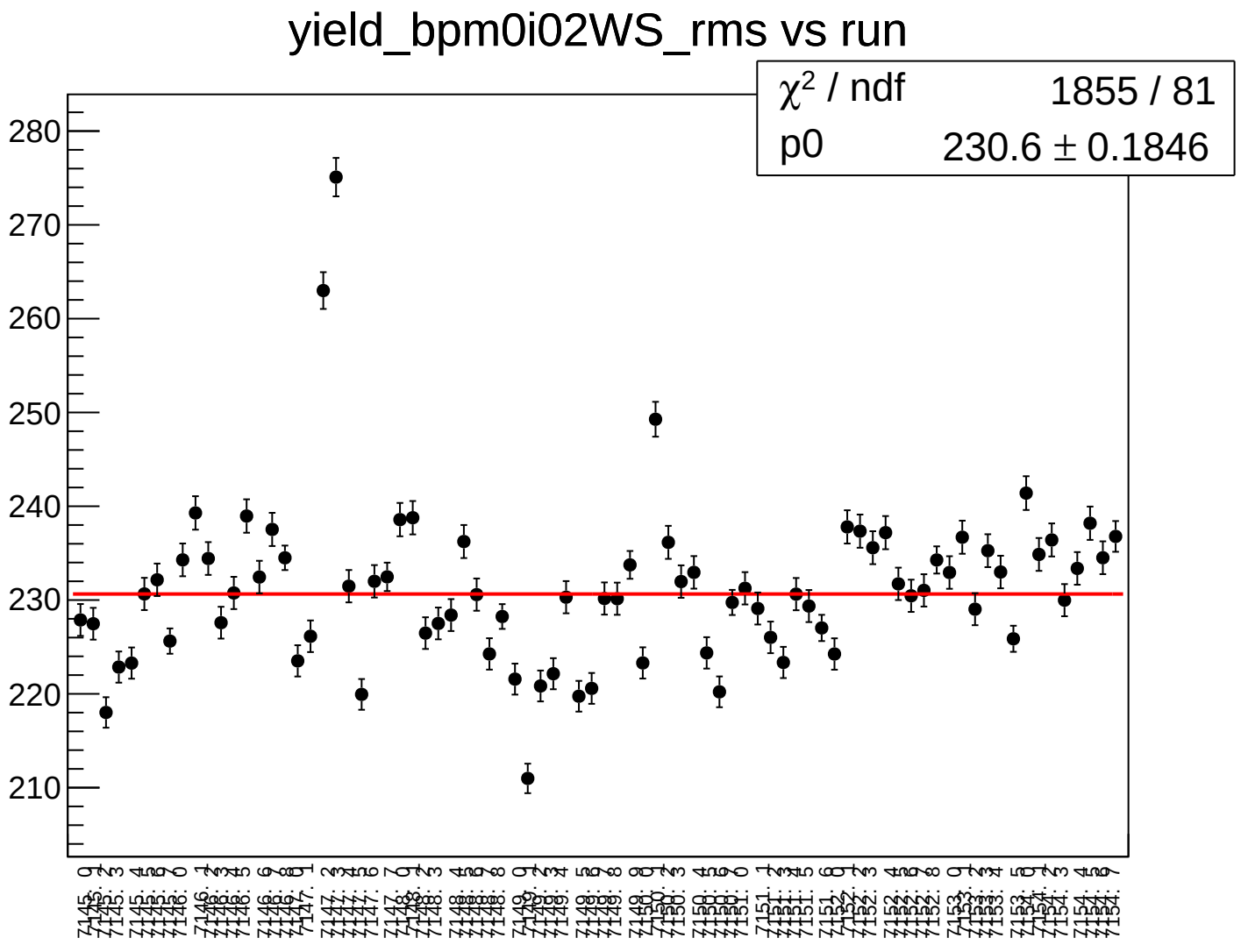

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 9.4e+04 / 81
p0 1.324e+05 ± 0.4211
132.8
132.7
132.6
132.5
132.4
132.3
132.2
132.1
pull
Entries 82
Mean −727
Std Dev 771.3
100
80
60
40
20
0
−20
−40
−60
−80

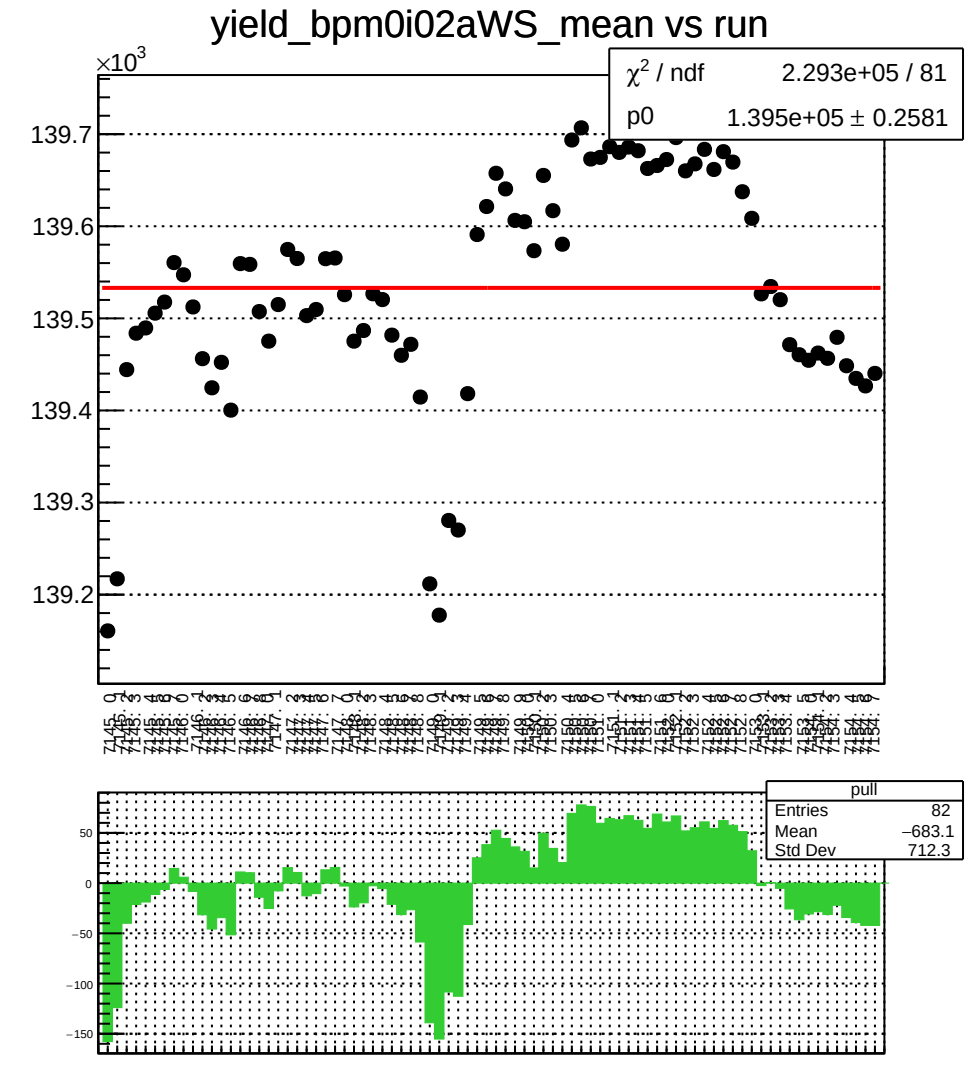

pull1D
Entries 82
Mean −0.1206
Std Dev 4.925
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

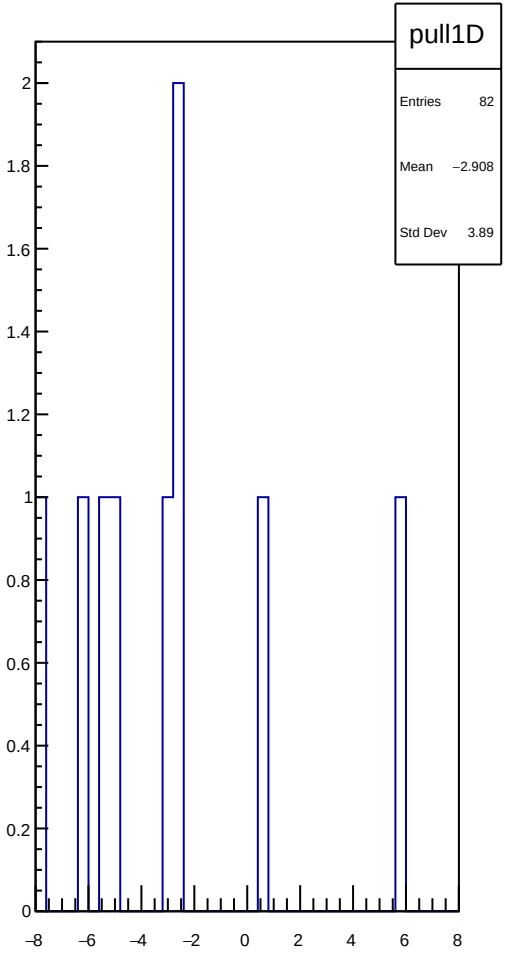

yield_bpm0r05WS_rms vs run
χ² / ndf 2185 / 81
p0 372.1 ± 0.2978
410
400
390
380
370
360
350
340

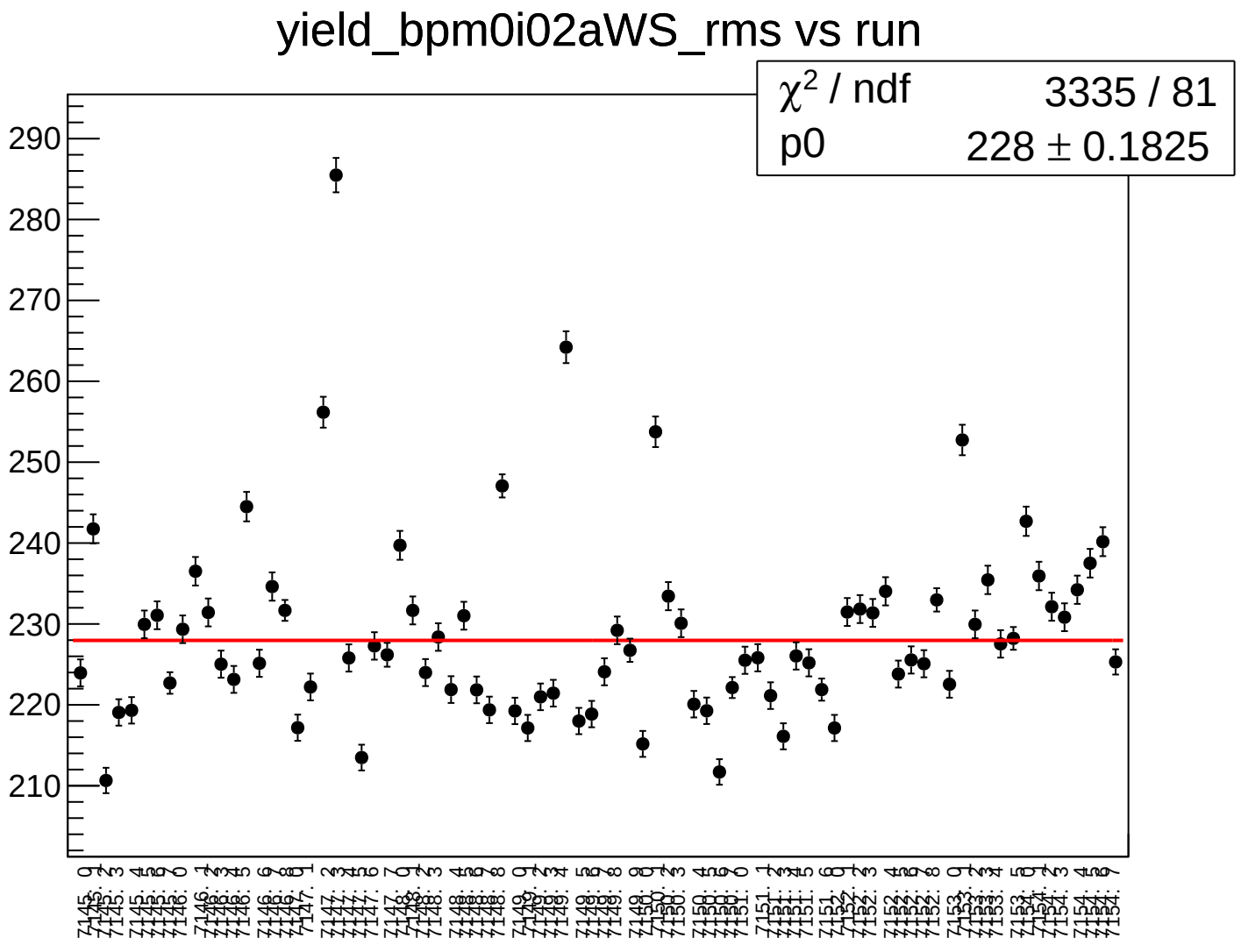

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 6.476e+04 / 81
p0 1.418e+05 ± 0.261
141.9
141.85
141.8
141.75
141.7
141.65
141.6
pull
Entries 82
Mean 6.374e+04
Std Dev 6.369e+04
40
20
0
−20
−40
−60

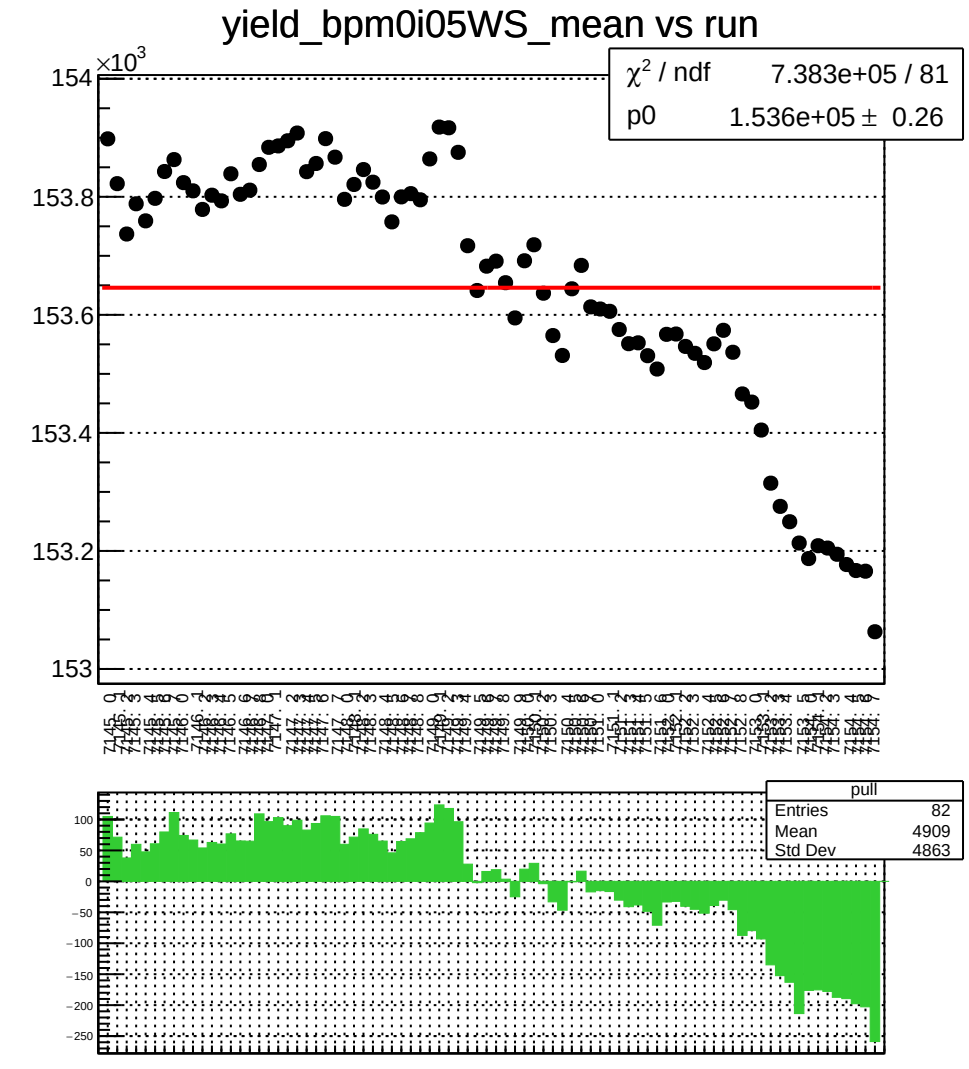

pull1D
Entries 82
Mean 2.429
Std Dev 4.44
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

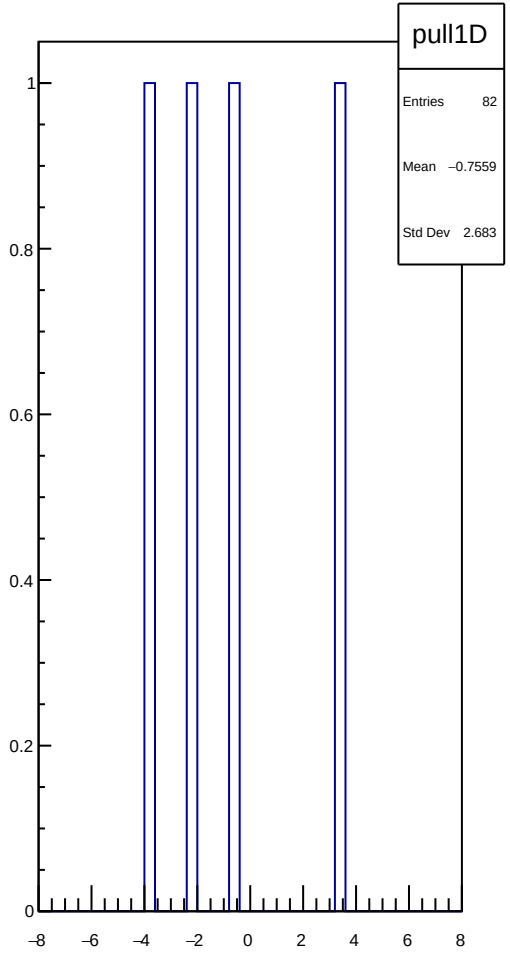

yield_bpm0i02WS_rms vs run
χ² / ndf 1855 / 81
p0 230.6 ± 0.1846
280
270
260
250
240
230
220
210

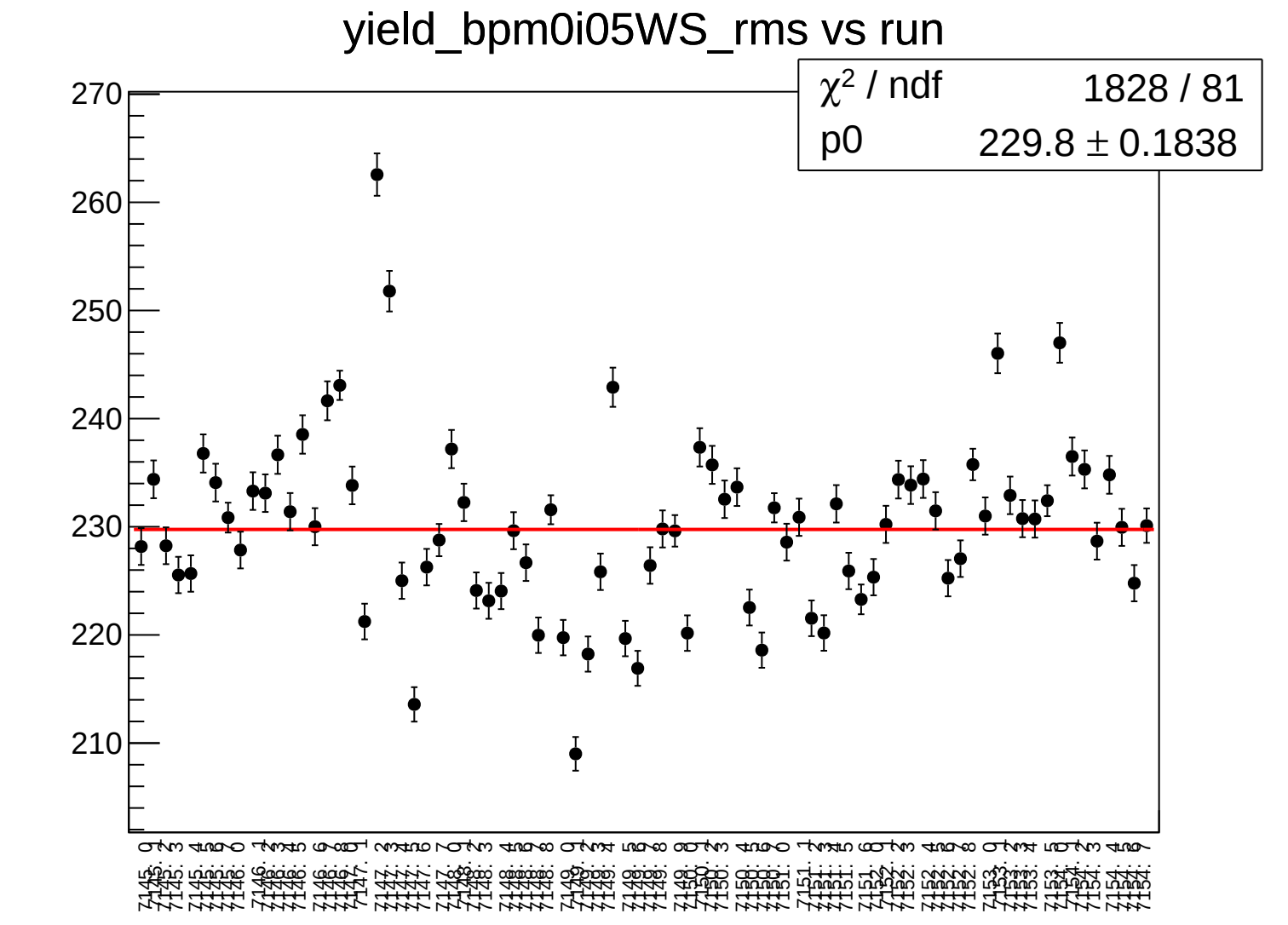

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 2.293e+05 / 81
p0 1.395e+05 ± 0.2581
139.7
139.6
139.5
139.4
139.3
139.2
pull
Entries 82
Mean −683.1
Std Dev 712.3
50
0
−50
−100
−150

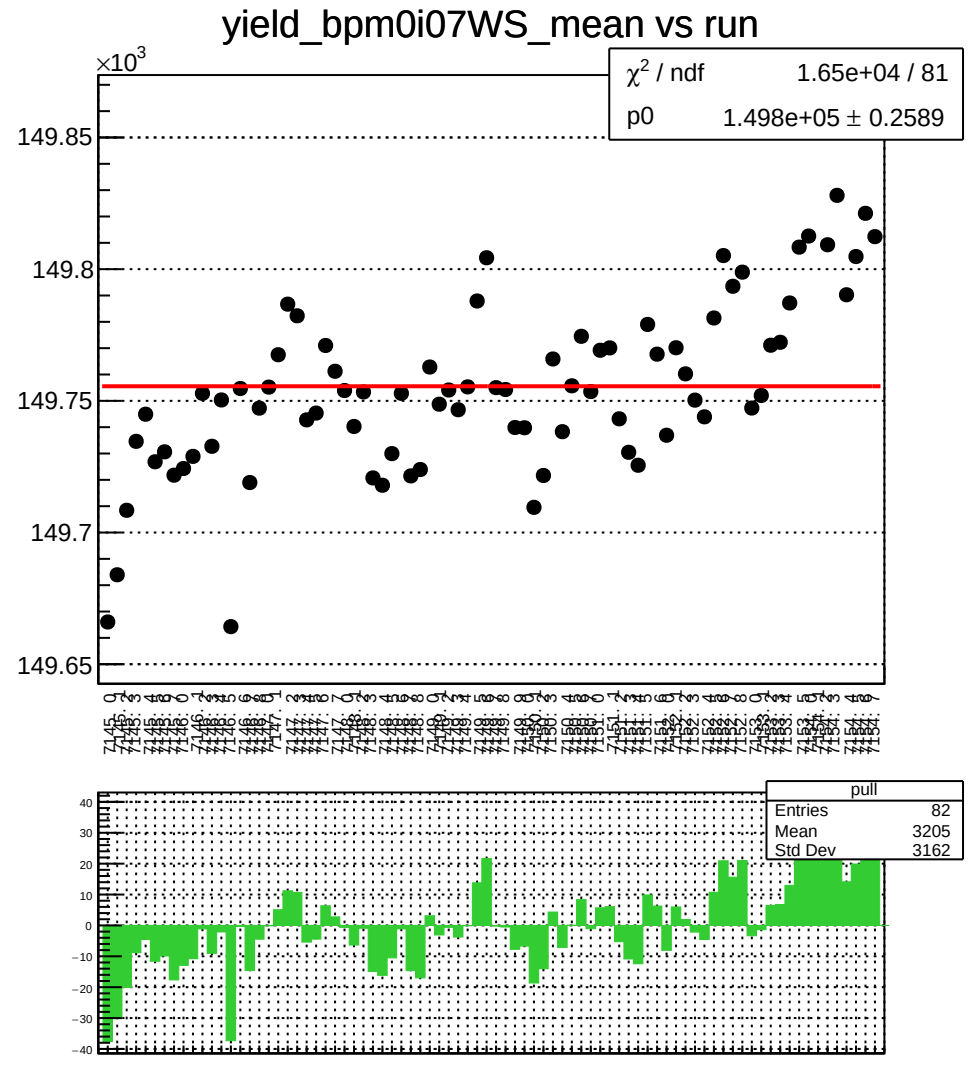

pull1D
Entries 82
Mean −2.908
Std Dev 3.89
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

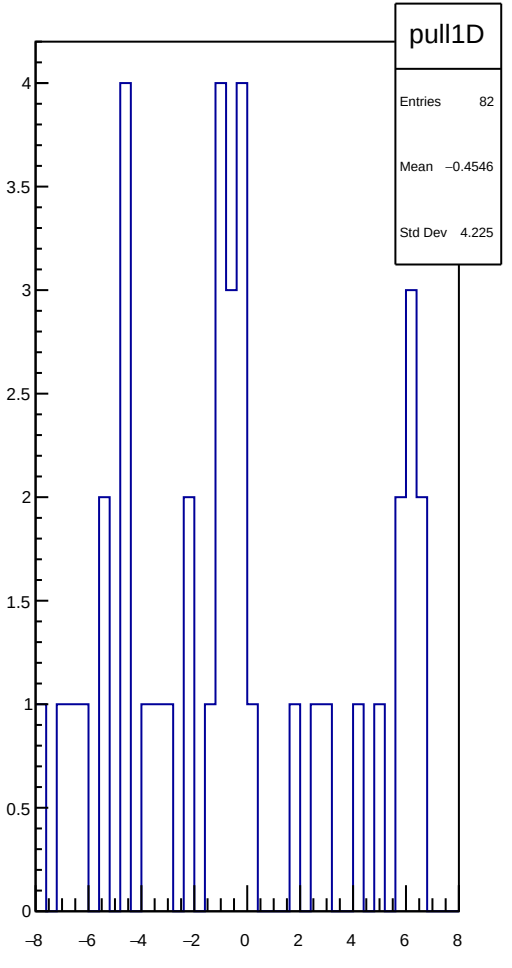

yield_bpm0i02aWS_rms vs run
χ² / ndf 3335 / 81
p0 228 ± 0.1825
290
280
270
260
250
240
230
220
210

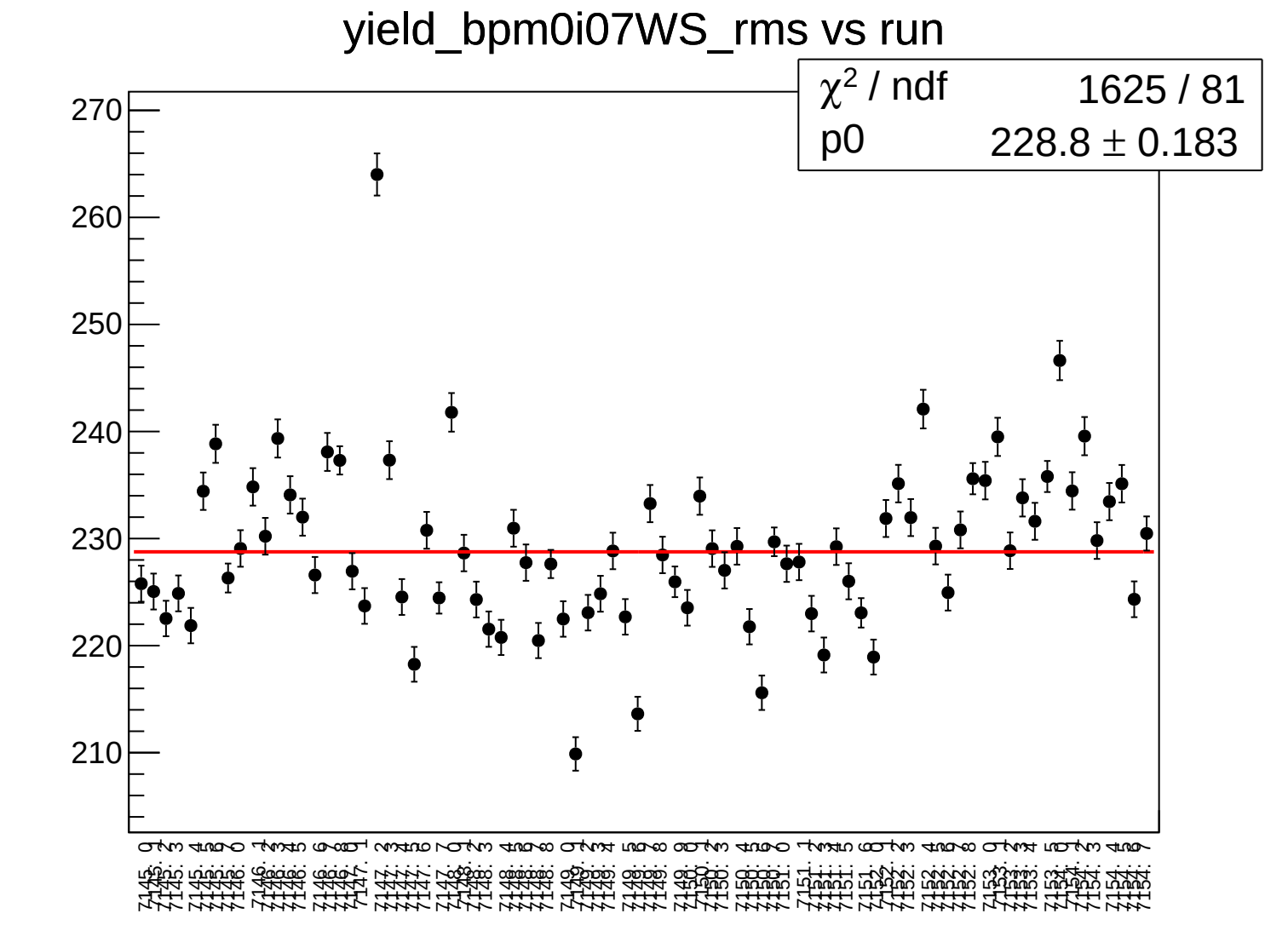

yield_bpm0i05WS_mean vs run
×10^3
154
153.8
153.6
153.4
153.2
153
χ² / ndf 7.383e+05 / 81
p0 1.536e+05 ± 0.26
pull
Entries 82
Mean 4909
Std Dev 4863
100
50
0
−50
−100
−150
−200
−250

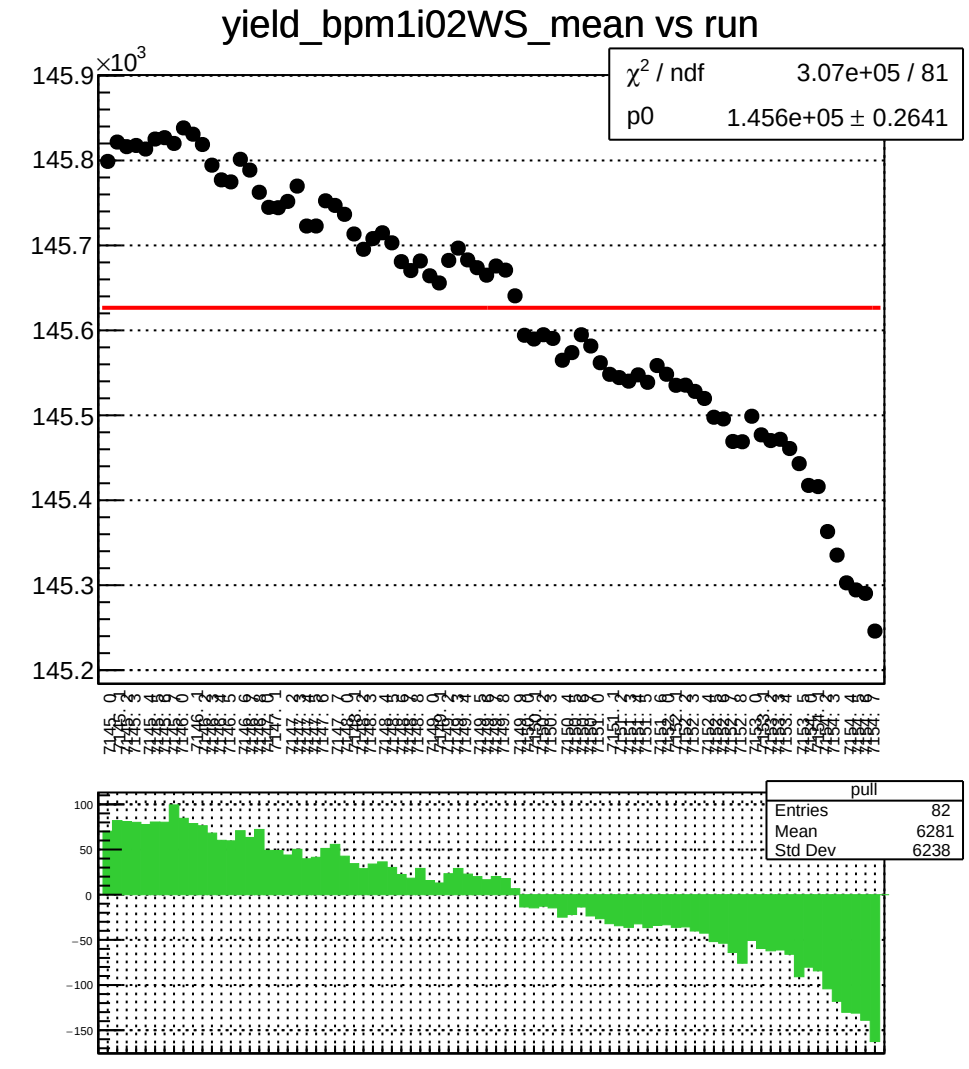

pull1D
Entries 82
Mean −0.7559
Std Dev 2.683
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

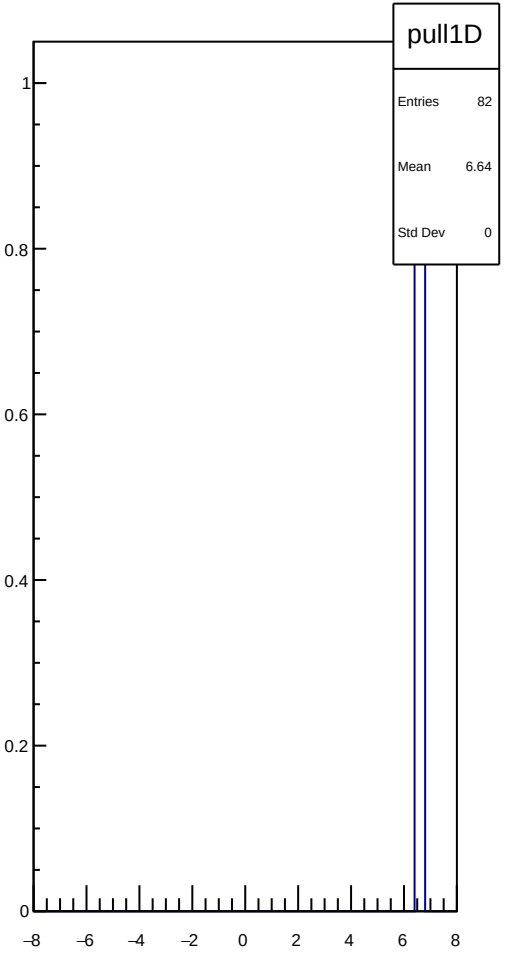

yield_bpm0i05WS_rms vs run
χ² / ndf 1828 / 81
p0 229.8 ± 0.1838
270
260
250
240
230
220
210

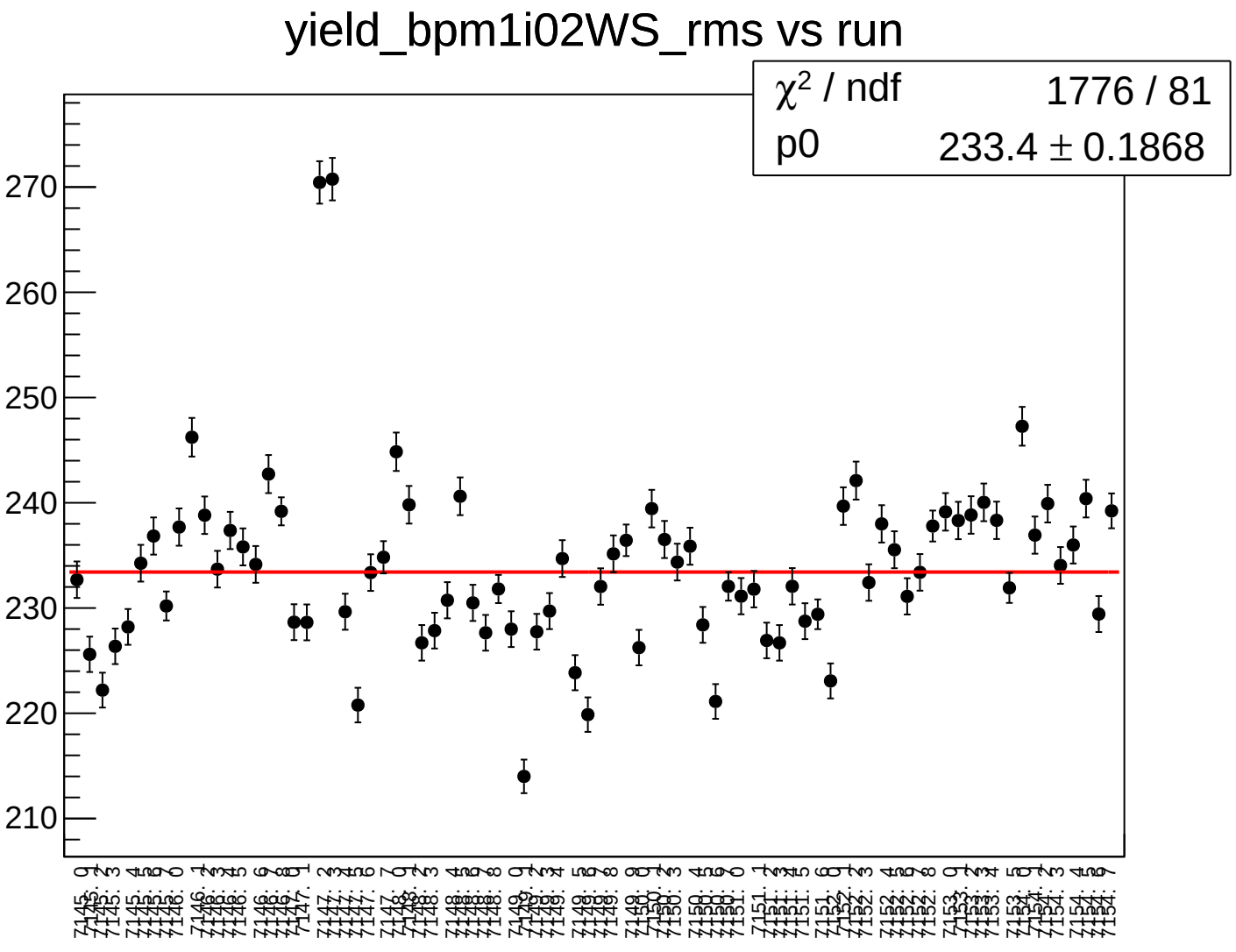

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 1.65e+04 / 81
p0 1.498e+05 ± 0.2589
149.85
149.8
149.75
149.7
149.65
pull
Entries 82
Mean 3205
Std Dev 3162
40
30
20
10
0
−10
−20
−30
−40

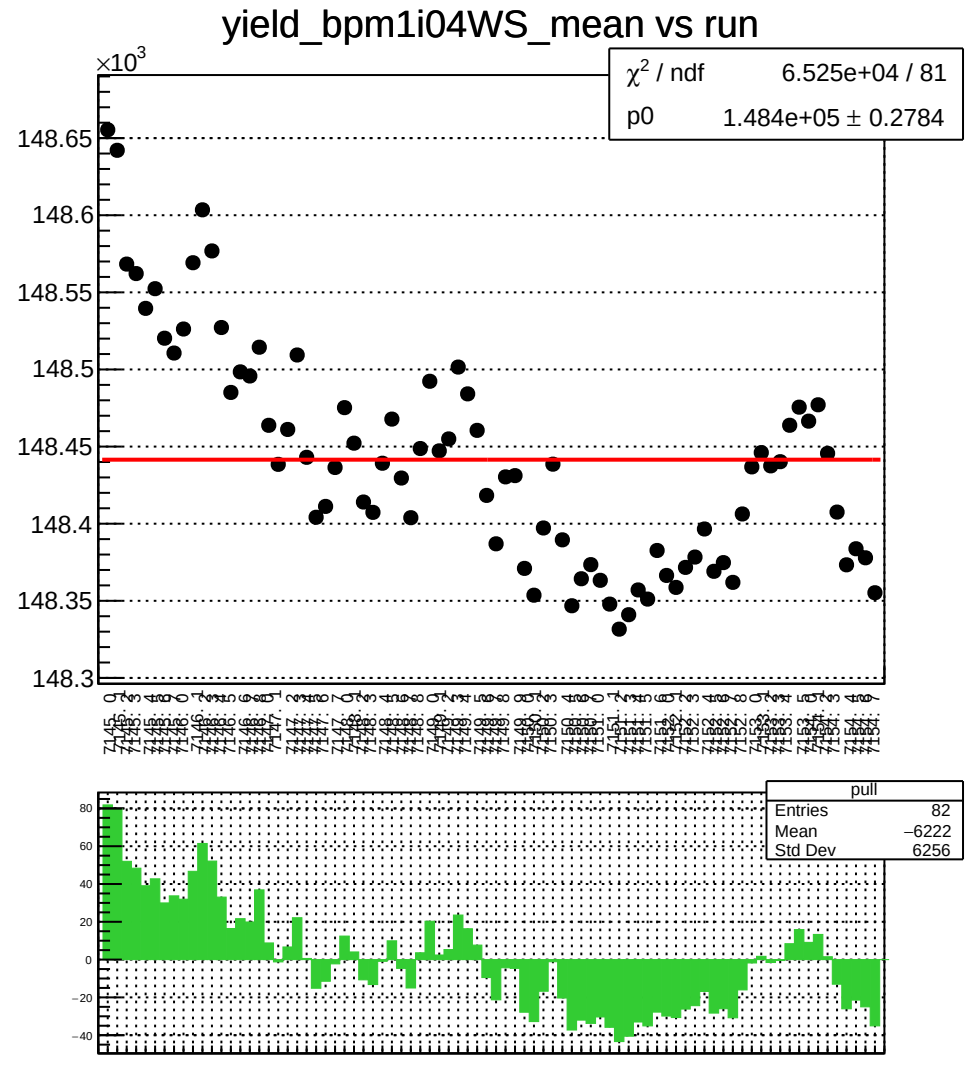

pull1D
Entries 82
Mean −0.4546
Std Dev 4.225
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

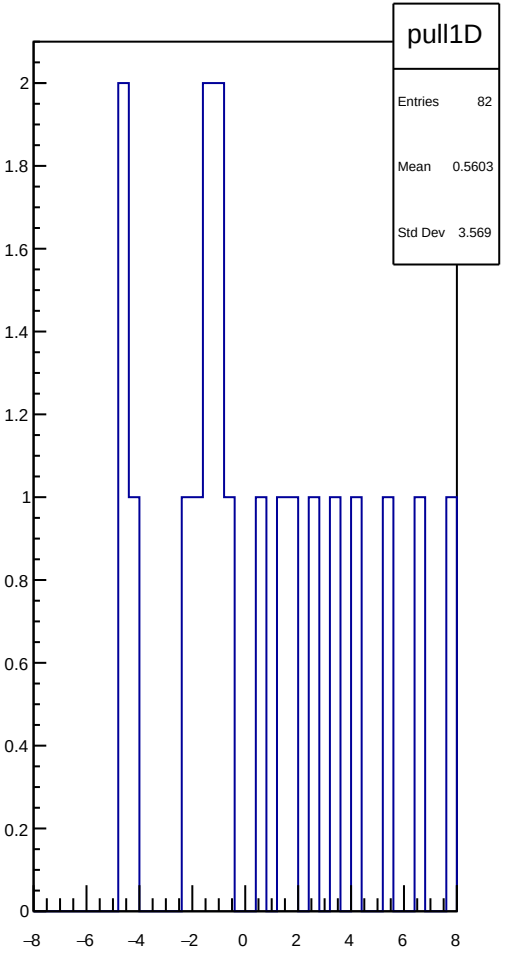

yield_bpm0i07WS_rms vs run
χ² / ndf 1625 / 81
p0 228.8 ± 0.183
270
260
250
240
230
220
210

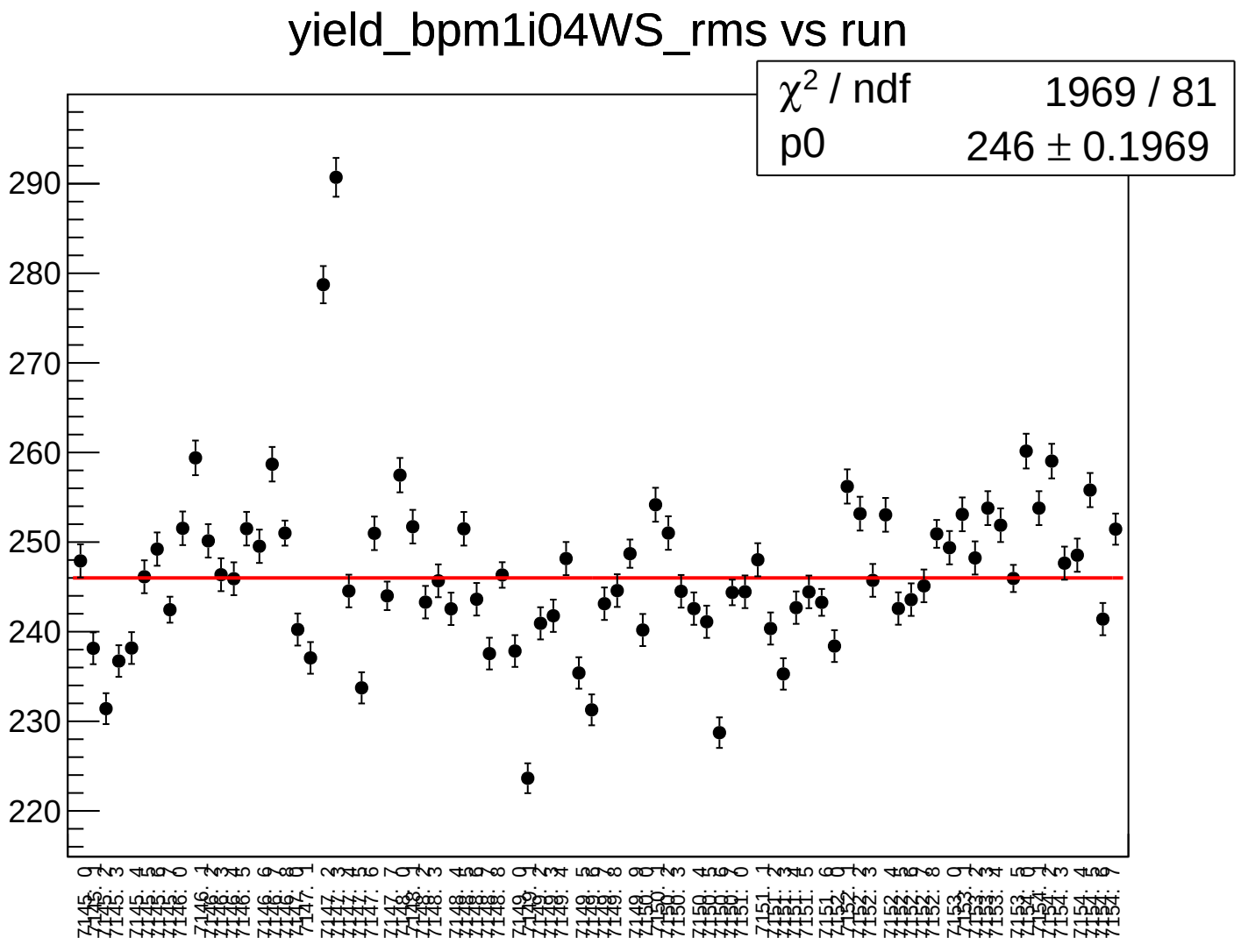

yield_bpm1i02WS_mean vs run
χ² / ndf 3.07e+05 / 81
p0 1.456e+05 ± 0.2641
×10³
145.9
145.8
145.7
145.6
145.5
145.4
145.3
145.2
pull
Entries 82
Mean 6281
Std Dev 6238
100
50
0
−50
−100
−150

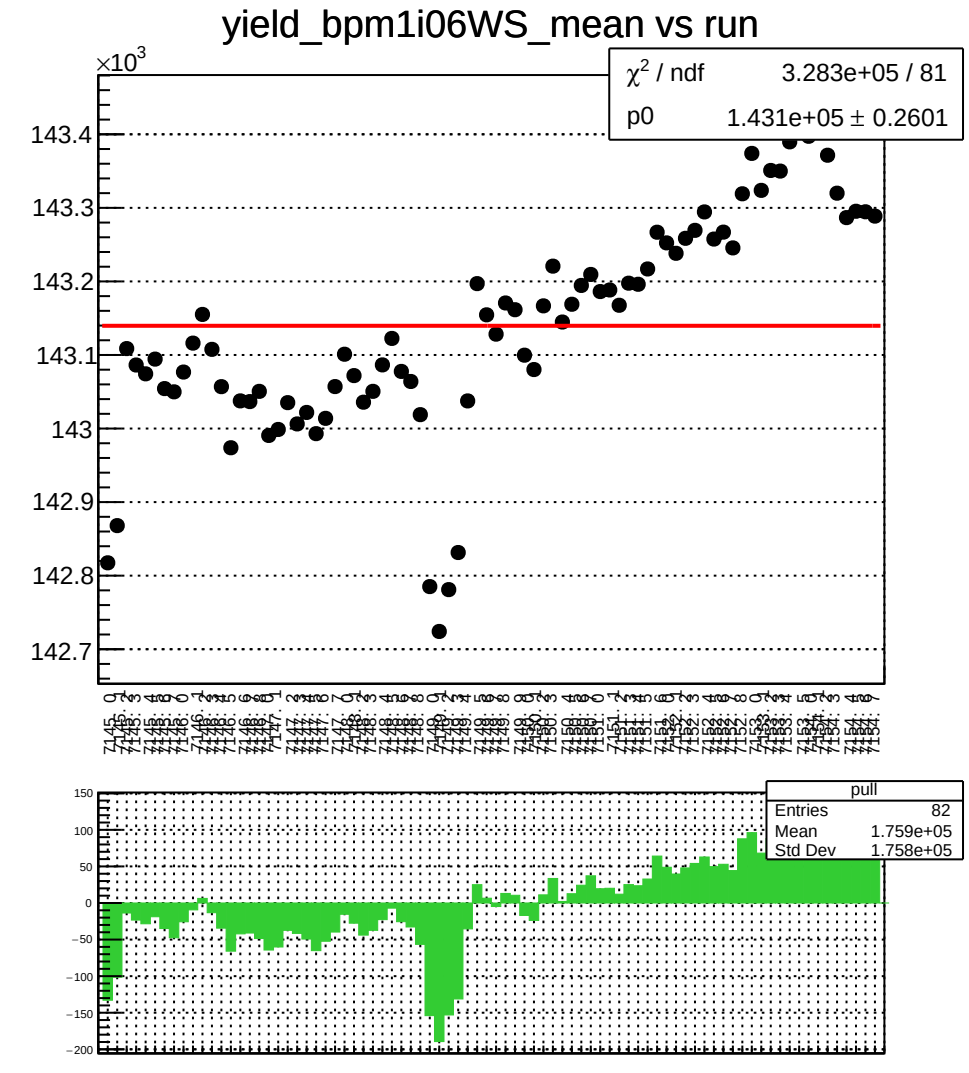

pull1D
Entries 82
Mean 6.64
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

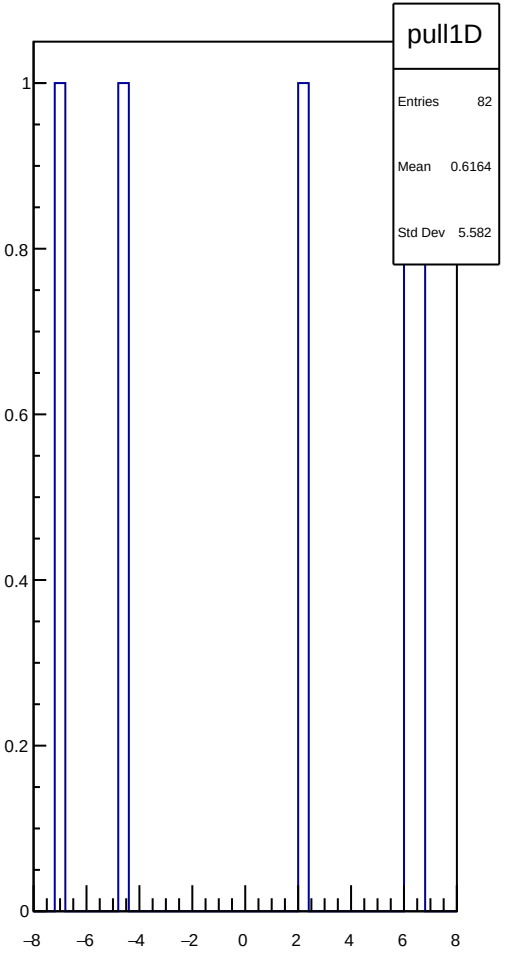

yield_bpm1i02WS_rms vs run
χ² / ndf 1776 / 81
p0 233.4 ± 0.1868
270
260
250
240
230
220
210

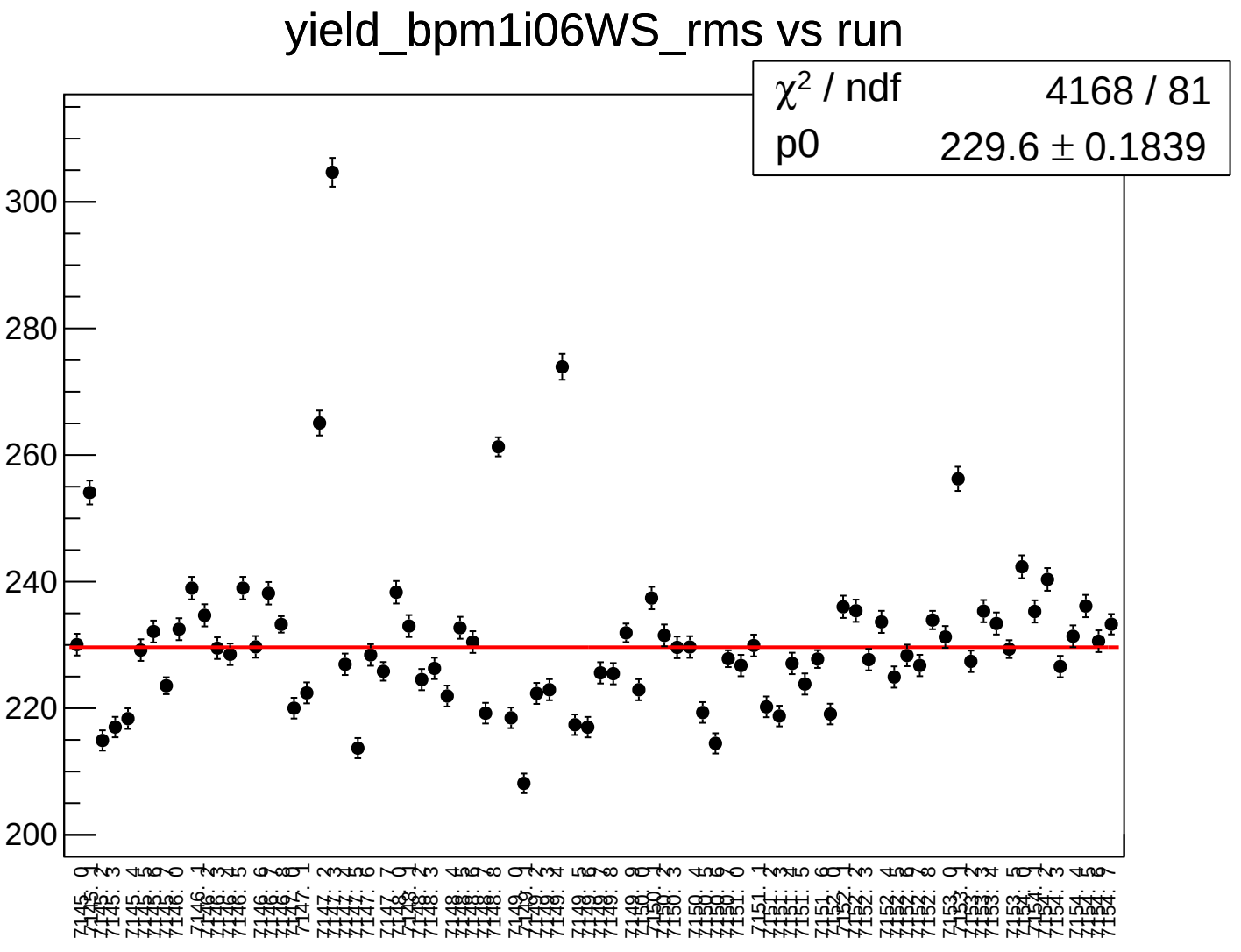

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 6.525e+04 / 81
p0 1.484e+05 ± 0.2784
148.65
148.6
148.55
148.5
148.45
148.4
148.35
148.3
pull
Entries 82
Mean −6222
Std Dev 6256
80
60
40
20
0
−20
−40

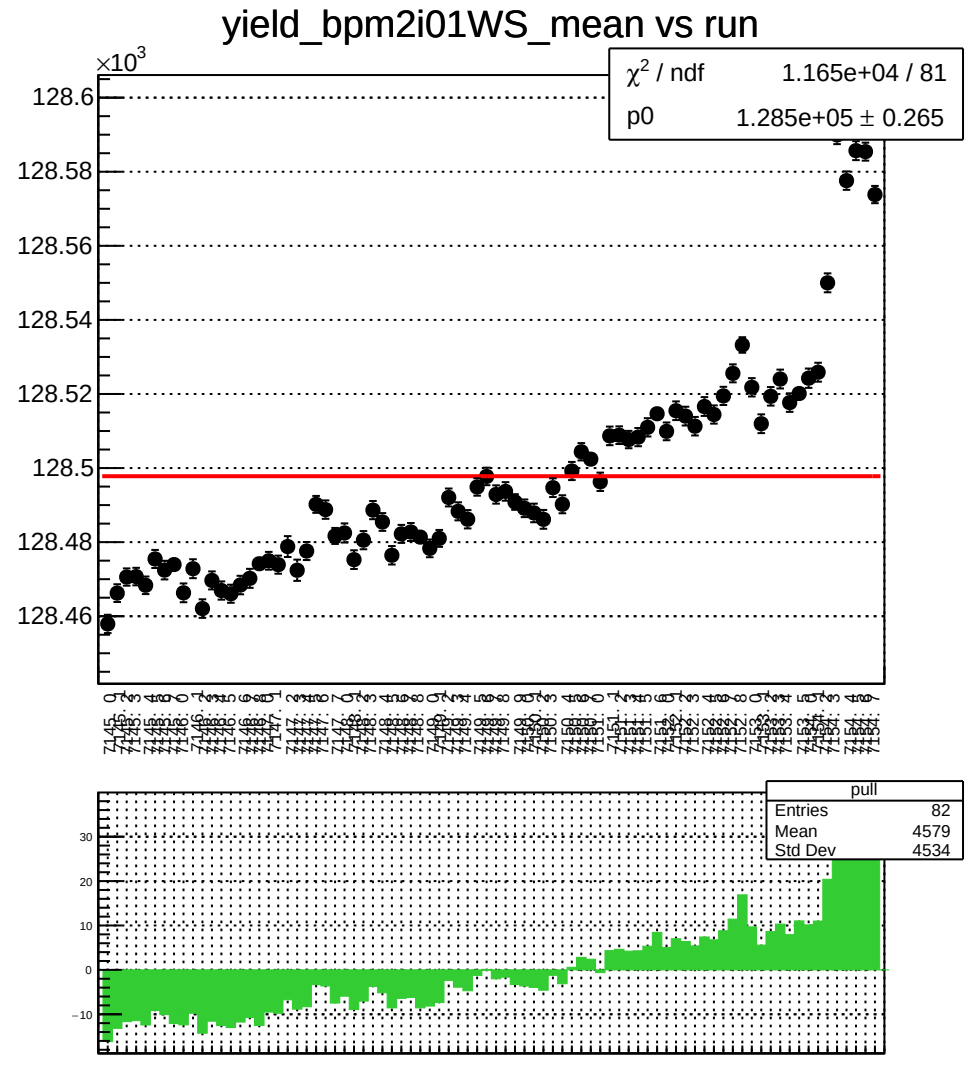

pull1D
Entries 82
Mean 0.5603
Std Dev 3.569
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

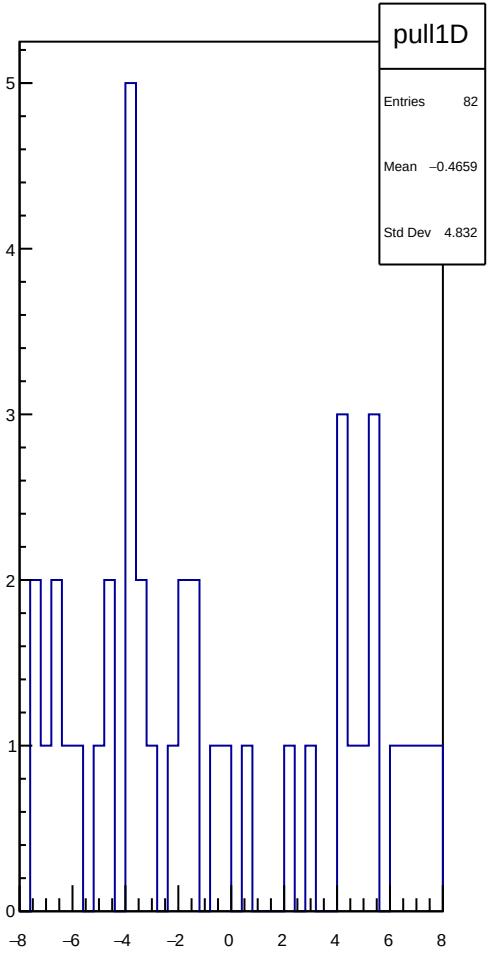

yield_bpm1i04WS_rms vs run
χ² / ndf 1969 / 81
p0 246 ± 0.1969
290
280
270
260
250
240
230
220

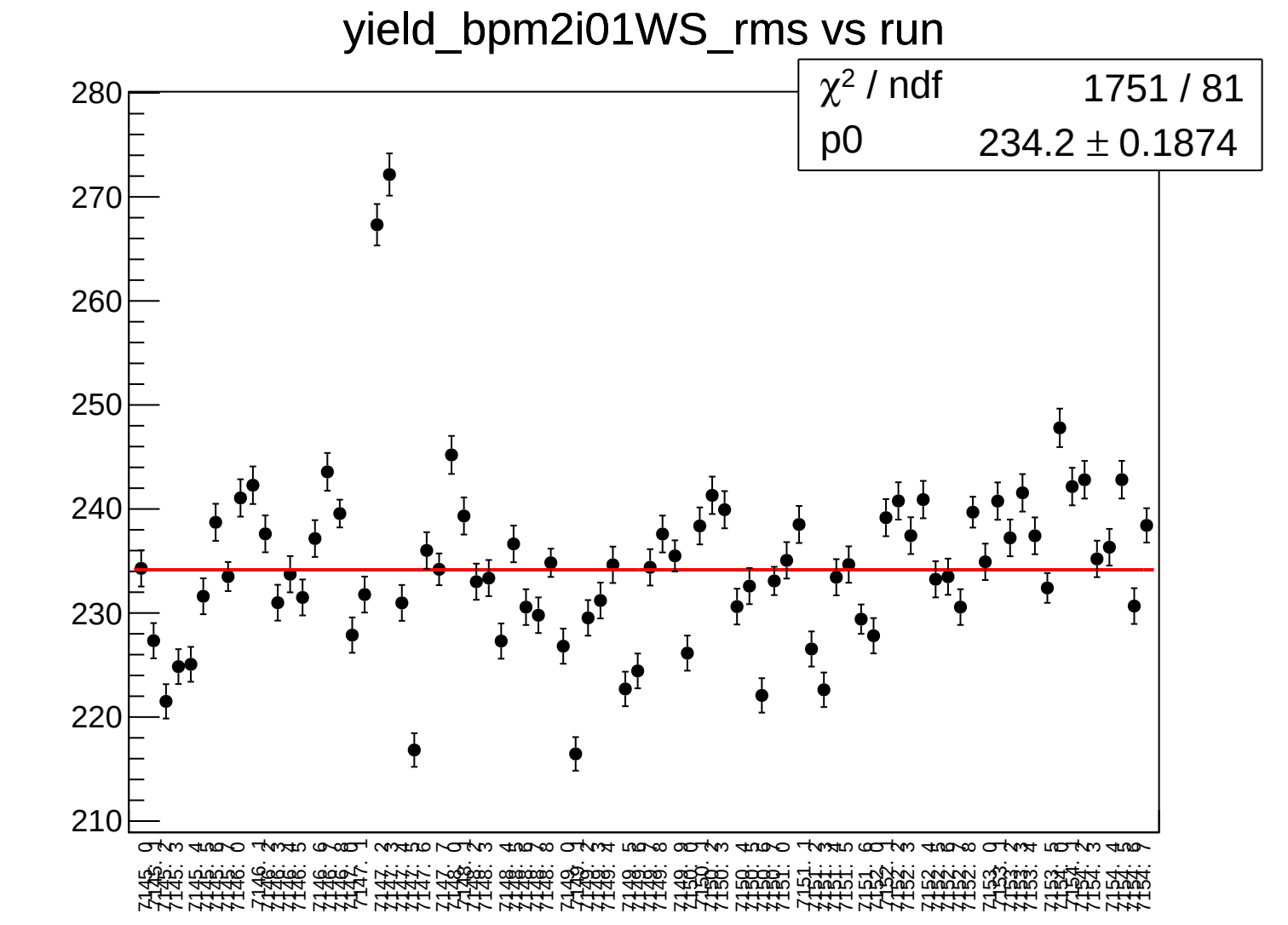

yield_bpm1i06WS_mean vs run
×10^3
χ^2 / ndf 3.283e+05 / 81
p0 1.431e+05 ± 0.2601
143.4
143.3
143.2
143.1
143
142.9
142.8
142.7
pull
Entries 82
Mean 1.759e+05
Std Dev 1.758e+05
150
100
50
0
−50
−100
−150
−200

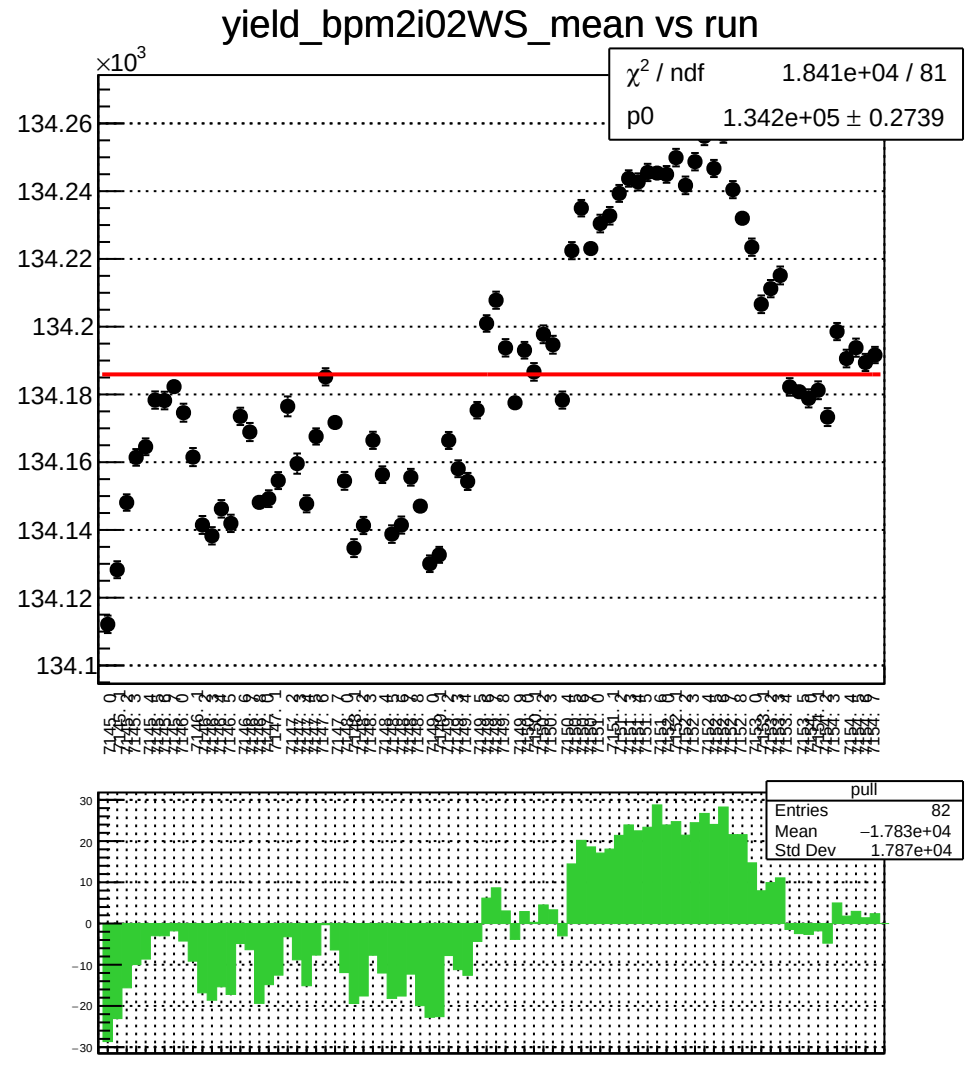

pull1D
Entries 82
Mean 0.6164
Std Dev 5.582
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

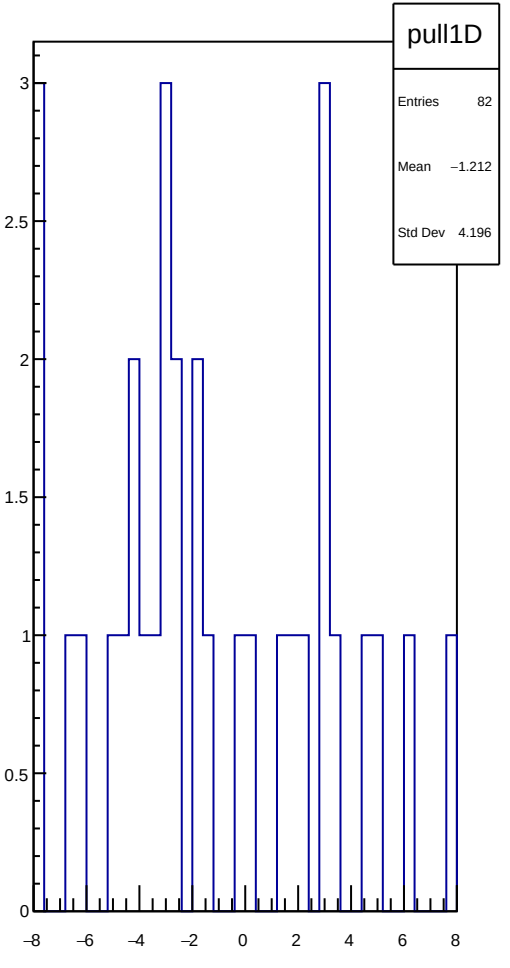

yield_bpm1i06WS_rms vs run
χ² / ndf 4168 / 81
p0 229.6 ± 0.1839
300
280
260
240
220
200

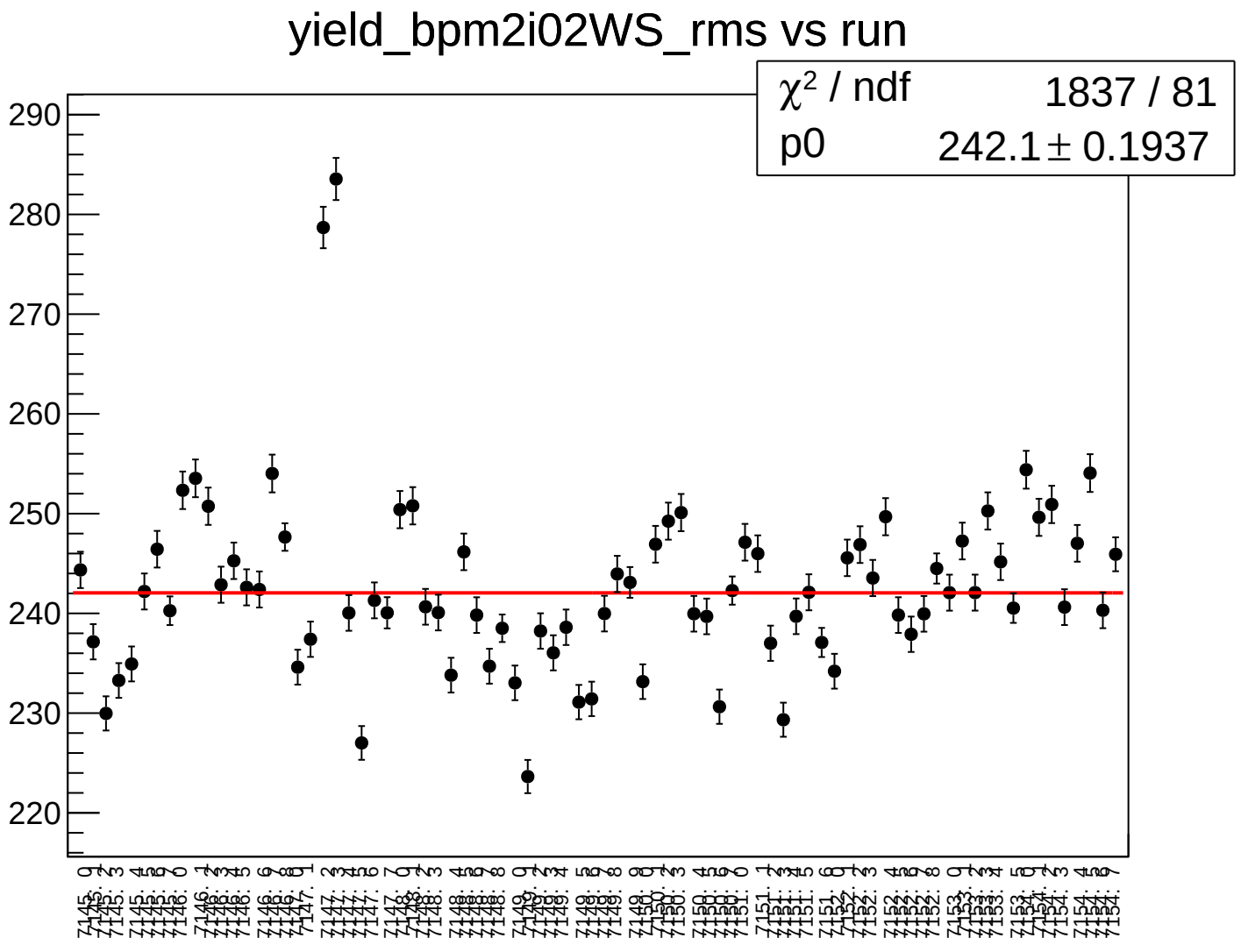

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 1.165e+04 / 81
p0 1.285e+05 ± 0.265
128.6
128.58
128.56
128.54
128.52
128.5
128.48
128.46
pull
Entries 82
Mean 4579
Std Dev 4534
30
20
10
0
−10

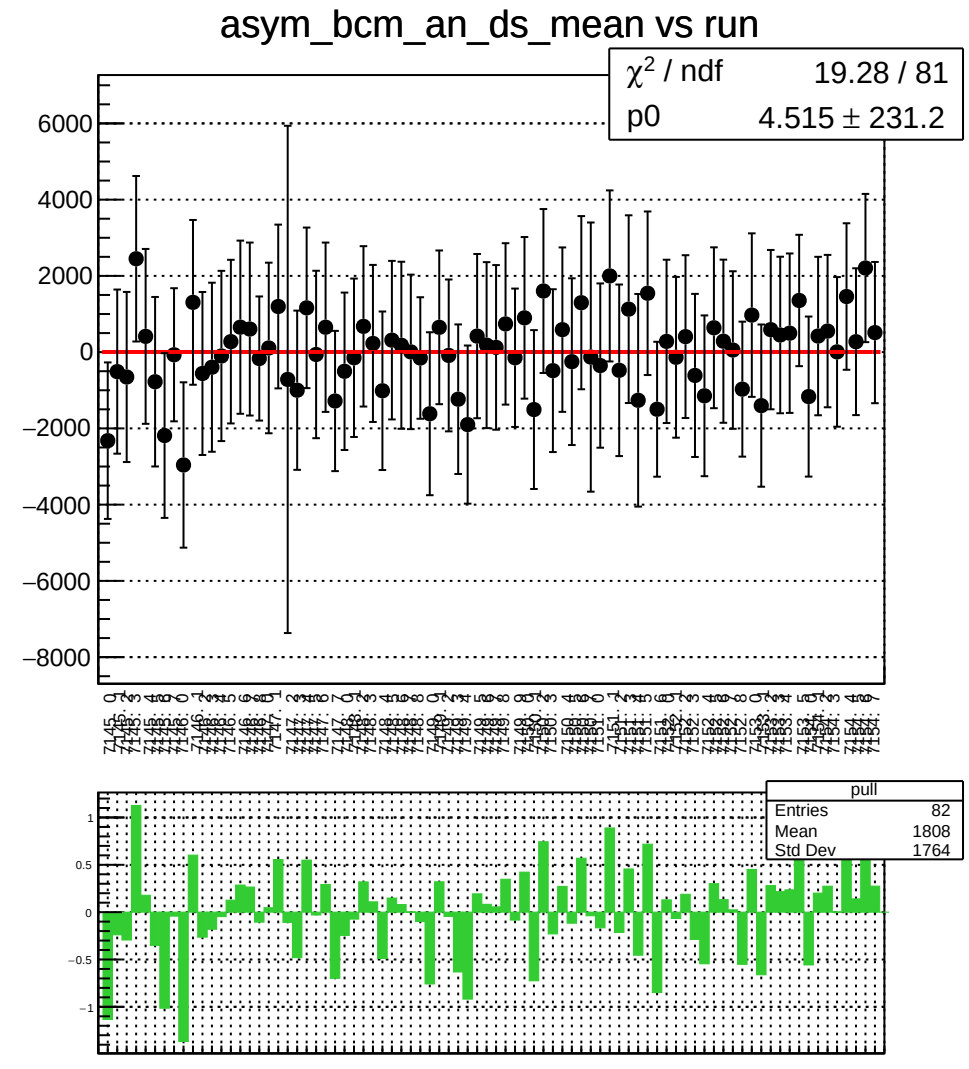

pull1D
Entries 82
Mean −0.4659
Std Dev 4.832
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

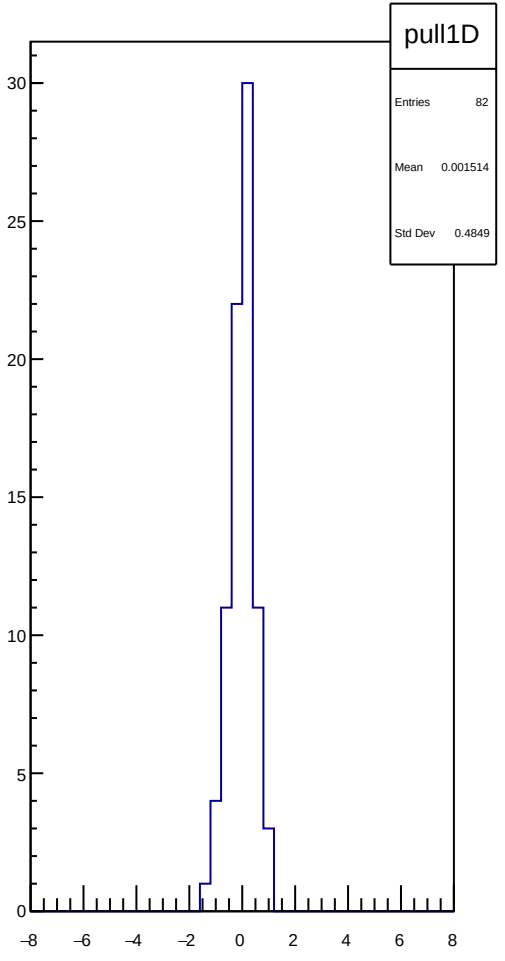

yield_bpm2i01WS_rms vs run
χ² / ndf 1751 / 81
p0 234.2 ± 0.1874
280
270
260
250
240
230
220
210

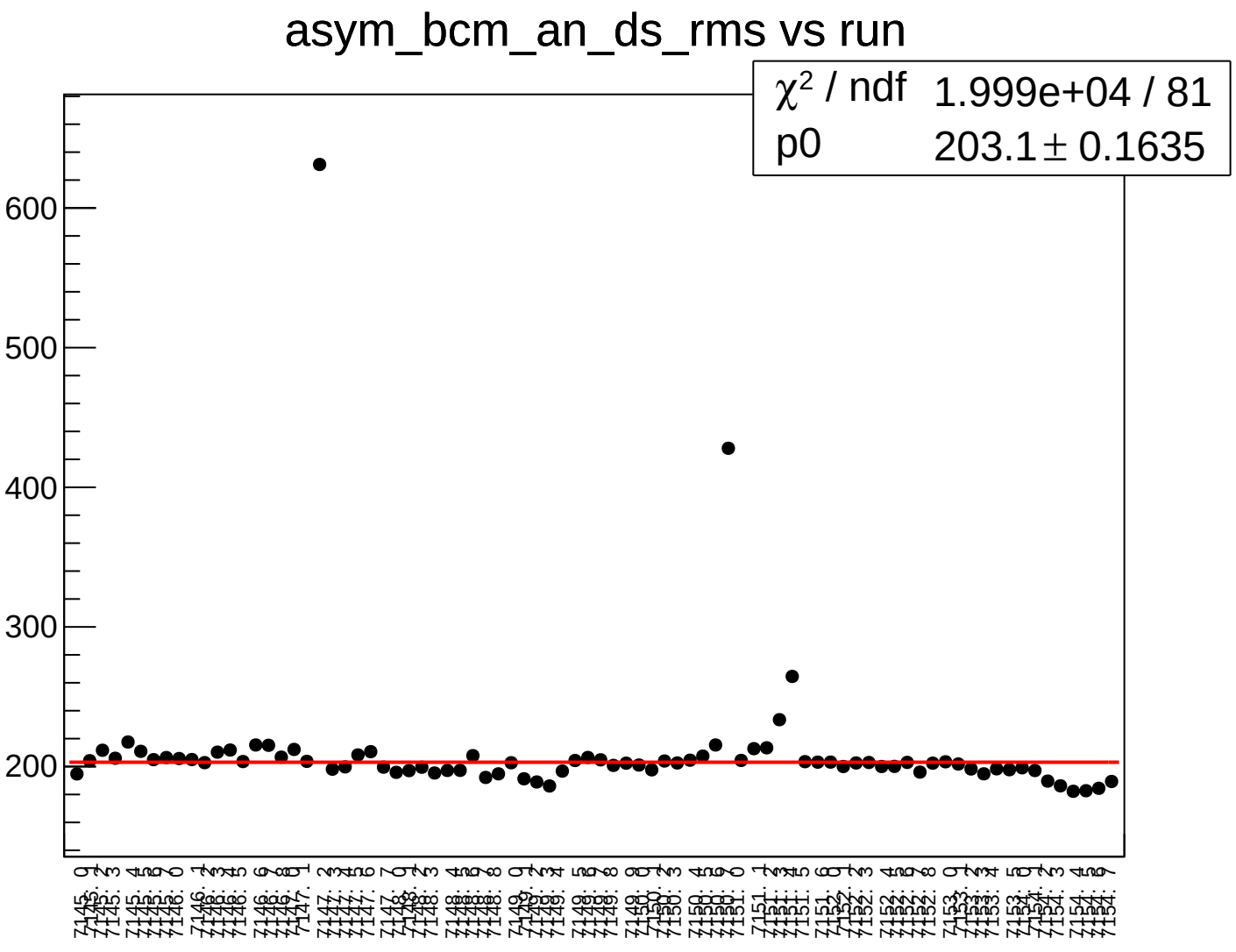

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 1.841e+04 / 81
p0 1.342e+05 ± 0.2739
134.26
134.24
134.22
134.2
134.18
134.16
134.14
134.12
134.1
pull
Entries 82
Mean −1.783e+04
Std Dev 1.787e+04
30
20
10
0
−10
−20
−30

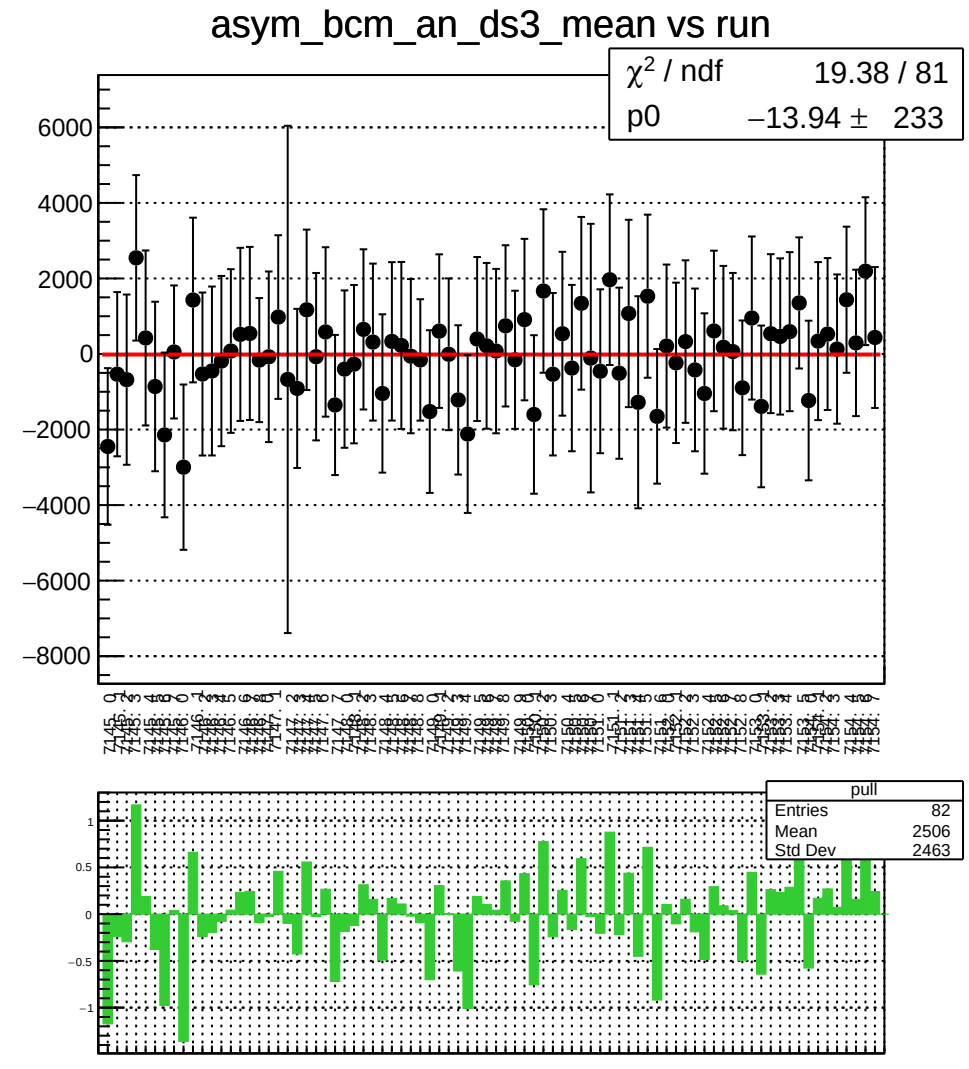

pull1D
Entries 82
Mean −1.212
Std Dev 4.196
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

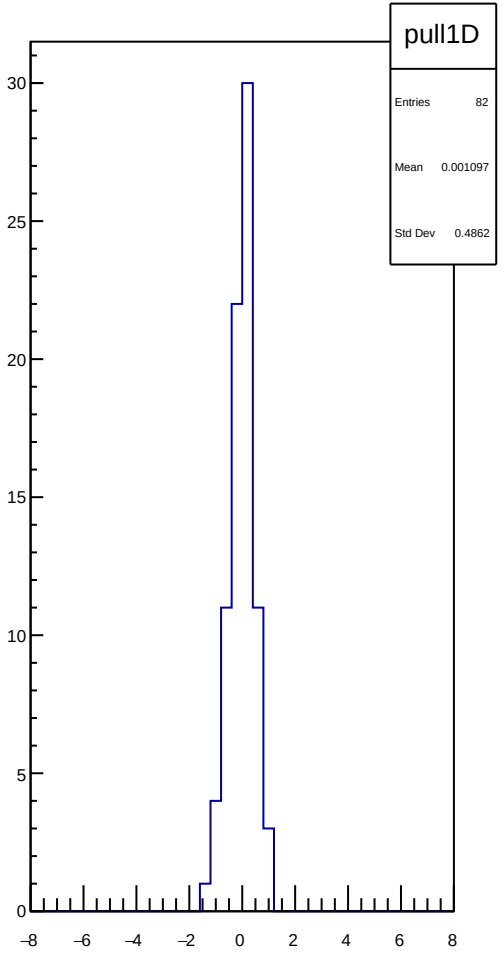

yield_bpm2i02WS_rms vs run
χ² / ndf 1837 / 81
p0 242.1 ± 0.1937
290
280
270
260
250
240
230
220

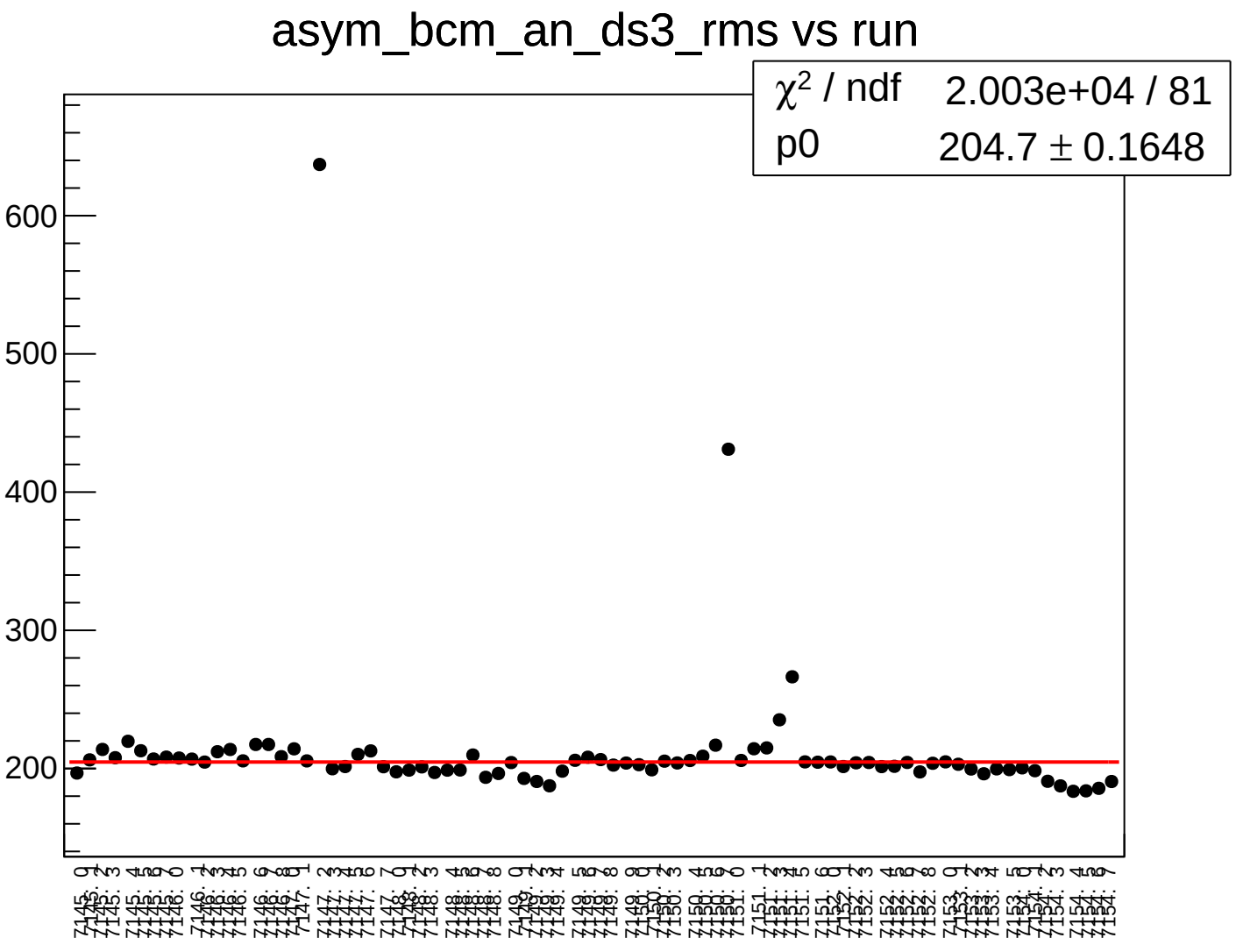

asym_bcm_an_ds_mean vs run
χ² / ndf 19.28 / 81
p0 4.515 ± 231.2
pull
Entries 82
Mean 1808
Std Dev 1764

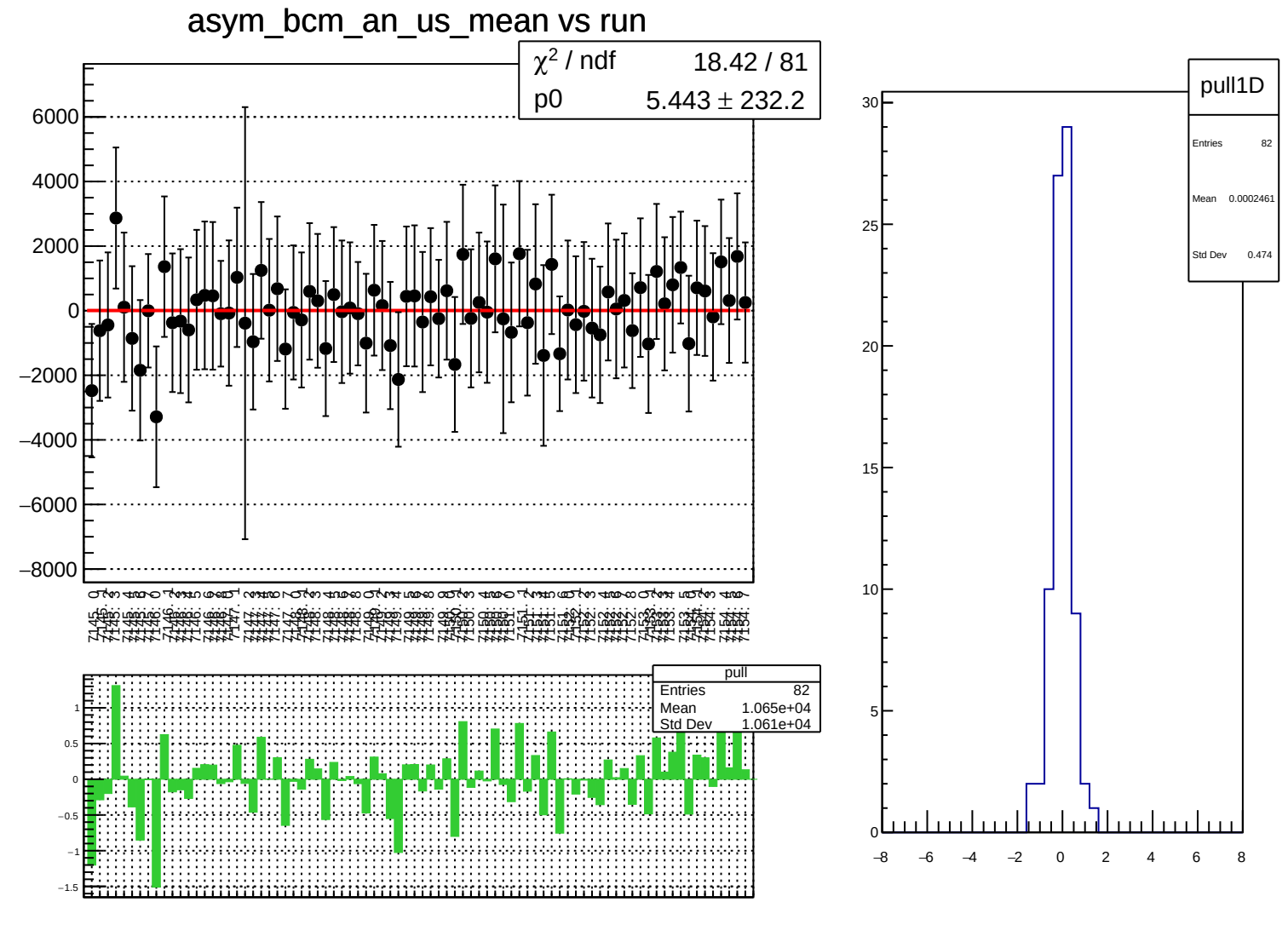

pull1D
Entries 82
Mean 0.001514
Std Dev 0.4849

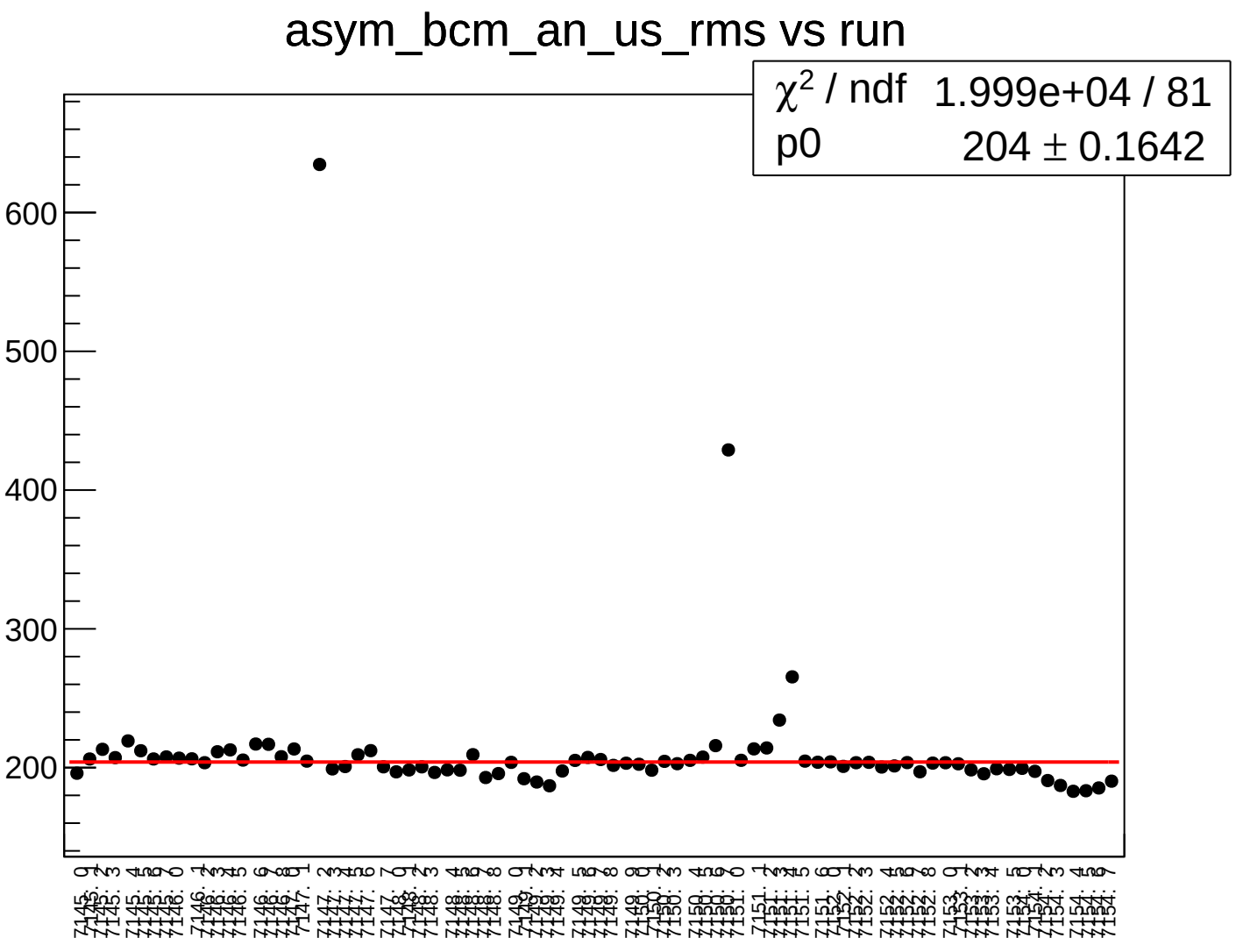

asym_bcm_an_ds_rms vs run
χ² / ndf 1.999e+04 / 81
p0 203.1 ± 0.1635
600
500
400
300
200

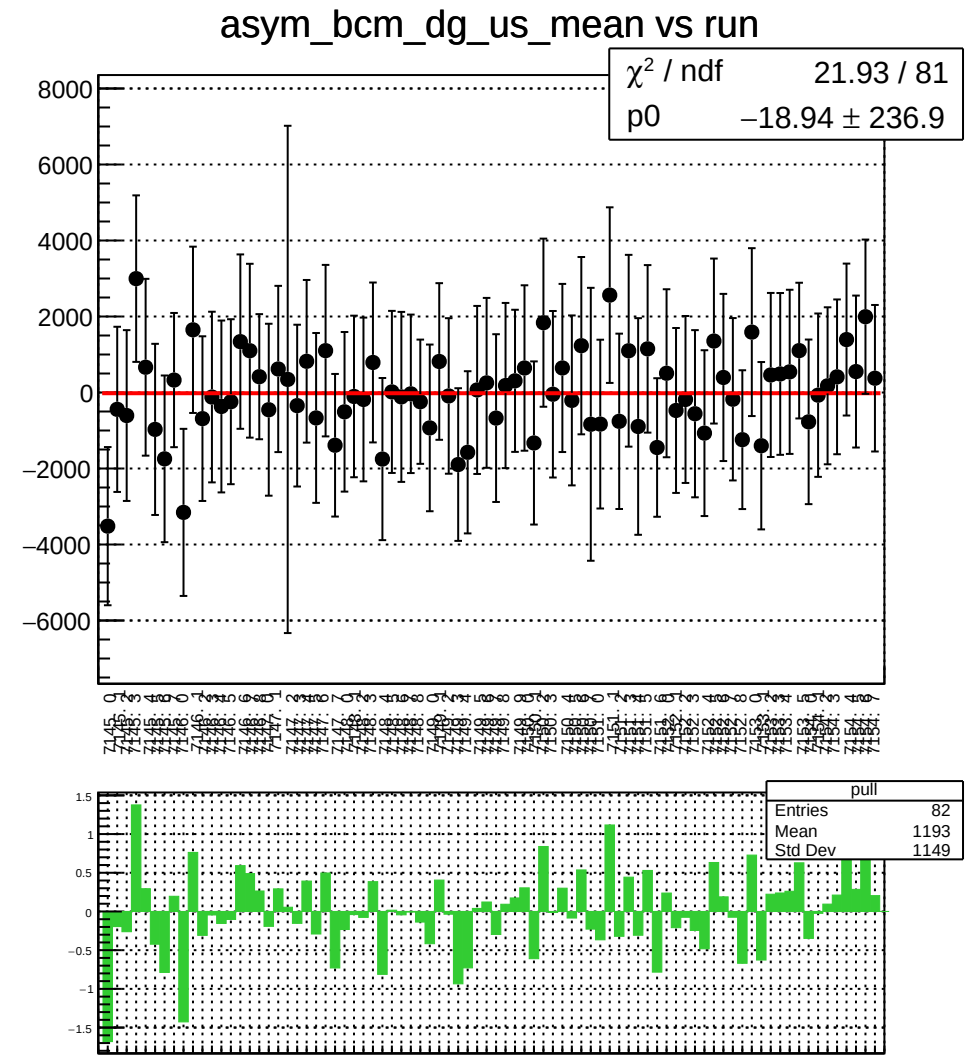

asym_bcm_an_ds3_mean vs run
χ² / ndf 19.38 / 81
p0 −13.94 ± 233
pull
Entries 82
Mean 2506
Std Dev 2463

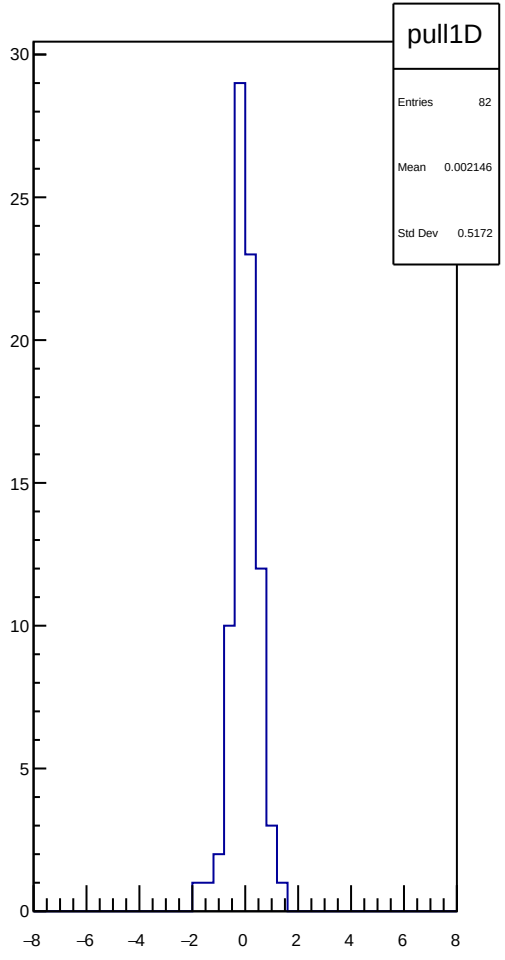

pull1D
Entries 82
Mean 0.001097
Std Dev 0.4862

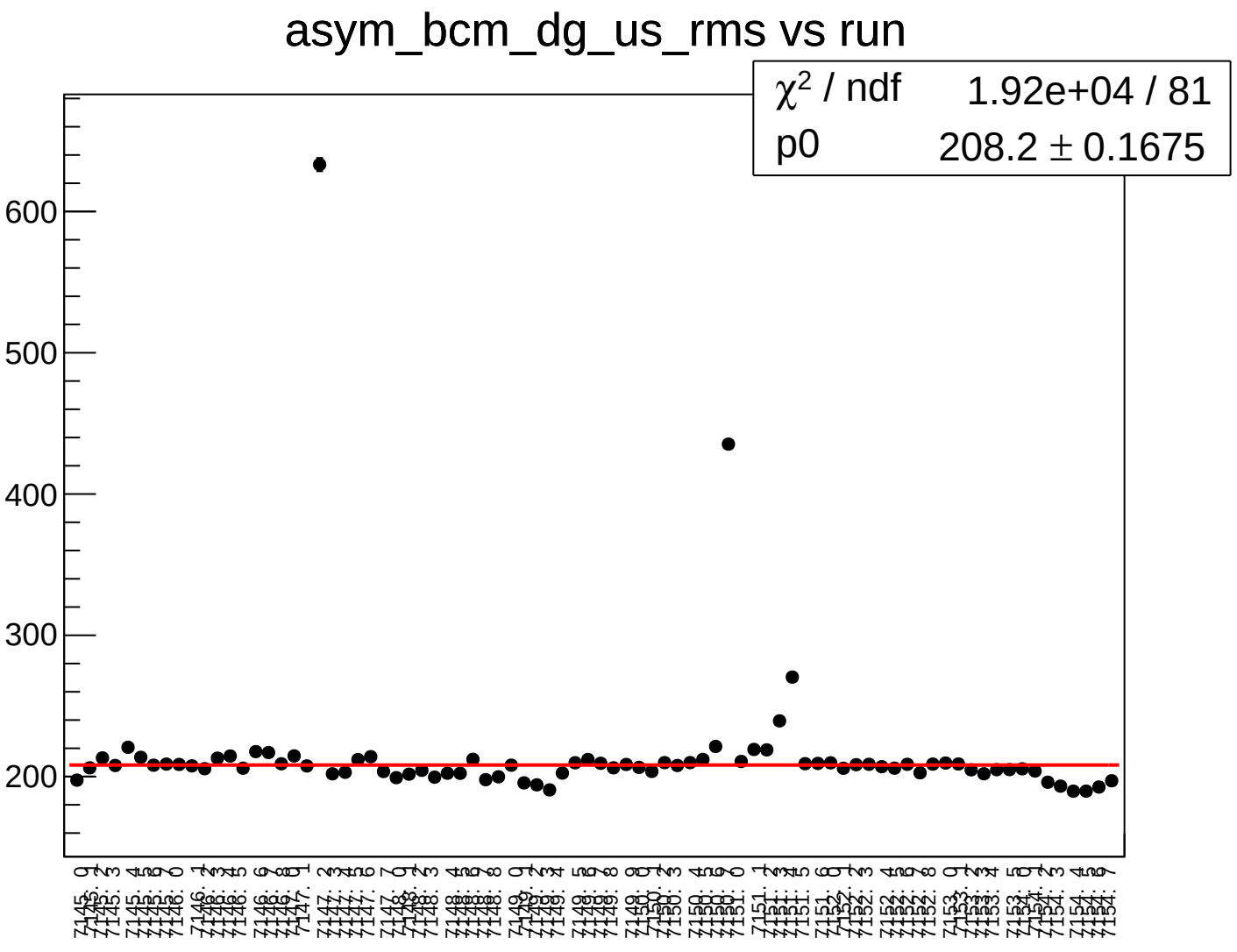

asym_bcm_an_ds3_rms vs run
χ² / ndf 2.003e+04 / 81
p0 204.7 ± 0.1648
600
500
400
300
200

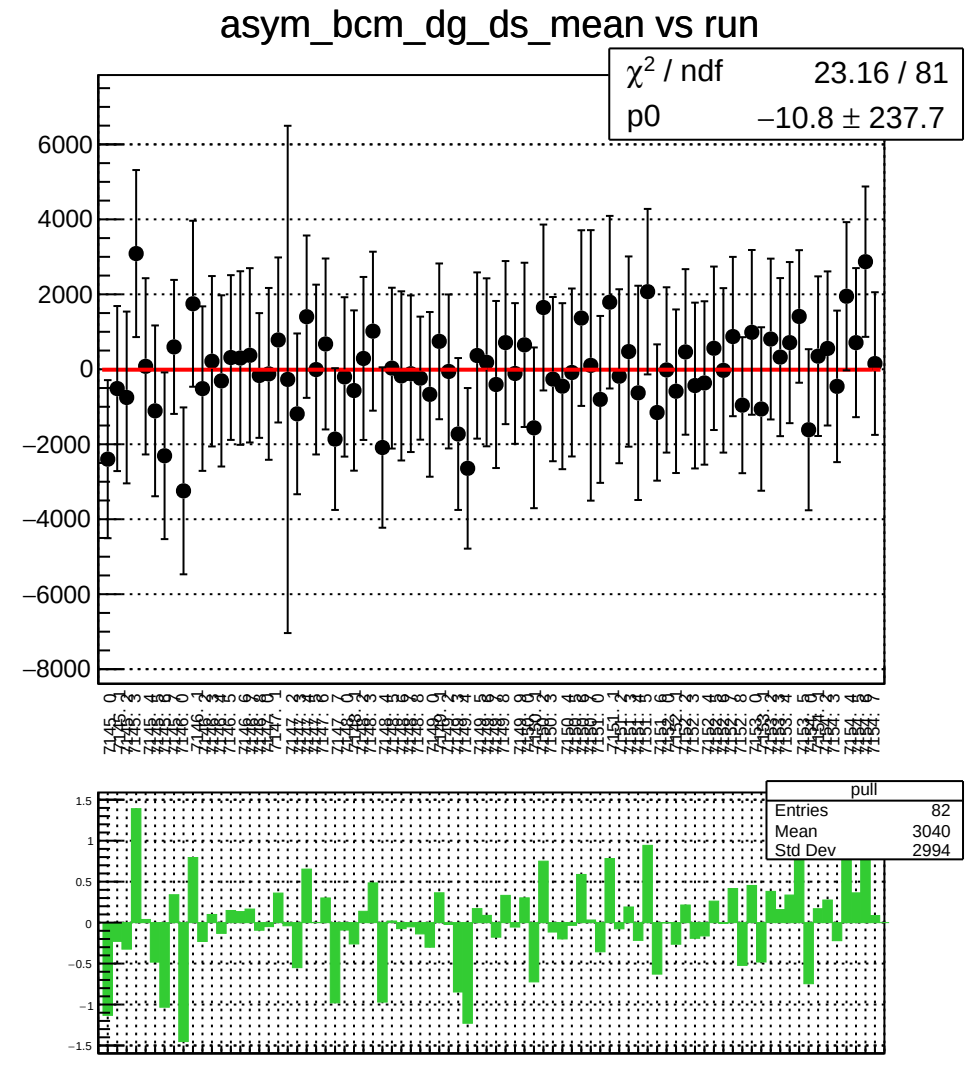

asym_bcm_an_us_mean vs run
χ² / ndf 18.42 / 81
p0 5.443 ± 232.2
pull
Entries 82
Mean 1.065e+04
Std Dev 1.061e+04
pull1D
Entries 82
Mean 0.0002461
Std Dev 0.474

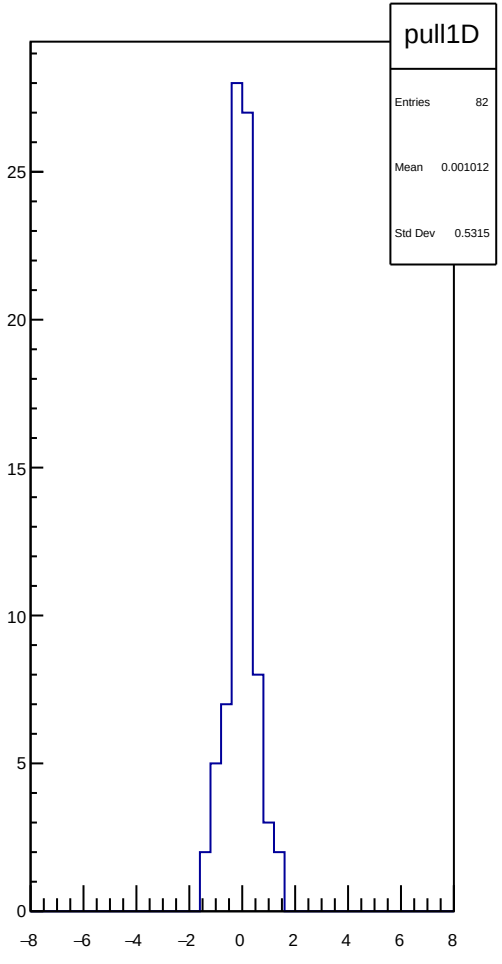

asym_bcm_an_us_rms vs run
χ^2 / ndf 1.999e+04 / 81
p0 204 ± 0.1642
600
500
400
300
200

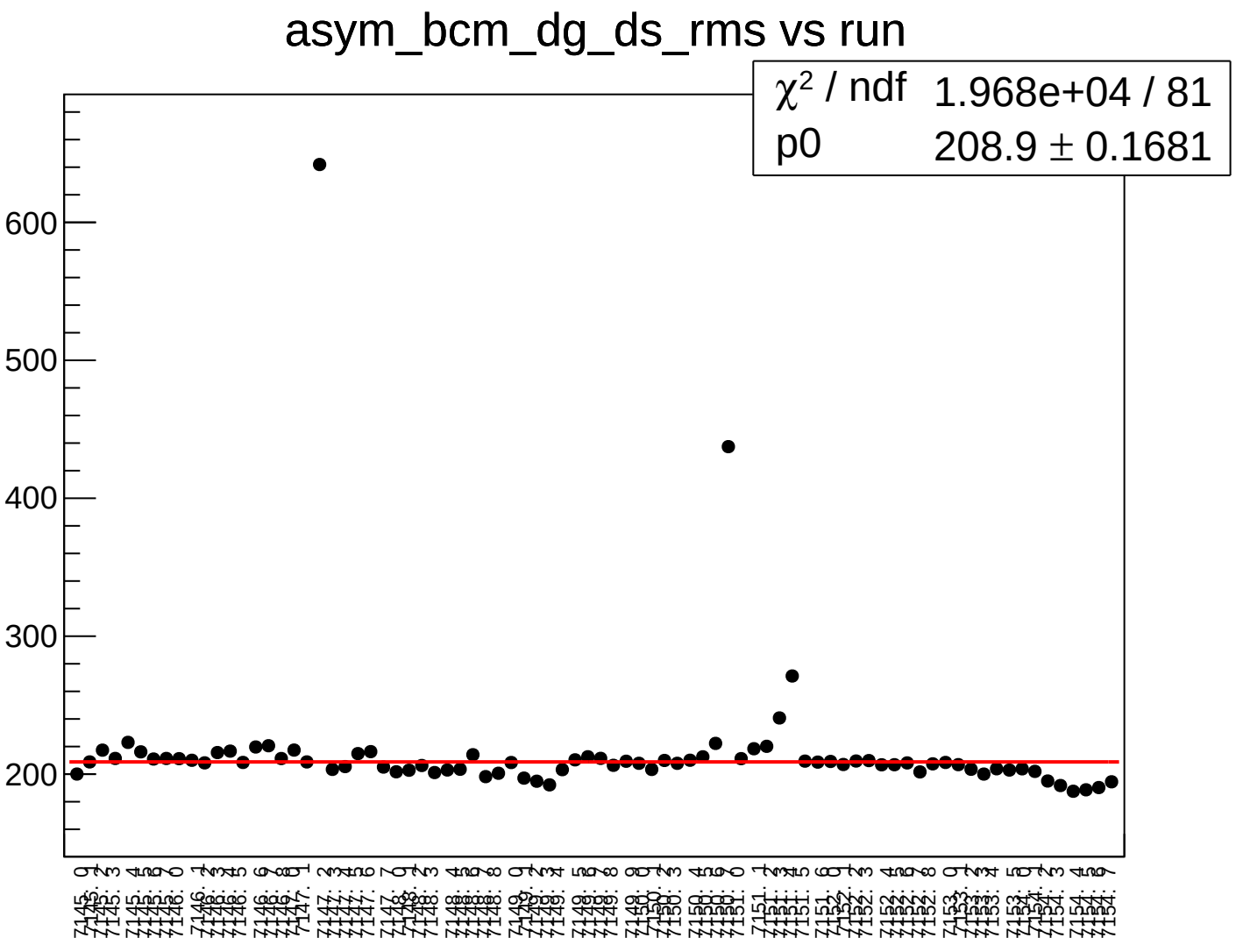

asym_bcm_dg_us_mean vs run
χ² / ndf 21.93 / 81
p0 −18.94 ± 236.9
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 82
Mean 1193
Std Dev 1149
1.5
1
0.5
0
−0.5
−1
−1.5

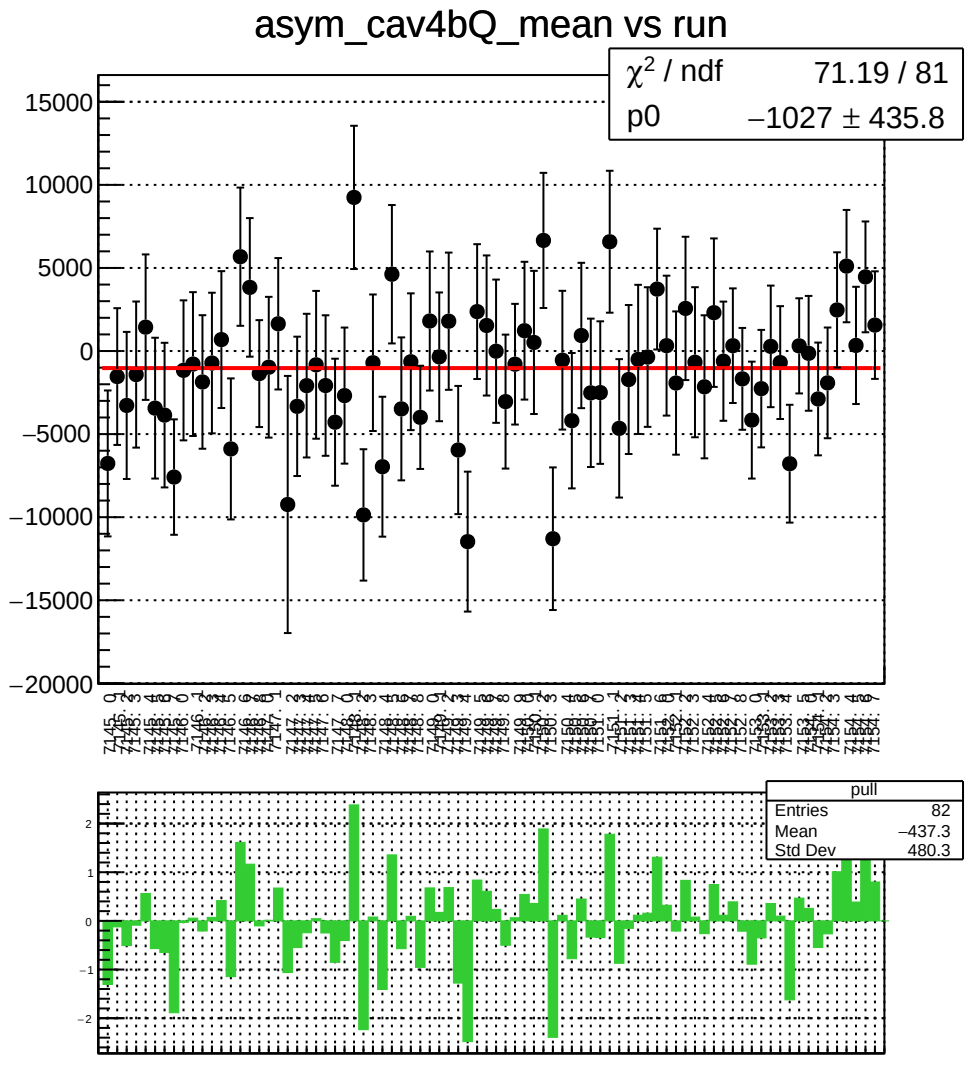

pull1D
Entries 82
Mean 0.002146
Std Dev 0.5172
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

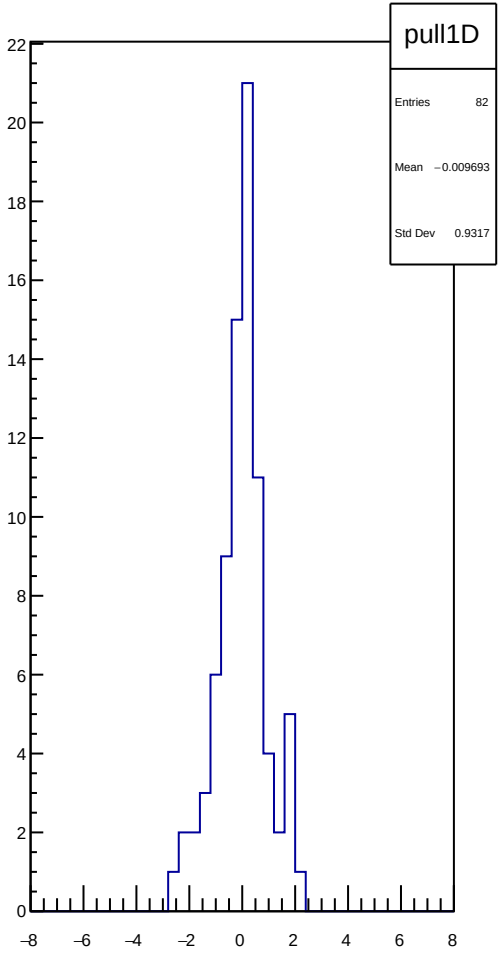

asym_bcm_dg_us_rms vs run
χ² / ndf 1.92e+04 / 81
p0 208.2 ± 0.1675
600
500
400
300
200

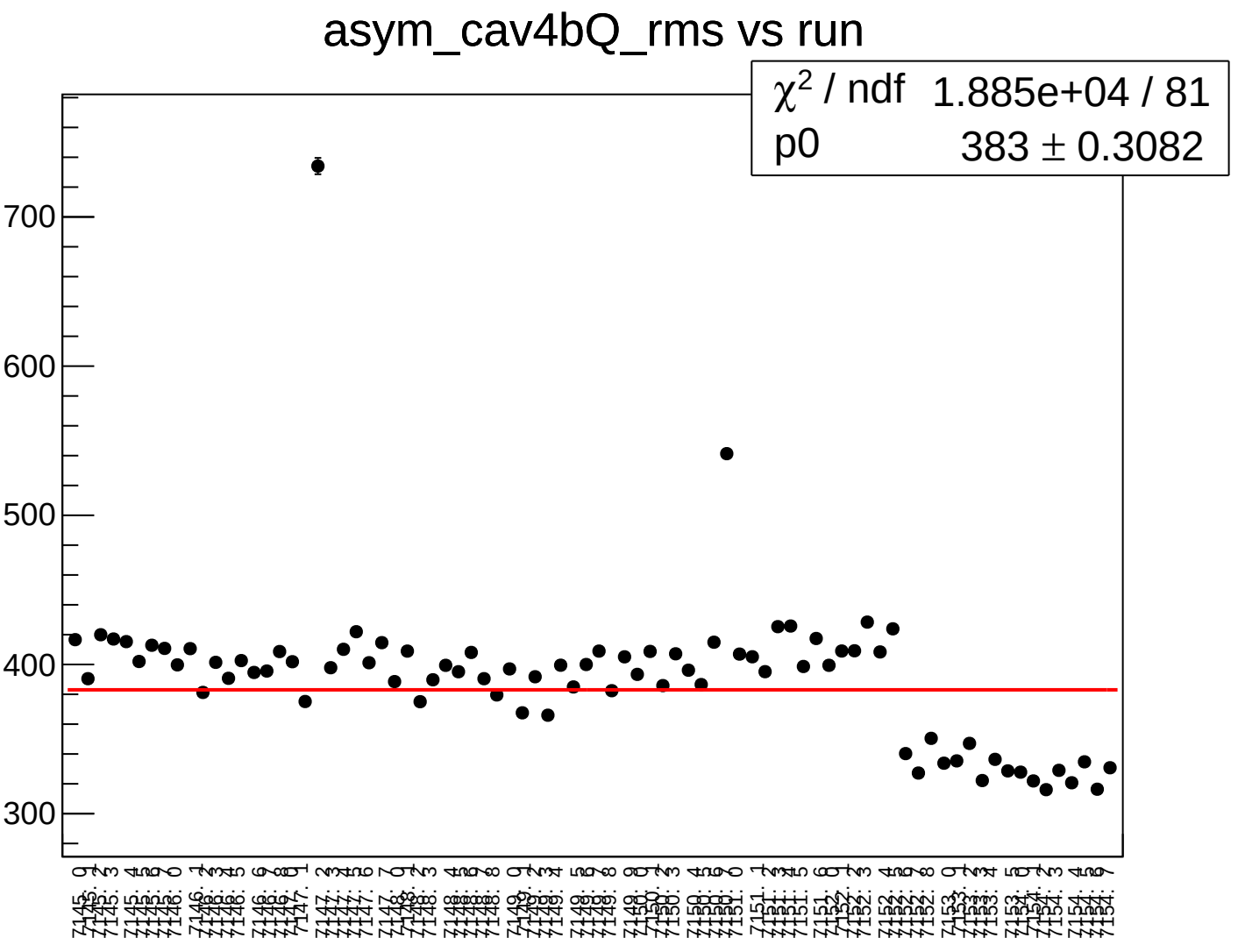

asym_bcm_dg_ds_mean vs run
χ² / ndf 23.16 / 81
p0 −10.8 ± 237.7
pull
Entries 82
Mean 3040
Std Dev 2994

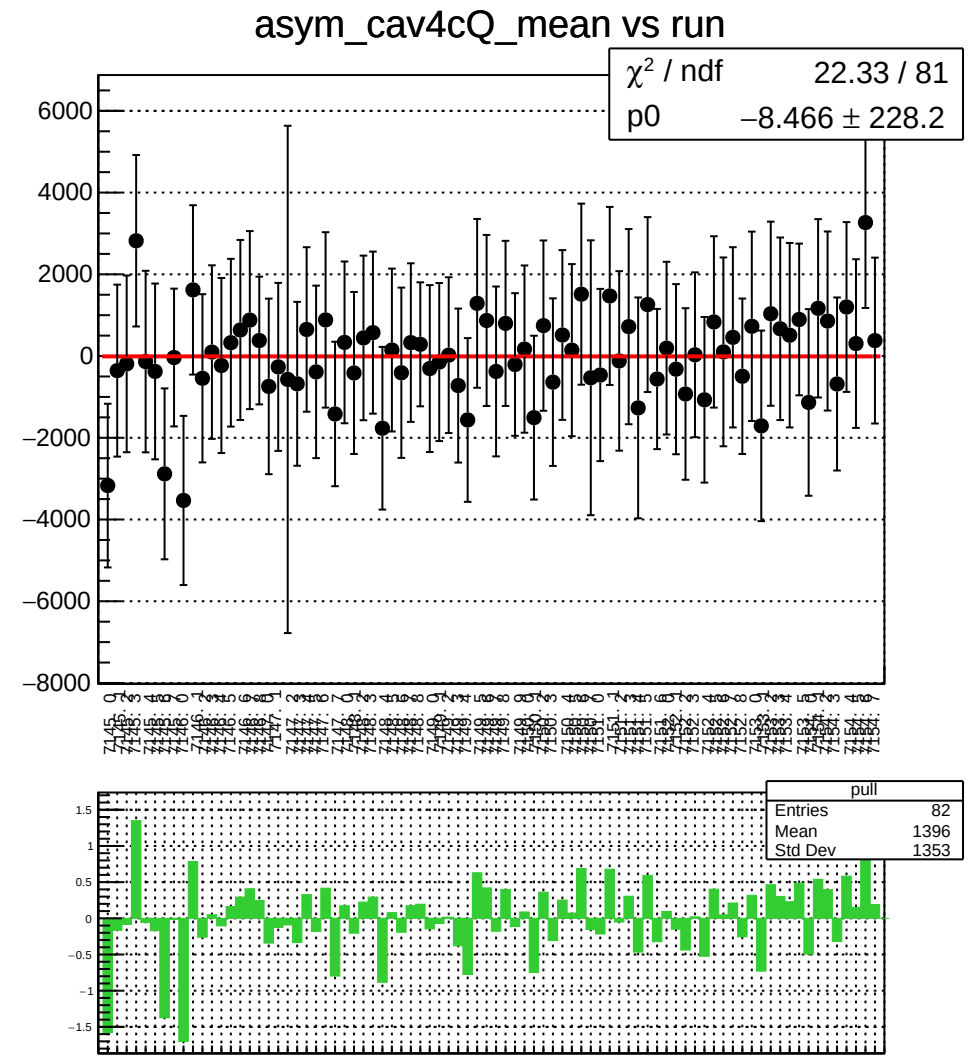

pull1D
Entries 82
Mean 0.001012
Std Dev 0.5315

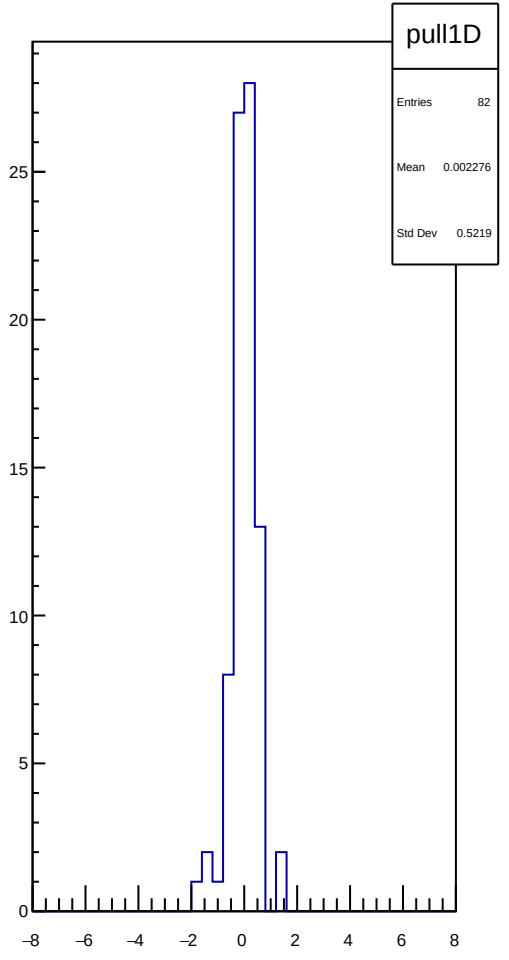

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.968e+04 / 81
p0 208.9 ± 0.1681
600
500
400
300
200

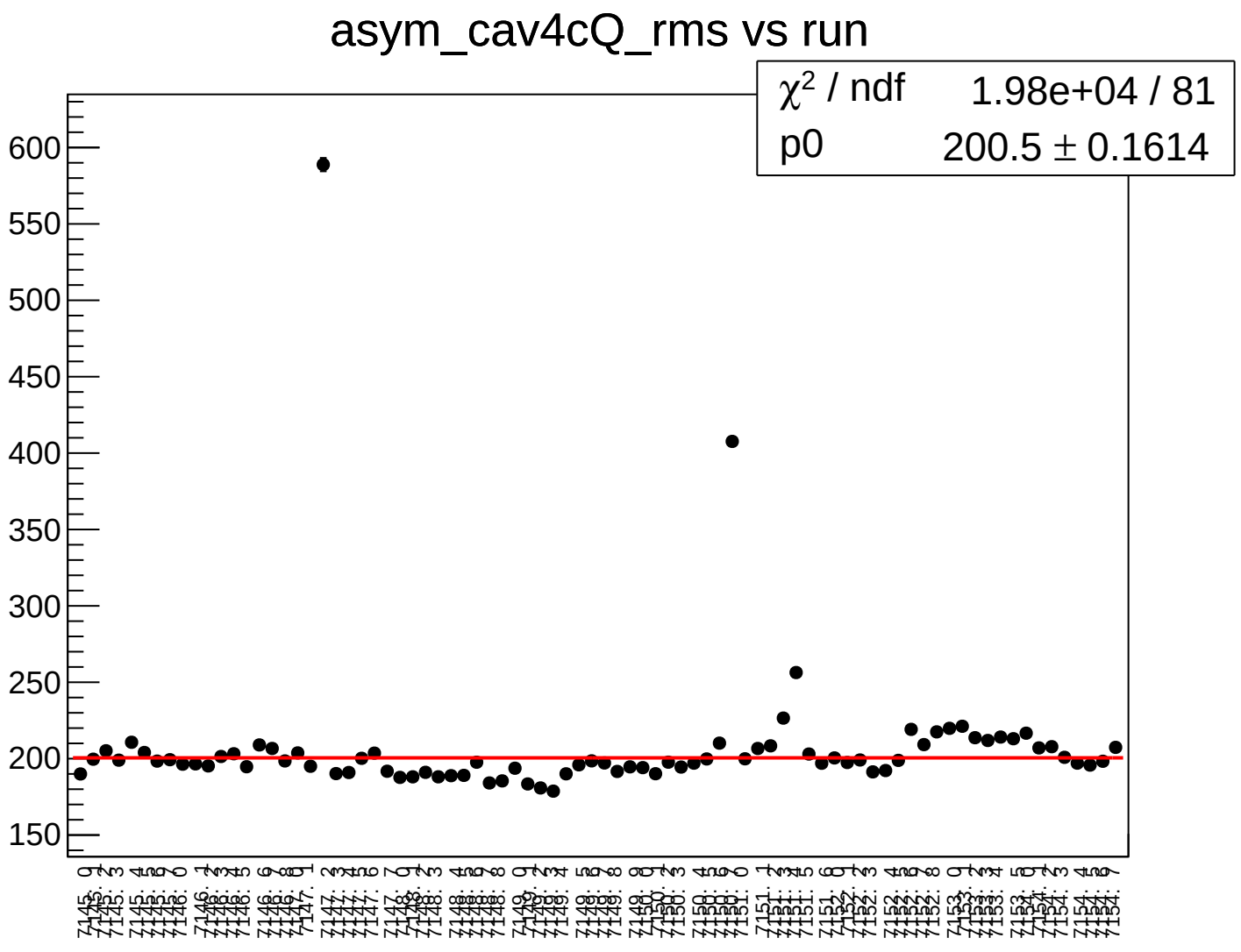

asym_cav4bQ_mean vs run
χ² / ndf 71.19 / 81
p0 −1027 ± 435.8
pull
Entries 82
Mean −437.3
Std Dev 480.3

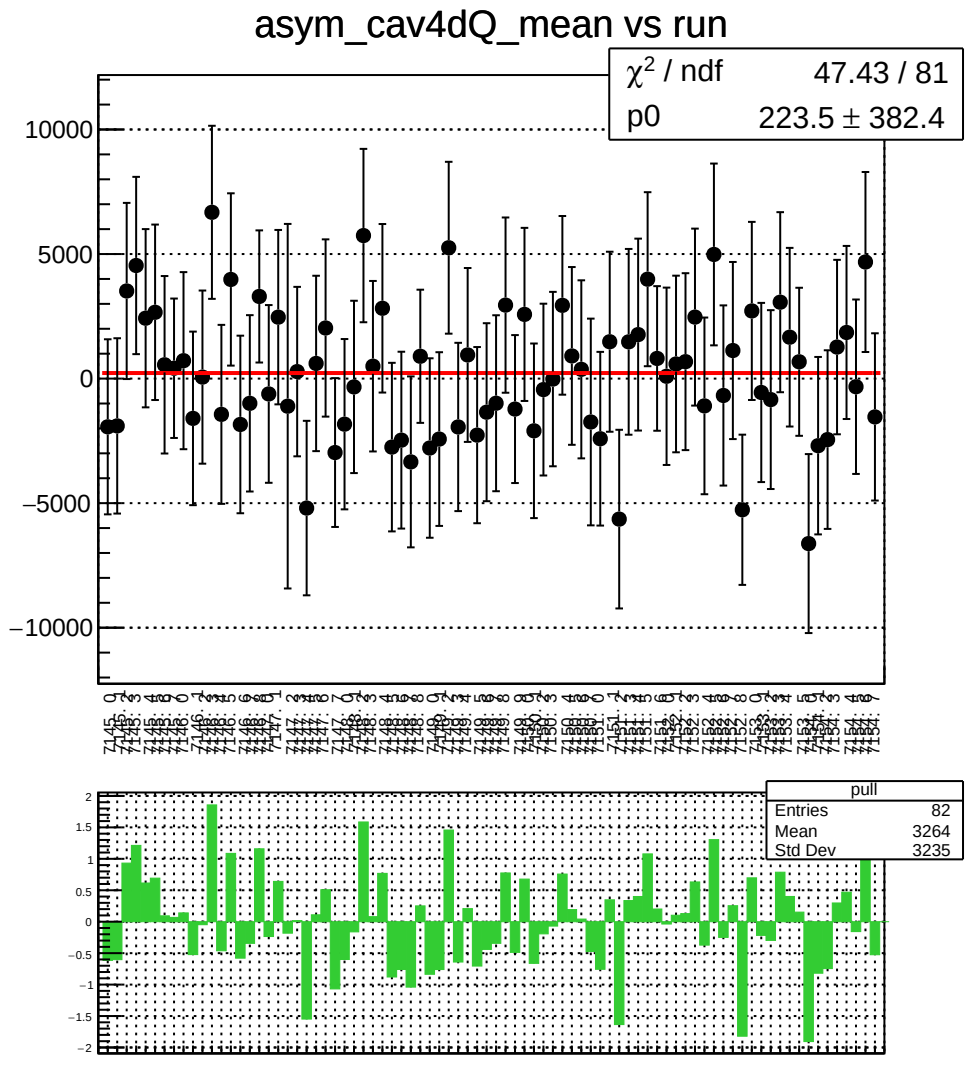

pull1D
Entries 82
Mean −0.009693
Std Dev 0.9317

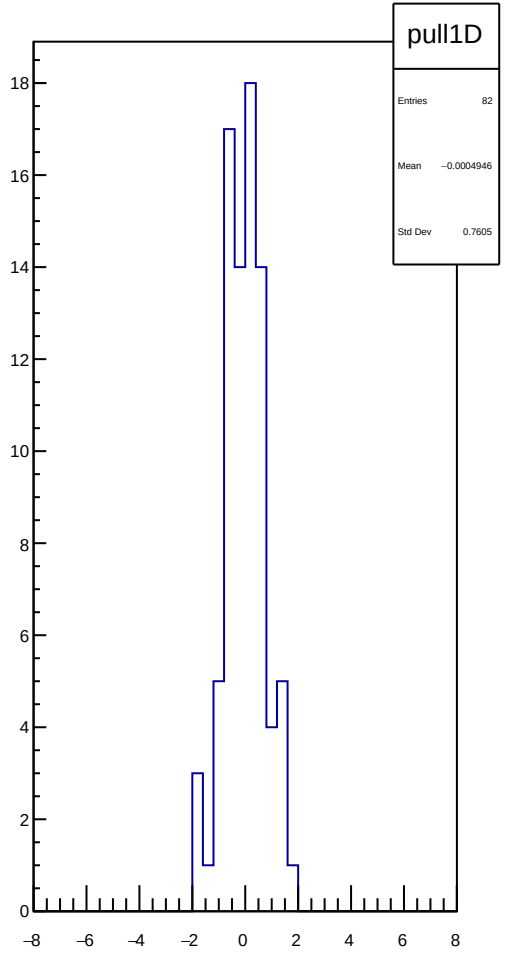

asym_cav4bQ_rms vs run
χ² / ndf 1.885e+04 / 81
p0 383 ± 0.3082
700
600
500
400
300

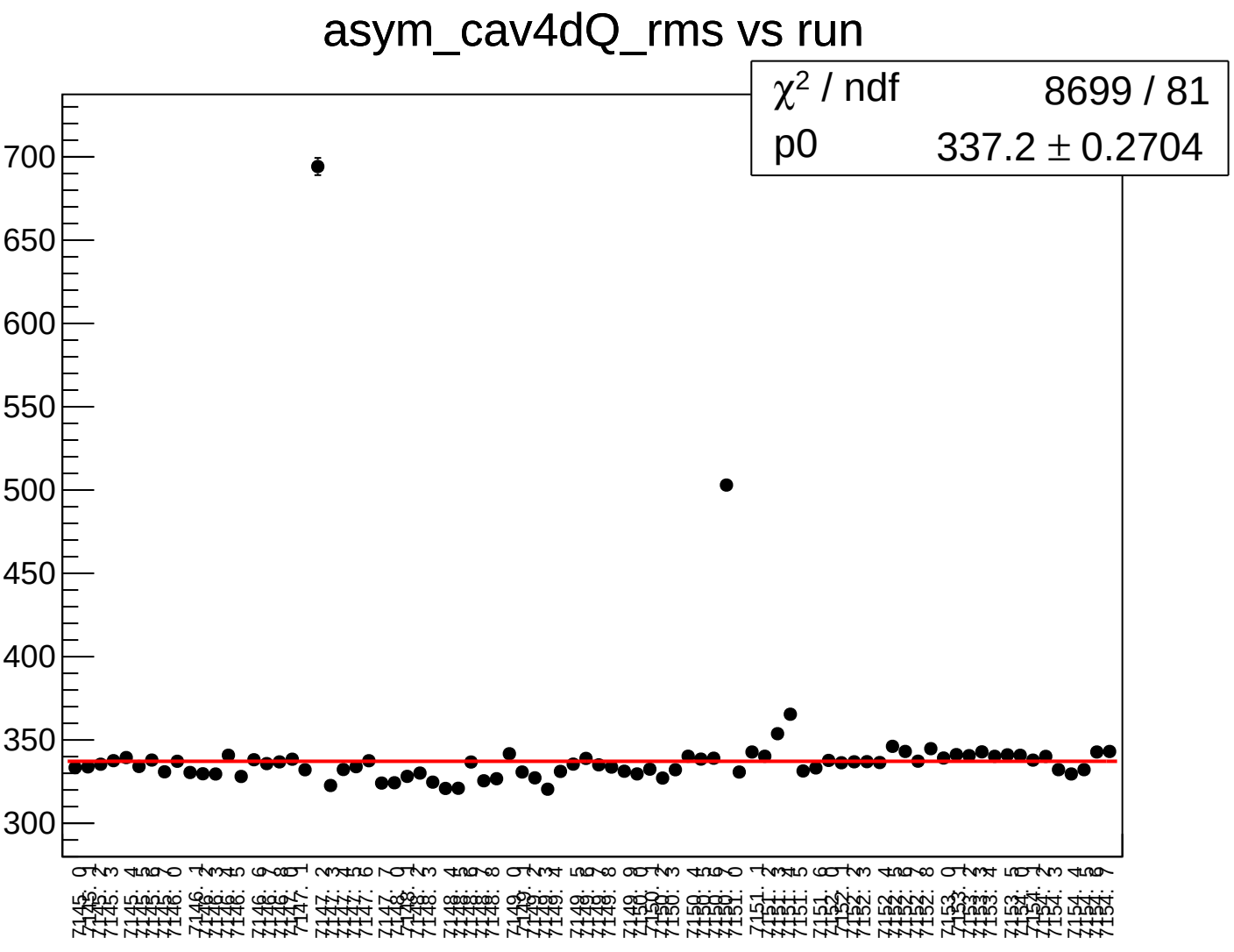

asym_cav4cQ_mean vs run
χ² / ndf 22.33 / 81
p0 −8.466 ± 228.2
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 82
Mean 1396
Std Dev 1353
1.5
1
0.5
0
−0.5
−1
−1.5

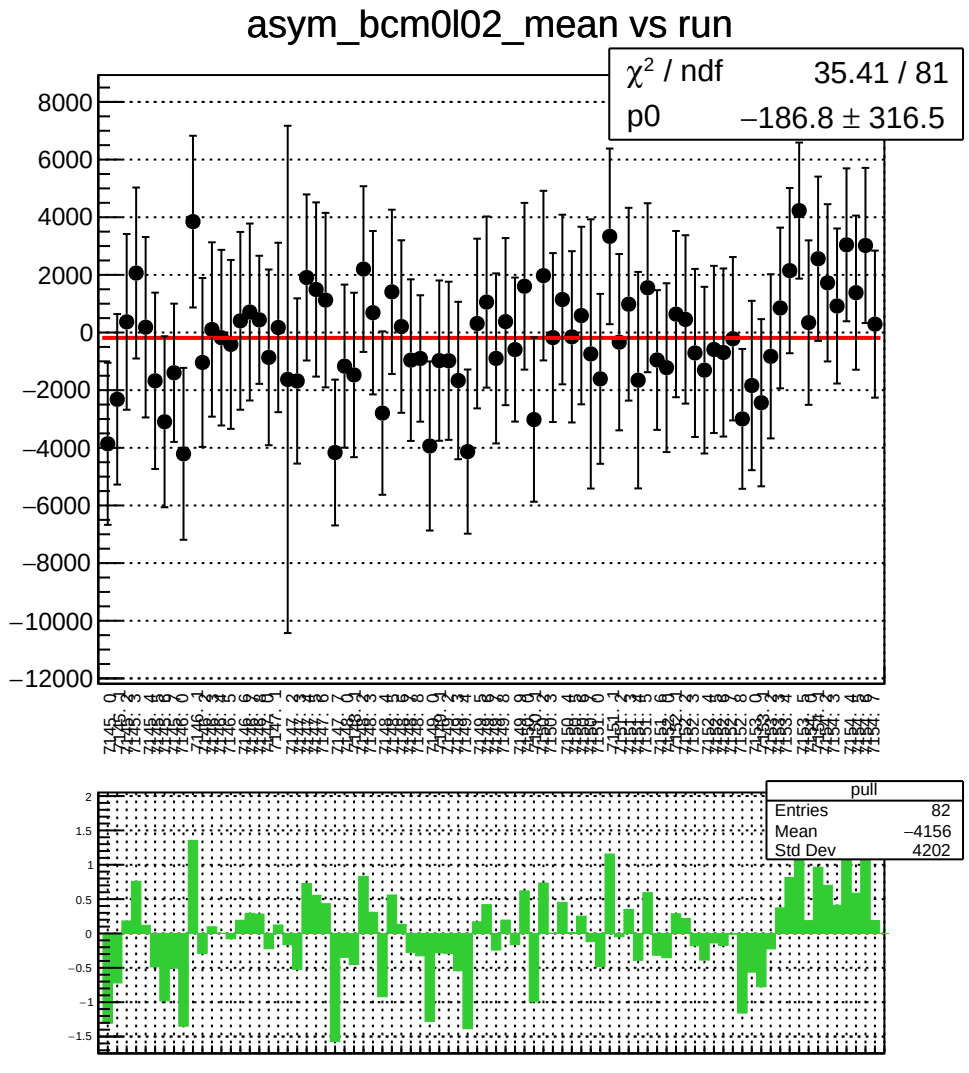

pull1D
Entries 82
Mean 0.002276
Std Dev 0.5219
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

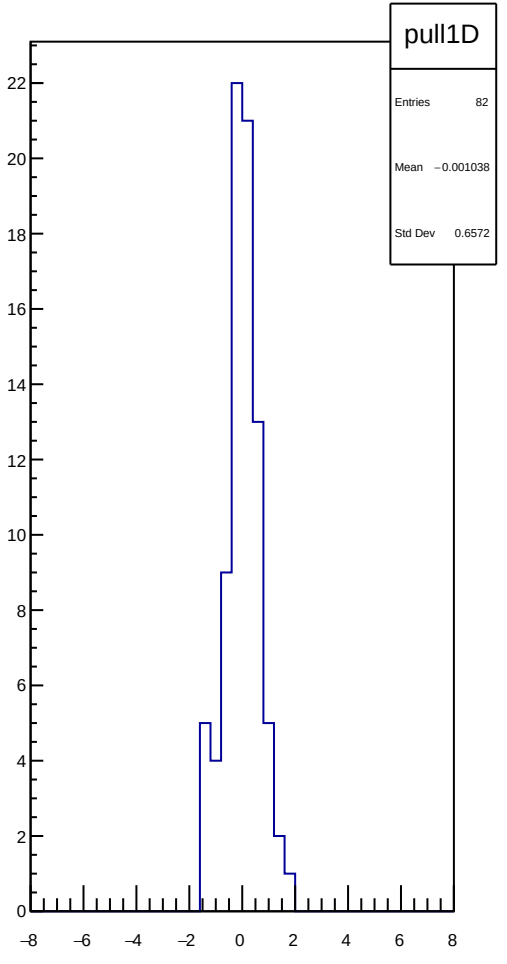

asym_cav4cQ_rms vs run
χ^2 / ndf 1.98e+04 / 81
p0 200.5 ± 0.1614
600
550
500
450
400
350
300
250
200
150

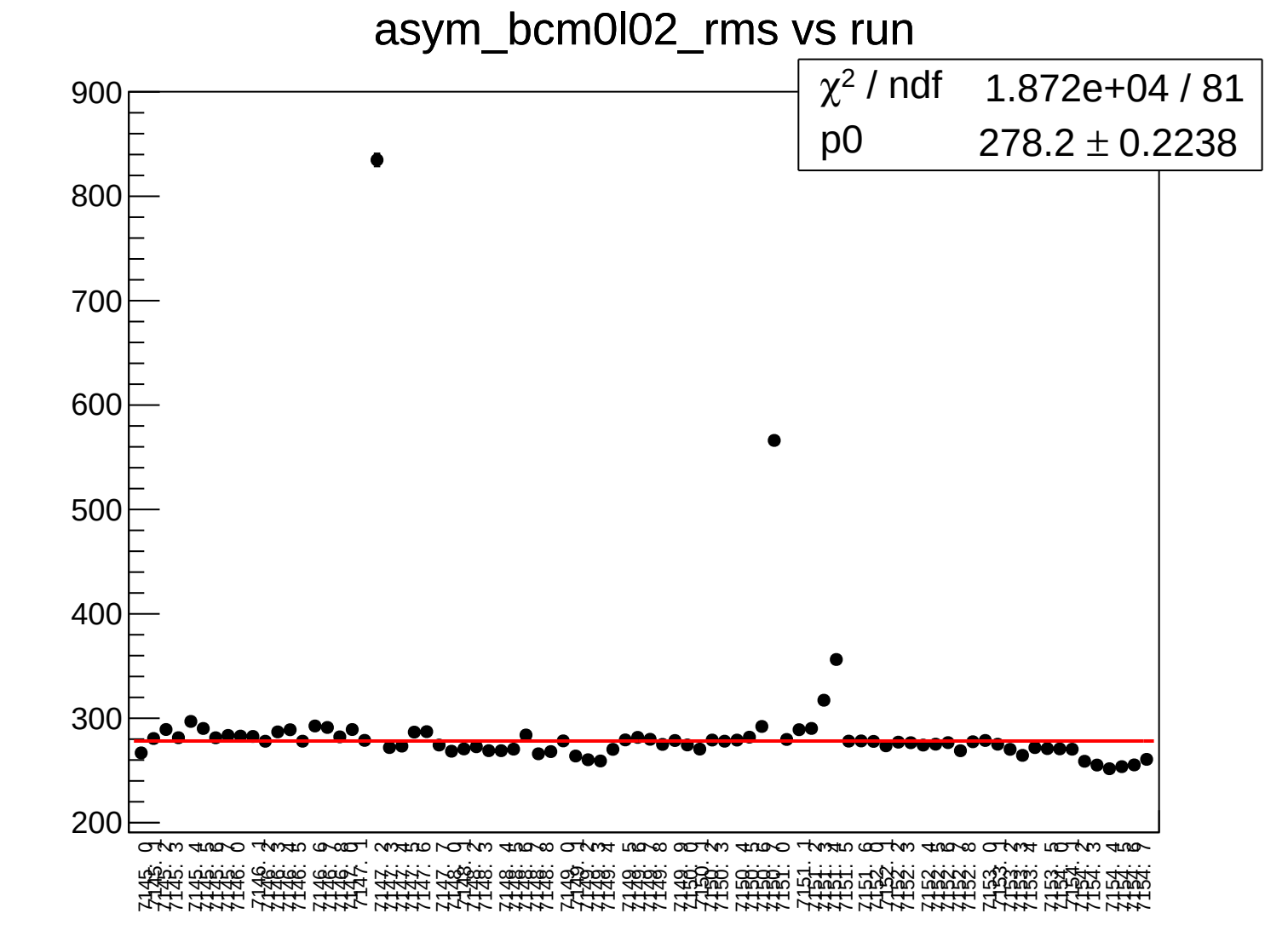

asym_cav4dQ_mean vs run
χ² / ndf 47.43 / 81
p0 223.5 ± 382.4
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 3264
Std Dev 3235
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

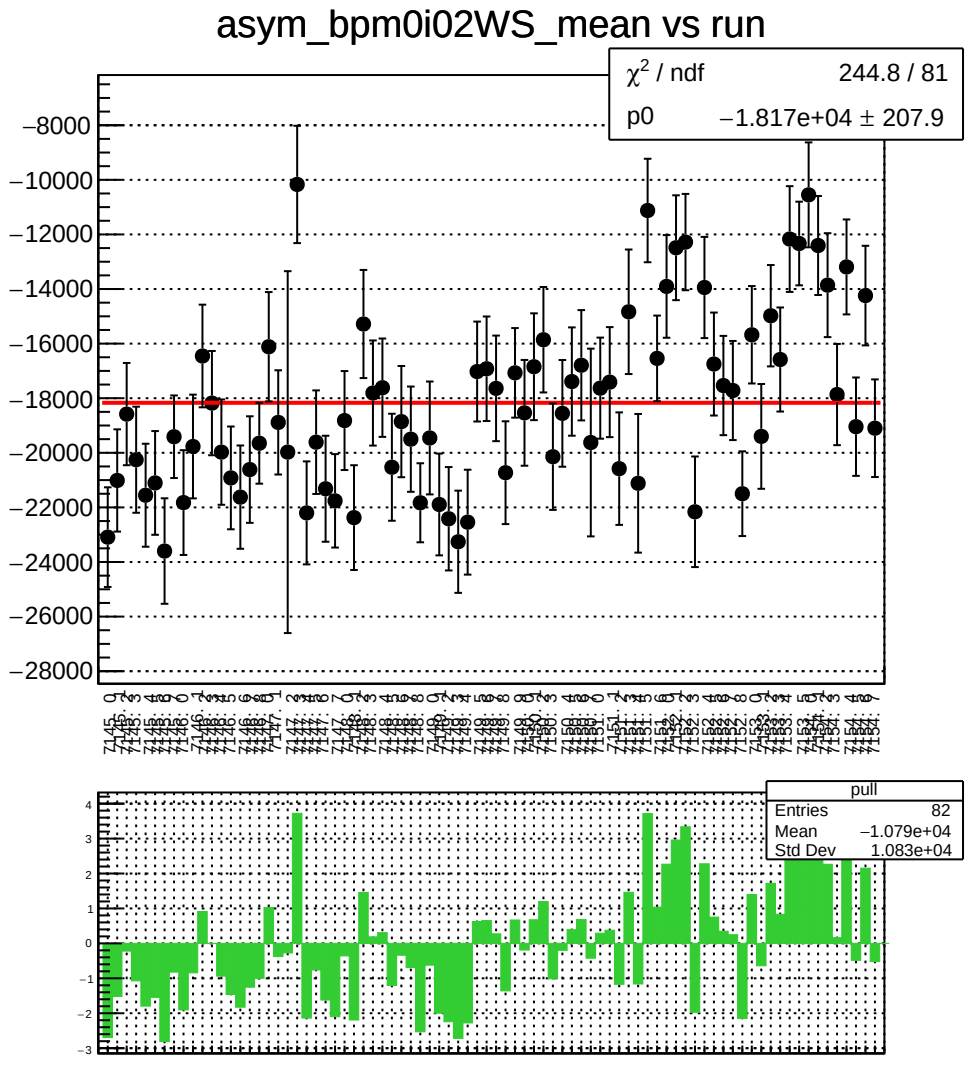

pull1D
Entries 82
Mean −0.0004946
Std Dev 0.7605
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

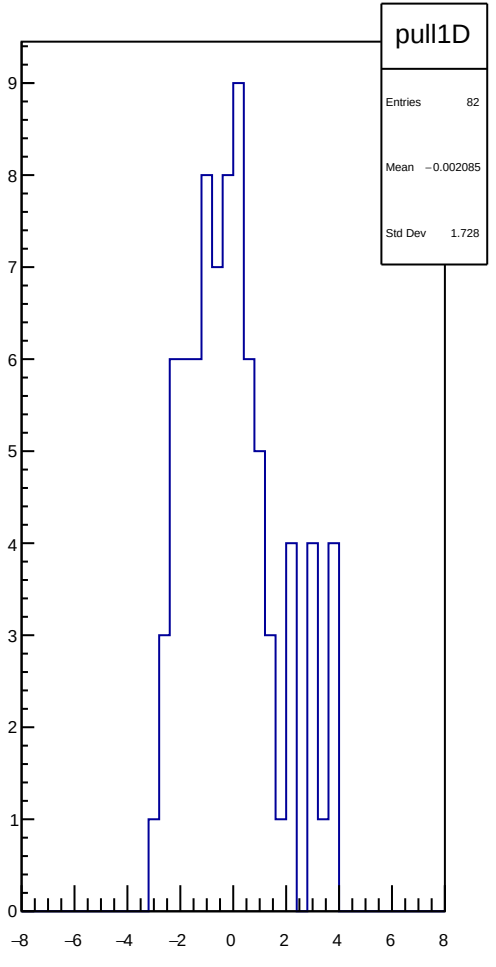

asym_cav4dQ_rms vs run
χ² / ndf 8699 / 81
p0 337.2 ± 0.2704
700
650
600
550
500
450
400
350
300

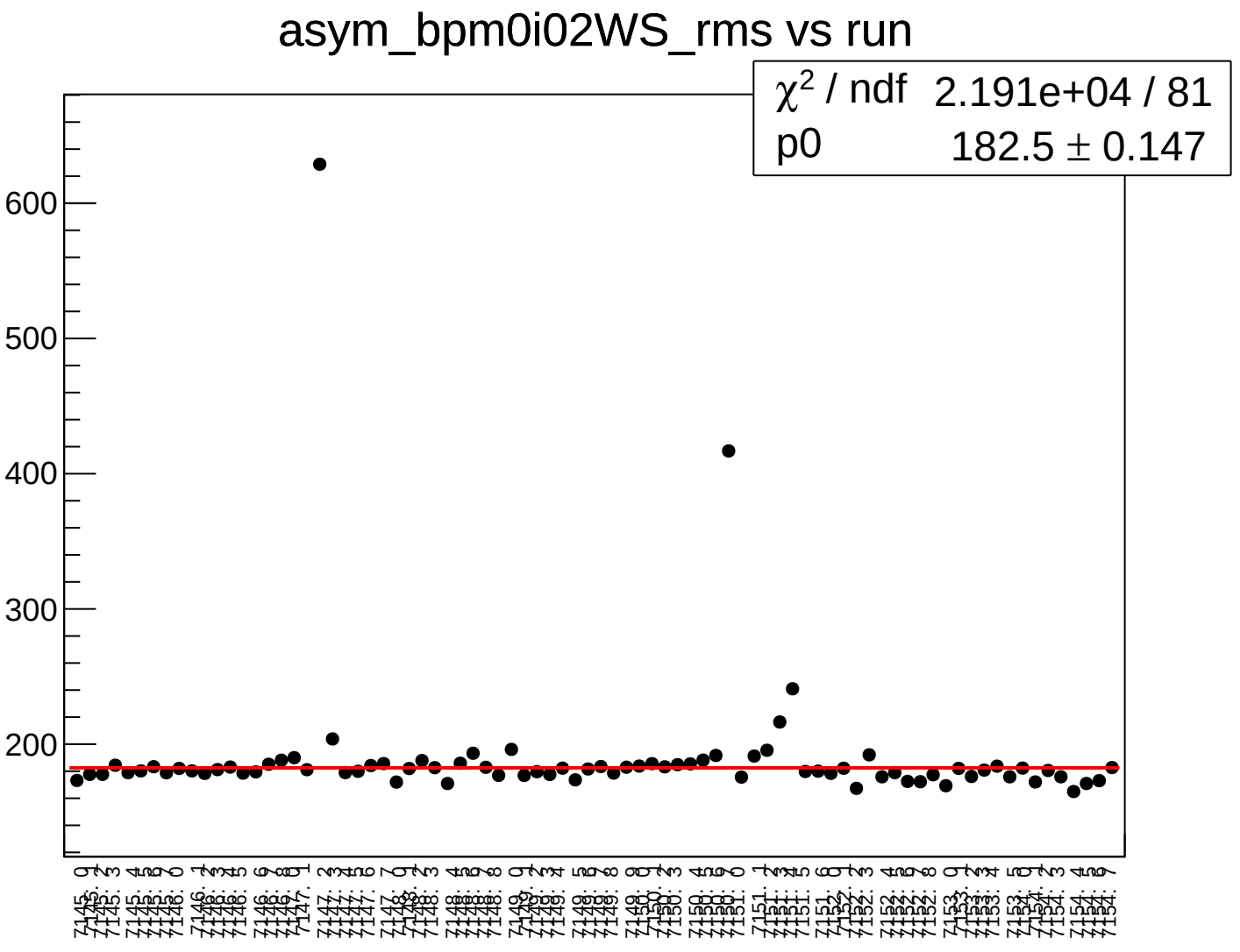

asym_bcm0l02_mean vs run
χ² / ndf 35.41 / 81
p0 −186.8 ± 316.5
pull
Entries 82
Mean −4156
Std Dev 4202

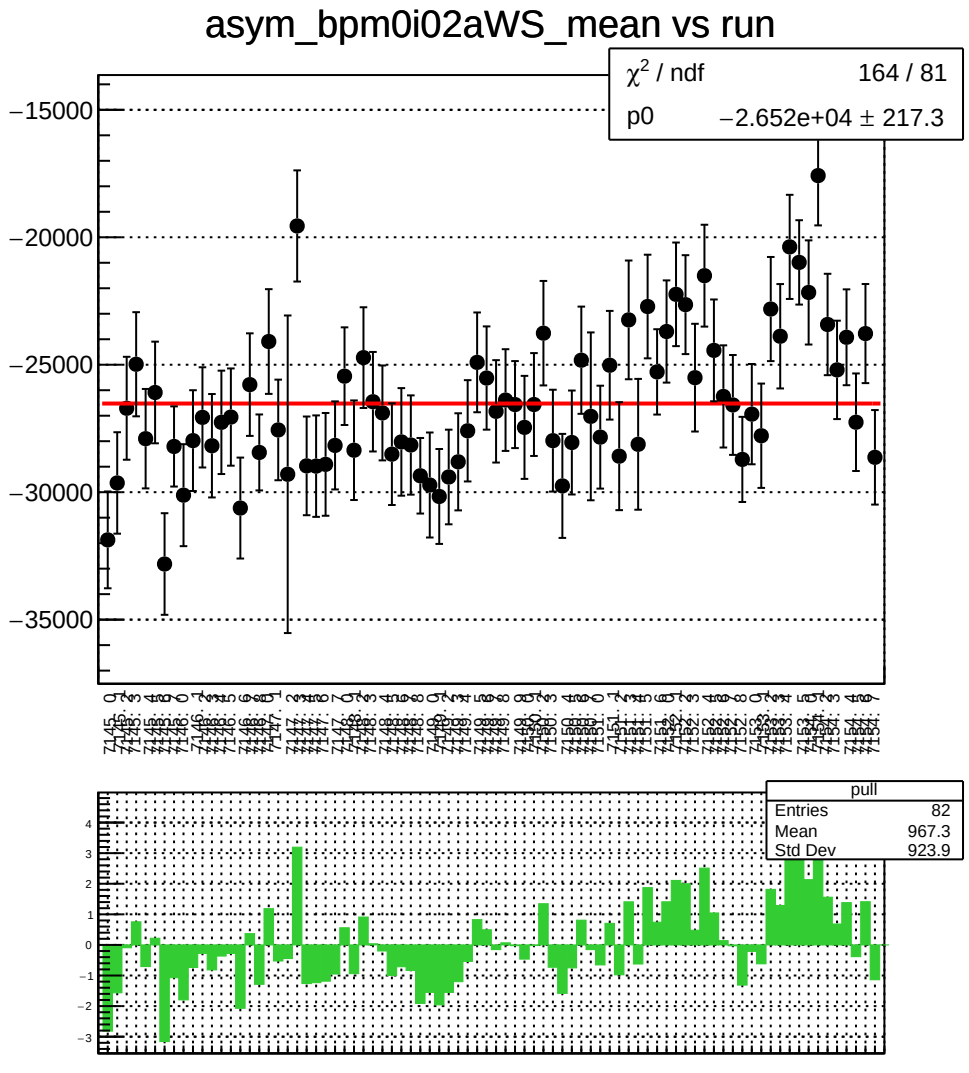

pull1D
Entries 82
Mean −0.001038
Std Dev 0.6572

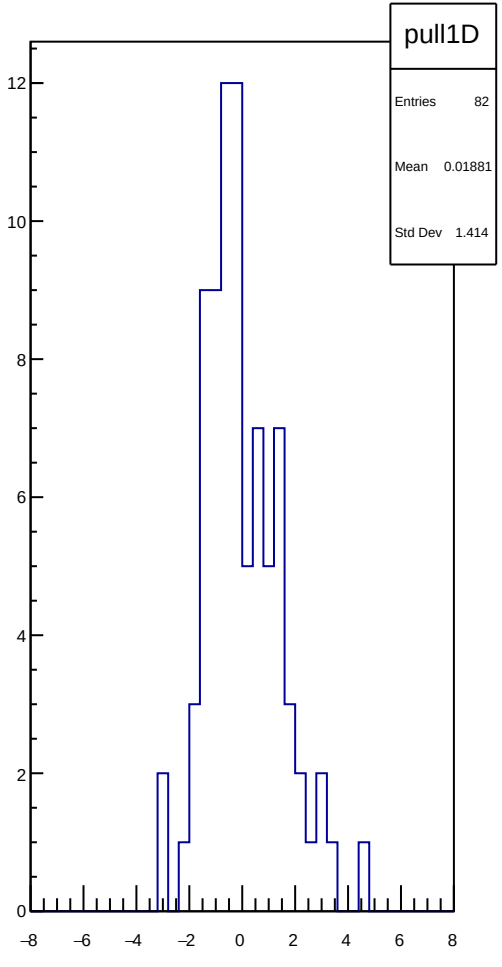

asym_bcm0l02_rms vs run
χ^2 / ndf 1.872e+04 / 81
p0 278.2 ± 0.2238
900
800
700
600
500
400
300
200

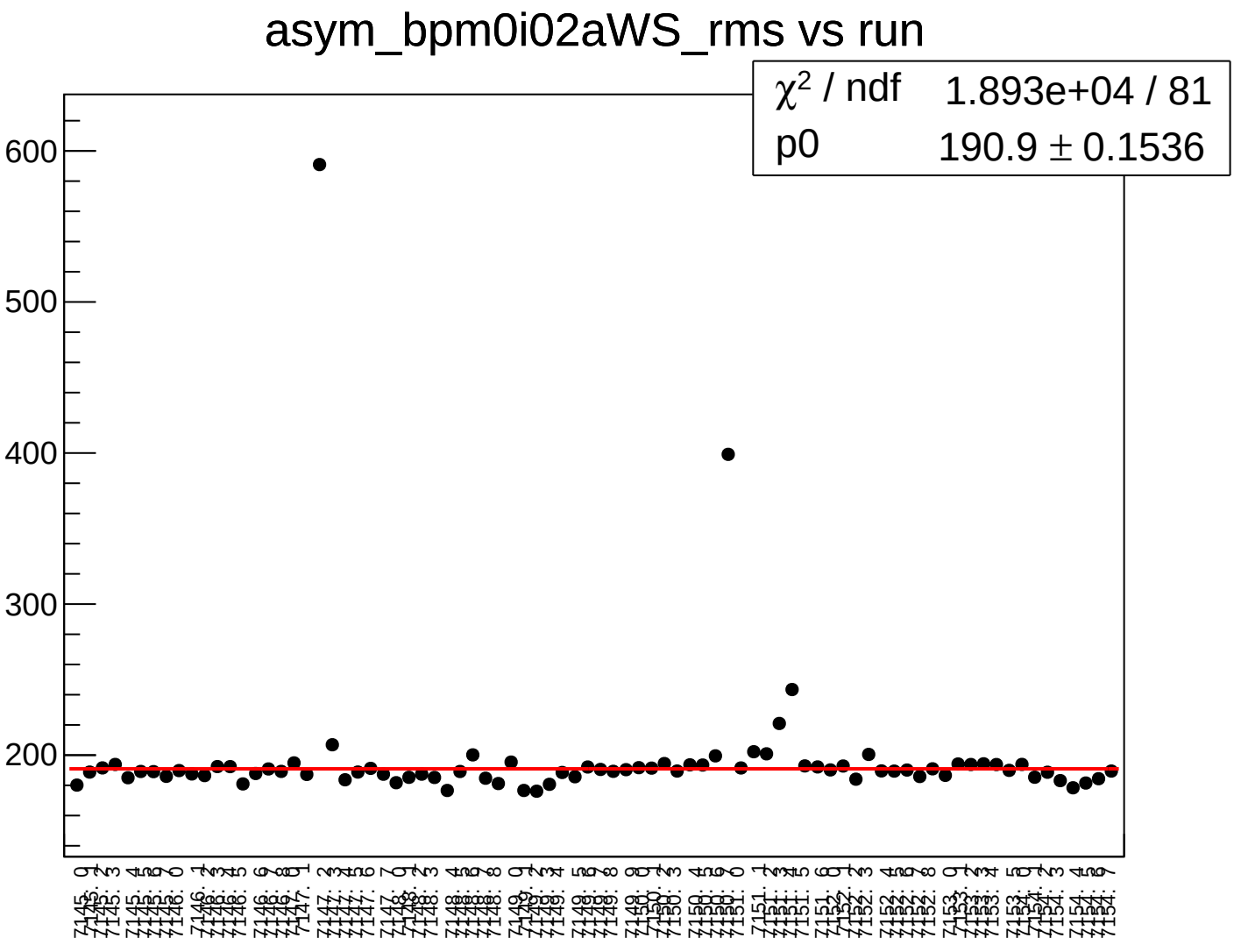

asym_bpm0i02WS_mean vs run
χ² / ndf 244.8 / 81
p0 −1.817e+04 ± 207.9
pull
Entries 82
Mean −1.079e+04
Std Dev 1.083e+04

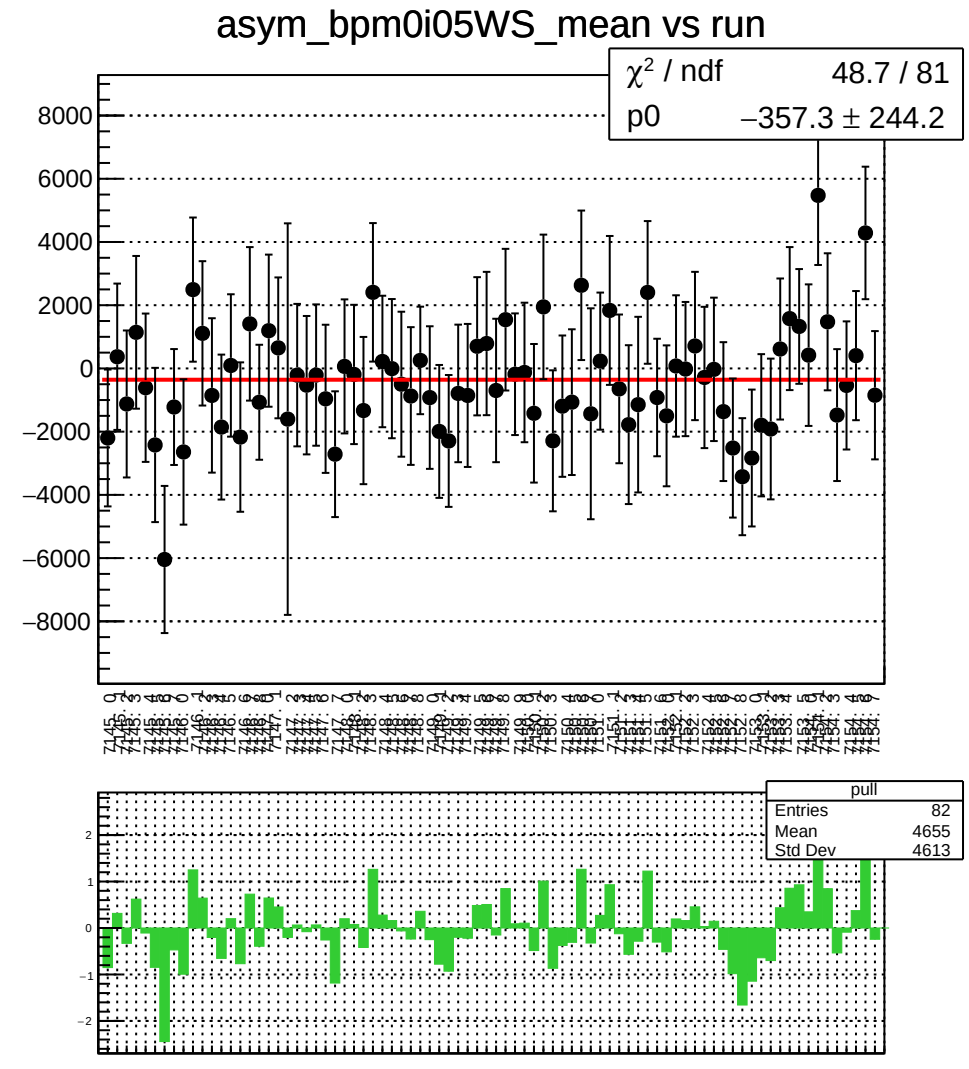

pull1D
Entries 82
Mean −0.002085
Std Dev 1.728

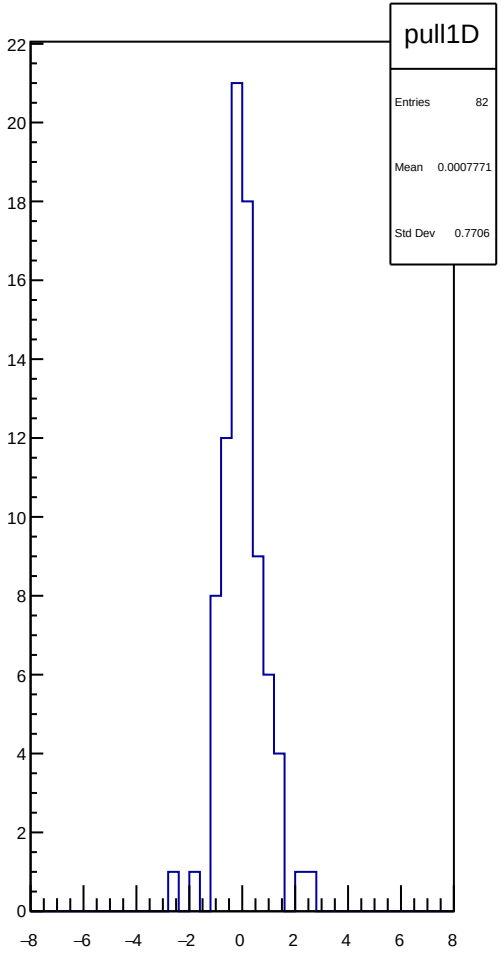

asym_bpm0i02WS_rms vs run
χ² / ndf 2.191e+04 / 81
p0 182.5 ± 0.147
600
500
400
300
200

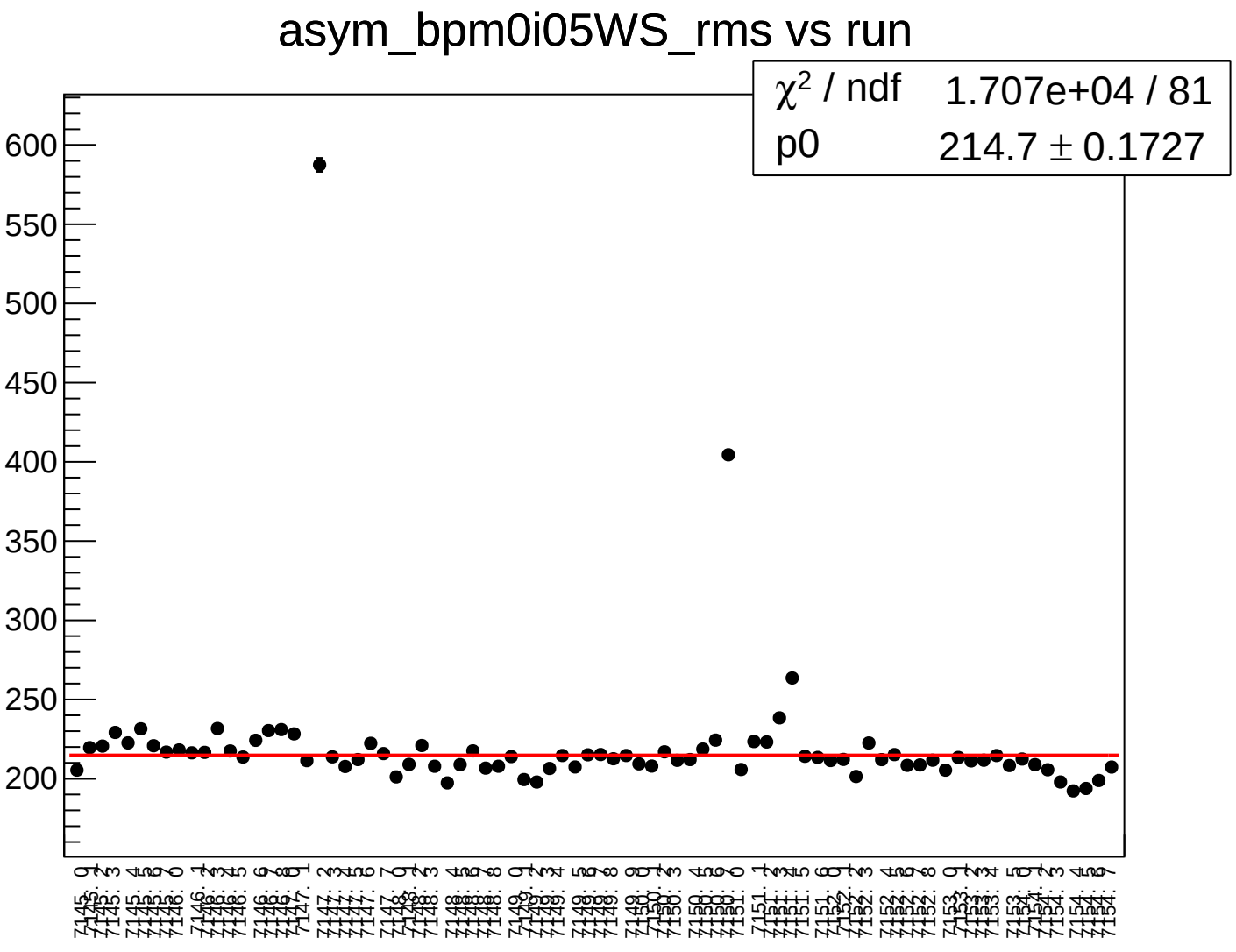

asym_bpm0i02aWS_mean vs run
χ² / ndf 164 / 81
p0 −2.652e+04 ± 217.3
−15000
−20000
−25000
−30000
−35000
pull
Entries 82
Mean 967.3
Std Dev 923.9
4
3
2
1
0
−1
−2
−3

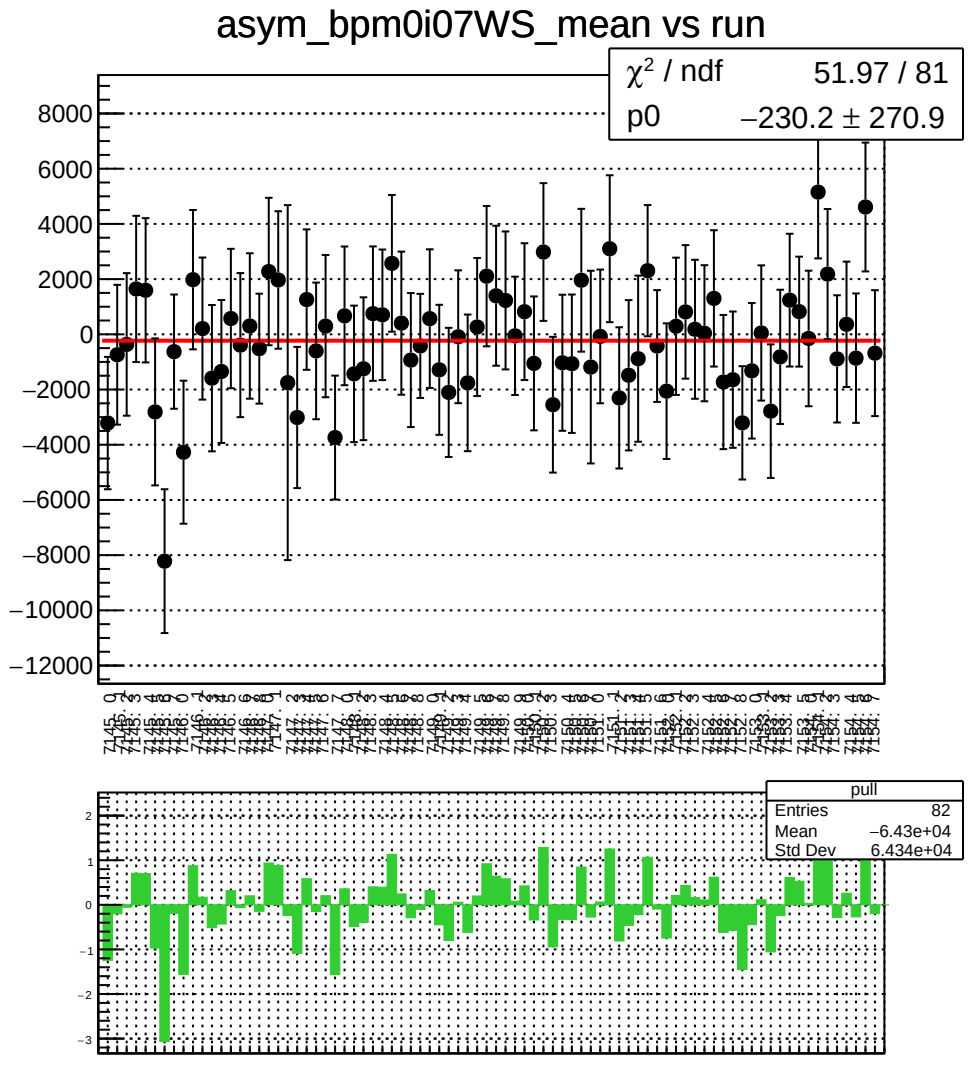

pull1D
Entries 82
Mean 0.01881
Std Dev 1.414
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

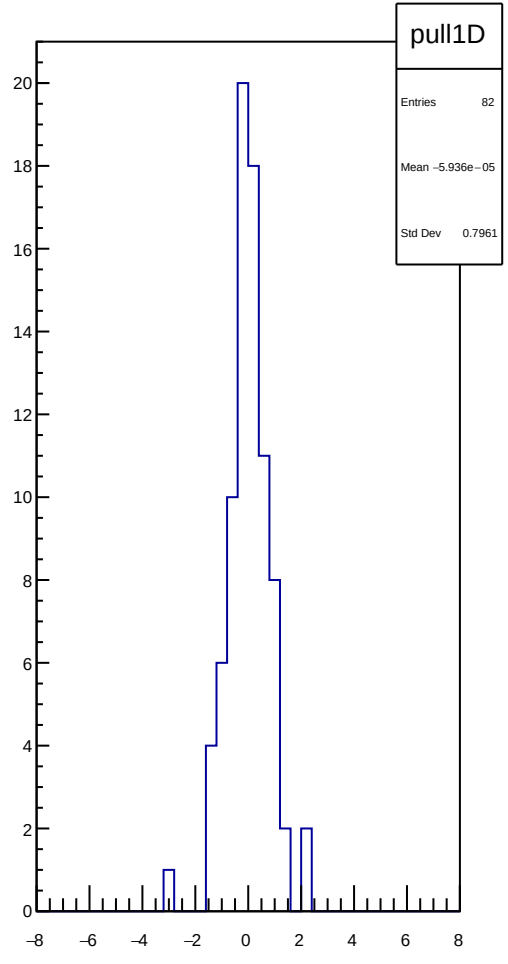

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 1.893e+04 / 81
p0 190.9 ± 0.1536
600
500
400
300
200

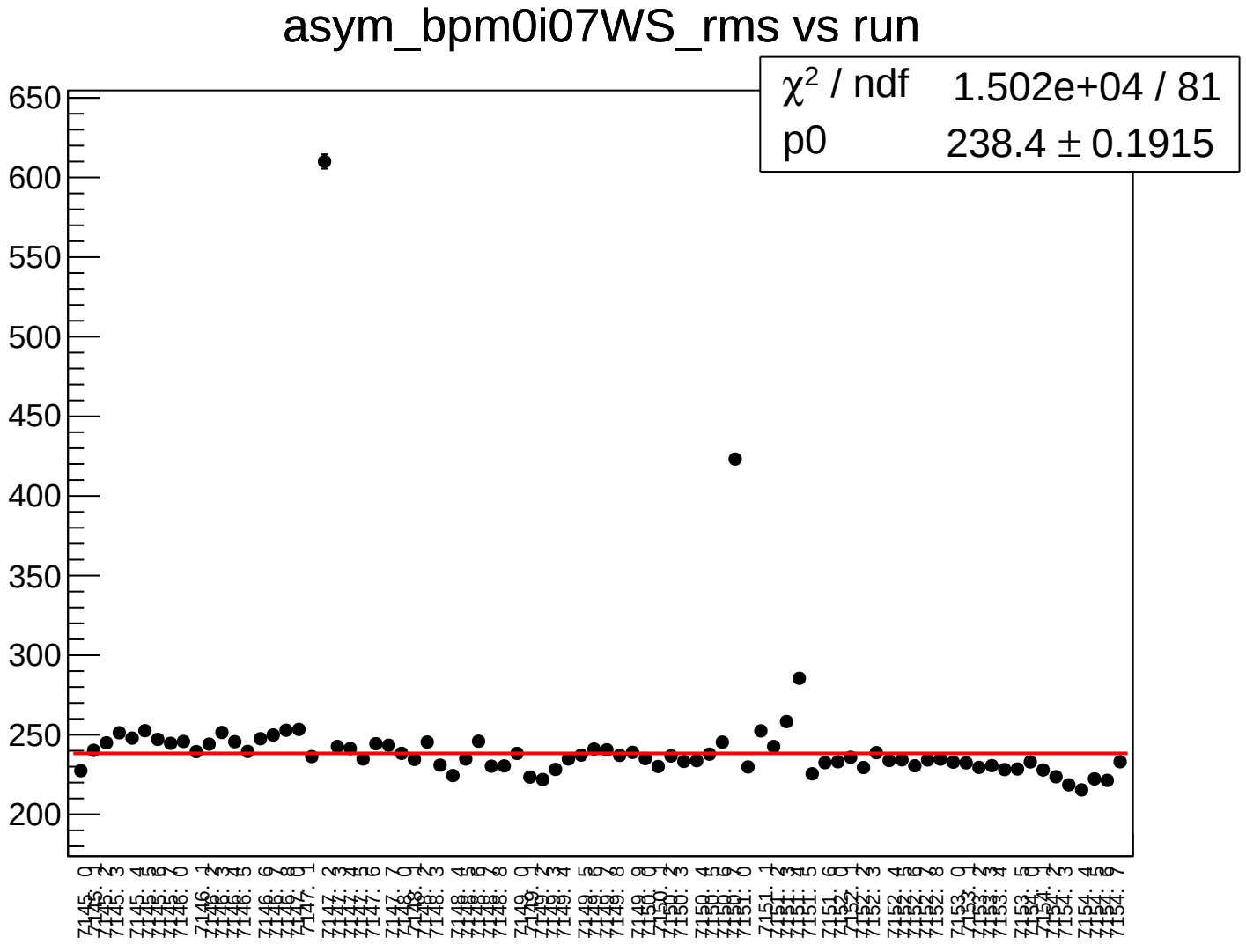

asym_bpm0i05WS_mean vs run
χ² / ndf 48.7 / 81
p0 −357.3 ± 244.2
pull
Entries 82
Mean 4655
Std Dev 4613

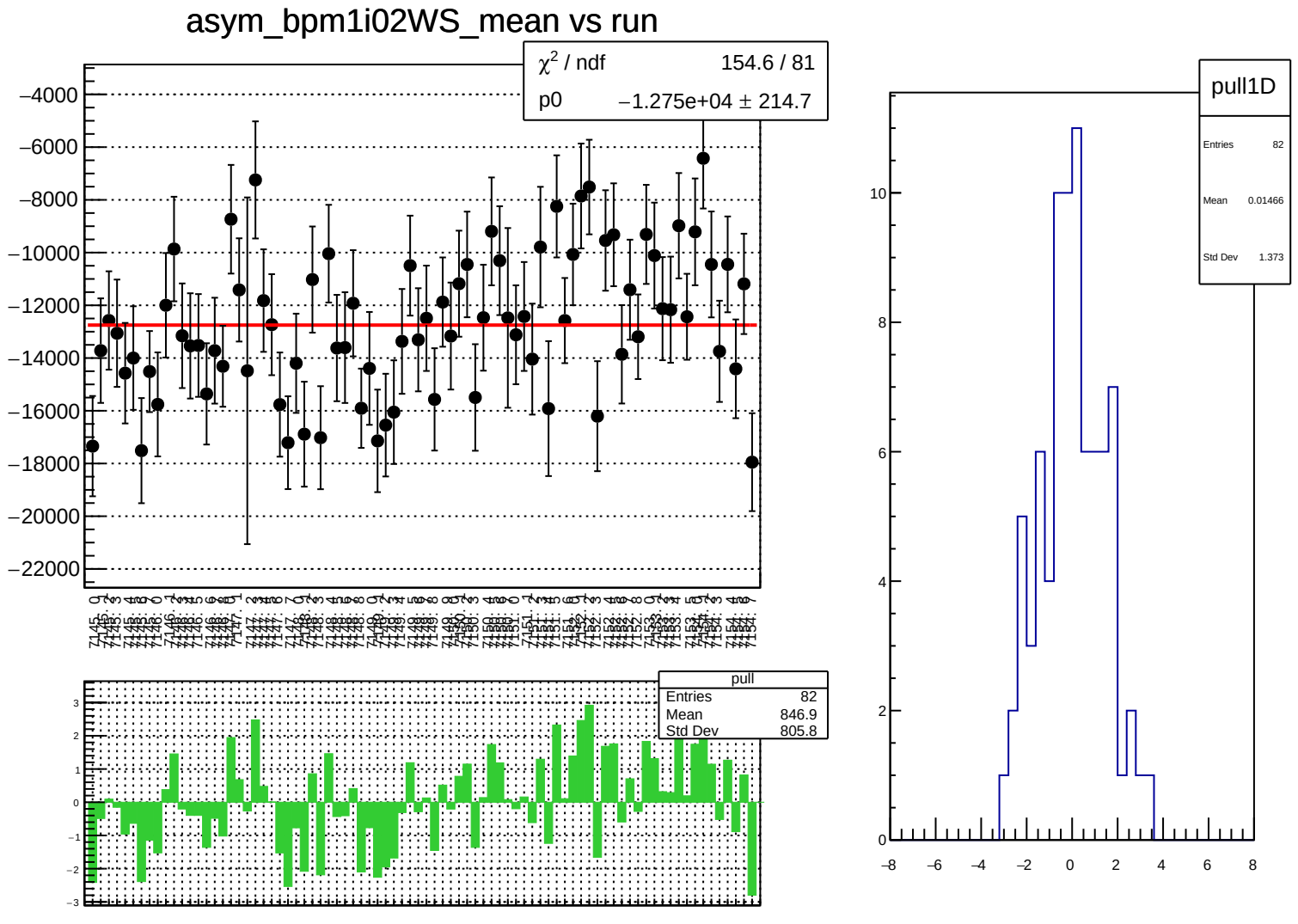

pull1D
Entries 82
Mean 0.0007771
Std Dev 0.7706

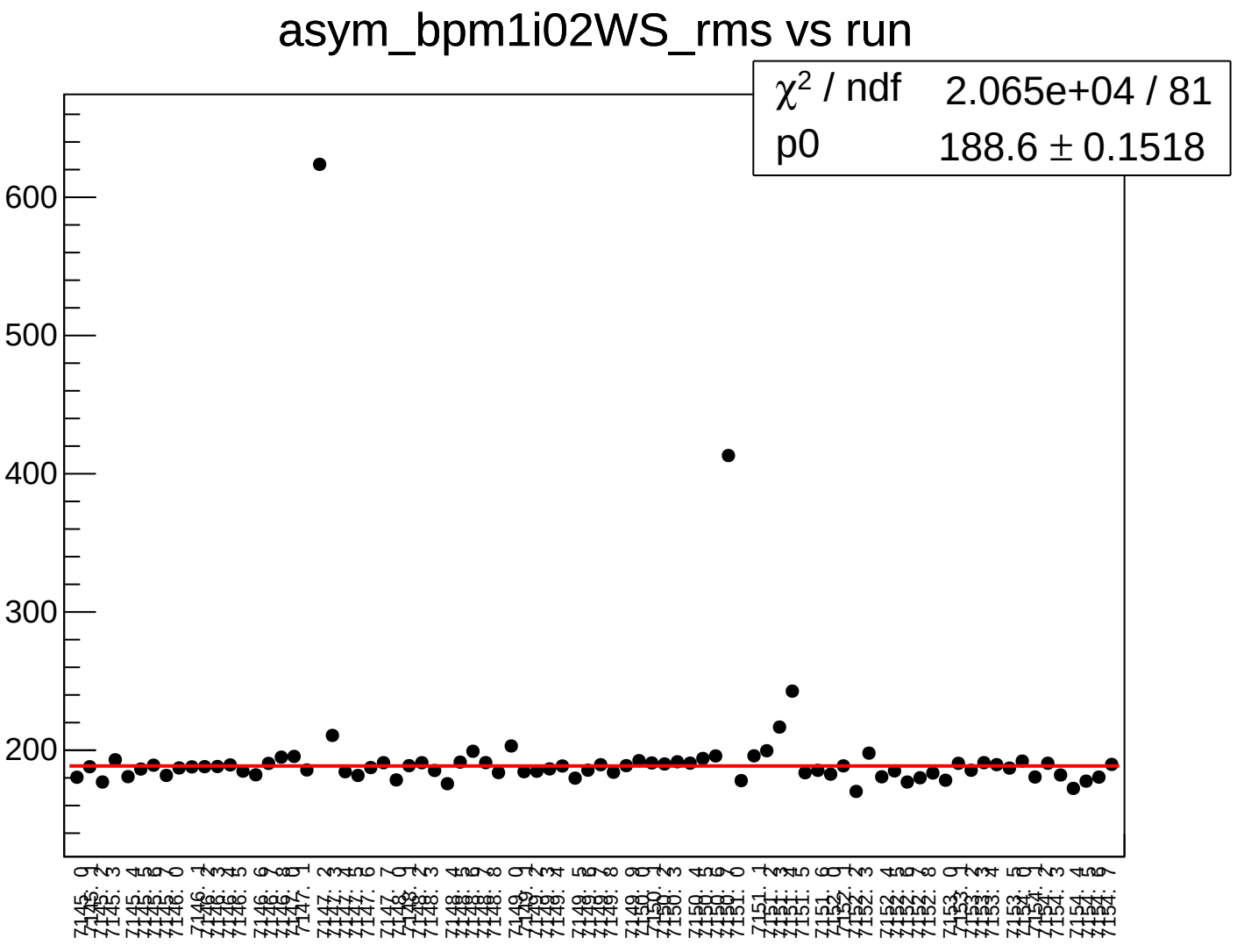

asym_bpm0i05WS_rms vs run
χ^2 / ndf 1.707e+04 / 81
p0 214.7 ± 0.1727
600
550
500
450
400
350
300
250
200

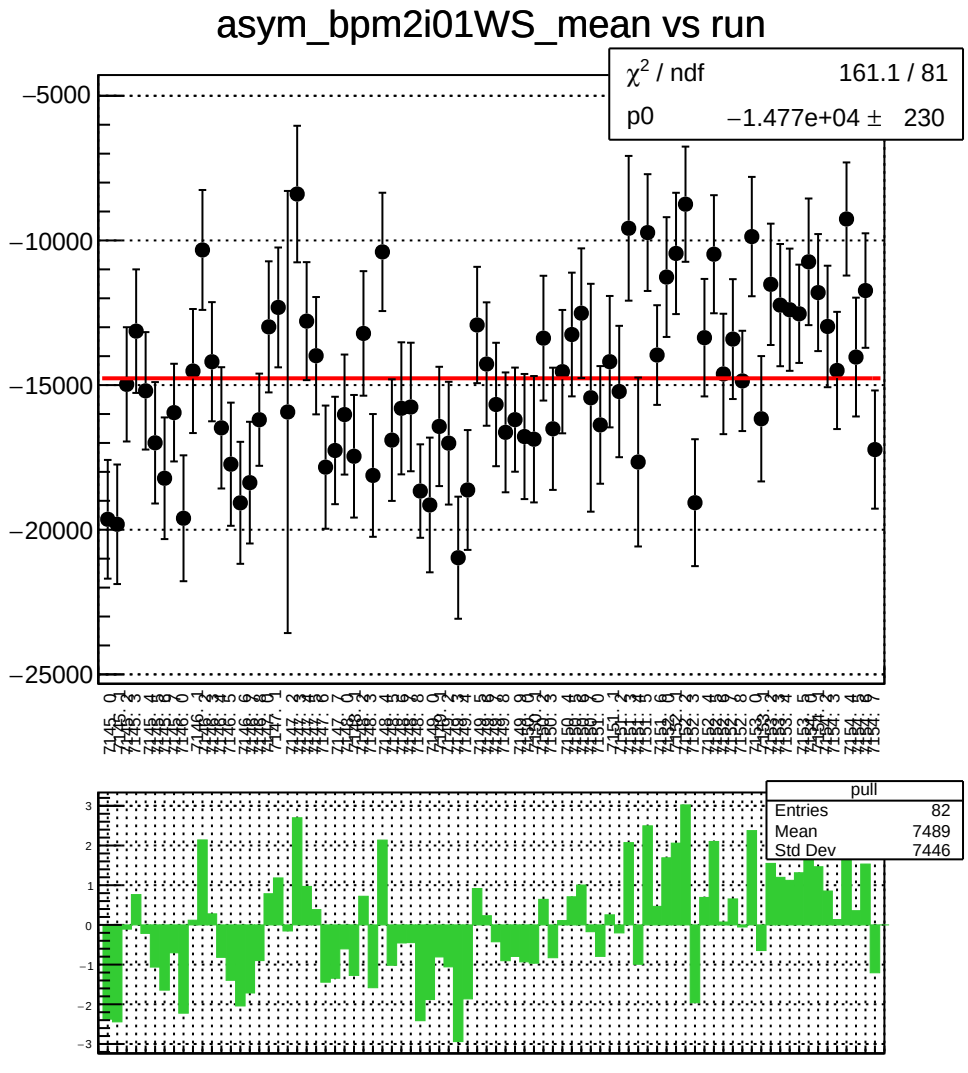

asym_bpm0i07WS_mean vs run
χ² / ndf 51.97 / 81
p0 −230.2 ± 270.9
pull
Entries 82
Mean −6.43e+04
Std Dev 6.434e+04

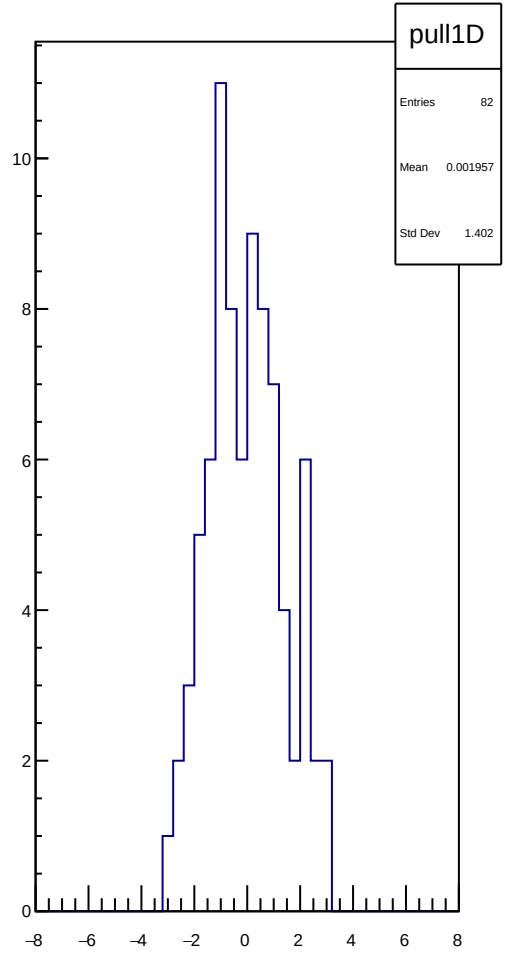

pull1D
Entries 82
Mean −5.936e−05
Std Dev 0.7961

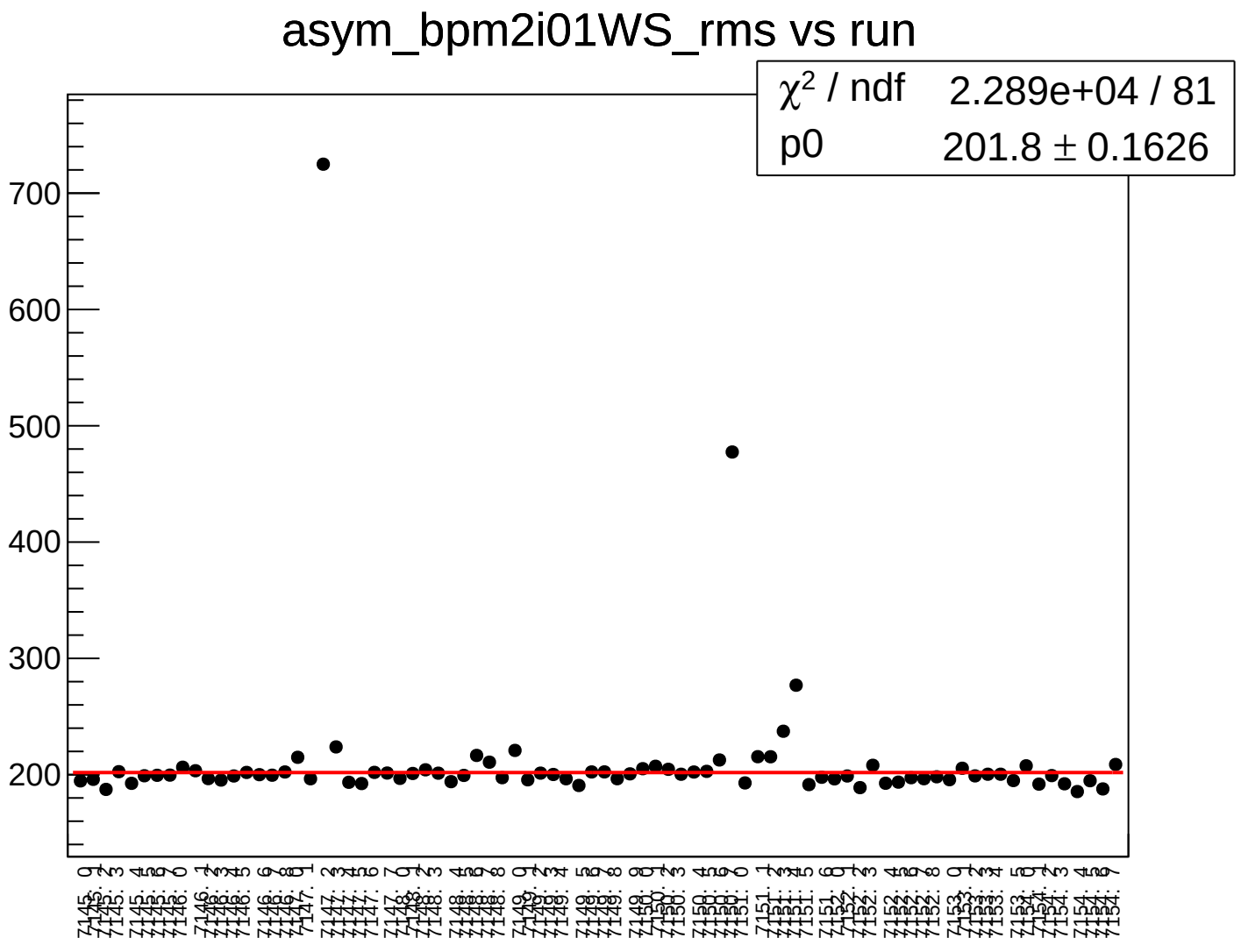

asym_bpm0i07WS_rms vs run
χ² / ndf 1.502e+04 / 81
p0 238.4 ± 0.1915
650
600
550
500
450
400
350
300
250
200

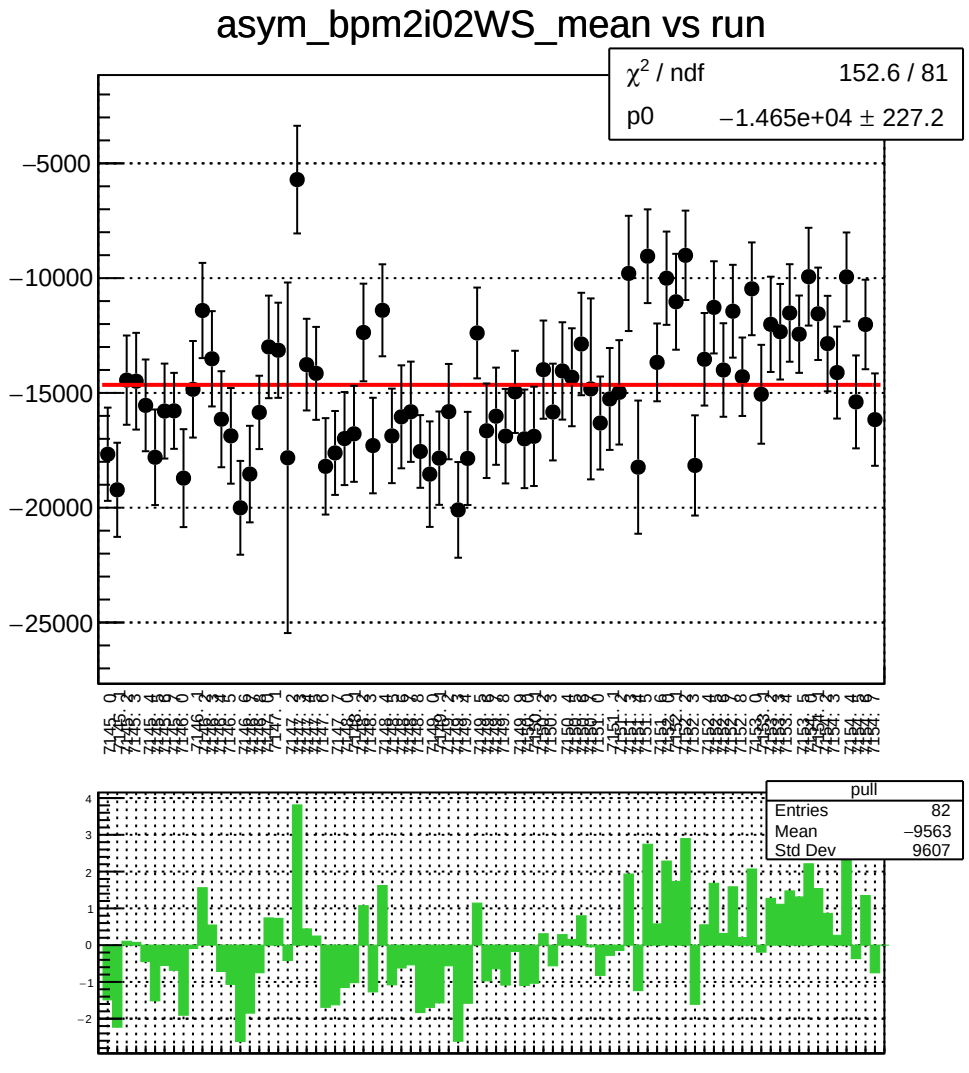

asym_bpm1i02WS_mean vs run
χ² / ndf 154.6 / 81
p0 −1.275e+04 ± 214.7
pull
Entries 82
Mean 846.9
Std Dev 805.8
pull1D
Entries 82
Mean 0.01466
Std Dev 1.373

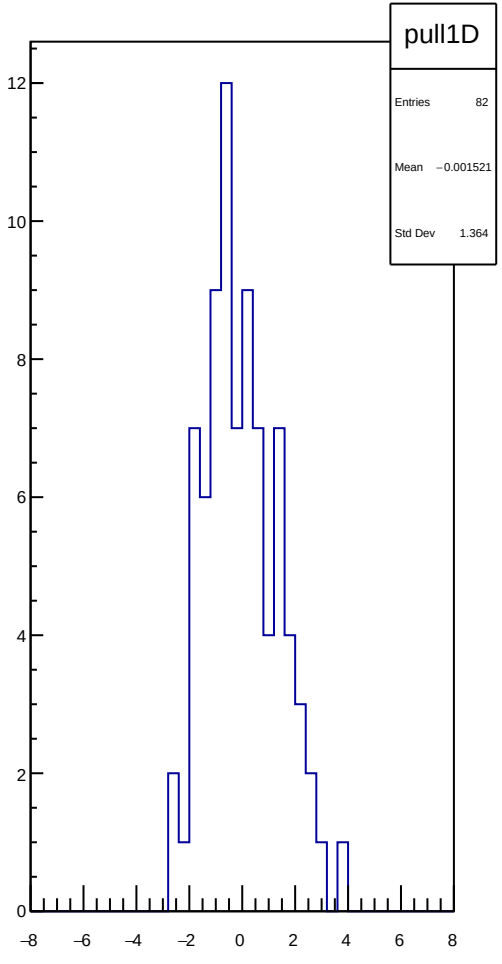

asym_bpm1i02WS_rms vs run
χ² / ndf 2.065e+04 / 81
p0 188.6 ± 0.1518
600
500
400
300
200

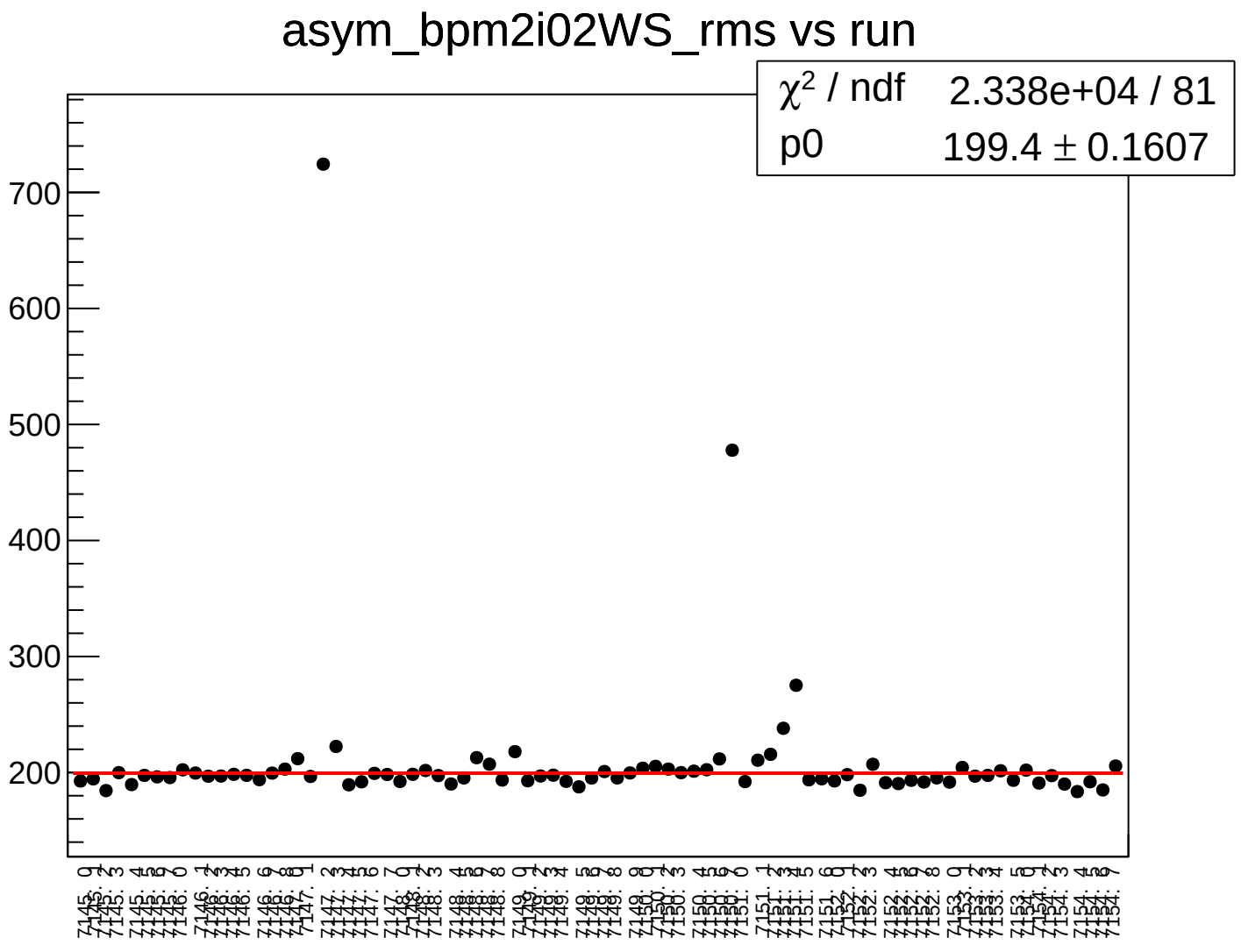

asym_bpm2i01WS_mean vs run
χ² / ndf 161.1 / 81
p0 −1.477e+04 ± 230
−5000
−10000
−15000
−20000
−25000
pull
Entries 82
Mean 7489
Std Dev 7446
3
2
1
0
−1
−2
−3

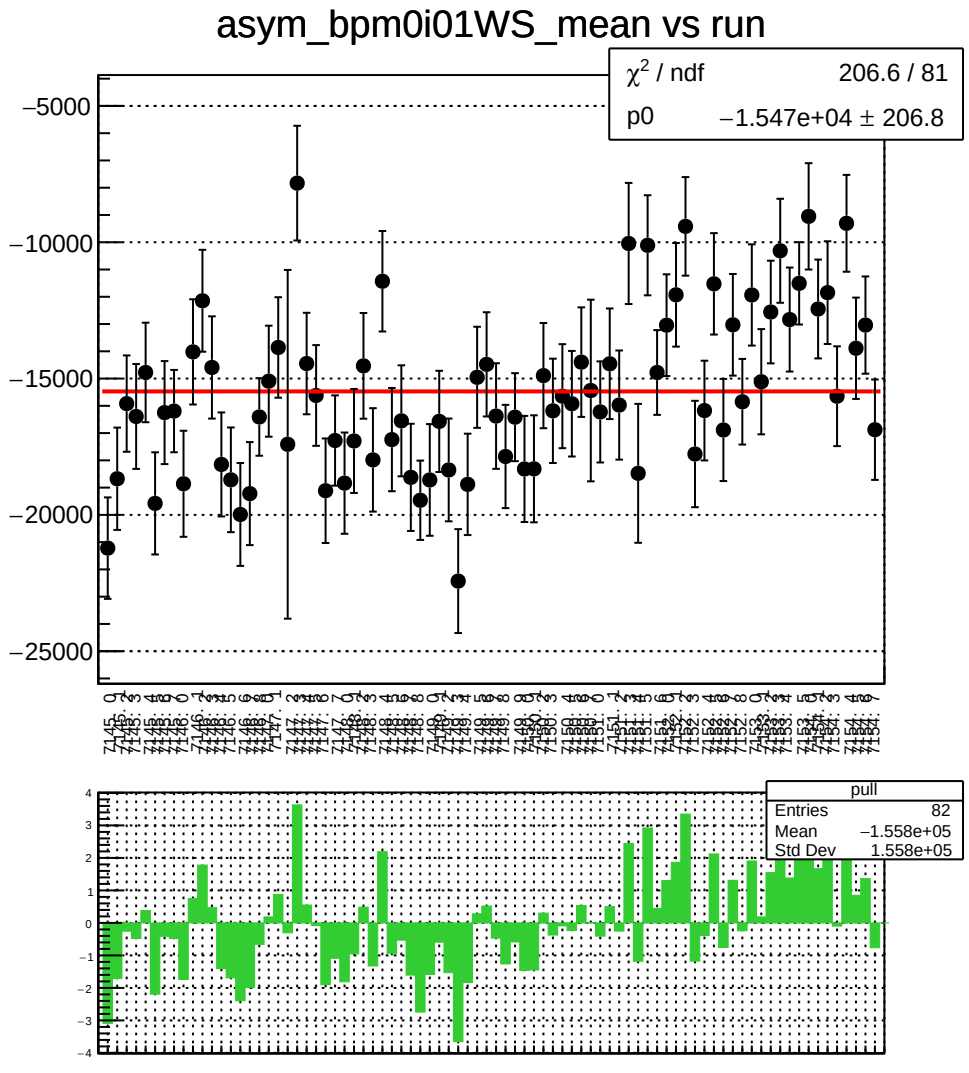

pull1D
Entries 82
Mean 0.001957
Std Dev 1.402
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

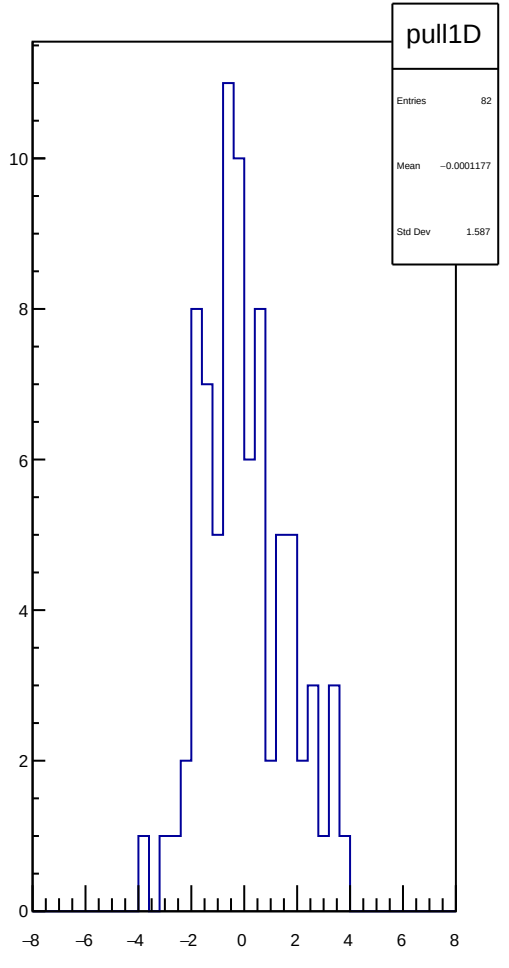

asym_bpm2i01WS_rms vs run
χ² / ndf 2.289e+04 / 81
p0 201.8 ± 0.1626
700
600
500
400
300
200

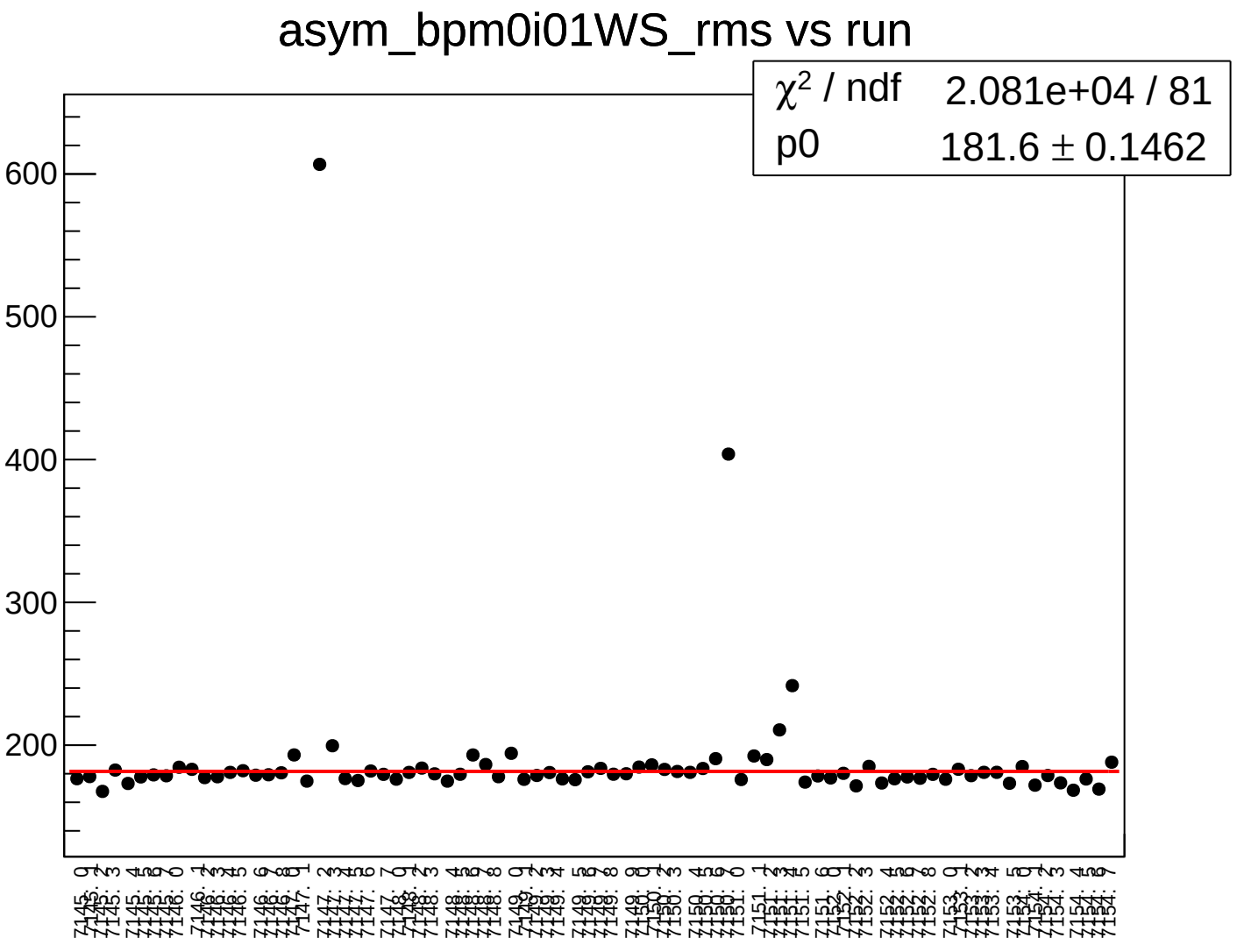

asym_bpm2i02WS_mean vs run
χ² / ndf 152.6 / 81
p0 −1.465e+04 ± 227.2
−5000
−10000
−15000
−20000
−25000
pull
Entries 82
Mean −9563
Std Dev 9607
4
3
2
1
0
−1
−2

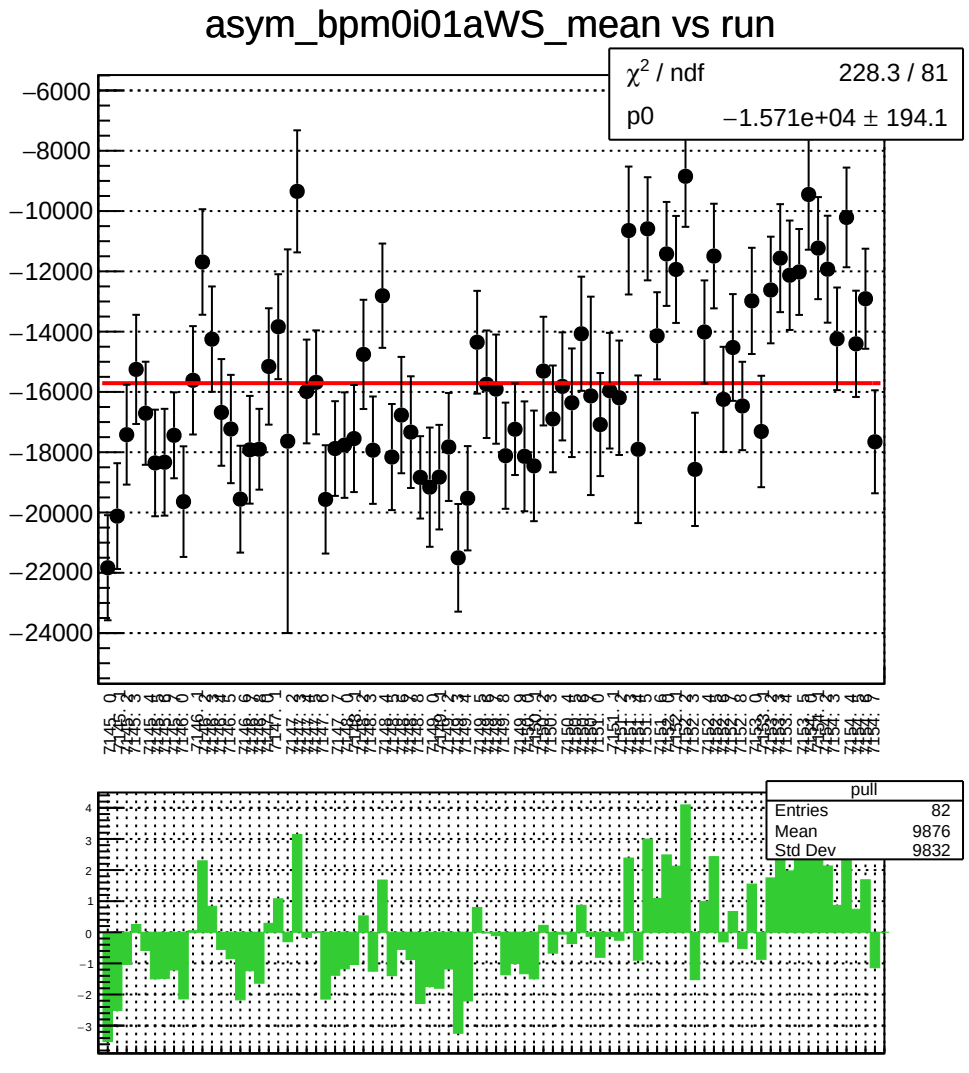

pull1D
Entries 82
Mean −0.001521
Std Dev 1.364
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

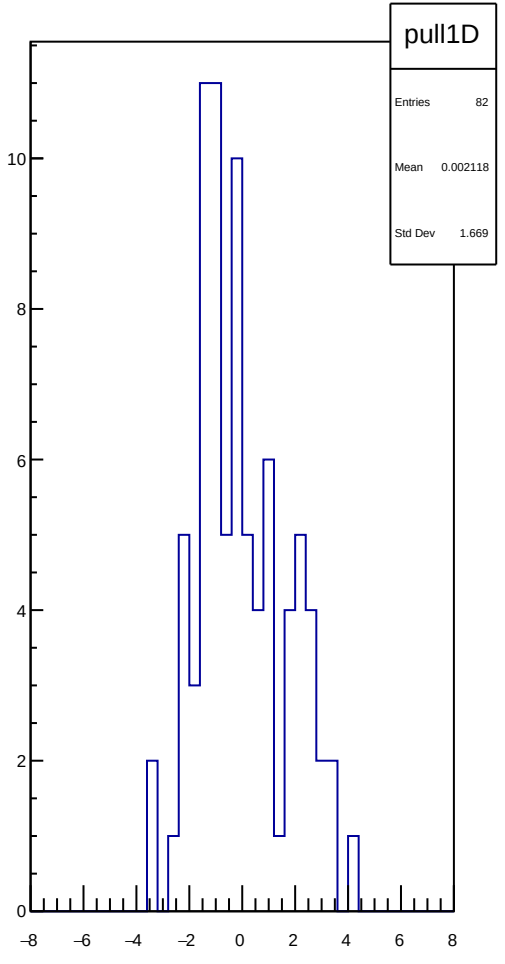

asym_bpm2i02WS_rms vs run
χ² / ndf 2.338e+04 / 81
p0 199.4 ± 0.1607
700
600
500
400
300
200

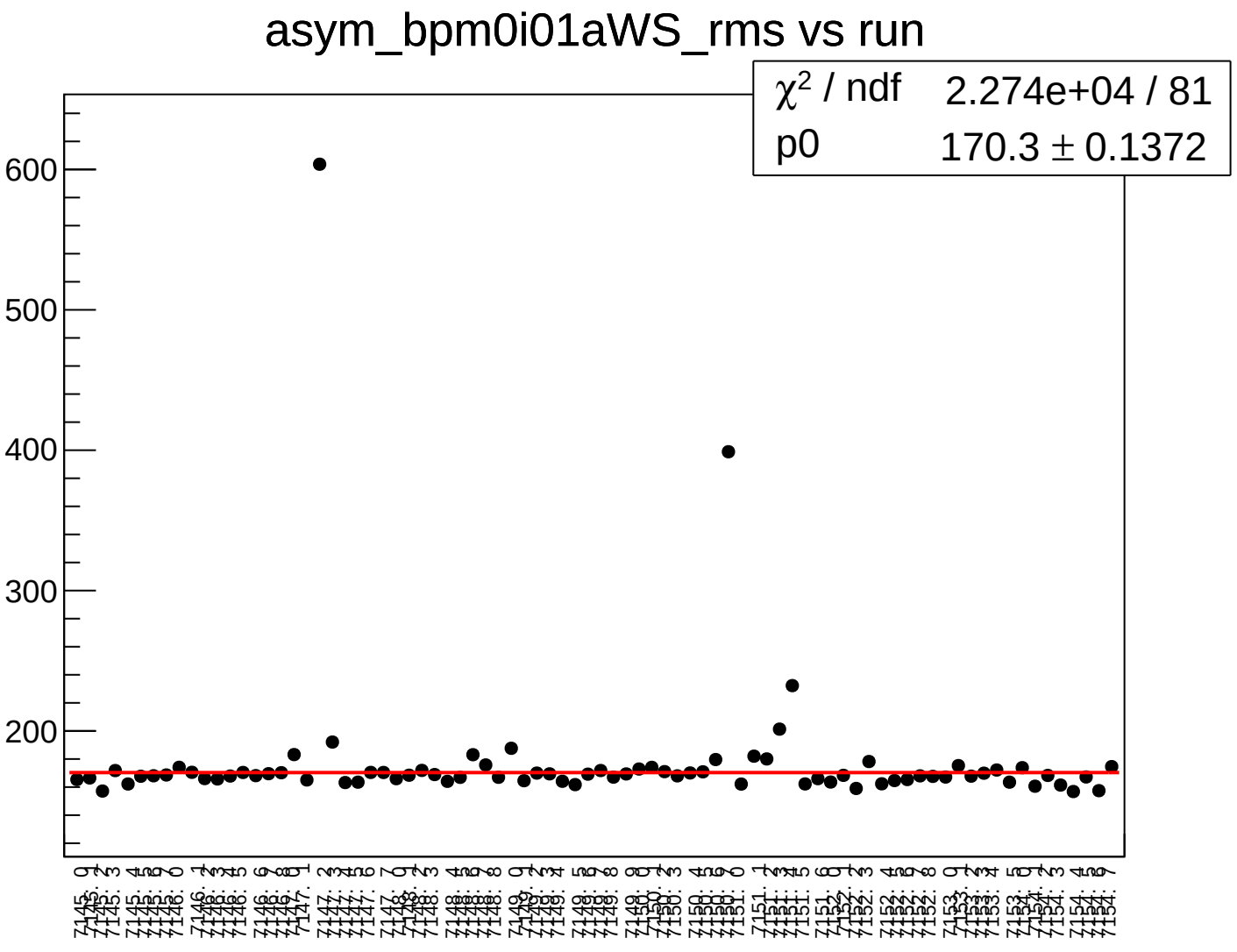

asym_bpm0i01WS_mean vs run
χ² / ndf 206.6 / 81
p0 −1.547e+04 ± 206.8
−5000
−10000
−15000
−20000
−25000
pull
Entries 82
Mean −1.558e+05
Std Dev 1.558e+05
4
3
2
1
0
−1
−2
−3
−4

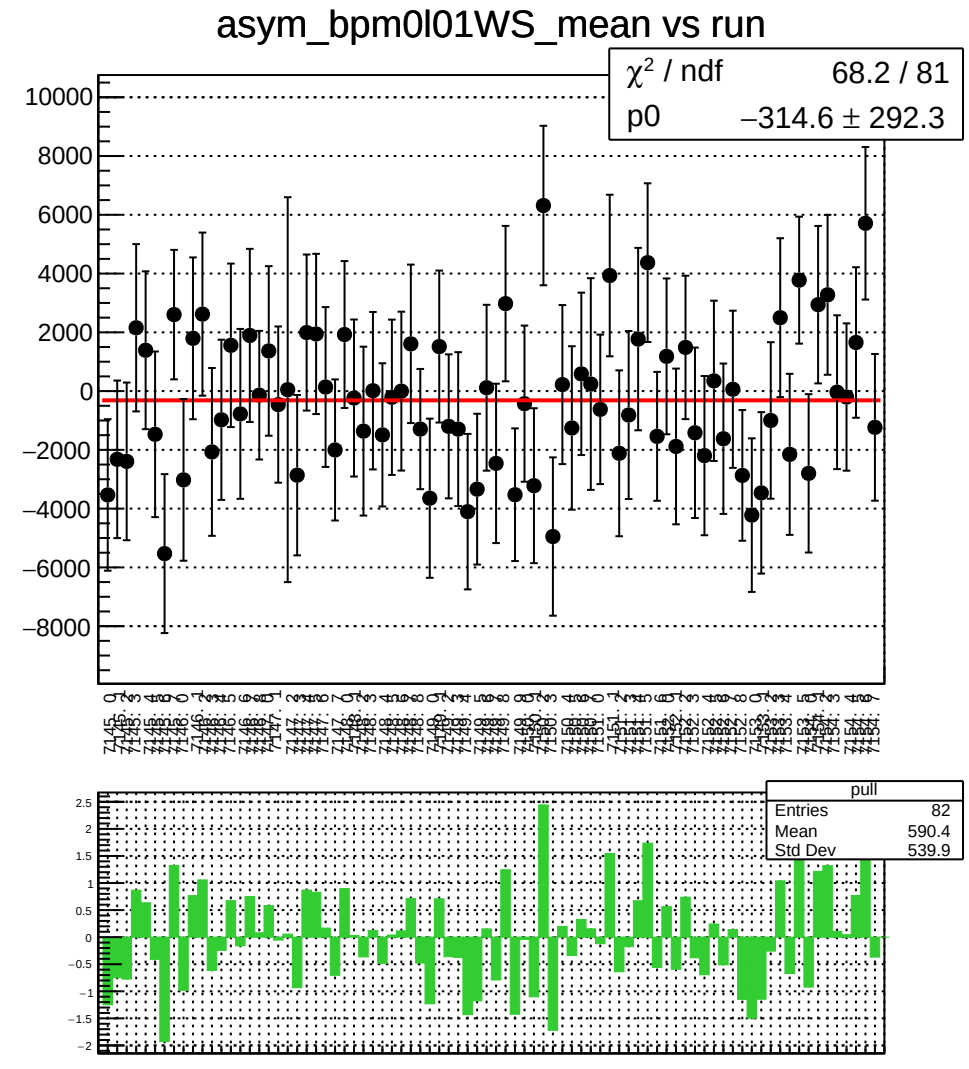

pull1D
Entries 82
Mean −0.0001177
Std Dev 1.587
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

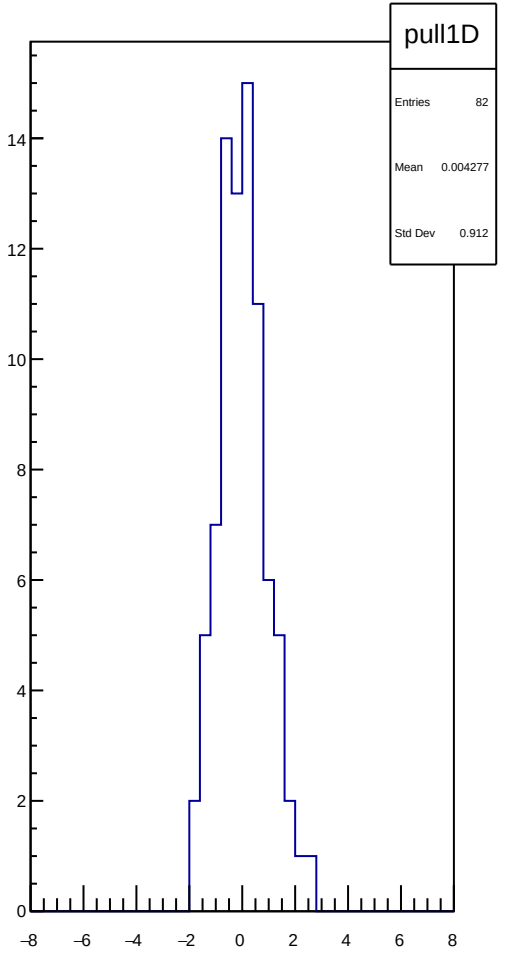

asym_bpm0i01WS_rms vs run
χ^2 / ndf 2.081e+04 / 81
p0 181.6 ± 0.1462
600
500
400
300
200

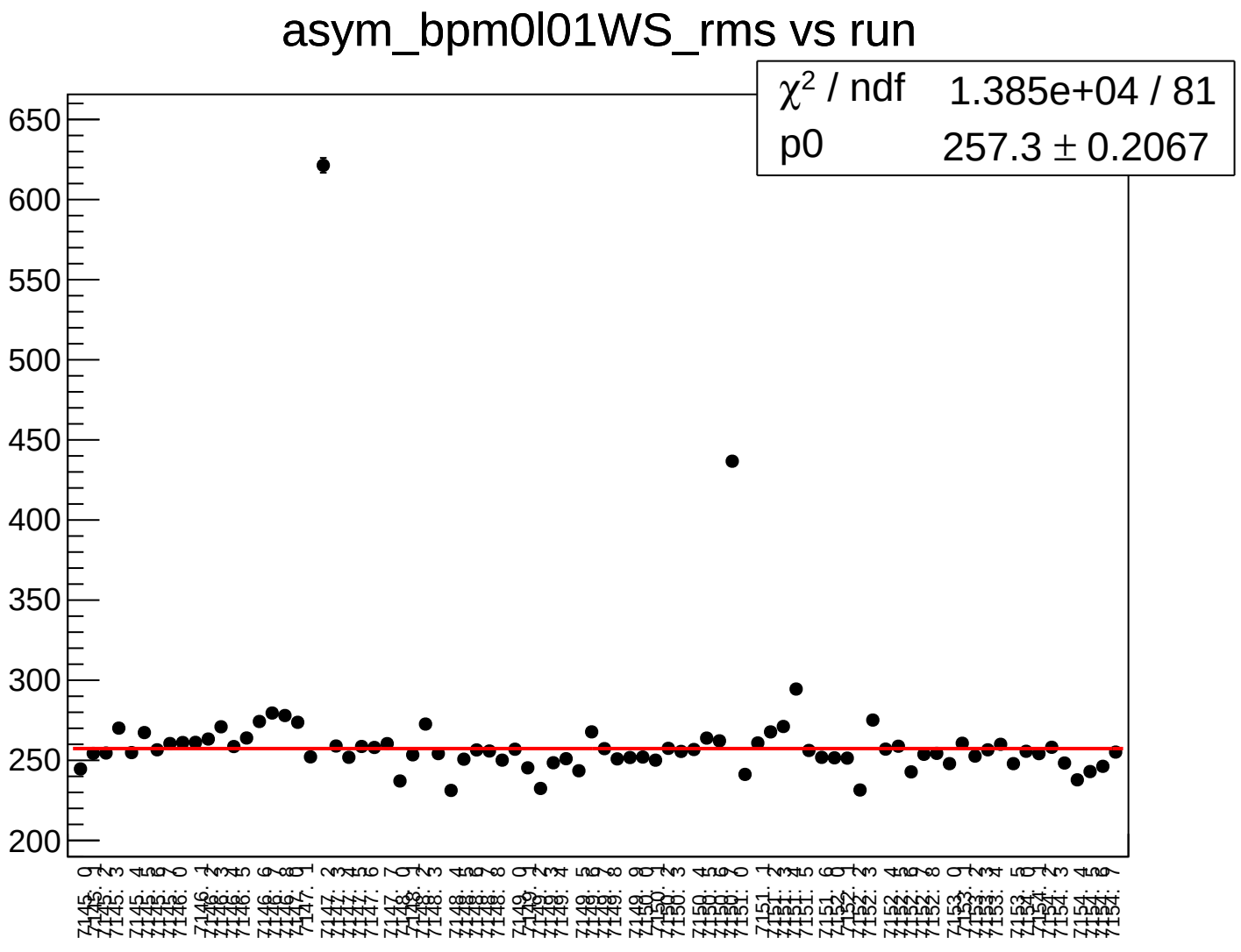

asym_bpm0i01aWS_mean vs run
χ² / ndf 228.3 / 81
p0 −1.571e+04 ± 194.1
pull
Entries 82
Mean 9876
Std Dev 9832

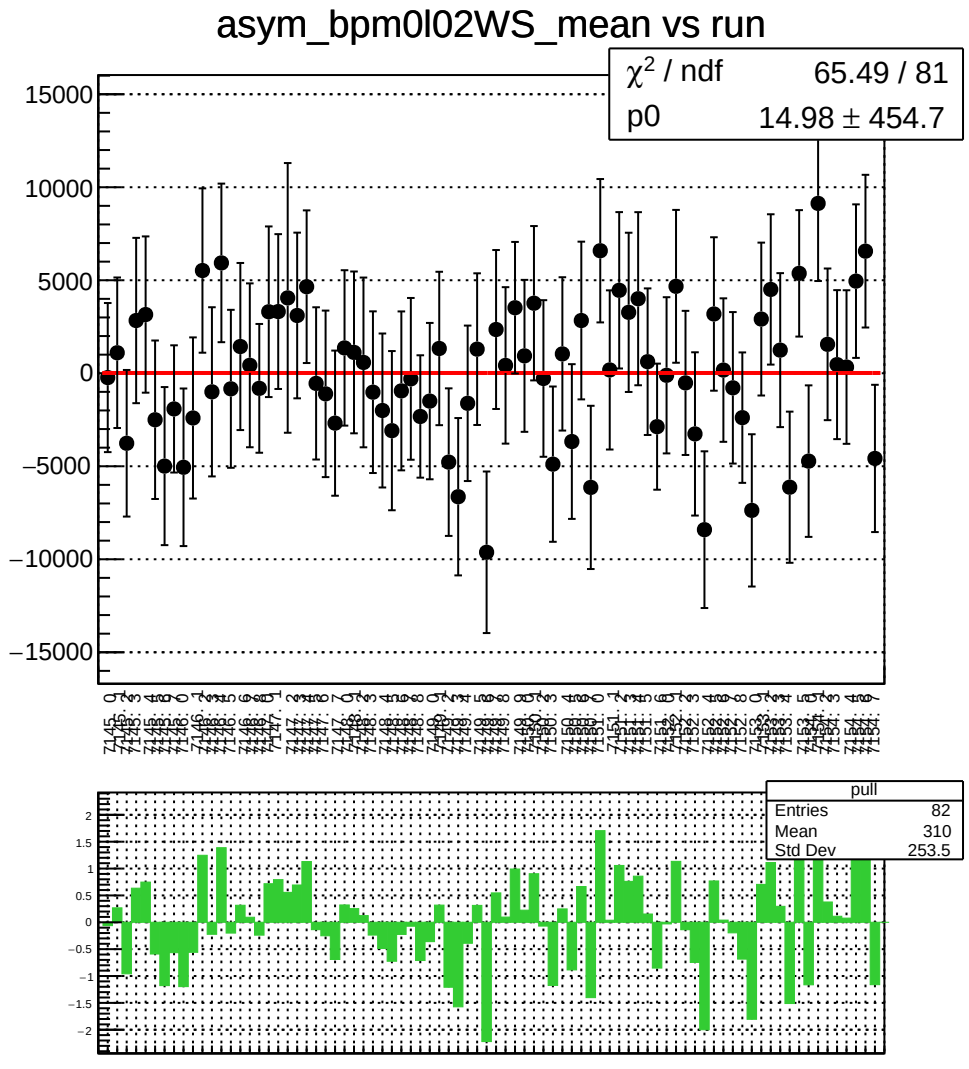

pull1D
Entries 82
Mean 0.002118
Std Dev 1.669

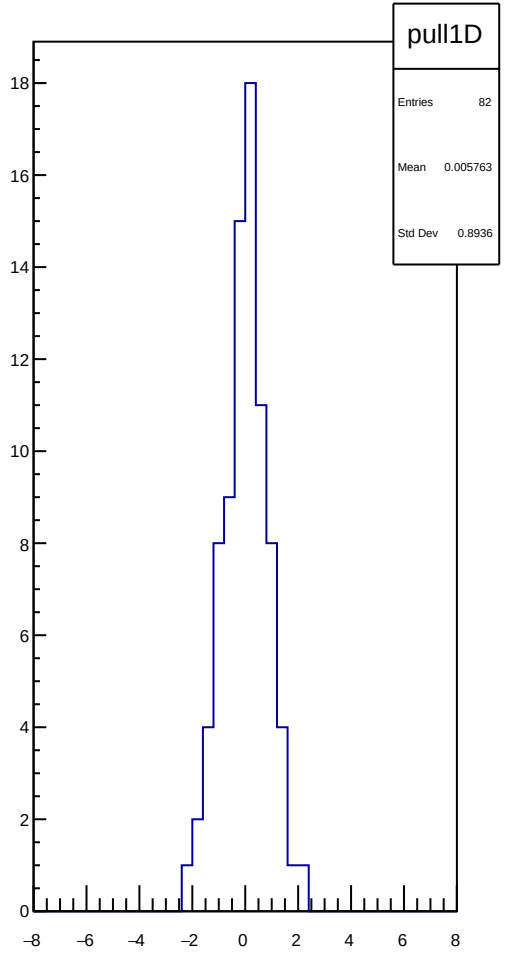

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 2.274e+04 / 81
p0 170.3 ± 0.1372
600
500
400
300
200

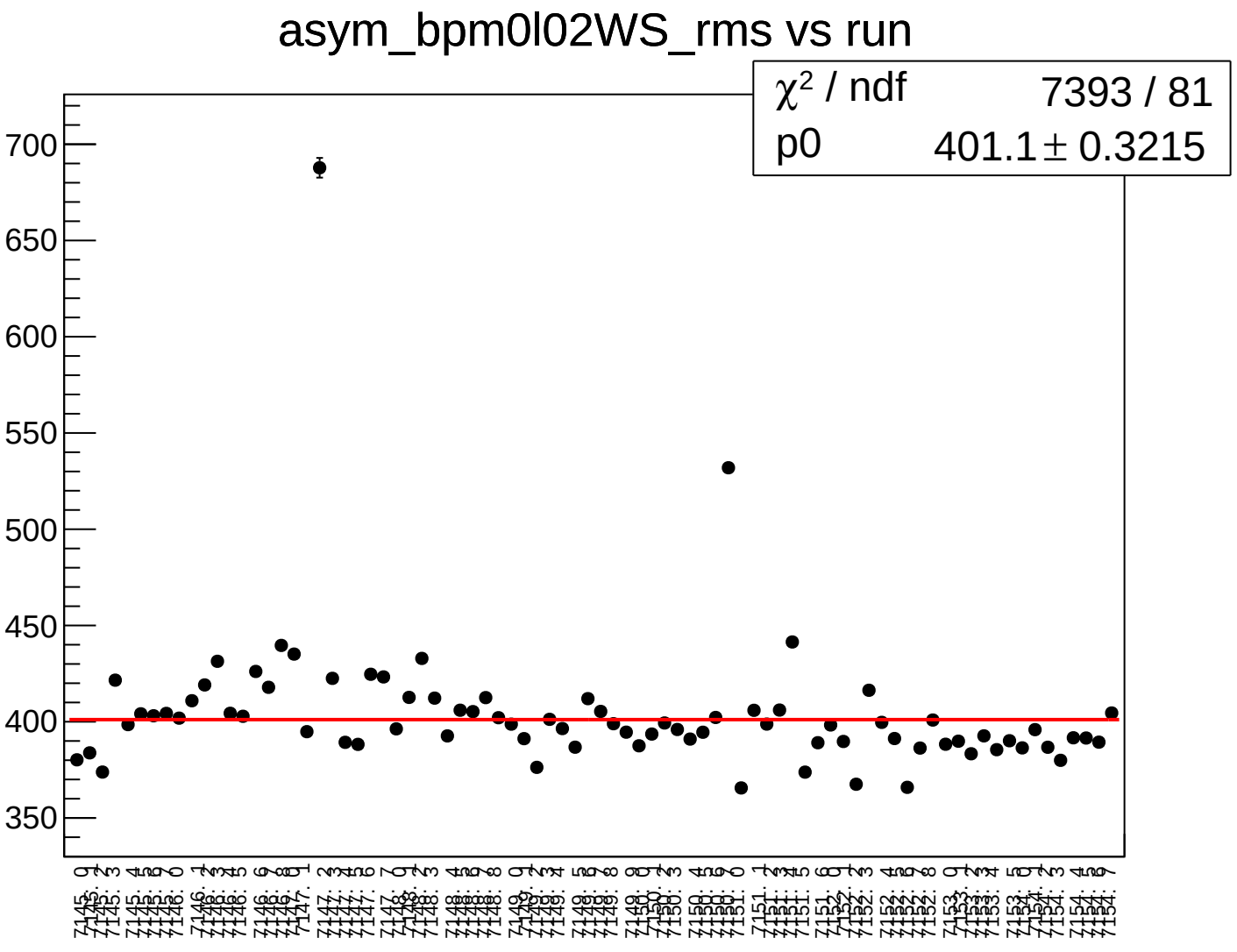

asym_bpm0l01WS_mean vs run
χ² / ndf 68.2 / 81
p0 −314.6 ± 292.3
pull
Entries 82
Mean 590.4
Std Dev 539.9

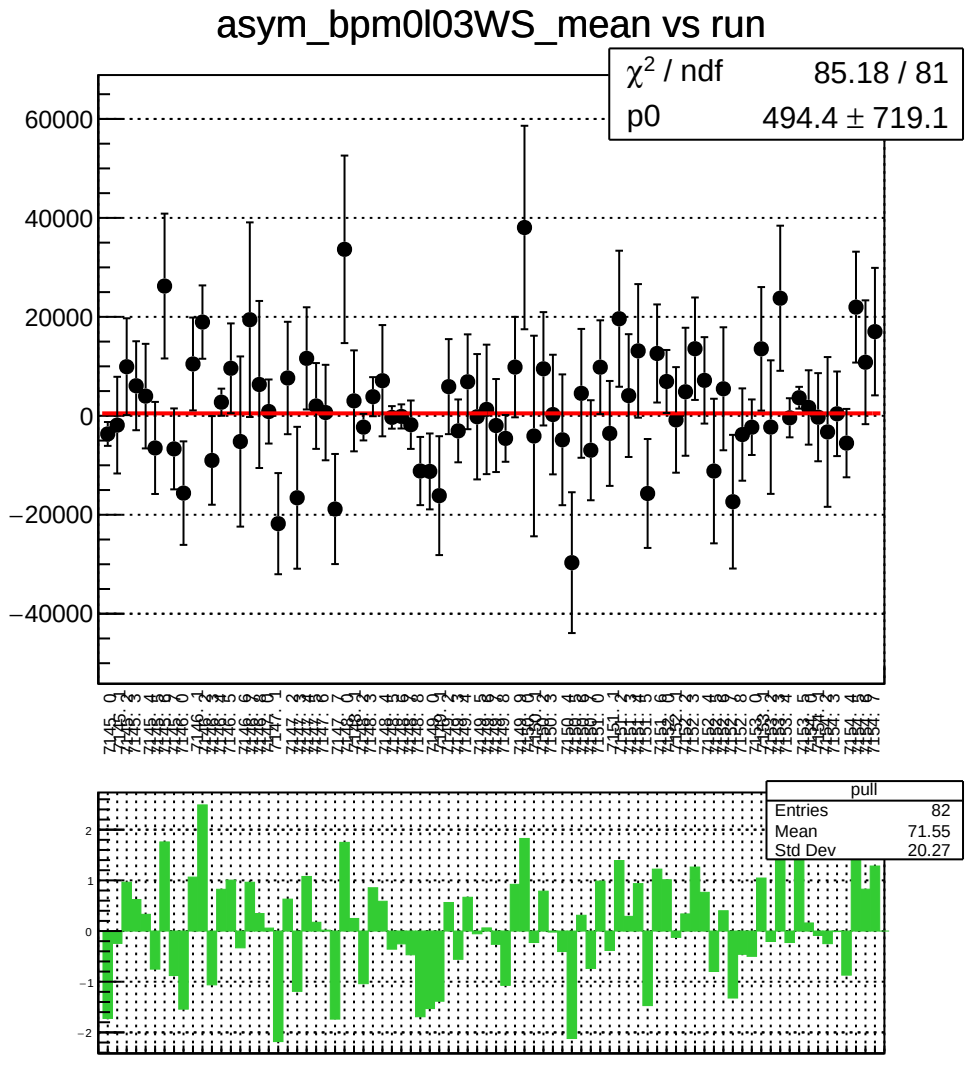

pull1D
Entries 82
Mean 0.004277
Std Dev 0.912

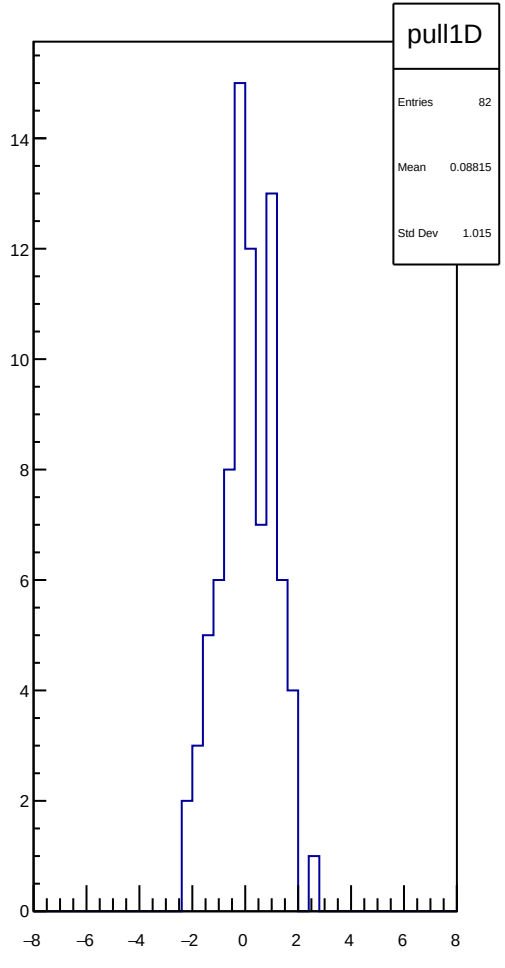

asym_bpm0l01WS_rms vs run
χ² / ndf 1.385e+04 / 81
p0 257.3 ± 0.2067
650
600
550
500
450
400
350
300
250
200

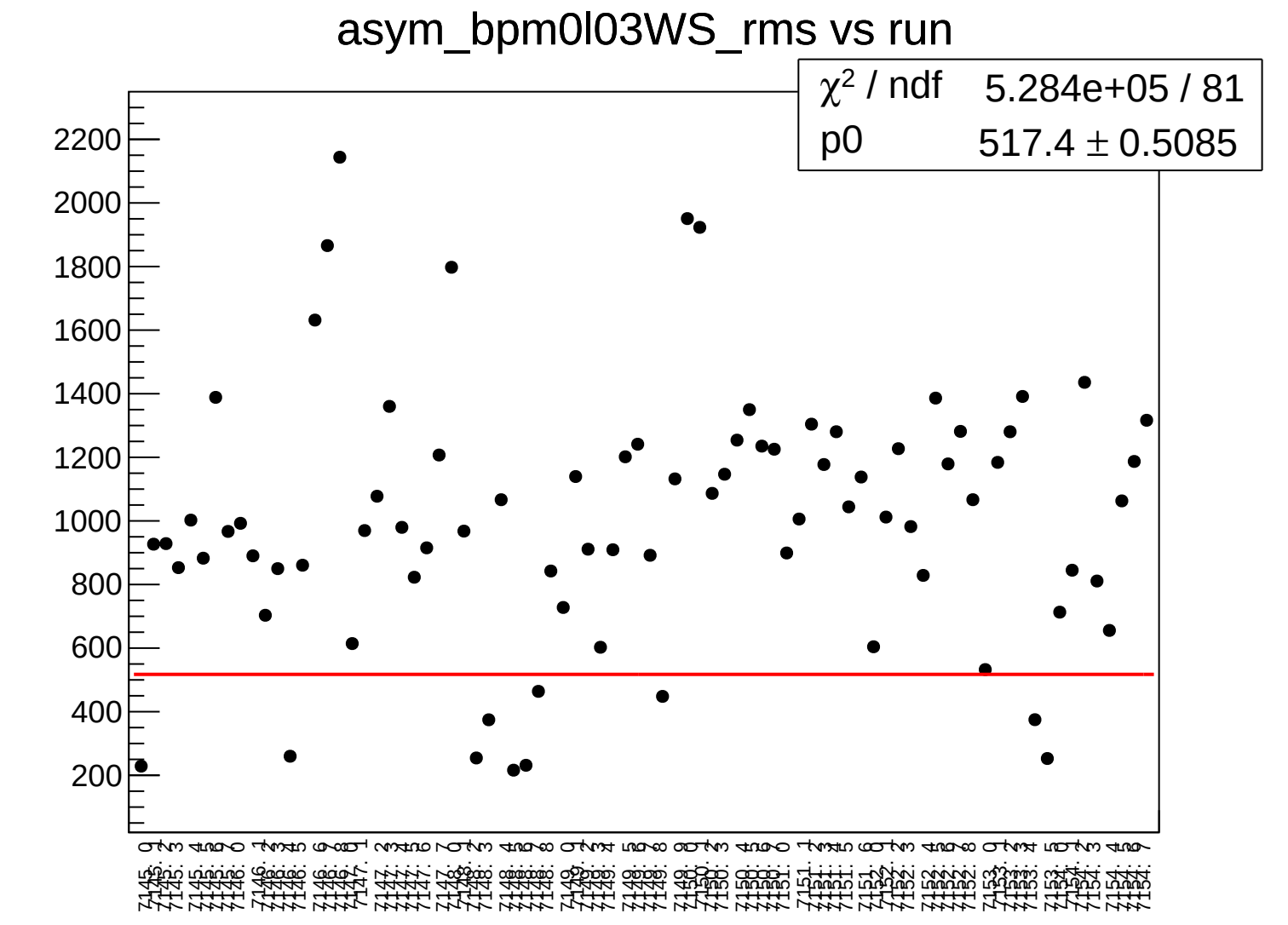

asym_bpm0l02WS_mean vs run
χ² / ndf 65.49 / 81
p0 14.98 ± 454.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 310
Std Dev 253.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

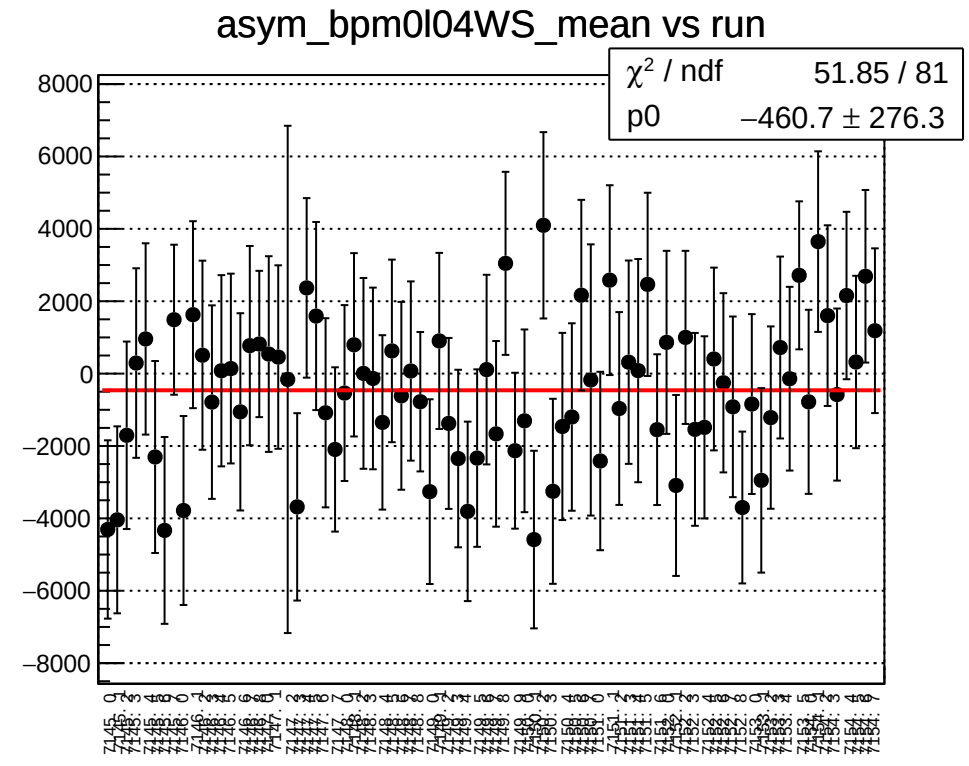

pull1D
Entries 82
Mean 0.005763
Std Dev 0.8936
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

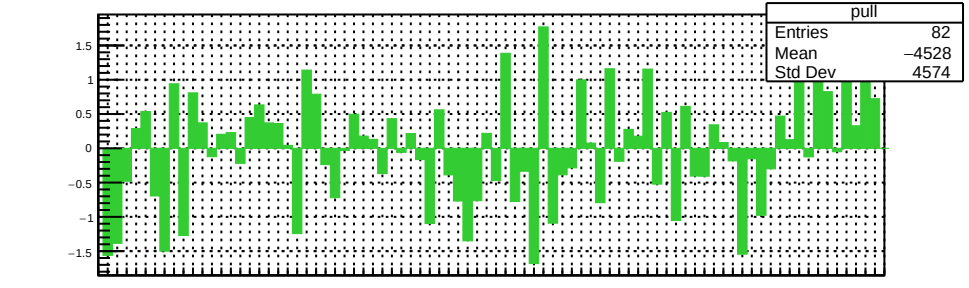

asym_bpm0l02WS_rms vs run
χ² / ndf 7393 / 81
p0 401.1 ± 0.3215
700
650
600
550
500
450
400
350

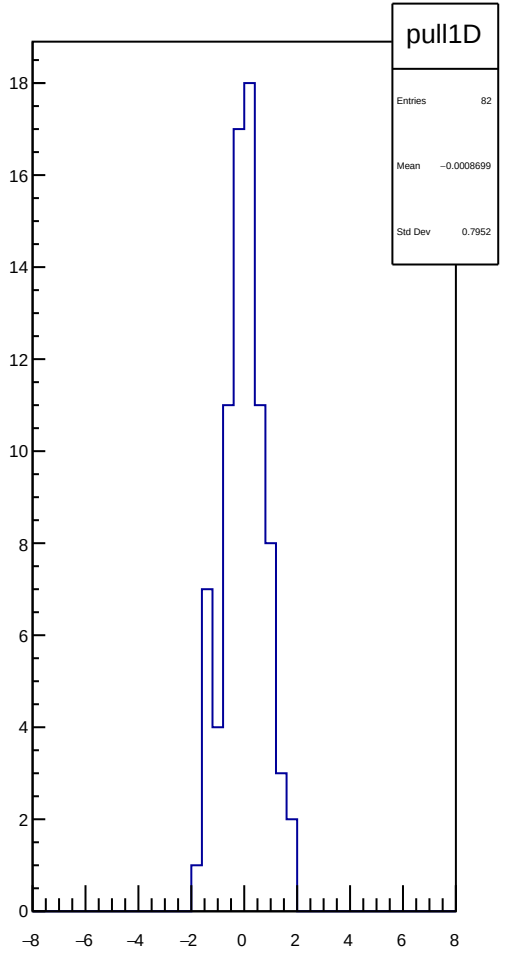

asym_bpm0l03WS_mean vs run
χ² / ndf 85.18 / 81
p0 494.4 ± 719.1
60000
40000
20000
0
−20000
−40000
pull
Entries 82
Mean 71.55
Std Dev 20.27
2
1
0
−1
−2

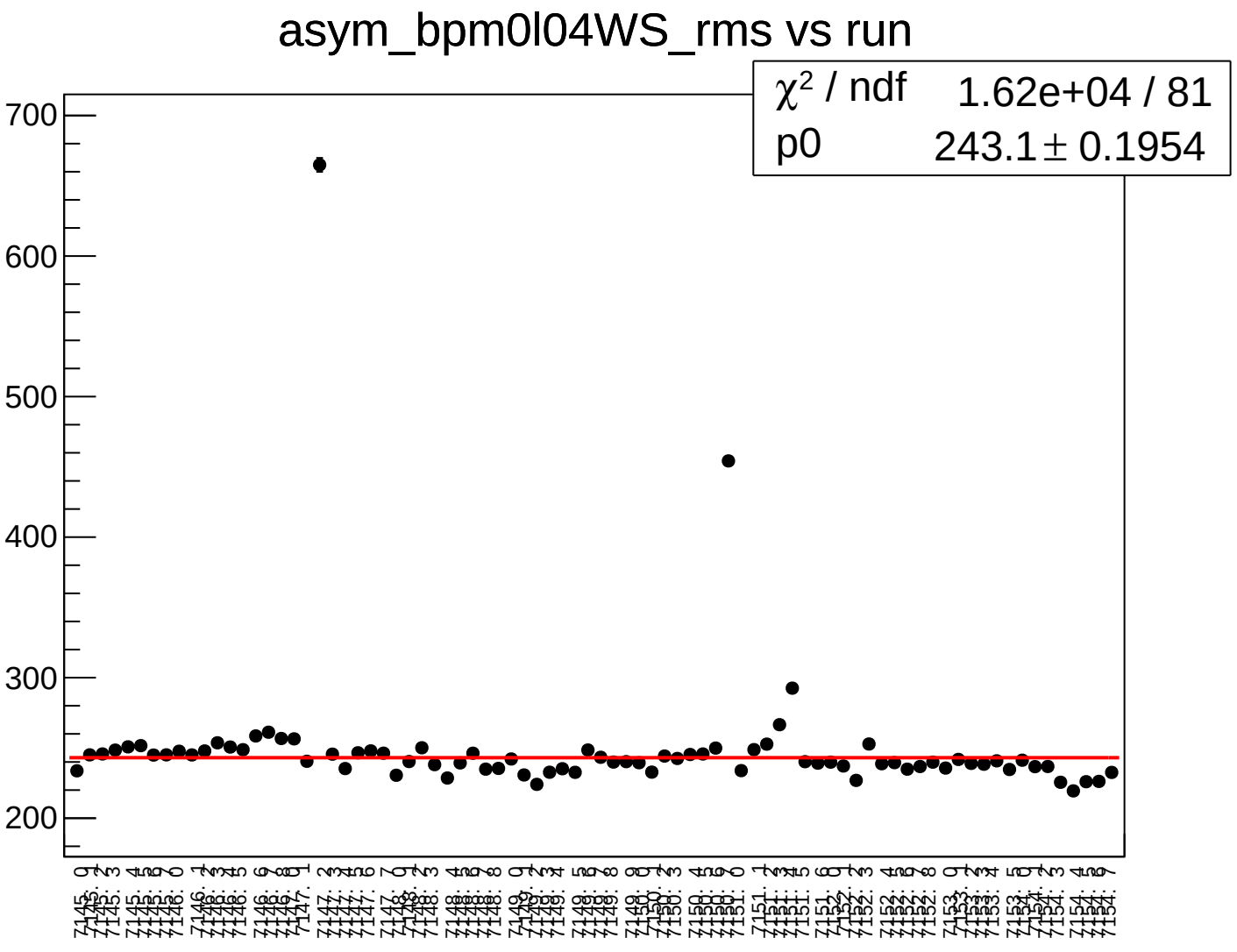

pull1D
Entries 82
Mean 0.08815
Std Dev 1.015
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

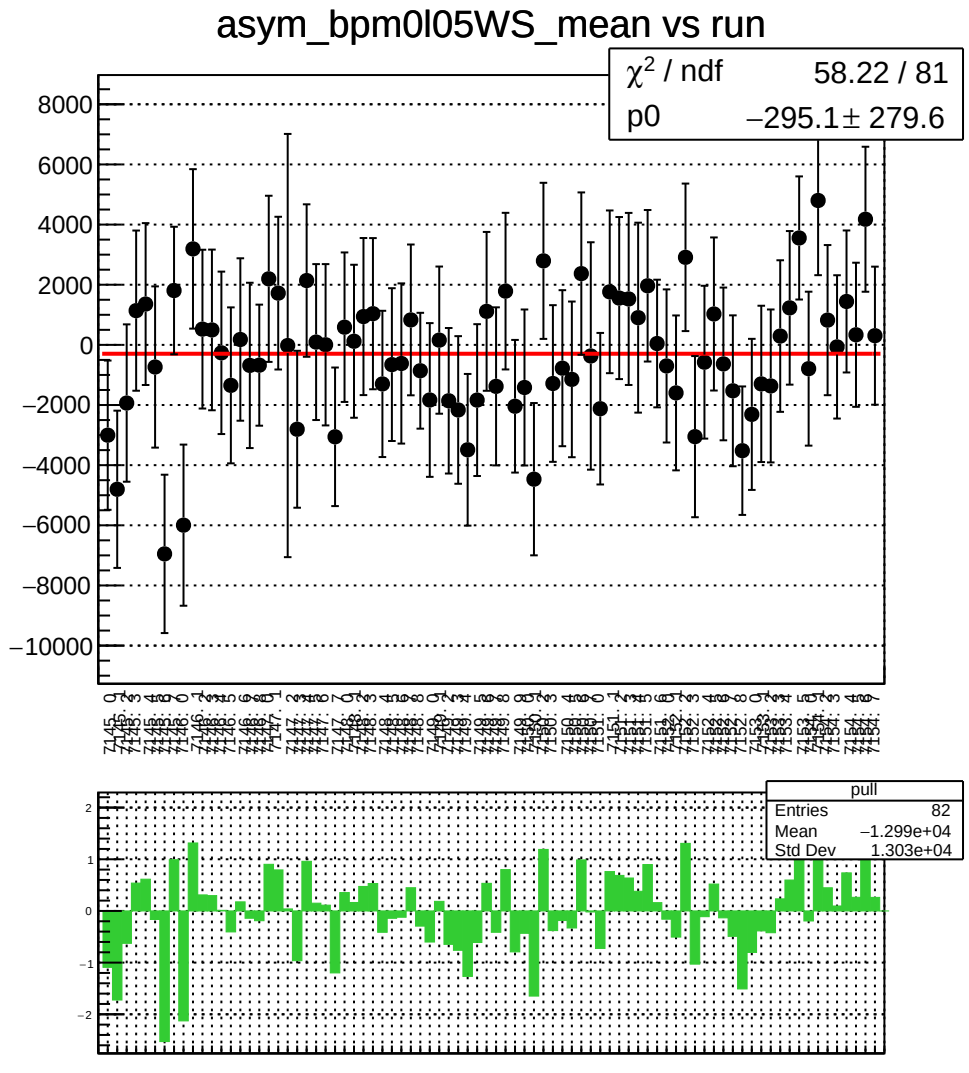

asym_bpm0l03WS_rms vs run
χ² / ndf 5.284e+05 / 81
p0 517.4 ± 0.5085
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

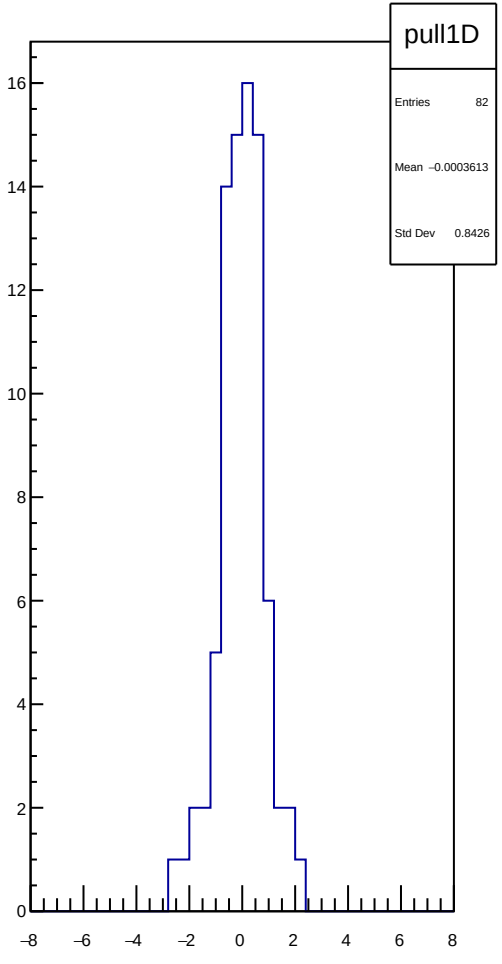

asym_bpm0l04WS_mean vs run
χ² / ndf 51.85 / 81
p0 −460.7 ± 276.3
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000

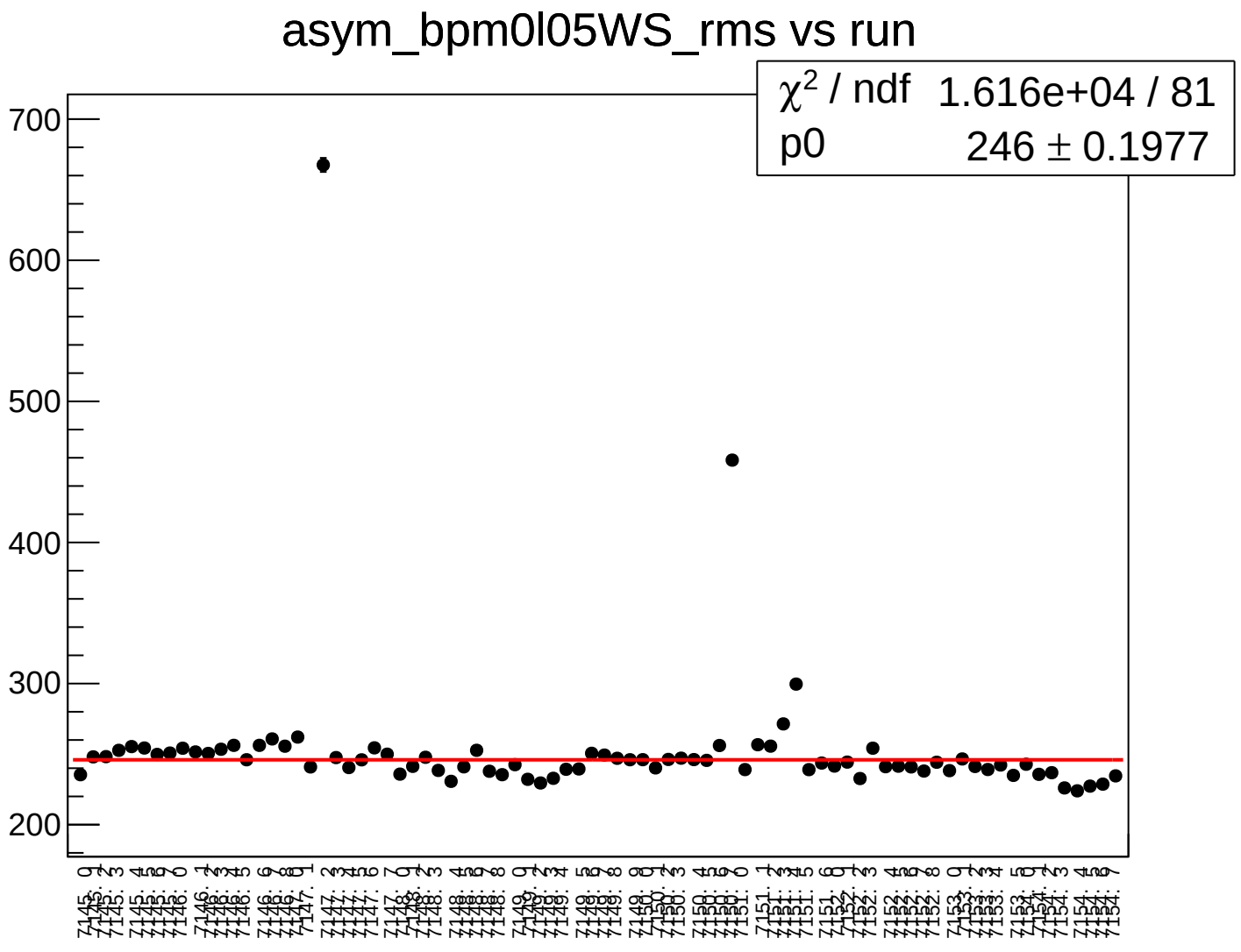

pull
Entries 82
Mean −4528
Std Dev 4574
1.5
1
0.5
0
−0.5
−1
−1.5

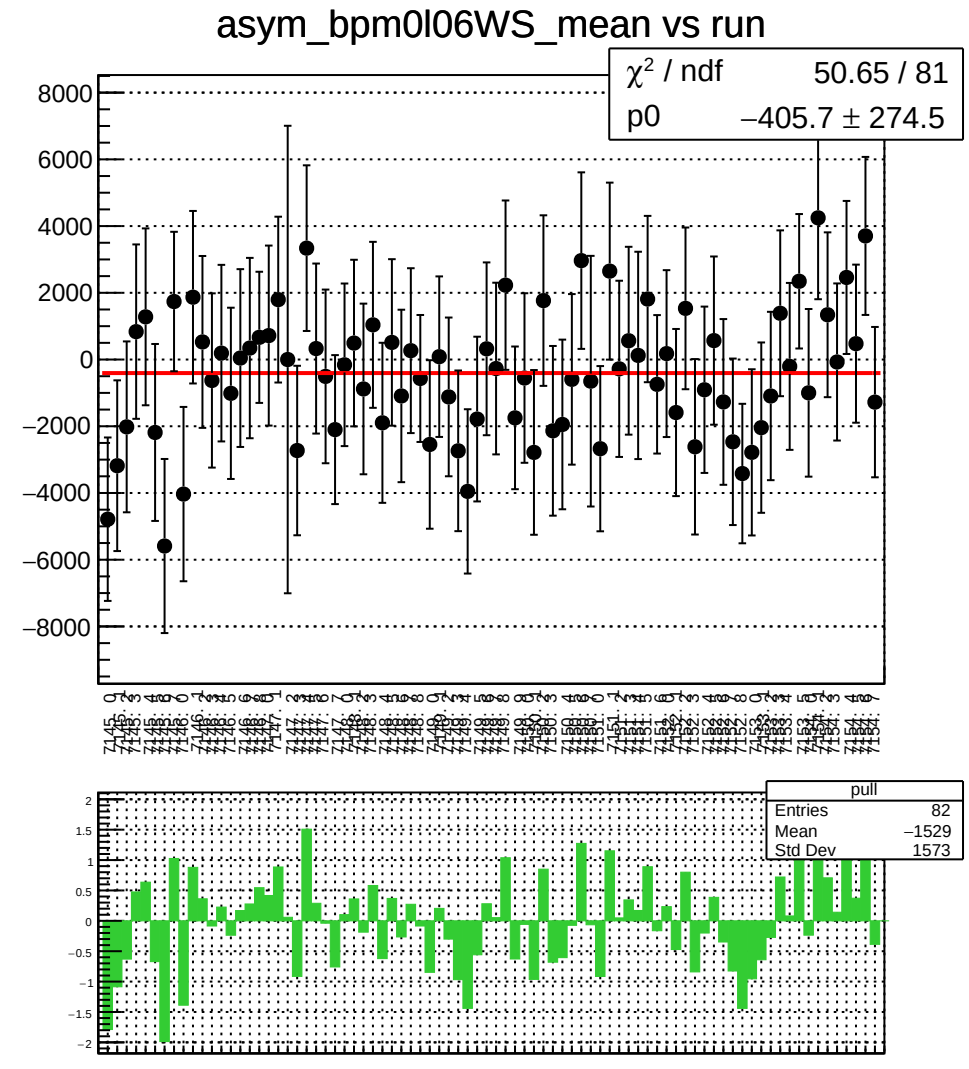

pull1D
Entries 82
Mean −0.0008699
Std Dev 0.7952
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

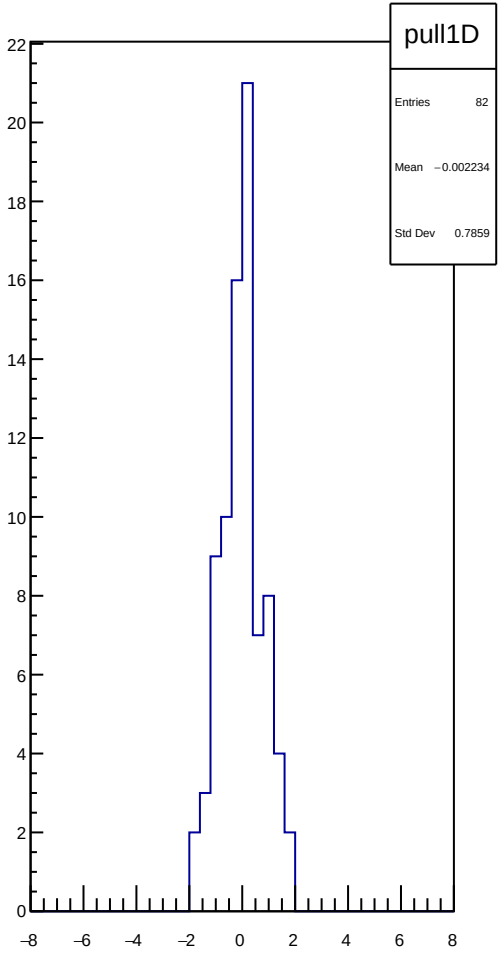

asym_bpm0l04WS_rms vs run
χ² / ndf 1.62e+04 / 81
p0 243.1 ± 0.1954
700
600
500
400
300
200

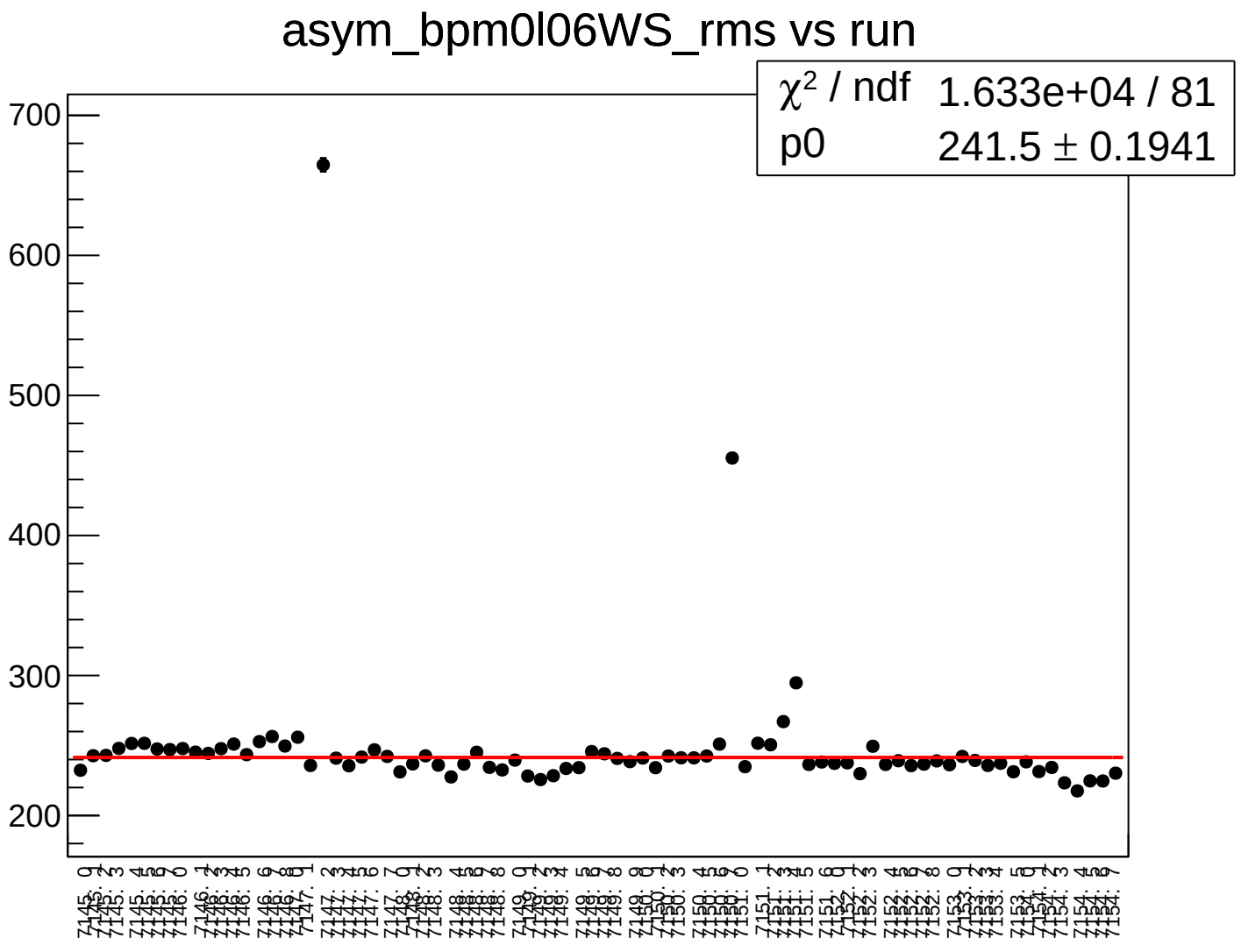

asym_bpm0l05WS_mean vs run
χ² / ndf 58.22 / 81
p0 −295.1± 279.6
pull
Entries 82
Mean −1.299e+04
Std Dev 1.303e+04

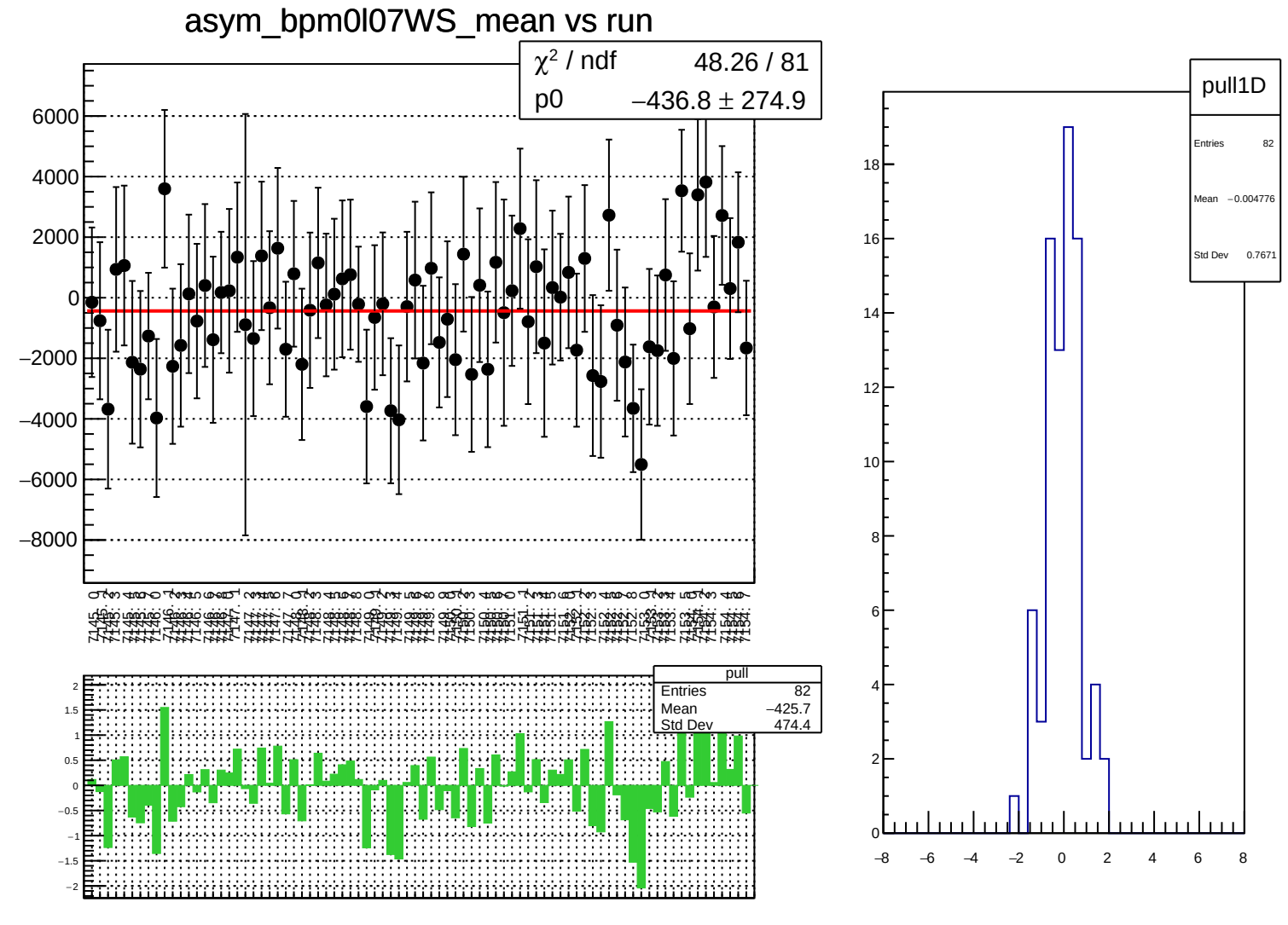

pull1D
Entries 82
Mean −0.0003613
Std Dev 0.8426

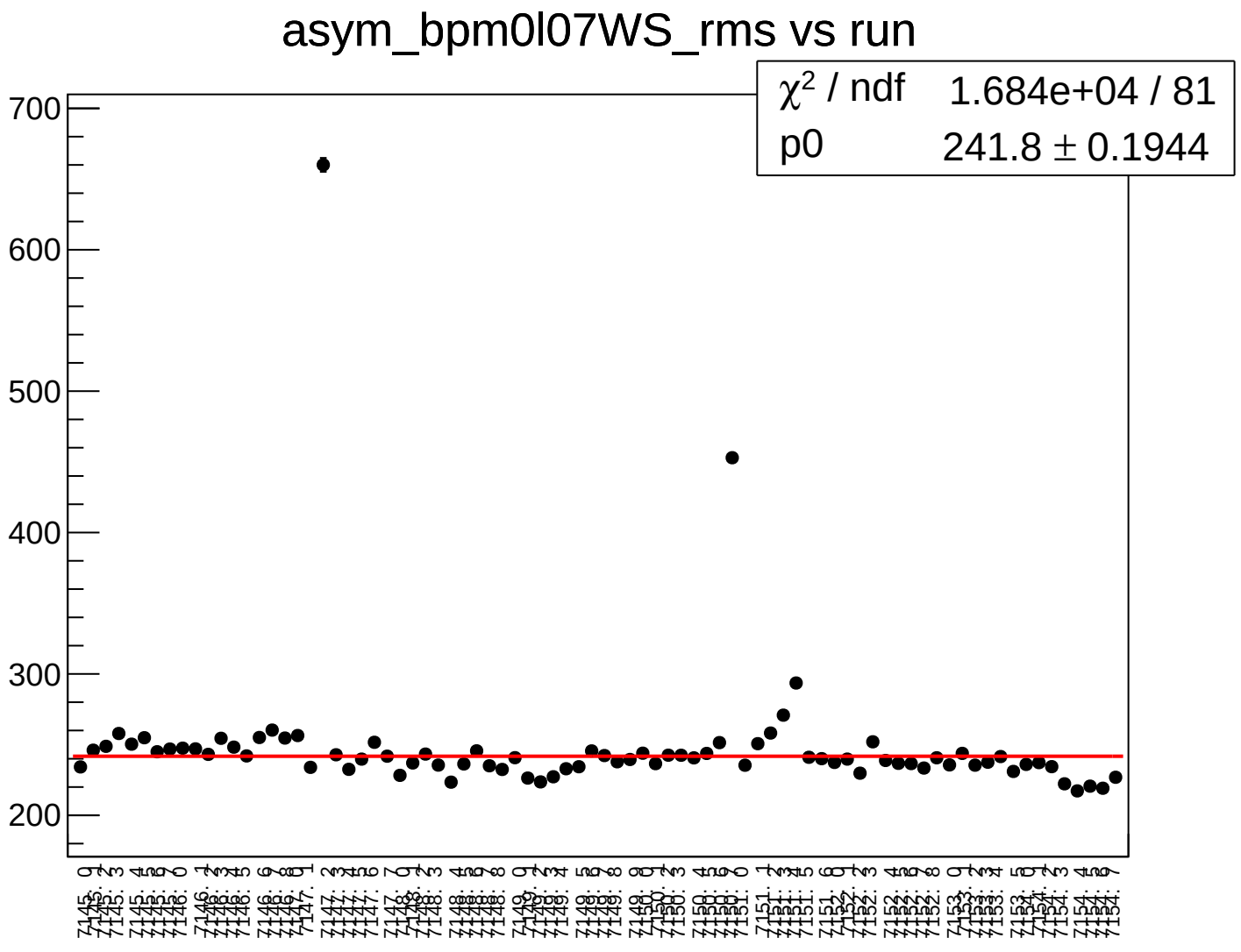

asym_bpm0l05WS_rms vs run
χ² / ndf 1.616e+04 / 81
p0 246 ± 0.1977
700
600
500
400
300
200

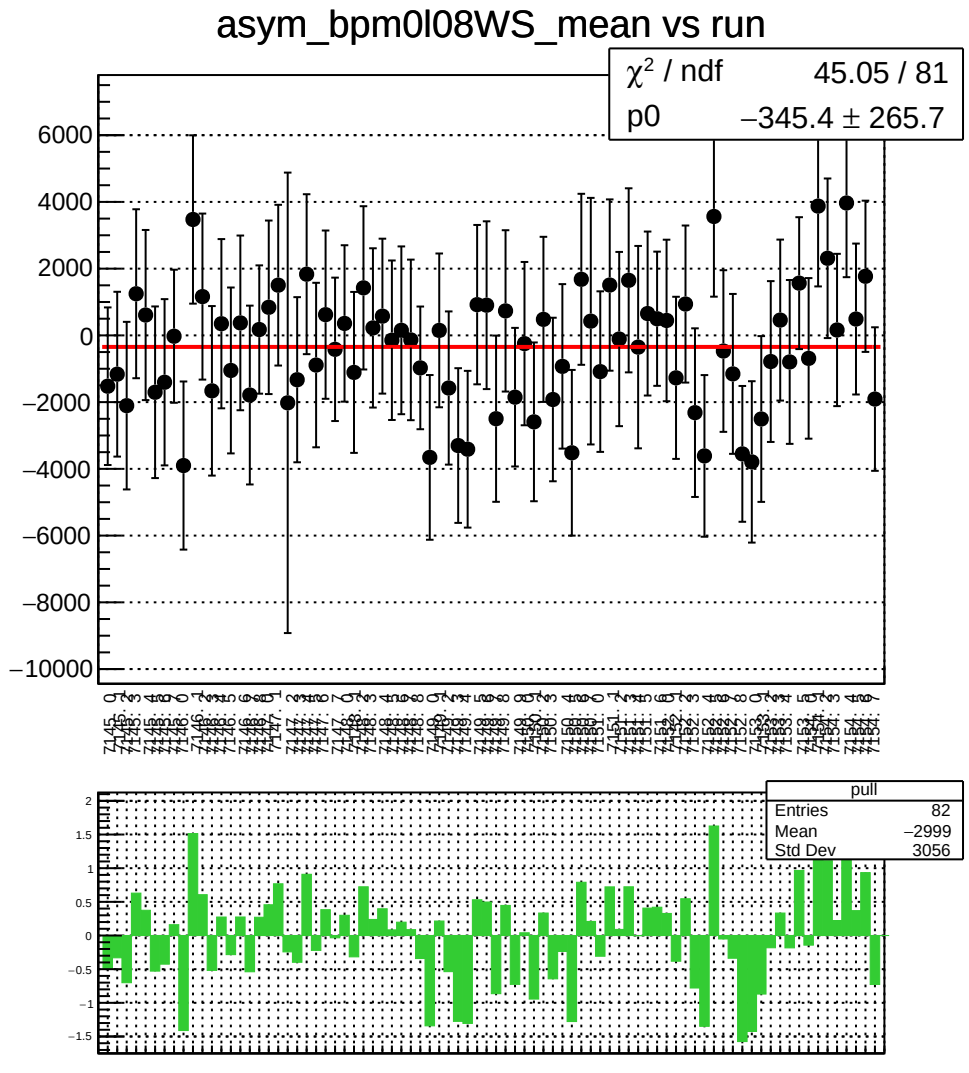

asym_bpm0l06WS_mean vs run
χ² / ndf 50.65 / 81
p0 −405.7 ± 274.5
pull
Entries 82
Mean −1529
Std Dev 1573

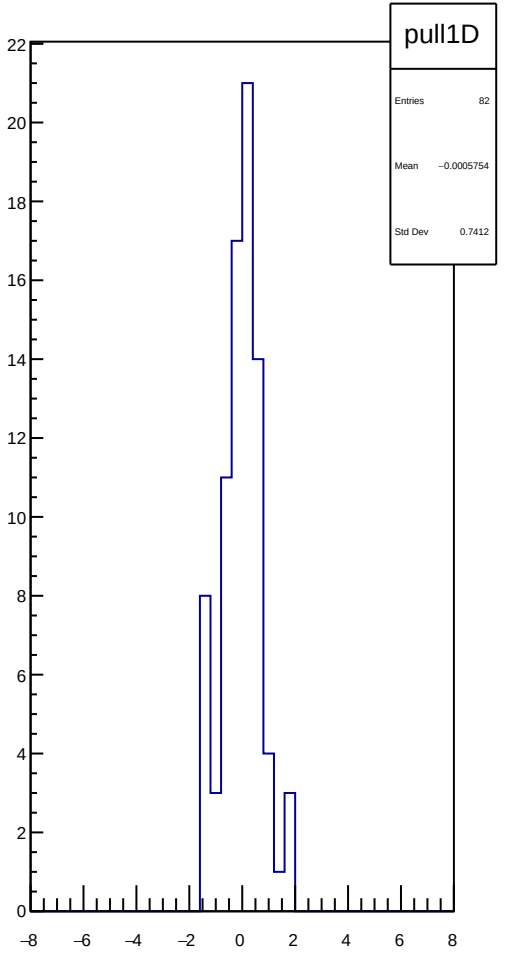

pull1D
Entries 82
Mean −0.002234
Std Dev 0.7859

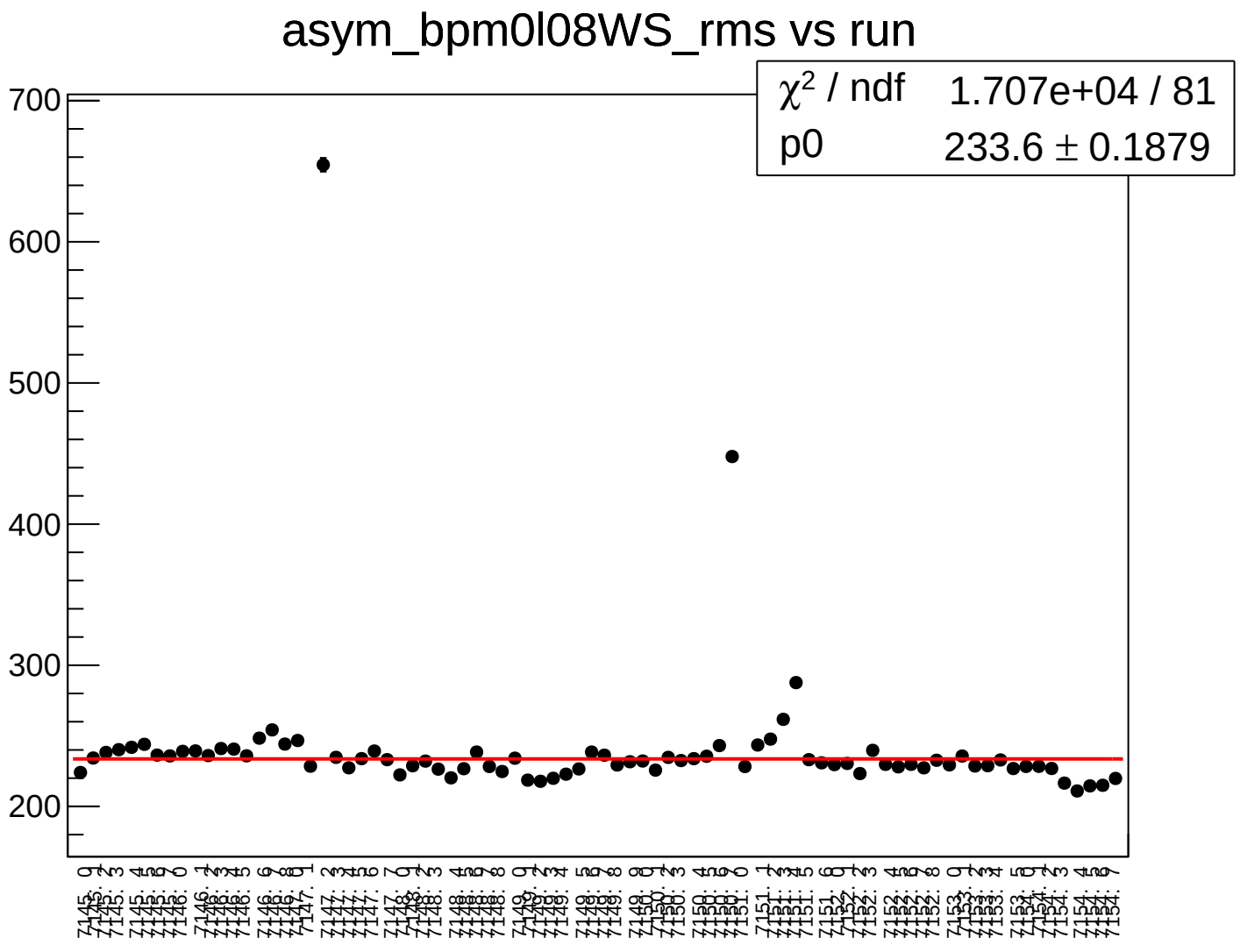

asym_bpm0l06WS_rms vs run
χ² / ndf 1.633e+04 / 81
p0 241.5 ± 0.1941
700
600
500
400
300
200

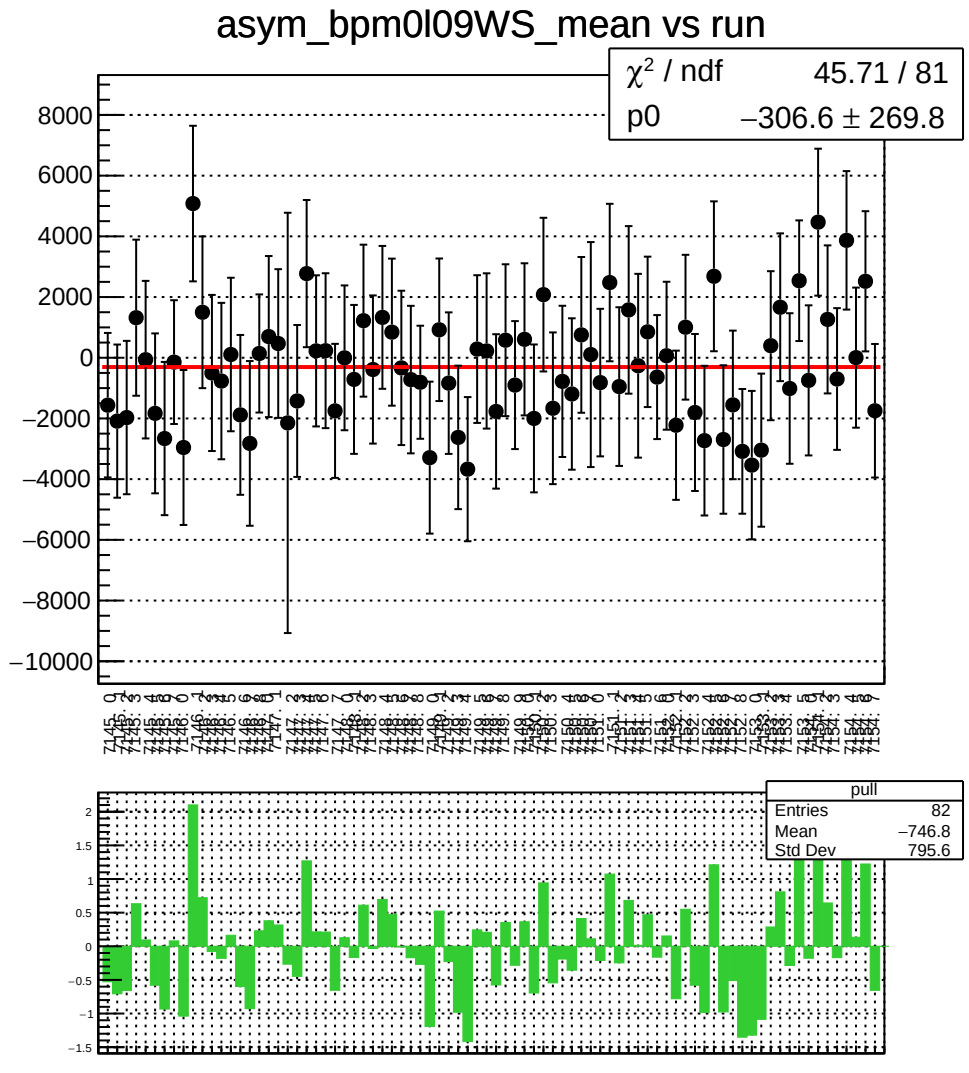

asym_bpm0l07WS_mean vs run
χ² / ndf 48.26 / 81
p0 −436.8 ± 274.9
pull
Entries 82
Mean −425.7
Std Dev 474.4
pull1D
Entries 82
Mean −0.004776
Std Dev 0.7671

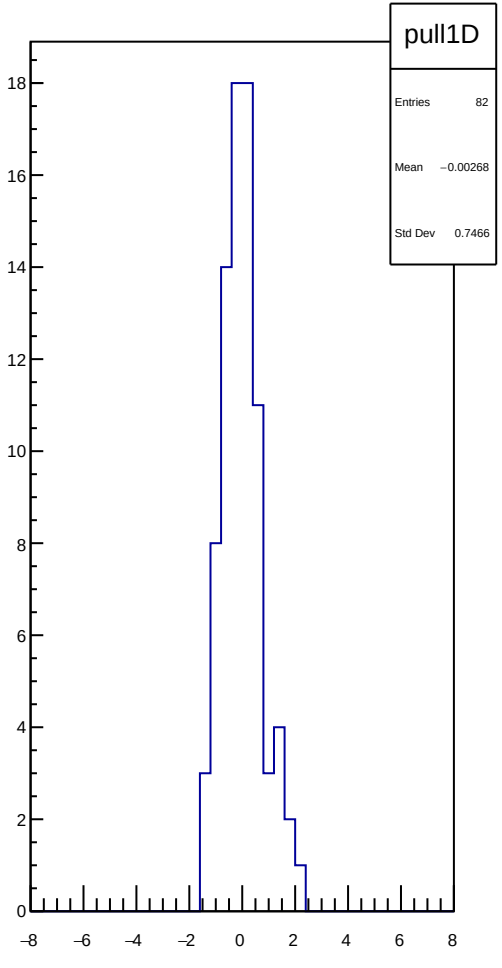

asym_bpm0l07WS_rms vs run
χ² / ndf 1.684e+04 / 81
p0 241.8 ± 0.1944
700
600
500
400
300
200

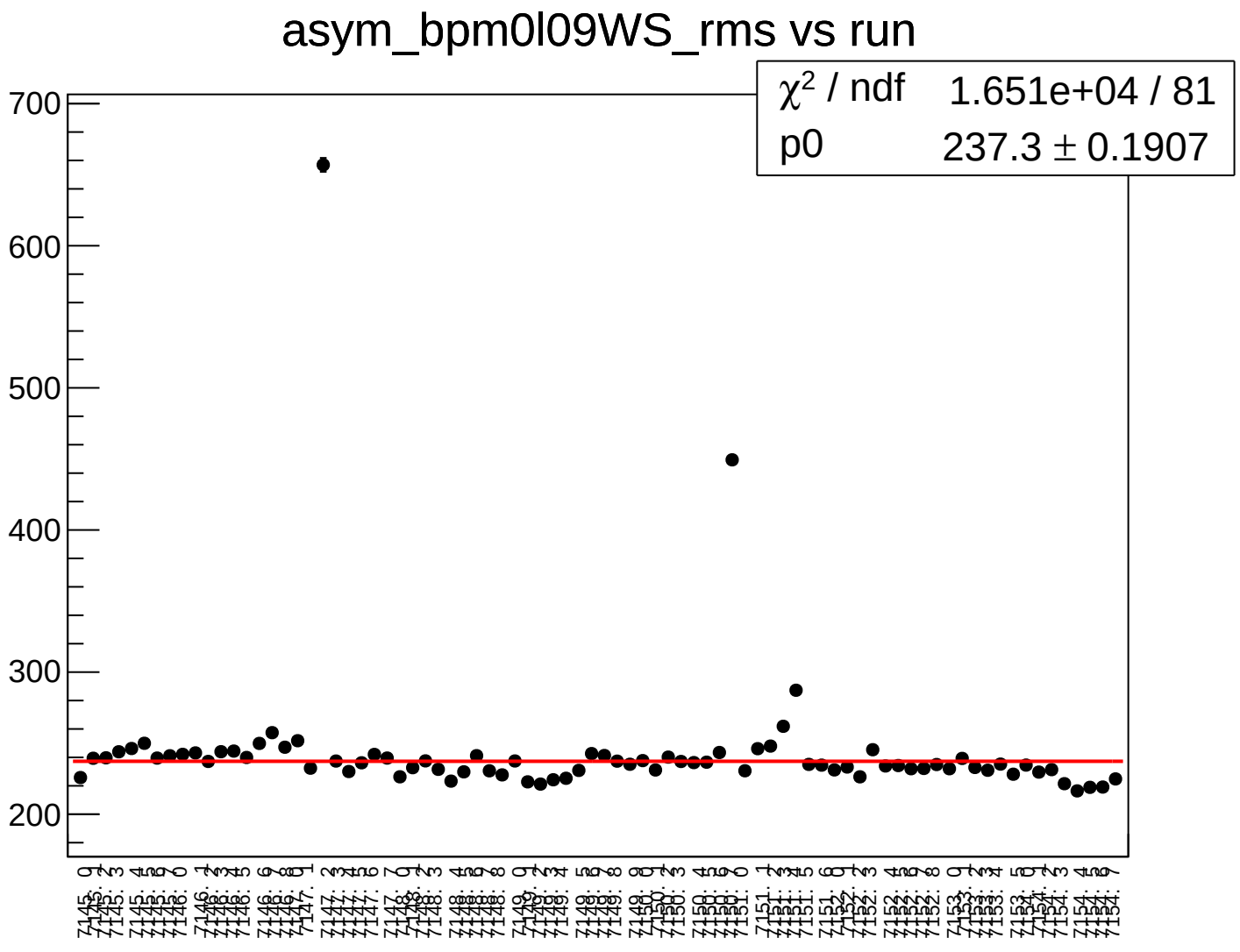

asym_bpm0l08WS_mean vs run
χ² / ndf 45.05 / 81
p0 −345.4 ± 265.7
pull
Entries 82
Mean −2999
Std Dev 3056

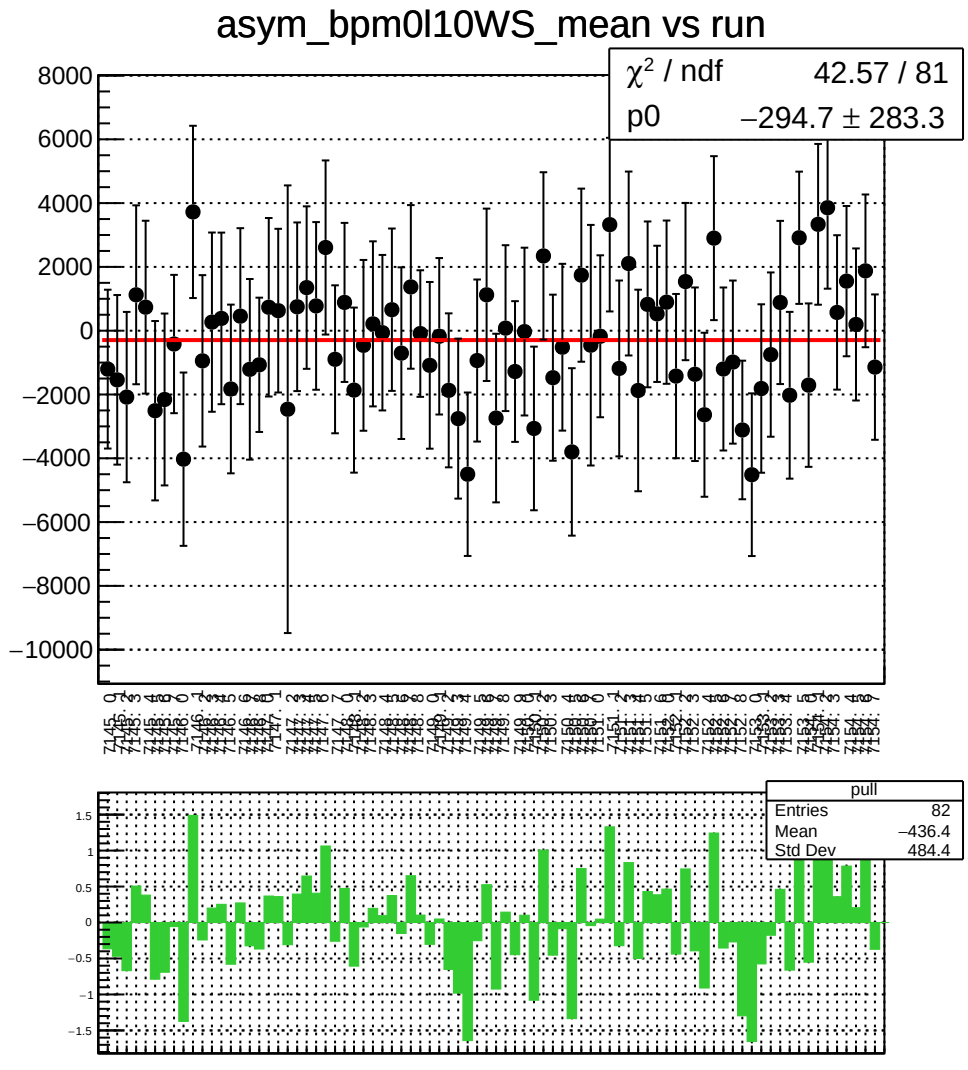

pull1D
Entries 82
Mean −0.0005754
Std Dev 0.7412

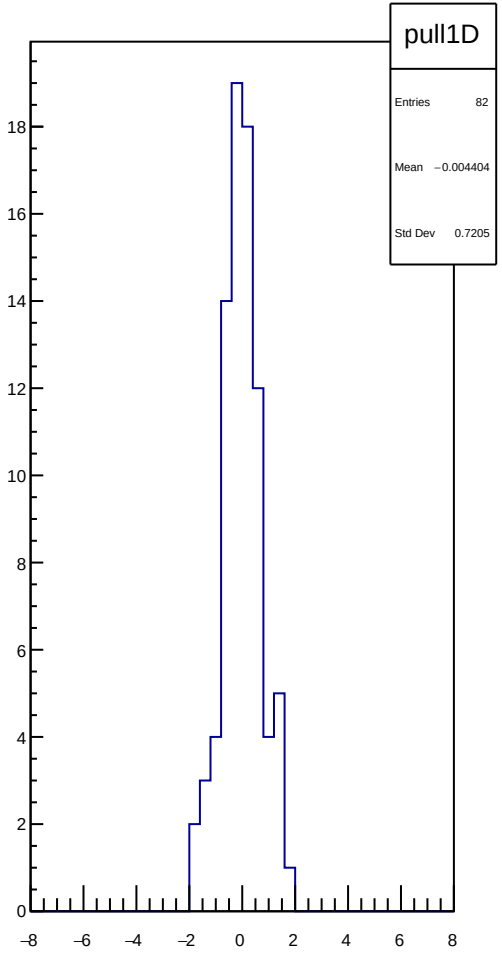

asym_bpm0l08WS_rms vs run
χ² / ndf 1.707e+04 / 81
p0 233.6 ± 0.1879
700
600
500
400
300
200

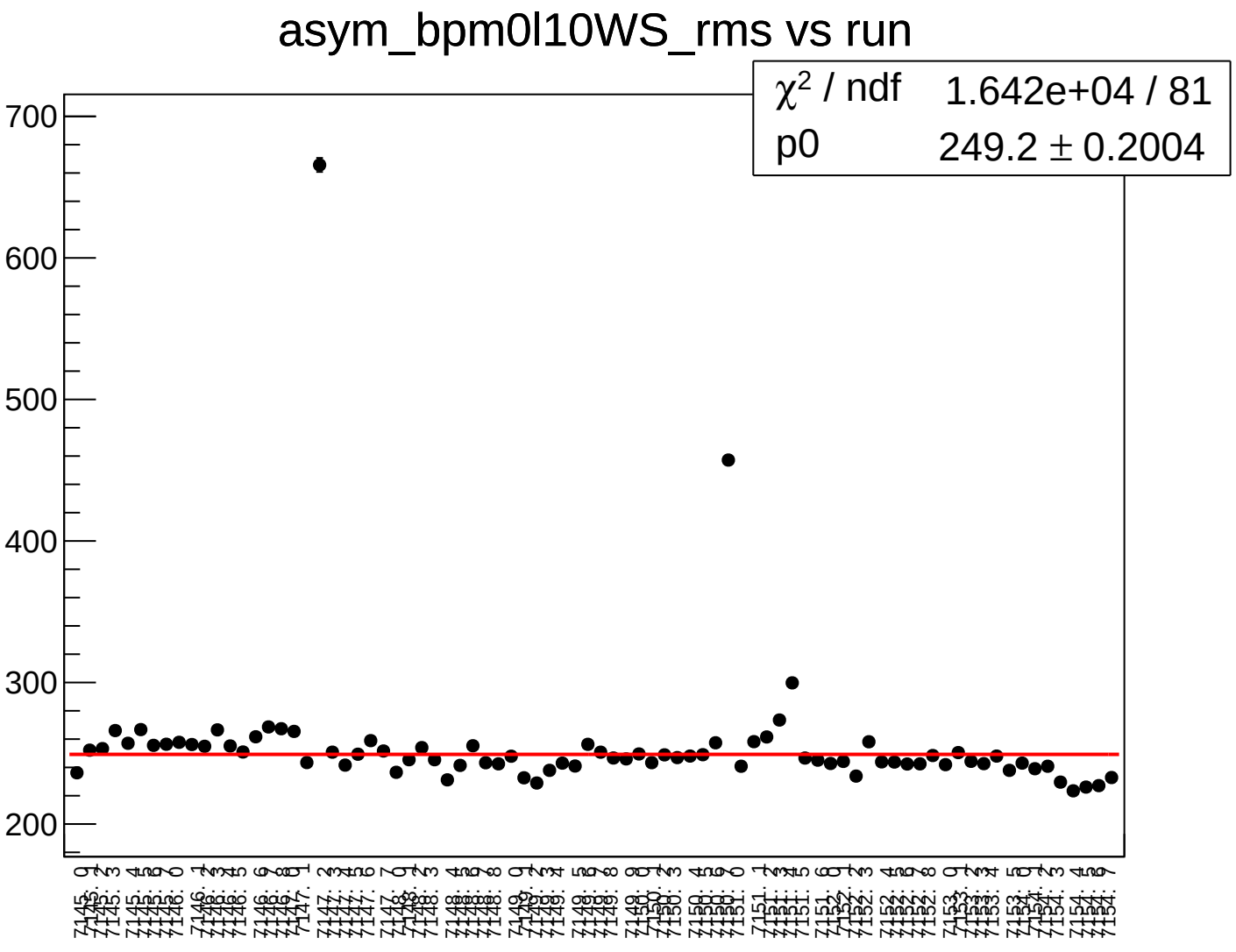

asym_bpm0l09WS_mean vs run
χ² / ndf 45.71 / 81
p0 −306.6 ± 269.8
pull
Entries 82
Mean −746.8
Std Dev 795.6

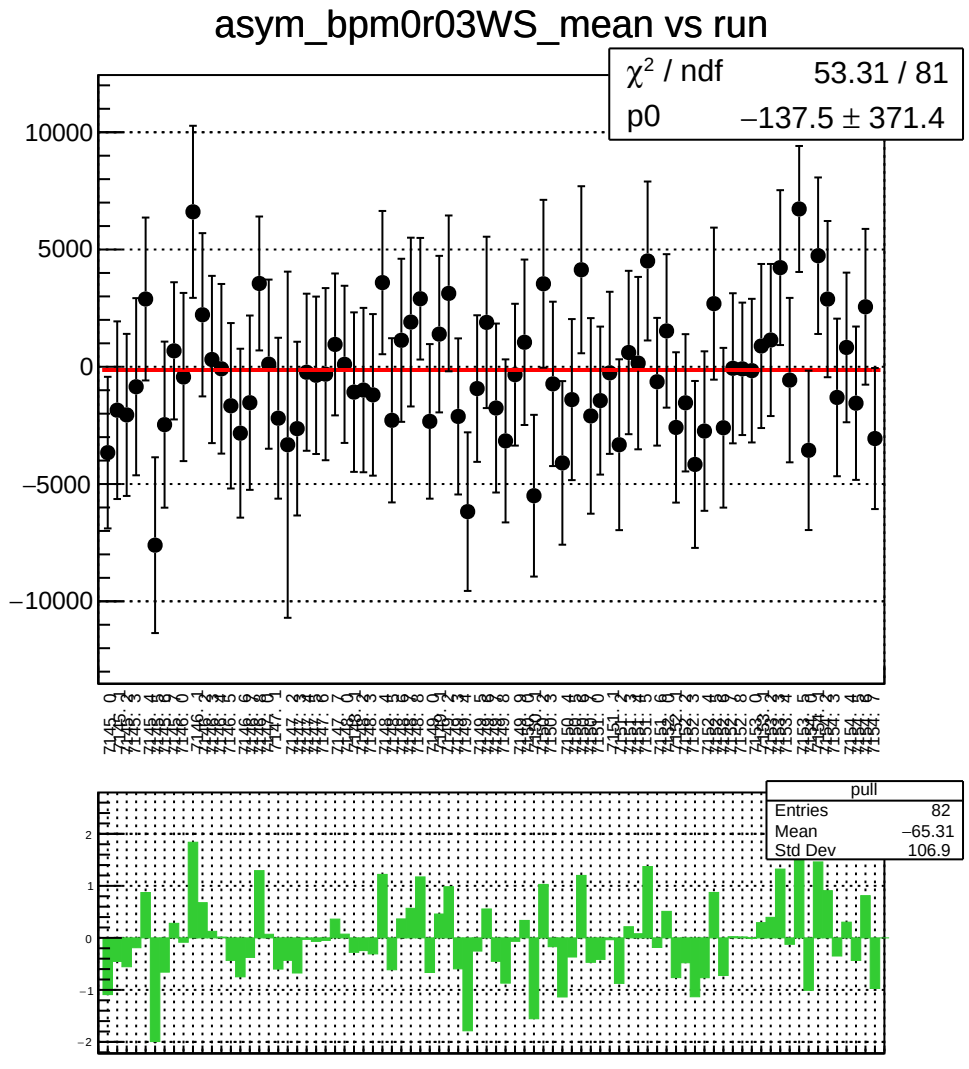

pull1D
Entries 82
Mean −0.00268
Std Dev 0.7466

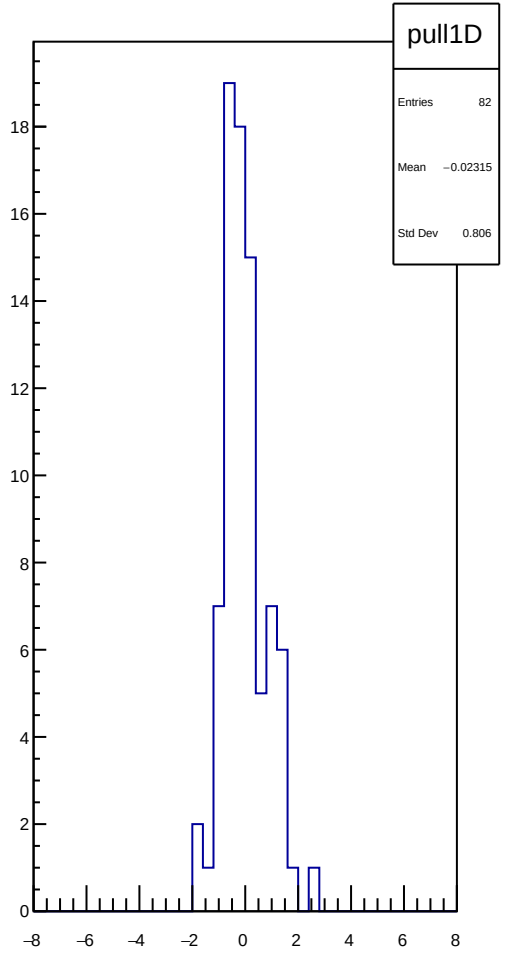

asym_bpm0l09WS_rms vs run
χ² / ndf 1.651e+04 / 81
p0 237.3 ± 0.1907
700
600
500
400
300
200

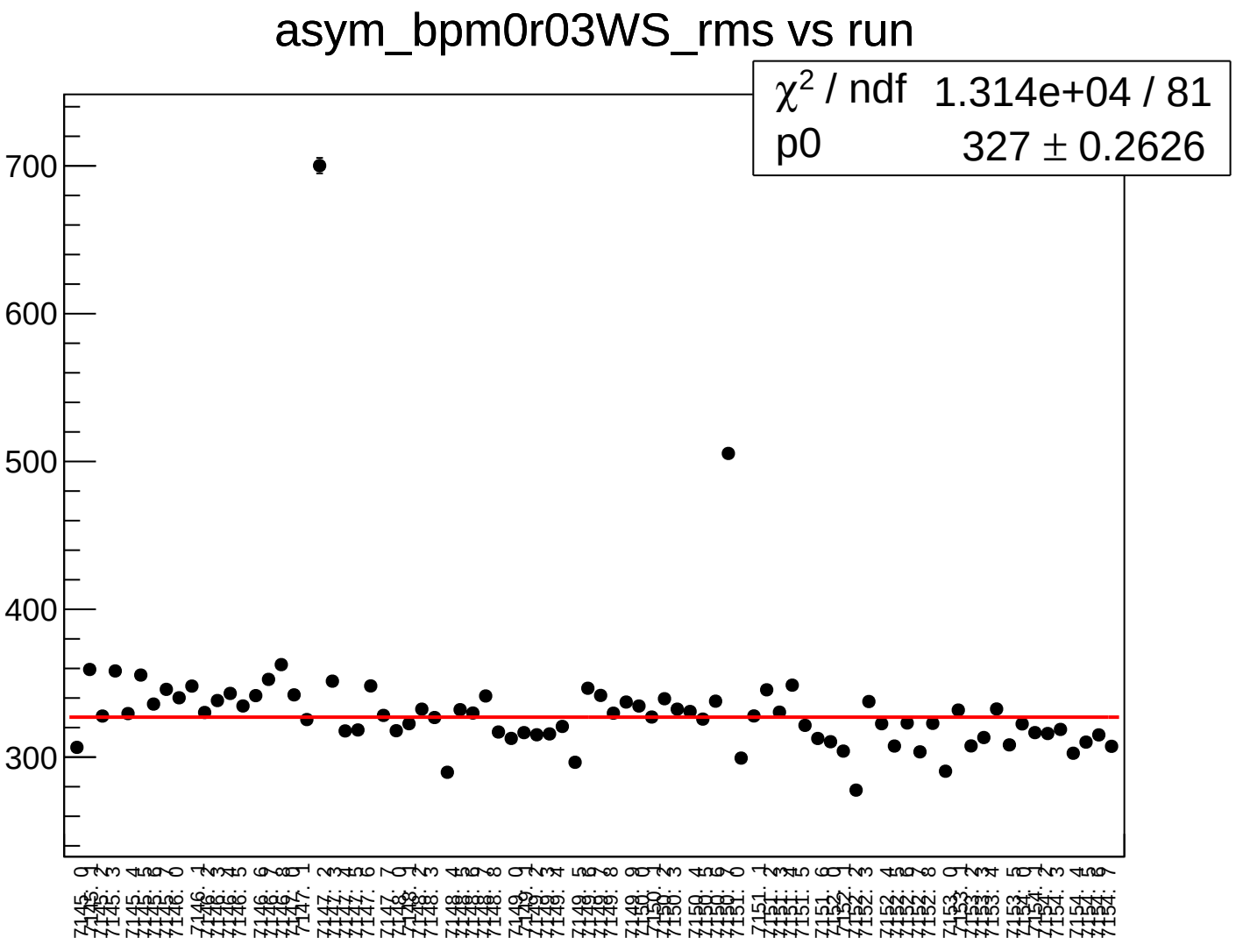

asym_bpm0l10WS_mean vs run
χ² / ndf 42.57 / 81
p0 −294.7 ± 283.3
pull
Entries 82
Mean −436.4
Std Dev 484.4

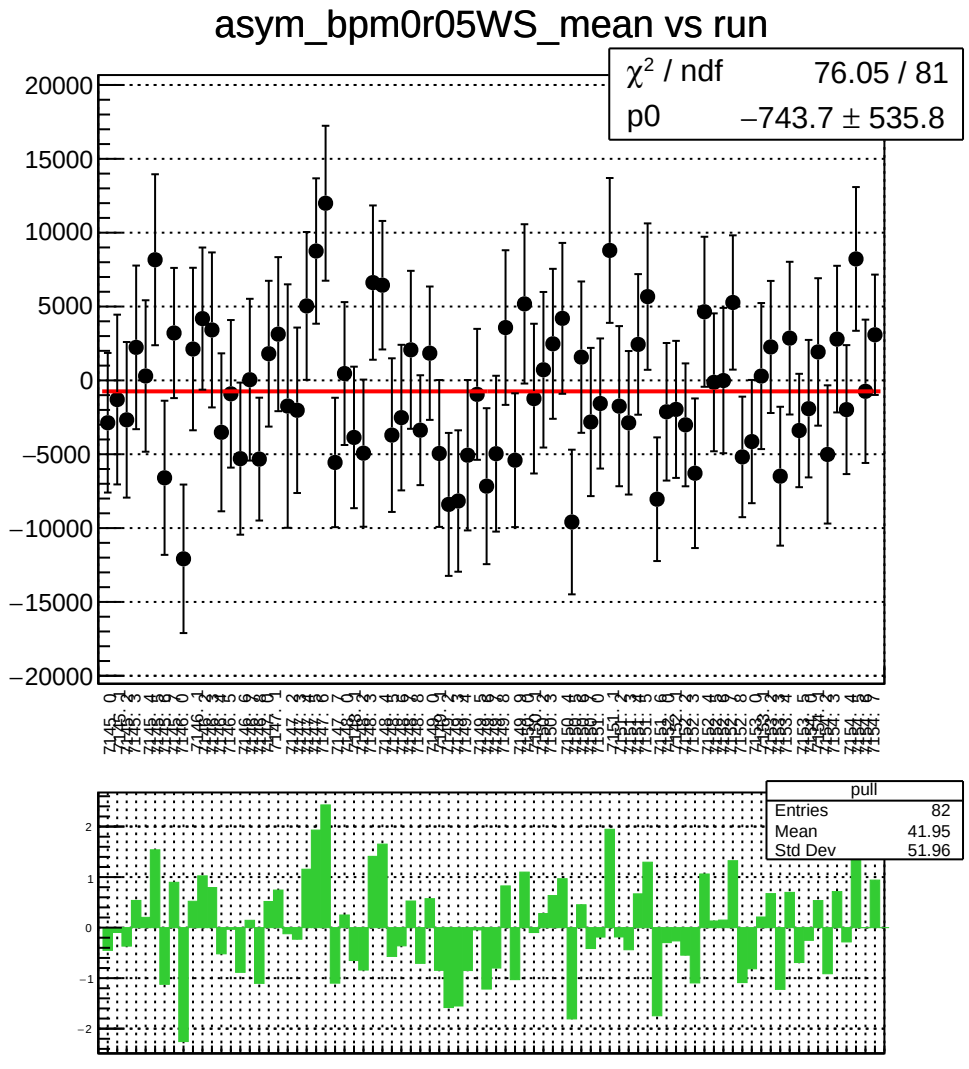

pull1D
Entries 82
Mean −0.004404
Std Dev 0.7205

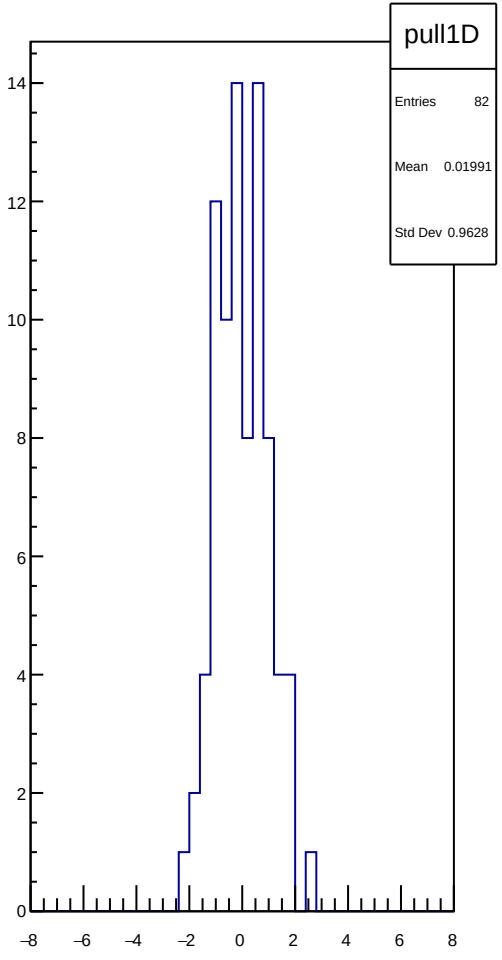

asym_bpm0l10WS_rms vs run
χ² / ndf 1.642e+04 / 81
p0 249.2 ± 0.2004
700
600
500
400
300
200

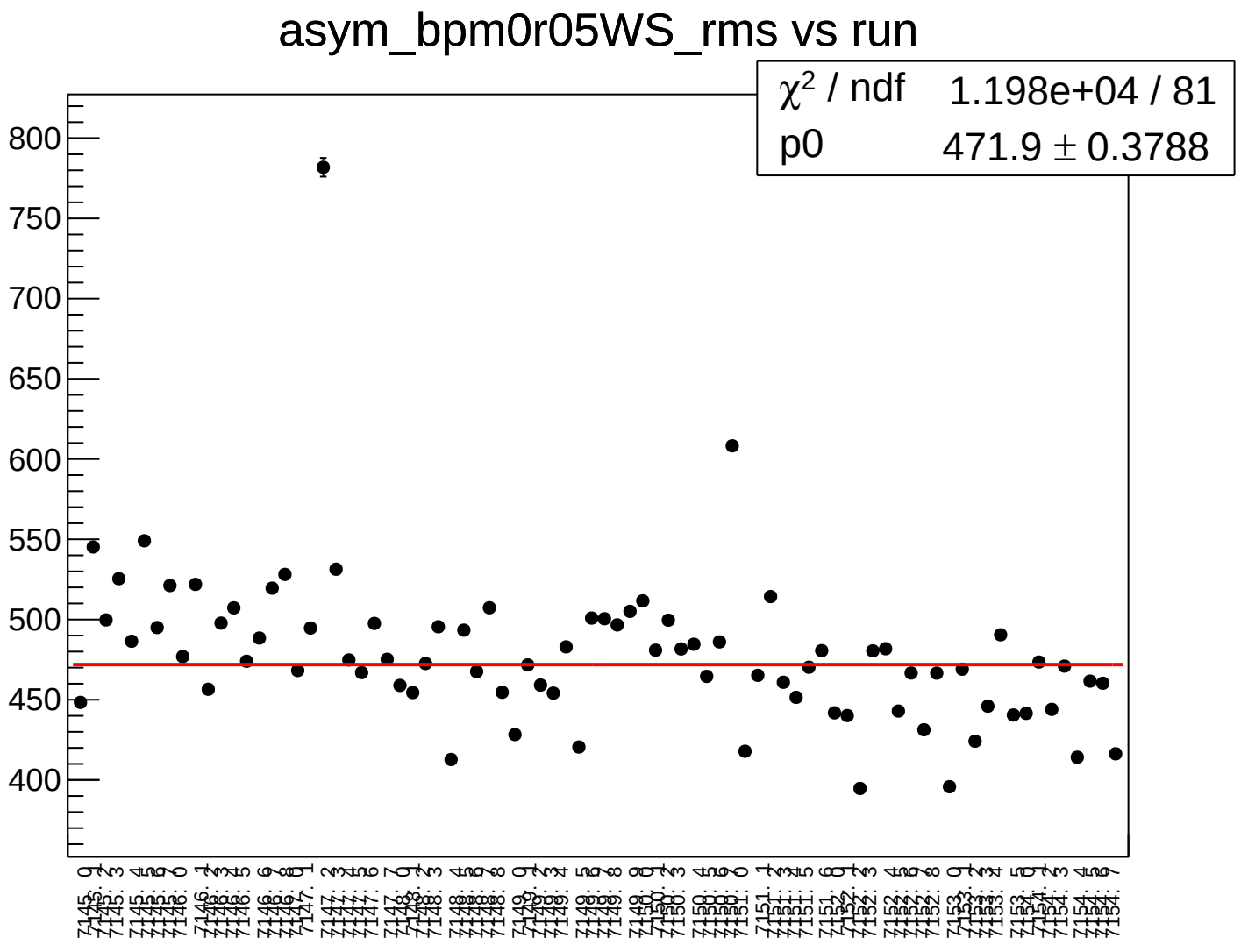

asym_bpm0r03WS_mean vs run
χ² / ndf 53.31 / 81
p0 −137.5 ± 371.4
10000
5000
0
−5000
−10000
pull
Entries 82
Mean −65.31
Std Dev 106.9
2
1
0
−1
−2

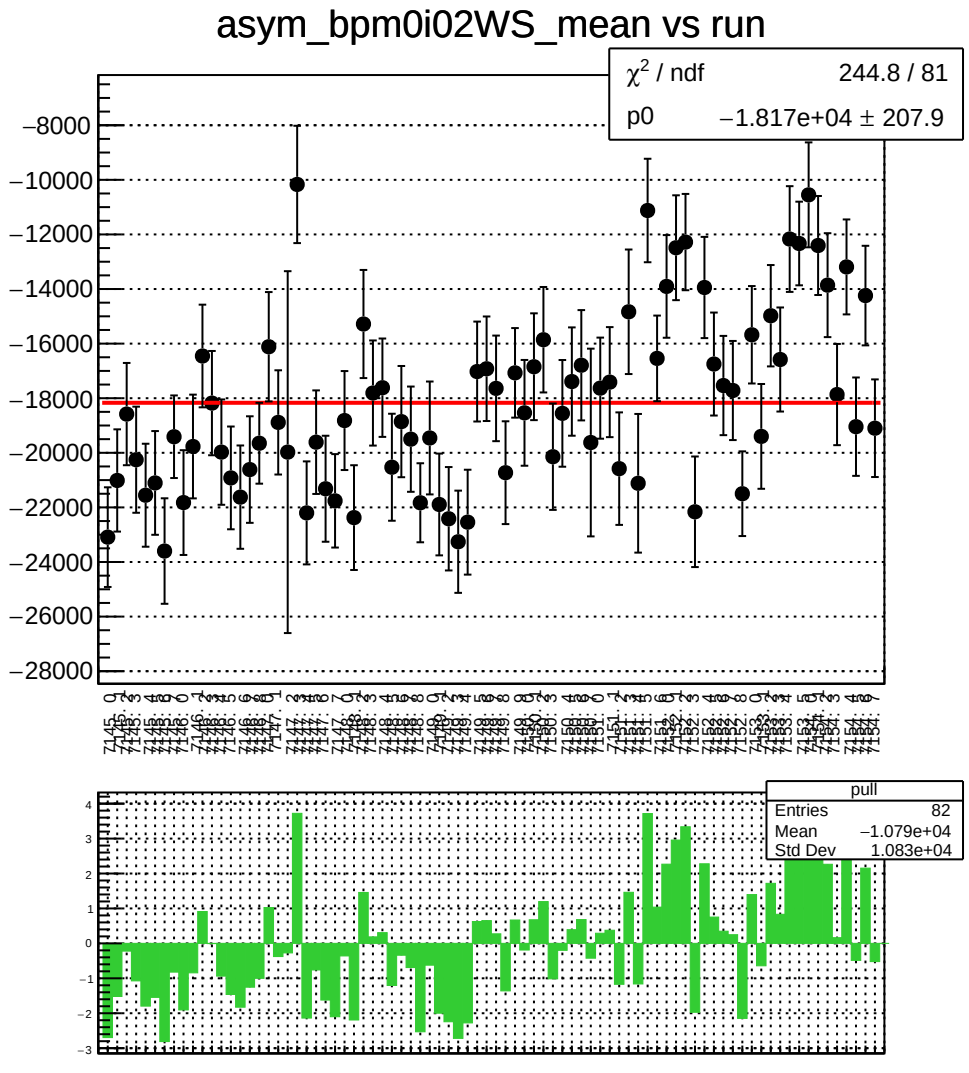

pull1D
Entries 82
Mean −0.02315
Std Dev 0.806
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

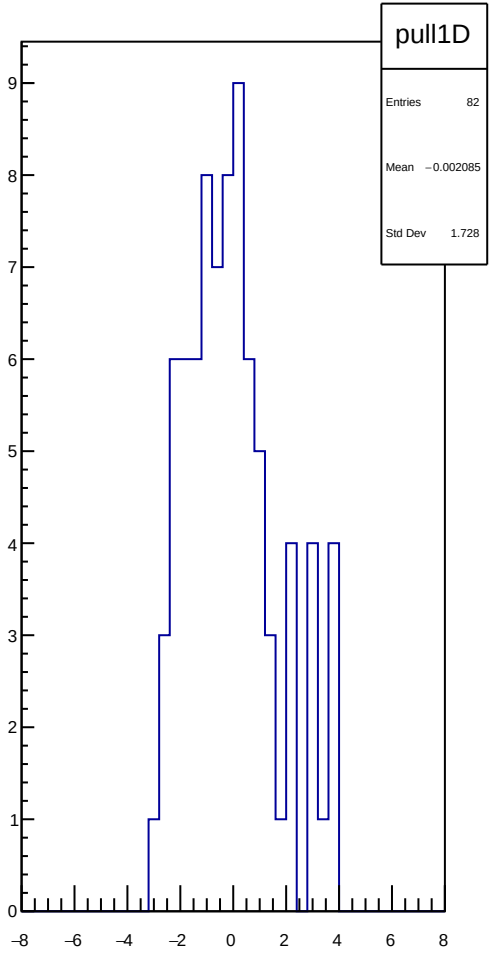

asym_bpm0r03WS_rms vs run
χ² / ndf 1.314e+04 / 81
p0 327 ± 0.2626
700
600
500
400
300

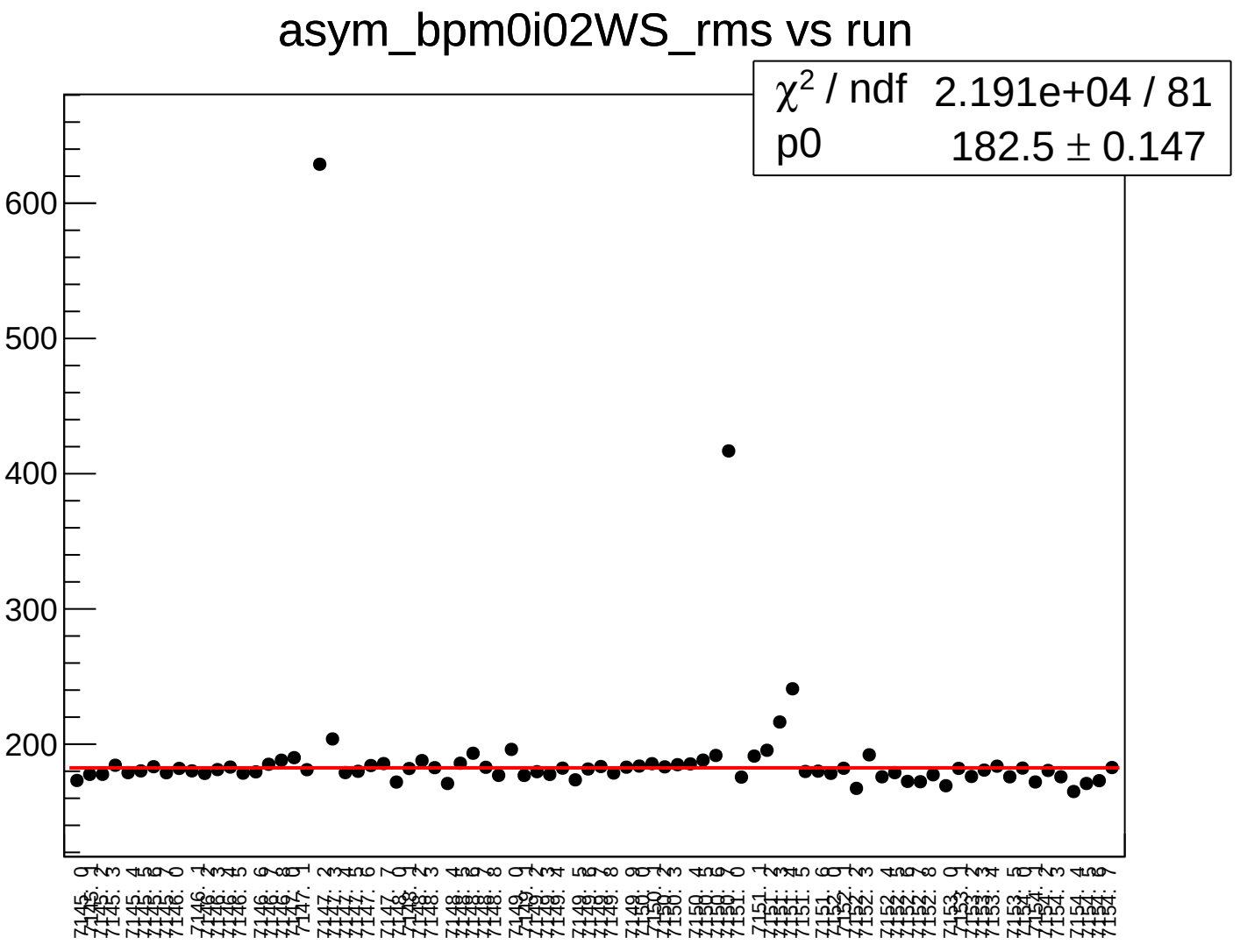

asym_bpm0r05WS_mean vs run
χ² / ndf 76.05 / 81
p0 −743.7 ± 535.8
pull
Entries 82
Mean 41.95
Std Dev 51.96

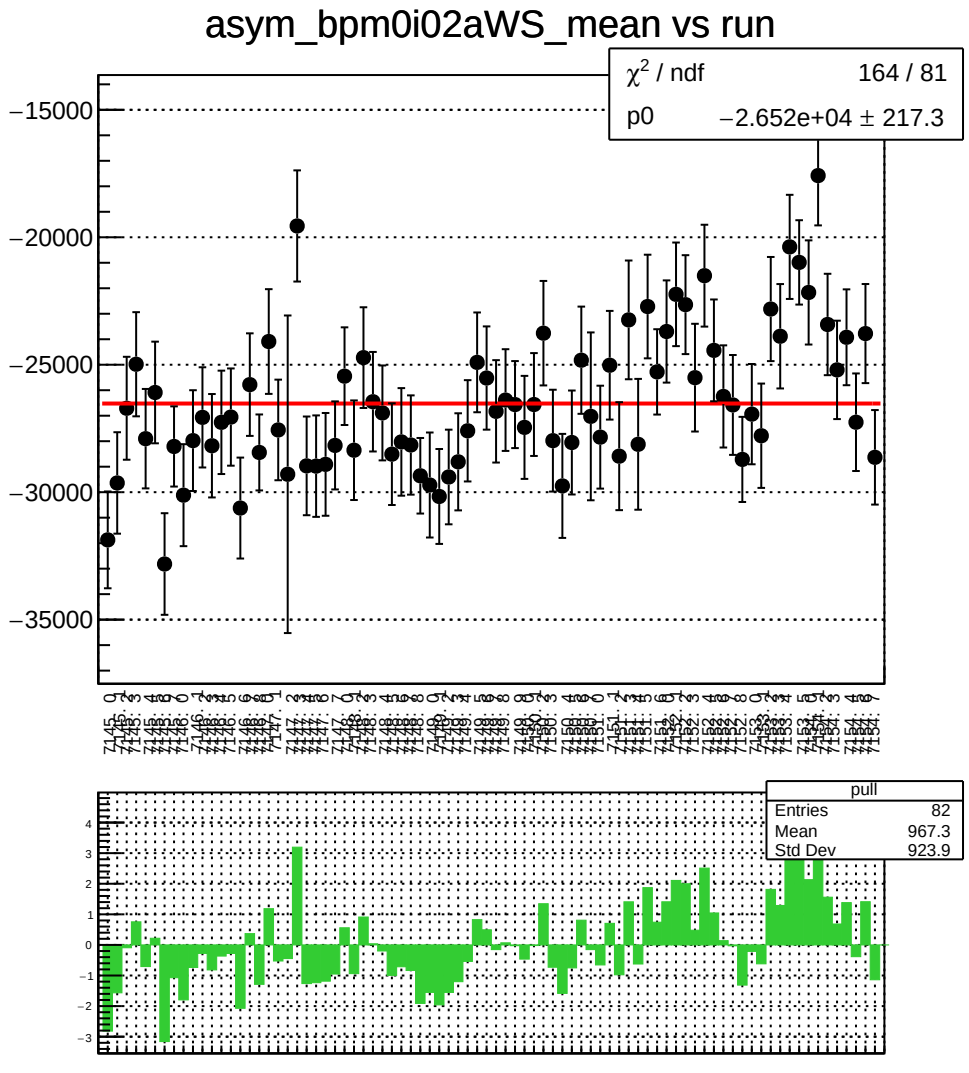

pull1D
Entries 82
Mean 0.01991
Std Dev 0.9628

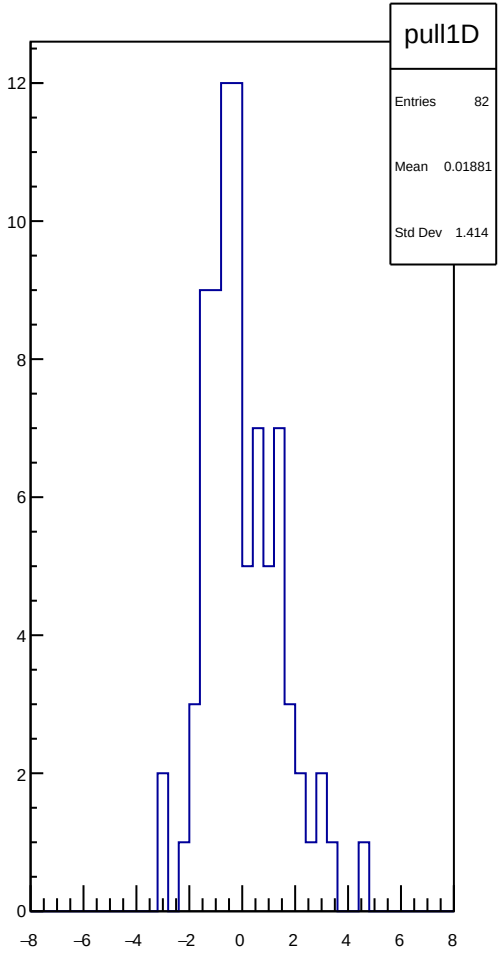

asym_bpm0r05WS_rms vs run
χ² / ndf 1.198e+04 / 81
p0 471.9 ± 0.3788
800
750
700
650
600
550
500
450
400

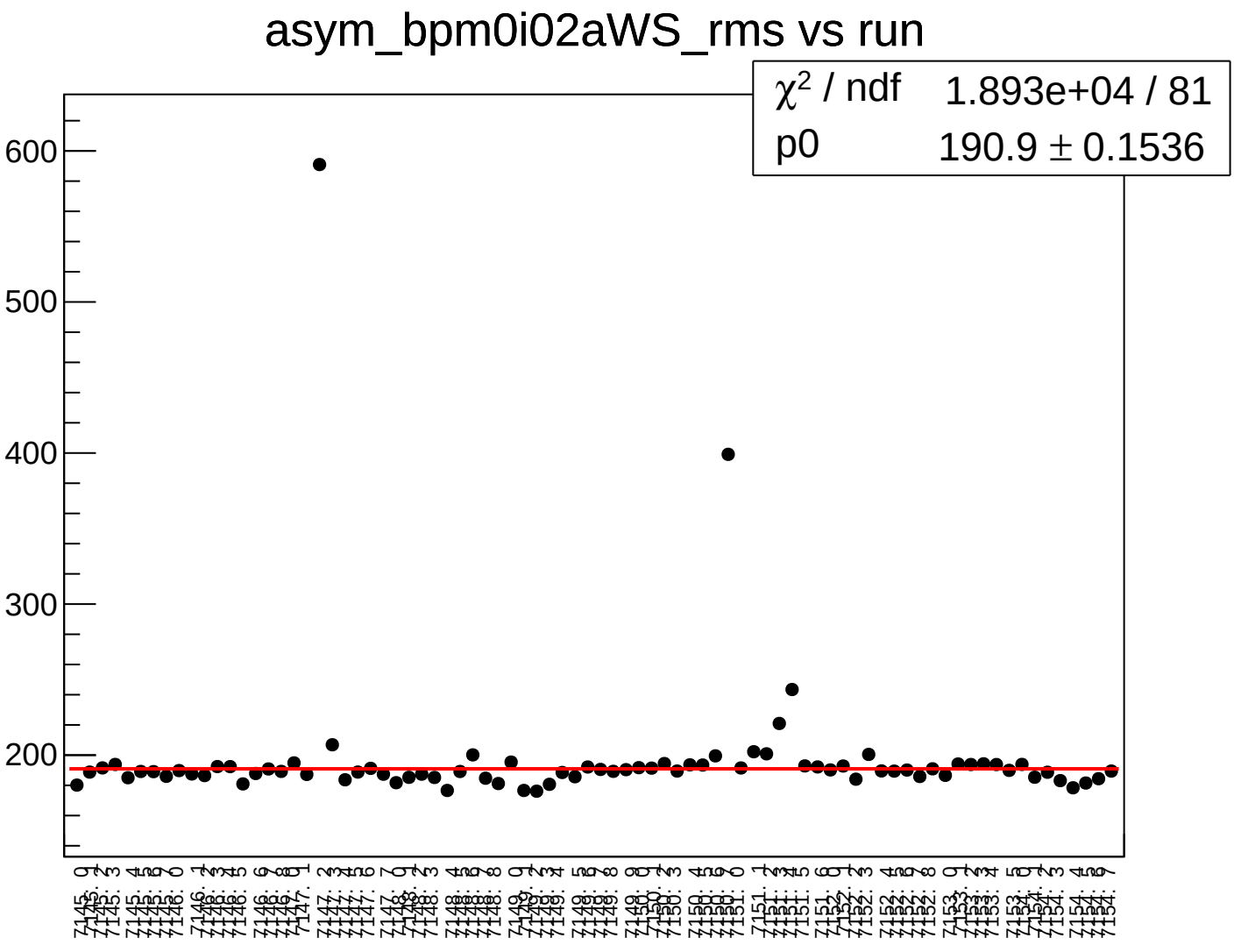

asym_bpm0i02WS_mean vs run
χ² / ndf 244.8 / 81
p0 −1.817e+04 ± 207.9
pull
Entries 82
Mean −1.079e+04
Std Dev 1.083e+04

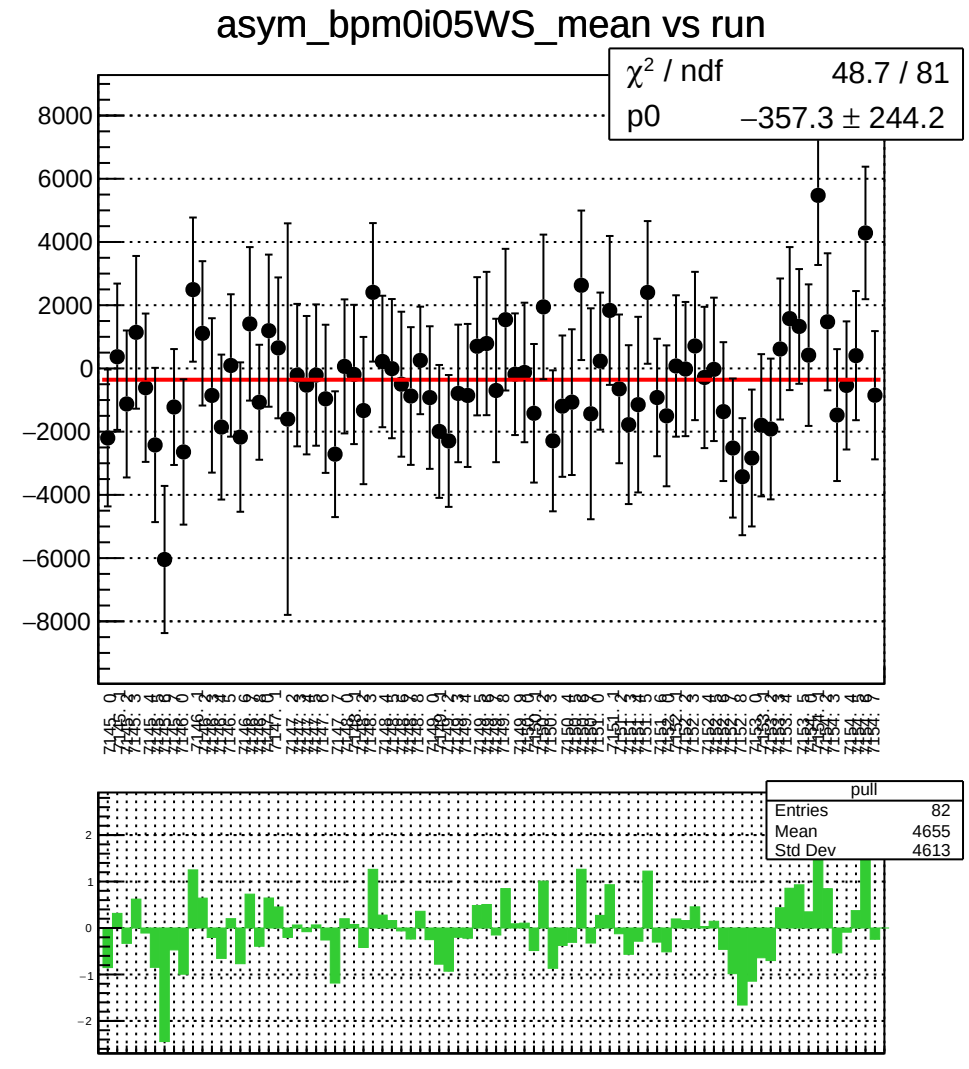

pull1D
Entries 82
Mean −0.002085
Std Dev 1.728

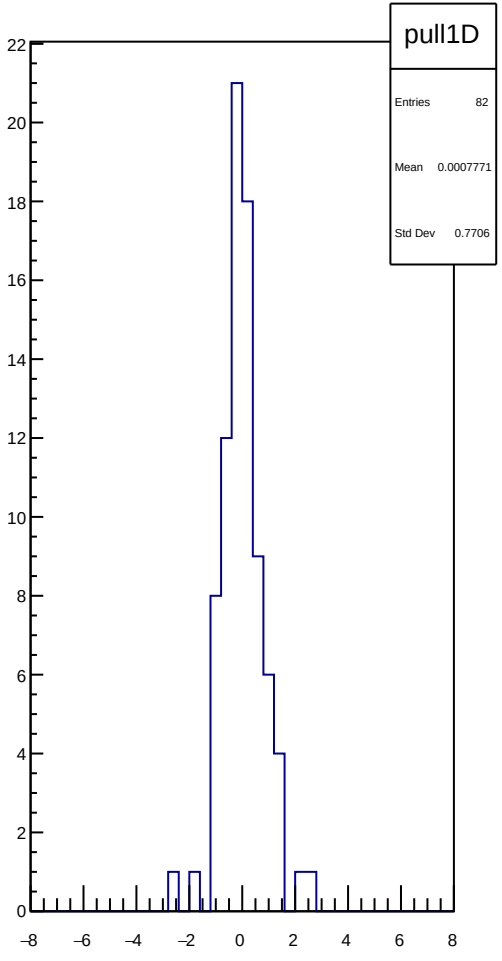

asym_bpm0i02WS_rms vs run
χ² / ndf 2.191e+04 / 81
p0 182.5 ± 0.147
600
500
400
300
200

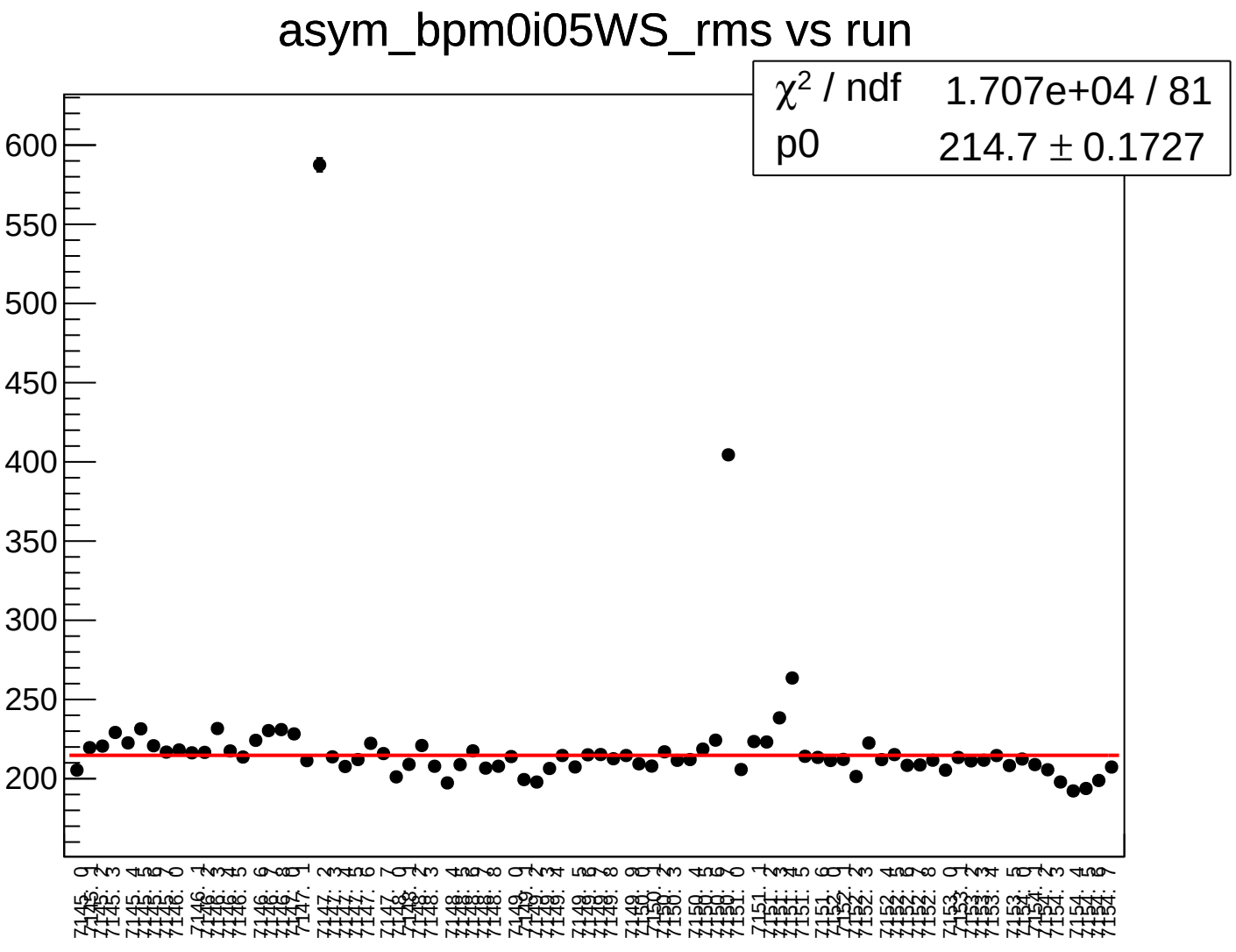

asym_bpm0i02aWS_mean vs run
χ² / ndf 164 / 81
p0 −2.652e+04 ± 217.3
−15000
−20000
−25000
−30000
−35000
pull
Entries 82
Mean 967.3
Std Dev 923.9
4
3
2
1
0
−1
−2
−3

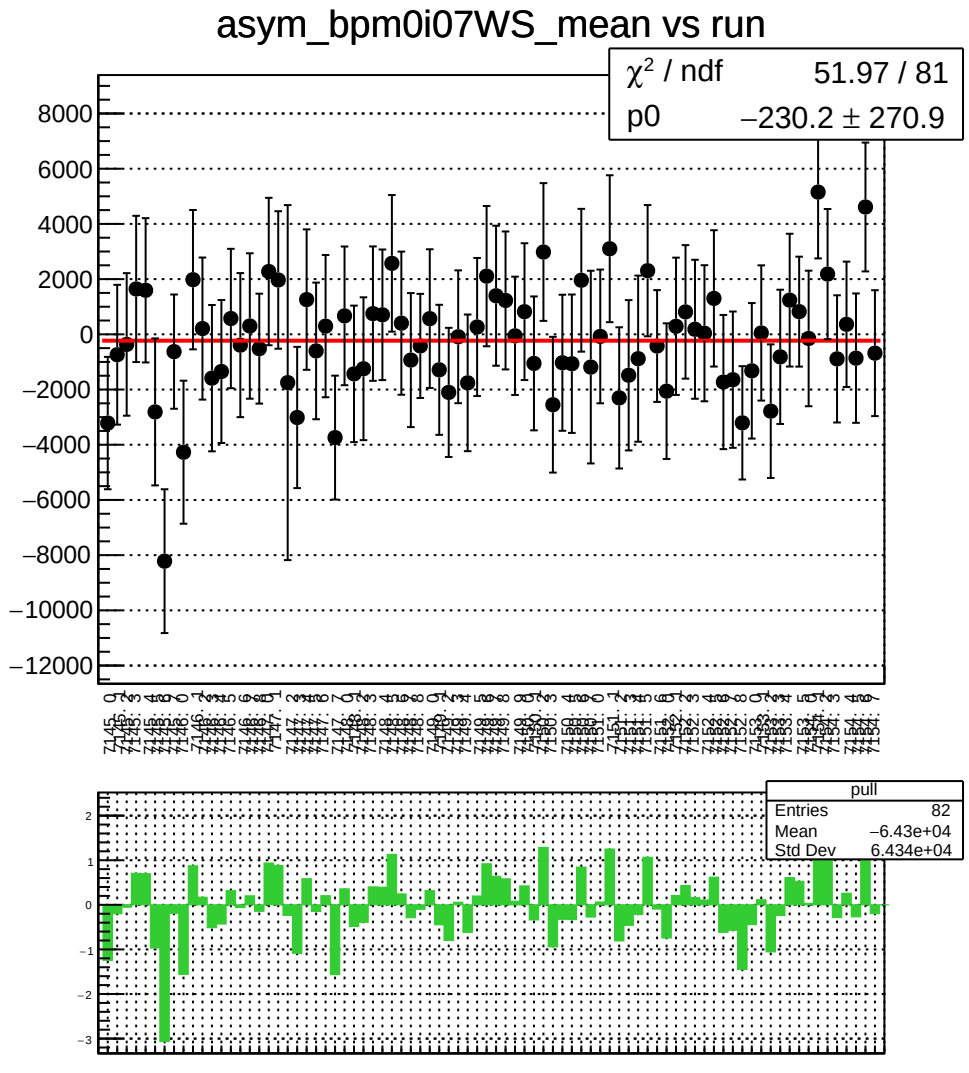

pull1D
Entries 82
Mean 0.01881
Std Dev 1.414
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

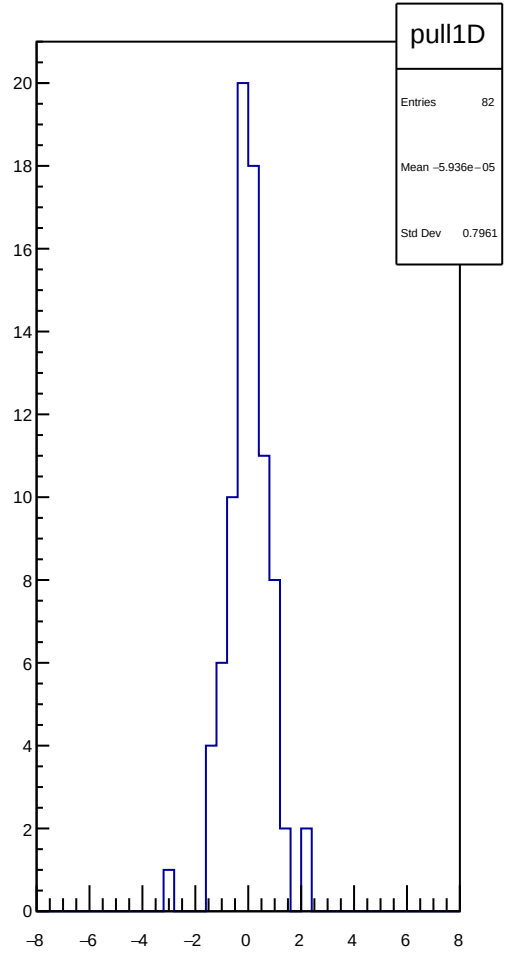

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 1.893e+04 / 81
p0 190.9 ± 0.1536
600
500
400
300
200

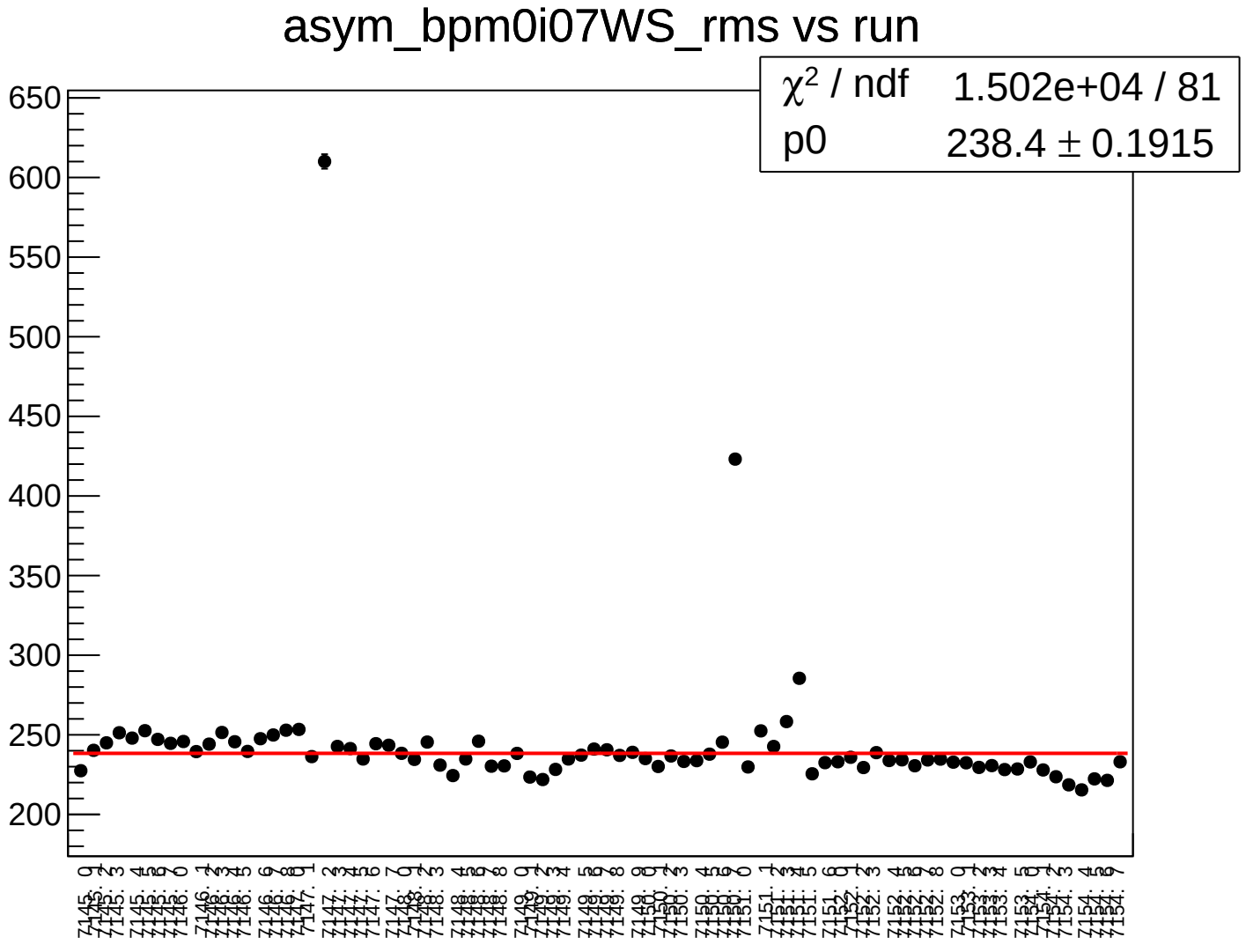

asym_bpm0i05WS_mean vs run
χ² / ndf 48.7 / 81
p0 −357.3 ± 244.2
pull
Entries 82
Mean 4655
Std Dev 4613

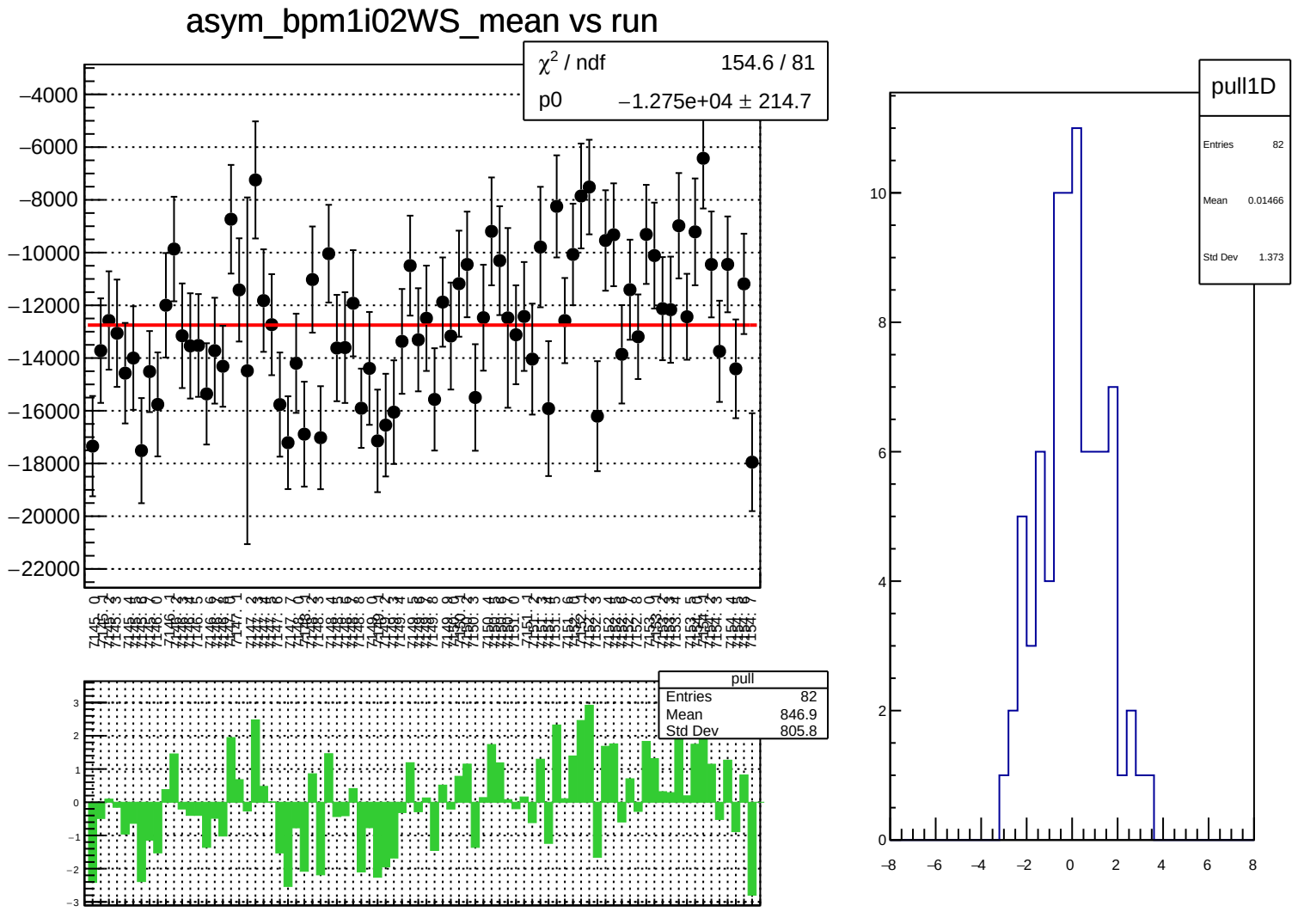

pull1D
Entries 82
Mean 0.0007771
Std Dev 0.7706

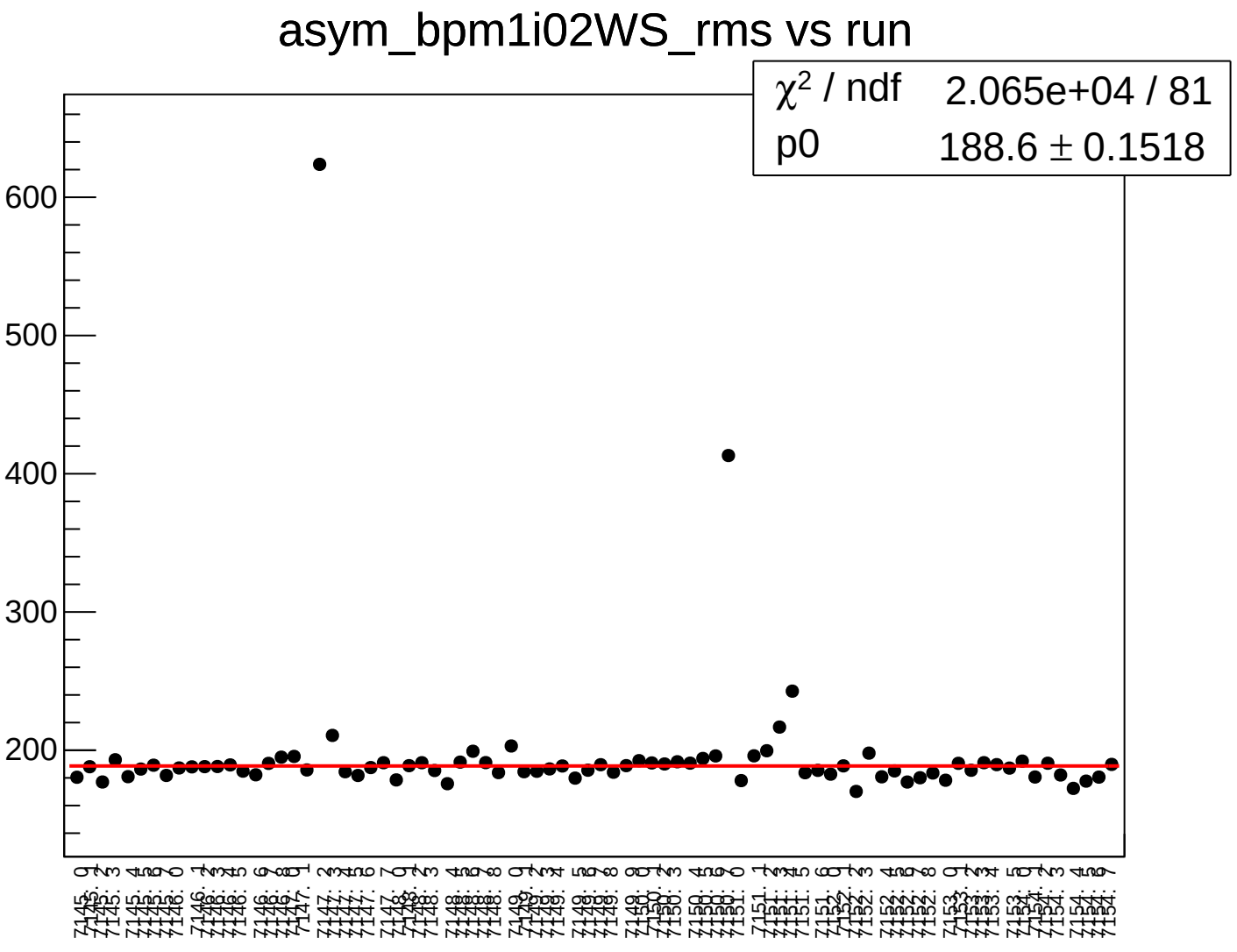

asym_bpm0i05WS_rms vs run
χ^2 / ndf 1.707e+04 / 81
p0 214.7 ± 0.1727
600
550
500
450
400
350
300
250
200

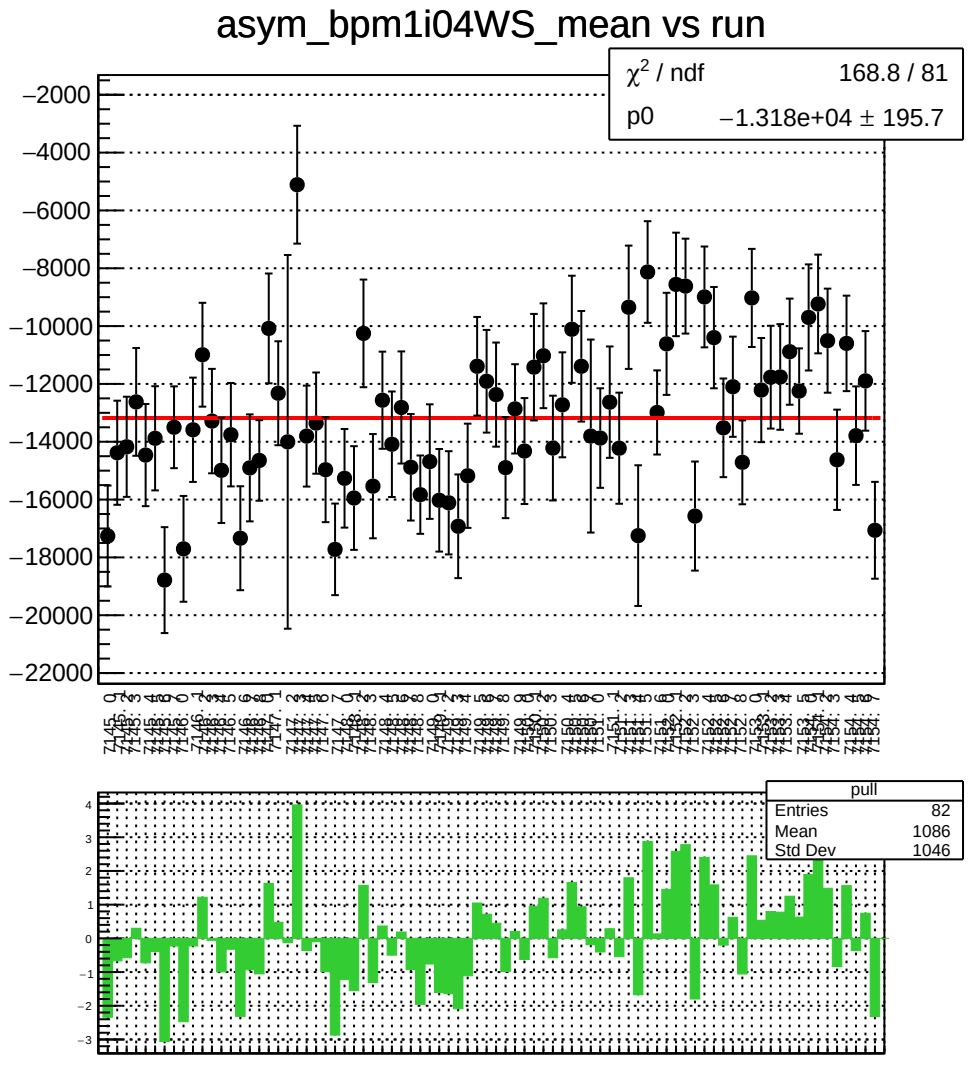

asym_bpm0i07WS_mean vs run
χ² / ndf 51.97 / 81
p0 −230.2 ± 270.9
pull
Entries 82
Mean −6.43e+04
Std Dev 6.434e+04

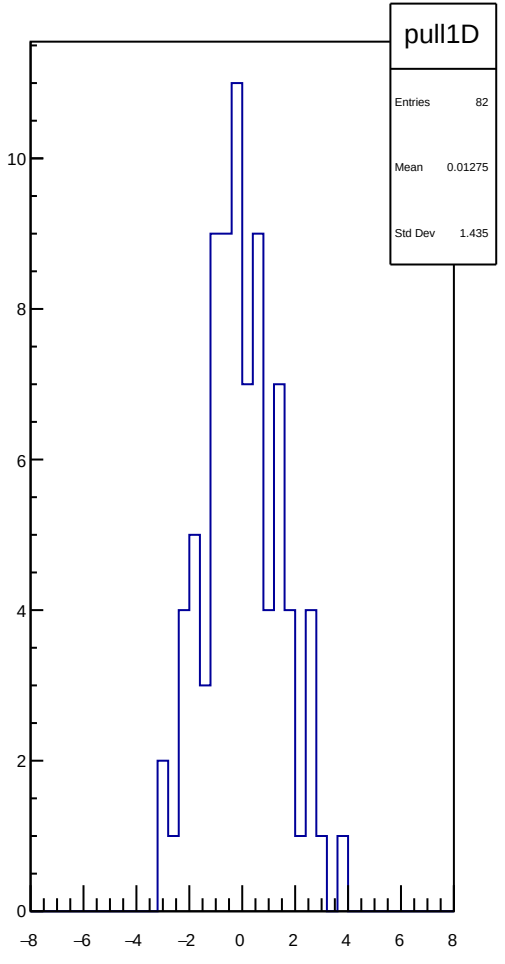

pull1D
Entries 82
Mean −5.936e−05
Std Dev 0.7961

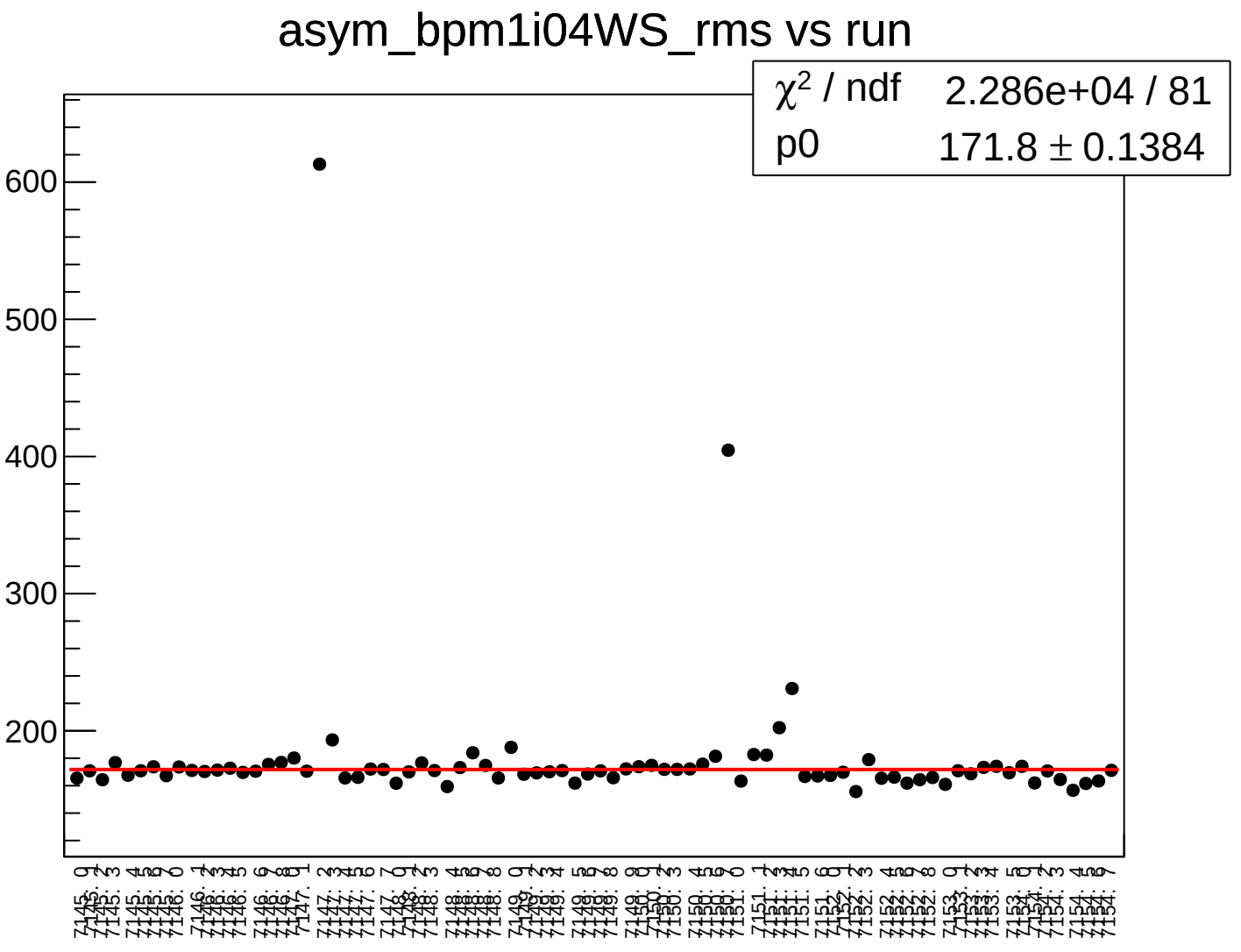

asym_bpm0i07WS_rms vs run
χ² / ndf 1.502e+04 / 81
p0 238.4 ± 0.1915
650
600
550
500
450
400
350
300
250
200

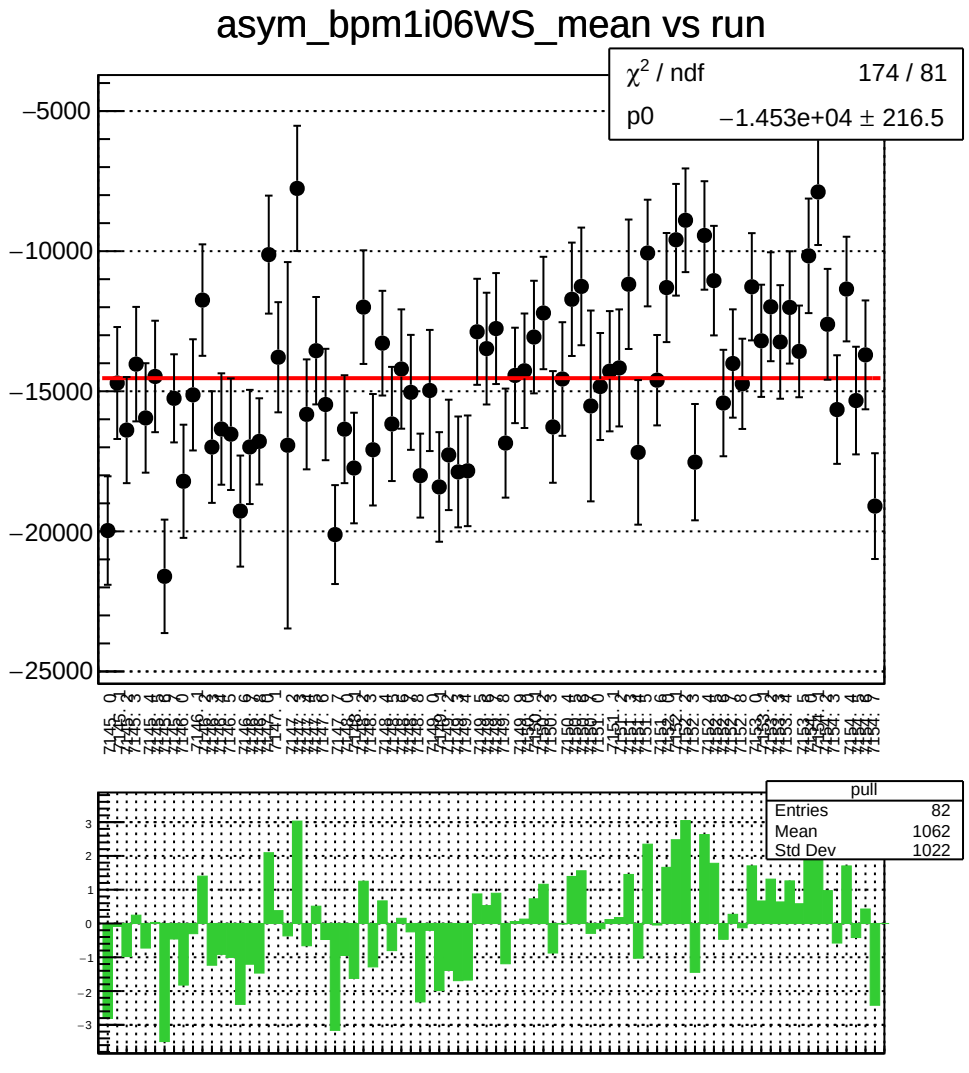

asym_bpm1i02WS_mean vs run
χ² / ndf 154.6 / 81
p0 −1.275e+04 ± 214.7
pull
Entries 82
Mean 846.9
Std Dev 805.8
pull1D
Entries 82
Mean 0.01466
Std Dev 1.373

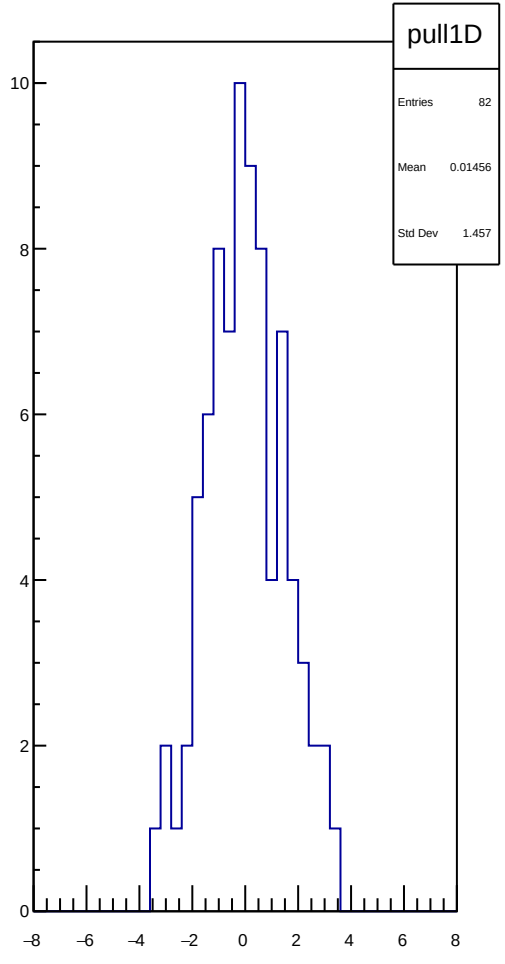

asym_bpm1i02WS_rms vs run
χ² / ndf 2.065e+04 / 81
p0 188.6 ± 0.1518
600
500
400
300
200

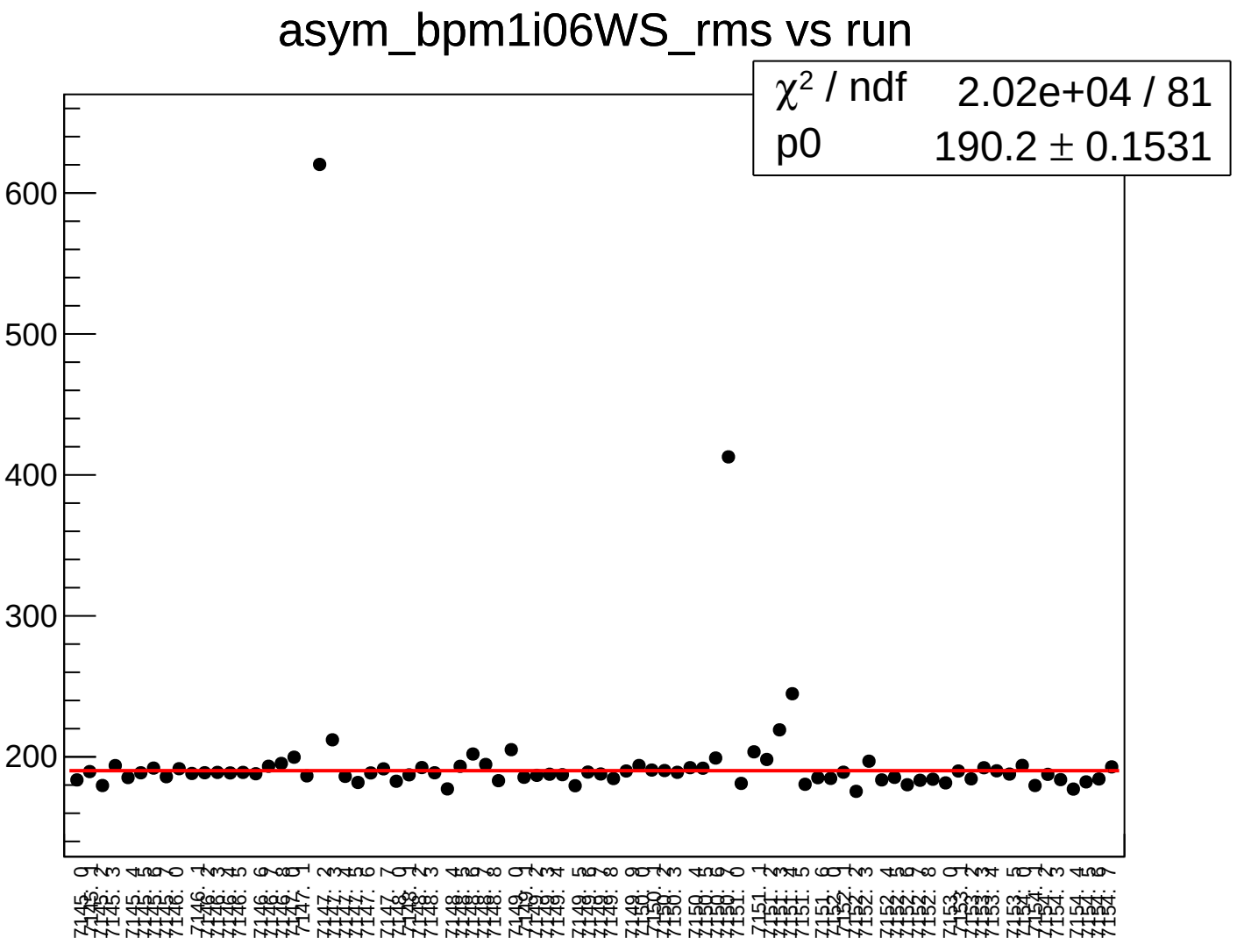

asym_bpm1i04WS_mean vs run
χ² / ndf 168.8 / 81
p0 −1.318e+04 ± 195.7
pull
Entries 82
Mean 1086
Std Dev 1046

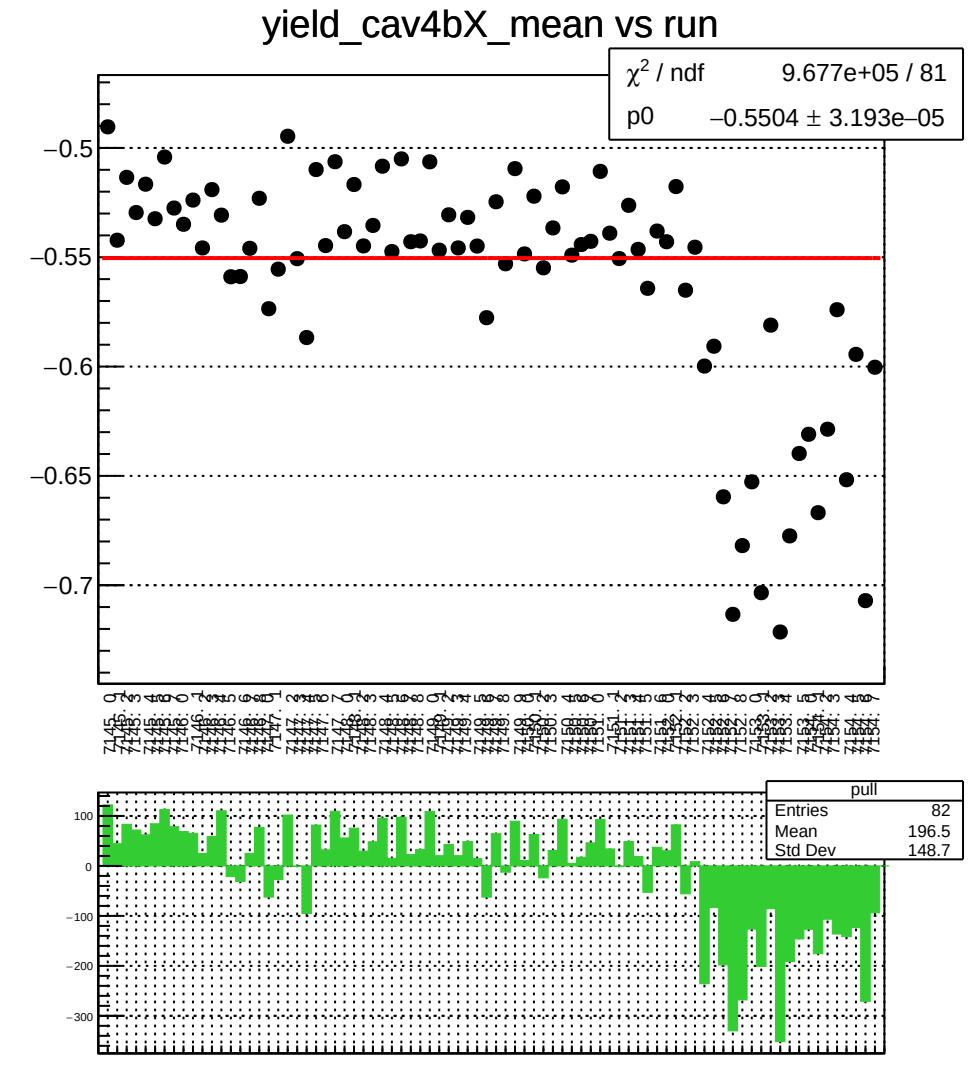

pull1D
Entries 82
Mean 0.01275
Std Dev 1.435

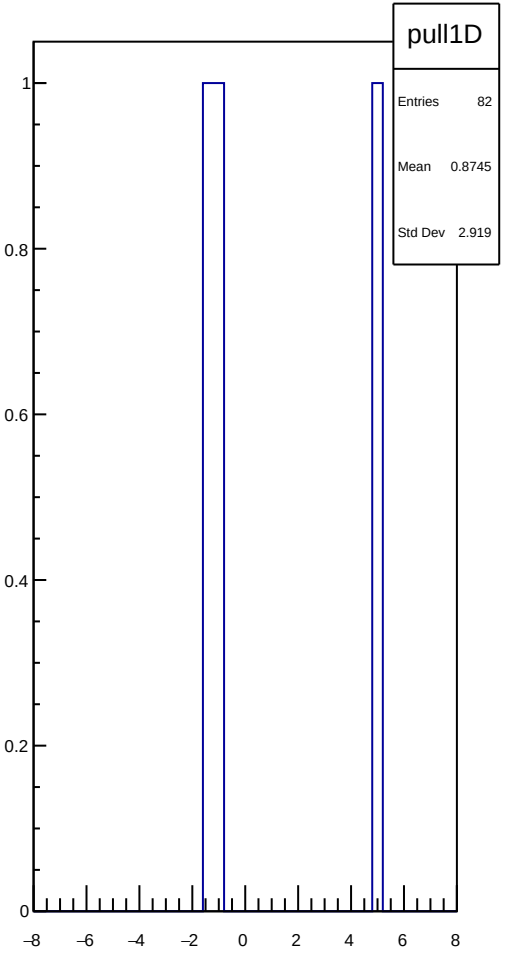

asym_bpm1i04WS_rms vs run
χ^2 / ndf 2.286e+04 / 81
p0 171.8 ± 0.1384
600
500
400
300
200

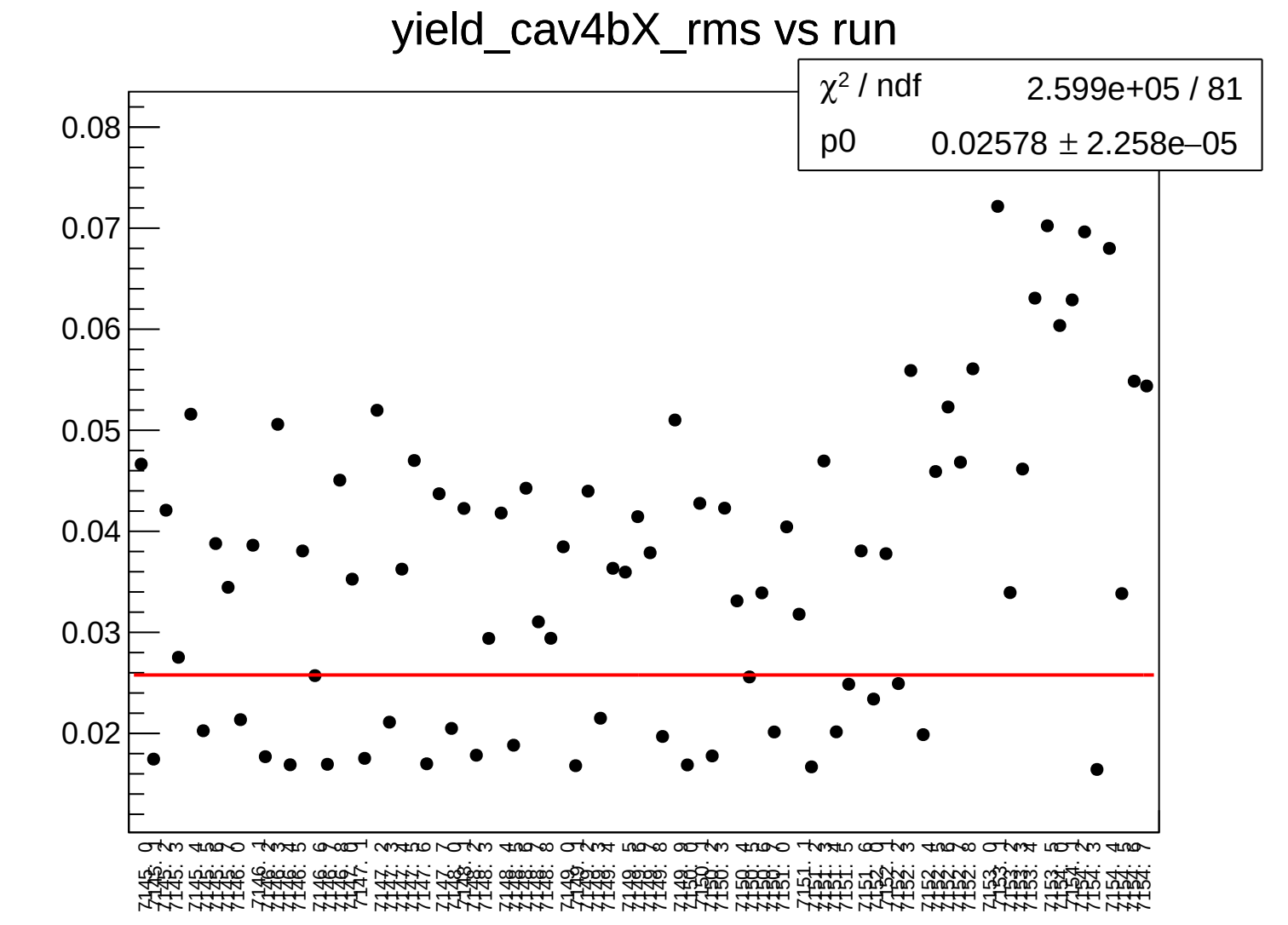

asym_bpm1i06WS_mean vs run
χ² / ndf 174 / 81
p0 −1.453e+04 ± 216.5
−5000
−10000
−15000
−20000
−25000
pull
Entries 82
Mean 1062
Std Dev 1022
3
2
1
0
−1
−2
−3

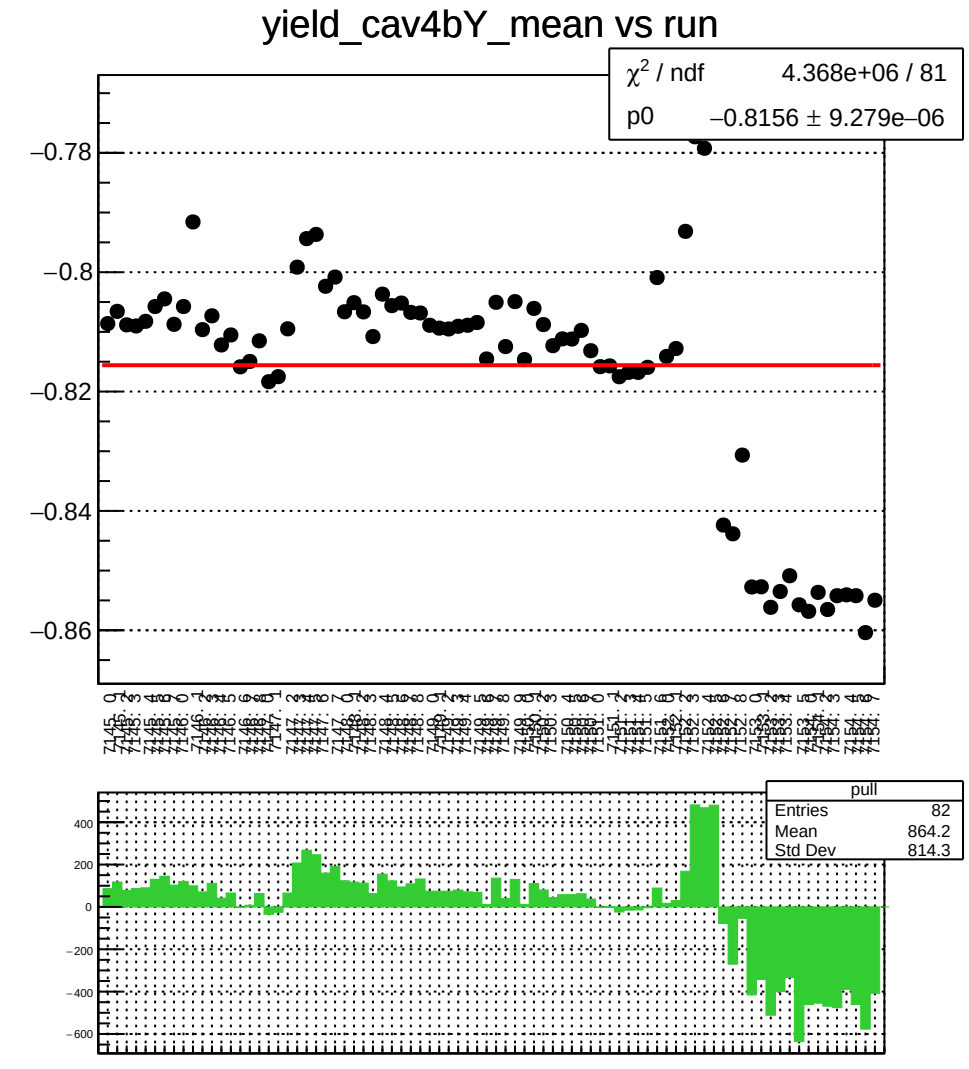

pull1D
Entries 82
Mean 0.01456
Std Dev 1.457
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

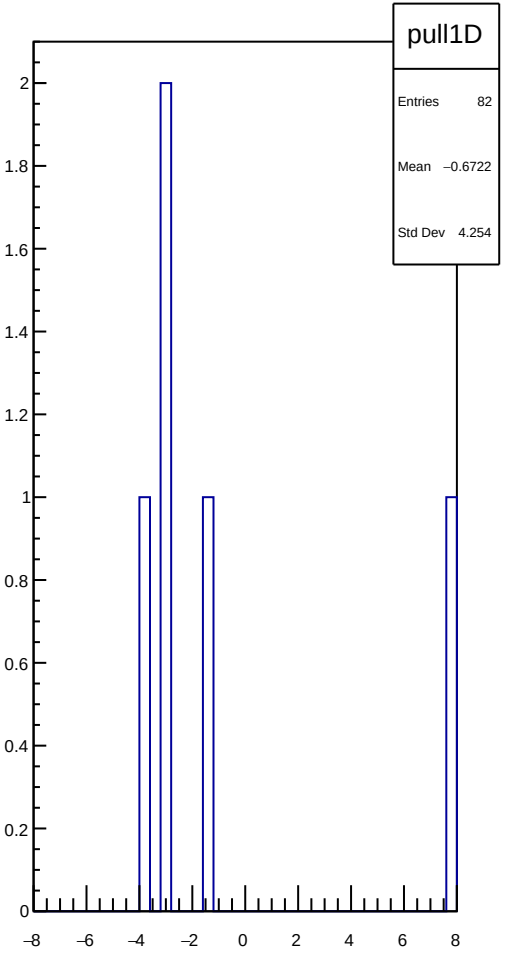

asym_bpm1i06WS_rms vs run
χ² / ndf 2.02e+04 / 81
p0 190.2 ± 0.1531
600
500
400
300
200

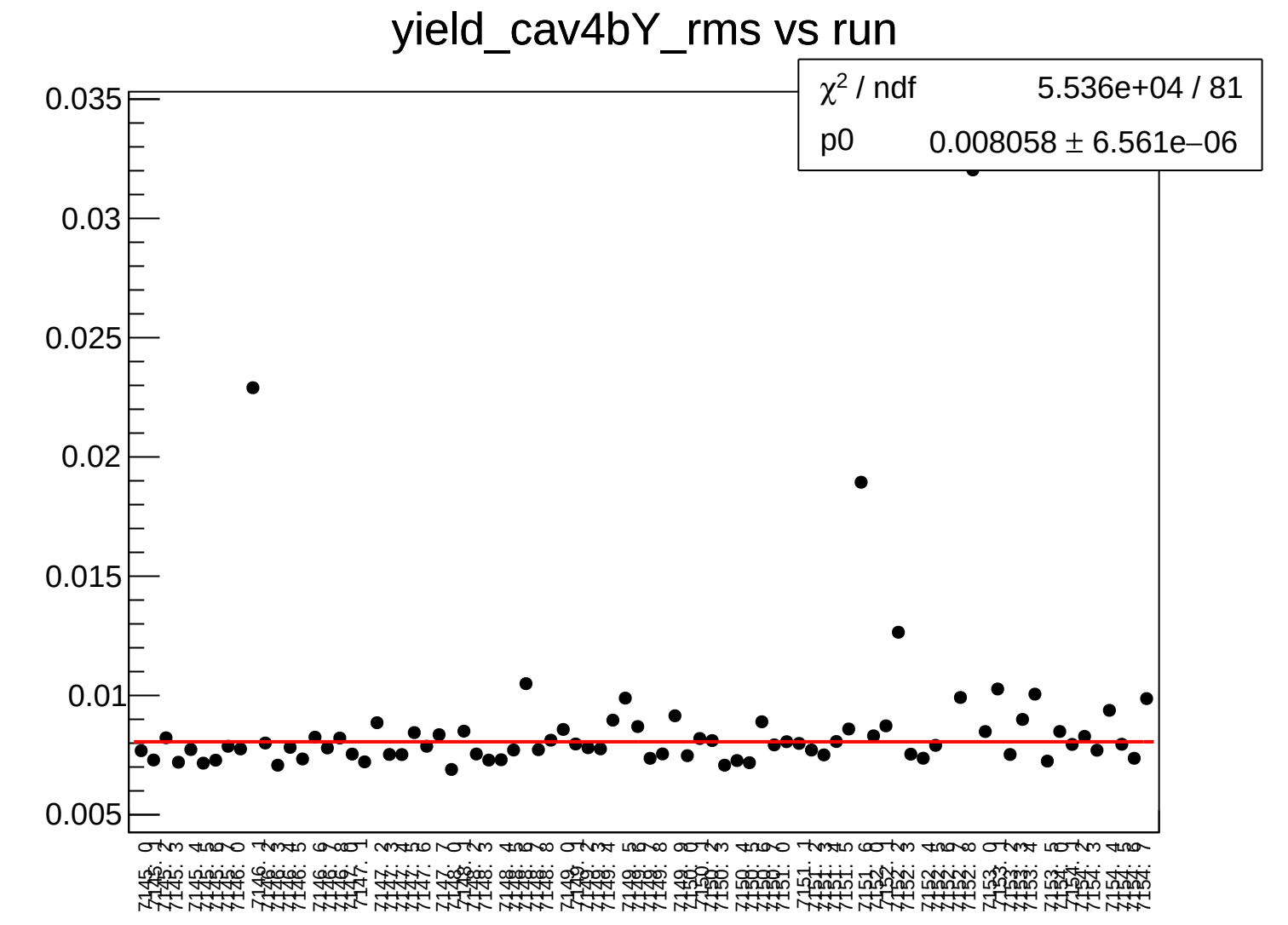

yield_cav4bX_mean vs run
χ² / ndf 9.677e+05 / 81
p0 −0.5504 ± 3.193e−05
−0.5
−0.55
−0.6
−0.65
−0.7
pull
Entries 82
Mean 196.5
Std Dev 148.7
100
0
−100
−200
−300

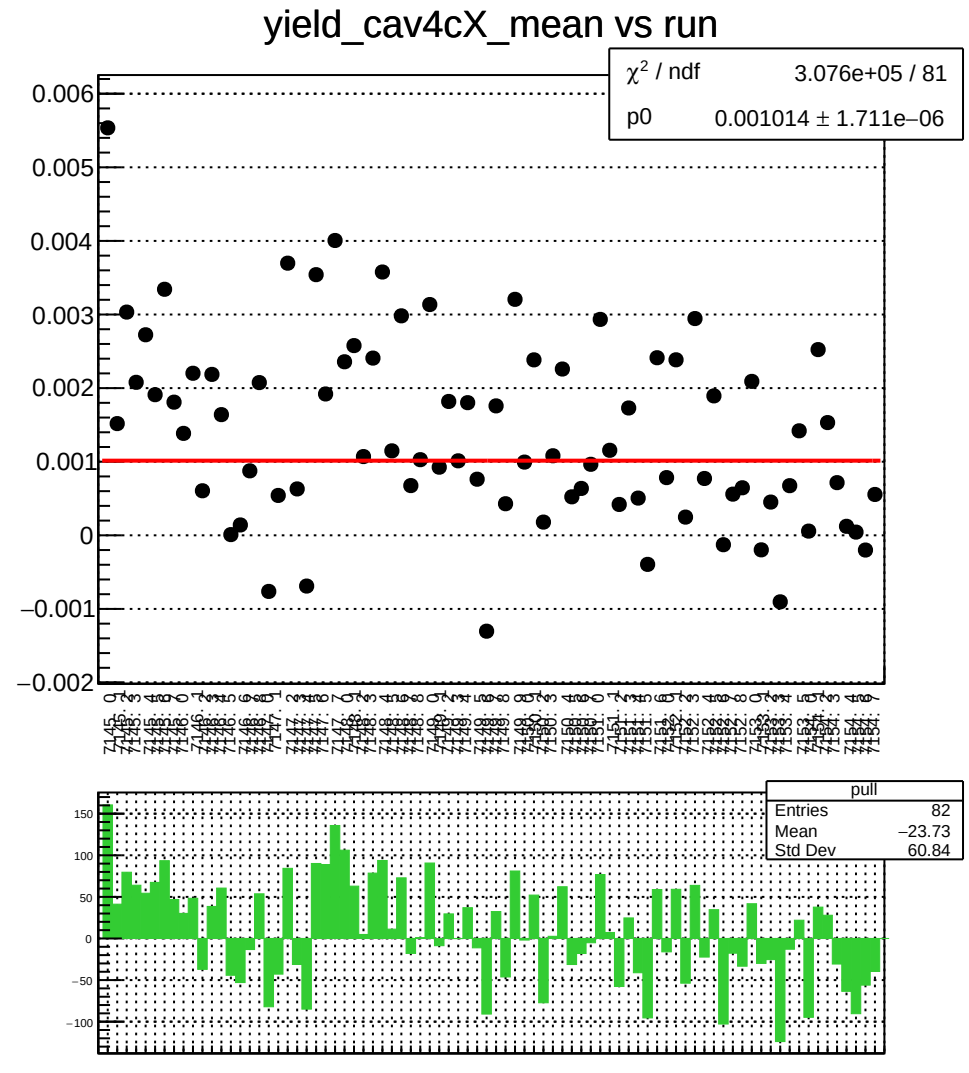

pull1D
Entries 82
Mean 0.8745
Std Dev 2.919
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

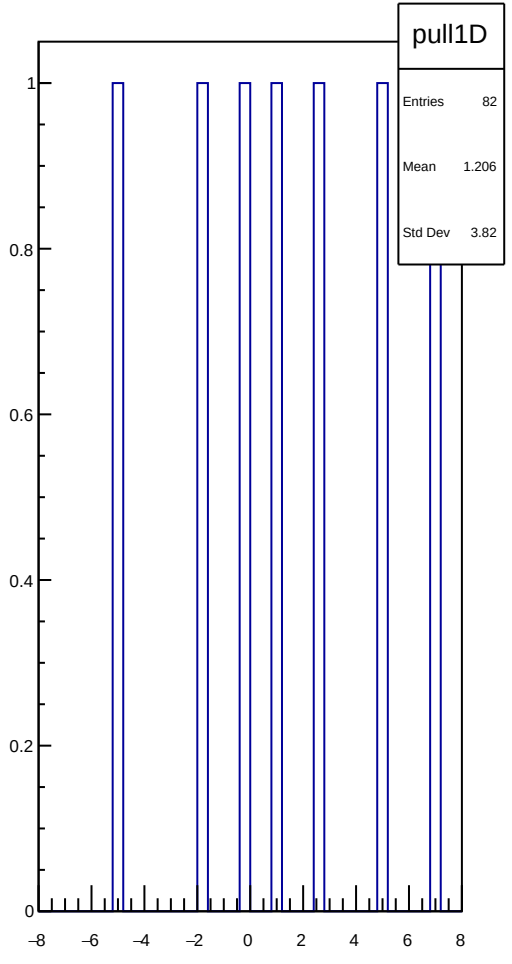

yield_cav4bX_rms vs run
χ² / ndf 2.599e+05 / 81
p0 0.02578 ± 2.258e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02

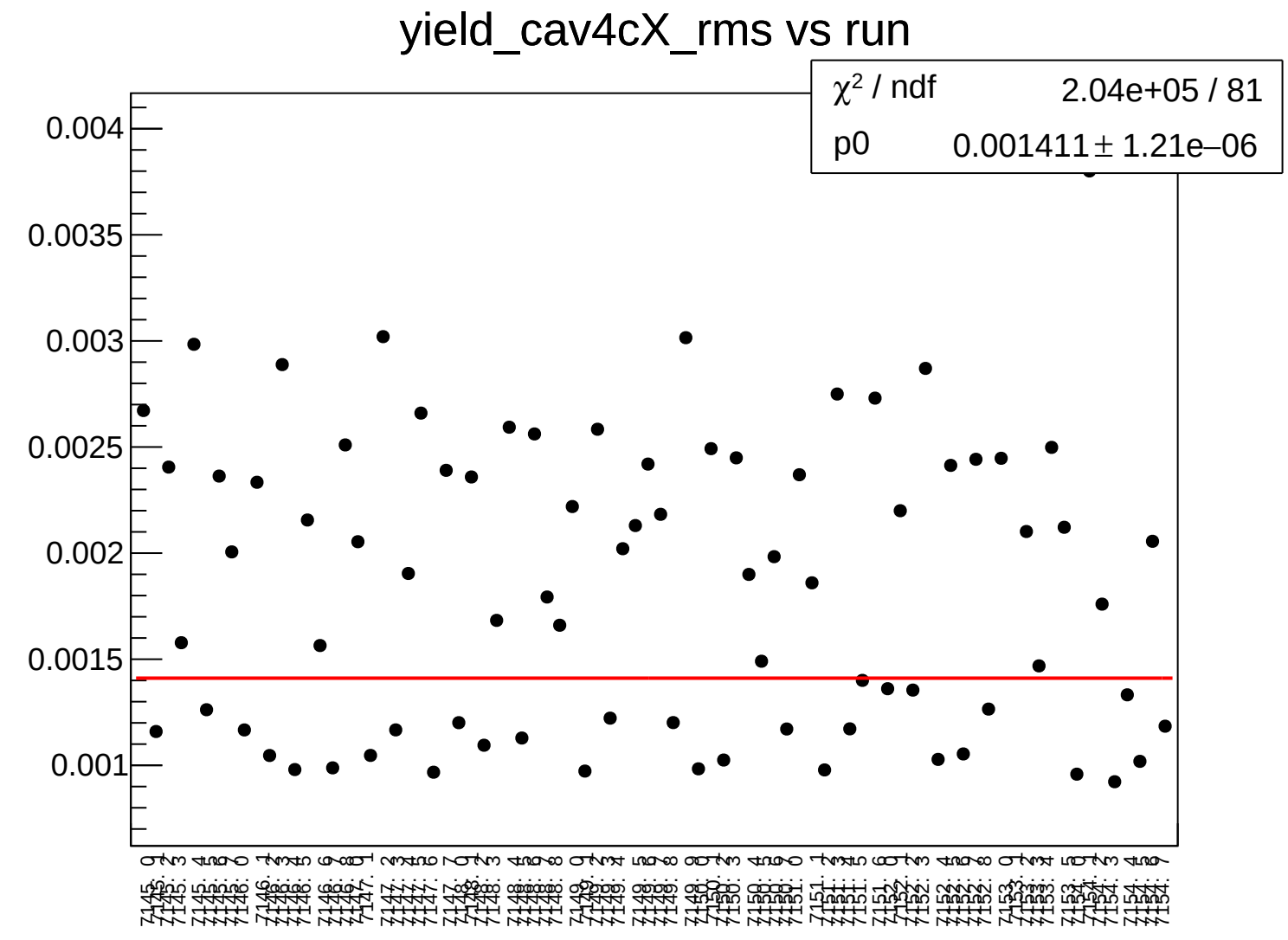

yield_cav4bY_mean vs run
χ² / ndf 4.368e+06 / 81
p0 −0.8156 ± 9.279e−06
−0.78
−0.8
−0.82
−0.84
−0.86
pull
Entries 82
Mean 864.2
Std Dev 814.3
400
200
0
−200
−400
−600

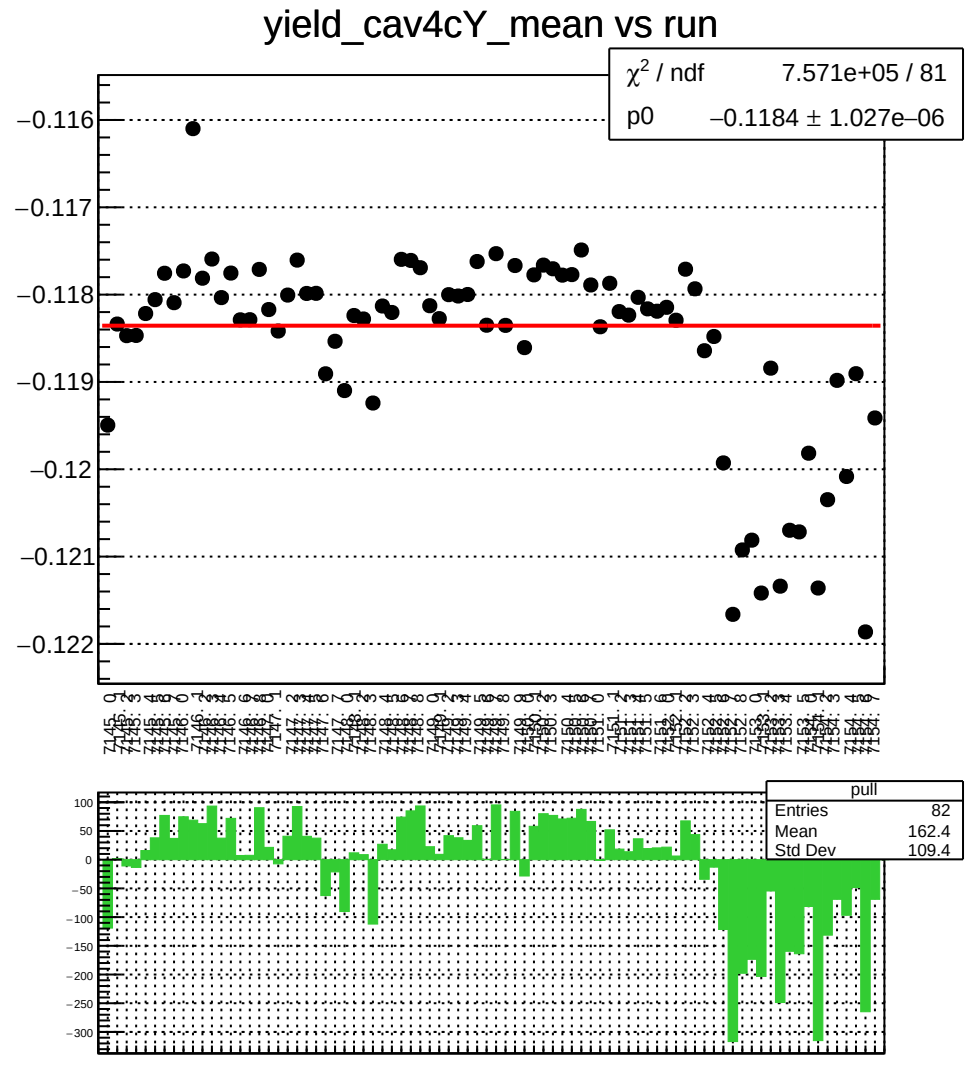

pull1D
Entries 82
Mean −0.6722
Std Dev 4.254
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

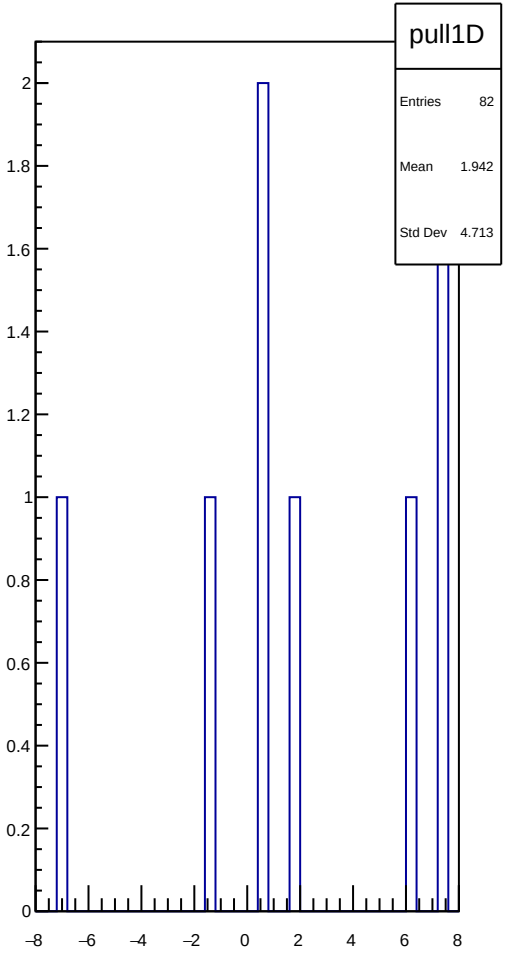

yield_cav4bY_rms vs run
χ² / ndf 5.536e+04 / 81
p0 0.008058 ± 6.561e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

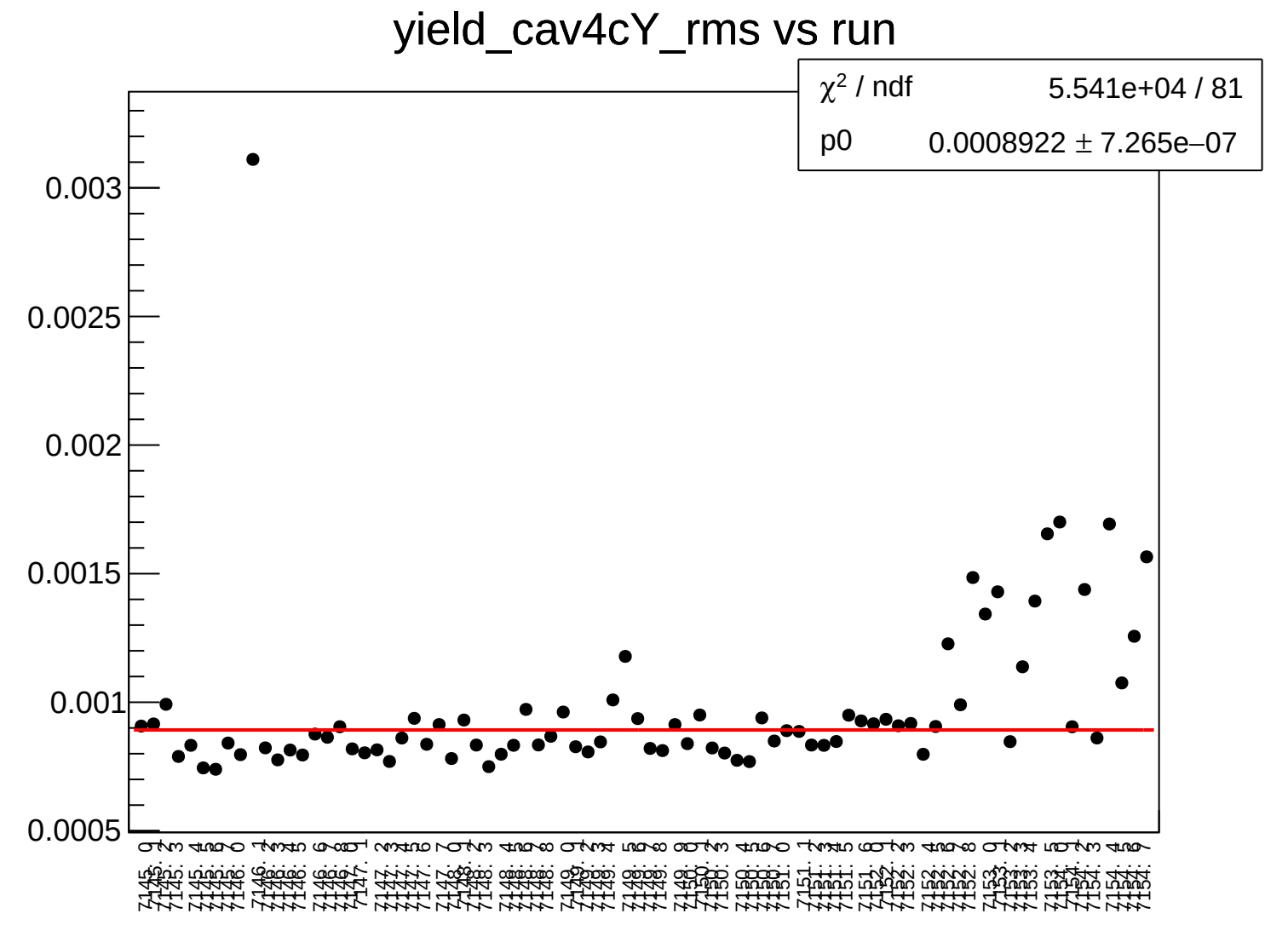

yield_cav4cX_mean vs run
χ² / ndf 3.076e+05 / 81
p0 0.001014 ± 1.711e−06
0.006
0.005
0.004
0.003
0.002
0.001
0
−0.001
−0.002
pull
Entries 82
Mean −23.73
Std Dev 60.84
150
100
50
0
−50
−100

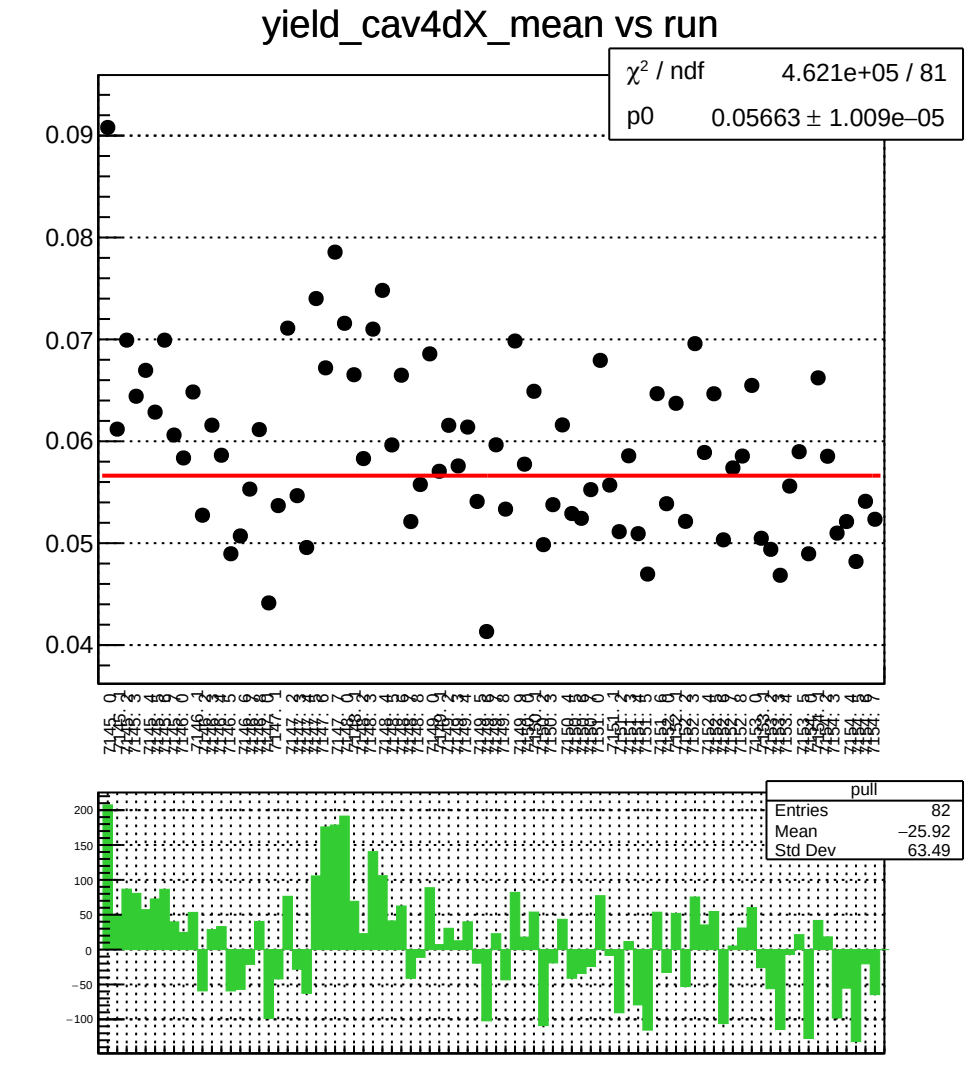

pull1D
Entries 82
Mean 1.206
Std Dev 3.82
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

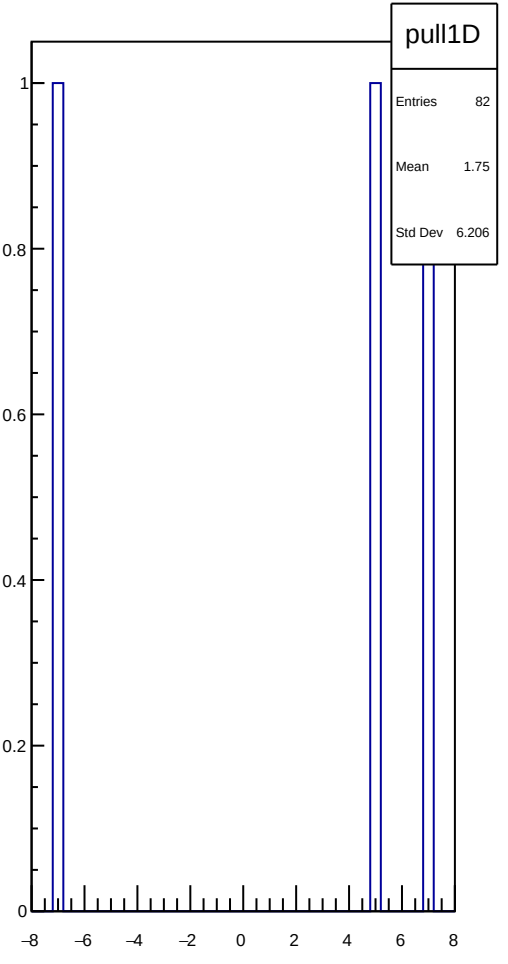

yield_cav4cX_rms vs run
χ² / ndf 2.04e+05 / 81
p0 0.001411 ± 1.21e–06
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

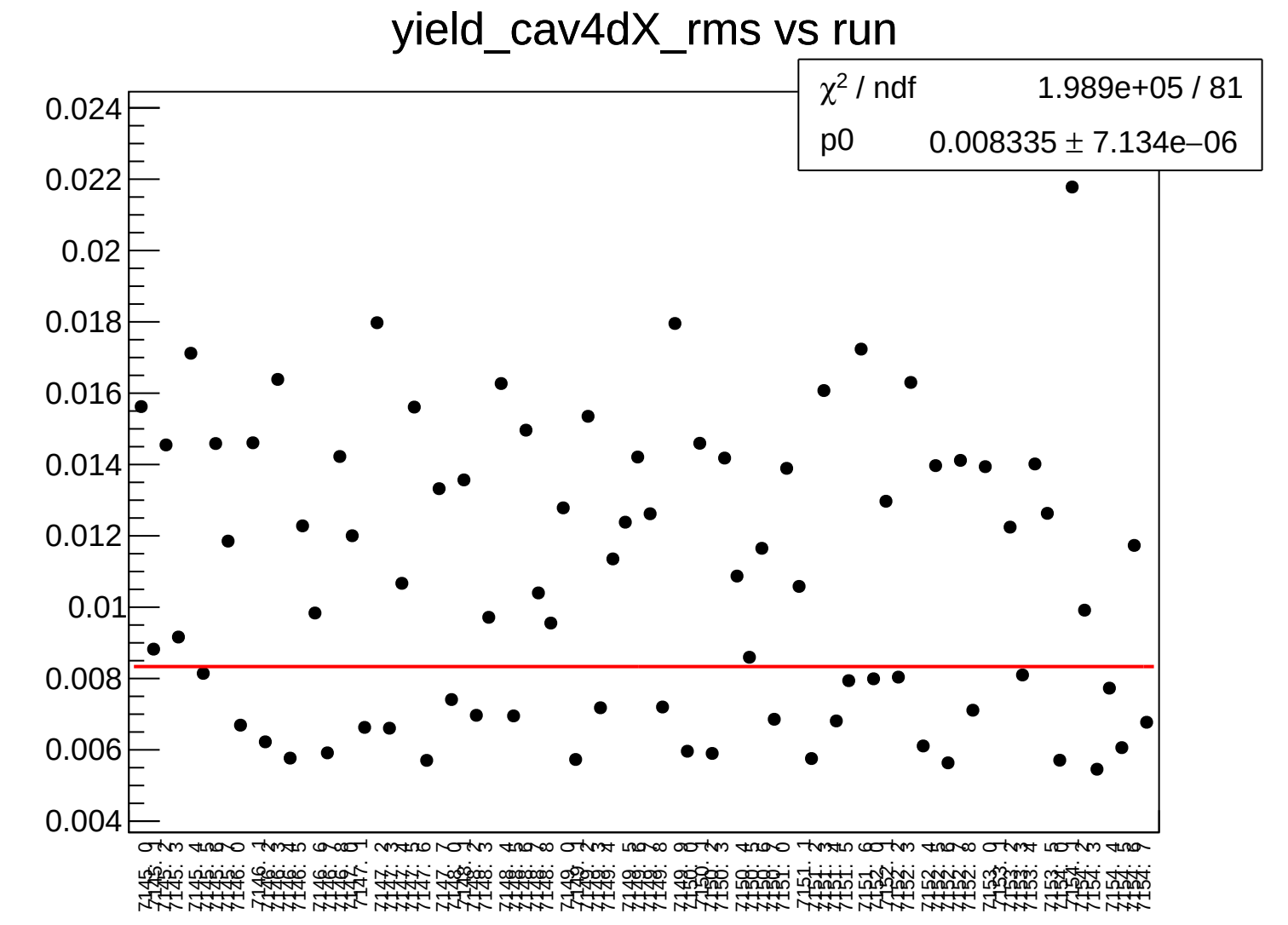

yield_cav4cY_mean vs run
χ² / ndf 7.571e+05 / 81
p0 −0.1184 ± 1.027e−06
−0.116
−0.117
−0.118
−0.119
−0.12
−0.121
−0.122
pull
Entries 82
Mean 162.4
Std Dev 109.4
100
50
0
−50
−100
−150
−200
−250
−300

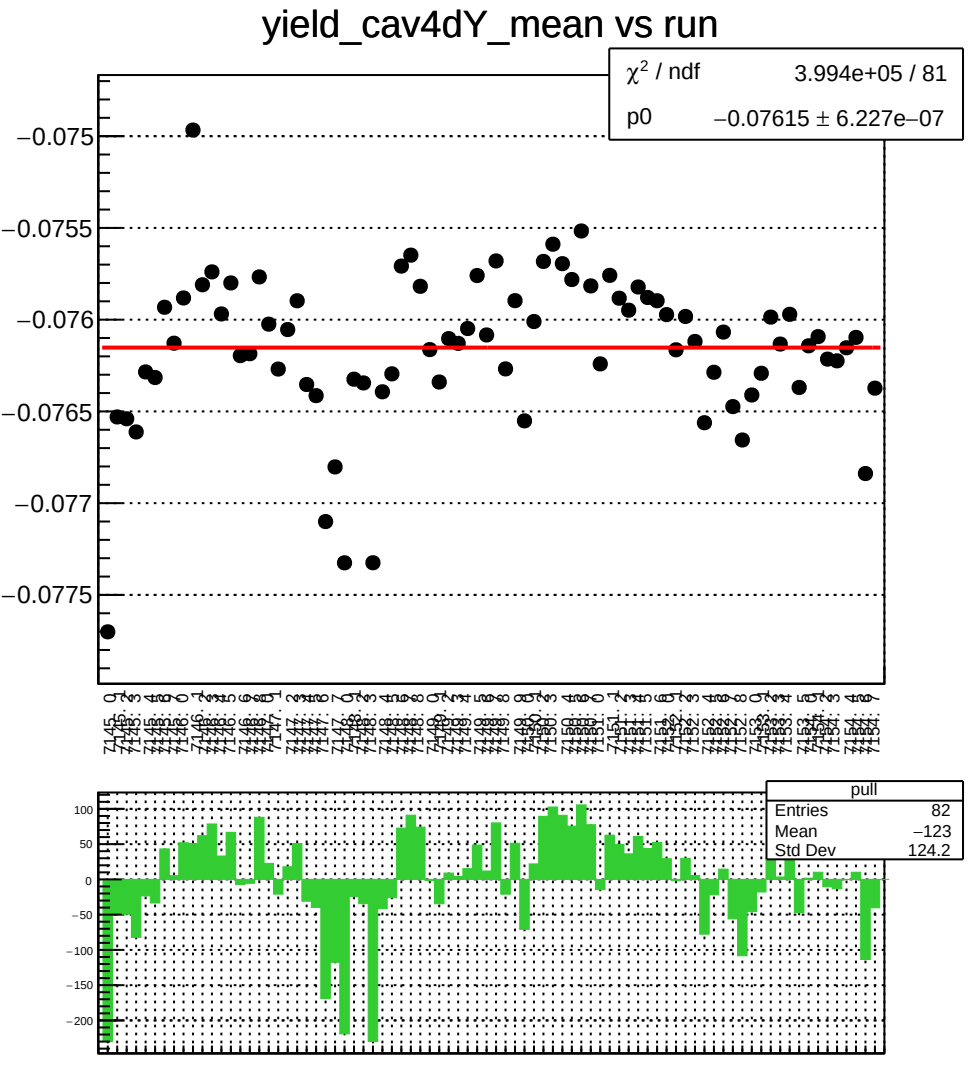

pull1D
Entries 82
Mean 1.942
Std Dev 4.713
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

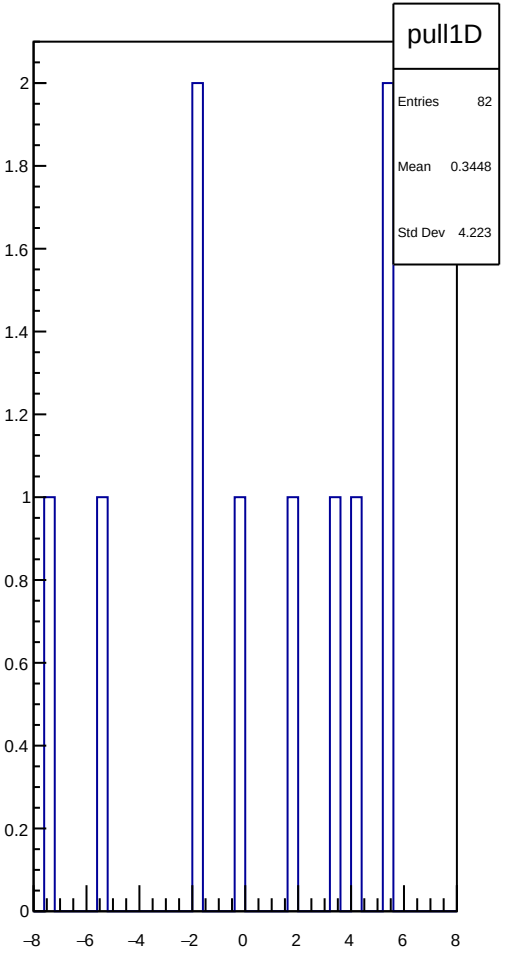

yield_cav4cY_rms vs run
χ² / ndf 5.541e+04 / 81
p0 0.0008922 ± 7.265e−07
0.003
0.0025
0.002
0.0015
0.001
0.0005

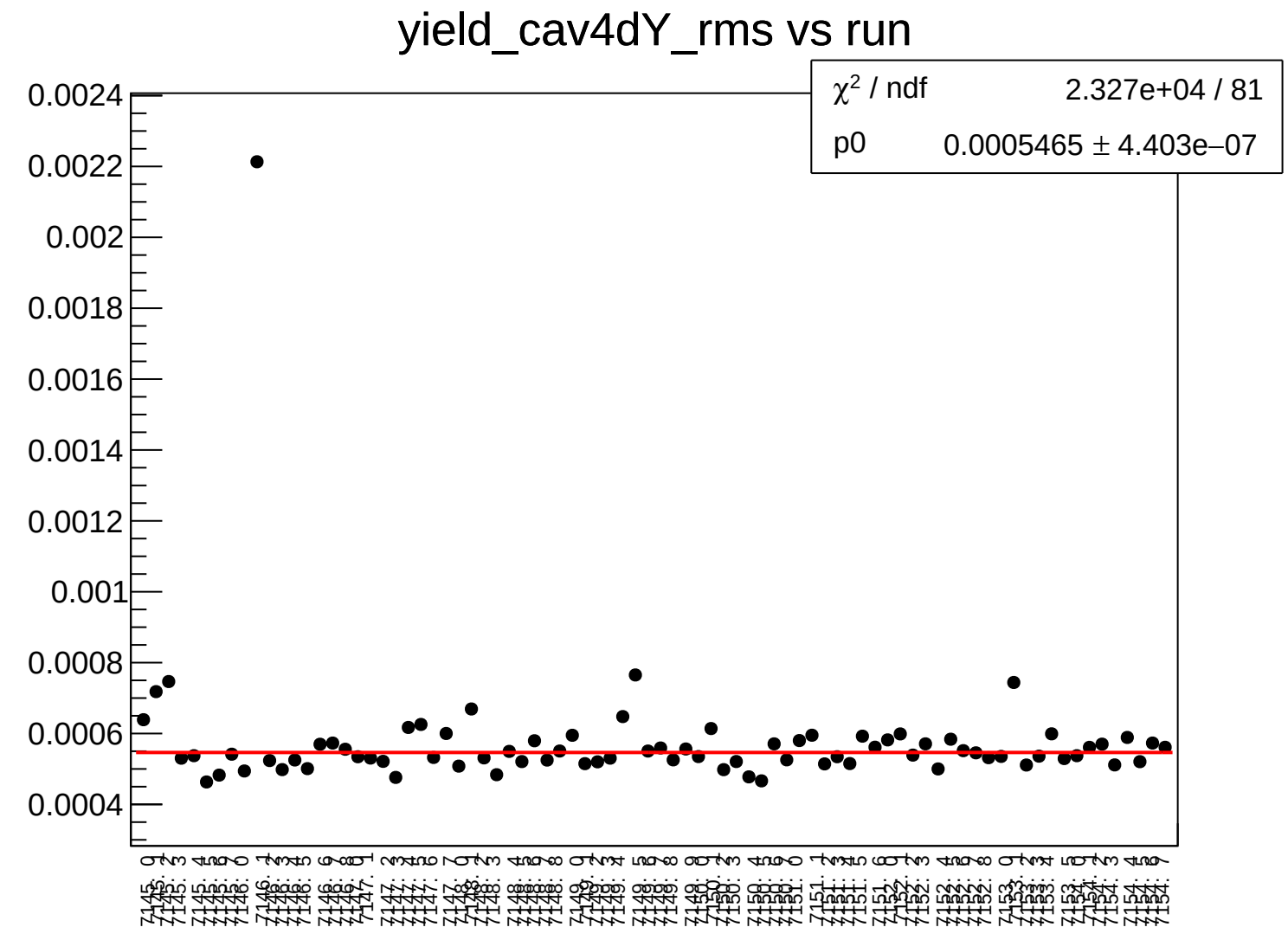

yield_cav4dX_mean vs run
χ² / ndf 4.621e+05 / 81
p0 0.05663 ± 1.009e−05
0.09
0.08
0.07
0.06
0.05
0.04
pull
Entries 82
Mean −25.92
Std Dev 63.49
200
150
100
50
0
−50
−100

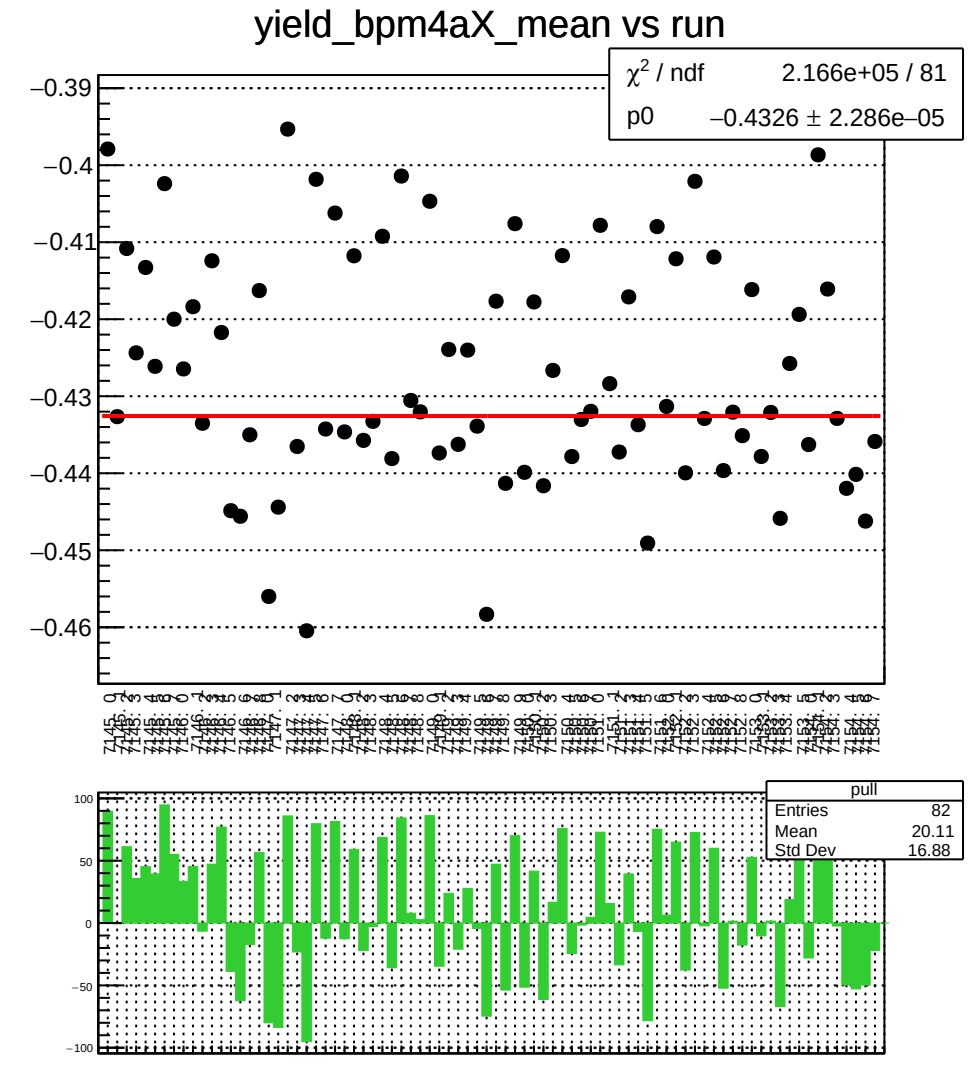

pull1D
Entries 82
Mean 1.75
Std Dev 6.206
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

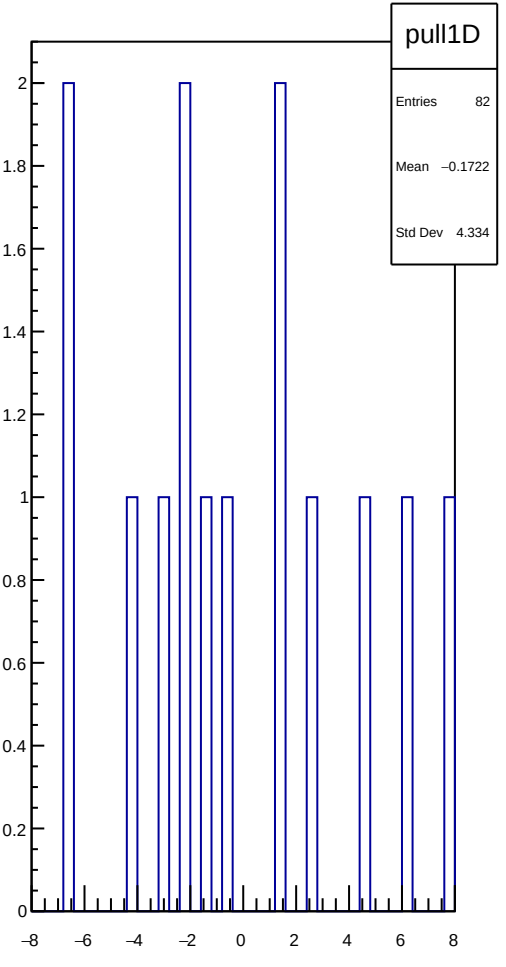

yield_cav4dX_rms vs run
χ² / ndf 1.989e+05 / 81
p0 0.008335 ± 7.134e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

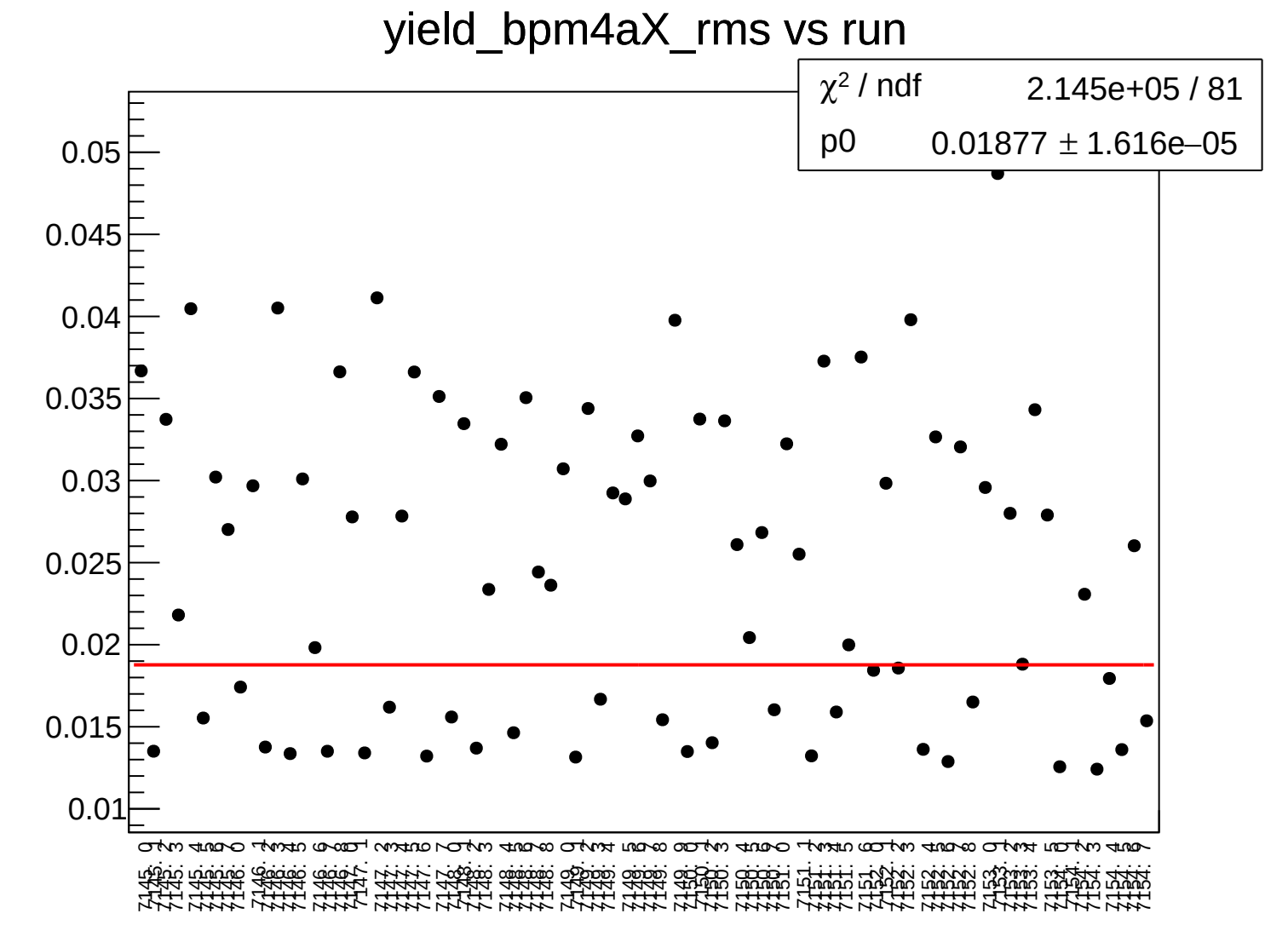

yield_cav4dY_mean vs run
χ² / ndf 3.994e+05 / 81
p0 −0.07615 ± 6.227e−07
−0.075
−0.0755
−0.076
−0.0765
−0.077
−0.0775
pull
Entries 82
Mean −123
Std Dev 124.2
100
50
0
−50
−100
−150
−200

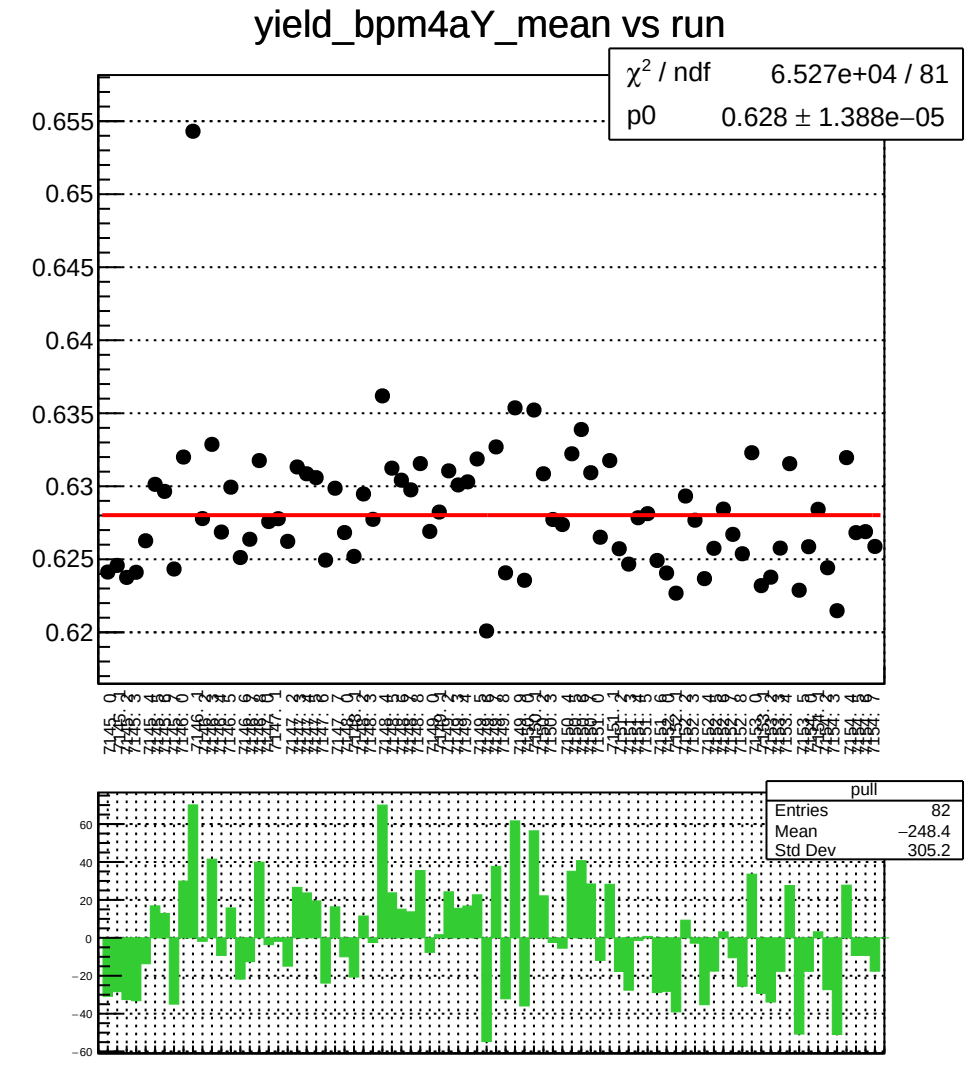

pull1D
Entries 82
Mean 0.3448
Std Dev 4.223
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

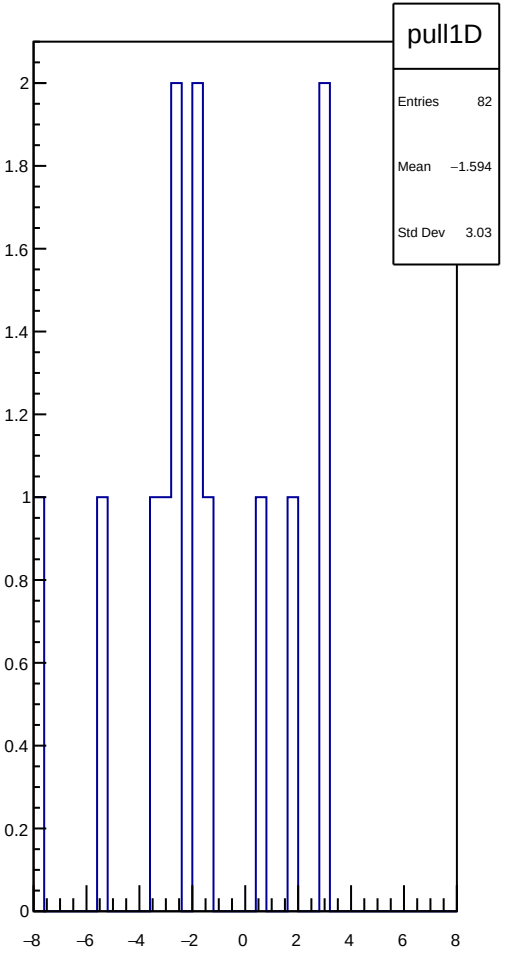

yield_cav4dY_rms vs run
χ² / ndf 2.327e+04 / 81
p0 0.0005465 ± 4.403e−07
0.0024
0.0022
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

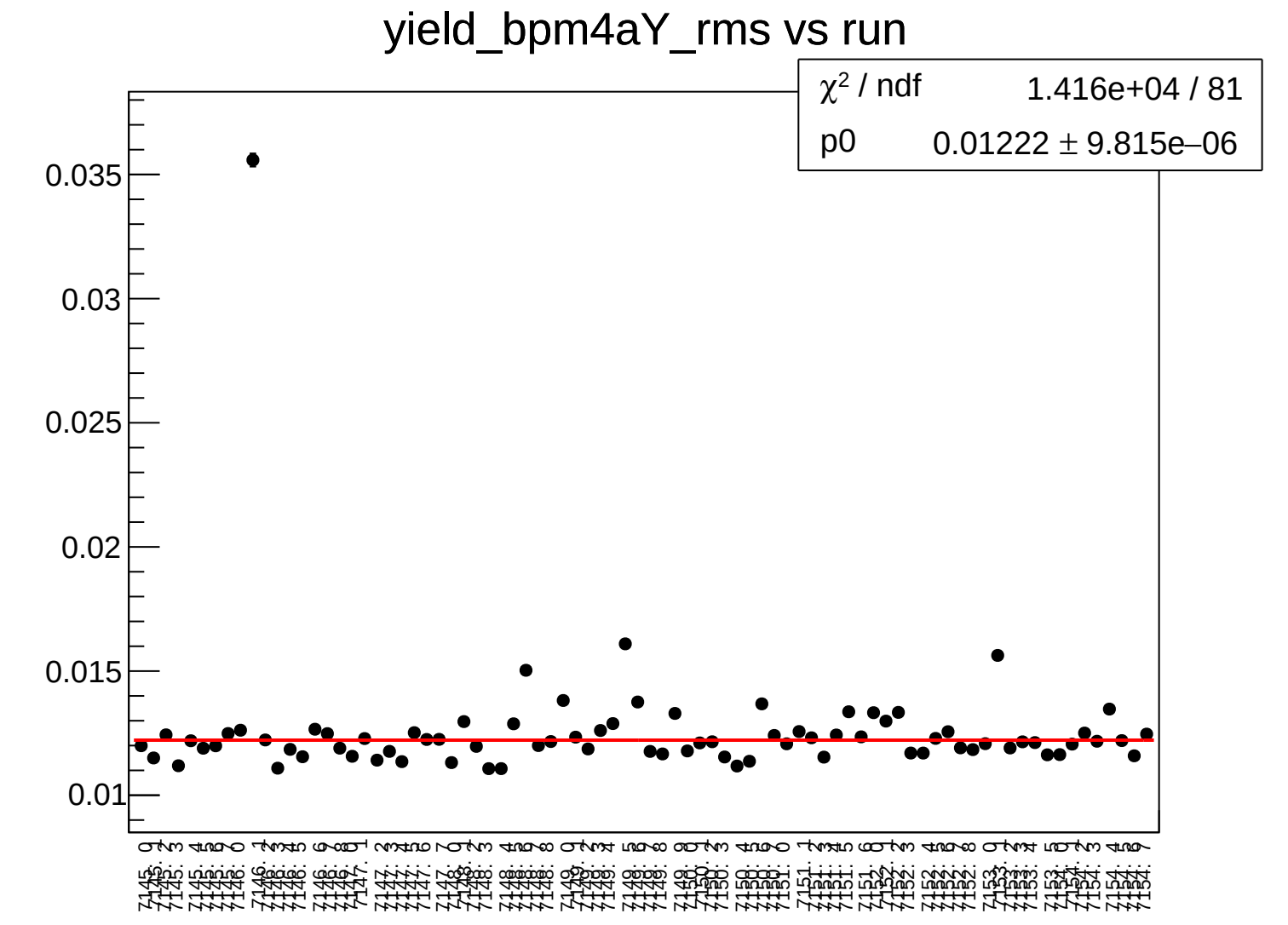

yield_bpm4aX_mean vs run
χ² / ndf 2.166e+05 / 81
p0 −0.4326 ± 2.286e−05
−0.39
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
−0.46
pull
Entries 82
Mean 20.11
Std Dev 16.88
100
50
0
−50
−100

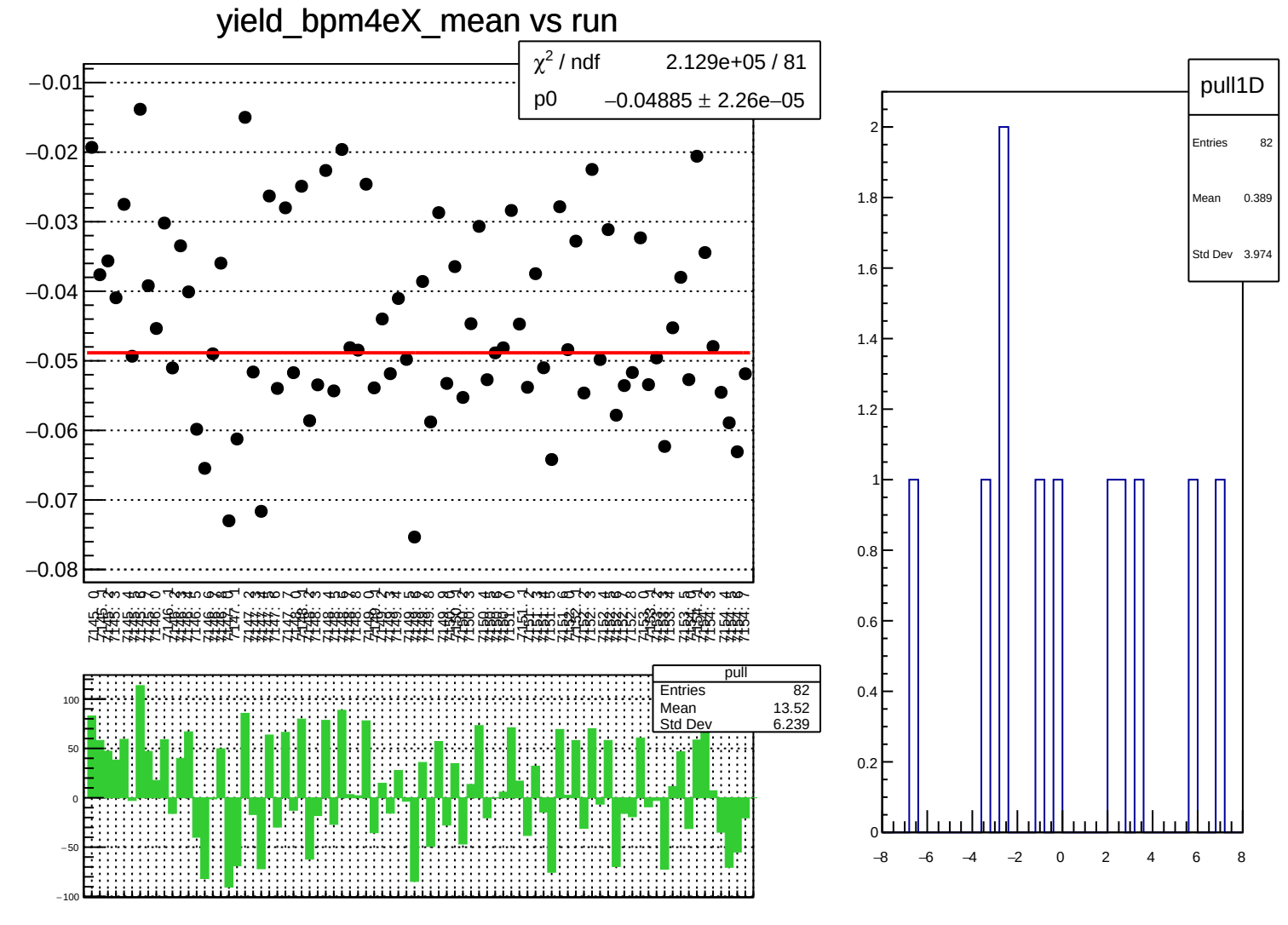

pull1D
Entries 82
Mean −0.1722
Std Dev 4.334
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

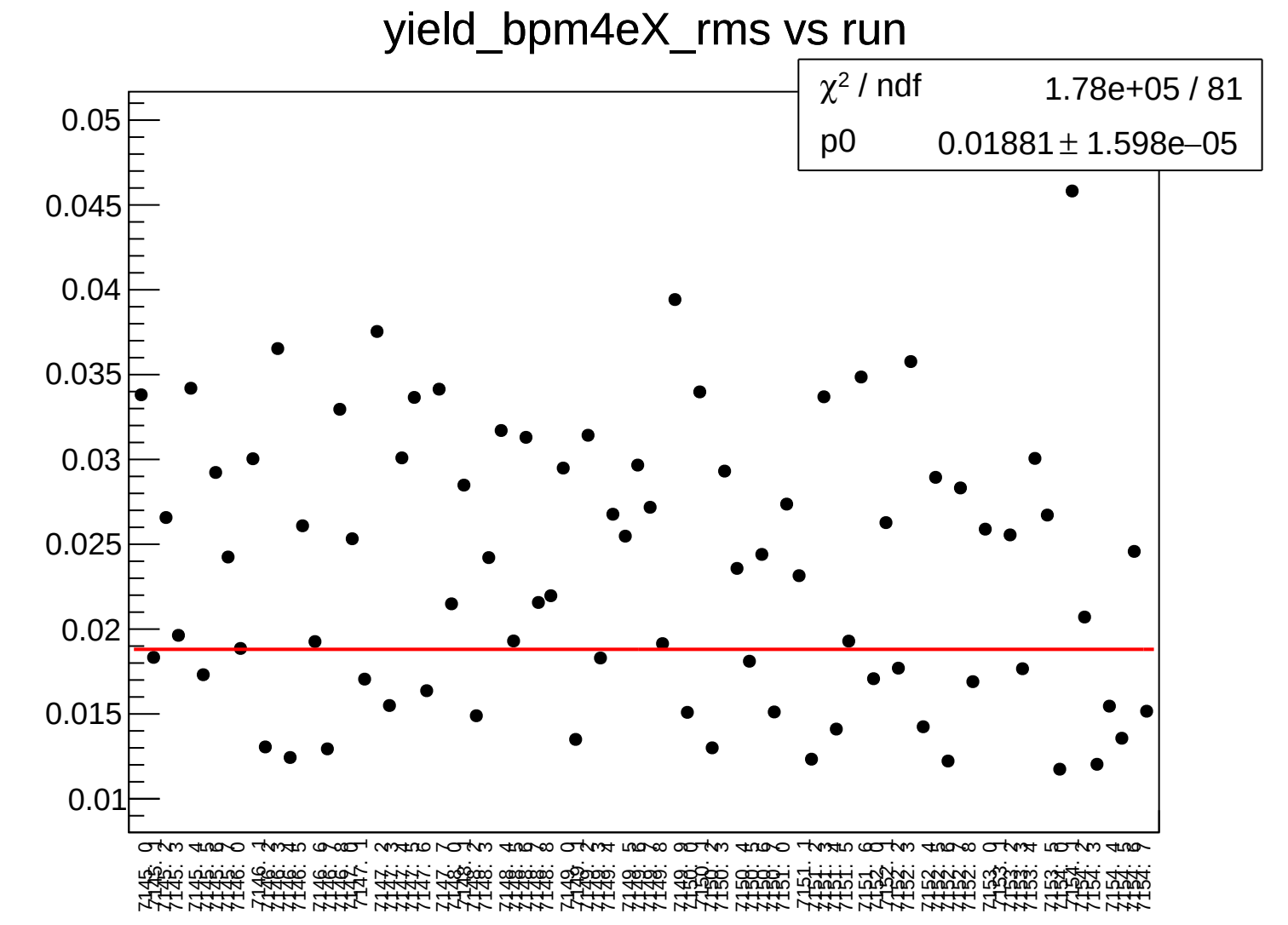

yield_bpm4aX_rms vs run
χ² / ndf 2.145e+05 / 81
p0 0.01877 ± 1.616e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

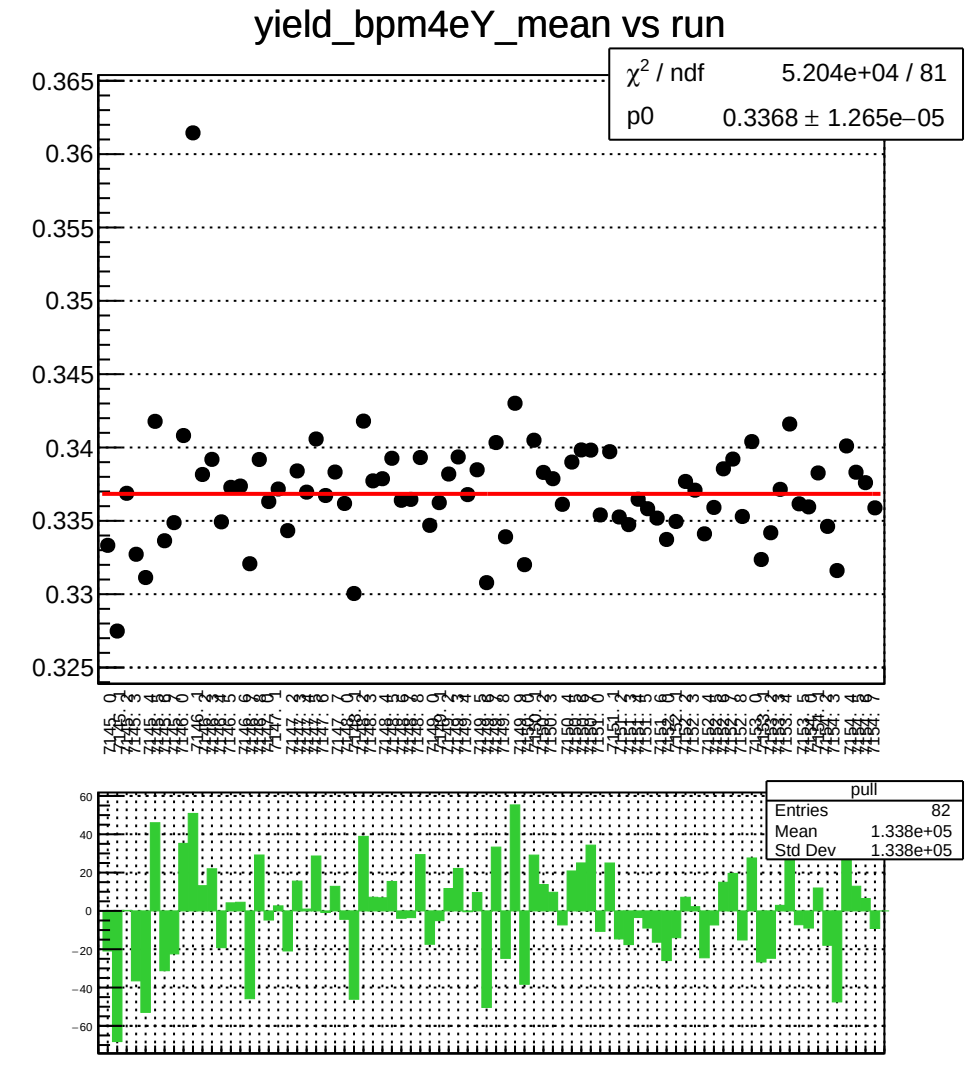

yield_bpm4aY_mean vs run
χ² / ndf 6.527e+04 / 81
p0 0.628 ± 1.388e−05
0.655
0.65
0.645
0.64
0.635
0.63
0.625
0.62
pull
Entries 82
Mean −248.4
Std Dev 305.2
60
40
20
0
−20
−40
−60

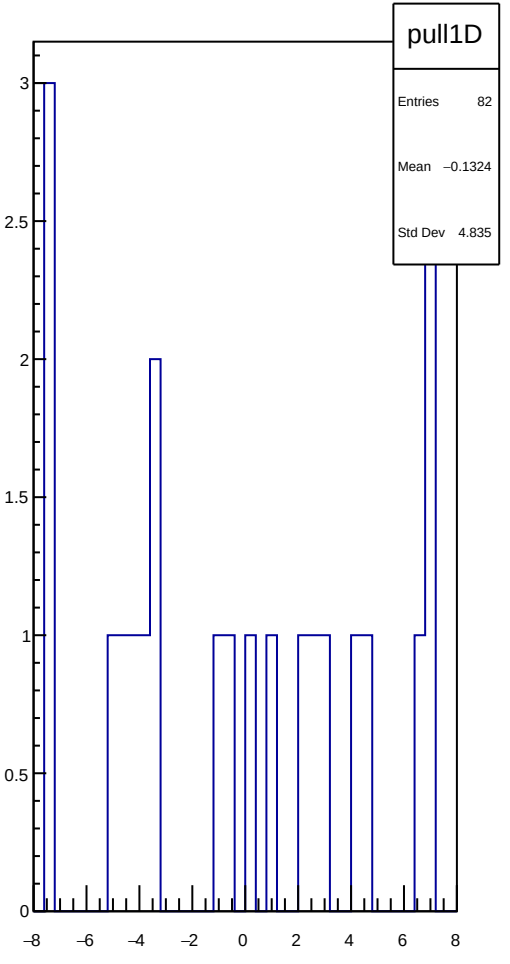

pull1D
Entries 82
Mean −1.594
Std Dev 3.03
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

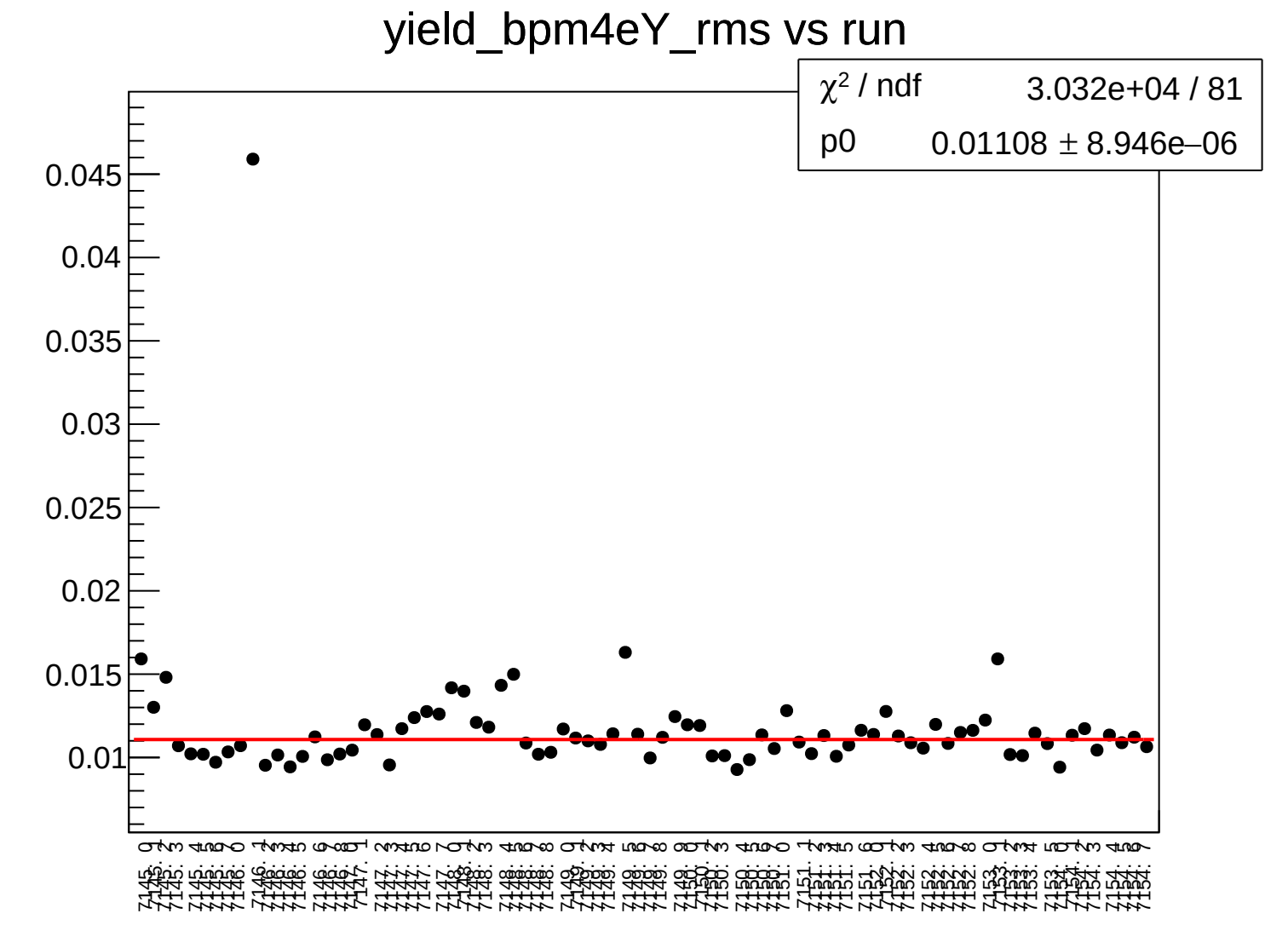

yield_bpm4aY_rms vs run
χ² / ndf 1.416e+04 / 81
p0 0.01222 ± 9.815e–06
0.035
0.03
0.025
0.02
0.015
0.01

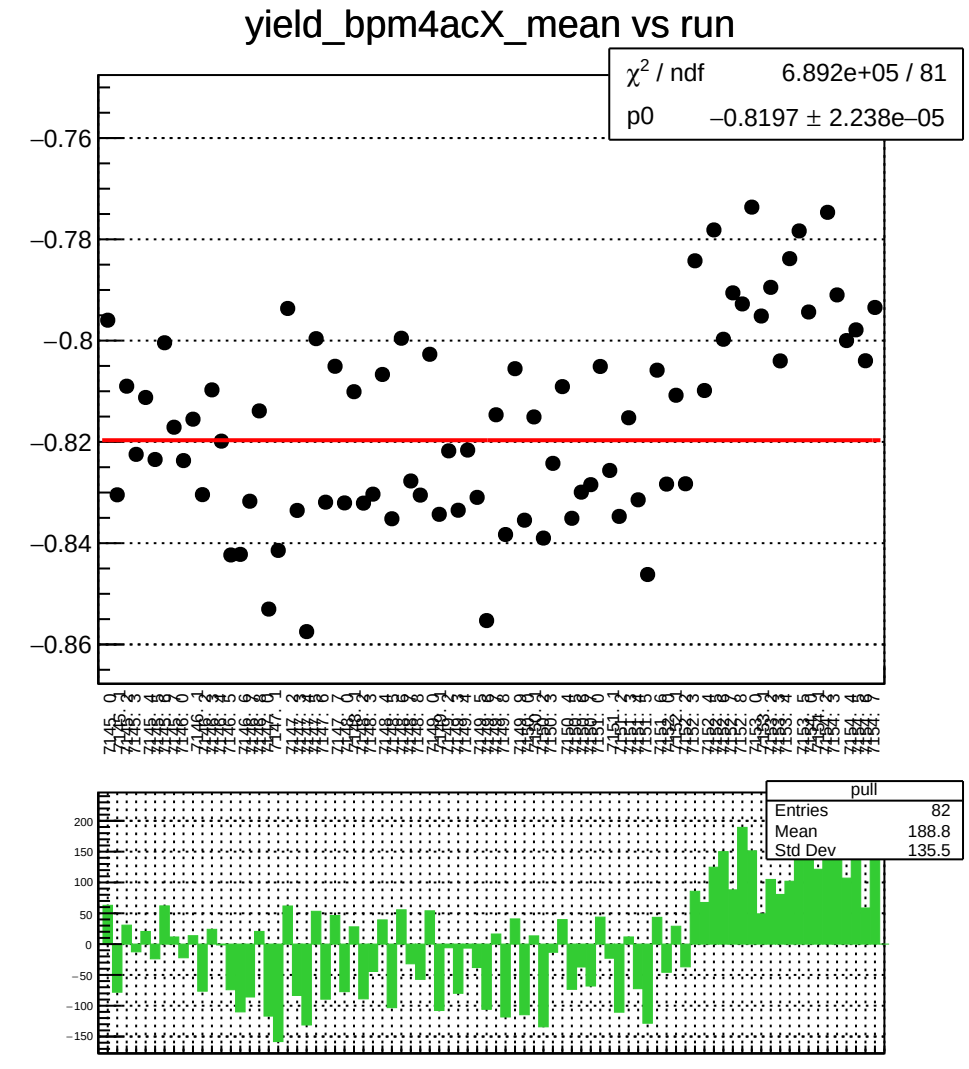

yield_bpm4eX_mean vs run
χ² / ndf 2.129e+05 / 81
p0 −0.04885 ± 2.26e−05
−0.01
−0.02
−0.03
−0.04
−0.05
−0.06
−0.07
−0.08
pull
Entries 82
Mean 13.52
Std Dev 6.239
100
50
0
−50
−100
pull1D
Entries 82
Mean 0.389
Std Dev 3.974
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

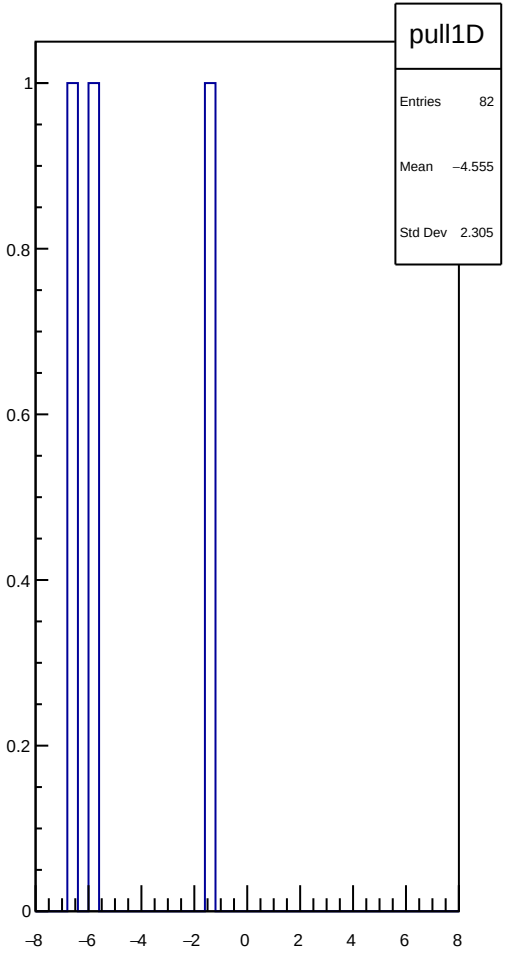

yield_bpm4eX_rms vs run
χ² / ndf 1.78e+05 / 81
p0 0.01881 ± 1.598e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

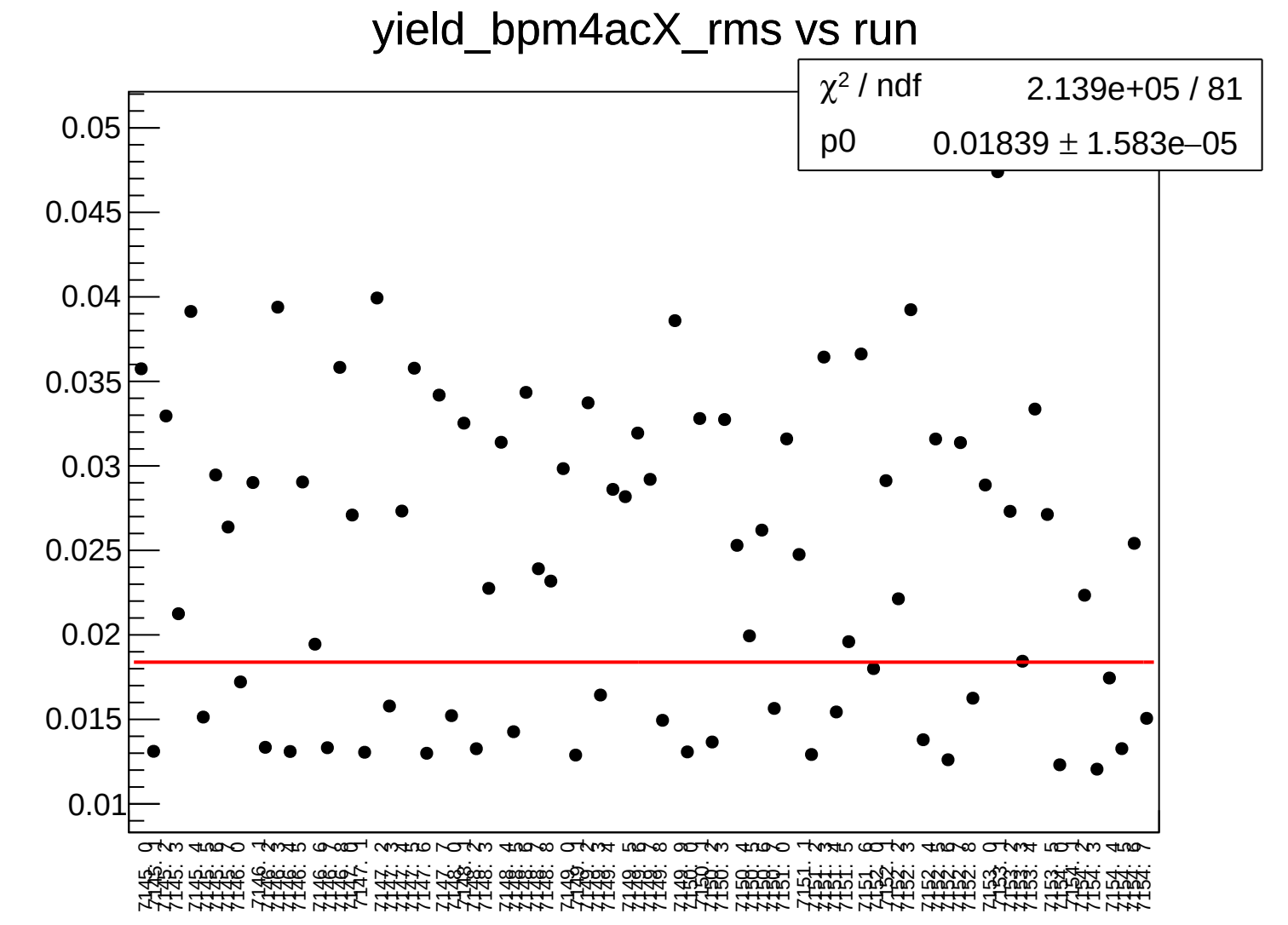

yield_bpm4eY_mean vs run
χ² / ndf 5.204e+04 / 81
p0 0.3368 ± 1.265e−05
0.365
0.36
0.355
0.35
0.345
0.34
0.335
0.33
0.325
pull
Entries 82
Mean 1.338e+05
Std Dev 1.338e+05
60
40
20
0
−20
−40
−60

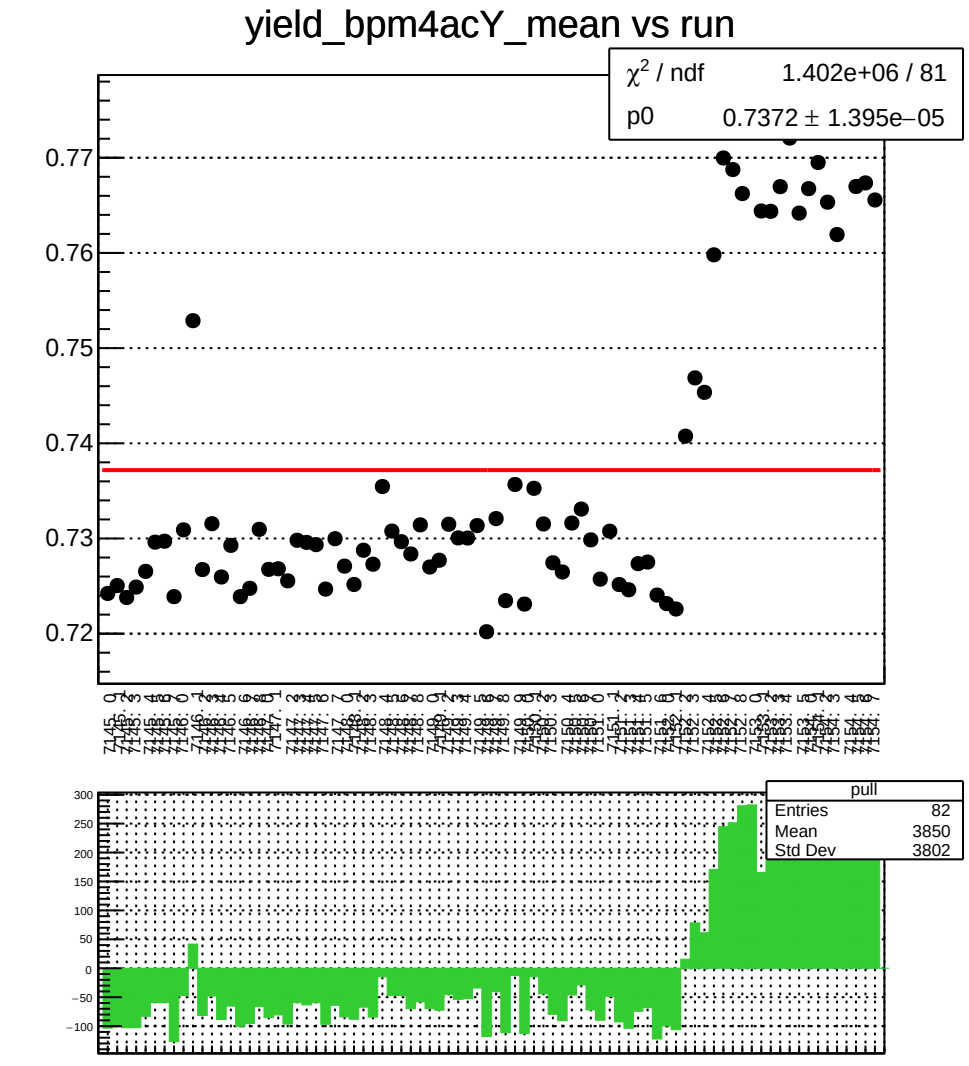

pull1D
Entries 82
Mean −0.1324
Std Dev 4.835
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

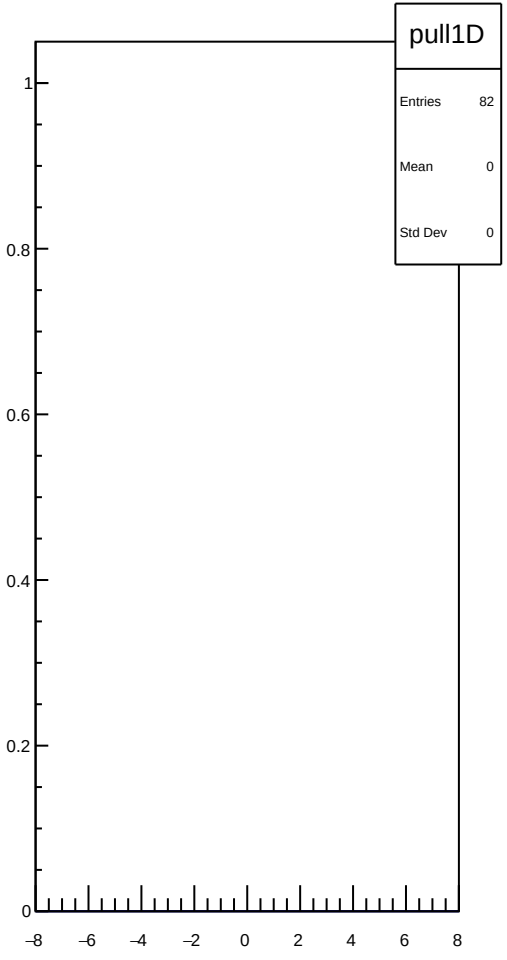

yield_bpm4eY_rms vs run
χ² / ndf 3.032e+04 / 81
p0 0.01108 ± 8.946e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

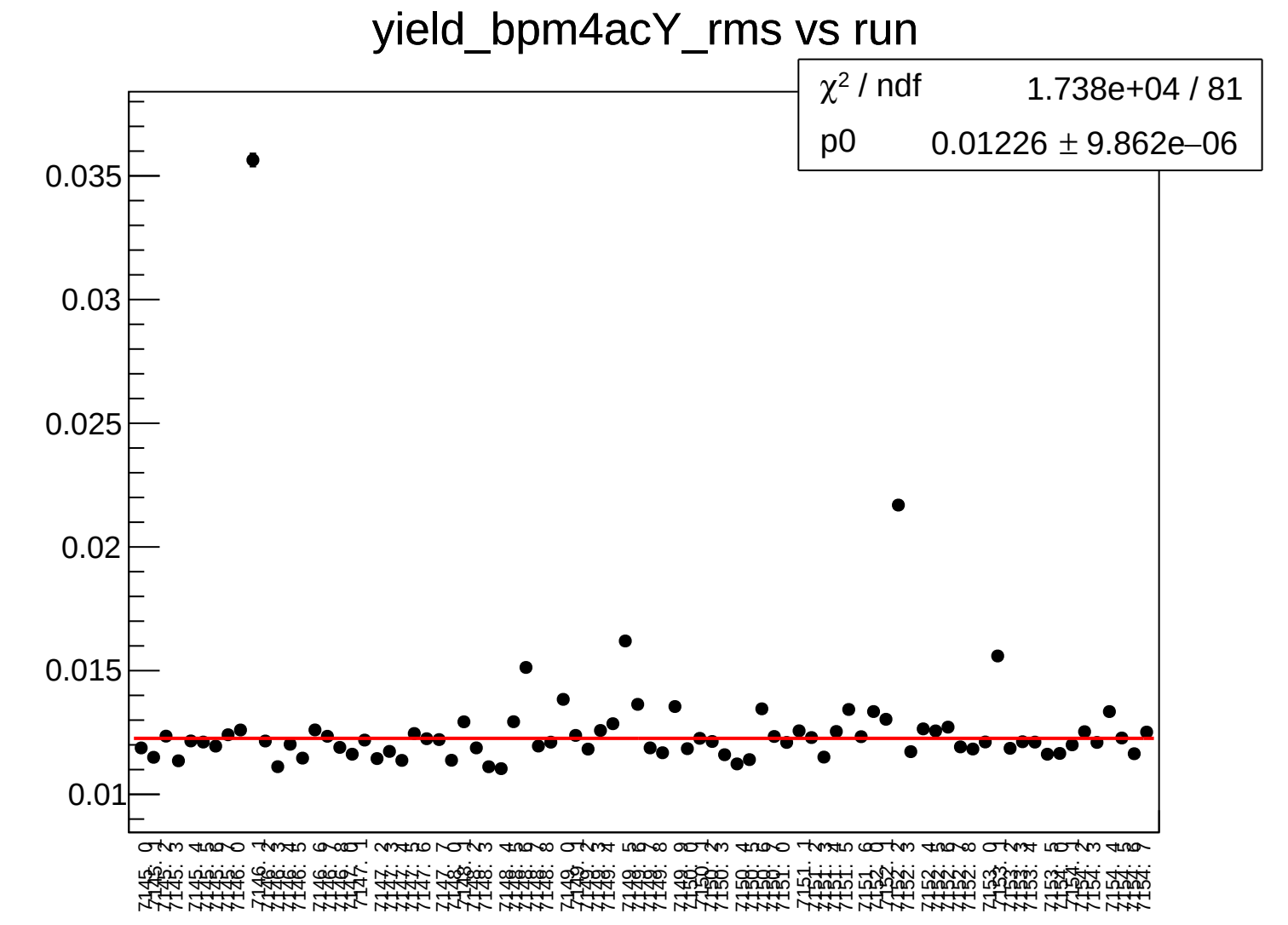

yield_bpm4acX_mean vs run
χ² / ndf 6.892e+05 / 81
p0 −0.8197 ± 2.238e−05
−0.76
−0.78
−0.8
−0.82
−0.84
−0.86
pull
Entries 82
Mean 188.8
Std Dev 135.5
200
150
100
50
0
−50
−100
−150

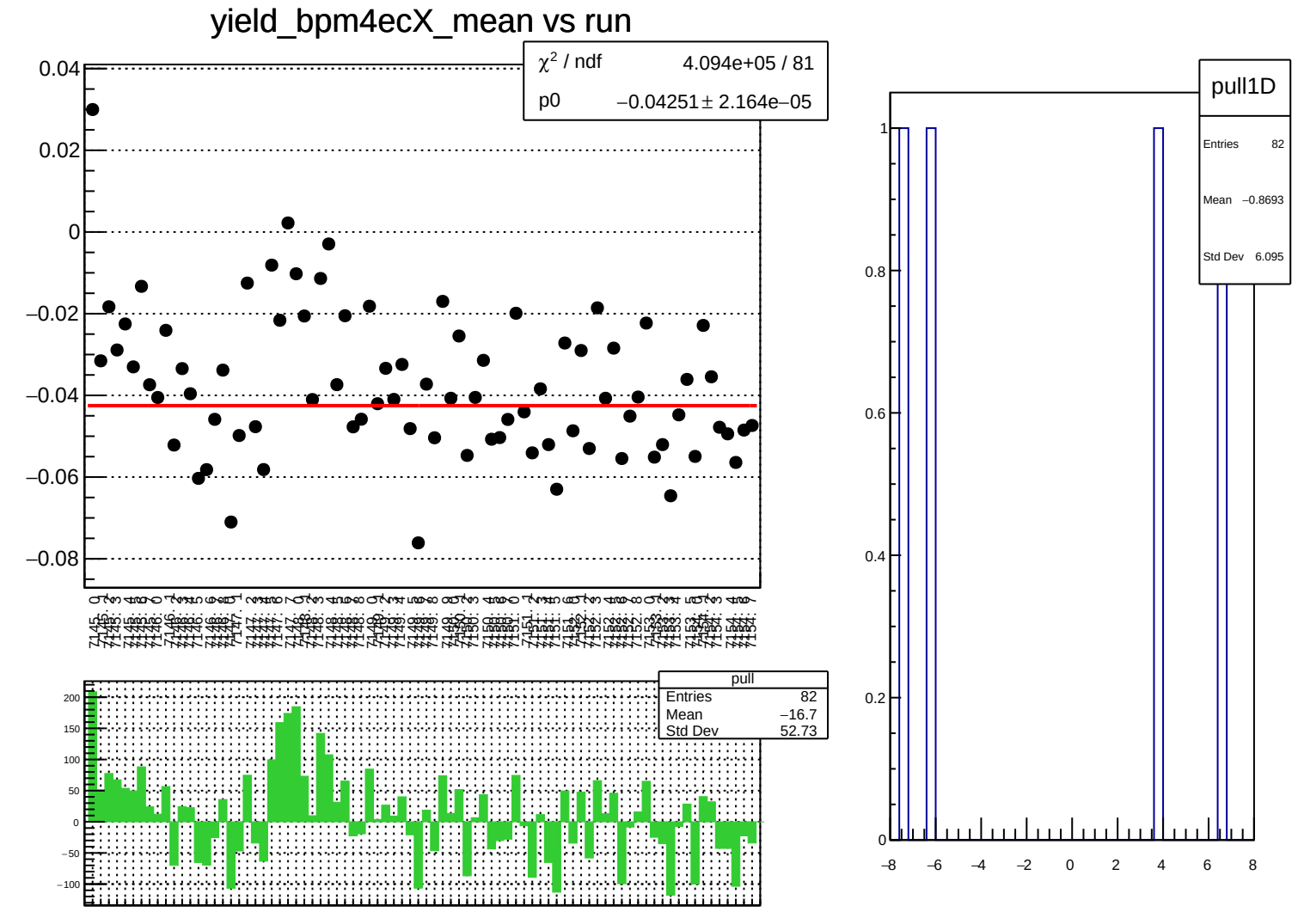

pull1D
Entries 82
Mean −4.555
Std Dev 2.305
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

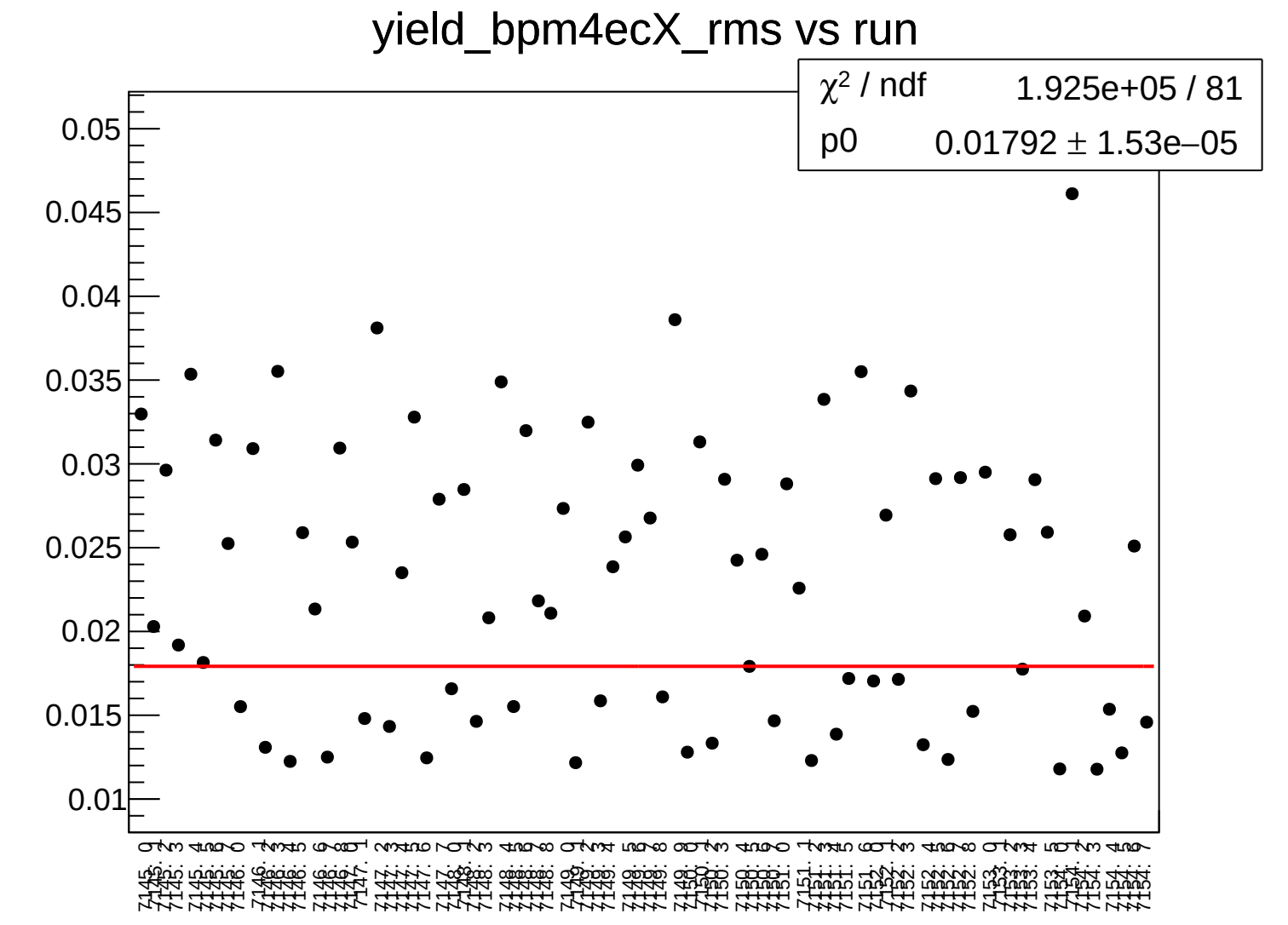

yield_bpm4acX_rms vs run
χ² / ndf 2.139e+05 / 81
p0 0.01839 ± 1.583e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

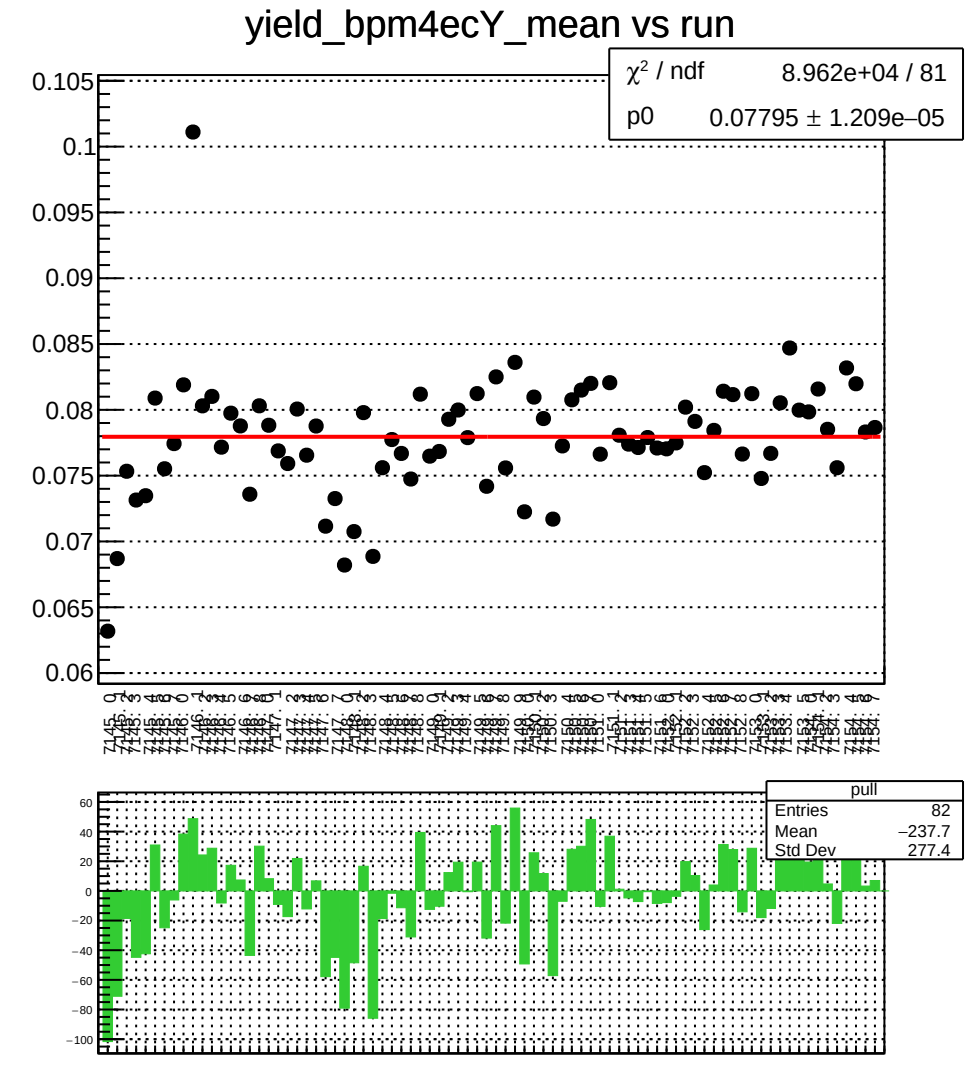

yield_bpm4acY_mean vs run
χ² / ndf 1.402e+06 / 81
p0 0.7372 ± 1.395e−05
0.77
0.76
0.75
0.74
0.73
0.72
pull
Entries 82
Mean 3850
Std Dev 3802
300
250
200
150
100
50
0
−50
−100

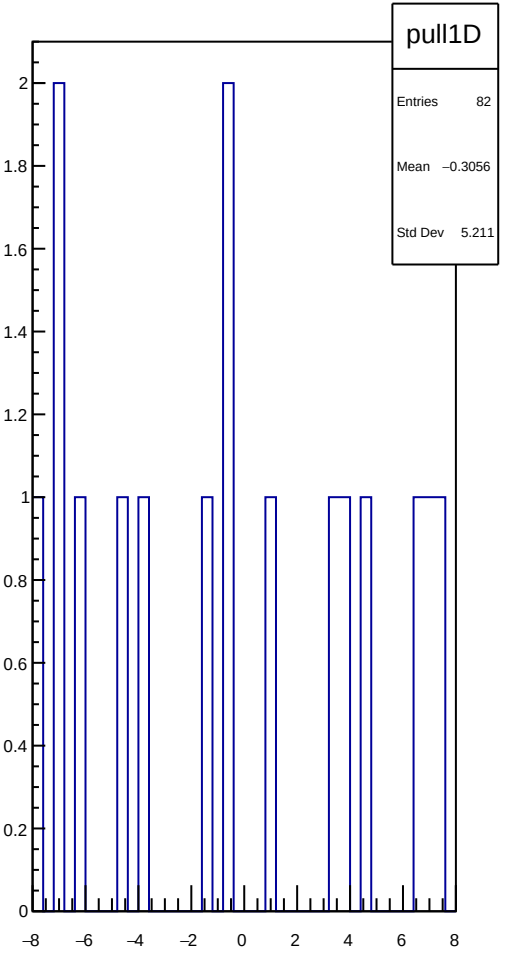

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

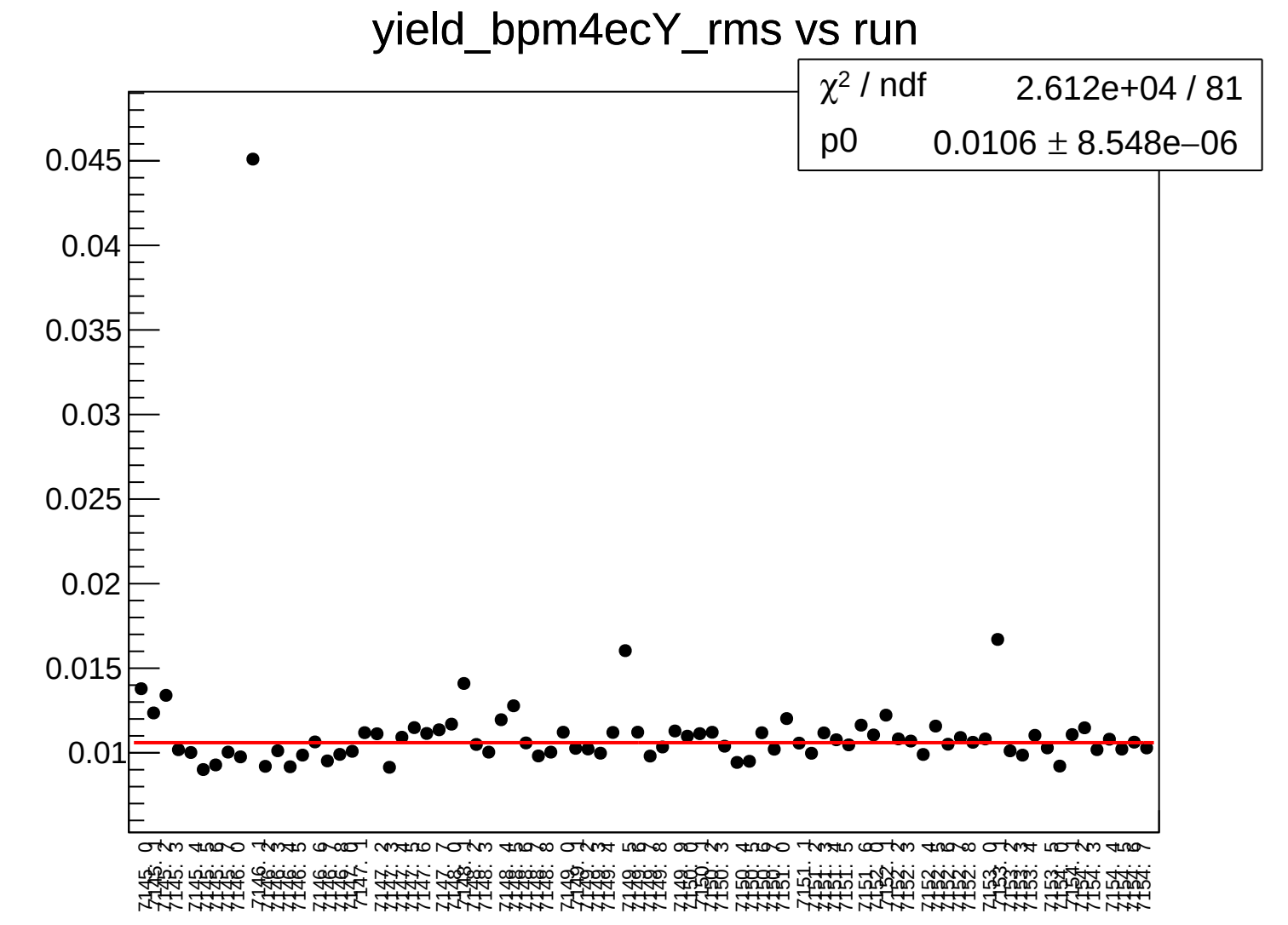

yield_bpm4acY_rms vs run
χ² / ndf 1.738e+04 / 81
p0 0.01226 ± 9.862e–06
0.035
0.03
0.025
0.02
0.015
0.01

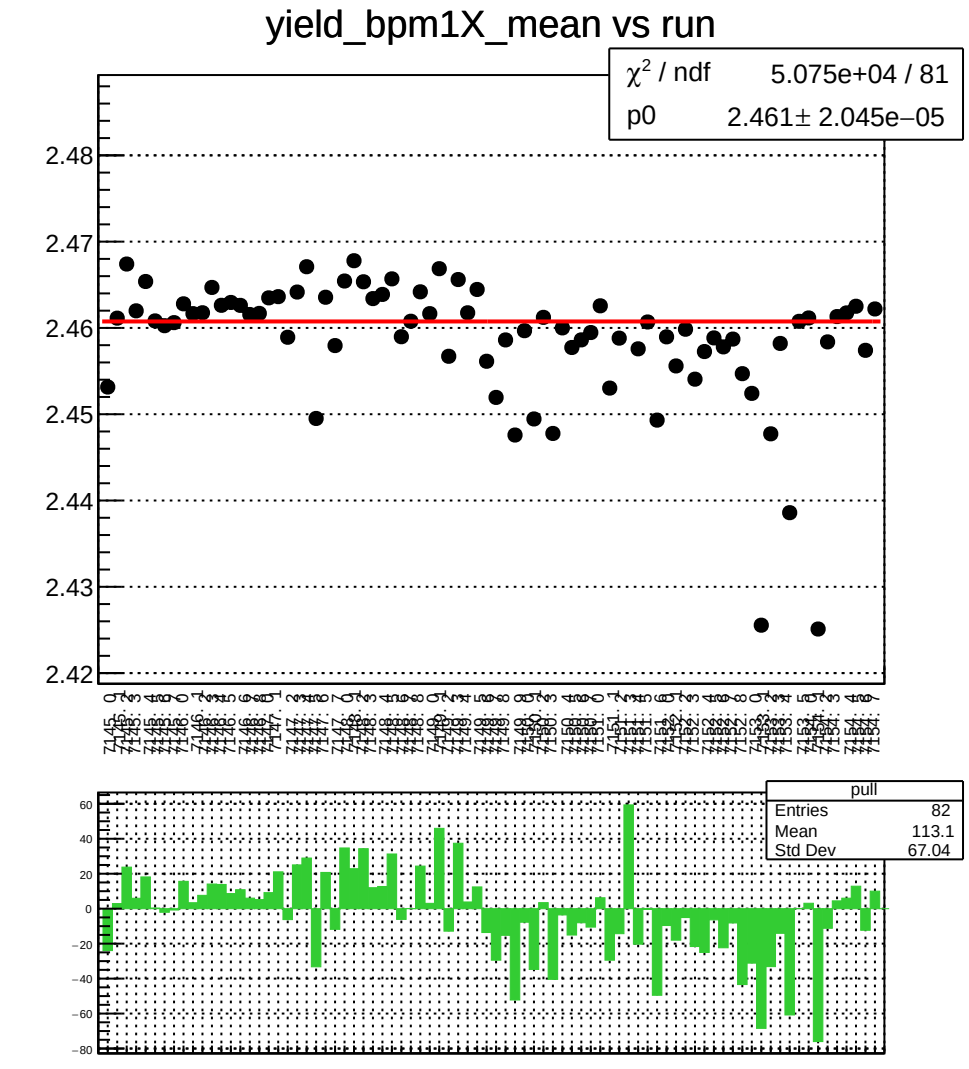

yield_bpm4ecX_mean vs run
χ² / ndf 4.094e+05 / 81
p0 −0.04251 ± 2.164e−05
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull
Entries 82
Mean −16.7
Std Dev 52.73
200
150
100
50
0
−50
−100
pull1D
Entries 82
Mean −0.8693
Std Dev 6.095
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

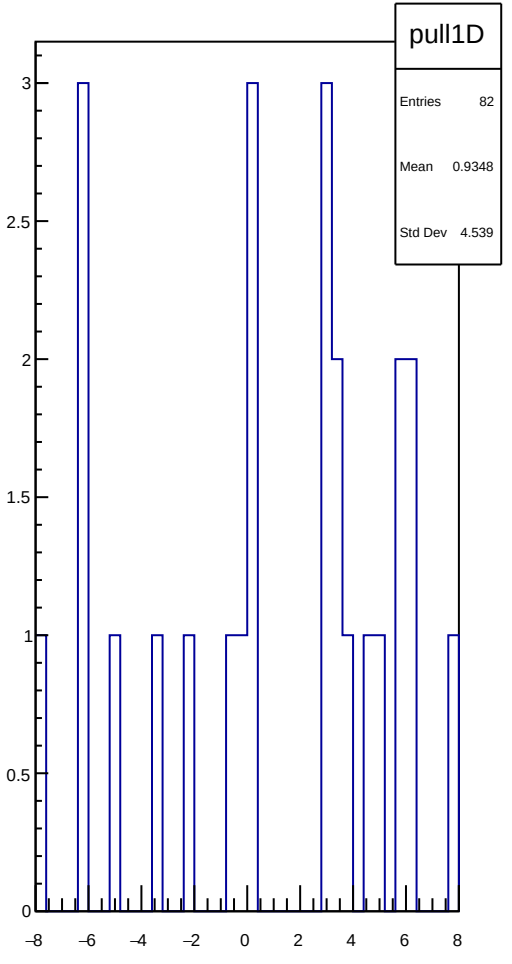

yield_bpm4ecX_rms vs run
χ² / ndf 1.925e+05 / 81
p0 0.01792 ± 1.53e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

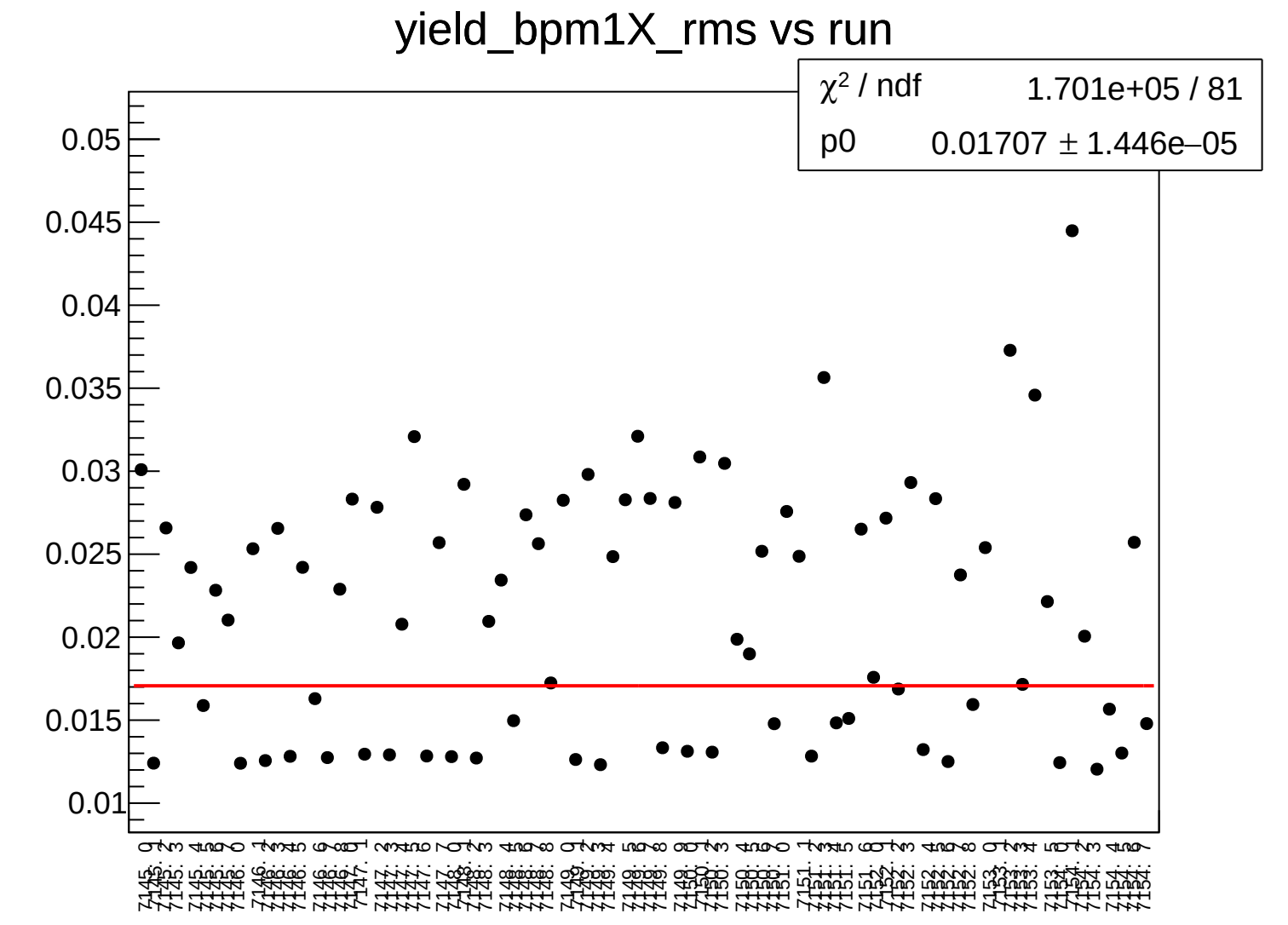

yield_bpm4ecY_mean vs run
χ² / ndf 8.962e+04 / 81
p0 0.07795 ± 1.209e−05
pull
Entries 82
Mean −237.7
Std Dev 277.4

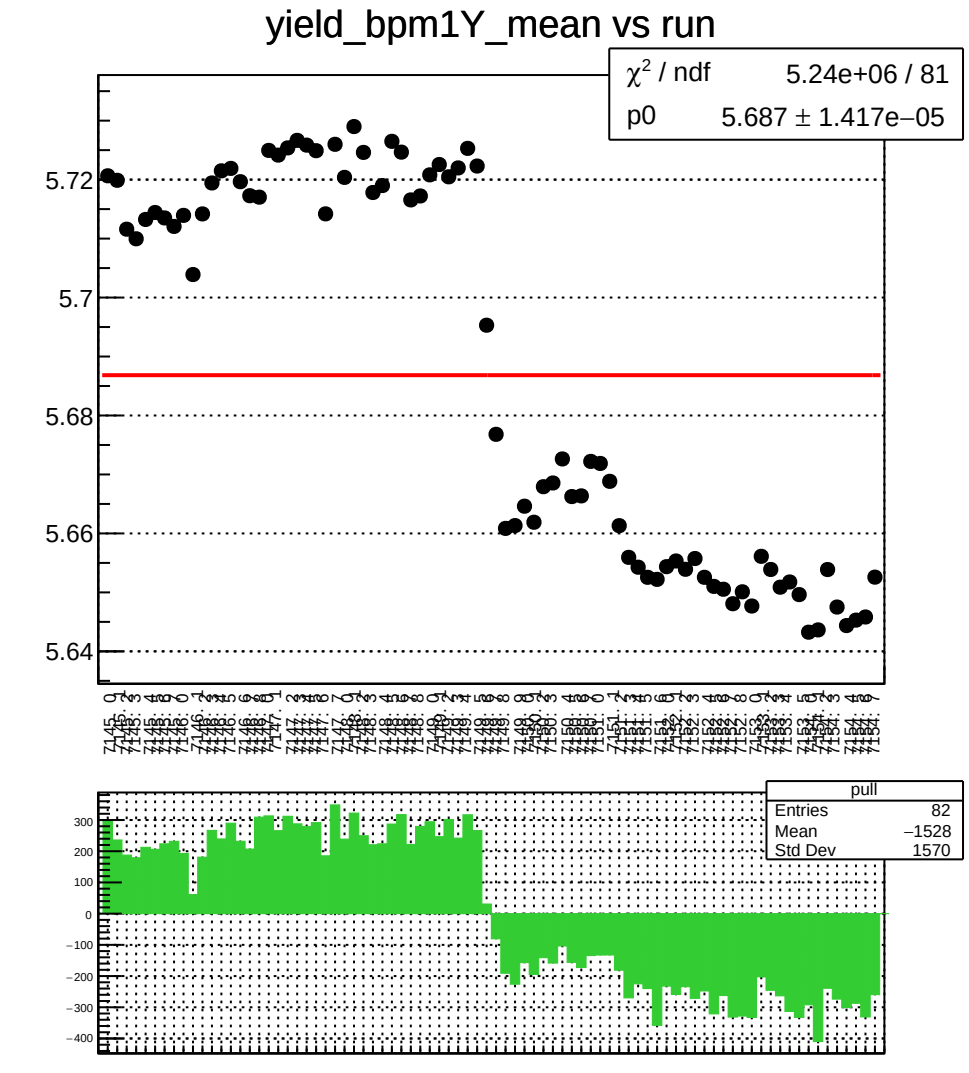

pull1D
Entries 82
Mean −0.3056
Std Dev 5.211

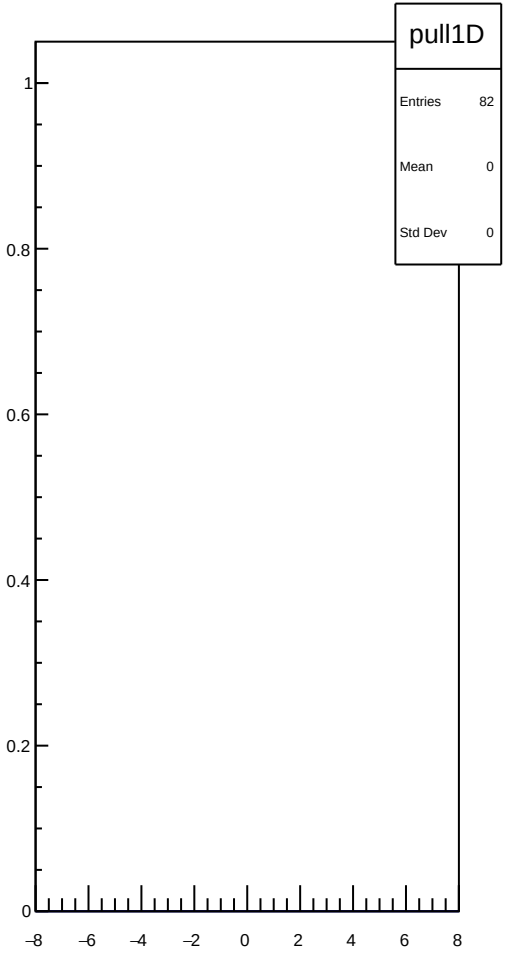

yield_bpm4ecY_rms vs run
χ² / ndf 2.612e+04 / 81
p0 0.0106 ± 8.548e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

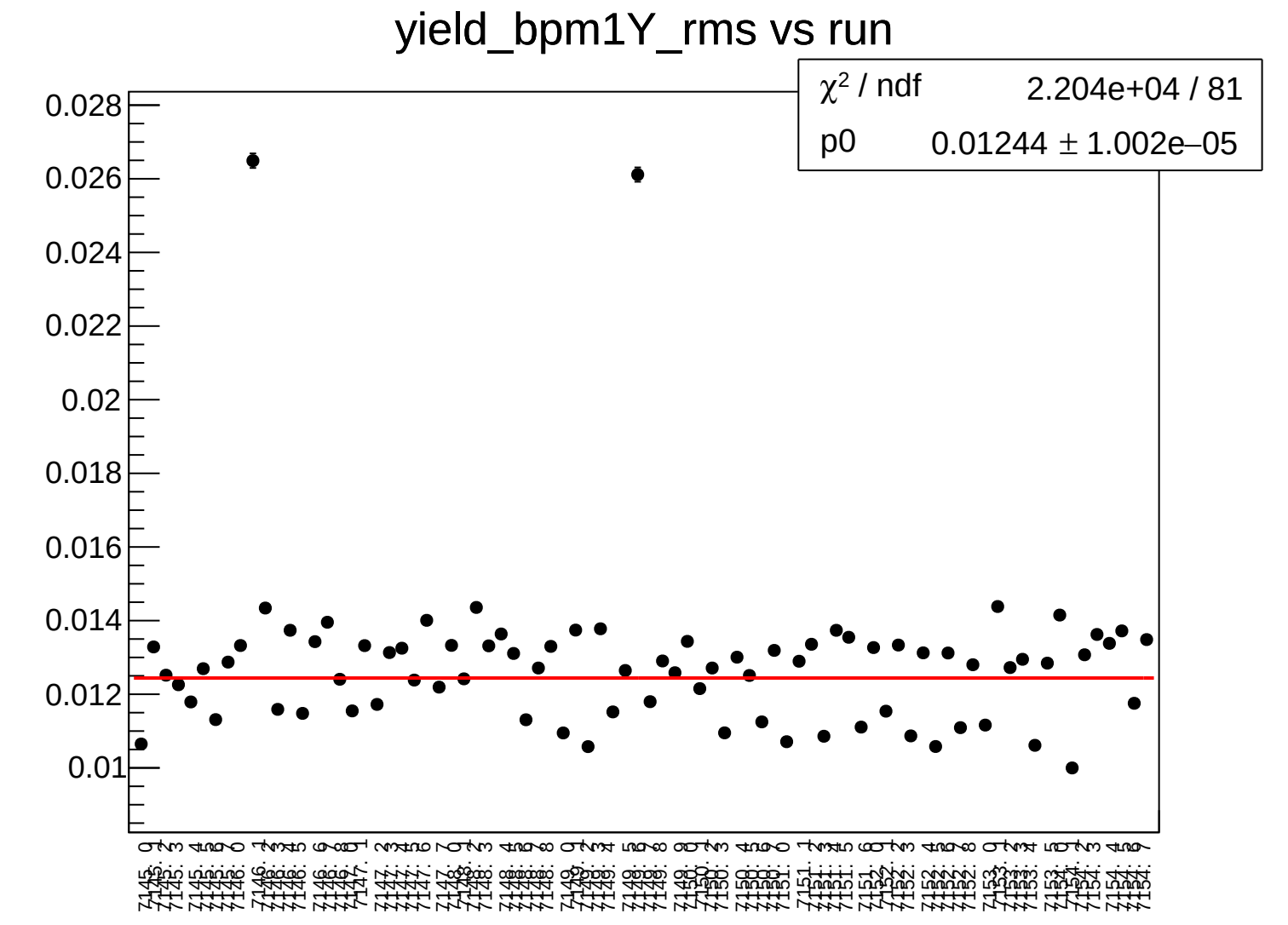

yield_bpm1X_mean vs run
χ² / ndf 5.075e+04 / 81
p0 2.461± 2.045e−05
2.48
2.47
2.46
2.45
2.44
2.43
2.42
pull
Entries 82
Mean 113.1
Std Dev 67.04
60
40
20
0
−20
−40
−60
−80

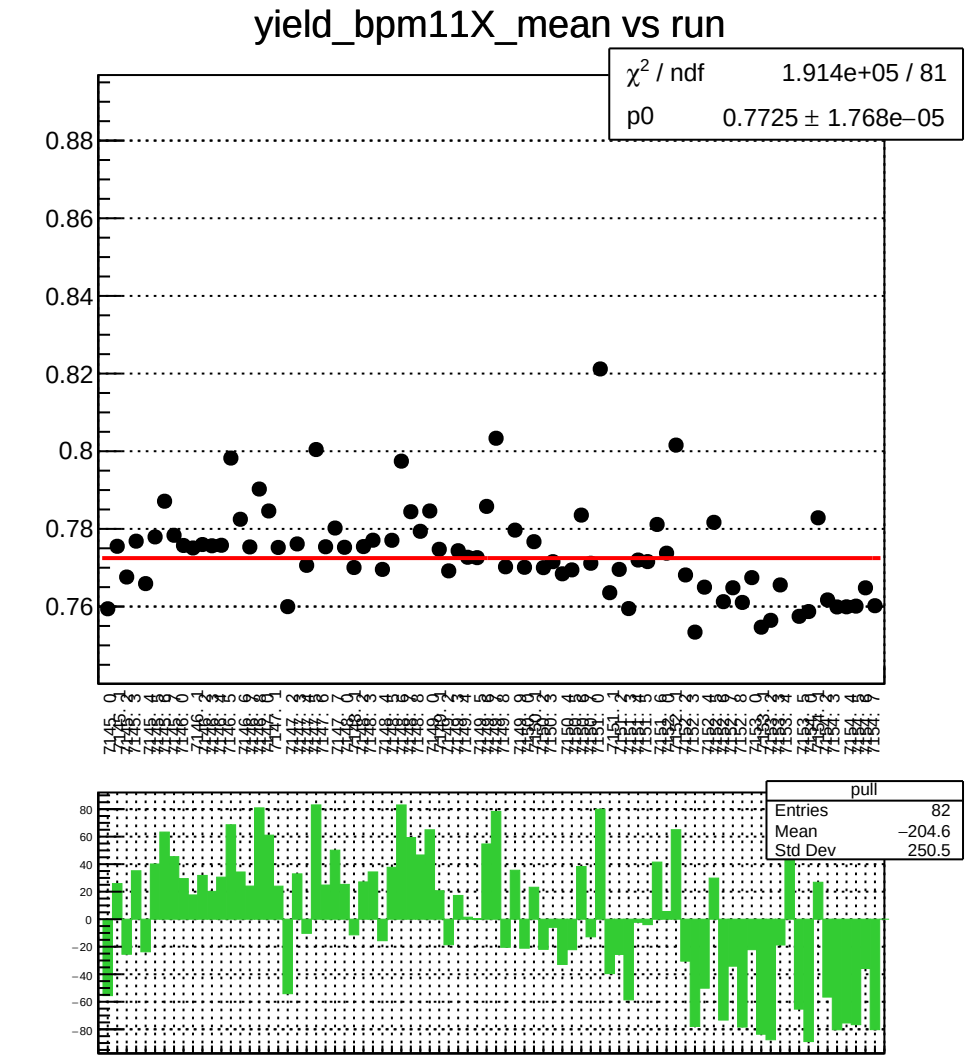

pull1D
Entries 82
Mean 0.9348
Std Dev 4.539
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

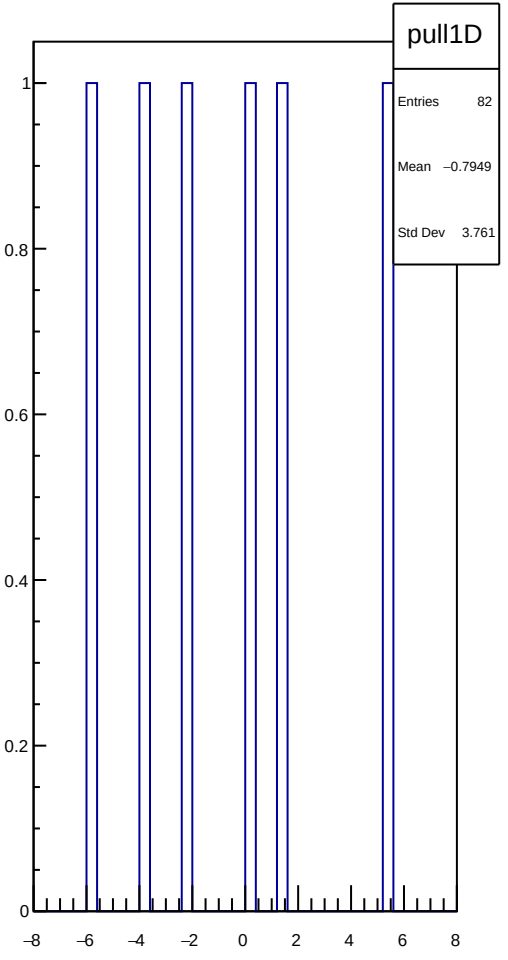

yield_bpm1X_rms vs run
χ² / ndf 1.701e+05 / 81
p0 0.01707 ± 1.446e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

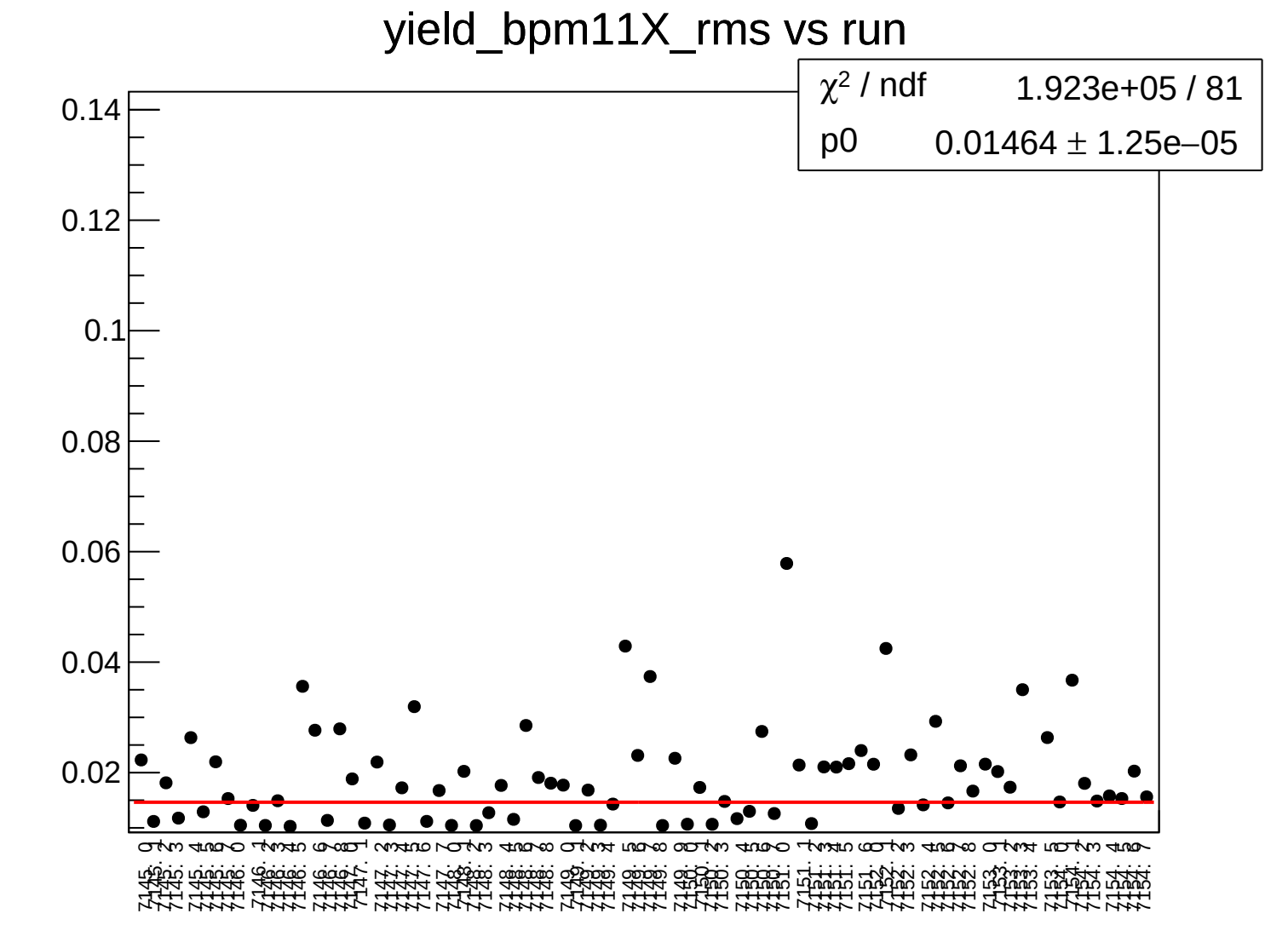

yield_bpm1Y_mean vs run
χ² / ndf 5.24e+06 / 81
p0 5.687 ± 1.417e−05
5.72
5.7
5.68
5.66
5.64
pull
Entries 82
Mean −1528
Std Dev 1570
300
200
100
0
−100
−200
−300
−400

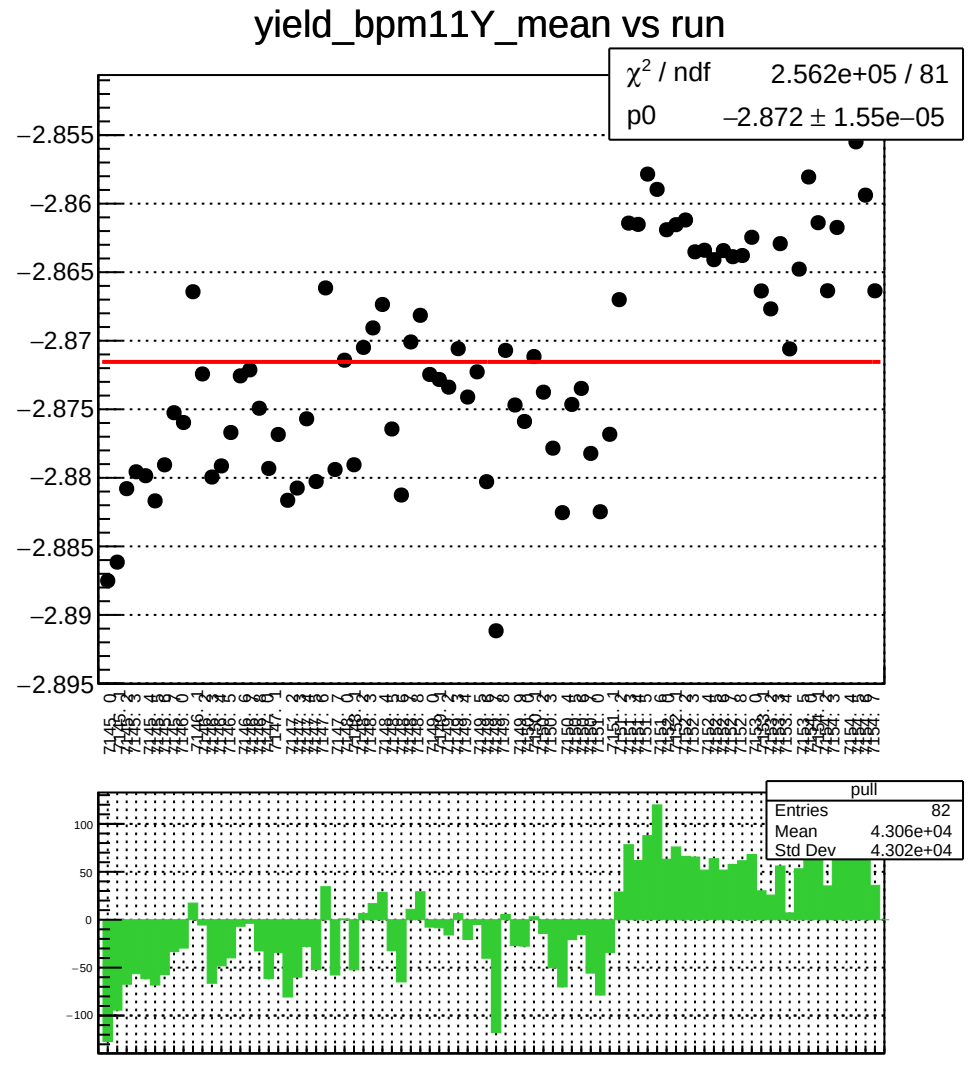

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

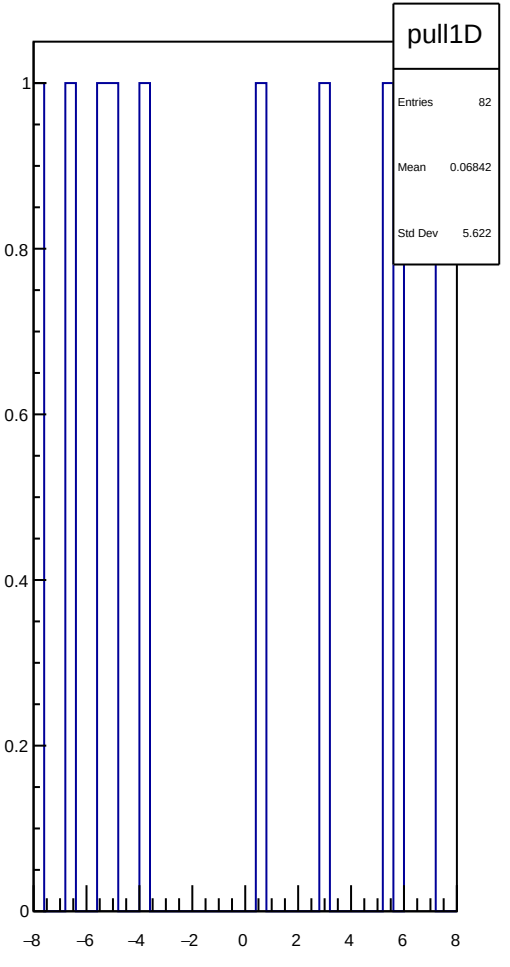

yield_bpm1Y_rms vs run
χ² / ndf 2.204e+04 / 81
p0 0.01244 ± 1.002e−05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

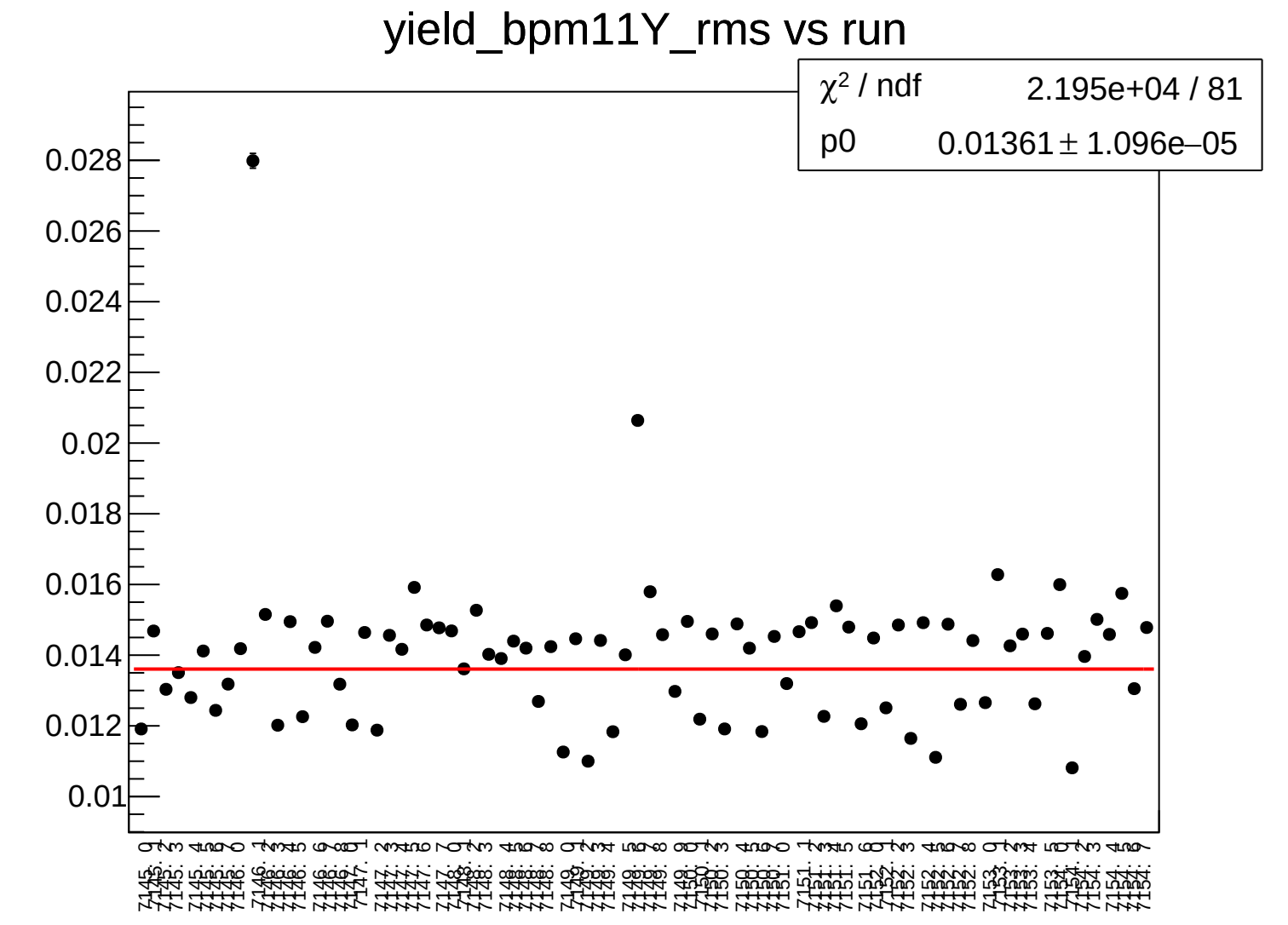

yield_bpm11X_mean vs run
χ² / ndf 1.914e+05 / 81
p0 0.7725 ± 1.768e−05
0.88
0.86
0.84
0.82
0.8
0.78
0.76
pull
Entries 82
Mean −204.6
Std Dev 250.5
80
60
40
20
0
−20
−40
−60
−80

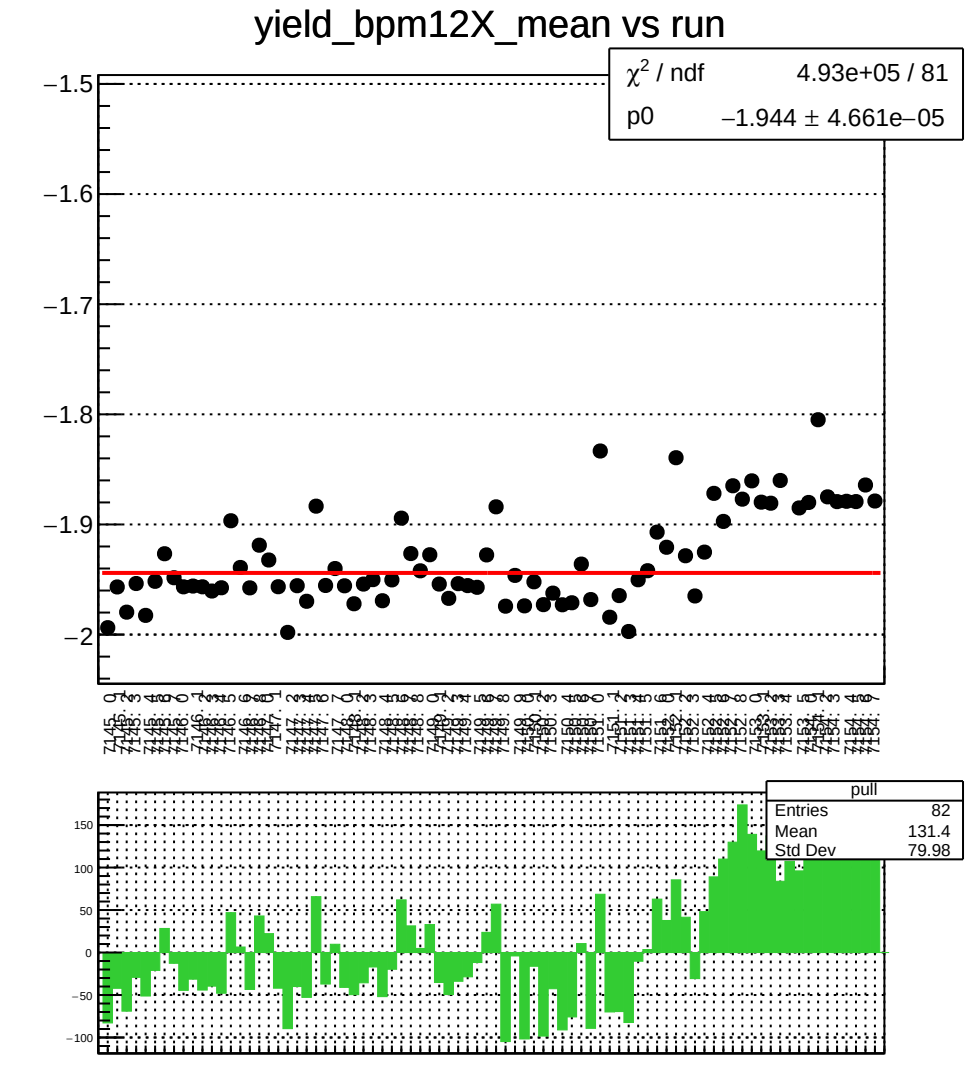

pull1D
Entries 82
Mean −0.7949
Std Dev 3.761
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

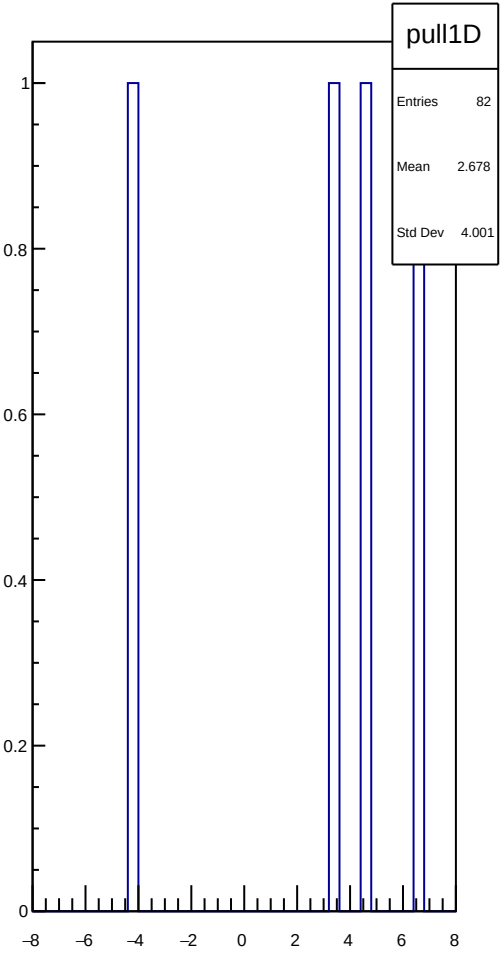

yield_bpm11X_rms vs run
χ² / ndf 1.923e+05 / 81
p0 0.01464 ± 1.25e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

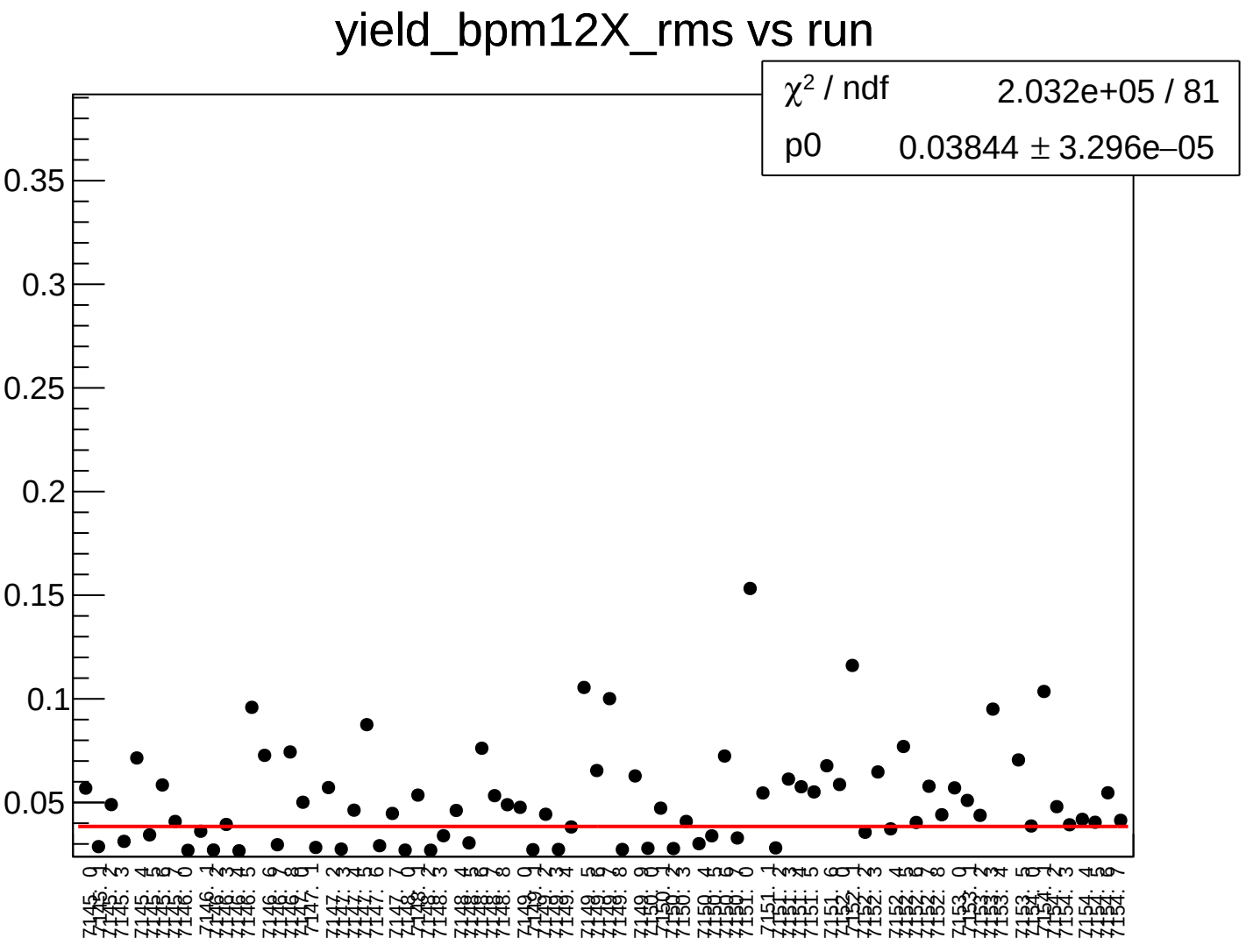

yield_bpm11Y_mean vs run
χ² / ndf 2.562e+05 / 81
p0 −2.872 ± 1.55e−05
−2.855
−2.86
−2.865
−2.87
−2.875
−2.88
−2.885
−2.89
−2.895
pull
Entries 82
Mean 4.306e+04
Std Dev 4.302e+04
100
50
0
−50
−100

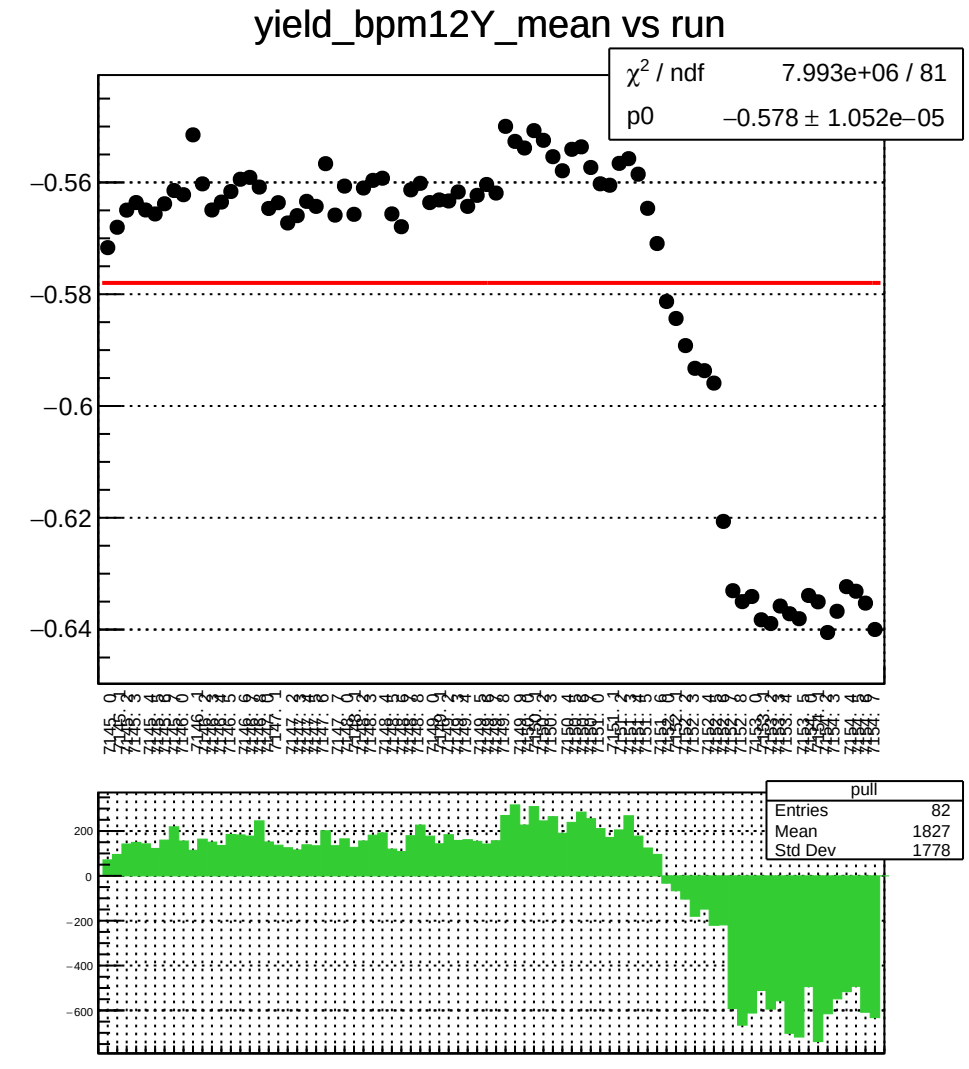

pull1D
Entries 82
Mean 0.06842
Std Dev 5.622
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

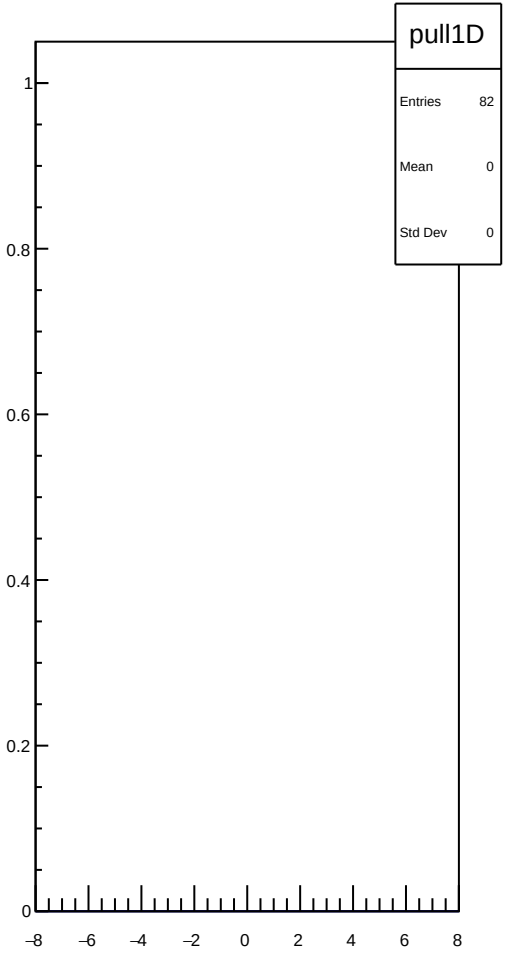

yield_bpm11Y_rms vs run
χ² / ndf 2.195e+04 / 81
p0 0.01361 ± 1.096e–05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

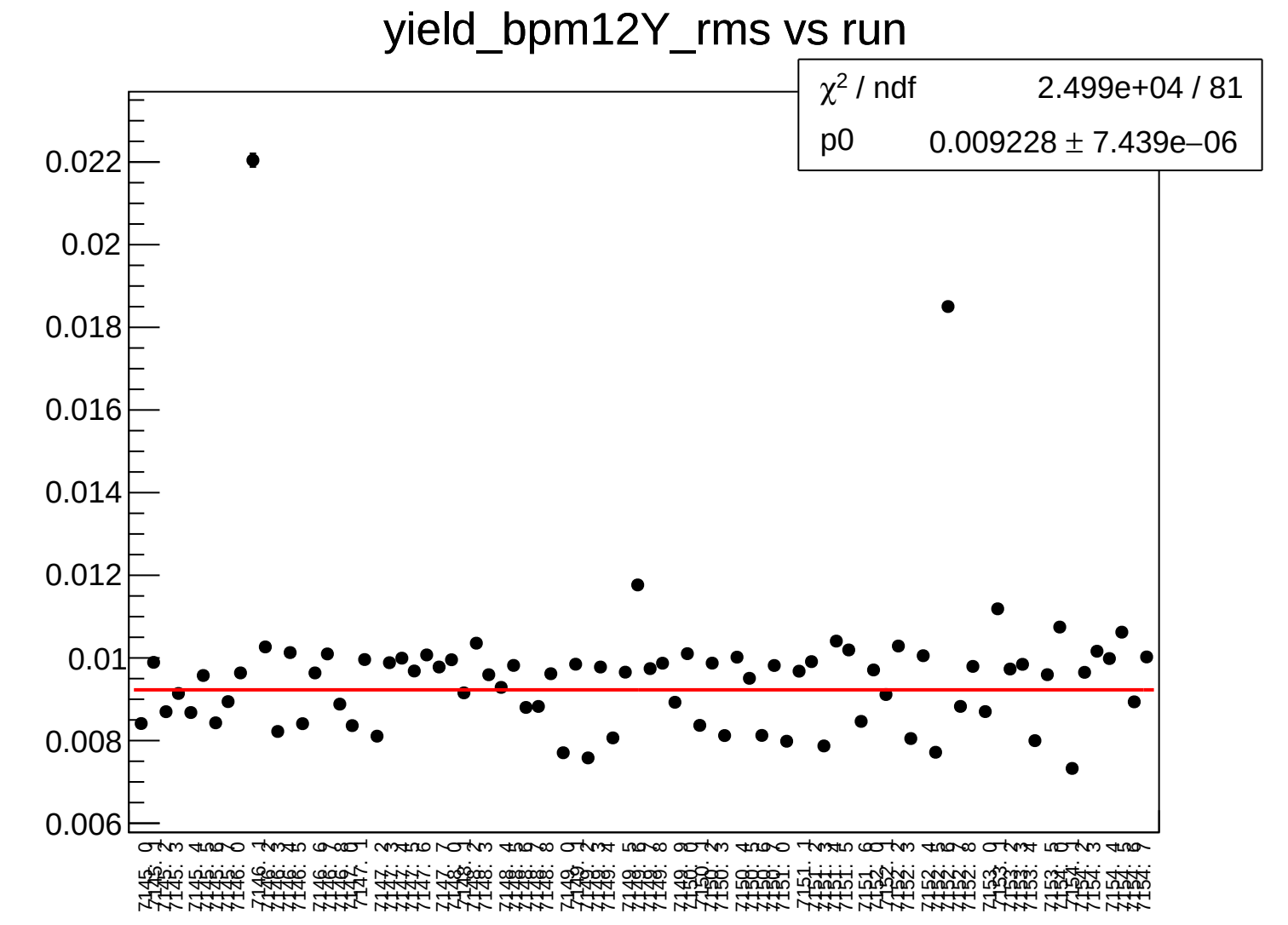

yield_bpm12X_mean vs run
χ² / ndf 4.93e+05 / 81
p0 −1.944 ± 4.661e−05
pull
Entries 82
Mean 131.4
Std Dev 79.98

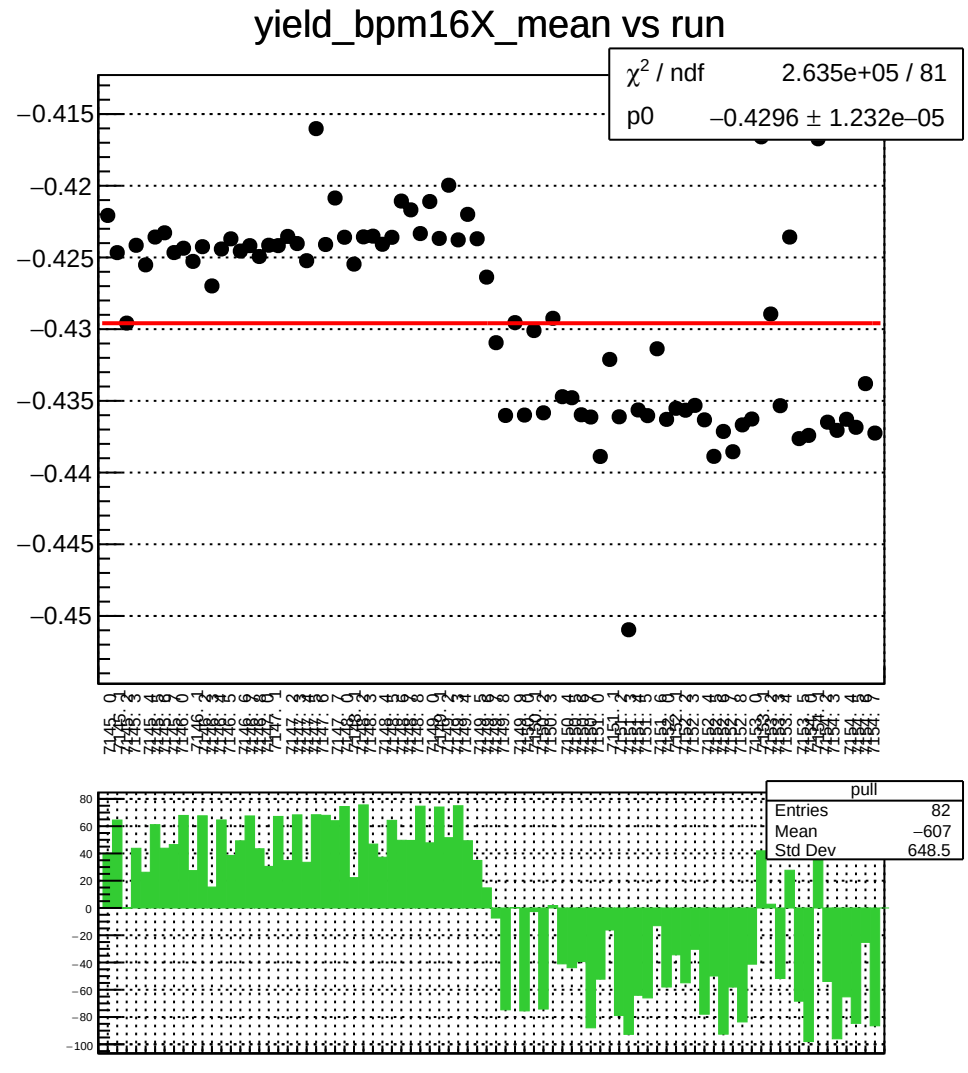

pull1D
Entries 82
Mean 2.678
Std Dev 4.001

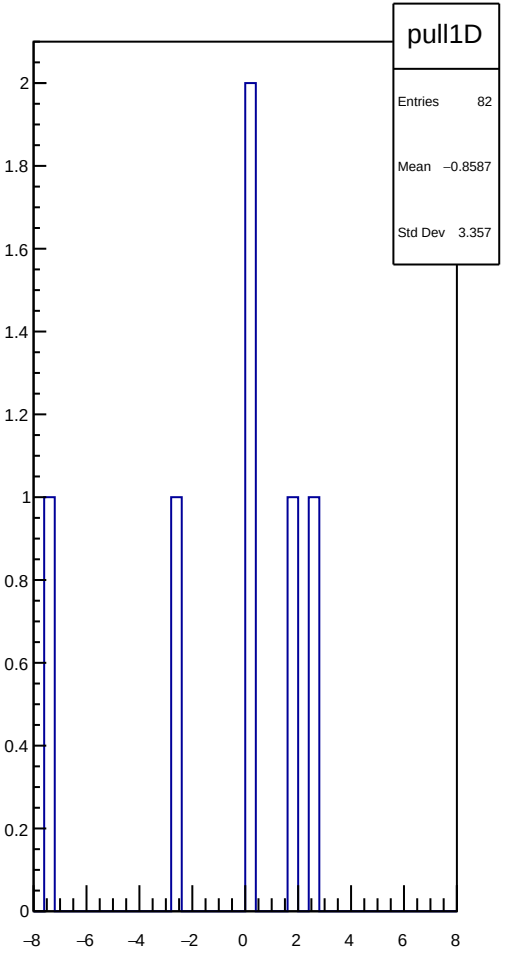

yield_bpm12X_rms vs run
χ² / ndf 2.032e+05 / 81
p0 0.03844 ± 3.296e−05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

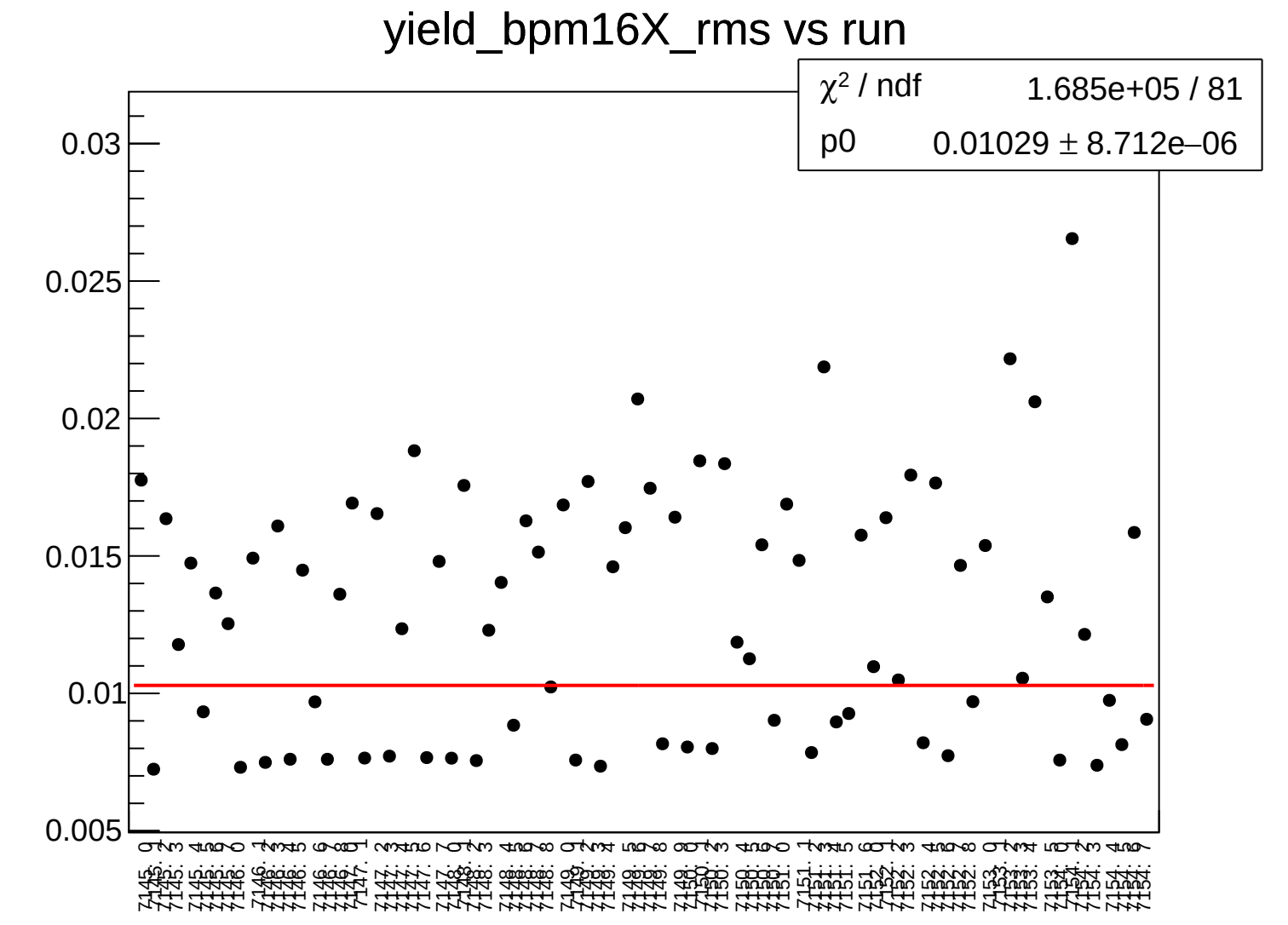

yield_bpm12Y_mean vs run
χ² / ndf 7.993e+06 / 81
p0 −0.578 ± 1.052e−05
−0.56
−0.58
−0.6
−0.62
−0.64
pull
Entries 82
Mean 1827
Std Dev 1778
200
0
−200
−400
−600

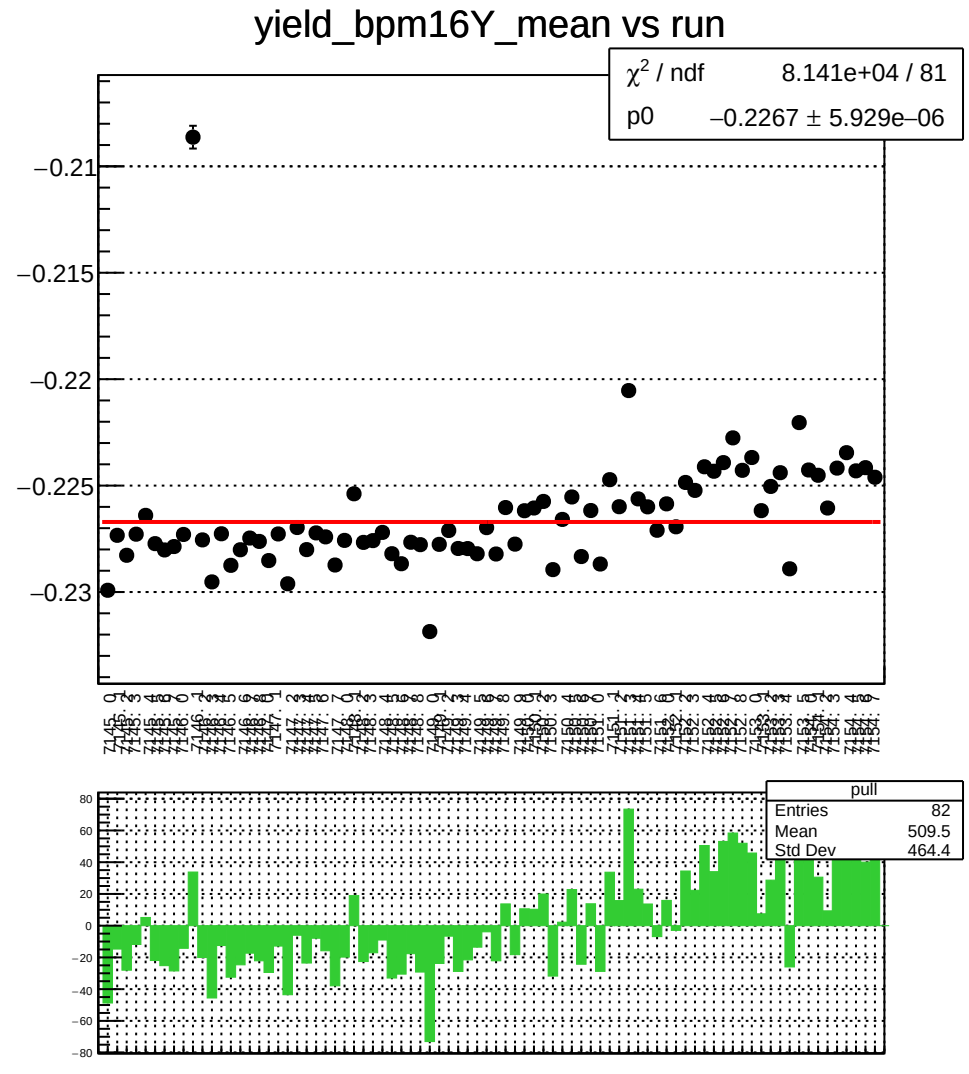

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

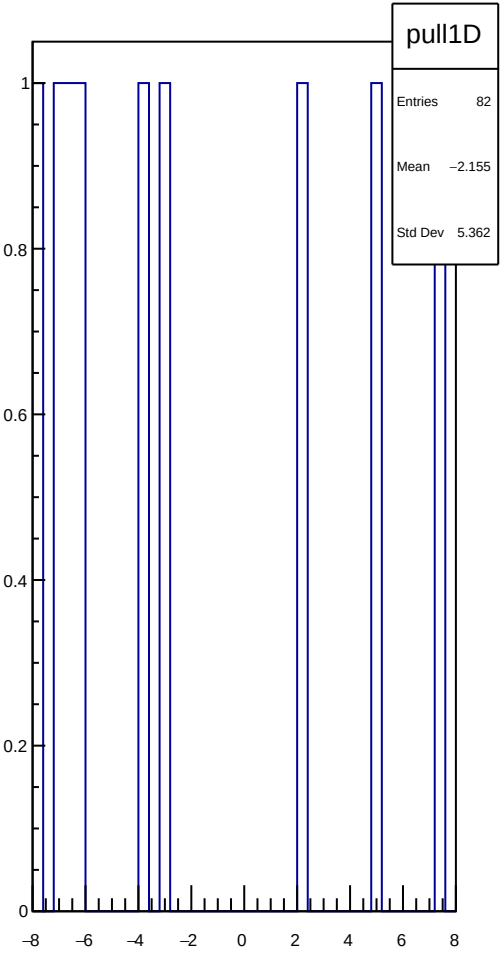

yield_bpm12Y_rms vs run
χ² / ndf 2.499e+04 / 81
p0 0.009228 ± 7.439e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

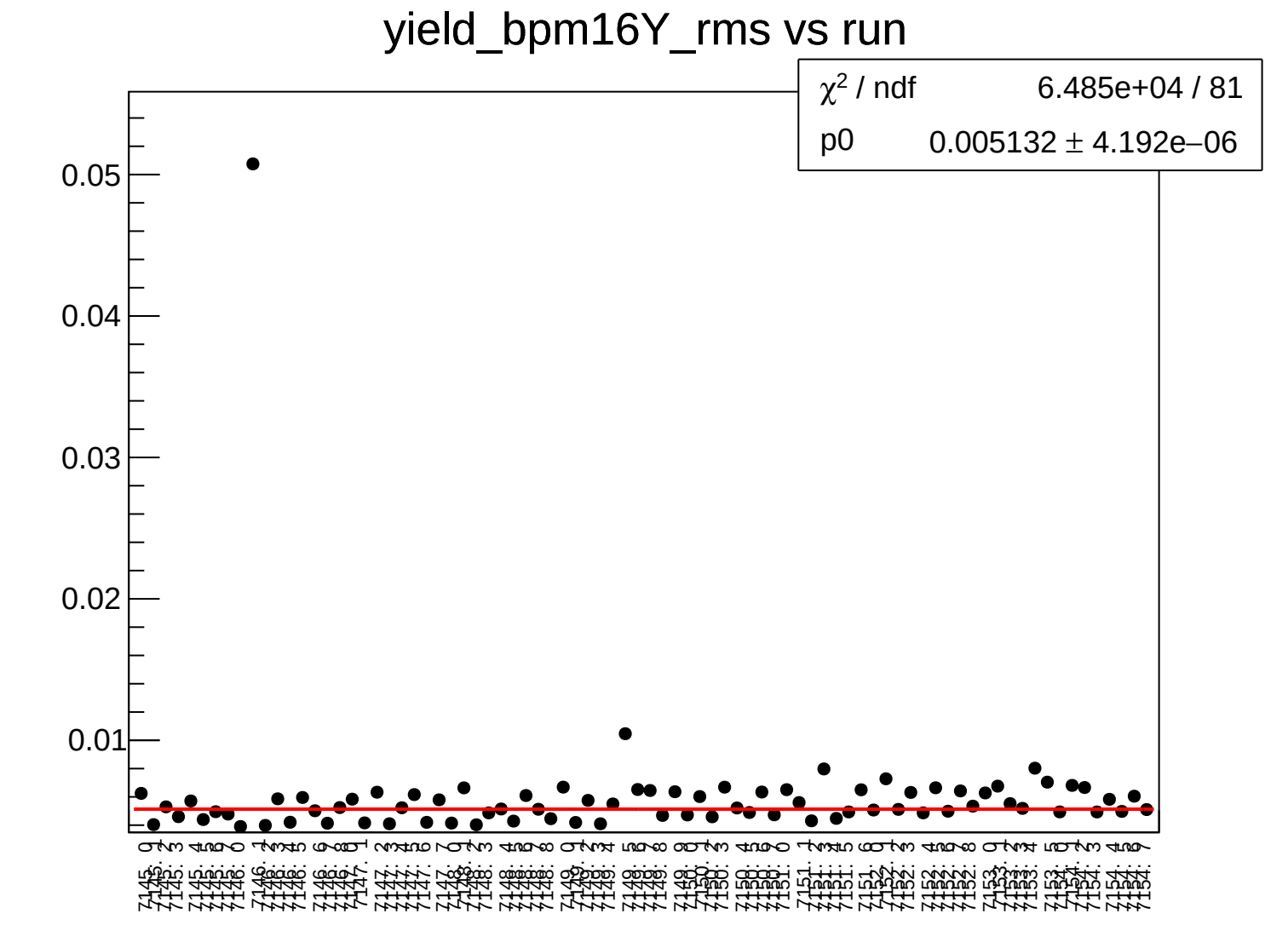

yield_bpm16X_mean vs run
χ^2 / ndf 2.635e+05 / 81
p0 −0.4296 ± 1.232e−05
−0.415
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
−0.45
pull
Entries 82
Mean −607
Std Dev 648.5
80
60
40
20
0
−20
−40
−60
−80
−100

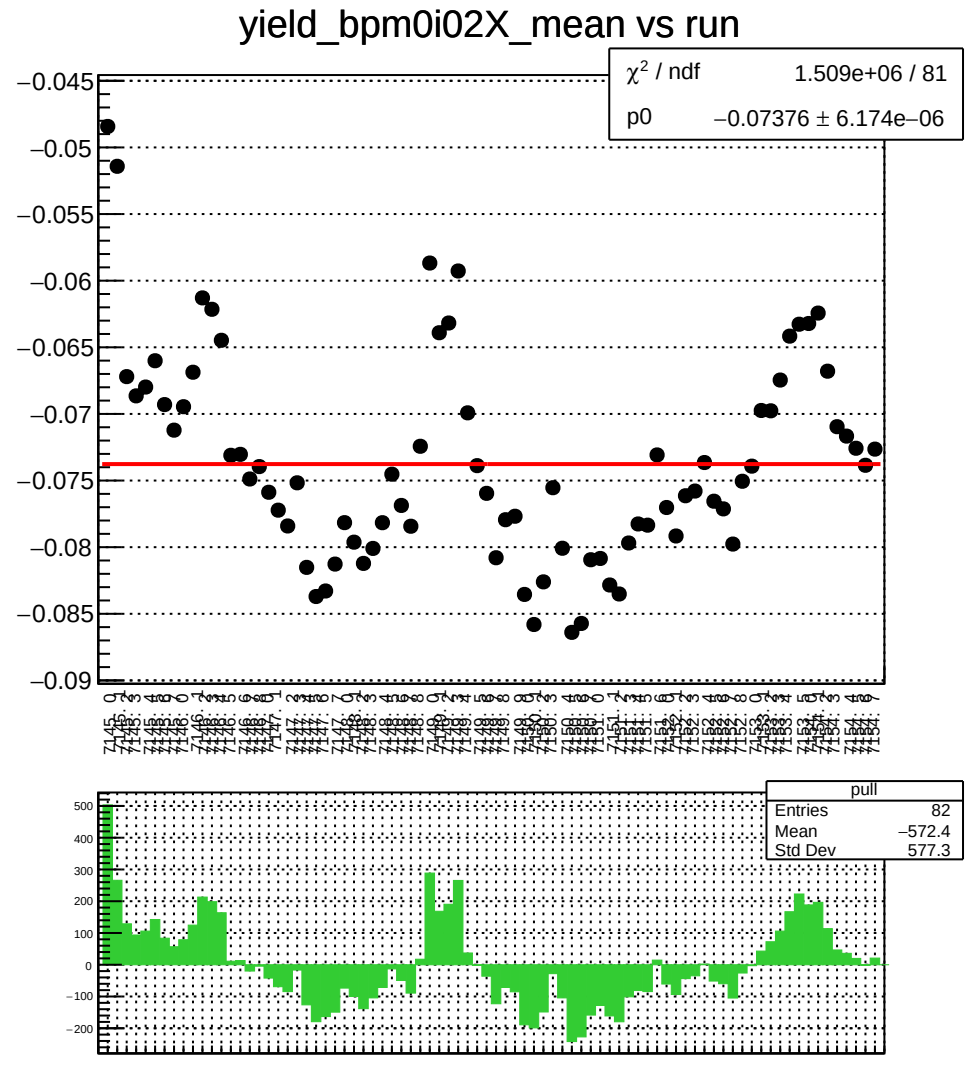

pull1D
Entries 82
Mean −0.8587
Std Dev 3.357
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

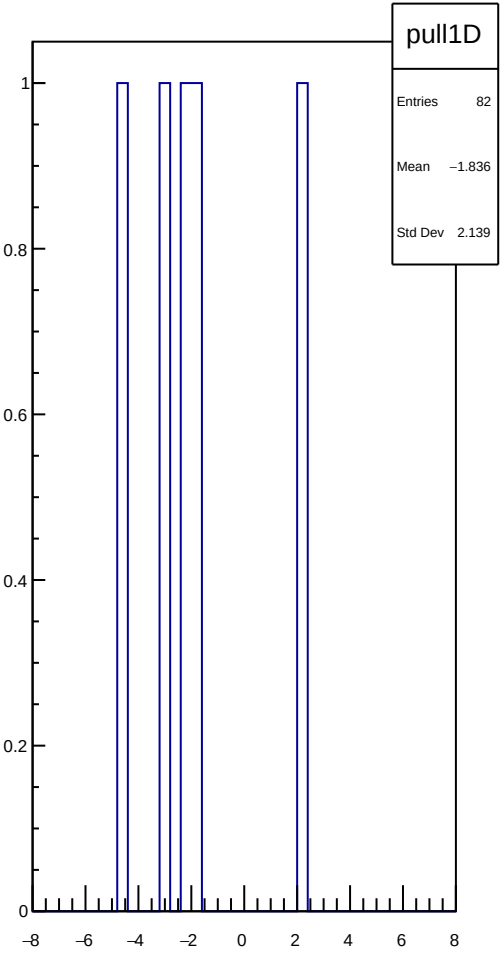

yield_bpm16X_rms vs run
χ² / ndf 1.685e+05 / 81
p0 0.01029 ± 8.712e–06
0.03
0.025
0.02
0.015
0.01
0.005

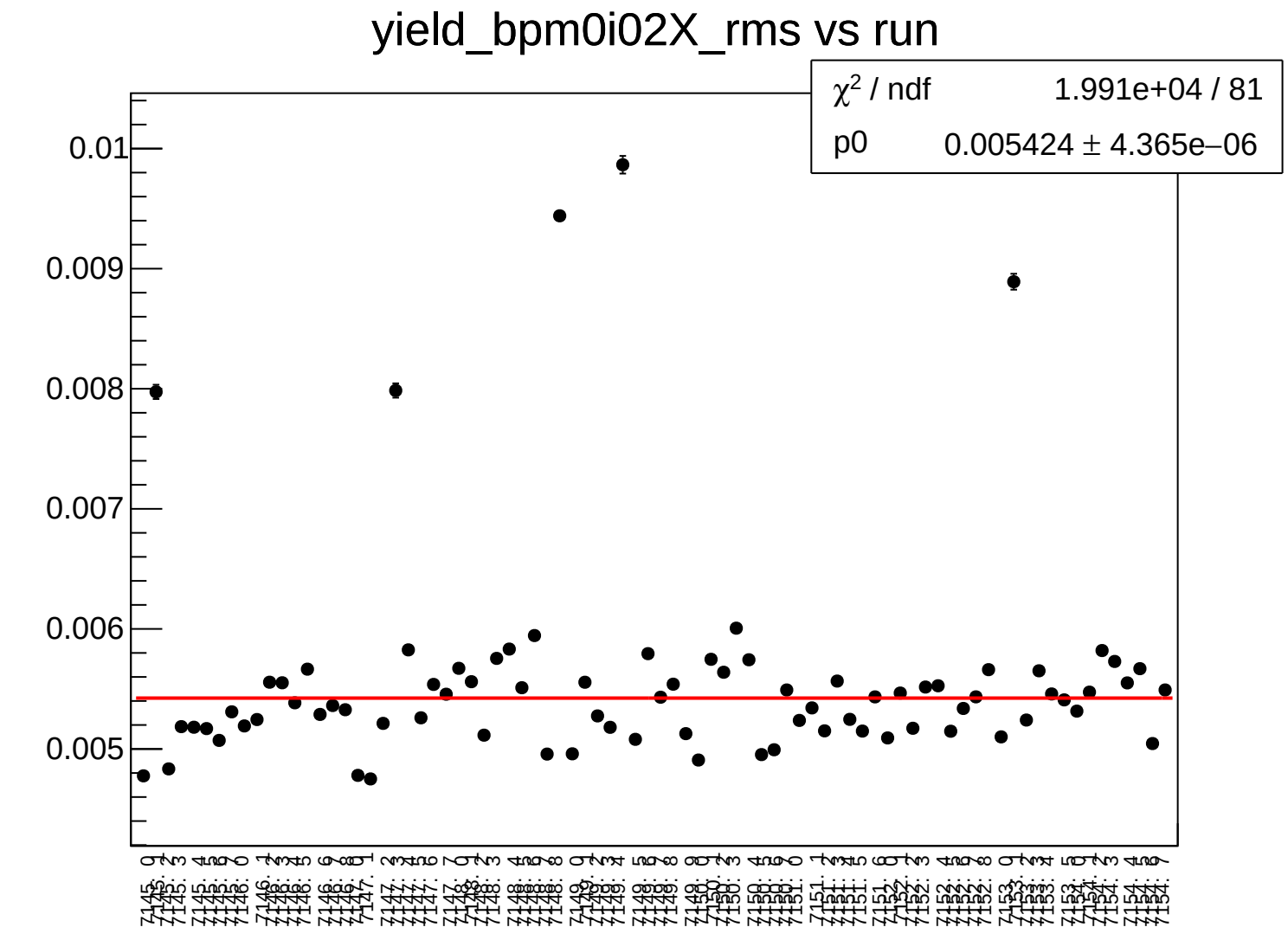

yield_bpm16Y_mean vs run
χ² / ndf 8.141e+04 / 81
p0 −0.2267 ± 5.929e−06
−0.21
−0.215
−0.22
−0.225
−0.23
pull
Entries 82
Mean 509.5
Std Dev 464.4
80
60
40
20
0
−20
−40
−60
−80

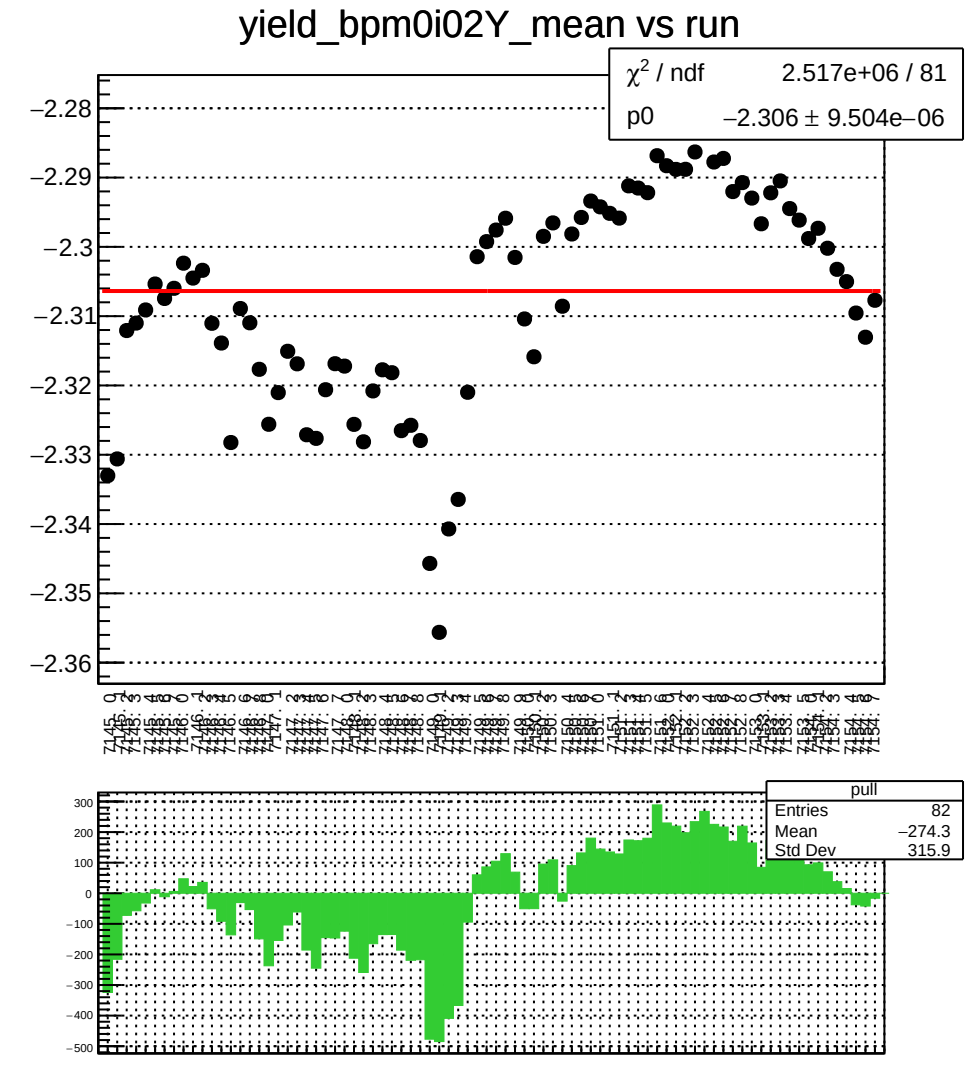

pull1D
Entries 82
Mean −2.155
Std Dev 5.362
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

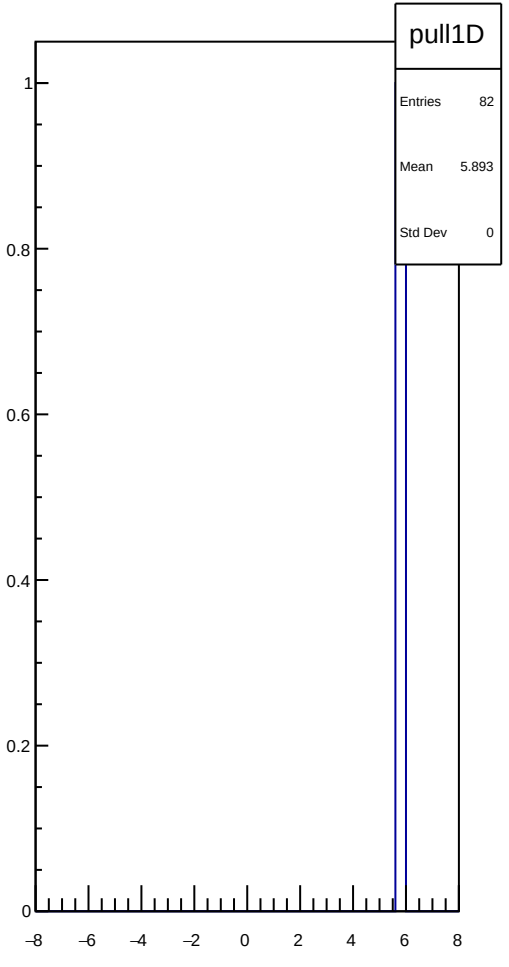

yield_bpm16Y_rms vs run
χ^2 / ndf 6.485e+04 / 81
p0 0.005132 ± 4.192e−06
0.05
0.04
0.03
0.02
0.01

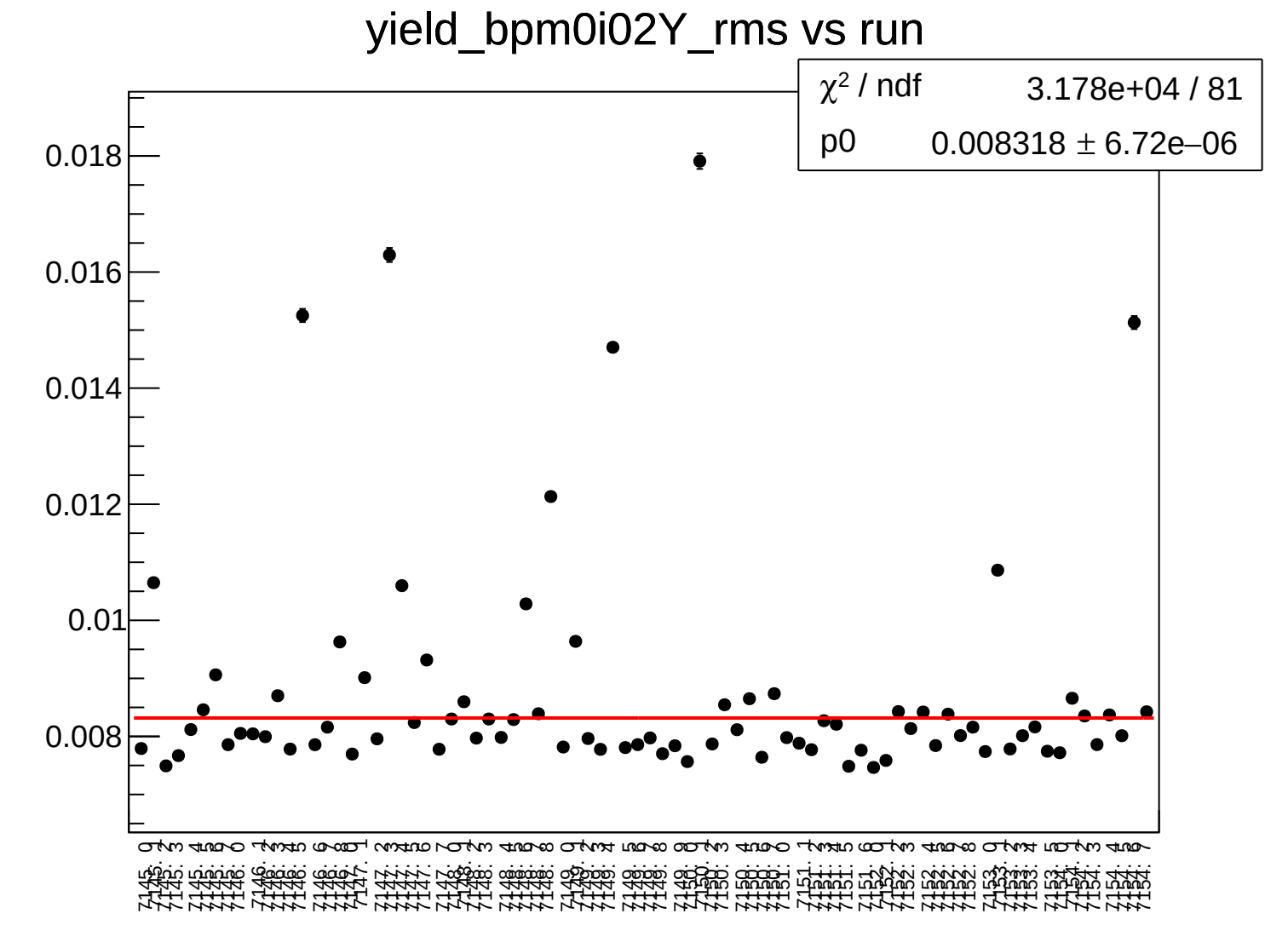

yield_bpm0i02X_mean vs run
χ² / ndf 1.509e+06 / 81
p0 −0.07376 ± 6.174e−06
−0.045
−0.05
−0.055
−0.06
−0.065
−0.07
−0.075
−0.08
−0.085
−0.09
pull
Entries 82
Mean −572.4
Std Dev 577.3
500
400
300
200
100
0
−100
−200

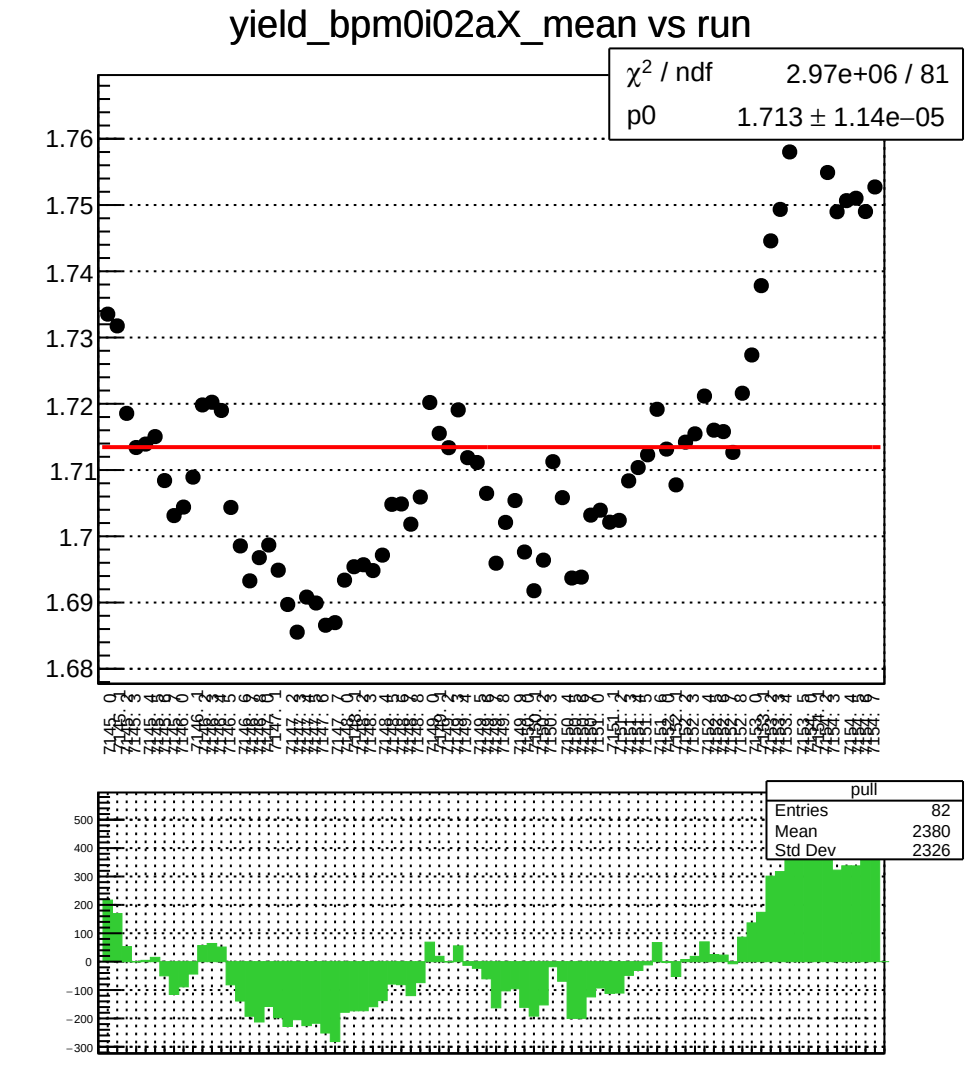

pull1D
Entries 82
Mean −1.836
Std Dev 2.139
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

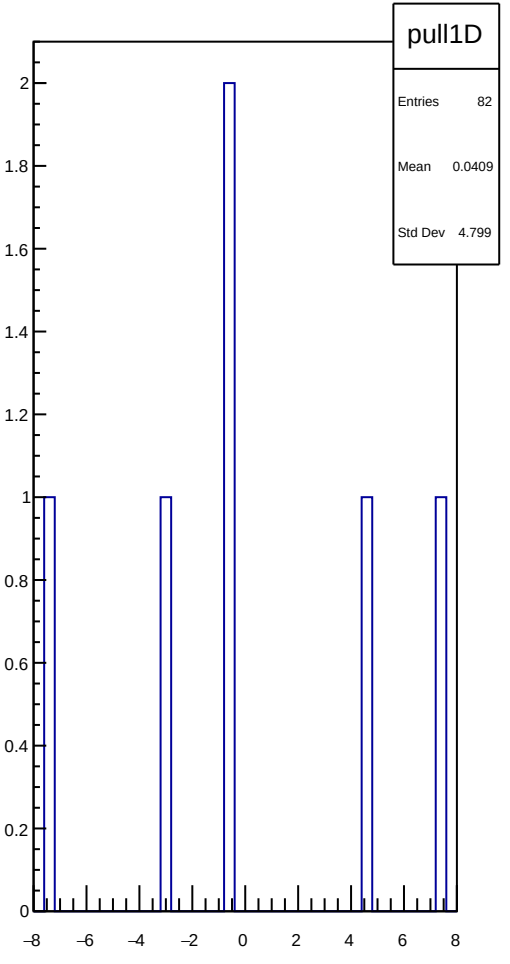

yield_bpm0i02X_rms vs run
χ² / ndf 1.991e+04 / 81
p0 0.005424 ± 4.365e−06
0.01
0.009
0.008
0.007
0.006
0.005

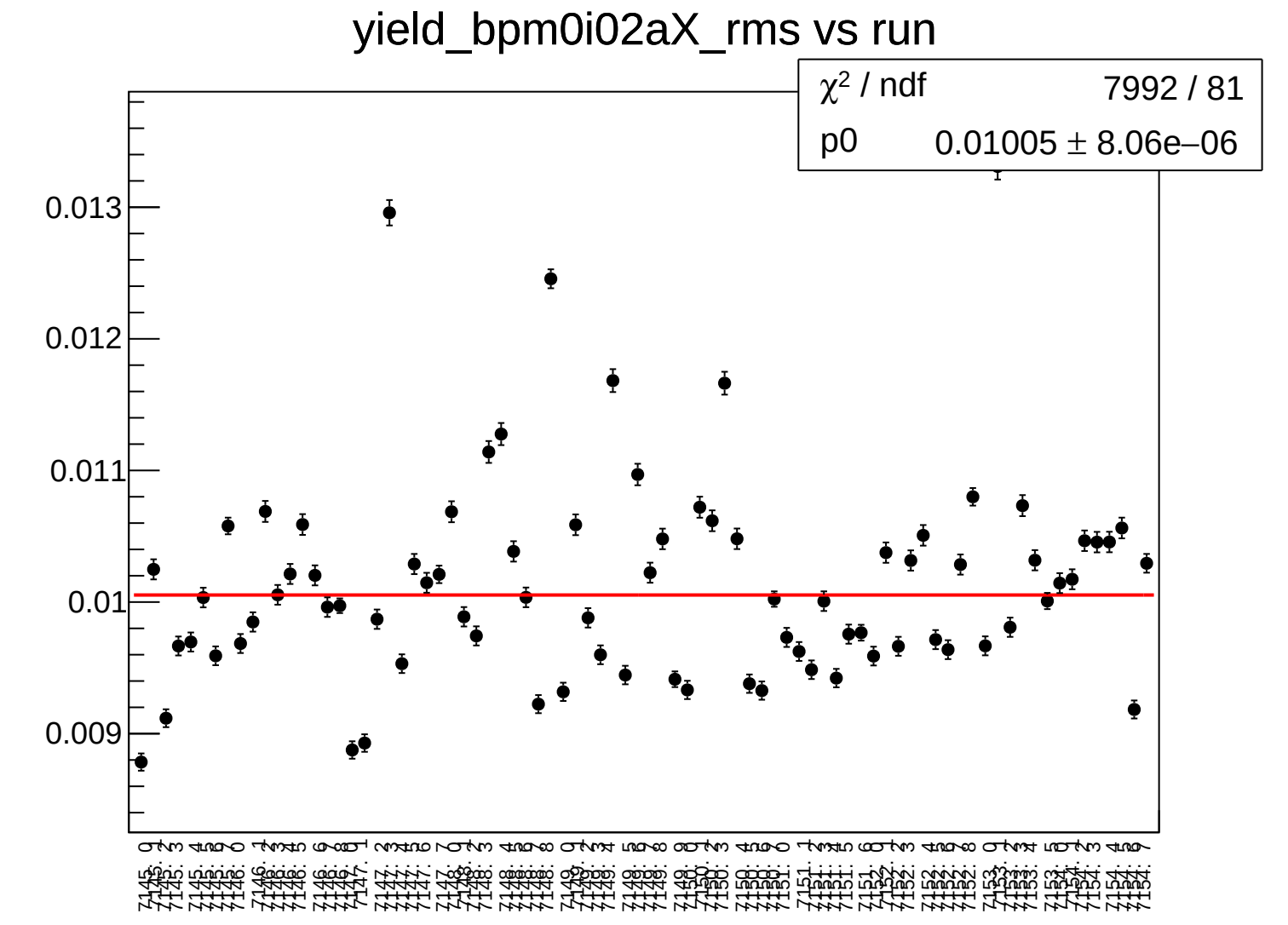

yield_bpm0i02Y_mean vs run
χ² / ndf 2.517e+06 / 81
p0 −2.306 ± 9.504e−06
−2.28
−2.29
−2.3
−2.31
−2.32
−2.33
−2.34
−2.35
−2.36
pull
Entries 82
Mean −274.3
Std Dev 315.9
300
200
100
0
−100
−200
−300
−400
−500

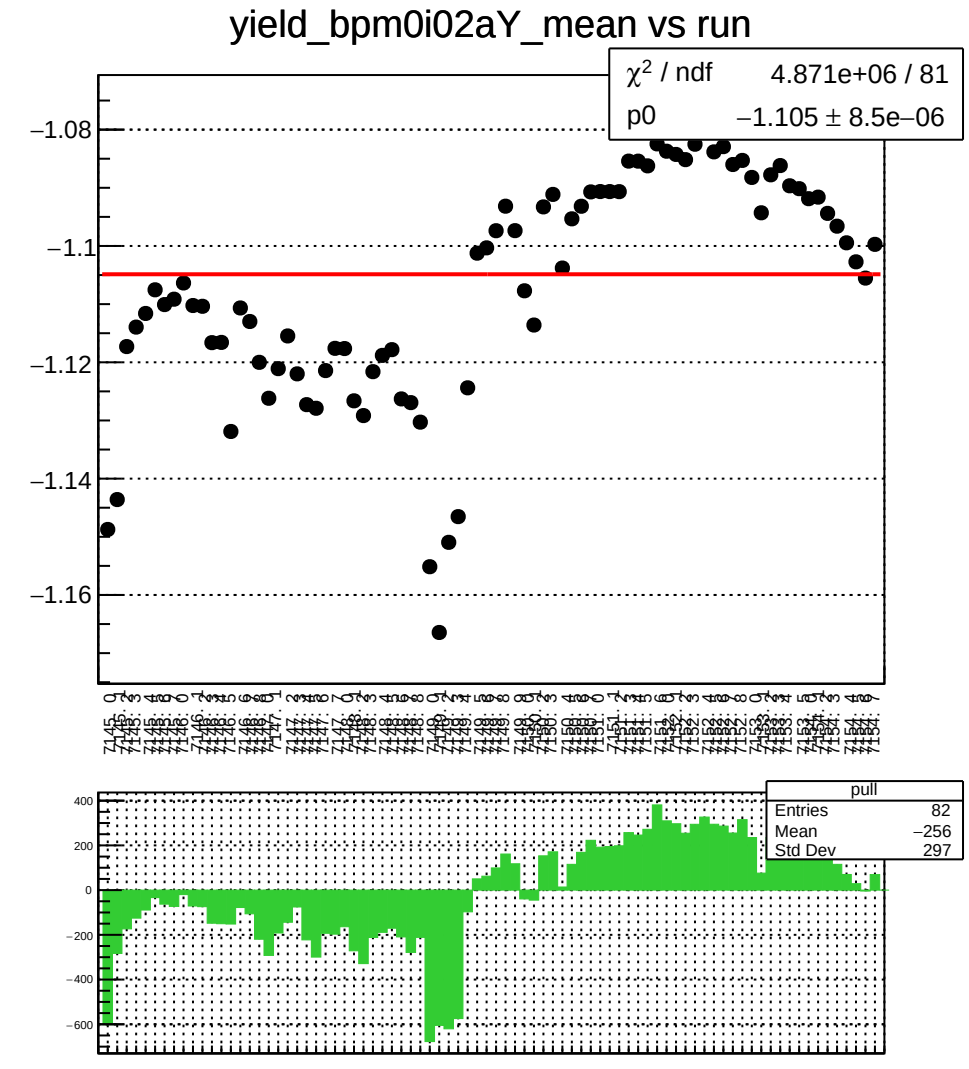

pull1D
Entries 82
Mean 5.893
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

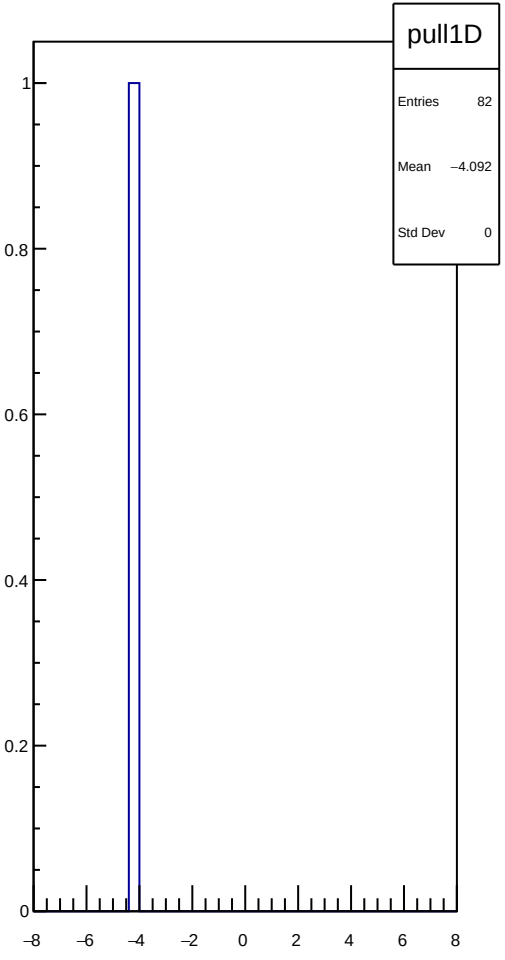

yield_bpm0i02Y_rms vs run
χ² / ndf 3.178e+04 / 81
p0 0.008318 ± 6.72e–06
0.018
0.016
0.014
0.012
0.01
0.008

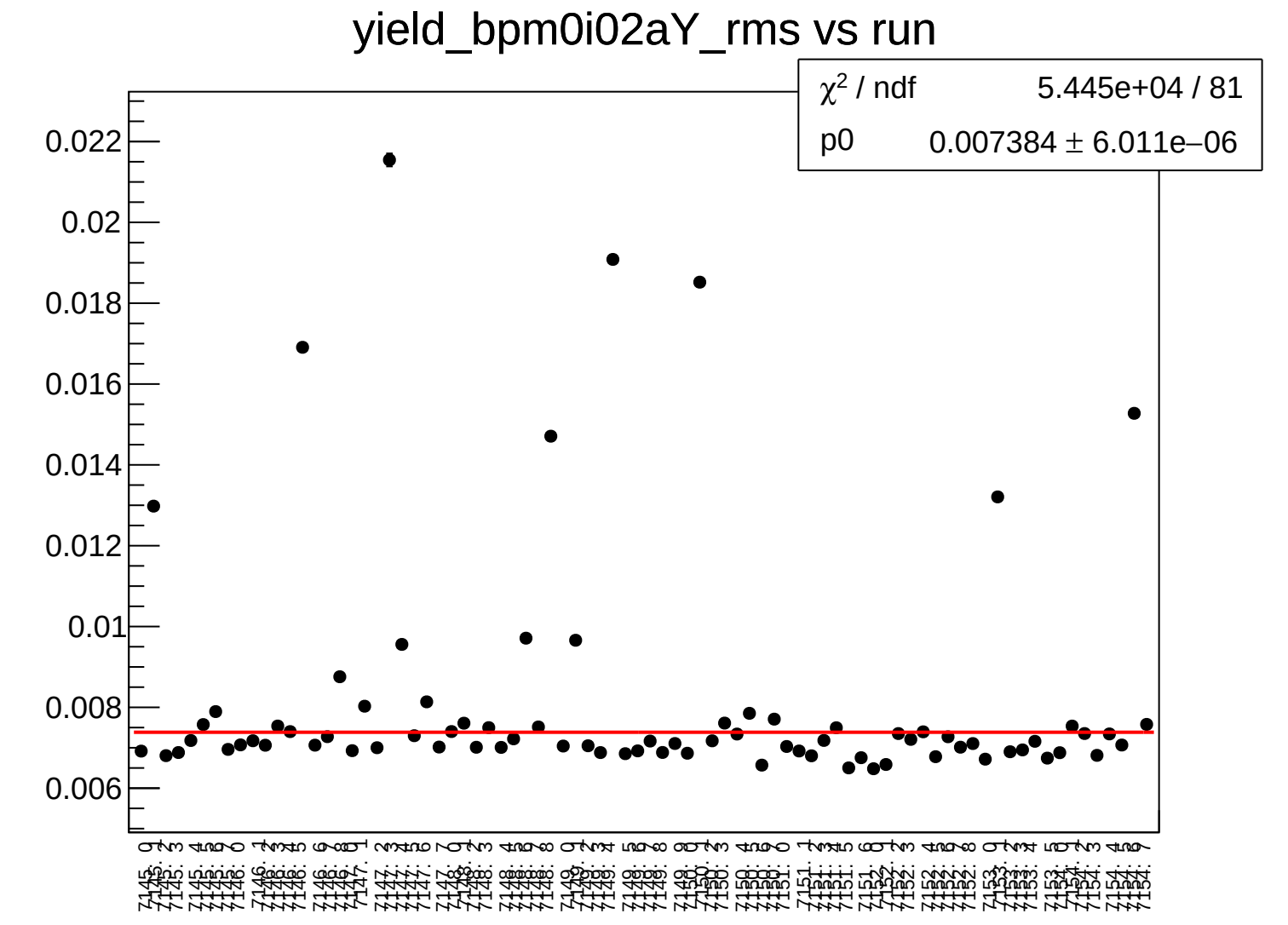

yield_bpm0i02aX_mean vs run
χ² / ndf 2.97e+06 / 81
p0 1.713 ± 1.14e−05
1.76
1.75
1.74
1.73
1.72
1.71
1.7
1.69
1.68
pull
Entries 82
Mean 2380
Std Dev 2326
500
400
300
200
100
0
−100
−200
−300

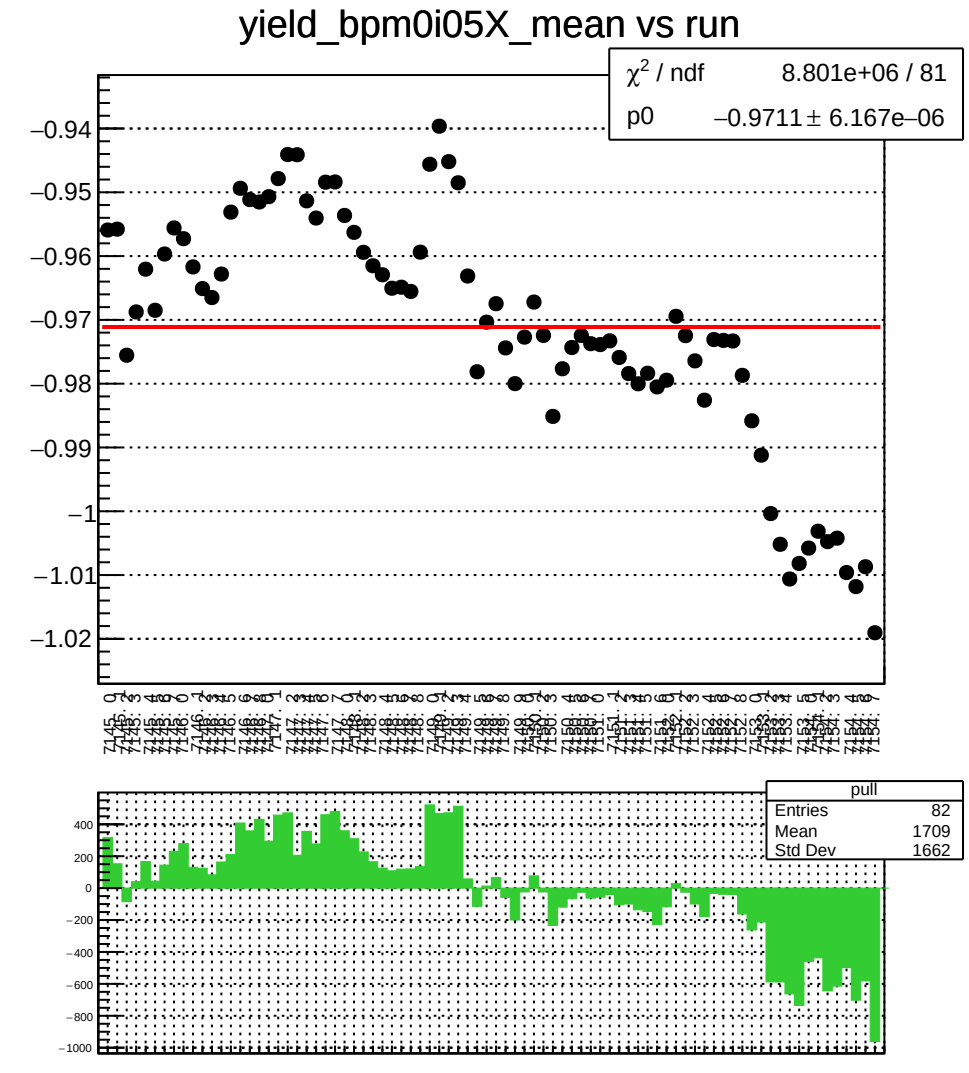

pull1D
Entries 82
Mean 0.0409
Std Dev 4.799
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

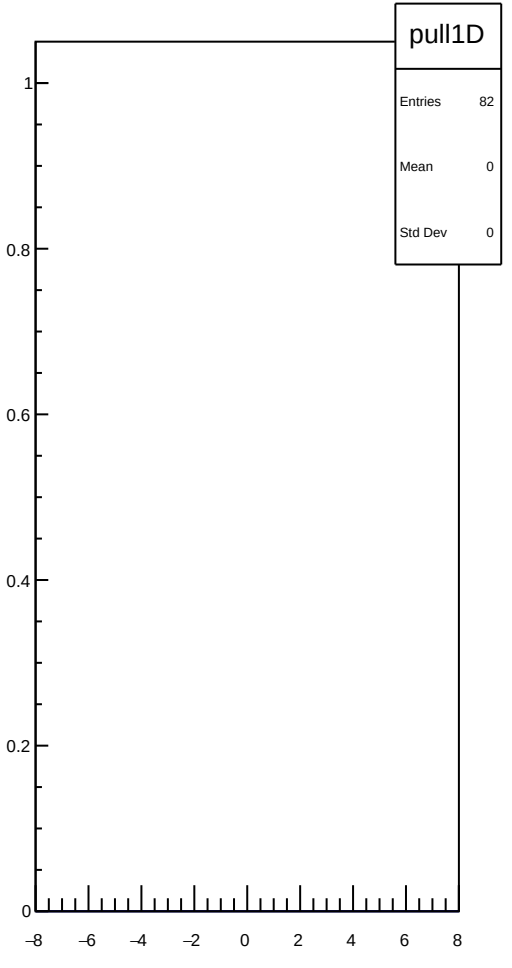

yield_bpm0i02aX_rms vs run
χ² / ndf 7992 / 81
p0 0.01005 ± 8.06e−06
0.013
0.012
0.011
0.01
0.009

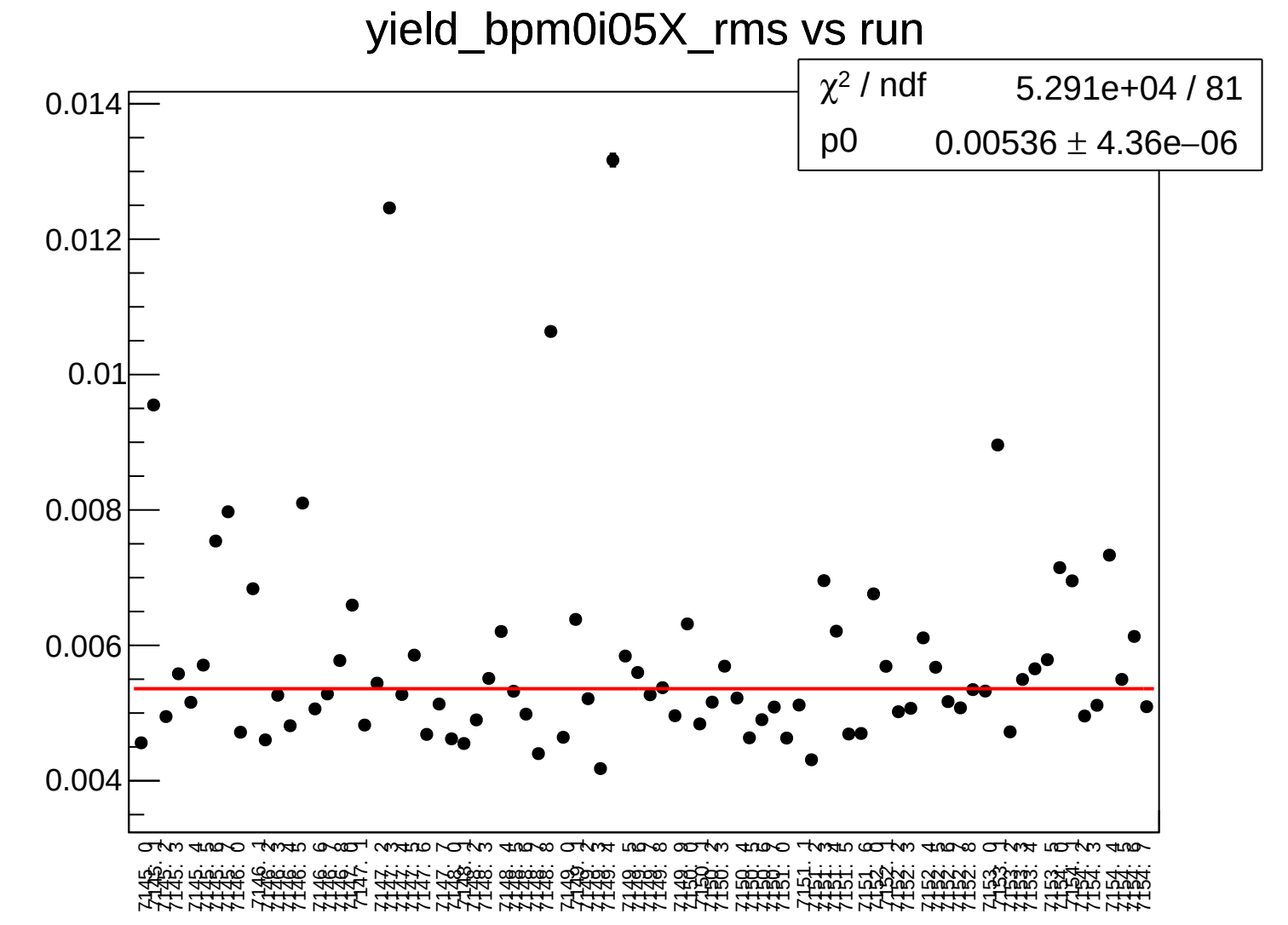

yield_bpm0i02aY_mean vs run
χ² / ndf 4.871e+06 / 81
p0 −1.105 ± 8.5e−06
−1.08
−1.1
−1.12
−1.14
−1.16
pull
Entries 82
Mean −256
Std Dev 297
400
200
0
−200
−400
−600

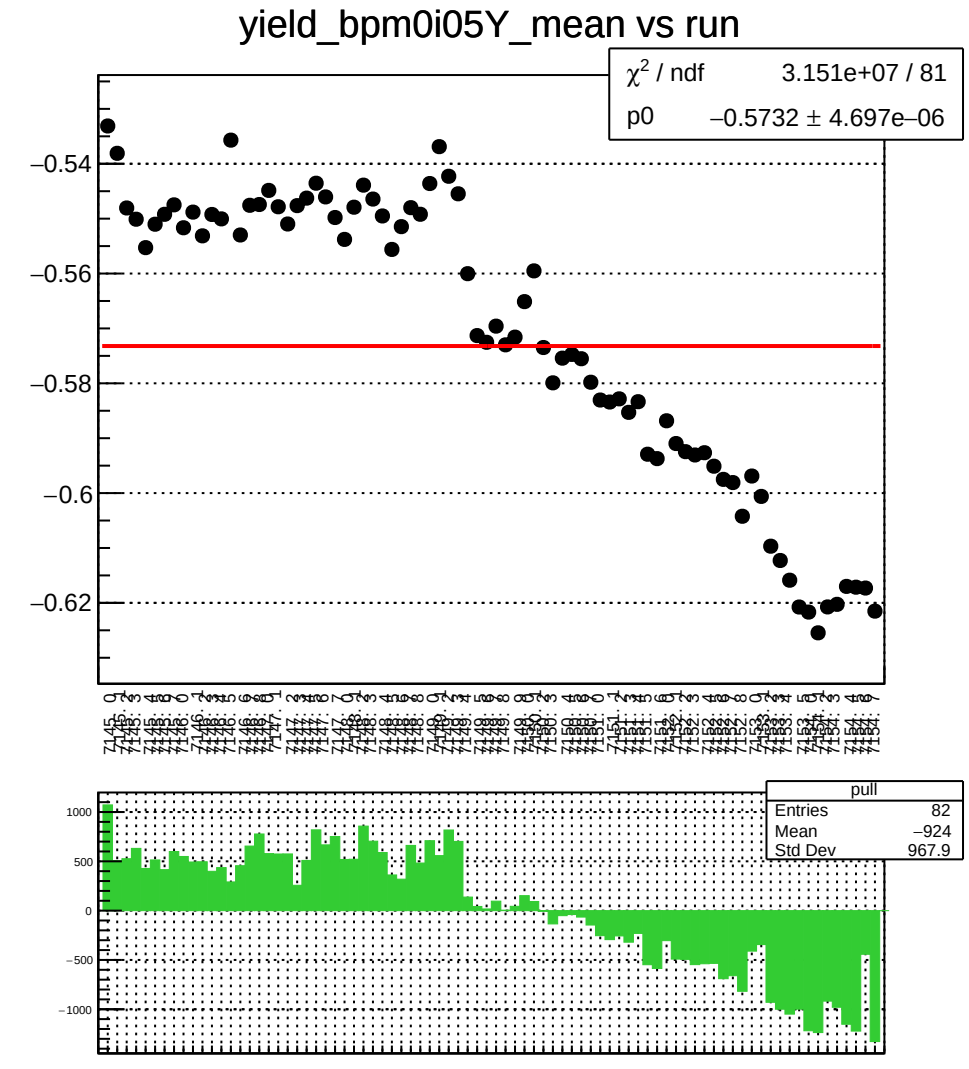

pull1D
Entries 82
Mean −4.092
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

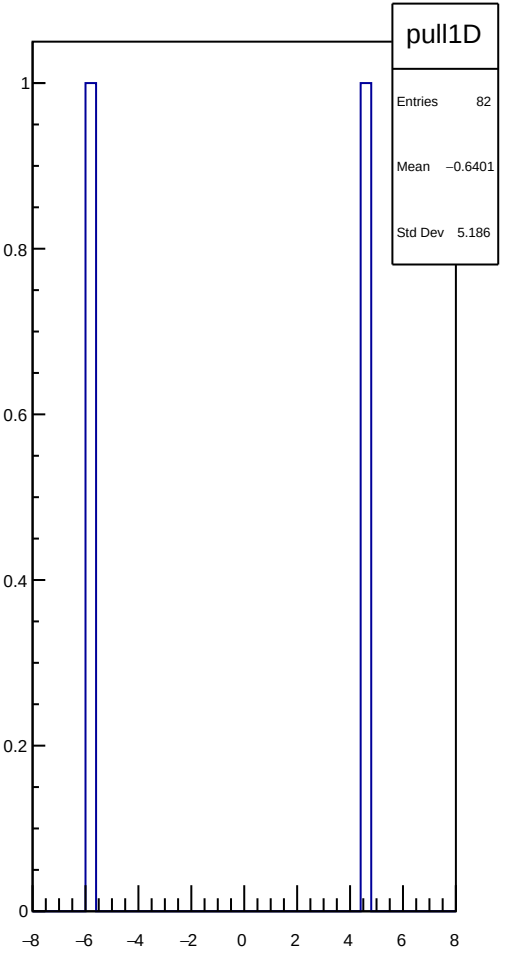

yield_bpm0i02aY_rms vs run
χ² / ndf 5.445e+04 / 81
p0 0.007384 ± 6.011e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

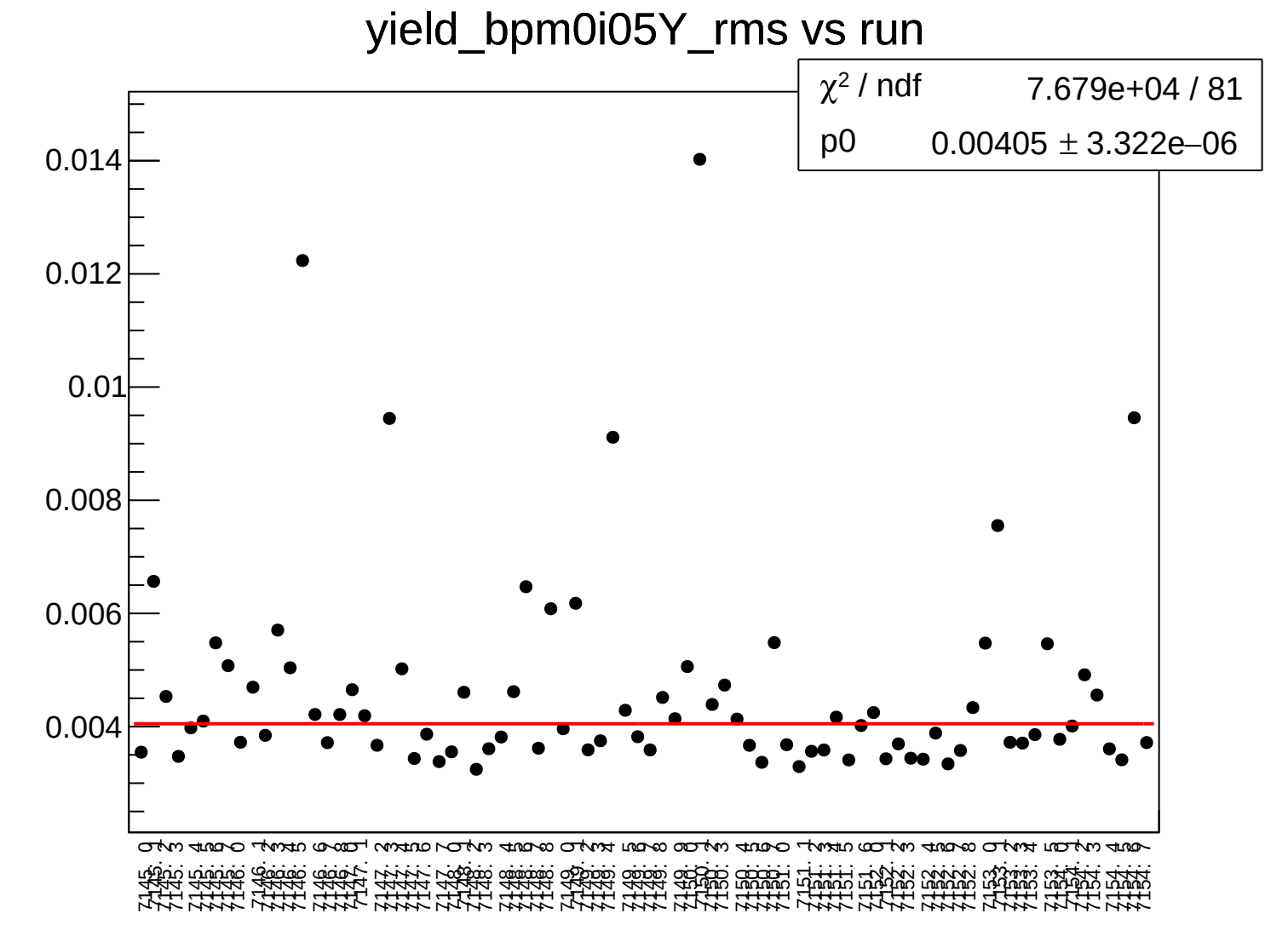

yield_bpm0i05X_mean vs run
χ² / ndf 8.801e+06 / 81
p0 −0.9711 ± 6.167e−06
−0.94
−0.95
−0.96
−0.97
−0.98
−0.99
−1
−1.01
−1.02
pull
Entries 82
Mean 1709
Std Dev 1662
400
200
0
−200
−400
−600
−800
−1000

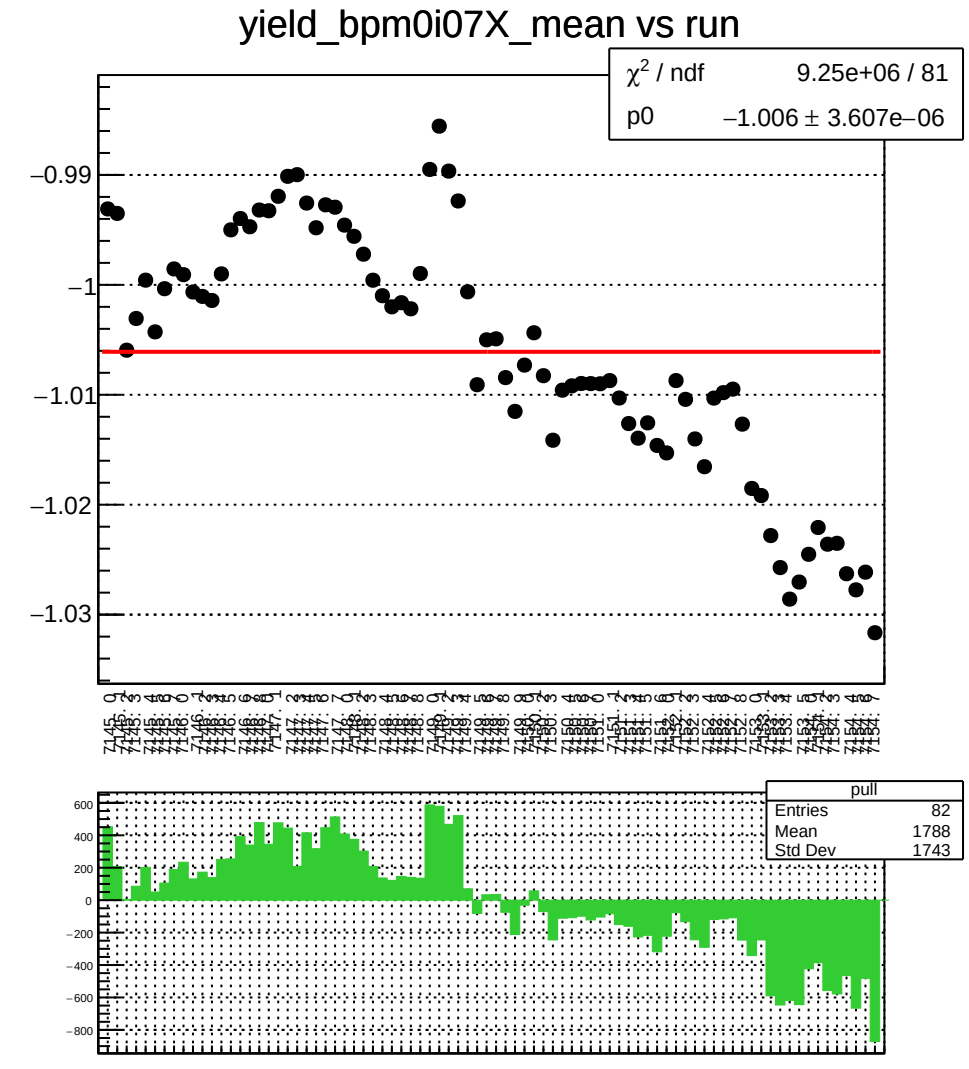

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

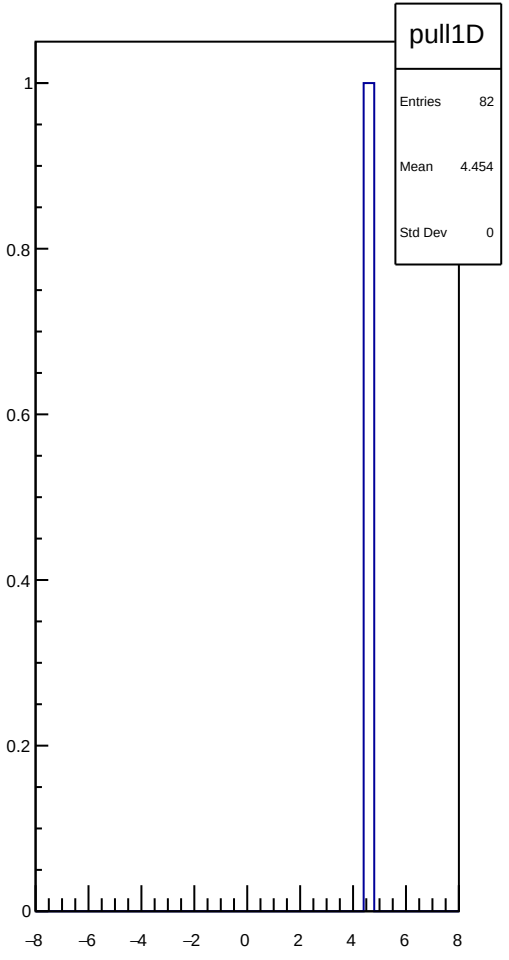

yield_bpm0i05X_rms vs run
χ² / ndf 5.291e+04 / 81
p0 0.00536 ± 4.36e−06
0.014
0.012
0.01
0.008
0.006
0.004

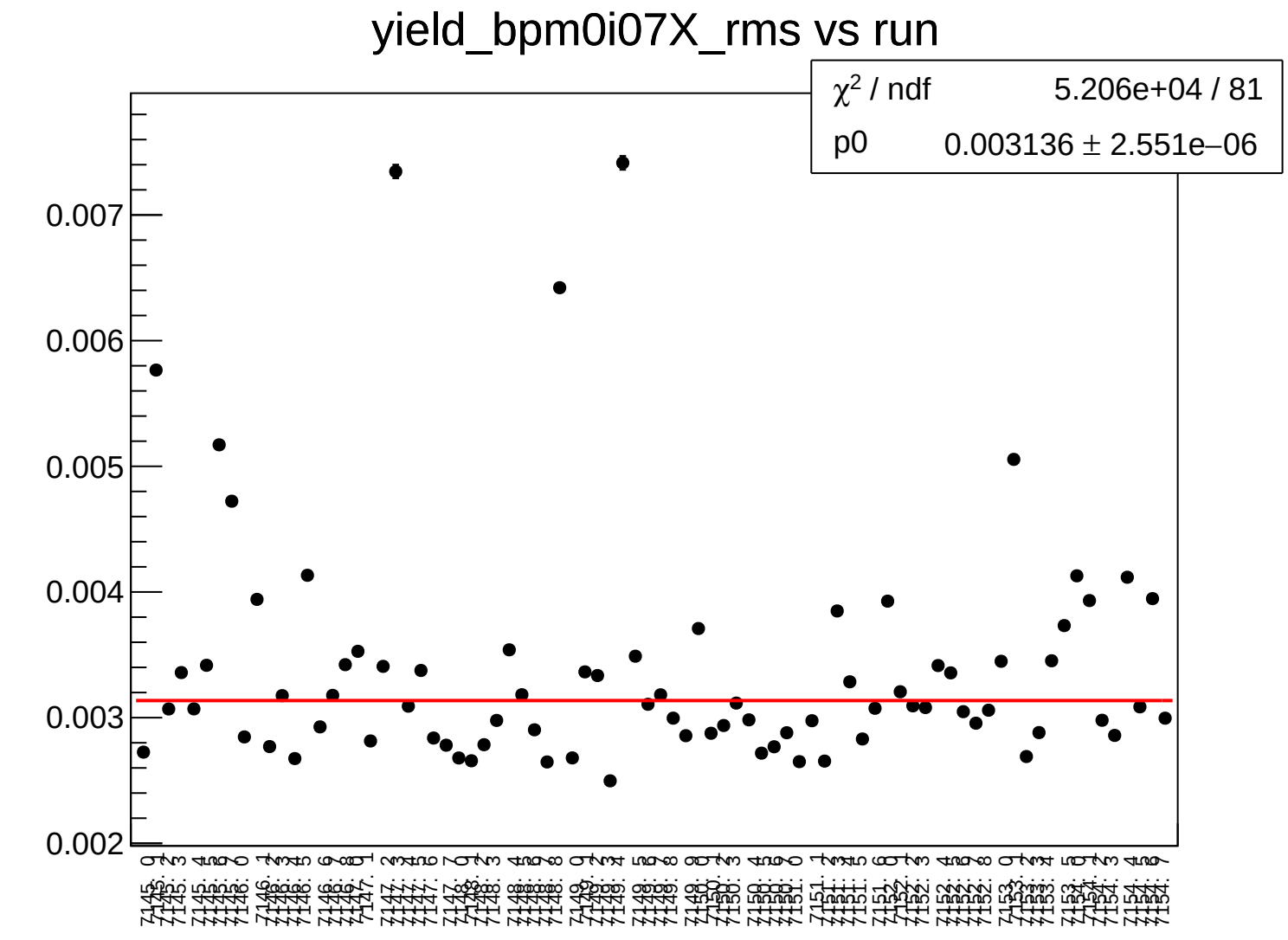

yield_bpm0i05Y_mean vs run
χ² / ndf 3.151e+07 / 81
p0 −0.5732 ± 4.697e−06
−0.54
−0.56
−0.58
−0.6
−0.62
pull
Entries 82
Mean −924
Std Dev 967.9
1000
500
0
−500
−1000

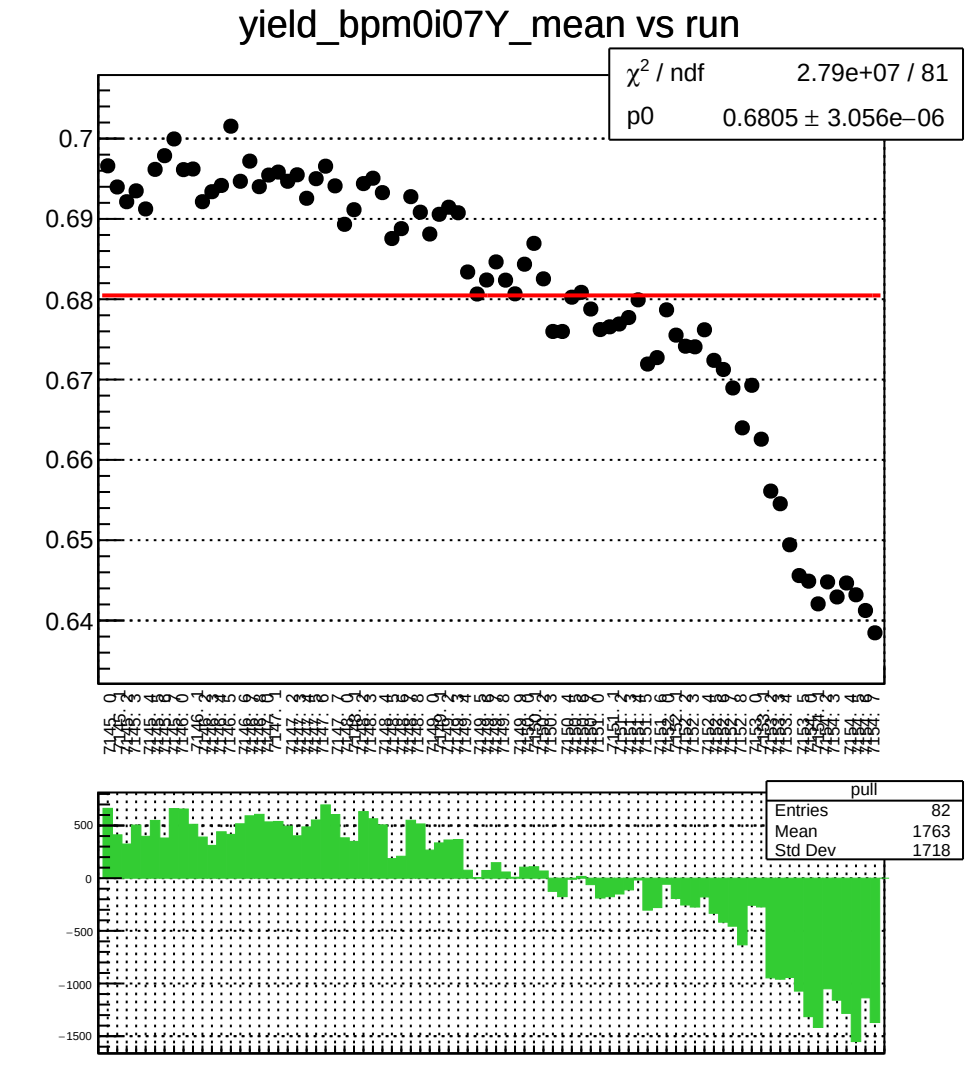

pull1D
Entries 82
Mean −0.6401
Std Dev 5.186
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

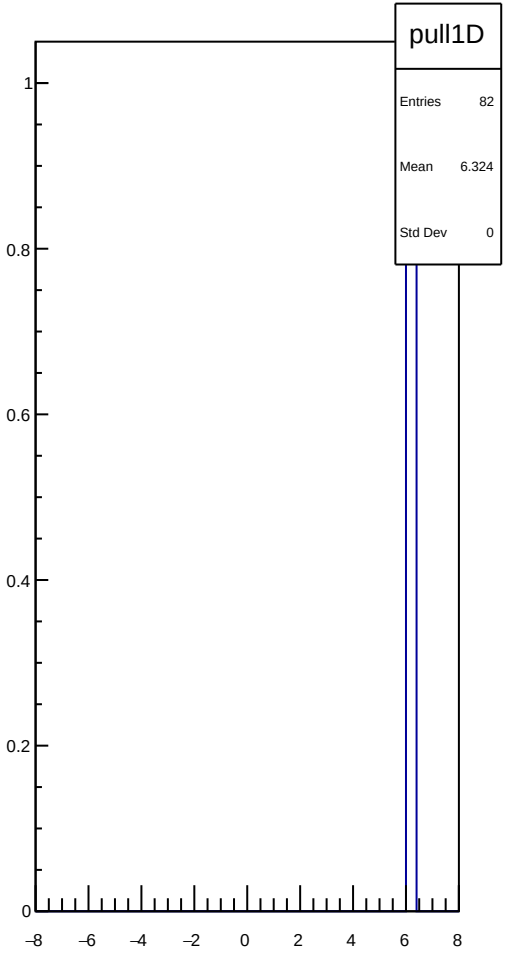

yield_bpm0i05Y_rms vs run
χ² / ndf 7.679e+04 / 81
p0 0.00405 ± 3.322e–06
0.014
0.012
0.01
0.008
0.006
0.004

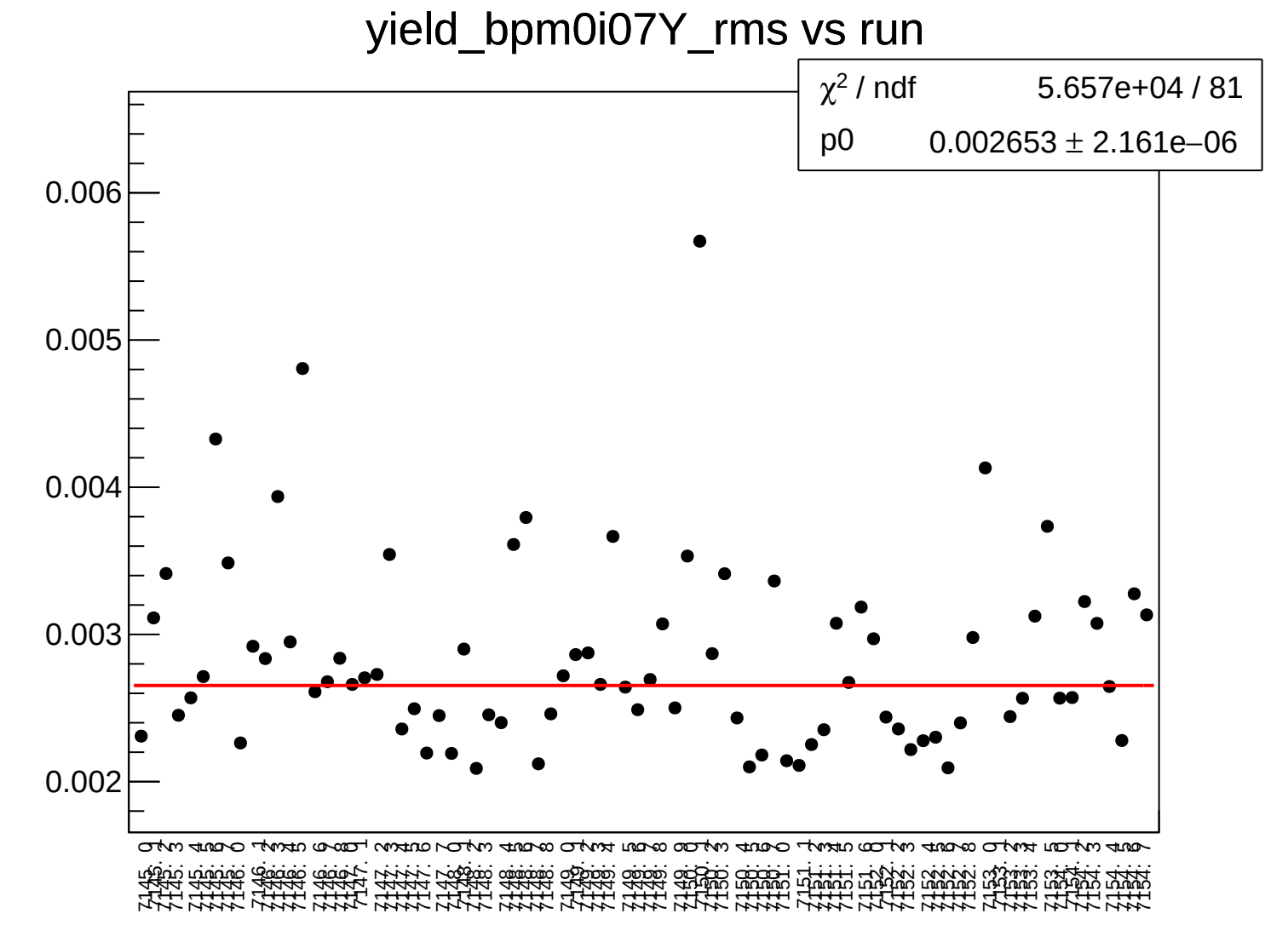

yield_bpm0i07X_mean vs run
χ² / ndf 9.25e+06 / 81
p0 −1.006 ± 3.607e−06
−0.99
−1
−1.01
−1.02
−1.03
pull
Entries 82
Mean 1788
Std Dev 1743
600
400
200
0
−200
−400
−600
−800

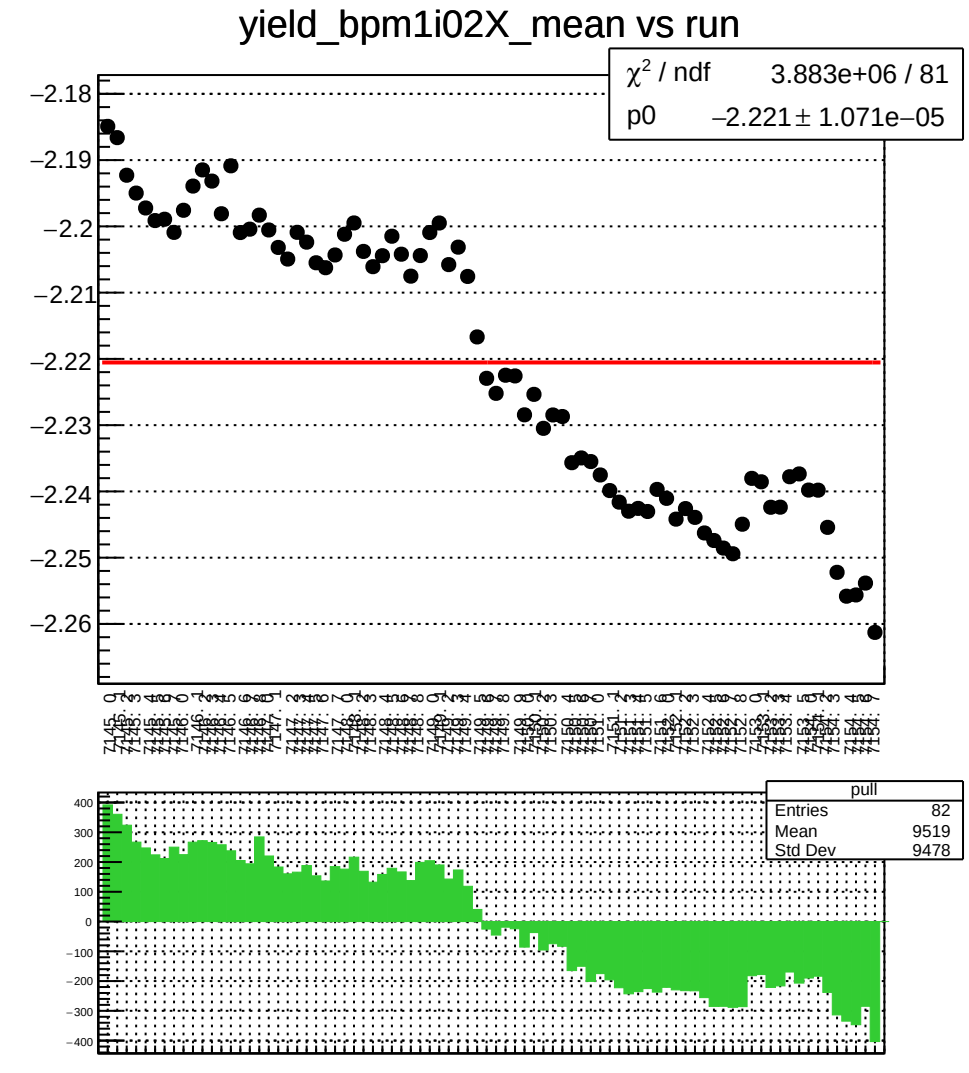

pull1D
Entries 82
Mean 4.454
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

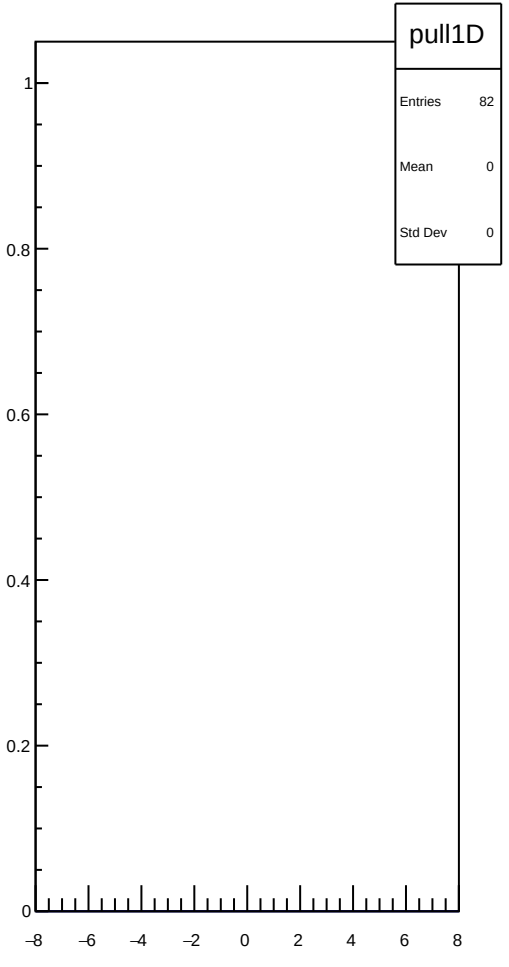

yield_bpm0i07X_rms vs run
χ^2 / ndf 5.206e+04 / 81
p0 0.003136 ± 2.551e−06
0.007
0.006
0.005
0.004
0.003
0.002

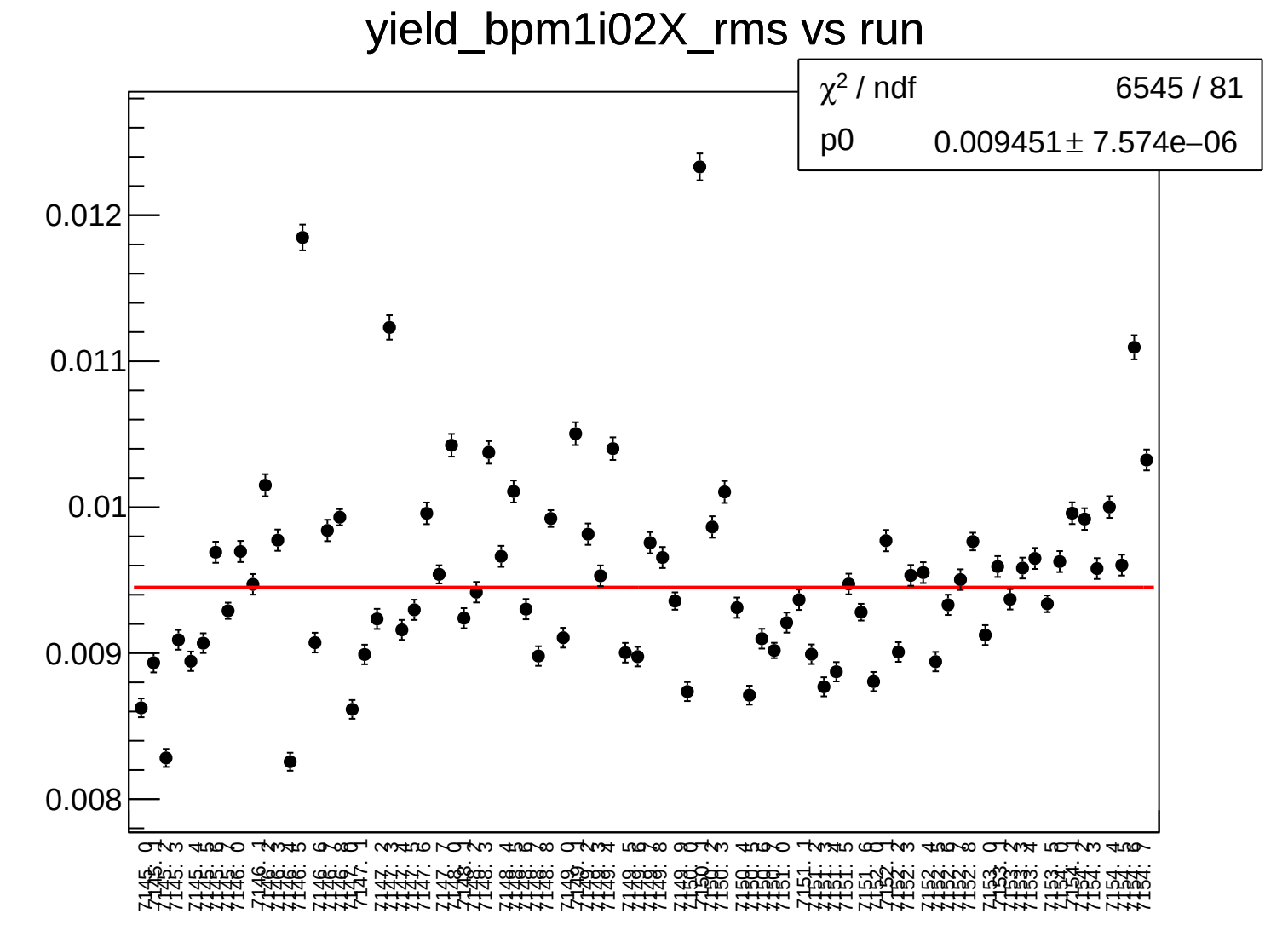

yield_bpm0i07Y_mean vs run
χ² / ndf 2.79e+07 / 81
p0 0.6805 ± 3.056e−06
0.7
0.69
0.68
0.67
0.66
0.65
0.64
pull
Entries 82
Mean 1763
Std Dev 1718
500
0
−500
−1000
−1500

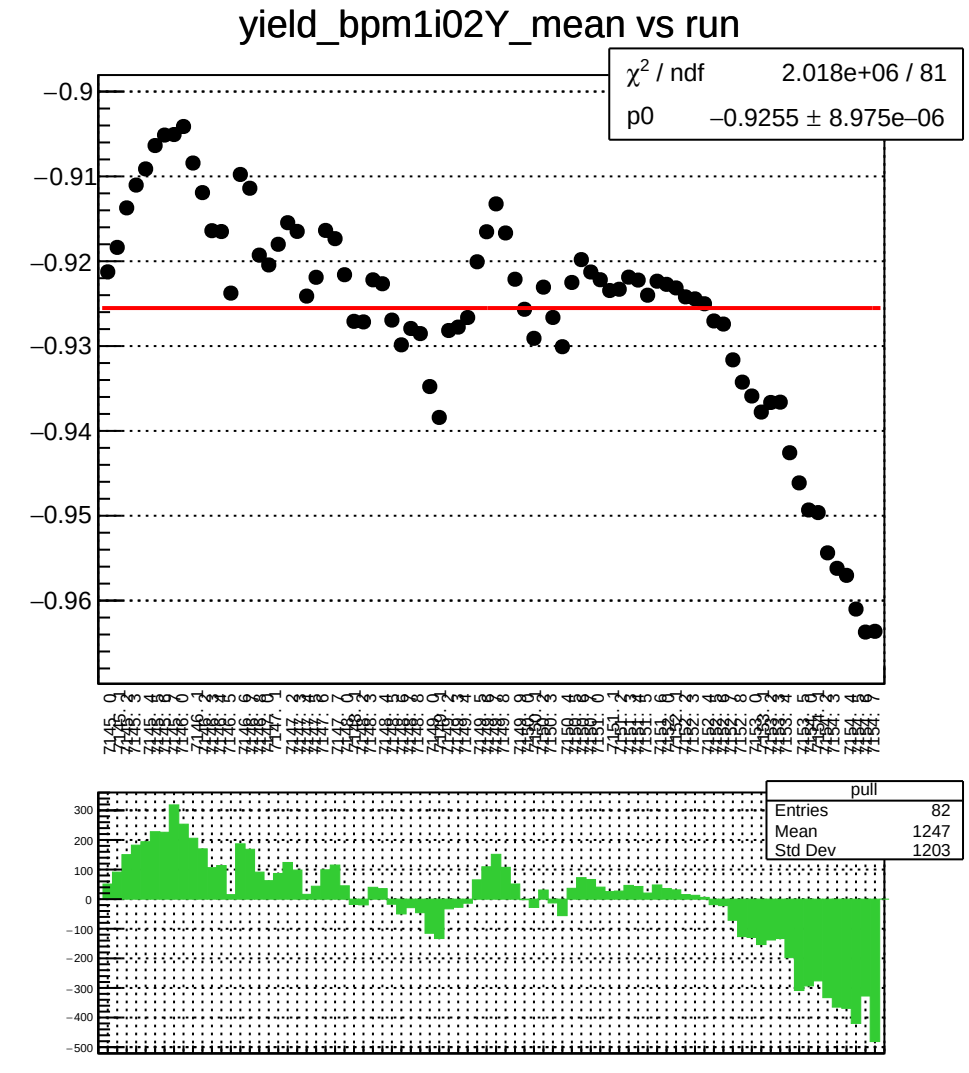

pull1D
Entries 82
Mean 6.324
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

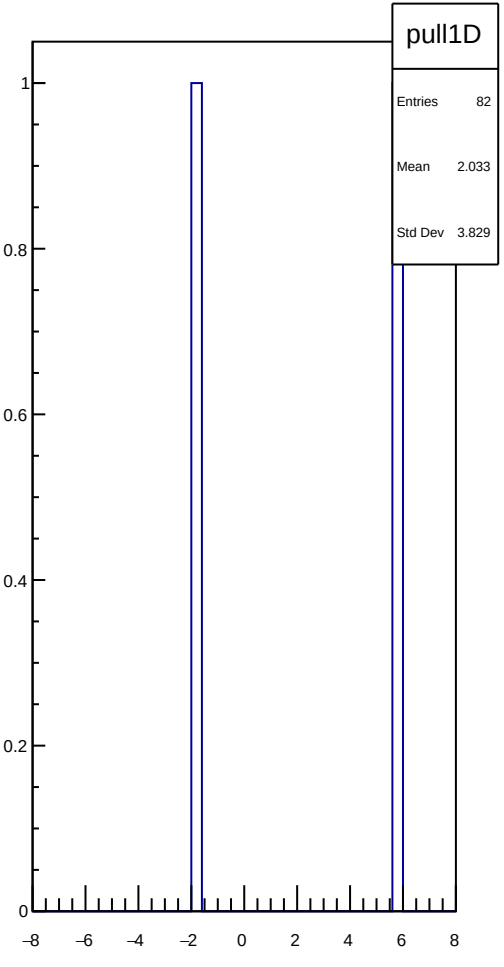

yield_bpm0i07Y_rms vs run
χ^2 / ndf 5.657e+04 / 81
p0 0.002653 ± 2.161e−06
0.006
0.005
0.004
0.003
0.002


yield_bpm1i02X_mean vs run
χ² / ndf 3.883e+06 / 81
p0 −2.221 ± 1.071e−05
−2.18
−2.19
−2.2
−2.21
−2.22
−2.23
−2.24
−2.25
−2.26
pull
Entries 82
Mean 9519
Std Dev 9478
400
300
200
100
0
−100
−200
−300
−400

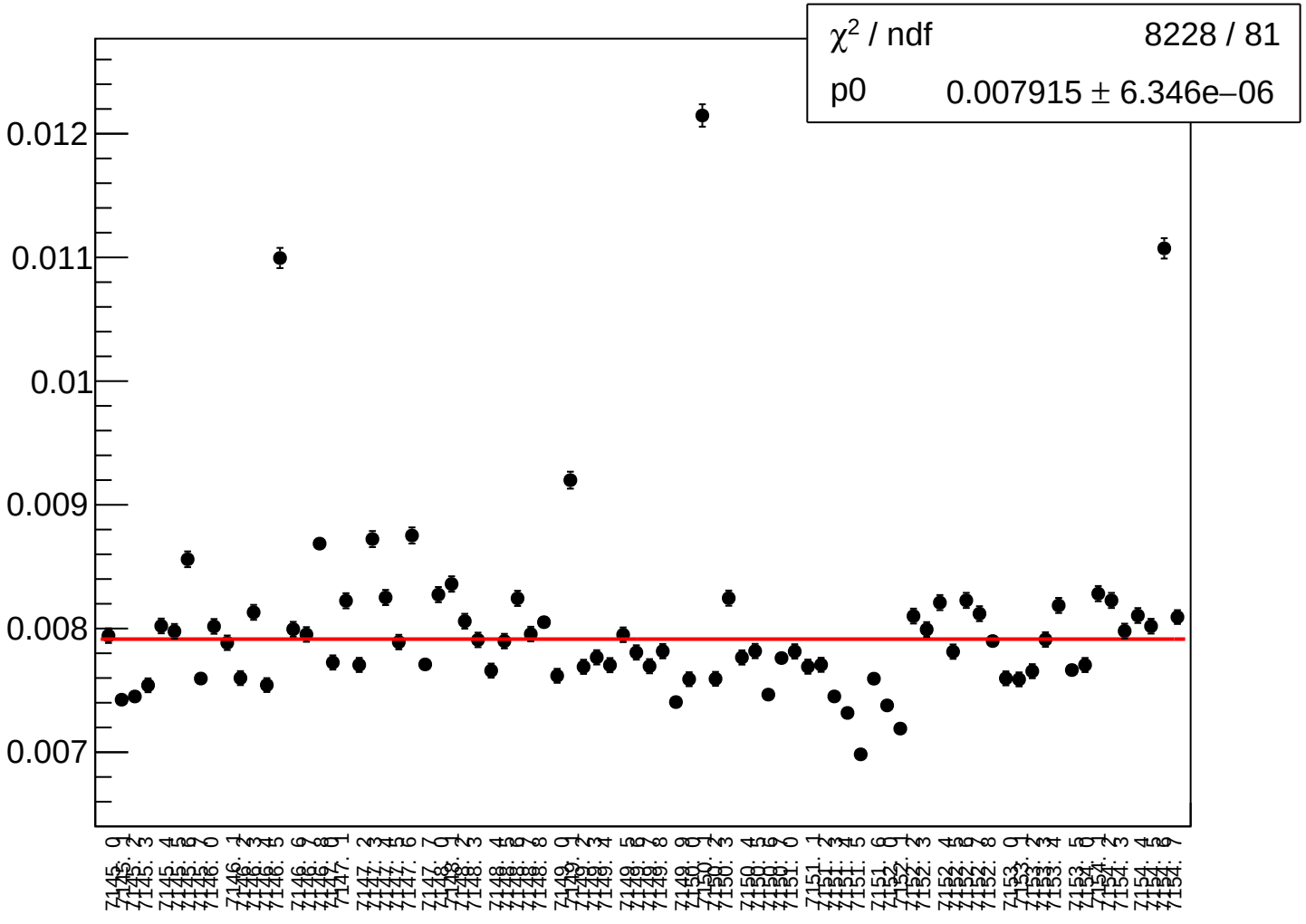

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

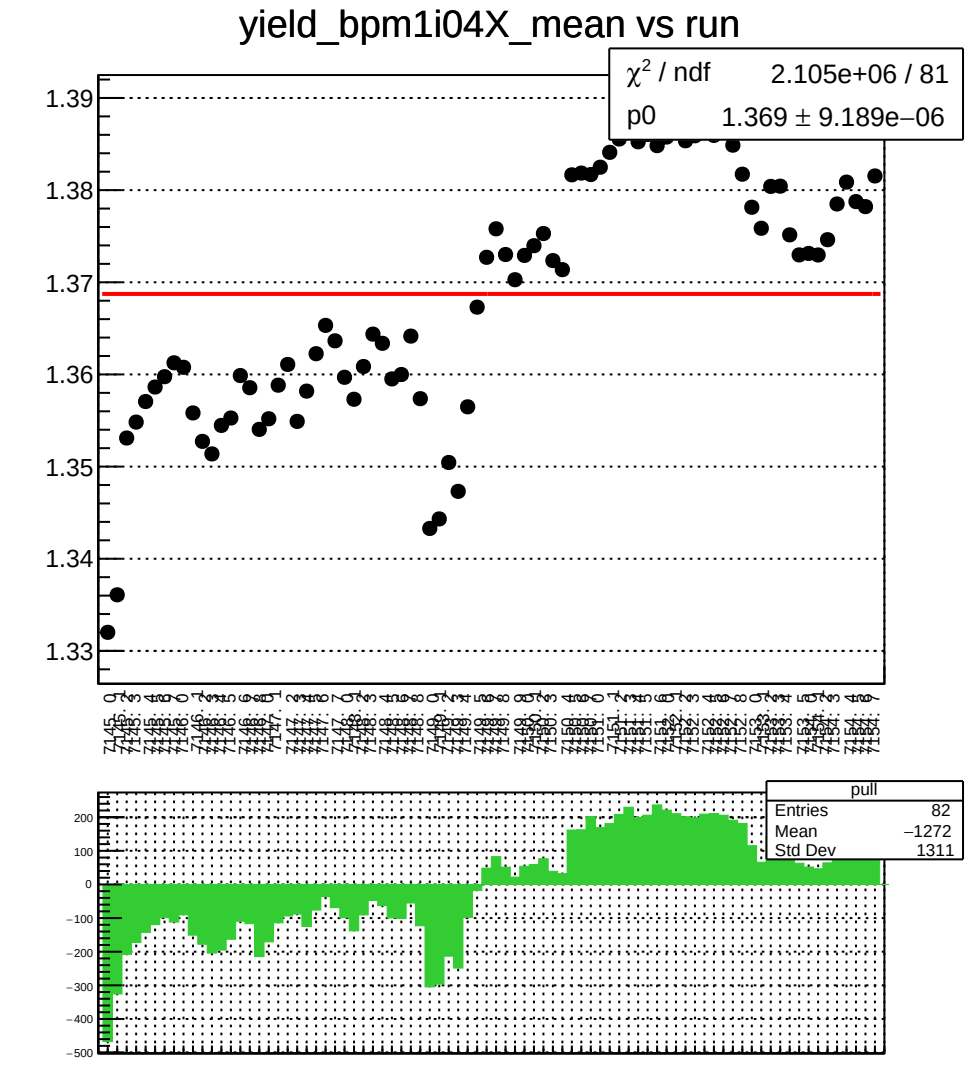

yield_bpm1i02X_rms vs run
χ² / ndf 6545 / 81
p0 0.009451 ± 7.574e−06
0.012
0.011
0.01
0.009
0.008

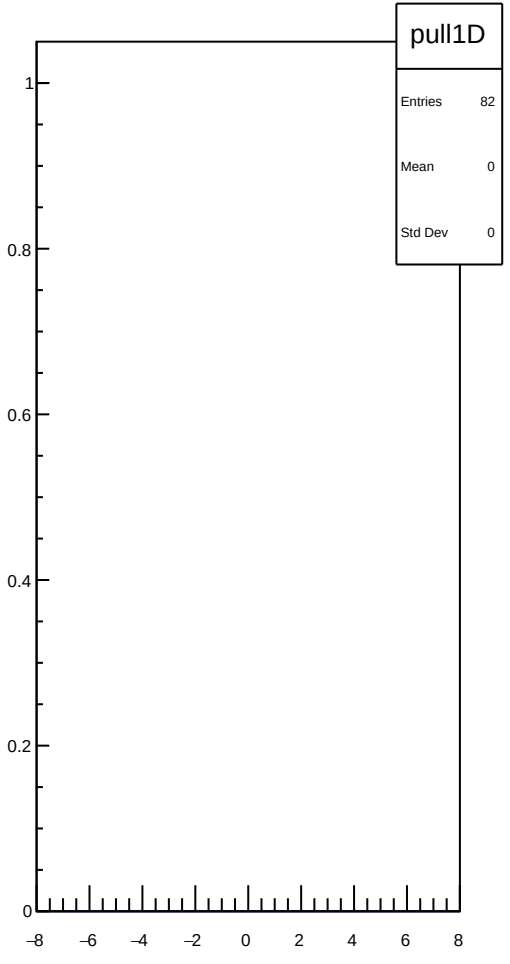

yield_bpm1i02Y_mean vs run
χ^2 / ndf 2.018e+06 / 81
p0 −0.9255 ± 8.975e−06
−0.9
−0.91
−0.92
−0.93
−0.94
−0.95
−0.96
pull
Entries 82
Mean 1247
Std Dev 1203
300
200
100
0
−100
−200
−300
−400
−500

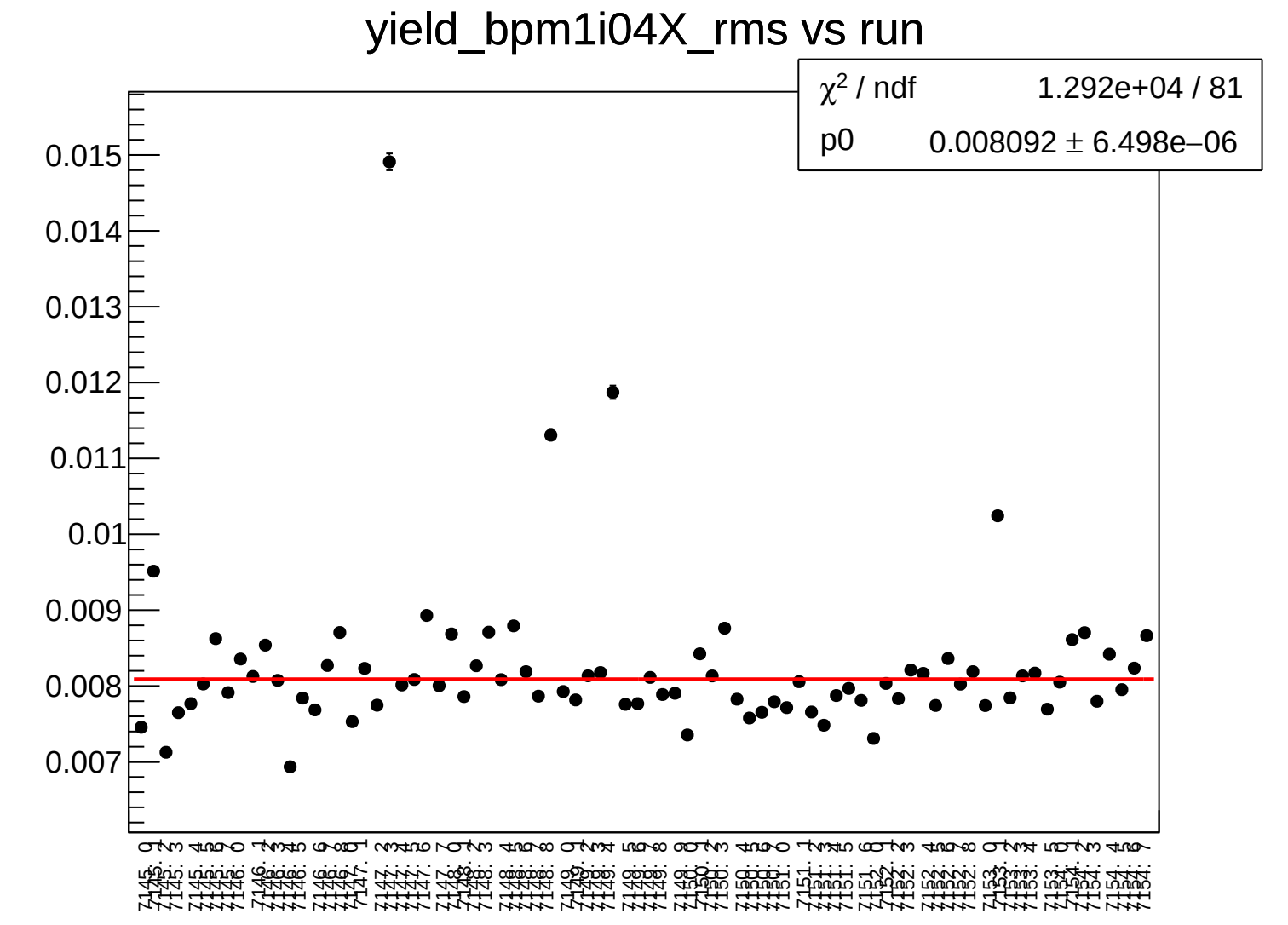

pull1D
Entries 82
Mean 2.033
Std Dev 3.829
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

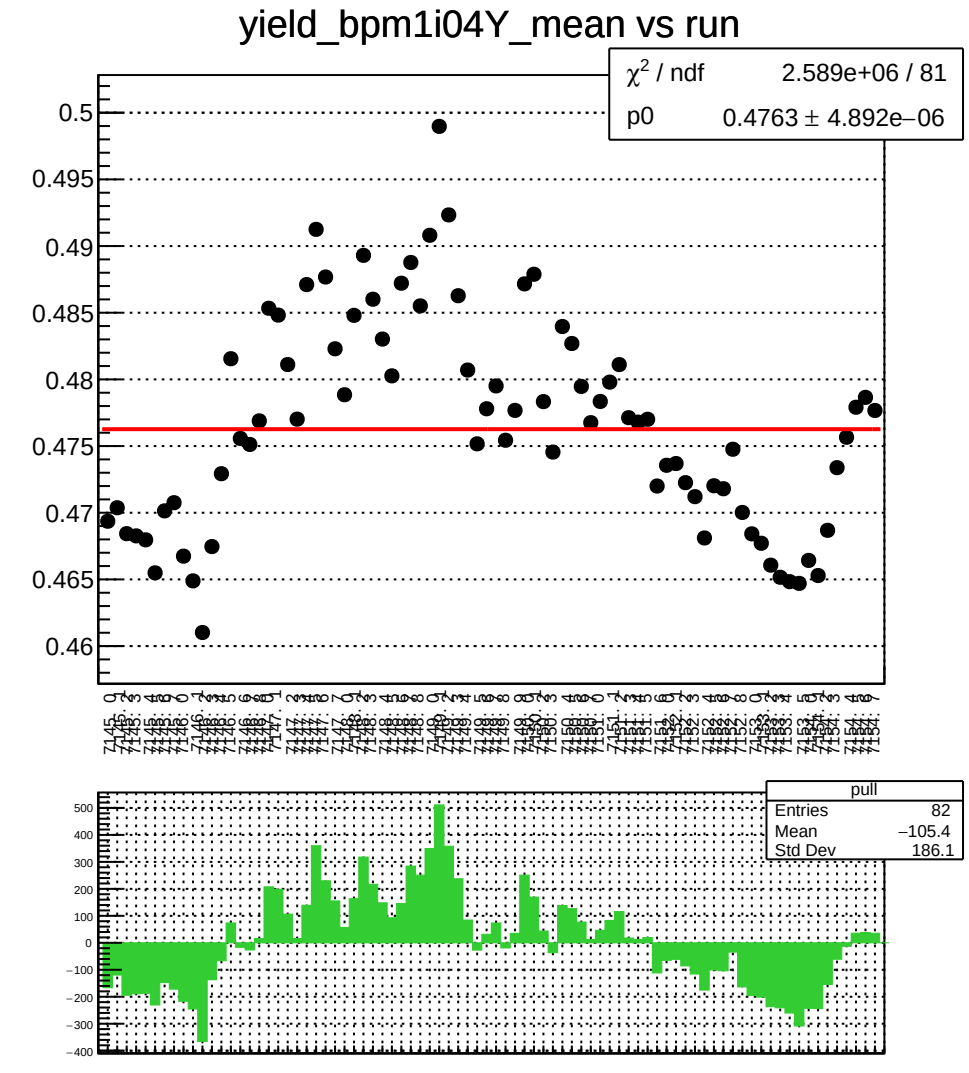
yield_bpm1i02Y_rms vs run

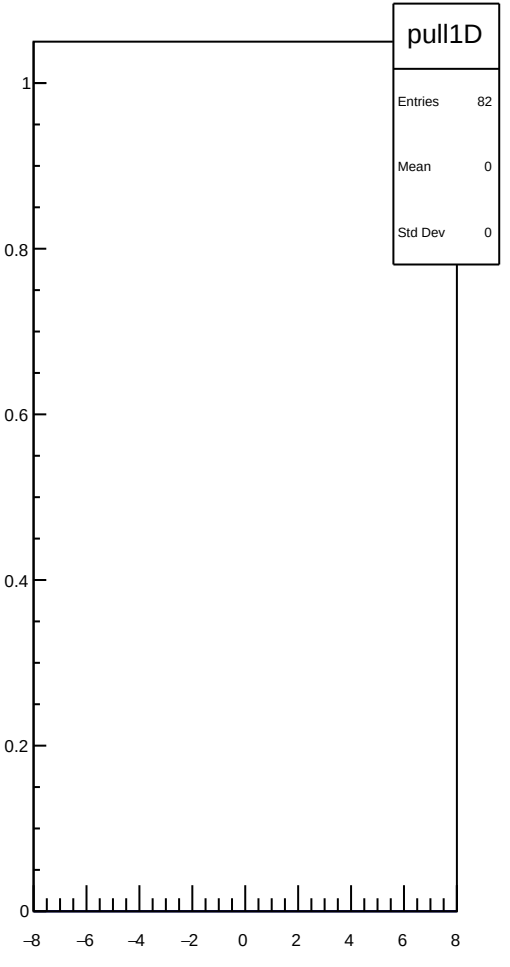


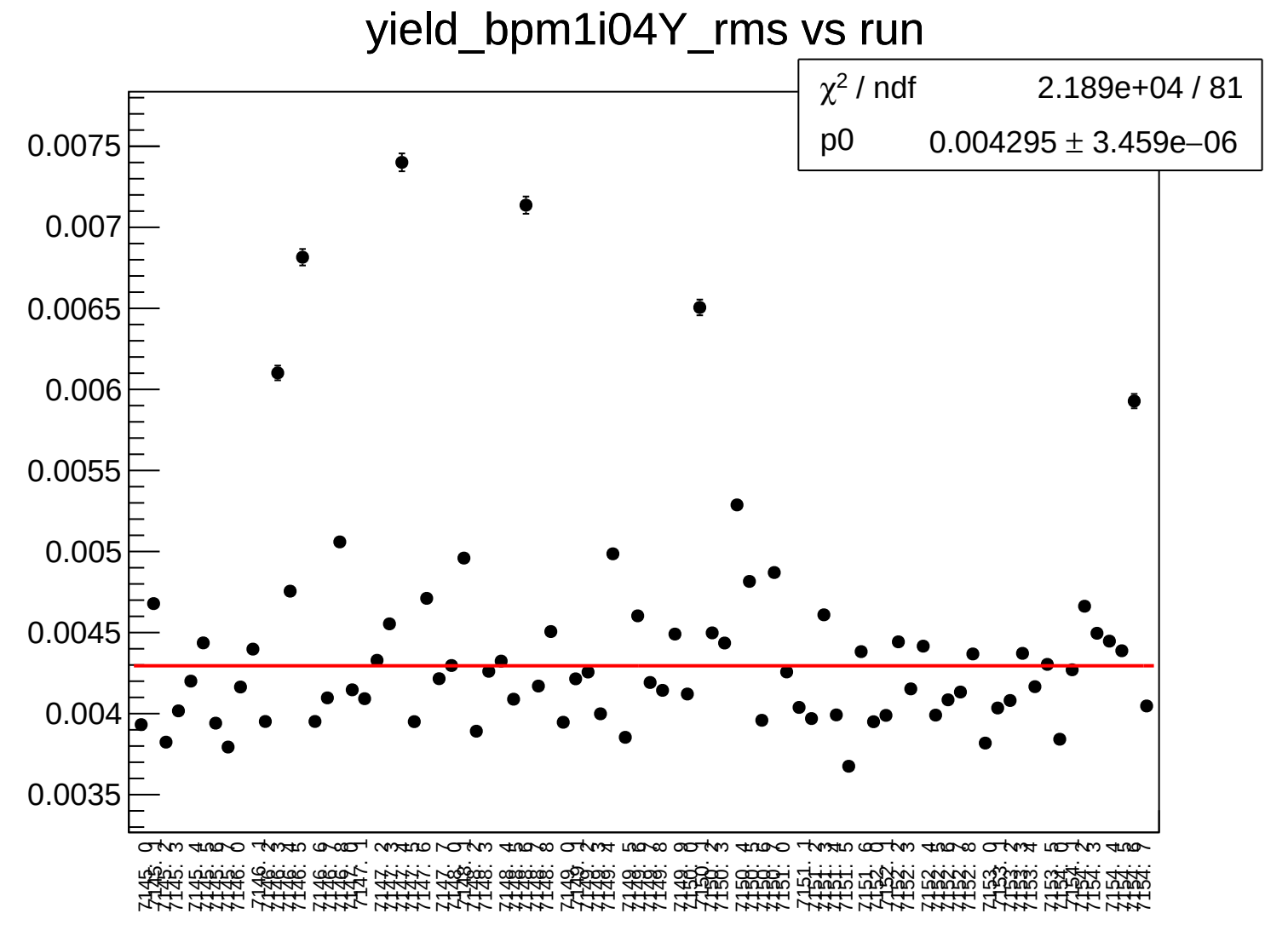

yield_bpm1i04X_mean vs run
χ² / ndf 2.105e+06 / 81
p0 1.369 ± 9.189e−06
1.39
1.38
1.37
1.36
1.35
1.34
1.33
pull
Entries 82
Mean −1272
Std Dev 1311
200
100
0
−100
−200
−300
−400
−500

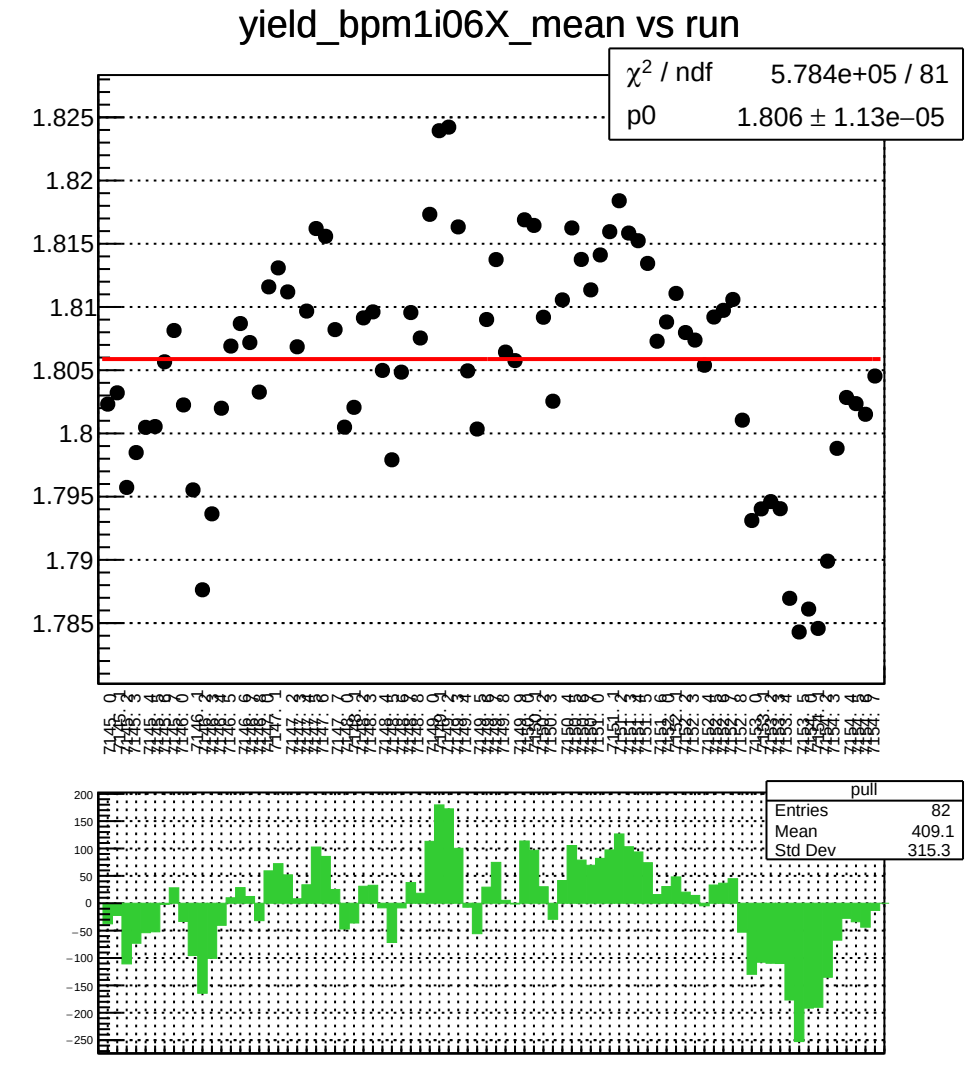

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

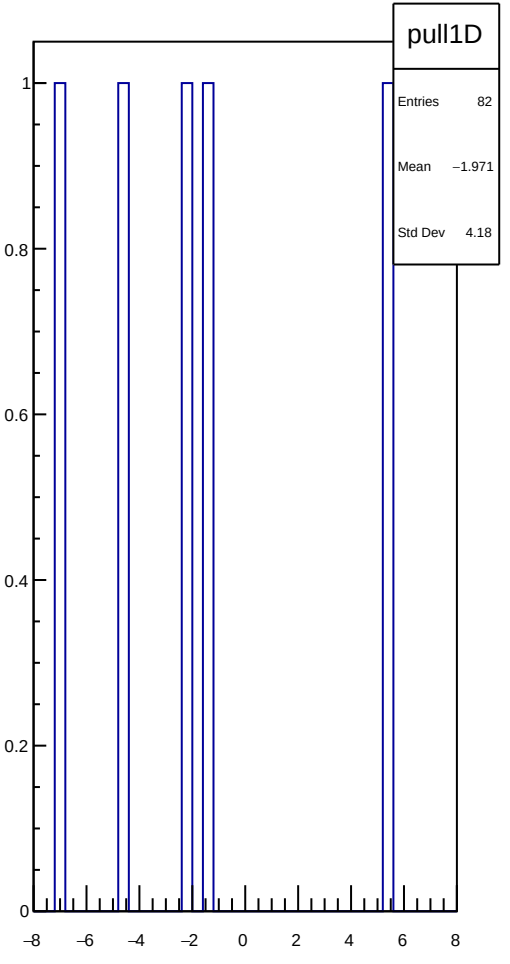

yield_bpm1i04X_rms vs run
χ² / ndf 1.292e+04 / 81
p0 0.008092 ± 6.498e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

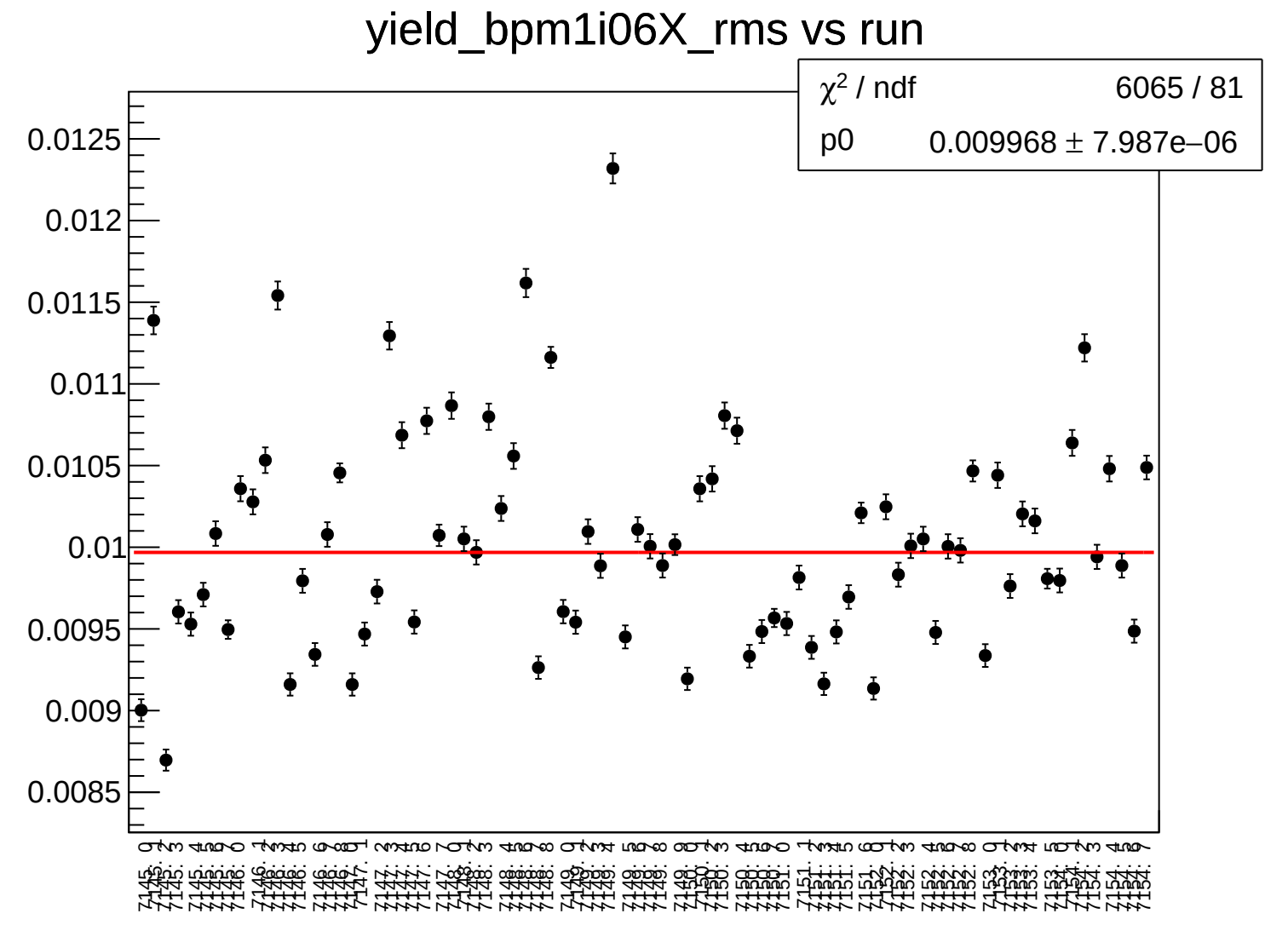

yield_bpm1i04Y_mean vs run
χ² / ndf 2.589e+06 / 81
p0 0.4763 ± 4.892e−06
pull
Entries 82
Mean −105.4
Std Dev 186.1

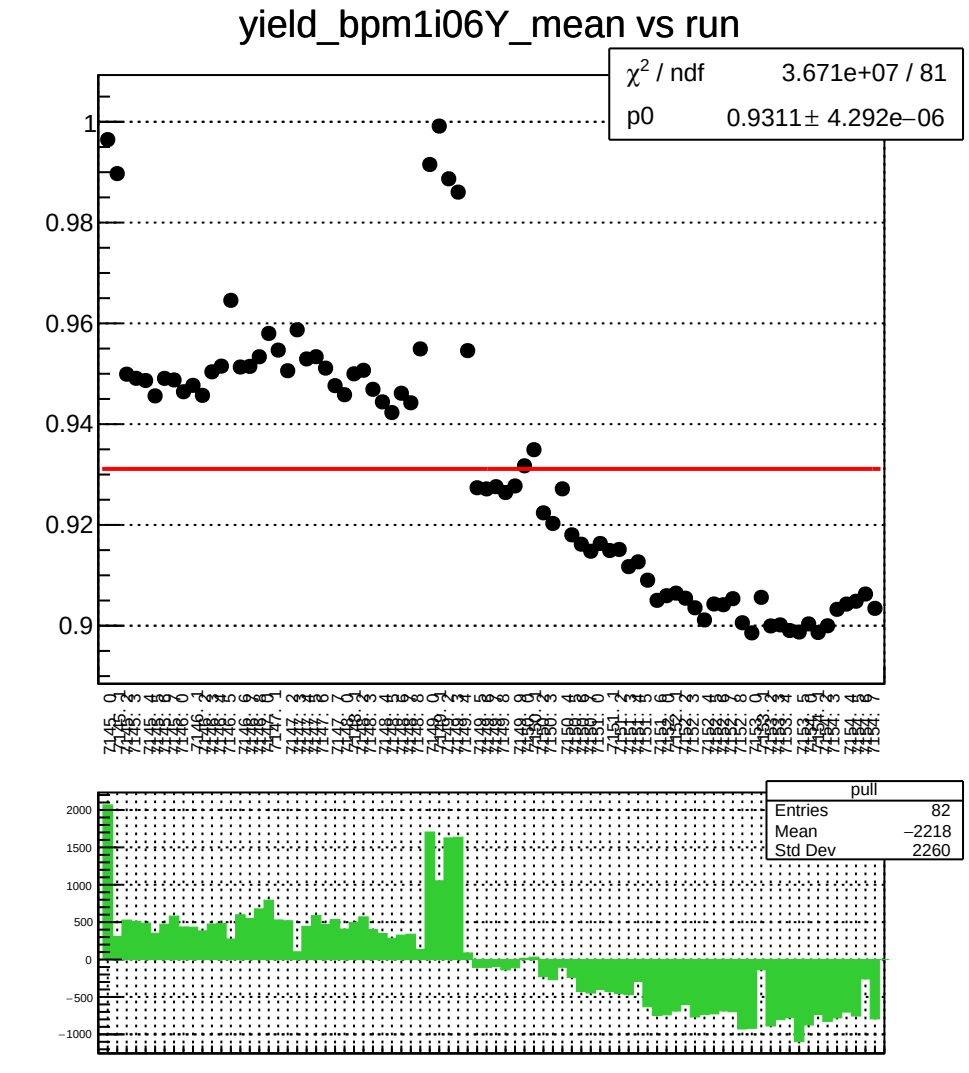

pull1D
Entries 82
Mean 0
Std Dev 0

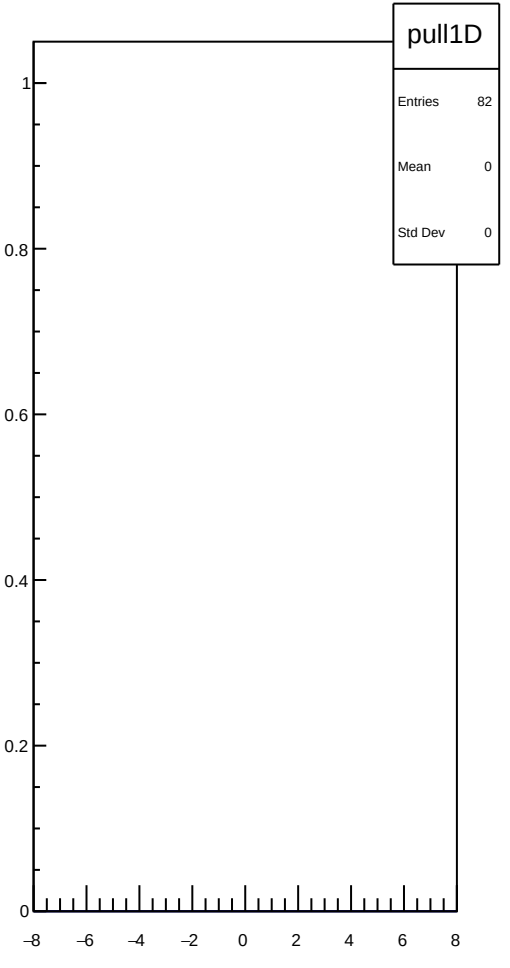

yield_bpm1i04Y_rms vs run
χ² / ndf 2.189e+04 / 81
p0 0.004295 ± 3.459e−06
0.0075
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035

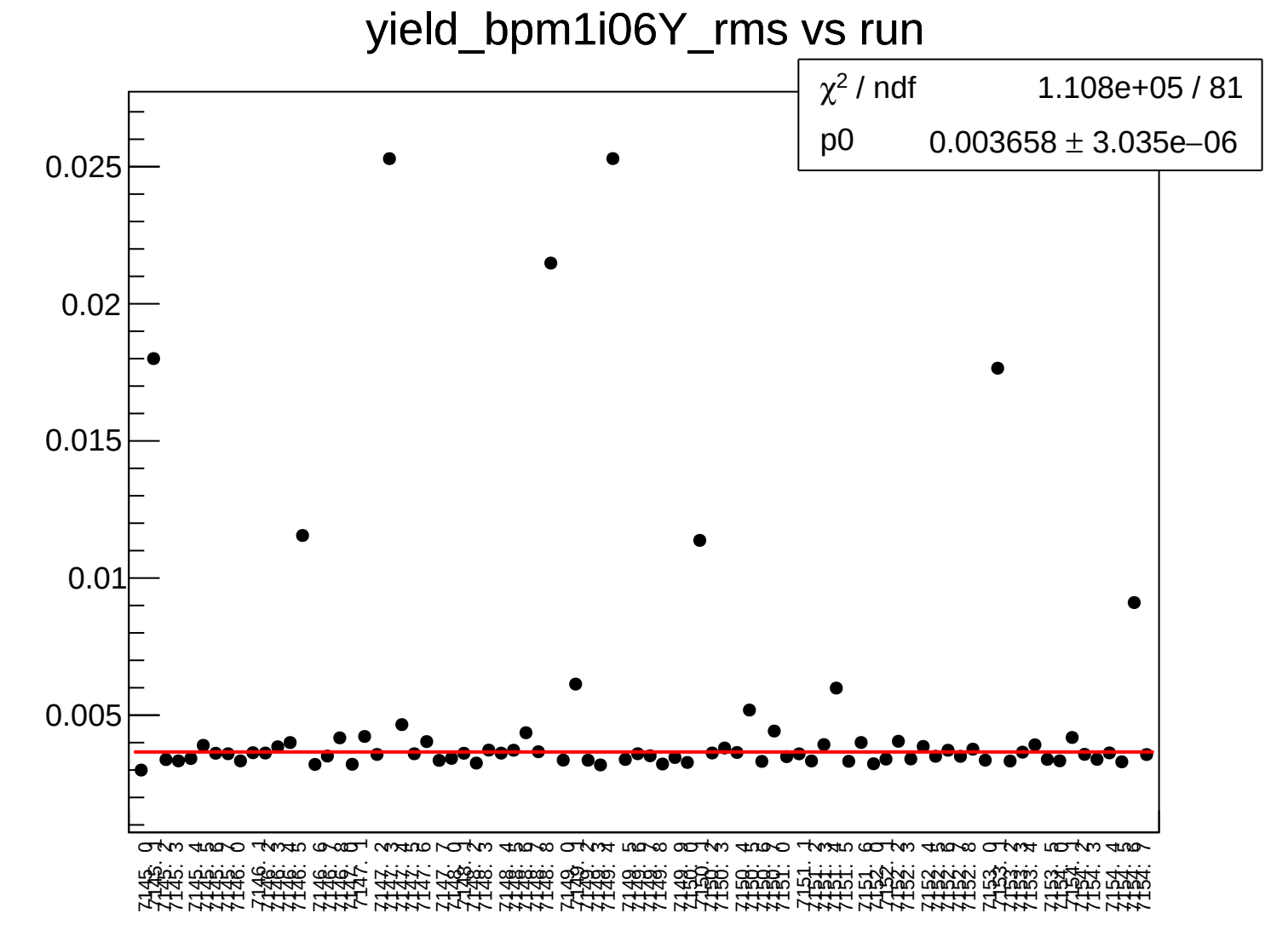

yield_bpm1i06X_mean vs run
χ² / ndf 5.784e+05 / 81
p0 1.806 ± 1.13e−05
1.825
1.82
1.815
1.81
1.805
1.8
1.795
1.79
1.785
pull
Entries 82
Mean 409.1
Std Dev 315.3
200
150
100
50
0
−50
−100
−150
−200
−250

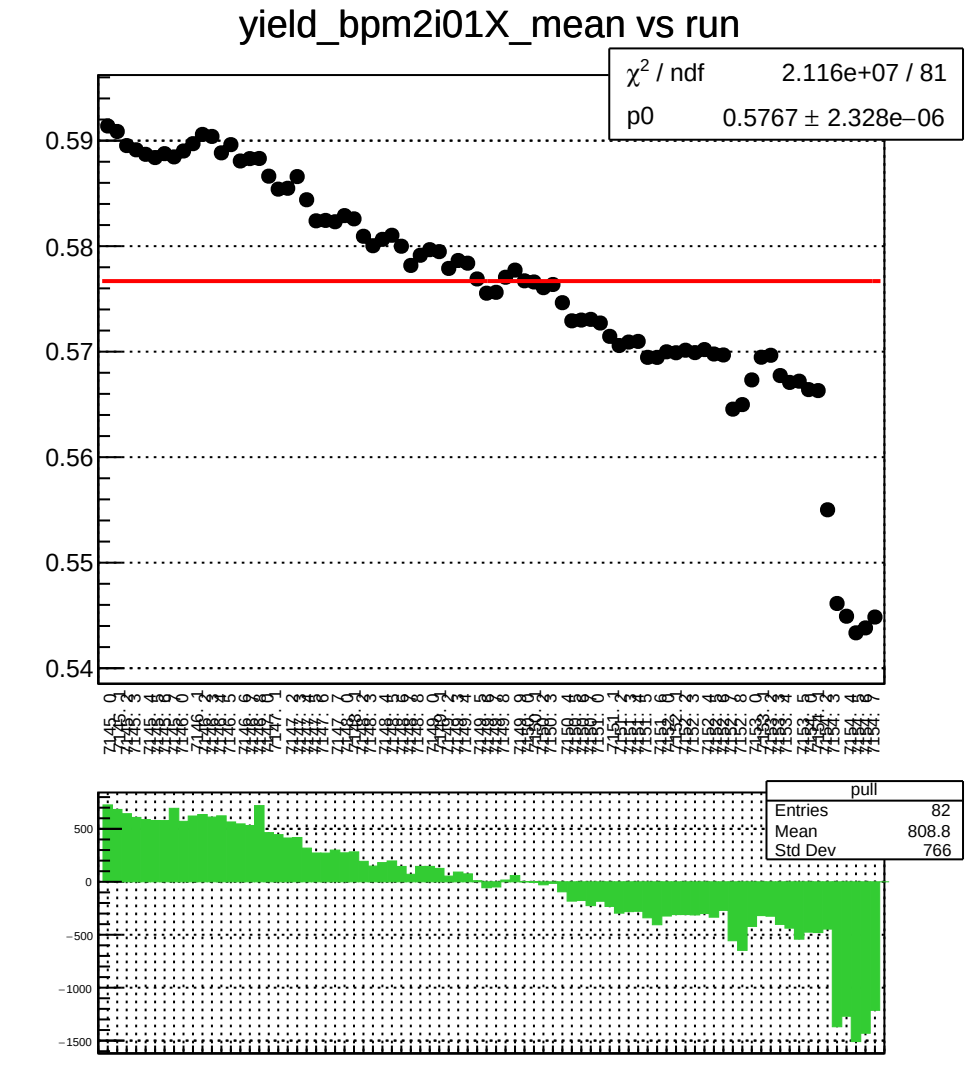

pull1D
Entries 82
Mean −1.971
Std Dev 4.18
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

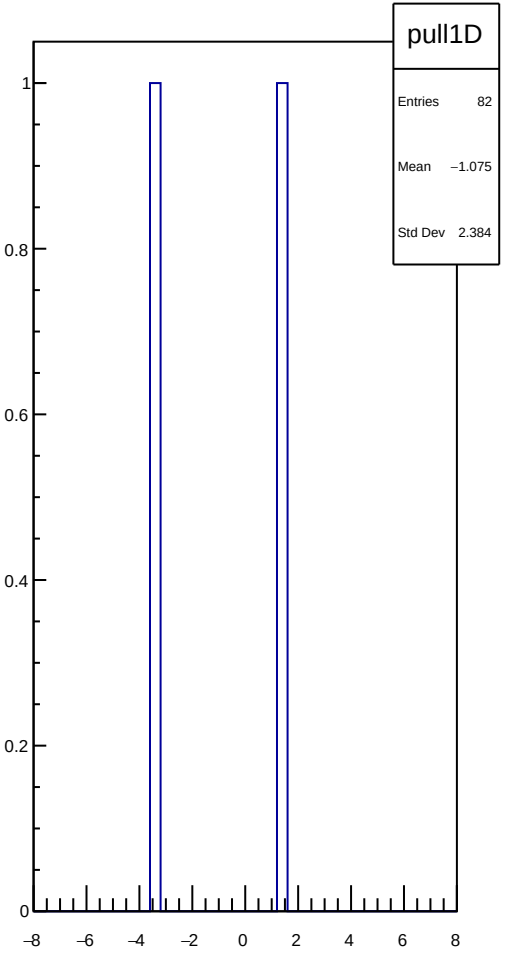

yield_bpm1i06X_rms vs run
χ² / ndf 6065 / 81
p0 0.009968 ± 7.987e−06
0.0125
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009
0.0085

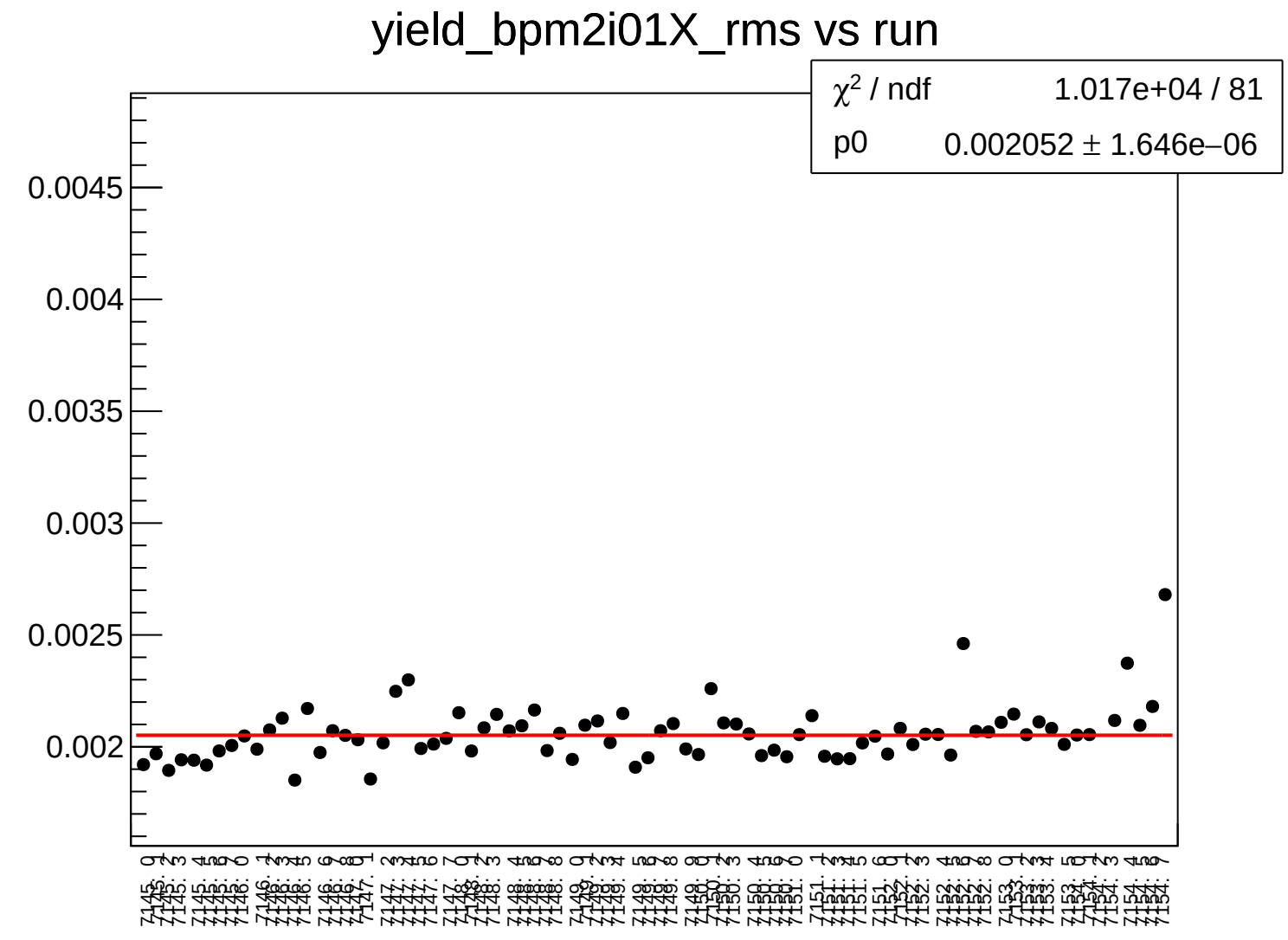

yield_bpm1i06Y_mean vs run
χ² / ndf 3.671e+07 / 81
p0 0.9311 ± 4.292e−06
1
0.98
0.96
0.94
0.92
0.9
pull
Entries 82
Mean −2218
Std Dev 2260
2000
1500
1000
500
0
−500
−1000

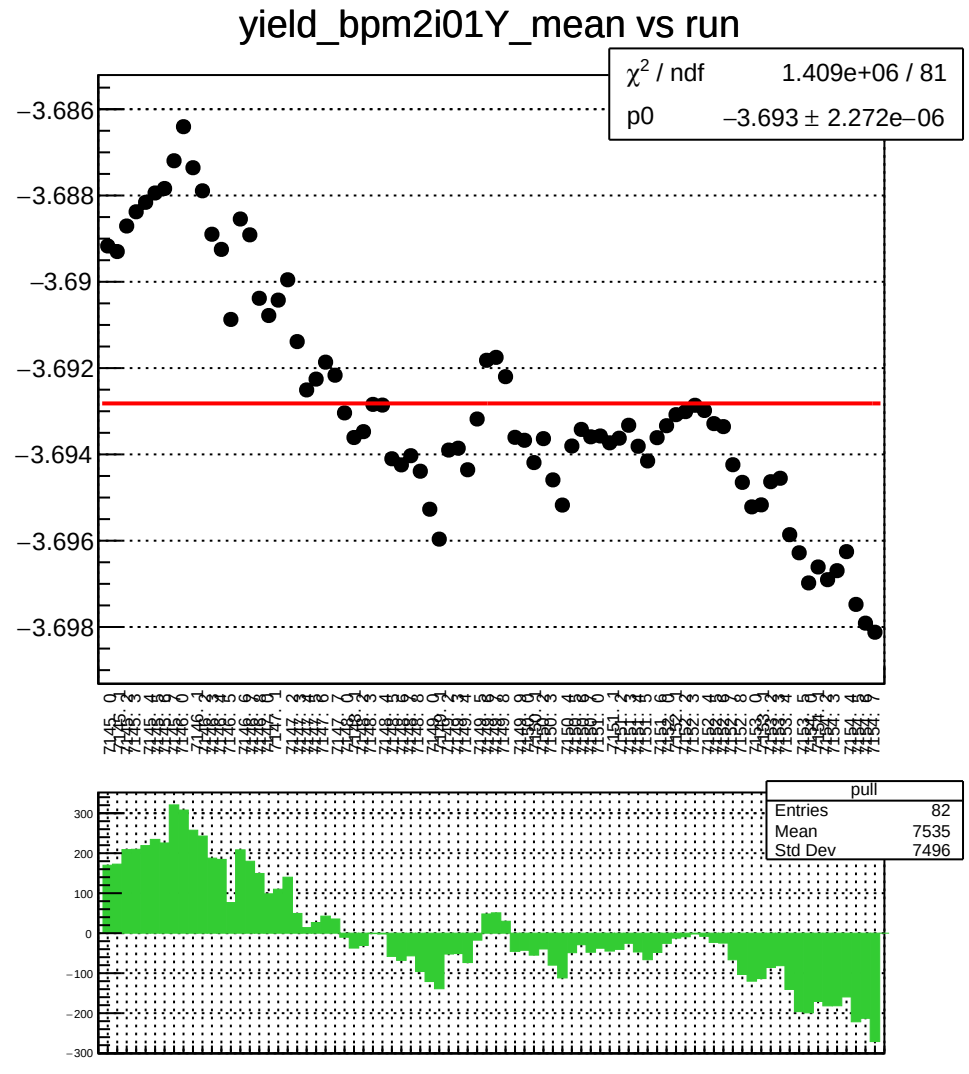

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

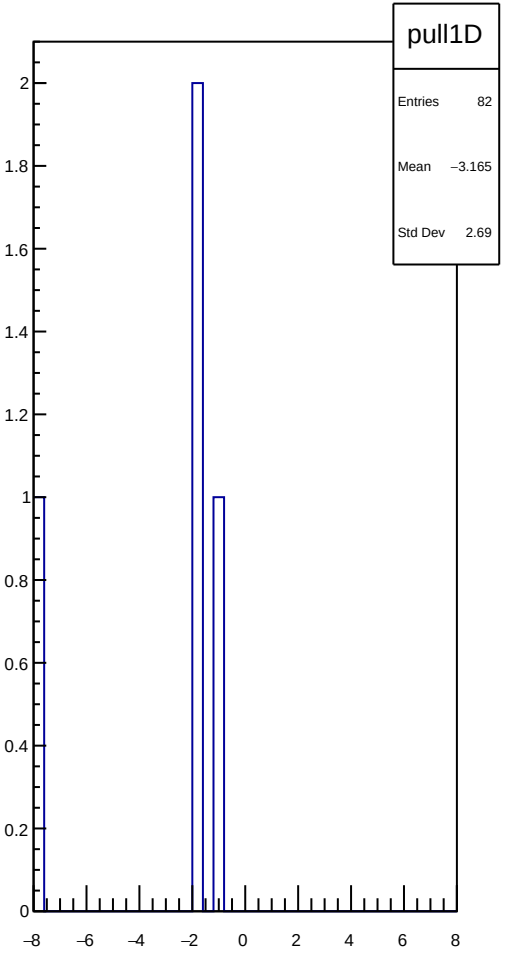

yield_bpm1i06Y_rms vs run
χ² / ndf 1.108e+05 / 81
p0 0.003658 ± 3.035e−06
0.025
0.02
0.015
0.01
0.005

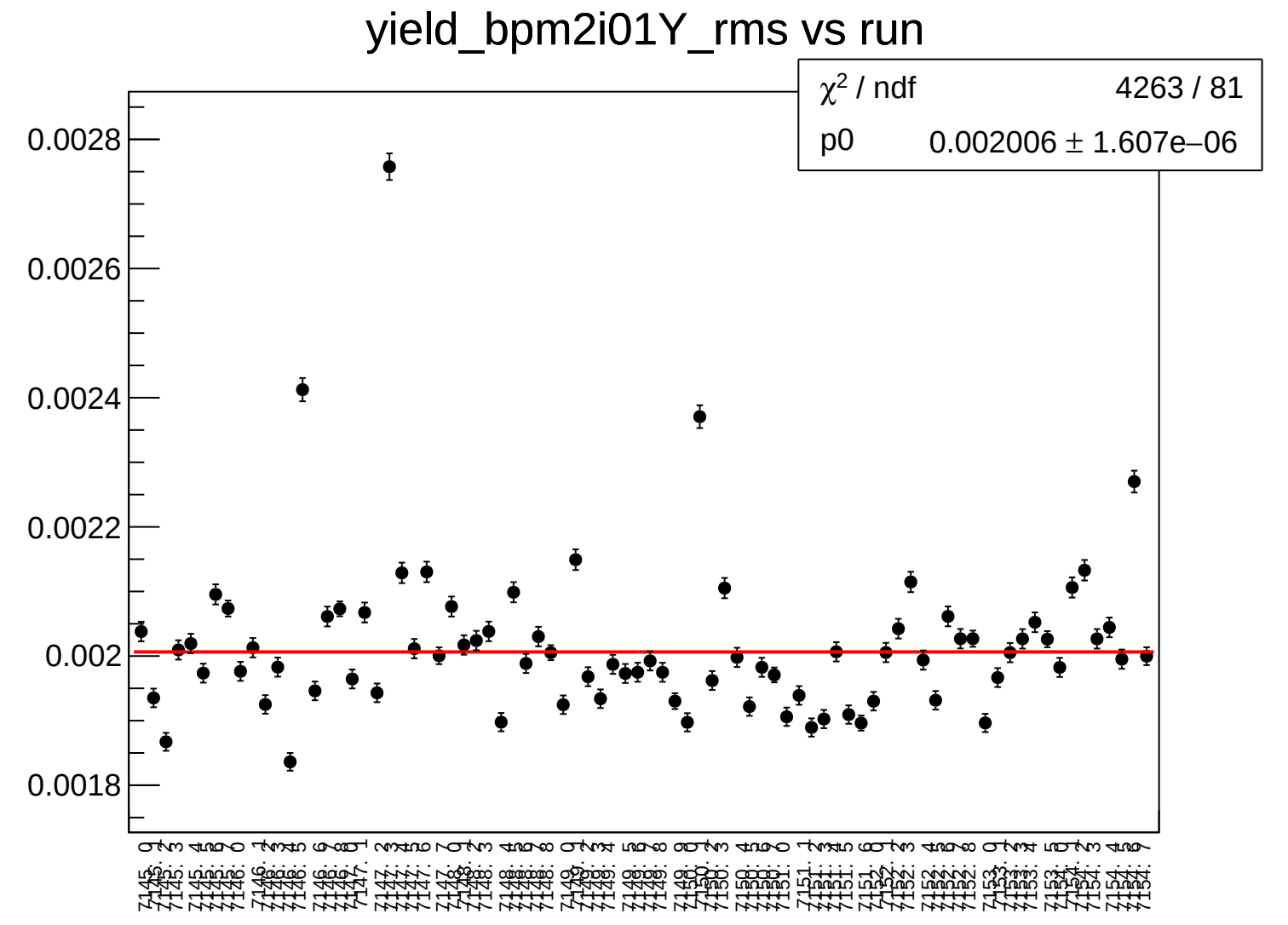

yield_bpm2i01X_mean vs run
χ² / ndf 2.116e+07 / 81
p0 0.5767 ± 2.328e−06
0.59
0.58
0.57
0.56
0.55
0.54
pull
Entries 82
Mean 808.8
Std Dev 766
500
0
−500
−1000
−1500

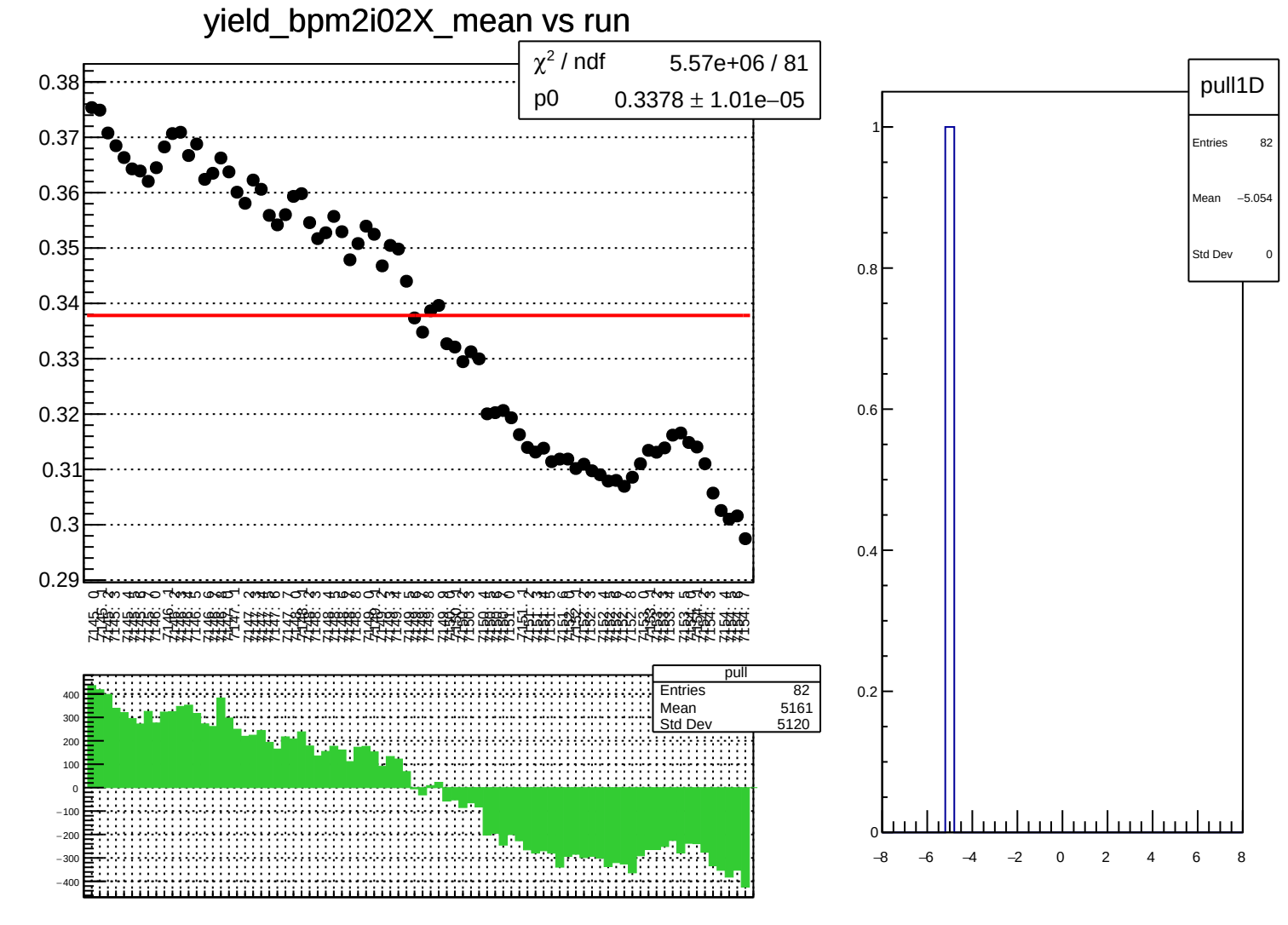

pull1D
Entries 82
Mean −1.075
Std Dev 2.384
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

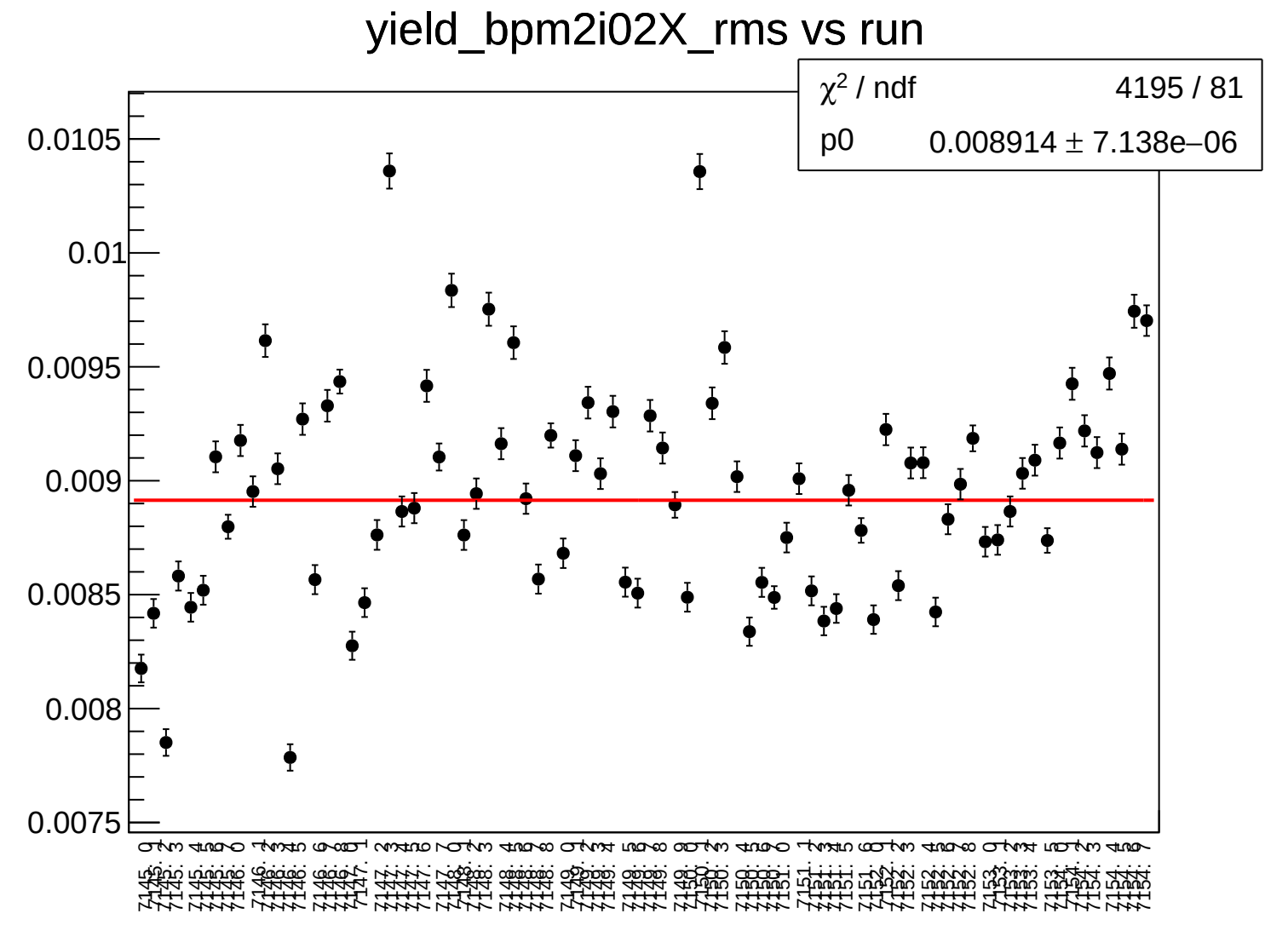

yield_bpm2i01X_rms vs run
χ² / ndf 1.017e+04 / 81
p0 0.002052 ± 1.646e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002

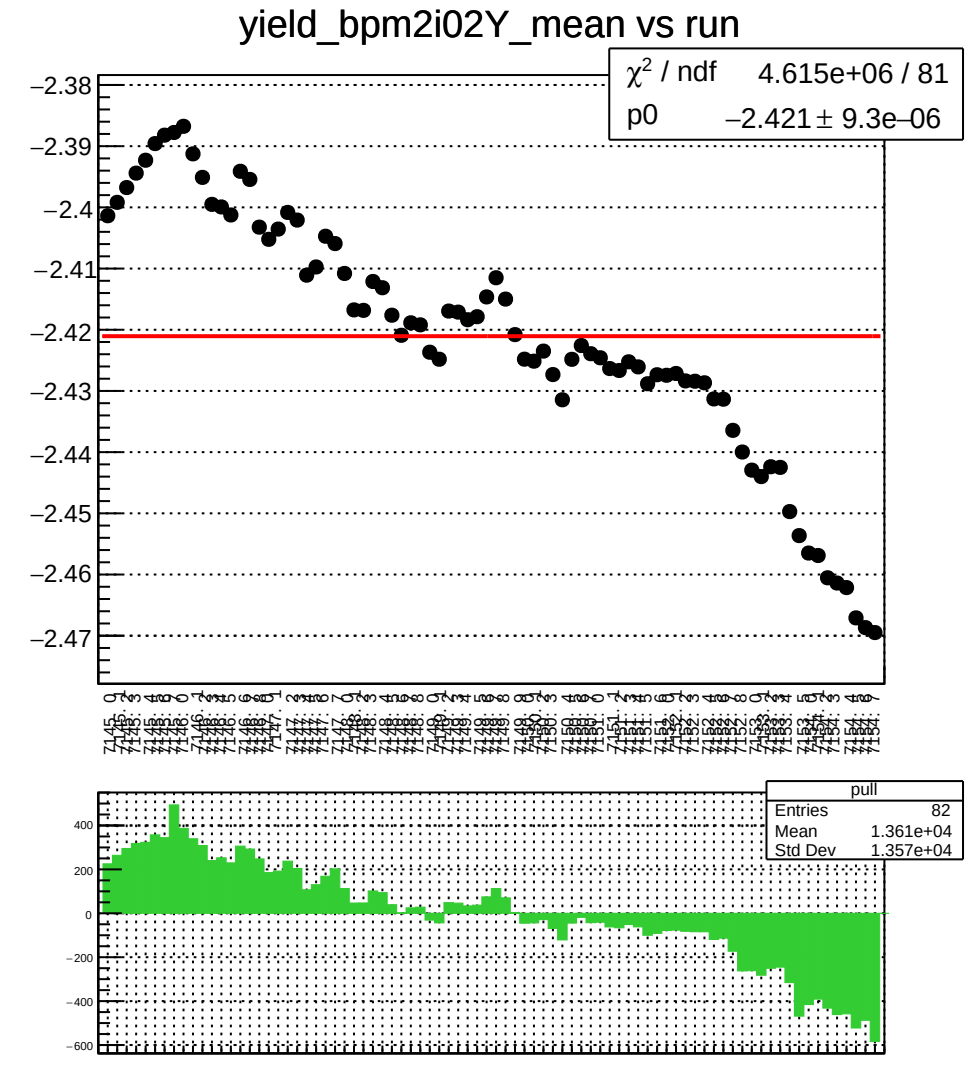

yield_bpm2i01Y_mean vs run
χ² / ndf 1.409e+06 / 81
p0 −3.693 ± 2.272e−06
−3.686
−3.688
−3.69
−3.692
−3.694
−3.696
−3.698
pull
Entries 82
Mean 7535
Std Dev 7496
300
200
100
0
−100
−200
−300

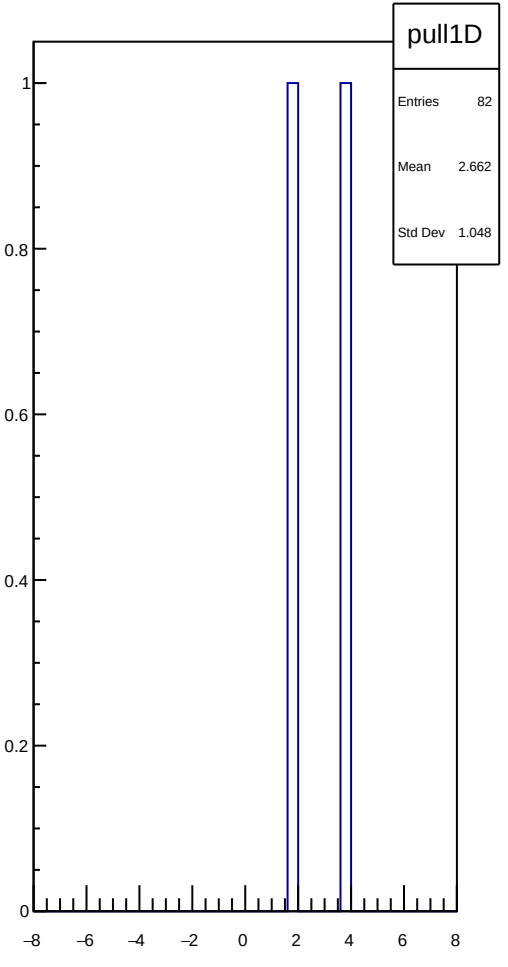

pull1D
Entries 82
Mean −3.165
Std Dev 2.69
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

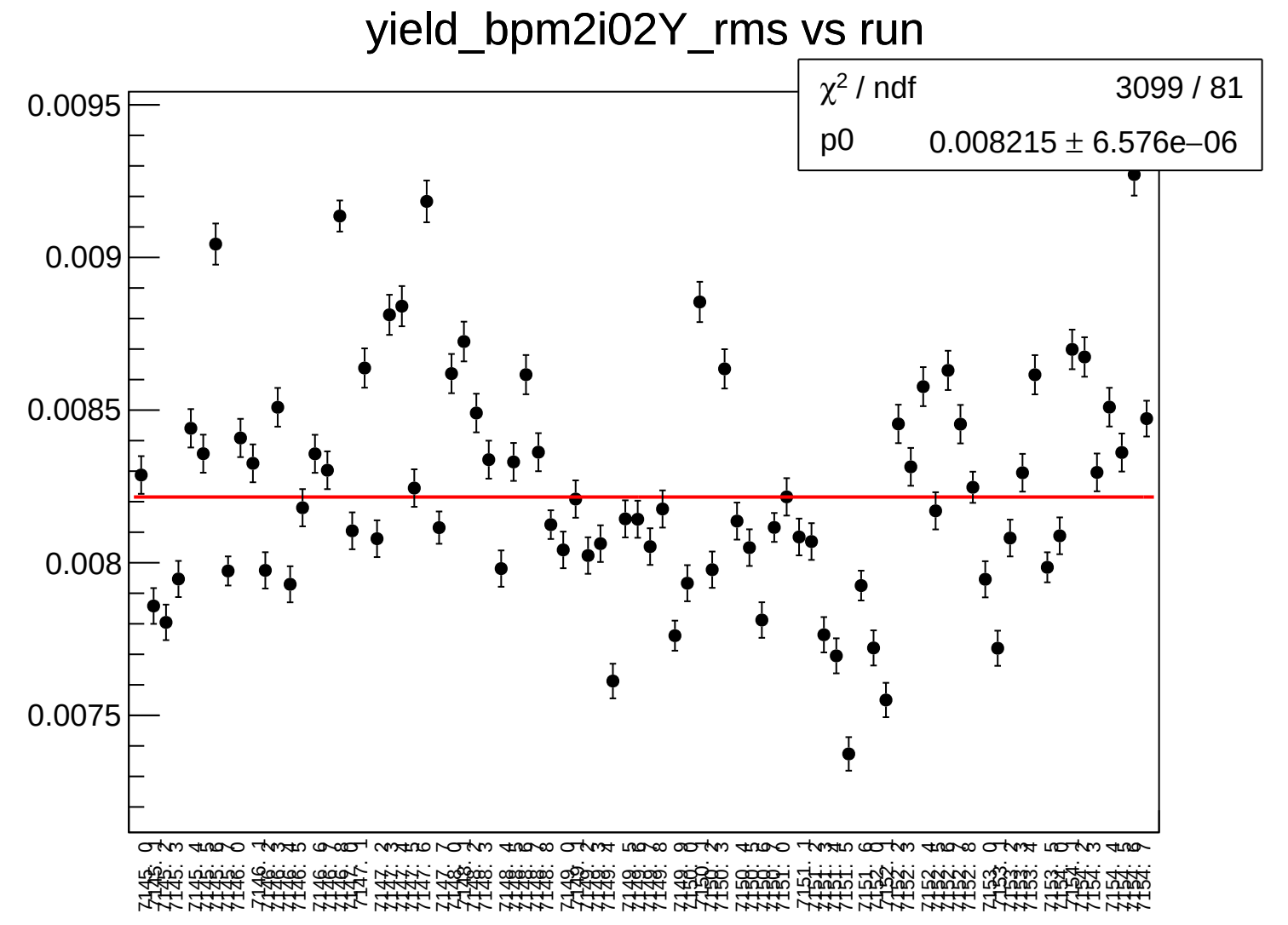

yield_bpm2i01Y_rms vs run
χ² / ndf 4263 / 81
p0 0.002006 ± 1.607e−06
0.0028
0.0026
0.0024
0.0022
0.002
0.0018

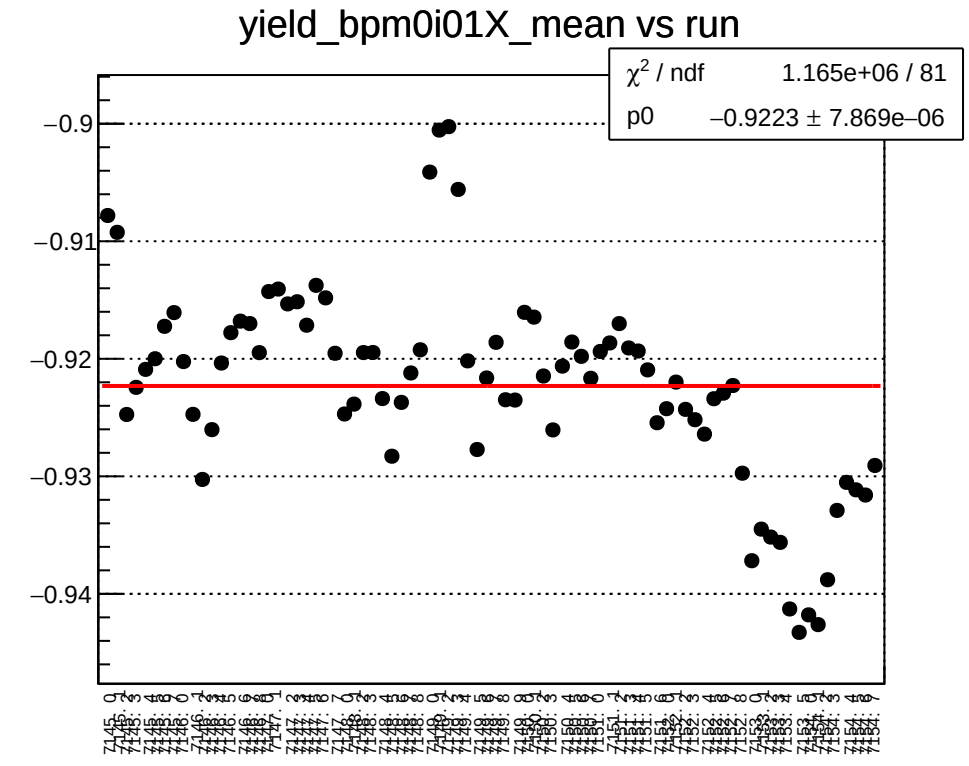

yield_bpm2i02X_mean vs run
χ² / ndf 5.57e+06 / 81
p0 0.3378 ± 1.01e−05
pull
Entries 82
Mean 5161
Std Dev 5120
pull1D
Entries 82
Mean −5.054
Std Dev 0

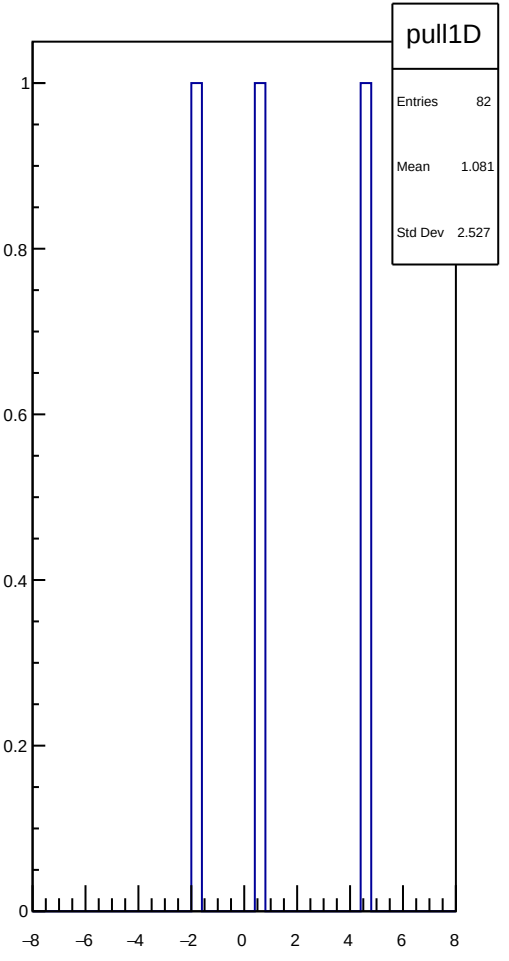

yield_bpm2i02X_rms vs run
χ² / ndf 4195 / 81
p0 0.008914 ± 7.138e−06
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075

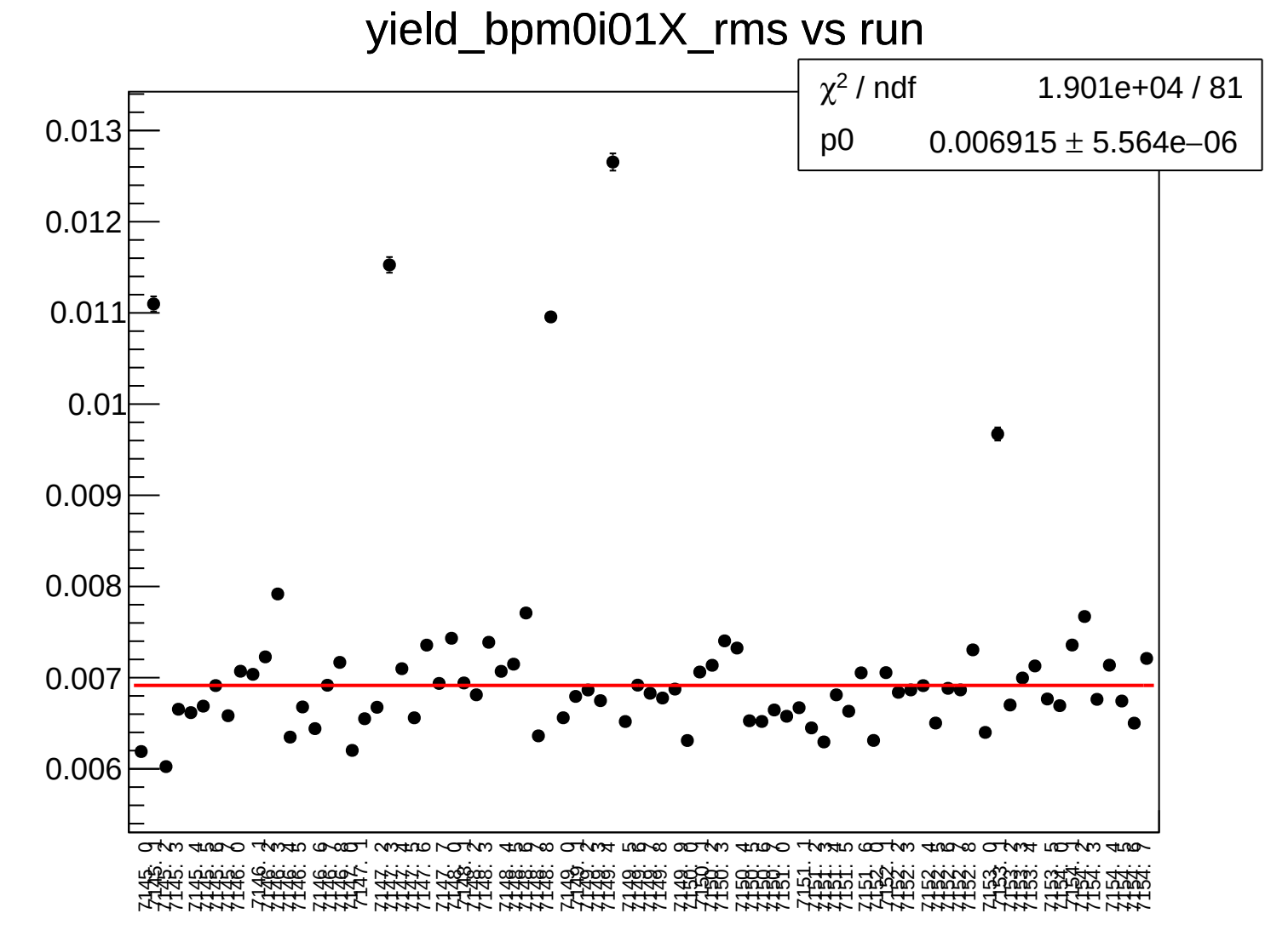

yield_bpm2i02Y_mean vs run
χ² / ndf 4.615e+06 / 81
p0 −2.421 ± 9.3e−06
−2.38
−2.39
−2.4
−2.41
−2.42
−2.43
−2.44
−2.45
−2.46
−2.47
pull
Entries 82
Mean 1.361e+04
Std Dev 1.357e+04
400
200
0
−200
−400
−600

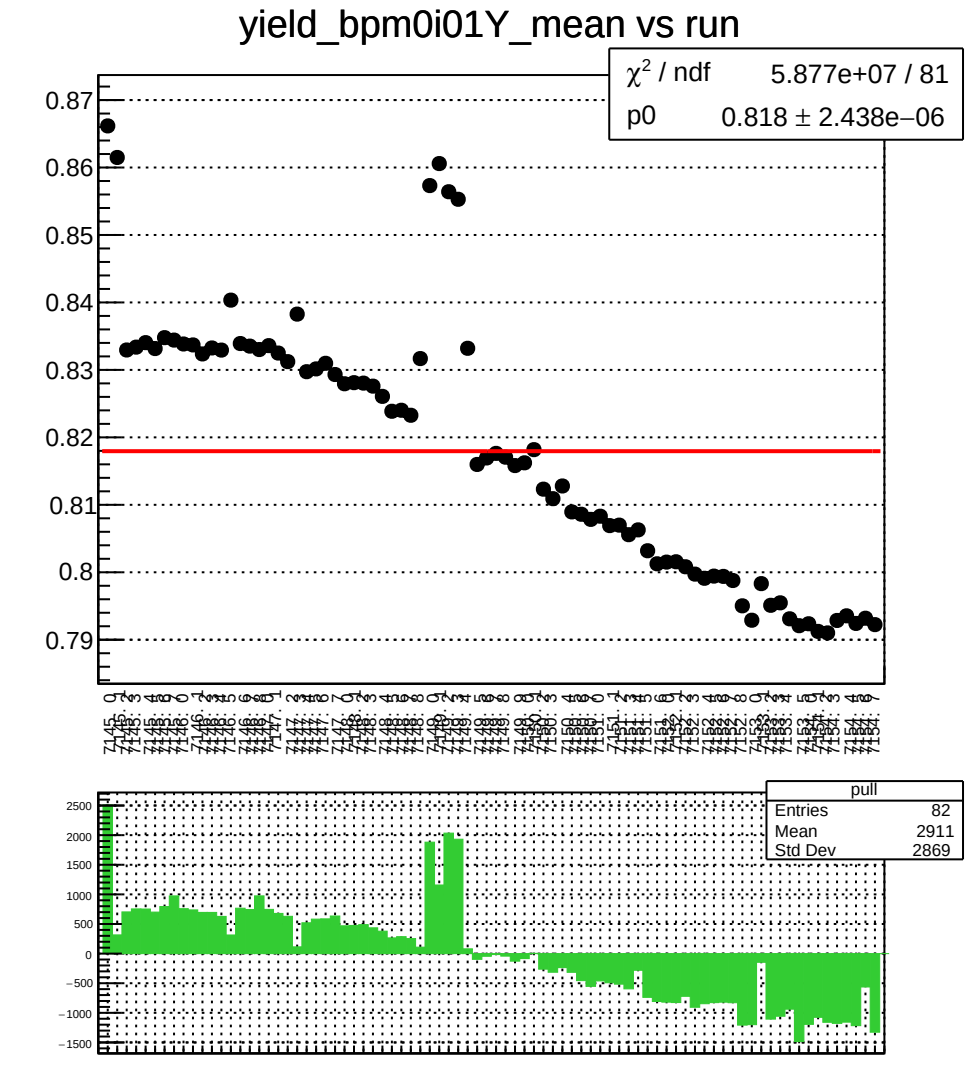

pull1D
Entries 82
Mean 2.662
Std Dev 1.048
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

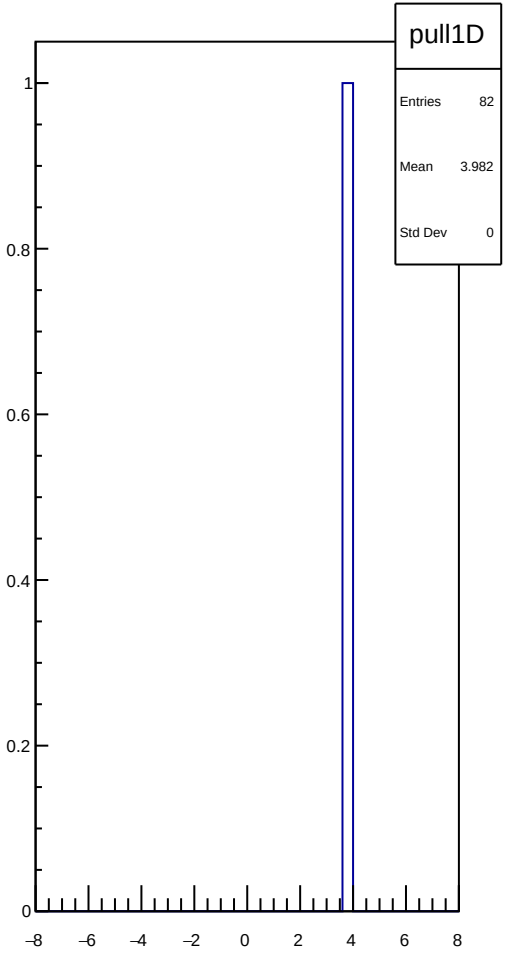

yield_bpm2i02Y_rms vs run
χ^2 / ndf 3099 / 81
p0 0.008215 ± 6.576e−06
0.0095
0.009
0.0085
0.008
0.0075

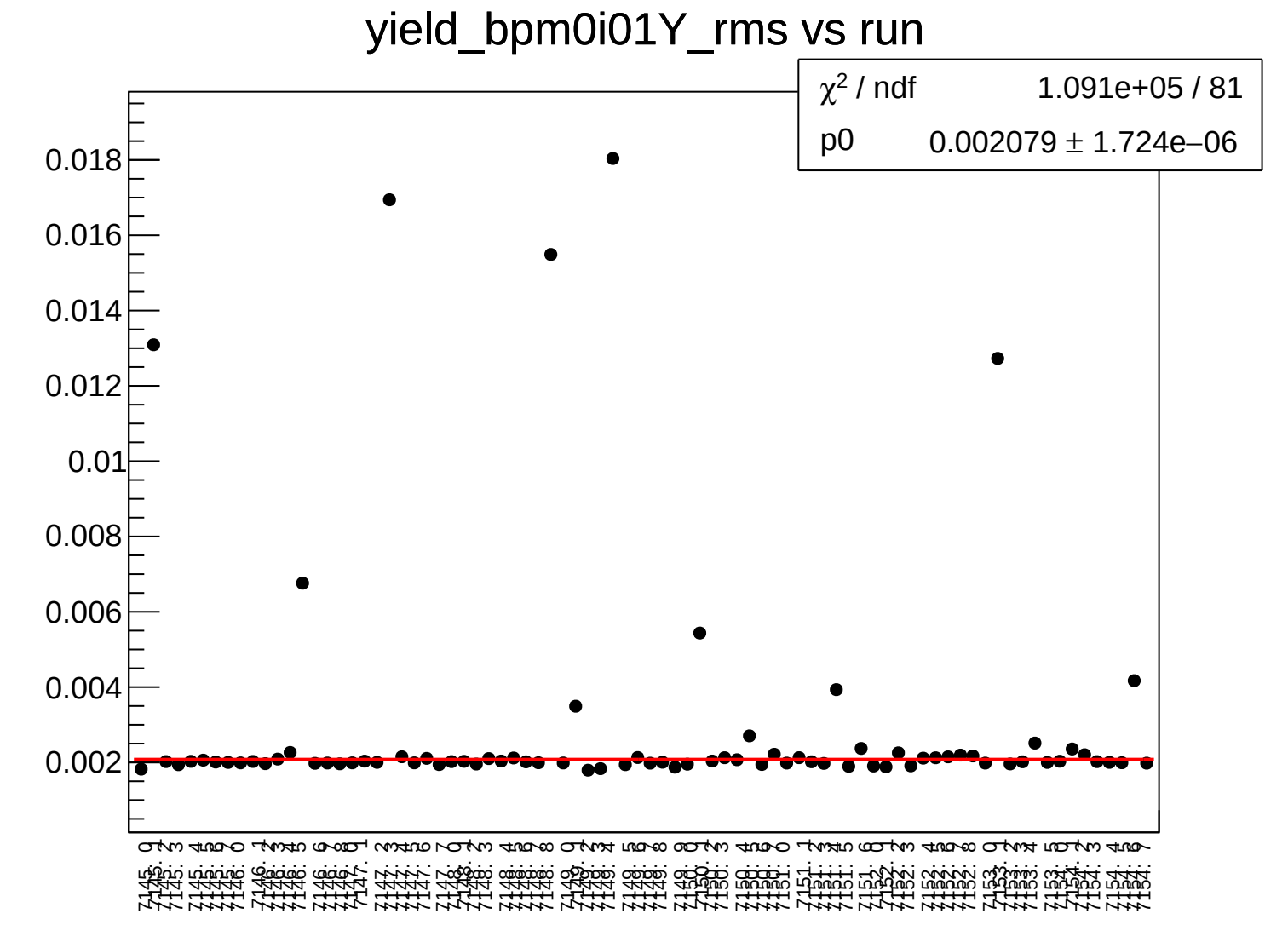

yield_bpm0i01X_mean vs run
χ² / ndf 1.165e+06 / 81
p0 −0.9223 ± 7.869e−06
−0.9
−0.91
−0.92
−0.93
−0.94
pull
Entries 82
Mean 6507
Std Dev 6458
300
200
100
0
−100
−200
−300

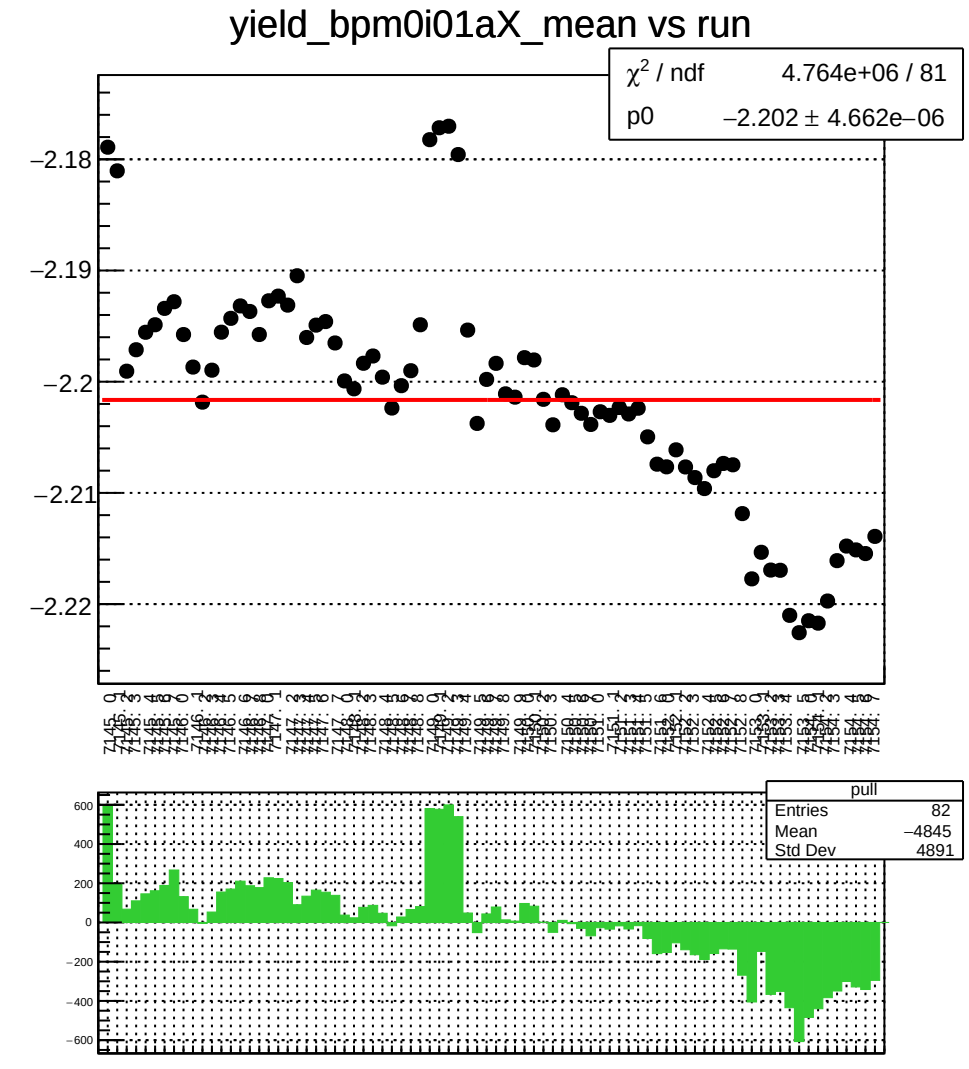

pull1D
Entries 82
Mean 1.081
Std Dev 2.527
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

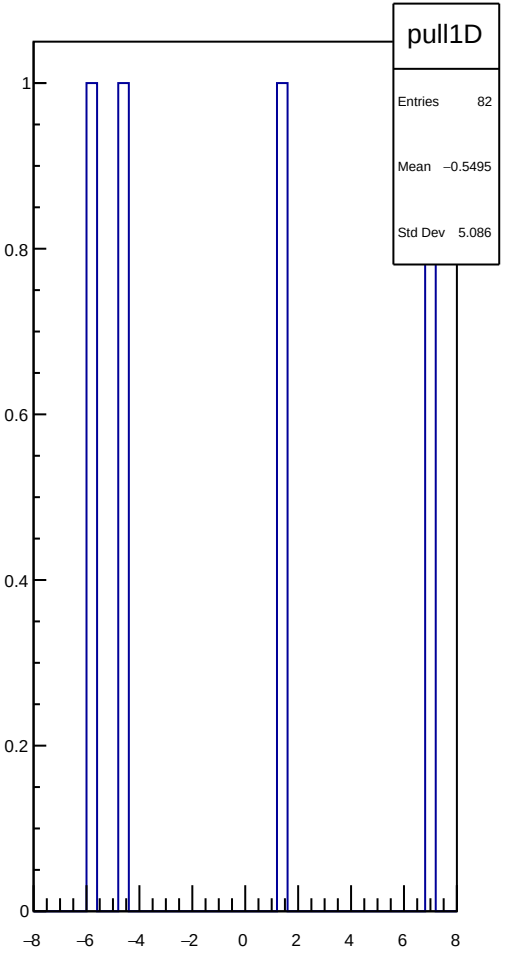

yield_bpm0i01X_rms vs run
χ² / ndf 1.901e+04 / 81
p0 0.006915 ± 5.564e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

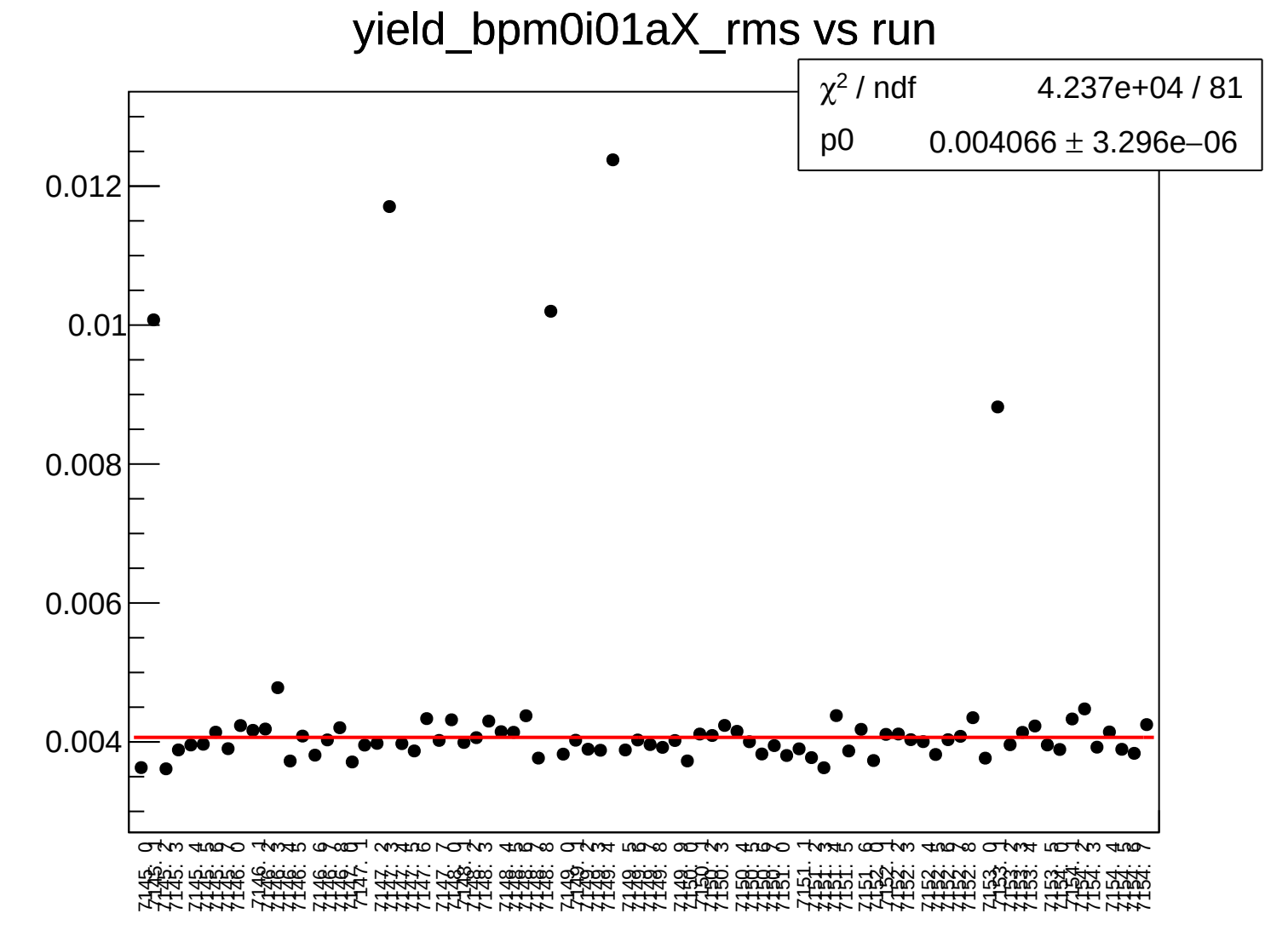

yield_bpm0i01Y_mean vs run
χ² / ndf 5.877e+07 / 81
p0 0.818 ± 2.438e−06
pull
Entries 82
Mean 2911
Std Dev 2869

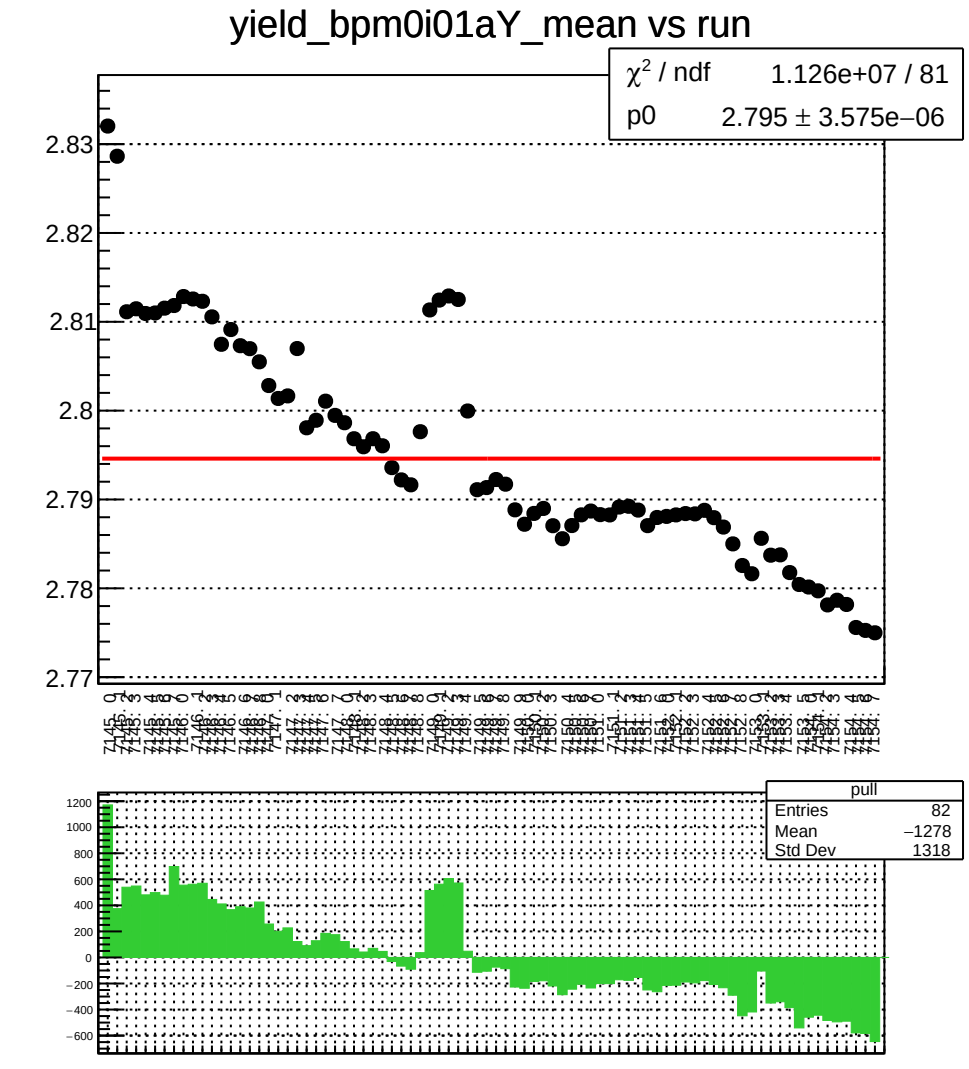

pull1D
Entries 82
Mean 3.982
Std Dev 0

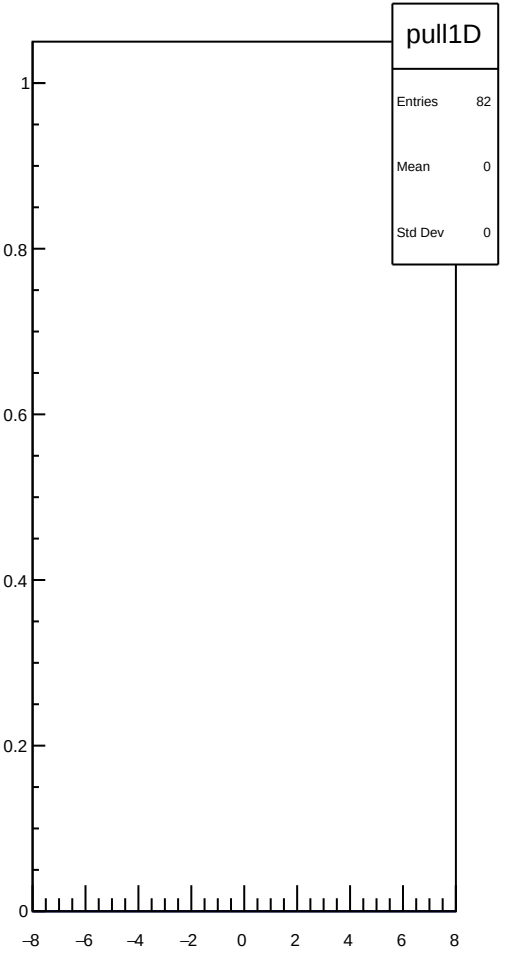

yield_bpm0i01Y_rms vs run
χ² / ndf 1.091e+05 / 81
p0 0.002079 ± 1.724e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

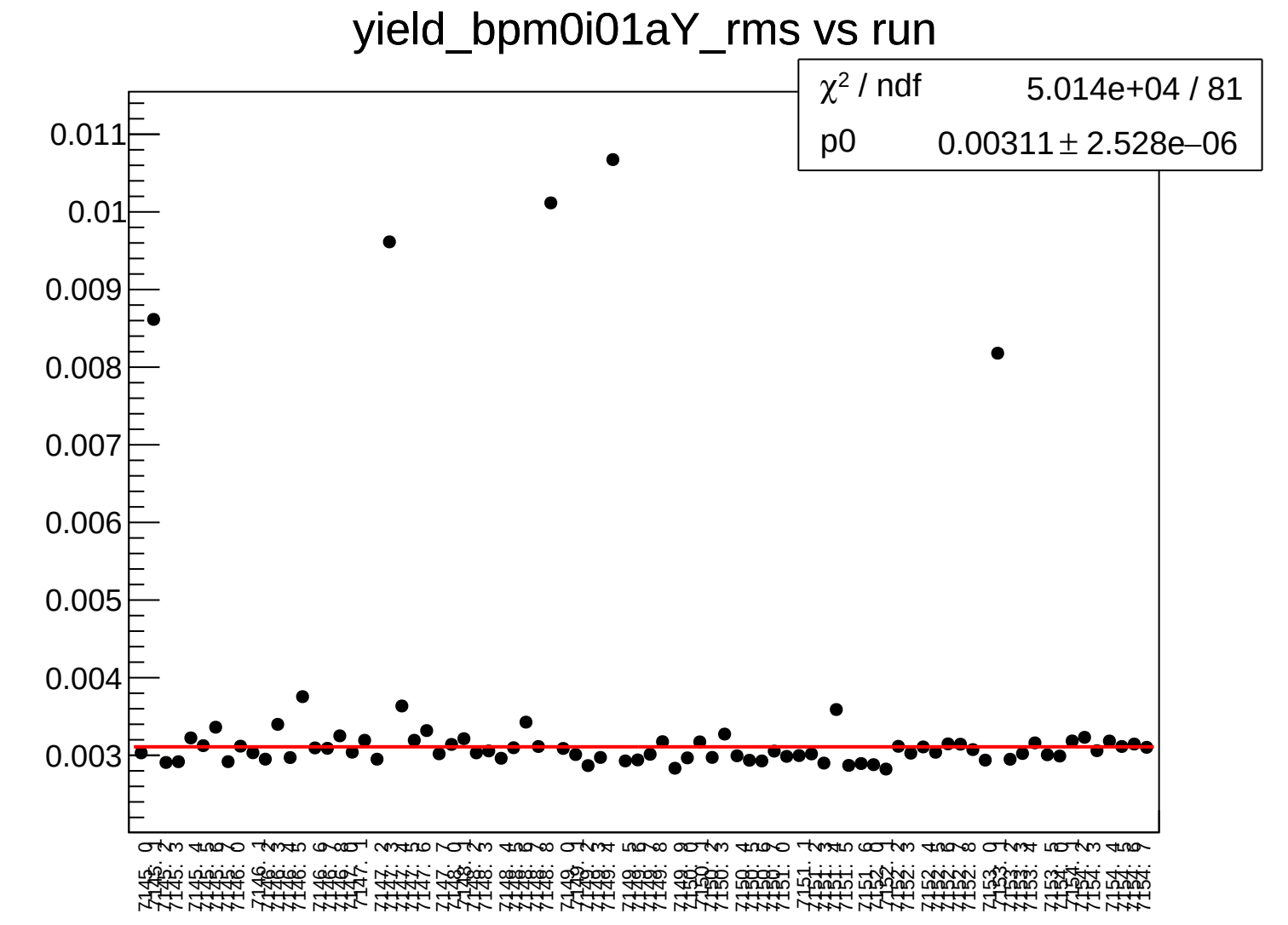

yield_bpm0i01aX_mean vs run
χ² / ndf 4.764e+06 / 81
p0 −2.202 ± 4.662e−06
−2.18
−2.19
−2.2
−2.21
−2.22
pull
Entries 82
Mean −4845
Std Dev 4891
600
400
200
0
−200
−400
−600

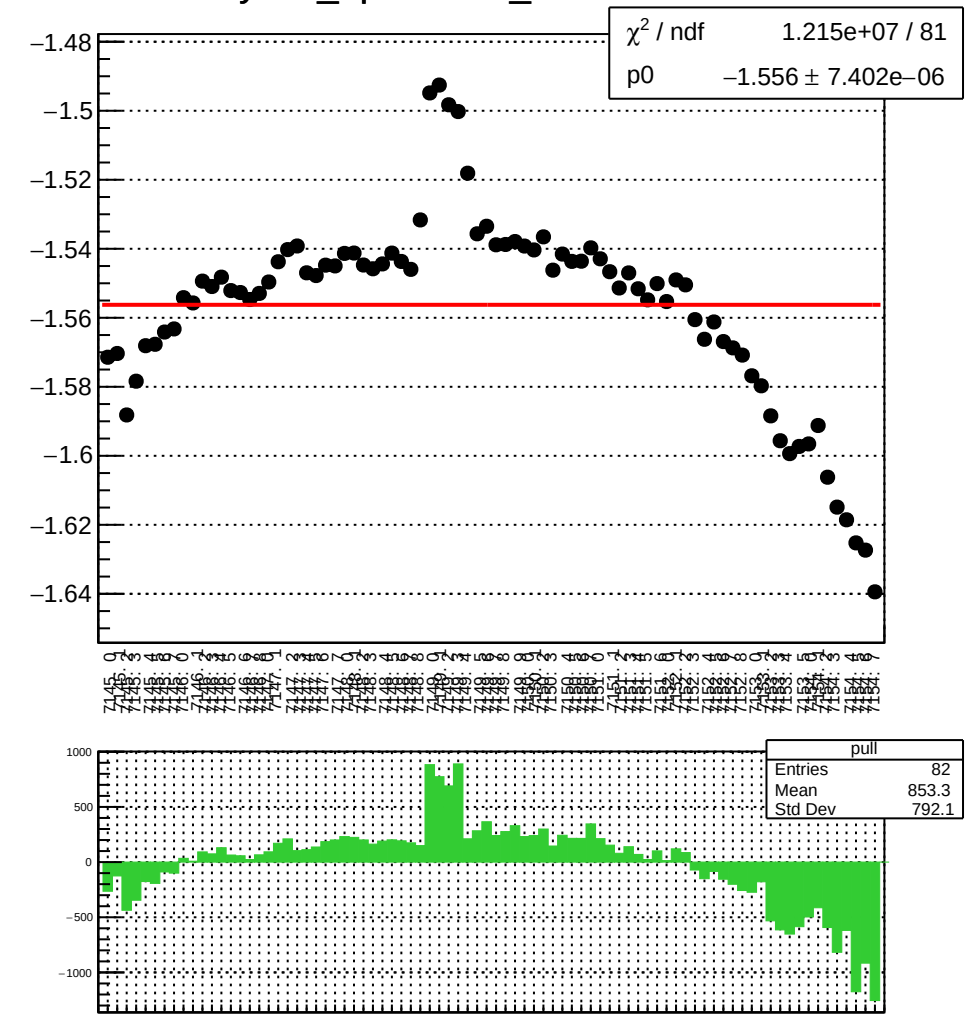

pull1D
Entries 82
Mean −0.5495
Std Dev 5.086
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

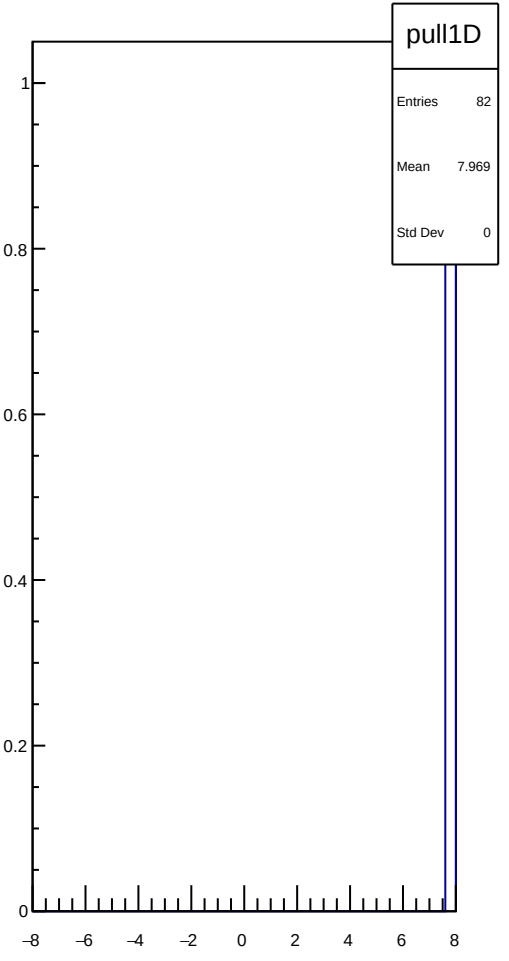

yield_bpm0i01aX_rms vs run
χ² / ndf 4.237e+04 / 81
p0 0.004066 ± 3.296e−06
0.012
0.01
0.008
0.006
0.004

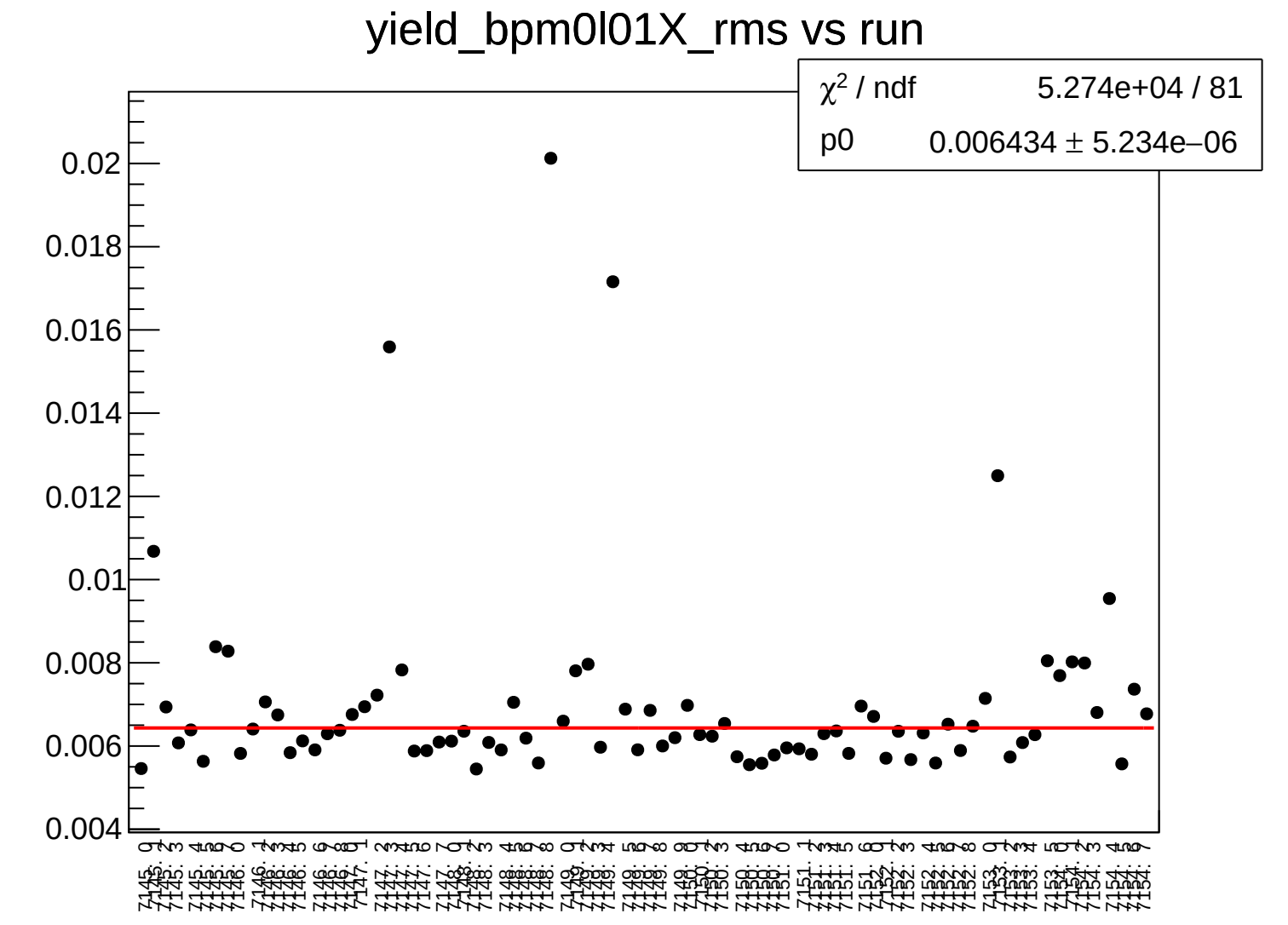

yield_bpm0i01aY_mean vs run
χ² / ndf 1.126e+07 / 81
p0 2.795 ± 3.575e−06
2.83
2.82
2.81
2.8
2.79
2.78
2.77
pull
Entries 82
Mean −1278
Std Dev 1318
1200
1000
800
600
400
200
0
−200
−400
−600

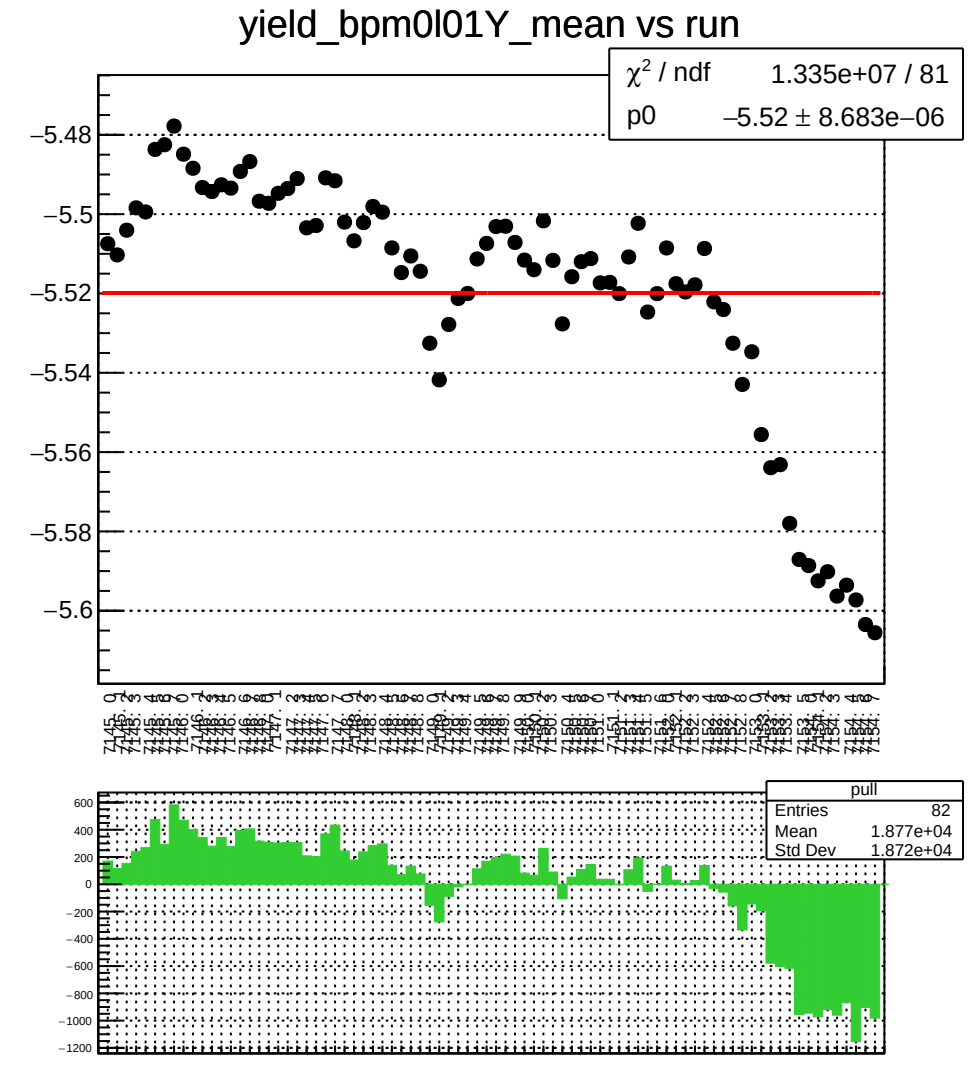

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

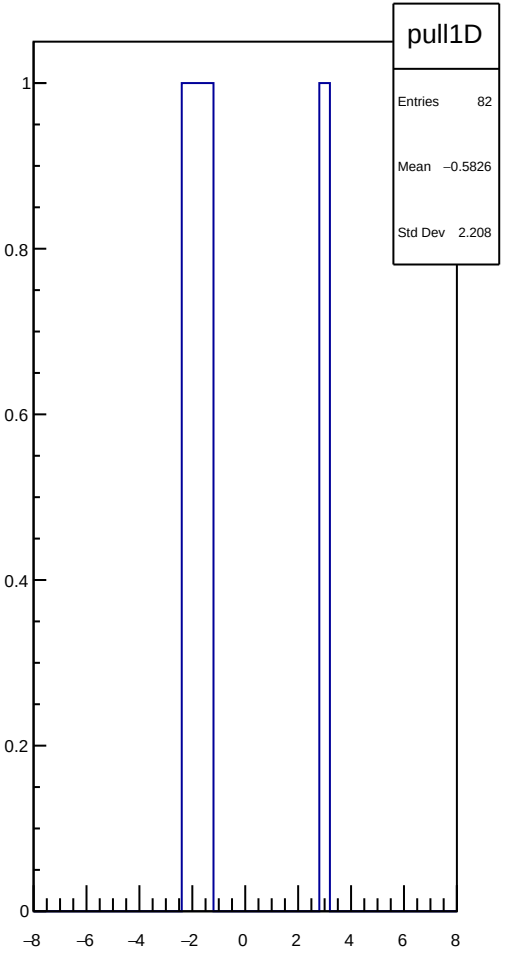

yield_bpm0i01aY_rms vs run
χ² / ndf 5.014e+04 / 81
p0 0.00311 ± 2.528e–06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

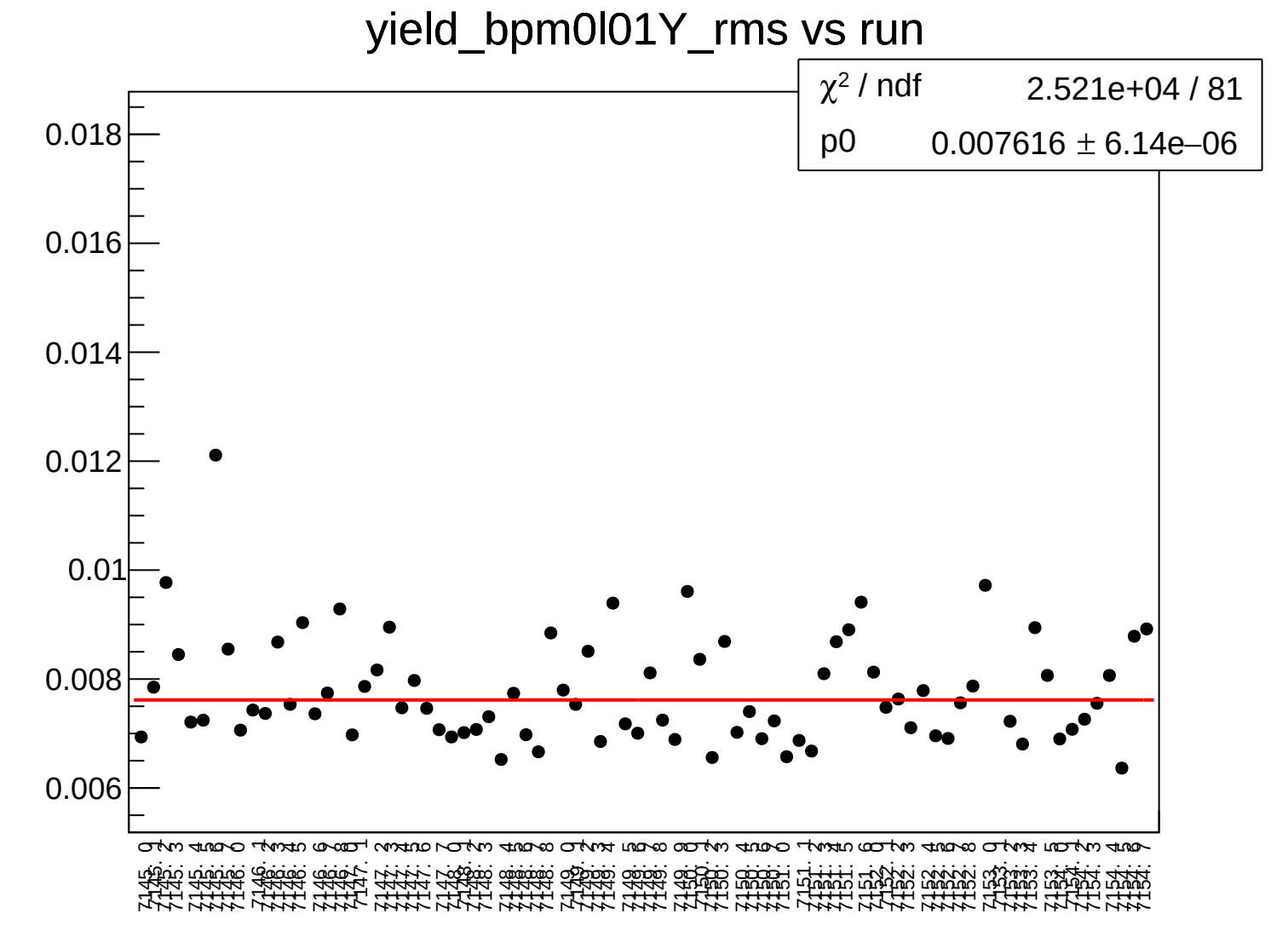

yield_bpm0l01X_mean vs run
χ² / ndf 1.215e+07 / 81
p0 −1.556 ± 7.402e−06
−1.48
−1.5
−1.52
−1.54
−1.56
−1.58
−1.6
−1.62
−1.64
pull
Entries 82
Mean 853.3
Std Dev 792.1
1000
500
0
−500
−1000

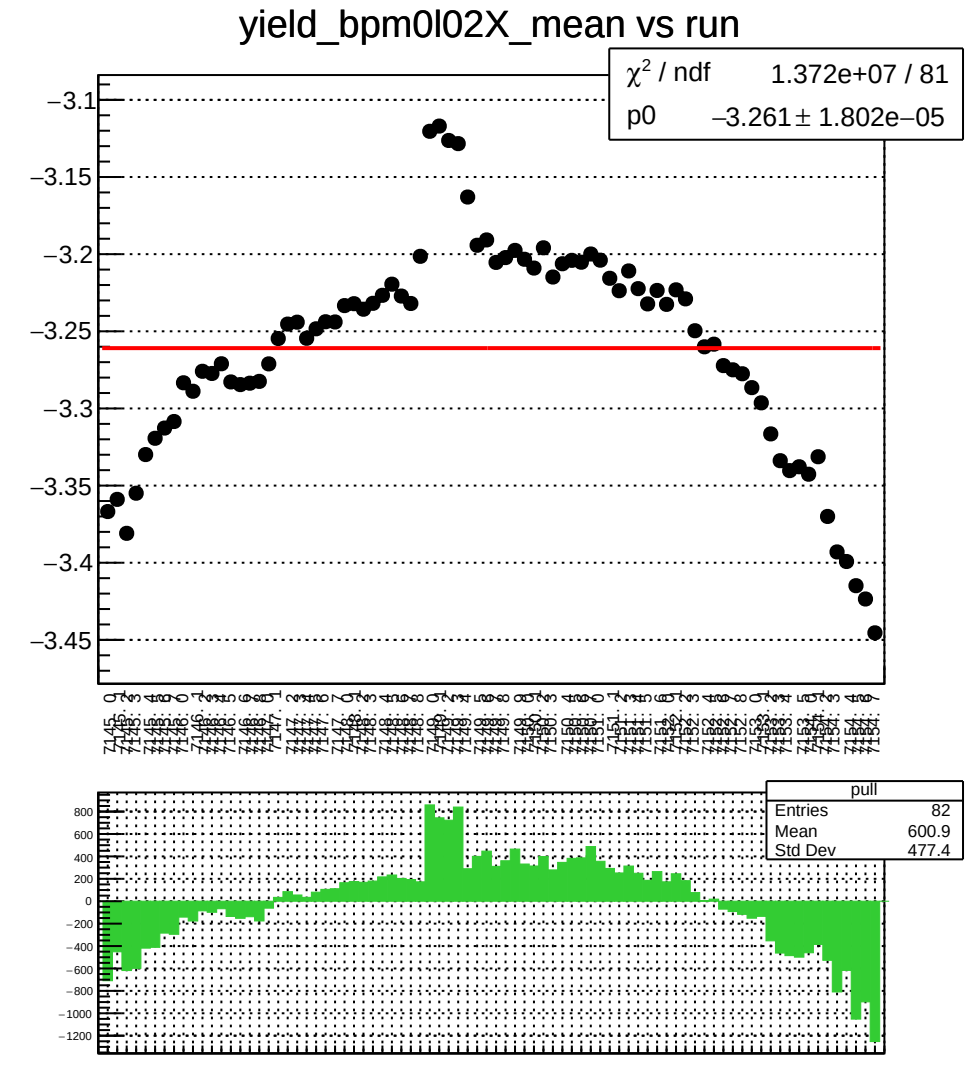

pull1D
Entries 82
Mean 7.969
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

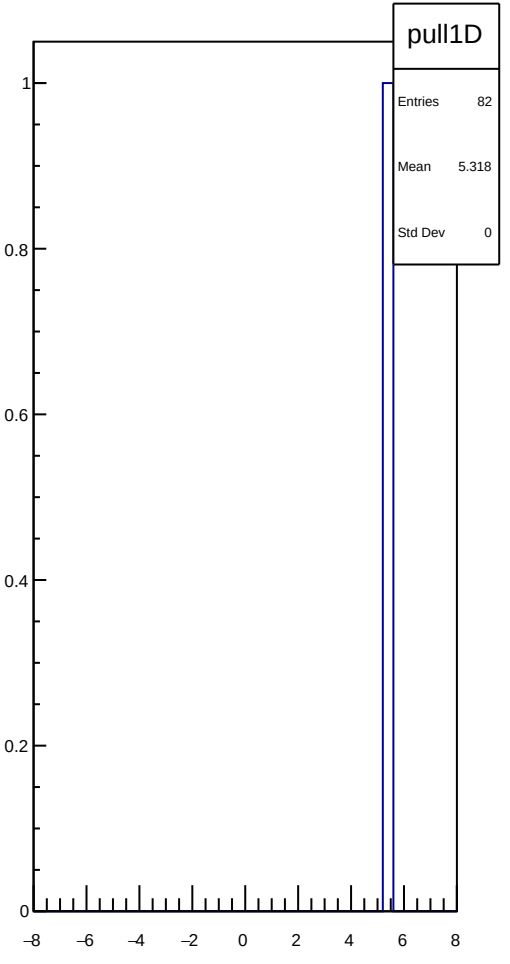

yield_bpm0l01X_rms vs run
χ^2 / ndf 5.274e+04 / 81
p0 0.006434 ± 5.234e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

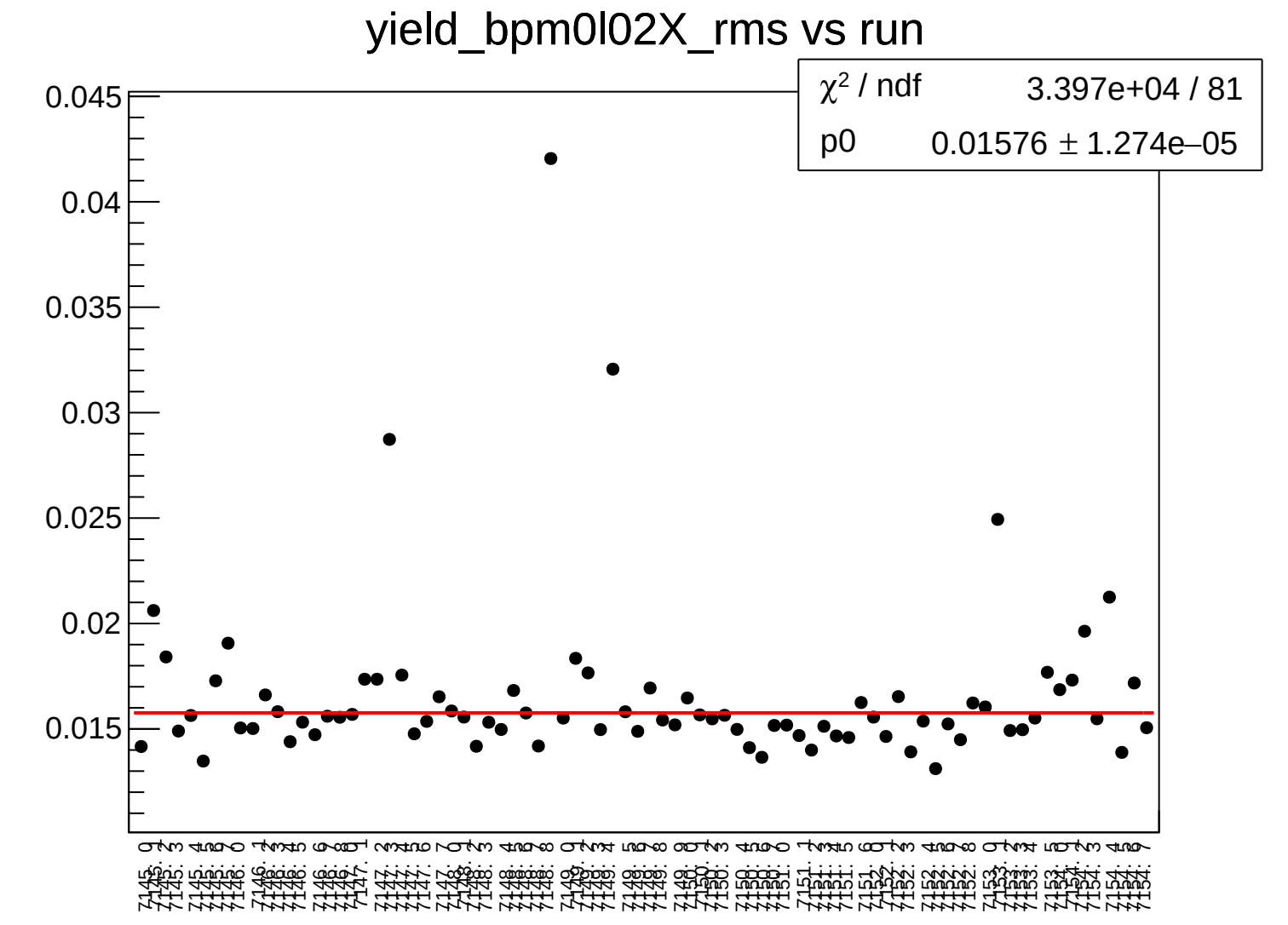

yield_bpm0l01Y_mean vs run
χ² / ndf 1.335e+07 / 81
p0 −5.52 ± 8.683e−06
−5.48
−5.5
−5.52
−5.54
−5.56
−5.58
−5.6
pull
Entries 82
Mean 1.877e+04
Std Dev 1.872e+04
600
400
200
0
−200
−400
−600
−800
−1000
−1200

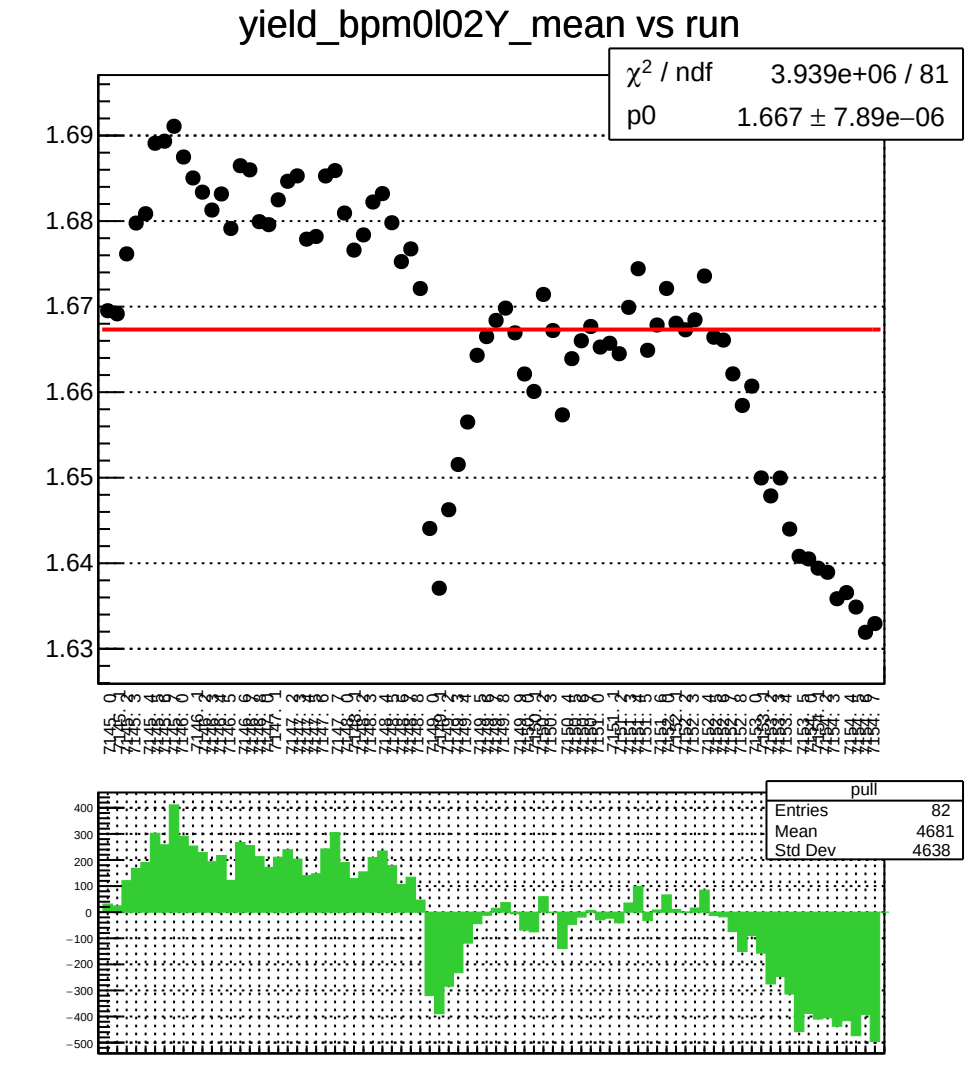

pull1D
Entries 82
Mean −0.5826
Std Dev 2.208
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

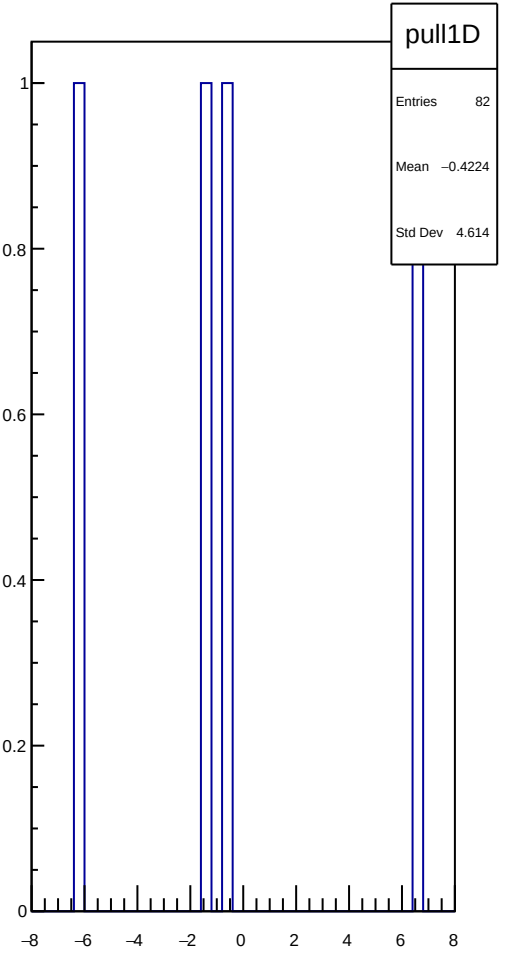

yield_bpm0l01Y_rms vs run
χ² / ndf 2.521e+04 / 81
p0 0.007616 ± 6.14e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

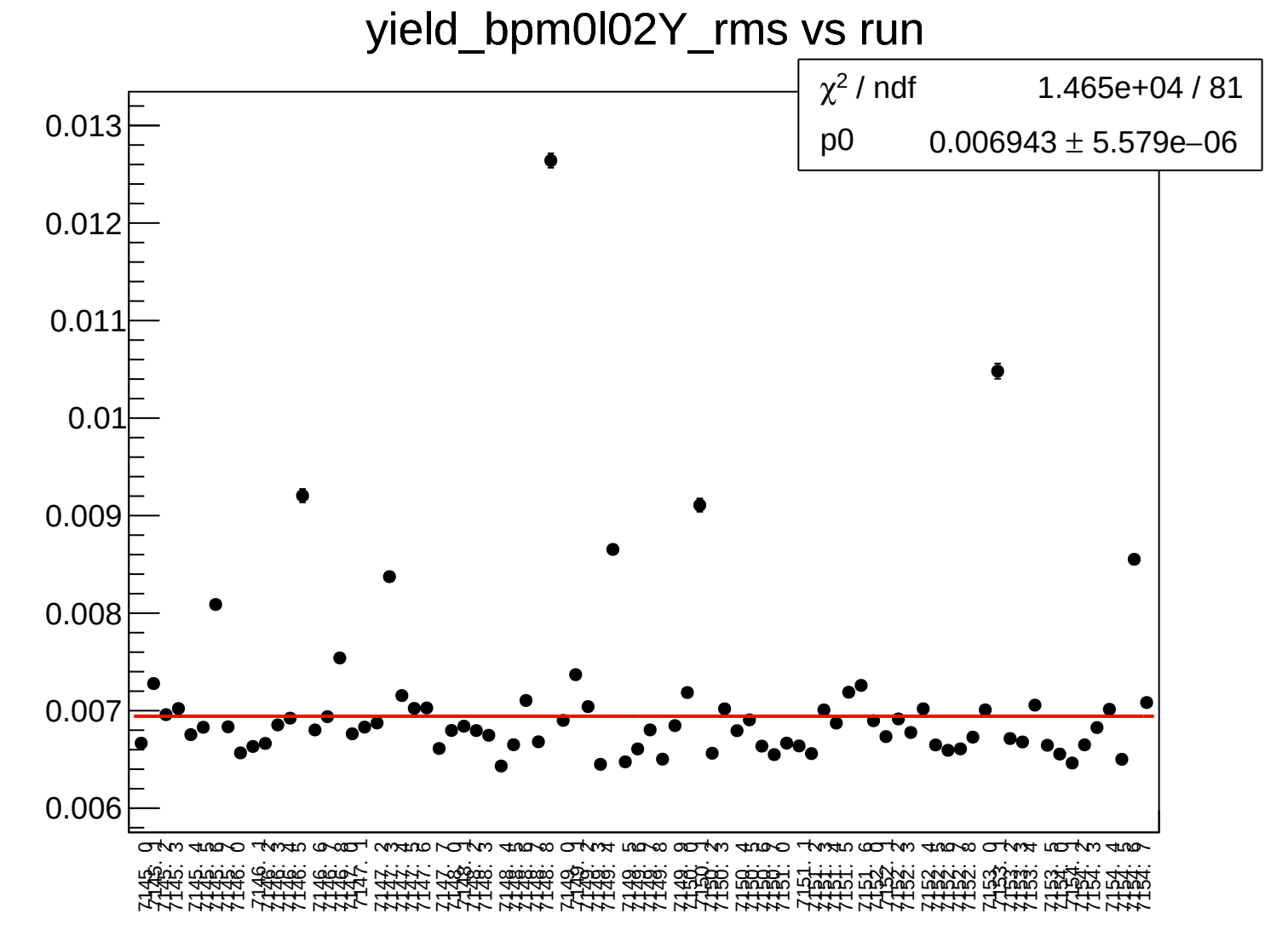

yield_bpm0l02X_mean vs run
χ² / ndf 1.372e+07 / 81
p0 −3.261 ± 1.802e−05
−3.1
−3.15
−3.2
−3.25
−3.3
−3.35
−3.4
−3.45
pull
Entries 82
Mean 600.9
Std Dev 477.4
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

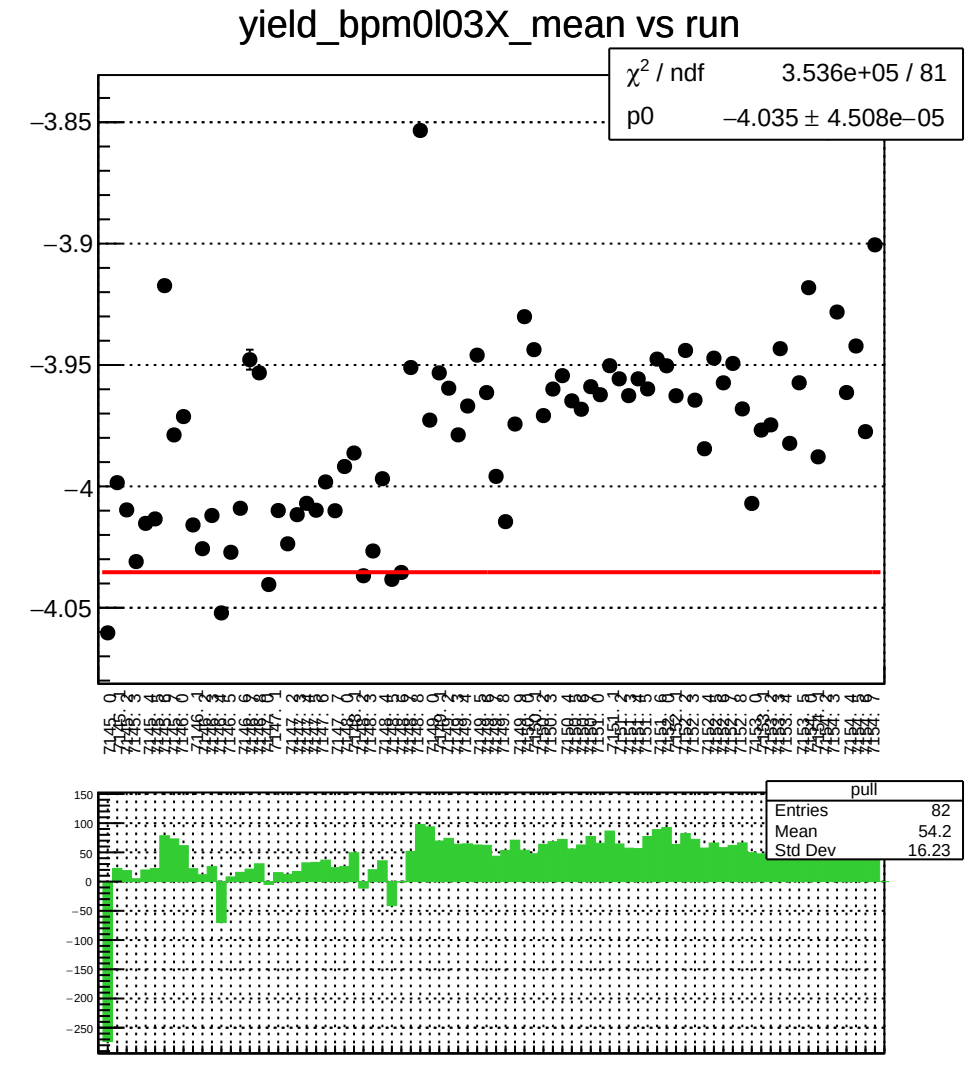

pull1D
Entries 82
Mean 5.318
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

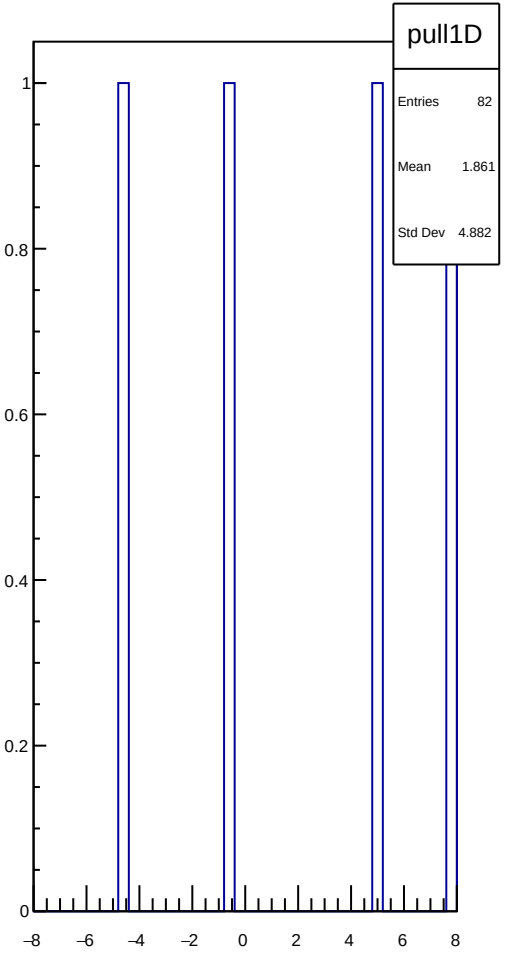

yield_bpm0l02X_rms vs run
χ² / ndf 3.397e+04 / 81
p0 0.01576 ± 1.274e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

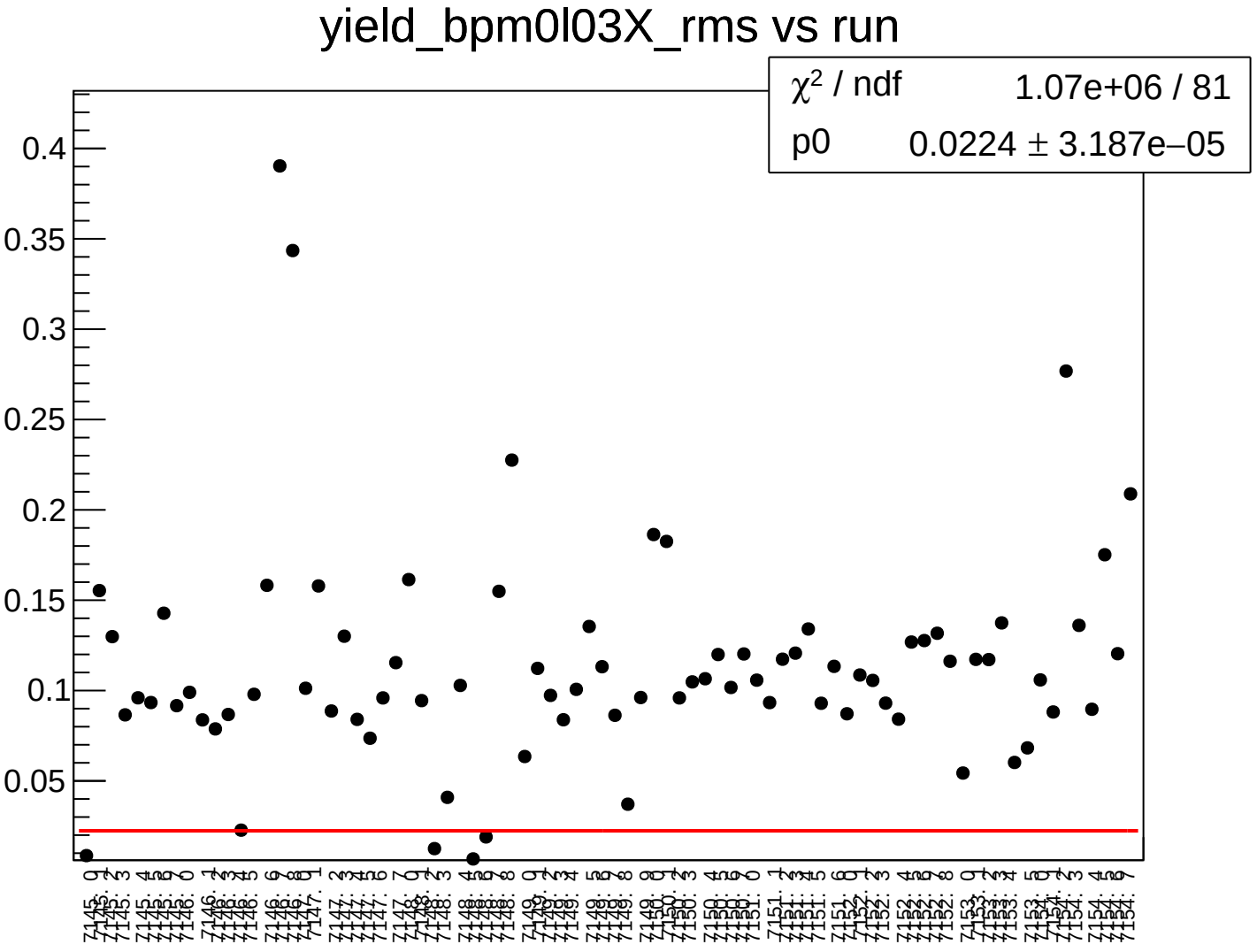

yield_bpm0l02Y_mean vs run
χ² / ndf 3.939e+06 / 81
p0 1.667 ± 7.89e−06
1.69
1.68
1.67
1.66
1.65
1.64
1.63
pull
Entries 82
Mean 4681
Std Dev 4638
400
300
200
100
0
−100
−200
−300
−400
−500

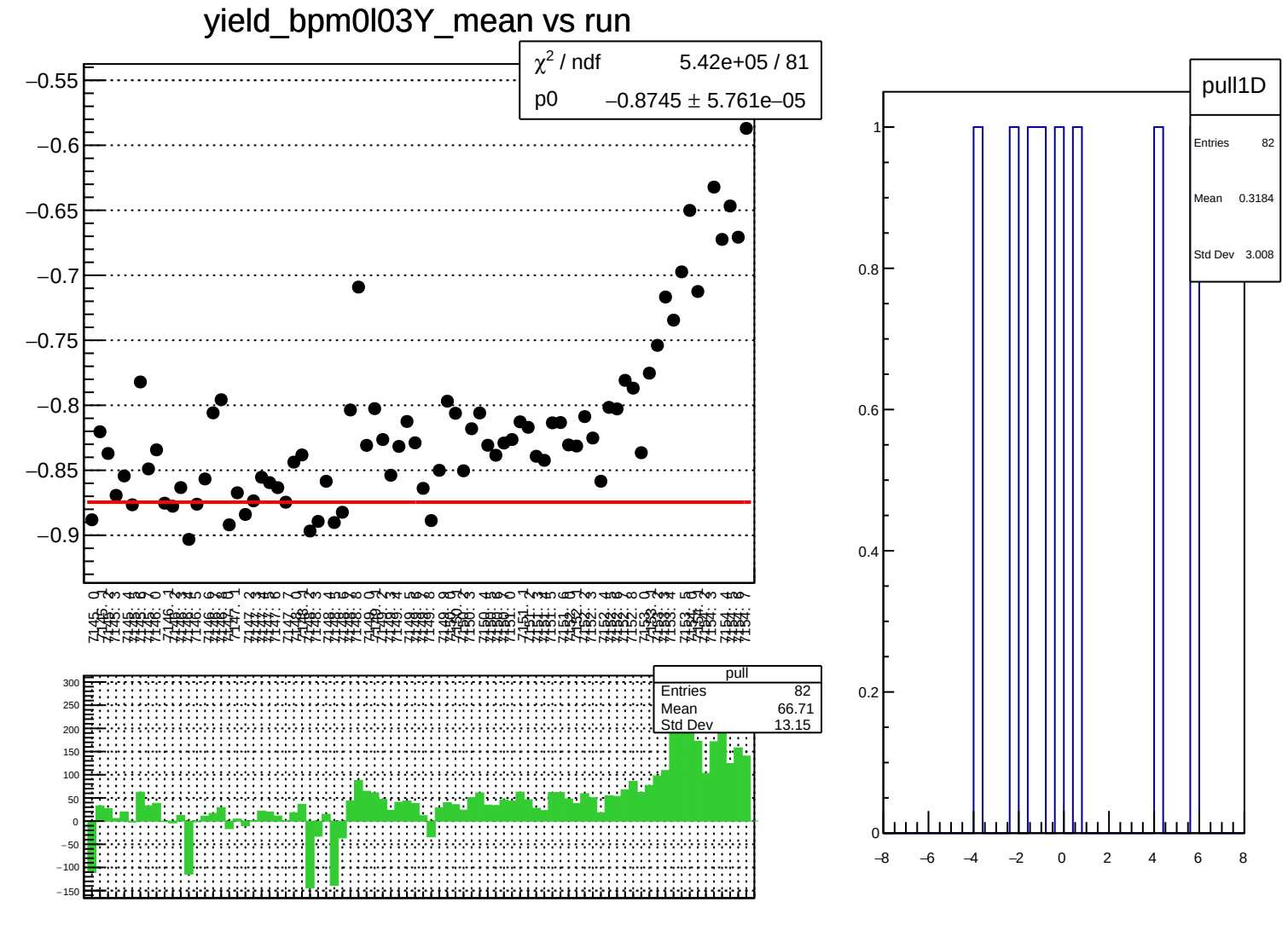

pull1D
Entries 82
Mean −0.4224
Std Dev 4.614
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

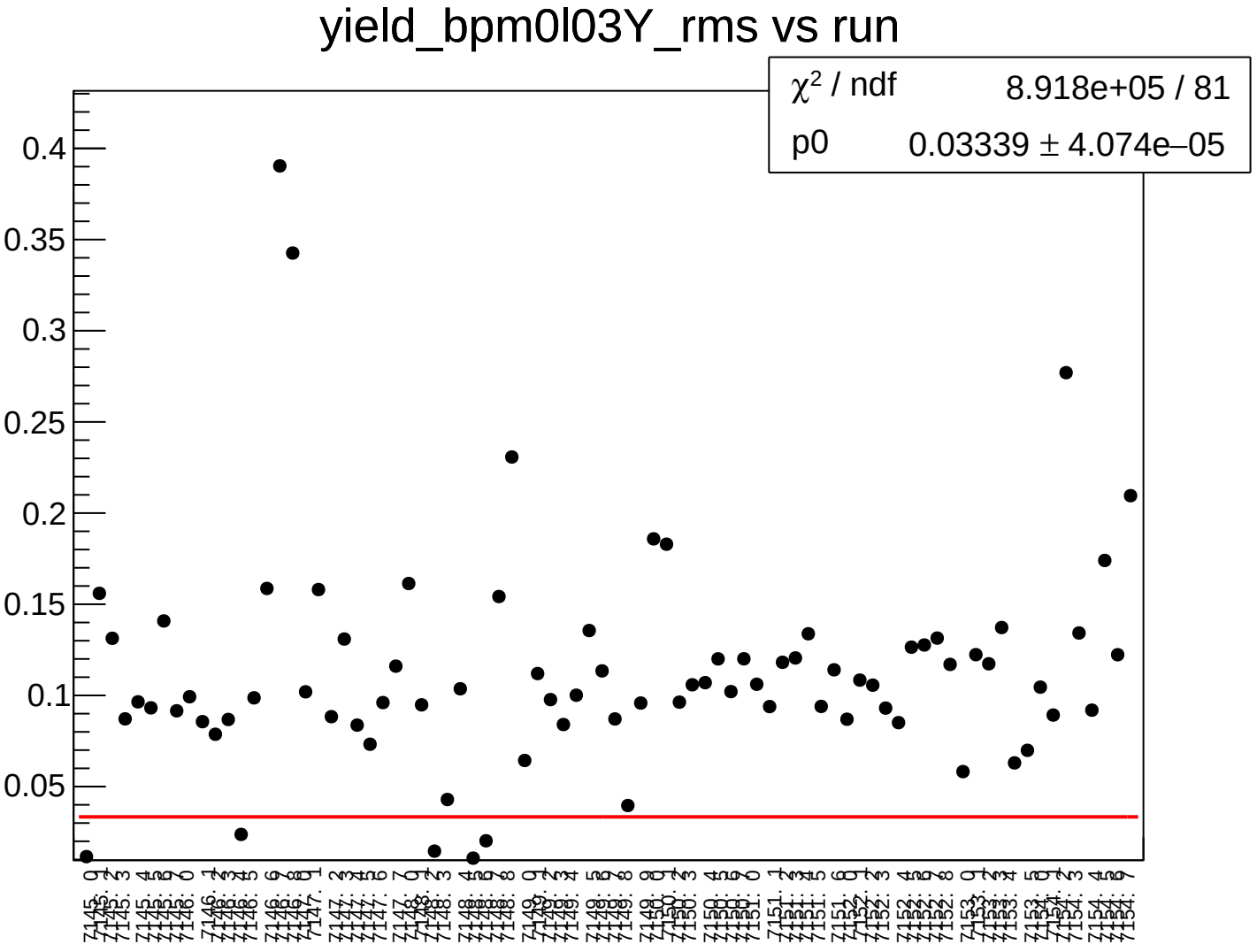

yield_bpm0l02Y_rms vs run
χ² / ndf 1.465e+04 / 81
p0 0.006943 ± 5.579e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

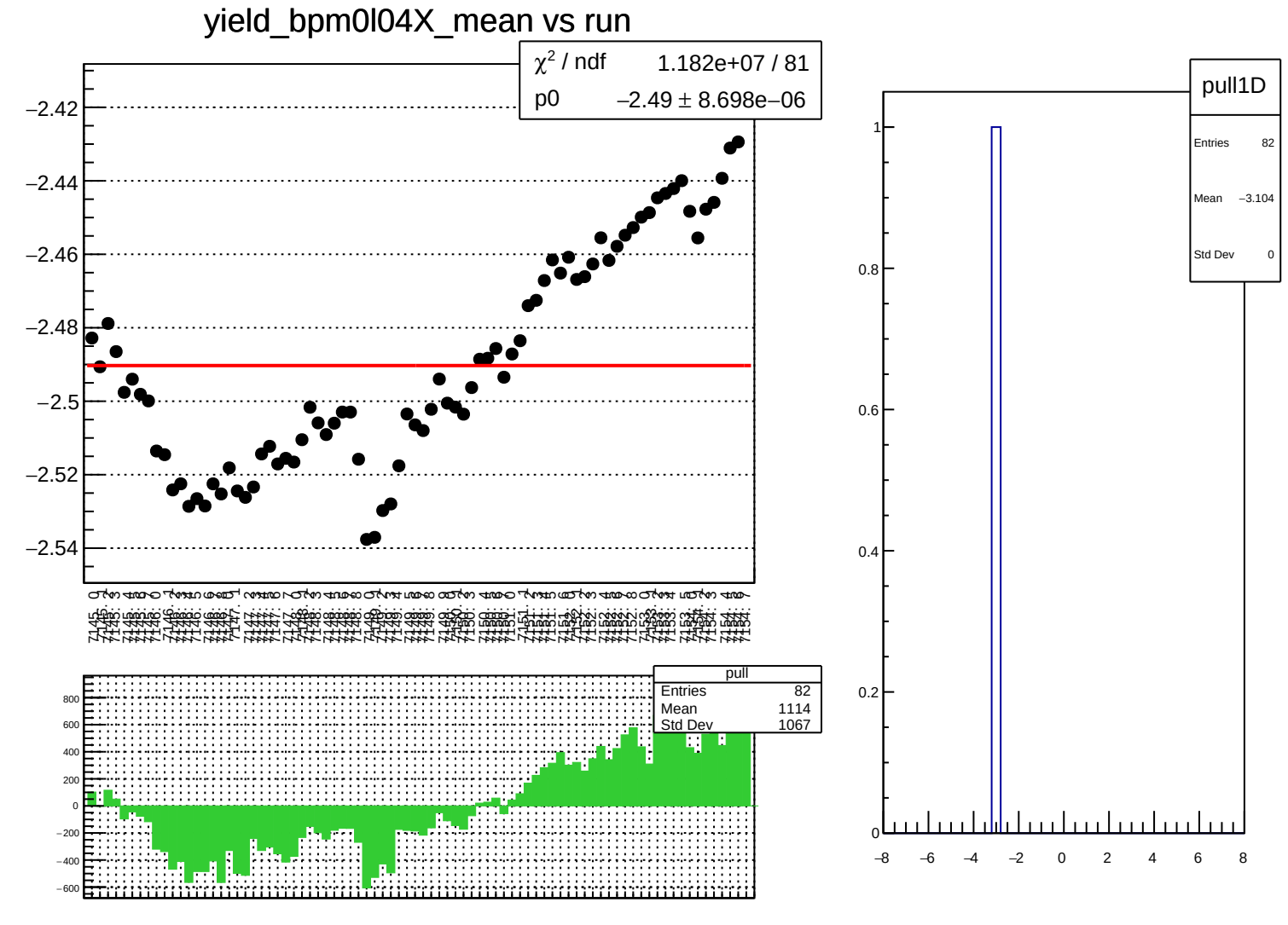

yield_bpm0l03X_mean vs run
χ² / ndf 3.536e+05 / 81
p0 −4.035 ± 4.508e−05
−3.85
−3.9
−3.95
−4
−4.05
pull
Entries 82
Mean 54.2
Std Dev 16.23
150
100
50
0
−50
−100
−150
−200
−250

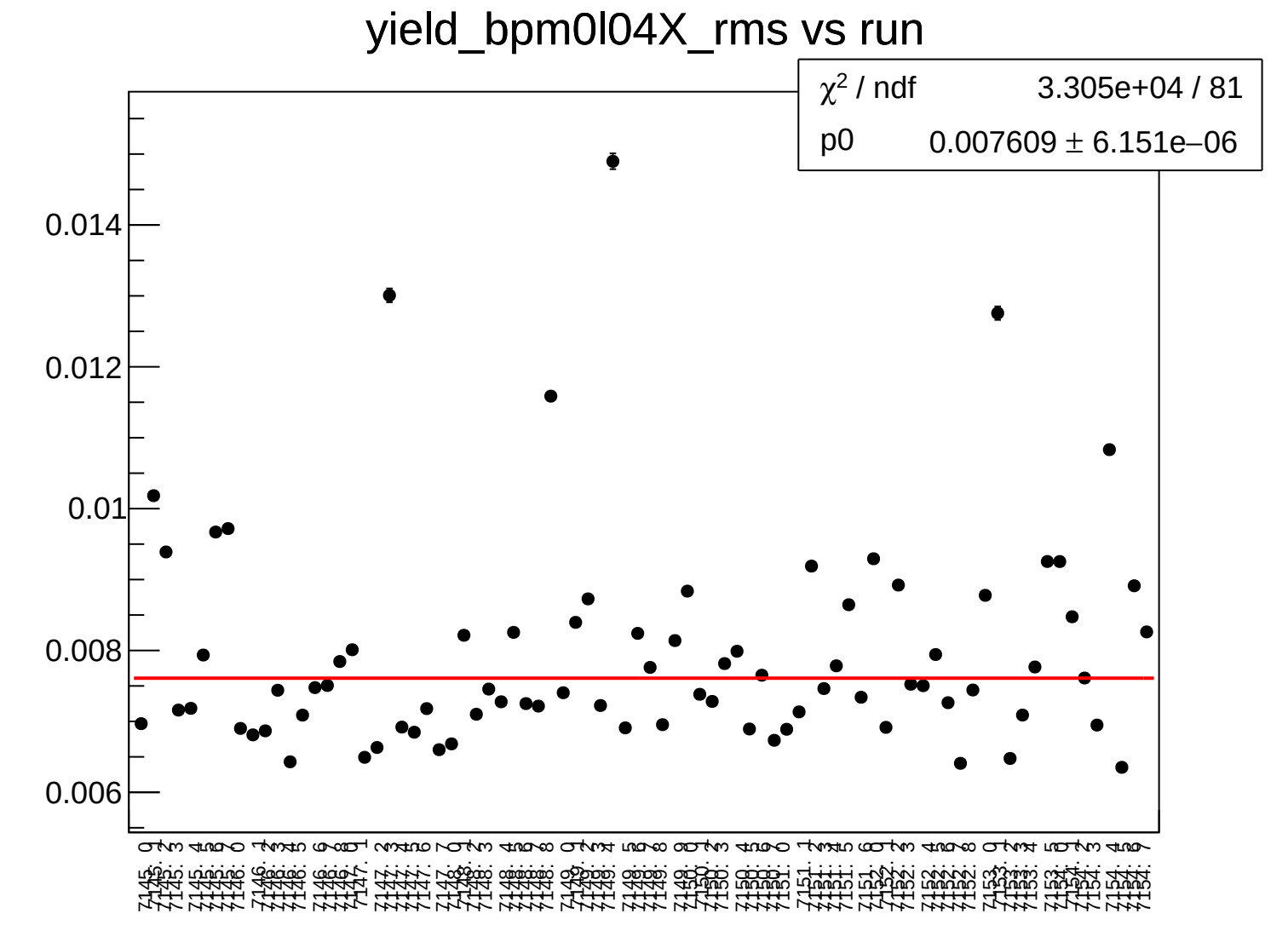

pull1D
Entries 82
Mean 1.861
Std Dev 4.882
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

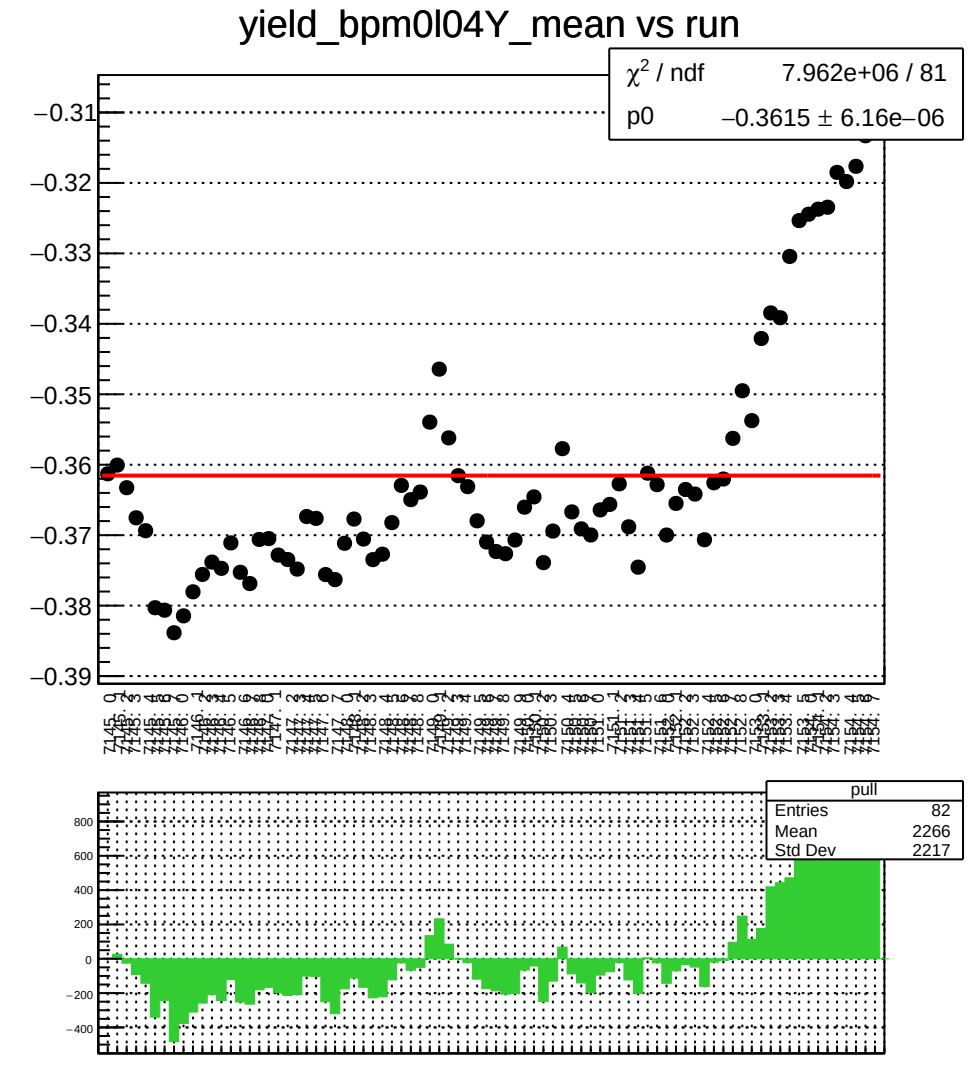

yield_bpm0l03X_rms vs run
χ² / ndf 1.07e+06 / 81
p0 0.0224 ± 3.187e−05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

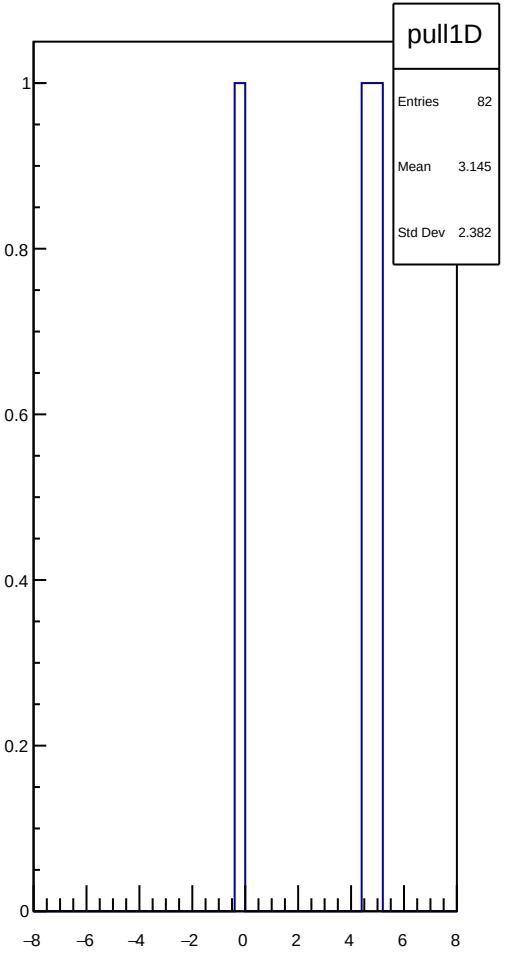

yield_bpm0l03Y_mean vs run
χ^2 / ndf 5.42e+05 / 81
p0 −0.8745 ± 5.761e−05
pull
Entries 82
Mean 66.71
Std Dev 13.15
pull1D
Entries 82
Mean 0.3184
Std Dev 3.008

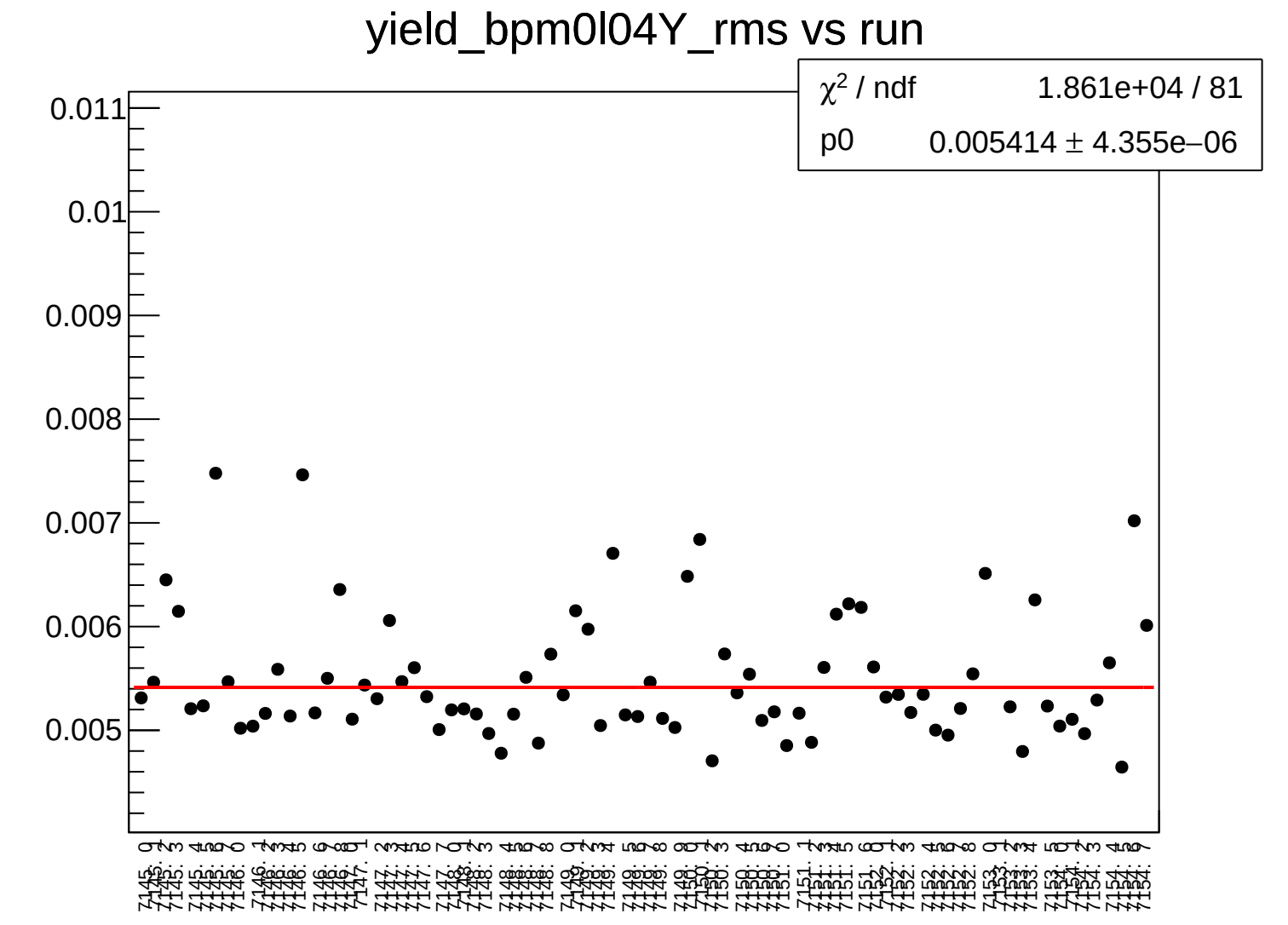

yield_bpm0l03Y_rms vs run
χ² / ndf 8.918e+05 / 81
p0 0.03339 ± 4.074e−05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

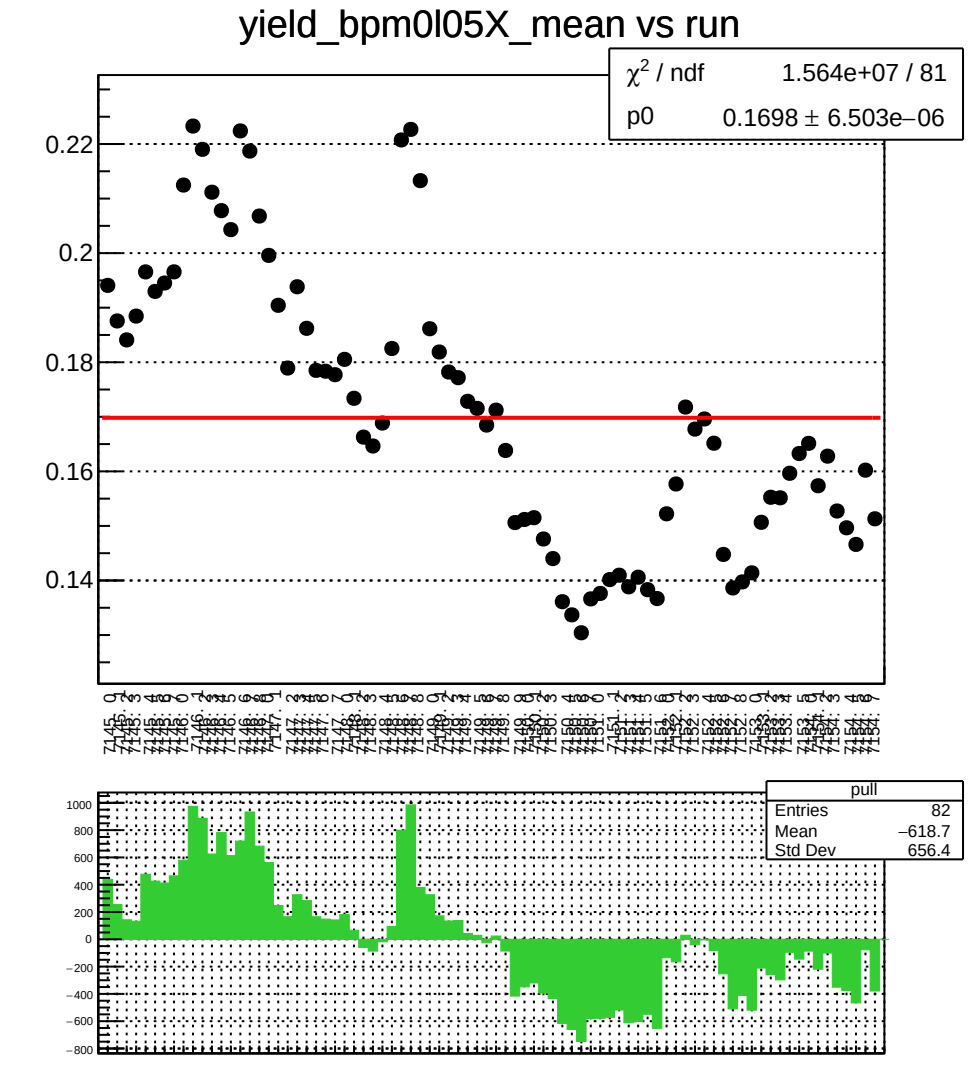

yield_bpm0l04X_mean vs run
χ² / ndf 1.182e+07 / 81
p0 −2.49 ± 8.698e−06
−2.42
−2.44
−2.46
−2.48
−2.5
−2.52
−2.54
pull
Entries 82
Mean 1114
Std Dev 1067
800
600
400
200
0
−200
−400
−600
pull1D
Entries 82
Mean −3.104
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

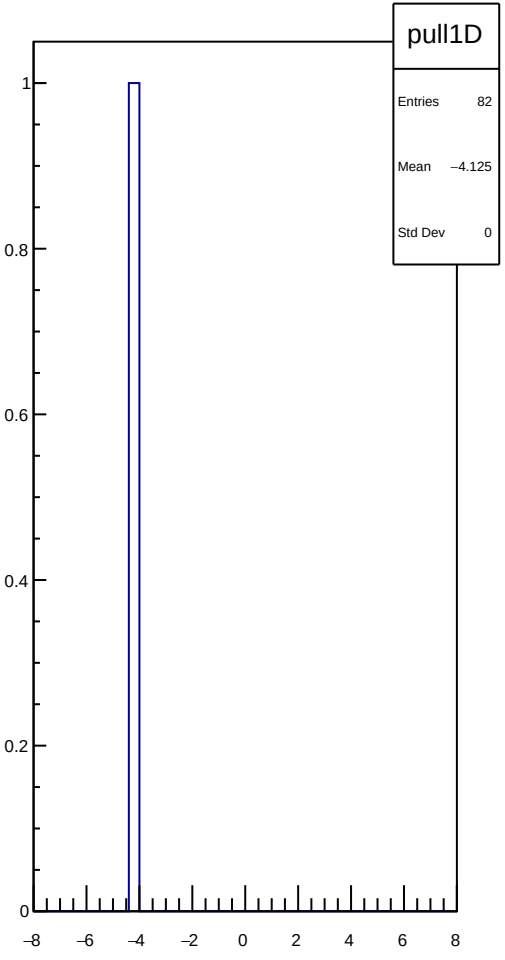

yield_bpm0l04X_rms vs run
χ² / ndf 3.305e+04 / 81
p0 0.007609 ± 6.151e−06
0.014
0.012
0.01
0.008
0.006

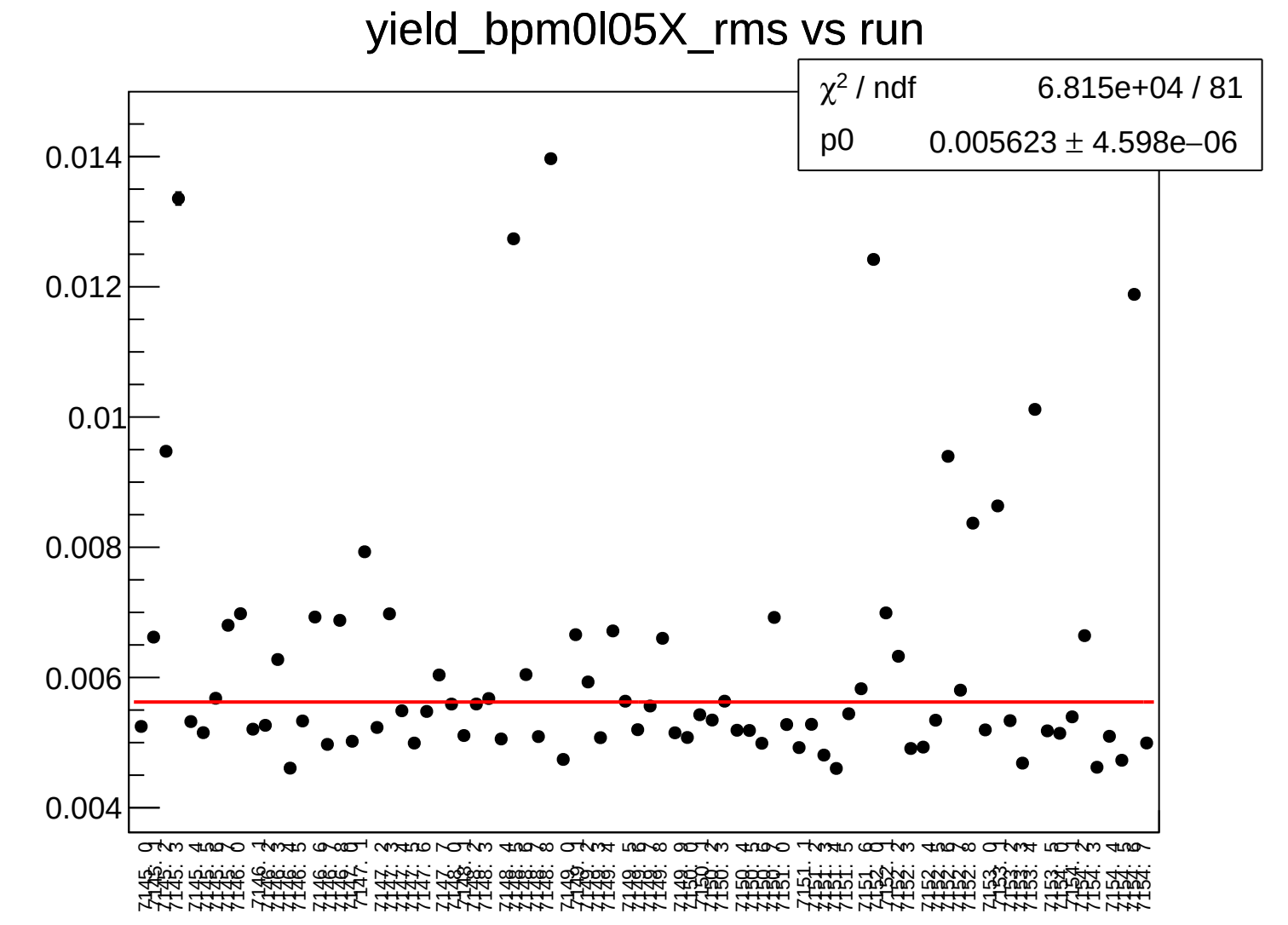

yield_bpm0l04Y_mean vs run
χ² / ndf 7.962e+06 / 81
p0 −0.3615 ± 6.16e−06
−0.31
−0.32
−0.33
−0.34
−0.35
−0.36
−0.37
−0.38
−0.39
pull
Entries 82
Mean 2266
Std Dev 2217
800
600
400
200
0
−200
−400

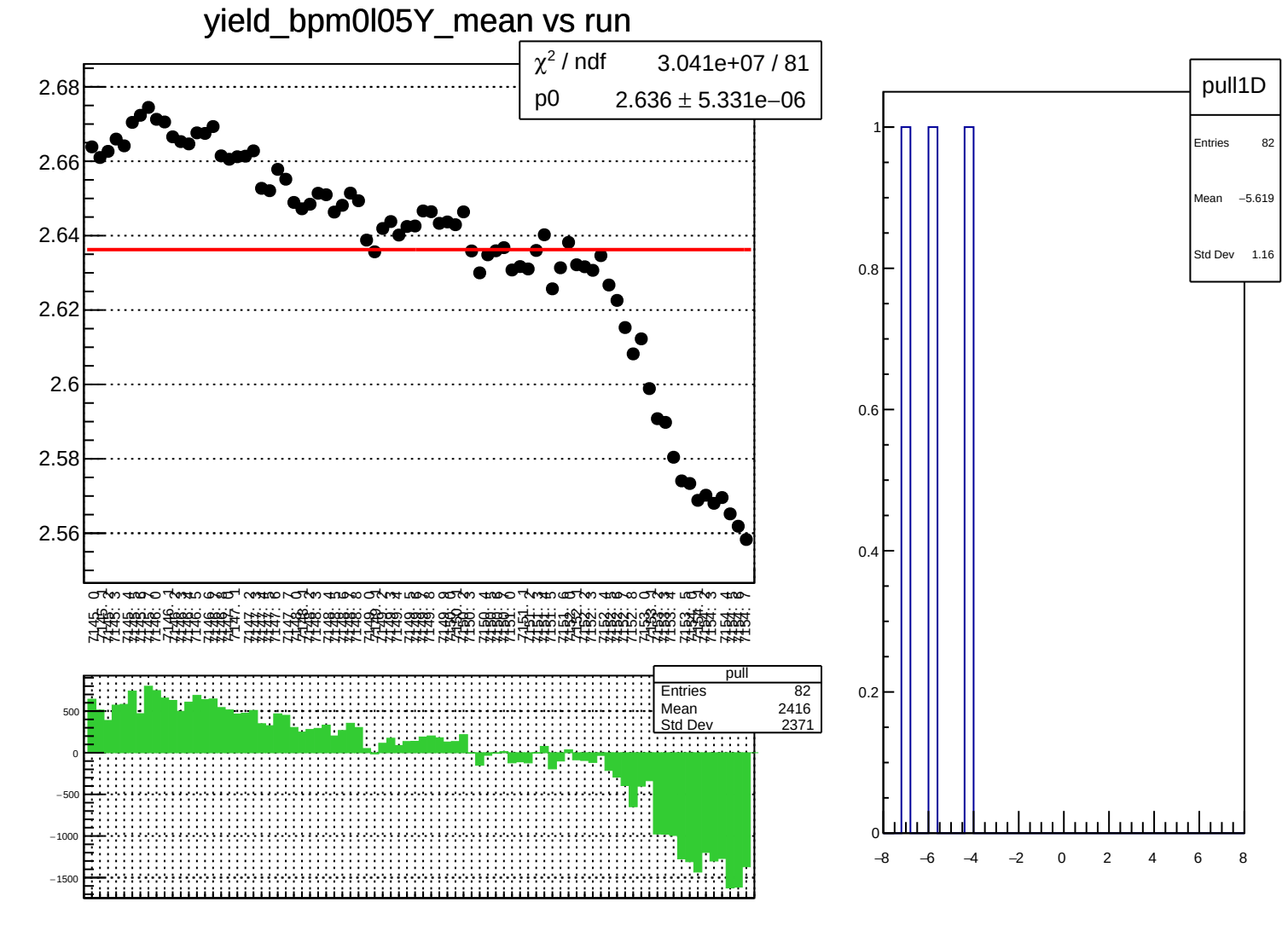

pull1D
Entries 82
Mean 3.145
Std Dev 2.382
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

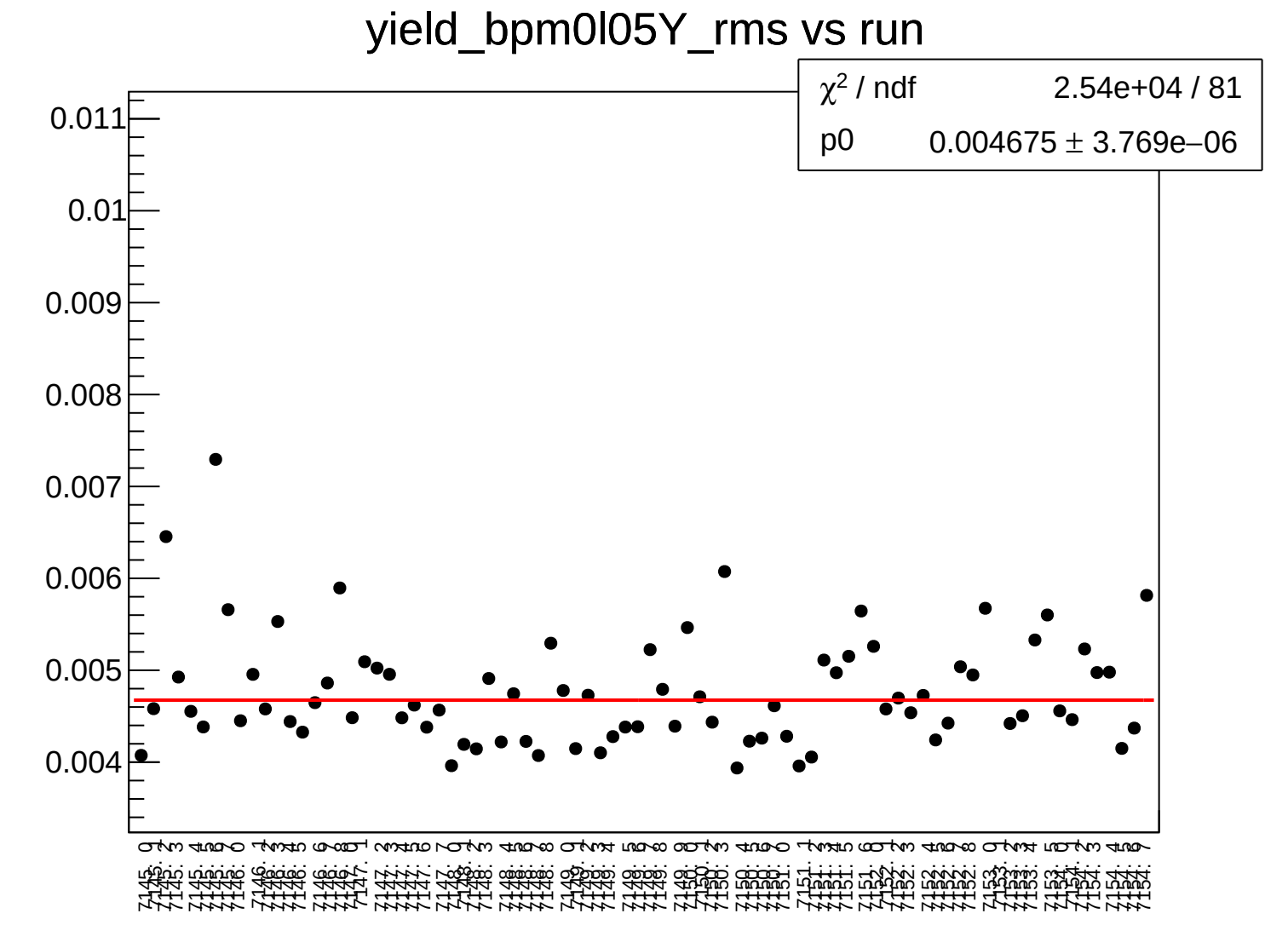

yield_bpm0l04Y_rms vs run
χ² / ndf 1.861e+04 / 81
p0 0.005414 ± 4.355e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005

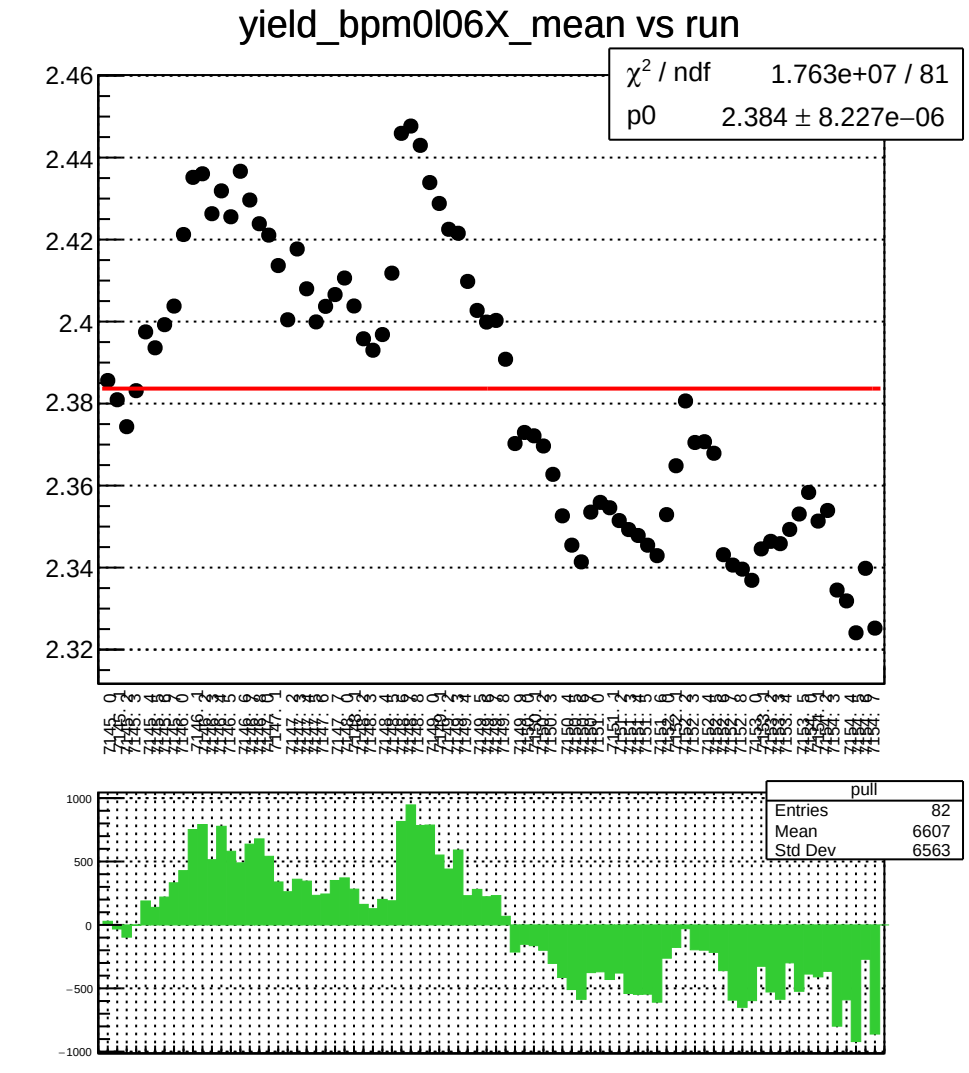

yield_bpm0l05X_mean vs run
χ² / ndf 1.564e+07 / 81
p0 0.1698 ± 6.503e−06
0.22
0.2
0.18
0.16
0.14
pull
Entries 82
Mean −618.7
Std Dev 656.4
1000
800
600
400
200
0
−200
−400
−600
−800

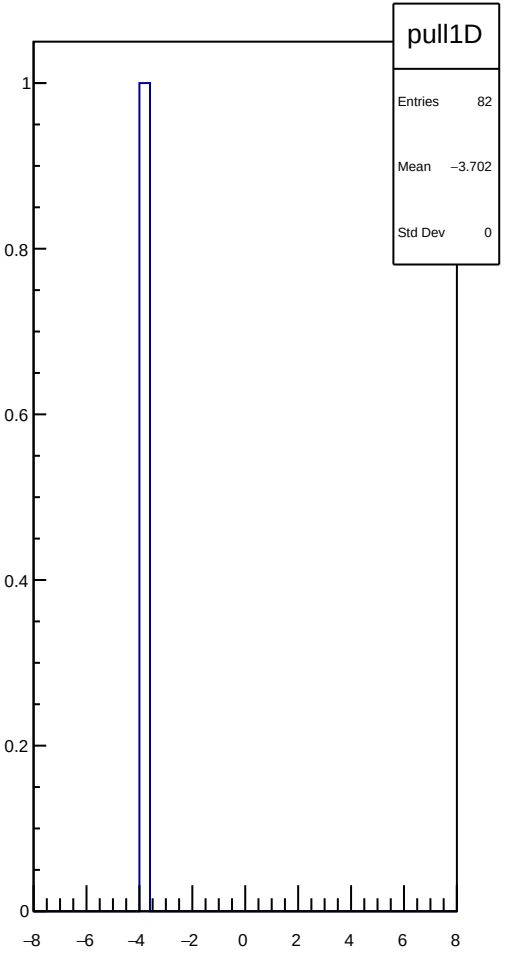

pull1D
Entries 82
Mean −4.125
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

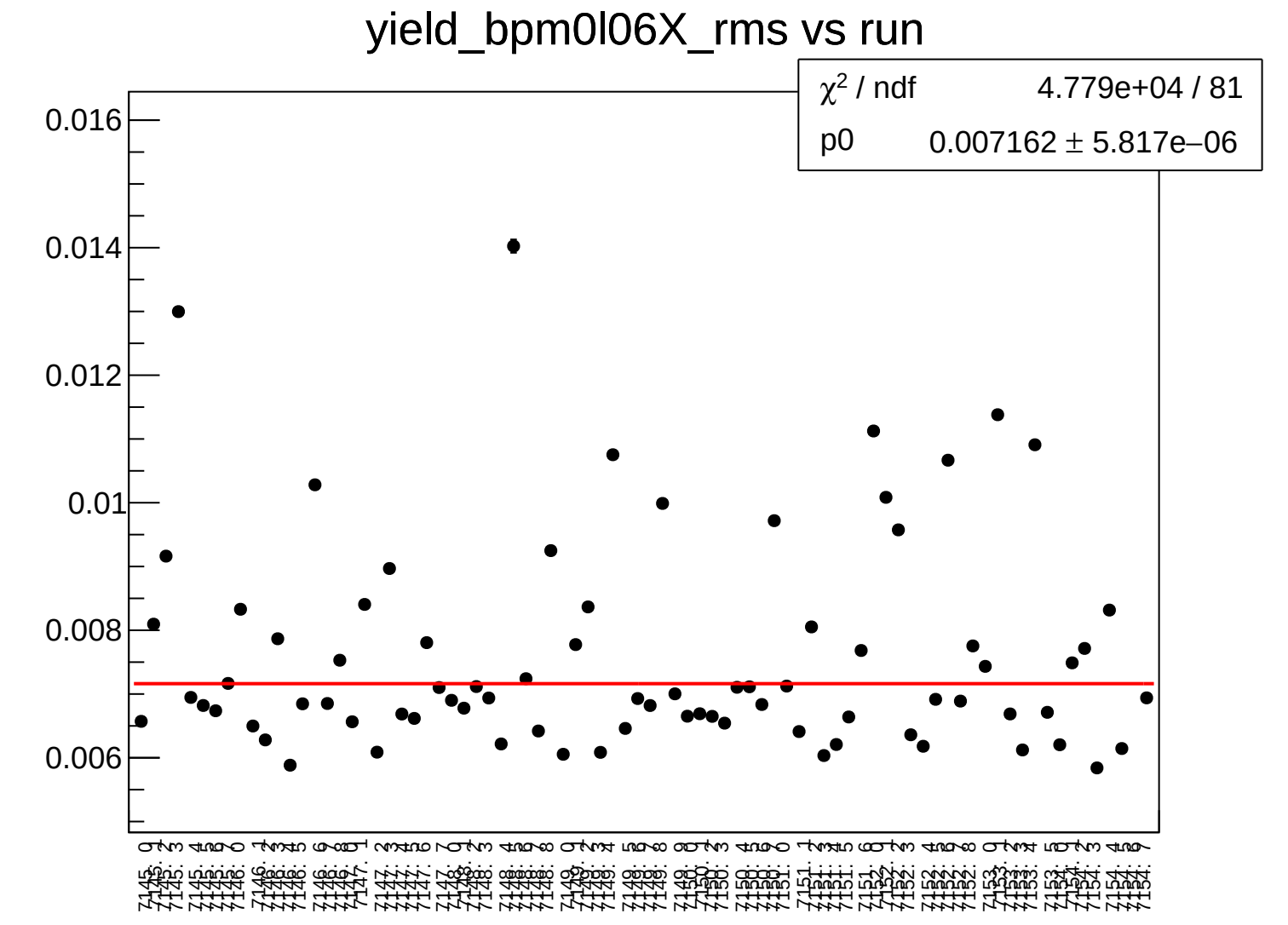

yield_bpm0l05X_rms vs run
χ^2 / ndf 6.815e+04 / 81
p0 0.005623 ± 4.598e−06
0.014
0.012
0.01
0.008
0.006
0.004

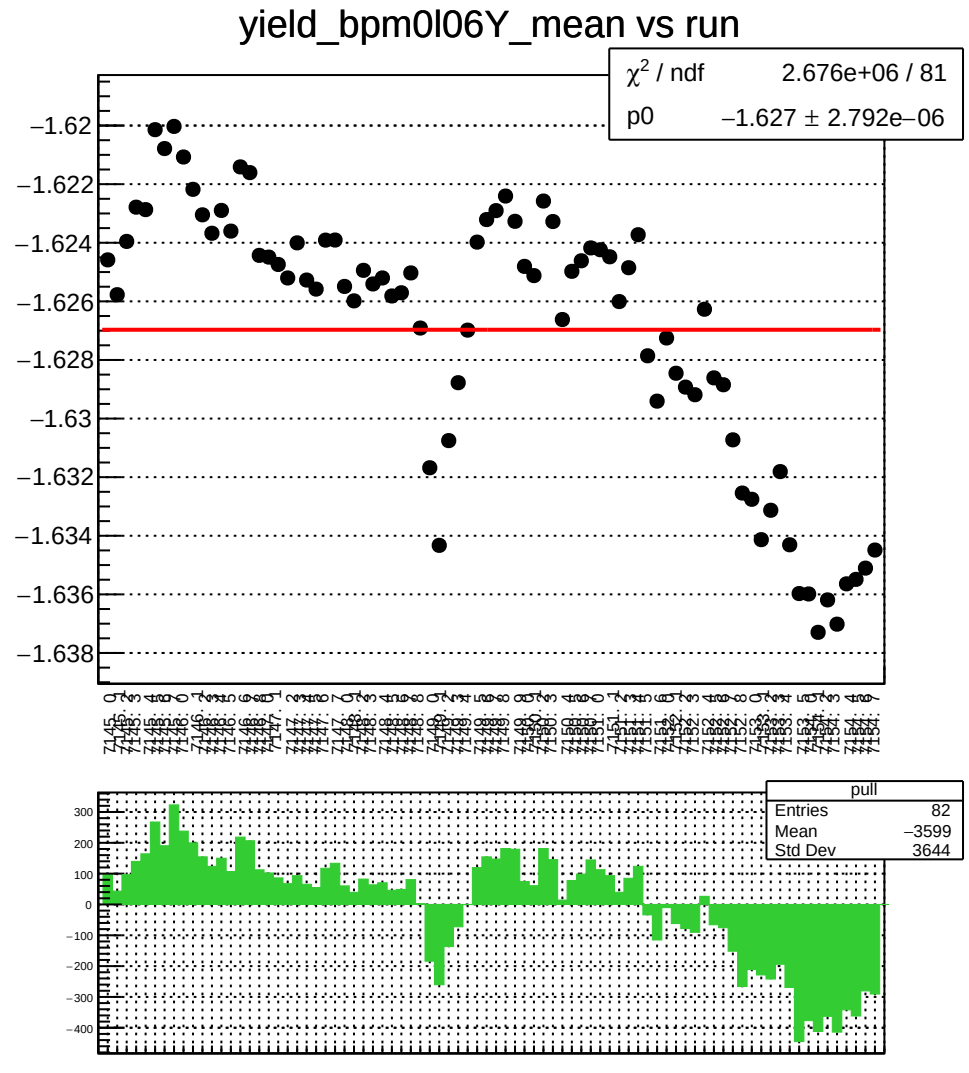

yield_bpm0l05Y_mean vs run
χ² / ndf 3.041e+07 / 81
p0 2.636 ± 5.331e−06
2.68
2.66
2.64
2.62
2.6
2.58
2.56
pull
Entries 82
Mean 2416
Std Dev 2371
500
0
−500
−1000
−1500
pull1D
Entries 82
Mean −5.619
Std Dev 1.16
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

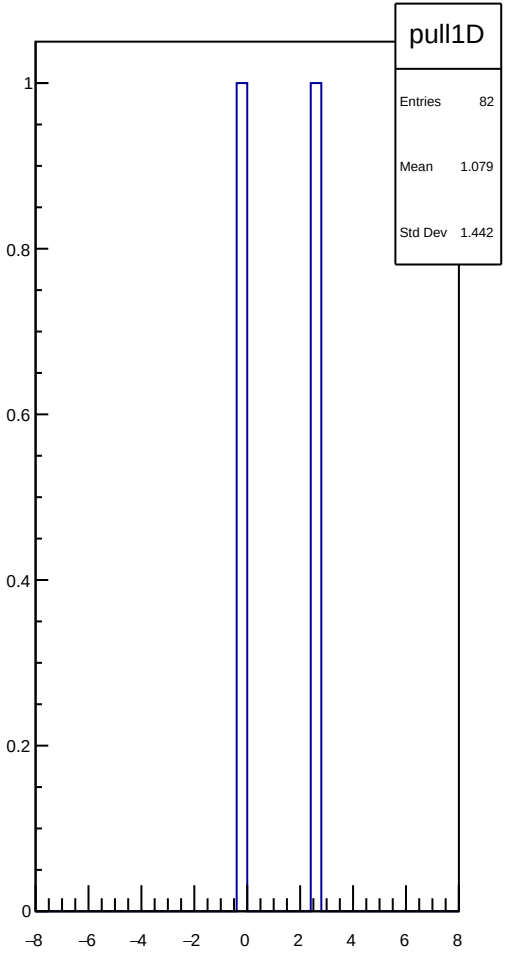

yield_bpm0l05Y_rms vs run
χ² / ndf 2.54e+04 / 81
p0 0.004675 ± 3.769e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

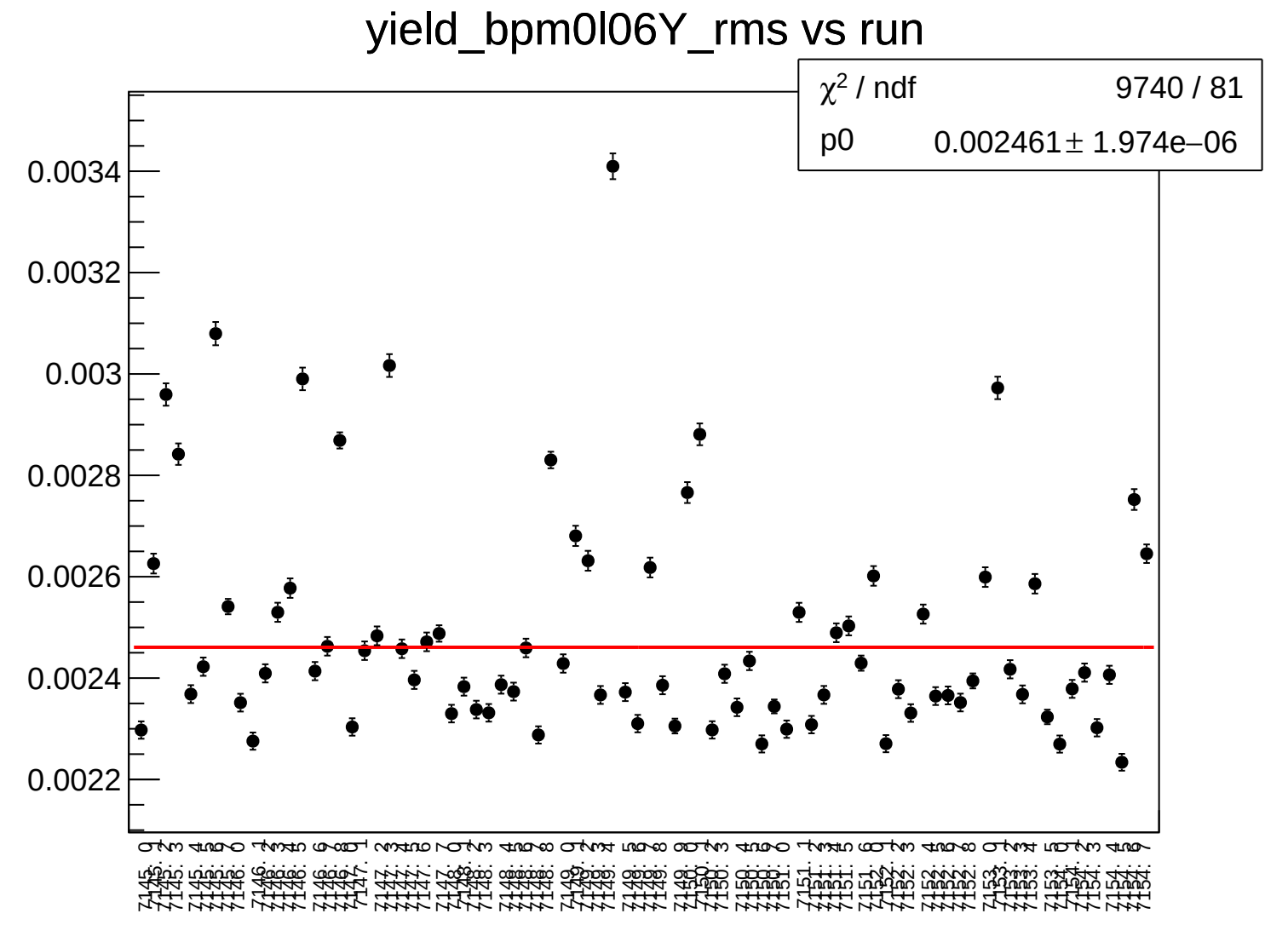

yield_bpm0l06X_mean vs run
χ² / ndf 1.763e+07 / 81
p0 2.384 ± 8.227e−06
2.46
2.44
2.42
2.4
2.38
2.36
2.34
2.32
pull
Entries 82
Mean 6607
Std Dev 6563
1000
500
0
−500
−1000

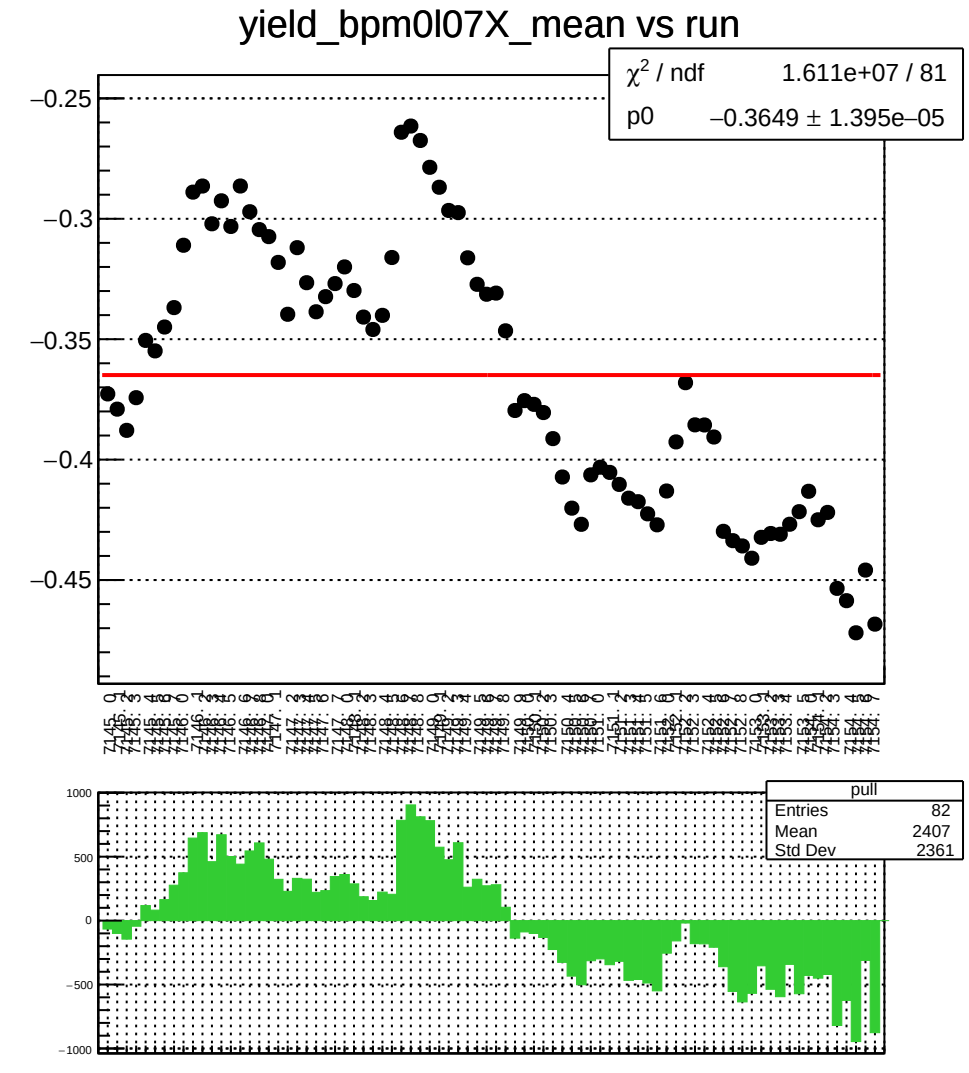

pull1D
Entries 82
Mean −3.702
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

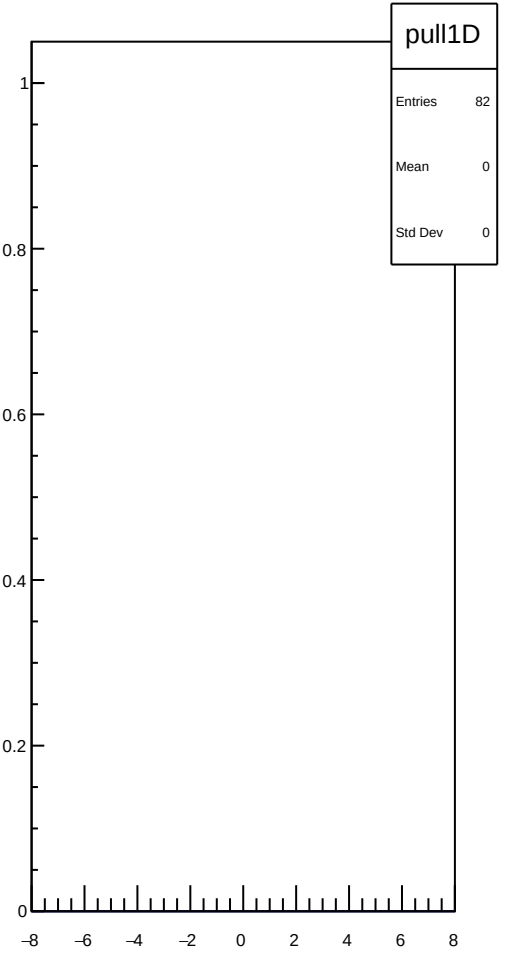

yield_bpm0l06X_rms vs run
χ^2 / ndf 4.779e+04 / 81
p0 0.007162 ± 5.817e−06
0.016
0.014
0.012
0.01
0.008
0.006

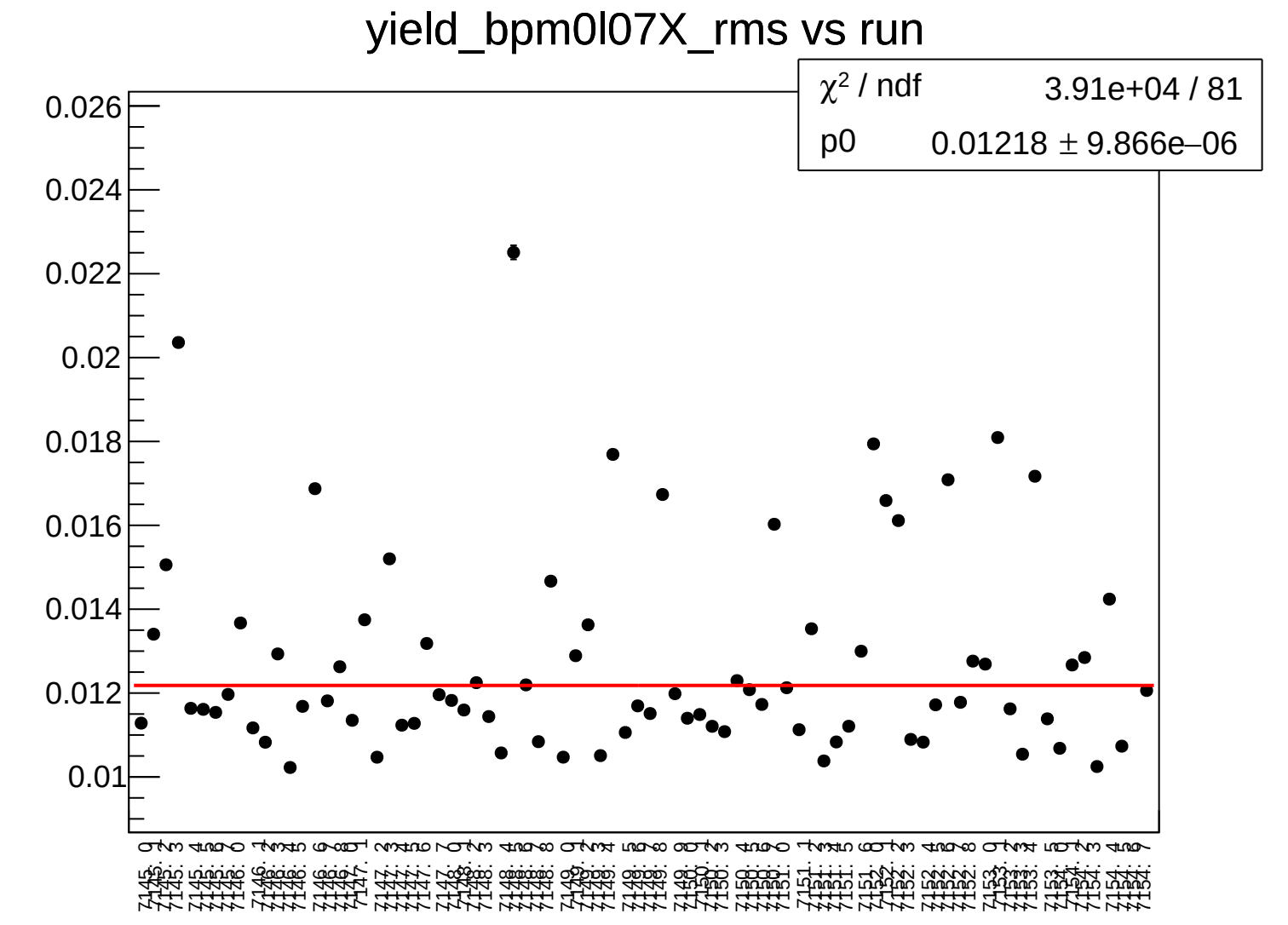

yield_bpm0l06Y_mean vs run
χ² / ndf 2.676e+06 / 81
p0 −1.627 ± 2.792e−06
−1.62
−1.622
−1.624
−1.626
−1.628
−1.63
−1.632
−1.634
−1.636
−1.638
pull
Entries 82
Mean −3599
Std Dev 3644
300
200
100
0
−100
−200
−300
−400

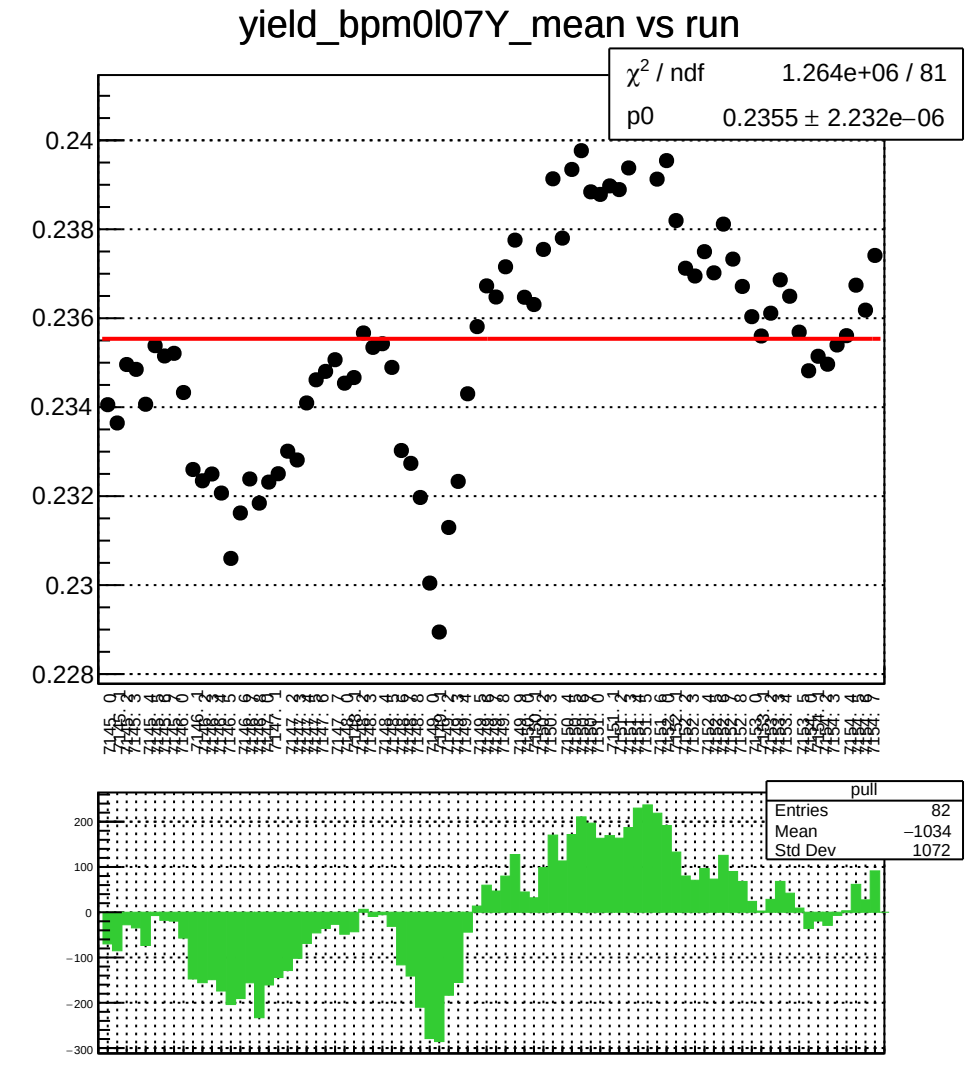

pull1D
Entries 82
Mean 1.079
Std Dev 1.442
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

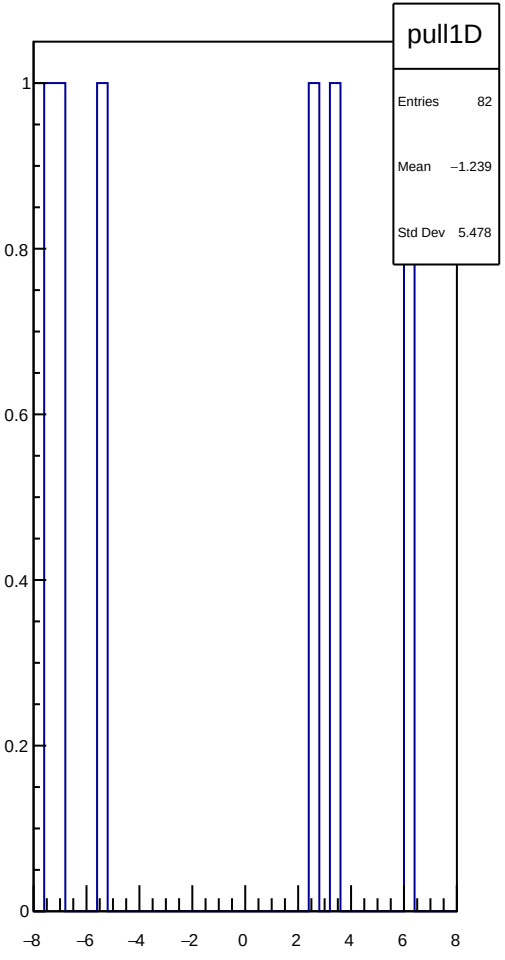

yield_bpm0l06Y_rms vs run
χ² / ndf 9740 / 81
p0 0.002461 ± 1.974e−06
0.0034
0.0032
0.003
0.0028
0.0026
0.0024
0.0022

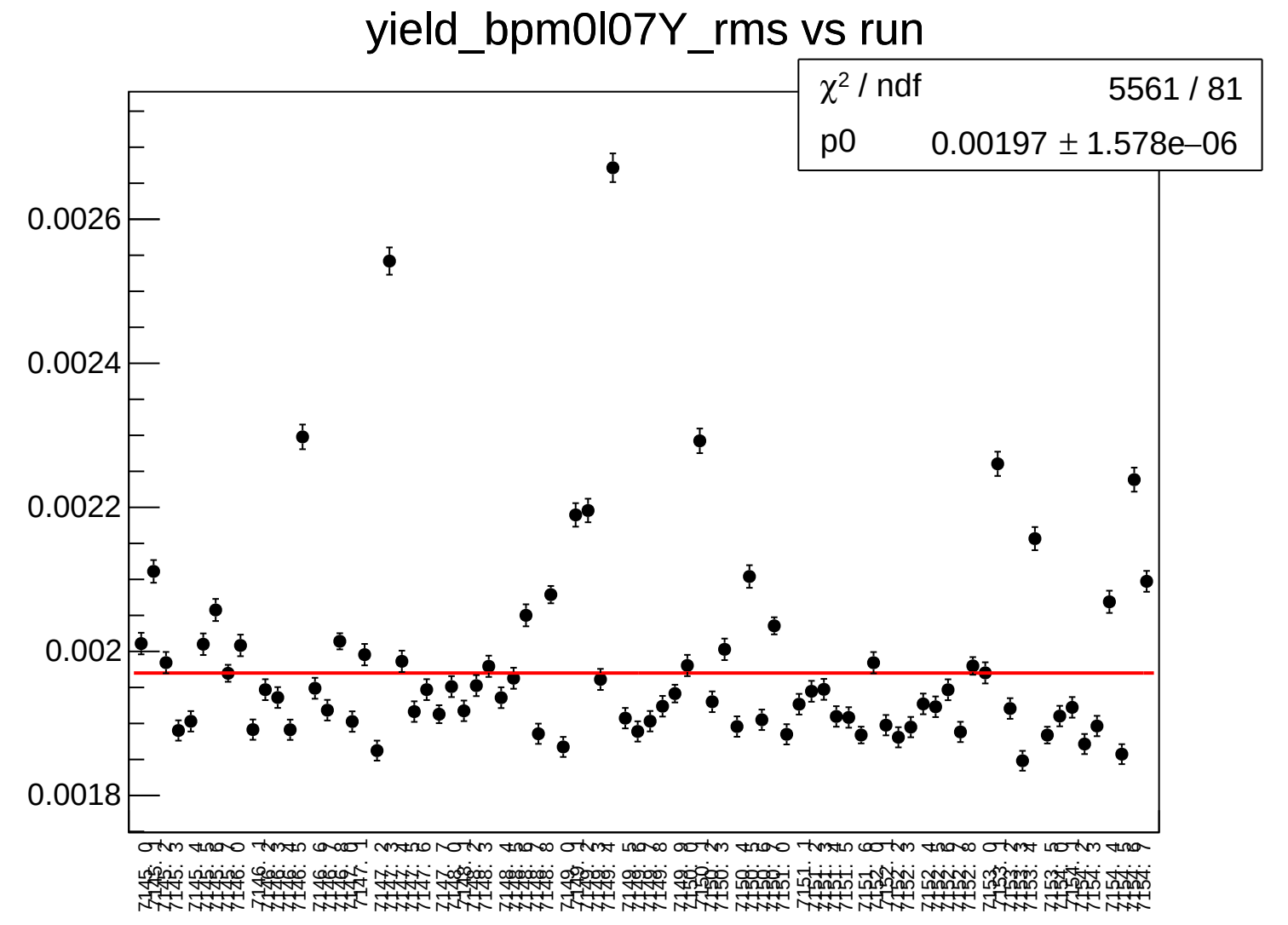

yield_bpm0l07X_mean vs run
χ² / ndf 1.611e+07 / 81
p0 −0.3649 ± 1.395e−05
−0.25
−0.3
−0.35
−0.4
−0.45
pull
Entries 82
Mean 2407
Std Dev 2361
1000
500
0
−500
−1000

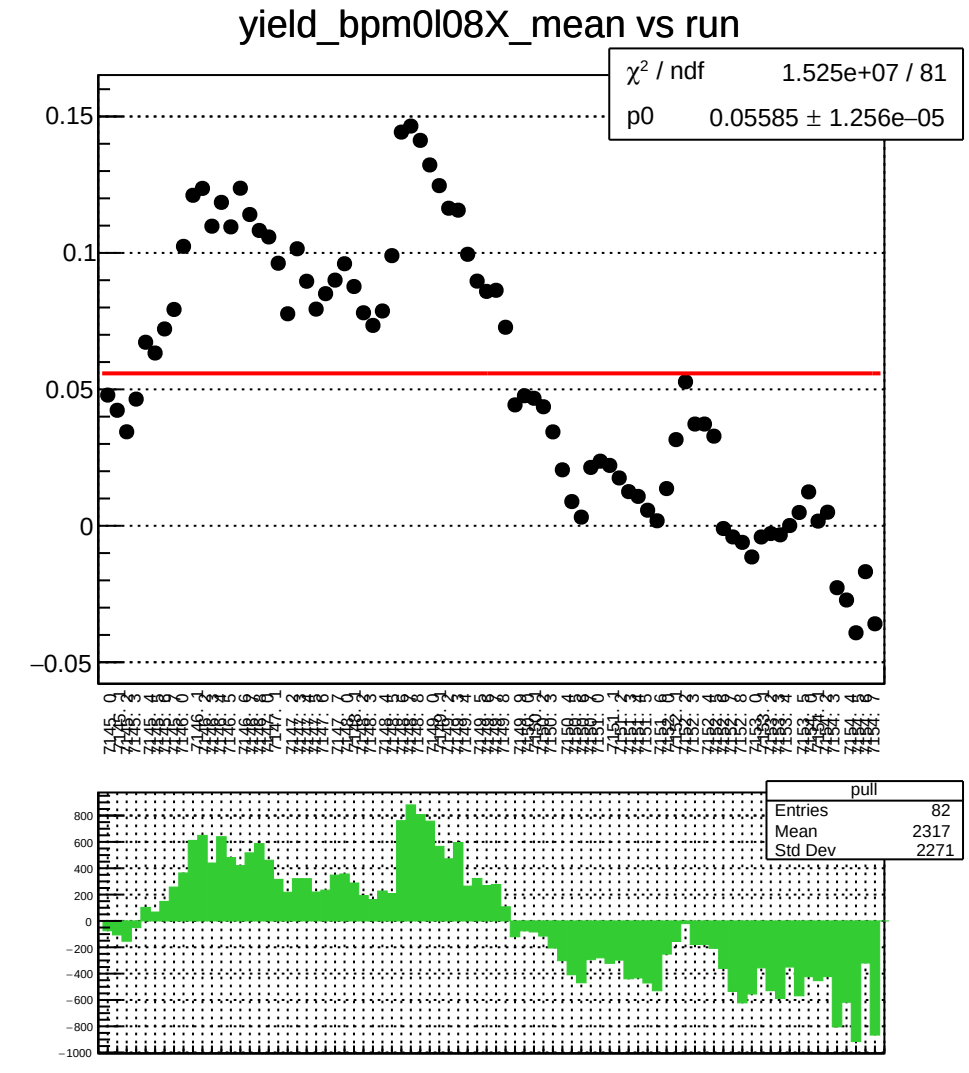

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

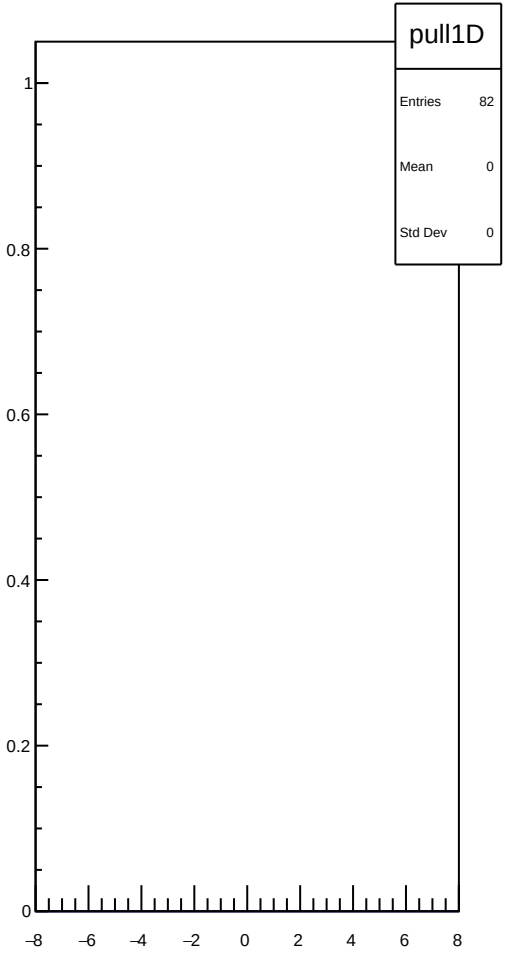

yield_bpm0l07X_rms vs run
χ² / ndf 3.91e+04 / 81
p0 0.01218 ± 9.866e–06
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

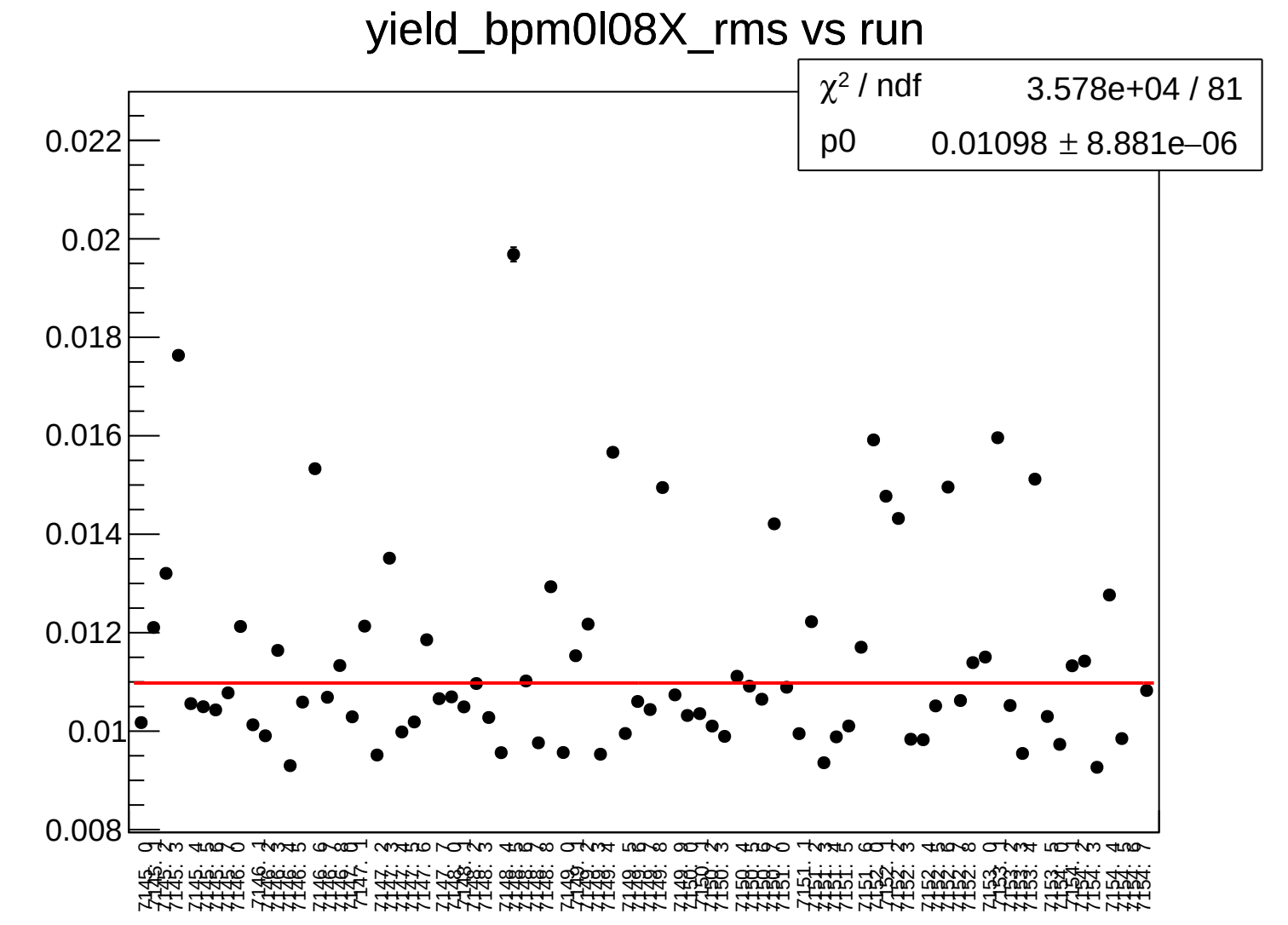

yield_bpm0l07Y_mean vs run
χ² / ndf 1.264e+06 / 81
p0 0.2355 ± 2.232e−06
0.24
0.238
0.236
0.234
0.232
0.23
0.228
pull
Entries 82
Mean −1034
Std Dev 1072
200
100
0
−100
−200
−300

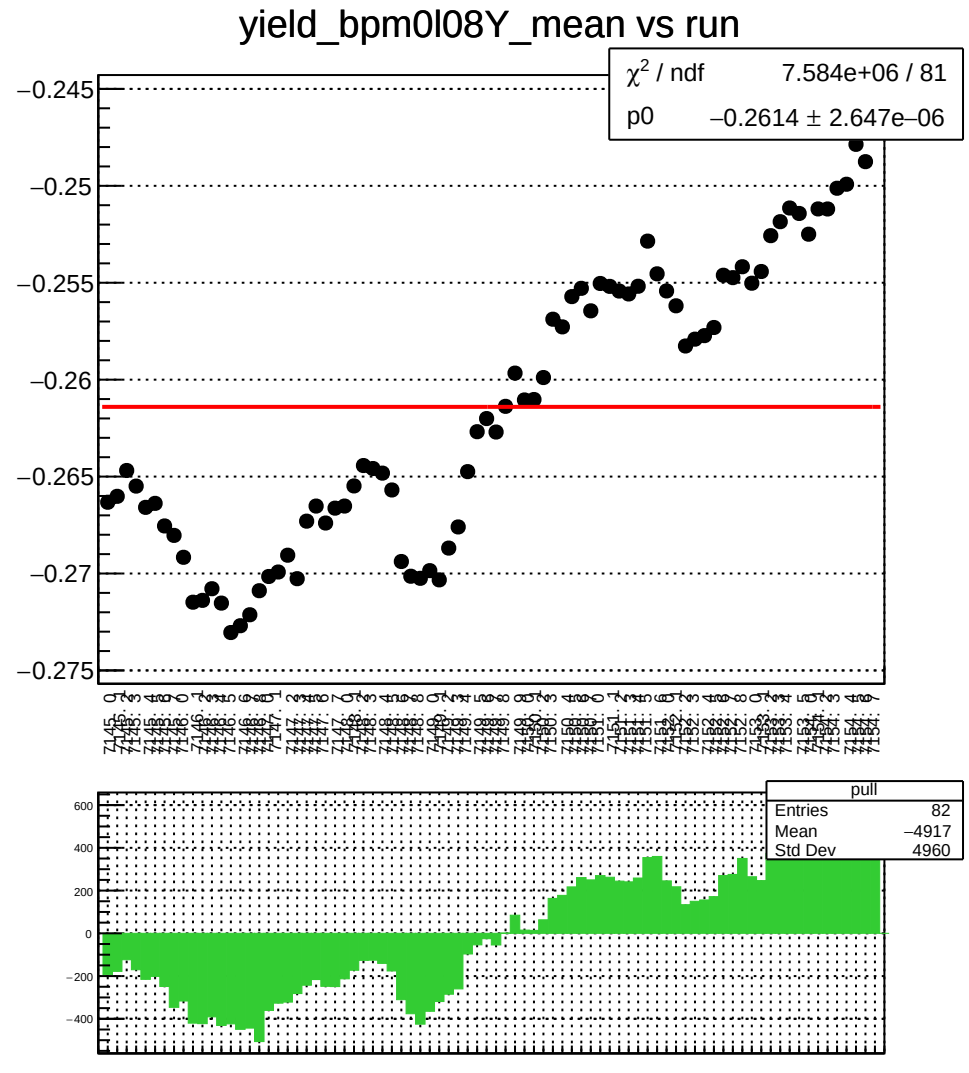

pull1D
Entries 82
Mean −1.239
Std Dev 5.478
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

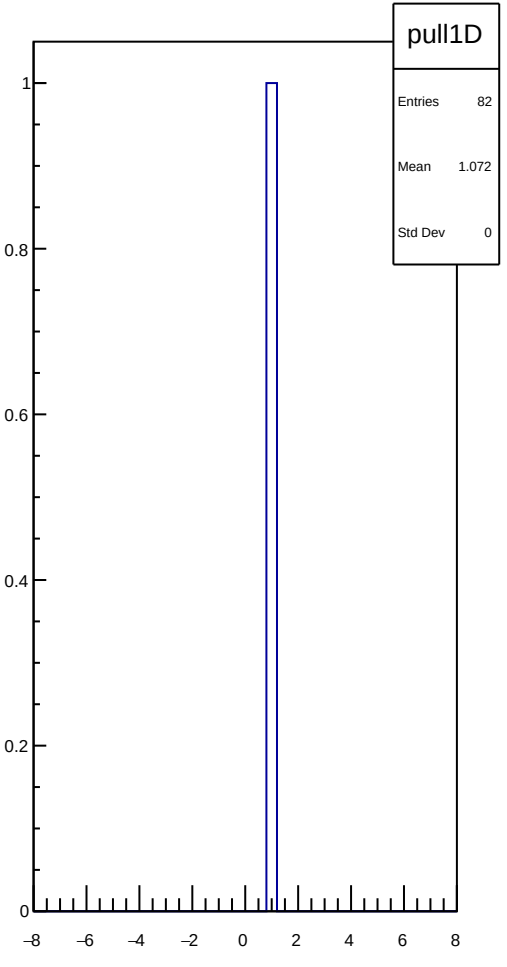

yield_bpm0l07Y_rms vs run
χ² / ndf 5561 / 81
p0 0.00197 ± 1.578e–06
0.0026
0.0024
0.0022
0.002
0.0018

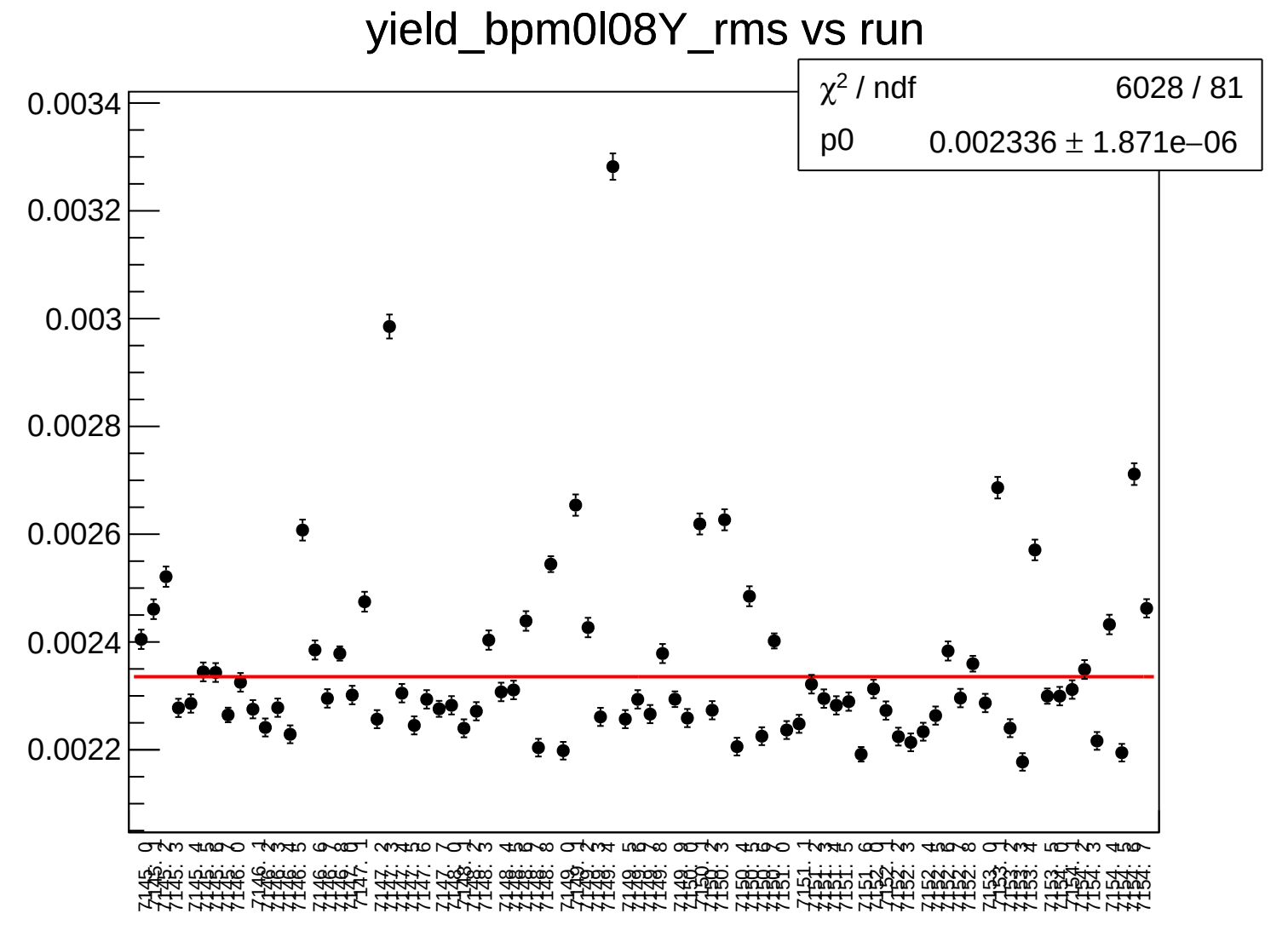

yield_bpm0l08X_mean vs run
χ² / ndf 1.525e+07 / 81
p0 0.05585 ± 1.256e−05
0.15
0.1
0.05
0
−0.05
pull
Entries 82
Mean 2317
Std Dev 2271
800
600
400
200
0
−200
−400
−600
−800
−1000

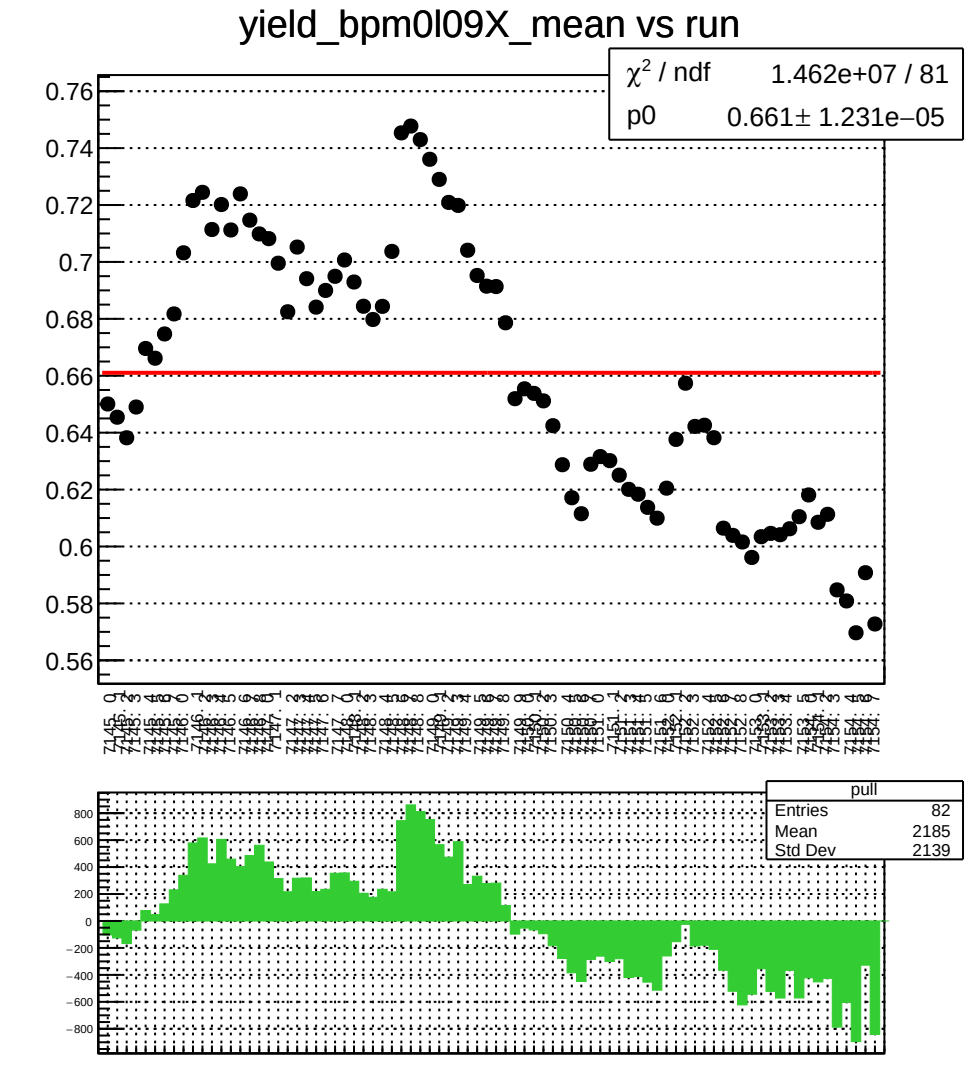

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

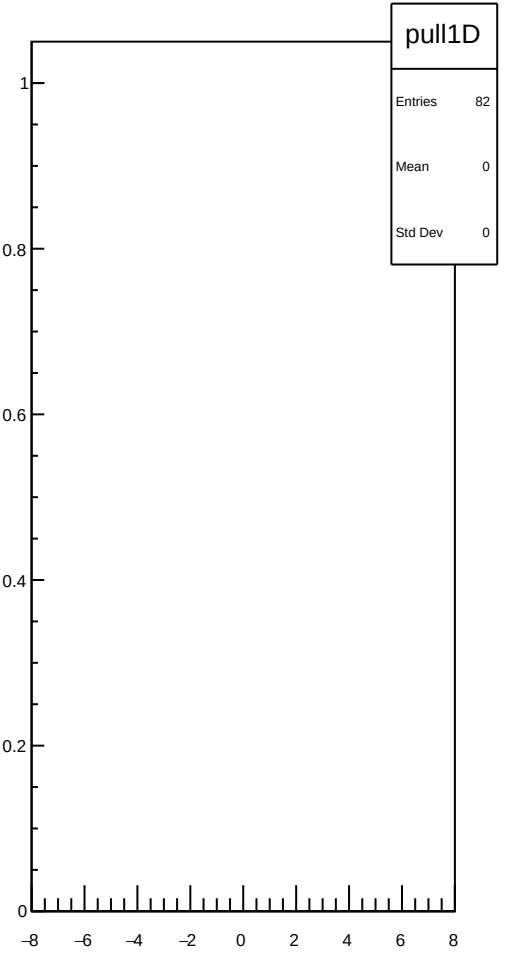

yield_bpm0l08X_rms vs run
χ² / ndf 3.578e+04 / 81
p0 0.01098 ± 8.881e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

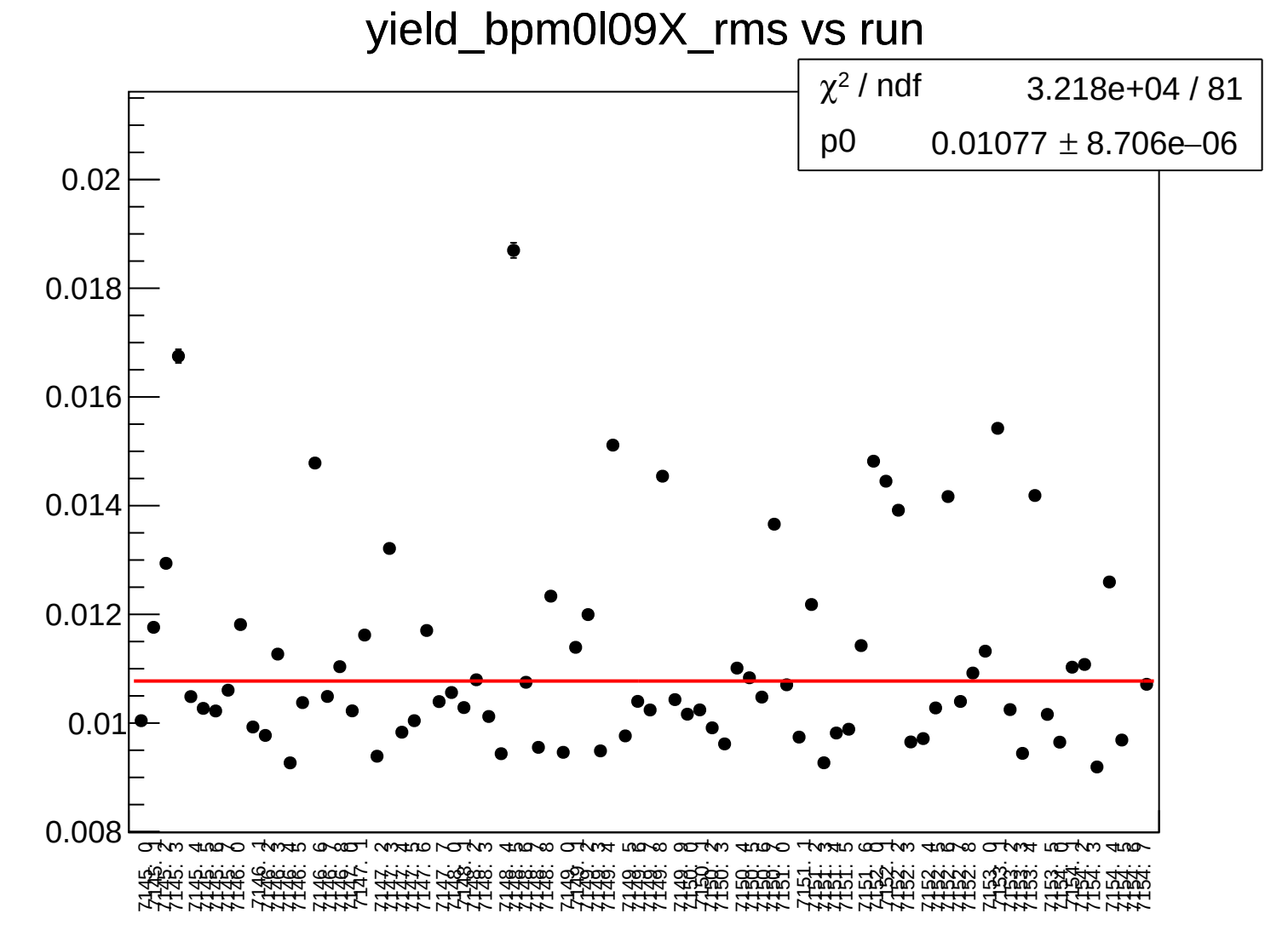

yield_bpm0l08Y_mean vs run
χ² / ndf 7.584e+06 / 81
p0 −0.2614 ± 2.647e−06
−0.245
−0.25
−0.255
−0.26
−0.265
−0.27
−0.275
pull
Entries 82
Mean −4917
Std Dev 4960
600
400
200
0
−200
−400

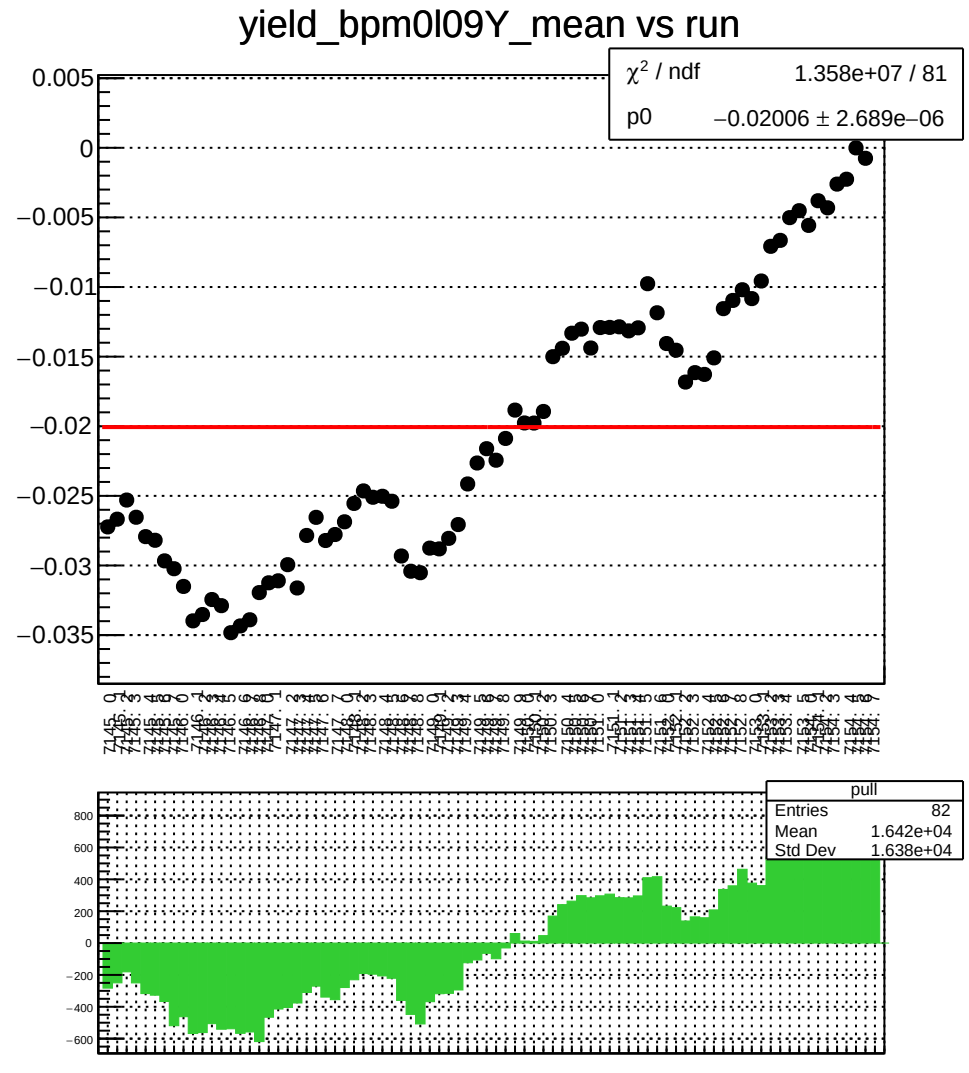

pull1D
Entries 82
Mean 1.072
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

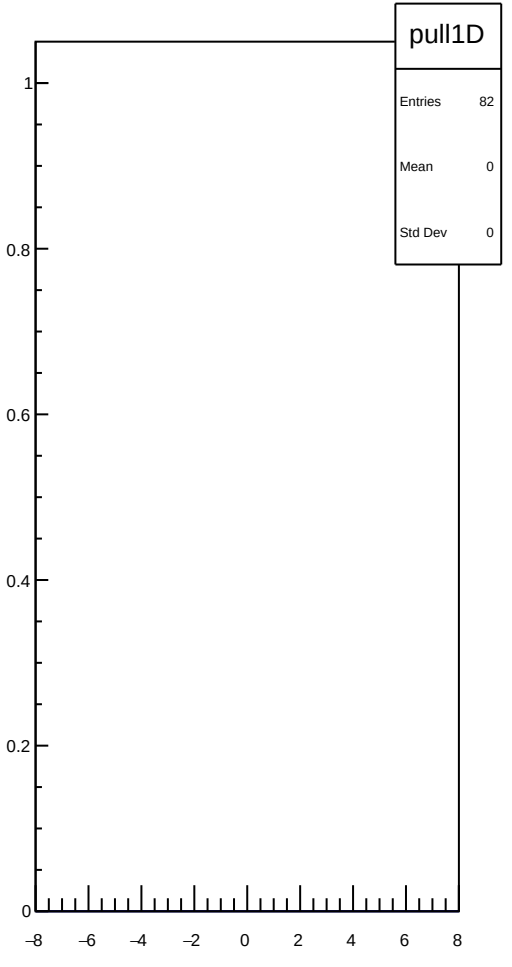

yield_bpm0l08Y_rms vs run
χ² / ndf 6028 / 81
p0 0.002336 ± 1.871e−06
0.0034
0.0032
0.003
0.0028
0.0026
0.0024
0.0022

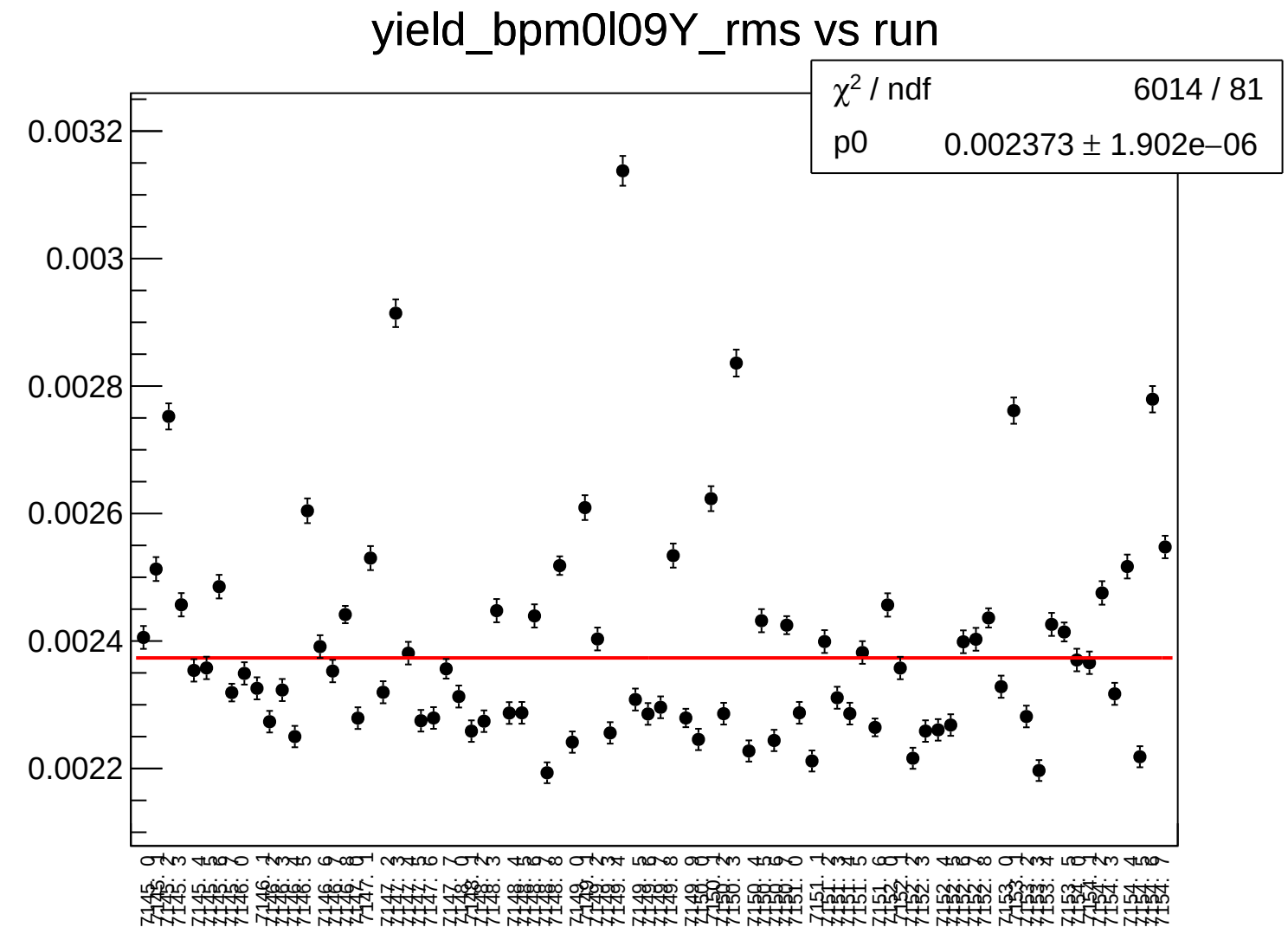

yield_bpm0l09X_mean vs run
χ² / ndf 1.462e+07 / 81
p0 0.661± 1.231e−05
0.76
0.74
0.72
0.7
0.68
0.66
0.64
0.62
0.6
0.58
0.56
pull
Entries 82
Mean 2185
Std Dev 2139
800
600
400
200
0
−200
−400
−600
−800

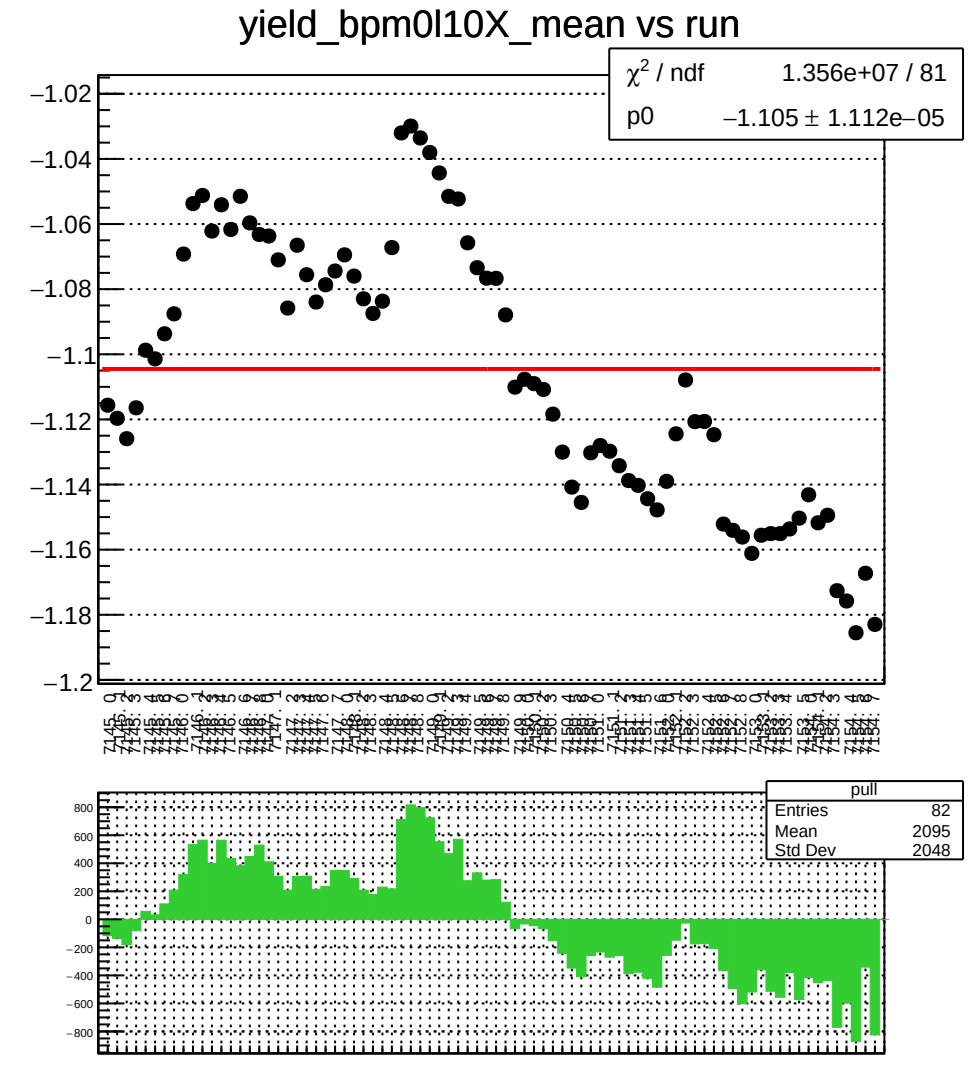

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

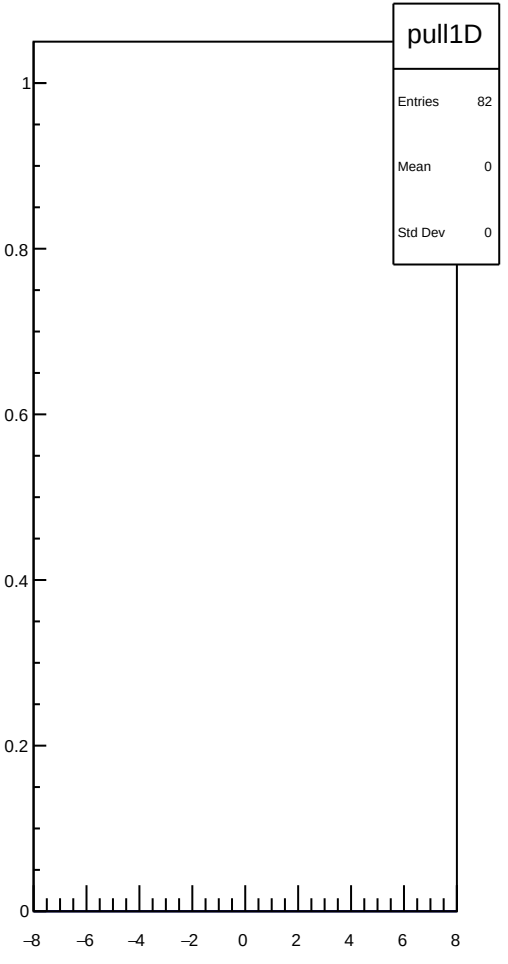

yield_bpm0l09X_rms vs run
χ² / ndf 3.218e+04 / 81
p0 0.01077 ± 8.706e–06
0.02
0.018
0.016
0.014
0.012
0.01
0.008

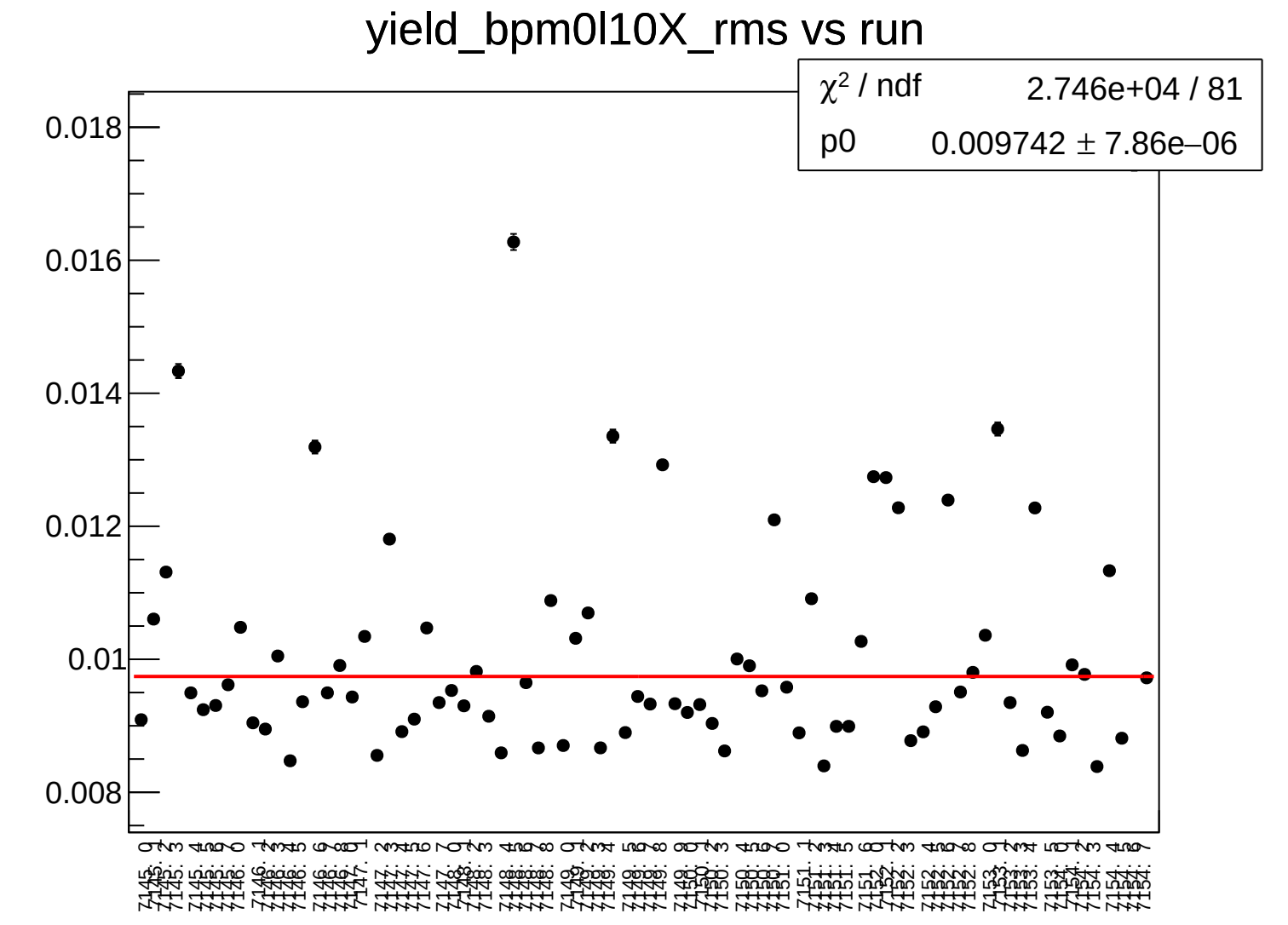

yield_bpm0l09Y_mean vs run
χ² / ndf 1.358e+07 / 81
p0 −0.02006 ± 2.689e−06
0.005
0
−0.005
−0.01
−0.015
−0.02
−0.025
−0.03
−0.035
pull
Entries 82
Mean 1.642e+04
Std Dev 1.638e+04
800
600
400
200
0
−200
−400
−600

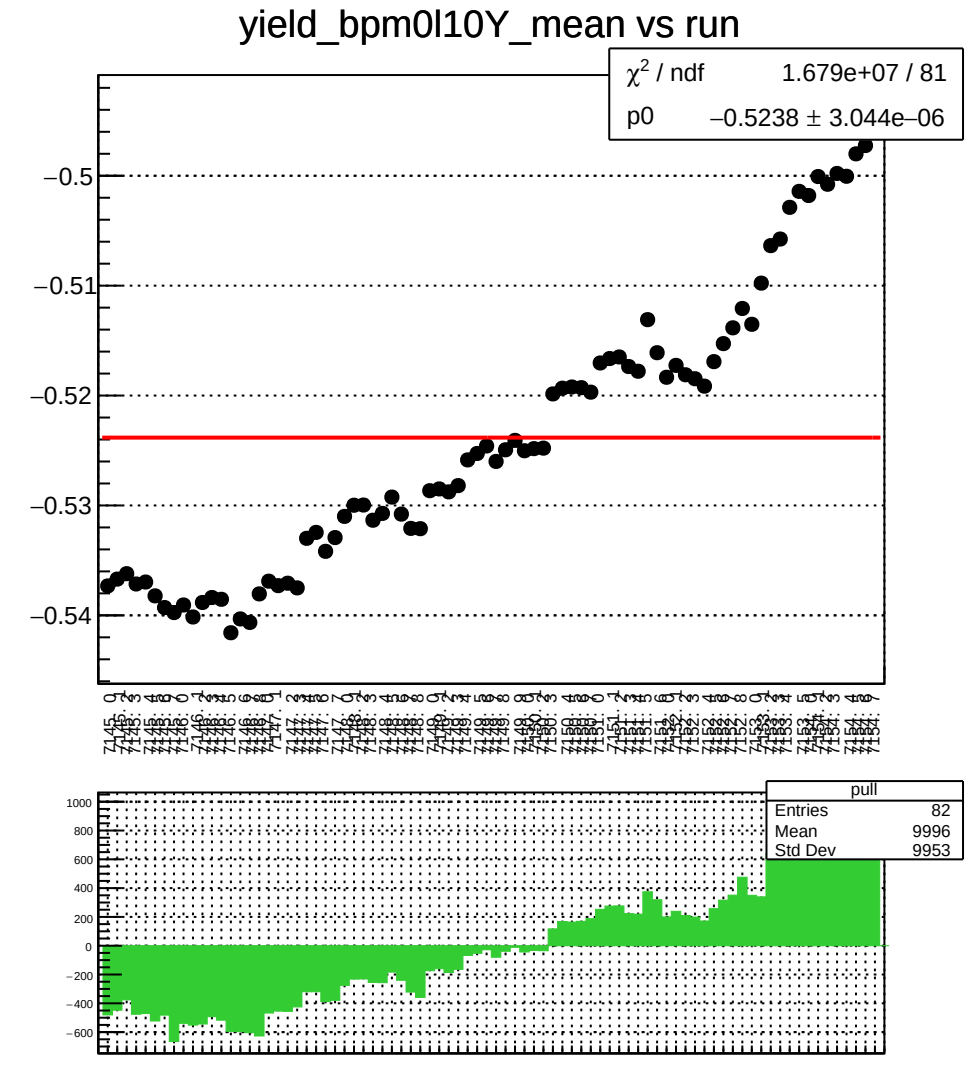

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

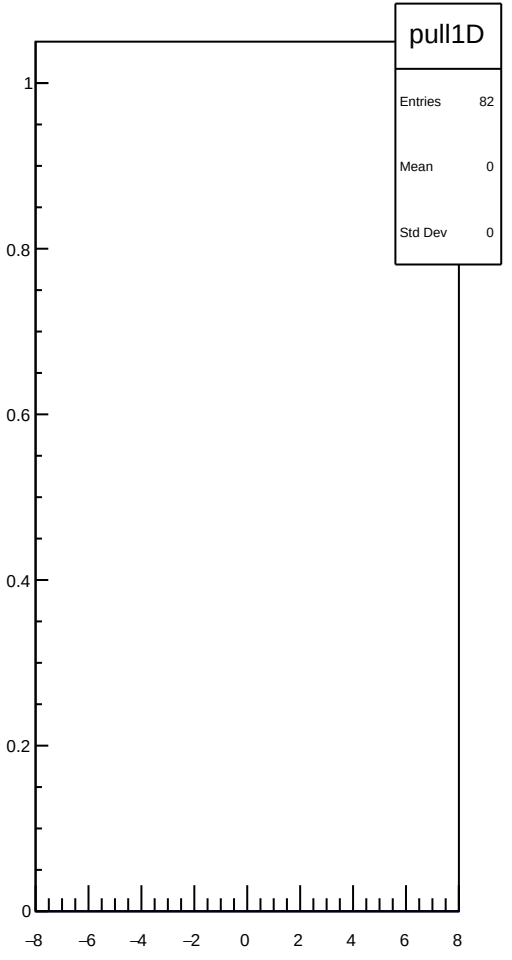

yield_bpm0l09Y_rms vs run
χ² / ndf 6014 / 81
p0 0.002373 ± 1.902e−06
0.0032
0.003
0.0028
0.0026
0.0024
0.0022

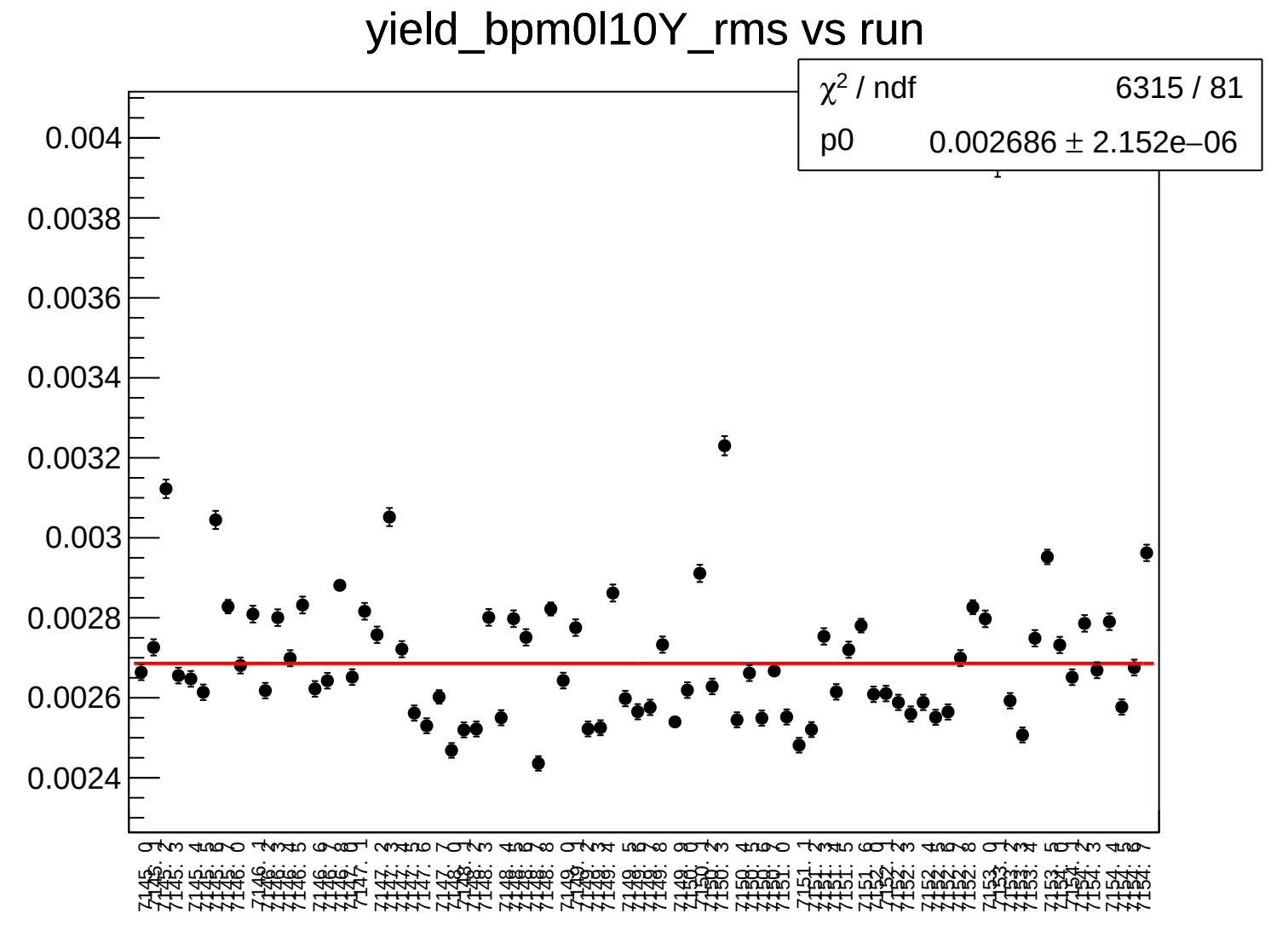

yield_bpm0l10X_mean vs run
χ² / ndf 1.356e+07 / 81
p0 −1.105 ± 1.112e−05
−1.02
−1.04
−1.06
−1.08
−1.1
−1.12
−1.14
−1.16
−1.18
−1.2
pull
Entries 82
Mean 2095
Std Dev 2048
800
600
400
200
0
−200
−400
−600
−800

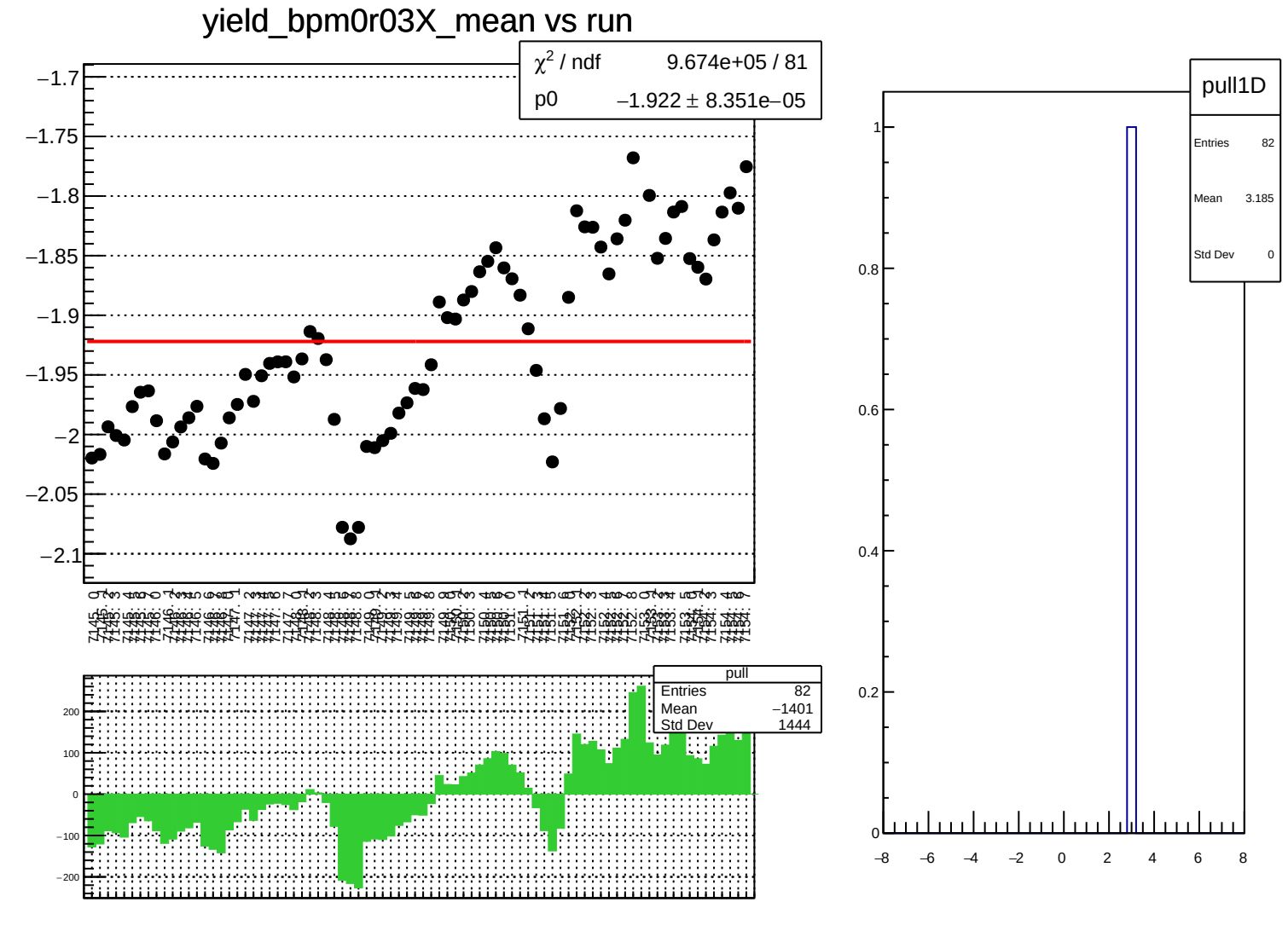

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

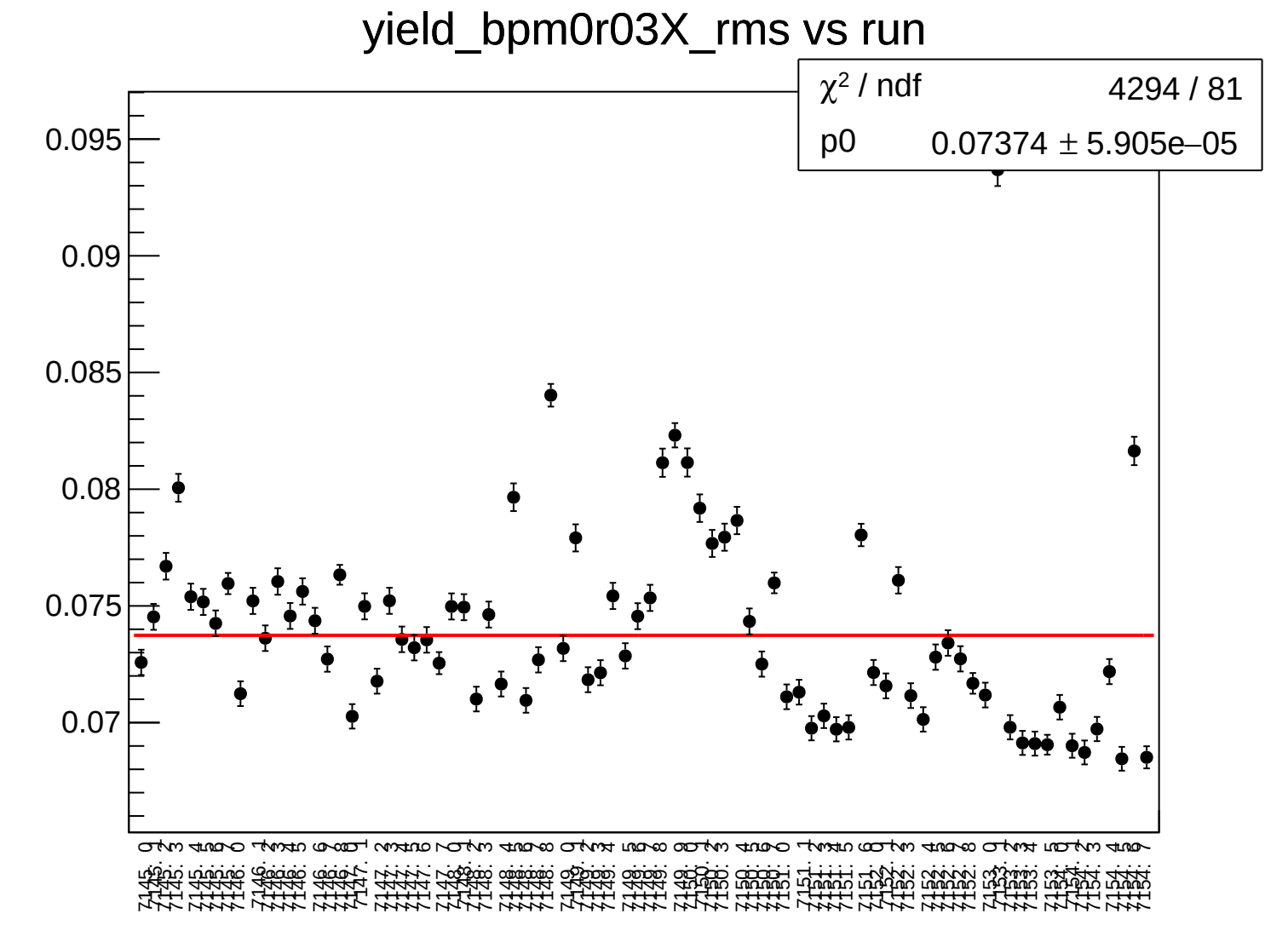

yield_bpm0l10X_rms vs run
χ² / ndf 2.746e+04 / 81
p0 0.009742 ± 7.86e–06
0.018
0.016
0.014
0.012
0.01
0.008

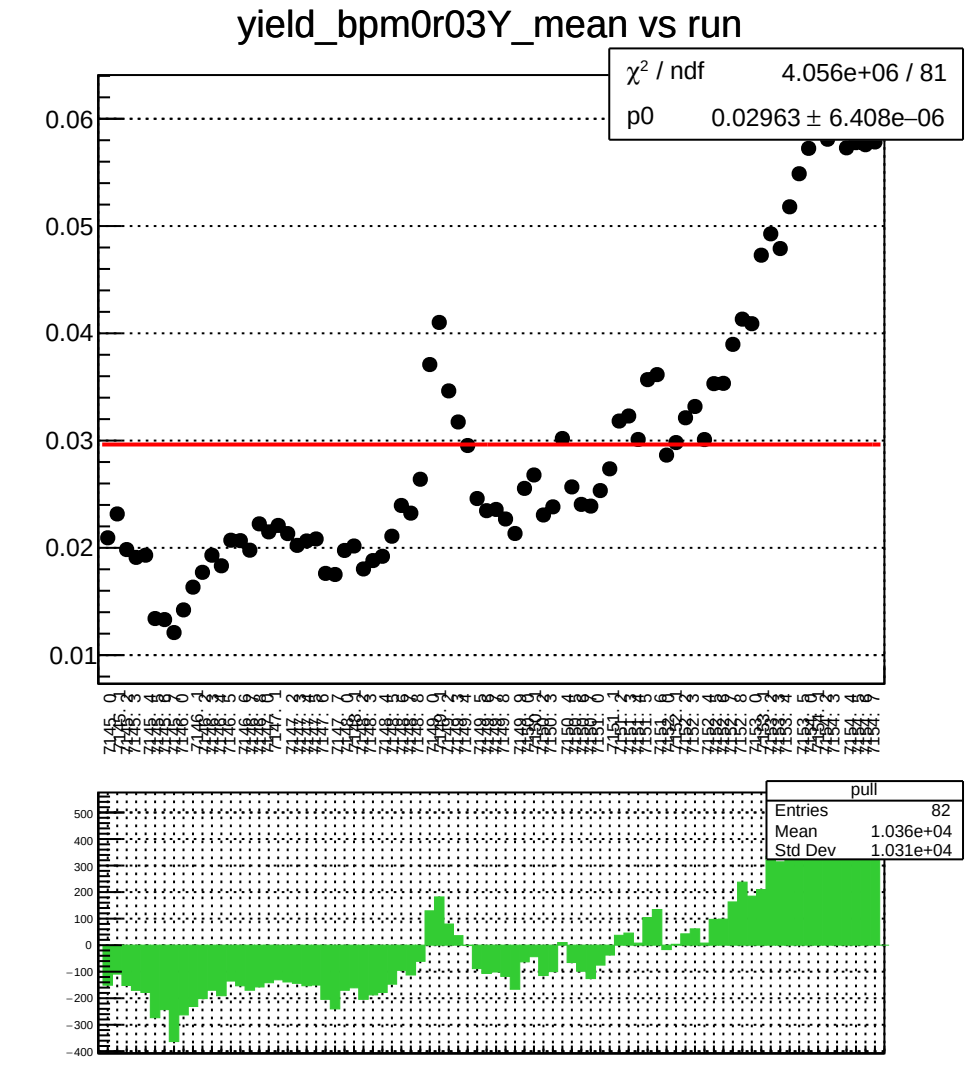

yield_bpm0l10Y_mean vs run
χ² / ndf 1.679e+07 / 81
p0 −0.5238 ± 3.044e−06
−0.5
−0.51
−0.52
−0.53
−0.54
pull
Entries 82
Mean 9996
Std Dev 9953
1000
800
600
400
200
0
−200
−400
−600

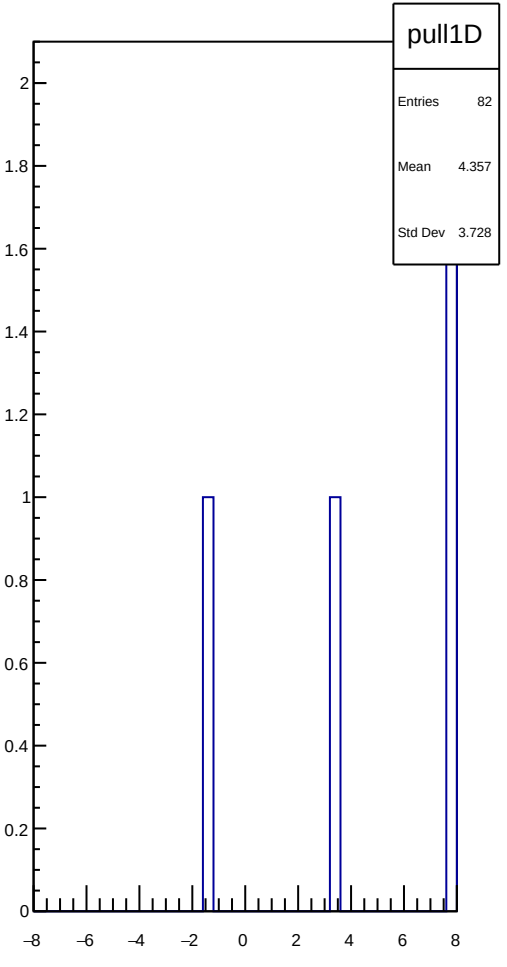

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

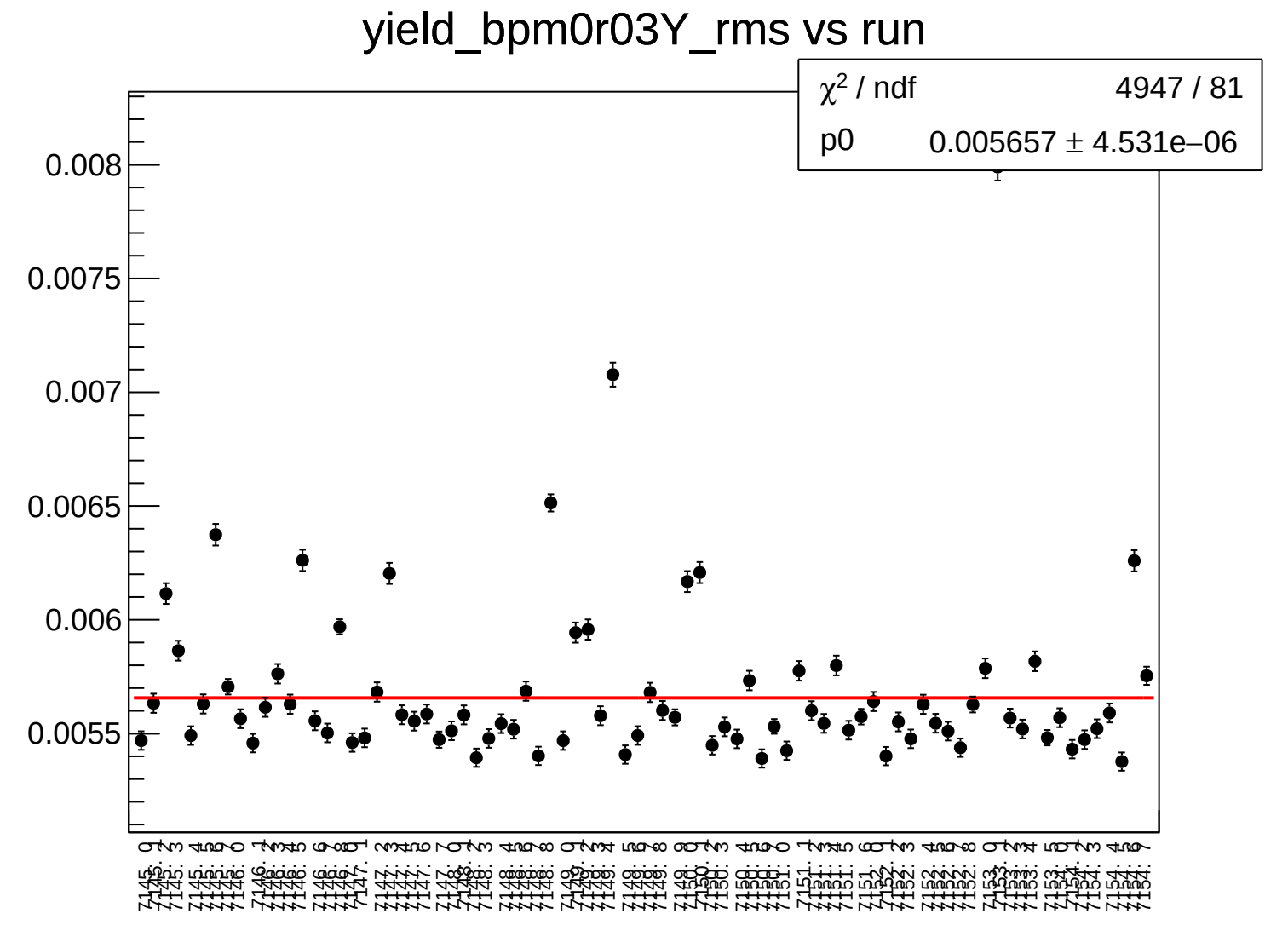

yield_bpm0l10Y_rms vs run
χ² / ndf 6315 / 81
p0 0.002686 ± 2.152e−06
0.004
0.0038
0.0036
0.0034
0.0032
0.003
0.0028
0.0026
0.0024

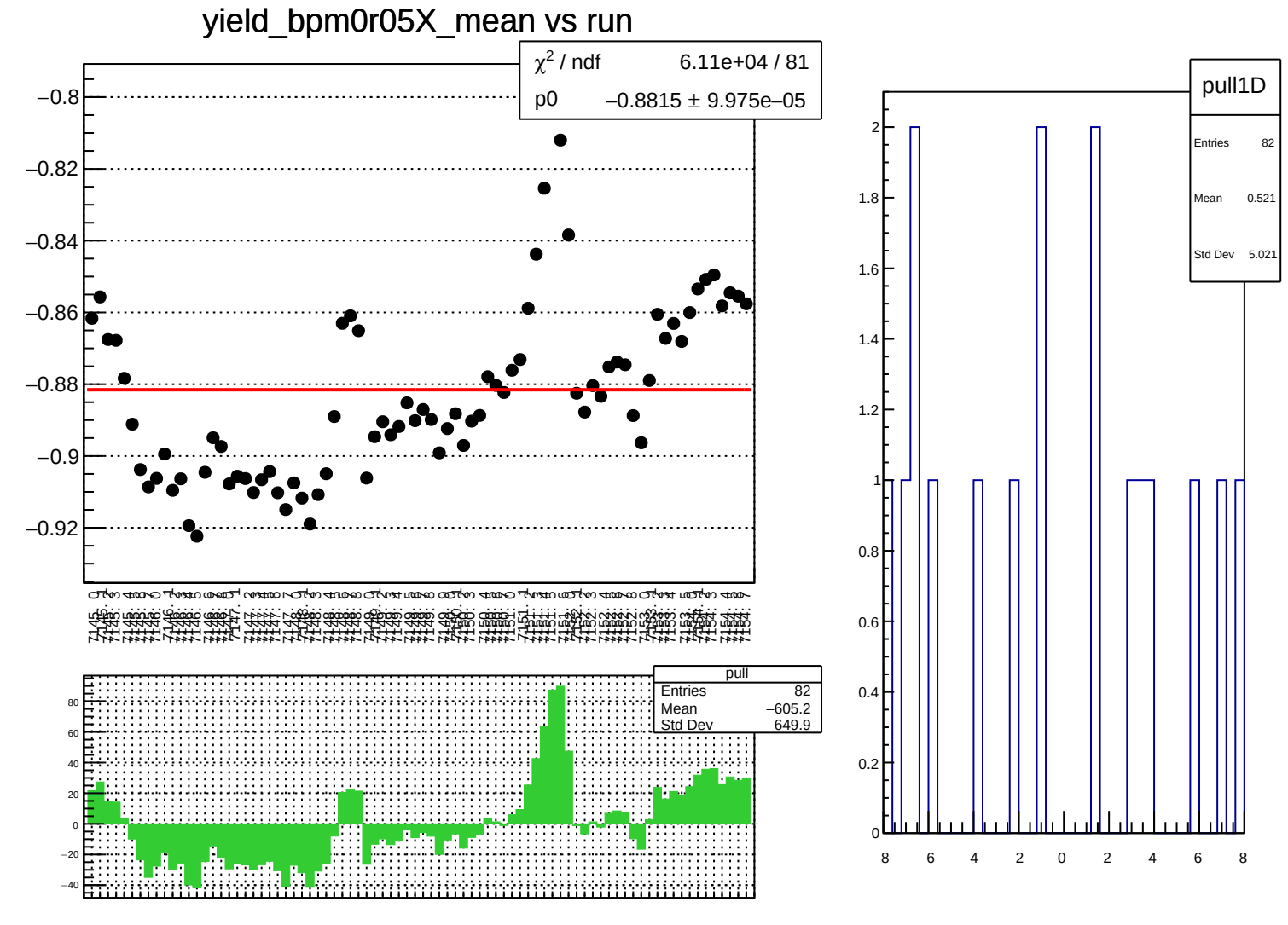

yield_bpm0r03X_mean vs run
χ² / ndf 9.674e+05 / 81
p0 −1.922 ± 8.351e−05
−1.7
−1.75
−1.8
−1.85
−1.9
−1.95
−2
−2.05
−2.1
pull
Entries 82
Mean −1401
Std Dev 1444
200
100
0
−100
−200
pull1D
Entries 82
Mean 3.185
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

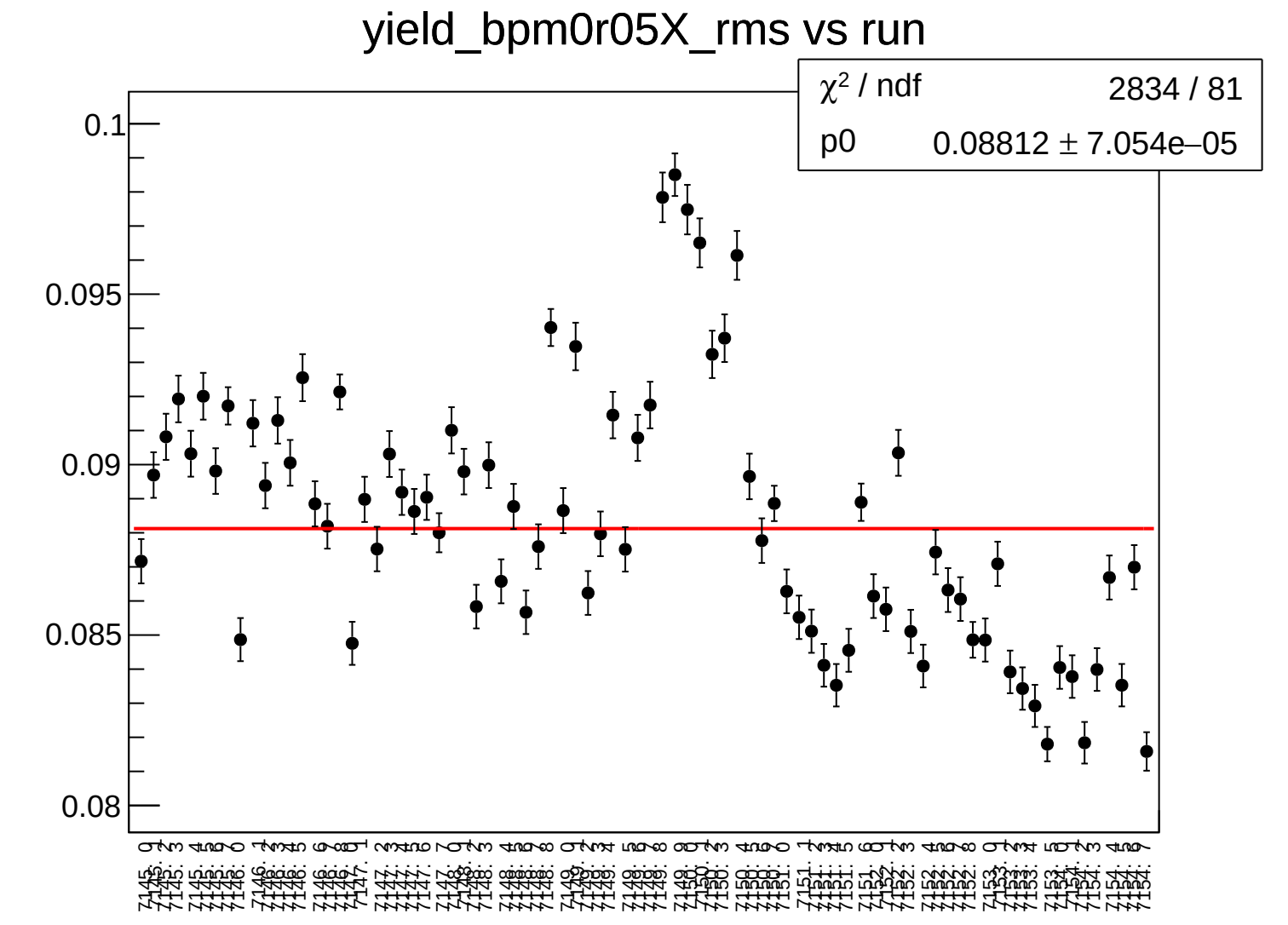

yield_bpm0r03X_rms vs run
χ² / ndf 4294 / 81
p0 0.07374 ± 5.905e−05
0.095
0.09
0.085
0.08
0.075
0.07

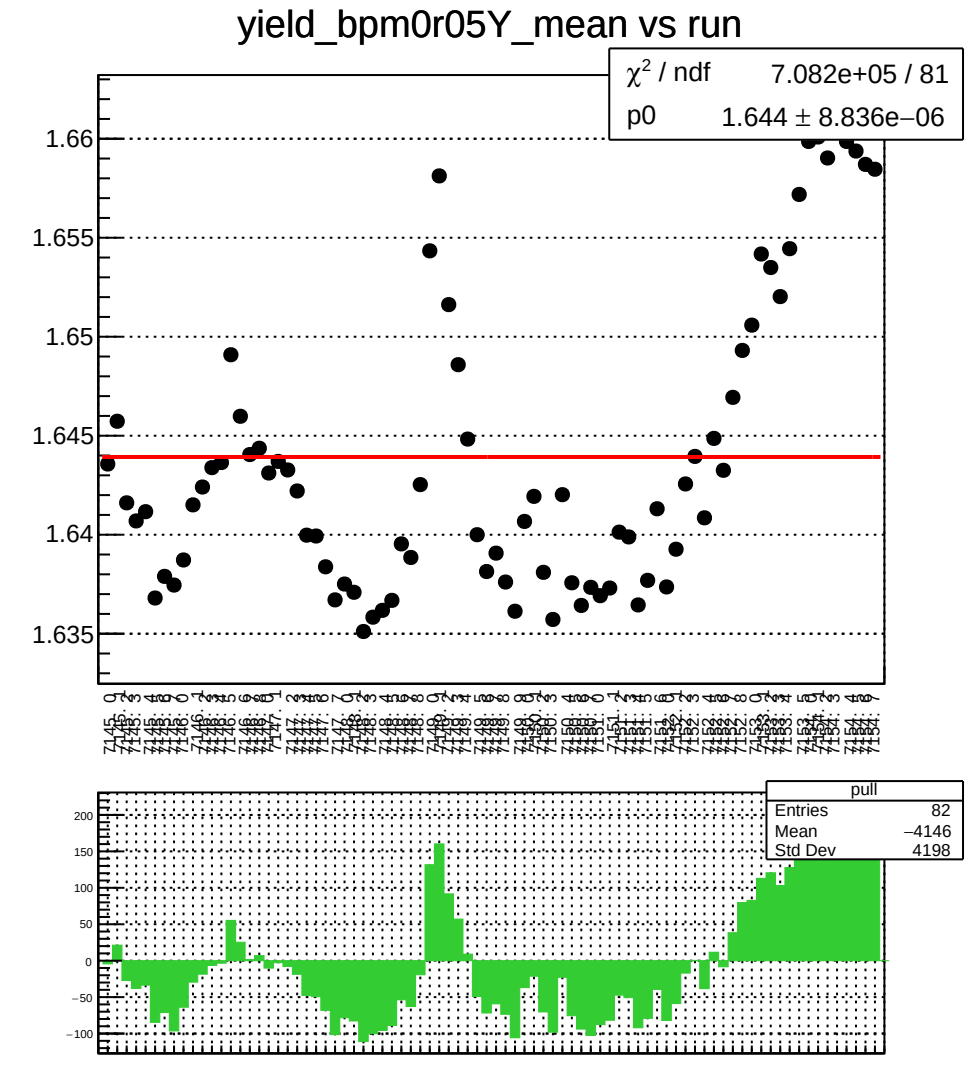

yield_bpm0r03Y_mean vs run
χ² / ndf 4.056e+06 / 81
p0 0.02963 ± 6.408e−06
0.06
0.05
0.04
0.03
0.02
0.01
pull
Entries 82
Mean 1.036e+04
Std Dev 1.031e+04
500
400
300
200
100
0
−100
−200
−300
−400

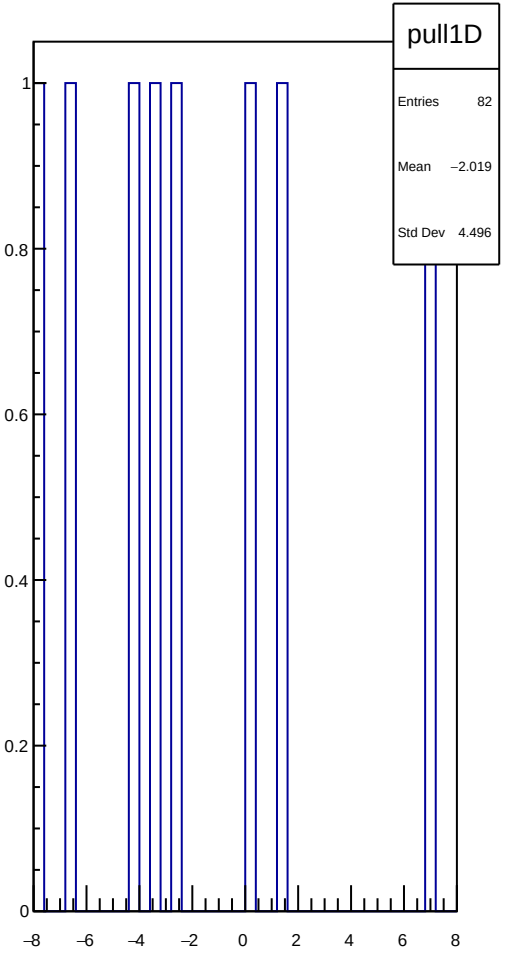

pull1D
Entries 82
Mean 4.357
Std Dev 3.728
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

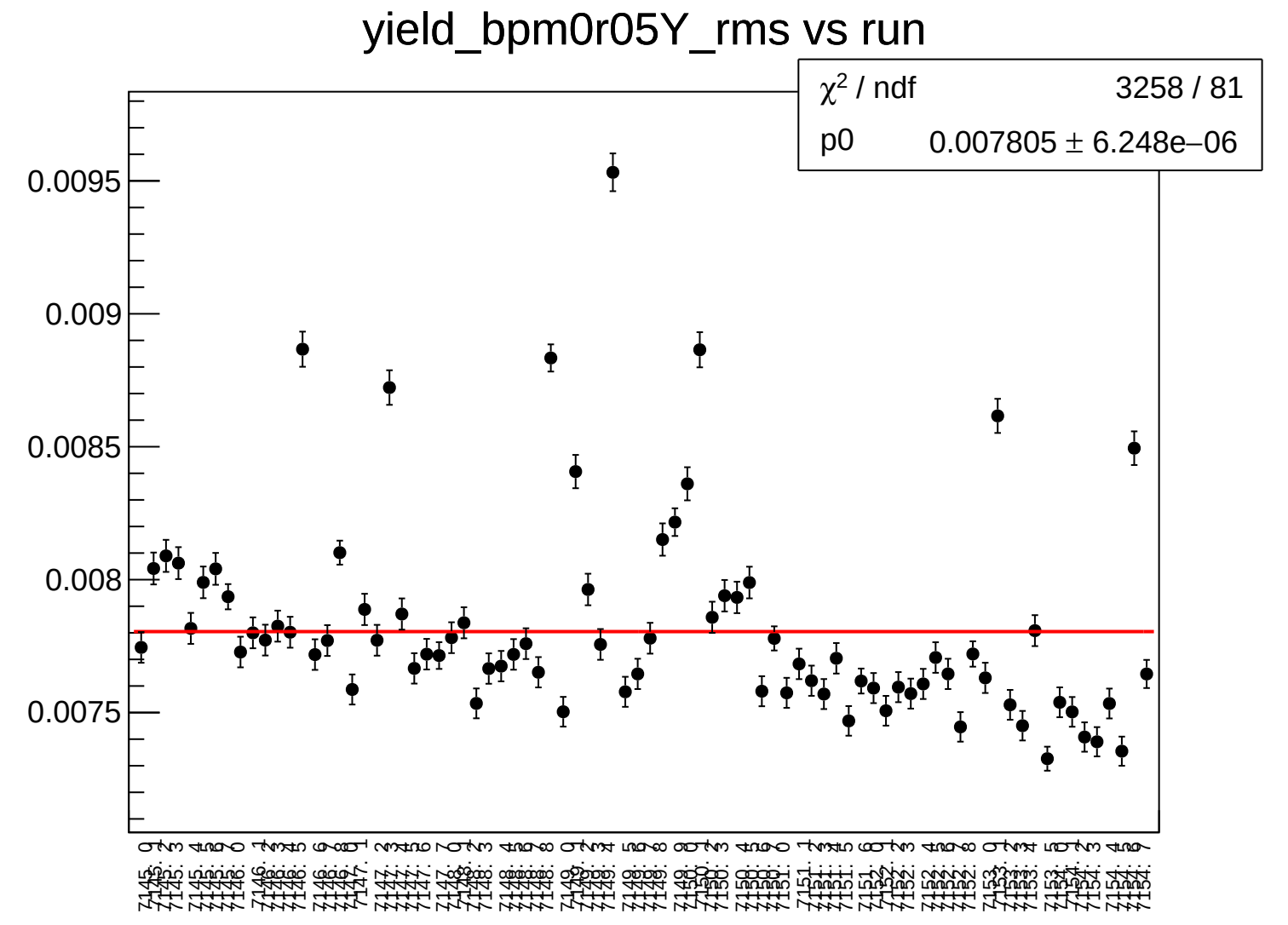

yield_bpm0r03Y_rms vs run
χ² / ndf 4947 / 81
p0 0.005657 ± 4.531e−06
0.008
0.0075
0.007
0.0065
0.006
0.0055

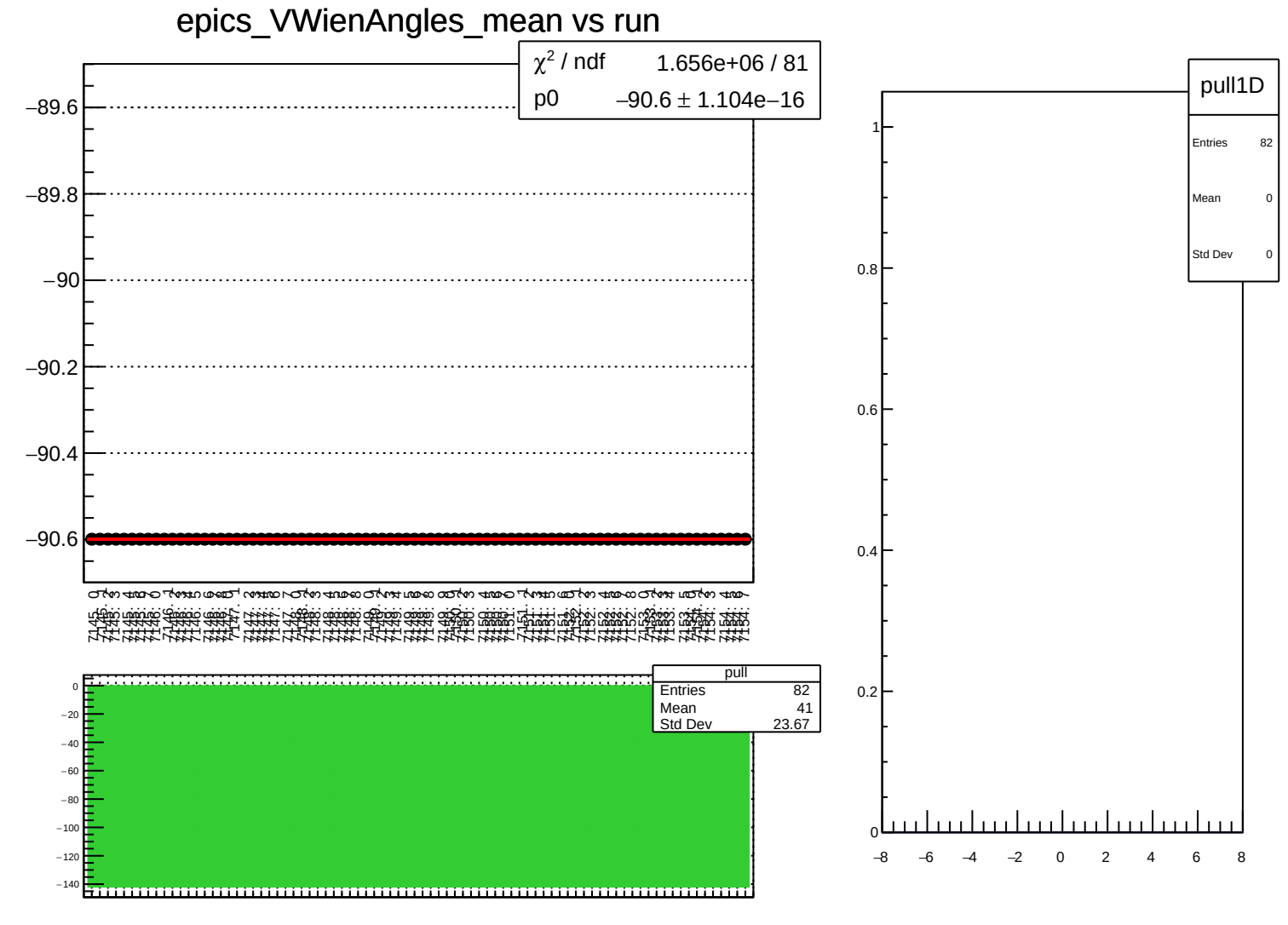

yield_bpm0r05X_mean vs run
χ² / ndf 6.11e+04 / 81
p0 −0.8815 ± 9.975e−05
pull
Entries 82
Mean −605.2
Std Dev 649.9
pull1D
Entries 82
Mean −0.521
Std Dev 5.021

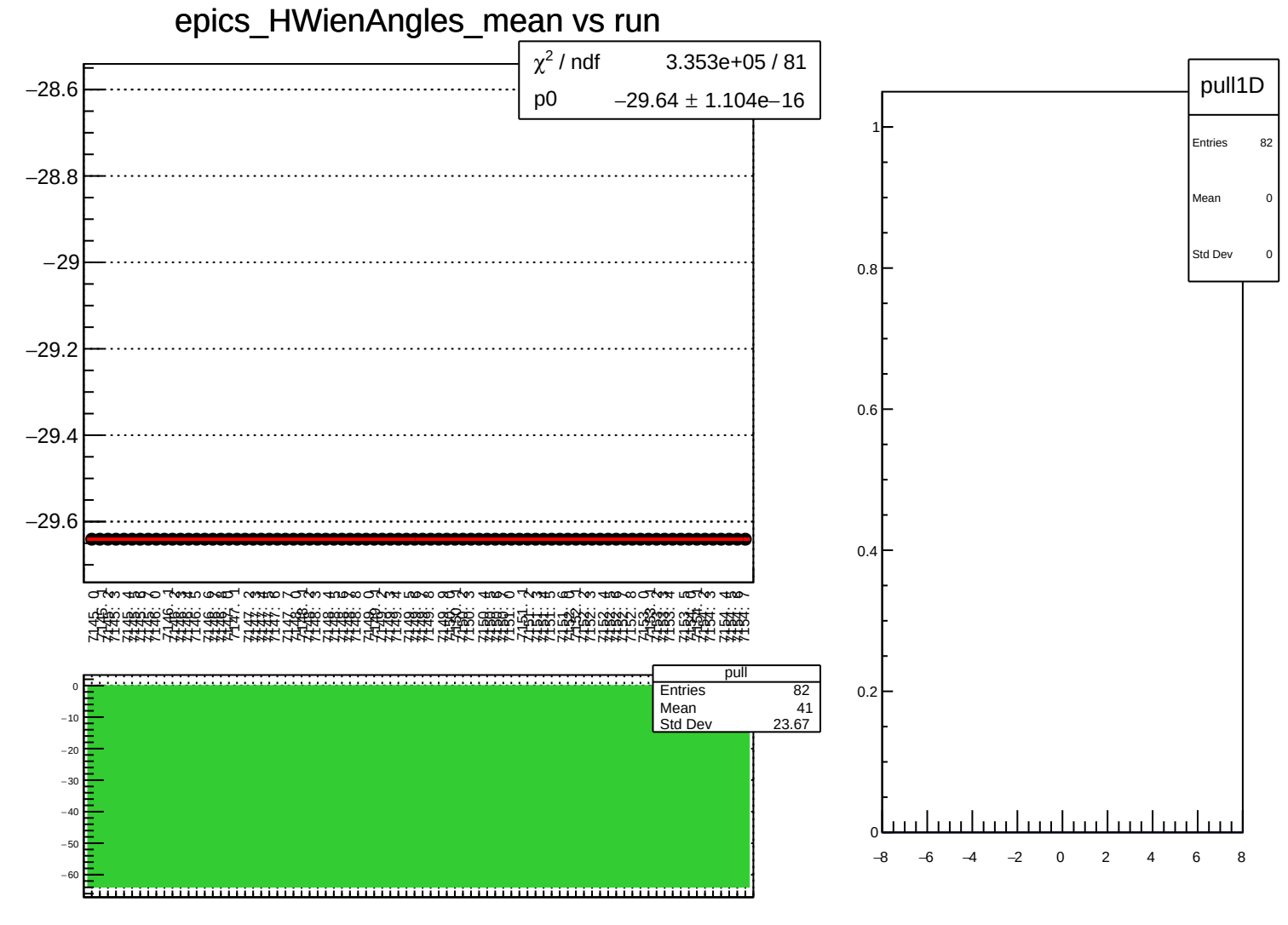

yield_bpm0r05X_rms vs run
χ² / ndf 2834 / 81
p0 0.08812 ± 7.054e−05
0.1
0.095
0.09
0.085
0.08

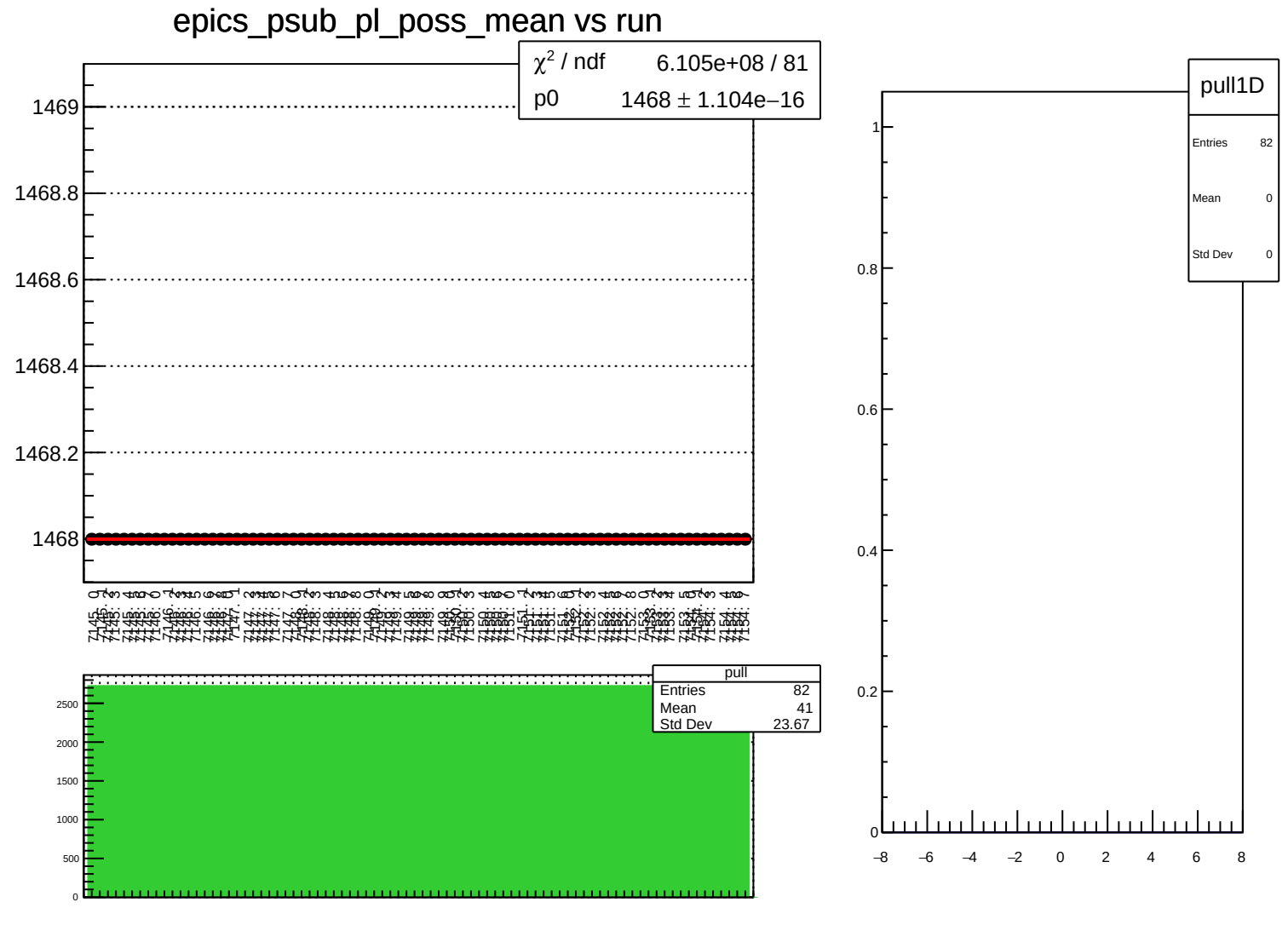

yield_bpm0r05Y_mean vs run
χ² / ndf 7.082e+05 / 81
p0 1.644 ± 8.836e−06
1.66
1.655
1.65
1.645
1.64
1.635
pull
Entries 82
Mean −4146
Std Dev 4198
200
150
100
50
0
−50
−100

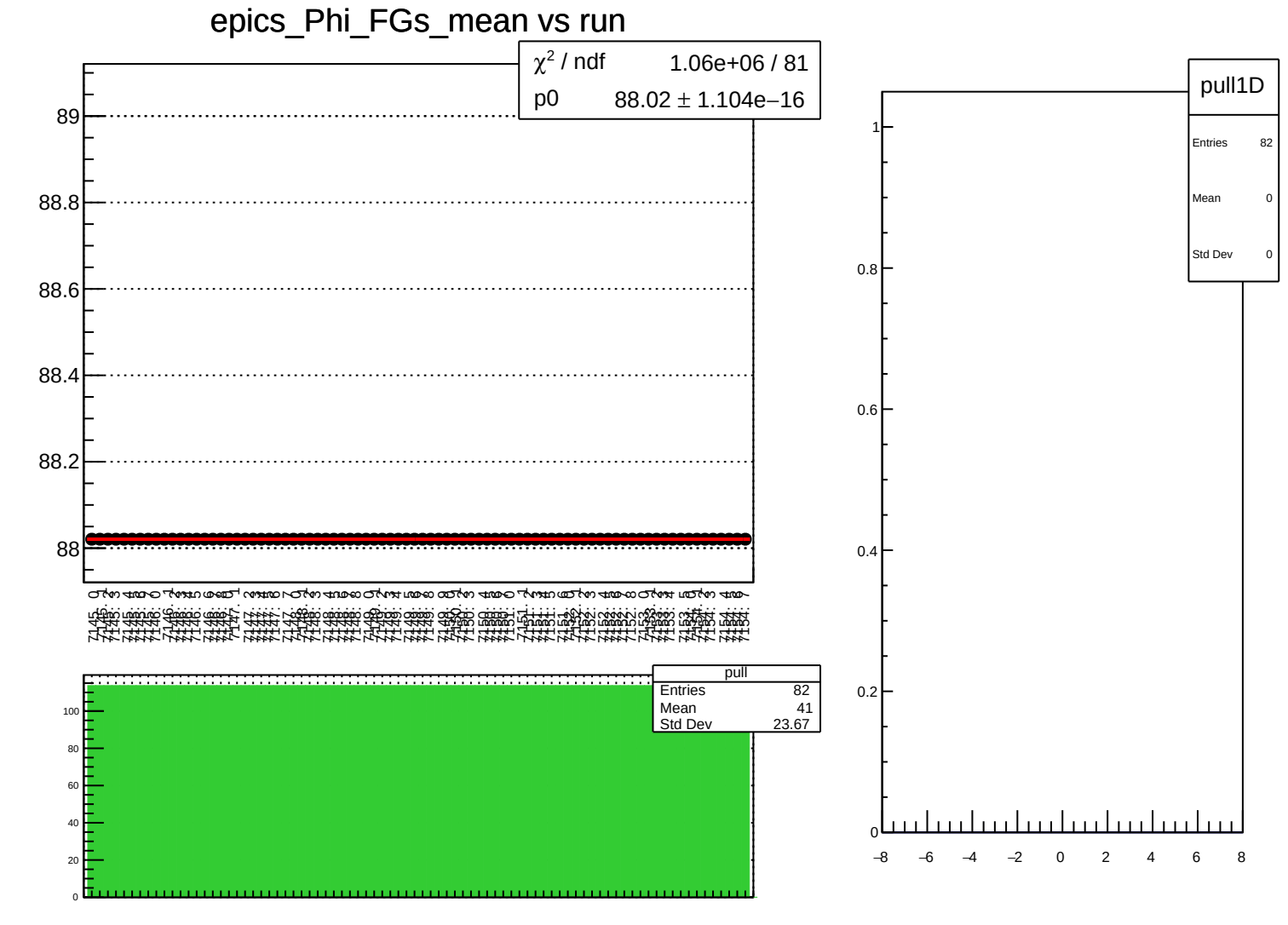

pull1D
Entries 82
Mean −2.019
Std Dev 4.496
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

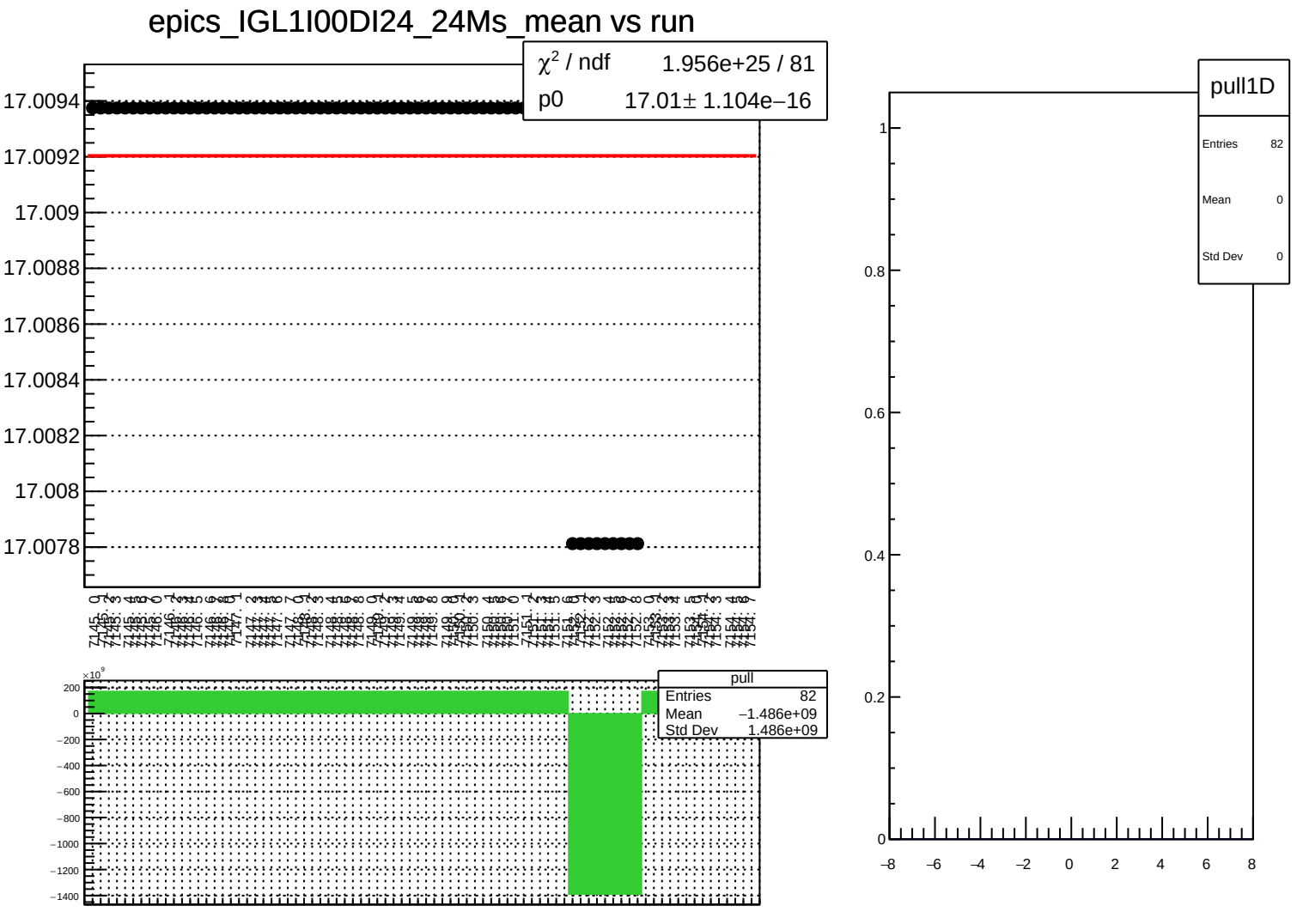

yield_bpm0r05Y_rms vs run
χ² / ndf 3258 / 81
p0 0.007805 ± 6.248e−06
0.0095
0.009
0.0085
0.008
0.0075

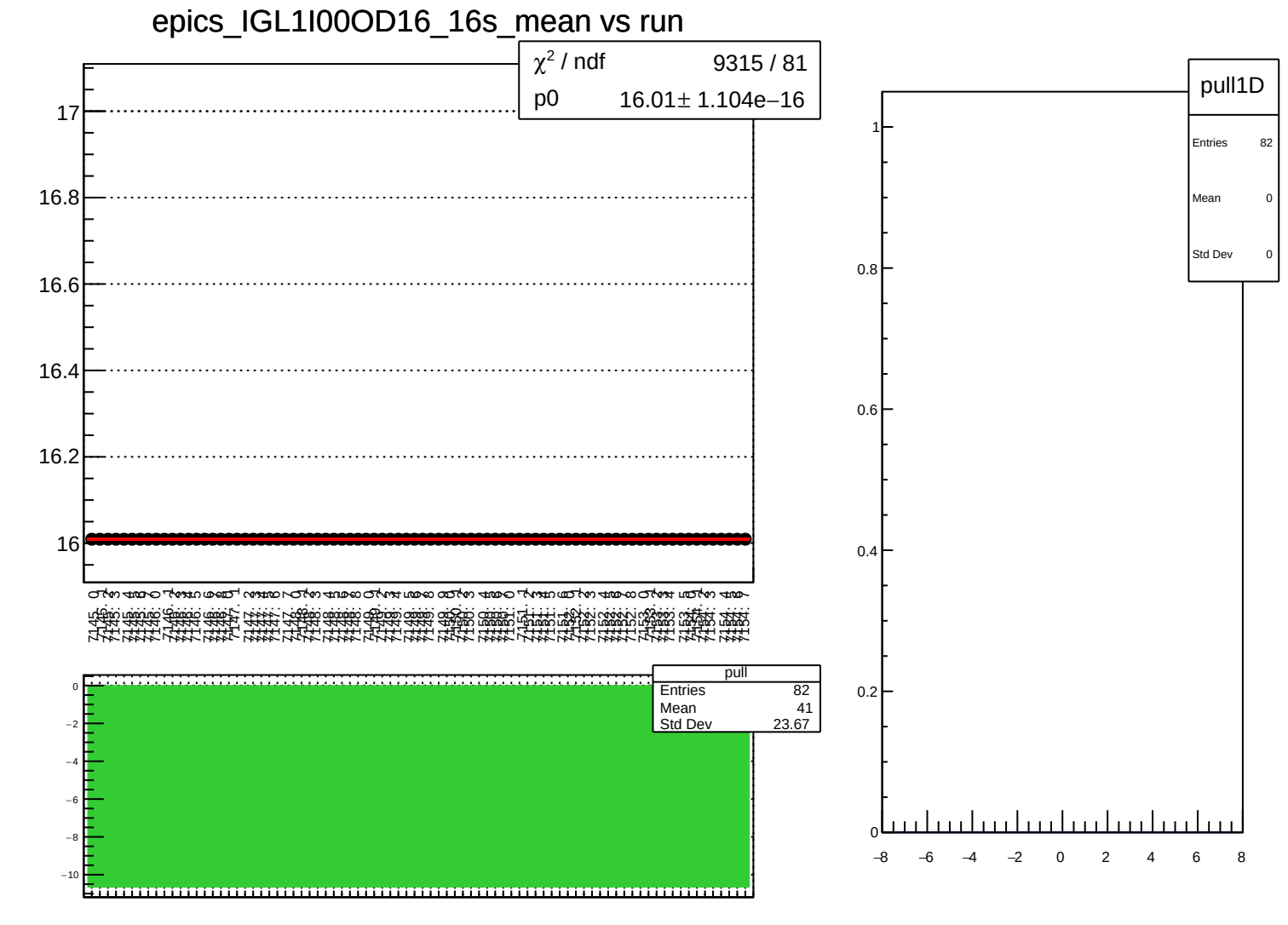

epics_VWienAngles_mean vs run
χ² / ndf 1.656e+06 / 81
p0 −90.6 ± 1.104e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 82
Mean 41
Std Dev 23.67
0
−20
−40
−60
−80
−100
−120
−140
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

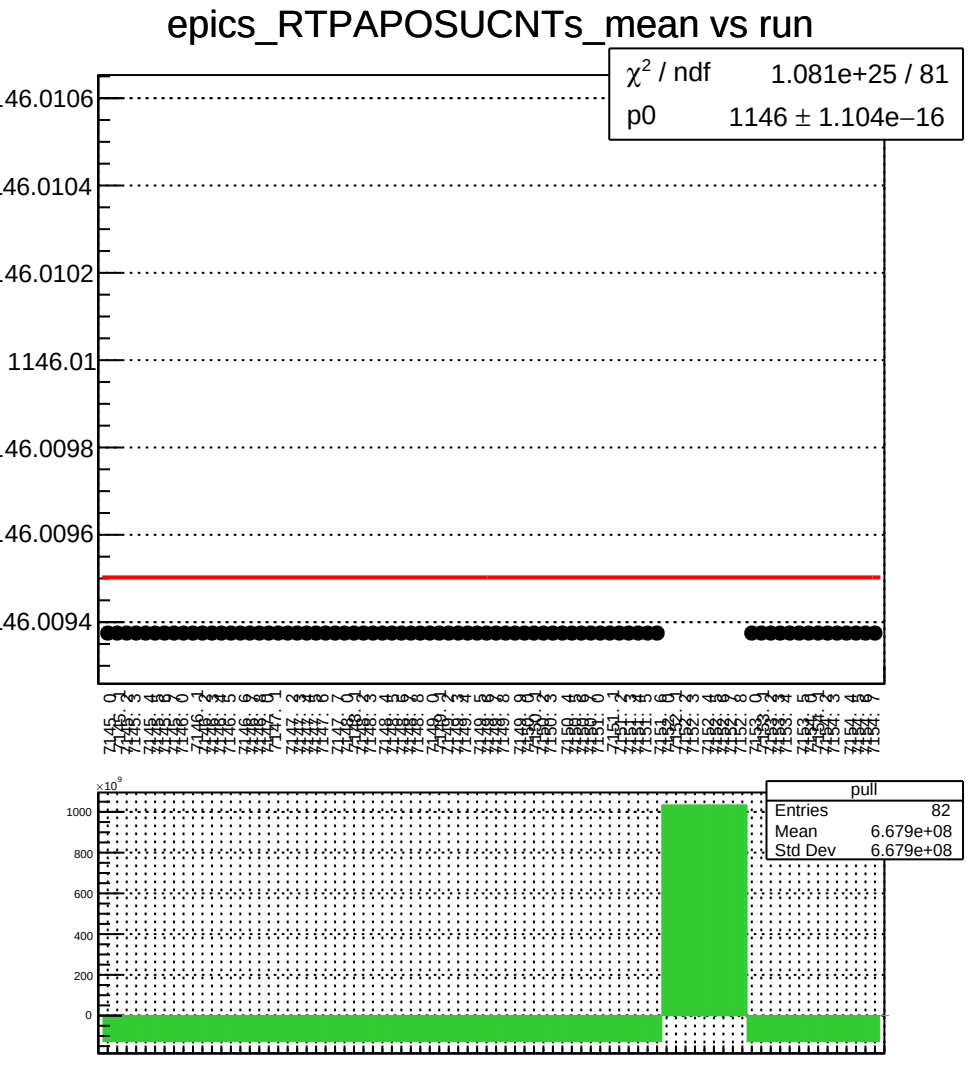

epics_HWienAngles_mean vs run
χ² / ndf 3.353e+05 / 81
p0 −29.64 ± 1.104e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 82
Mean 41
Std Dev 23.67
0
−10
−20
−30
−40
−50
−60
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

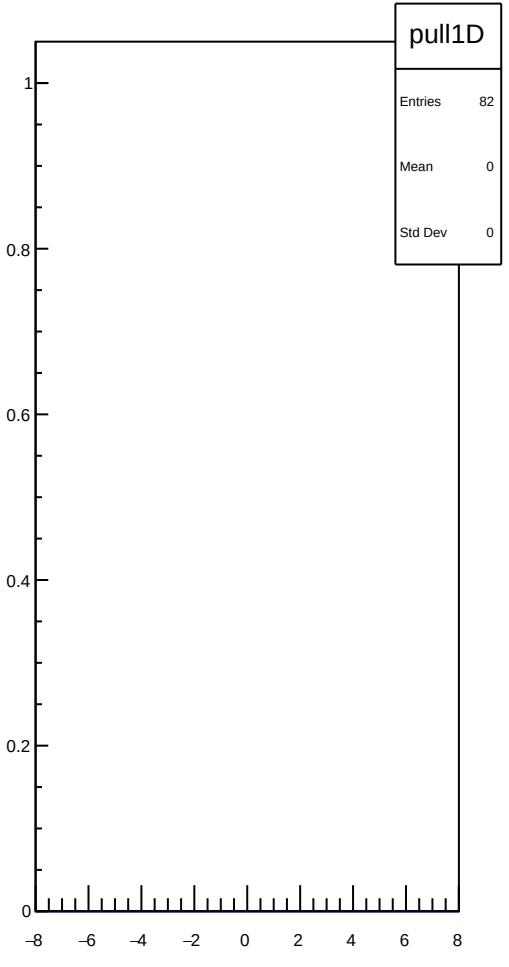

epics_psub_pl_poss_mean vs run
χ² / ndf 6.105e+08 / 81
p0 1468 ± 1.104e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 82
Mean 41
Std Dev 23.67
2500
2000
1500
1000
500
0
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

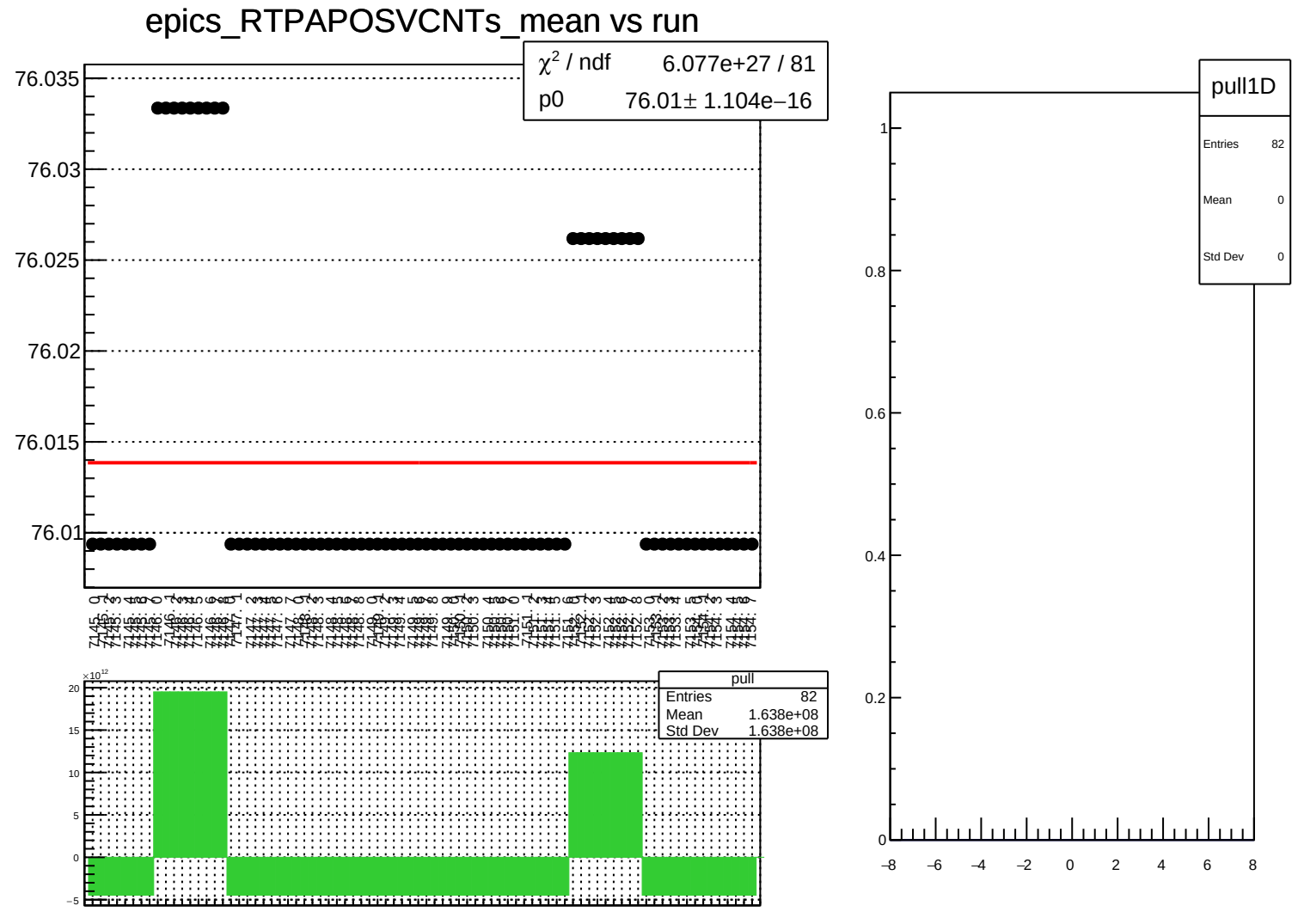

epics_Phi_FGs_mean vs run
χ² / ndf 1.06e+06 / 81
p0 88.02 ± 1.104e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 82
Mean 41
Std Dev 23.67
100
80
60
40
20
0
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 1.956e+25 / 81
p0 17.01± 1.104e−16
17.0094
17.0092
17.009
17.0088
17.0086
17.0084
17.0082
17.008
17.0078
pull
Entries 82
Mean −1.486e+09
Std Dev 1.486e+09
×10⁹
200
0
−200
−400
−600
−800
−1000
−1200
−1400
pull1D
Entries 82
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 9315 / 81
p0 16.01± 1.104e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 82
Mean 41
Std Dev 23.67
0
−2
−4
−6
−8
−10
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 1.081e+25 / 81
p0 1146 ± 1.104e−16
1146.0106
1146.0104
1146.0102
1146.01
1146.0098
1146.0096
1146.0094
pull
Entries 82
Mean 6.679e+08
Std Dev 6.679e+08
×10⁹
1000
800
600
400
200
0


pull1D
Entries 82
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 6.077e+27 / 81
p0 76.01± 1.104e−16
76.035
76.03
76.025
76.02
76.015
76.01
pull
Entries 82
Mean 1.638e+08
Std Dev 1.638e+08
pull1D
Entries 82
Mean 0
Std Dev 0