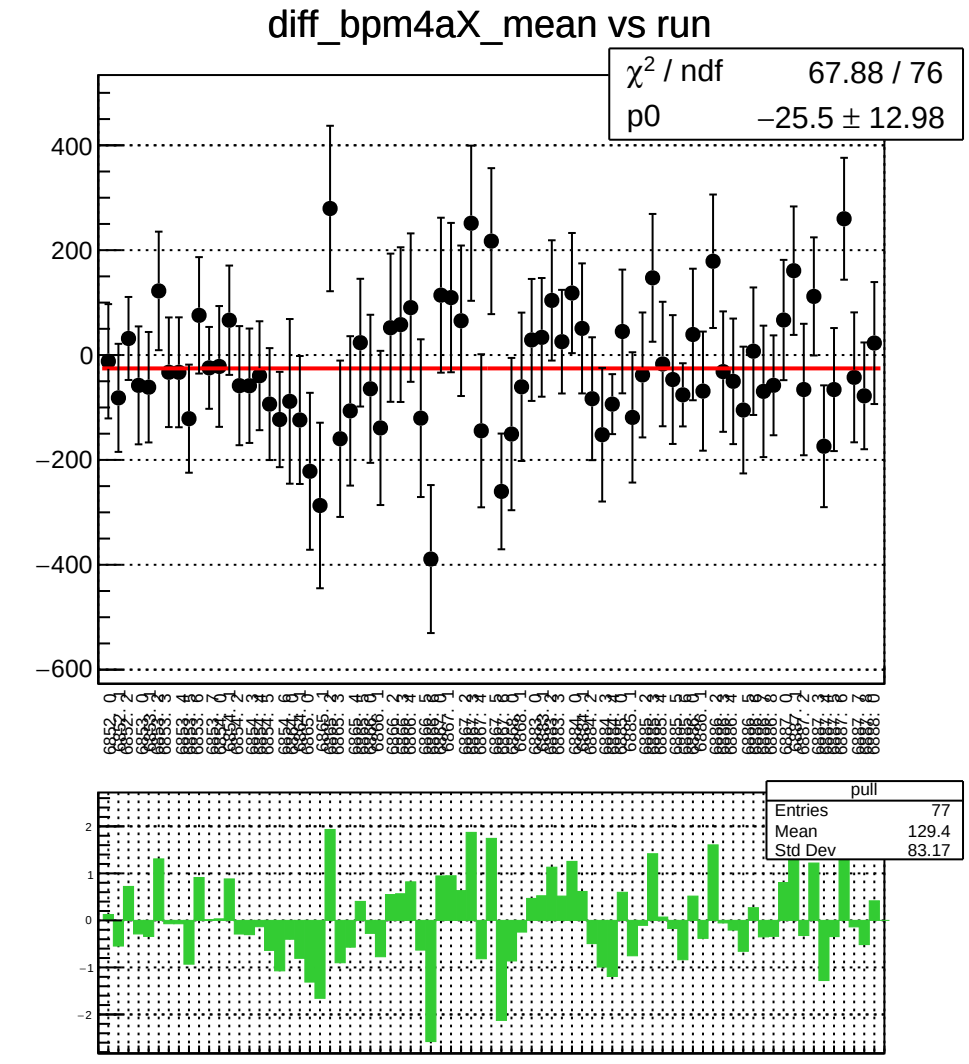
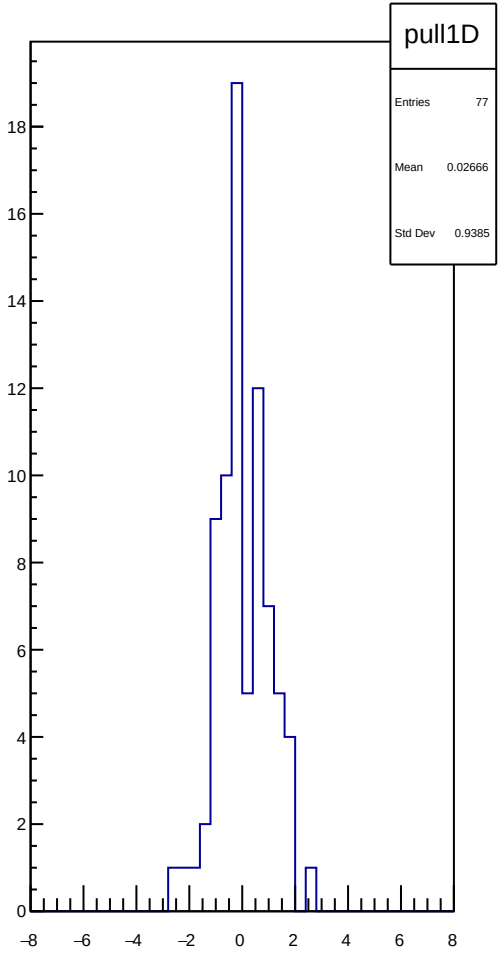
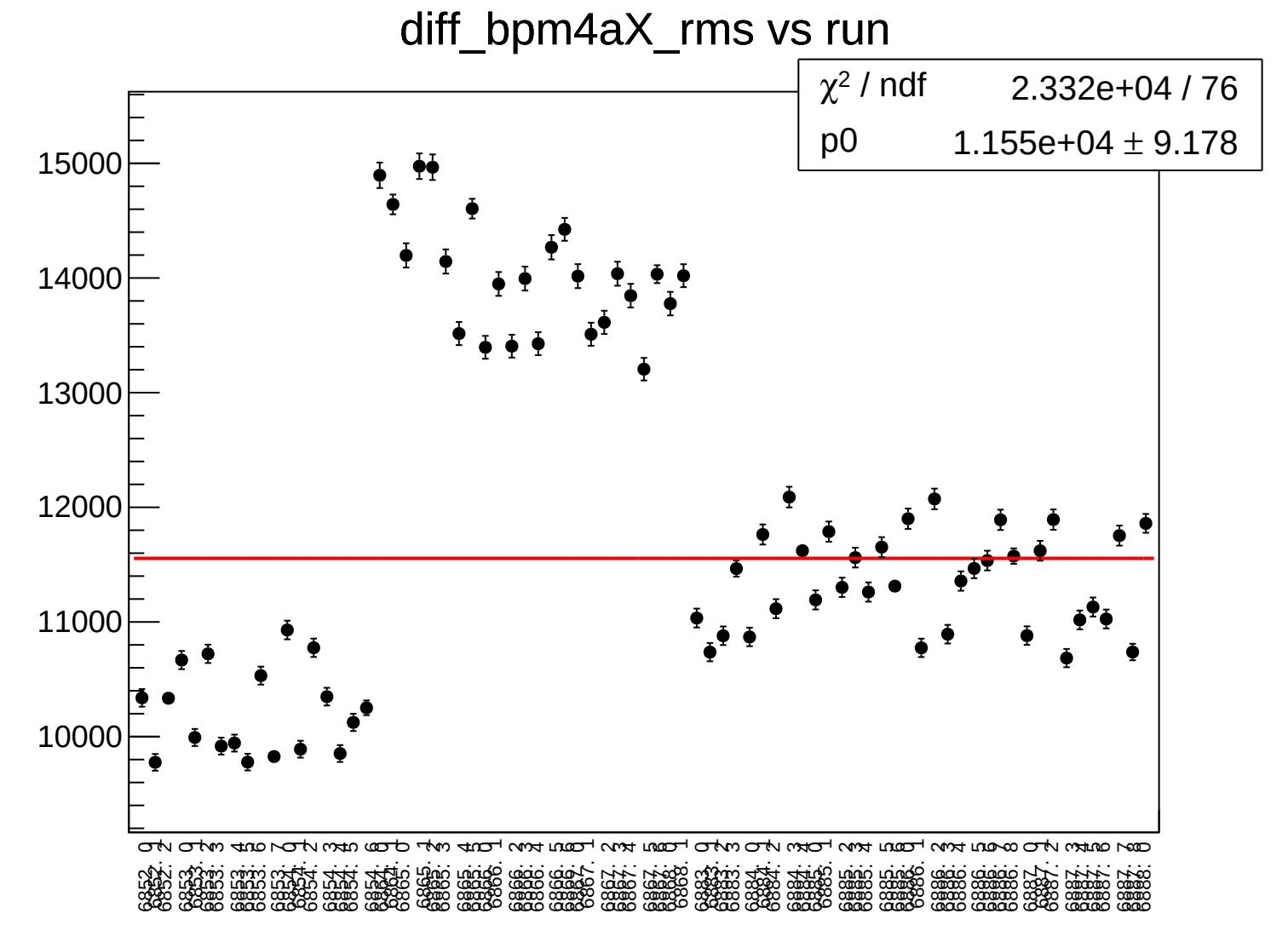
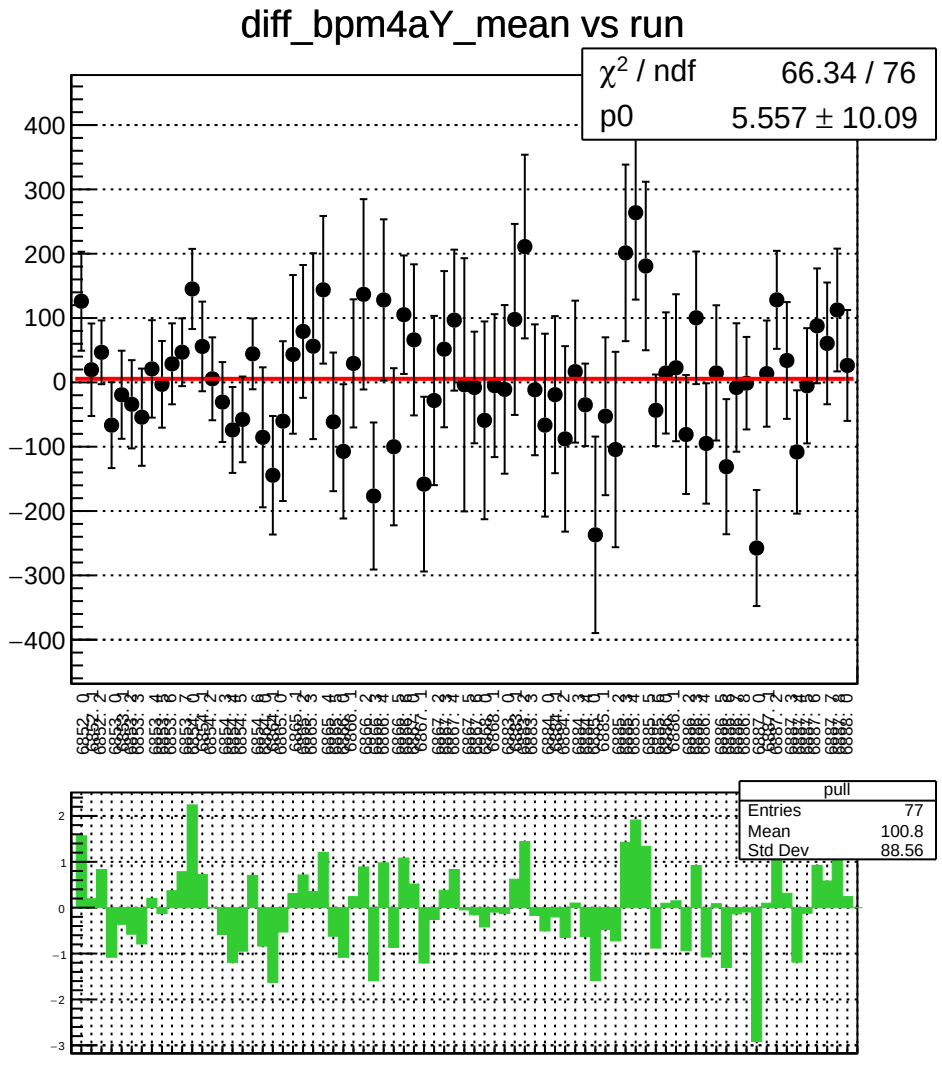
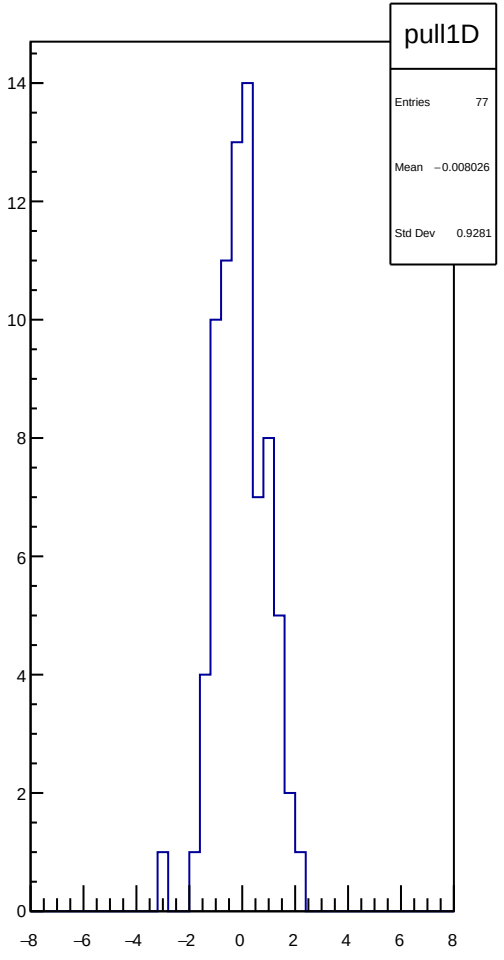
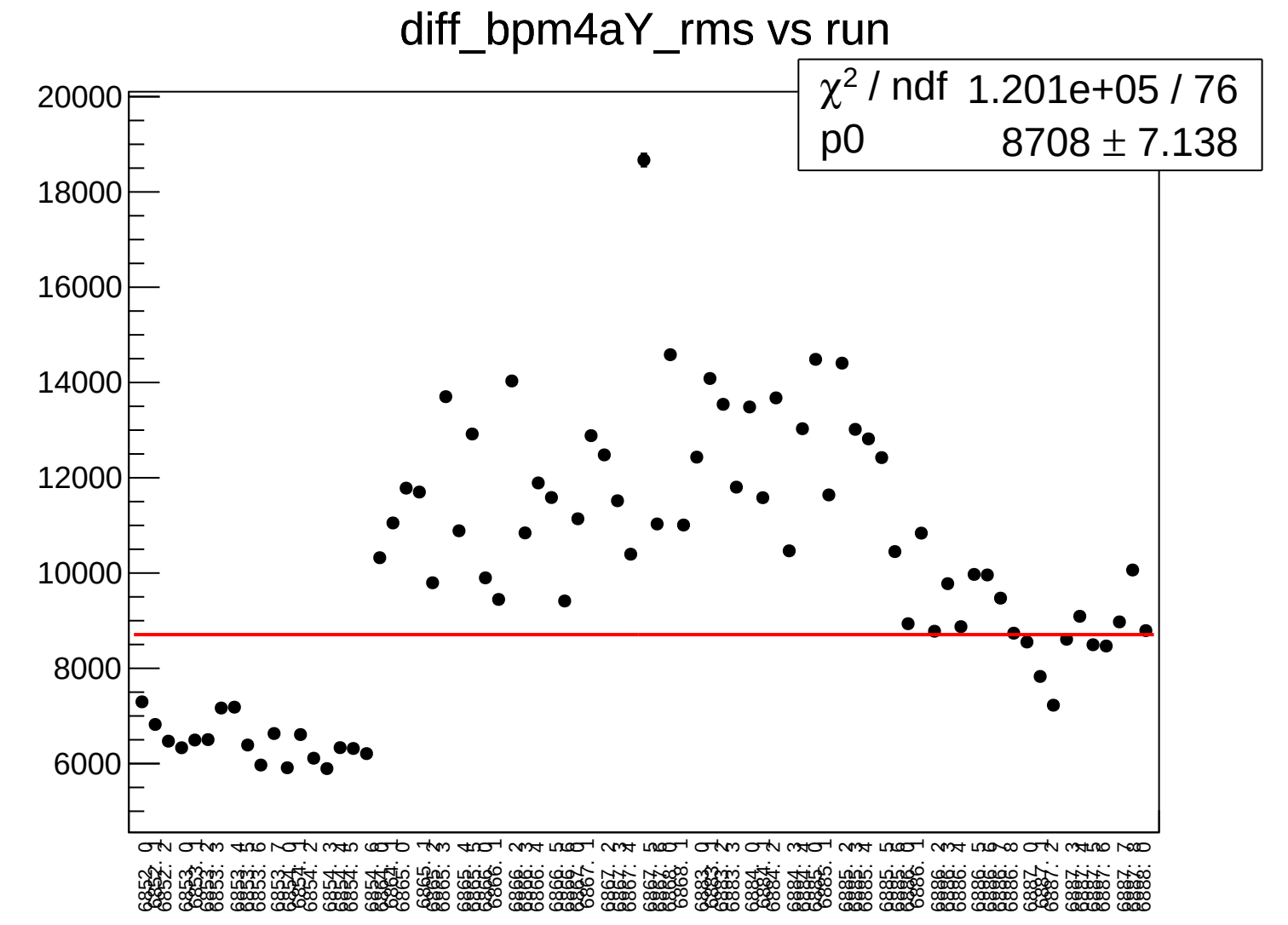

diff_bpm4aX_mean vs run
χ² / ndf 67.88 / 76
p0 −25.5 ± 12.98
pull
Entries 77
Mean 129.4
Std Dev 83.17

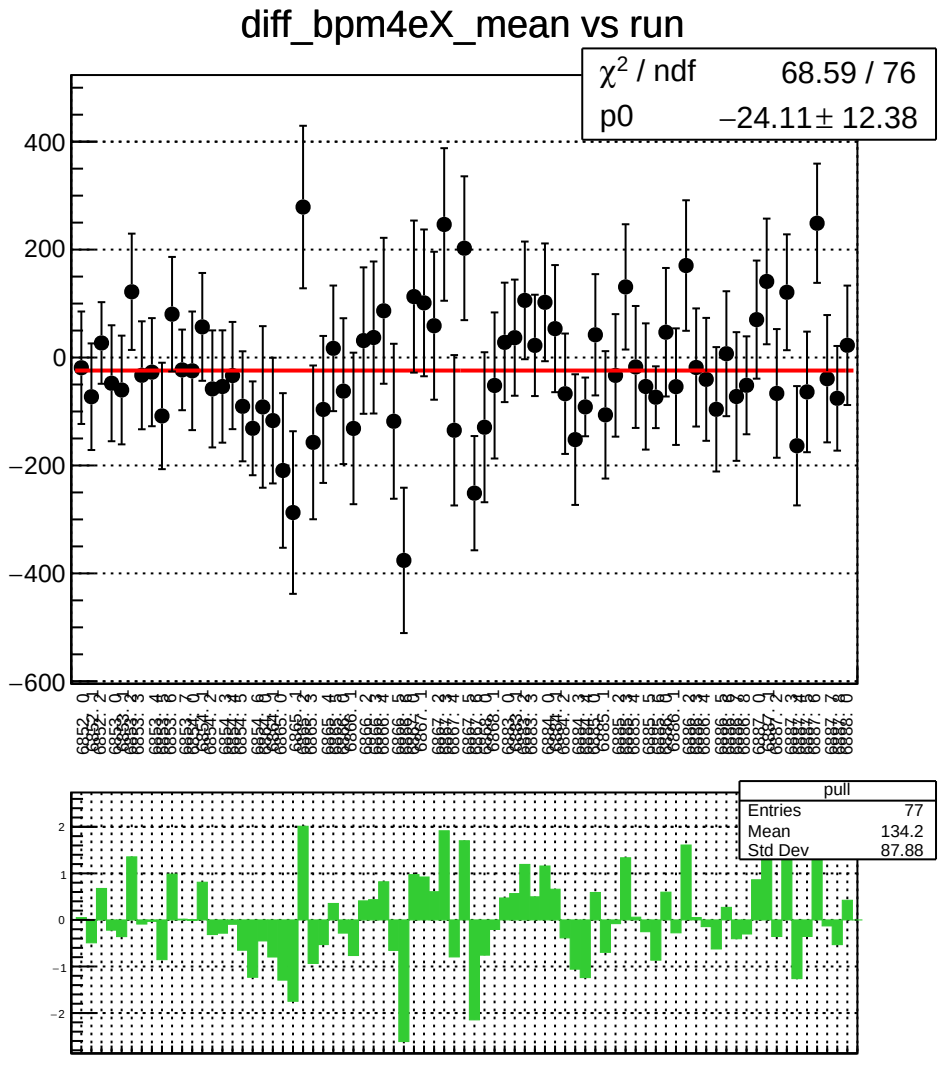

pull1D
Entries 77
Mean 0.02666
Std Dev 0.9385

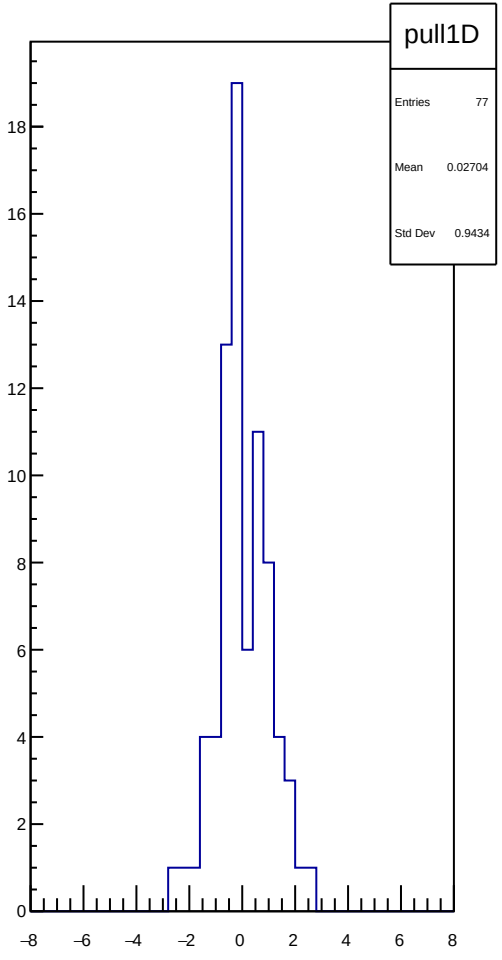

diff_bpm4aX_rms vs run
χ² / ndf 2.332e+04 / 76
p0 1.155e+04 ± 9.178
15000
14000
13000
12000
11000
10000

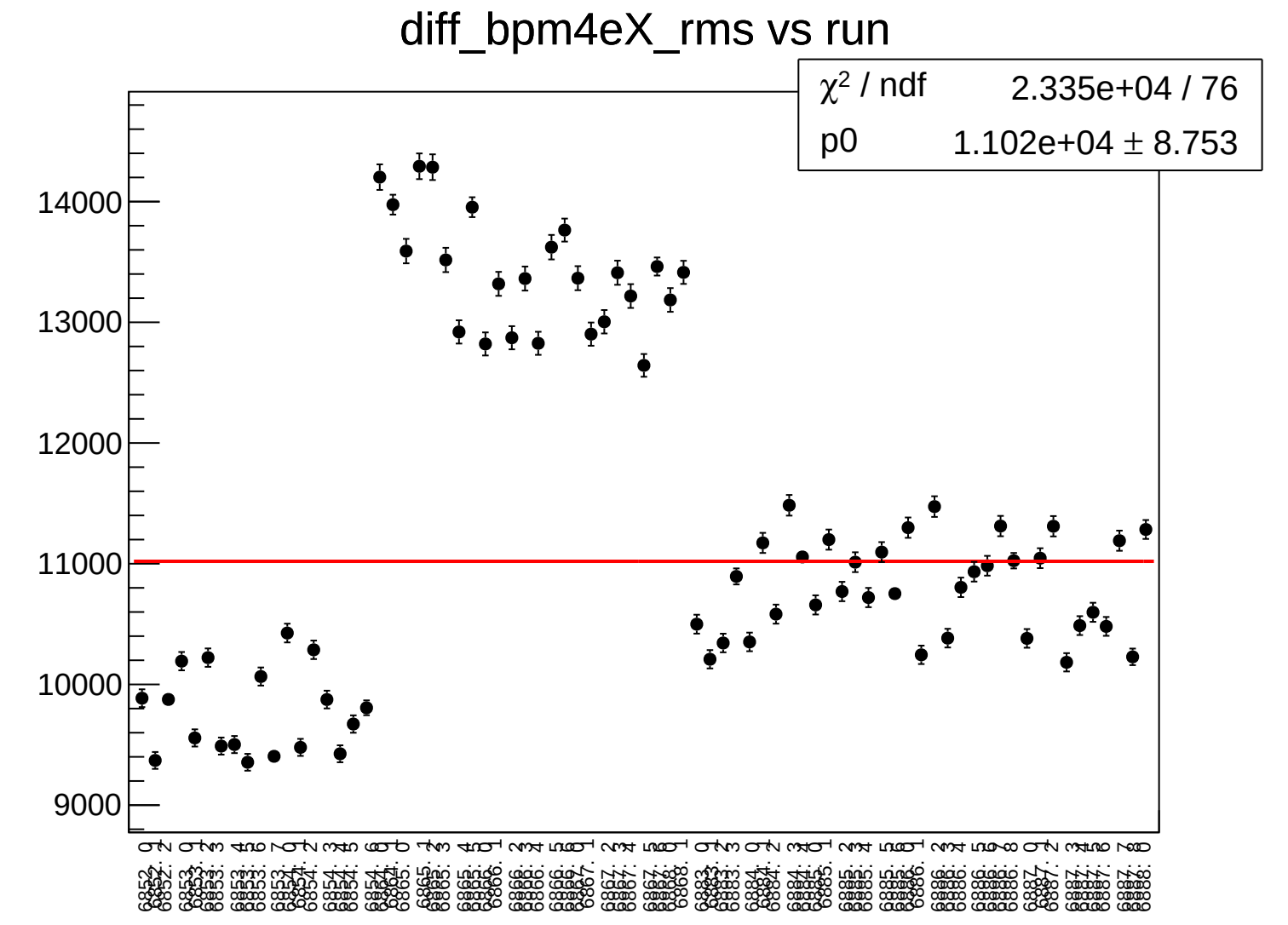

diff_bpm4aY_mean vs run
χ^2 / ndf 66.34 / 76
p0 5.557 ± 10.09
pull
Entries 77
Mean 100.8
Std Dev 88.56

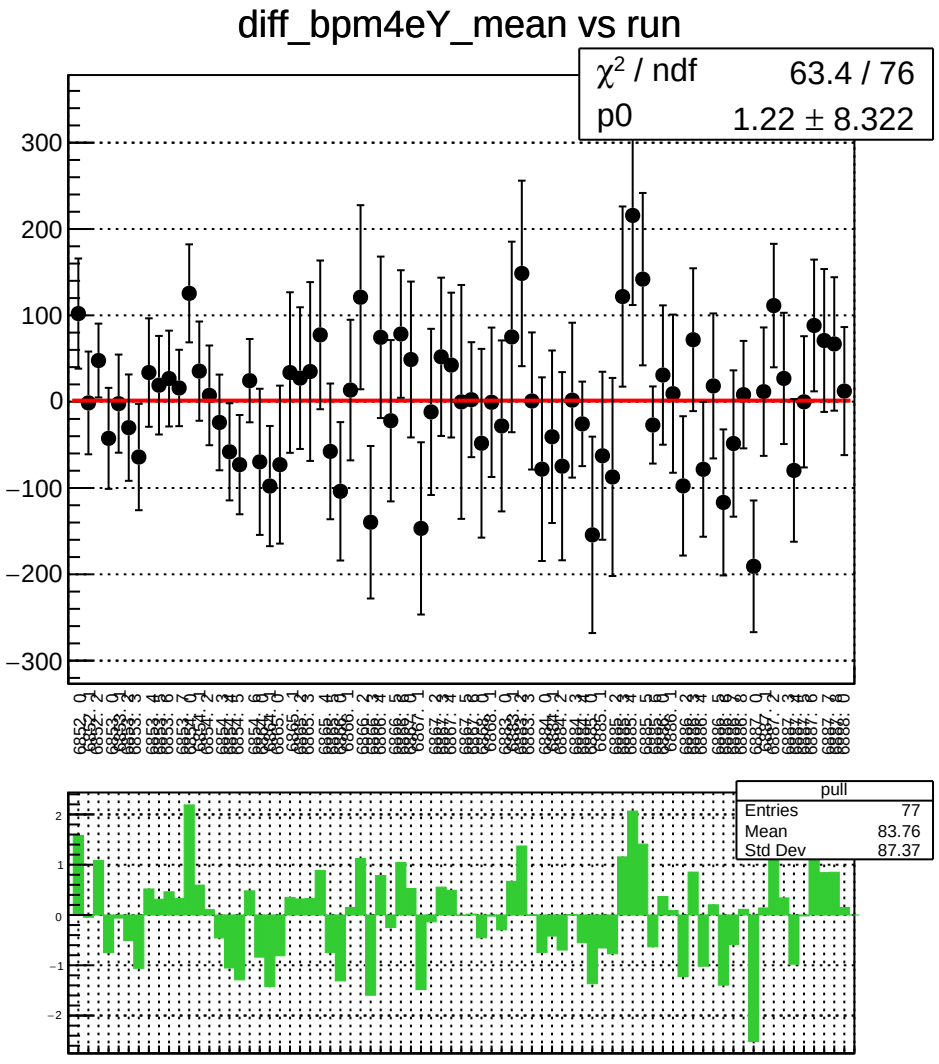

pull1D
Entries 77
Mean −0.008026
Std Dev 0.9281

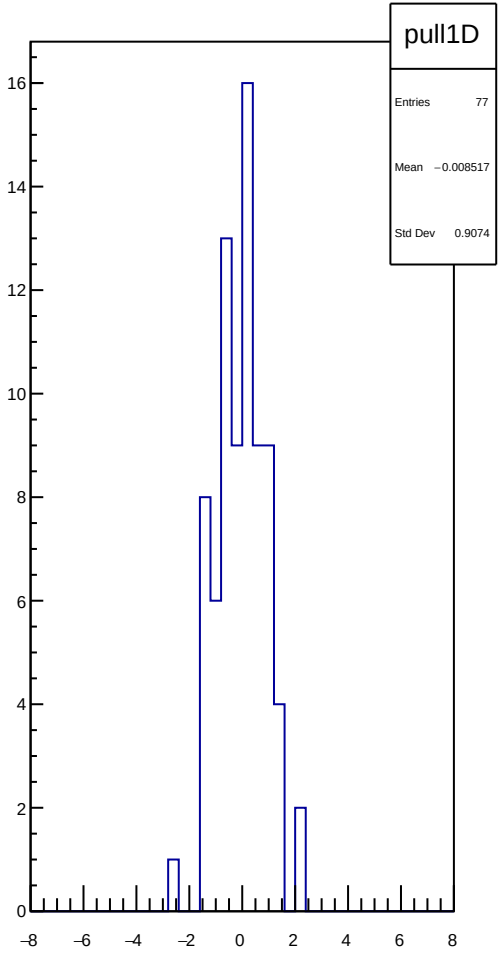

diff_bpm4aY_rms vs run
χ² / ndf 1.201e+05 / 76
p0 8708 ± 7.138
20000
18000
16000
14000
12000
10000
8000
6000

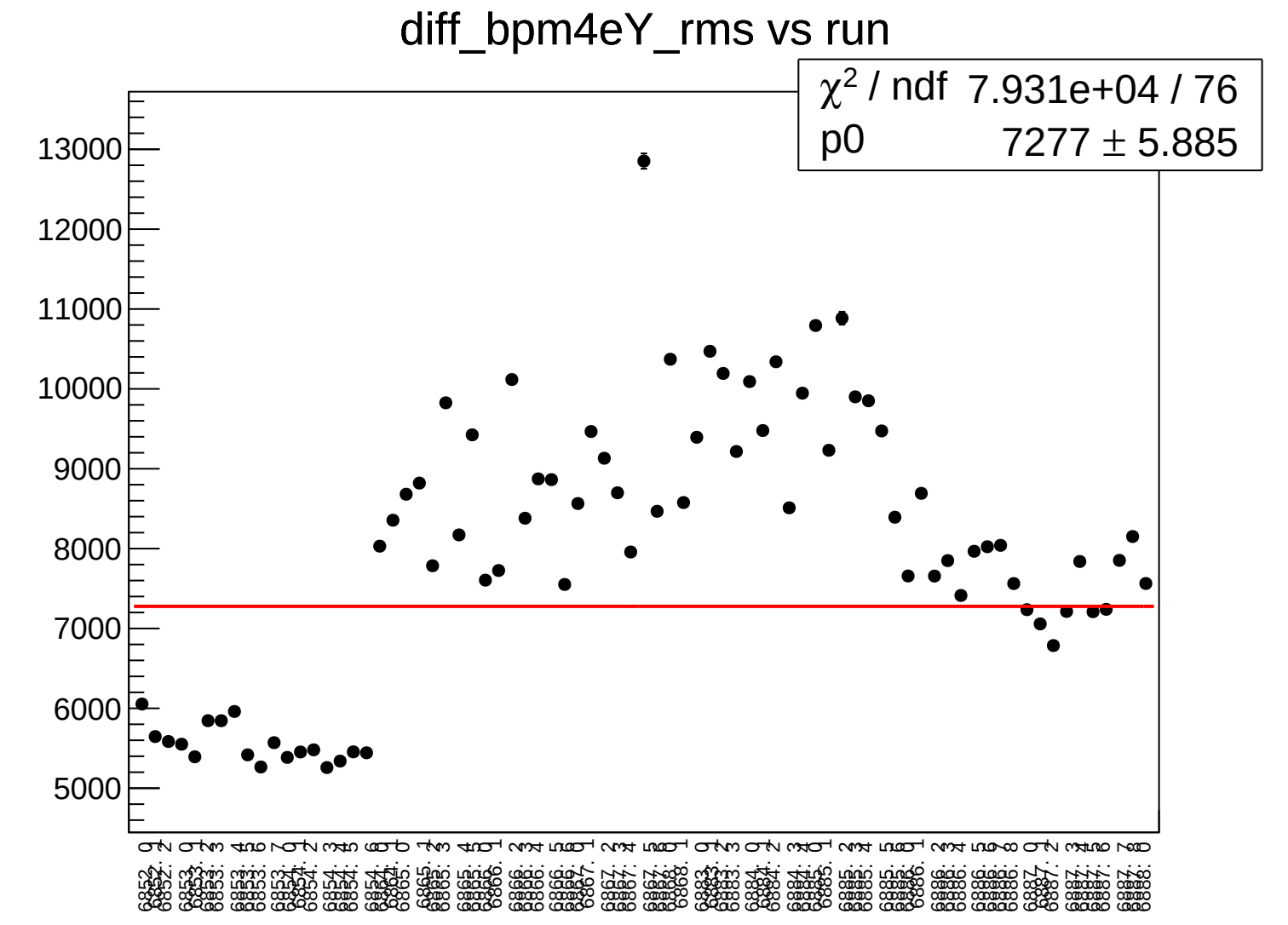

diff_bpm4eX_mean vs run
χ² / ndf 68.59 / 76
p0 −24.11± 12.38
pull
Entries 77
Mean 134.2
Std Dev 87.88

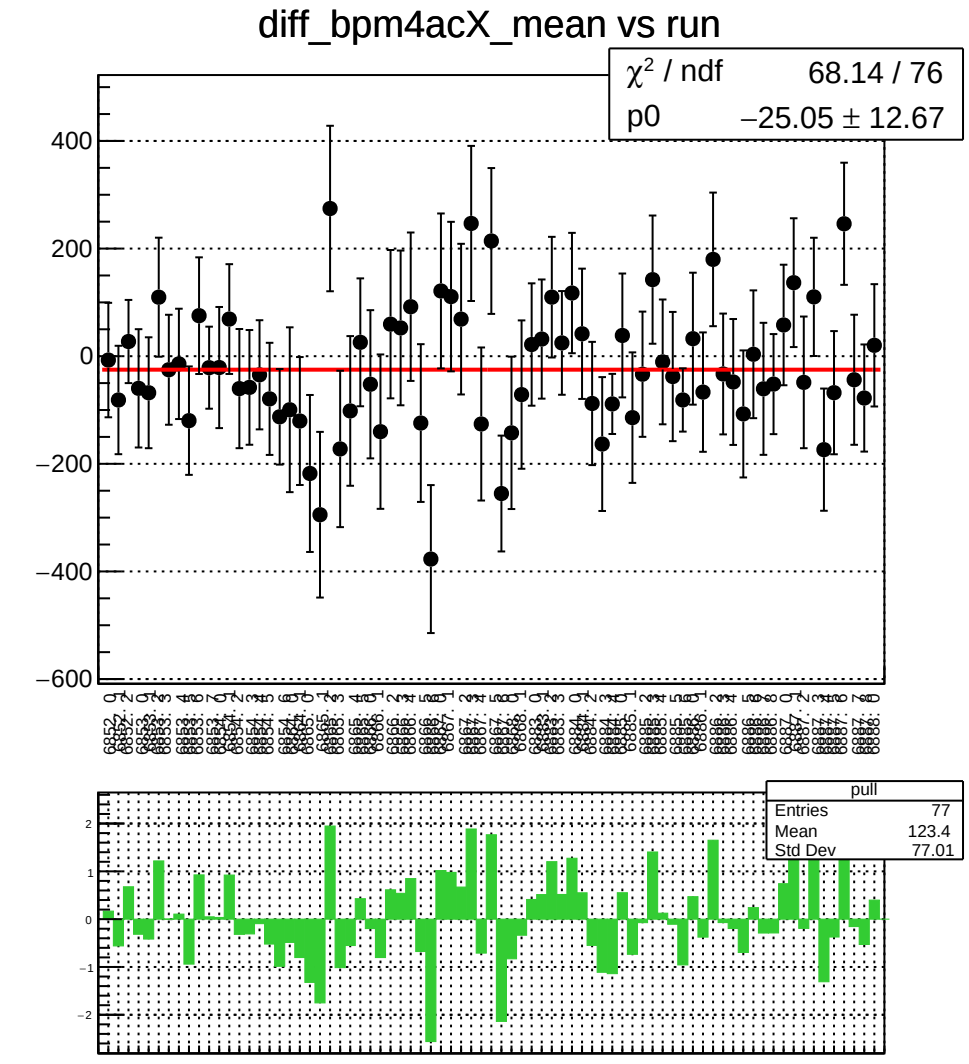

pull1D
Entries 77
Mean 0.02704
Std Dev 0.9434

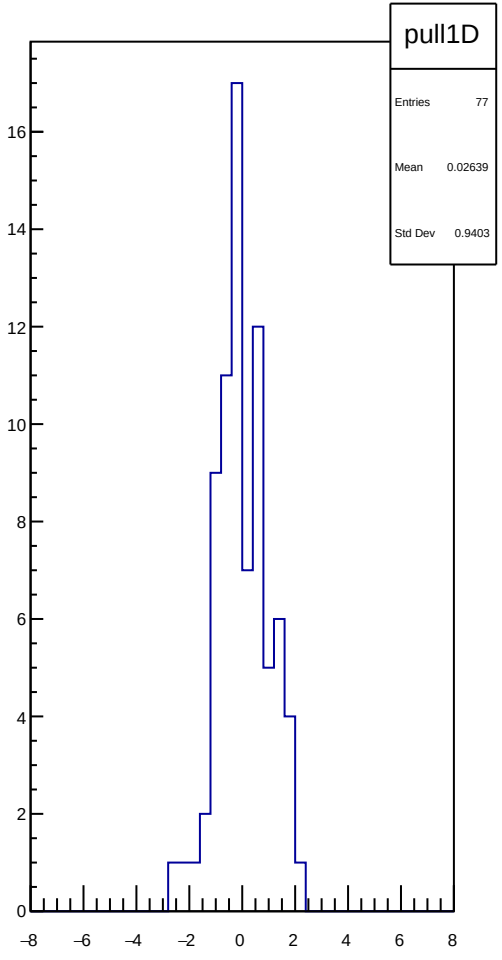

diff_bpm4eX_rms vs run
χ² / ndf 2.335e+04 / 76
p0 1.102e+04 ± 8.753
14000
13000
12000
11000
10000
9000

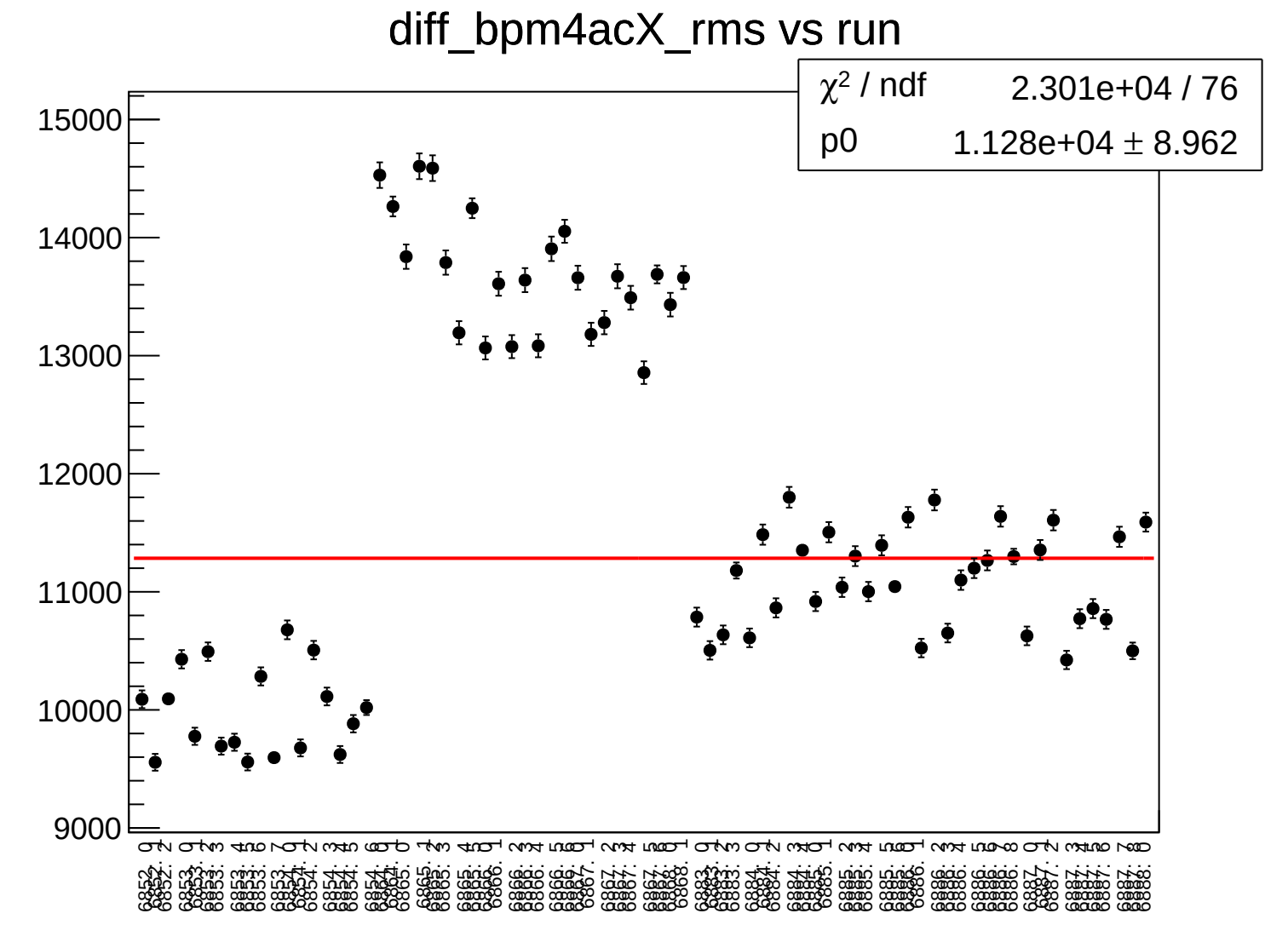

diff_bpm4eY_mean vs run
χ² / ndf 63.4 / 76
p0 1.22 ± 8.322
pull
Entries 77
Mean 83.76
Std Dev 87.37

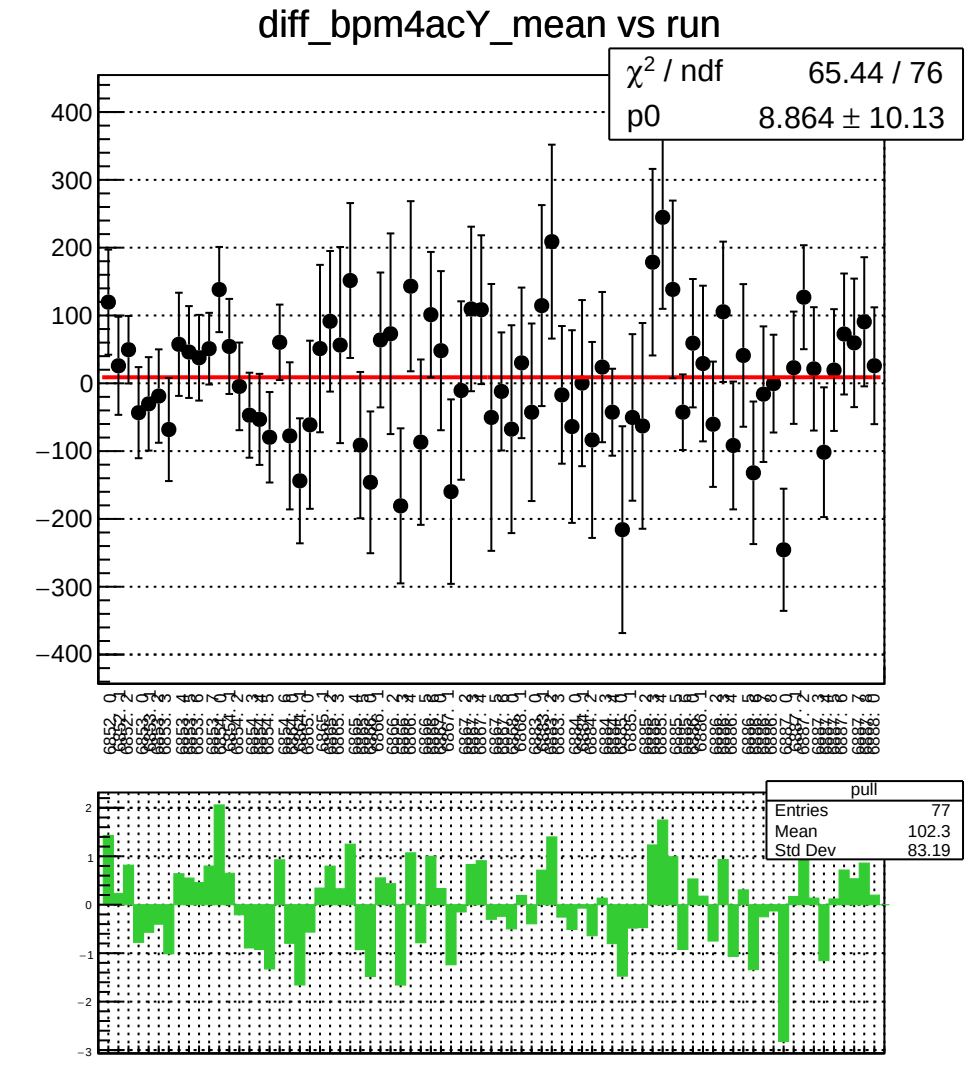

pull1D
Entries 77
Mean −0.008517
Std Dev 0.9074

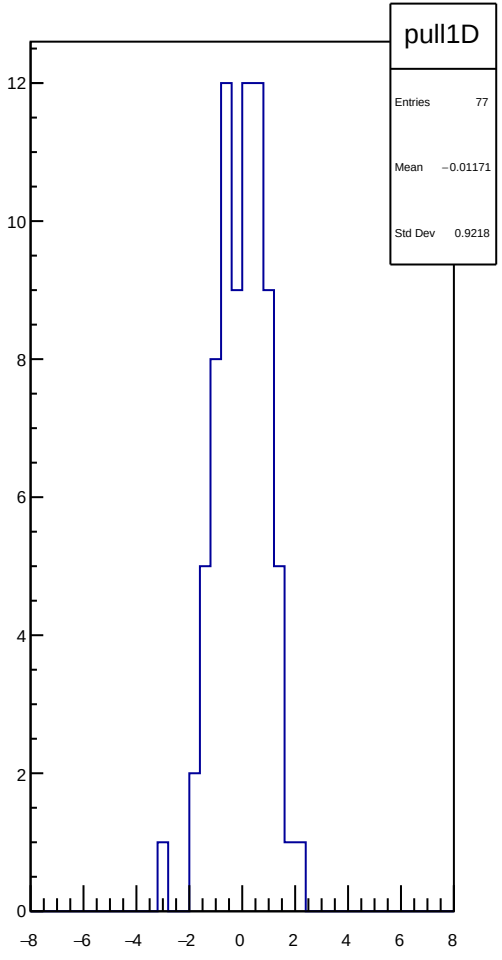

diff_bpm4eY_rms vs run
χ² / ndf 7.931e+04 / 76
p0 7277 ± 5.885
13000
12000
11000
10000
9000
8000
7000
6000
5000

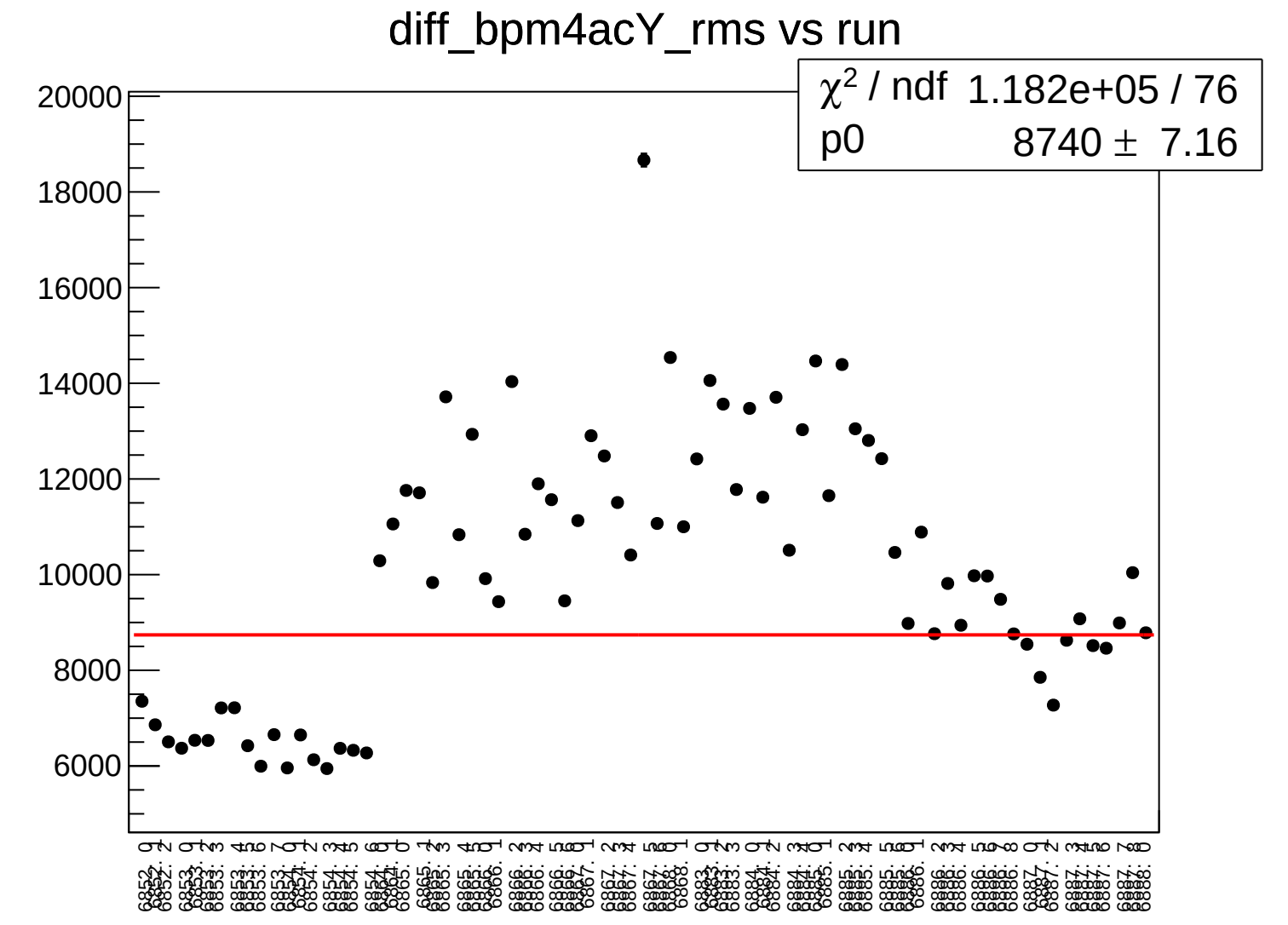

diff_bpm4acX_mean vs run
χ² / ndf 68.14 / 76
p0 −25.05 ± 12.67
pull
Entries 77
Mean 123.4
Std Dev 77.01

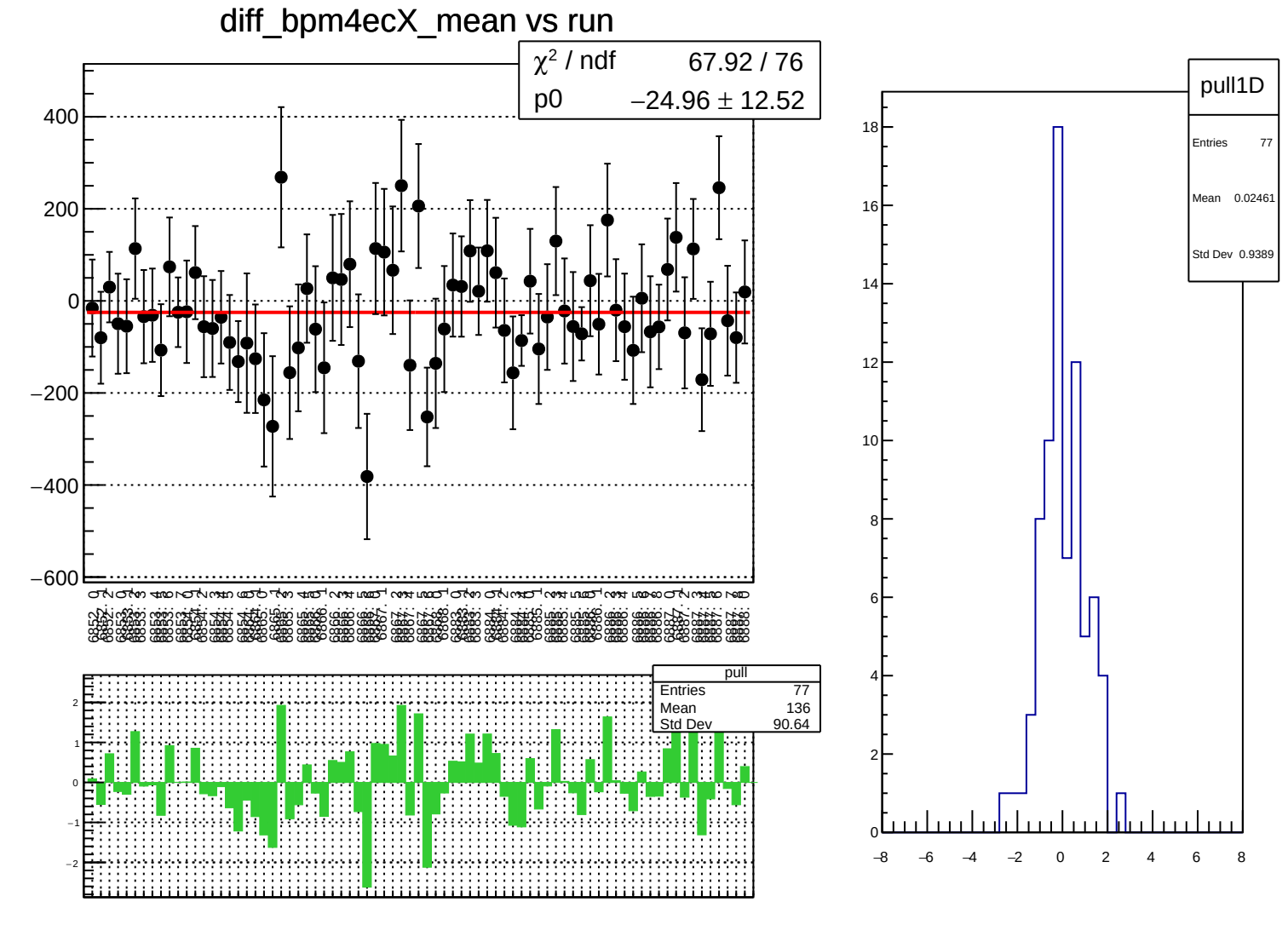

pull1D
Entries 77
Mean 0.02639
Std Dev 0.9403

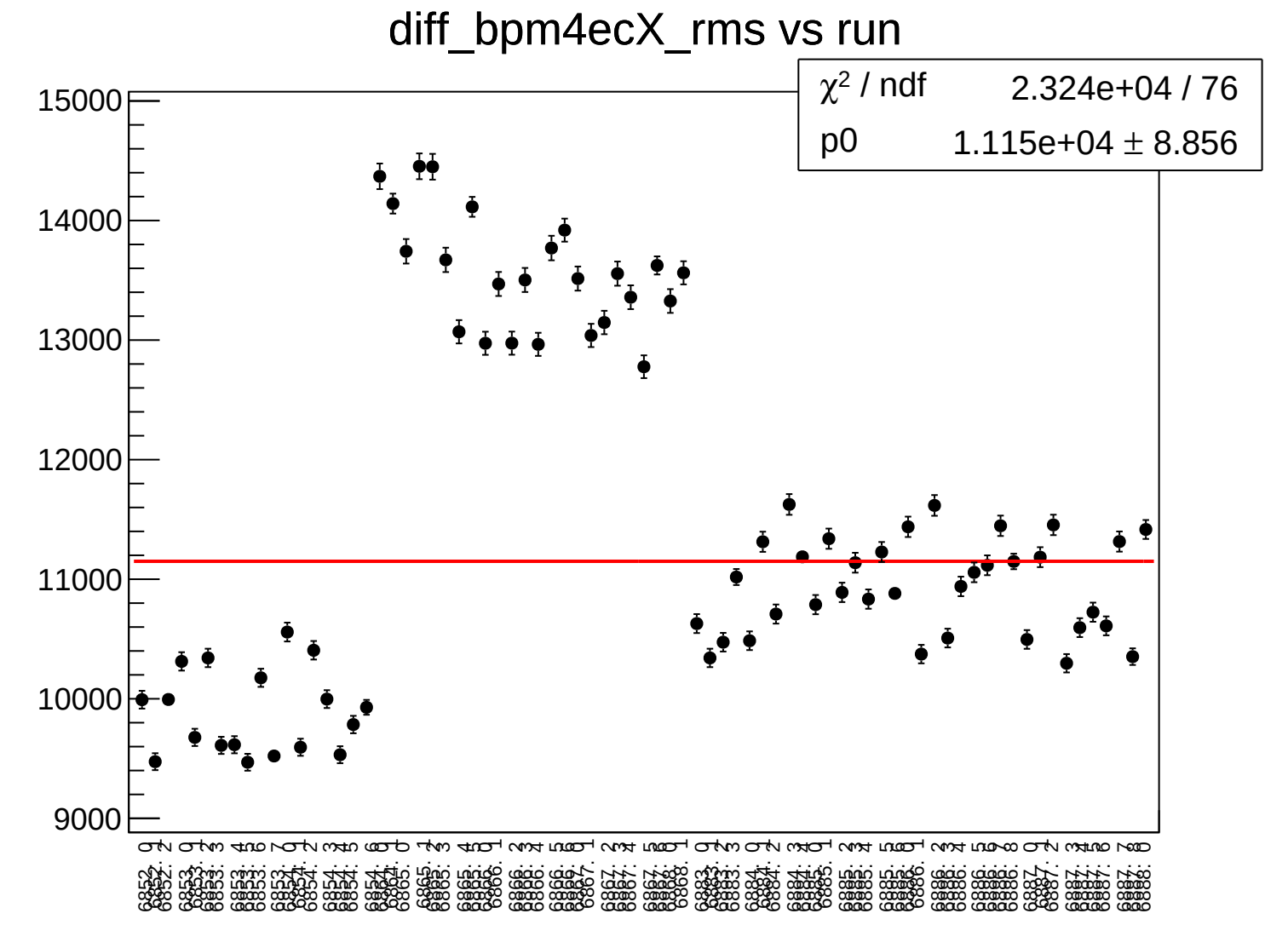

diff_bpm4acX_rms vs run
χ² / ndf 2.301e+04 / 76
p0 1.128e+04 ± 8.962
15000
14000
13000
12000
11000
10000
9000

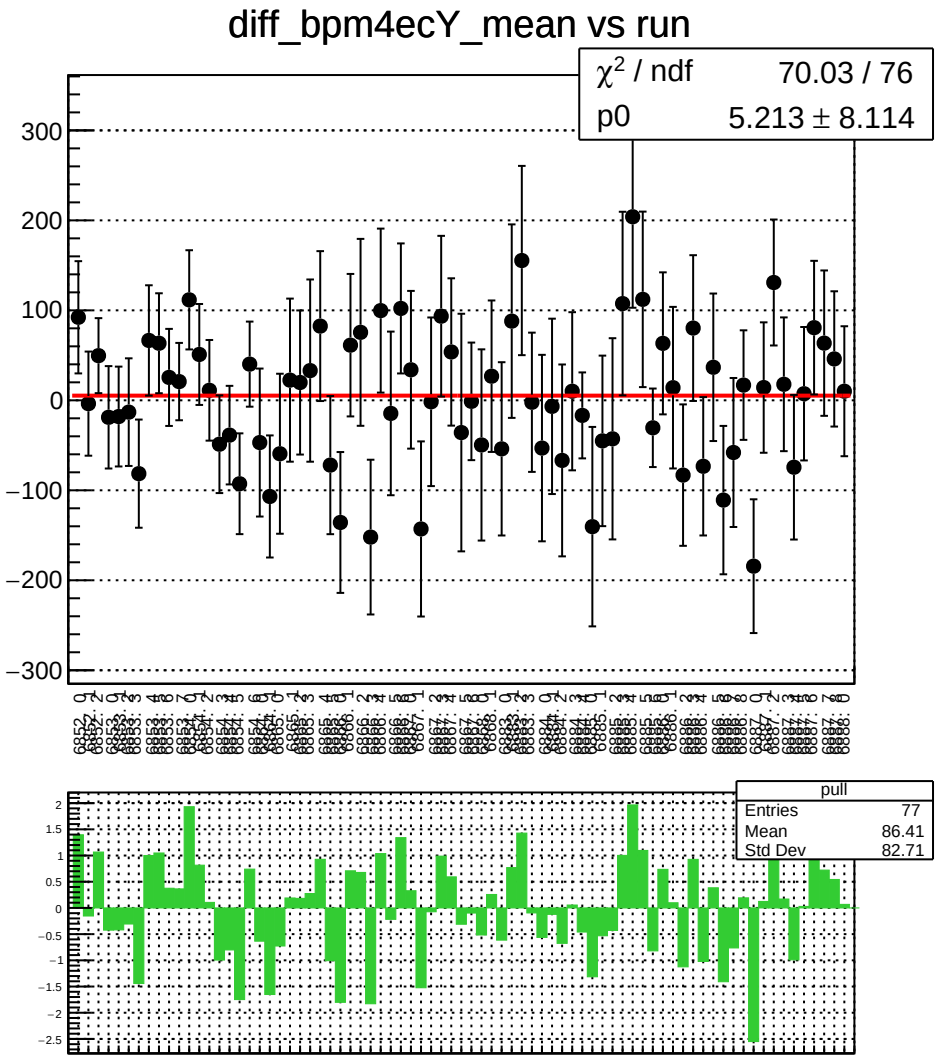

diff_bpm4acY_mean vs run
χ² / ndf 65.44 / 76
p0 8.864 ± 10.13
pull
Entries 77
Mean 102.3
Std Dev 83.19

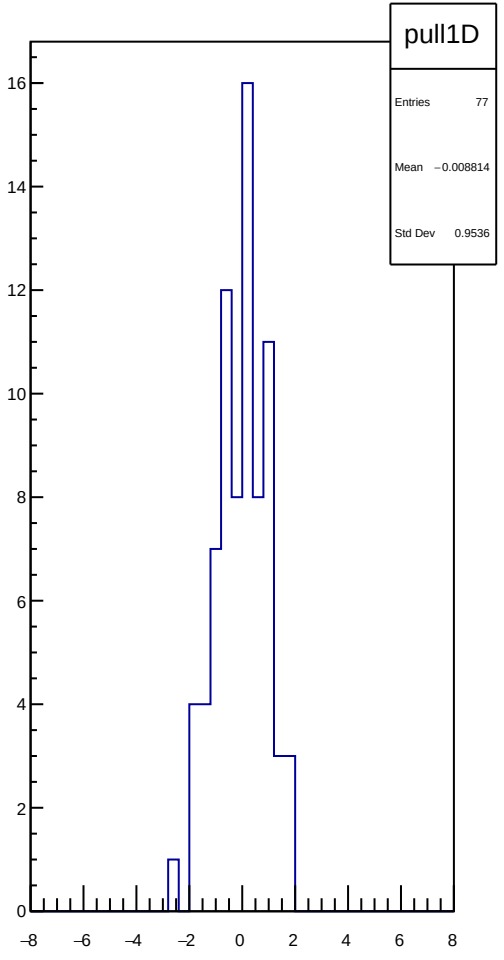

pull1D
Entries 77
Mean −0.01171
Std Dev 0.9218

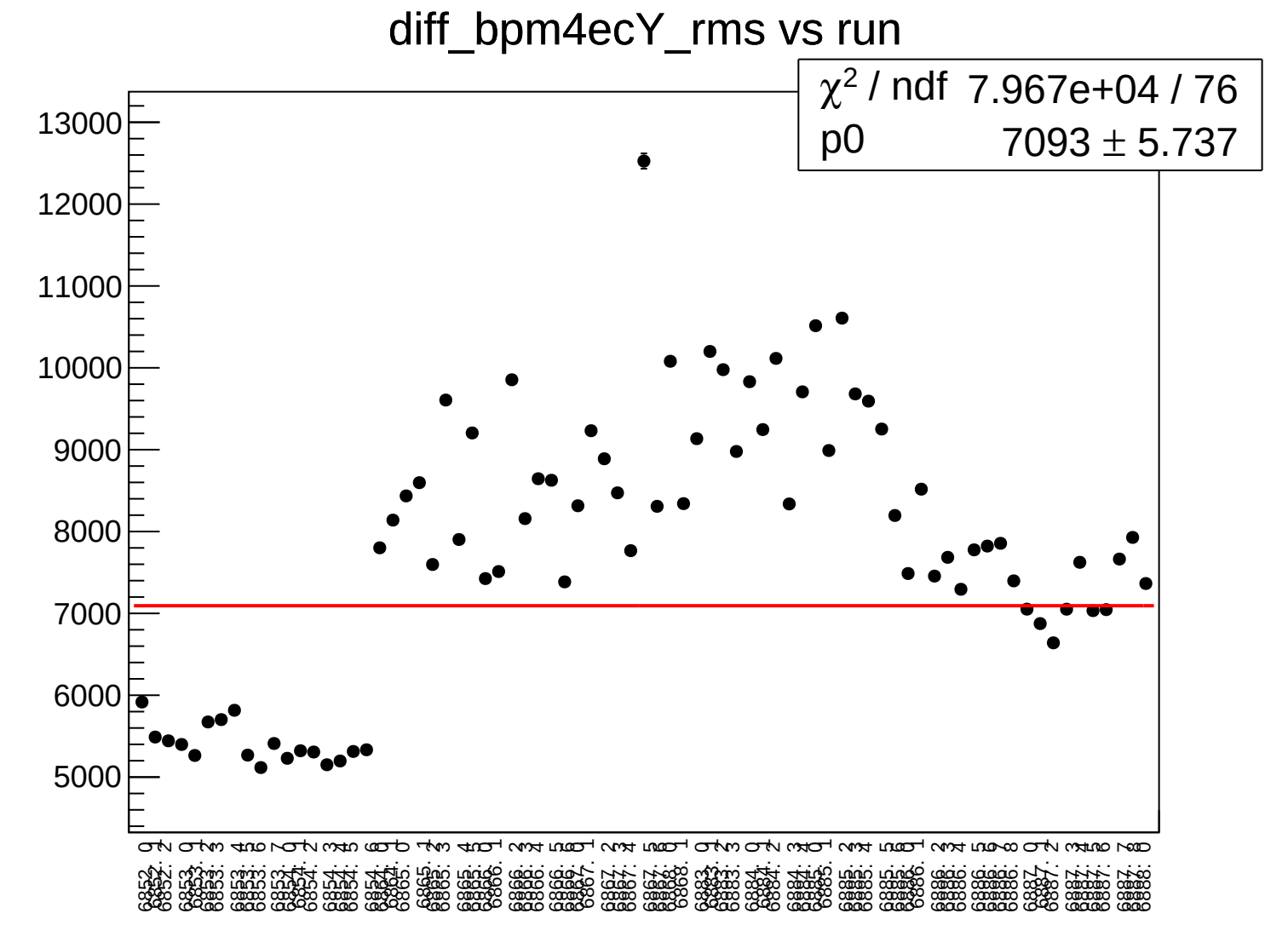

diff_bpm4acY_rms vs run
χ² / ndf 1.182e+05 / 76
p0 8740 ± 7.16
20000
18000
16000
14000
12000
10000
8000
6000

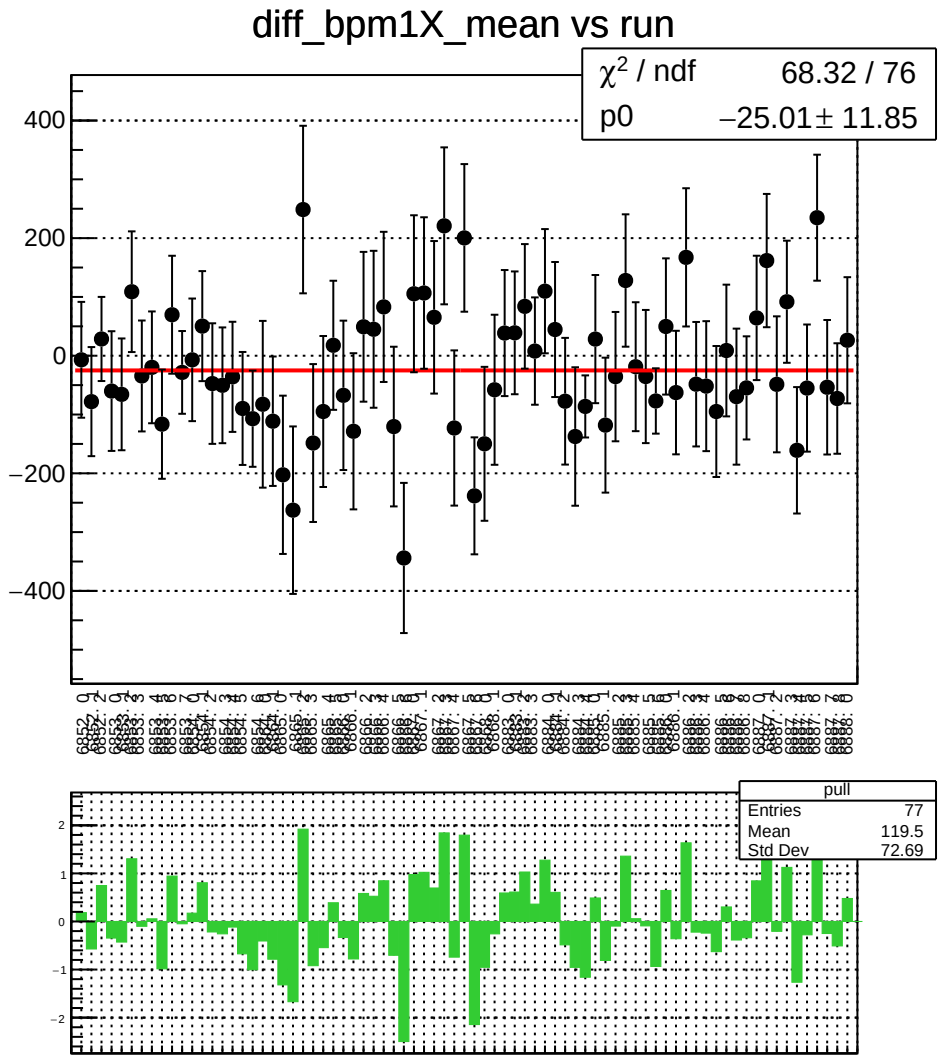

diff_bpm4ecX_mean vs run
χ² / ndf 67.92 / 76
p0 −24.96 ± 12.52
pull
Entries 77
Mean 136
Std Dev 90.64
pull1D
Entries 77
Mean 0.02461
Std Dev 0.9389

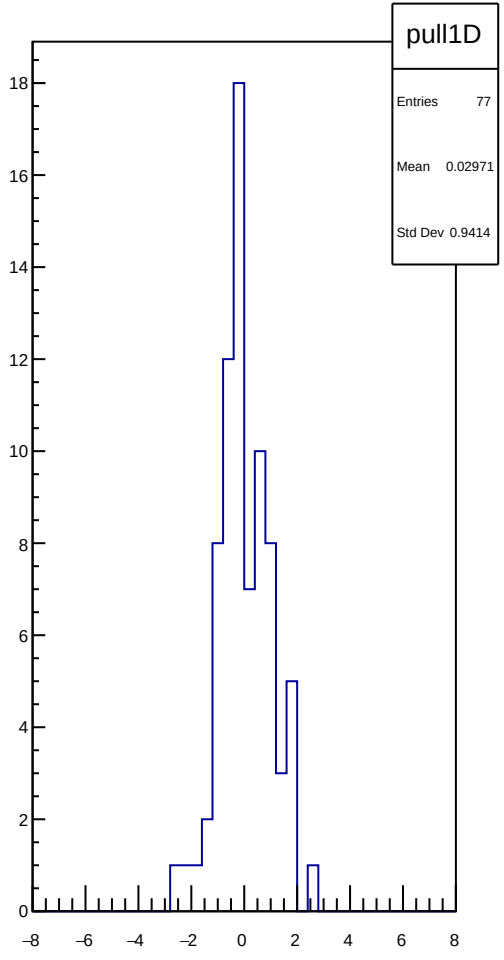

diff_bpm4ecX_rms vs run
χ² / ndf 2.324e+04 / 76
p0 1.115e+04 ± 8.856
15000
14000
13000
12000
11000
10000
9000

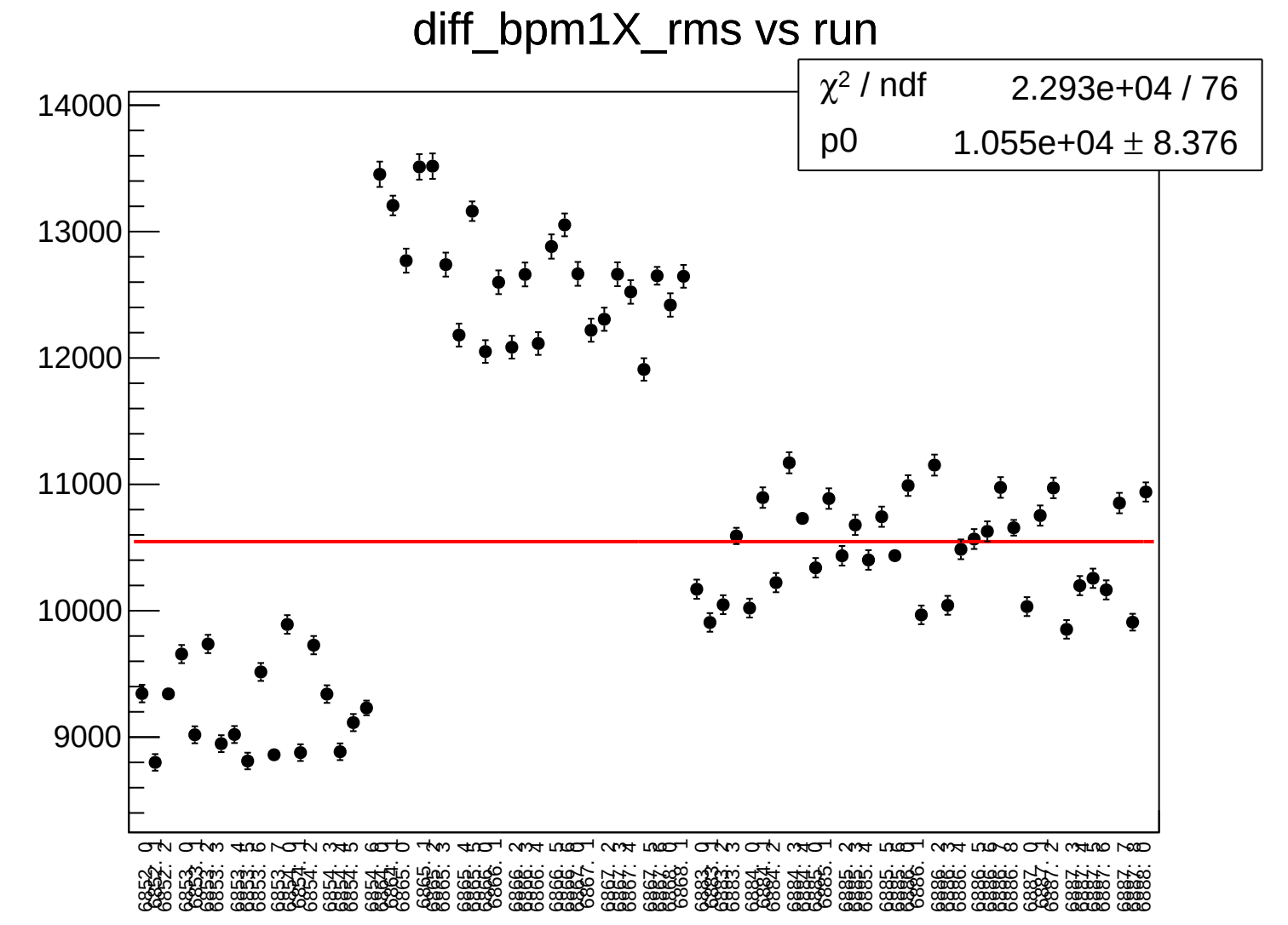

diff_bpm4ecY_mean vs run
χ^2 / ndf 70.03 / 76
p0 5.213 ± 8.114
pull
Entries 77
Mean 86.41
Std Dev 82.71

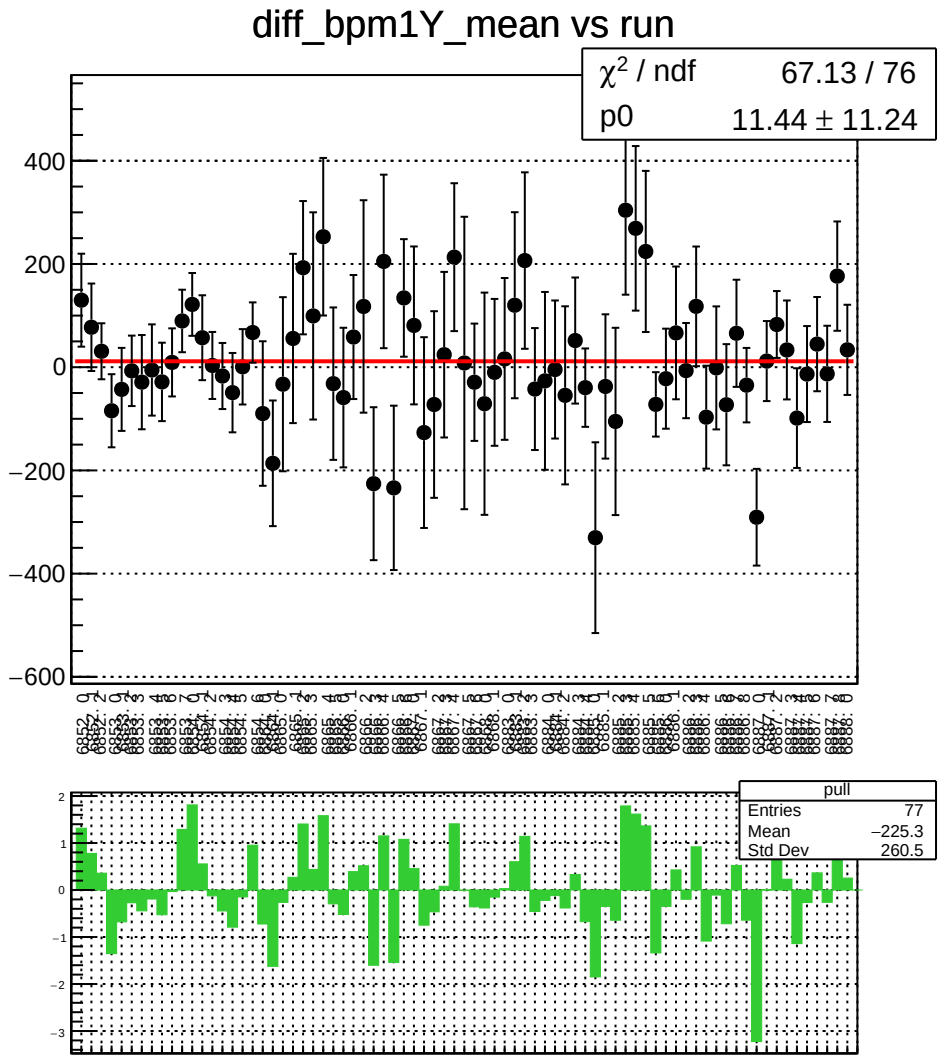

pull1D
Entries 77
Mean −0.008814
Std Dev 0.9536

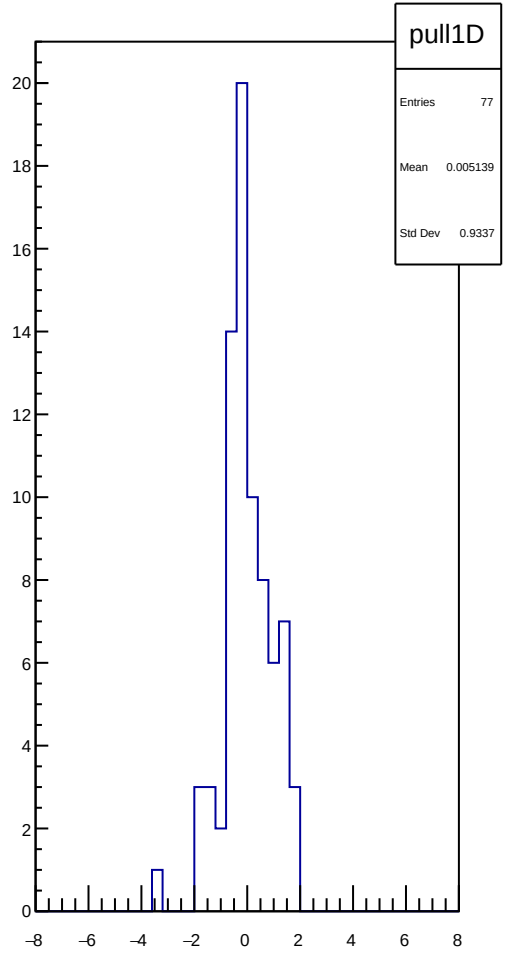

diff_bpm4ecY_rms vs run
χ² / ndf 7.967e+04 / 76
p0 7093 ± 5.737
13000
12000
11000
10000
9000
8000
7000
6000
5000

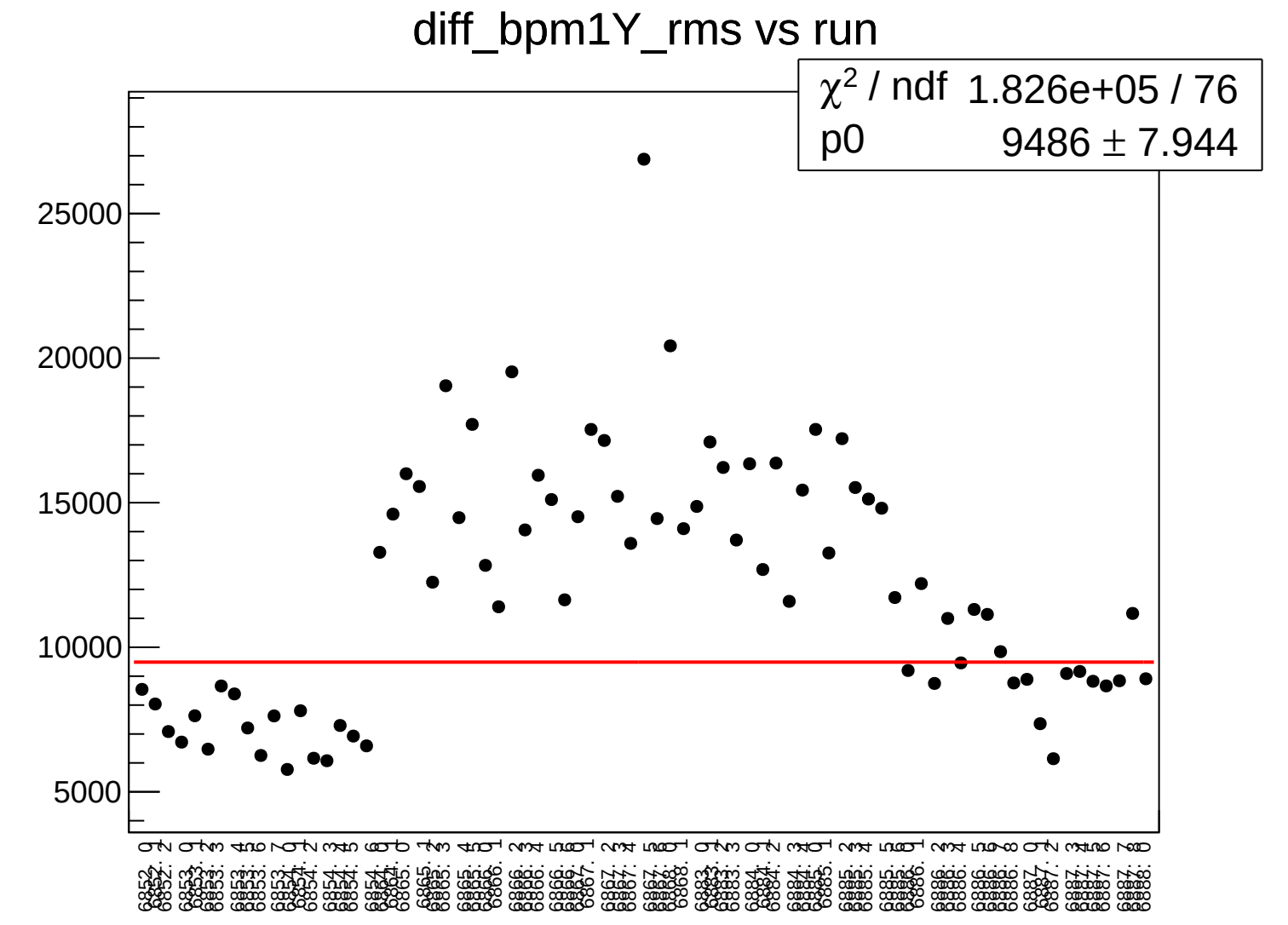

diff_bpm1X_mean vs run
χ² / ndf 68.32 / 76
p0 −25.01± 11.85
400
200
0
−200
−400
pull
Entries 77
Mean 119.5
Std Dev 72.69
2
1
0
−1
−2

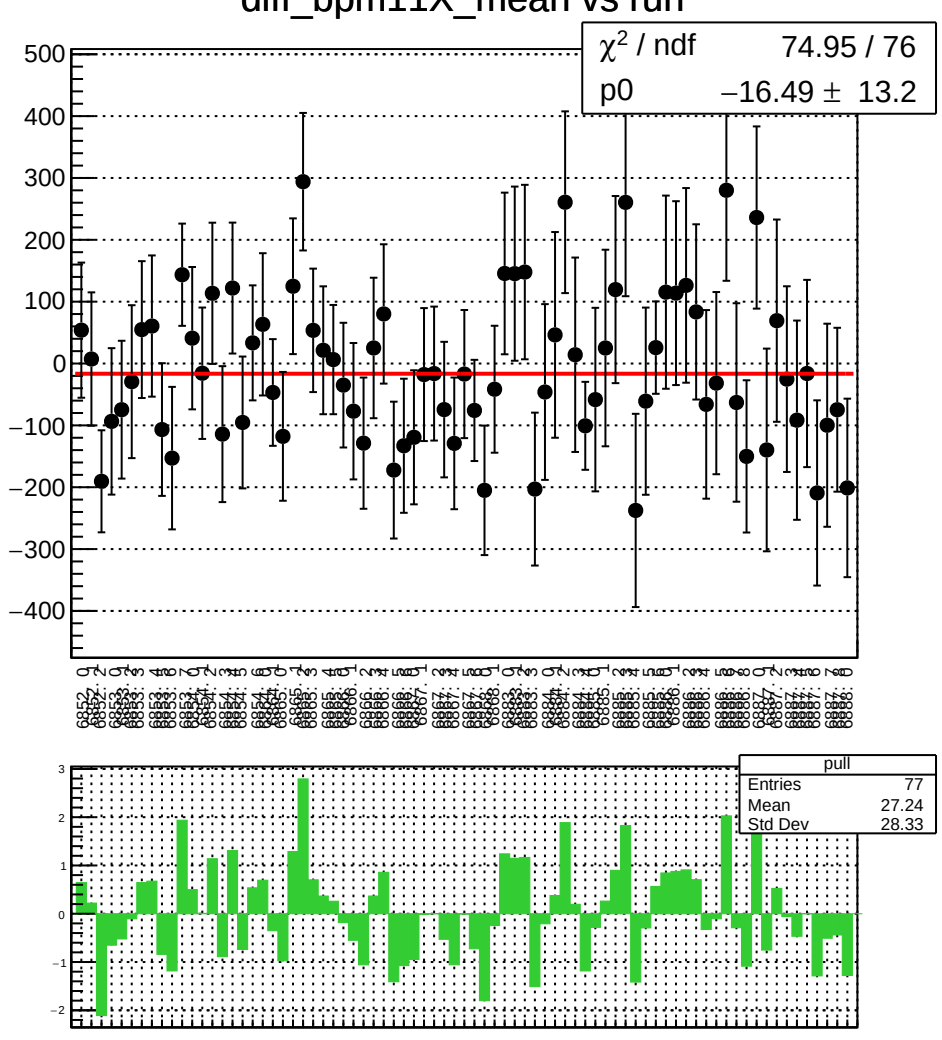

pull1D
Entries 77
Mean 0.02971
Std Dev 0.9414
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

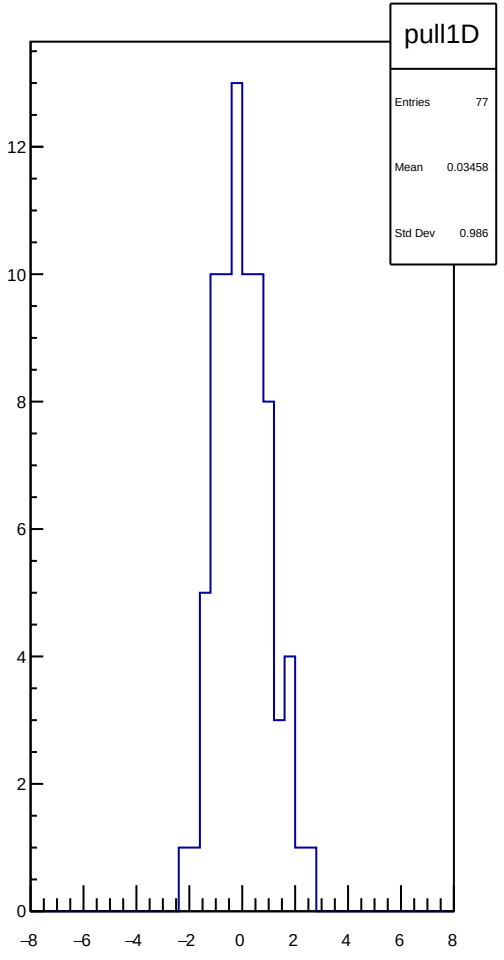

diff_bpm1X_rms vs run
χ² / ndf 2.293e+04 / 76
p0 1.055e+04 ± 8.376
14000
13000
12000
11000
10000
9000

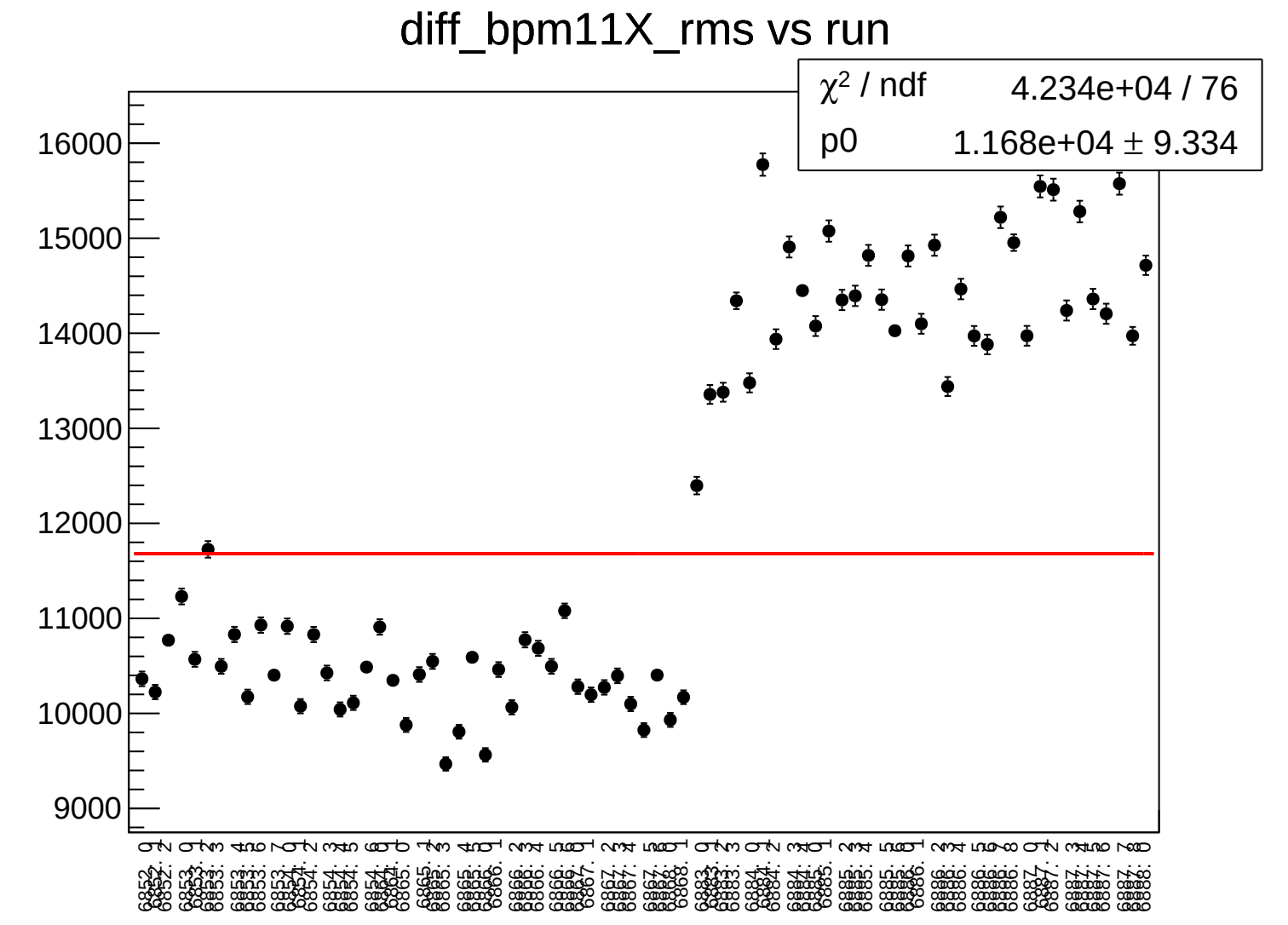

diff_bpm1Y_mean vs run
χ^2 / ndf 67.13 / 76
p0 11.44 ± 11.24
pull
Entries 77
Mean −225.3
Std Dev 260.5

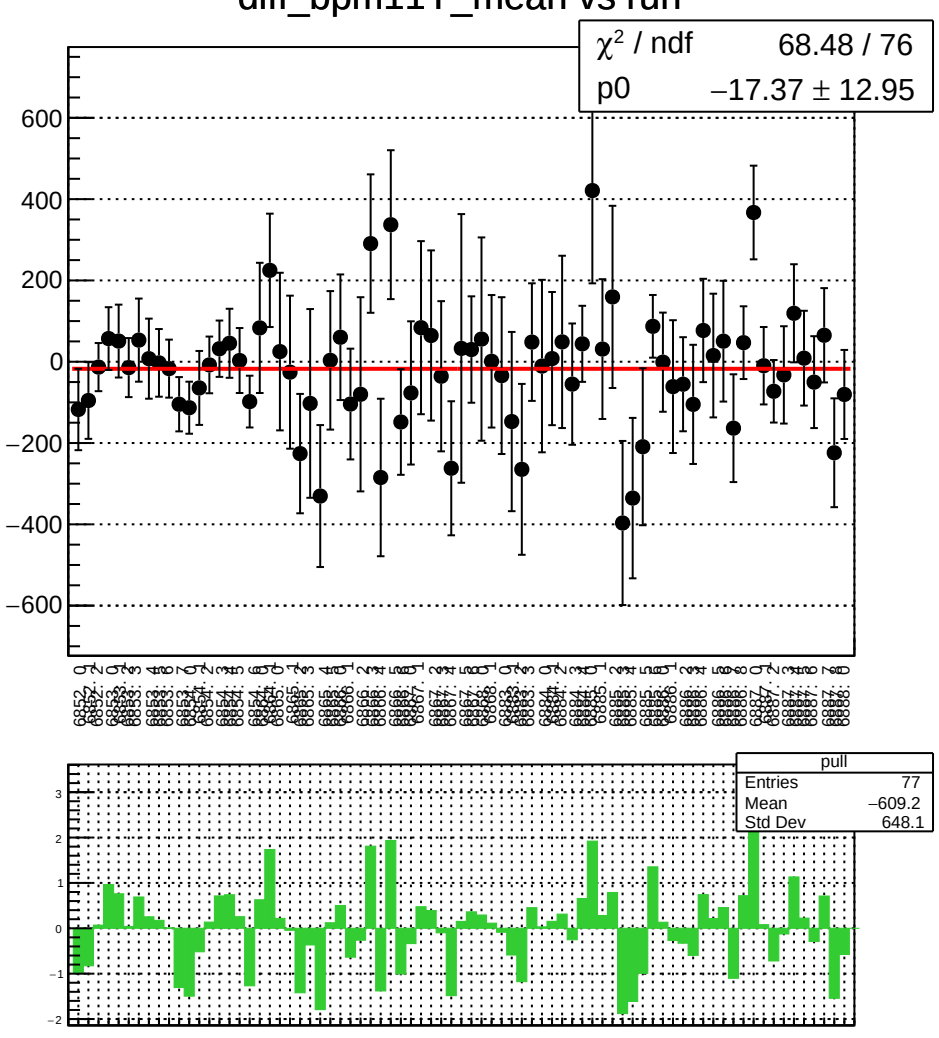

pull1D
Entries 77
Mean 0.005139
Std Dev 0.9337

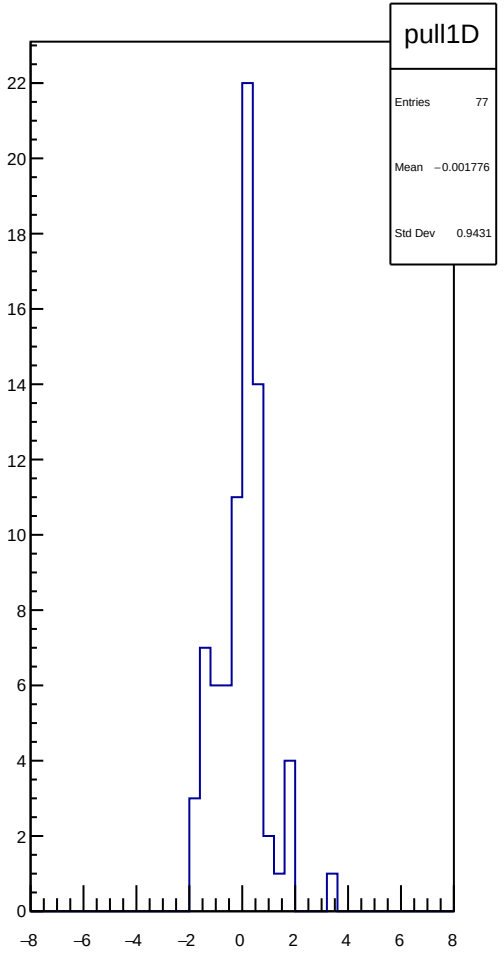

diff_bpm1Y_rms vs run
χ² / ndf 1.826e+05 / 76
p0 9486 ± 7.944
25000
20000
15000
10000
5000

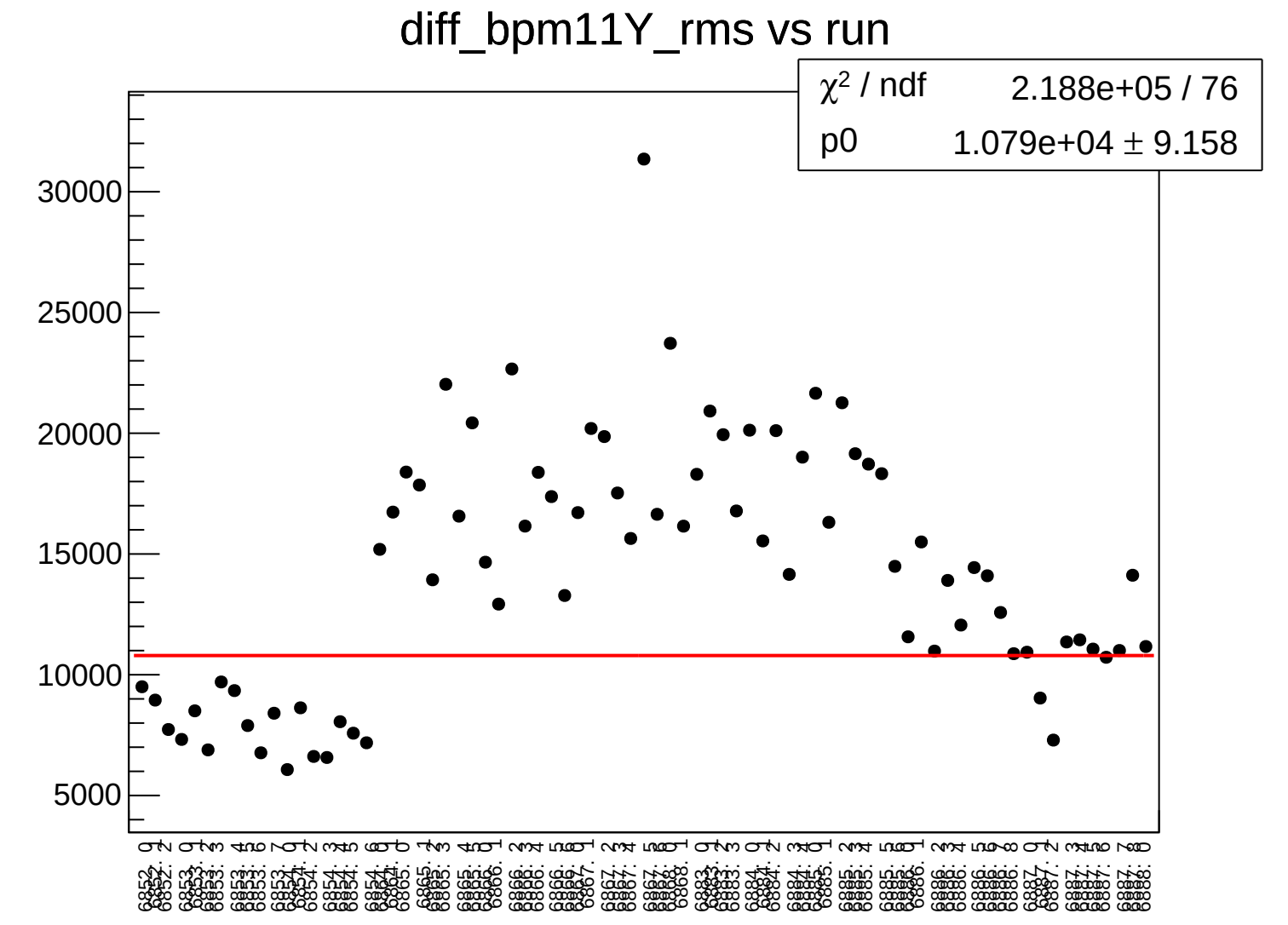

diff_bpm11X_mean vs run
χ² / ndf 74.95 / 76
p0 −16.49 ± 13.2
pull
Entries 77
Mean 27.24
Std Dev 28.33

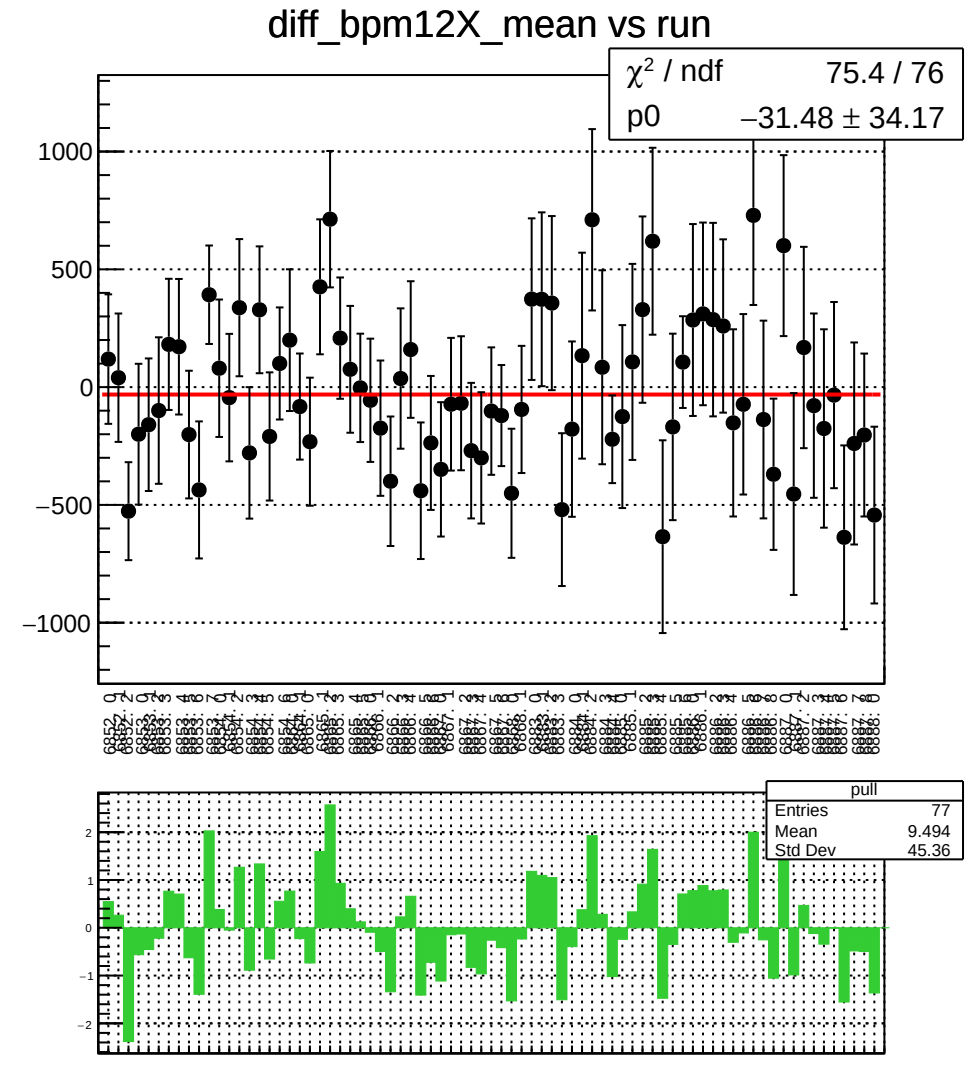

pull1D
Entries 77
Mean 0.03458
Std Dev 0.986

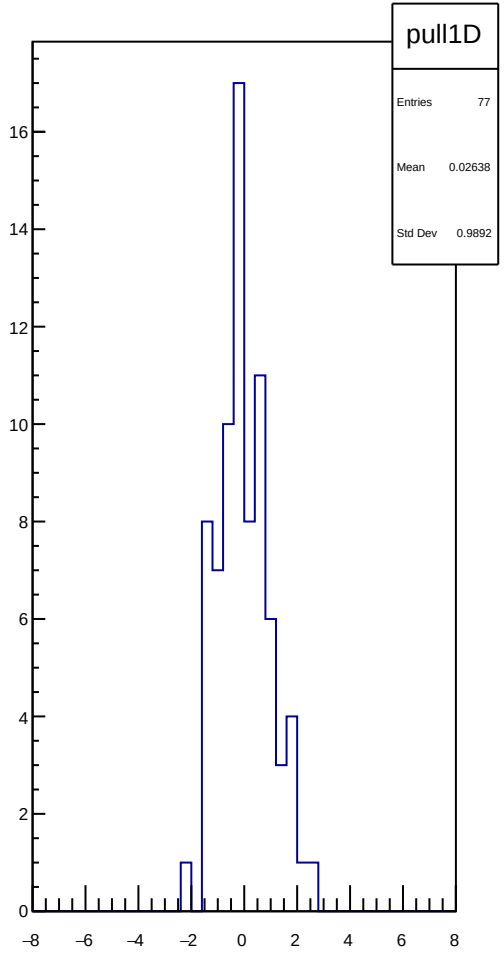

diff_bpm11X_rms vs run
χ² / ndf 4.234e+04 / 76
p0 1.168e+04 ± 9.334
16000
15000
14000
13000
12000
11000
10000
9000

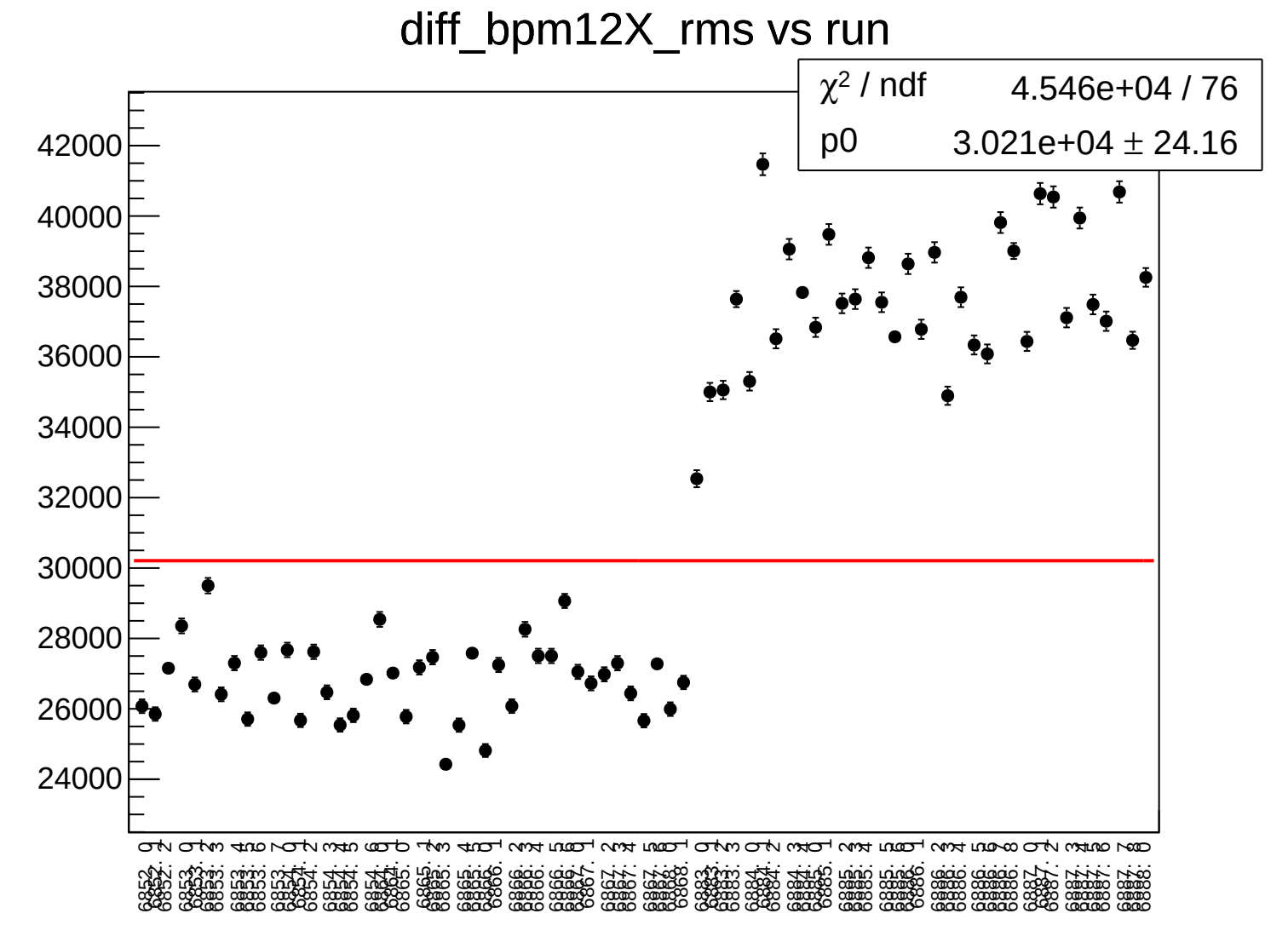

diff_bpm11Y_mean vs run
χ² / ndf 68.48 / 76
p0 −17.37 ± 12.95
pull
Entries 77
Mean −609.2
Std Dev 648.1

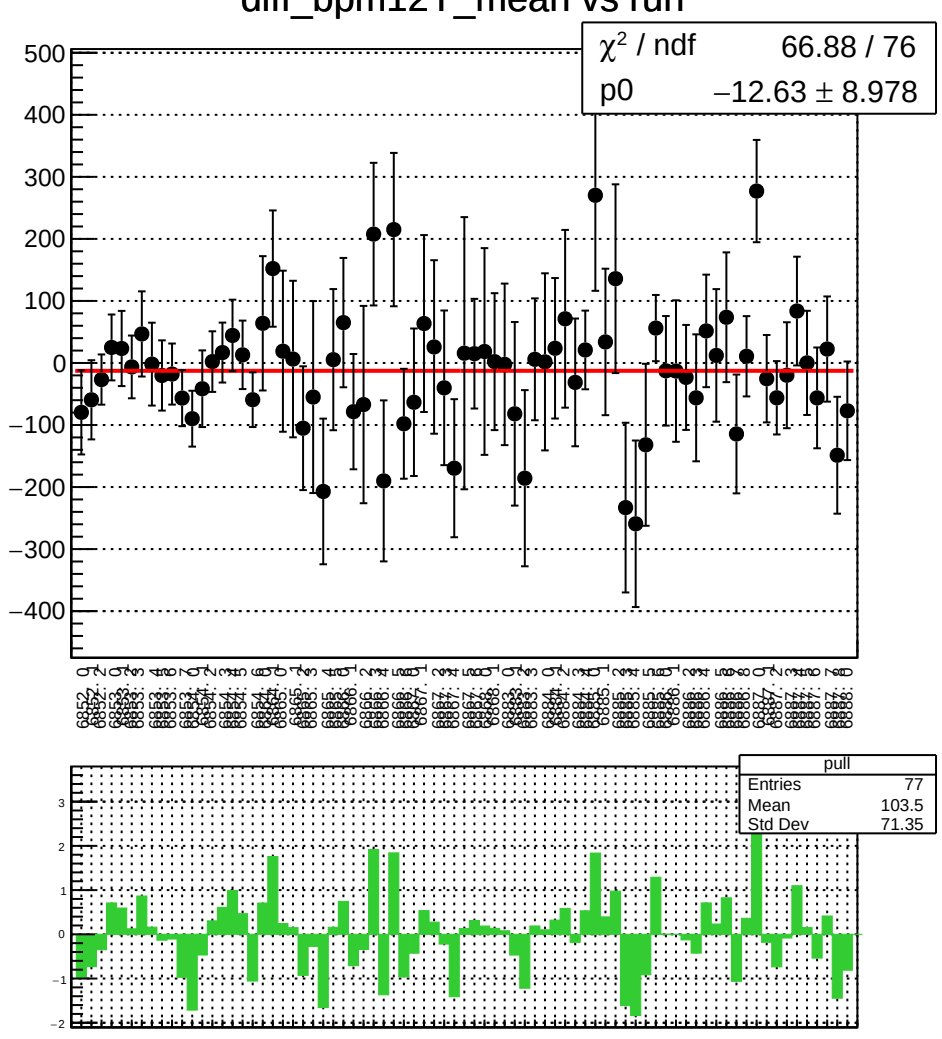

pull1D
Entries 77
Mean −0.001776
Std Dev 0.9431

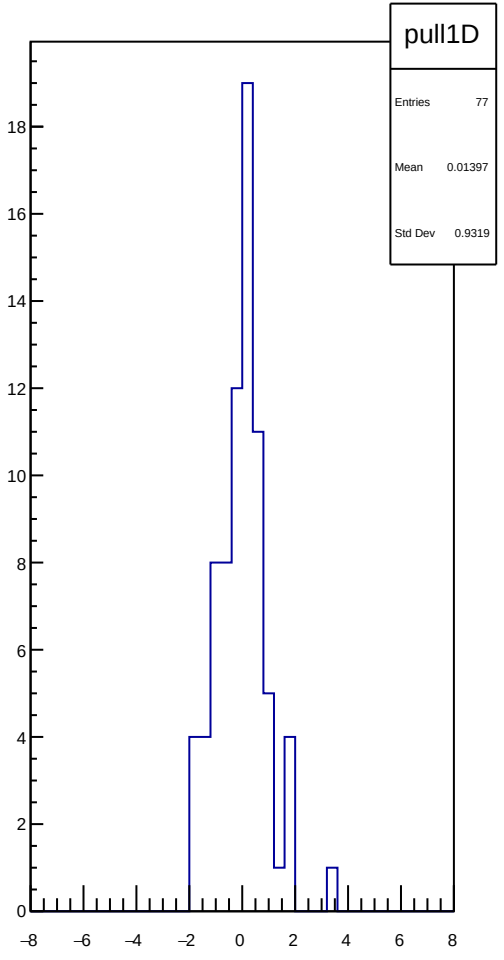

diff_bpm11Y_rms vs run
χ² / ndf 2.188e+05 / 76
p0 1.079e+04 ± 9.158
30000
25000
20000
15000
10000
5000

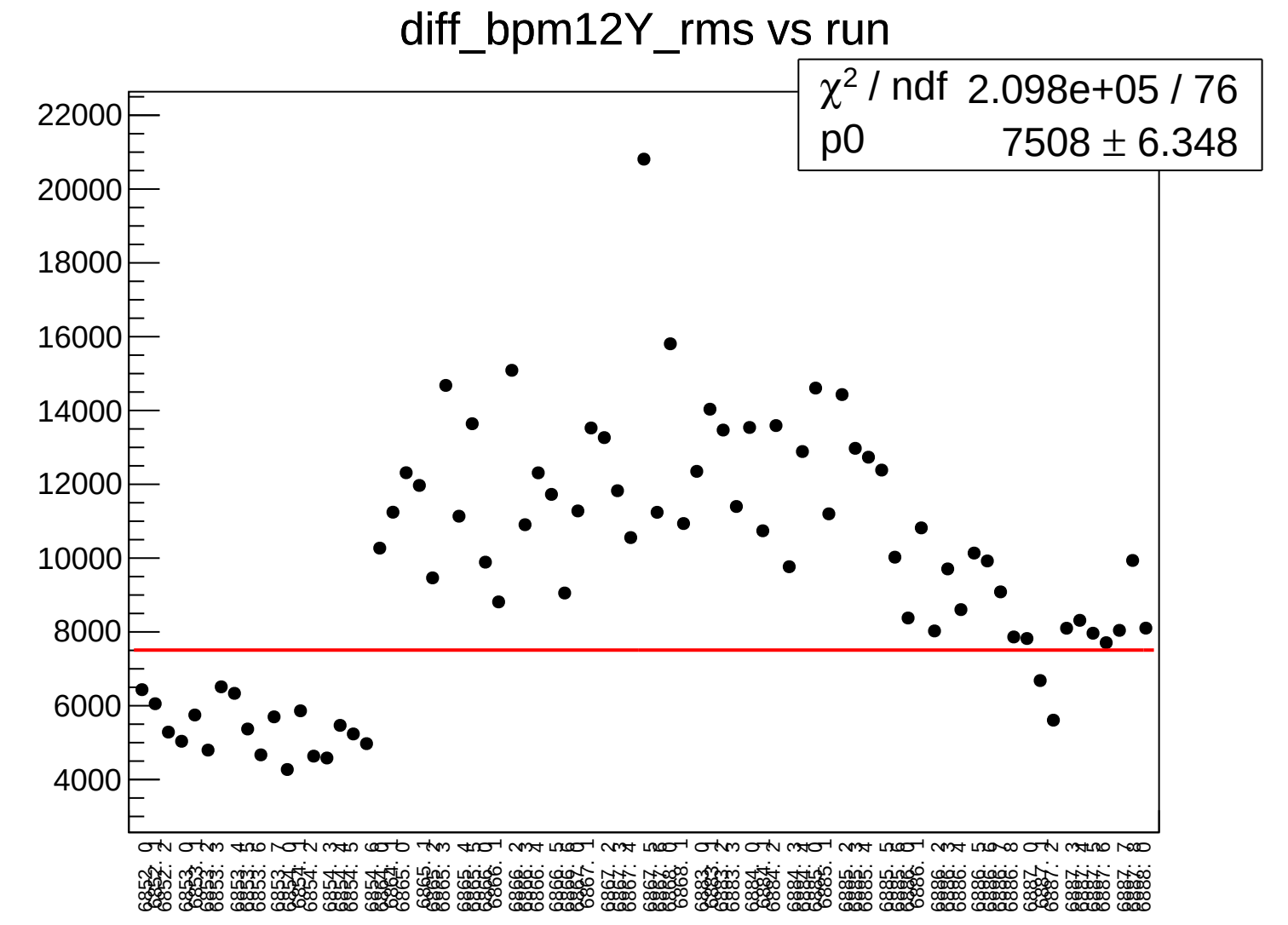

diff_bpm12X_mean vs run
χ² / ndf 75.4 / 76
p0 −31.48 ± 34.17
1000
500
0
−500
−1000
pull
Entries 77
Mean 9.494
Std Dev 45.36
2
1
0
−1
−2

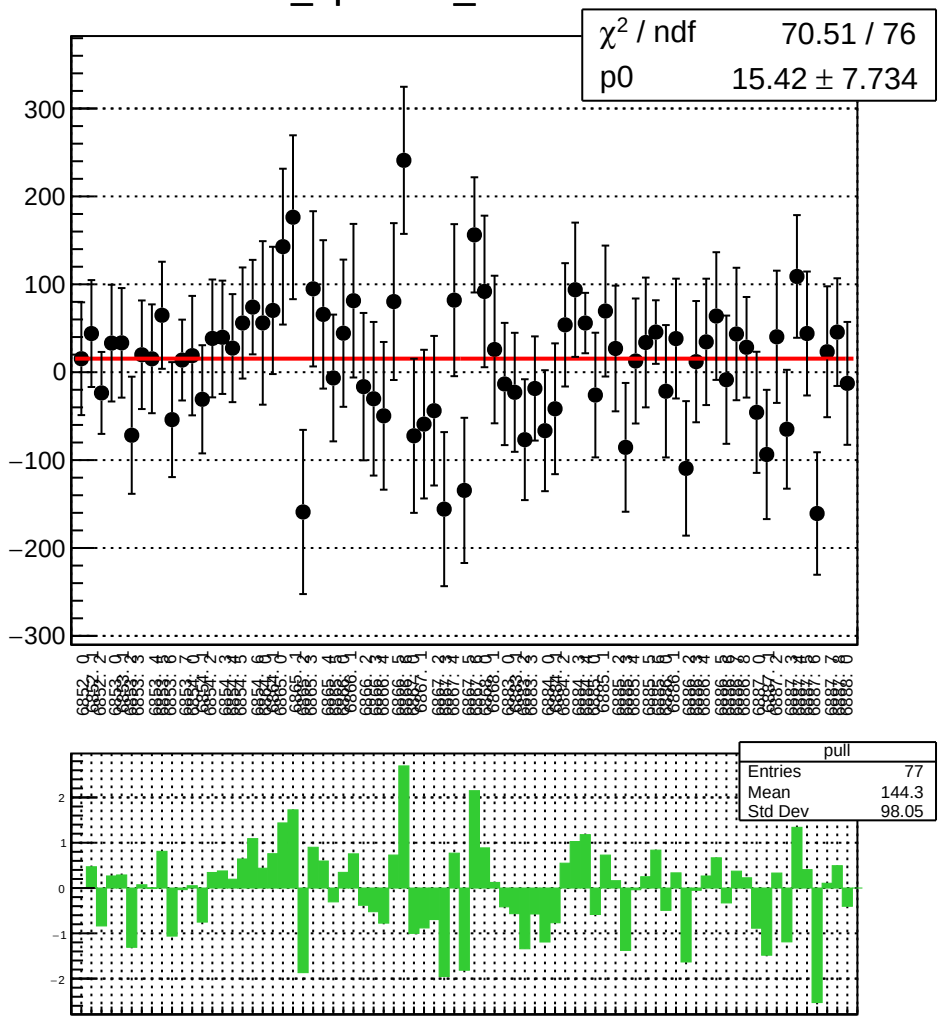

pull1D
Entries 77
Mean 0.02638
Std Dev 0.9892
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

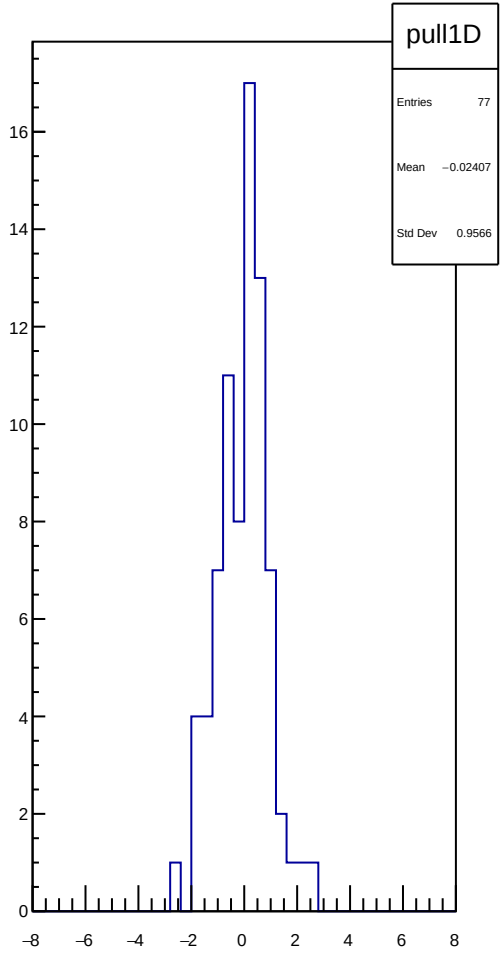

diff_bpm12X_rms vs run
χ² / ndf 4.546e+04 / 76
p0 3.021e+04 ± 24.16
42000
40000
38000
36000
34000
32000
30000
28000
26000
24000

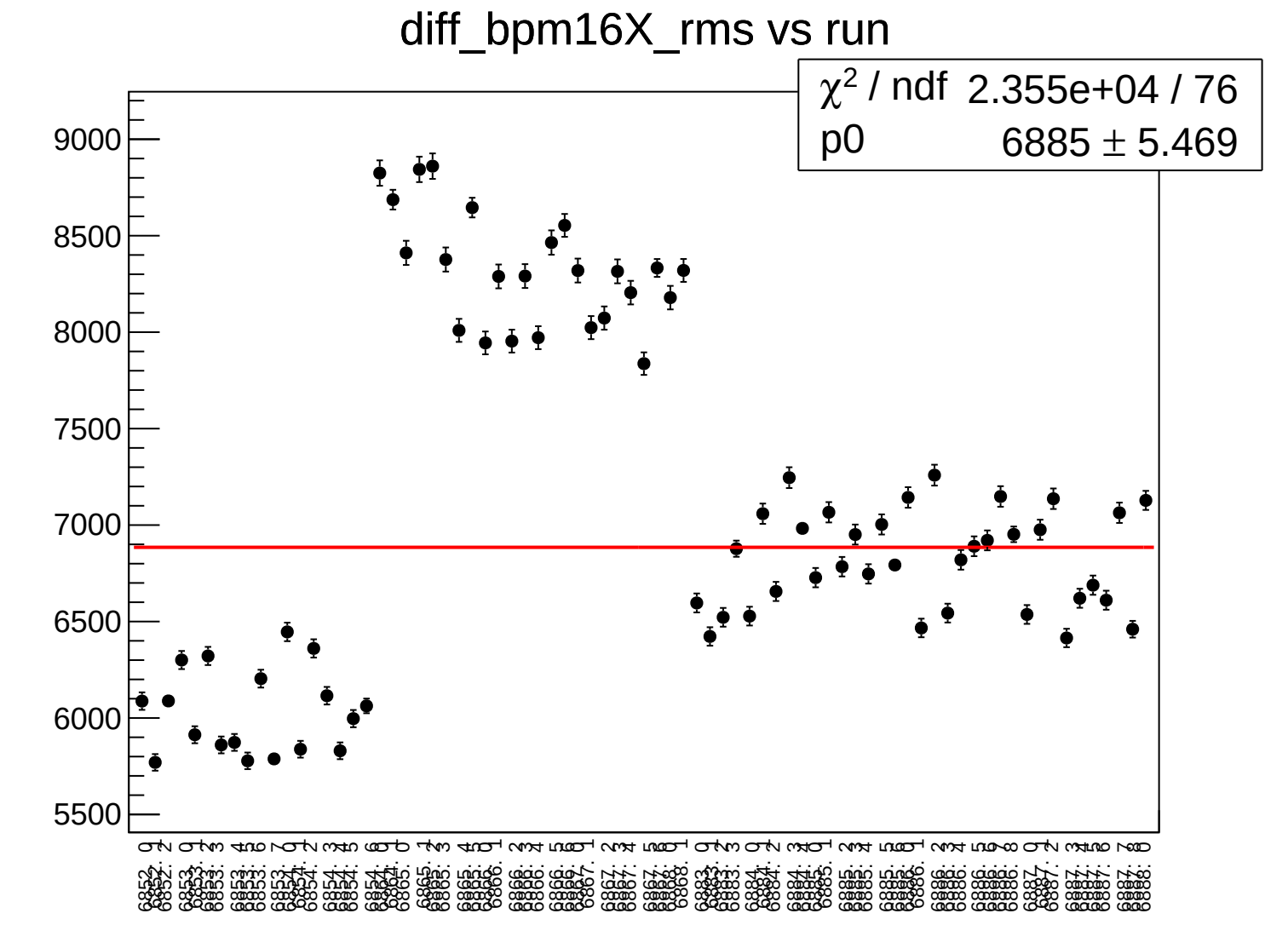

diff_bpm12Y_mean vs run
χ² / ndf 66.88 / 76
p0 −12.63 ± 8.978
pull
Entries 77
Mean 103.5
Std Dev 71.35

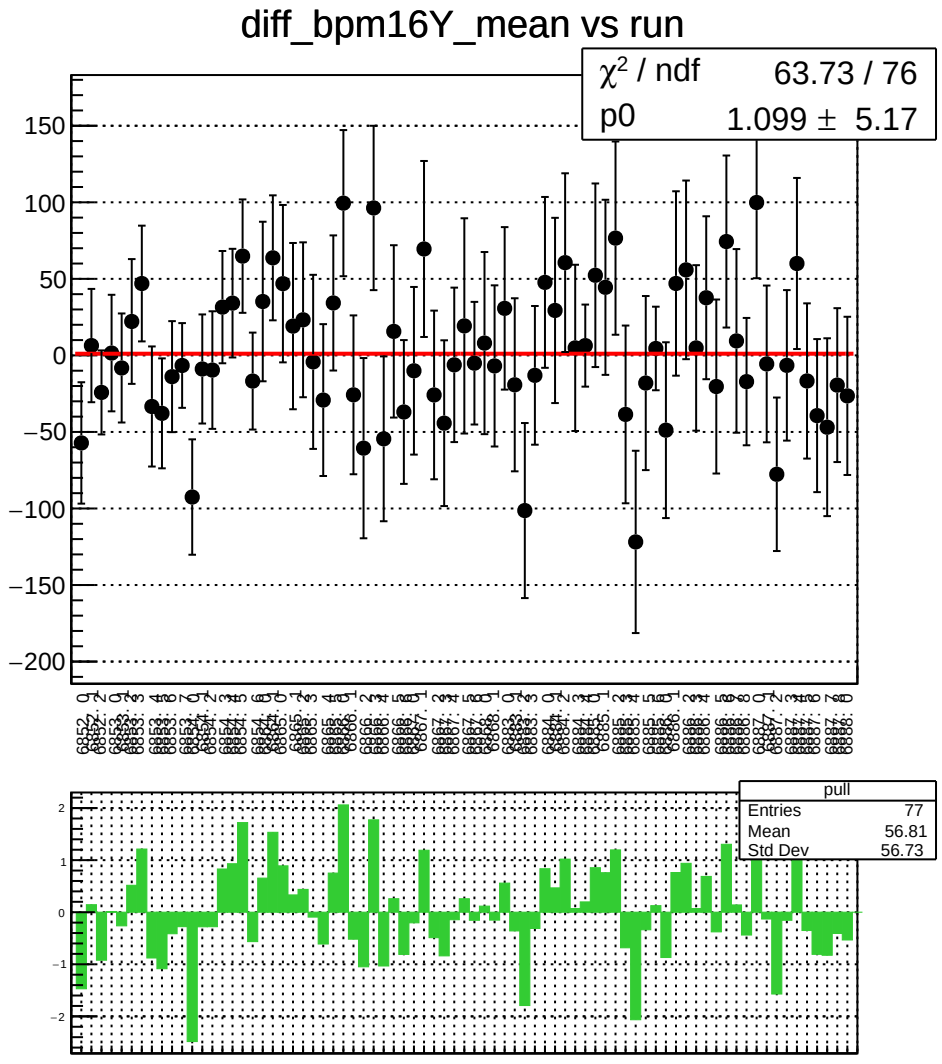

pull1D
Entries 77
Mean 0.01397
Std Dev 0.9319

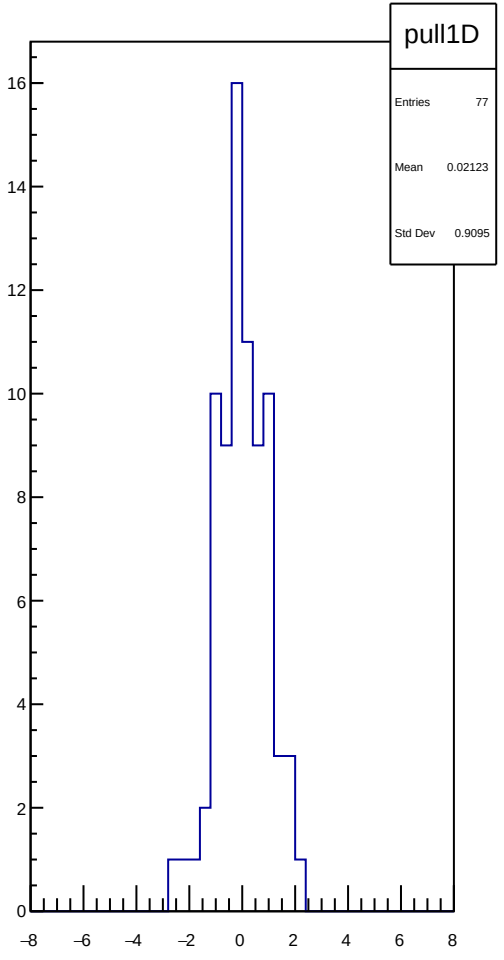

diff_bpm12Y_rms vs run
χ² / ndf 2.098e+05 / 76
p0 7508 ± 6.348
22000
20000
18000
16000
14000
12000
10000
8000
6000
4000

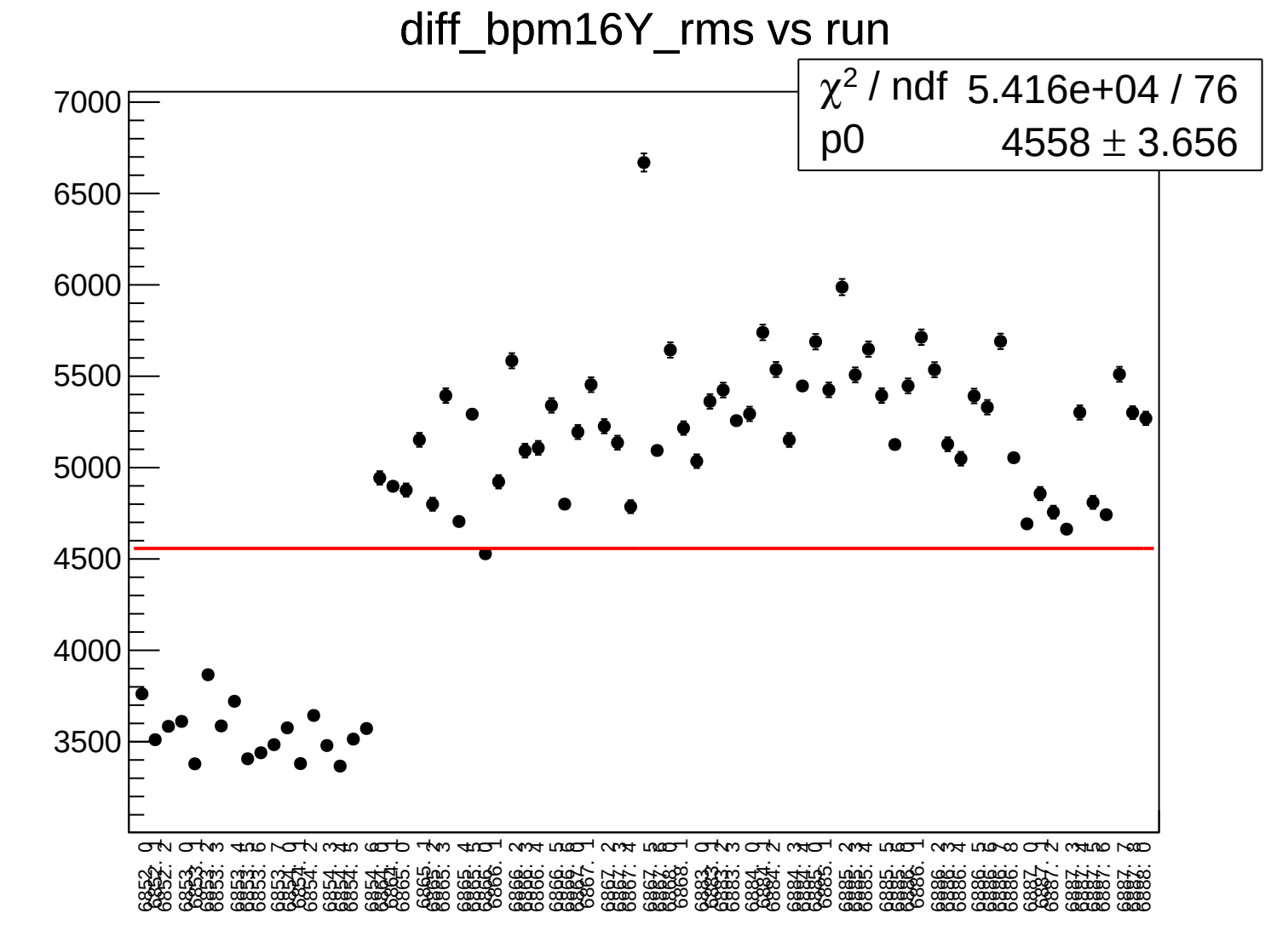

diff_bpm16X_mean vs run
χ² / ndf 70.51 / 76
p0 15.42 ± 7.734
pull
Entries 77
Mean 144.3
Std Dev 98.05

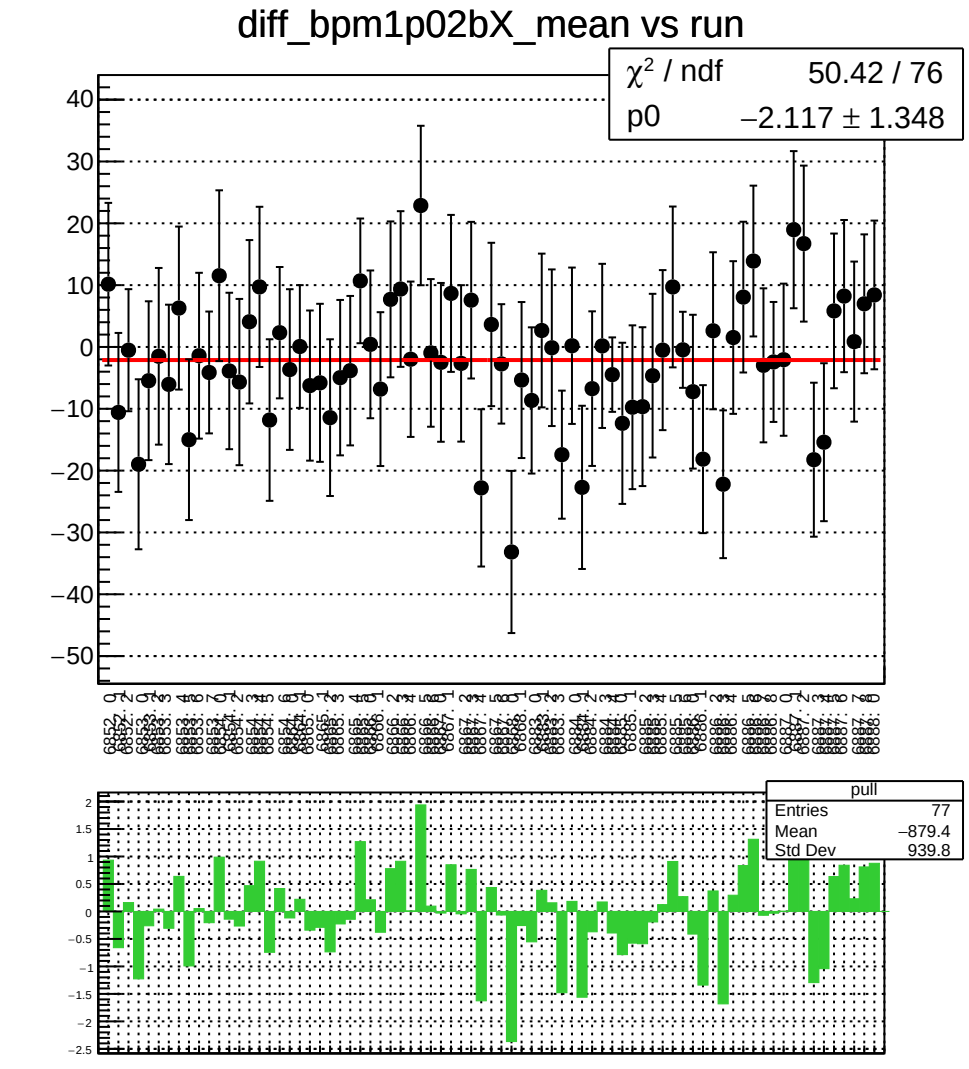

pull1D
Entries 77
Mean −0.02407
Std Dev 0.9566

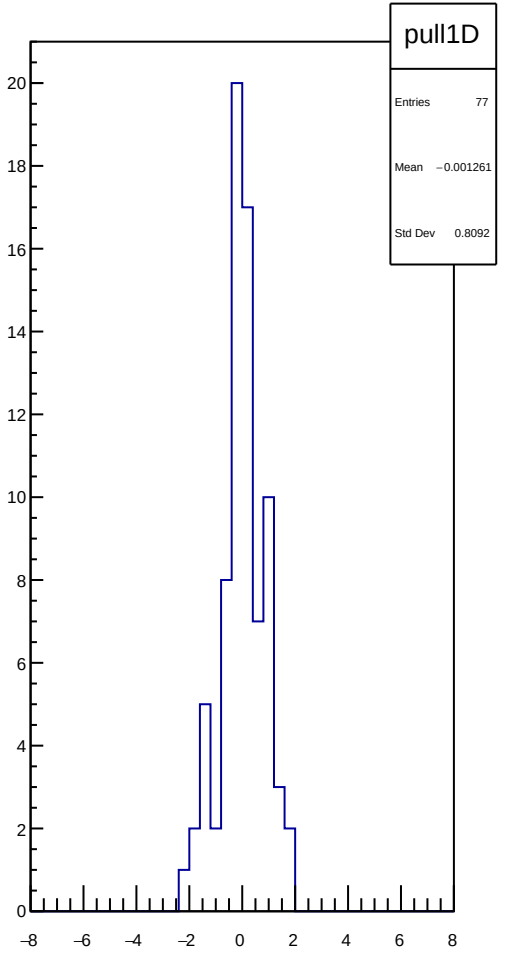

diff_bpm16X_rms vs run
χ^2 / ndf 2.355e+04 / 76
p0 6885 ± 5.469
9000
8500
8000
7500
7000
6500
6000
5500

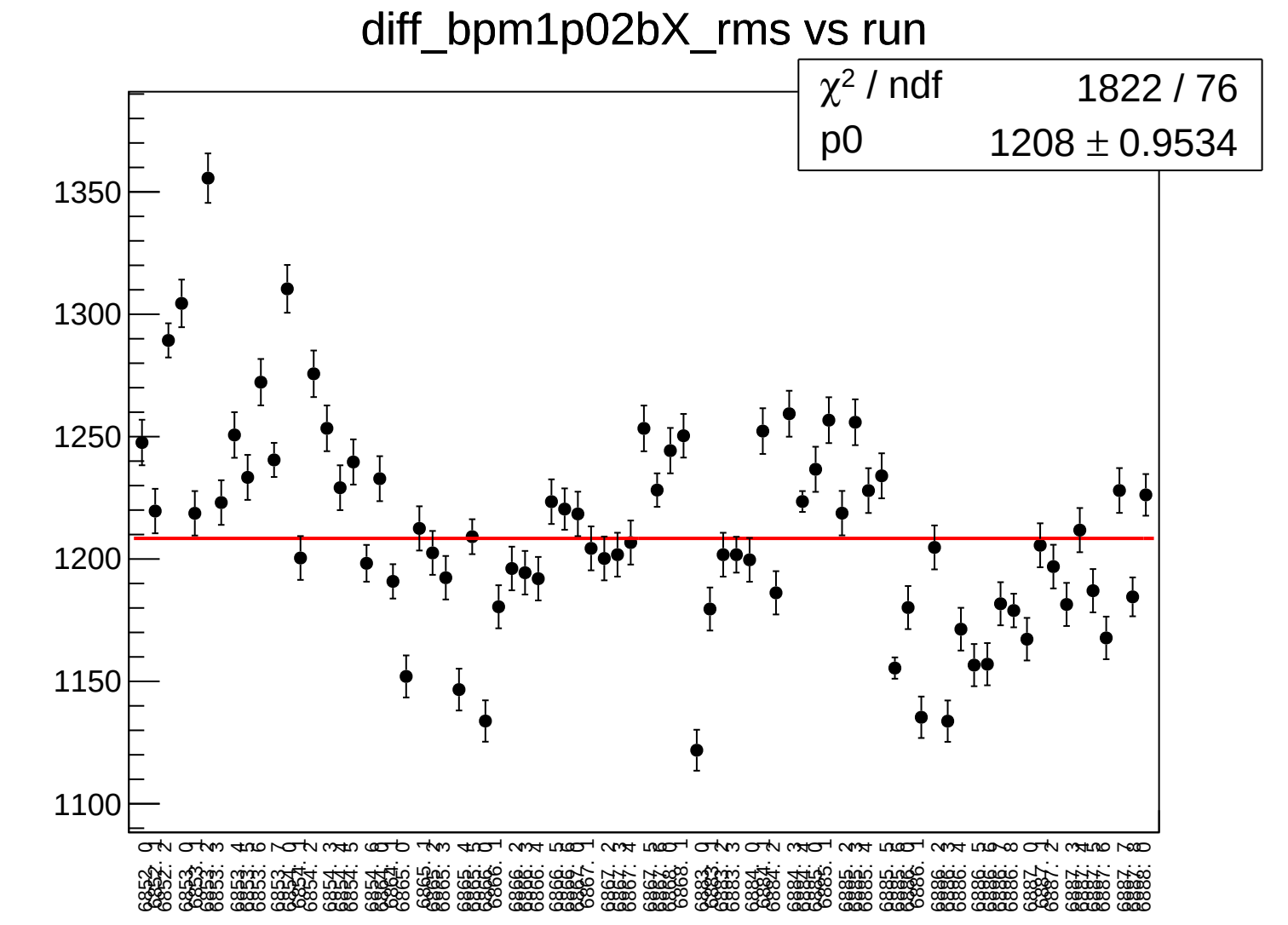

diff_bpm16Y_mean vs run
χ² / ndf 63.73 / 76
p0 1.099 ± 5.17
pull
Entries 77
Mean 56.81
Std Dev 56.73

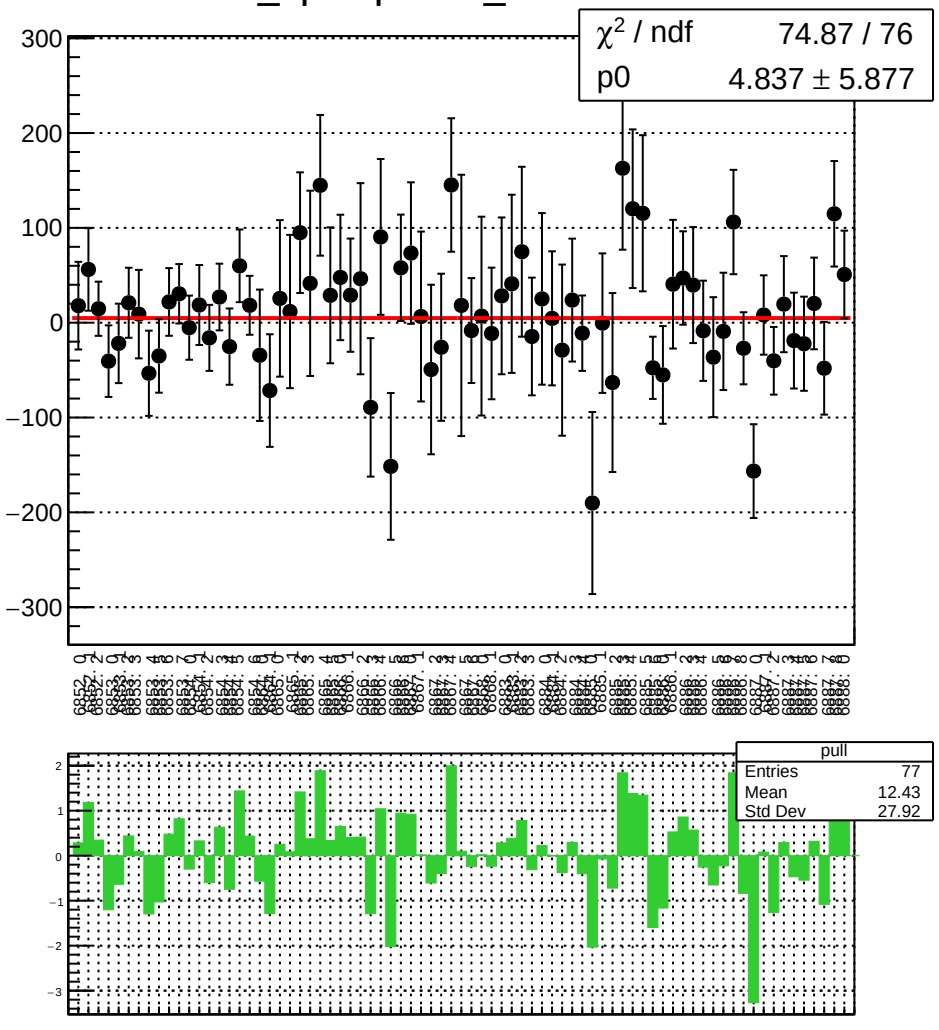

pull1D
Entries 77
Mean 0.02123
Std Dev 0.9095

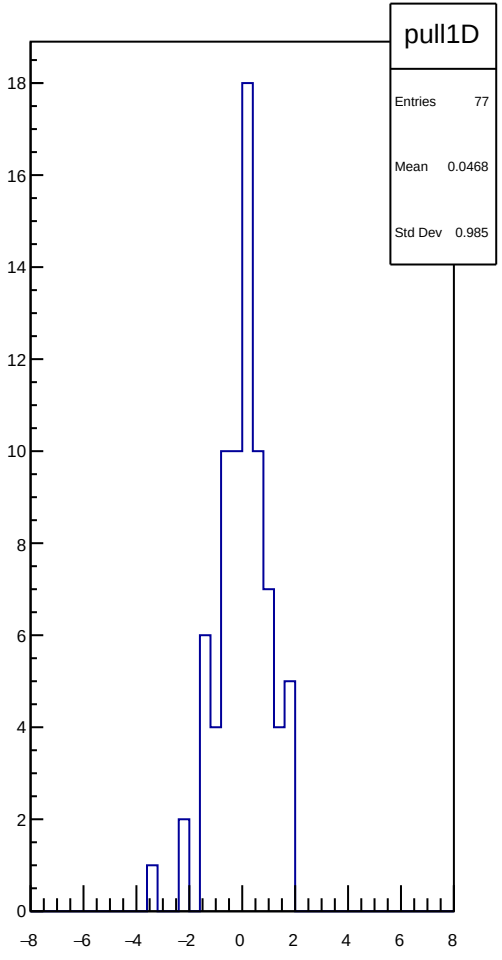

diff_bpm16Y_rms vs run
χ^2 / ndf 5.416e+04 / 76
p0 4558 ± 3.656
7000
6500
6000
5500
5000
4500
4000
3500

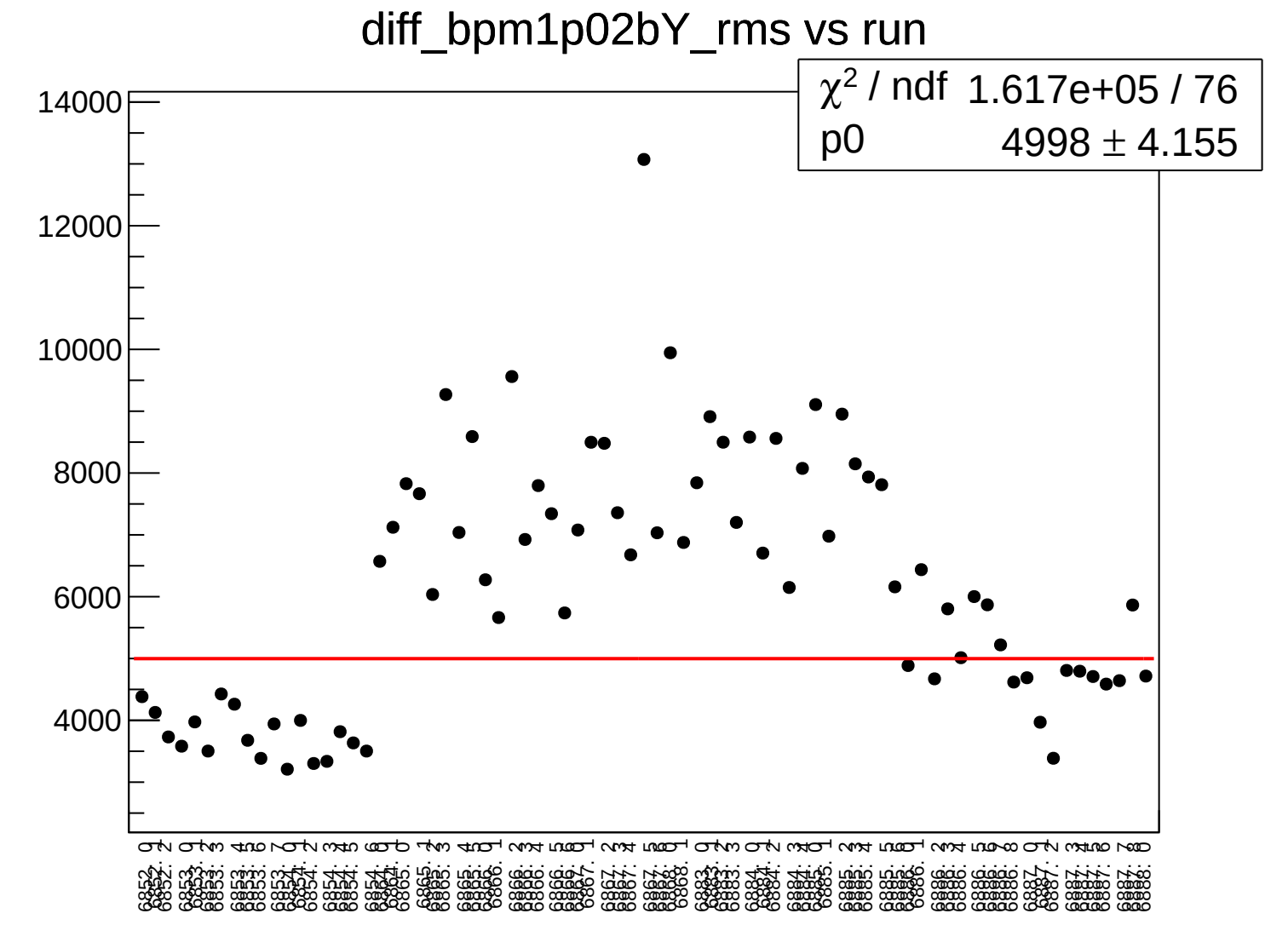

diff_bpm1p02bX_mean vs run
χ² / ndf 50.42 / 76
p0 −2.117 ± 1.348
pull
Entries 77
Mean −879.4
Std Dev 939.8

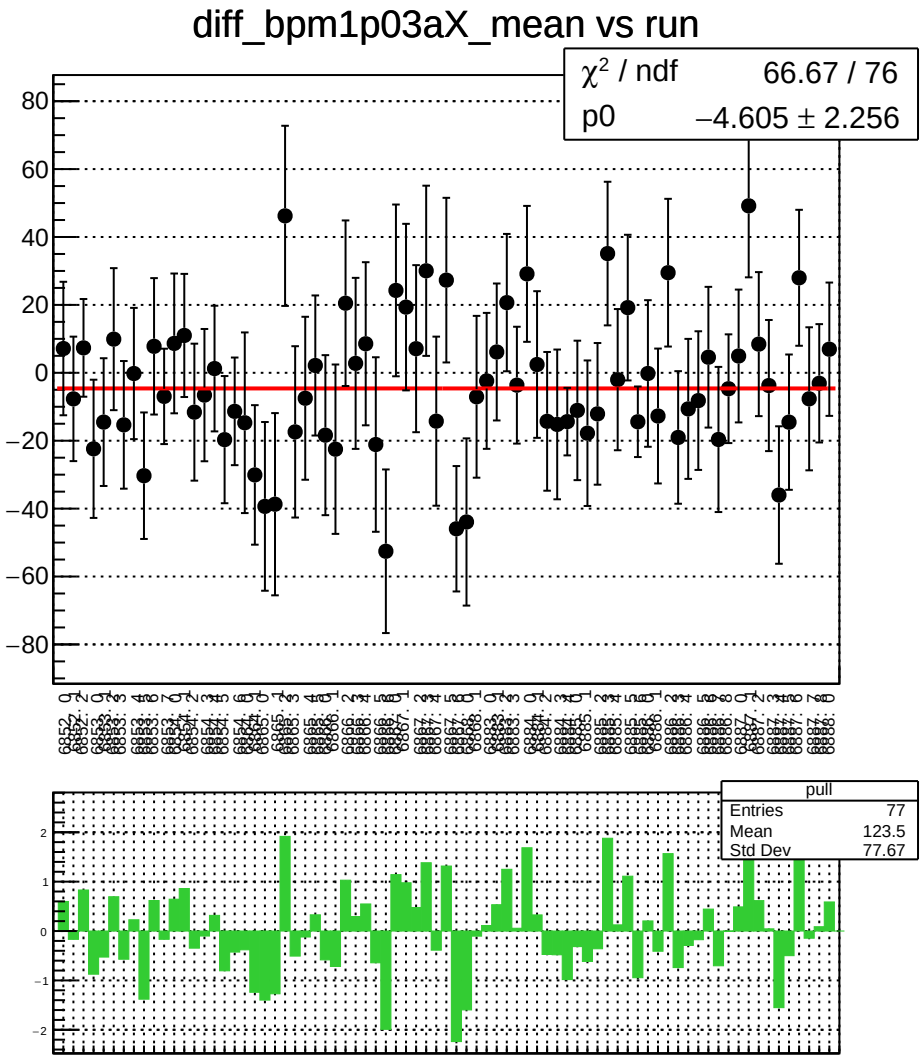

pull1D
Entries 77
Mean −0.001261
Std Dev 0.8092

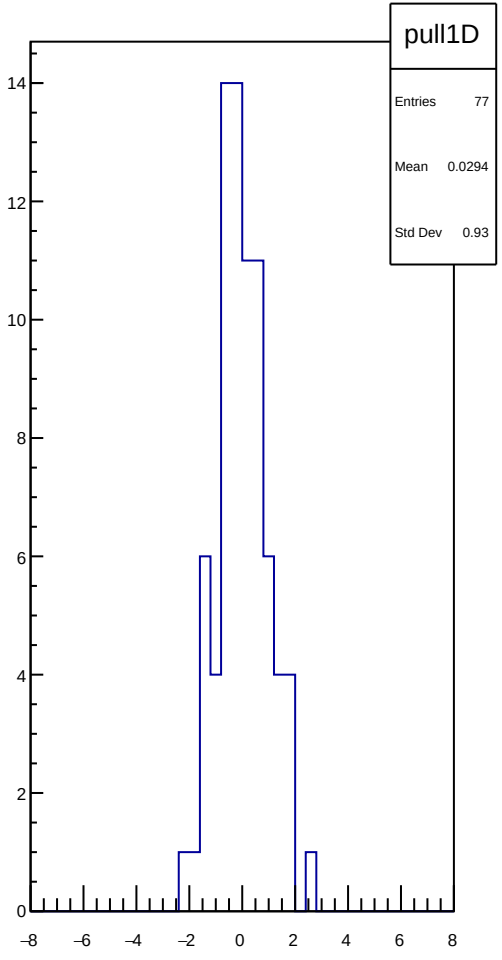

diff_bpm1p02bX_rms vs run
χ² / ndf 1822 / 76
p0 1208 ± 0.9534
1350
1300
1250
1200
1150
1100

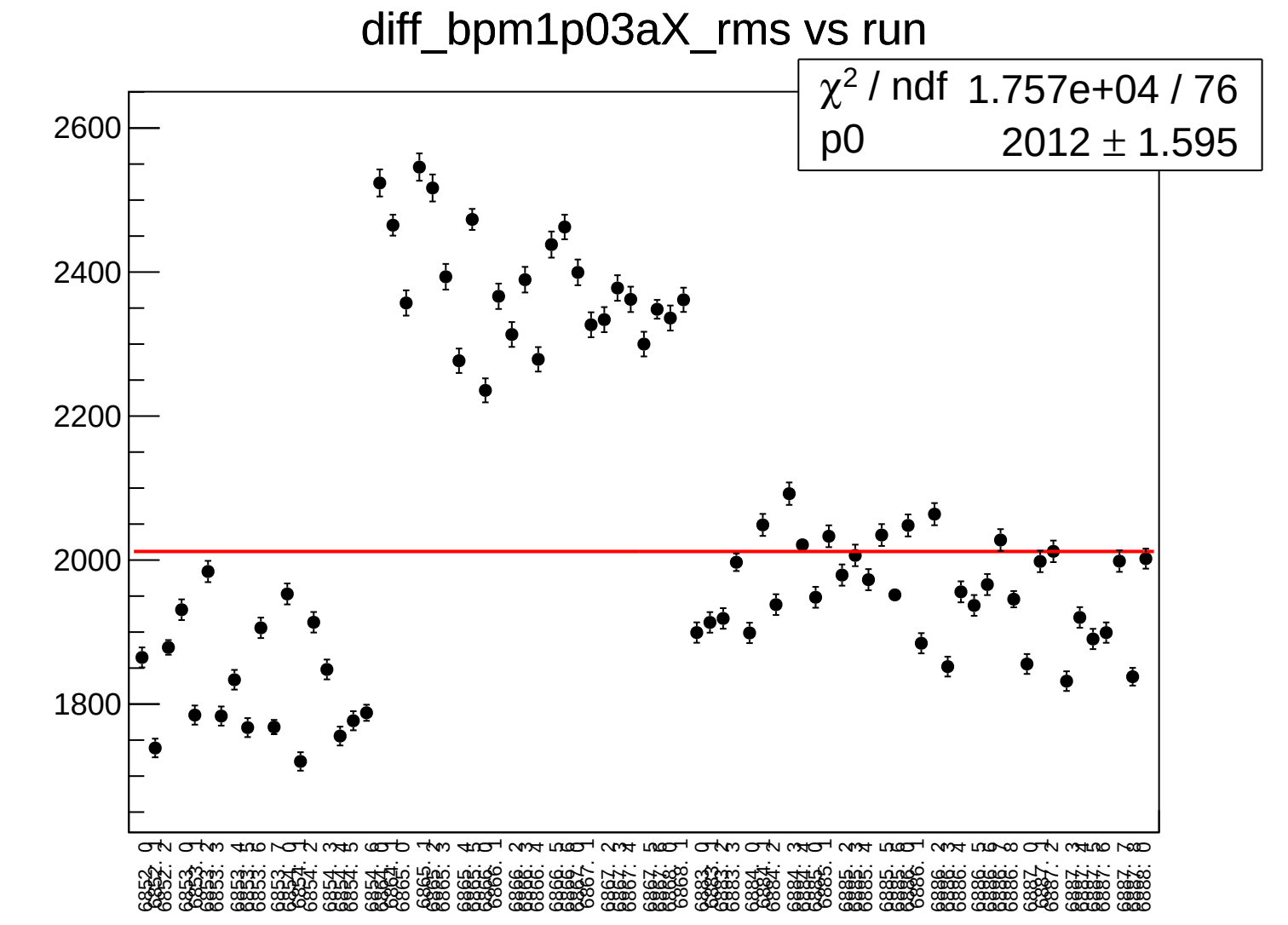

diff_bpm1p02bY_mean vs run
χ² / ndf 74.87 / 76
p0 4.837 ± 5.877
pull
Entries 77
Mean 12.43
Std Dev 27.92

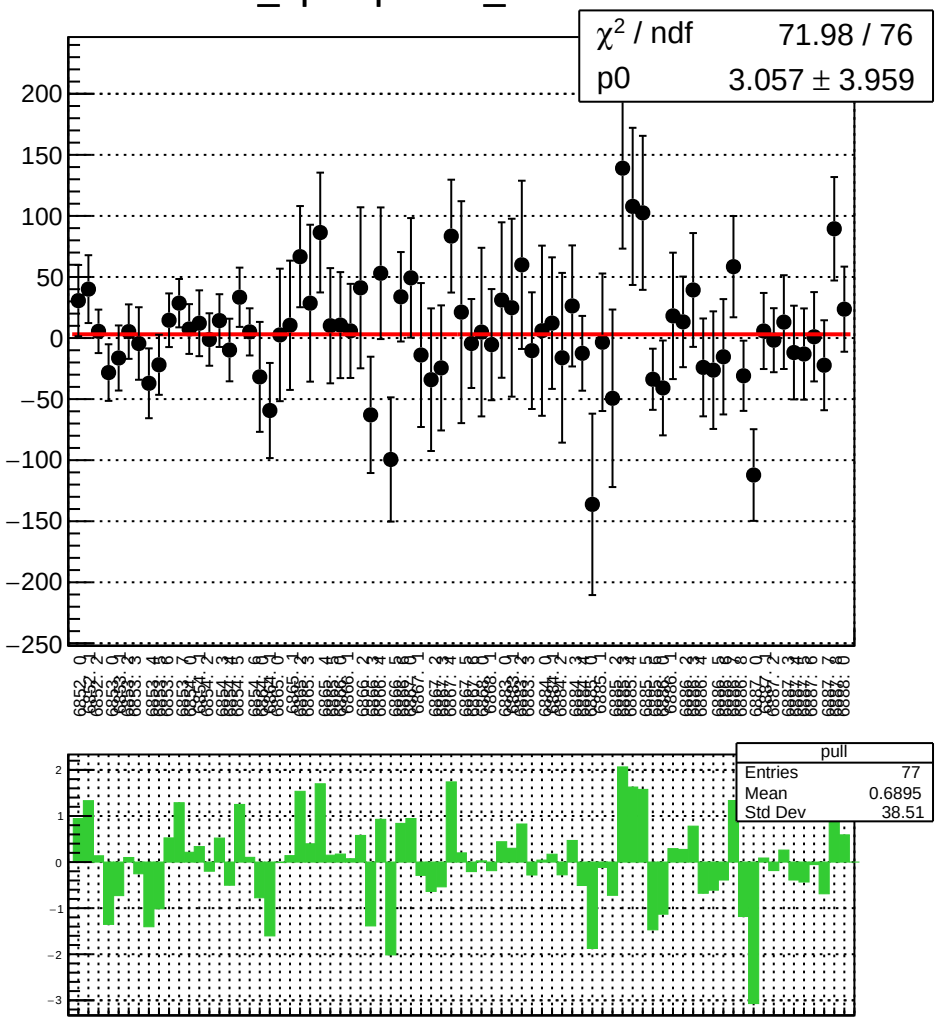

pull1D
Entries 77
Mean 0.0468
Std Dev 0.985

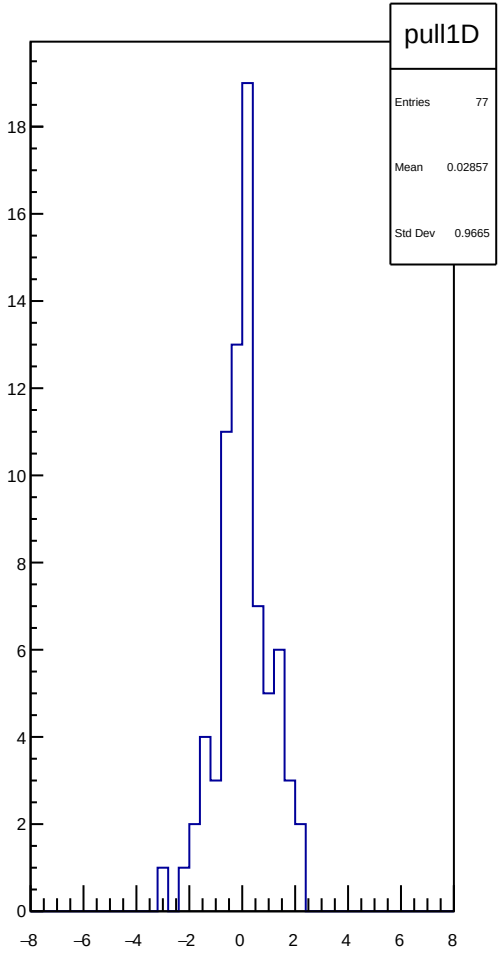

diff_bpm1p02bY_rms vs run
χ² / ndf 1.617e+05 / 76
p0 4998 ± 4.155
14000
12000
10000
8000
6000
4000

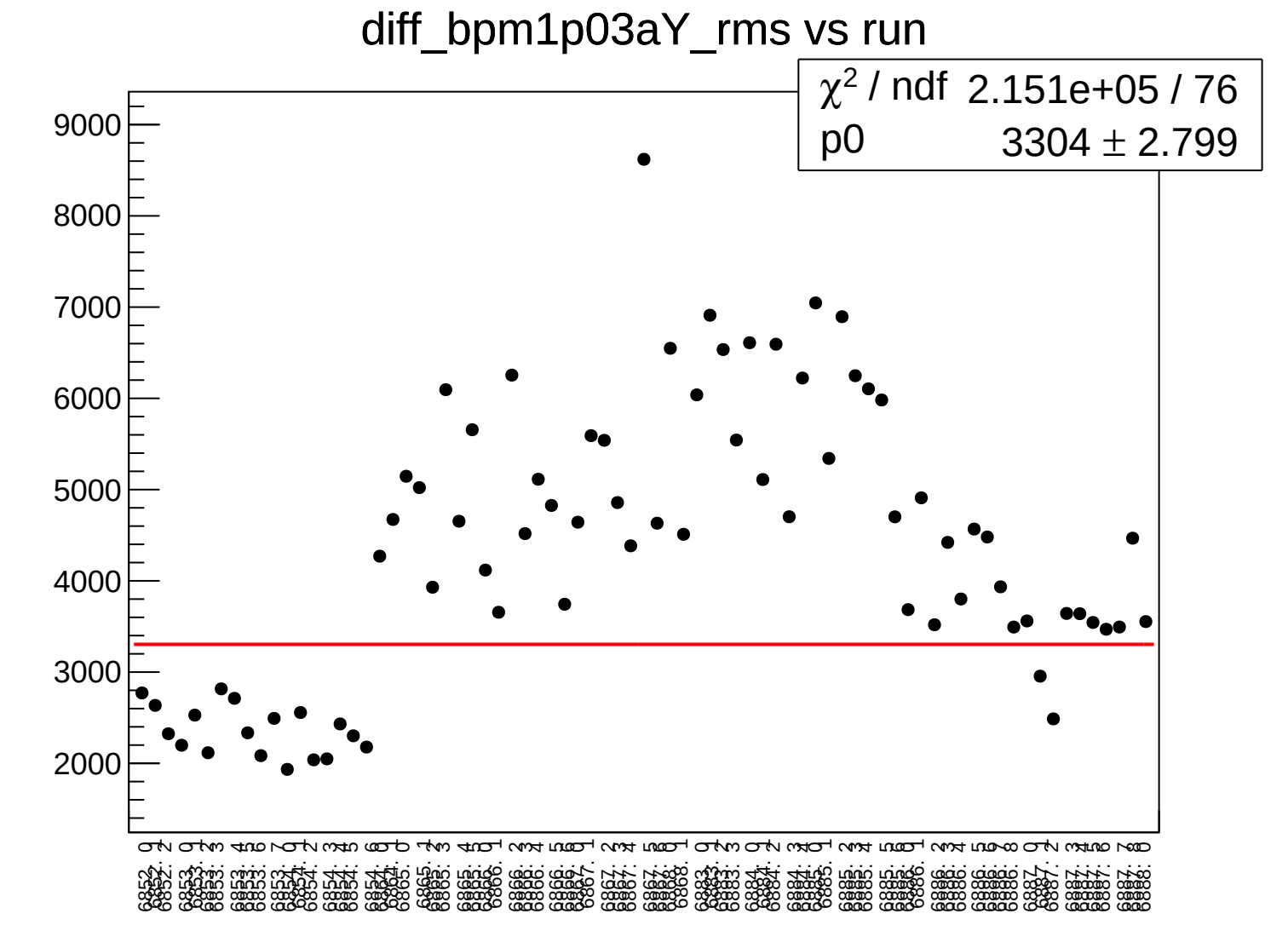

diff_bpm1p03aX_mean vs run
χ² / ndf 66.67 / 76
p0 −4.605 ± 2.256
pull
Entries 77
Mean 123.5
Std Dev 77.67

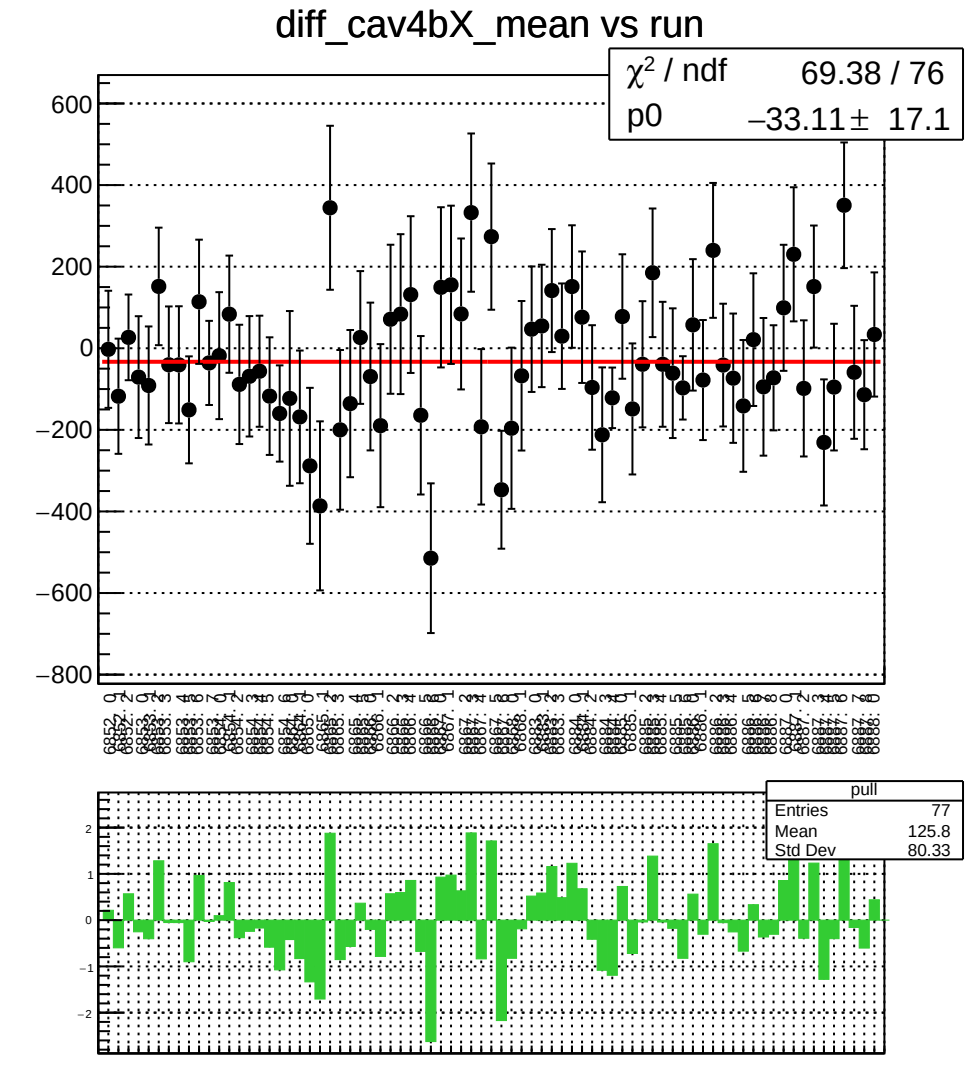

pull1D
Entries 77
Mean 0.0294
Std Dev 0.93

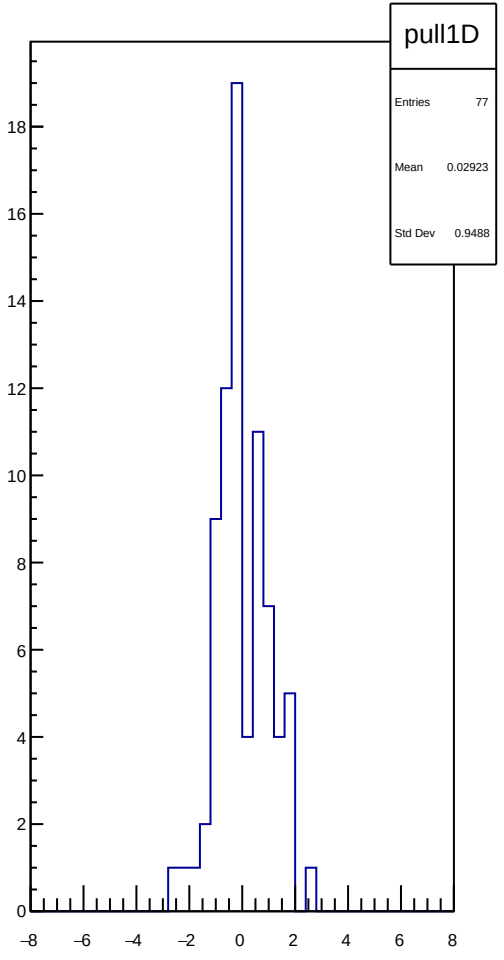

diff_bpm1p03aX_rms vs run
χ² / ndf 1.757e+04 / 76
p0 2012 ± 1.595
2600
2400
2200
2000
1800

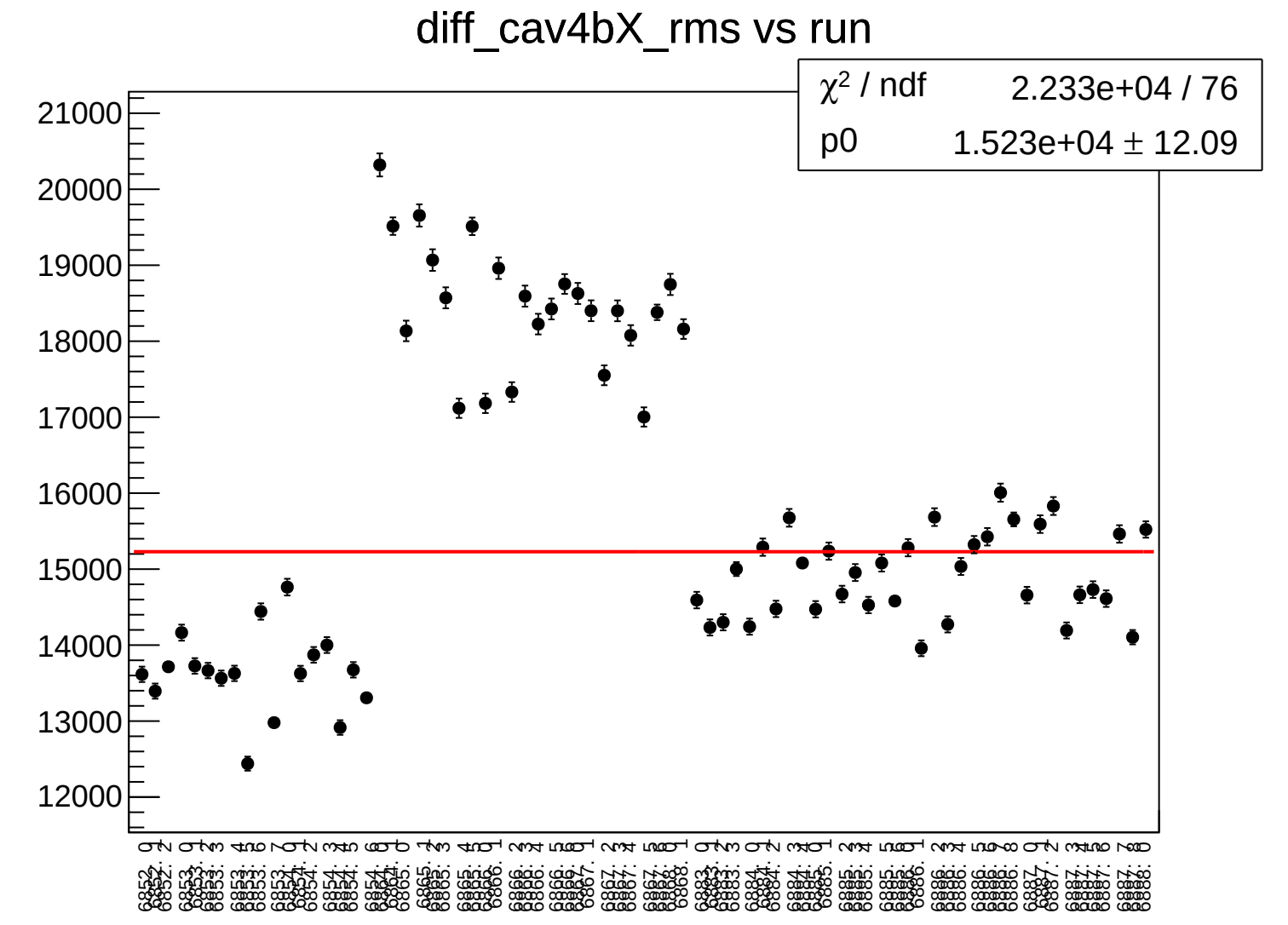

diff_bpm1p03aY_mean vs run
χ² / ndf 71.98 / 76
p0 3.057 ± 3.959
pull
Entries 77
Mean 0.6895
Std Dev 38.51

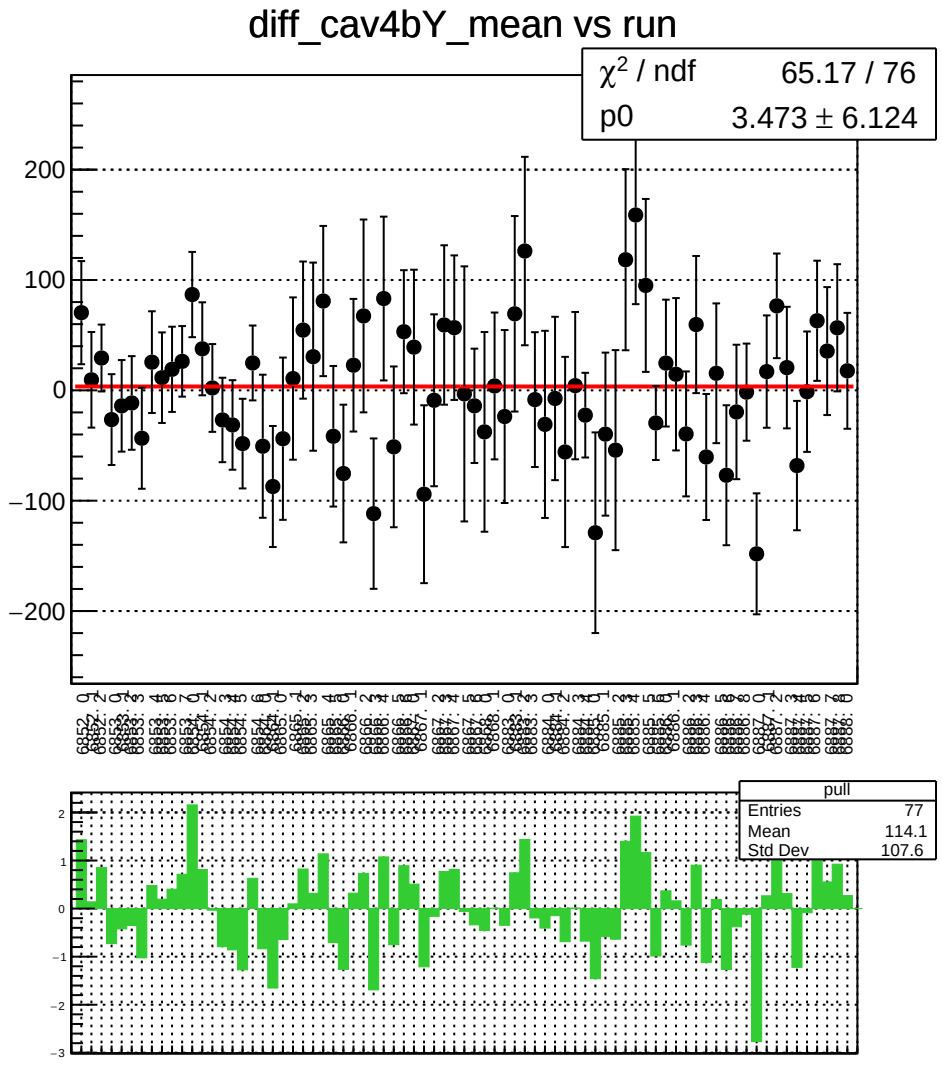

pull1D
Entries 77
Mean 0.02857
Std Dev 0.9665

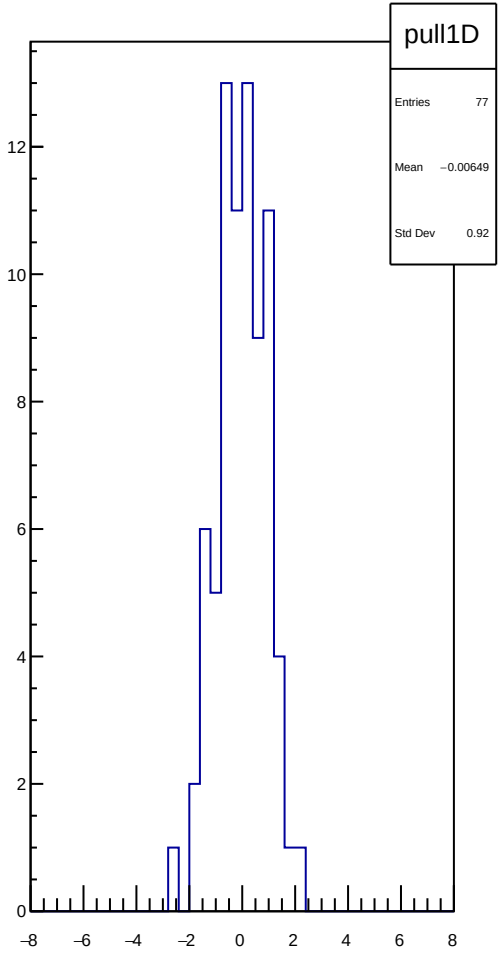

diff_bpm1p03aY_rms vs run
χ² / ndf 2.151e+05 / 76
p0 3304 ± 2.799
9000
8000
7000
6000
5000
4000
3000
2000

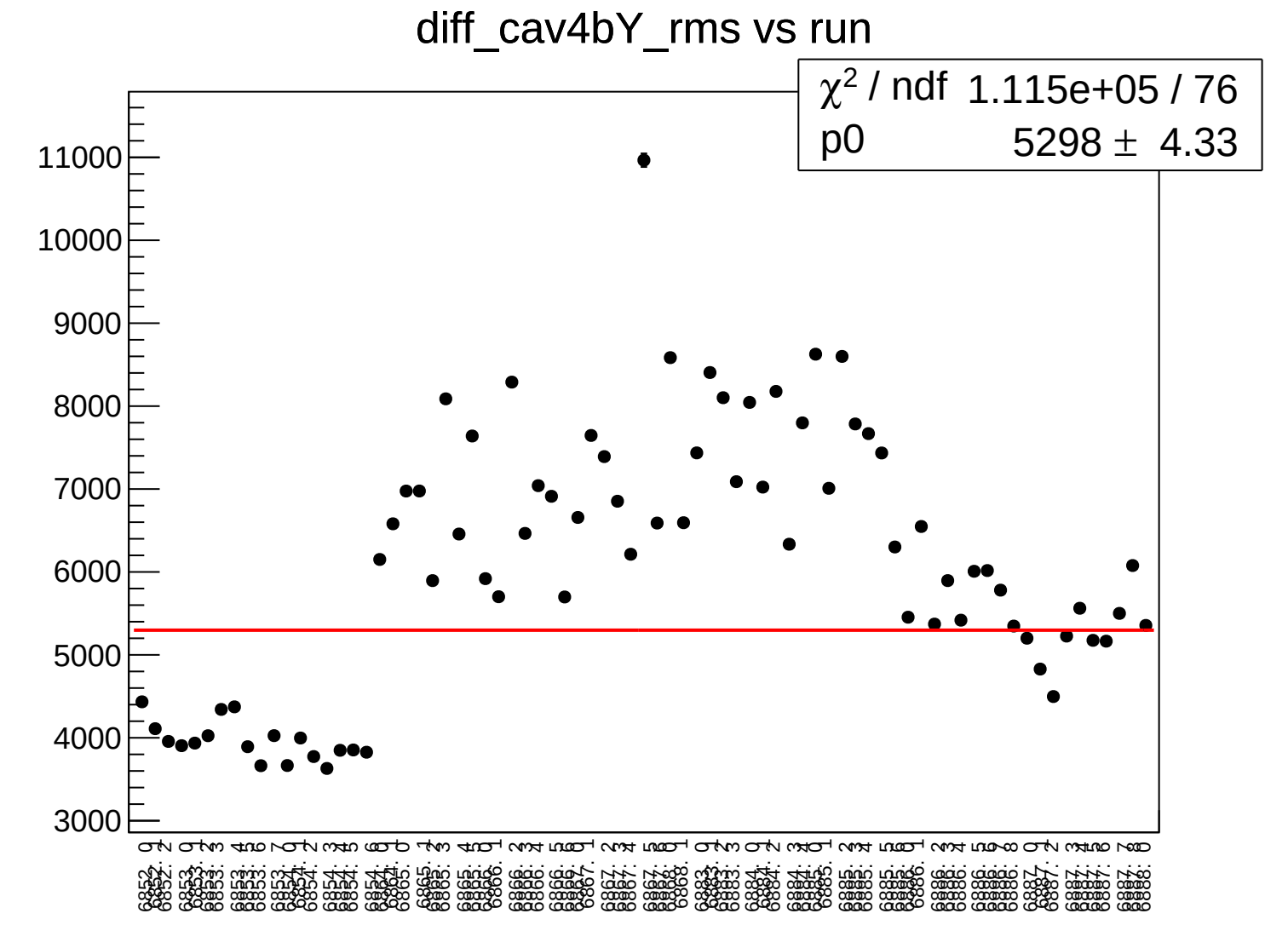

diff_cav4bX_mean vs run
χ² / ndf 69.38 / 76
p0 −33.11 ± 17.1
pull
Entries 77
Mean 125.8
Std Dev 80.33

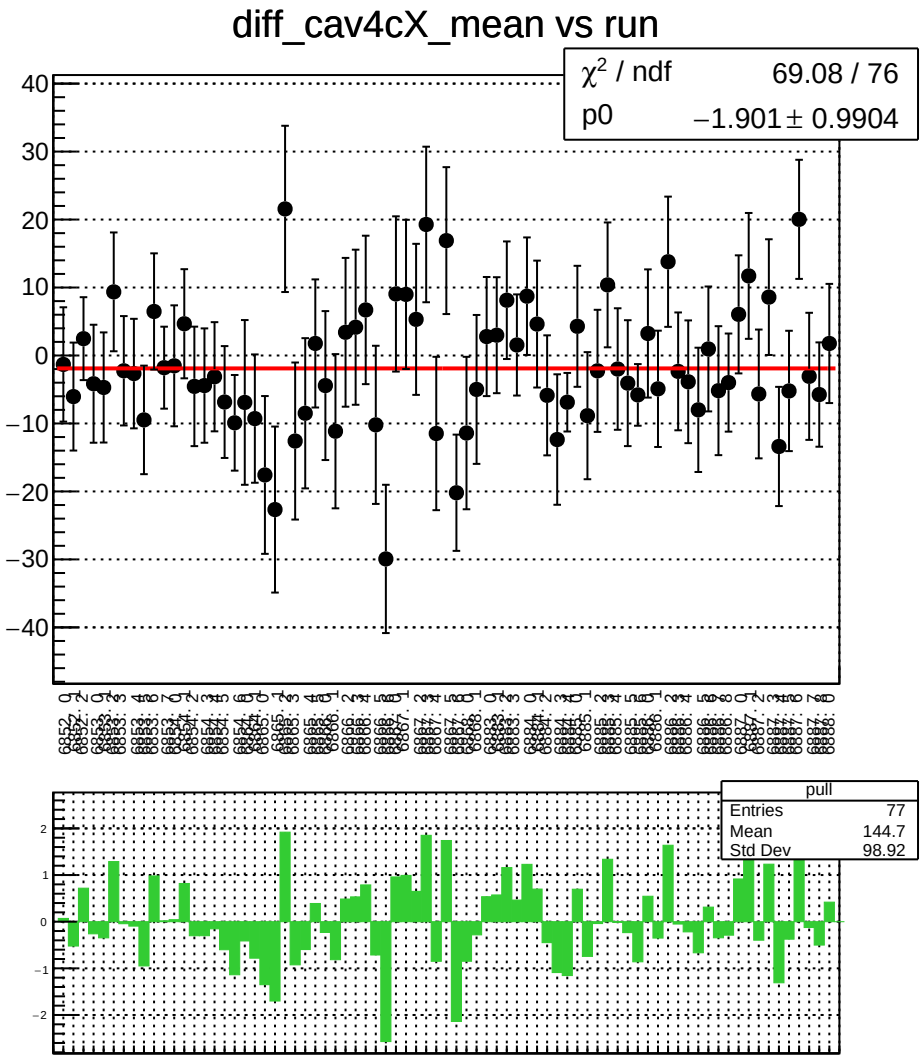

pull1D
Entries 77
Mean 0.02923
Std Dev 0.9488

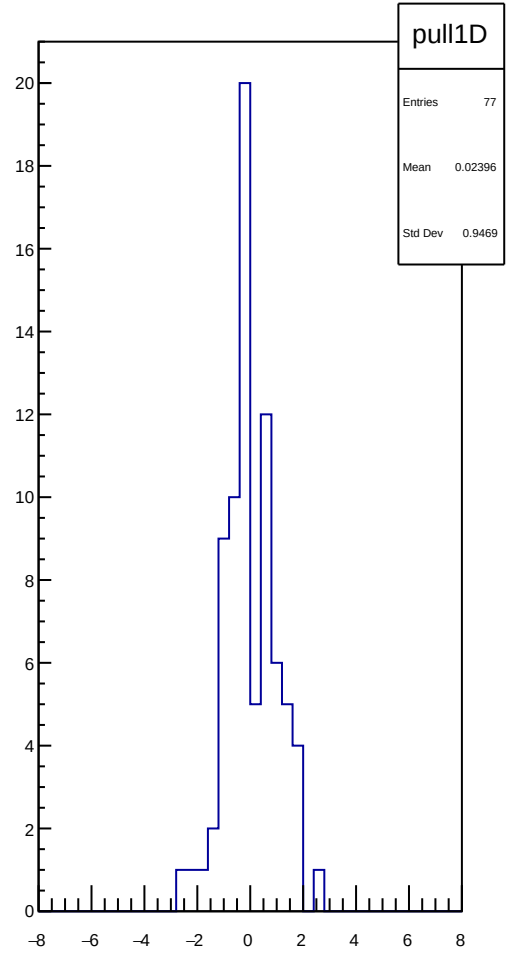

diff_cav4bX_rms vs run
χ² / ndf 2.233e+04 / 76
p0 1.523e+04 ± 12.09
21000
20000
19000
18000
17000
16000
15000
14000
13000
12000

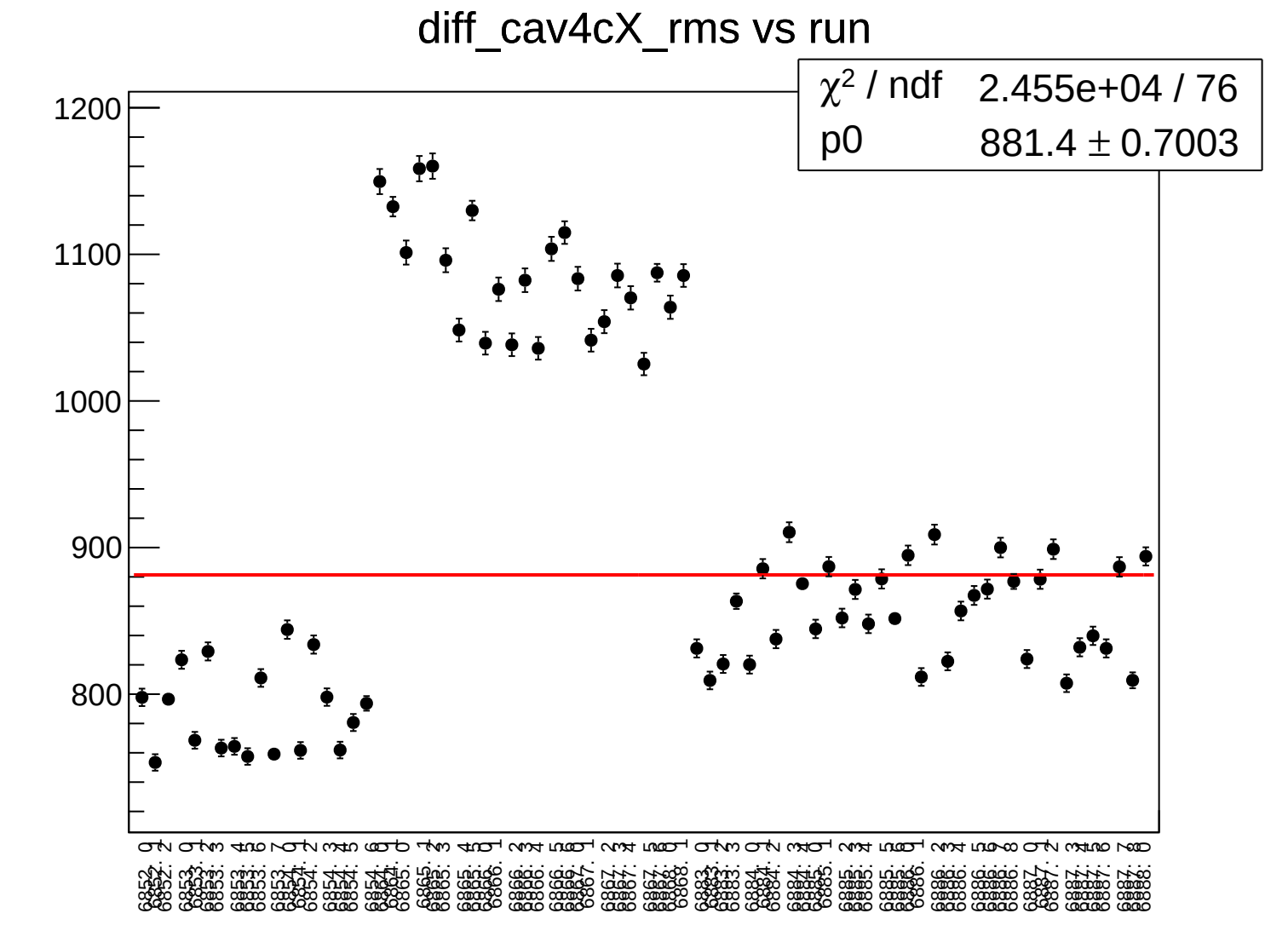

diff_cav4bY_mean vs run
χ^2 / ndf 65.17 / 76
p0 3.473 ± 6.124
200
100
0
−100
−200
pull
Entries 77
Mean 114.1
Std Dev 107.6
2
1
0
−1
−2
−3

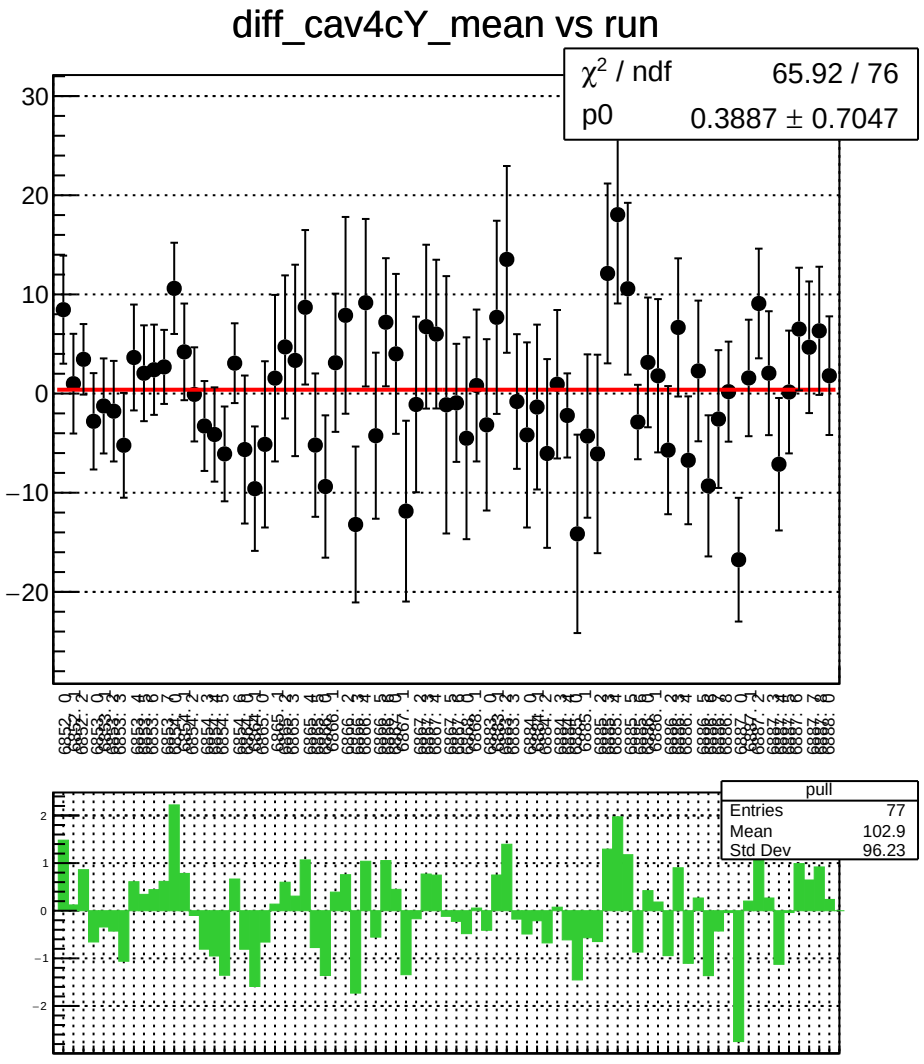

pull1D
Entries 77
Mean −0.00649
Std Dev 0.92
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

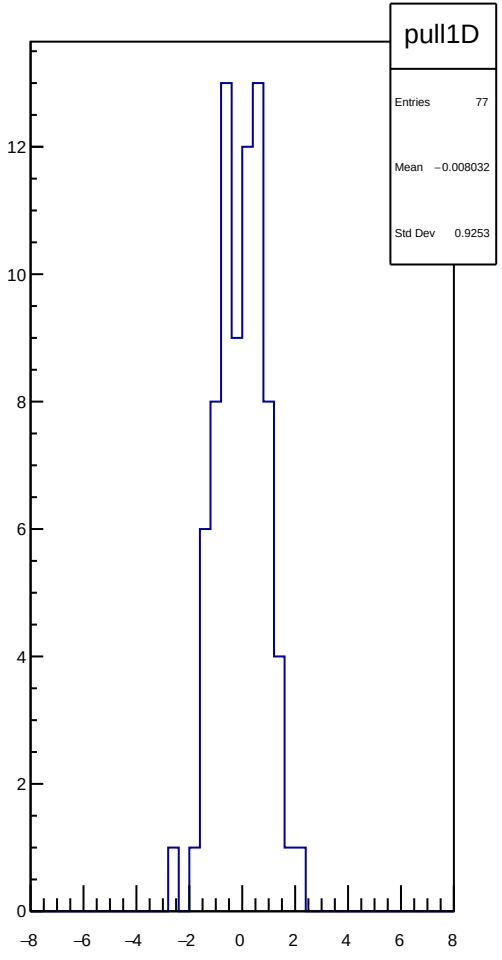

diff_cav4bY_rms vs run
χ² / ndf 1.115e+05 / 76
p0 5298 ± 4.33
11000
10000
9000
8000
7000
6000
5000
4000
3000

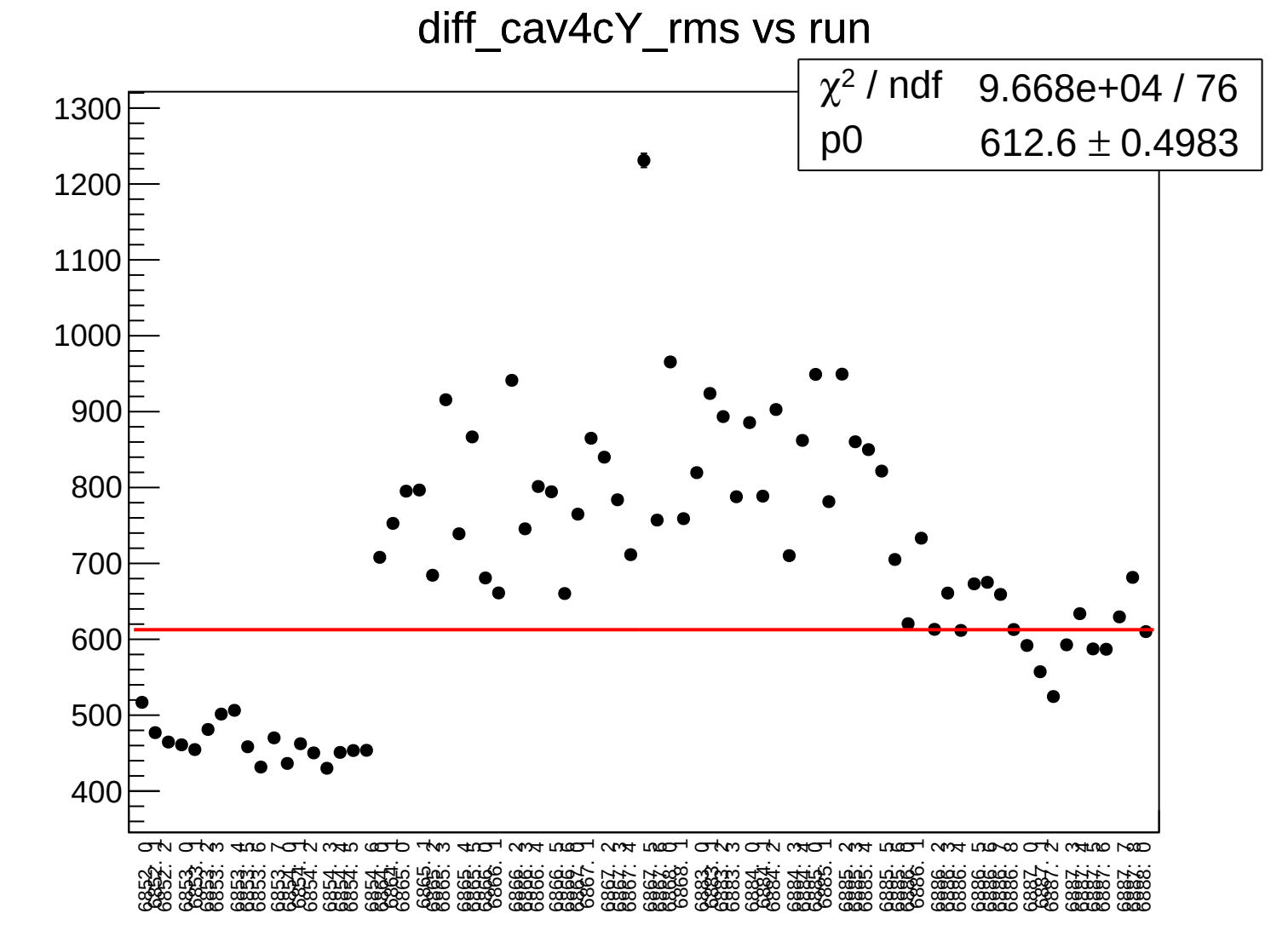

diff_cav4cX_mean vs run
χ² / ndf 69.08 / 76
p0 −1.901 ± 0.9904
pull
Entries 77
Mean 144.7
Std Dev 98.92

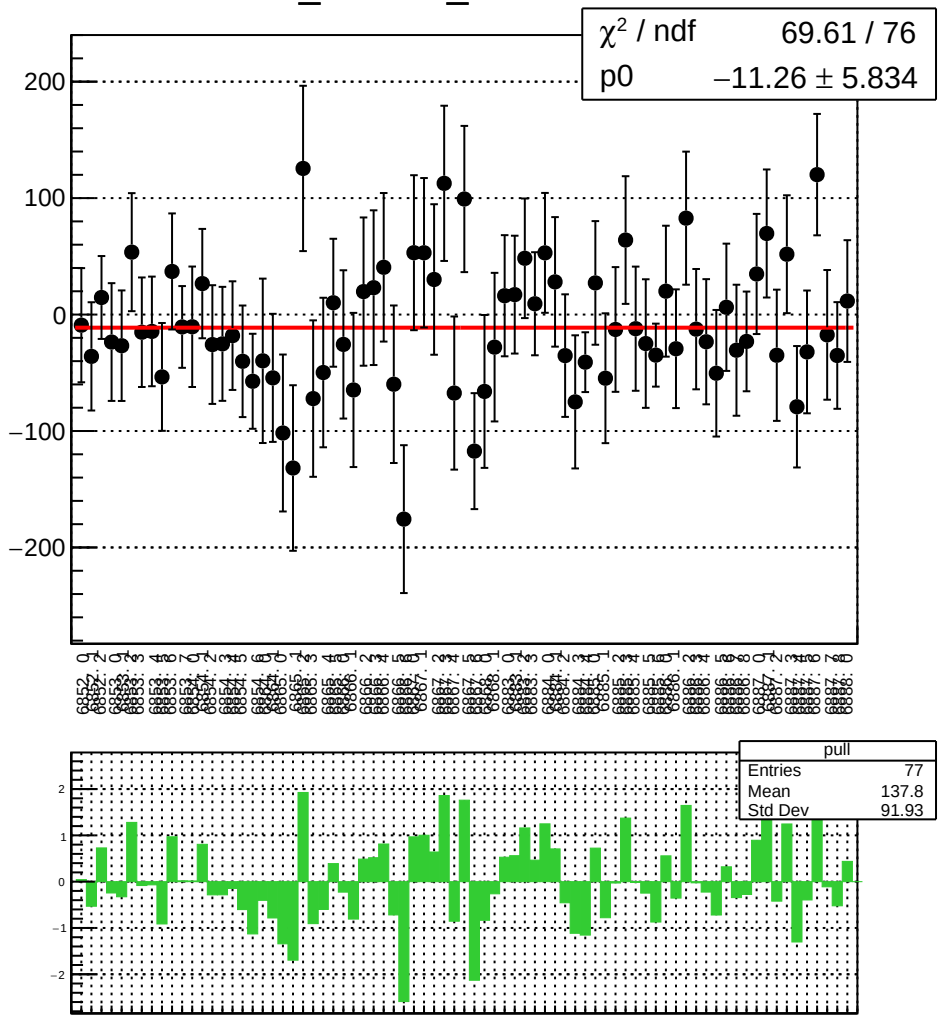

pull1D
Entries 77
Mean 0.02396
Std Dev 0.9469

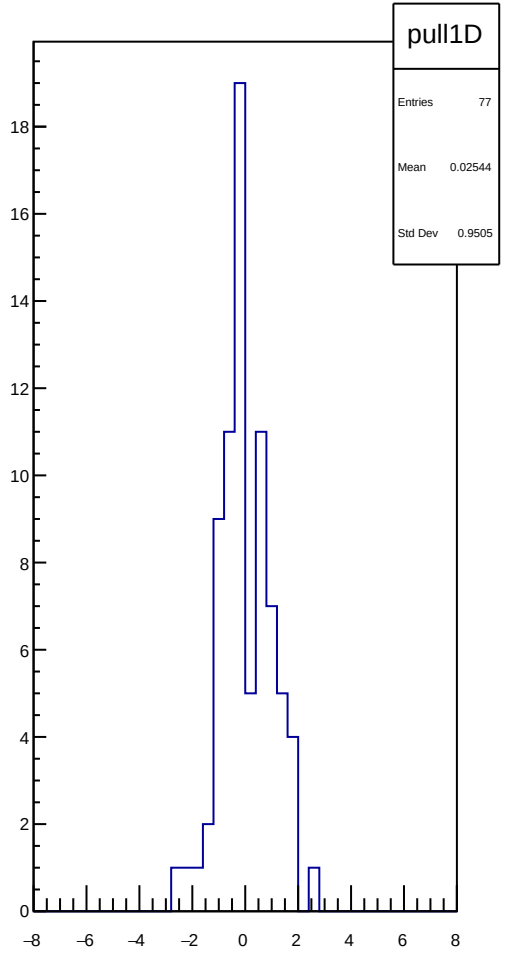

diff_cav4cX_rms vs run
χ² / ndf 2.455e+04 / 76
p0 881.4 ± 0.7003
1200
1100
1000
900
800

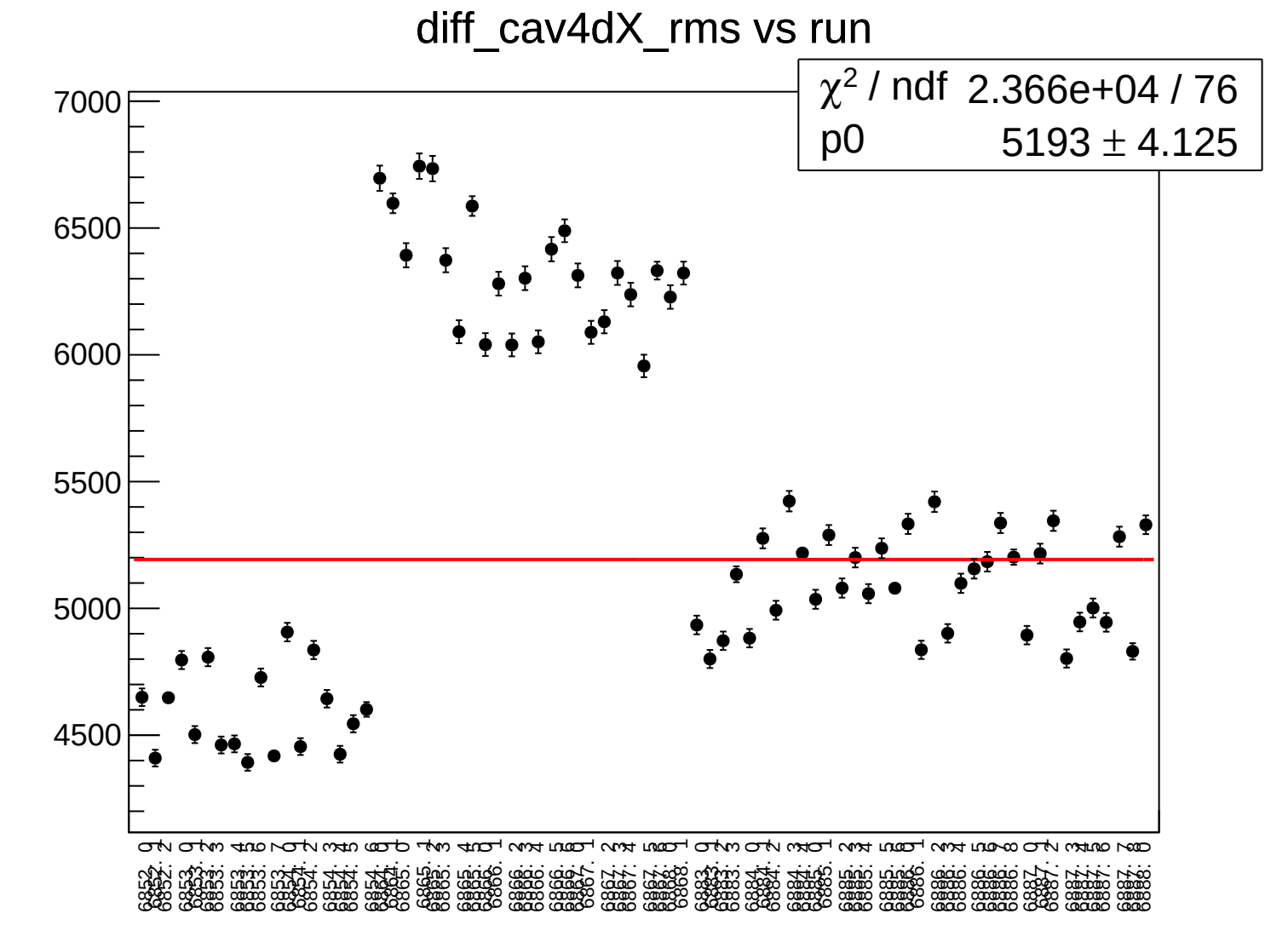

diff_cav4cY_mean vs run
χ² / ndf 65.92 / 76
p0 0.3887 ± 0.7047
pull
Entries 77
Mean 102.9
Std Dev 96.23

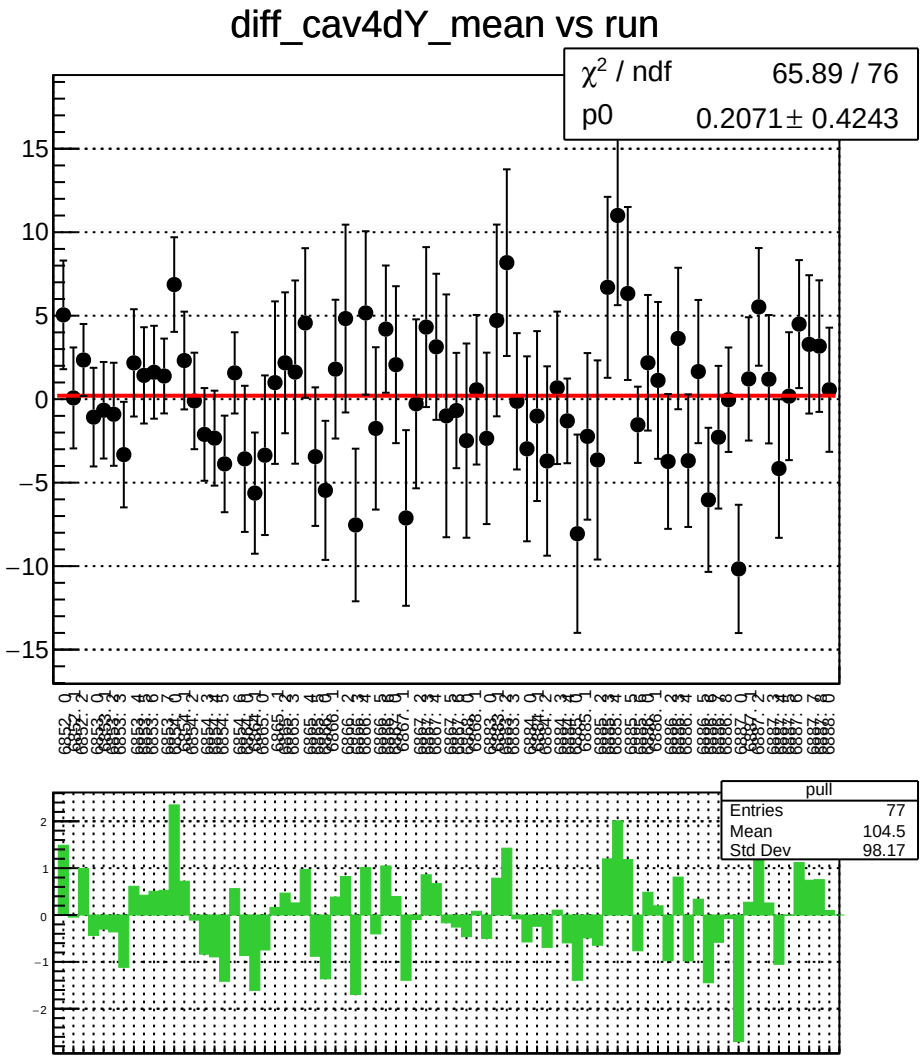

pull1D
Entries 77
Mean −0.008032
Std Dev 0.9253

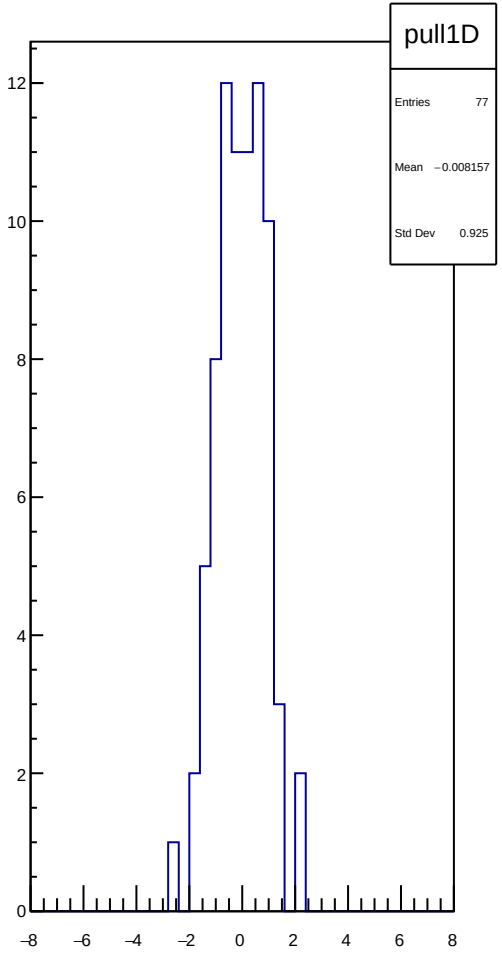

diff_cav4cY_rms vs run
χ² / ndf 9.668e+04 / 76
p0 612.6 ± 0.4983
1300
1200
1100
1000
900
800
700
600
500
400

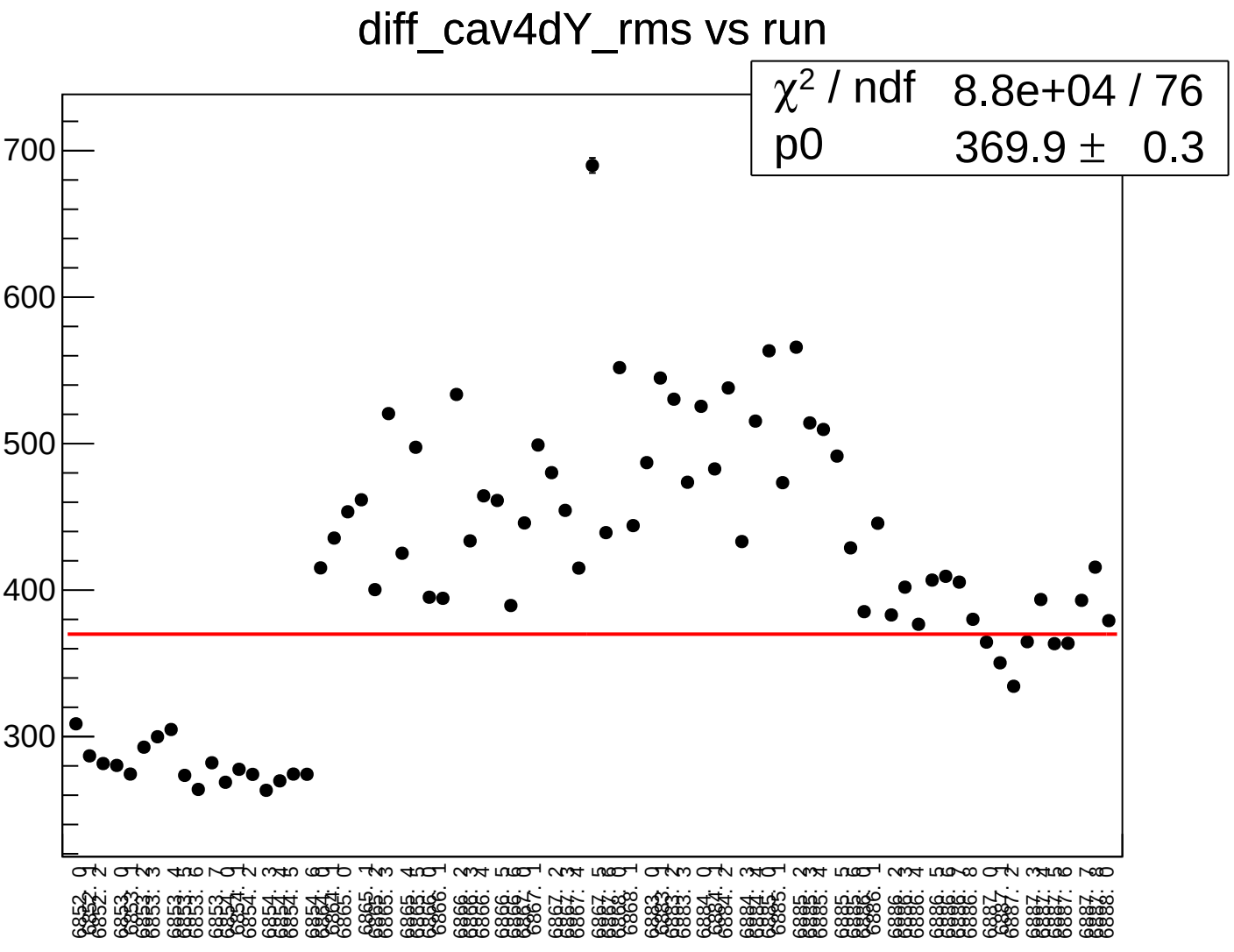

diff_cav4dX_mean vs run
χ^2 / ndf 69.61 / 76
p0 −11.26 ± 5.834
200
100
0
−100
−200
pull
Entries 77
Mean 137.8
Std Dev 91.93
2
1
0
−1
−2

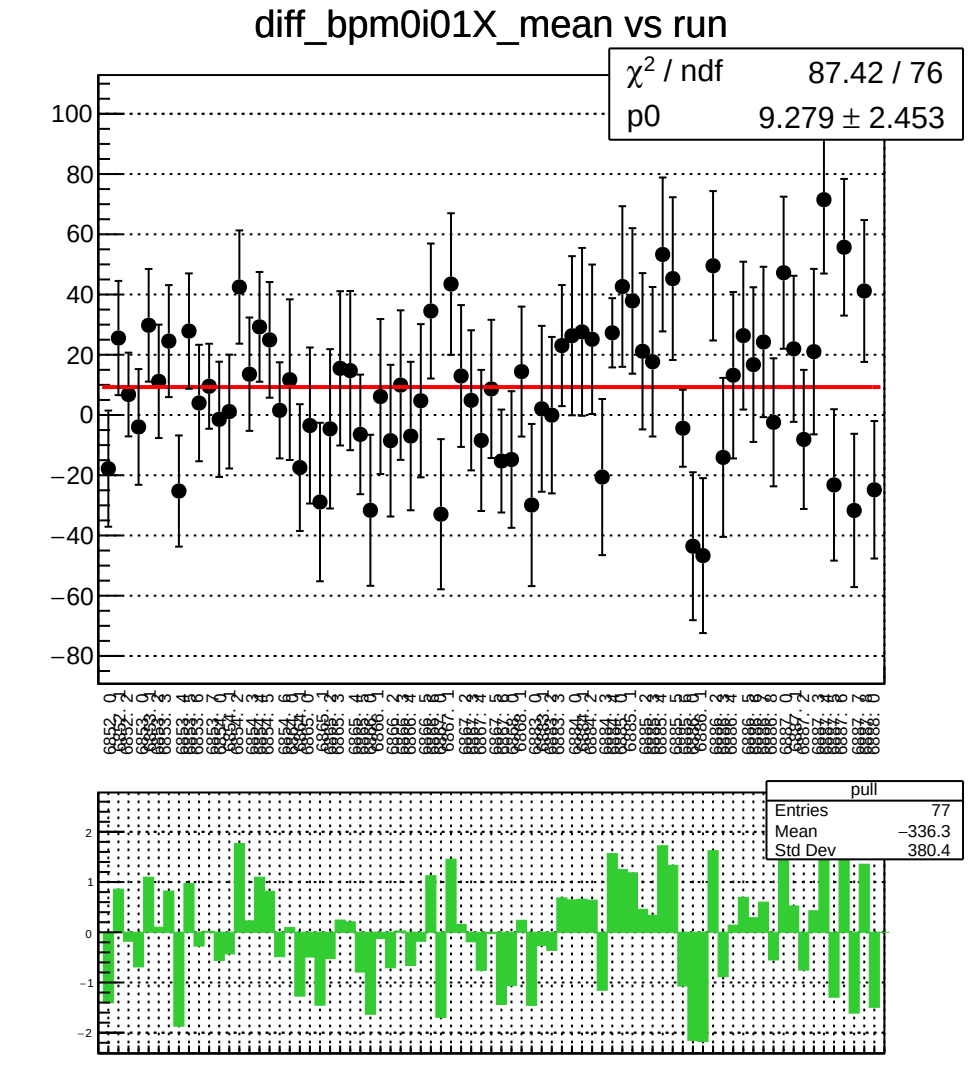

pull1D
Entries 77
Mean 0.02544
Std Dev 0.9505
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

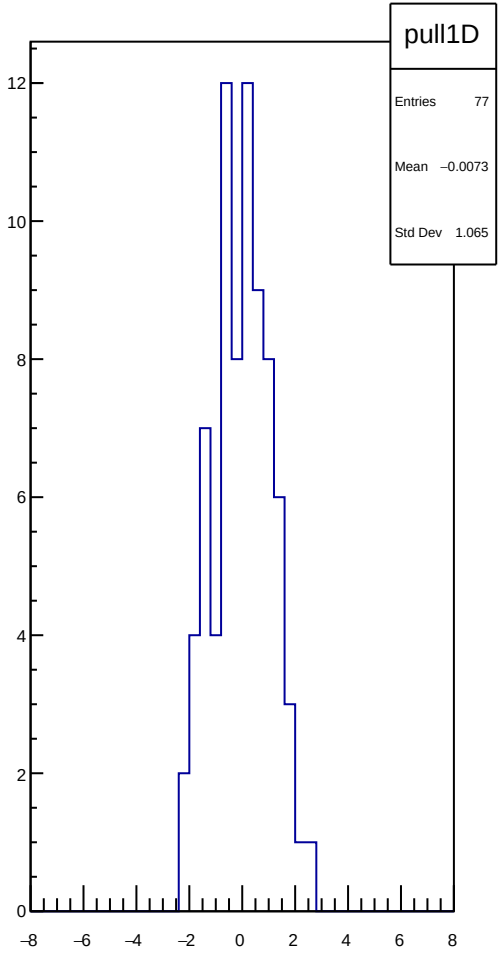

diff_cav4dX_rms vs run
χ^2 / ndf 2.366e+04 / 76
p0 5193 ± 4.125
7000
6500
6000
5500
5000
4500

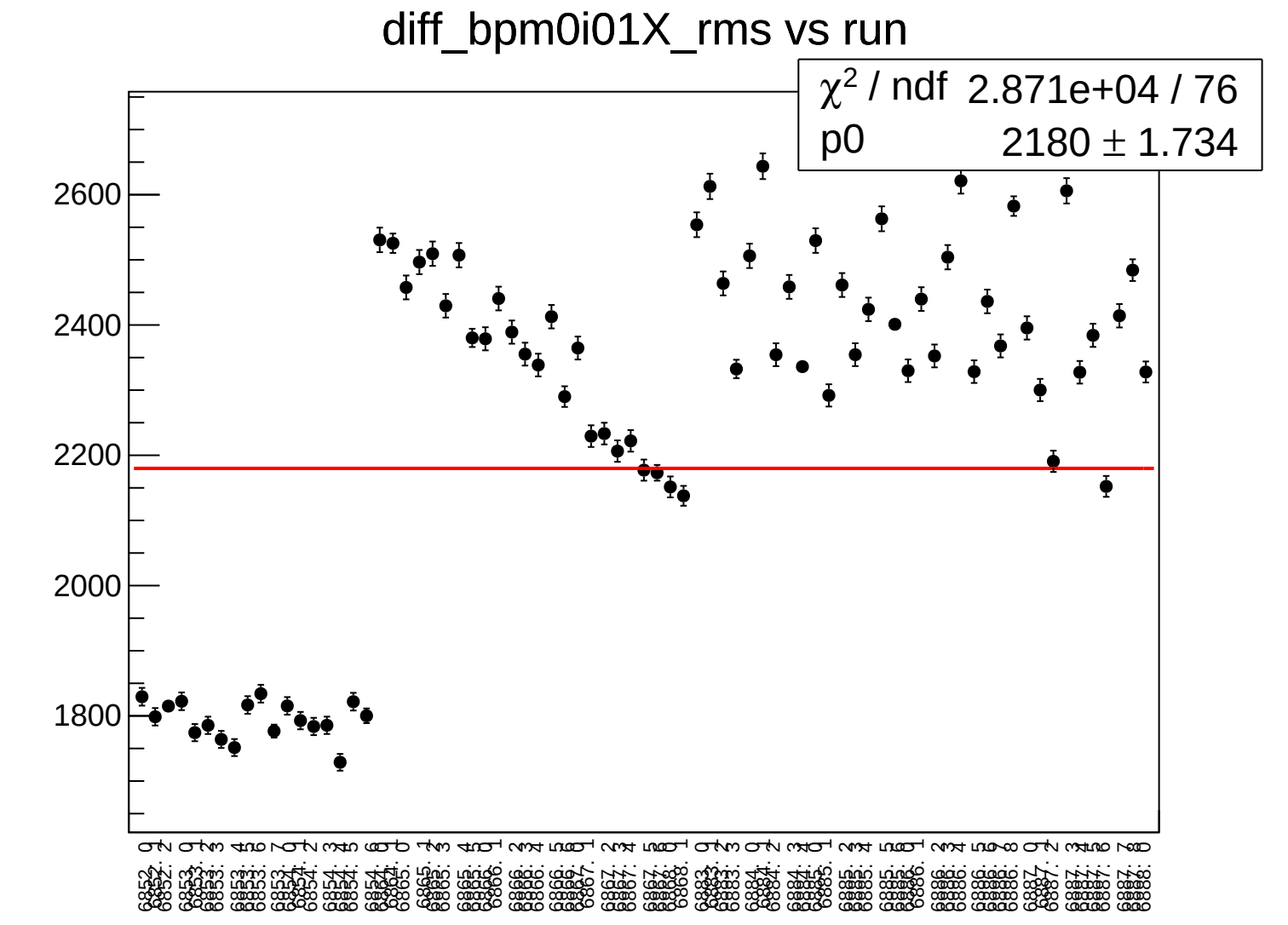

diff_cav4dY_mean vs run
χ² / ndf 65.89 / 76
p0 0.2071 ± 0.4243
pull
Entries 77
Mean 104.5
Std Dev 98.17

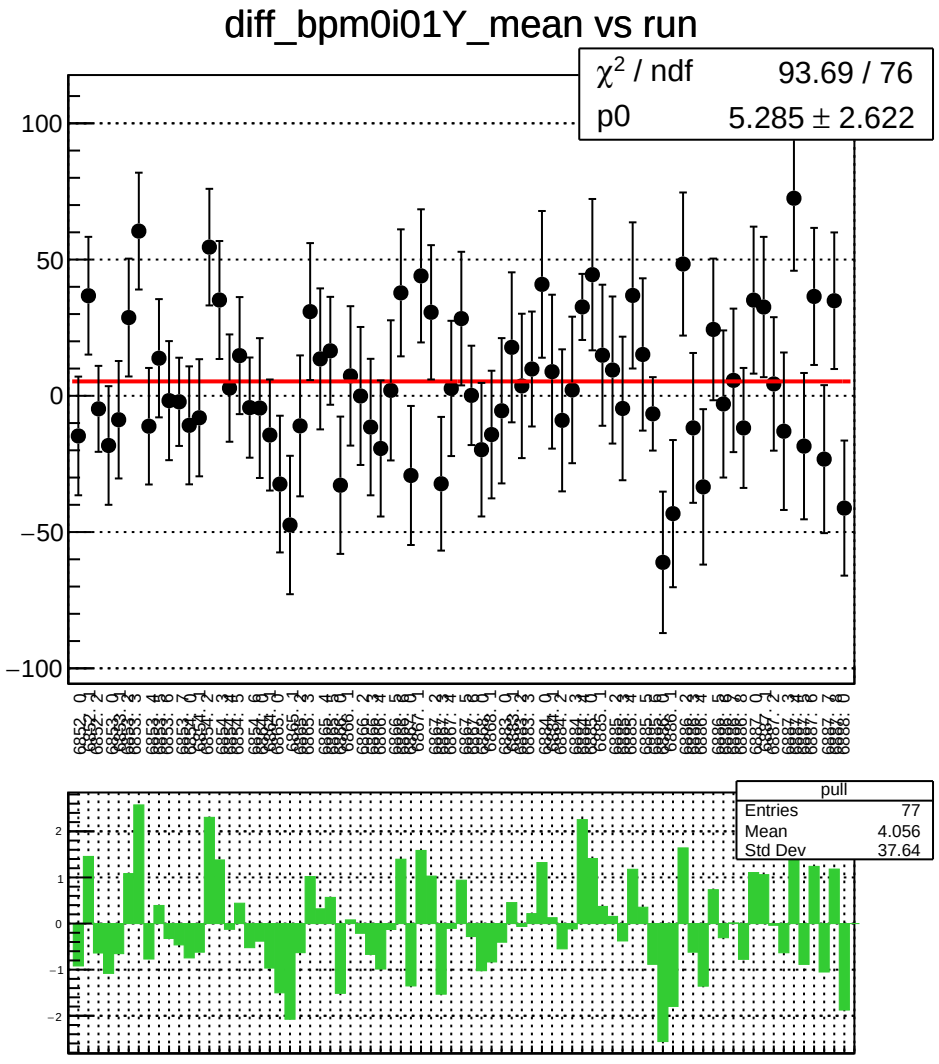

pull1D
Entries 77
Mean −0.008157
Std Dev 0.925

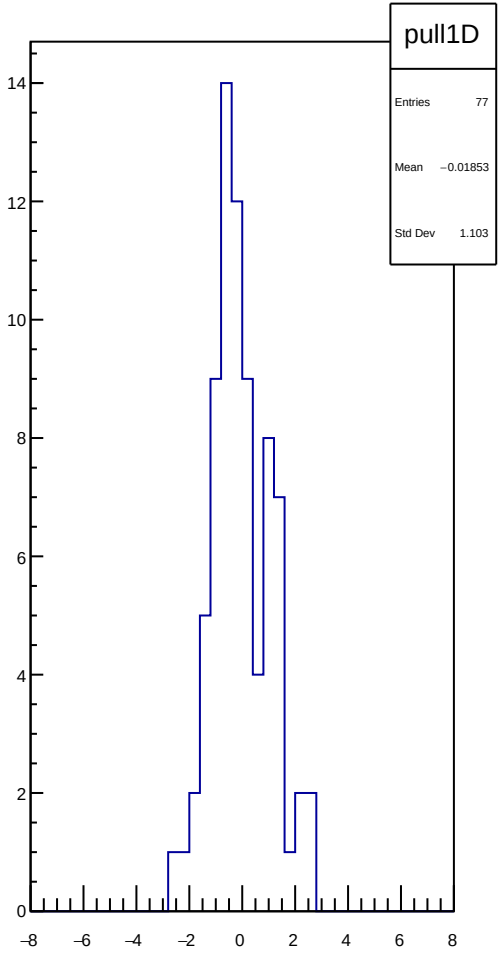

diff_cav4dY_rms vs run
χ² / ndf 8.8e+04 / 76
p0 369.9 ± 0.3
700
600
500
400
300

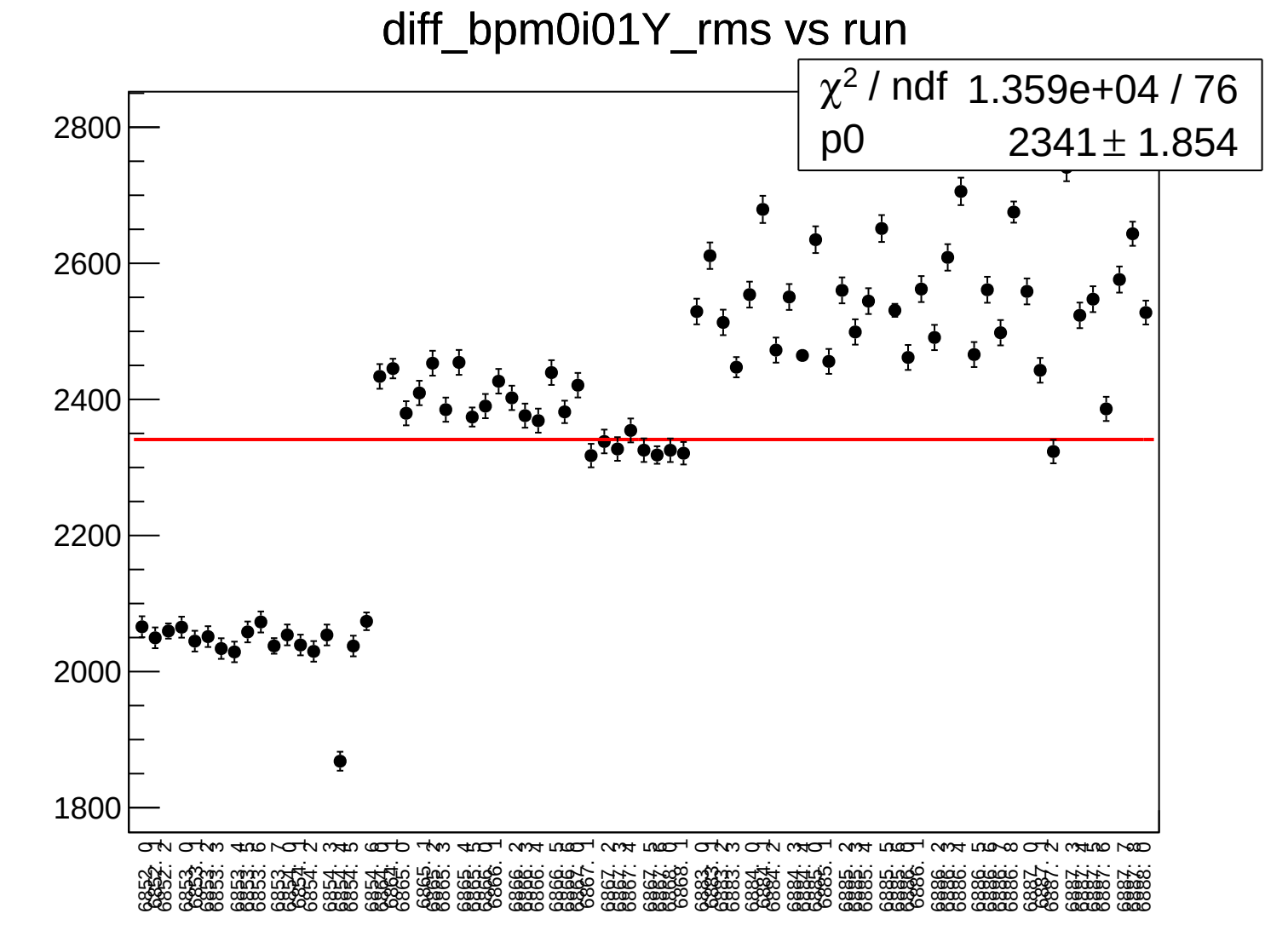

diff_bpm0i01X_mean vs run
χ^2 / ndf 87.42 / 76
p0 9.279 ± 2.453
pull
Entries 77
Mean −336.3
Std Dev 380.4

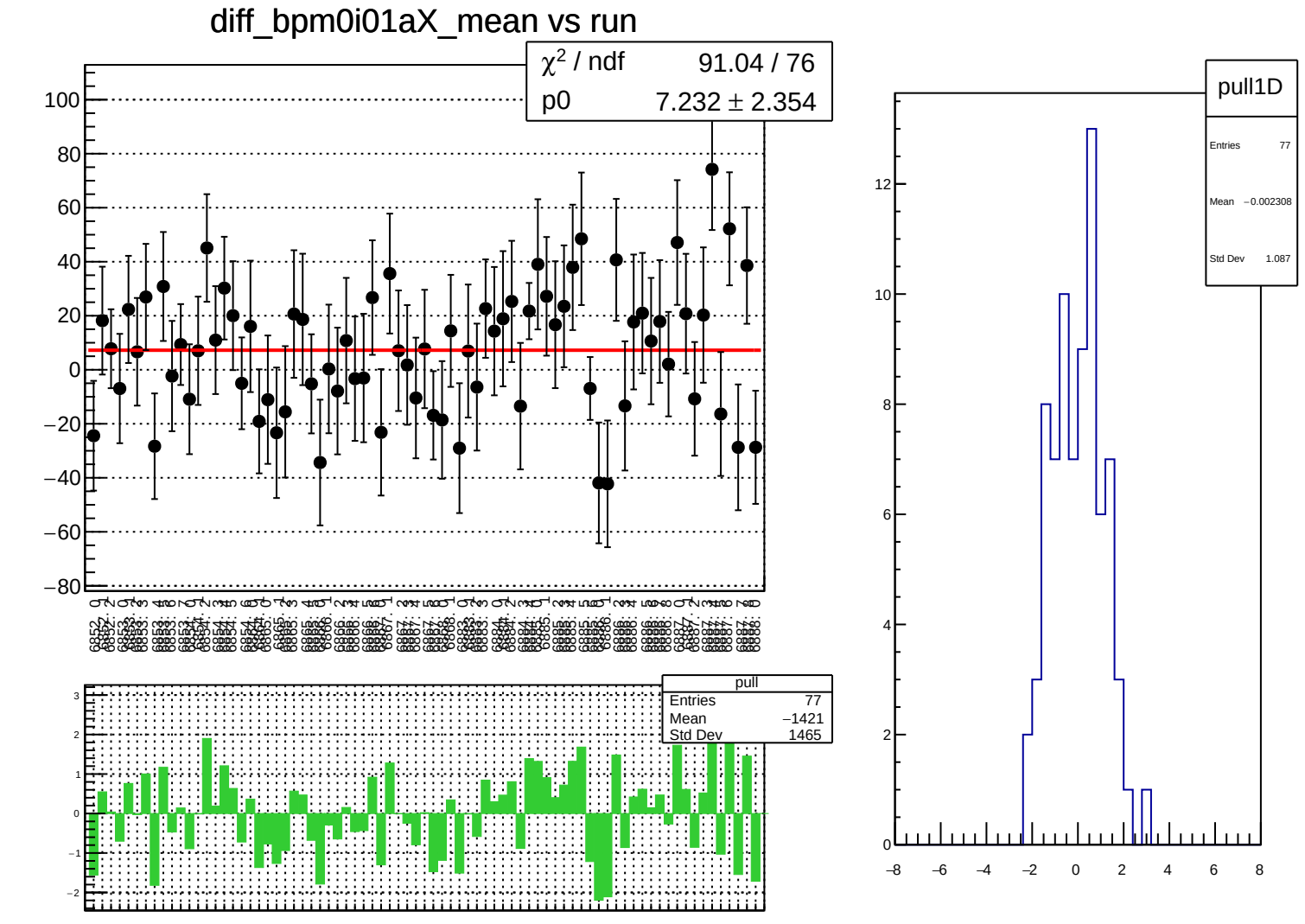

pull1D
Entries 77
Mean −0.0073
Std Dev 1.065

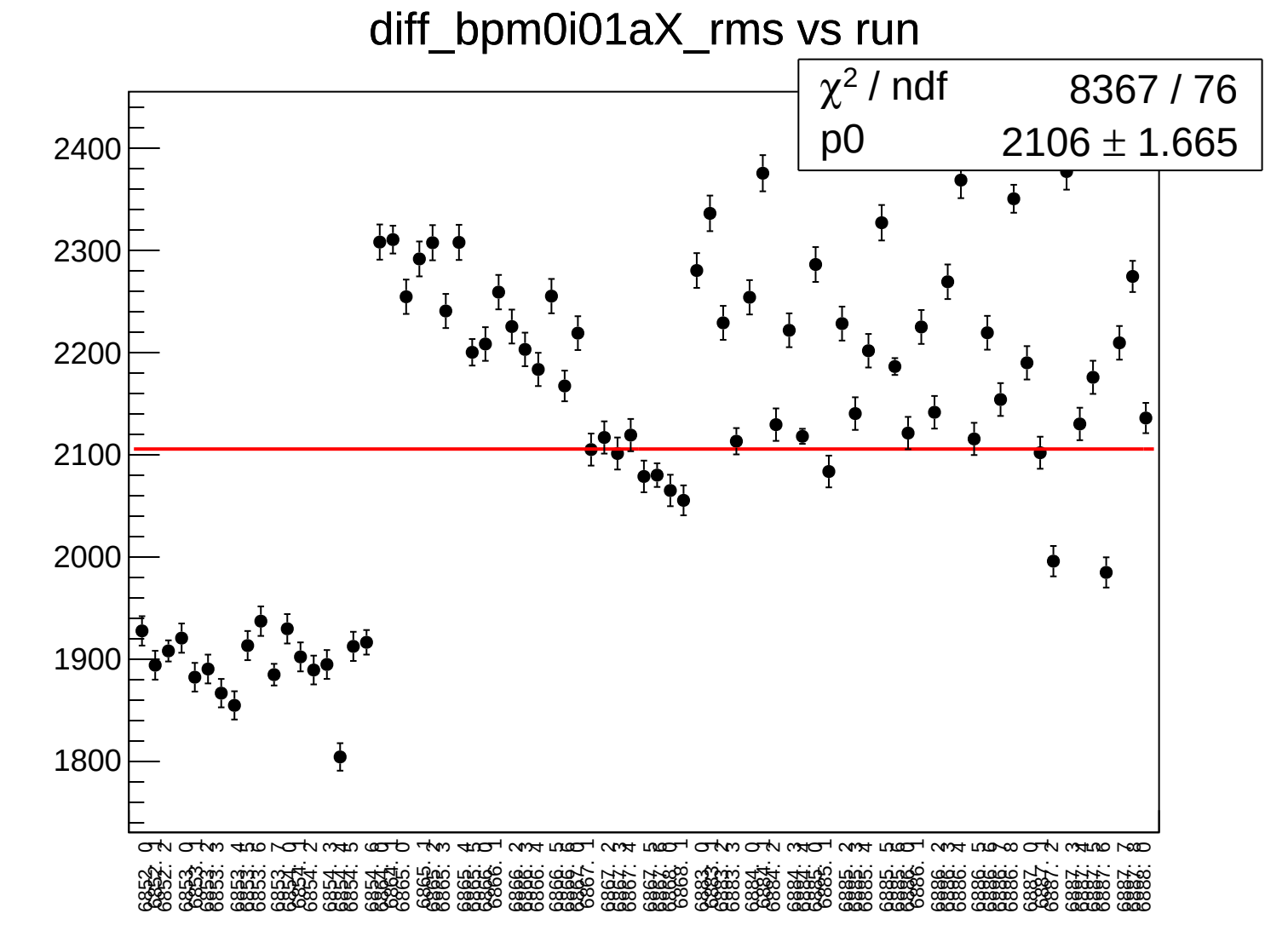

diff_bpm0i01X_rms vs run
χ² / ndf 2.871e+04 / 76
p0 2180 ± 1.734
2600
2400
2200
2000
1800

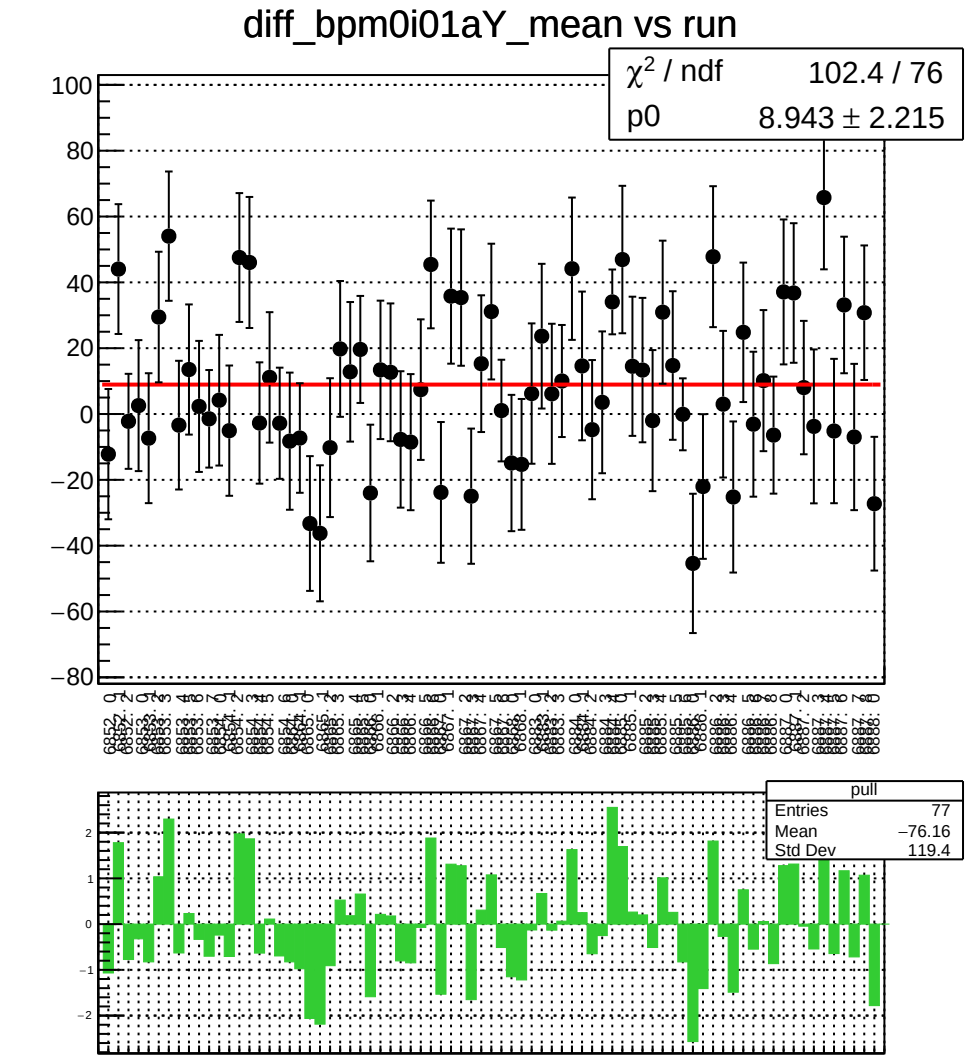

diff_bpm0i01Y_mean vs run
χ^2 / ndf 93.69 / 76
p0 5.285 ± 2.622
pull
Entries 77
Mean 4.056
Std Dev 37.64

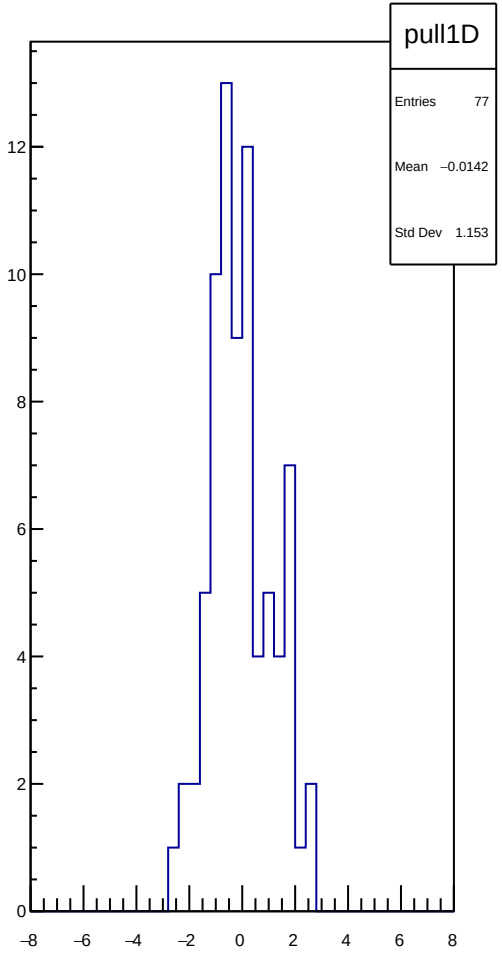

pull1D
Entries 77
Mean −0.01853
Std Dev 1.103

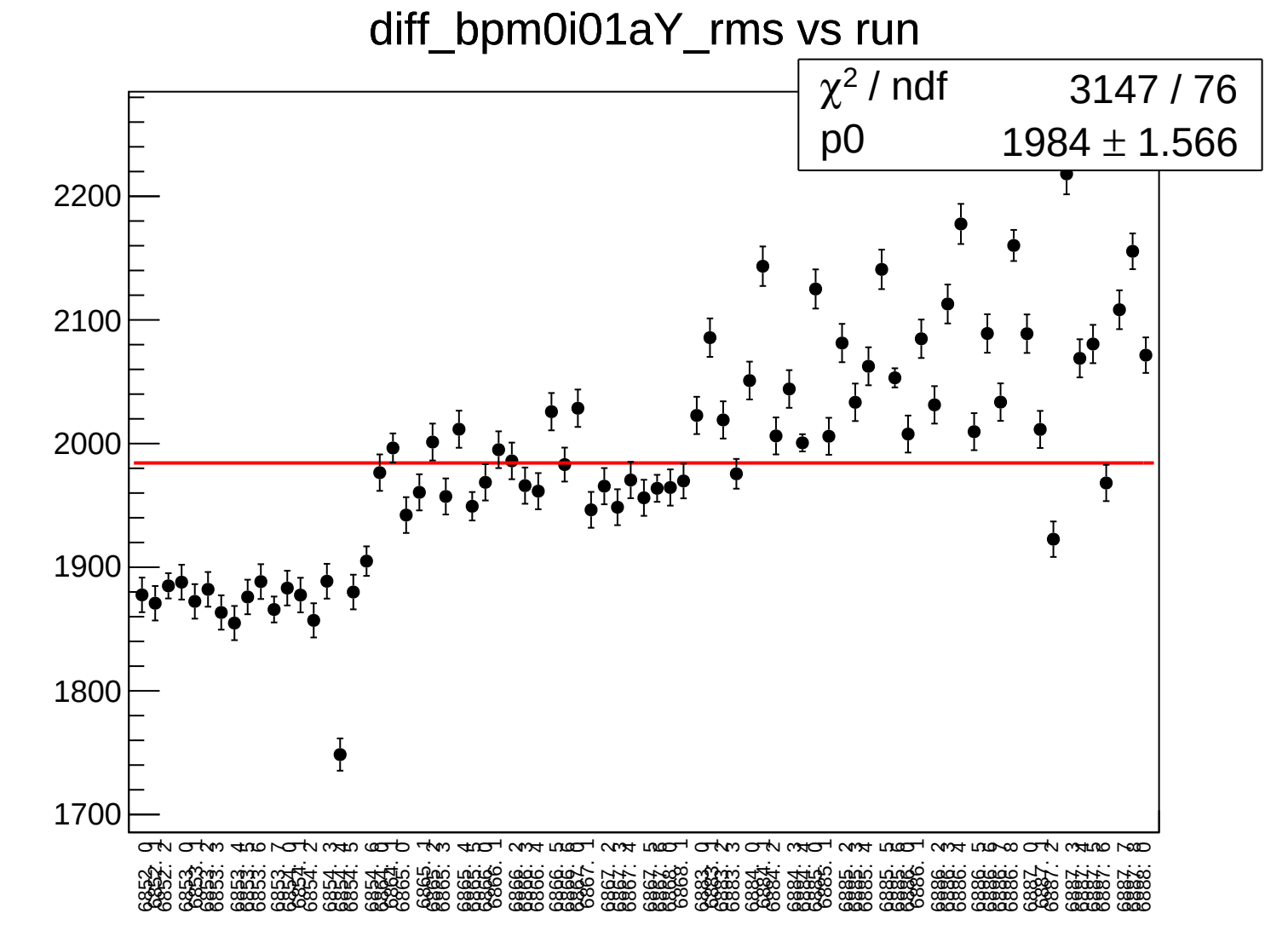

diff_bpm0i01Y_rms vs run
χ² / ndf 1.359e+04 / 76
p0 2341 ± 1.854
2800
2600
2400
2200
2000
1800

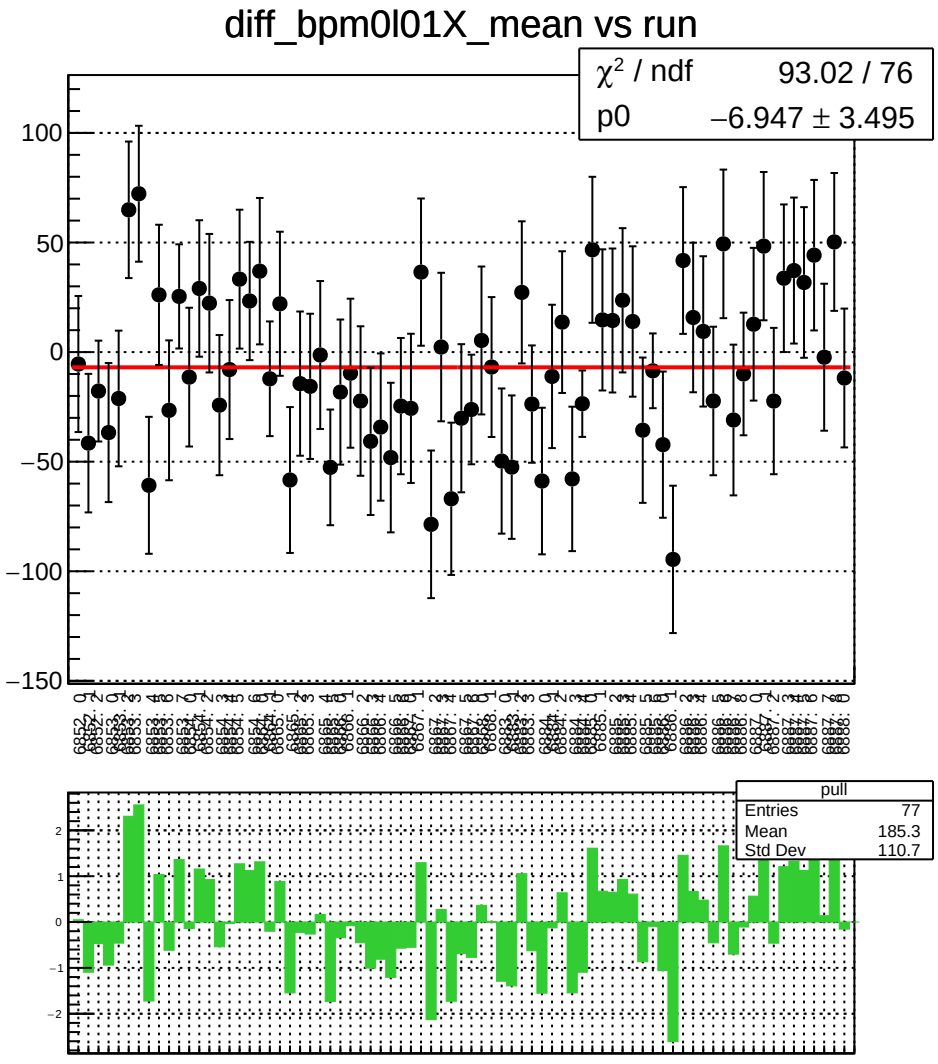

diff_bpm0i01aX_mean vs run
χ² / ndf 91.04 / 76
p0 7.232 ± 2.354
pull
Entries 77
Mean −1421
Std Dev 1465
pull1D
Entries 77
Mean −0.002308
Std Dev 1.087

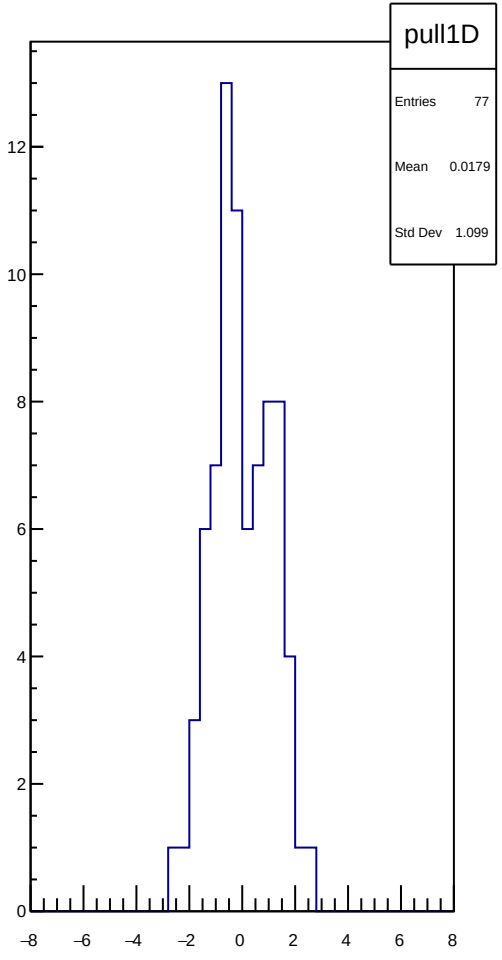

diff_bpm0i01aX_rms vs run
χ^2 / ndf 8367 / 76
p0 2106 ± 1.665
2400
2300
2200
2100
2000
1900
1800

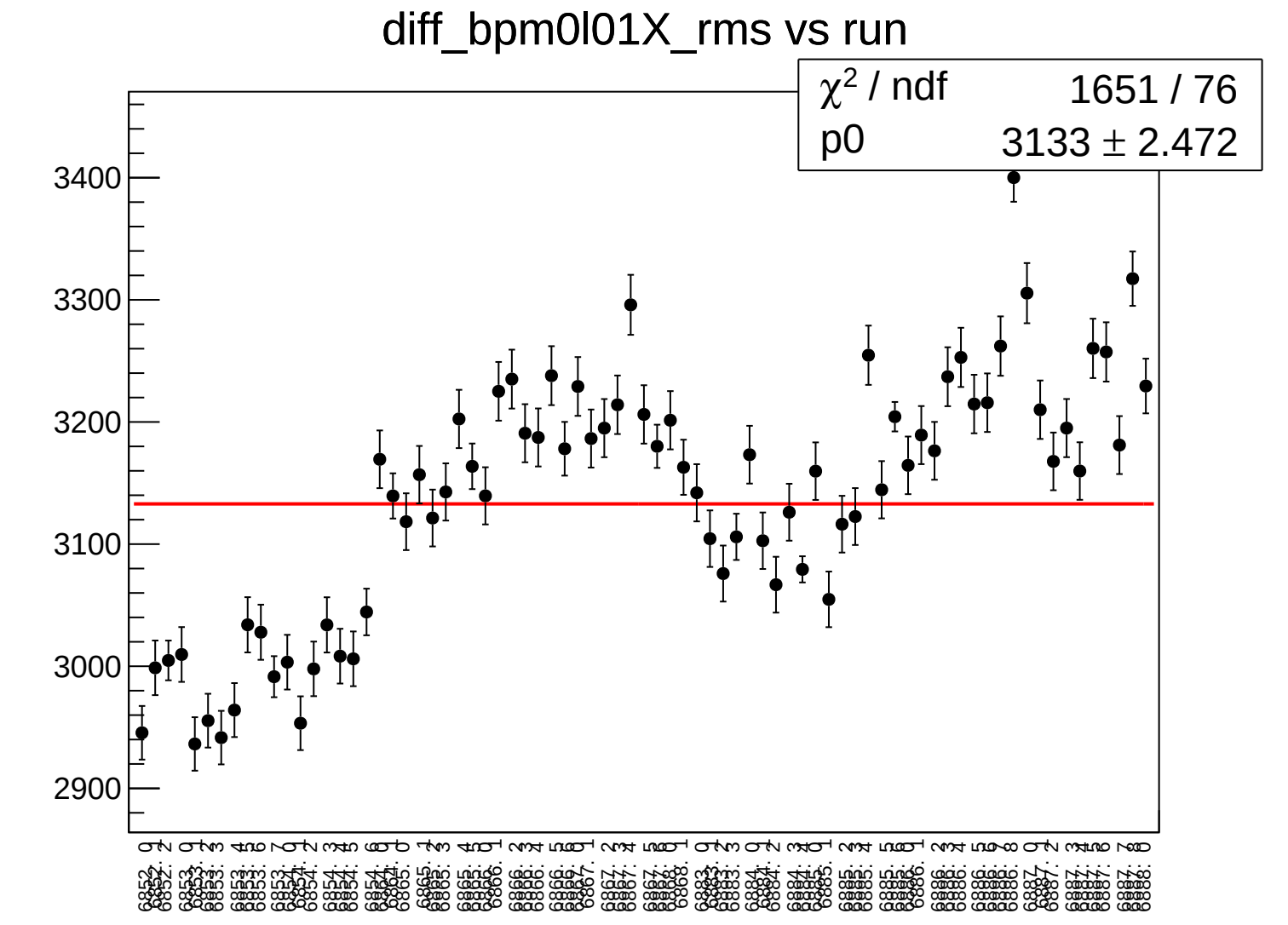

diff_bpm0i01aY_mean vs run
χ² / ndf 102.4 / 76
p0 8.943 ± 2.215
pull
Entries 77
Mean −76.16
Std Dev 119.4

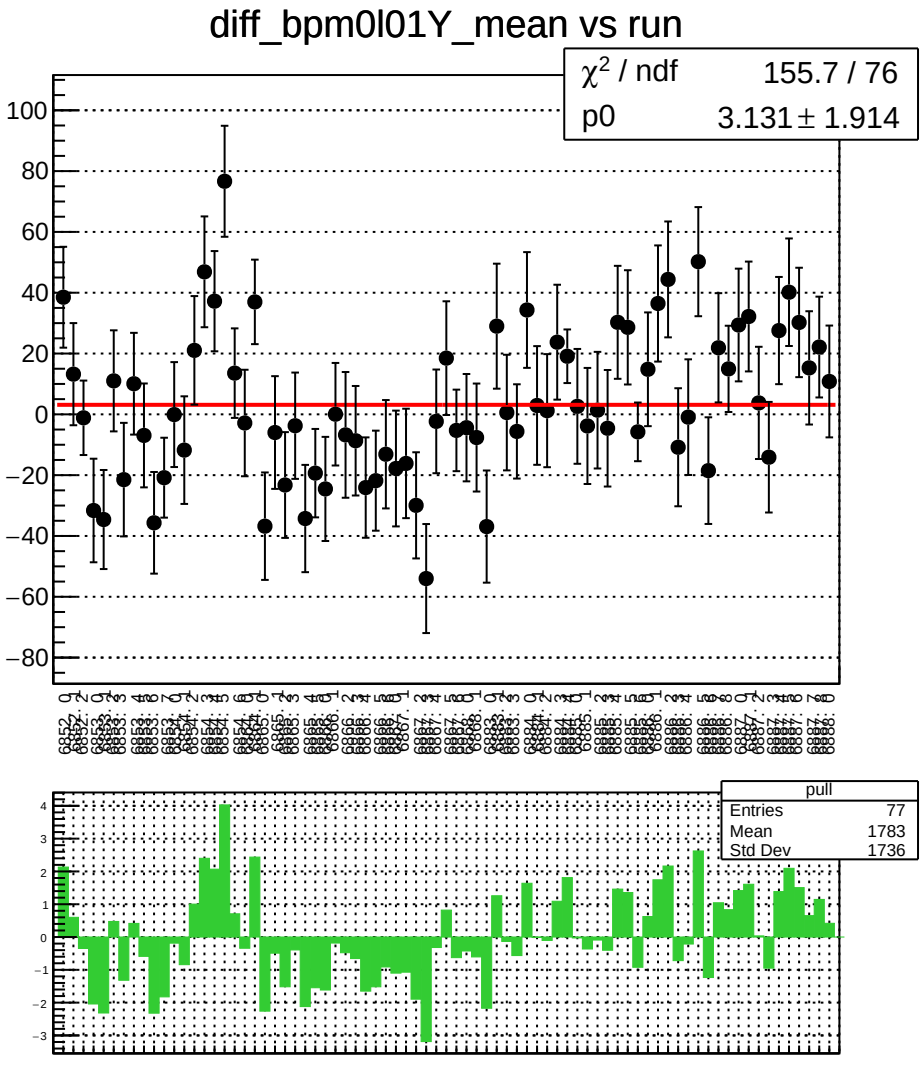

pull1D
Entries 77
Mean −0.0142
Std Dev 1.153

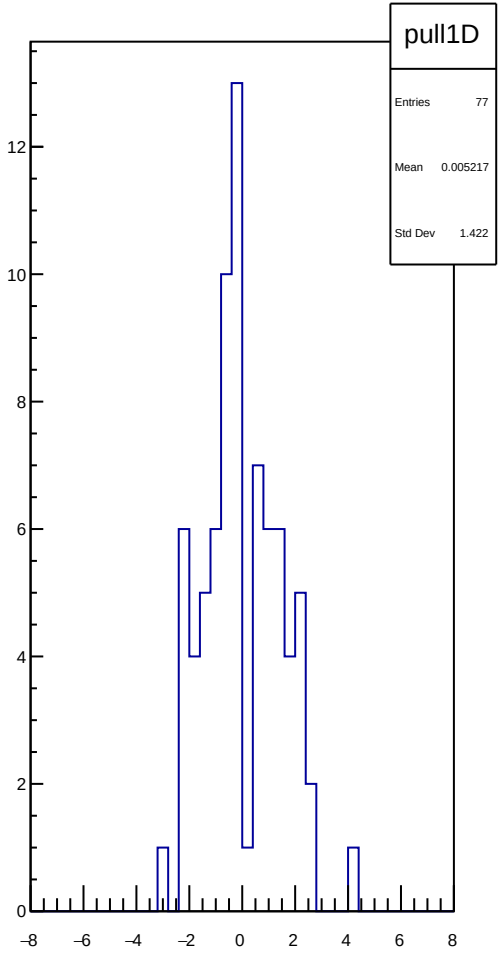

diff_bpm0i01aY_rms vs run
χ² / ndf 3147 / 76
p0 1984 ± 1.566
2200
2100
2000
1900
1800
1700

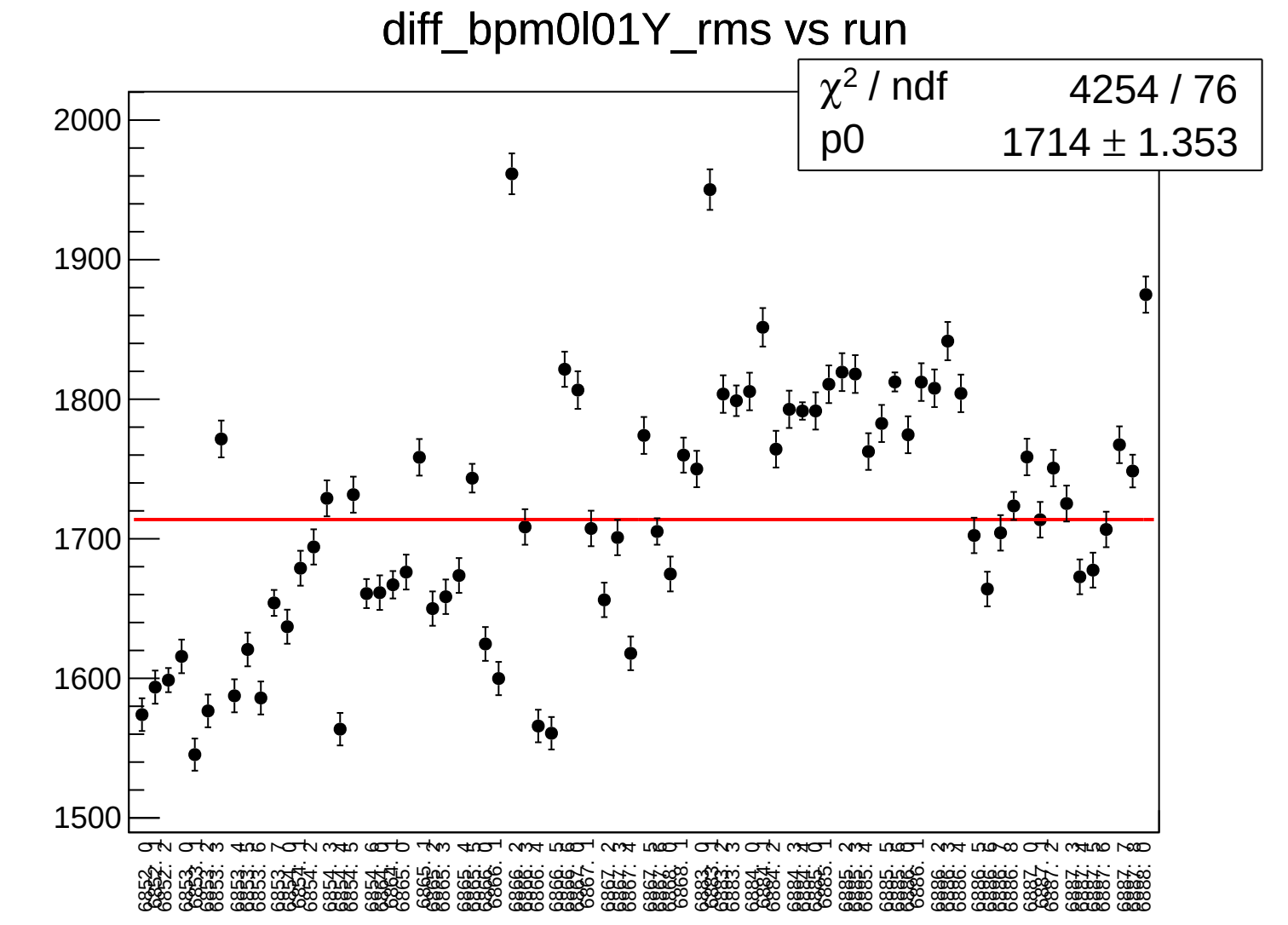

diff_bpm0l01X_mean vs run
χ² / ndf 93.02 / 76
p0 −6.947 ± 3.495
pull
Entries 77
Mean 185.3
Std Dev 110.7

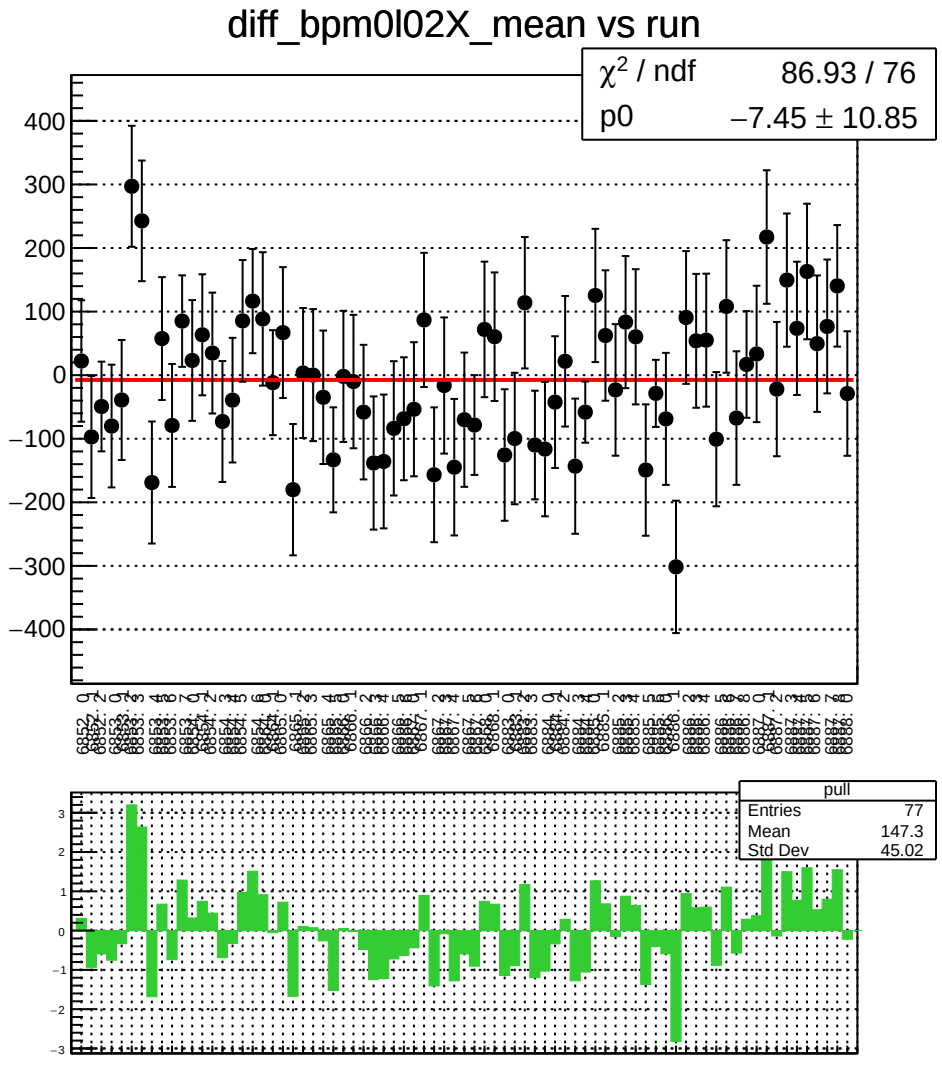

pull1D
Entries 77
Mean 0.0179
Std Dev 1.099

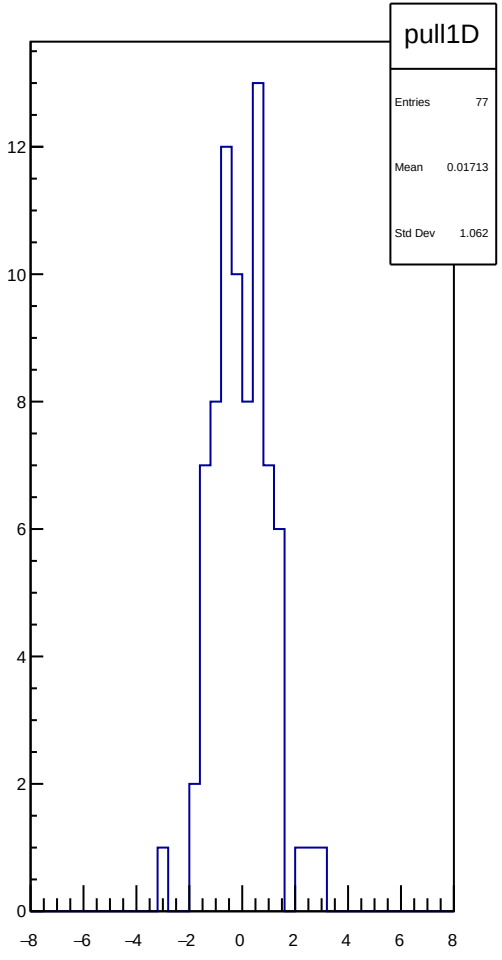

diff_bpm0l01X_rms vs run
χ² / ndf 1651 / 76
p0 3133 ± 2.472
3400
3300
3200
3100
3000
2900

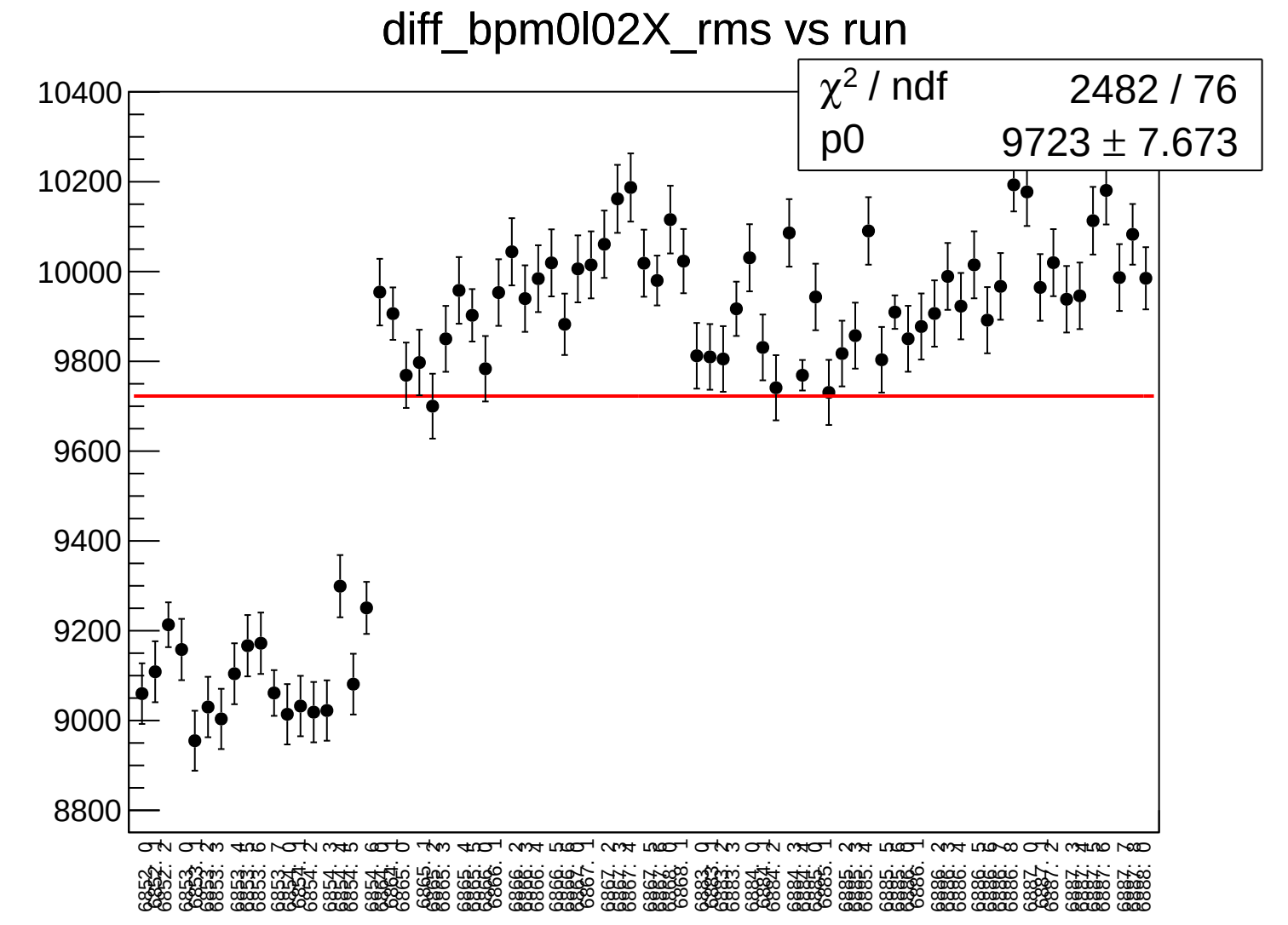

diff_bpm0l01Y_mean vs run
χ^2 / ndf 155.7 / 76
p0 3.131 ± 1.914
pull
Entries 77
Mean 1783
Std Dev 1736

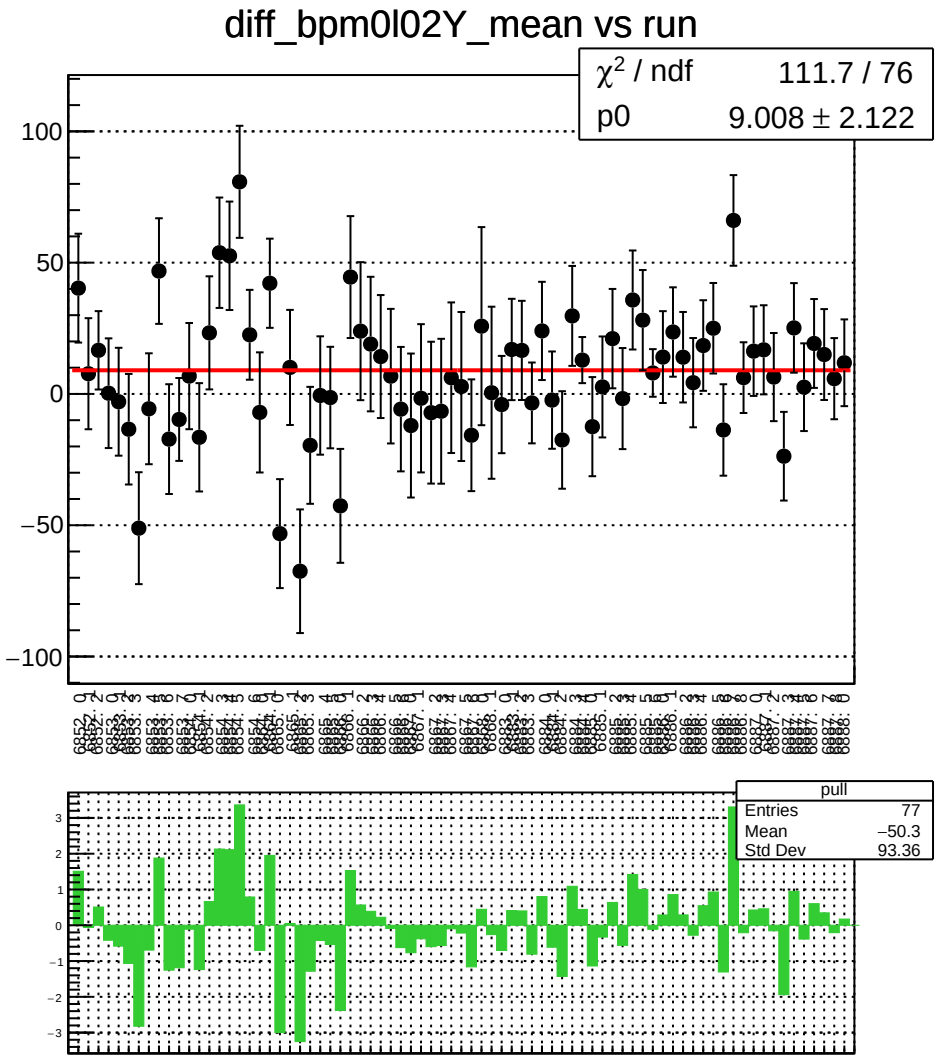

pull1D
Entries 77
Mean 0.005217
Std Dev 1.422

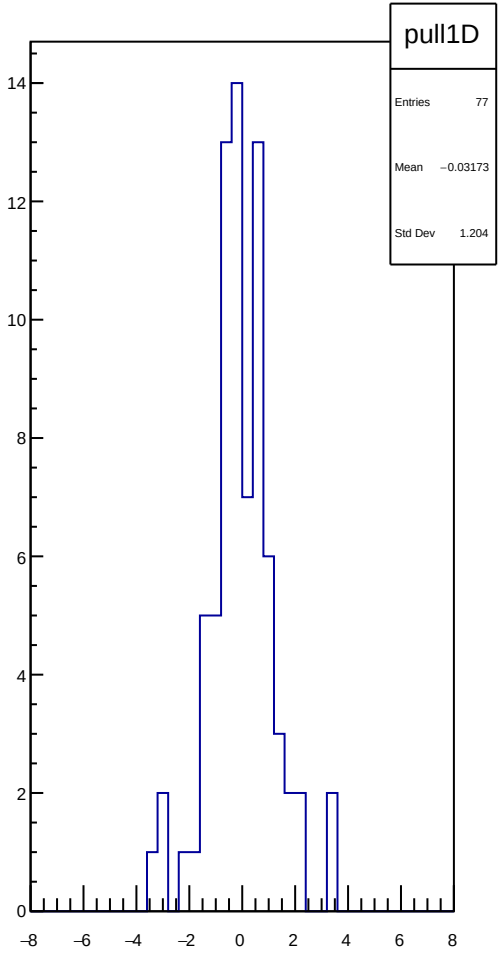

diff_bpm0l01Y_rms vs run
χ² / ndf 4254 / 76
p0 1714 ± 1.353
2000
1900
1800
1700
1600
1500

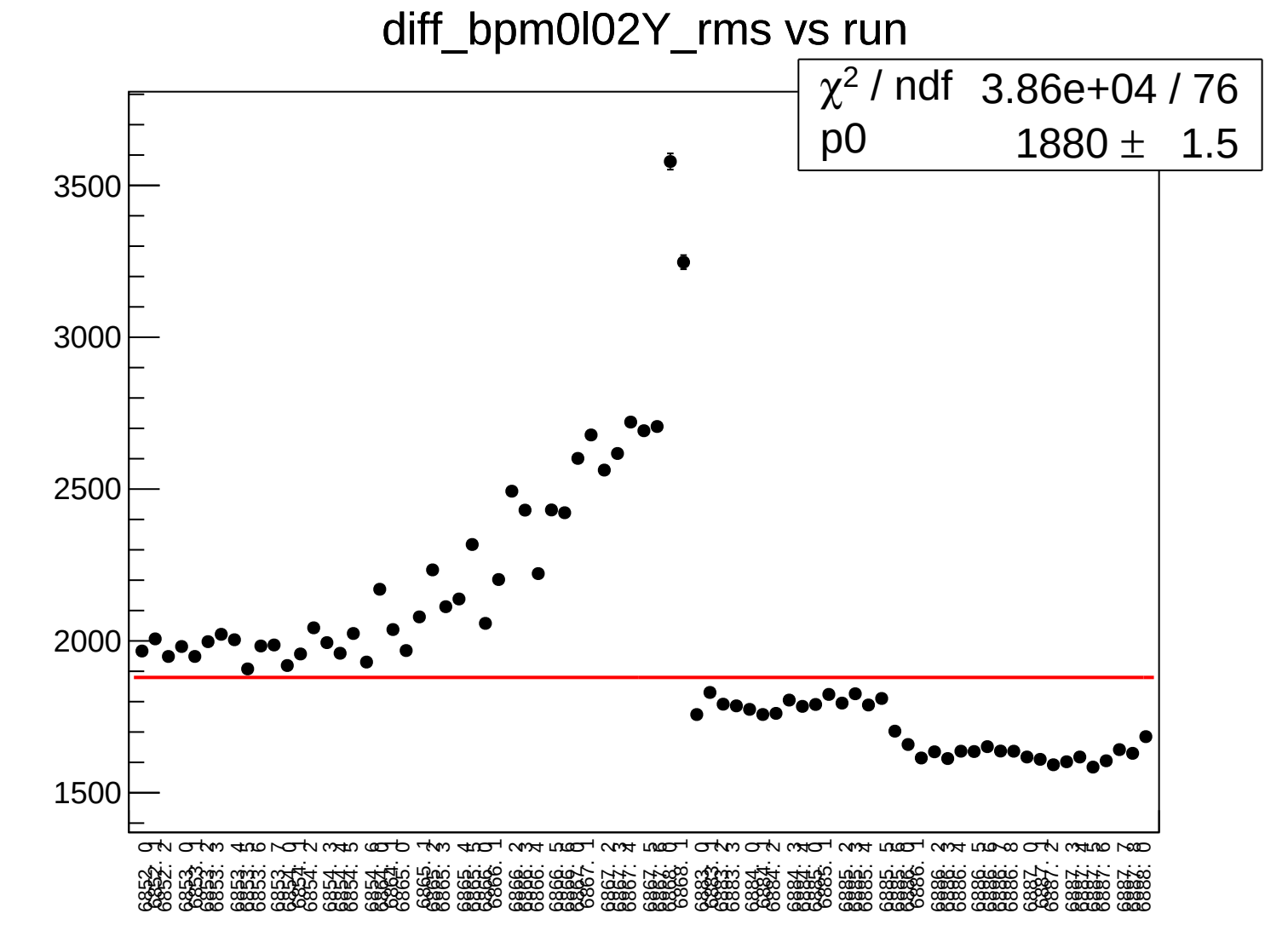

diff_bpm0l02X_mean vs run
χ² / ndf 86.93 / 76
p0 −7.45 ± 10.85
pull
Entries 77
Mean 147.3
Std Dev 45.02

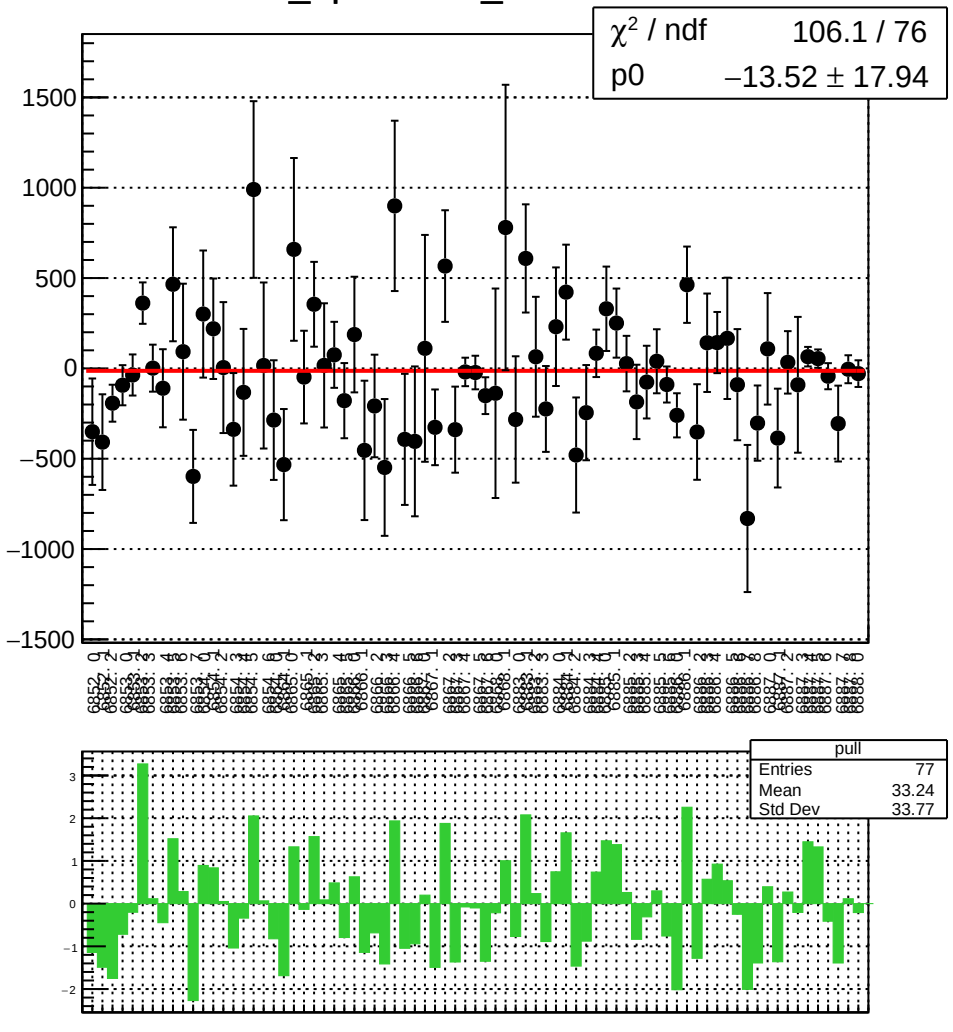

pull1D
Entries 77
Mean 0.01713
Std Dev 1.062

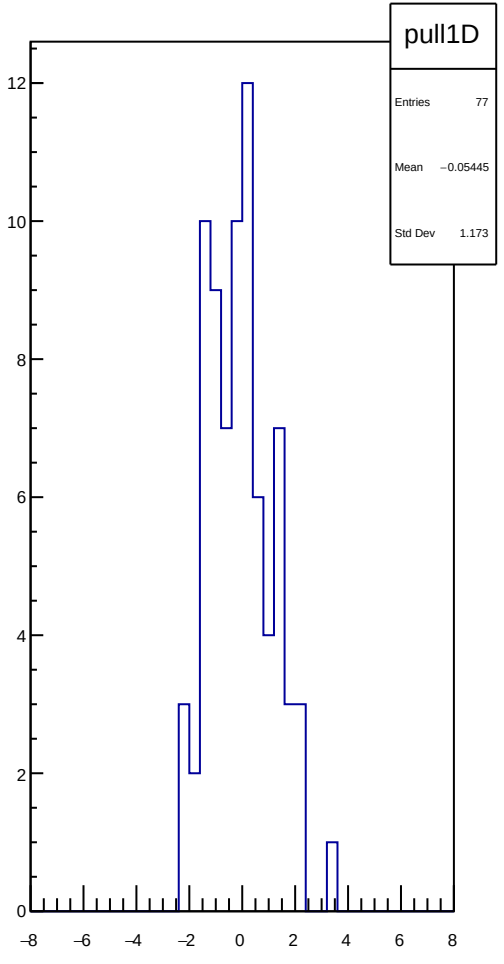

diff_bpm0l02X_rms vs run
χ² / ndf 2482 / 76
p0 9723 ± 7.673
10400
10200
10000
9800
9600
9400
9200
9000
8800

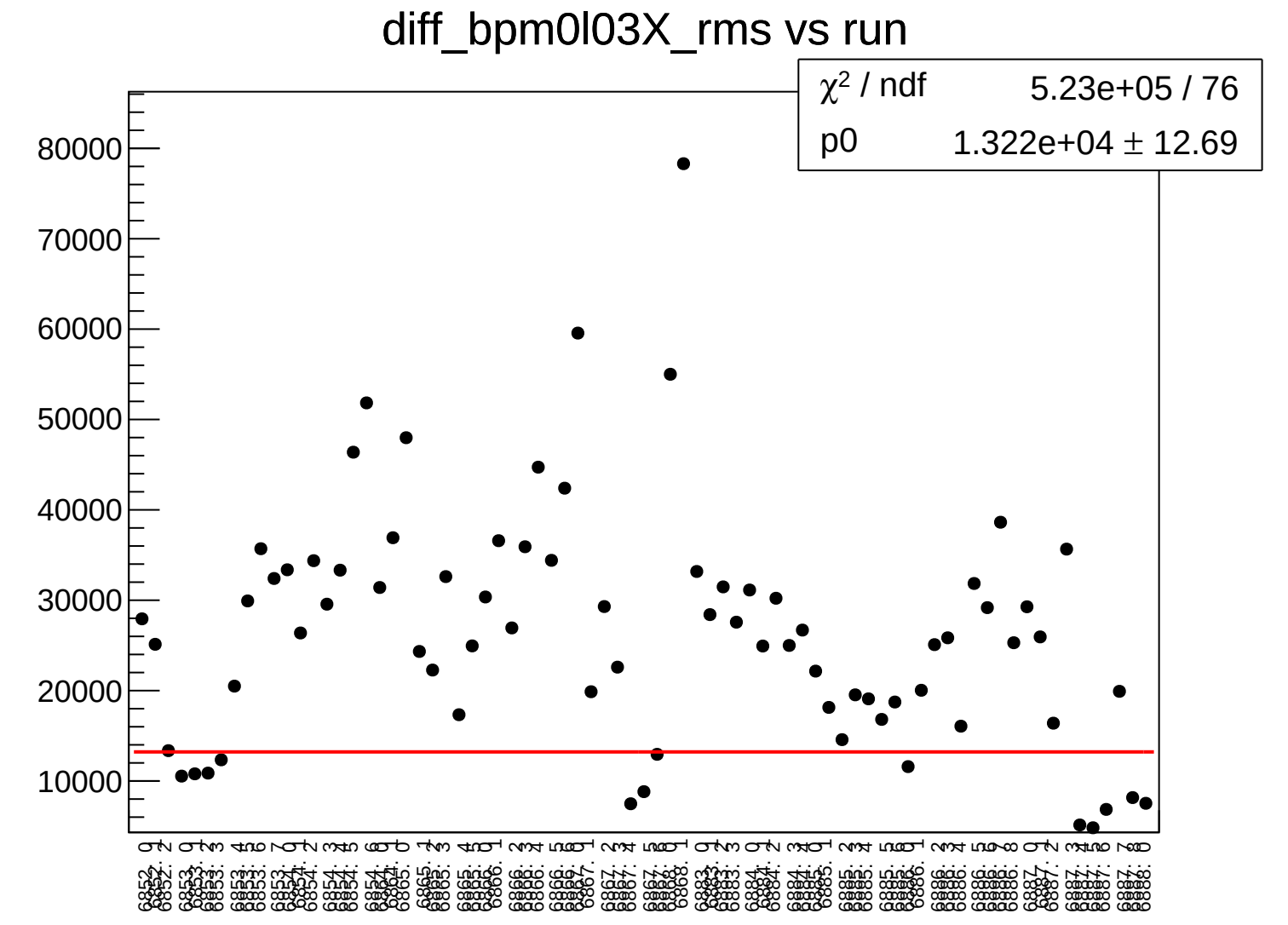

diff_bpm0l02Y_mean vs run
χ^2 / ndf 111.7 / 76
p0 9.008 ± 2.122
100
50
0
−50
−100
pull
Entries 77
Mean −50.3
Std Dev 93.36
3
2
1
0
−1
−2
−3

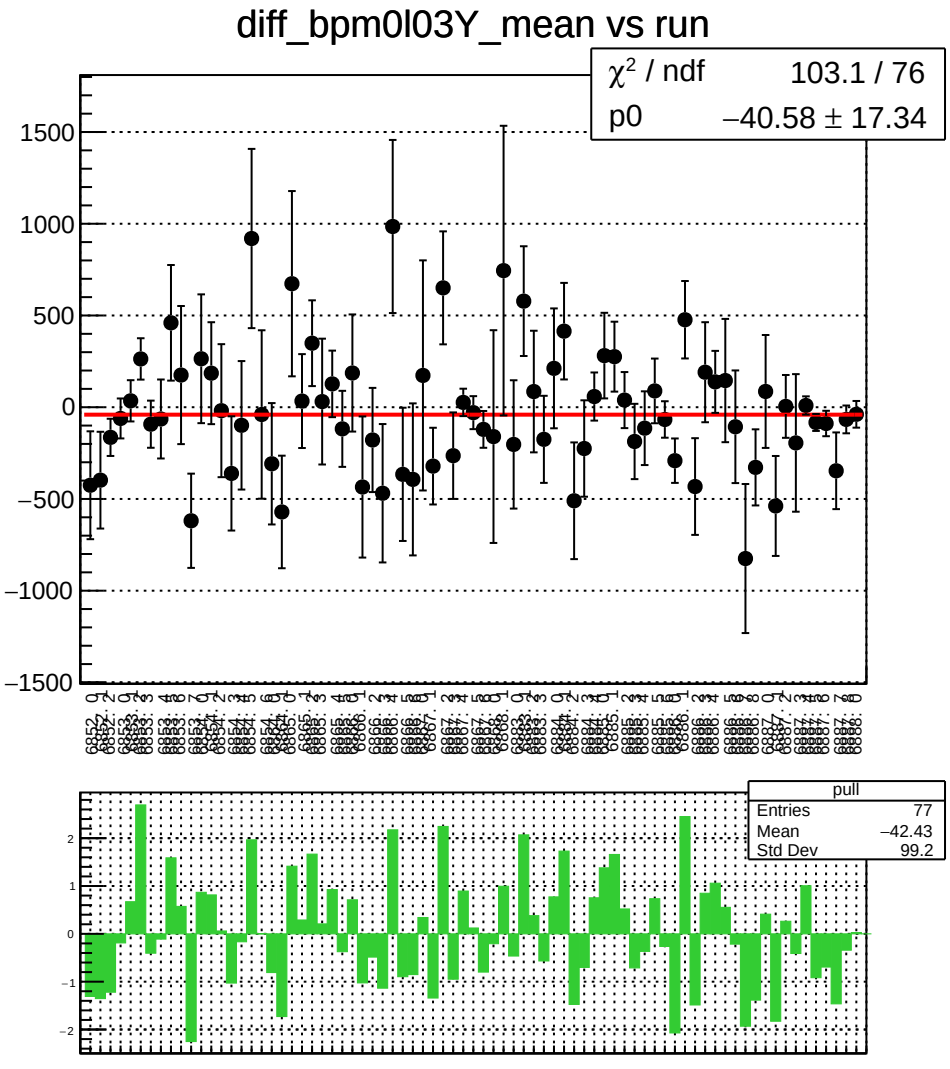

pull1D
Entries 77
Mean −0.03173
Std Dev 1.204
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

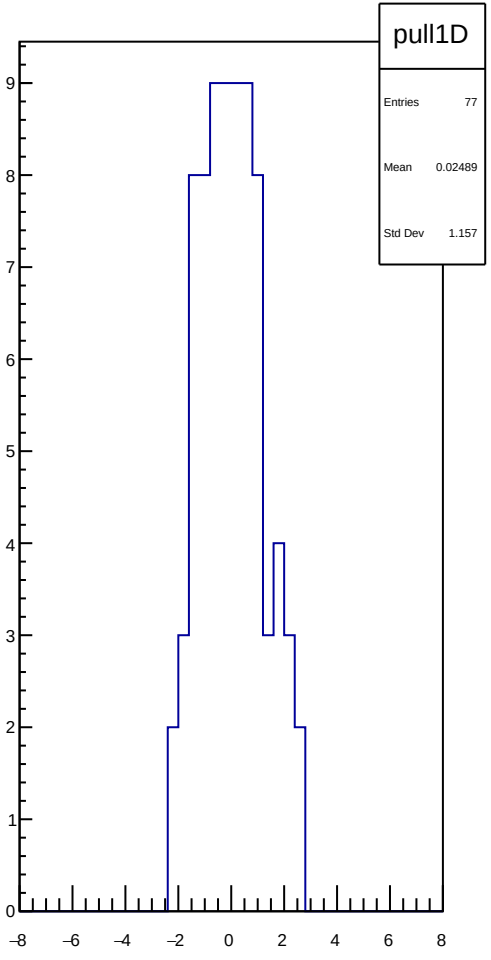

diff_bpm0l02Y_rms vs run
χ² / ndf 3.86e+04 / 76
p0 1880 ± 1.5
3500
3000
2500
2000
1500

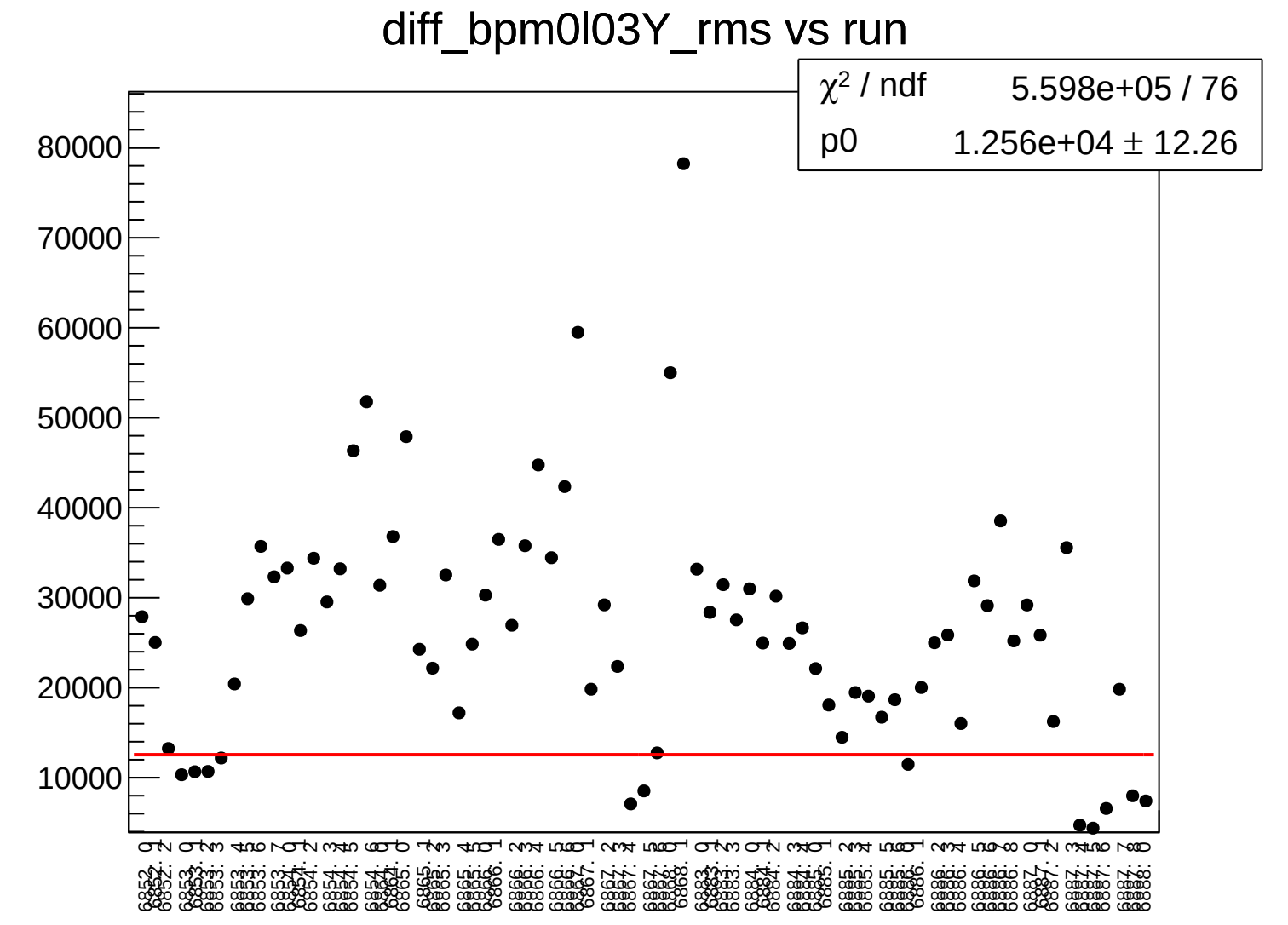

diff_bpm0l03X_mean vs run
χ² / ndf 106.1 / 76
p0 −13.52 ± 17.94
pull
Entries 77
Mean 33.24
Std Dev 33.77

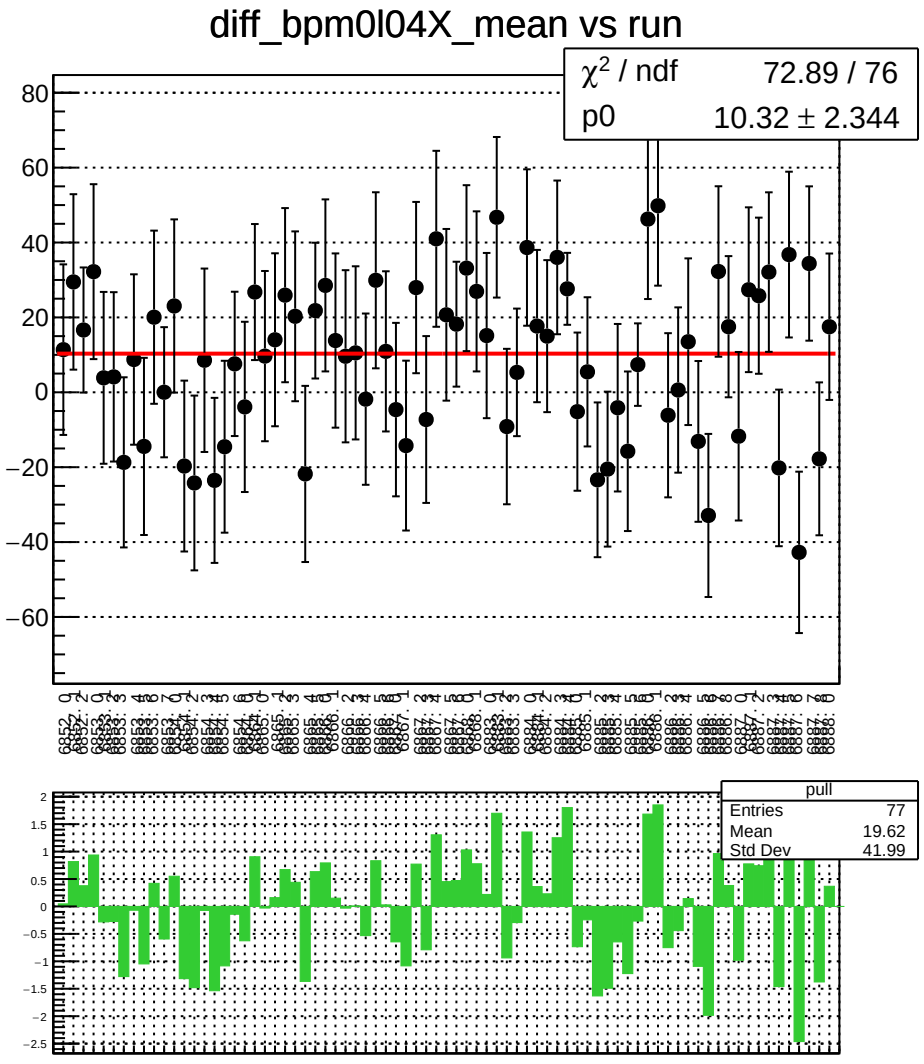

pull1D
Entries 77
Mean −0.05445
Std Dev 1.173

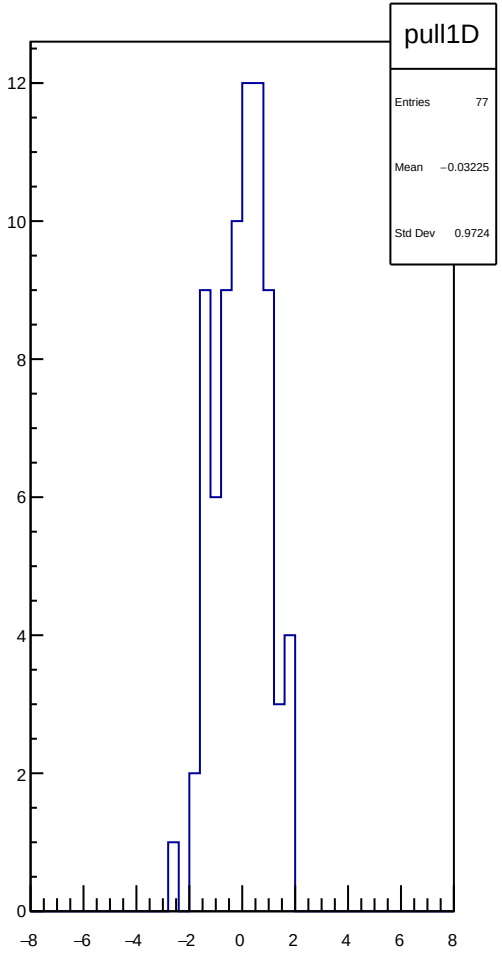

diff_bpm0l03X_rms vs run
χ² / ndf 5.23e+05 / 76
p0 1.322e+04 ± 12.69
80000
70000
60000
50000
40000
30000
20000
10000

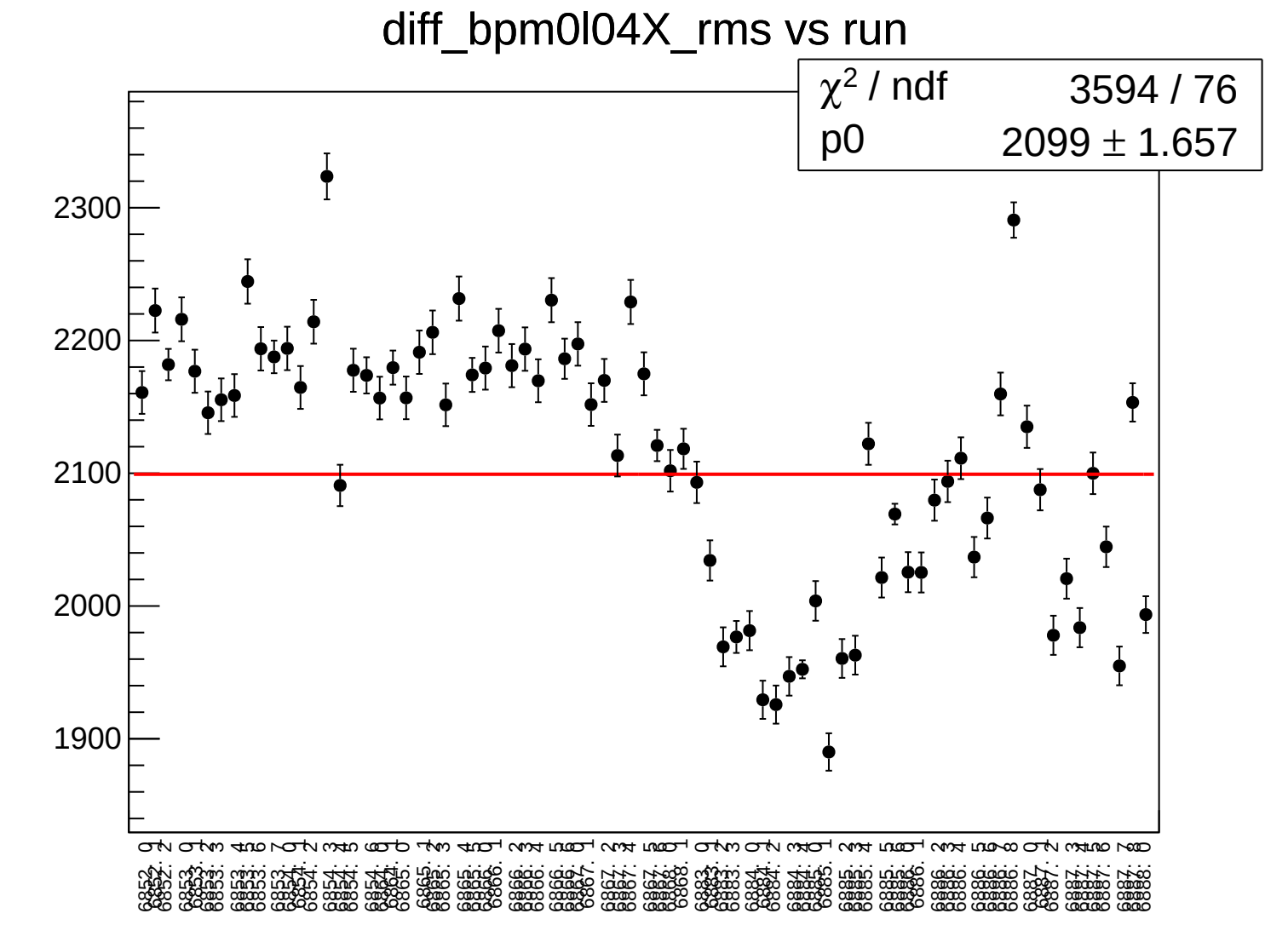

diff_bpm0l03Y_mean vs run
χ² / ndf 103.1 / 76
p0 −40.58 ± 17.34
1500
1000
500
0
−500
−1000
−1500
pull
Entries 77
Mean −42.43
Std Dev 99.2
2
1
0
−1
−2

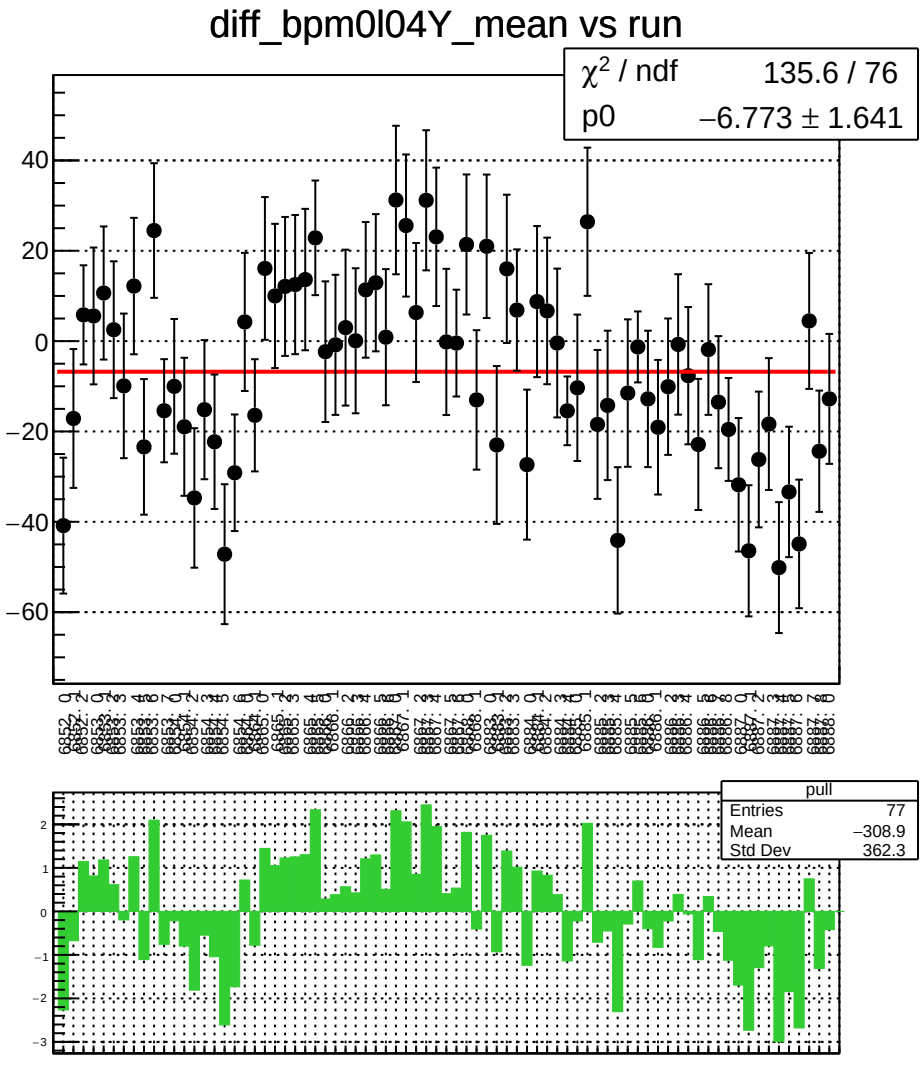

pull1D
Entries 77
Mean 0.02489
Std Dev 1.157
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

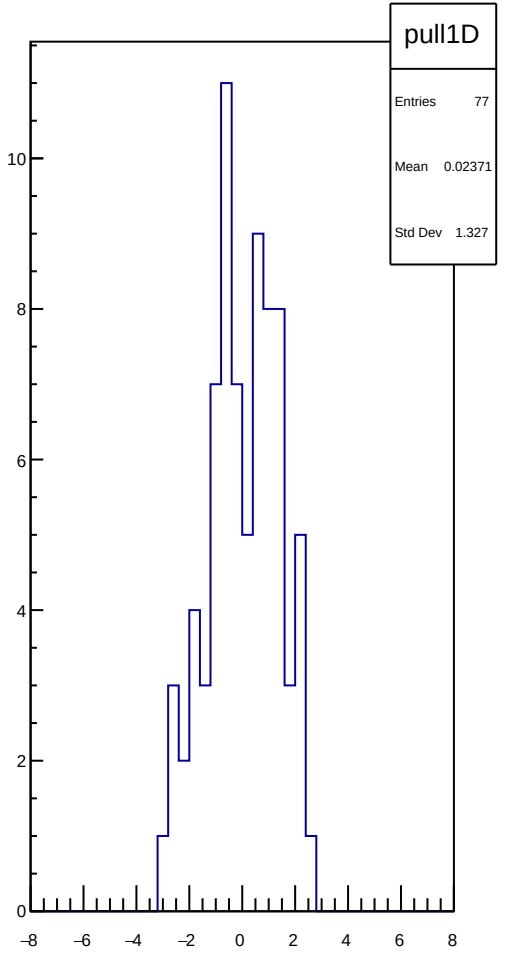

diff_bpm0l03Y_rms vs run
χ² / ndf 5.598e+05 / 76
p0 1.256e+04 ± 12.26
80000
70000
60000
50000
40000
30000
20000
10000

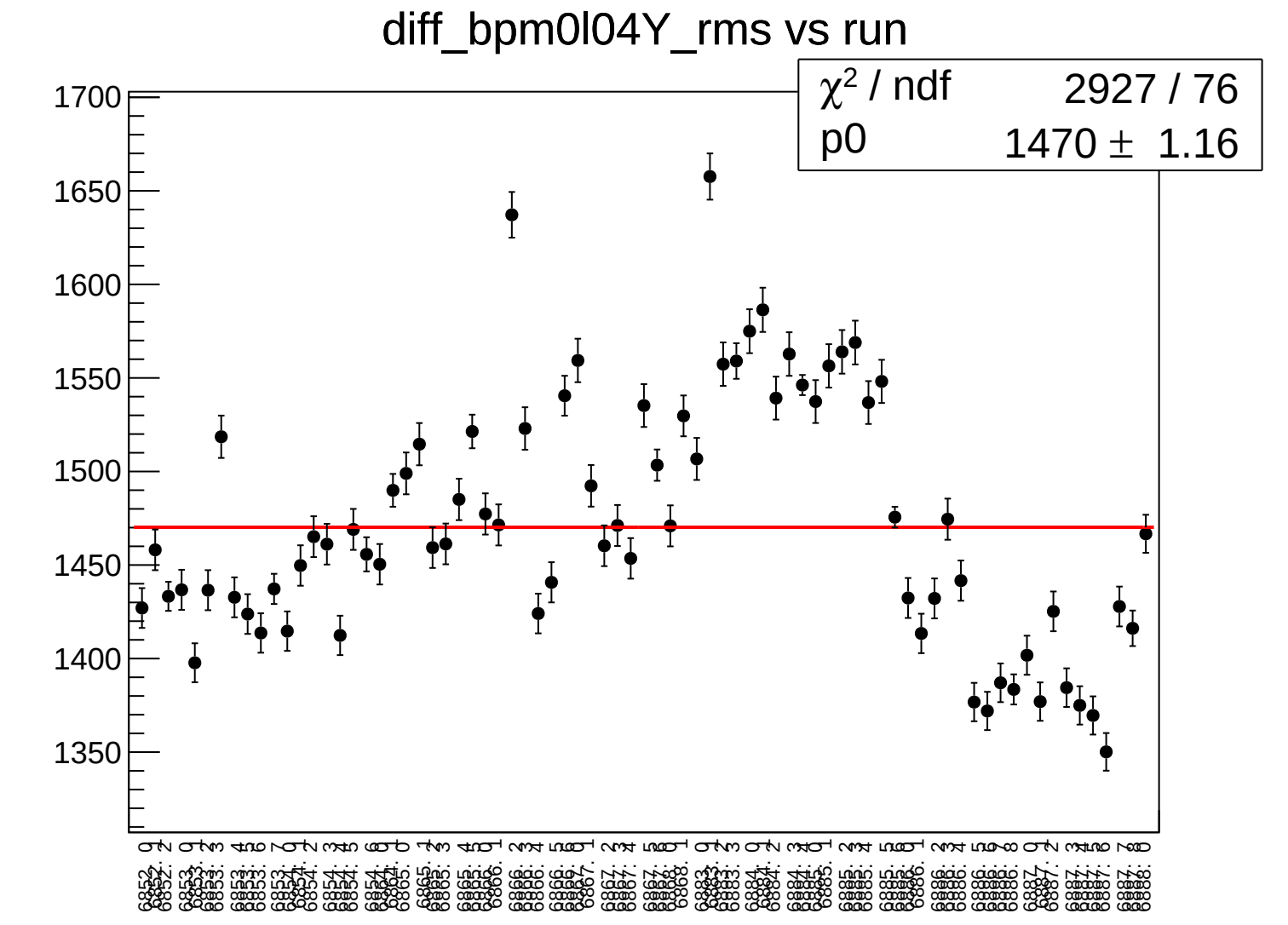

diff_bpm0l04X_mean vs run
χ^2 / ndf 72.89 / 76
p0 10.32 ± 2.344
pull
Entries 77
Mean 19.62
Std Dev 41.99

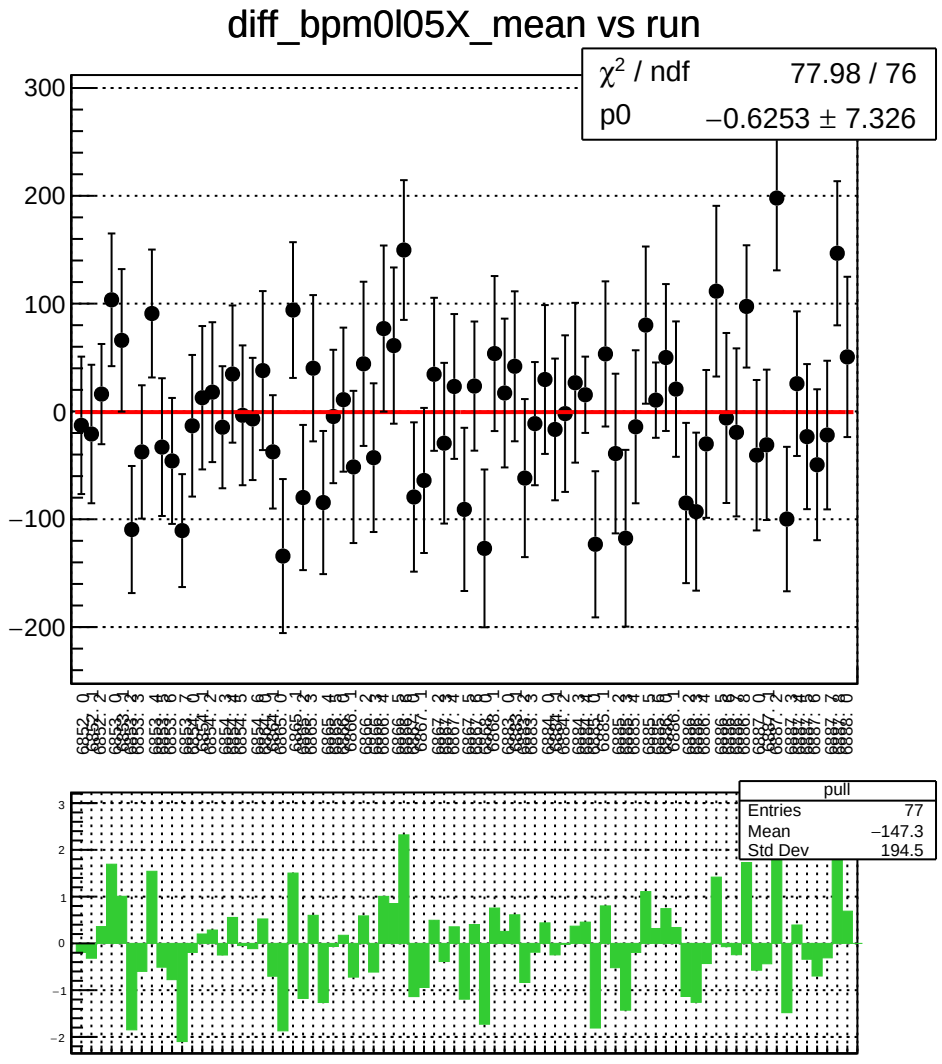

pull1D
Entries 77
Mean −0.03225
Std Dev 0.9724

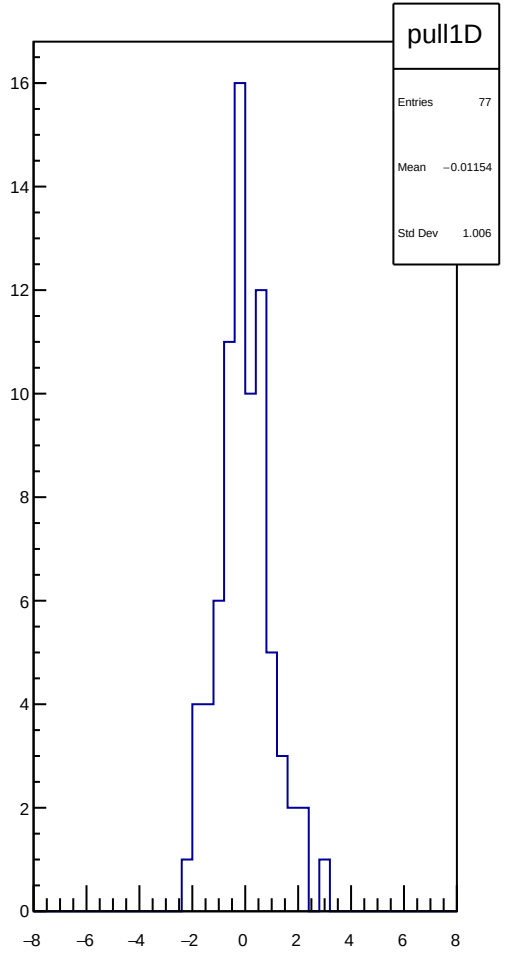

diff_bpm0l04X_rms vs run
χ² / ndf 3594 / 76
p0 2099 ± 1.657
2300
2200
2100
2000
1900

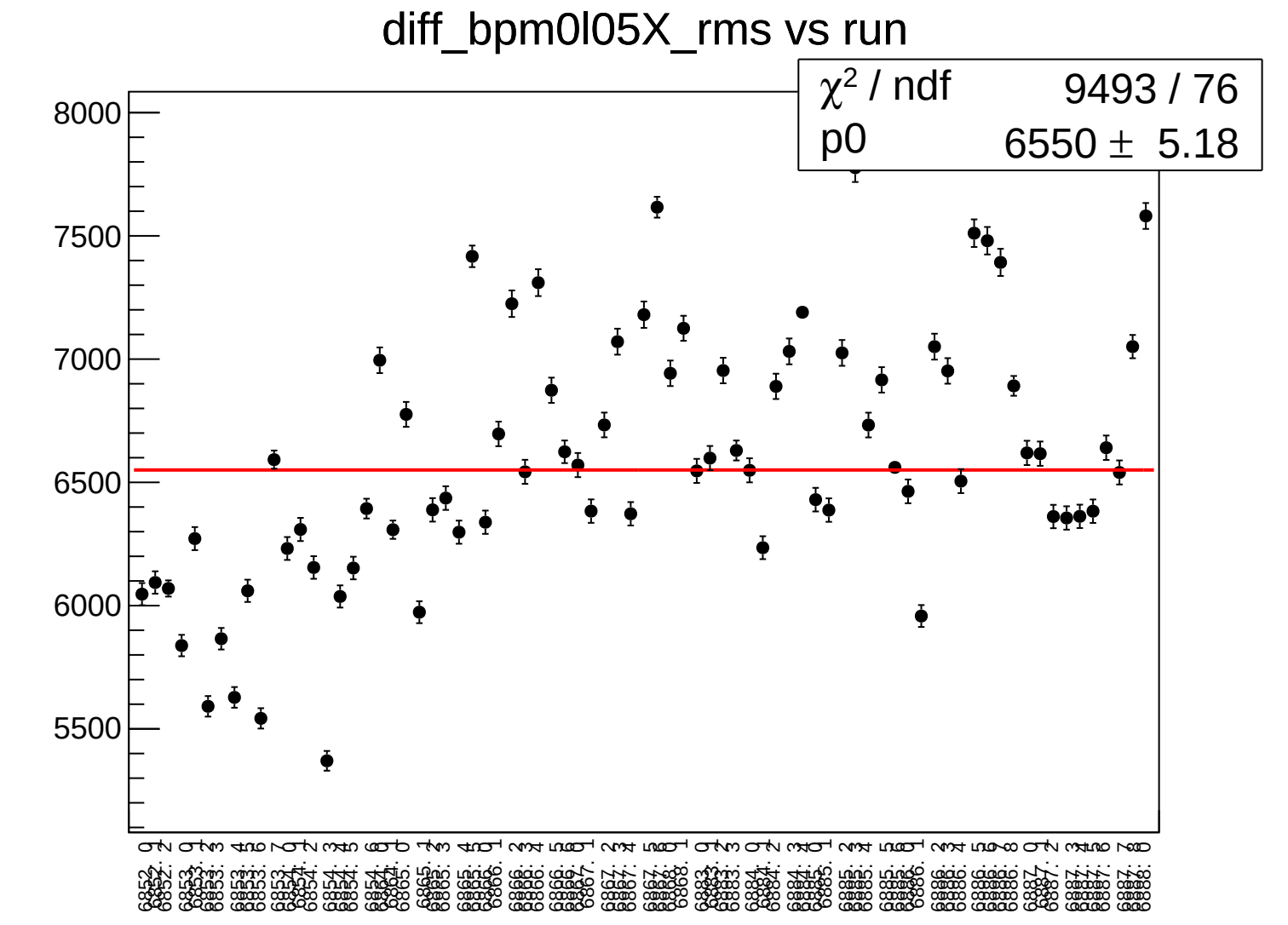

diff_bpm0l04Y_mean vs run
χ² / ndf 135.6 / 76
p0 −6.773 ± 1.641
pull
Entries 77
Mean −308.9
Std Dev 362.3

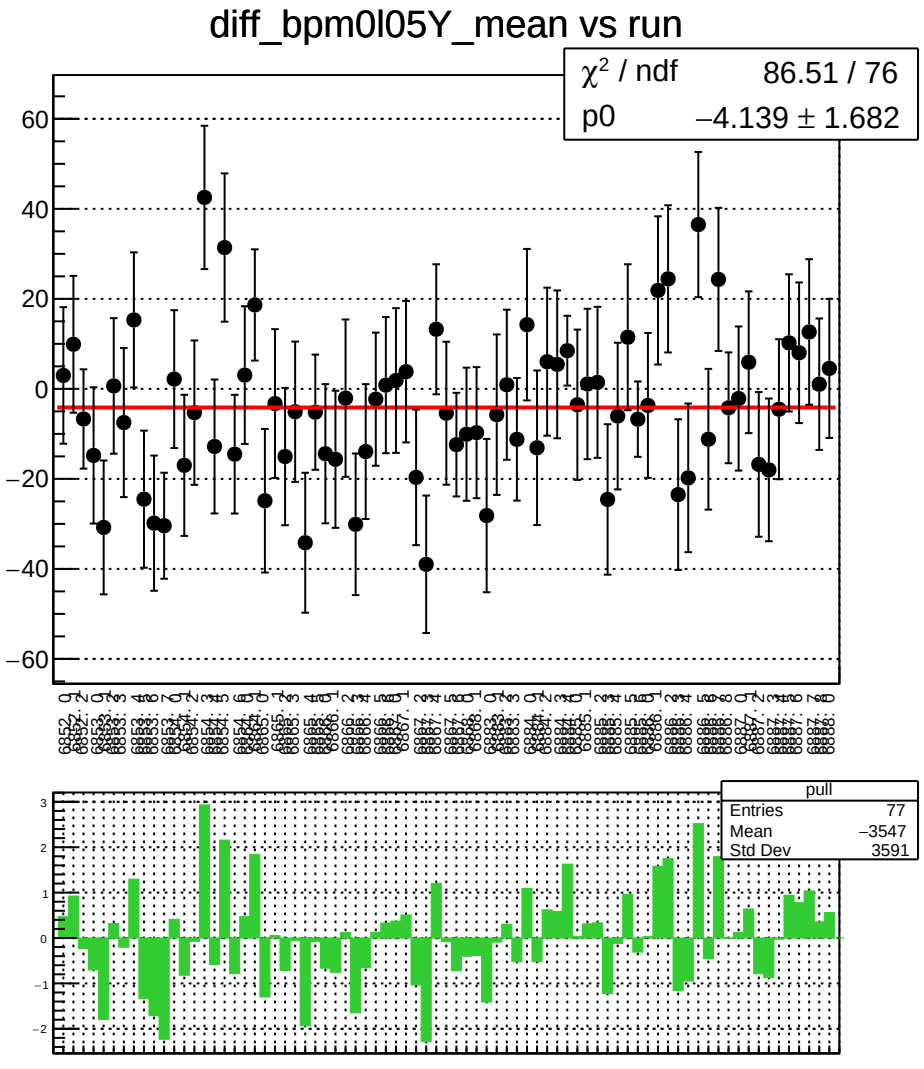

pull1D
Entries 77
Mean 0.02371
Std Dev 1.327

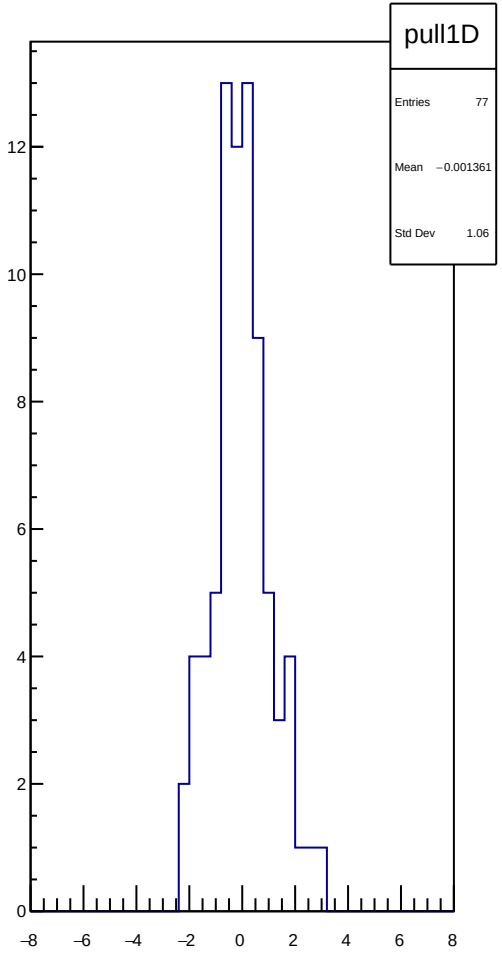

diff_bpm0l04Y_rms vs run
χ² / ndf 2927 / 76
p0 1470 ± 1.16
1700
1650
1600
1550
1500
1450
1400
1350

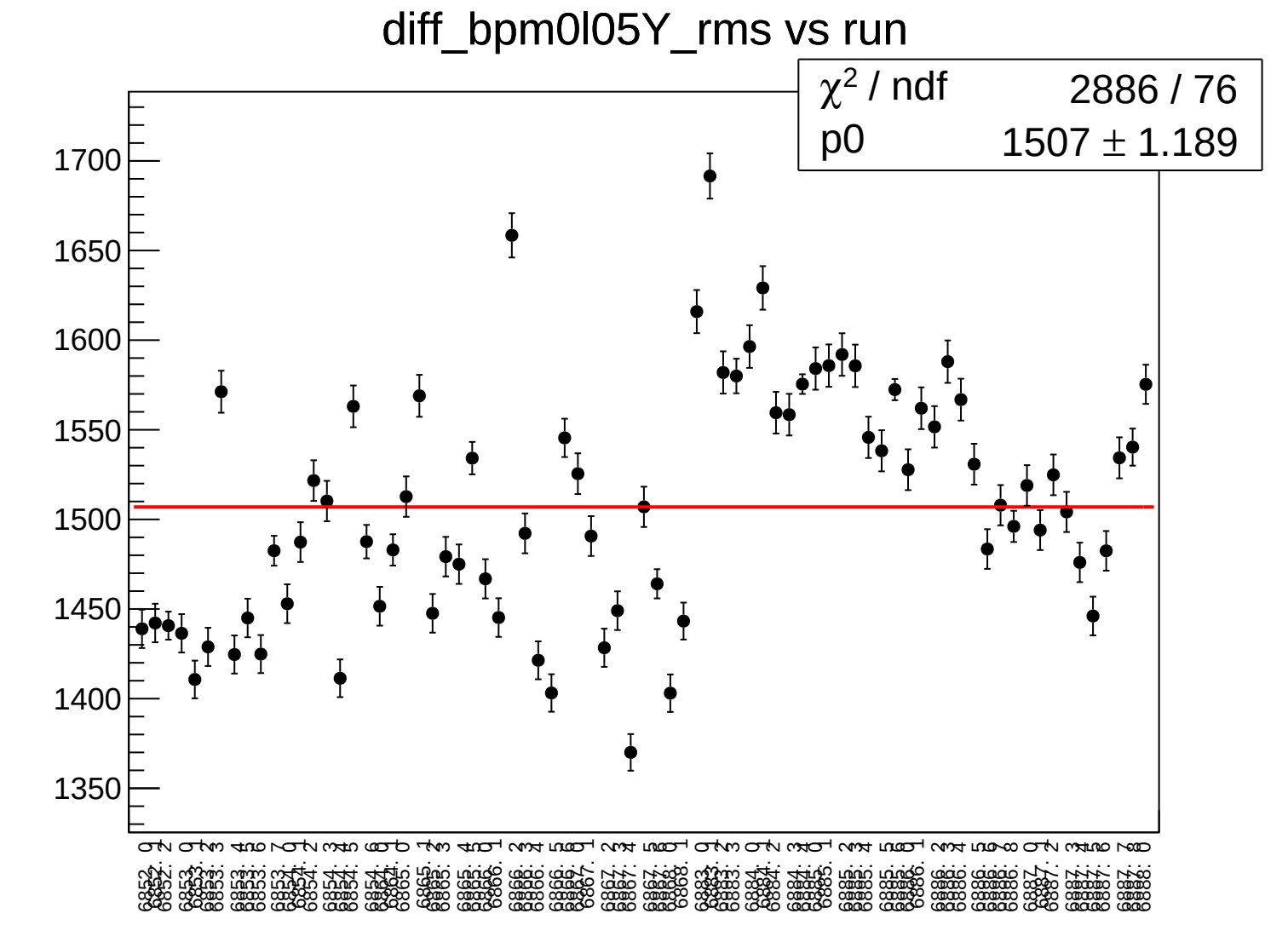

diff_bpm0l05X_mean vs run
χ² / ndf 77.98 / 76
p0 −0.6253 ± 7.326
300
200
100
0
−100
−200
pull
Entries 77
Mean −147.3
Std Dev 194.5
3
2
1
0
−1
−2

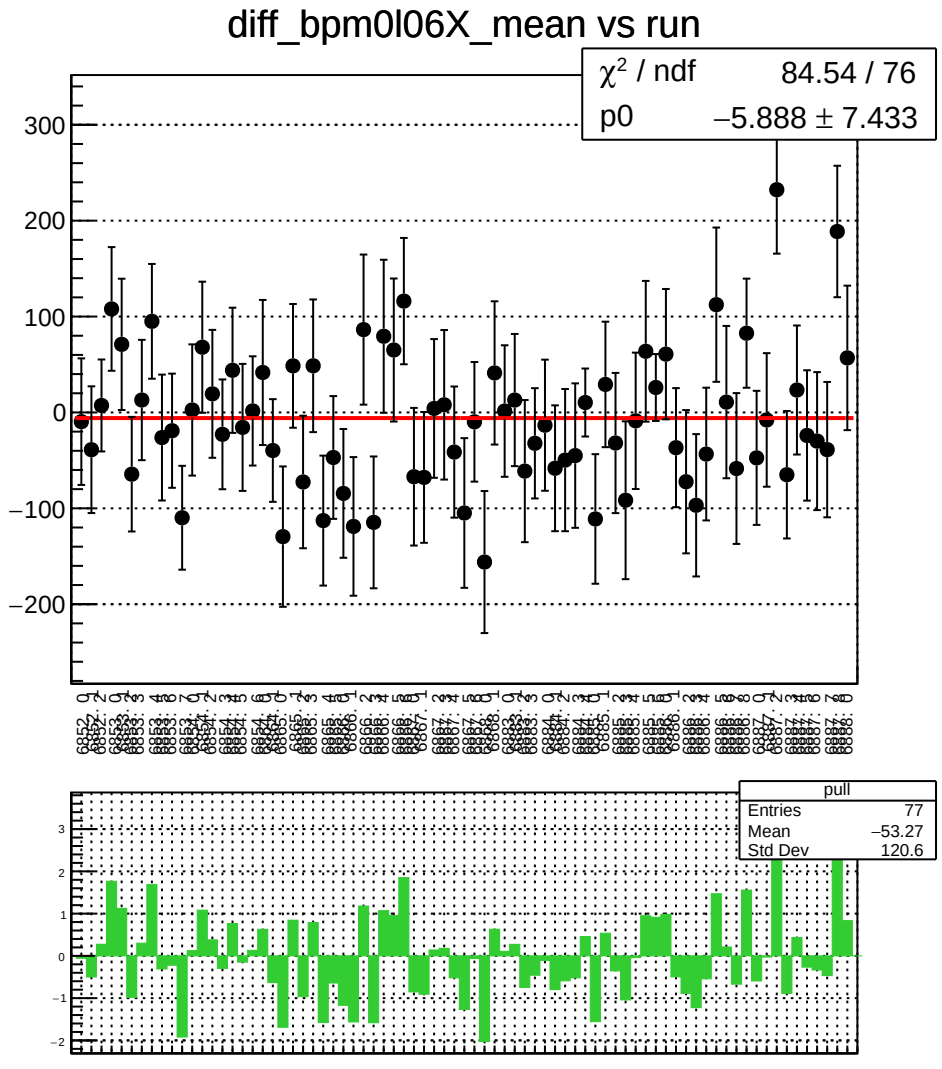

pull1D
Entries 77
Mean −0.01154
Std Dev 1.006
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

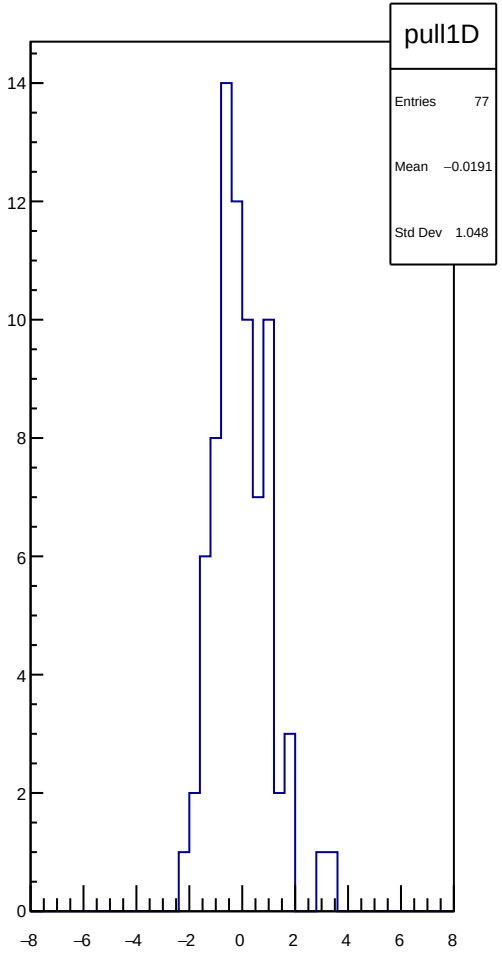

diff_bpm0l05X_rms vs run
χ² / ndf 9493 / 76
p0 6550 ± 5.18
8000
7500
7000
6500
6000
5500

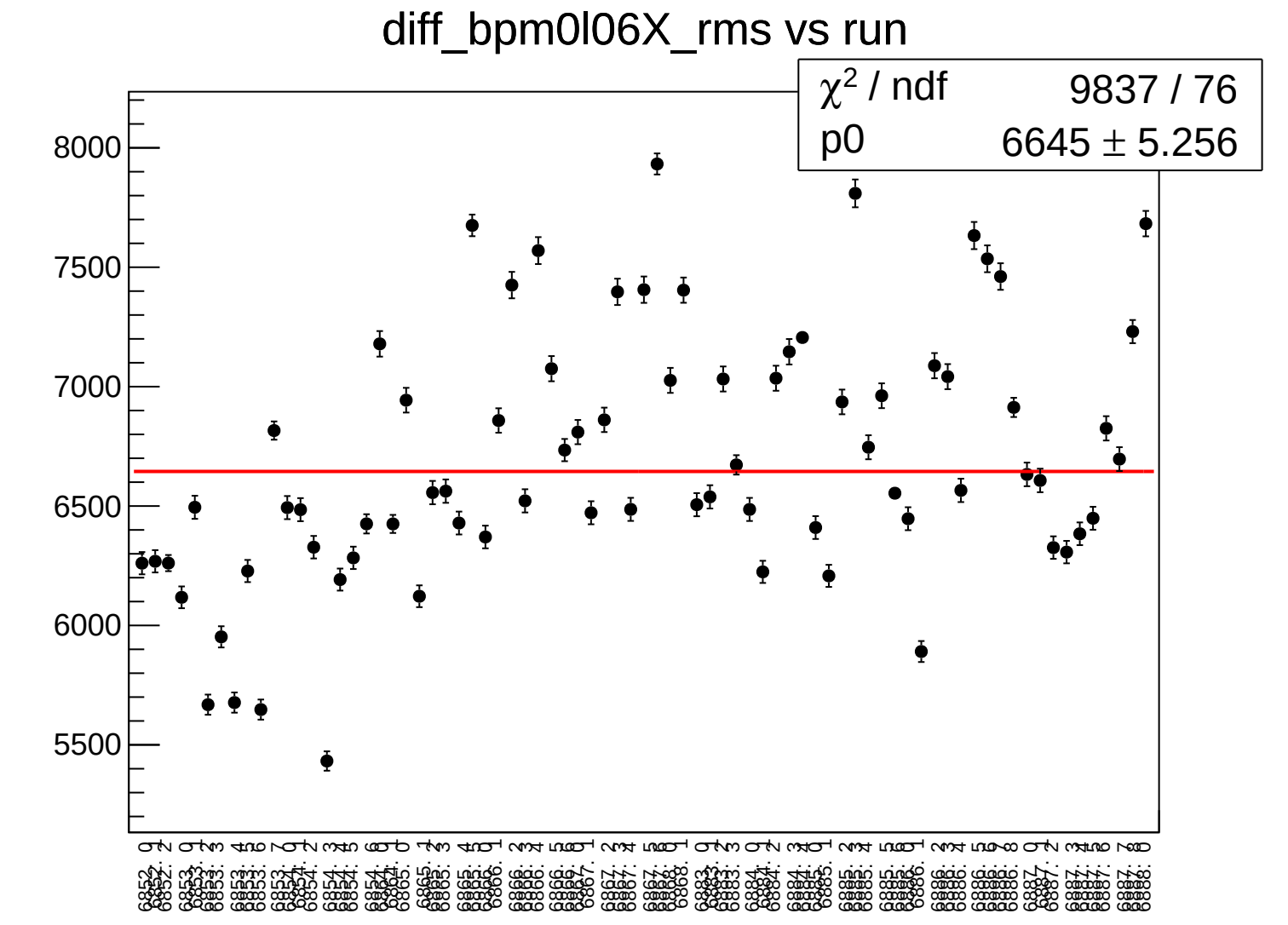

diff_bpm0l05Y_mean vs run
χ² / ndf 86.51 / 76
p0 −4.139 ± 1.682
pull
Entries 77
Mean −3547
Std Dev 3591

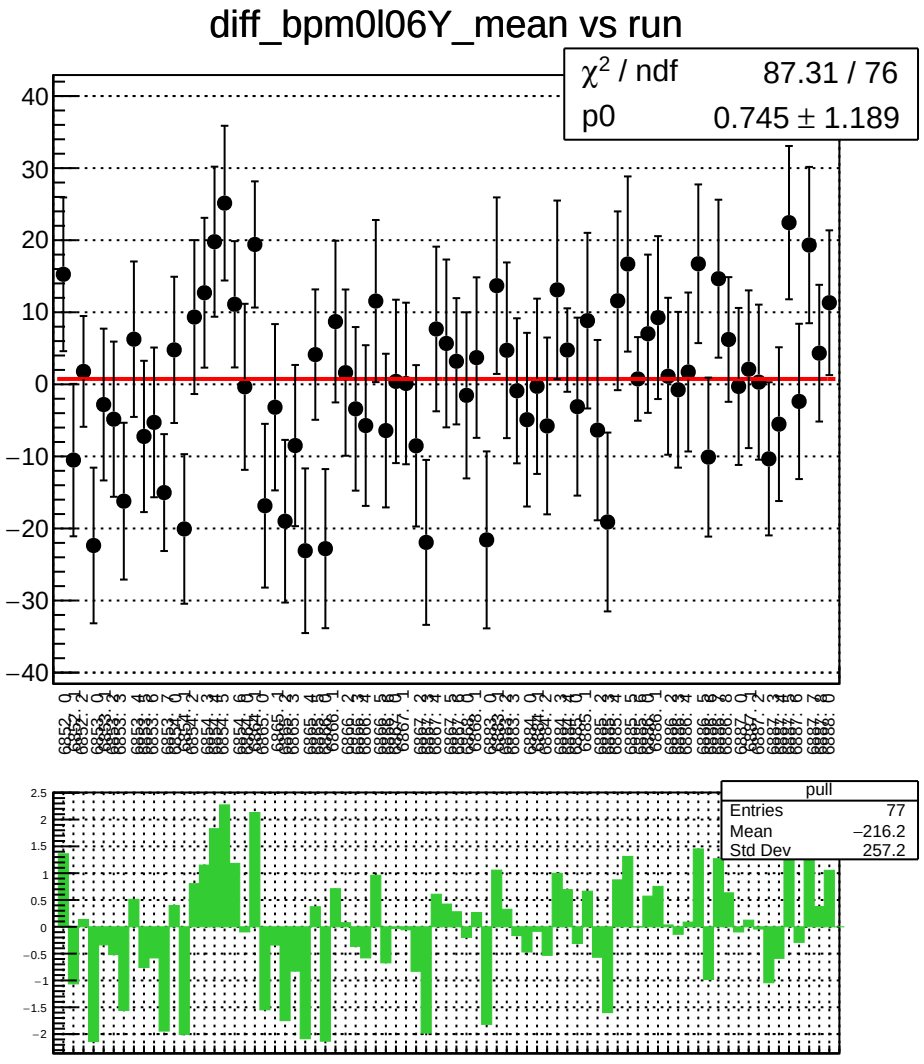

pull1D
Entries 77
Mean −0.001361
Std Dev 1.06

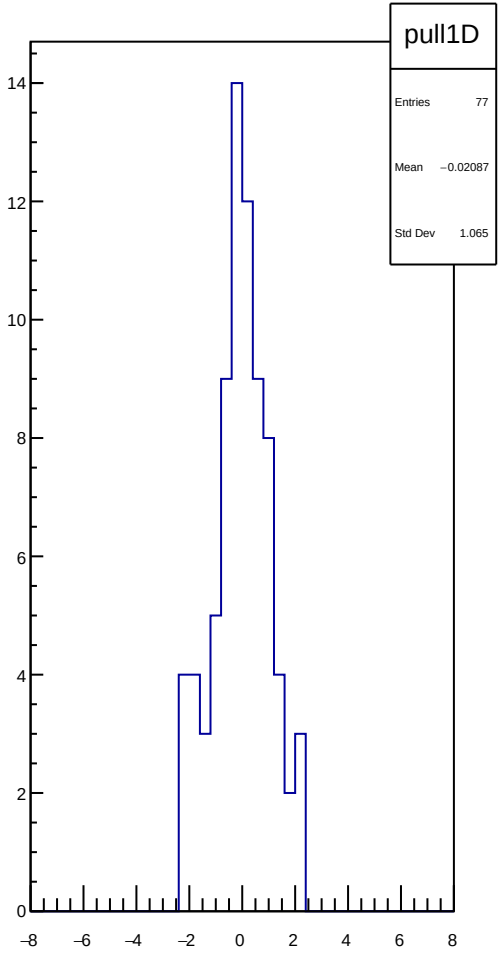

diff_bpm0l05Y_rms vs run
χ² / ndf 2886 / 76
p0 1507 ± 1.189
1700
1650
1600
1550
1500
1450
1400
1350

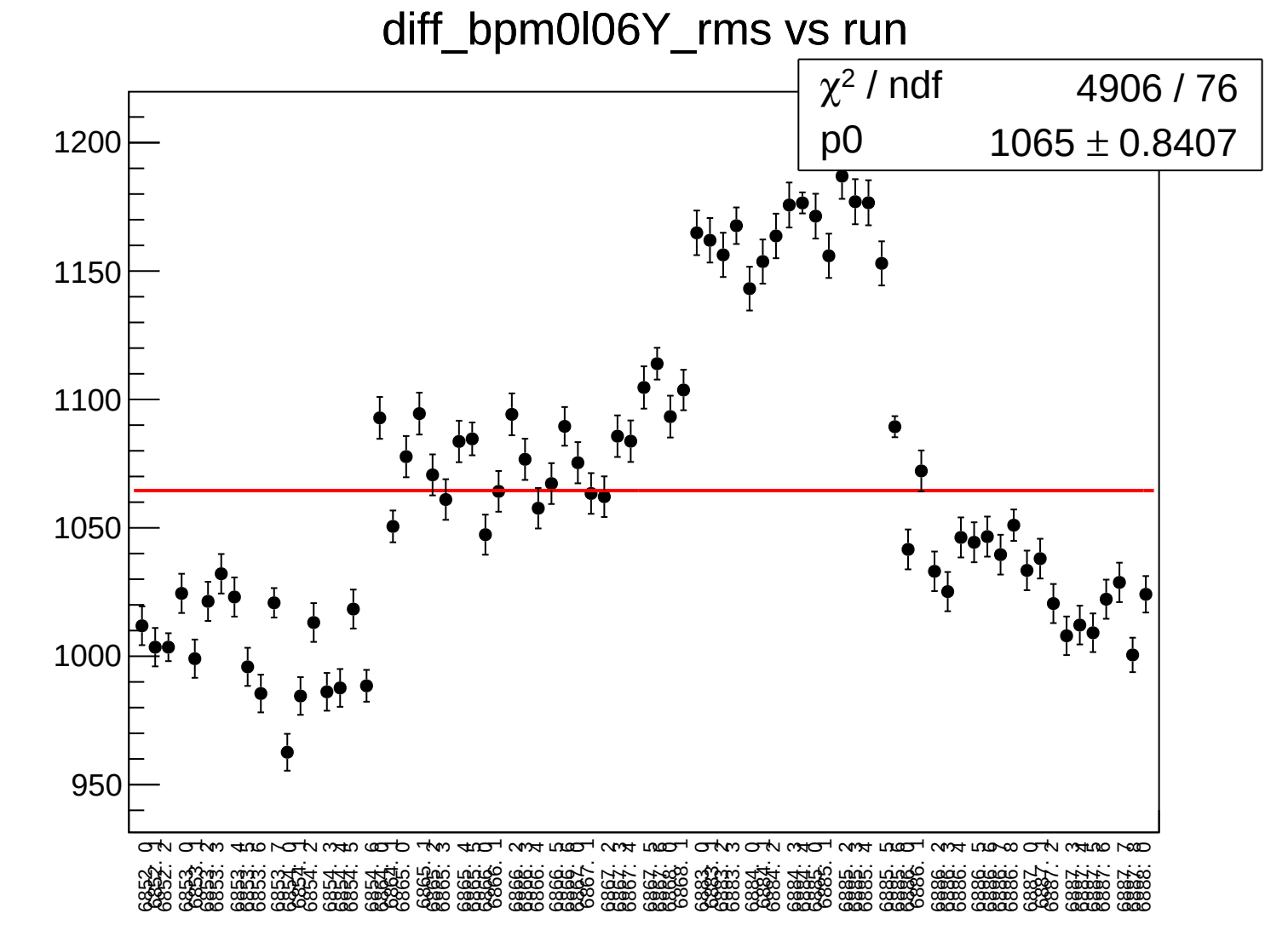

diff_bpm0l06X_mean vs run
χ² / ndf 84.54 / 76
p0 −5.888 ± 7.433
300
200
100
0
−100
−200
pull
Entries 77
Mean −53.27
Std Dev 120.6
3
2
1
0
−1
−2

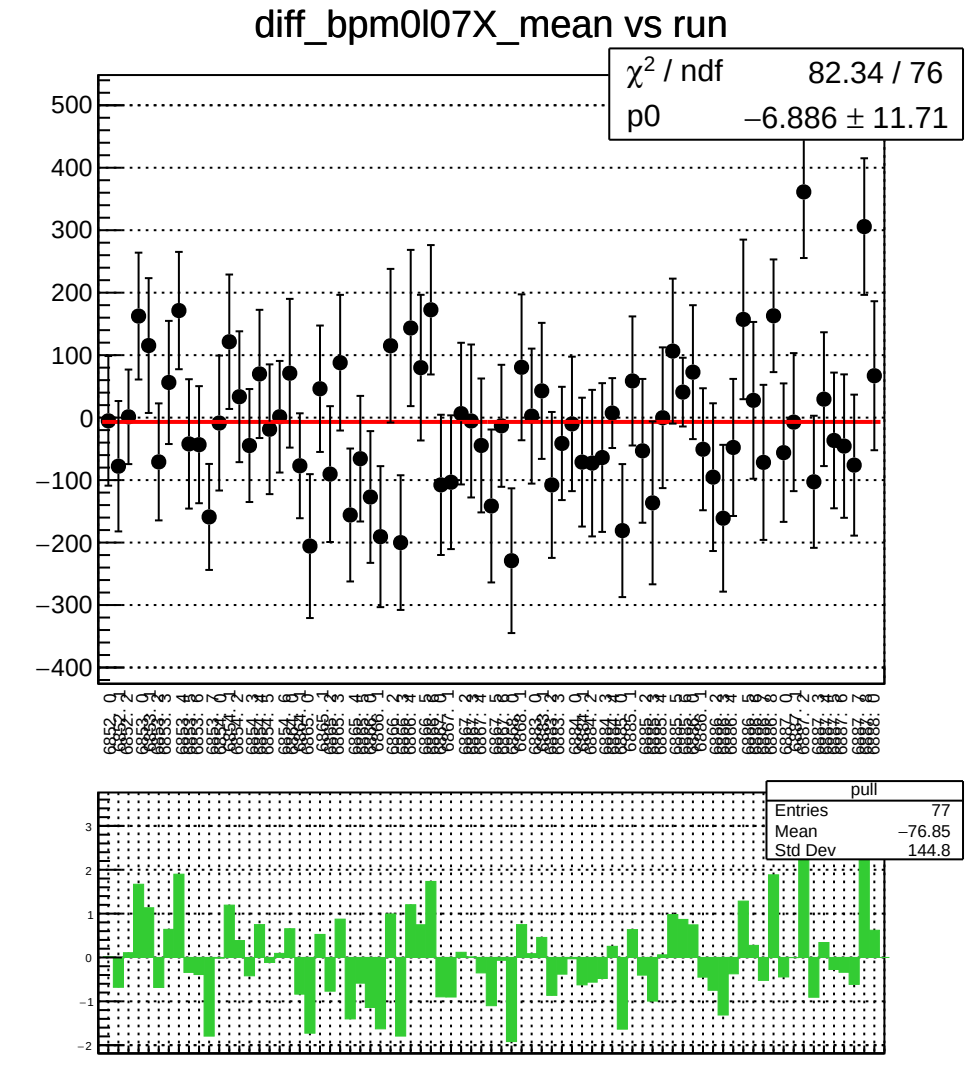

pull1D
Entries 77
Mean −0.0191
Std Dev 1.048
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

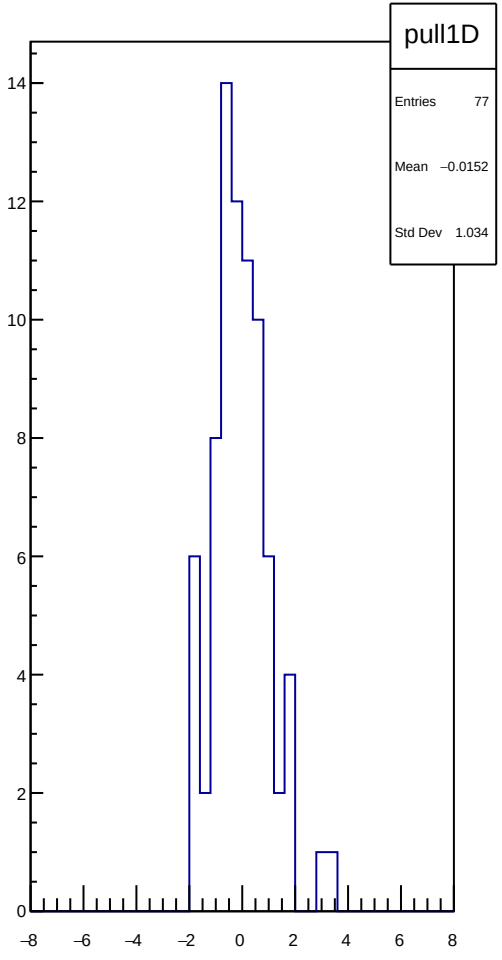

diff_bpm0l06X_rms vs run
χ² / ndf 9837 / 76
p0 6645 ± 5.256
8000
7500
7000
6500
6000
5500

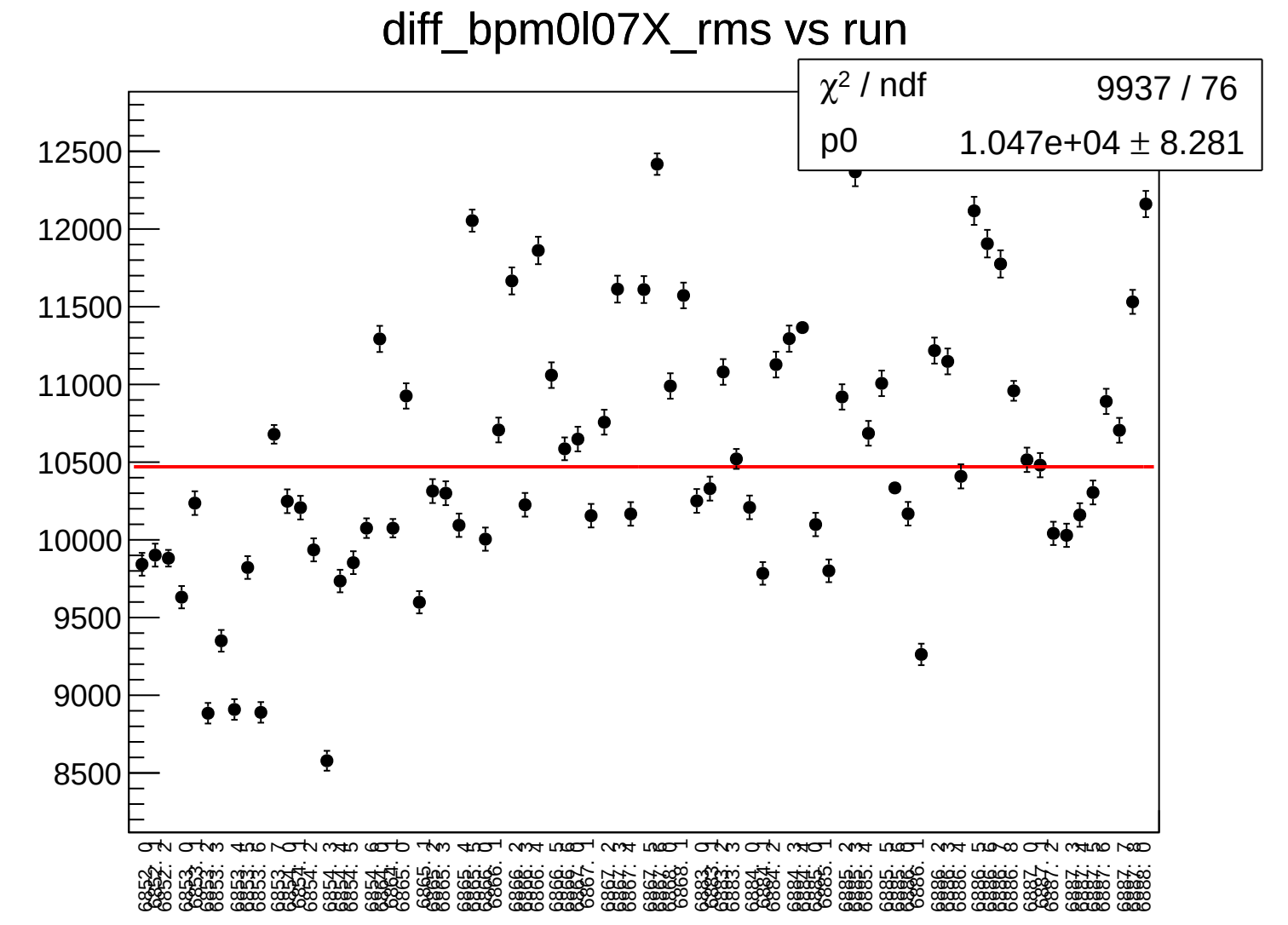

diff_bpm0l06Y_mean vs run
χ² / ndf 87.31 / 76
p0 0.745 ± 1.189
pull
Entries 77
Mean −216.2
Std Dev 257.2

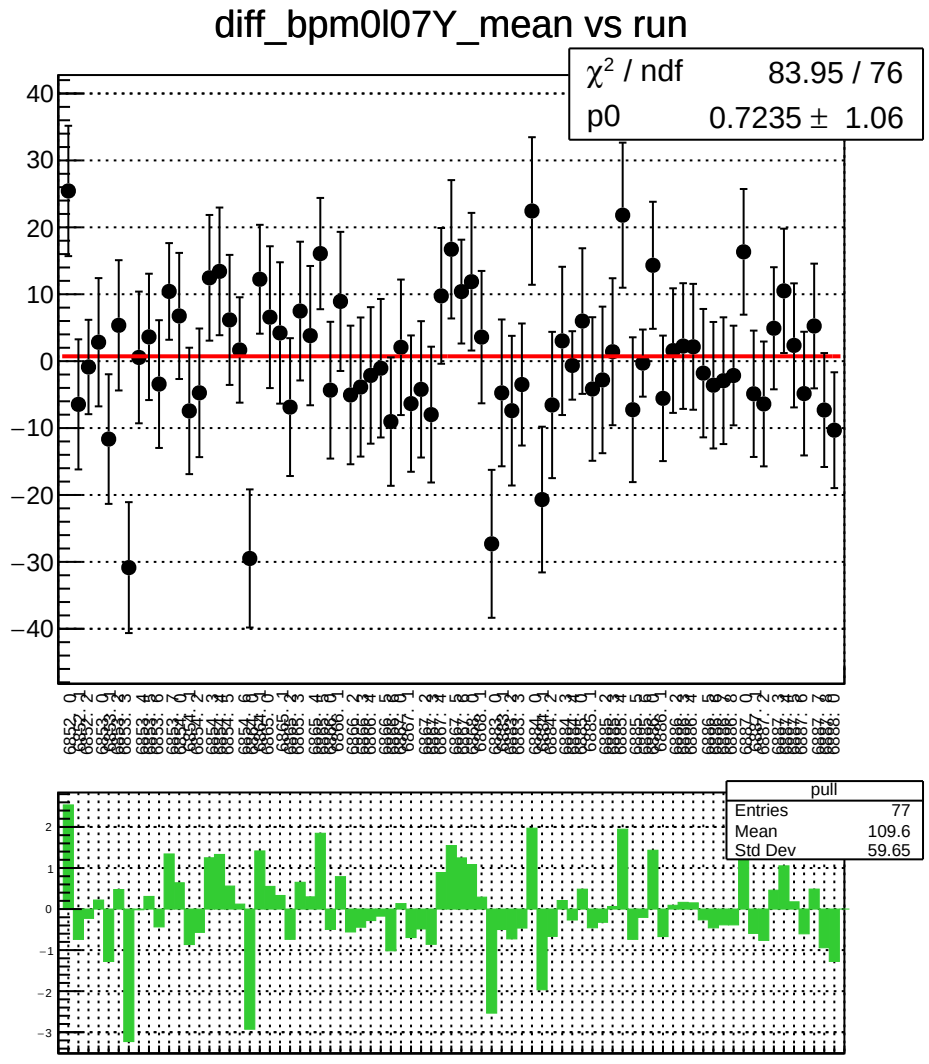

pull1D
Entries 77
Mean −0.02087
Std Dev 1.065

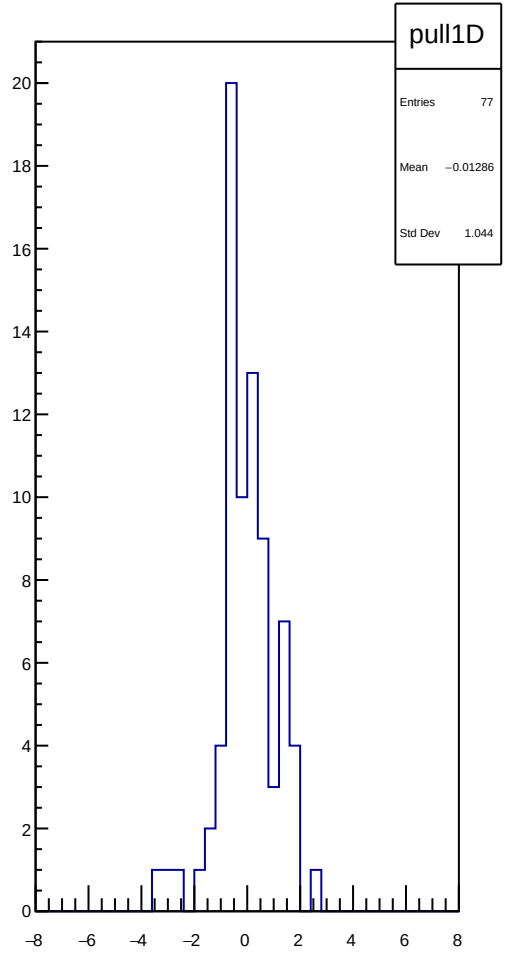

diff_bpm0l06Y_rms vs run
χ² / ndf 4906 / 76
p0 1065 ± 0.8407
1200
1150
1100
1050
1000
950

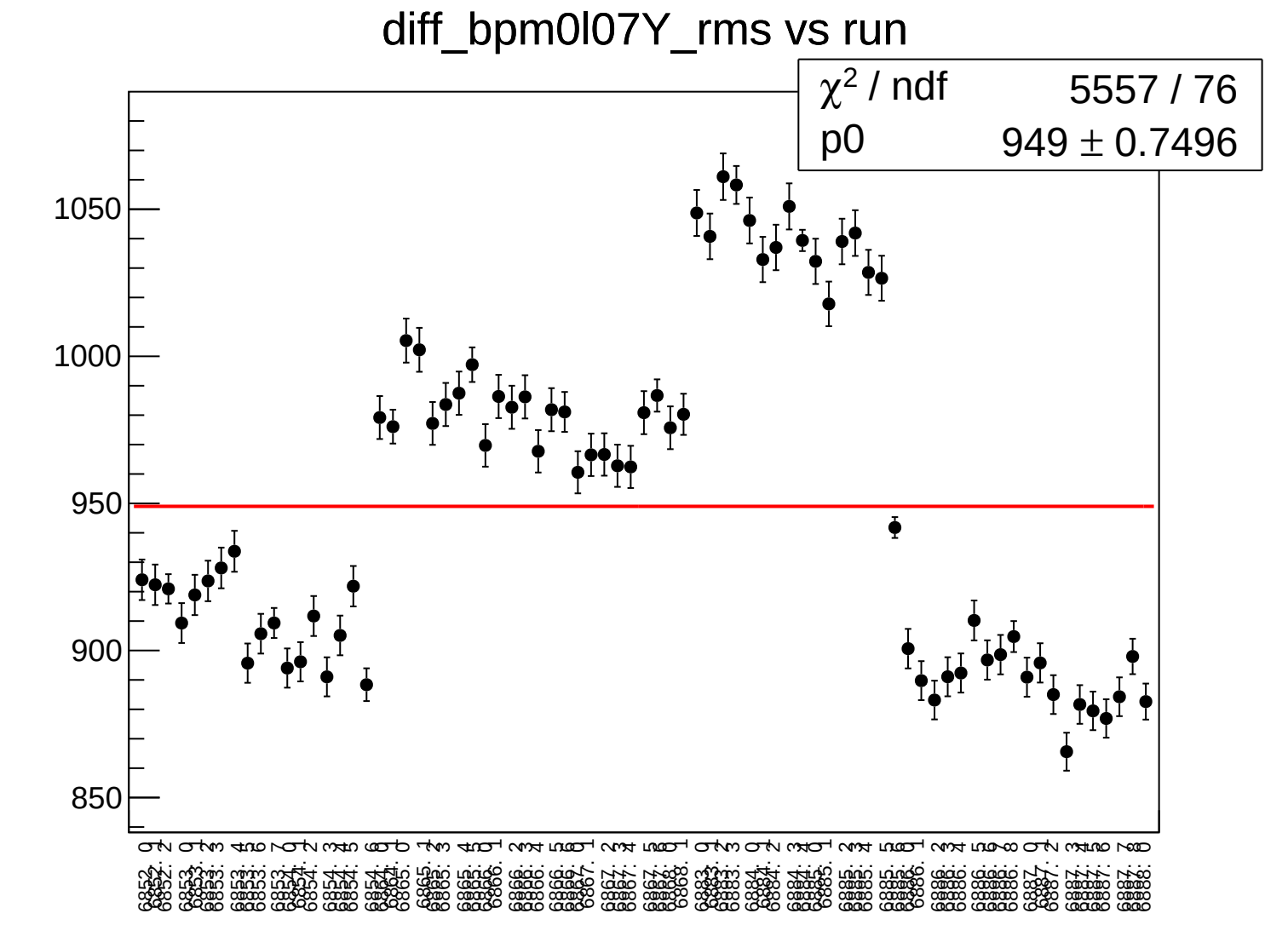

diff_bpm0l07X_mean vs run
χ² / ndf 82.34 / 76
p0 −6.886 ± 11.71
pull
Entries 77
Mean −76.85
Std Dev 144.8

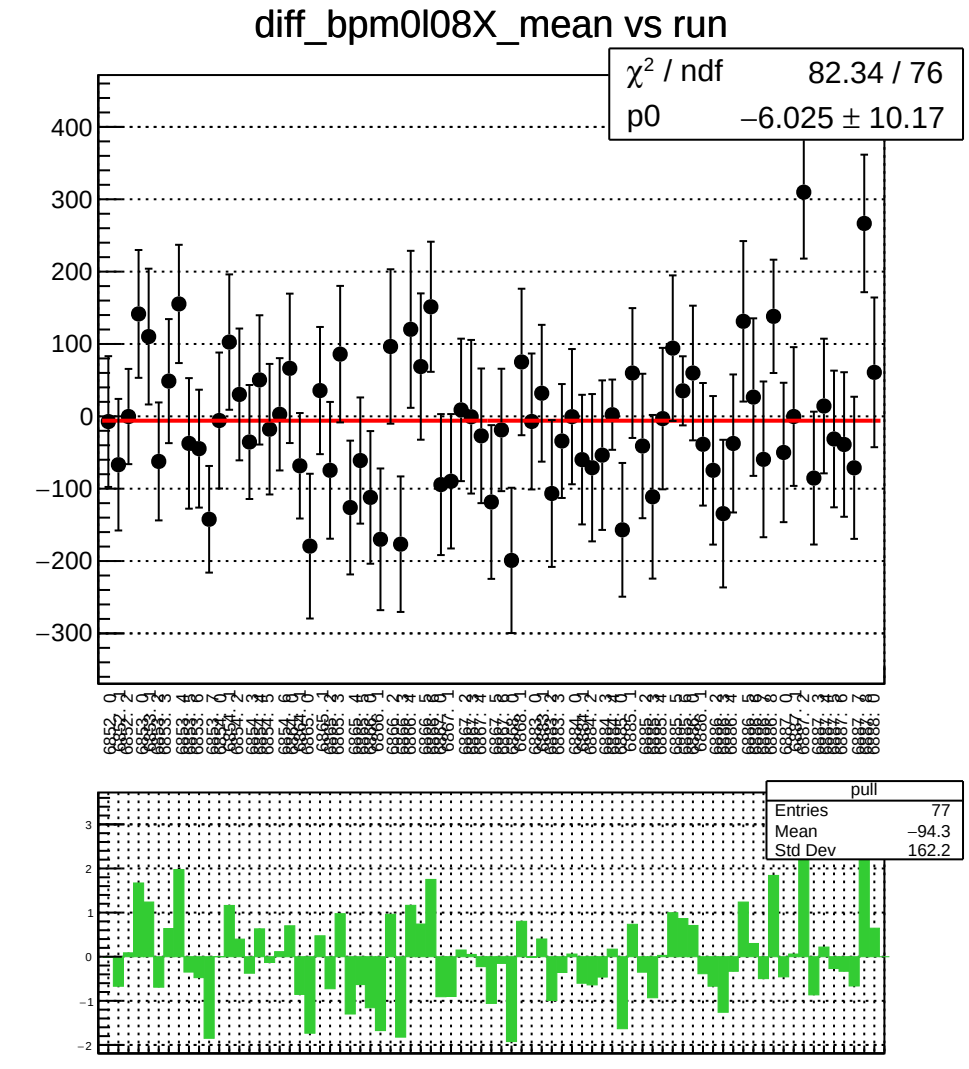

pull1D
Entries 77
Mean −0.0152
Std Dev 1.034

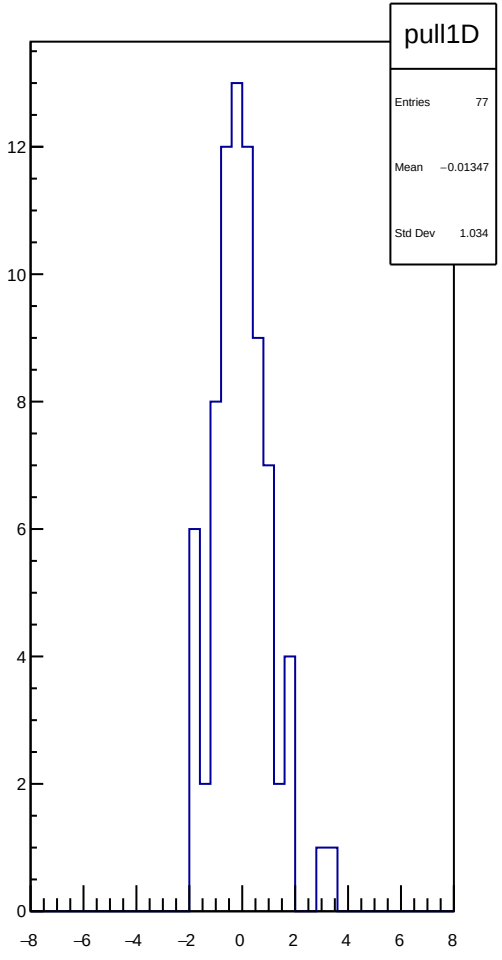

diff_bpm0l07X_rms vs run
χ² / ndf 9937 / 76
p0 1.047e+04 ± 8.281
12500
12000
11500
11000
10500
10000
9500
9000
8500


diff_bpm0l07Y_mean vs run
χ² / ndf 83.95 / 76
p0 0.7235 ± 1.06
pull
Entries 77
Mean 109.6
Std Dev 59.65

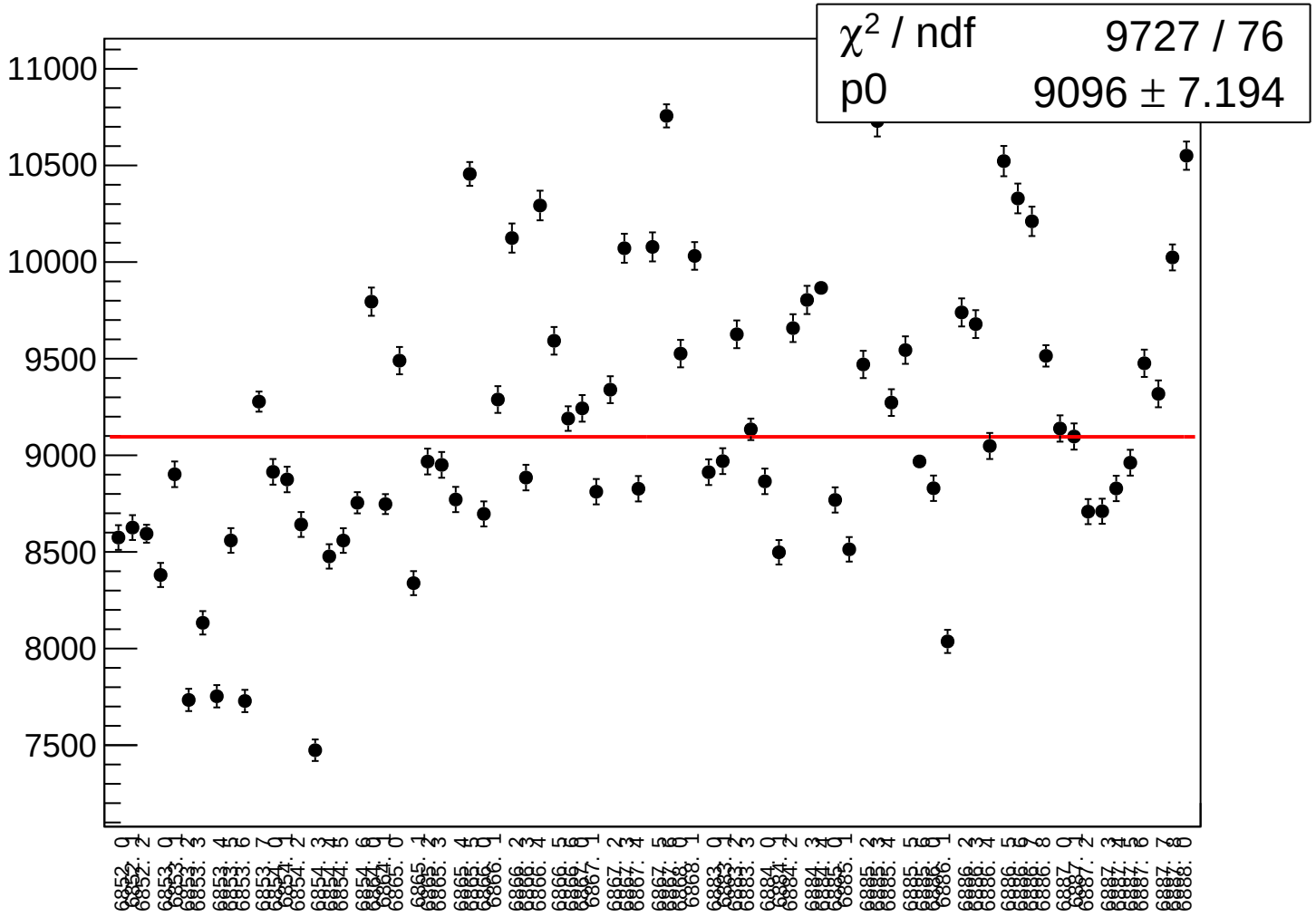

pull1D
Entries 77
Mean −0.01286
Std Dev 1.044

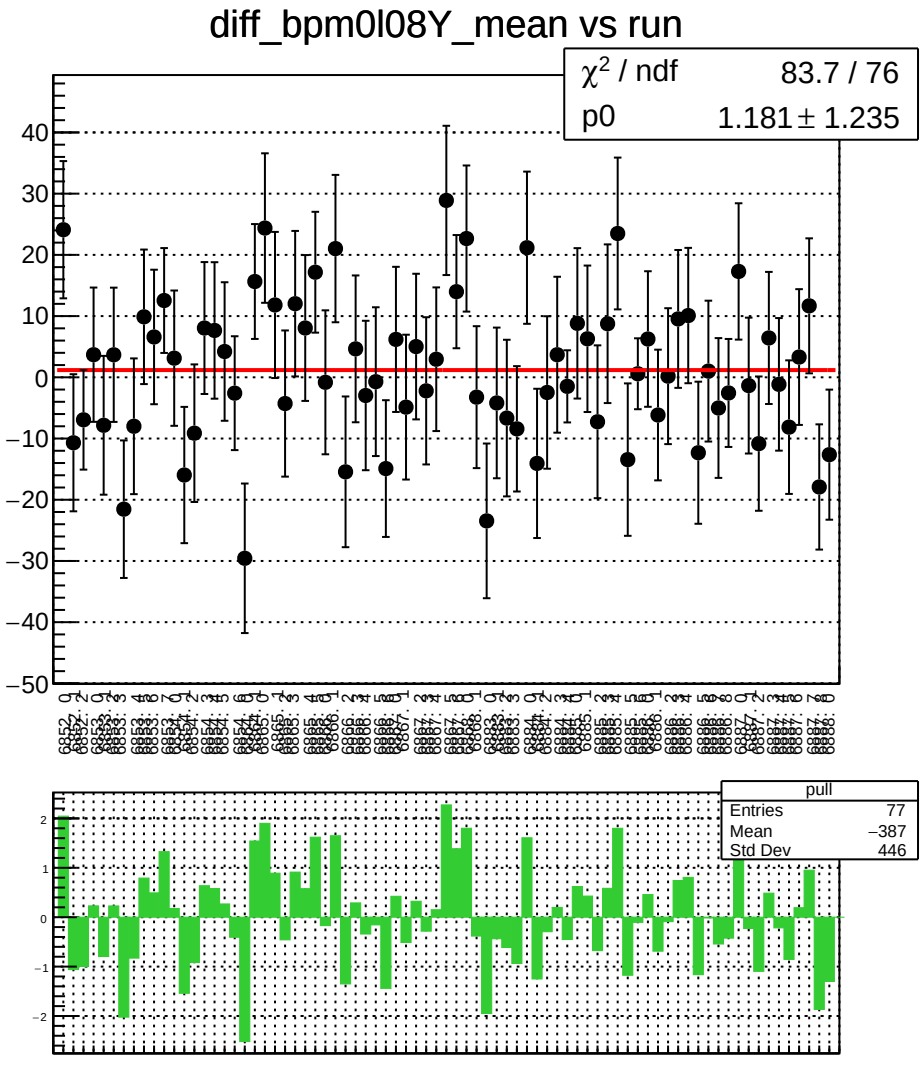

diff_bpm0l07Y_rms vs run
χ² / ndf 5557 / 76
p0 949 ± 0.7496
1050
1000
950
900
850

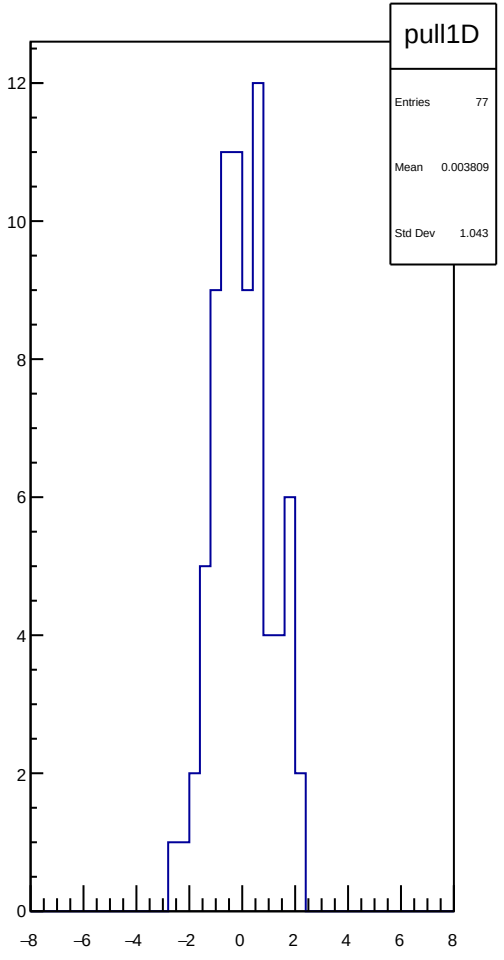

diff_bpm0l08X_mean vs run
χ² / ndf 82.34 / 76
p0 −6.025 ± 10.17
pull
Entries 77
Mean −94.3
Std Dev 162.2

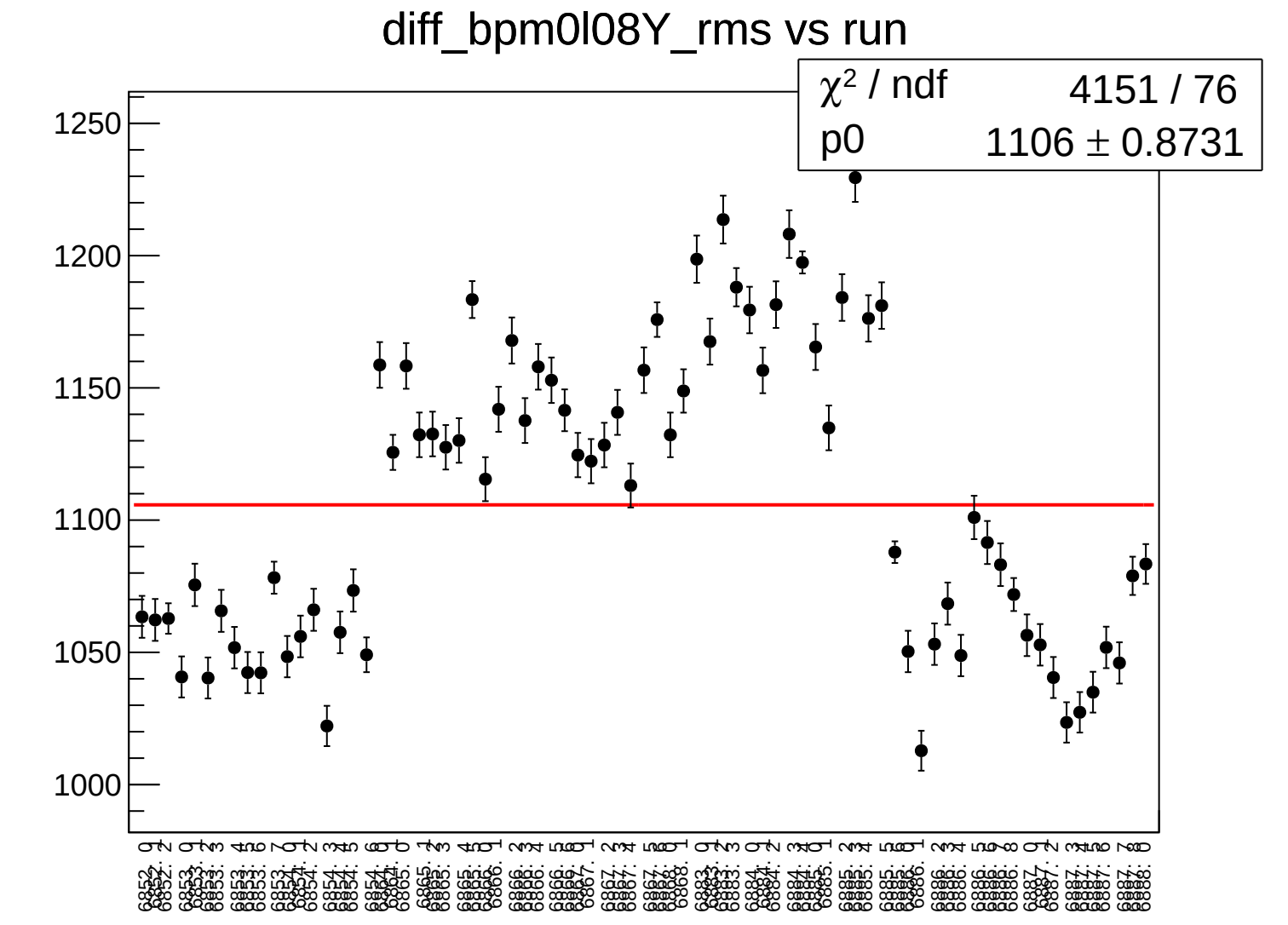

pull1D
Entries 77
Mean −0.01347
Std Dev 1.034

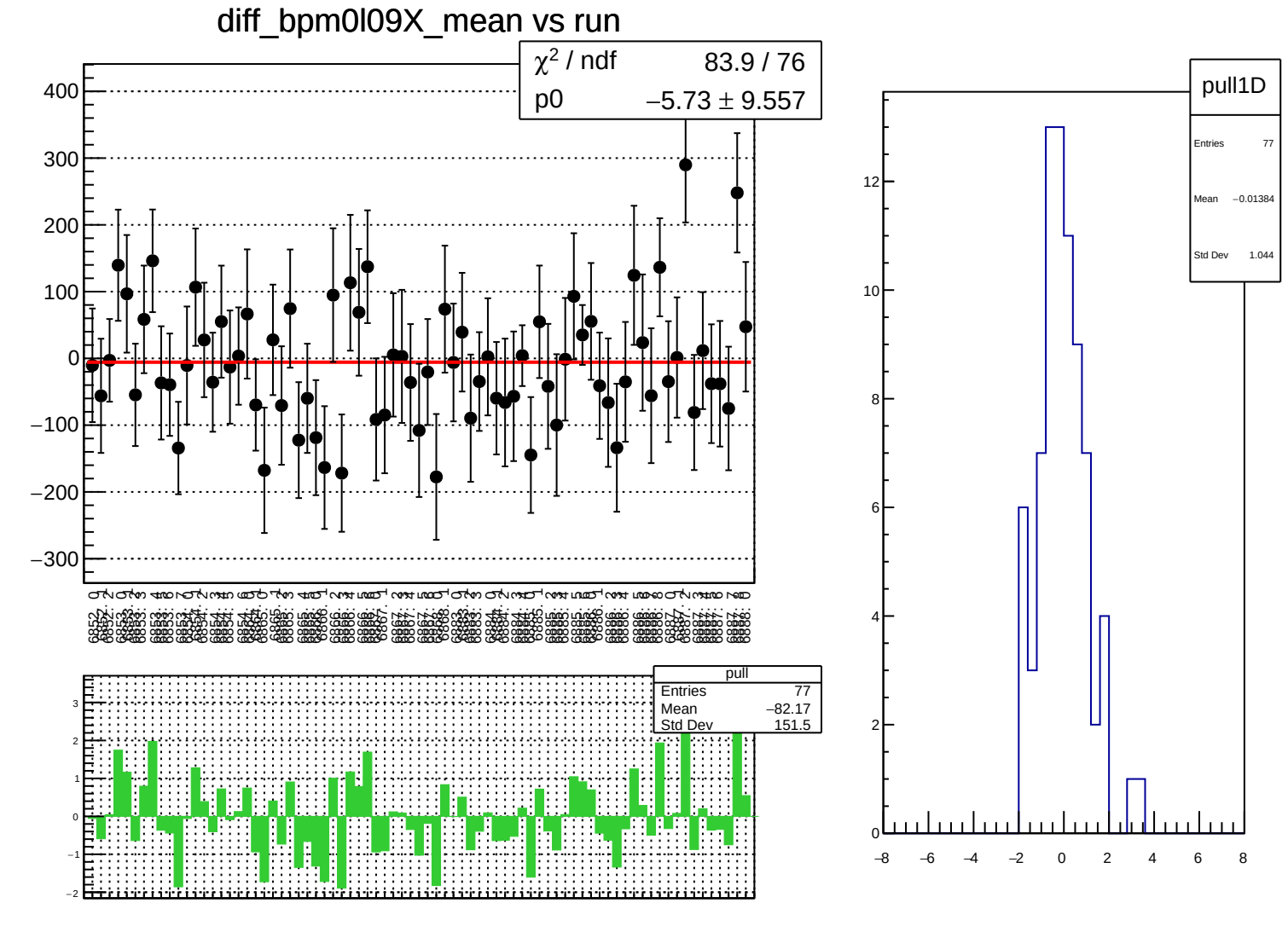
diff_bpm0l08X_rms vs run

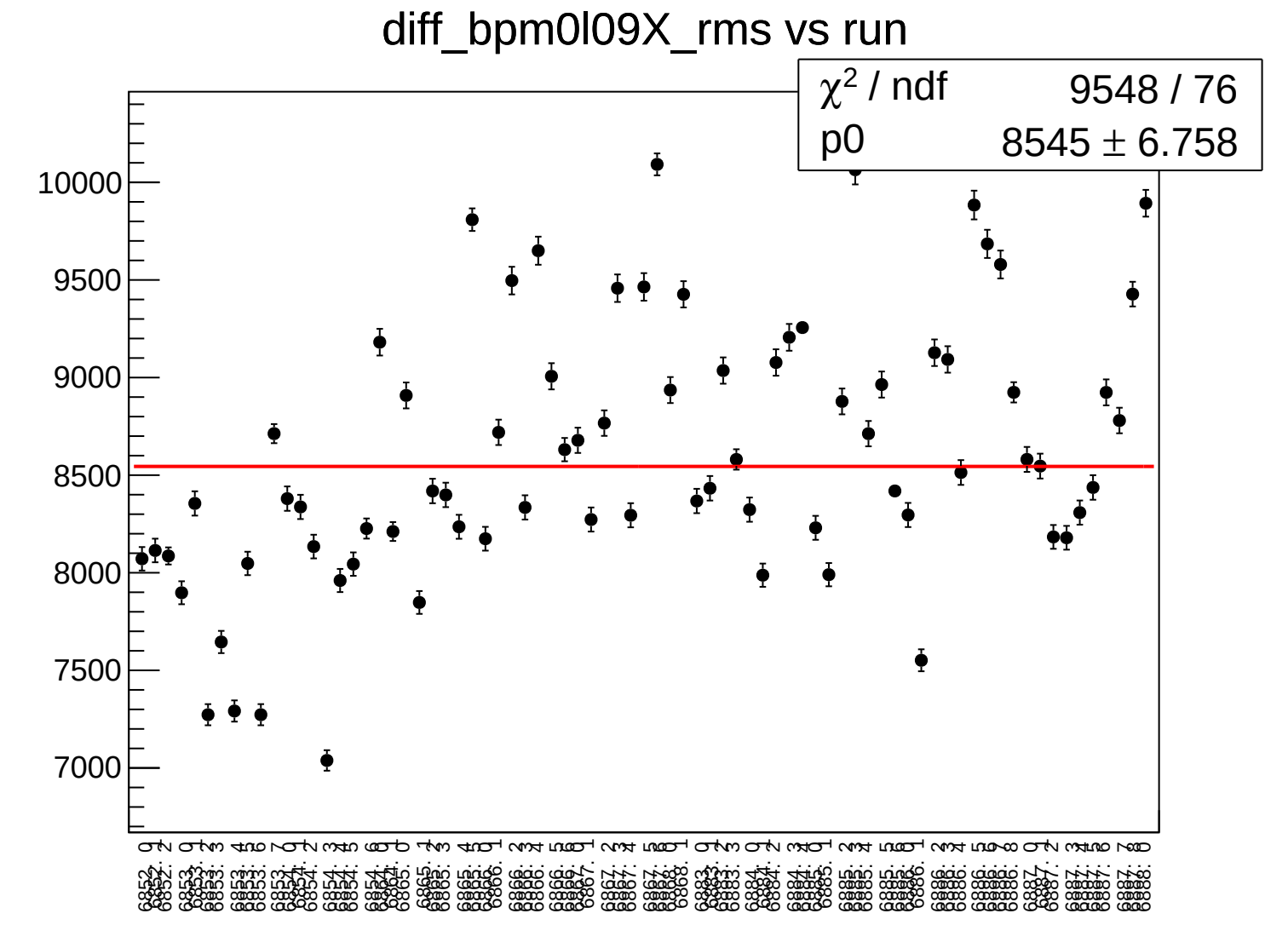


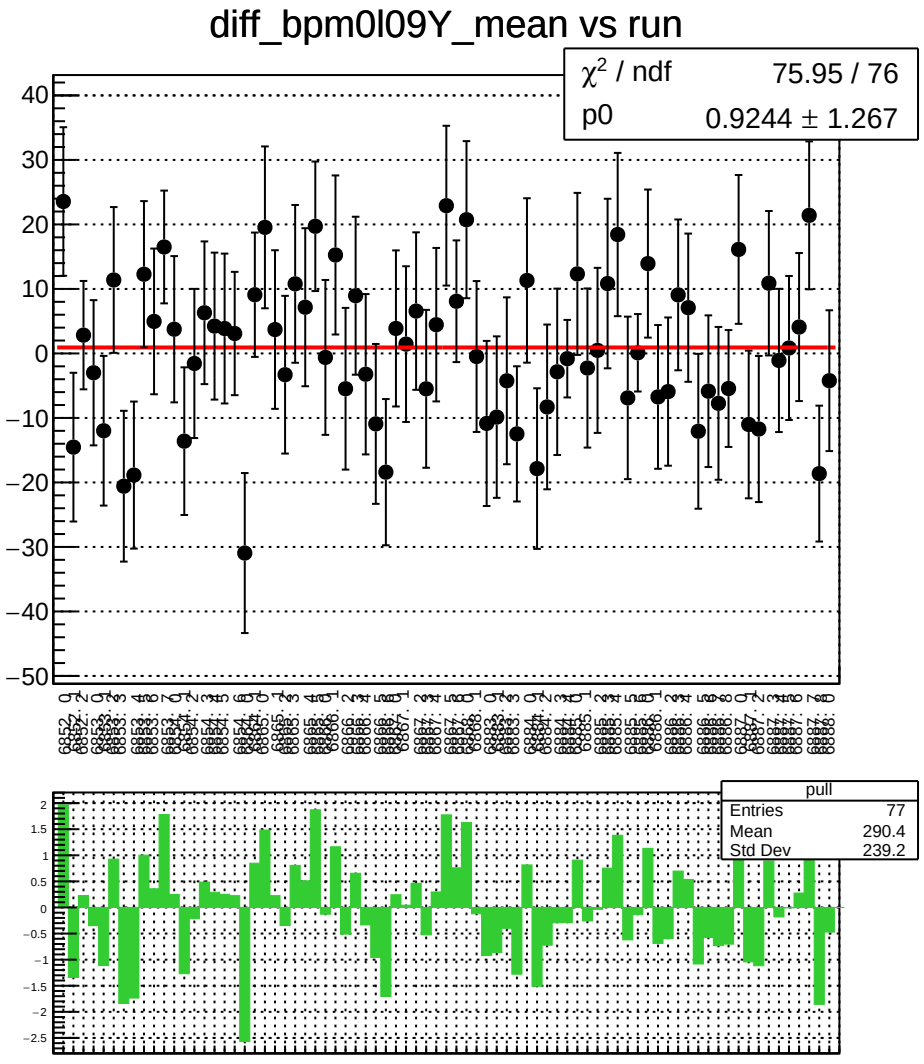

diff_bpm0l08Y_mean vs run
χ² / ndf 83.7 / 76
p0 1.181 ± 1.235
pull
Entries 77
Mean −387
Std Dev 446

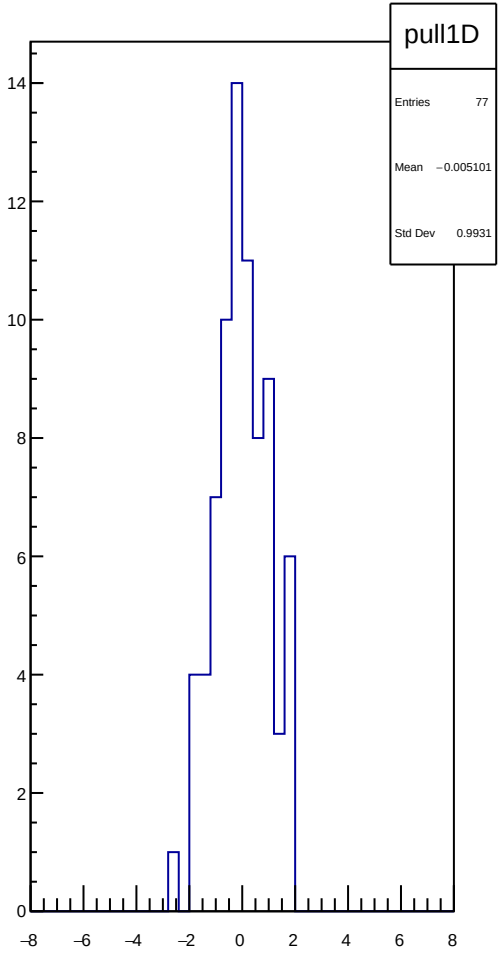

pull1D
Entries 77
Mean 0.003809
Std Dev 1.043

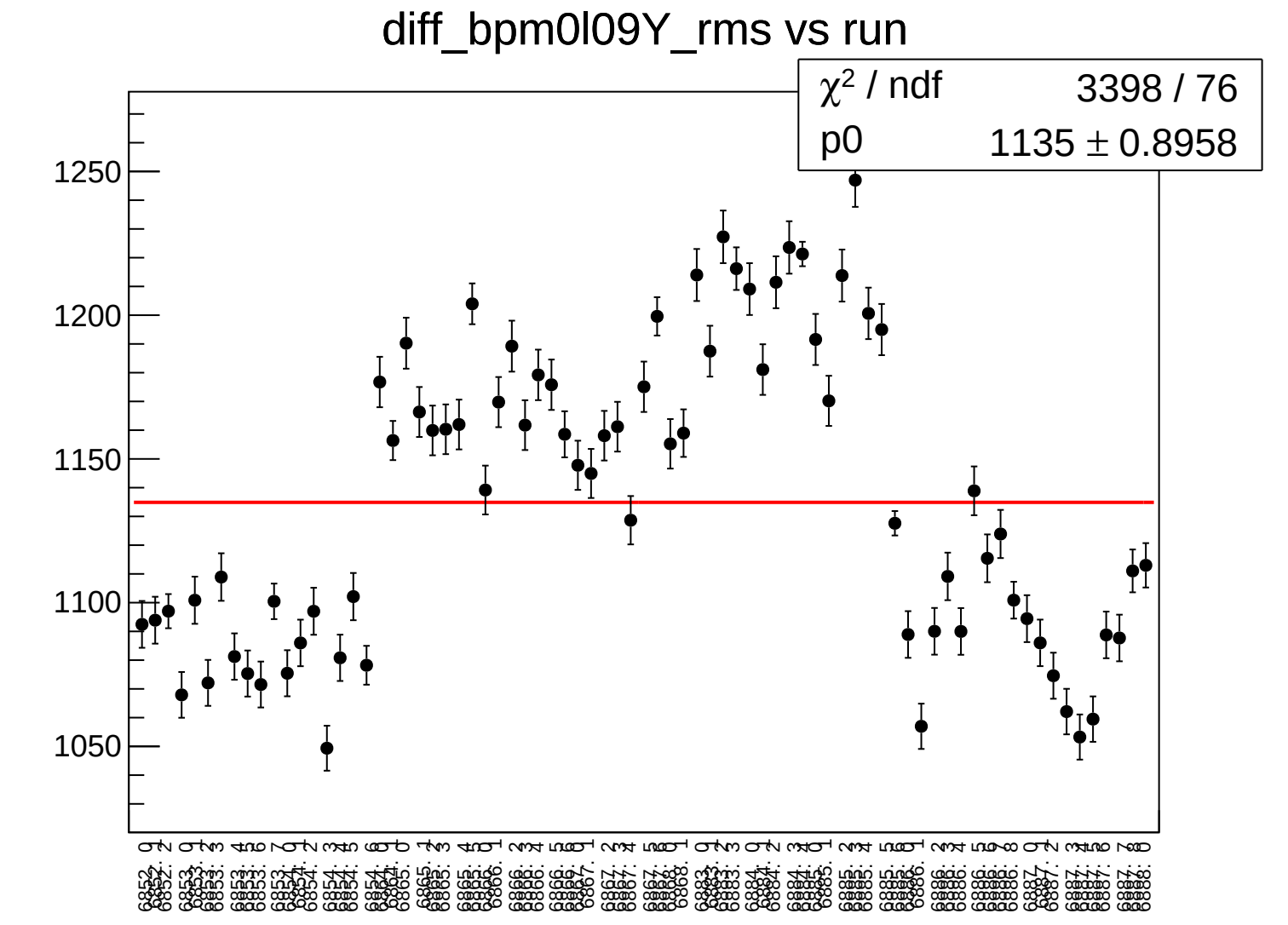

diff_bpm0l08Y_rms vs run
χ² / ndf 4151 / 76
p0 1106 ± 0.8731
1250
1200
1150
1100
1050
1000

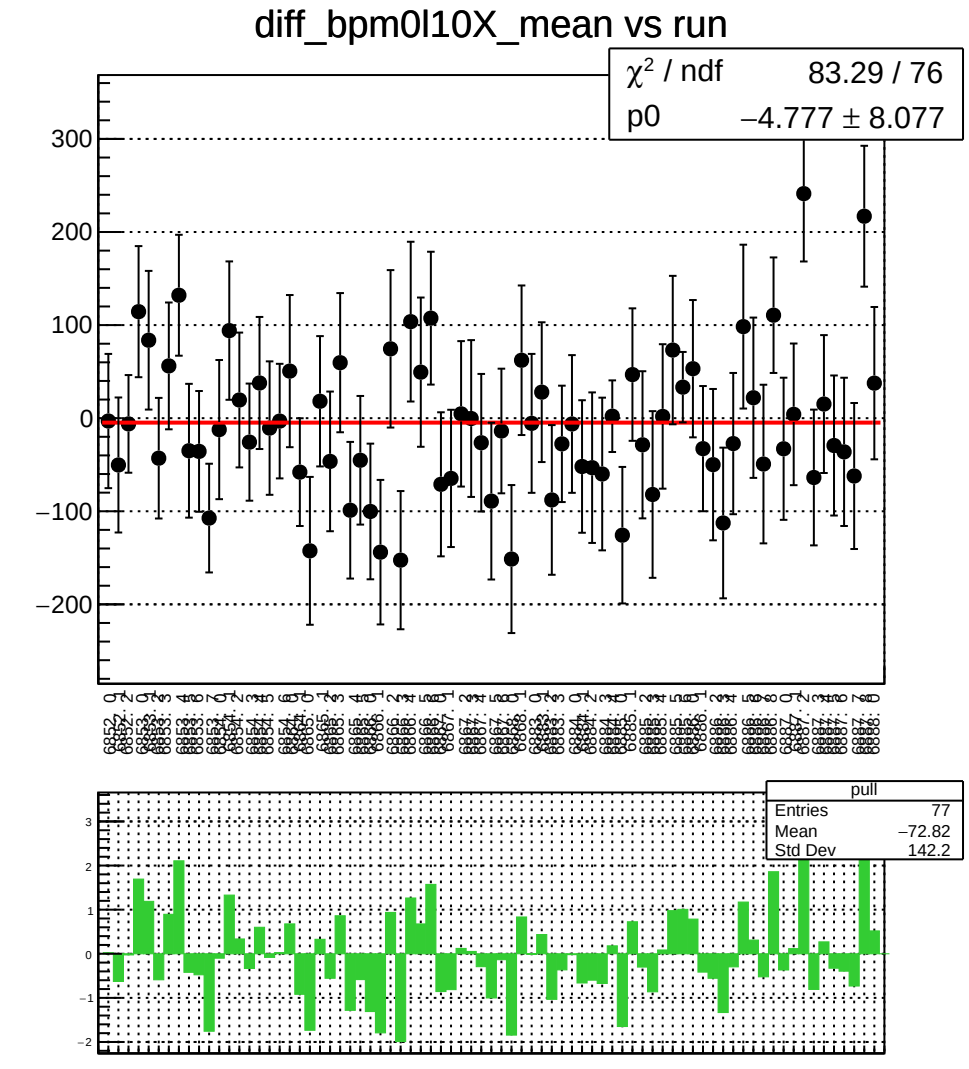

diff_bpm0l09X_mean vs run
χ² / ndf 83.9 / 76
p0 −5.73 ± 9.557
pull
Entries 77
Mean −82.17
Std Dev 151.5
pull1D
Entries 77
Mean −0.01384
Std Dev 1.044

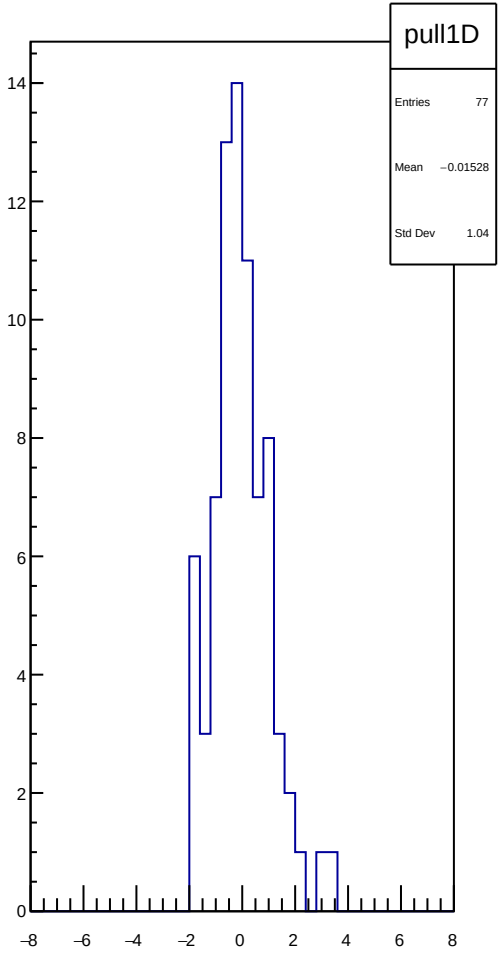

diff_bpm0l09X_rms vs run
χ^2 / ndf 9548 / 76
p0 8545 ± 6.758
10000
9500
9000
8500
8000
7500
7000

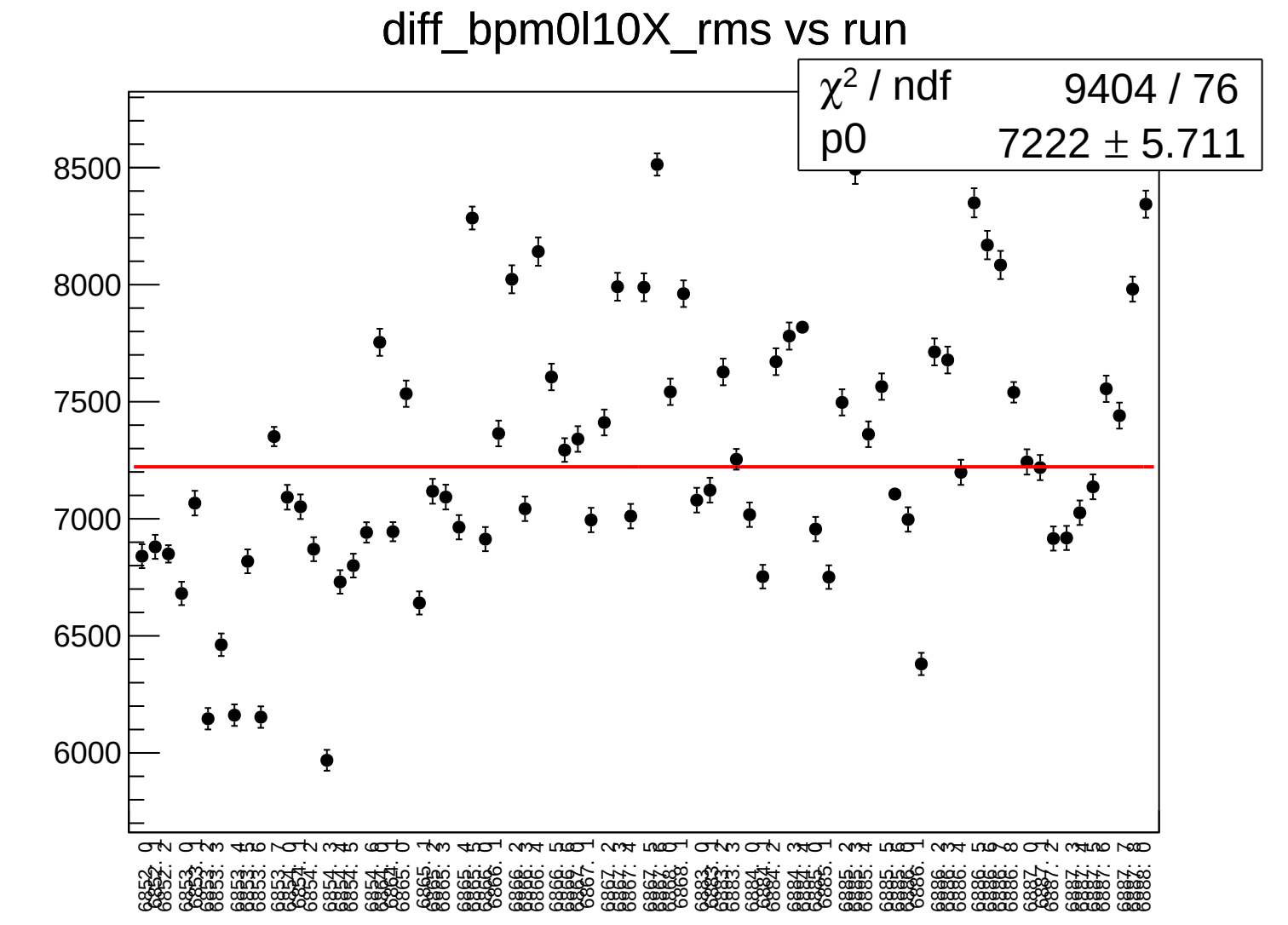

diff_bpm0l09Y_mean vs run
χ² / ndf 75.95 / 76
p0 0.9244 ± 1.267
pull
Entries 77
Mean 290.4
Std Dev 239.2

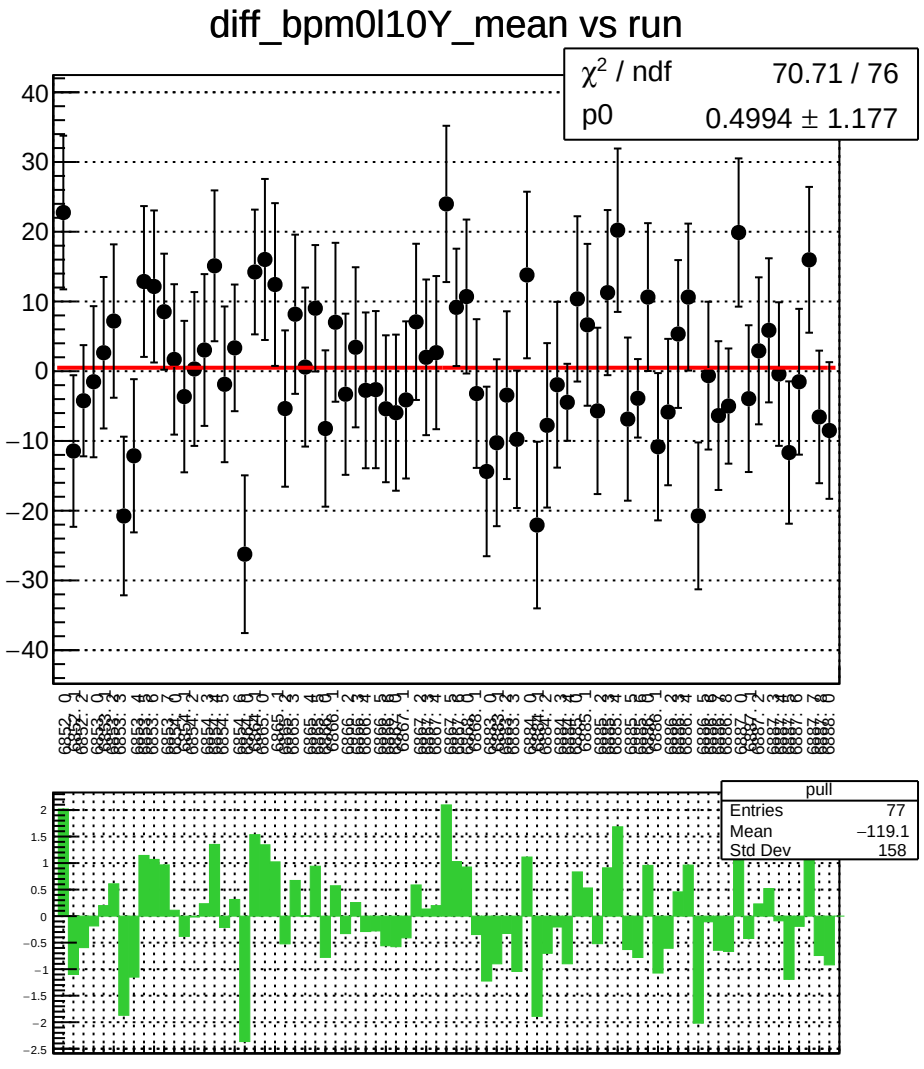

pull1D
Entries 77
Mean −0.005101
Std Dev 0.9931

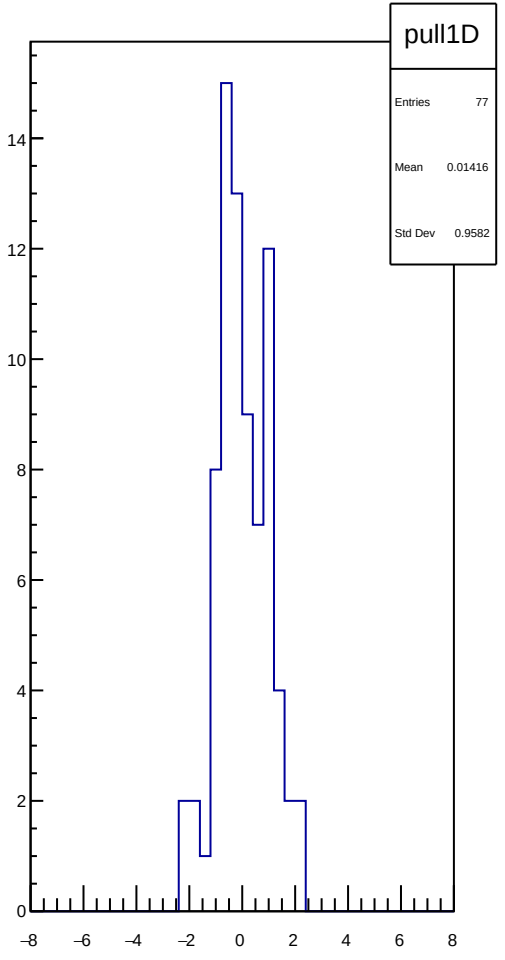

diff_bpm0l09Y_rms vs run
χ² / ndf 3398 / 76
p0 1135 ± 0.8958
1250
1200
1150
1100
1050

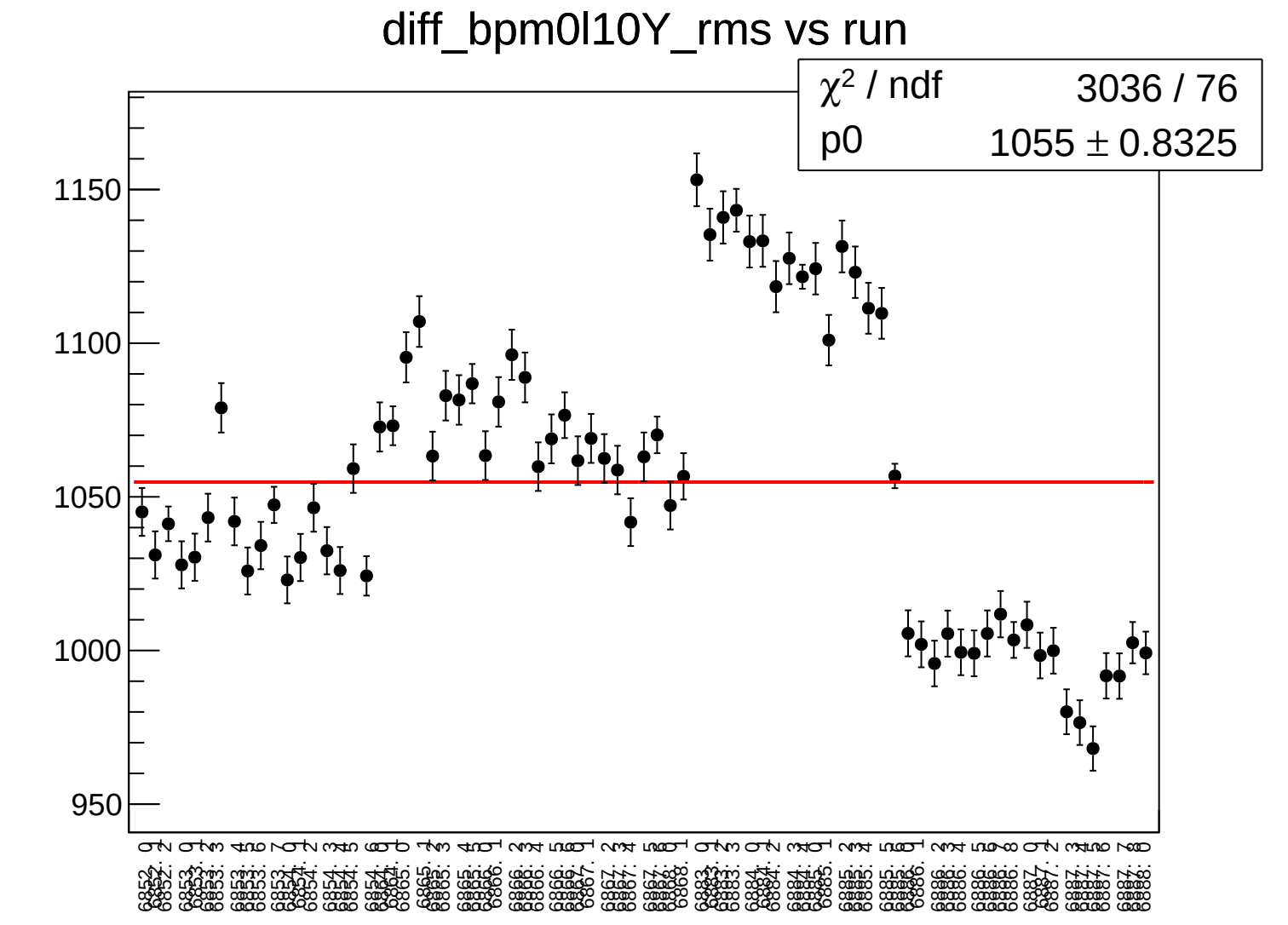

diff_bpm0l10X_mean vs run
χ² / ndf 83.29 / 76
p0 −4.777 ± 8.077
pull
Entries 77
Mean −72.82
Std Dev 142.2

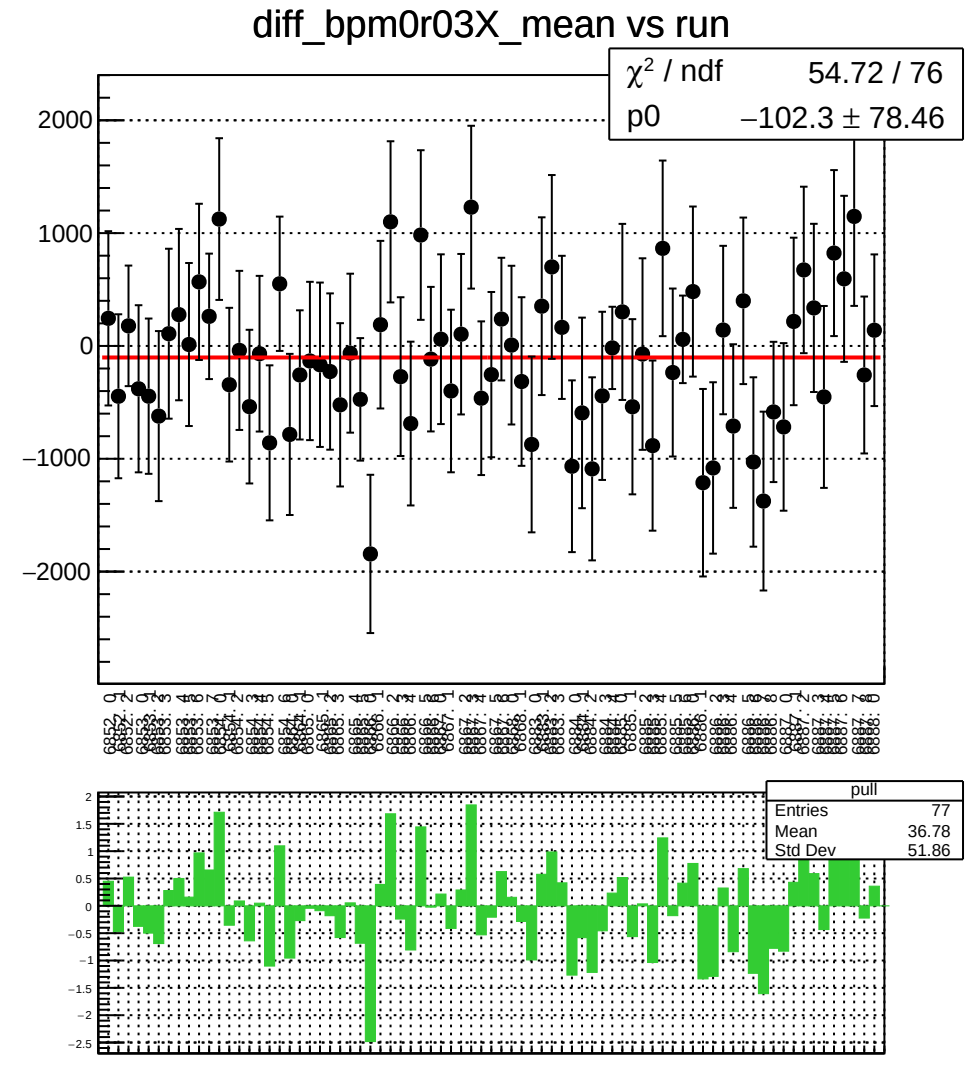

pull1D
Entries 77
Mean −0.01528
Std Dev 1.04

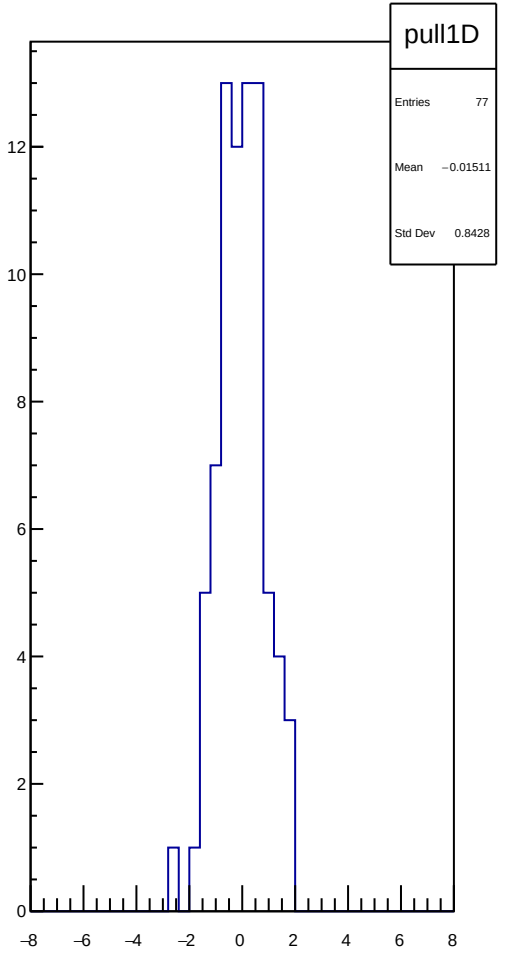

diff_bpm0l10X_rms vs run
χ² / ndf 9404 / 76
p0 7222 ± 5.711
8500
8000
7500
7000
6500
6000

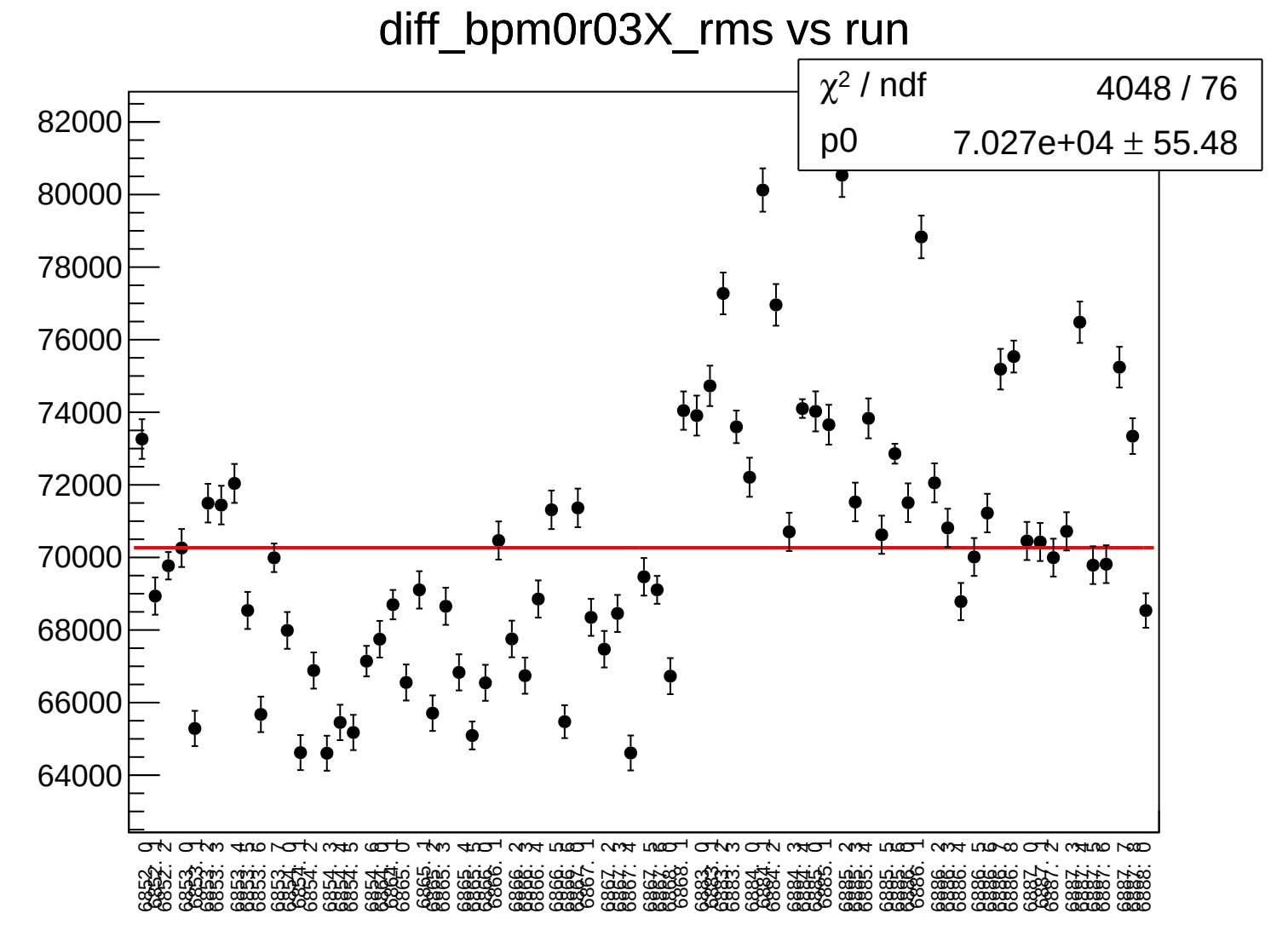

diff_bpm0l10Y_mean vs run
χ² / ndf 70.71 / 76
p0 0.4994 ± 1.177
pull
Entries 77
Mean −119.1
Std Dev 158

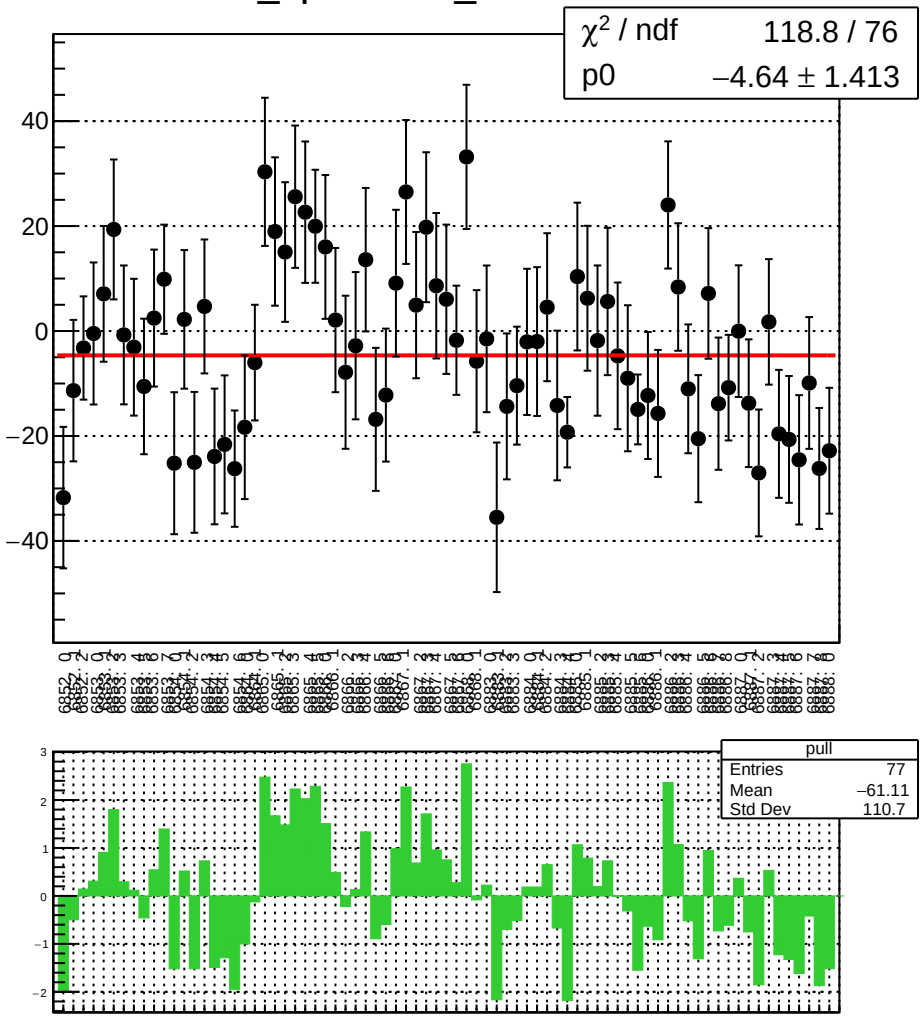

pull1D
Entries 77
Mean 0.01416
Std Dev 0.9582

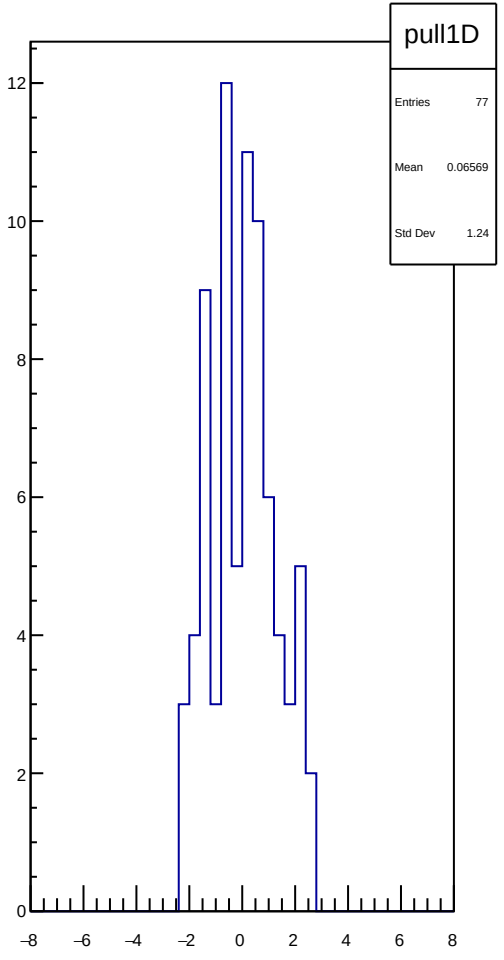

diff_bpm0l10Y_rms vs run
χ² / ndf 3036 / 76
p0 1055 ± 0.8325
1150
1100
1050
1000
950

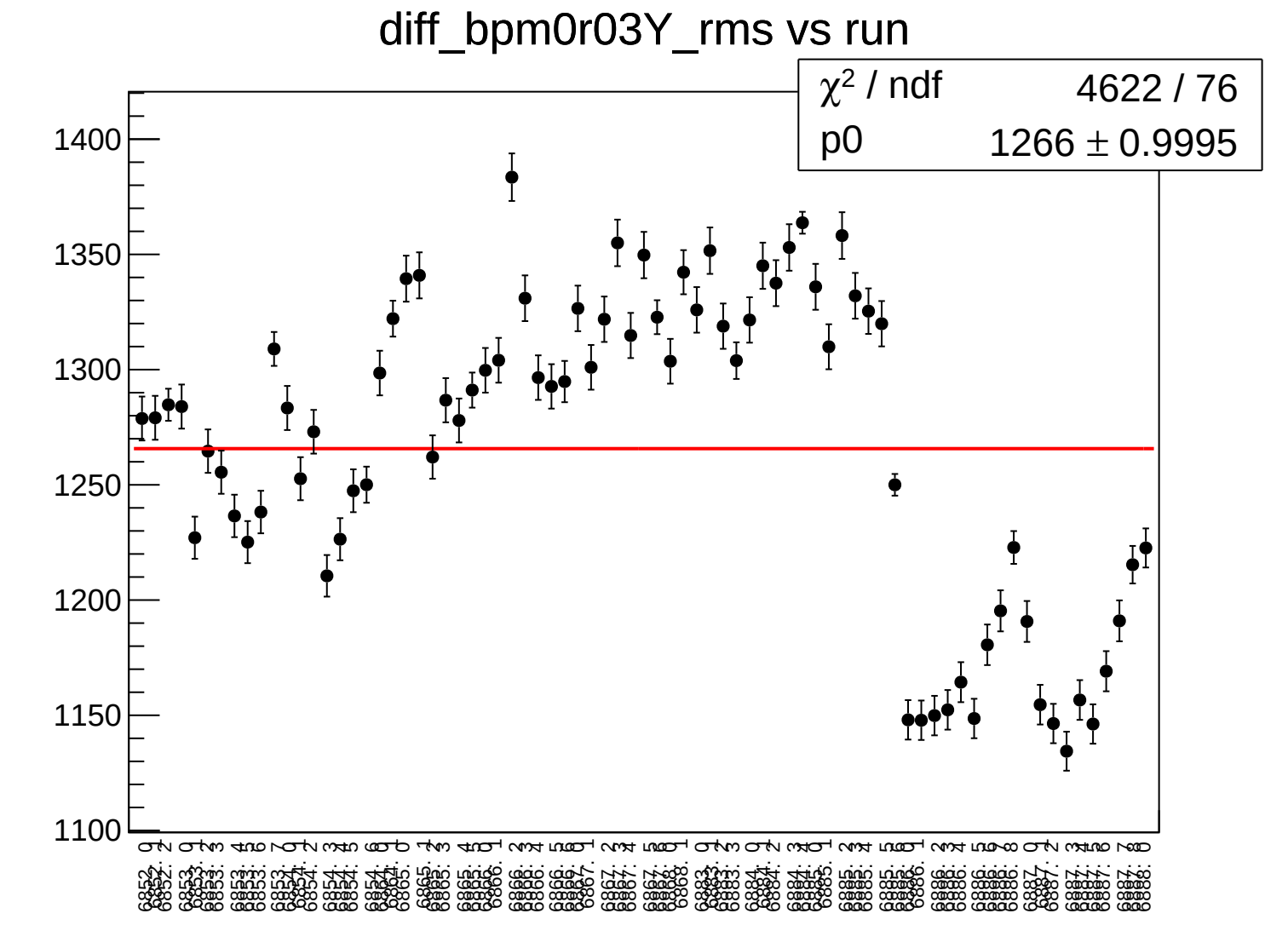

diff_bpm0r03X_mean vs run
χ² / ndf 54.72 / 76
p0 −102.3 ± 78.46
2000
1000
0
−1000
−2000
pull
Entries 77
Mean 36.78
Std Dev 51.86
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

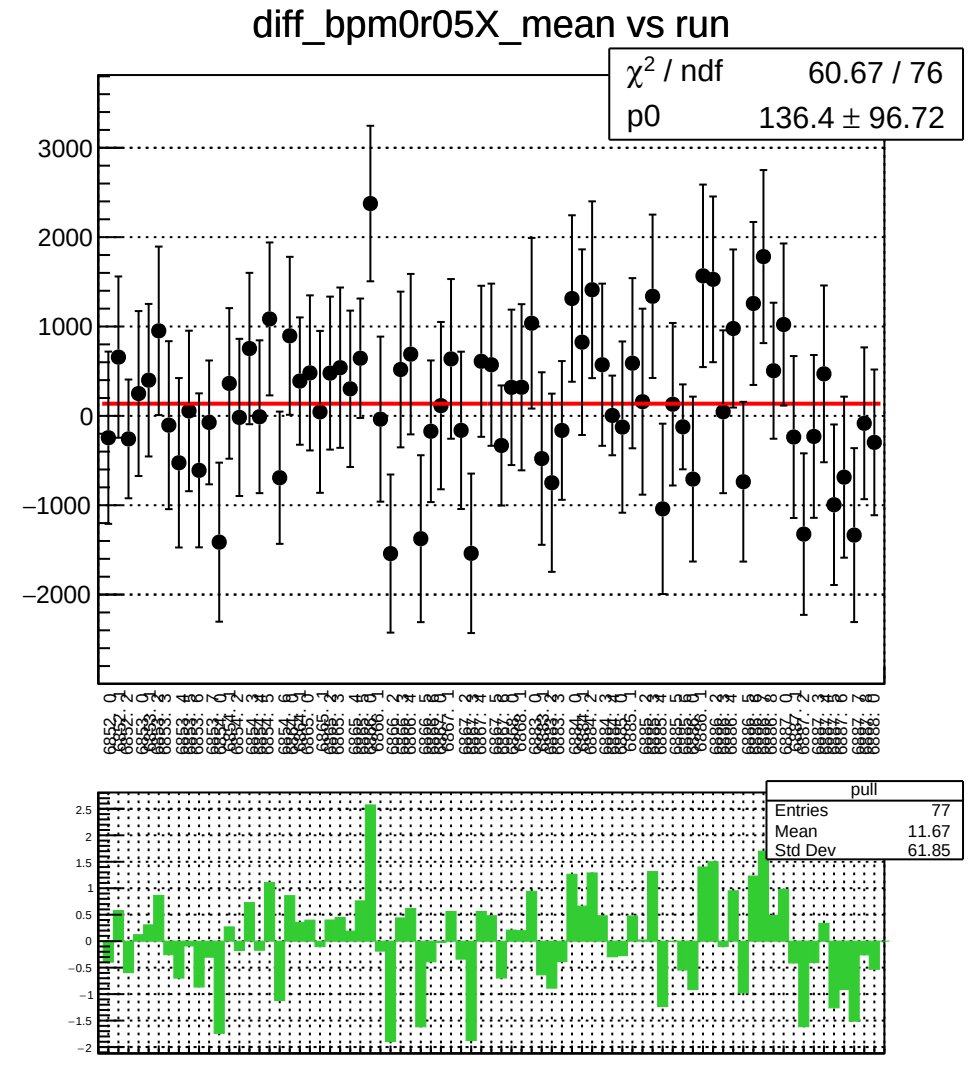

pull1D
Entries 77
Mean −0.01511
Std Dev 0.8428
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

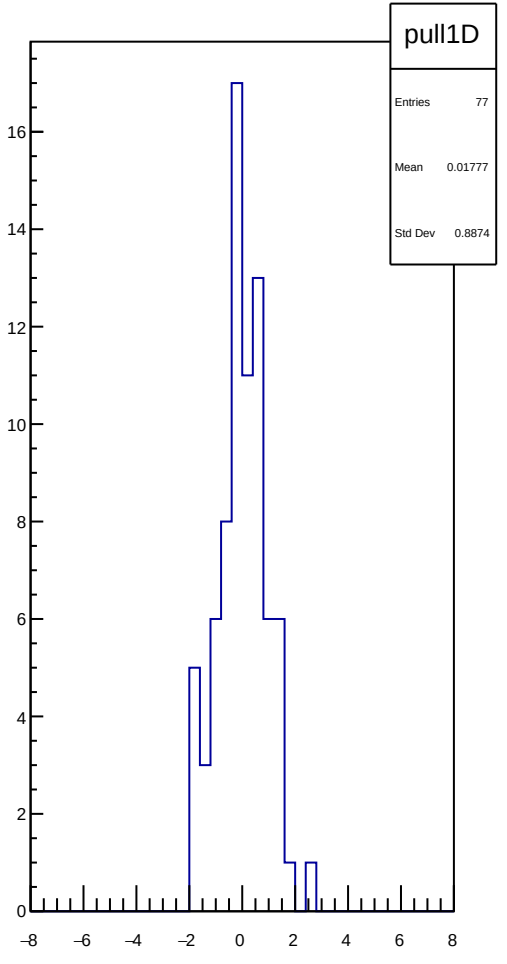

diff_bpm0r03X_rms vs run
χ² / ndf 4048 / 76
p0 7.027e+04 ± 55.48
82000
80000
78000
76000
74000
72000
70000
68000
66000
64000

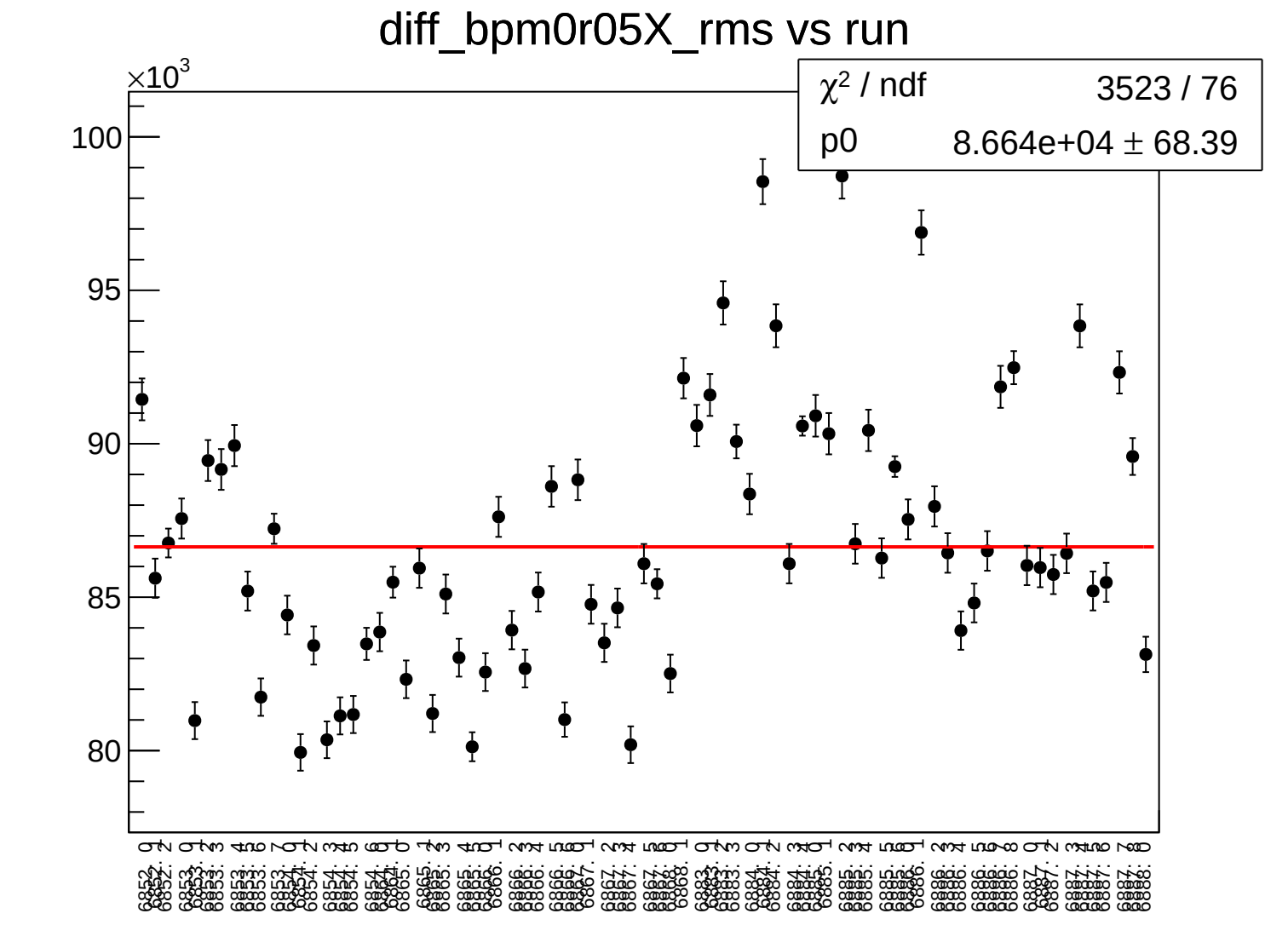

diff_bpm0r03Y_mean vs run
χ² / ndf 118.8 / 76
p0 −4.64 ± 1.413
pull
Entries 77
Mean −61.11
Std Dev 110.7

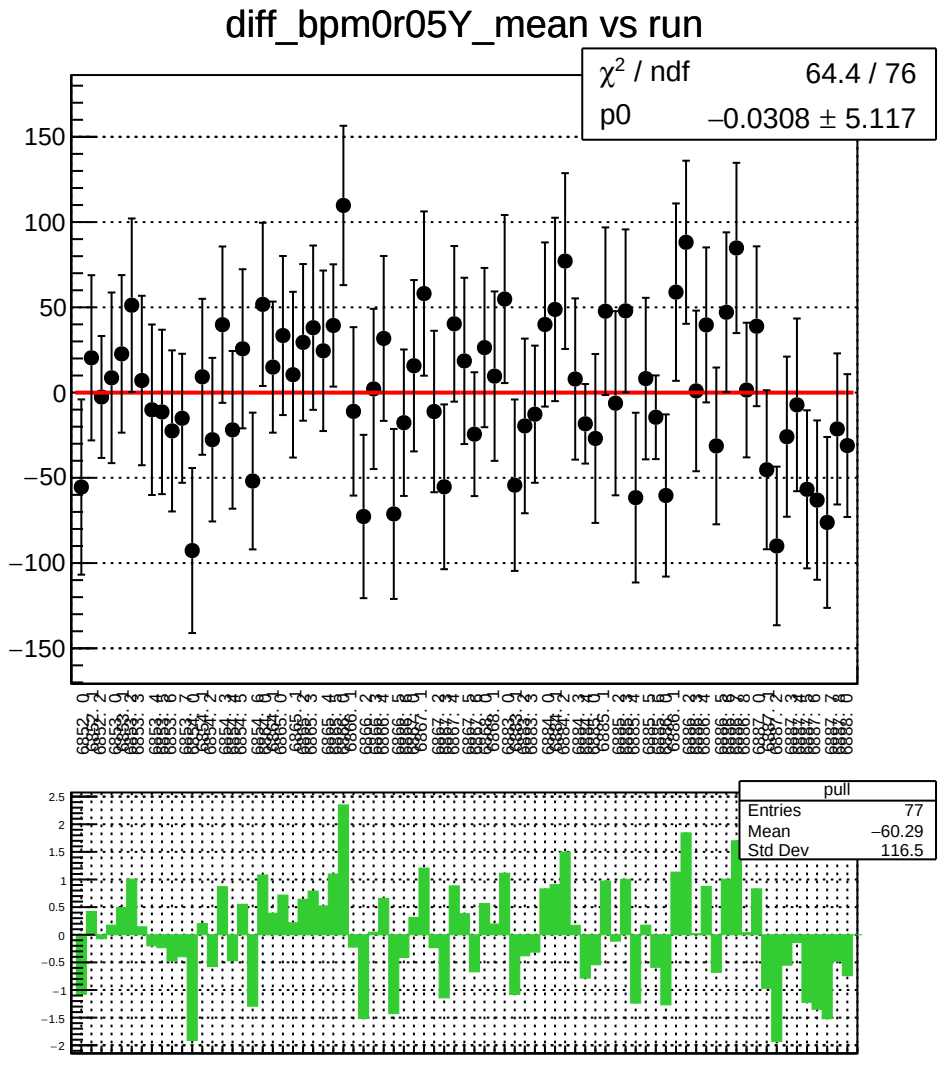

pull1D
Entries 77
Mean 0.06569
Std Dev 1.24

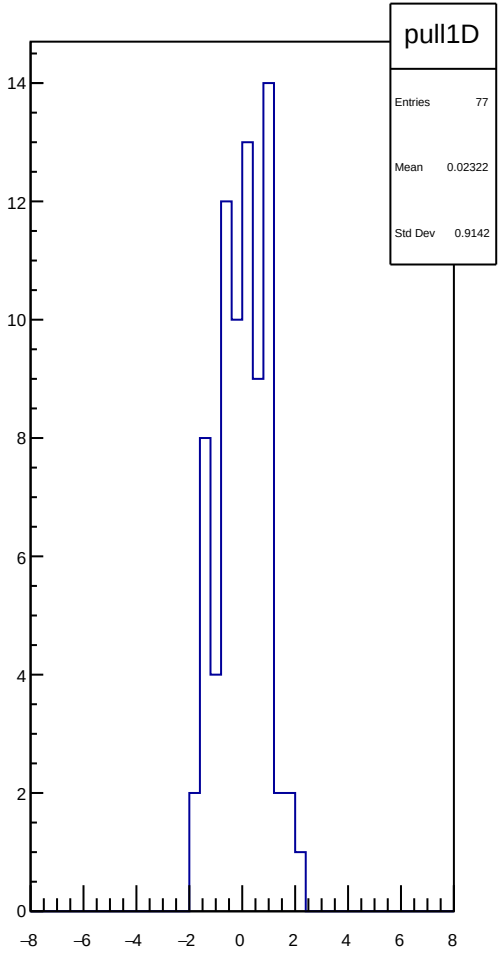

diff_bpm0r03Y_rms vs run
χ² / ndf 4622 / 76
p0 1266 ± 0.9995
1400
1350
1300
1250
1200
1150
1100

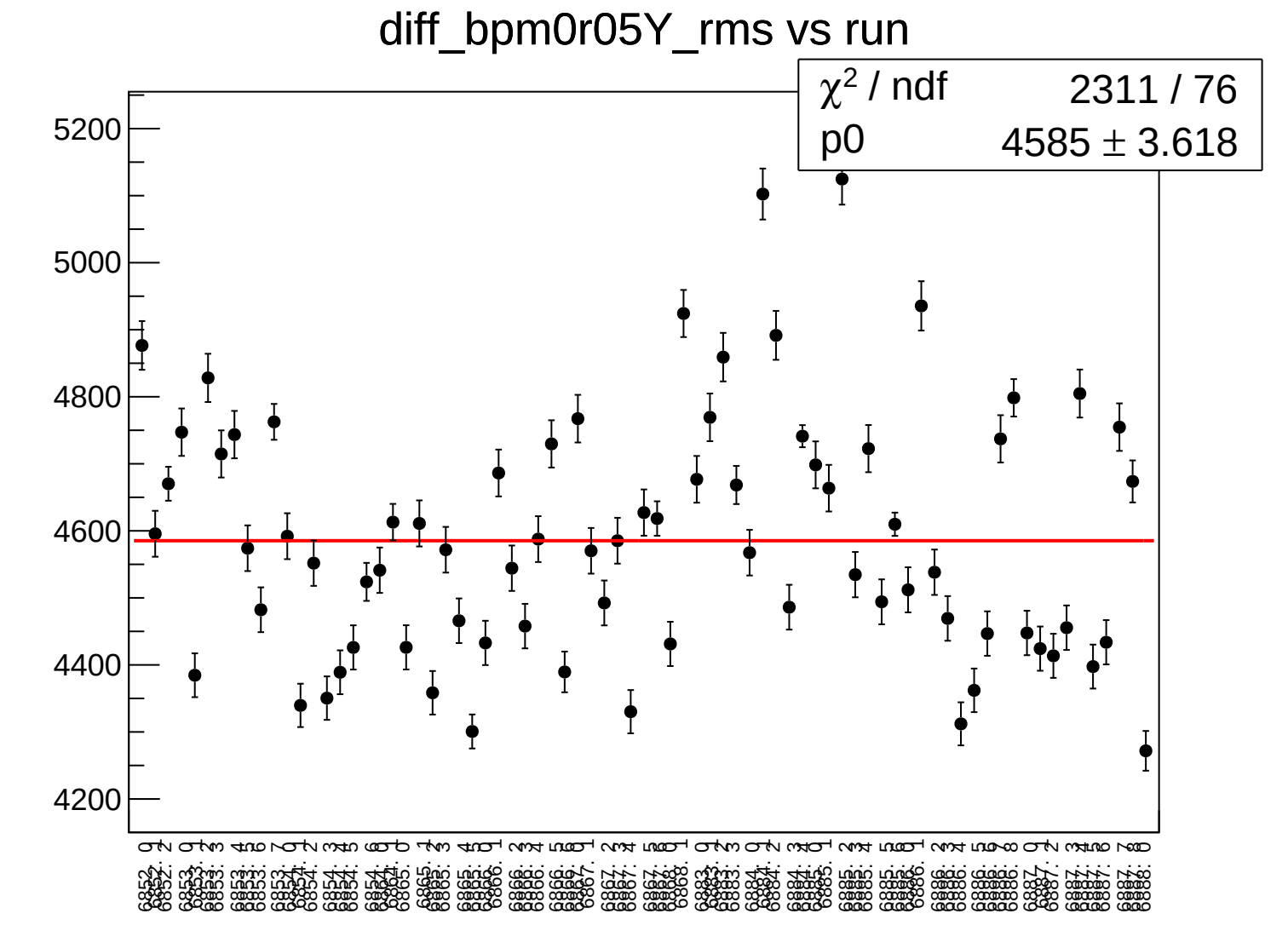

diff_bpm0r05X_mean vs run
χ² / ndf 60.67 / 76
p0 136.4 ± 96.72
3000
2000
1000
0
−1000
−2000
pull
Entries 77
Mean 11.67
Std Dev 61.85
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

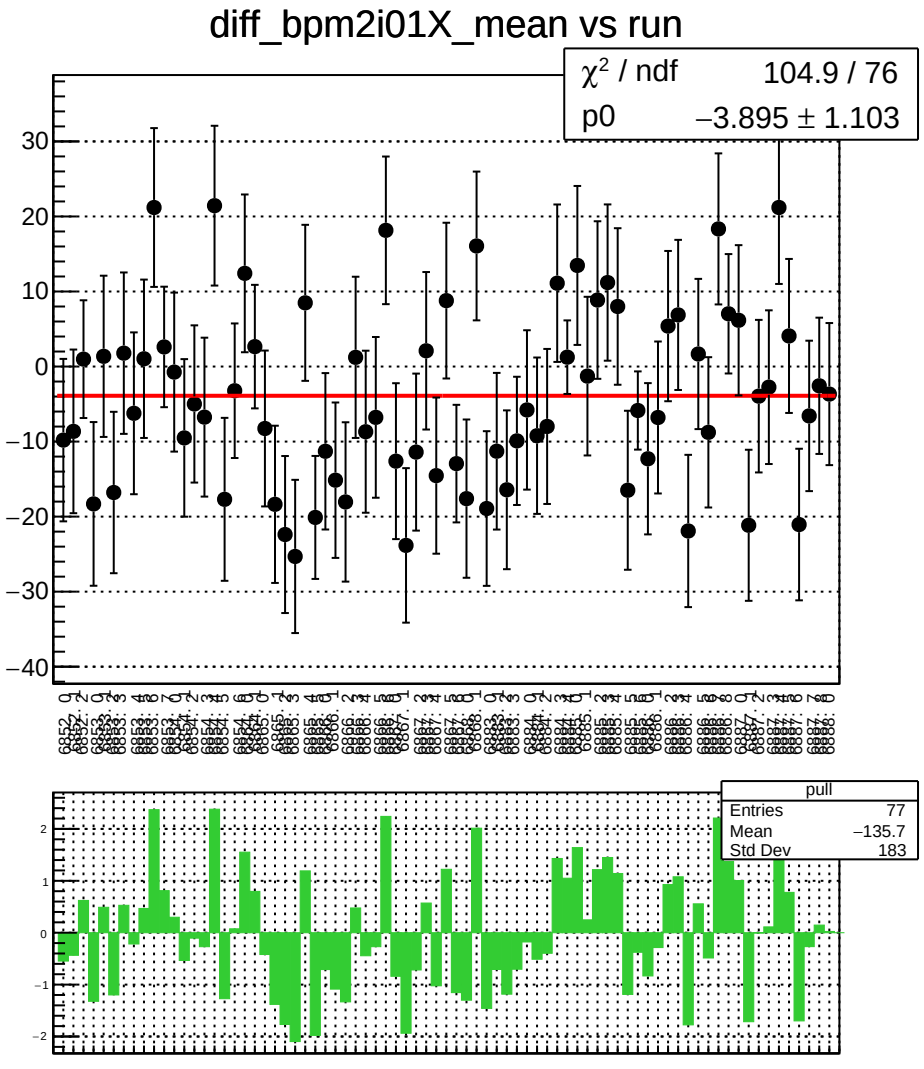

pull1D
Entries 77
Mean 0.01777
Std Dev 0.8874
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

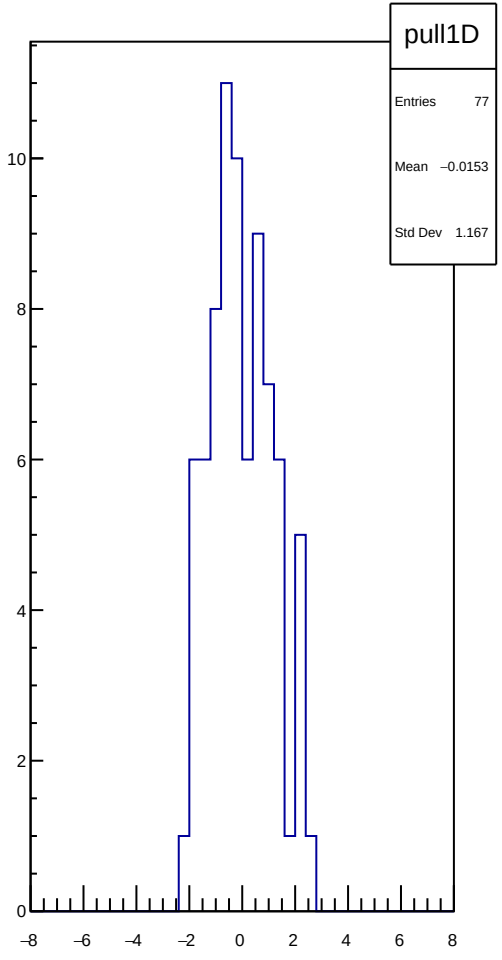

diff_bpm0r05X_rms vs run
×10^3
χ² / ndf 3523 / 76
p0 8.664e+04 ± 68.39
100
95
90
85
80

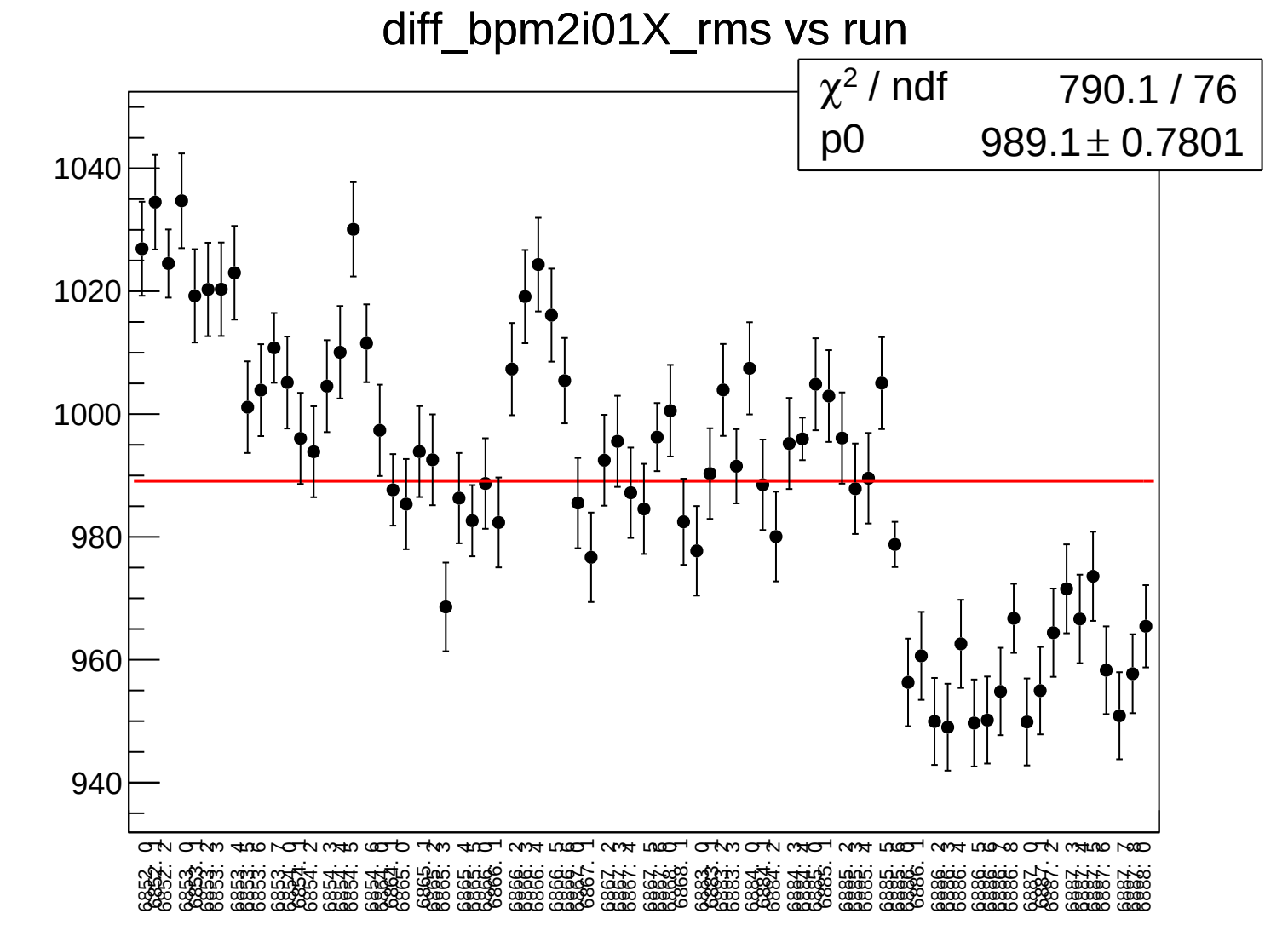

diff_bpm0r05Y_mean vs run
χ² / ndf 64.4 / 76
p0 −0.0308 ± 5.117
pull
Entries 77
Mean −60.29
Std Dev 116.5

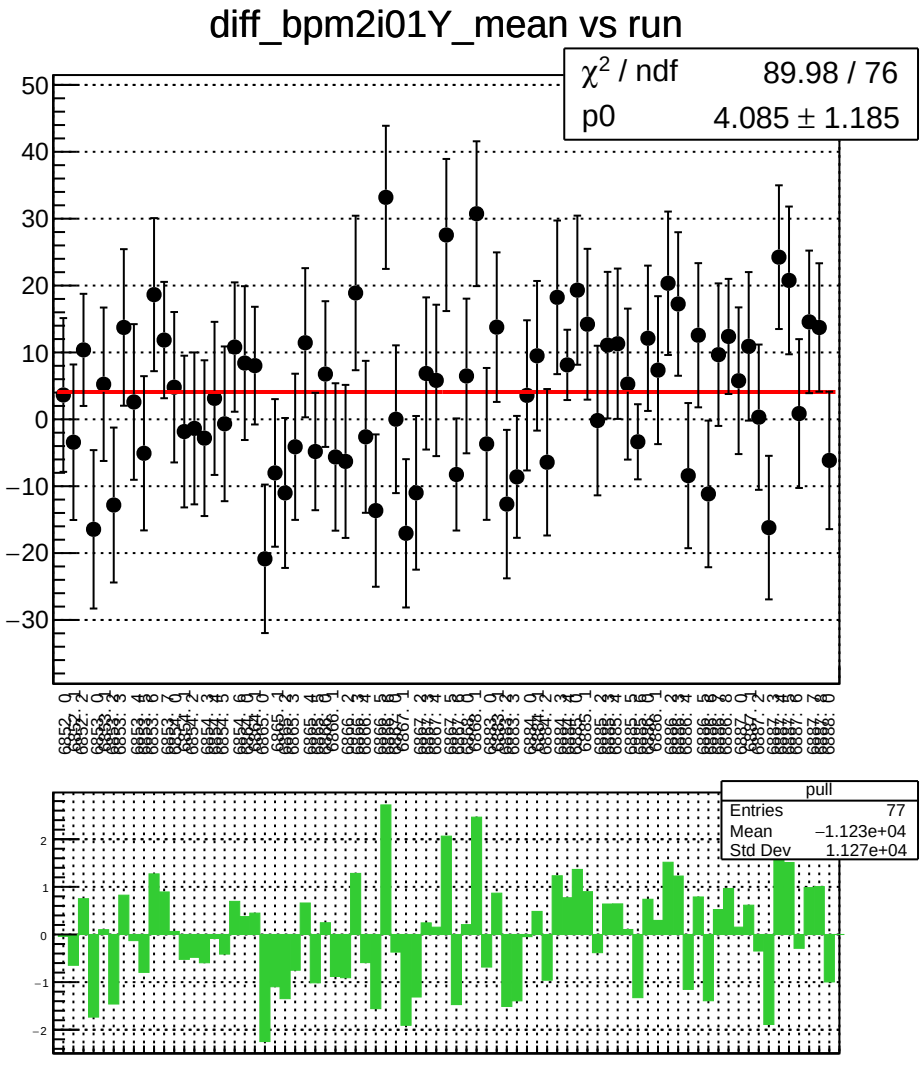

pull1D
Entries 77
Mean 0.02322
Std Dev 0.9142

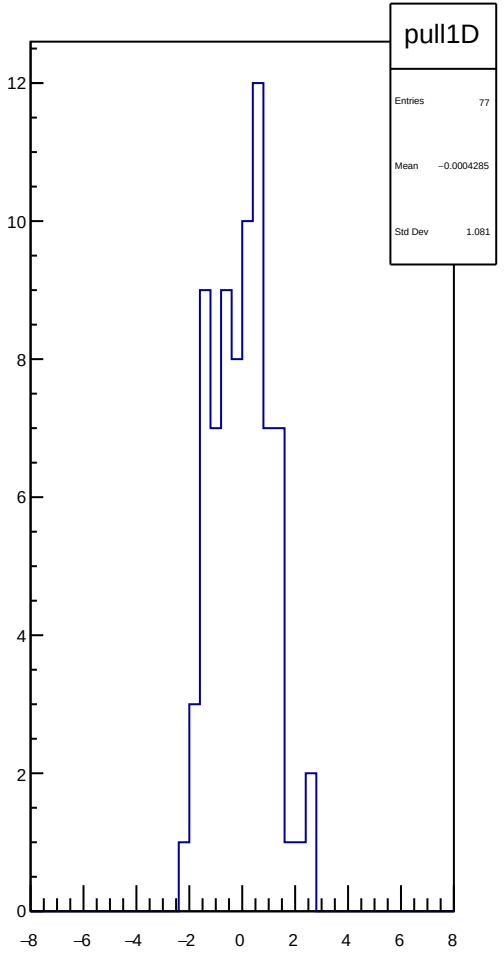

diff_bpm0r05Y_rms vs run
χ² / ndf 2311 / 76
p0 4585 ± 3.618
5200
5000
4800
4600
4400
4200

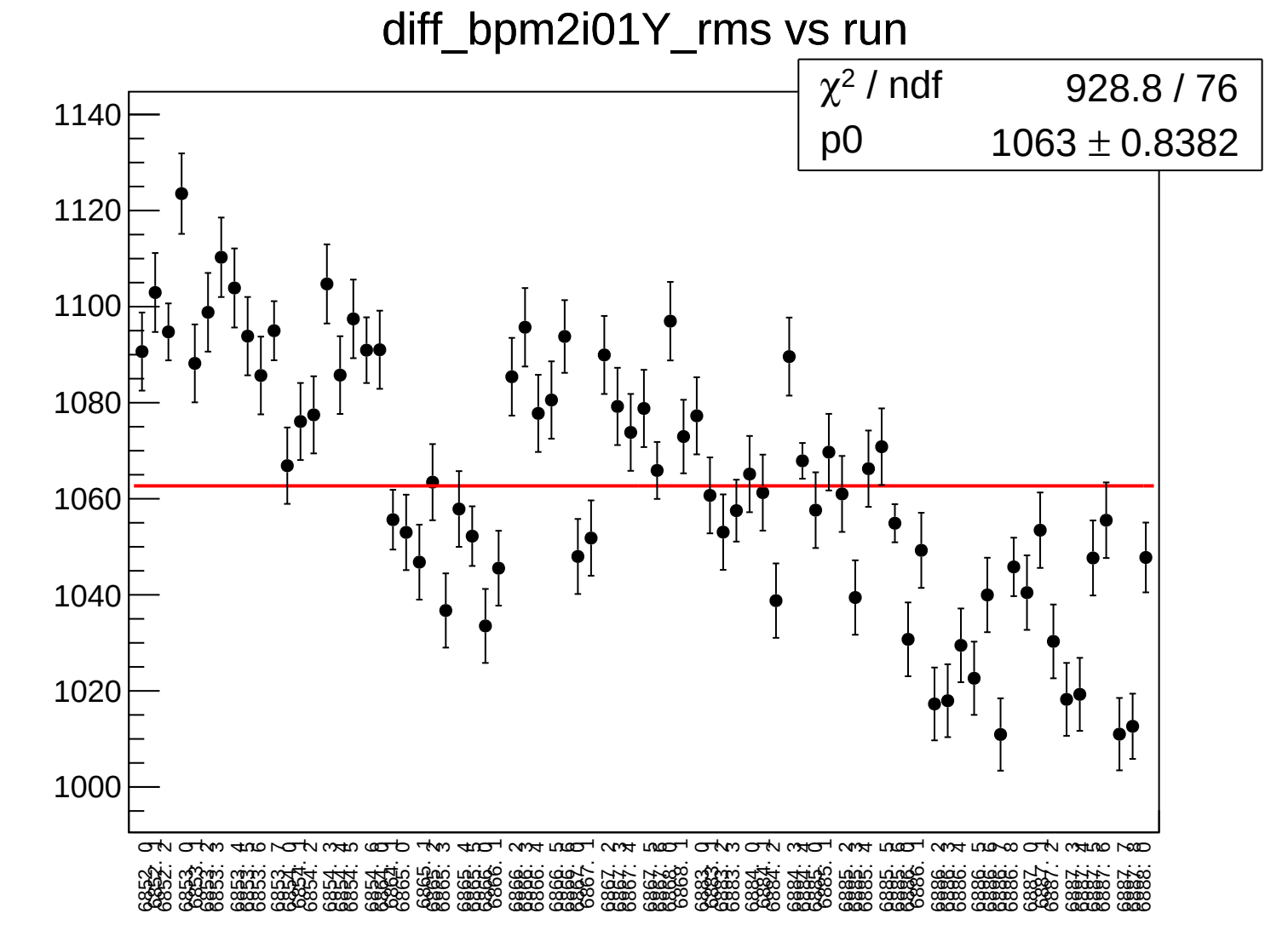

diff_bpm2i01X_mean vs run
χ² / ndf 104.9 / 76
p0 −3.895 ± 1.103
pull
Entries 77
Mean −135.7
Std Dev 183

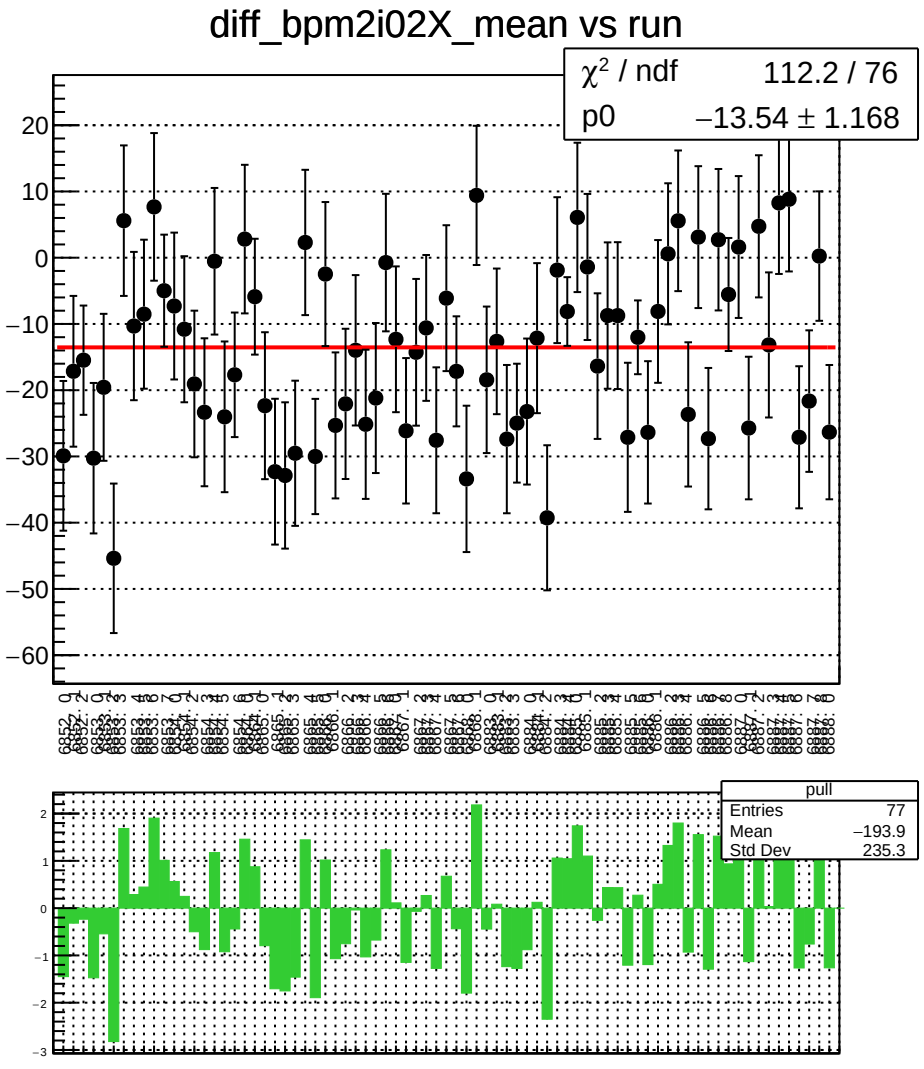

pull1D
Entries 77
Mean −0.0153
Std Dev 1.167

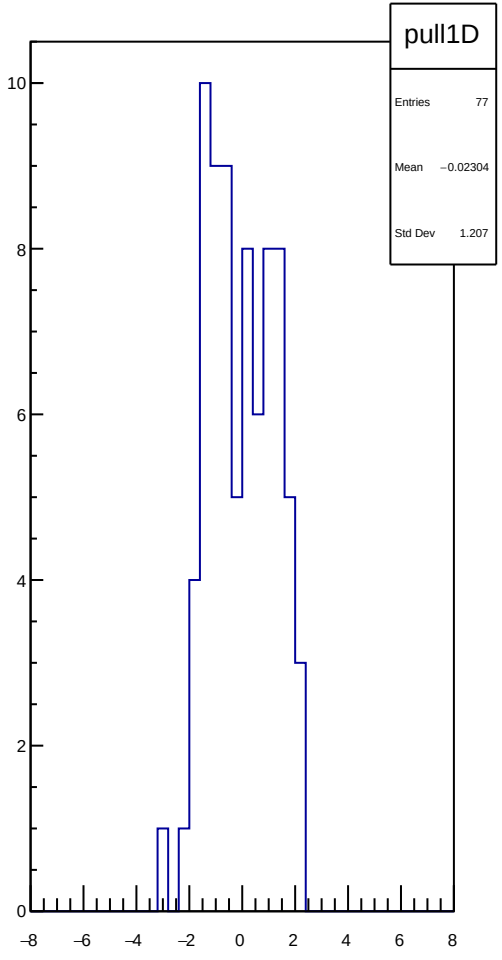

diff_bpm2i01X_rms vs run
χ² / ndf 790.1 / 76
p0 989.1 ± 0.7801
1040
1020
1000
980
960
940

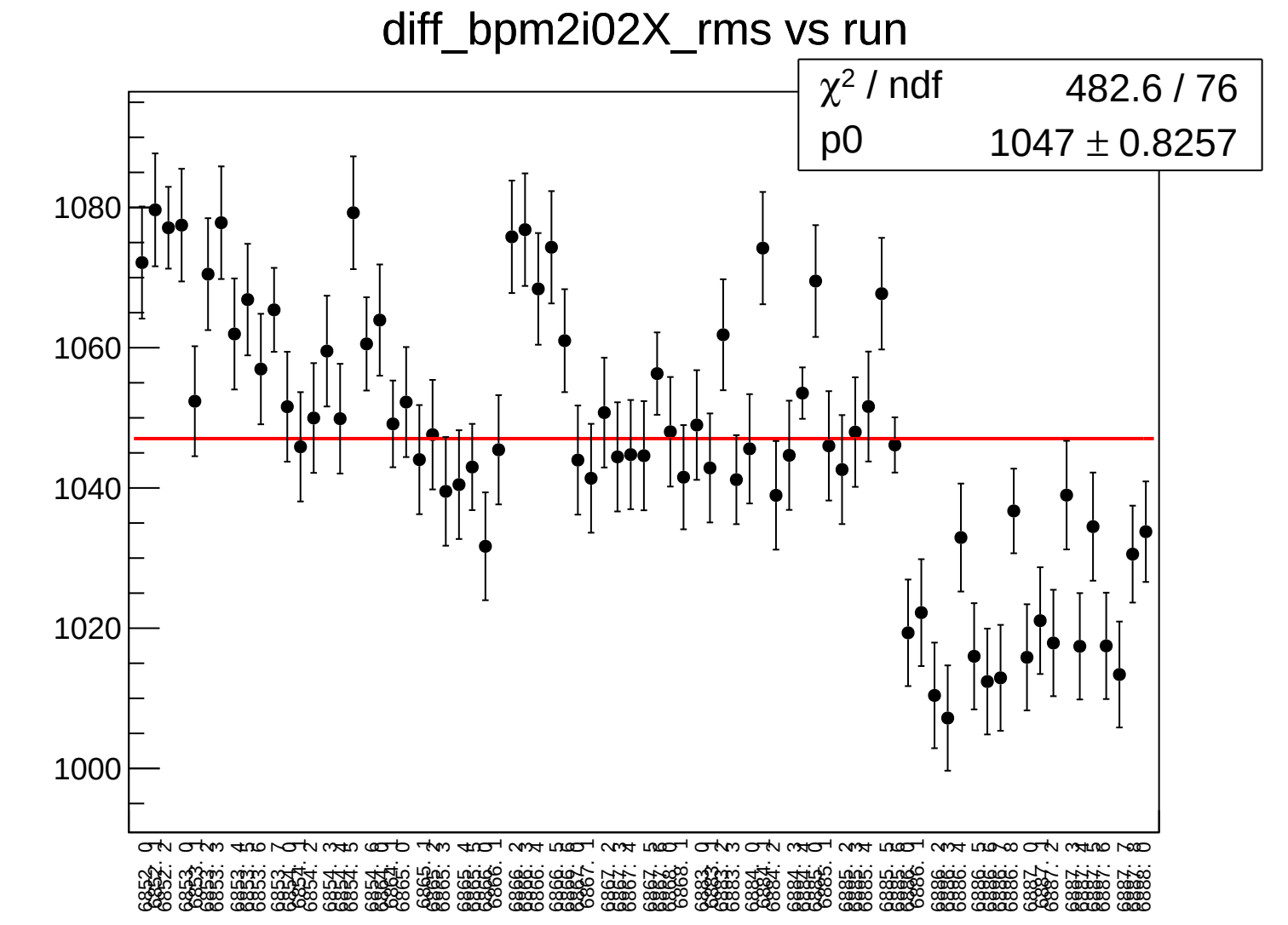

diff_bpm2i01Y_mean vs run
χ² / ndf 89.98 / 76
p0 4.085 ± 1.185
pull
Entries 77
Mean −1.123e+04
Std Dev 1.127e+04

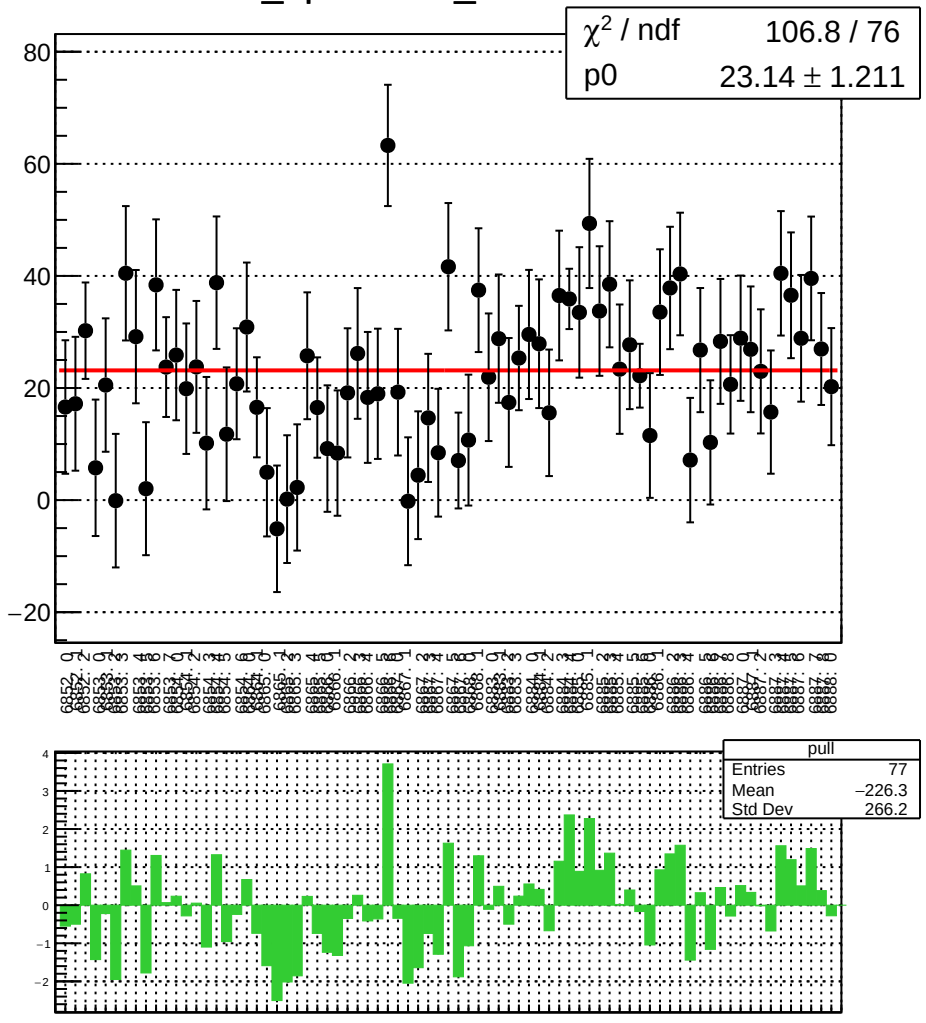

pull1D
Entries 77
Mean −0.0004285
Std Dev 1.081

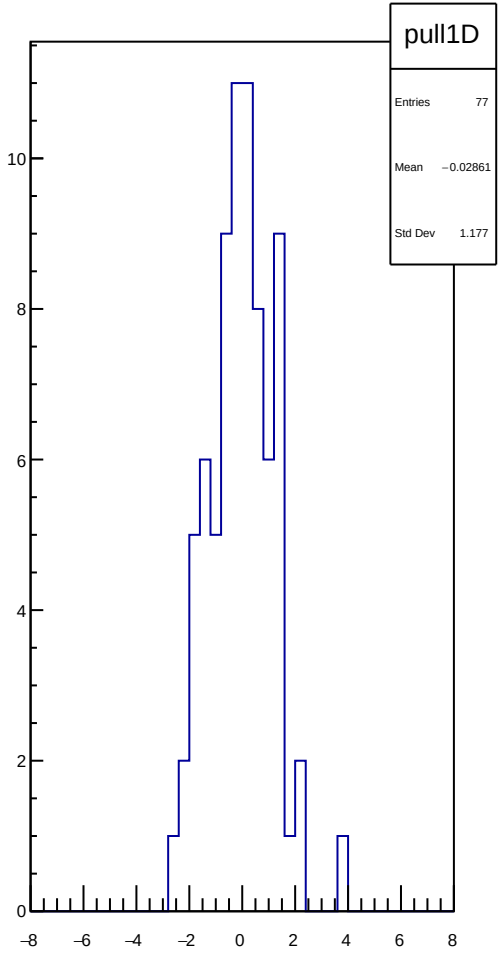

diff_bpm2i01Y_rms vs run
χ² / ndf 928.8 / 76
p0 1063 ± 0.8382
1140
1120
1100
1080
1060
1040
1020
1000

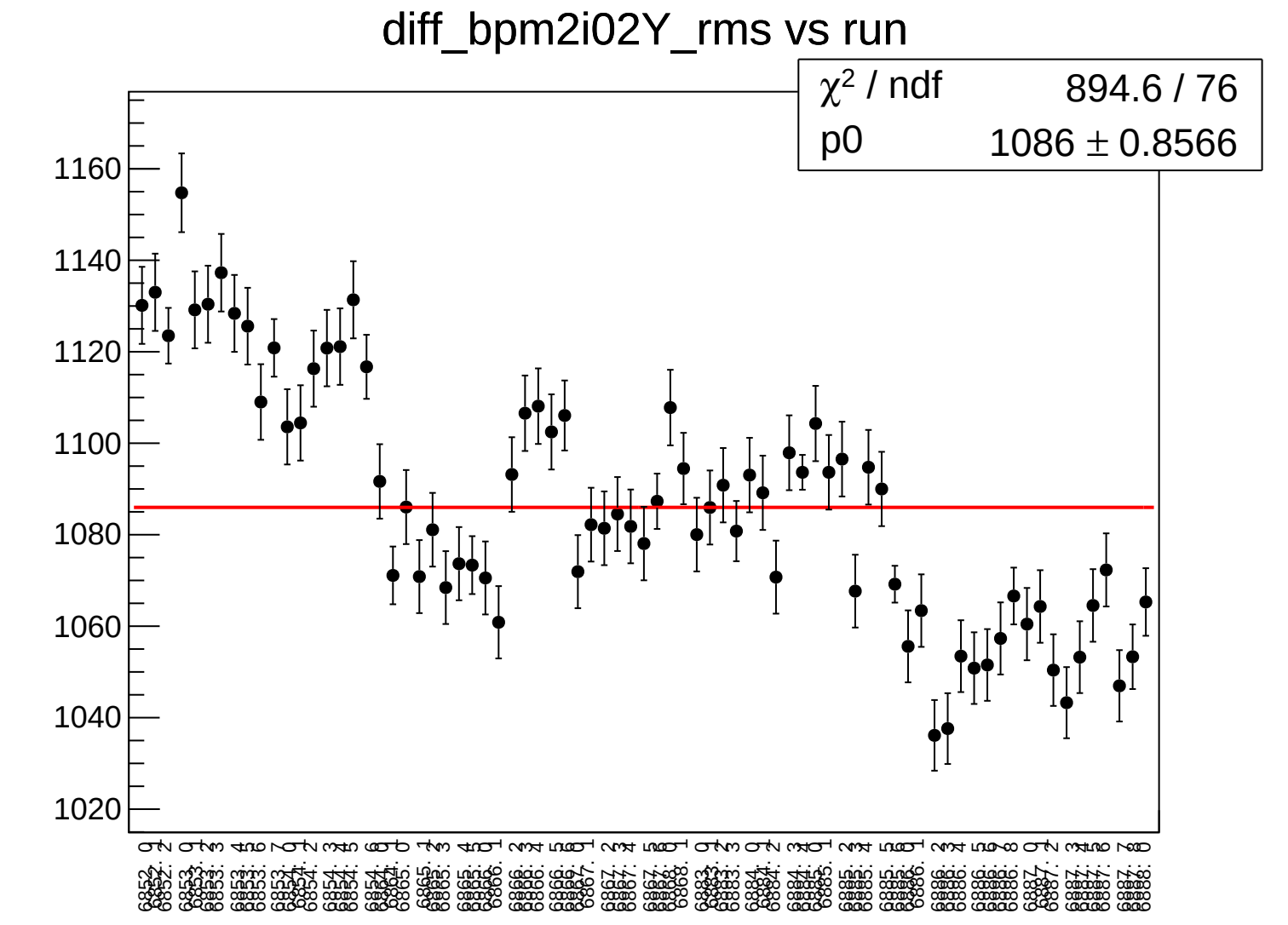

diff_bpm2i02X_mean vs run
χ² / ndf 112.2 / 76
p0 −13.54 ± 1.168
pull
Entries 77
Mean −193.9
Std Dev 235.3

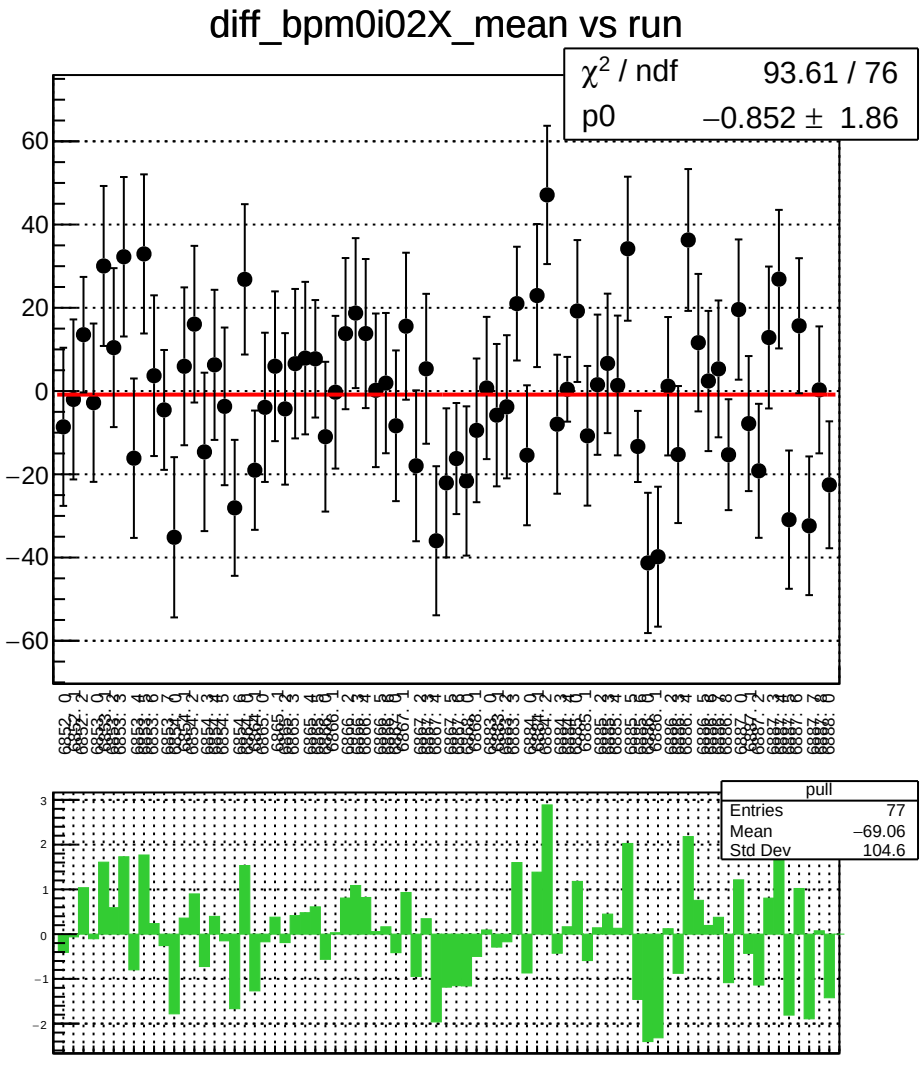

pull1D
Entries 77
Mean −0.02304
Std Dev 1.207

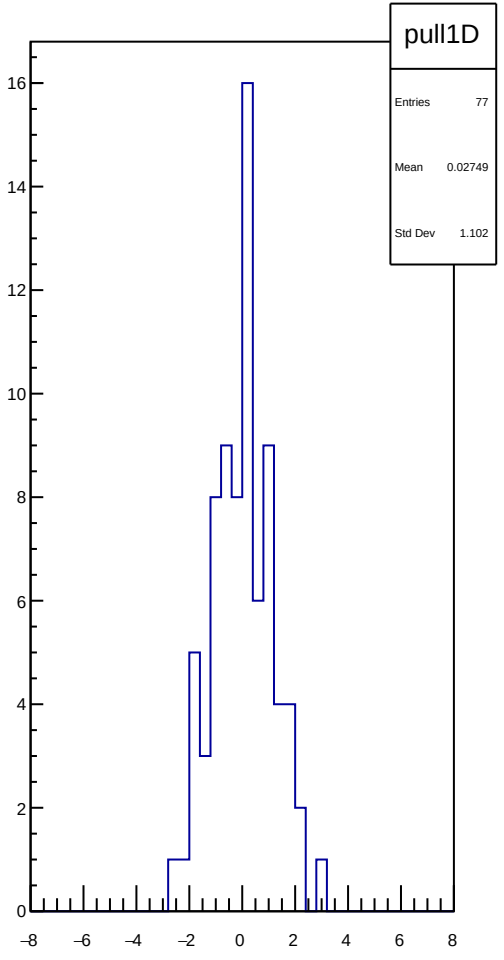

diff_bpm2i02X_rms vs run
χ² / ndf 482.6 / 76
p0 1047 ± 0.8257
1080
1060
1040
1020
1000

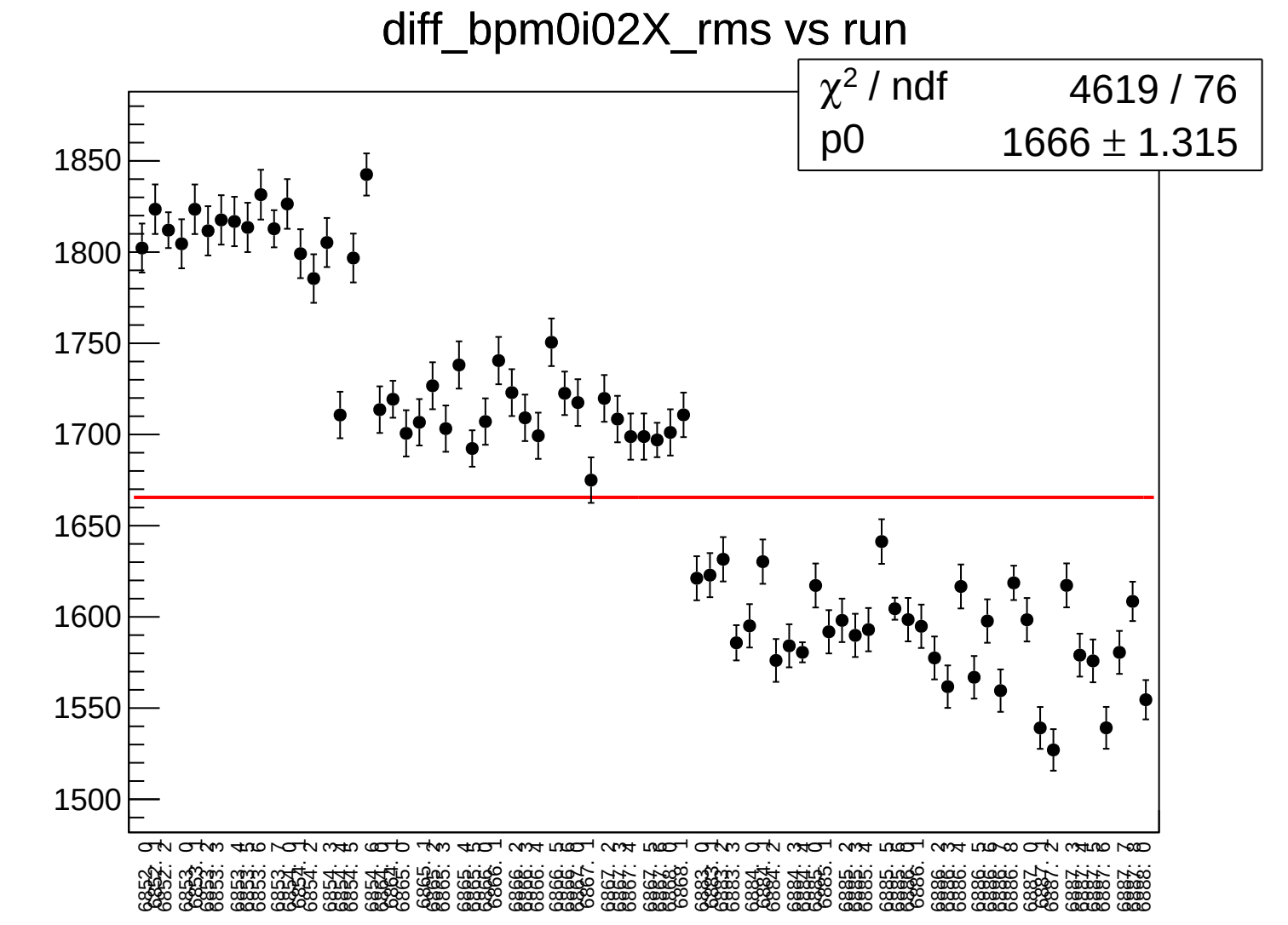

diff_bpm2i02Y_mean vs run
χ² / ndf 106.8 / 76
p0 23.14 ± 1.211
pull
Entries 77
Mean −226.3
Std Dev 266.2

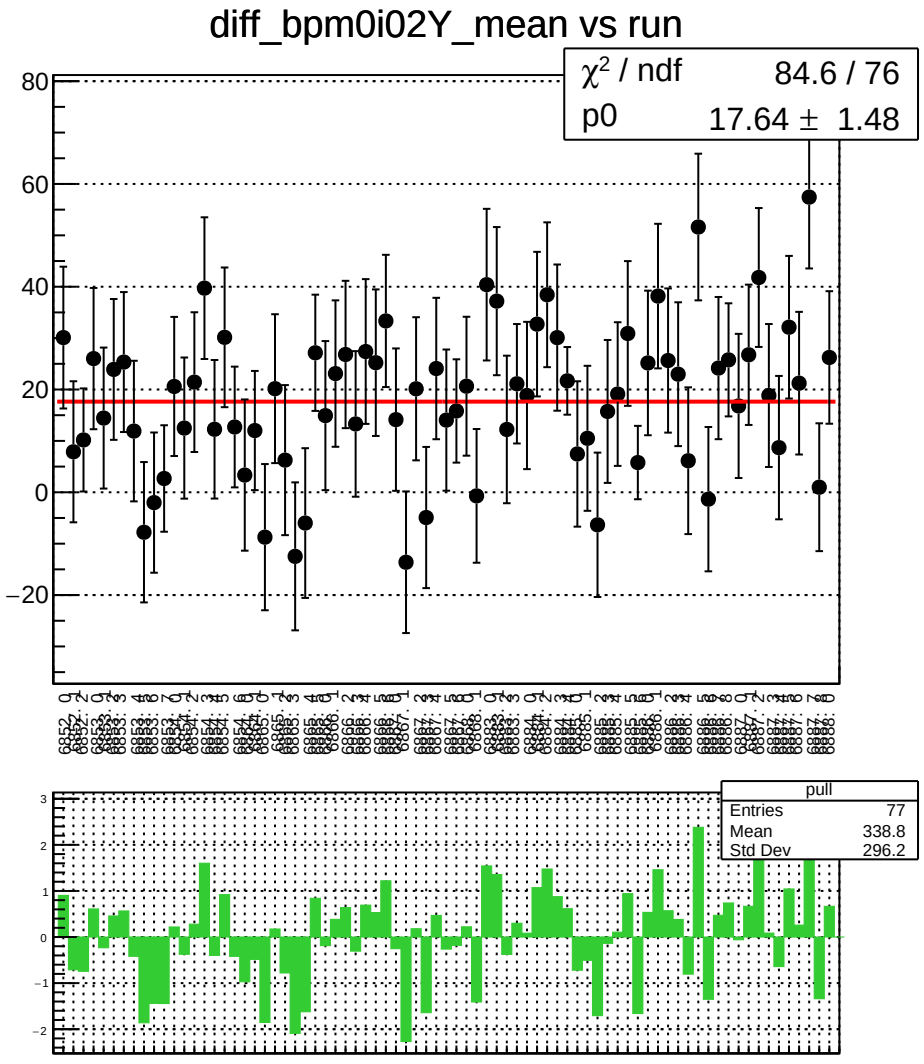

pull1D
Entries 77
Mean −0.02861
Std Dev 1.177

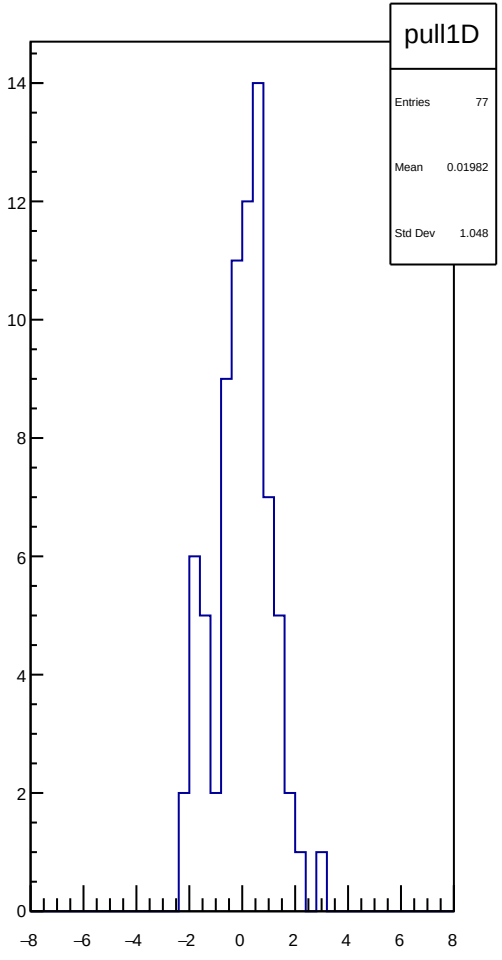

diff_bpm2i02Y_rms vs run
χ² / ndf 894.6 / 76
p0 1086 ± 0.8566
1160
1140
1120
1100
1080
1060
1040
1020

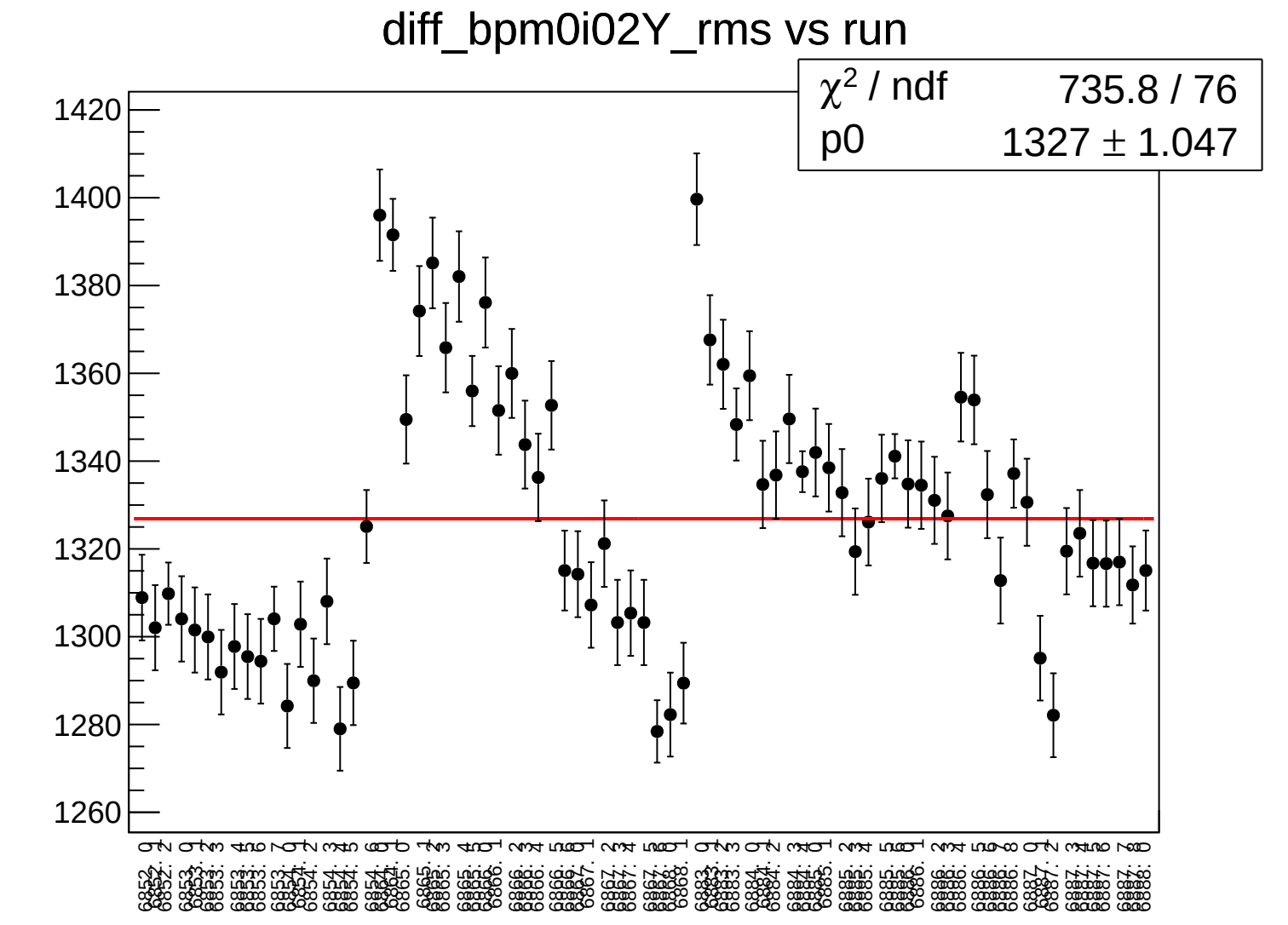

diff_bpm0i02X_mean vs run
χ^2 / ndf 93.61 / 76
p0 −0.852 ± 1.86
pull
Entries 77
Mean −69.06
Std Dev 104.6

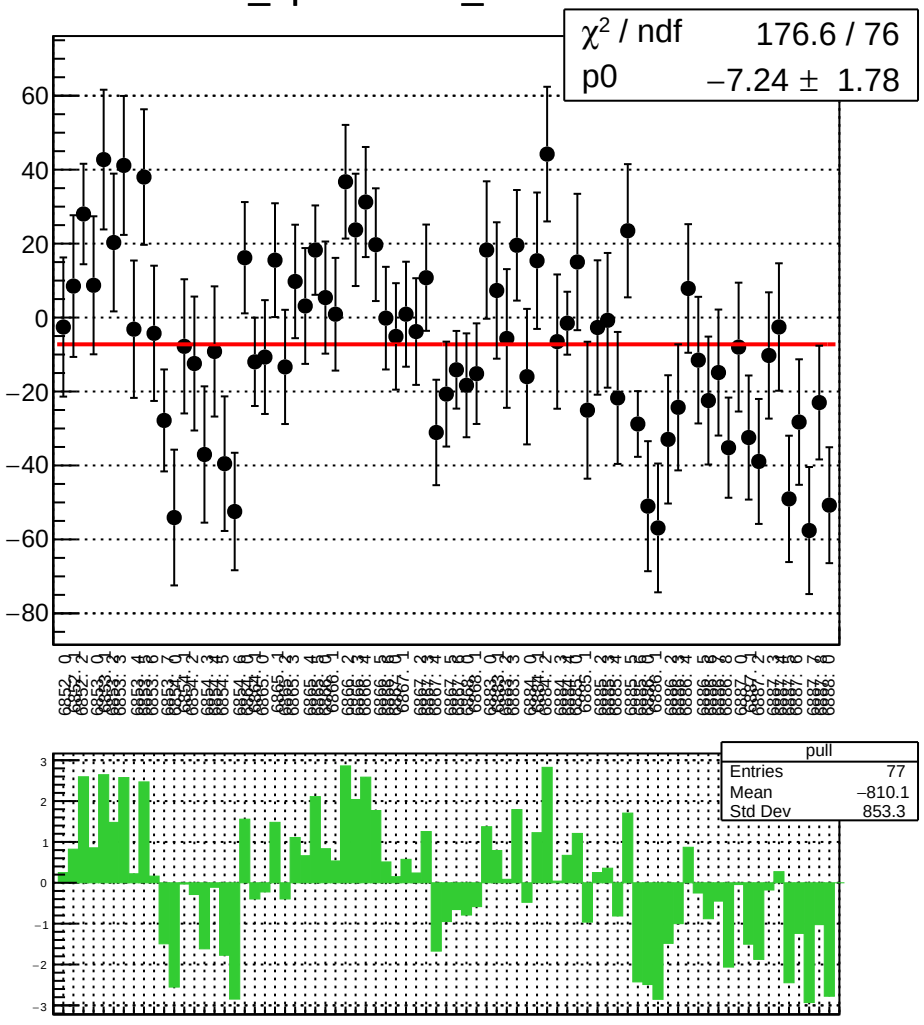

pull1D
Entries 77
Mean 0.02749
Std Dev 1.102

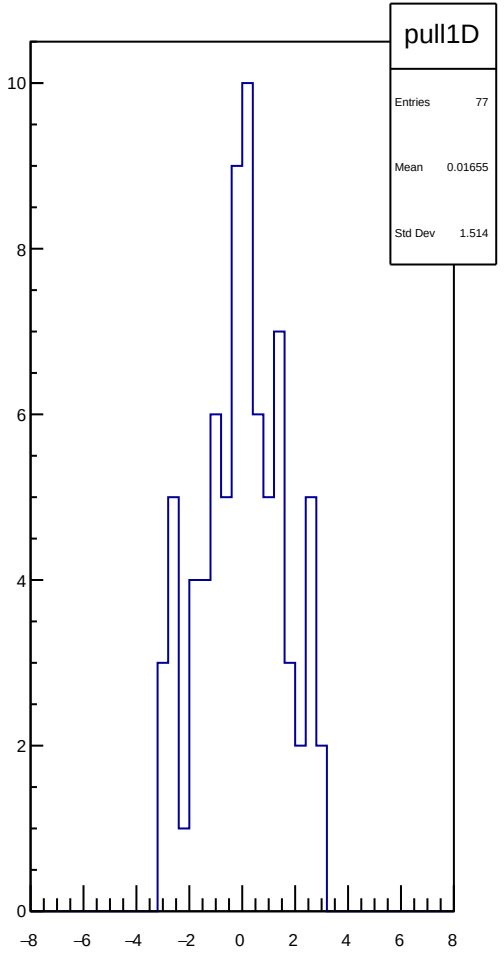

diff_bpm0i02X_rms vs run
χ² / ndf 4619 / 76
p0 1666 ± 1.315
1850
1800
1750
1700
1650
1600
1550
1500

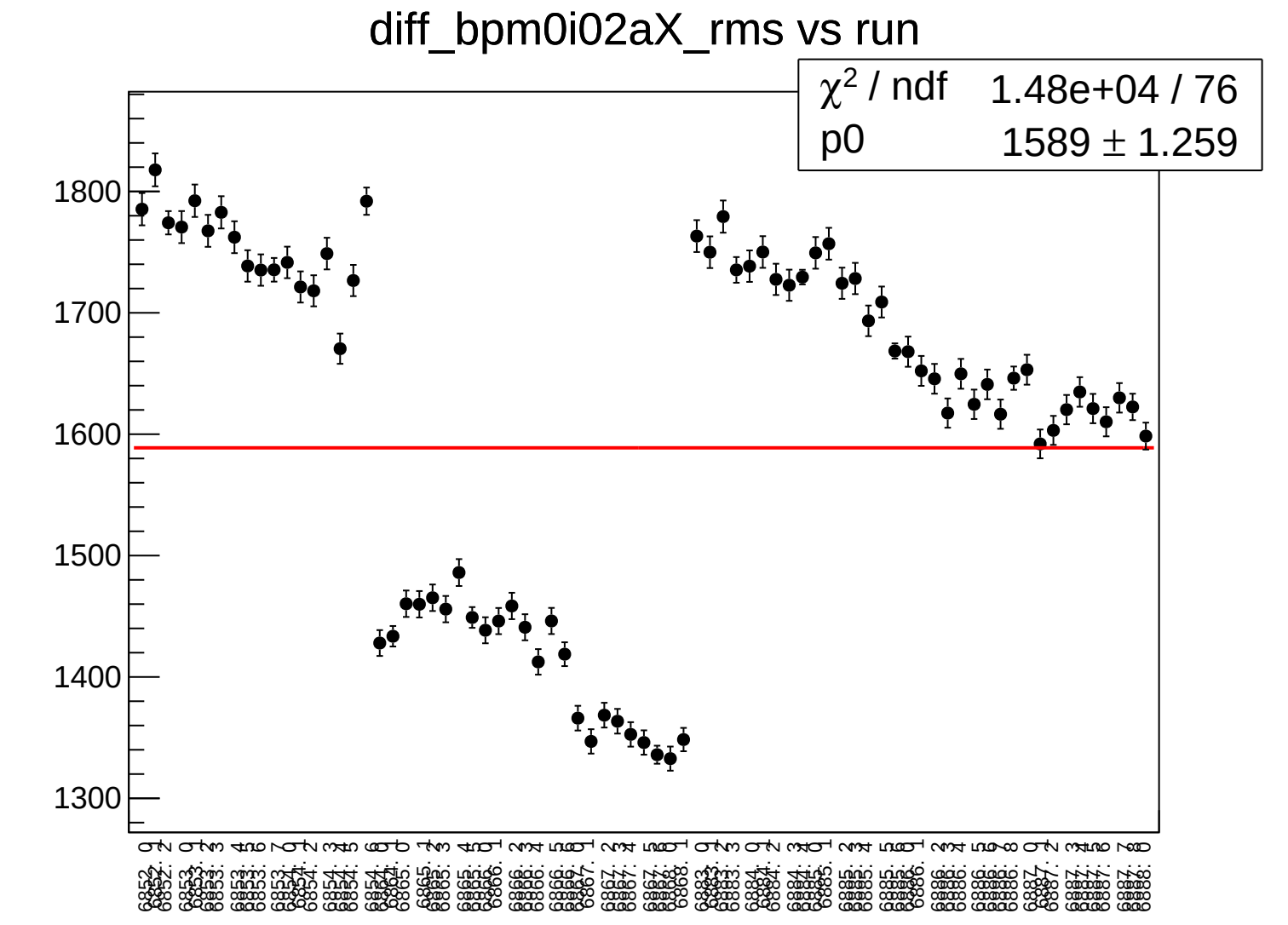

diff_bpm0i02Y_mean vs run
χ² / ndf 84.6 / 76
p0 17.64 ± 1.48
pull
Entries 77
Mean 338.8
Std Dev 296.2

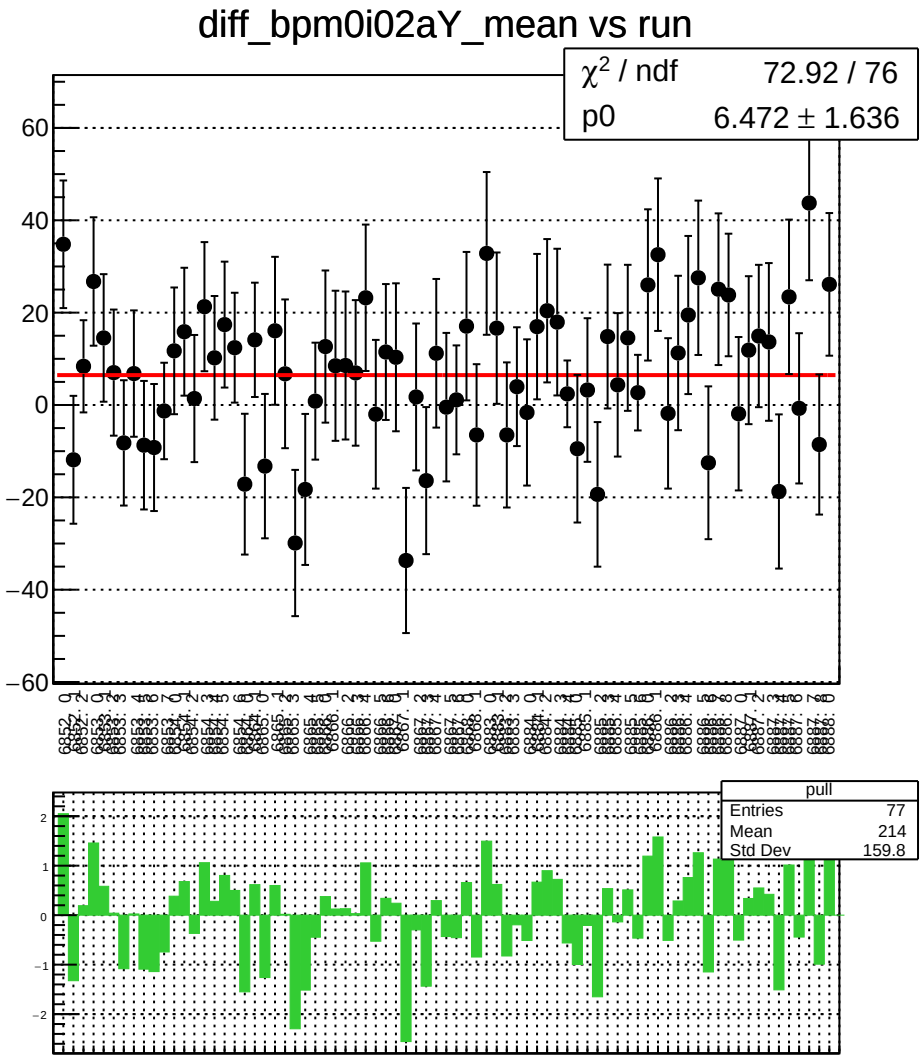

pull1D
Entries 77
Mean 0.01982
Std Dev 1.048

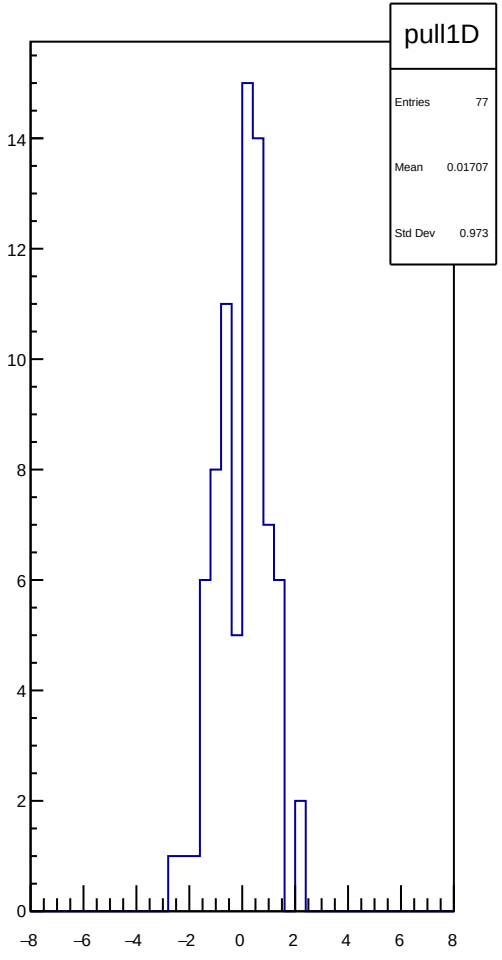

diff_bpm0i02Y_rms vs run
χ² / ndf 735.8 / 76
p0 1327 ± 1.047
1420
1400
1380
1360
1340
1320
1300
1280
1260

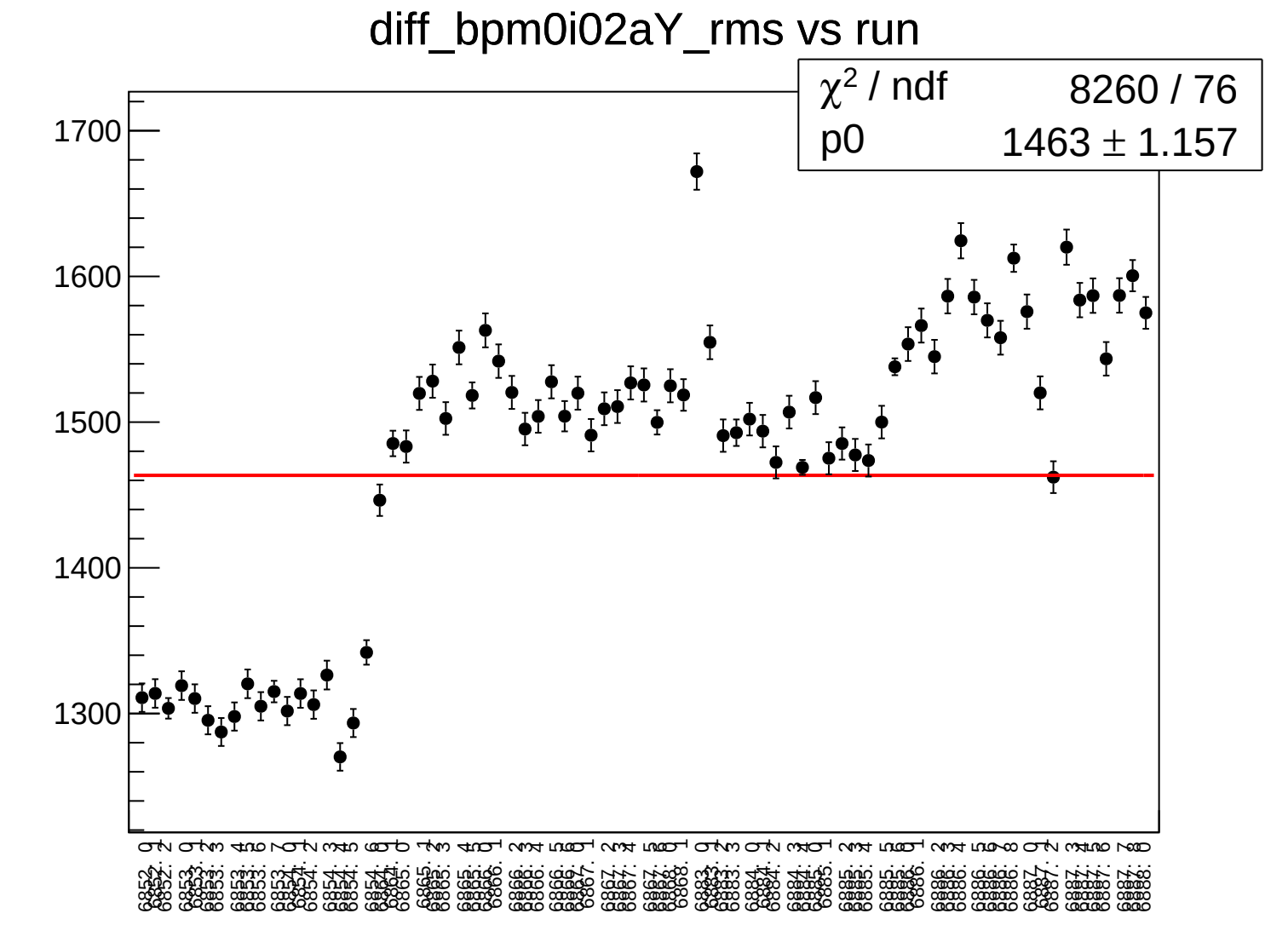

diff_bpm0i02aX_mean vs run
χ² / ndf 176.6 / 76
p0 −7.24 ± 1.78
pull
Entries 77
Mean −810.1
Std Dev 853.3

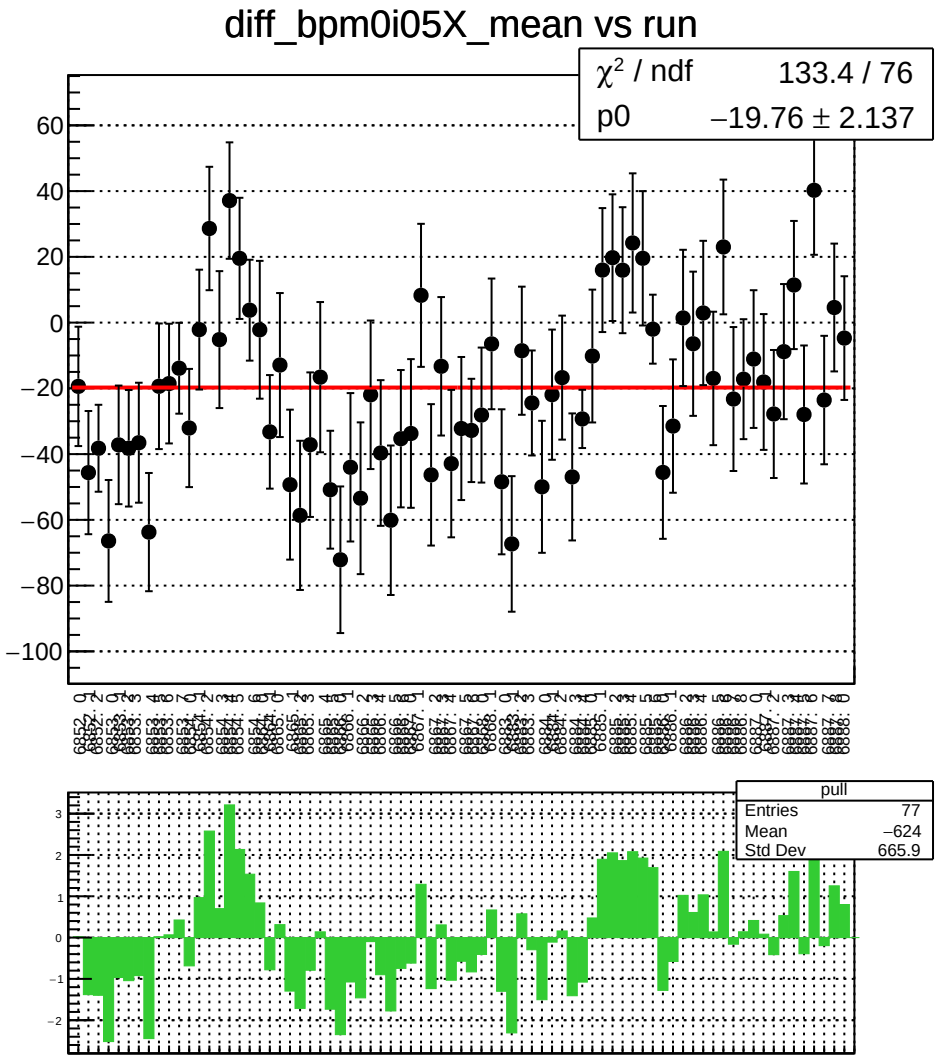

pull1D
Entries 77
Mean 0.01655
Std Dev 1.514

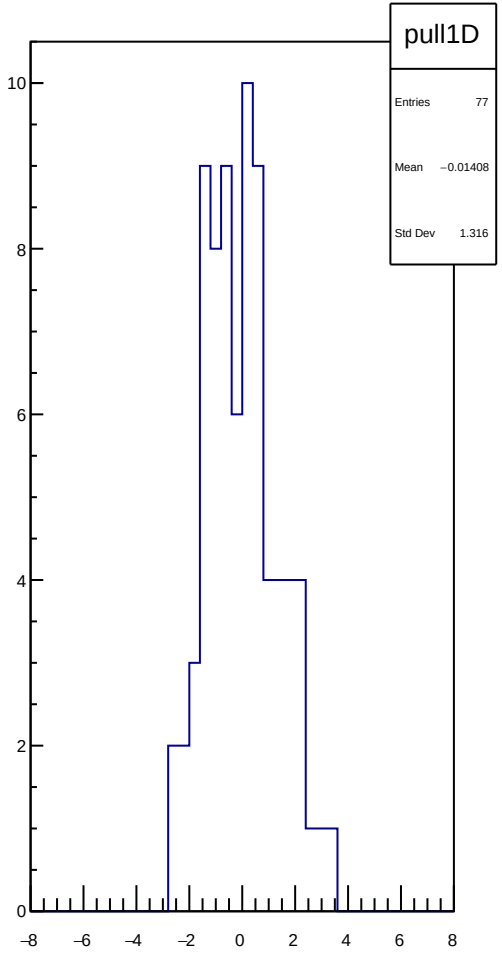

diff_bpm0i02aX_rms vs run
χ² / ndf 1.48e+04 / 76
p0 1589 ± 1.259
1800
1700
1600
1500
1400
1300

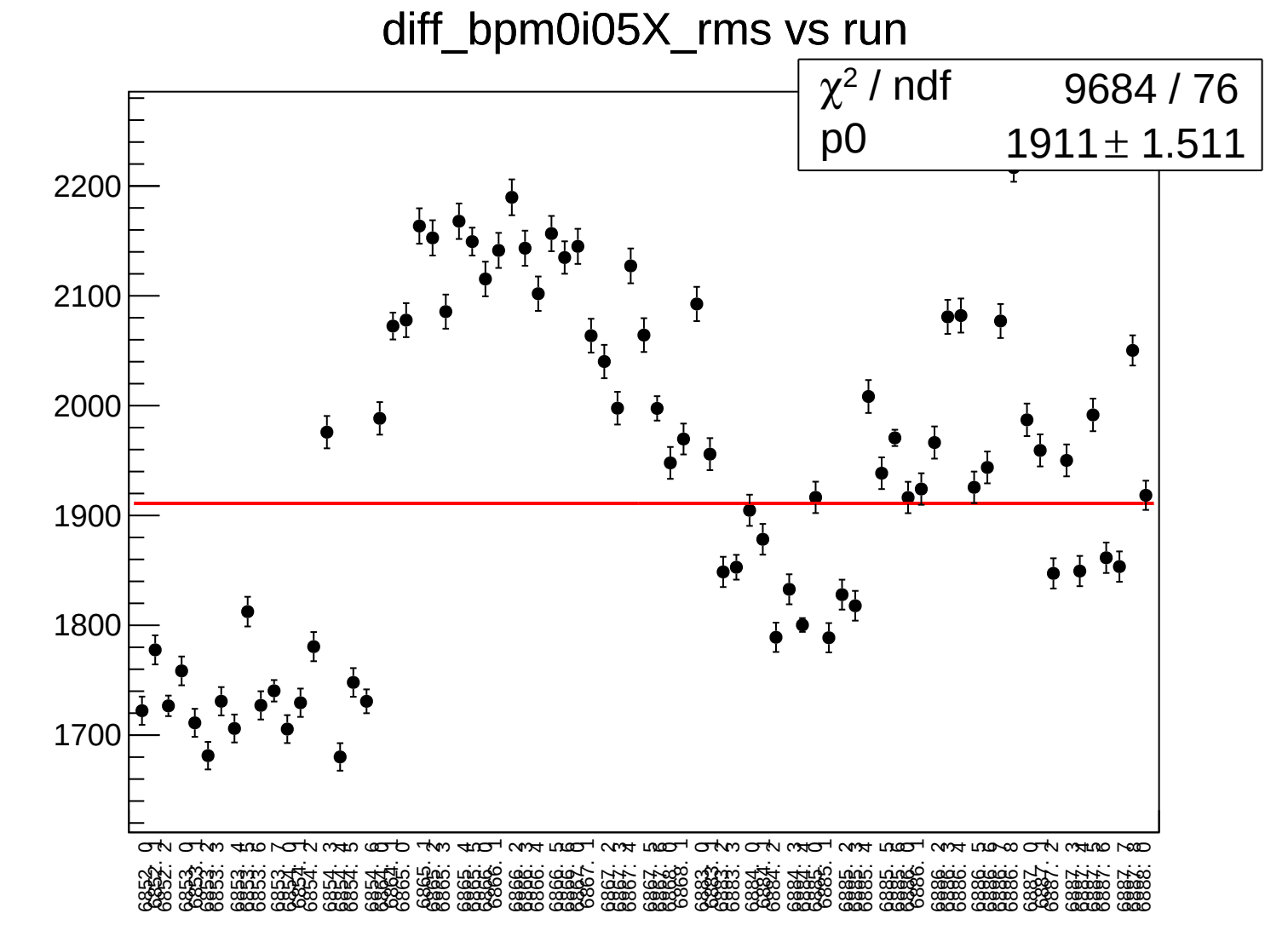

diff_bpm0i02aY_mean vs run
χ² / ndf 72.92 / 76
p0 6.472 ± 1.636
pull
Entries 77
Mean 214
Std Dev 159.8

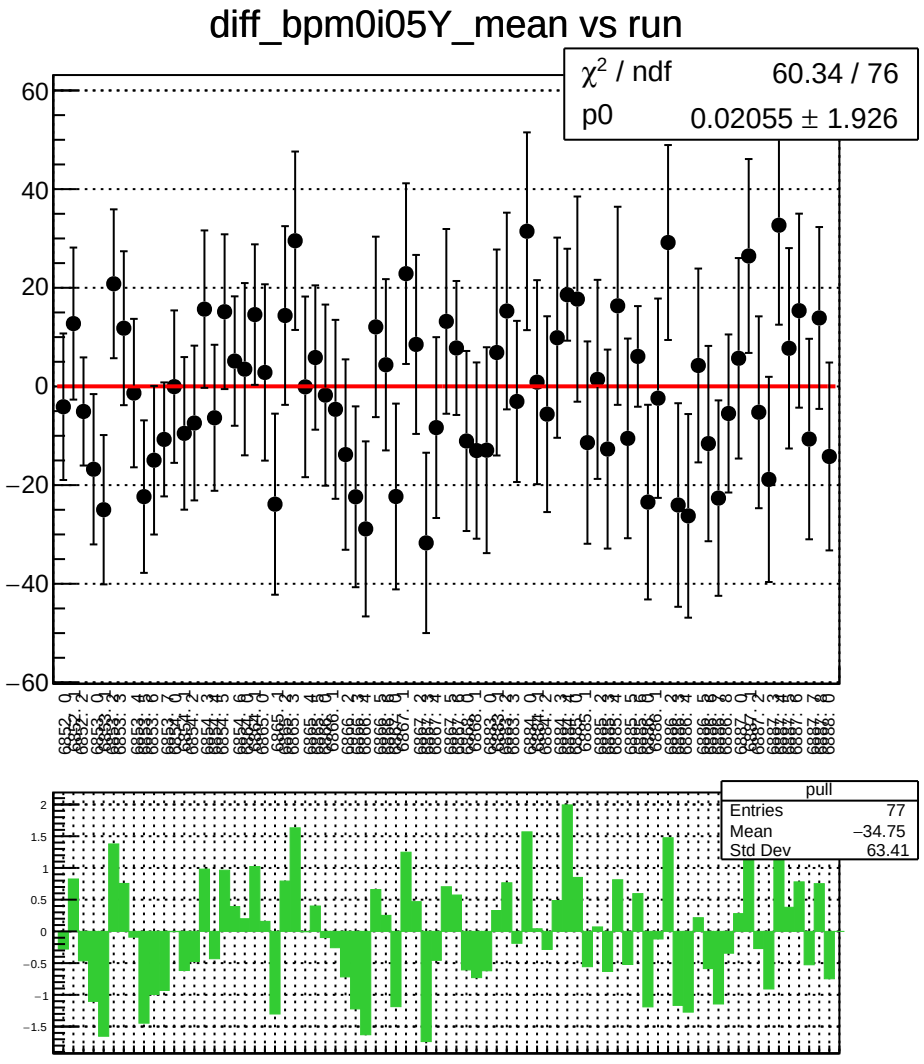

pull1D
Entries 77
Mean 0.01707
Std Dev 0.973

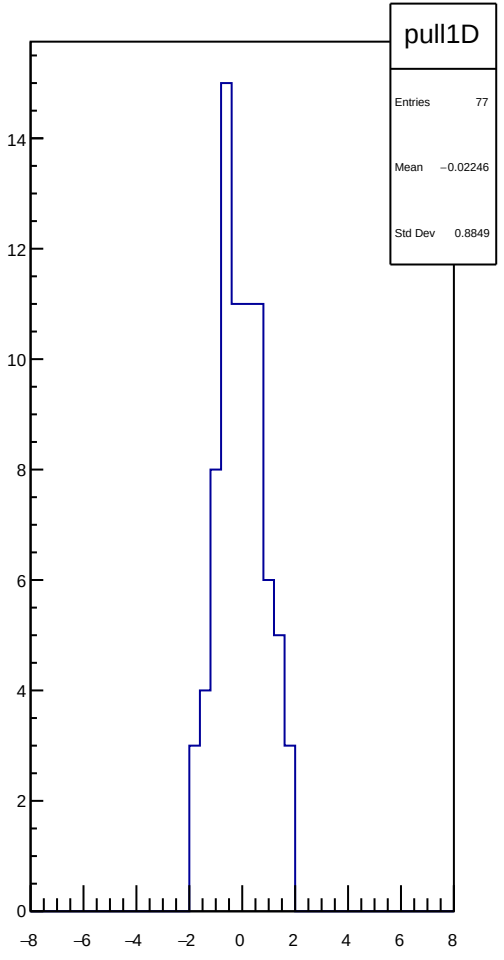

diff_bpm0i02aY_rms vs run
χ² / ndf 8260 / 76
p0 1463 ± 1.157
1700
1600
1500
1400
1300

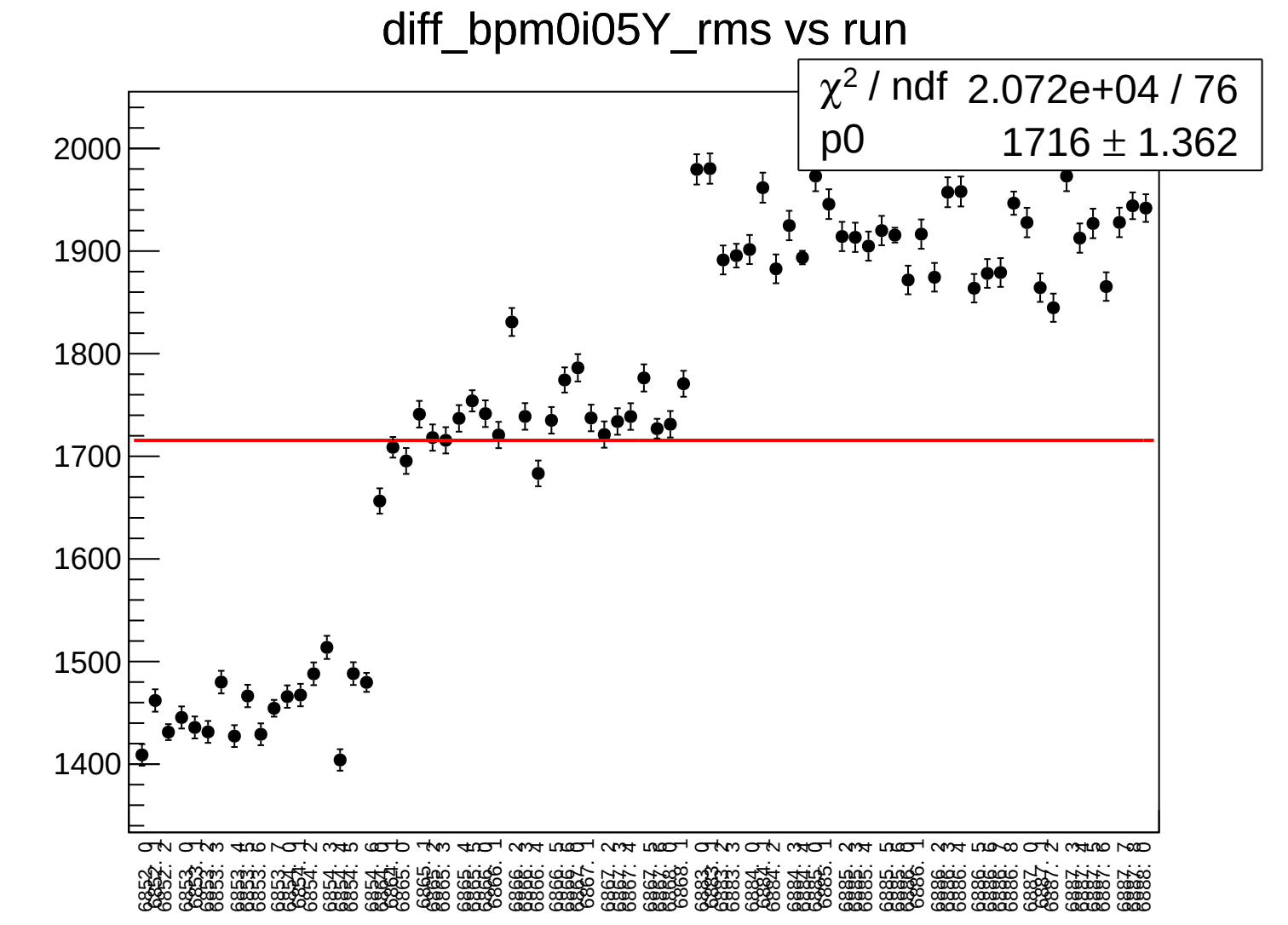

diff_bpm0i05X_mean vs run
χ² / ndf 133.4 / 76
p0 −19.76 ± 2.137
pull
Entries 77
Mean −624
Std Dev 665.9

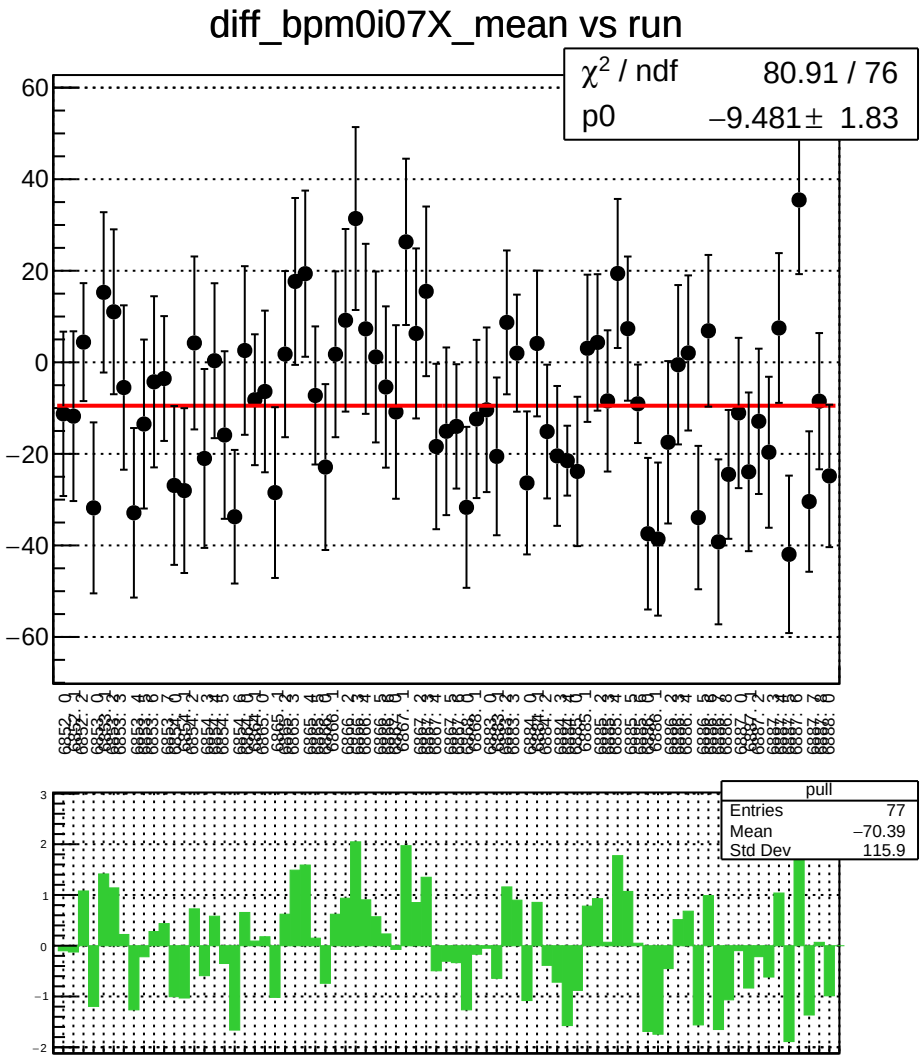

pull1D
Entries 77
Mean −0.01408
Std Dev 1.316

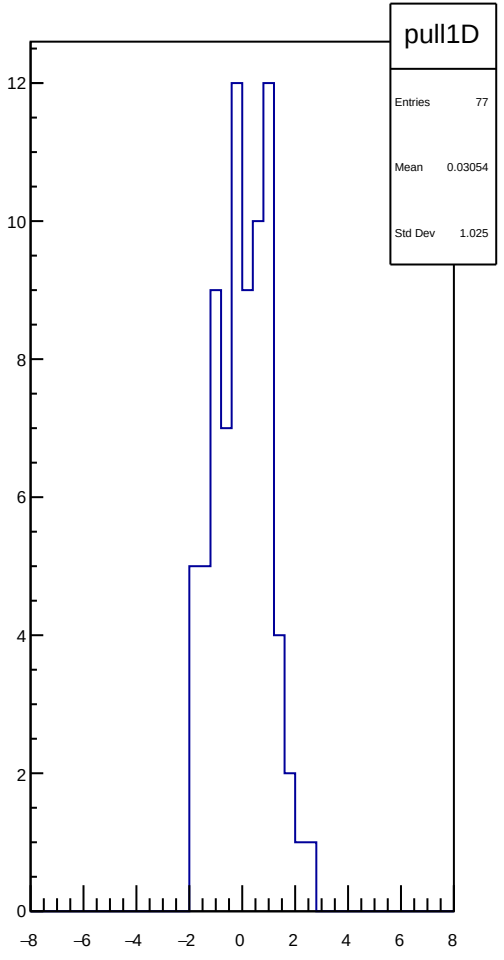

diff_bpm0i05X_rms vs run
χ² / ndf 9684 / 76
p0 1911 ± 1.511
2200
2100
2000
1900
1800
1700

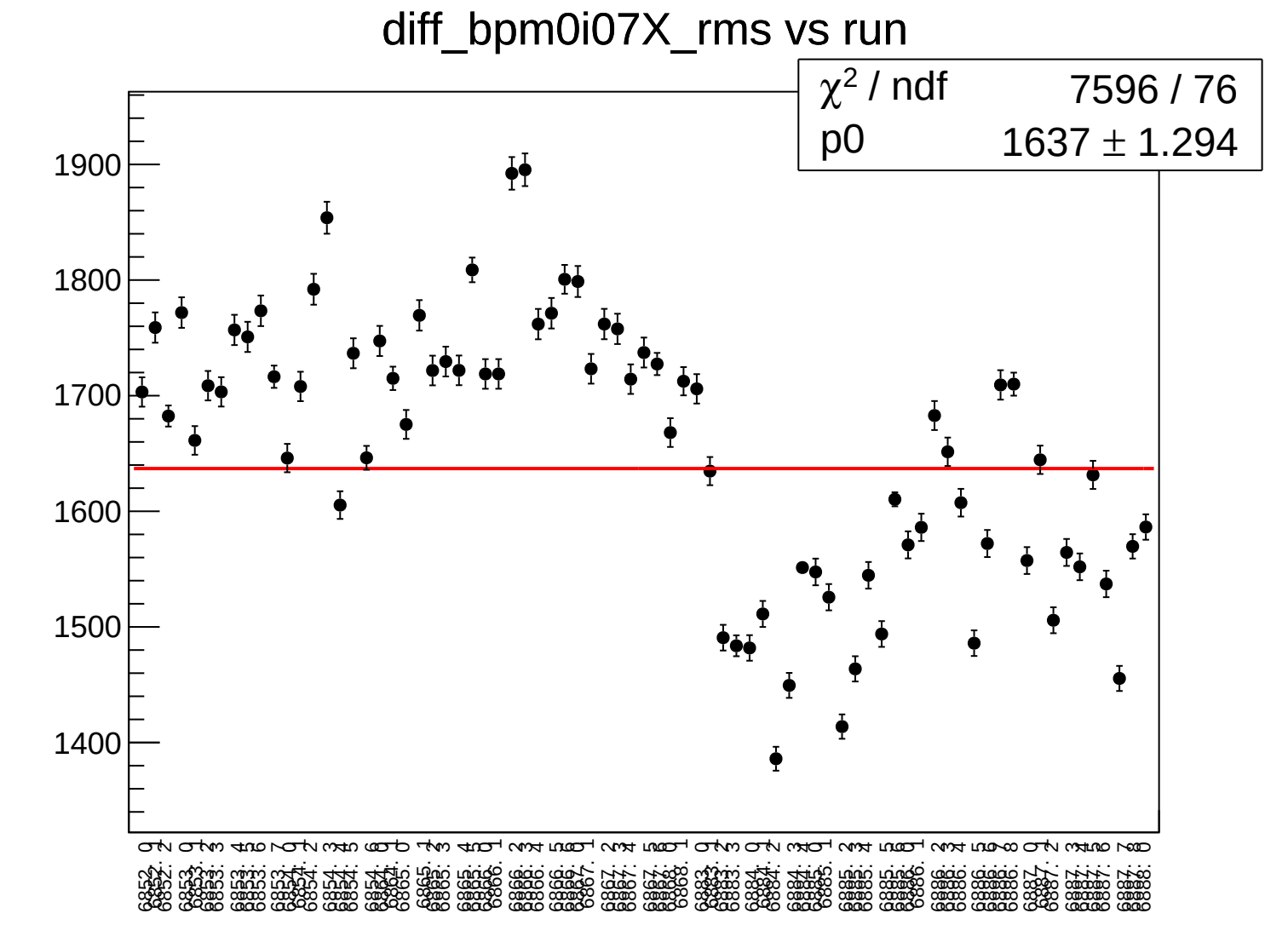

diff_bpm0i05Y_mean vs run
χ² / ndf 60.34 / 76
p0 0.02055 ± 1.926
pull
Entries 77
Mean −34.75
Std Dev 63.41

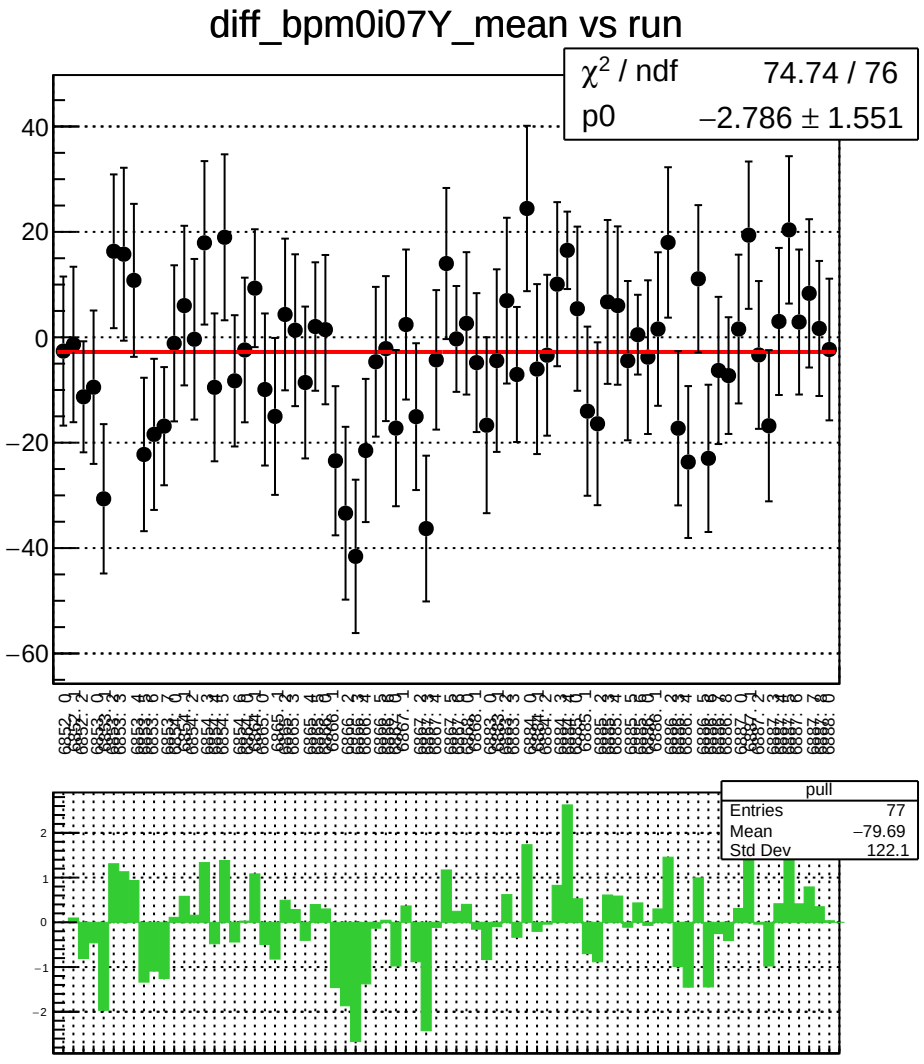

pull1D
Entries 77
Mean −0.02246
Std Dev 0.8849

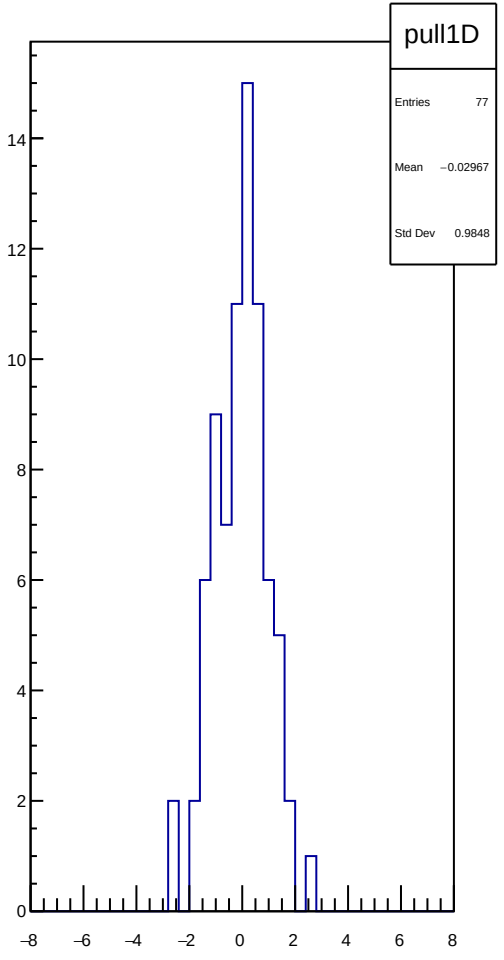

diff_bpm0i05Y_rms vs run
χ² / ndf 2.072e+04 / 76
p0 1716 ± 1.362
2000
1900
1800
1700
1600
1500
1400

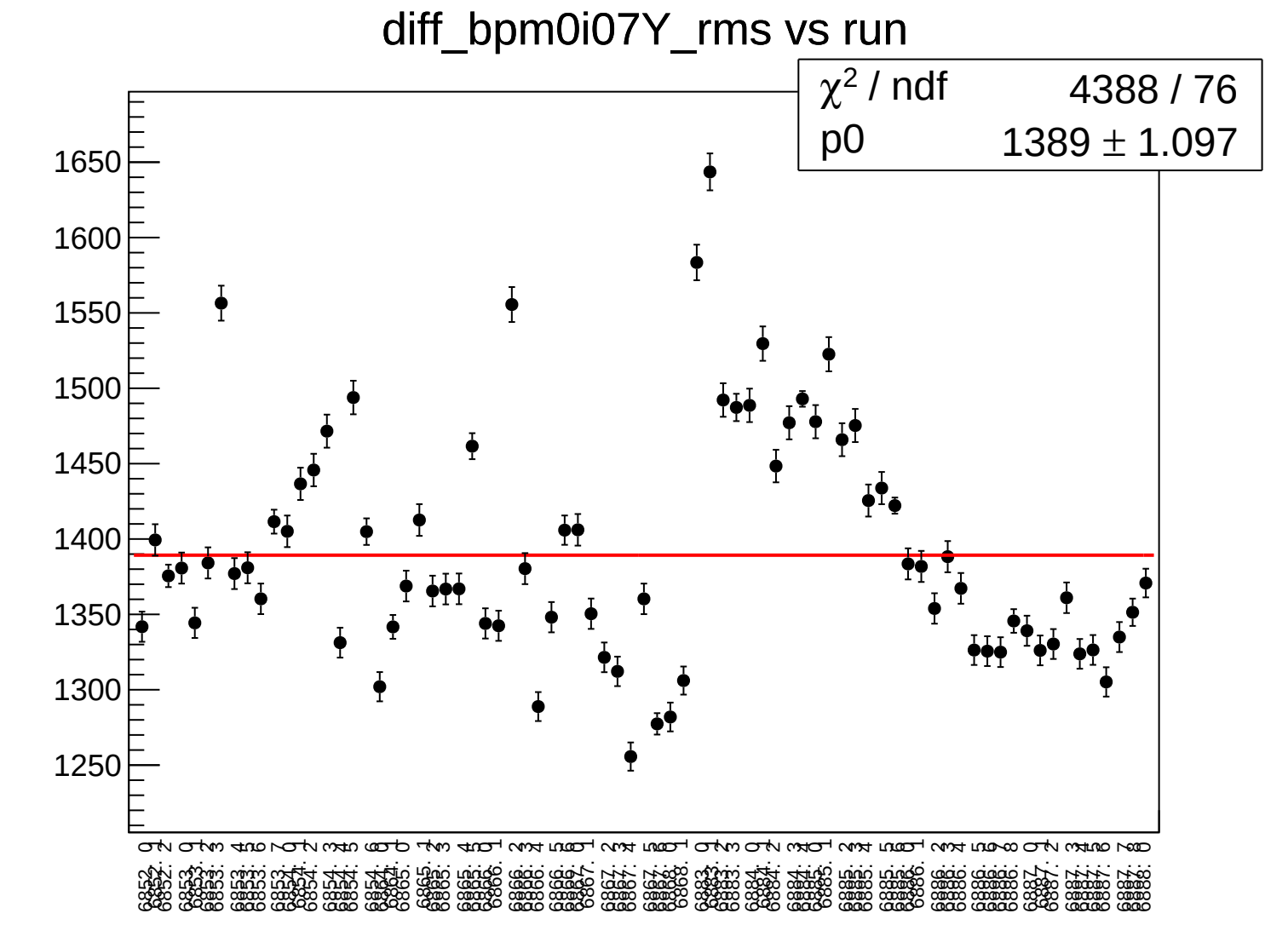

diff_bpm0i07X_mean vs run
χ² / ndf 80.91 / 76
p0 −9.481 ± 1.83
pull
Entries 77
Mean −70.39
Std Dev 115.9

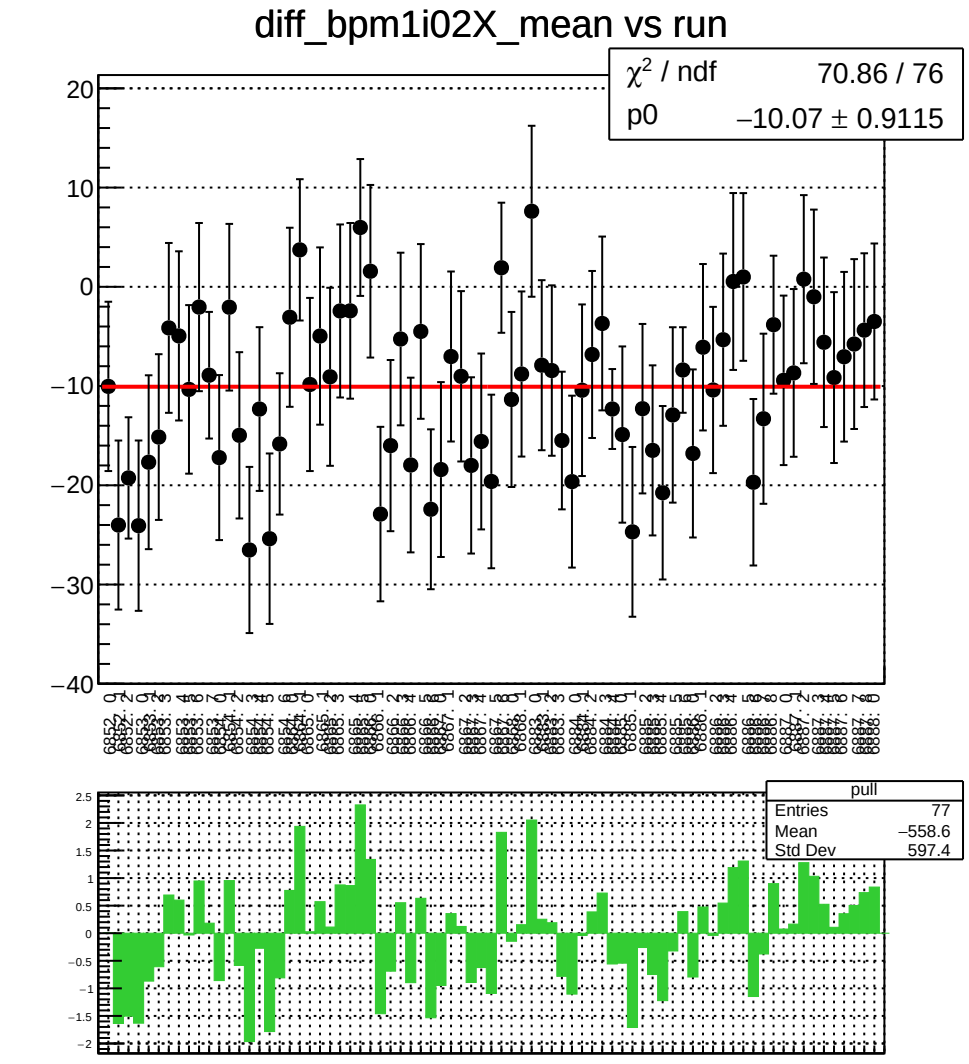

pull1D
Entries 77
Mean 0.03054
Std Dev 1.025

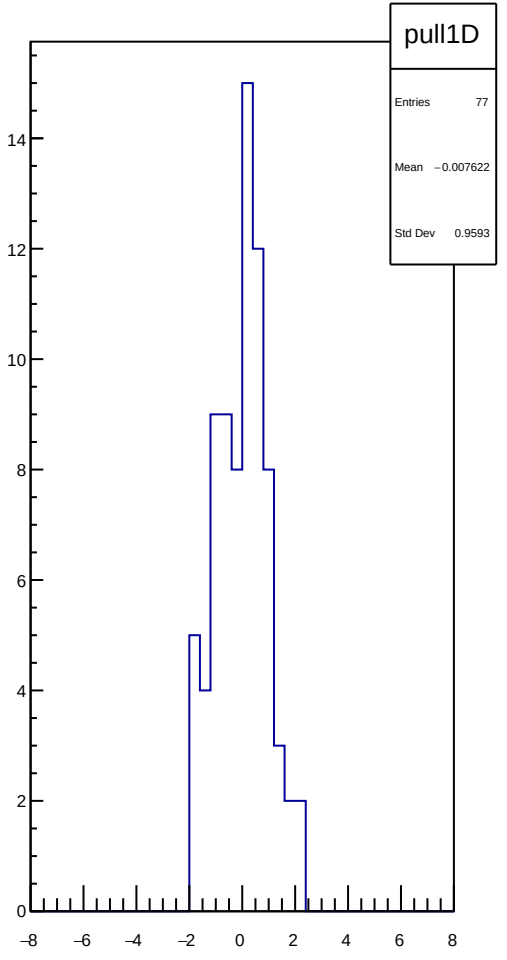

diff_bpm0i07X_rms vs run
χ² / ndf 7596 / 76
p0 1637 ± 1.294
1900
1800
1700
1600
1500
1400

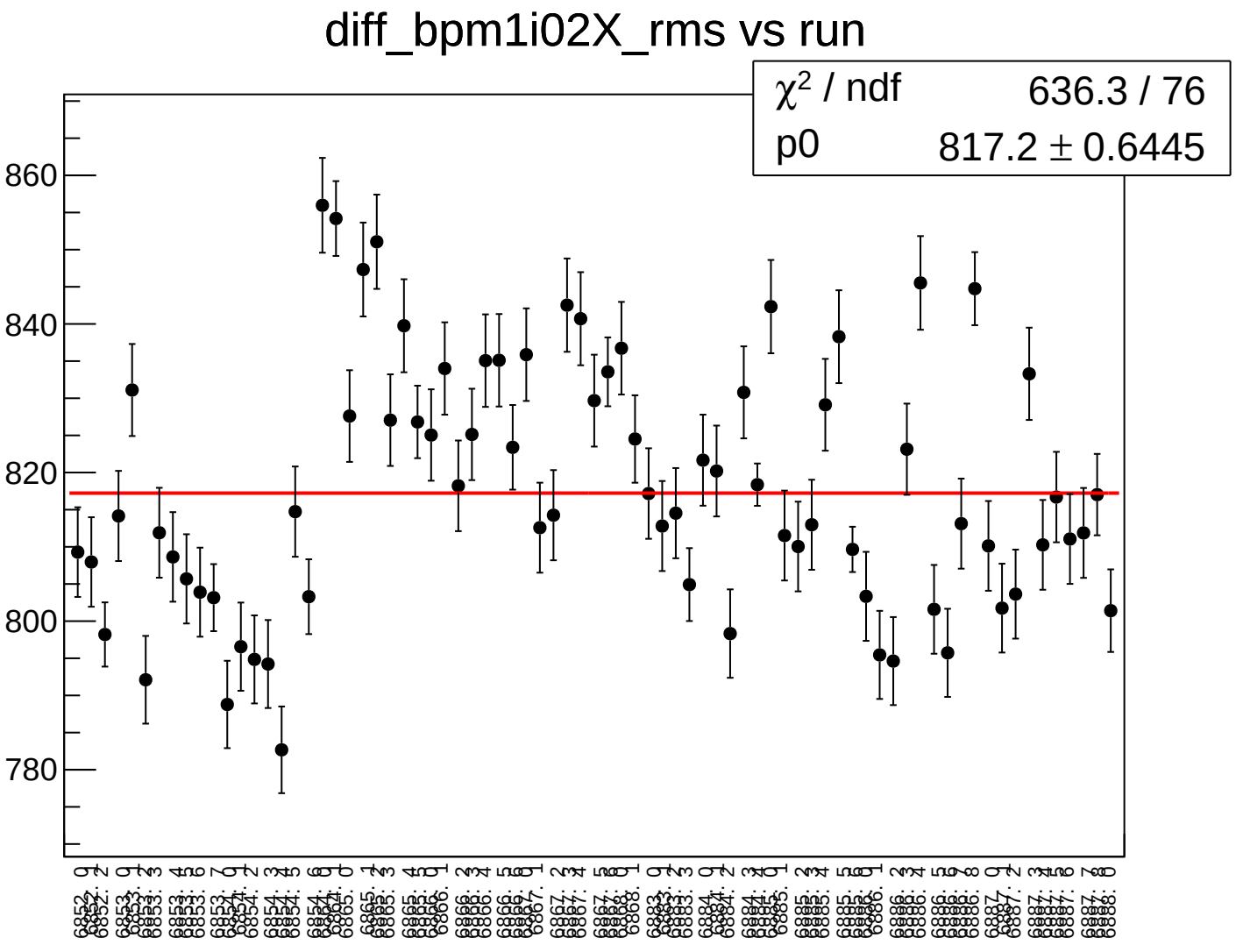

diff_bpm0i07Y_mean vs run
χ^2 / ndf 74.74 / 76
p0 −2.786 ± 1.551
pull
Entries 77
Mean −79.69
Std Dev 122.1

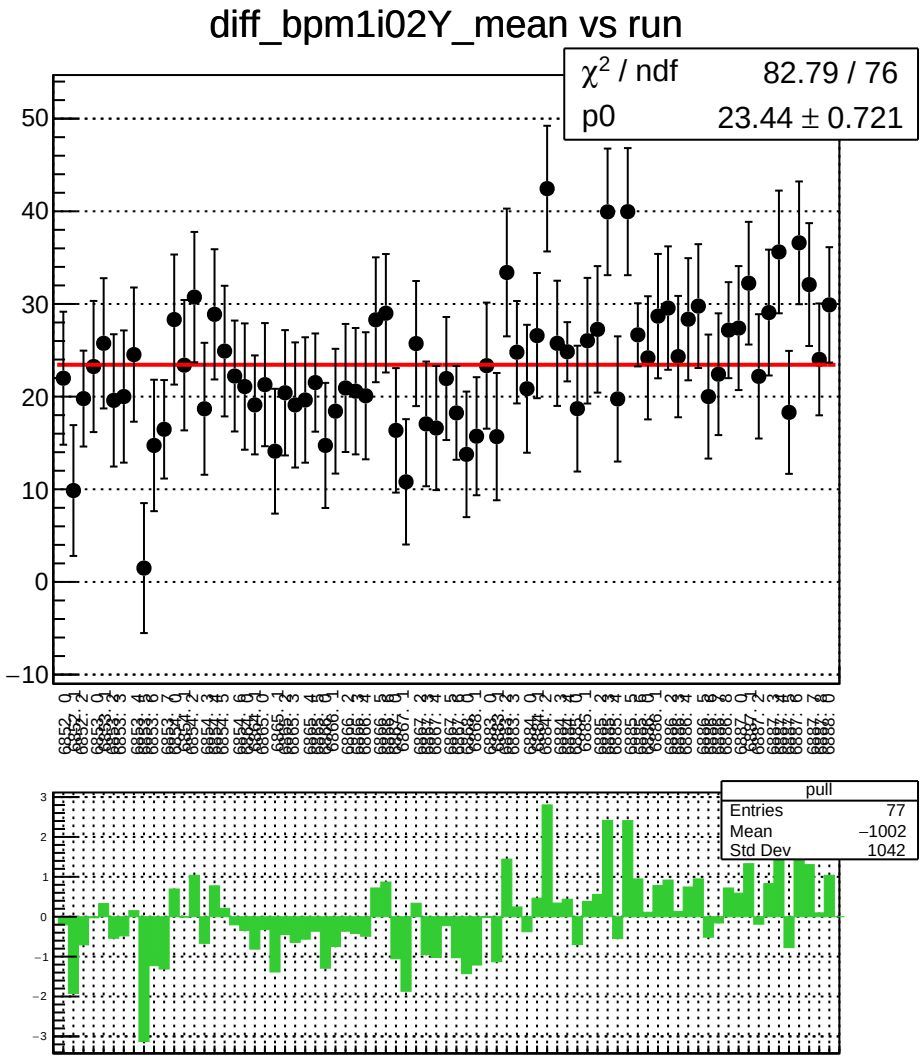

pull1D
Entries 77
Mean −0.02967
Std Dev 0.9848

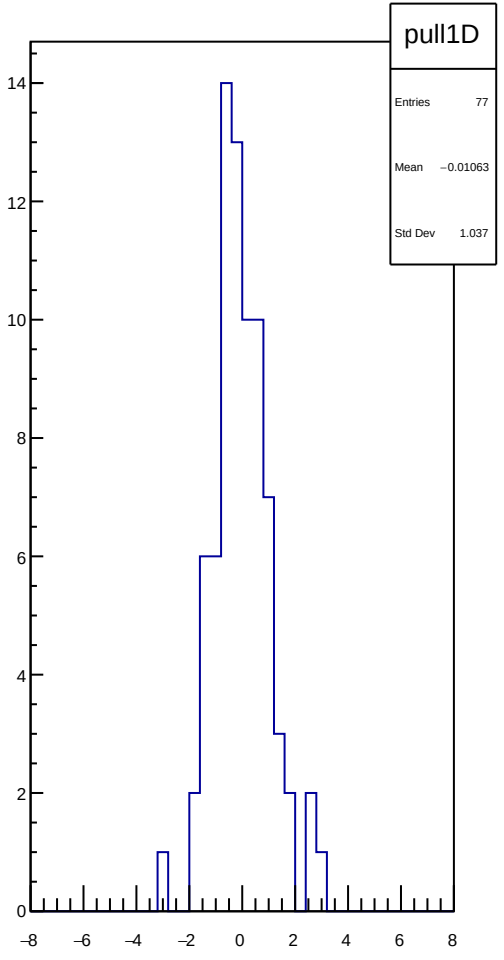

diff_bpm0i07Y_rms vs run
χ² / ndf 4388 / 76
p0 1389 ± 1.097
1650
1600
1550
1500
1450
1400
1350
1300
1250

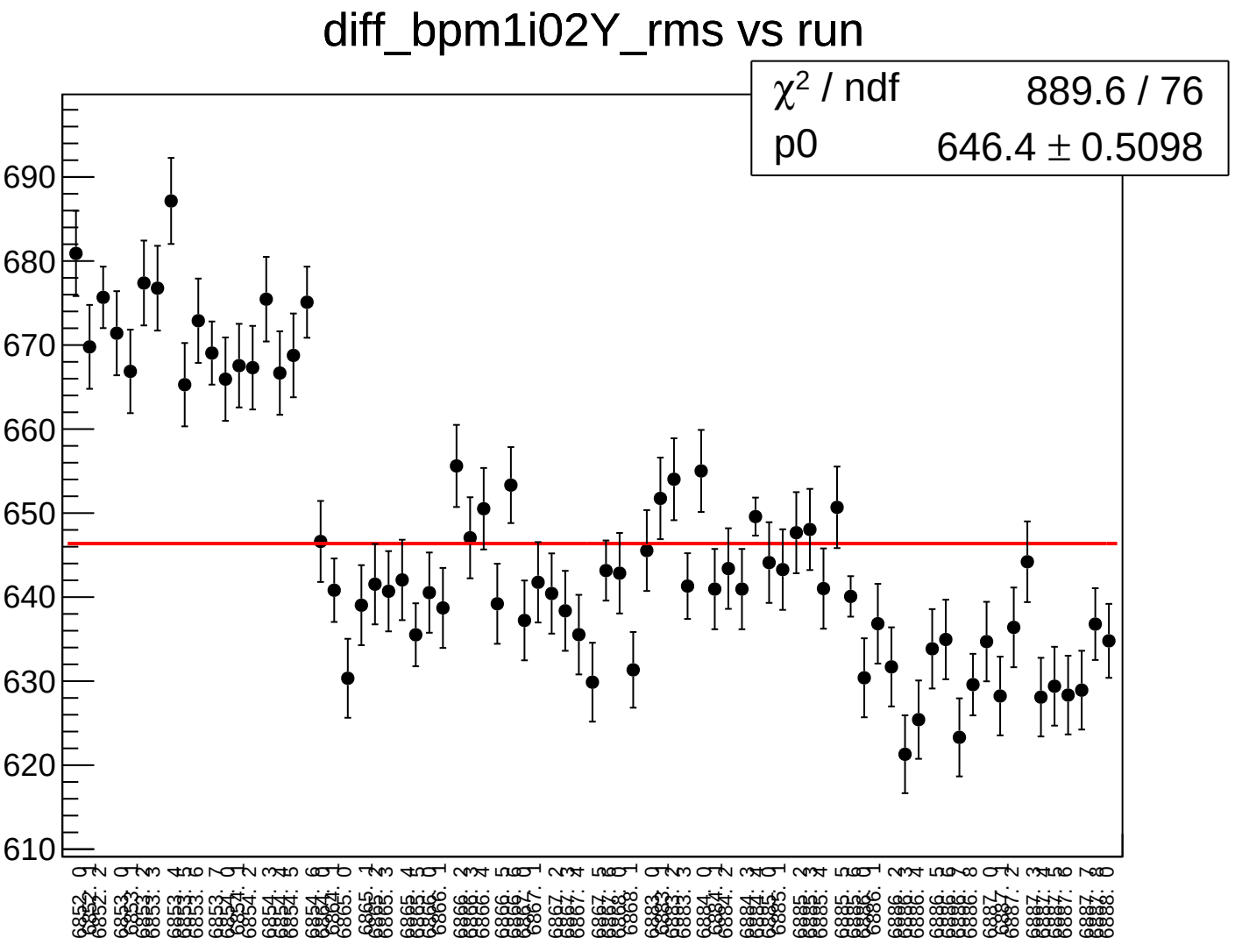

diff_bpm1i02X_mean vs run
χ² / ndf 70.86 / 76
p0 −10.07 ± 0.9115
pull
Entries 77
Mean −558.6
Std Dev 597.4

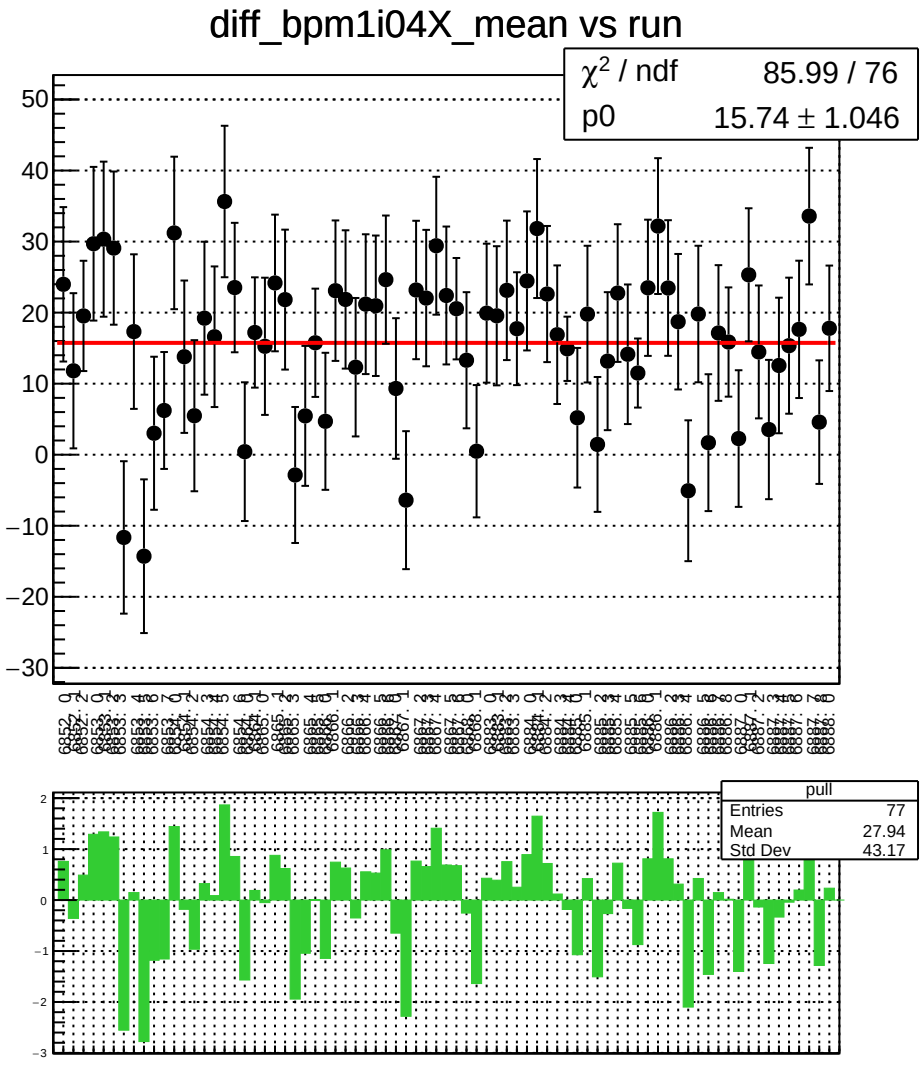

pull1D
Entries 77
Mean −0.007622
Std Dev 0.9593

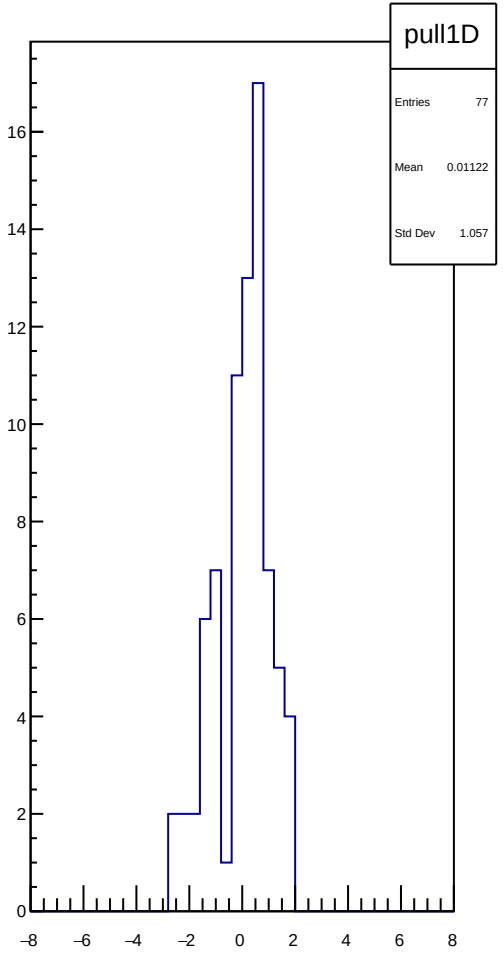

diff_bpm1i02X_rms vs run
χ² / ndf 636.3 / 76
p0 817.2 ± 0.6445
860
840
820
800
780

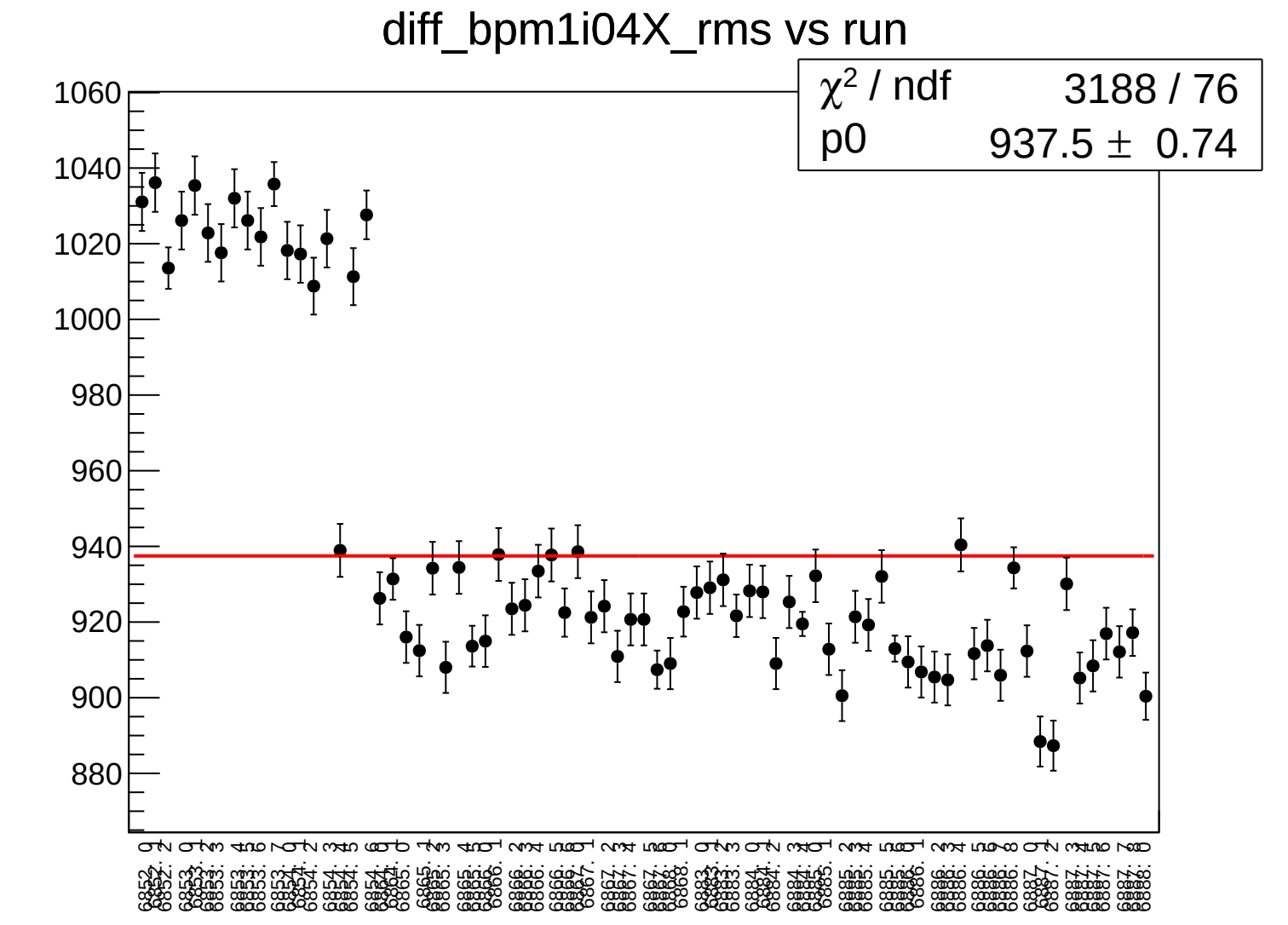

diff_bpm1i02Y_mean vs run
χ² / ndf 82.79 / 76
p0 23.44 ± 0.721
pull
Entries 77
Mean −1002
Std Dev 1042

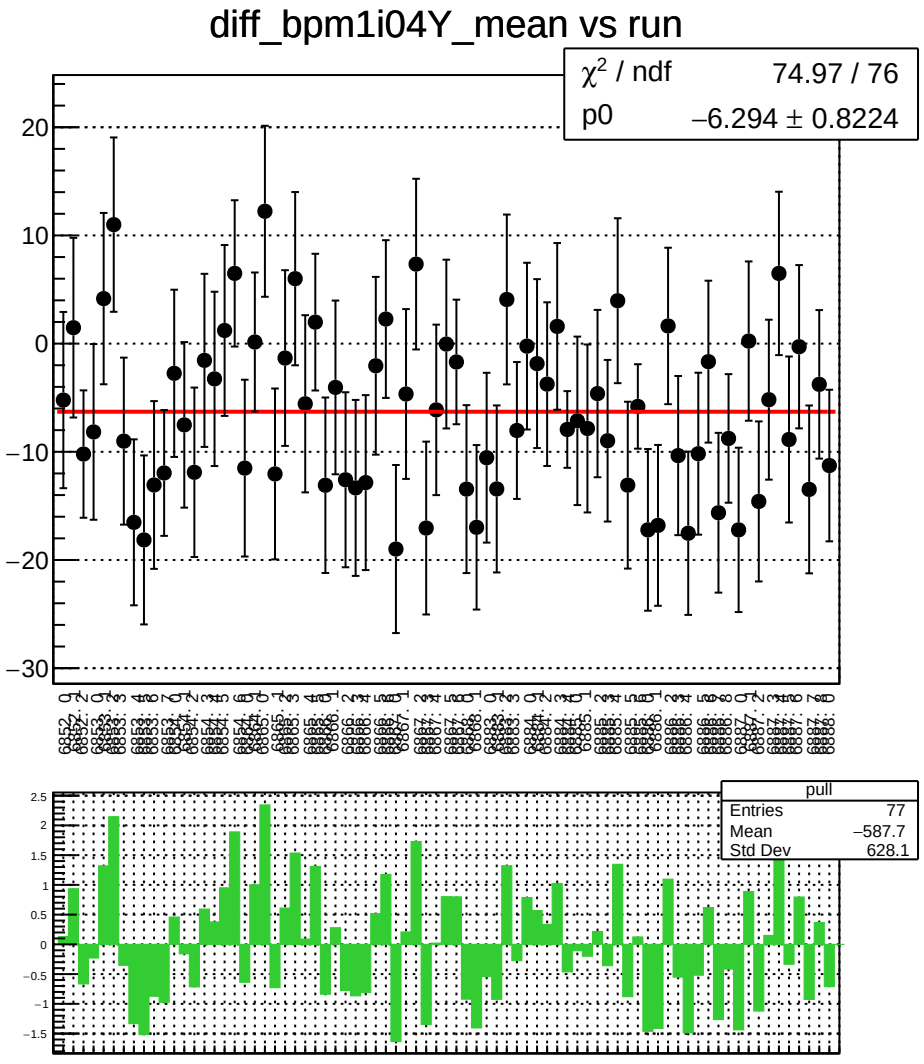

pull1D
Entries 77
Mean −0.01063
Std Dev 1.037

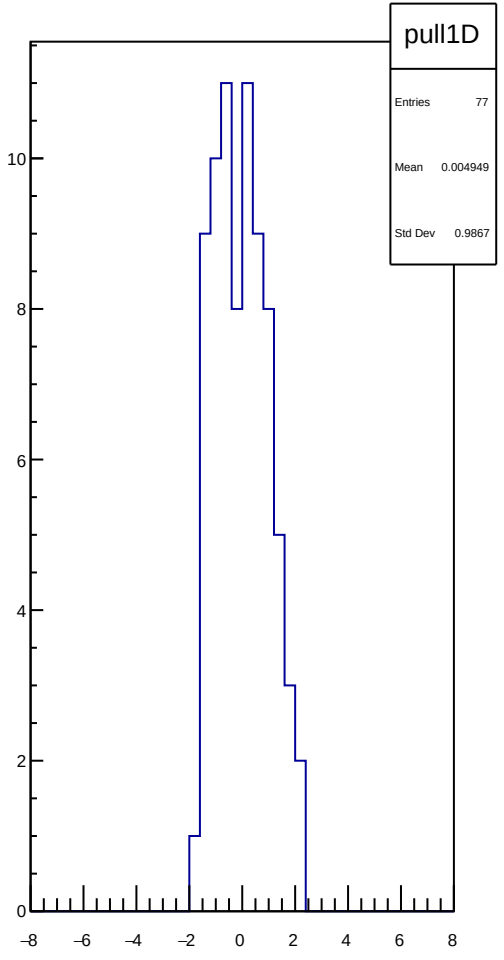

diff_bpm1i02Y_rms vs run
χ² / ndf 889.6 / 76
p0 646.4 ± 0.5098
690
680
670
660
650
640
630
620
610

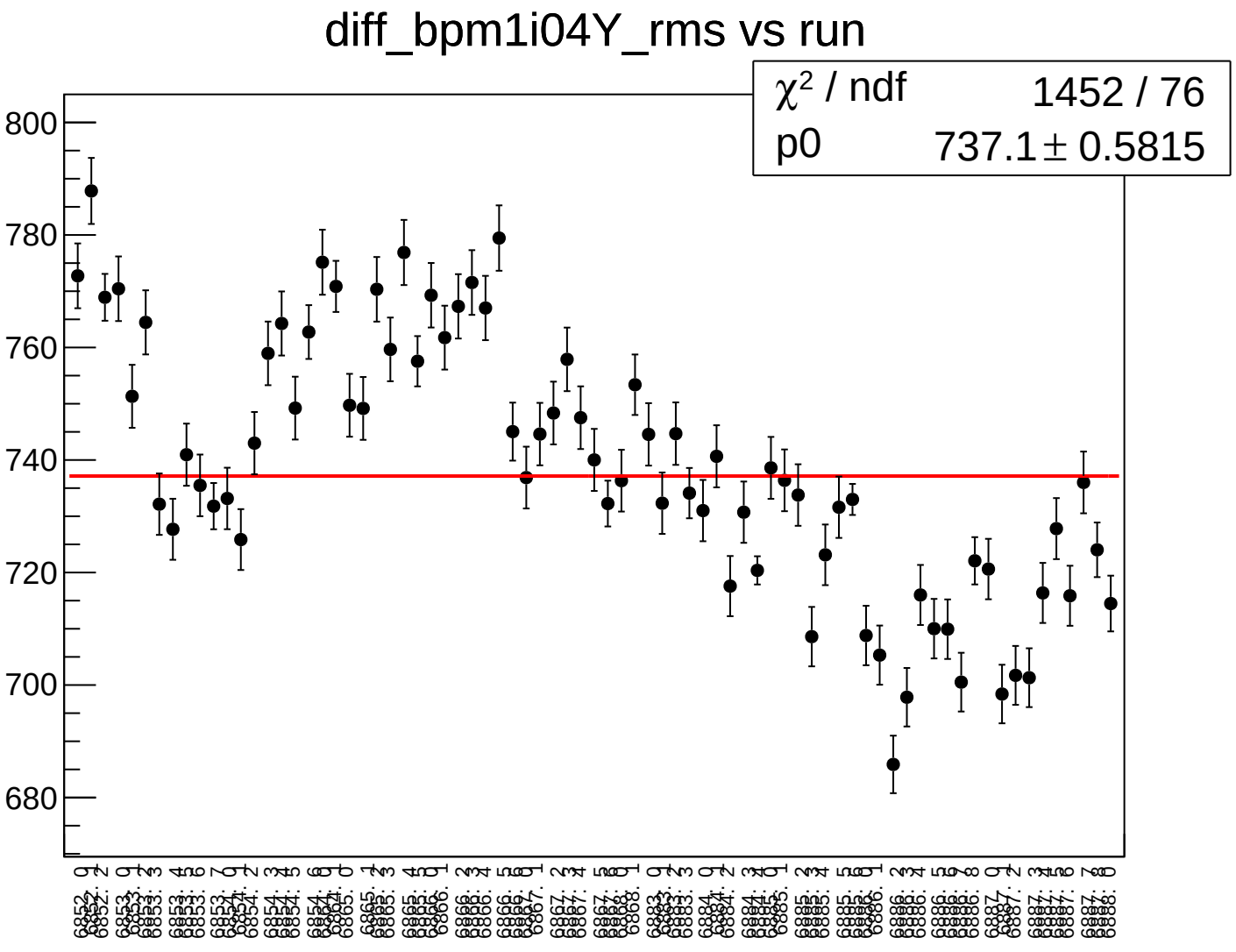

diff_bpm1i04X_mean vs run
χ² / ndf 85.99 / 76
p0 15.74 ± 1.046
pull
Entries 77
Mean 27.94
Std Dev 43.17

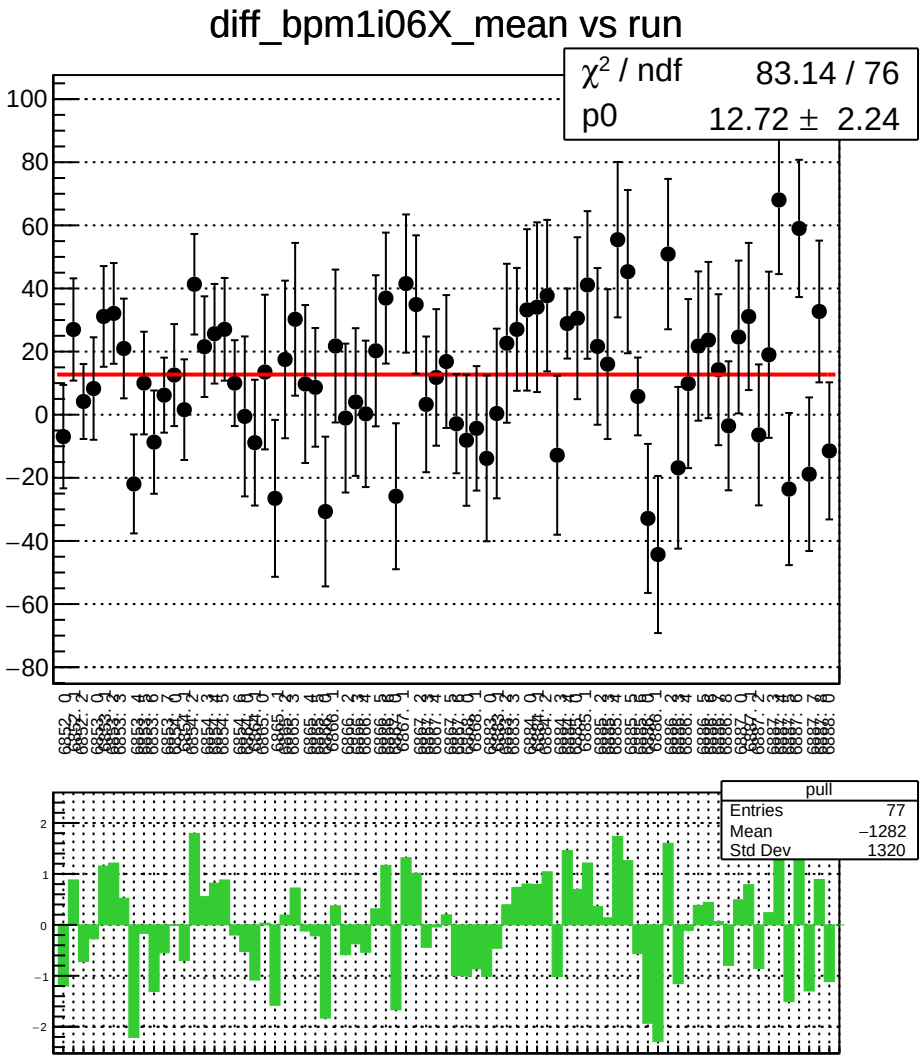

pull1D
Entries 77
Mean 0.01122
Std Dev 1.057

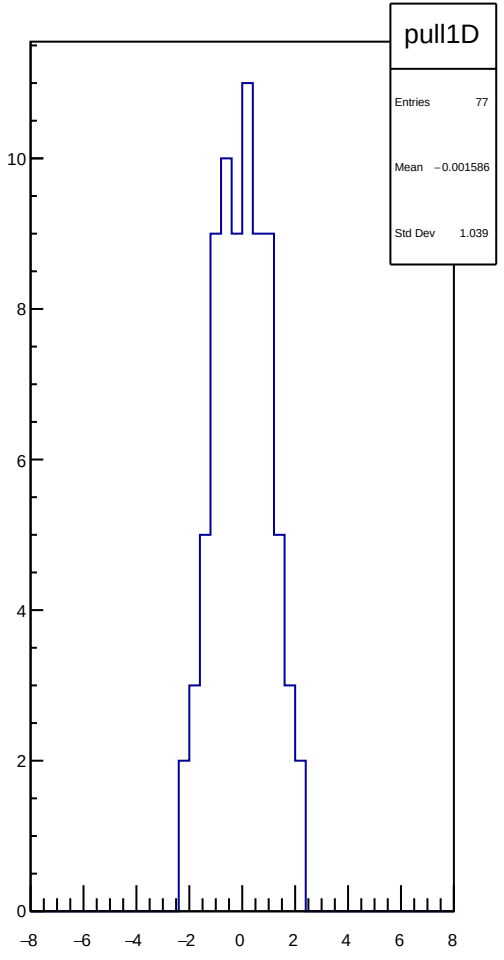

diff_bpm1i04X_rms vs run
χ² / ndf 3188 / 76
p0 937.5 ± 0.74
1060
1040
1020
1000
980
960
940
920
900
880

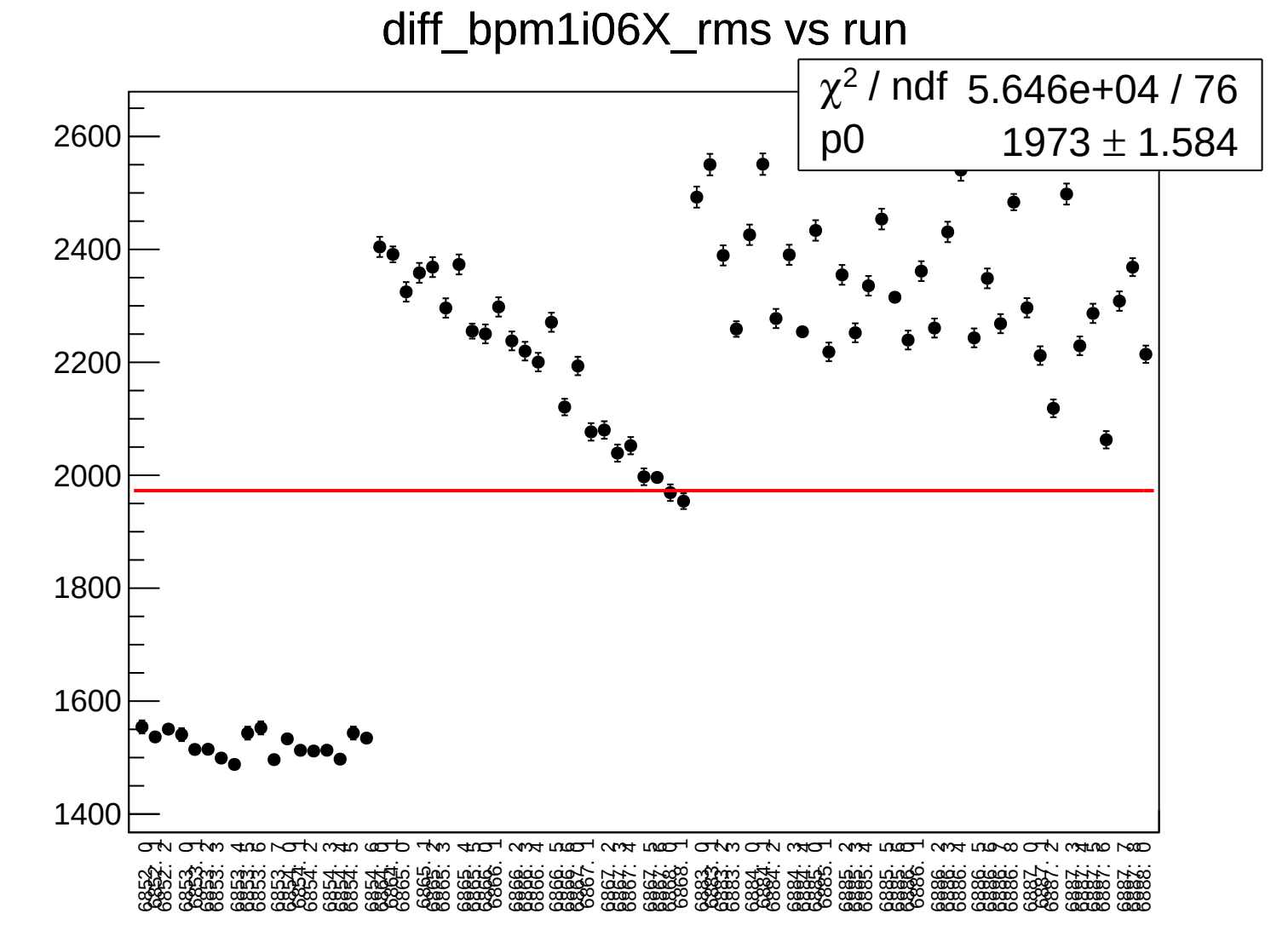

diff_bpm1i04Y_mean vs run
χ² / ndf 74.97 / 76
p0 −6.294 ± 0.8224
pull
Entries 77
Mean −587.7
Std Dev 628.1

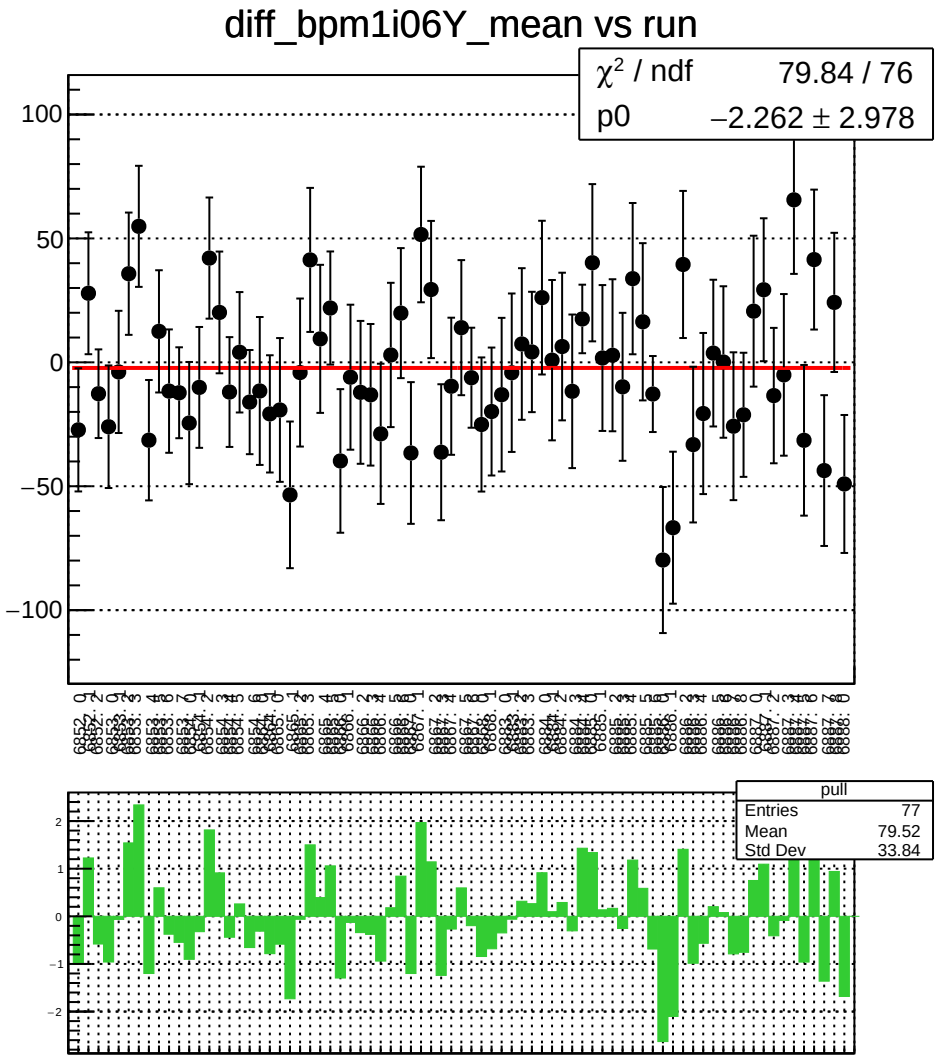

pull1D
Entries 77
Mean 0.004949
Std Dev 0.9867

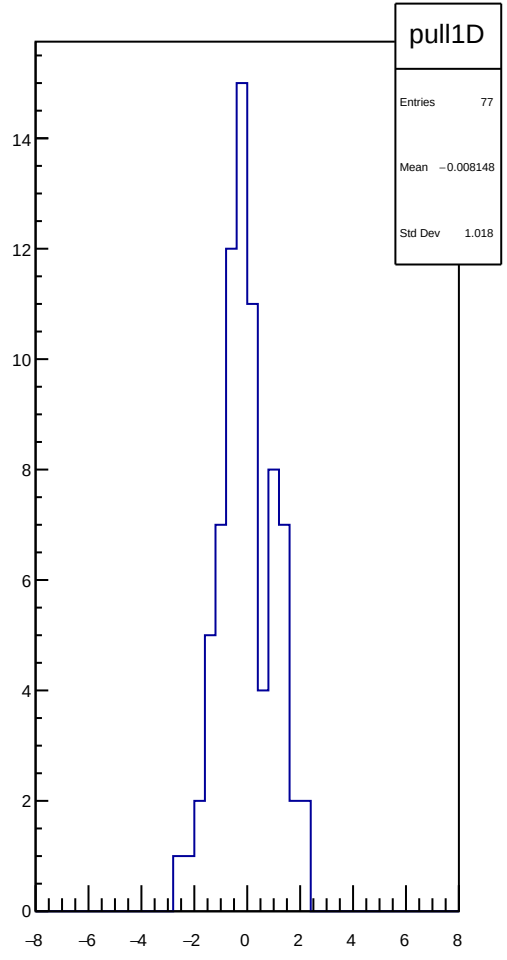

diff_bpm1i04Y_rms vs run
χ² / ndf 1452 / 76
p0 737.1 ± 0.5815
800
780
760
740
720
700
680

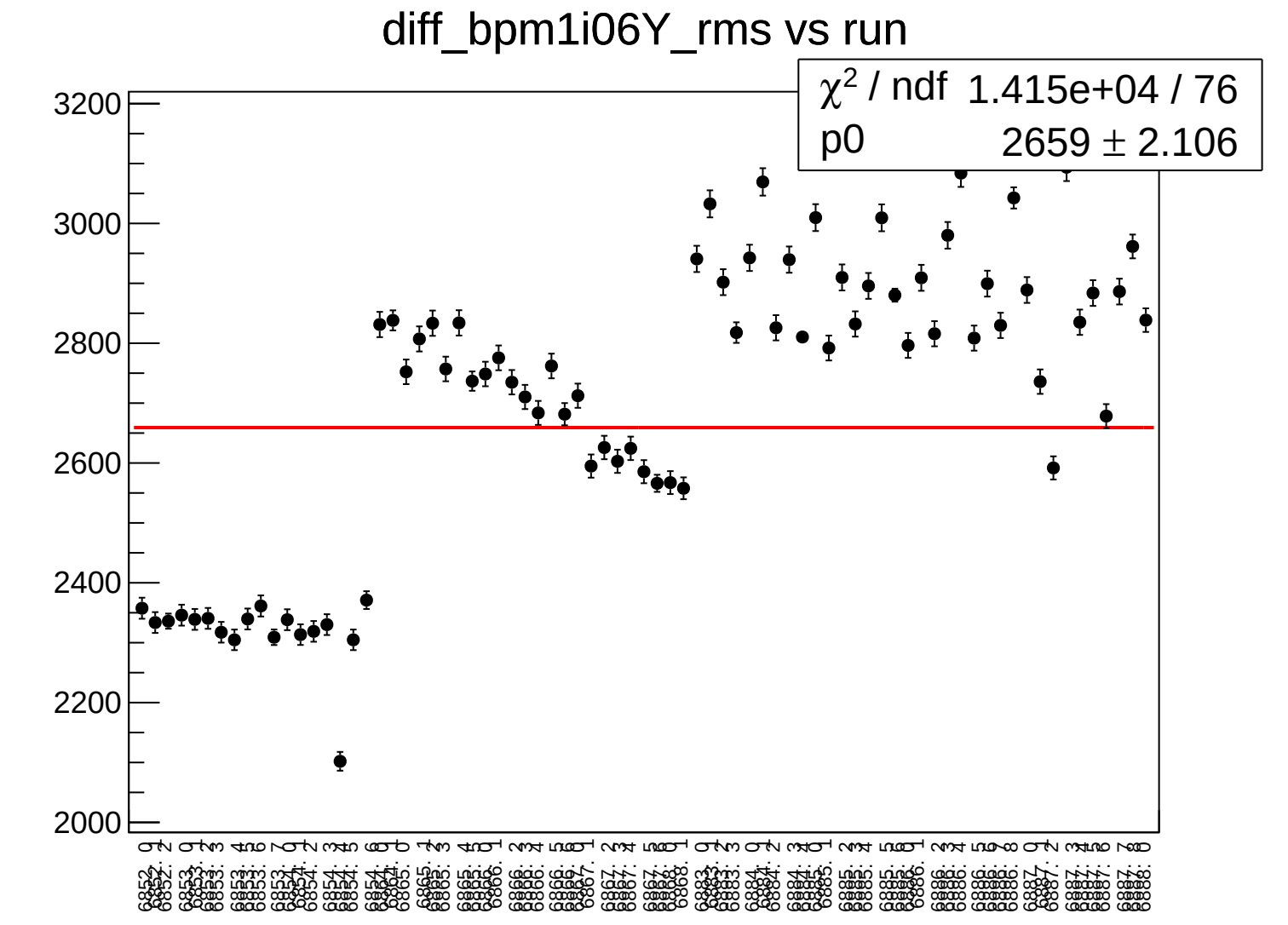

diff_bpm1i06X_mean vs run
χ² / ndf 83.14 / 76
p0 12.72 ± 2.24
pull
Entries 77
Mean −1282
Std Dev 1320

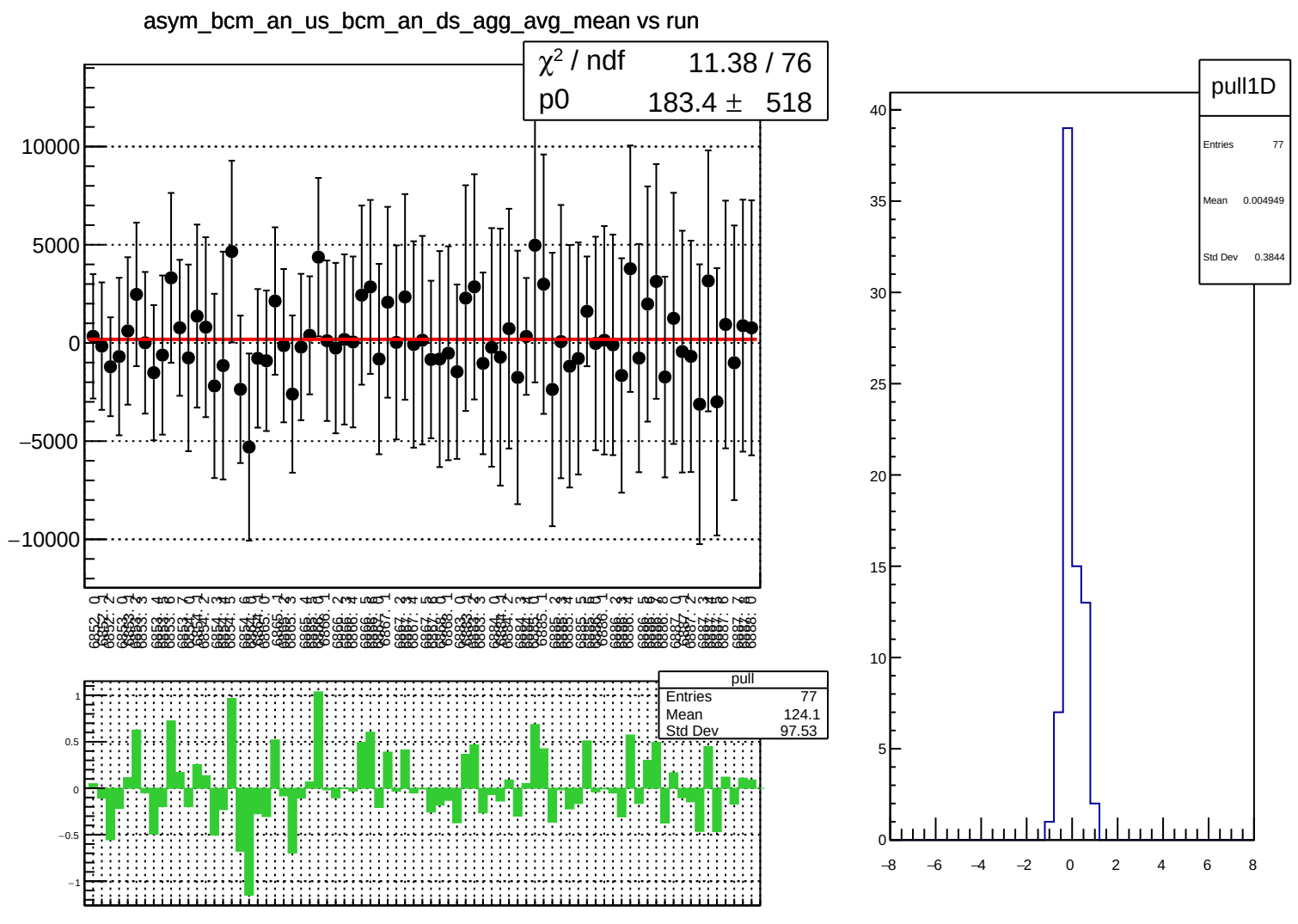

pull1D
Entries 77
Mean −0.001586
Std Dev 1.039

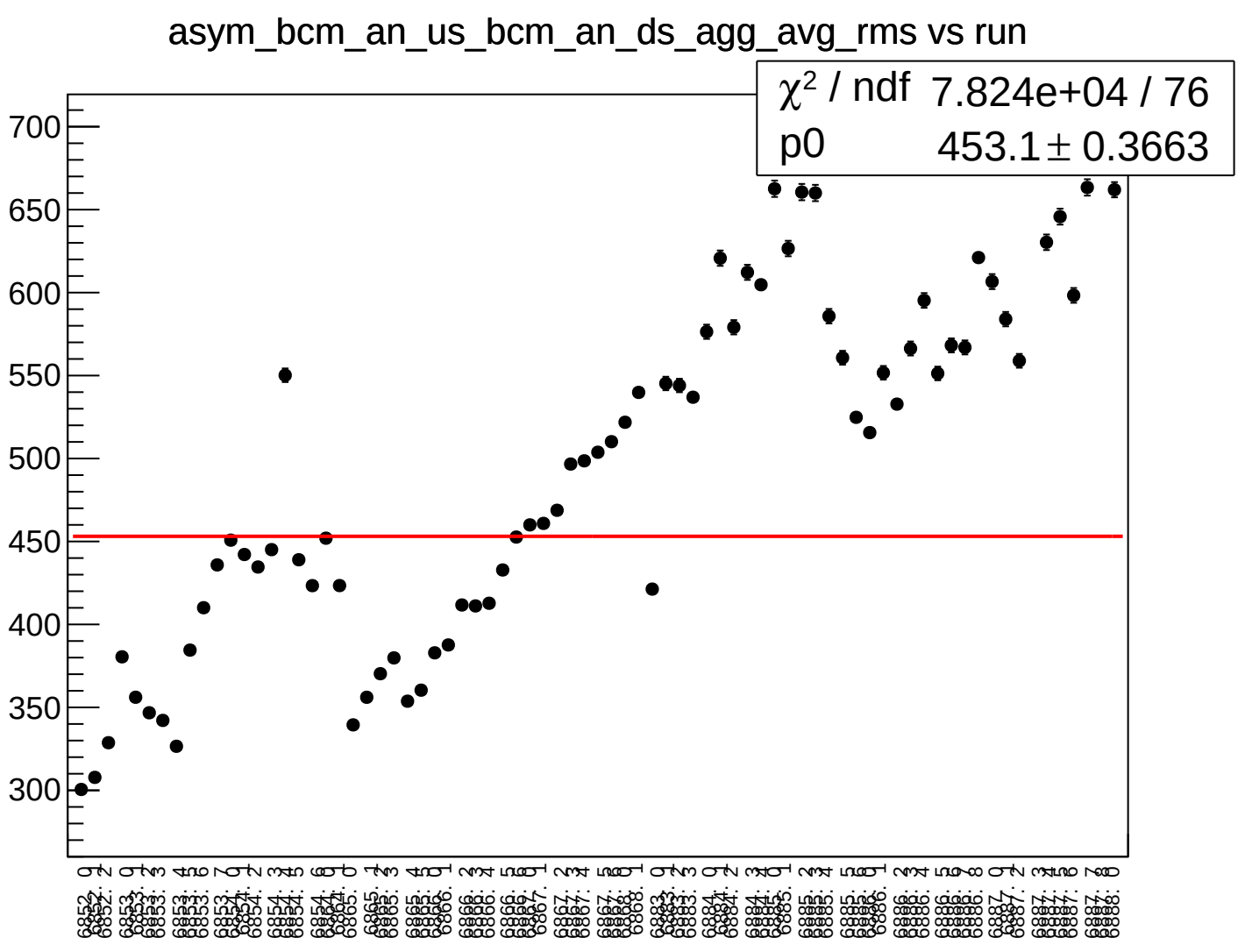

diff_bpm1i06X_rms vs run
χ^2 / ndf 5.646e+04 / 76
p0 1973 ± 1.584
2600
2400
2200
2000
1800
1600
1400

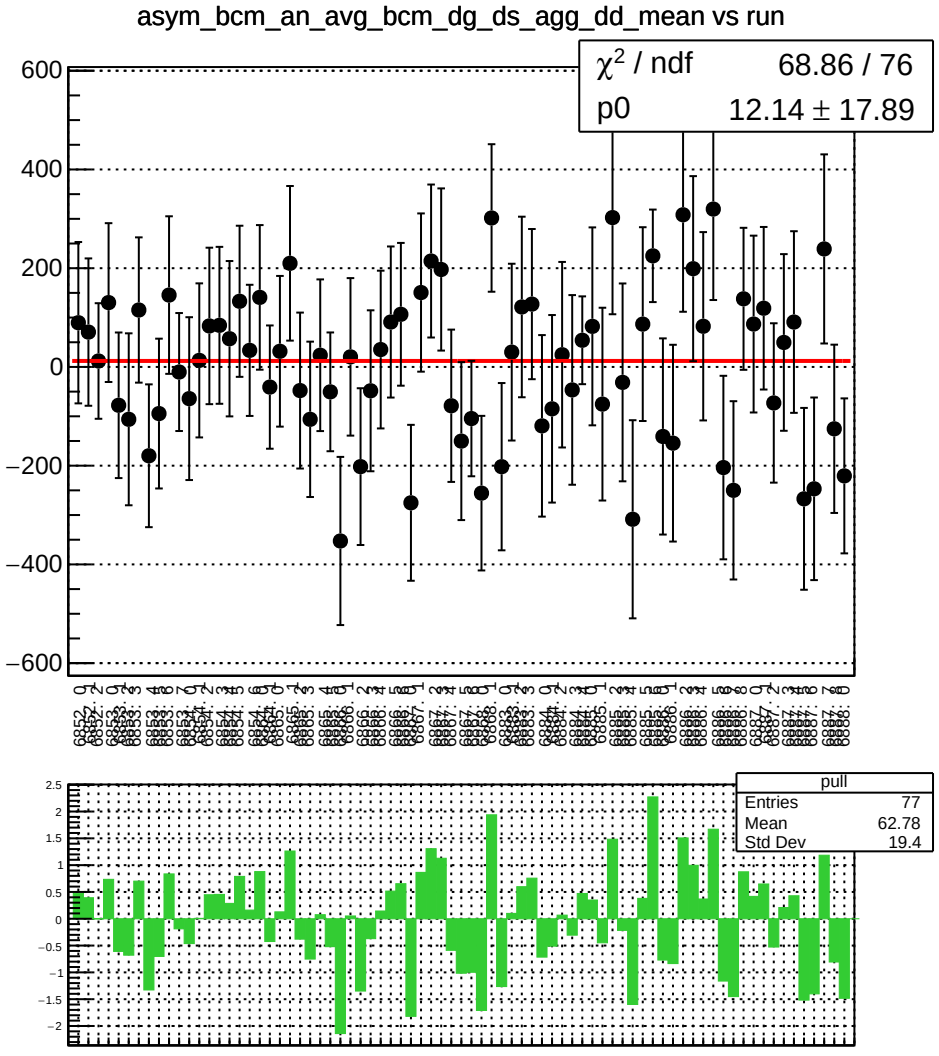

diff_bpm1i06Y_mean vs run
χ^2 / ndf 79.84 / 76
p0 −2.262 ± 2.978
100
50
0
−50
−100
pull
Entries 77
Mean 79.52
Std Dev 33.84
2
1
0
−1
−2

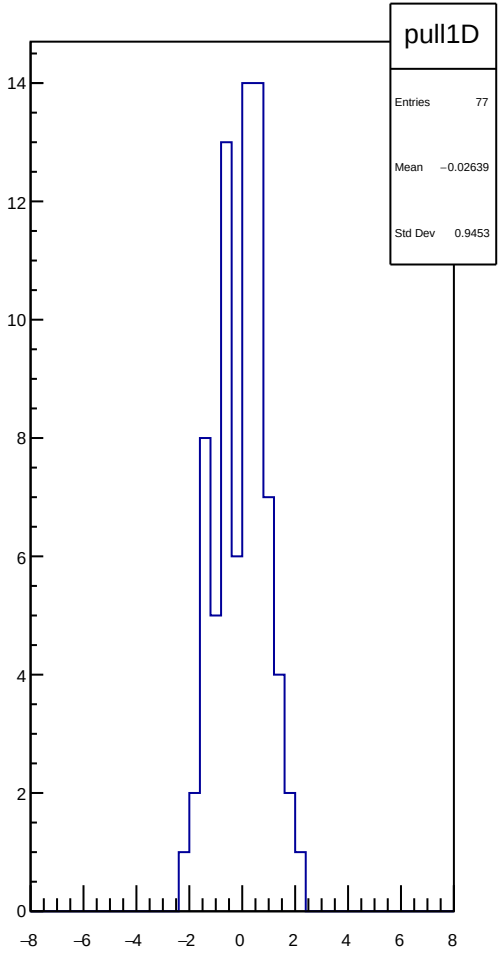

pull1D
Entries 77
Mean −0.008148
Std Dev 1.018
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

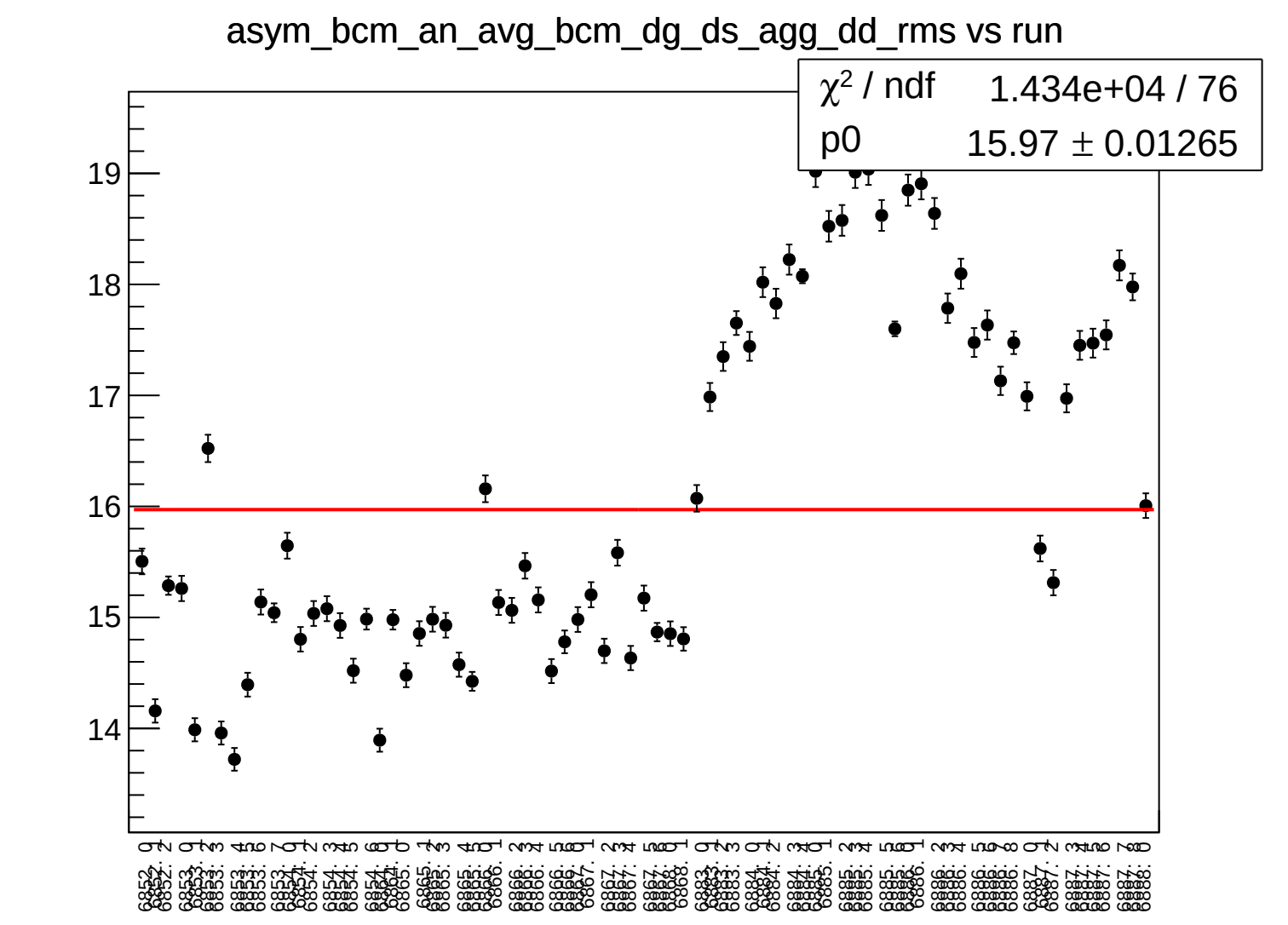

diff_bpm1i06Y_rms vs run
χ² / ndf 1.415e+04 / 76
p0 2659 ± 2.106
3200
3000
2800
2600
2400
2200
2000

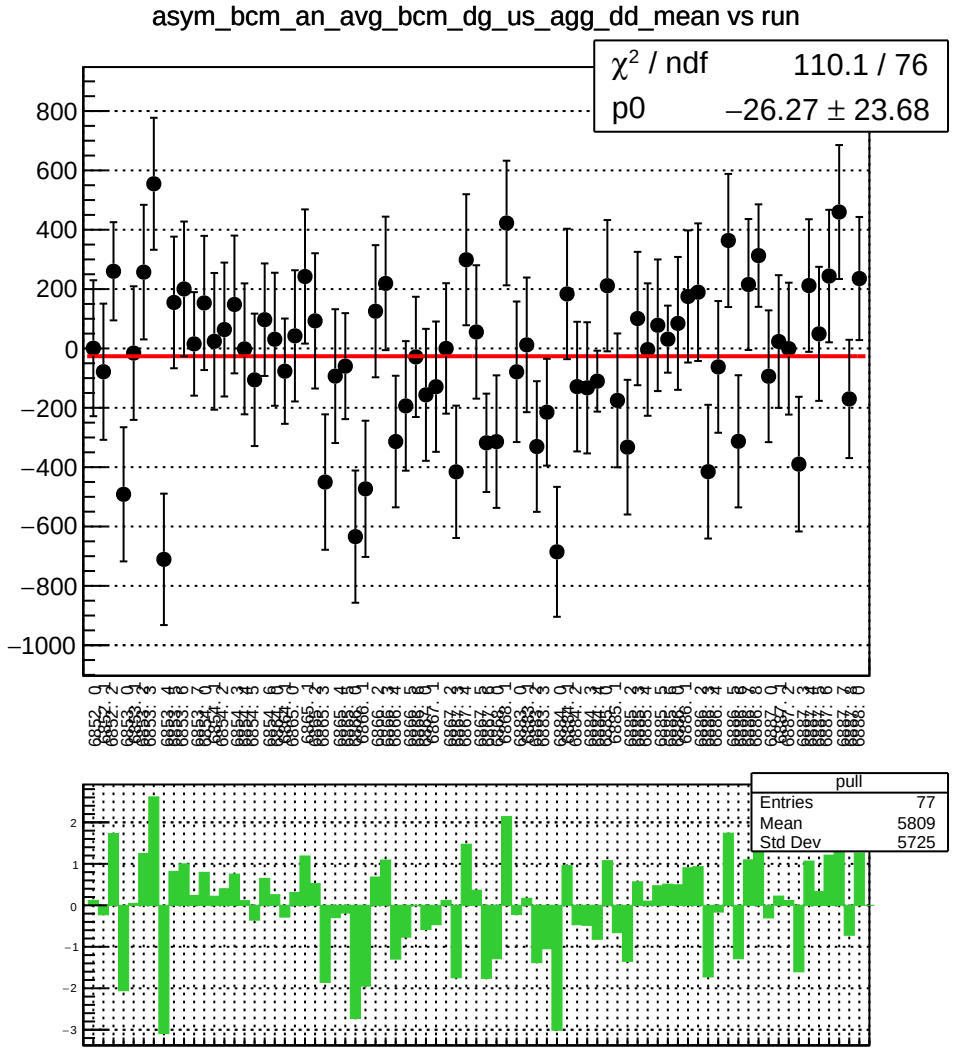

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.38 / 76
p0 183.4 ± 518
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 124.1
Std Dev 97.53
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.004949
Std Dev 0.3844
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

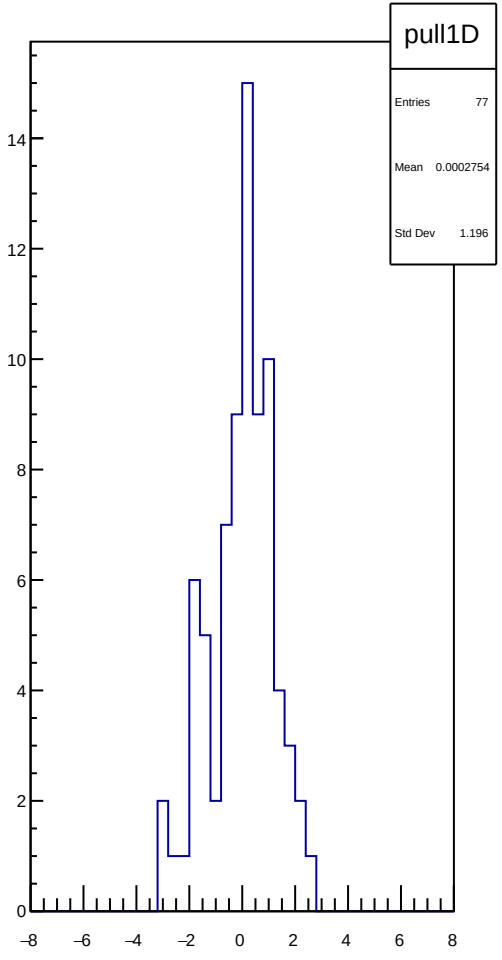

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 7.824e+04 / 76
p0 453.1 ± 0.3663
700
650
600
550
500
450
400
350
300

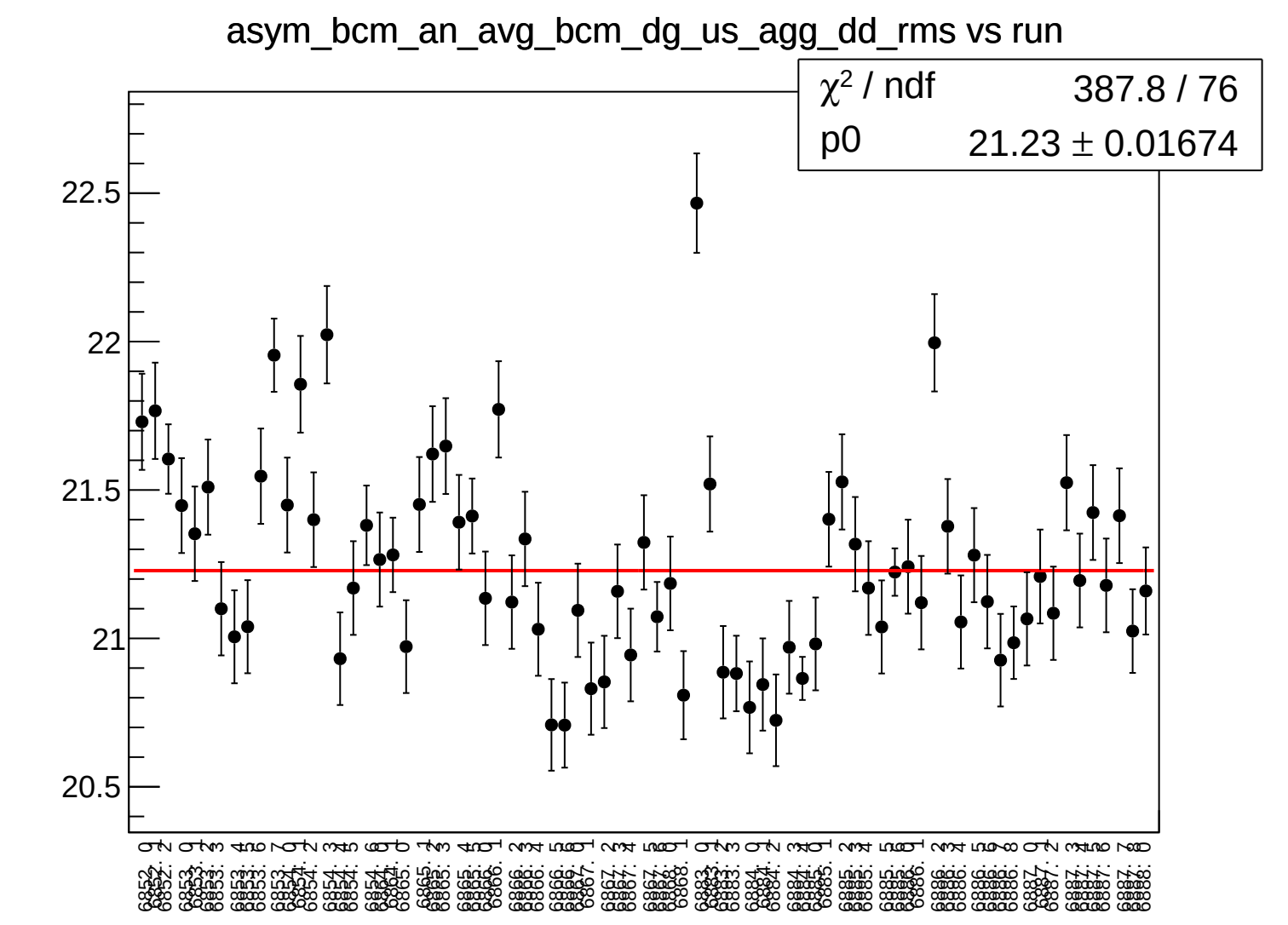

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 68.86 / 76
p0 12.14 ± 17.89
pull
Entries 77
Mean 62.78
Std Dev 19.4

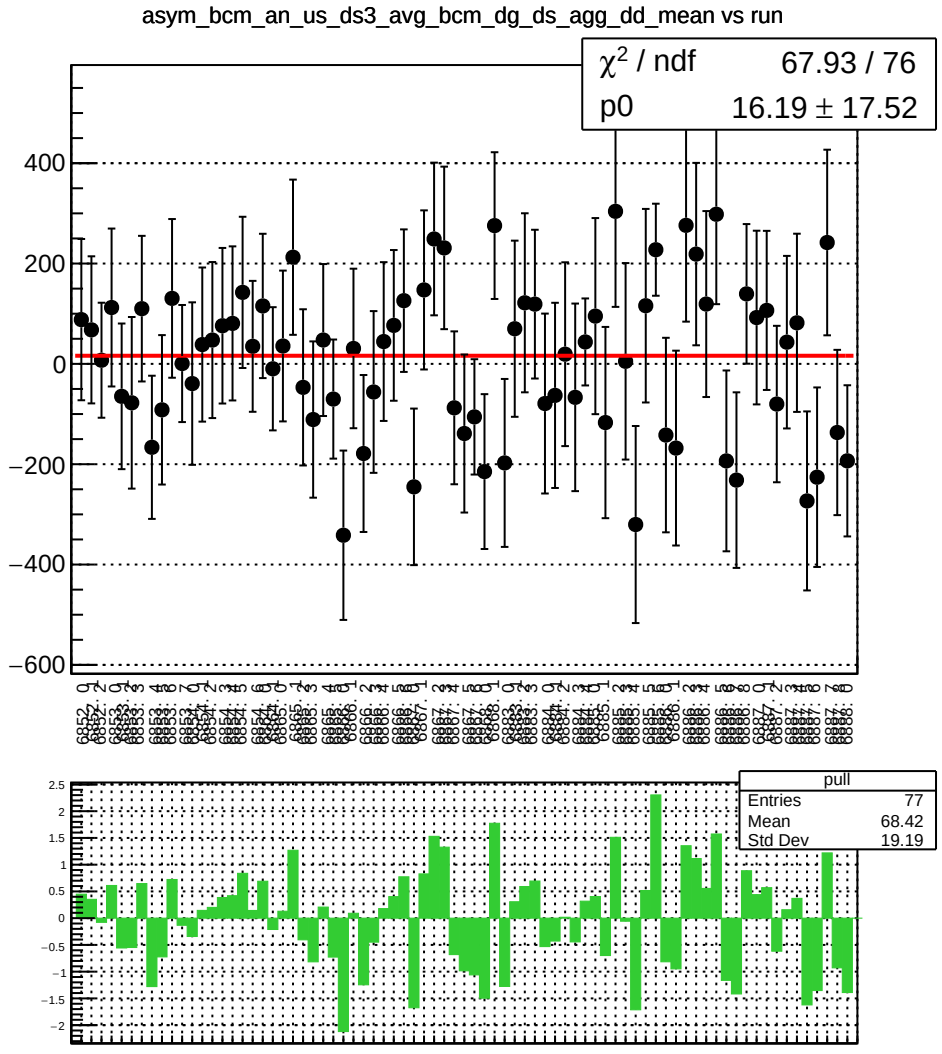

pull1D
Entries 77
Mean −0.02639
Std Dev 0.9453

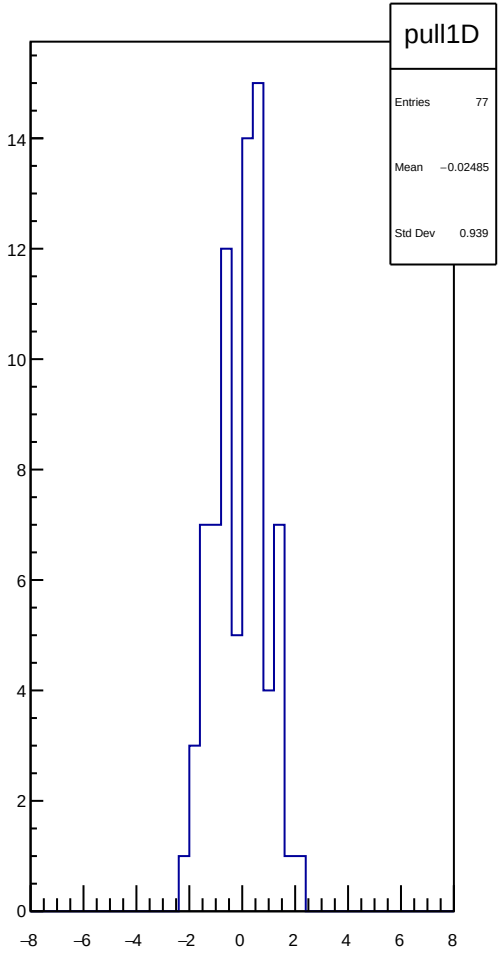

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1.434e+04 / 76
p0 15.97 ± 0.01265
19
18
17
16
15
14

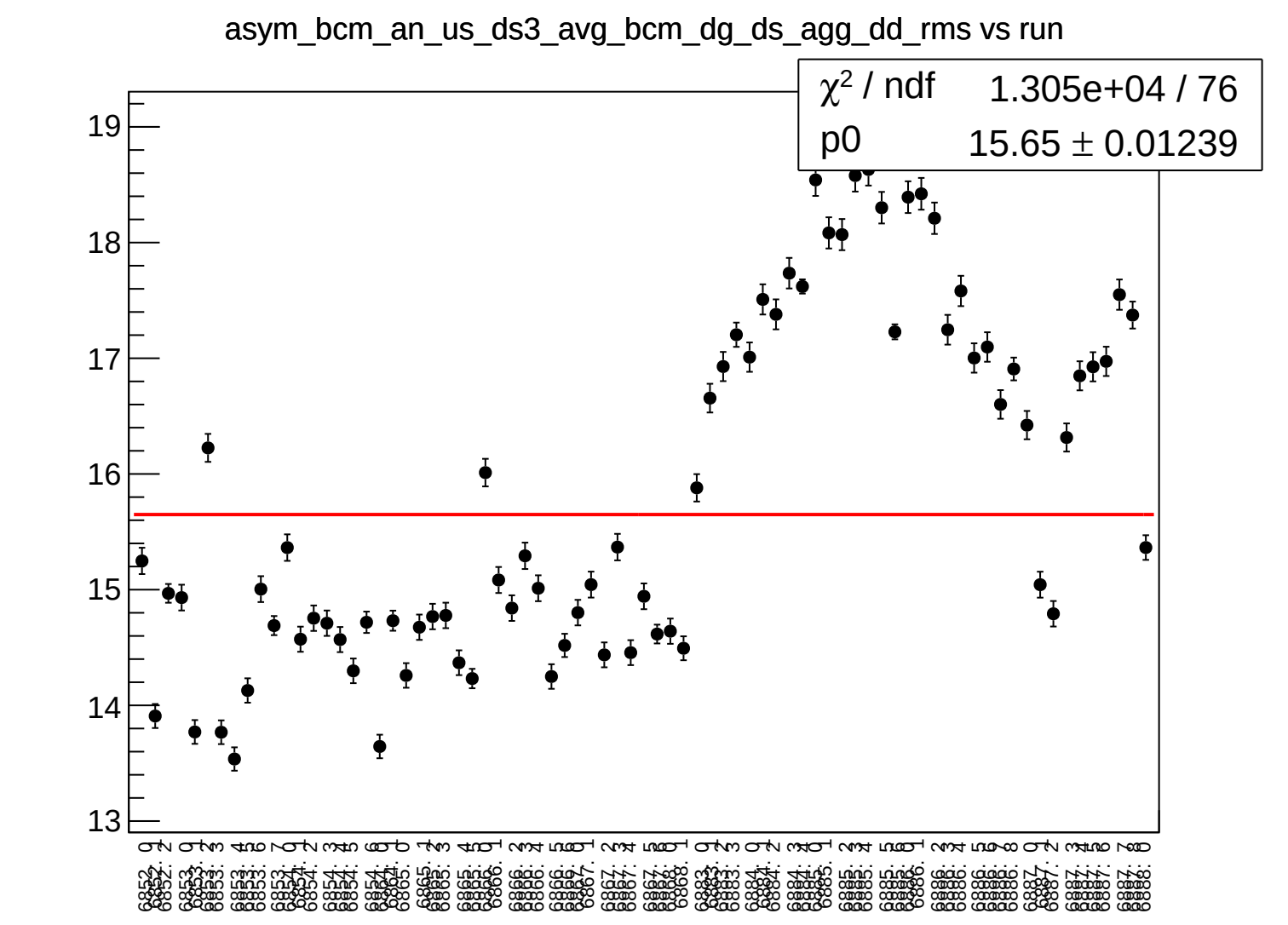

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 110.1 / 76
p0 −26.27 ± 23.68
pull
Entries 77
Mean 5809
Std Dev 5725

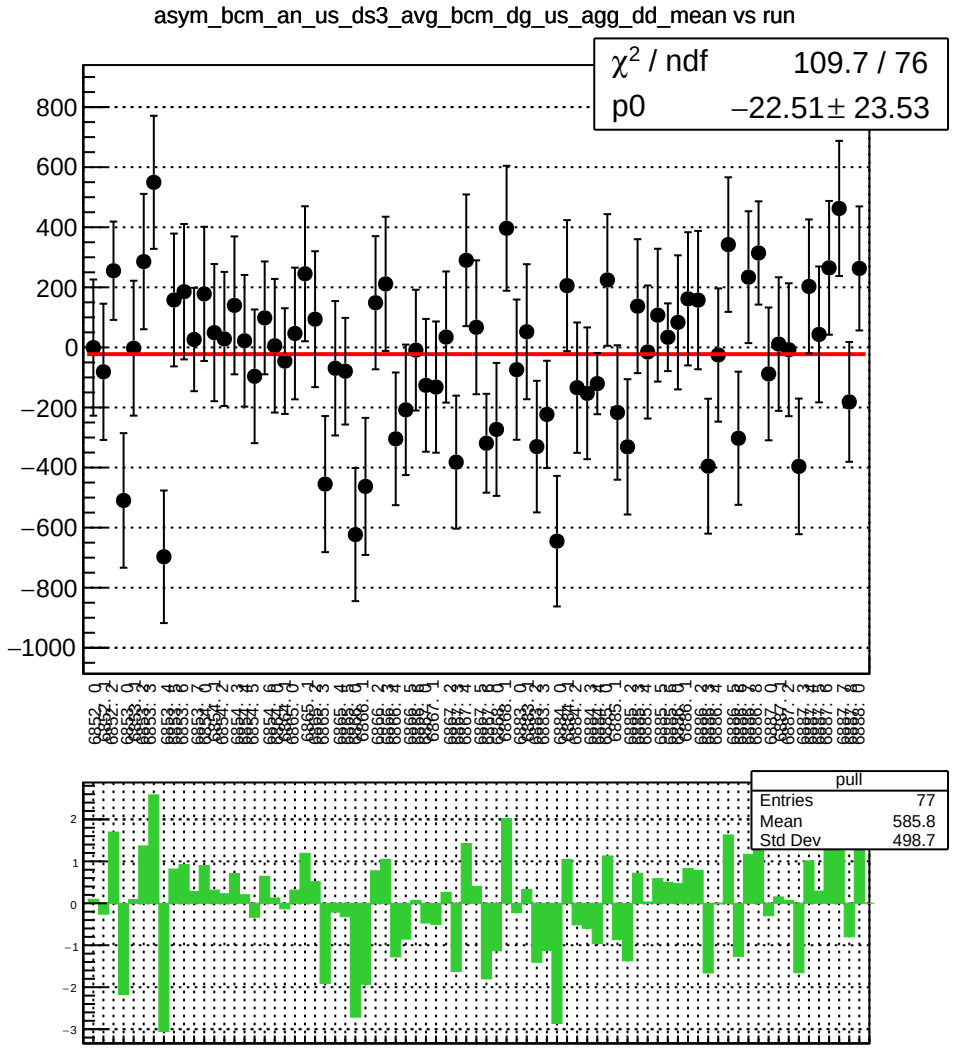

pull1D
Entries 77
Mean 0.0002754
Std Dev 1.196

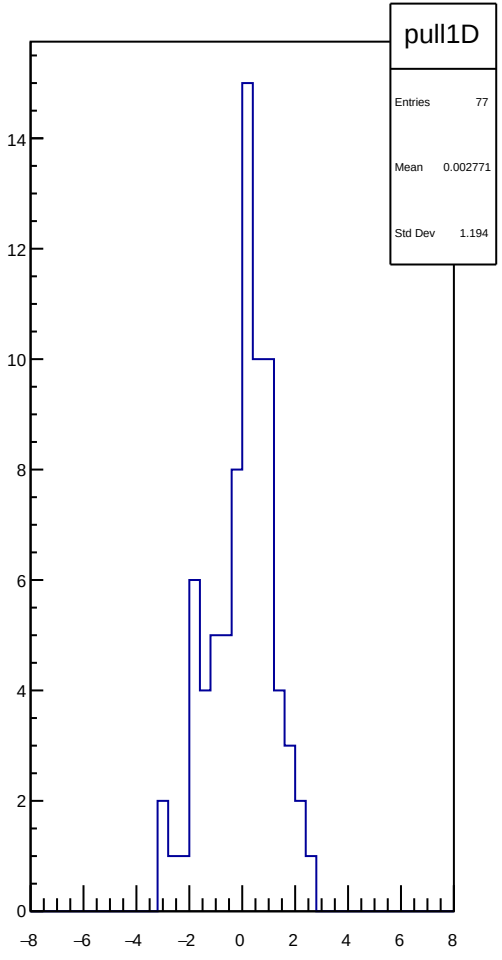

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 387.8 / 76
p0 21.23 ± 0.01674
22.5
22
21.5
21
20.5

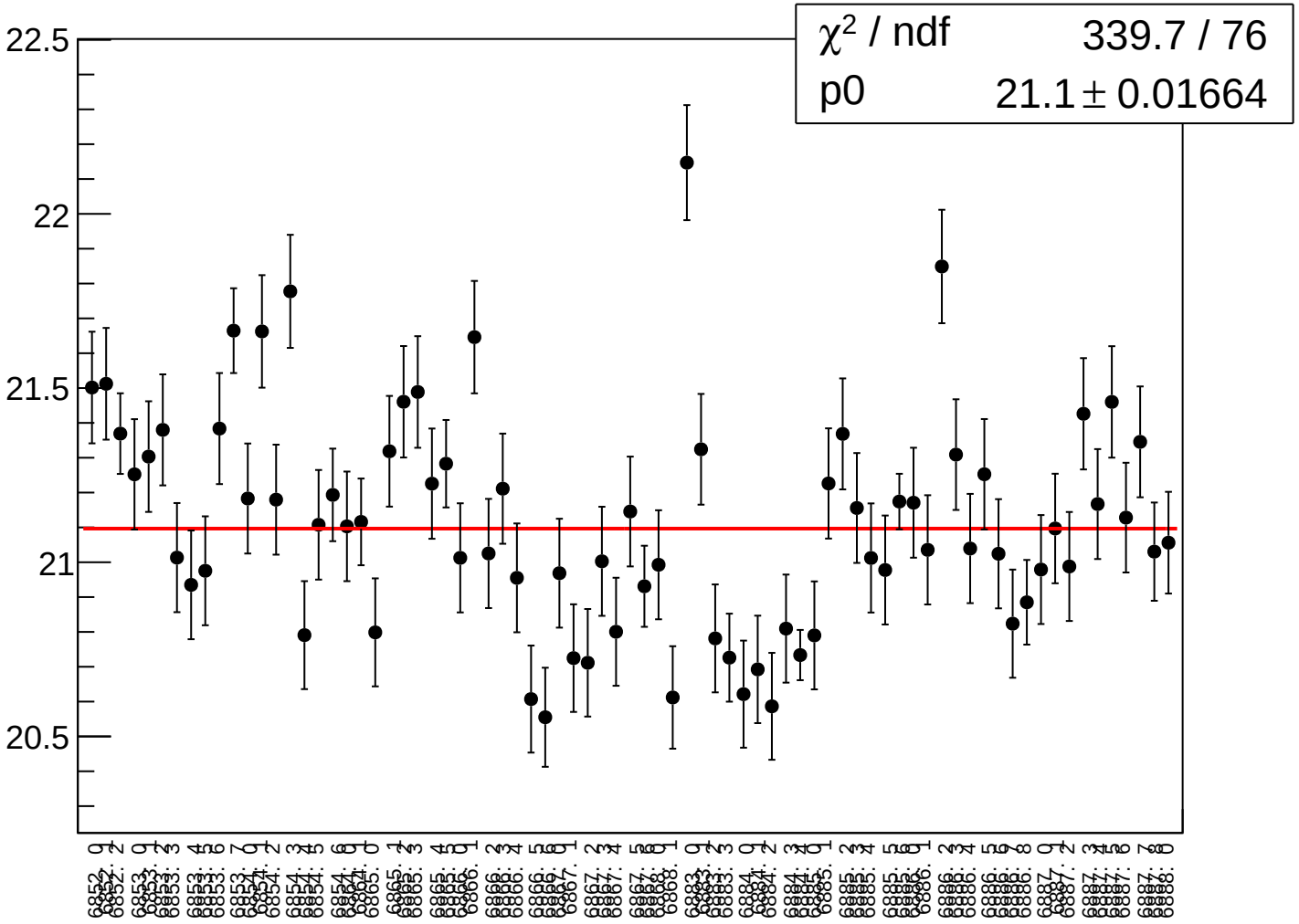

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 67.93 / 76
p0 16.19 ± 17.52
pull
Entries 77
Mean 68.42
Std Dev 19.19

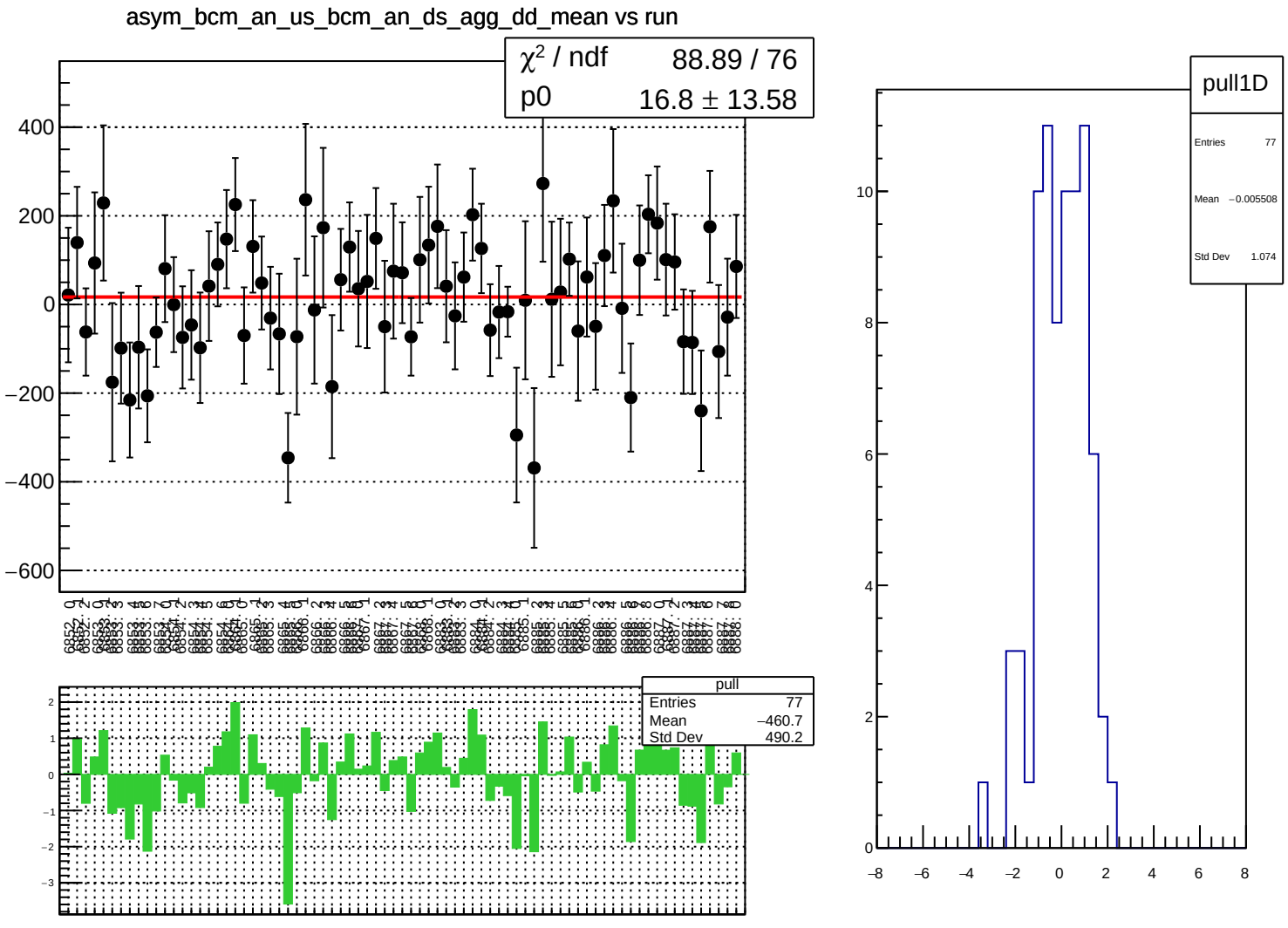

pull1D
Entries 77
Mean −0.02485
Std Dev 0.939

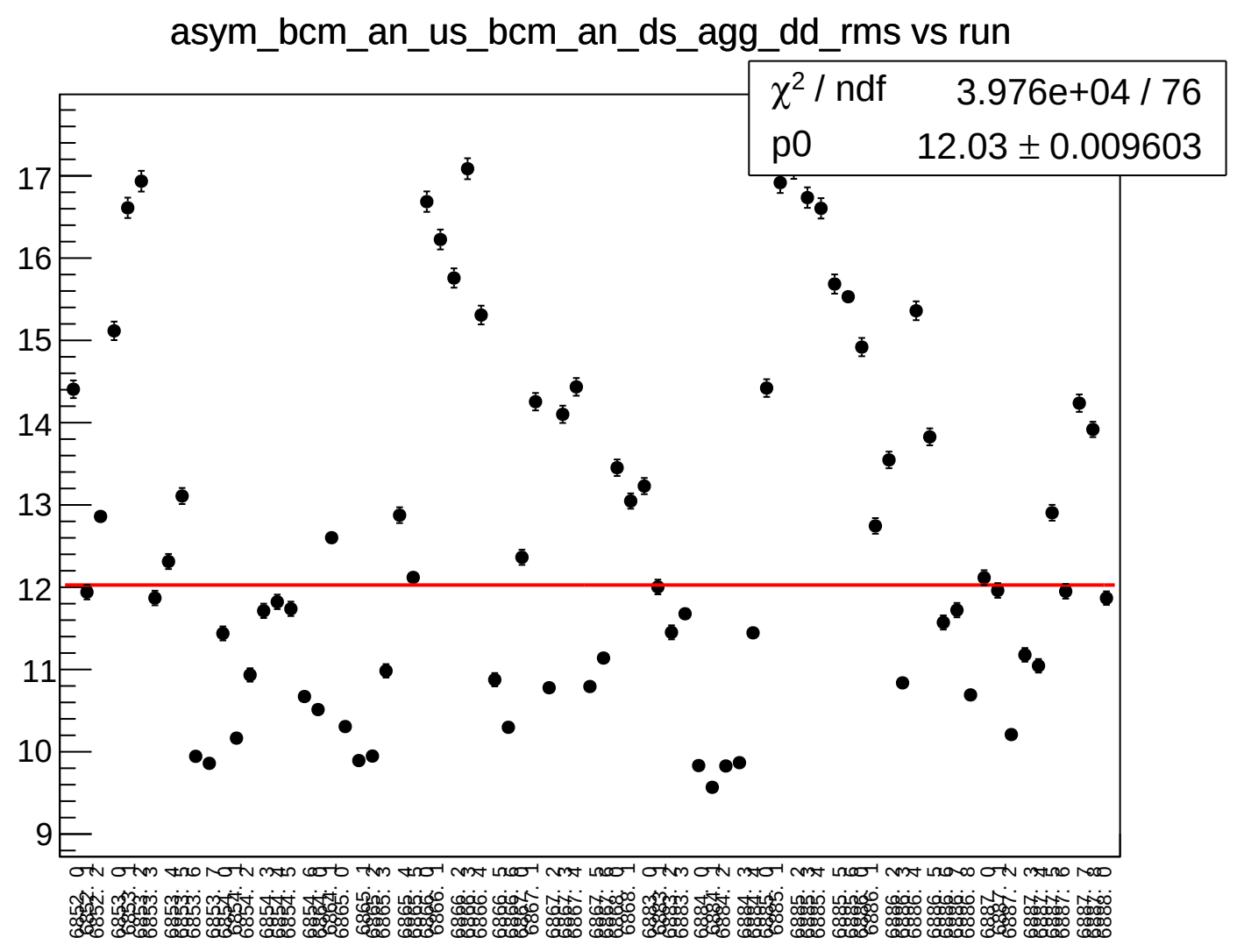

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1.305e+04 / 76
p0 15.65 ± 0.01239
19
18
17
16
15
14
13

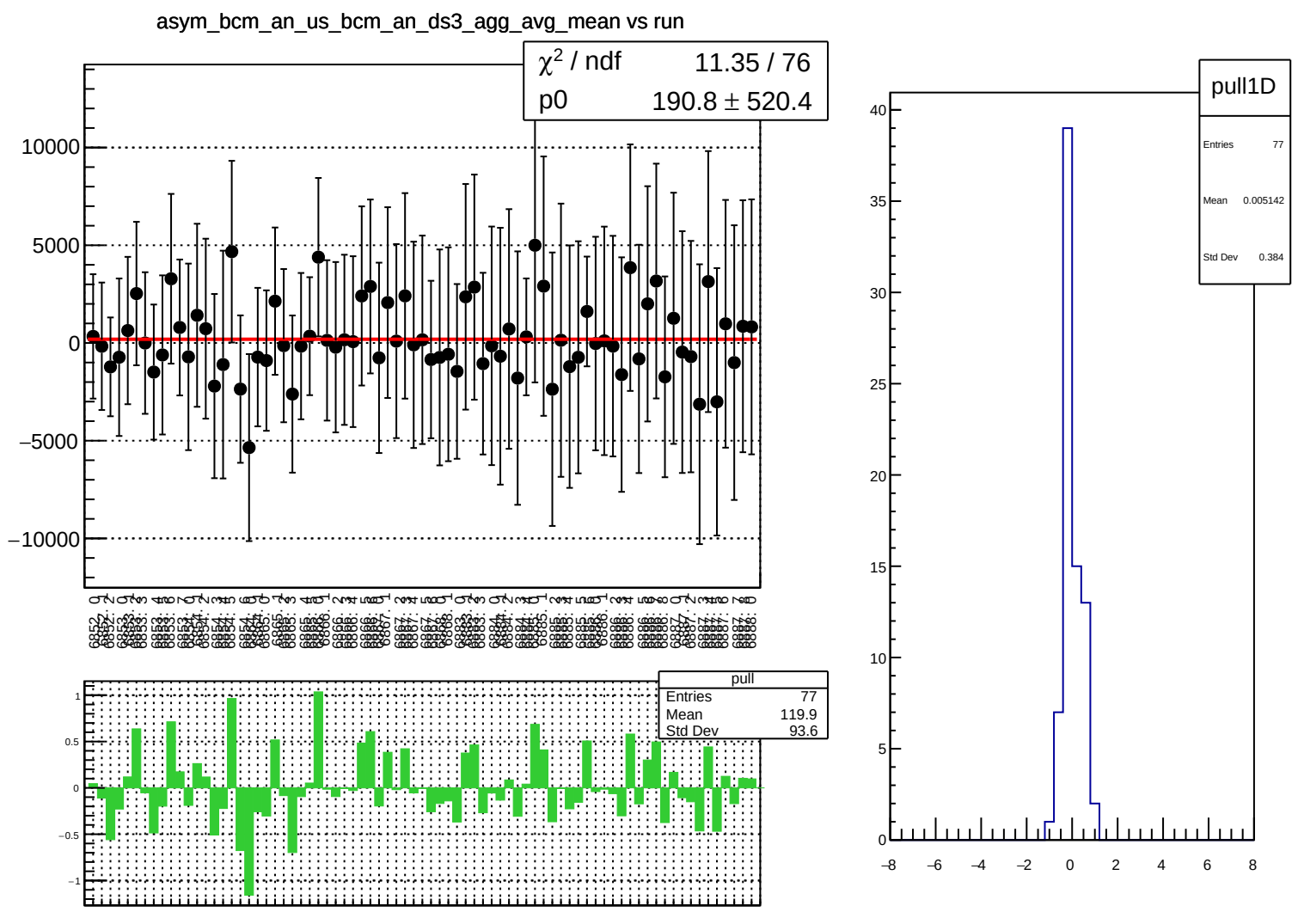

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 109.7 / 76
p0 −22.51± 23.53
pull
Entries 77
Mean 585.8
Std Dev 498.7

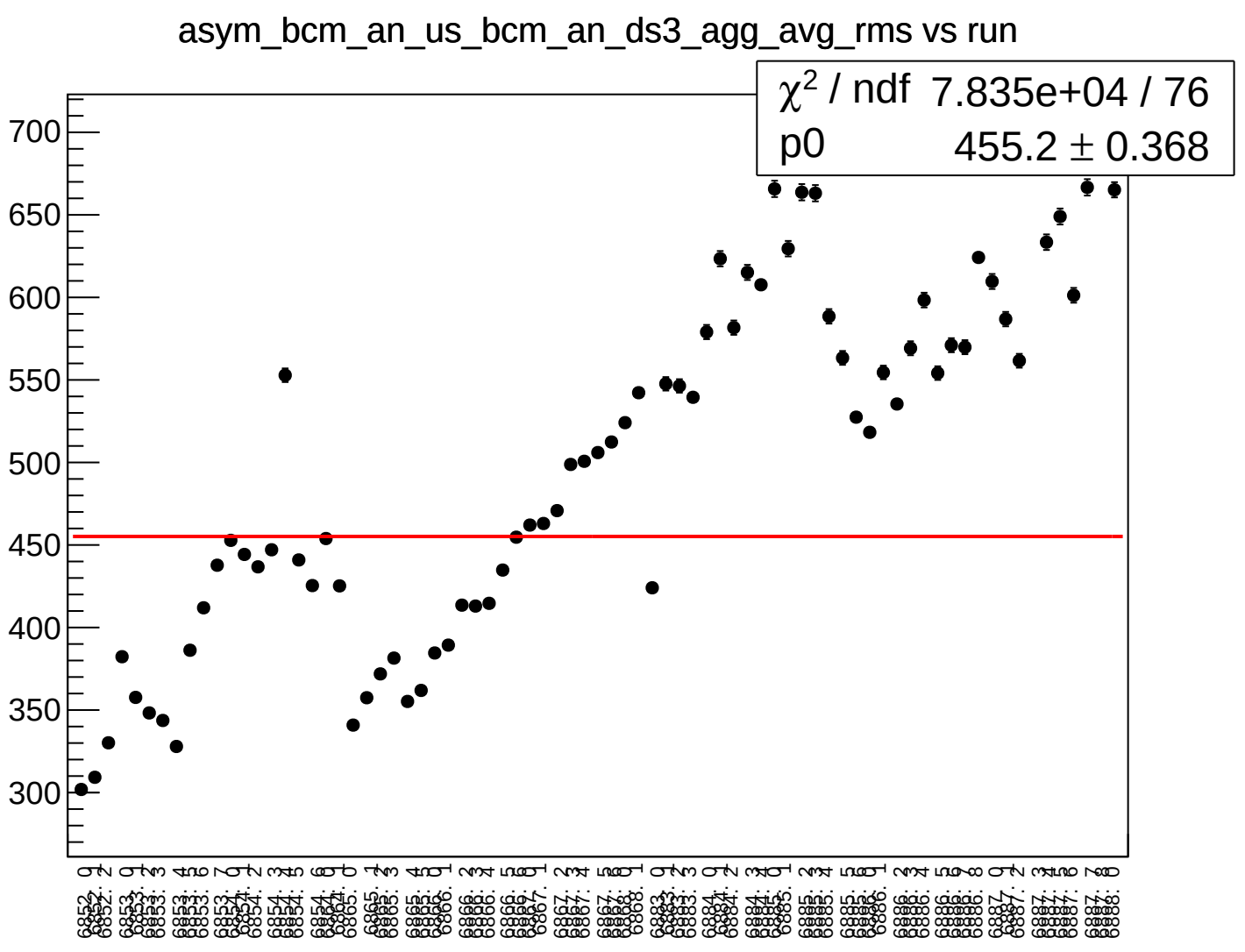

pull1D
Entries 77
Mean 0.002771
Std Dev 1.194

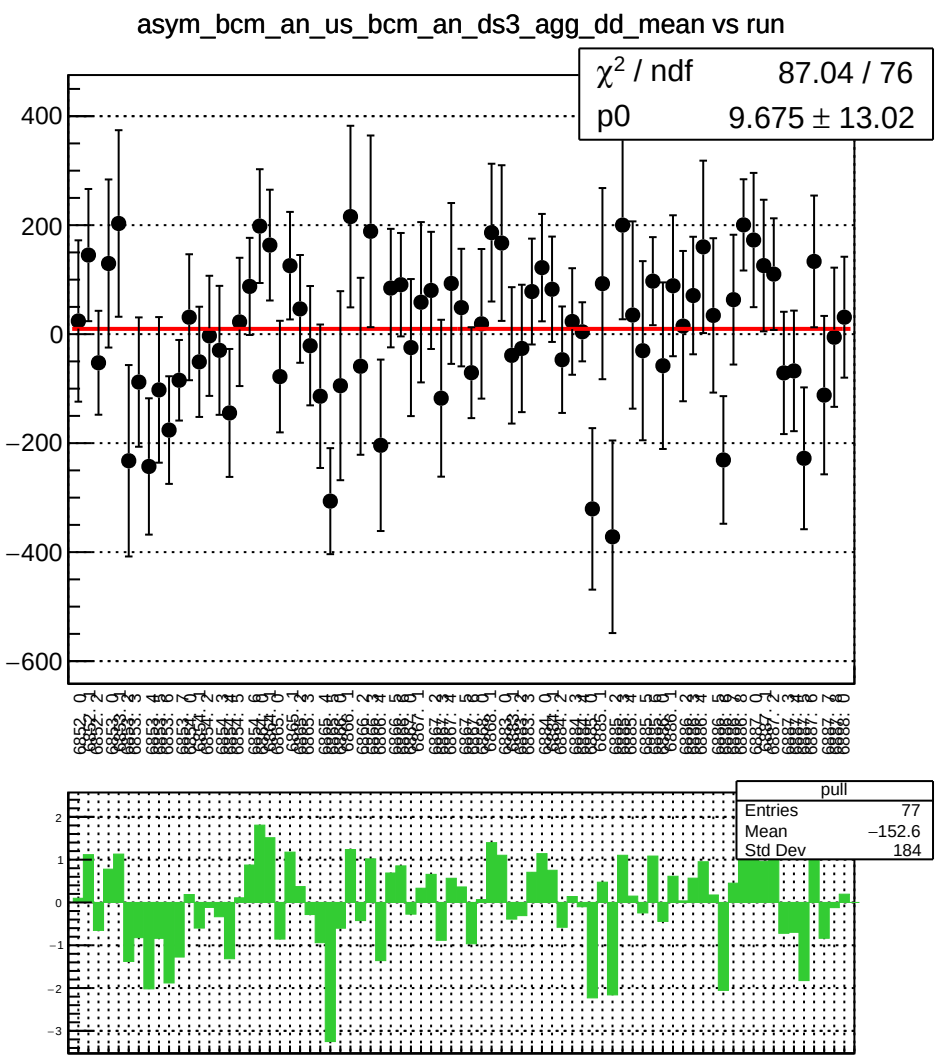

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 339.7 / 76
p0 21.1 ± 0.01664
22.5
22
21.5
21
20.5

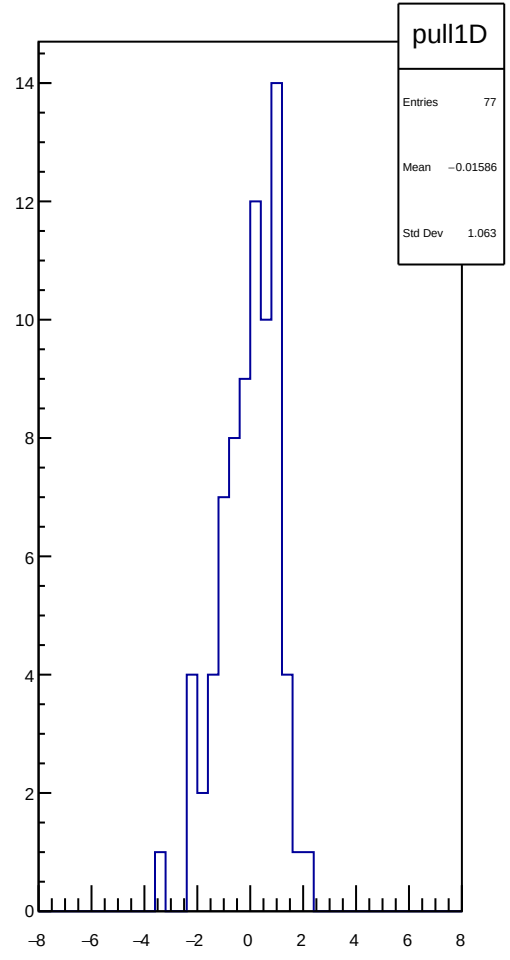

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 88.89 / 76
p0 16.8 ± 13.58
pull
Entries 77
Mean −460.7
Std Dev 490.2
pull1D
Entries 77
Mean −0.005508
Std Dev 1.074

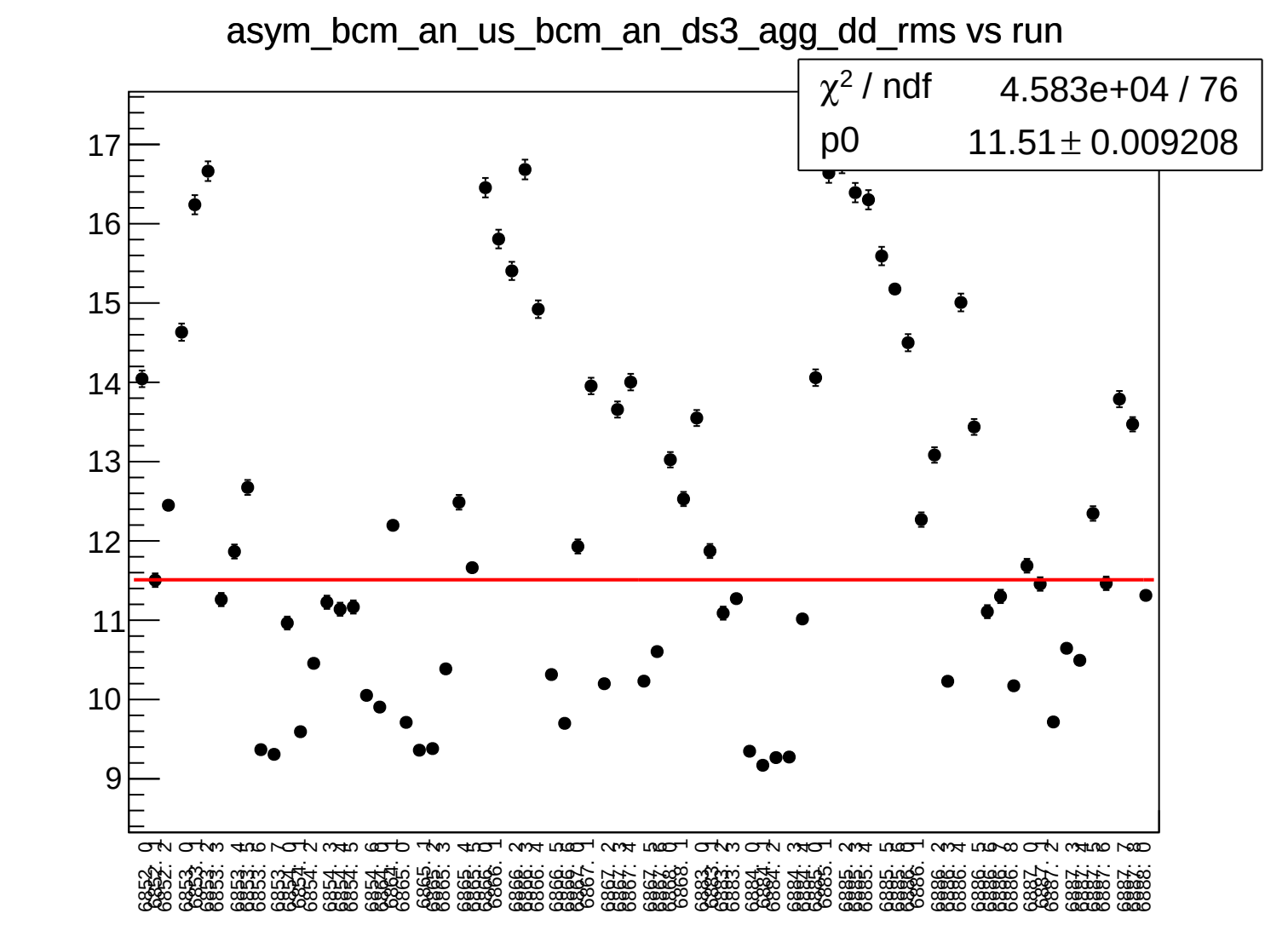

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3.976e+04 / 76
p0 12.03 ± 0.009603
17
16
15
14
13
12
11
10
9

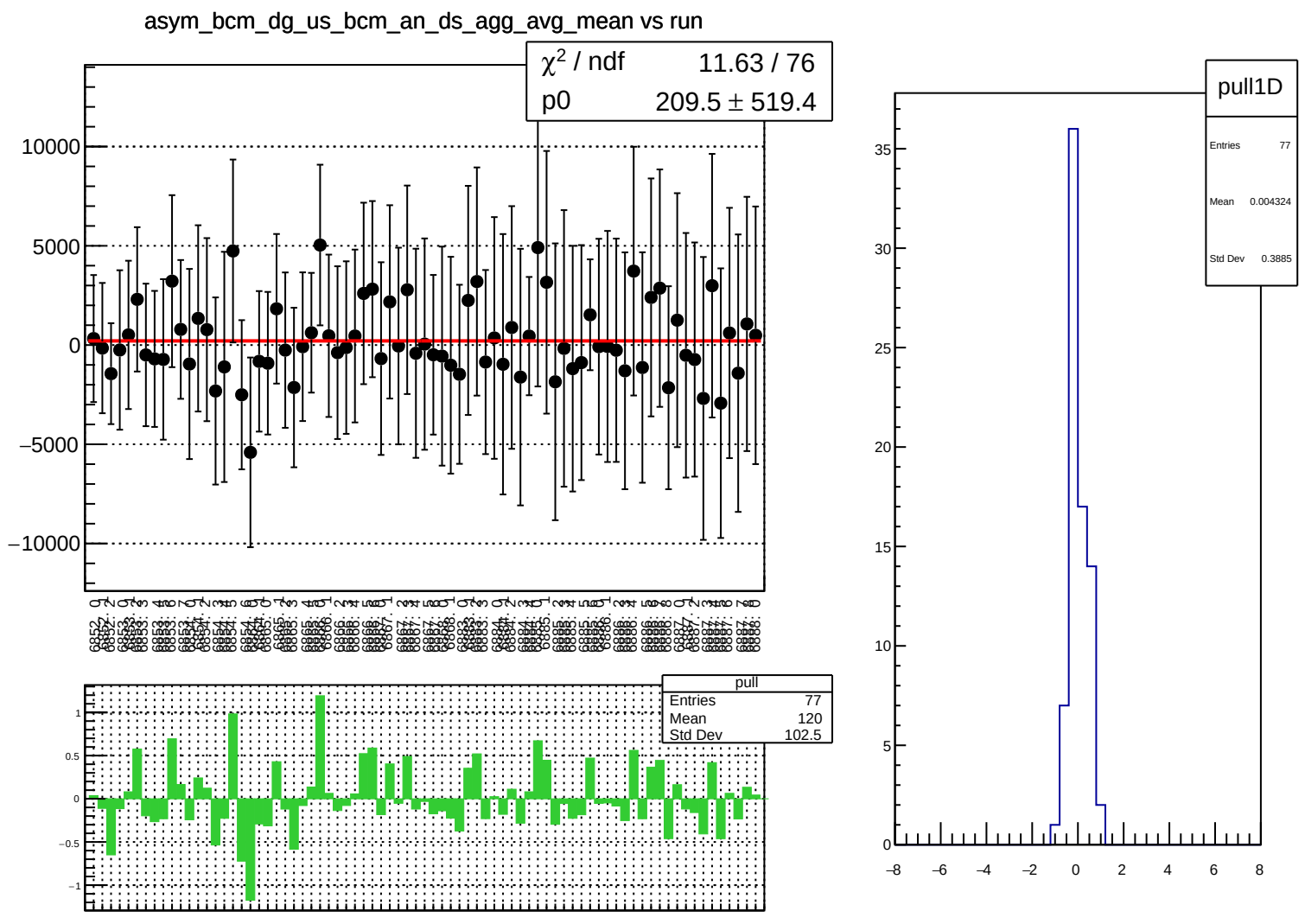

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 11.35 / 76
p0 190.8 ± 520.4
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 119.9
Std Dev 93.6
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.005142
Std Dev 0.384
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

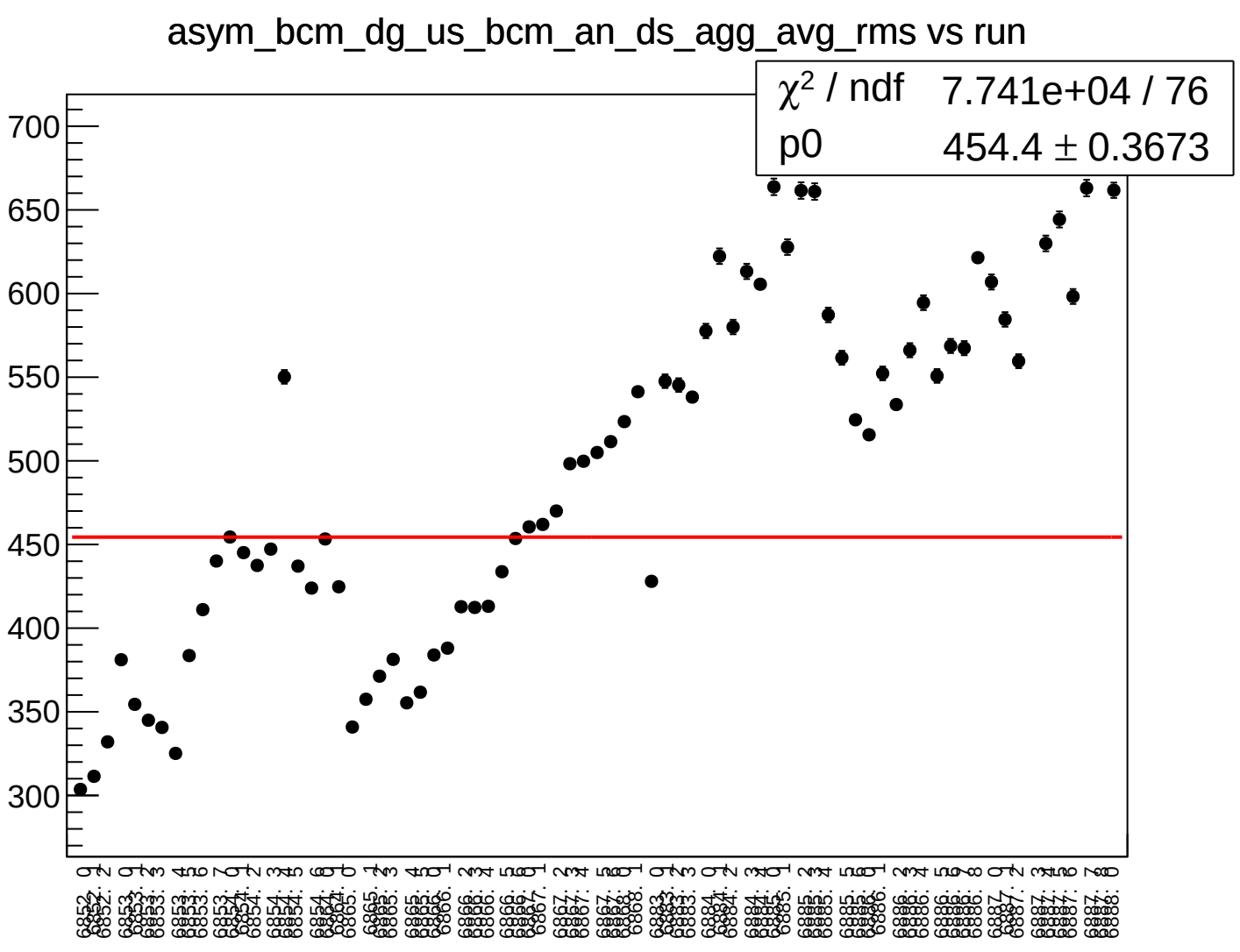

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 7.835e+04 / 76
p0 455.2 ± 0.368
700
650
600
550
500
450
400
350
300

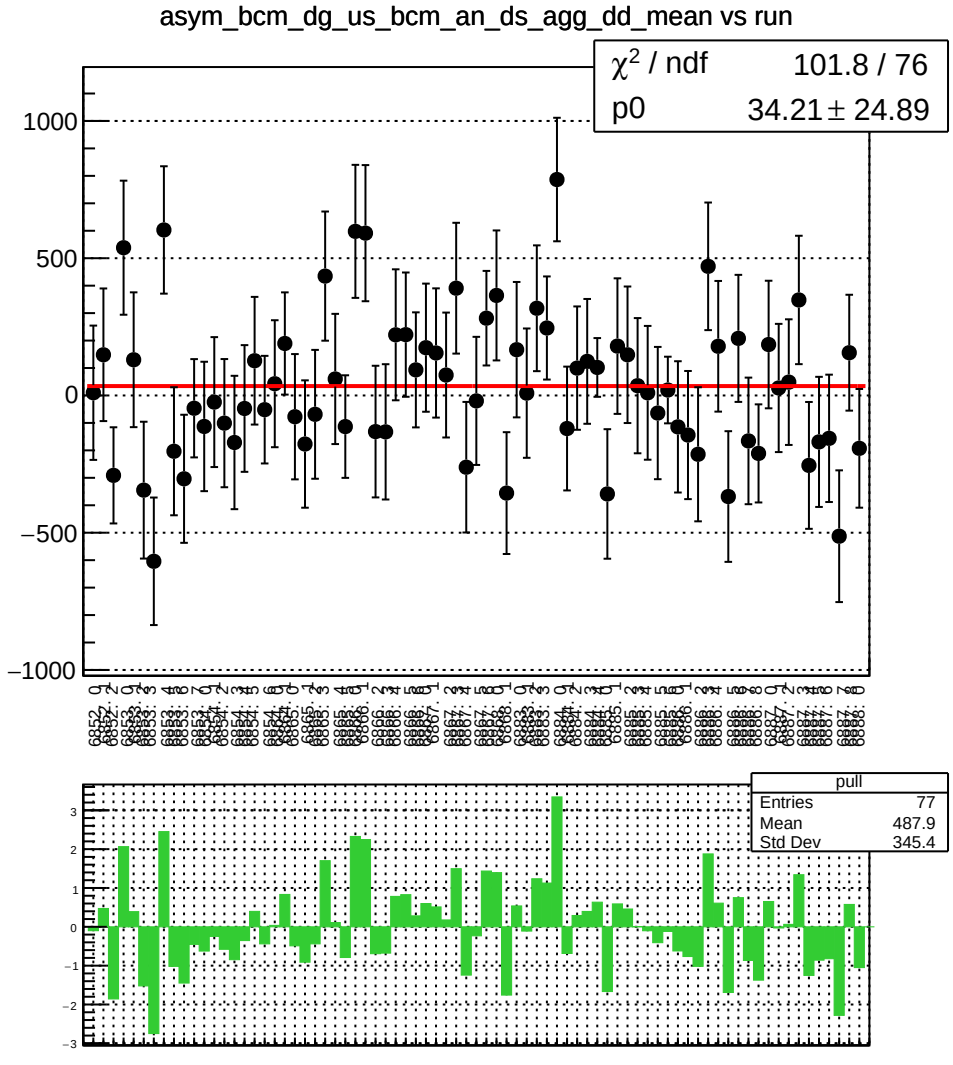

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 87.04 / 76
p0 9.675 ± 13.02
pull
Entries 77
Mean −152.6
Std Dev 184

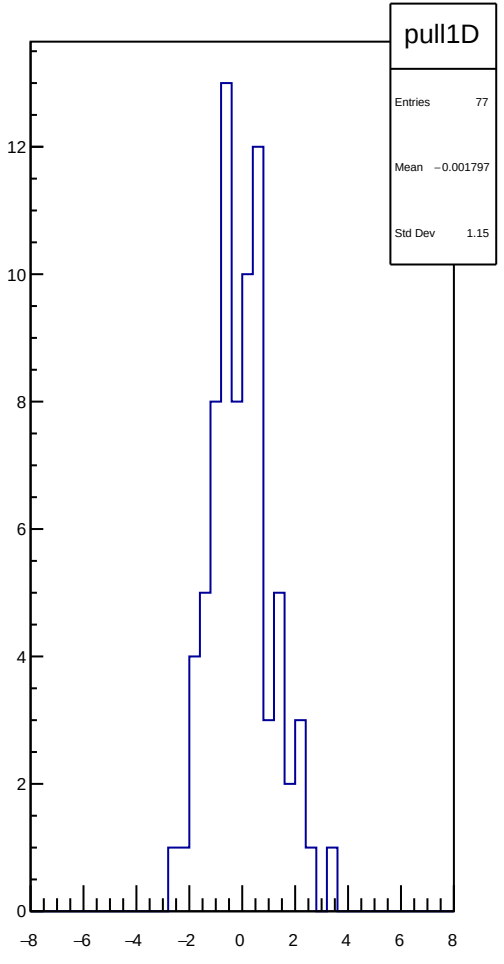

pull1D
Entries 77
Mean −0.01586
Std Dev 1.063

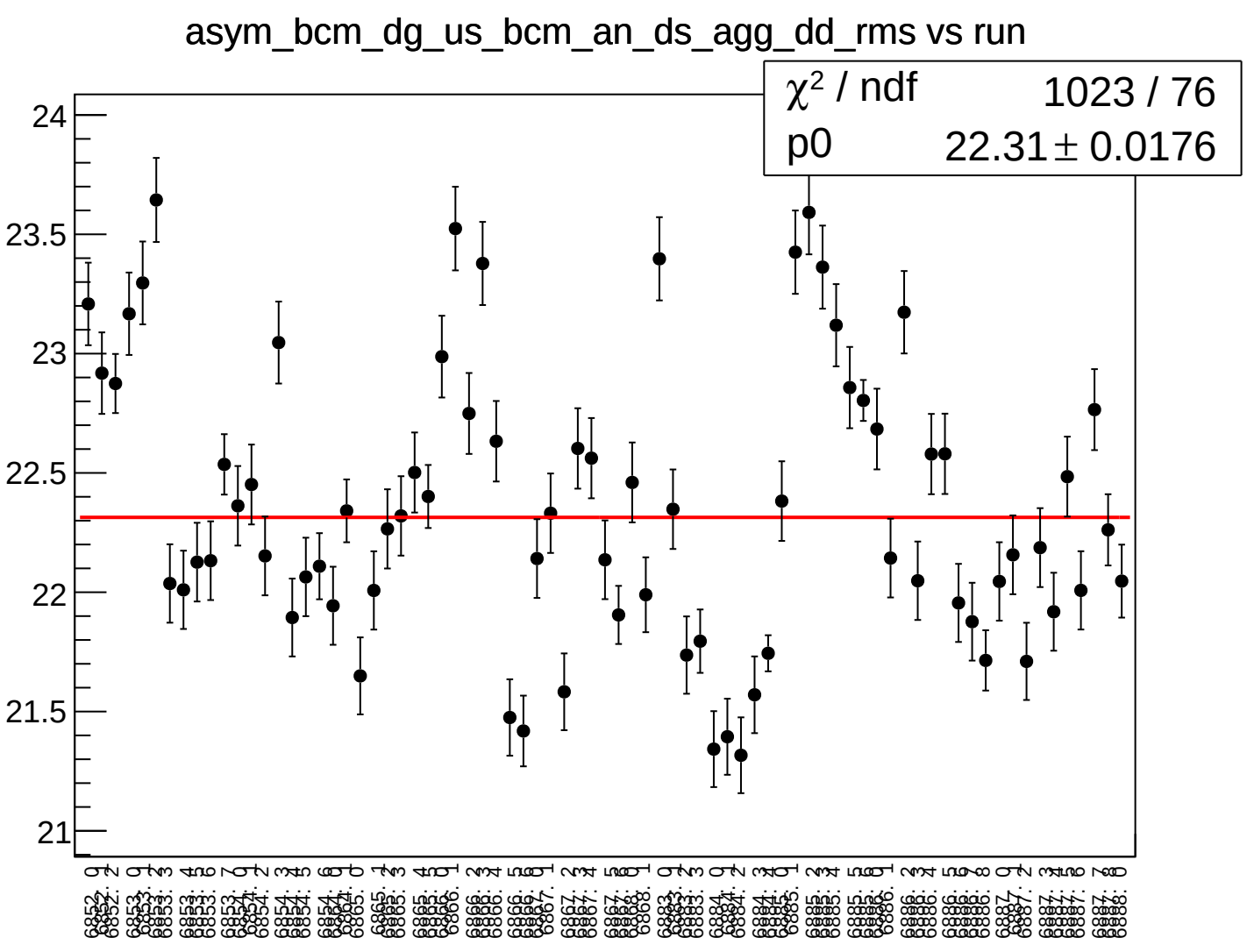

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 4.583e+04 / 76
p0 11.51 ± 0.009208
17
16
15
14
13
12
11
10
9

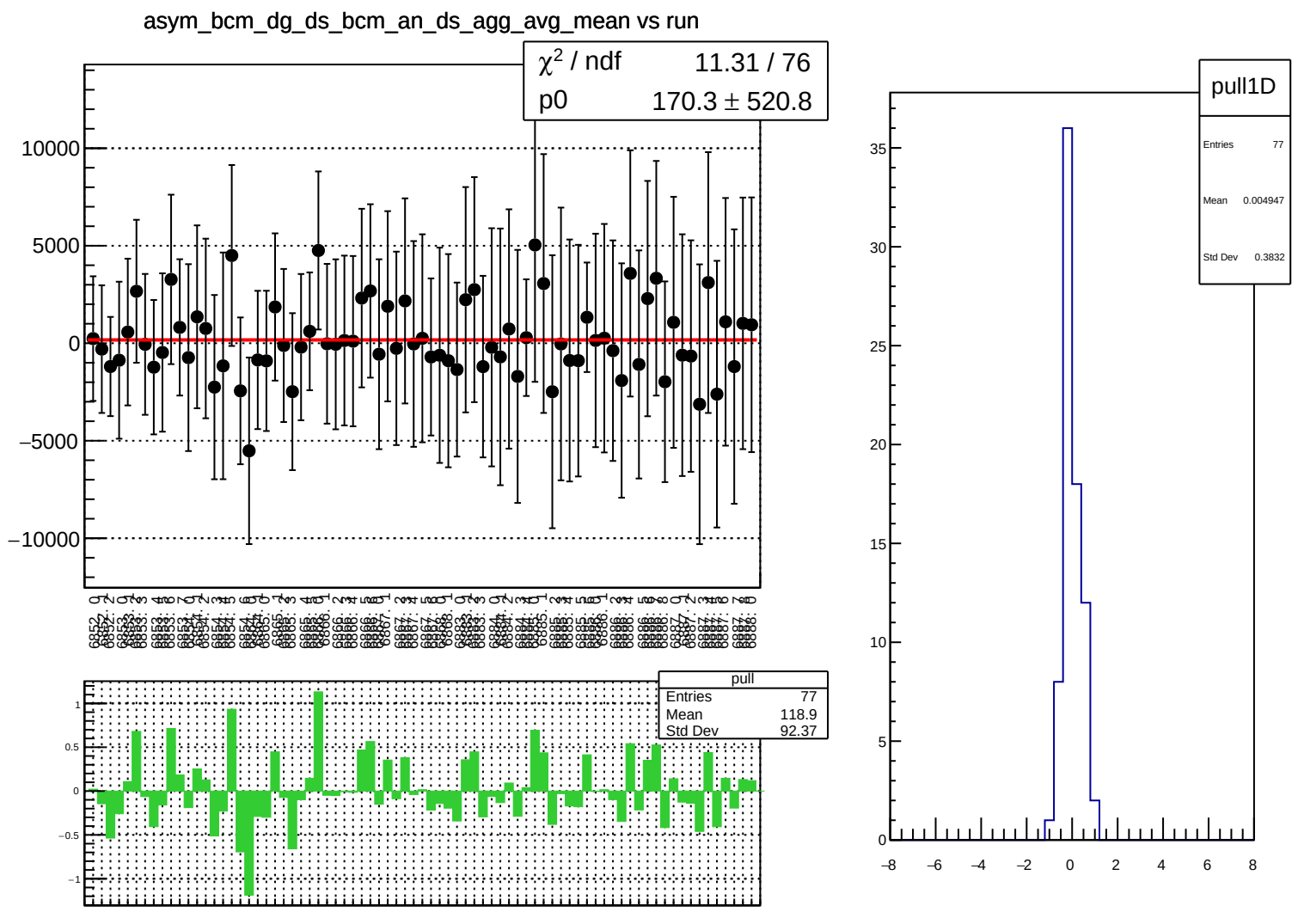

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.63 / 76
p0 209.5 ± 519.4
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 120
Std Dev 102.5
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.004324
Std Dev 0.3885
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

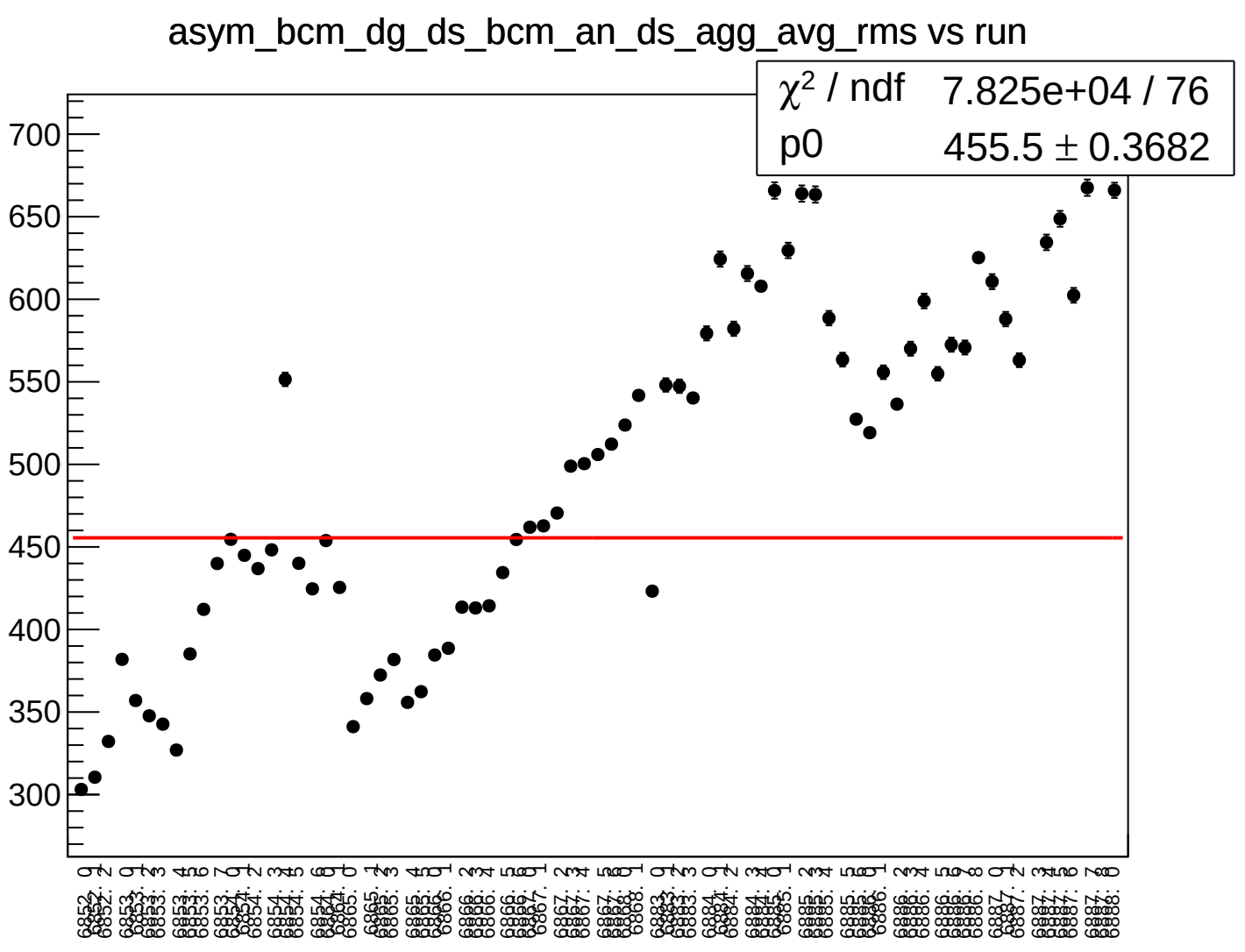

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 7.741e+04 / 76
p0 454.4 ± 0.3673
700
650
600
550
500
450
400
350
300

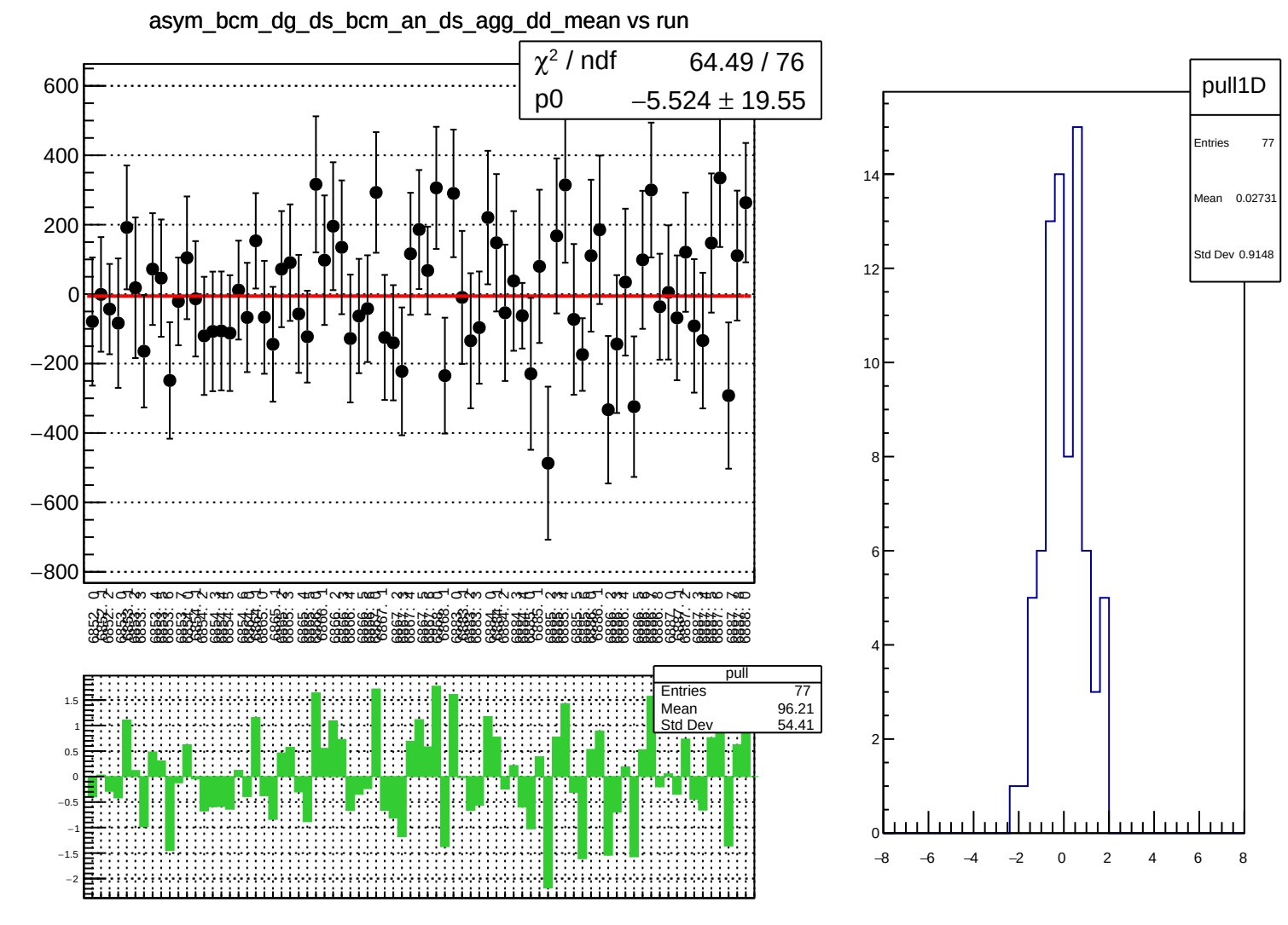

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 101.8 / 76
p0 34.21 ± 24.89
1000
500
0
−500
−1000
pull
Entries 77
Mean 487.9
Std Dev 345.4
3
2
1
0
−1
−2
−3

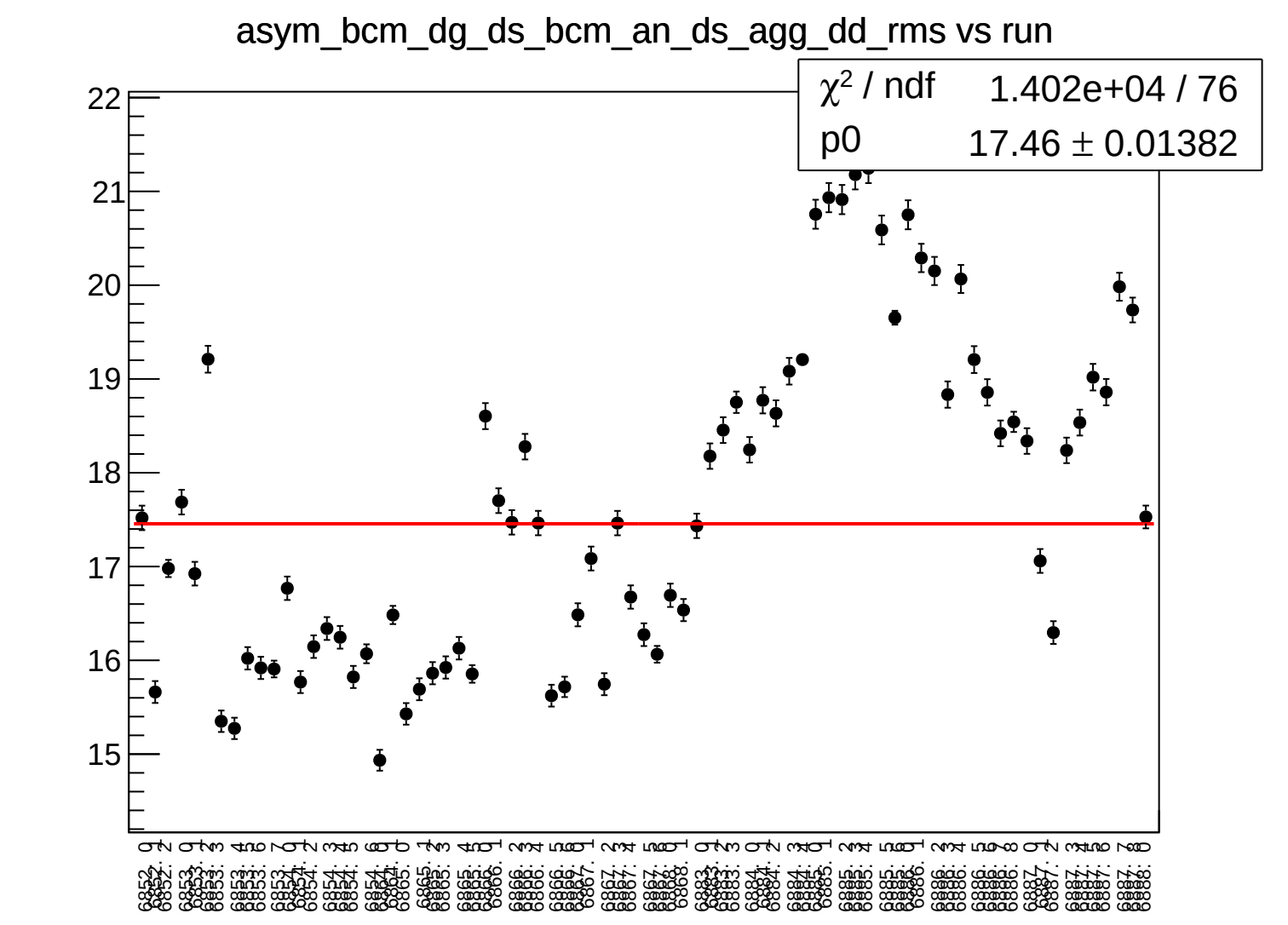

pull1D
Entries 77
Mean −0.001797
Std Dev 1.15
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

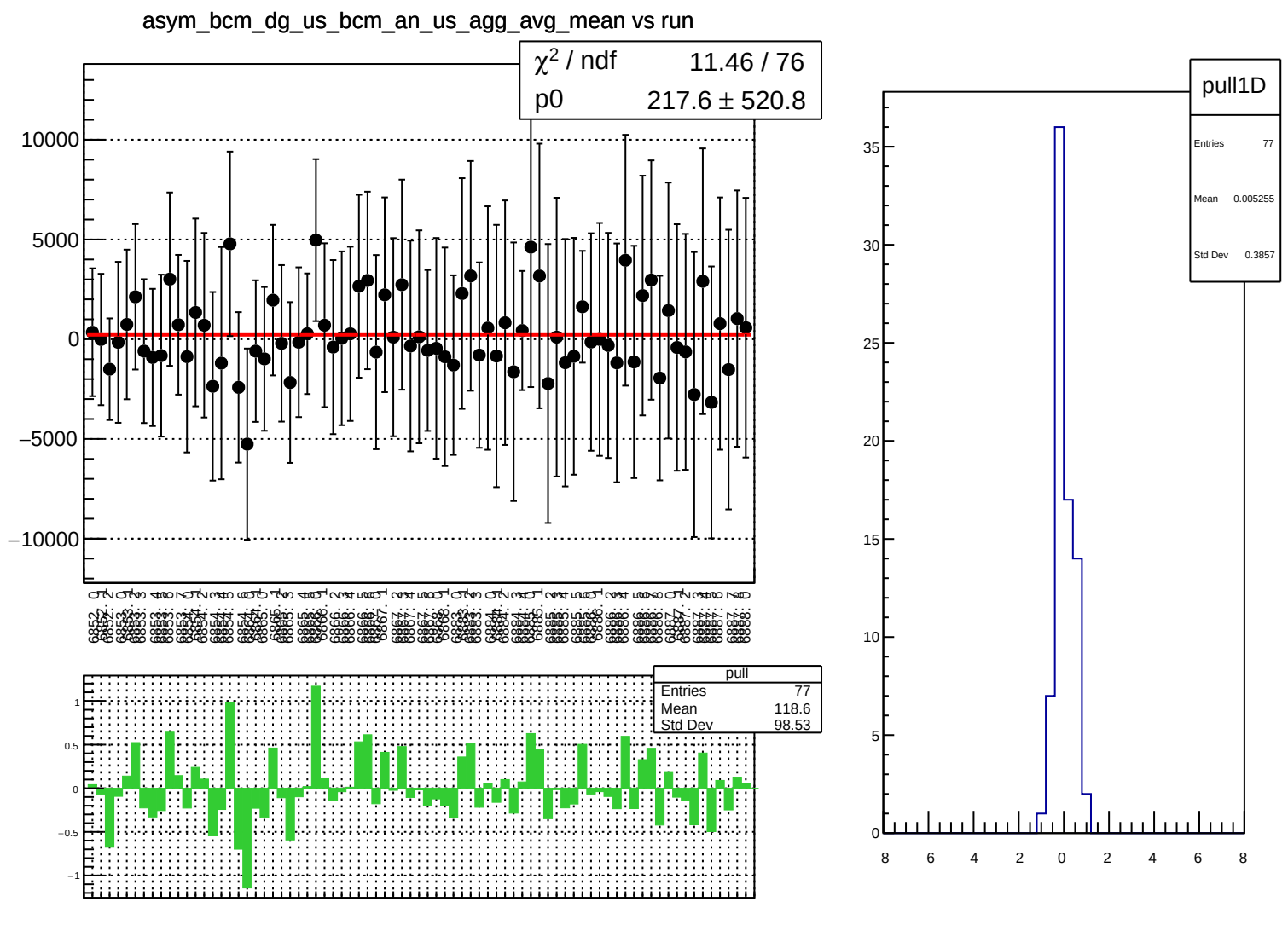

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1023 / 76
p0 22.31 ± 0.0176
24
23.5
23
22.5
22
21.5
21

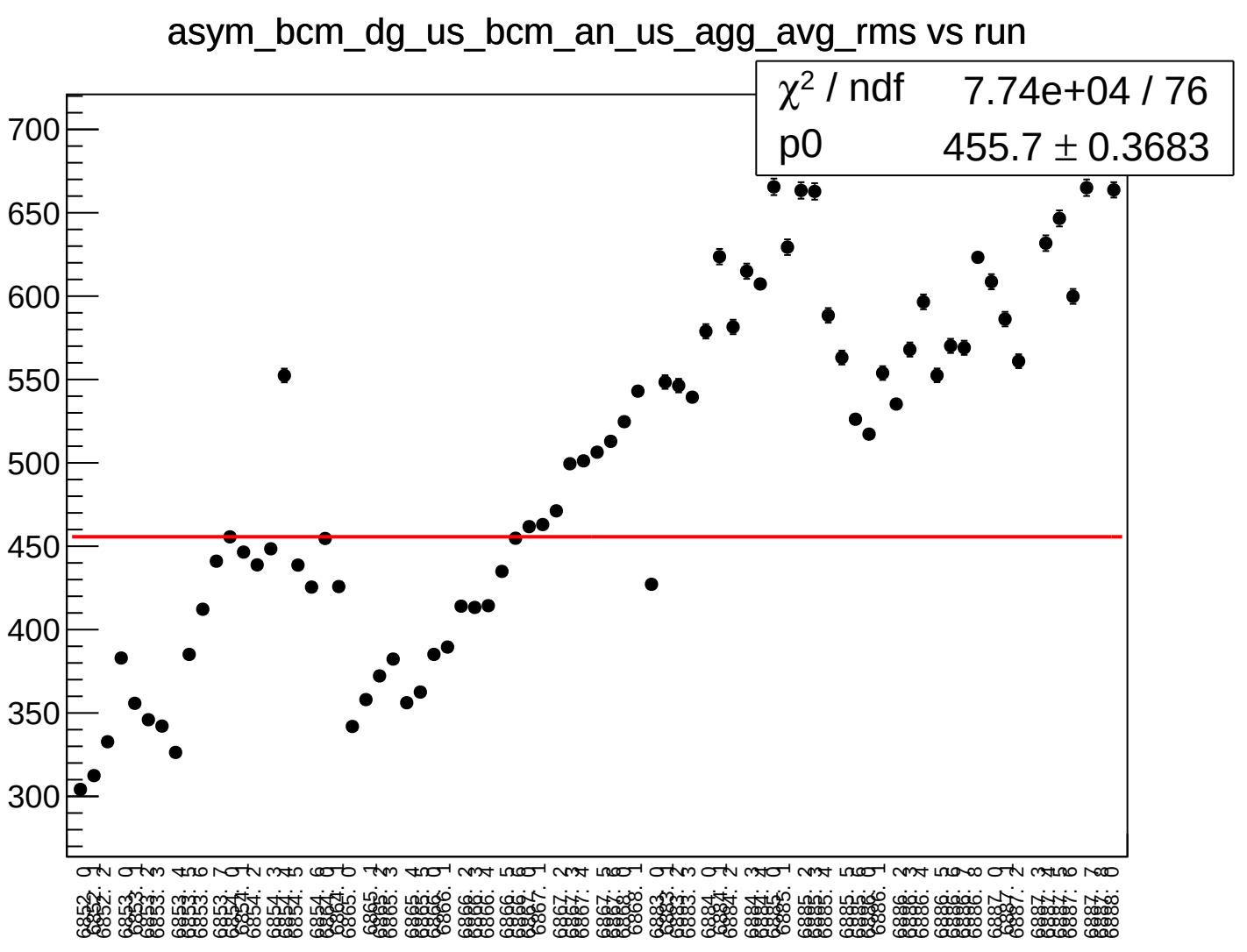

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 11.31 / 76
p0 170.3 ± 520.8
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 118.9
Std Dev 92.37
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.004947
Std Dev 0.3832
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

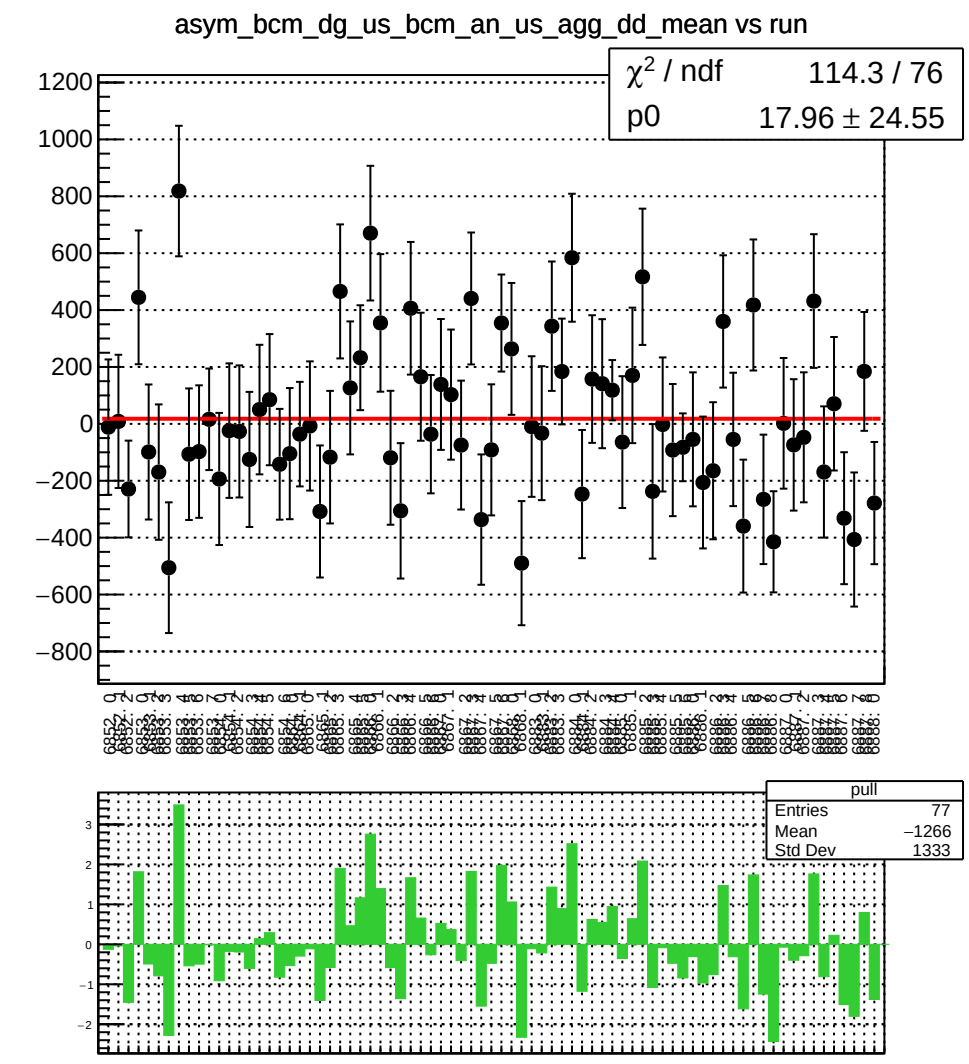

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 7.825e+04 / 76
p0 455.5 ± 0.3682
700
650
600
550
500
450
400
350
300

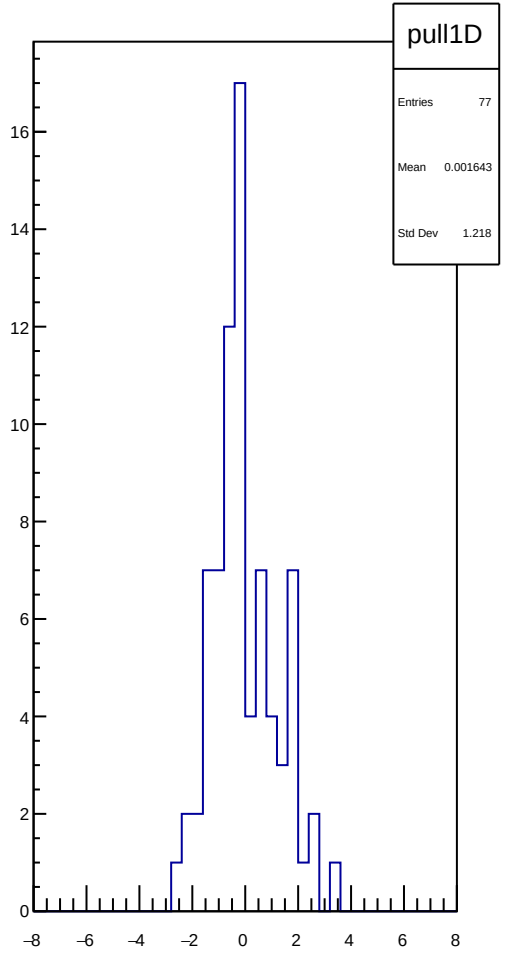

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 64.49 / 76
p0 −5.524 ± 19.55
pull
Entries 77
Mean 96.21
Std Dev 54.41
pull1D
Entries 77
Mean 0.02731
Std Dev 0.9148

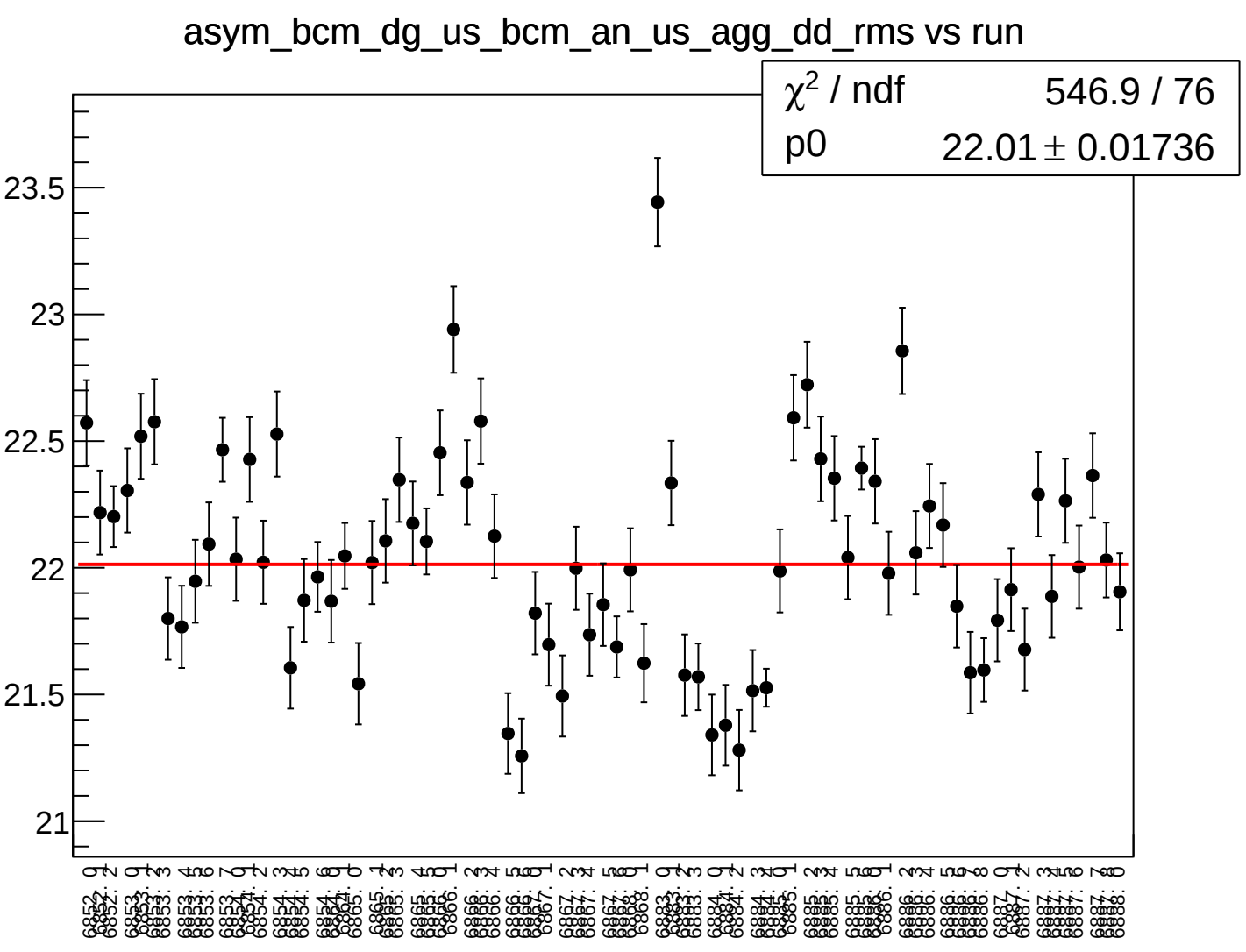

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.402e+04 / 76
p0 17.46 ± 0.01382
22
21
20
19
18
17
16
15

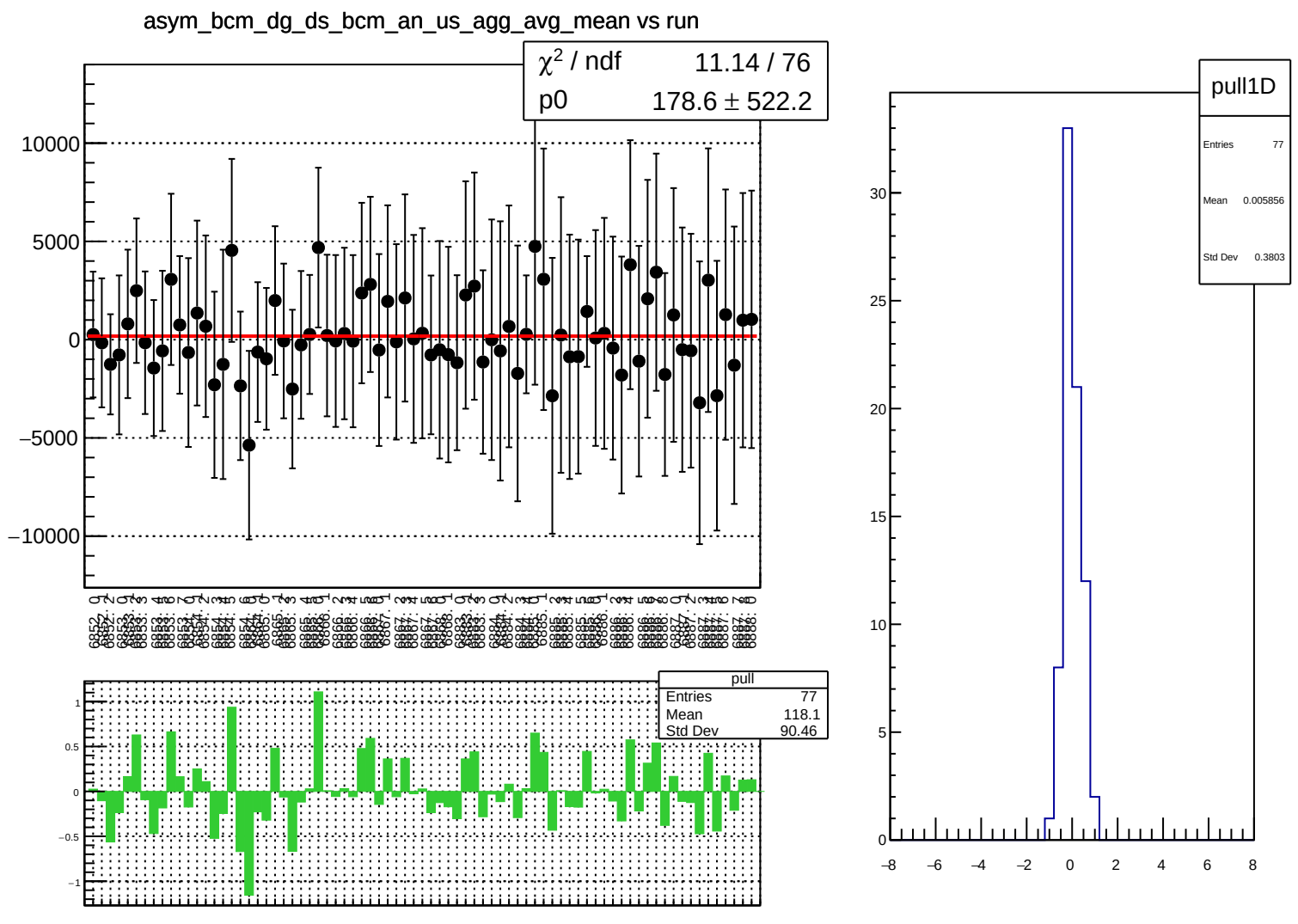

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 11.46 / 76
p0 217.6 ± 520.8
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 118.6
Std Dev 98.53
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.005255
Std Dev 0.3857
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

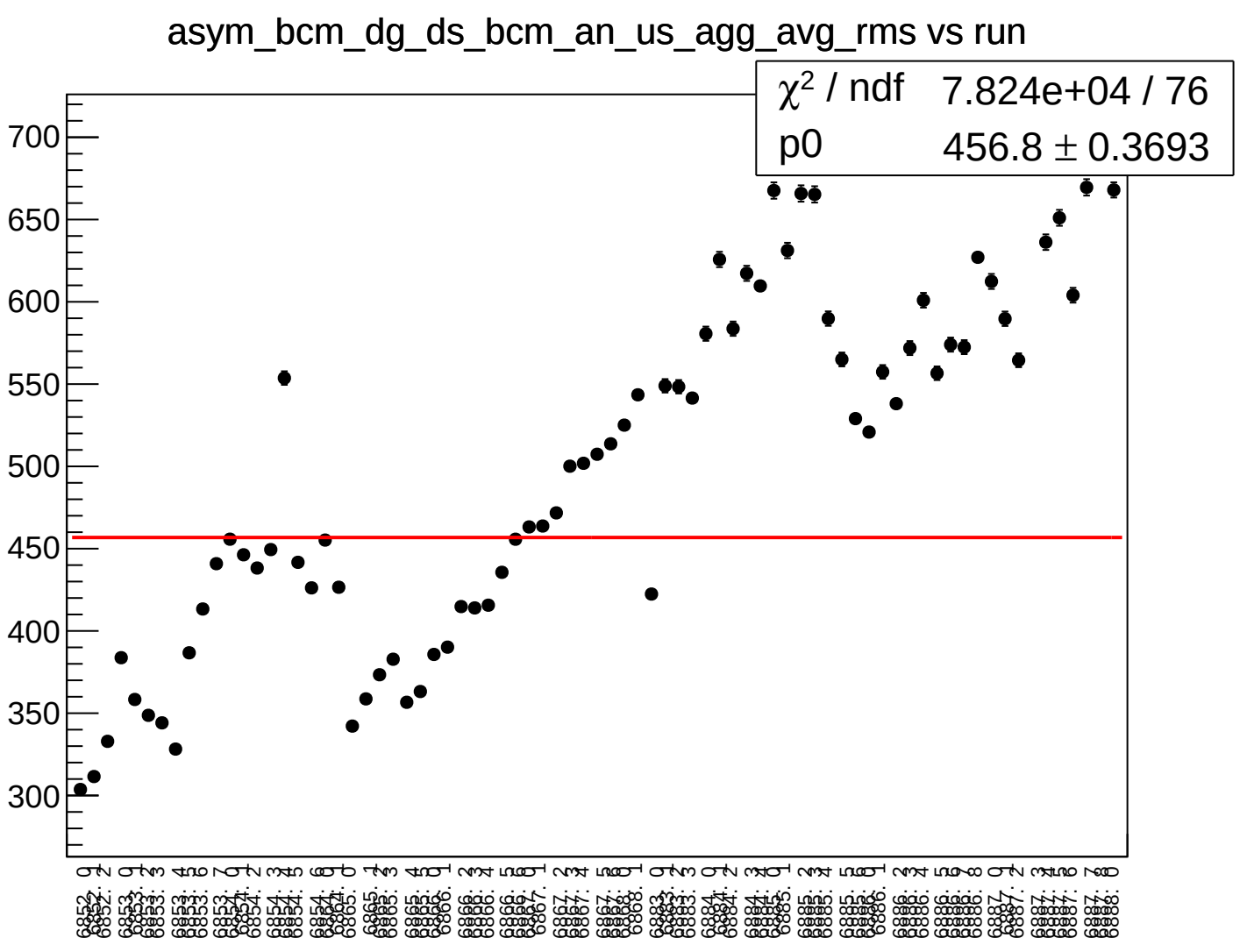

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 7.74e+04 / 76
p0 455.7 ± 0.3683
700
650
600
550
500
450
400
350
300

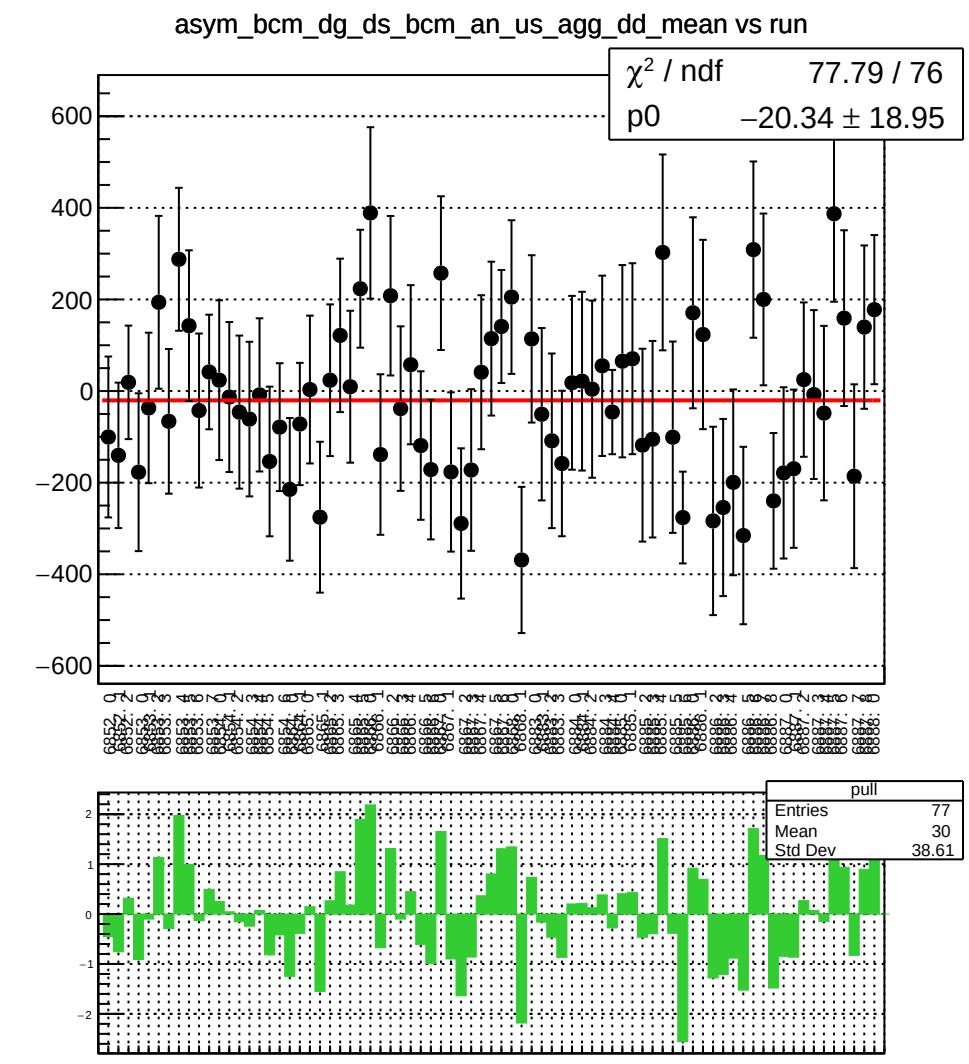

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 114.3 / 76
p0 17.96 ± 24.55
pull
Entries 77
Mean −1266
Std Dev 1333

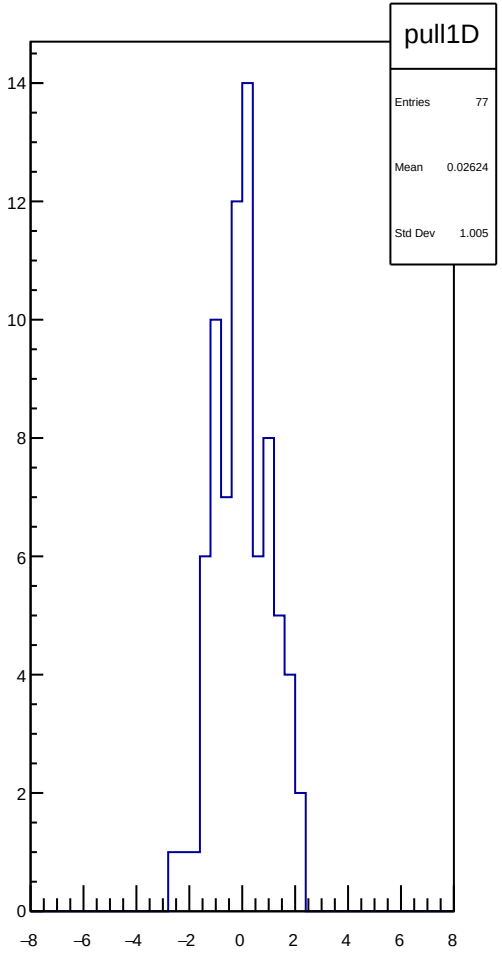

pull1D
Entries 77
Mean 0.001643
Std Dev 1.218

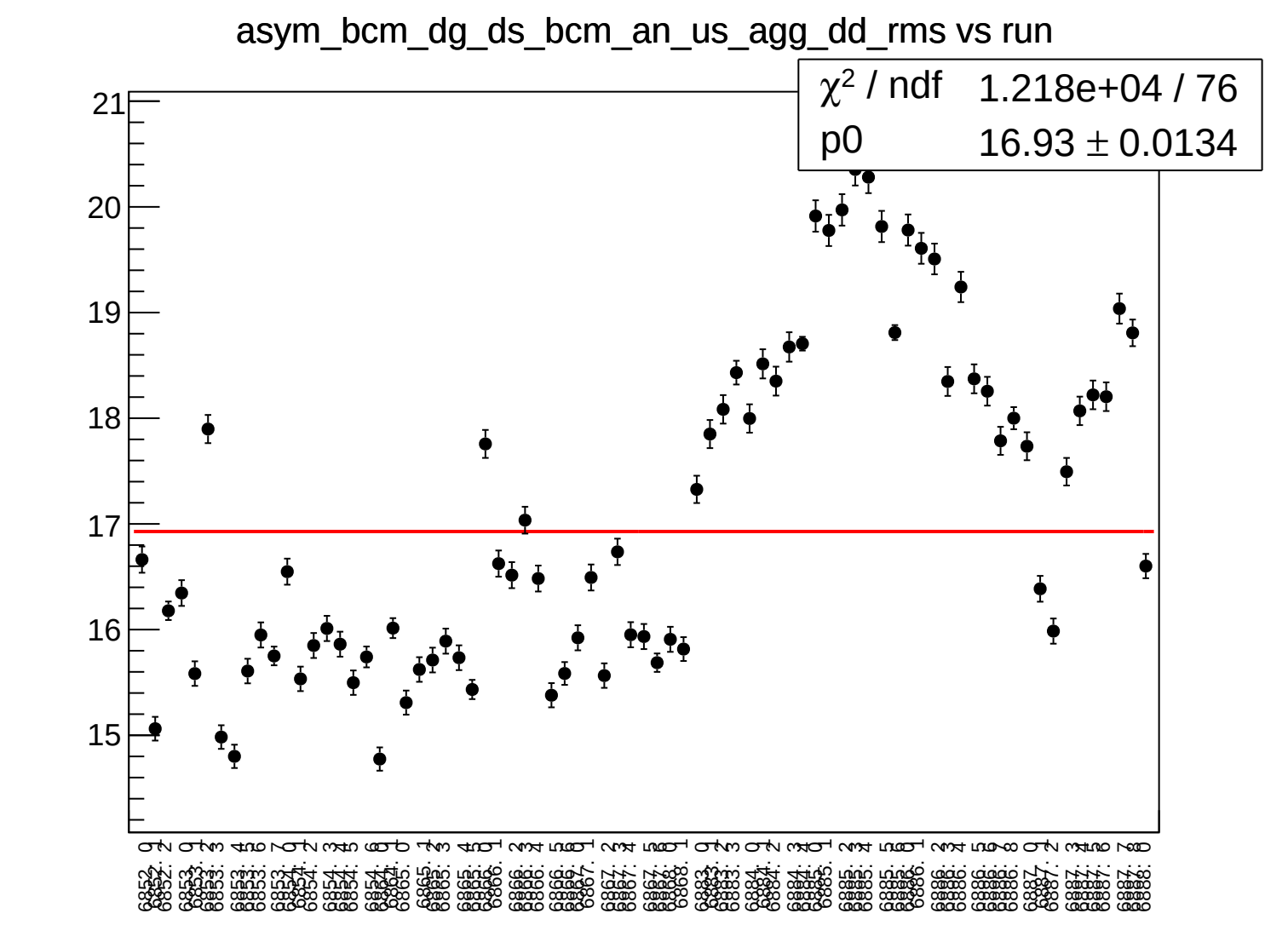

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 546.9 / 76
p0 22.01 ± 0.01736
23.5
23
22.5
22
21.5
21

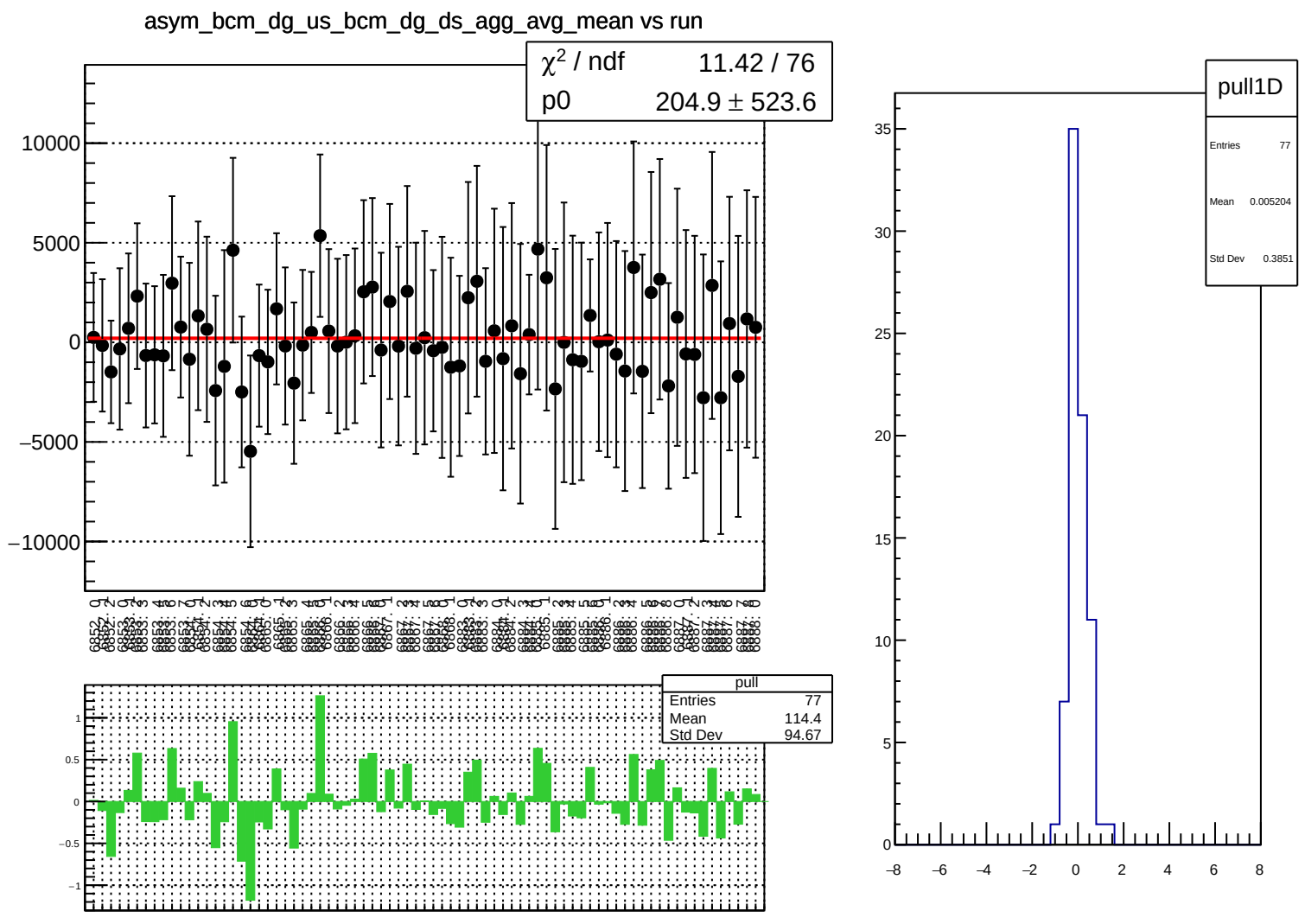

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 11.14 / 76
p0 178.6 ± 522.2
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 118.1
Std Dev 90.46
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.005856
Std Dev 0.3803
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

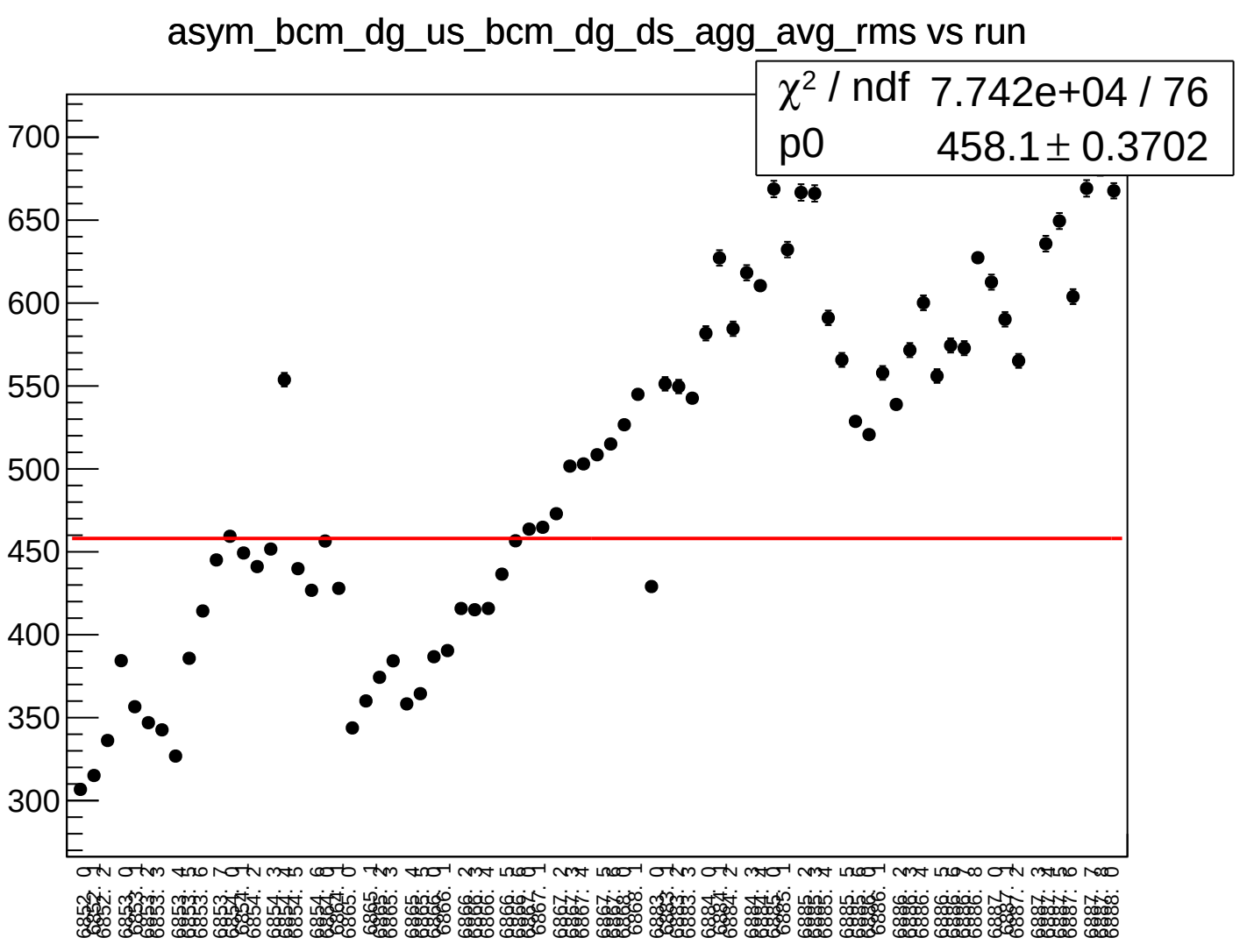

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 7.824e+04 / 76
p0 456.8 ± 0.3693
700
650
600
550
500
450
400
350
300

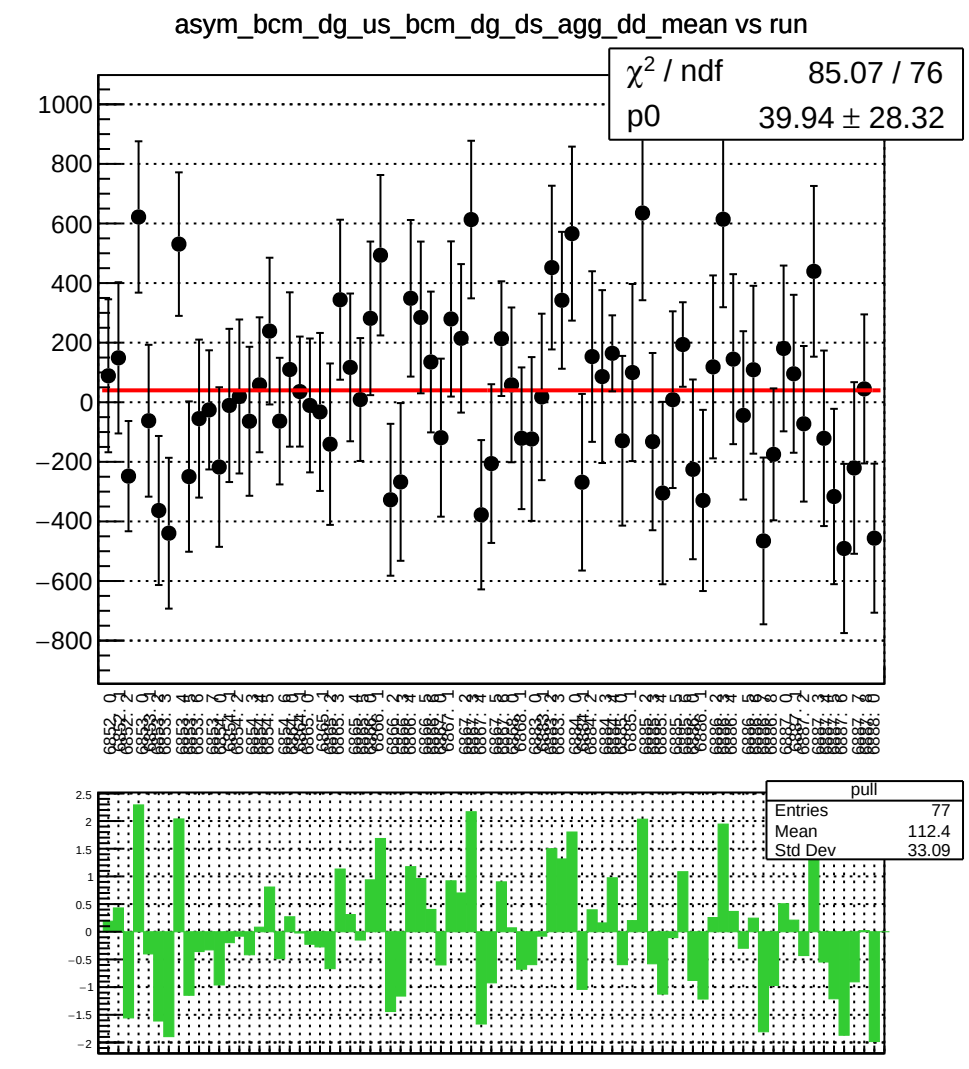

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 77.79 / 76
p0 −20.34 ± 18.95
pull
Entries 77
Mean 30
Std Dev 38.61

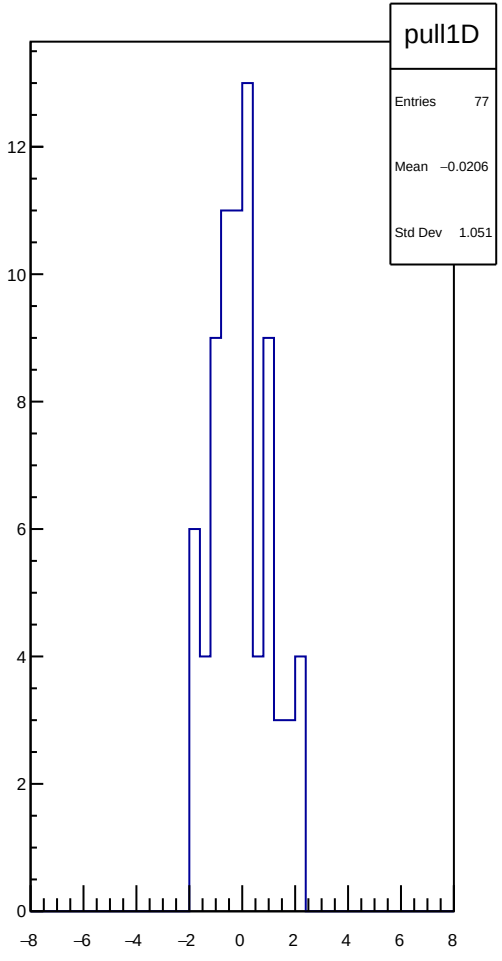

pull1D
Entries 77
Mean 0.02624
Std Dev 1.005

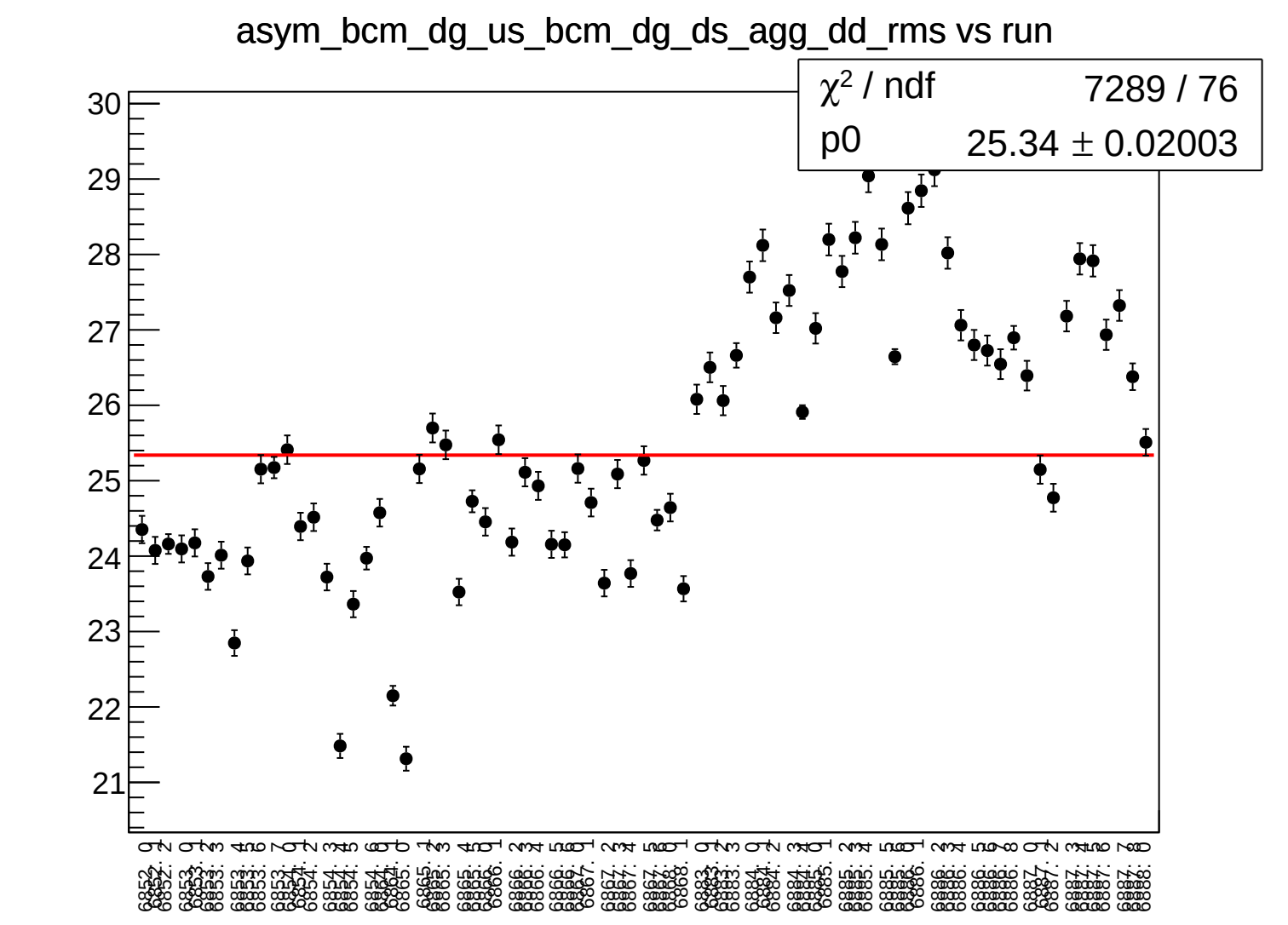

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1.218e+04 / 76
p0 16.93 ± 0.0134
21
20
19
18
17
16
15

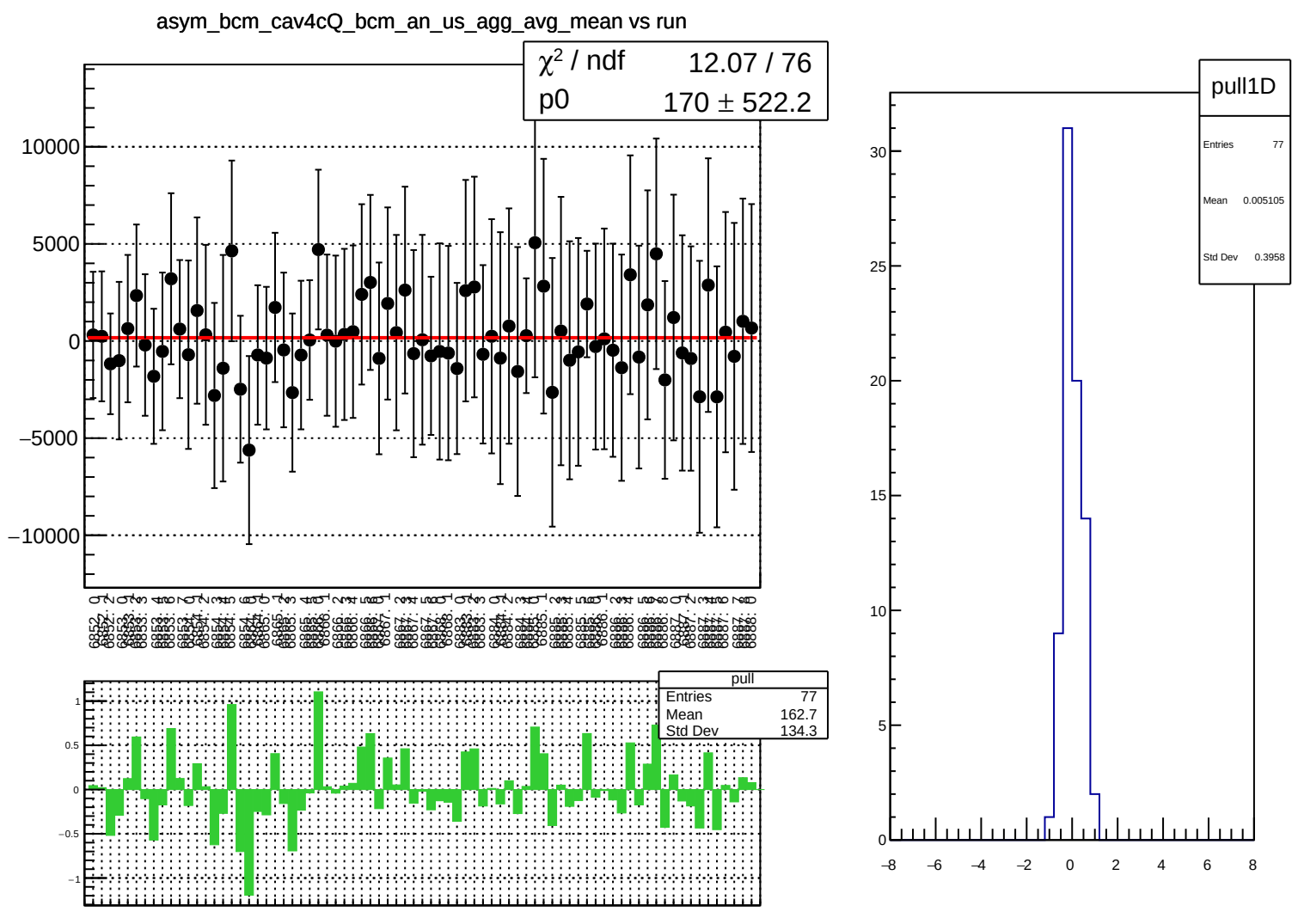

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 11.42 / 76
p0 204.9 ± 523.6
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 114.4
Std Dev 94.67
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.005204
Std Dev 0.3851
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

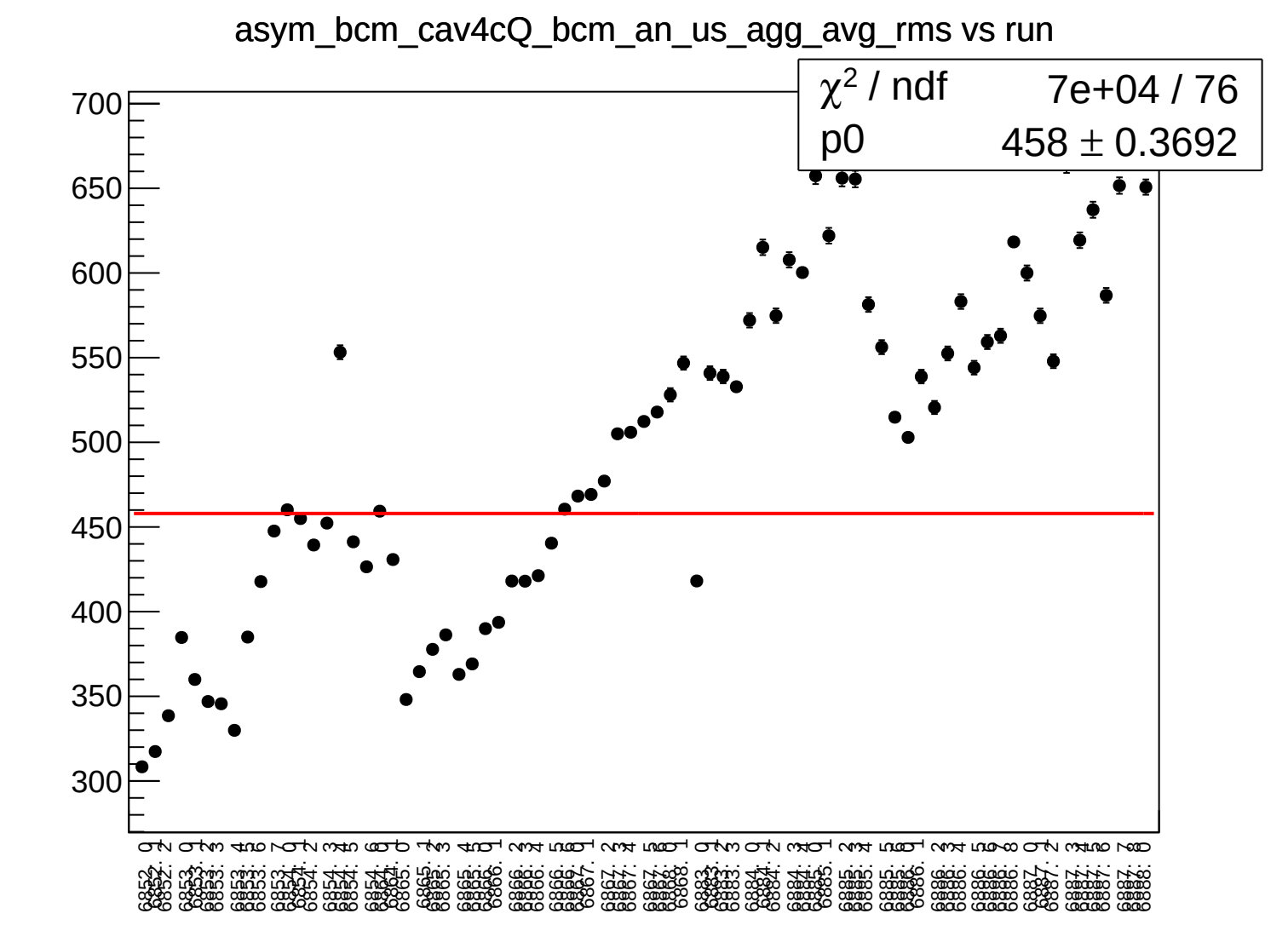

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 7.742e+04 / 76
p0 458.1 ± 0.3702
700
650
600
550
500
450
400
350
300

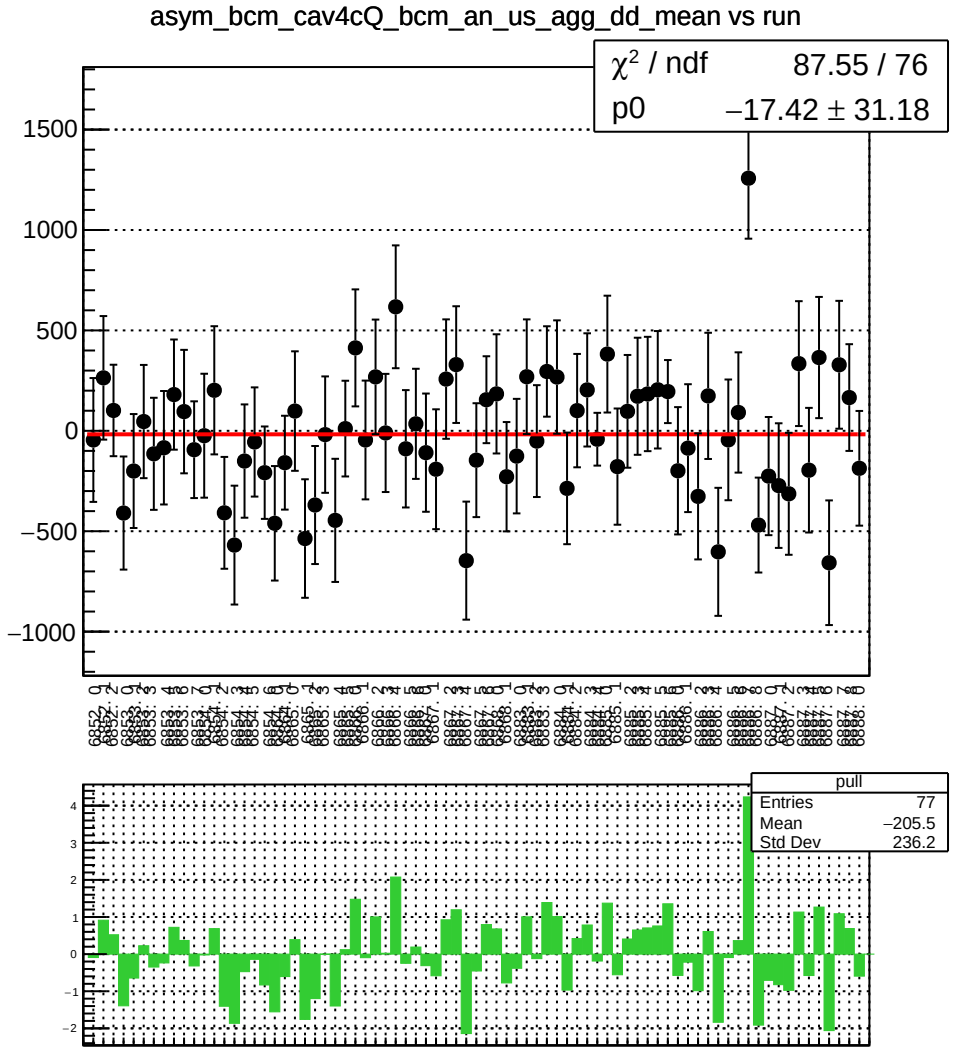

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 85.07 / 76
p0 39.94 ± 28.32
pull
Entries 77
Mean 112.4
Std Dev 33.09

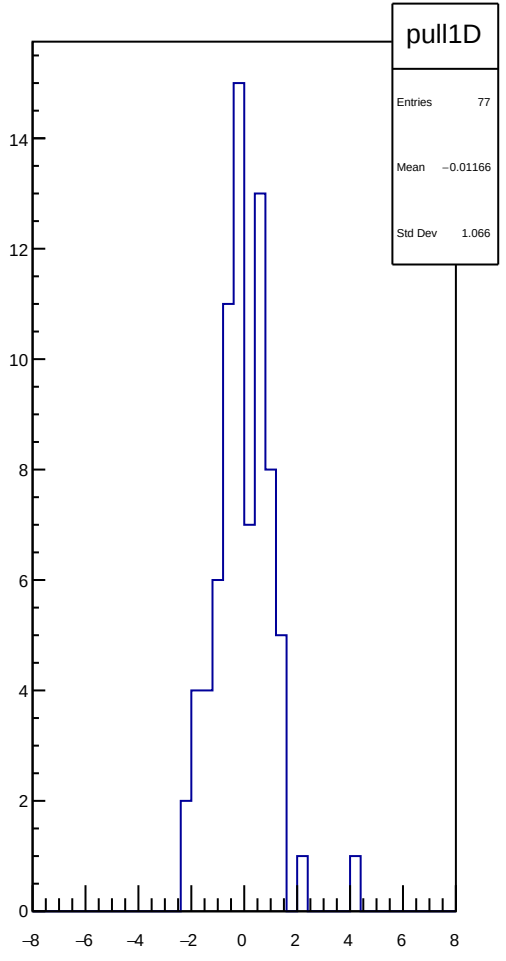

pull1D
Entries 77
Mean −0.0206
Std Dev 1.051

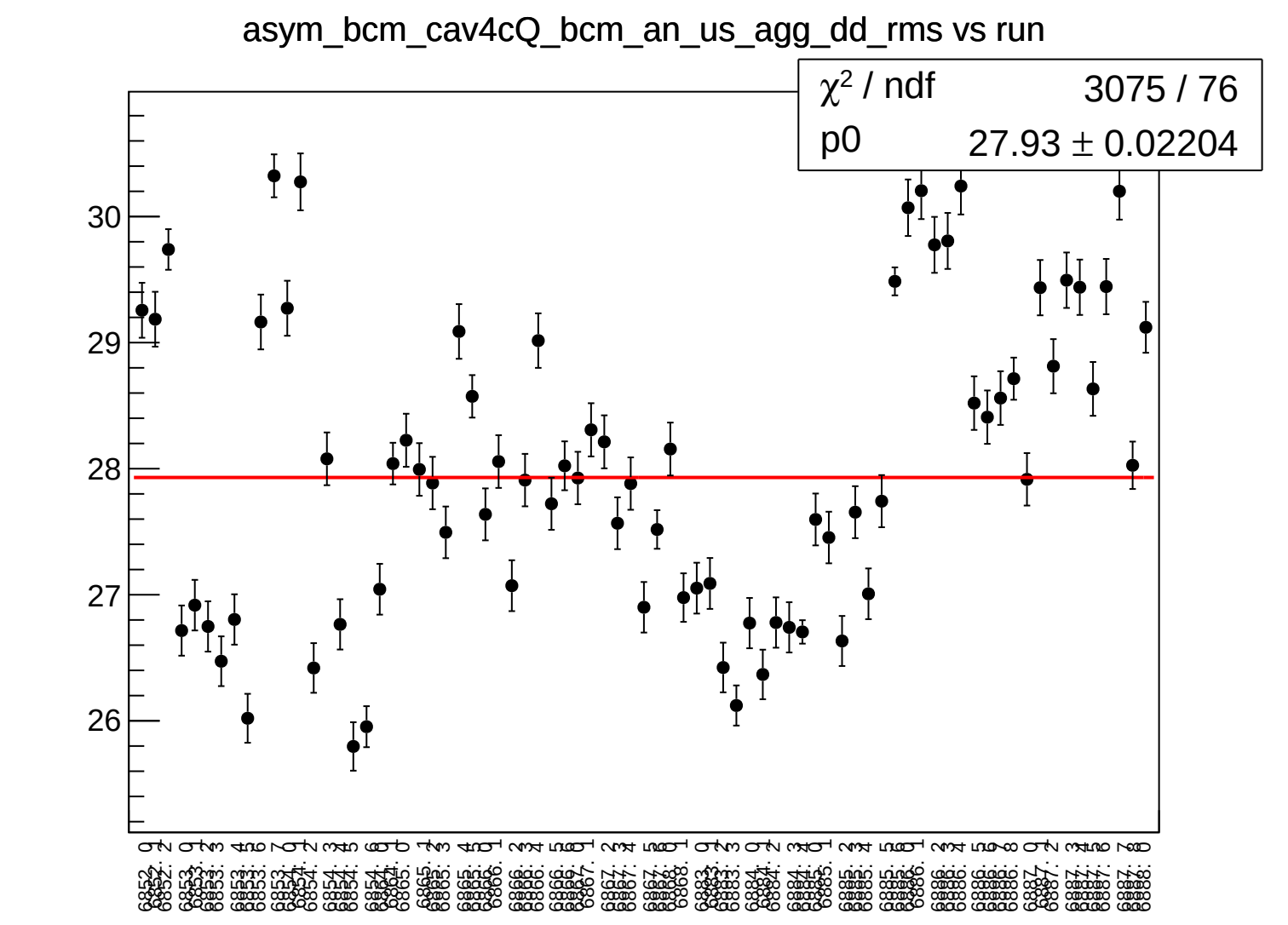

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 7289 / 76
p0 25.34 ± 0.02003
30
29
28
27
26
25
24
23
22
21

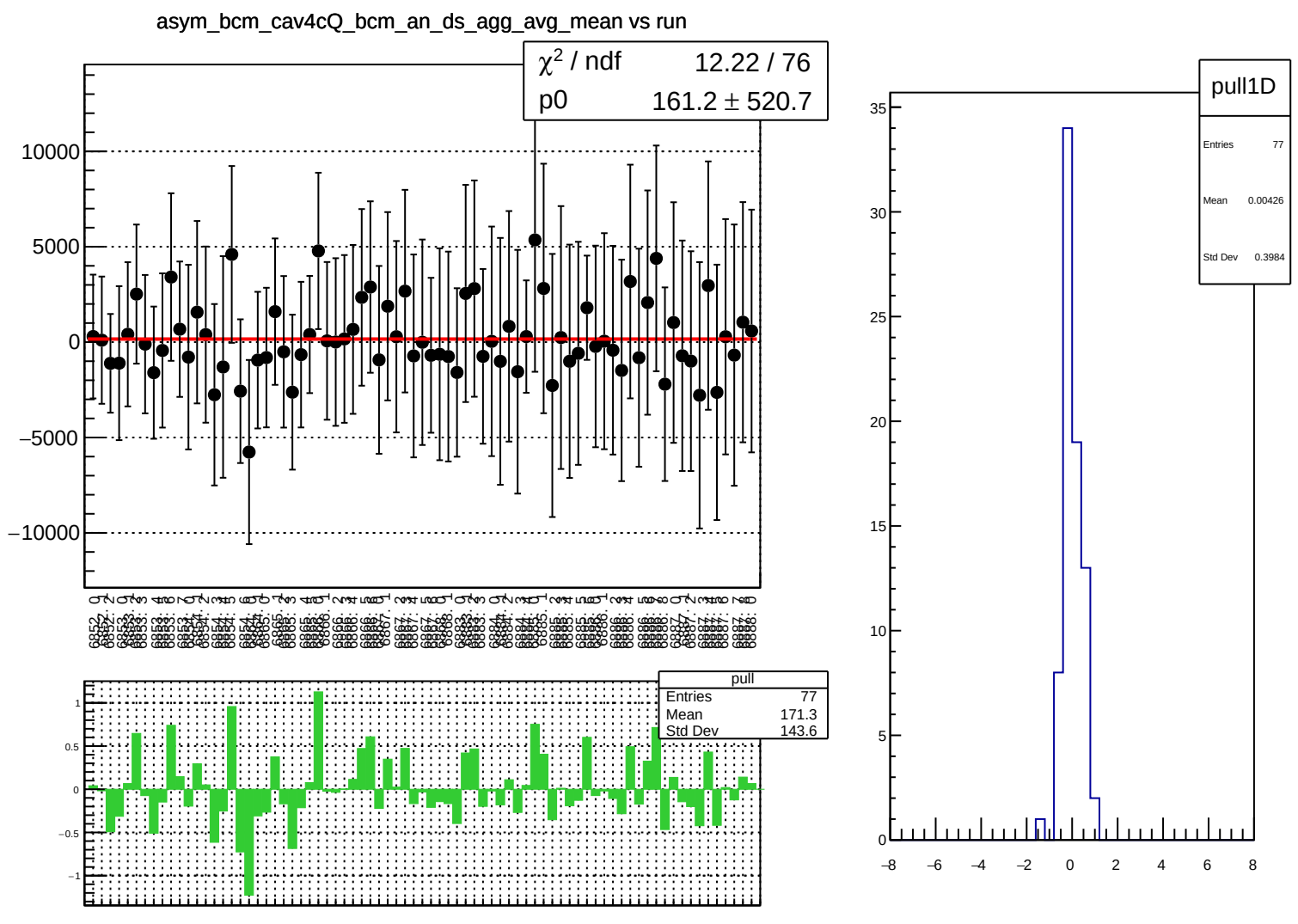

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 12.07 / 76
p0 170 ± 522.2
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 162.7
Std Dev 134.3
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.005105
Std Dev 0.3958
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

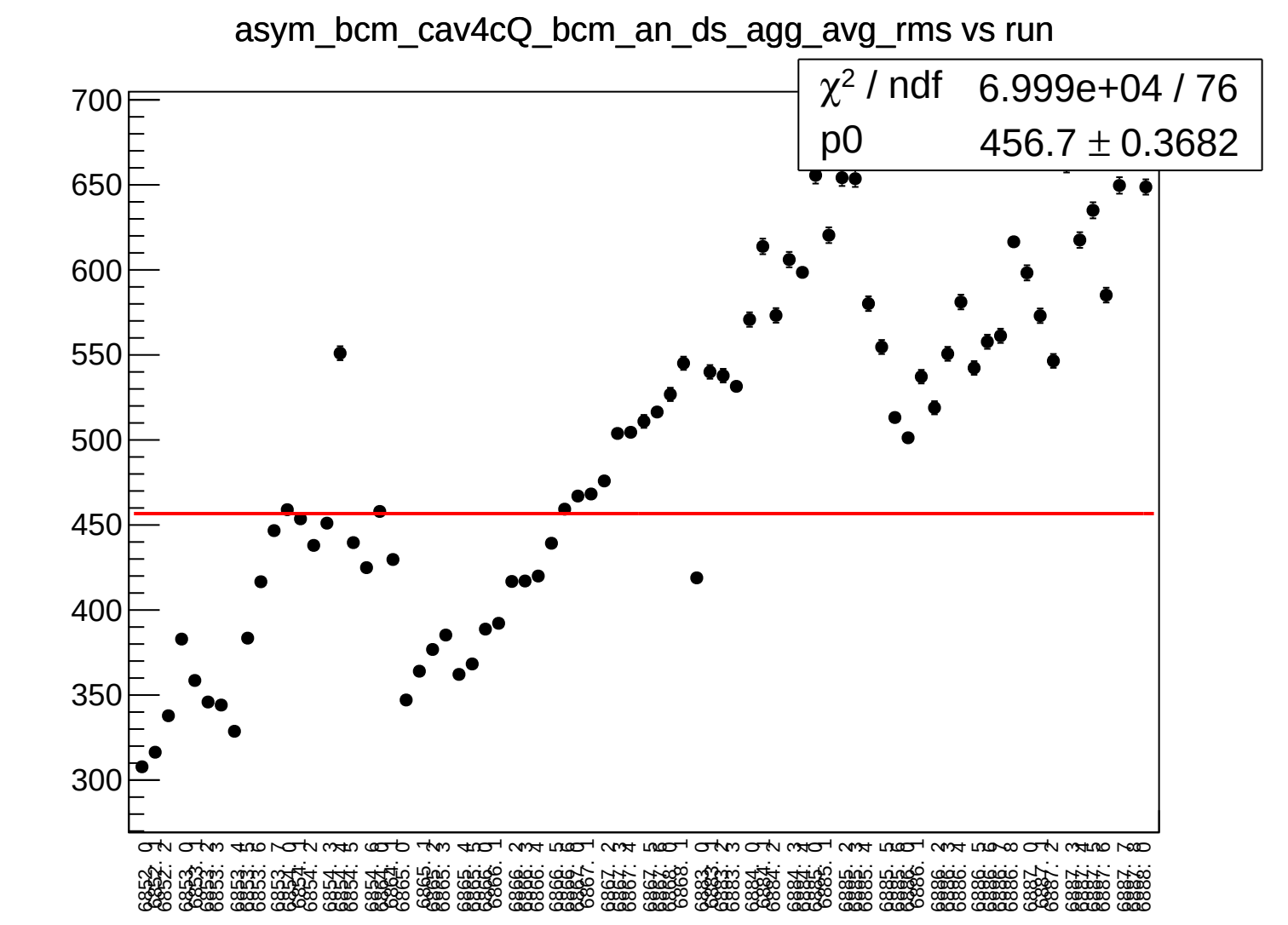

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 7e+04 / 76
p0 458 ± 0.3692
700
650
600
550
500
450
400
350
300

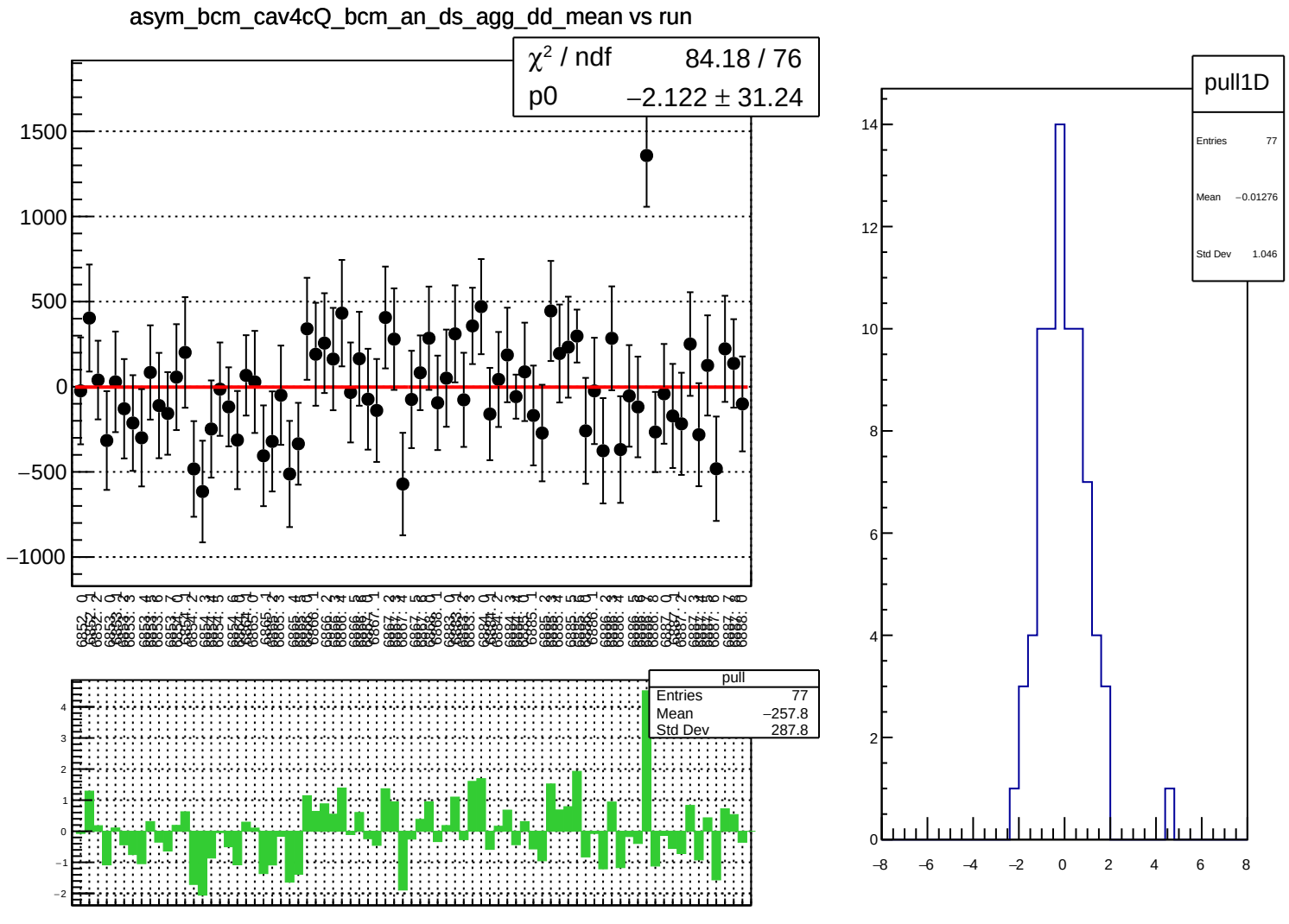

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 87.55 / 76
p0 −17.42 ± 31.18
1500
1000
500
0
−500
−1000
pull
Entries 77
Mean −205.5
Std Dev 236.2
4
3
2
1
0
−1
−2

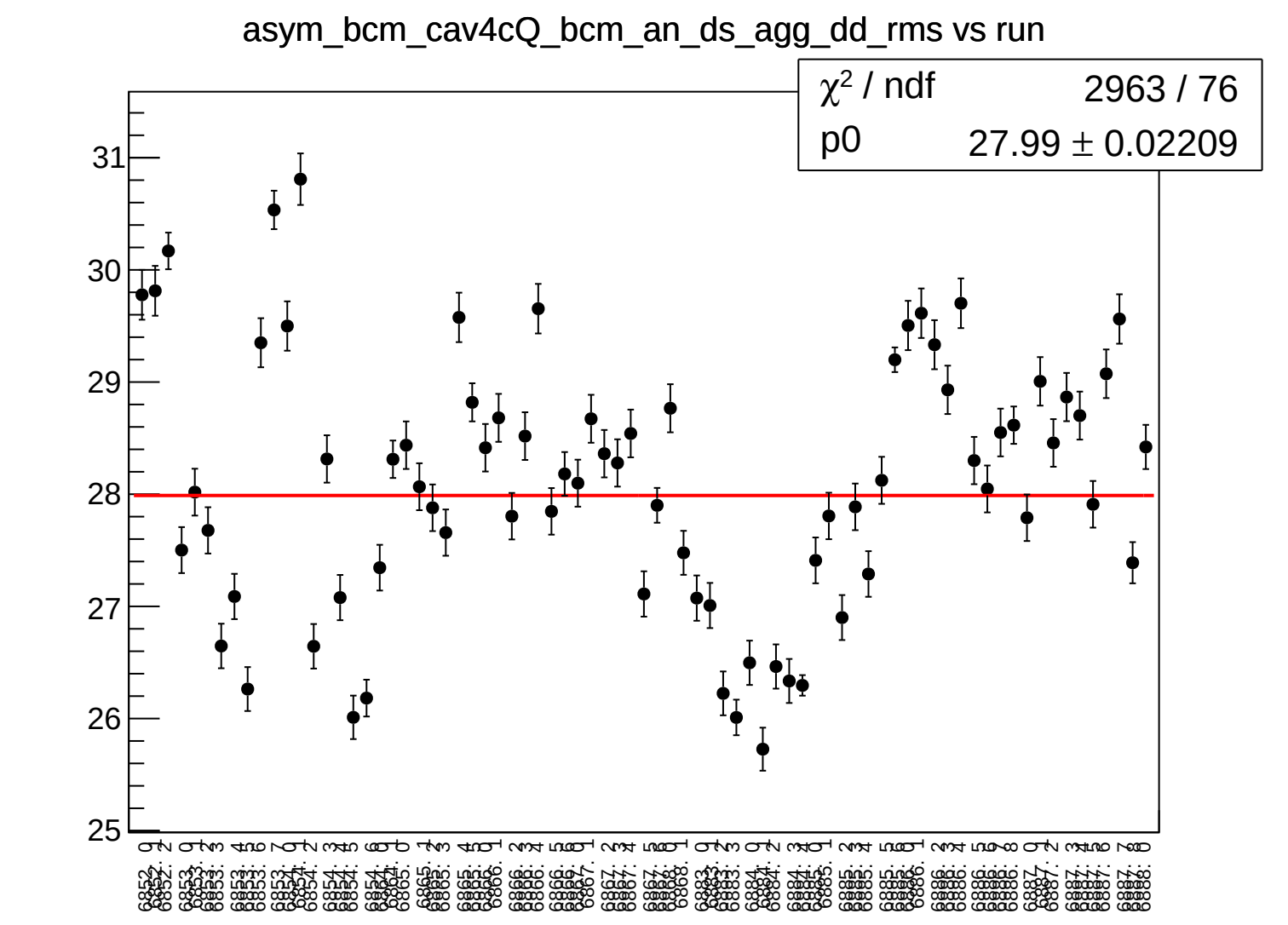

pull1D
Entries 77
Mean −0.01166
Std Dev 1.066
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

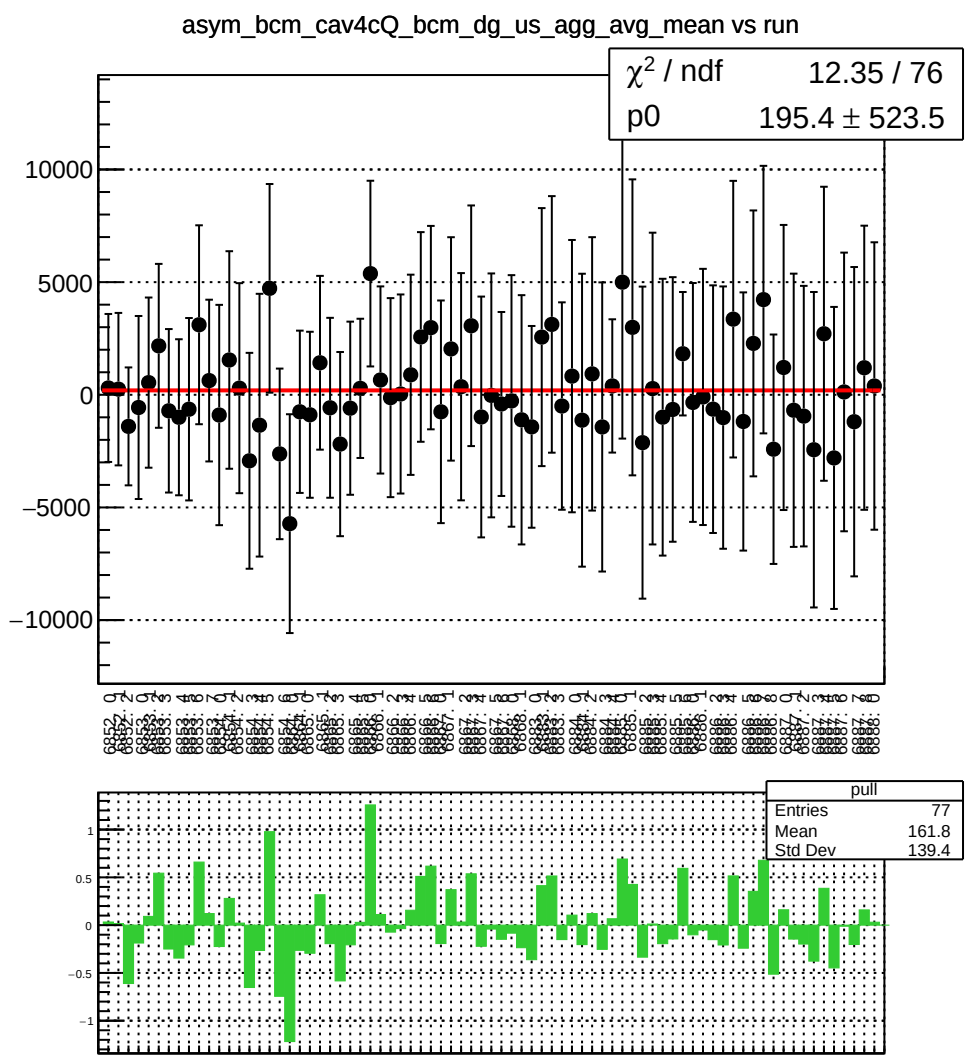

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3075 / 76
p0 27.93 ± 0.02204
30
29
28
27
26

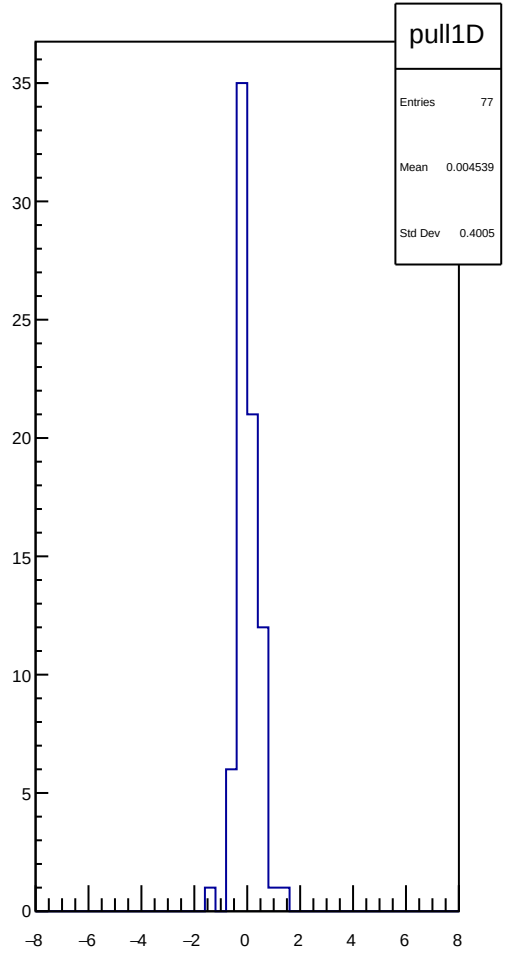

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 12.22 / 76
p0 161.2 ± 520.7
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 171.3
Std Dev 143.6
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.00426
Std Dev 0.3984
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

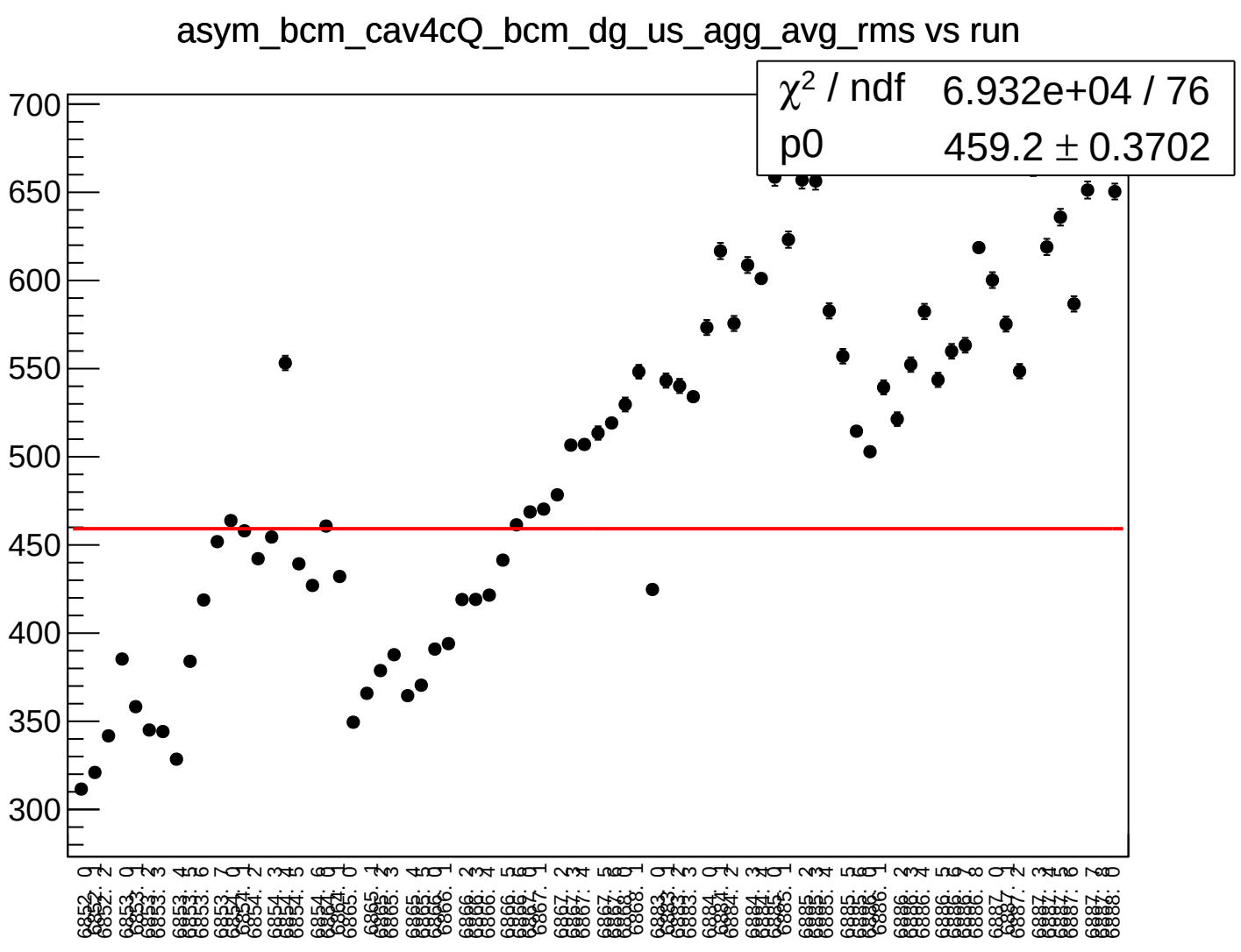

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 6.999e+04 / 76
p0 456.7 ± 0.3682
700
650
600
550
500
450
400
350
300

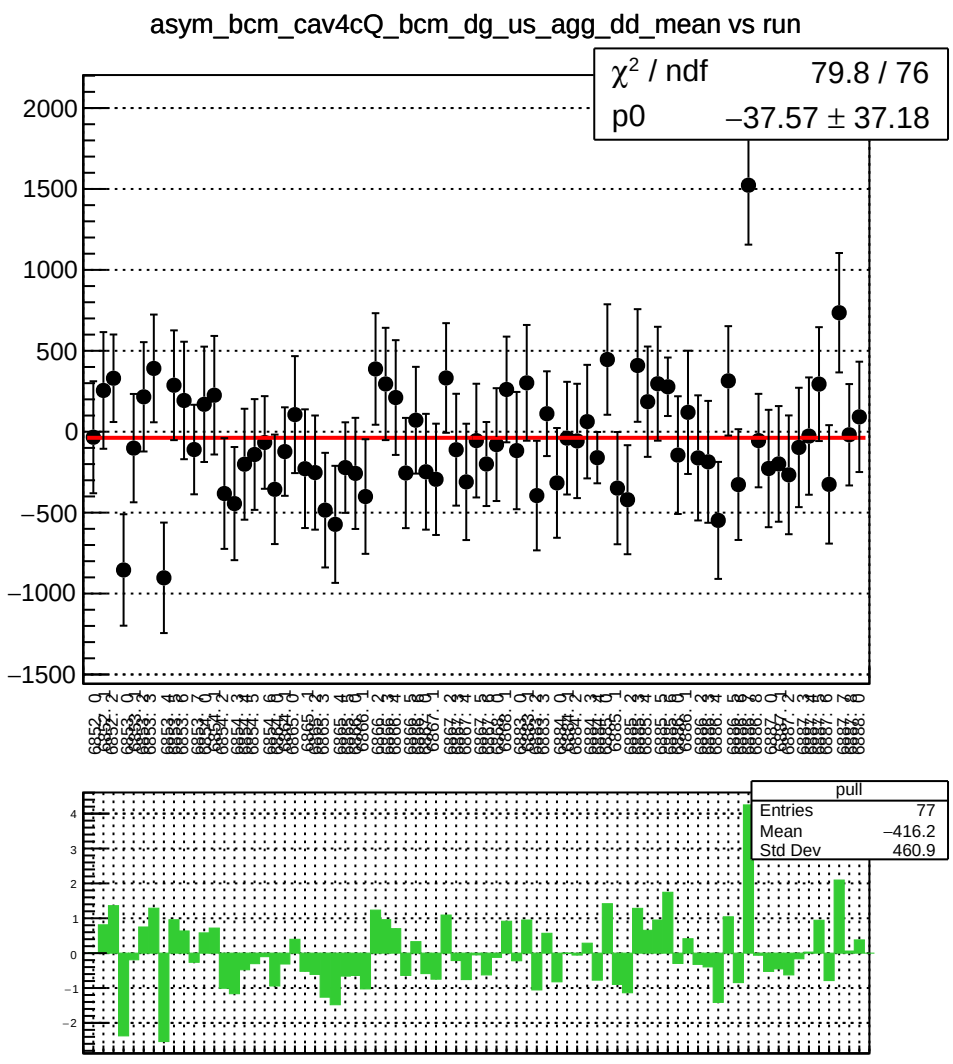

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 84.18 / 76
p0 −2.122 ± 31.24
pull
Entries 77
Mean −257.8
Std Dev 287.8
pull1D
Entries 77
Mean −0.01276
Std Dev 1.046

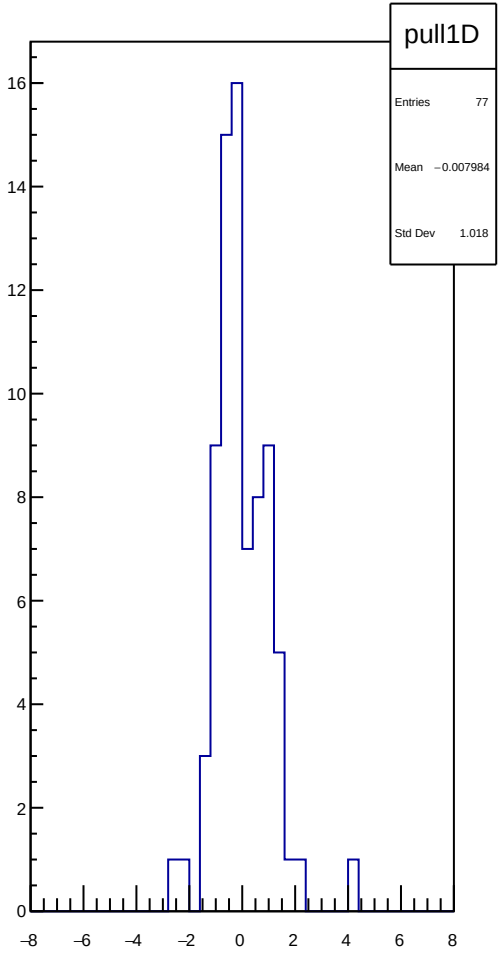

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2963 / 76
p0 27.99 ± 0.02209
31
30
29
28
27
26
25

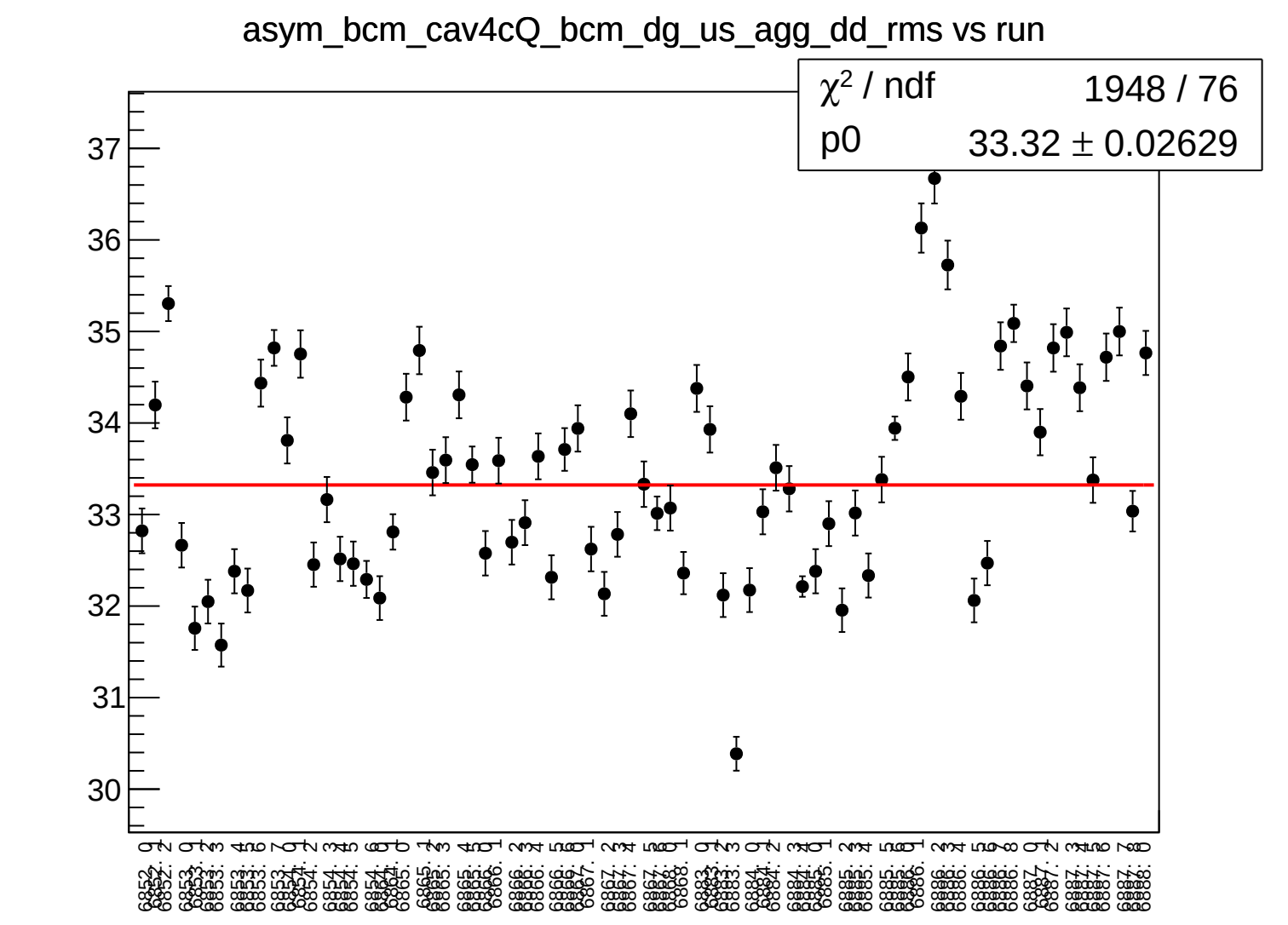

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 12.35 / 76
p0 195.4 ± 523.5
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 161.8
Std Dev 139.4
1
0.5
0
−0.5
−1

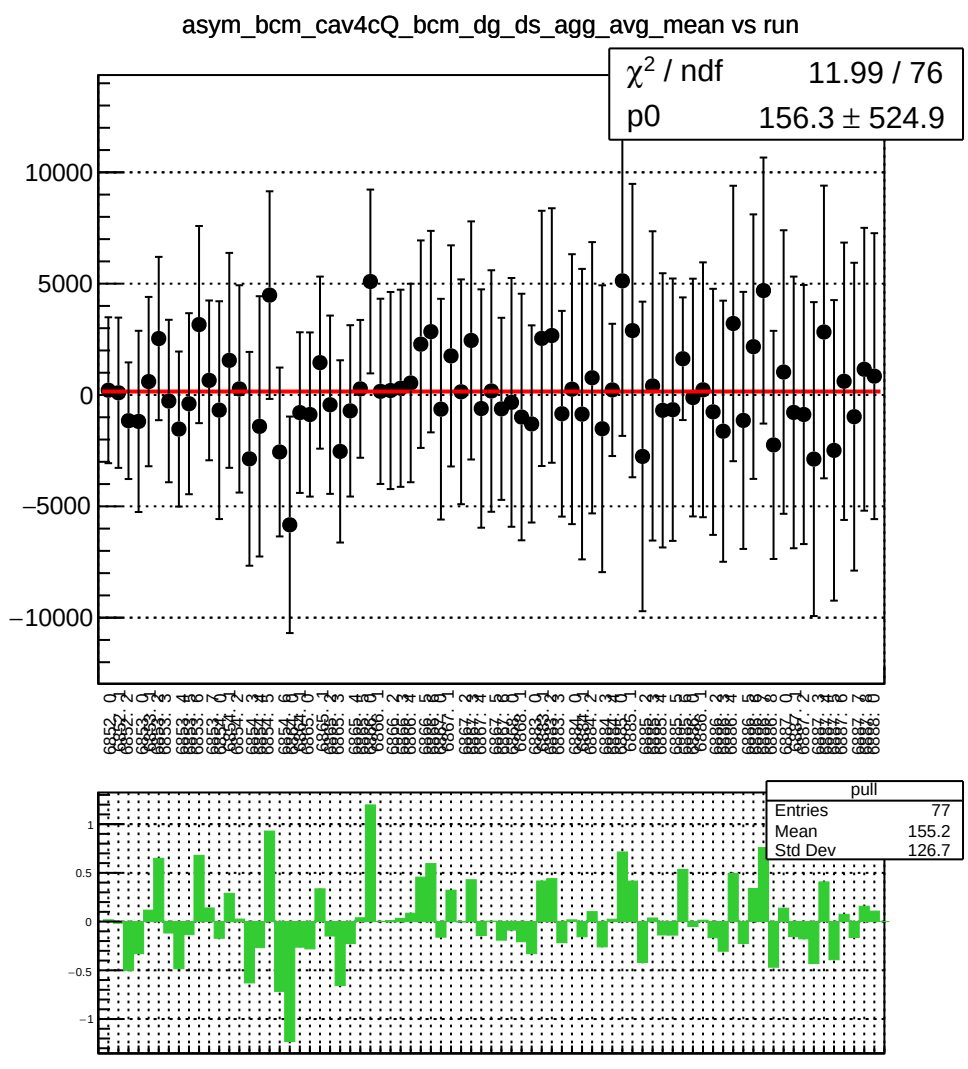

pull1D
Entries 77
Mean 0.004539
Std Dev 0.4005
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

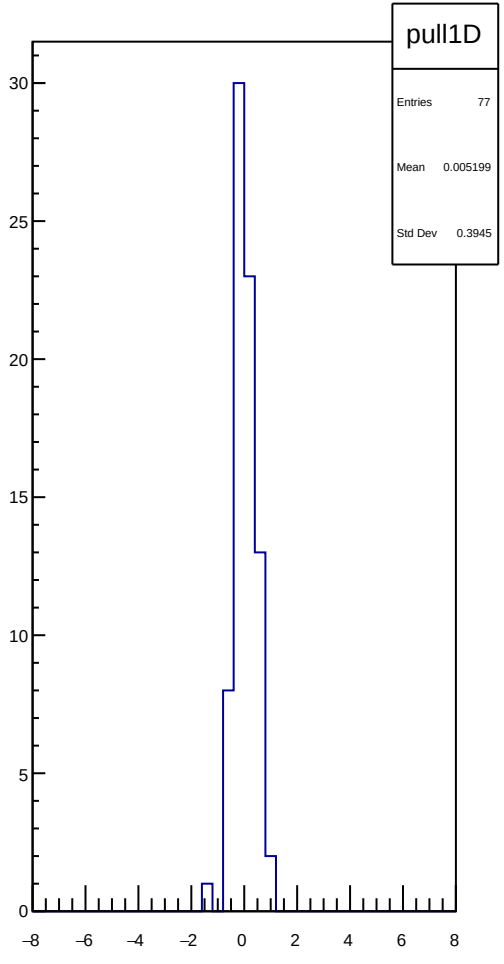

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 6.932e+04 / 76
p0 459.2 ± 0.3702
700
650
600
550
500
450
400
350
300

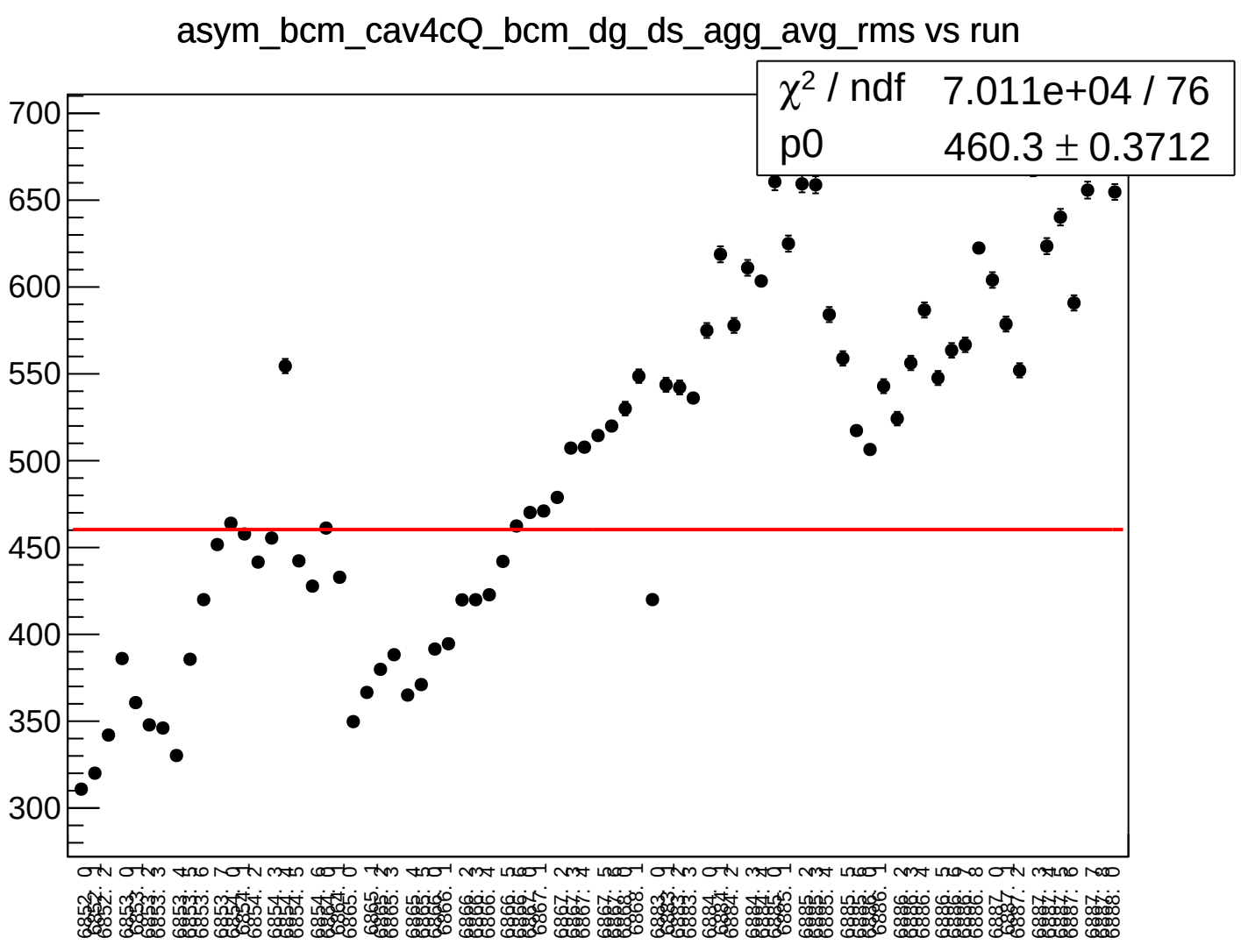

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 79.8 / 76
p0 −37.57 ± 37.18
pull
Entries 77
Mean −416.2
Std Dev 460.9

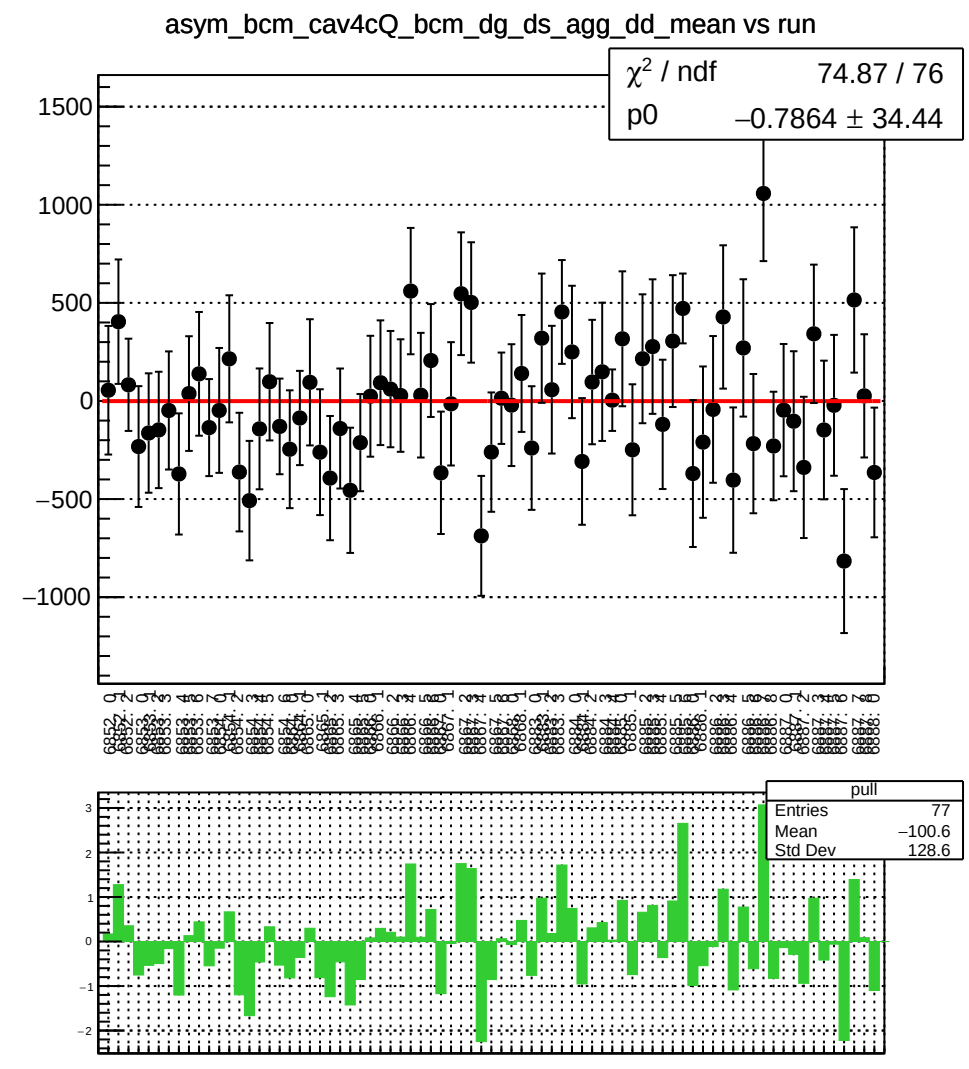

pull1D
Entries 77
Mean −0.007984
Std Dev 1.018

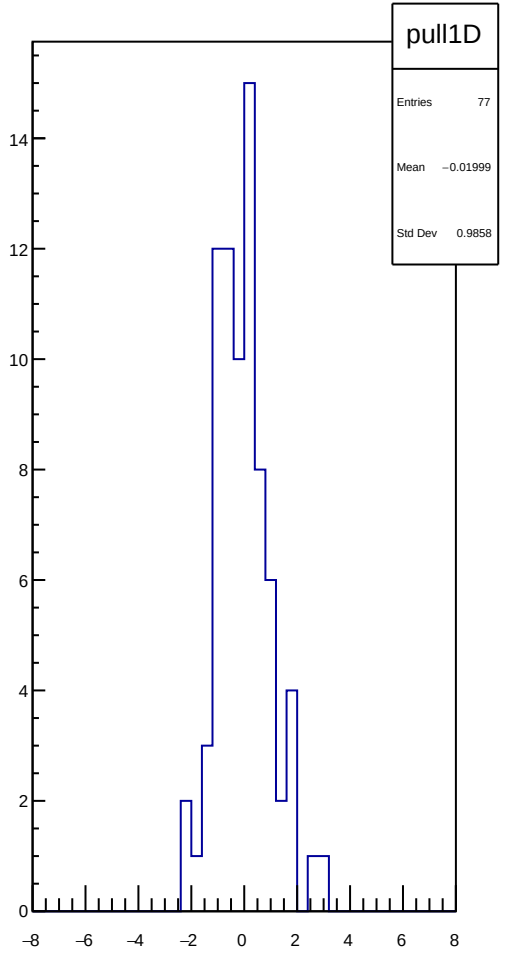

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1948 / 76
p0 33.32 ± 0.02629
37
36
35
34
33
32
31
30

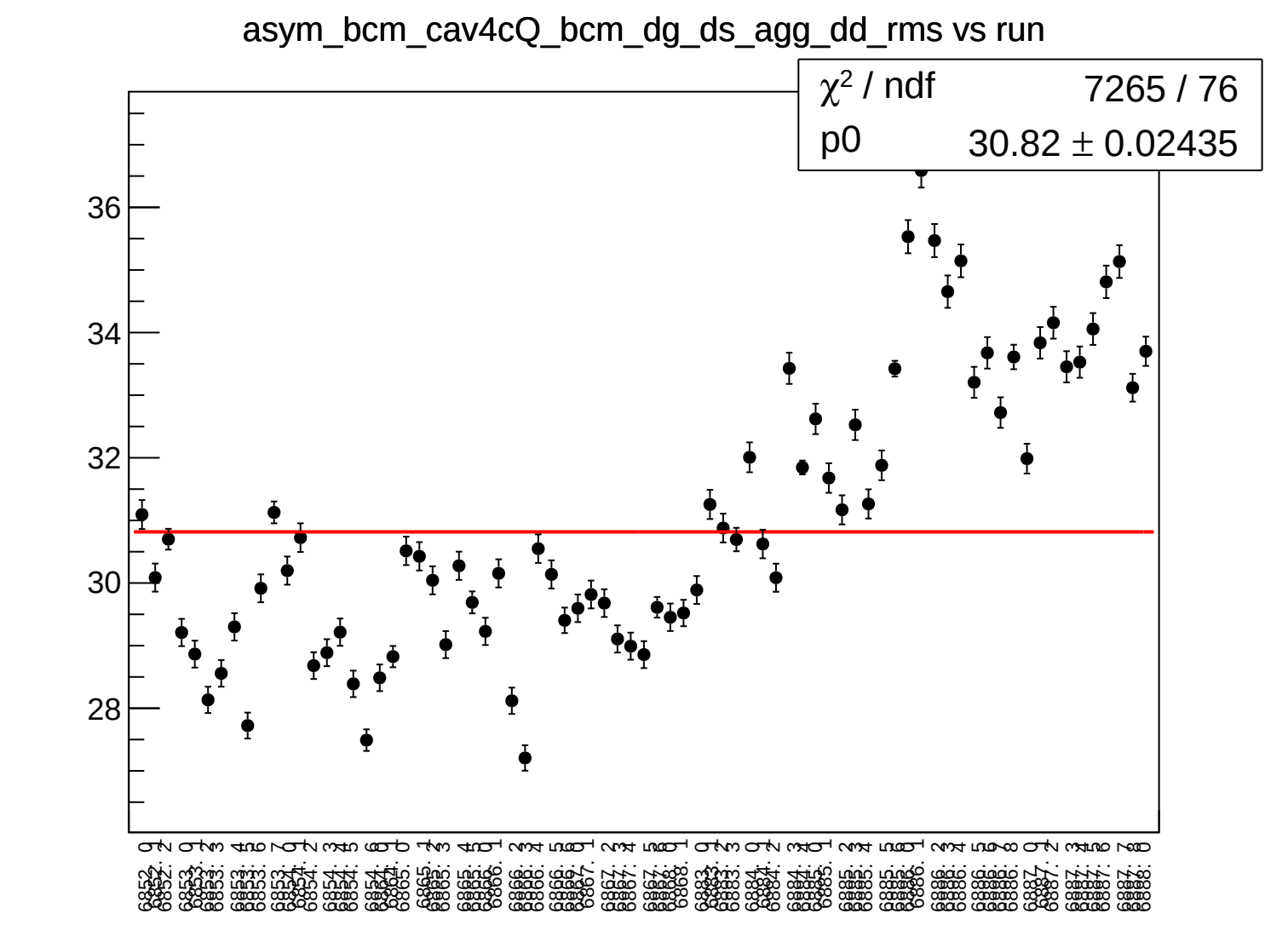

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 11.99 / 76
p0 156.3 ± 524.9
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 155.2
Std Dev 126.7
1
0.5
0
−0.5
−1

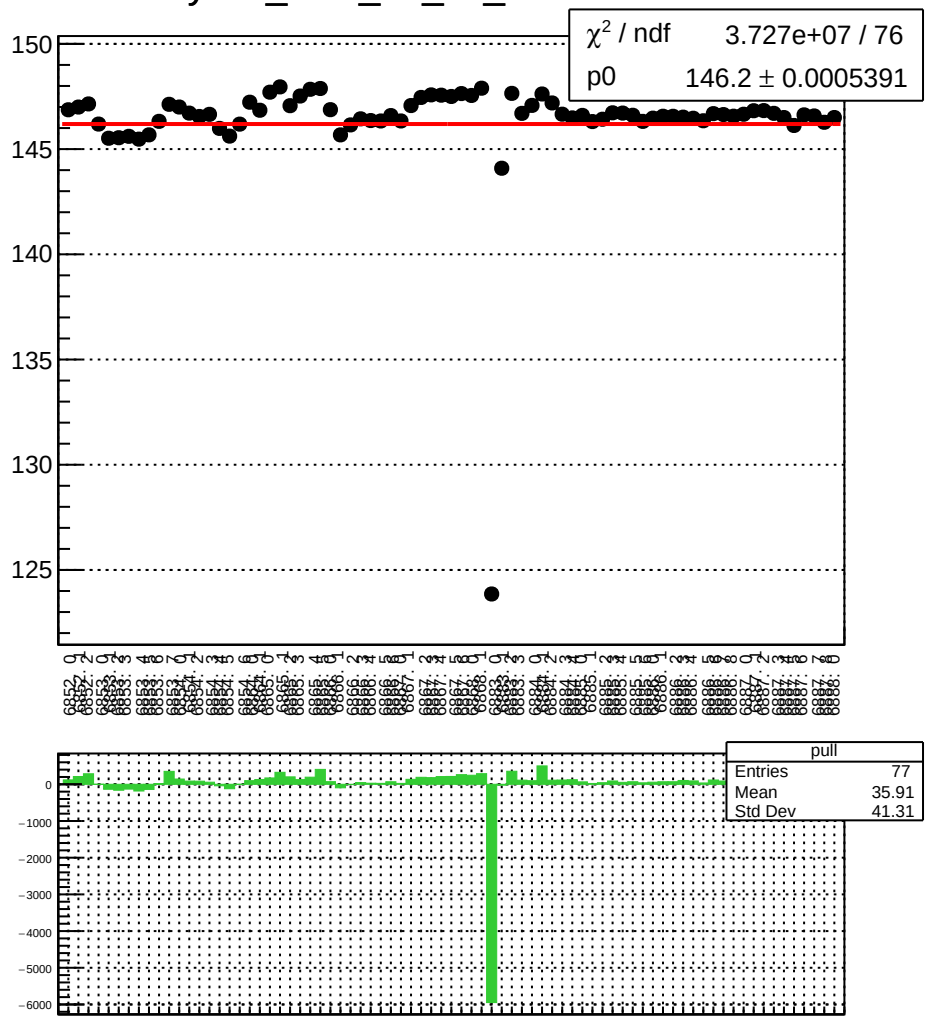

pull1D
Entries 77
Mean 0.005199
Std Dev 0.3945
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

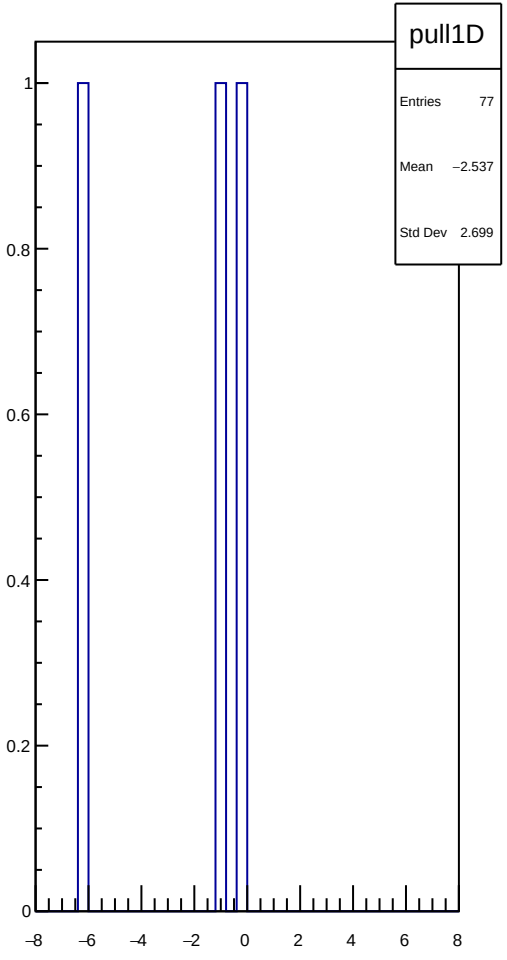

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 7.011e+04 / 76
p0 460.3 ± 0.3712
700
650
600
550
500
450
400
350
300

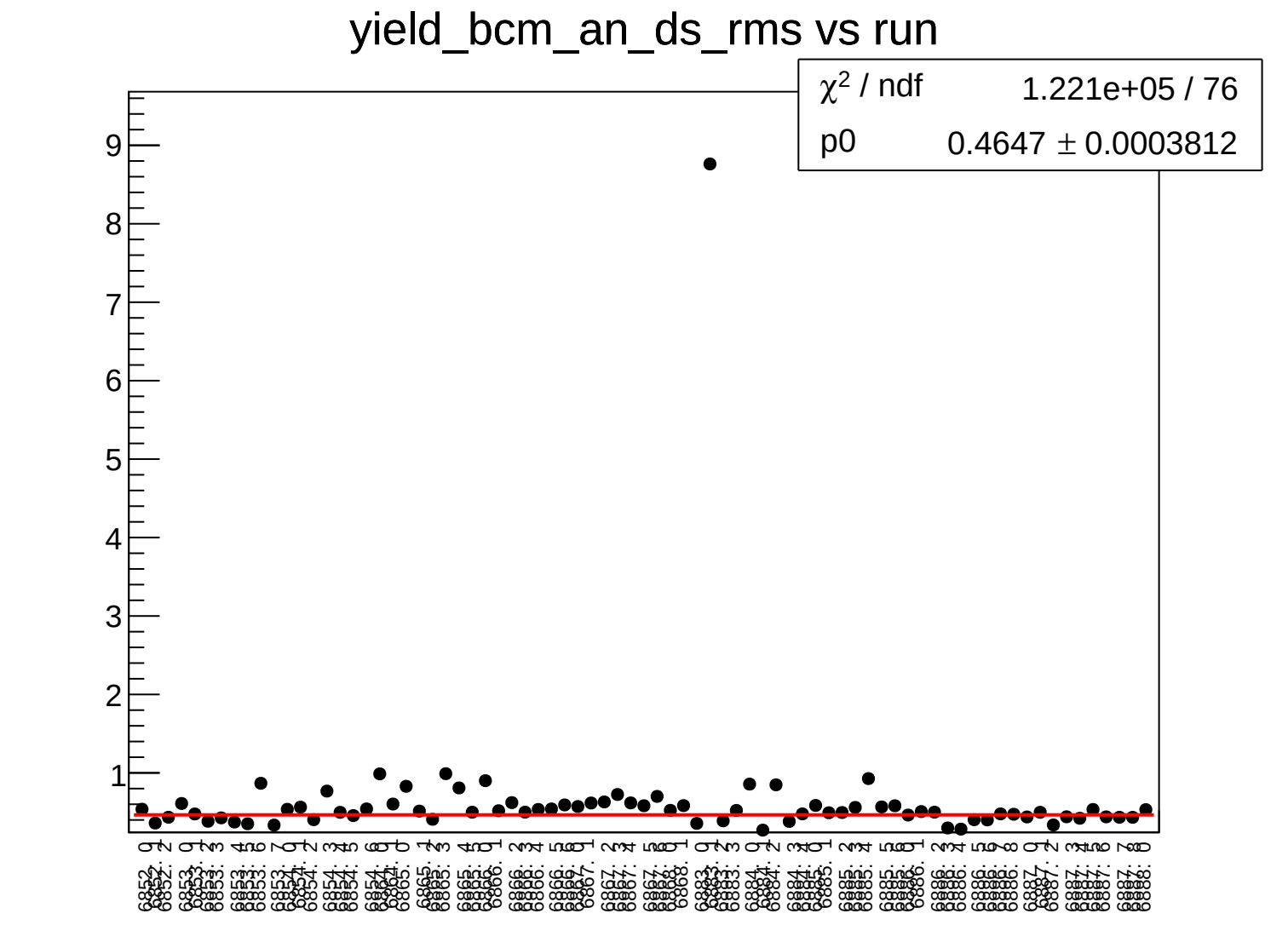

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 74.87 / 76
p0 −0.7864 ± 34.44
1500
1000
500
0
−500
−1000
pull
Entries 77
Mean −100.6
Std Dev 128.6
3
2
1
0
−1
−2

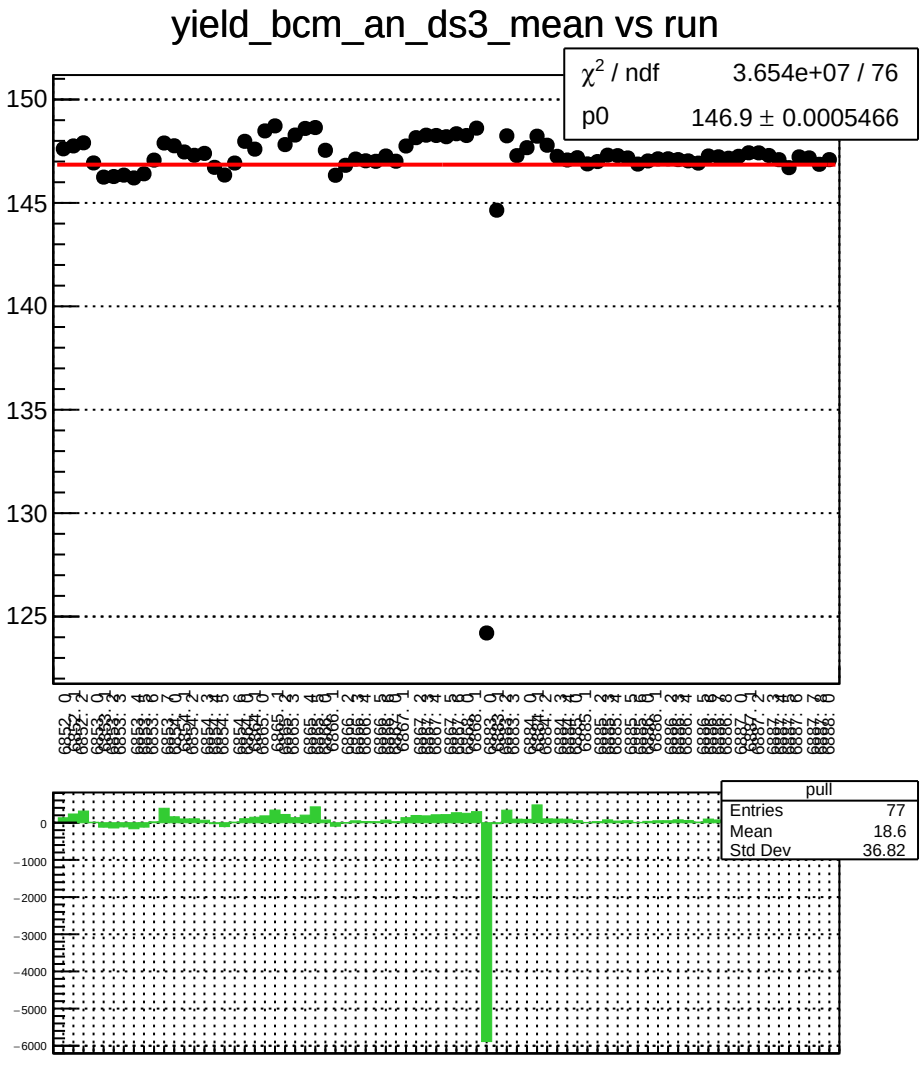

pull1D
Entries 77
Mean −0.01999
Std Dev 0.9858
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

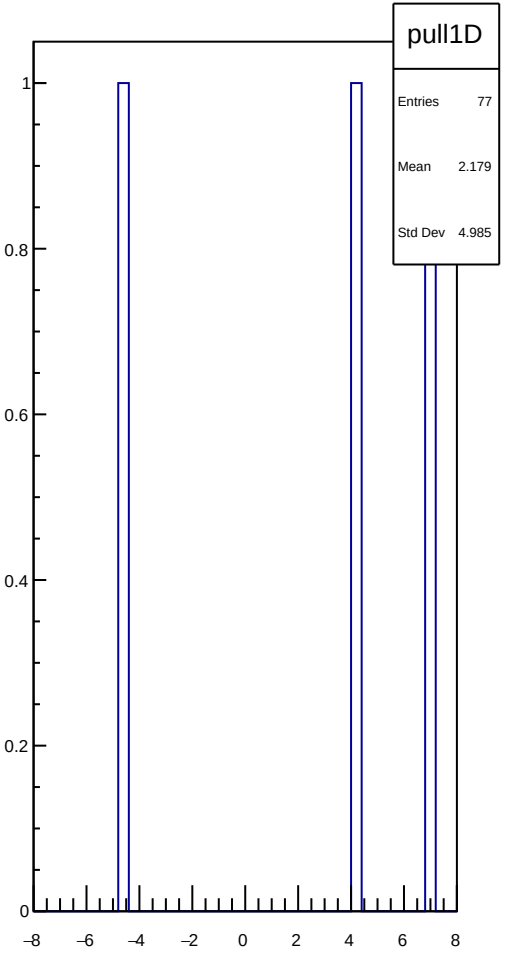

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 7265 / 76
p0 30.82 ± 0.02435
36
34
32
30
28

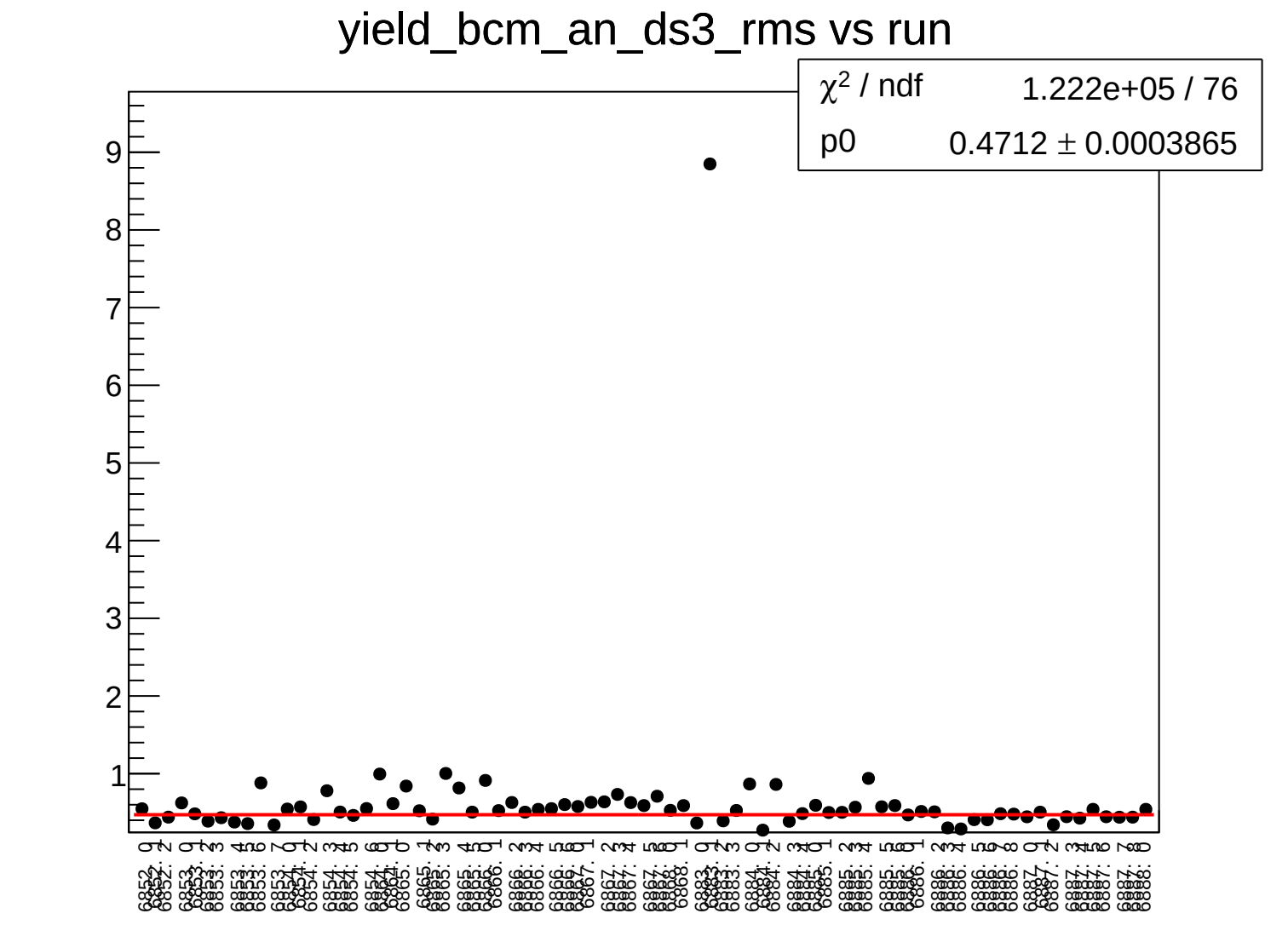

yield_bcm_an_ds_mean vs run
χ² / ndf 3.727e+07 / 76
p0 146.2 ± 0.0005391
150
145
140
135
130
125
pull
Entries 77
Mean 35.91
Std Dev 41.31
0
−1000
−2000
−3000
−4000
−5000
−6000

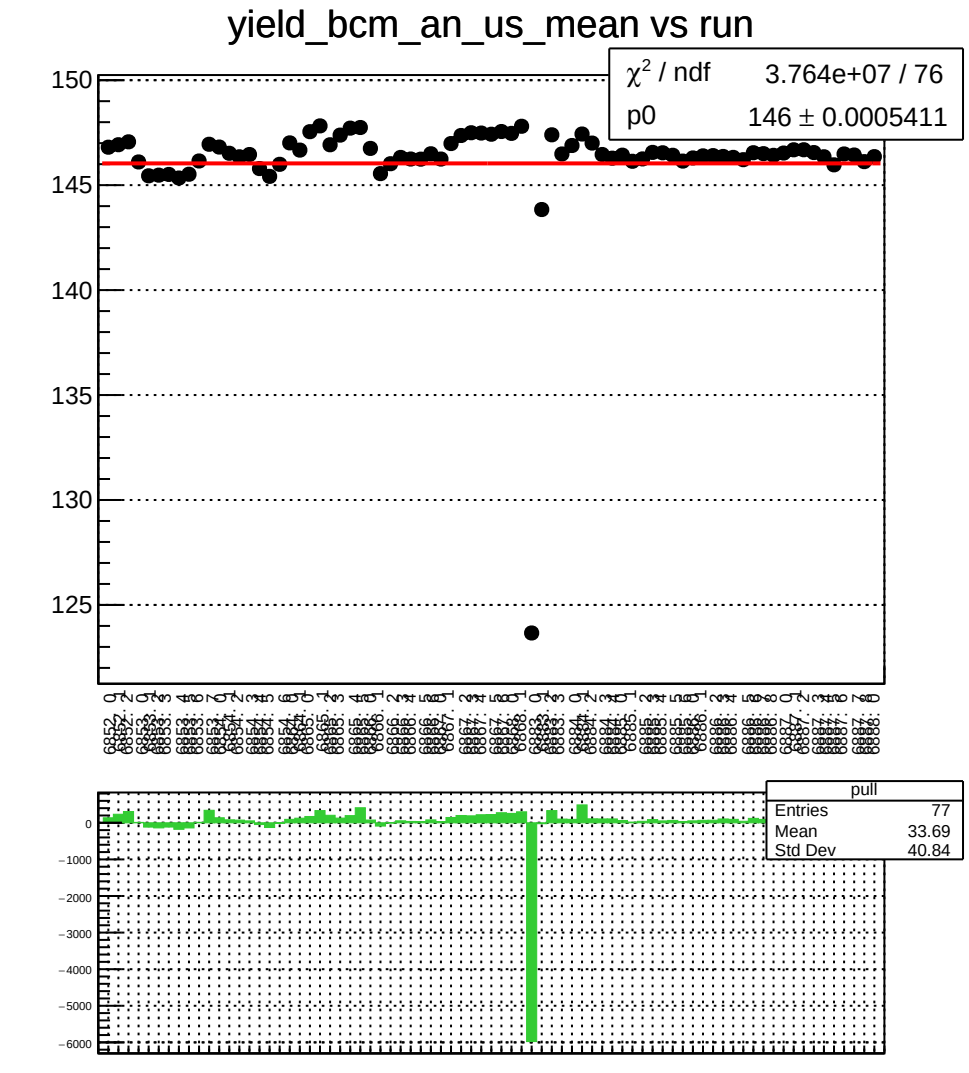

pull1D
Entries 77
Mean −2.537
Std Dev 2.699
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

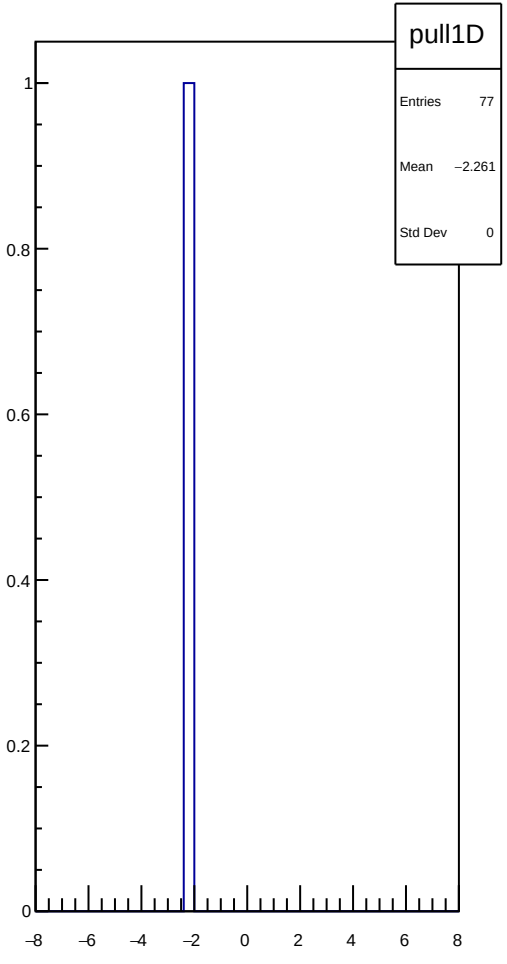

yield_bcm_an_ds_rms vs run
χ^2 / ndf 1.221e+05 / 76
p0 0.4647 ± 0.0003812
9
8
7
6
5
4
3
2
1

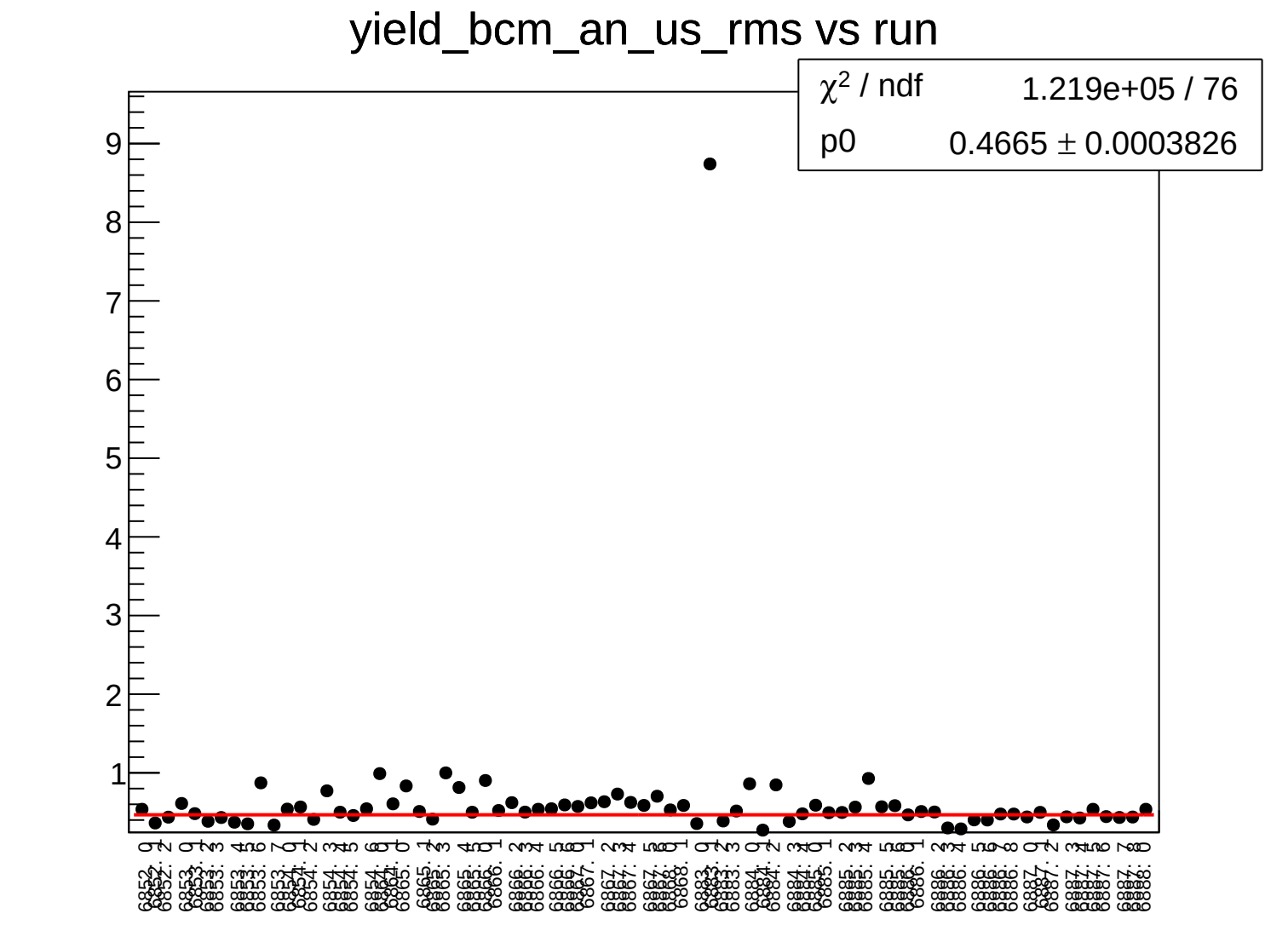

yield_bcm_an_ds3_mean vs run
χ² / ndf 3.654e+07 / 76
p0 146.9 ± 0.0005466
150
145
140
135
130
125
pull
Entries 77
Mean 18.6
Std Dev 36.82
0
−1000
−2000
−3000
−4000
−5000
−6000

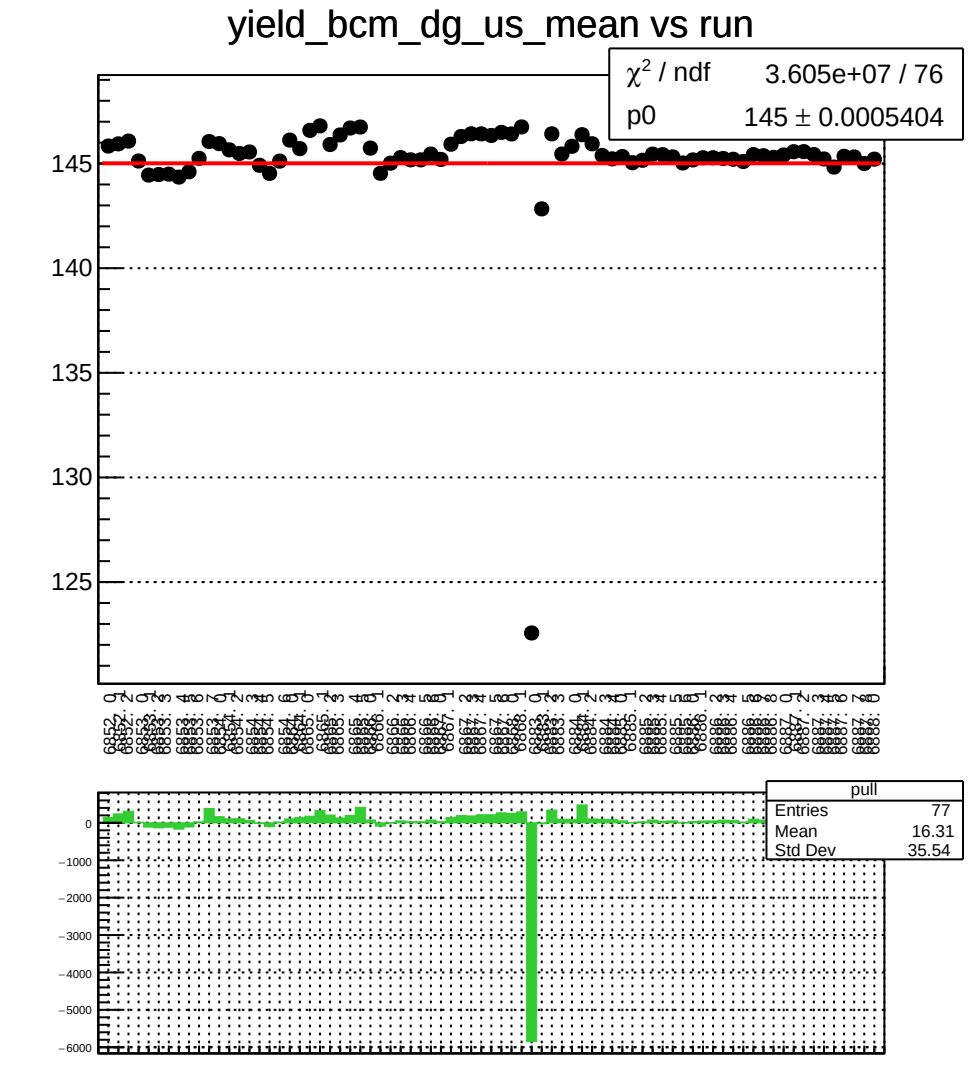

pull1D
Entries 77
Mean 2.179
Std Dev 4.985
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

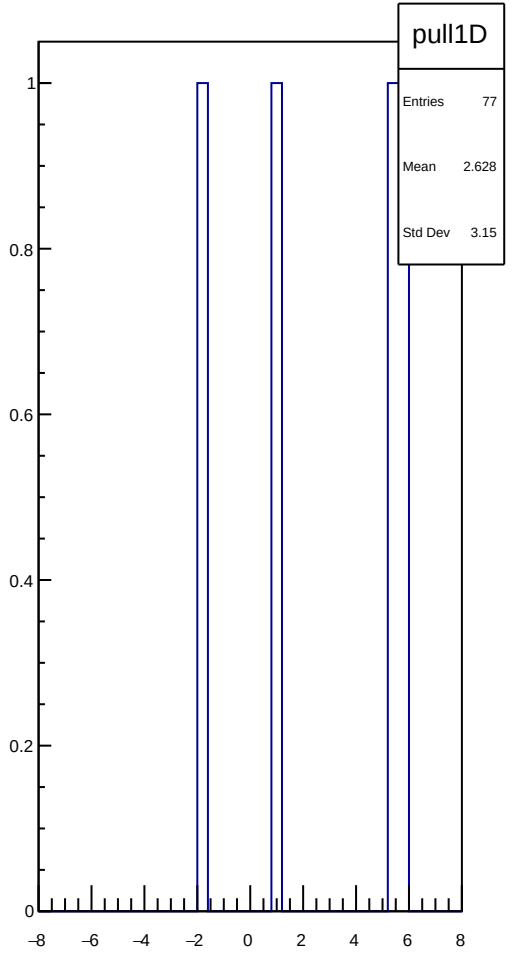

yield_bcm_an_ds3_rms vs run
χ^2 / ndf 1.222e+05 / 76
p0 0.4712 ± 0.0003865
9
8
7
6
5
4
3
2
1

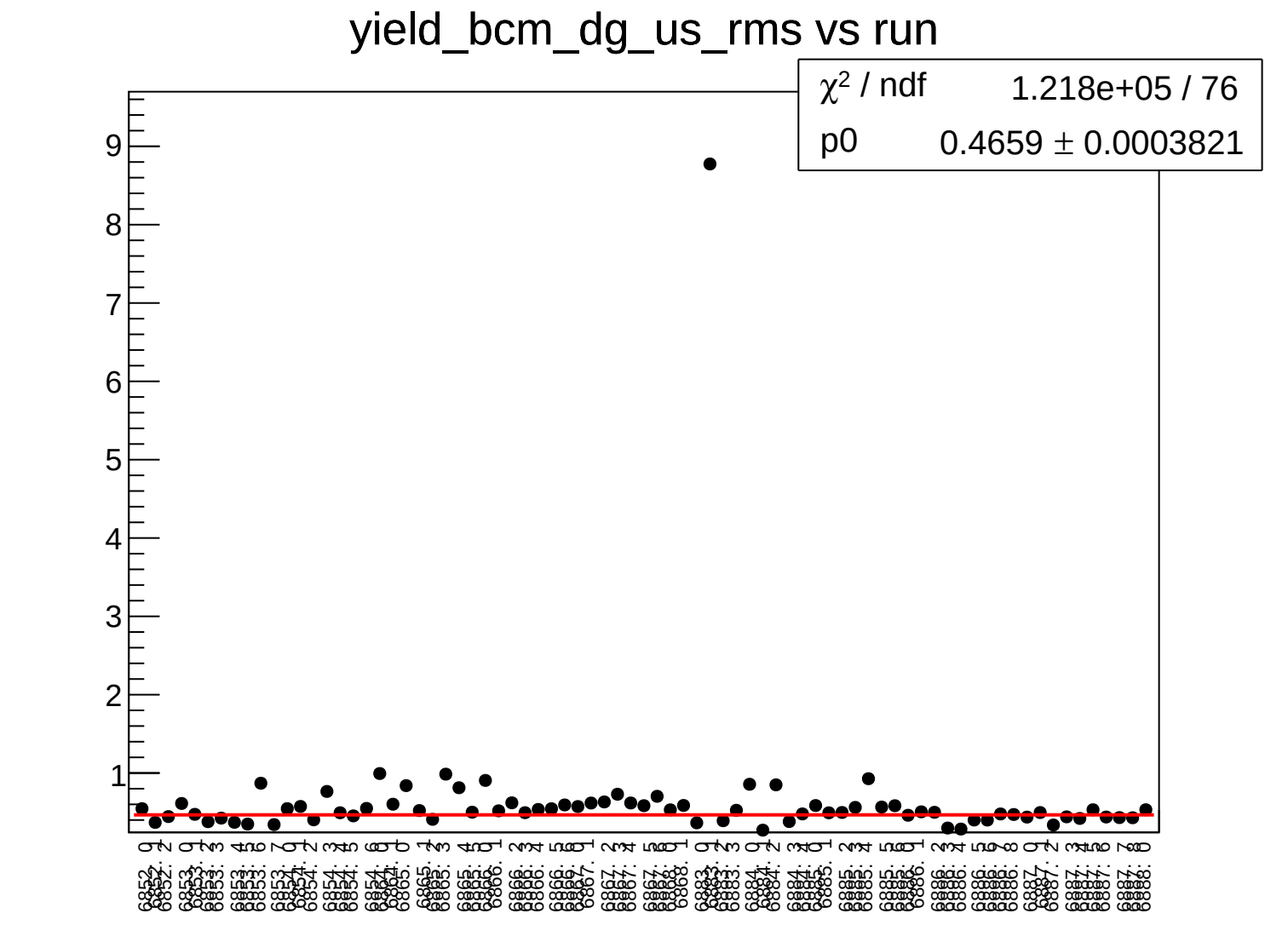

yield_bcm_an_us_mean vs run
χ² / ndf 3.764e+07 / 76
p0 146 ± 0.0005411
150
145
140
135
130
125
pull
Entries 77
Mean 33.69
Std Dev 40.84
0
−1000
−2000
−3000
−4000
−5000
−6000

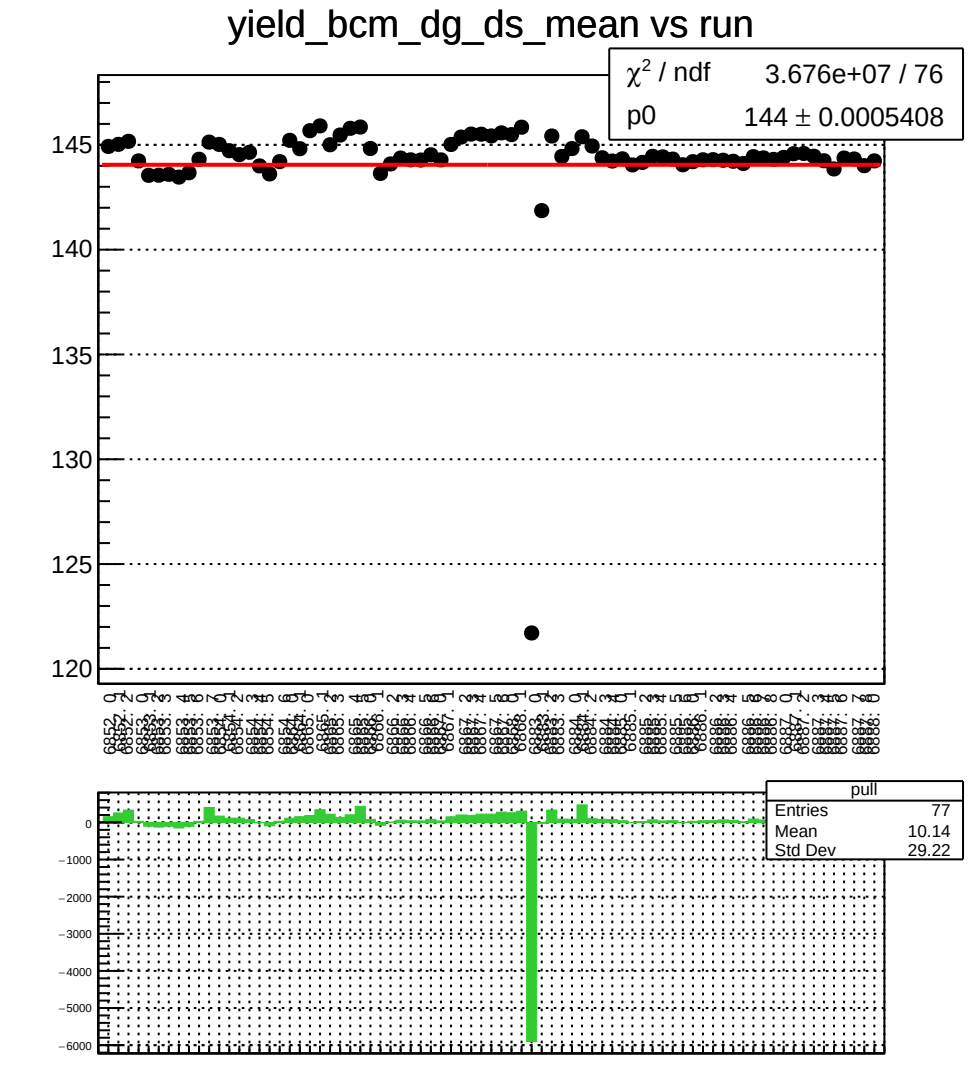

pull1D
Entries 77
Mean −2.261
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

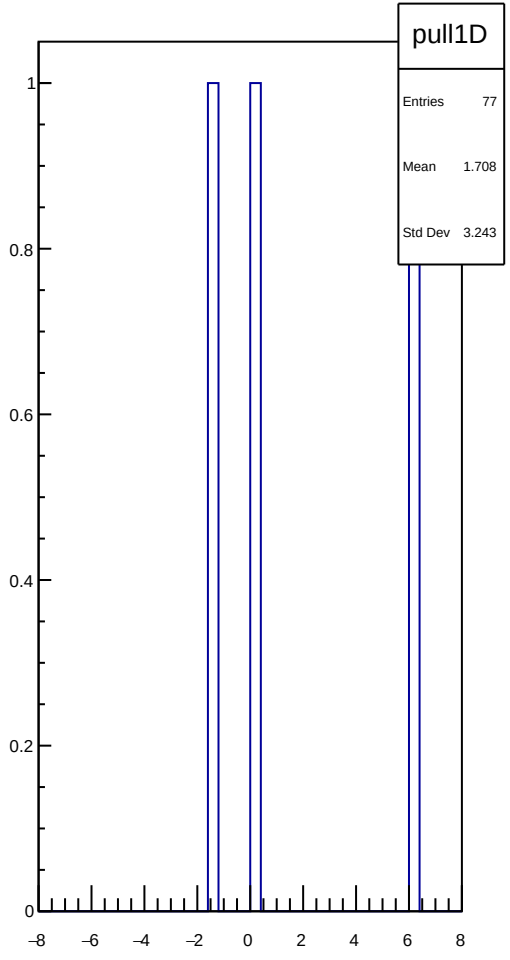

yield_bcm_an_us_rms vs run
χ² / ndf 1.219e+05 / 76
p0 0.4665 ± 0.0003826
9
8
7
6
5
4
3
2
1

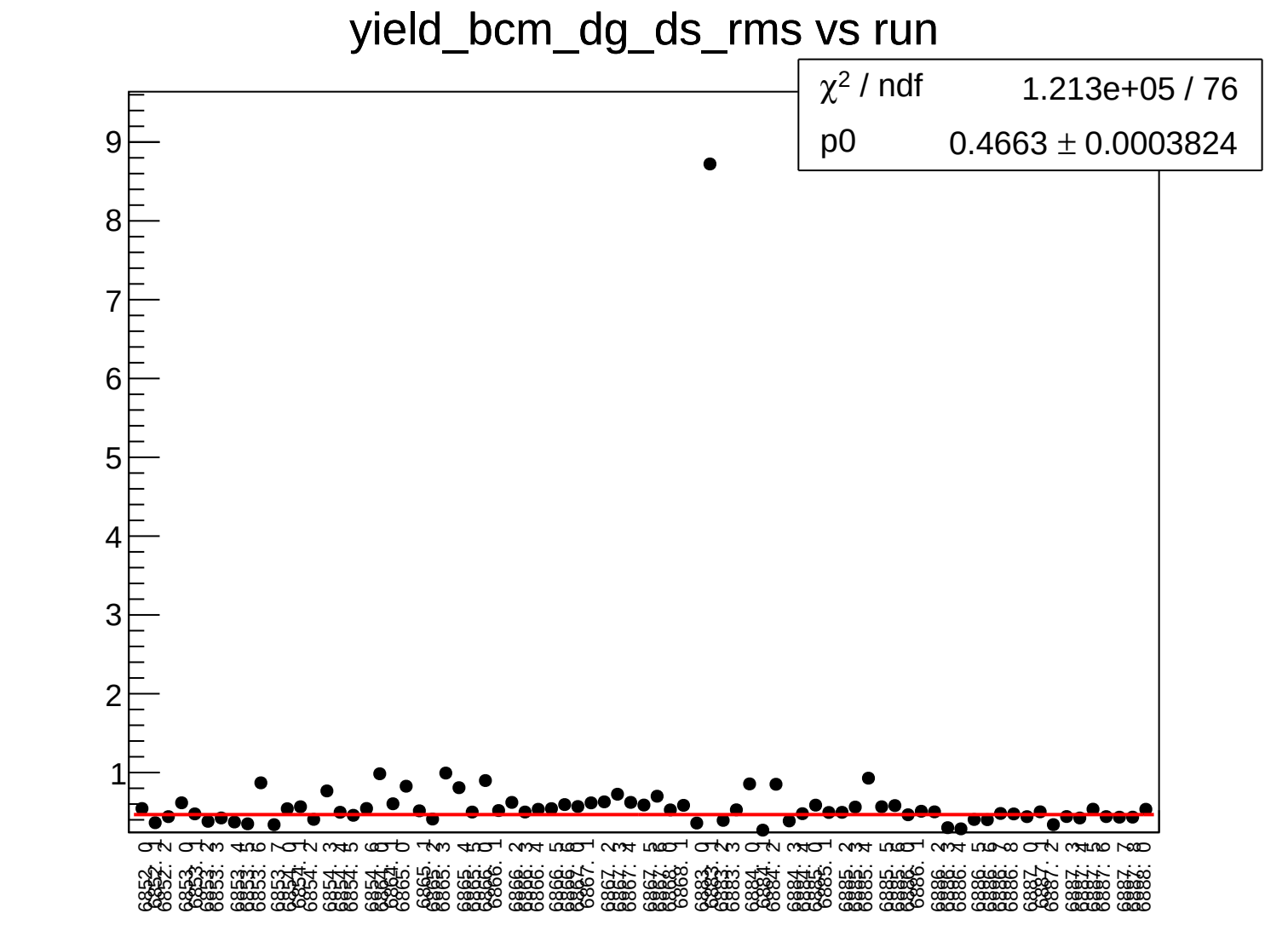

yield_bcm_dg_us_mean vs run
χ² / ndf 3.605e+07 / 76
p0 145 ± 0.0005404
145
140
135
130
125
pull
Entries 77
Mean 16.31
Std Dev 35.54
0
−1000
−2000
−3000
−4000
−5000
−6000

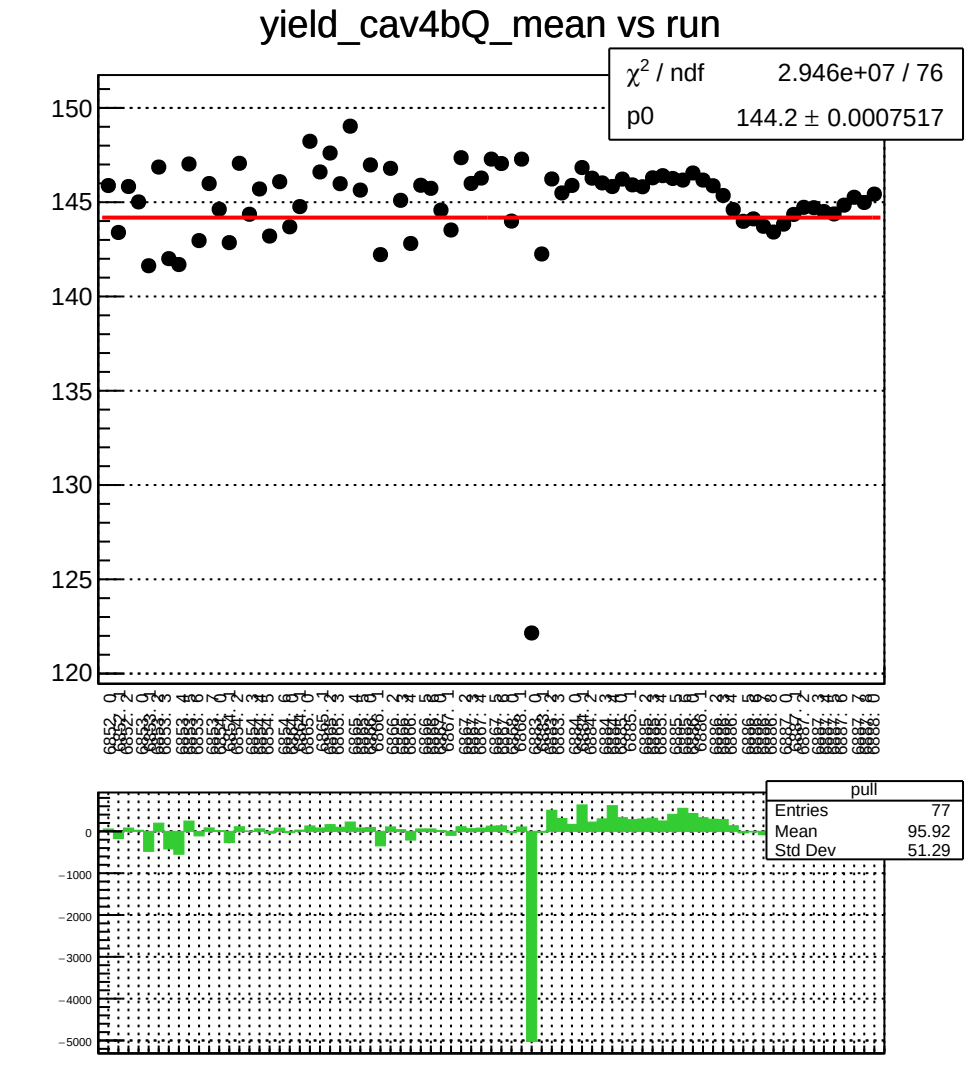

pull1D
Entries 77
Mean 2.628
Std Dev 3.15
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

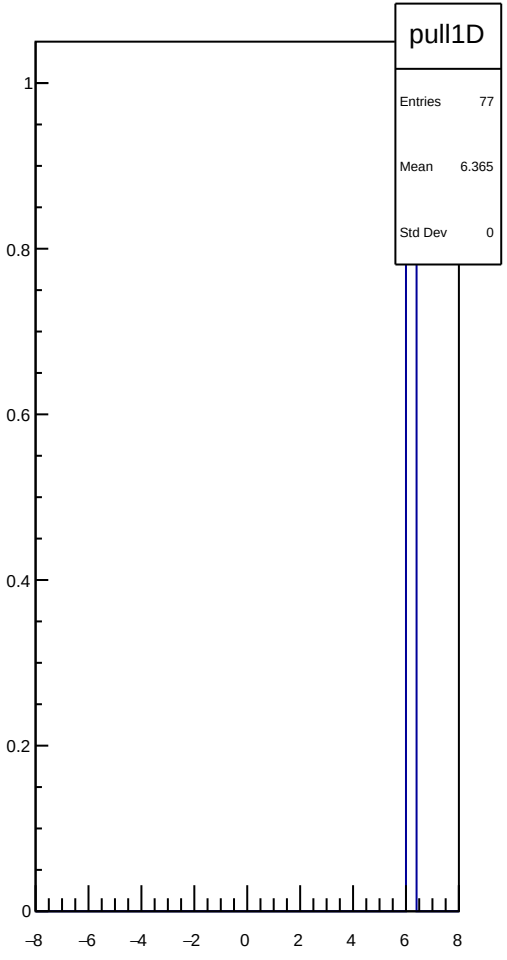

yield_bcm_dg_us_rms vs run
χ² / ndf 1.218e+05 / 76
p0 0.4659 ± 0.0003821
9
8
7
6
5
4
3
2
1

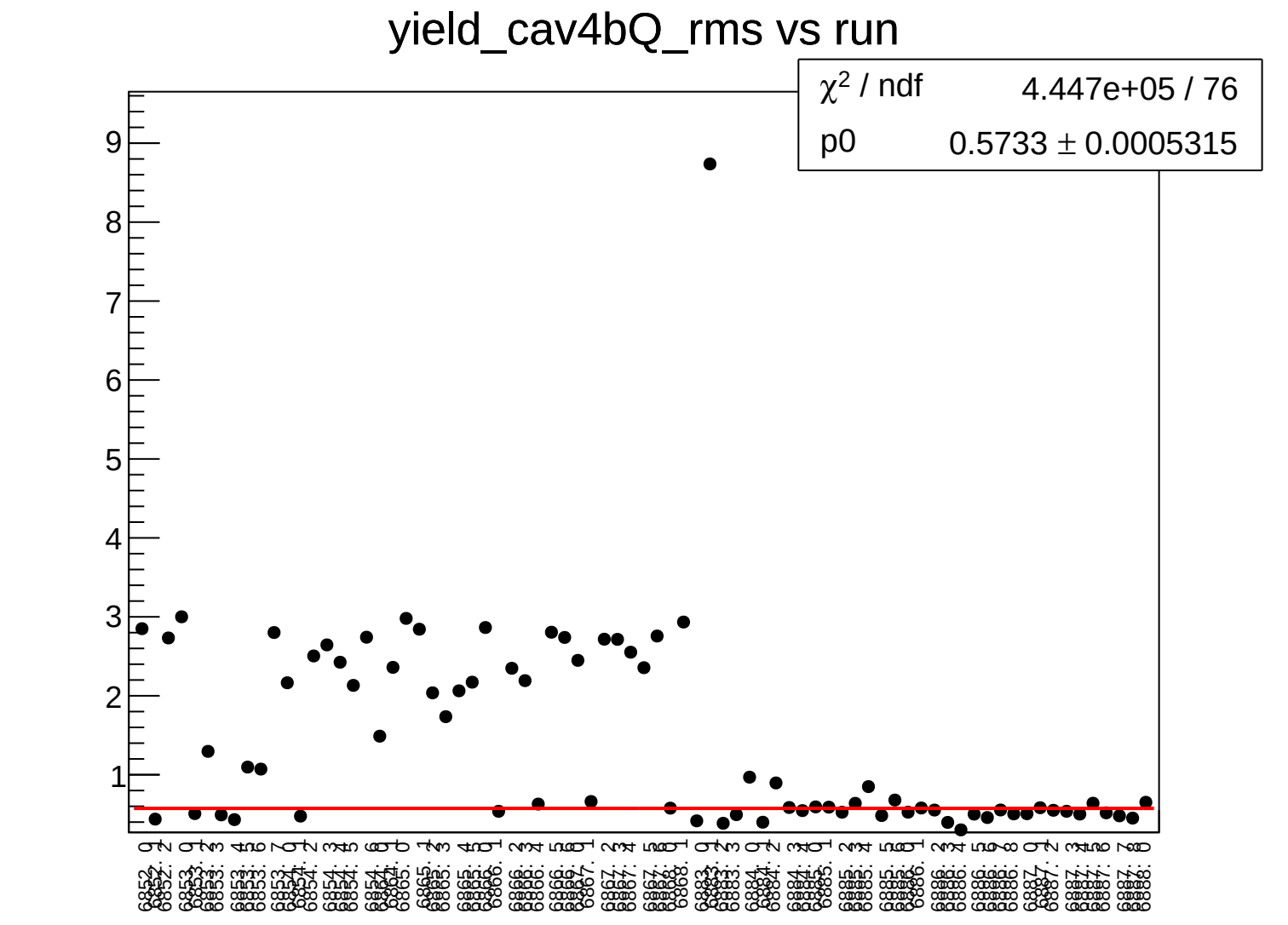

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.676e+07 / 76
p0 144 ± 0.0005408
145
140
135
130
125
120
pull
Entries 77
Mean 10.14
Std Dev 29.22
0
−1000
−2000
−3000
−4000
−5000
−6000

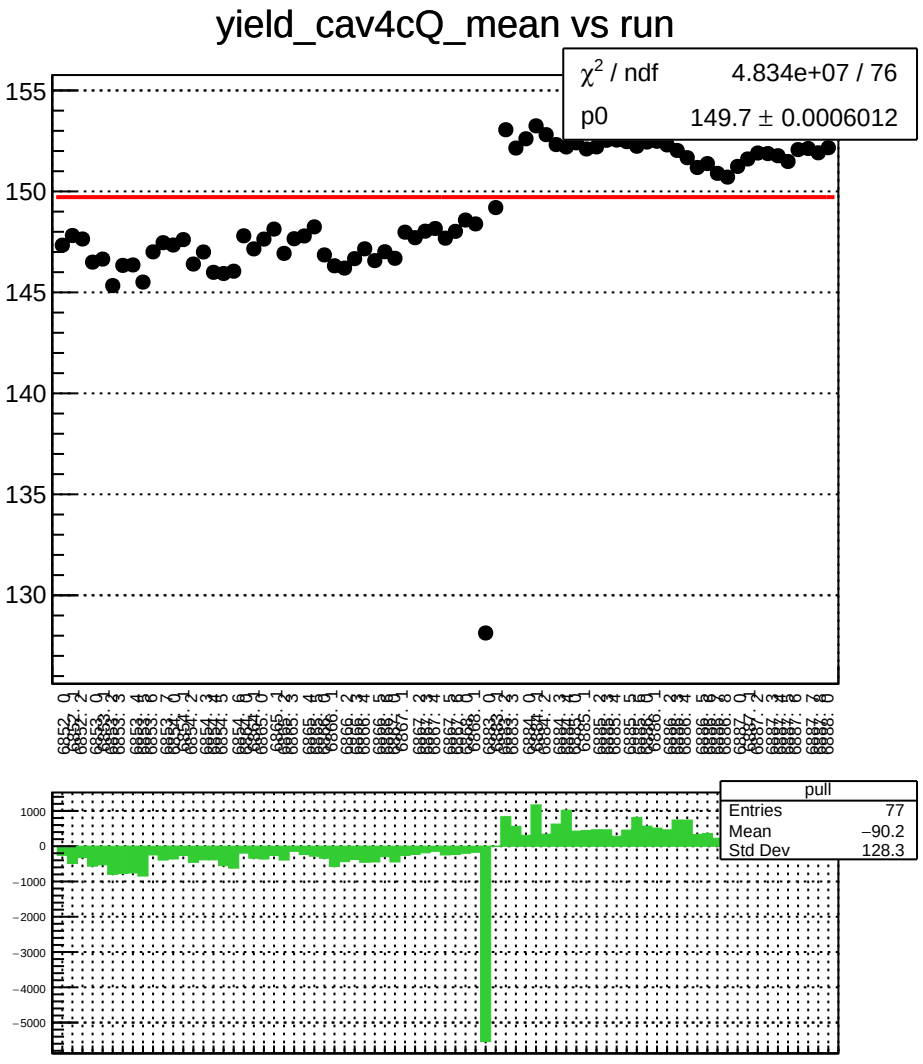

pull1D
Entries 77
Mean 1.708
Std Dev 3.243
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

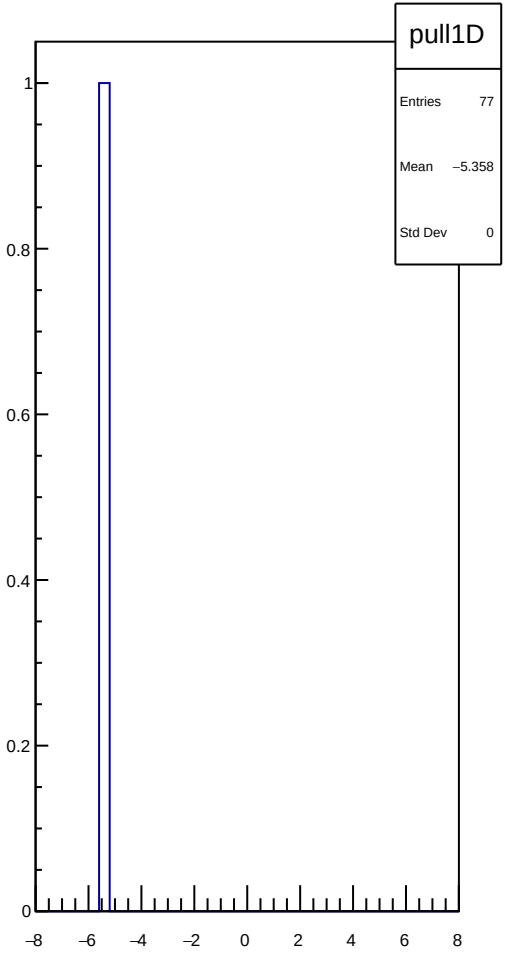

yield_bcm_dg_ds_rms vs run
χ^2 / ndf 1.213e+05 / 76
p0 0.4663 ± 0.0003824
9
8
7
6
5
4
3
2
1

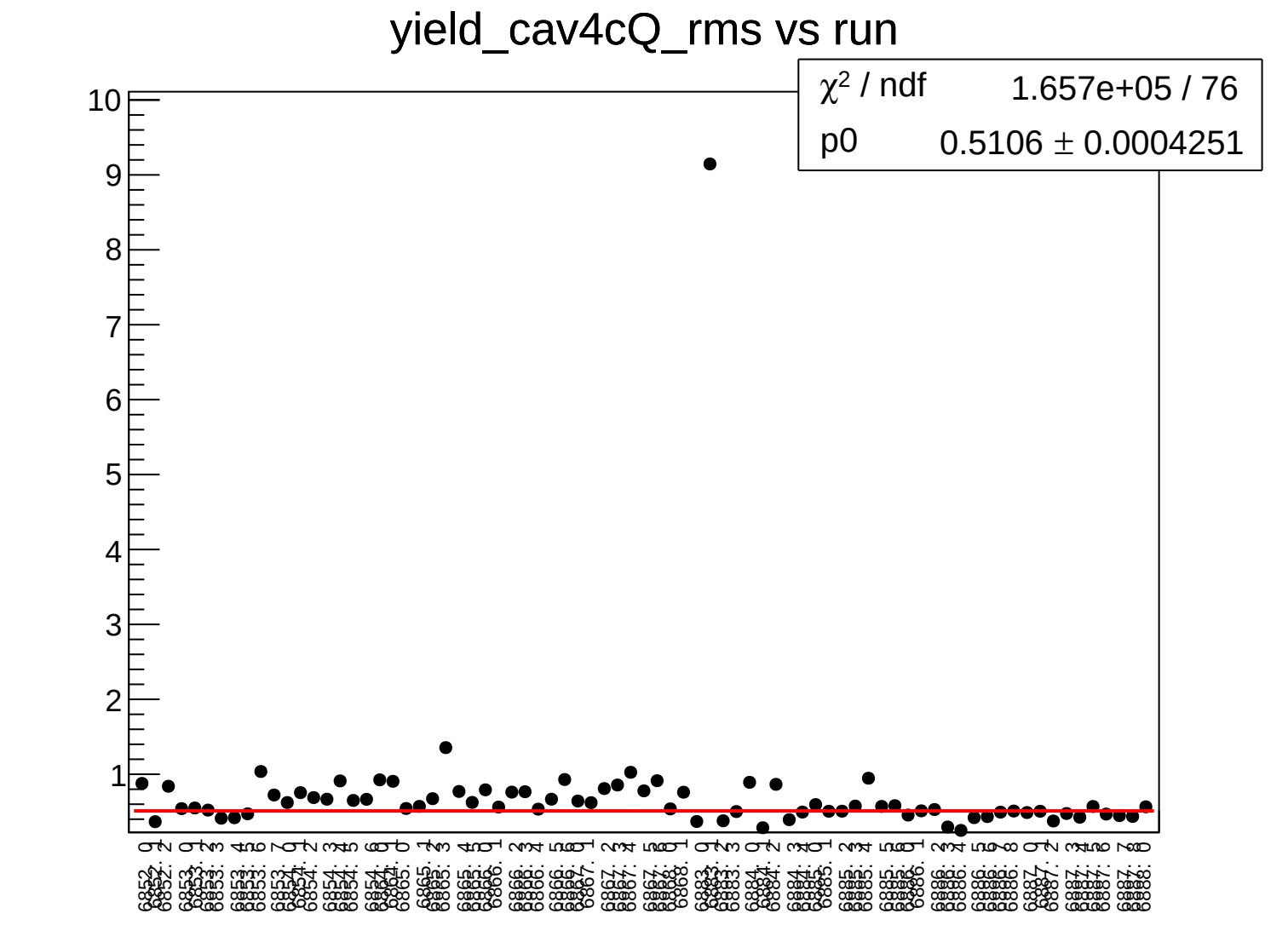

yield_cav4bQ_mean vs run
χ² / ndf 2.946e+07 / 76
p0 144.2 ± 0.0007517
150
145
140
135
130
125
120
pull
Entries 77
Mean 95.92
Std Dev 51.29
0
−1000
−2000
−3000
−4000
−5000

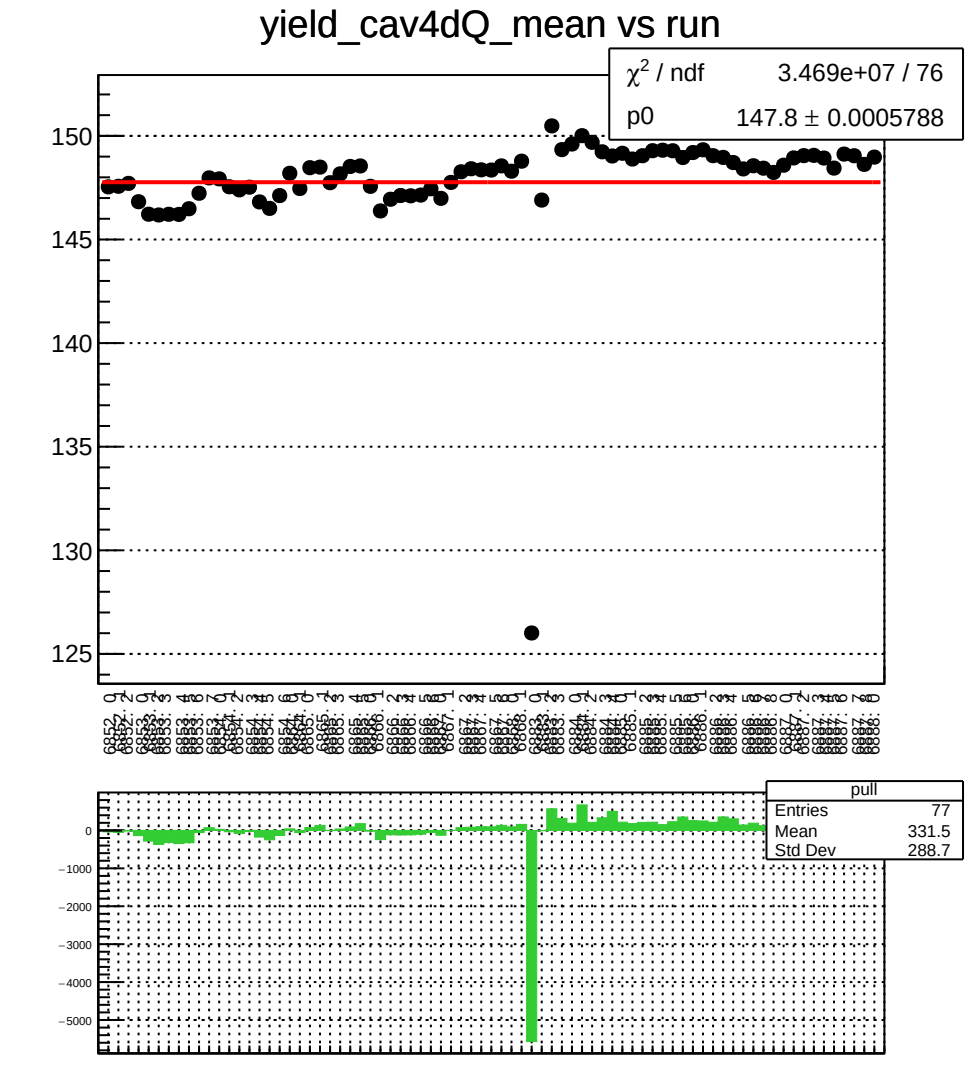

pull1D
Entries 77
Mean 6.365
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

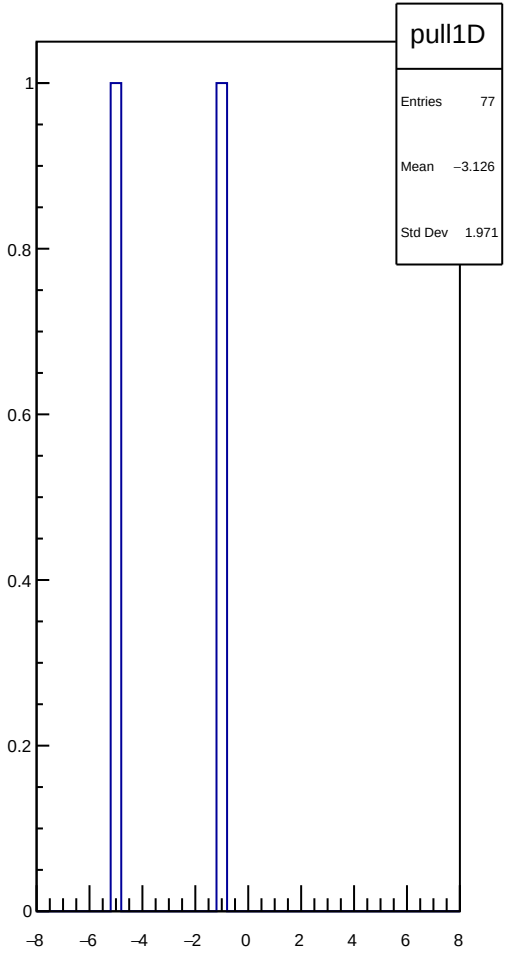

yield_cav4bQ_rms vs run
χ² / ndf 4.447e+05 / 76
p0 0.5733 ± 0.0005315
9
8
7
6
5
4
3
2
1

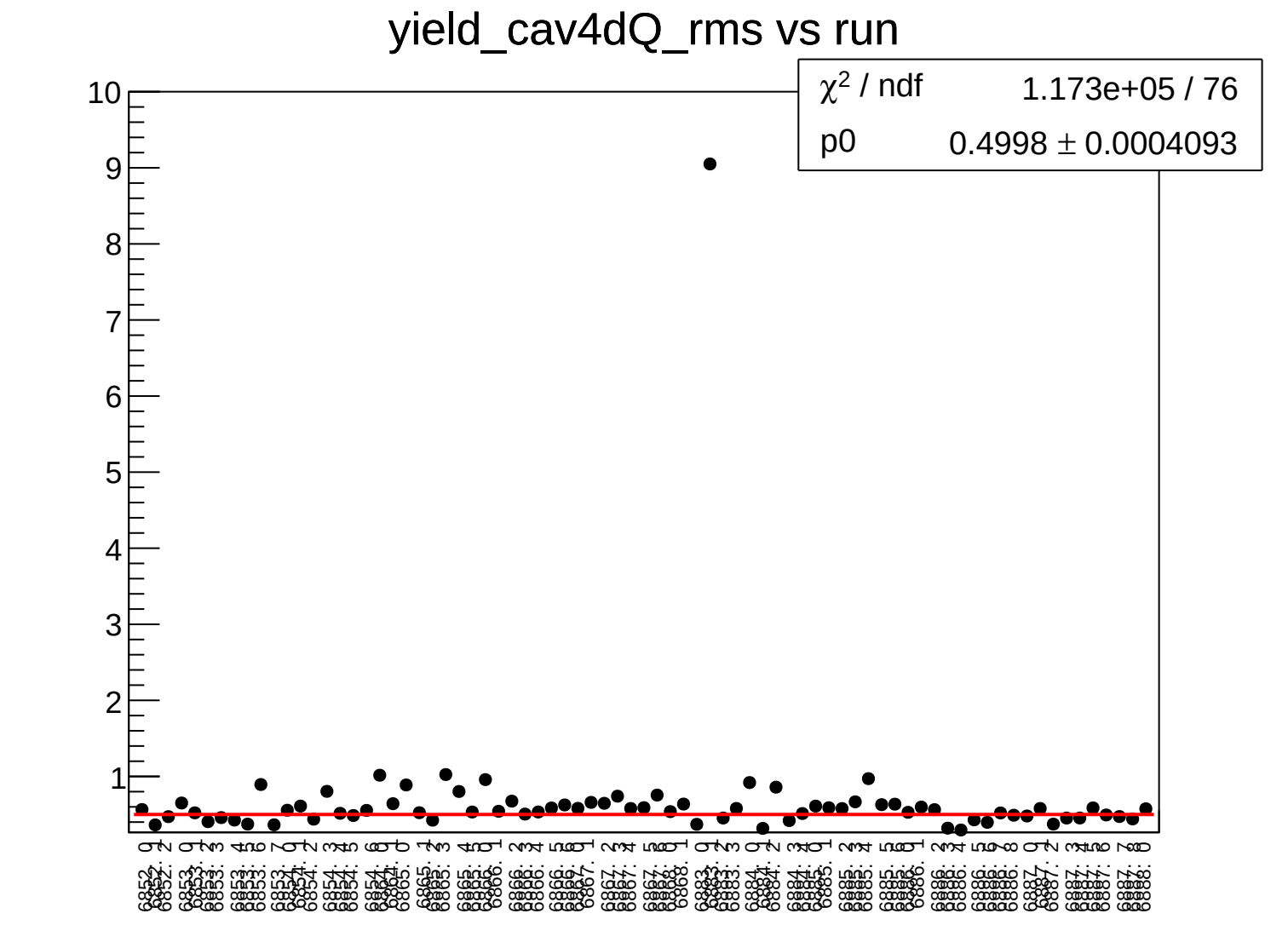

yield_cav4cQ_mean vs run
χ² / ndf 4.834e+07 / 76
p0 149.7 ± 0.0006012
155
150
145
140
135
130
pull
Entries 77
Mean −90.2
Std Dev 128.3
1000
0
−1000
−2000
−3000
−4000
−5000

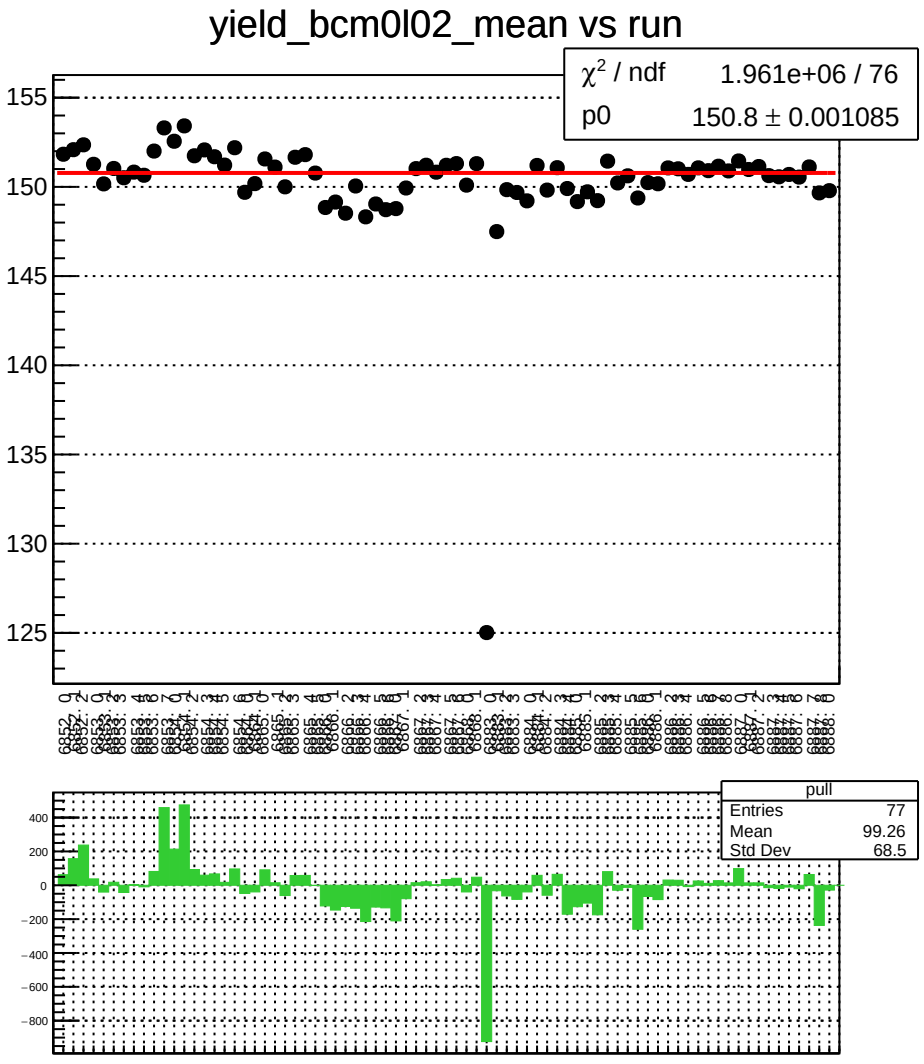

pull1D
Entries 77
Mean −5.358
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

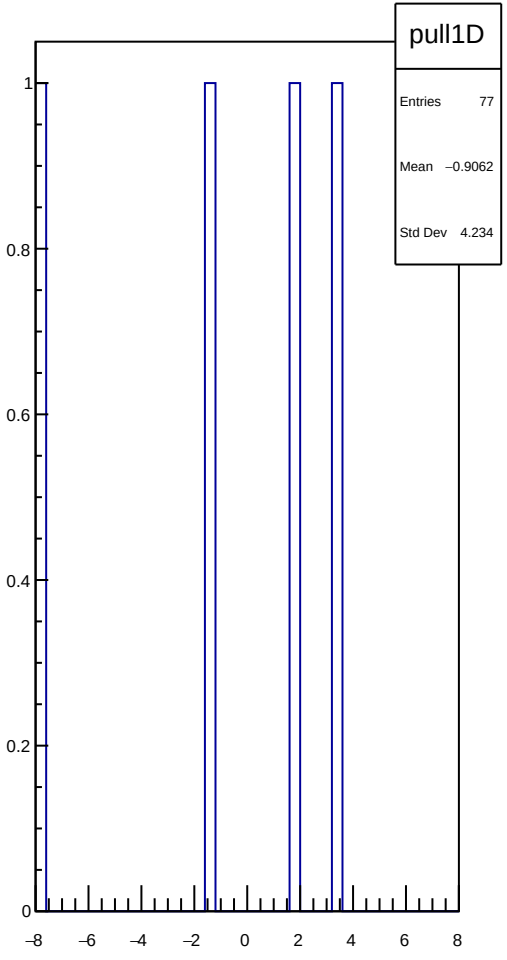

yield_cav4cQ_rms vs run
χ² / ndf 1.657e+05 / 76
p0 0.5106 ± 0.0004251
10
9
8
7
6
5
4
3
2
1

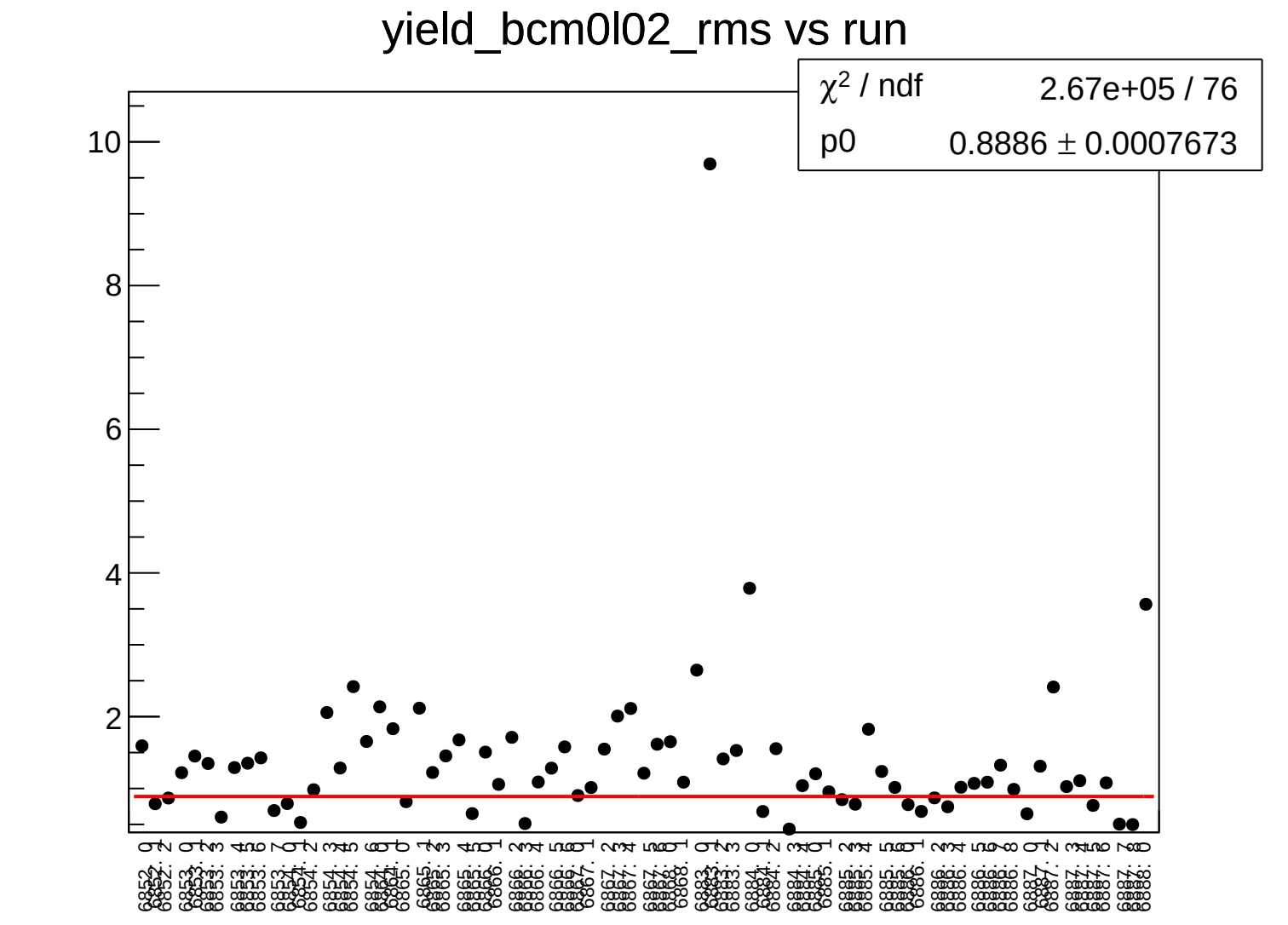

yield_cav4dQ_mean vs run
χ² / ndf 3.469e+07 / 76
p0 147.8 ± 0.0005788
150
145
140
135
130
125
pull
Entries 77
Mean 331.5
Std Dev 288.7
0
−1000
−2000
−3000
−4000
−5000

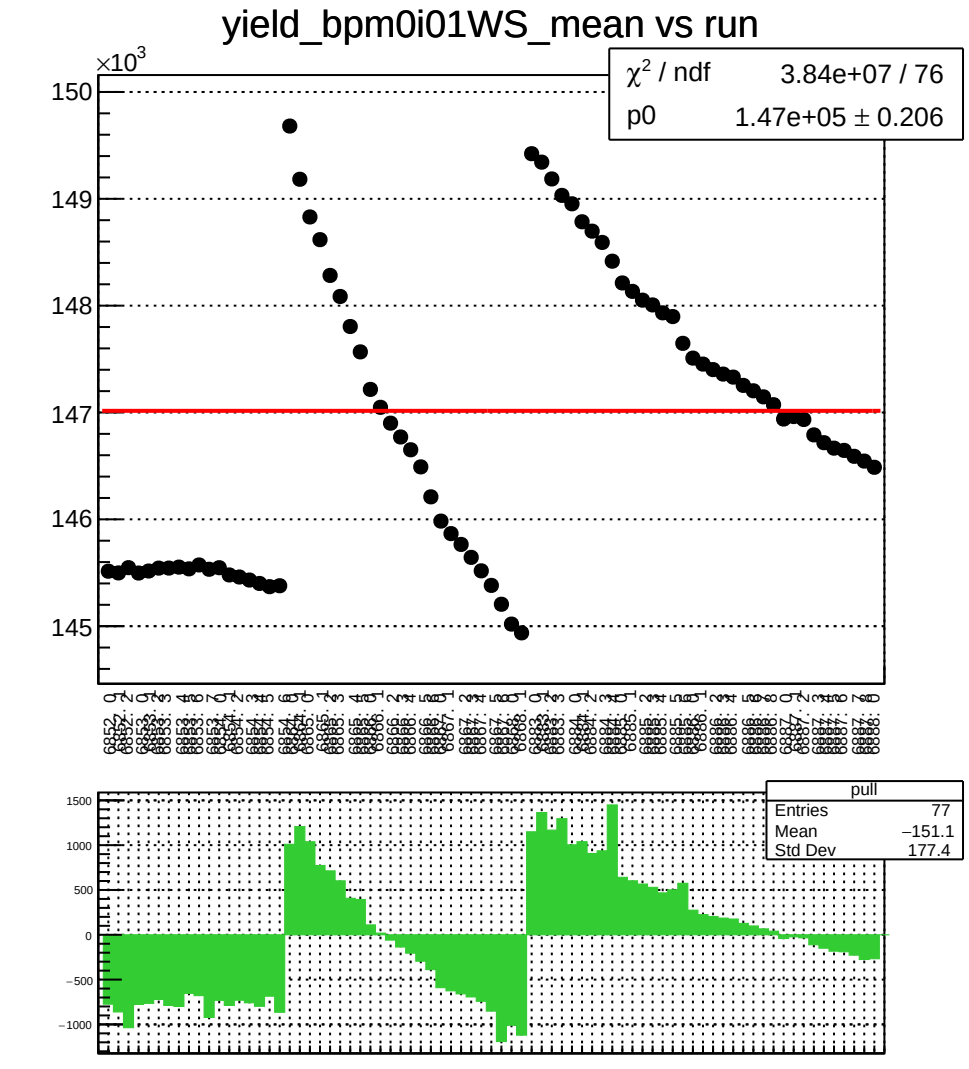

pull1D
Entries 77
Mean −3.126
Std Dev 1.971
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

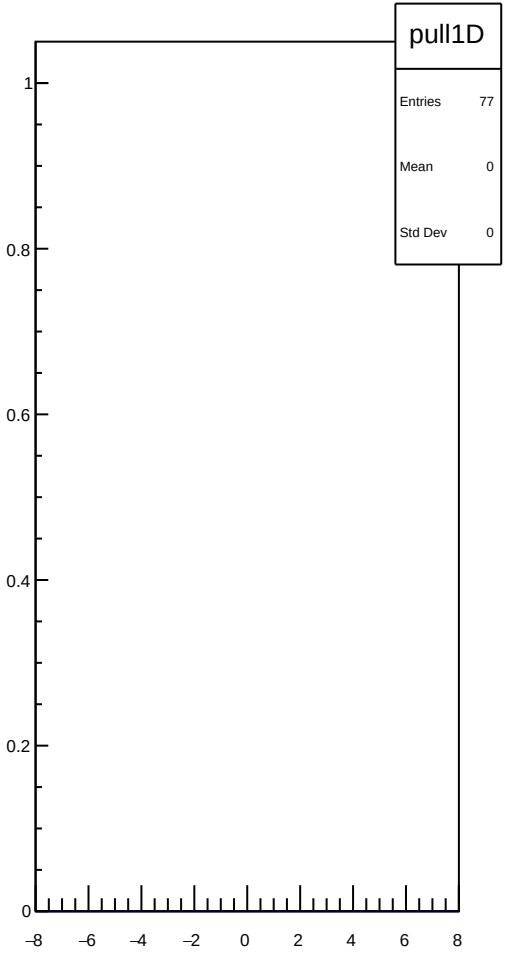

yield_cav4dQ_rms vs run
χ² / ndf 1.173e+05 / 76
p0 0.4998 ± 0.0004093
10
9
8
7
6
5
4
3
2
1

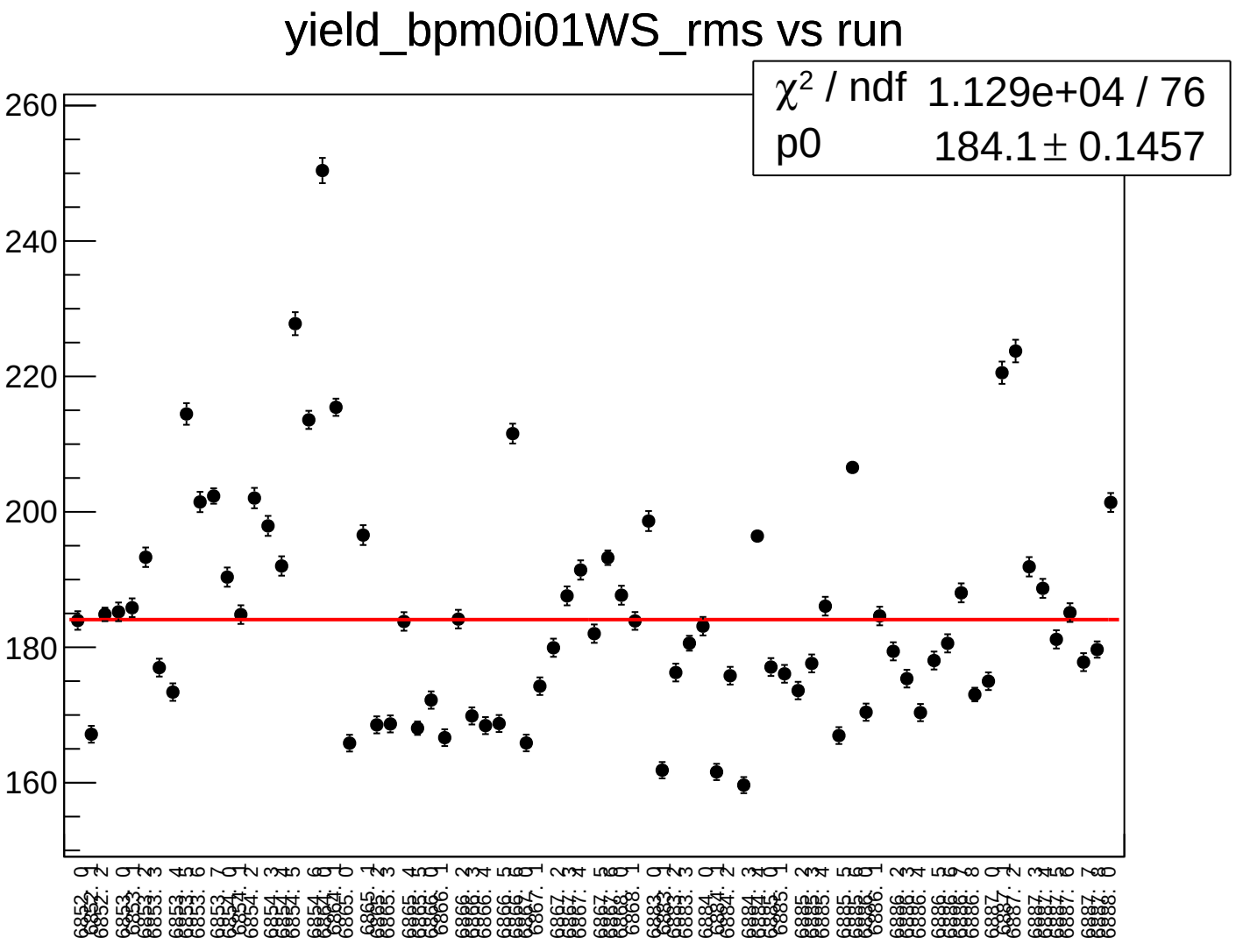

yield_bcm0l02_mean vs run
χ² / ndf 1.961e+06 / 76
p0 150.8 ± 0.001085
155
150
145
140
135
130
125
pull
Entries 77
Mean 99.26
Std Dev 68.5
400
200
0
−200
−400
−600
−800

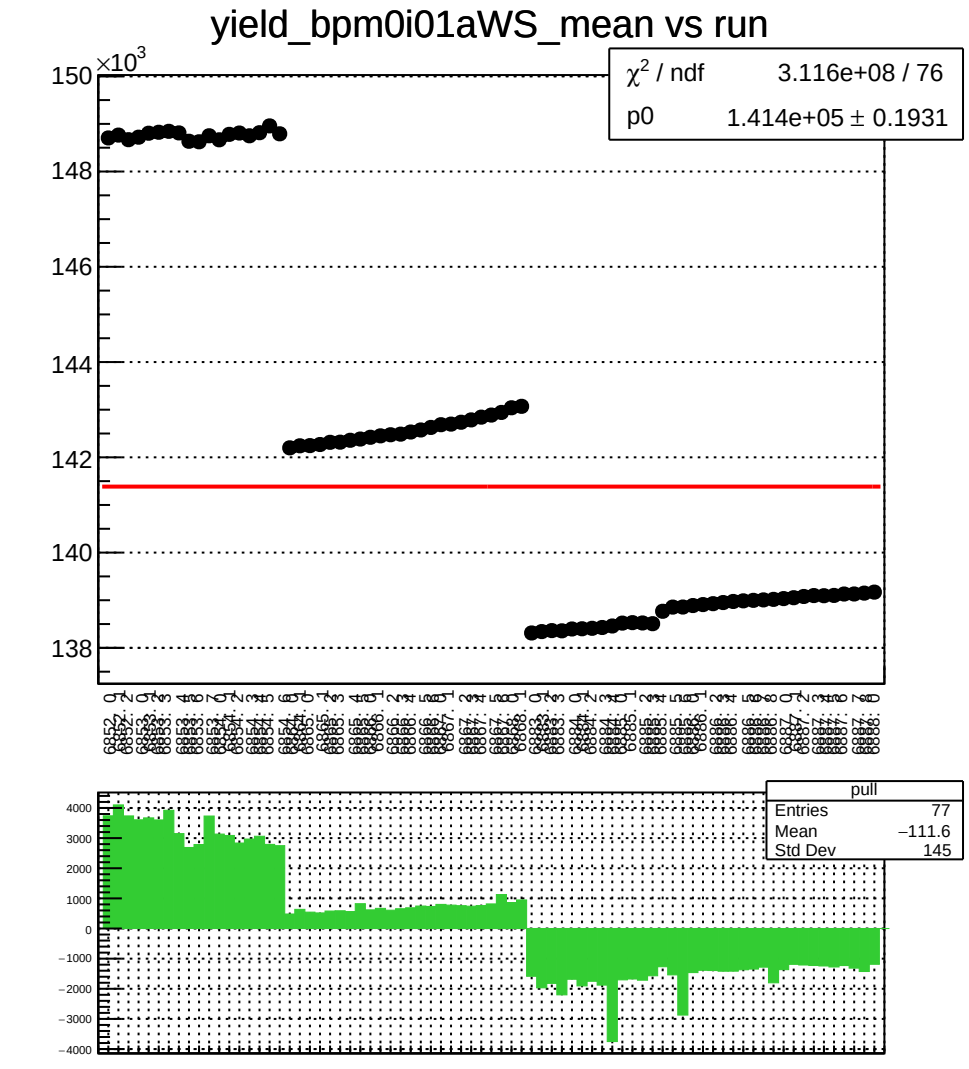

pull1D
Entries 77
Mean −0.9062
Std Dev 4.234
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

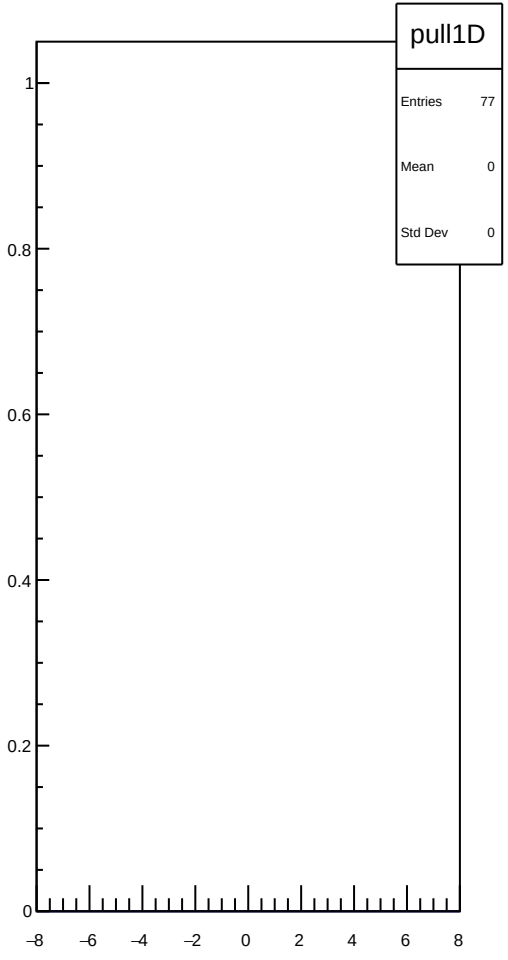

yield_bcm0l02_rms vs run
χ² / ndf 2.67e+05 / 76
p0 0.8886 ± 0.0007673
10
8
6
4
2

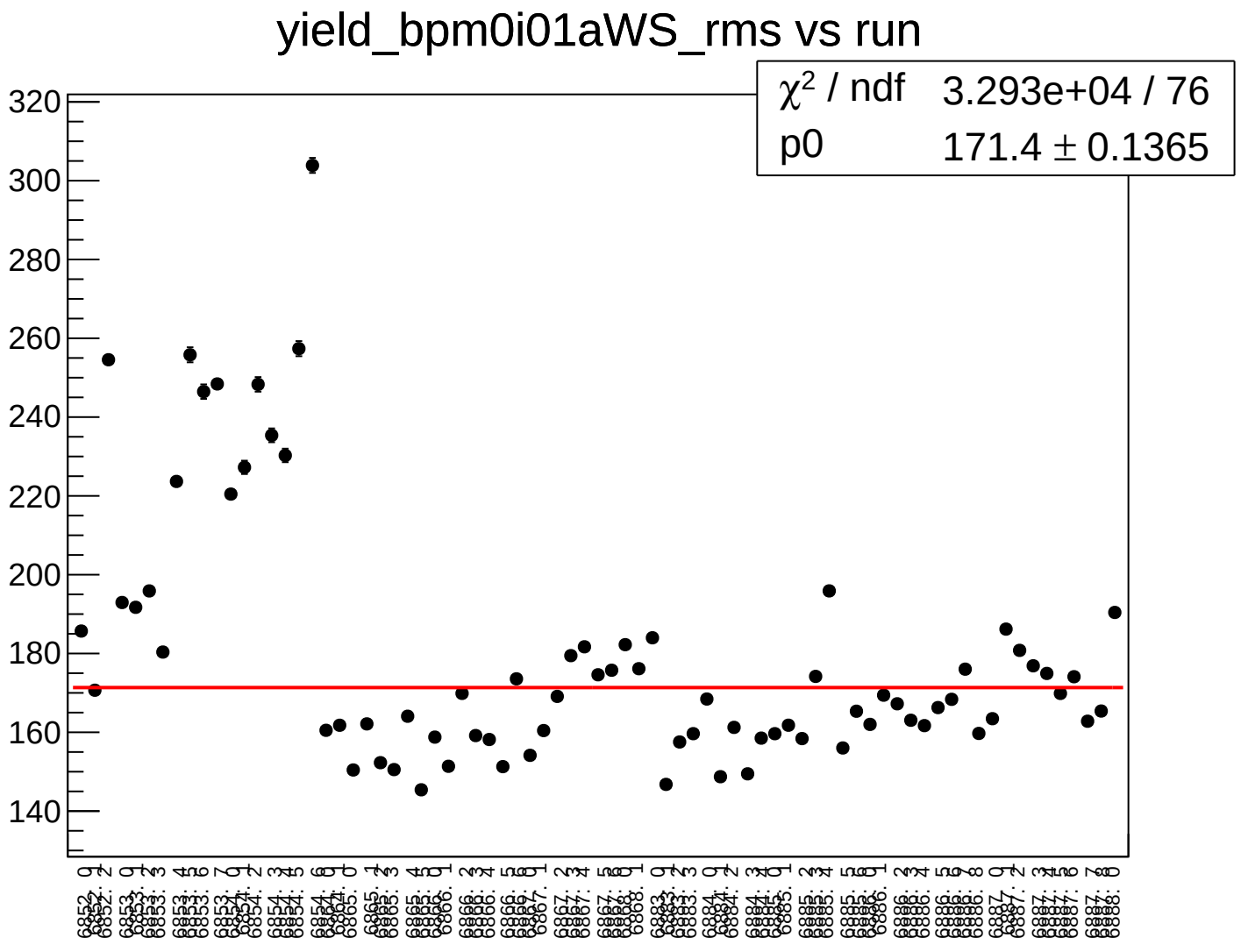

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 3.84e+07 / 76
p0 1.47e+05 ± 0.206
150
149
148
147
146
145
pull
Entries 77
Mean −151.1
Std Dev 177.4
1500
1000
500
0
−500
−1000

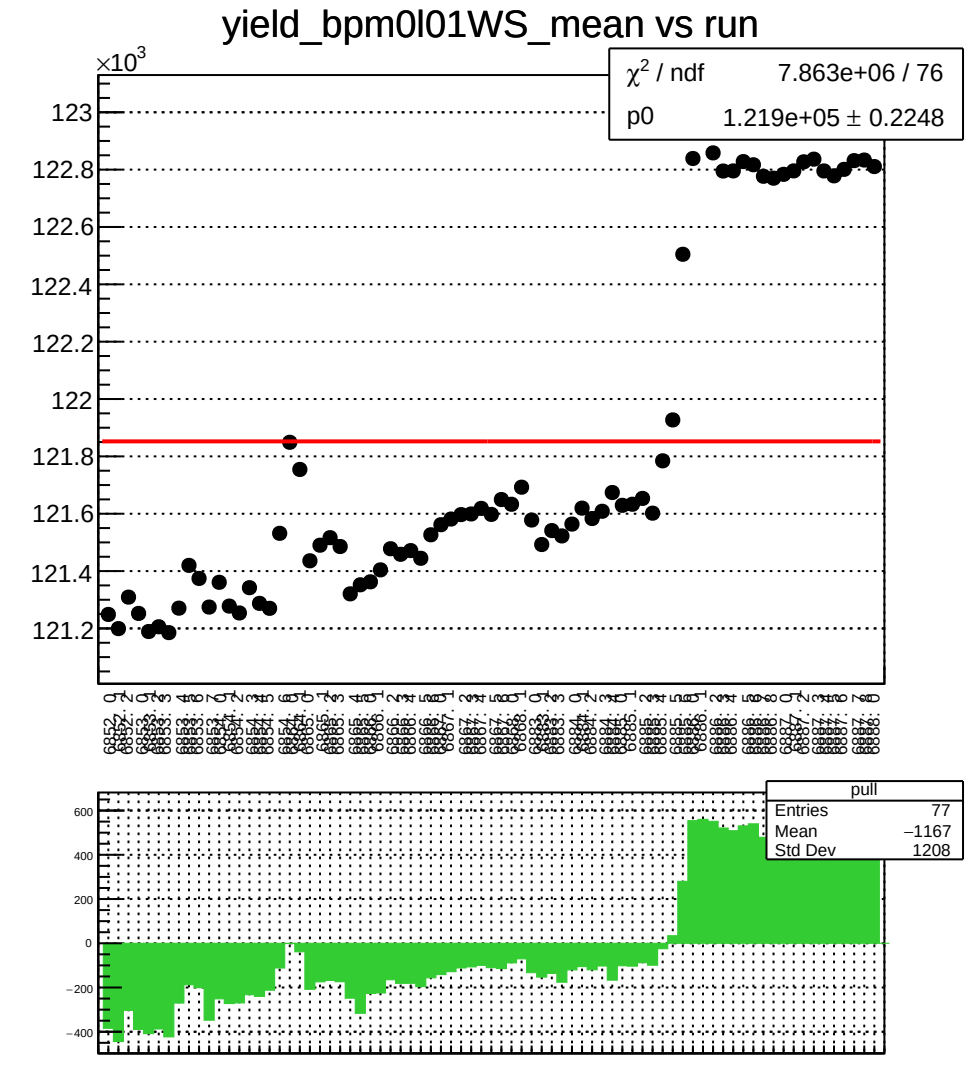

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

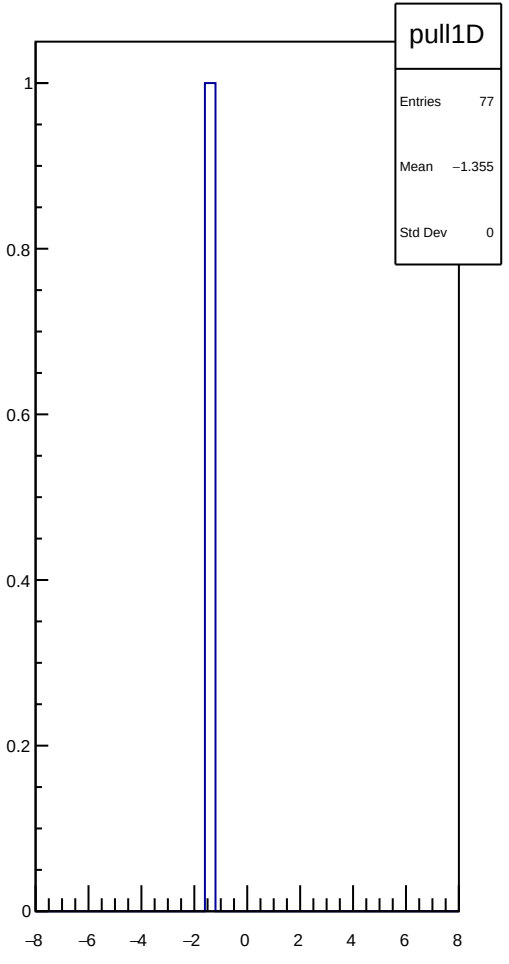

yield_bpm0i01WS_rms vs run
χ² / ndf 1.129e+04 / 76
p0 184.1 ± 0.1457
260
240
220
200
180
160

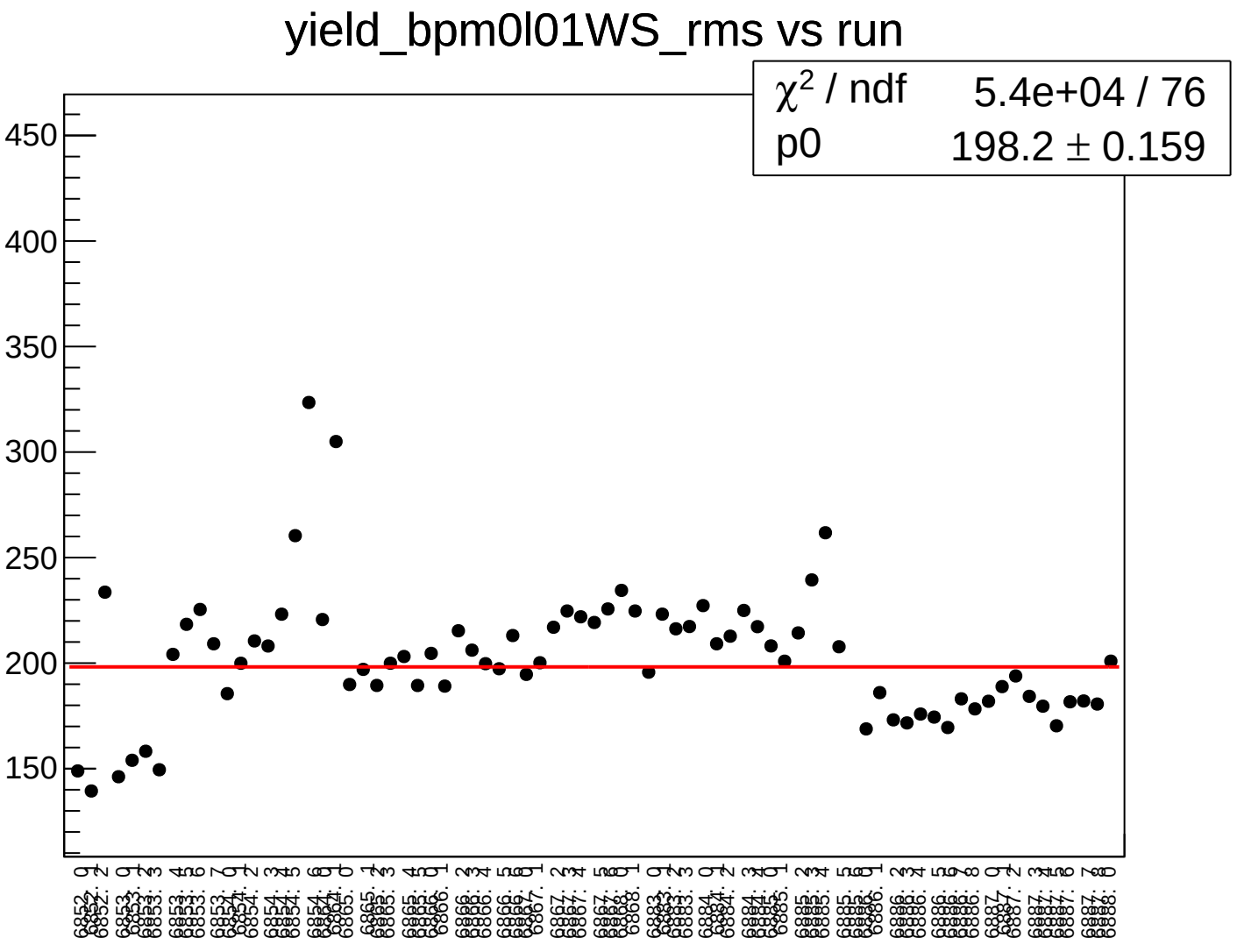

yield_bpm0i01aWS_mean vs run
χ² / ndf 3.116e+08 / 76
p0 1.414e+05 ± 0.1931
×10³
150
148
146
144
142
140
138
pull
Entries 77
Mean −111.6
Std Dev 145
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000

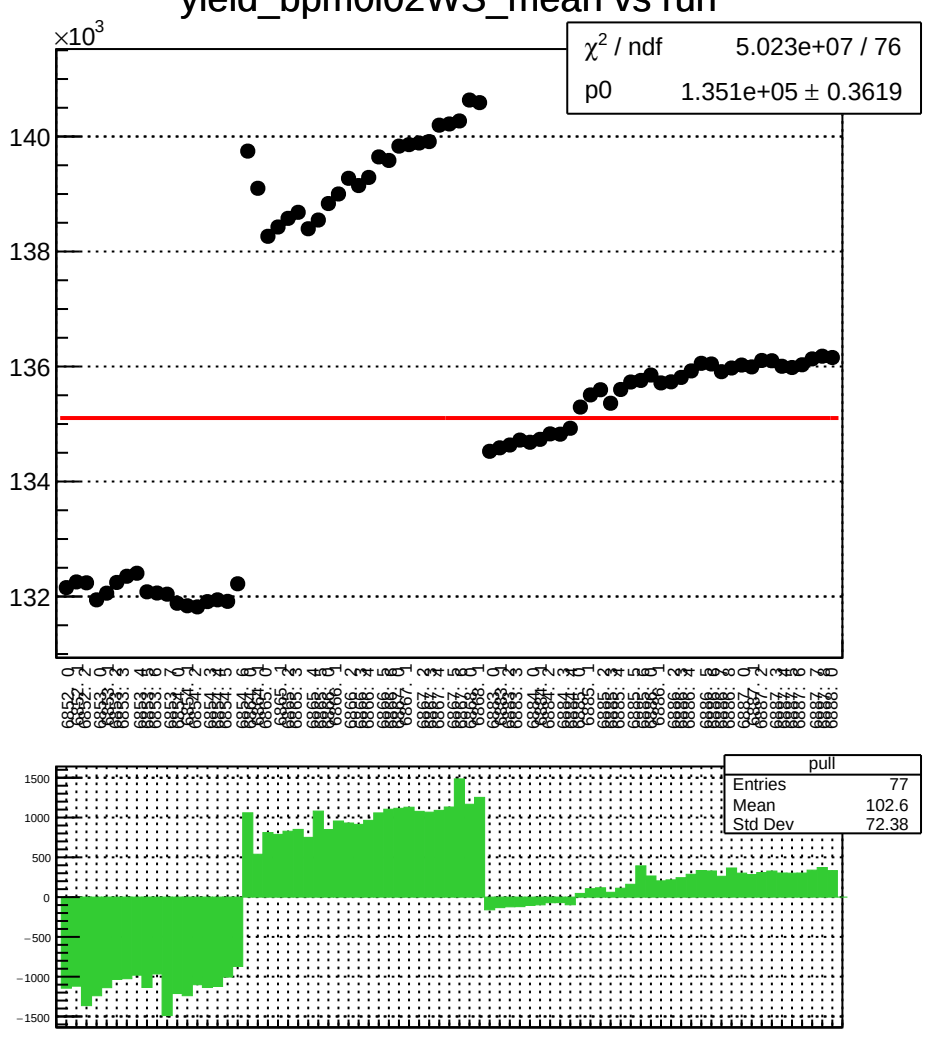

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

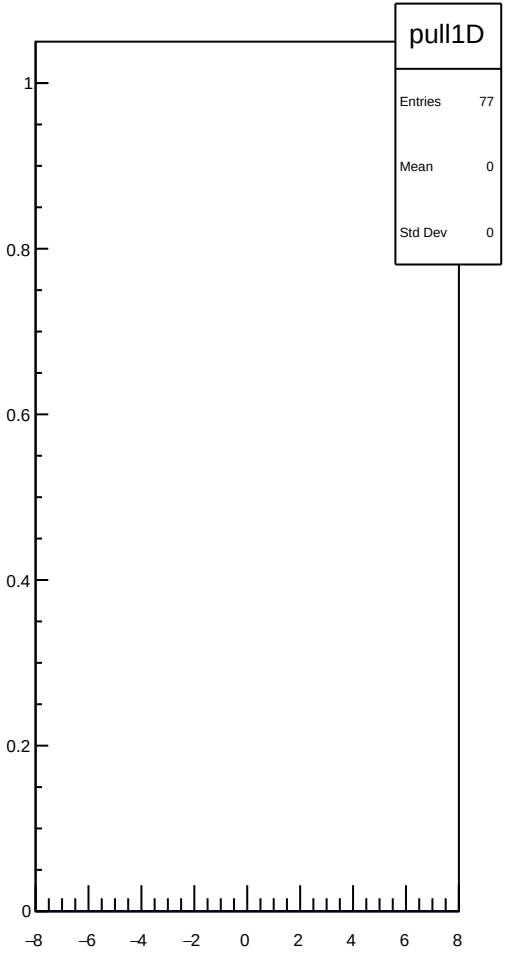

yield_bpm0i01aWS_rms vs run
χ² / ndf 3.293e+04 / 76
p0 171.4 ± 0.1365
320
300
280
260
240
220
200
180
160
140

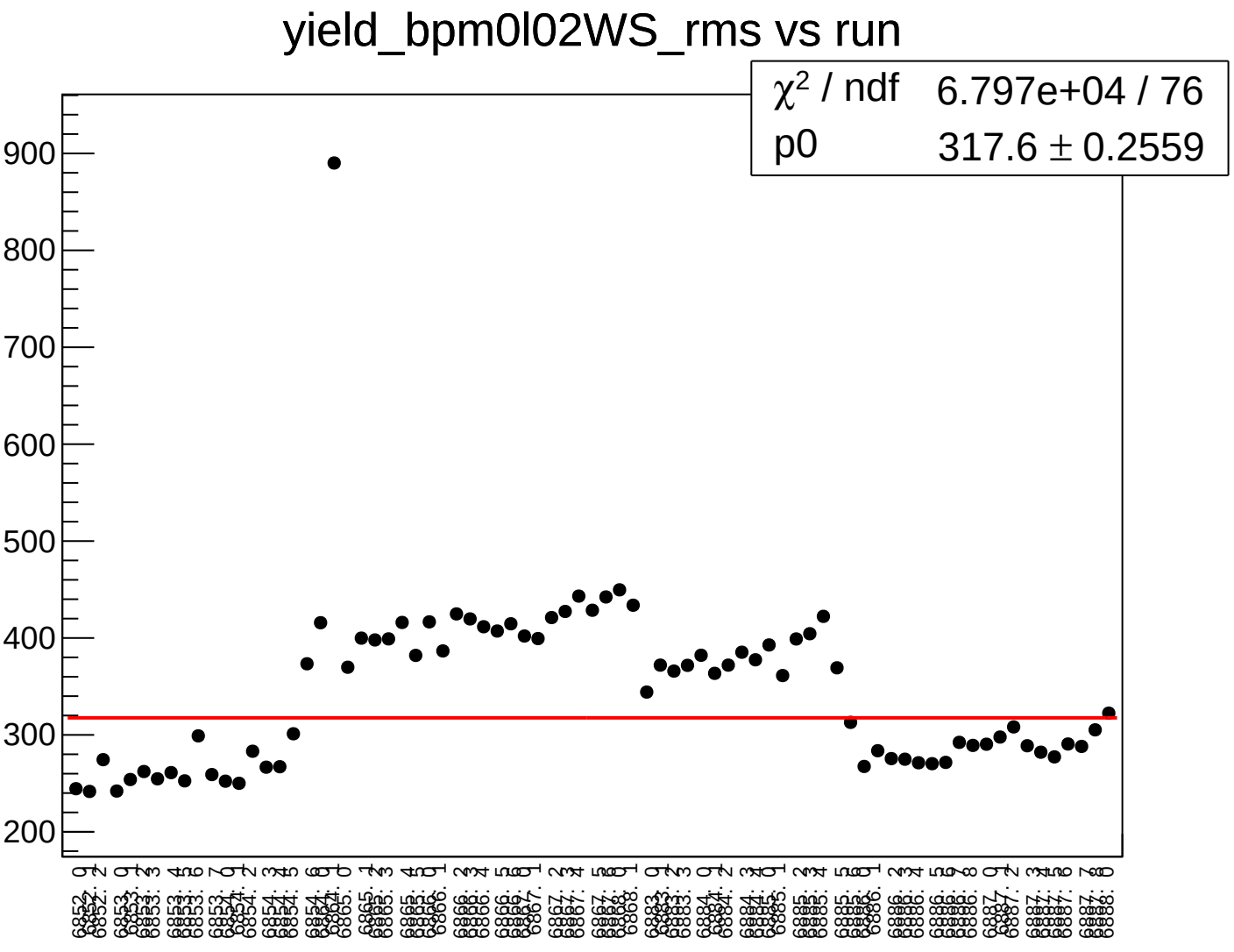

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 7.863e+06 / 76
p0 1.219e+05 ± 0.2248
123
122.8
122.6
122.4
122.2
122
121.8
121.6
121.4
121.2
pull
Entries 77
Mean −1167
Std Dev 1208
600
400
200
0
−200
−400

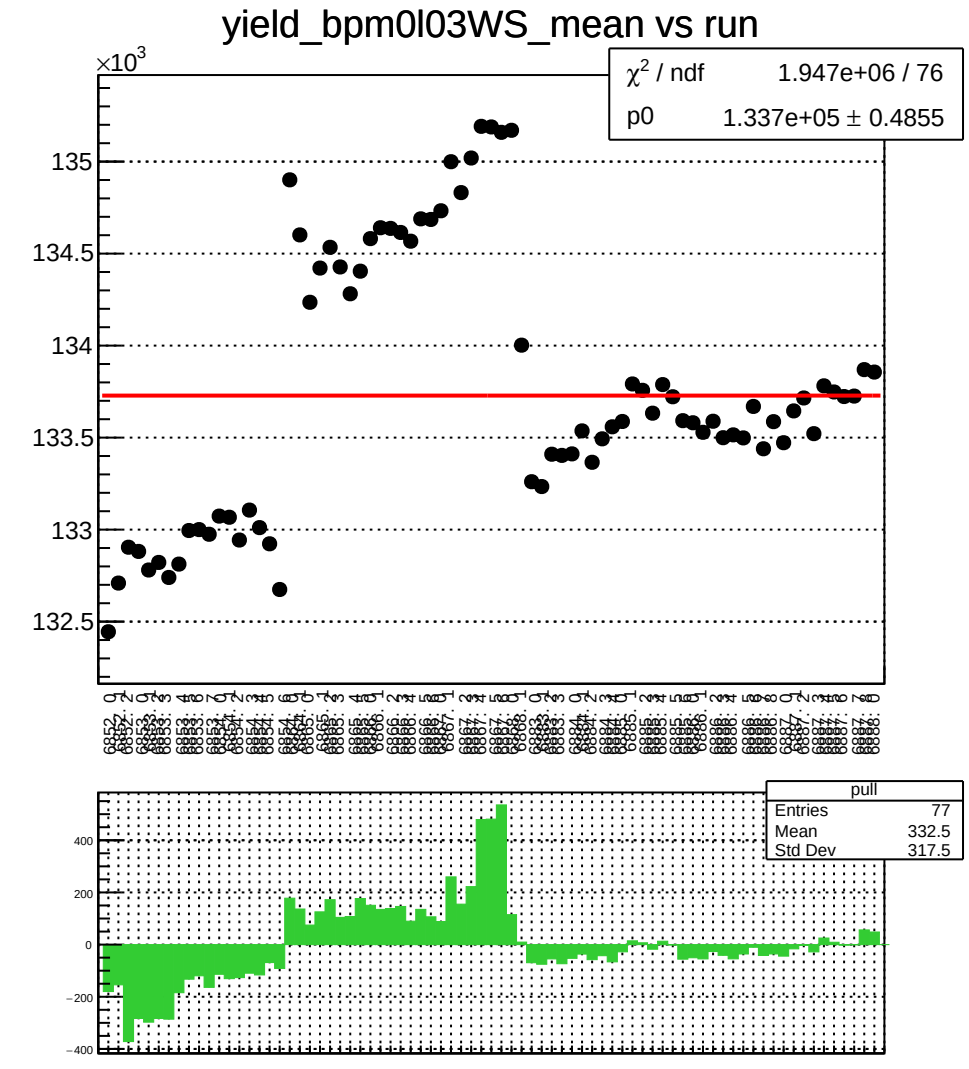

pull1D
Entries 77
Mean −1.355
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

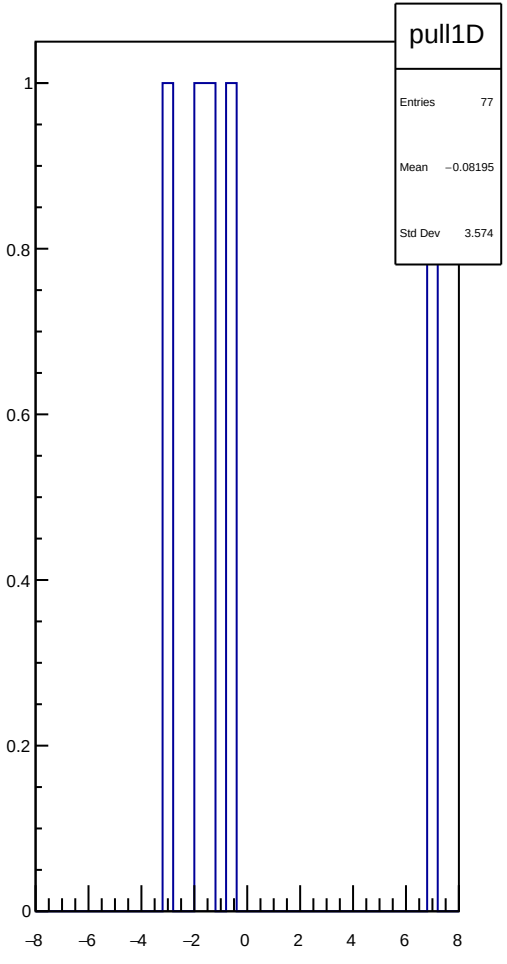

yield_bpm0l01WS_rms vs run
χ^2 / ndf 5.4e+04 / 76
p0 198.2 ± 0.159
450
400
350
300
250
200
150

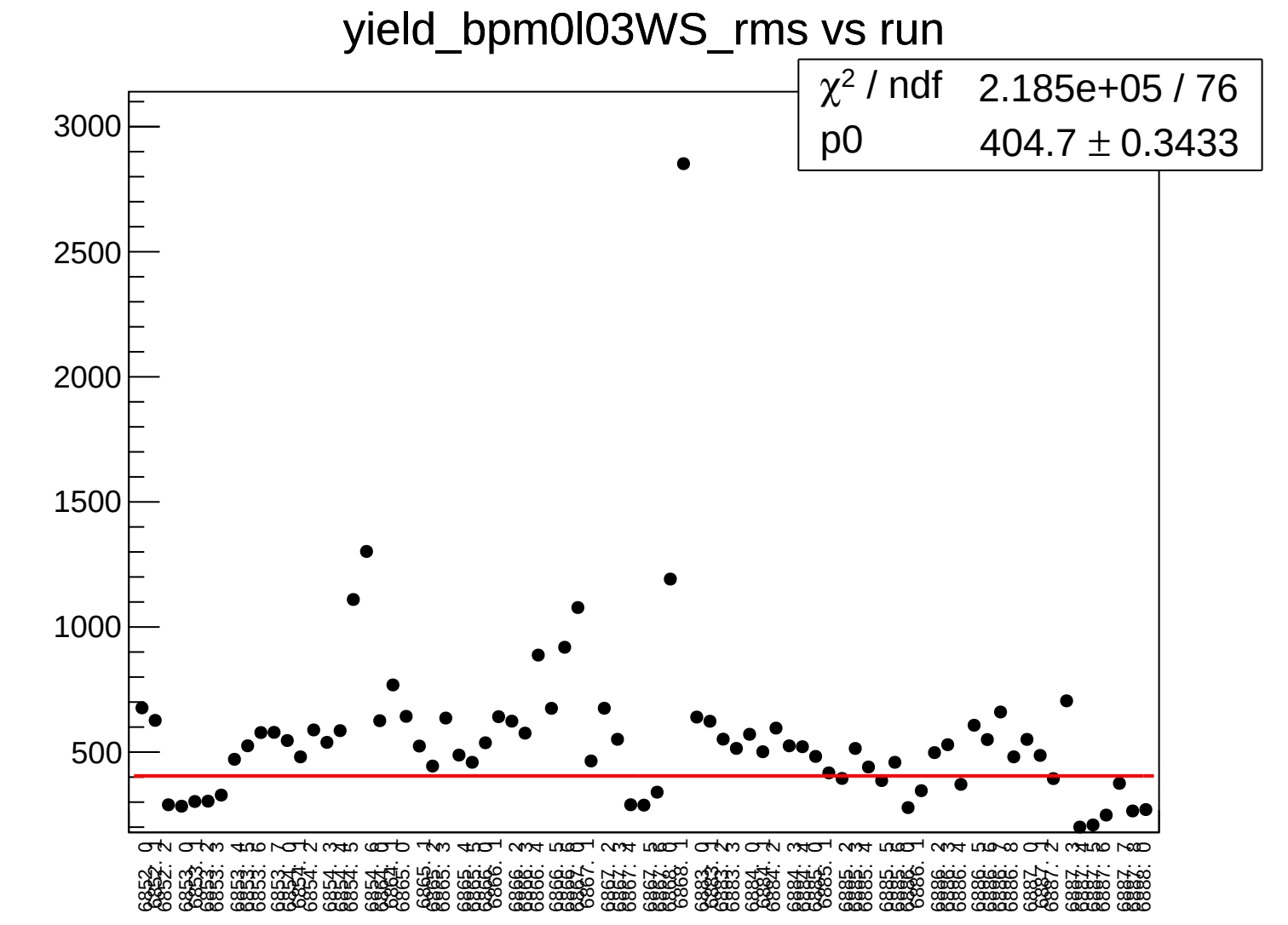

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 5.023e+07 / 76
p0 1.351e+05 ± 0.3619
140
138
136
134
132
pull
Entries 77
Mean 102.6
Std Dev 72.38
1500
1000
500
0
−500
−1000
−1500

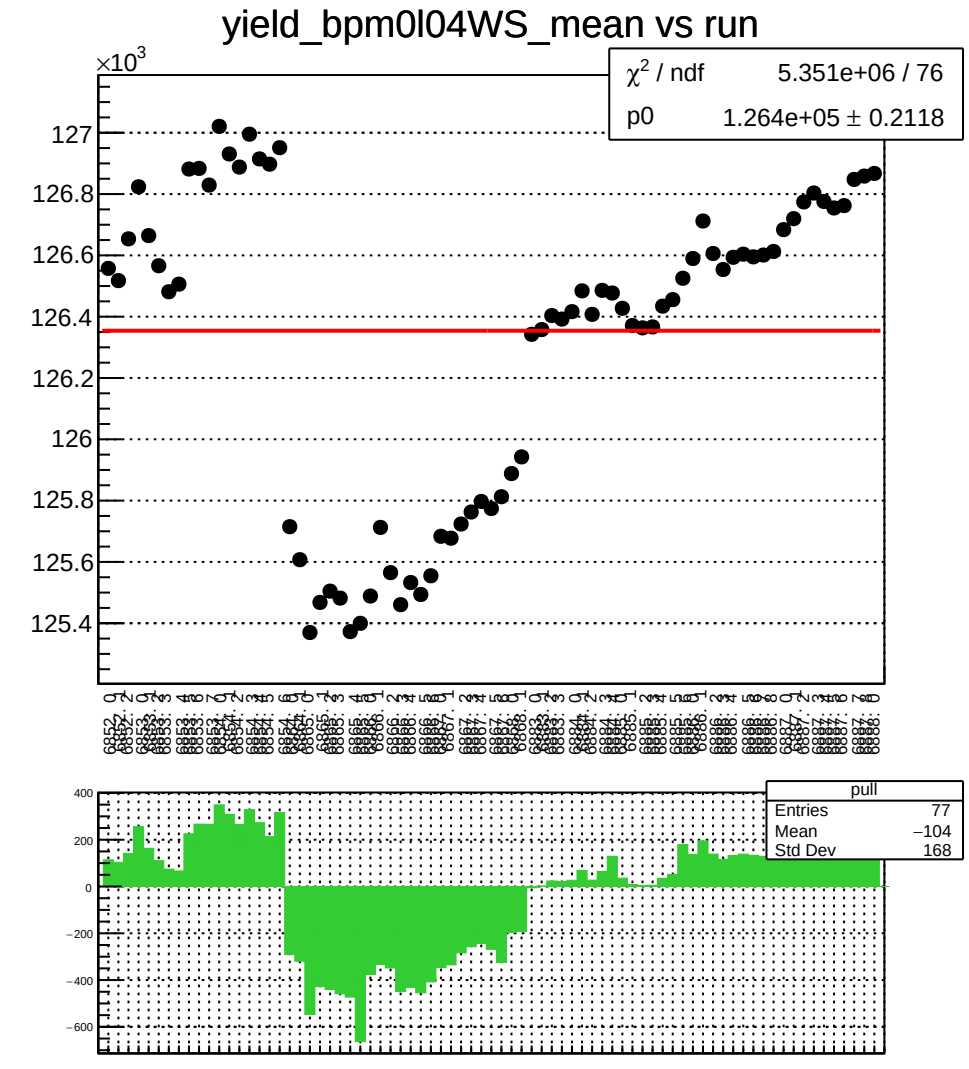

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

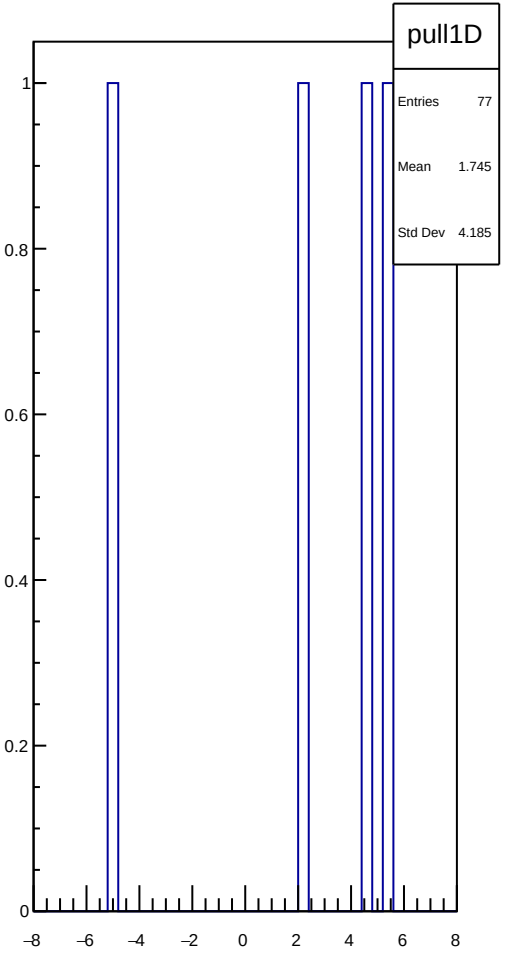

yield_bpm0l02WS_rms vs run
χ² / ndf 6.797e+04 / 76
p0 317.6 ± 0.2559
900
800
700
600
500
400
300
200

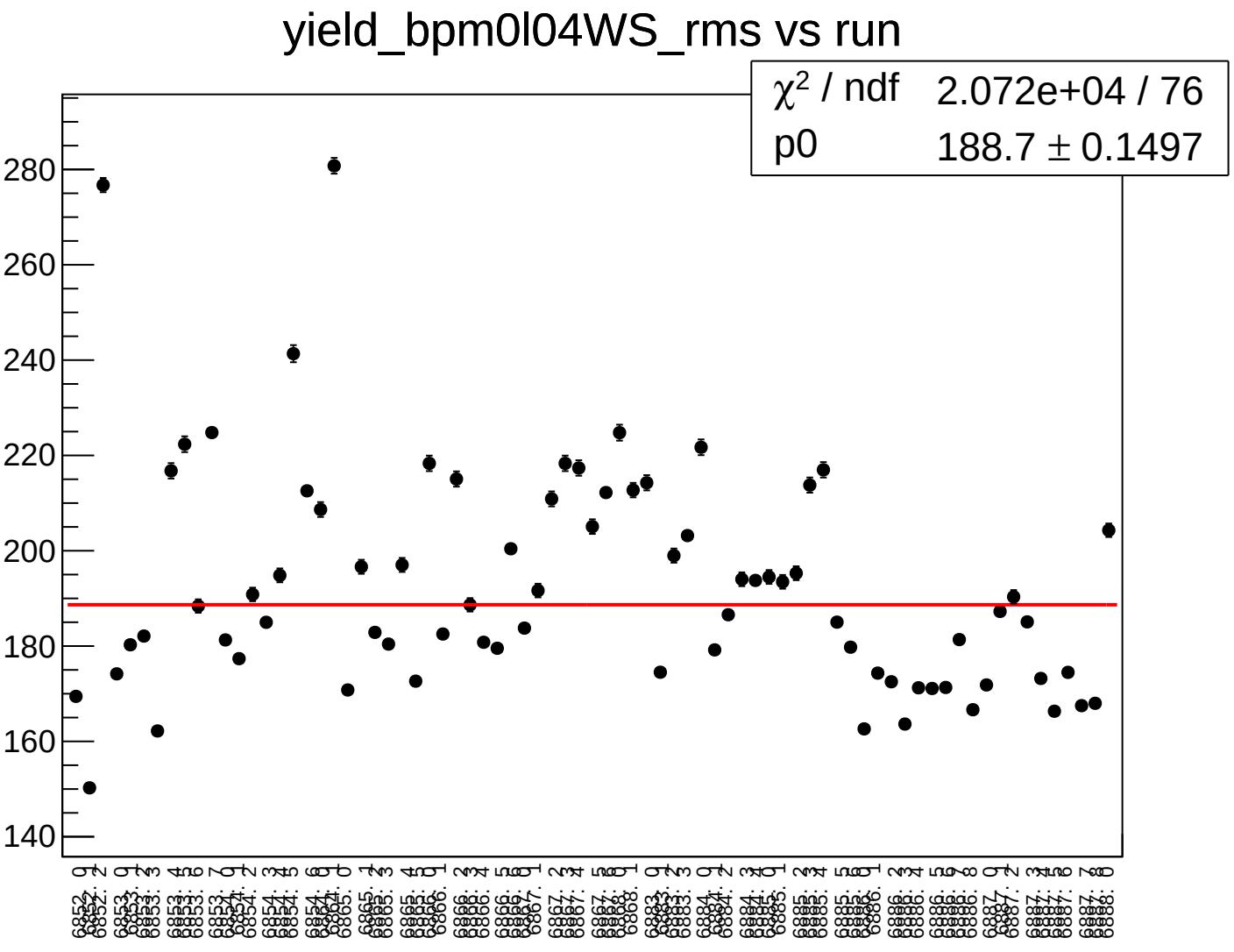

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 1.947e+06 / 76
p0 1.337e+05 ± 0.4855
135
134.5
134
133.5
133
132.5
pull
Entries 77
Mean 332.5
Std Dev 317.5
400
200
0
−200
−400

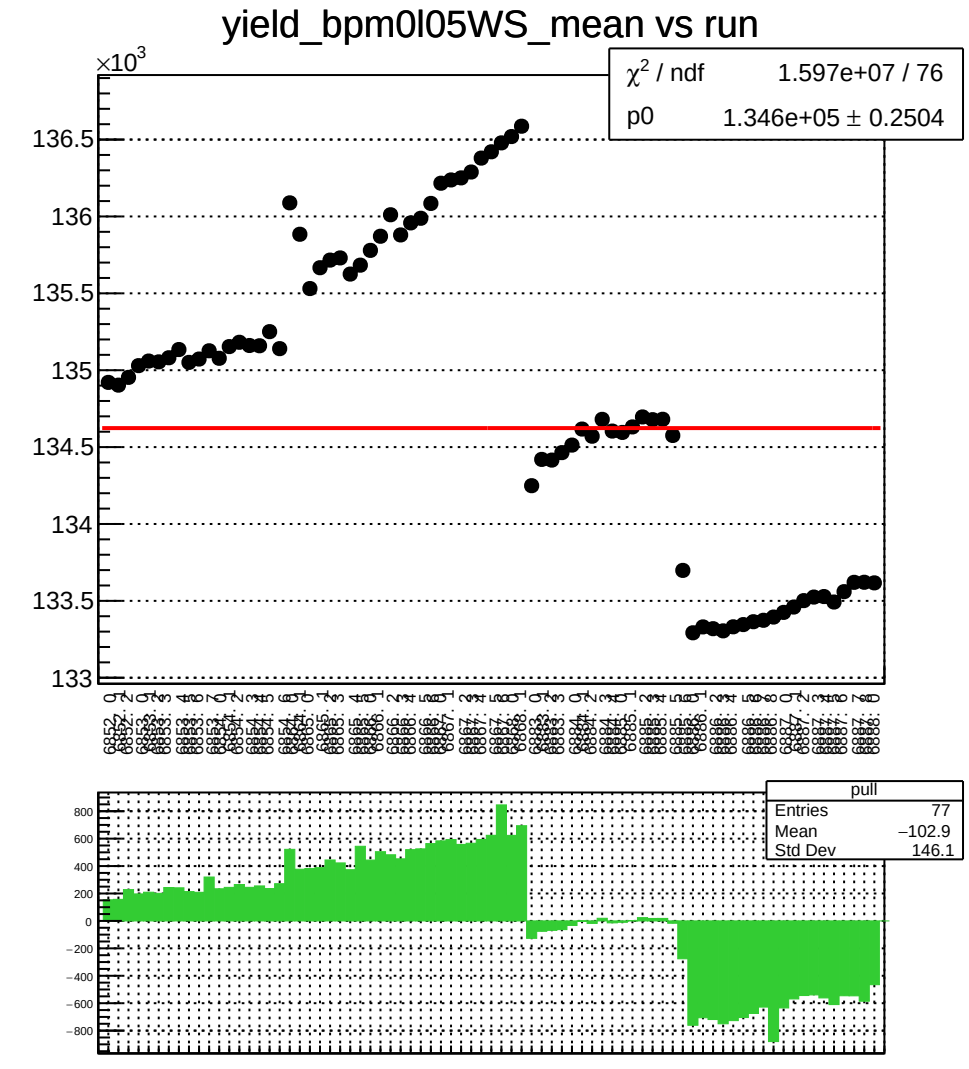

pull1D
Entries 77
Mean −0.08195
Std Dev 3.574
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

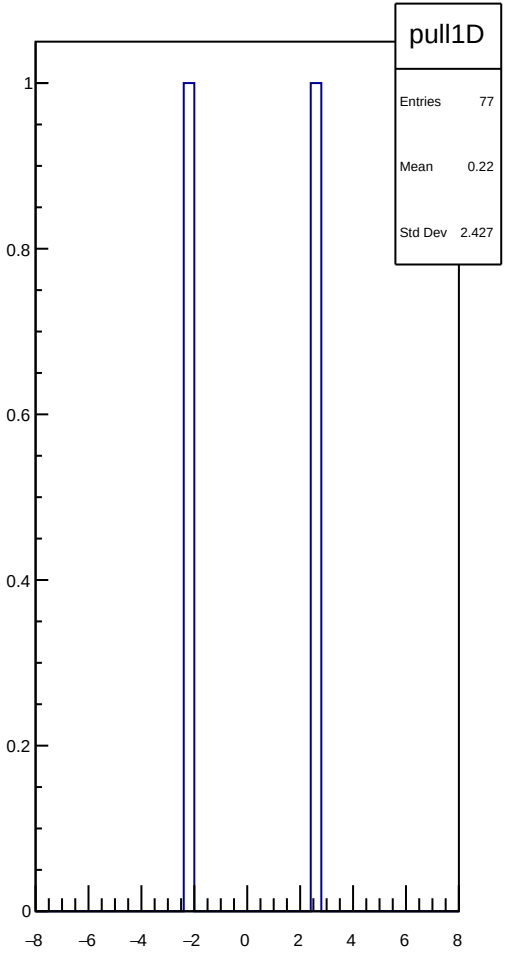

yield_bpm0l03WS_rms vs run
χ² / ndf 2.185e+05 / 76
p0 404.7 ± 0.3433
3000
2500
2000
1500
1000
500

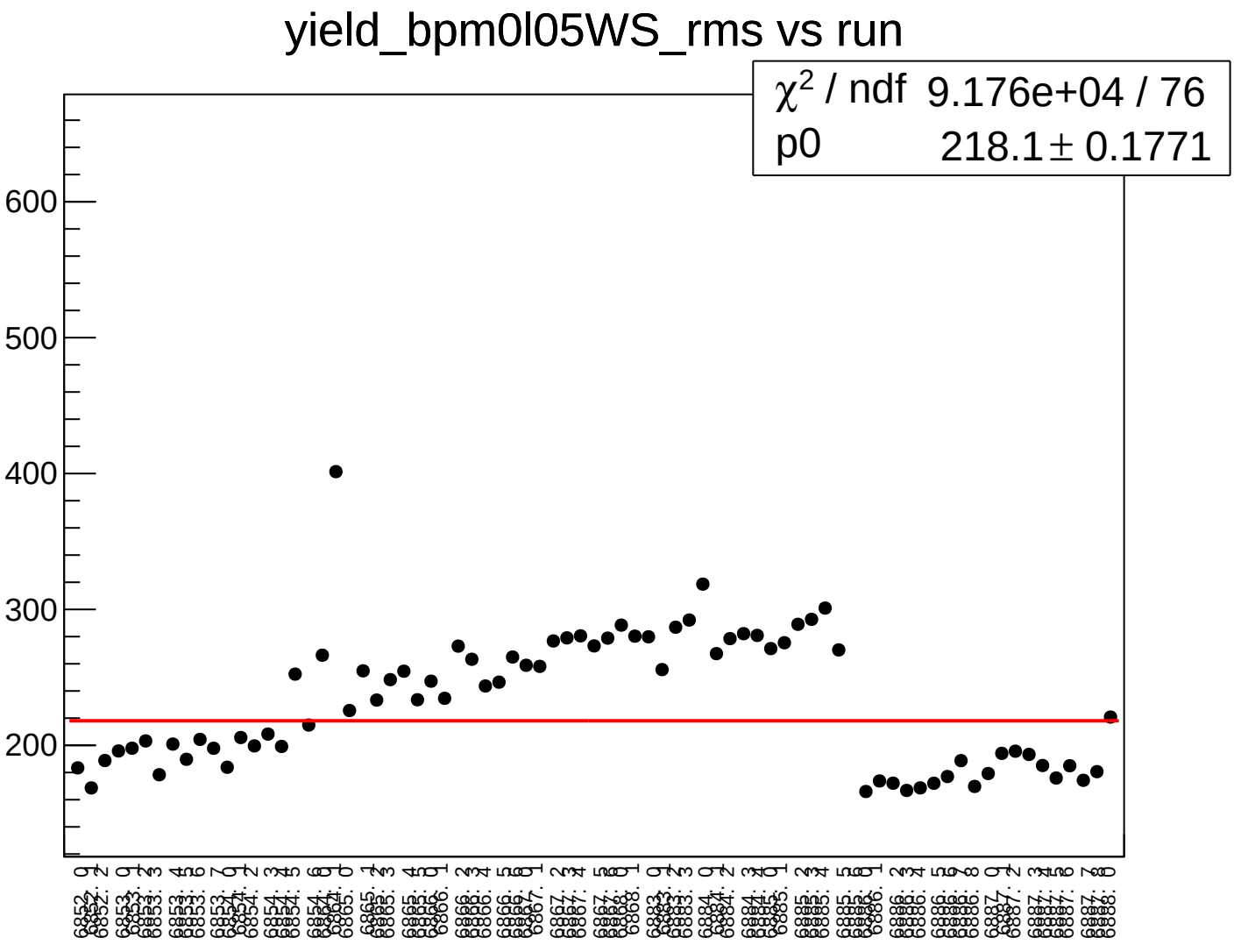

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 5.351e+06 / 76
p0 1.264e+05 ± 0.2118
127
126.8
126.6
126.4
126.2
126
125.8
125.6
125.4
pull
Entries 77
Mean −104
Std Dev 168
400
200
0
−200
−400
−600

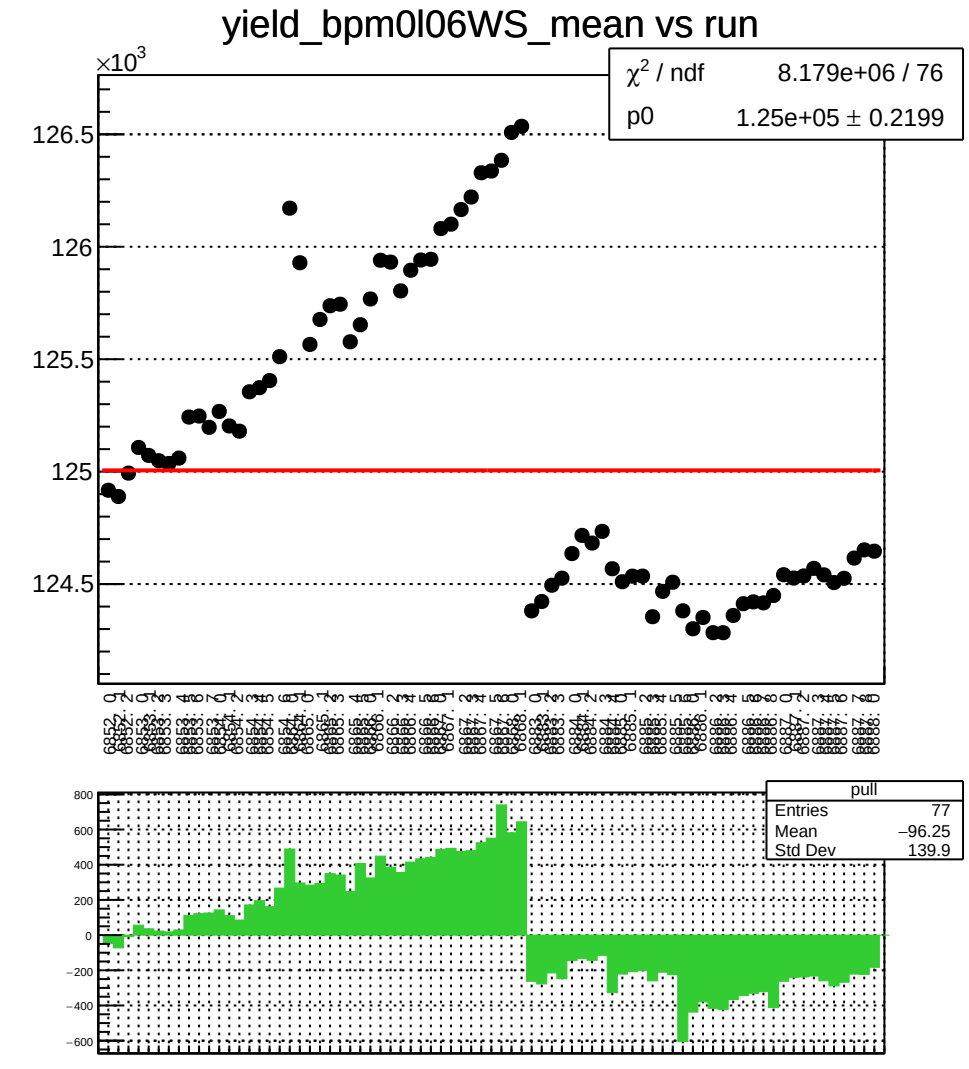

pull1D
Entries 77
Mean 1.745
Std Dev 4.185
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

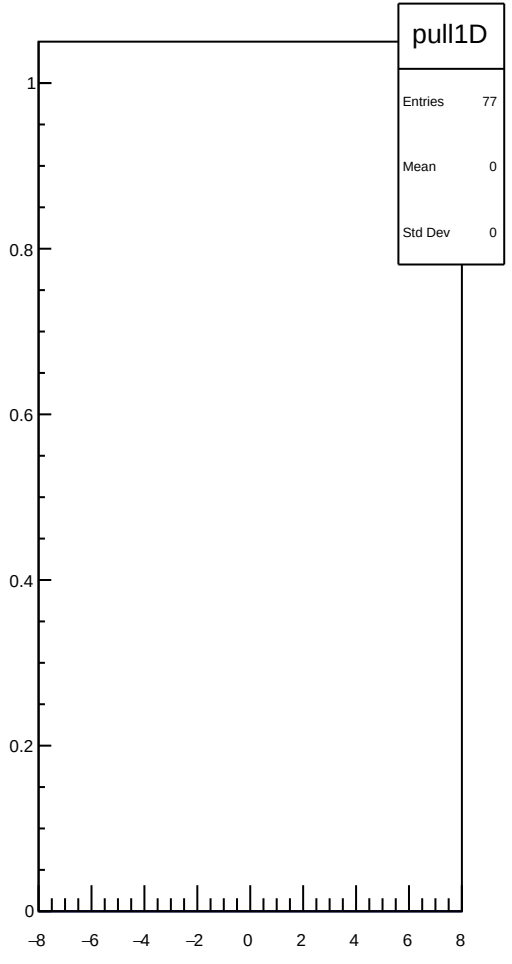

yield_bpm0l04WS_rms vs run
χ² / ndf 2.072e+04 / 76
p0 188.7 ± 0.1497
280
260
240
220
200
180
160
140

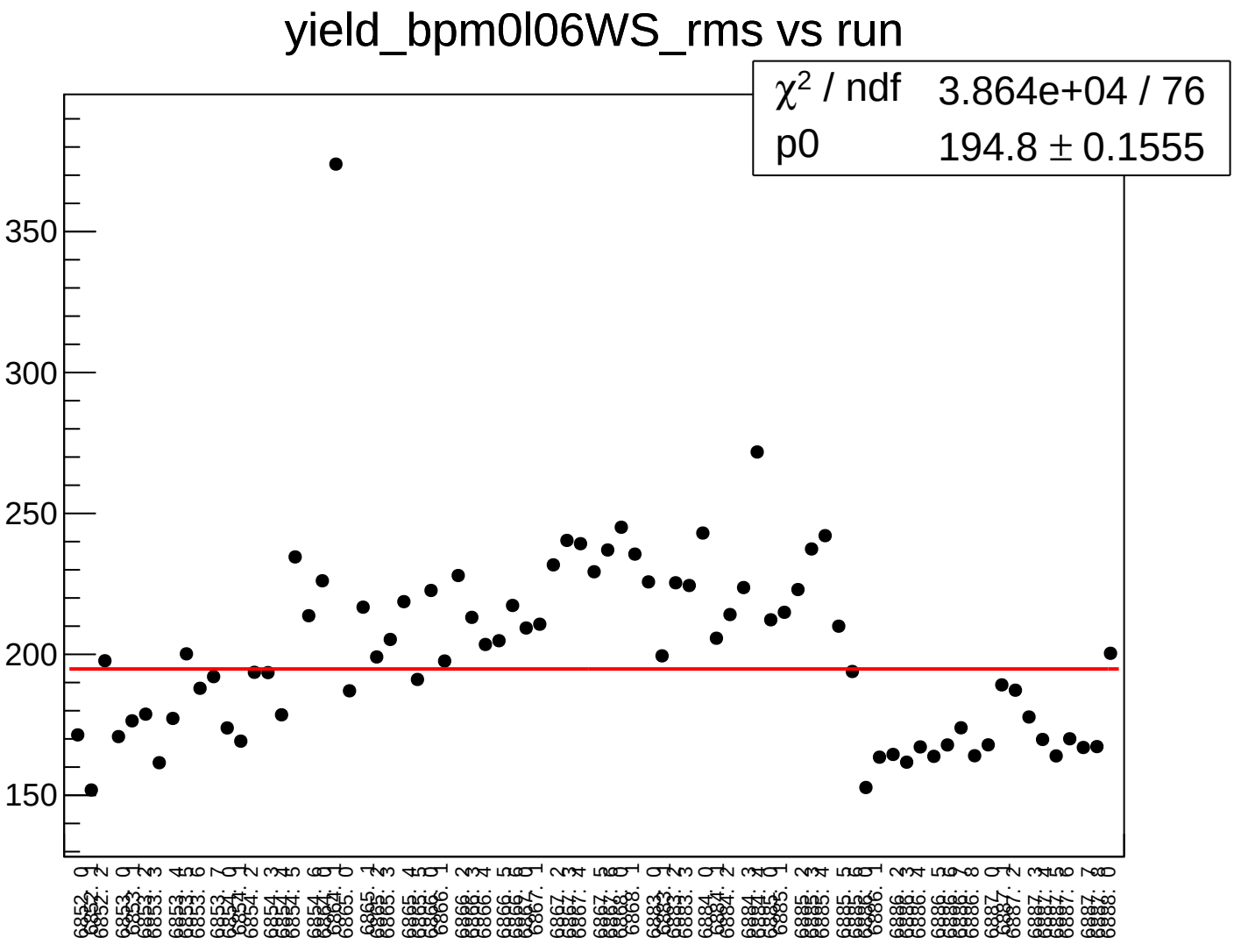

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 1.597e+07 / 76
p0 1.346e+05 ± 0.2504
136.5
136
135.5
135
134.5
134
133.5
133
pull
Entries 77
Mean −102.9
Std Dev 146.1
800
600
400
200
0
−200
−400
−600
−800

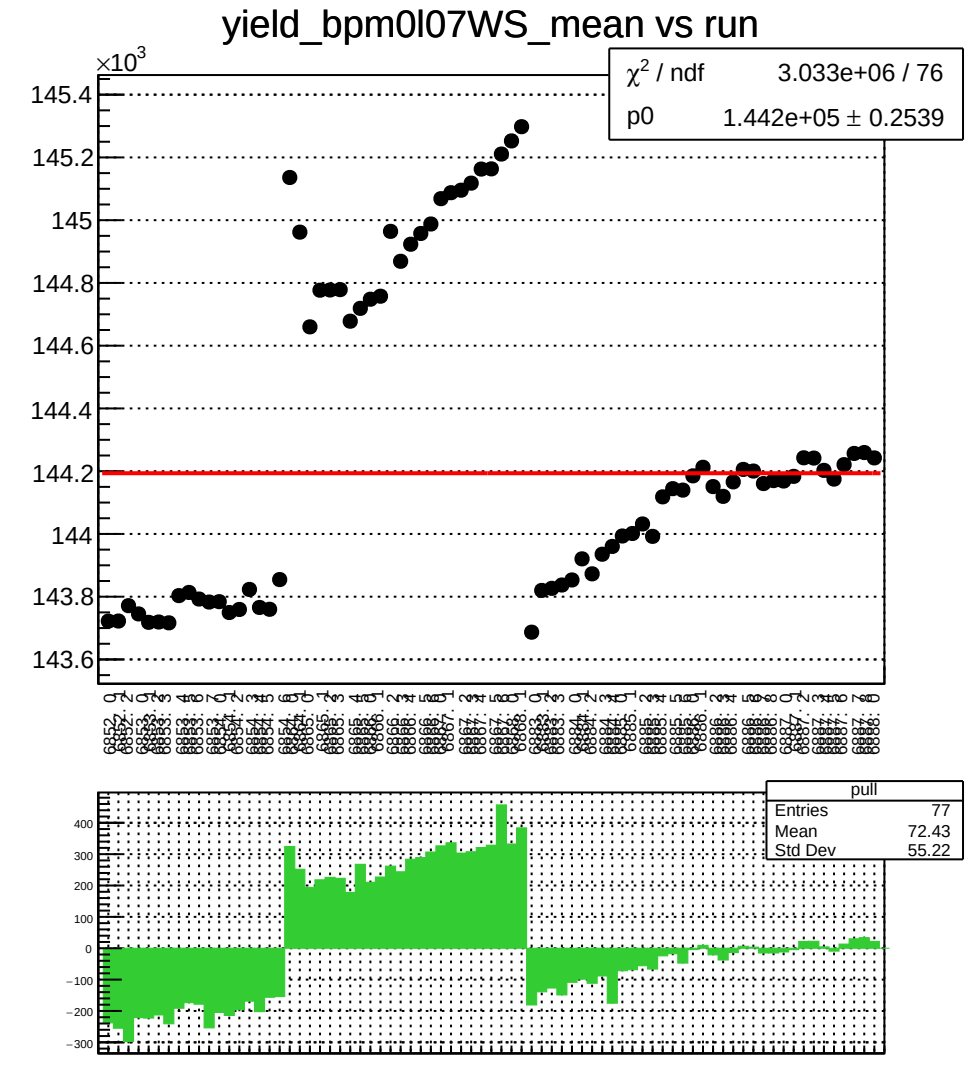

pull1D
Entries 77
Mean 0.22
Std Dev 2.427
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

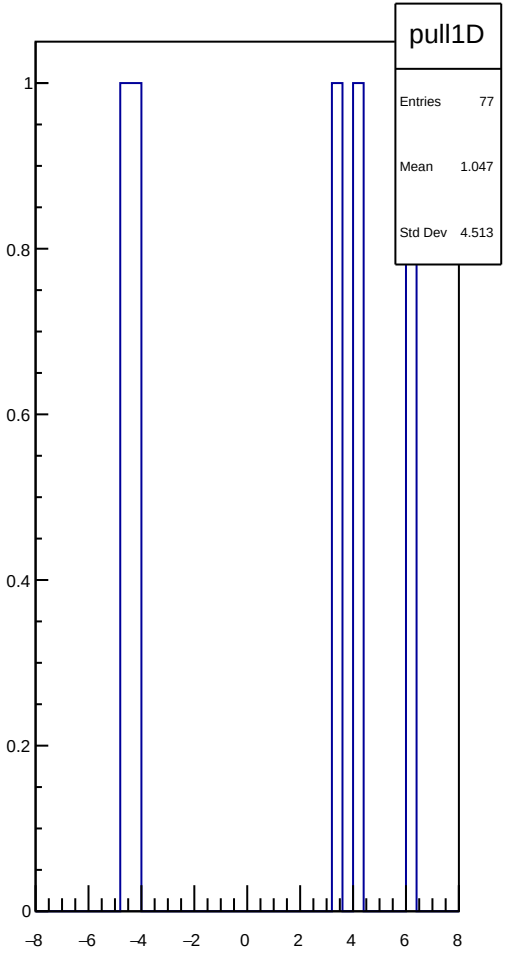

yield_bpm0l05WS_rms vs run
χ² / ndf 9.176e+04 / 76
p0 218.1 ± 0.1771
600
500
400
300
200

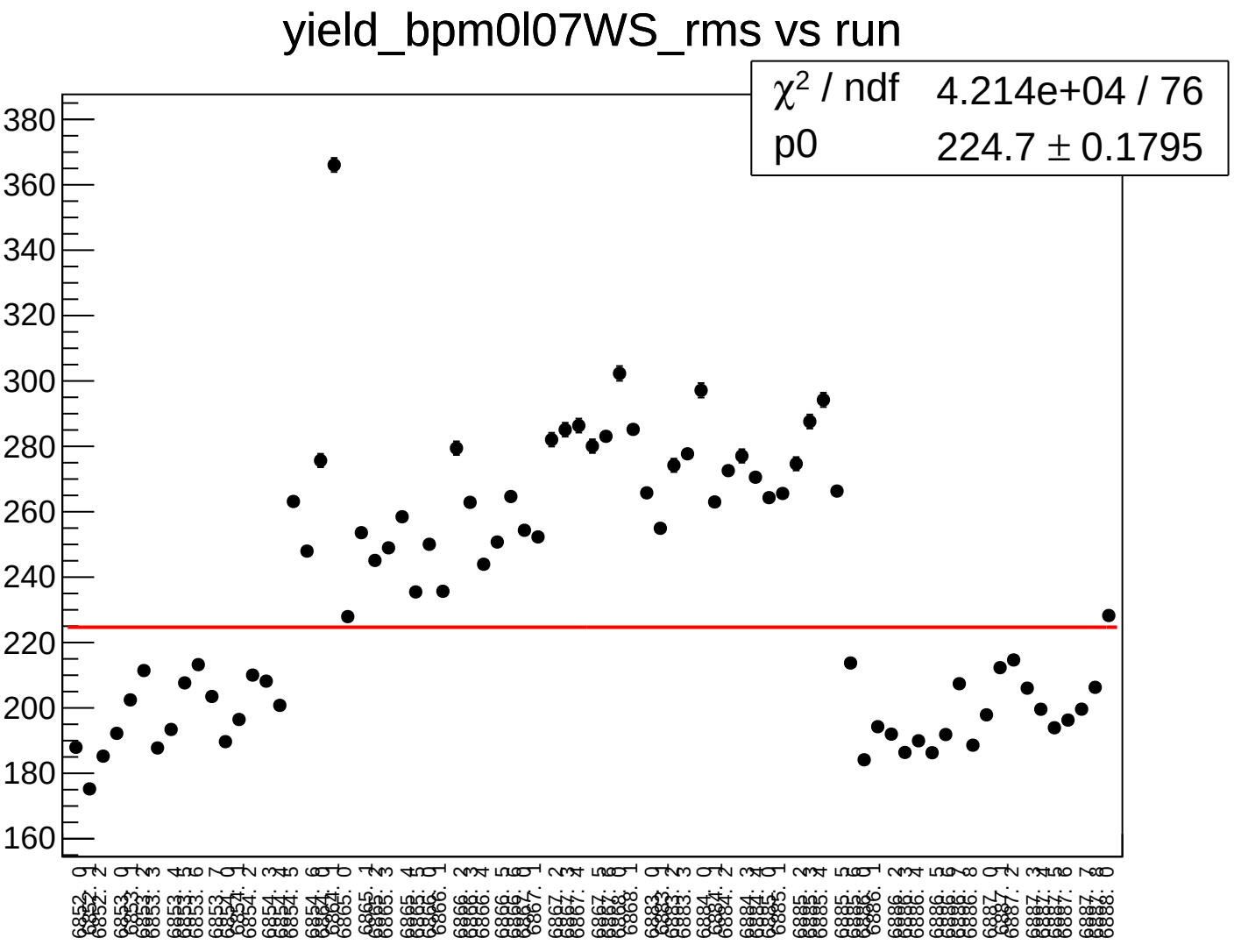

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 8.179e+06 / 76
p0 1.25e+05 ± 0.2199
126.5
126
125.5
125
124.5
pull
Entries 77
Mean −96.25
Std Dev 139.9
800
600
400
200
0
−200
−400
−600

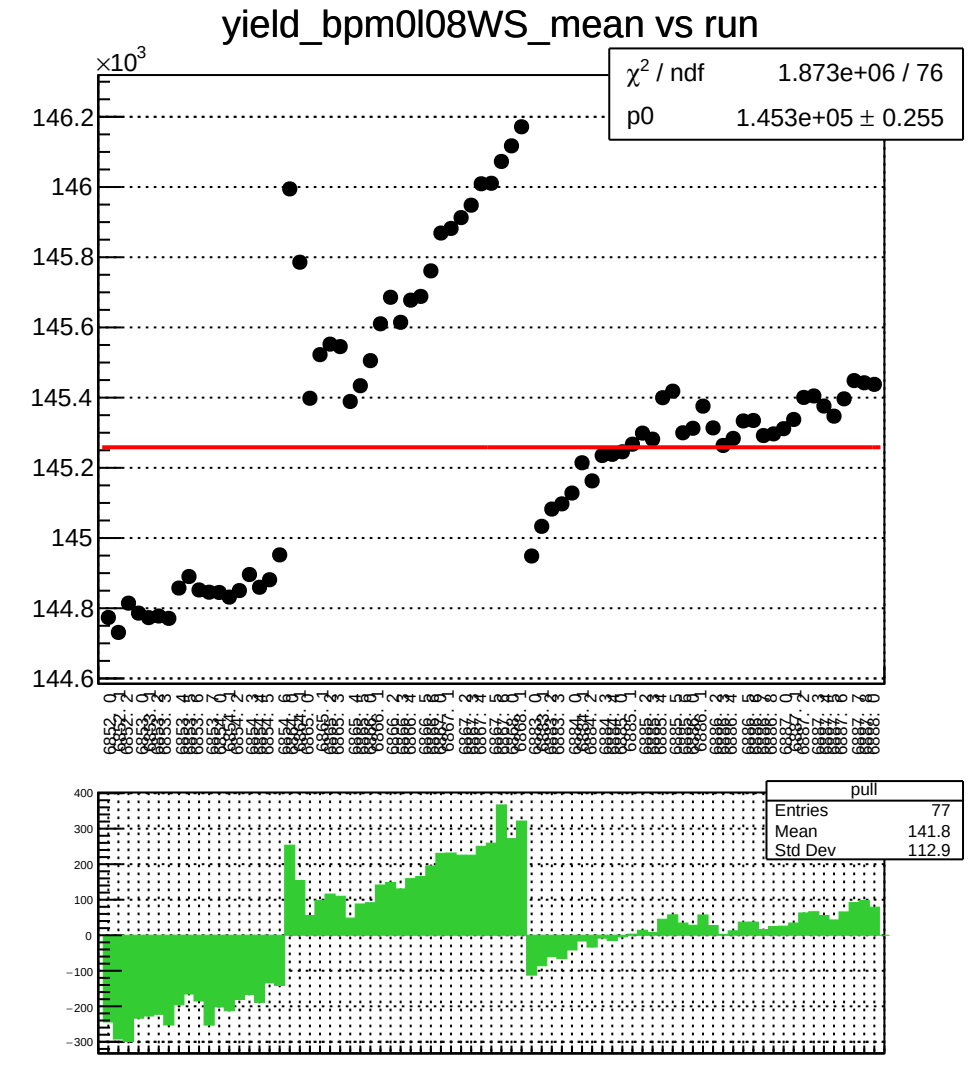

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

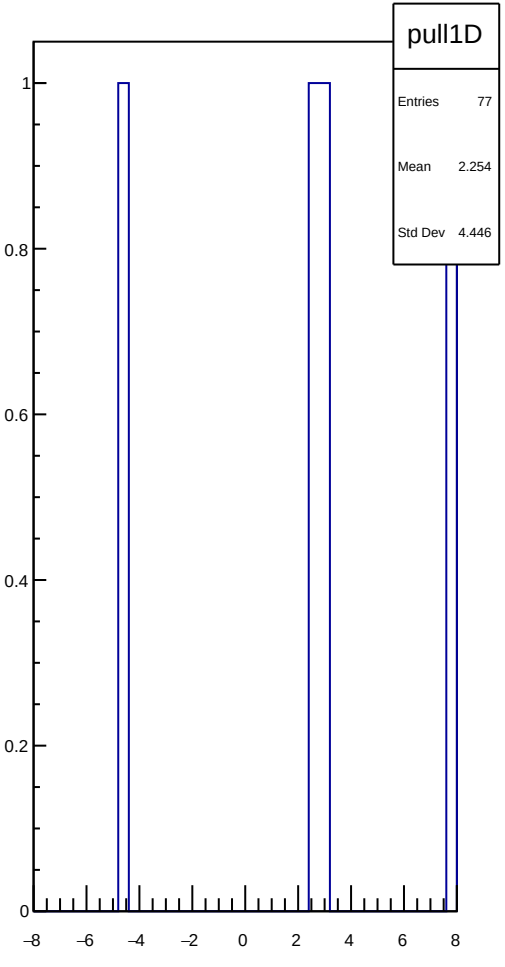

yield_bpm0l06WS_rms vs run
χ² / ndf 3.864e+04 / 76
p0 194.8 ± 0.1555
350
300
250
200
150

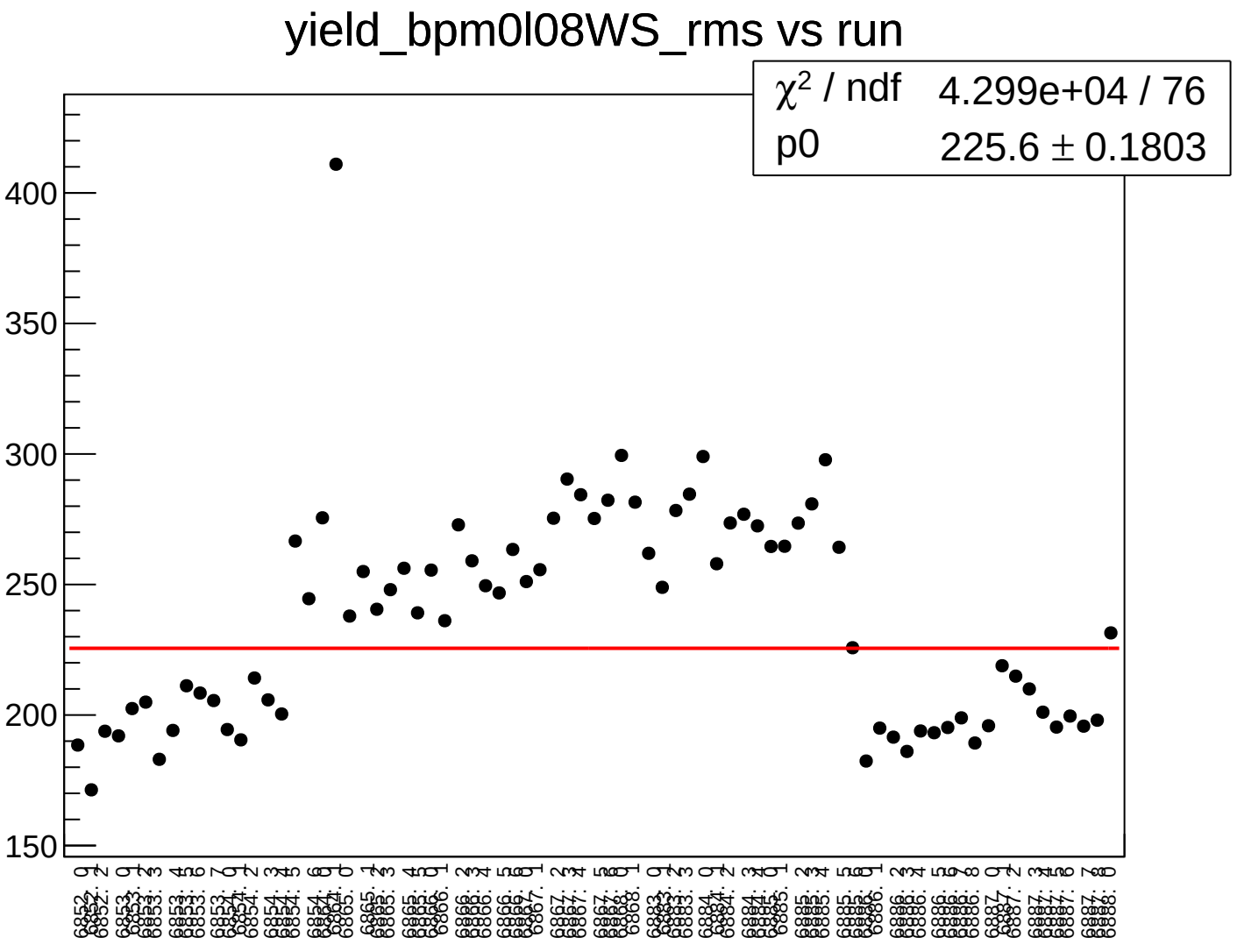

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 3.033e+06 / 76
p0 1.442e+05 ± 0.2539
145.4
145.2
145
144.8
144.6
144.4
144.2
144
143.8
143.6
pull
Entries 77
Mean 72.43
Std Dev 55.22
400
300
200
100
0
−100
−200
−300

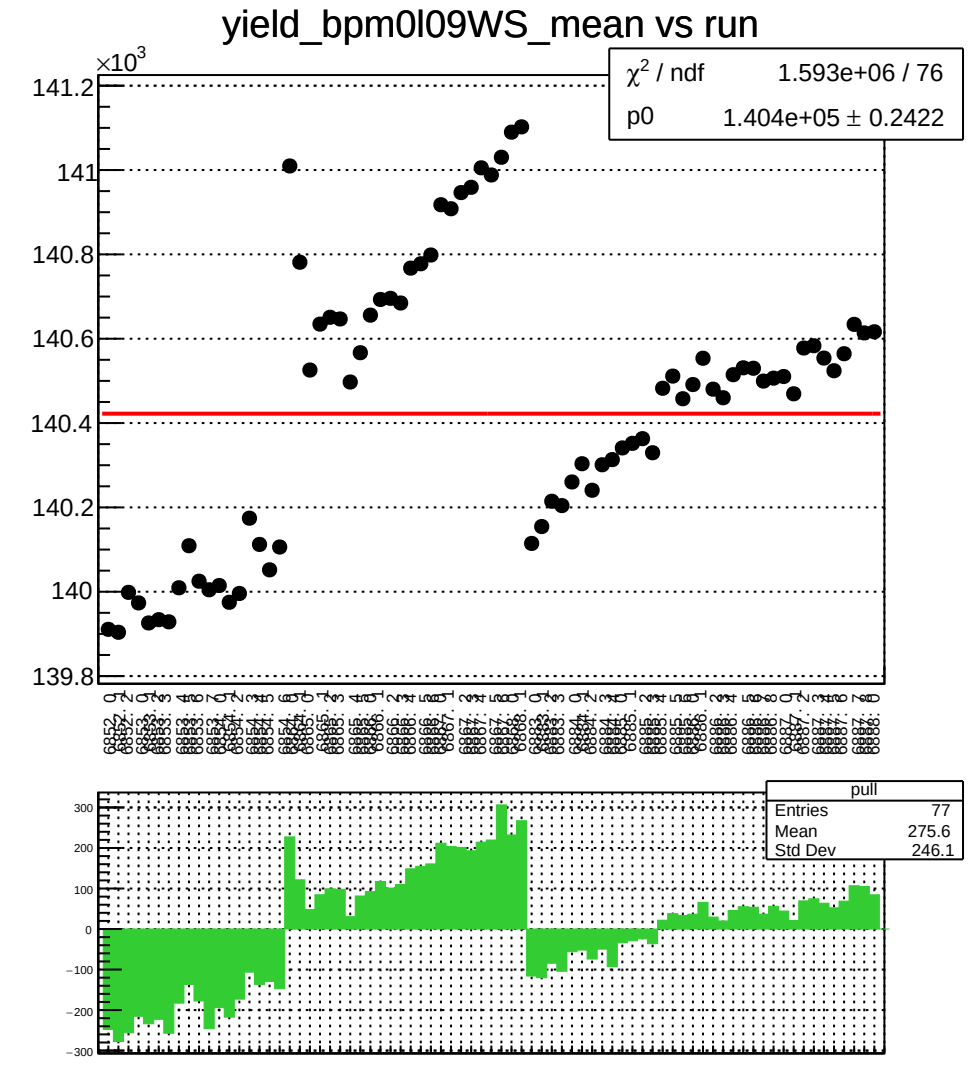

pull1D
Entries 77
Mean 1.047
Std Dev 4.513
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

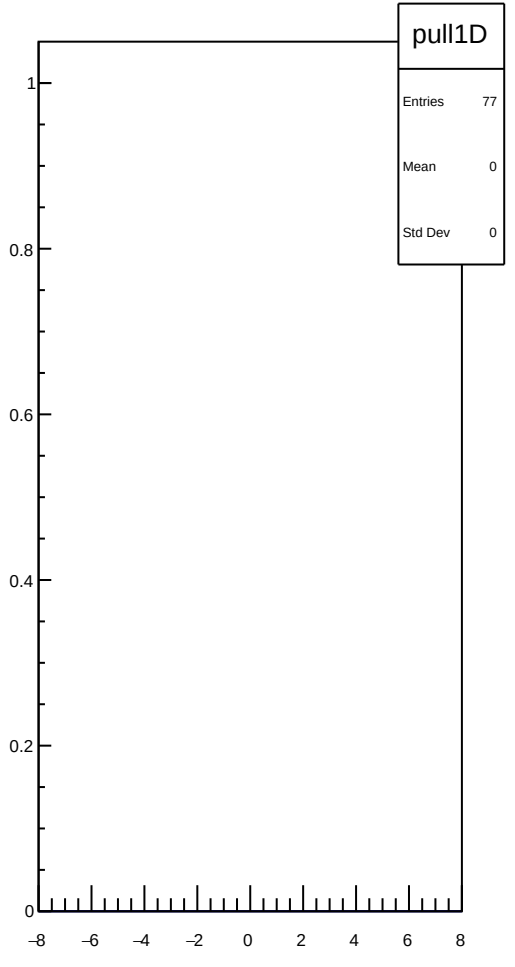

yield_bpm0l07WS_rms vs run
χ² / ndf 4.214e+04 / 76
p0 224.7 ± 0.1795
380
360
340
320
300
280
260
240
220
200
180
160

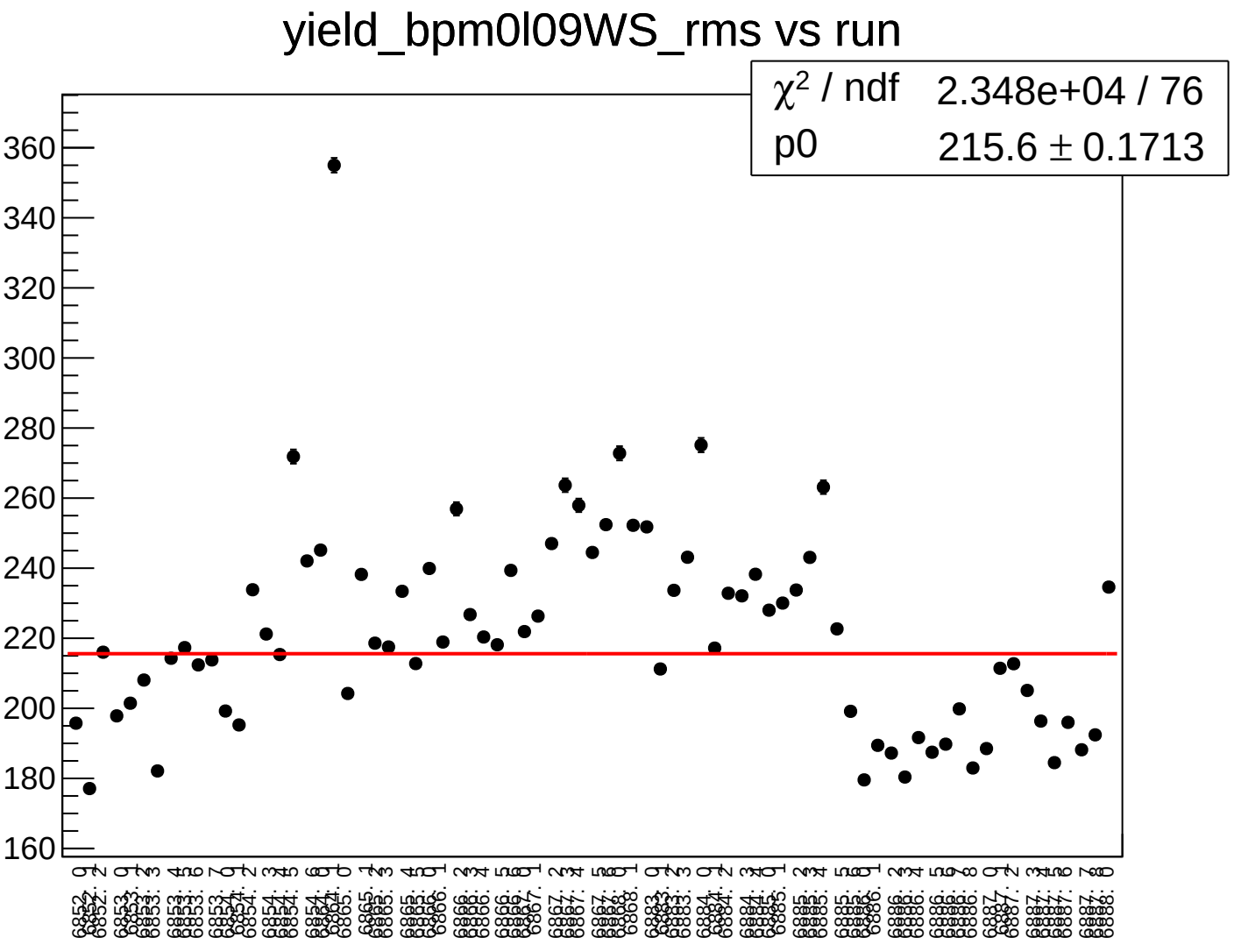

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 1.873e+06 / 76
p0 1.453e+05 ± 0.255
146.2
146
145.8
145.6
145.4
145.2
145
144.8
144.6
pull
Entries 77
Mean 141.8
Std Dev 112.9
400
300
200
100
0
−100
−200
−300

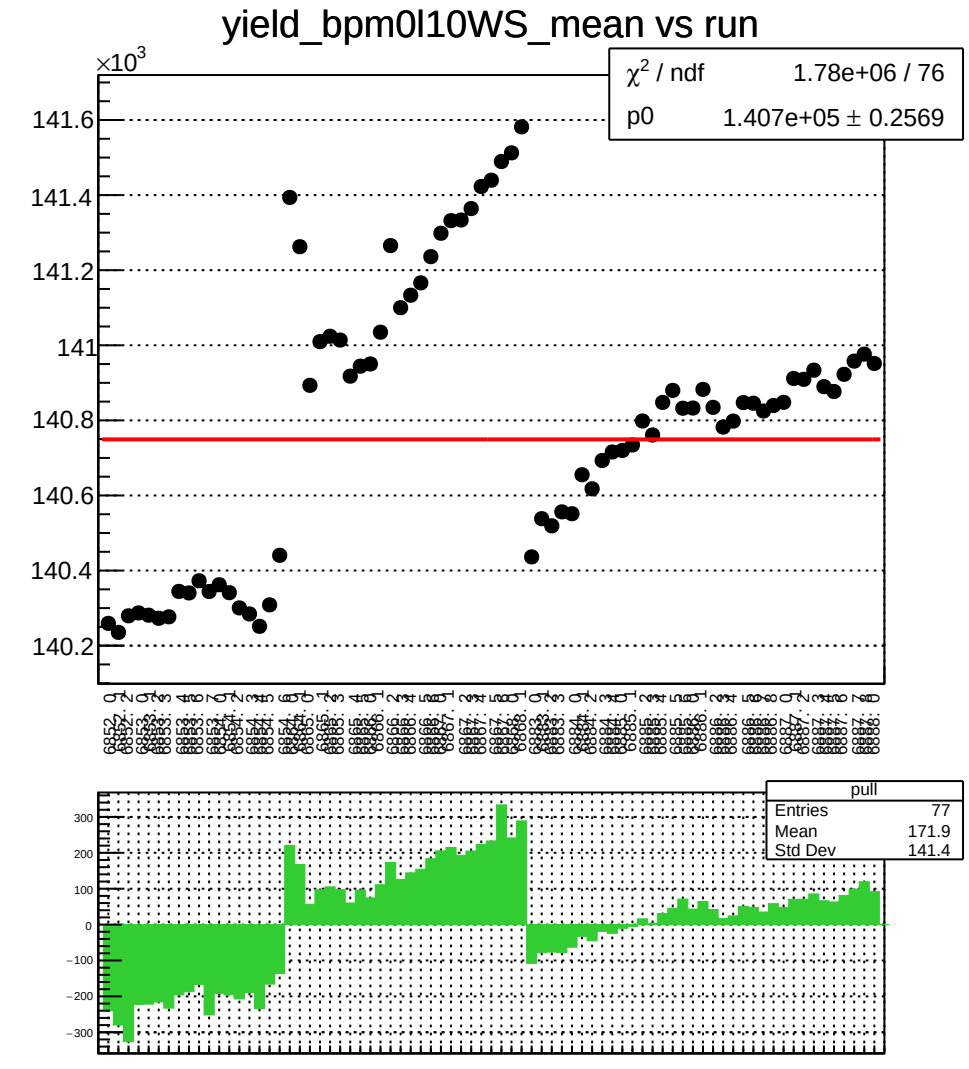

pull1D
Entries 77
Mean 2.254
Std Dev 4.446
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

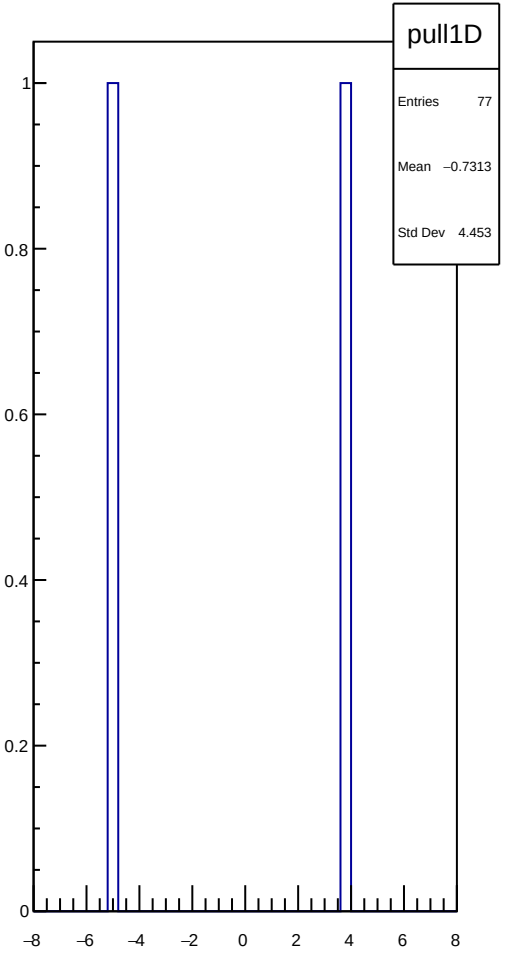

yield_bpm0l08WS_rms vs run
χ² / ndf 4.299e+04 / 76
p0 225.6 ± 0.1803
400
350
300
250
200
150

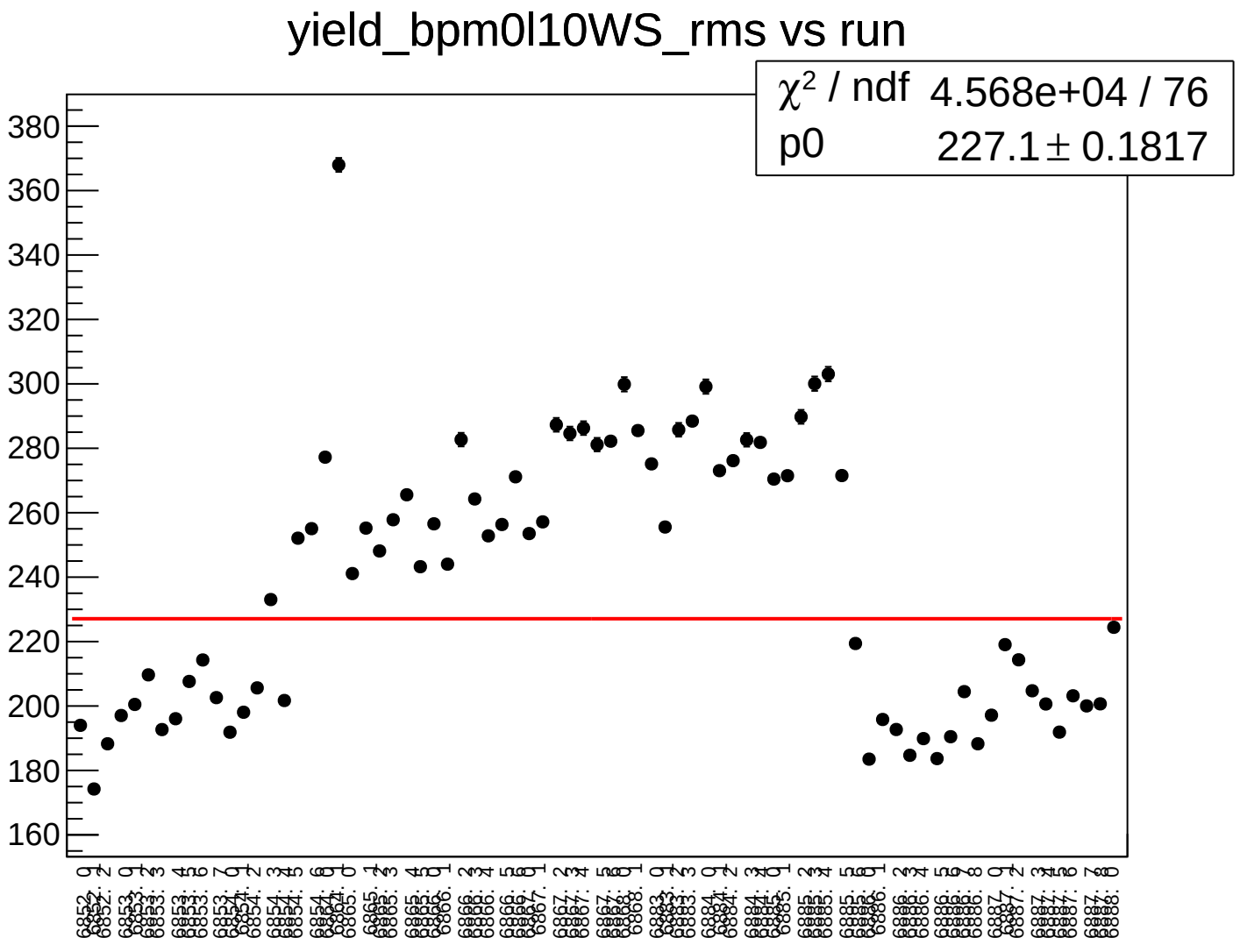

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 1.593e+06 / 76
p0 1.404e+05 ± 0.2422
141.2
141
140.8
140.6
140.4
140.2
140
139.8
pull
Entries 77
Mean 275.6
Std Dev 246.1
300
200
100
0
−100
−200
−300

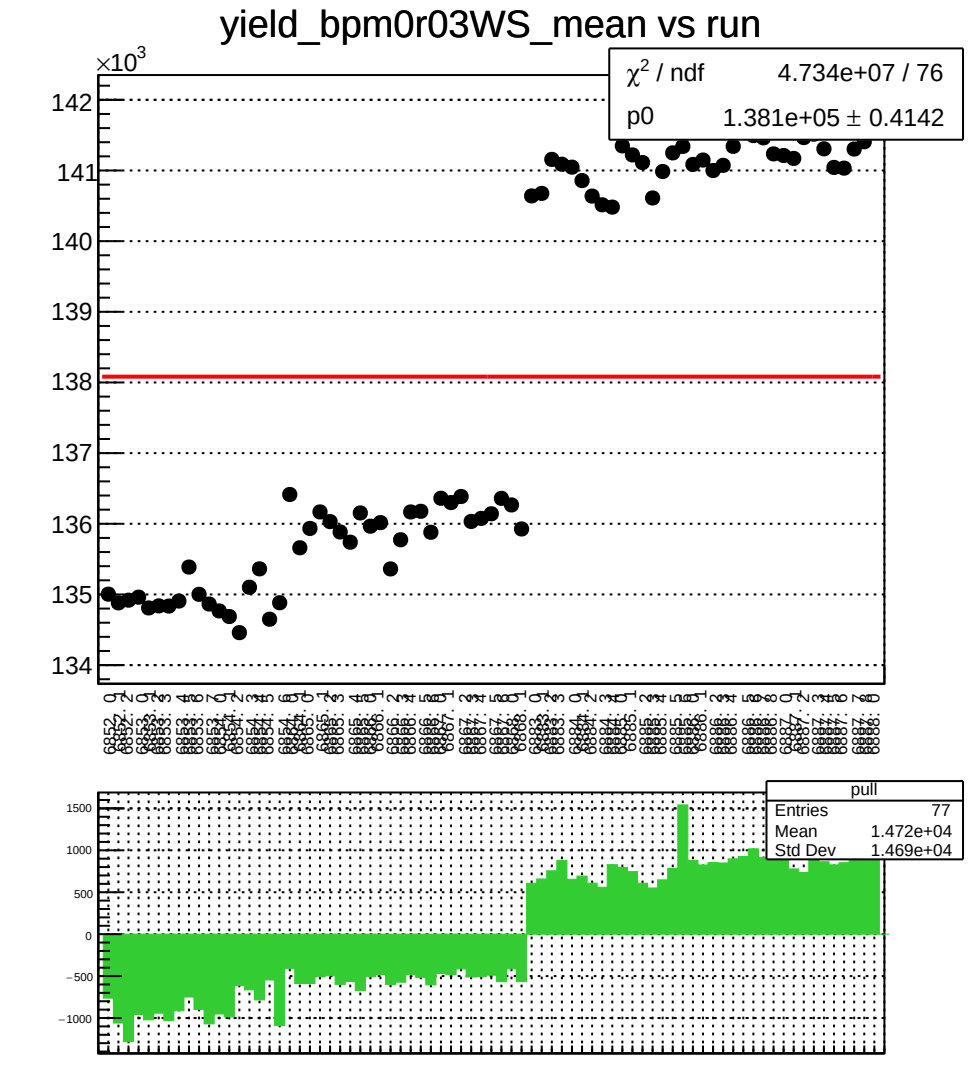

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

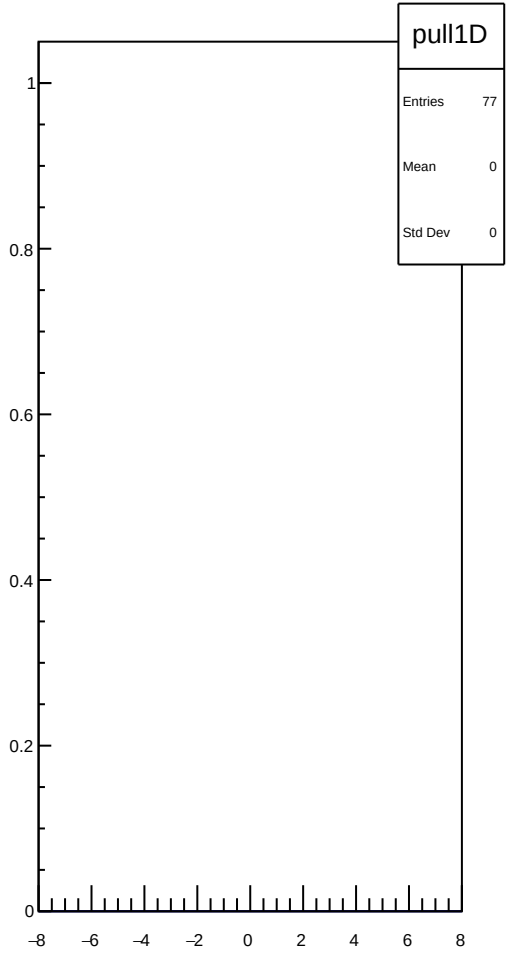

yield_bpm0l09WS_rms vs run
χ² / ndf 2.348e+04 / 76
p0 215.6 ± 0.1713
360
340
320
300
280
260
240
220
200
180
160

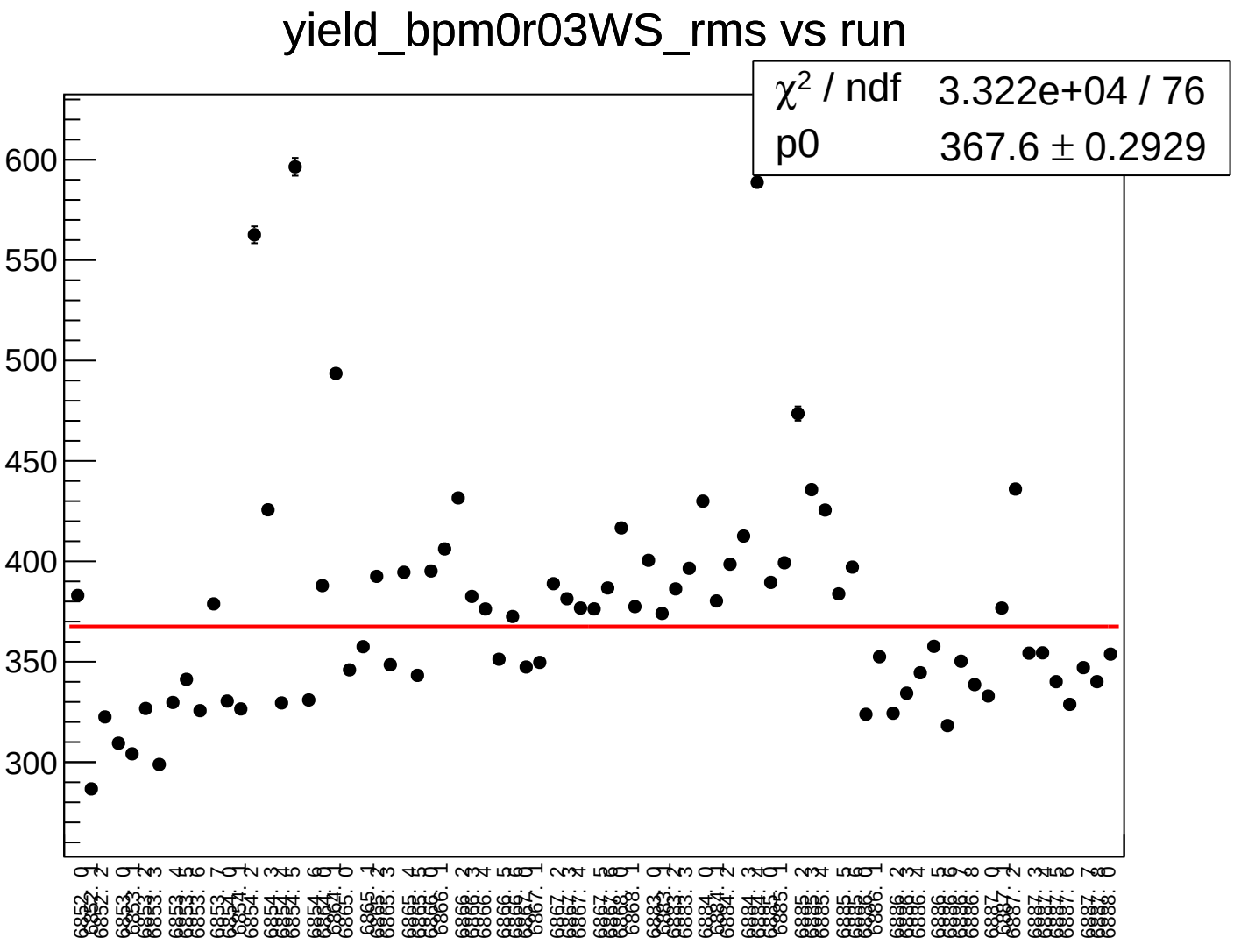

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 1.78e+06 / 76
p0 1.407e+05 ± 0.2569
141.6
141.4
141.2
141
140.8
140.6
140.4
140.2
pull
Entries 77
Mean 171.9
Std Dev 141.4
300
200
100
0
−100
−200
−300

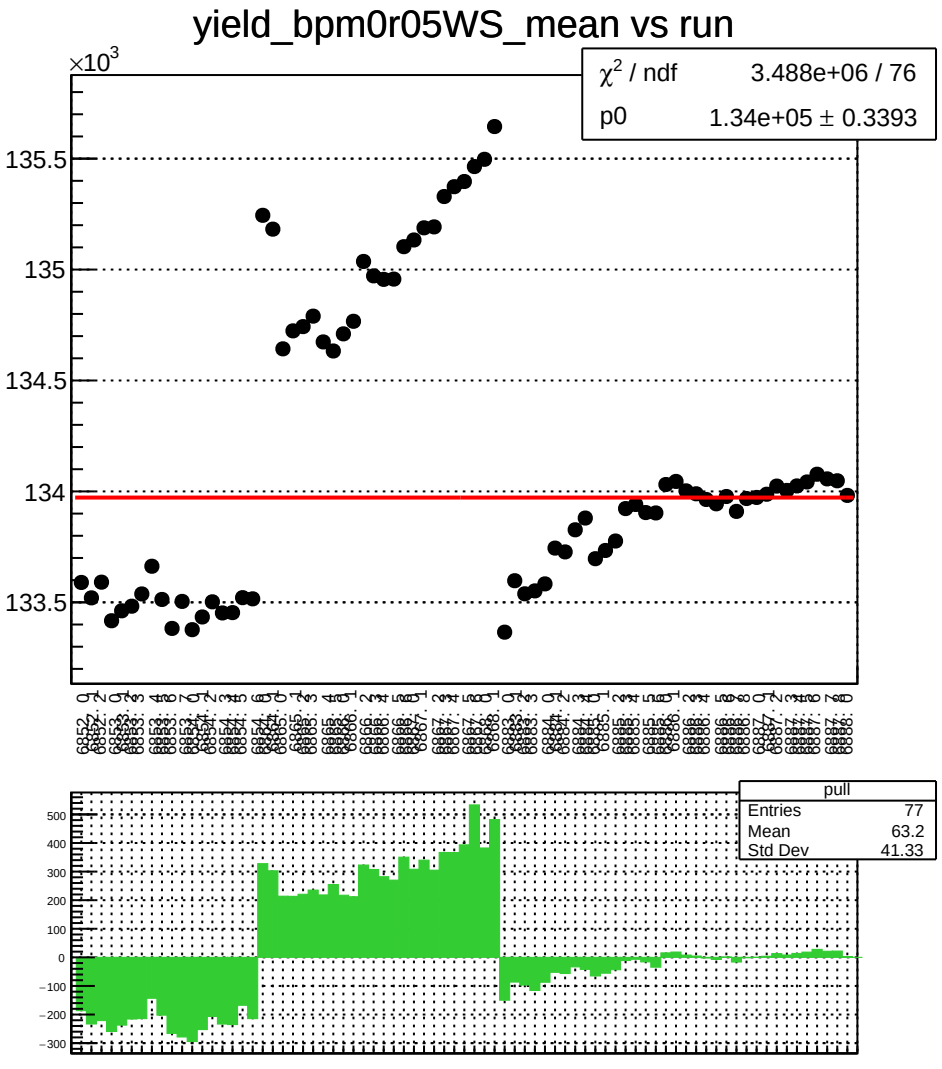

pull1D
Entries 77
Mean −0.7313
Std Dev 4.453
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

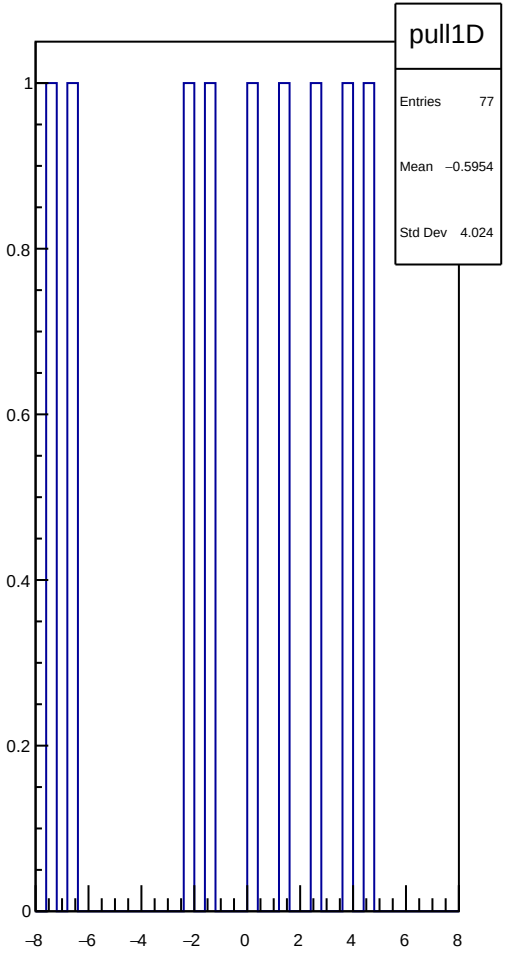

yield_bpm0l10WS_rms vs run
χ² / ndf 4.568e+04 / 76
p0 227.1 ± 0.1817
380
360
340
320
300
280
260
240
220
200
180
160

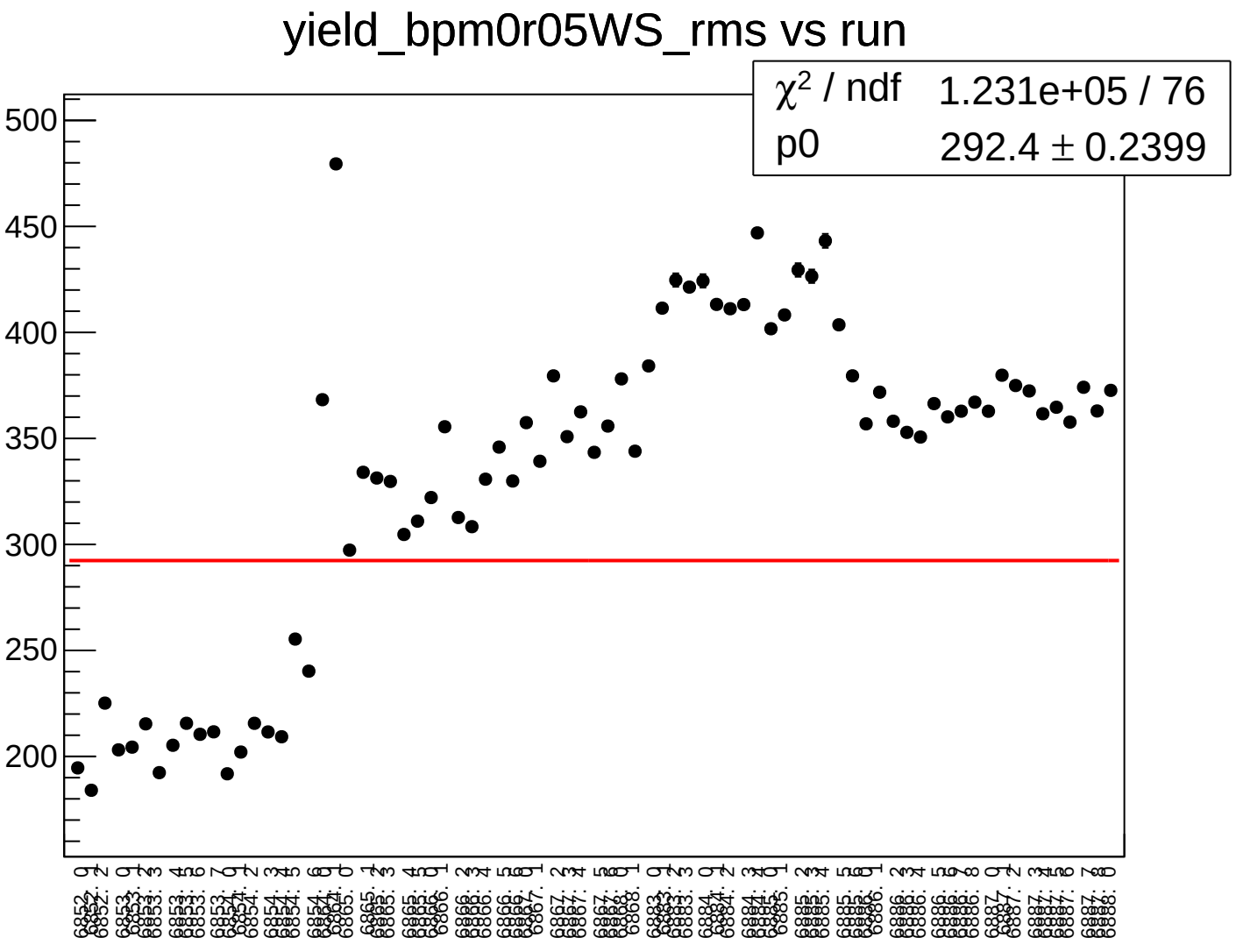

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 4.734e+07 / 76
p0 1.381e+05 ± 0.4142
142
141
140
139
138
137
136
135
134
pull
Entries 77
Mean 1.472e+04
Std Dev 1.469e+04
1500
1000
500
0
−500
−1000

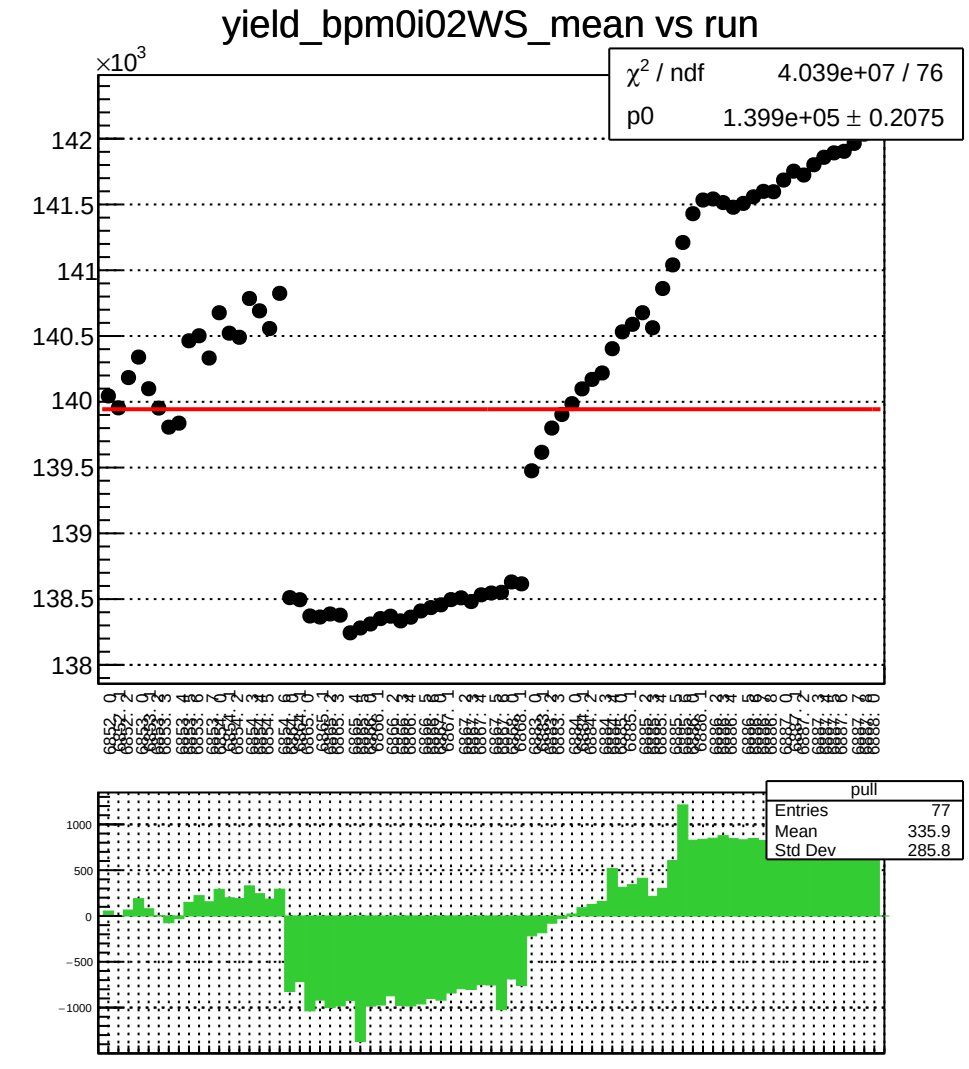

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

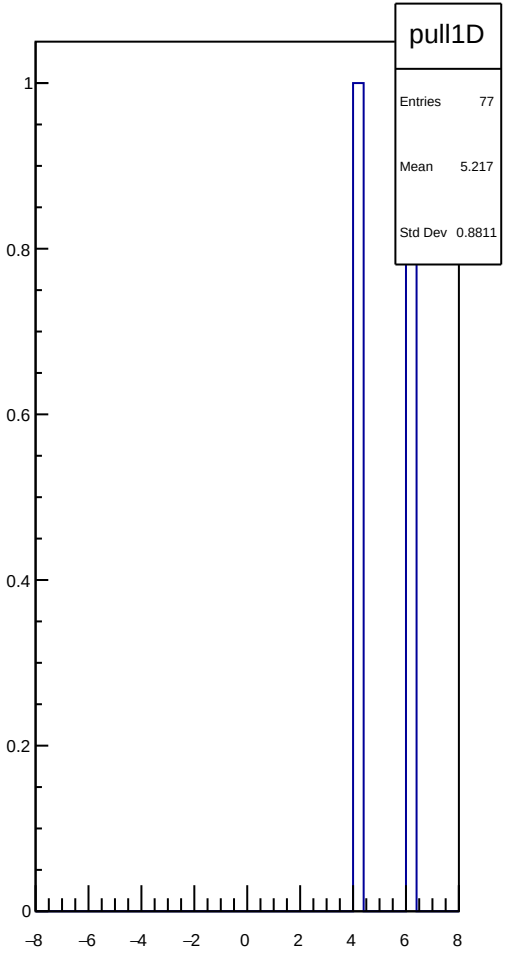

yield_bpm0r03WS_rms vs run
χ² / ndf 3.322e+04 / 76
p0 367.6 ± 0.2929
600
550
500
450
400
350
300

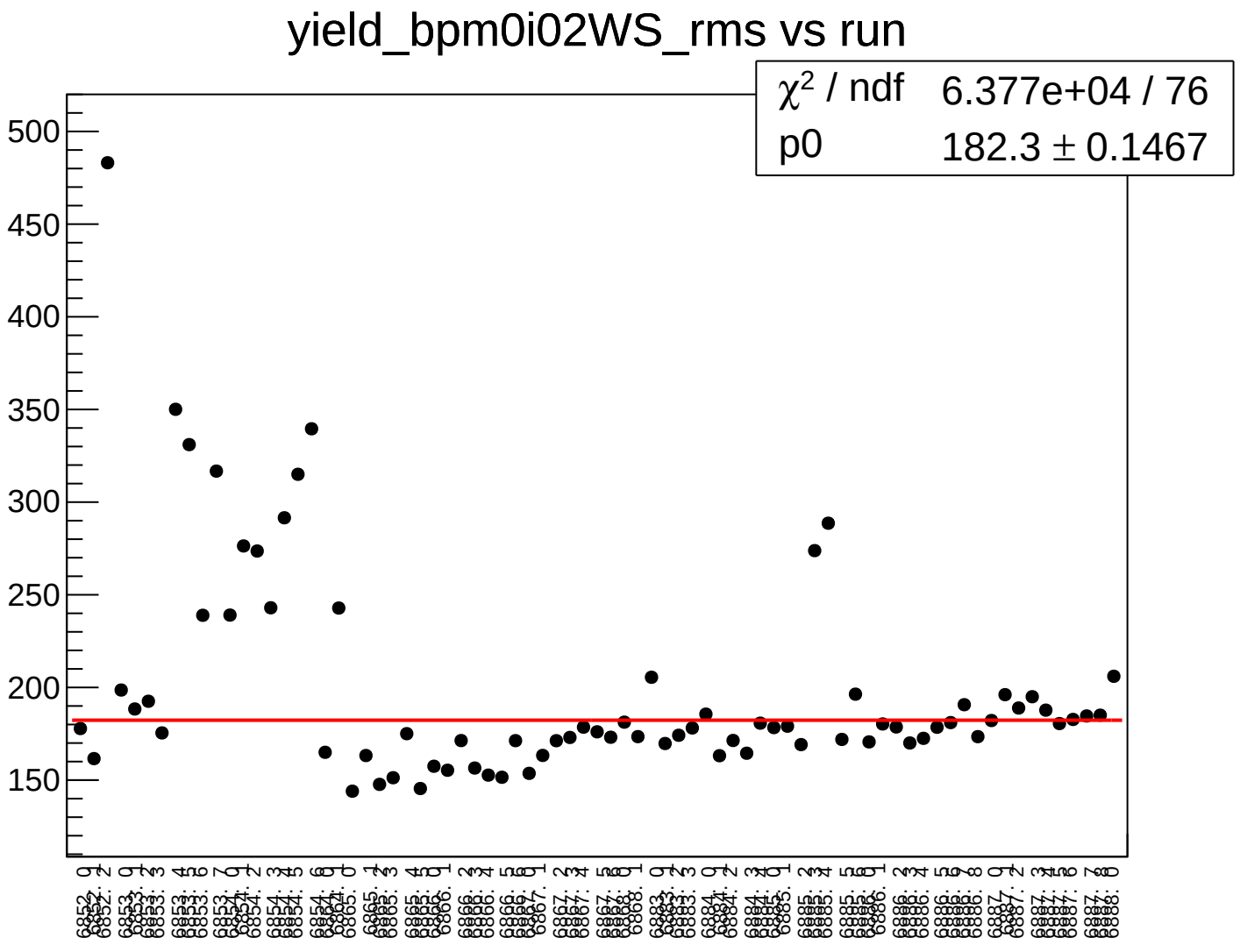

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 3.488e+06 / 76
p0 1.34e+05 ± 0.3393
135.5
135
134.5
134
133.5
pull
Entries 77
Mean 63.2
Std Dev 41.33
500
400
300
200
100
0
−100
−200
−300

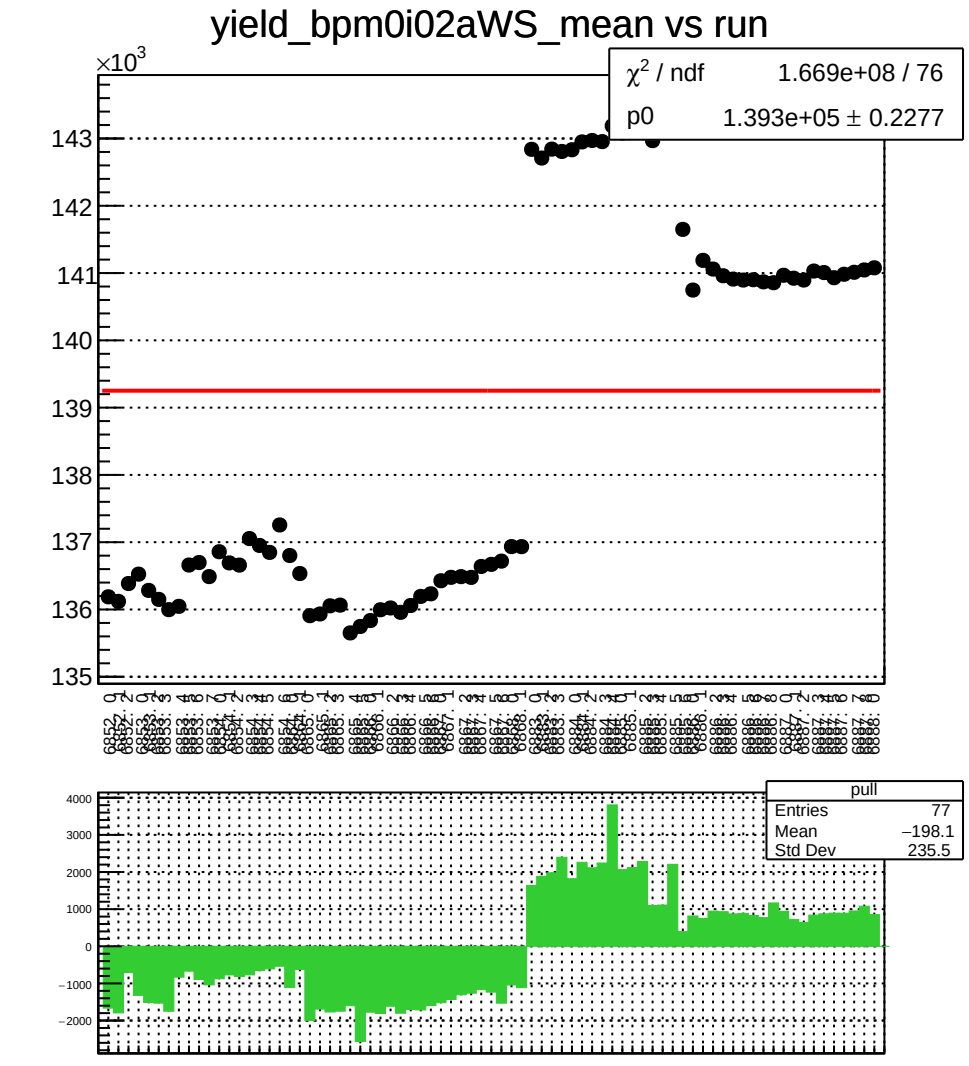

pull1D
Entries 77
Mean −0.5954
Std Dev 4.024
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

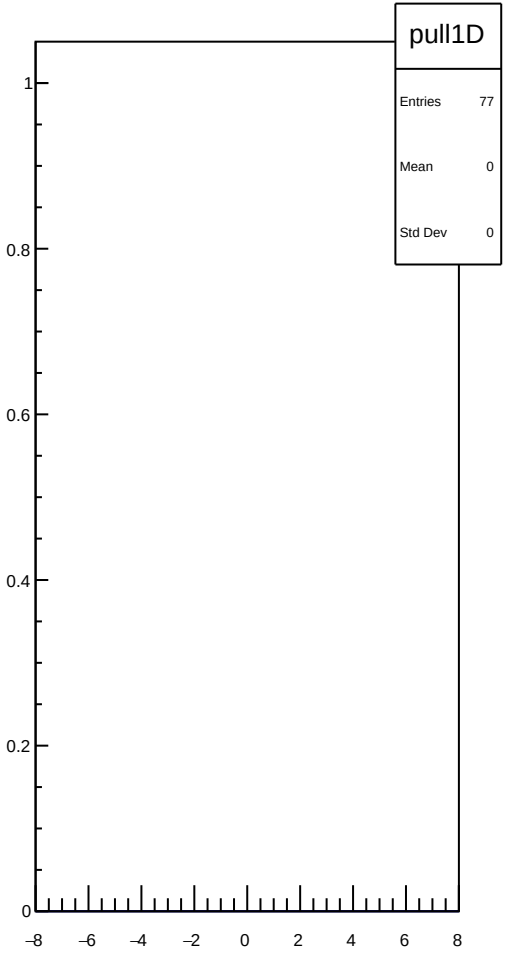

yield_bpm0r05WS_rms vs run
χ² / ndf 1.231e+05 / 76
p0 292.4 ± 0.2399
500
450
400
350
300
250
200

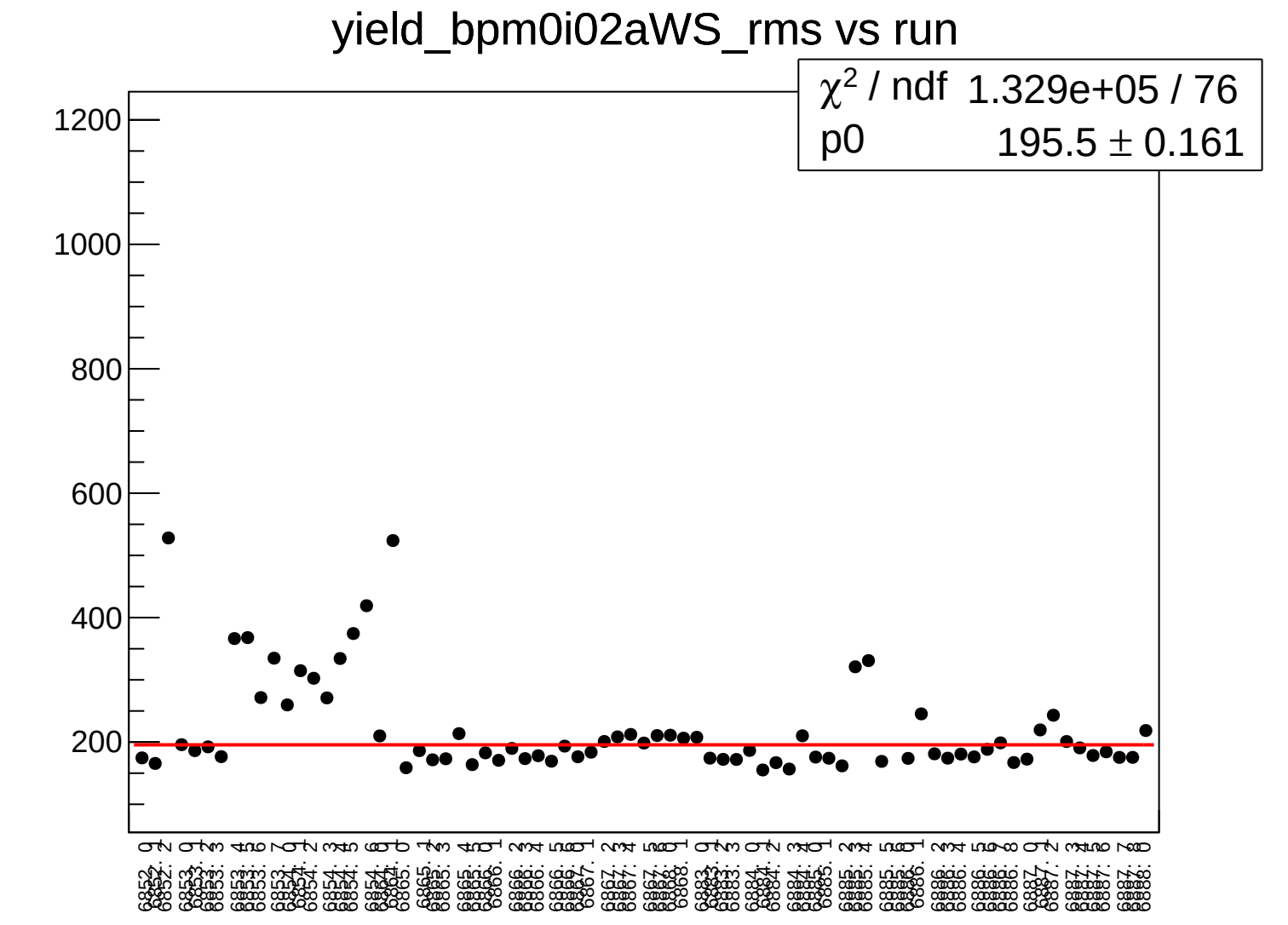

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 4.039e+07 / 76
p0 1.399e+05 ± 0.2075
142
141.5
141
140.5
140
139.5
139
138.5
138
pull
Entries 77
Mean 335.9
Std Dev 285.8
1000
500
0
−500
−1000

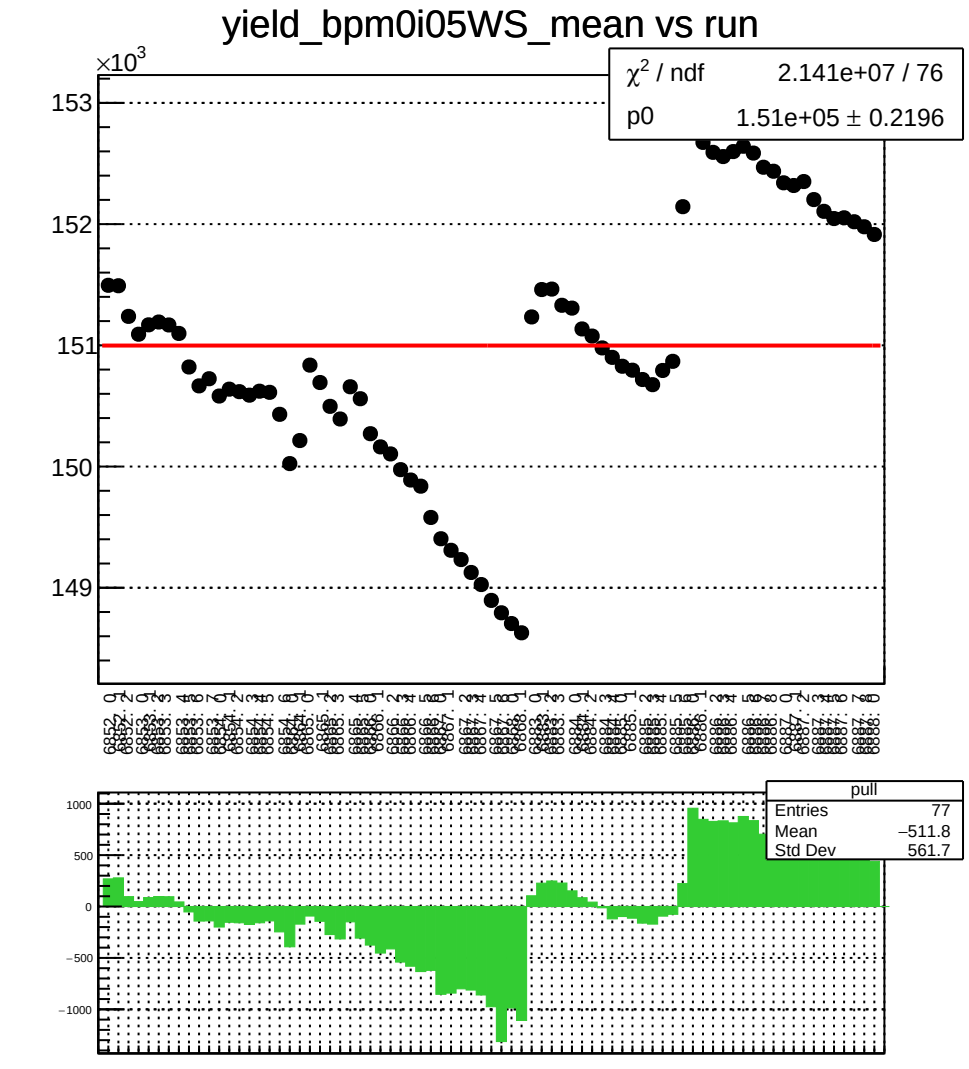

pull1D
Entries 77
Mean 5.217
Std Dev 0.8811
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

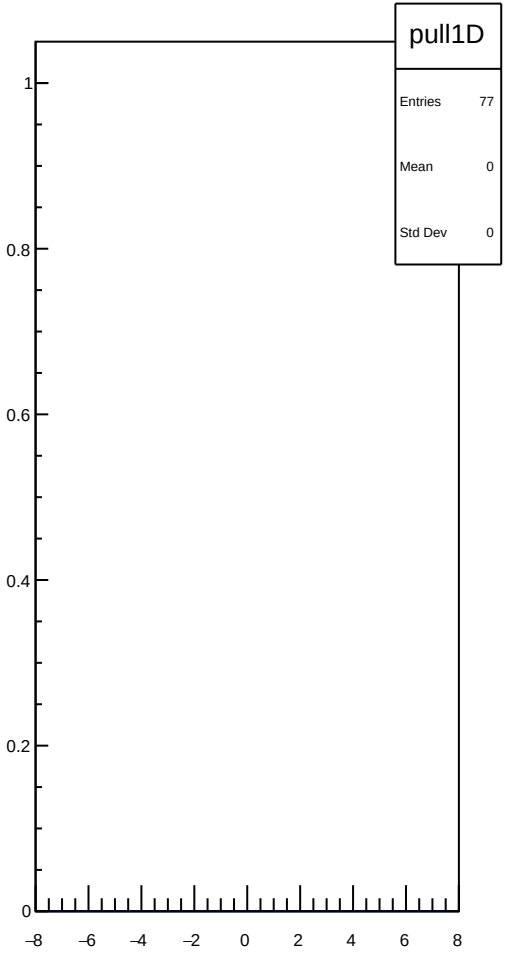

yield_bpm0i02WS_rms vs run
χ² / ndf 6.377e+04 / 76
p0 182.3 ± 0.1467
500
450
400
350
300
250
200
150

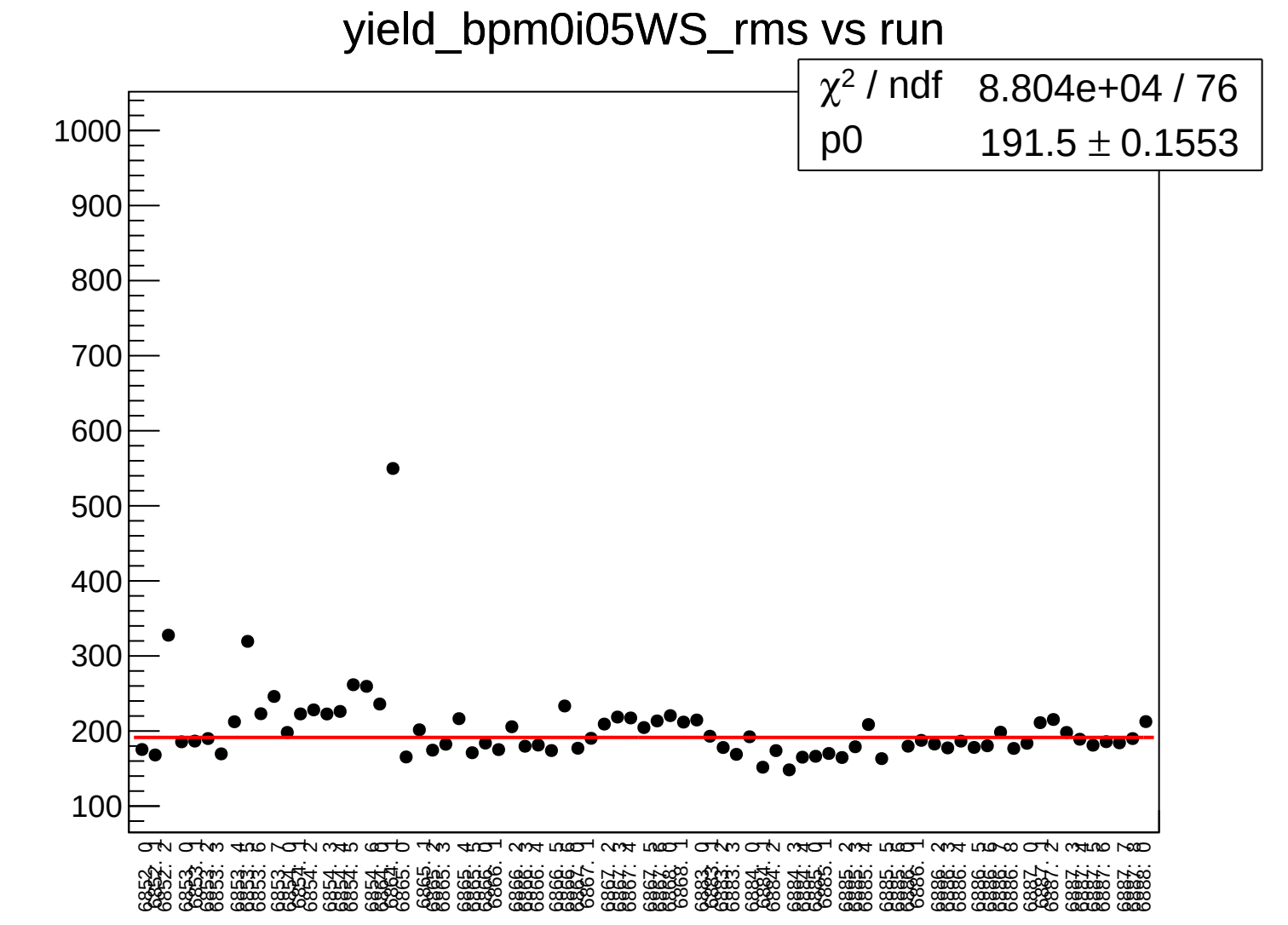

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 1.669e+08 / 76
p0 1.393e+05 ± 0.2277
143
142
141
140
139
138
137
136
135
pull
Entries 77
Mean −198.1
Std Dev 235.5
4000
3000
2000
1000
0
−1000
−2000

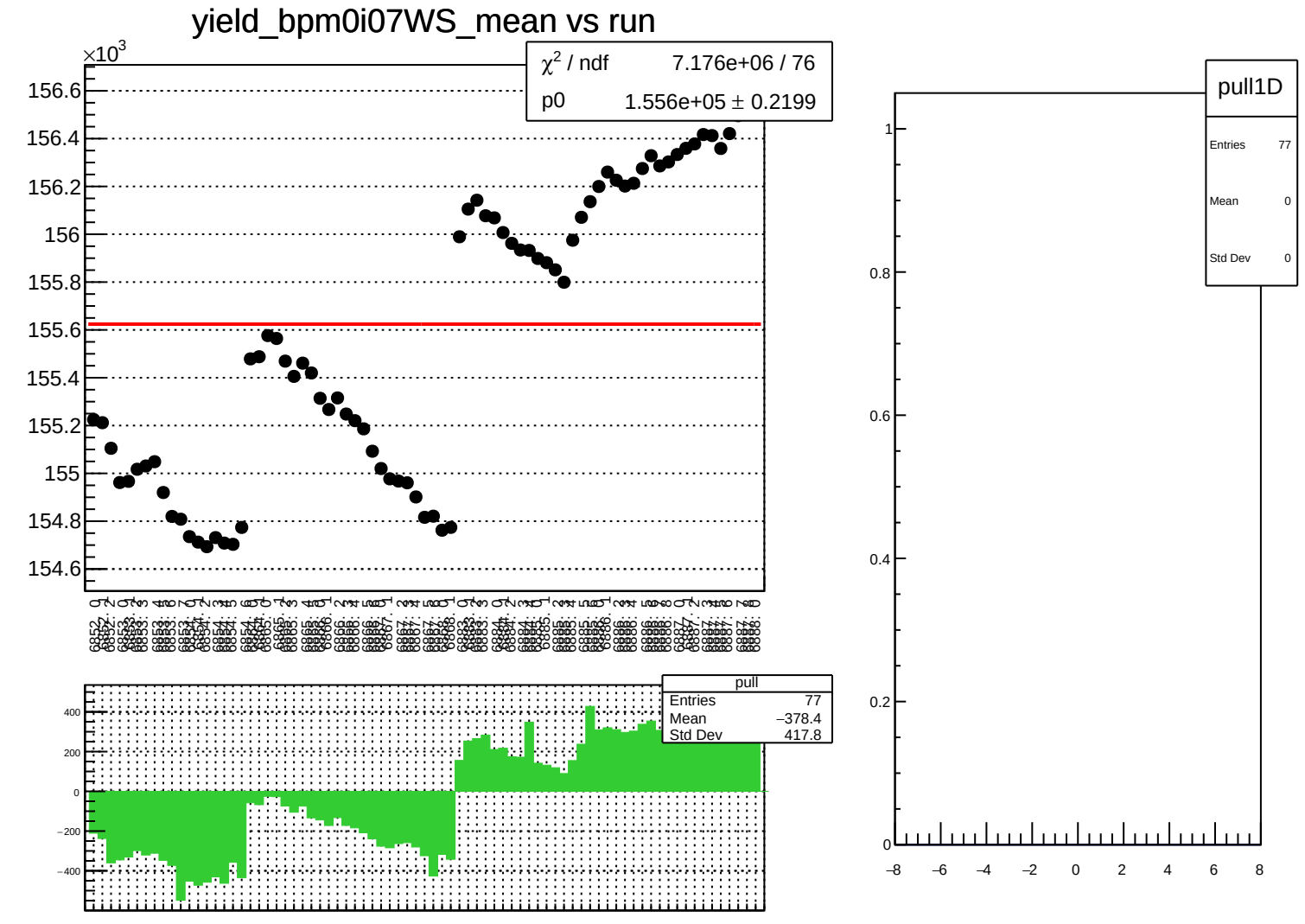

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

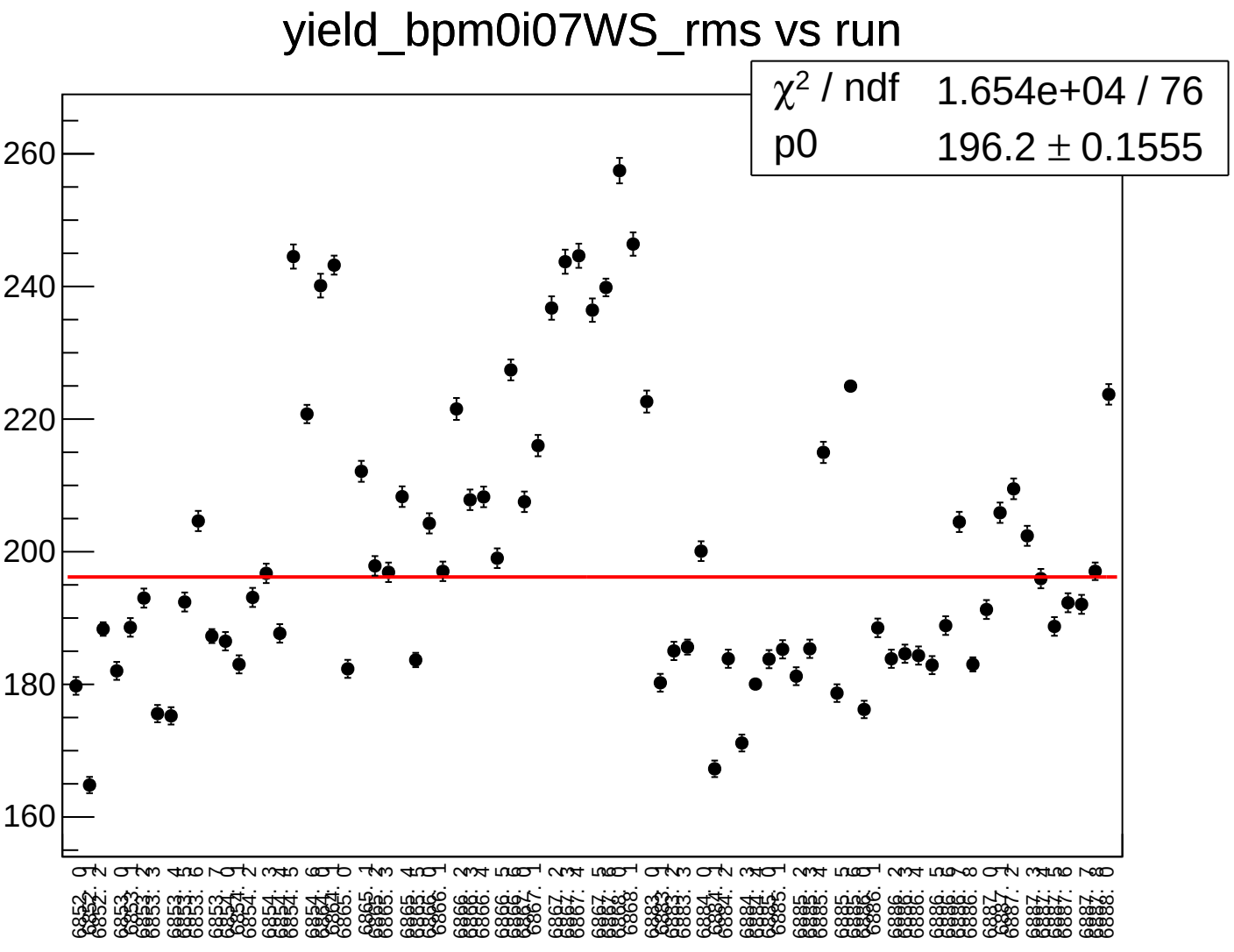

yield_bpm0i02aWS_rms vs run
χ² / ndf 1.329e+05 / 76
p0 195.5 ± 0.161
1200
1000
800
600
400
200

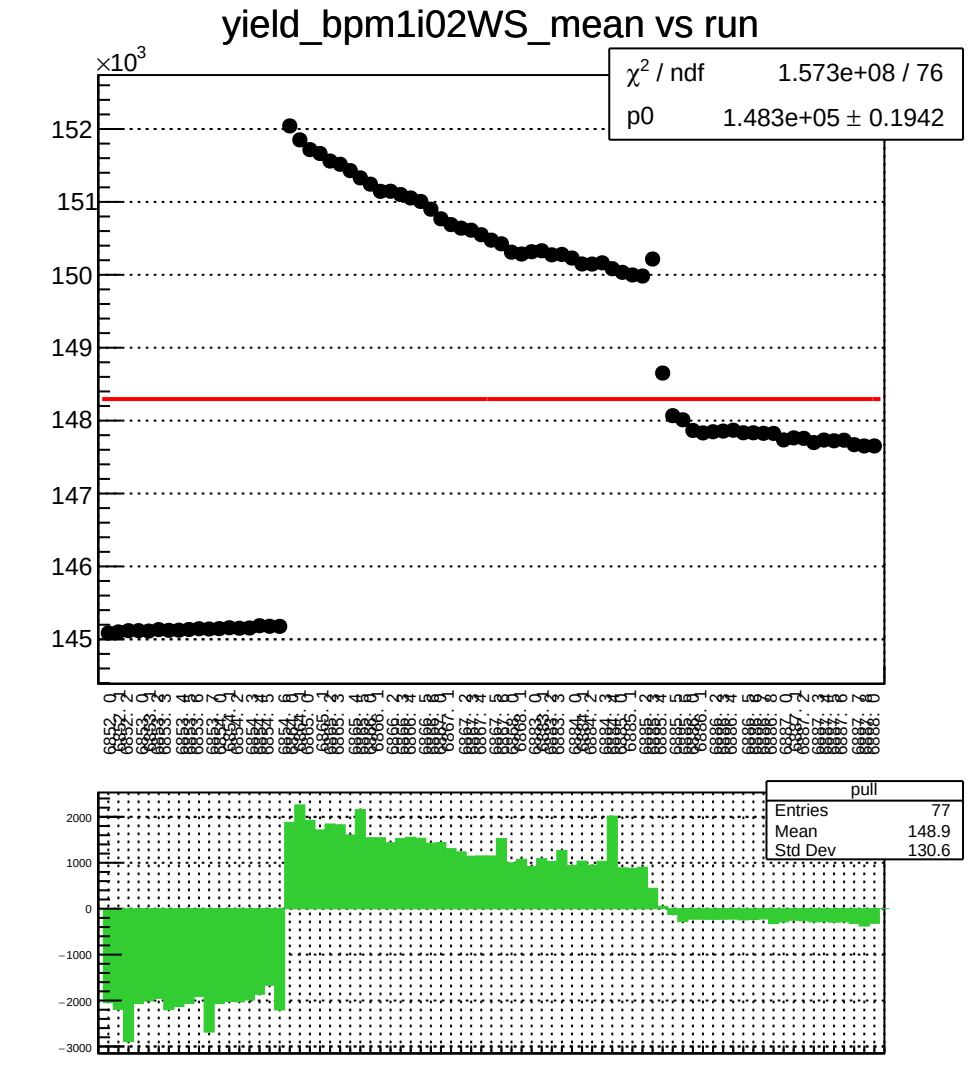

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 2.141e+07 / 76
p0 1.51e+05 ± 0.2196
153
152
151
150
149
pull
Entries 77
Mean −511.8
Std Dev 561.7
1000
500
0
−500
−1000

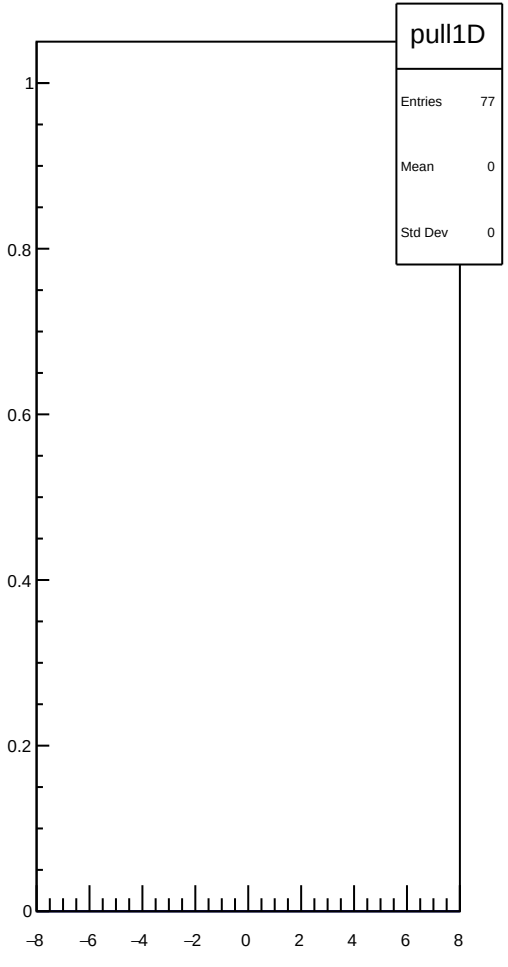

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

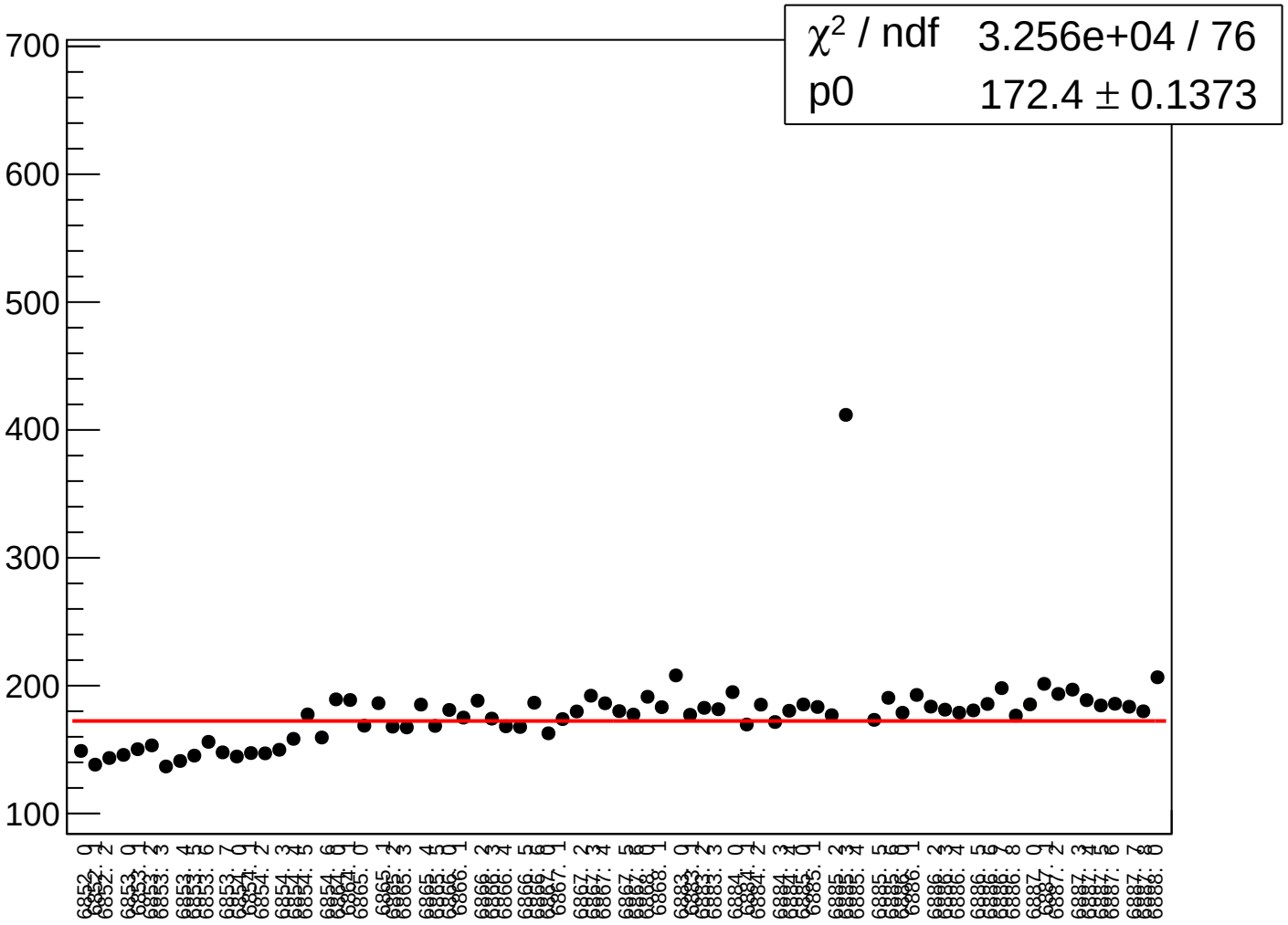

yield_bpm0i05WS_rms vs run
χ² / ndf 8.804e+04 / 76
p0 191.5 ± 0.1553
1000
900
800
700
600
500
400
300
200
100

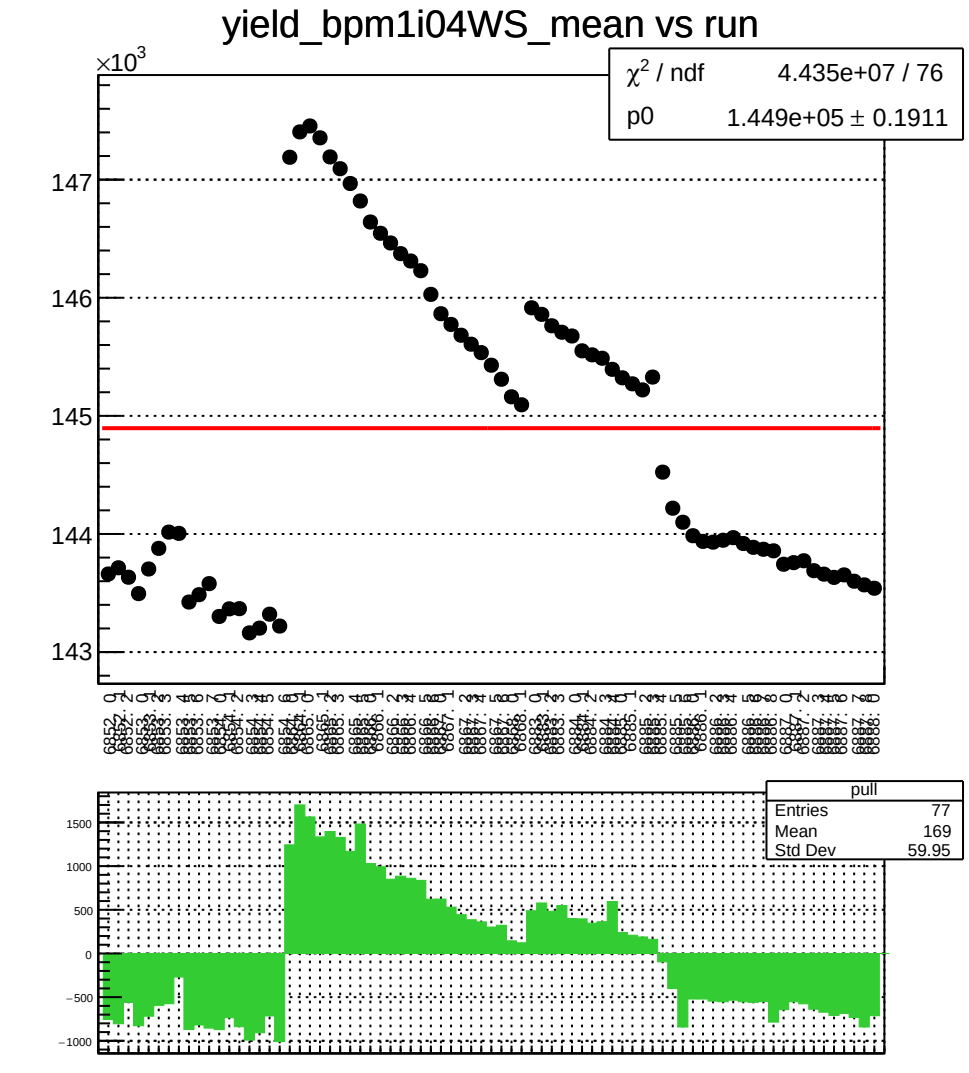

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 7.176e+06 / 76
p0 1.556e+05 ± 0.2199
156.6
156.4
156.2
156
155.8
155.6
155.4
155.2
155
154.8
154.6
pull
Entries 77
Mean −378.4
Std Dev 417.8
400
200
0
−200
−400
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

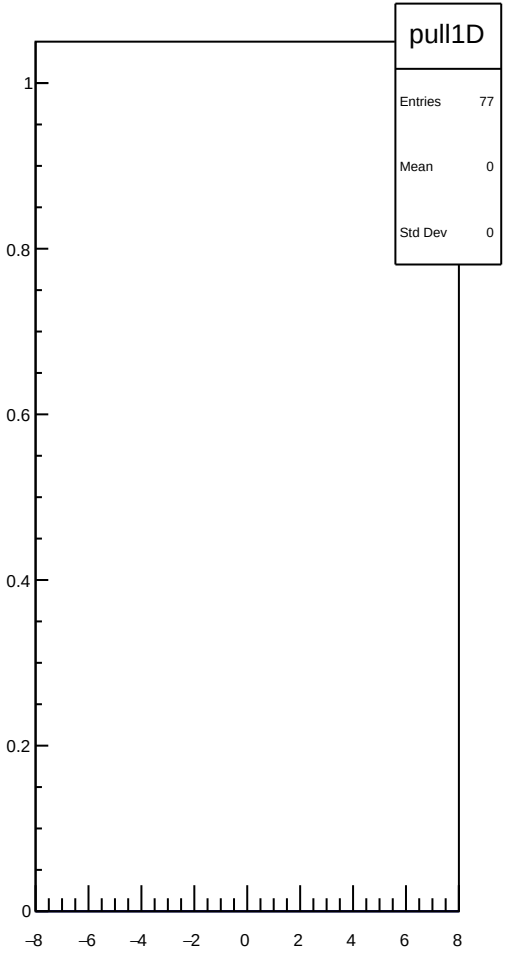

yield_bpm0i07WS_rms vs run
χ² / ndf 1.654e+04 / 76
p0 196.2 ± 0.1555
260
240
220
200
180
160

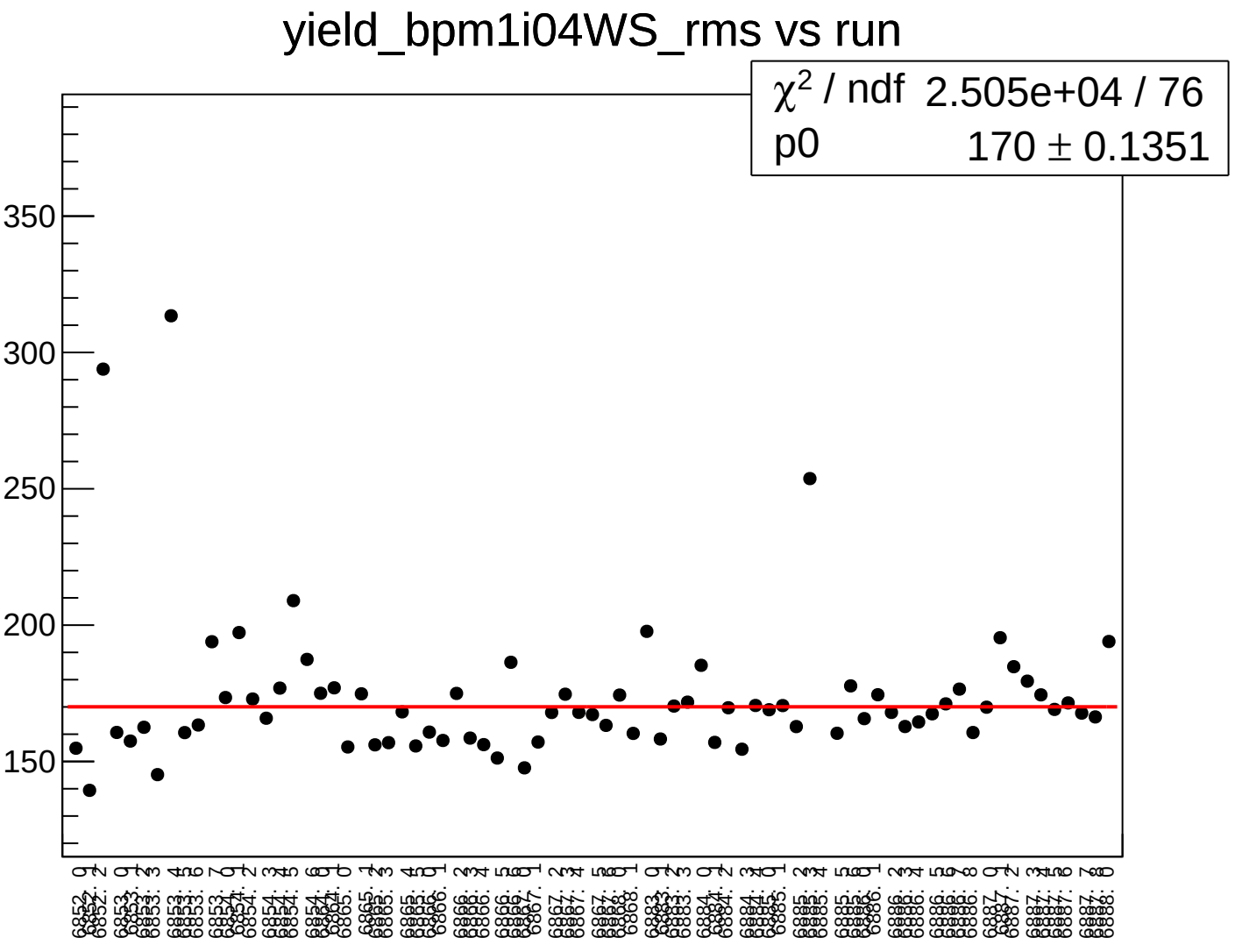

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 1.573e+08 / 76
p0 1.483e+05 ± 0.1942
152
151
150
149
148
147
146
145
pull
Entries 77
Mean 148.9
Std Dev 130.6
2000
1000
0
−1000
−2000
−3000

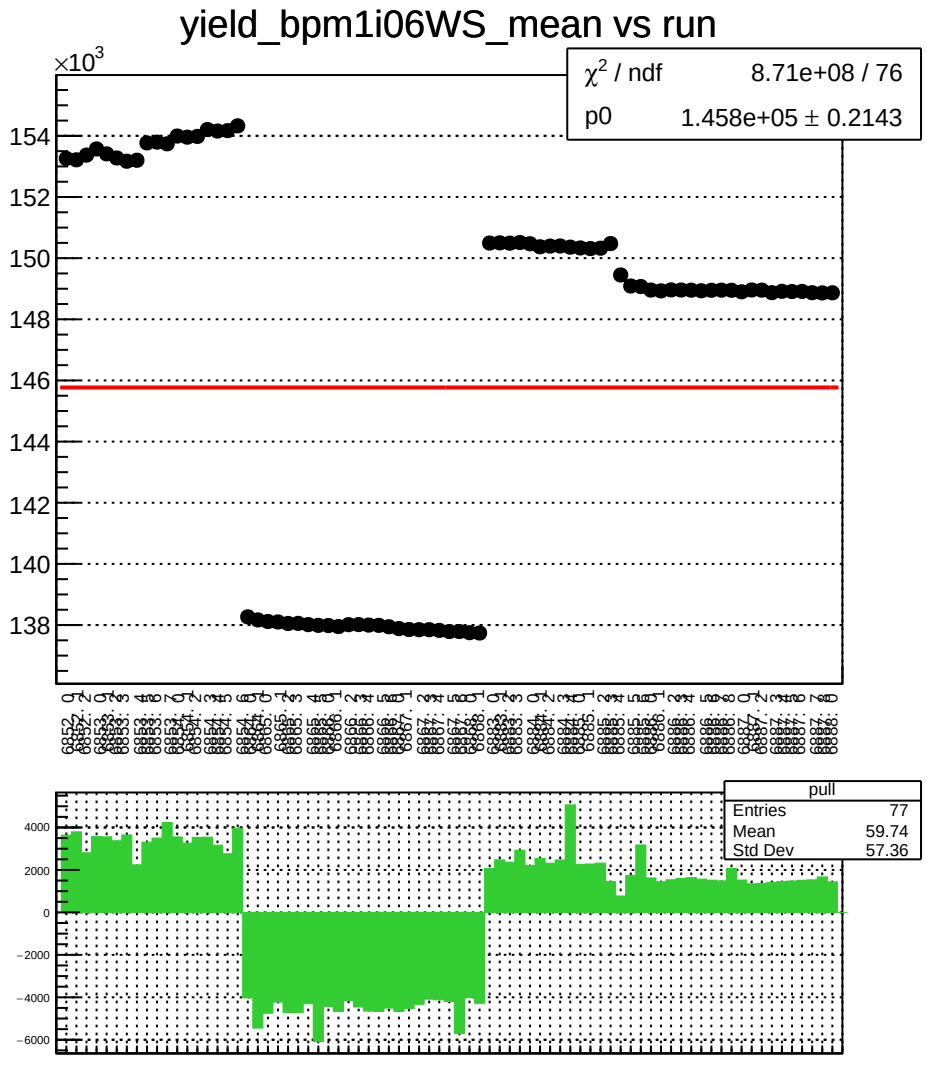

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

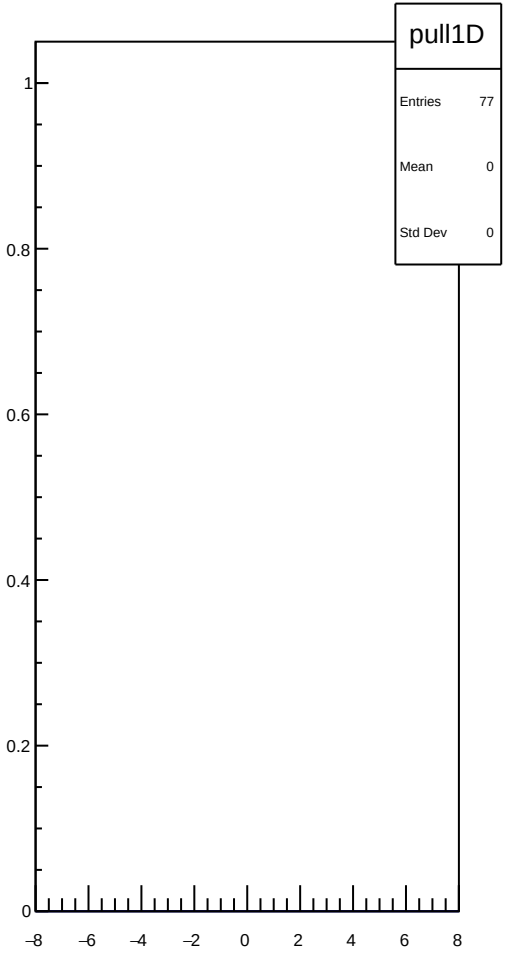

yield_bpm1i02WS_rms vs run
χ^2 / ndf 3.256e+04 / 76
p0 172.4 ± 0.1373
700
600
500
400
300
200
100

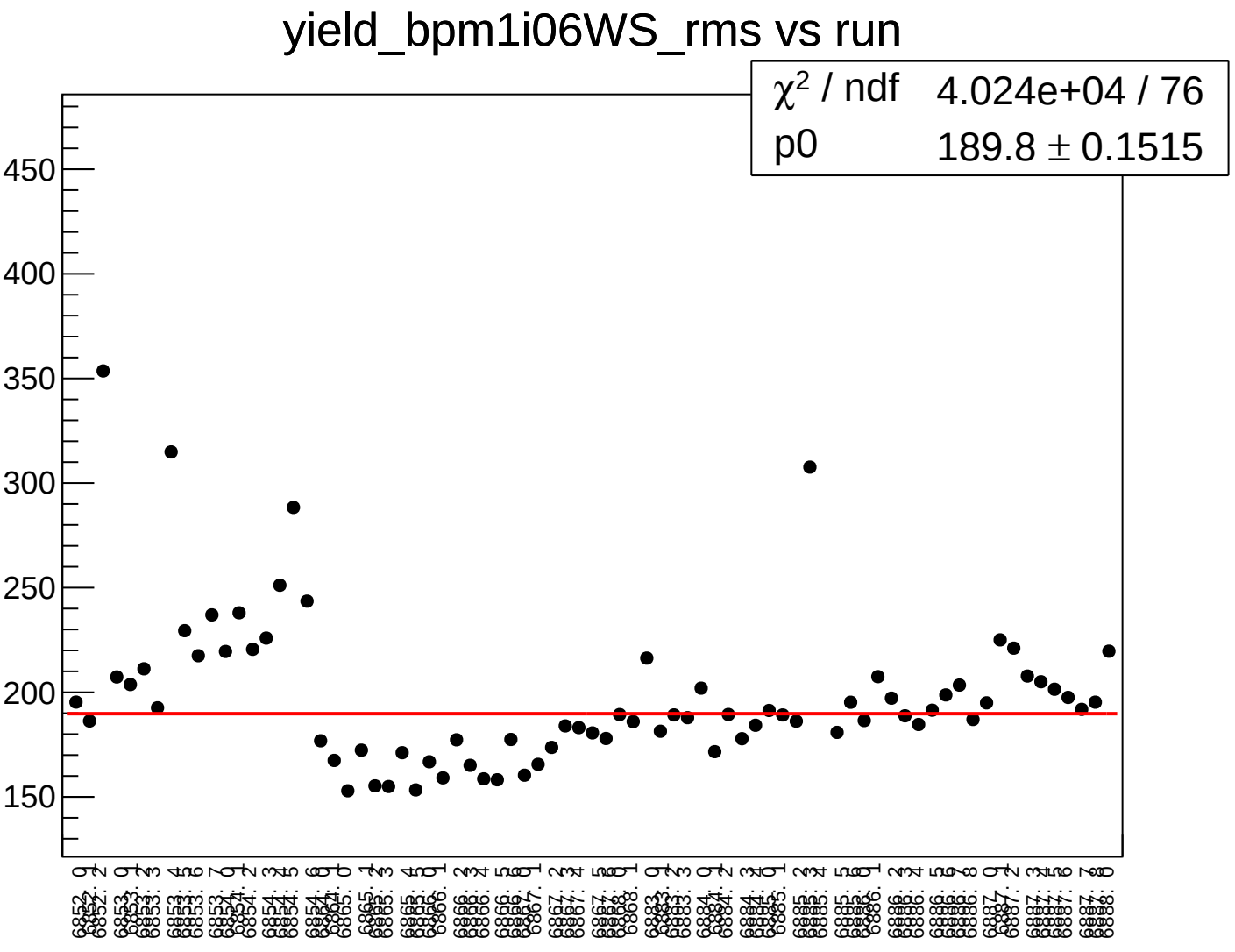

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 4.435e+07 / 76
p0 1.449e+05 ± 0.1911
147
146
145
144
143
pull
Entries 77
Mean 169
Std Dev 59.95
1500
1000
500
0
−500
−1000

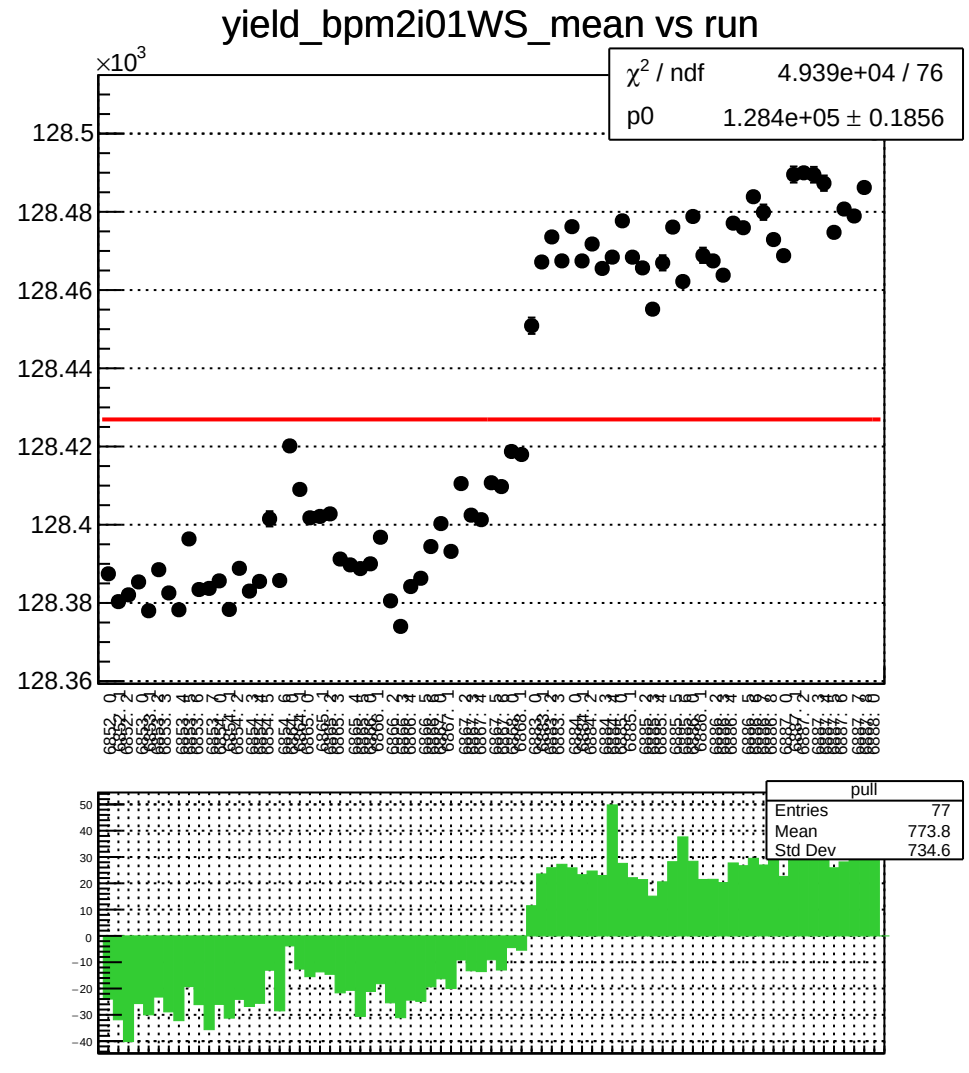

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

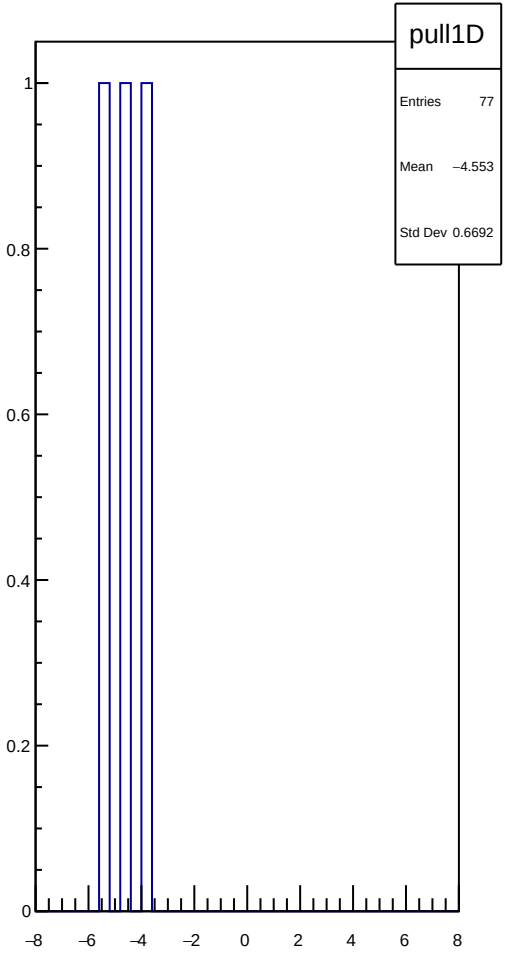

yield_bpm1i04WS_rms vs run
χ² / ndf 2.505e+04 / 76
p0 170 ± 0.1351
350
300
250
200
150

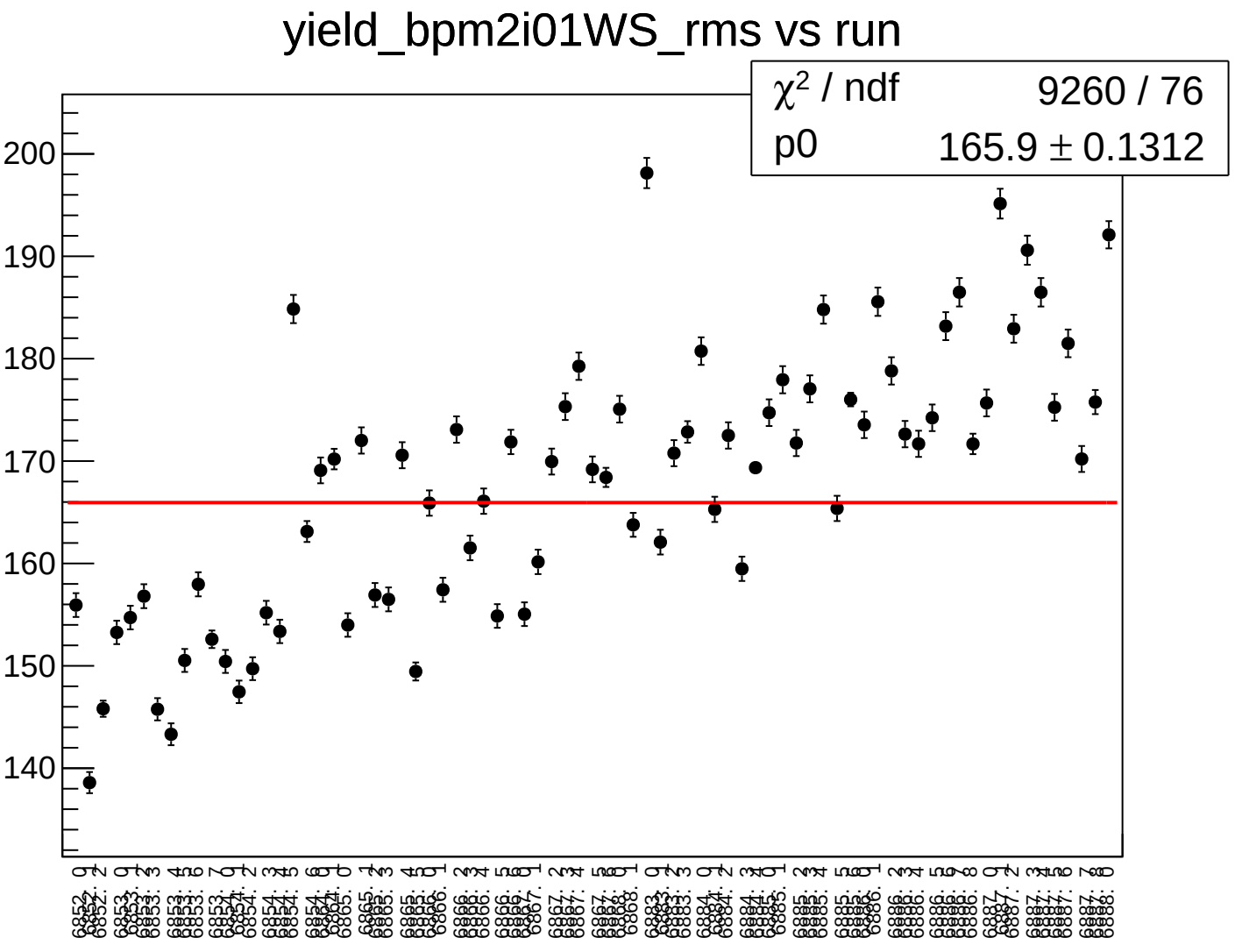

yield_bpm1i06WS_mean vs run
×10^3
χ^2 / ndf 8.71e+08 / 76
p0 1.458e+05 ± 0.2143
154
152
150
148
146
144
142
140
138
pull
Entries 77
Mean 59.74
Std Dev 57.36
4000
2000
0
−2000
−4000
−6000

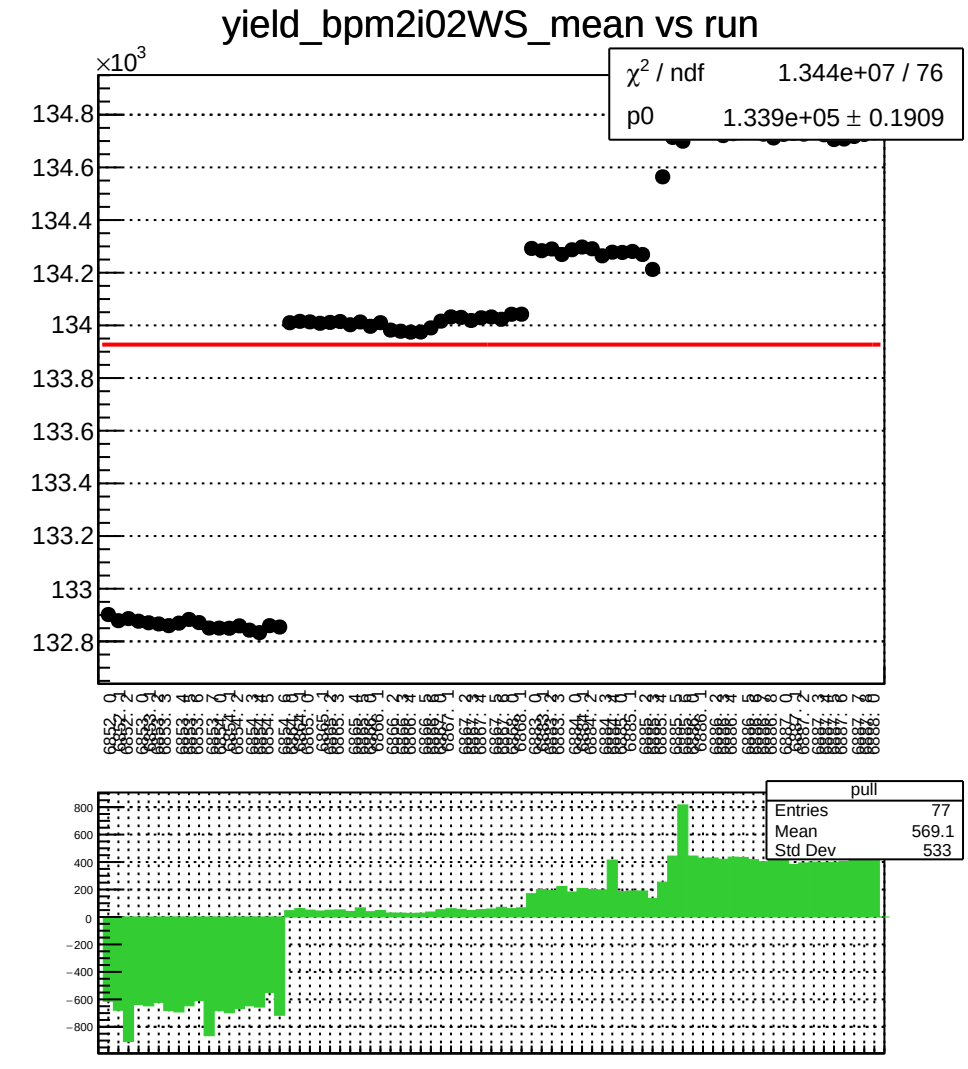

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

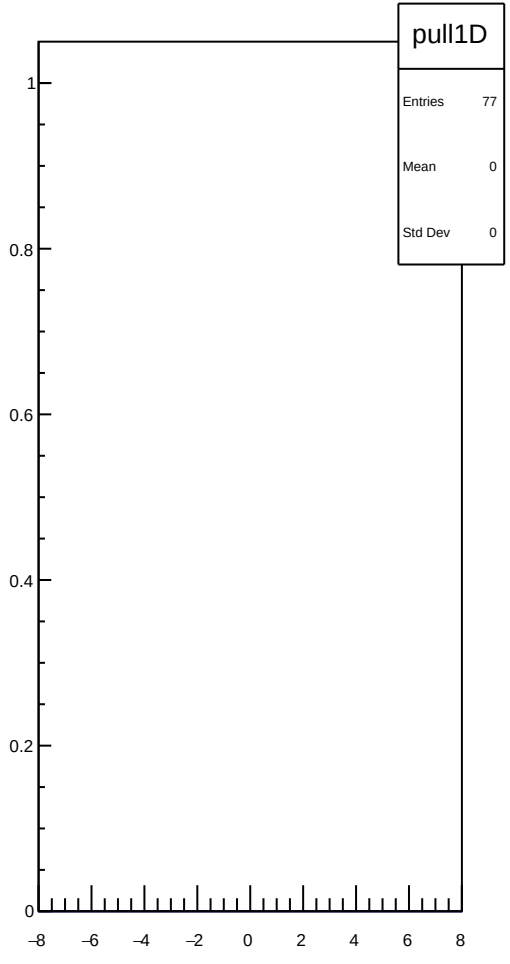

yield_bpm1i06WS_rms vs run
χ² / ndf 4.024e+04 / 76
p0 189.8 ± 0.1515
450
400
350
300
250
200
150

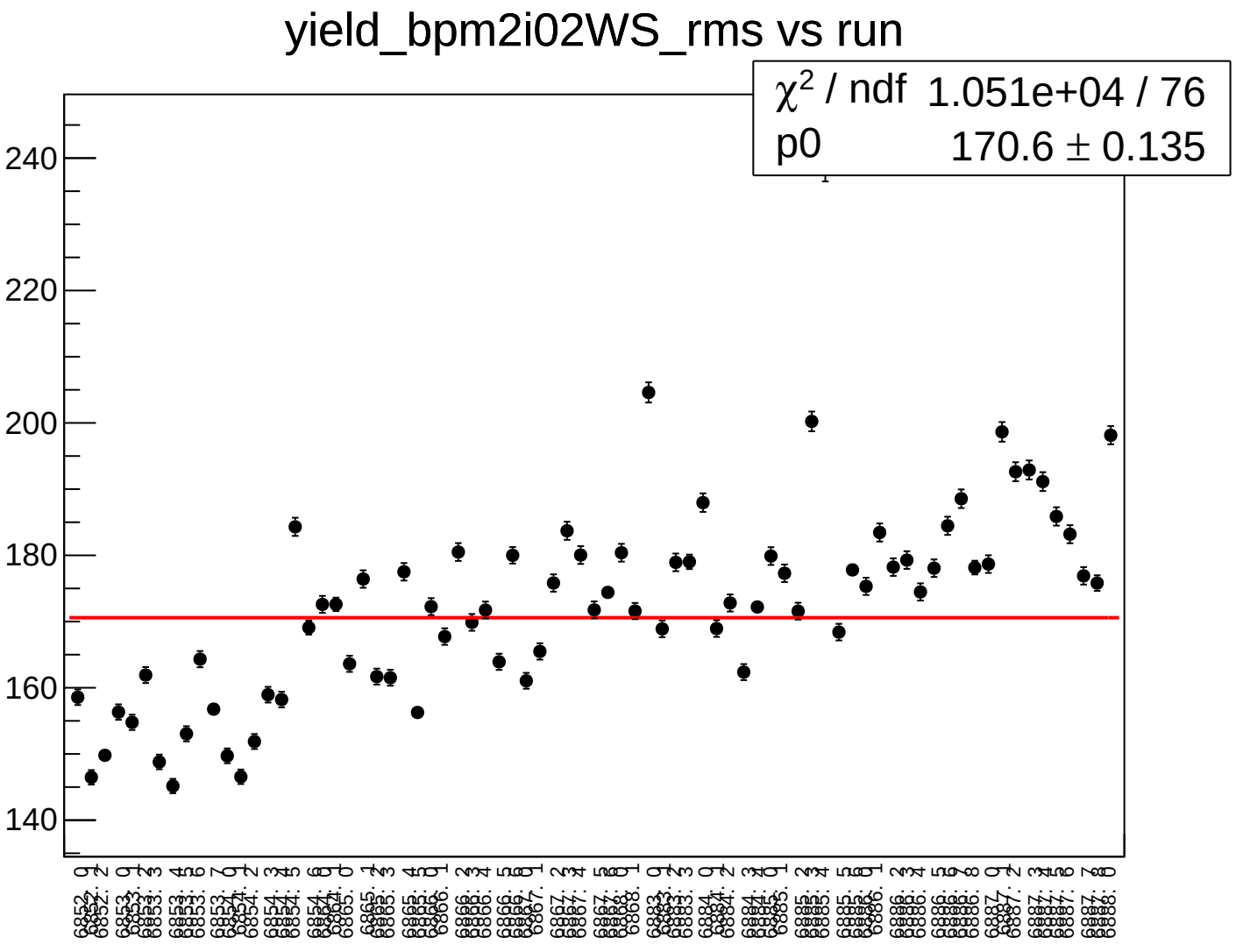

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 4.939e+04 / 76
p0 1.284e+05 ± 0.1856
128.5
128.48
128.46
128.44
128.42
128.4
128.38
128.36
pull
Entries 77
Mean 773.8
Std Dev 734.6
50
40
30
20
10
0
−10
−20
−30
−40

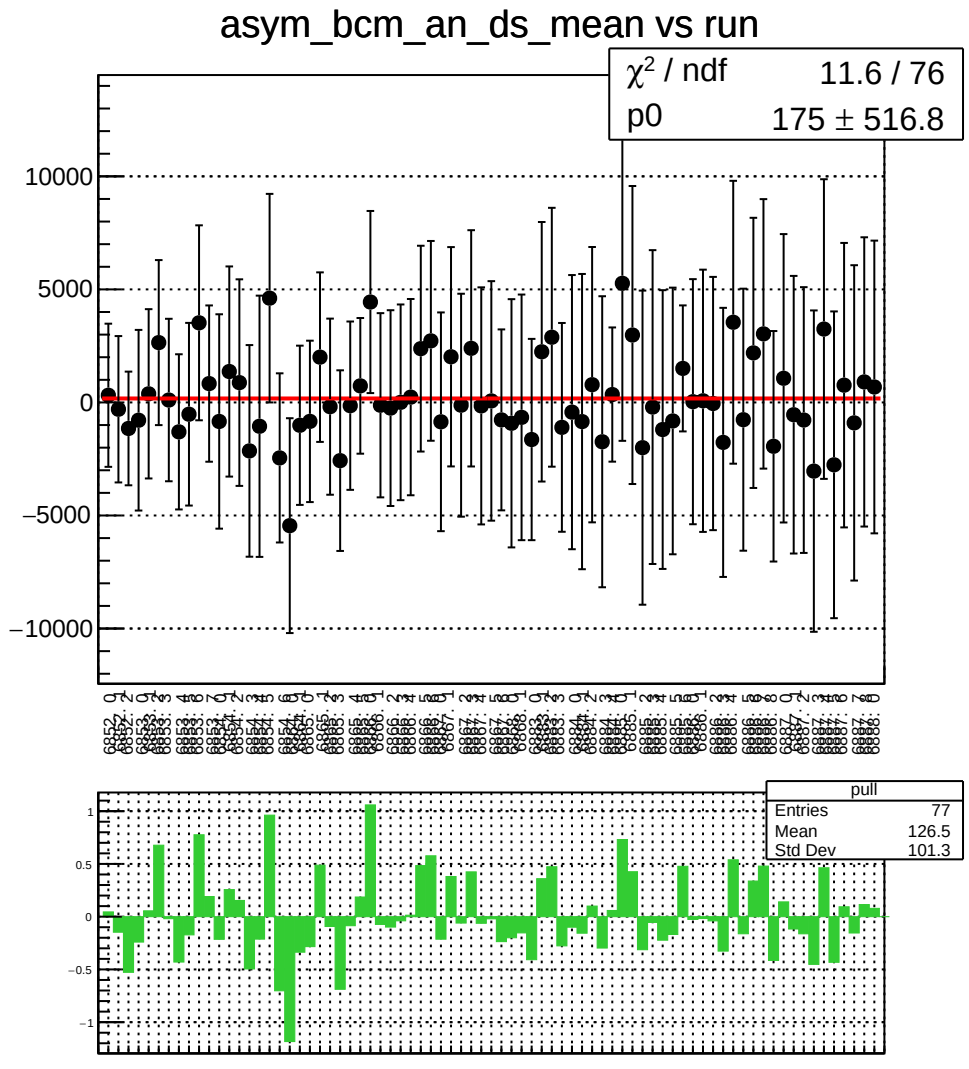

pull1D
Entries 77
Mean −4.553
Std Dev 0.6692
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

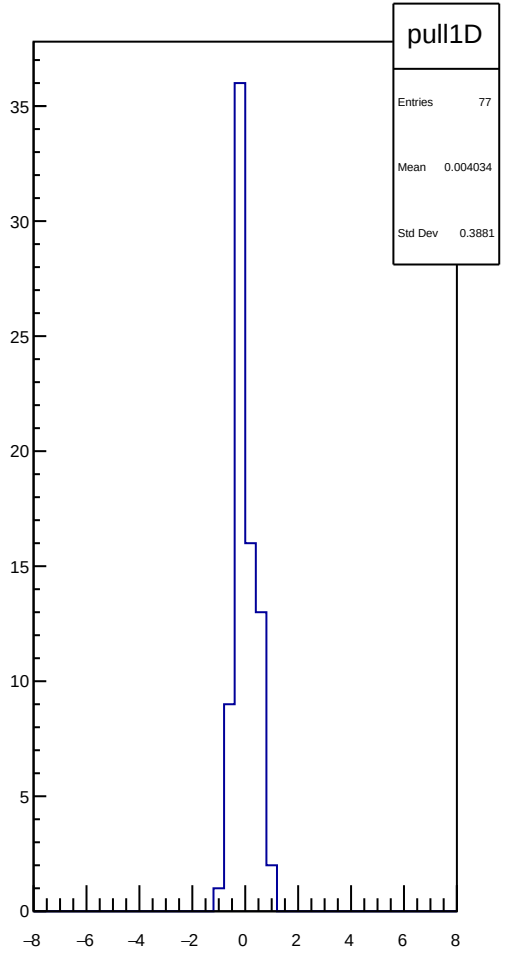

yield_bpm2i01WS_rms vs run
χ² / ndf 9260 / 76
p0 165.9 ± 0.1312
200
190
180
170
160
150
140

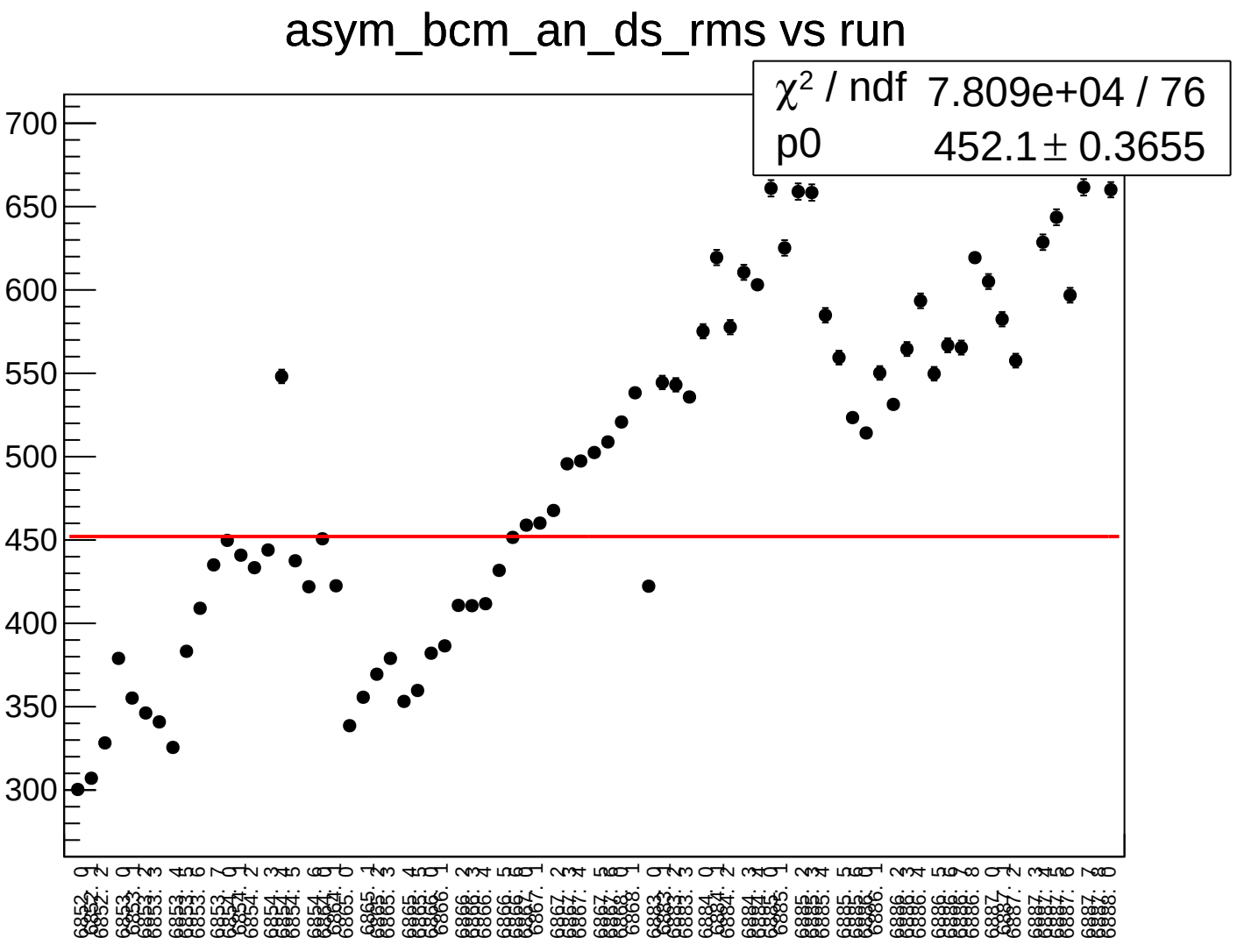

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 1.344e+07 / 76
p0 1.339e+05 ± 0.1909
134.8
134.6
134.4
134.2
134
133.8
133.6
133.4
133.2
133
132.8
pull
Entries 77
Mean 569.1
Std Dev 533
800
600
400
200
0
−200
−400
−600
−800

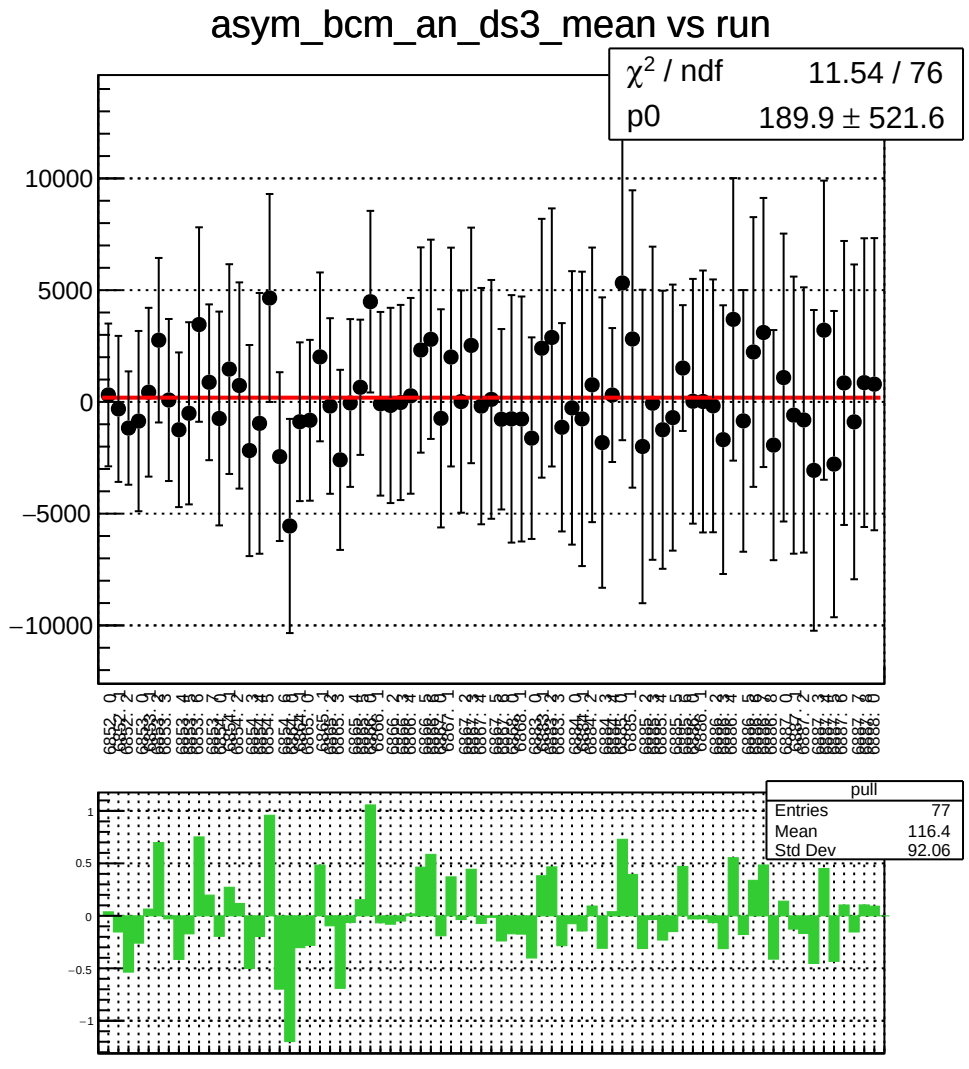

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

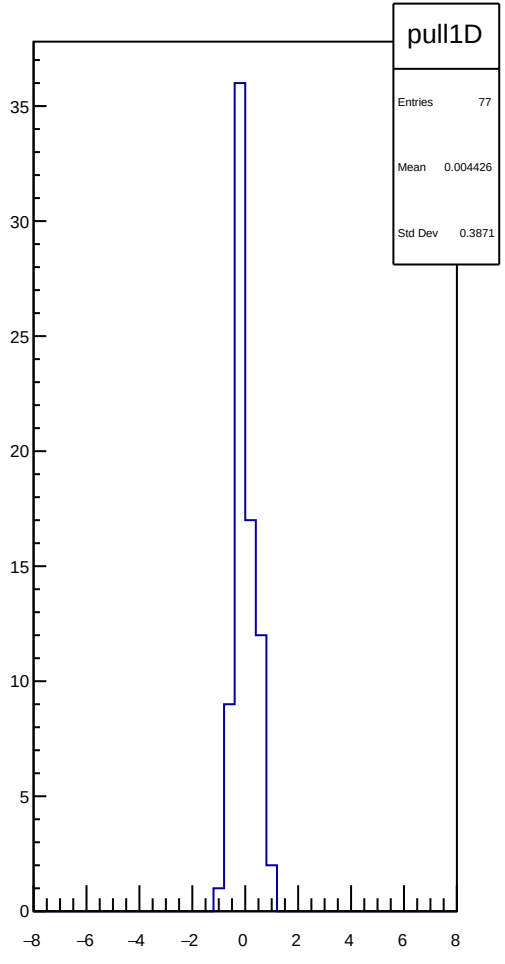

yield_bpm2i02WS_rms vs run
χ² / ndf 1.051e+04 / 76
p0 170.6 ± 0.135
240
220
200
180
160
140

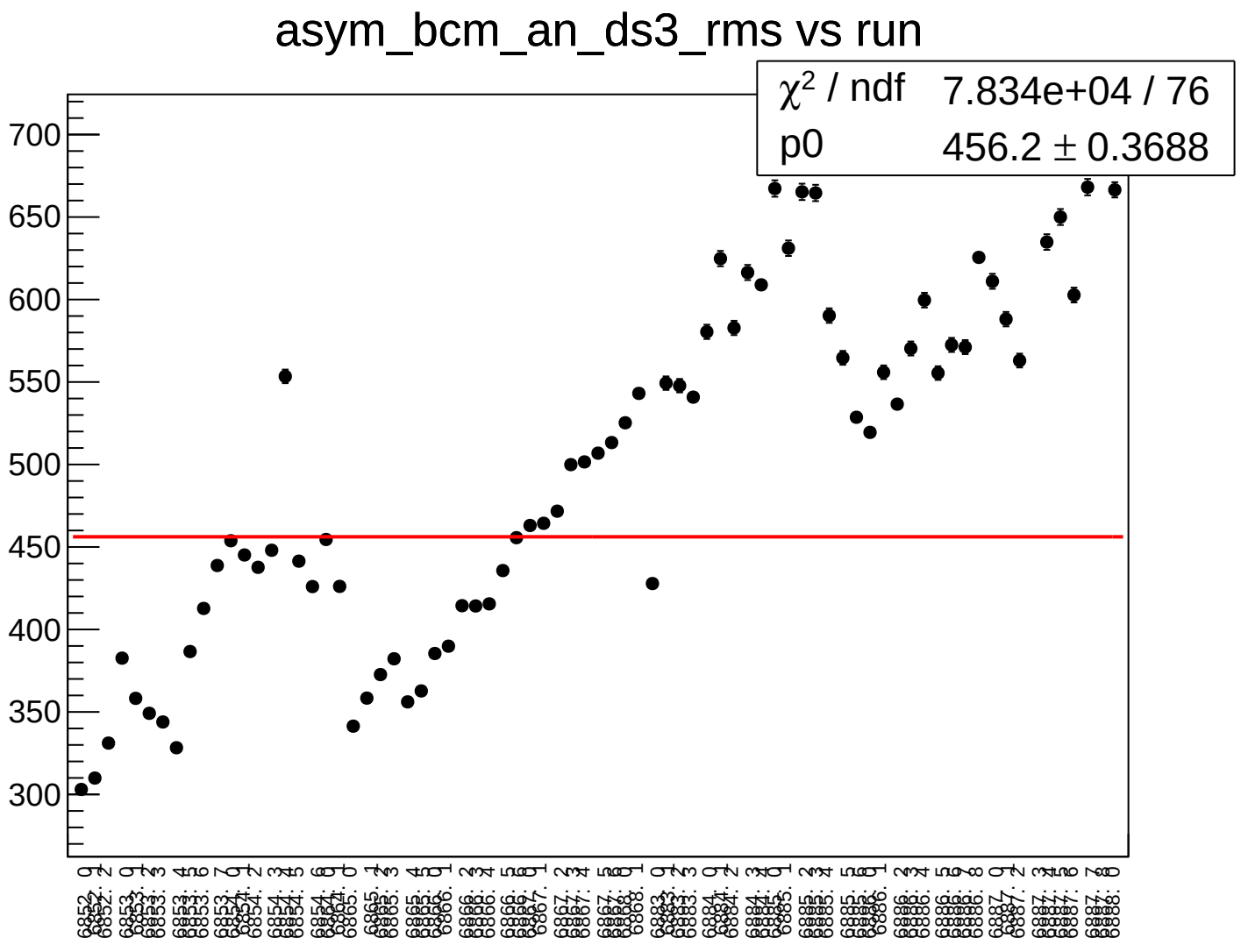

asym_bcm_an_ds_mean vs run
χ² / ndf 11.6 / 76
p0 175 ± 516.8
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 126.5
Std Dev 101.3
1
0.5
0
−0.5
−1

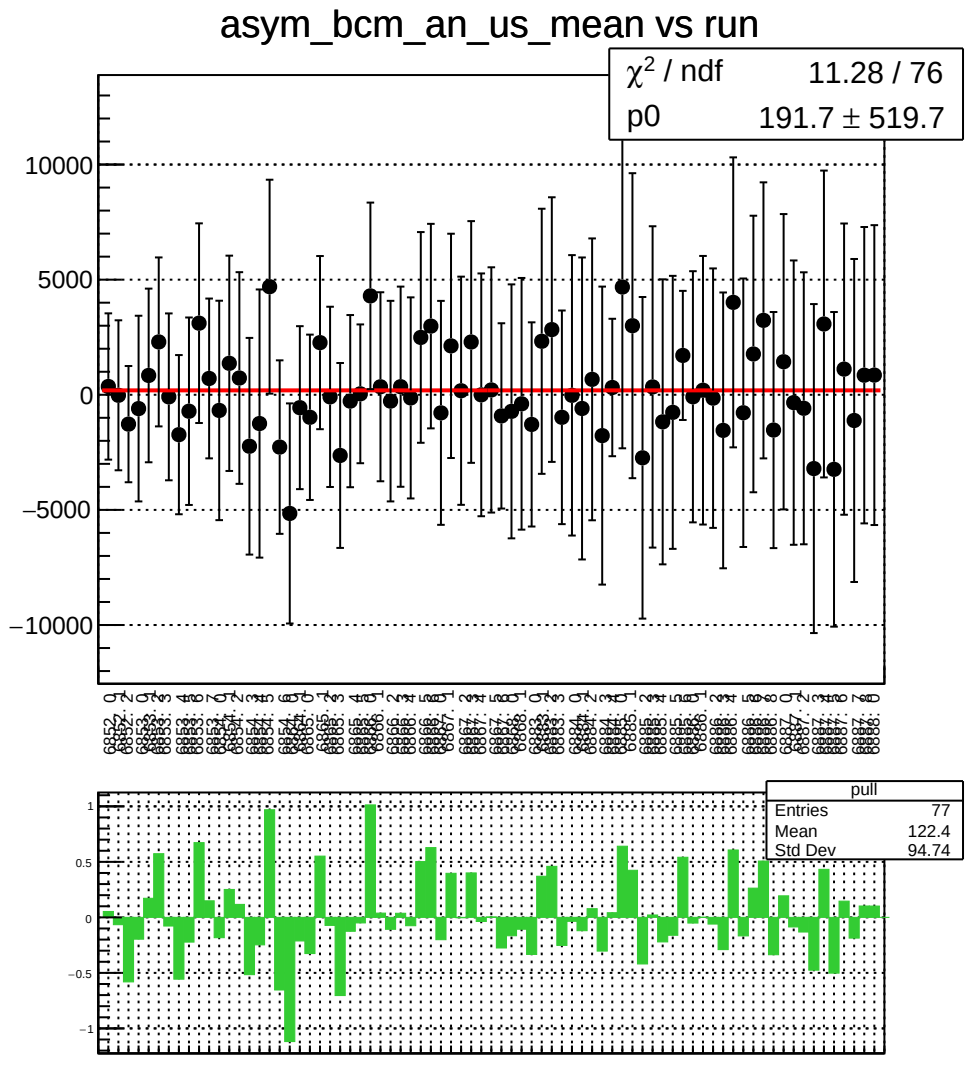

pull1D
Entries 77
Mean 0.004034
Std Dev 0.3881
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

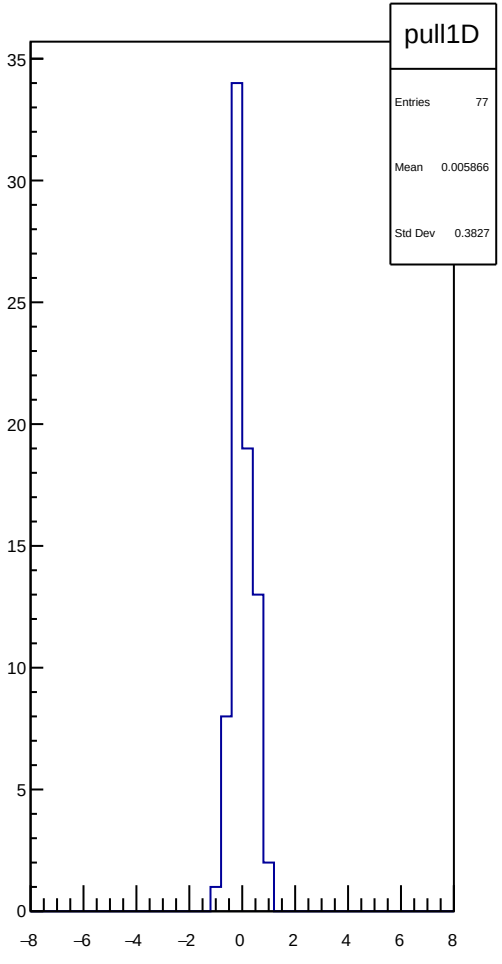

asym_bcm_an_ds_rms vs run
χ² / ndf 7.809e+04 / 76
p0 452.1 ± 0.3655
700
650
600
550
500
450
400
350
300

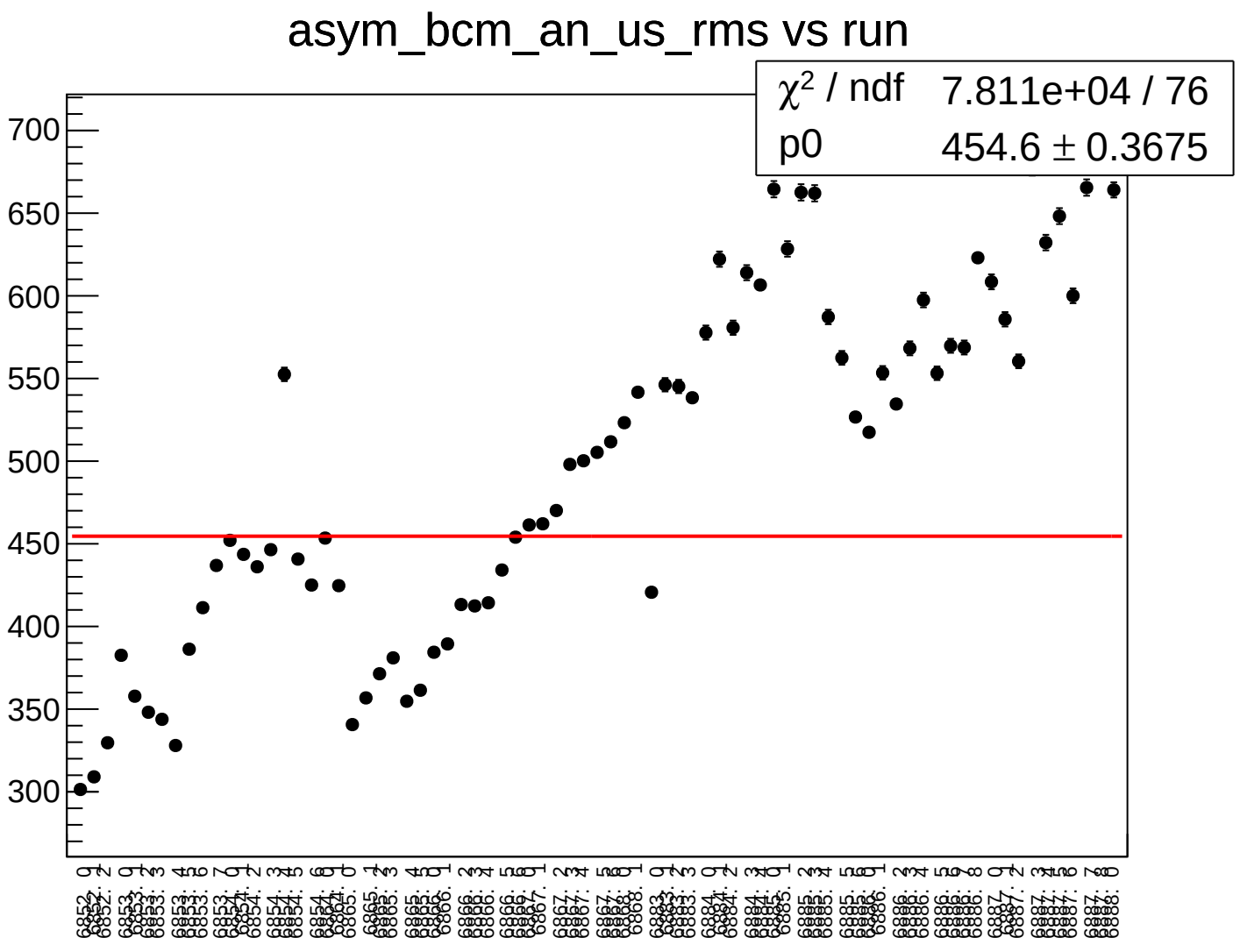

asym_bcm_an_ds3_mean vs run
χ² / ndf 11.54 / 76
p0 189.9 ± 521.6
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 116.4
Std Dev 92.06
1
0.5
0
−0.5
−1

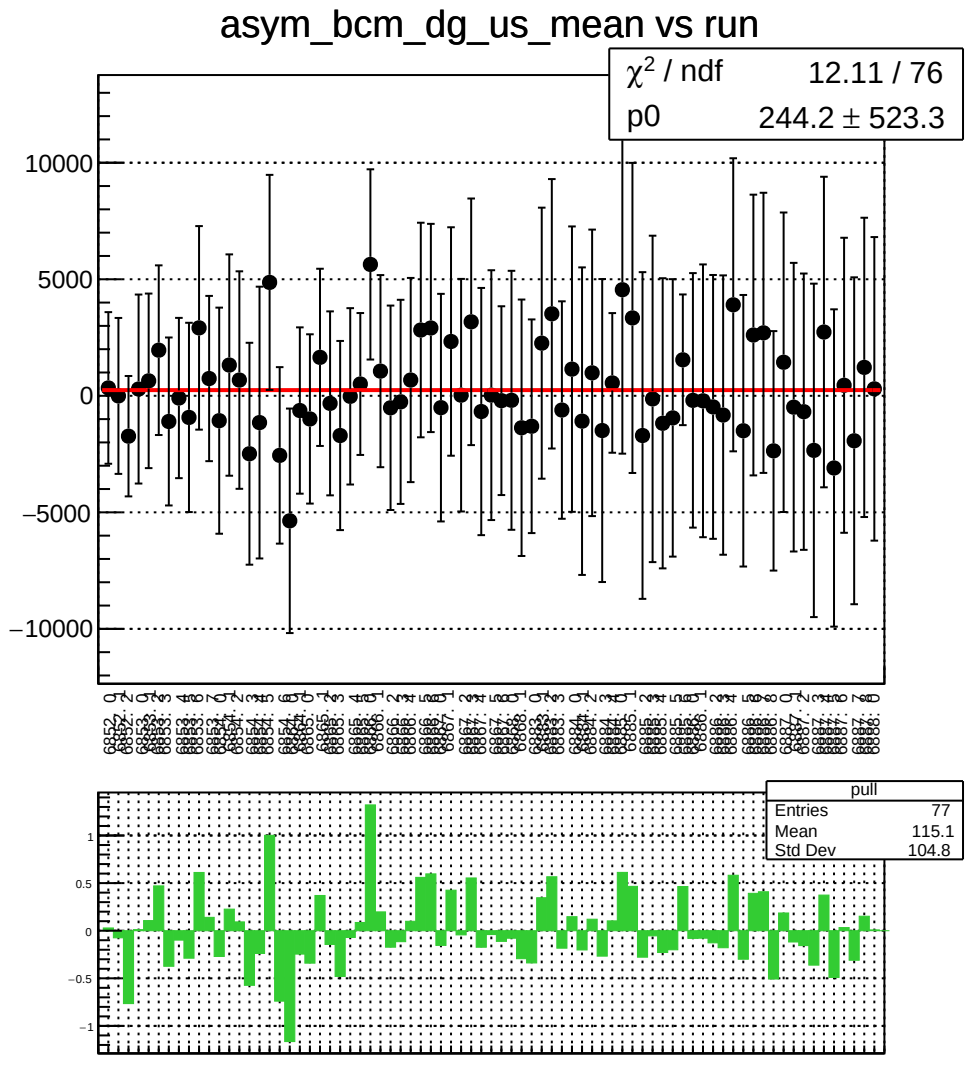

pull1D
Entries 77
Mean 0.004426
Std Dev 0.3871
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

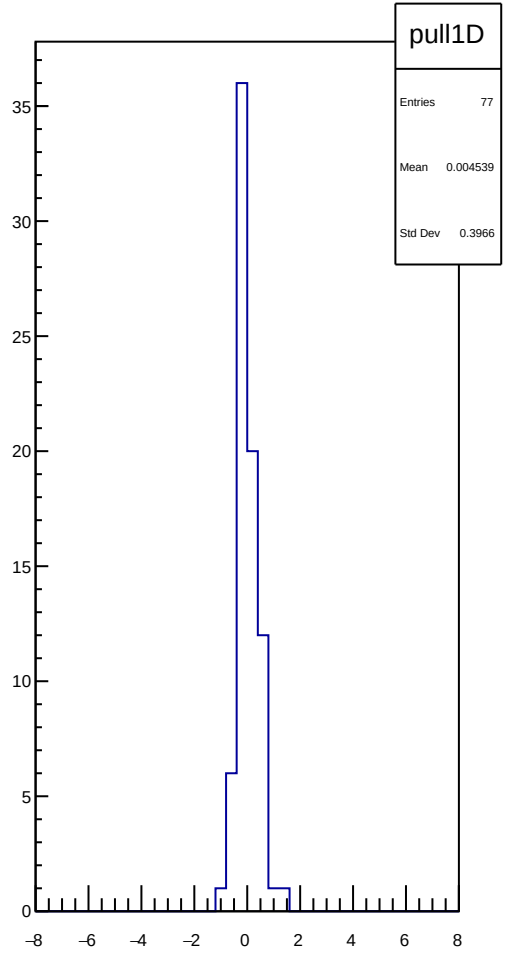

asym_bcm_an_ds3_rms vs run
χ² / ndf 7.834e+04 / 76
p0 456.2 ± 0.3688
700
650
600
550
500
450
400
350
300

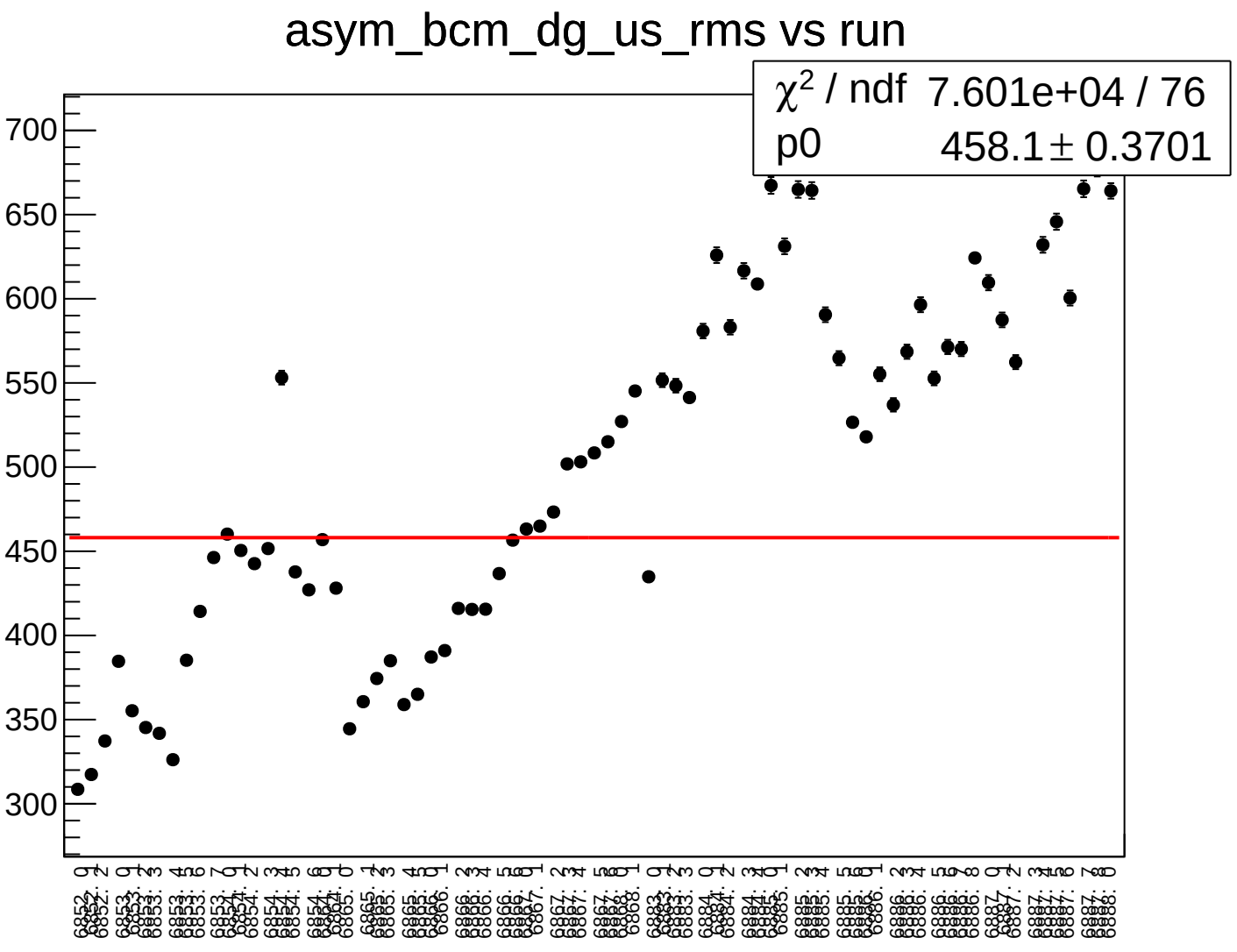

asym_bcm_an_us_mean vs run
χ² / ndf 11.28 / 76
p0 191.7 ± 519.7
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 122.4
Std Dev 94.74
1
0.5
0
−0.5
−1

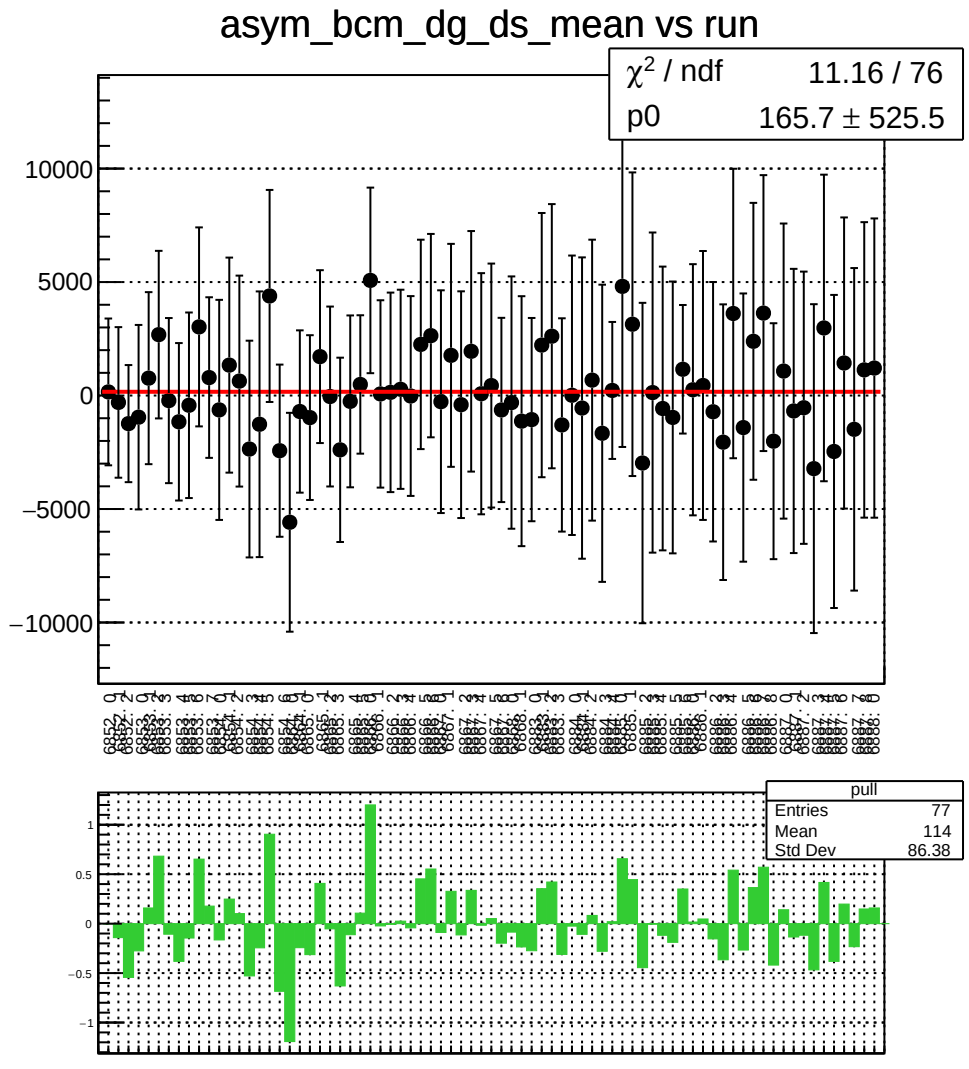

pull1D
Entries 77
Mean 0.005866
Std Dev 0.3827
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

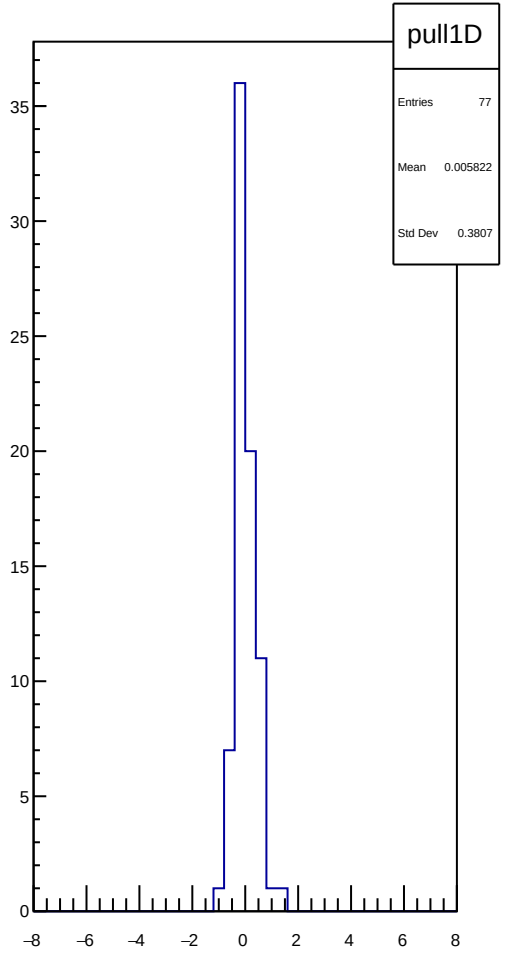

asym_bcm_an_us_rms vs run
χ^2 / ndf 7.811e+04 / 76
p0 454.6 ± 0.3675
700
650
600
550
500
450
400
350
300

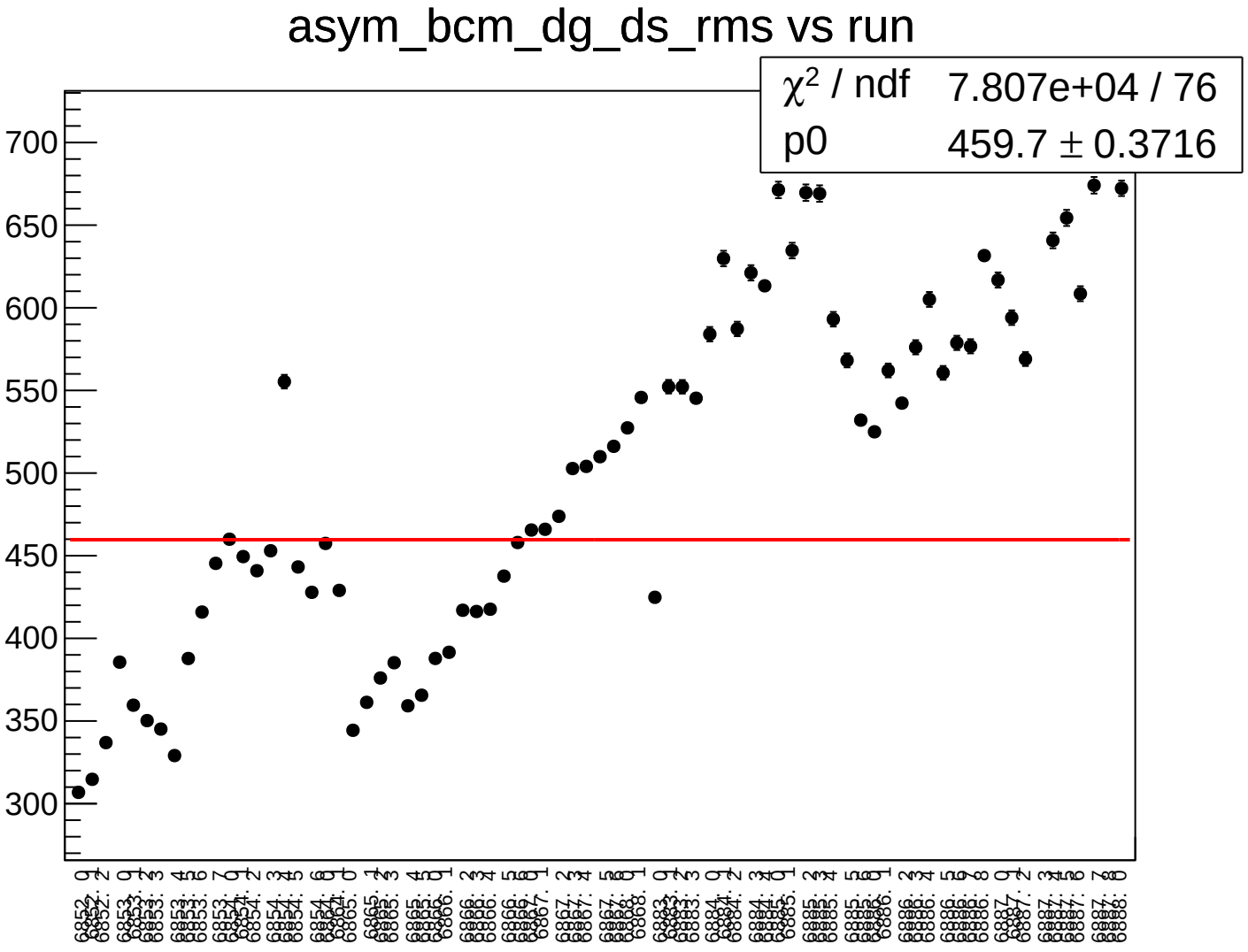

asym_bcm_dg_us_mean vs run
χ² / ndf 12.11 / 76
p0 244.2 ± 523.3
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 115.1
Std Dev 104.8
1
0.5
0
−0.5
−1

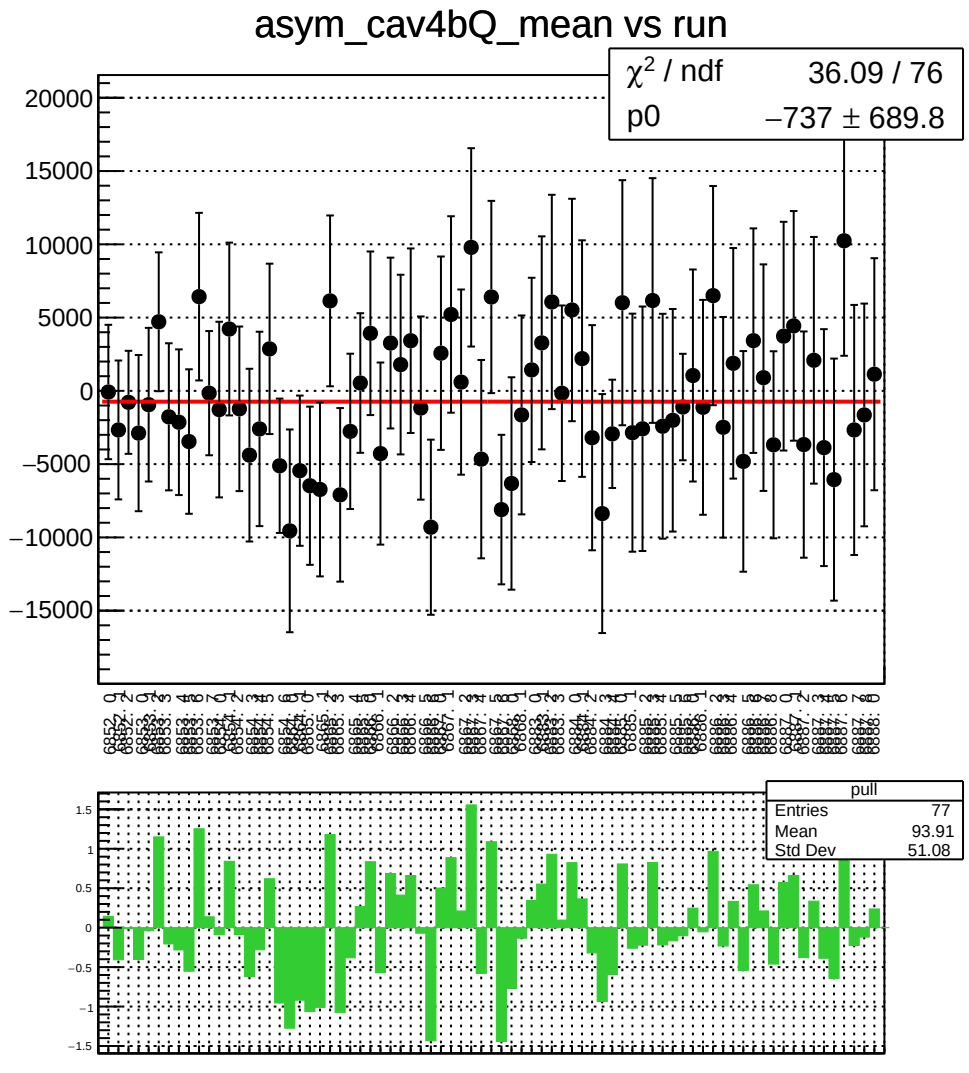

pull1D
Entries 77
Mean 0.004539
Std Dev 0.3966
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

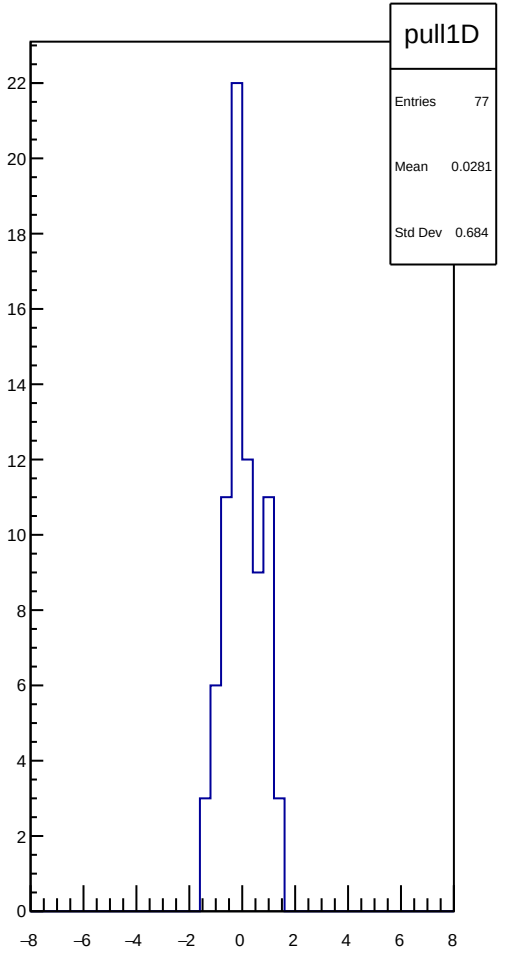

asym_bcm_dg_us_rms vs run
χ^2 / ndf 7.601e+04 / 76
p0 458.1 ± 0.3701
700
650
600
550
500
450
400
350
300

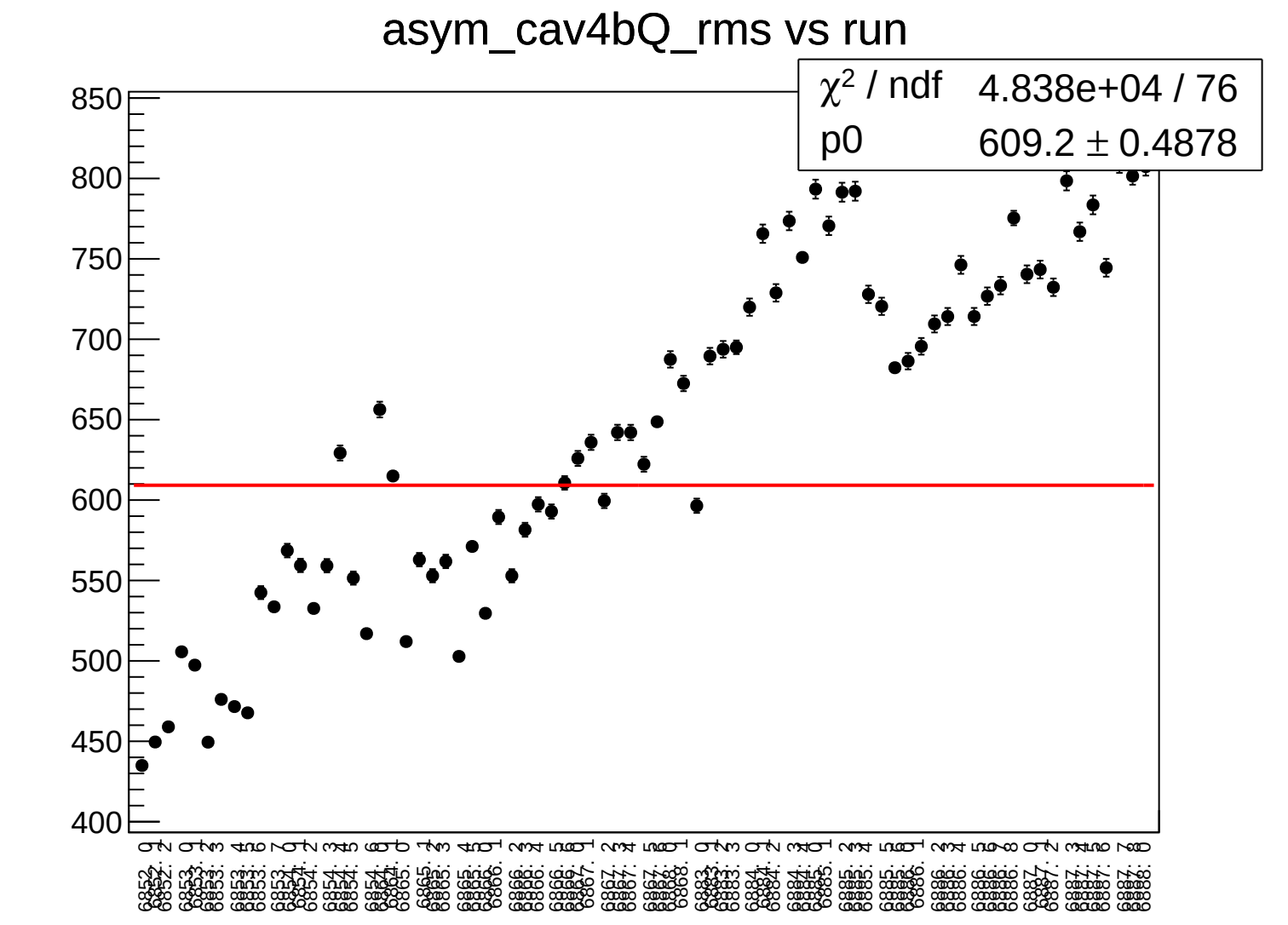

asym_bcm_dg_ds_mean vs run
χ² / ndf 11.16 / 76
p0 165.7 ± 525.5
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 114
Std Dev 86.38
1
0.5
0
−0.5
−1

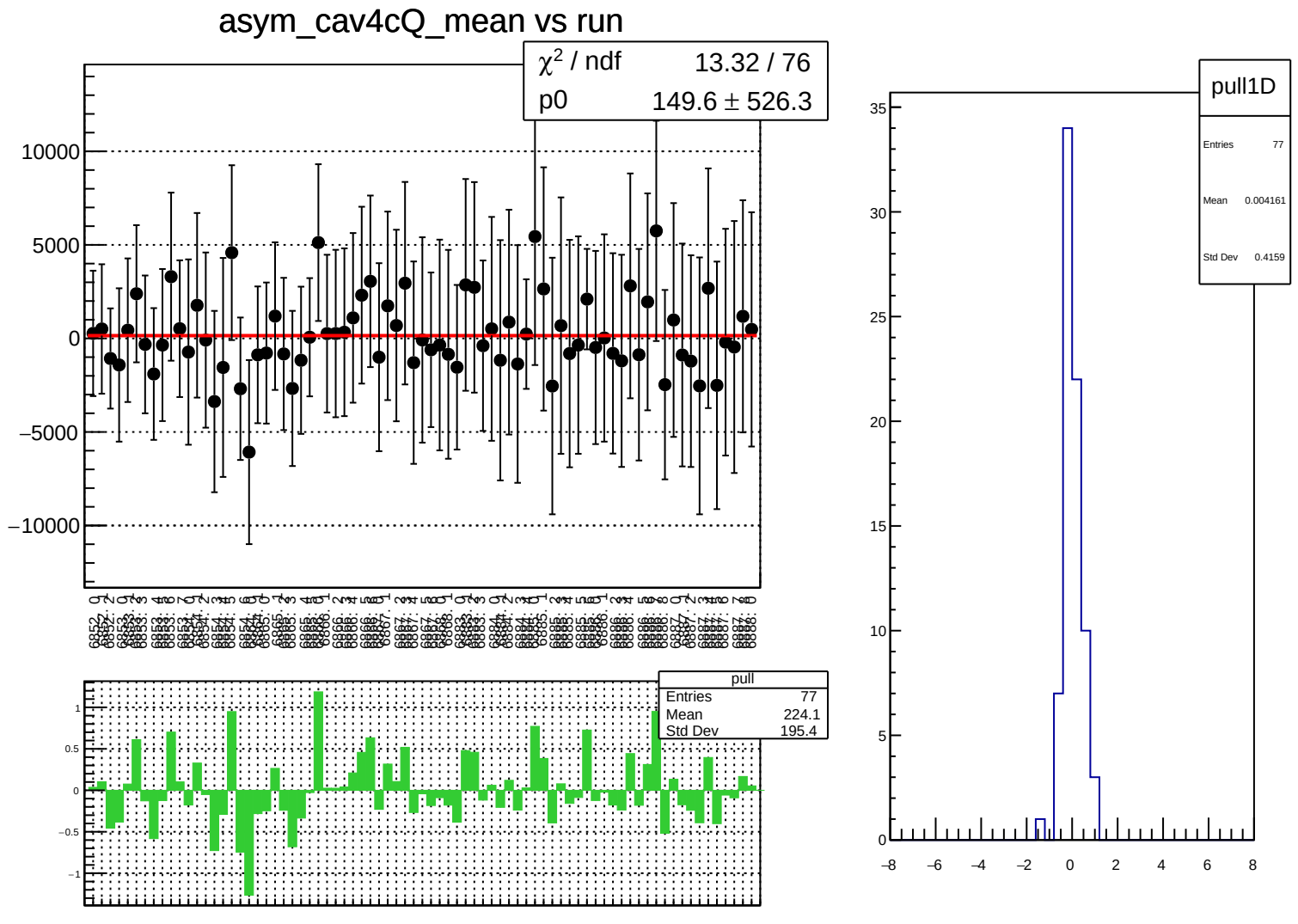

pull1D
Entries 77
Mean 0.005822
Std Dev 0.3807
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

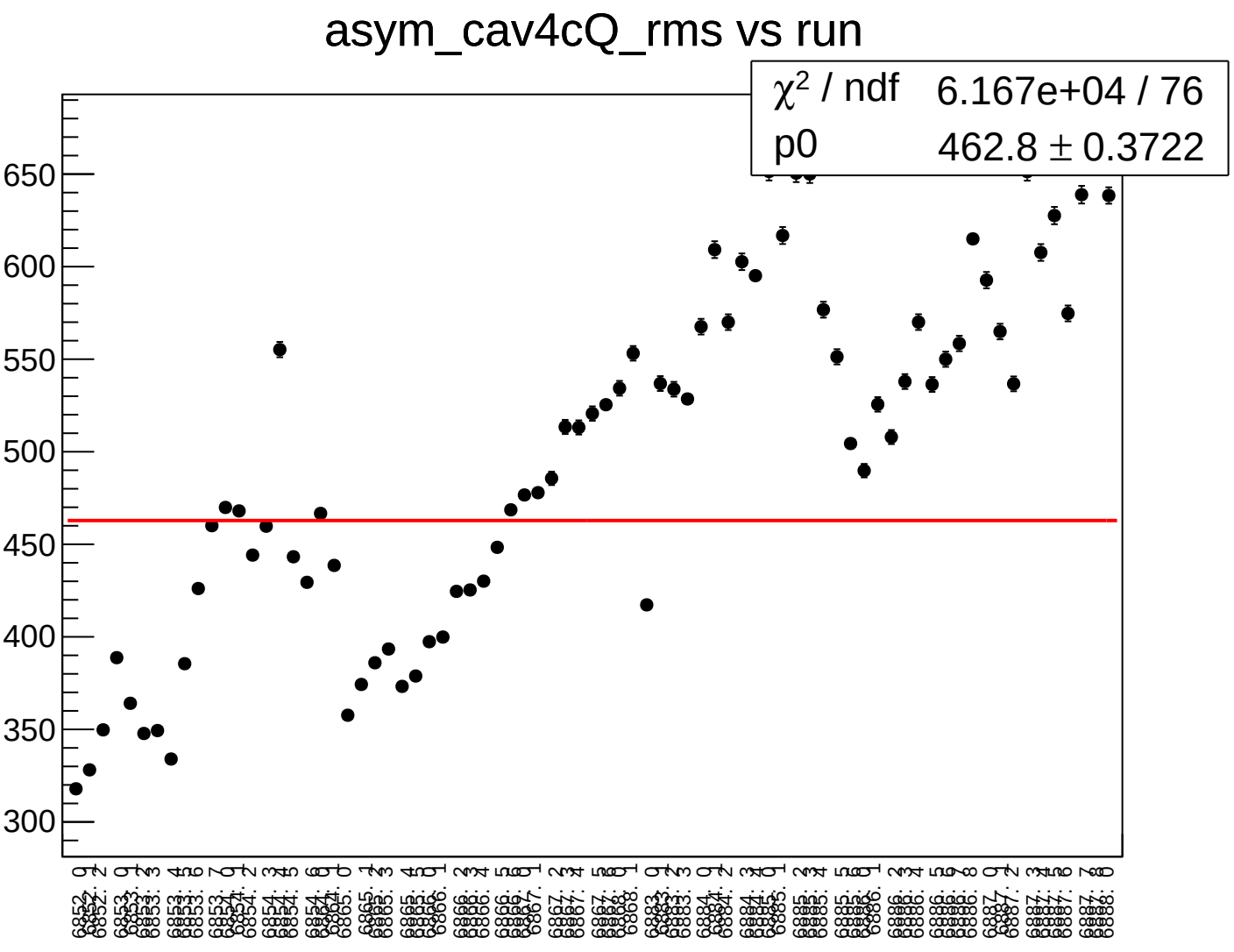

asym_bcm_dg_ds_rms vs run
χ² / ndf 7.807e+04 / 76
p0 459.7 ± 0.3716
700
650
600
550
500
450
400
350
300

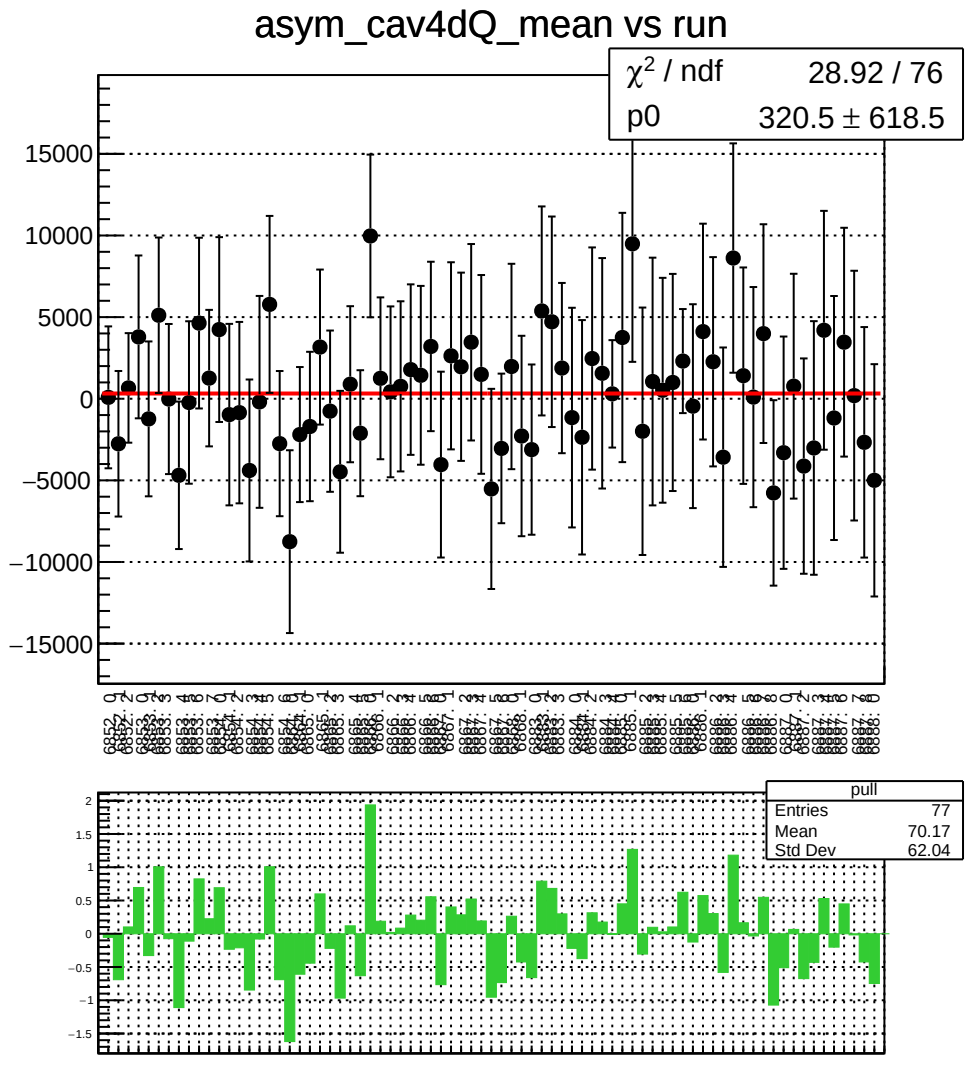

asym_cav4bQ_mean vs run
χ² / ndf 36.09 / 76
p0 −737 ± 689.8
pull
Entries 77
Mean 93.91
Std Dev 51.08

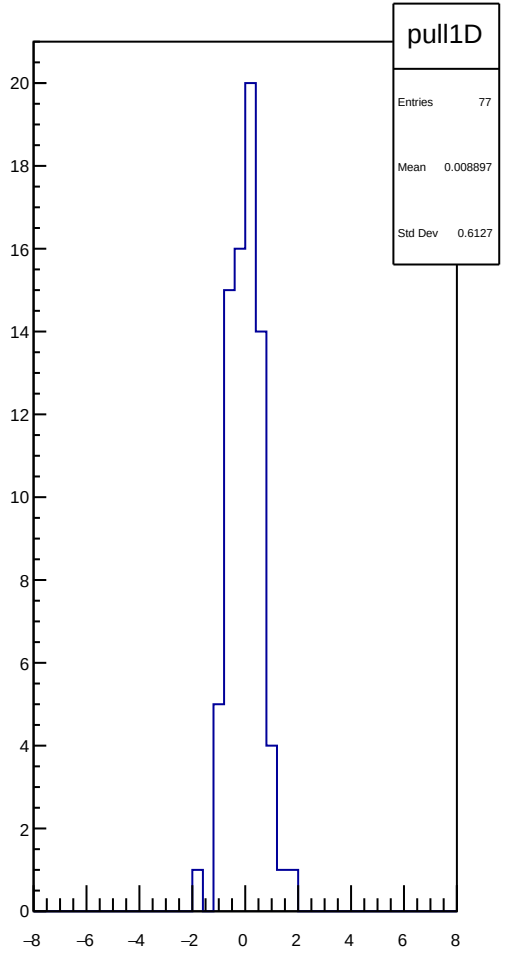

pull1D
Entries 77
Mean 0.0281
Std Dev 0.684

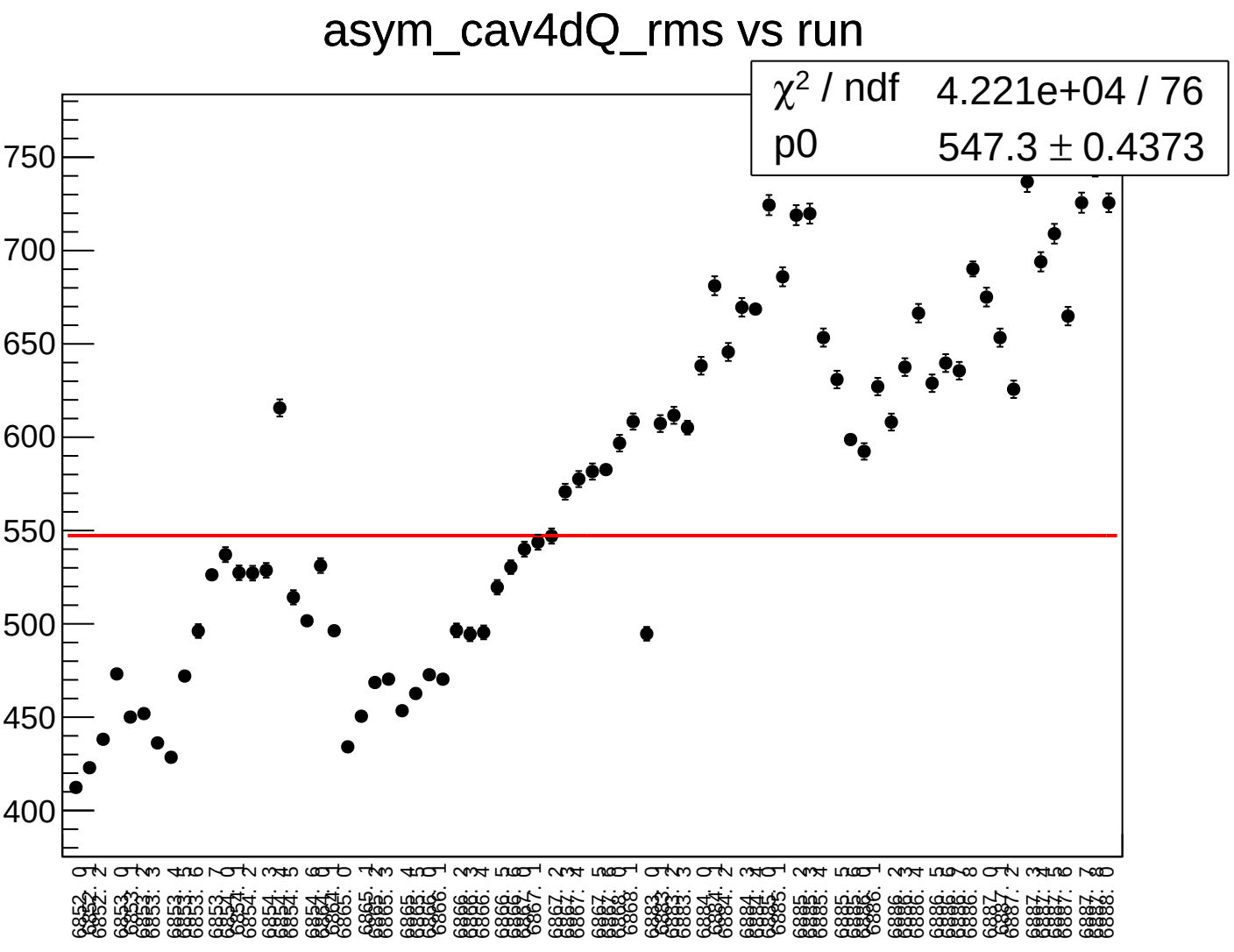

asym_cav4bQ_rms vs run
χ² / ndf 4.838e+04 / 76
p0 609.2 ± 0.4878
850
800
750
700
650
600
550
500
450
400

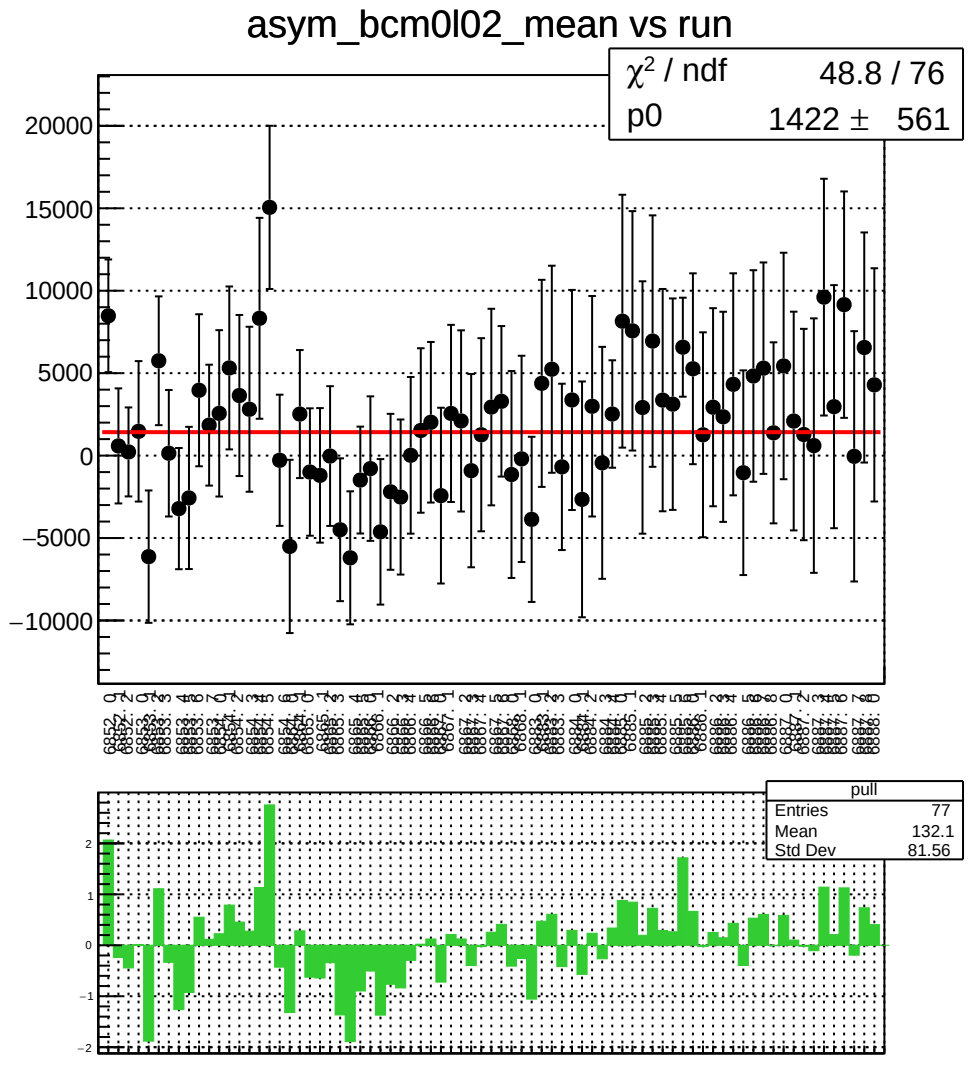

asym_cav4cQ_mean vs run
χ² / ndf 13.32 / 76
p0 149.6 ± 526.3
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 224.1
Std Dev 195.4
1
0.5
0
−0.5
−1
pull1D
Entries 77
Mean 0.004161
Std Dev 0.4159
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

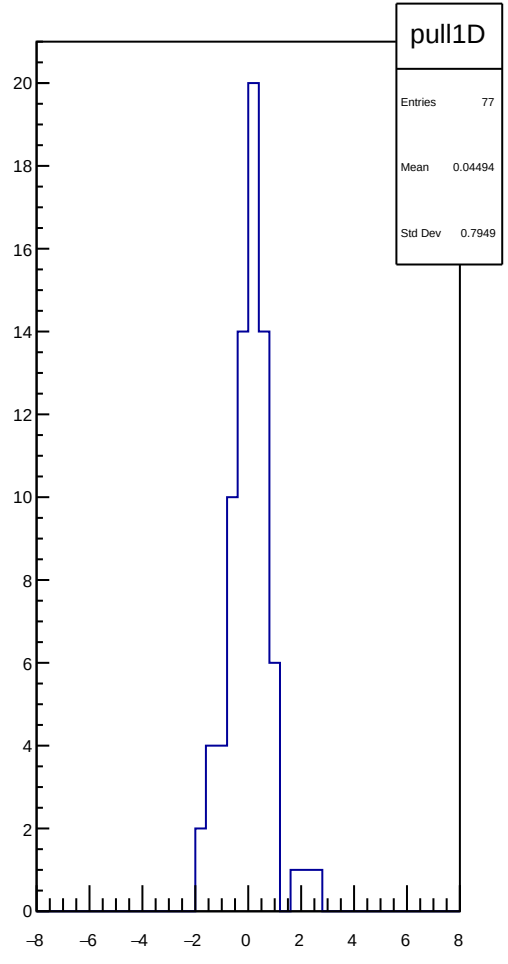

asym_cav4cQ_rms vs run
χ² / ndf 6.167e+04 / 76
p0 462.8 ± 0.3722
650
600
550
500
450
400
350
300

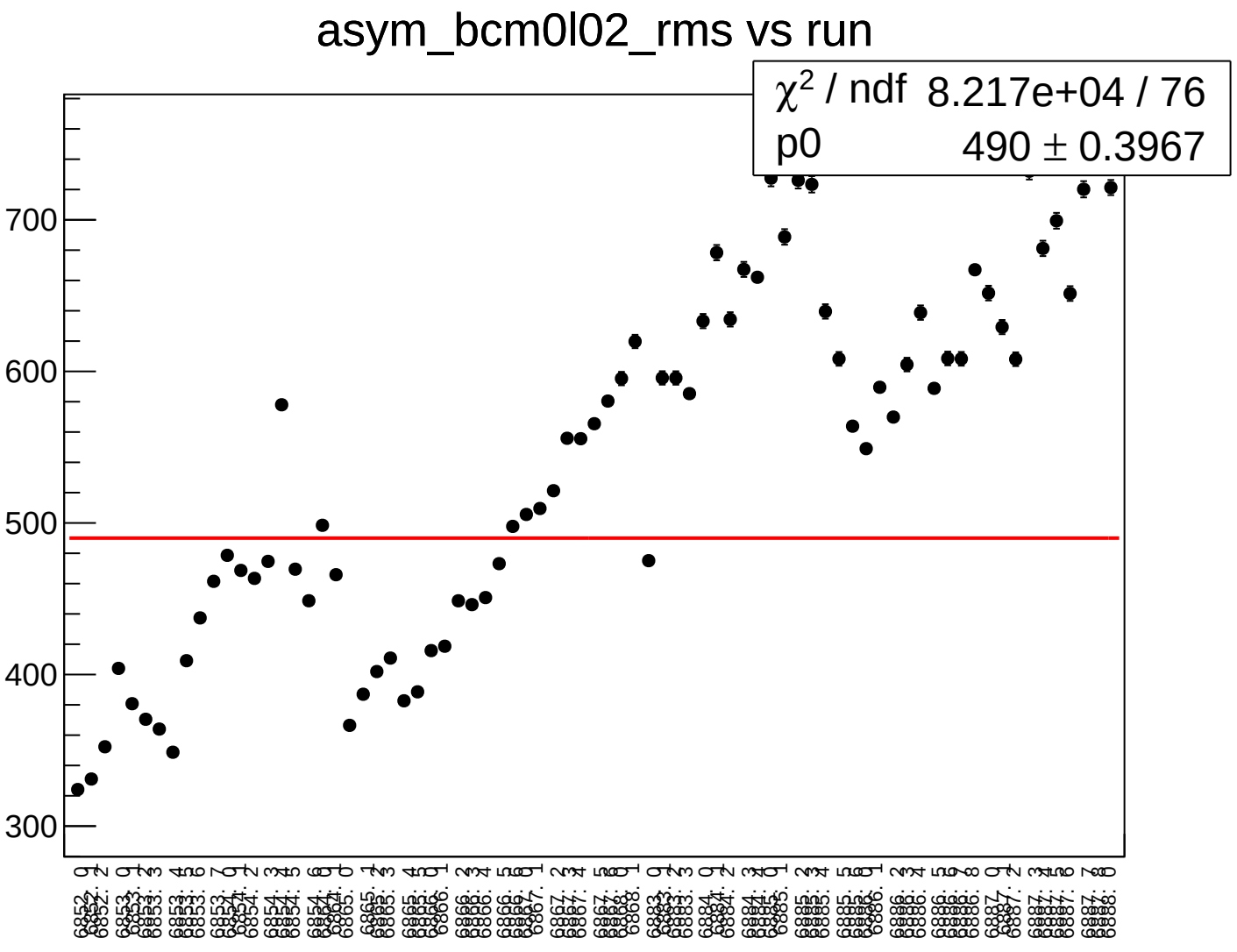

asym_cav4dQ_mean vs run
χ² / ndf 28.92 / 76
p0 320.5 ± 618.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 77
Mean 70.17
Std Dev 62.04
2
1.5
1
0.5
0
−0.5
−1
−1.5

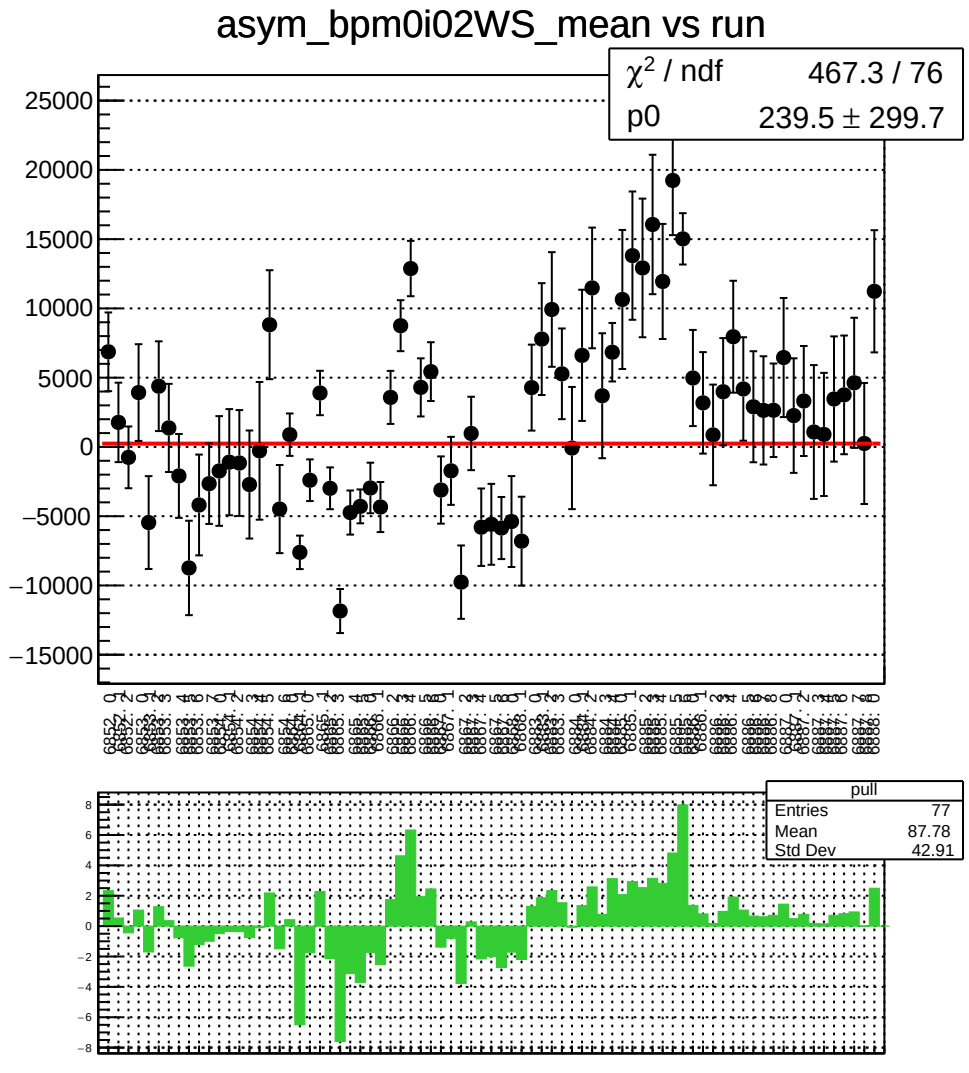

pull1D
Entries 77
Mean 0.008897
Std Dev 0.6127
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

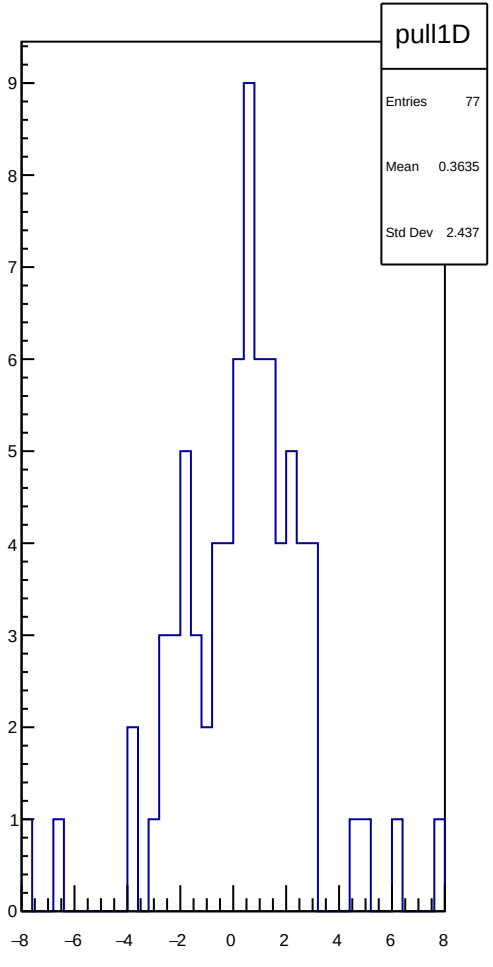

asym_cav4dQ_rms vs run
χ² / ndf 4.221e+04 / 76
p0 547.3 ± 0.4373
750
700
650
600
550
500
450
400

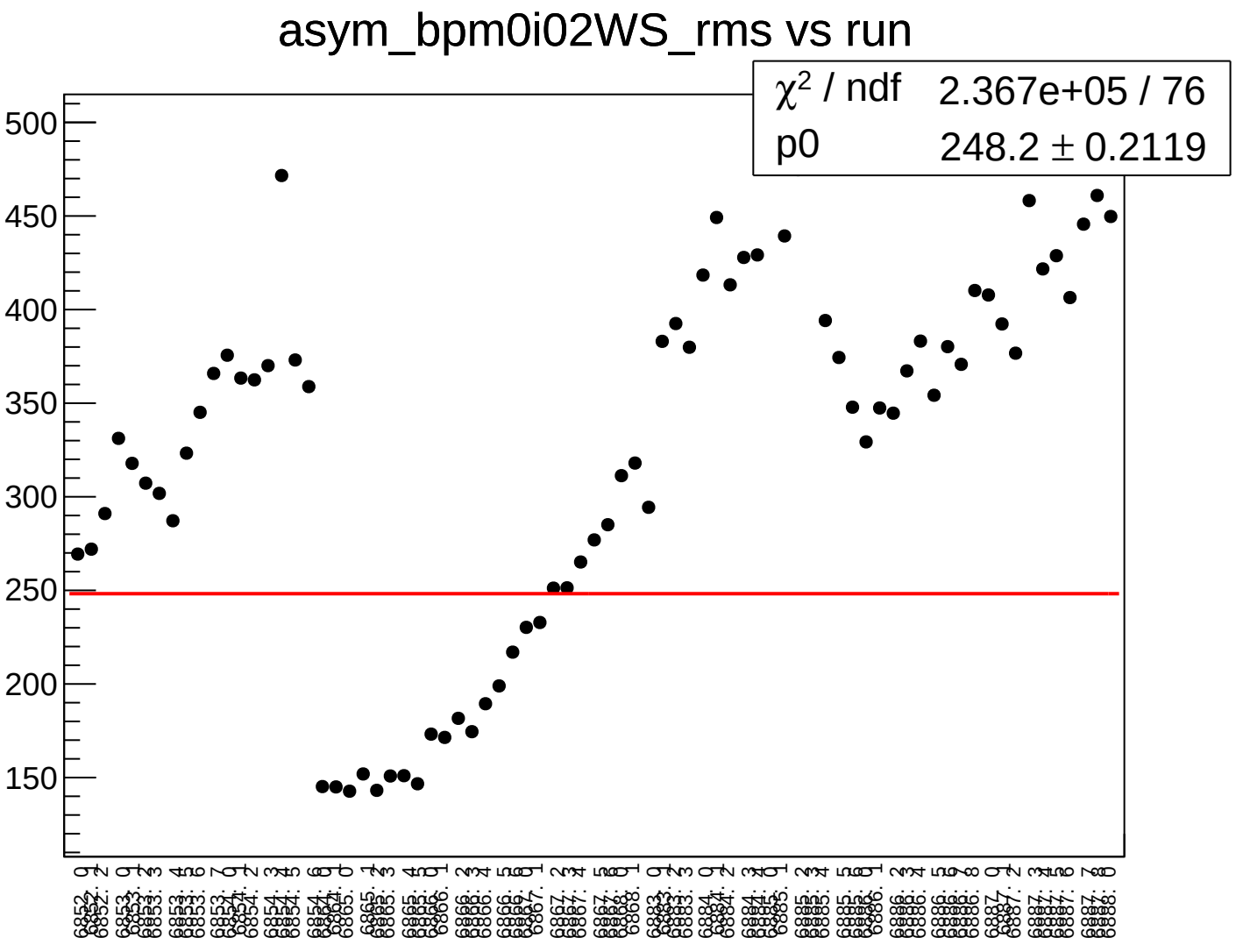

asym_bcm0l02_mean vs run
χ² / ndf 48.8 / 76
p0 1422 ± 561
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 132.1
Std Dev 81.56
2
1
0
−1
−2

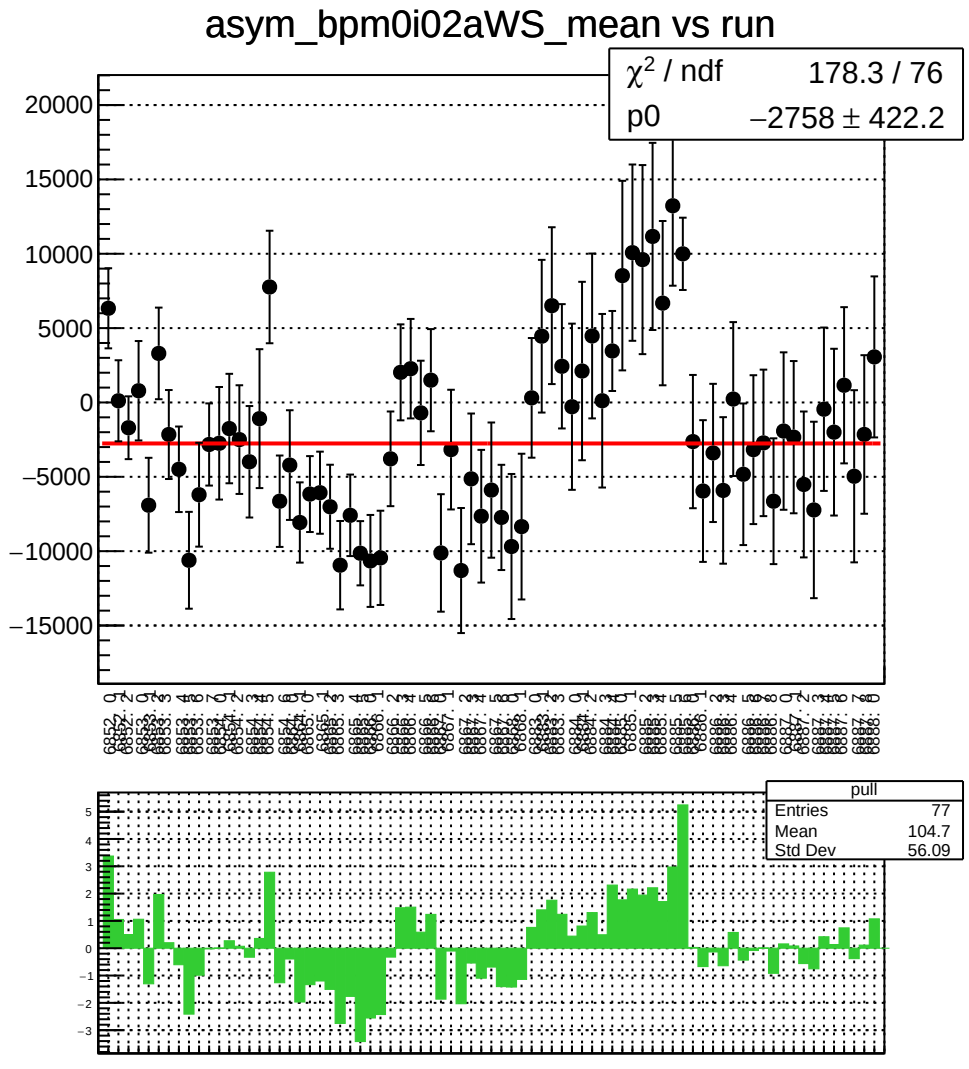

pull1D
Entries 77
Mean 0.04494
Std Dev 0.7949
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

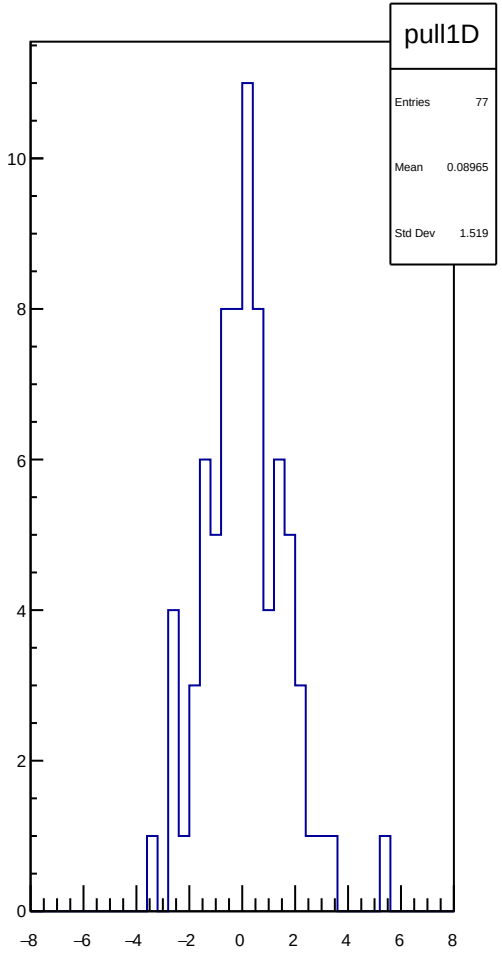

asym_bcm0l02_rms vs run
χ² / ndf 8.217e+04 / 76
p0 490 ± 0.3967
700
600
500
400
300

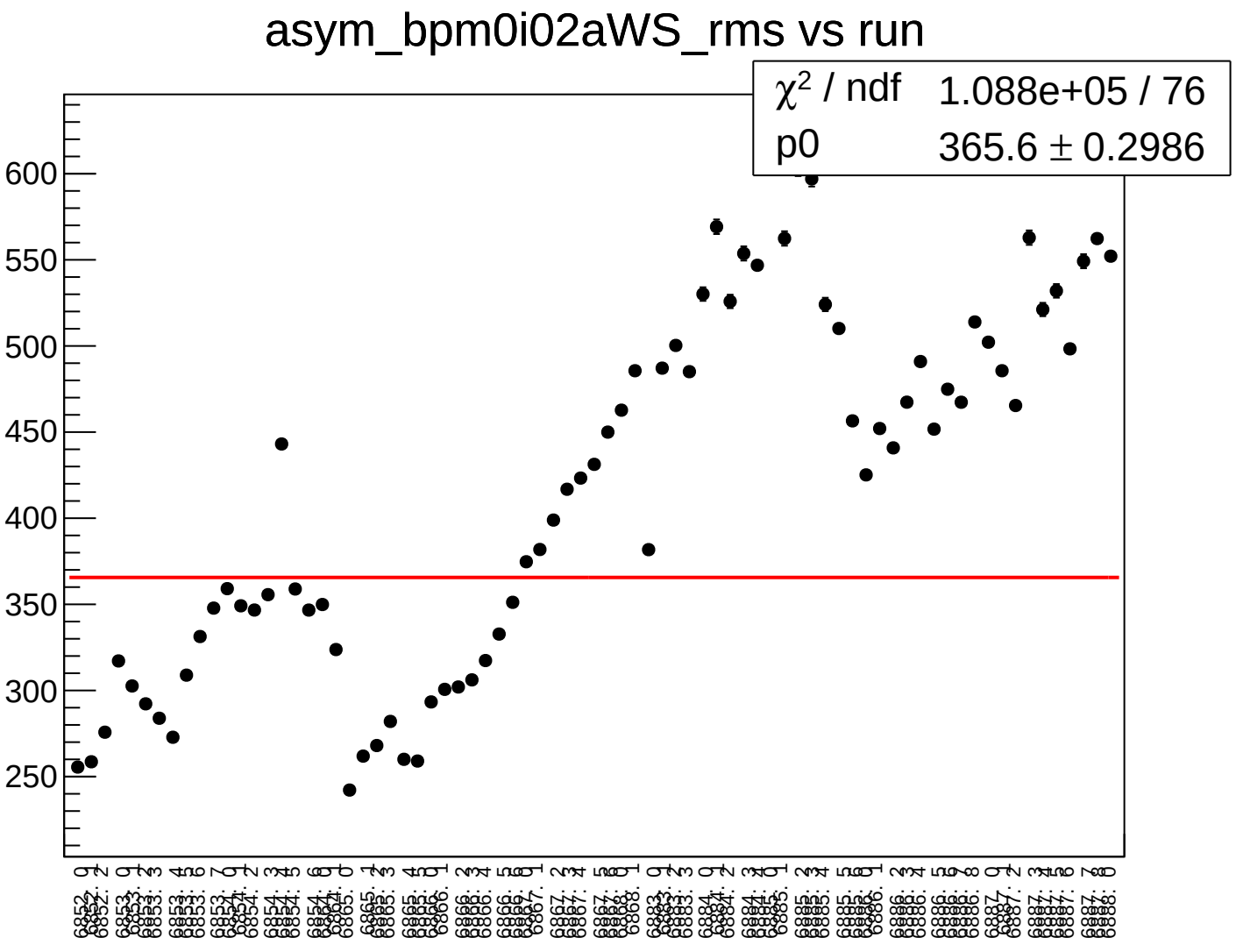

asym_bpm0i02WS_mean vs run
χ² / ndf 467.3 / 76
p0 239.5 ± 299.7
pull
Entries 77
Mean 87.78
Std Dev 42.91

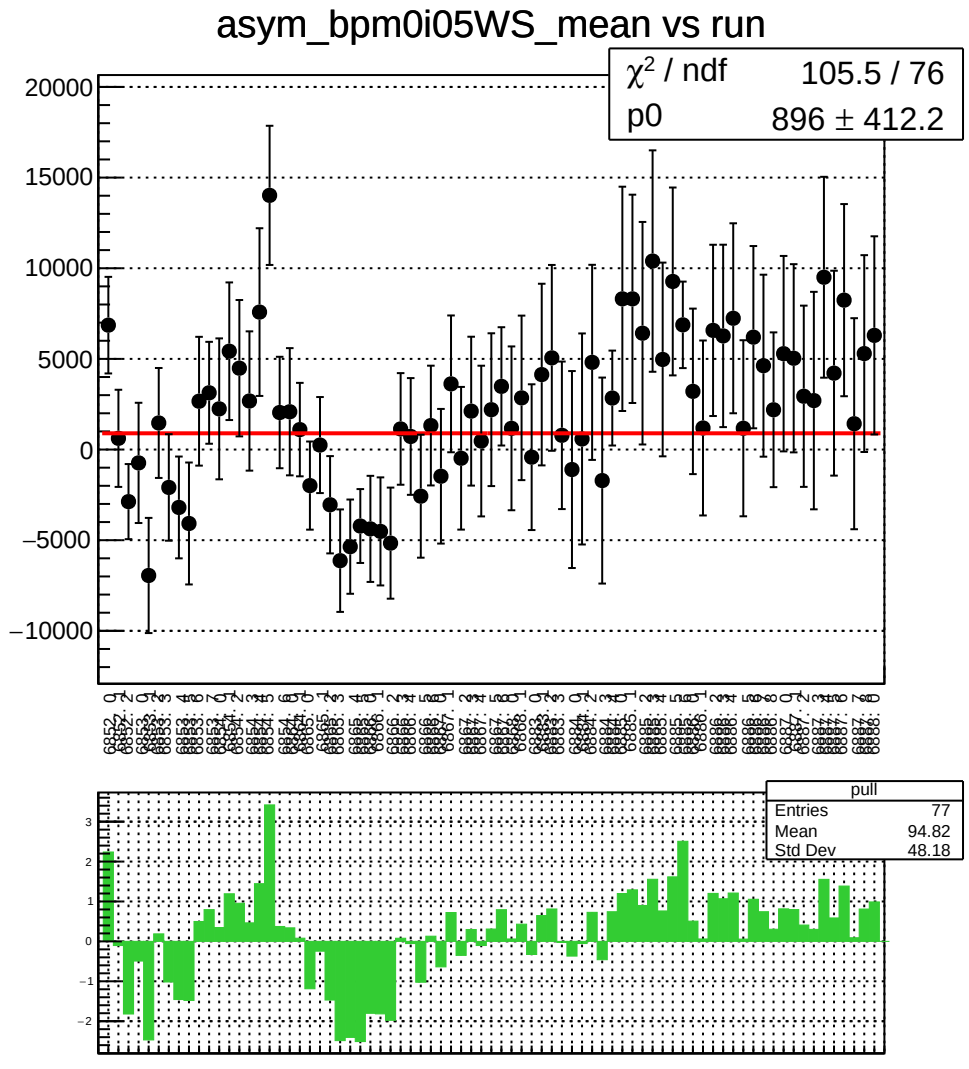

pull1D
Entries 77
Mean 0.3635
Std Dev 2.437

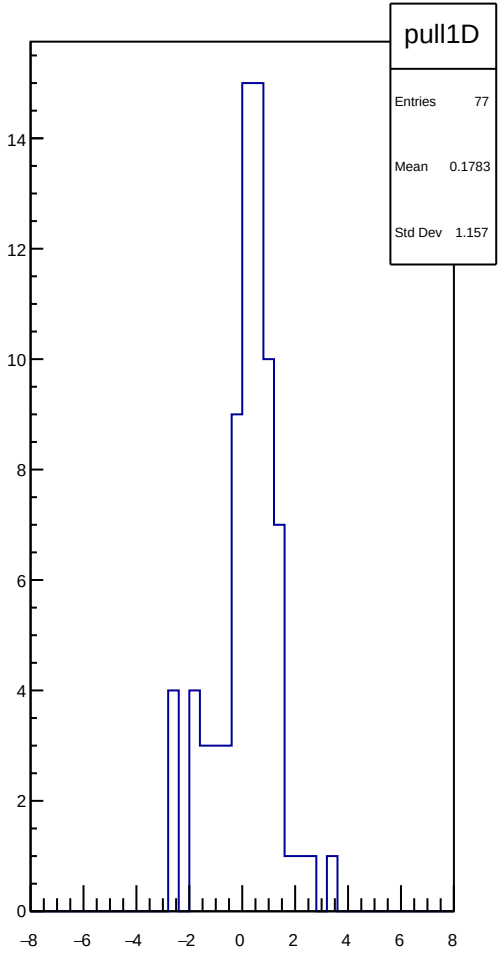

asym_bpm0i02WS_rms vs run
χ² / ndf 2.367e+05 / 76
p0 248.2 ± 0.2119
500
450
400
350
300
250
200
150

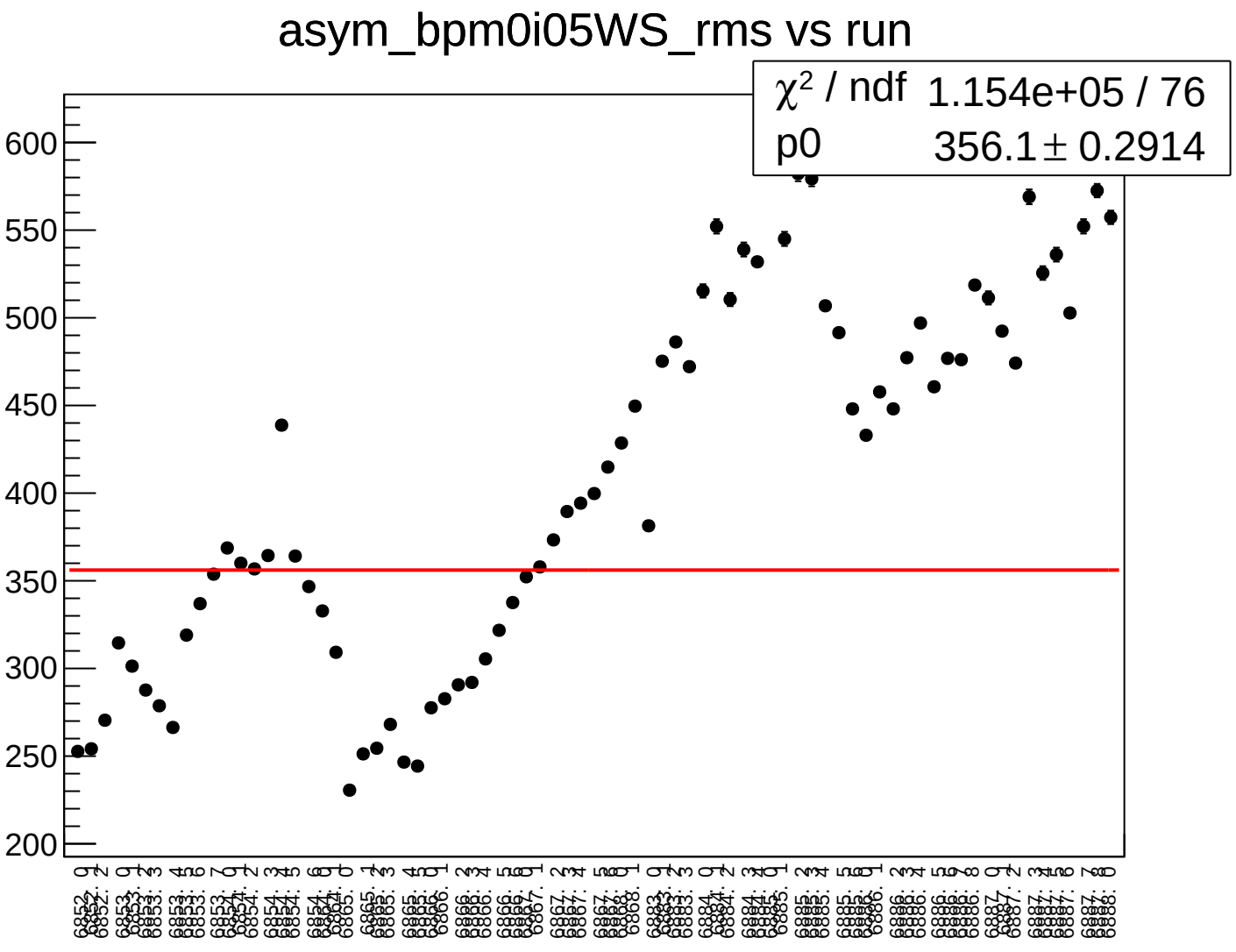

asym_bpm0i02aWS_mean vs run
χ² / ndf 178.3 / 76
p0 −2758 ± 422.2
pull
Entries 77
Mean 104.7
Std Dev 56.09

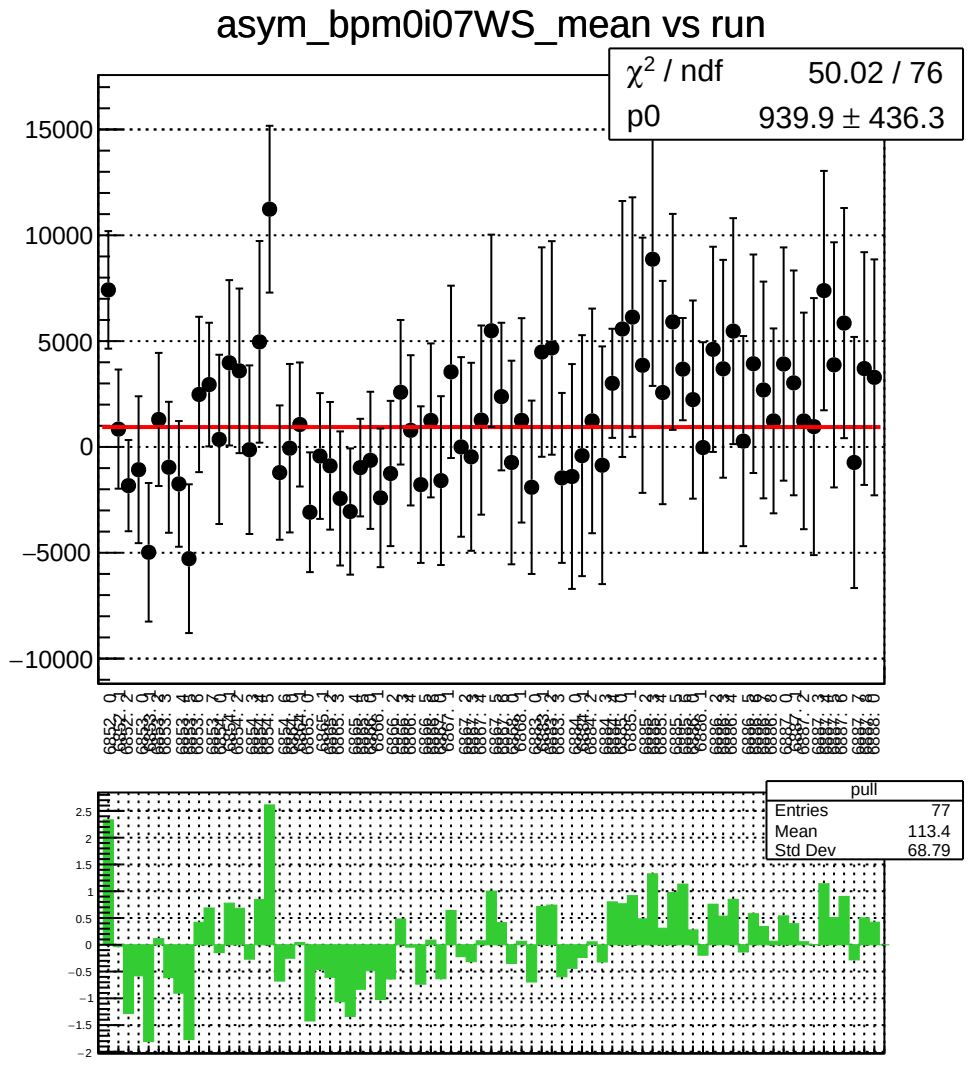

pull1D
Entries 77
Mean 0.08965
Std Dev 1.519

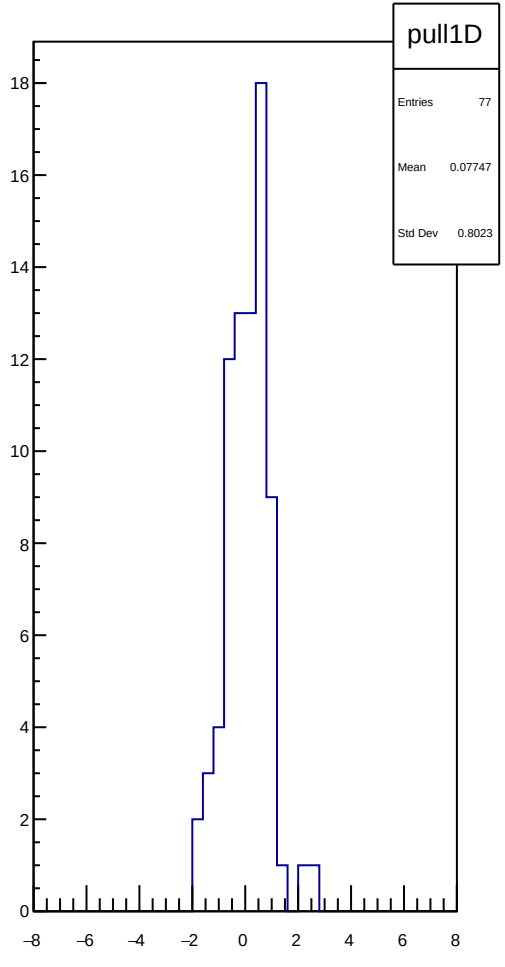

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 1.088e+05 / 76
p0 365.6 ± 0.2986
600
550
500
450
400
350
300
250

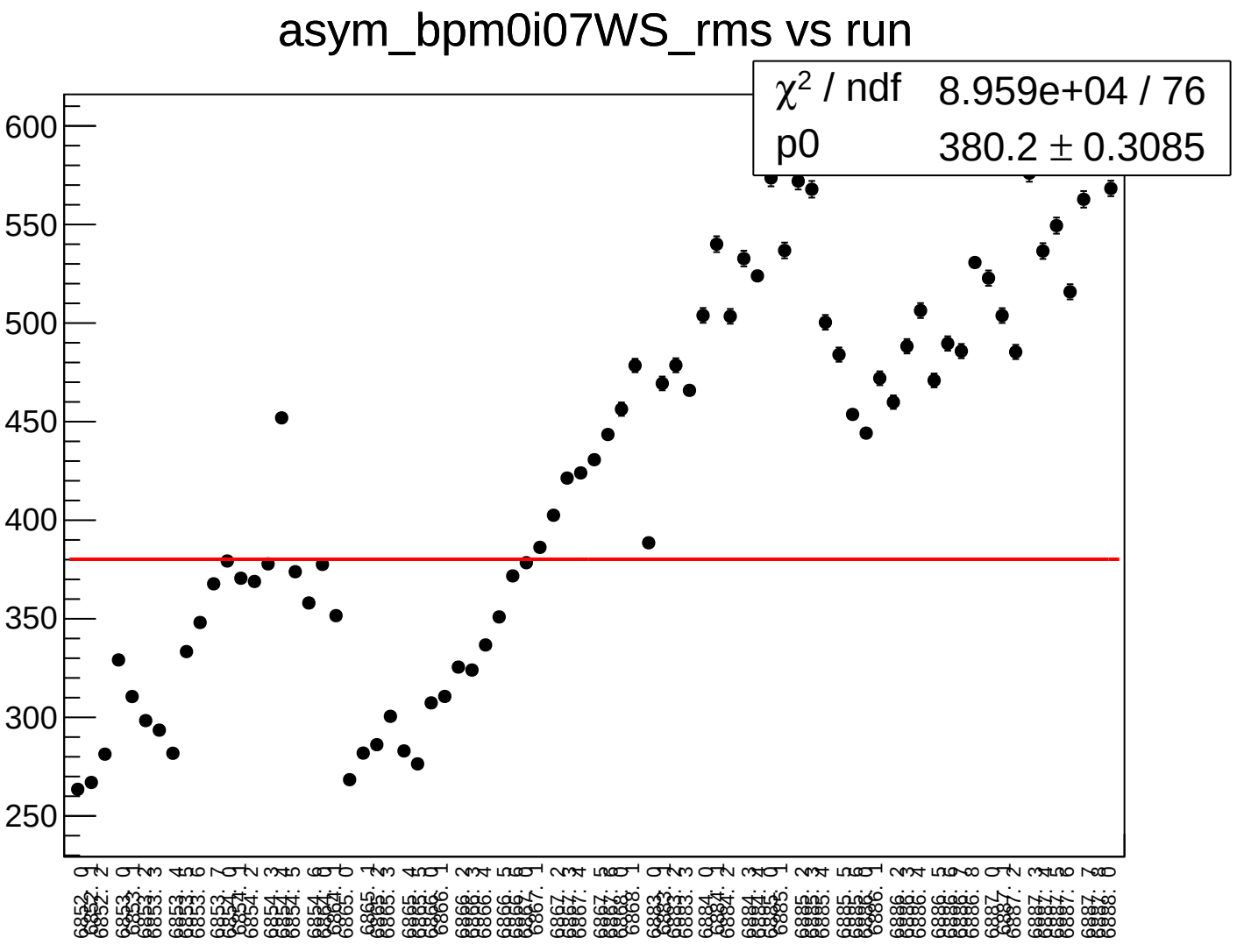

asym_bpm0i05WS_mean vs run
χ² / ndf 105.5 / 76
p0 896 ± 412.2
pull
Entries 77
Mean 94.82
Std Dev 48.18

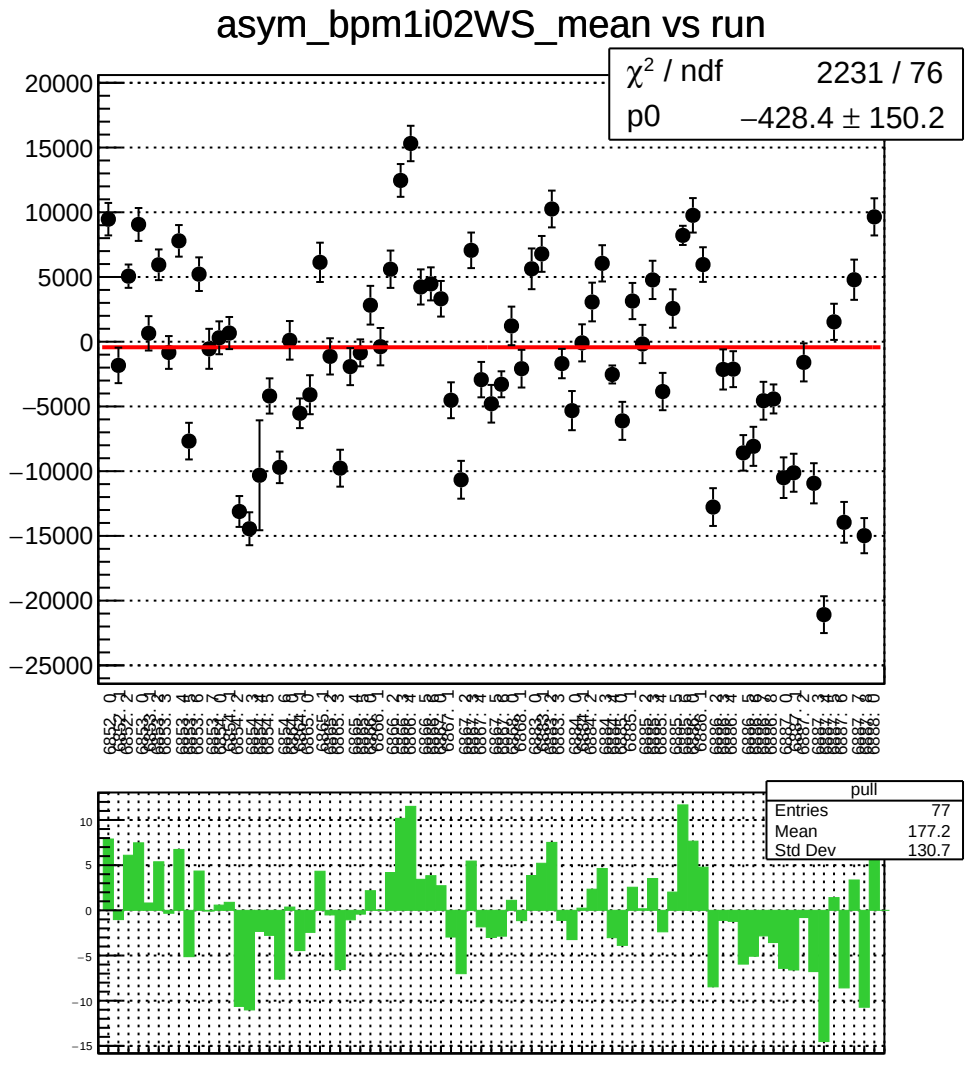

pull1D
Entries 77
Mean 0.1783
Std Dev 1.157

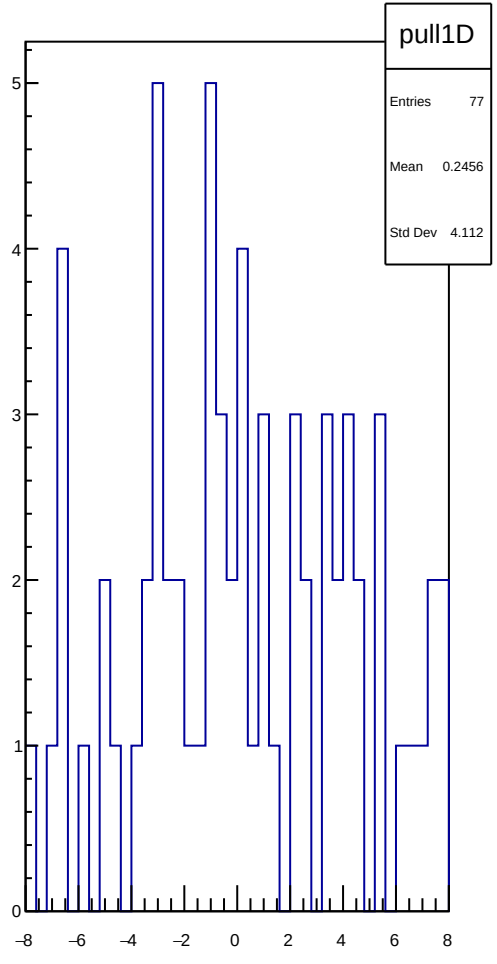

asym_bpm0i05WS_rms vs run
χ² / ndf 1.154e+05 / 76
p0 356.1 ± 0.2914
600
550
500
450
400
350
300
250
200

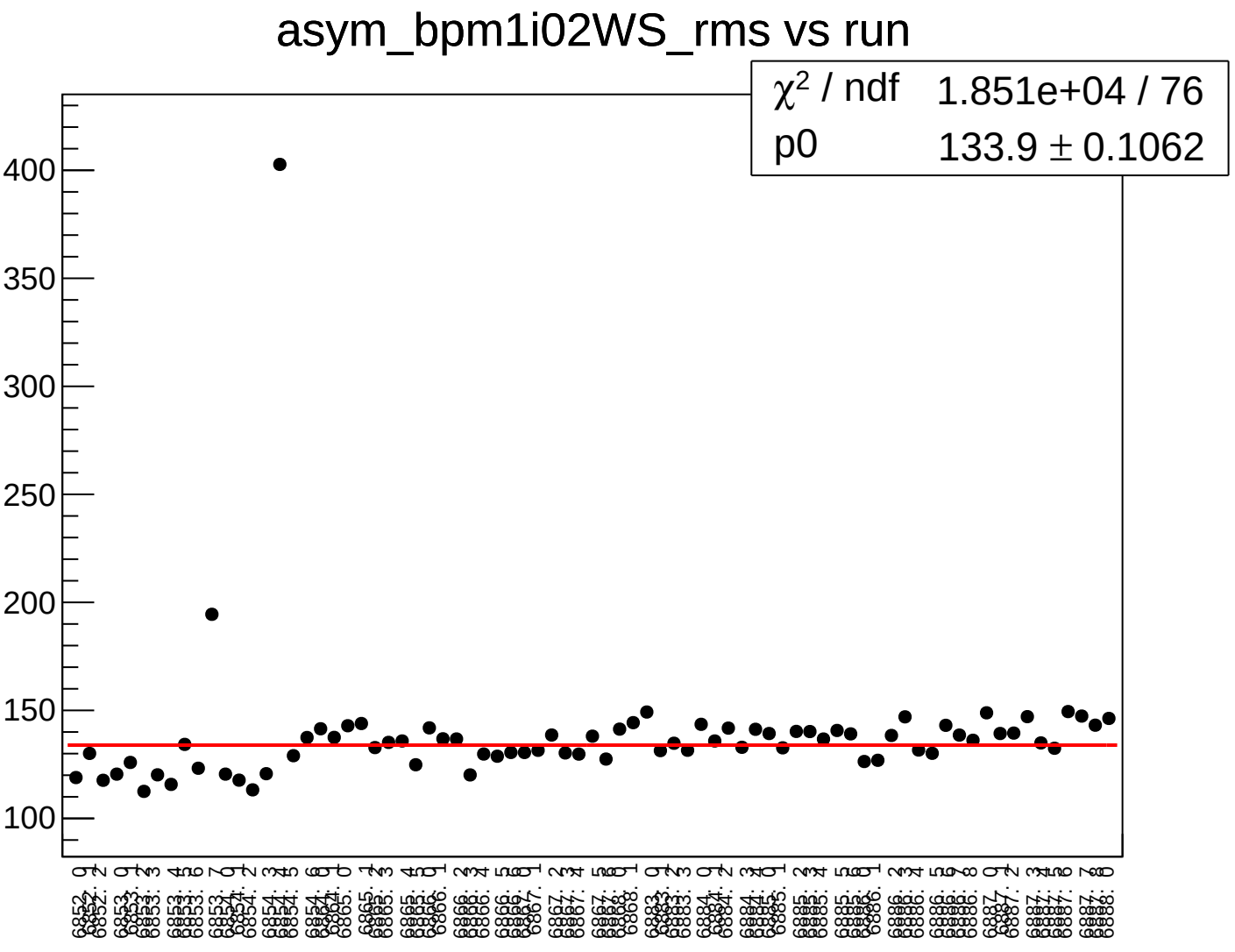

asym_bpm0i07WS_mean vs run
χ² / ndf 50.02 / 76
p0 939.9 ± 436.3
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 113.4
Std Dev 68.79
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

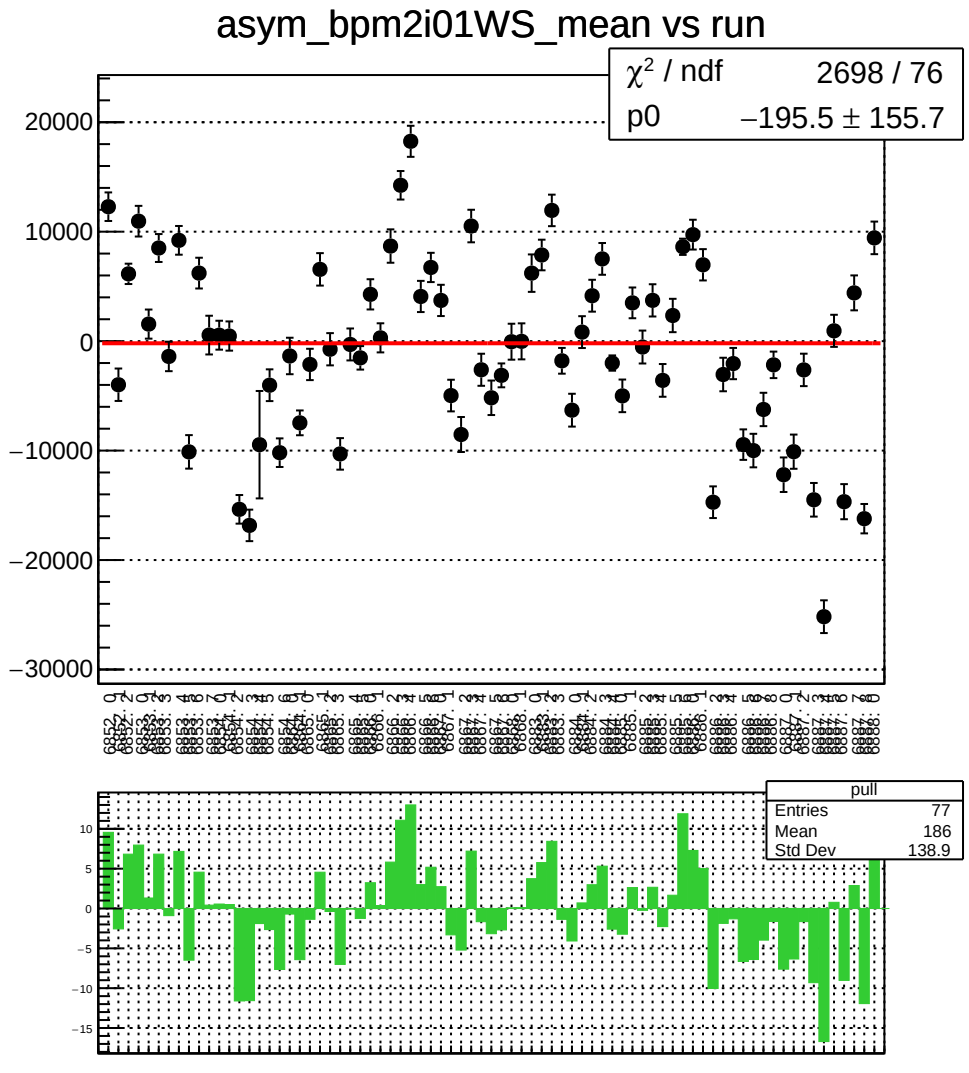

pull1D
Entries 77
Mean 0.07747
Std Dev 0.8023
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

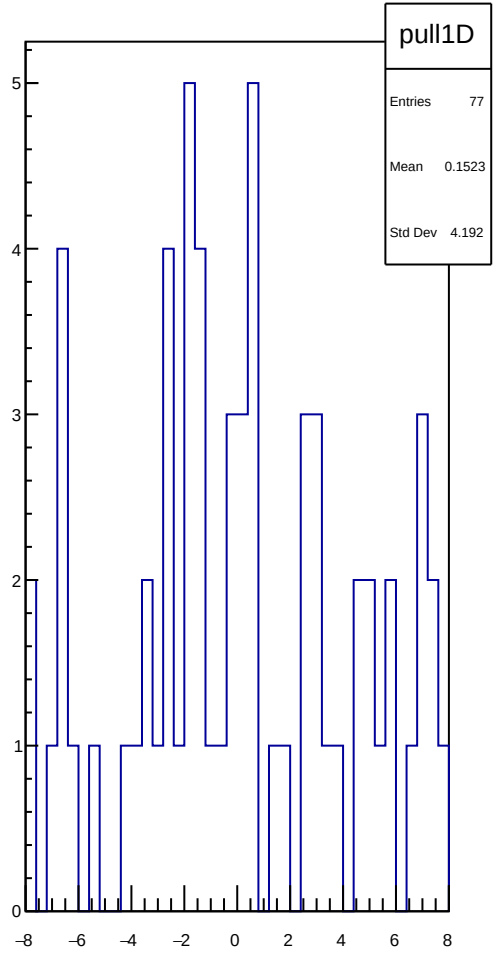

asym_bpm0i07WS_rms vs run
χ^2 / ndf 8.959e+04 / 76
p0 380.2 ± 0.3085
600
550
500
450
400
350
300
250

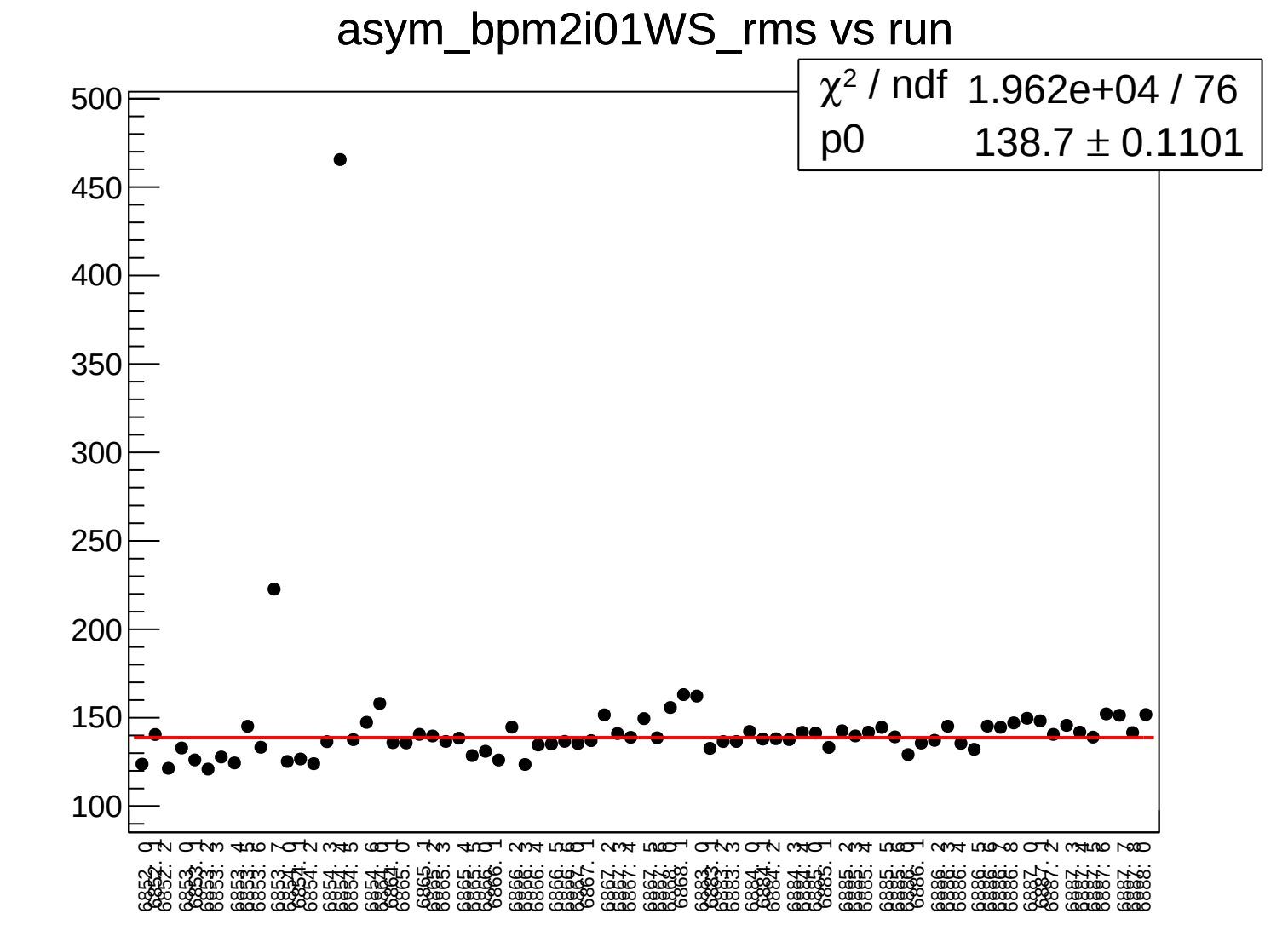

asym_bpm1i02WS_mean vs run
χ² / ndf 2231 / 76
p0 −428.4 ± 150.2
pull
Entries 77
Mean 177.2
Std Dev 130.7

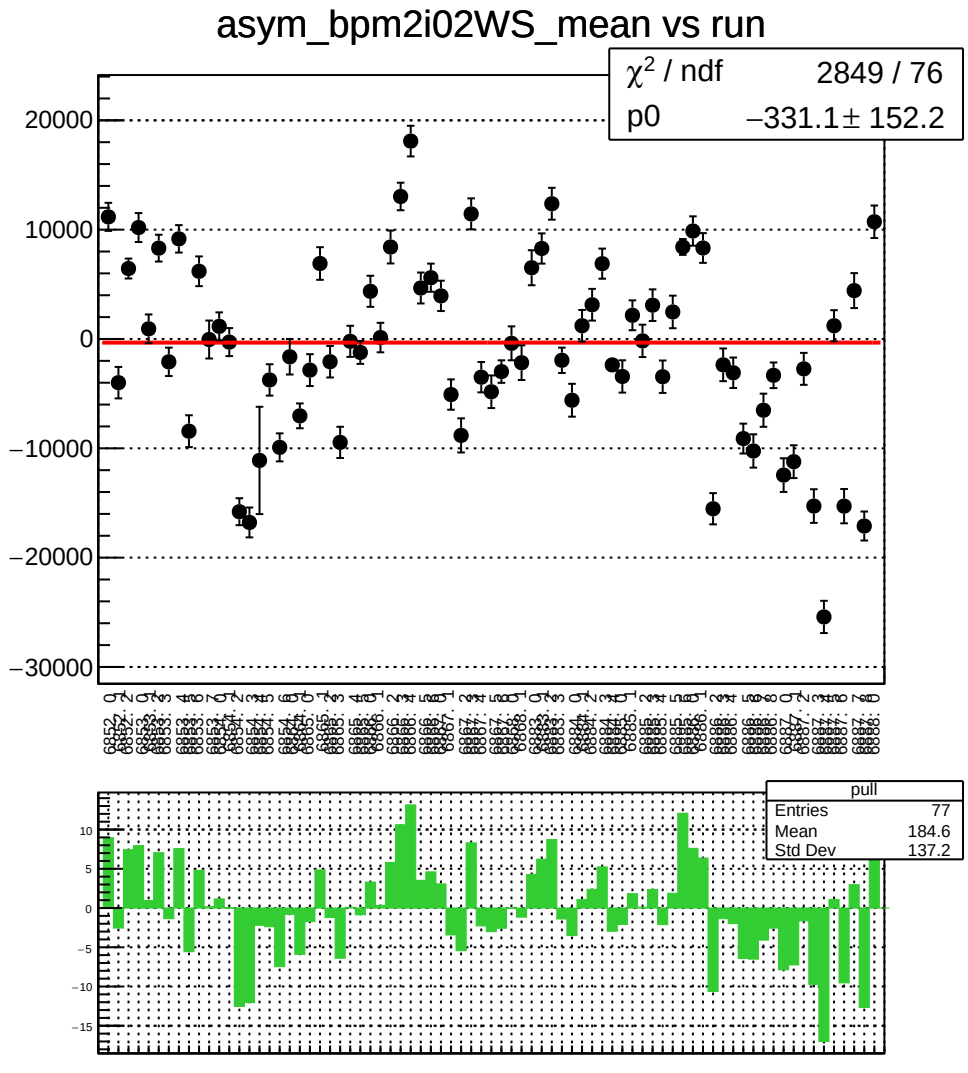

pull1D
Entries 77
Mean 0.2456
Std Dev 4.112

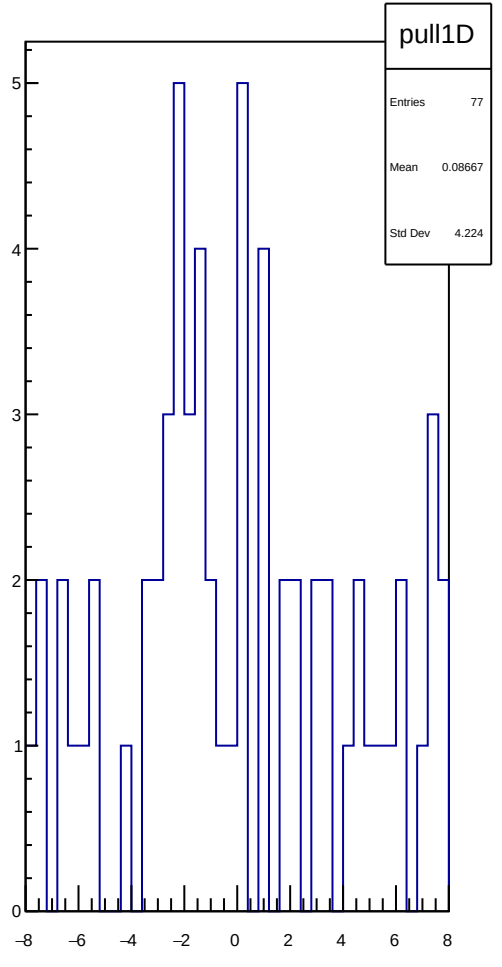

asym_bpm1i02WS_rms vs run
χ² / ndf 1.851e+04 / 76
p0 133.9 ± 0.1062
400
350
300
250
200
150
100

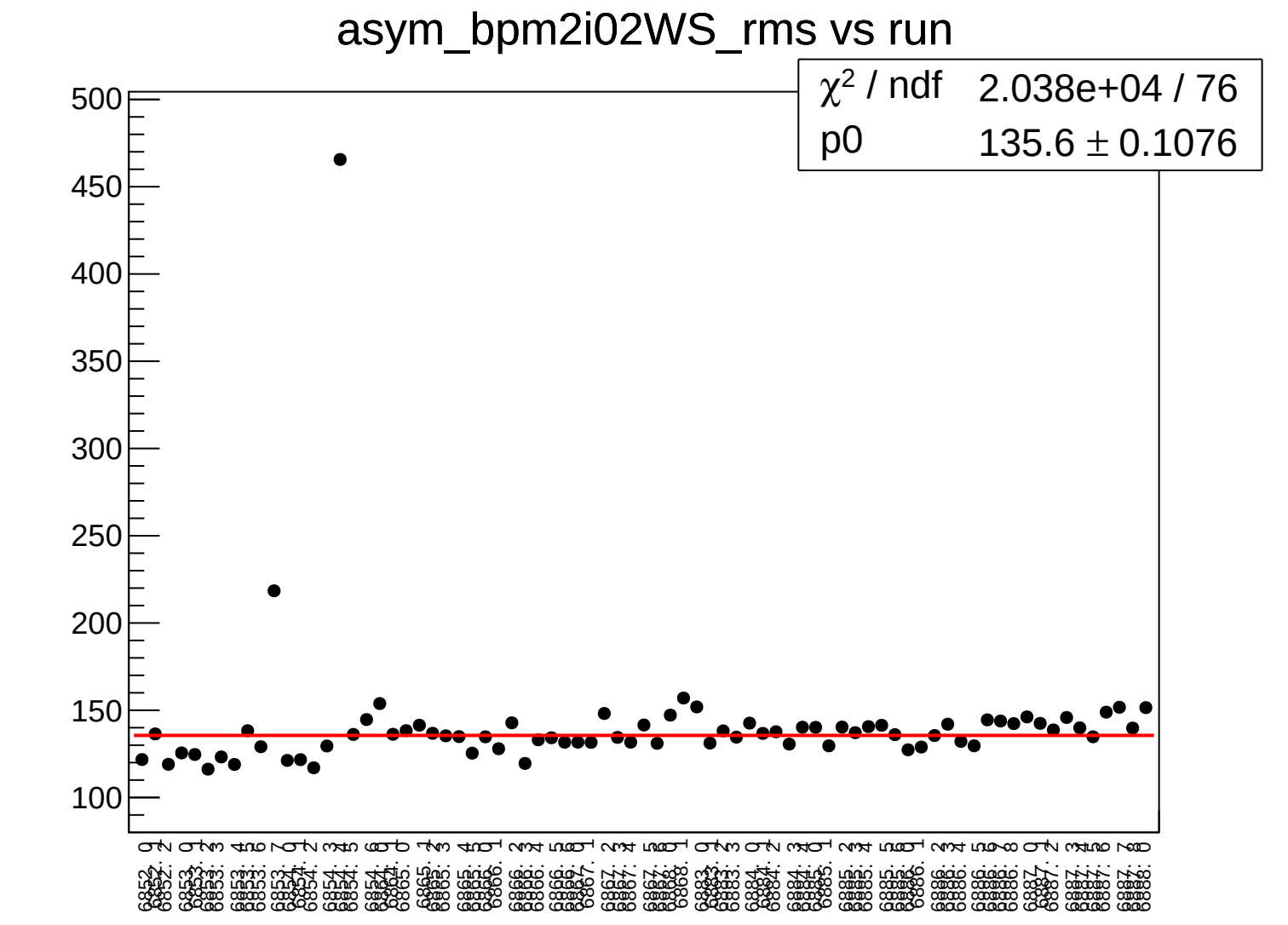

asym_bpm2i01WS_mean vs run
χ² / ndf 2698 / 76
p0 −195.5 ± 155.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 77
Mean 186
Std Dev 138.9
10
5
0
−5
−10
−15

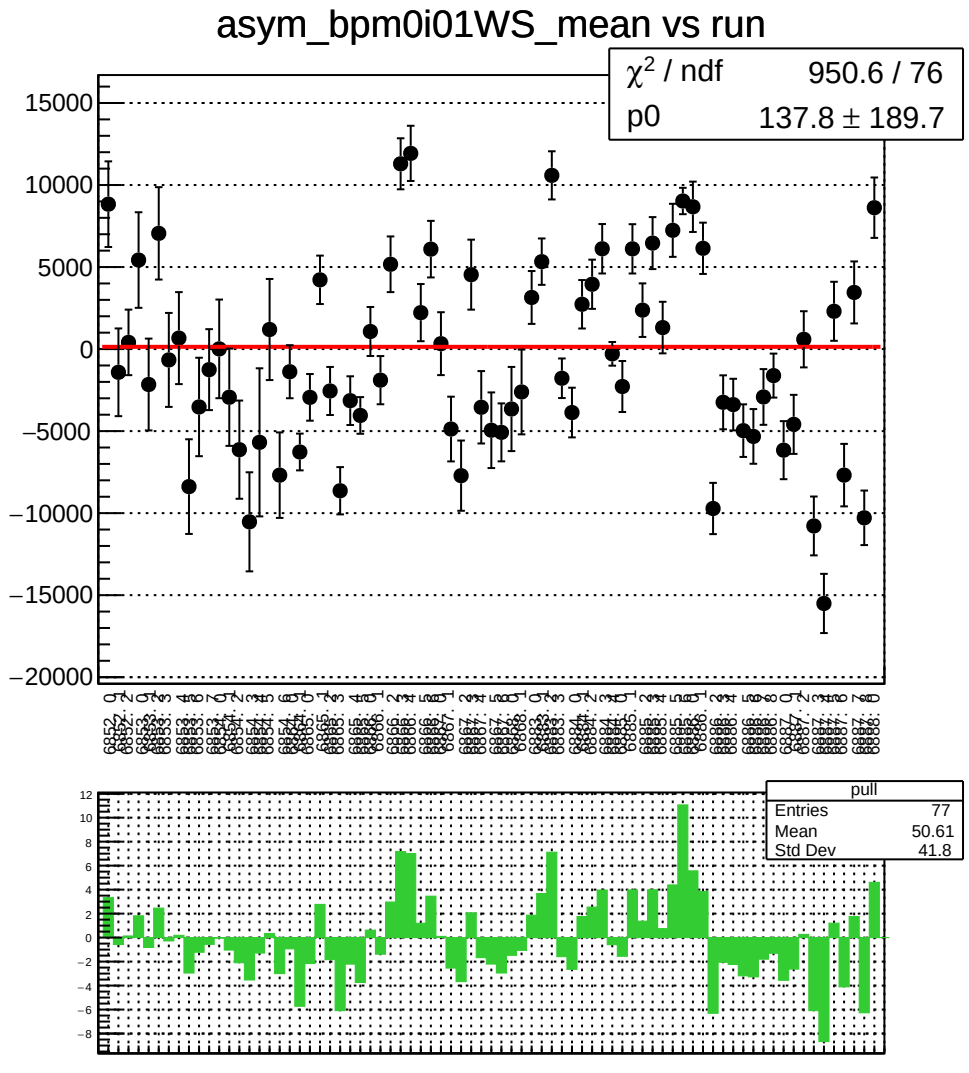

pull1D
Entries 77
Mean 0.1523
Std Dev 4.192
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

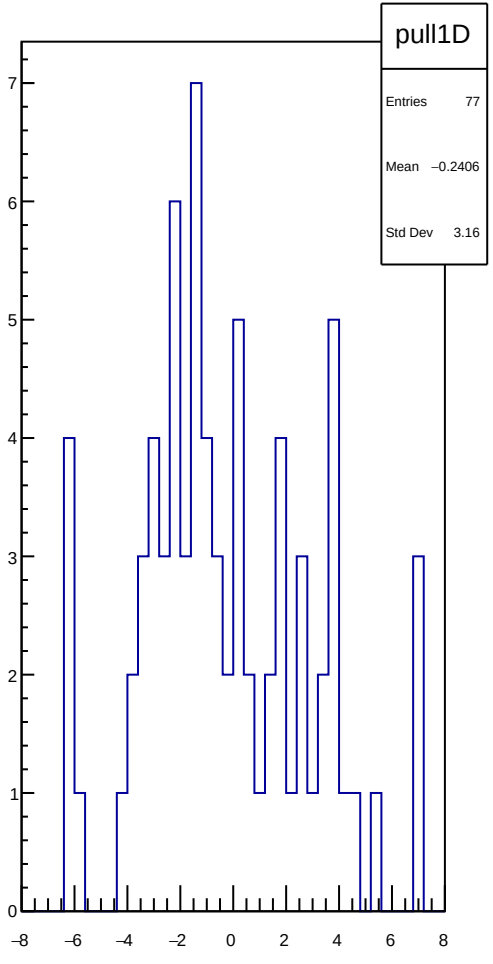

asym_bpm2i01WS_rms vs run
χ² / ndf 1.962e+04 / 76
p0 138.7 ± 0.1101
500
450
400
350
300
250
200
150
100

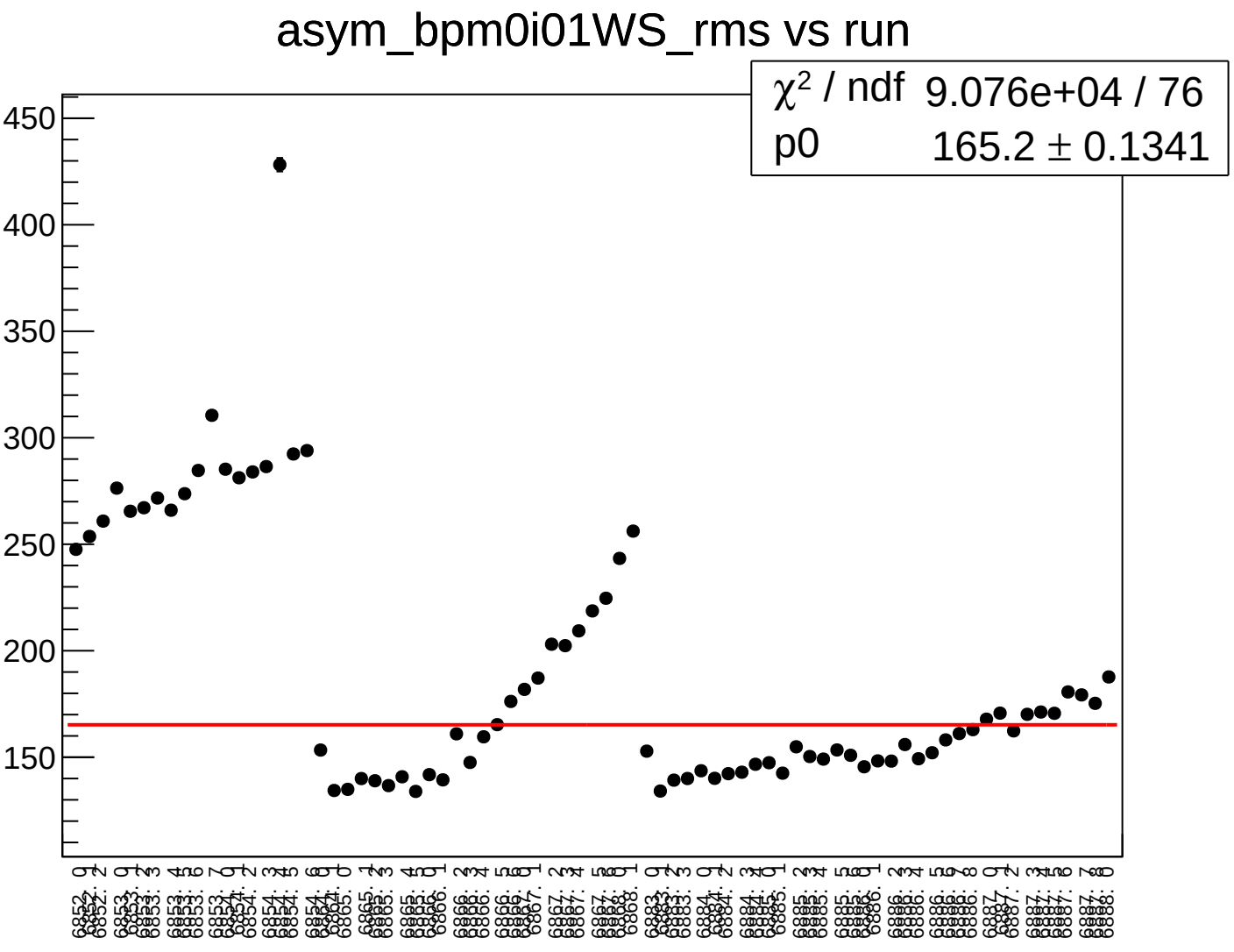

asym_bpm2i02WS_mean vs run
χ² / ndf 2849 / 76
p0 −331.1± 152.2
20000
10000
0
−10000
−20000
−30000
pull
Entries 77
Mean 184.6
Std Dev 137.2
10
5
0
−5
−10
−15

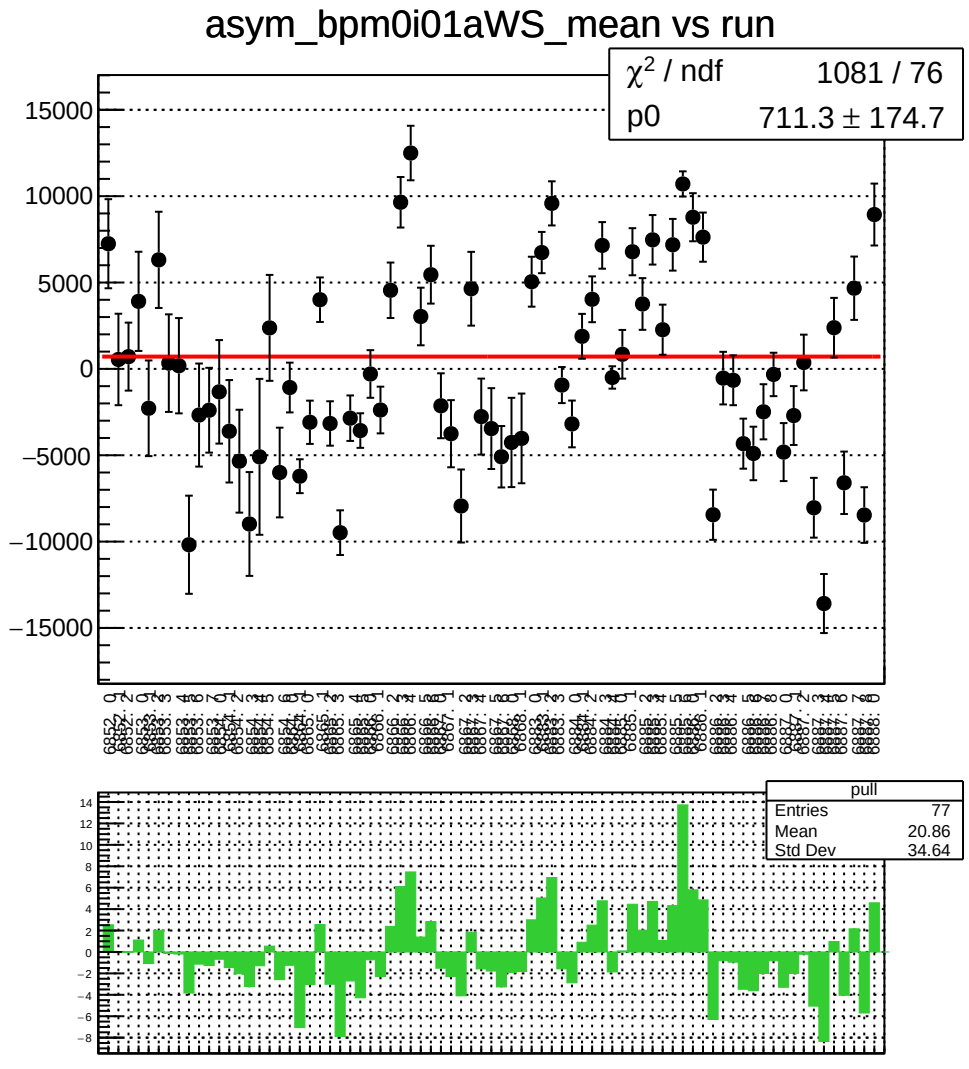

pull1D
Entries 77
Mean 0.08667
Std Dev 4.224
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

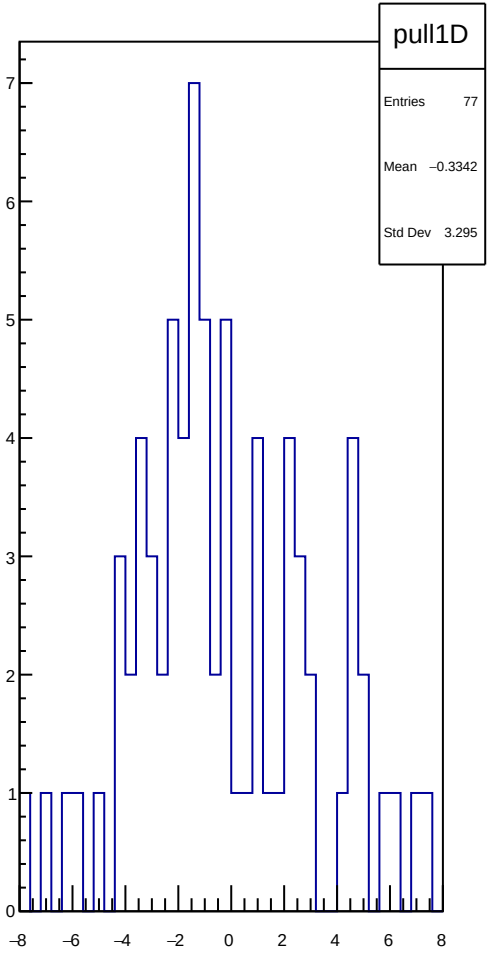

asym_bpm2i02WS_rms vs run
χ^2 / ndf 2.038e+04 / 76
p0 135.6 ± 0.1076
500
450
400
350
300
250
200
150
100

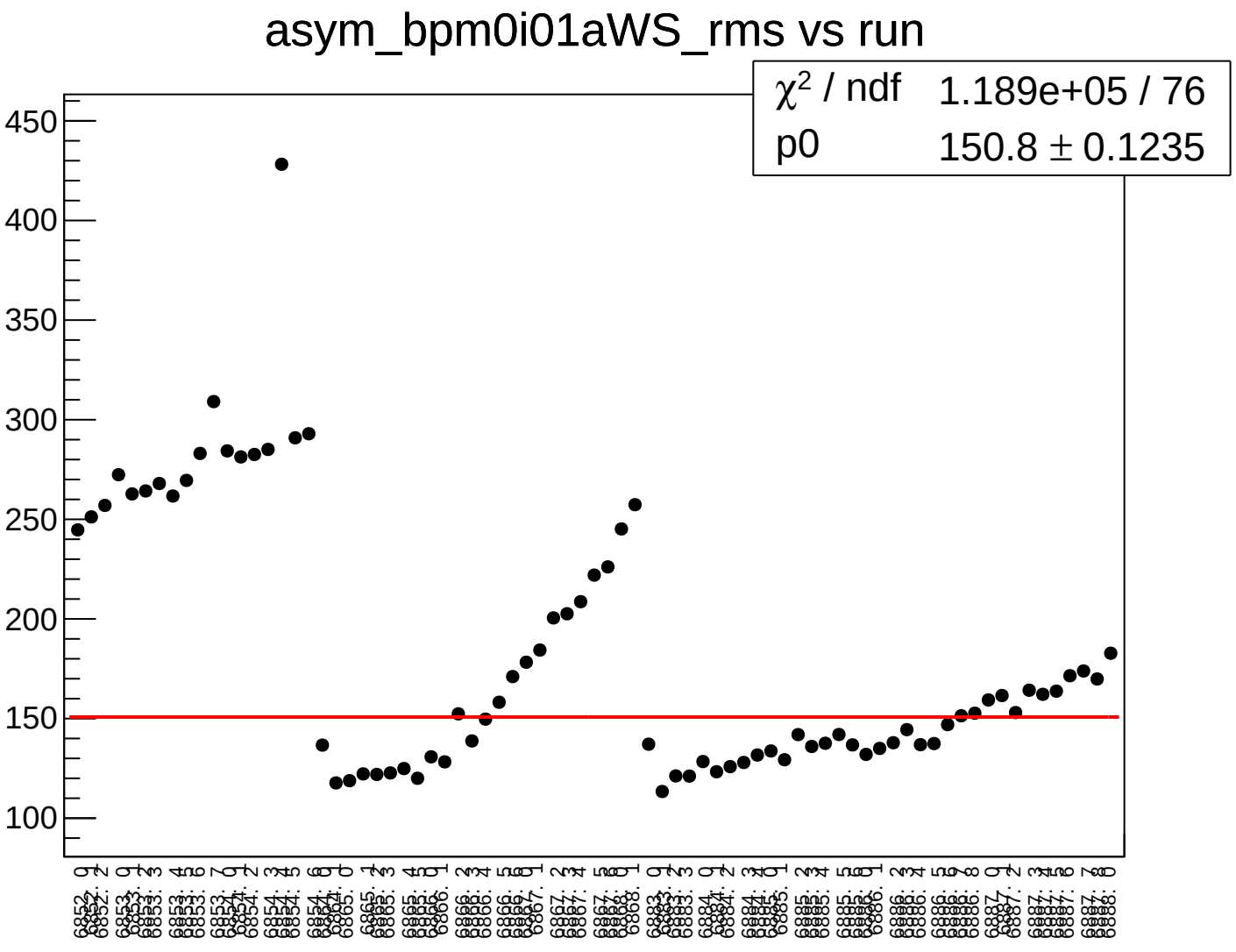

asym_bpm0i01WS_mean vs run
χ² / ndf 950.6 / 76
p0 137.8 ± 189.7
pull
Entries 77
Mean 50.61
Std Dev 41.8

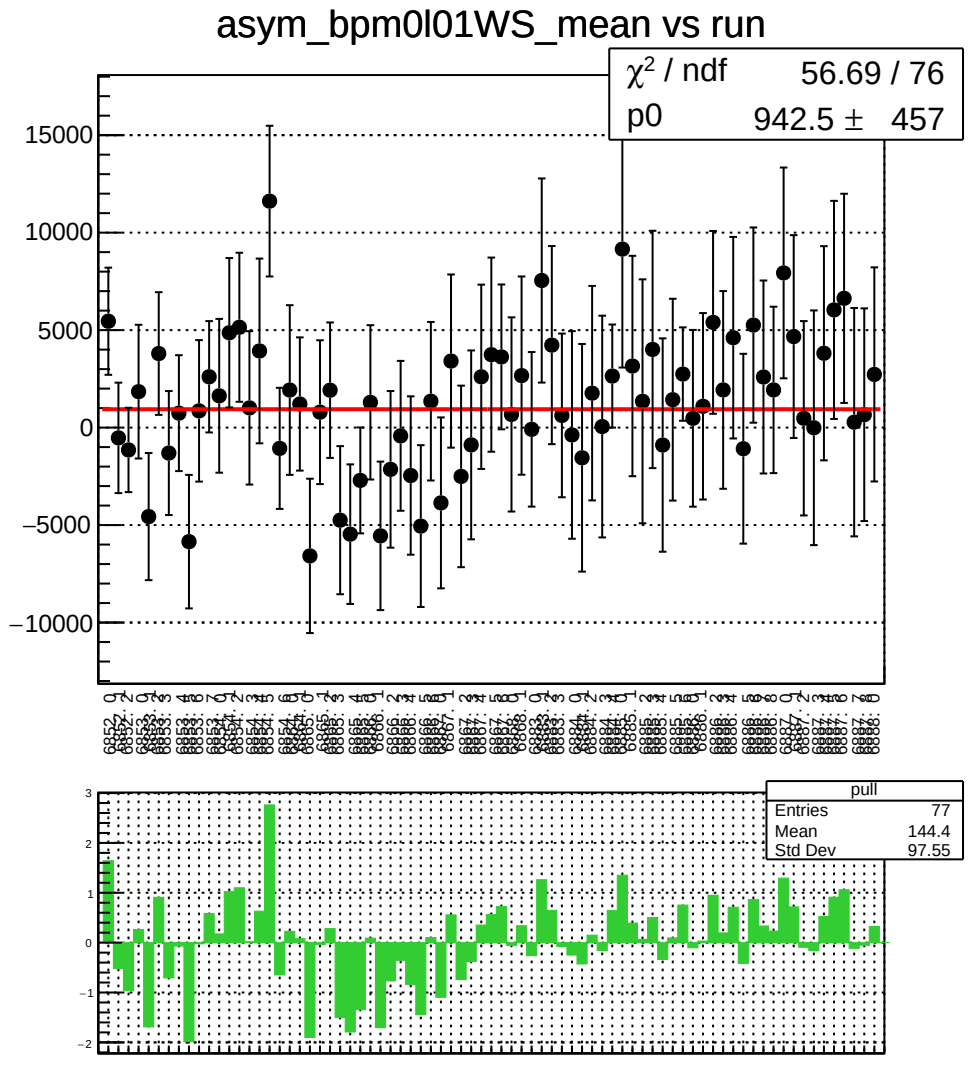

pull1D
Entries 77
Mean −0.2406
Std Dev 3.16

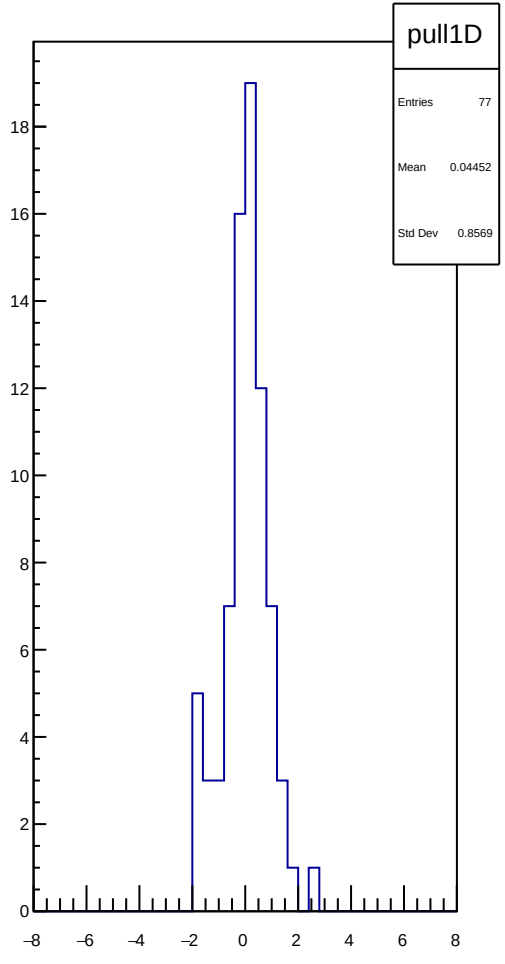

asym_bpm0i01WS_rms vs run
χ² / ndf 9.076e+04 / 76
p0 165.2 ± 0.1341
450
400
350
300
250
200
150

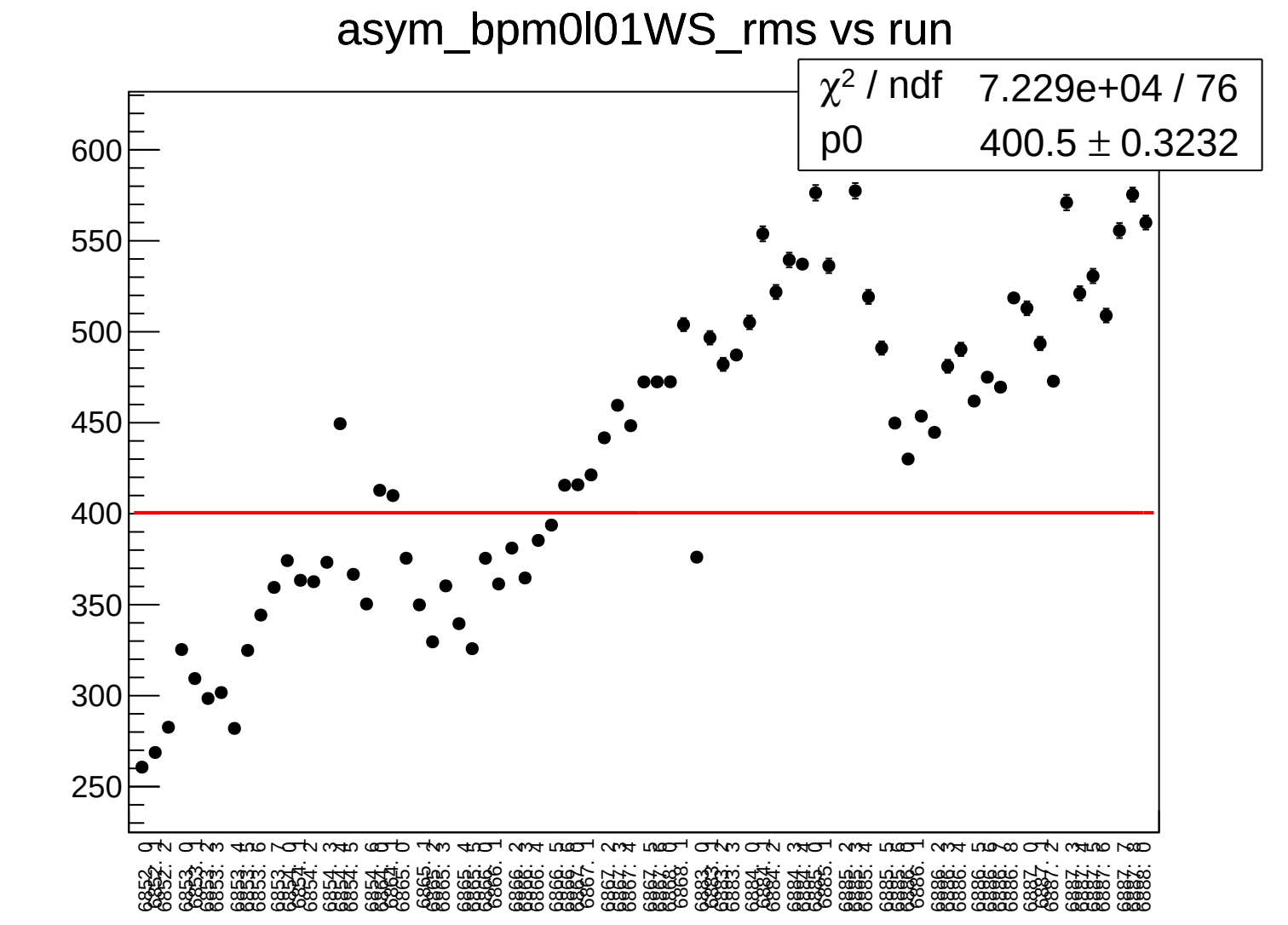

asym_bpm0i01aWS_mean vs run
χ² / ndf 1081 / 76
p0 711.3 ± 174.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 77
Mean 20.86
Std Dev 34.64
14
12
10
8
6
4
2
0
−2
−4
−6
−8

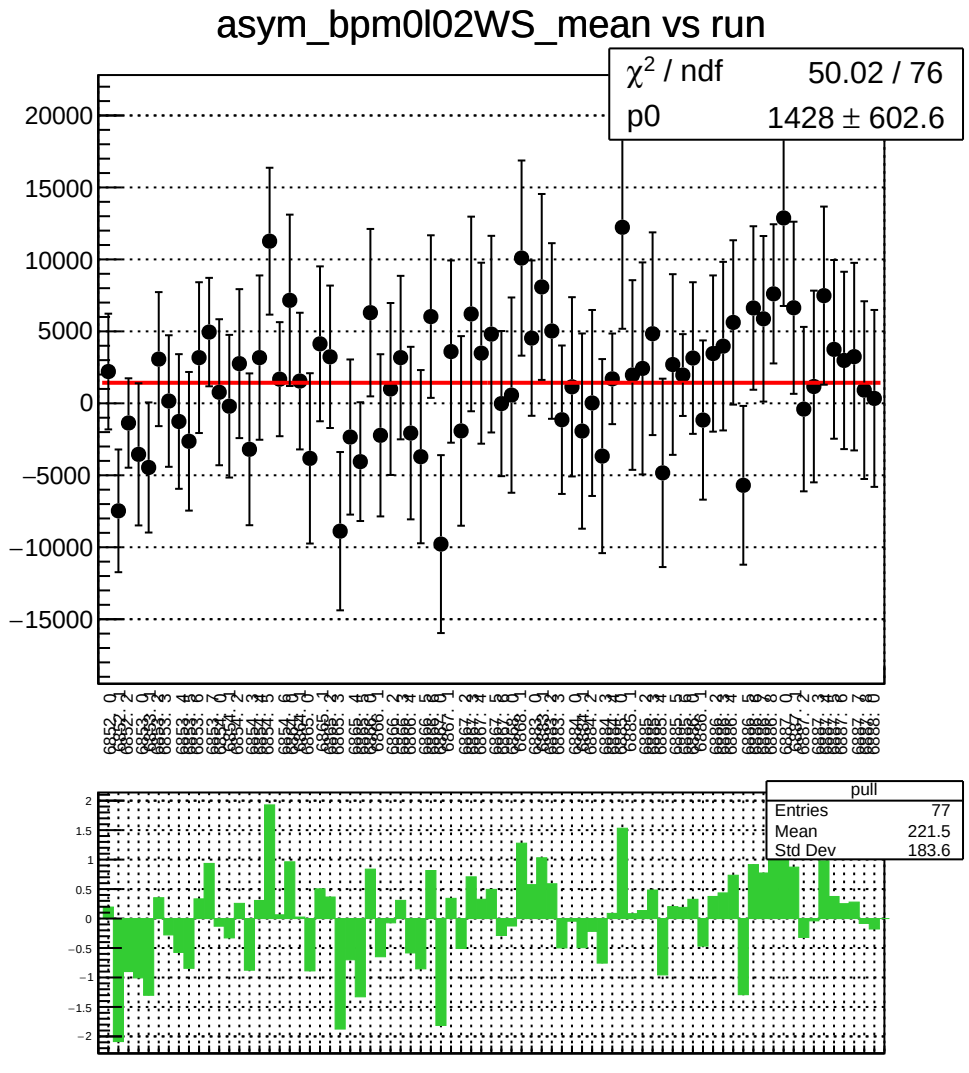

pull1D
Entries 77
Mean −0.3342
Std Dev 3.295
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

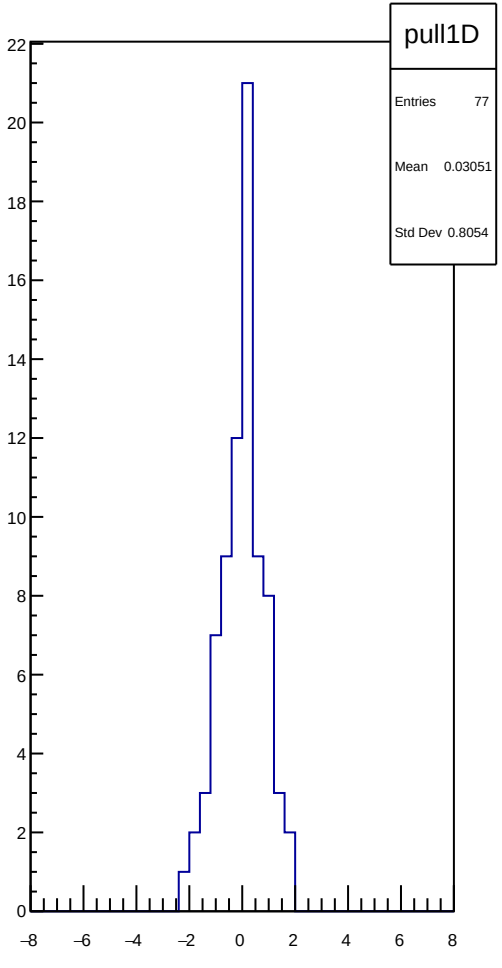

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 1.189e+05 / 76
p0 150.8 ± 0.1235
450
400
350
300
250
200
150
100

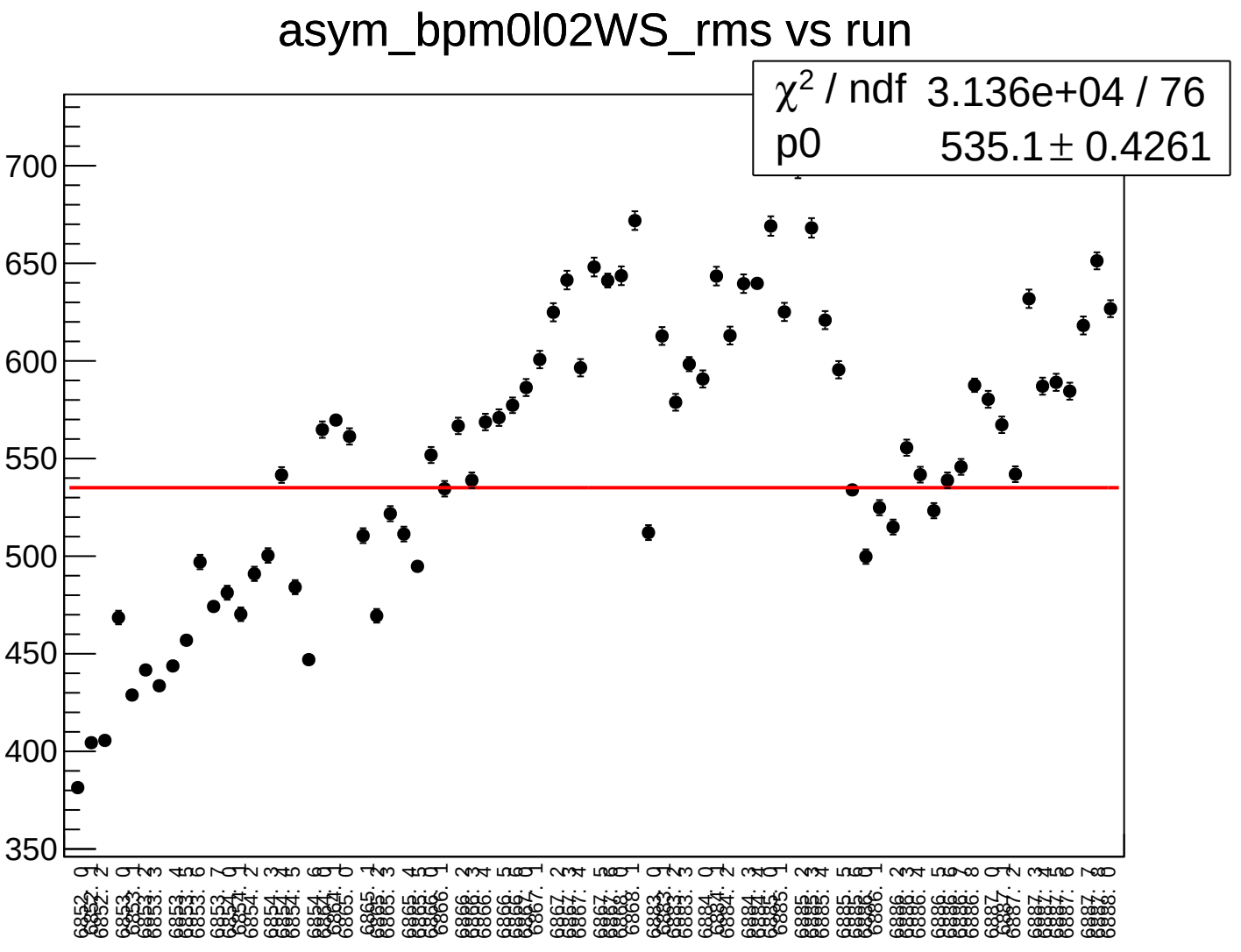

asym_bpm0l01WS_mean vs run
χ² / ndf 56.69 / 76
p0 942.5 ± 457
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 144.4
Std Dev 97.55
3
2
1
0
−1
−2

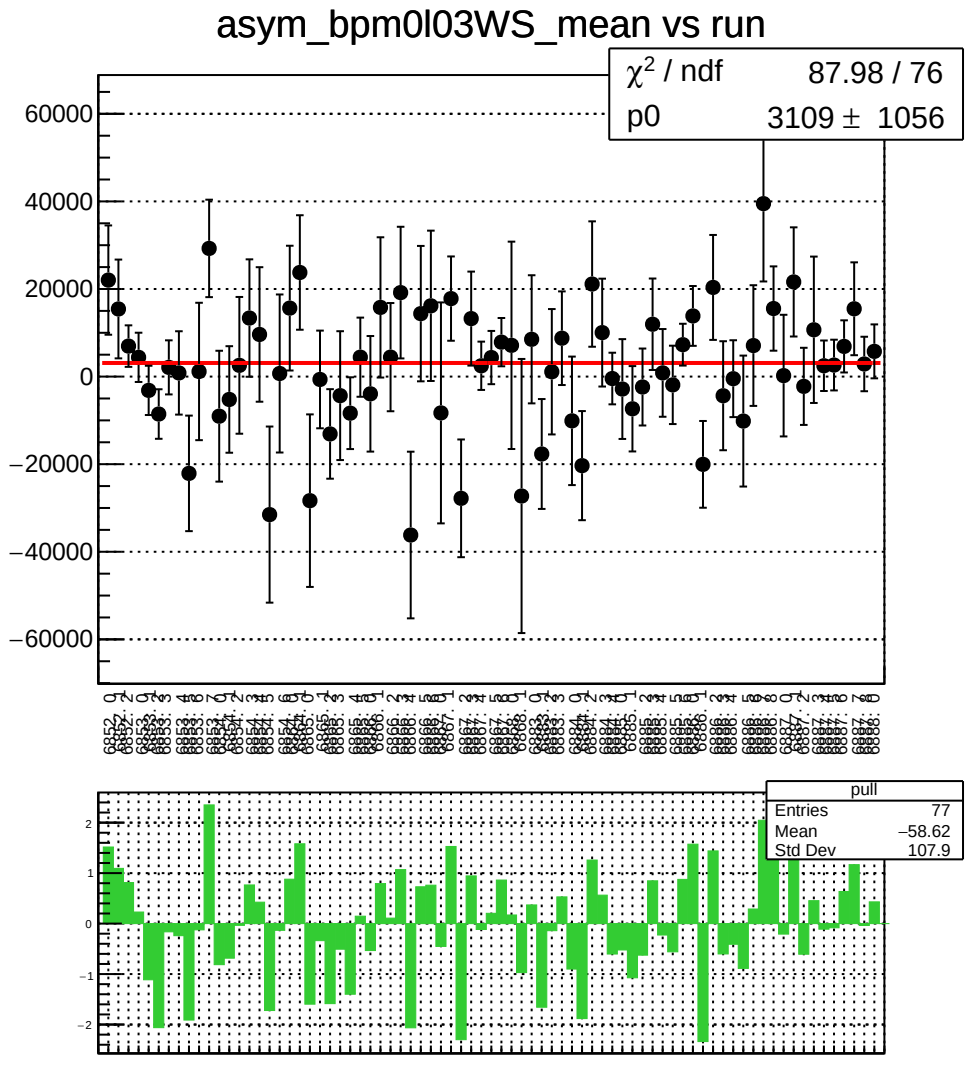

pull1D
Entries 77
Mean 0.04452
Std Dev 0.8569
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

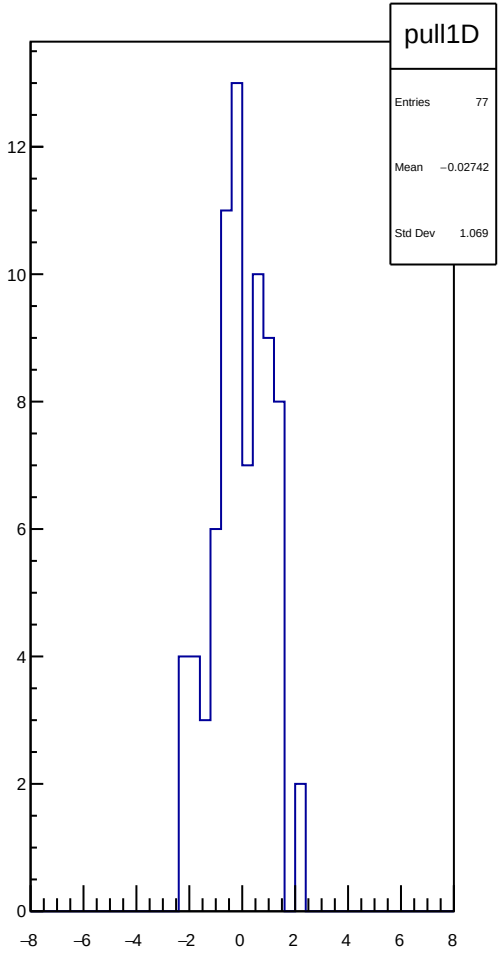

asym_bpm0l01WS_rms vs run
χ² / ndf 7.229e+04 / 76
p0 400.5 ± 0.3232
600
550
500
450
400
350
300
250

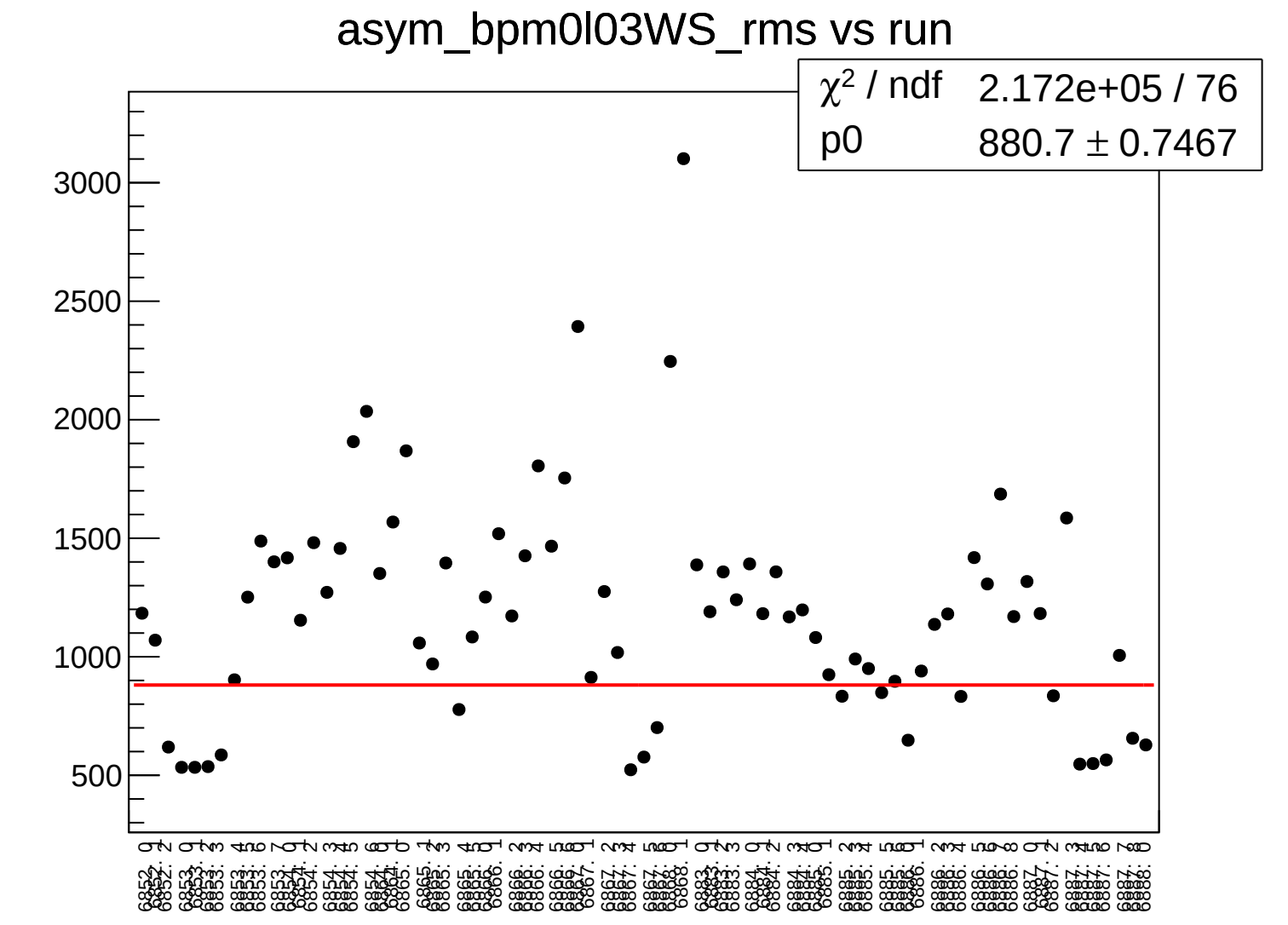

asym_bpm0l02WS_mean vs run
χ² / ndf 50.02 / 76
p0 1428 ± 602.6
pull
Entries 77
Mean 221.5
Std Dev 183.6

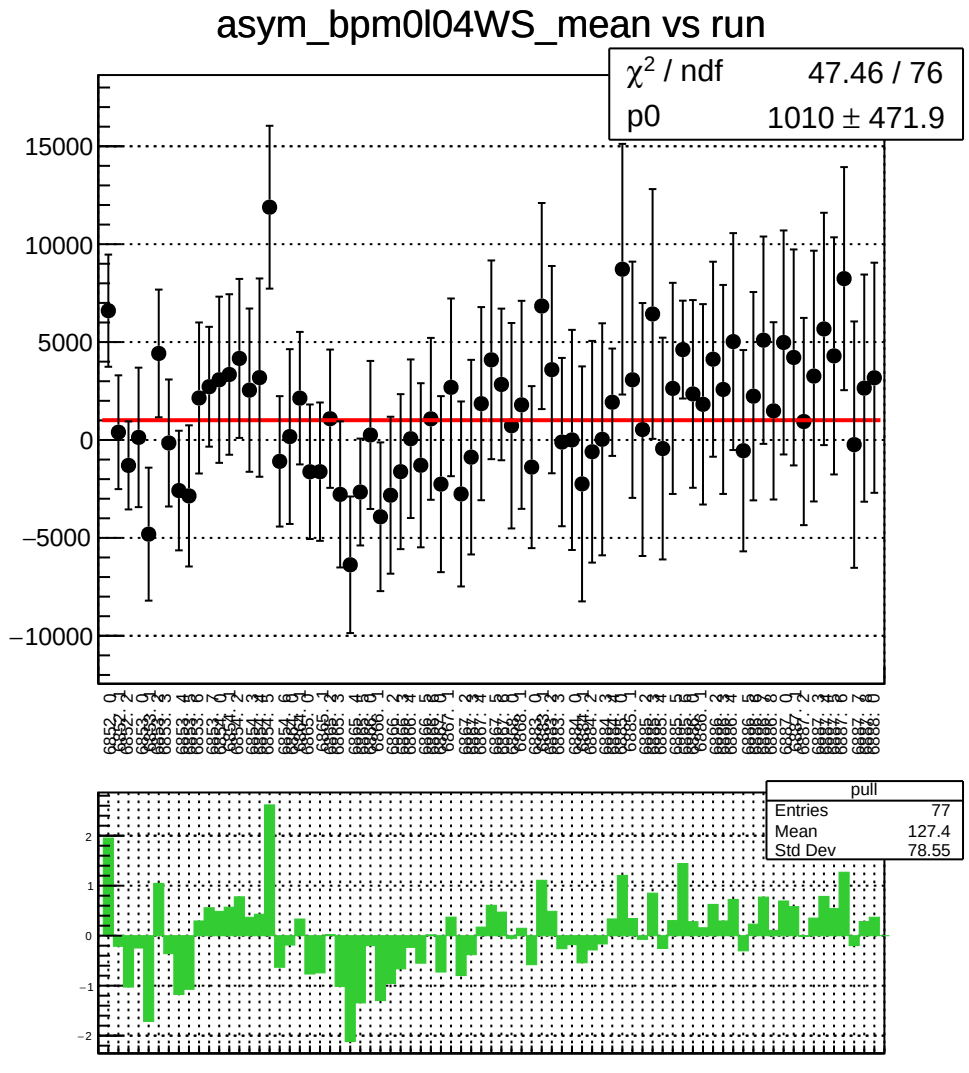

pull1D
Entries 77
Mean 0.03051
Std Dev 0.8054

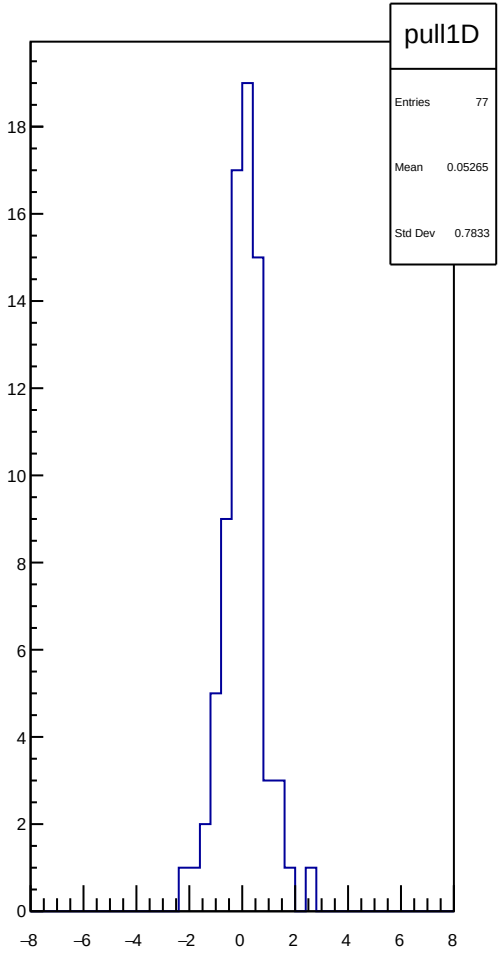

asym_bpm0l02WS_rms vs run
χ² / ndf 3.136e+04 / 76
p0 535.1 ± 0.4261
700
650
600
550
500
450
400
350

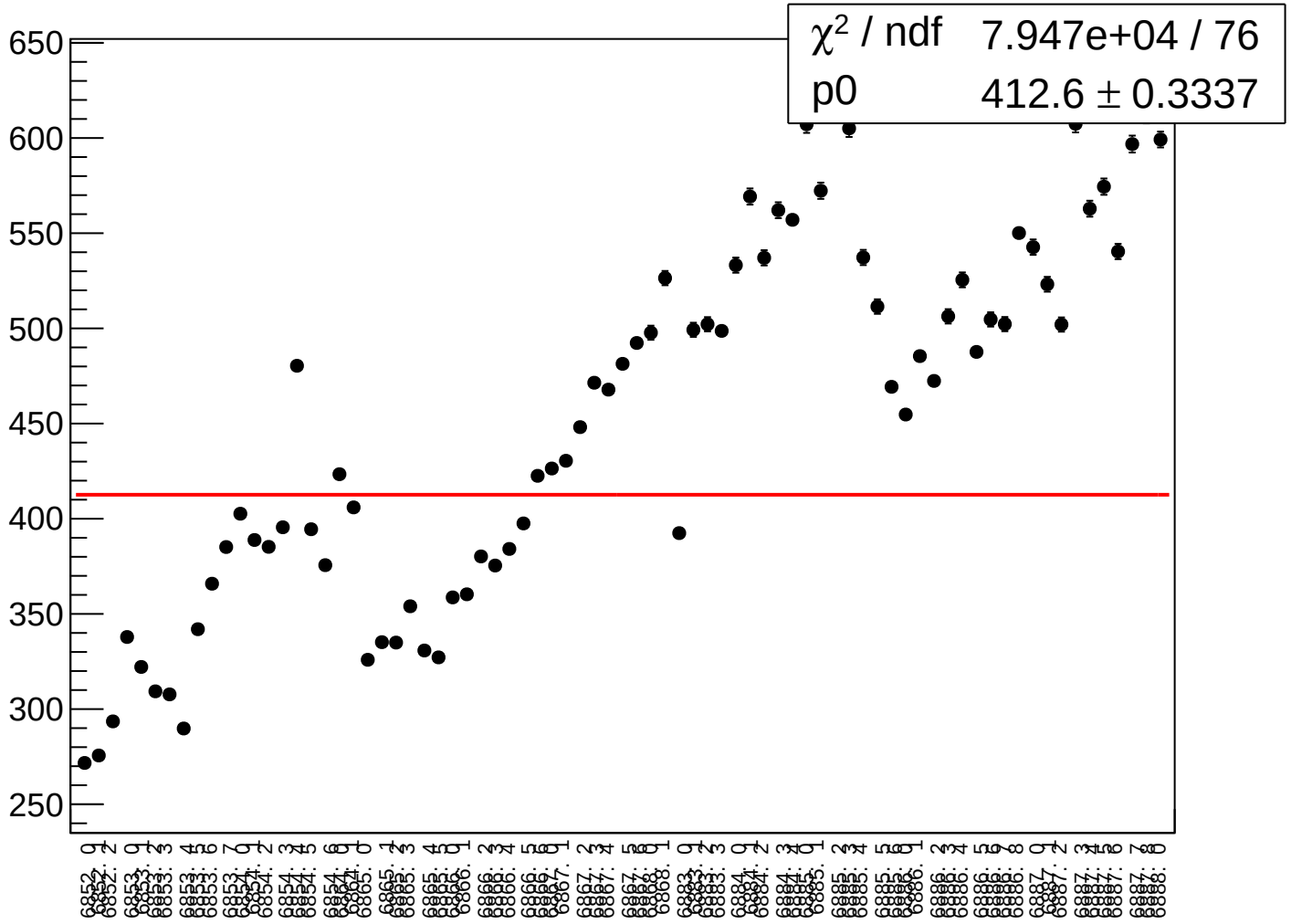

asym_bpm0l03WS_mean vs run
χ² / ndf 87.98 / 76
p0 3109 ± 1056
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 77
Mean −58.62
Std Dev 107.9
2
1
0
−1
−2

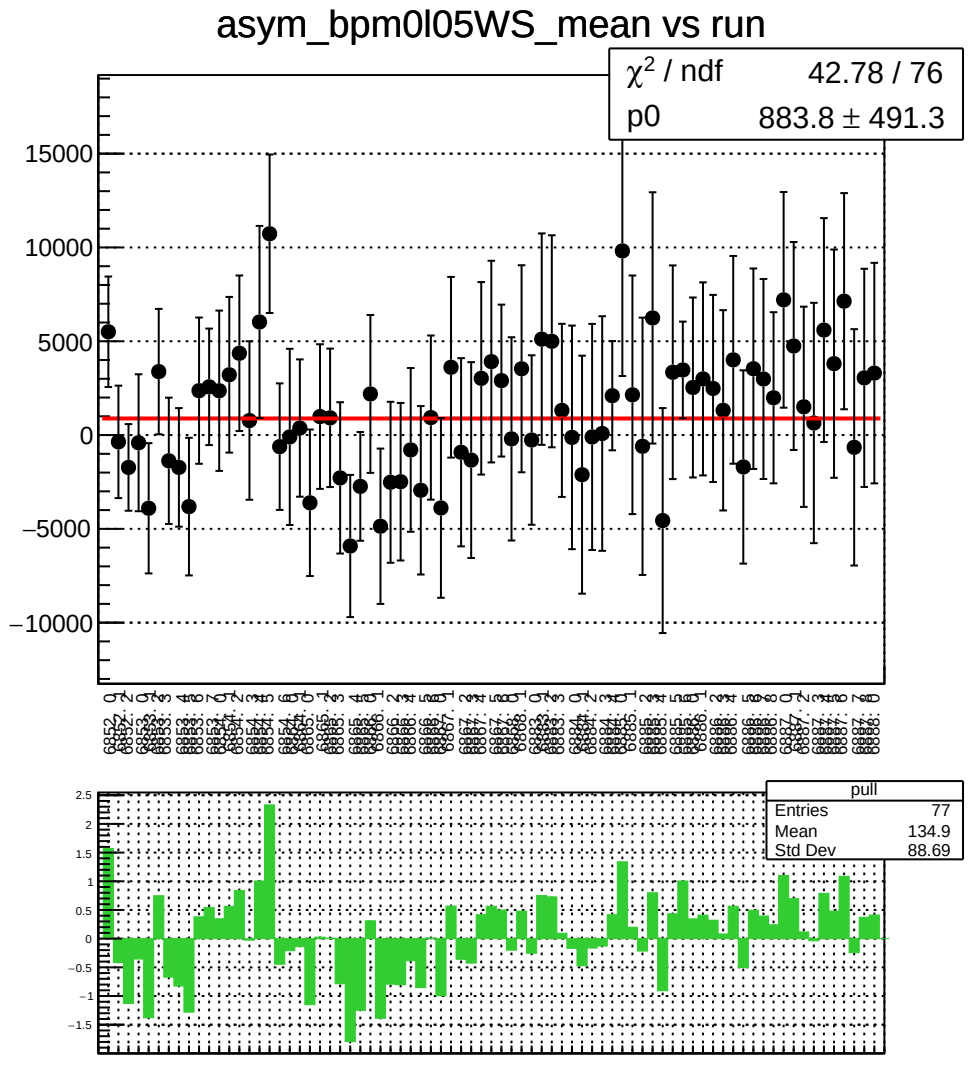

pull1D
Entries 77
Mean −0.02742
Std Dev 1.069
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

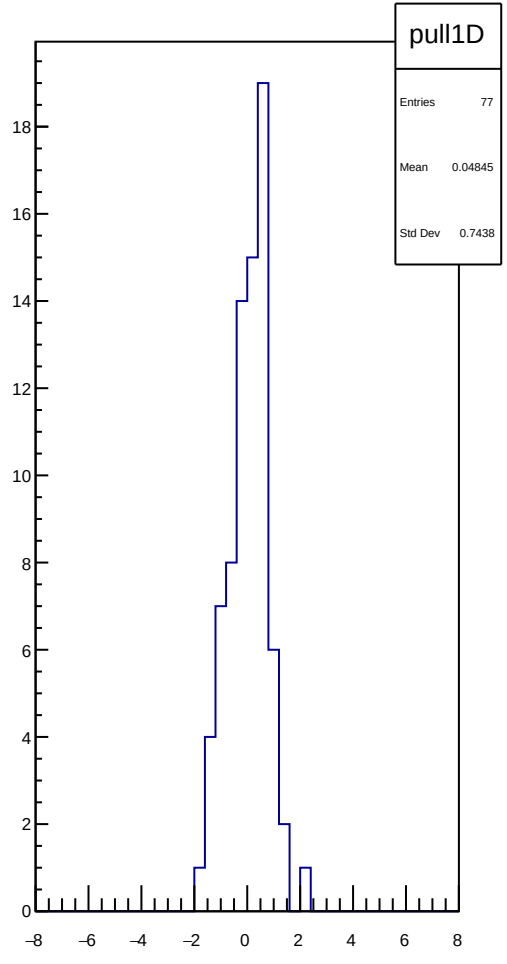

asym_bpm0l03WS_rms vs run
χ² / ndf 2.172e+05 / 76
p0 880.7 ± 0.7467
3000
2500
2000
1500
1000
500

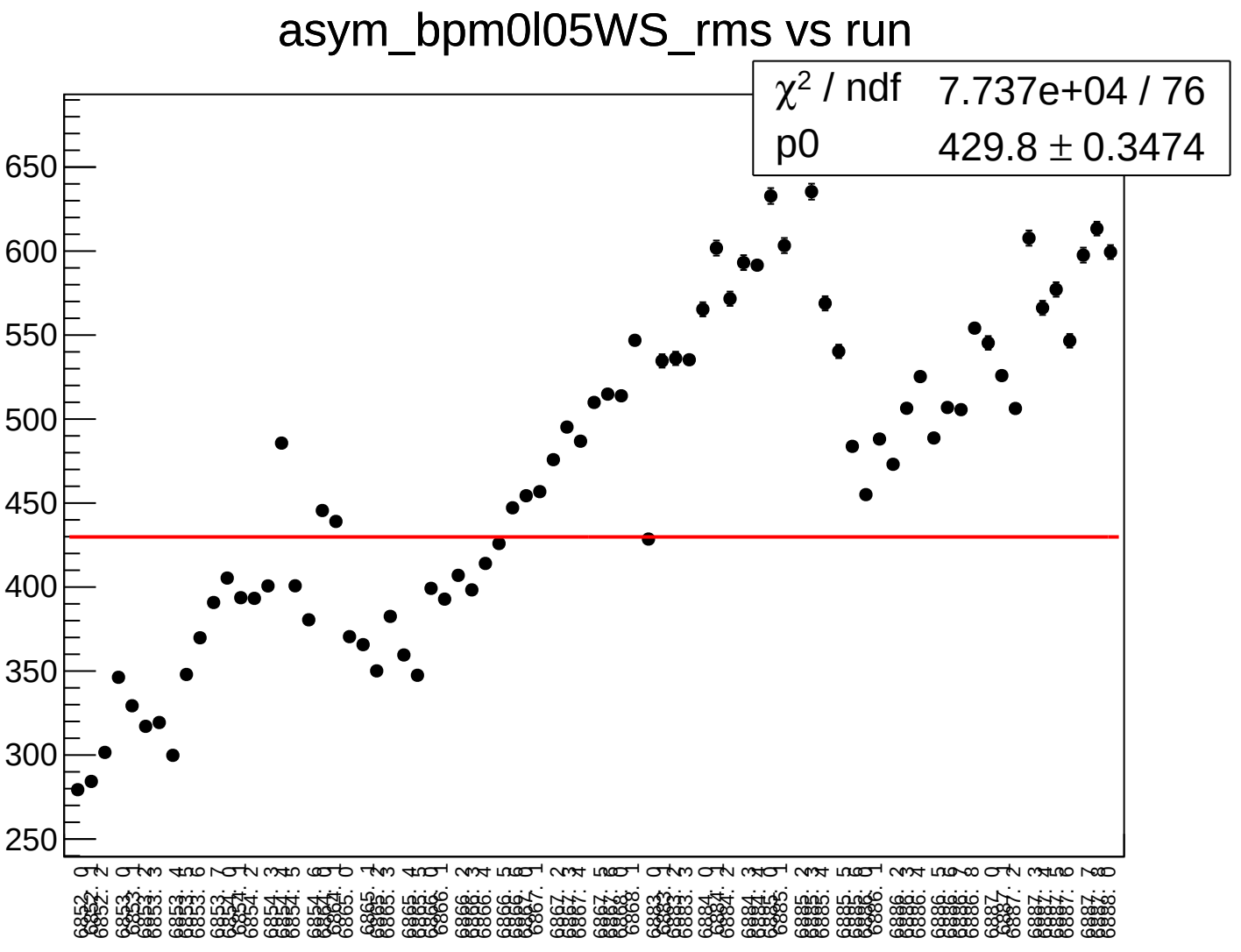

asym_bpm0l04WS_mean vs run
χ² / ndf 47.46 / 76
p0 1010 ± 471.9
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 127.4
Std Dev 78.55
2
1
0
−1
−2

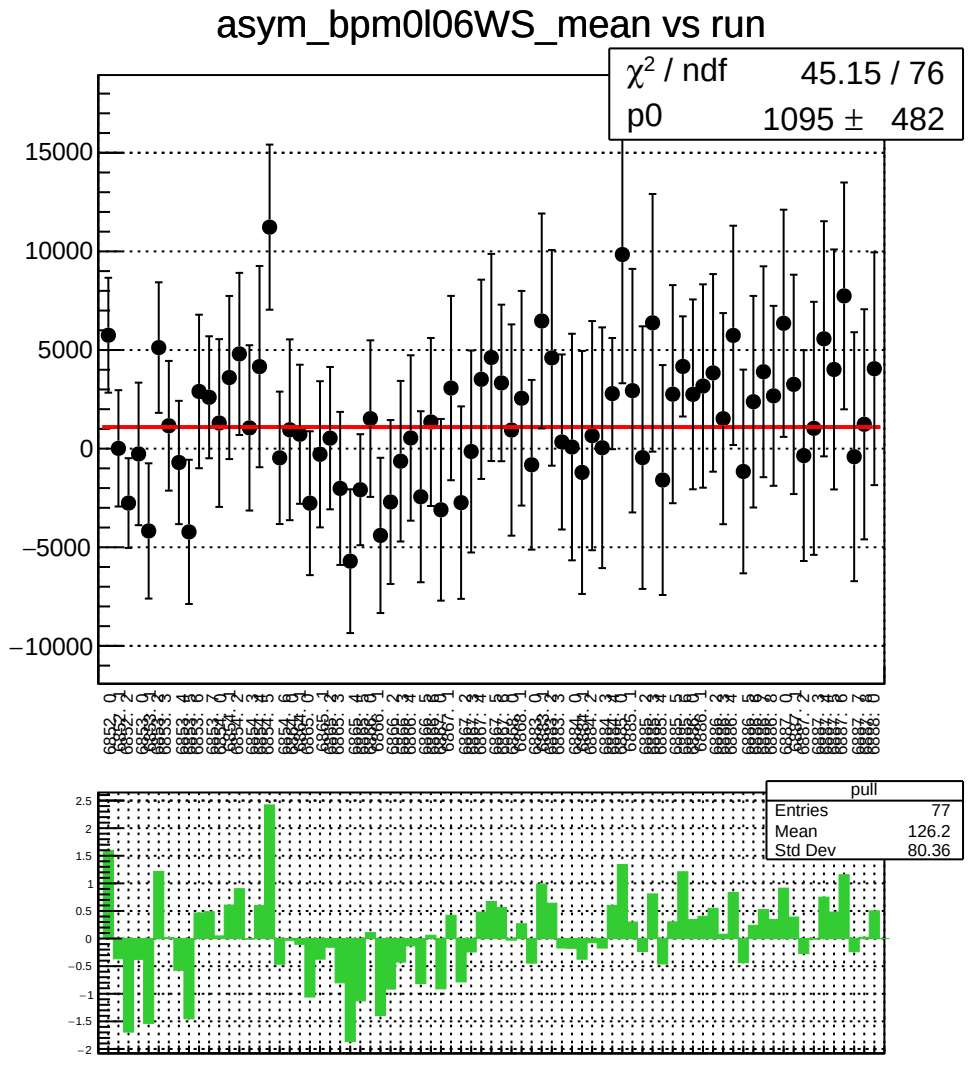

pull1D
Entries 77
Mean 0.05265
Std Dev 0.7833
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

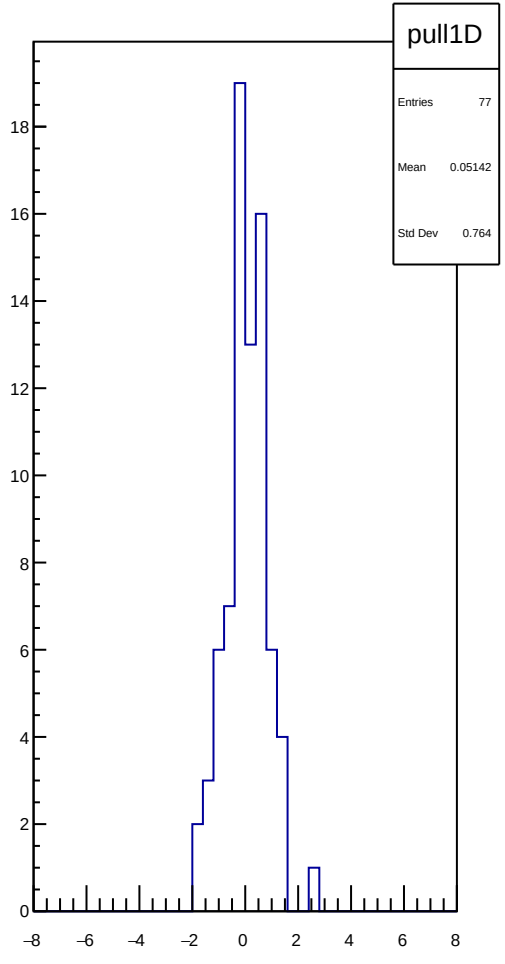

asym_bpm0l04WS_rms vs run
χ² / ndf 7.947e+04 / 76
p0 412.6 ± 0.3337
650
600
550
500
450
400
350
300
250

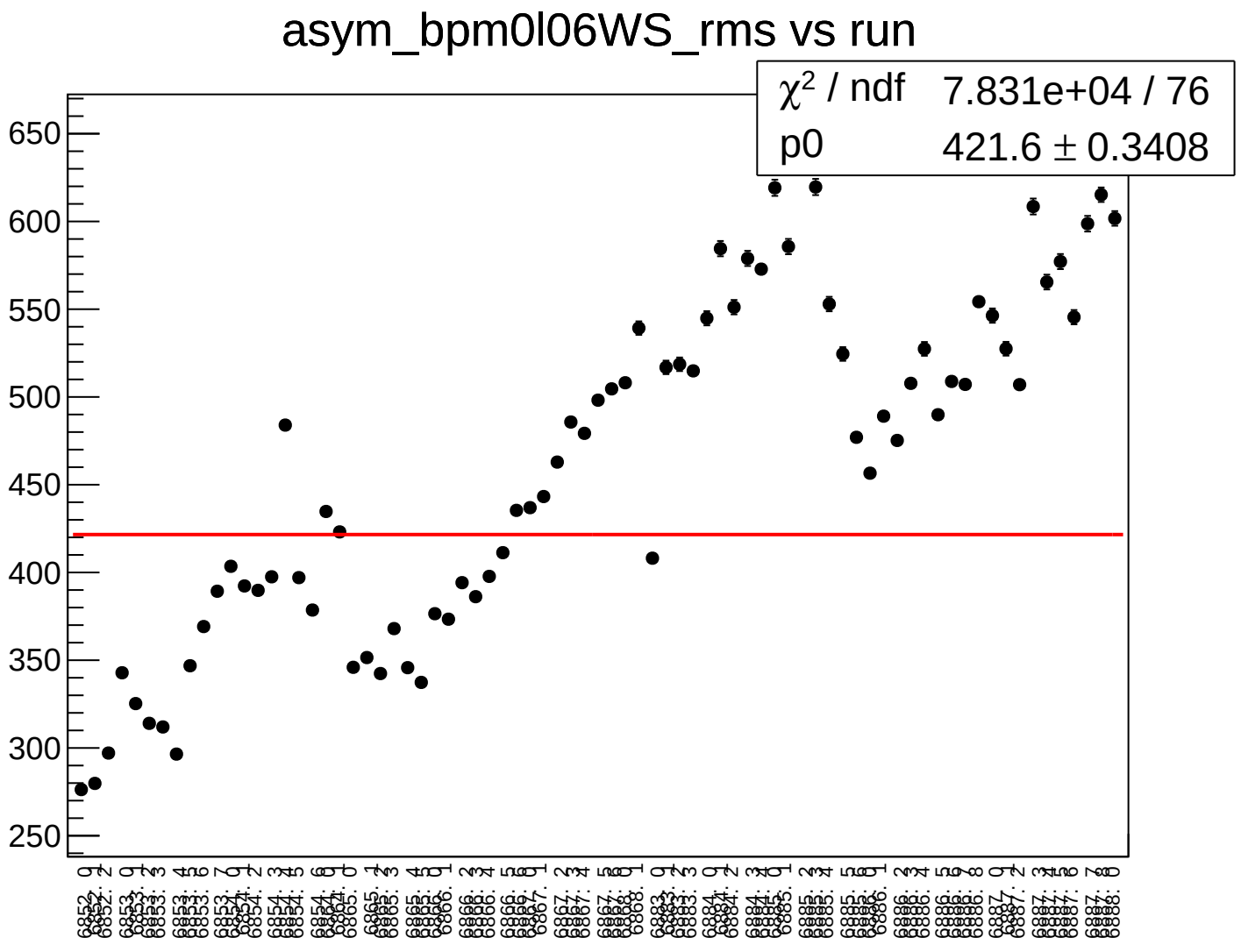

asym_bpm0l05WS_mean vs run
χ² / ndf 42.78 / 76
p0 883.8 ± 491.3
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 134.9
Std Dev 88.69
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

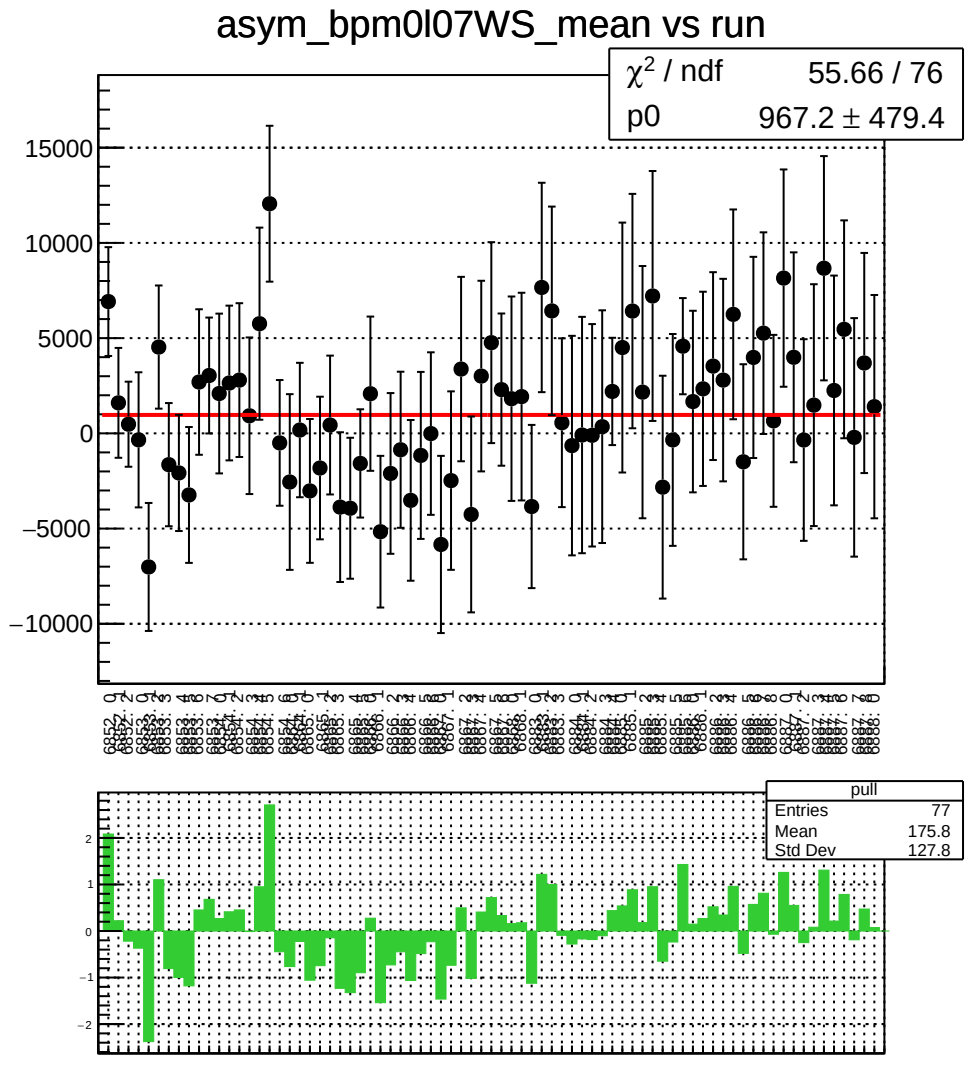

pull1D
Entries 77
Mean 0.04845
Std Dev 0.7438
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

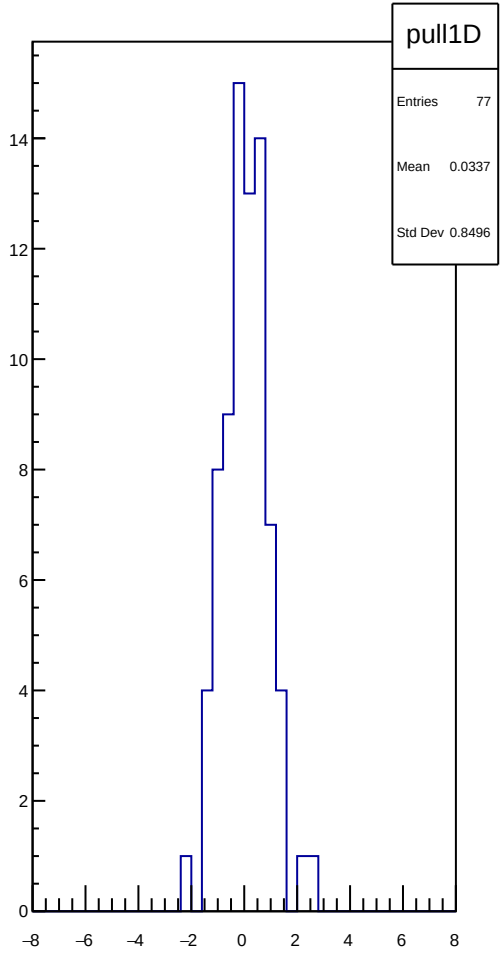

asym_bpm0l05WS_rms vs run
χ² / ndf 7.737e+04 / 76
p0 429.8 ± 0.3474
650
600
550
500
450
400
350
300
250

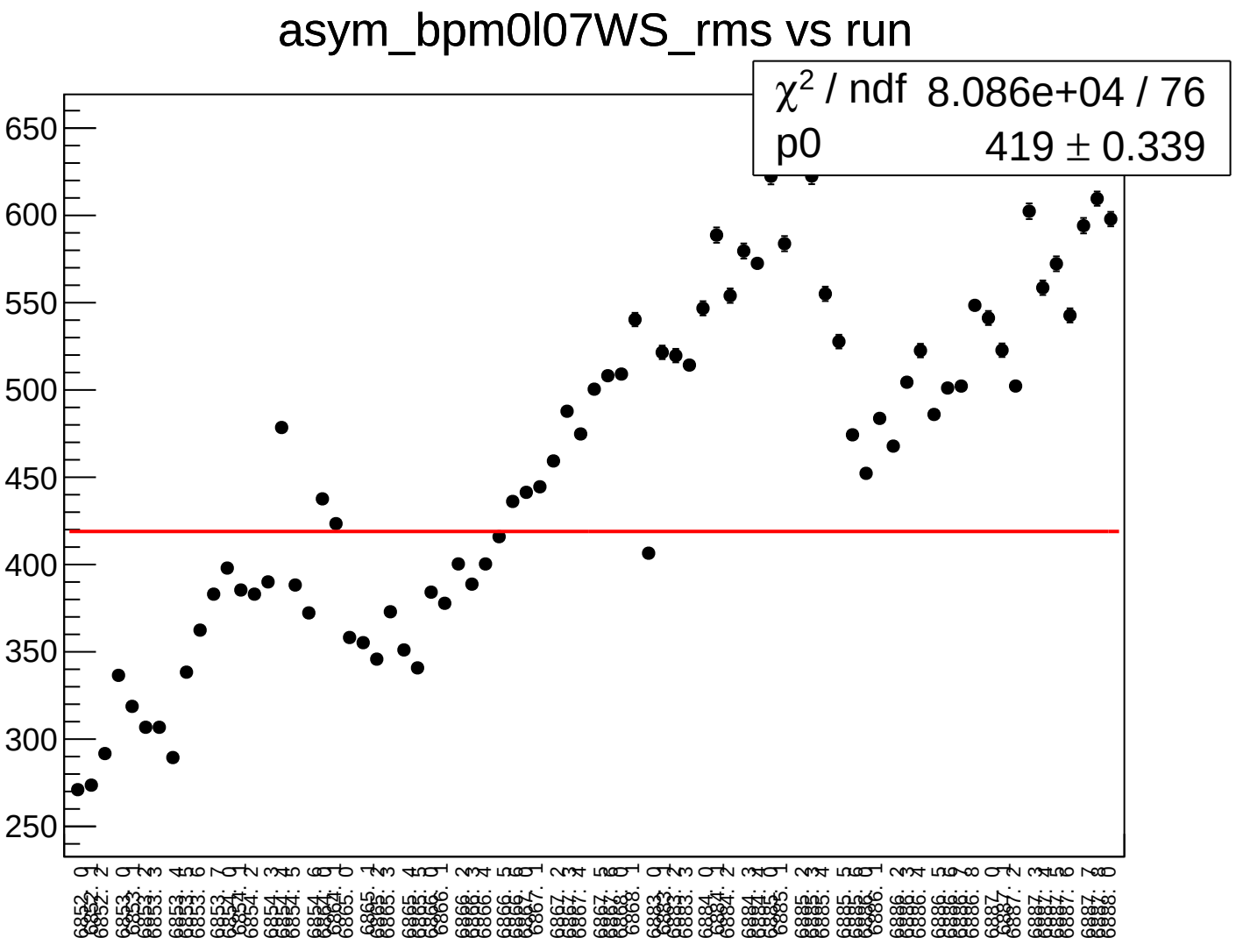

asym_bpm0l06WS_mean vs run
χ² / ndf 45.15 / 76
p0 1095 ± 482
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 126.2
Std Dev 80.36
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

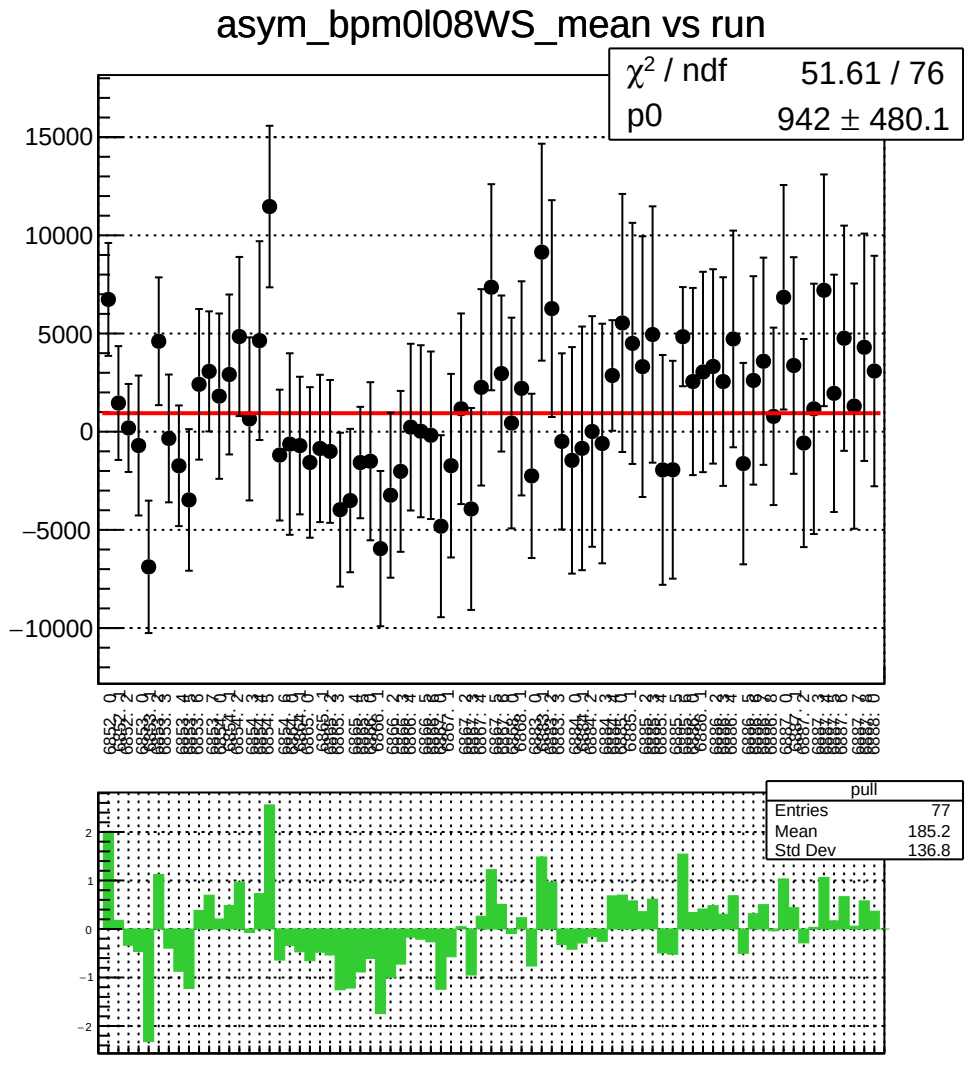

pull1D
Entries 77
Mean 0.05142
Std Dev 0.764
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

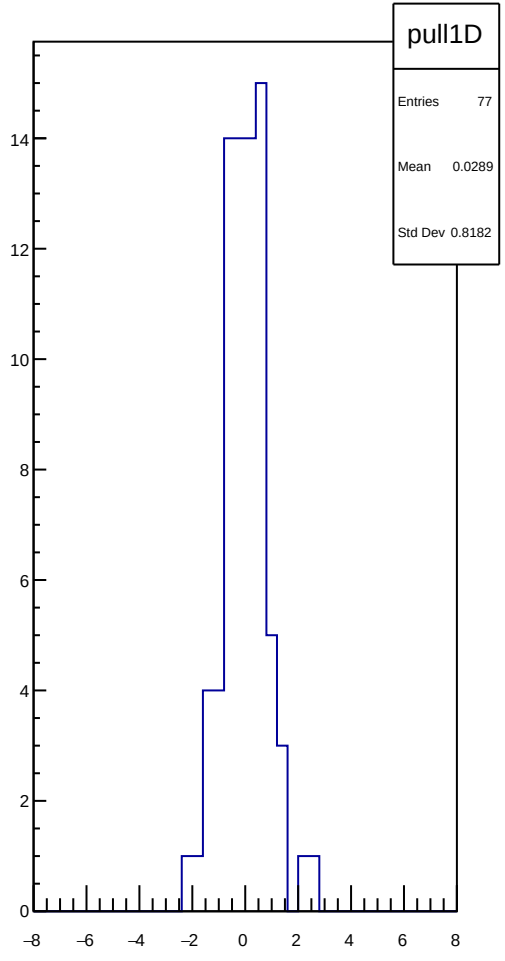

asym_bpm0l06WS_rms vs run
χ² / ndf 7.831e+04 / 76
p0 421.6 ± 0.3408
650
600
550
500
450
400
350
300
250

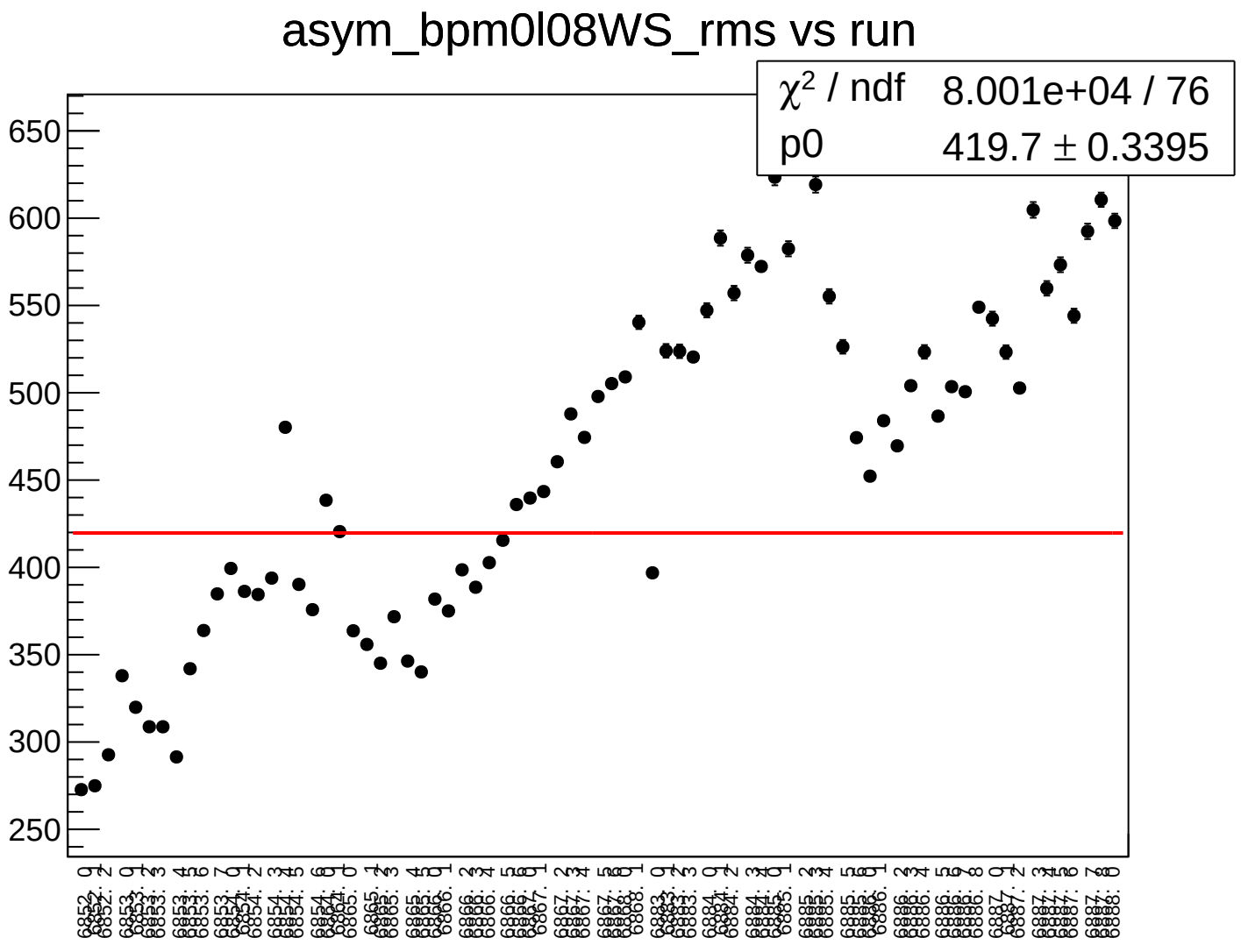

asym_bpm0l07WS_mean vs run
χ² / ndf 55.66 / 76
p0 967.2 ± 479.4
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 175.8
Std Dev 127.8
2
1
0
−1
−2

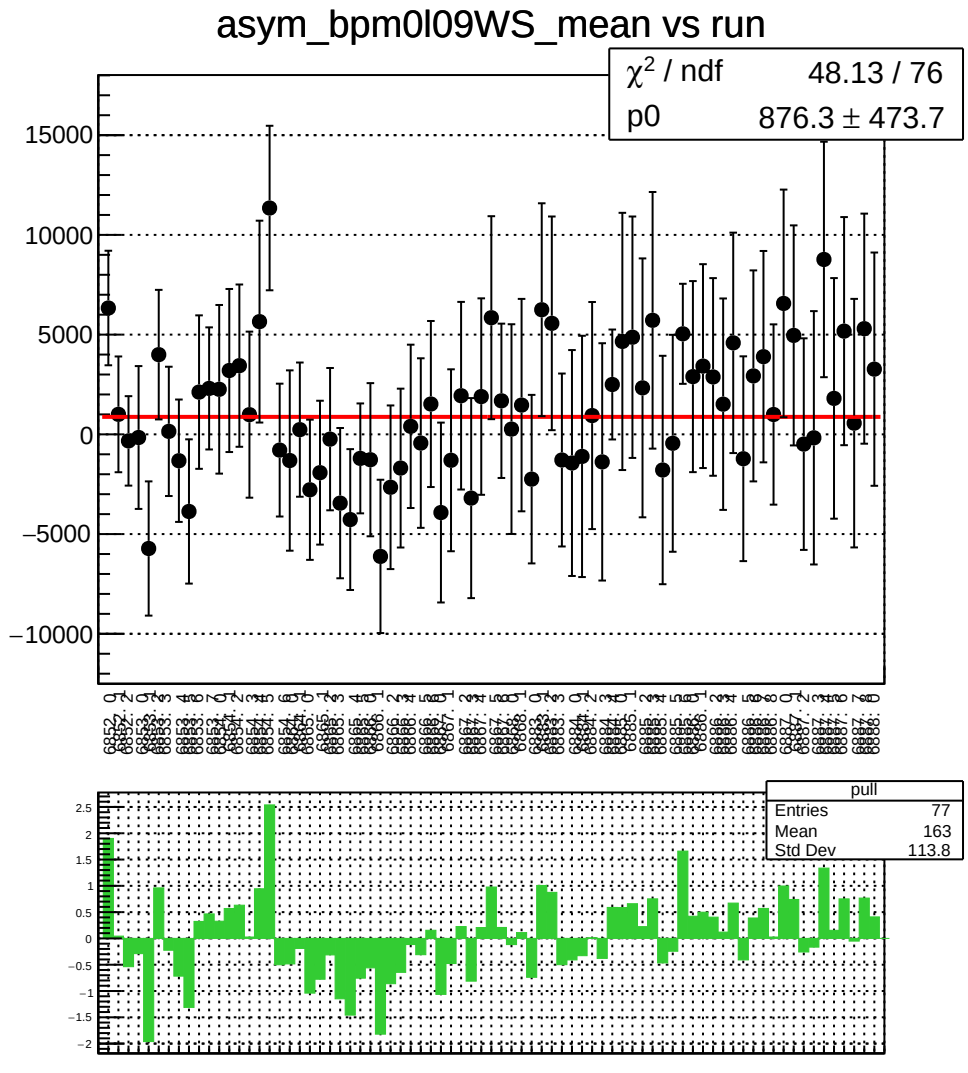

pull1D
Entries 77
Mean 0.0337
Std Dev 0.8496
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

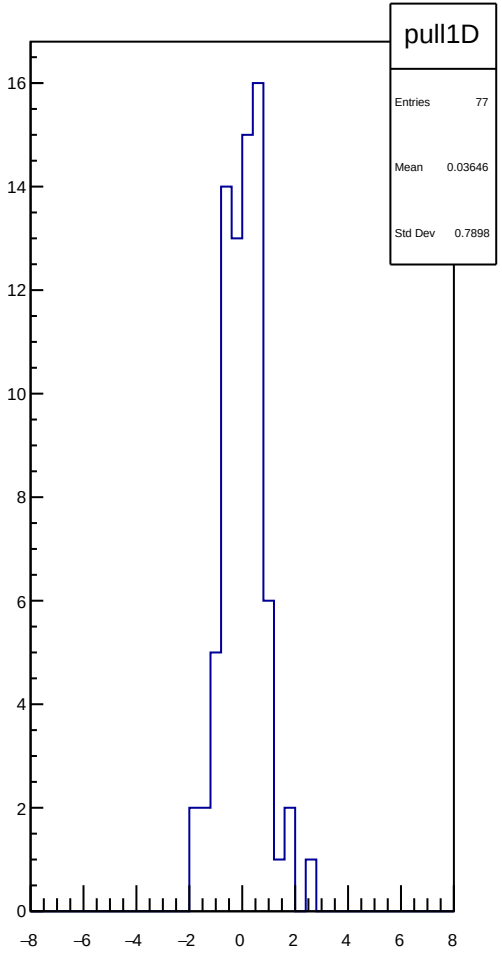

asym_bpm0l07WS_rms vs run
χ^2 / ndf 8.086e+04 / 76
p0 419 ± 0.339
650
600
550
500
450
400
350
300
250

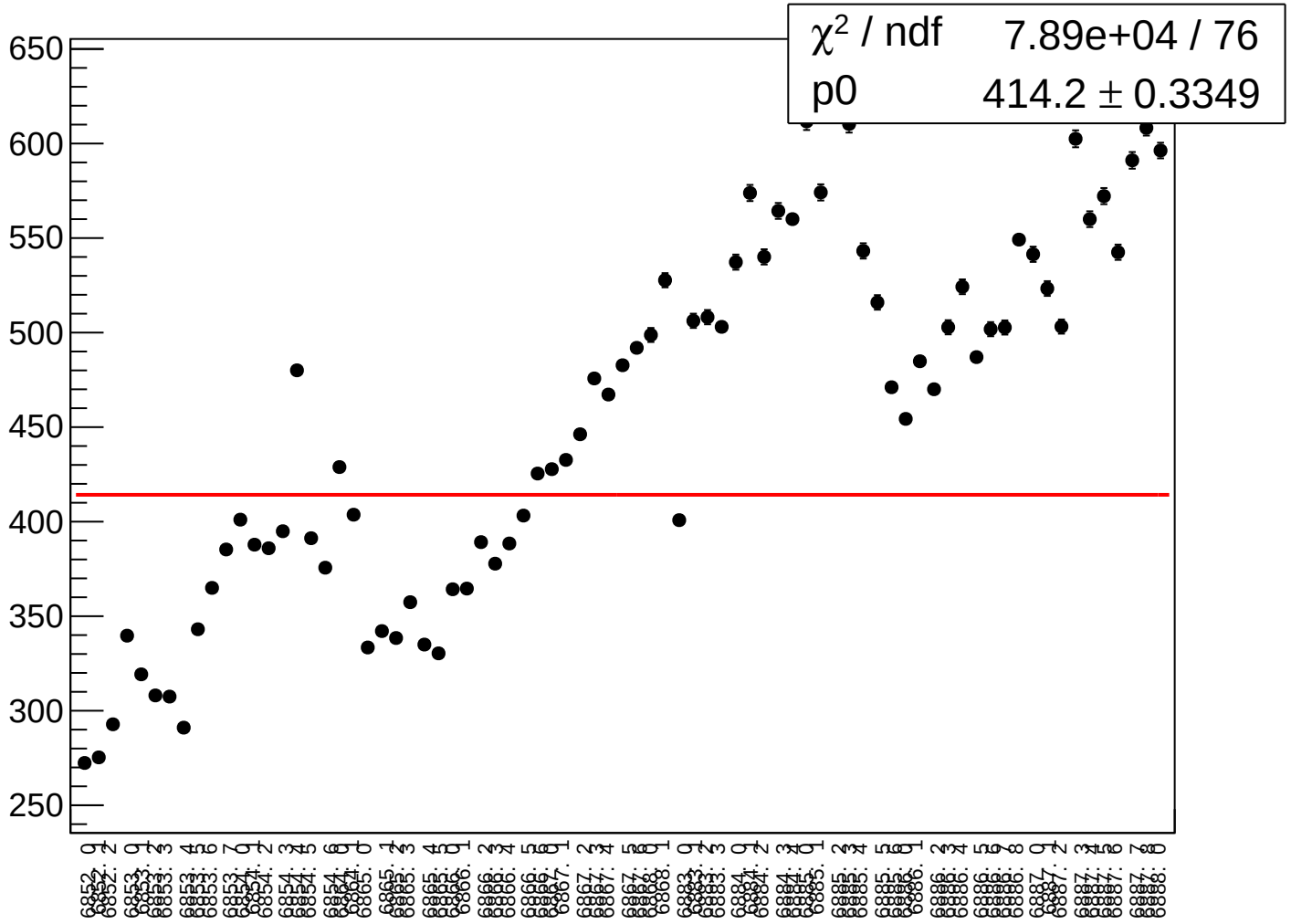

asym_bpm0l08WS_mean vs run
χ² / ndf 51.61 / 76
p0 942 ± 480.1
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 185.2
Std Dev 136.8
2
1
0
−1
−2

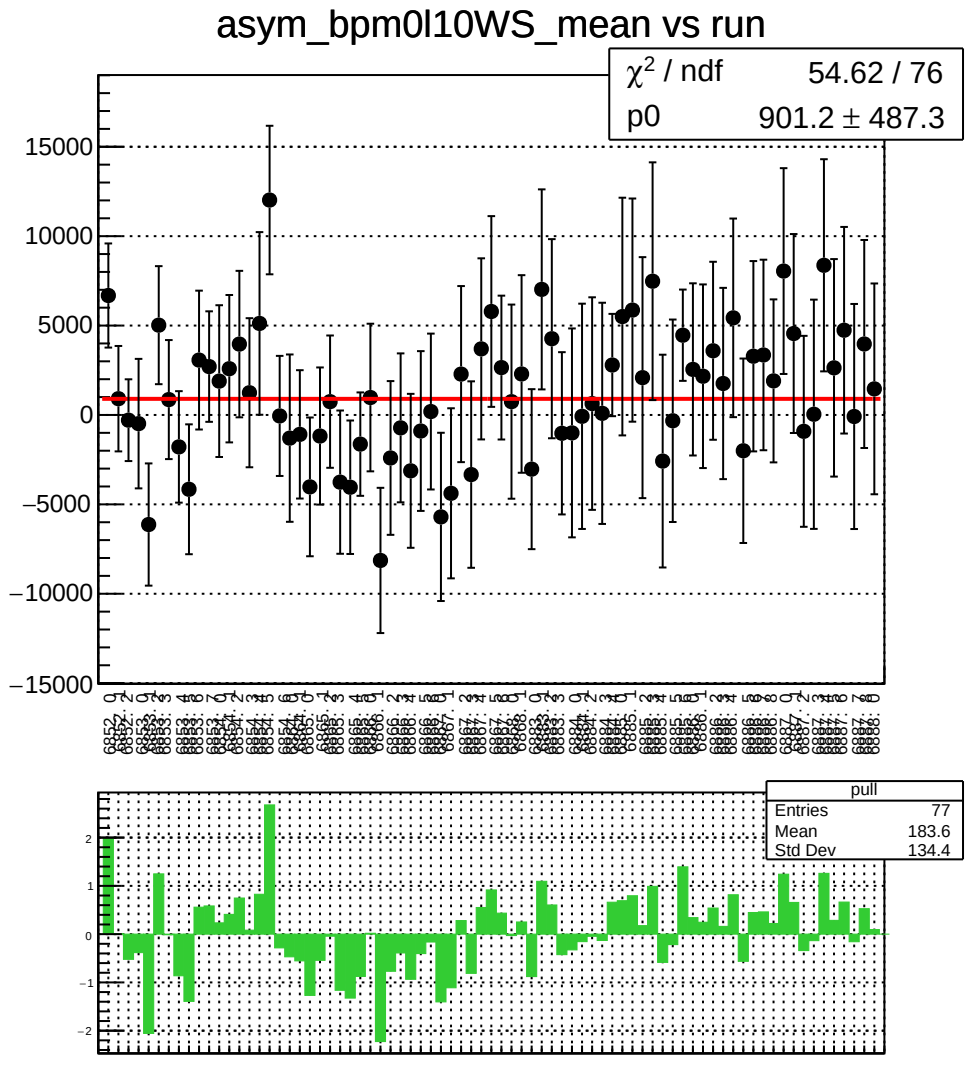

pull1D
Entries 77
Mean 0.0289
Std Dev 0.8182
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

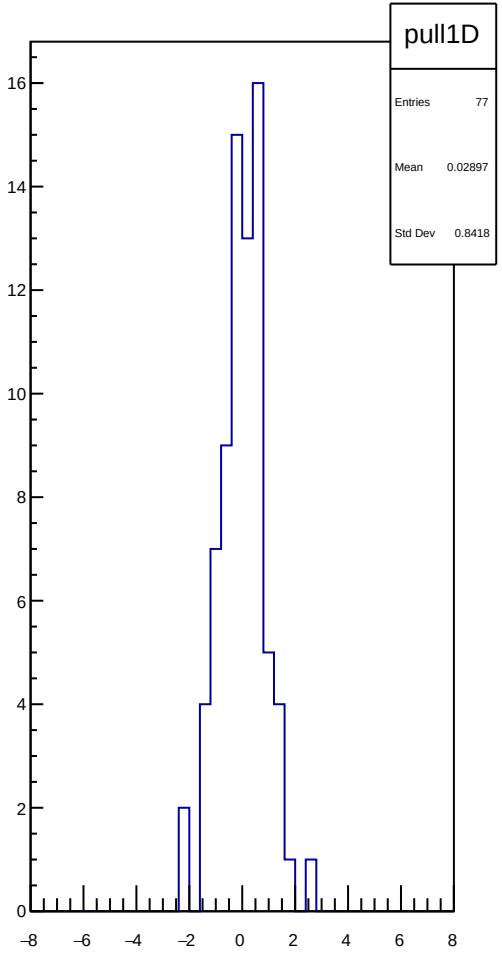

asym_bpm0l08WS_rms vs run
χ² / ndf 8.001e+04 / 76
p0 419.7 ± 0.3395
650
600
550
500
450
400
350
300
250

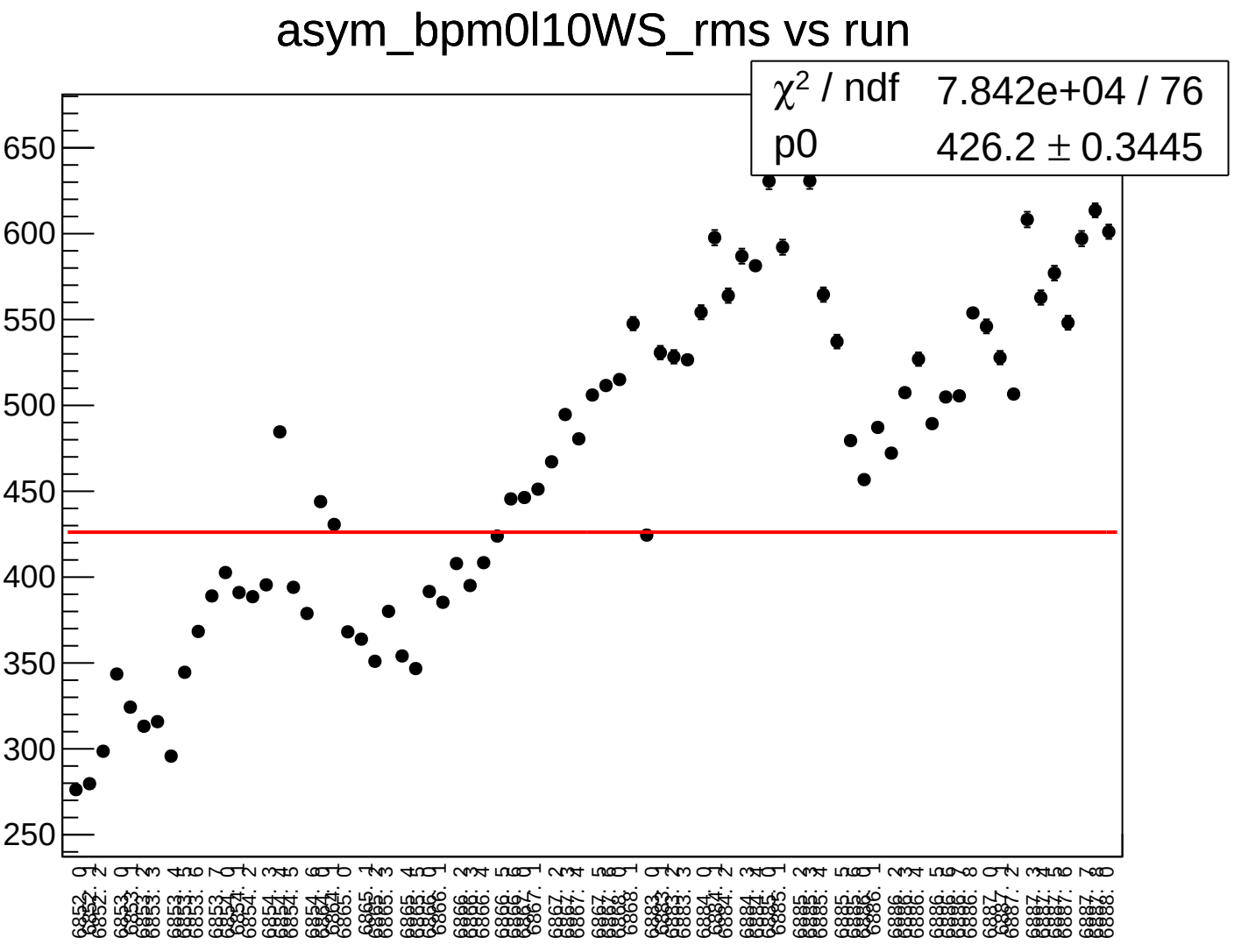

asym_bpm0l09WS_mean vs run
χ² / ndf 48.13 / 76
p0 876.3 ± 473.7
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 163
Std Dev 113.8
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

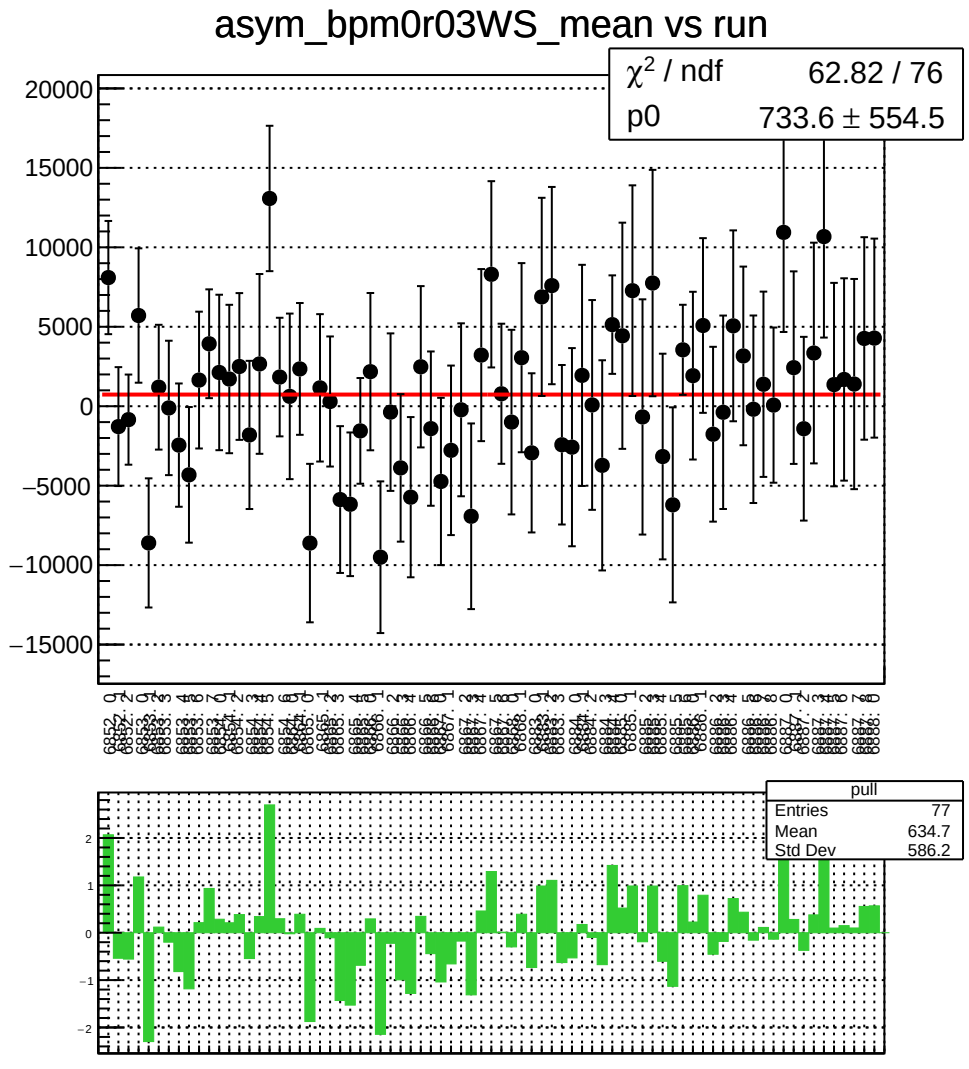

pull1D
Entries 77
Mean 0.03646
Std Dev 0.7898
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

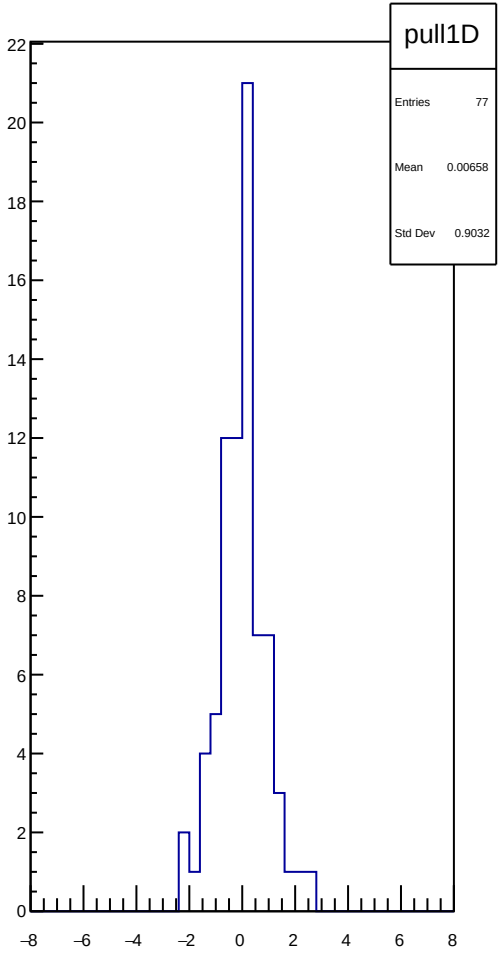

asym_bpm0l09WS_rms vs run
χ² / ndf 7.89e+04 / 76
p0 414.2 ± 0.3349
650
600
550
500
450
400
350
300
250

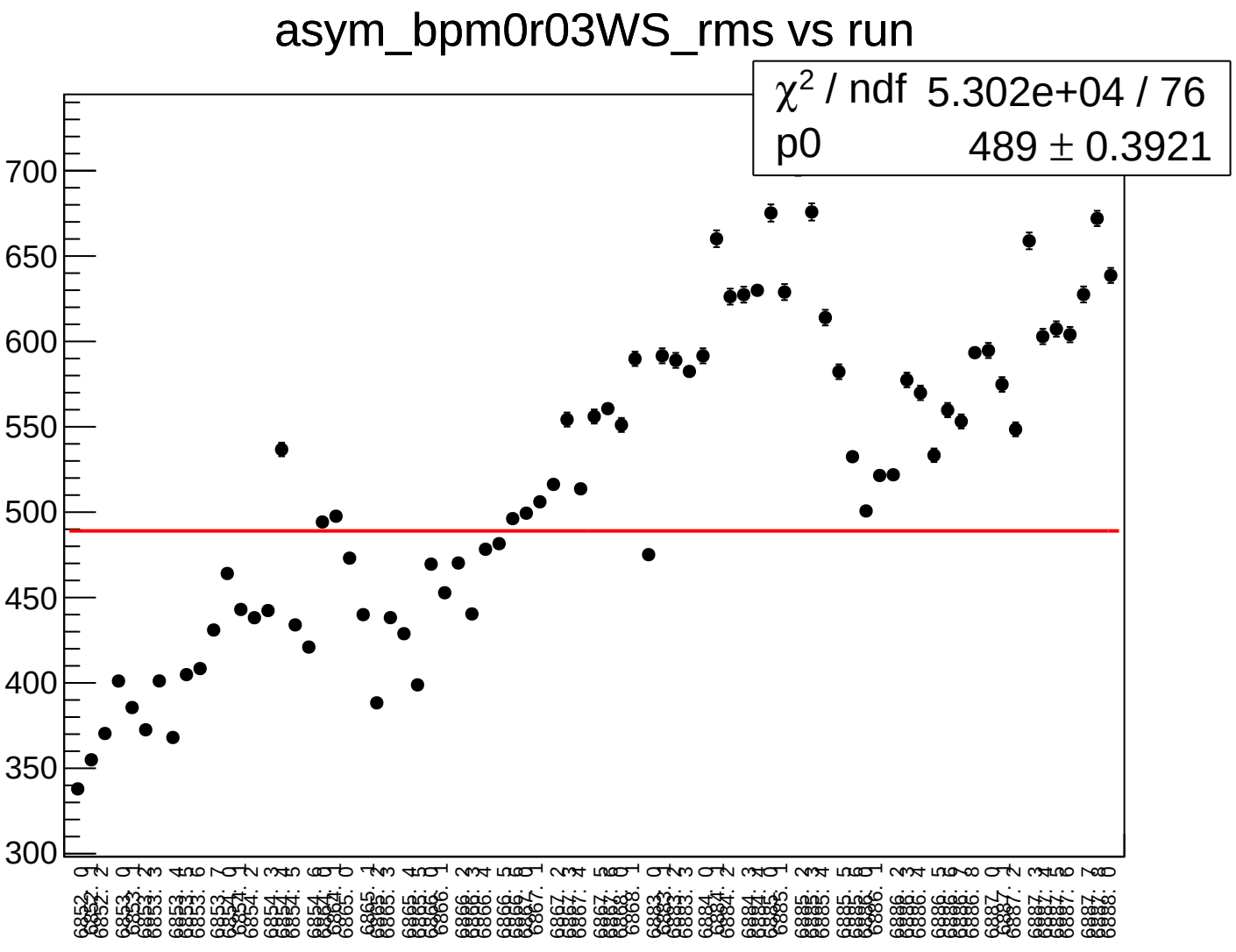

asym_bpm0l10WS_mean vs run
χ² / ndf 54.62 / 76
p0 901.2 ± 487.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 77
Mean 183.6
Std Dev 134.4
2
1
0
−1
−2

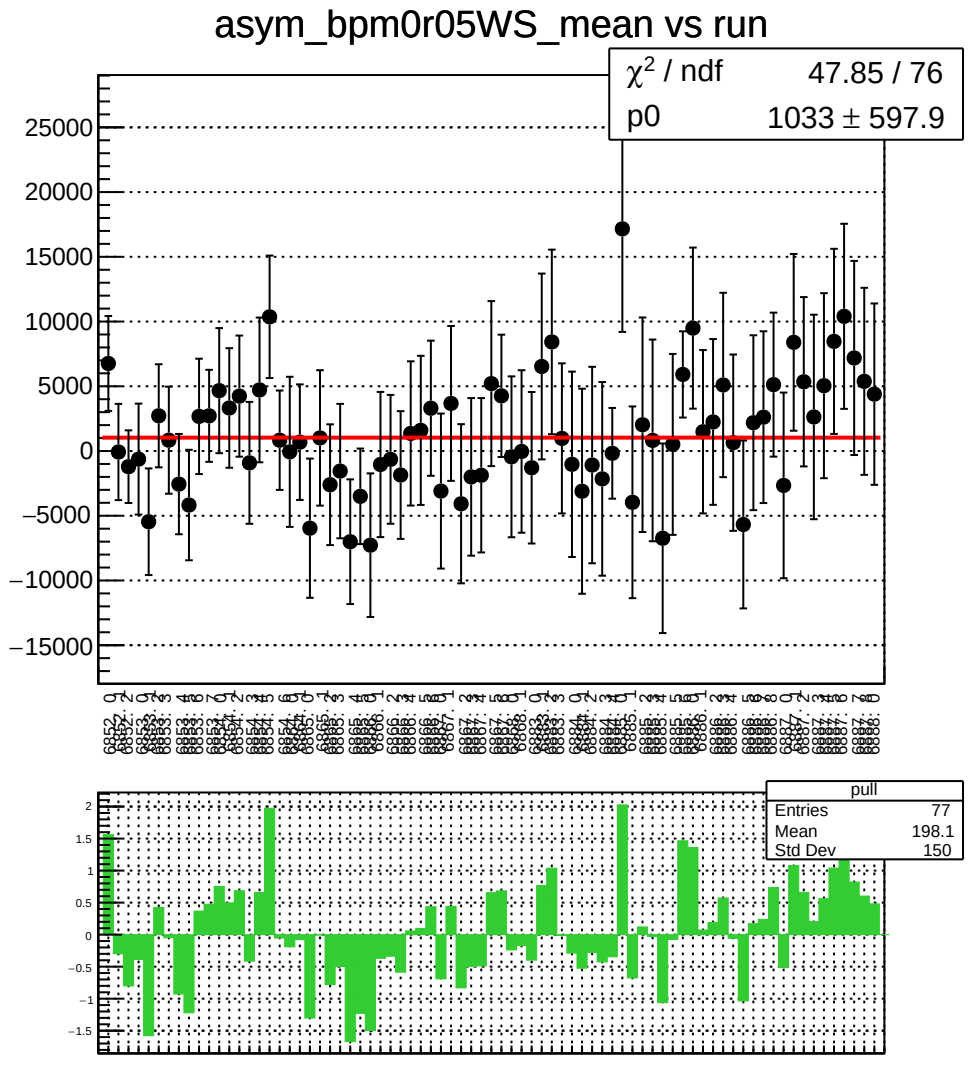

pull1D
Entries 77
Mean 0.02897
Std Dev 0.8418
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

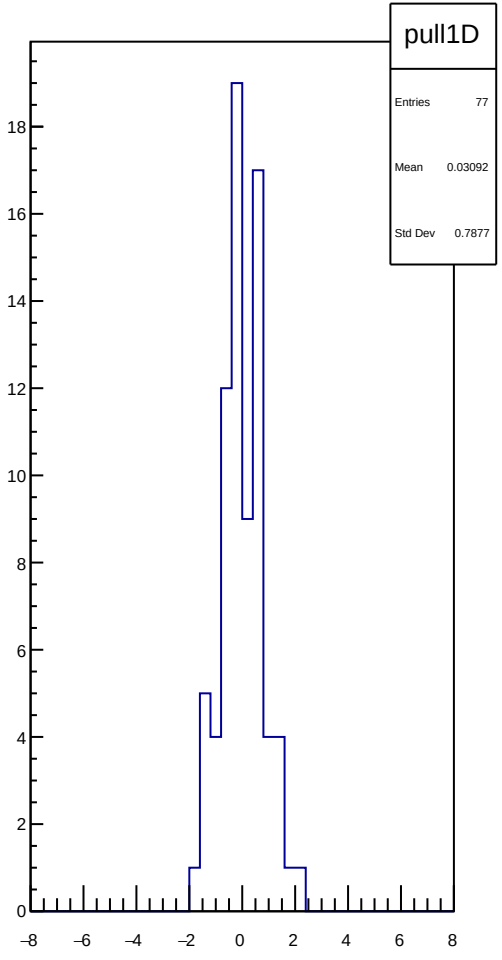

asym_bpm0l10WS_rms vs run
χ² / ndf 7.842e+04 / 76
p0 426.2 ± 0.3445
650
600
550
500
450
400
350
300
250

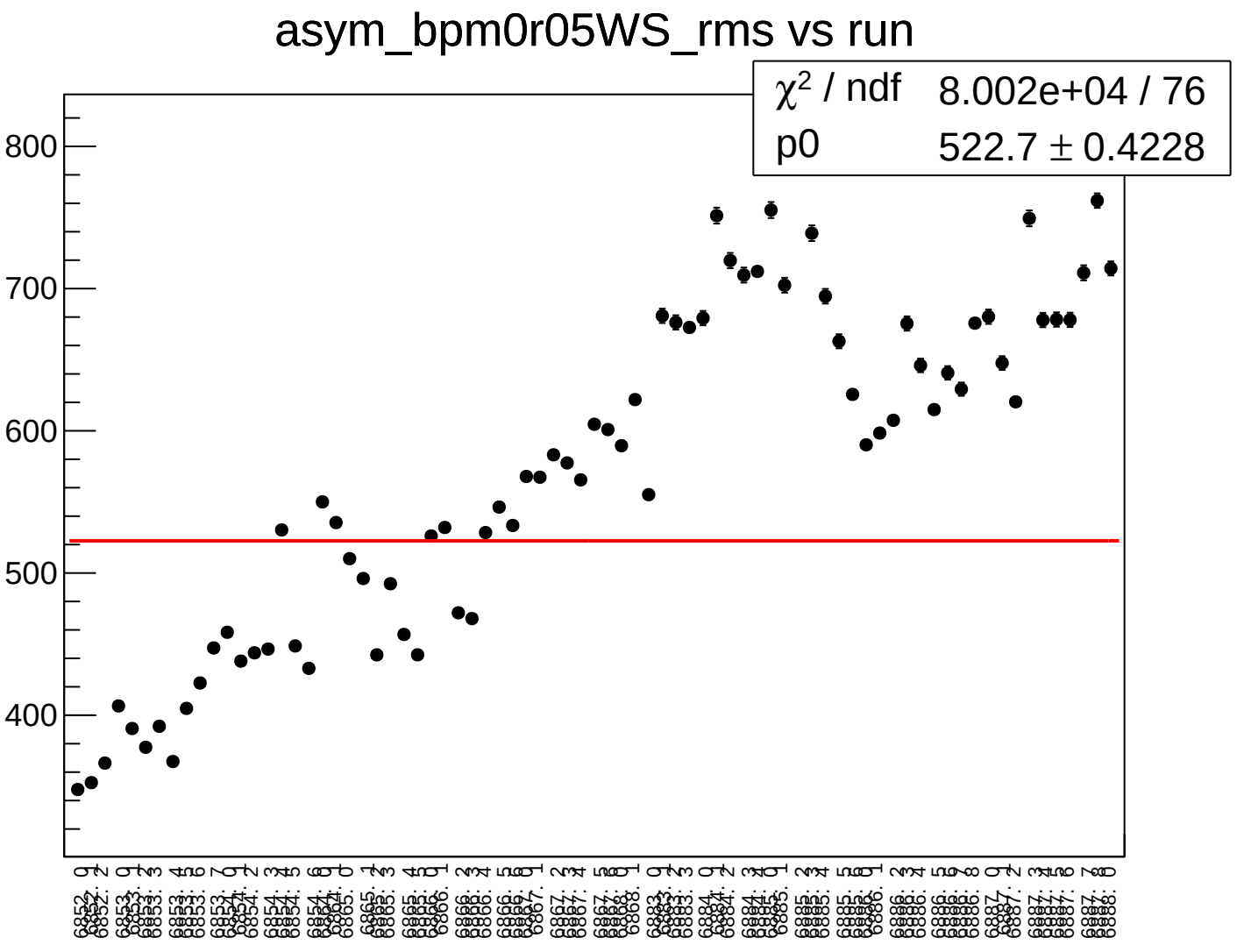

asym_bpm0r03WS_mean vs run
χ² / ndf 62.82 / 76
p0 733.6 ± 554.5
pull
Entries 77
Mean 634.7
Std Dev 586.2

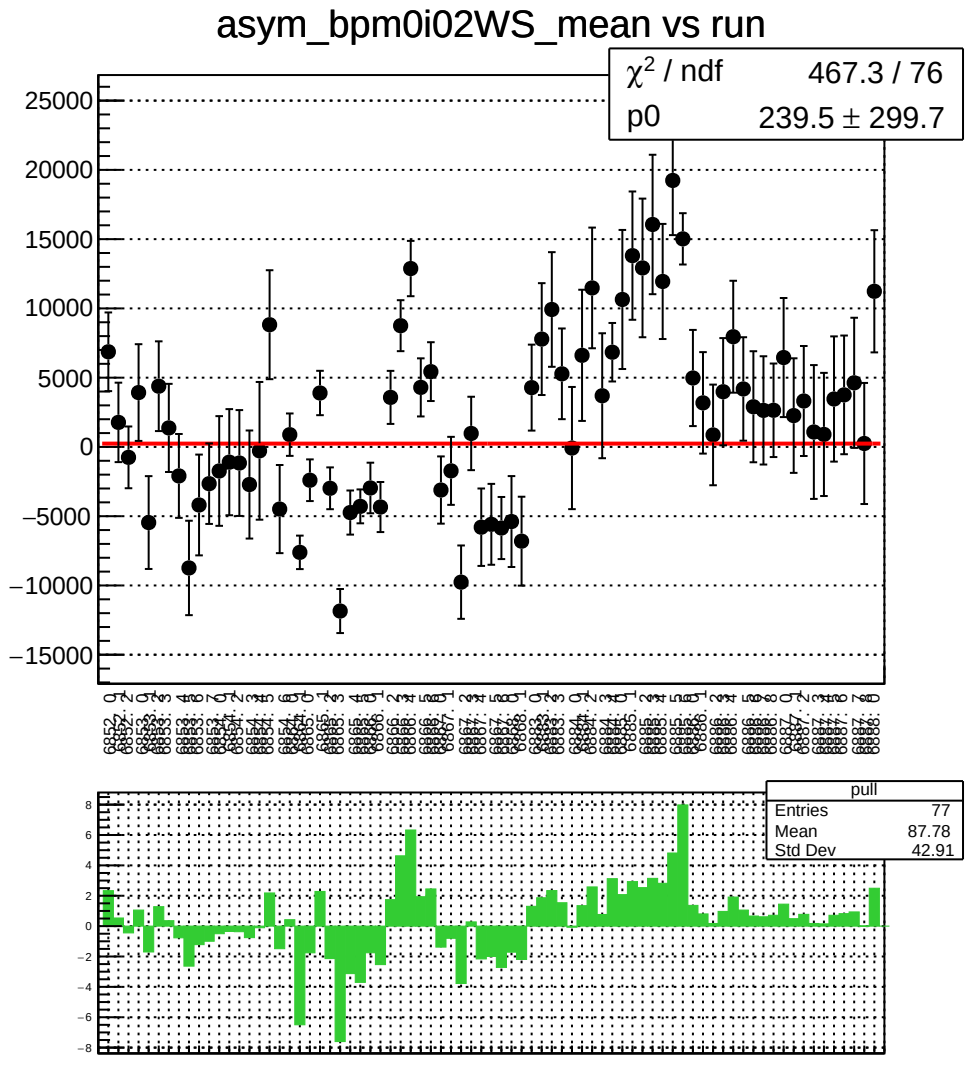

pull1D
Entries 77
Mean 0.00658
Std Dev 0.9032

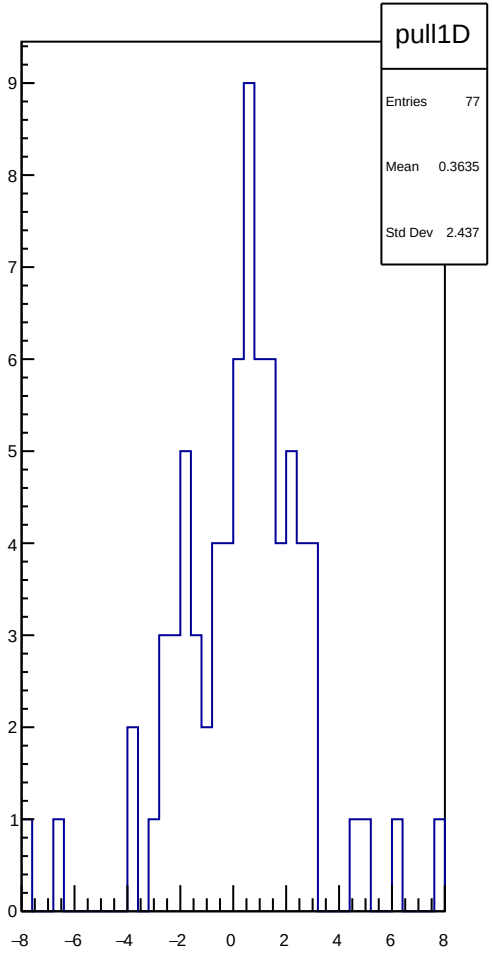

asym_bpm0r03WS_rms vs run
χ^2 / ndf 5.302e+04 / 76
p0 489 ± 0.3921
700
650
600
550
500
450
400
350
300

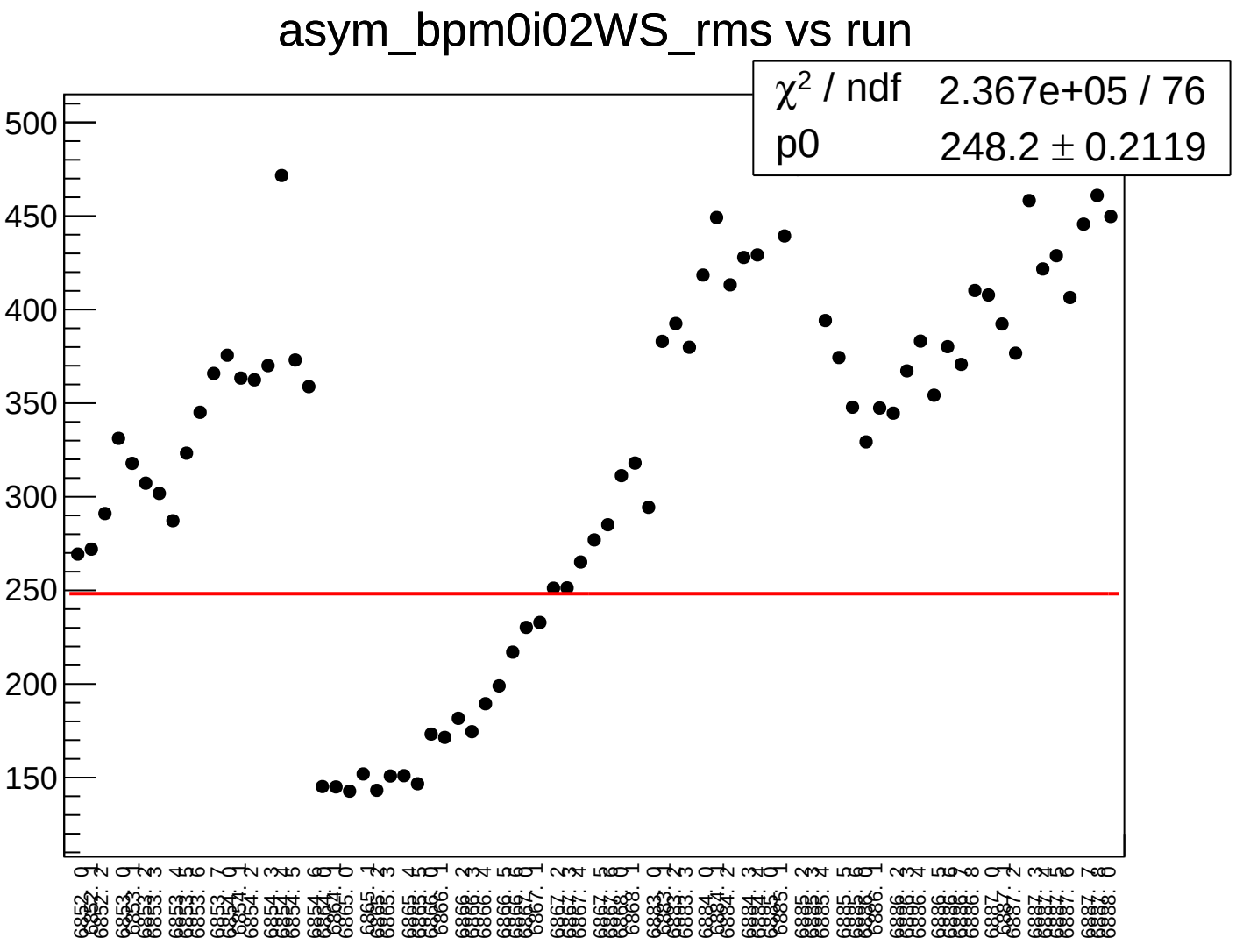

asym_bpm0r05WS_mean vs run
χ² / ndf 47.85 / 76
p0 1033 ± 597.9
25000
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 77
Mean 198.1
Std Dev 150
2
1.5
1
0.5
0
−0.5
−1
−1.5

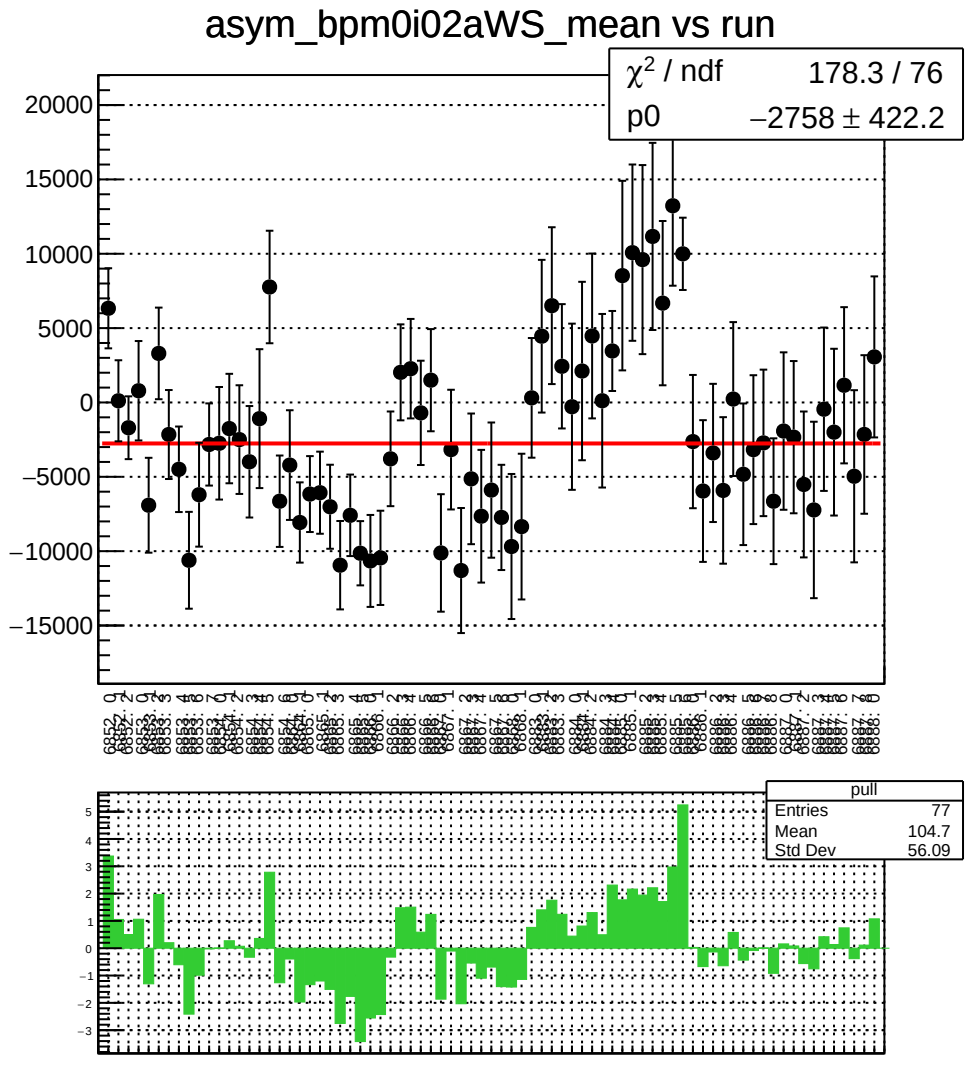

pull1D
Entries 77
Mean 0.03092
Std Dev 0.7877
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

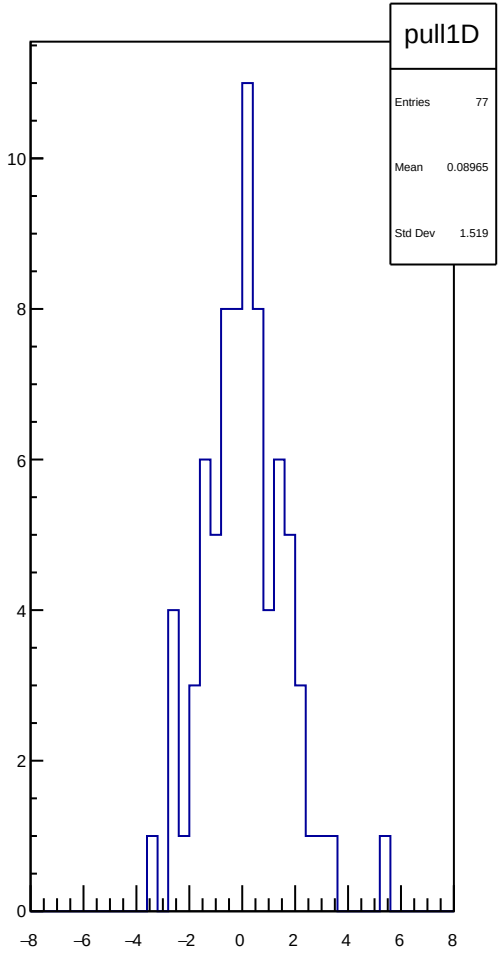

asym_bpm0r05WS_rms vs run
χ² / ndf 8.002e+04 / 76
p0 522.7 ± 0.4228
800
700
600
500
400

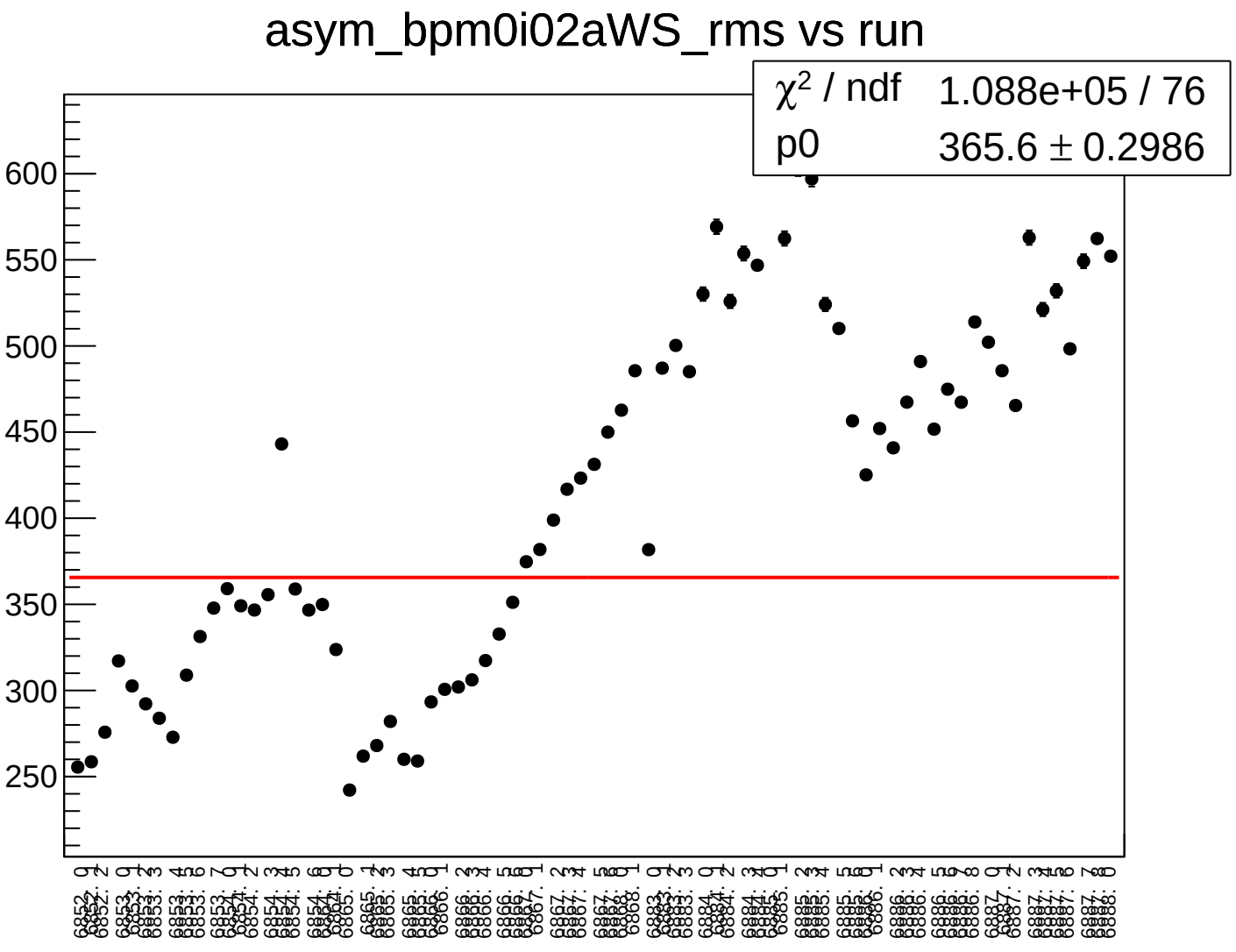

asym_bpm0i02WS_mean vs run
χ² / ndf 467.3 / 76
p0 239.5 ± 299.7
pull
Entries 77
Mean 87.78
Std Dev 42.91

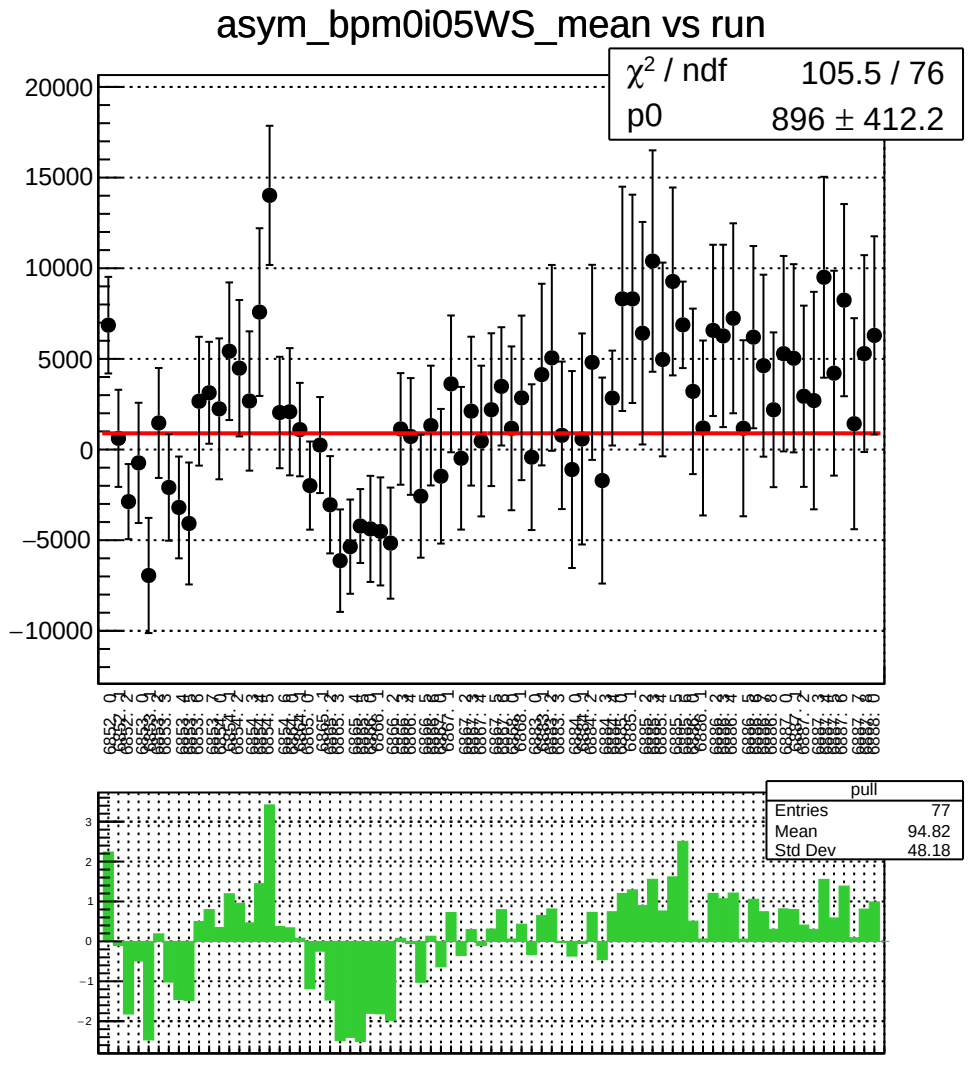

pull1D
Entries 77
Mean 0.3635
Std Dev 2.437

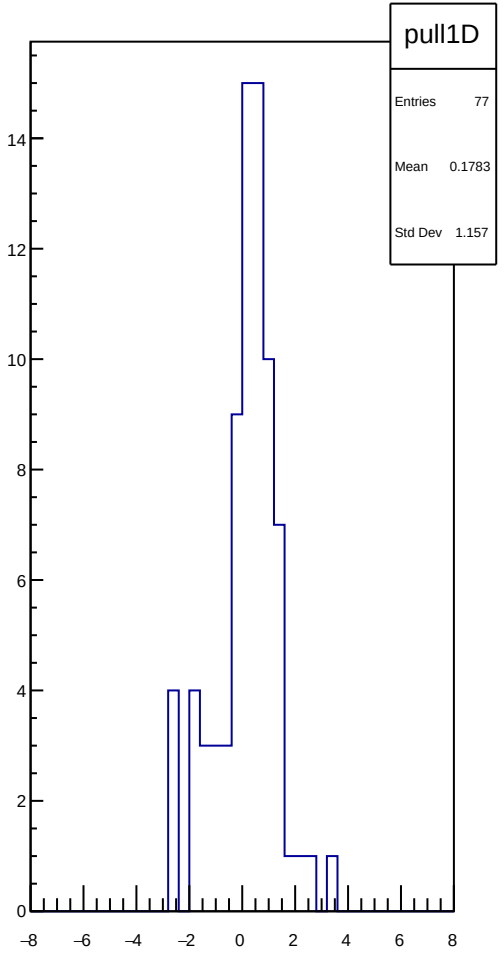

asym_bpm0i02WS_rms vs run
χ² / ndf 2.367e+05 / 76
p0 248.2 ± 0.2119
500
450
400
350
300
250
200
150

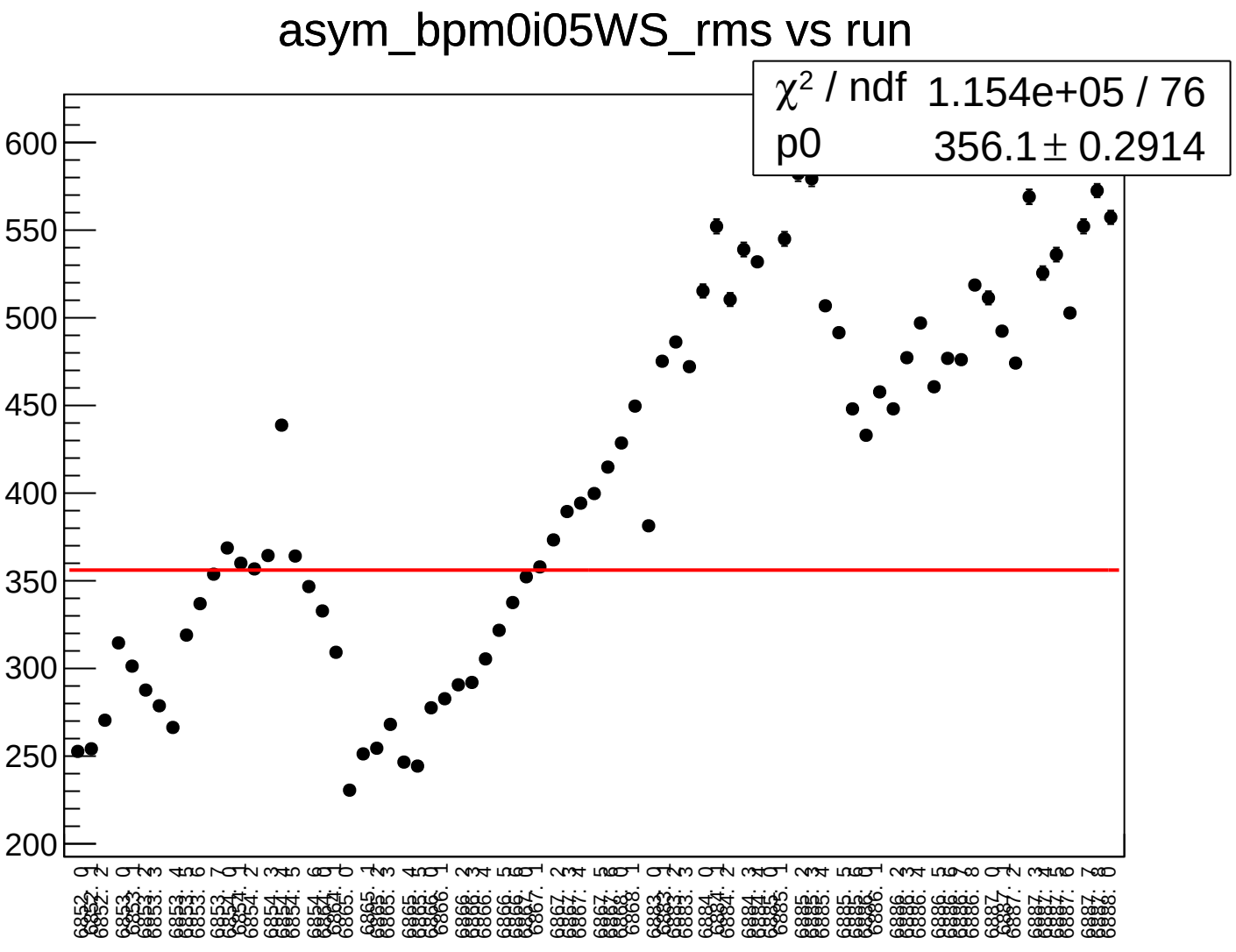

asym_bpm0i02aWS_mean vs run
χ² / ndf 178.3 / 76
p0 −2758 ± 422.2
pull
Entries 77
Mean 104.7
Std Dev 56.09

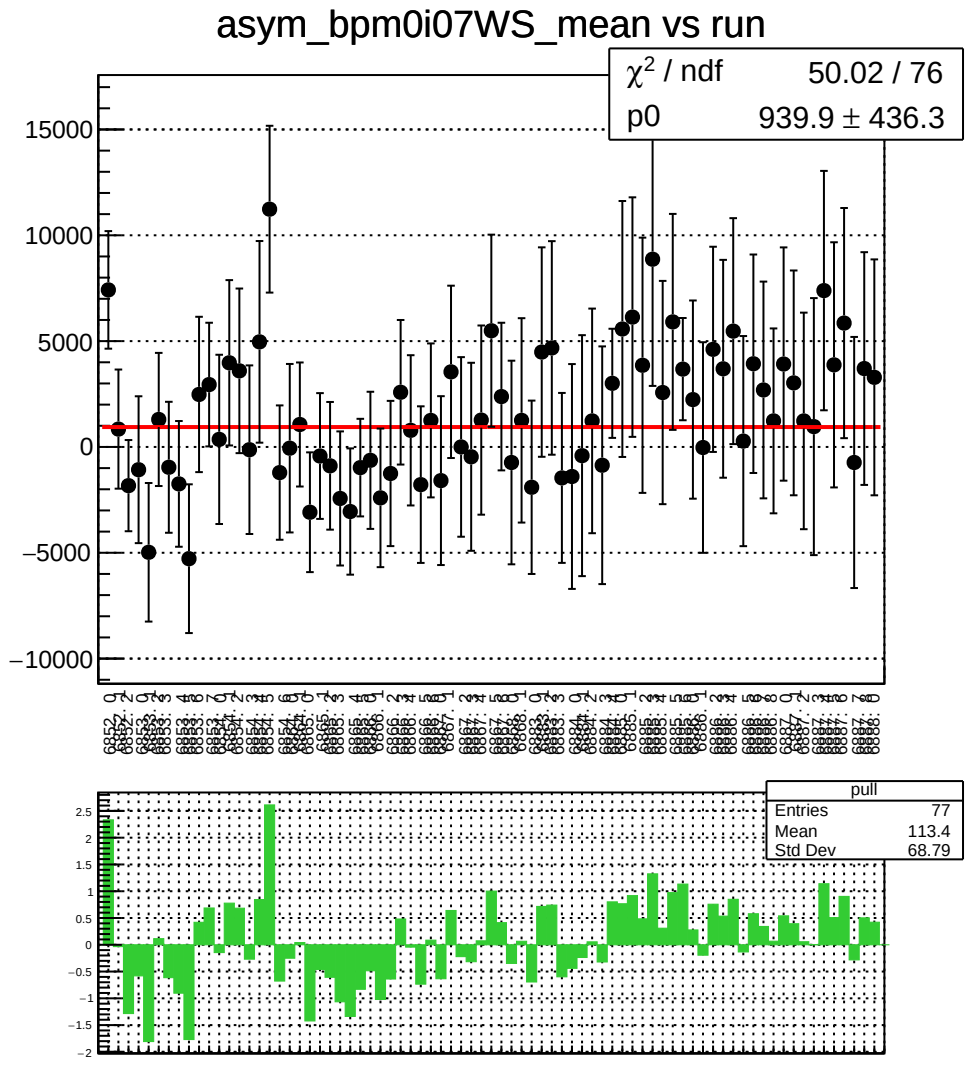

pull1D
Entries 77
Mean 0.08965
Std Dev 1.519

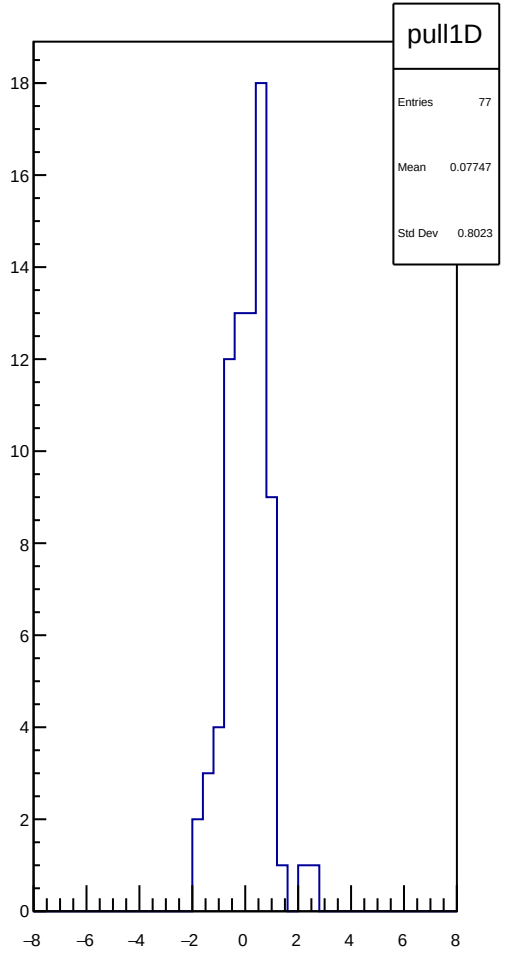

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 1.088e+05 / 76
p0 365.6 ± 0.2986
600
550
500
450
400
350
300
250

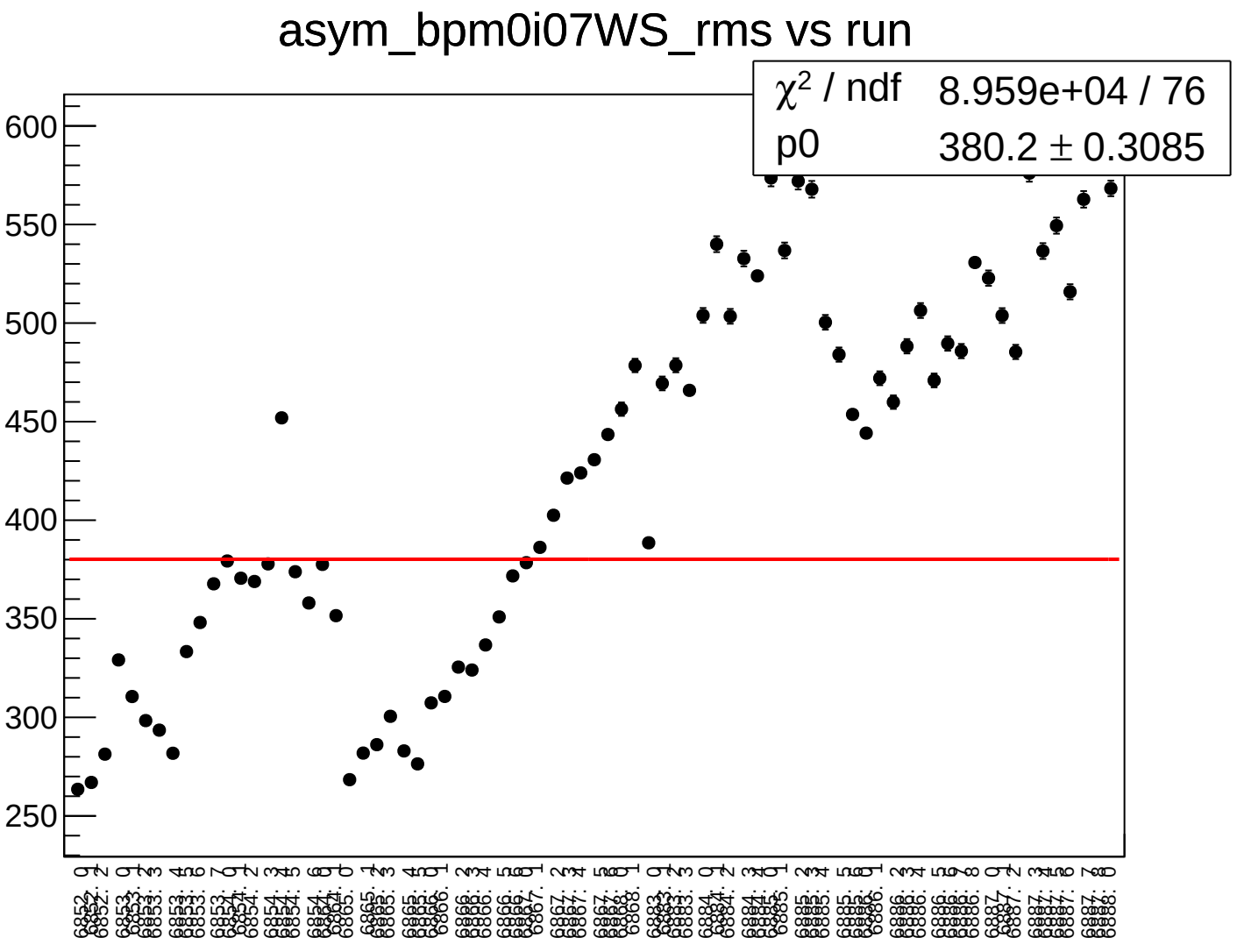

asym_bpm0i05WS_mean vs run
χ² / ndf 105.5 / 76
p0 896 ± 412.2
pull
Entries 77
Mean 94.82
Std Dev 48.18

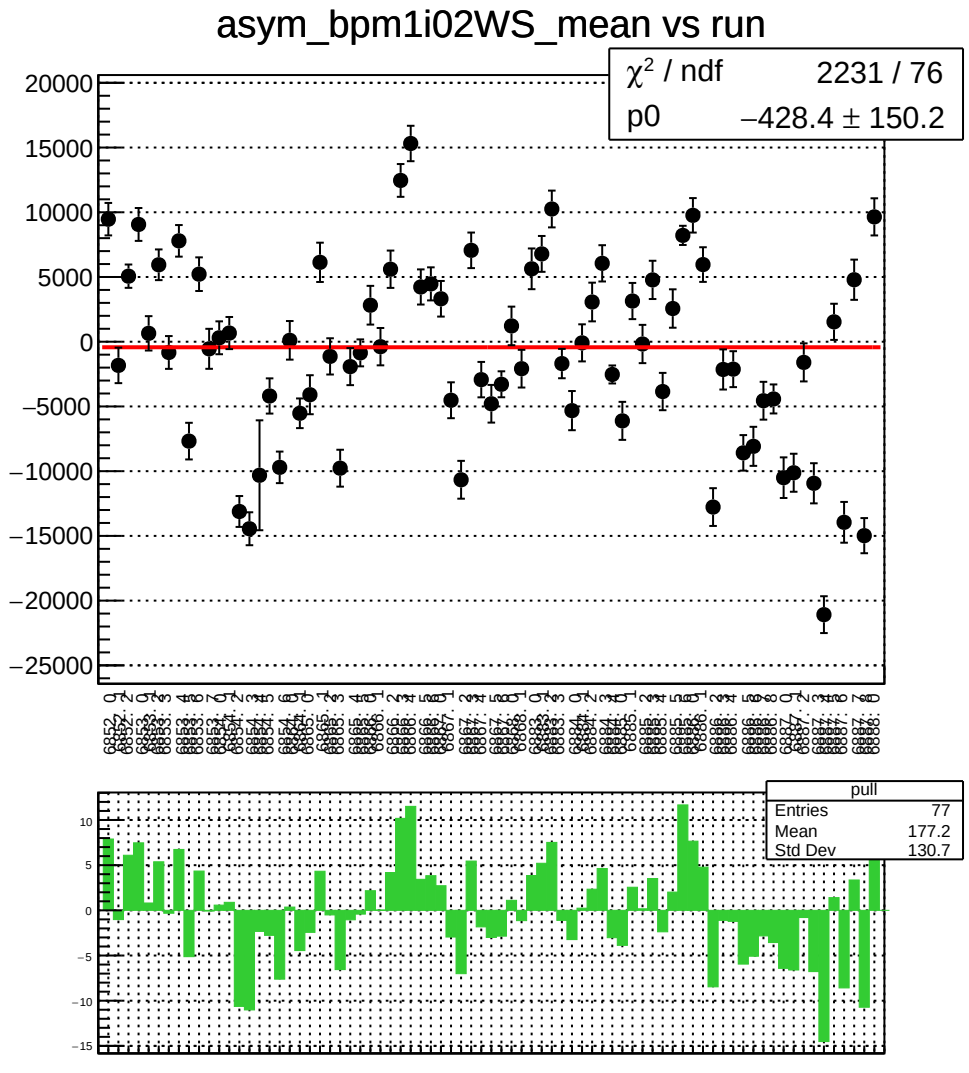

pull1D
Entries 77
Mean 0.1783
Std Dev 1.157

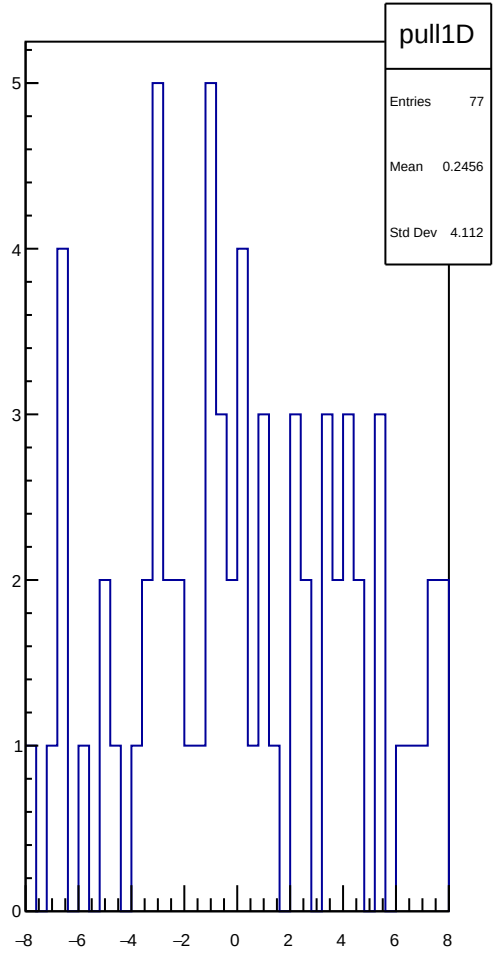

asym_bpm0i05WS_rms vs run
χ² / ndf 1.154e+05 / 76
p0 356.1 ± 0.2914
600
550
500
450
400
350
300
250
200

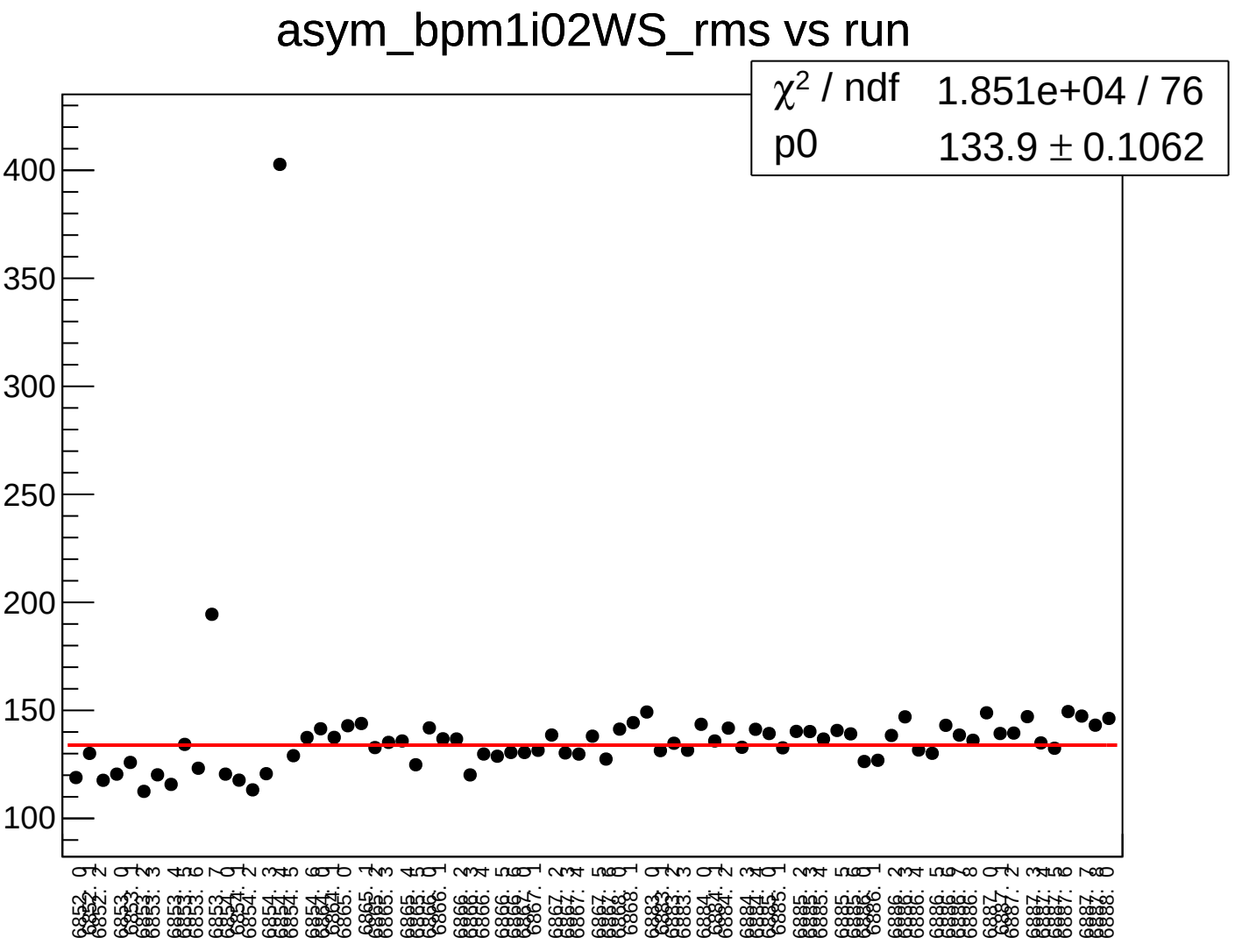

asym_bpm0i07WS_mean vs run
χ² / ndf 50.02 / 76
p0 939.9 ± 436.3
15000
10000
5000
0
−5000
−10000
pull
Entries 77
Mean 113.4
Std Dev 68.79
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

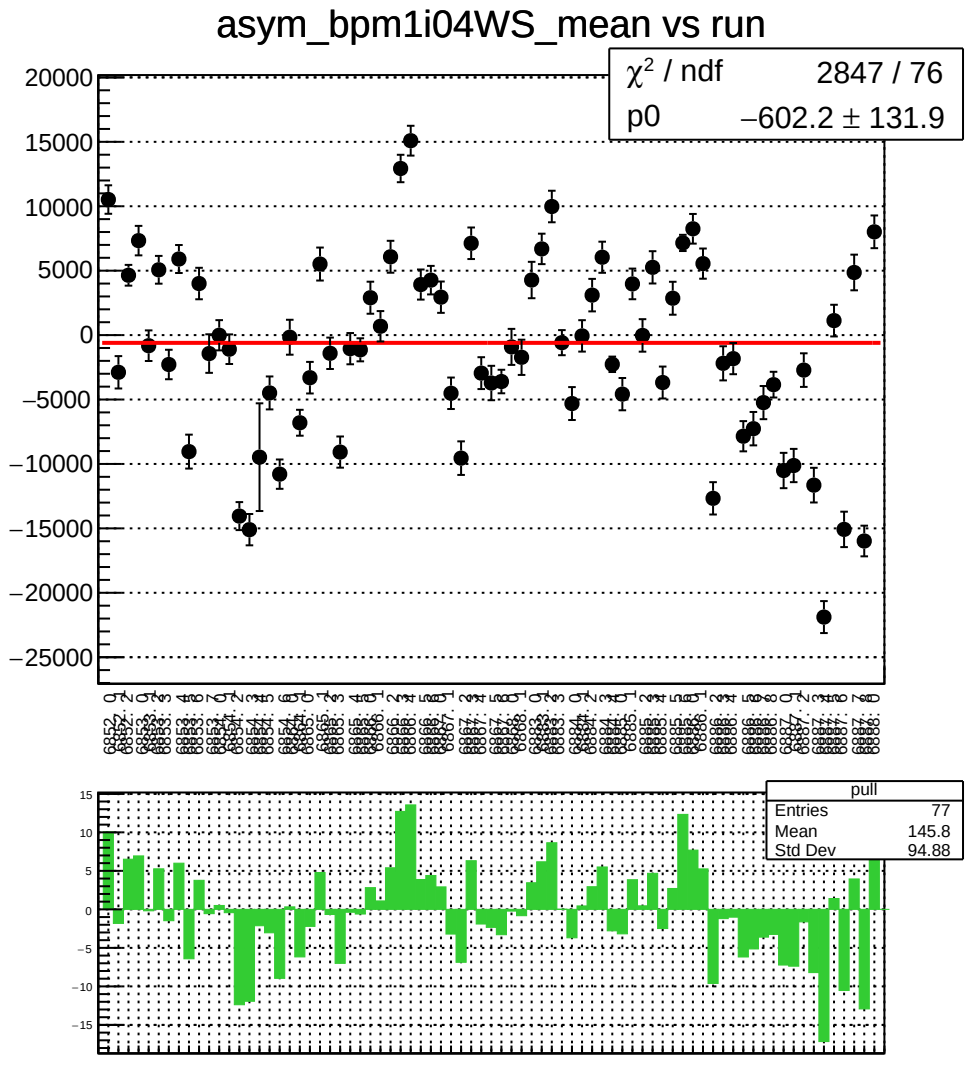

pull1D
Entries 77
Mean 0.07747
Std Dev 0.8023
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

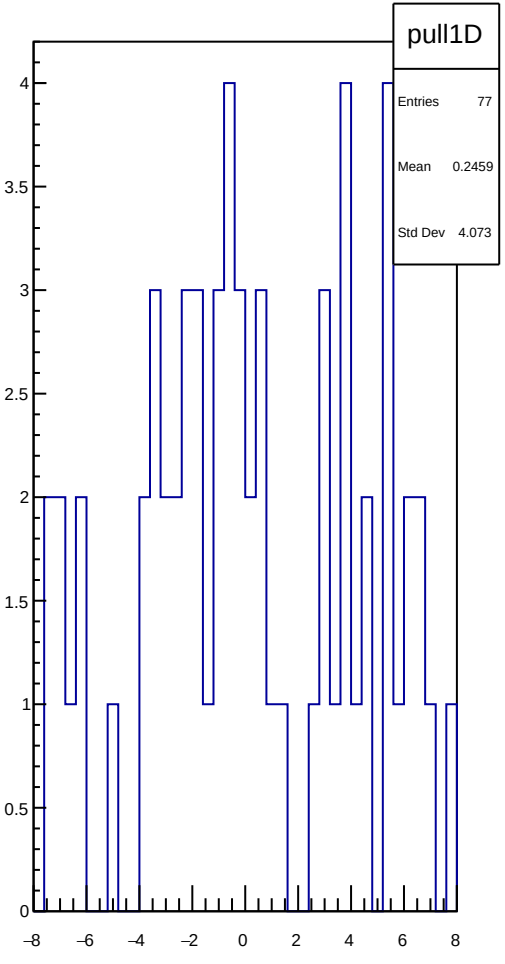

asym_bpm0i07WS_rms vs run
χ^2 / ndf 8.959e+04 / 76
p0 380.2 ± 0.3085
600
550
500
450
400
350
300
250

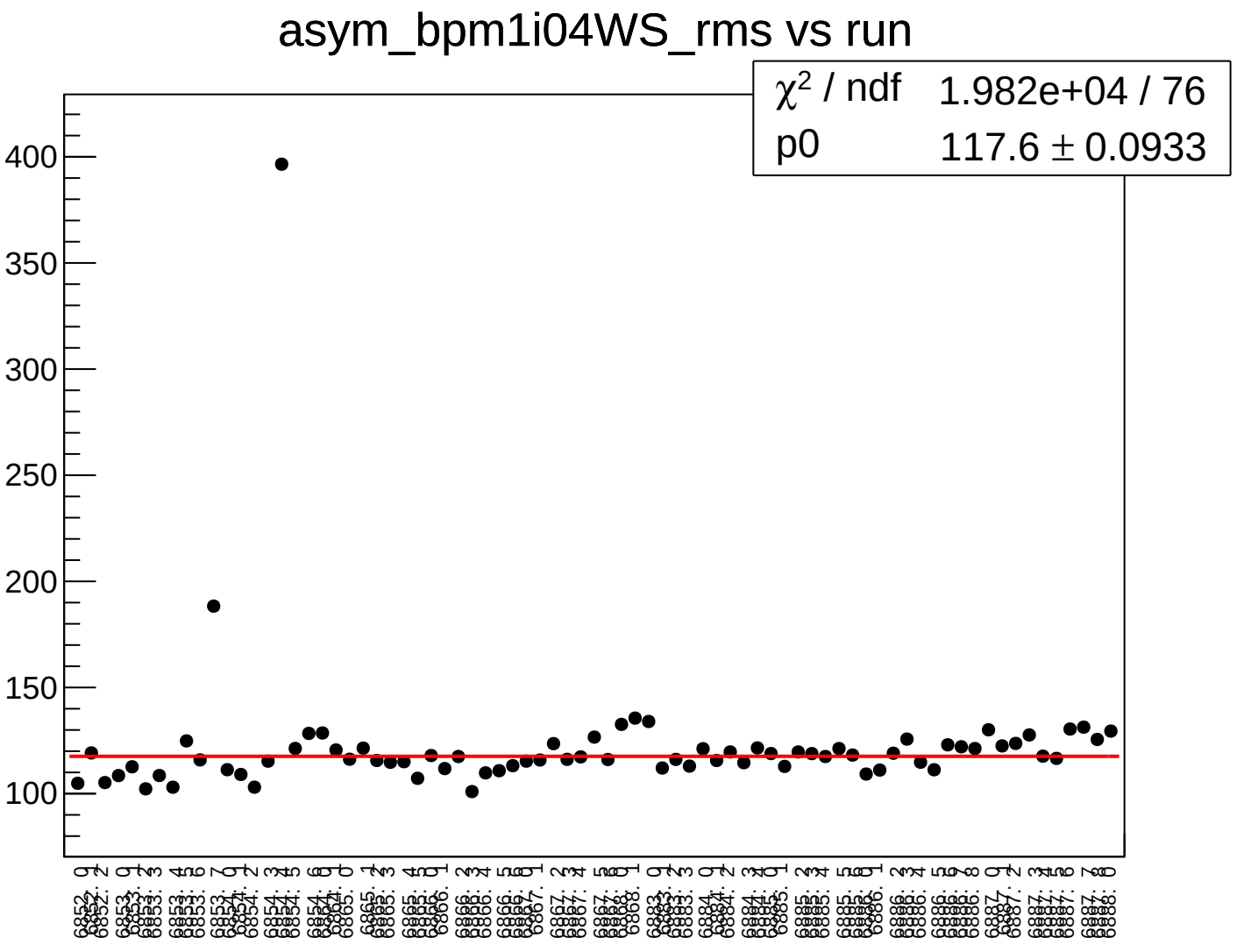

asym_bpm1i02WS_mean vs run
χ² / ndf 2231 / 76
p0 −428.4 ± 150.2
pull
Entries 77
Mean 177.2
Std Dev 130.7

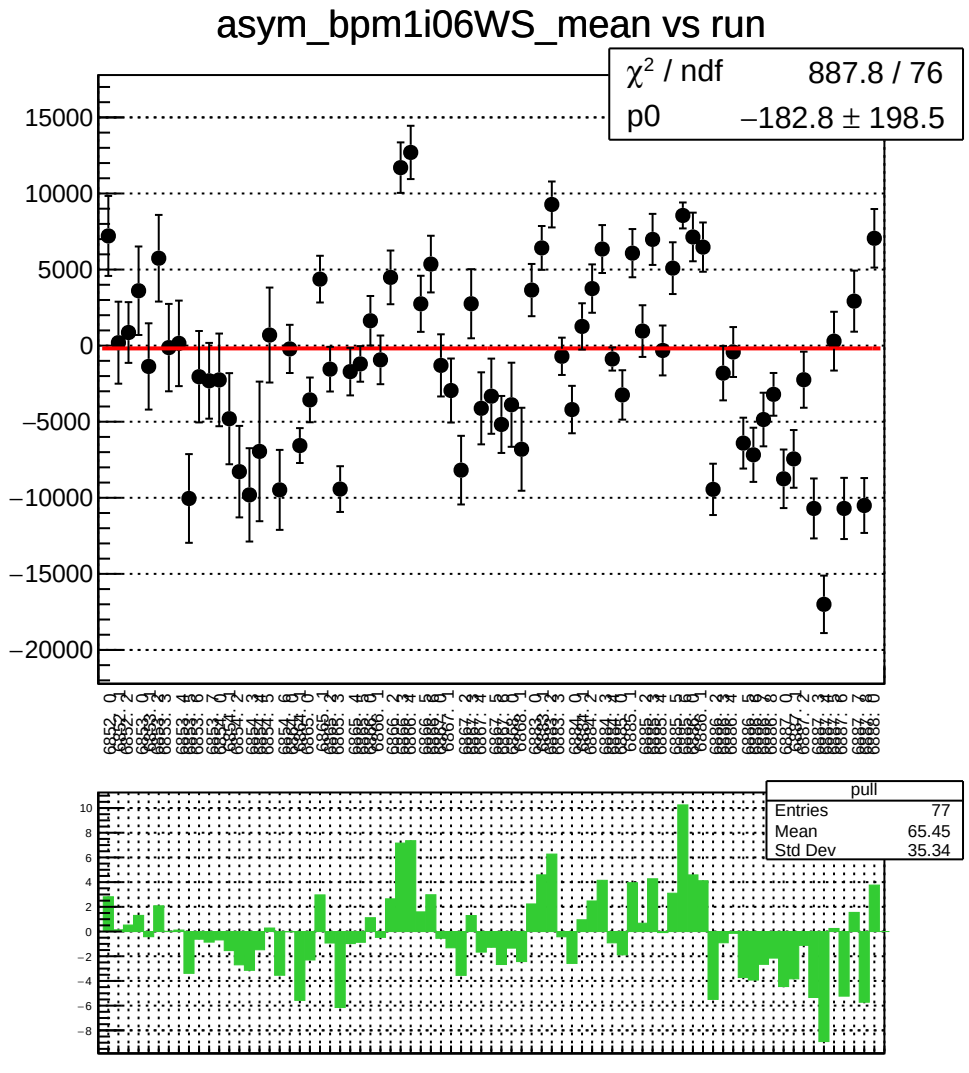

pull1D
Entries 77
Mean 0.2456
Std Dev 4.112

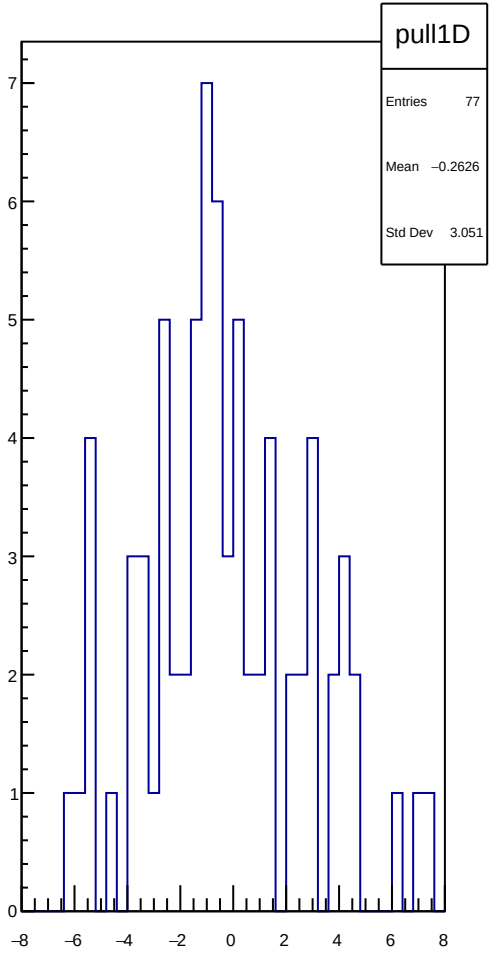

asym_bpm1i02WS_rms vs run
χ² / ndf 1.851e+04 / 76
p0 133.9 ± 0.1062
400
350
300
250
200
150
100

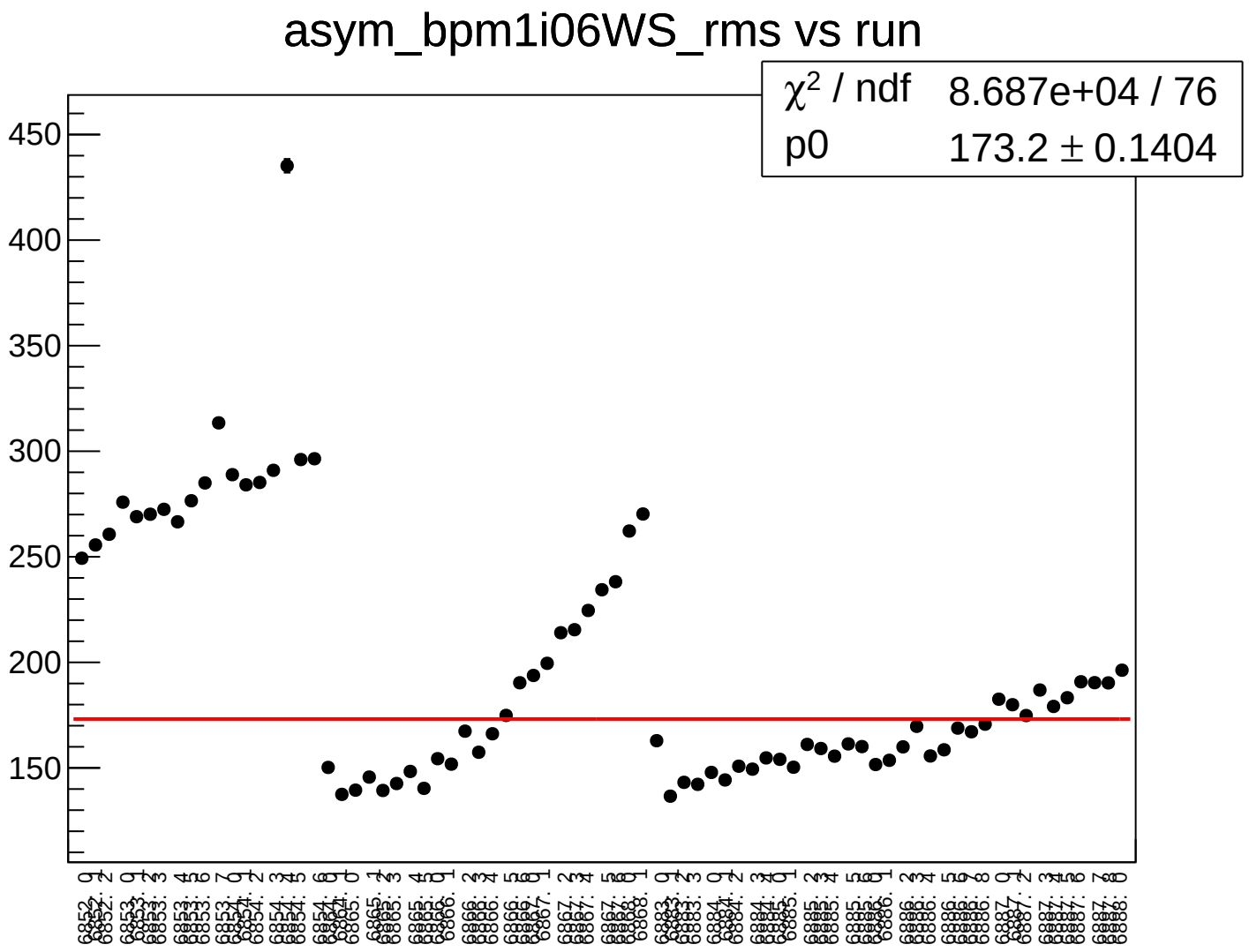

asym_bpm1i04WS_mean vs run
χ² / ndf 2847 / 76
p0 −602.2 ± 131.9
pull
Entries 77
Mean 145.8
Std Dev 94.88

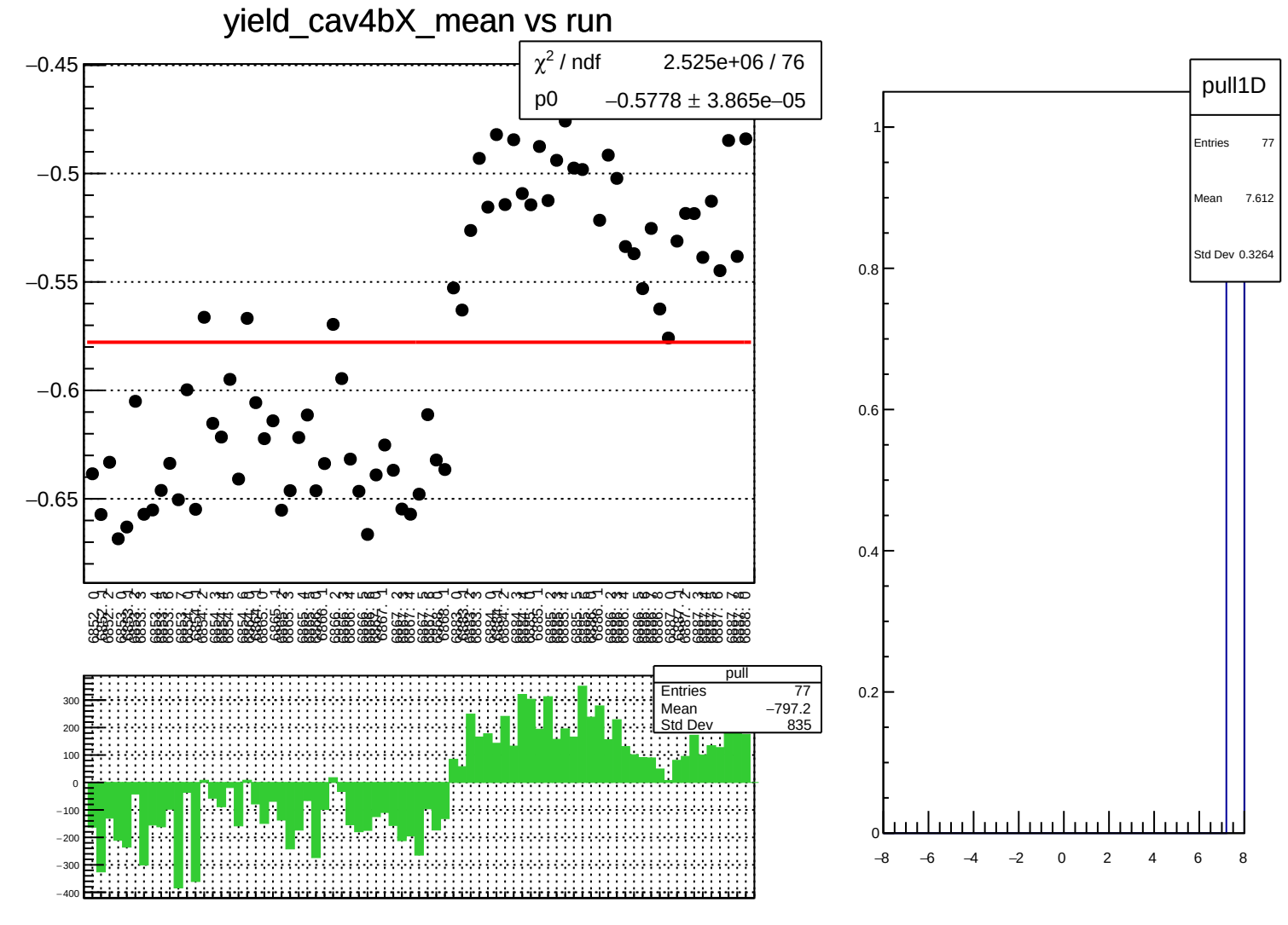

pull1D
Entries 77
Mean 0.2459
Std Dev 4.073

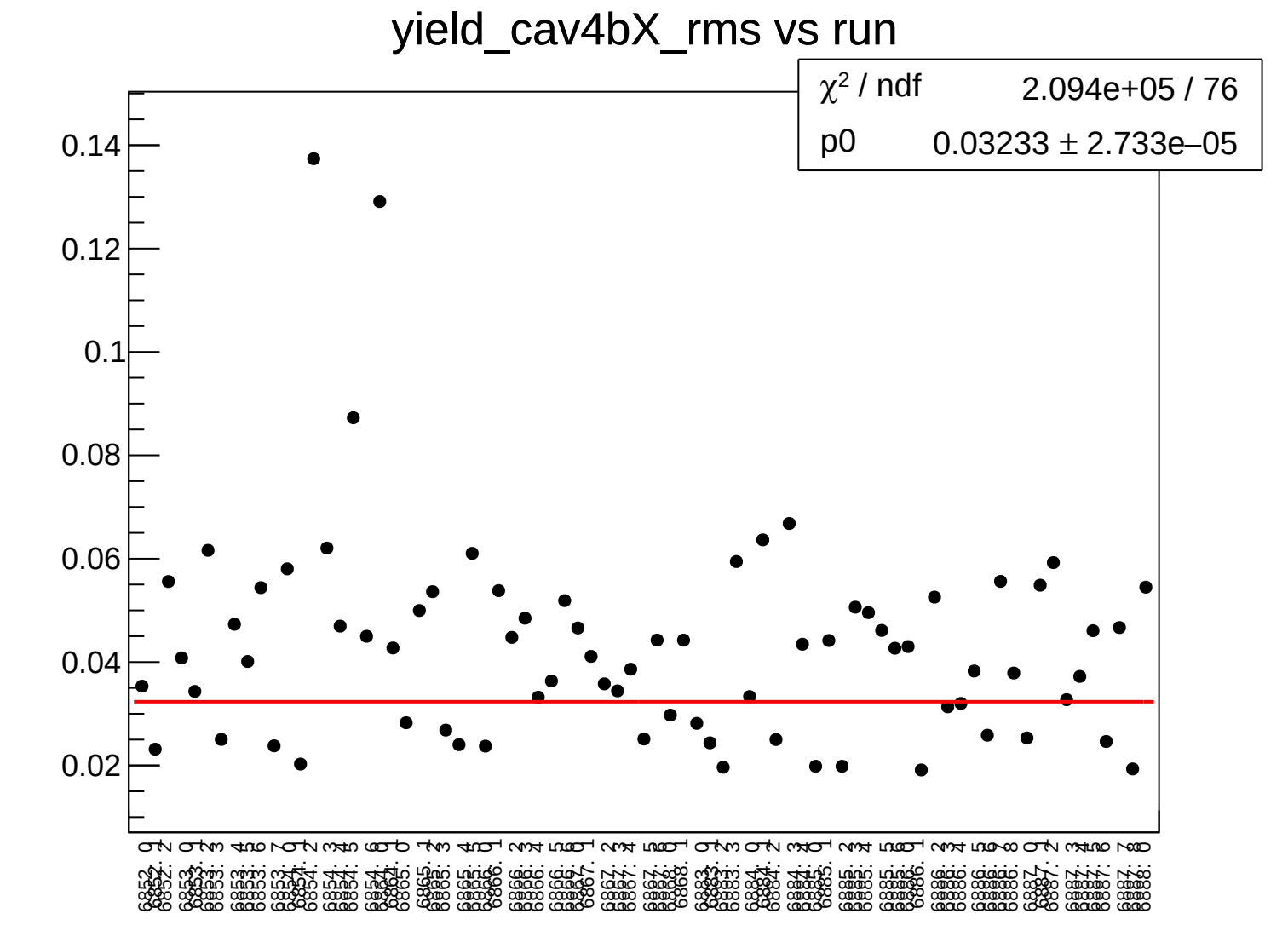

asym_bpm1i04WS_rms vs run
χ^2 / ndf 1.982e+04 / 76
p0 117.6 ± 0.0933
400
350
300
250
200
150
100

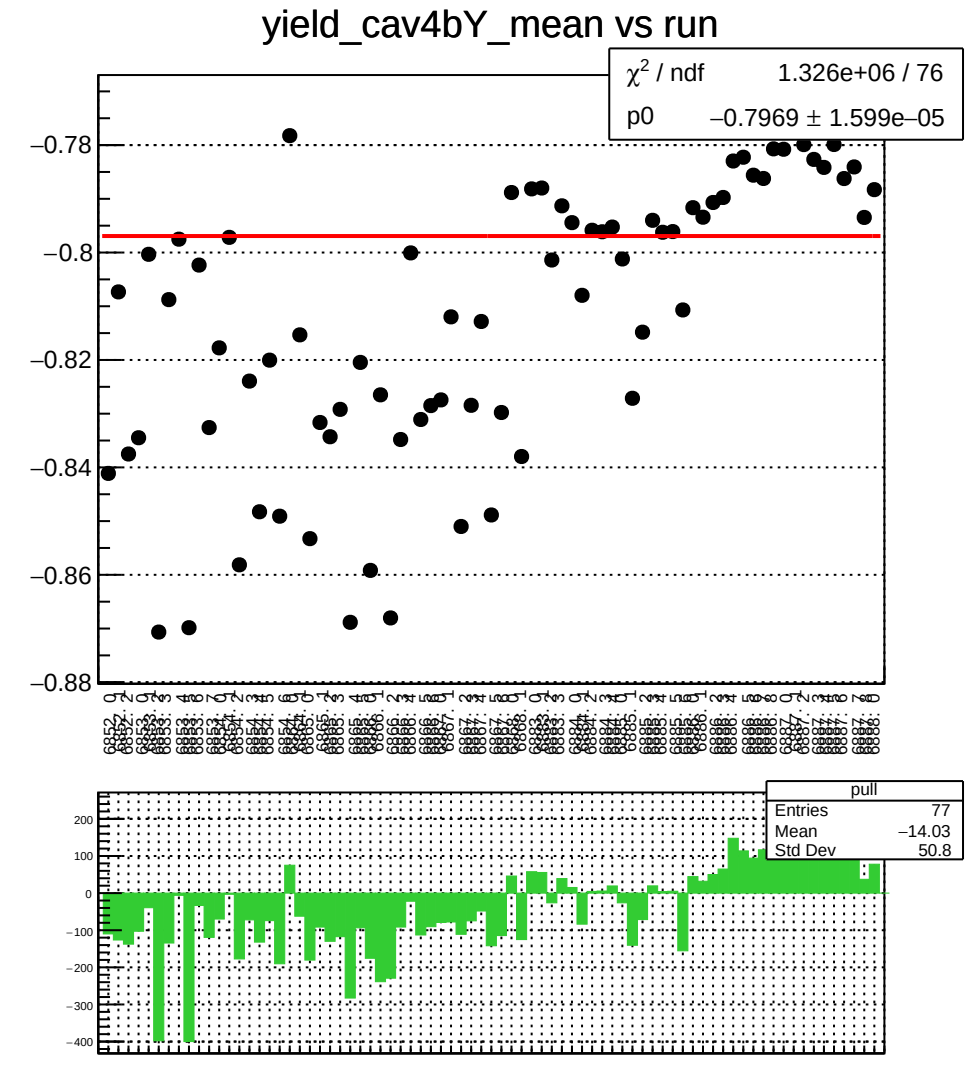

asym_bpm1i06WS_mean vs run
χ² / ndf 887.8 / 76
p0 −182.8 ± 198.5
pull
Entries 77
Mean 65.45
Std Dev 35.34

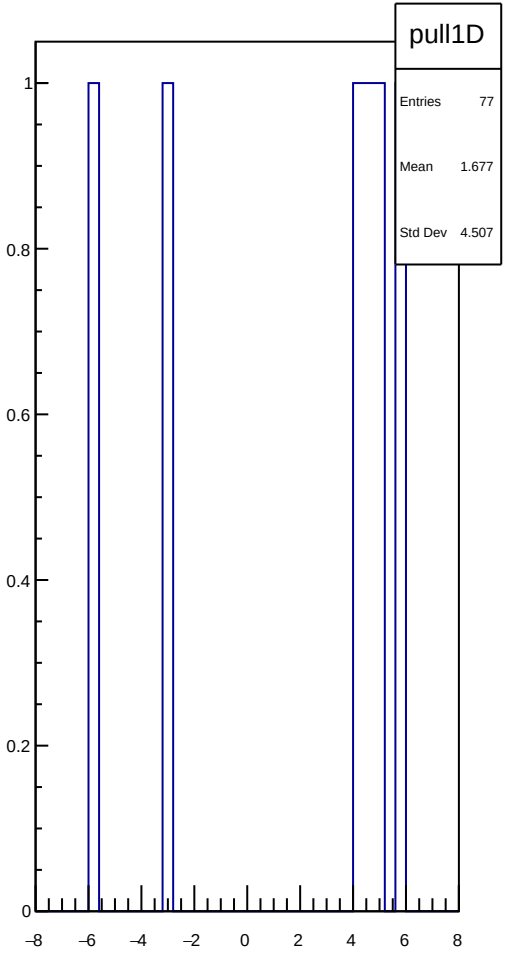

pull1D
Entries 77
Mean −0.2626
Std Dev 3.051

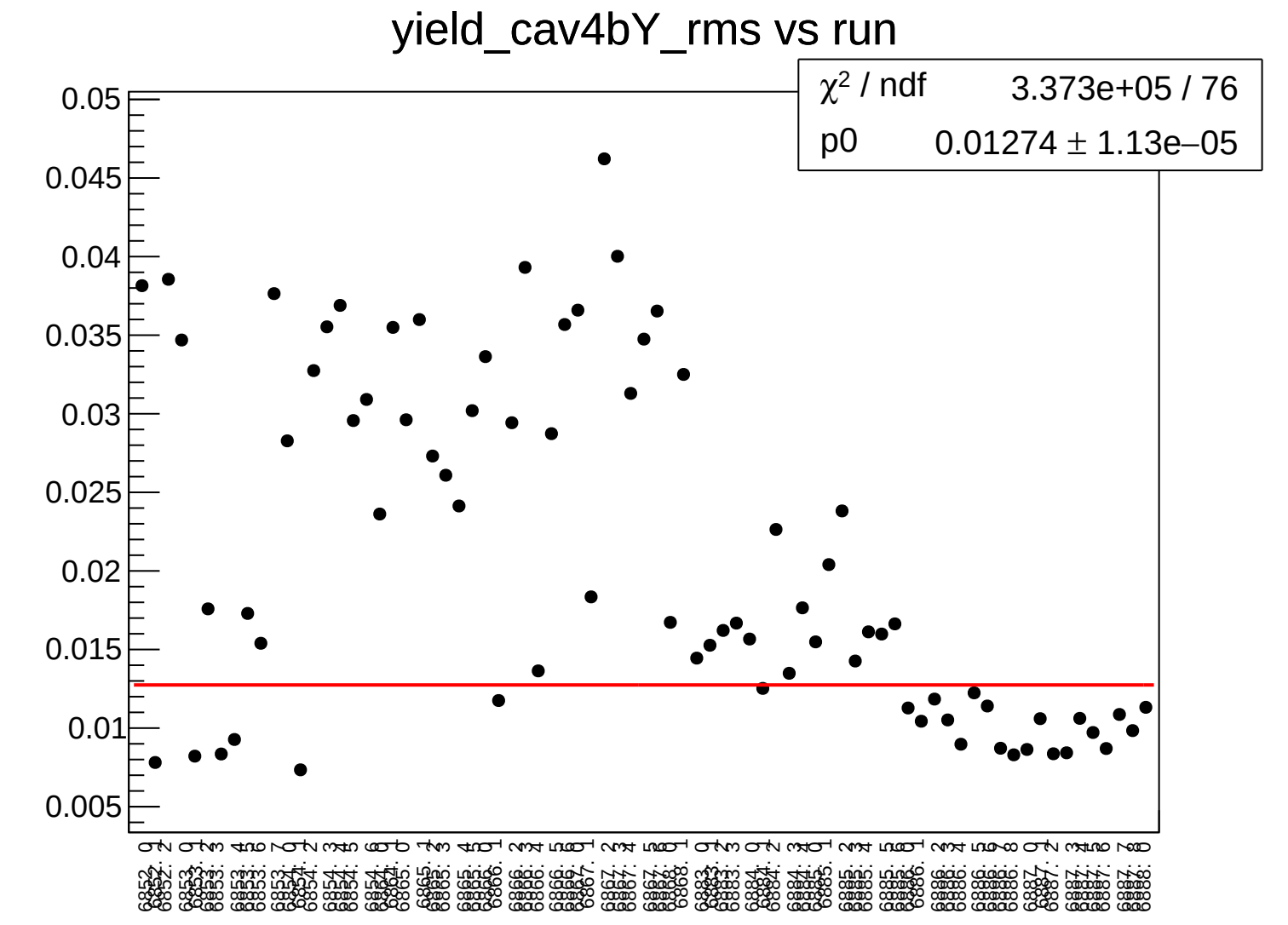

asym_bpm1i06WS_rms vs run
χ² / ndf 8.687e+04 / 76
p0 173.2 ± 0.1404
450
400
350
300
250
200
150

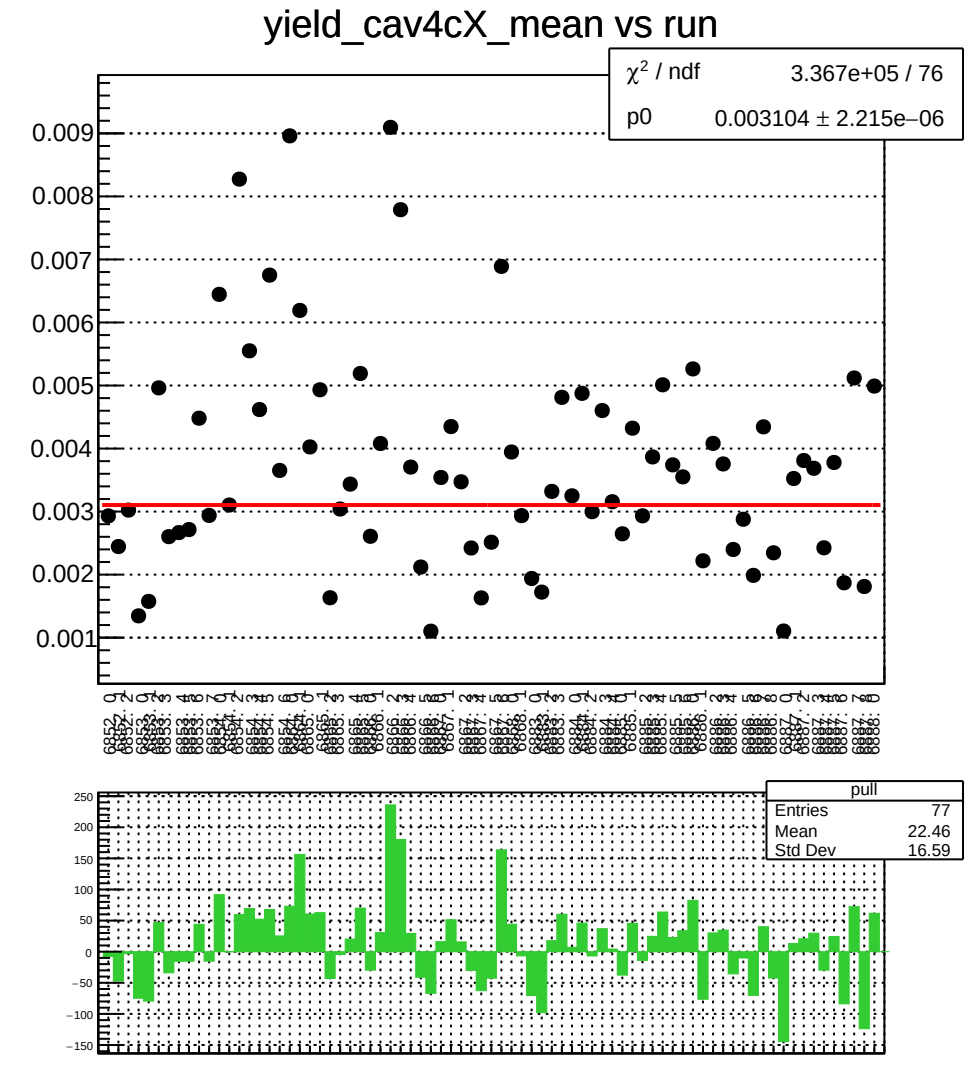

yield_cav4bX_mean vs run
χ² / ndf 2.525e+06 / 76
p0 −0.5778 ± 3.865e−05
−0.45
−0.5
−0.55
−0.6
−0.65
pull
Entries 77
Mean −797.2
Std Dev 835
300
200
100
0
−100
−200
−300
−400
pull1D
Entries 77
Mean 7.612
Std Dev 0.3264
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

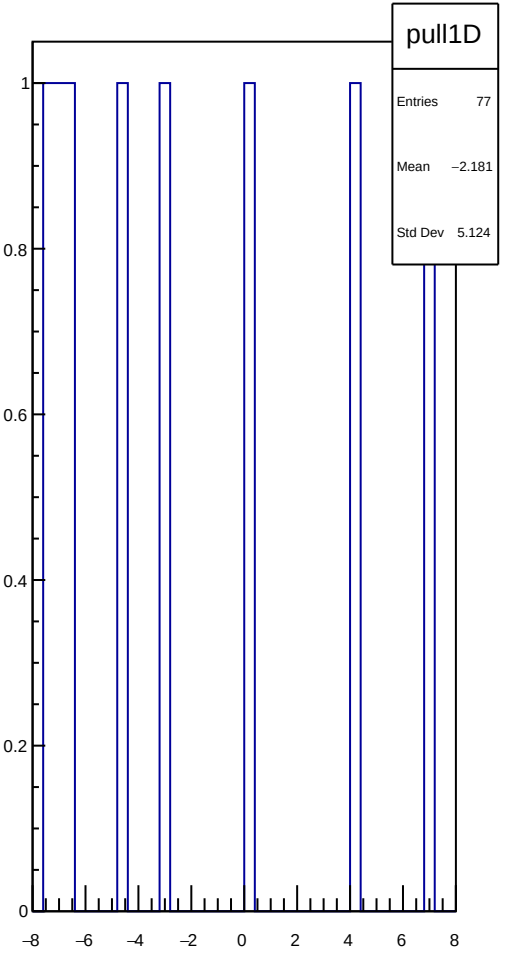

yield_cav4bX_rms vs run
χ² / ndf 2.094e+05 / 76
p0 0.03233 ± 2.733e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

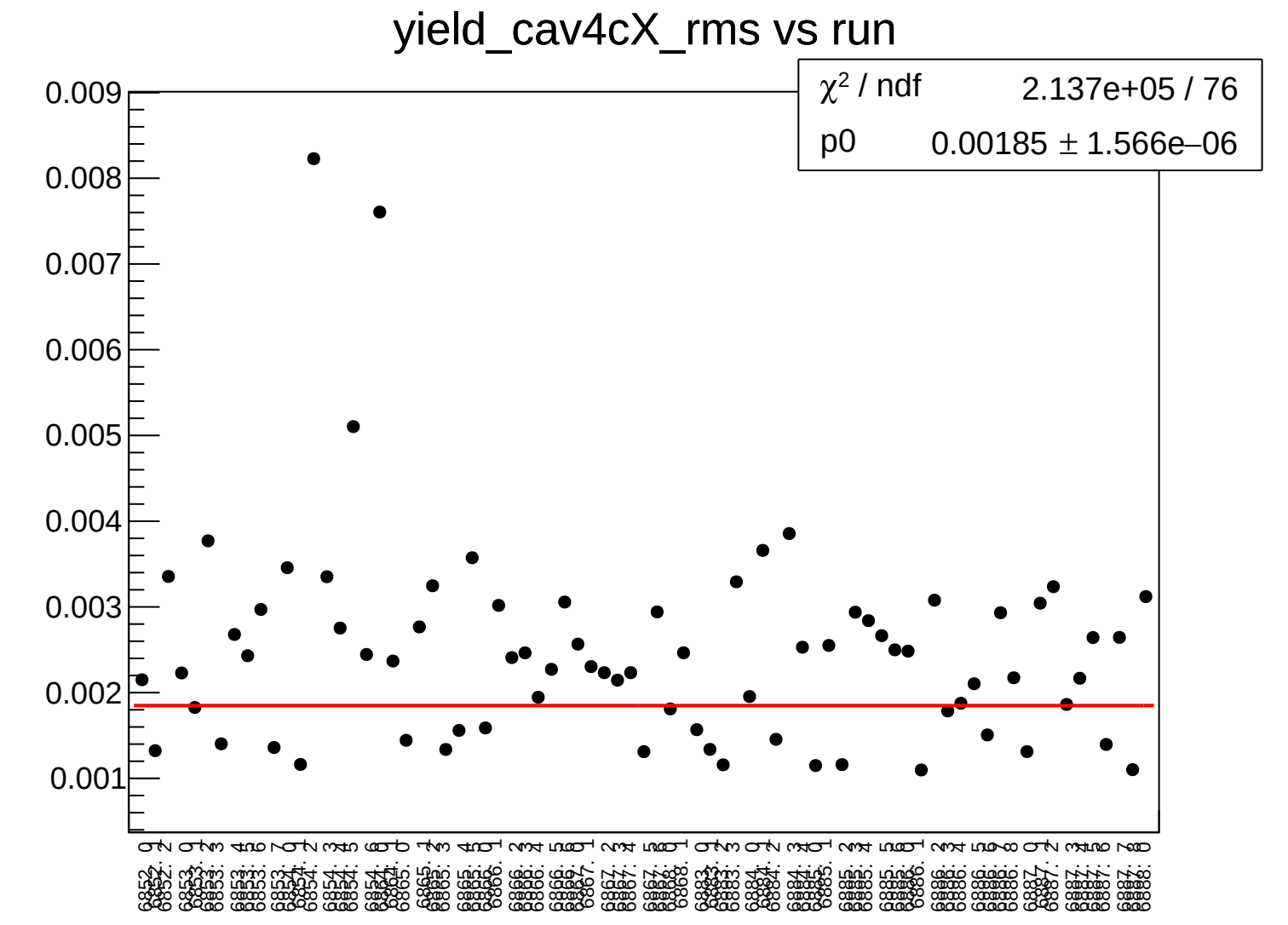

yield_cav4bY_mean vs run
χ² / ndf 1.326e+06 / 76
p0 −0.7969 ± 1.599e−05
−0.78
−0.8
−0.82
−0.84
−0.86
−0.88
pull
Entries 77
Mean −14.03
Std Dev 50.8
200
100
0
−100
−200
−300
−400

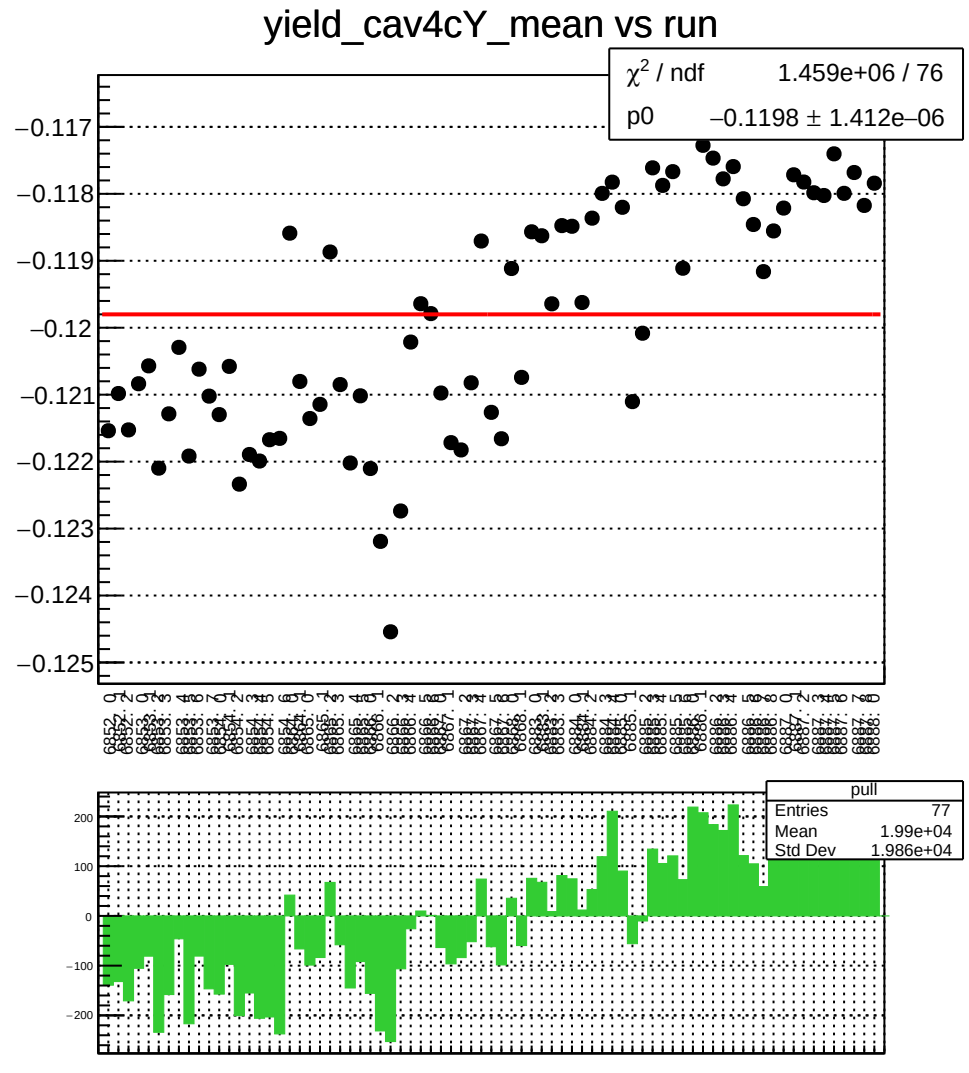

pull1D
Entries 77
Mean 1.677
Std Dev 4.507
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

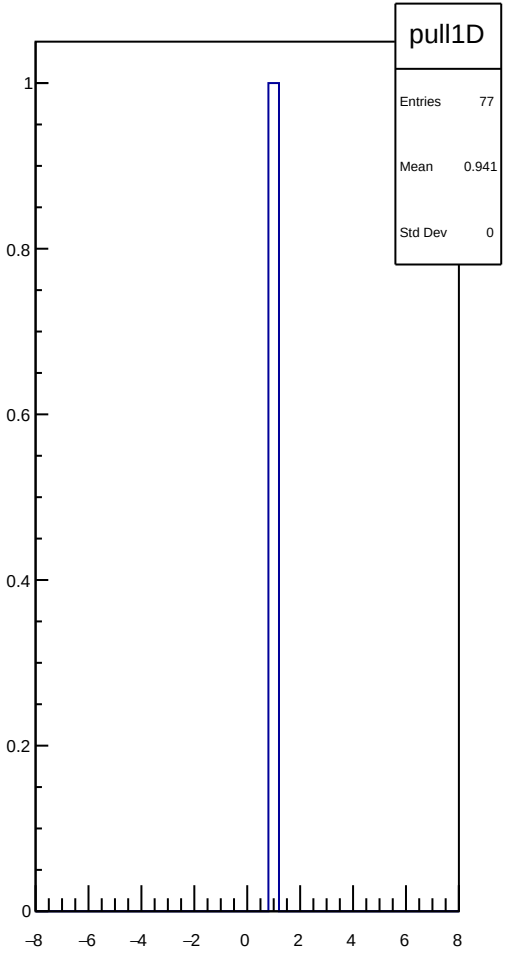

yield_cav4bY_rms vs run
χ² / ndf 3.373e+05 / 76
p0 0.01274 ± 1.13e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

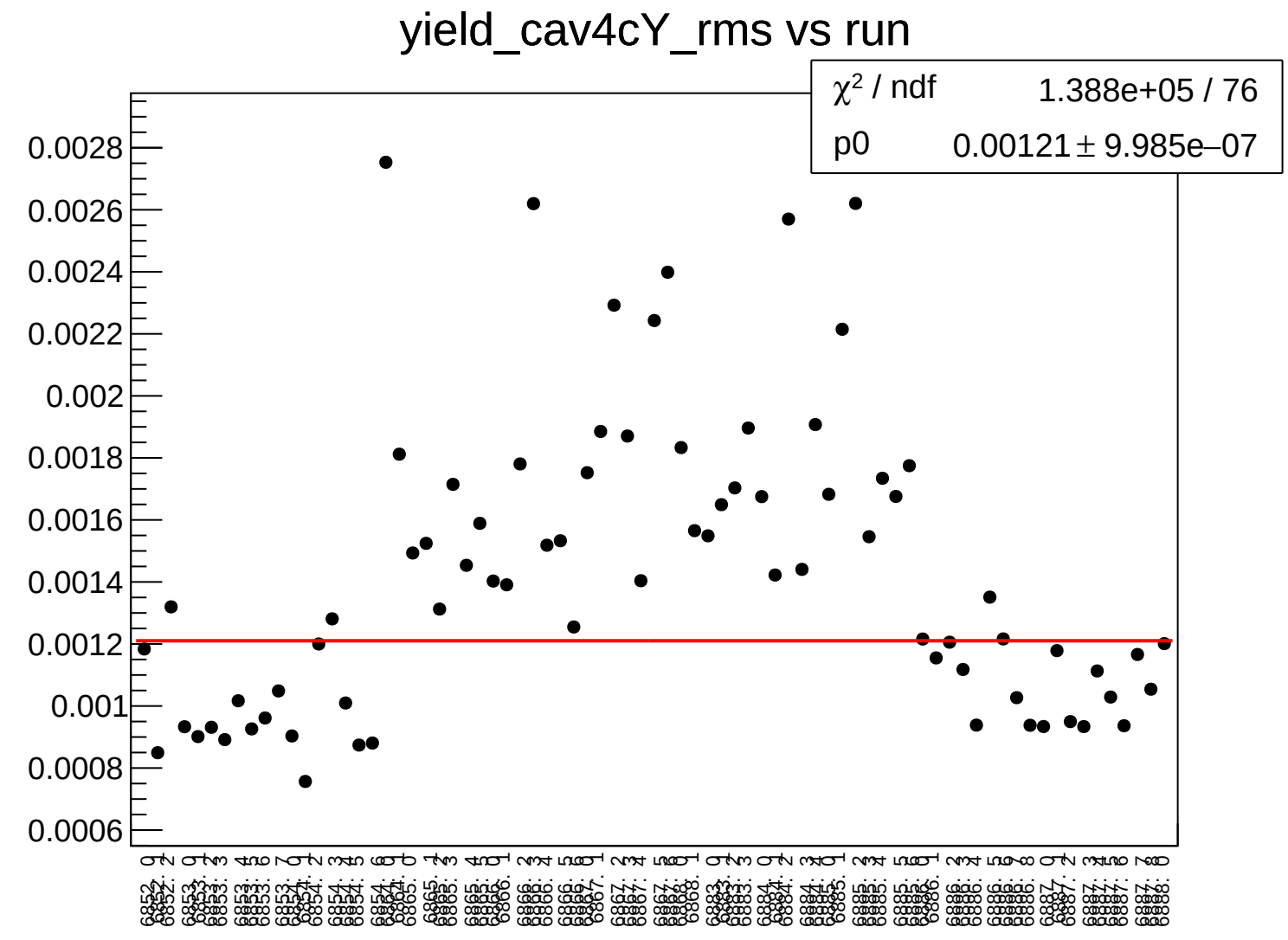

yield_cav4cX_mean vs run
χ² / ndf 3.367e+05 / 76
p0 0.003104 ± 2.215e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
pull
Entries 77
Mean 22.46
Std Dev 16.59
250
200
150
100
50
0
−50
−100
−150

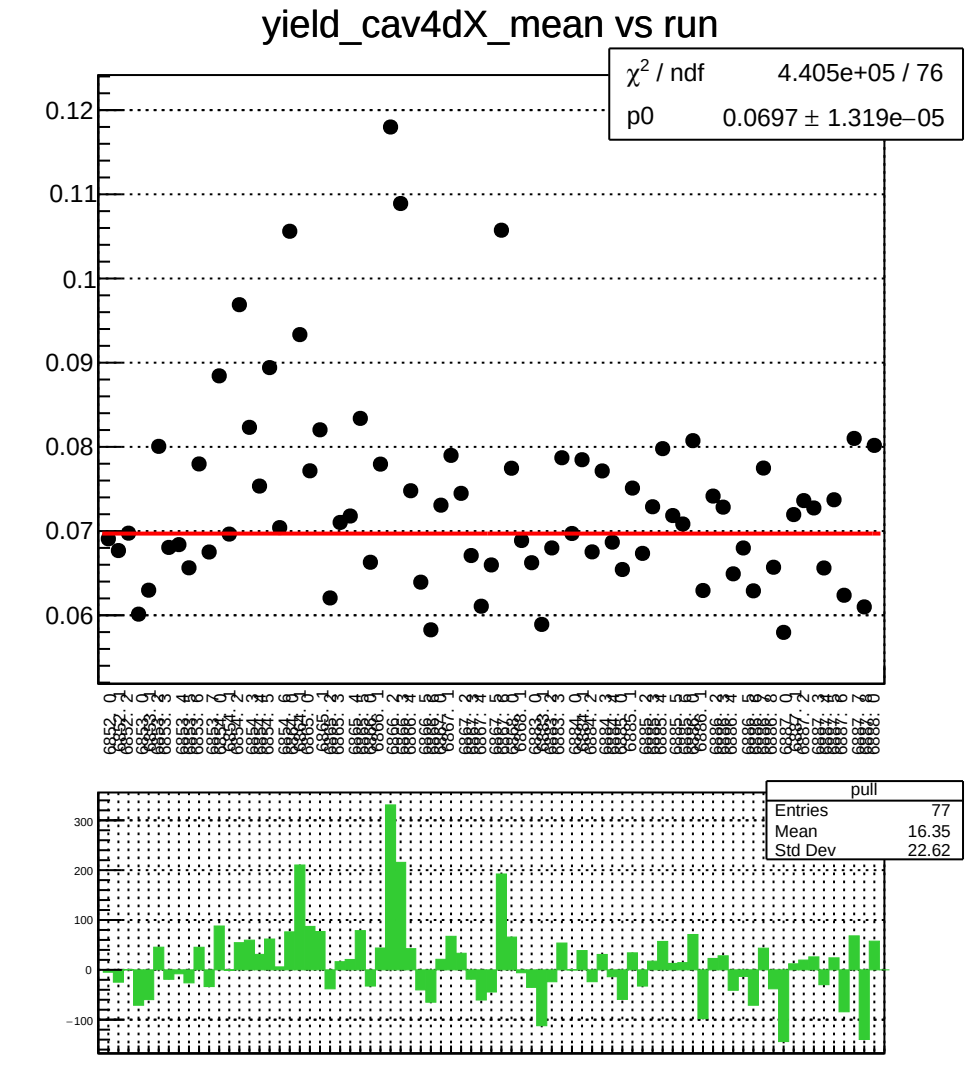

pull1D
Entries 77
Mean −2.181
Std Dev 5.124
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

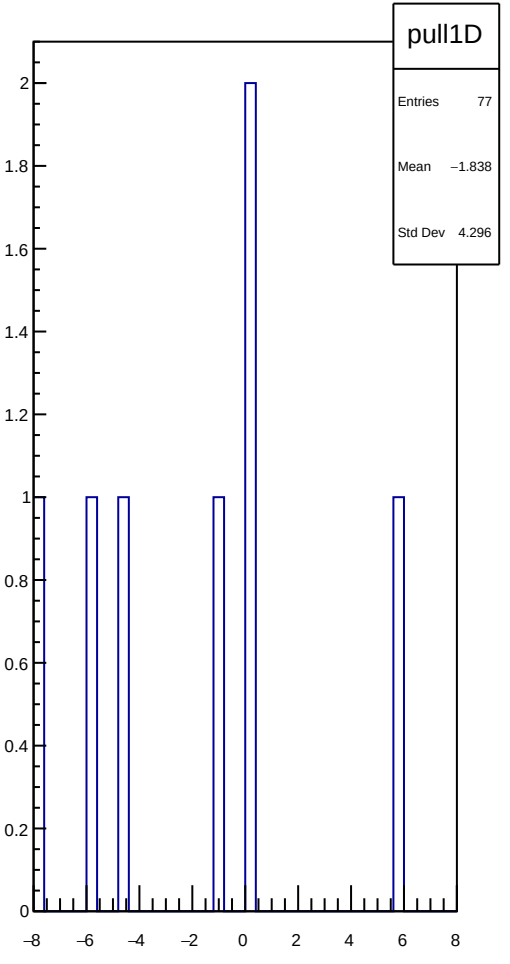

yield_cav4cX_rms vs run
χ² / ndf 2.137e+05 / 76
p0 0.00185 ± 1.566e–06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

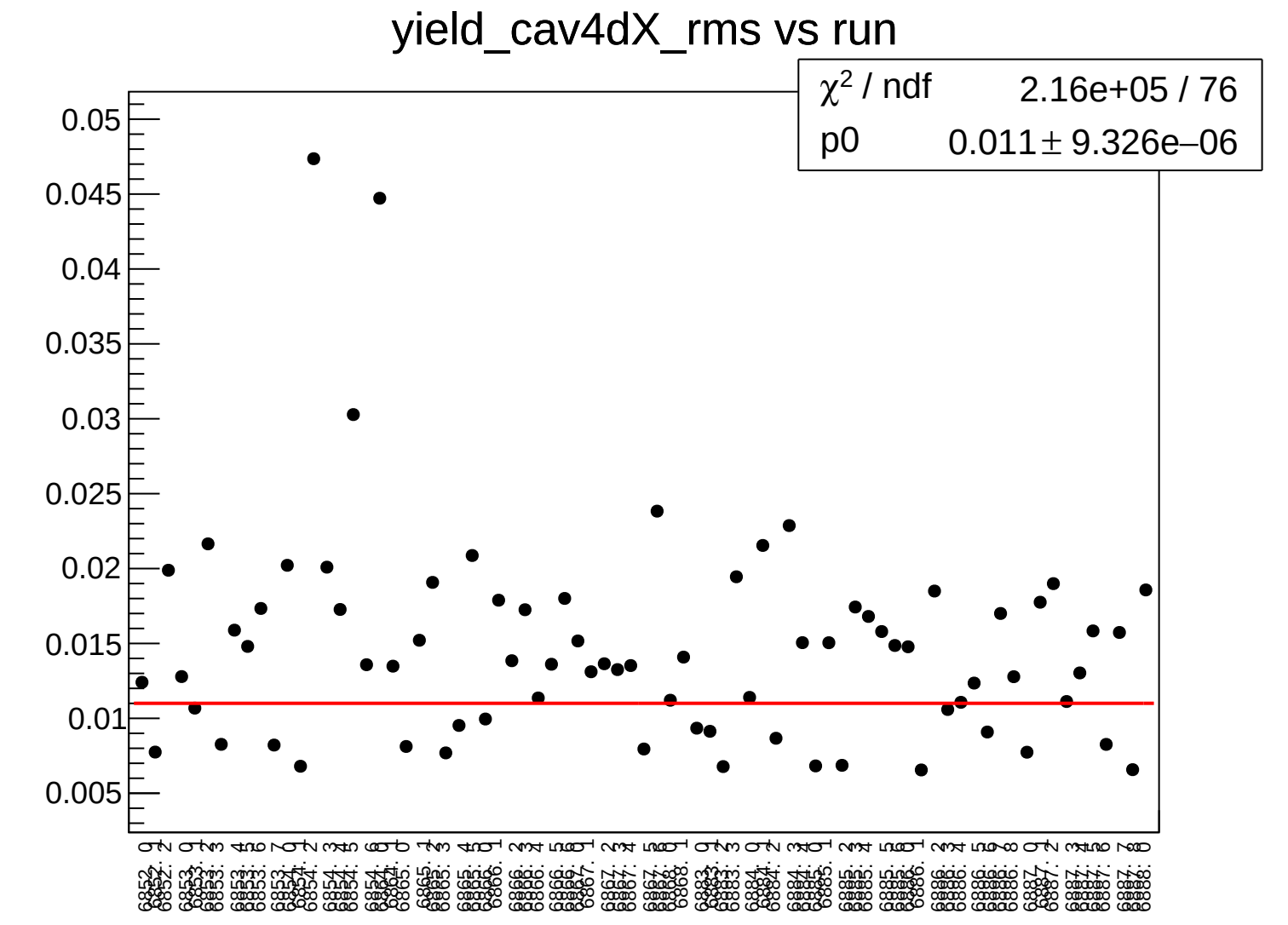

yield_cav4cY_mean vs run
χ² / ndf 1.459e+06 / 76
p0 −0.1198 ± 1.412e−06
−0.117
−0.118
−0.119
−0.12
−0.121
−0.122
−0.123
−0.124
−0.125
pull
Entries 77
Mean 1.99e+04
Std Dev 1.986e+04
200
100
0
−100
−200

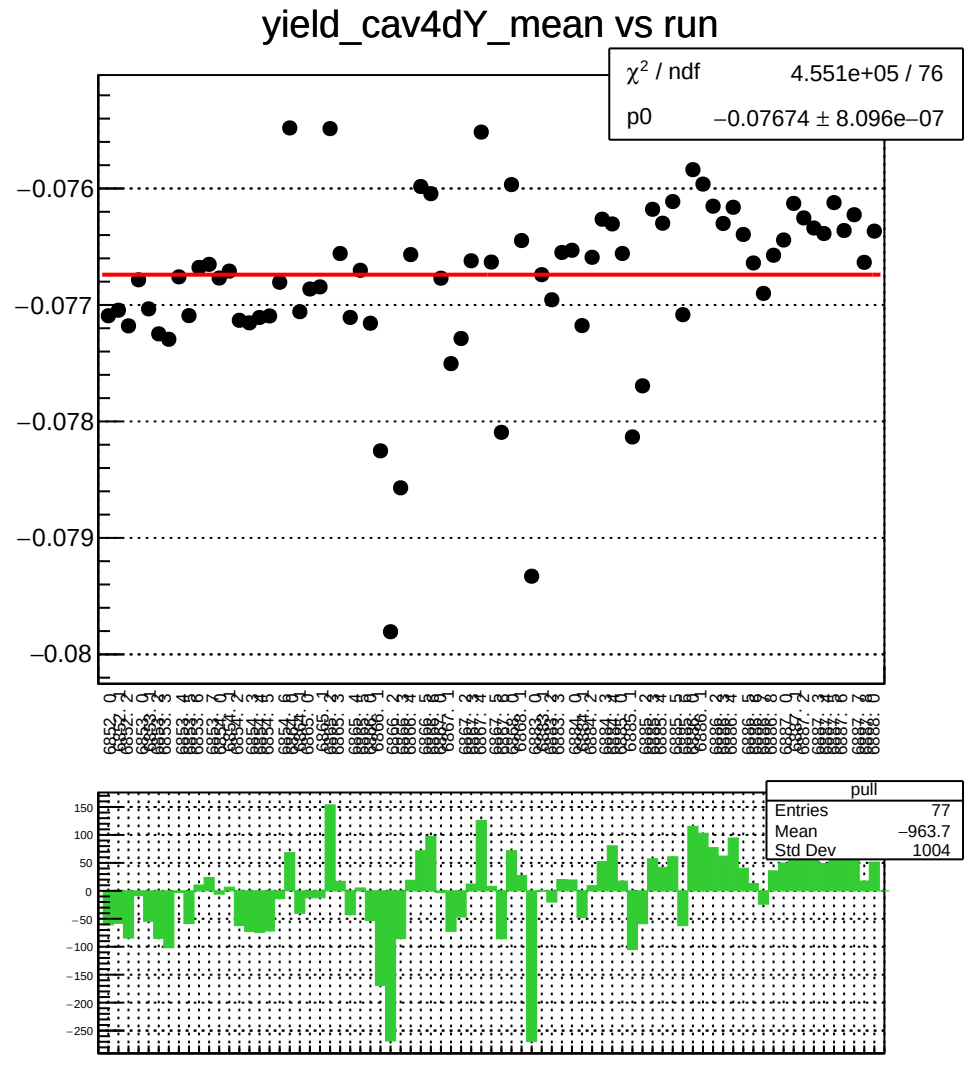

pull1D
Entries 77
Mean 0.941
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

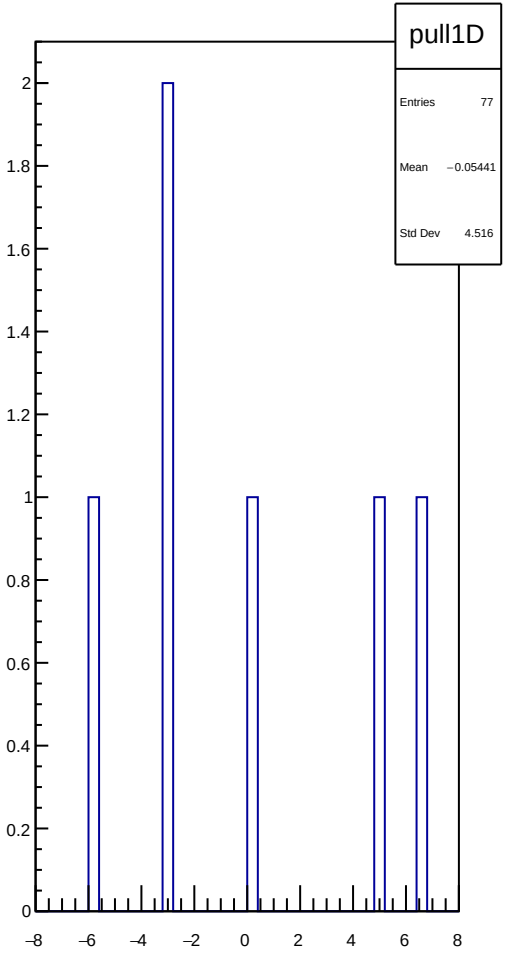

yield_cav4cY_rms vs run
χ² / ndf 1.388e+05 / 76
p0 0.00121 ± 9.985e–07
0.0028
0.0026
0.0024
0.0022
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006

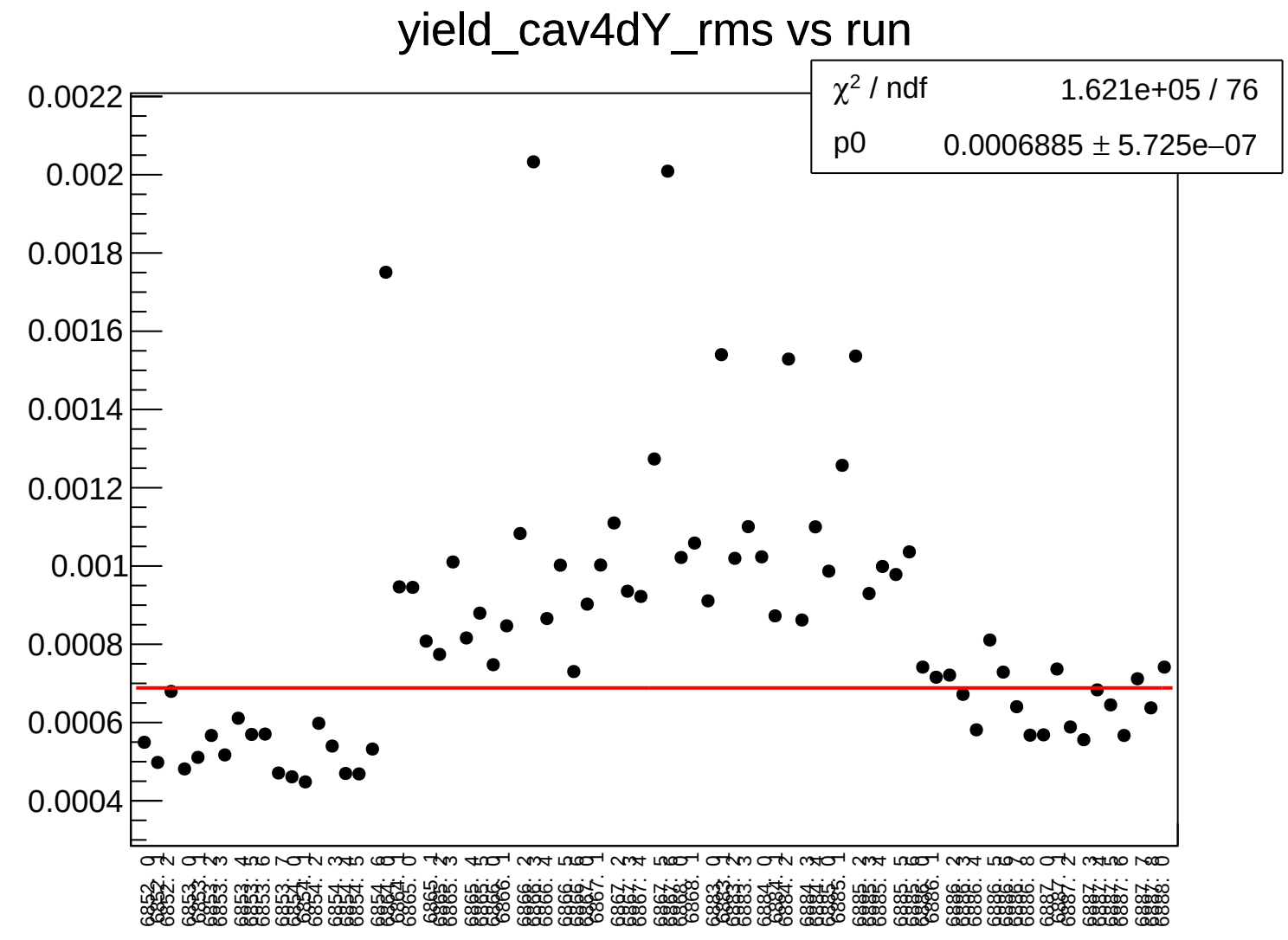

yield_cav4dX_mean vs run
χ² / ndf 4.405e+05 / 76
p0 0.0697 ± 1.319e−05
0.12
0.11
0.1
0.09
0.08
0.07
0.06
pull
Entries 77
Mean 16.35
Std Dev 22.62
300
200
100
0
−100

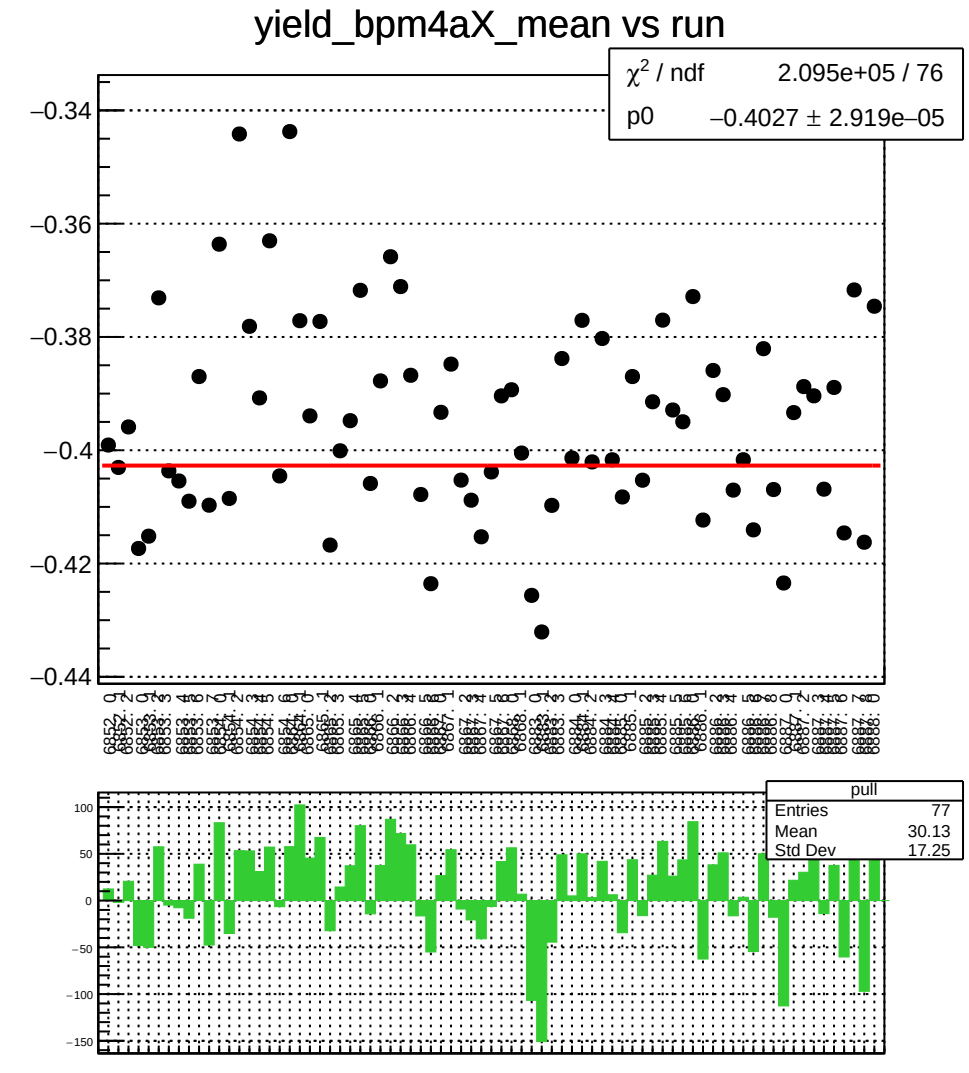

pull1D
Entries 77
Mean −1.838
Std Dev 4.296
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

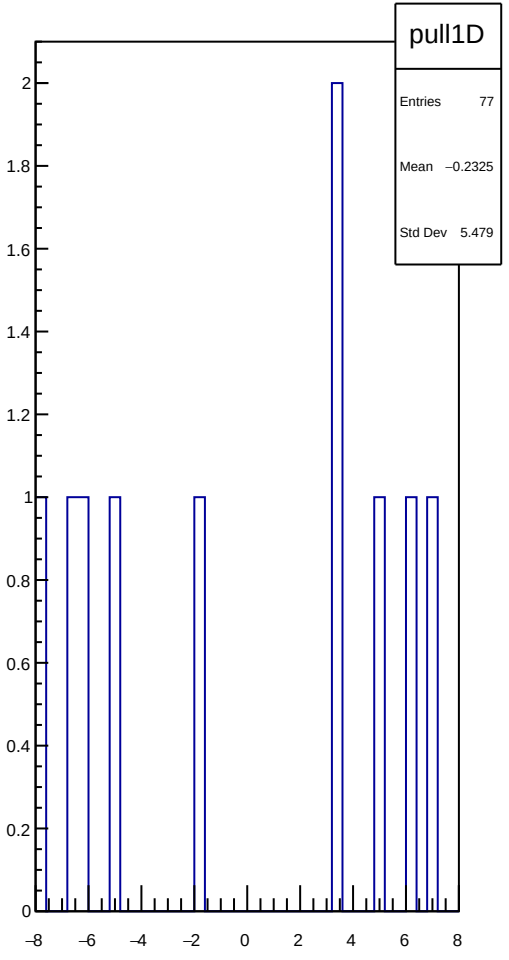

yield_cav4dX_rms vs run
χ² / ndf 2.16e+05 / 76
p0 0.011 ± 9.326e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

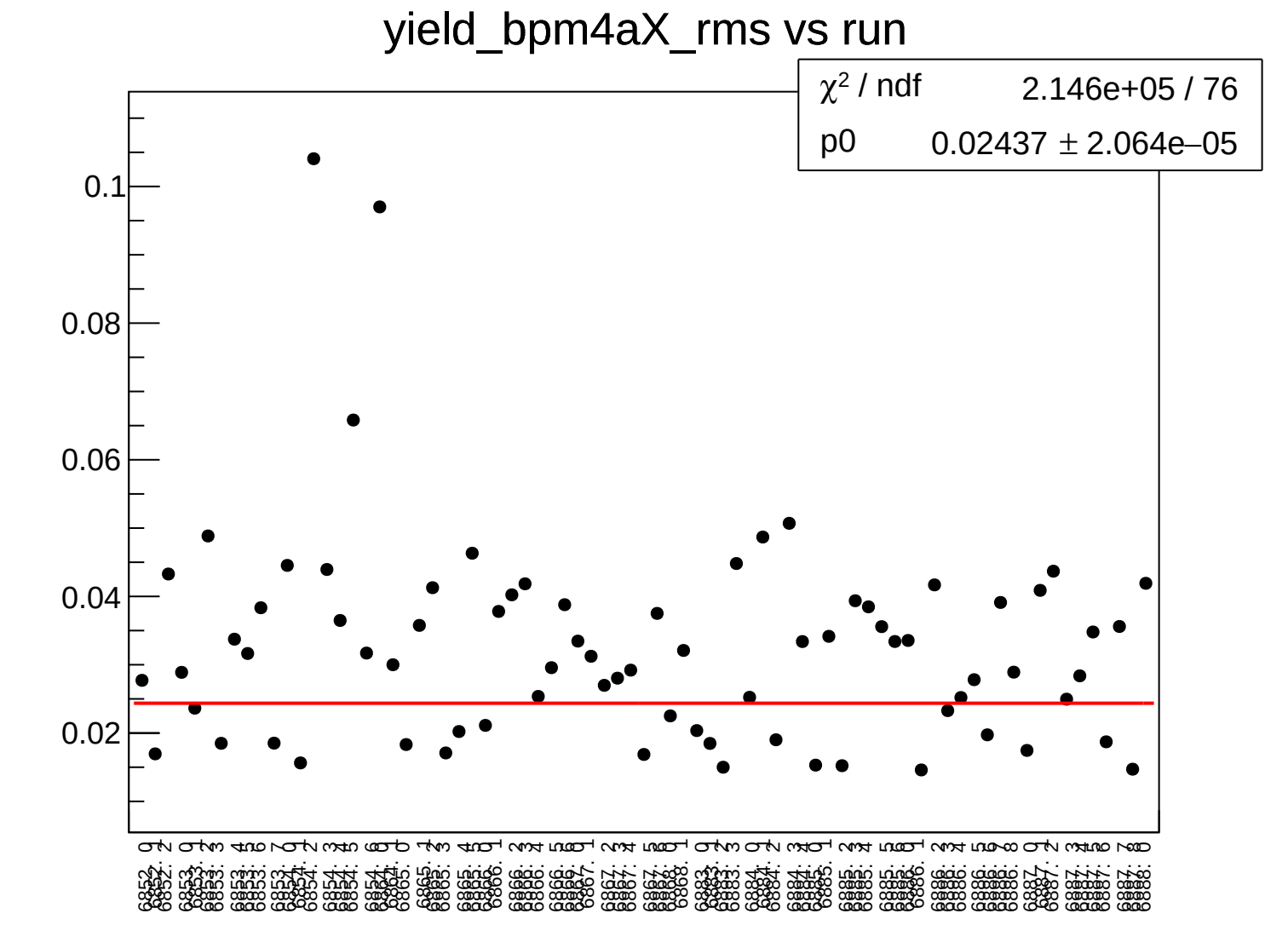

yield_cav4dY_mean vs run
χ² / ndf 4.551e+05 / 76
p0 −0.07674 ± 8.096e−07
−0.076
−0.077
−0.078
−0.079
−0.08
pull
Entries 77
Mean −963.7
Std Dev 1004
150
100
50
0
−50
−100
−150
−200
−250

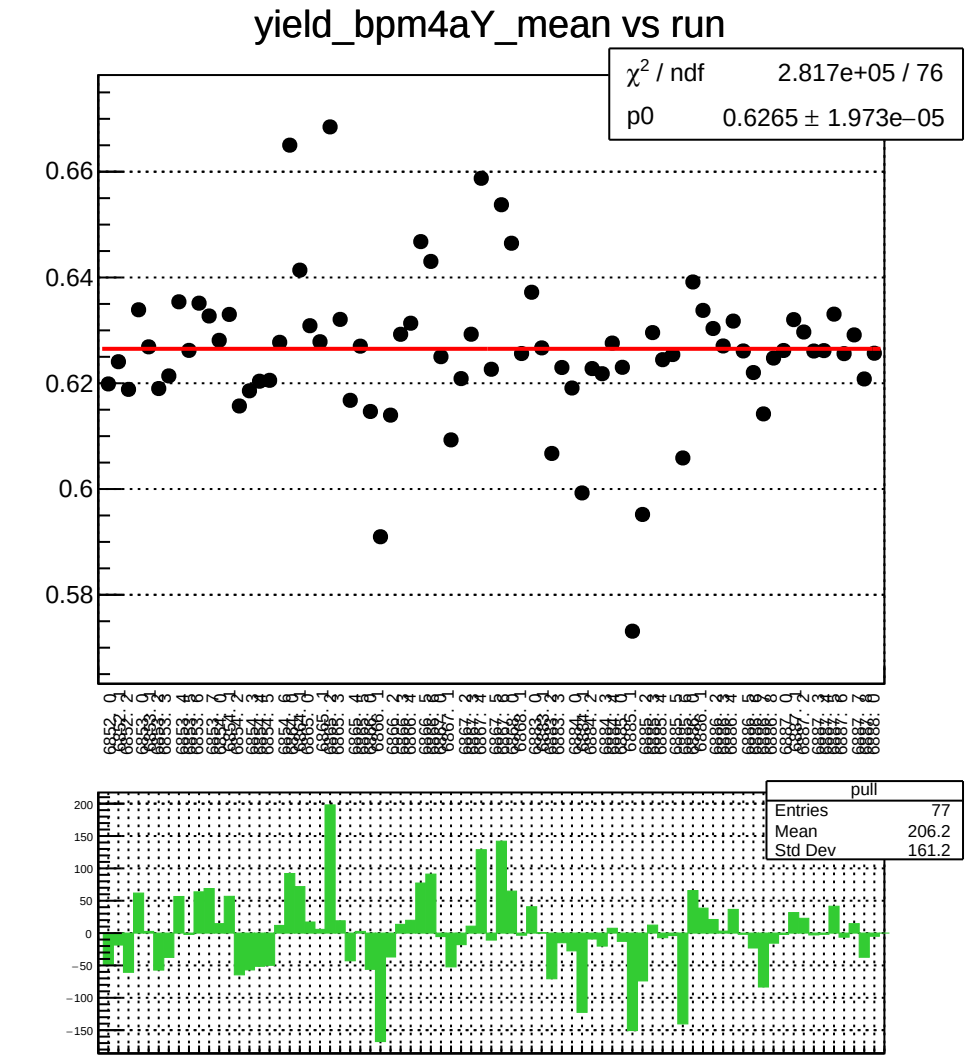

pull1D
Entries 77
Mean −0.05441
Std Dev 4.516
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

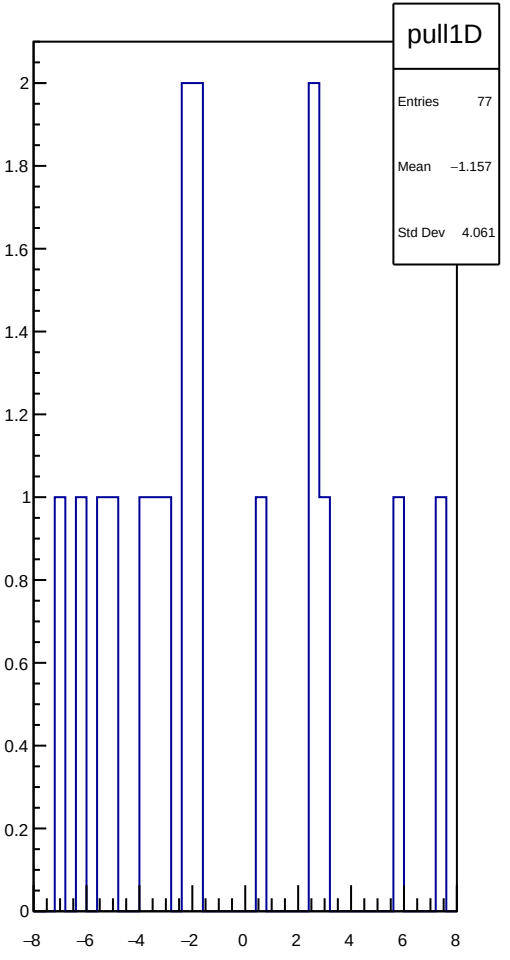

yield_cav4dY_rms vs run
χ² / ndf 1.621e+05 / 76
p0 0.0006885 ± 5.725e−07
0.0022
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

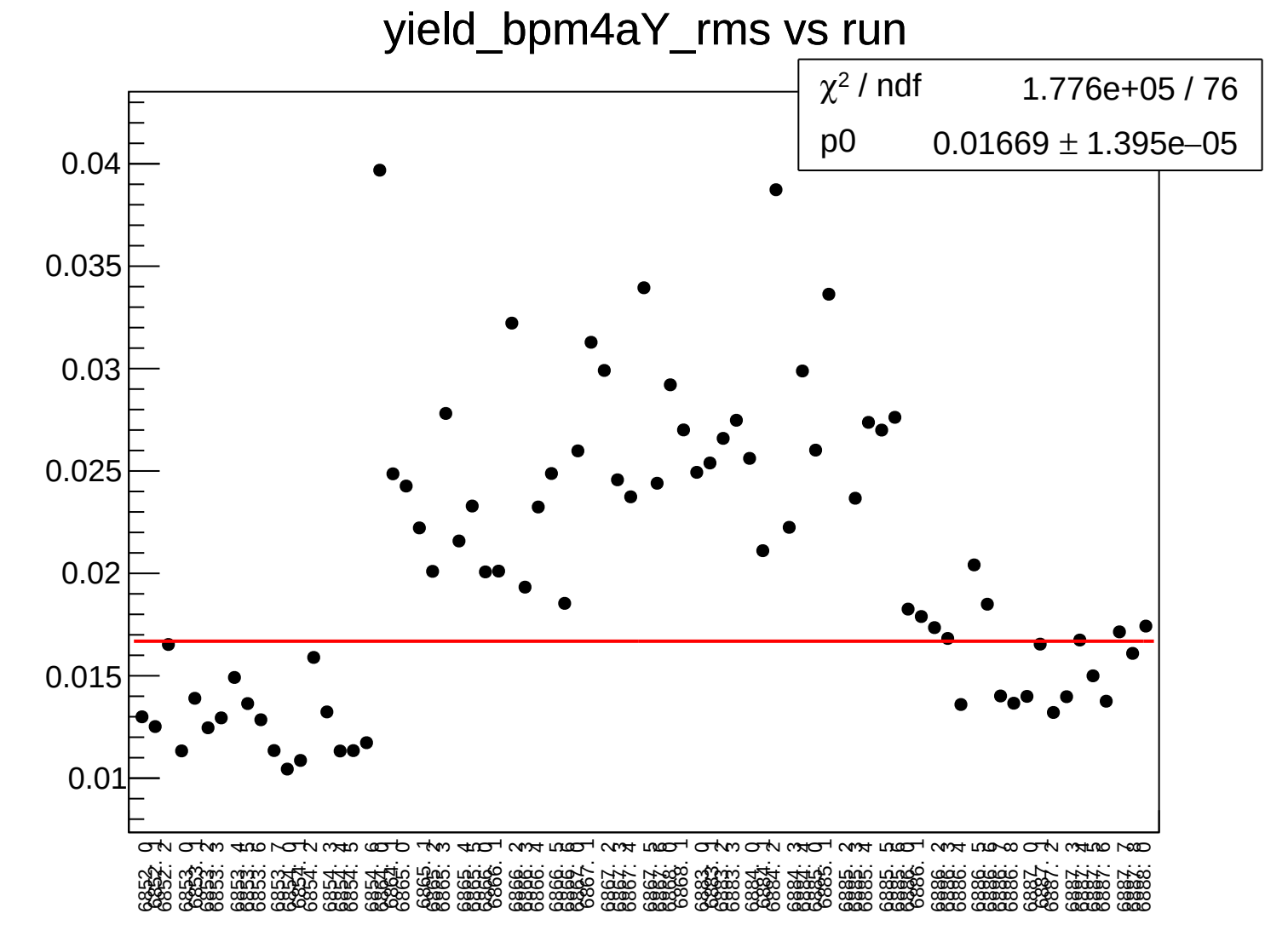

yield_bpm4aX_mean vs run
χ² / ndf 2.095e+05 / 76
p0 −0.4027 ± 2.919e−05
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
pull
Entries 77
Mean 30.13
Std Dev 17.25
100
50
0
−50
−100
−150

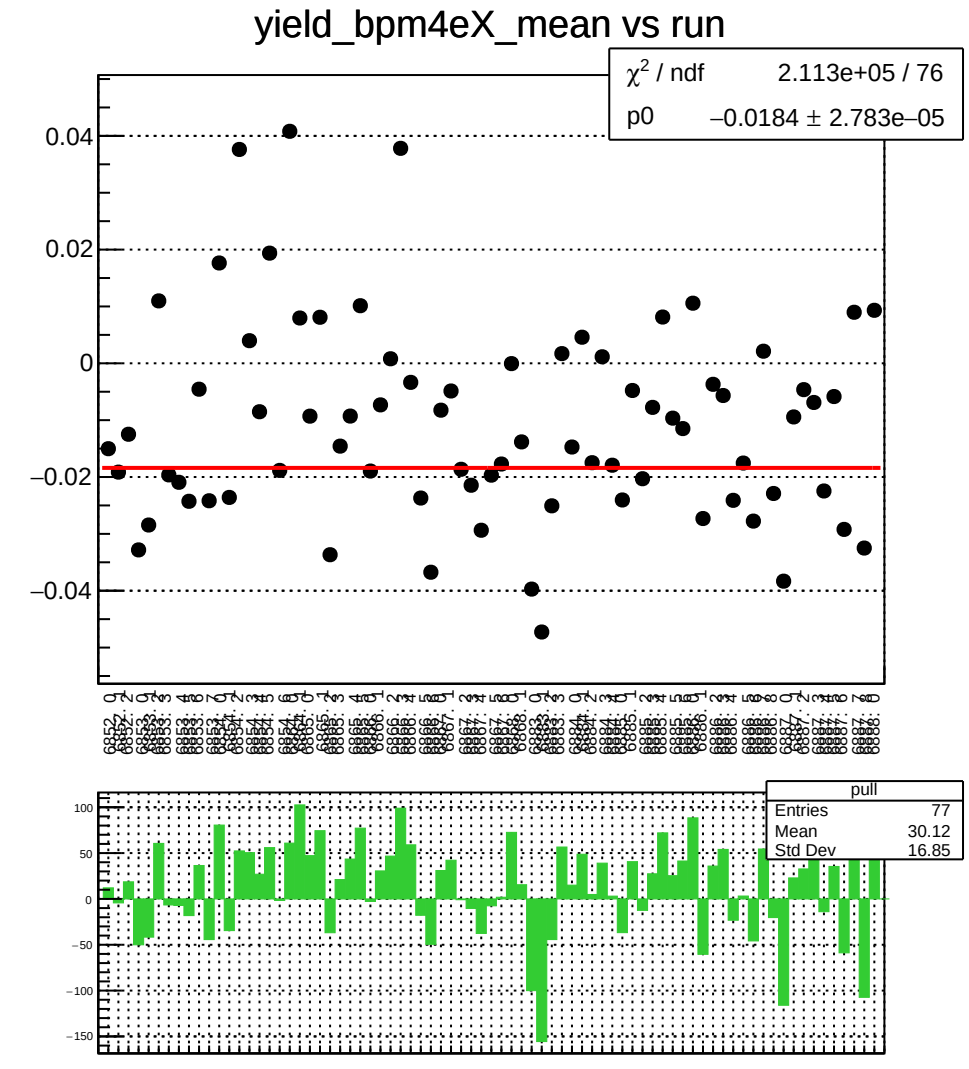

pull1D
Entries 77
Mean −0.2325
Std Dev 5.479
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

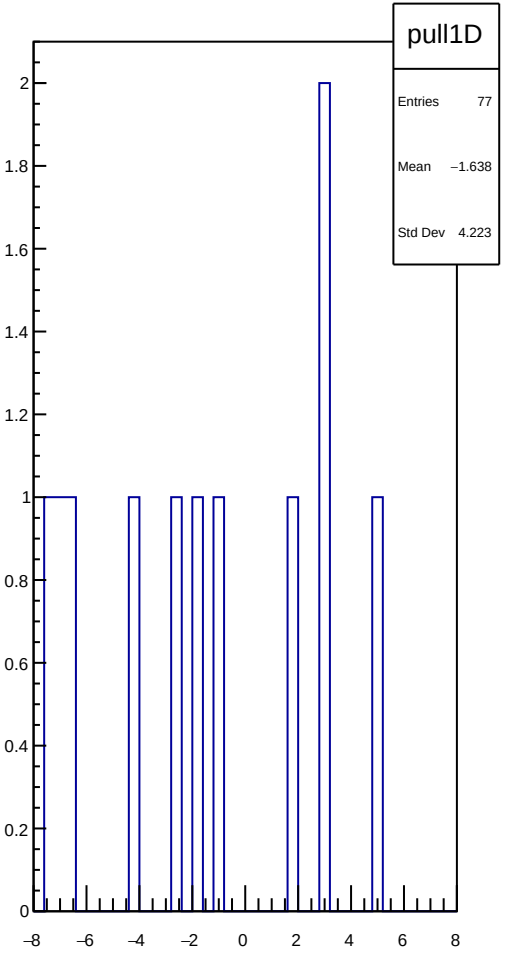

yield_bpm4aX_rms vs run
χ² / ndf 2.146e+05 / 76
p0 0.02437 ± 2.064e–05
0.1
0.08
0.06
0.04
0.02

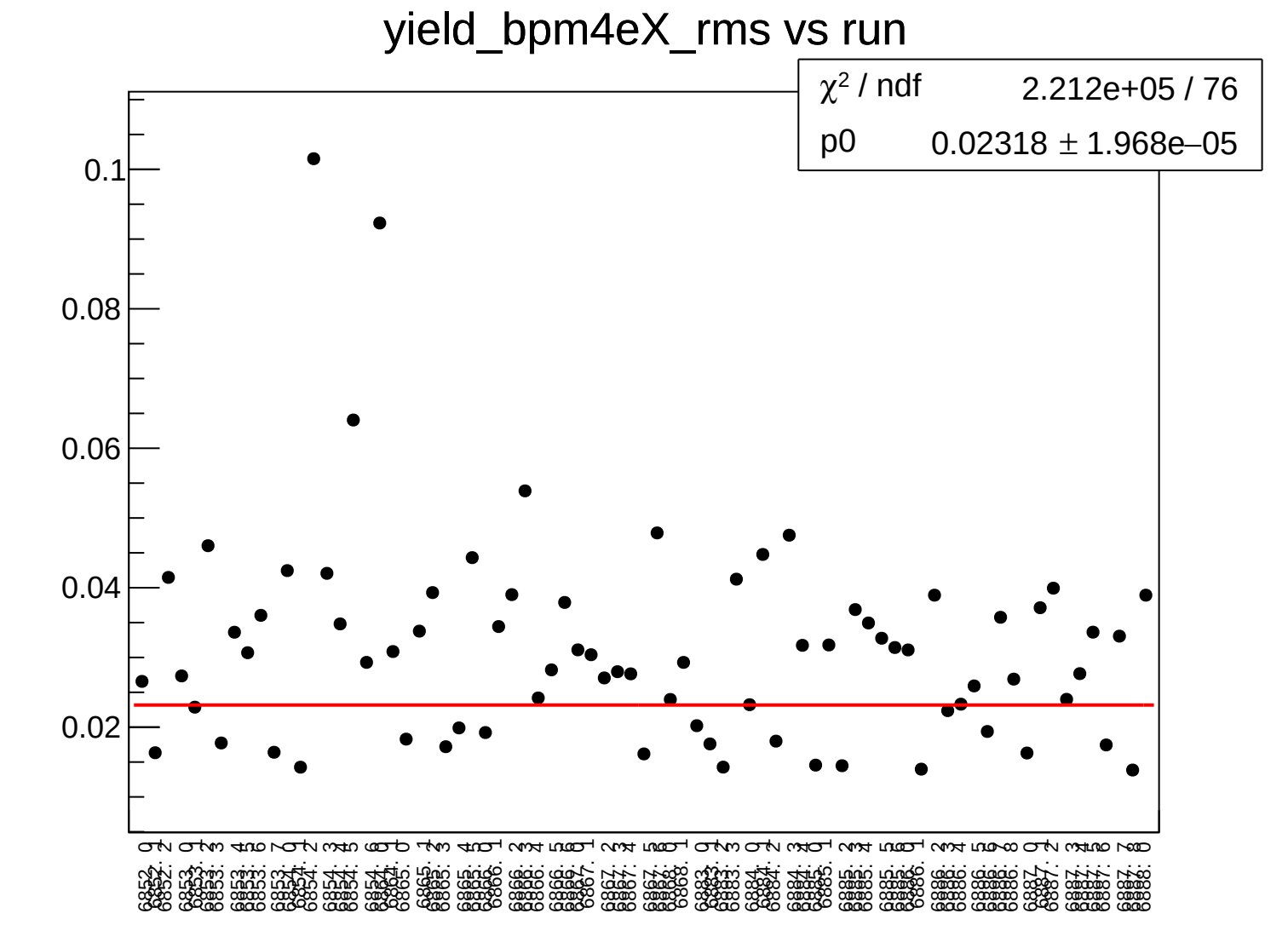

yield_bpm4aY_mean vs run
χ² / ndf 2.817e+05 / 76
p0 0.6265 ± 1.973e−05
0.66
0.64
0.62
0.6
0.58
pull
Entries 77
Mean 206.2
Std Dev 161.2
200
150
100
50
0
−50
−100
−150

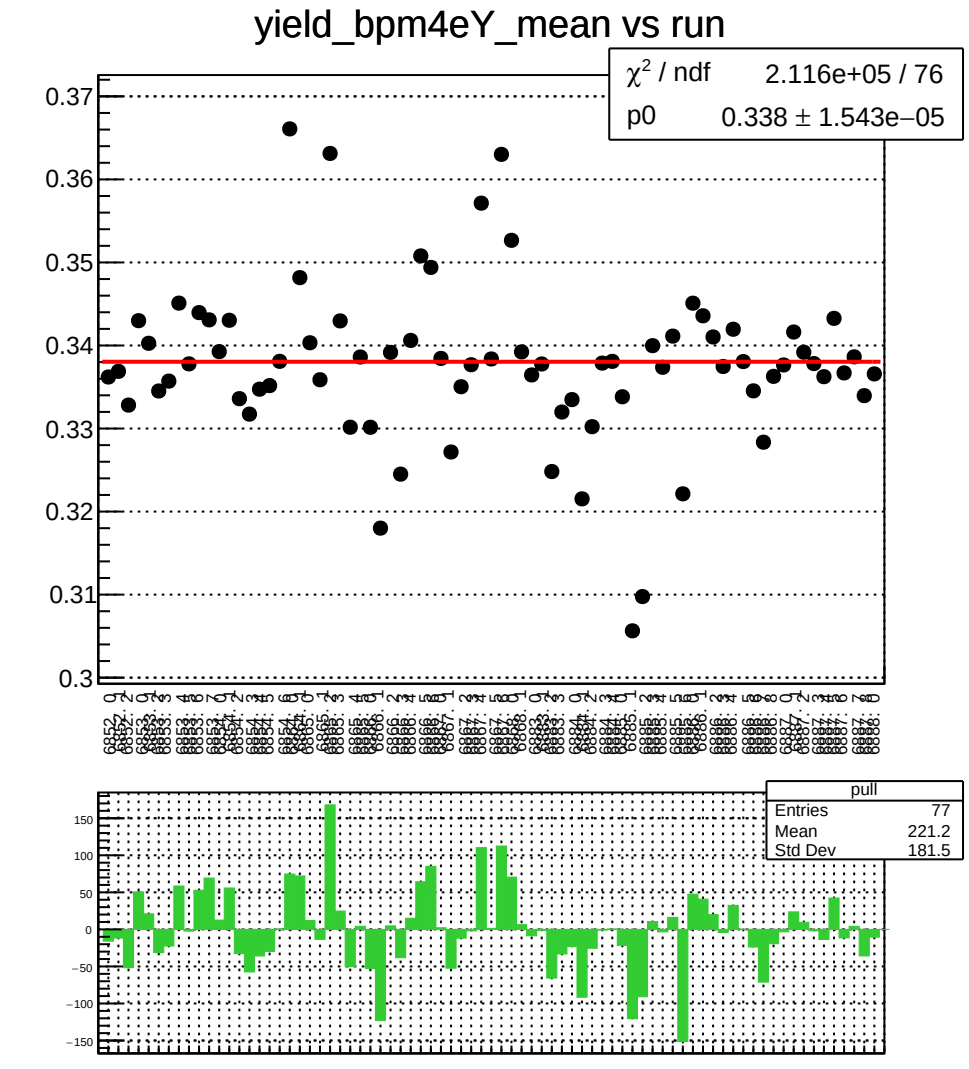

pull1D
Entries 77
Mean −1.157
Std Dev 4.061
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

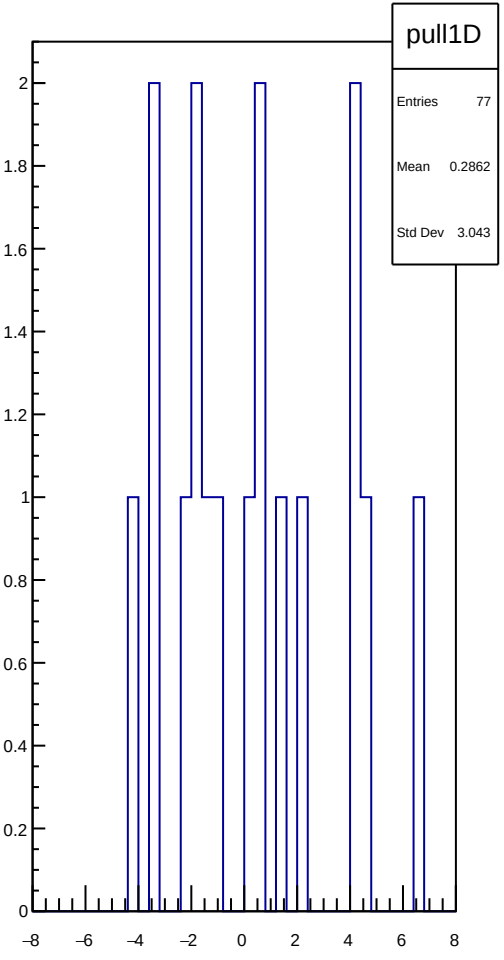

yield_bpm4aY_rms vs run
χ² / ndf 1.776e+05 / 76
p0 0.01669 ± 1.395e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

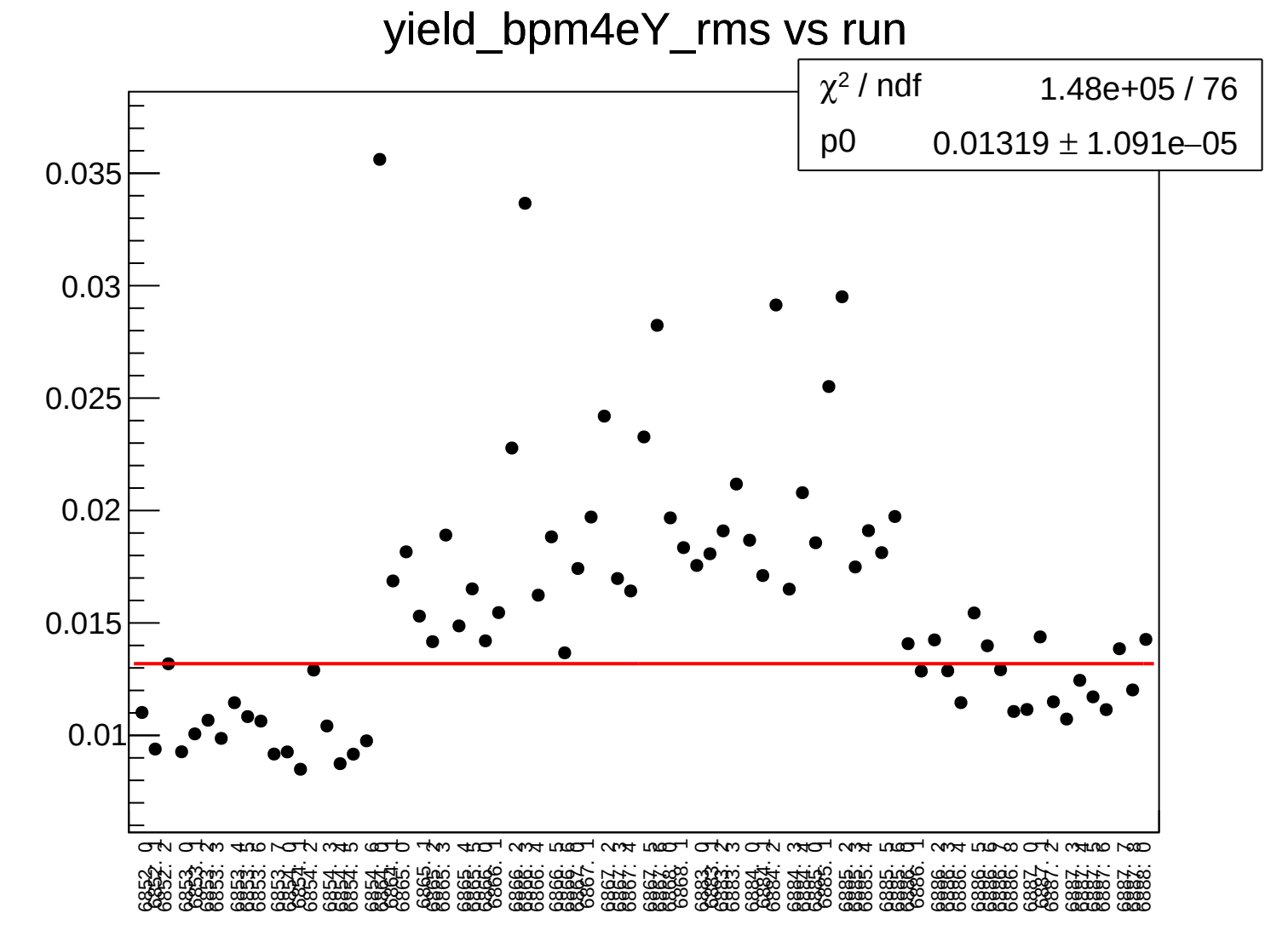

yield_bpm4eX_mean vs run
χ² / ndf 2.113e+05 / 76
p0 −0.0184 ± 2.783e−05
0.04
0.02
0
−0.02
−0.04
pull
Entries 77
Mean 30.12
Std Dev 16.85
100
50
0
−50
−100
−150

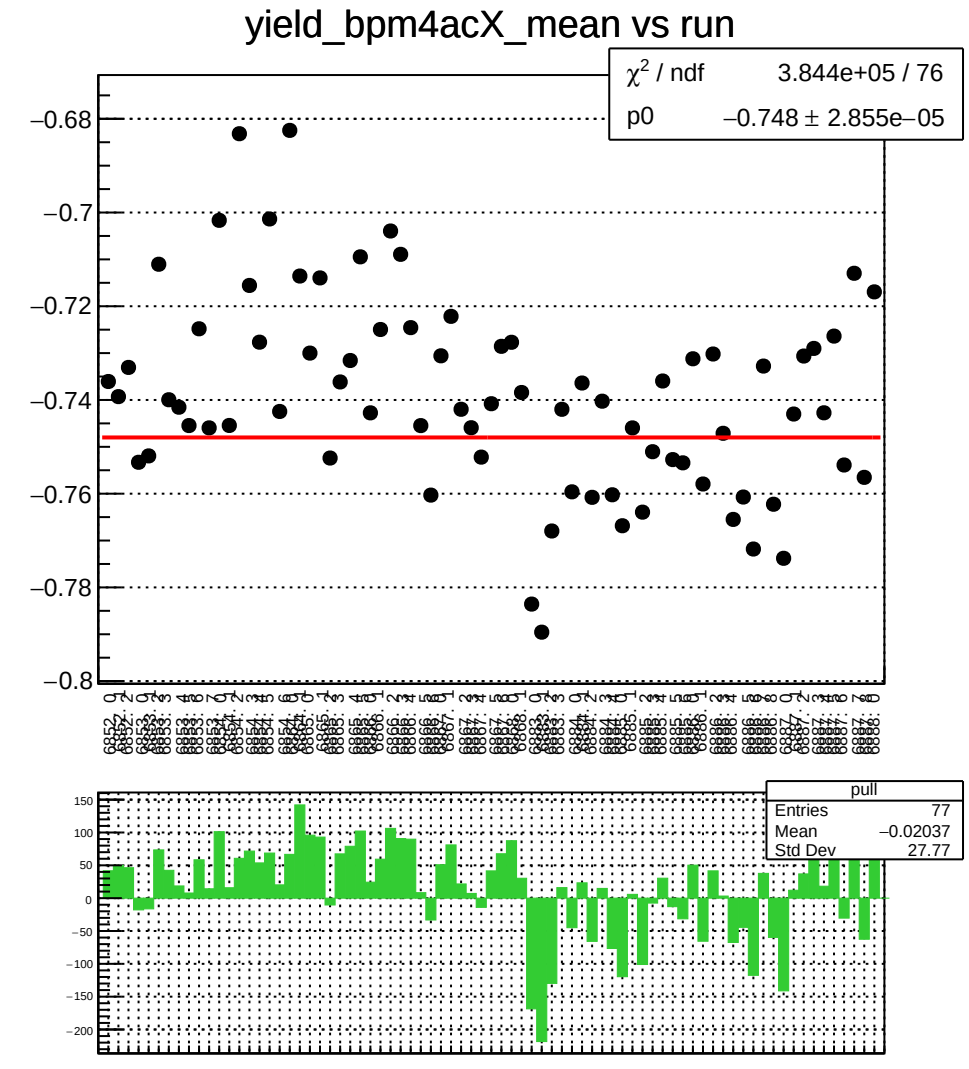

pull1D
Entries 77
Mean −1.638
Std Dev 4.223
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

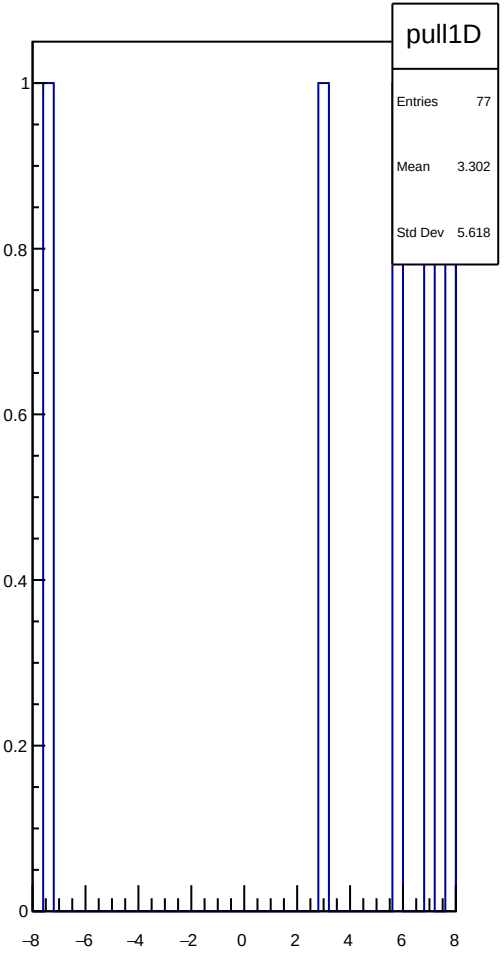

yield_bpm4eX_rms vs run
χ² / ndf 2.212e+05 / 76
p0 0.02318 ± 1.968e–05
0.1
0.08
0.06
0.04
0.02

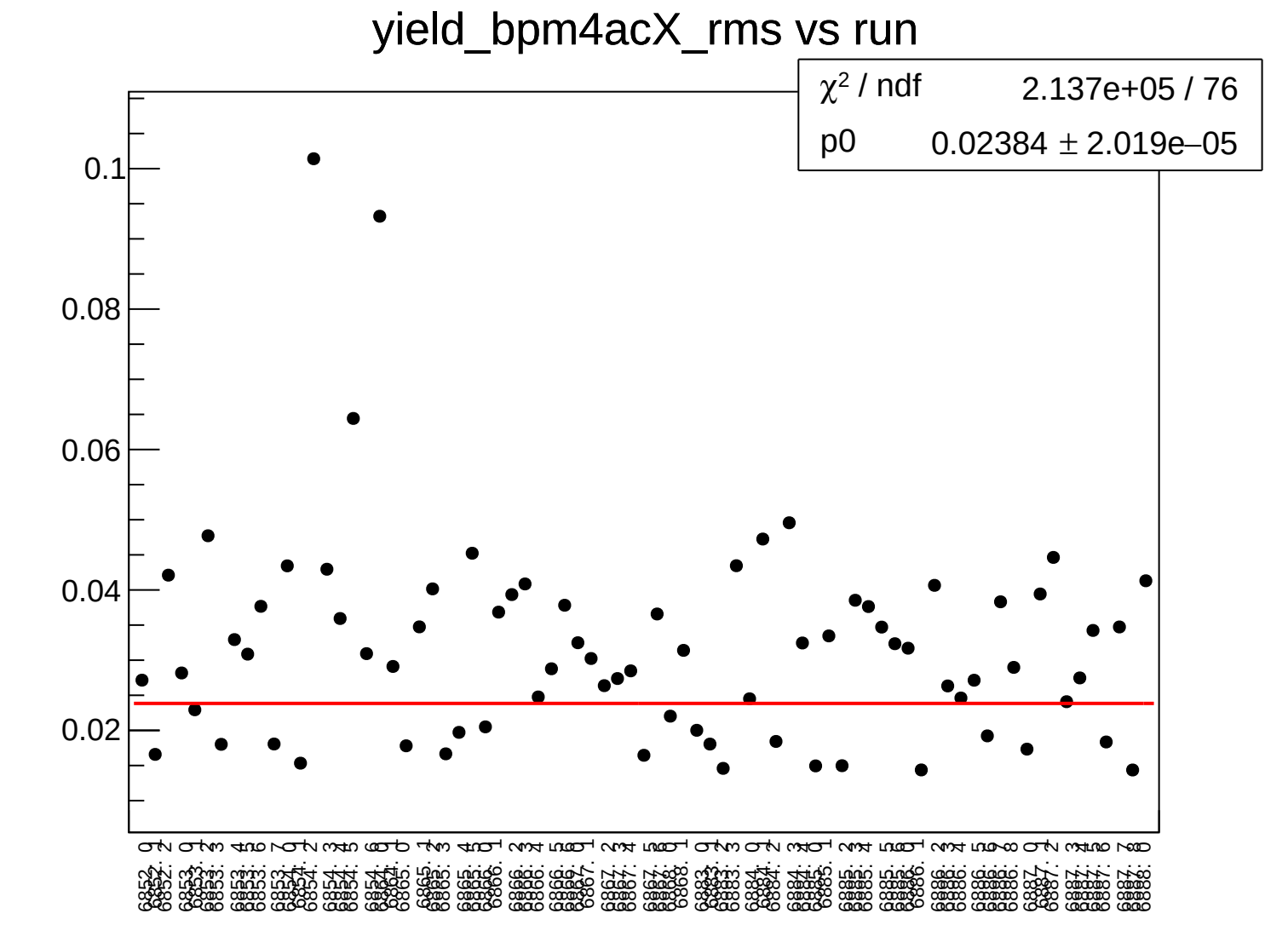

yield_bpm4eY_mean vs run
χ² / ndf 2.116e+05 / 76
p0 0.338 ± 1.543e−05
pull
Entries 77
Mean 221.2
Std Dev 181.5

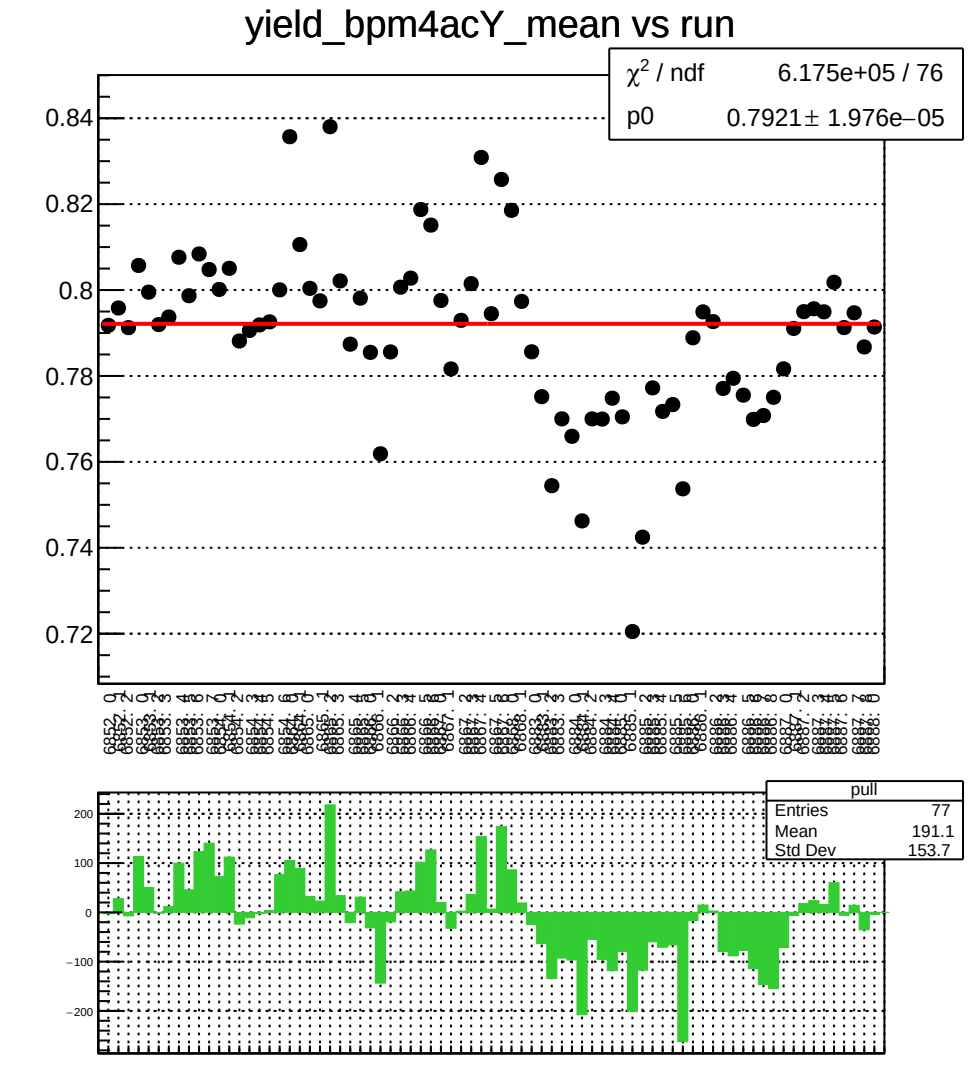

pull1D
Entries 77
Mean 0.2862
Std Dev 3.043

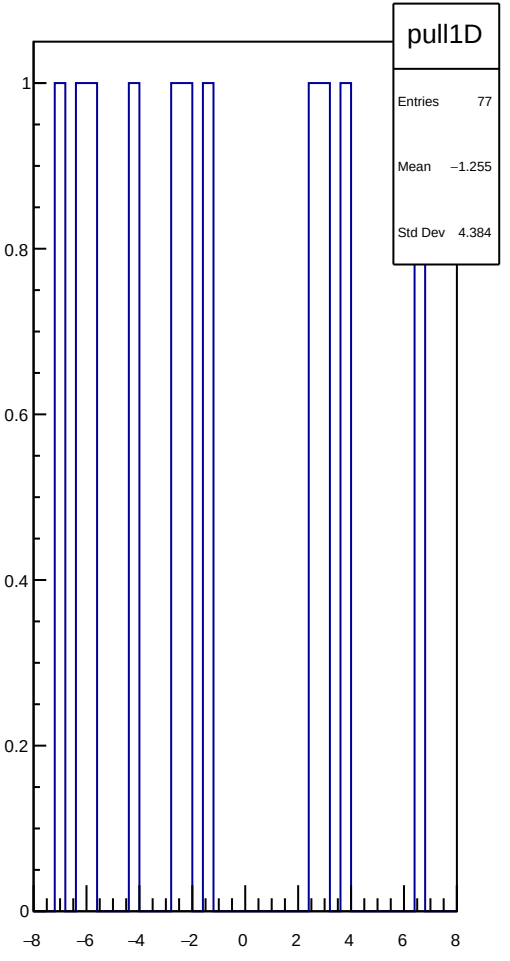

yield_bpm4eY_rms vs run
χ² / ndf 1.48e+05 / 76
p0 0.01319 ± 1.091e−05
0.035
0.03
0.025
0.02
0.015
0.01

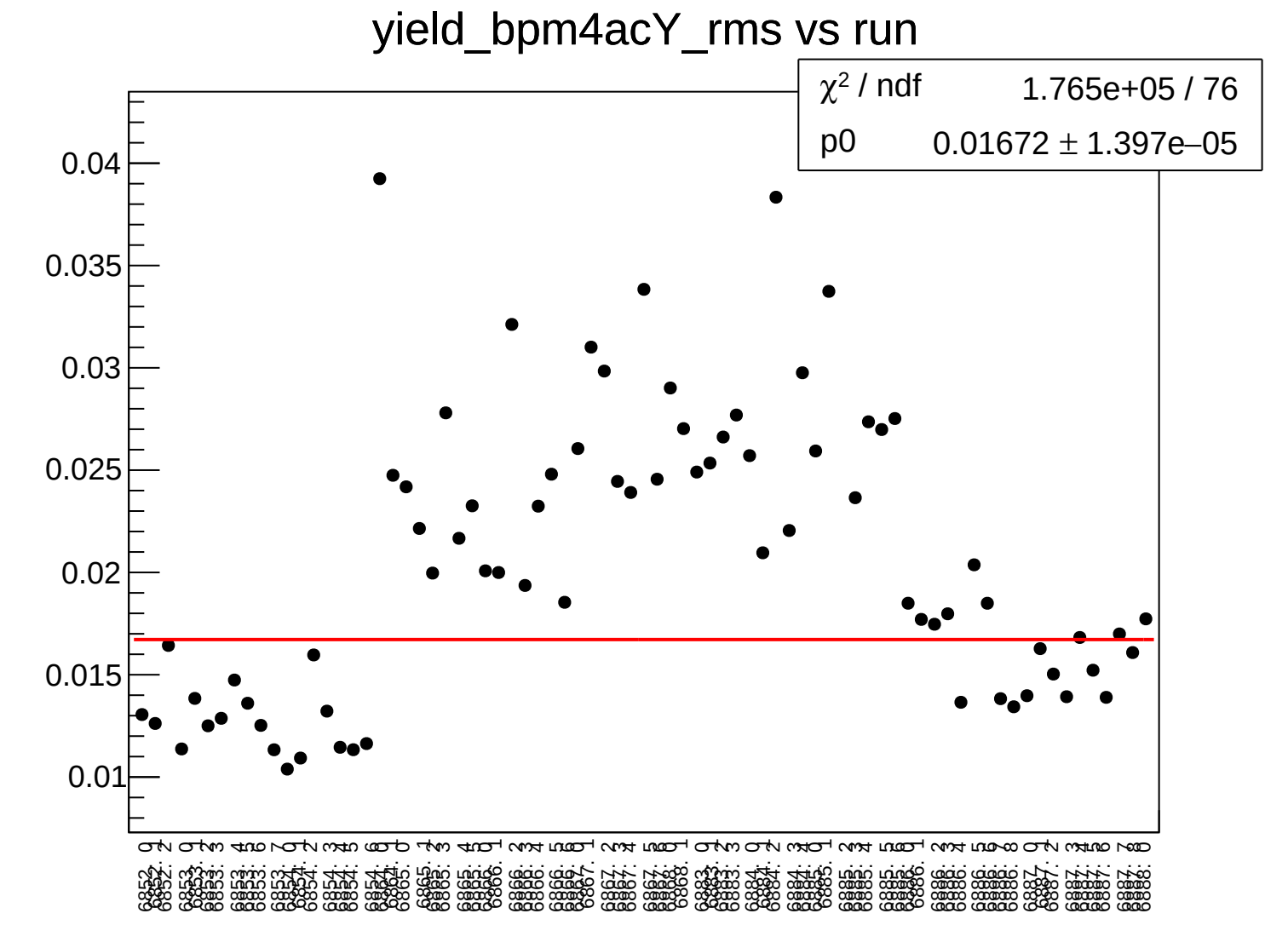

yield_bpm4acX_mean vs run
χ² / ndf 3.844e+05 / 76
p0 −0.748 ± 2.855e−05
−0.68
−0.7
−0.72
−0.74
−0.76
−0.78
−0.8
pull
Entries 77
Mean −0.02037
Std Dev 27.77
150
100
50
0
−50
−100
−150
−200

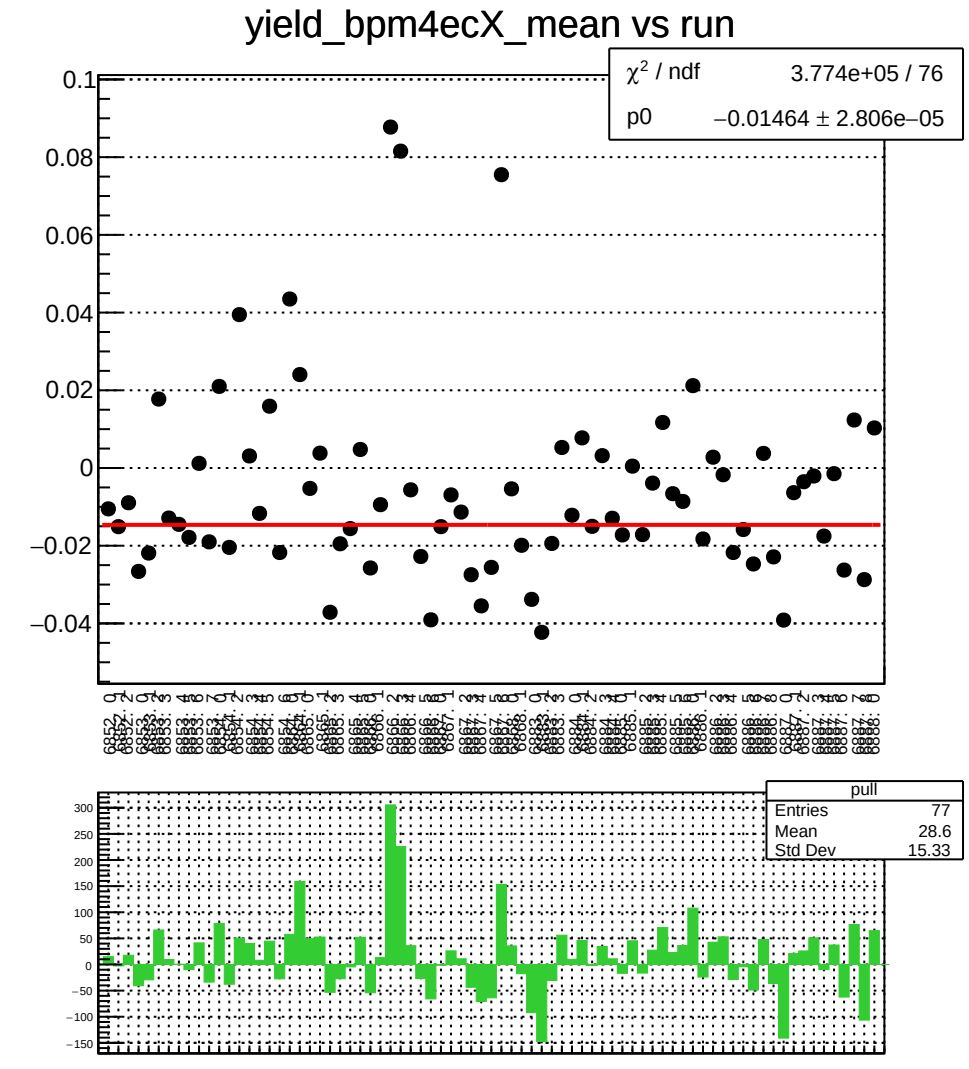

pull1D
Entries 77
Mean 3.302
Std Dev 5.618
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

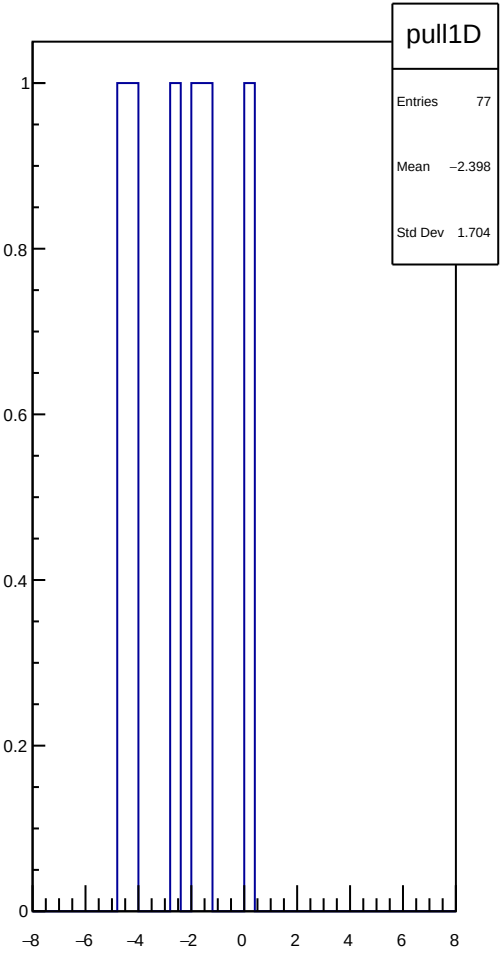

yield_bpm4acX_rms vs run
χ² / ndf 2.137e+05 / 76
p0 0.02384 ± 2.019e−05
0.1
0.08
0.06
0.04
0.02

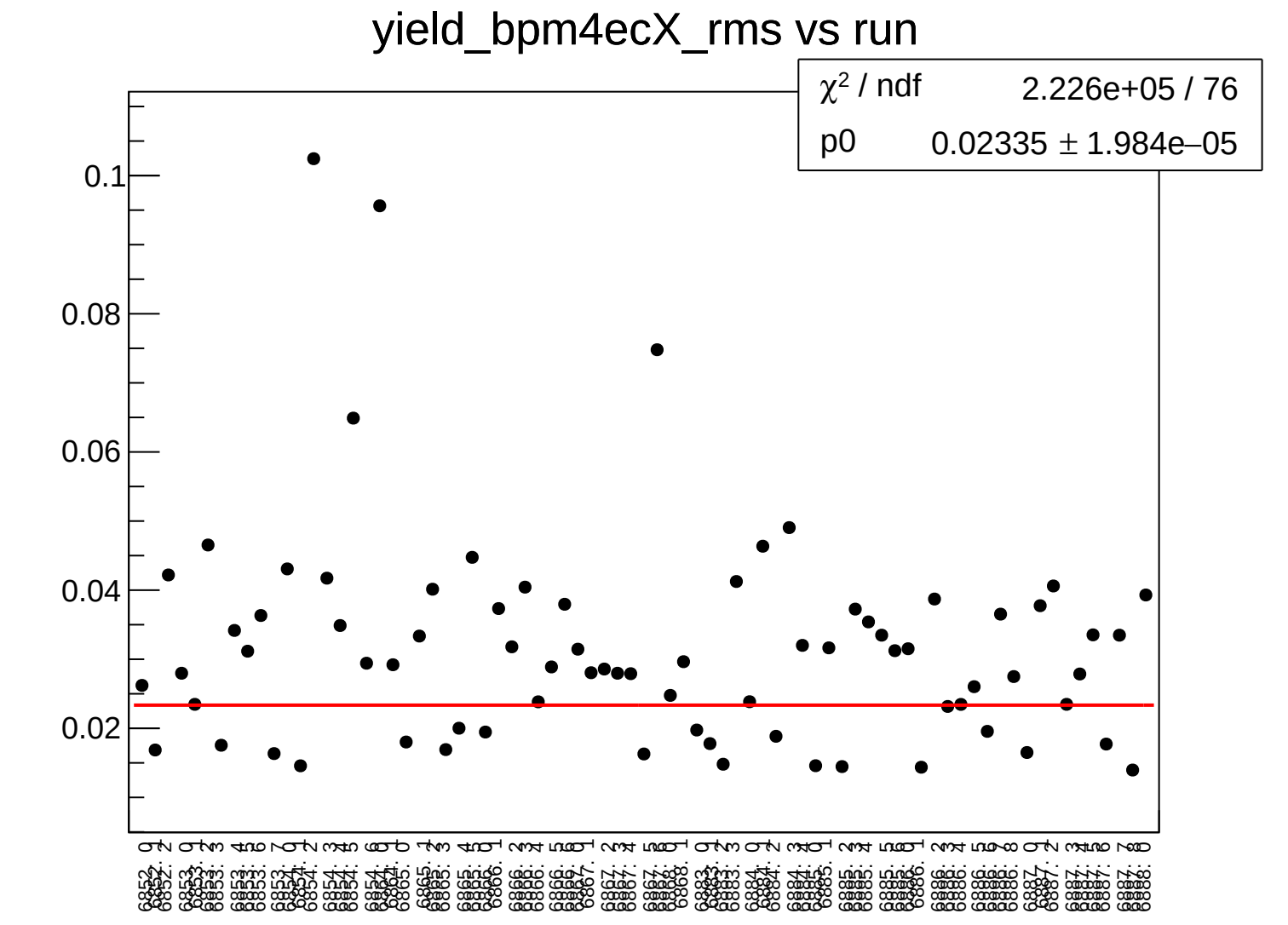

yield_bpm4acY_mean vs run
χ² / ndf 6.175e+05 / 76
p0 0.7921 ± 1.976e−05
0.84
0.82
0.8
0.78
0.76
0.74
0.72
pull
Entries 77
Mean 191.1
Std Dev 153.7
200
100
0
−100
−200

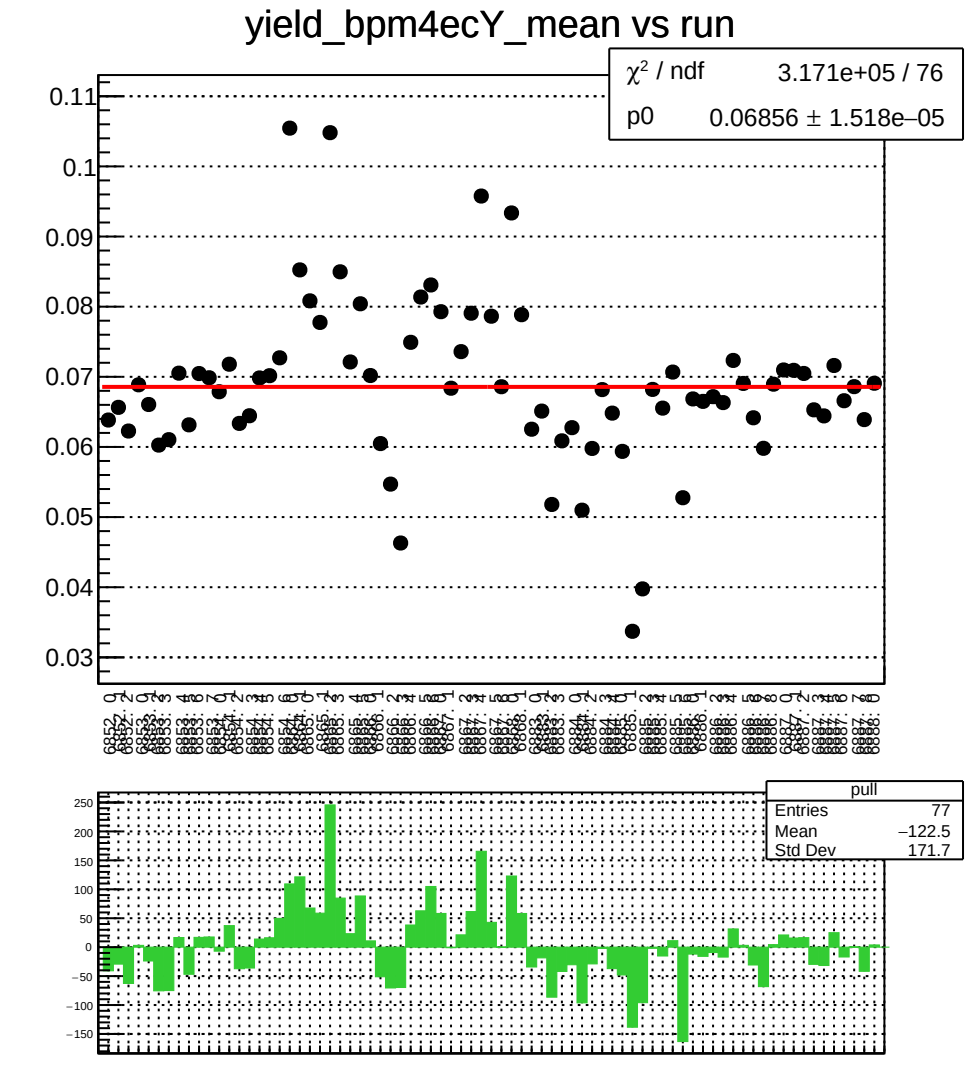

pull1D
Entries 77
Mean −1.255
Std Dev 4.384
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

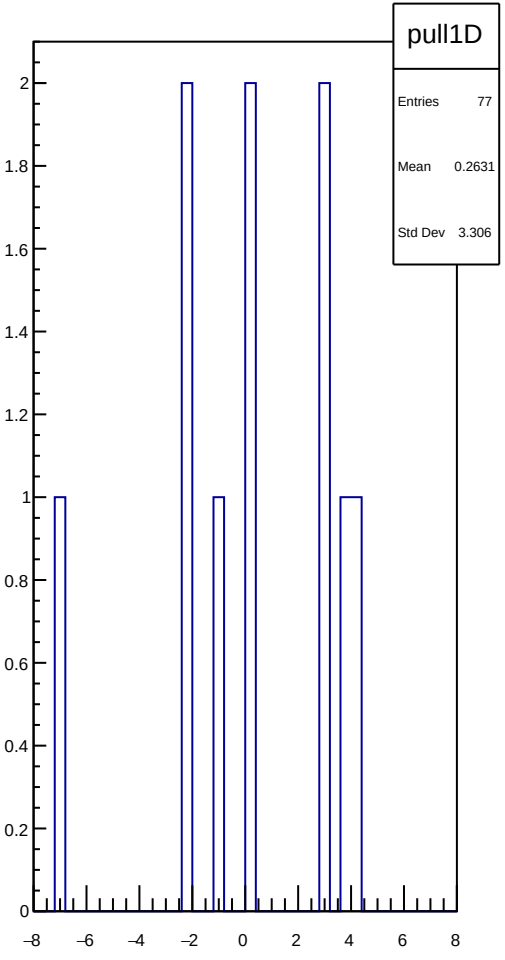

yield_bpm4acY_rms vs run
χ² / ndf 1.765e+05 / 76
p0 0.01672 ± 1.397e–05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

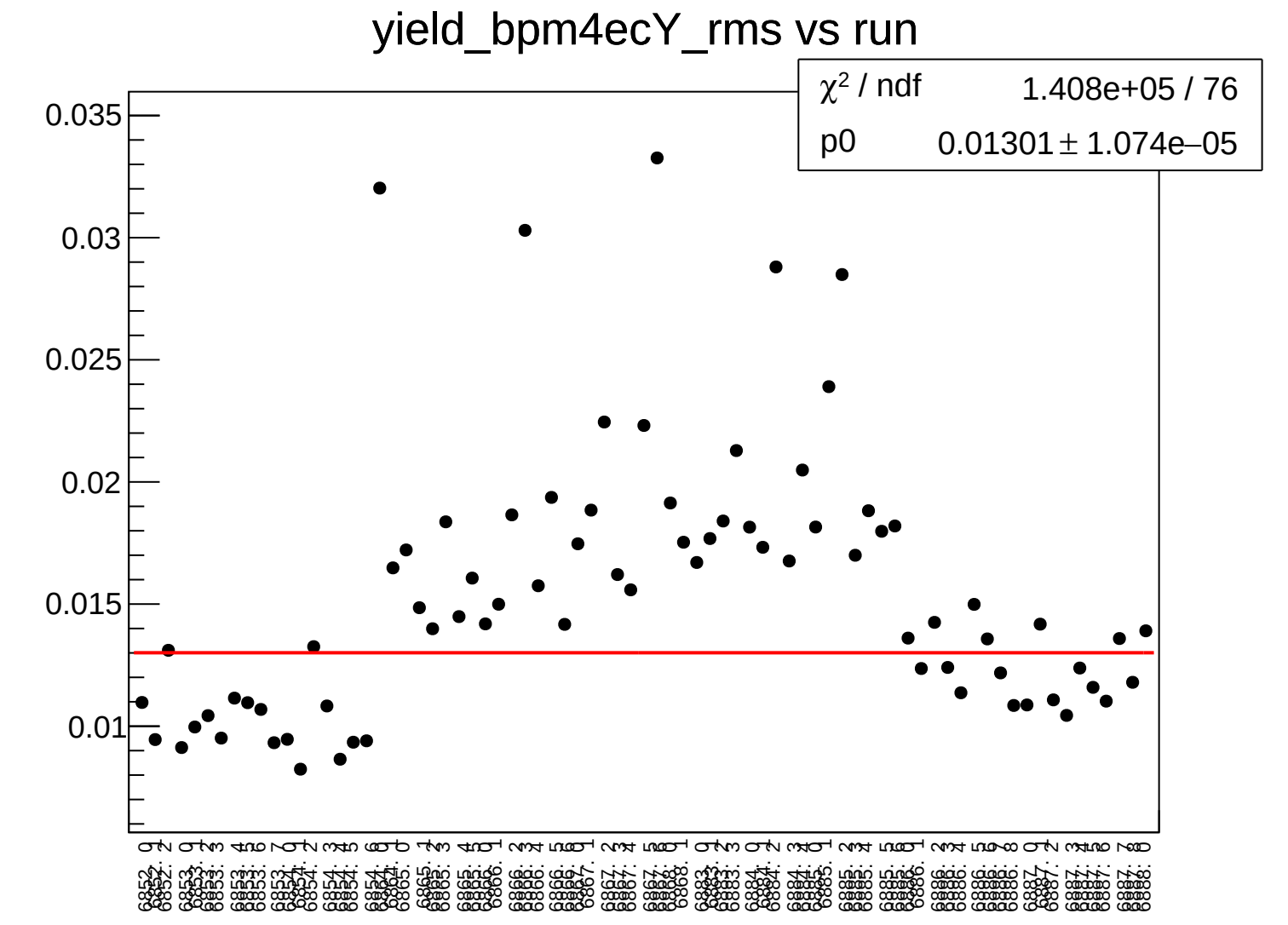

yield_bpm4ecX_mean vs run
χ² / ndf 3.774e+05 / 76
p0 −0.01464 ± 2.806e−05
pull
Entries 77
Mean 28.6
Std Dev 15.33

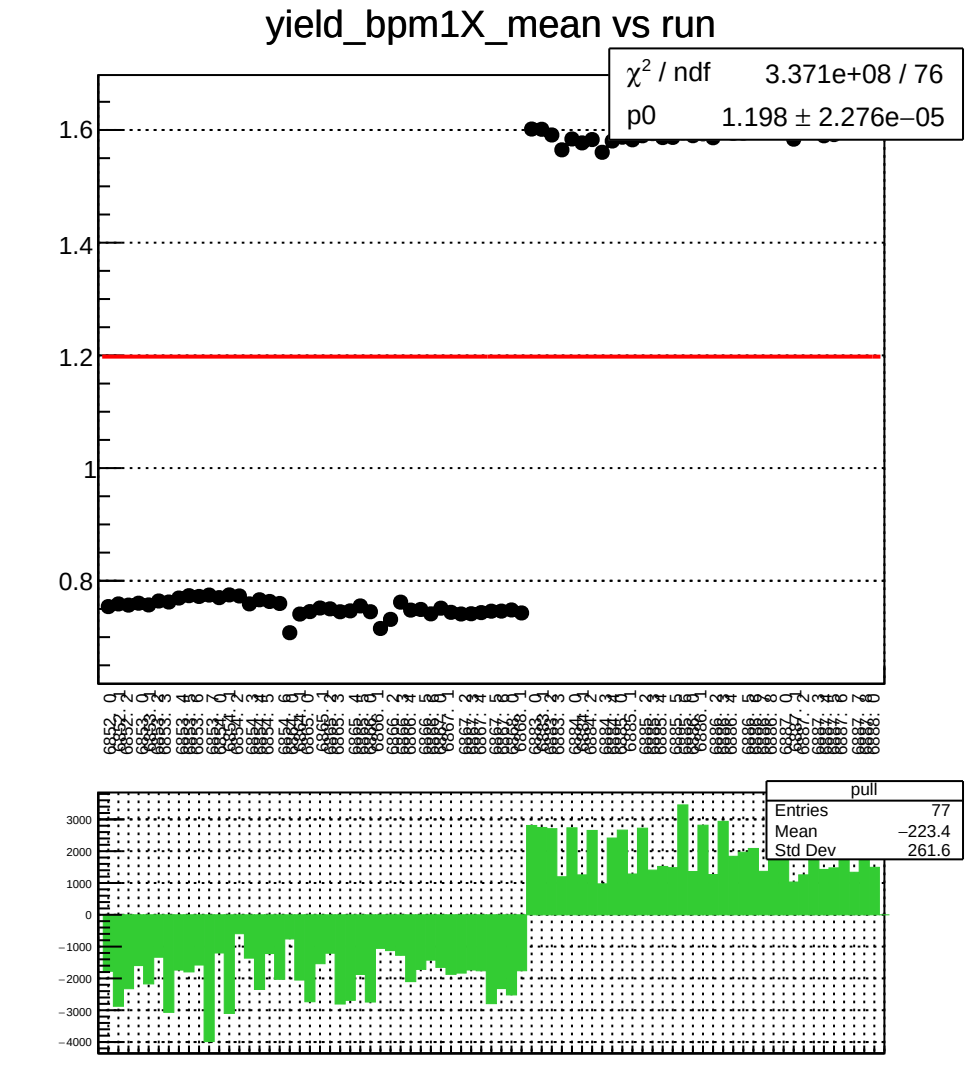

pull1D
Entries 77
Mean −2.398
Std Dev 1.704

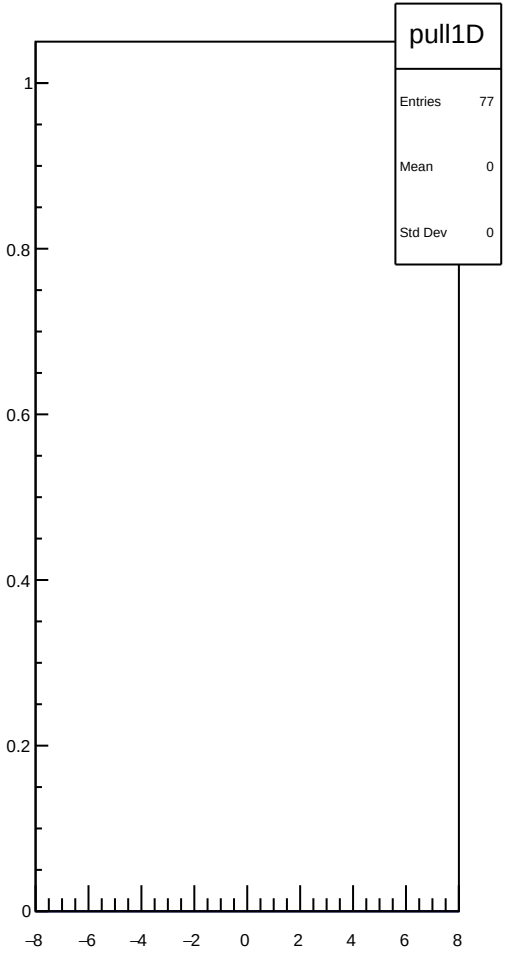

yield_bpm4ecX_rms vs run
χ² / ndf 2.226e+05 / 76
p0 0.02335 ± 1.984e–05
0.1
0.08
0.06
0.04
0.02

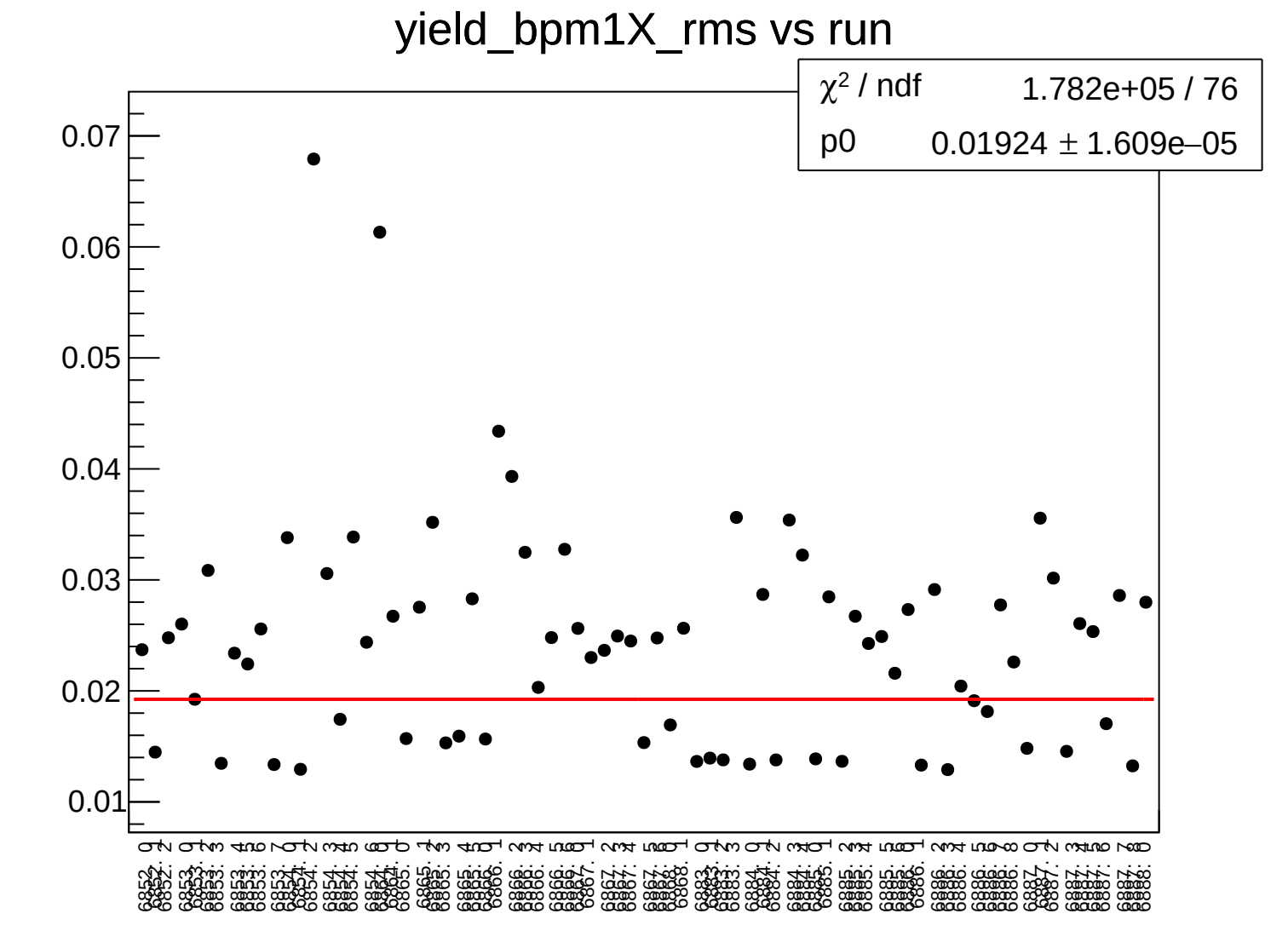

yield_bpm4ecY_mean vs run
χ² / ndf 3.171e+05 / 76
p0 0.06856 ± 1.518e−05
pull
Entries 77
Mean −122.5
Std Dev 171.7

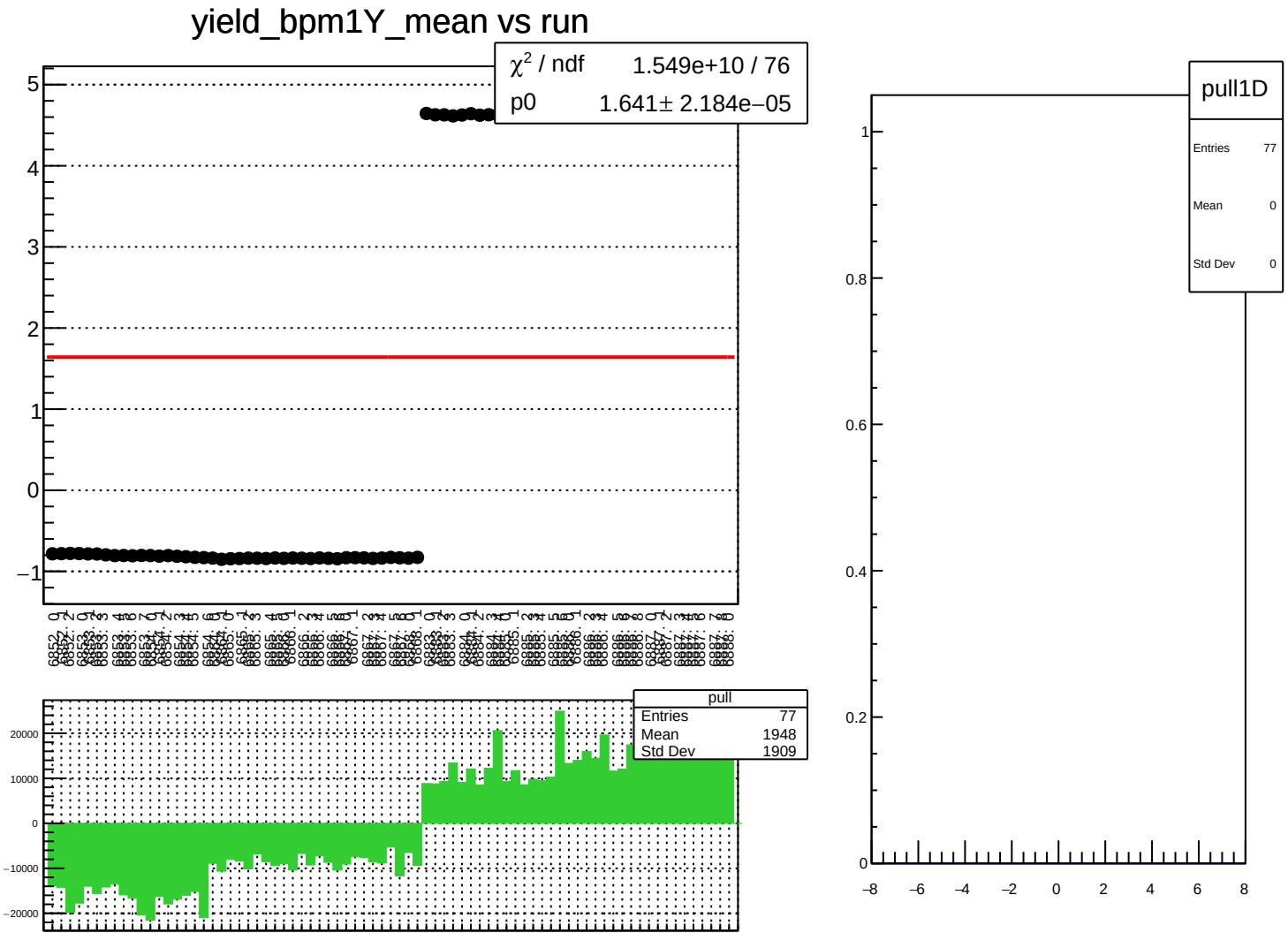

pull1D
Entries 77
Mean 0.2631
Std Dev 3.306

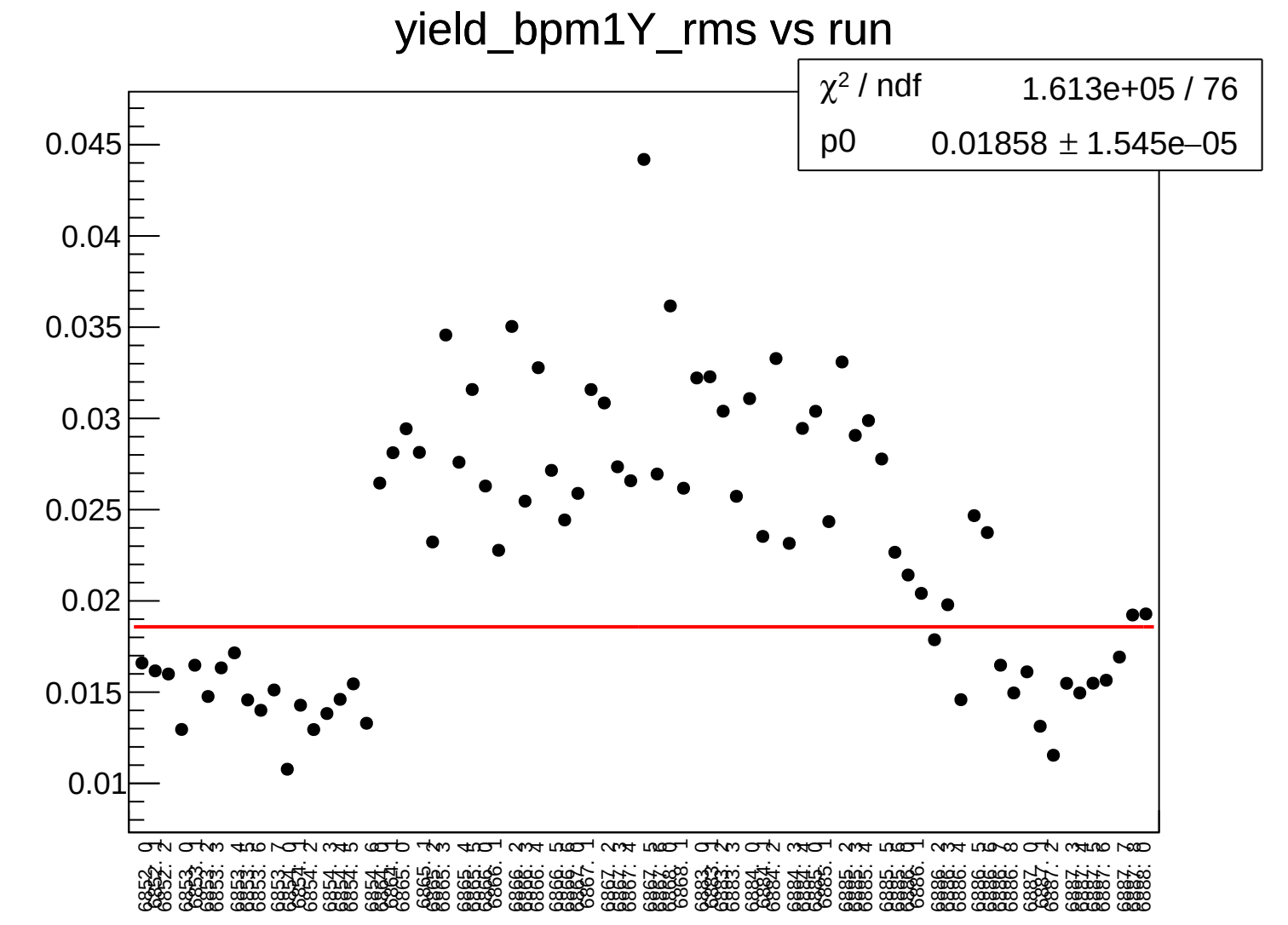

yield_bpm4ecY_rms vs run
χ² / ndf 1.408e+05 / 76
p0 0.01301 ± 1.074e–05
0.035
0.03
0.025
0.02
0.015
0.01

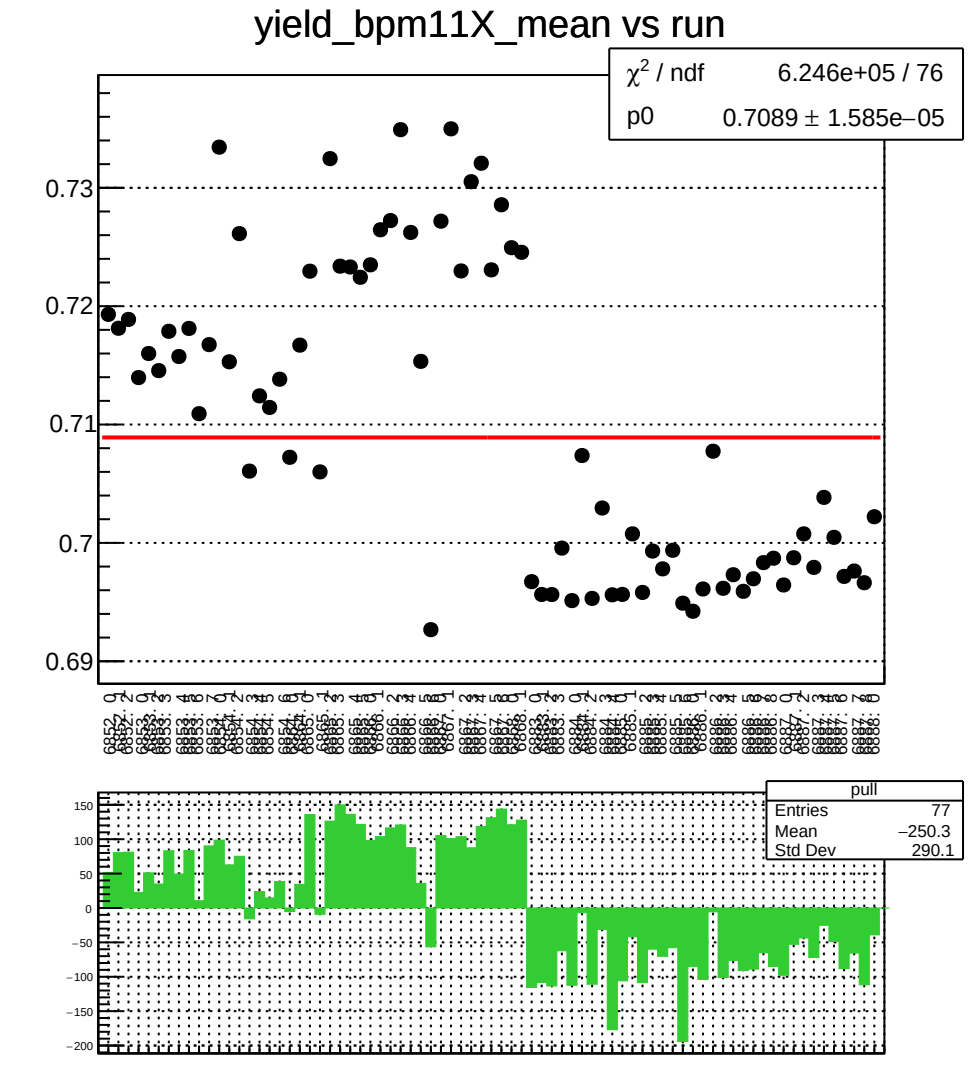

yield_bpm1X_mean vs run
χ² / ndf 3.371e+08 / 76
p0 1.198 ± 2.276e−05
1.6
1.4
1.2
1
0.8
pull
Entries 77
Mean −223.4
Std Dev 261.6
3000
2000
1000
0
−1000
−2000
−3000
−4000

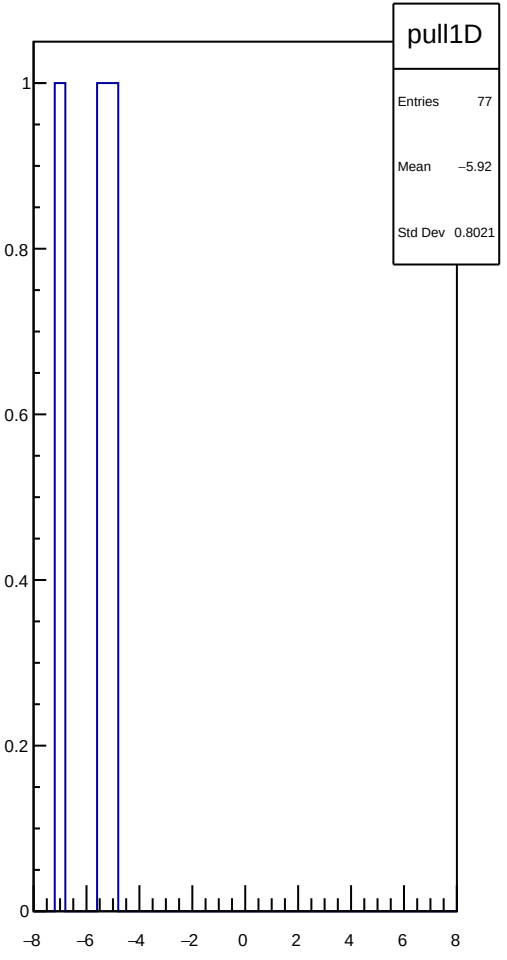

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

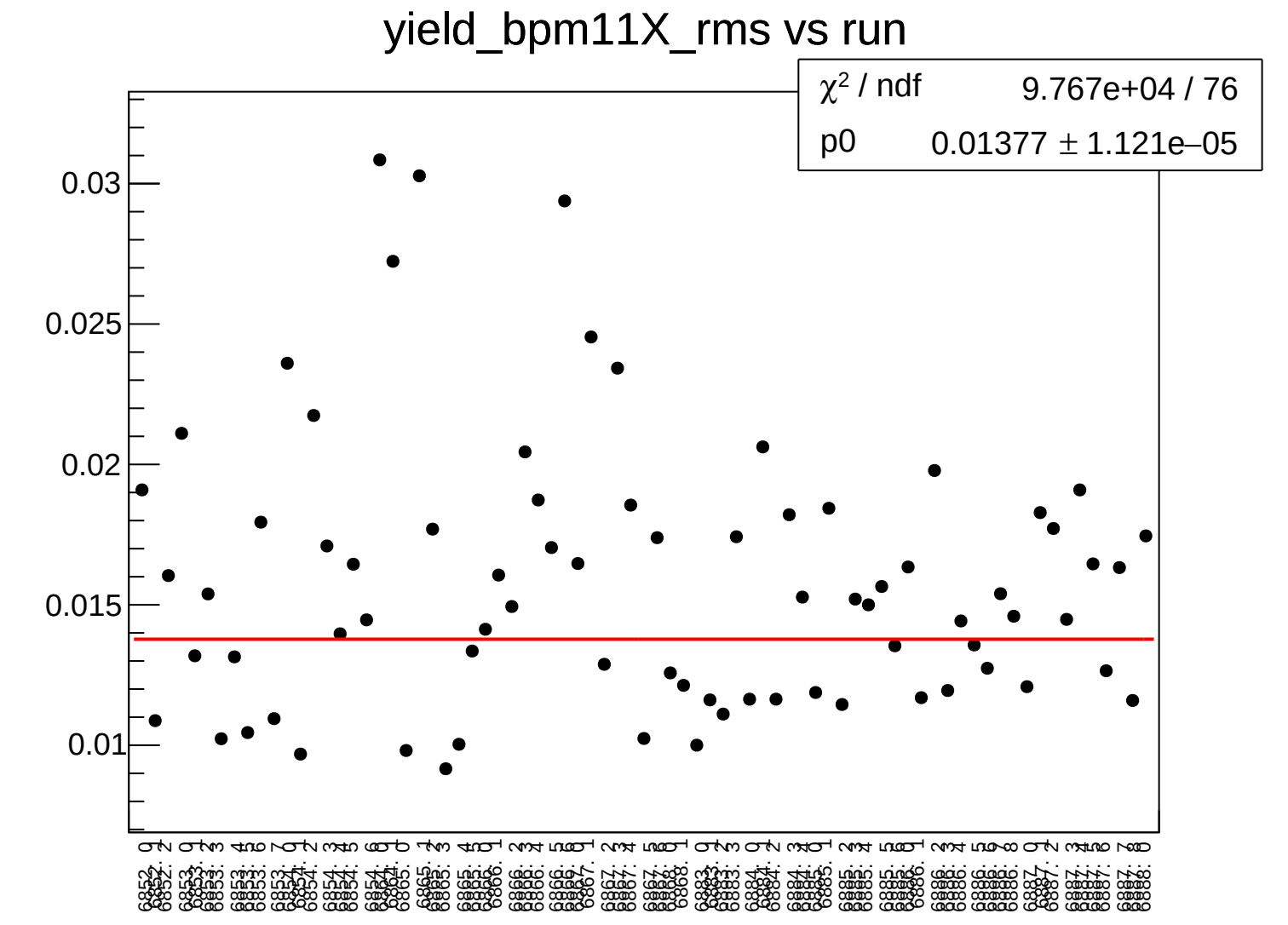

yield_bpm1X_rms vs run
χ² / ndf 1.782e+05 / 76
p0 0.01924 ± 1.609e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

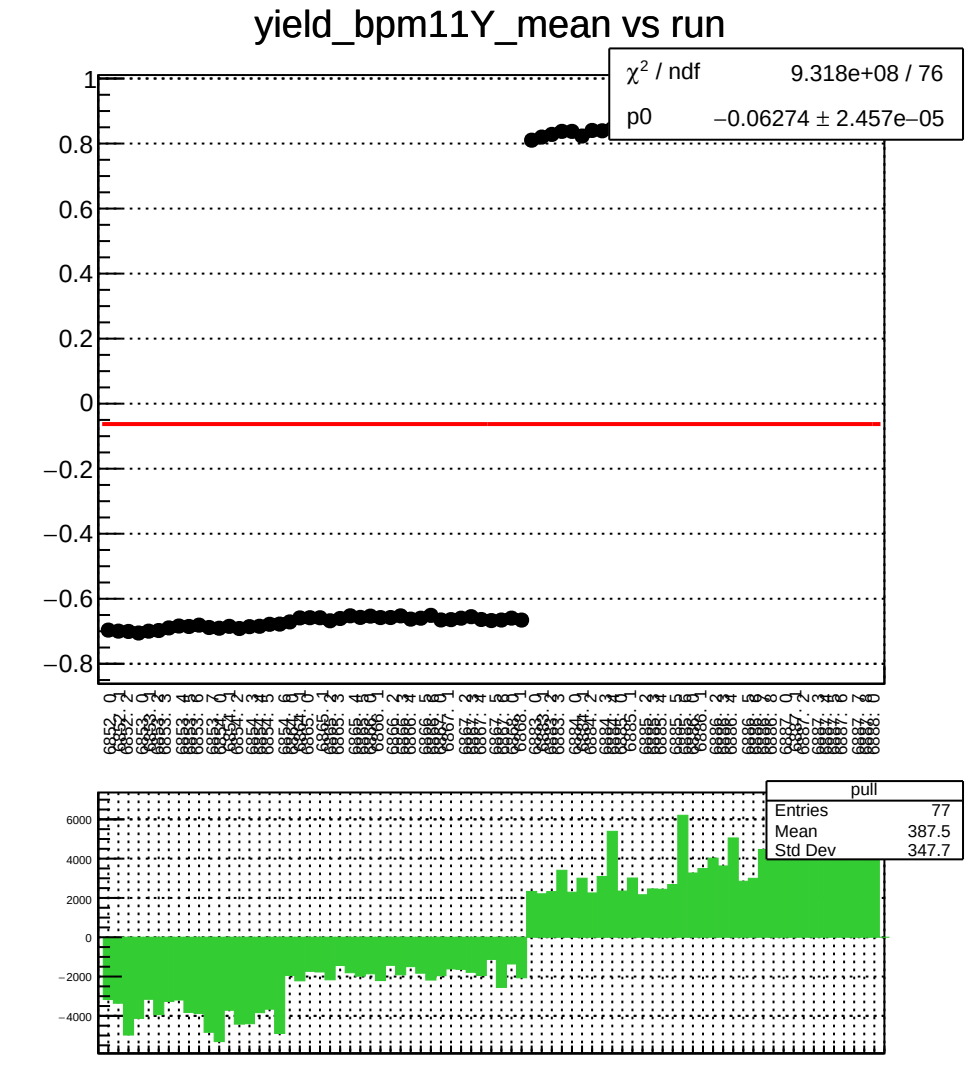

yield_bpm1Y_mean vs run
χ² / ndf 1.549e+10 / 76
p0 1.641± 2.184e−05
pull
Entries 77
Mean 1948
Std Dev 1909
pull1D
Entries 77
Mean 0
Std Dev 0

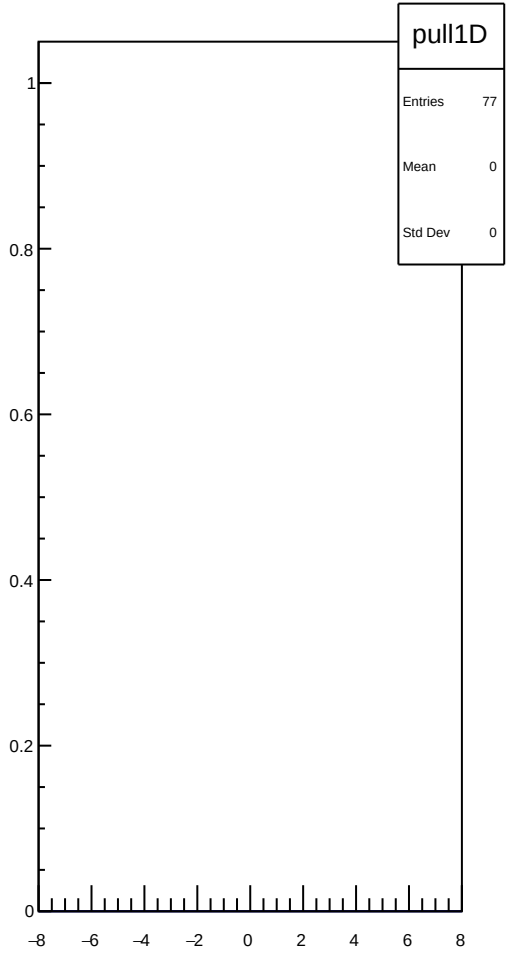

yield_bpm1Y_rms vs run
χ² / ndf 1.613e+05 / 76
p0 0.01858 ± 1.545e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

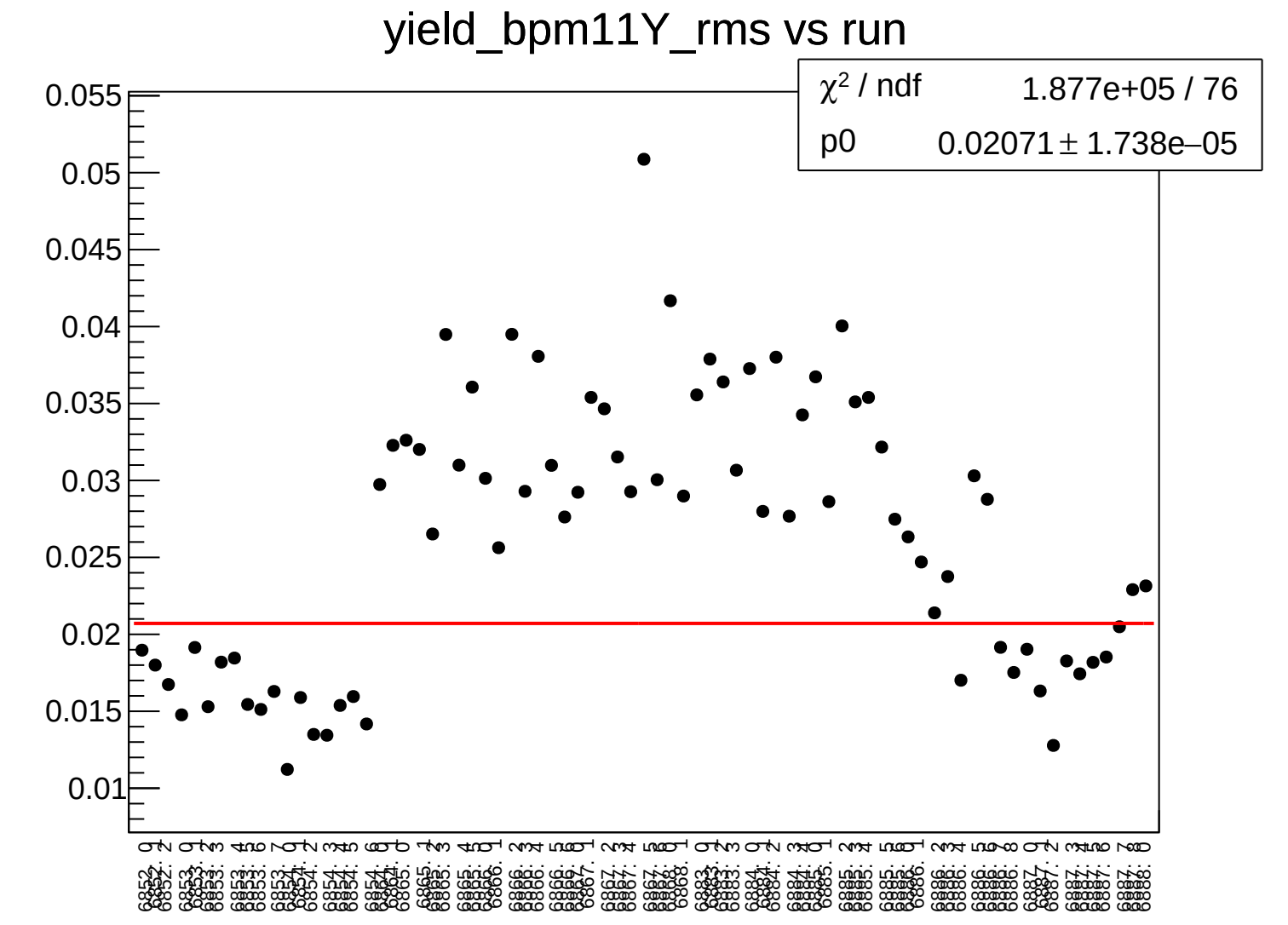

yield_bpm11X_mean vs run
χ² / ndf 6.246e+05 / 76
p0 0.7089 ± 1.585e−05
0.73
0.72
0.71
0.7
0.69
pull
Entries 77
Mean −250.3
Std Dev 290.1
150
100
50
0
−50
−100
−150
−200

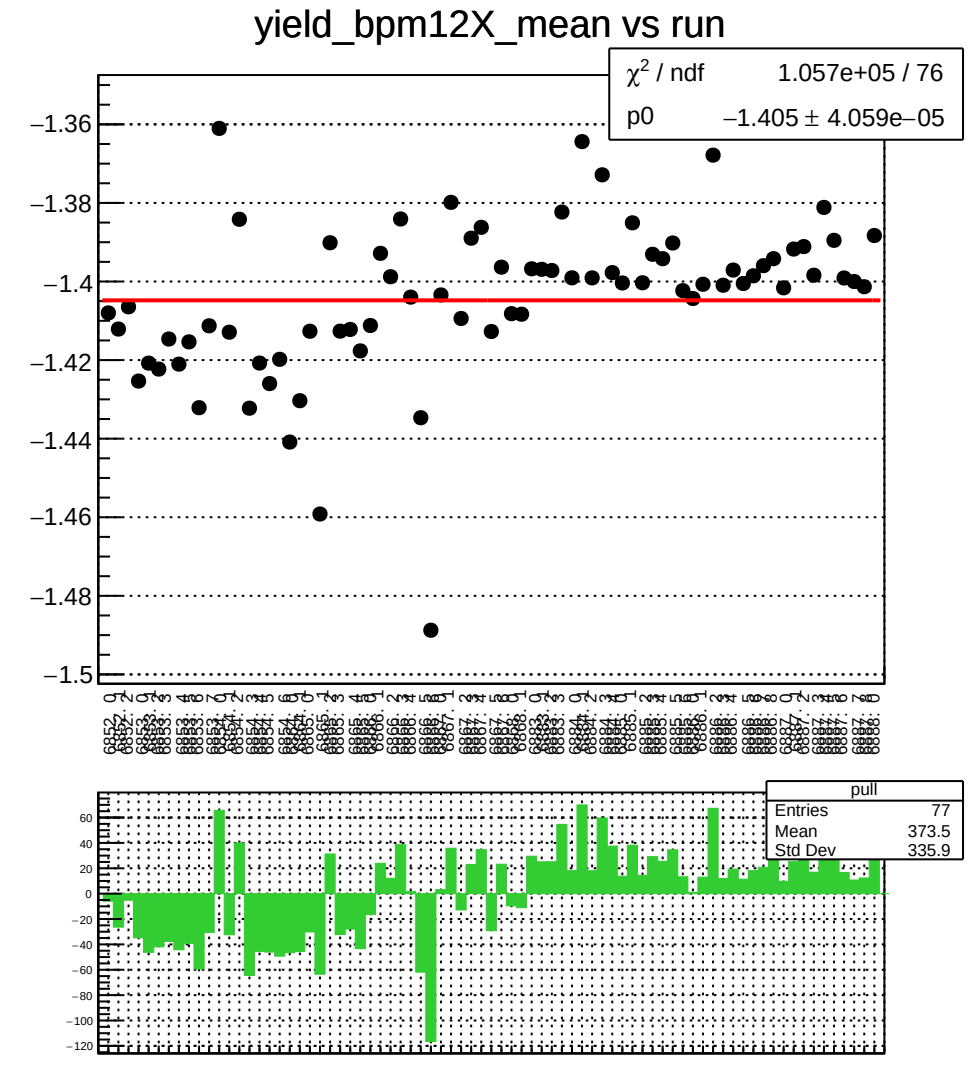

pull1D
Entries 77
Mean −5.92
Std Dev 0.8021
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

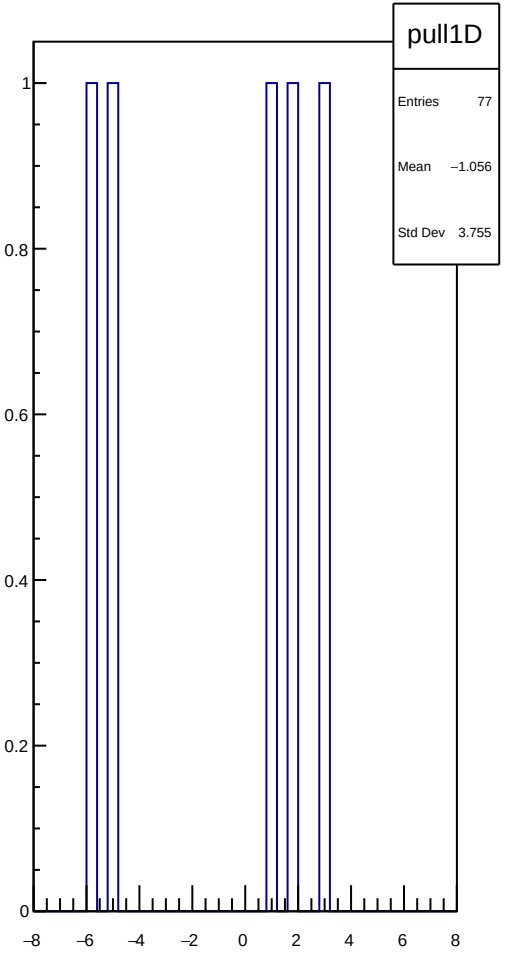

yield_bpm11X_rms vs run
χ² / ndf 9.767e+04 / 76
p0 0.01377 ± 1.121e–05
0.03
0.025
0.02
0.015
0.01

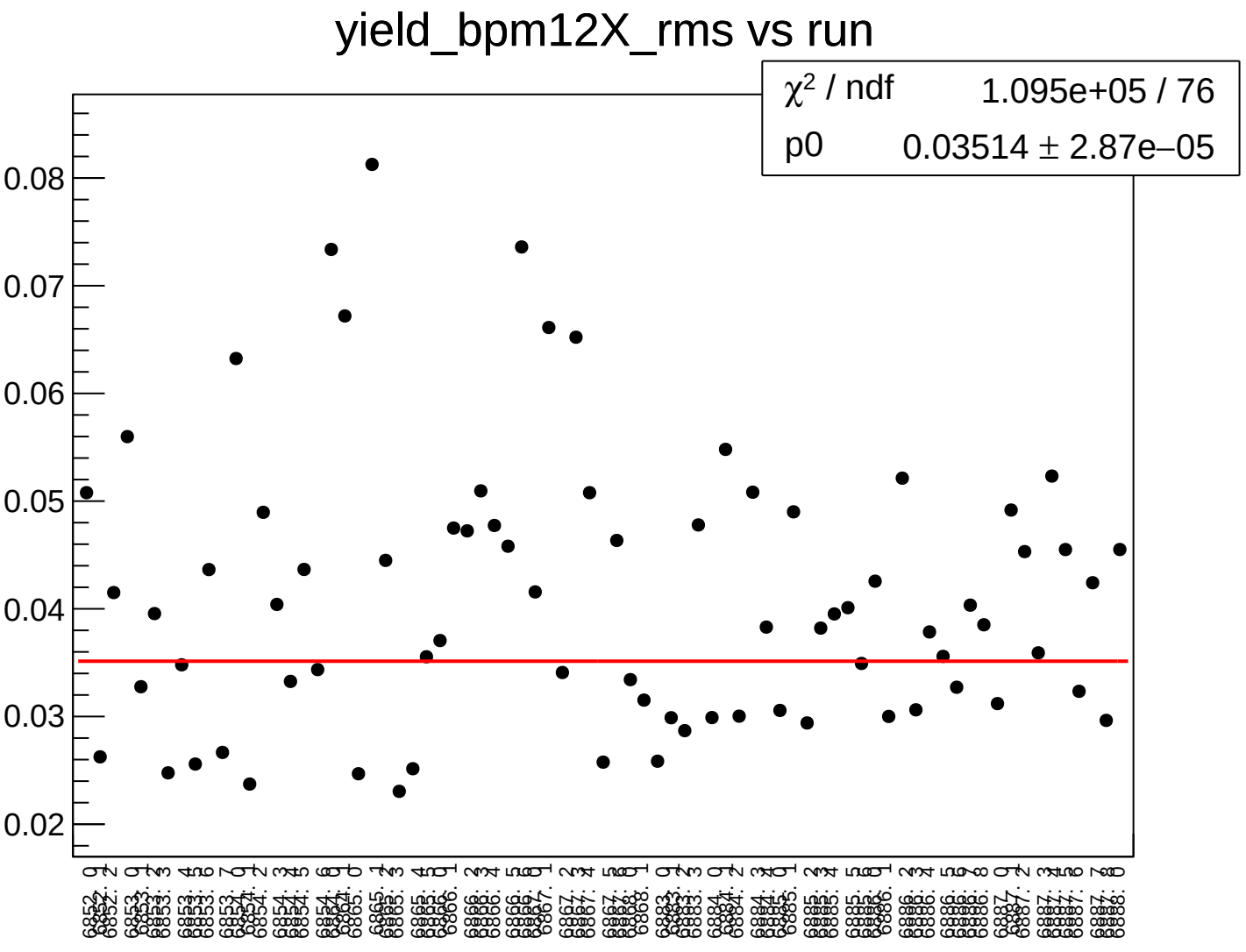

yield_bpm11Y_mean vs run
χ² / ndf 9.318e+08 / 76
p0 −0.06274 ± 2.457e−05
pull
Entries 77
Mean 387.5
Std Dev 347.7

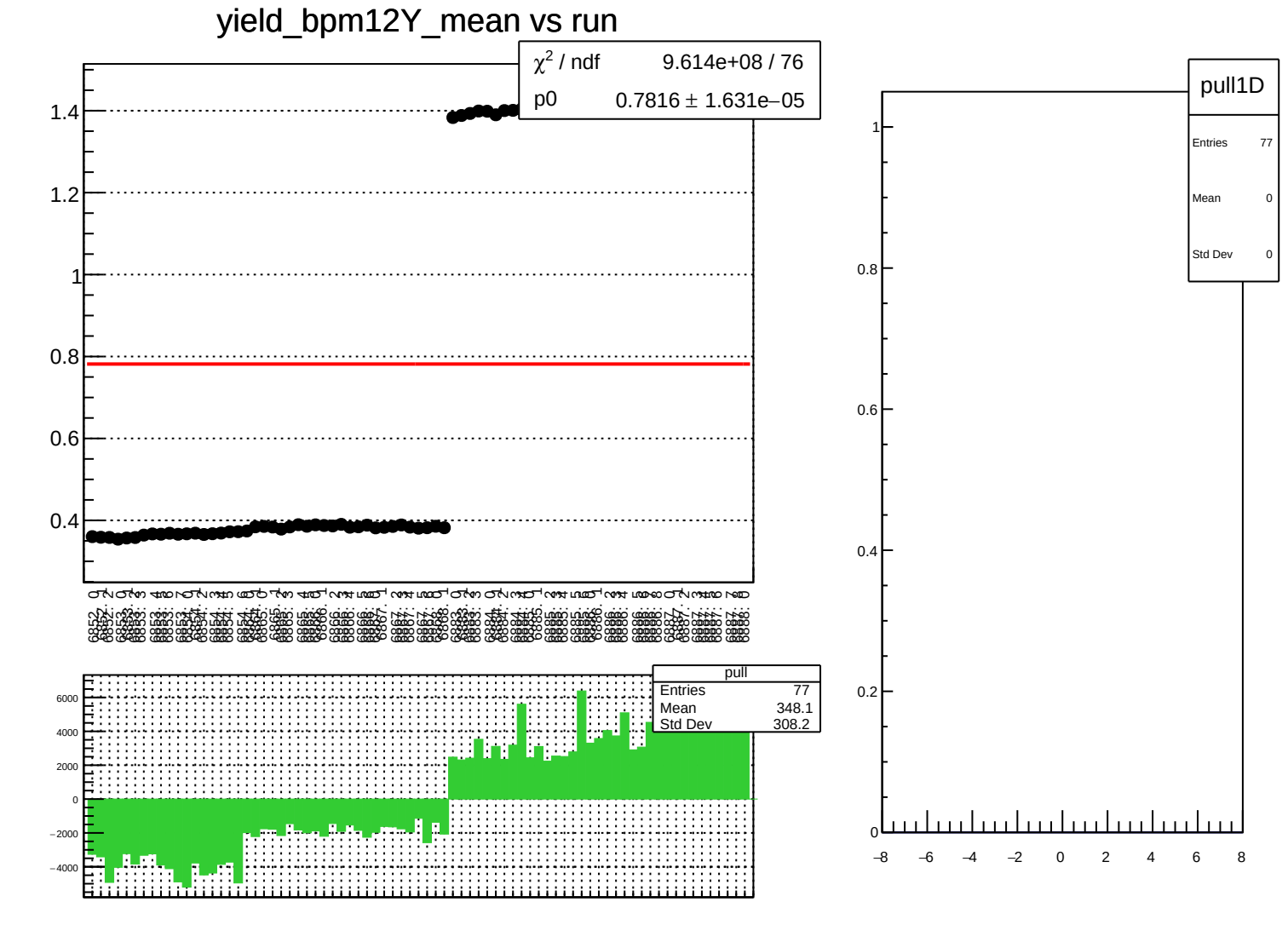

pull1D
Entries 77
Mean 0
Std Dev 0

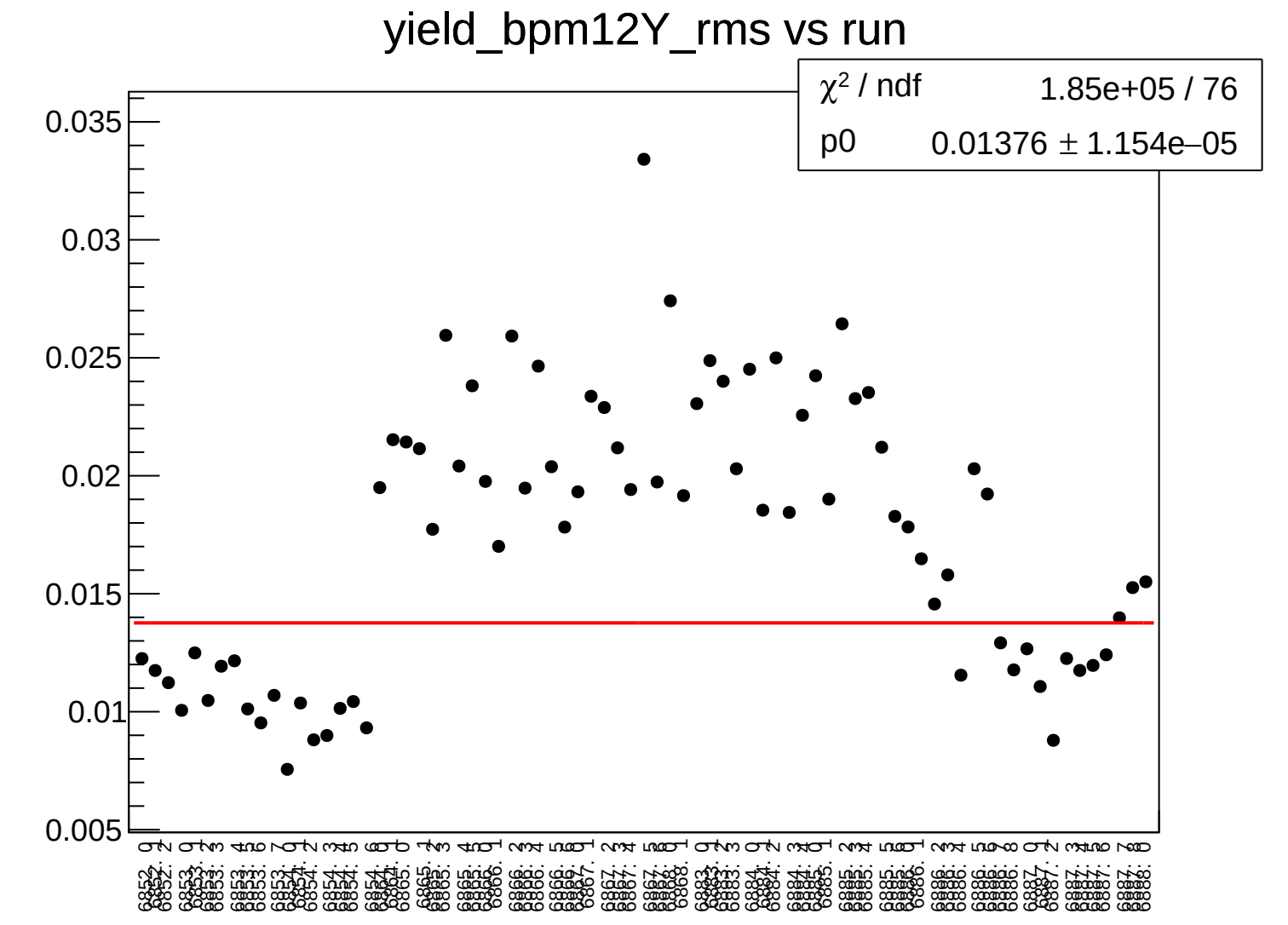

yield_bpm11Y_rms vs run
χ² / ndf 1.877e+05 / 76
p0 0.02071 ± 1.738e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

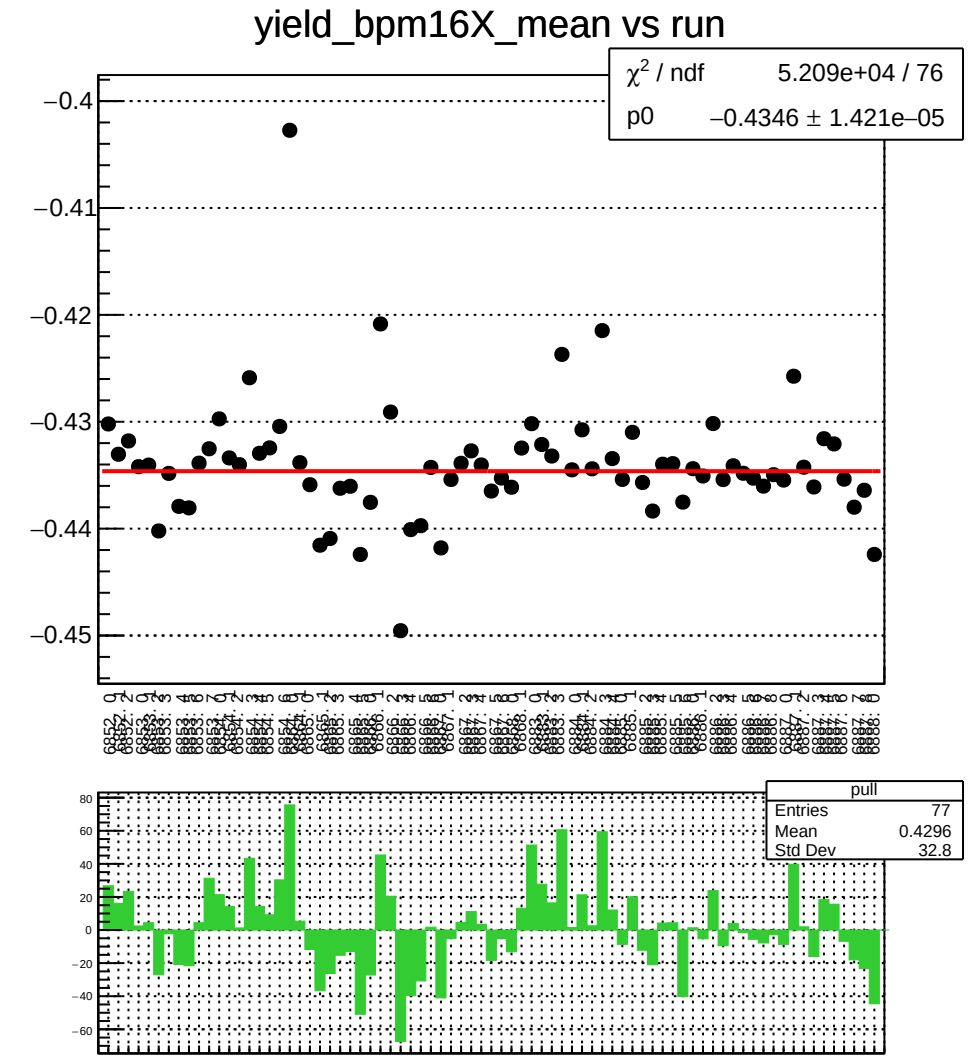

yield_bpm12X_mean vs run
χ² / ndf 1.057e+05 / 76
p0 −1.405 ± 4.059e−05
−1.36
−1.38
−1.4
−1.42
−1.44
−1.46
−1.48
−1.5
pull
Entries 77
Mean 373.5
Std Dev 335.9
60
40
20
0
−20
−40
−60
−80
−100
−120

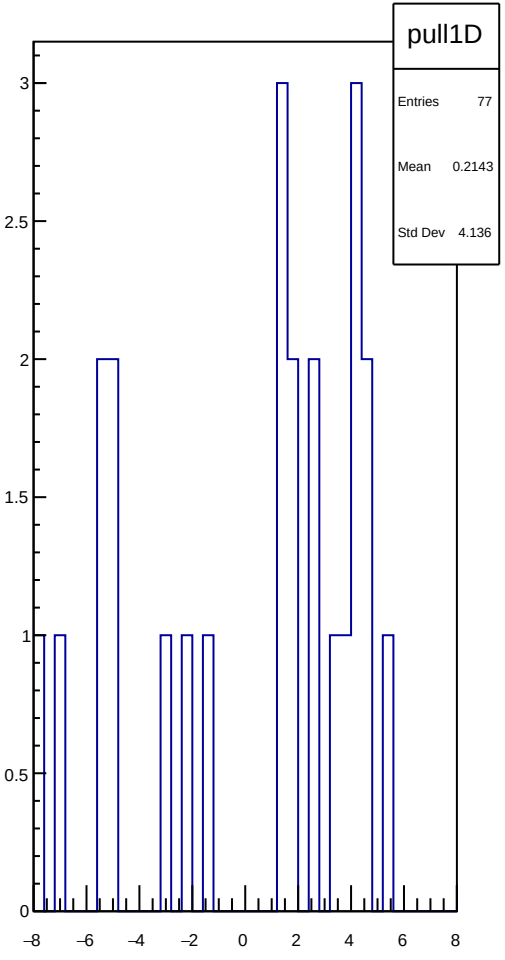

pull1D
Entries 77
Mean −1.056
Std Dev 3.755
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

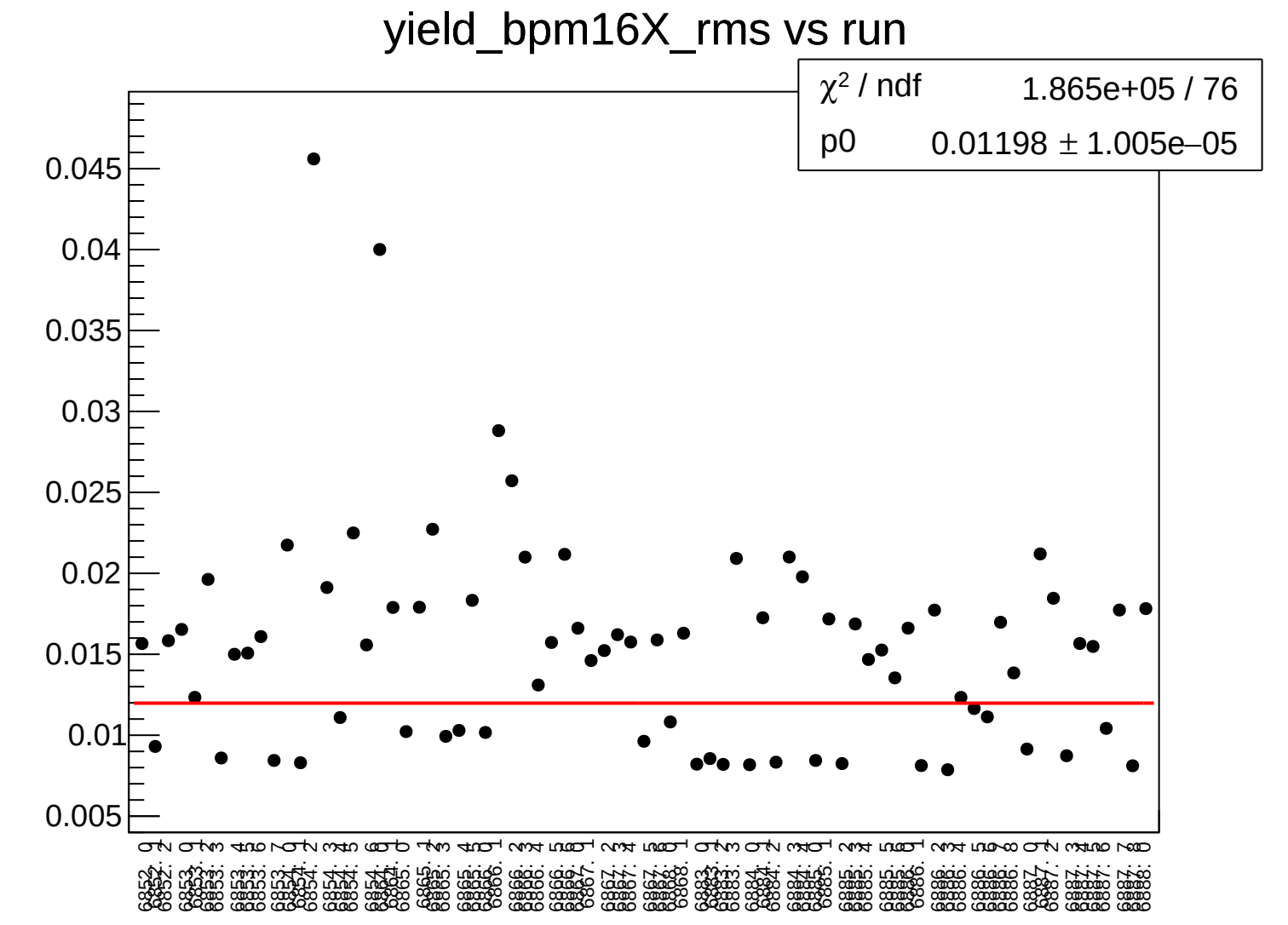

yield_bpm12X_rms vs run
χ² / ndf 1.095e+05 / 76
p0 0.03514 ± 2.87e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02

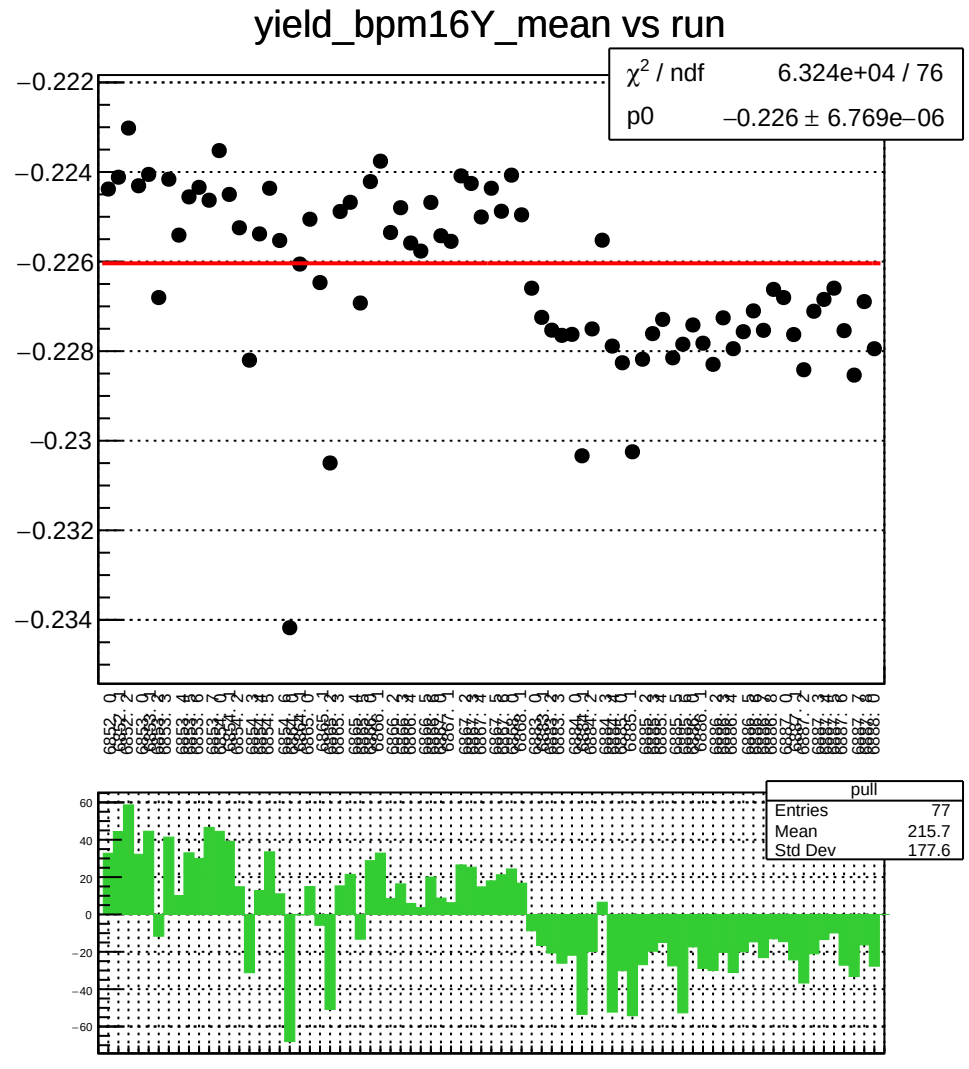

yield_bpm12Y_mean vs run
χ² / ndf 9.614e+08 / 76
p0 0.7816 ± 1.631e−05
1.4
1.2
1
0.8
0.6
0.4
pull
Entries 77
Mean 348.1
Std Dev 308.2
6000
4000
2000
0
−2000
−4000
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

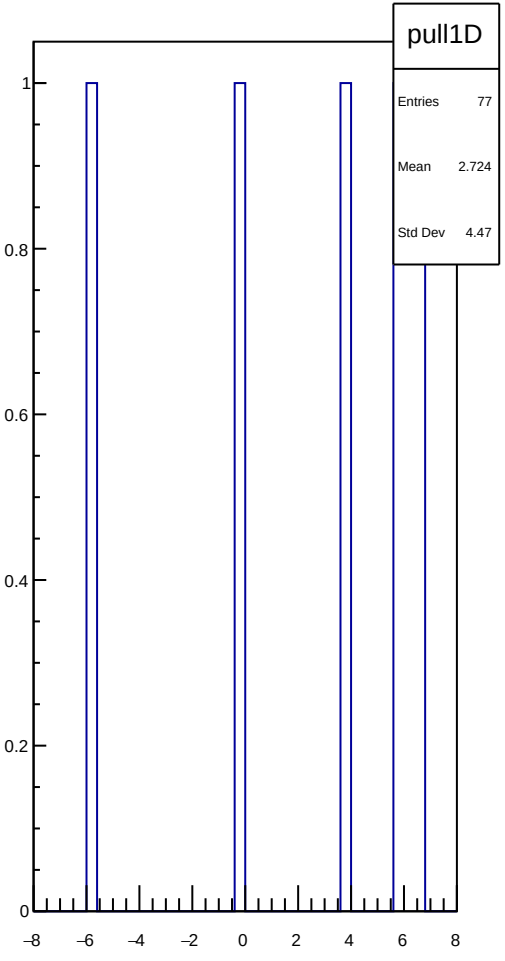

yield_bpm12Y_rms vs run
χ² / ndf 1.85e+05 / 76
p0 0.01376 ± 1.154e−05
0.035
0.03
0.025
0.02
0.015
0.01
0.005

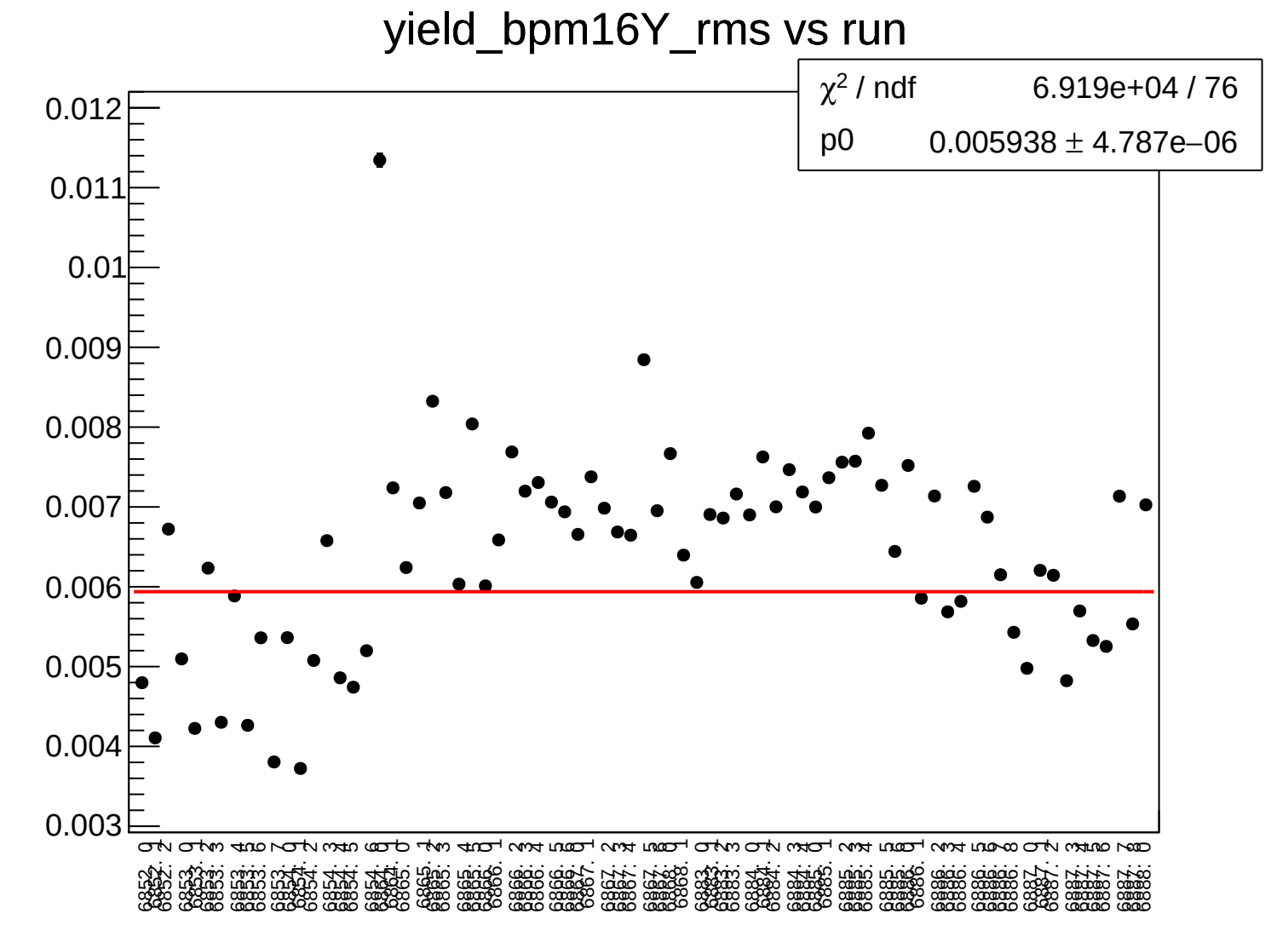

yield_bpm16X_mean vs run
χ² / ndf 5.209e+04 / 76
p0 −0.4346 ± 1.421e−05
−0.4
−0.41
−0.42
−0.43
−0.44
−0.45
pull
Entries 77
Mean 0.4296
Std Dev 32.8
80
60
40
20
0
−20
−40
−60

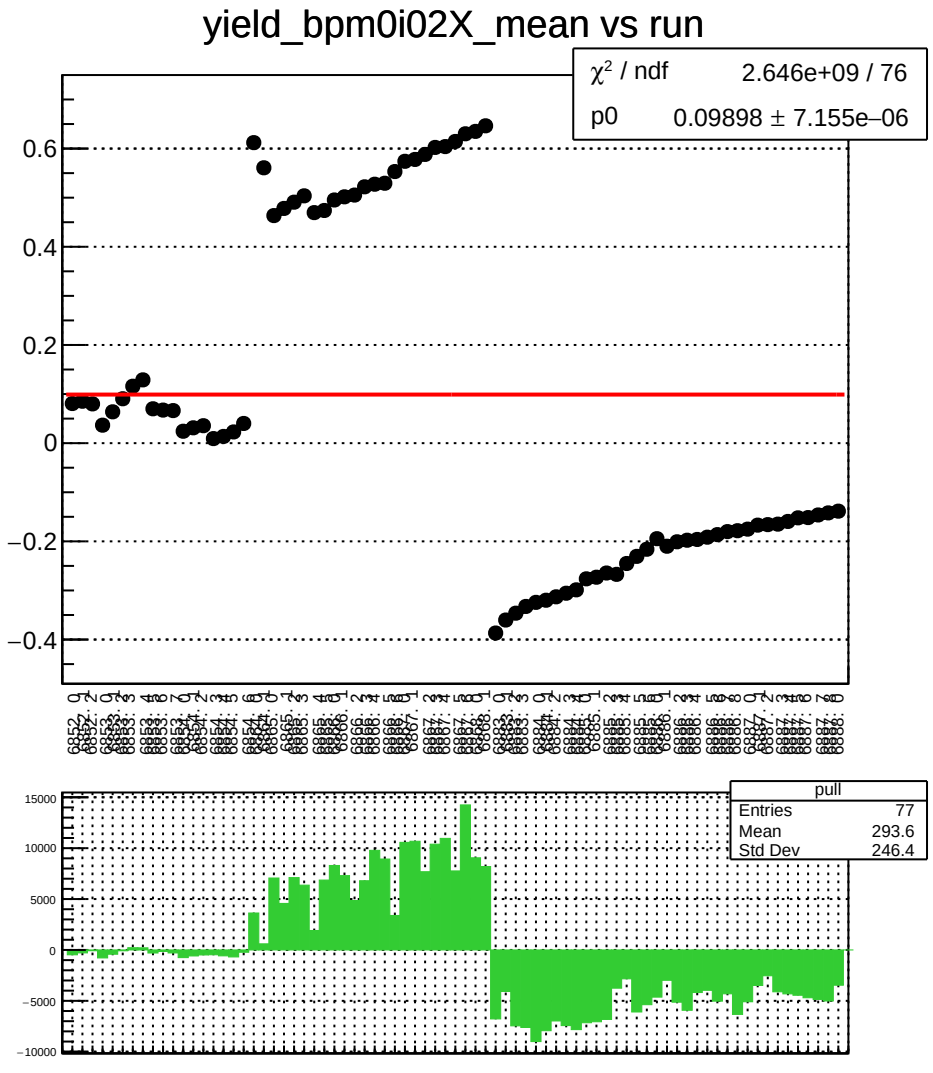

pull1D
Entries 77
Mean 0.2143
Std Dev 4.136
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

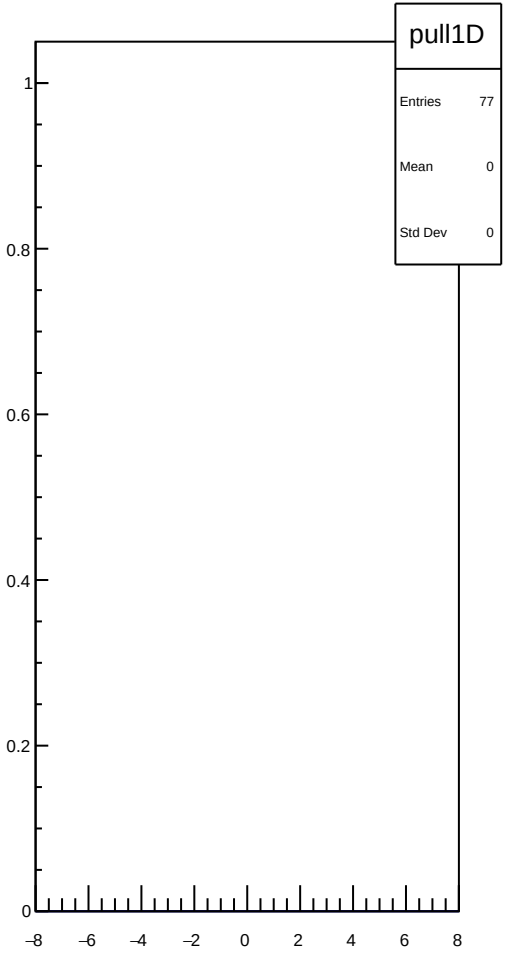

yield_bpm16X_rms vs run
χ² / ndf 1.865e+05 / 76
p0 0.01198 ± 1.005e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

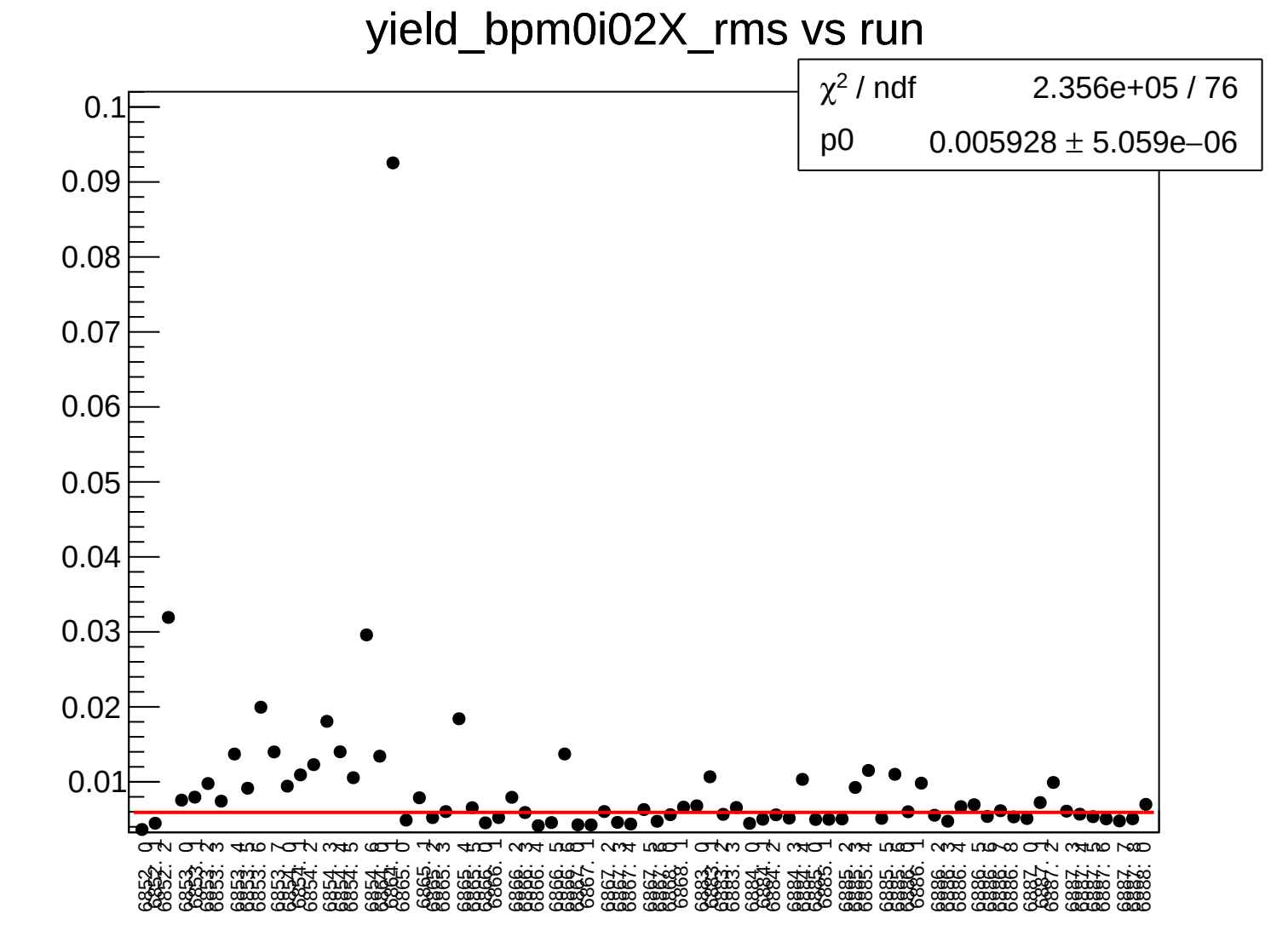

yield_bpm16Y_mean vs run
χ² / ndf 6.324e+04 / 76
p0 −0.226 ± 6.769e−06
−0.222
−0.224
−0.226
−0.228
−0.23
−0.232
−0.234
pull
Entries 77
Mean 215.7
Std Dev 177.6
60
40
20
0
−20
−40
−60

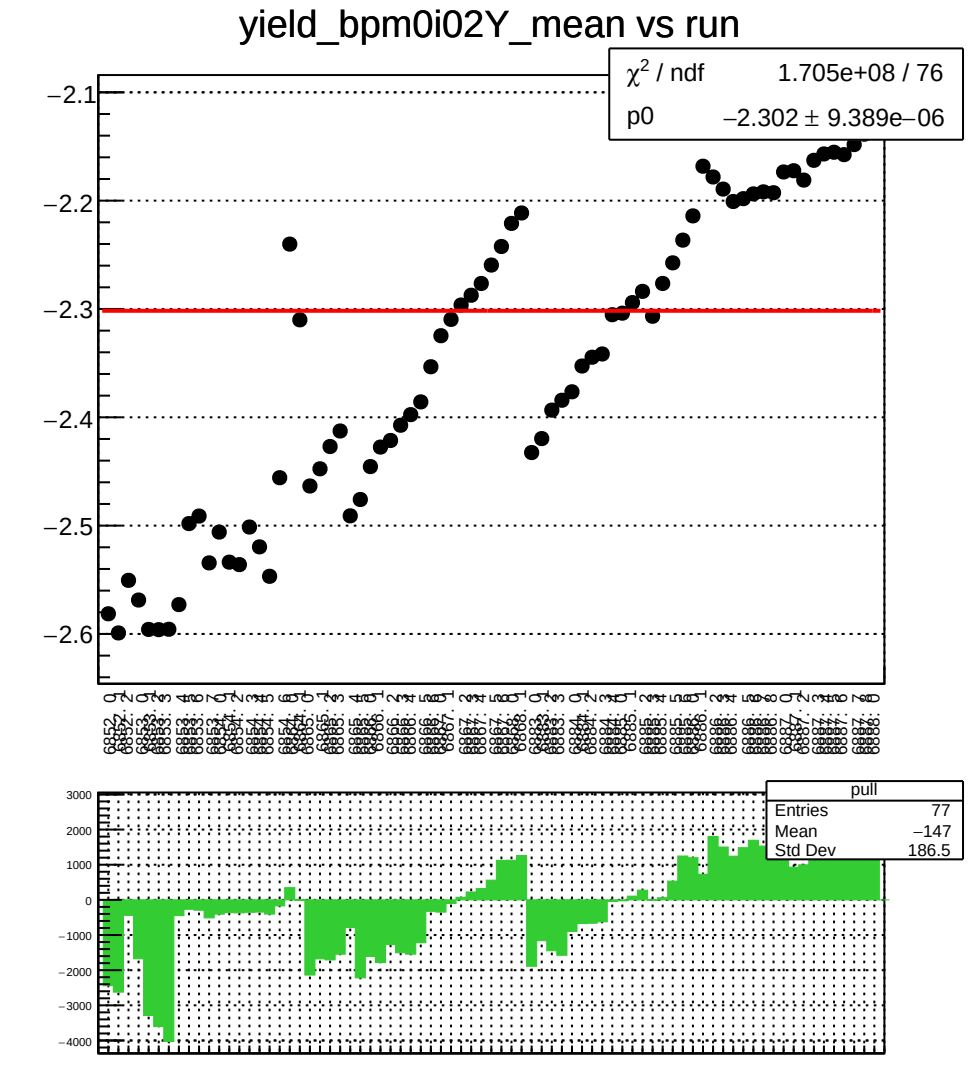

pull1D
Entries 77
Mean 2.724
Std Dev 4.47
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

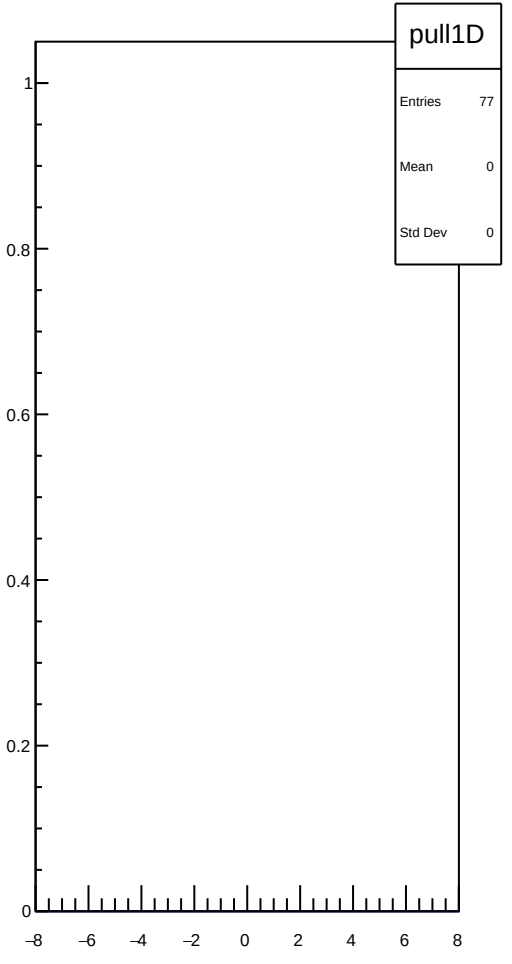

yield_bpm16Y_rms vs run
χ² / ndf 6.919e+04 / 76
p0 0.005938 ± 4.787e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

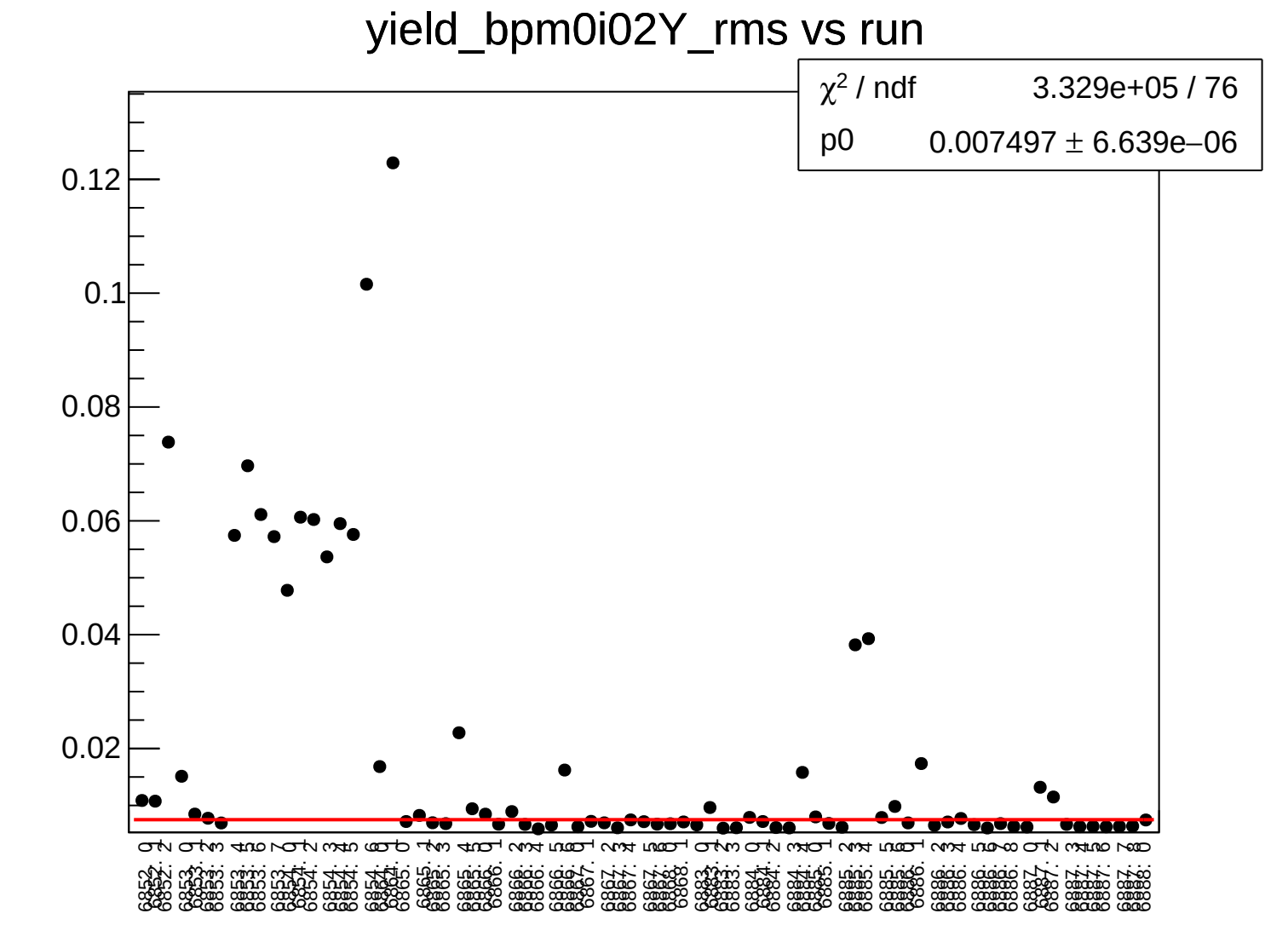

yield_bpm0i02X_mean vs run
χ² / ndf 2.646e+09 / 76
p0 0.09898 ± 7.155e−06
pull
Entries 77
Mean 293.6
Std Dev 246.4

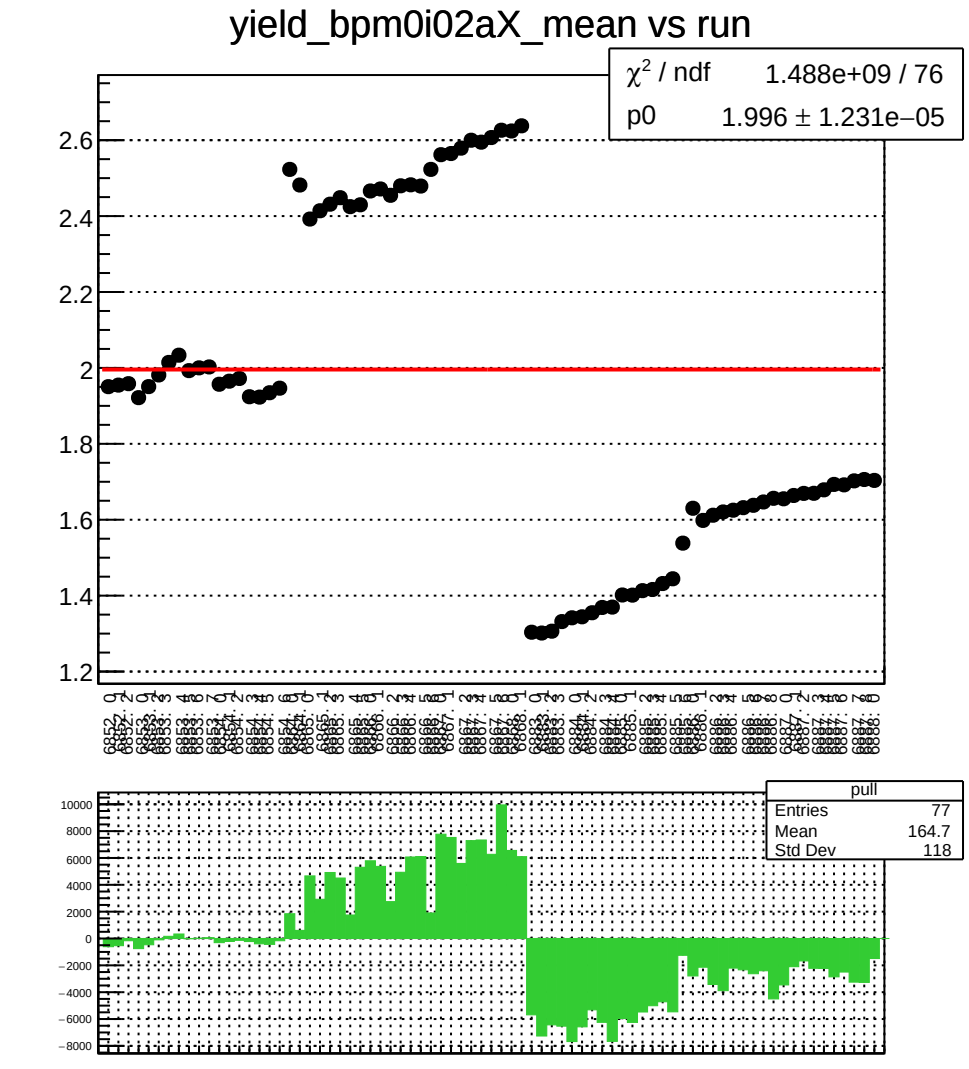

pull1D
Entries 77
Mean 0
Std Dev 0

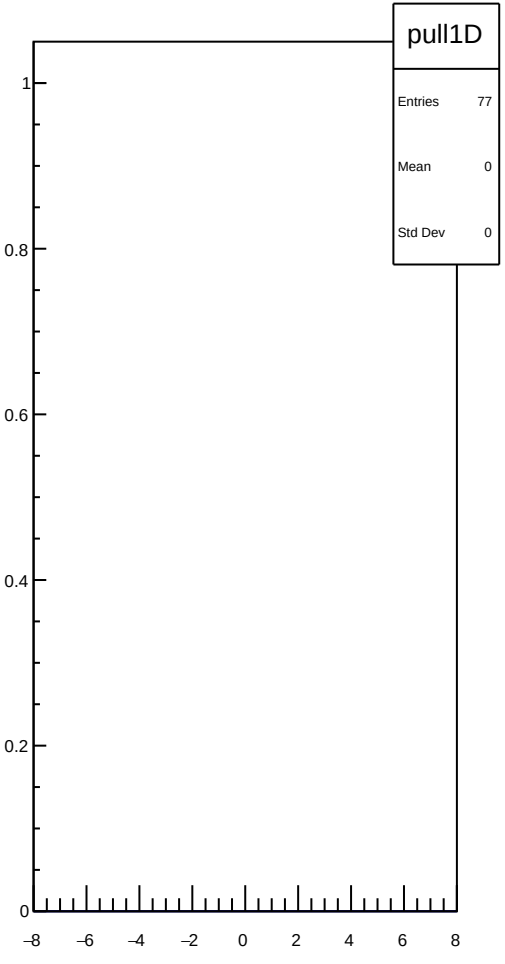

yield_bpm0i02X_rms vs run
χ² / ndf 2.356e+05 / 76
p0 0.005928 ± 5.059e−06
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

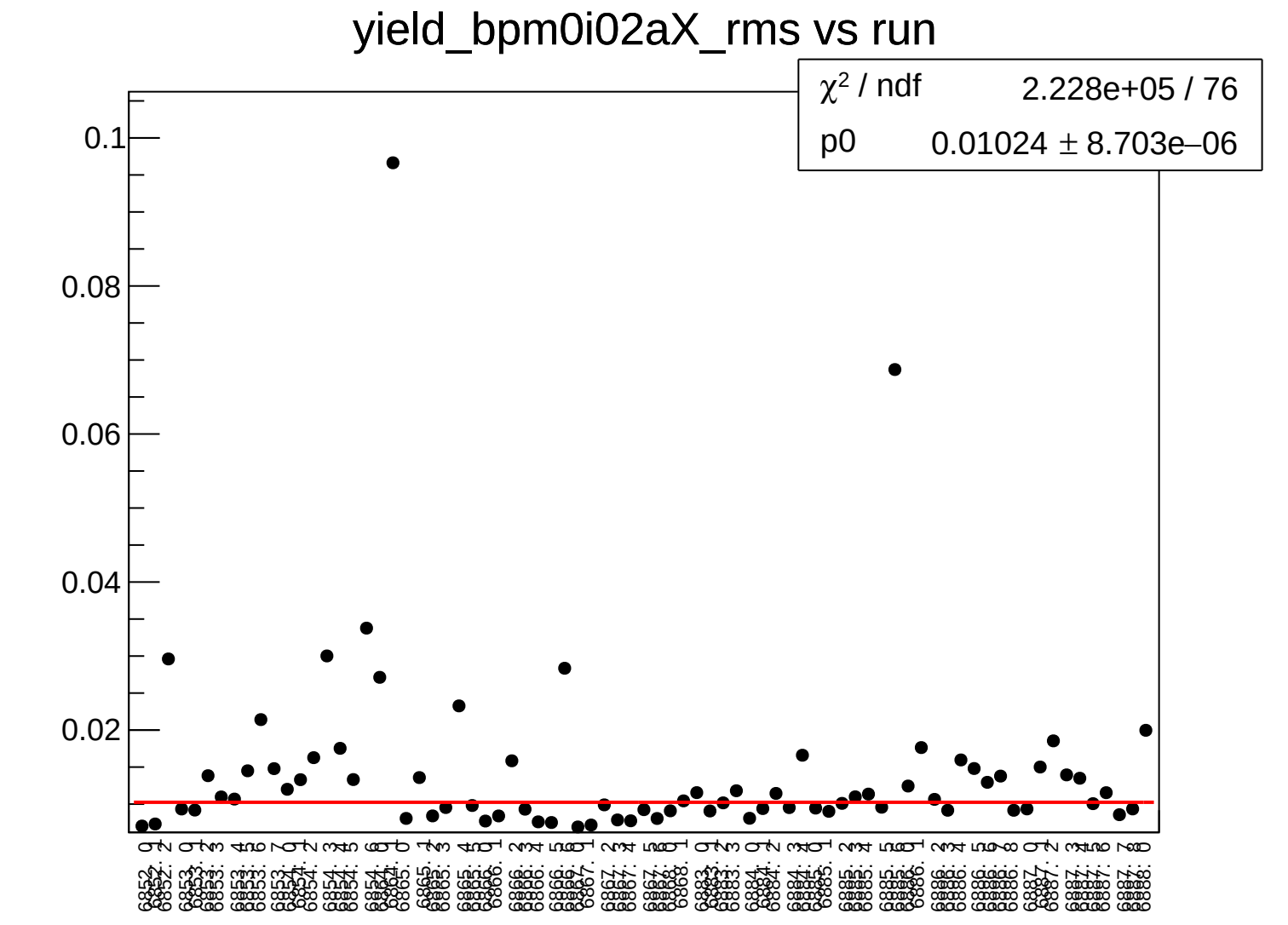

yield_bpm0i02Y_mean vs run
χ² / ndf 1.705e+08 / 76
p0 −2.302 ± 9.389e−06
−2.1
−2.2
−2.3
−2.4
−2.5
−2.6
pull
Entries 77
Mean −147
Std Dev 186.5
3000
2000
1000
0
−1000
−2000
−3000
−4000

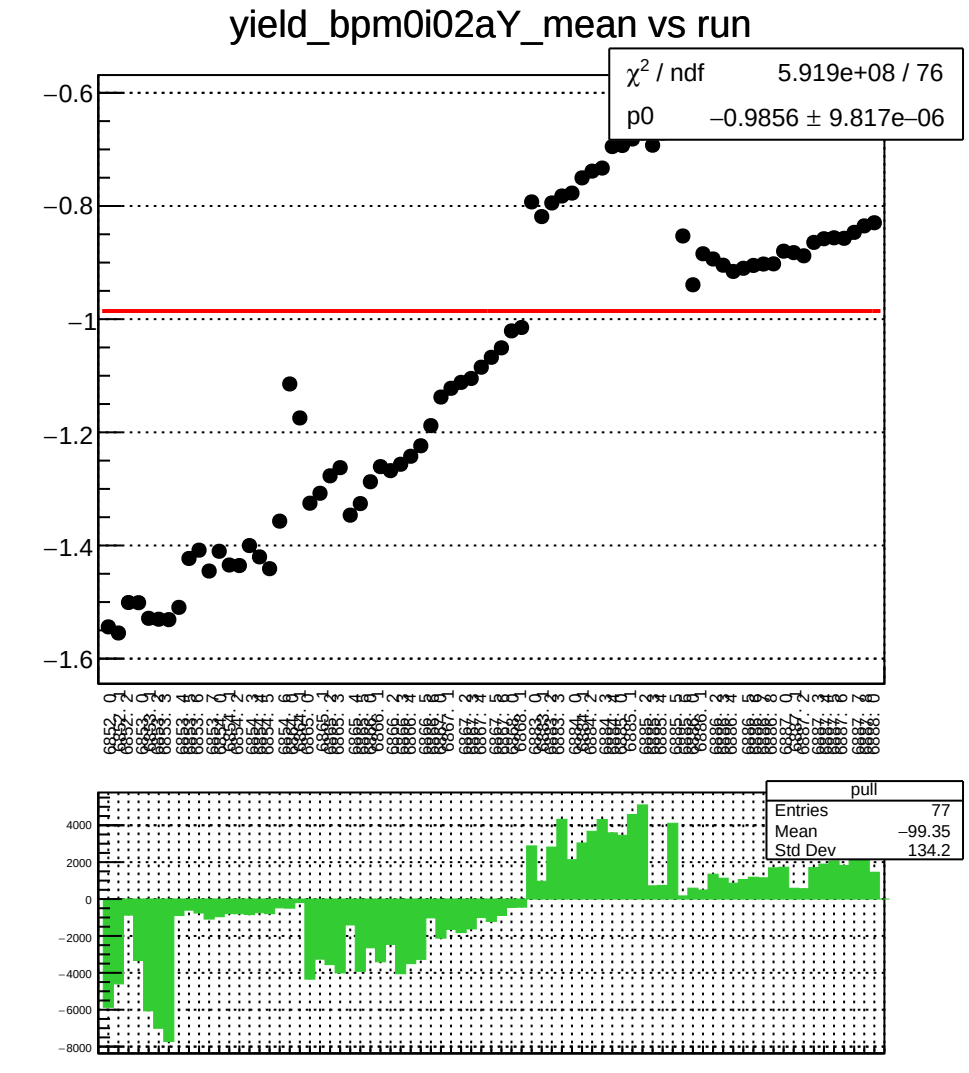

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

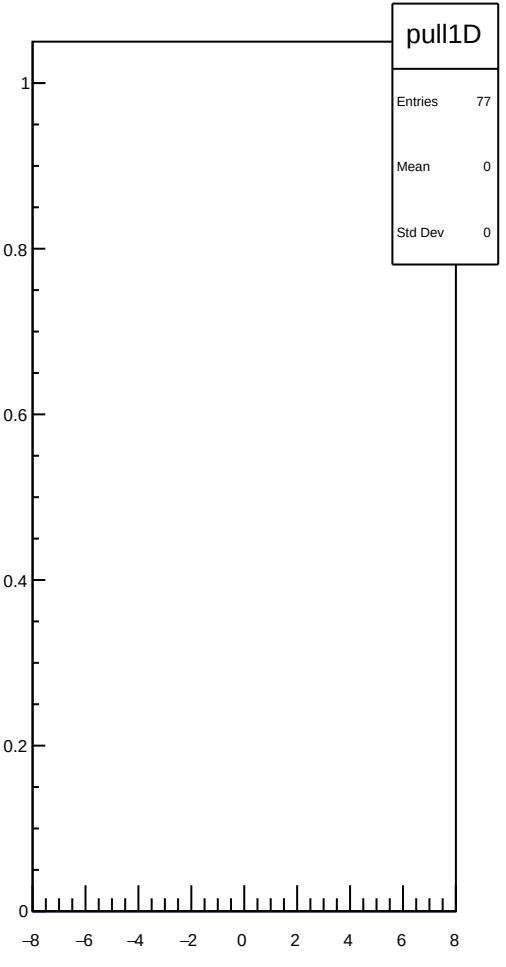

yield_bpm0i02Y_rms vs run
χ² / ndf 3.329e+05 / 76
p0 0.007497 ± 6.639e−06
0.12
0.1
0.08
0.06
0.04
0.02

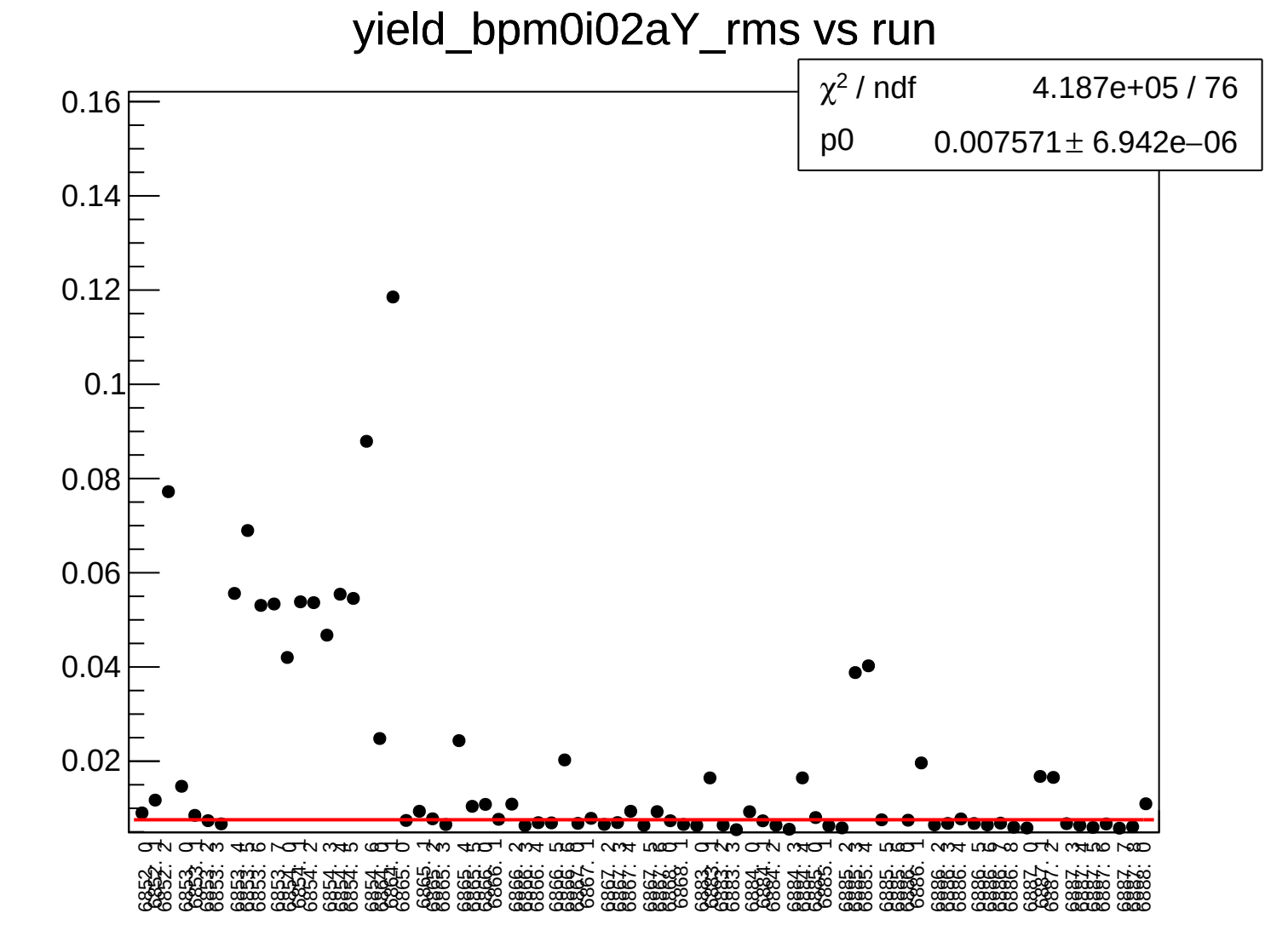

yield_bpm0i02aX_mean vs run
χ² / ndf 1.488e+09 / 76
p0 1.996 ± 1.231e−05
pull
Entries 77
Mean 164.7
Std Dev 118

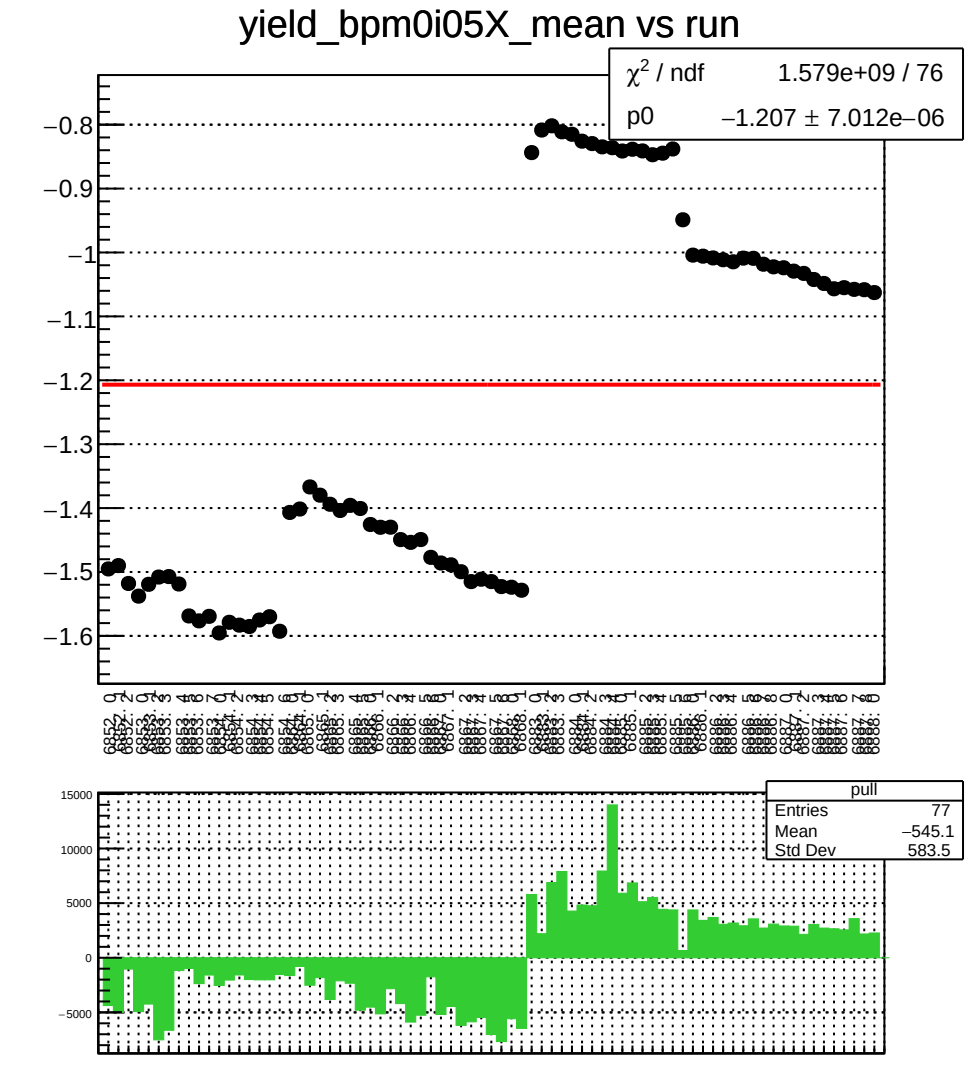

pull1D
Entries 77
Mean 0
Std Dev 0

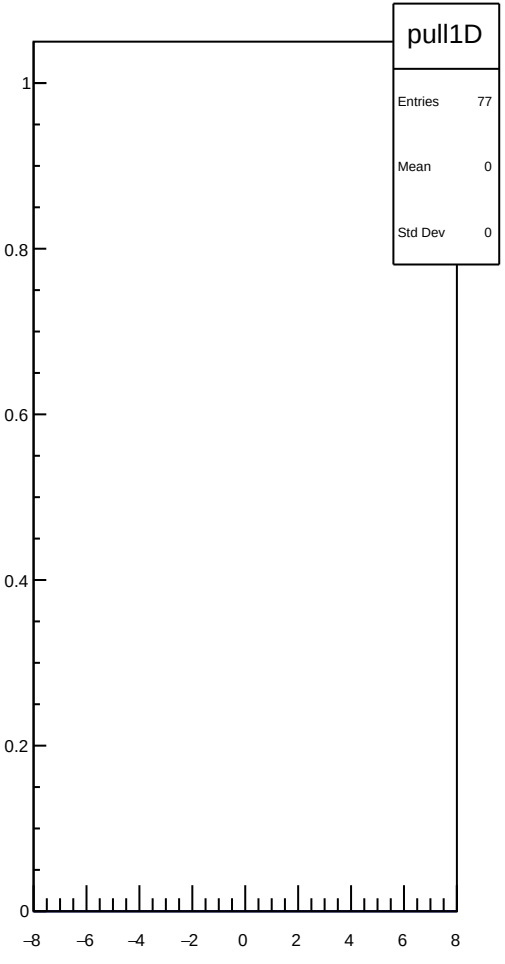

yield_bpm0i02aX_rms vs run
χ² / ndf 2.228e+05 / 76
p0 0.01024 ± 8.703e–06
0.1
0.08
0.06
0.04
0.02

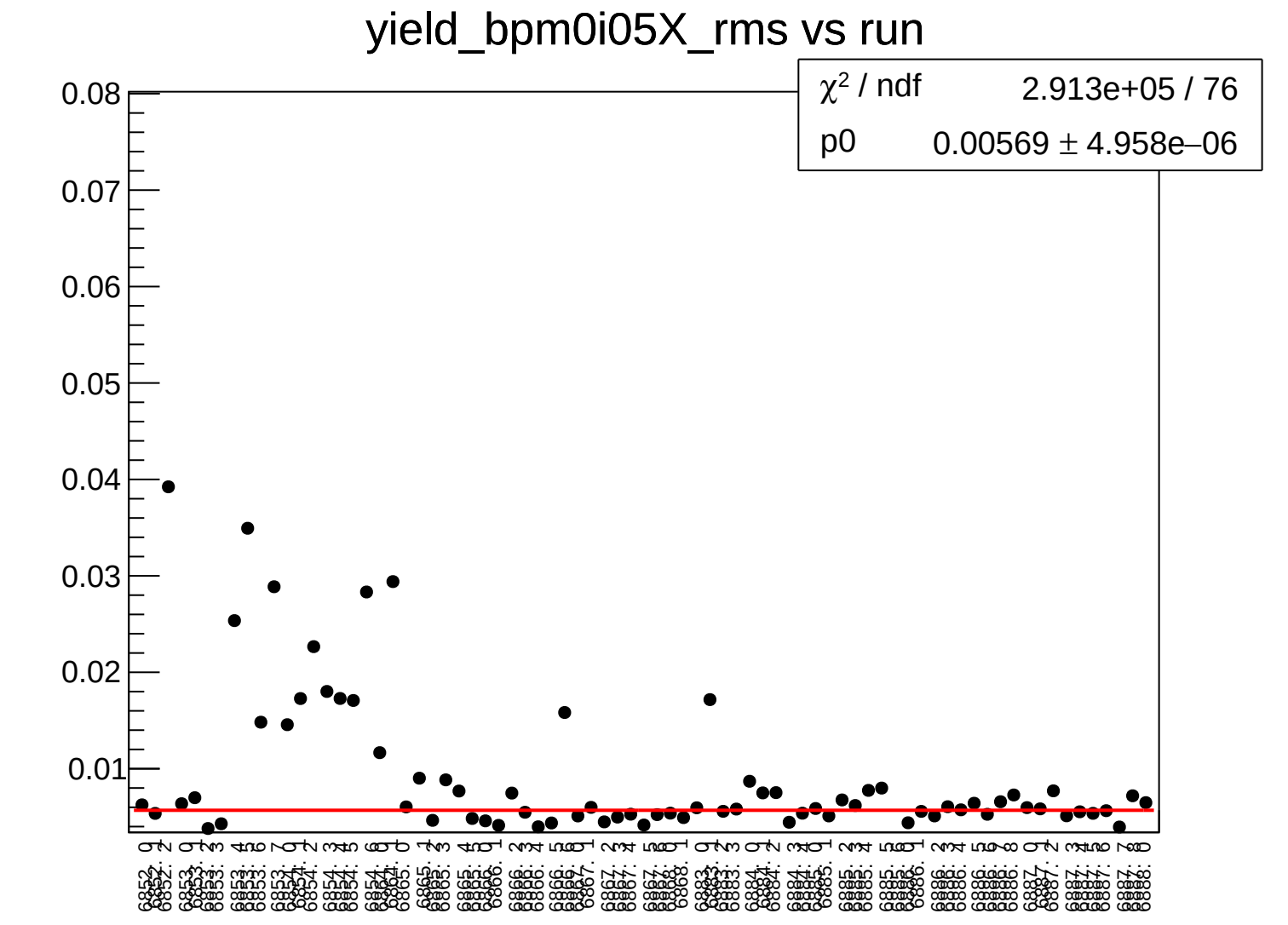

yield_bpm0i02aY_mean vs run
χ² / ndf 5.919e+08 / 76
p0 −0.9856 ± 9.817e−06
pull
Entries 77
Mean −99.35
Std Dev 134.2

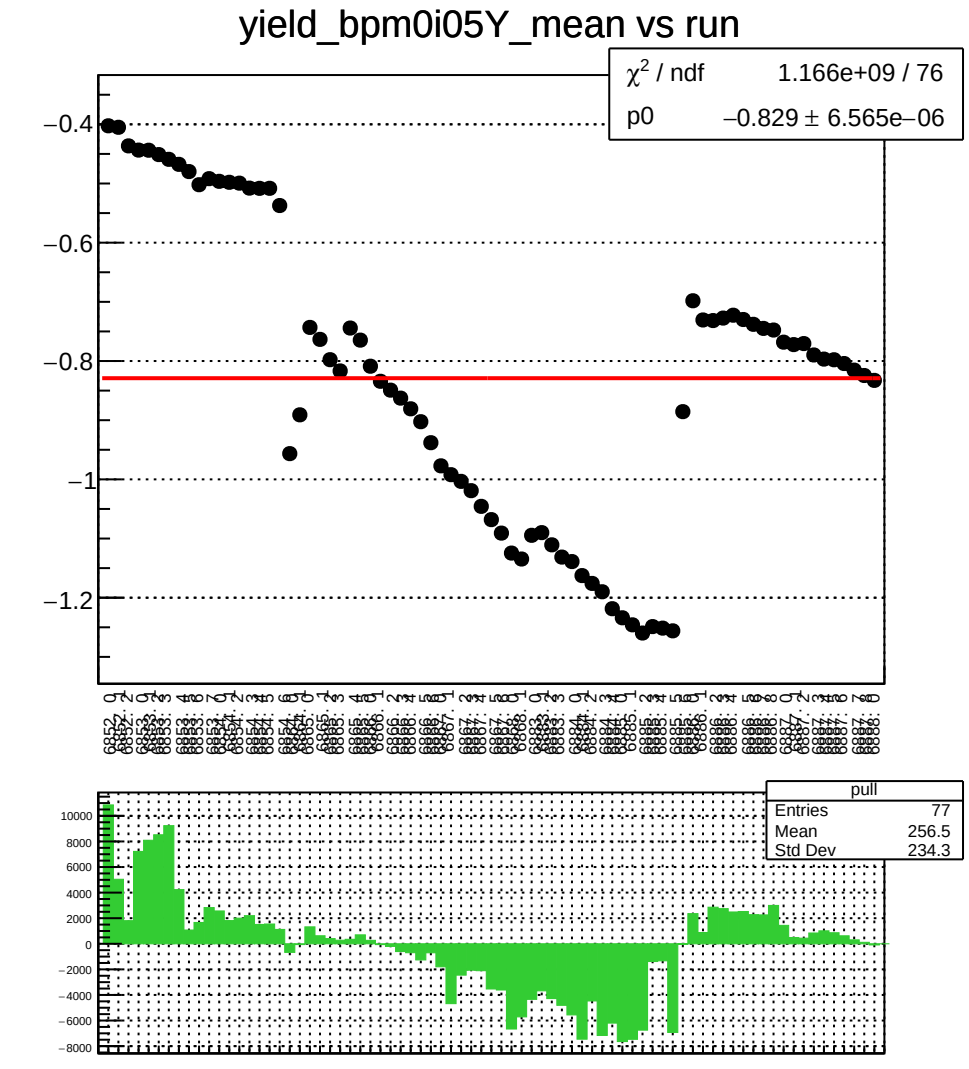

pull1D
Entries 77
Mean 0
Std Dev 0

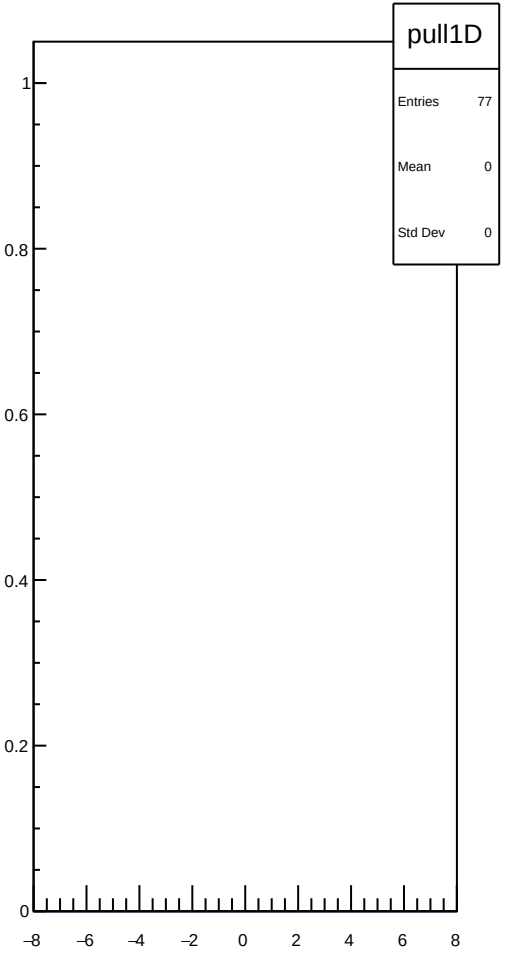

yield_bpm0i02aY_rms vs run
χ² / ndf 4.187e+05 / 76
p0 0.007571 ± 6.942e−06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

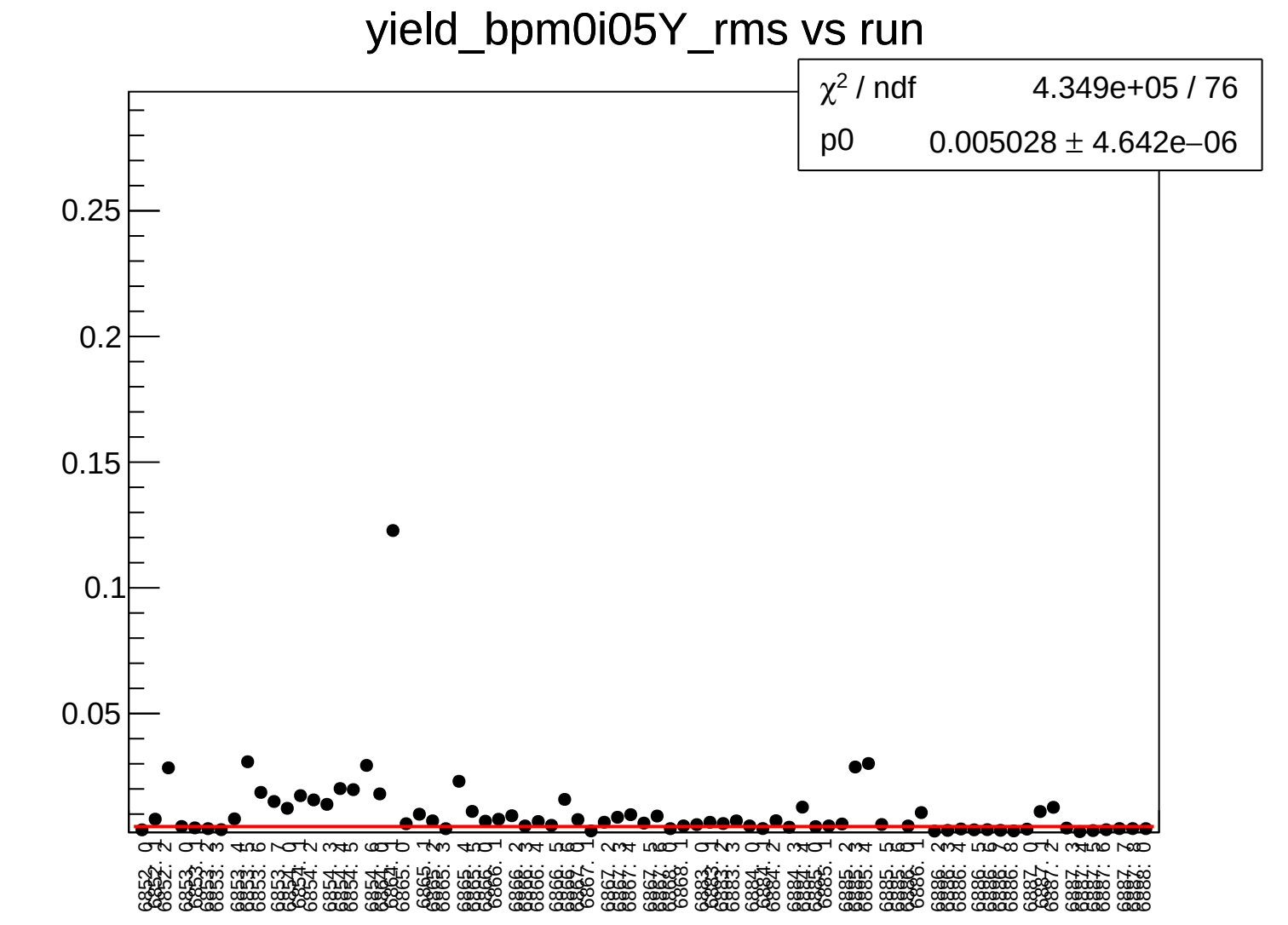

yield_bpm0i05X_mean vs run
χ² / ndf 1.579e+09 / 76
p0 −1.207 ± 7.012e−06
pull
Entries 77
Mean −545.1
Std Dev 583.5

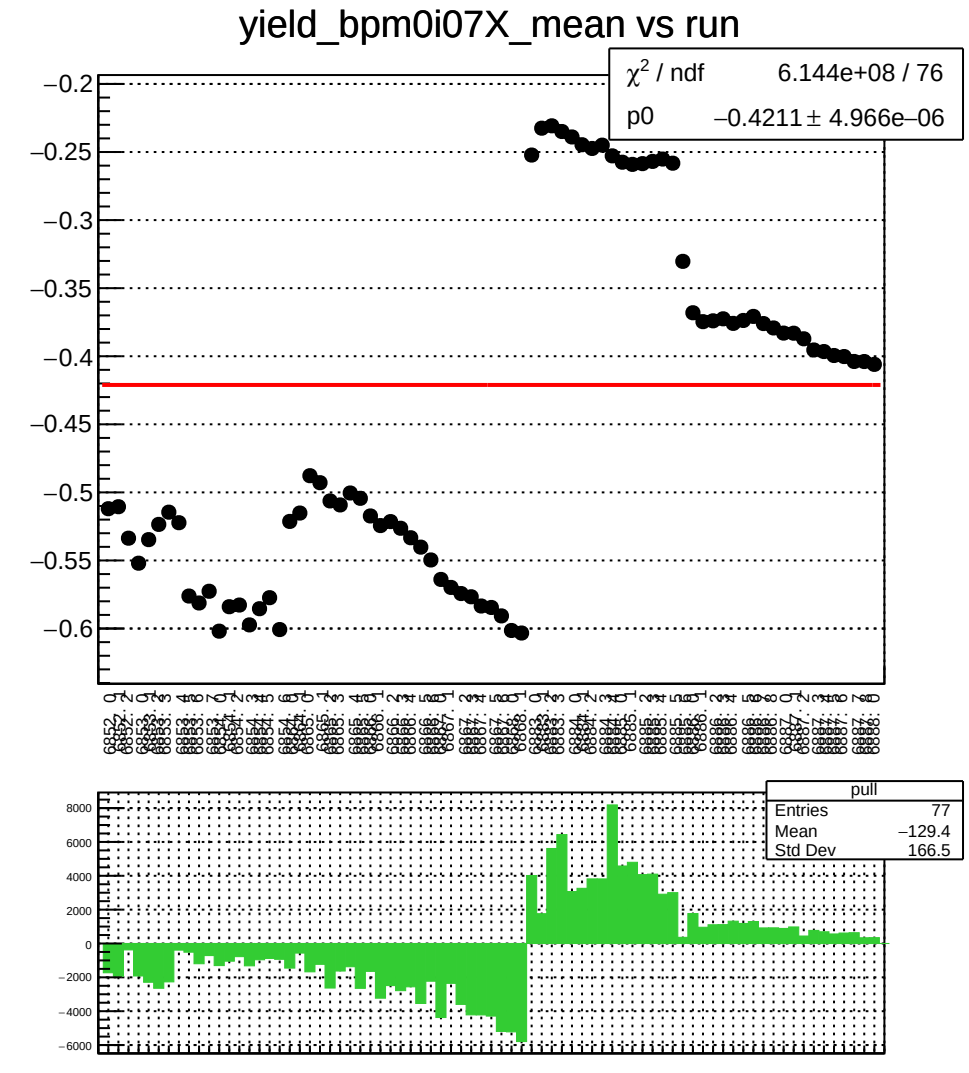

pull1D
Entries 77
Mean 0
Std Dev 0

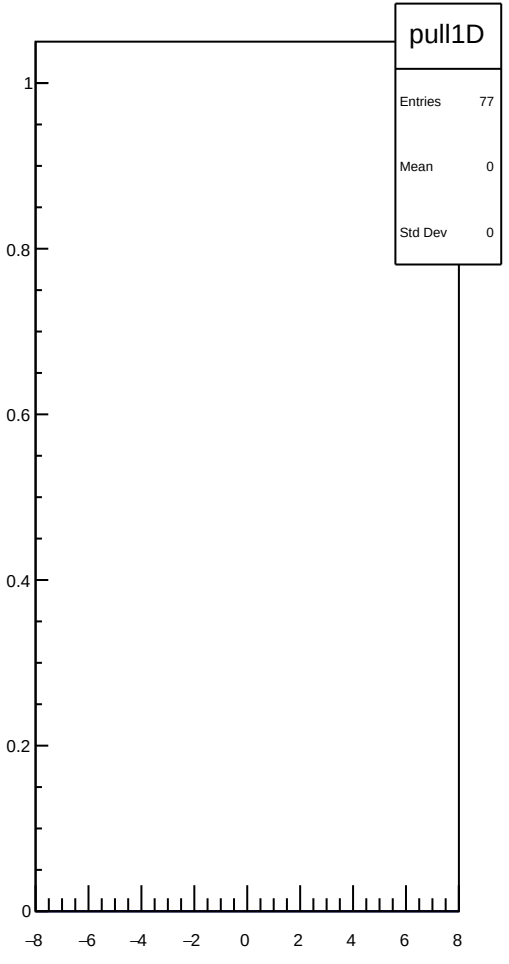

yield_bpm0i05X_rms vs run
χ² / ndf 2.913e+05 / 76
p0 0.00569 ± 4.958e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

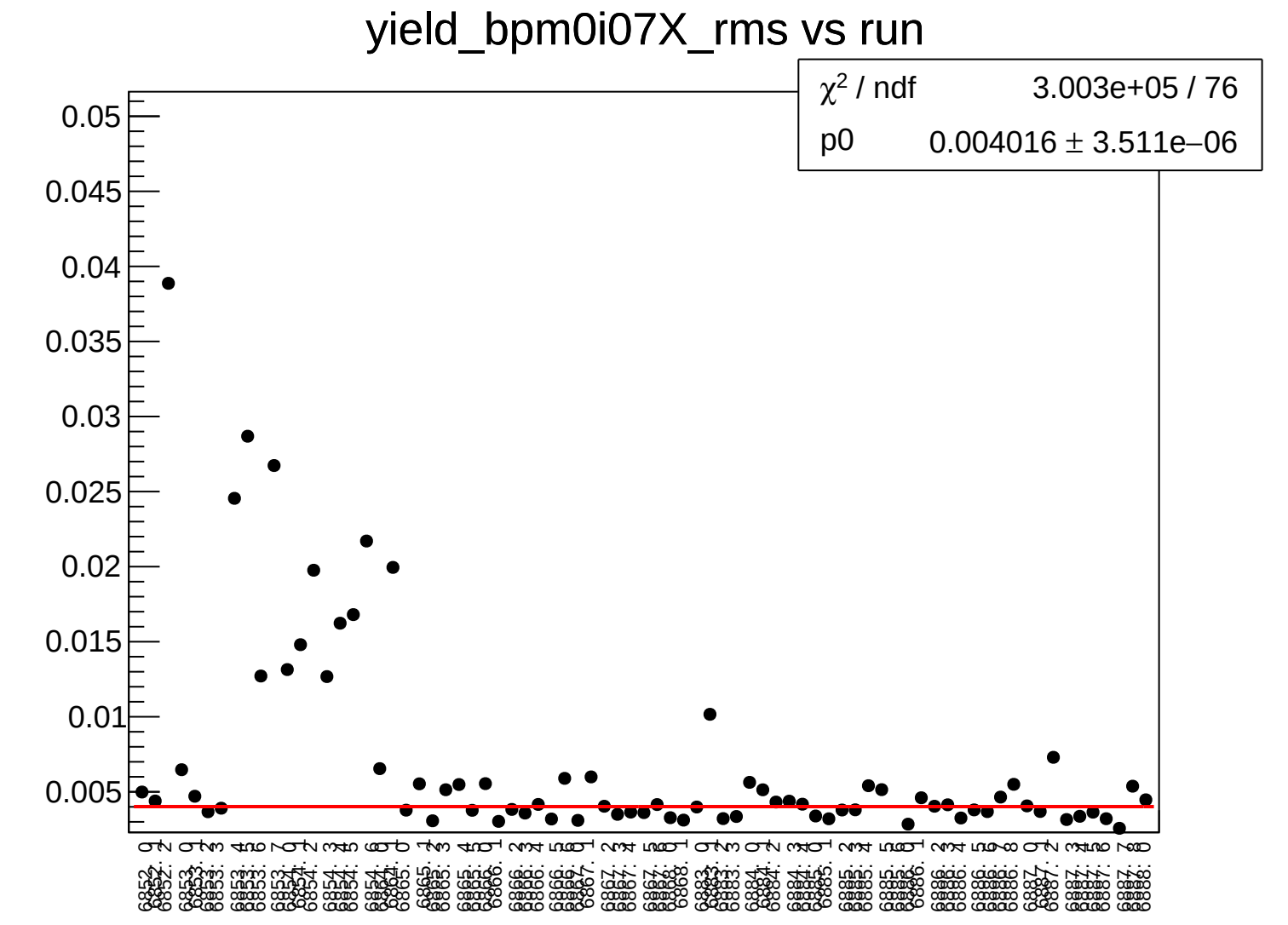

yield_bpm0i05Y_mean vs run
χ² / ndf 1.166e+09 / 76
p0 −0.829 ± 6.565e−06
pull
Entries 77
Mean 256.5
Std Dev 234.3

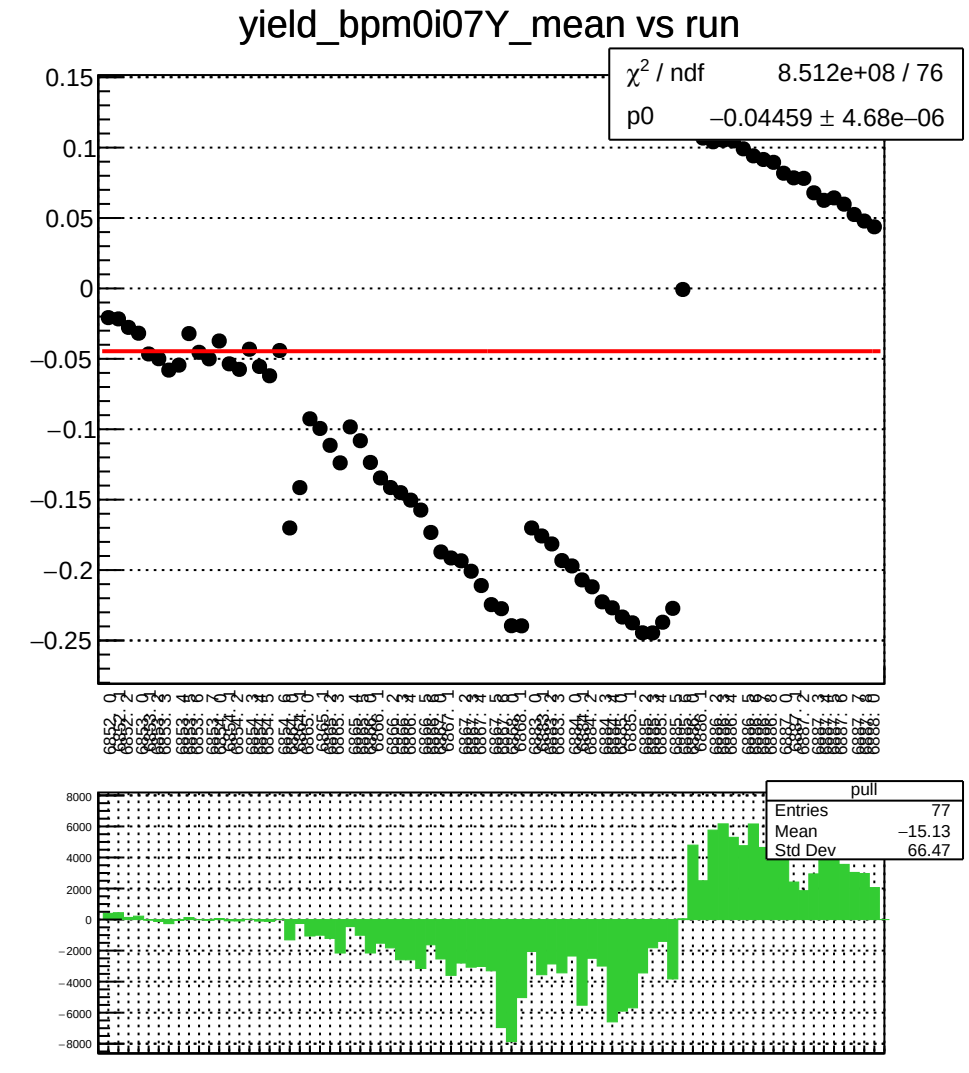

pull1D
Entries 77
Mean 0
Std Dev 0

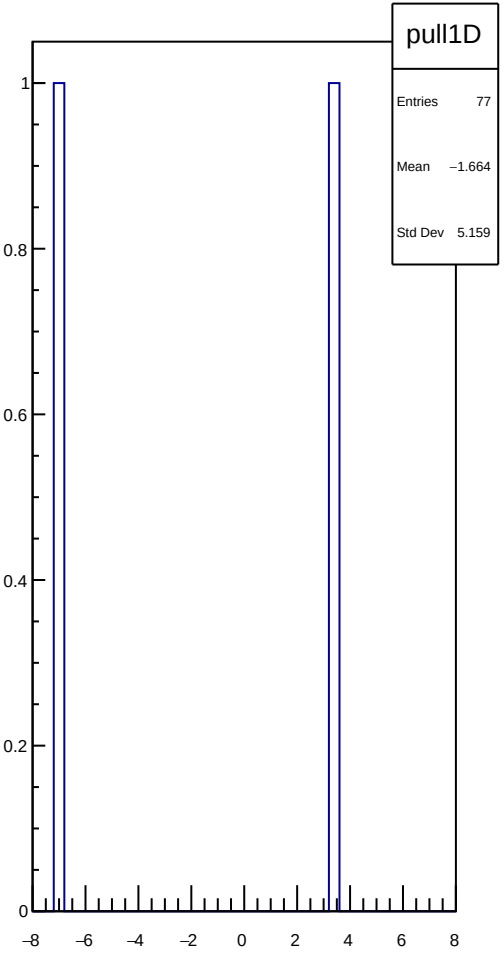

yield_bpm0i05Y_rms vs run
χ² / ndf 4.349e+05 / 76
p0 0.005028 ± 4.642e−06
0.25
0.2
0.15
0.1
0.05

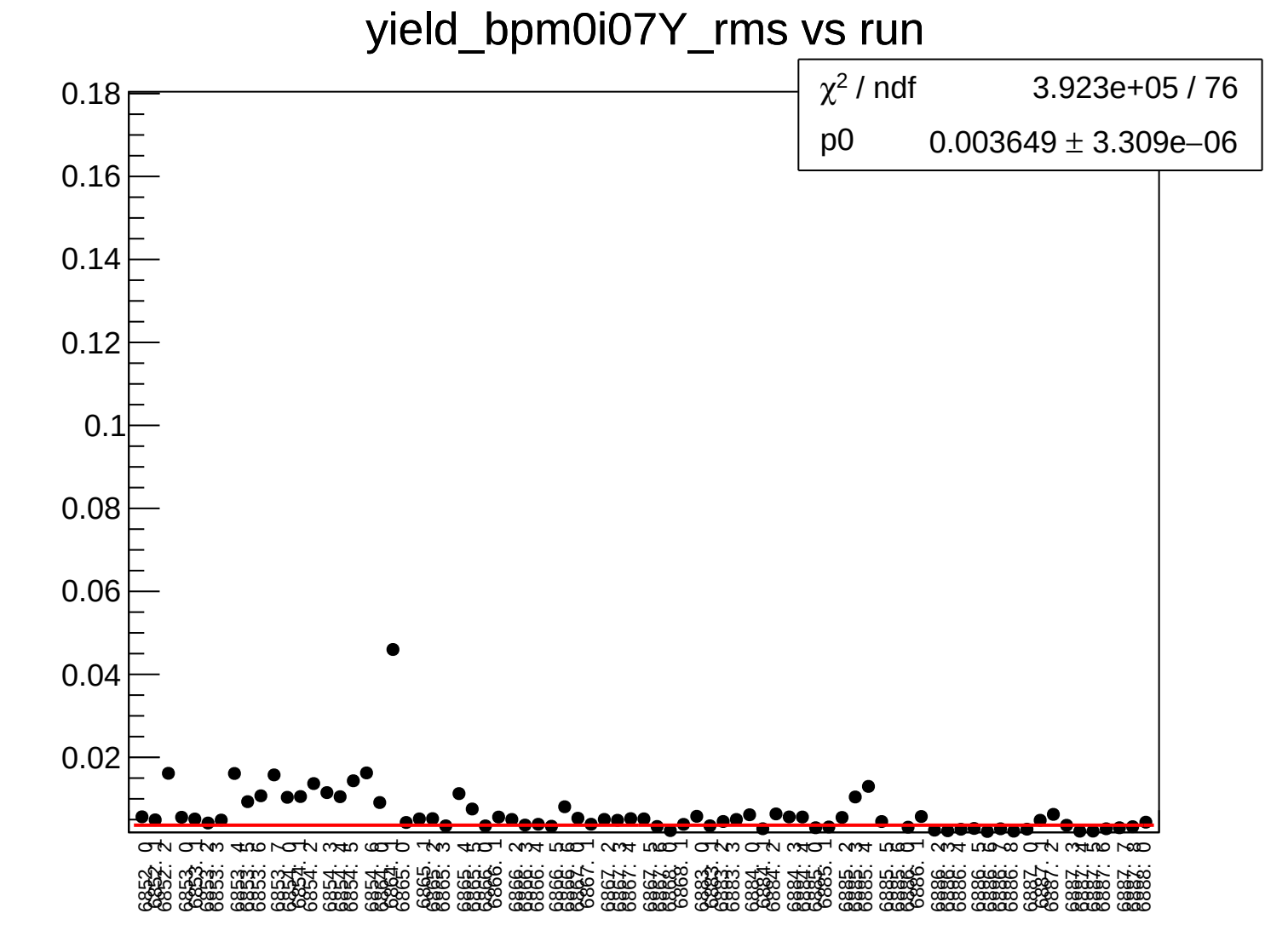

yield_bpm0i07X_mean vs run
χ² / ndf 6.144e+08 / 76
p0 −0.4211 ± 4.966e−06
pull
Entries 77
Mean −129.4
Std Dev 166.5

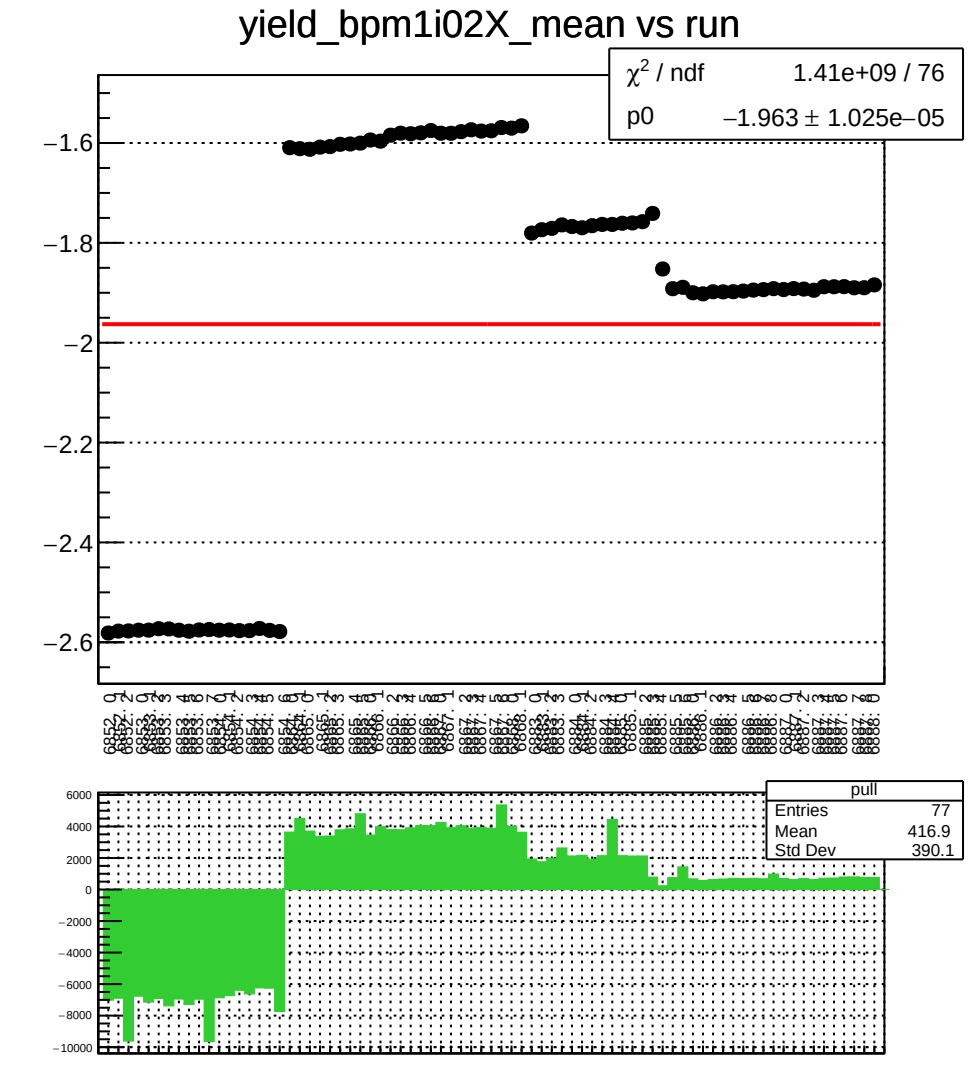

pull1D
Entries 77
Mean 0
Std Dev 0

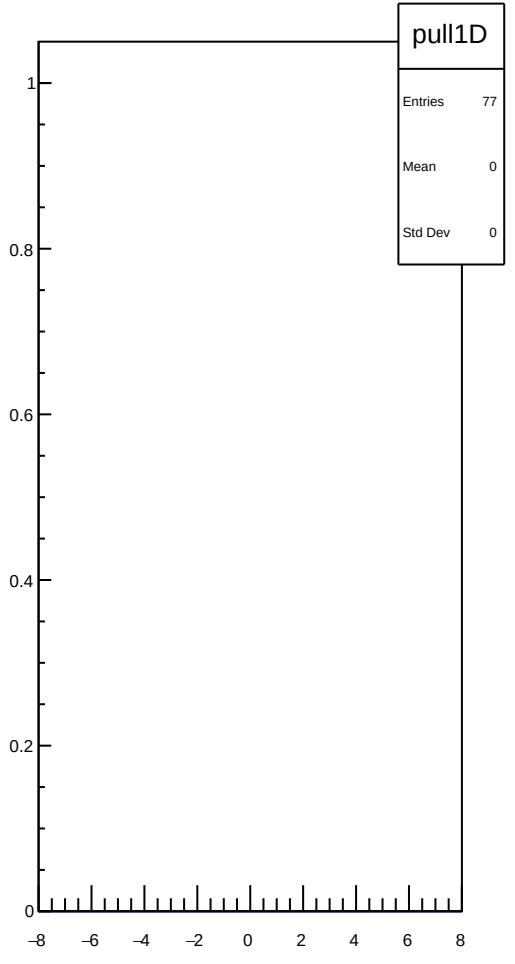

yield_bpm0i07X_rms vs run
χ² / ndf 3.003e+05 / 76
p0 0.004016 ± 3.511e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

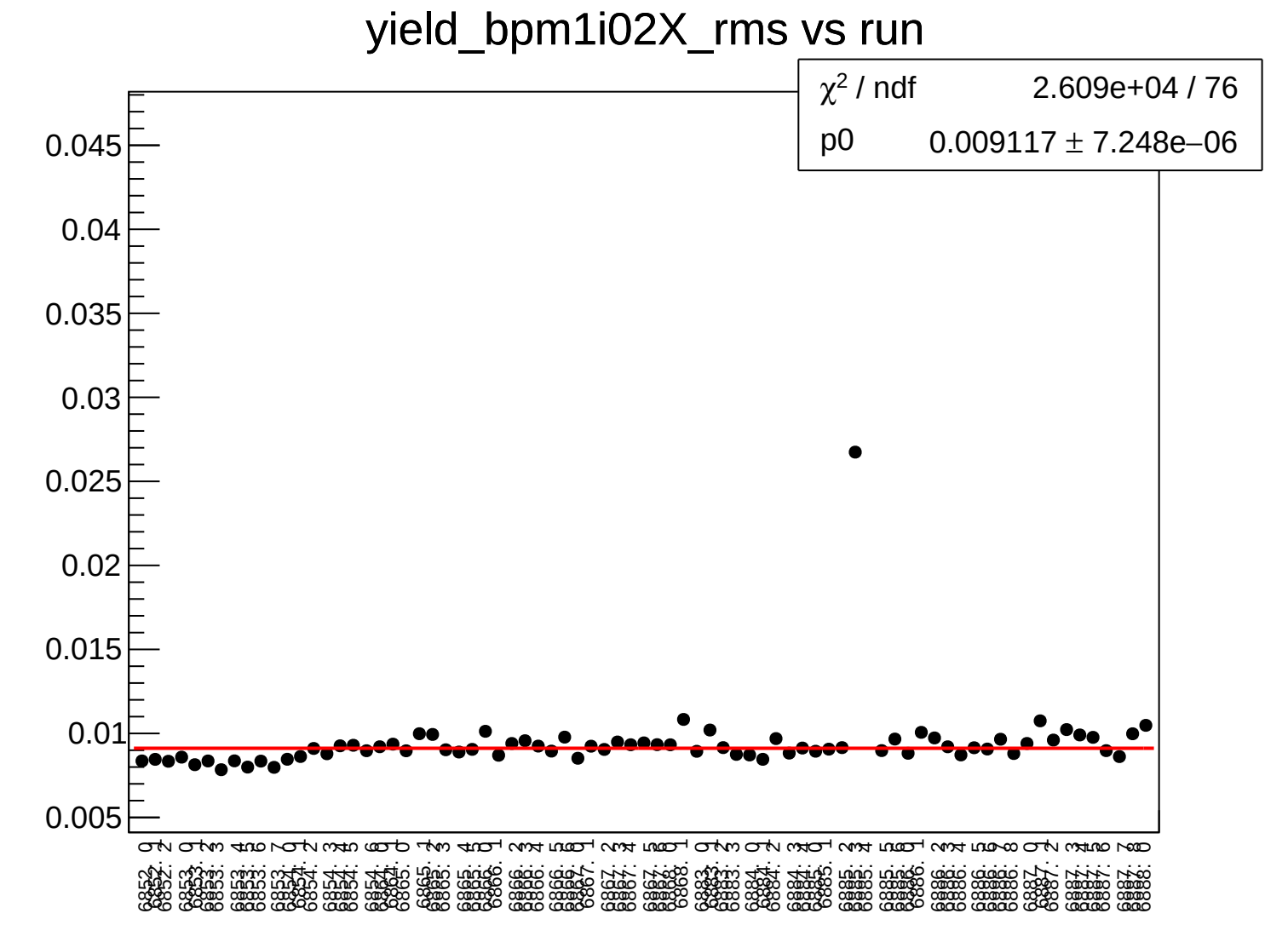

yield_bpm0i07Y_mean vs run
χ² / ndf 8.512e+08 / 76
p0 −0.04459 ± 4.68e−06
pull
Entries 77
Mean −15.13
Std Dev 66.47

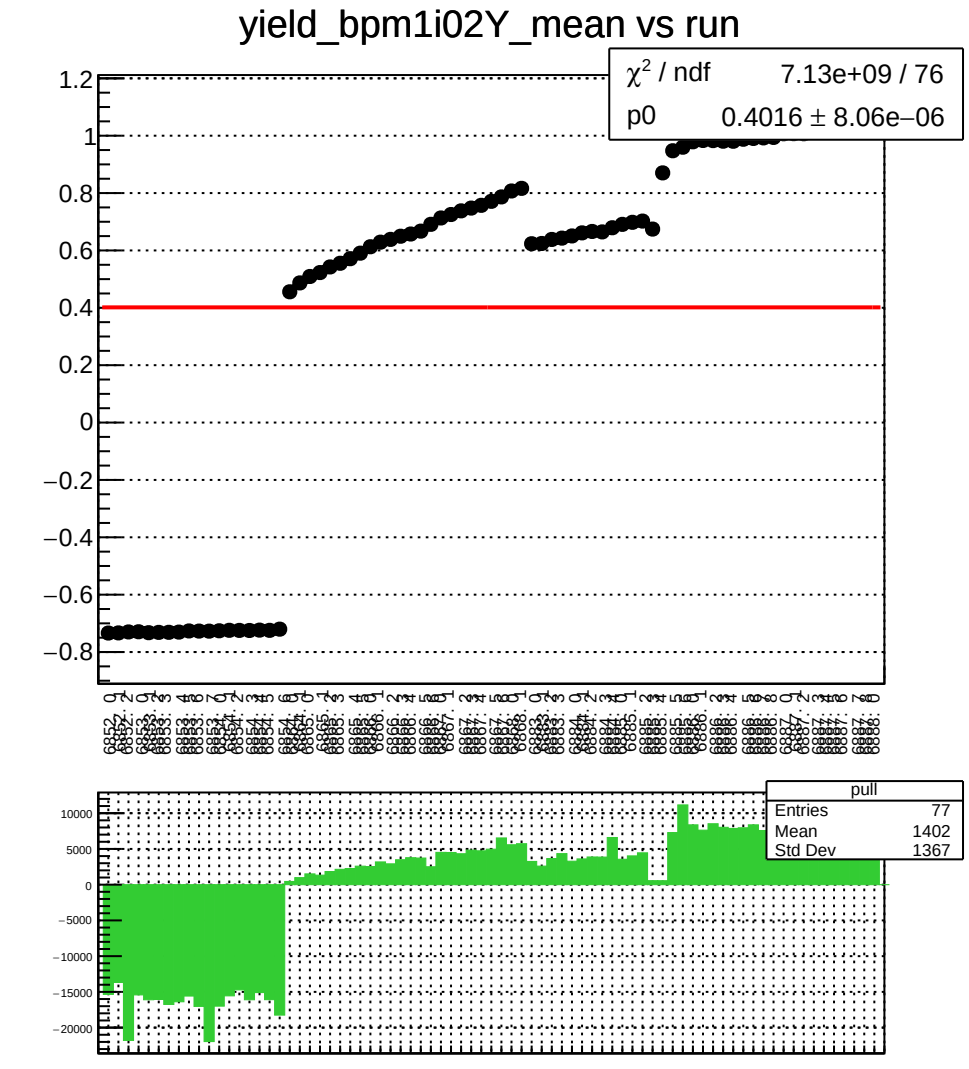

pull1D
Entries 77
Mean −1.664
Std Dev 5.159

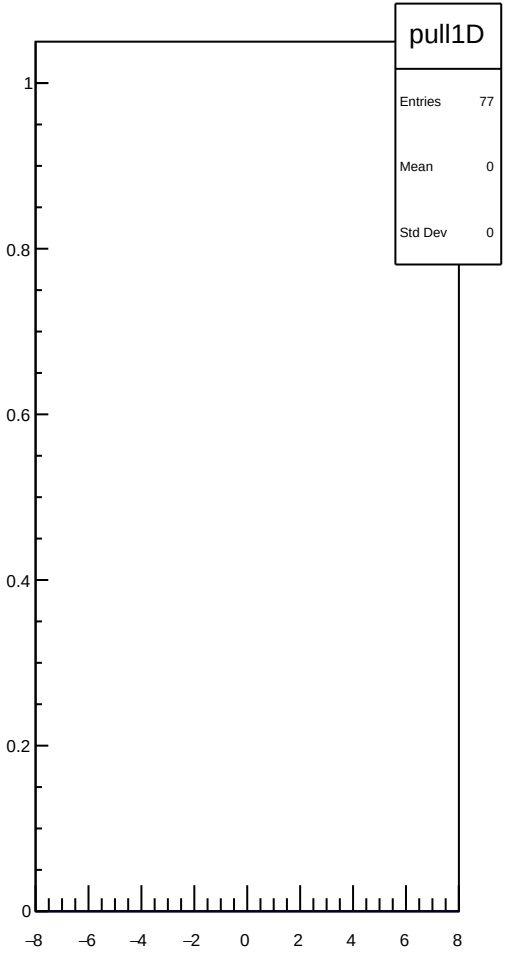

yield_bpm0i07Y_rms vs run
χ² / ndf 3.923e+05 / 76
p0 0.003649 ± 3.309e−06
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

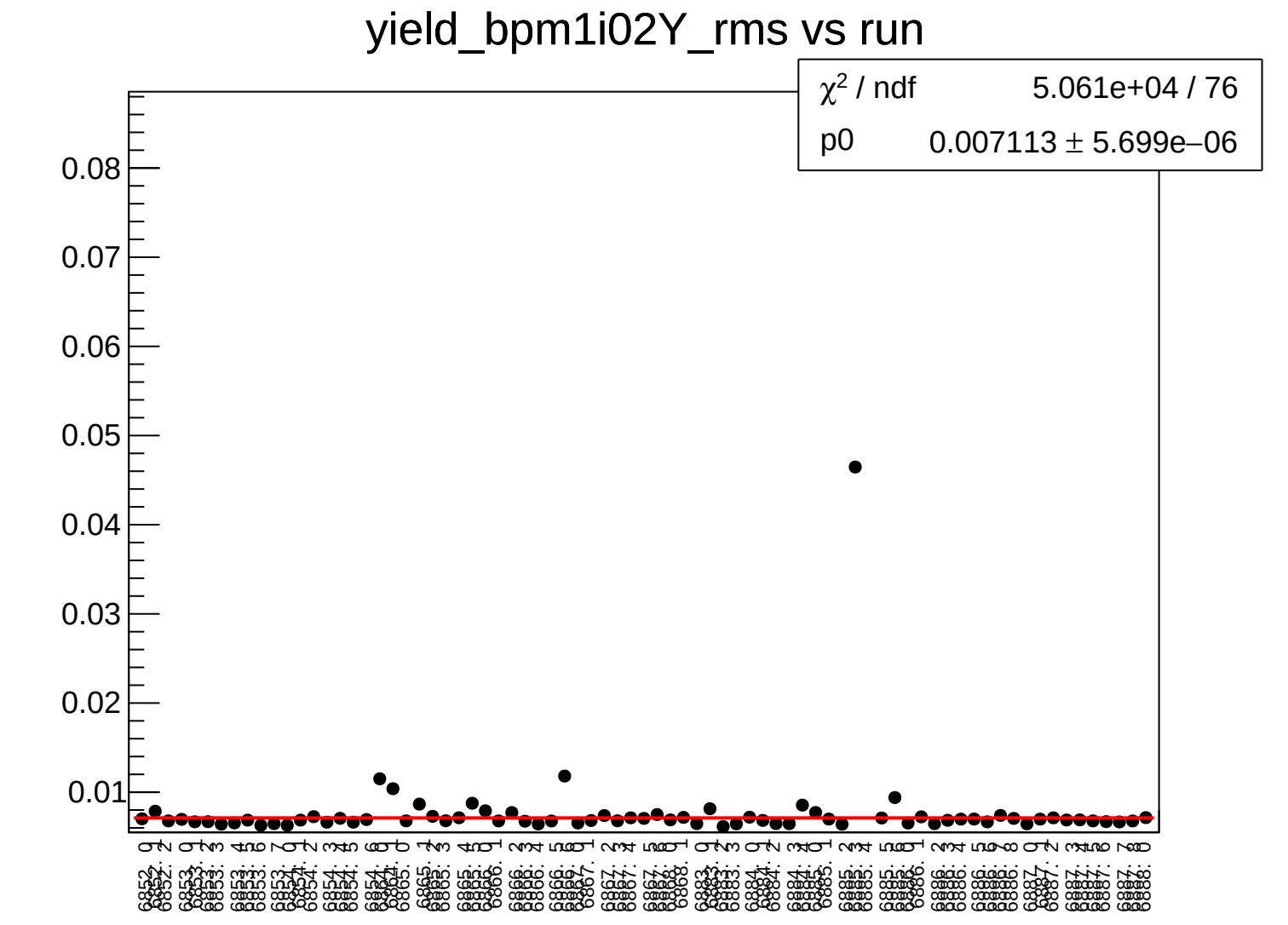

yield_bpm1i02X_mean vs run
χ² / ndf 1.41e+09 / 76
p0 −1.963 ± 1.025e−05
−1.6
−1.8
−2
−2.2
−2.4
−2.6
pull
Entries 77
Mean 416.9
Std Dev 390.1
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000

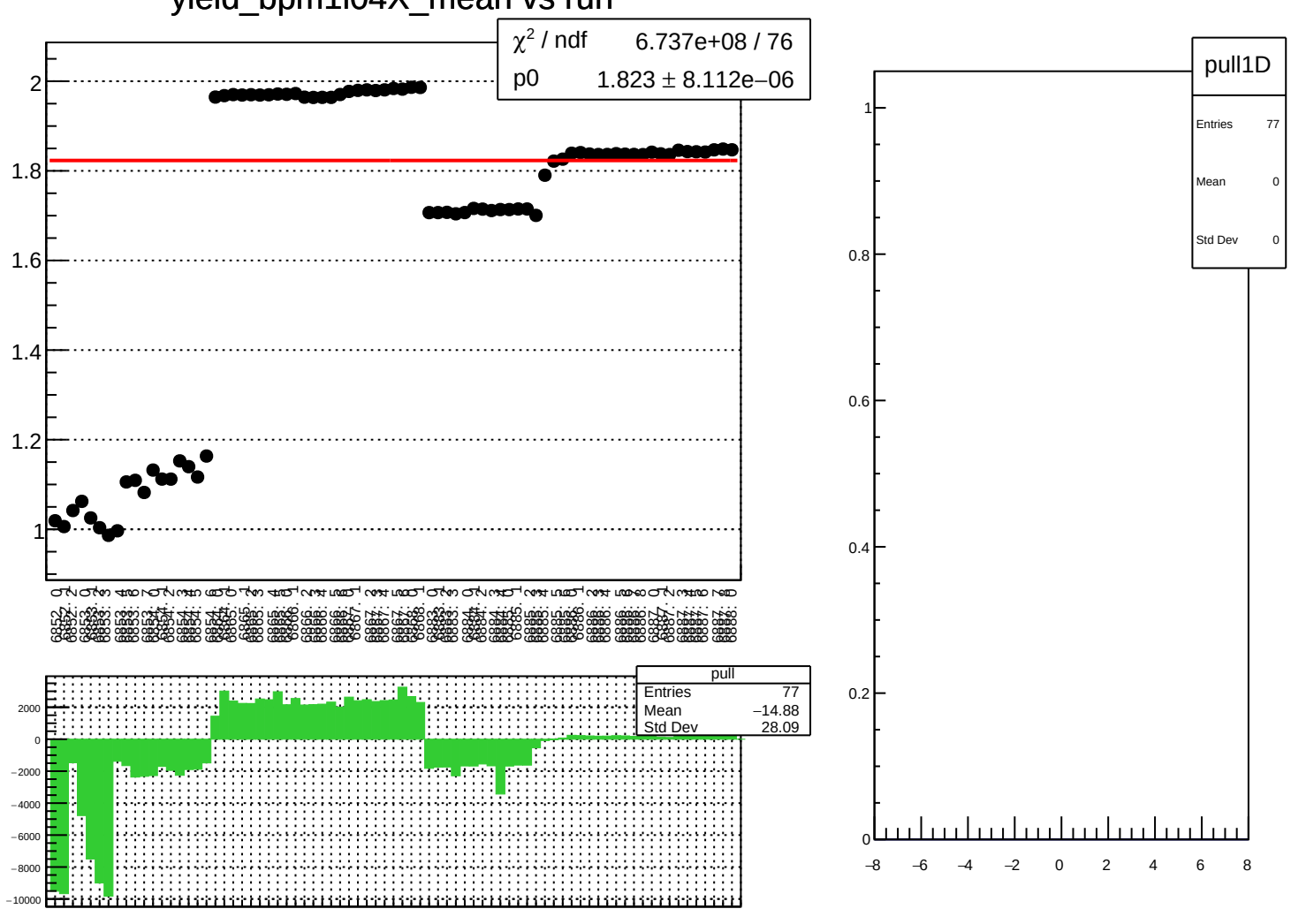

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

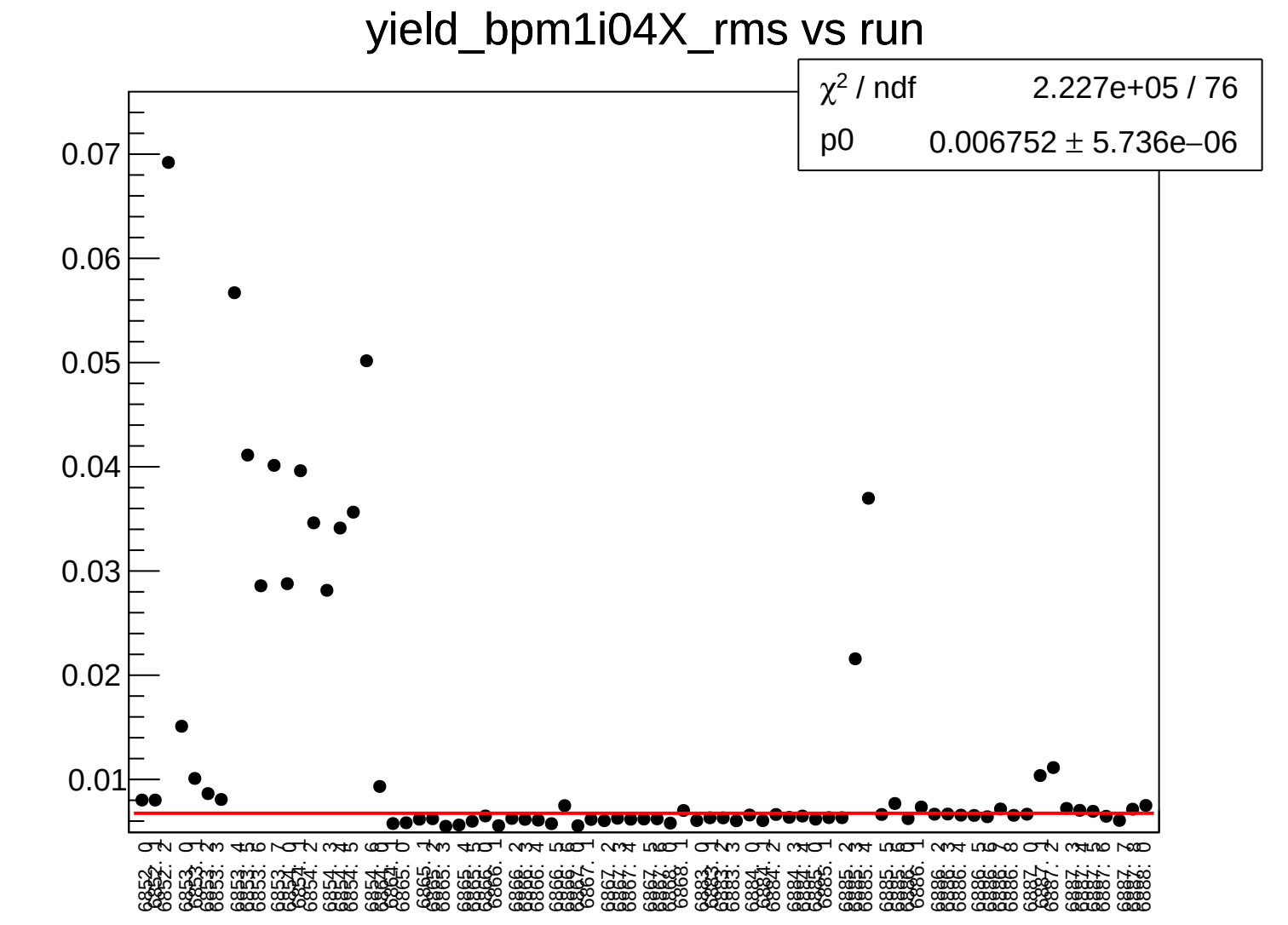

yield_bpm1i02X_rms vs run
χ² / ndf 2.609e+04 / 76
p0 0.009117 ± 7.248e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

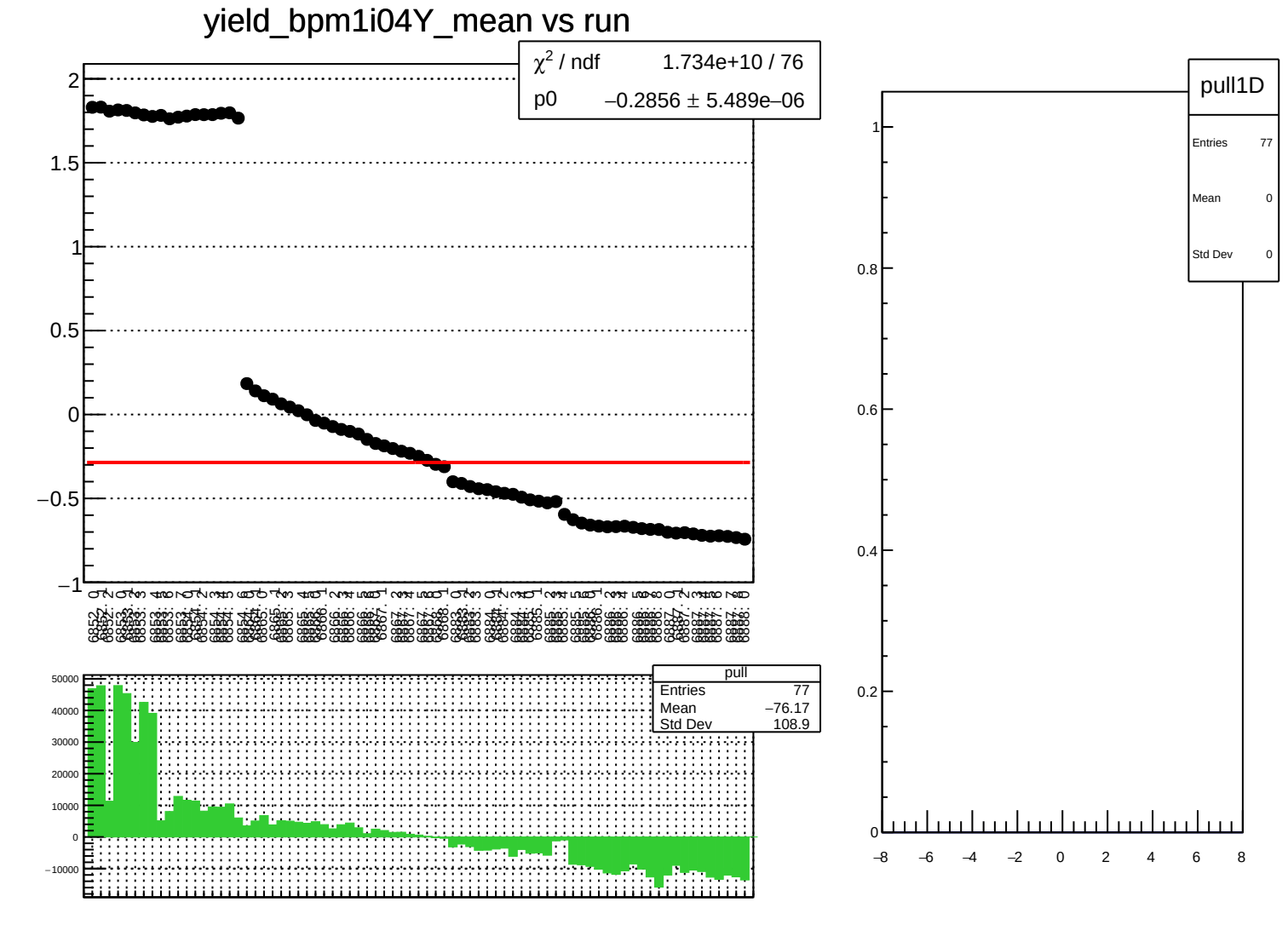

yield_bpm1i02Y_mean vs run
χ² / ndf 7.13e+09 / 76
p0 0.4016 ± 8.06e−06
pull
Entries 77
Mean 1402
Std Dev 1367

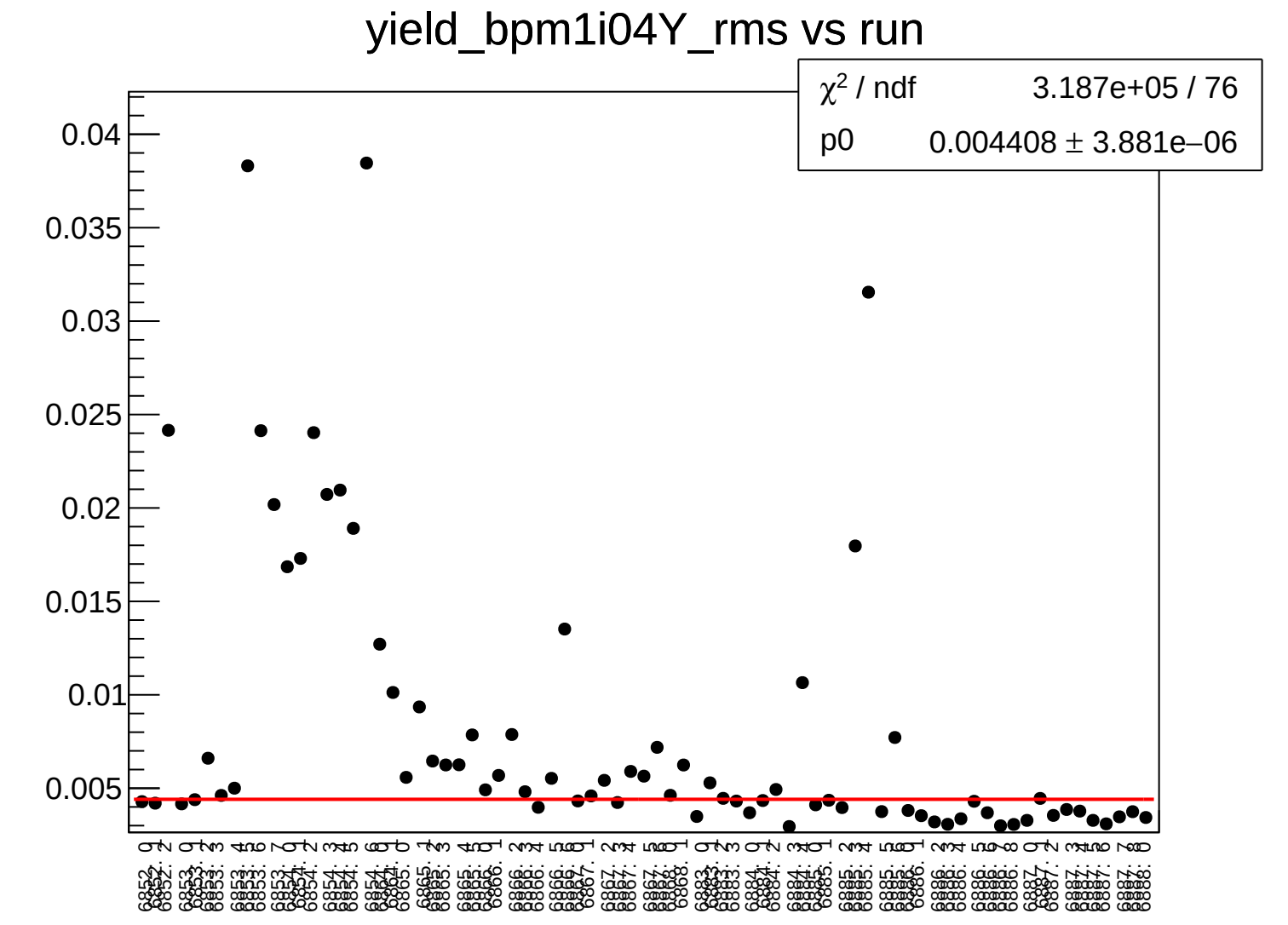

pull1D
Entries 77
Mean 0
Std Dev 0

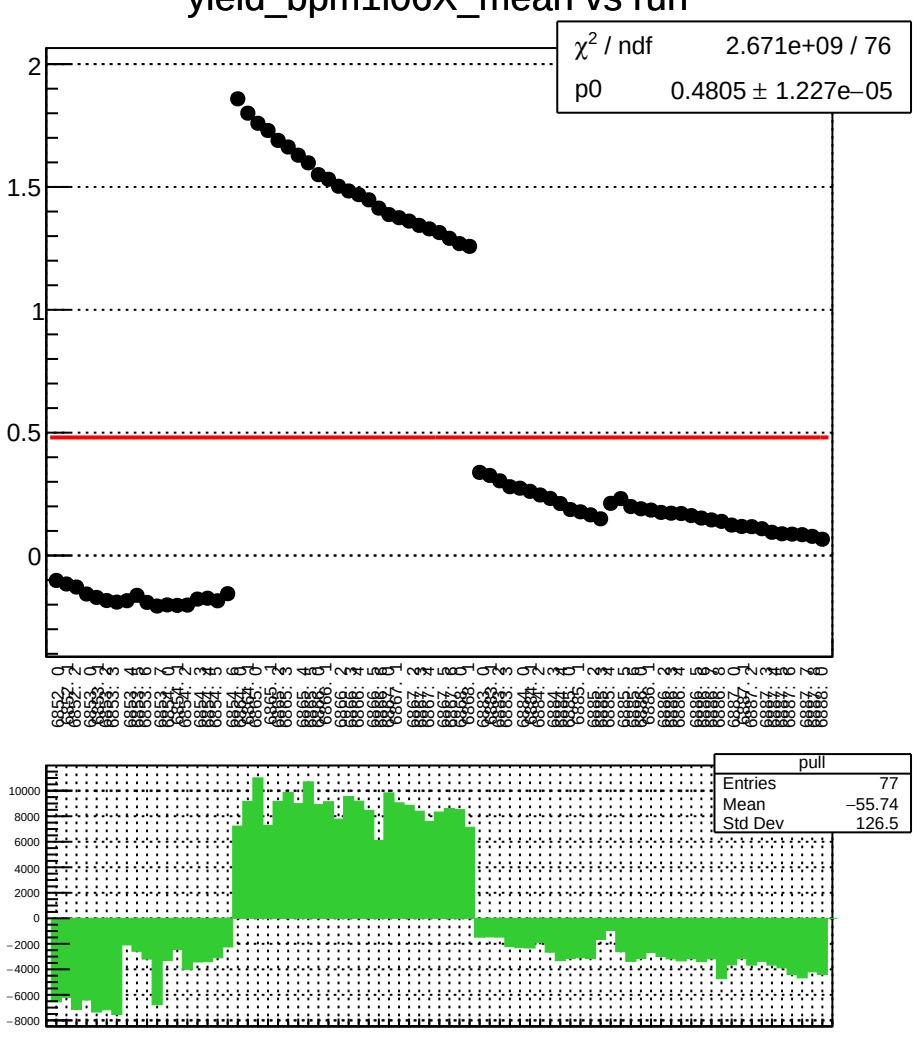

yield_bpm1i02Y_rms vs run
χ² / ndf 5.061e+04 / 76
p0 0.007113 ± 5.699e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

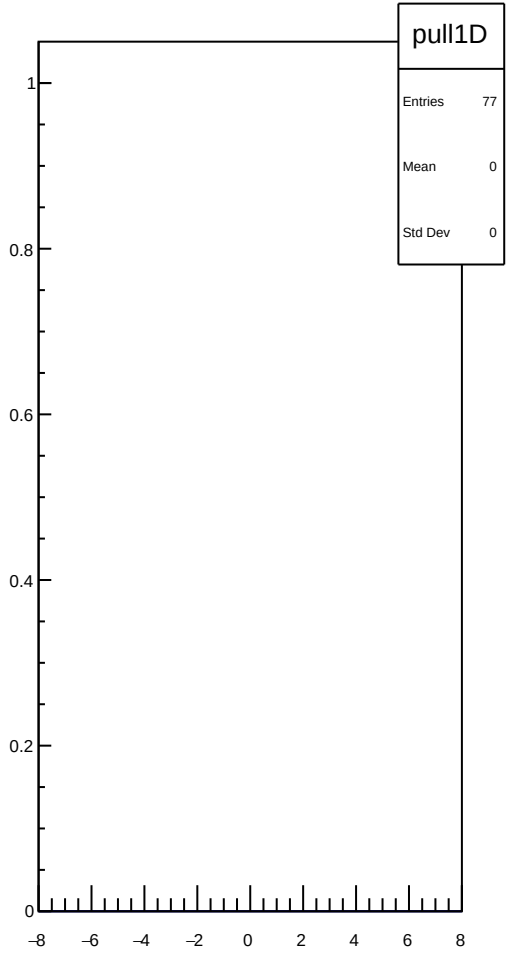

yield_bpm1i04X_mean vs run
χ² / ndf 6.737e+08 / 76
p0 1.823 ± 8.112e−06
pull
Entries 77
Mean −14.88
Std Dev 28.09
pull1D
Entries 77
Mean 0
Std Dev 0

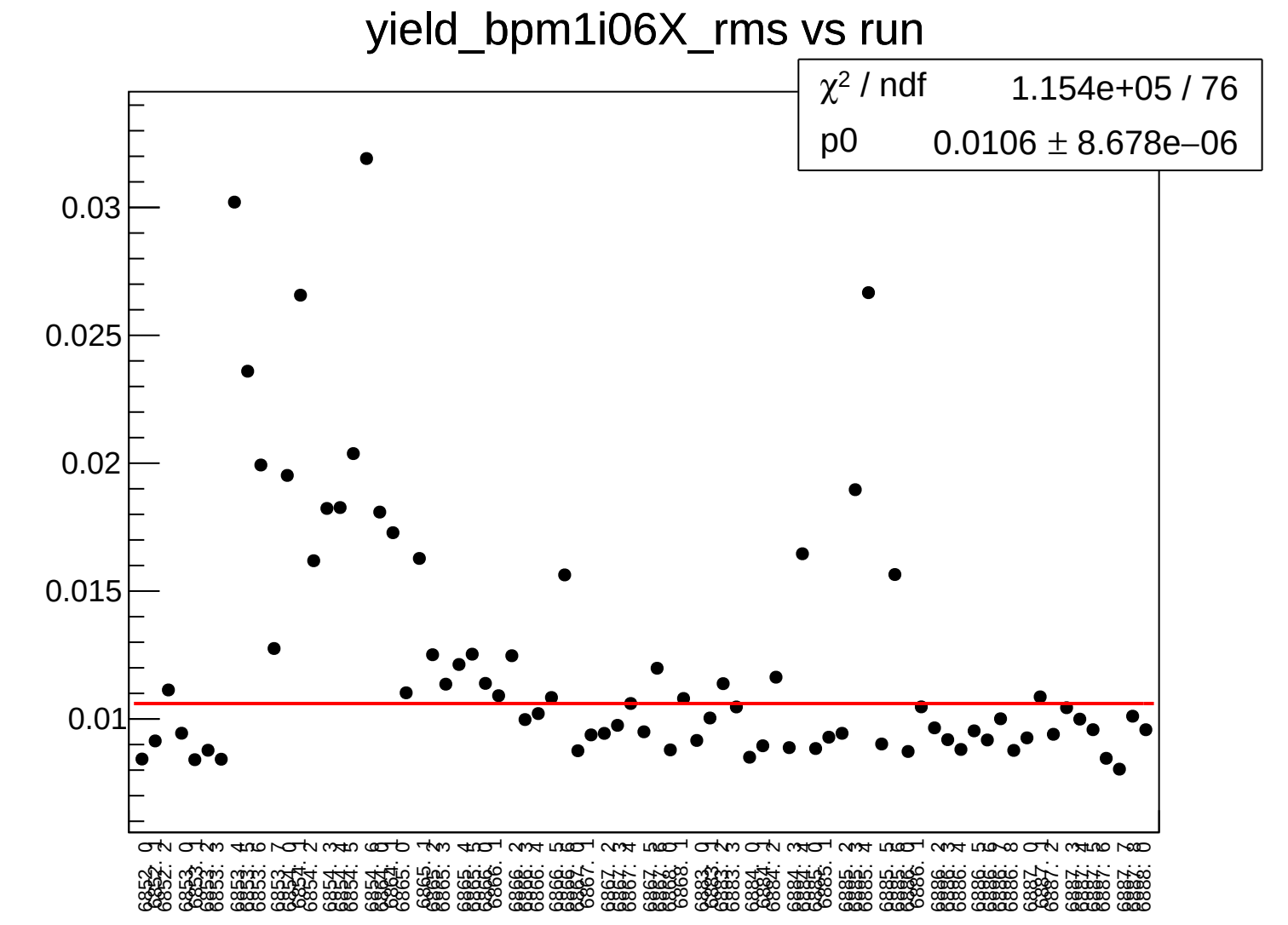

yield_bpm1i04X_rms vs run
χ² / ndf 2.227e+05 / 76
p0 0.006752 ± 5.736e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

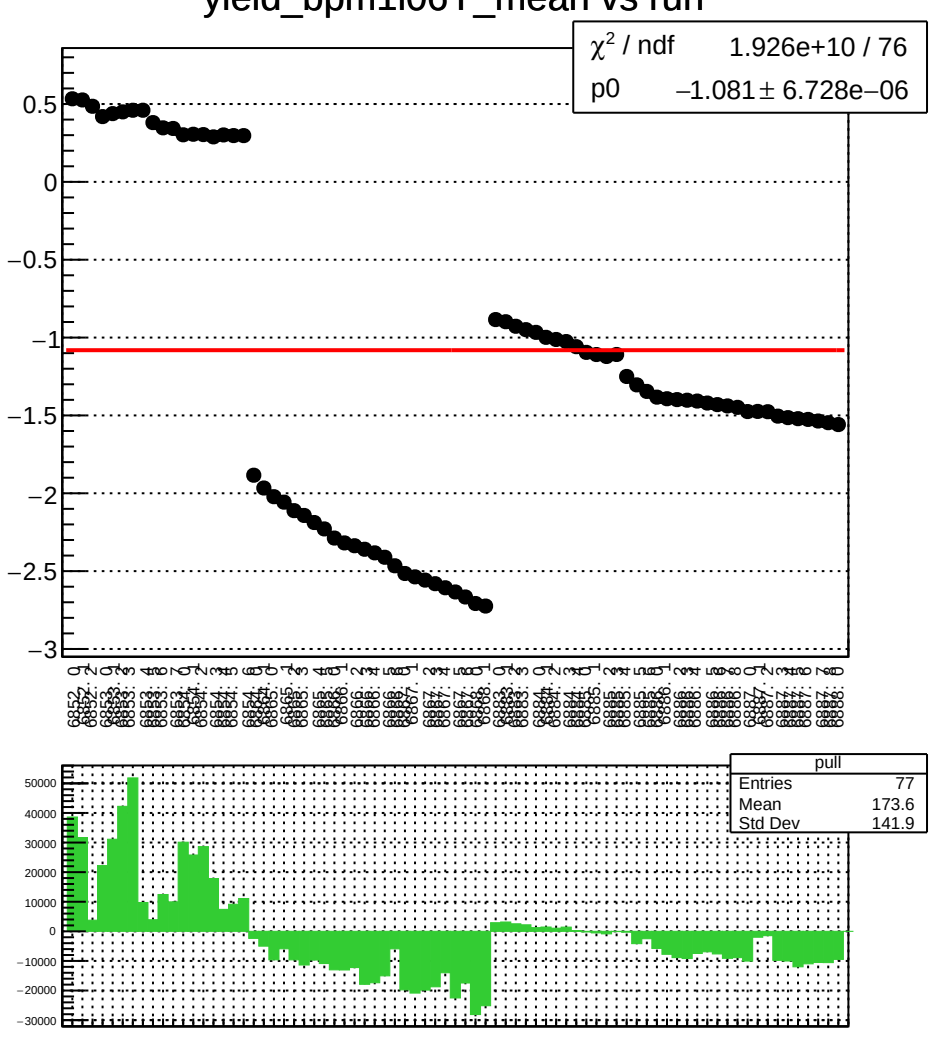

yield_bpm1i04Y_mean vs run
χ² / ndf 1.734e+10 / 76
p0 −0.2856 ± 5.489e−06
pull
Entries 77
Mean −76.17
Std Dev 108.9
pull1D
Entries 77
Mean 0
Std Dev 0

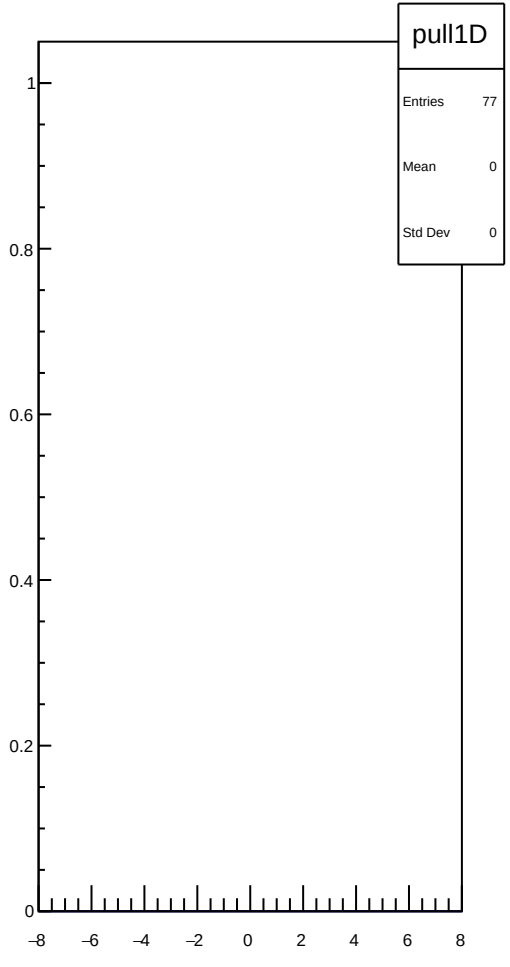

yield_bpm1i04Y_rms vs run
χ^2 / ndf 3.187e+05 / 76
p0 0.004408 ± 3.881e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

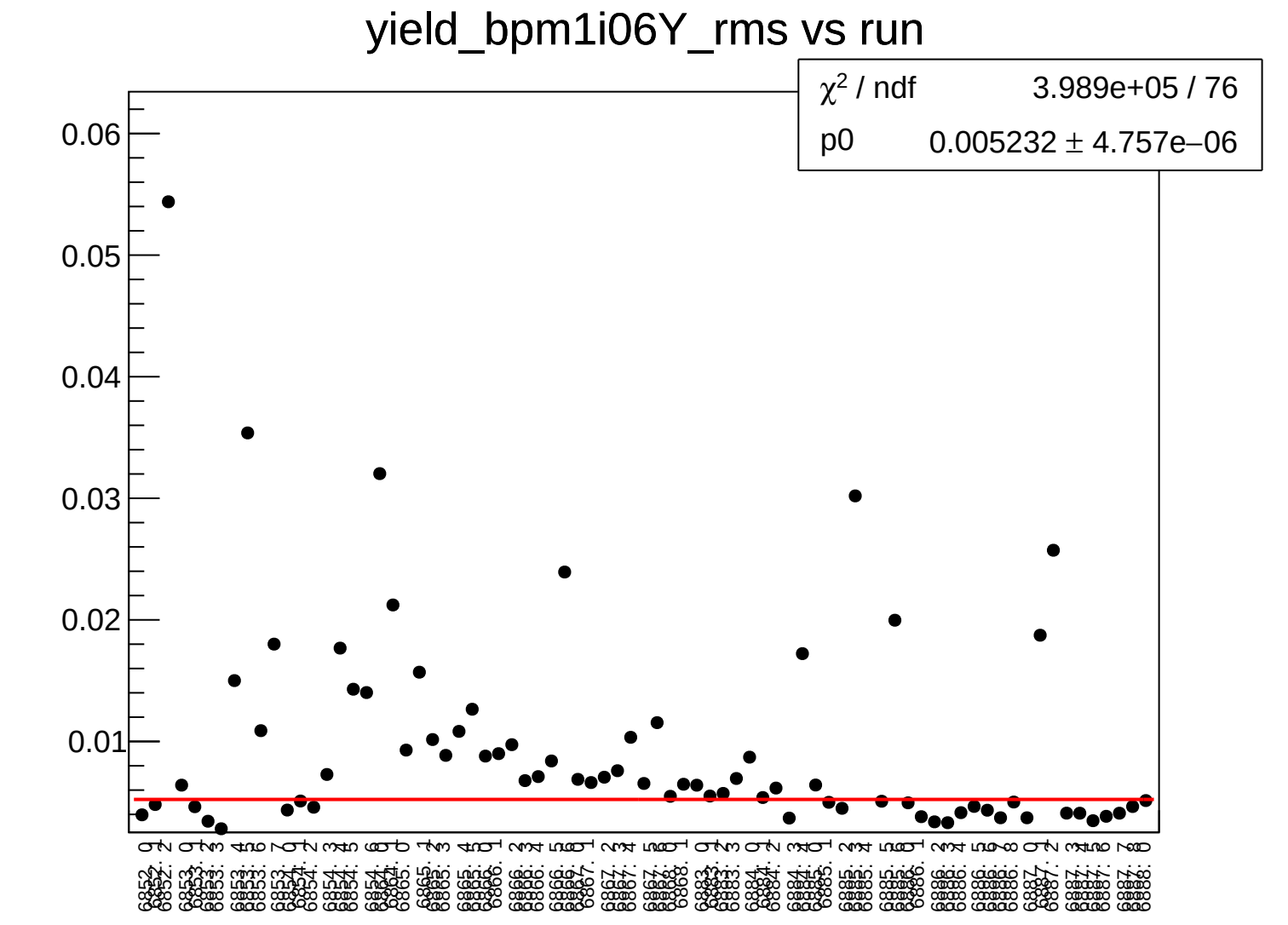

yield_bpm1i06X_mean vs run
χ² / ndf 2.671e+09 / 76
p0 0.4805 ± 1.227e−05
pull
Entries 77
Mean −55.74
Std Dev 126.5

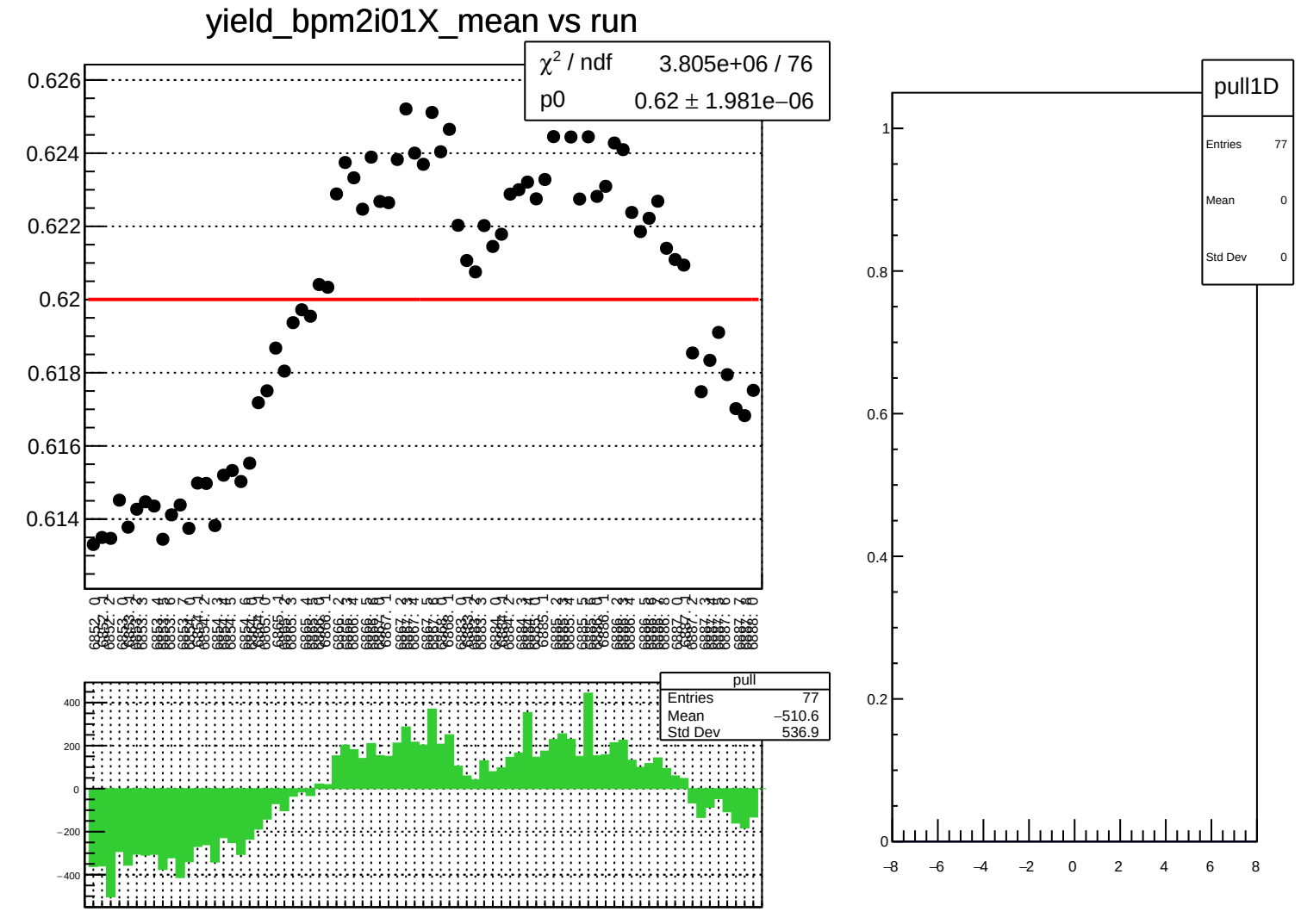

pull1D
Entries 77
Mean 0
Std Dev 0

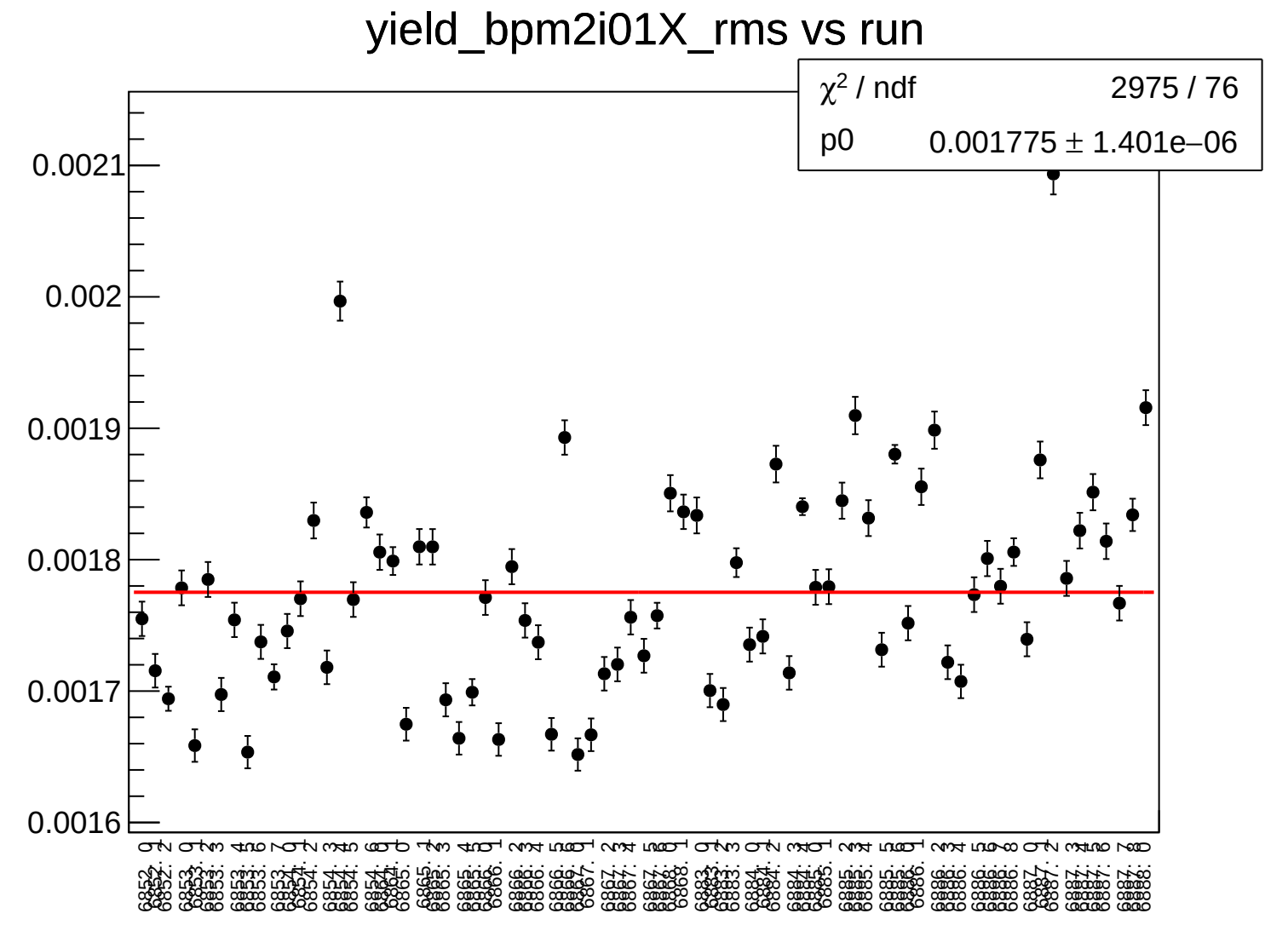

yield_bpm1i06X_rms vs run
χ² / ndf 1.154e+05 / 76
p0 0.0106 ± 8.678e−06
0.03
0.025
0.02
0.015
0.01

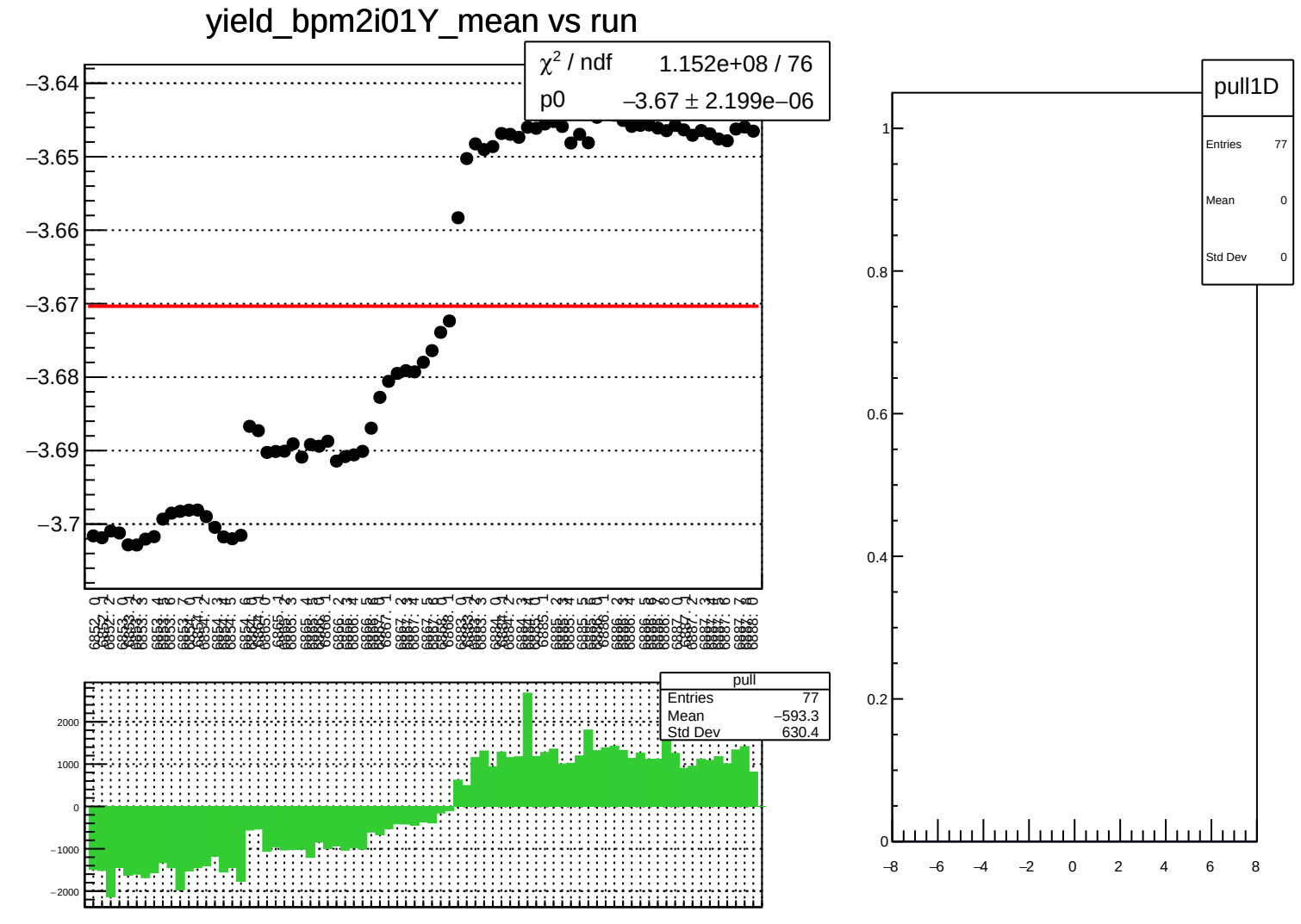

yield_bpm1i06Y_mean vs run
χ² / ndf 1.926e+10 / 76
p0 −1.081 ± 6.728e−06
pull
Entries 77
Mean 173.6
Std Dev 141.9

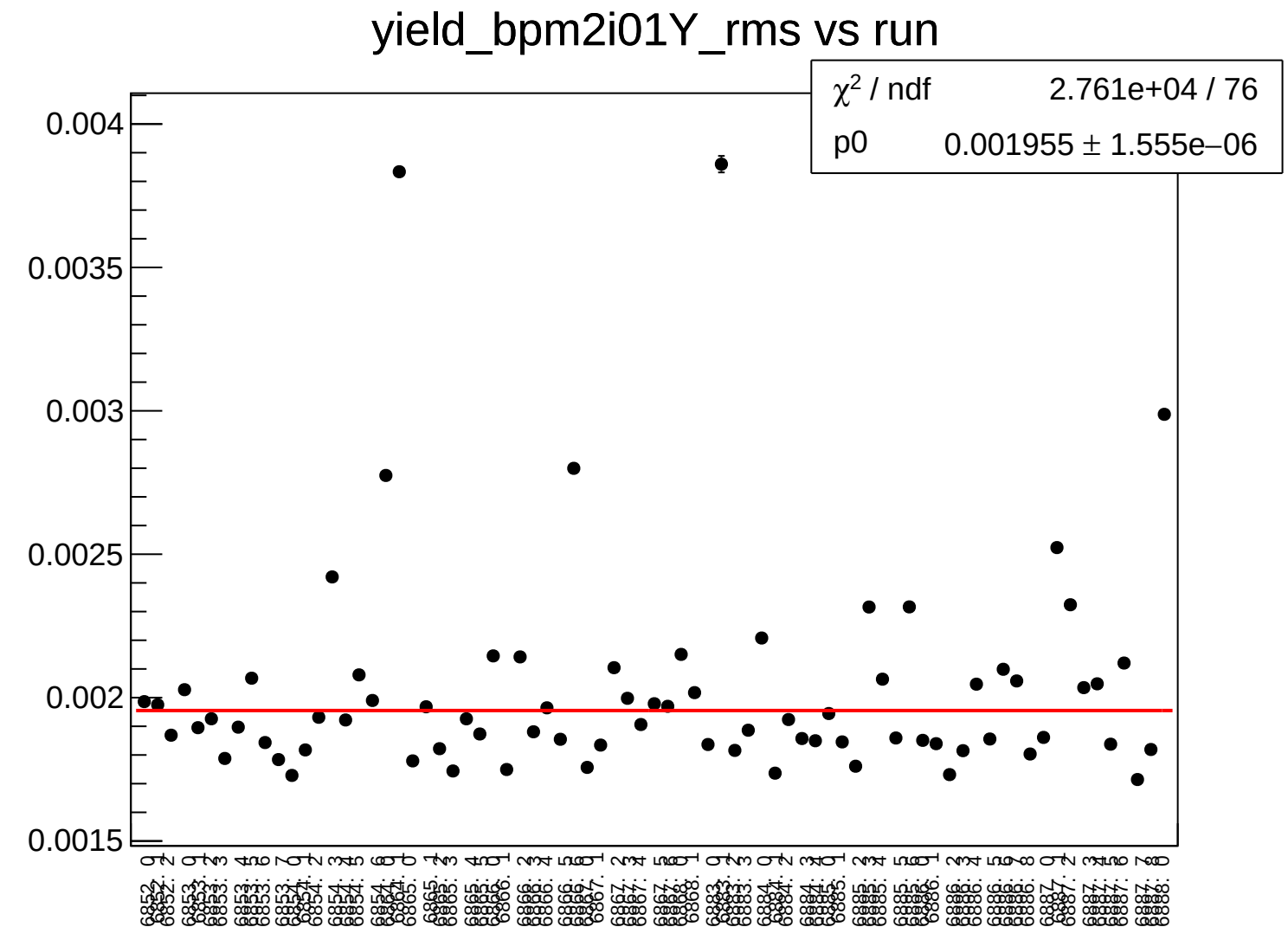

pull1D
Entries 77
Mean 0
Std Dev 0

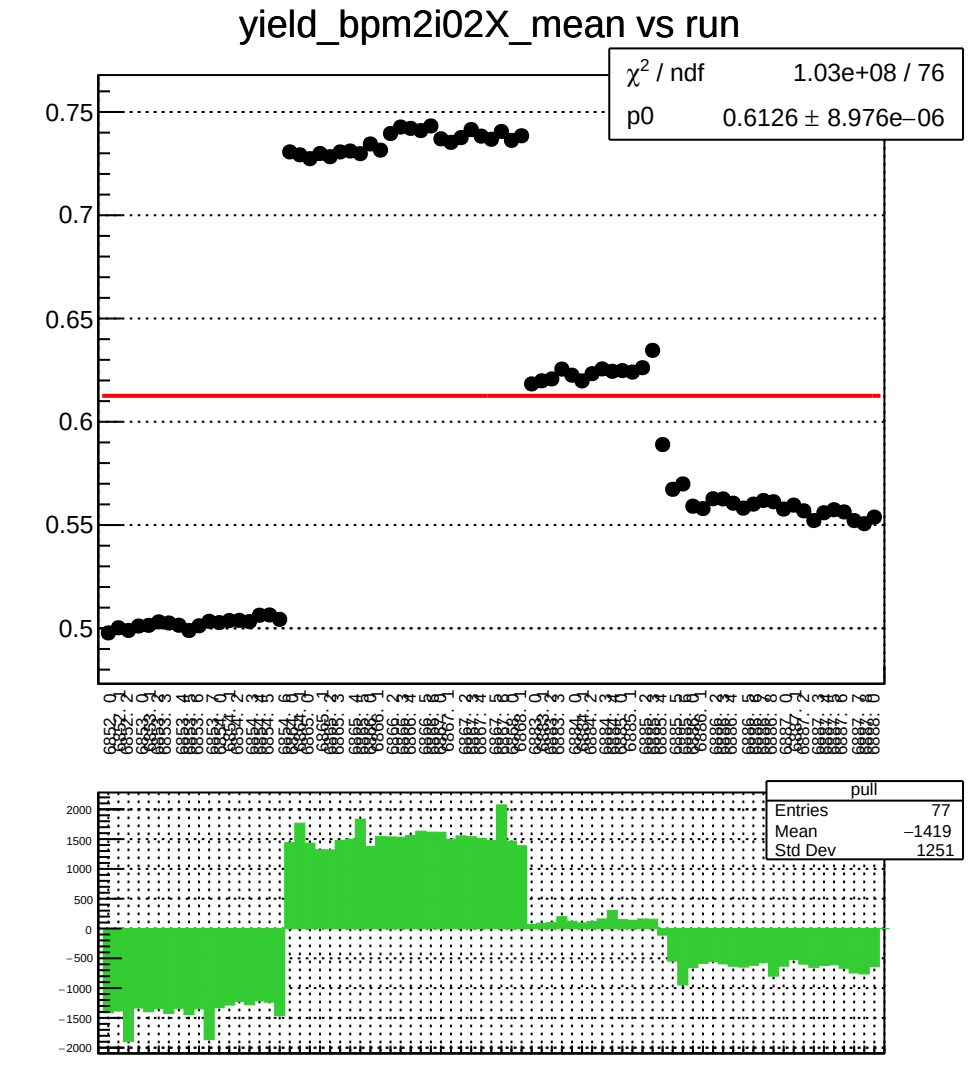

yield_bpm1i06Y_rms vs run
χ² / ndf 3.989e+05 / 76
p0 0.005232 ± 4.757e−06
0.06
0.05
0.04
0.03
0.02
0.01

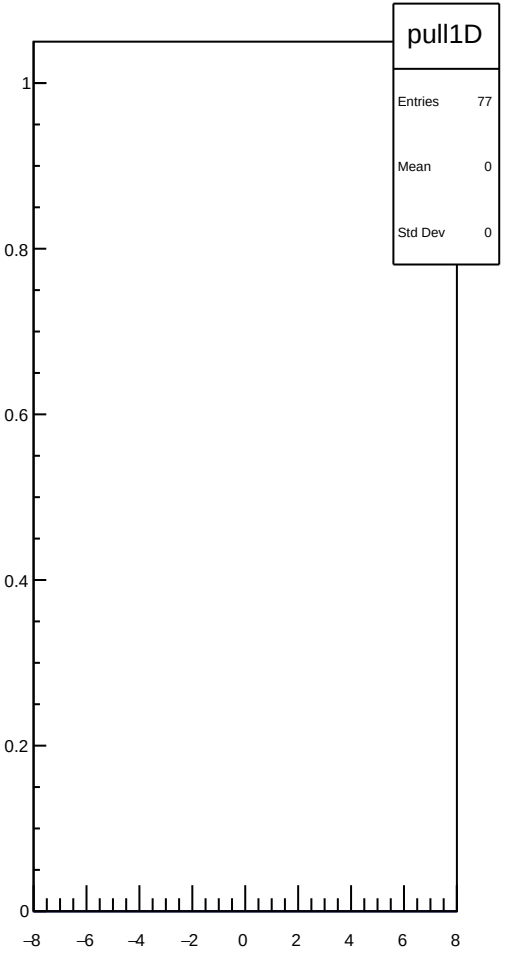

yield_bpm2i01X_mean vs run
χ² / ndf 3.805e+06 / 76
p0 0.62 ± 1.981e−06
0.626
0.624
0.622
0.62
0.618
0.616
0.614
pull
Entries 77
Mean −510.6
Std Dev 536.9
400
200
0
−200
−400
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

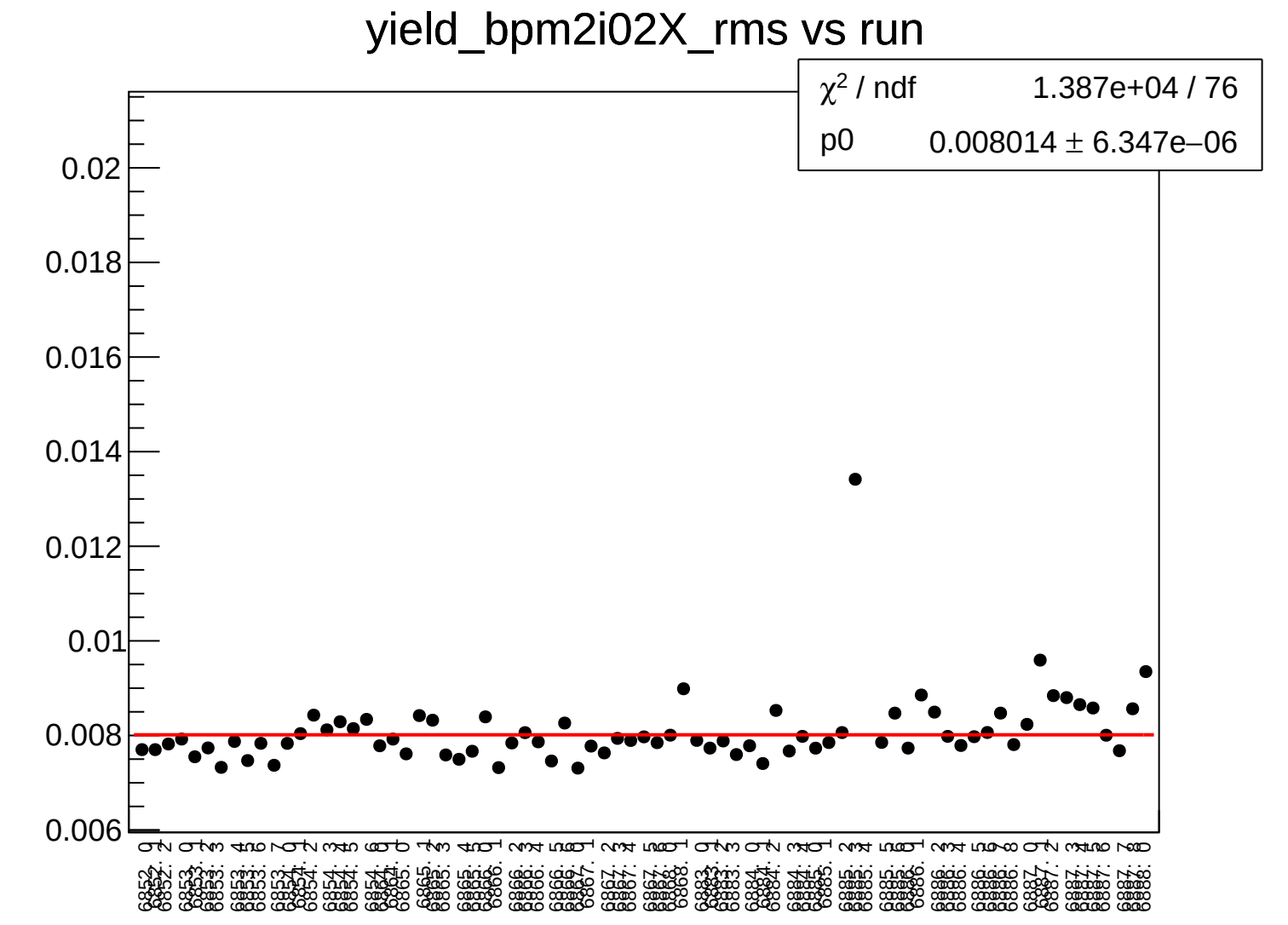

yield_bpm2i01X_rms vs run
χ² / ndf 2975 / 76
p0 0.001775 ± 1.401e−06
0.0021
0.002
0.0019
0.0018
0.0017
0.0016

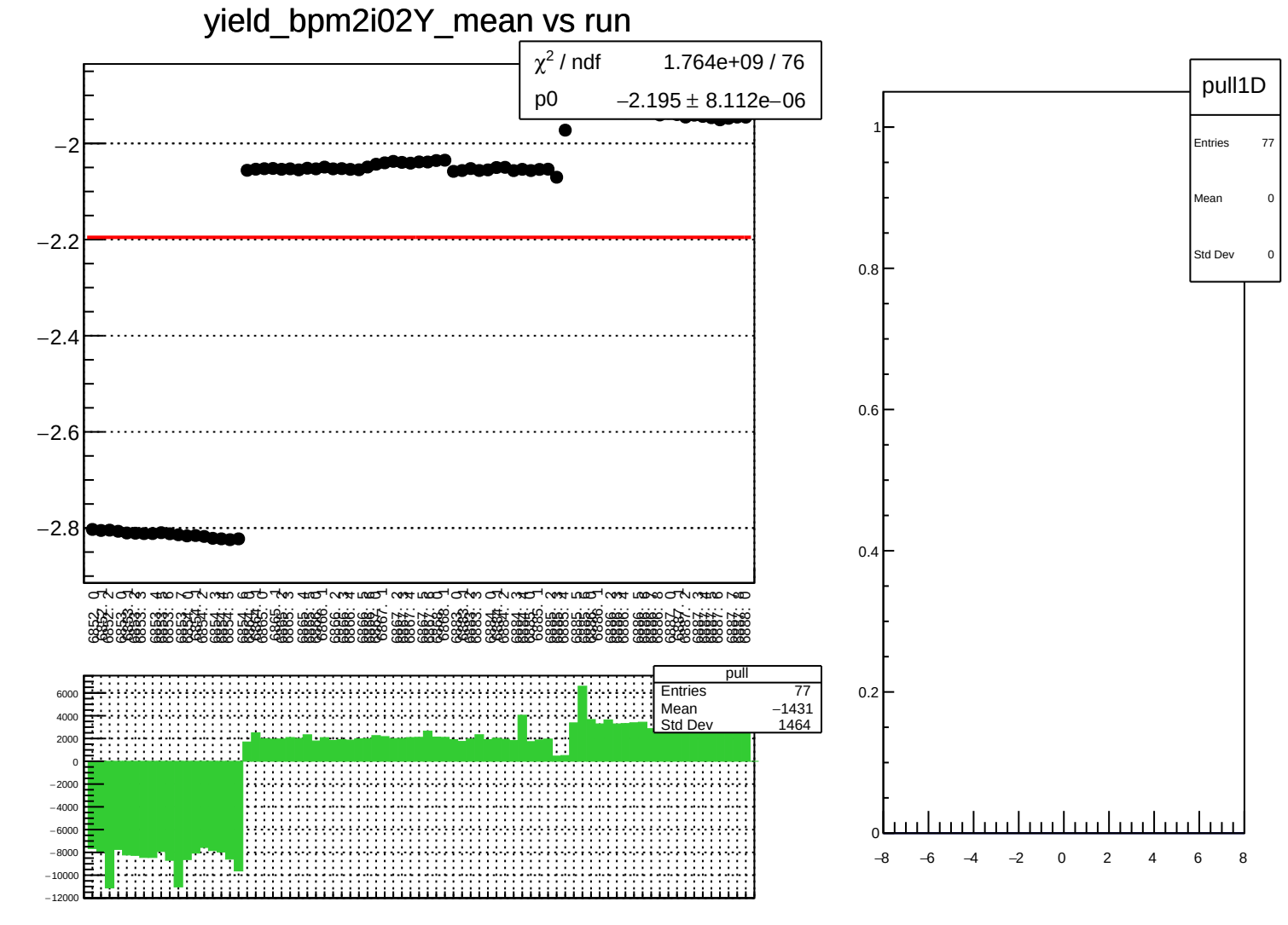

yield_bpm2i01Y_mean vs run
χ² / ndf 1.152e+08 / 76
p0 −3.67 ± 2.199e−06
−3.64
−3.65
−3.66
−3.67
−3.68
−3.69
−3.7
pull
Entries 77
Mean −593.3
Std Dev 630.4
2000
1000
0
−1000
−2000
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

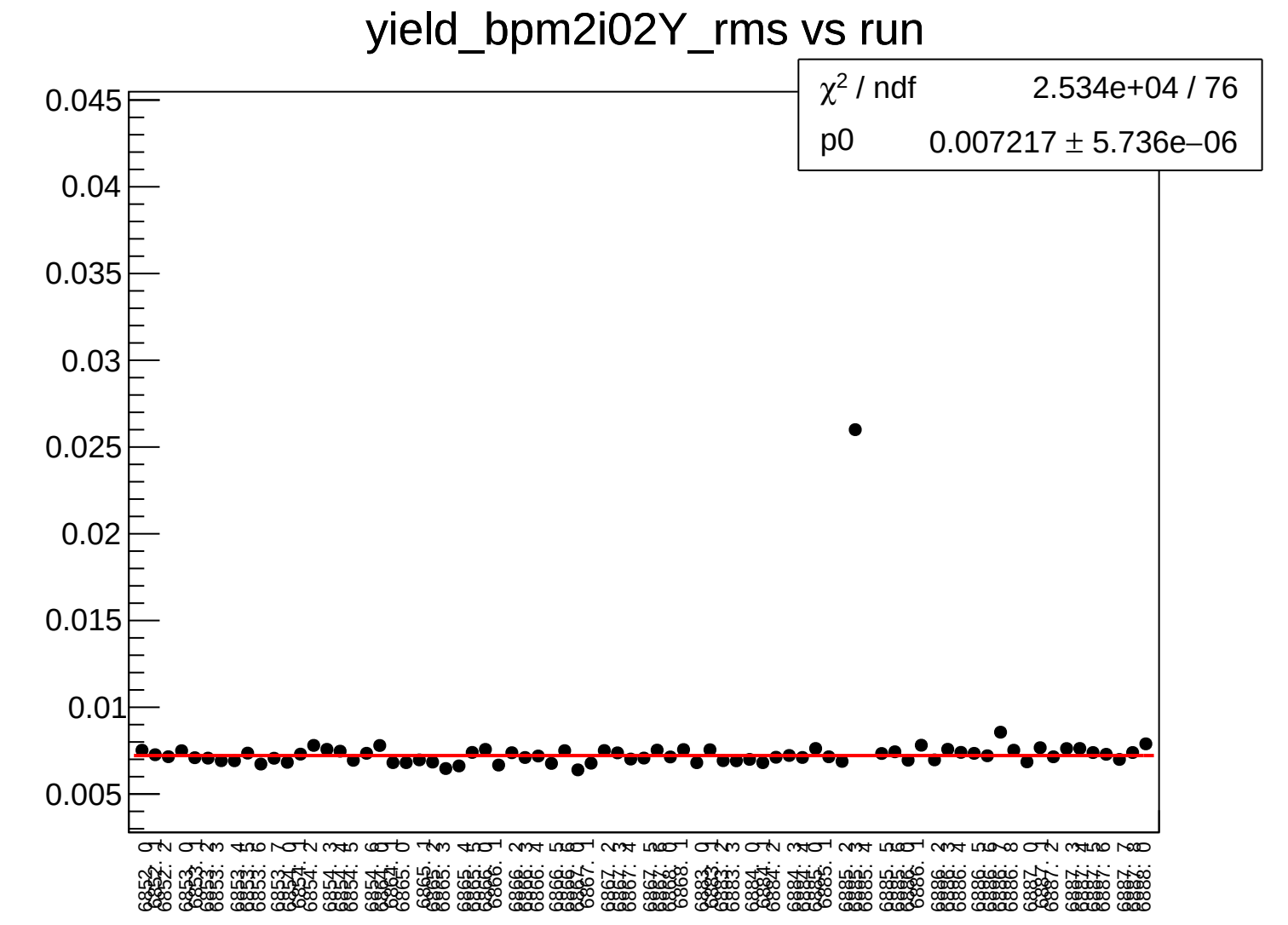

yield_bpm2i01Y_rms vs run
χ^2 / ndf 2.761e+04 / 76
p0 0.001955 ± 1.555e−06
0.004
0.0035
0.003
0.0025
0.002
0.0015

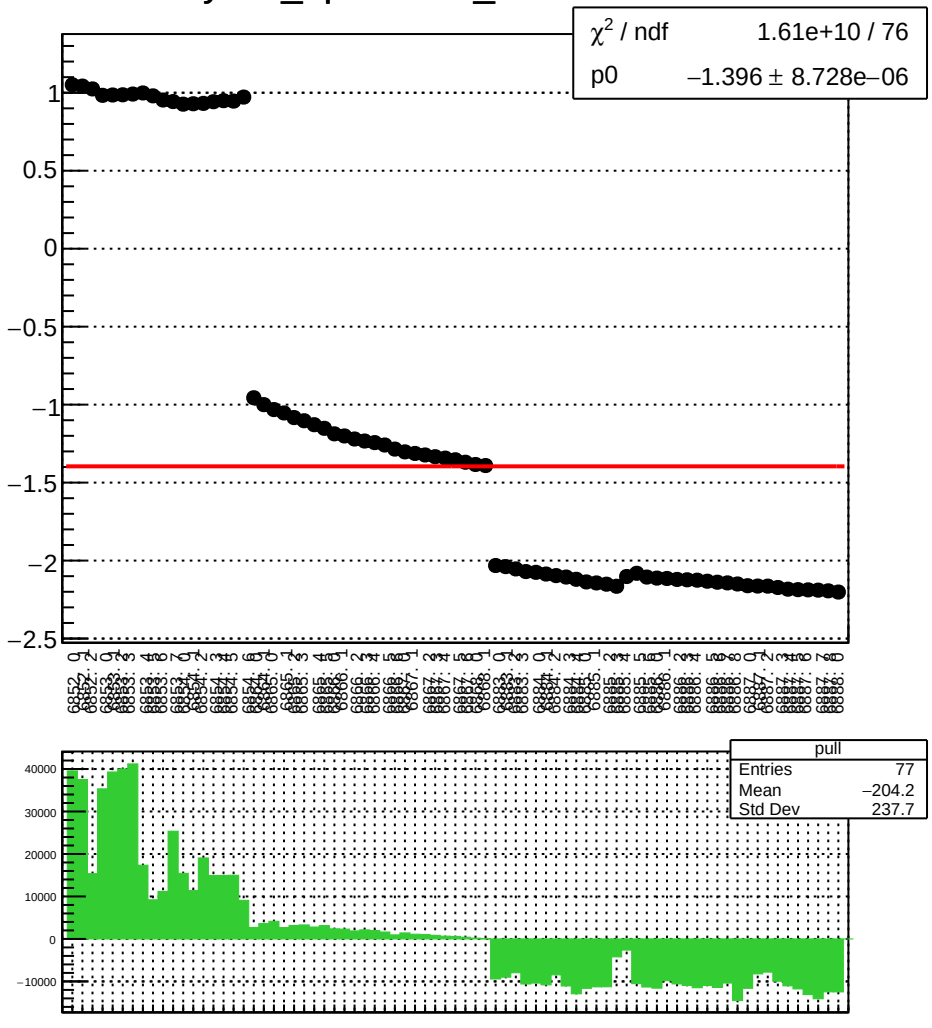

yield_bpm2i02X_mean vs run
χ² / ndf 1.03e+08 / 76
p0 0.6126 ± 8.976e−06
0.75
0.7
0.65
0.6
0.55
0.5
pull
Entries 77
Mean −1419
Std Dev 1251
2000
1500
1000
500
0
−500
−1000
−1500
−2000

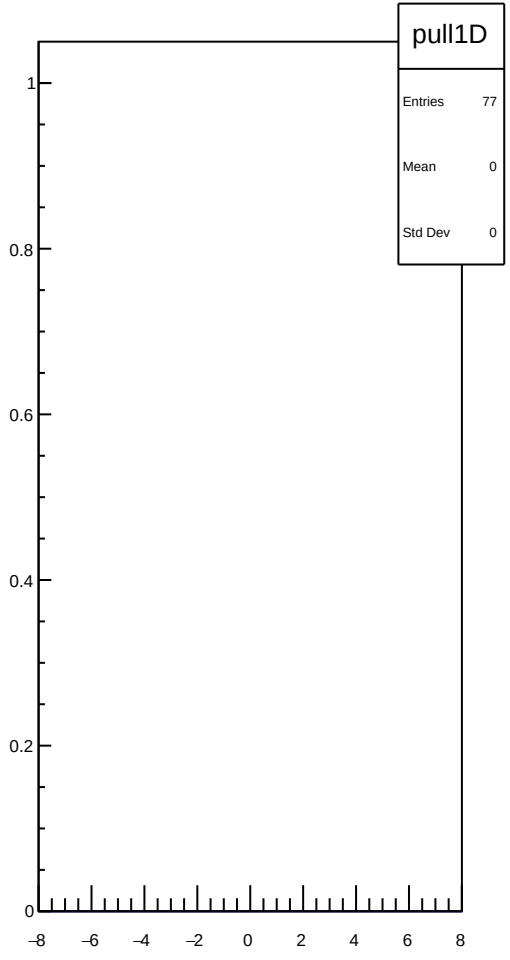

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

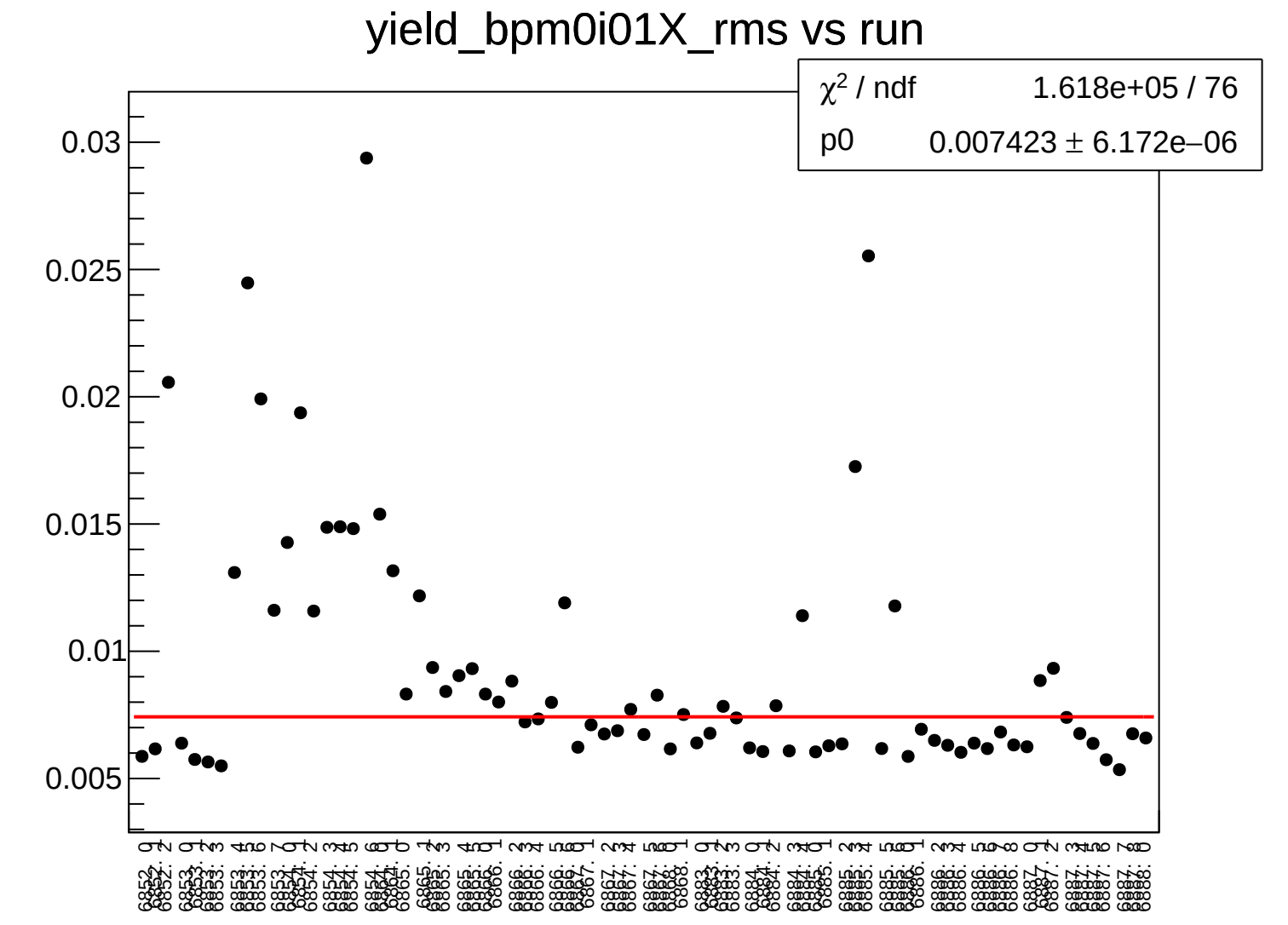

yield_bpm2i02X_rms vs run
χ² / ndf 1.387e+04 / 76
p0 0.008014 ± 6.347e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

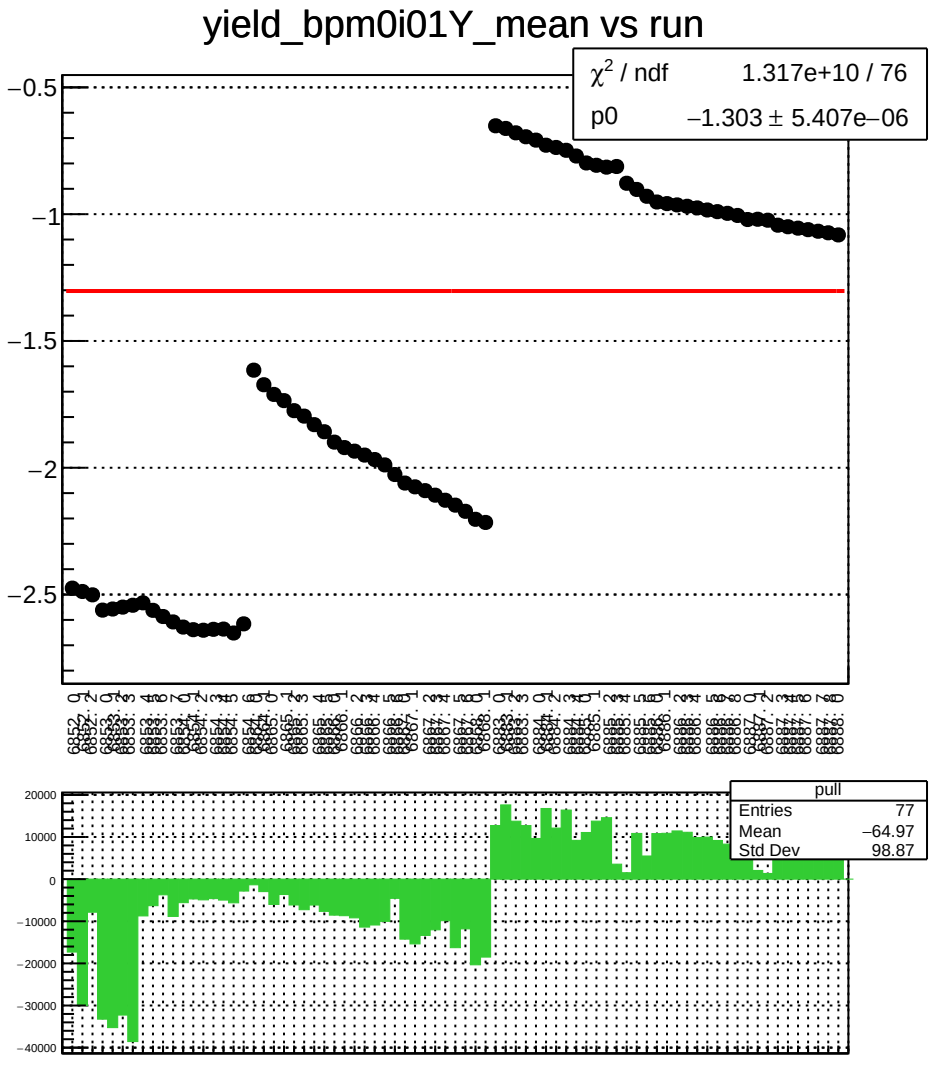

yield_bpm2i02Y_mean vs run
χ² / ndf 1.764e+09 / 76
p0 −2.195 ± 8.112e−06
−2
−2.2
−2.4
−2.6
−2.8
pull
Entries 77
Mean −1431
Std Dev 1464
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
−12000
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

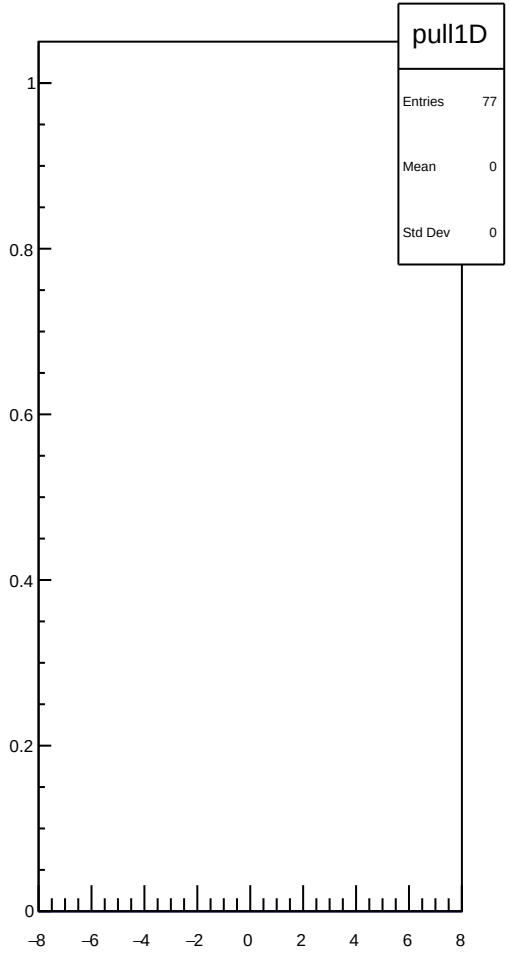

yield_bpm2i02Y_rms vs run
χ² / ndf 2.534e+04 / 76
p0 0.007217 ± 5.736e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

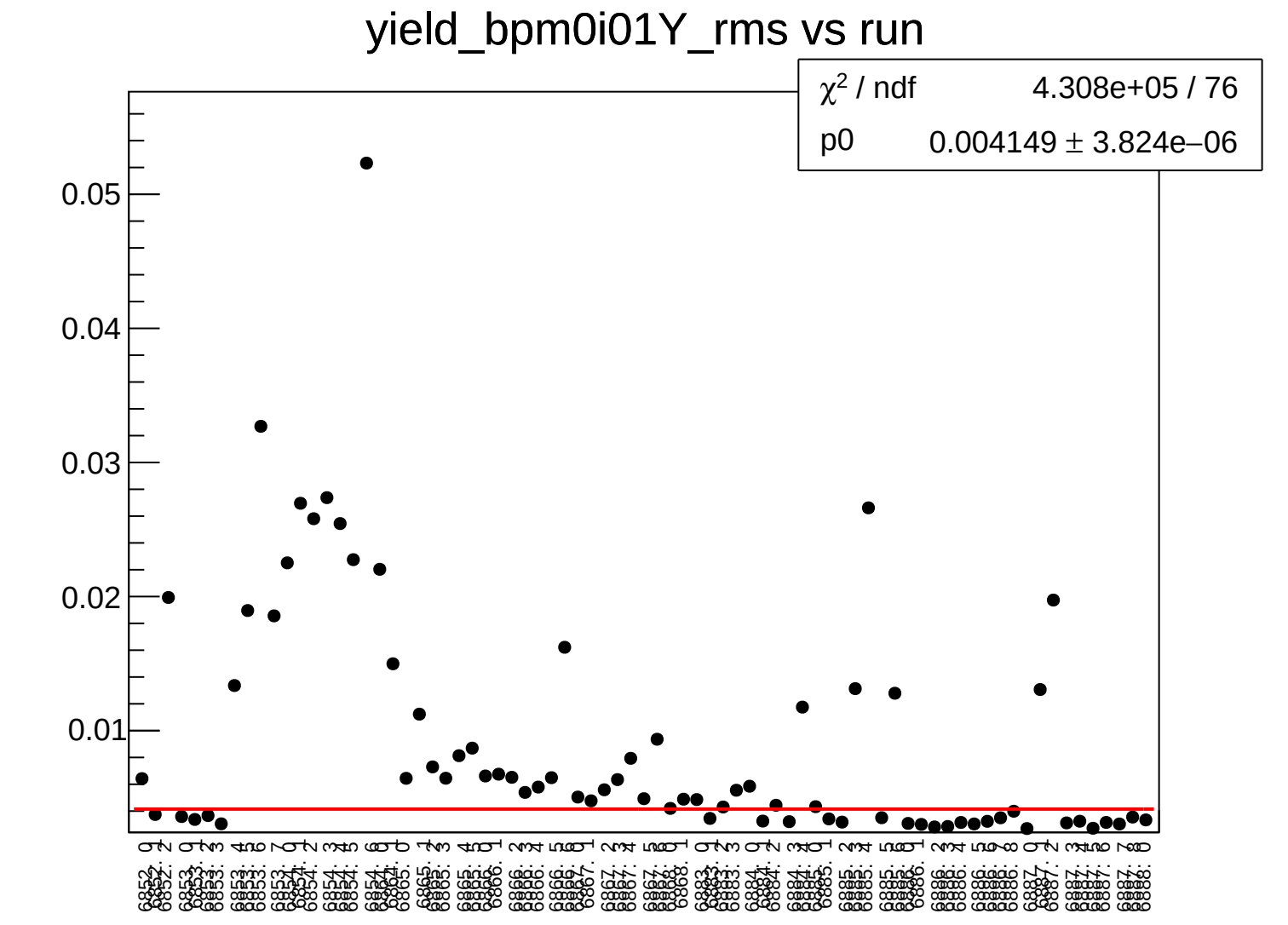

yield_bpm0i01X_mean vs run
χ² / ndf 1.61e+10 / 76
p0 −1.396 ± 8.728e−06
pull
Entries 77
Mean −204.2
Std Dev 237.7

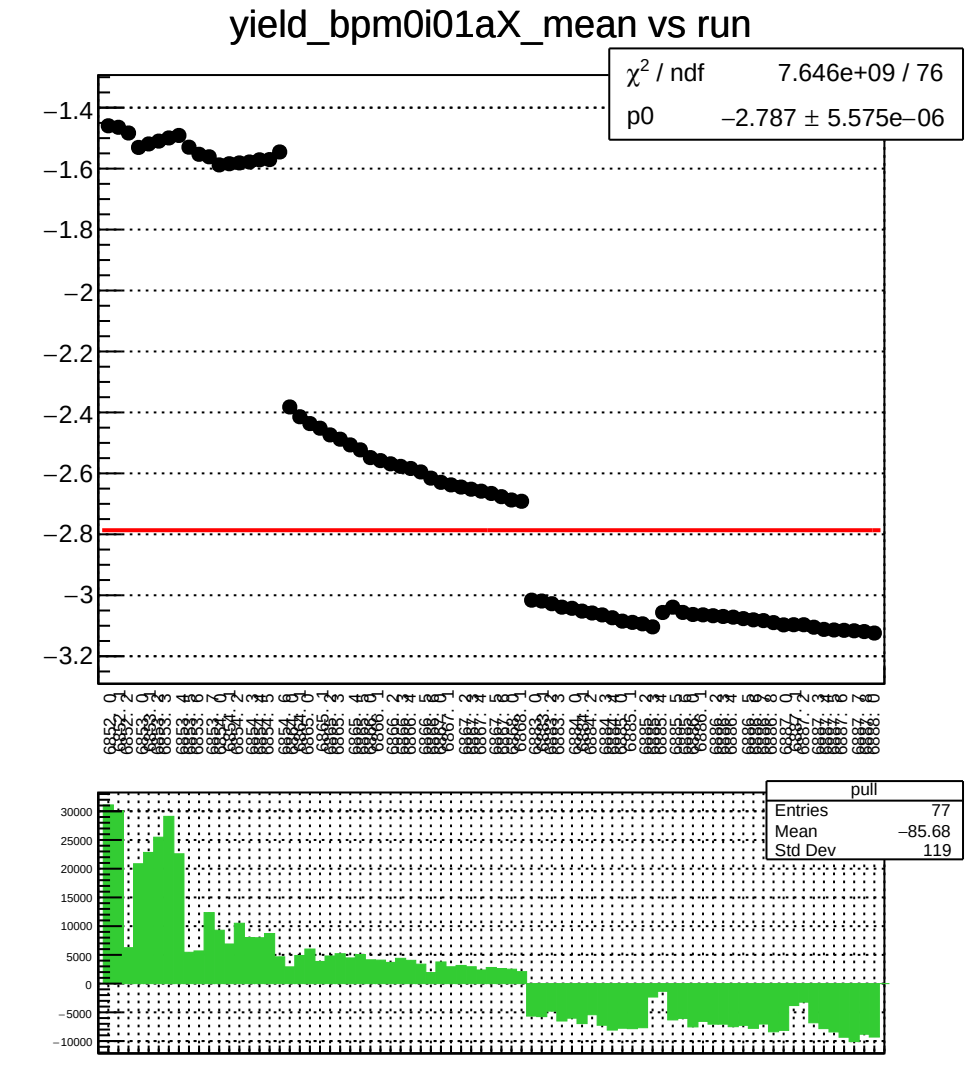

pull1D
Entries 77
Mean 0
Std Dev 0

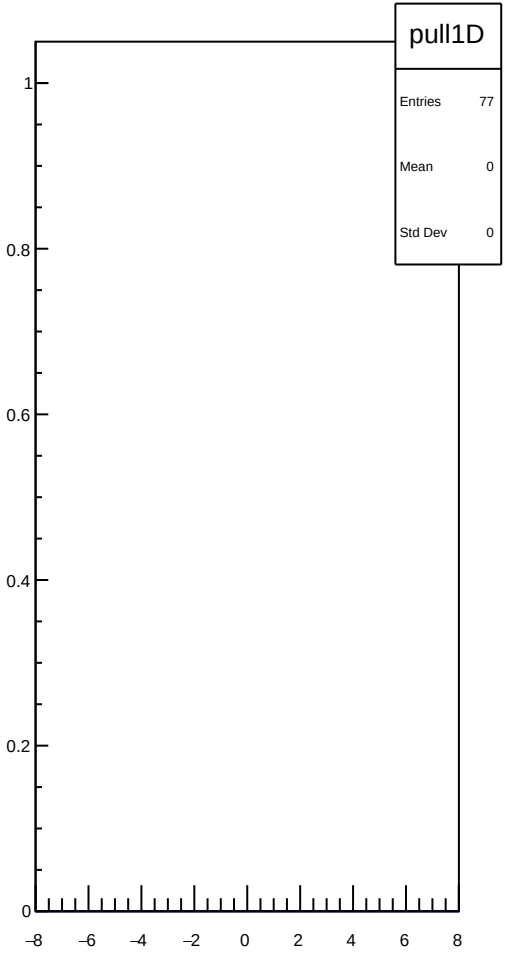

yield_bpm0i01X_rms vs run
χ² / ndf 1.618e+05 / 76
p0 0.007423 ± 6.172e−06
0.03
0.025
0.02
0.015
0.01
0.005

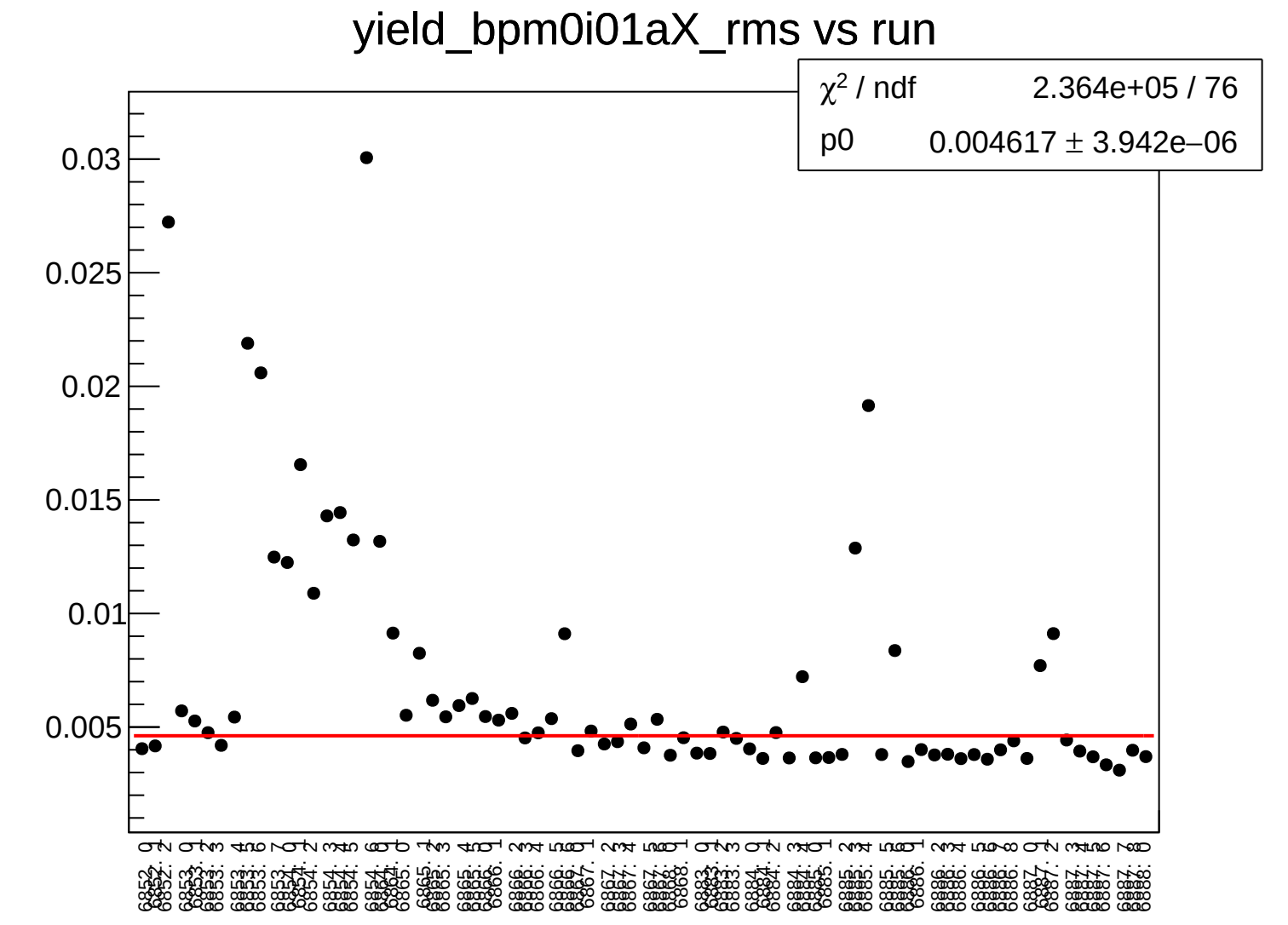

yield_bpm0i01Y_mean vs run
χ² / ndf 1.317e+10 / 76
p0 −1.303 ± 5.407e−06
−0.5
−1
−1.5
−2
−2.5
pull
Entries 77
Mean −64.97
Std Dev 98.87
20000
10000
0
−10000
−20000
−30000
−40000

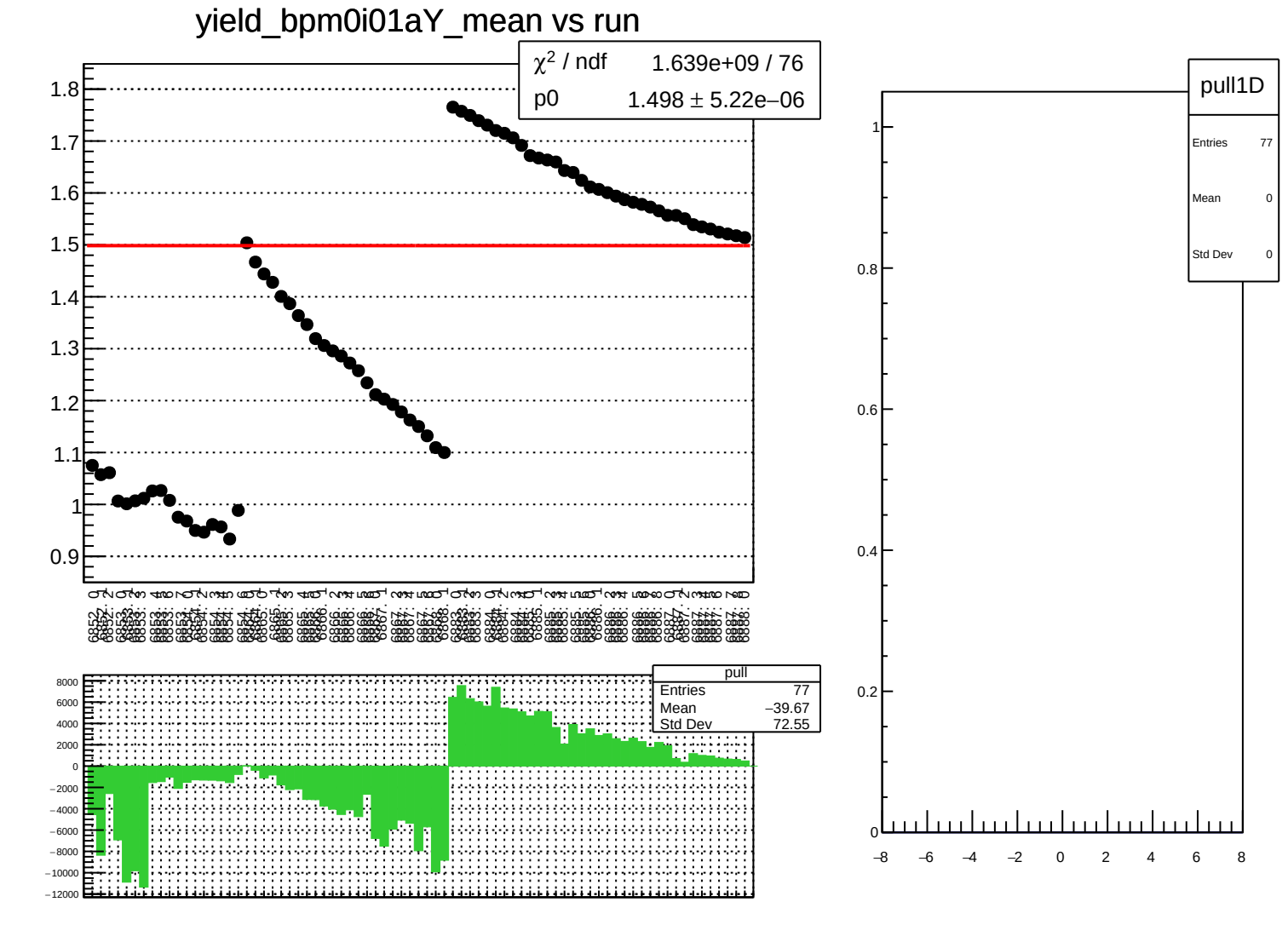

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

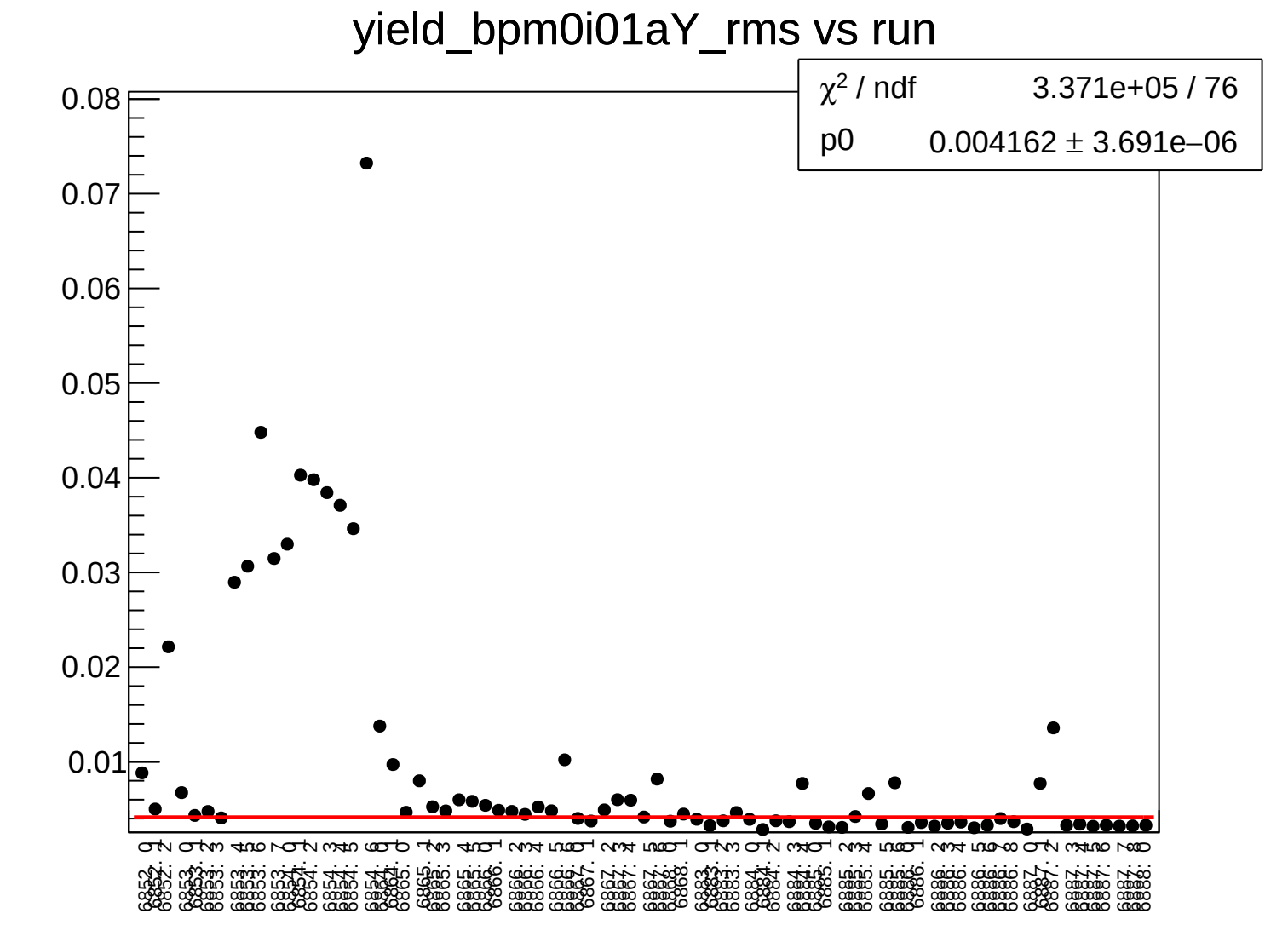

yield_bpm0i01Y_rms vs run
χ^2 / ndf 4.308e+05 / 76
p0 0.004149 ± 3.824e−06
0.05
0.04
0.03
0.02
0.01

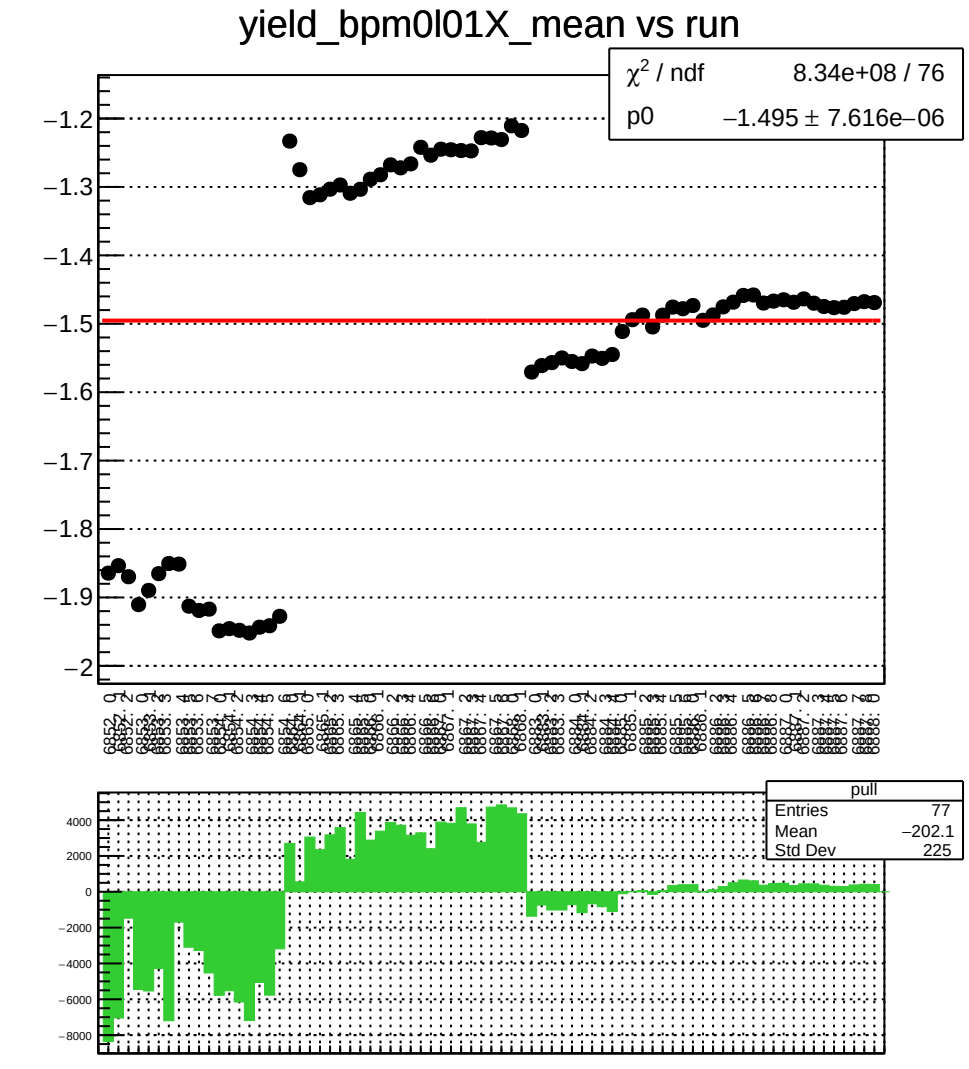

yield_bpm0i01aX_mean vs run
χ² / ndf 7.646e+09 / 76
p0 −2.787 ± 5.575e−06
−1.4
−1.6
−1.8
−2
−2.2
−2.4
−2.6
−2.8
−3
−3.2
pull
Entries 77
Mean −85.68
Std Dev 119
30000
25000
20000
15000
10000
5000
0
−5000
−10000

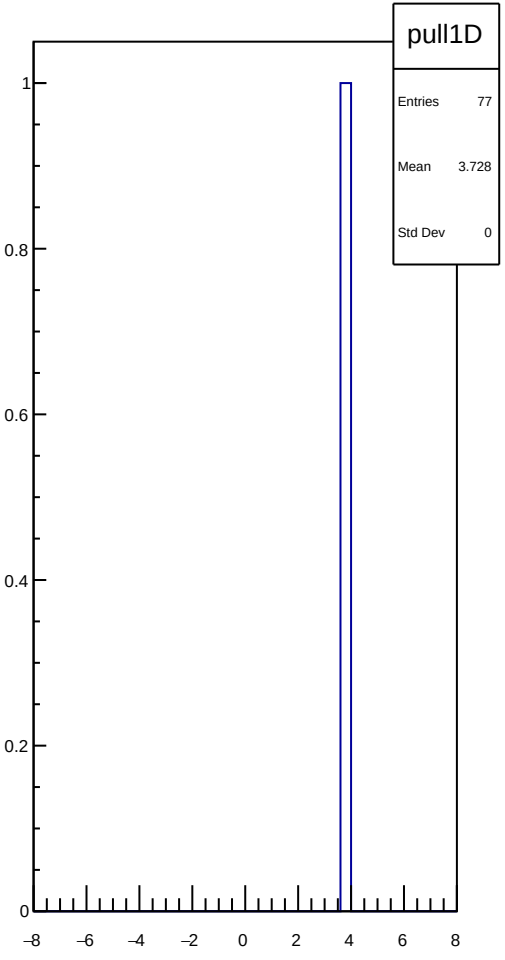

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

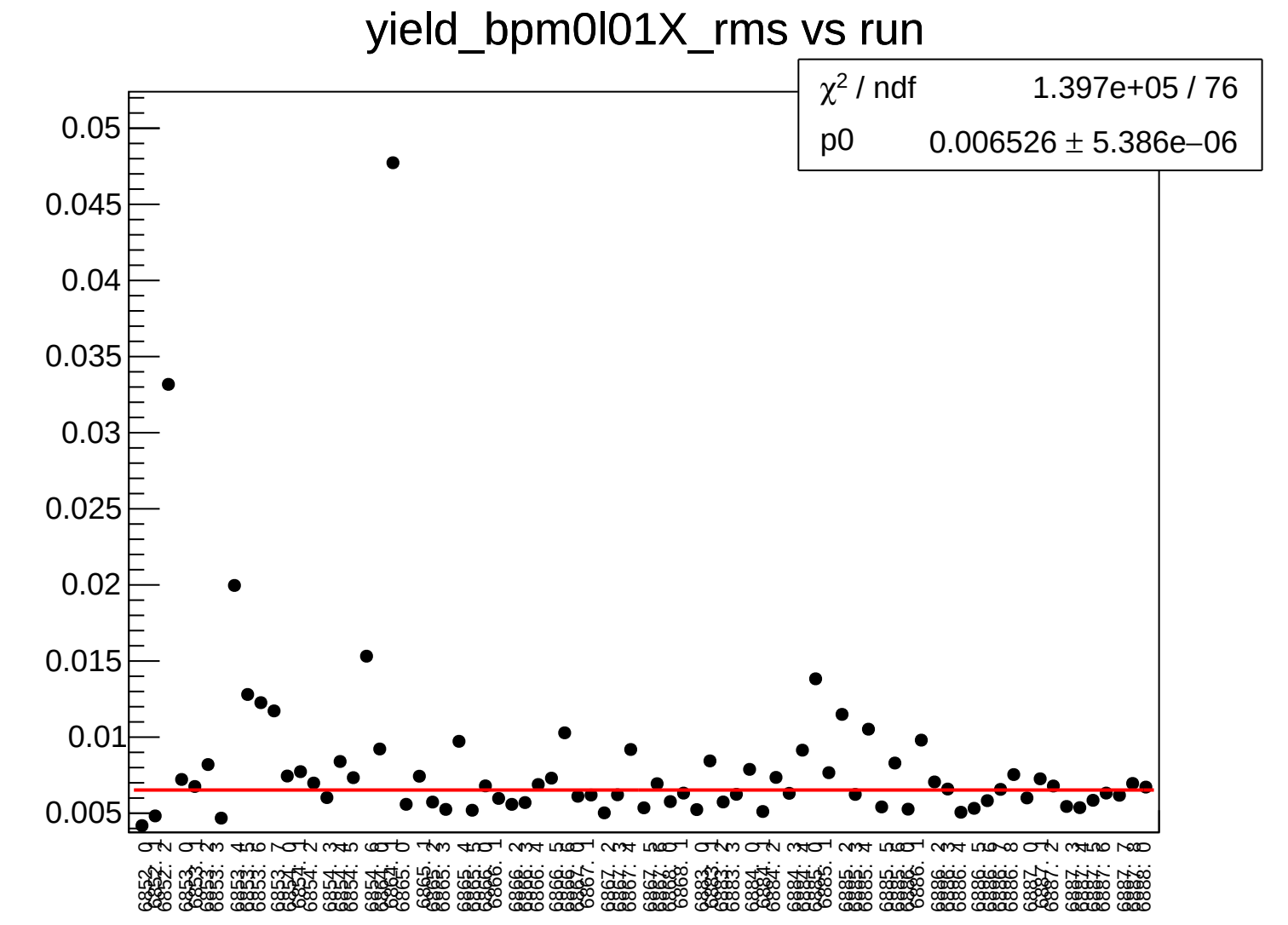

yield_bpm0i01aX_rms vs run
χ^2 / ndf 2.364e+05 / 76
p0 0.004617 ± 3.942e−06
0.03
0.025
0.02
0.015
0.01
0.005

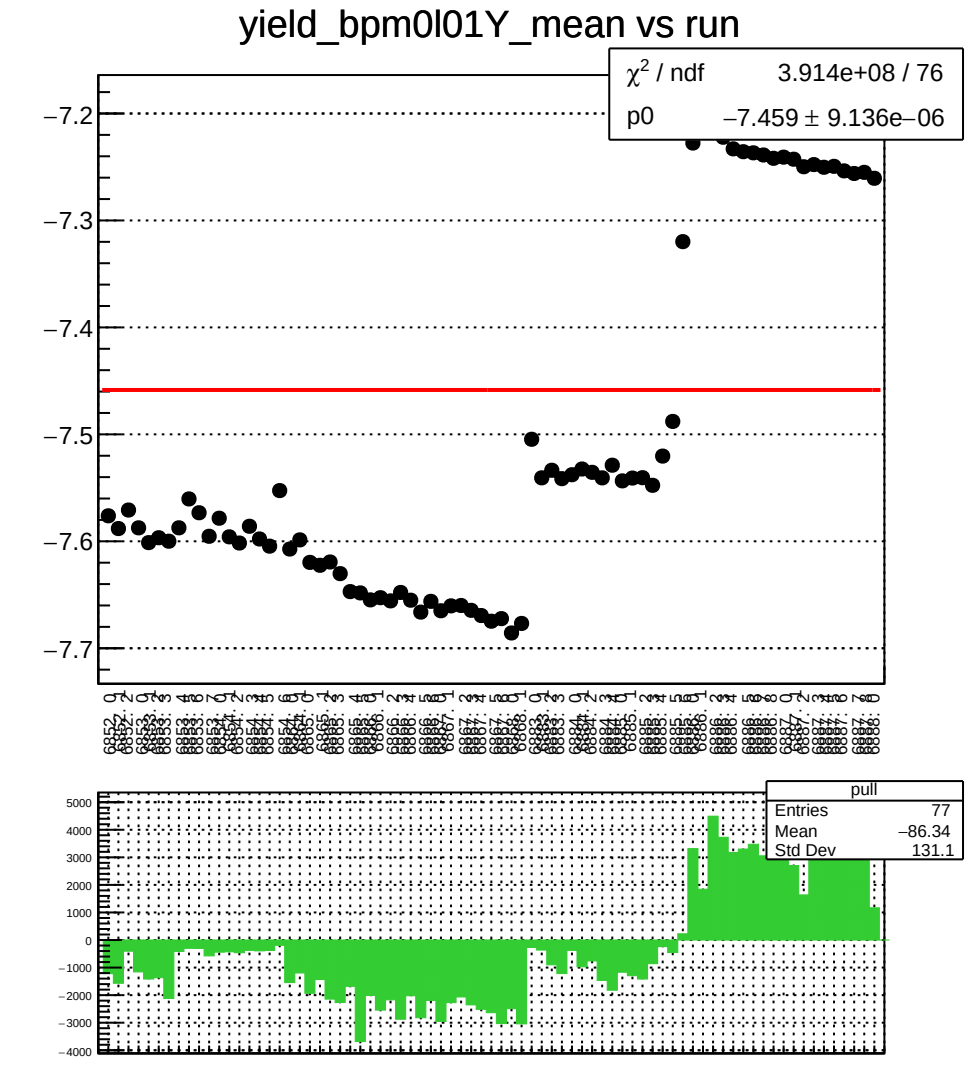

yield_bpm0i01aY_mean vs run
χ² / ndf 1.639e+09 / 76
p0 1.498 ± 5.22e−06
pull
Entries 77
Mean −39.67
Std Dev 72.55
pull1D
Entries 77
Mean 0
Std Dev 0

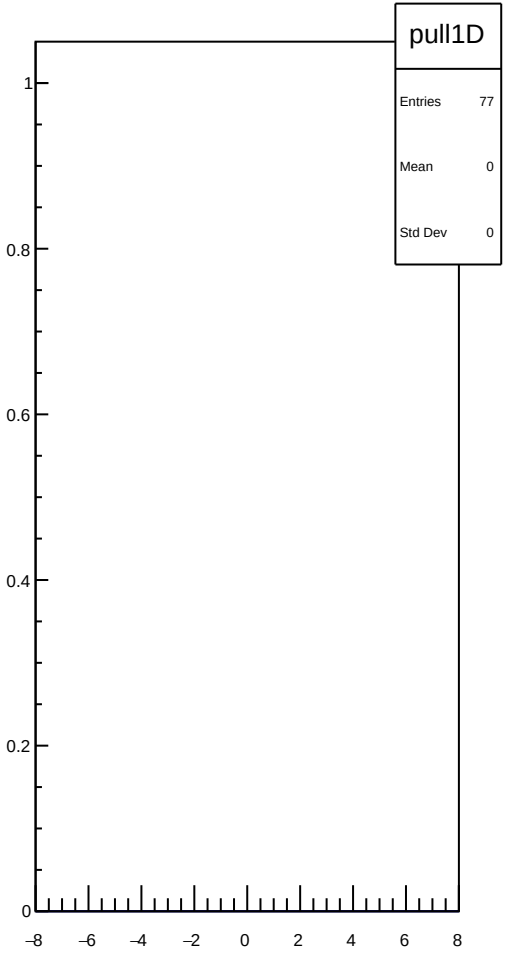

yield_bpm0i01aY_rms vs run
χ² / ndf 3.371e+05 / 76
p0 0.004162 ± 3.691e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

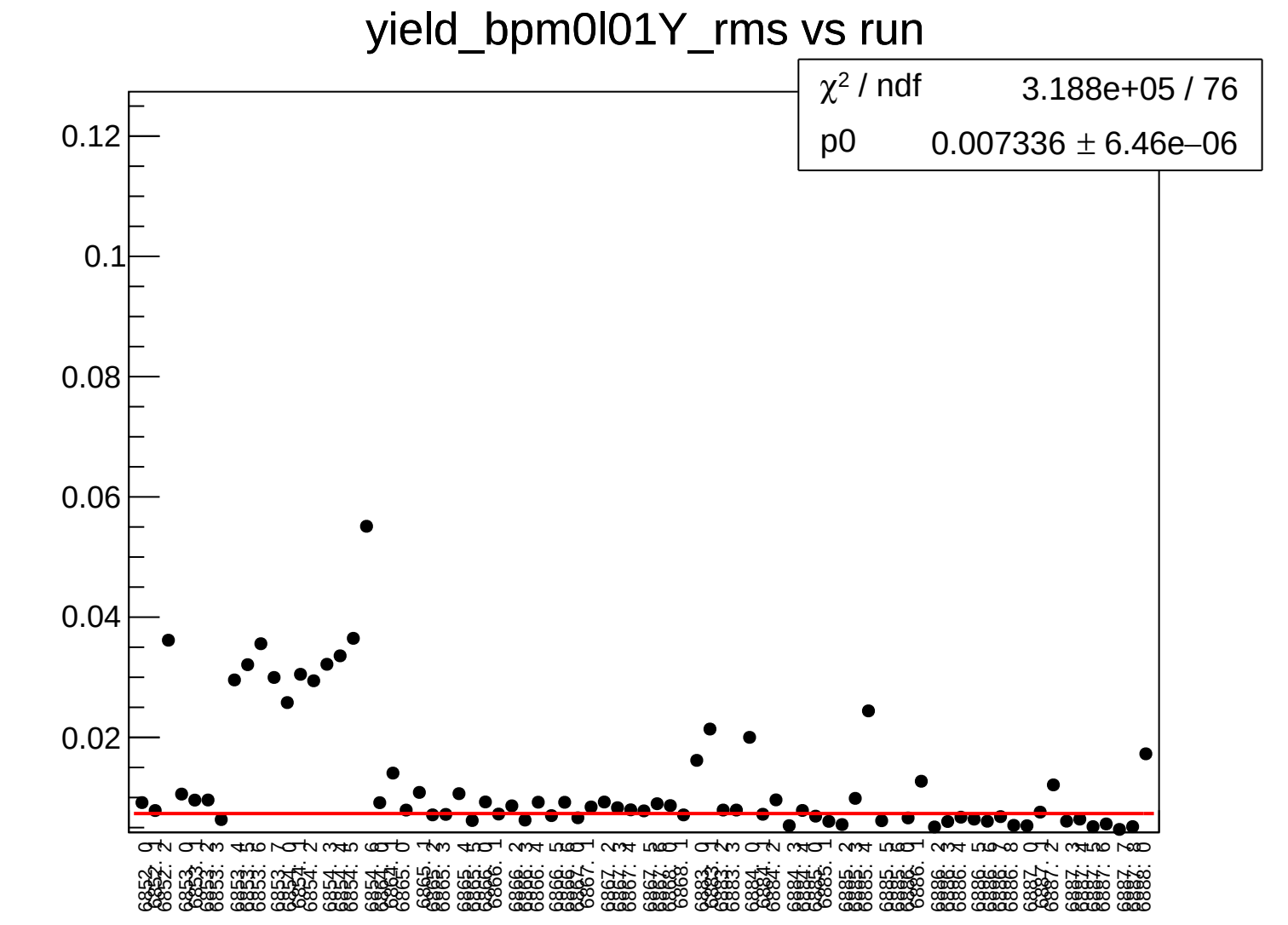

yield_bpm0l01X_mean vs run
χ² / ndf 8.34e+08 / 76
p0 −1.495 ± 7.616e−06
pull
Entries 77
Mean −202.1
Std Dev 225

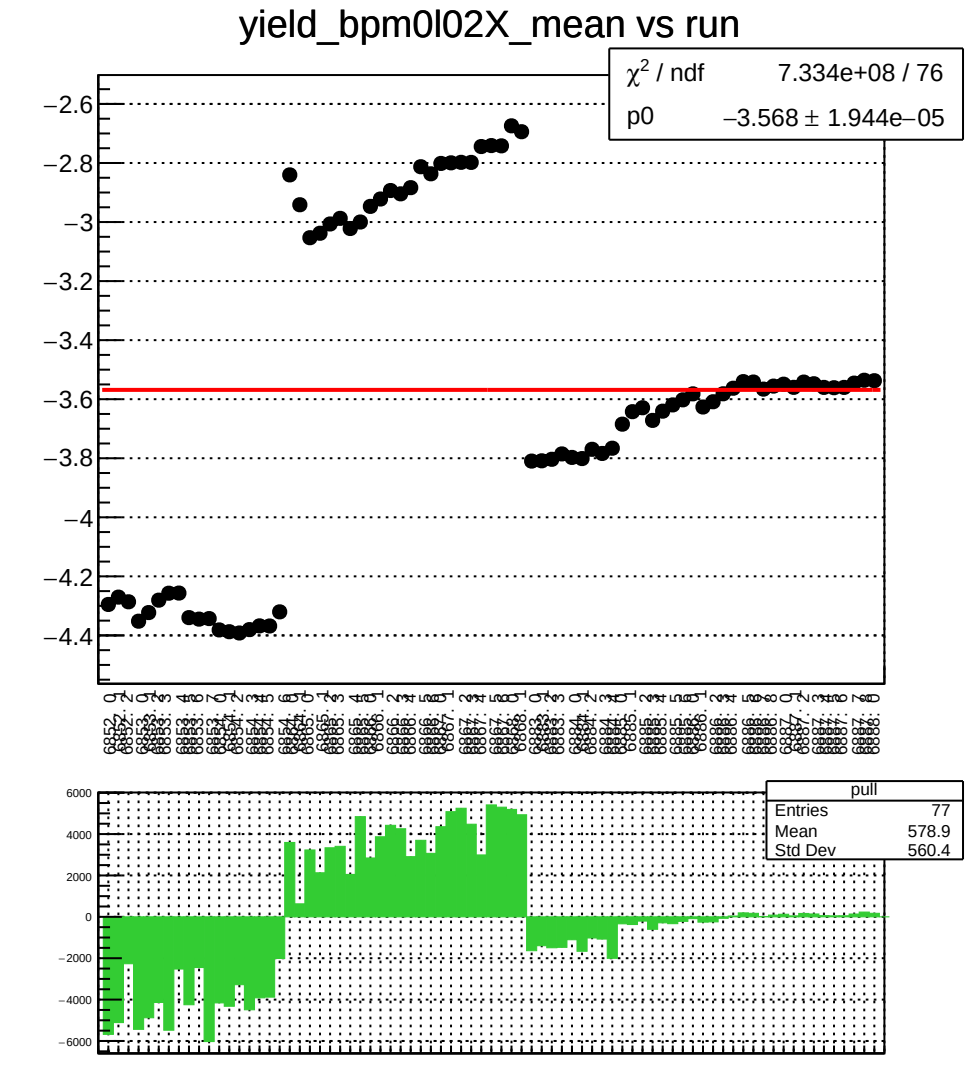

pull1D
Entries 77
Mean 3.728
Std Dev 0

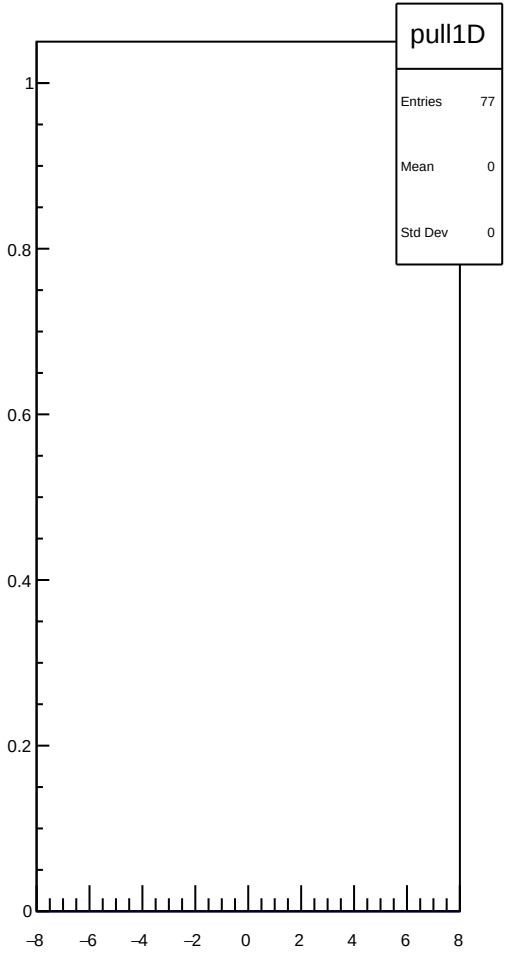

yield_bpm0l01X_rms vs run
χ^2 / ndf 1.397e+05 / 76
p0 0.006526 ± 5.386e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

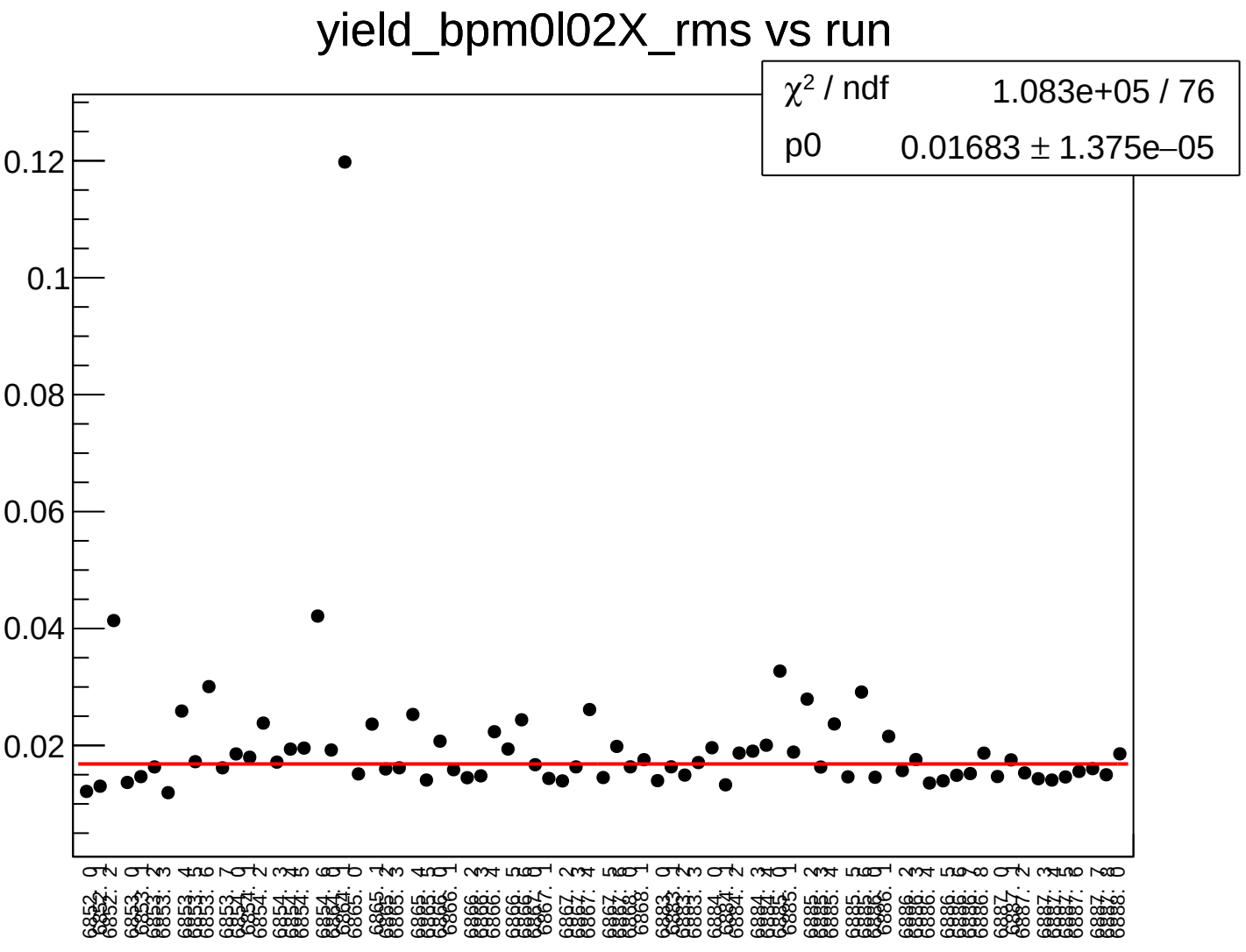

yield_bpm0l01Y_mean vs run
χ² / ndf 3.914e+08 / 76
p0 −7.459 ± 9.136e−06
−7.2
−7.3
−7.4
−7.5
−7.6
−7.7
pull
Entries 77
Mean −86.34
Std Dev 131.1
5000
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000

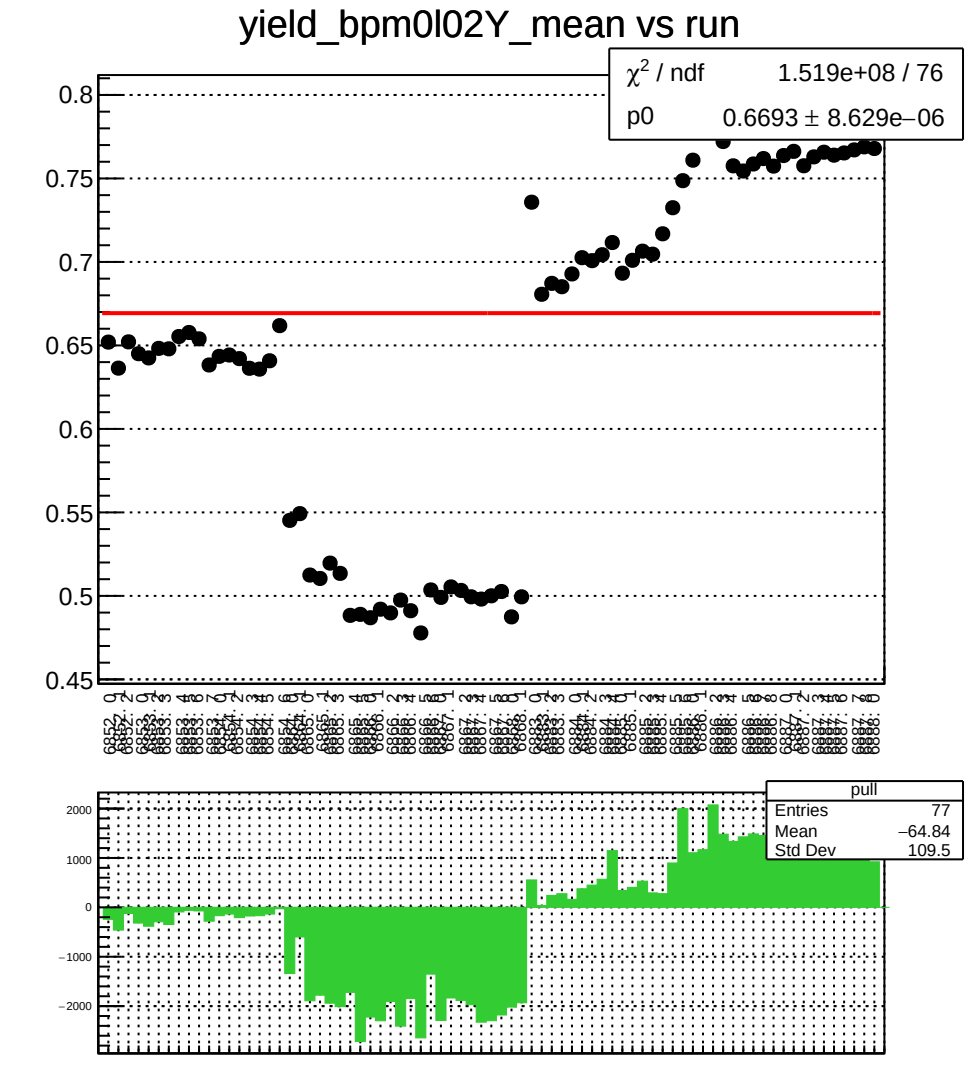

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

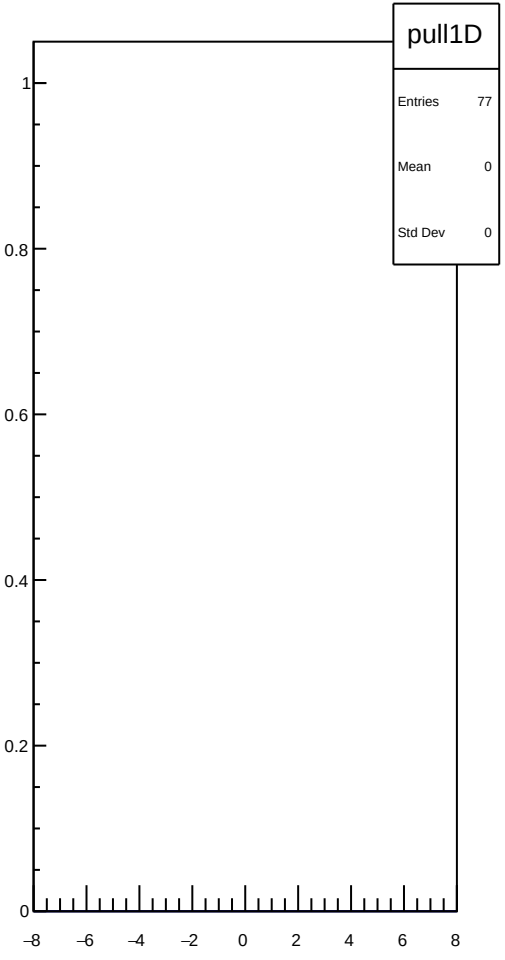

yield_bpm0l01Y_rms vs run
χ² / ndf 3.188e+05 / 76
p0 0.007336 ± 6.46e–06
0.12
0.1
0.08
0.06
0.04
0.02

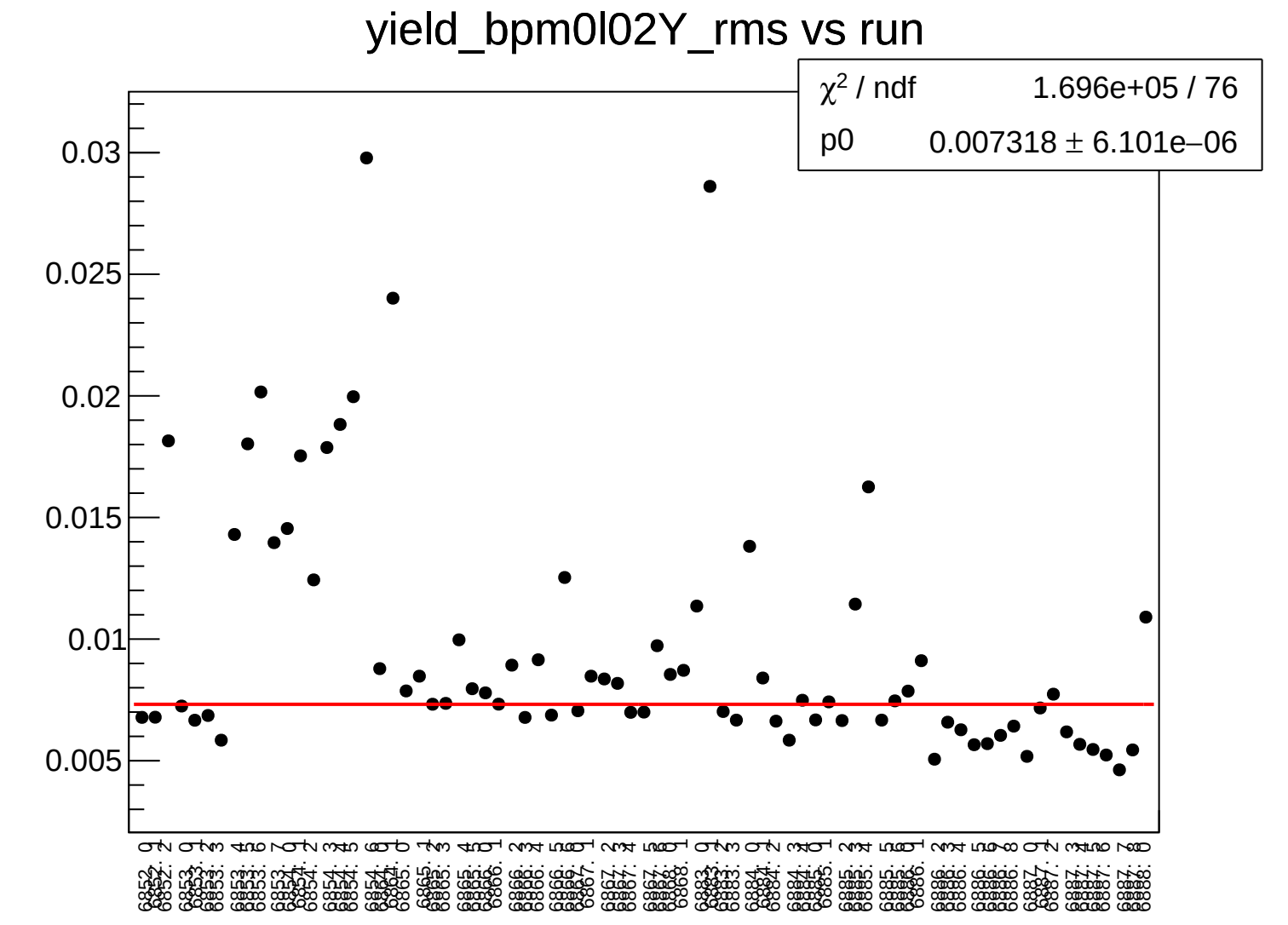

yield_bpm0l02X_mean vs run
χ² / ndf 7.334e+08 / 76
p0 −3.568 ± 1.944e−05
pull
Entries 77
Mean 578.9
Std Dev 560.4

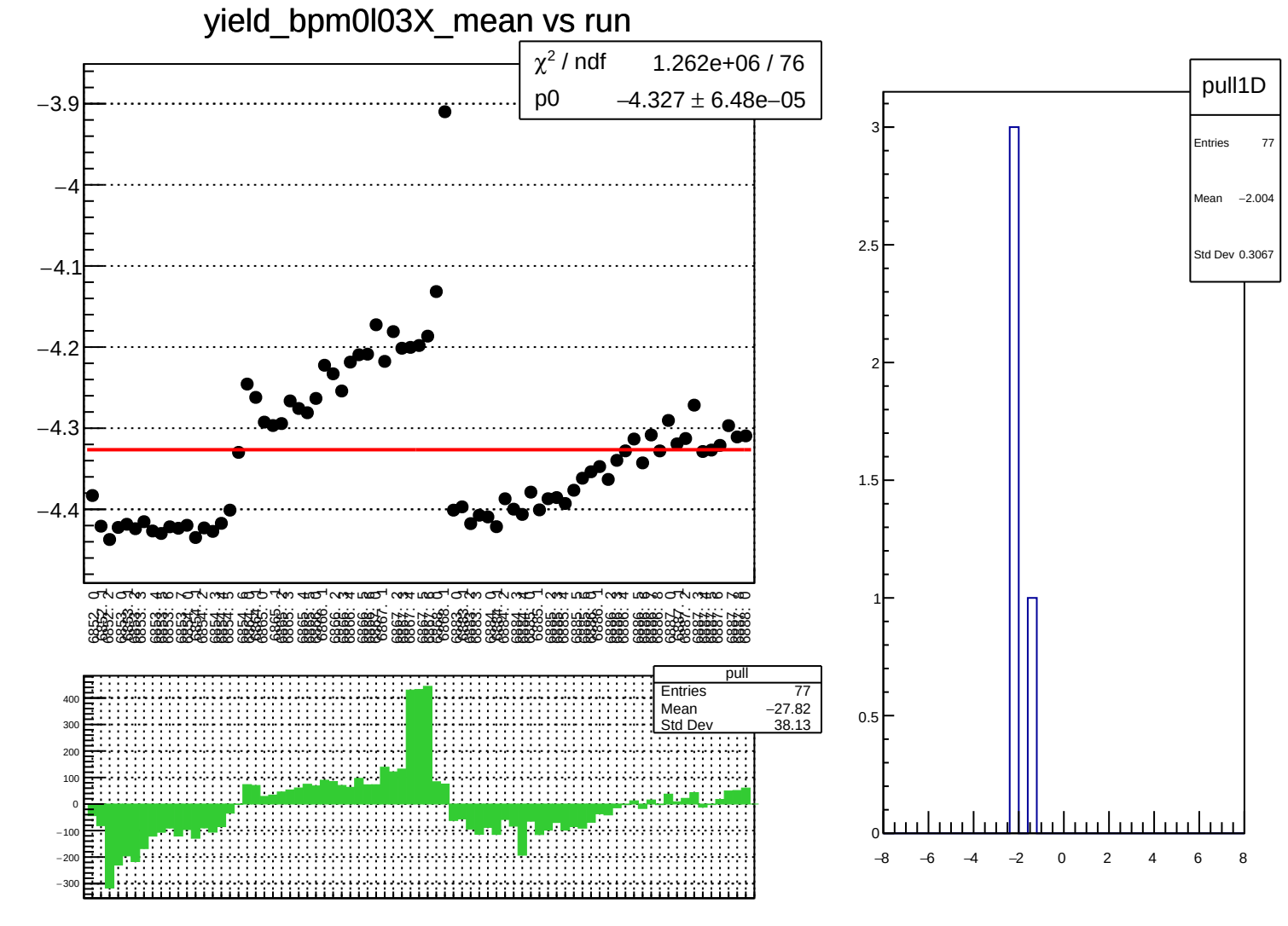

pull1D
Entries 77
Mean 0
Std Dev 0

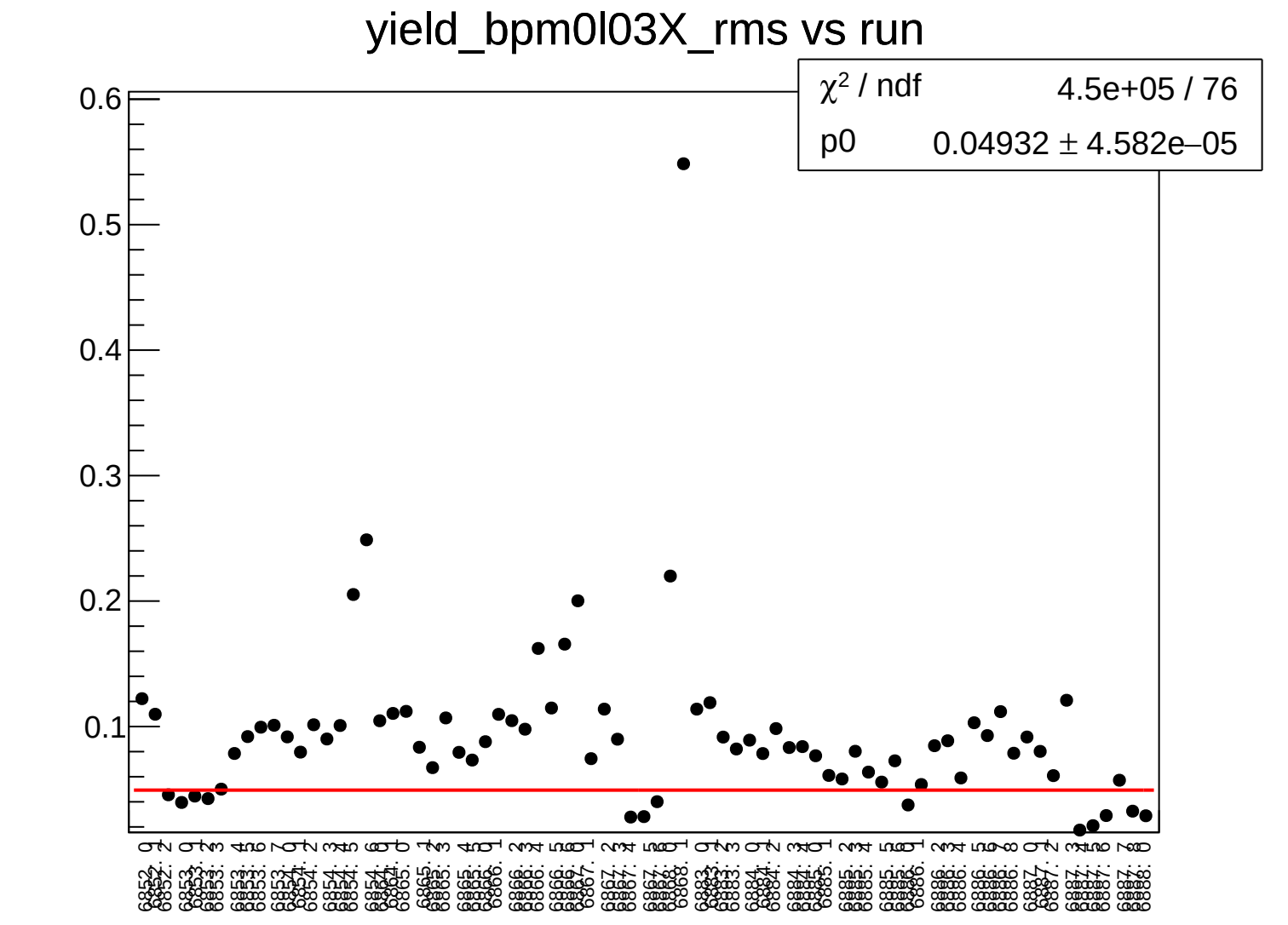

yield_bpm0l02X_rms vs run
χ² / ndf 1.083e+05 / 76
p0 0.01683 ± 1.375e–05
0.12
0.1
0.08
0.06
0.04
0.02

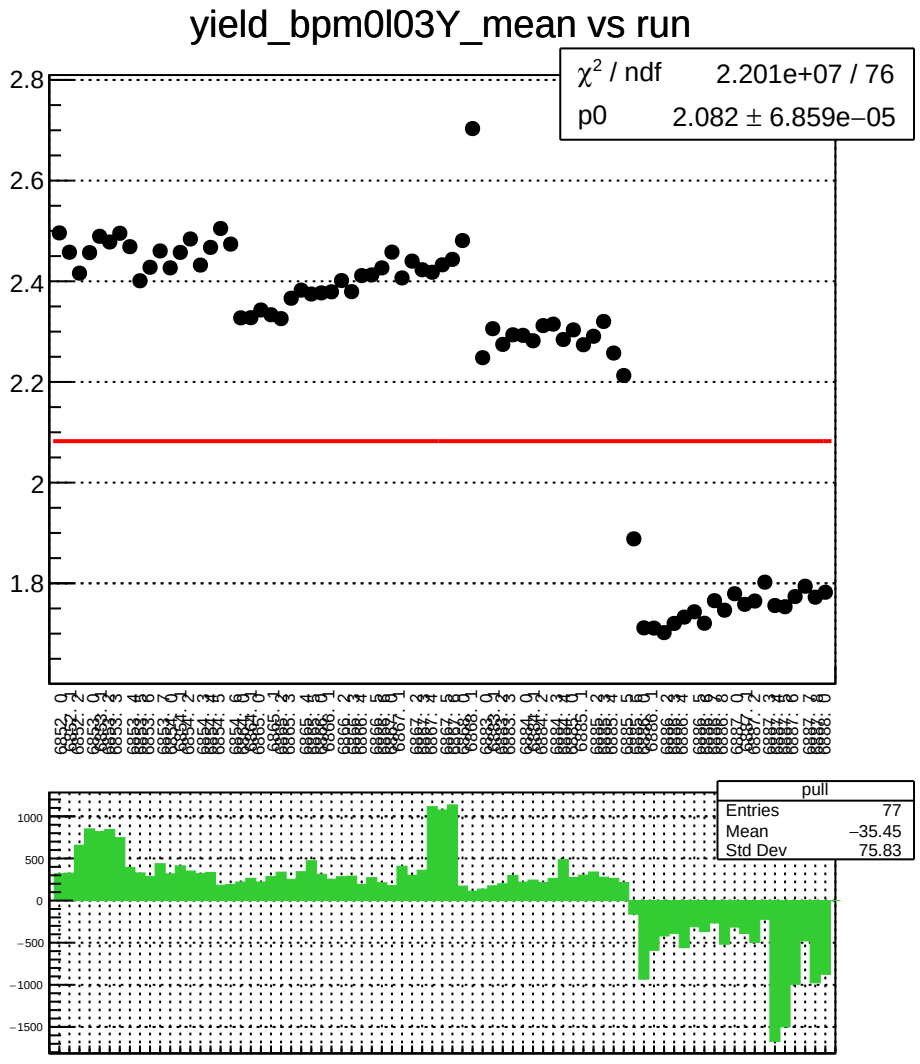

yield_bpm0l02Y_mean vs run
χ² / ndf 1.519e+08 / 76
p0 0.6693 ± 8.629e−06
pull
Entries 77
Mean −64.84
Std Dev 109.5

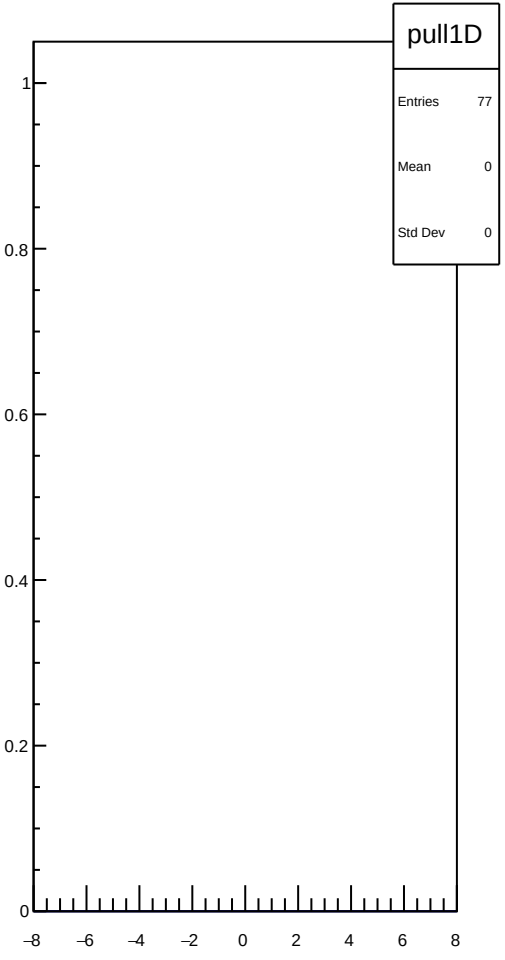

pull1D
Entries 77
Mean 0
Std Dev 0

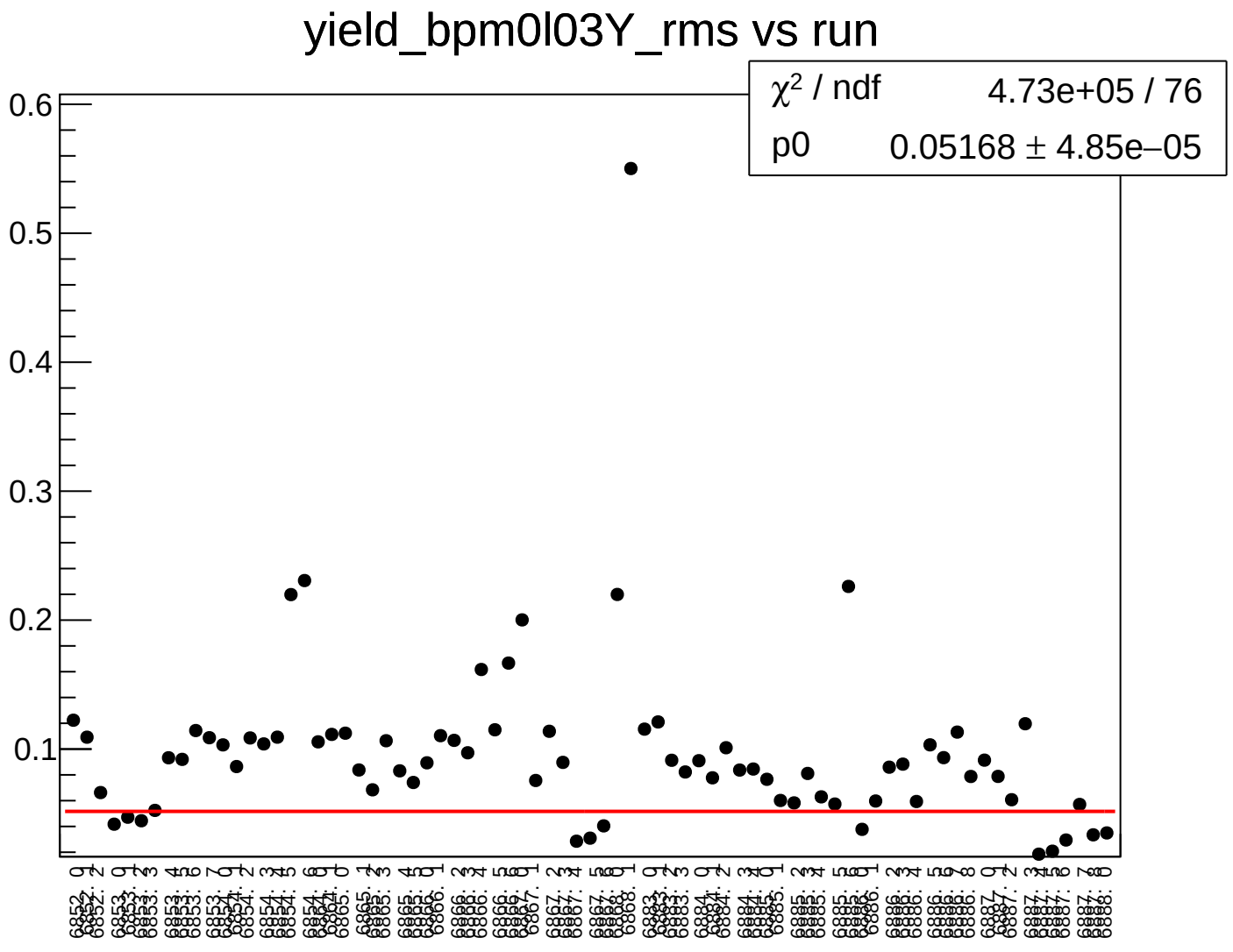

yield_bpm0l02Y_rms vs run
χ² / ndf 1.696e+05 / 76
p0 0.007318 ± 6.101e−06
0.03
0.025
0.02
0.015
0.01
0.005

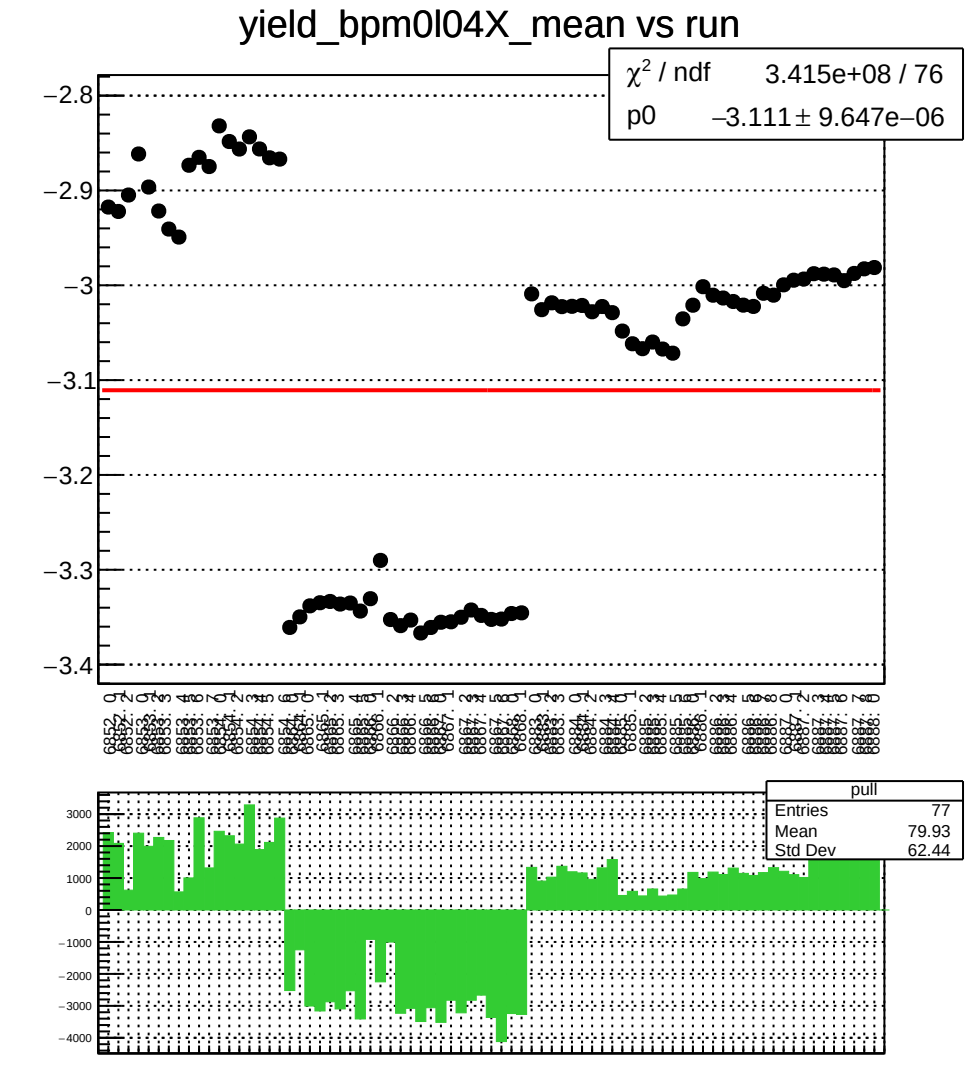

yield_bpm0l03X_mean vs run
χ² / ndf 1.262e+06 / 76
p0 −4.327 ± 6.48e−05
−3.9
−4
−4.1
−4.2
−4.3
−4.4
pull
Entries 77
Mean −27.82
Std Dev 38.13
400
300
200
100
0
−100
−200
−300
pull1D
Entries 77
Mean −2.004
Std Dev 0.3067
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

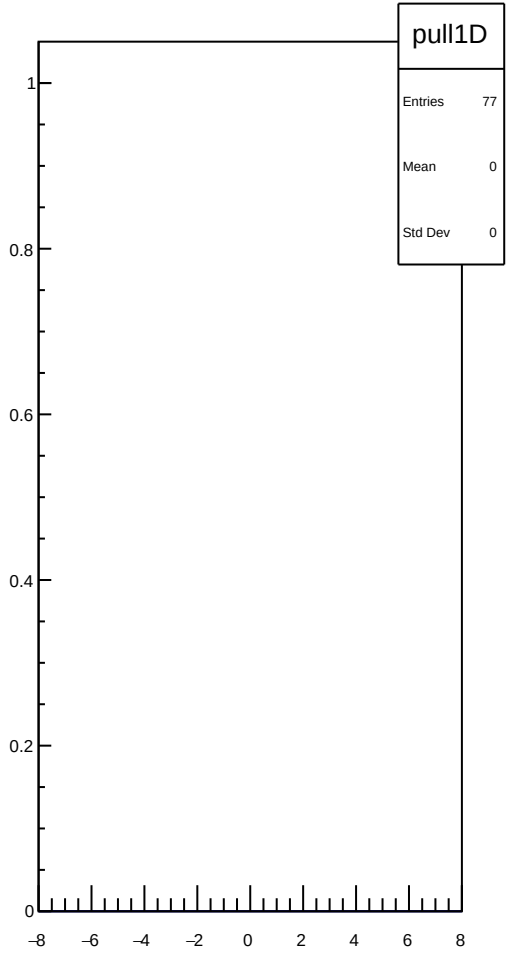

yield_bpm0l03X_rms vs run
χ² / ndf 4.5e+05 / 76
p0 0.04932 ± 4.582e−05
0.6
0.5
0.4
0.3
0.2
0.1

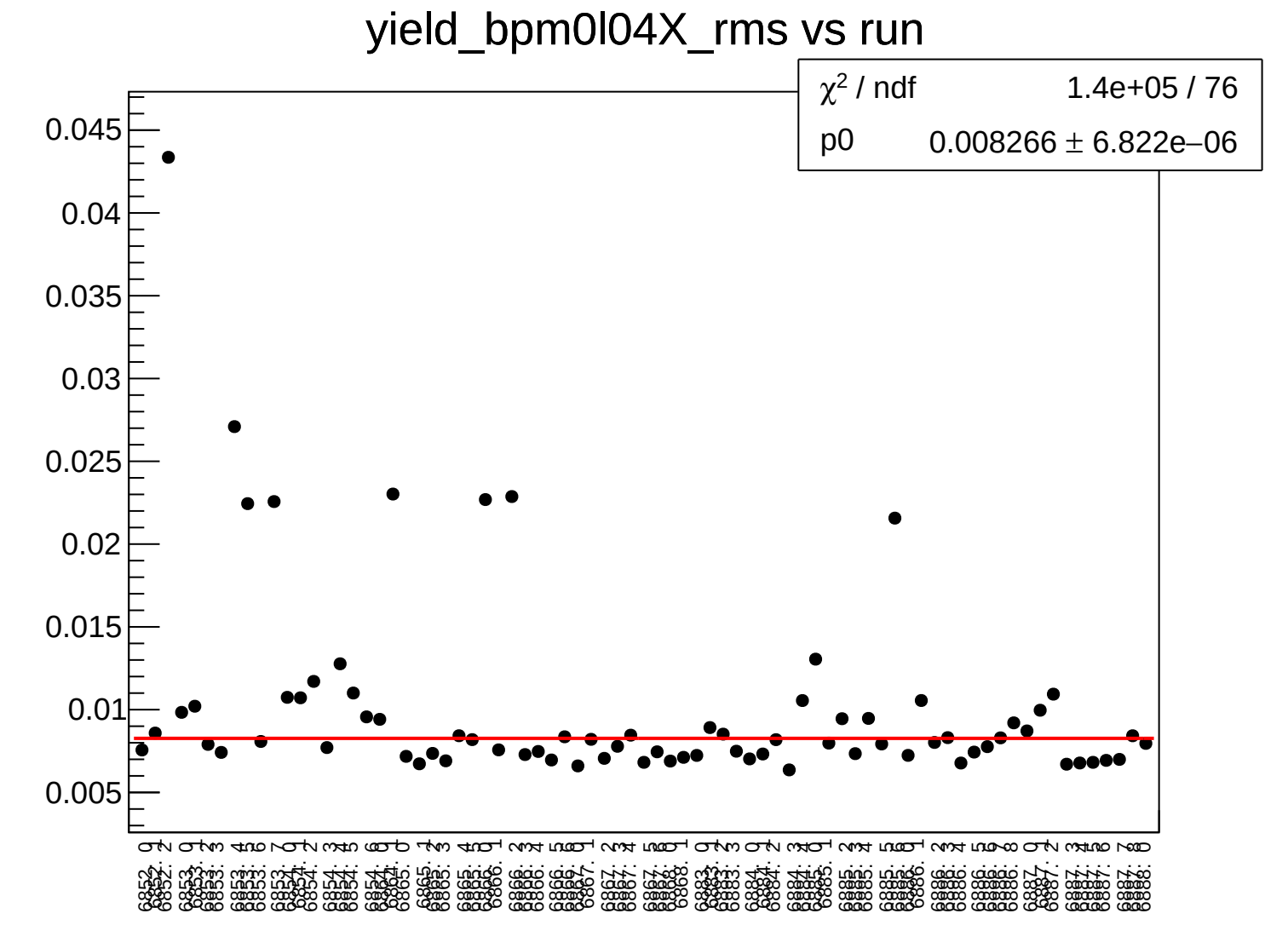

yield_bpm0l03Y_mean vs run
χ² / ndf 2.201e+07 / 76
p0 2.082 ± 6.859e−05
pull
Entries 77
Mean −35.45
Std Dev 75.83

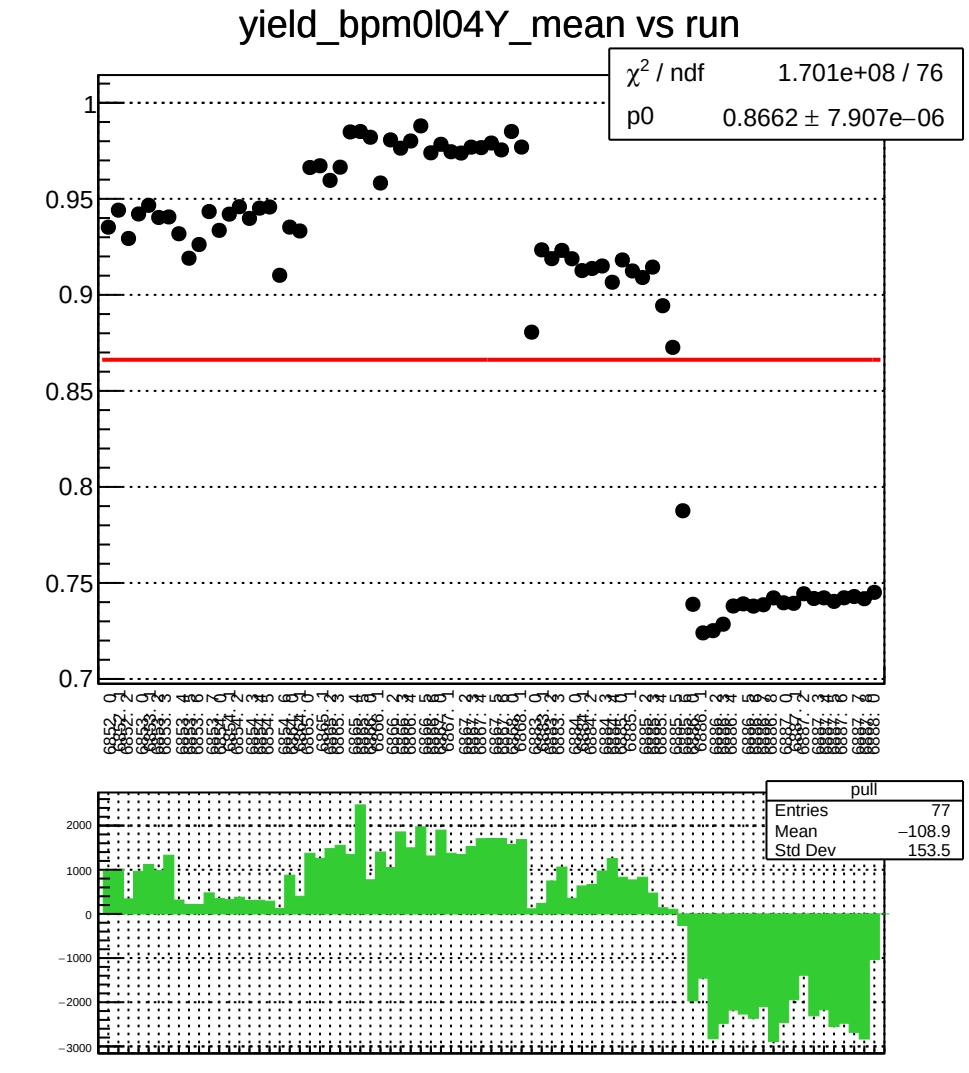

pull1D
Entries 77
Mean 0
Std Dev 0

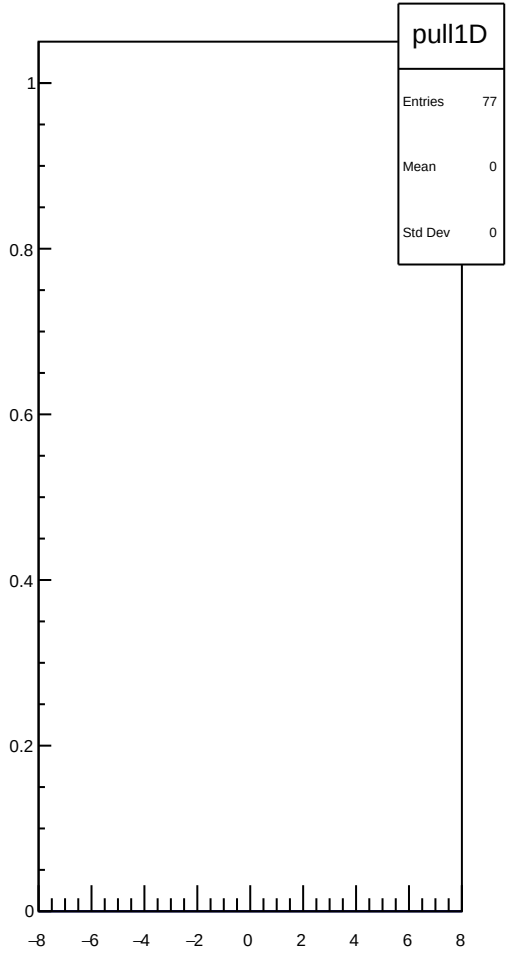

yield_bpm0l03Y_rms vs run
χ² / ndf 4.73e+05 / 76
p0 0.05168 ± 4.85e−05
0.6
0.5
0.4
0.3
0.2
0.1

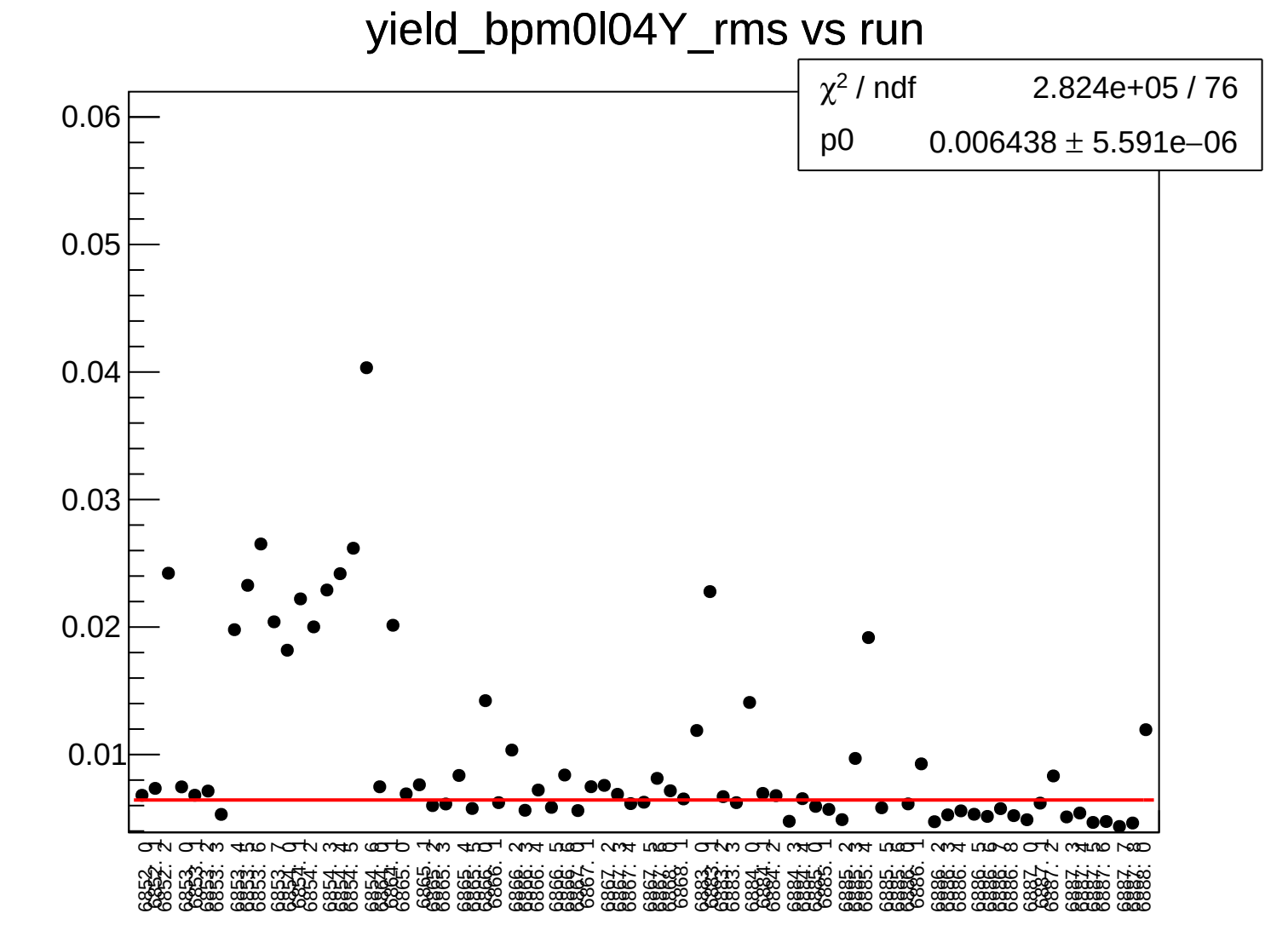

yield_bpm0l04X_mean vs run
χ² / ndf 3.415e+08 / 76
p0 −3.111 ± 9.647e−06
−2.8
−2.9
−3
−3.1
−3.2
−3.3
−3.4
pull
Entries 77
Mean 79.93
Std Dev 62.44
3000
2000
1000
0
−1000
−2000
−3000
−4000

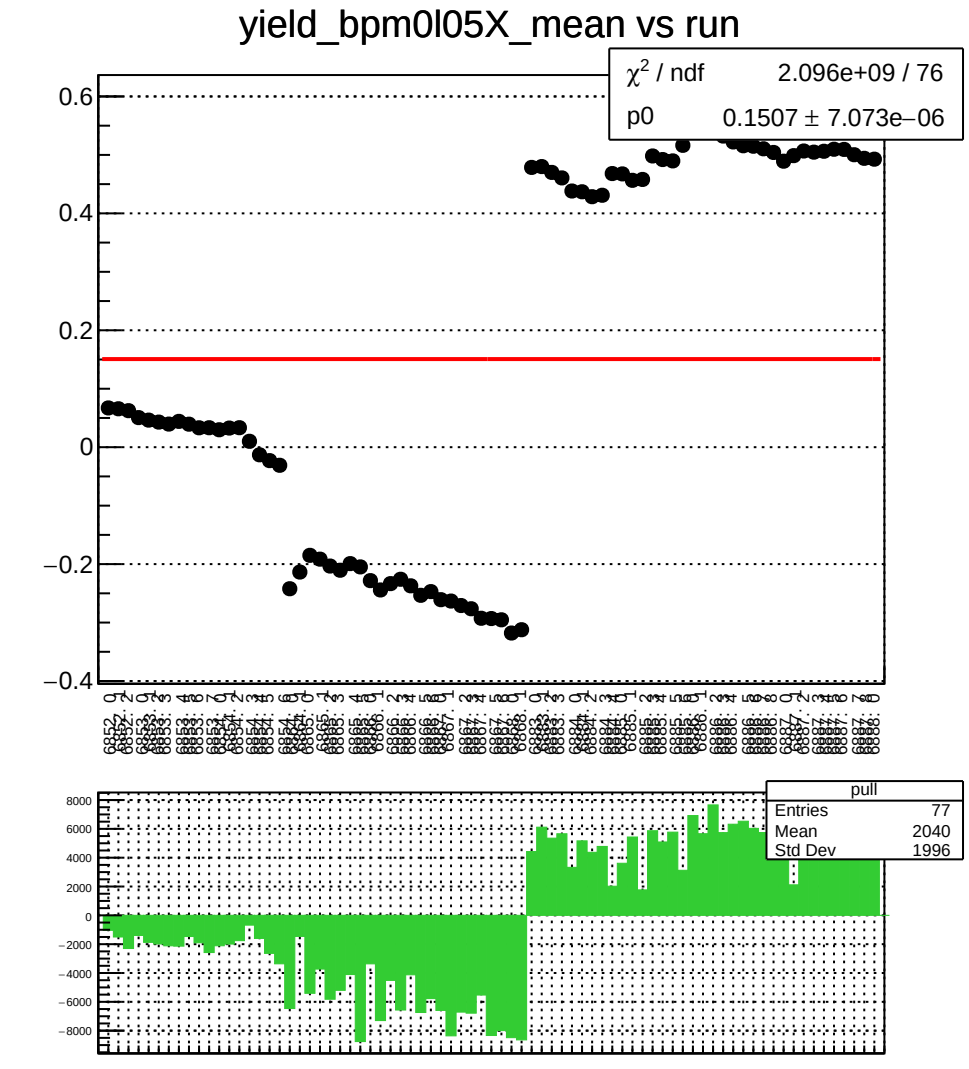

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

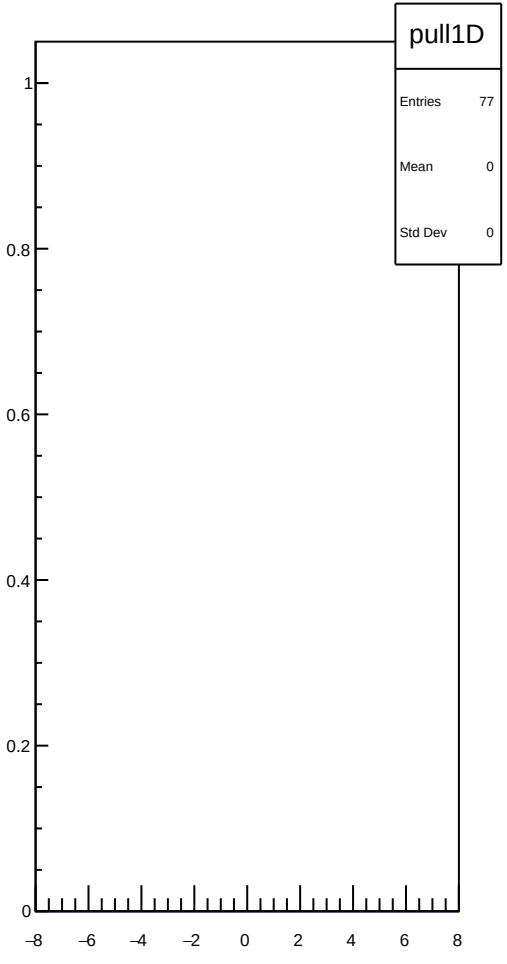

yield_bpm0l04X_rms vs run
χ² / ndf 1.4e+05 / 76
p0 0.008266 ± 6.822e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

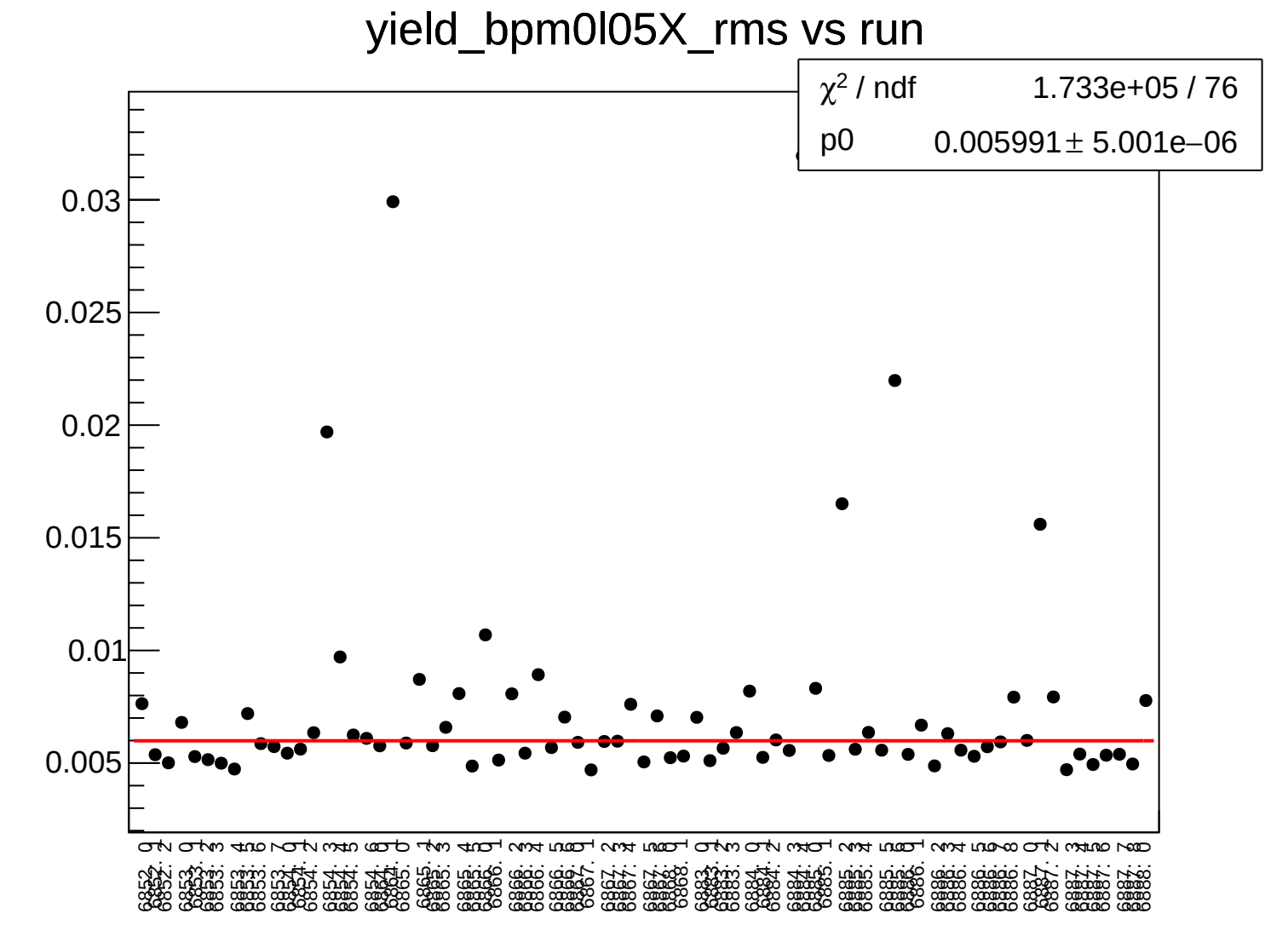

yield_bpm0l04Y_mean vs run
χ² / ndf 1.701e+08 / 76
p0 0.8662 ± 7.907e−06
pull
Entries 77
Mean −108.9
Std Dev 153.5

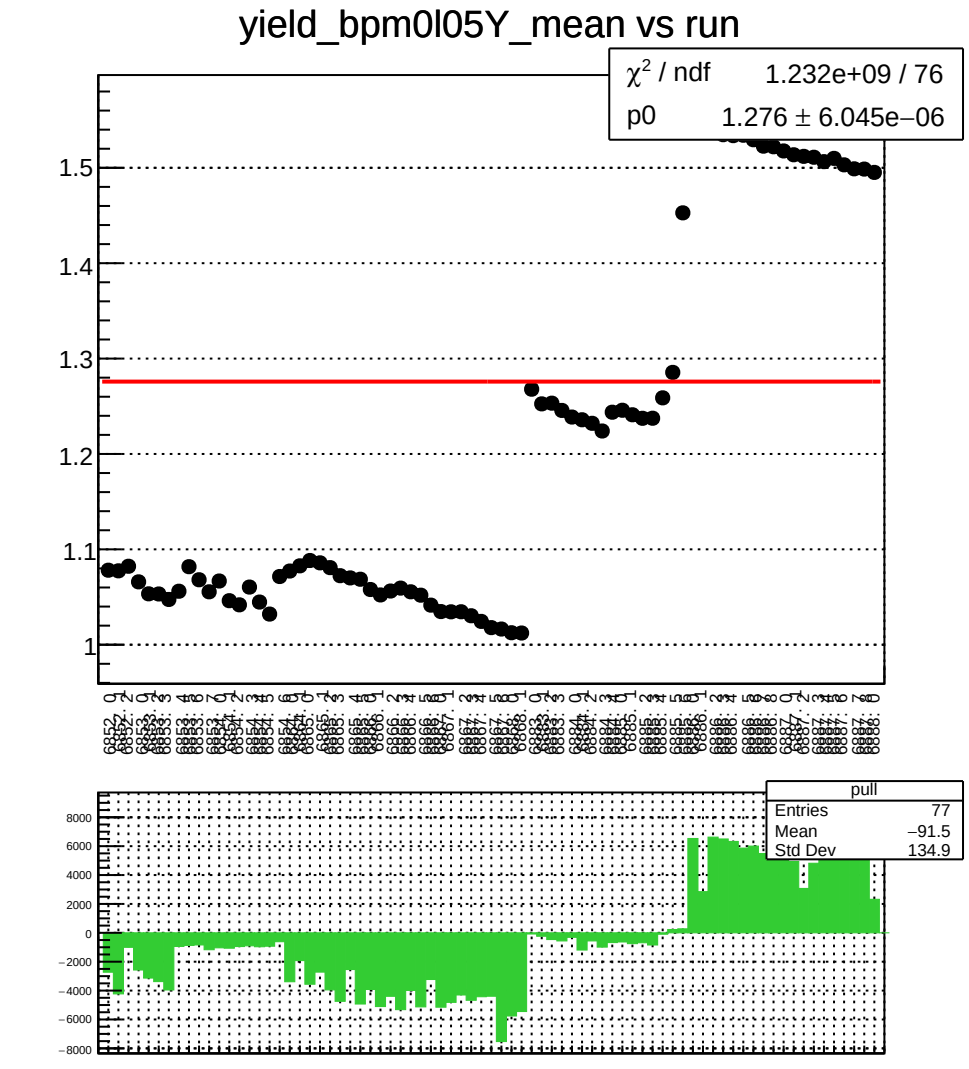

pull1D
Entries 77
Mean 0
Std Dev 0

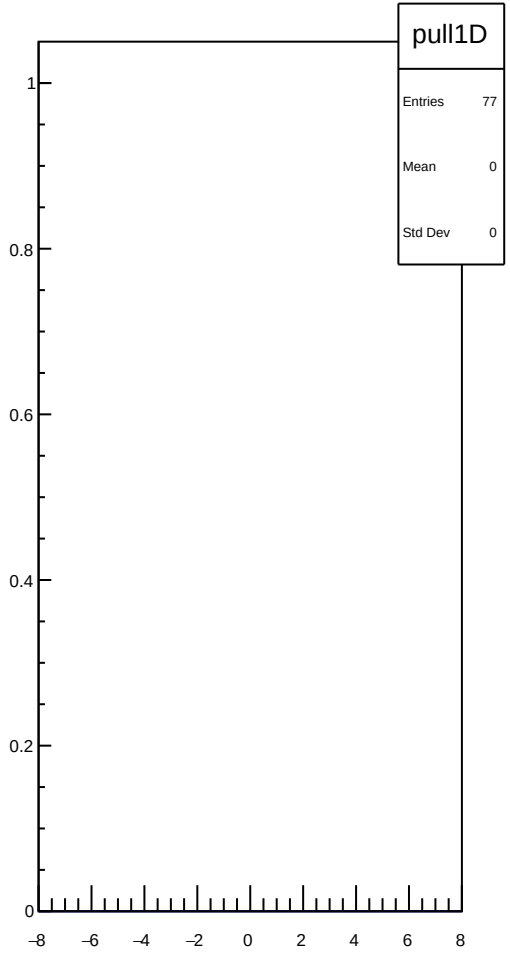

yield_bpm0l04Y_rms vs run
χ² / ndf 2.824e+05 / 76
p0 0.006438 ± 5.591e−06
0.06
0.05
0.04
0.03
0.02
0.01

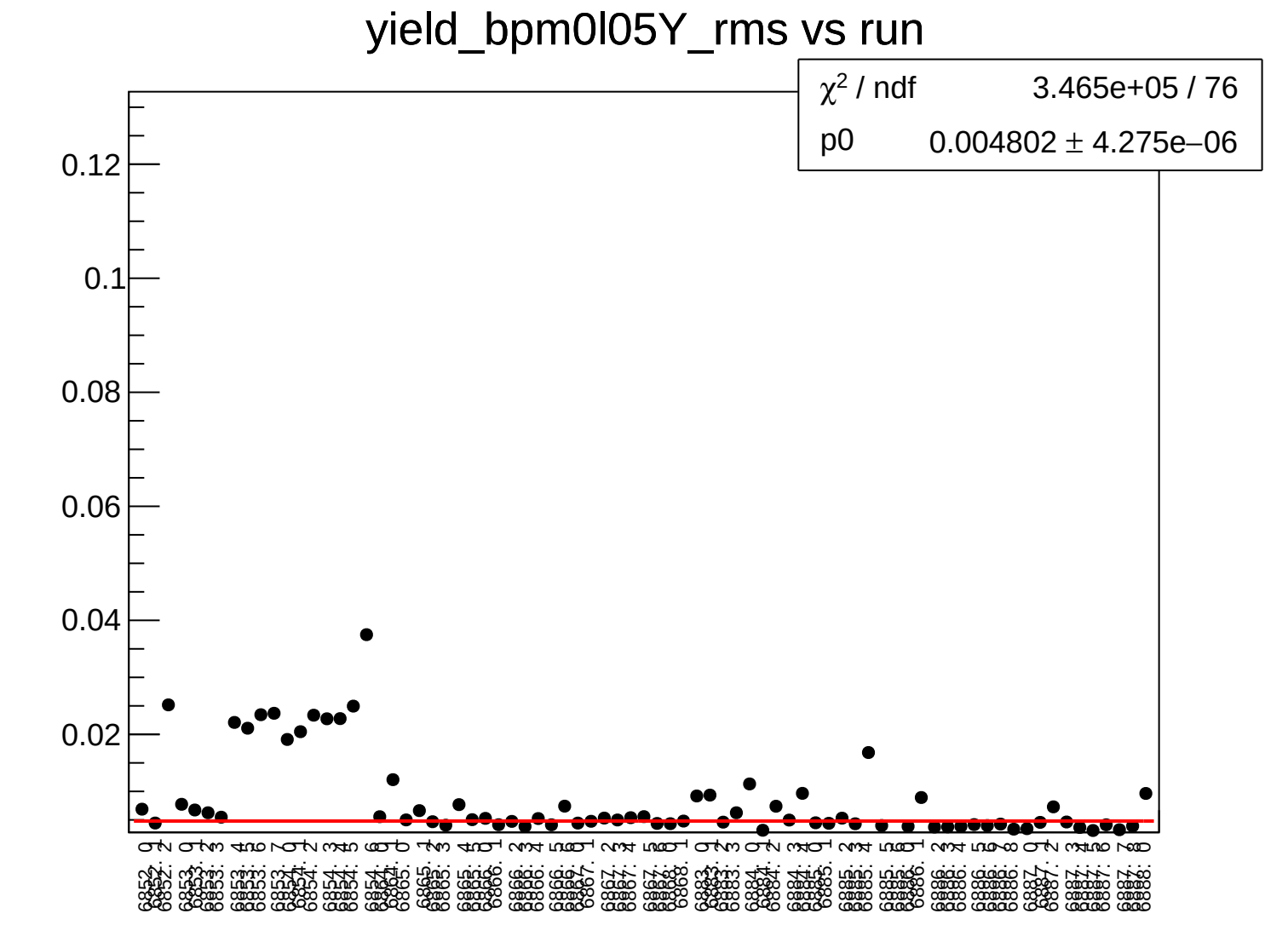

yield_bpm0l05X_mean vs run
χ² / ndf 2.096e+09 / 76
p0 0.1507 ± 7.073e−06
pull
Entries 77
Mean 2040
Std Dev 1996

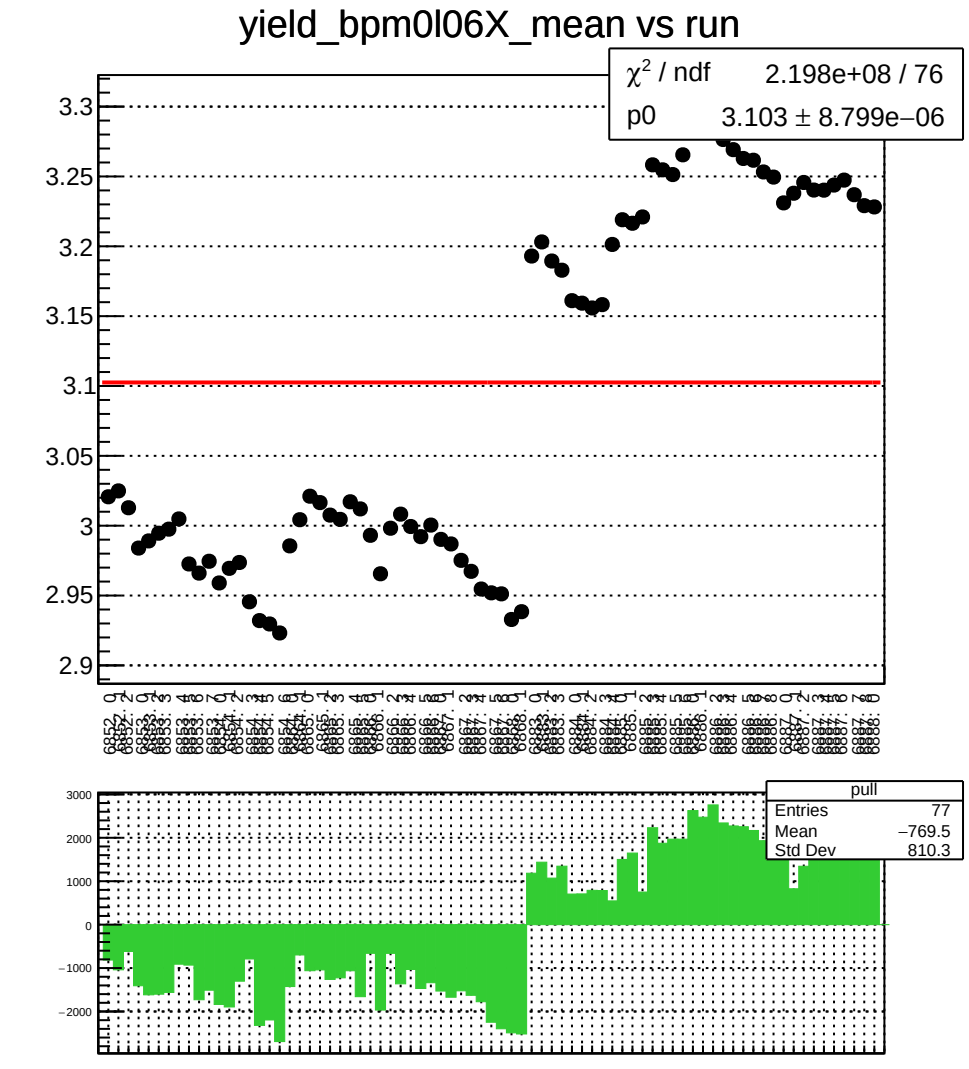

pull1D
Entries 77
Mean 0
Std Dev 0

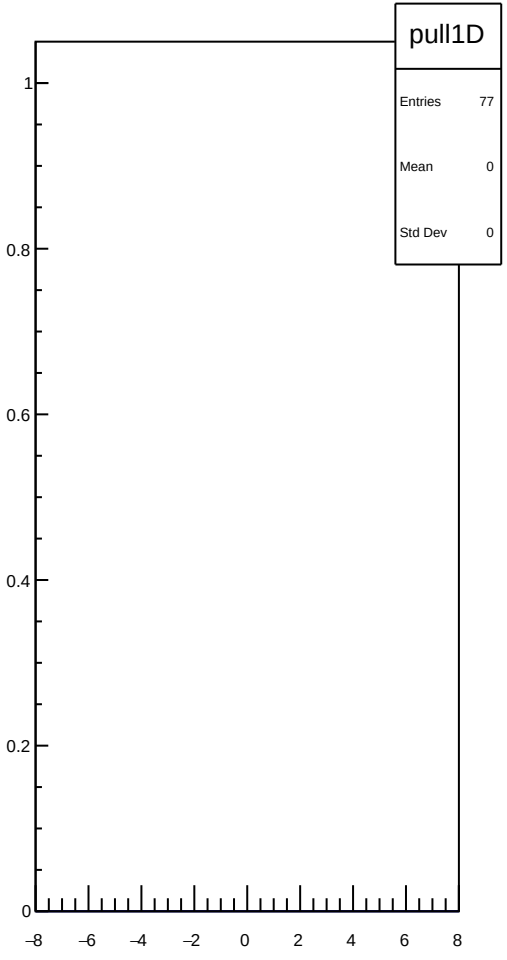

yield_bpm0l05X_rms vs run
χ^2 / ndf 1.733e+05 / 76
p0 0.005991 ± 5.001e−06
0.03
0.025
0.02
0.015
0.01
0.005

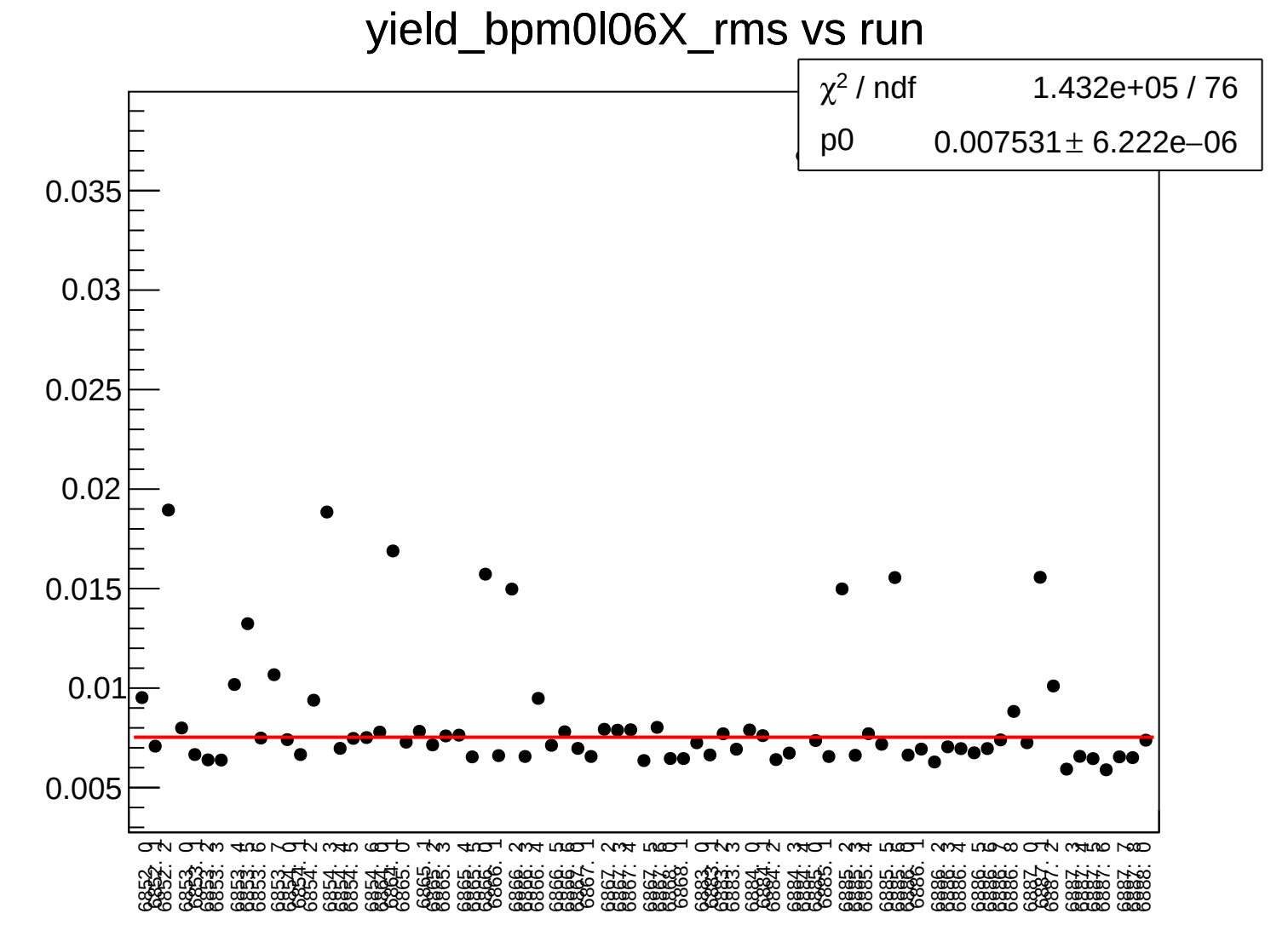

yield_bpm0l05Y_mean vs run
χ² / ndf 1.232e+09 / 76
p0 1.276 ± 6.045e−06
pull
Entries 77
Mean −91.5
Std Dev 134.9

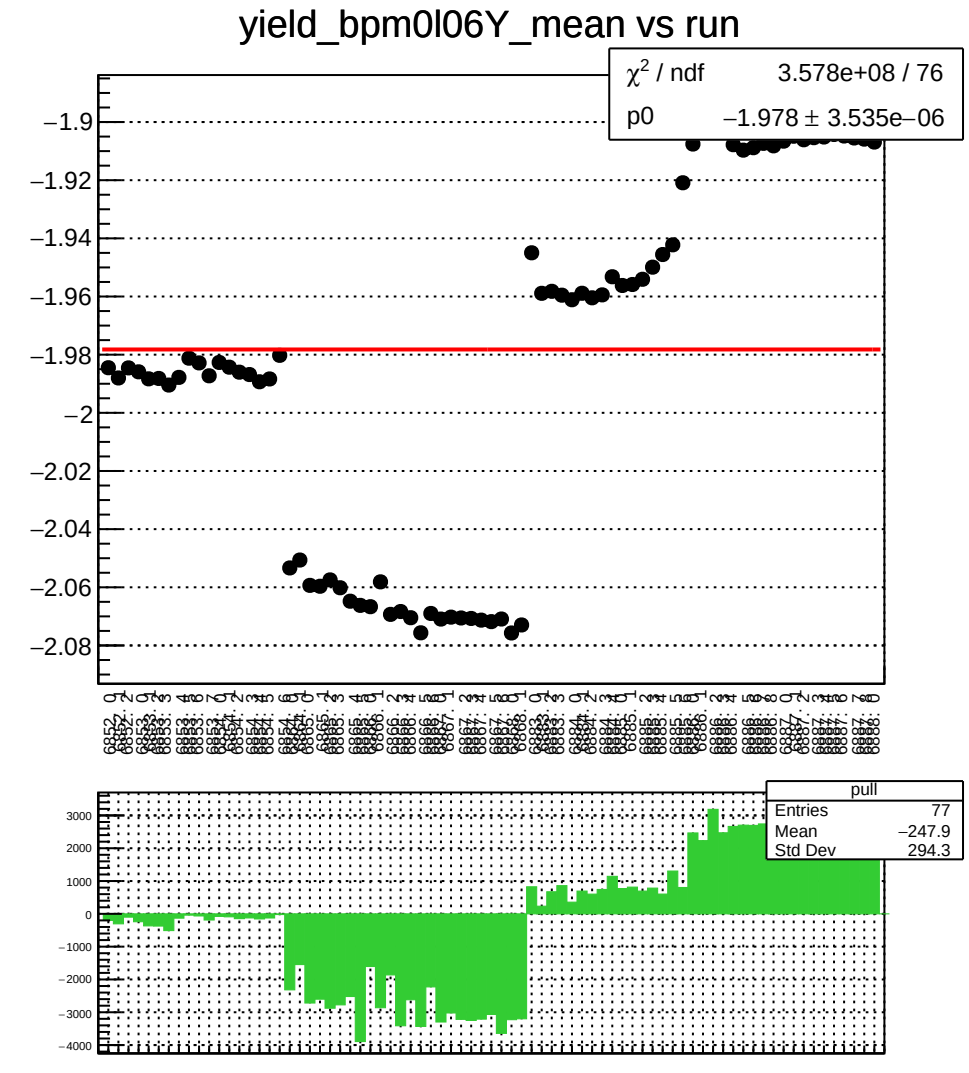

pull1D
Entries 77
Mean 0
Std Dev 0

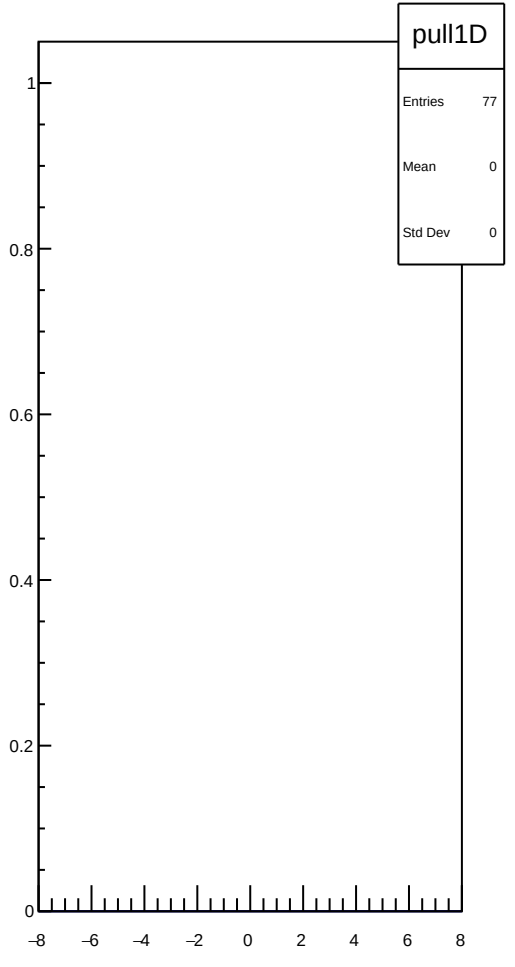

yield_bpm0l05Y_rms vs run
χ² / ndf 3.465e+05 / 76
p0 0.004802 ± 4.275e−06
0.12
0.1
0.08
0.06
0.04
0.02

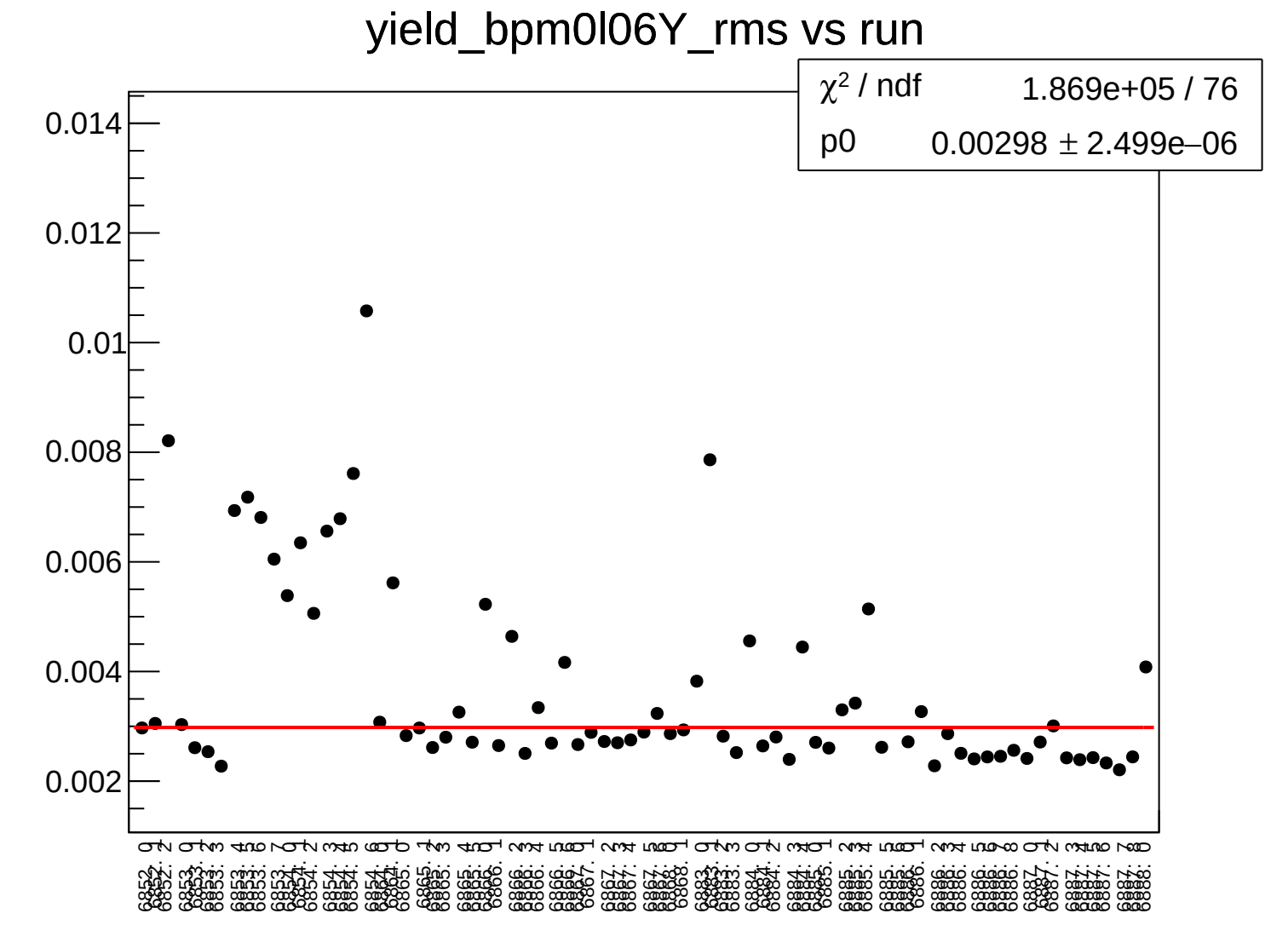

yield_bpm0l06X_mean vs run
χ² / ndf 2.198e+08 / 76
p0 3.103 ± 8.799e−06
pull
Entries 77
Mean −769.5
Std Dev 810.3

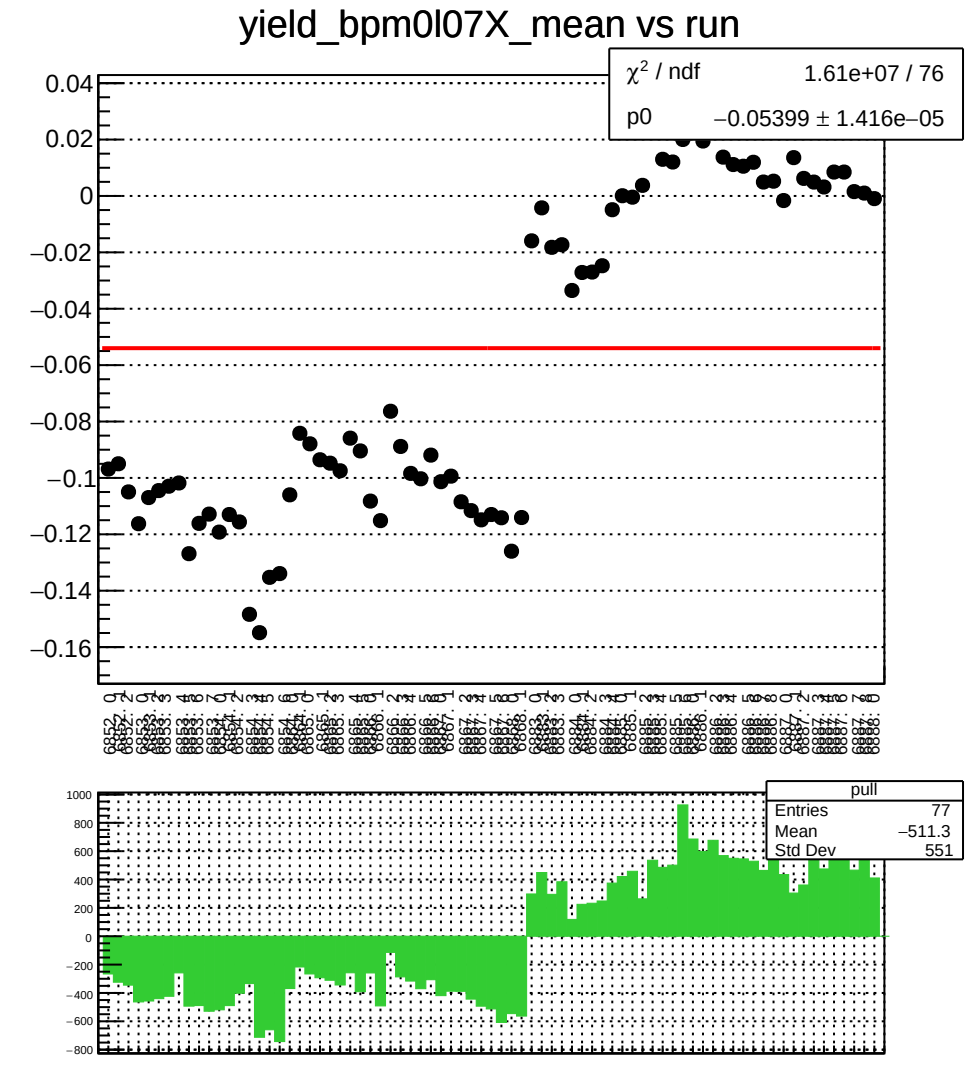

pull1D
Entries 77
Mean 0
Std Dev 0

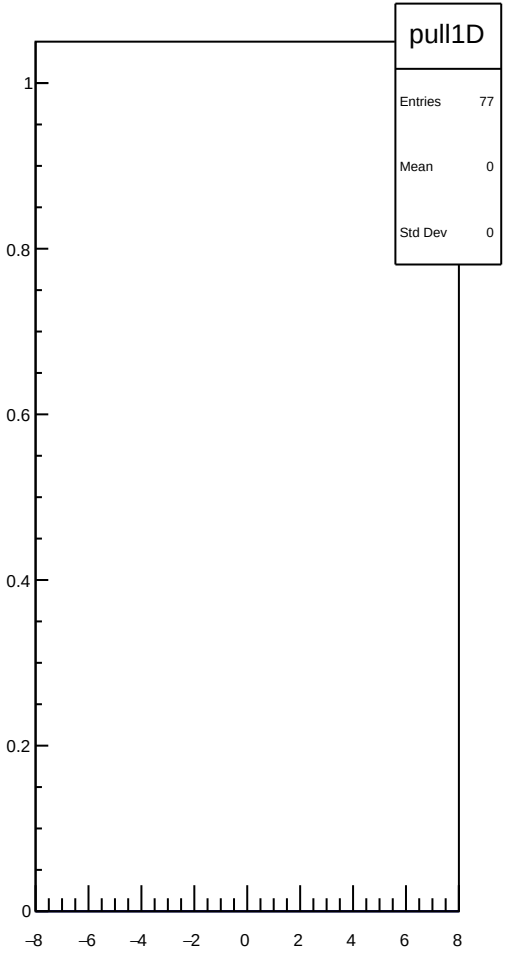

yield_bpm0l06X_rms vs run
χ² / ndf 1.432e+05 / 76
p0 0.007531 ± 6.222e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

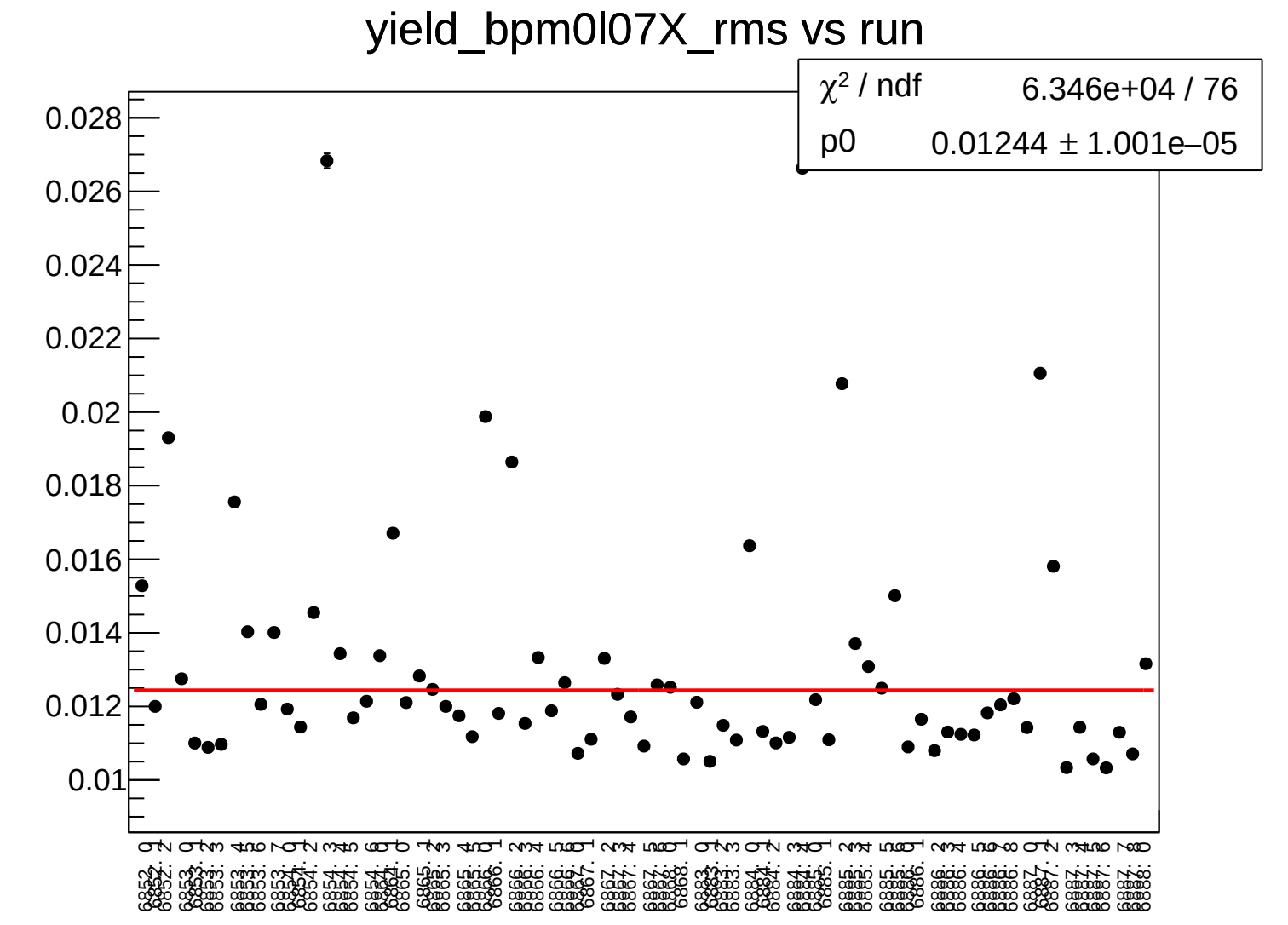

yield_bpm0l06Y_mean vs run
χ² / ndf 3.578e+08 / 76
p0 −1.978 ± 3.535e−06
−1.9
−1.92
−1.94
−1.96
−1.98
−2
−2.02
−2.04
−2.06
−2.08
pull
Entries 77
Mean −247.9
Std Dev 294.3
3000
2000
1000
0
−1000
−2000
−3000
−4000

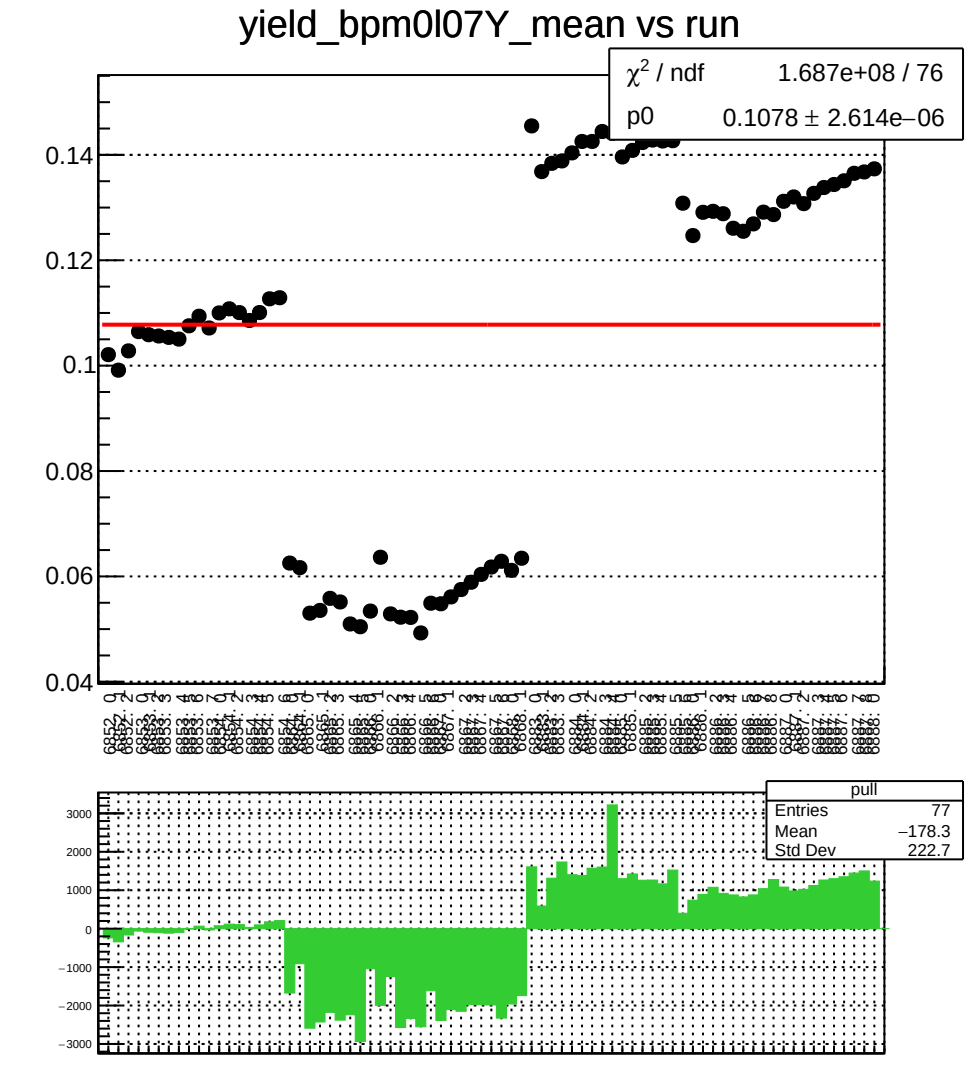

pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

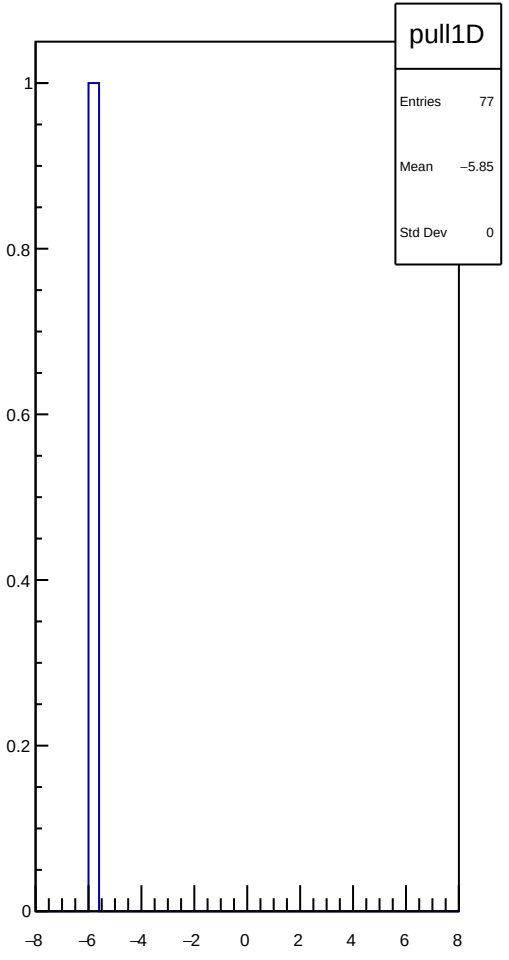

yield_bpm0l06Y_rms vs run
χ² / ndf 1.869e+05 / 76
p0 0.00298 ± 2.499e–06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

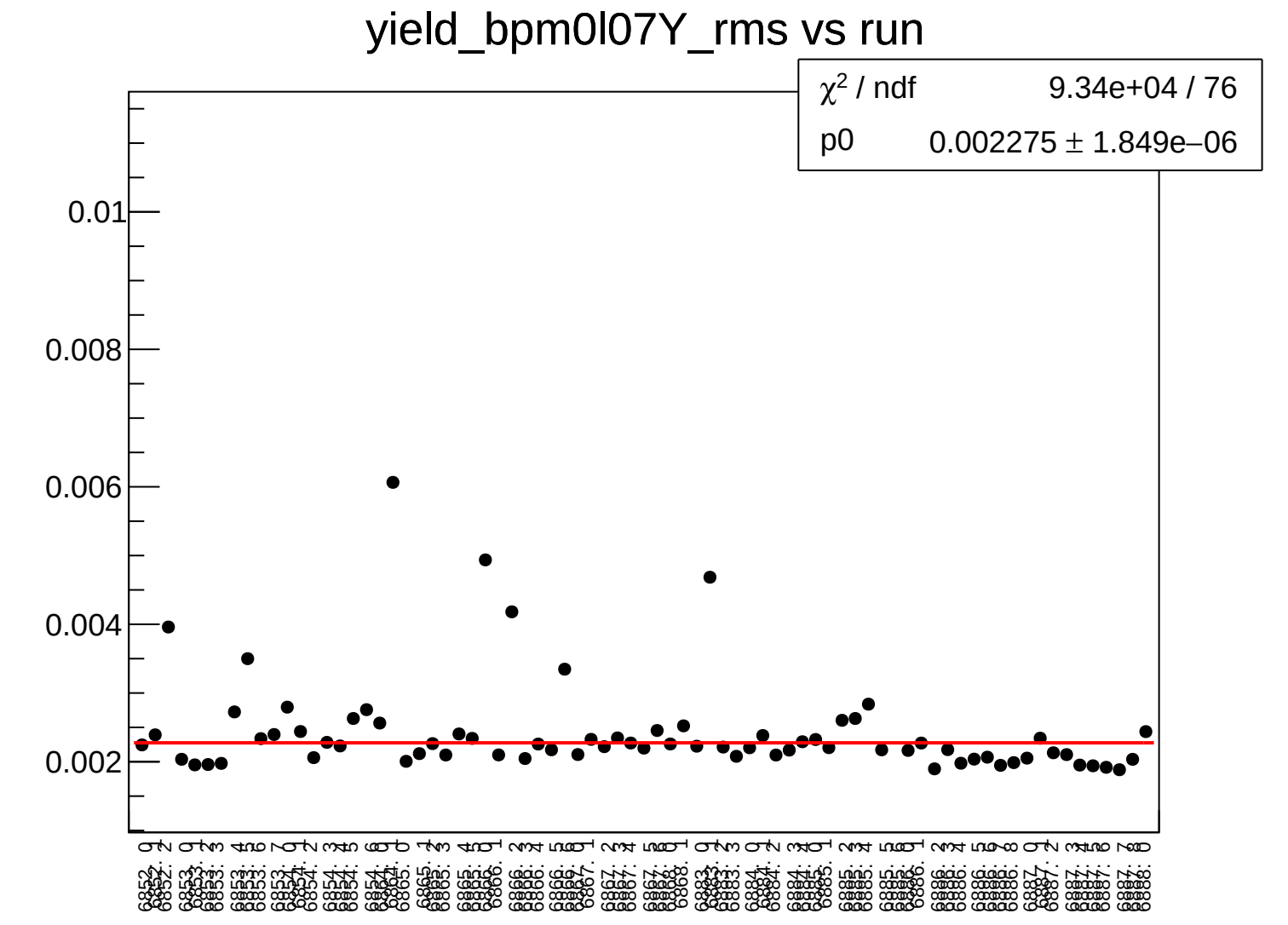

yield_bpm0l07X_mean vs run
χ² / ndf 1.61e+07 / 76
p0 −0.05399 ± 1.416e−05
pull
Entries 77
Mean −511.3
Std Dev 551

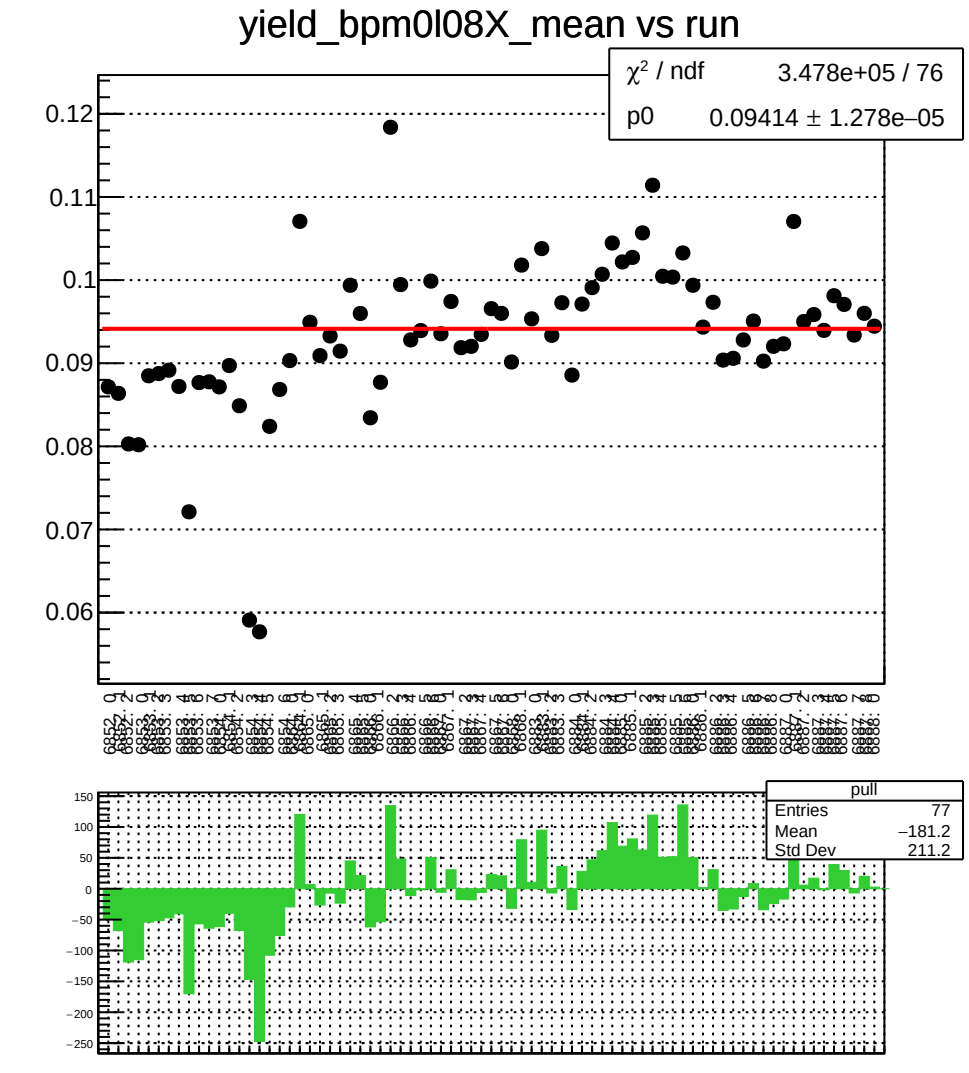

pull1D
Entries 77
Mean 0
Std Dev 0

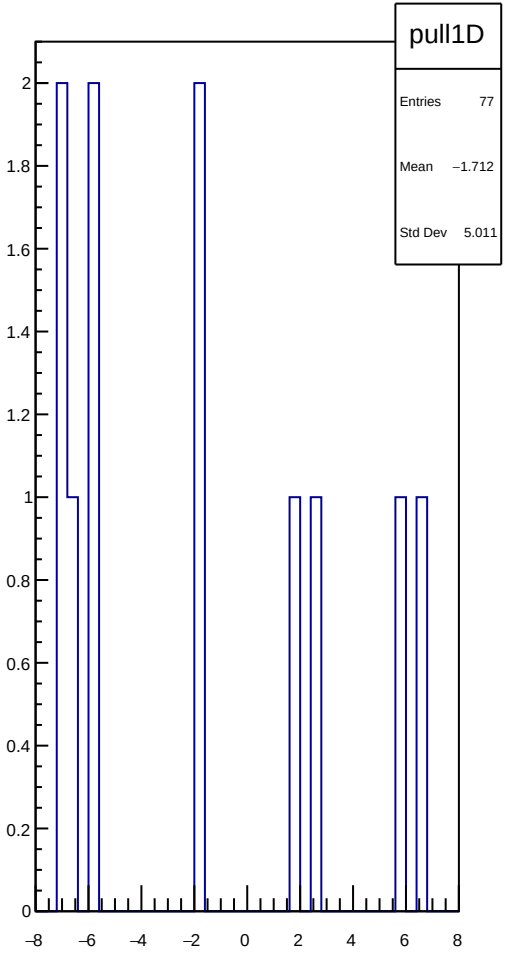

yield_bpm0l07X_rms vs run
χ² / ndf 6.346e+04 / 76
p0 0.01244 ± 1.001e–05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

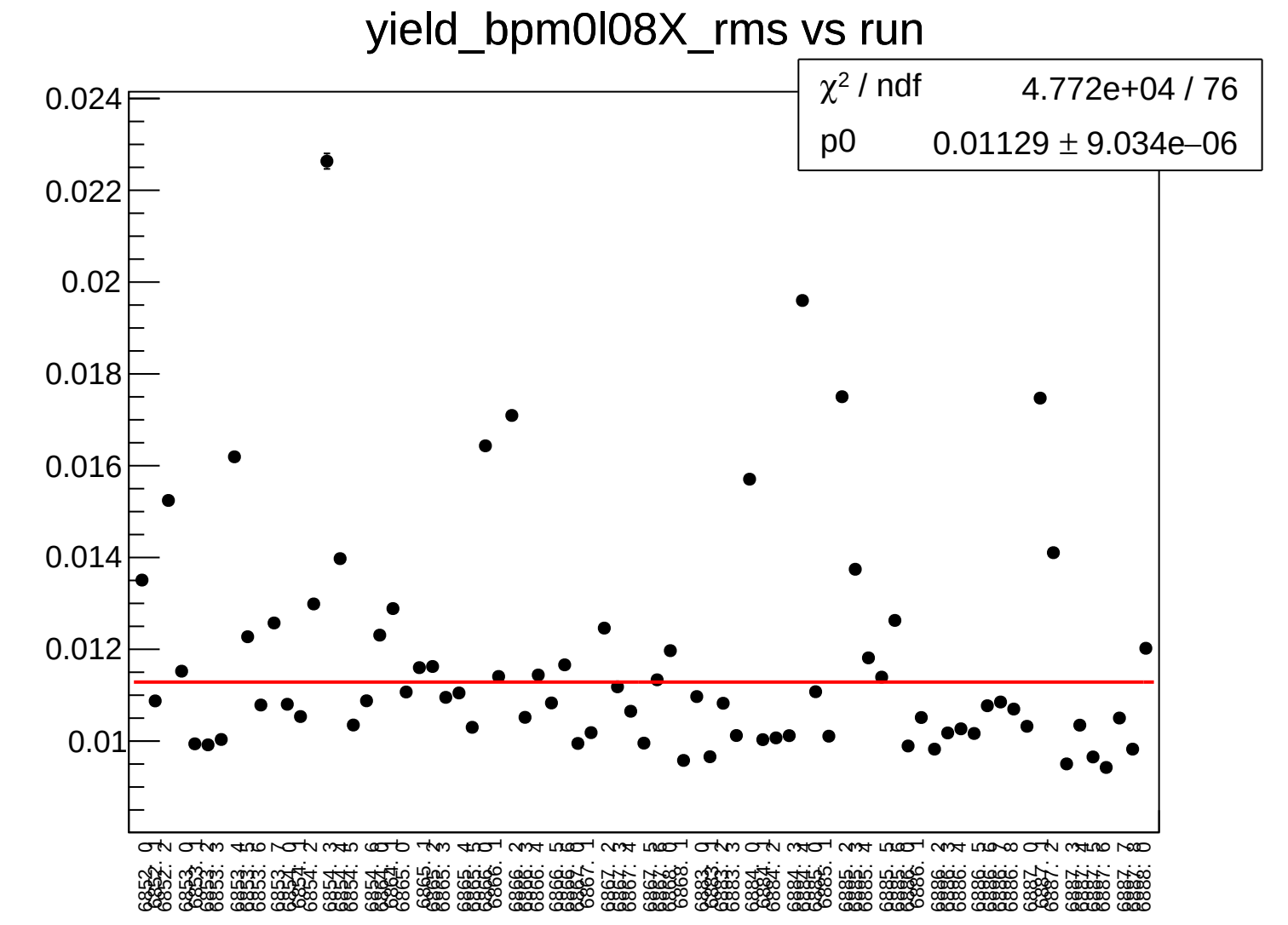

yield_bpm0l07Y_mean vs run
χ² / ndf 1.687e+08 / 76
p0 0.1078 ± 2.614e−06
0.14
0.12
0.1
0.08
0.06
0.04
pull
Entries 77
Mean −178.3
Std Dev 222.7
3000
2000
1000
0
−1000
−2000
−3000

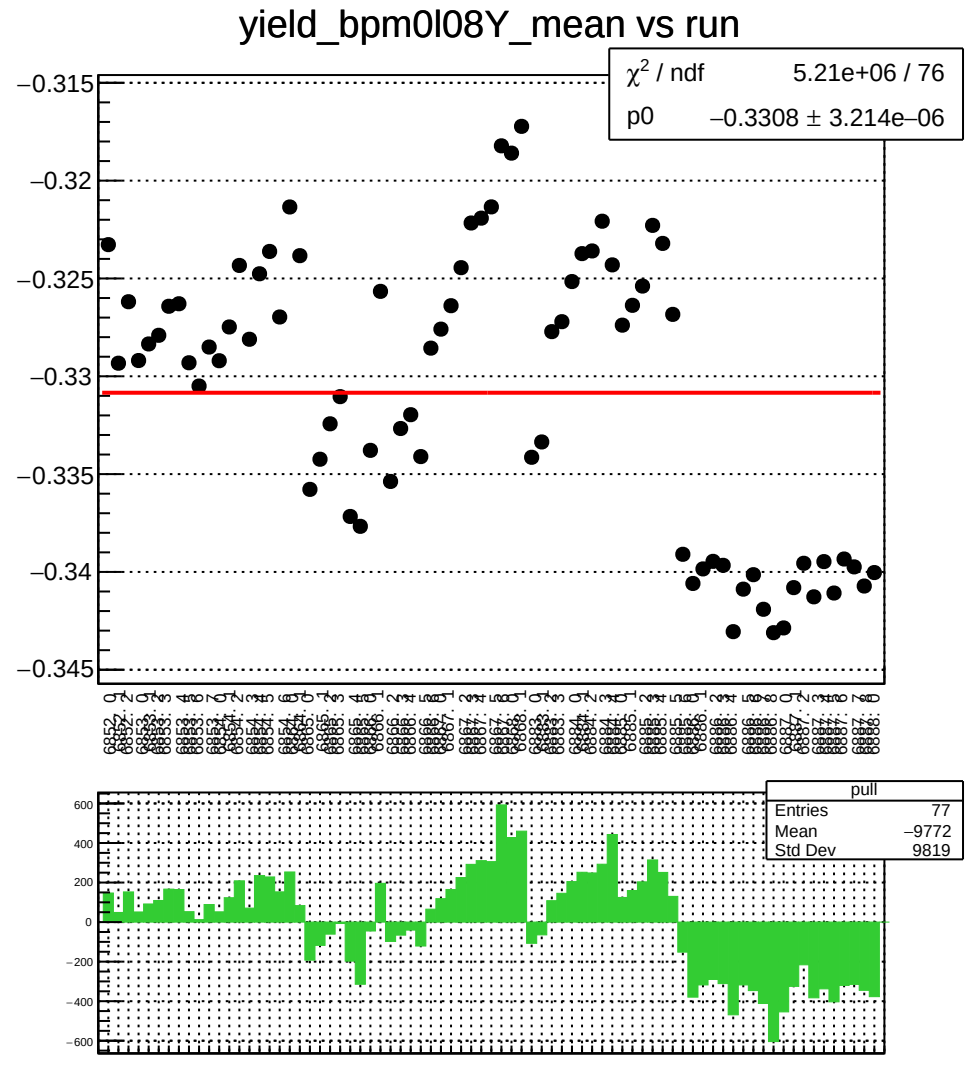

pull1D
Entries 77
Mean −5.85
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

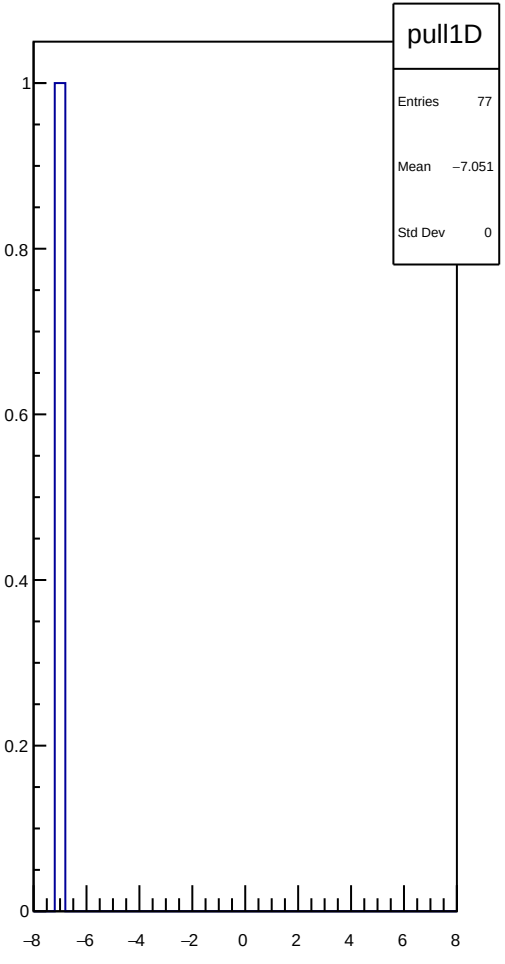

yield_bpm0l07Y_rms vs run
χ^2 / ndf 9.34e+04 / 76
p0 0.002275 ± 1.849e−06
0.01
0.008
0.006
0.004
0.002

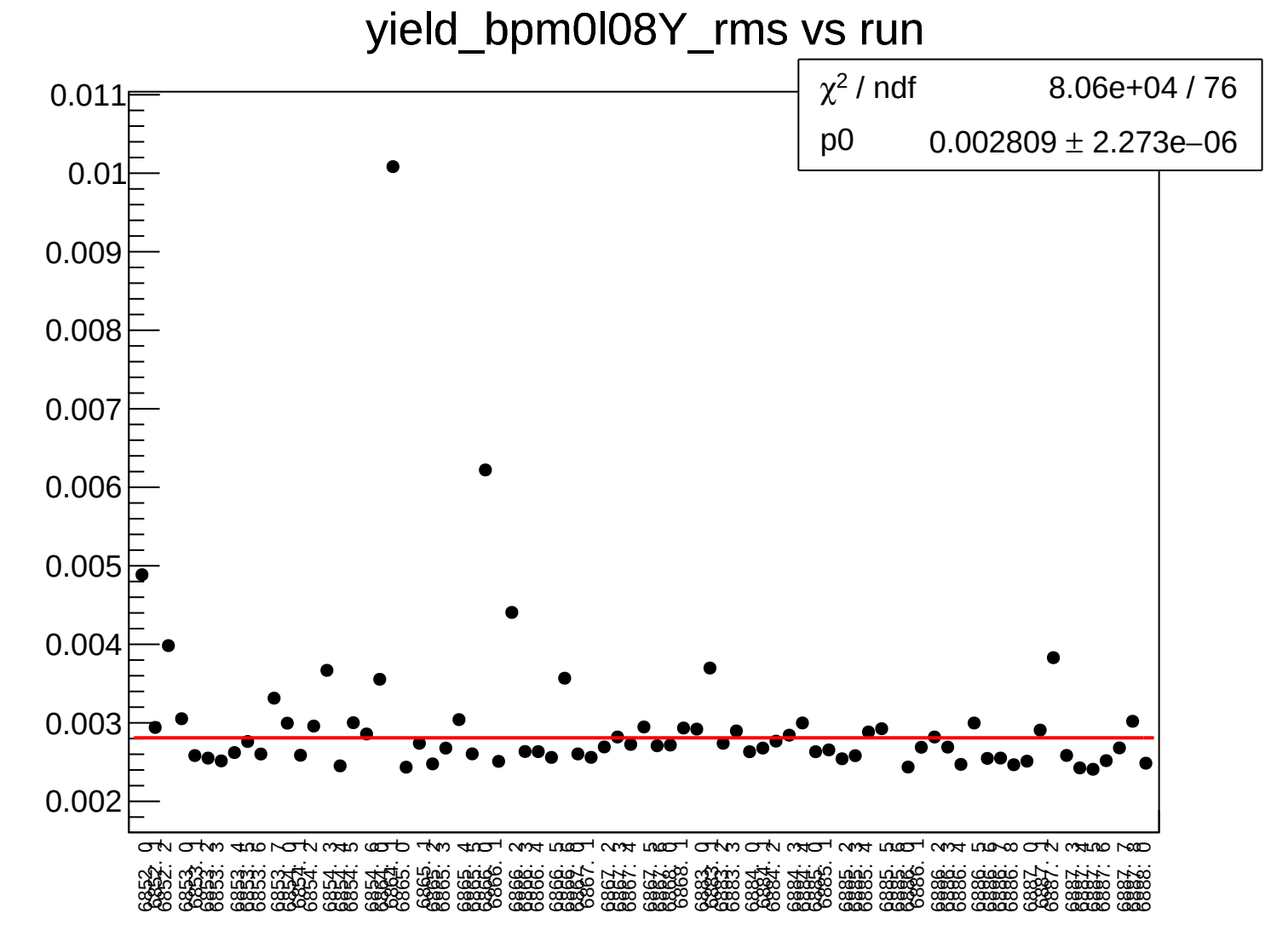

yield_bpm0l08X_mean vs run
χ² / ndf 3.478e+05 / 76
p0 0.09414 ± 1.278e−05
0.12
0.11
0.1
0.09
0.08
0.07
0.06
pull
Entries 77
Mean −181.2
Std Dev 211.2
150
100
50
0
−50
−100
−150
−200
−250

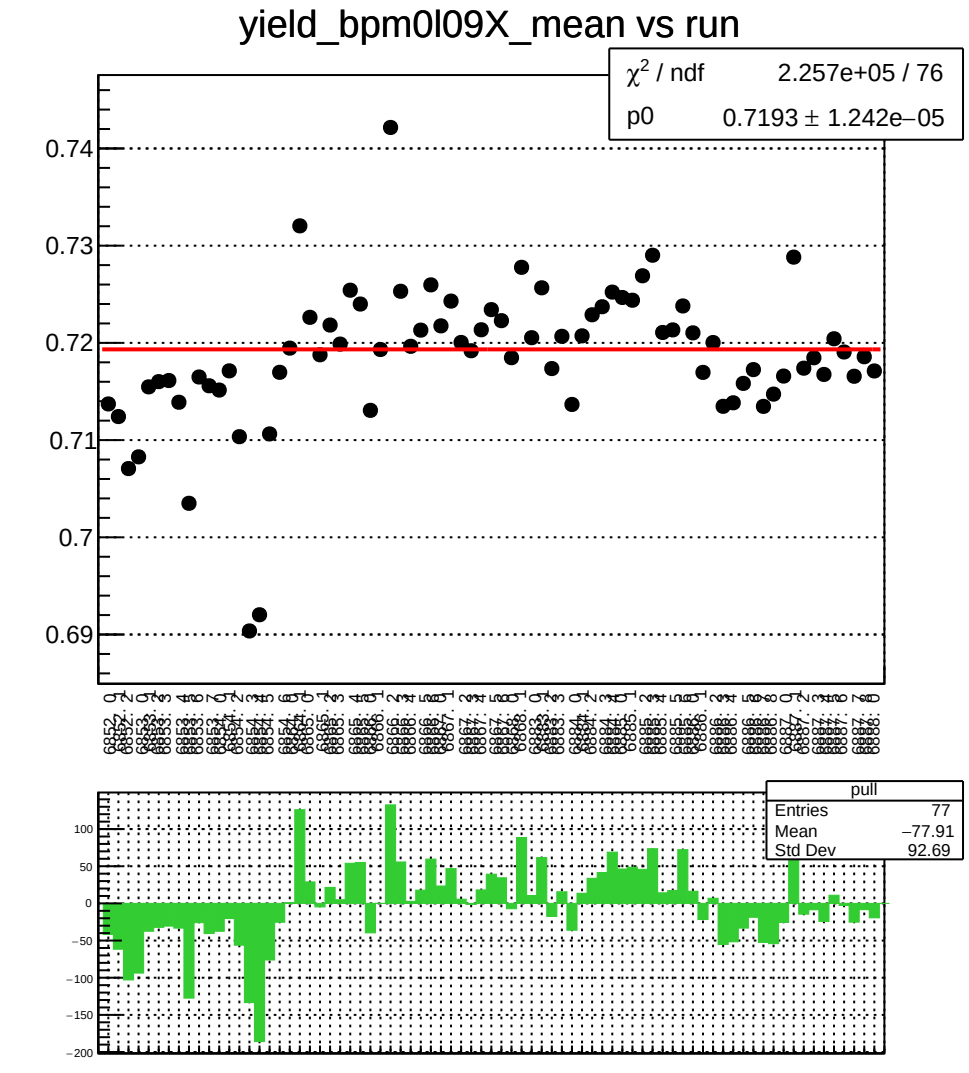

pull1D
Entries 77
Mean −1.712
Std Dev 5.011
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

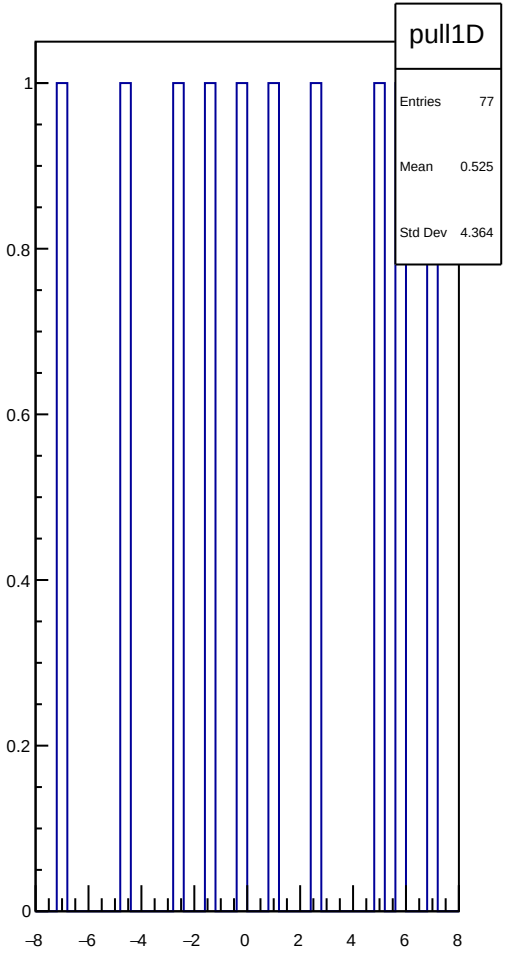

yield_bpm0l08X_rms vs run
χ² / ndf 4.772e+04 / 76
p0 0.01129 ± 9.034e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

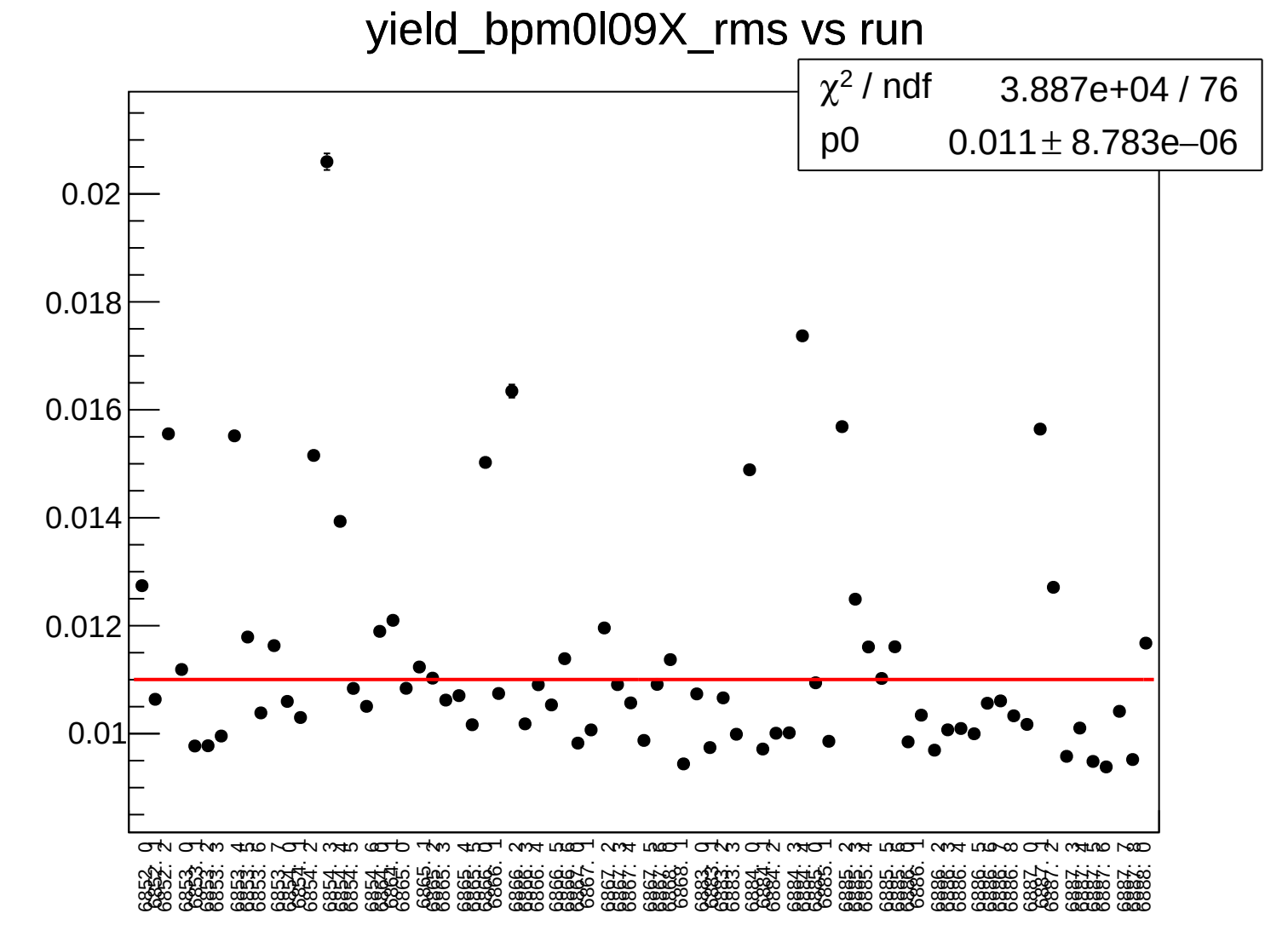

yield_bpm0l08Y_mean vs run
χ² / ndf 5.21e+06 / 76
p0 −0.3308 ± 3.214e−06
−0.315
−0.32
−0.325
−0.33
−0.335
−0.34
−0.345
pull
Entries 77
Mean −9772
Std Dev 9819
600
400
200
0
−200
−400
−600

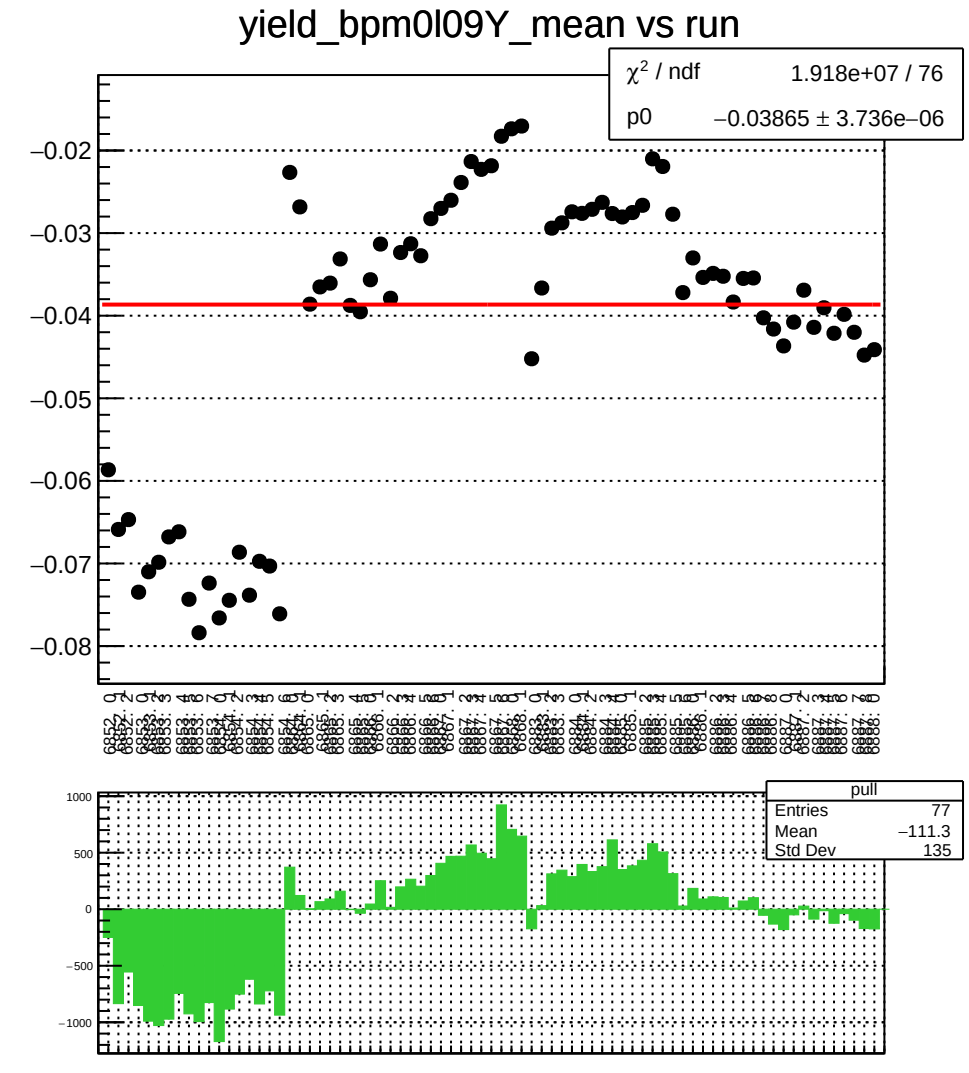

pull1D
Entries 77
Mean −7.051
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

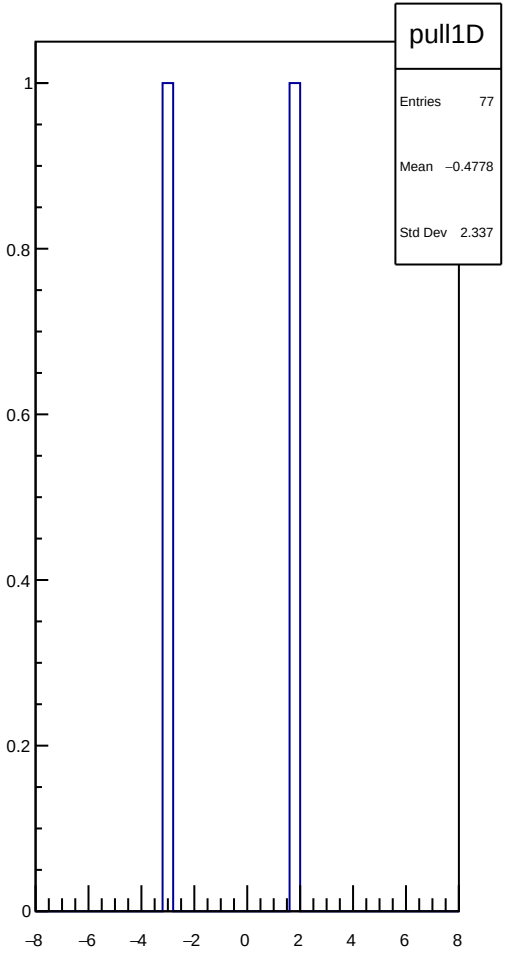

yield_bpm0l08Y_rms vs run
χ² / ndf 8.06e+04 / 76
p0 0.002809 ± 2.273e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

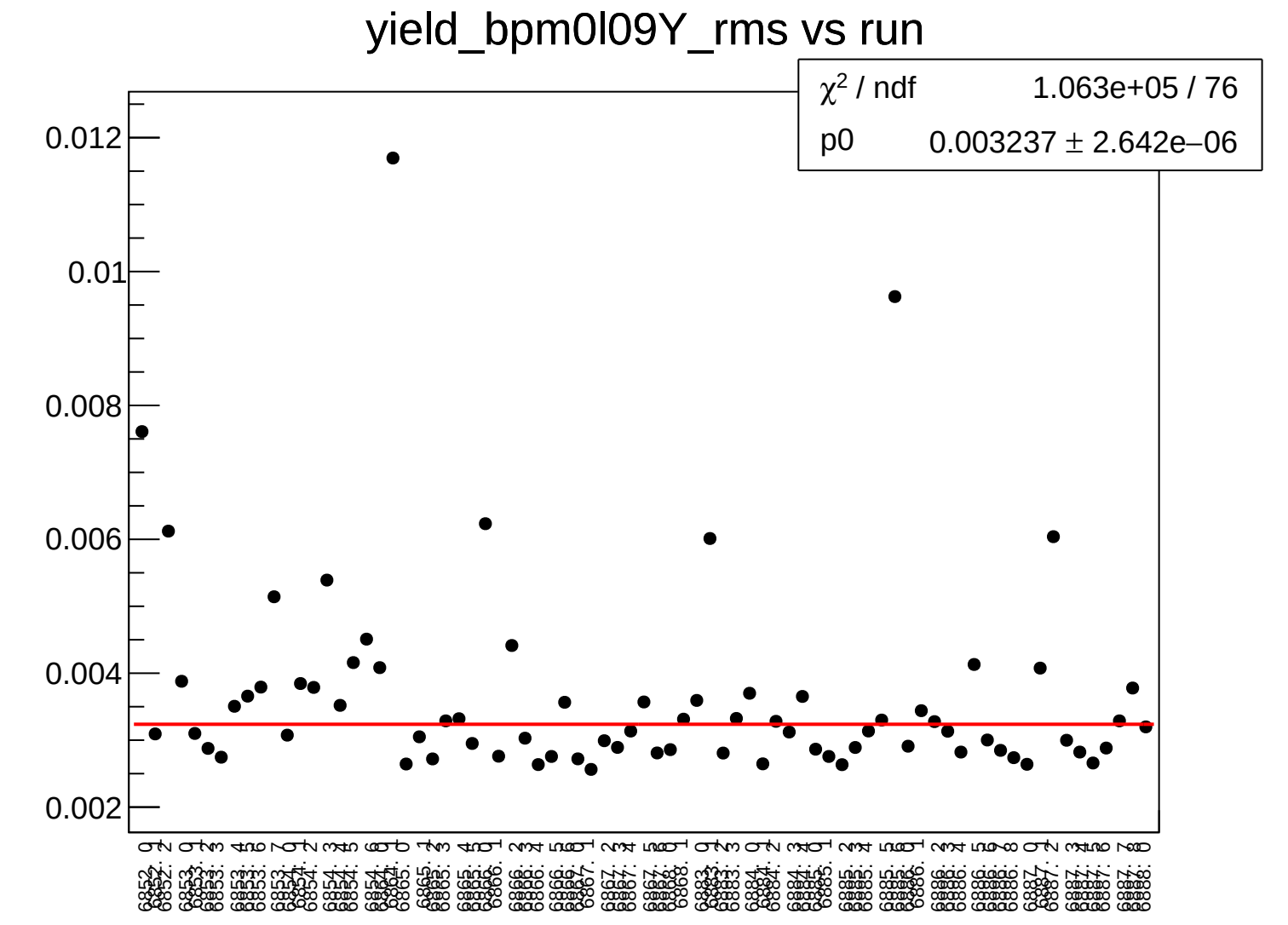

yield_bpm0l09X_mean vs run
χ² / ndf 2.257e+05 / 76
p0 0.7193 ± 1.242e−05
0.74
0.73
0.72
0.71
0.7
0.69
pull
Entries 77
Mean −77.91
Std Dev 92.69
100
50
0
−50
−100
−150
−200

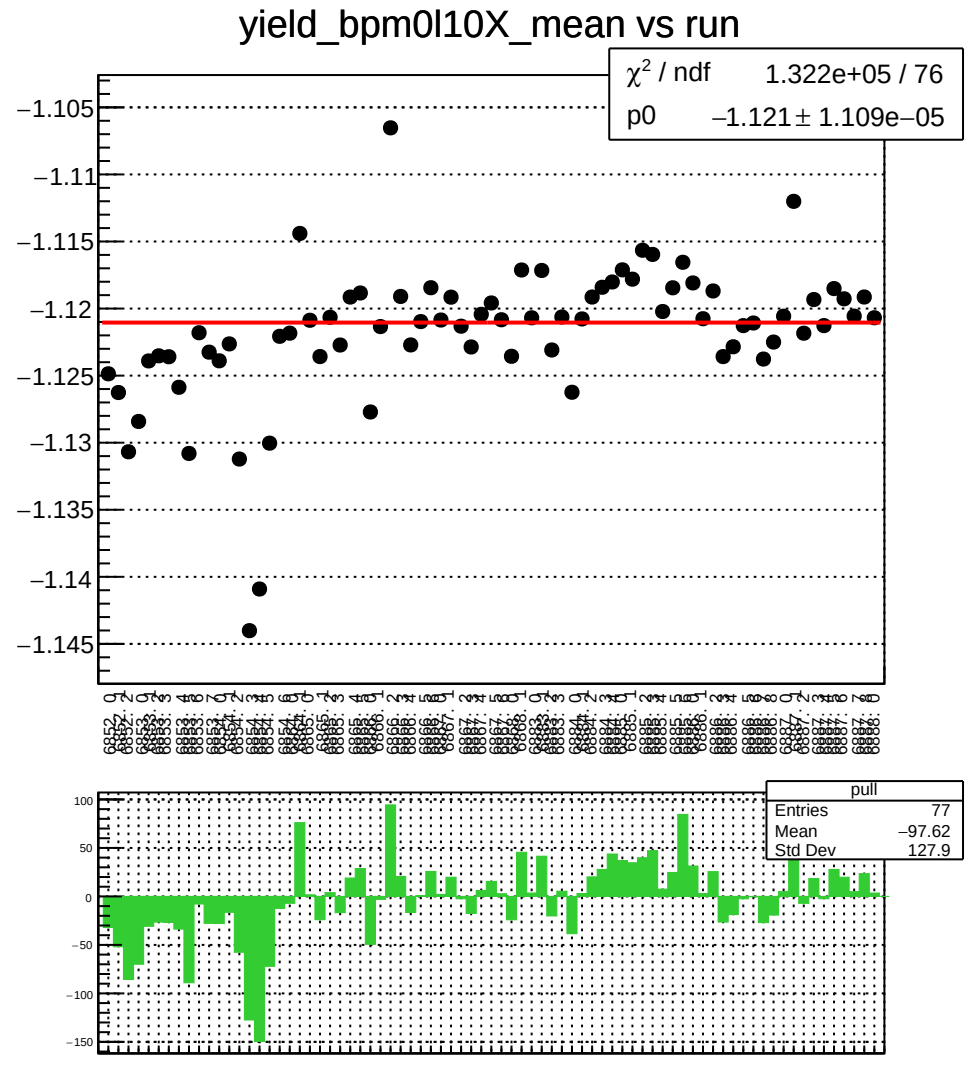

pull1D
Entries 77
Mean 0.525
Std Dev 4.364
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

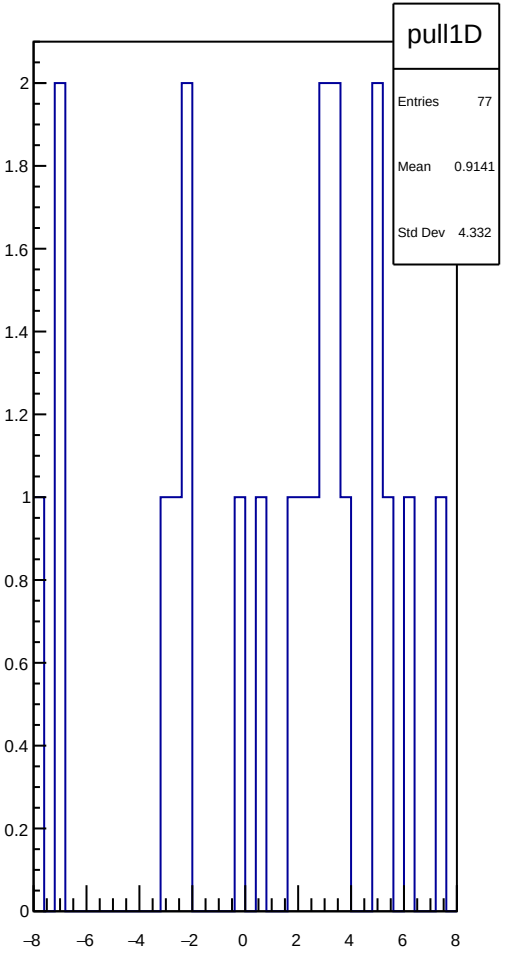

yield_bpm0l09X_rms vs run
χ^2 / ndf 3.887e+04 / 76
p0 0.011 ± 8.783e–06
0.02
0.018
0.016
0.014
0.012
0.01

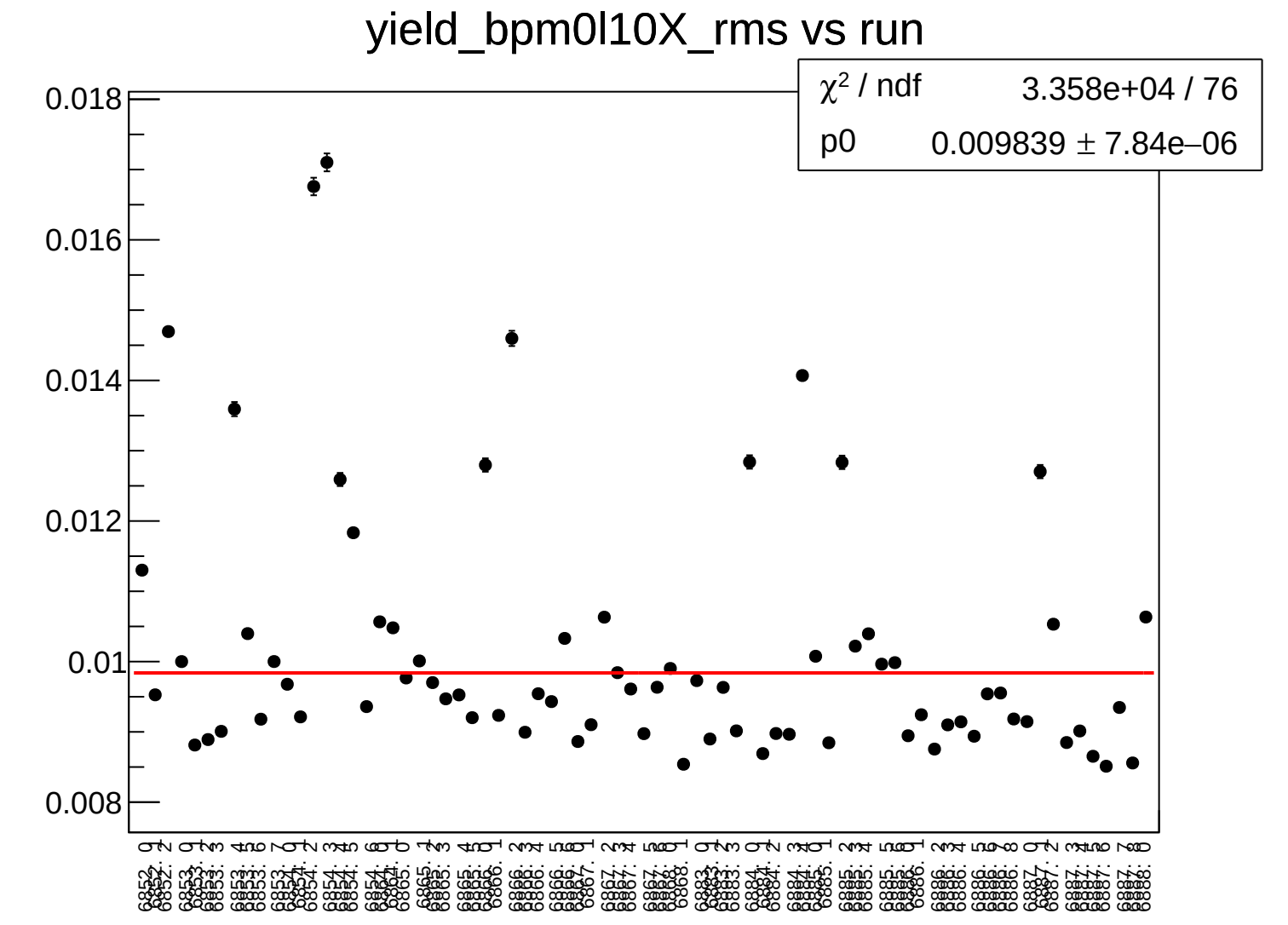

yield_bpm0l09Y_mean vs run
χ² / ndf 1.918e+07 / 76
p0 −0.03865 ± 3.736e−06
−0.02
−0.03
−0.04
−0.05
−0.06
−0.07
−0.08
pull
Entries 77
Mean −111.3
Std Dev 135
1000
500
0
−500
−1000

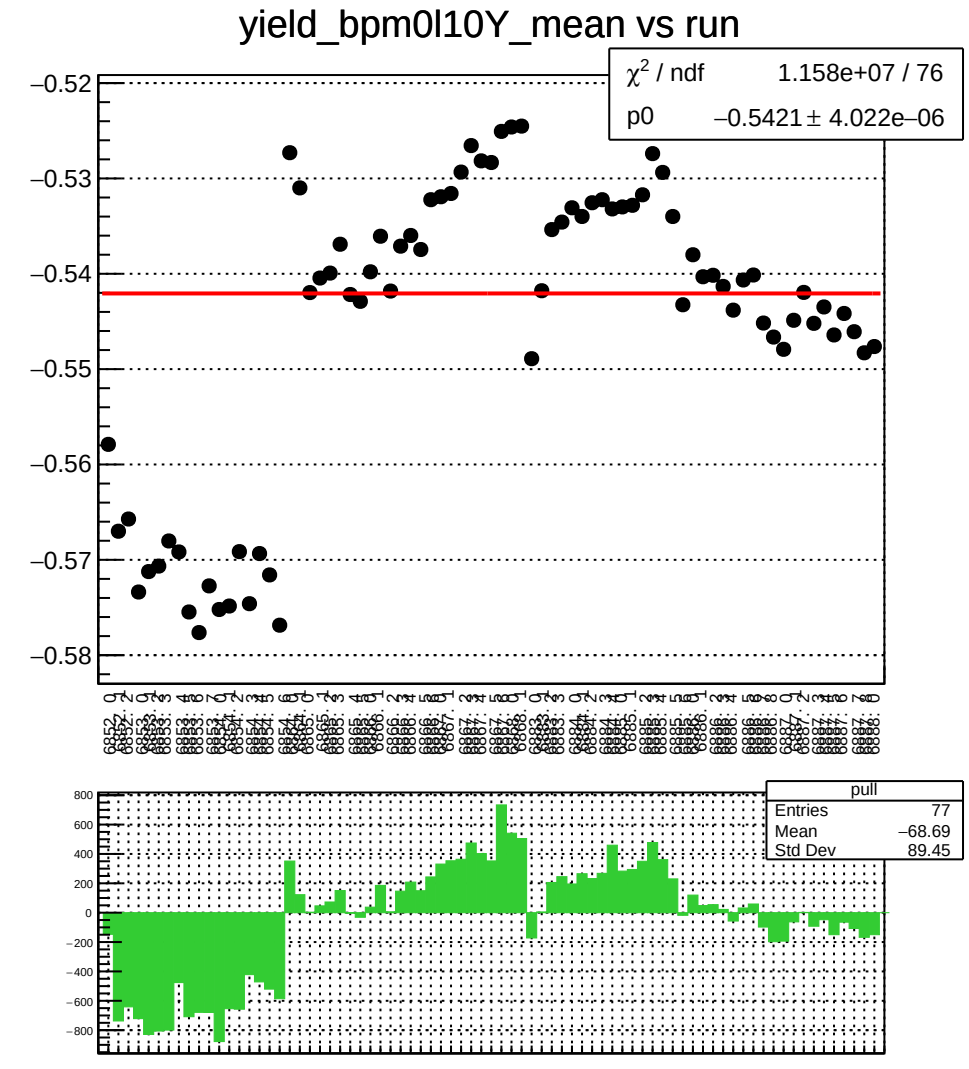

pull1D
Entries 77
Mean −0.4778
Std Dev 2.337
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

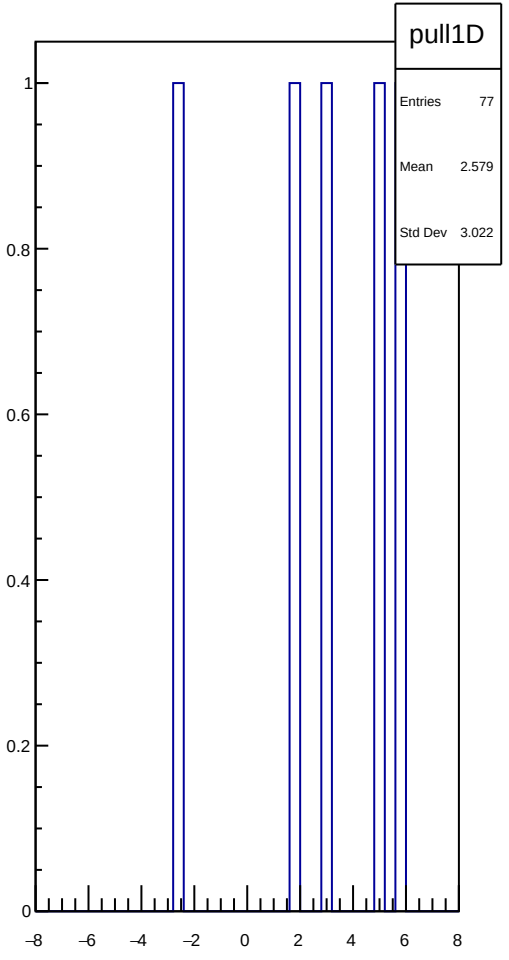

yield_bpm0l09Y_rms vs run
χ² / ndf 1.063e+05 / 76
p0 0.003237 ± 2.642e−06
0.012
0.01
0.008
0.006
0.004
0.002

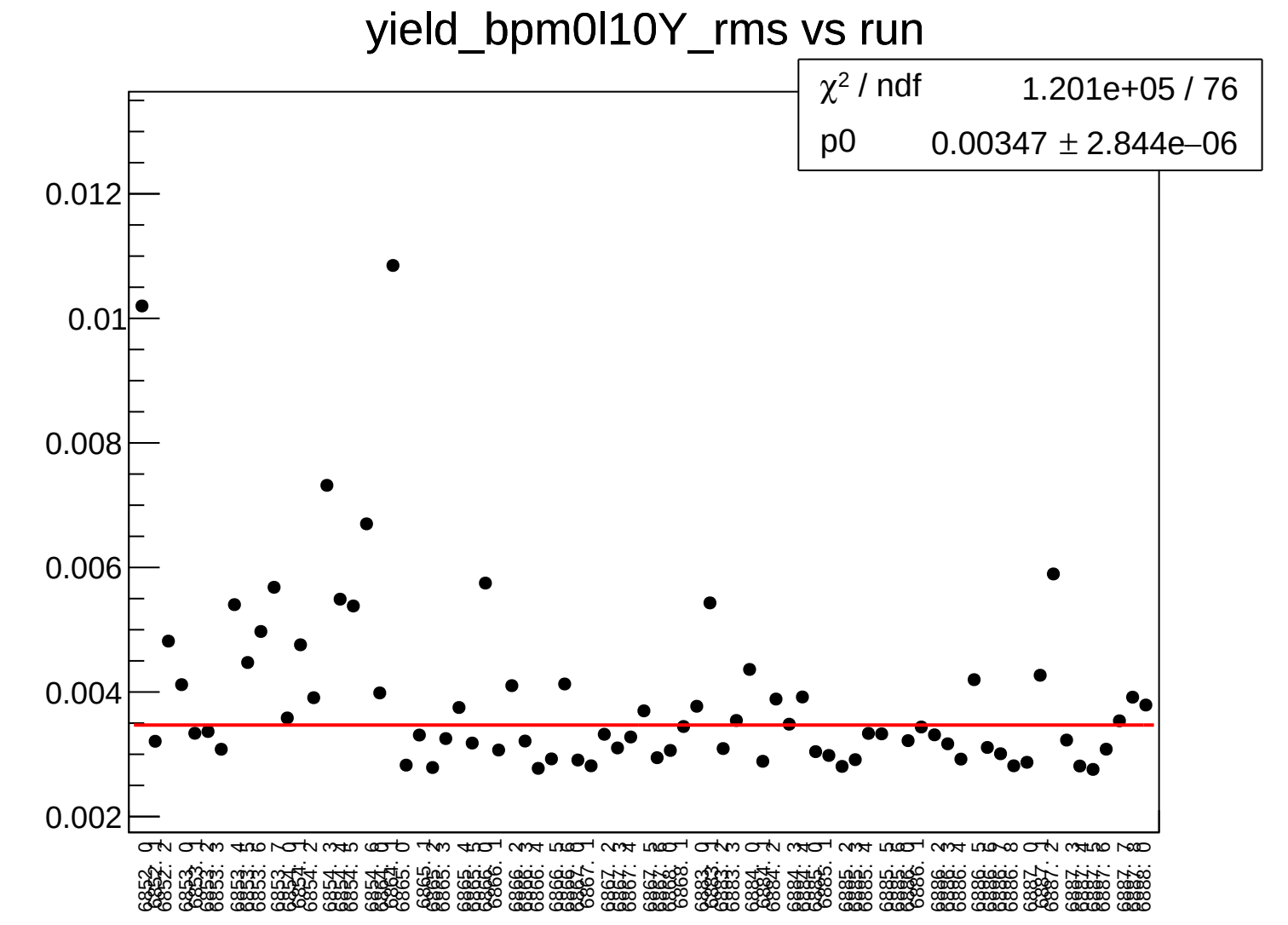

yield_bpm0l10X_mean vs run
χ² / ndf 1.322e+05 / 76
p0 −1.121 ± 1.109e−05
−1.105
−1.11
−1.115
−1.12
−1.125
−1.13
−1.135
−1.14
−1.145
pull
Entries 77
Mean −97.62
Std Dev 127.9
100
50
0
−50
−100
−150

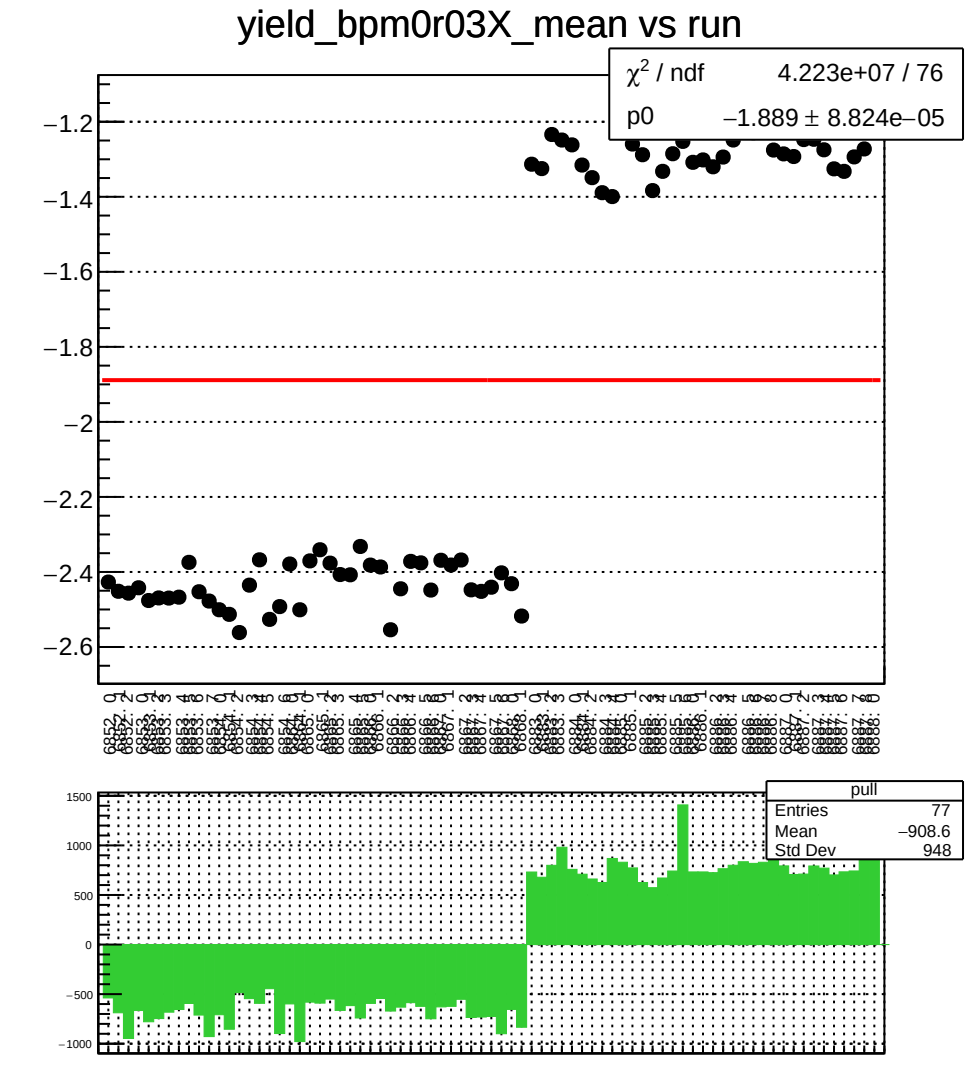

pull1D
Entries 77
Mean 0.9141
Std Dev 4.332
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

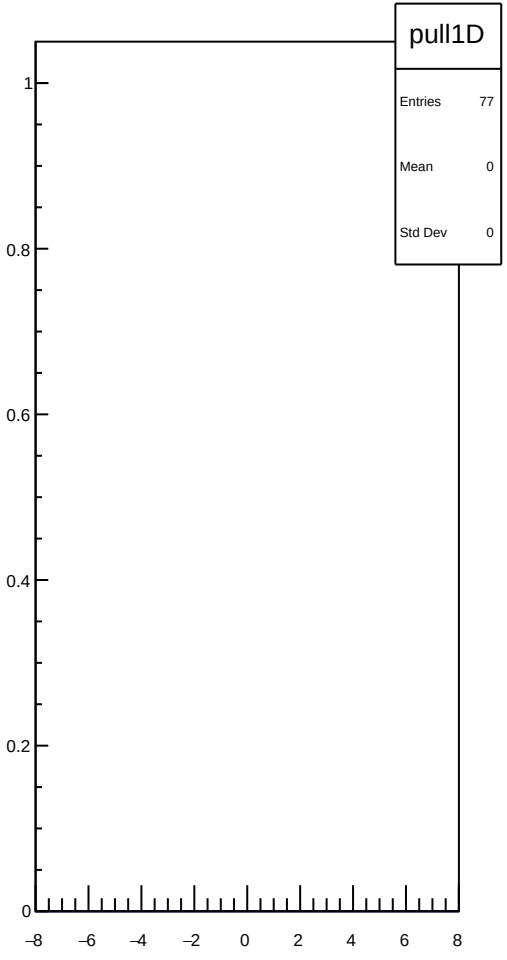

yield_bpm0l10X_rms vs run
χ² / ndf 3.358e+04 / 76
p0 0.009839 ± 7.84e–06
0.018
0.016
0.014
0.012
0.01
0.008

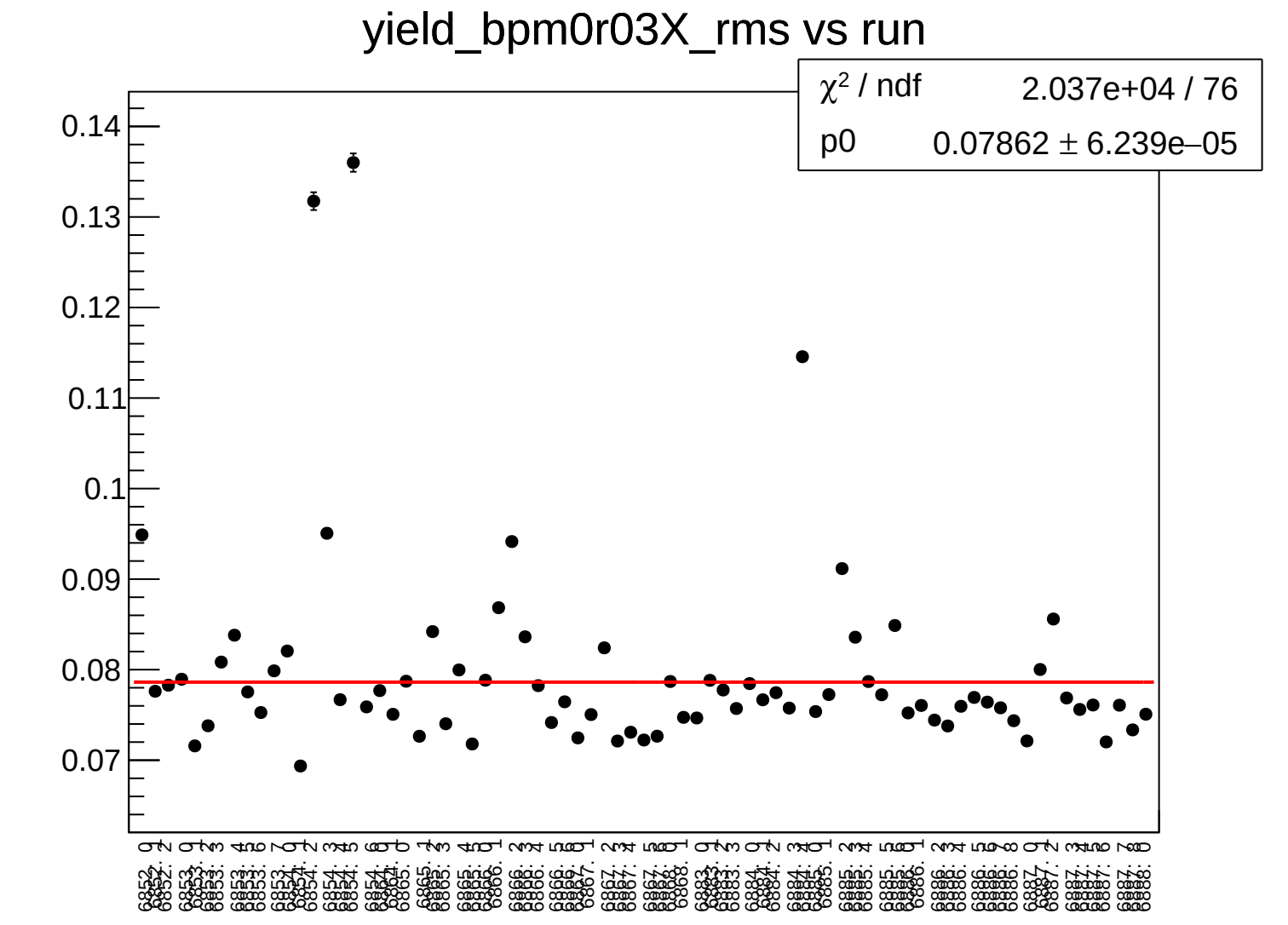

yield_bpm0l10Y_mean vs run
χ² / ndf 1.158e+07 / 76
p0 −0.5421 ± 4.022e−06
−0.52
−0.53
−0.54
−0.55
−0.56
−0.57
−0.58
pull
Entries 77
Mean −68.69
Std Dev 89.45
800
600
400
200
0
−200
−400
−600
−800

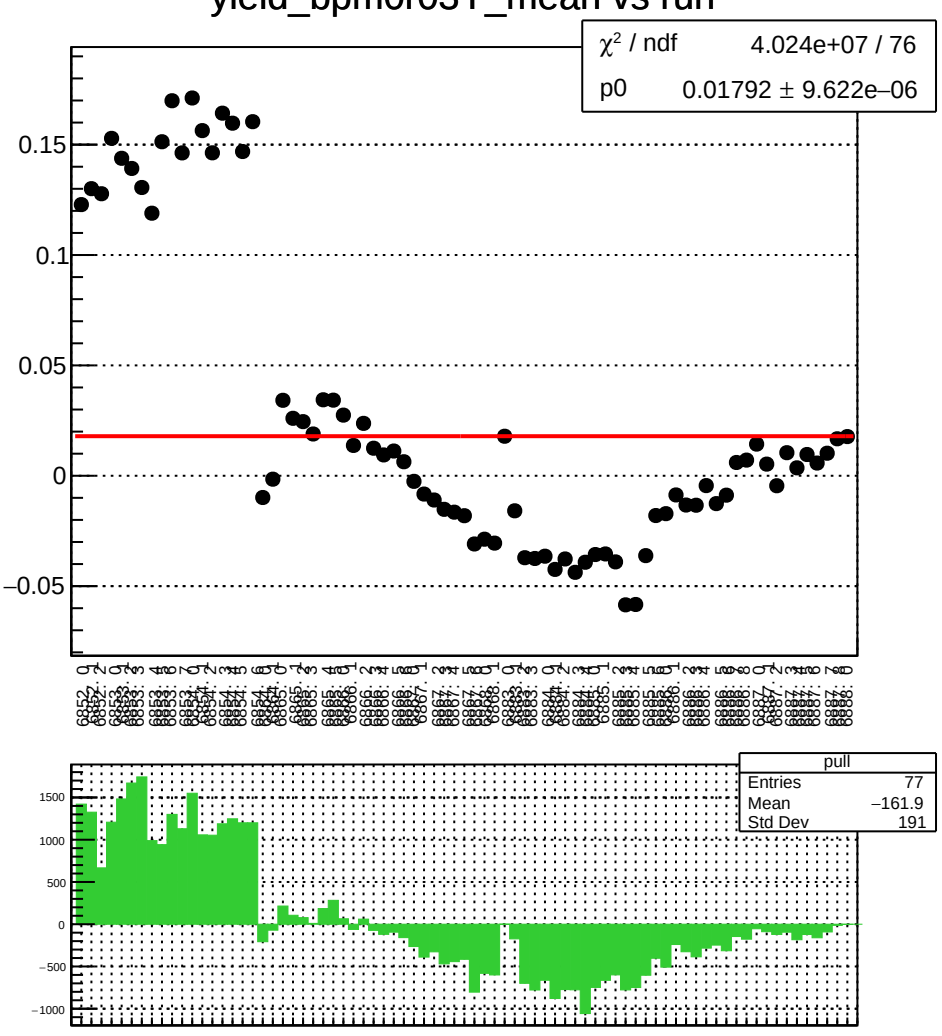

pull1D
Entries 77
Mean 2.579
Std Dev 3.022
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

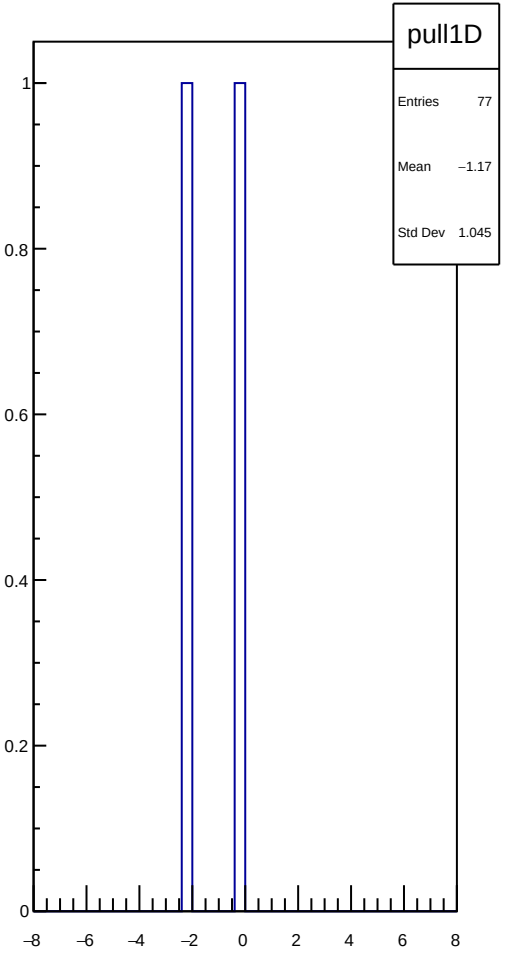

yield_bpm0l10Y_rms vs run
χ² / ndf 1.201e+05 / 76
p0 0.00347 ± 2.844e–06
0.012
0.01
0.008
0.006
0.004
0.002

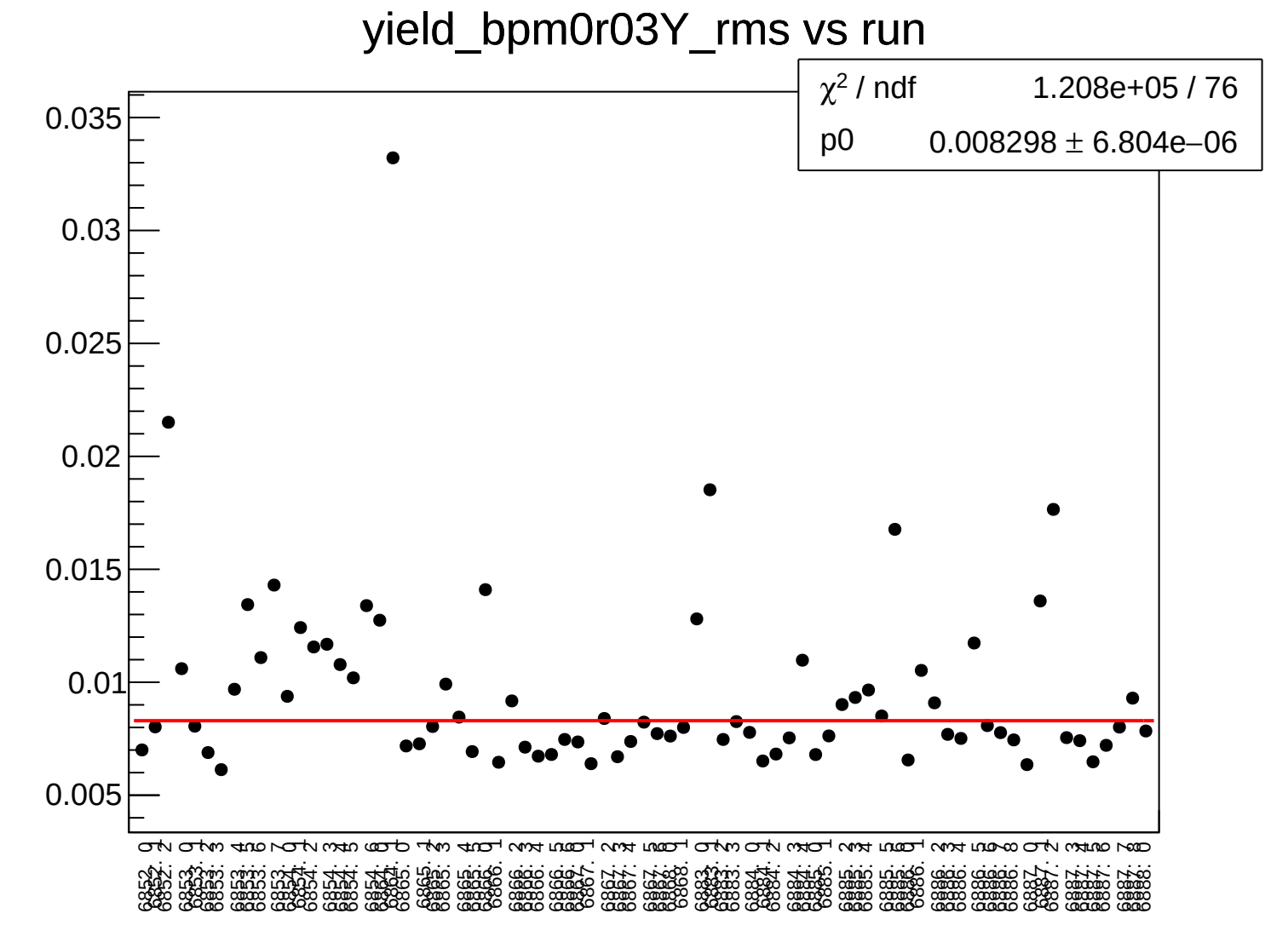

yield_bpm0r03X_mean vs run
χ² / ndf 4.223e+07 / 76
p0 −1.889 ± 8.824e−05
pull
Entries 77
Mean −908.6
Std Dev 948

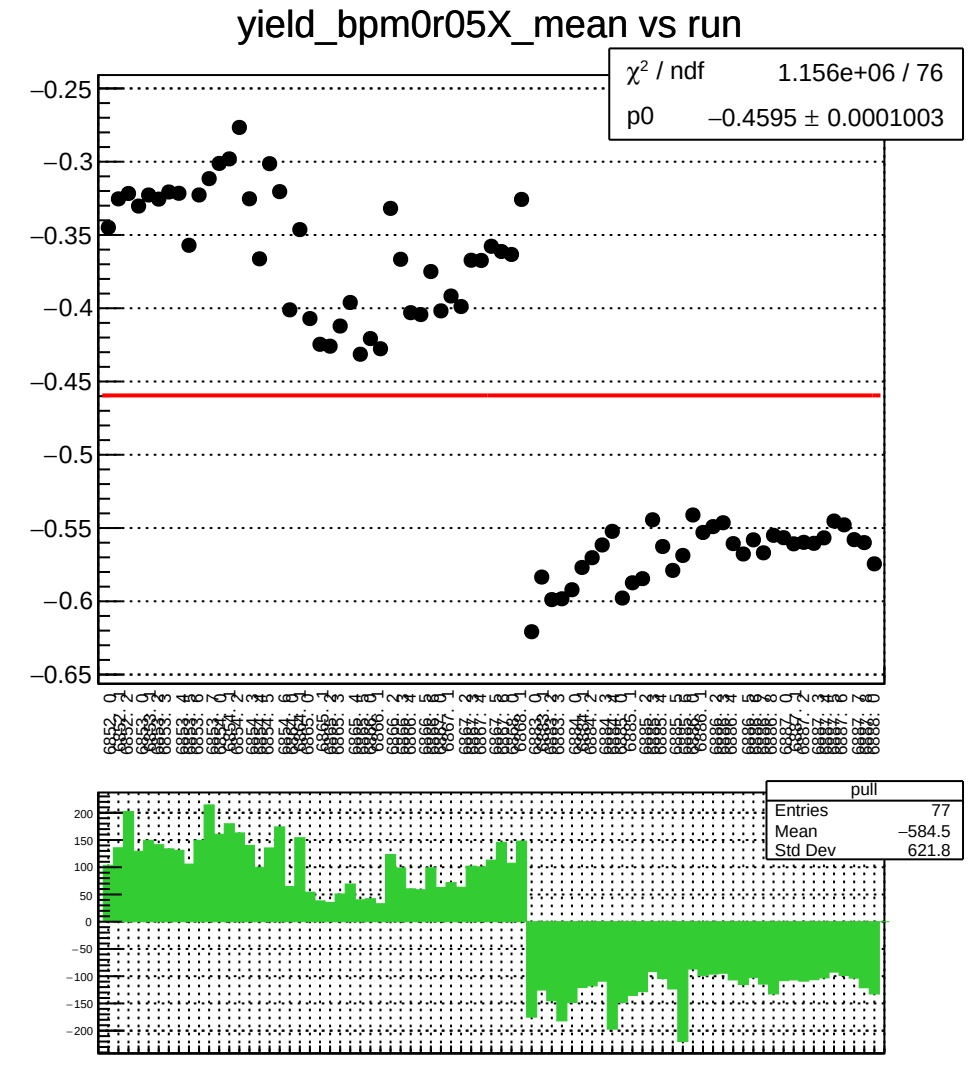

pull1D
Entries 77
Mean 0
Std Dev 0

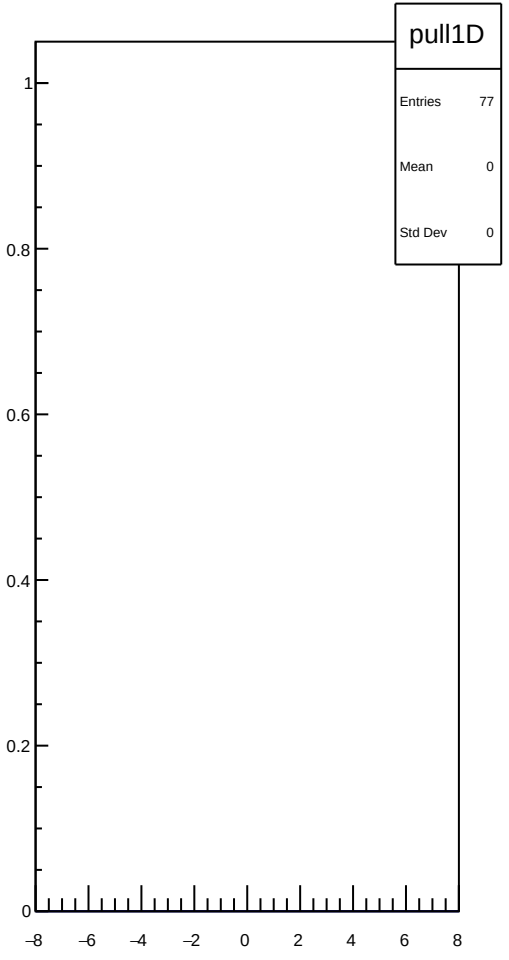

yield_bpm0r03X_rms vs run
χ² / ndf 2.037e+04 / 76
p0 0.07862 ± 6.239e–05
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07


yield_bpm0r03Y_mean vs run
χ² / ndf 4.024e+07 / 76
p0 0.01792 ± 9.622e−06
0.15
0.1
0.05
0
−0.05
pull
Entries 77
Mean −161.9
Std Dev 191
1500
1000
500
0
−500
−1000

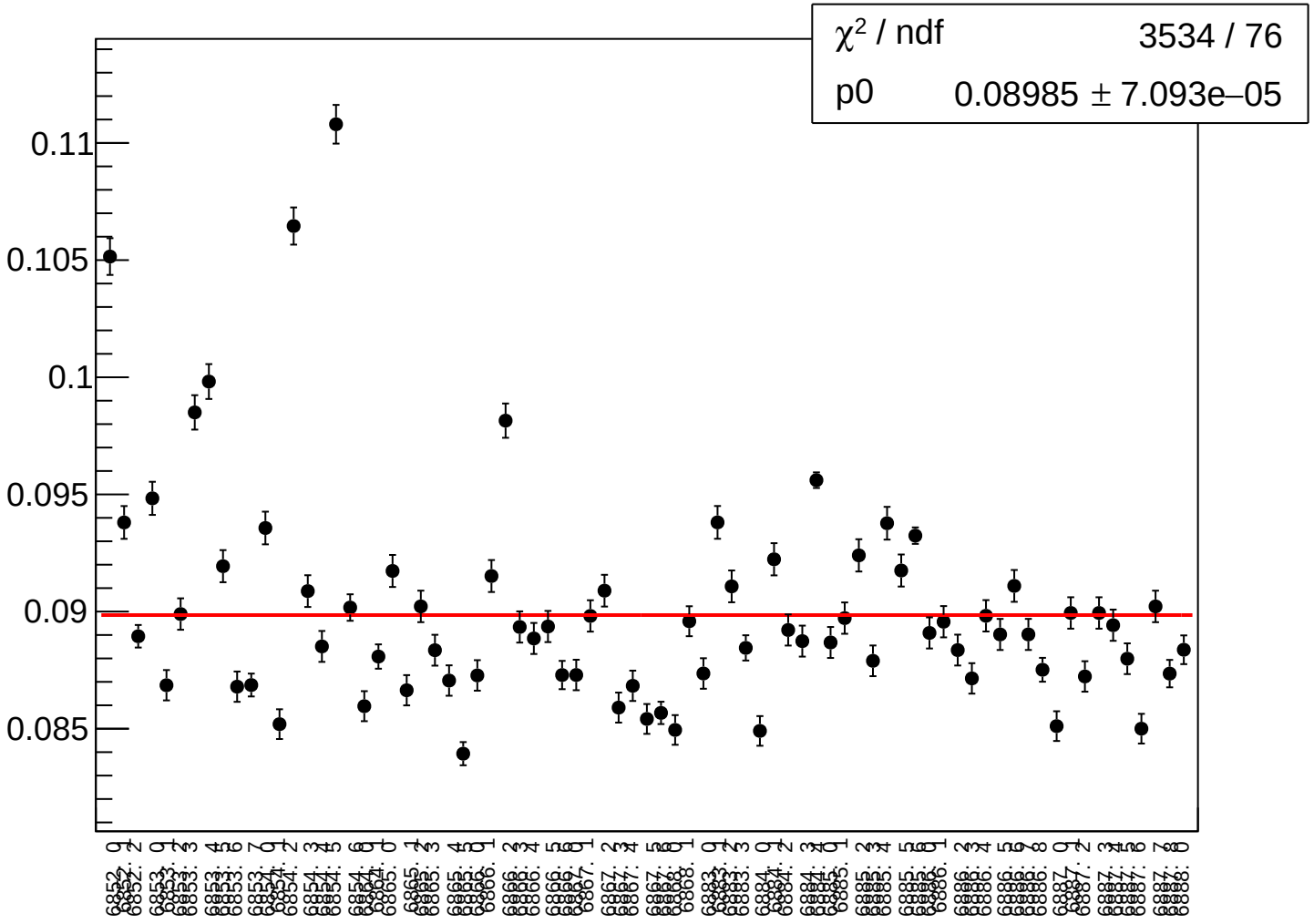

pull1D
Entries 77
Mean −1.17
Std Dev 1.045
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

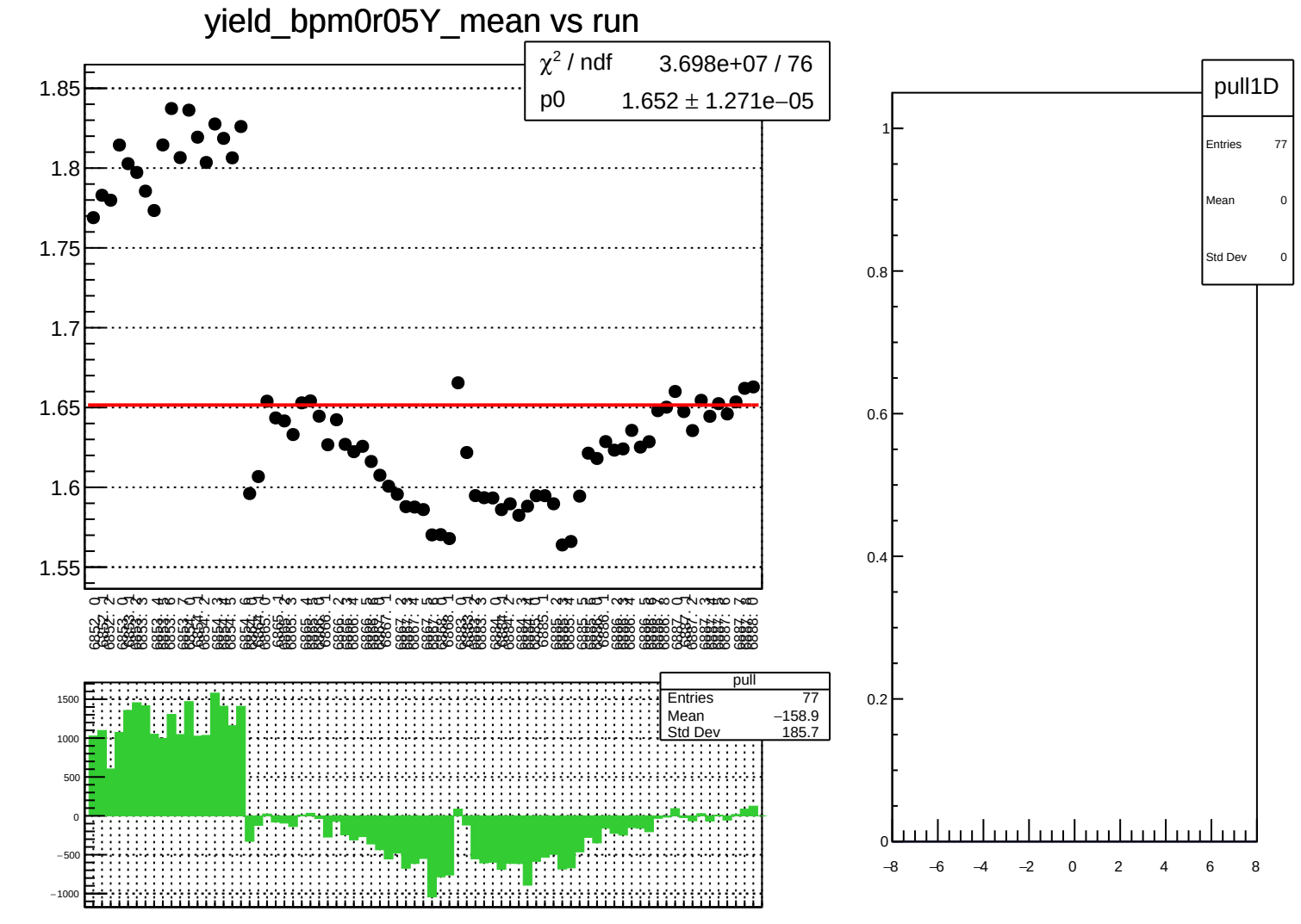

yield_bpm0r03Y_rms vs run
χ^2 / ndf 1.208e+05 / 76
p0 0.008298 ± 6.804e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

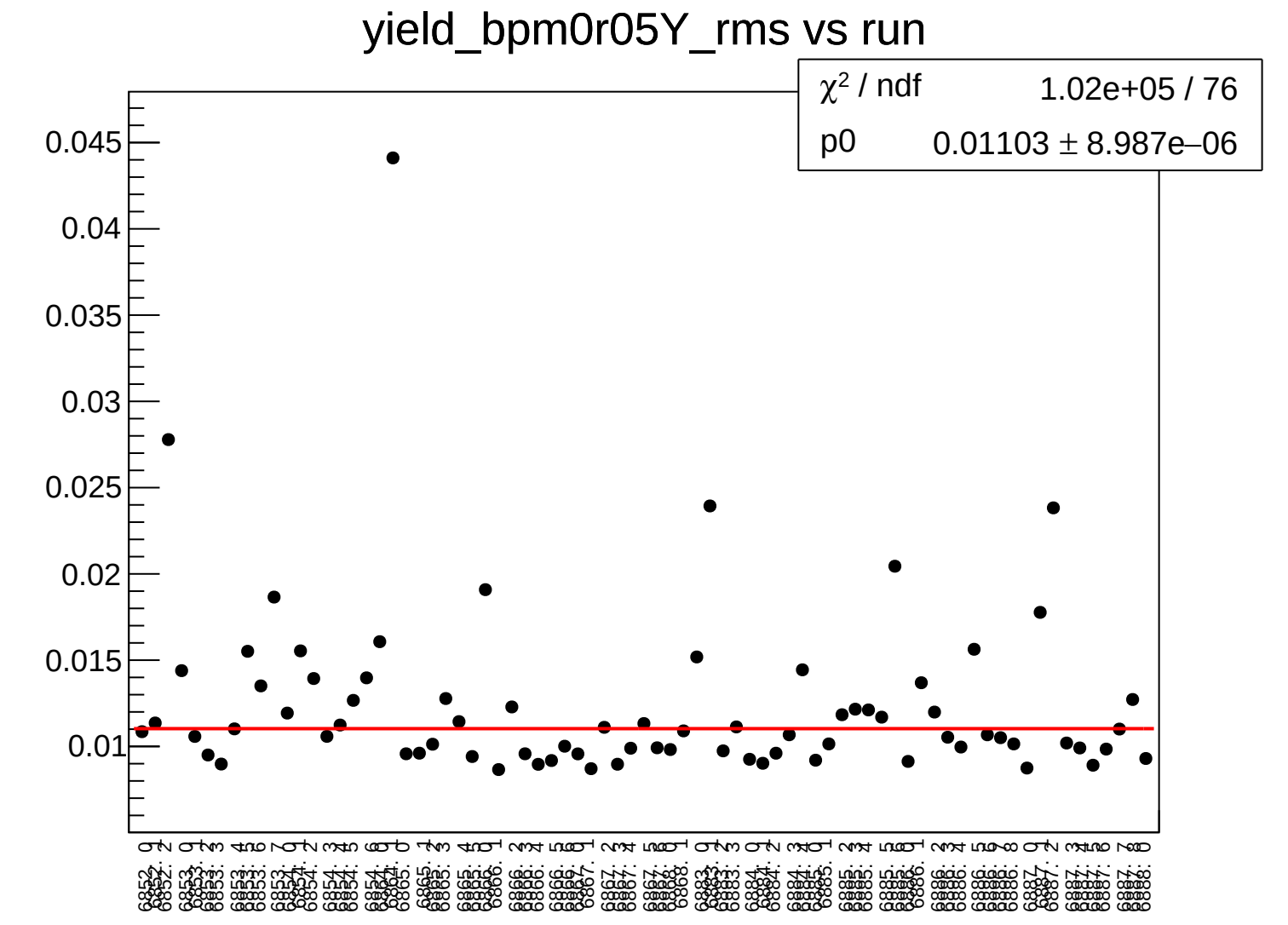

yield_bpm0r05X_mean vs run
χ² / ndf 1.156e+06 / 76
p0 −0.4595 ± 0.0001003
pull
Entries 77
Mean −584.5
Std Dev 621.8

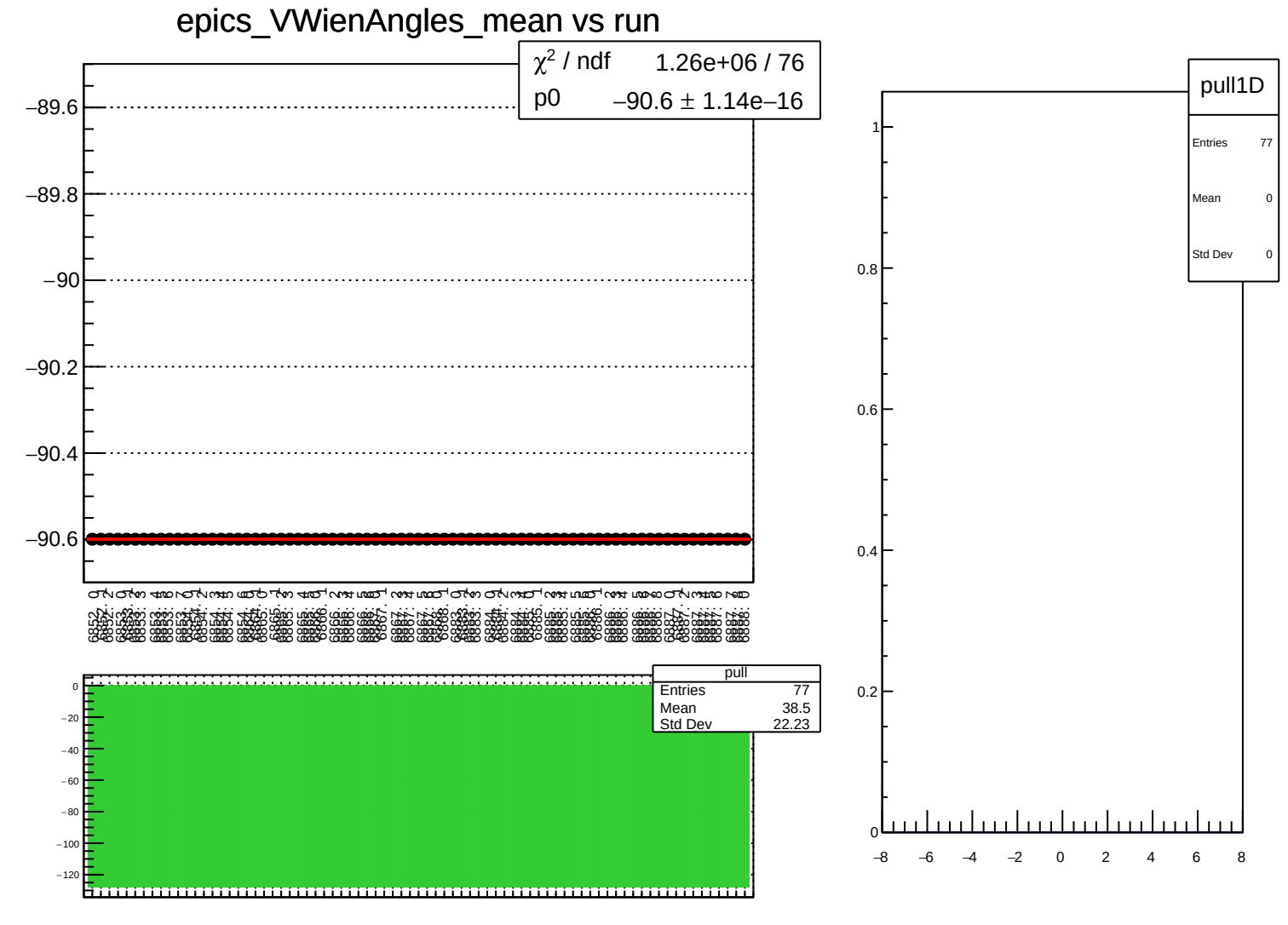

pull1D
Entries 77
Mean 0
Std Dev 0

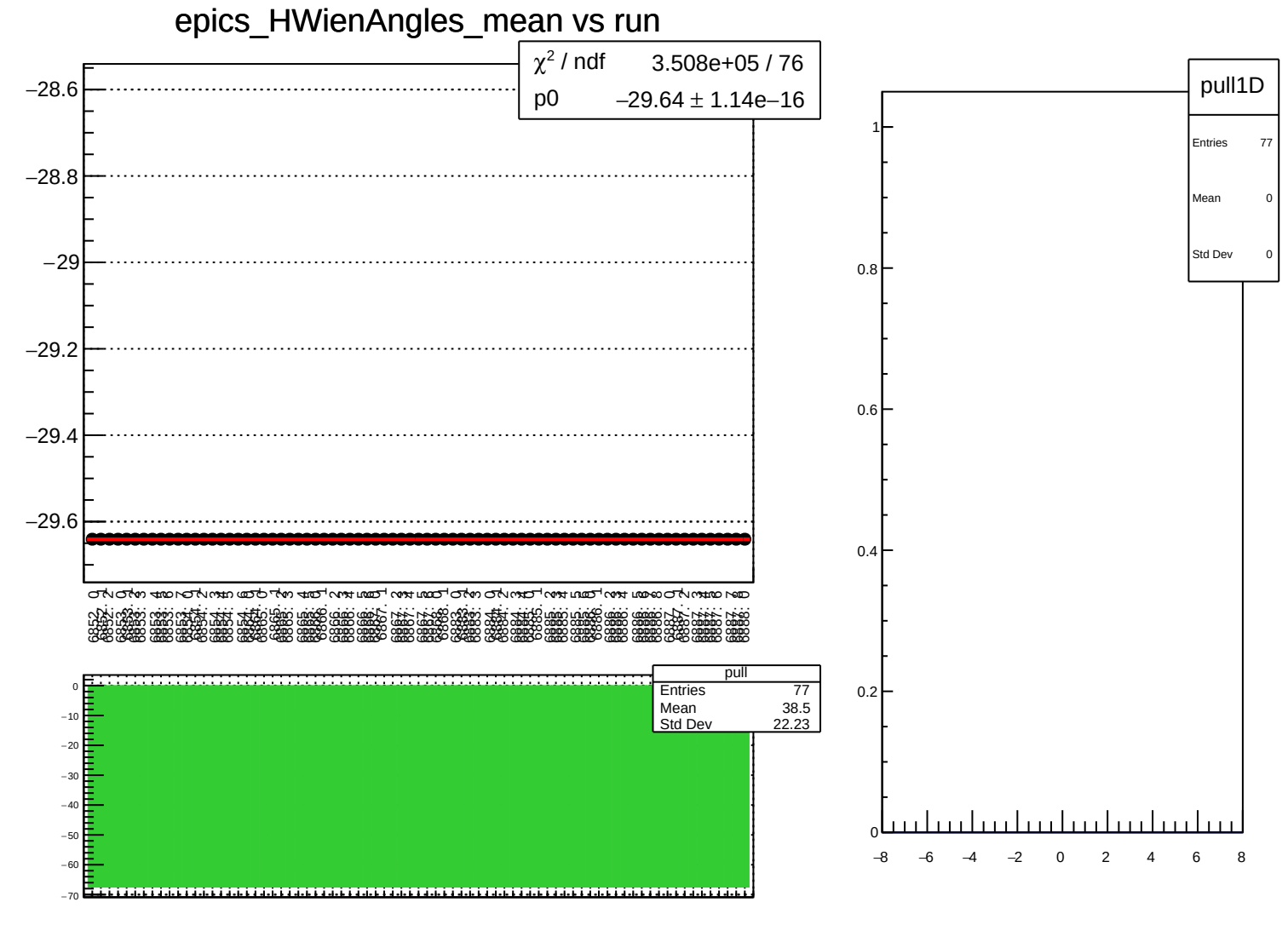
yield_bpm0r05X_rms vs run

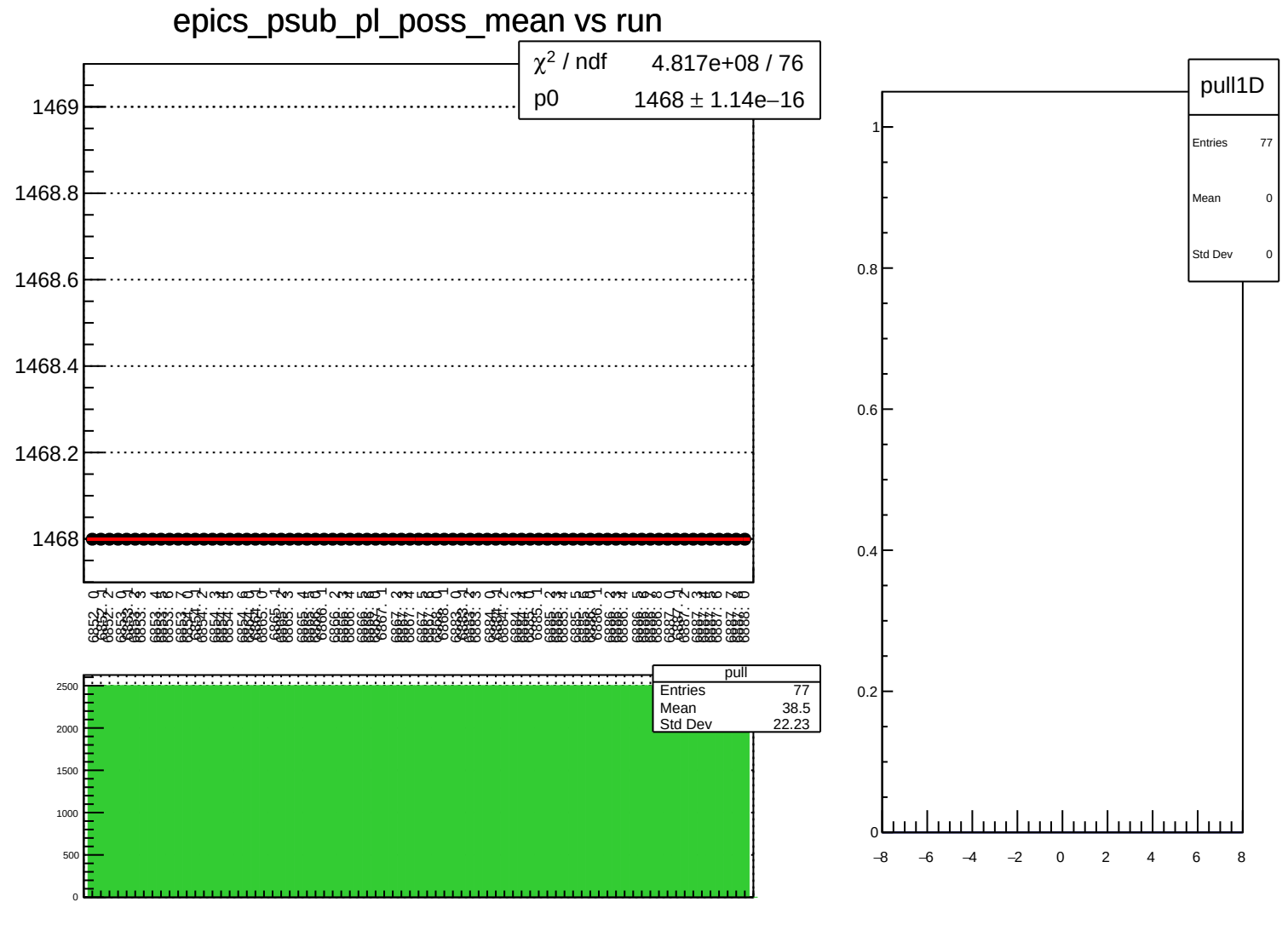


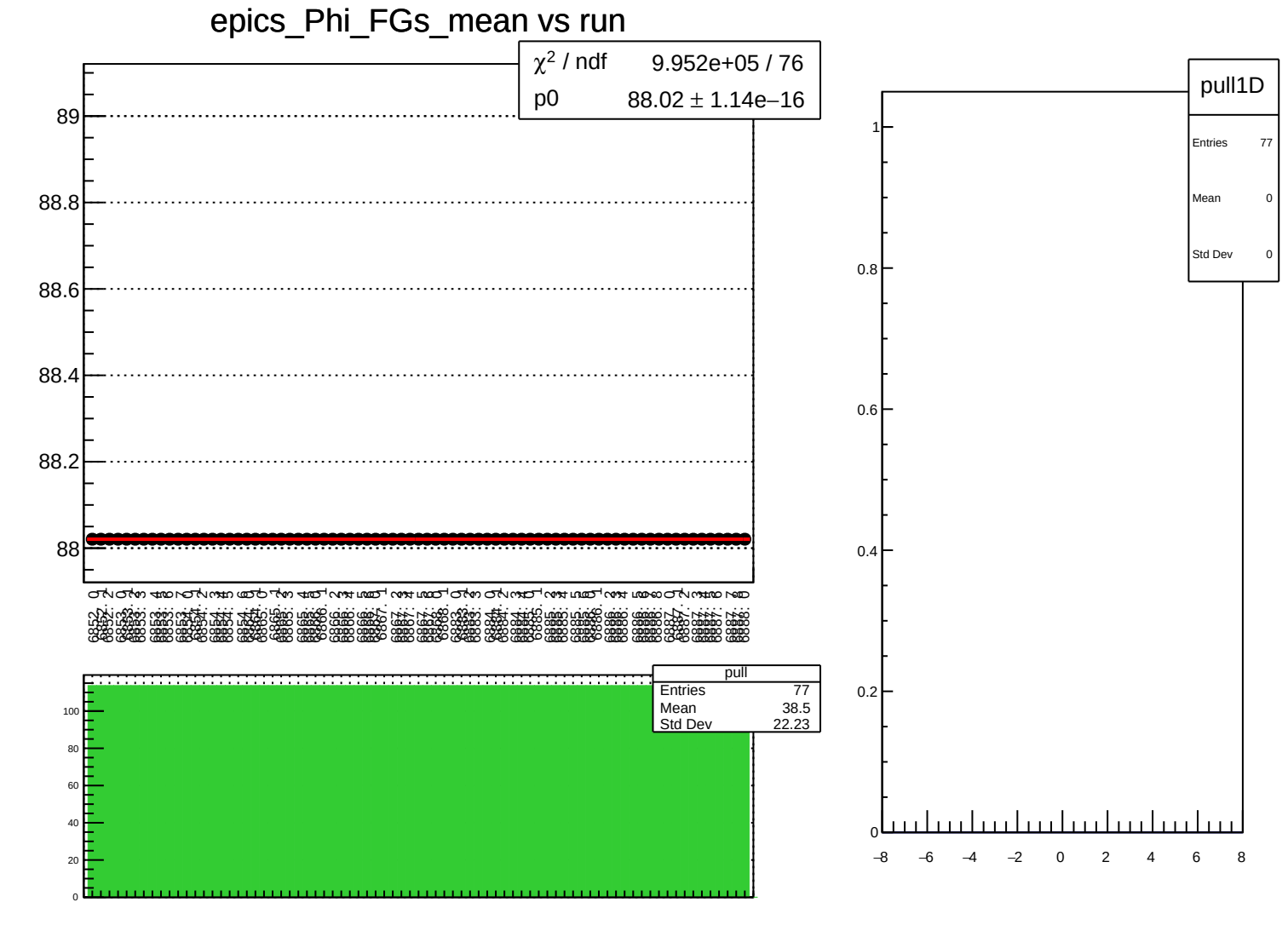

yield_bpm0r05Y_mean vs run
χ² / ndf 3.698e+07 / 76
p0 1.652 ± 1.271e−05
1.85
1.8
1.75
1.7
1.65
1.6
1.55
pull
Entries 77
Mean −158.9
Std Dev 185.7
1500
1000
500
0
−500
−1000
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

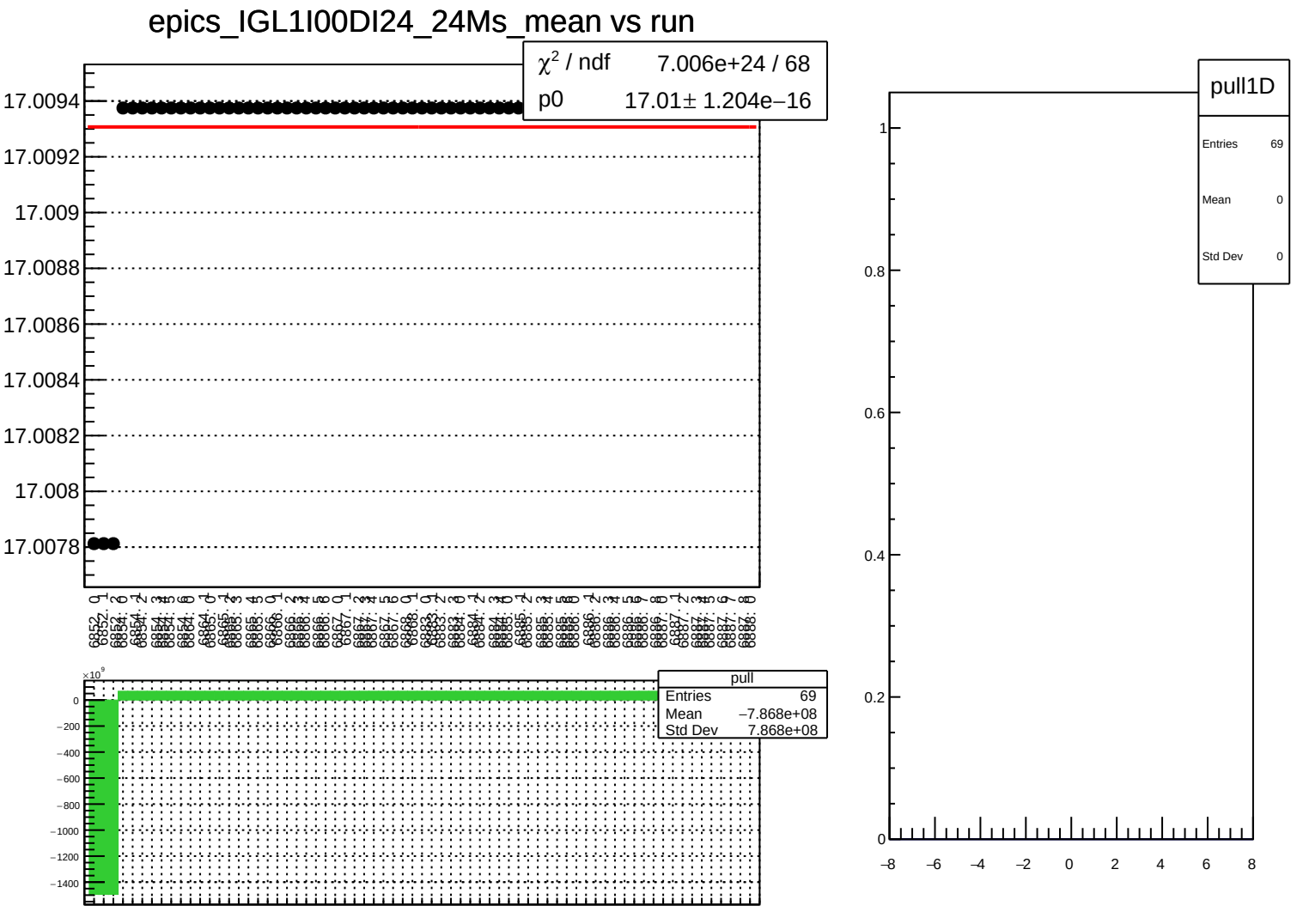

yield_bpm0r05Y_rms vs run
χ² / ndf 1.02e+05 / 76
p0 0.01103 ± 8.987e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

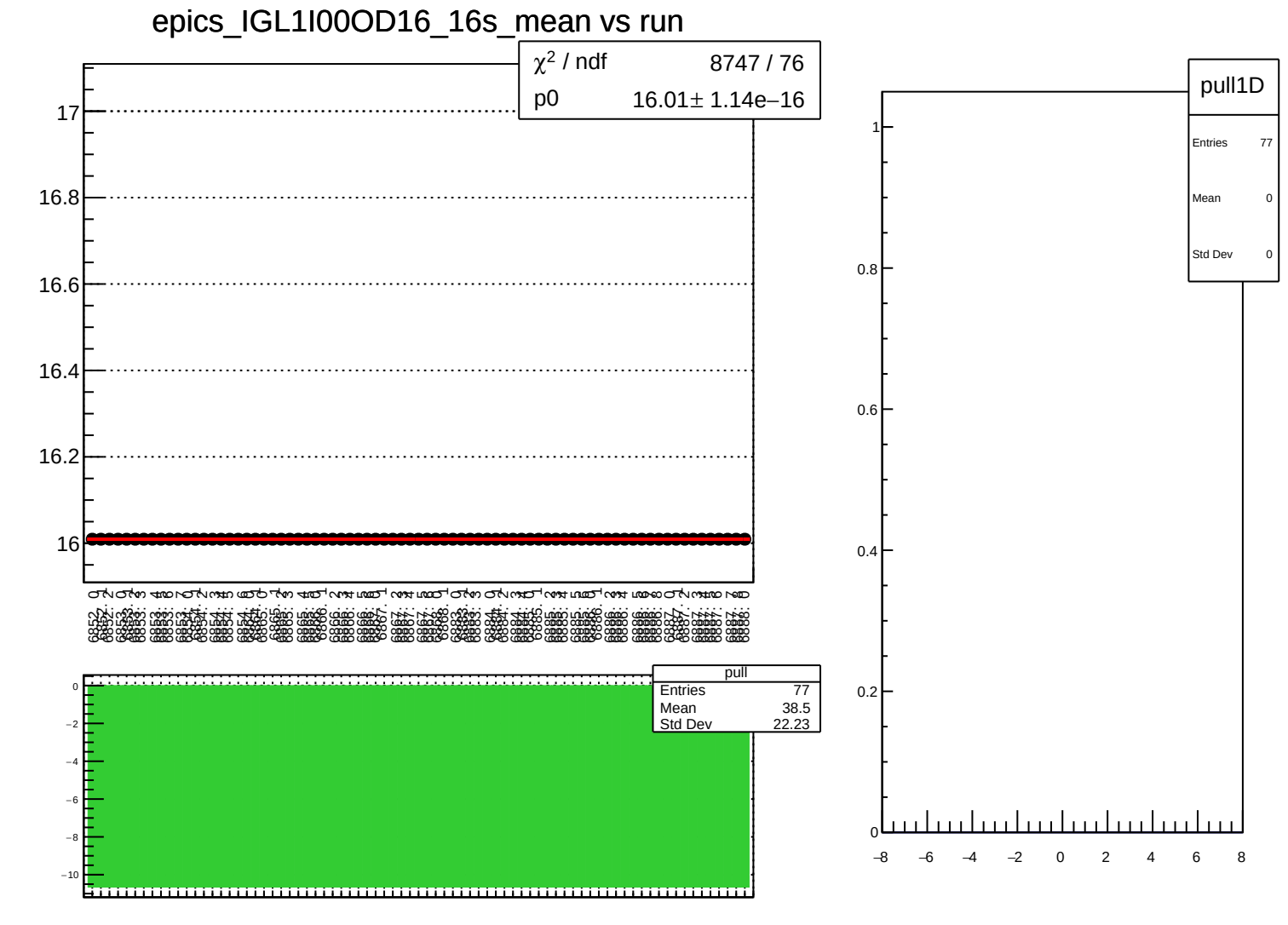

epics_VWienAngles_mean vs run
χ^2 / ndf 1.26e+06 / 76
p0 −90.6 ± 1.14e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−20
−40
−60
−80
−100
−120
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

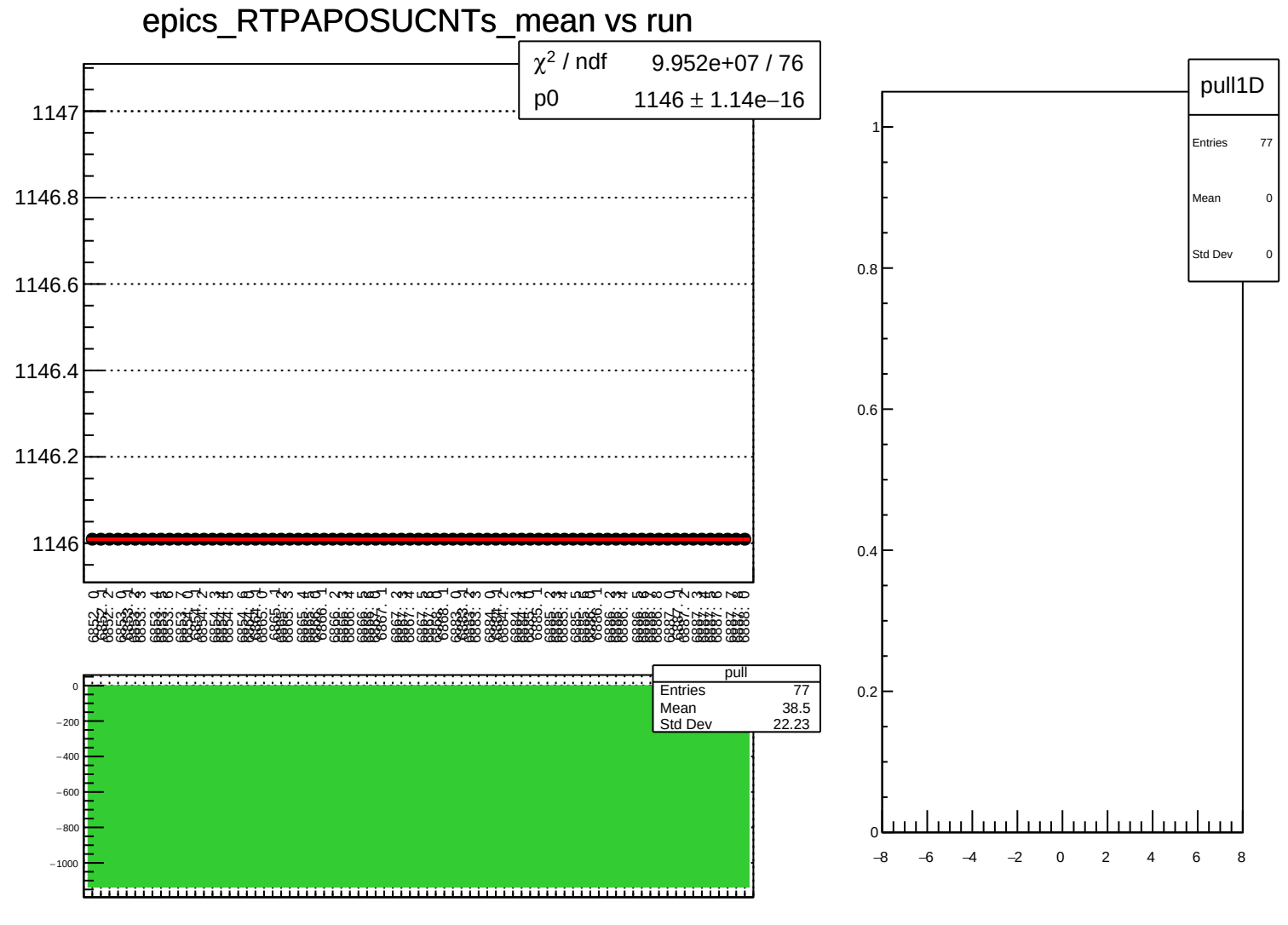

epics_HWienAngles_mean vs run
χ² / ndf 3.508e+05 / 76
p0 −29.64 ± 1.14e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

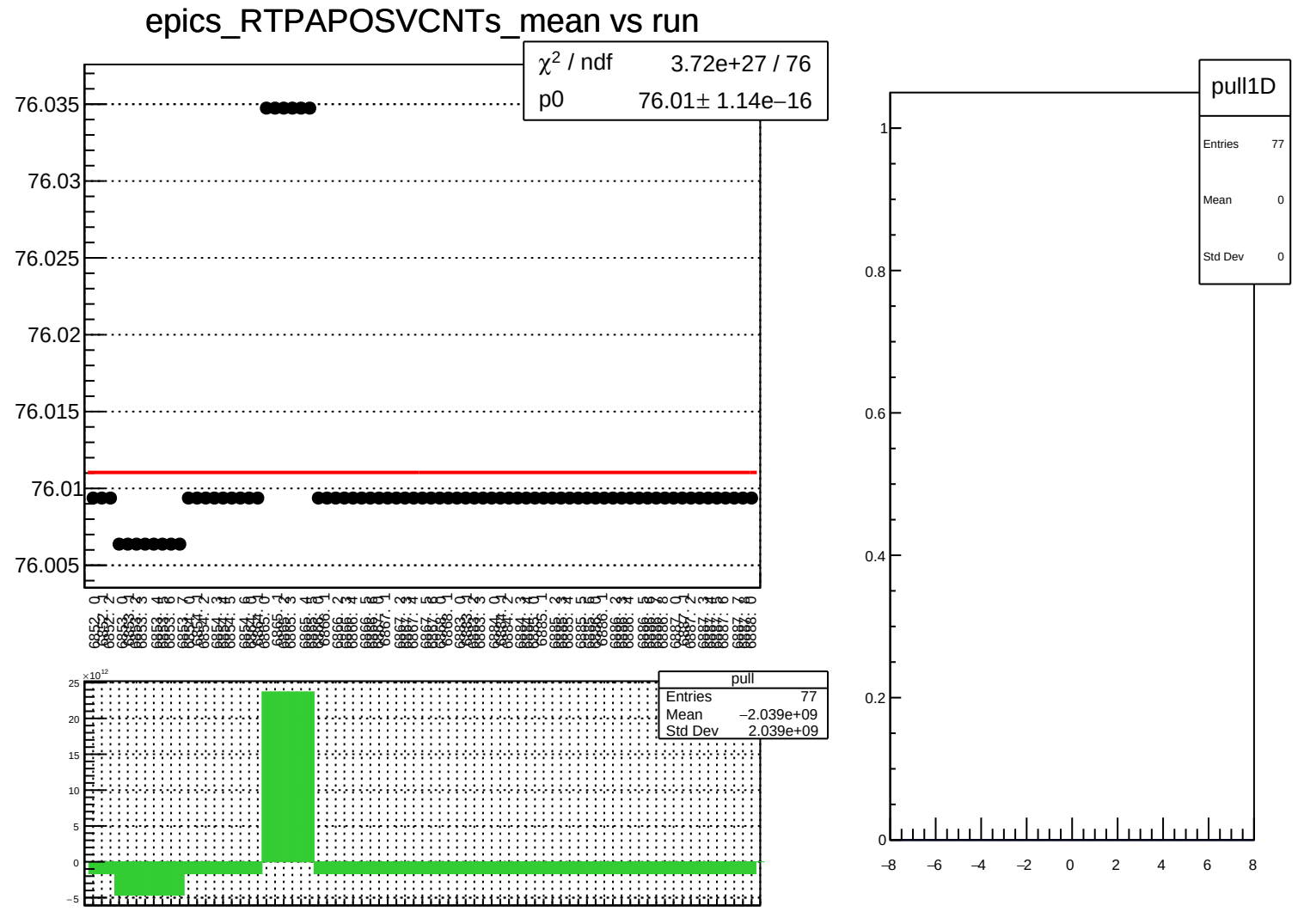

epics_psub_pl_poss_mean vs run
χ² / ndf 4.817e+08 / 76
p0 1468 ± 1.14e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 77
Mean 38.5
Std Dev 22.23
2500
2000
1500
1000
500
0
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_Phi_FGs_mean vs run
χ² / ndf 9.952e+05 / 76
p0 88.02 ± 1.14e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 77
Mean 38.5
Std Dev 22.23
100
80
60
40
20
0
pull1D
Entries 77
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 7.006e+24 / 68
p0 17.01± 1.204e−16
17.0094
17.0092
17.009
17.0088
17.0086
17.0084
17.0082
17.008
17.0078
pull
Entries 69
Mean −7.868e+08
Std Dev 7.868e+08
×10⁹
0
−200
−400
−600
−800
−1000
−1200
−1400
pull1D
Entries 69
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 8747 / 76
p0 16.01± 1.14e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−2
−4
−6
−8
−10
pull1D
Entries 77
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 9.952e+07 / 76
p0 1146 ± 1.14e−16
1147
1146.8
1146.6
1146.4
1146.2
1146
pull
Entries 77
Mean 38.5
Std Dev 22.23
0
−200
−400
−600
−800
−1000
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 3.72e+27 / 76
p0 76.01± 1.14e−16
76.035
76.03
76.025
76.02
76.015
76.01
76.005
pull
Entries 77
Mean −2.039e+09
Std Dev 2.039e+09
×10¹²
25
20
15
10
5
0
−5
pull1D
Entries 77
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8