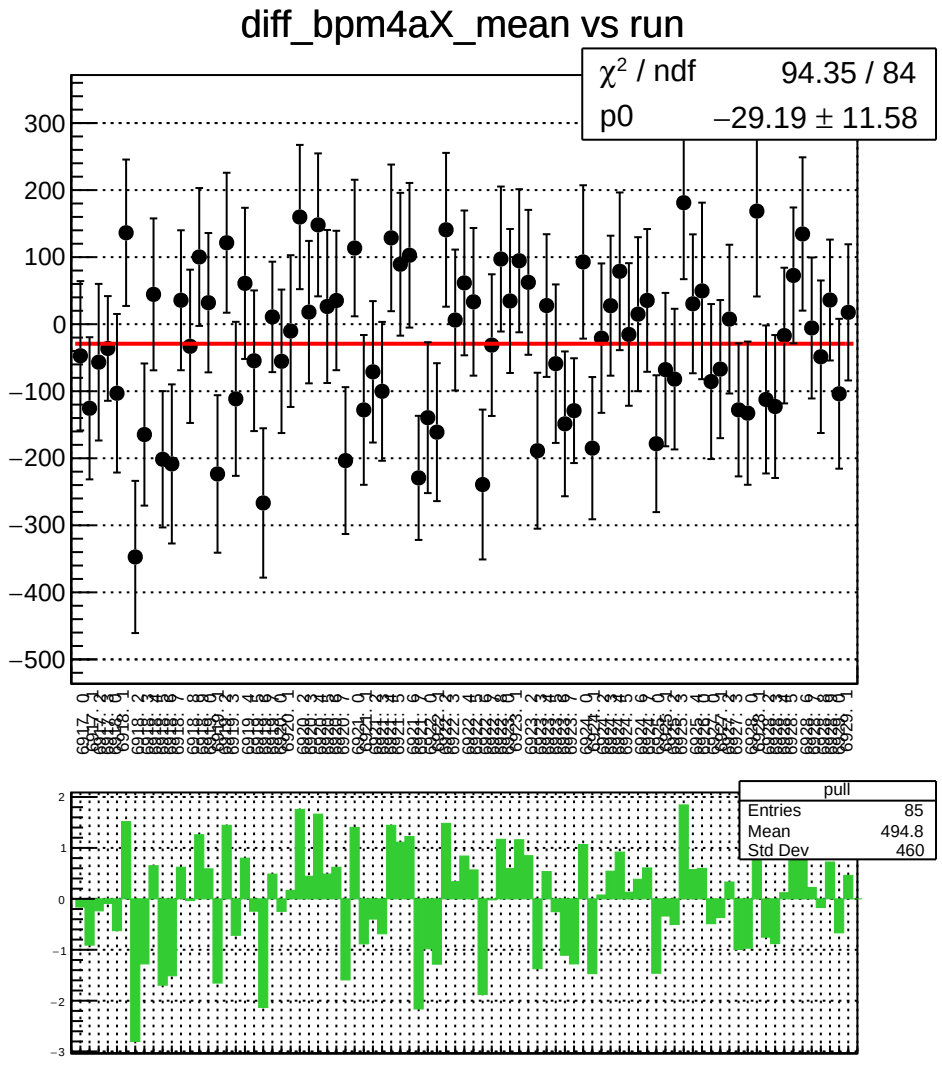
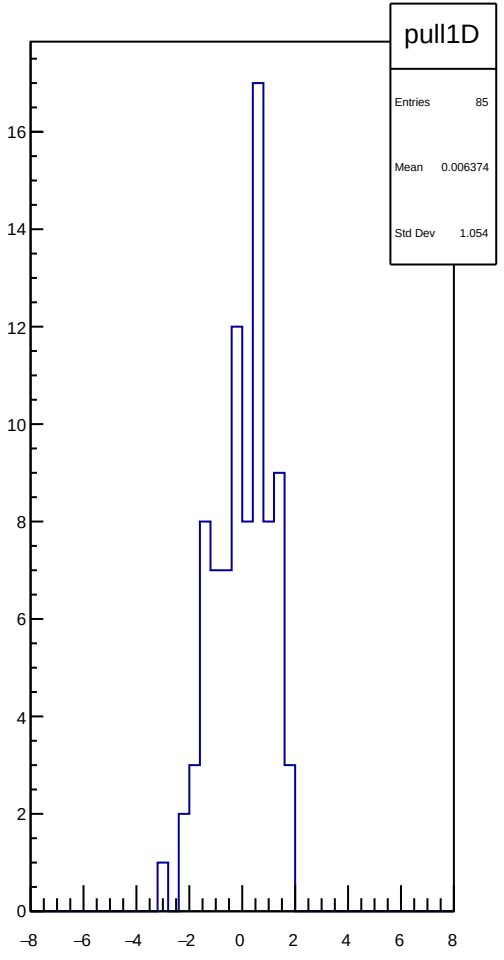
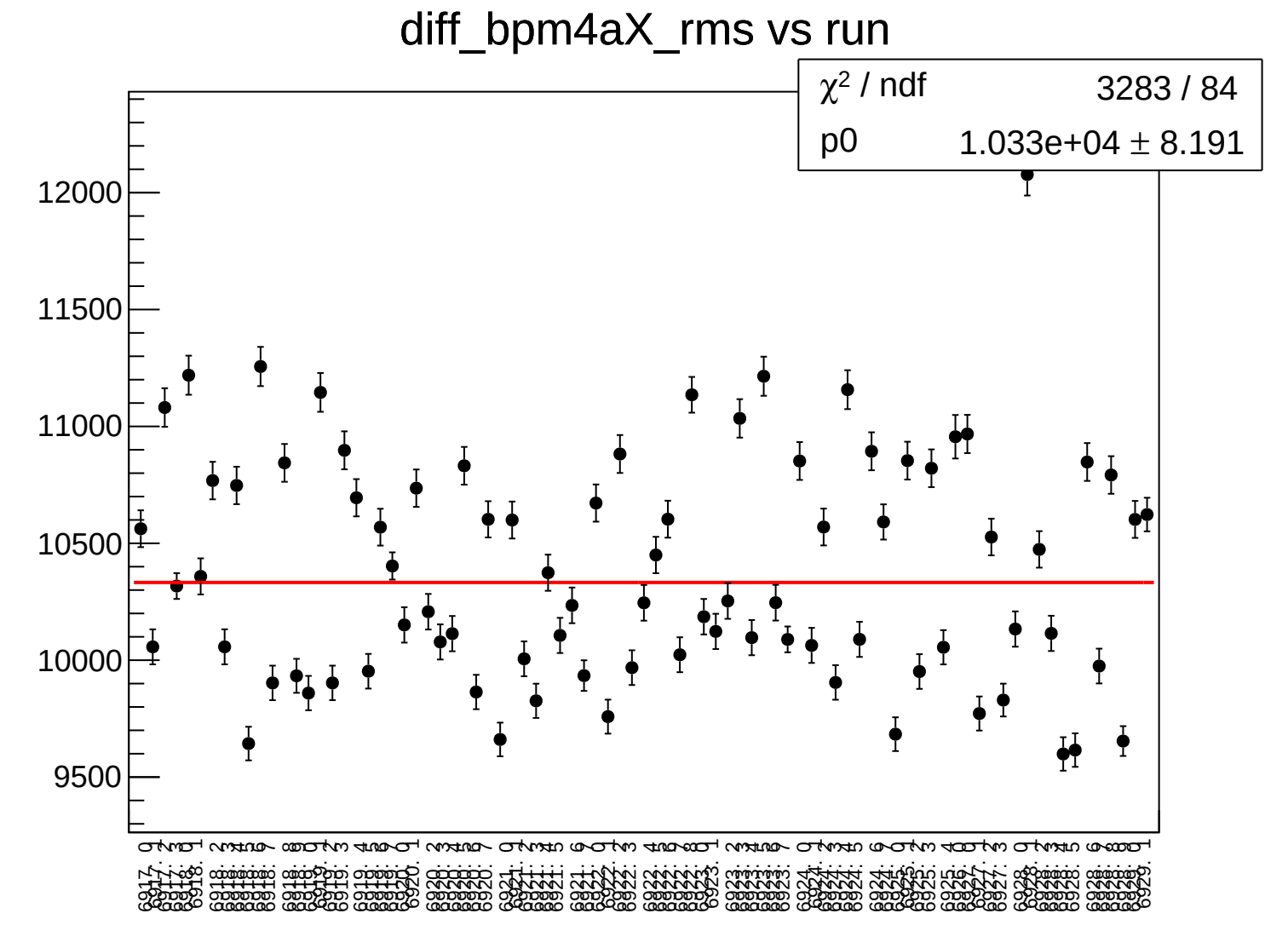
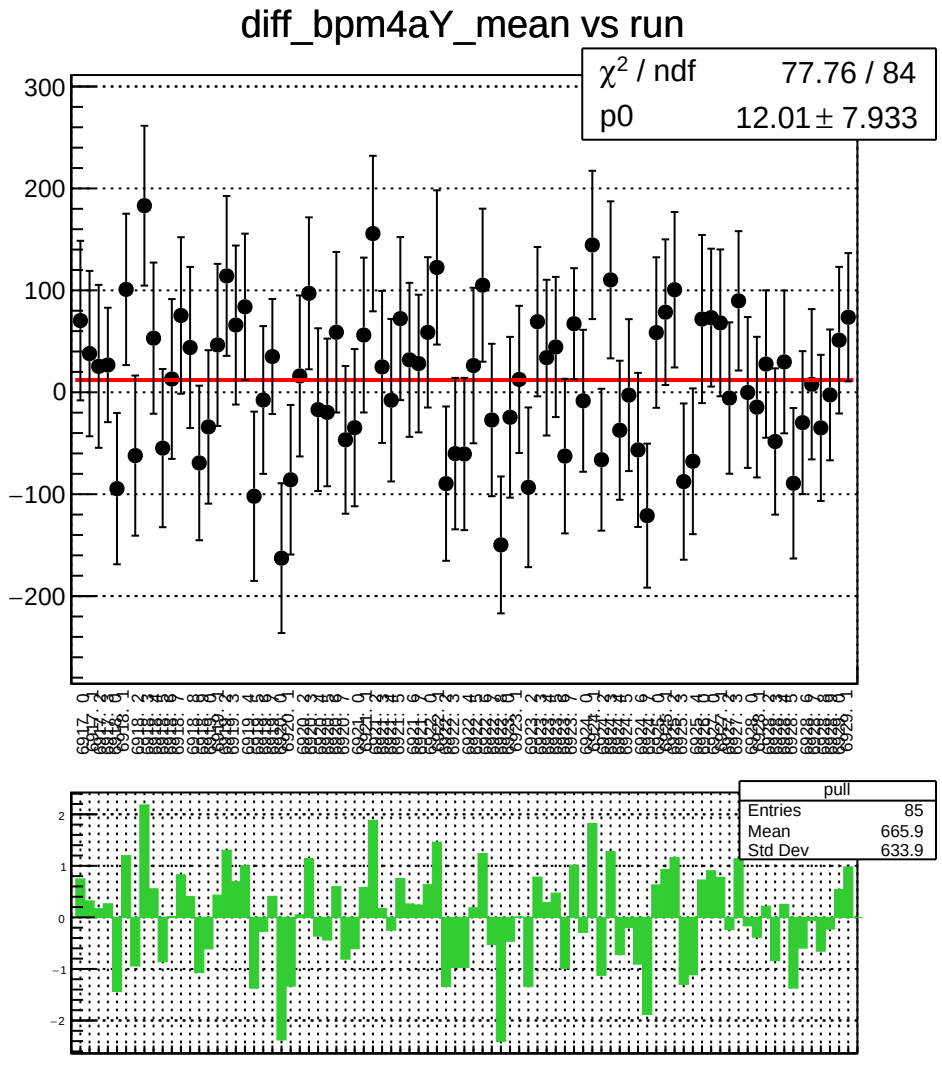
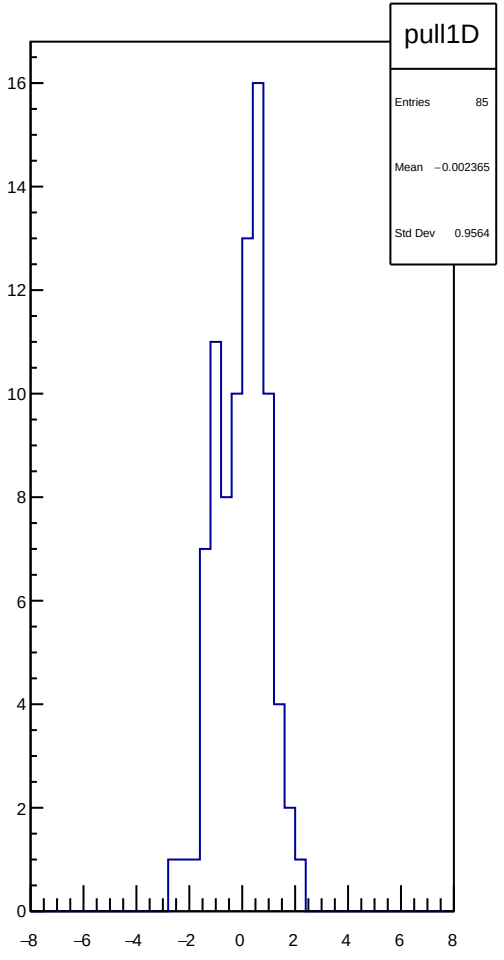
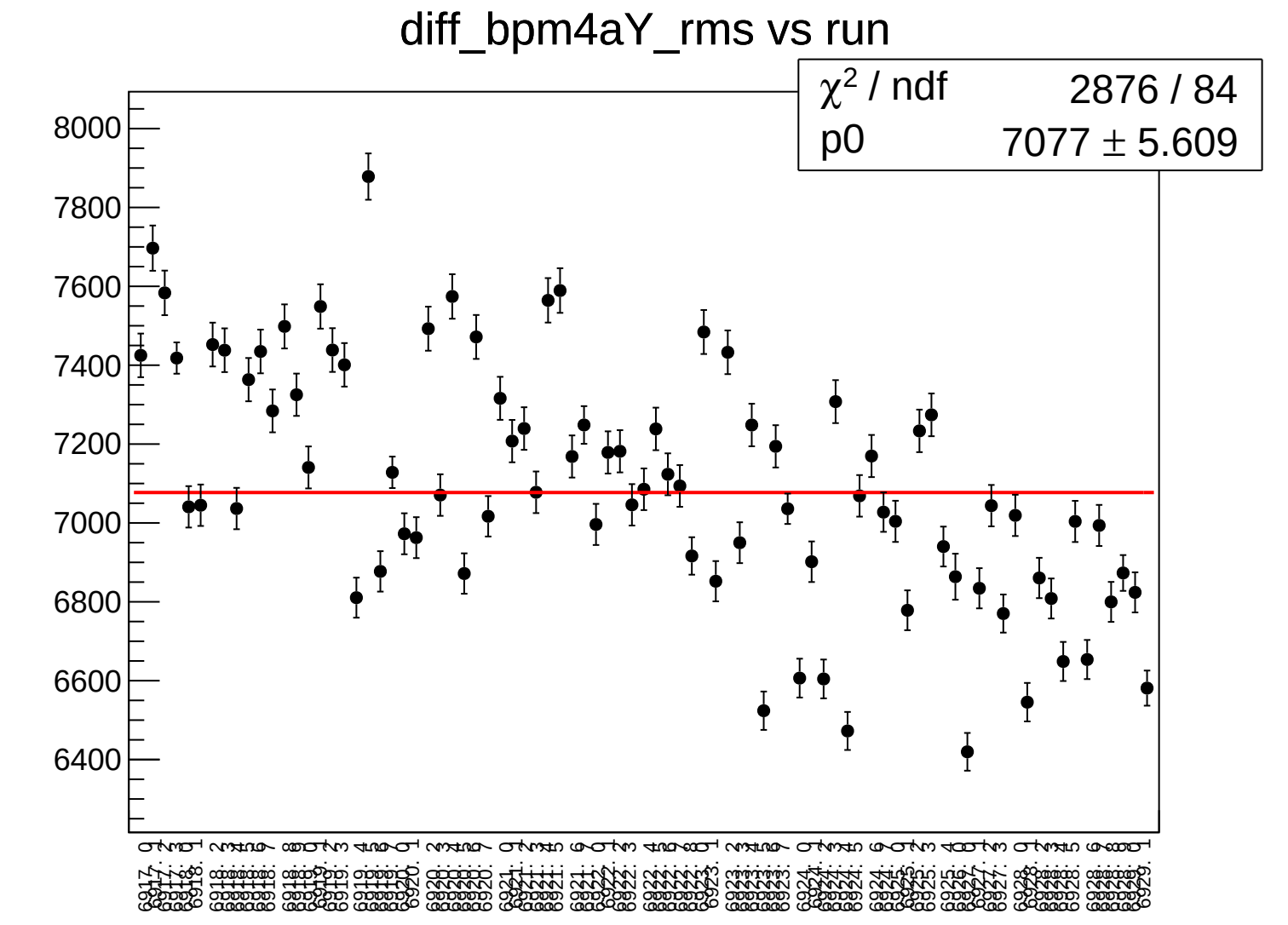

diff_bpm4aX_mean vs run
χ² / ndf 94.35 / 84
p0 −29.19 ± 11.58
pull
Entries 85
Mean 494.8
Std Dev 460

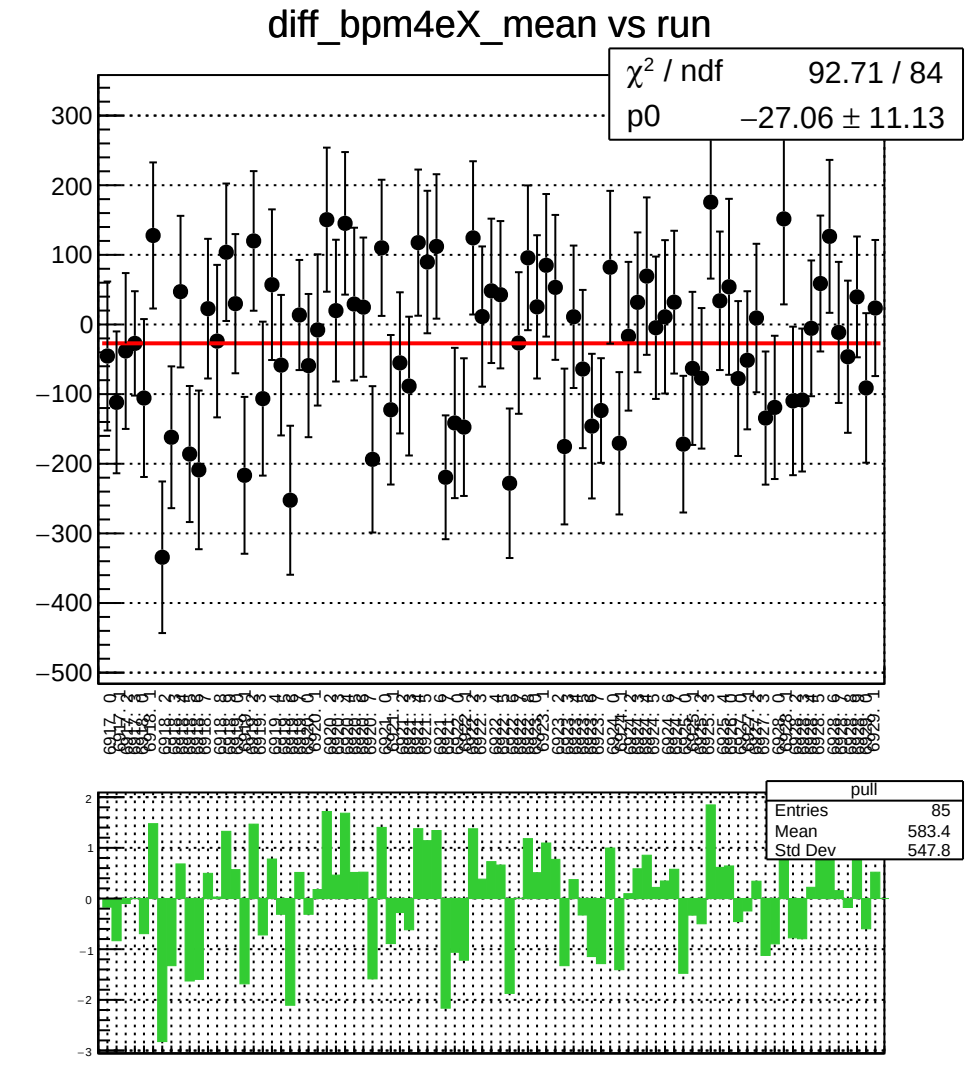

pull1D
Entries 85
Mean 0.006374
Std Dev 1.054

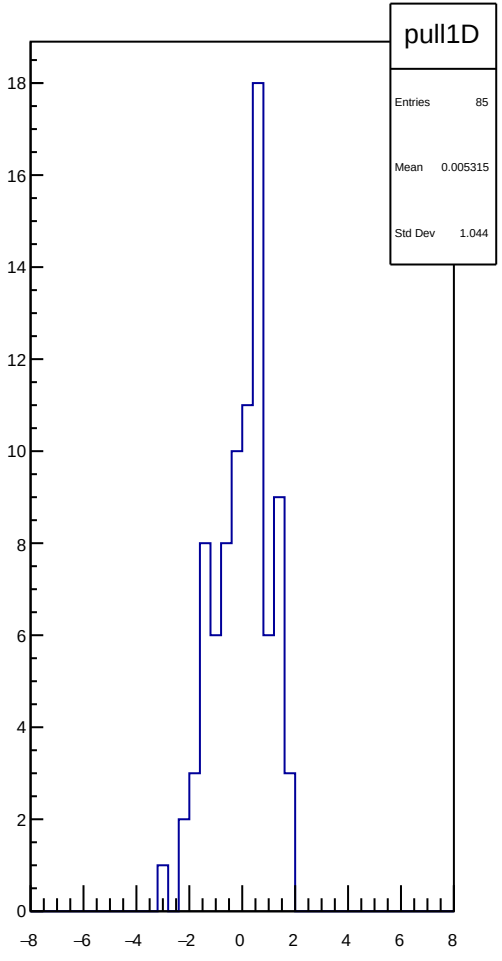

diff_bpm4aX_rms vs run
χ² / ndf 3283 / 84
p0 1.033e+04 ± 8.191
12000
11500
11000
10500
10000
9500

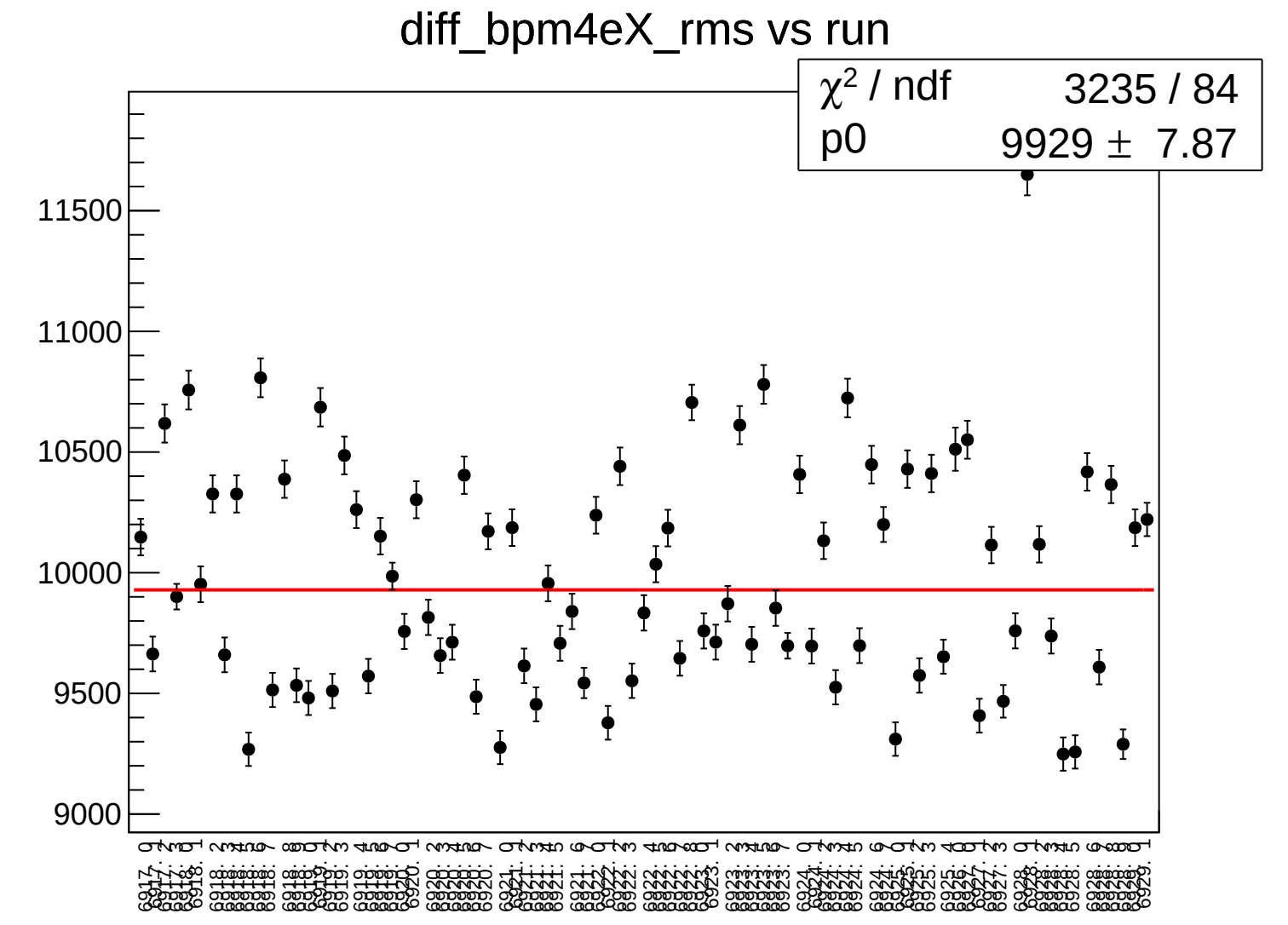

diff_bpm4aY_mean vs run
χ² / ndf 77.76 / 84
p0 12.01 ± 7.933
pull
Entries 85
Mean 665.9
Std Dev 633.9

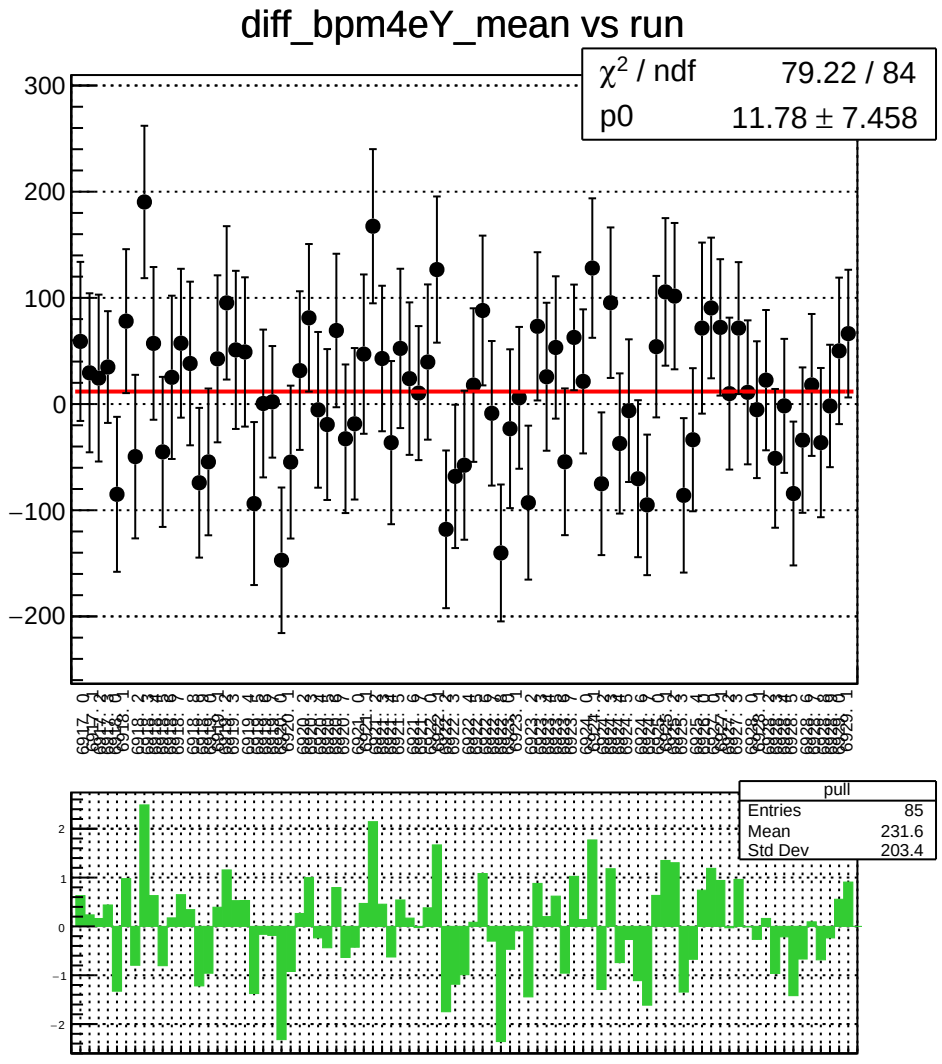

pull1D
Entries 85
Mean −0.002365
Std Dev 0.9564

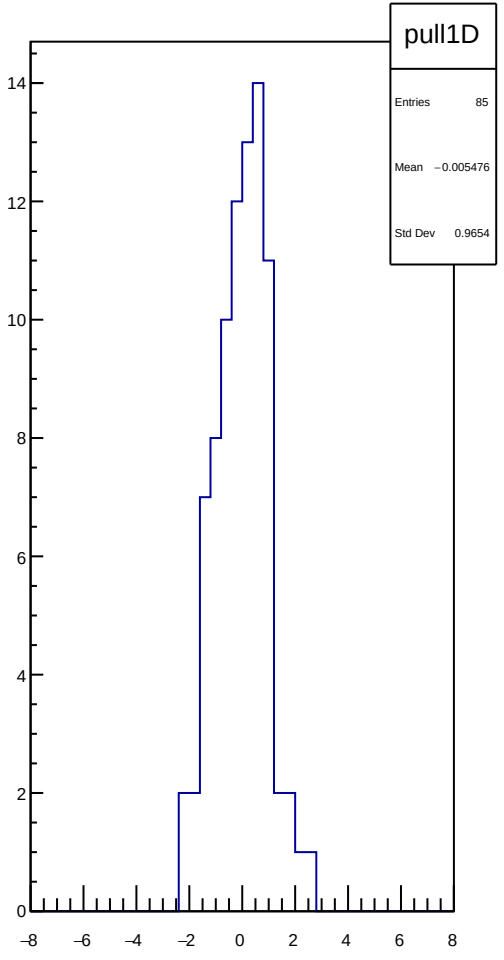

diff_bpm4aY_rms vs run
χ^2 / ndf 2876 / 84
p0 7077 ± 5.609
8000
7800
7600
7400
7200
7000
6800
6600
6400

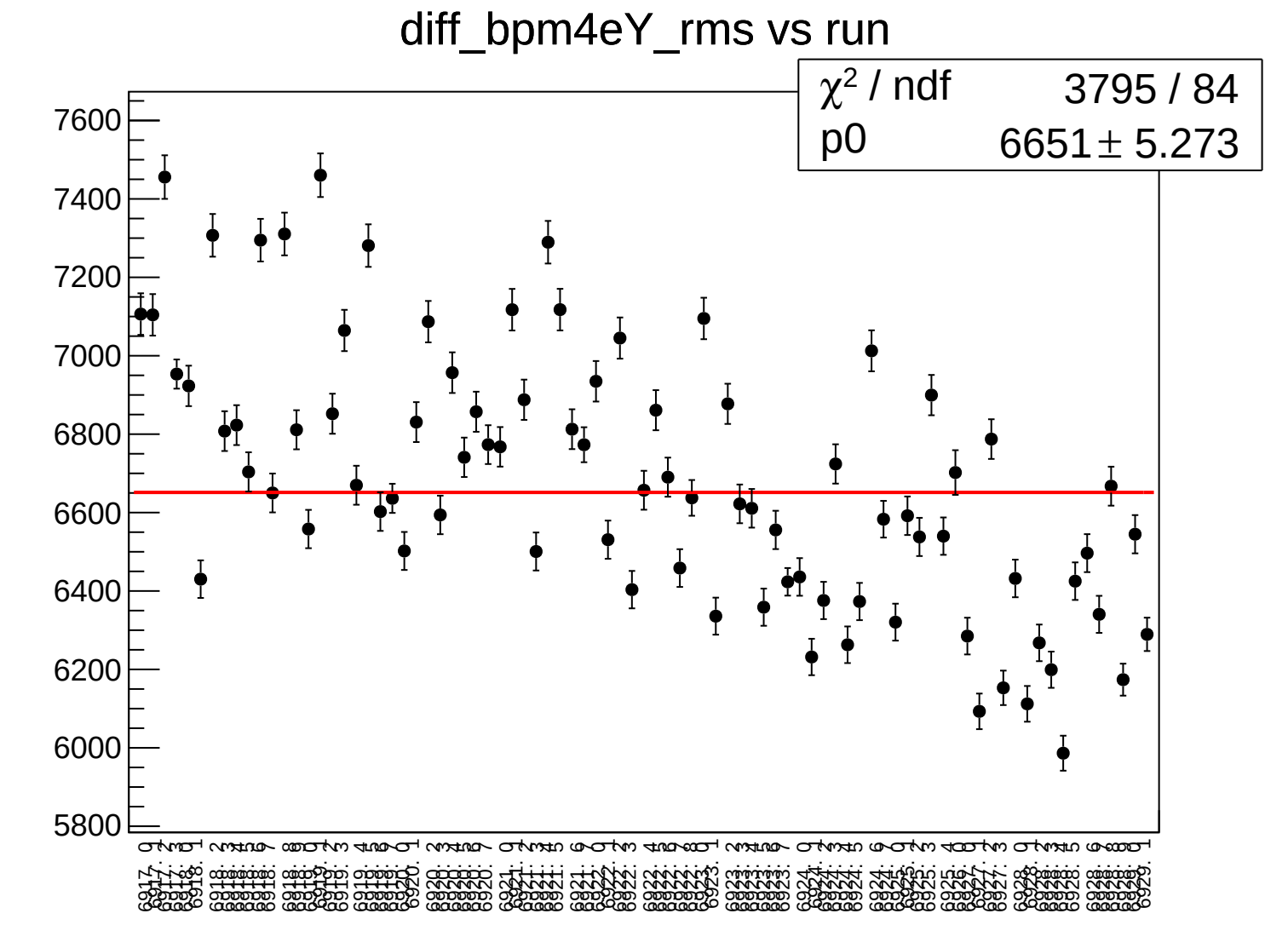

diff_bpm4eX_mean vs run
χ² / ndf 92.71 / 84
p0 −27.06 ± 11.13
pull
Entries 85
Mean 583.4
Std Dev 547.8

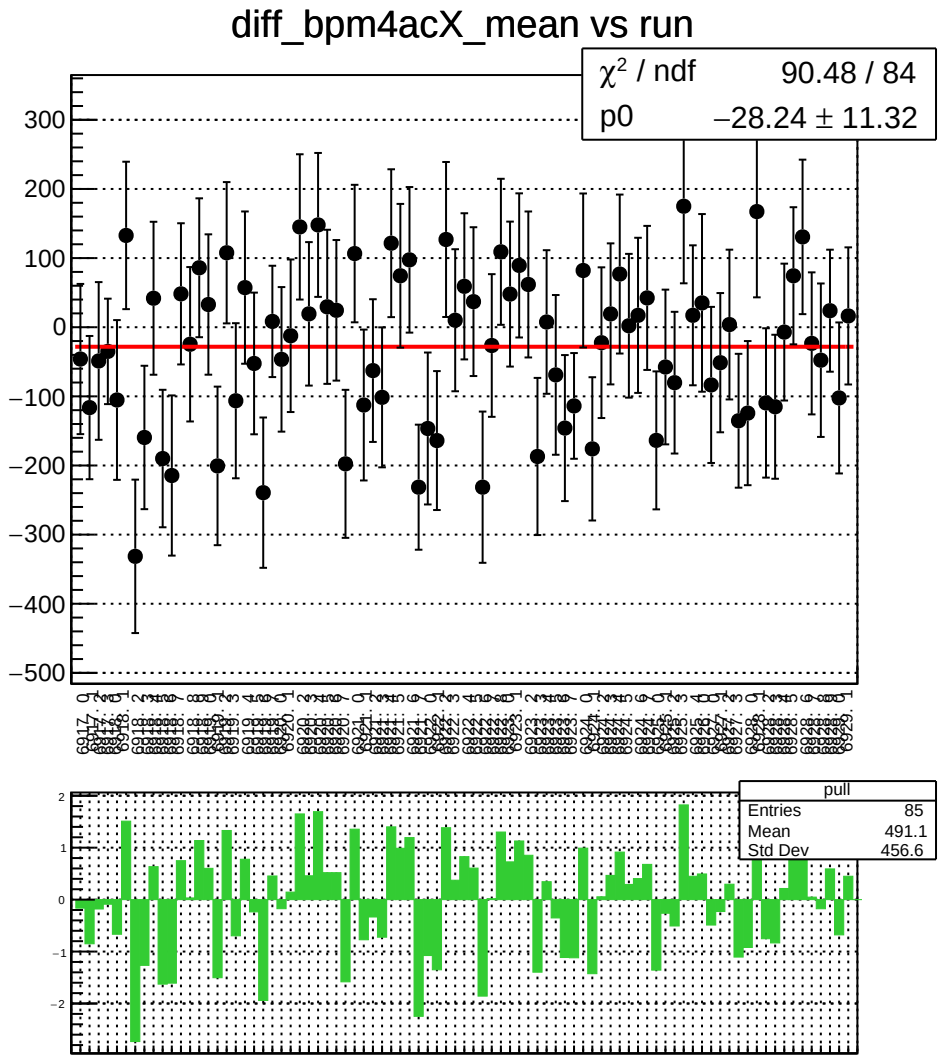

pull1D
Entries 85
Mean 0.005315
Std Dev 1.044

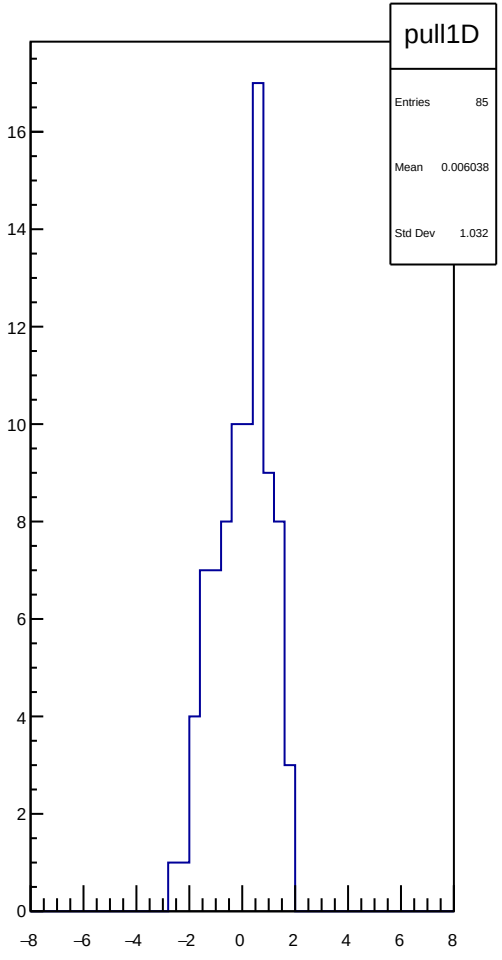

diff_bpm4eX_rms vs run
χ² / ndf 3235 / 84
p0 9929 ± 7.87
11500
11000
10500
10000
9500
9000

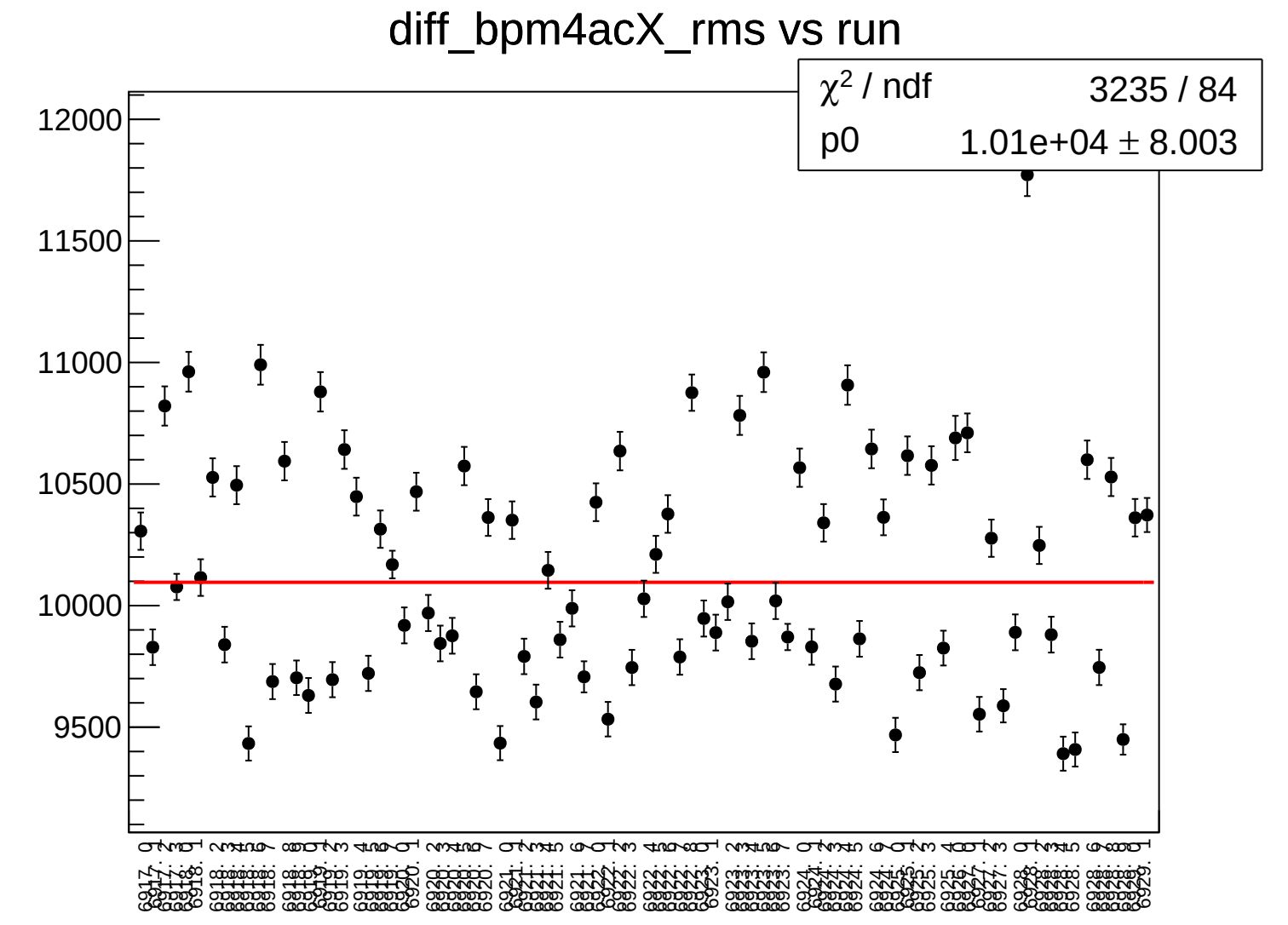

diff_bpm4eY_mean vs run
χ² / ndf 79.22 / 84
p0 11.78 ± 7.458
pull
Entries 85
Mean 231.6
Std Dev 203.4

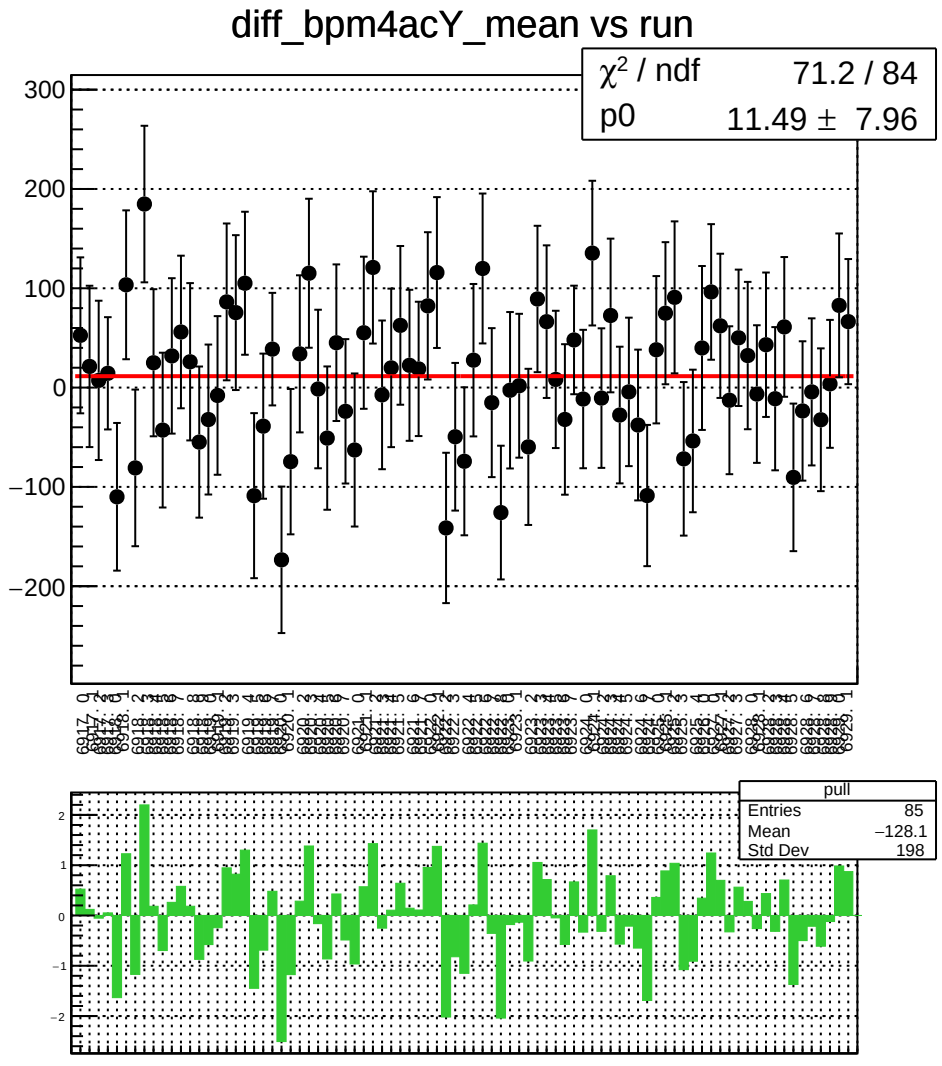

pull1D
Entries 85
Mean −0.005476
Std Dev 0.9654

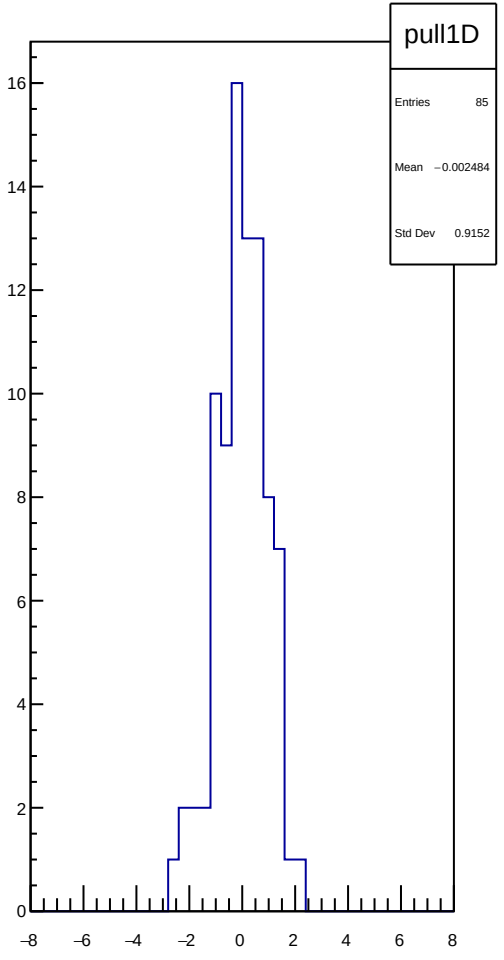

diff_bpm4eY_rms vs run
χ² / ndf 3795 / 84
p0 6651 ± 5.273
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800

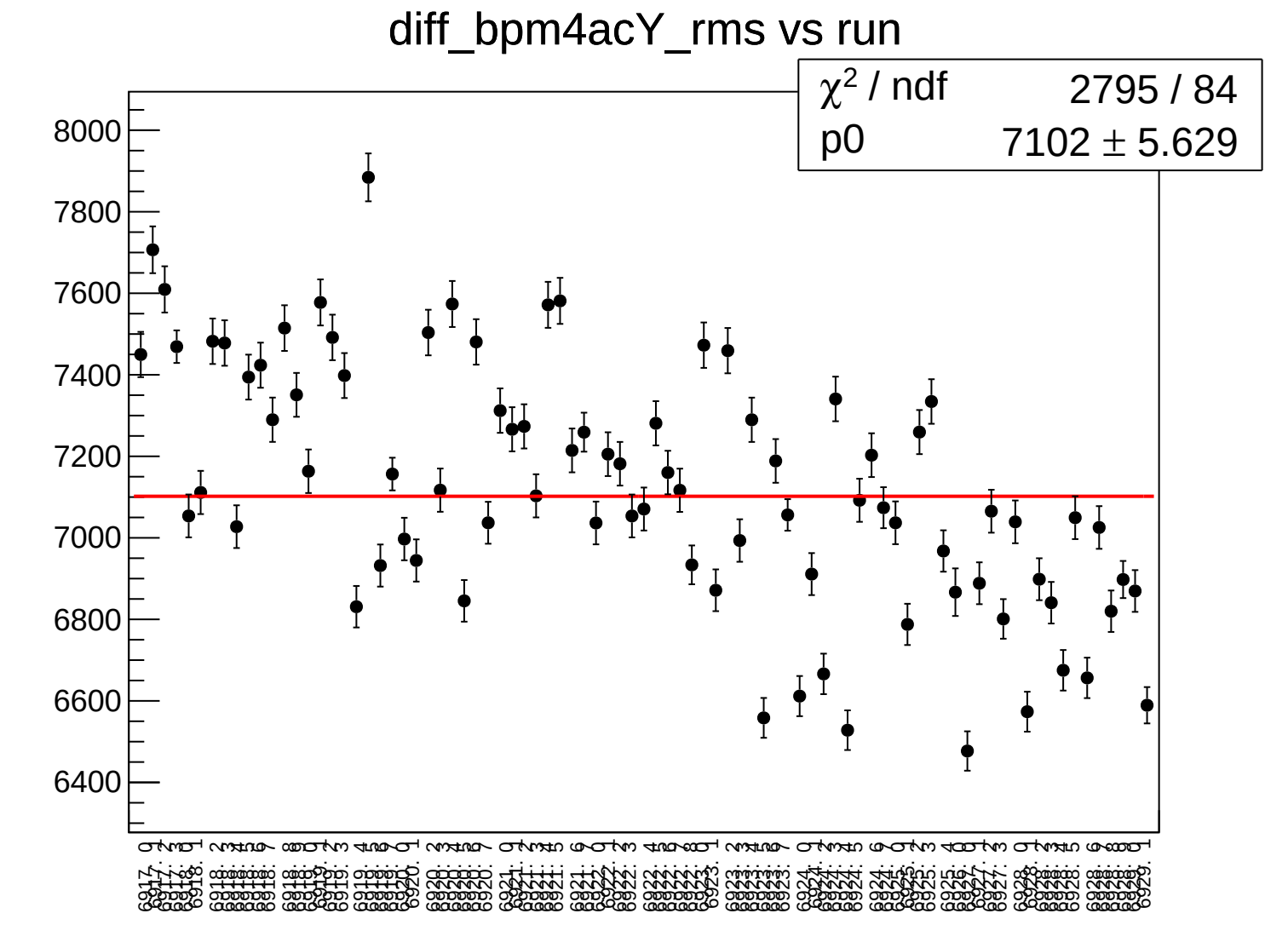

diff_bpm4acX_mean vs run
χ² / ndf 90.48 / 84
p0 −28.24 ± 11.32
pull
Entries 85
Mean 491.1
Std Dev 456.6

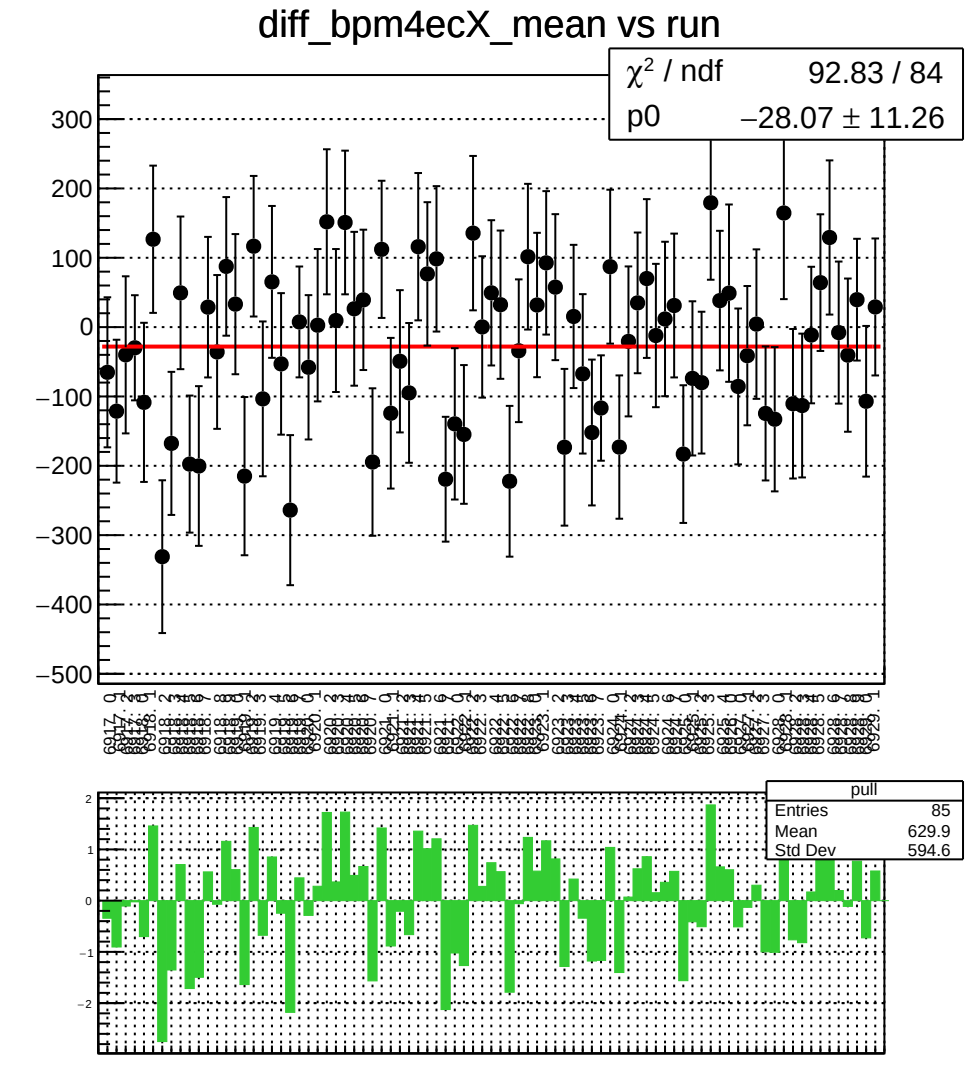

pull1D
Entries 85
Mean 0.006038
Std Dev 1.032

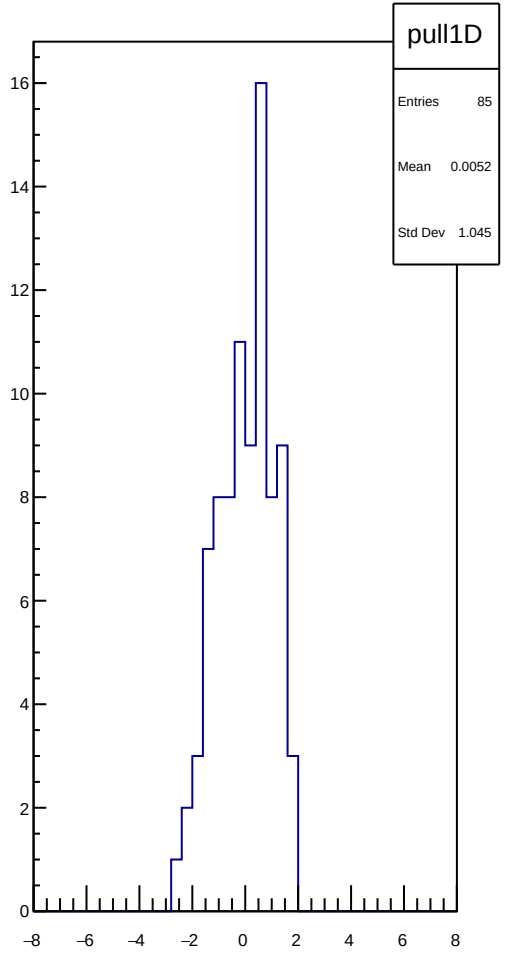

diff_bpm4acX_rms vs run
χ² / ndf 3235 / 84
p0 1.01e+04 ± 8.003
12000
11500
11000
10500
10000
9500

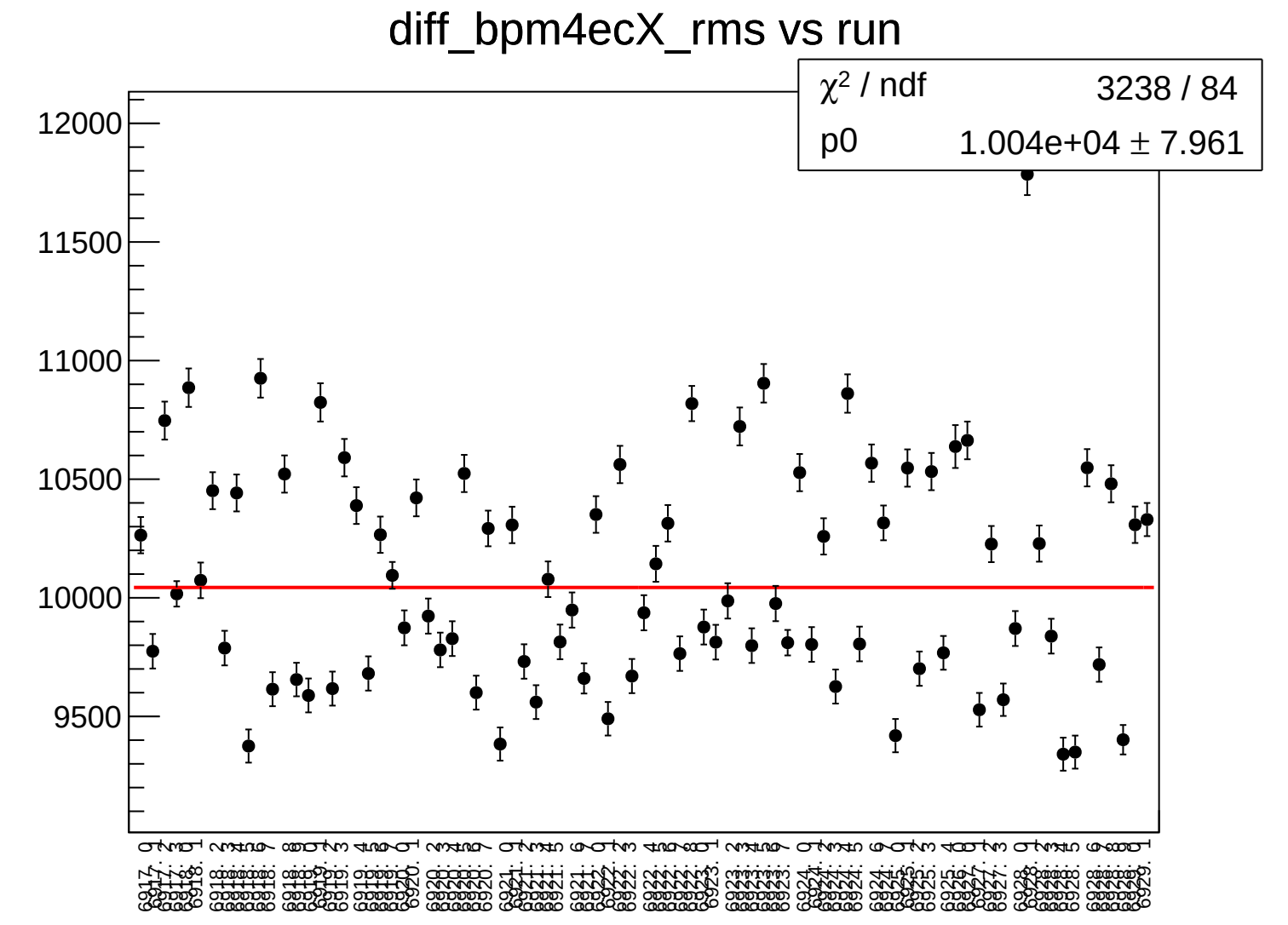

diff_bpm4acY_mean vs run
χ² / ndf 71.2 / 84
p0 11.49 ± 7.96
pull
Entries 85
Mean −128.1
Std Dev 198

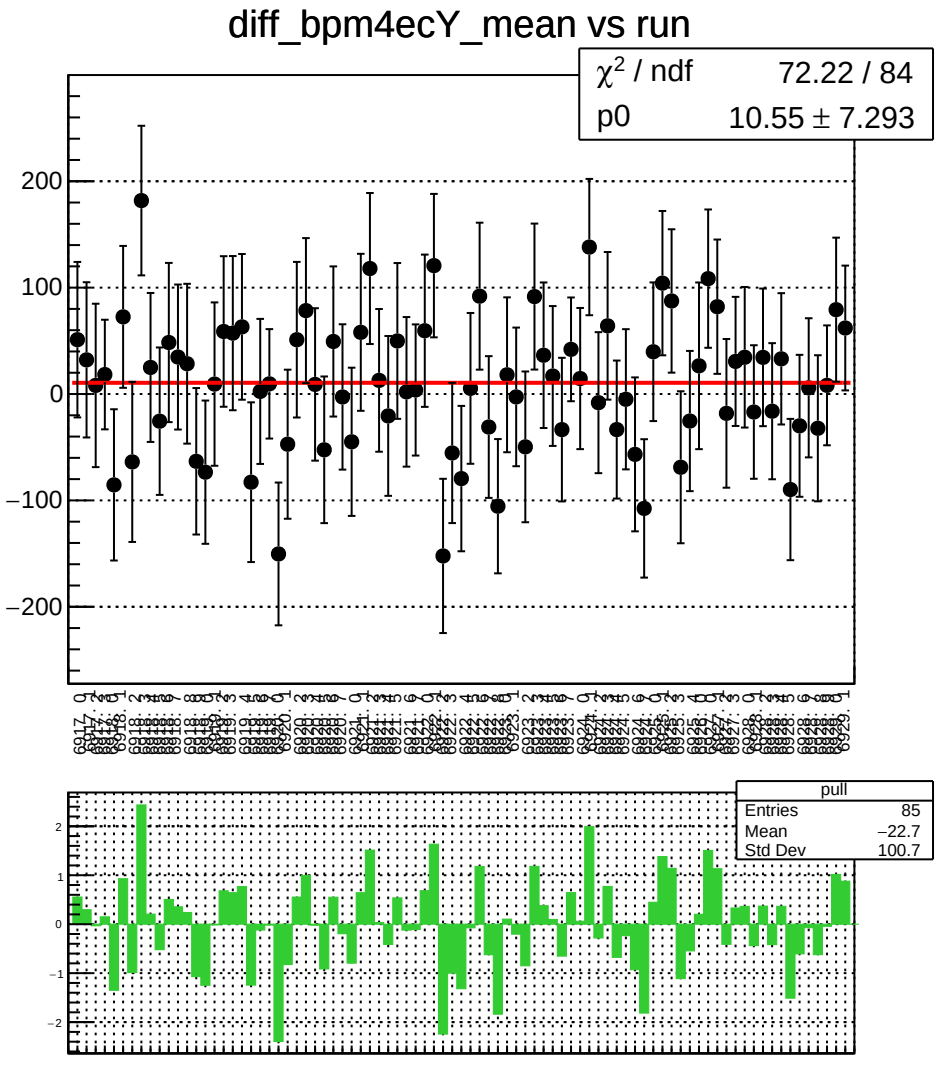

pull1D
Entries 85
Mean −0.002484
Std Dev 0.9152

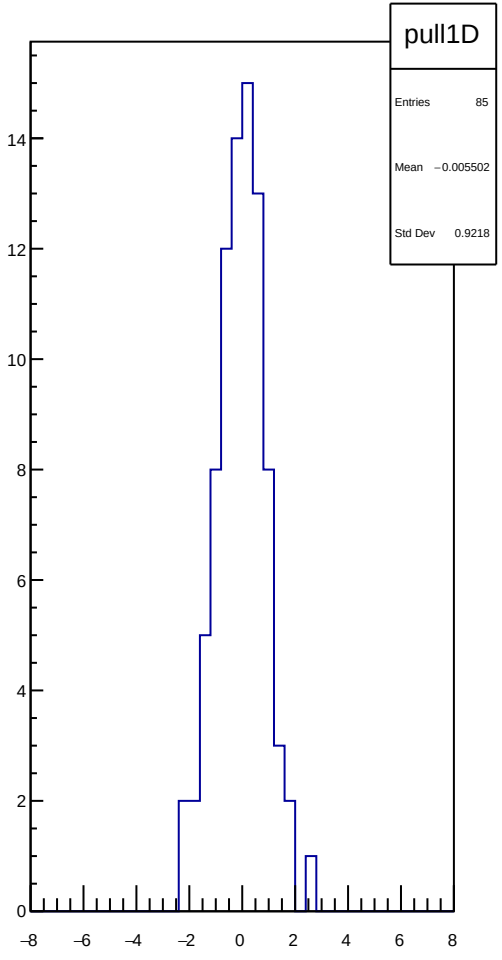

diff_bpm4acY_rms vs run
χ² / ndf 2795 / 84
p0 7102 ± 5.629
8000
7800
7600
7400
7200
7000
6800
6600
6400

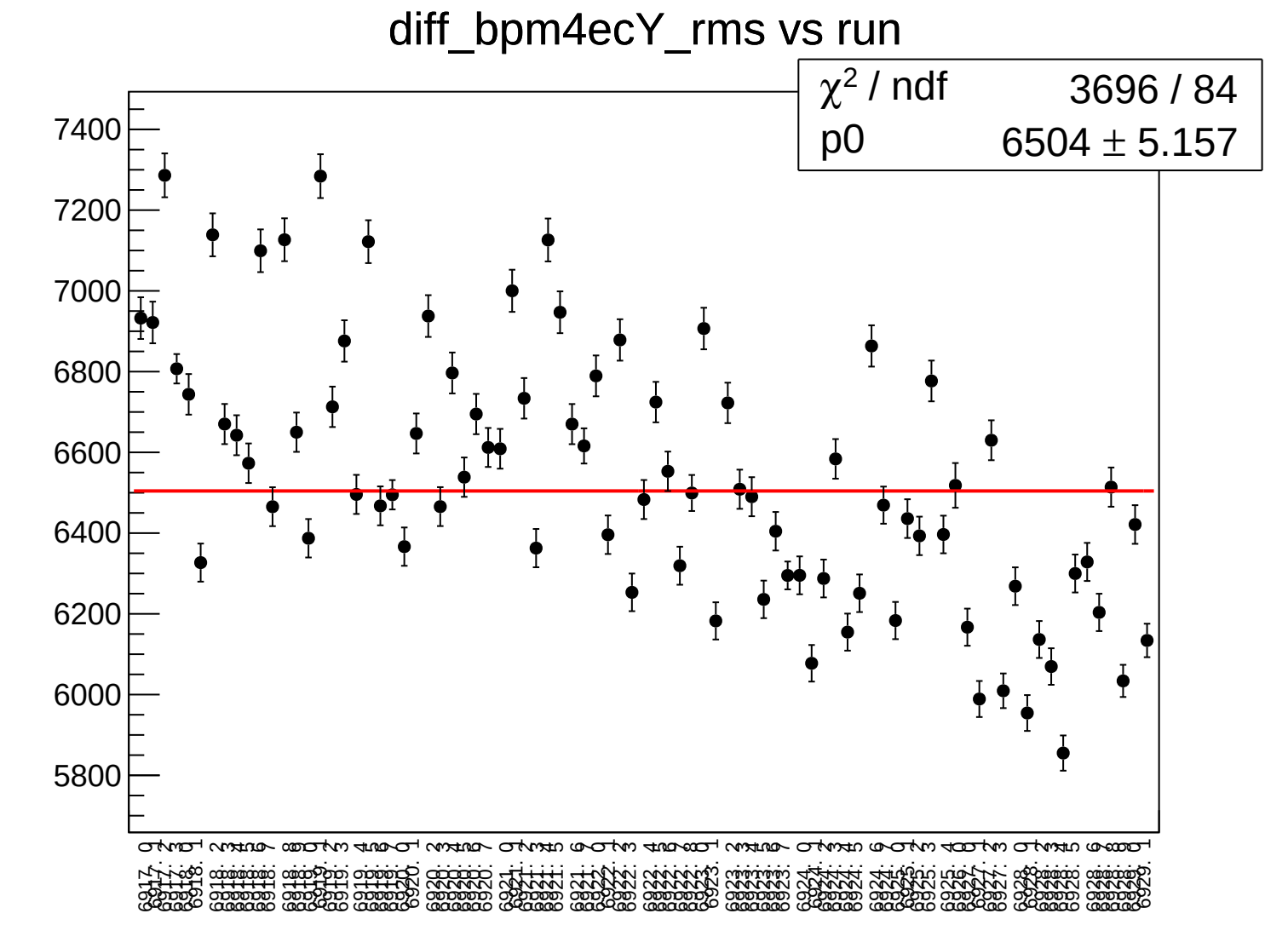

diff_bpm4ecX_mean vs run
χ² / ndf 92.83 / 84
p0 −28.07 ± 11.26
pull
Entries 85
Mean 629.9
Std Dev 594.6

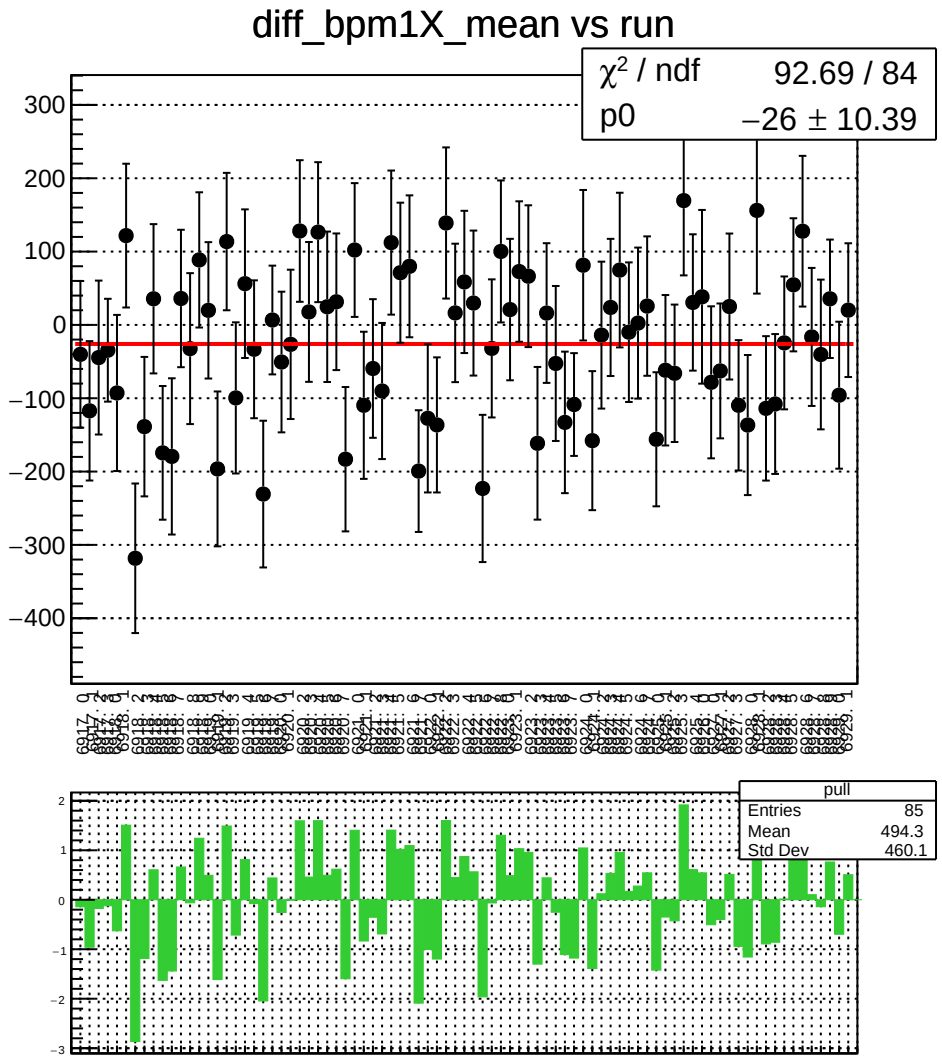

pull1D
Entries 85
Mean 0.0052
Std Dev 1.045

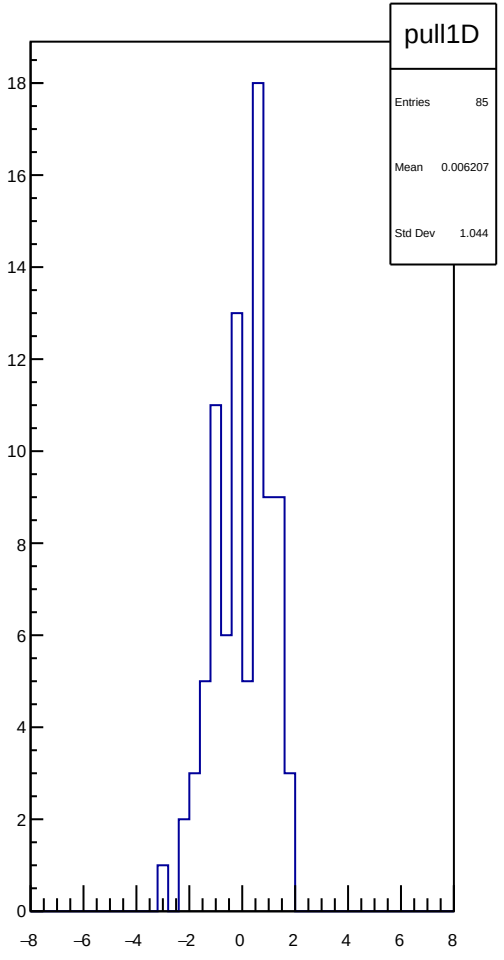

diff_bpm4ecX_rms vs run
χ² / ndf 3238 / 84
p0 1.004e+04 ± 7.961
12000
11500
11000
10500
10000
9500

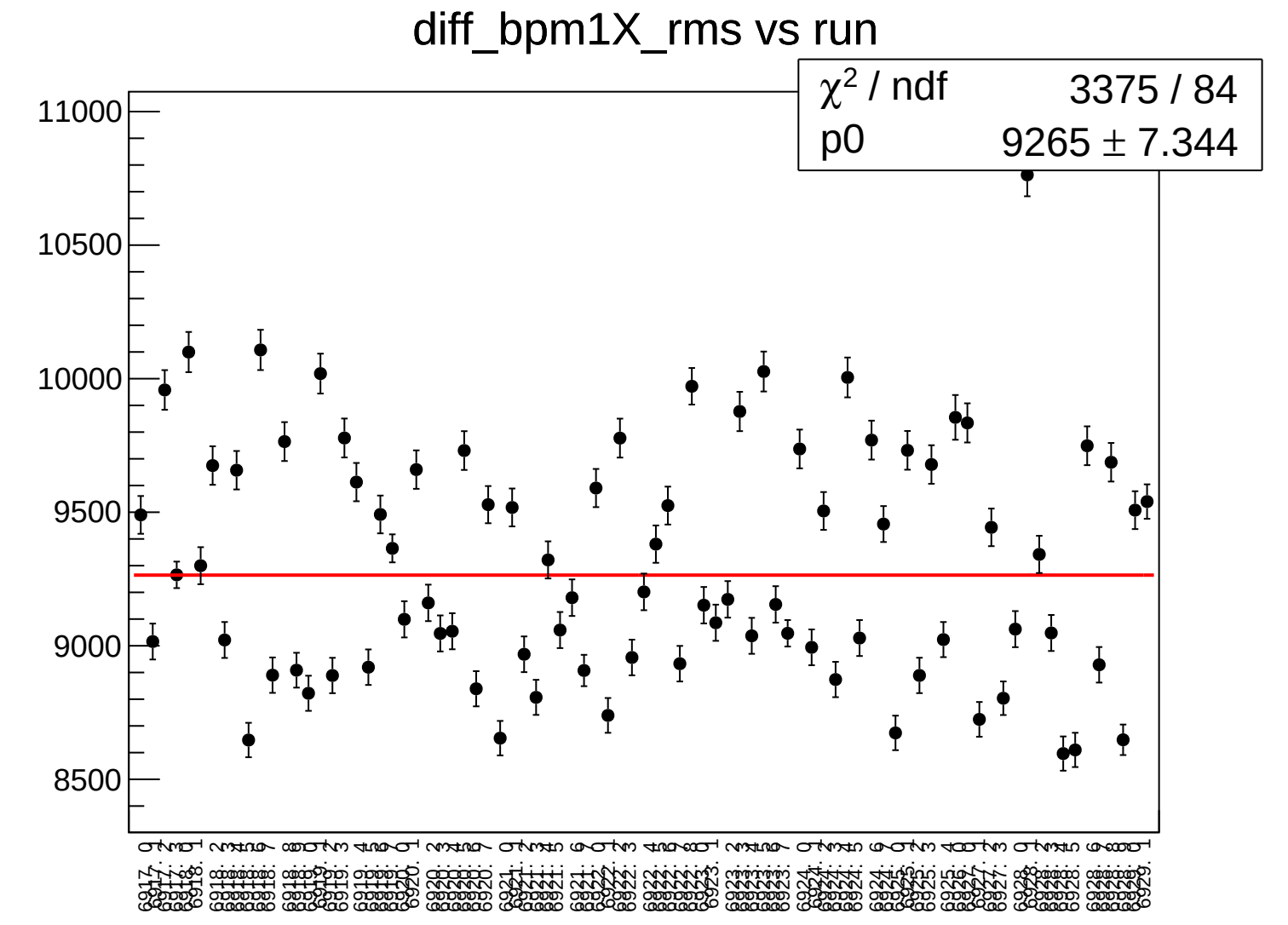

diff_bpm4ecY_mean vs run
χ² / ndf 72.22 / 84
p0 10.55 ± 7.293
200
100
0
−100
−200
pull
Entries 85
Mean −22.7
Std Dev 100.7
2
1
0
−1
−2

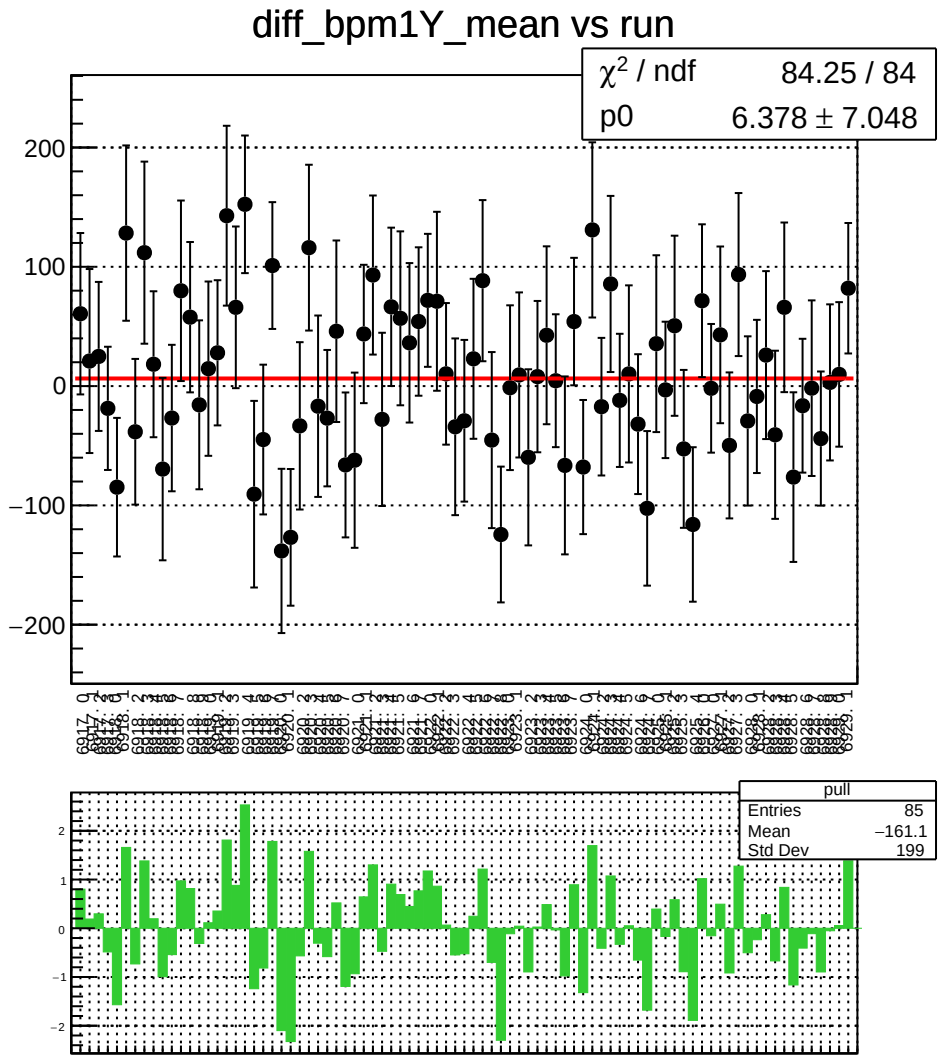

pull1D
Entries 85
Mean −0.005502
Std Dev 0.9218
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

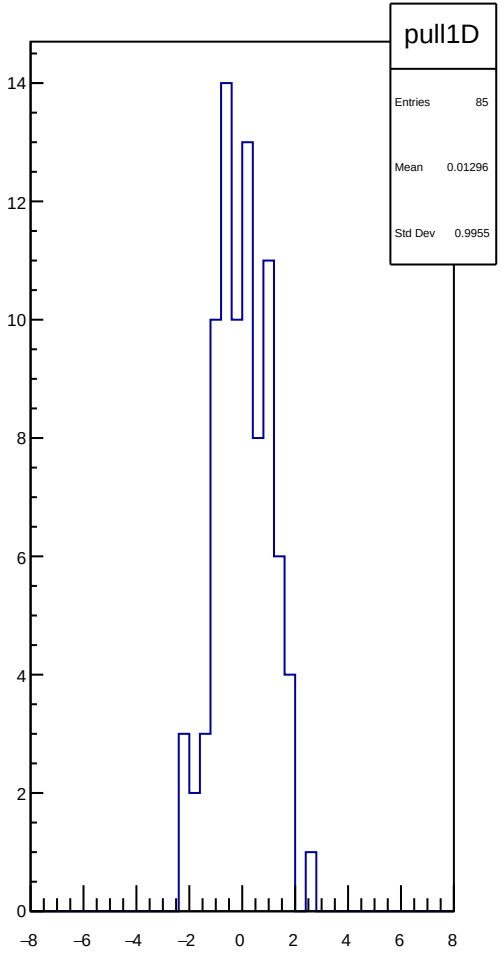

diff_bpm4ecY_rms vs run
χ^2 / ndf 3696 / 84
p0 6504 ± 5.157
7400
7200
7000
6800
6600
6400
6200
6000
5800

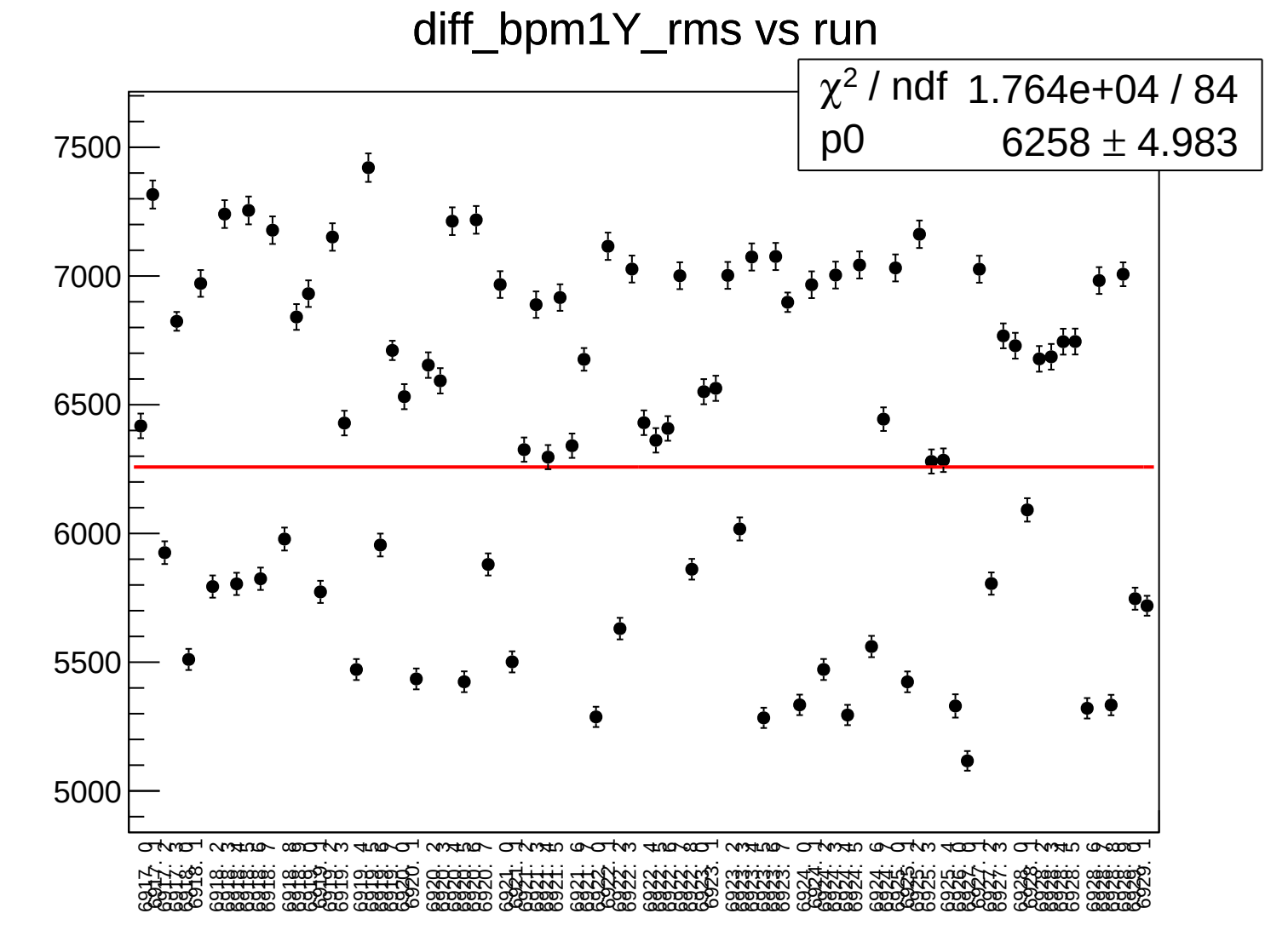

diff_bpm1X_mean vs run
χ² / ndf 92.69 / 84
p0 −26 ± 10.39
pull
Entries 85
Mean 494.3
Std Dev 460.1

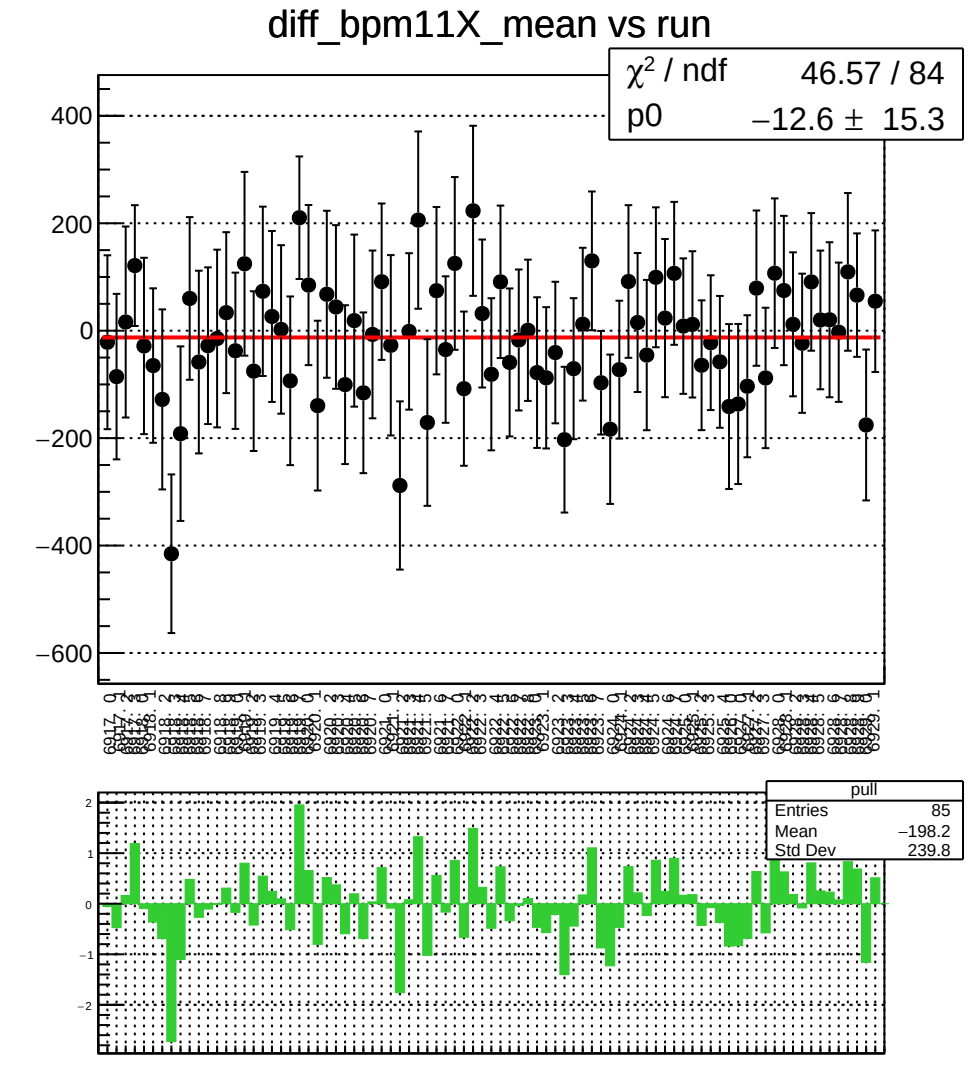

pull1D
Entries 85
Mean 0.006207
Std Dev 1.044

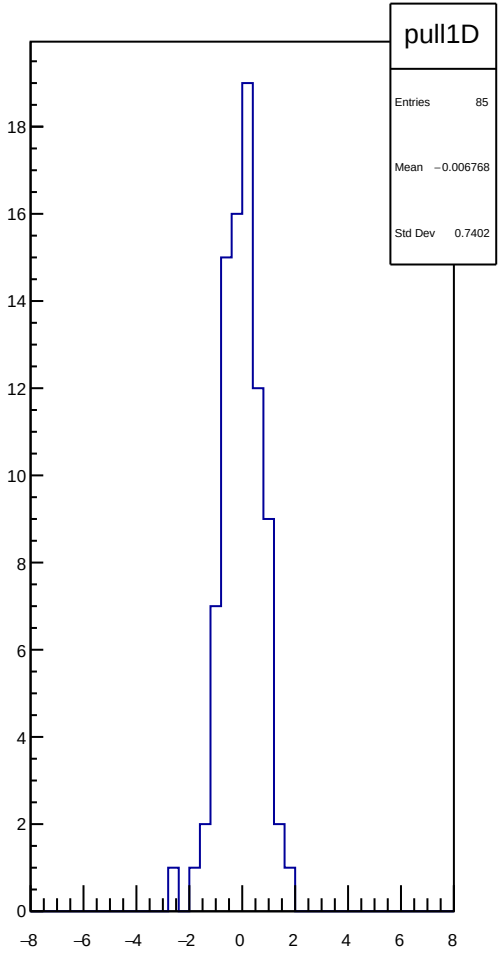

diff_bpm1X_rms vs run
χ² / ndf 3375 / 84
p0 9265 ± 7.344
11000
10500
10000
9500
9000
8500

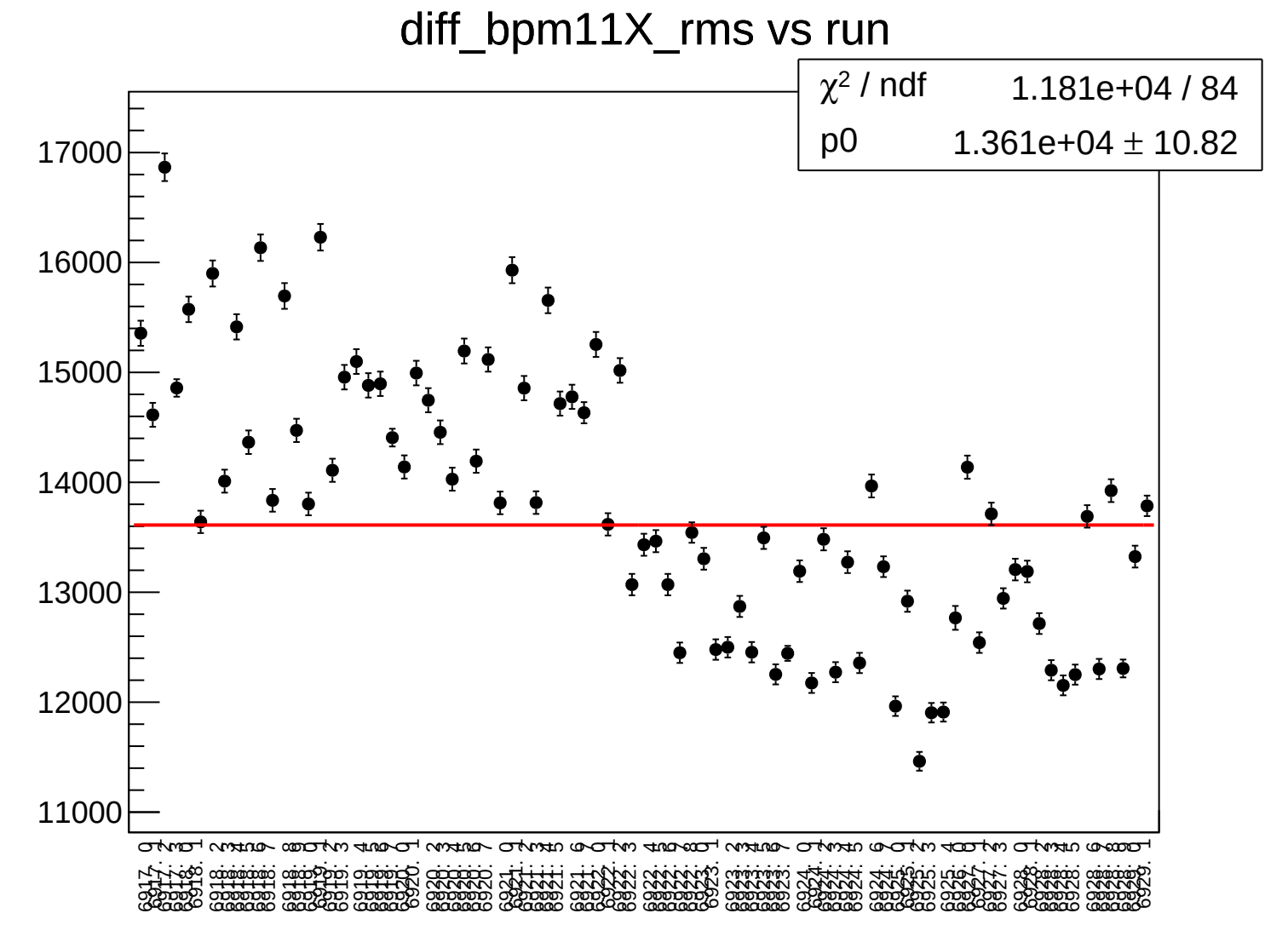

diff_bpm1Y_mean vs run
χ² / ndf 84.25 / 84
p0 6.378 ± 7.048
200
100
0
−100
−200
pull
Entries 85
Mean −161.1
Std Dev 199
2
1
0
−1
−2

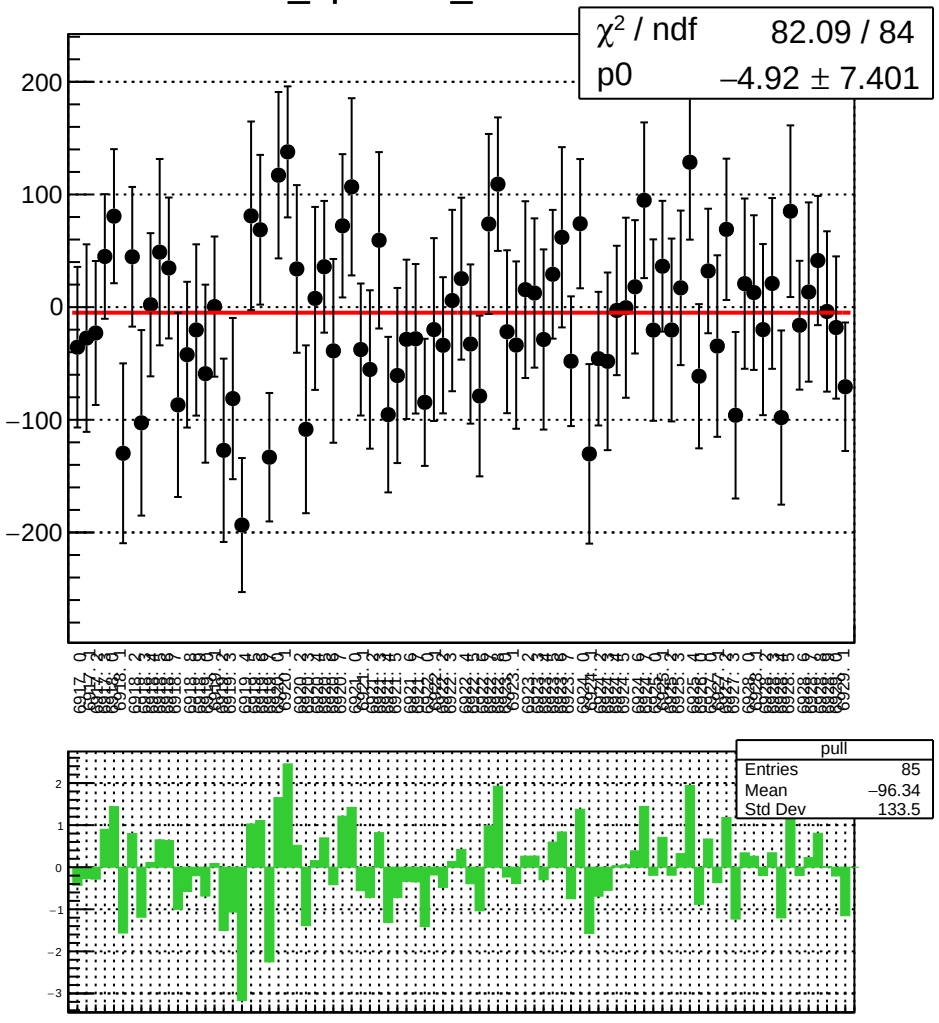

pull1D
Entries 85
Mean 0.01296
Std Dev 0.9955
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

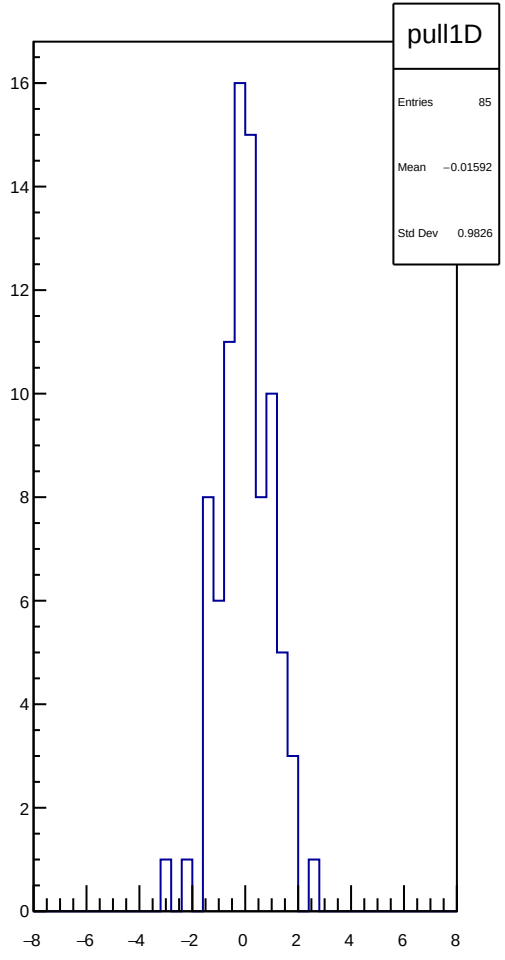

diff_bpm1Y_rms vs run
χ² / ndf 1.764e+04 / 84
p0 6258 ± 4.983
7500
7000
6500
6000
5500
5000

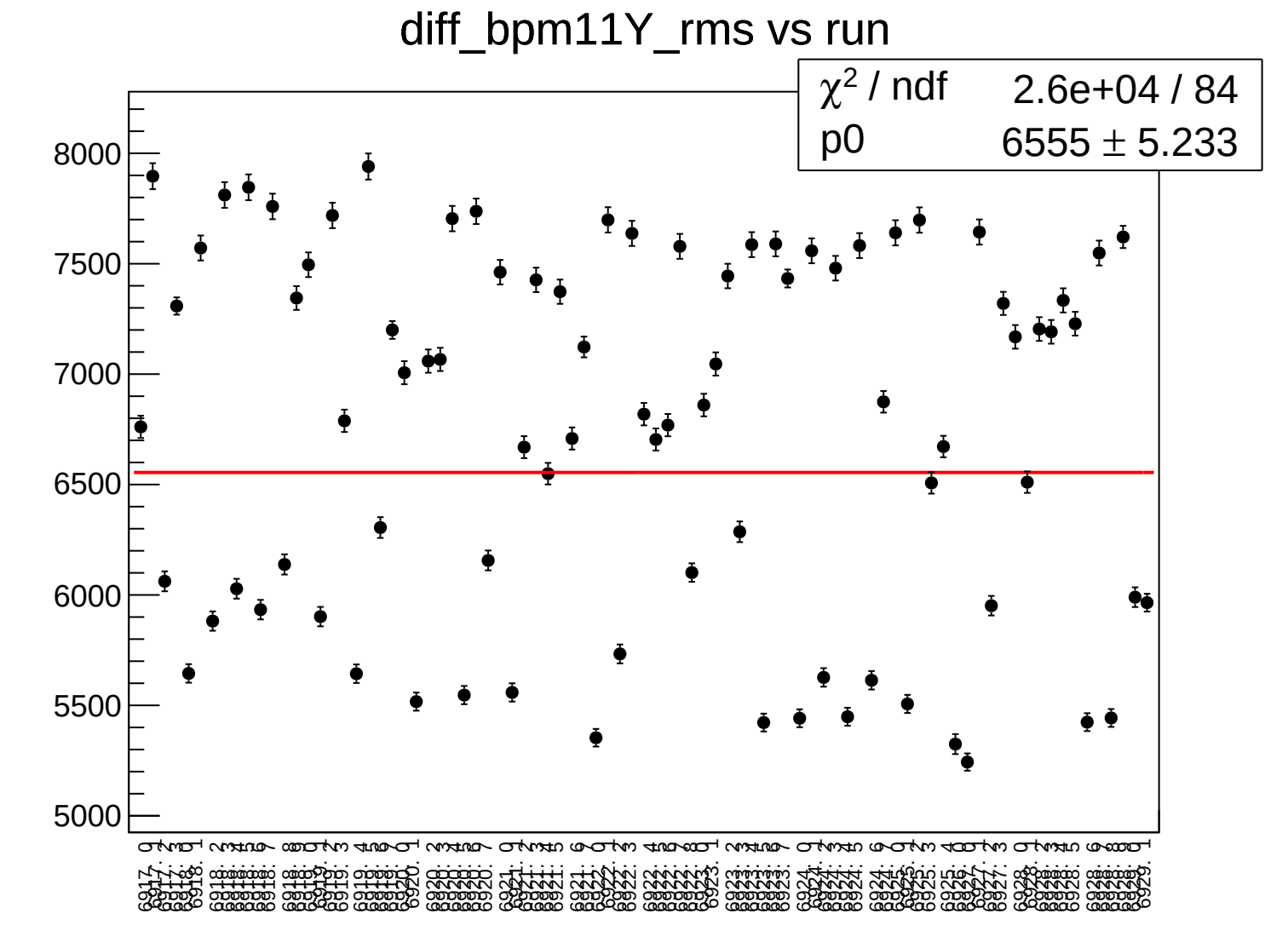

diff_bpm11X_mean vs run
χ^2 / ndf 46.57 / 84
p0 −12.6 ± 15.3
pull
Entries 85
Mean −198.2
Std Dev 239.8

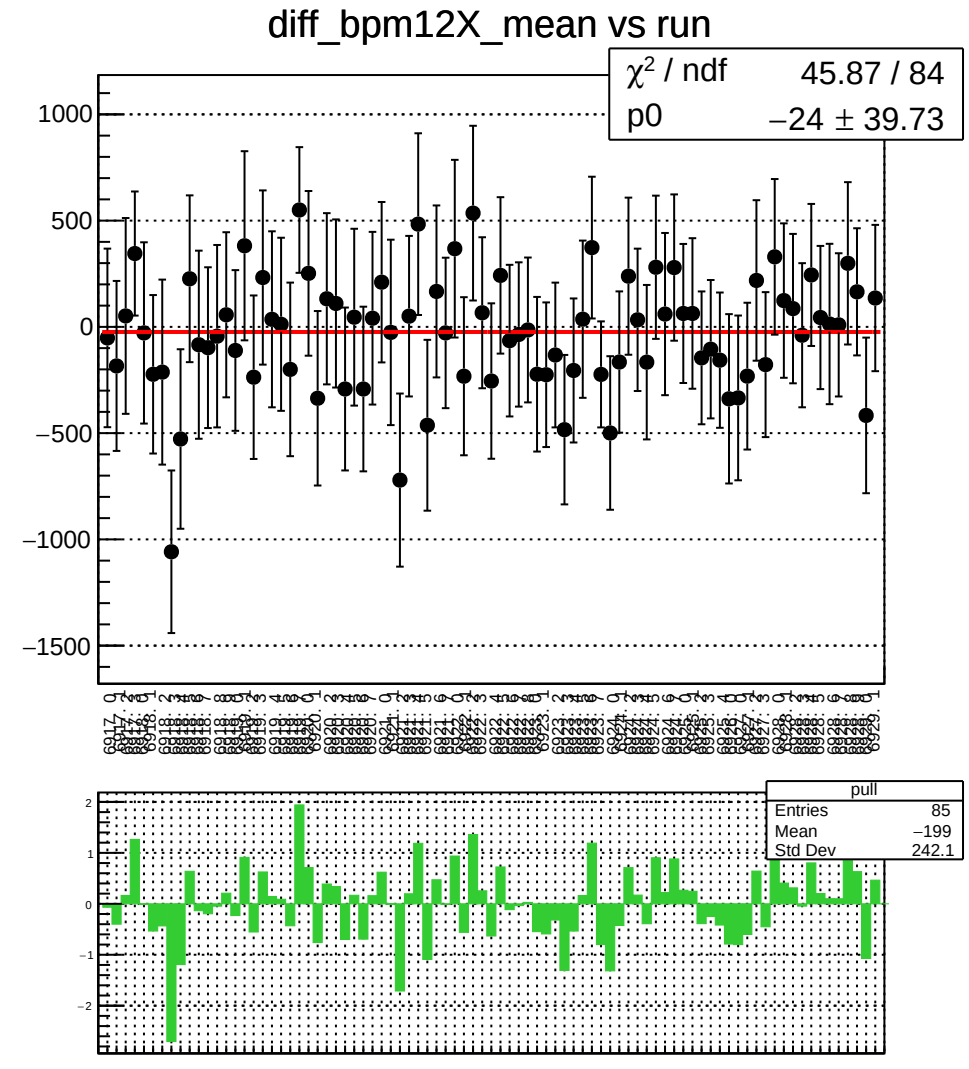

pull1D
Entries 85
Mean −0.006768
Std Dev 0.7402

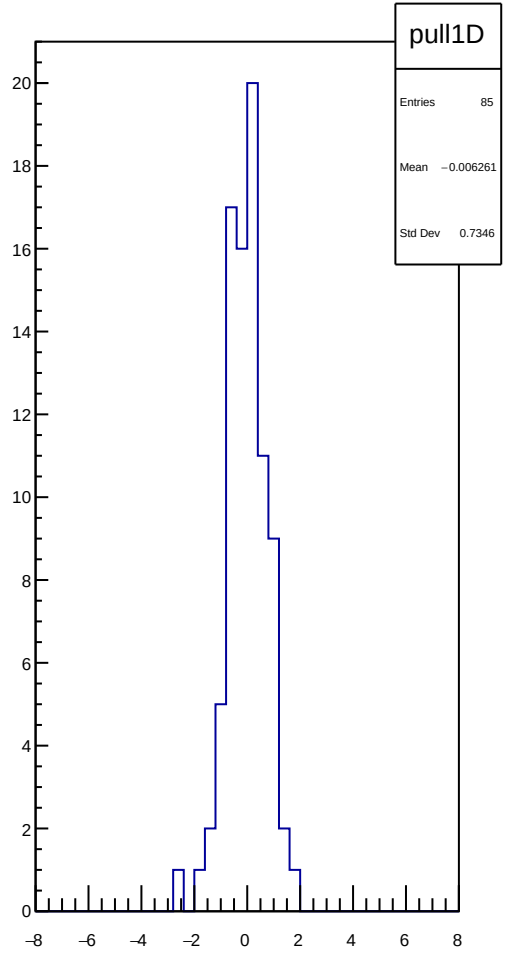

diff_bpm11X_rms vs run
χ² / ndf 1.181e+04 / 84
p0 1.361e+04 ± 10.82
17000
16000
15000
14000
13000
12000
11000

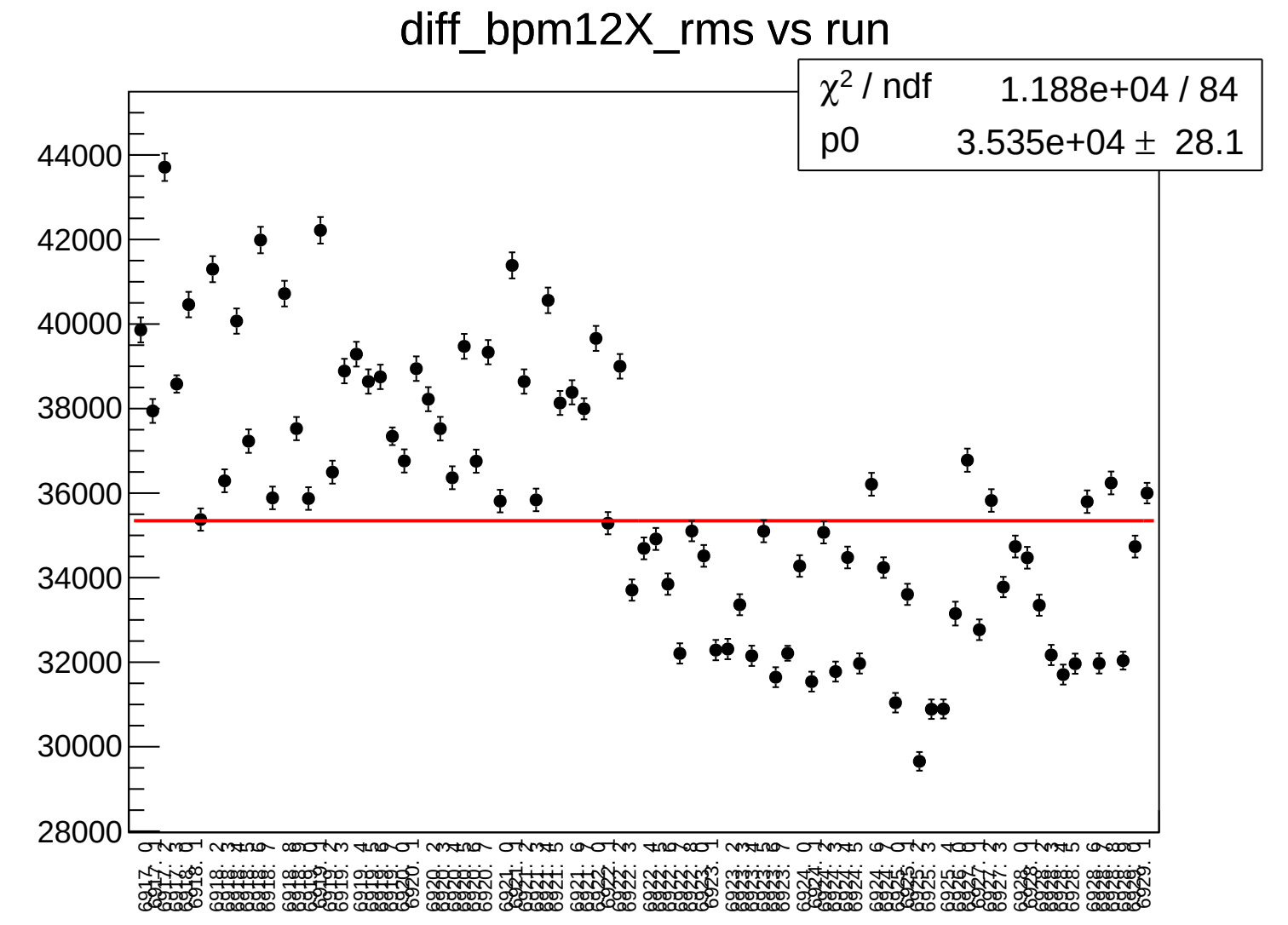

diff_bpm11Y_mean vs run
χ² / ndf 82.09 / 84
p0 –4.92 ± 7.401
200
100
0
–100
–200
pull
Entries 85
Mean –96.34
Std Dev 133.5
2
1
0
–1
–2
–3

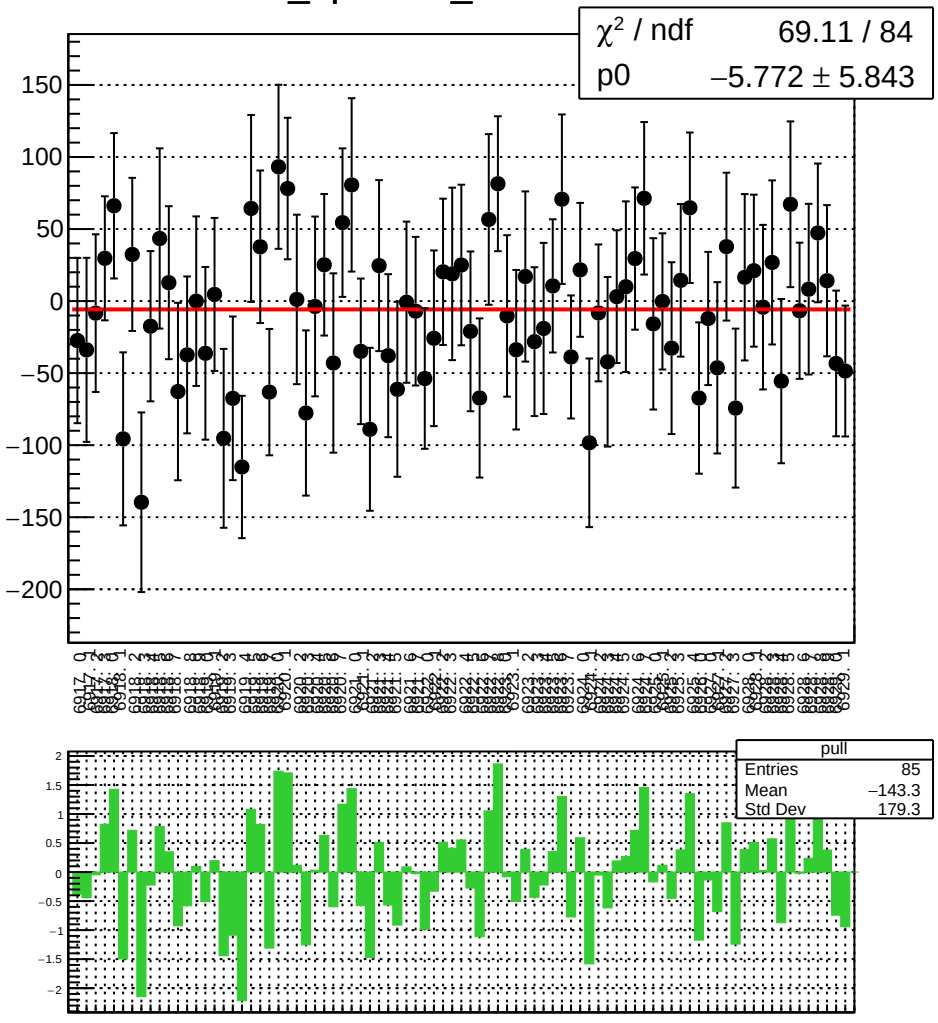

pull1D
Entries 85
Mean –0.01592
Std Dev 0.9826
16
14
12
10
8
6
4
2
0
–8
–6
–4
–2
0
2
4
6
8

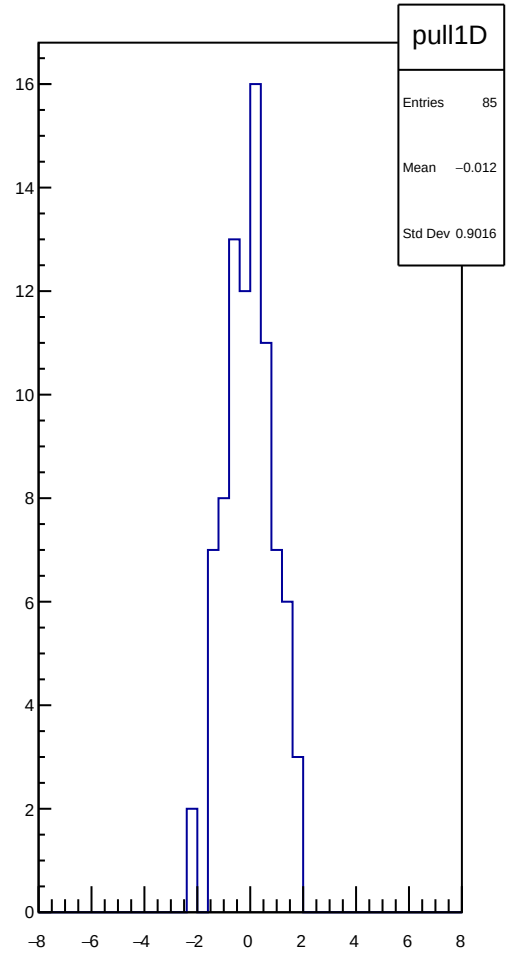

diff_bpm11Y_rms vs run
χ² / ndf 2.6e+04 / 84
p0 6555 ± 5.233
8000
7500
7000
6500
6000
5500
5000


diff_bpm12X_mean vs run
χ^2 / ndf 45.87 / 84
p0 −24 ± 39.73
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean −199
Std Dev 242.1
2
1
0
−1
−2

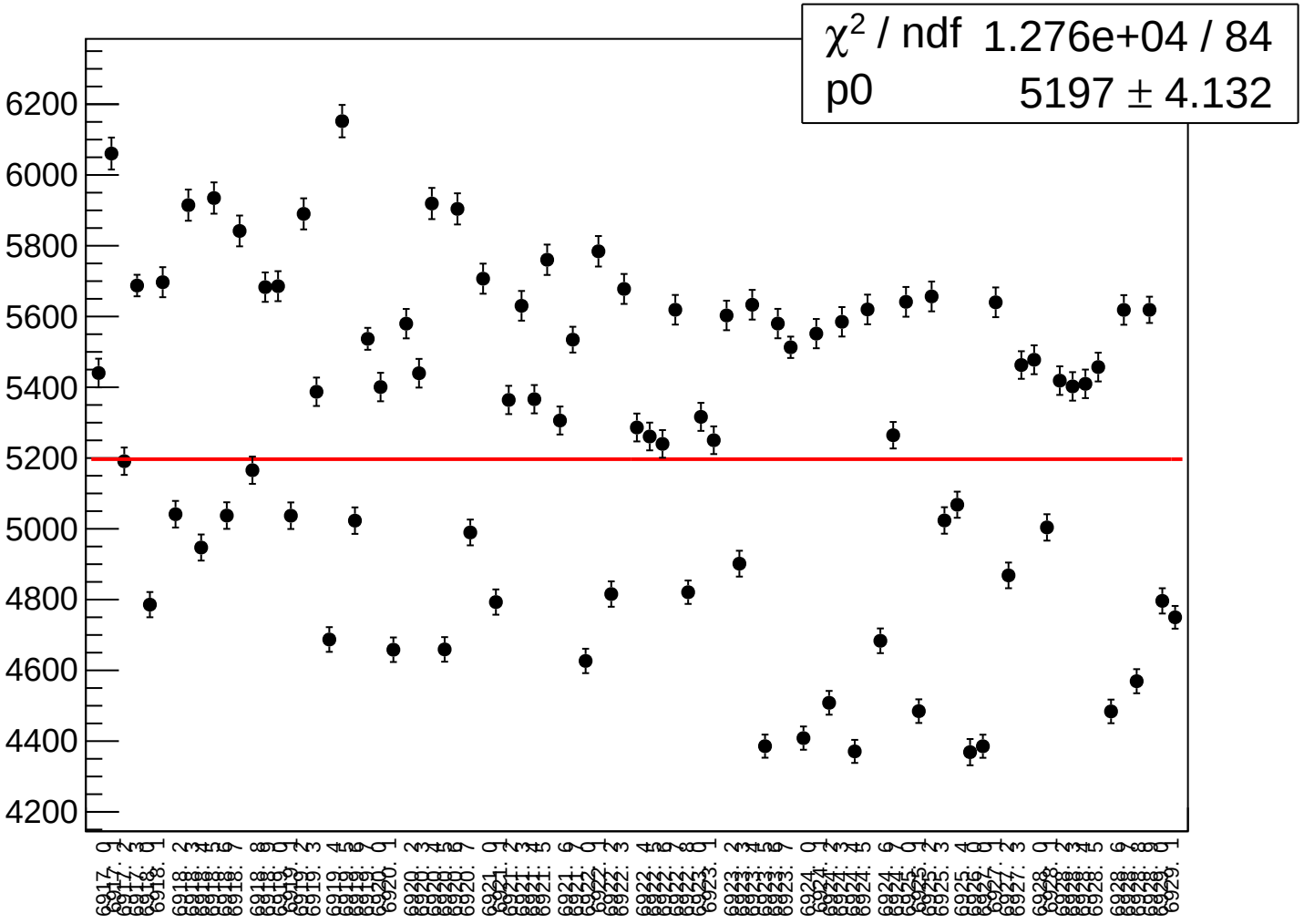

pull1D
Entries 85
Mean −0.006261
Std Dev 0.7346
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

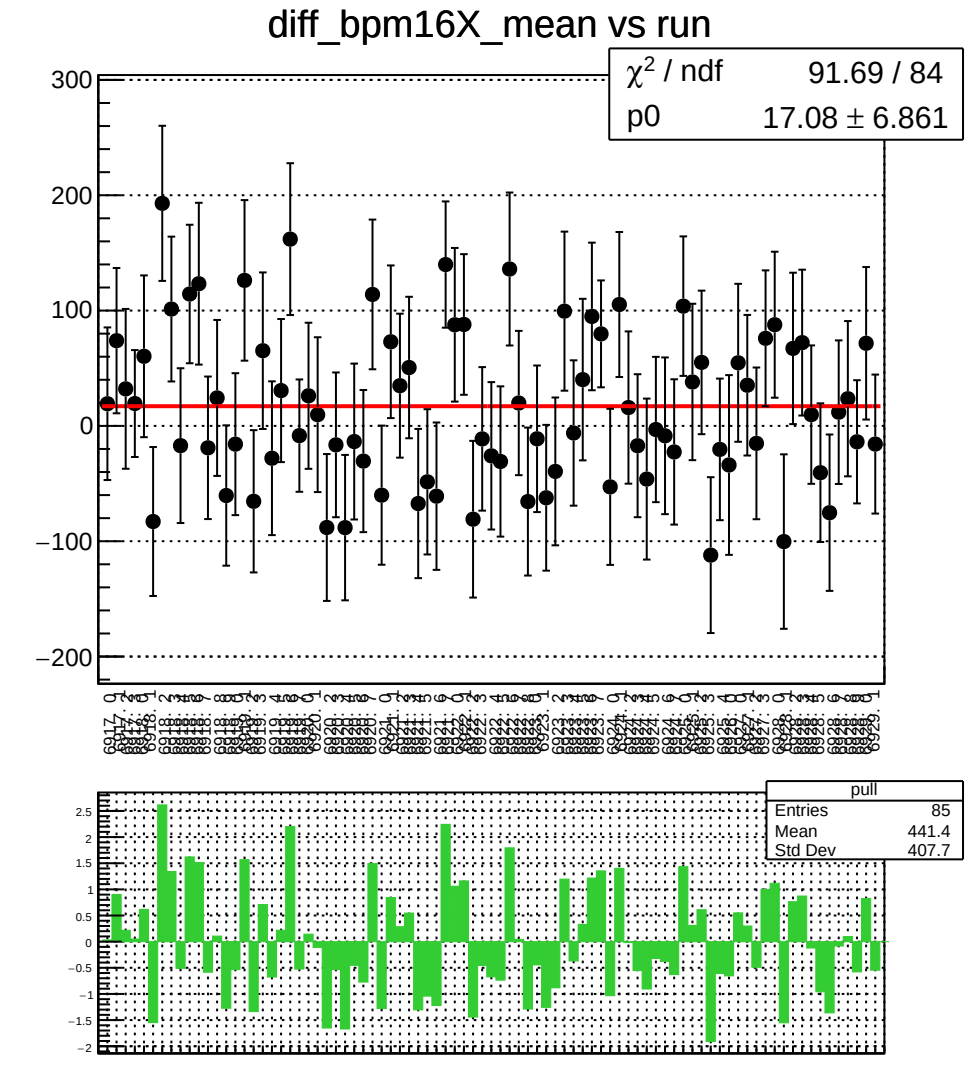

diff_bpm12X_rms vs run
χ² / ndf 1.188e+04 / 84
p0 3.535e+04 ± 28.1
44000
42000
40000
38000
36000
34000
32000
30000
28000

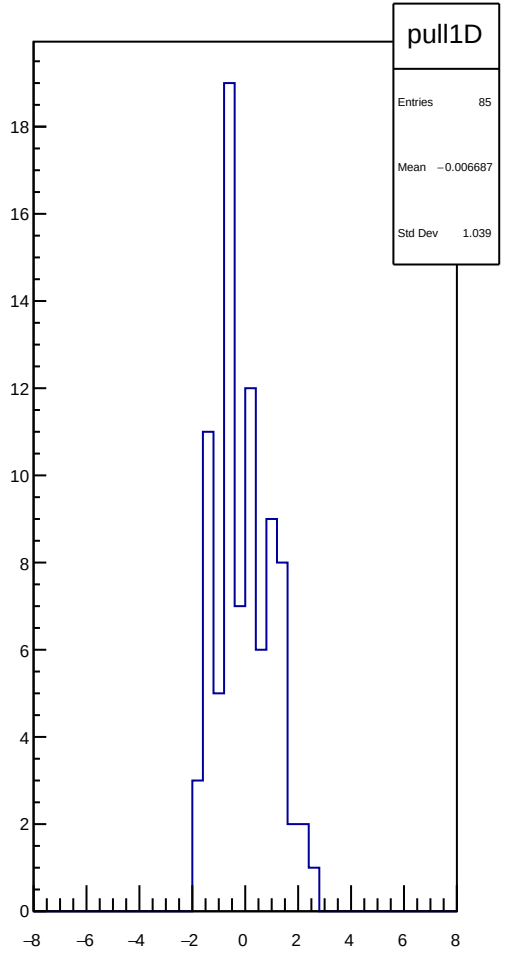

diff_bpm12Y_mean vs run
χ² / ndf 69.11 / 84
p0 −5.772 ± 5.843
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean −143.3
Std Dev 179.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

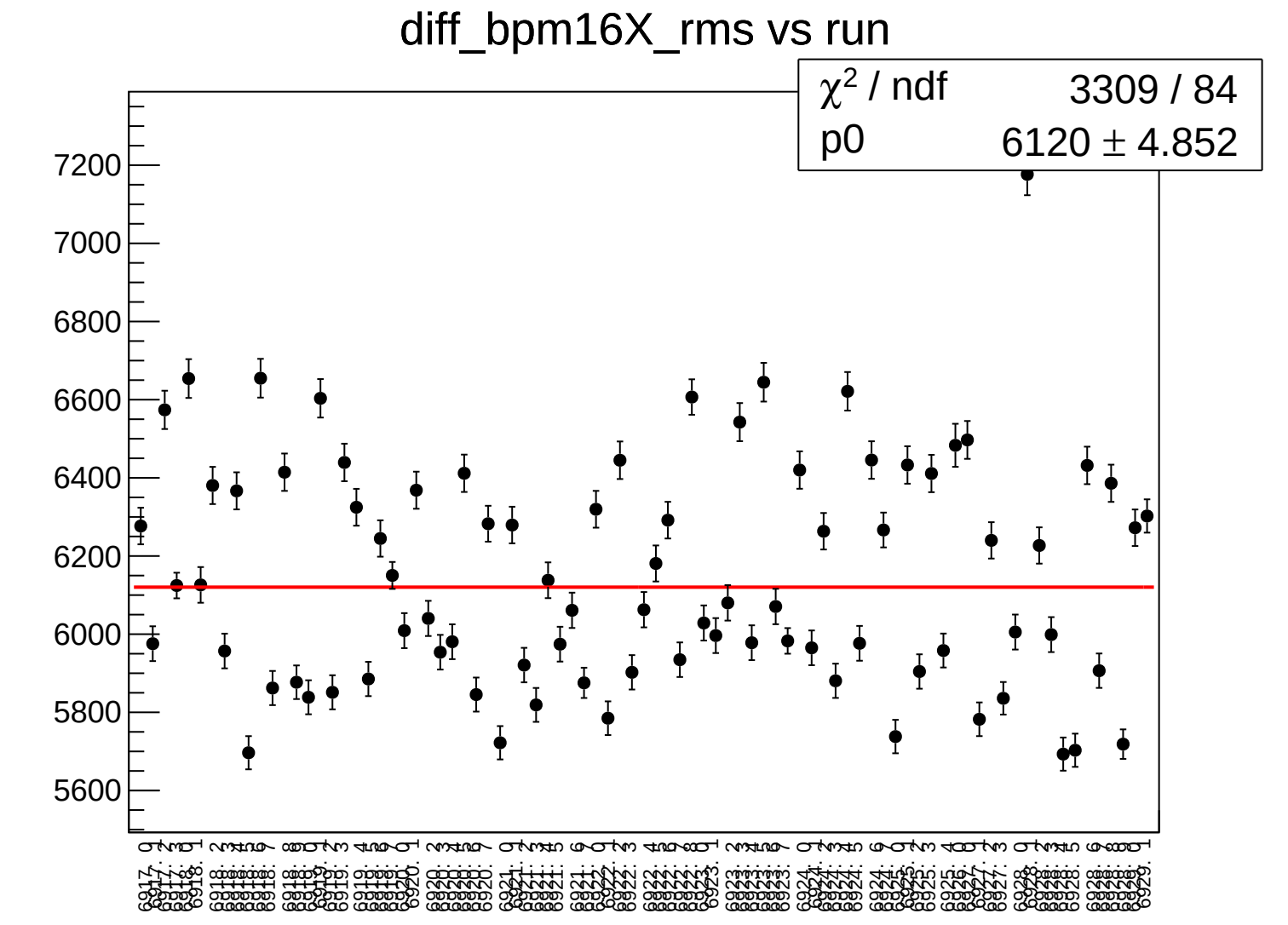

pull1D
Entries 85
Mean −0.012
Std Dev 0.9016
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

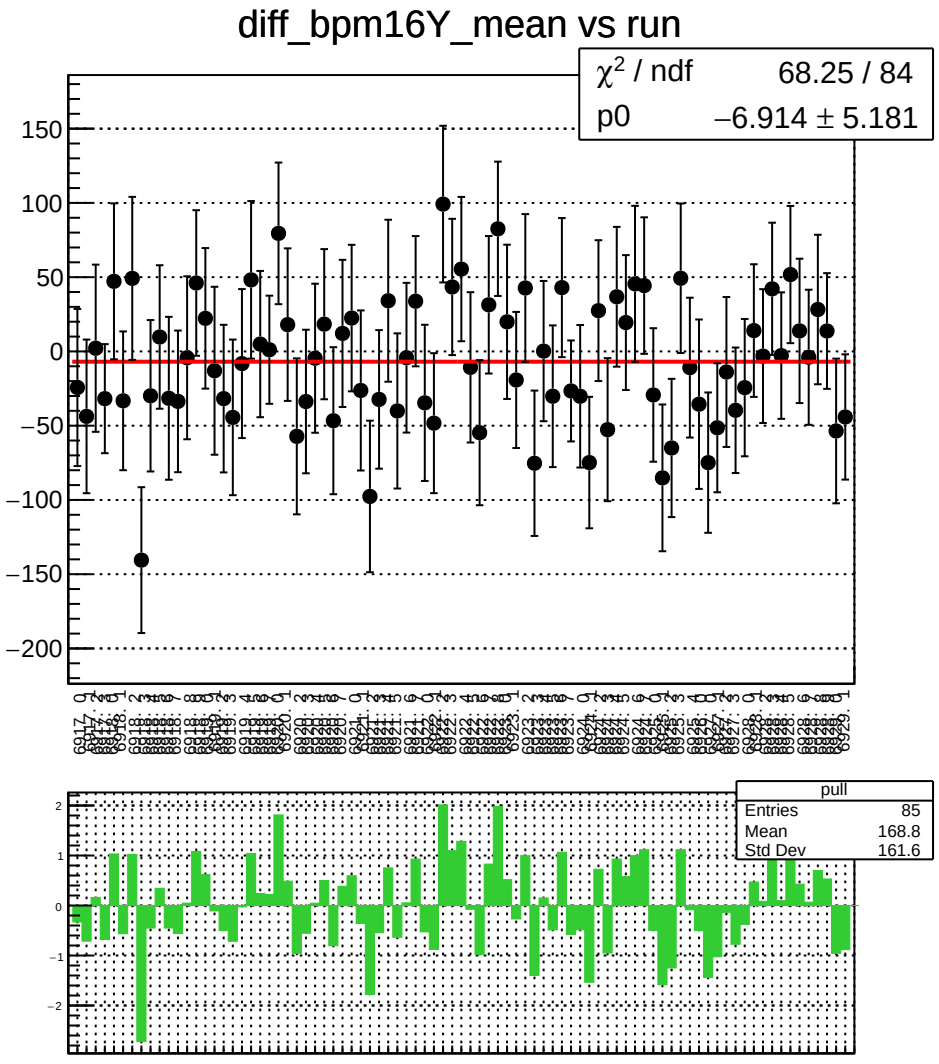
diff_bpm12Y_rms vs run

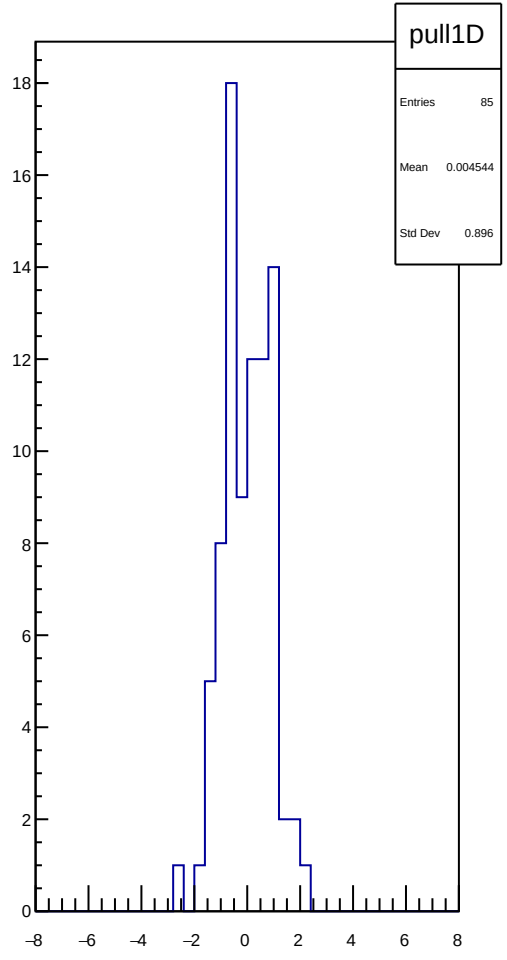


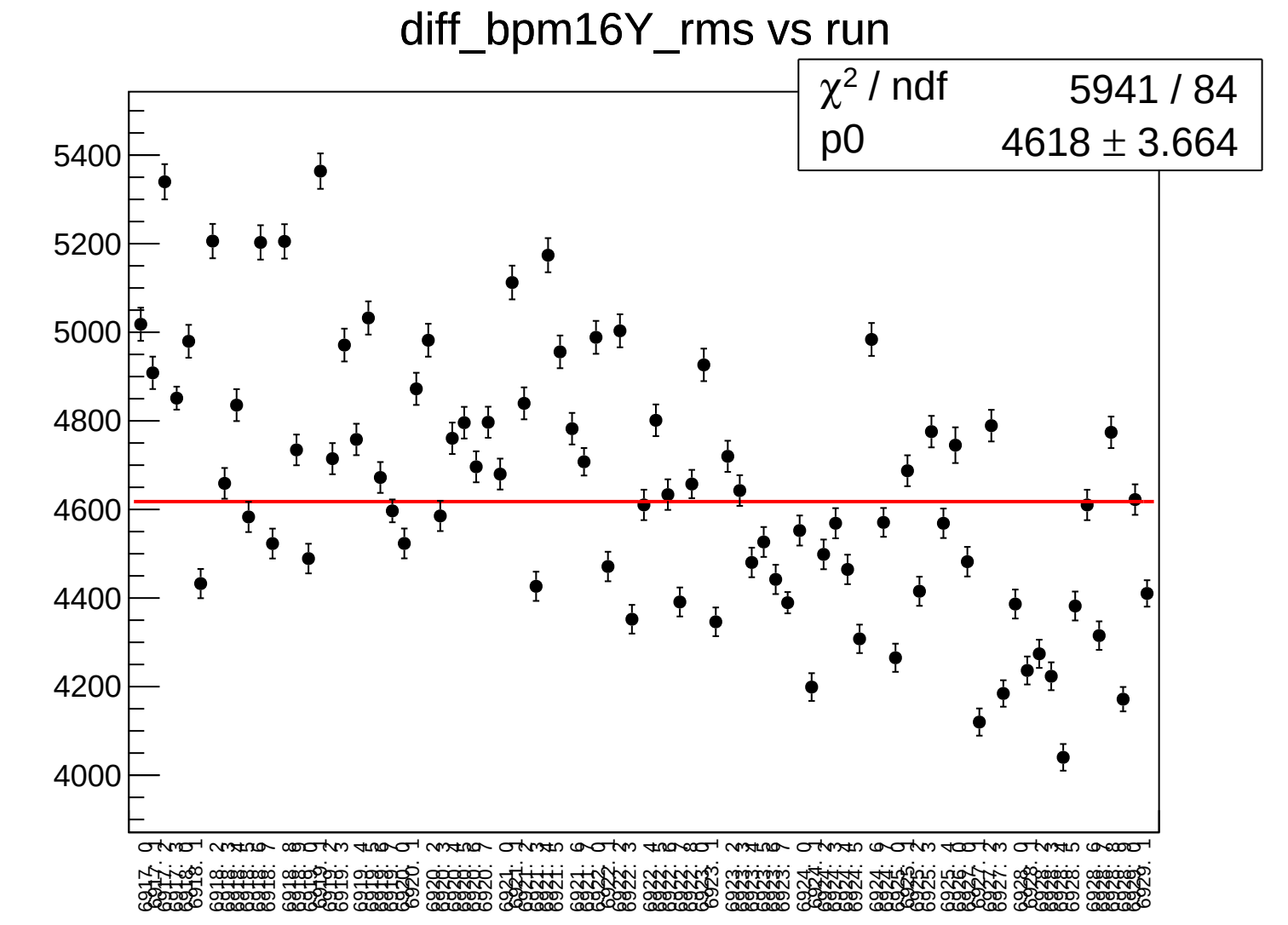

diff_bpm16X_mean vs run
χ^2 / ndf 91.69 / 84
p0 17.08 ± 6.861
pull
Entries 85
Mean 441.4
Std Dev 407.7

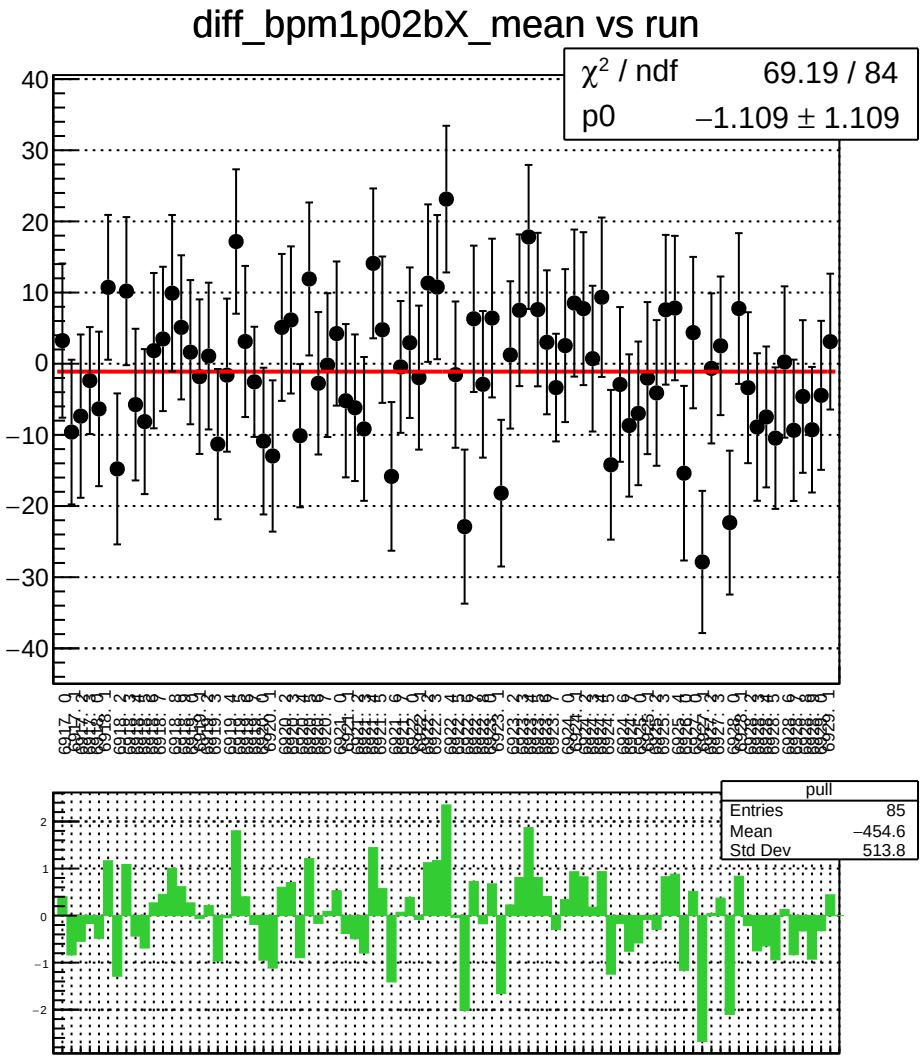

pull1D
Entries 85
Mean −0.006687
Std Dev 1.039

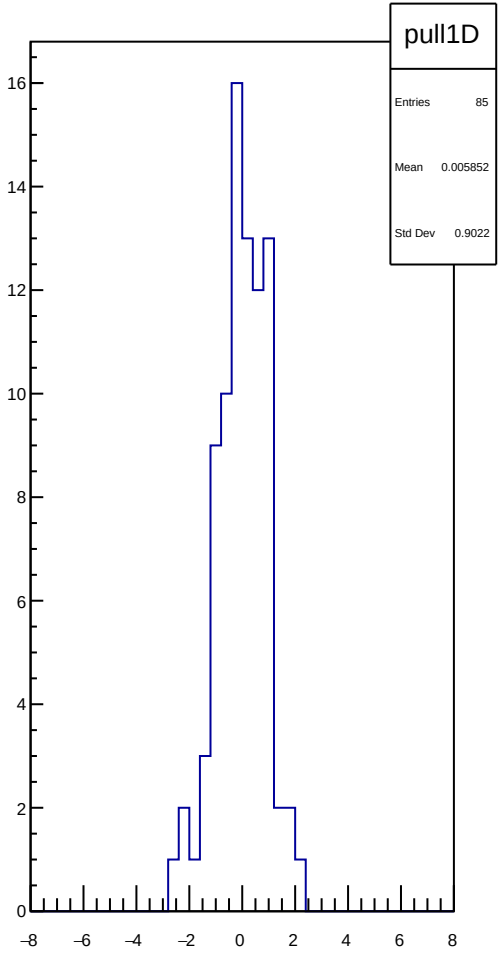

diff_bpm16X_rms vs run
χ² / ndf 3309 / 84
p0 6120 ± 4.852
7200
7000
6800
6600
6400
6200
6000
5800
5600

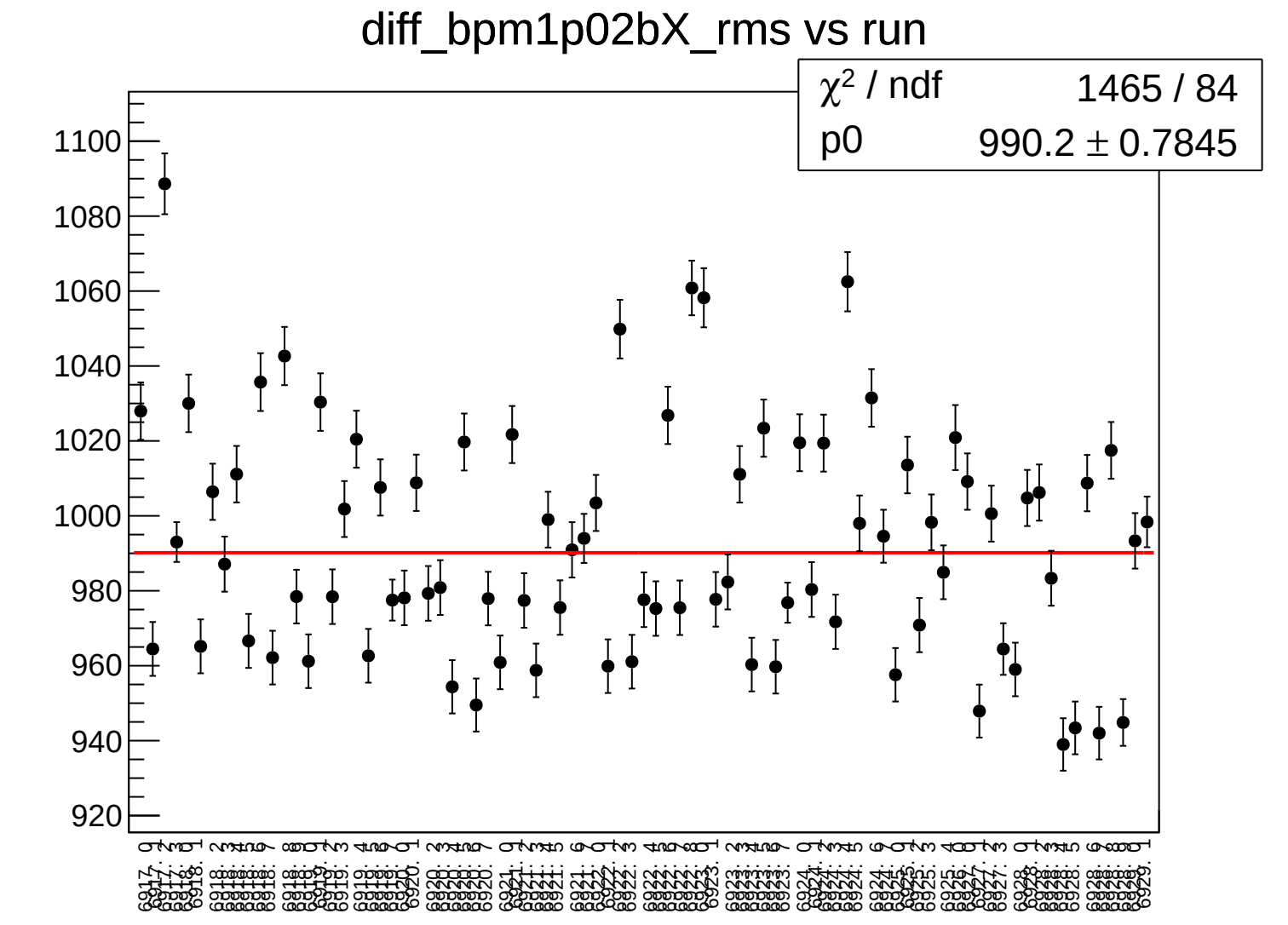

diff_bpm16Y_mean vs run
χ² / ndf 68.25 / 84
p0 −6.914 ± 5.181
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 168.8
Std Dev 161.6
2
1
0
−1
−2

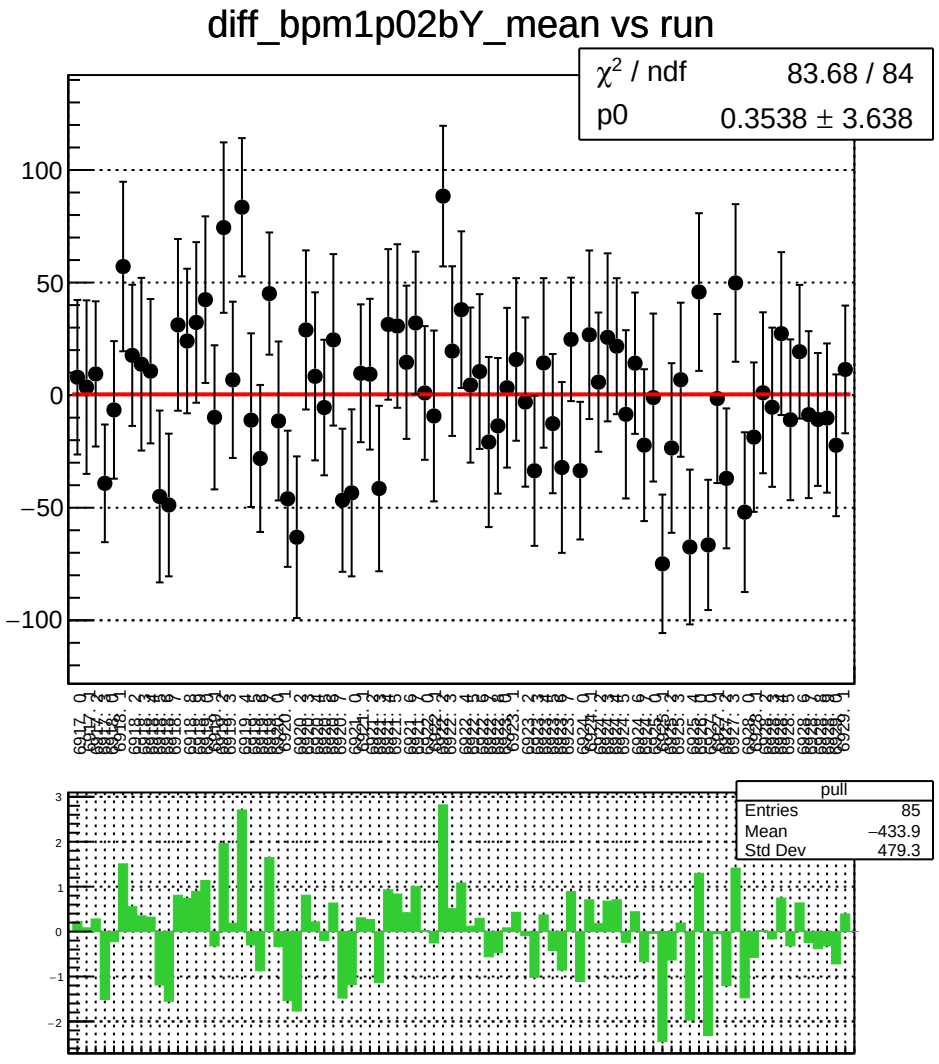

pull1D
Entries 85
Mean 0.004544
Std Dev 0.896
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

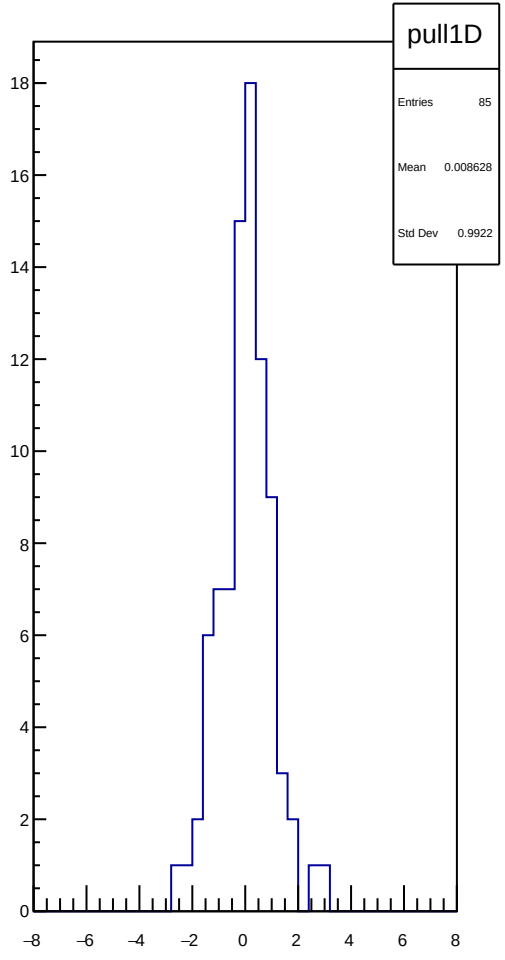

diff_bpm16Y_rms vs run
χ^2 / ndf 5941 / 84
p0 4618 ± 3.664
5400
5200
5000
4800
4600
4400
4200
4000

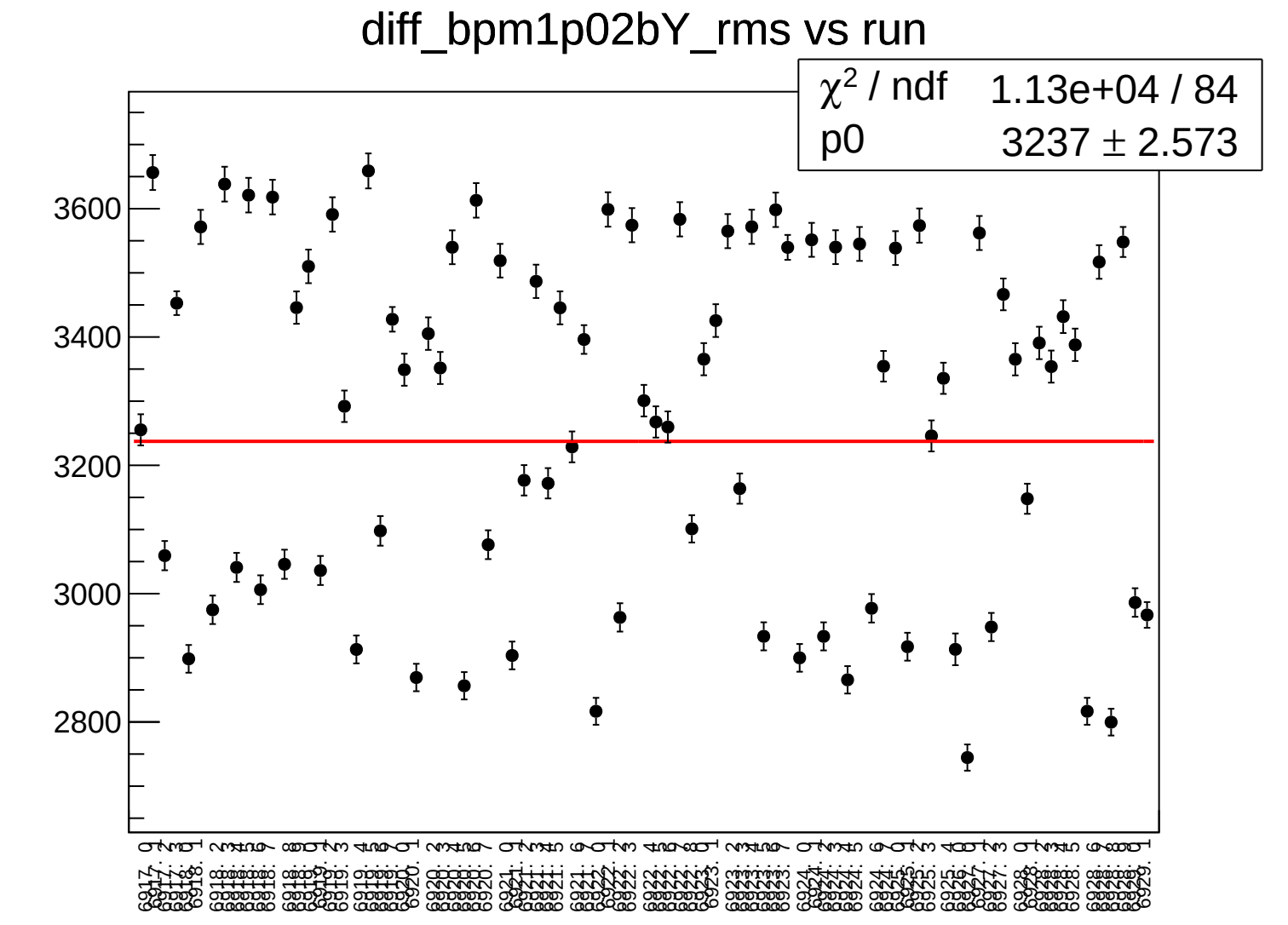

diff_bpm1p02bX_mean vs run
χ² / ndf 69.19 / 84
p0 −1.109 ± 1.109
pull
Entries 85
Mean −454.6
Std Dev 513.8

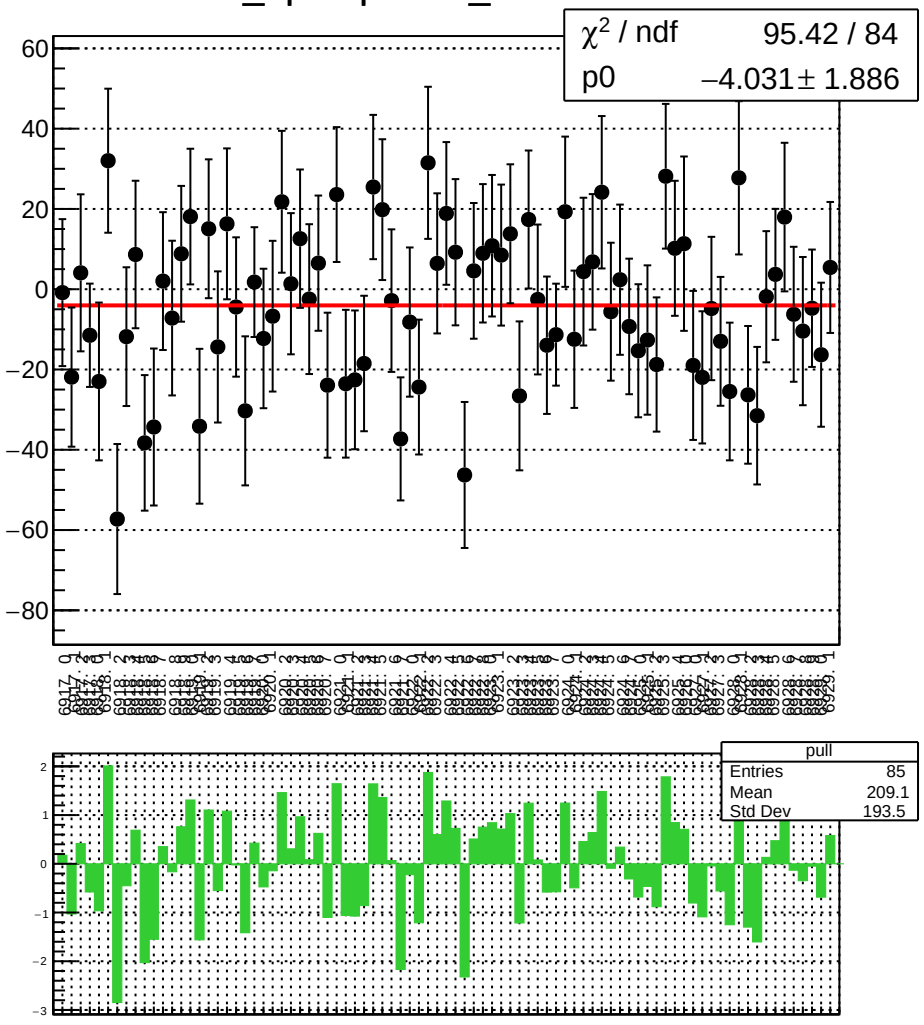

pull1D
Entries 85
Mean 0.005852
Std Dev 0.9022

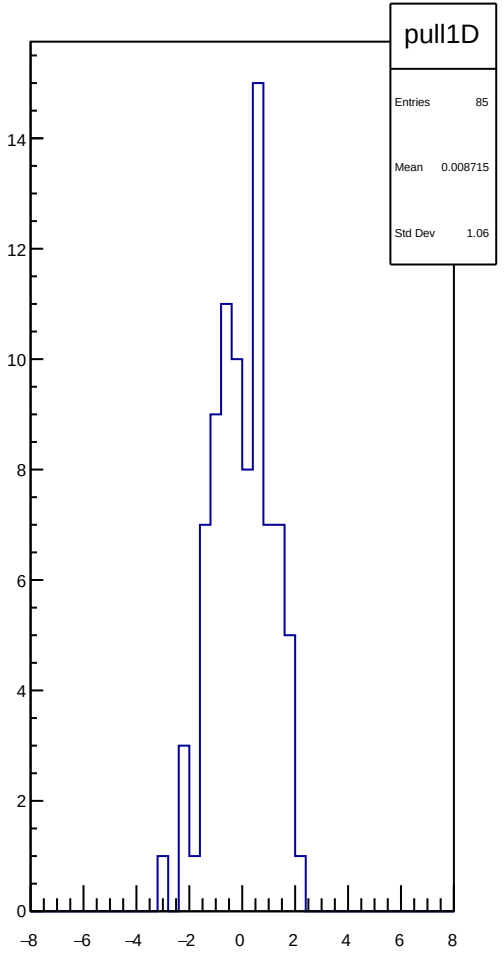

diff_bpm1p02bX_rms vs run
χ² / ndf 1465 / 84
p0 990.2 ± 0.7845
1100
1080
1060
1040
1020
1000
980
960
940
920

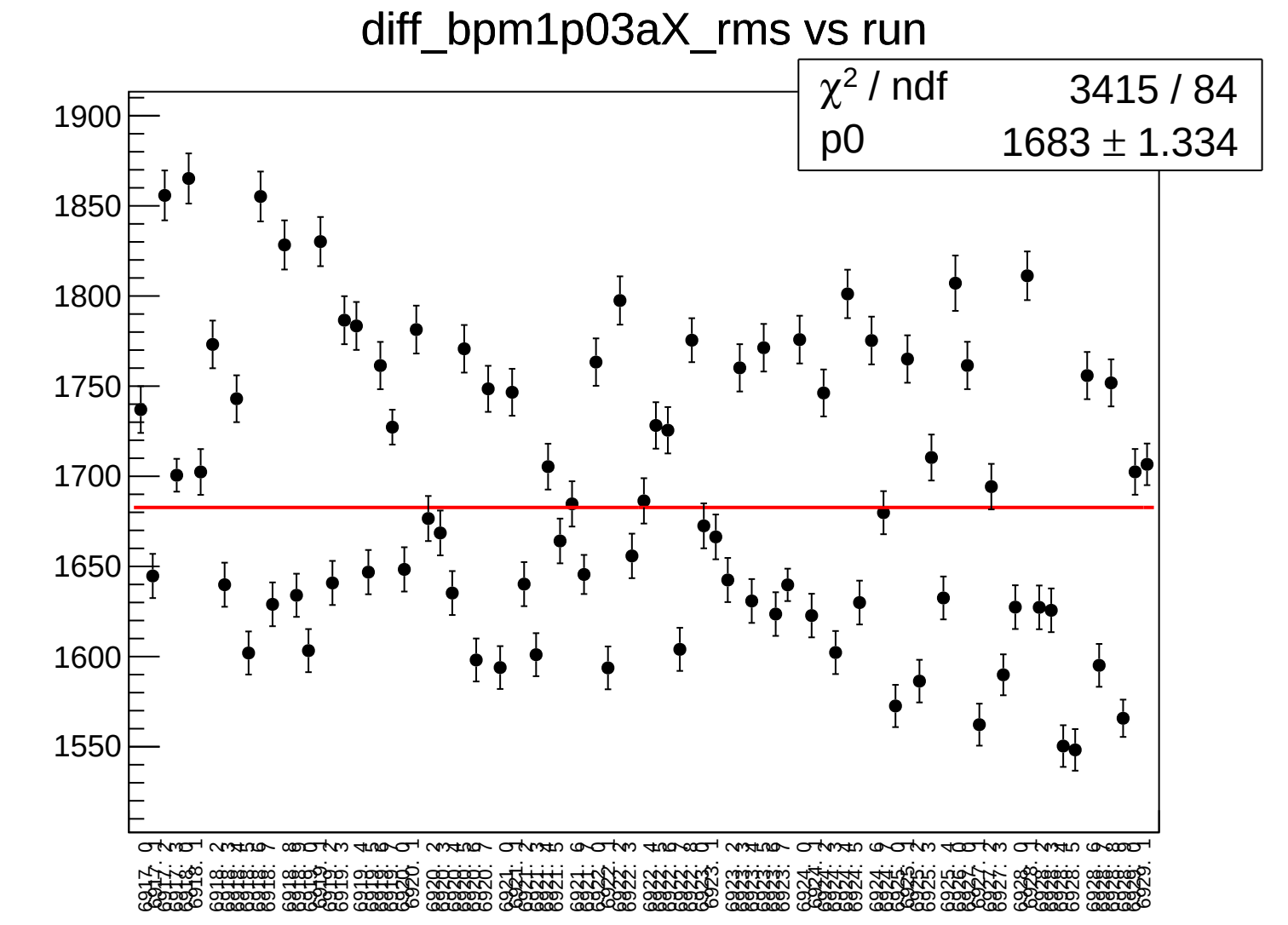

diff_bpm1p02bY_mean vs run
χ^2 / ndf 83.68 / 84
p0 0.3538 ± 3.638
100
50
0
−50
−100
pull
Entries 85
Mean −433.9
Std Dev 479.3
3
2
1
0
−1
−2

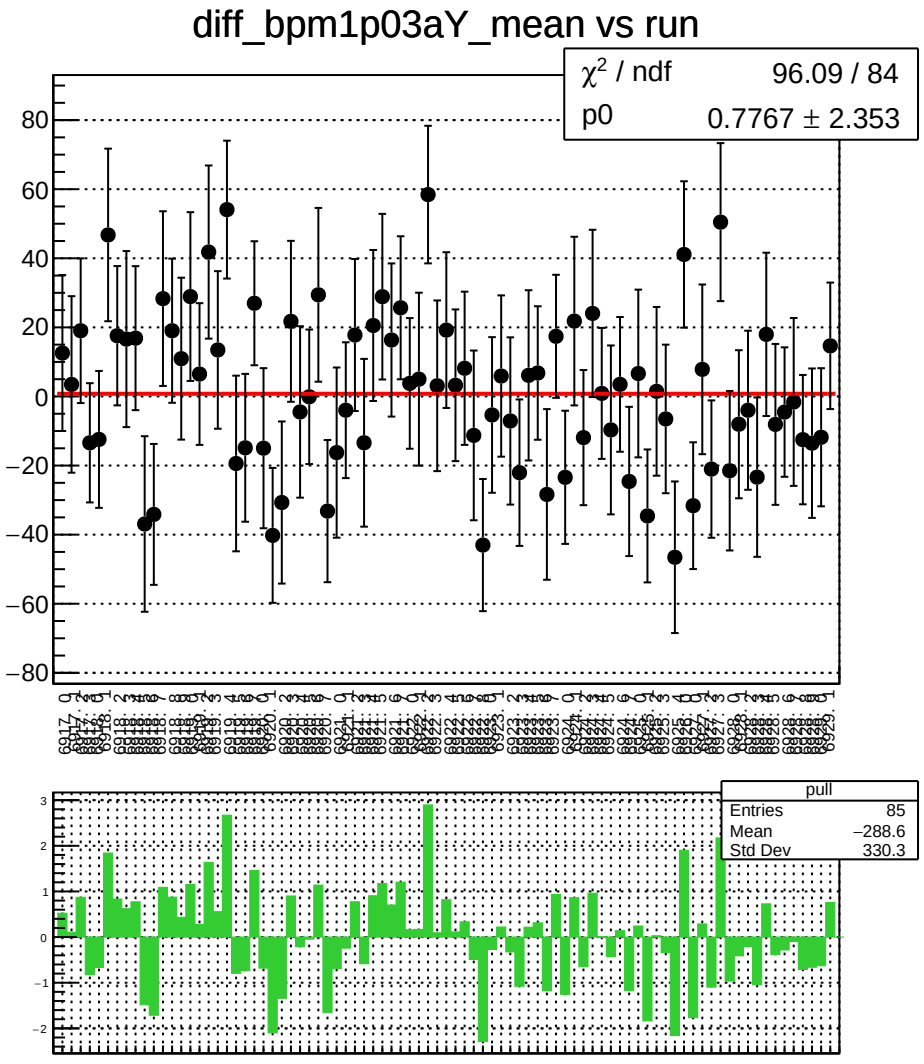

pull1D
Entries 85
Mean 0.008628
Std Dev 0.9922
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

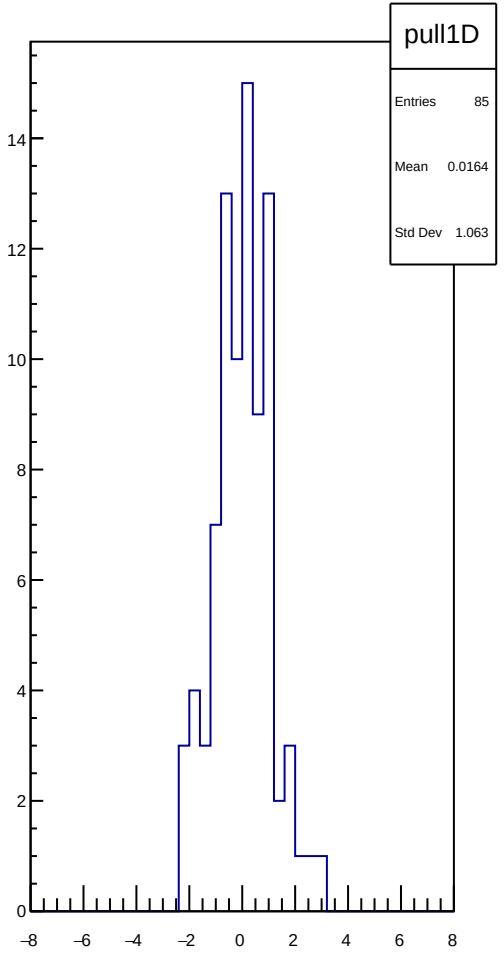

diff_bpm1p02bY_rms vs run
χ² / ndf 1.13e+04 / 84
p0 3237 ± 2.573
3600
3400
3200
3000
2800

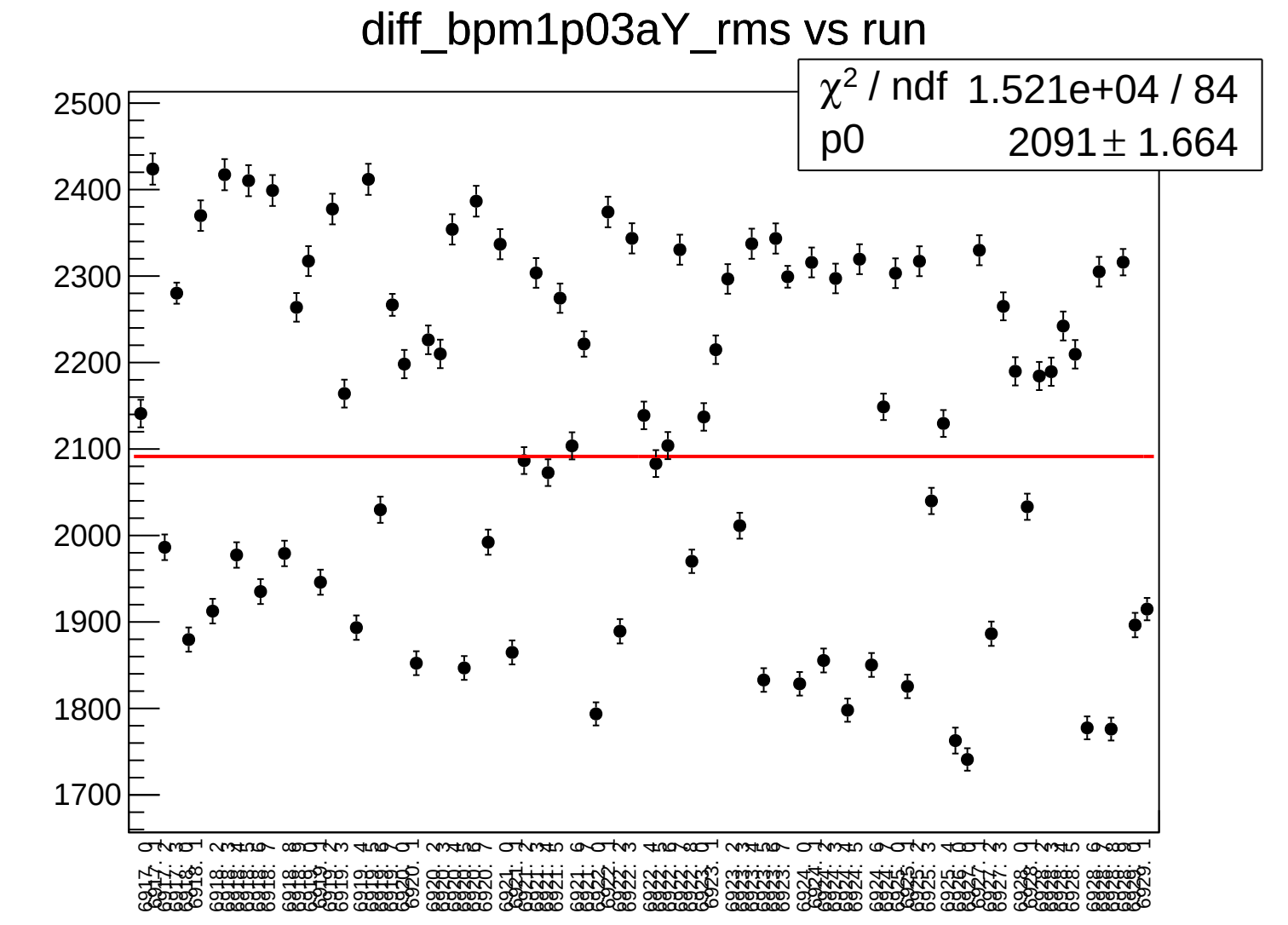

diff_bpm1p03aX_mean vs run
χ² / ndf 95.42 / 84
p0 −4.031 ± 1.886
pull
Entries 85
Mean 209.1
Std Dev 193.5

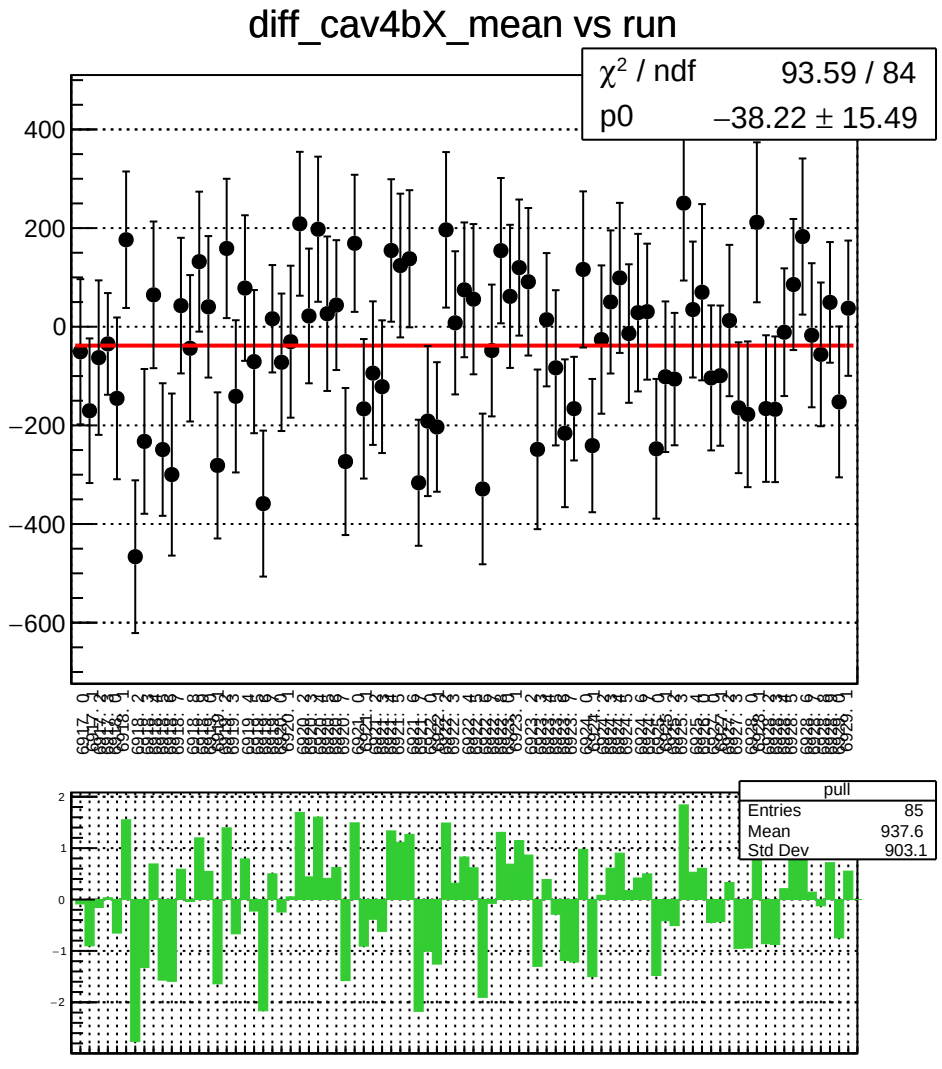

pull1D
Entries 85
Mean 0.008715
Std Dev 1.06

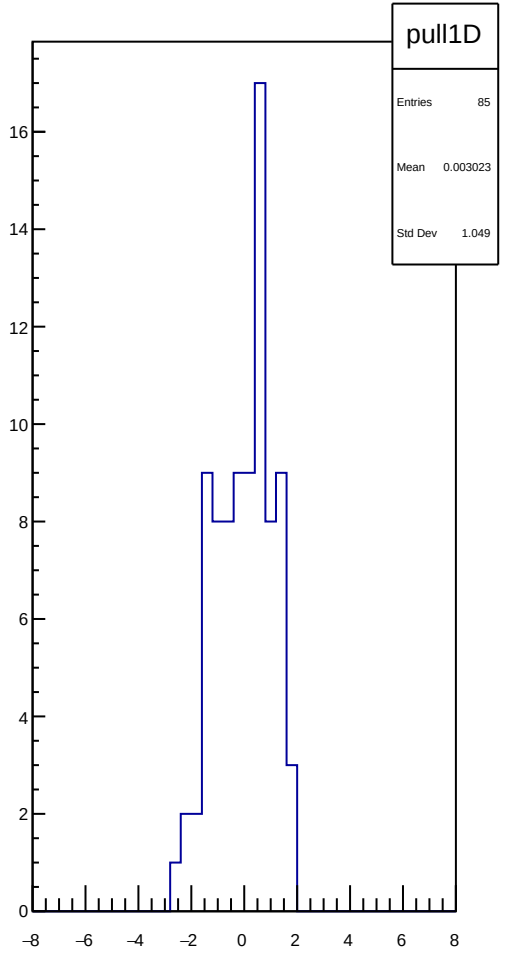

diff_bpm1p03aX_rms vs run
χ² / ndf 3415 / 84
p0 1683 ± 1.334
1900
1850
1800
1750
1700
1650
1600
1550

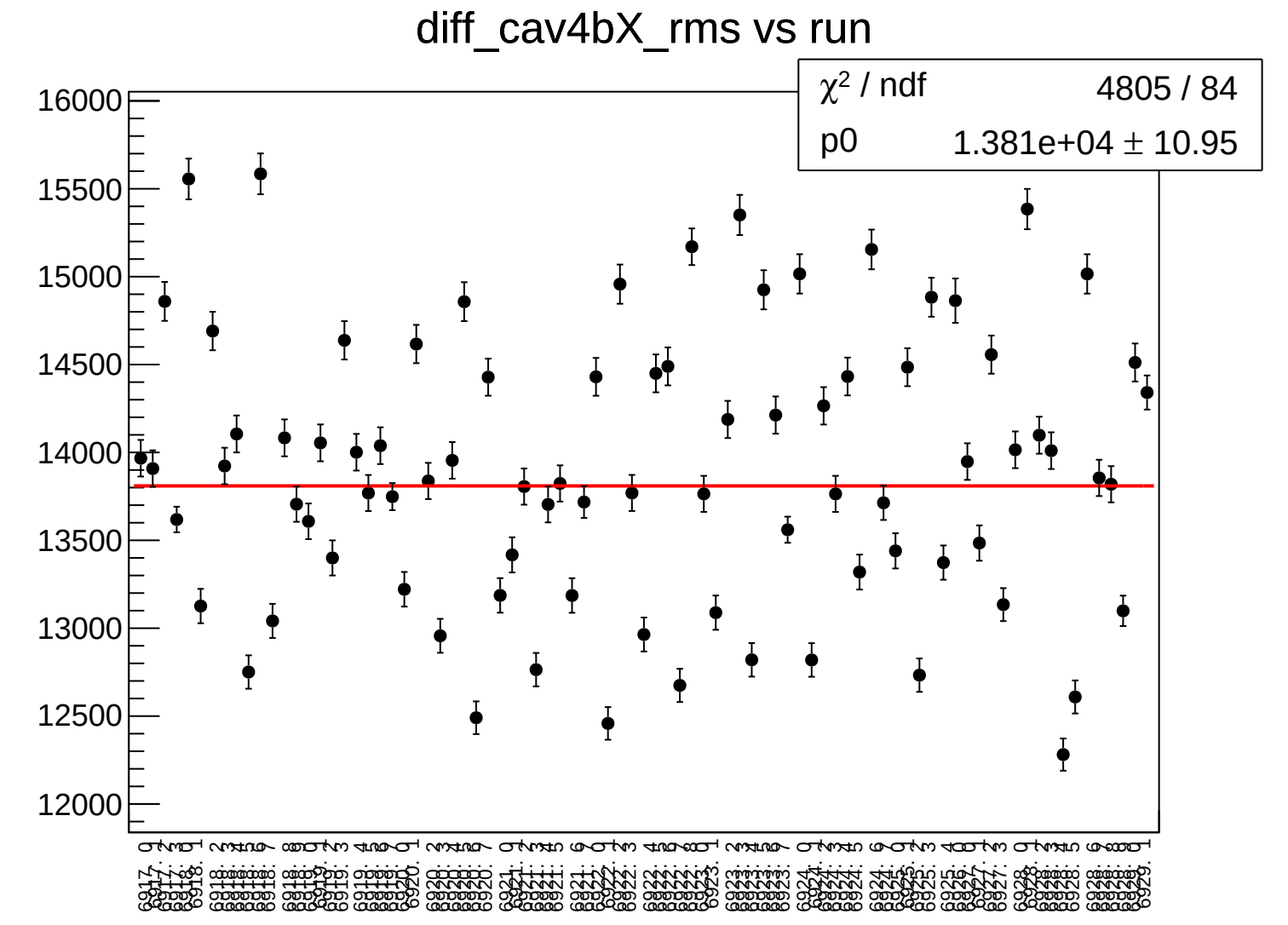

diff_bpm1p03aY_mean vs run
χ² / ndf 96.09 / 84
p0 0.7767 ± 2.353
pull
Entries 85
Mean −288.6
Std Dev 330.3

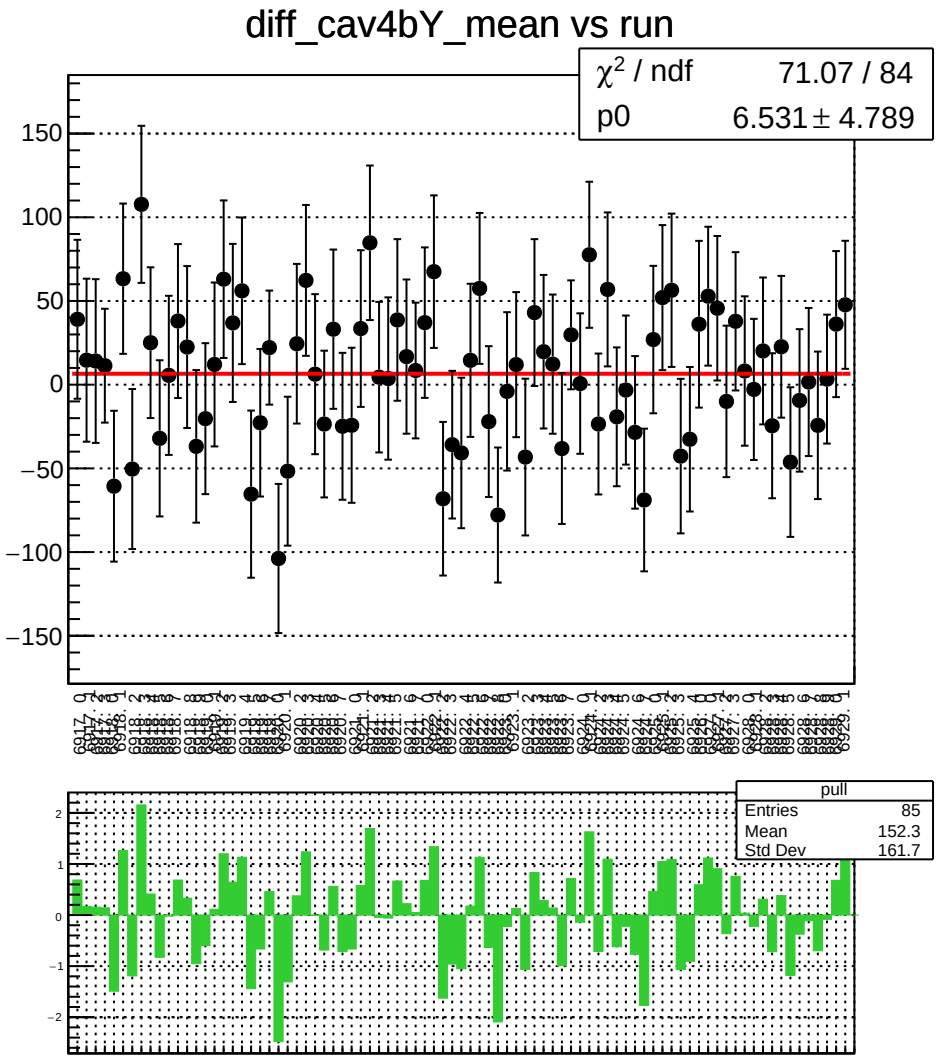

pull1D
Entries 85
Mean 0.0164
Std Dev 1.063

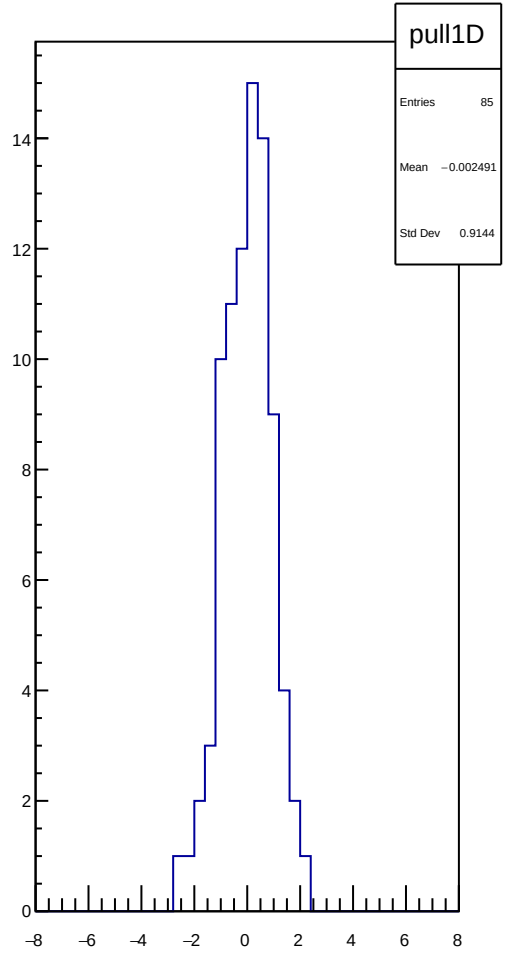

diff_bpm1p03aY_rms vs run
χ² / ndf 1.521e+04 / 84
p0 2091 ± 1.664
2500
2400
2300
2200
2100
2000
1900
1800
1700

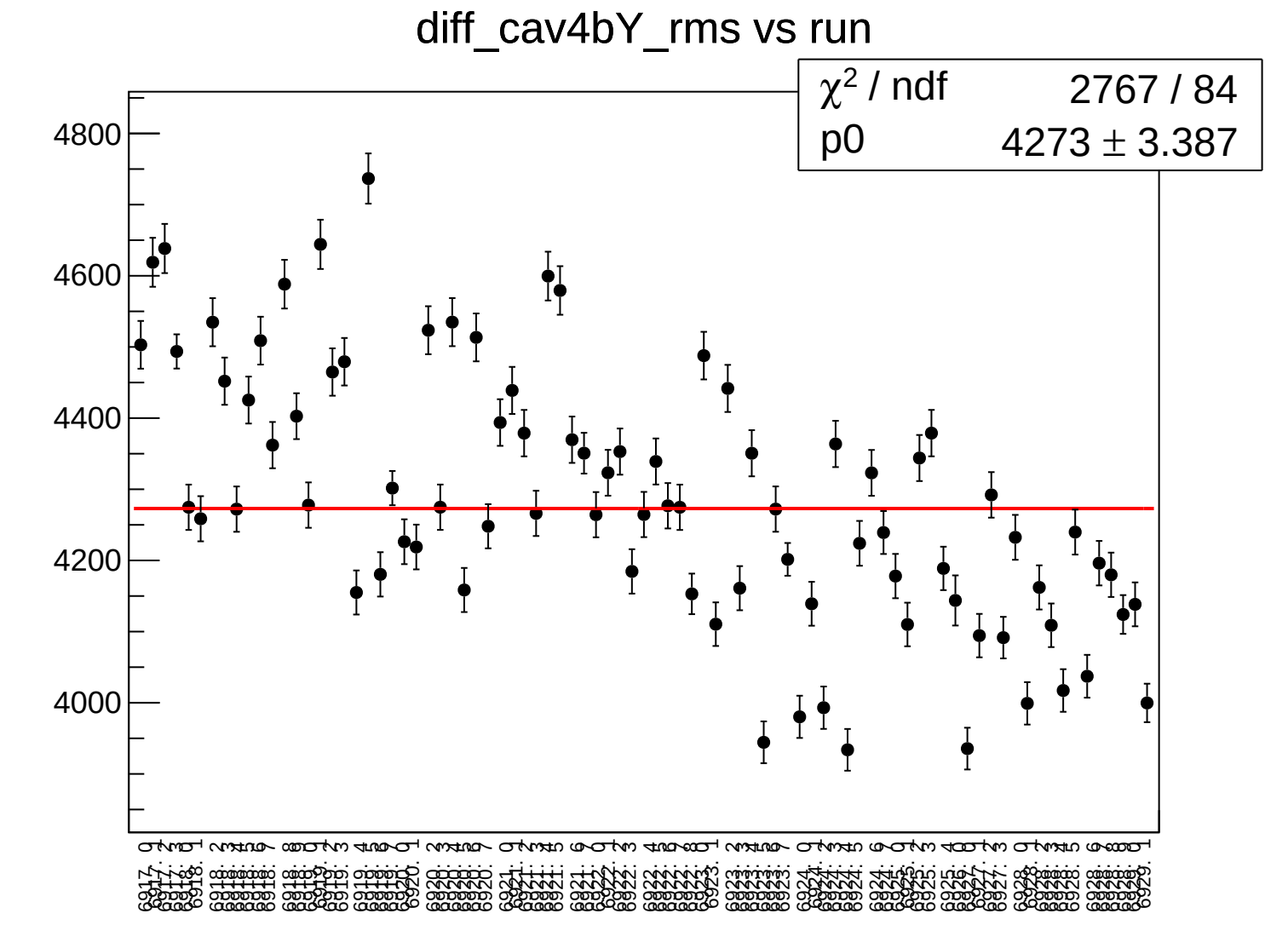

diff_cav4bX_mean vs run
χ² / ndf 93.59 / 84
p0 −38.22 ± 15.49
400
200
0
−200
−400
−600
pull
Entries 85
Mean 937.6
Std Dev 903.1
2
1
0
−1
−2

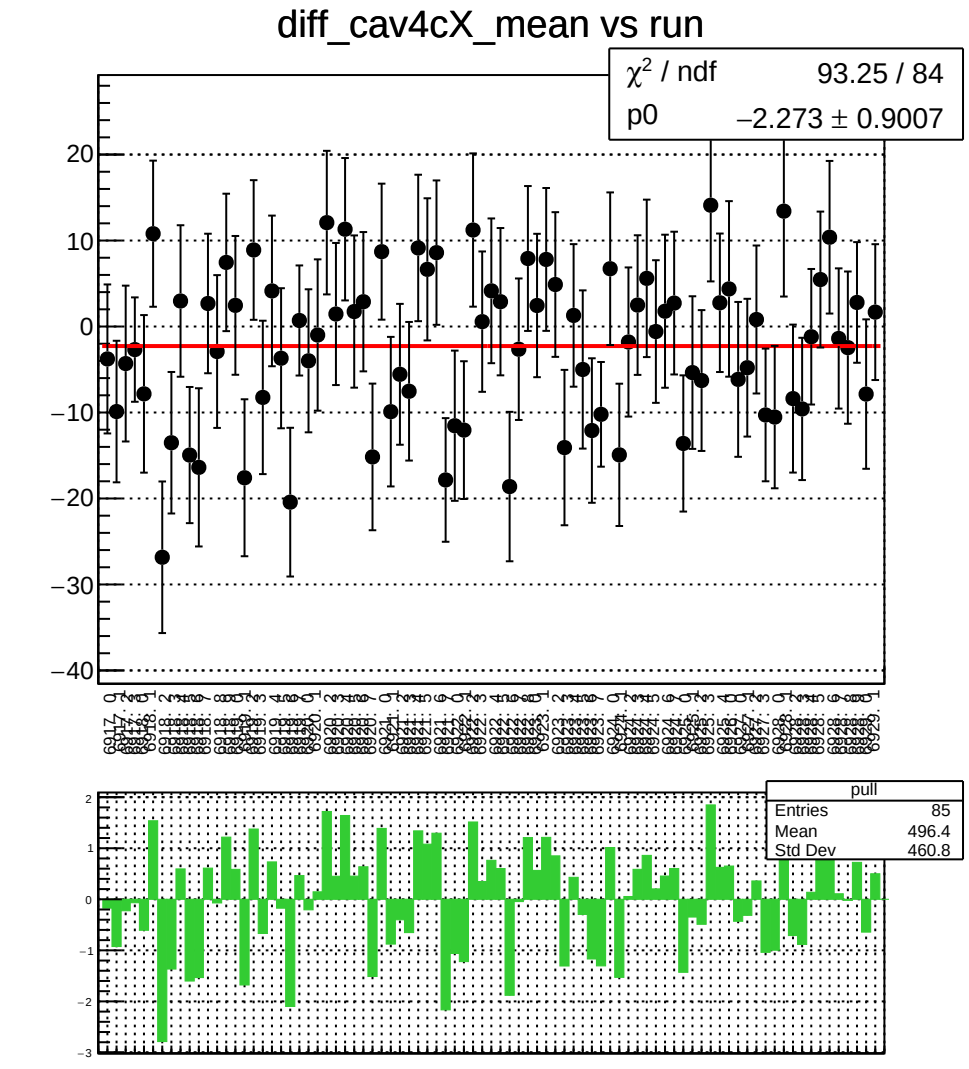

pull1D
Entries 85
Mean 0.003023
Std Dev 1.049
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

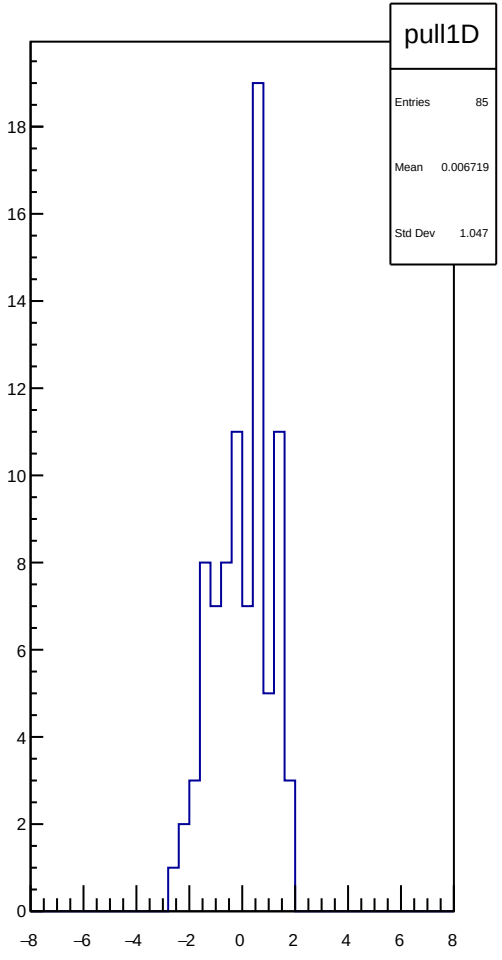

diff_cav4bX_rms vs run
χ² / ndf 4805 / 84
p0 1.381e+04 ± 10.95
16000
15500
15000
14500
14000
13500
13000
12500
12000

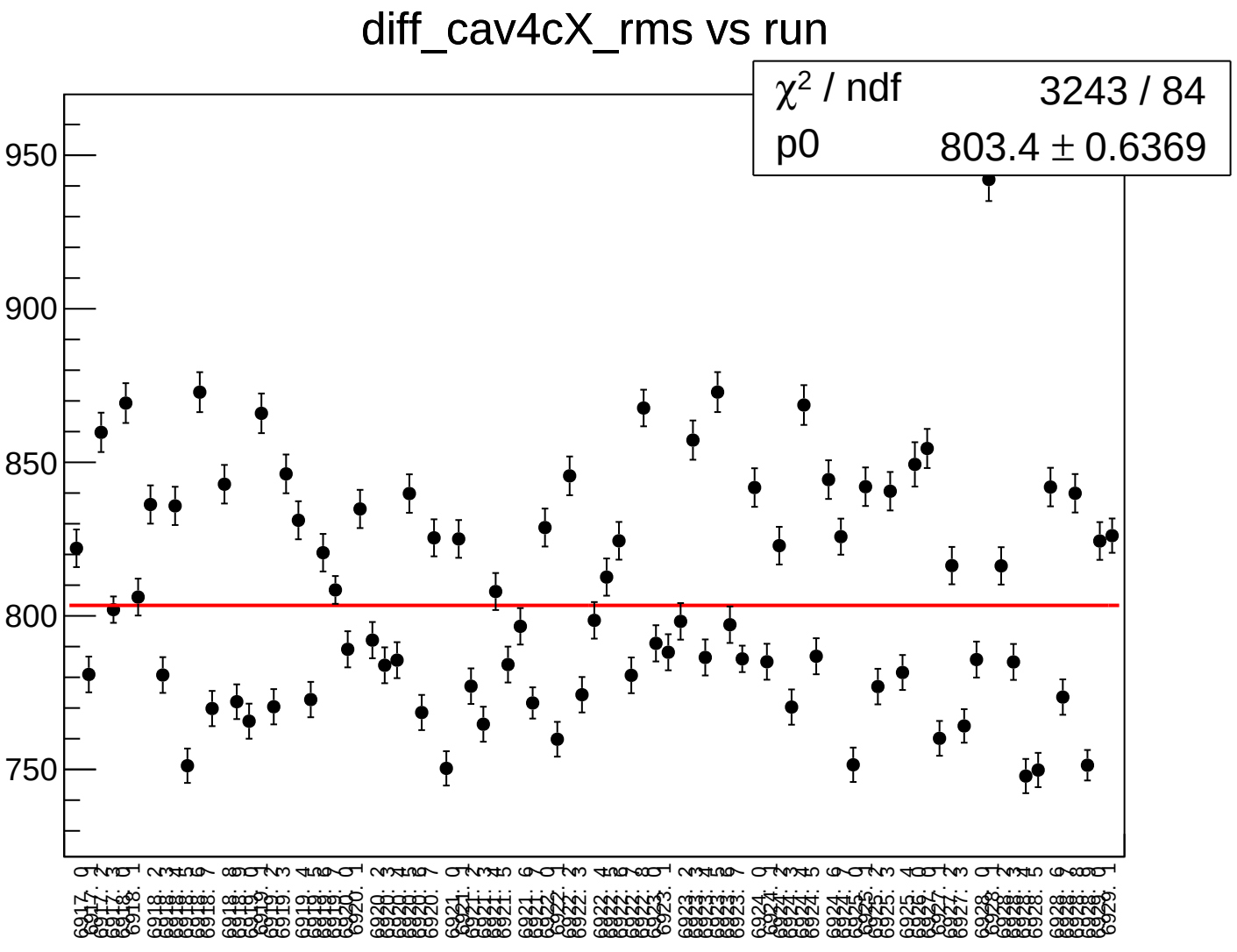

diff_cav4bY_mean vs run
χ² / ndf 71.07 / 84
p0 6.531 ± 4.789
150
100
50
0
−50
−100
−150
pull
Entries 85
Mean 152.3
Std Dev 161.7
2
1
0
−1
−2

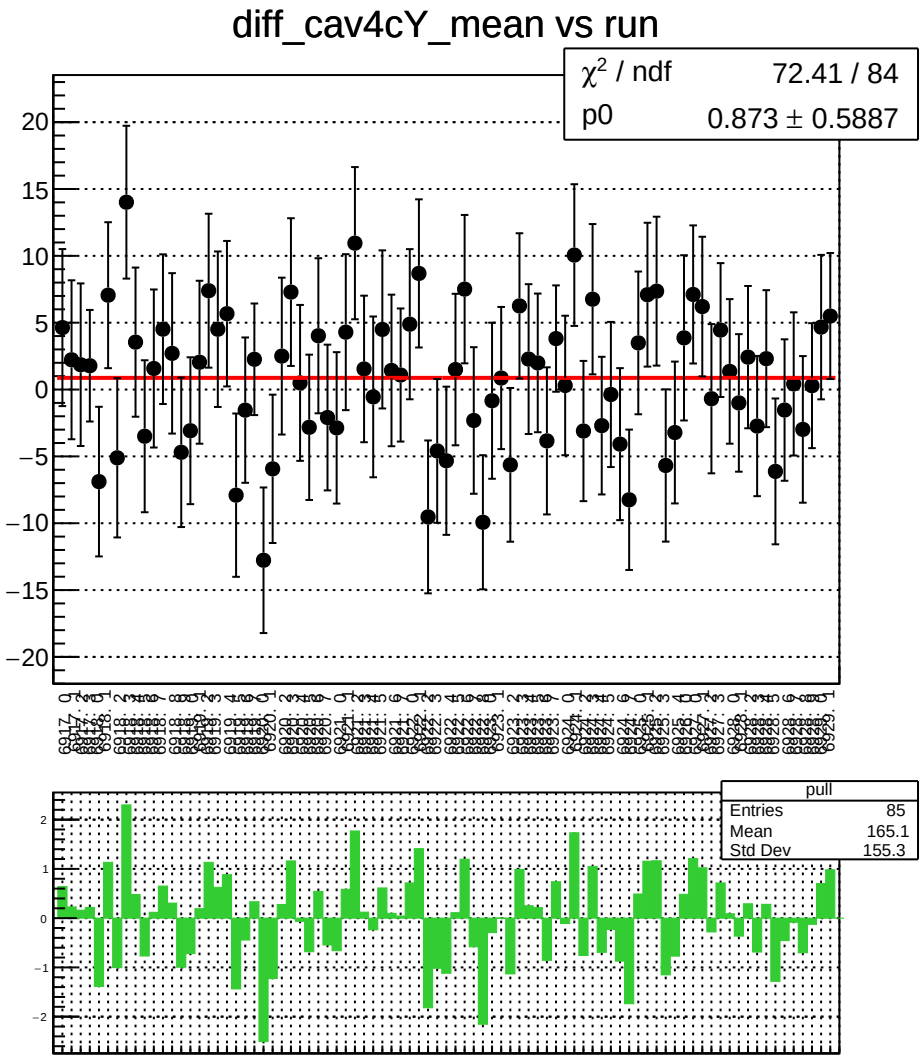

pull1D
Entries 85
Mean −0.002491
Std Dev 0.9144
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

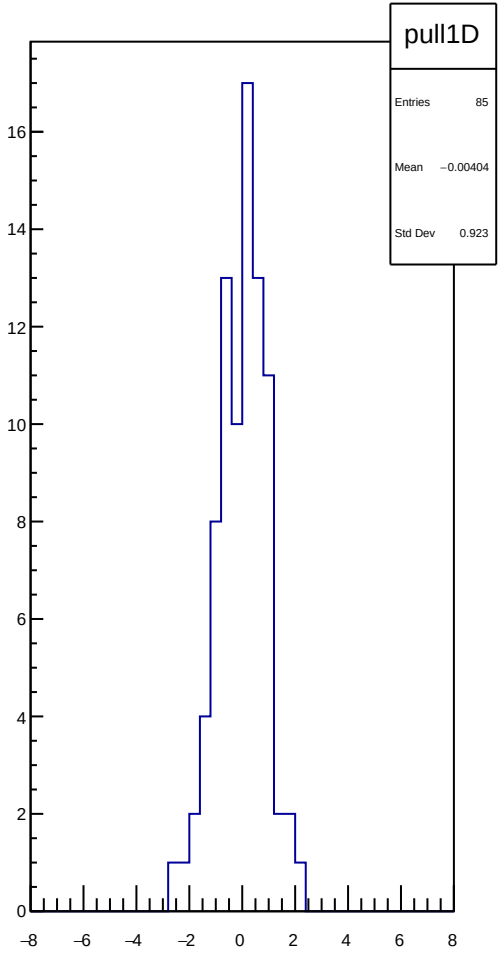

diff_cav4bY_rms vs run
χ² / ndf 2767 / 84
p0 4273 ± 3.387
4800
4600
4400
4200
4000

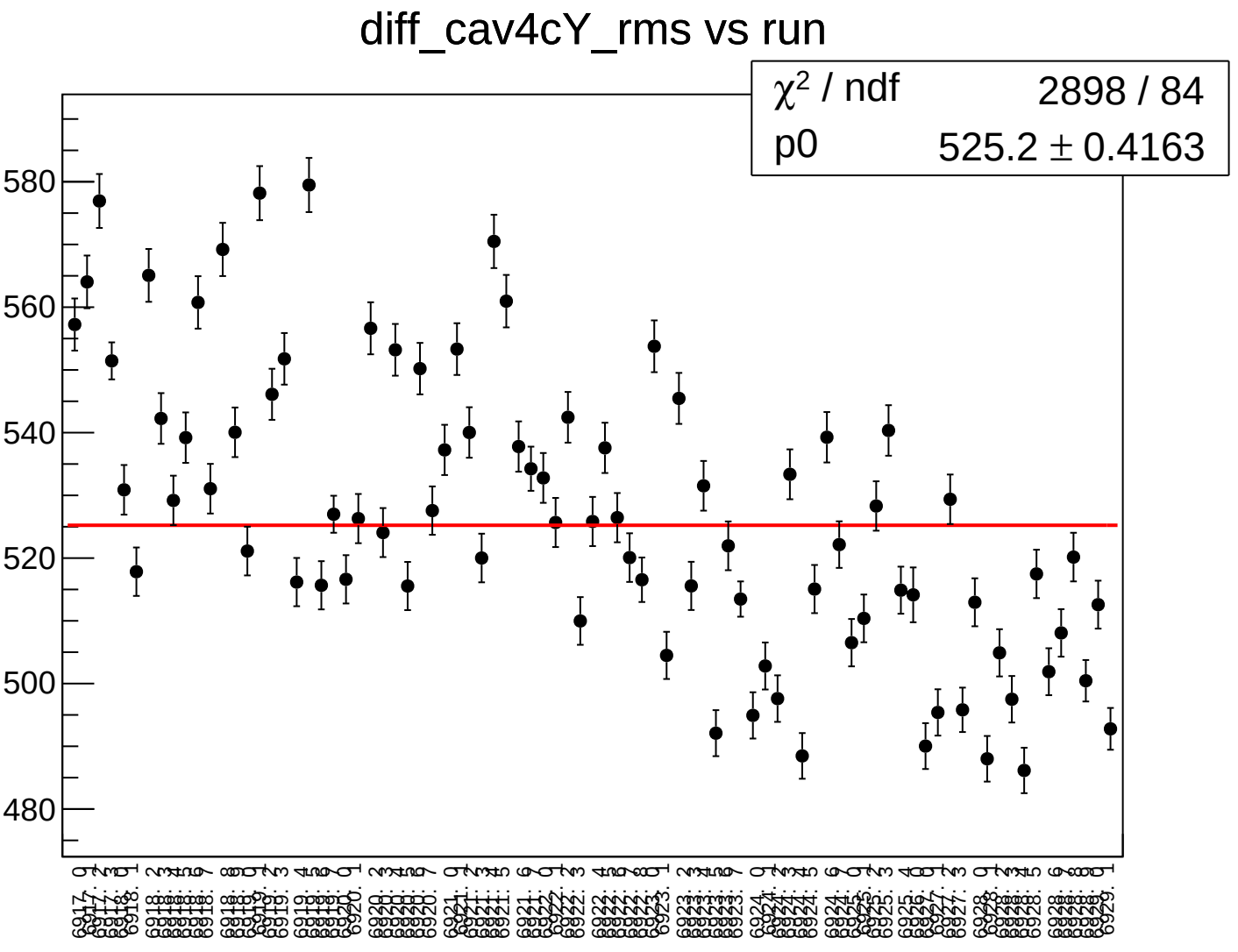

diff_cav4cX_mean vs run
χ² / ndf 93.25 / 84
p0 −2.273 ± 0.9007
pull
Entries 85
Mean 496.4
Std Dev 460.8

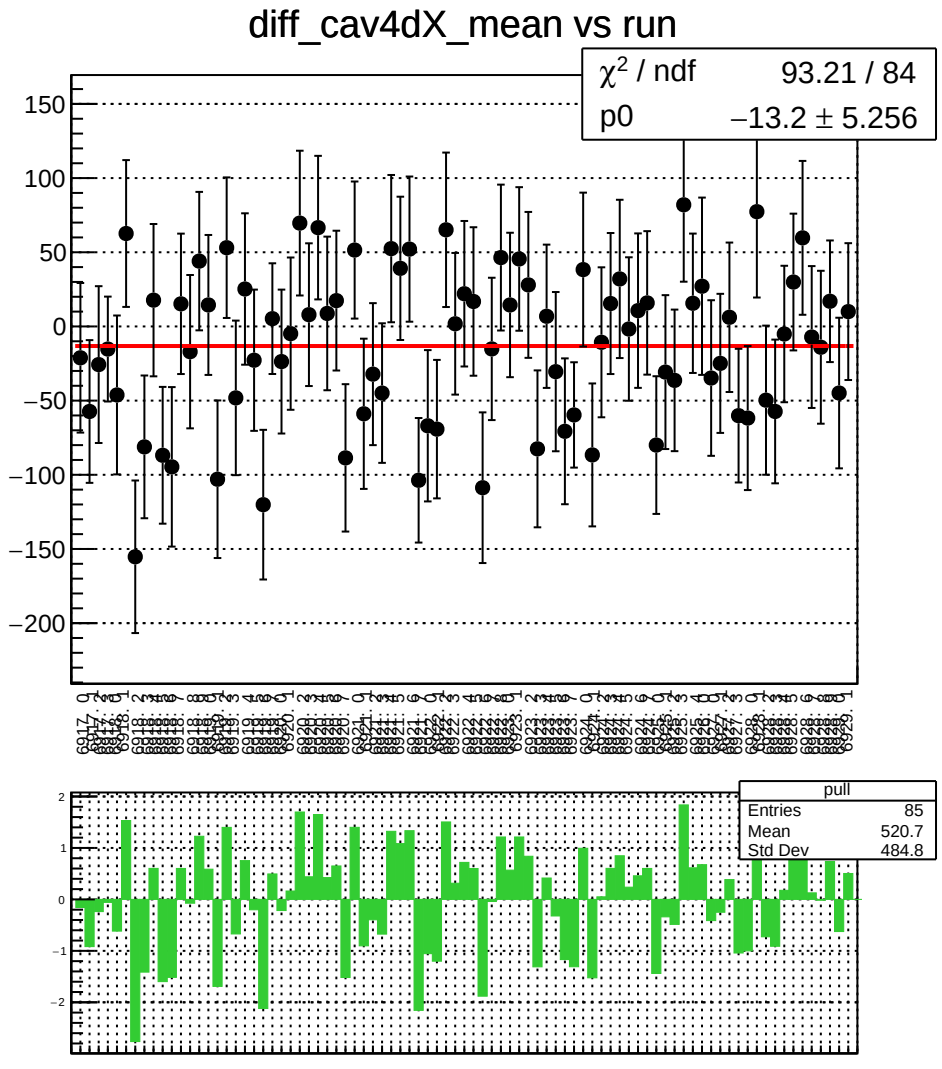

pull1D
Entries 85
Mean 0.006719
Std Dev 1.047

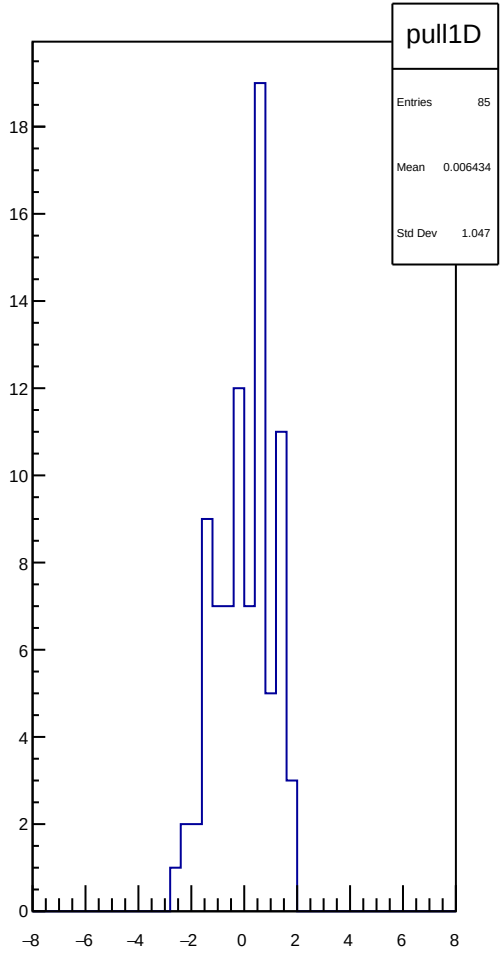

diff_cav4cX_rms vs run
χ² / ndf 3243 / 84
p0 803.4 ± 0.6369
950
900
850
800
750

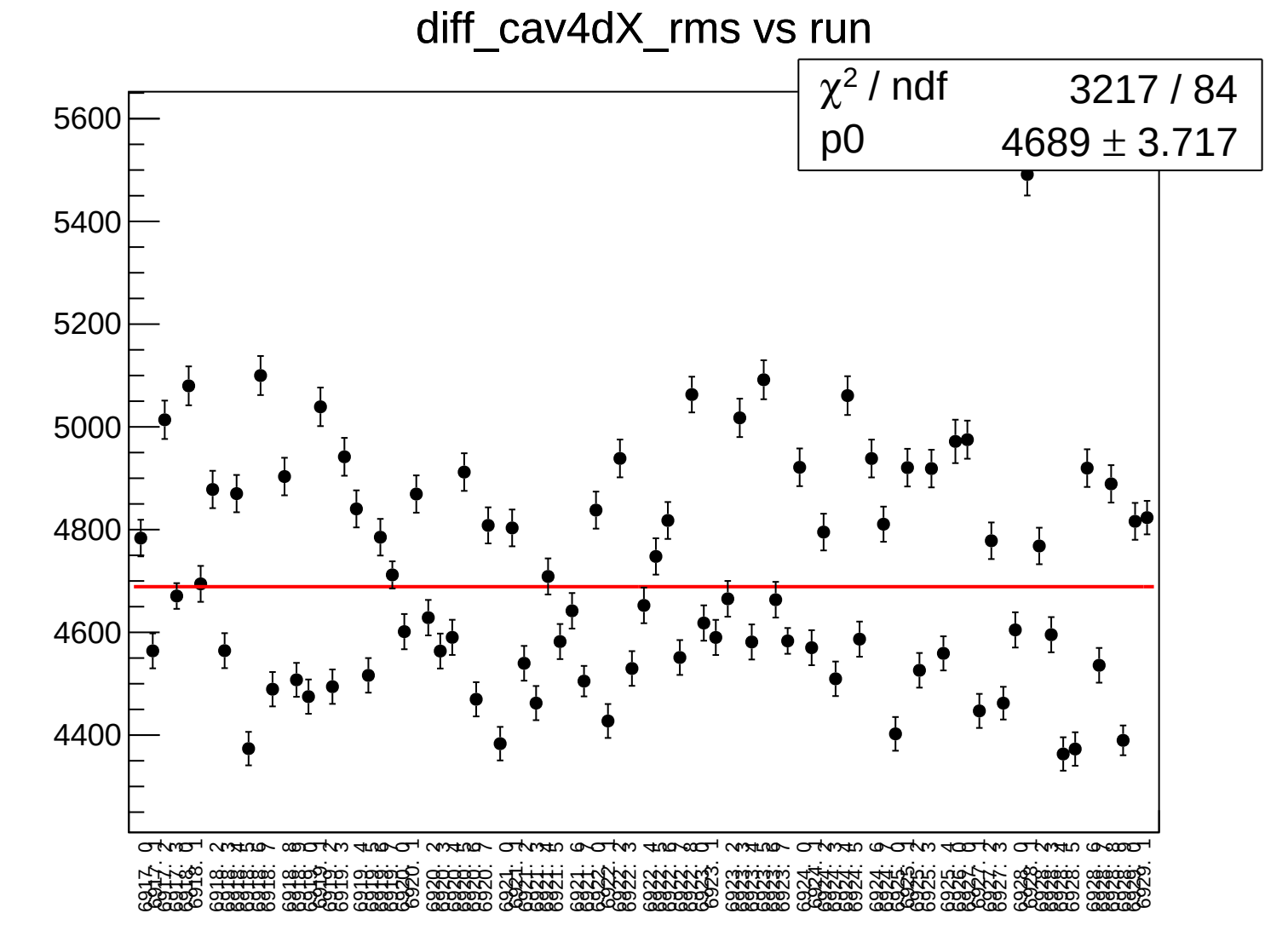

diff_cav4cY_mean vs run
χ² / ndf 72.41 / 84
p0 0.873 ± 0.5887
pull
Entries 85
Mean 165.1
Std Dev 155.3

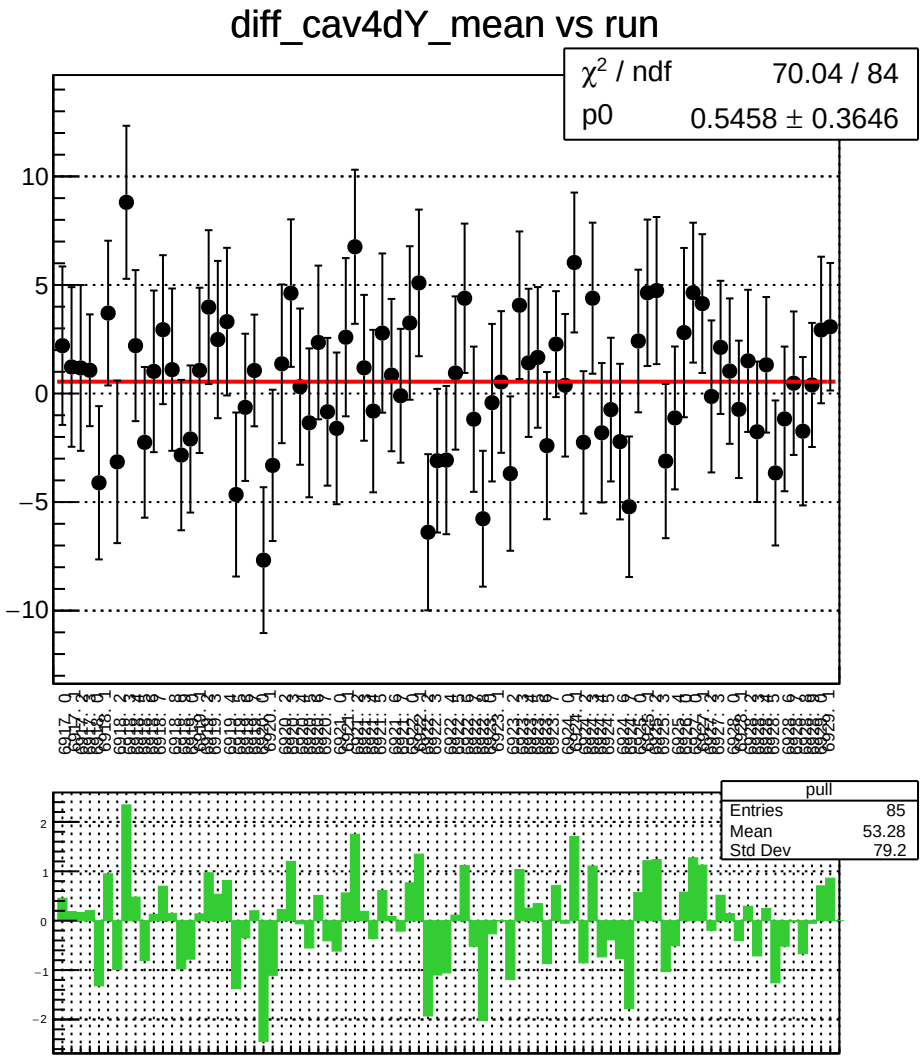

pull1D
Entries 85
Mean −0.00404
Std Dev 0.923

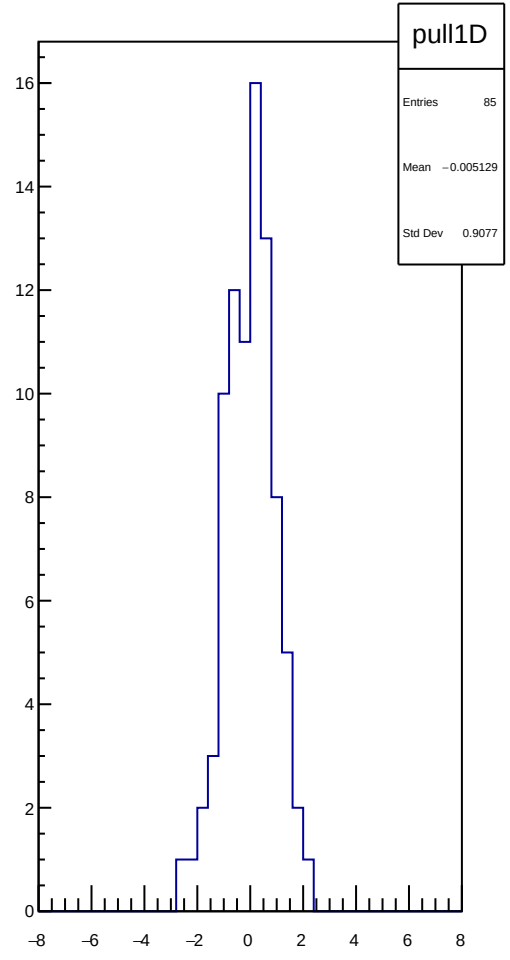

diff_cav4cY_rms vs run
χ² / ndf 2898 / 84
p0 525.2 ± 0.4163
580
560
540
520
500
480

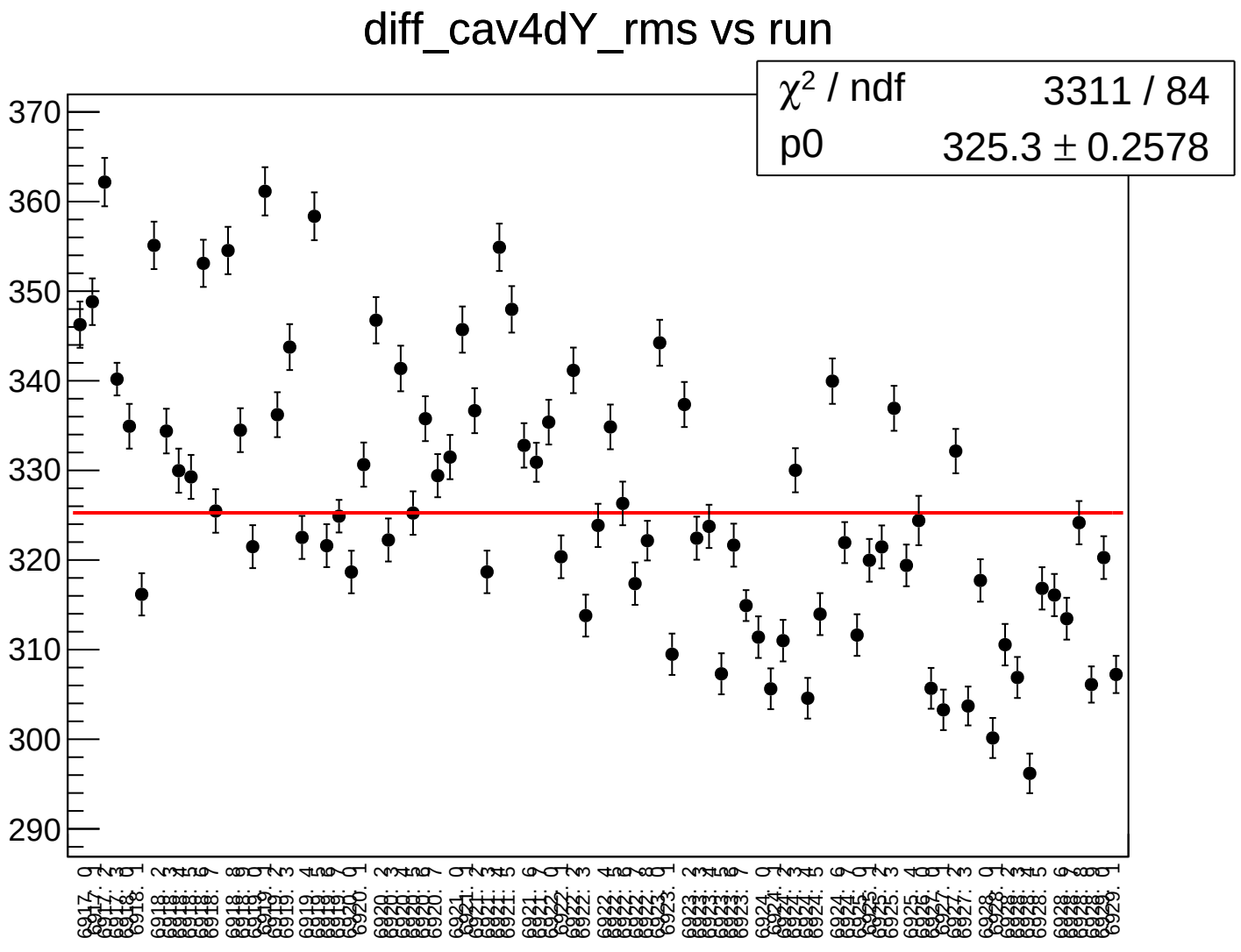

diff_cav4dX_mean vs run
χ² / ndf 93.21 / 84
p0 −13.2 ± 5.256
150
100
50
0
−50
−100
−150
−200
pull
Entries 85
Mean 520.7
Std Dev 484.8
2
1
0
−1
−2

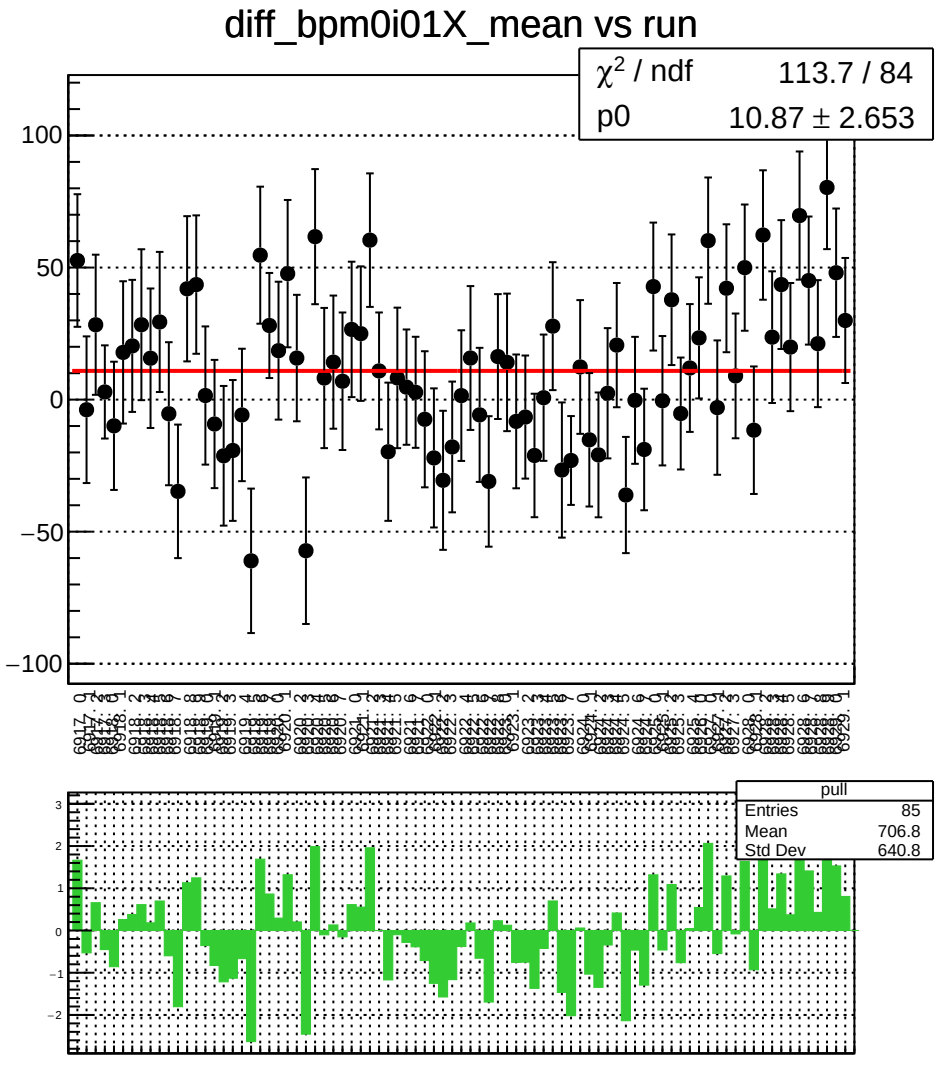

pull1D
Entries 85
Mean 0.006434
Std Dev 1.047
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

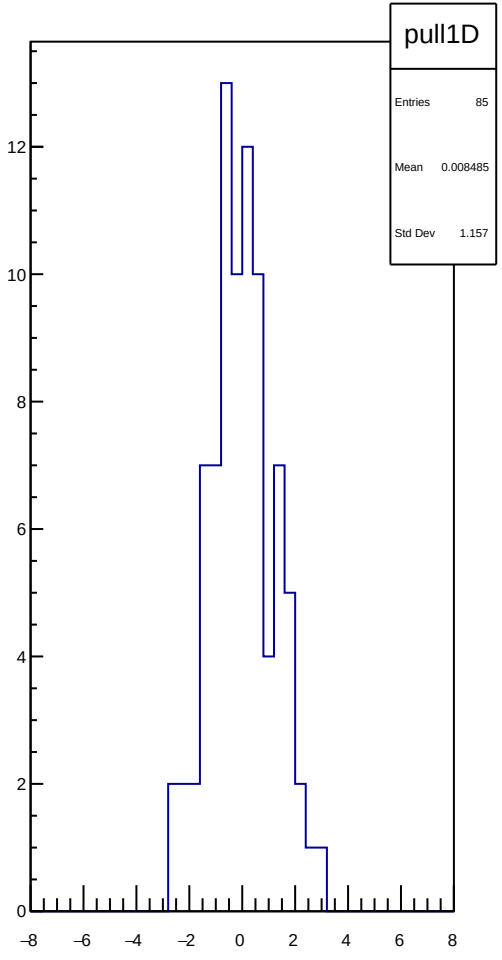

diff_cav4dX_rms vs run
χ^2 / ndf 3217 / 84
p0 4689 ± 3.717
5600
5400
5200
5000
4800
4600
4400

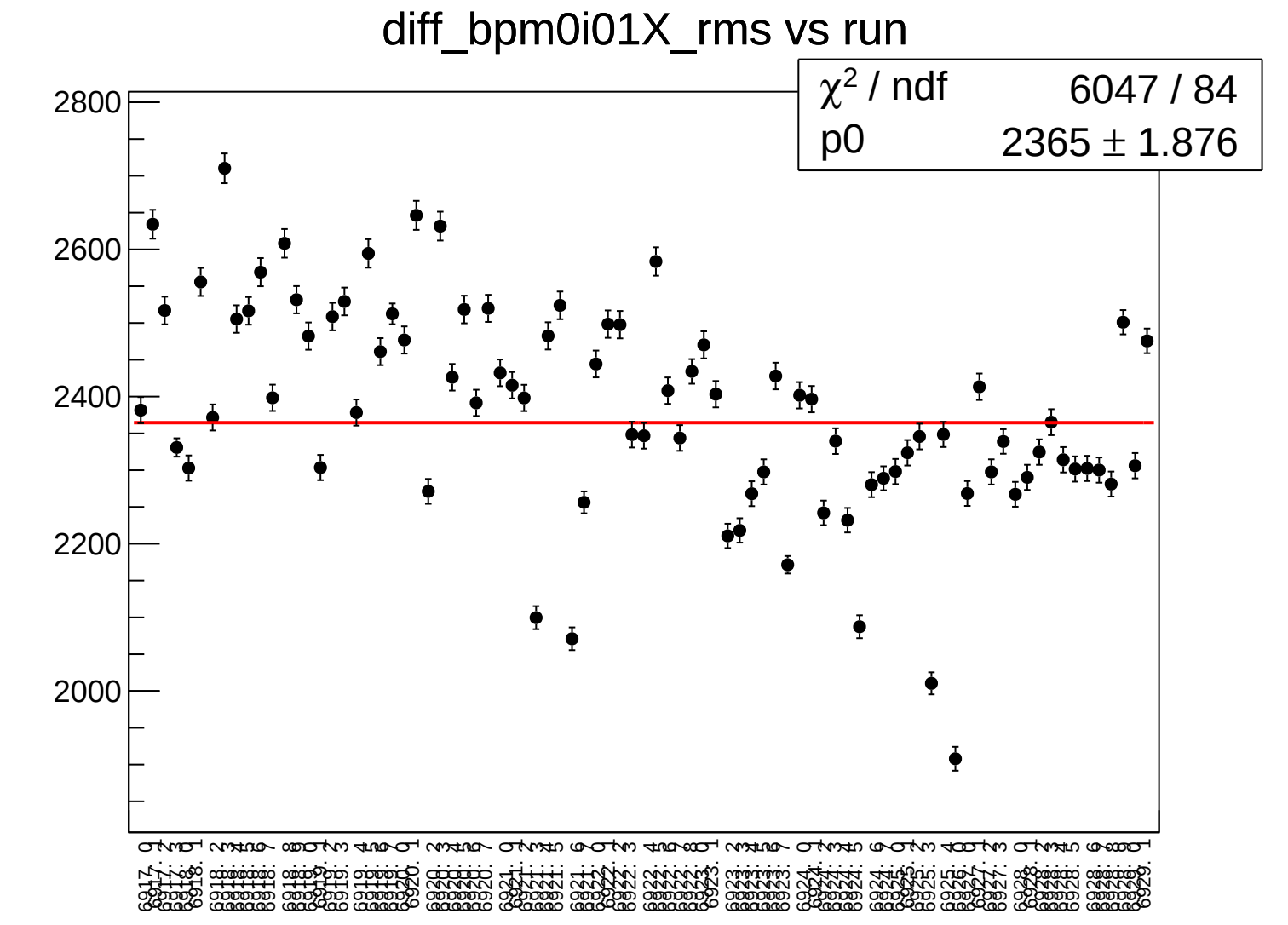

diff_cav4dY_mean vs run
χ^2 / ndf 70.04 / 84
p0 0.5458 ± 0.3646
pull
Entries 85
Mean 53.28
Std Dev 79.2

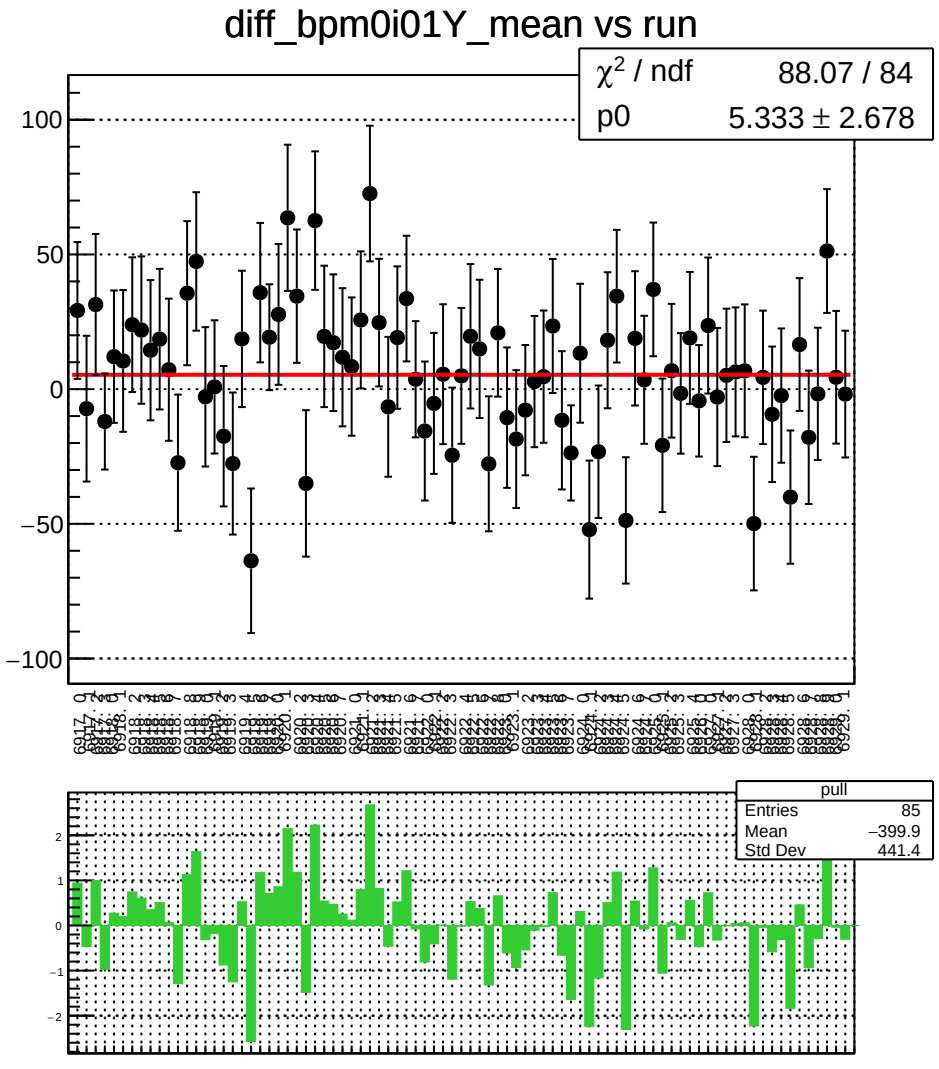

pull1D
Entries 85
Mean −0.005129
Std Dev 0.9077

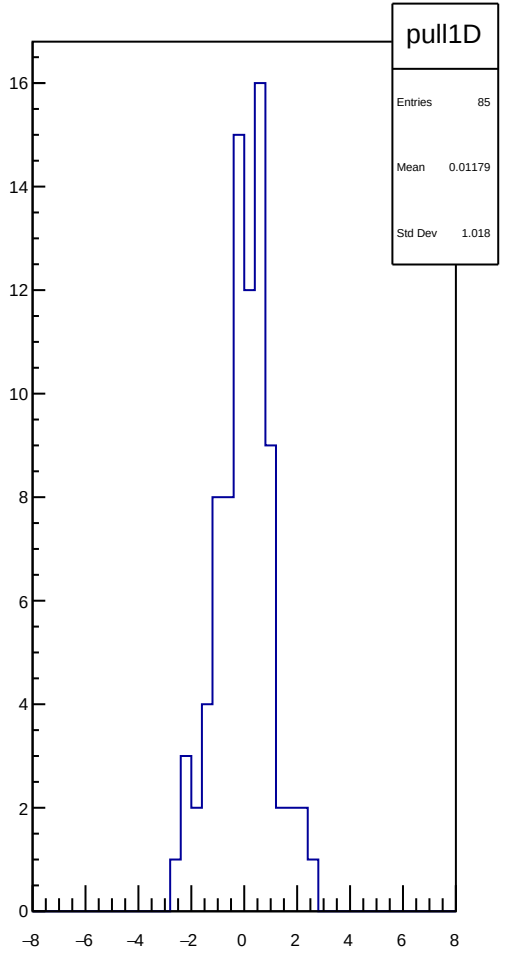

diff_cav4dY_rms vs run
χ² / ndf 3311 / 84
p0 325.3 ± 0.2578
370
360
350
340
330
320
310
300
290

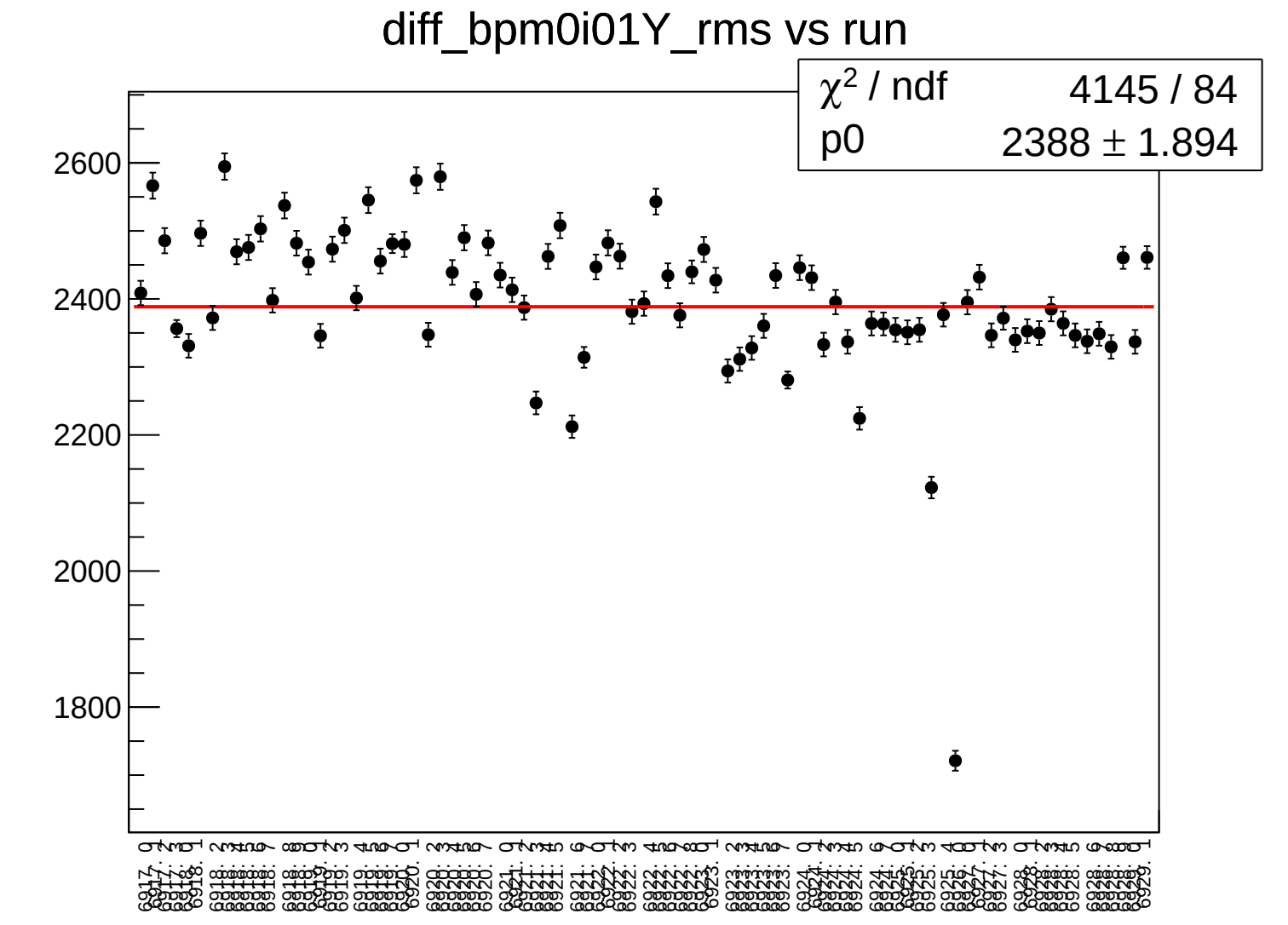

diff_bpm0i01X_mean vs run
χ^2 / ndf 113.7 / 84
p0 10.87 ± 2.653
100
50
0
−50
−100
pull
Entries 85
Mean 706.8
Std Dev 640.8
3
2
1
0
−1
−2

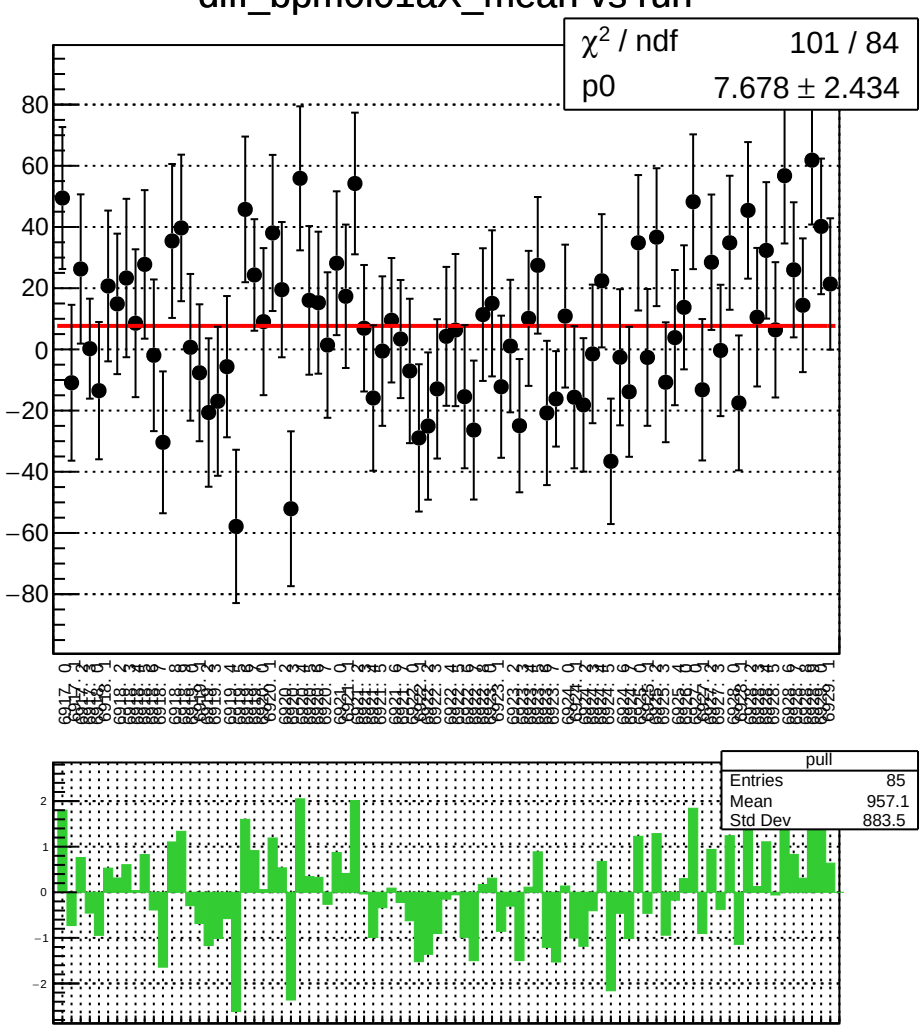

pull1D
Entries 85
Mean 0.008485
Std Dev 1.157
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

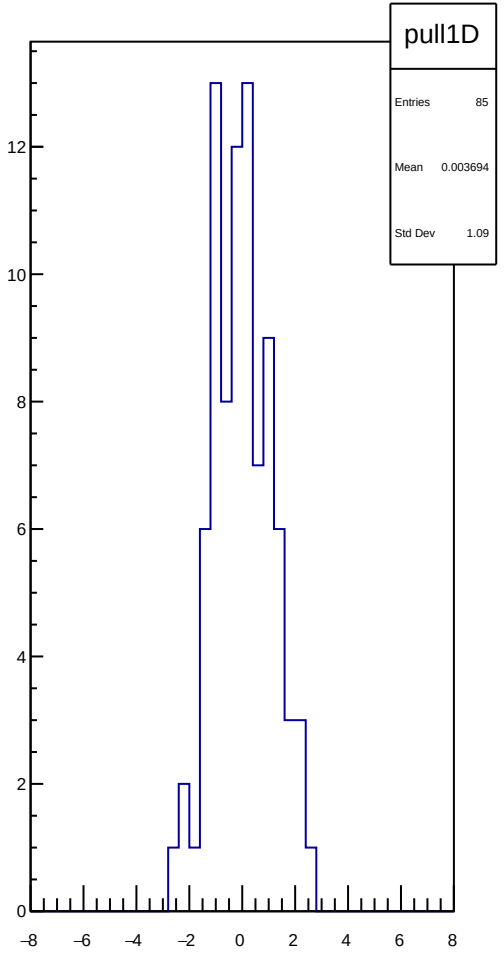

diff_bpm0i01X_rms vs run
χ² / ndf 6047 / 84
p0 2365 ± 1.876
2800
2600
2400
2200
2000

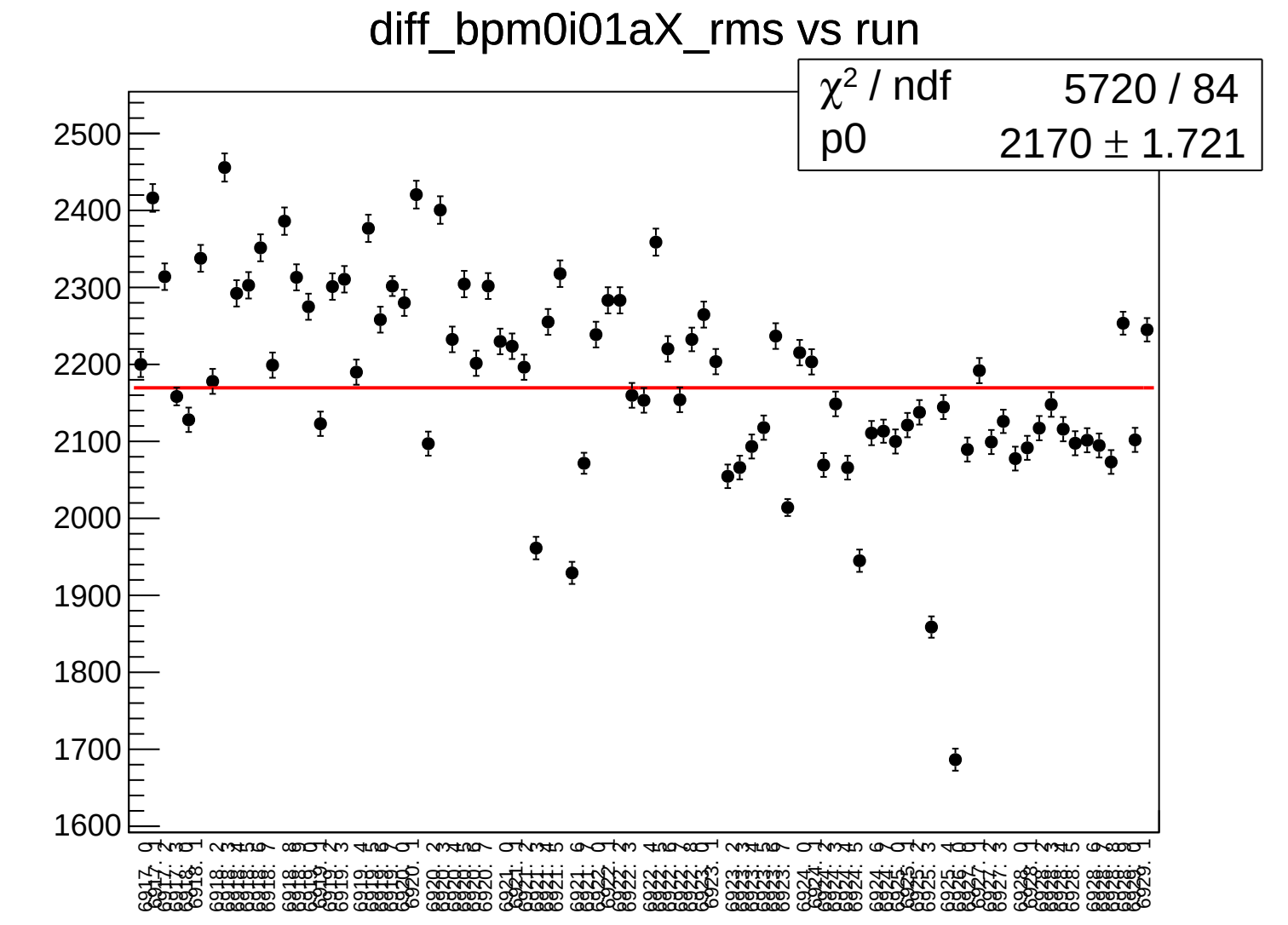

diff_bpm0i01Y_mean vs run
χ^2 / ndf 88.07 / 84
p0 5.333 ± 2.678
100
50
0
−50
−100
pull
Entries 85
Mean −399.9
Std Dev 441.4
2
1
0
−1
−2

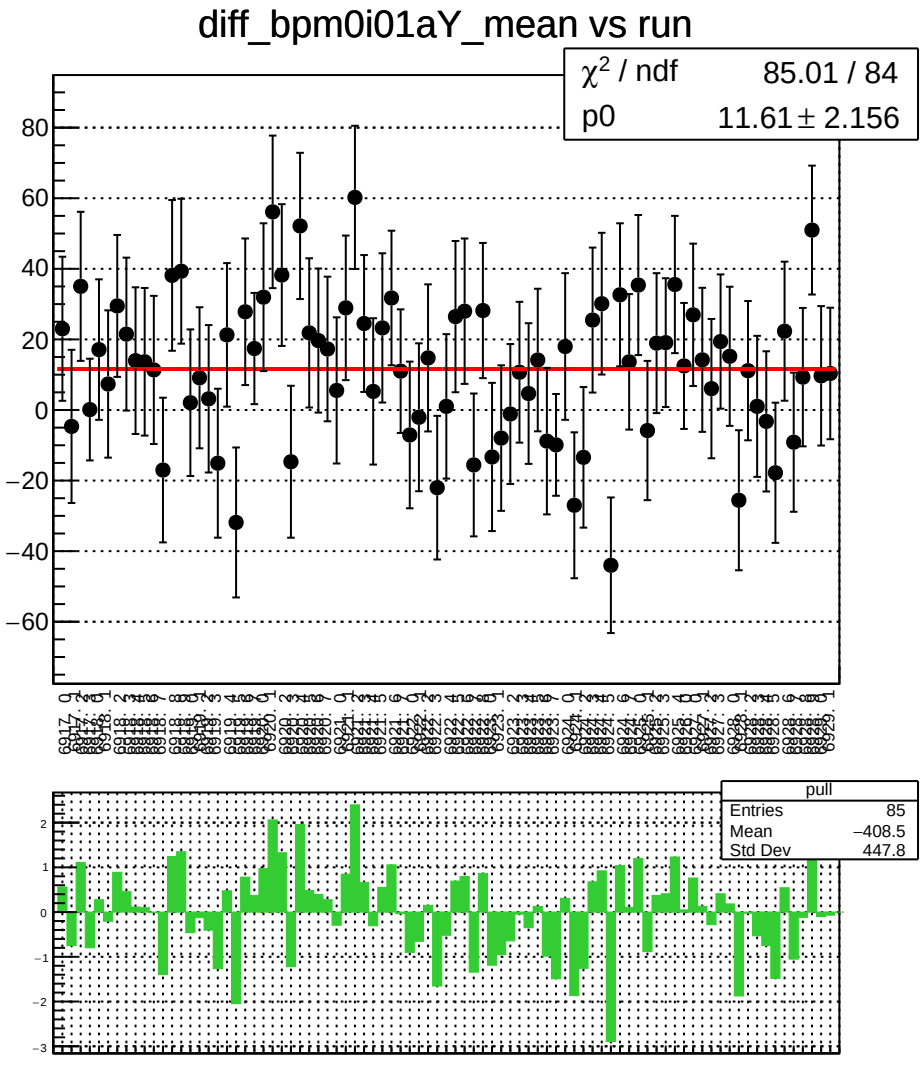

pull1D
Entries 85
Mean 0.01179
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

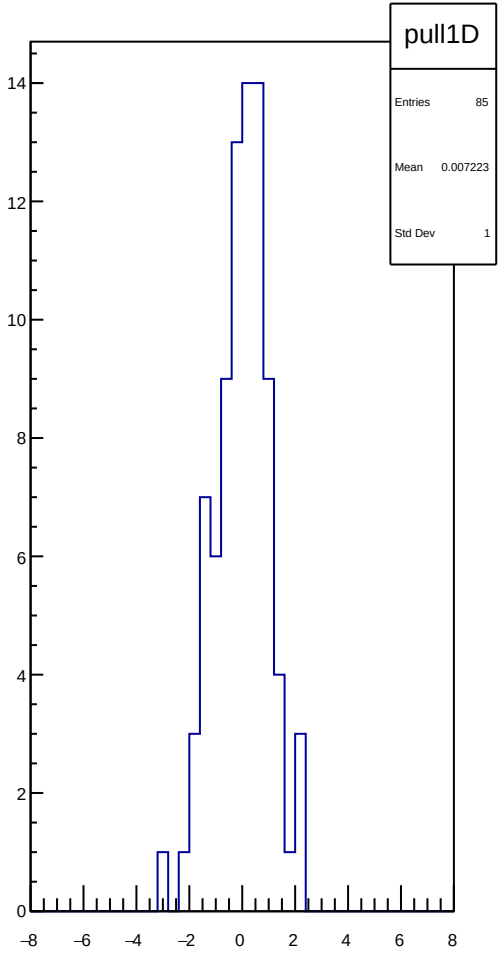

diff_bpm0i01Y_rms vs run
χ² / ndf 4145 / 84
p0 2388 ± 1.894
2600
2400
2200
2000
1800

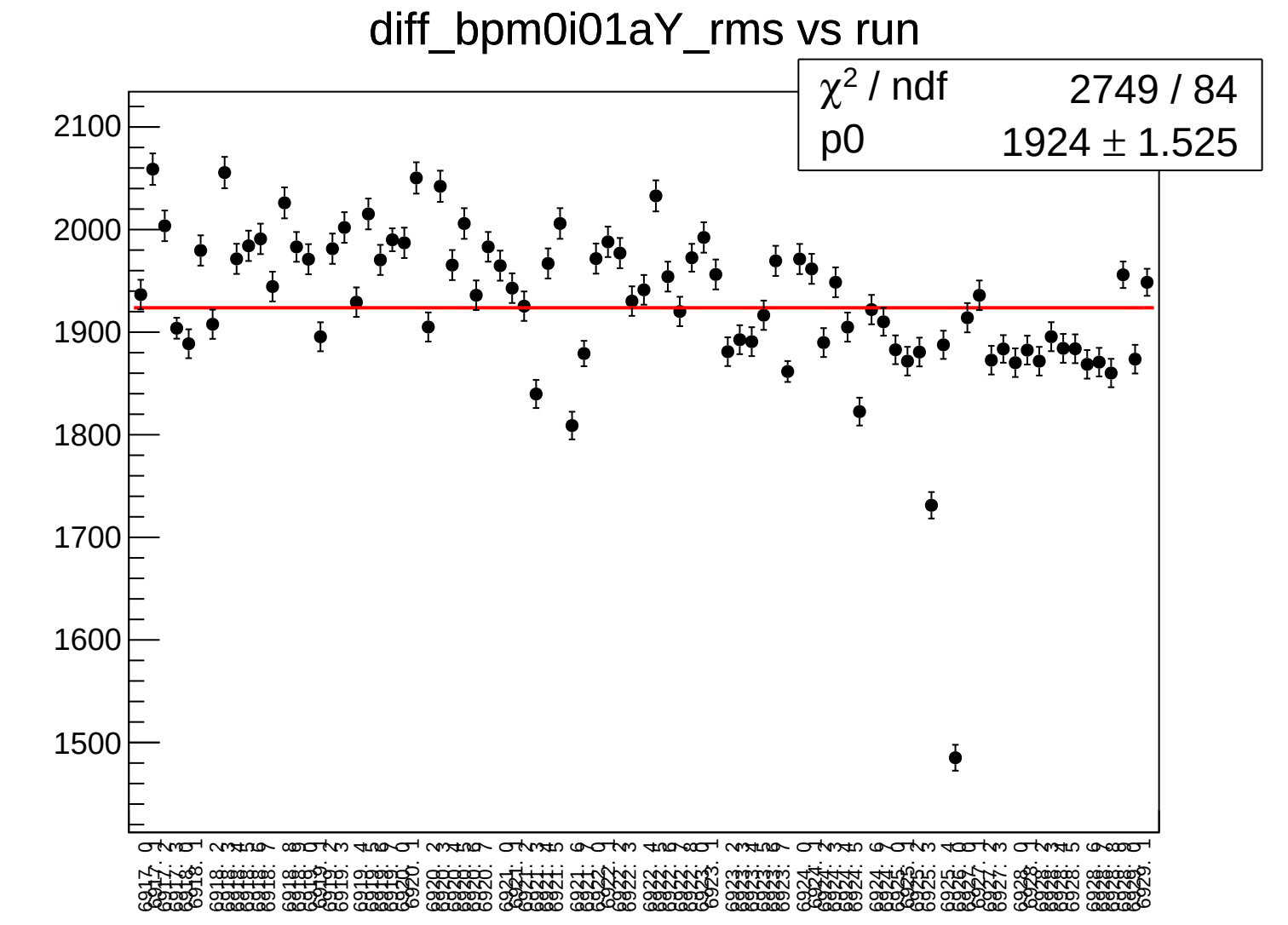

diff_bpm0i01aX_mean vs run
χ² / ndf 101 / 84
p0 7.678 ± 2.434
pull
Entries 85
Mean 957.1
Std Dev 883.5

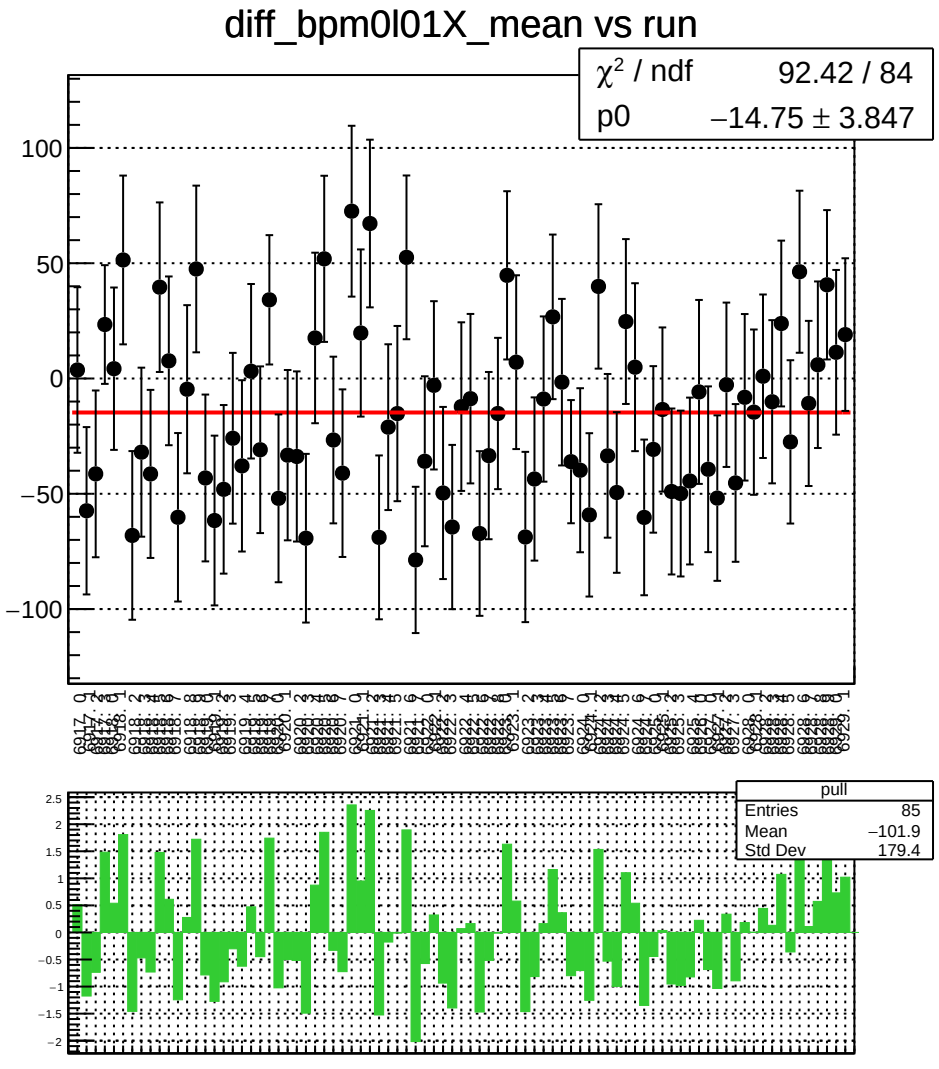

pull1D
Entries 85
Mean 0.003694
Std Dev 1.09

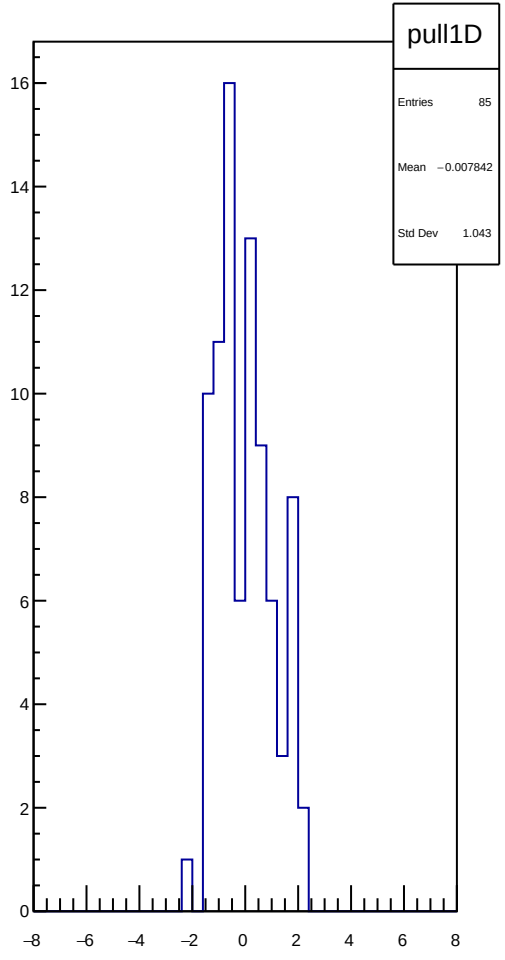

diff_bpm0i01aX_rms vs run
χ² / ndf 5720 / 84
p0 2170 ± 1.721
2500
2400
2300
2200
2100
2000
1900
1800
1700
1600

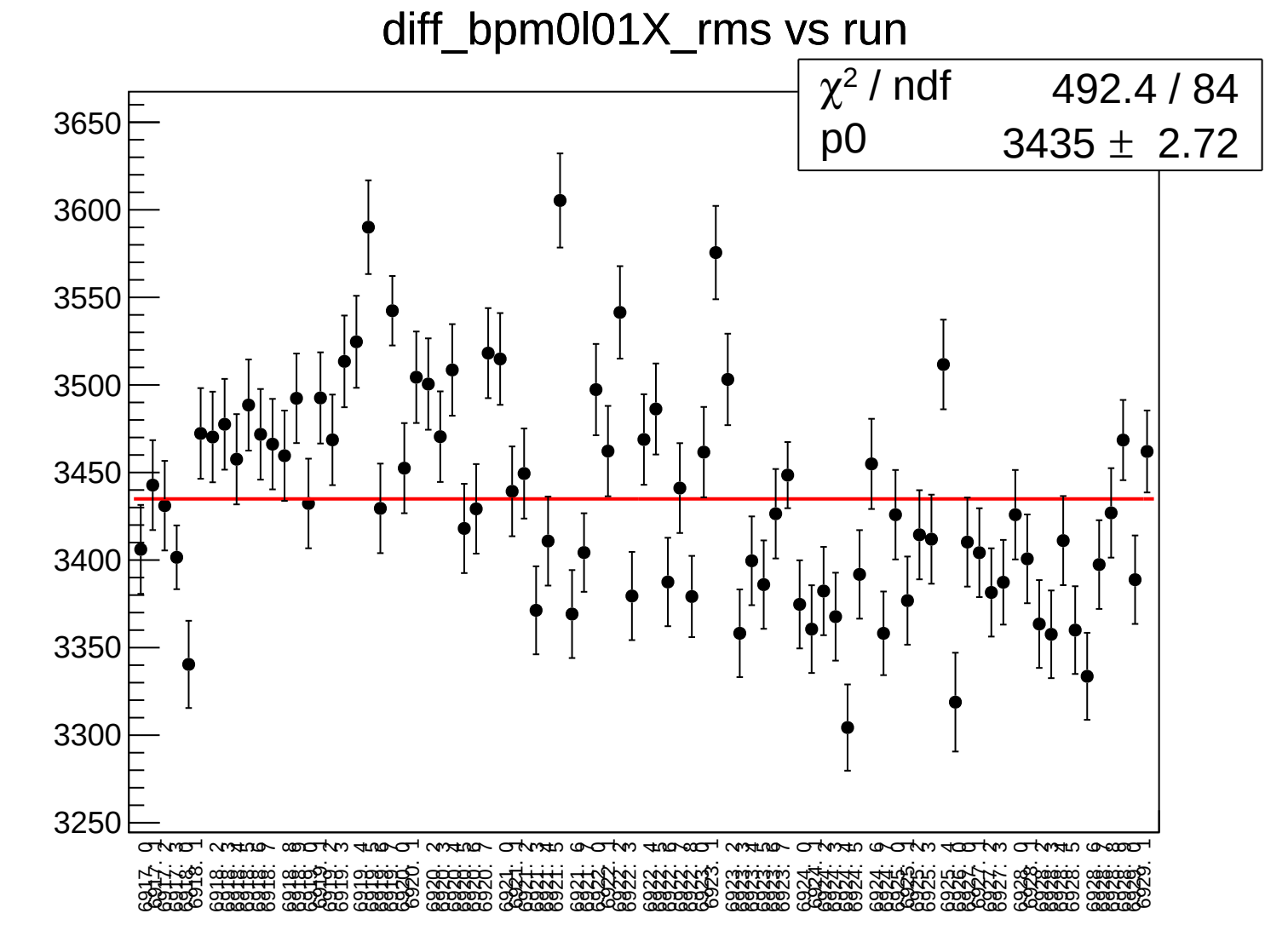

diff_bpm0i01aY_mean vs run
χ² / ndf 85.01 / 84
p0 11.61 ± 2.156
pull
Entries 85
Mean −408.5
Std Dev 447.8

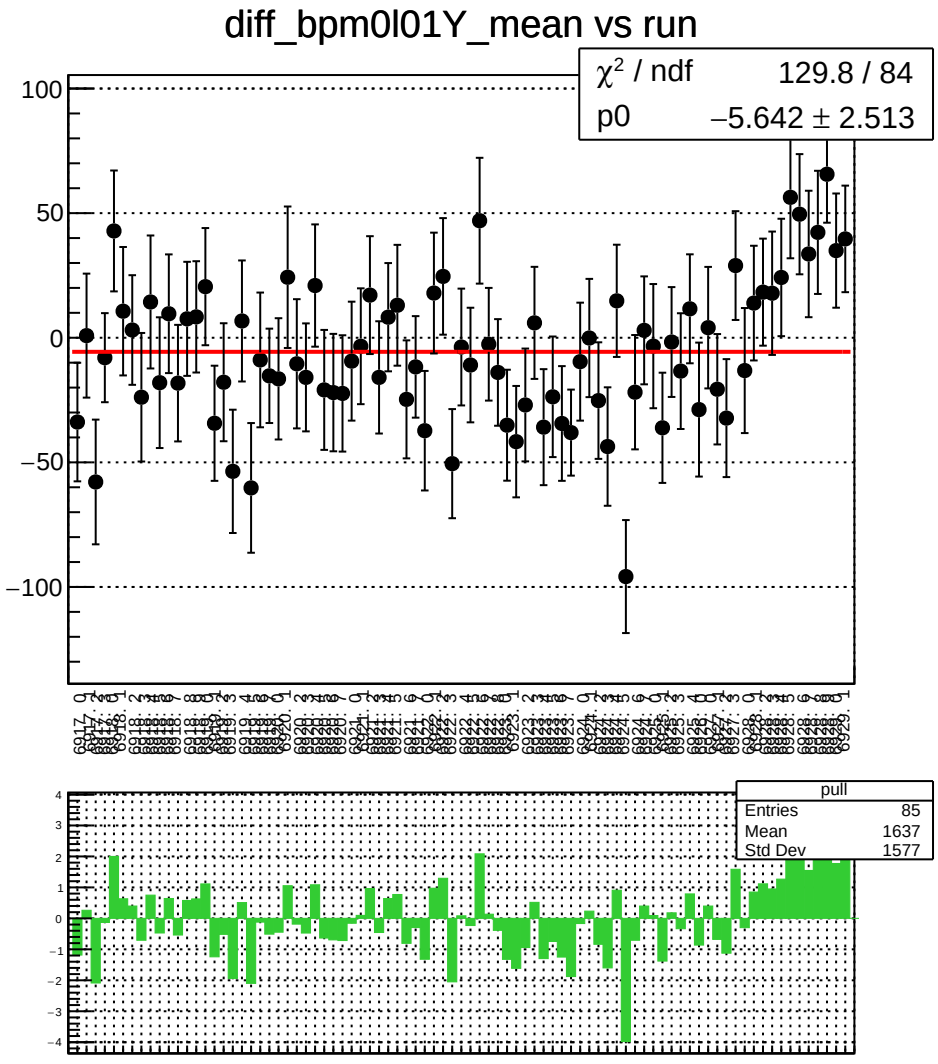

pull1D
Entries 85
Mean 0.007223
Std Dev 1

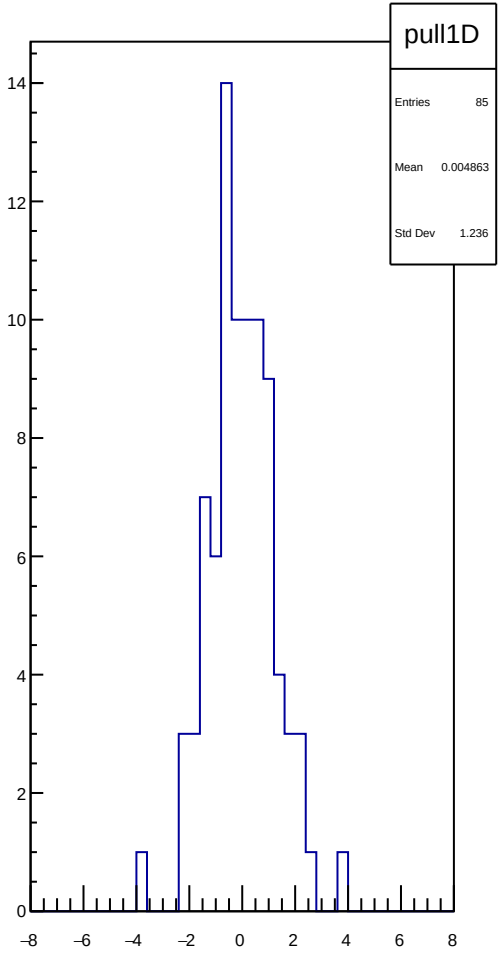

diff_bpm0i01aY_rms vs run
χ^2 / ndf 2749 / 84
p0 1924 ± 1.525
2100
2000
1900
1800
1700
1600
1500

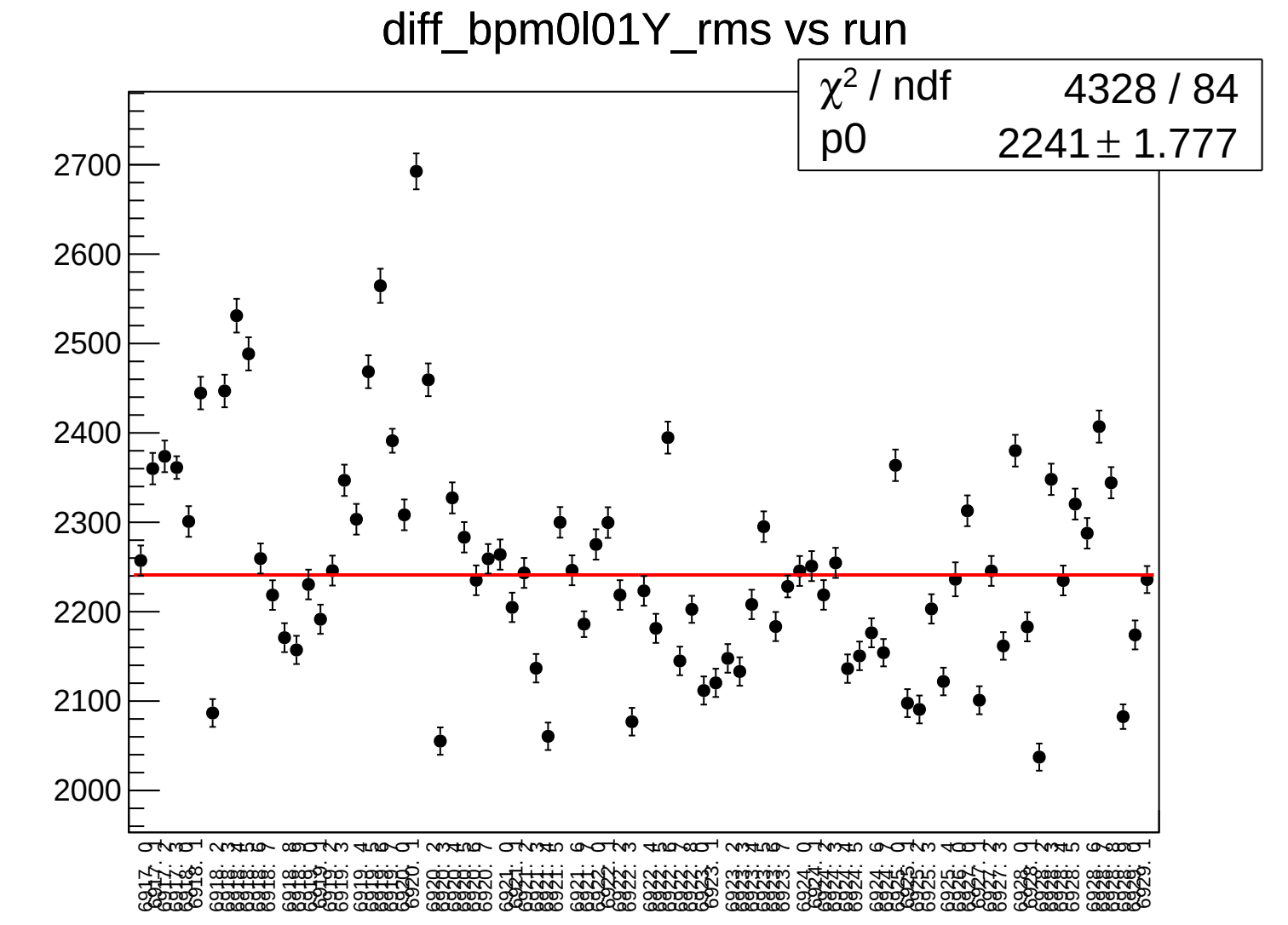

diff_bpm0l01X_mean vs run
χ^2 / ndf 92.42 / 84
p0 −14.75 ± 3.847
100
50
0
−50
−100
pull
Entries 85
Mean −101.9
Std Dev 179.4
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

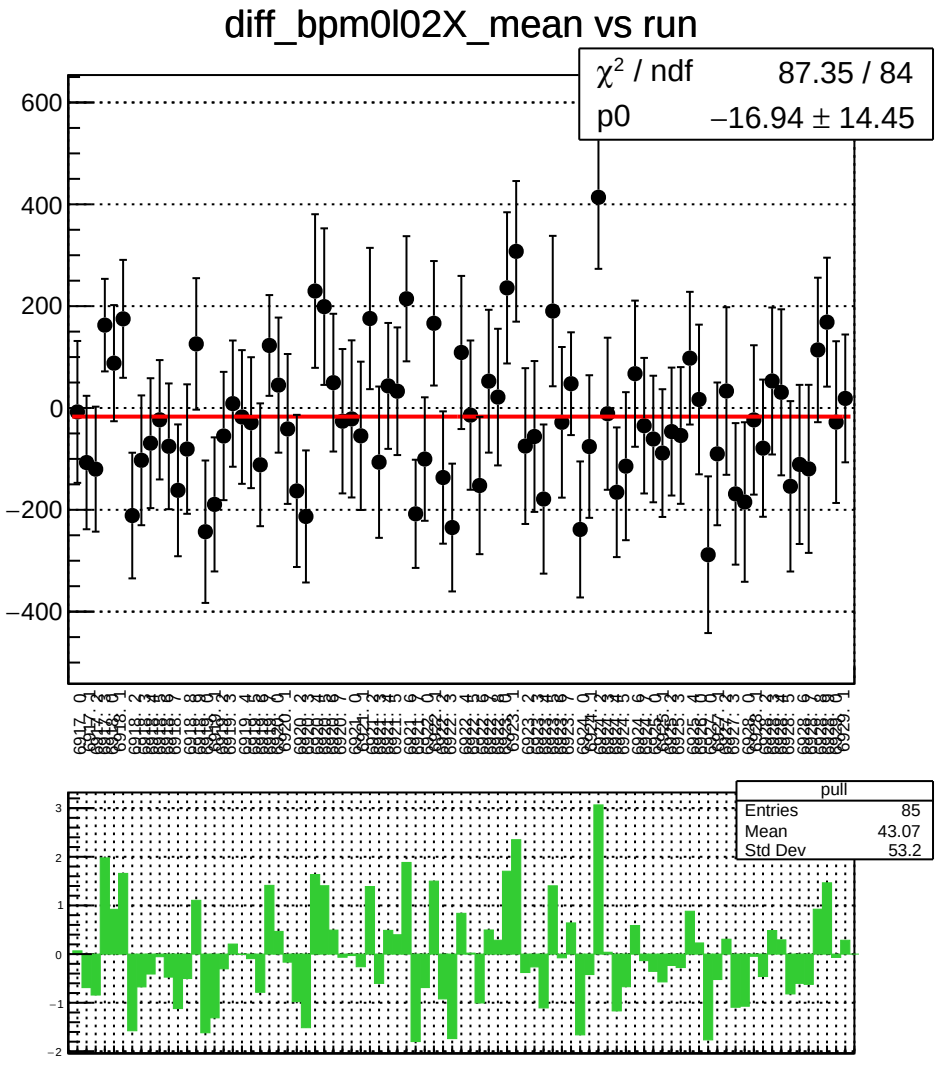

pull1D
Entries 85
Mean −0.007842
Std Dev 1.043
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

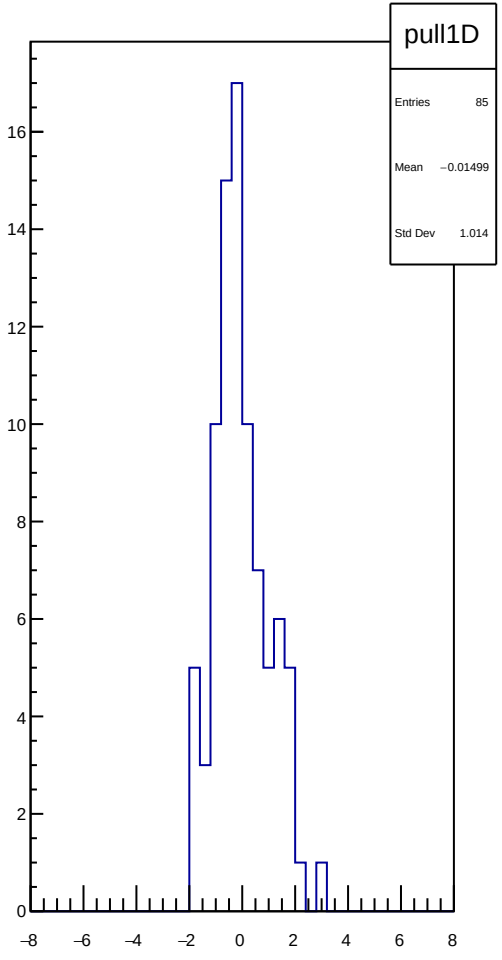

diff_bpm0l01X_rms vs run
χ² / ndf 492.4 / 84
p0 3435 ± 2.72
3650
3600
3550
3500
3450
3400
3350
3300
3250

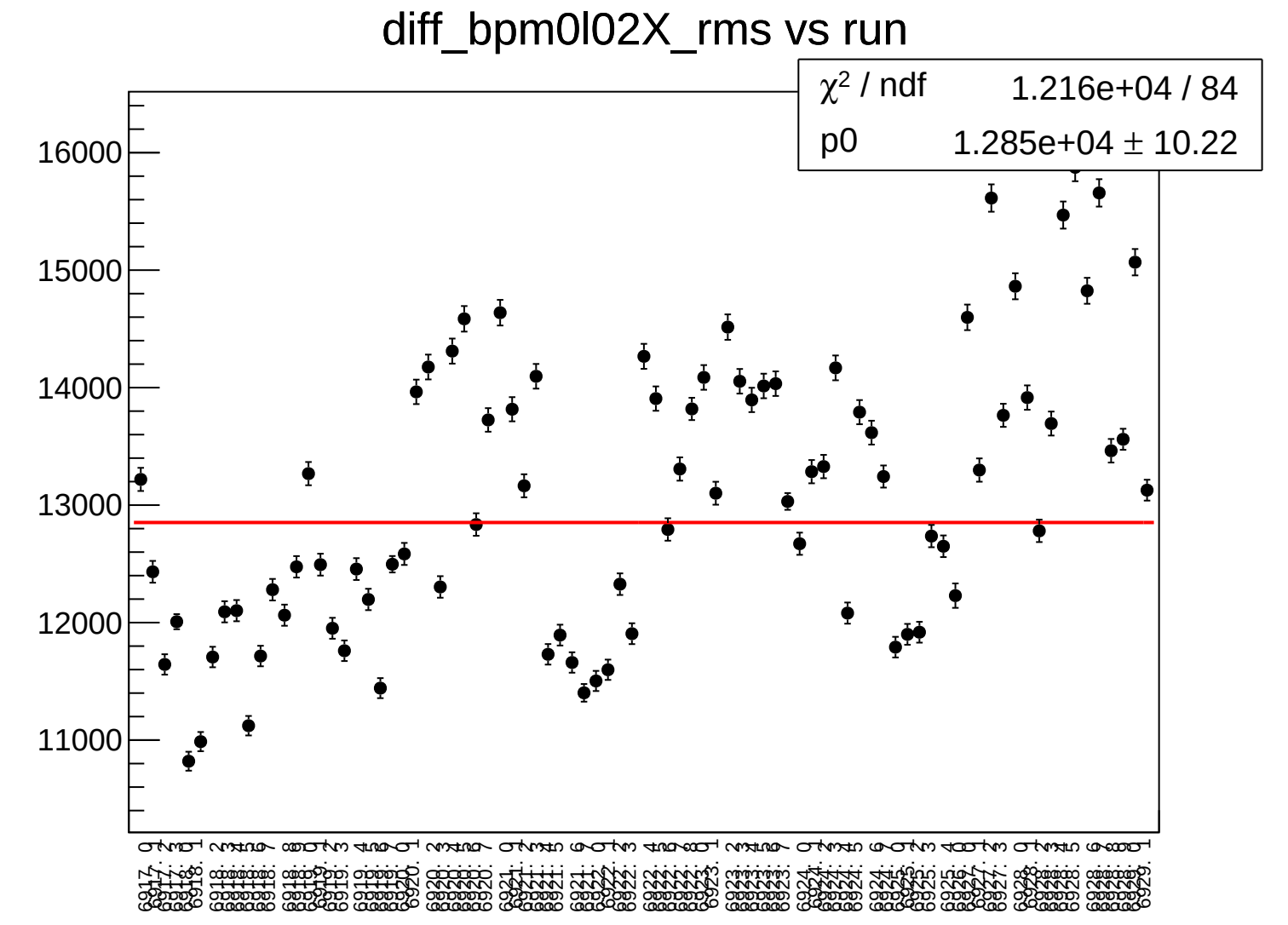

diff_bpm0l01Y_mean vs run
χ² / ndf 129.8 / 84
p0 −5.642 ± 2.513
100
50
0
−50
−100
pull
Entries 85
Mean 1637
Std Dev 1577
4
3
2
1
0
−1
−2
−3
−4

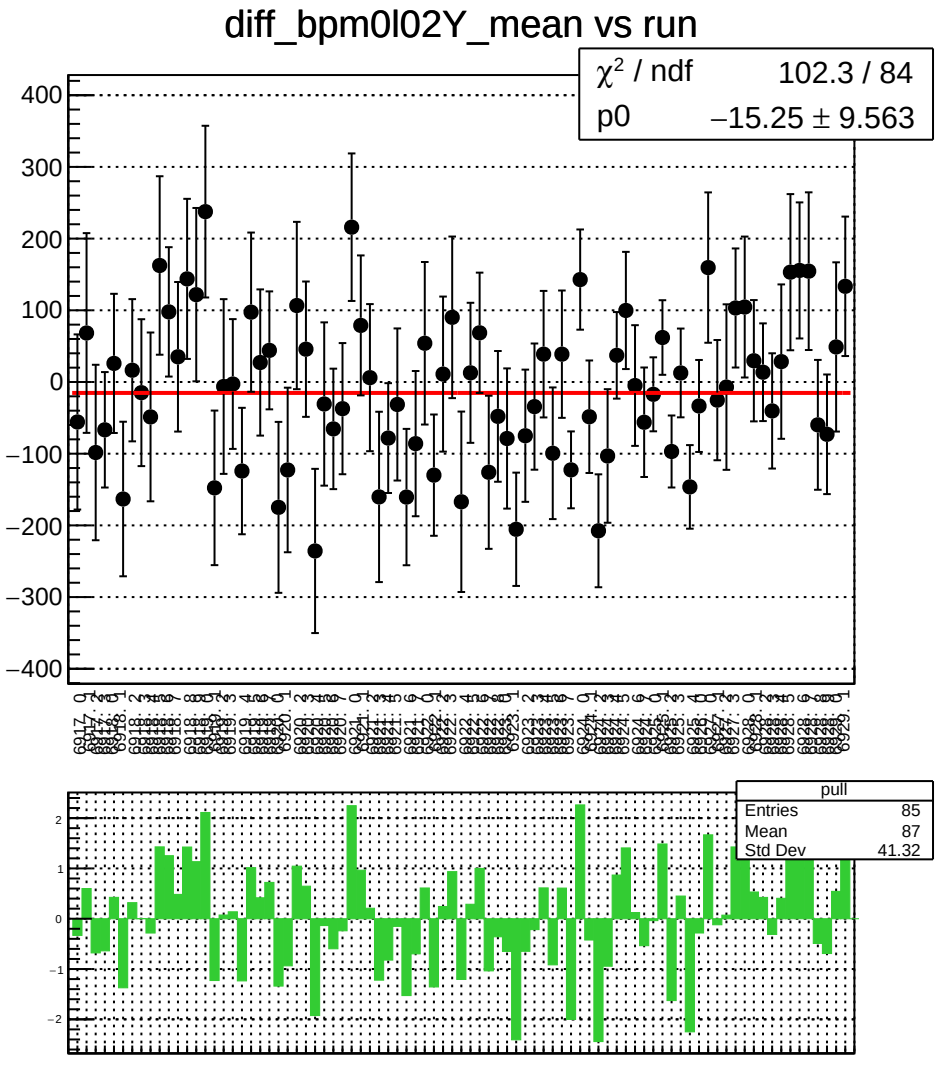

pull1D
Entries 85
Mean 0.004863
Std Dev 1.236
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

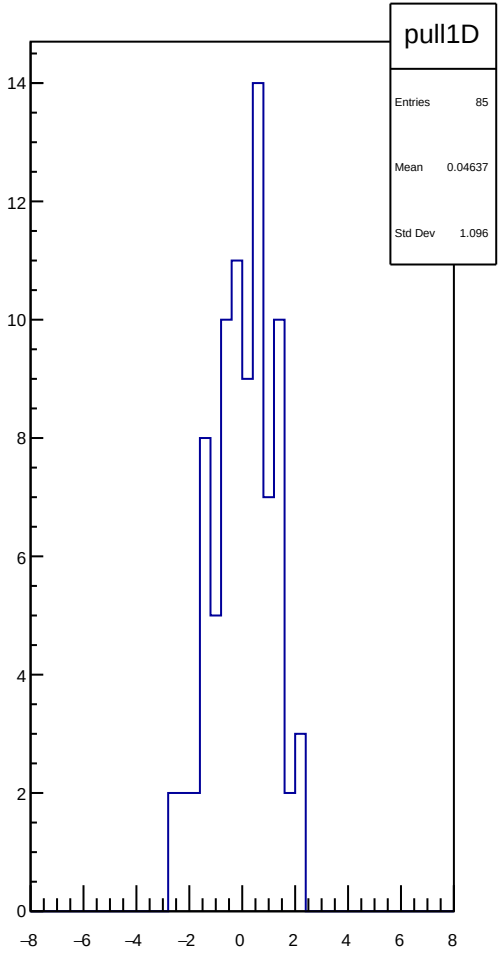

diff_bpm0l01Y_rms vs run
χ² / ndf 4328 / 84
p0 2241 ± 1.777
2700
2600
2500
2400
2300
2200
2100
2000

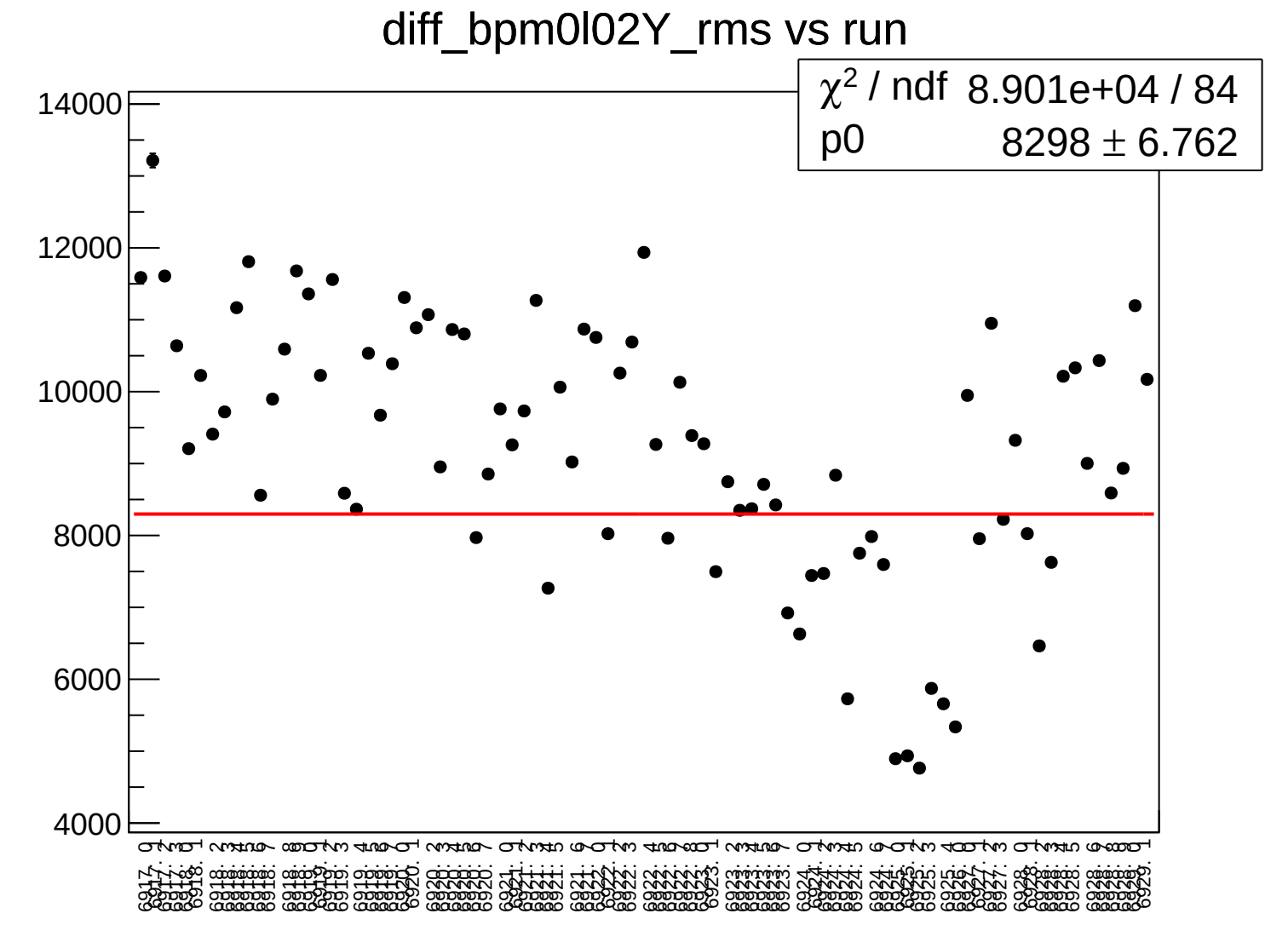

diff_bpm0l02X_mean vs run
χ² / ndf 87.35 / 84
p0 −16.94 ± 14.45
pull
Entries 85
Mean 43.07
Std Dev 53.2

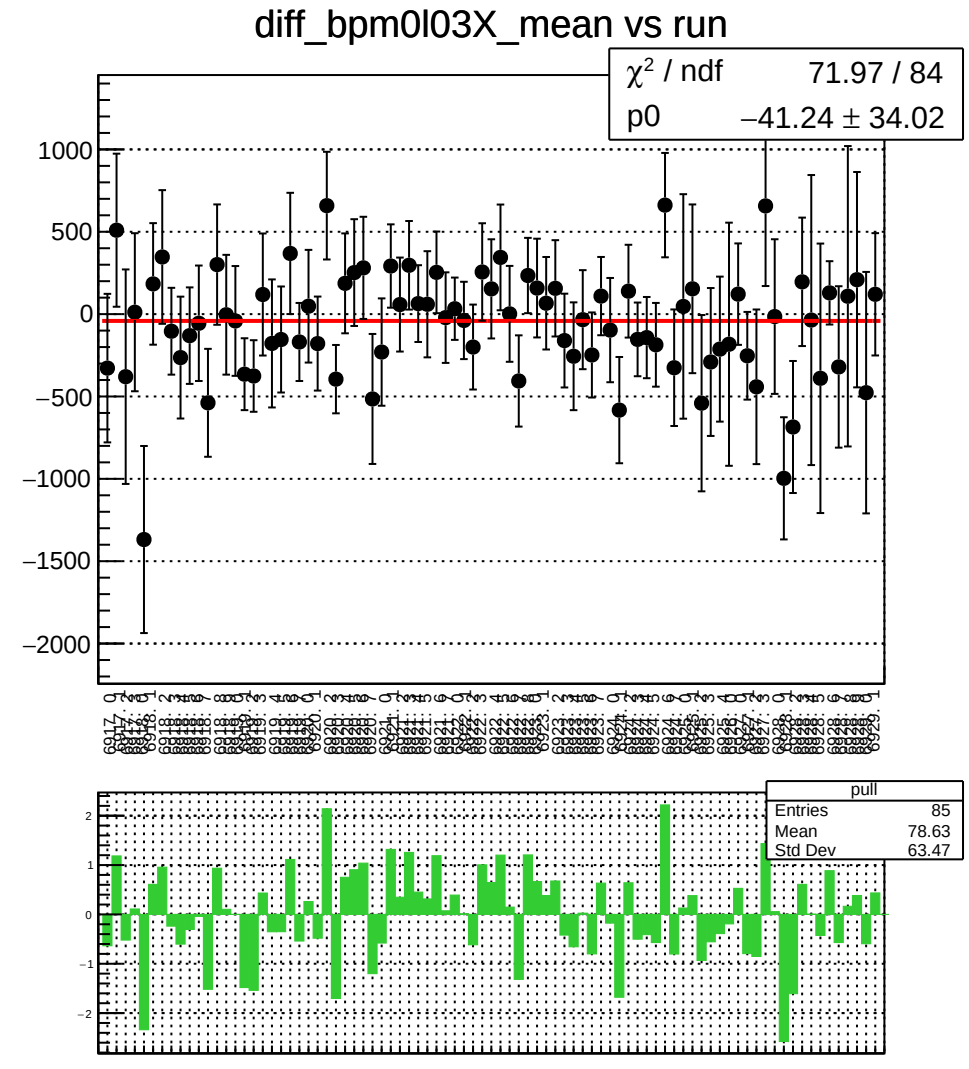

pull1D
Entries 85
Mean −0.01499
Std Dev 1.014

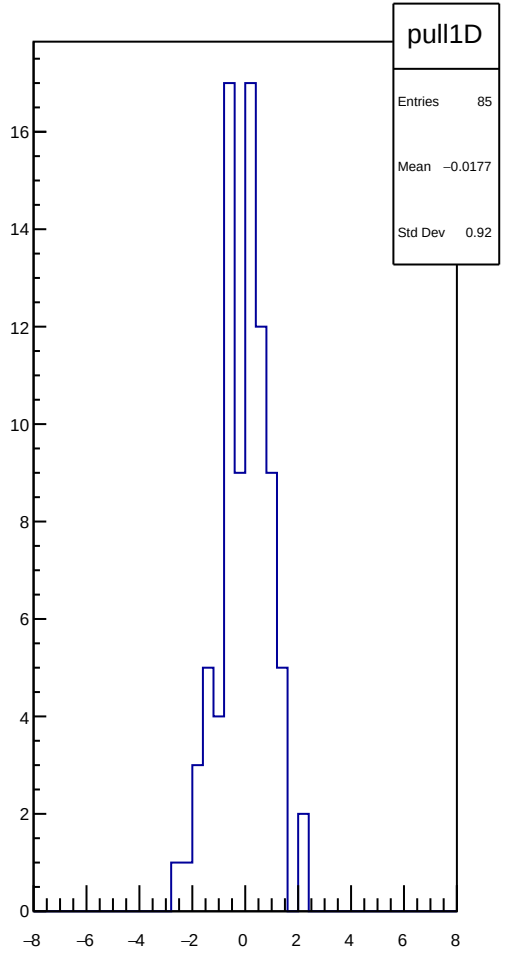

diff_bpm0l02X_rms vs run
χ² / ndf 1.216e+04 / 84
p0 1.285e+04 ± 10.22
16000
15000
14000
13000
12000
11000

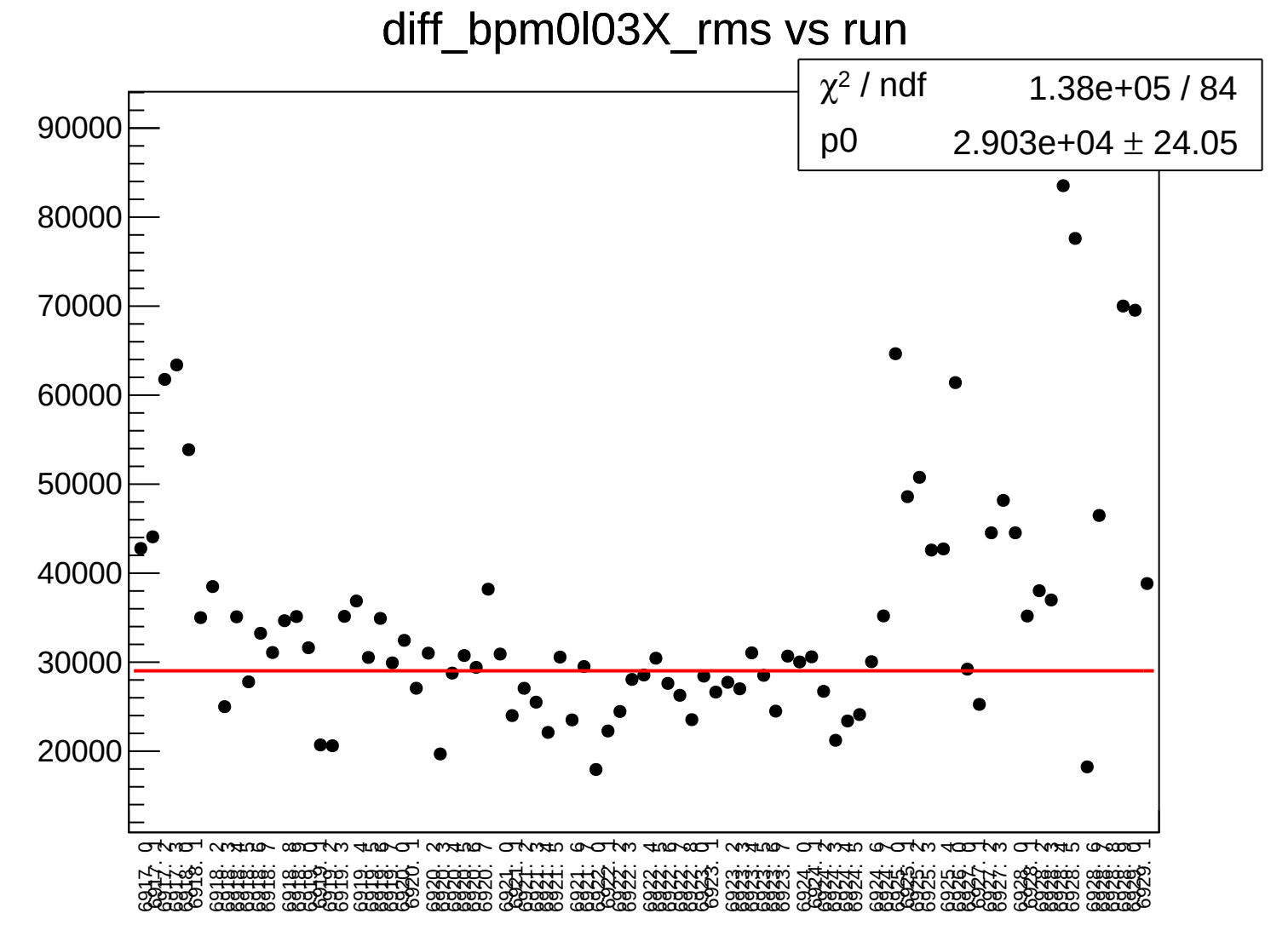

diff_bpm0l02Y_mean vs run
χ² / ndf 102.3 / 84
p0 −15.25 ± 9.563
pull
Entries 85
Mean 87
Std Dev 41.32

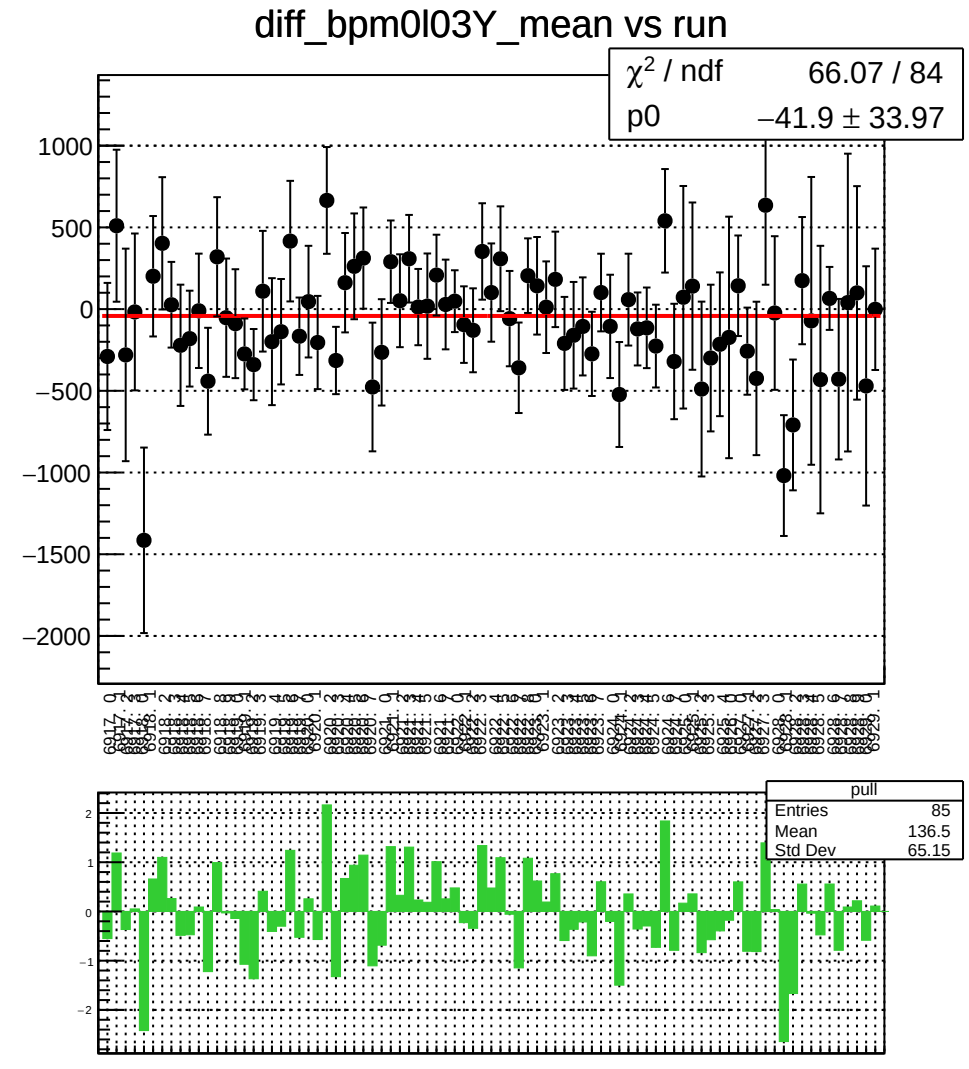

pull1D
Entries 85
Mean 0.04637
Std Dev 1.096

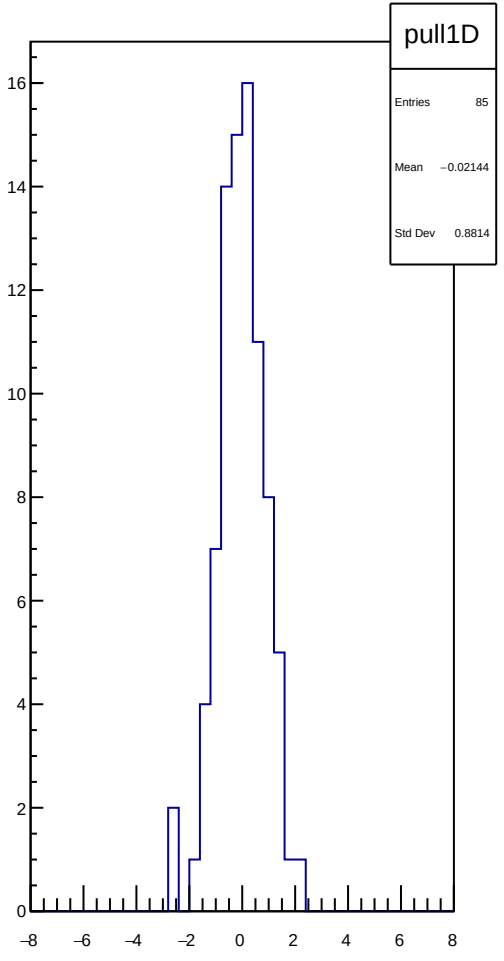

diff_bpm0l02Y_rms vs run
χ² / ndf 8.901e+04 / 84
p0 8298 ± 6.762
14000
12000
10000
8000
6000
4000

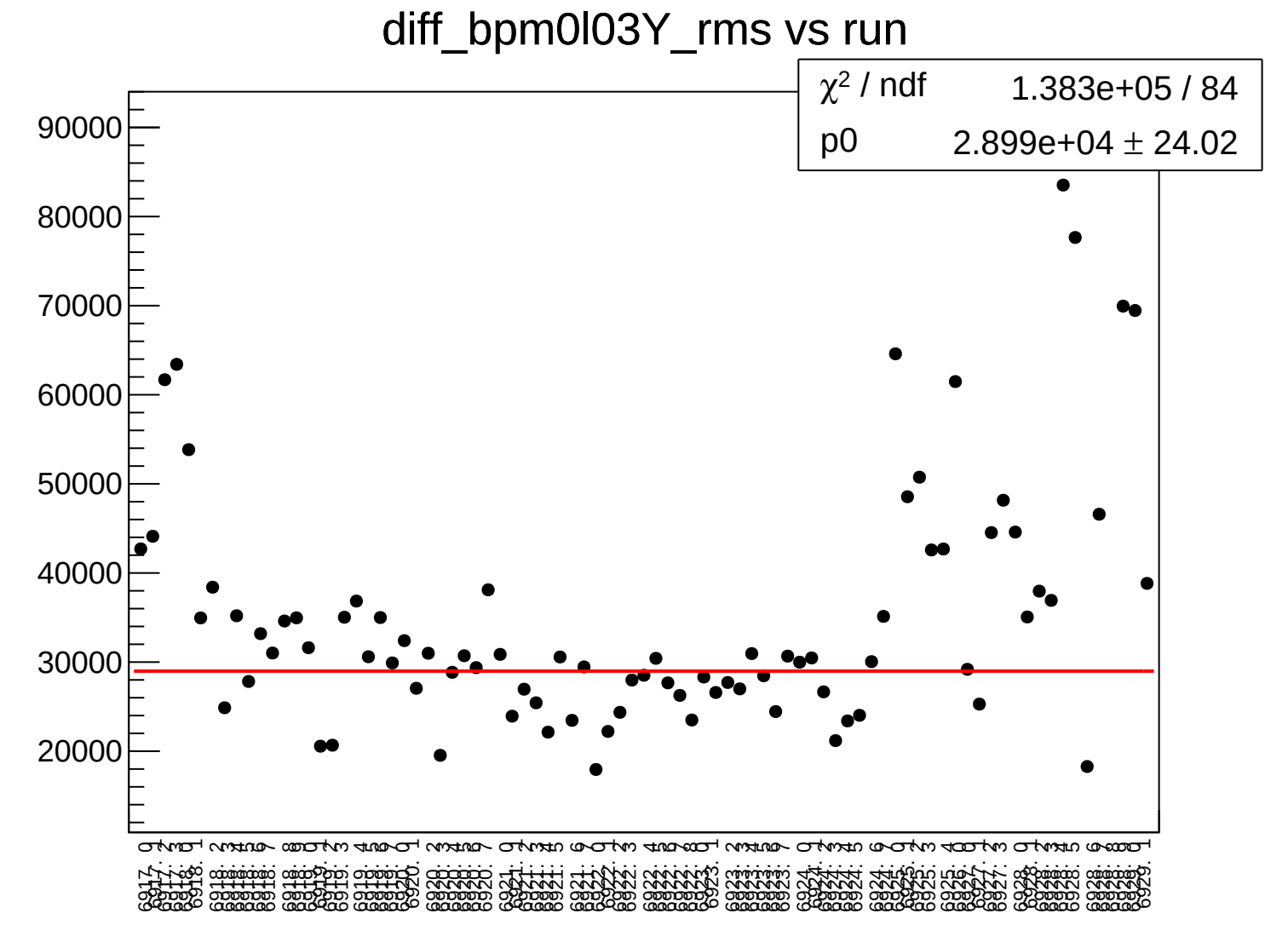

diff_bpm0l03X_mean vs run
χ² / ndf 71.97 / 84
p0 −41.24 ± 34.02
pull
Entries 85
Mean 78.63
Std Dev 63.47

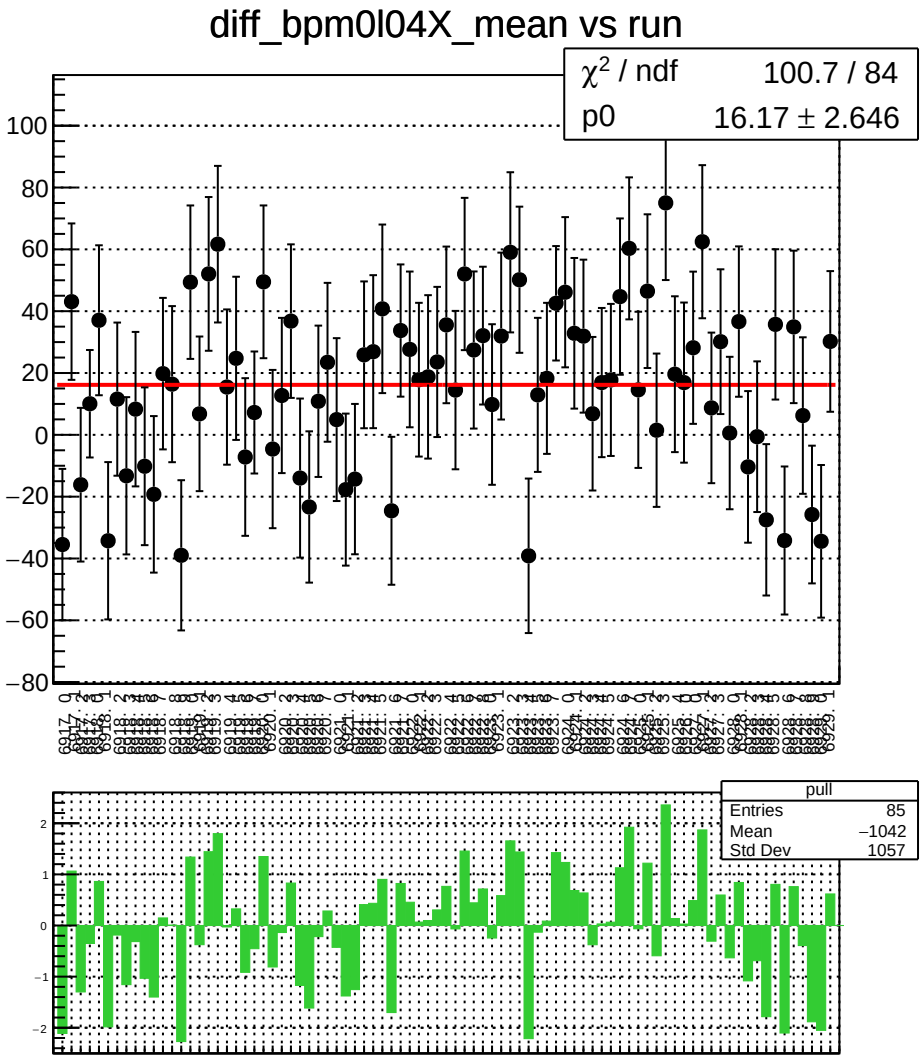

pull1D
Entries 85
Mean −0.0177
Std Dev 0.92

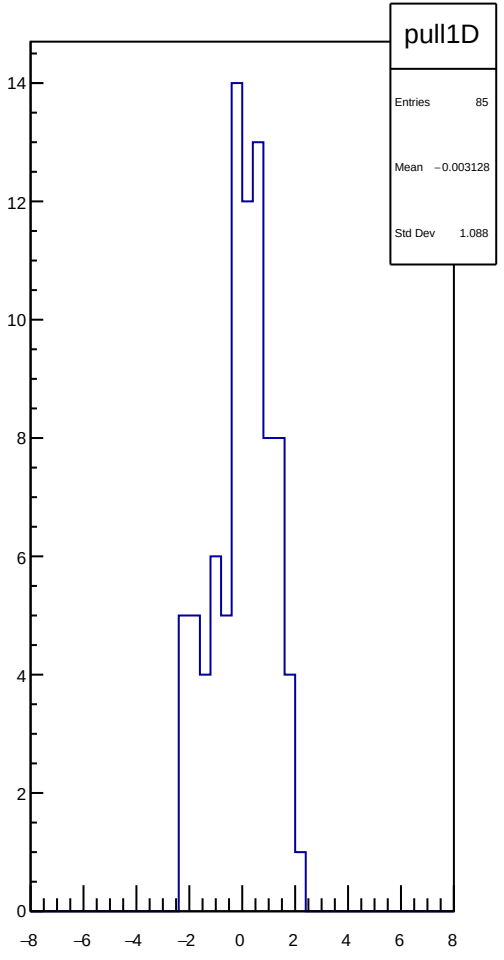

diff_bpm0l03X_rms vs run
χ² / ndf 1.38e+05 / 84
p0 2.903e+04 ± 24.05
90000
80000
70000
60000
50000
40000
30000
20000

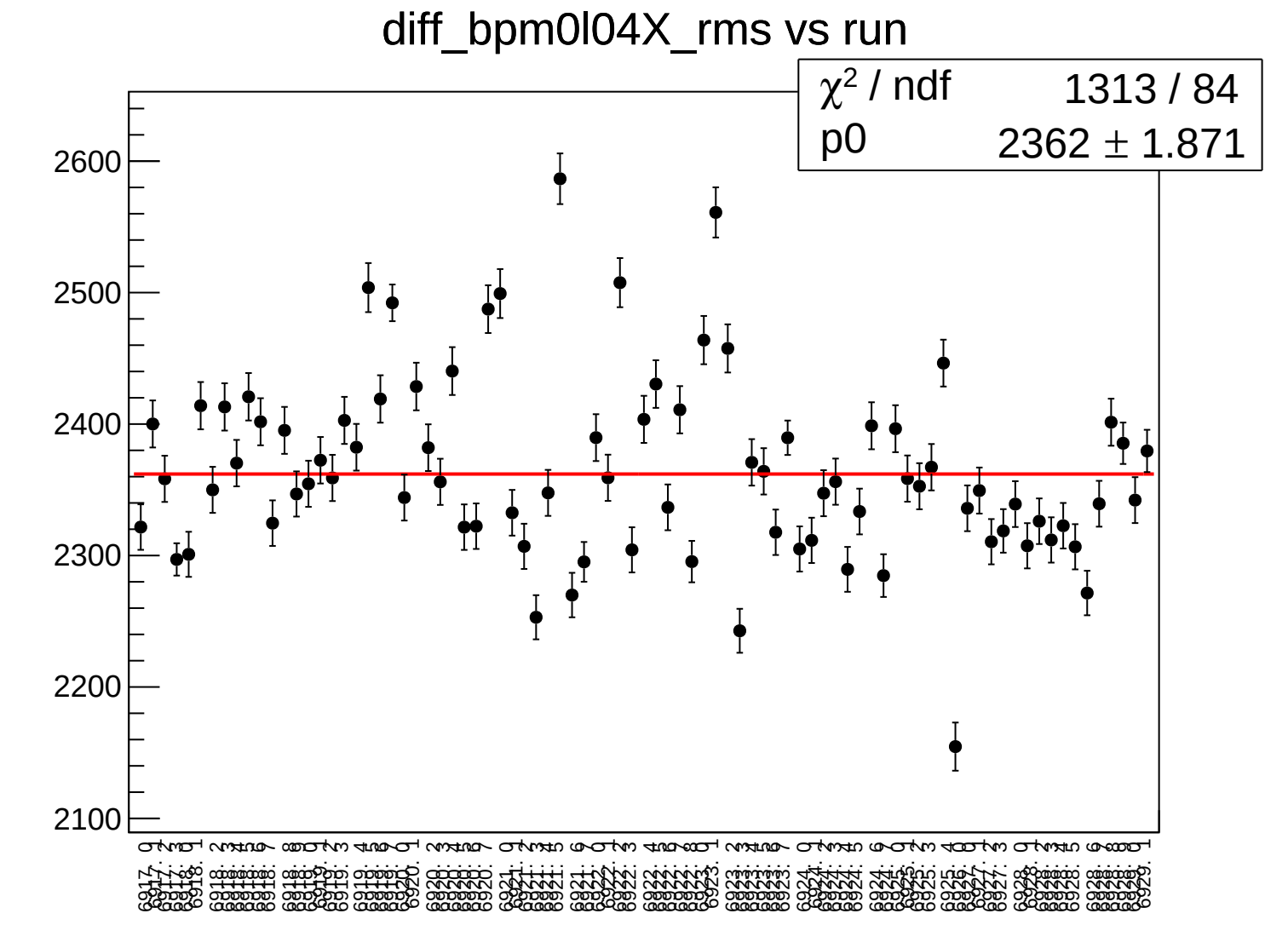

diff_bpm0l03Y_mean vs run
χ² / ndf 66.07 / 84
p0 −41.9 ± 33.97
pull
Entries 85
Mean 136.5
Std Dev 65.15

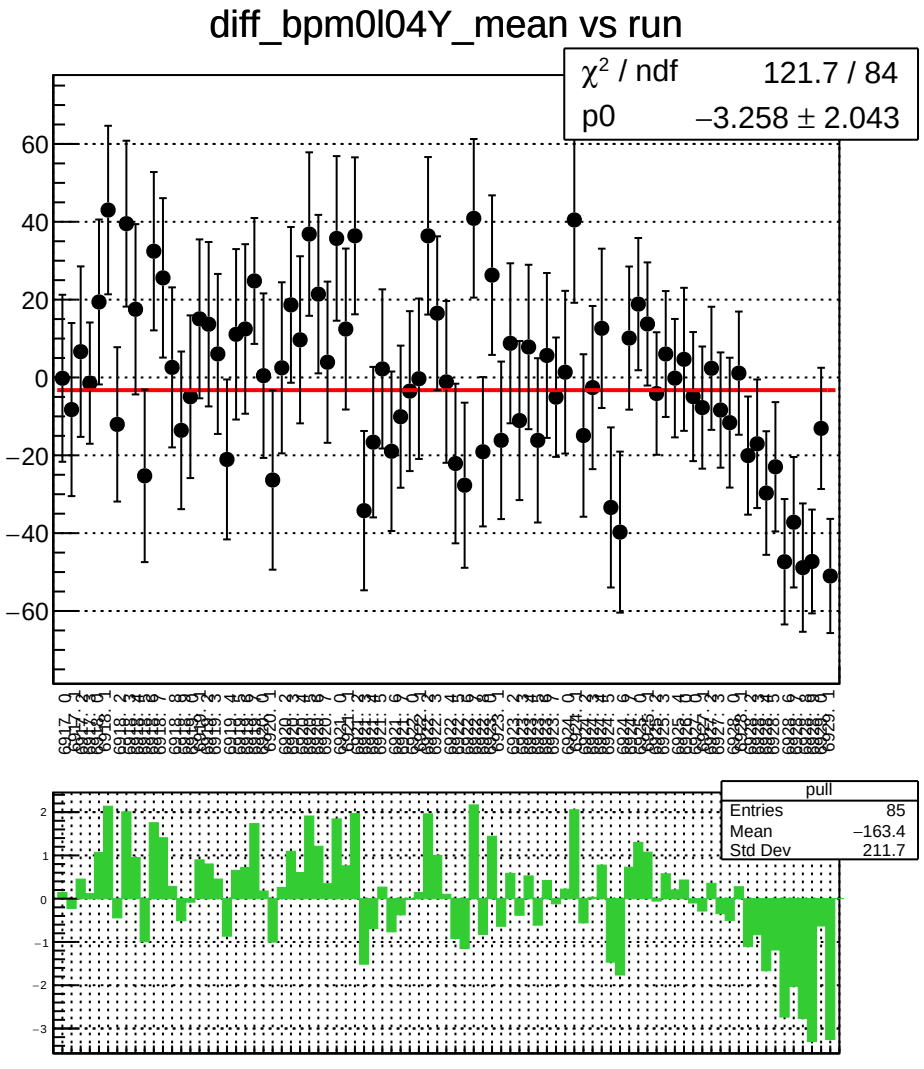

pull1D
Entries 85
Mean −0.02144
Std Dev 0.8814

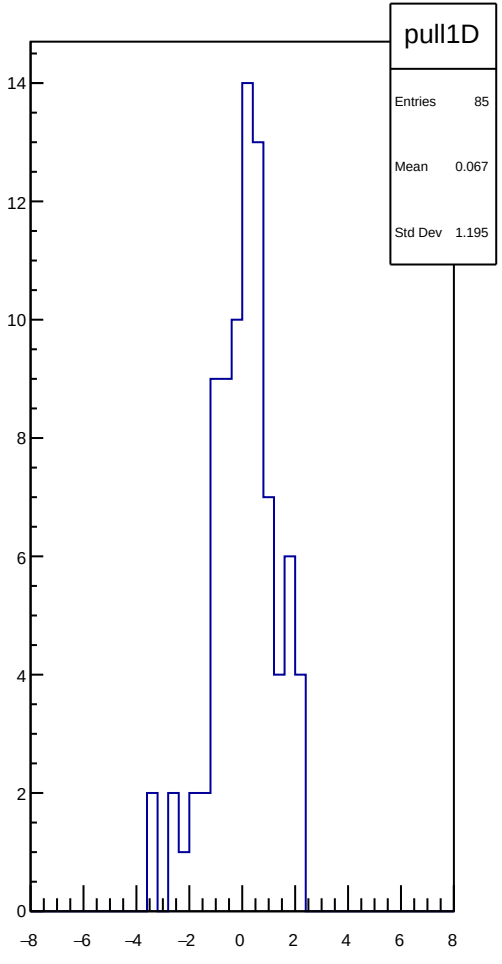

diff_bpm0l03Y_rms vs run
χ² / ndf 1.383e+05 / 84
p0 2.899e+04 ± 24.02
90000
80000
70000
60000
50000
40000
30000
20000

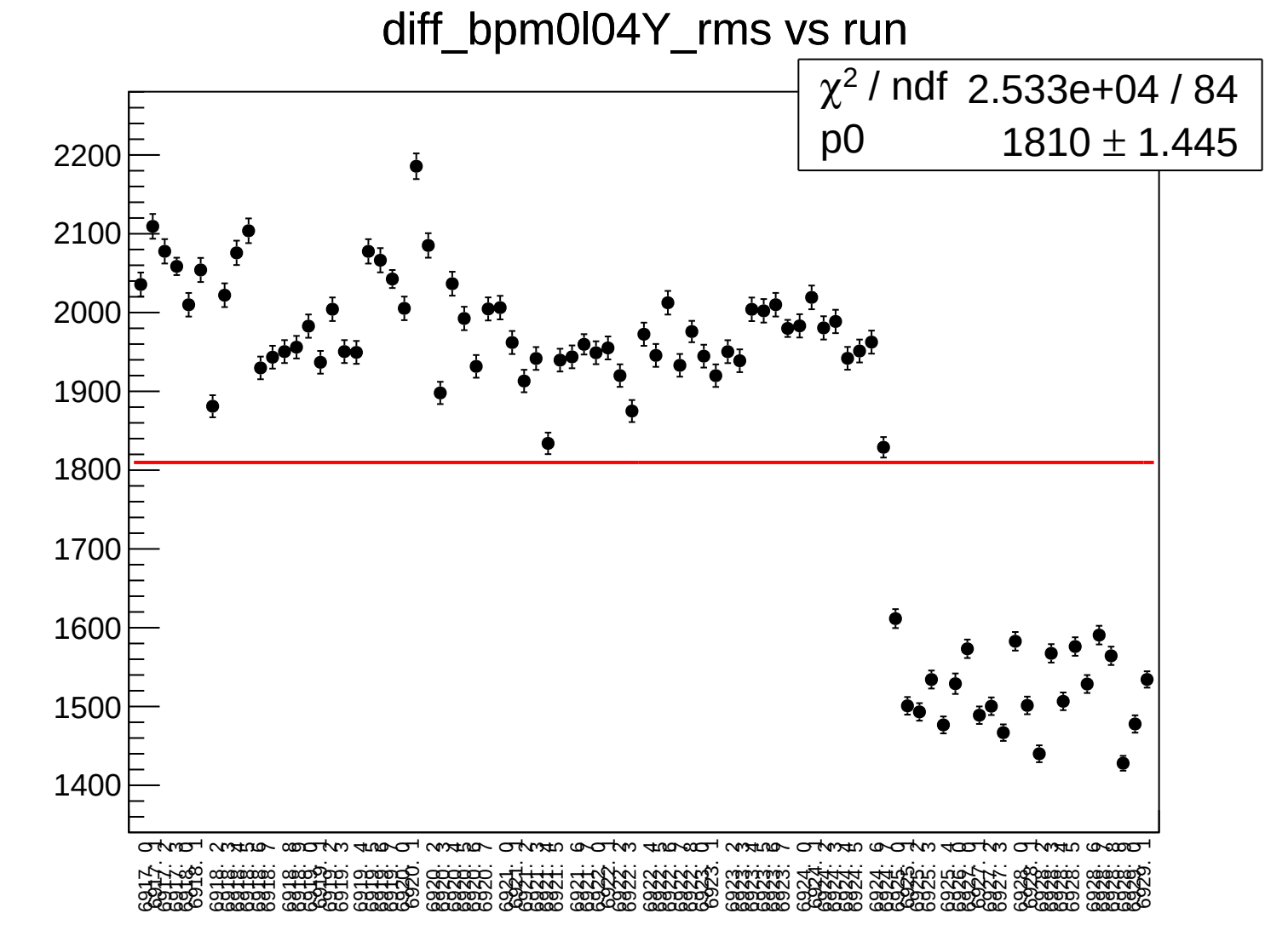

diff_bpm0l04X_mean vs run
χ^2 / ndf 100.7 / 84
p0 16.17 ± 2.646
pull
Entries 85
Mean −1042
Std Dev 1057

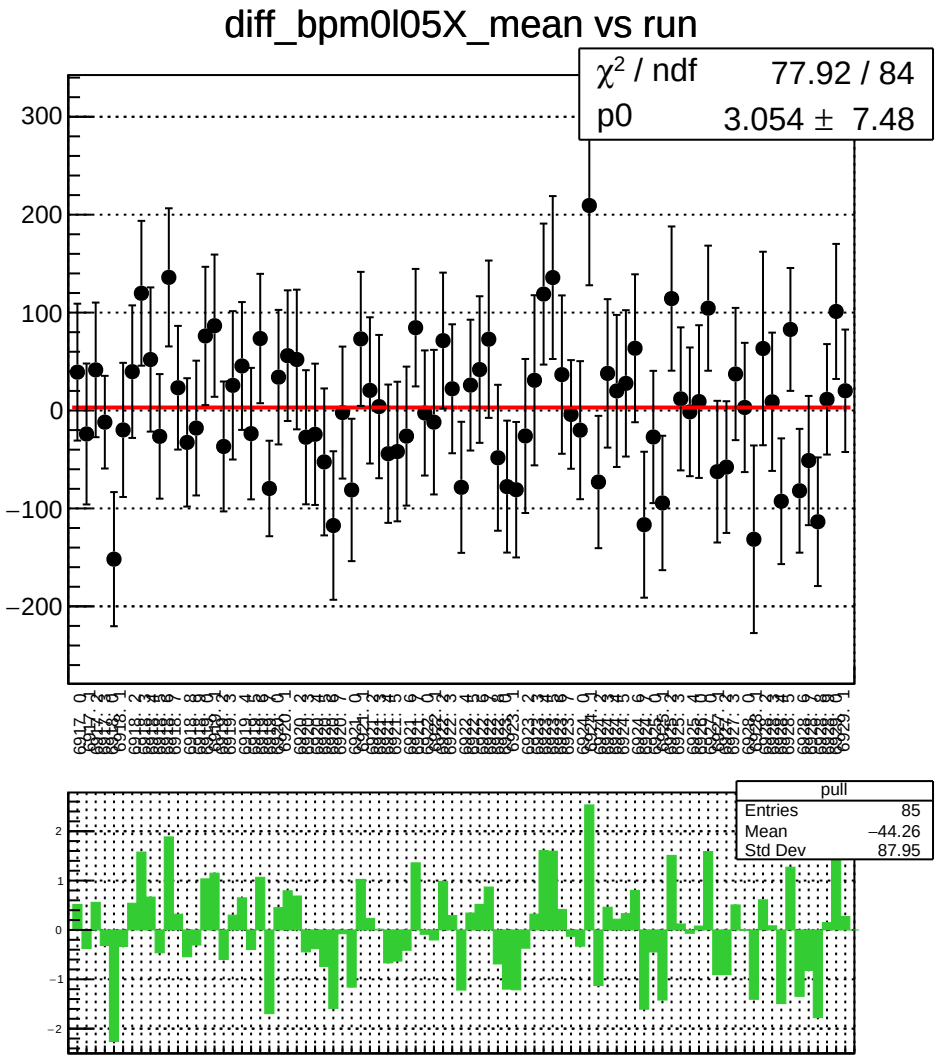

pull1D
Entries 85
Mean −0.003128
Std Dev 1.088

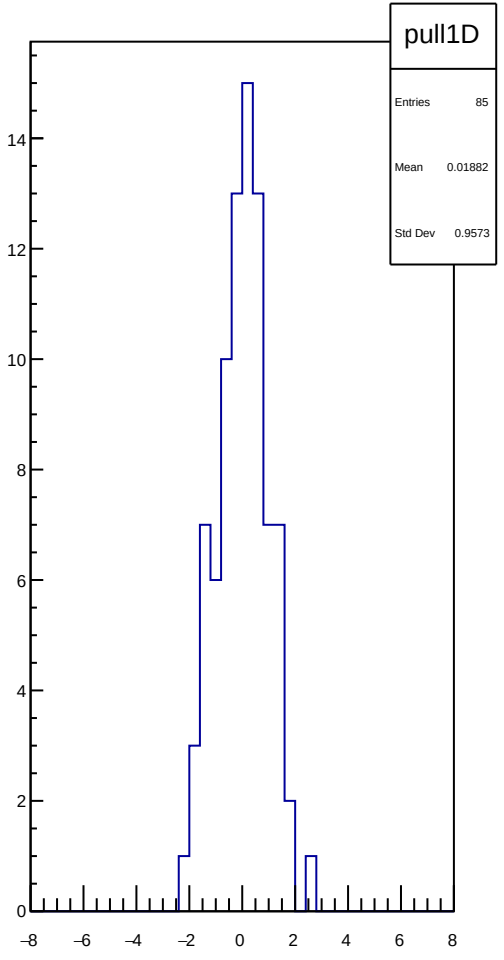

diff_bpm0l04X_rms vs run
χ² / ndf 1313 / 84
p0 2362 ± 1.871
2600
2500
2400
2300
2200
2100

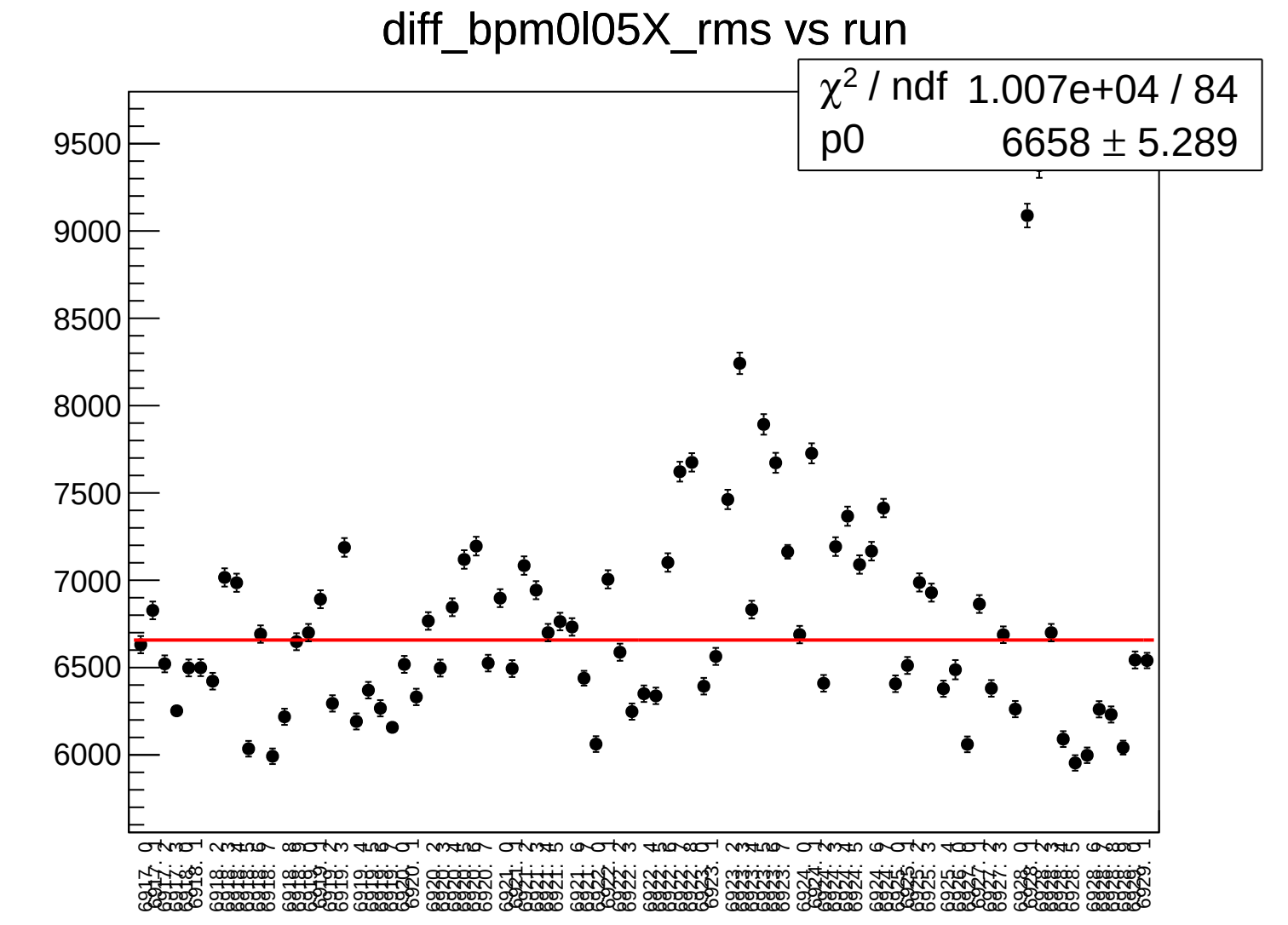

diff_bpm0l04Y_mean vs run
χ² / ndf 121.7 / 84
p0 −3.258 ± 2.043
pull
Entries 85
Mean −163.4
Std Dev 211.7

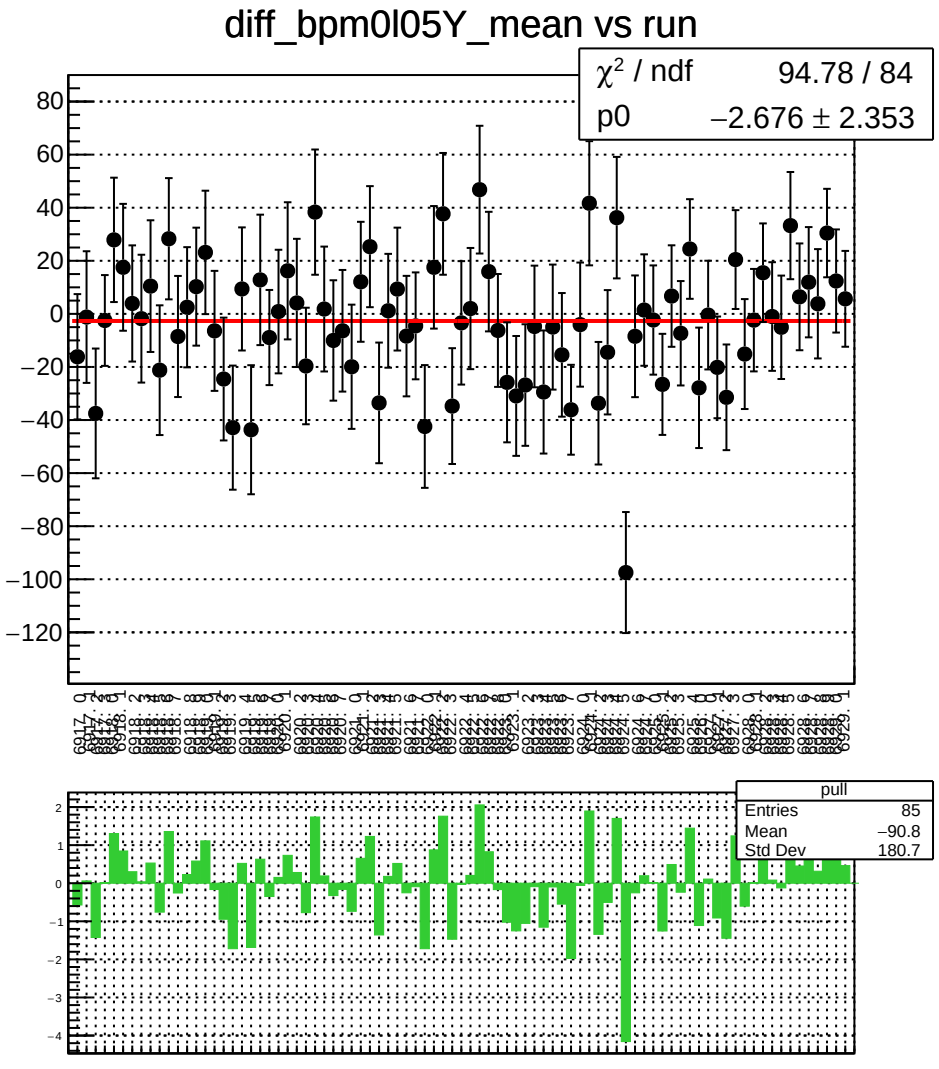

pull1D
Entries 85
Mean 0.067
Std Dev 1.195

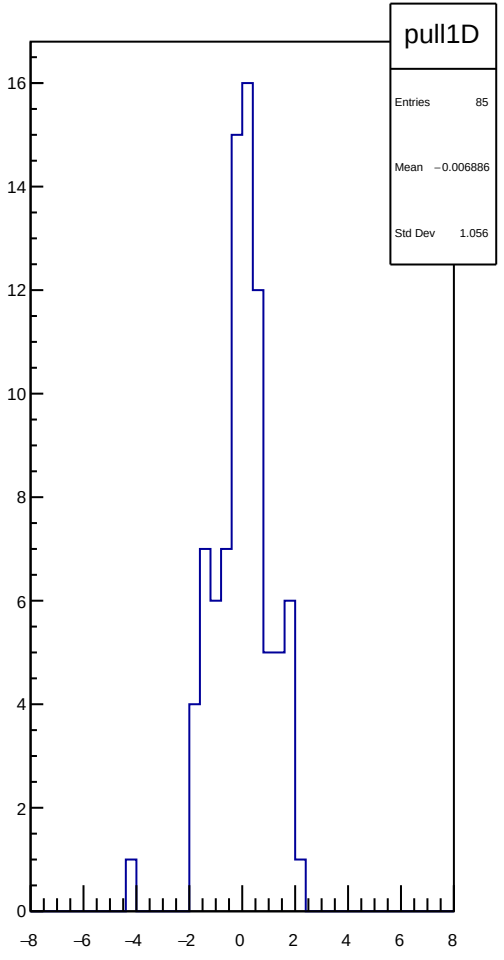

diff_bpm0l04Y_rms vs run
χ² / ndf 2.533e+04 / 84
p0 1810 ± 1.445
2200
2100
2000
1900
1800
1700
1600
1500
1400

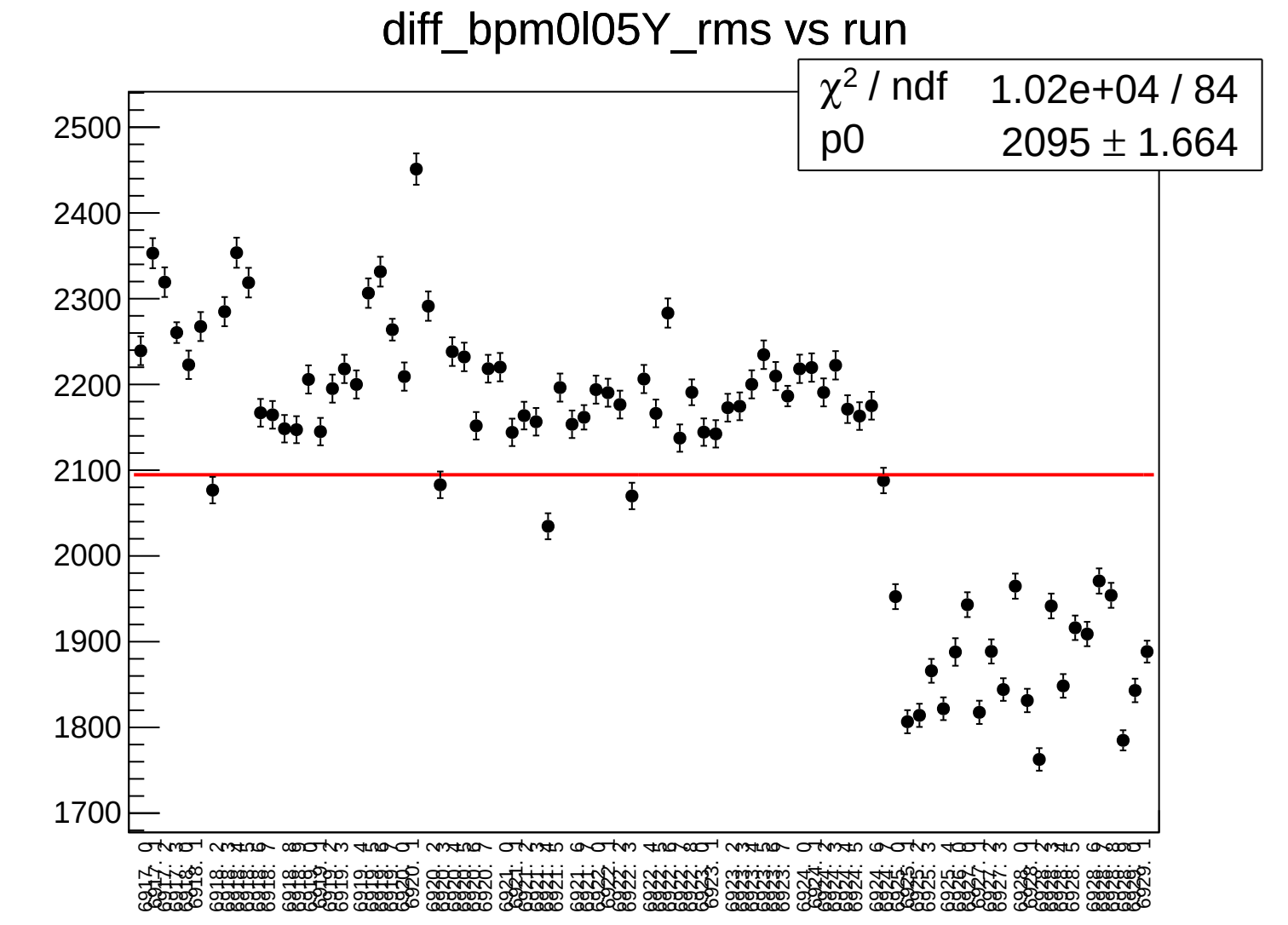

diff_bpm0l05X_mean vs run
χ² / ndf 77.92 / 84
p0 3.054 ± 7.48
pull
Entries 85
Mean −44.26
Std Dev 87.95

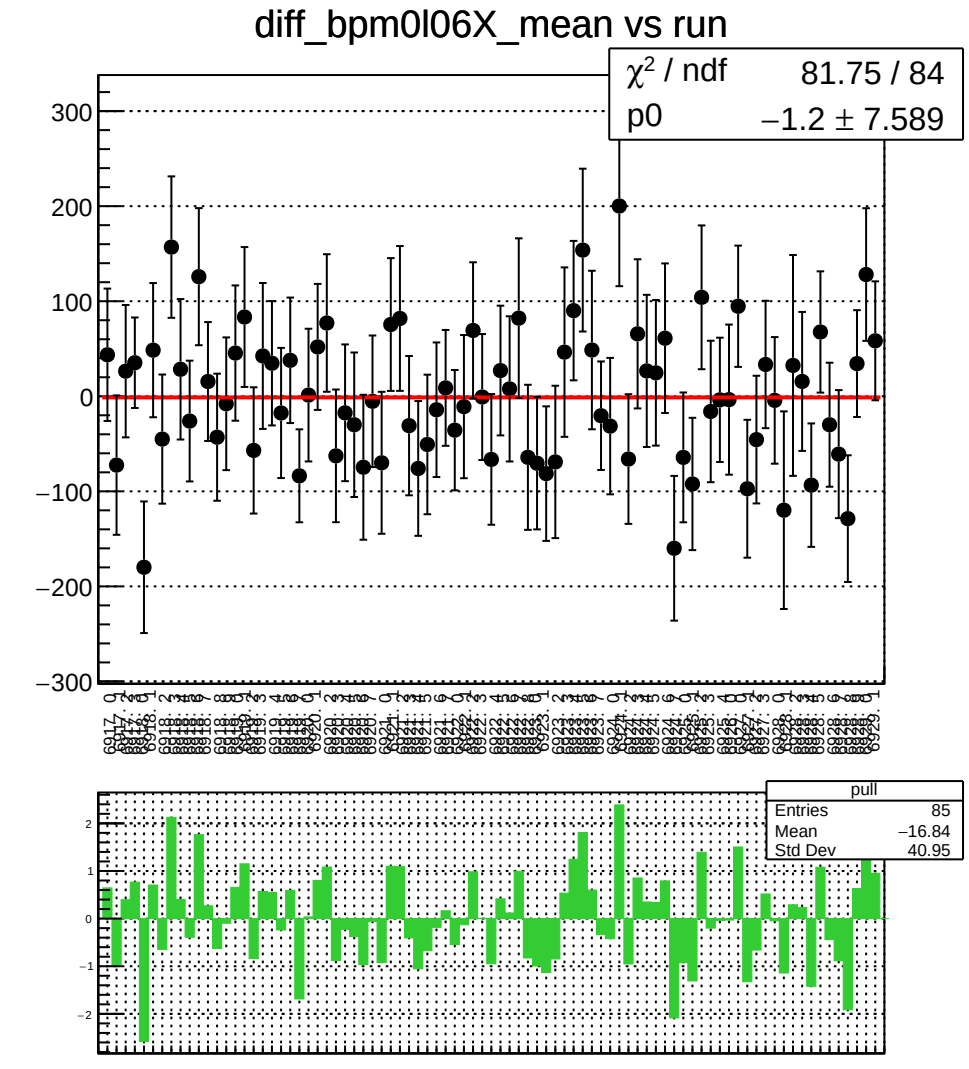

pull1D
Entries 85
Mean 0.01882
Std Dev 0.9573

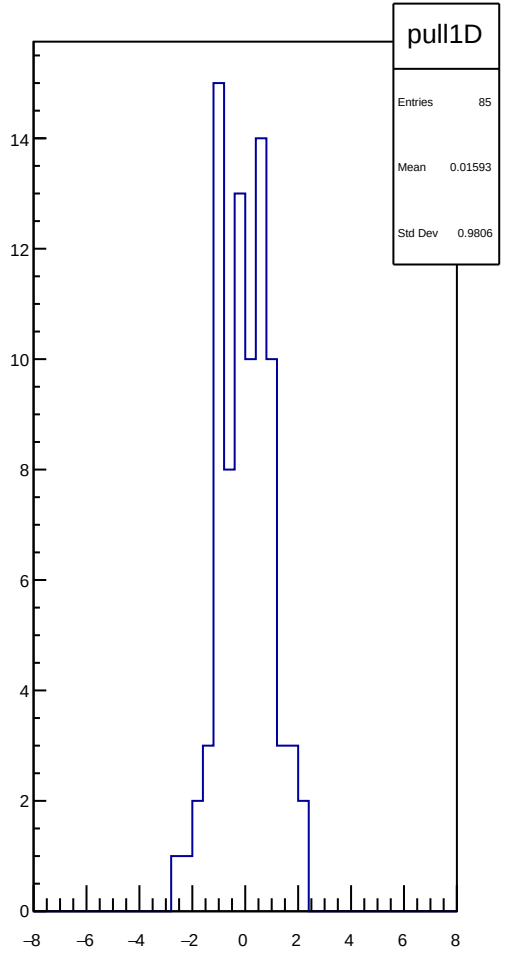

diff_bpm0l05X_rms vs run
χ² / ndf 1.007e+04 / 84
p0 6658 ± 5.289
9500
9000
8500
8000
7500
7000
6500
6000

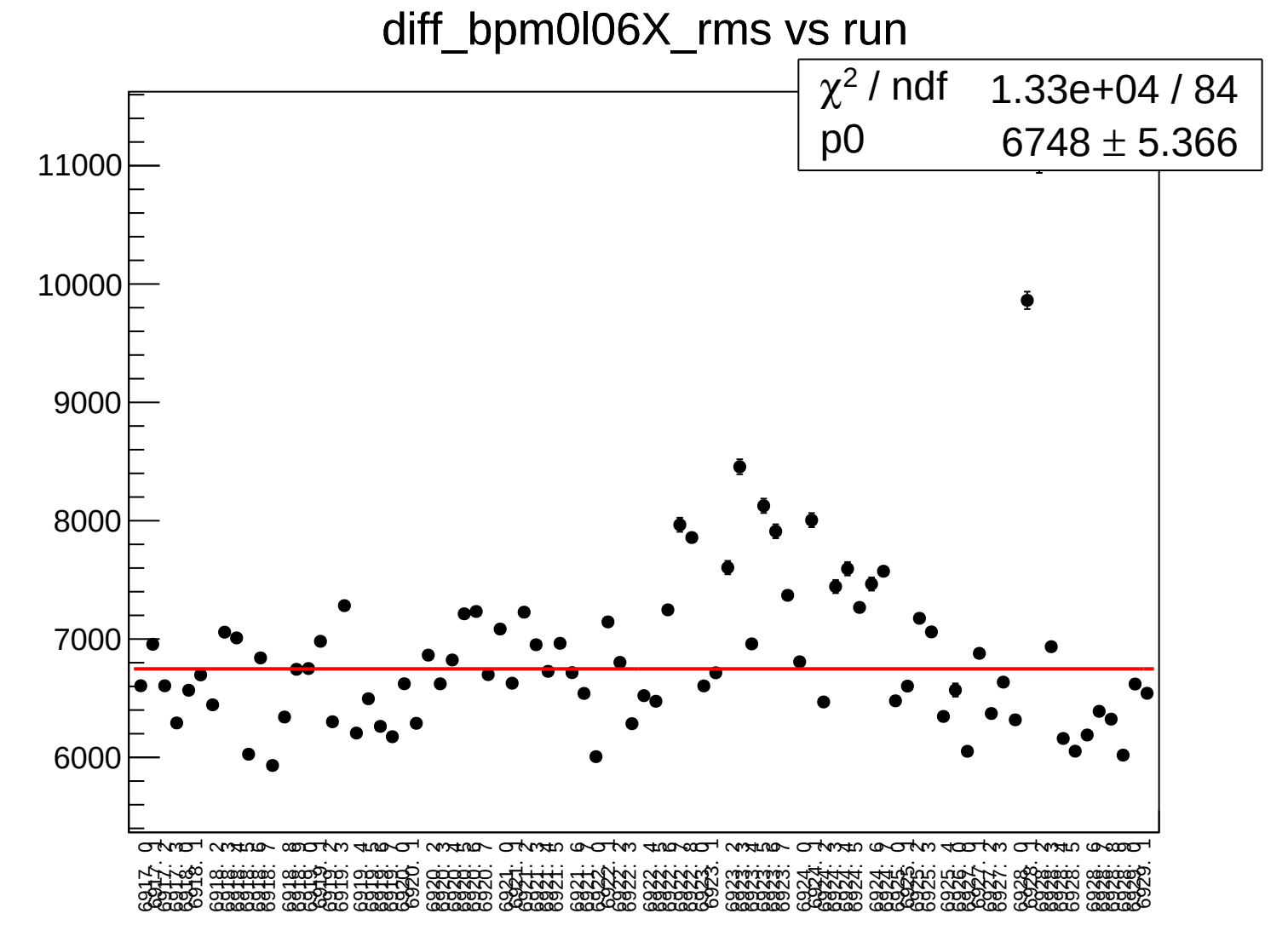

diff_bpm0l05Y_mean vs run
χ² / ndf 94.78 / 84
p0 −2.676 ± 2.353
pull
Entries 85
Mean −90.8
Std Dev 180.7

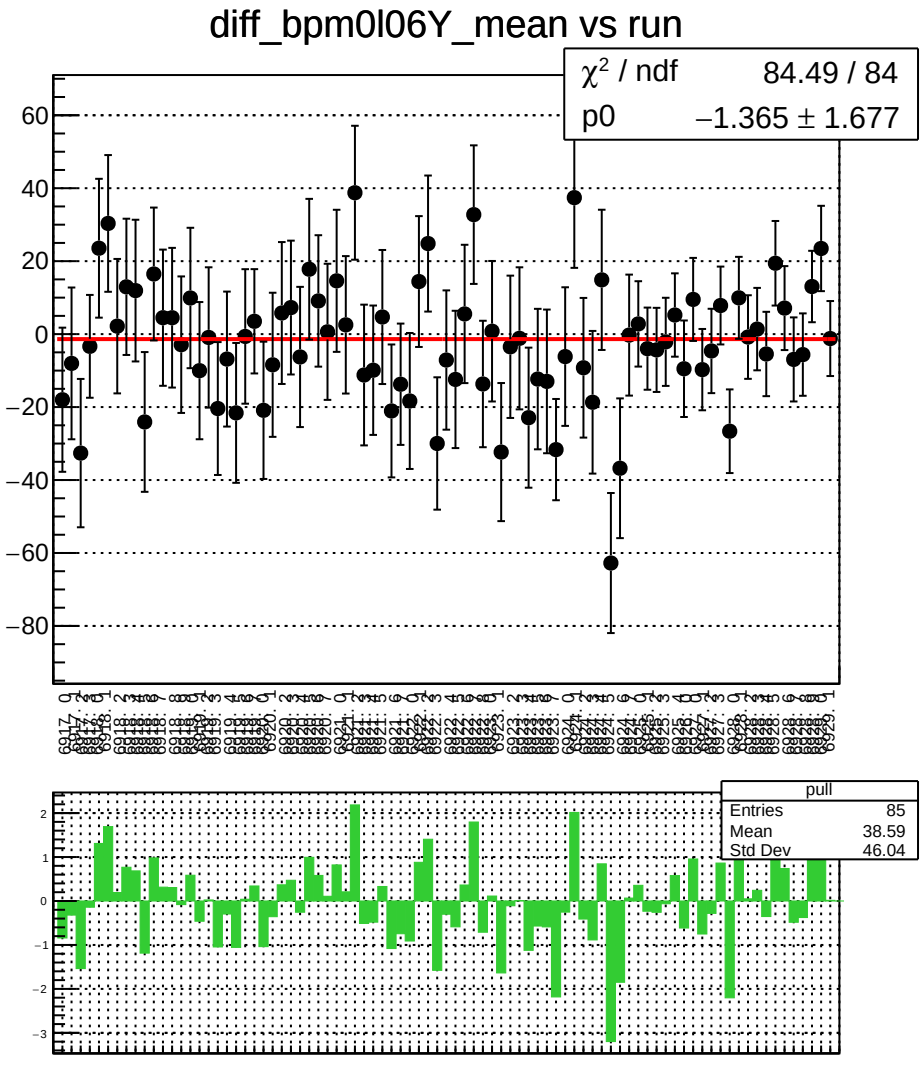

pull1D
Entries 85
Mean −0.006886
Std Dev 1.056

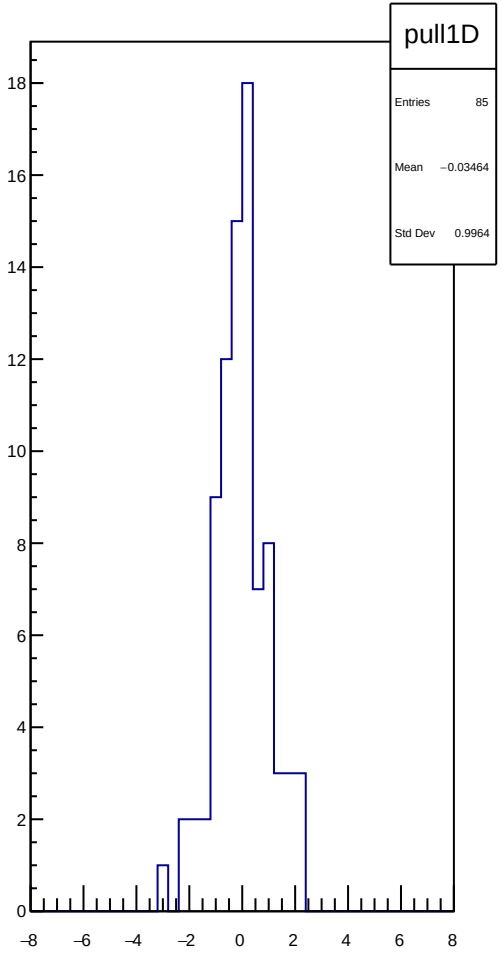

diff_bpm0l05Y_rms vs run
χ² / ndf 1.02e+04 / 84
p0 2095 ± 1.664
2500
2400
2300
2200
2100
2000
1900
1800
1700

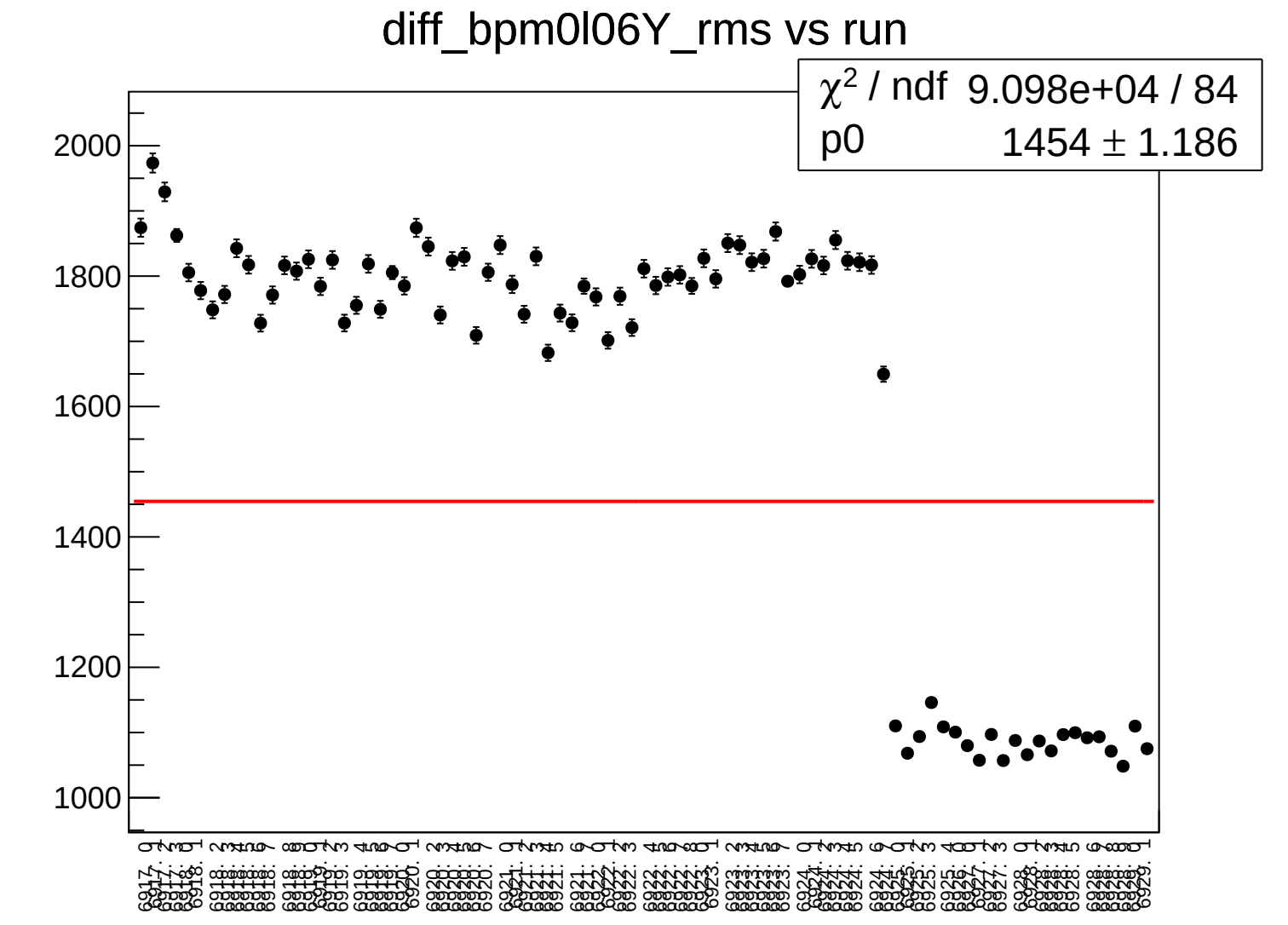

diff_bpm0l06X_mean vs run
χ² / ndf 81.75 / 84
p0 −1.2 ± 7.589
pull
Entries 85
Mean −16.84
Std Dev 40.95

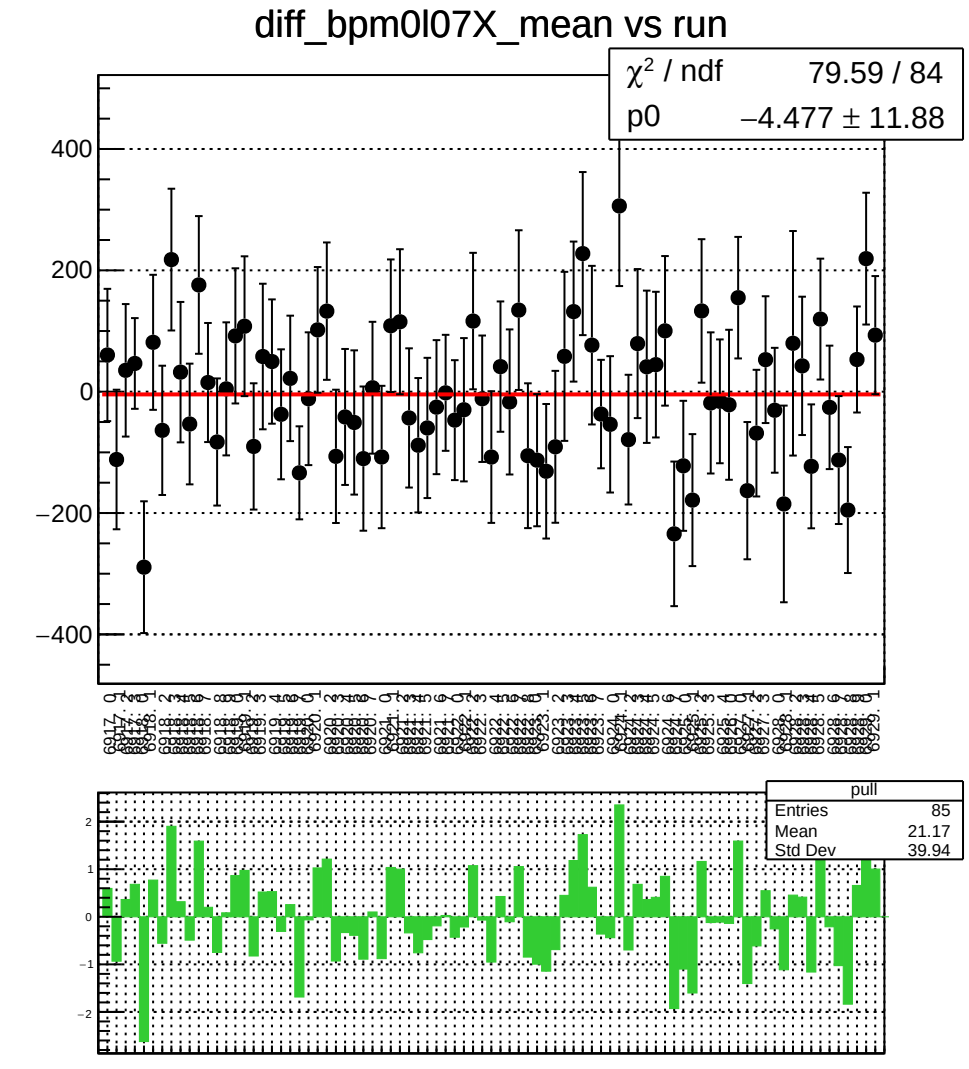

pull1D
Entries 85
Mean 0.01593
Std Dev 0.9806

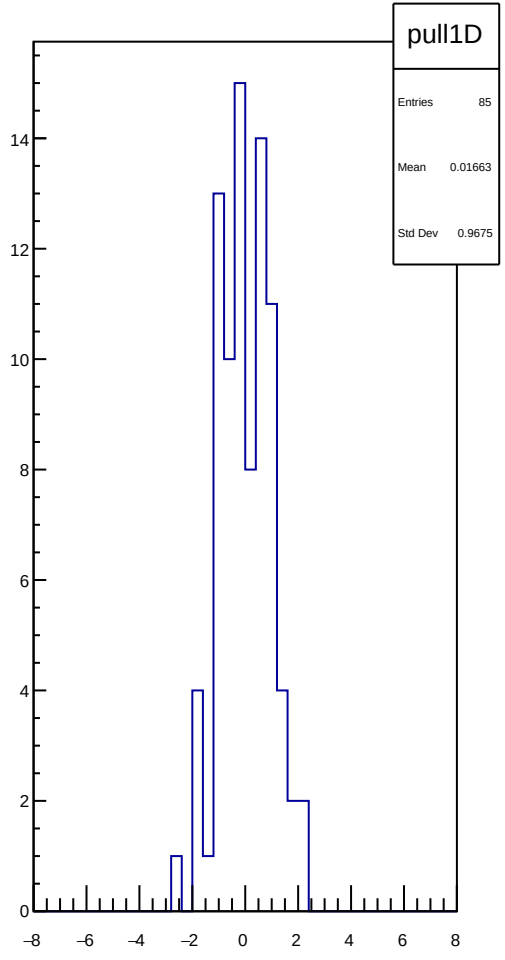

diff_bpm0l06X_rms vs run
χ² / ndf 1.33e+04 / 84
p0 6748 ± 5.366
11000
10000
9000
8000
7000
6000


diff_bpm0l06Y_mean vs run
χ² / ndf 84.49 / 84
p0 −1.365 ± 1.677
pull
Entries 85
Mean 38.59
Std Dev 46.04

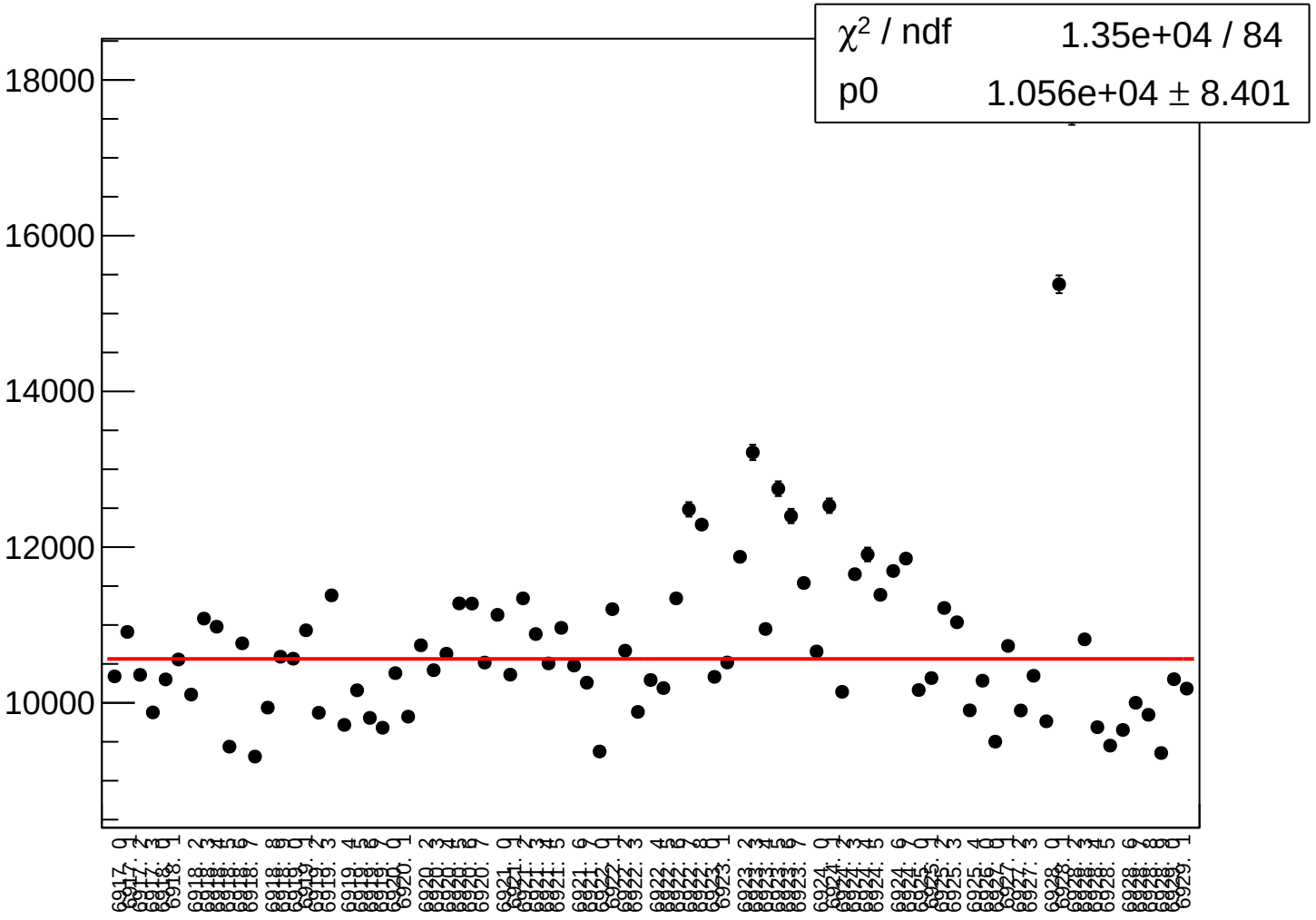

pull1D
Entries 85
Mean −0.03464
Std Dev 0.9964

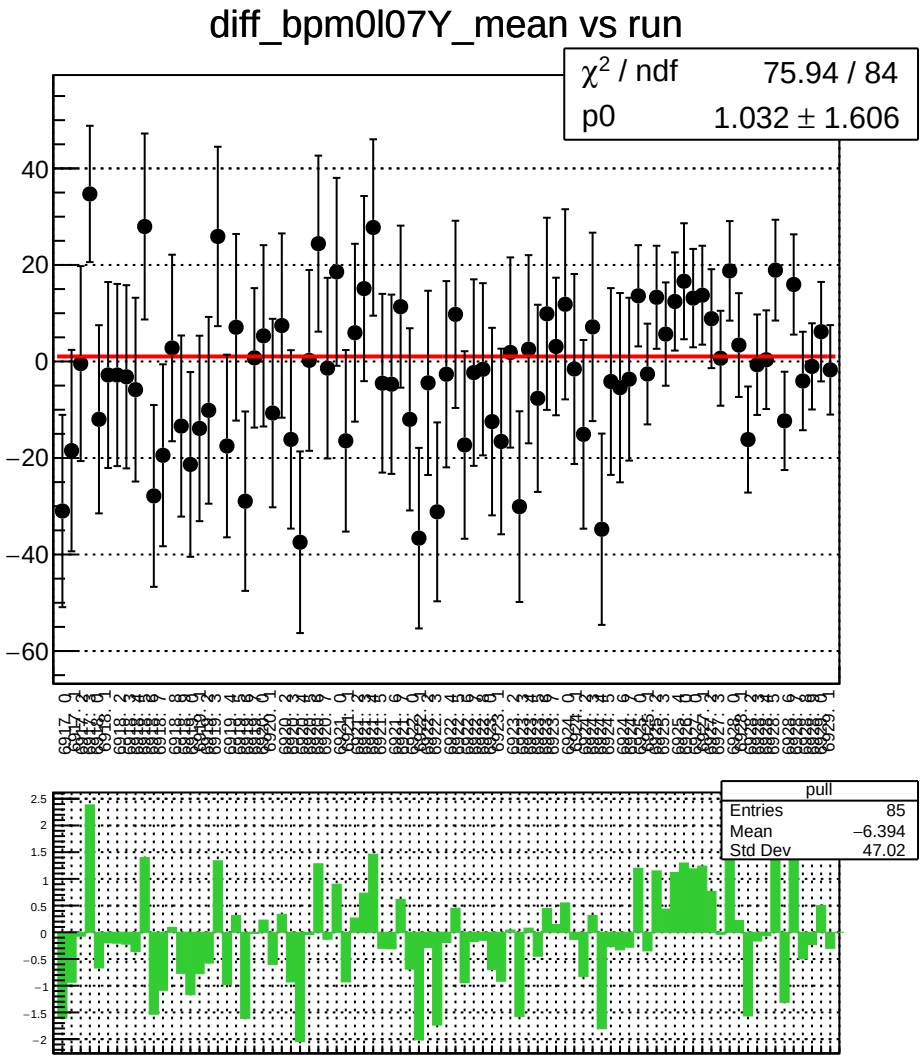

diff_bpm0l06Y_rms vs run
χ² / ndf 9.098e+04 / 84
p0 1454 ± 1.186
2000
1800
1600
1400
1200
1000

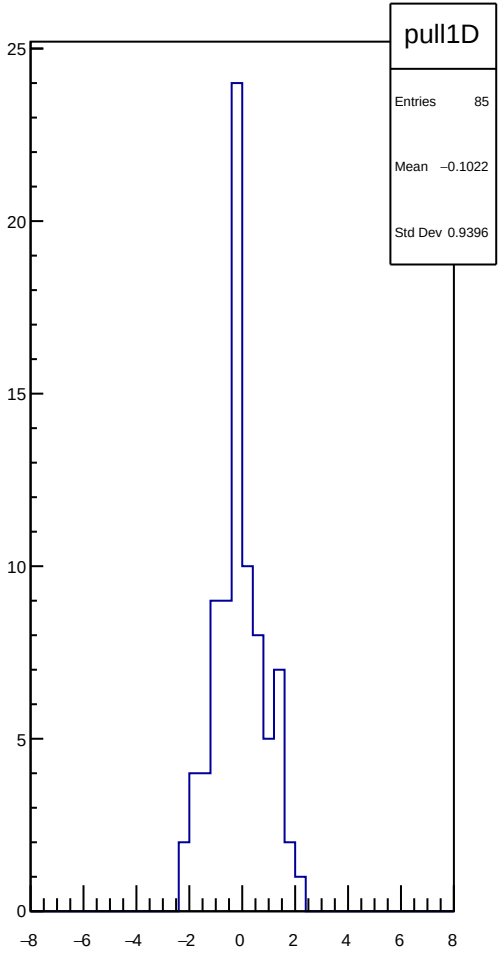

diff_bpm0l07X_mean vs run
χ² / ndf 79.59 / 84
p0 −4.477 ± 11.88
400
200
0
−200
−400
pull
Entries 85
Mean 21.17
Std Dev 39.94
2
1
0
−1
−2

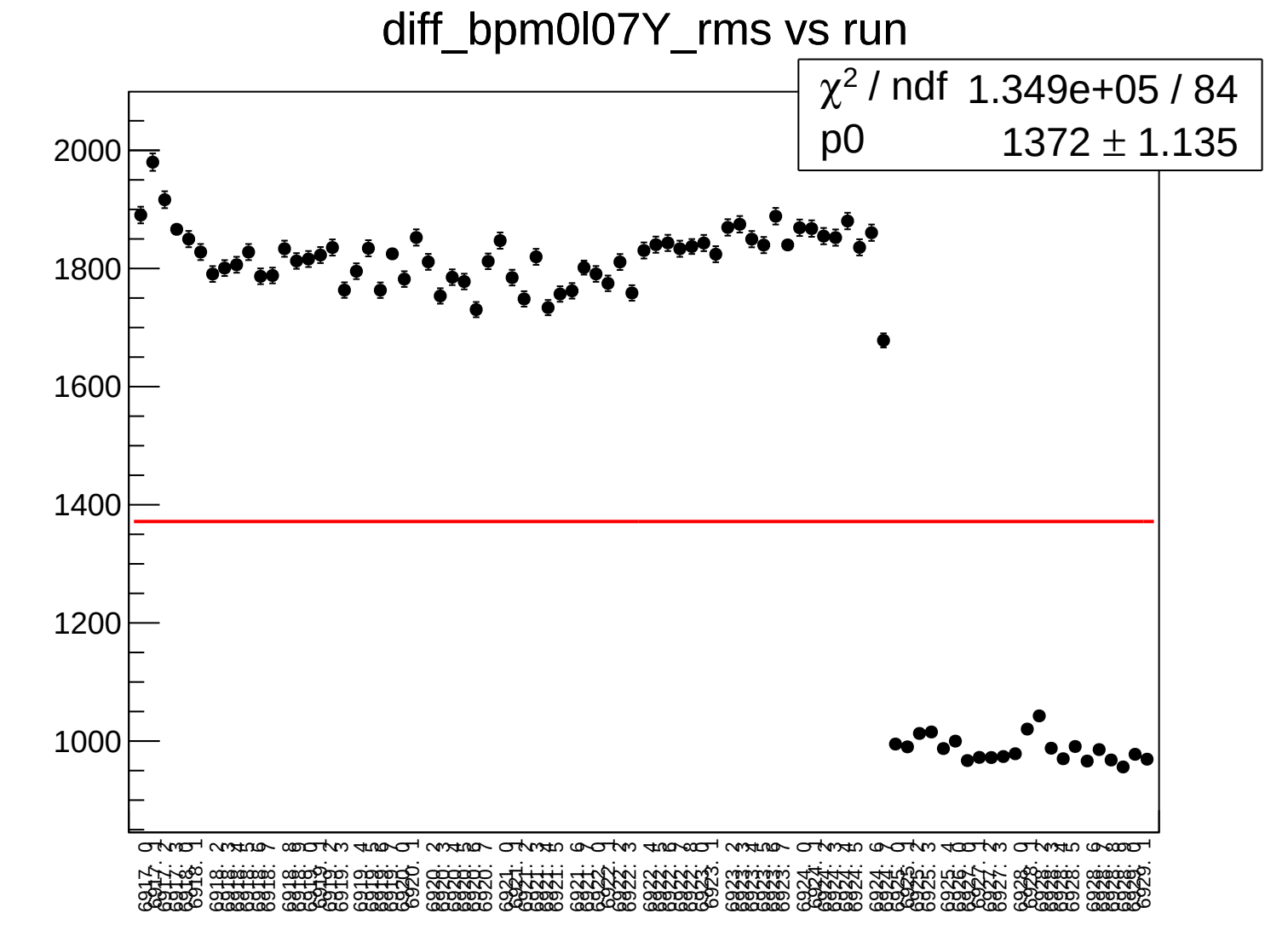

pull1D
Entries 85
Mean 0.01663
Std Dev 0.9675
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

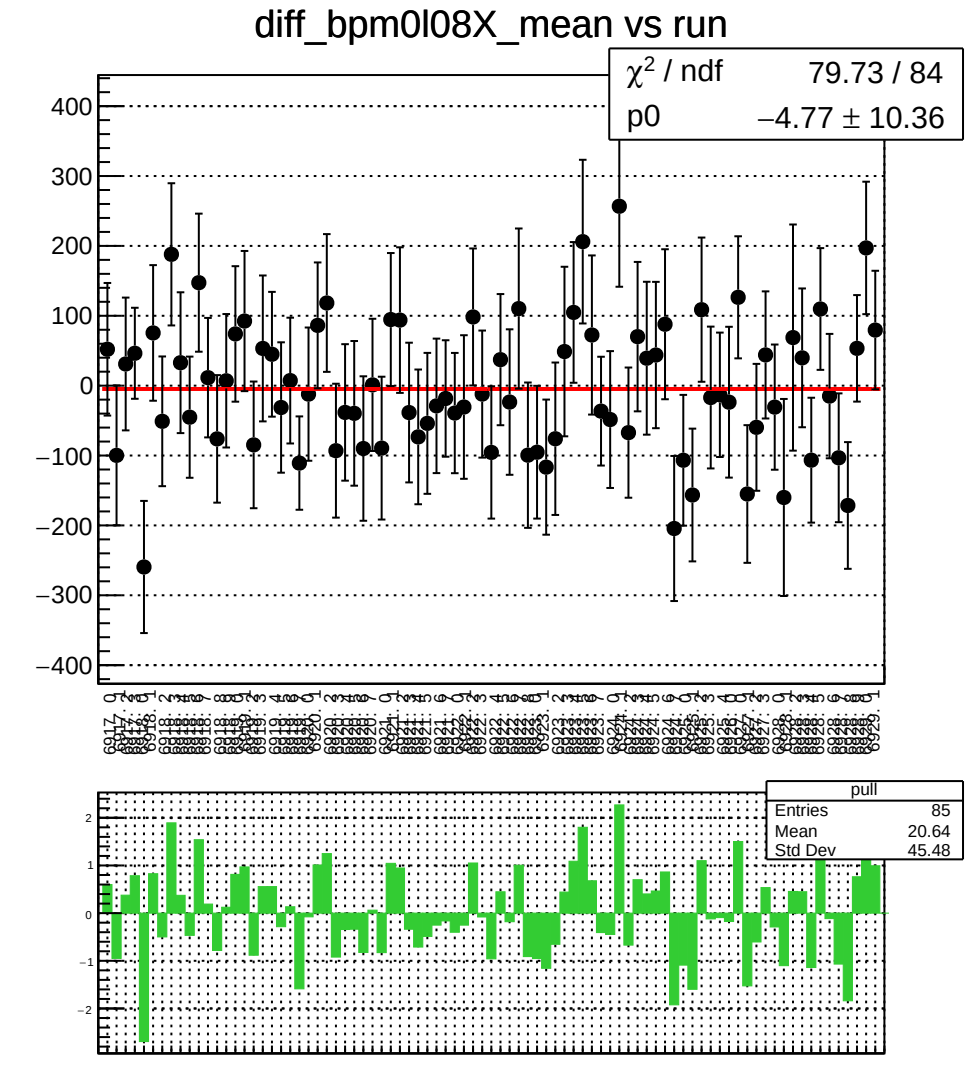
diff_bpm0l07X_rms vs run

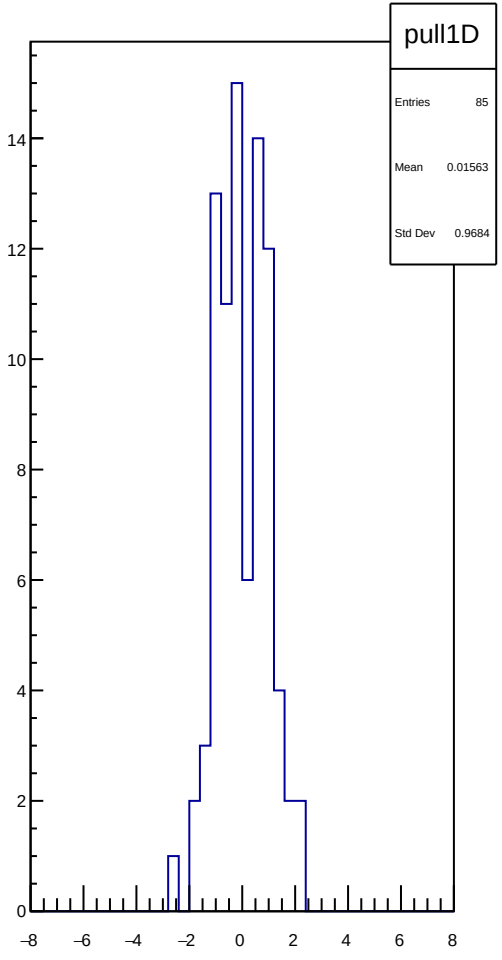


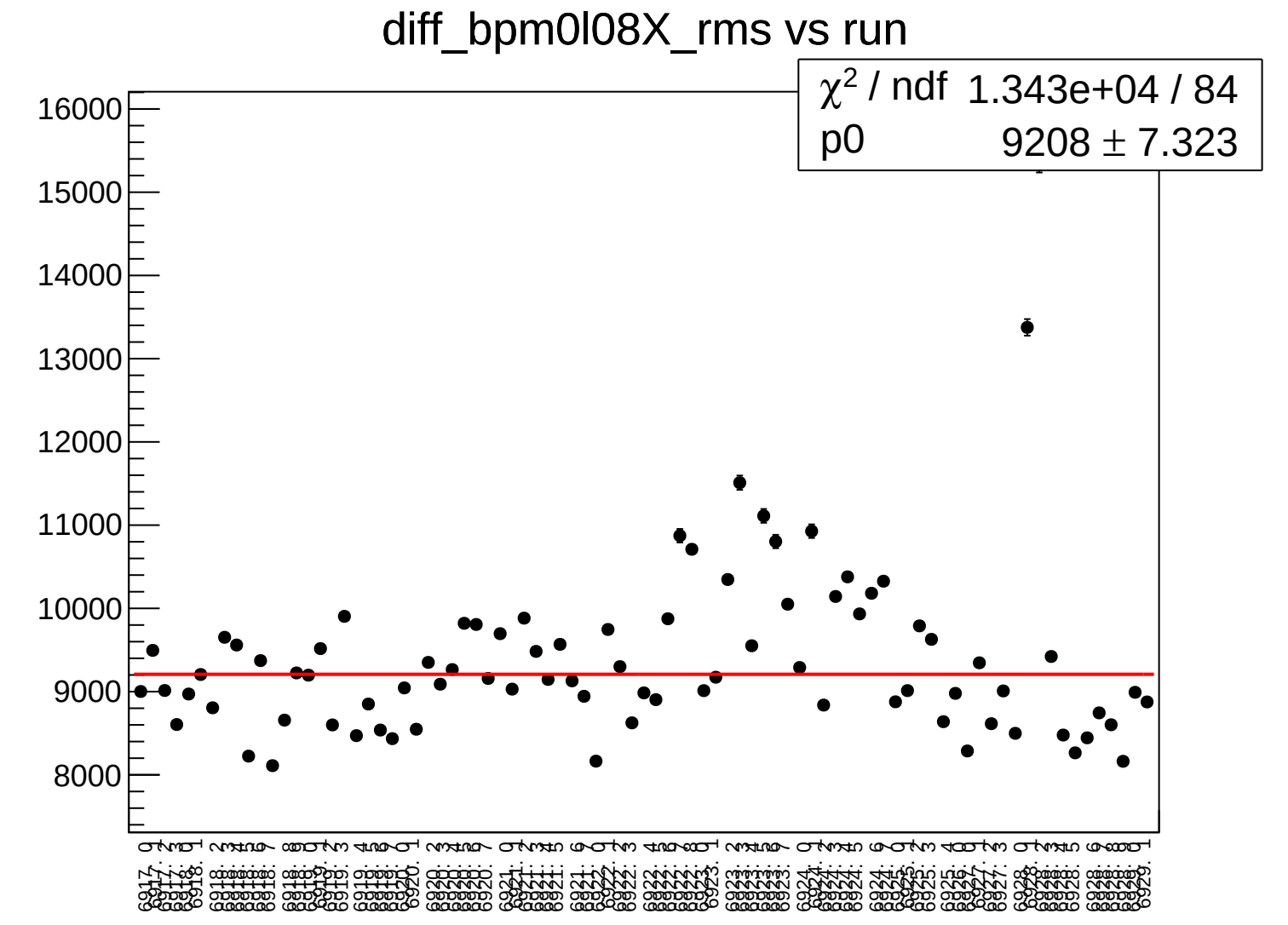

diff_bpm0l07Y_mean vs run
χ^2 / ndf 75.94 / 84
p0 1.032 ± 1.606
pull
Entries 85
Mean −6.394
Std Dev 47.02

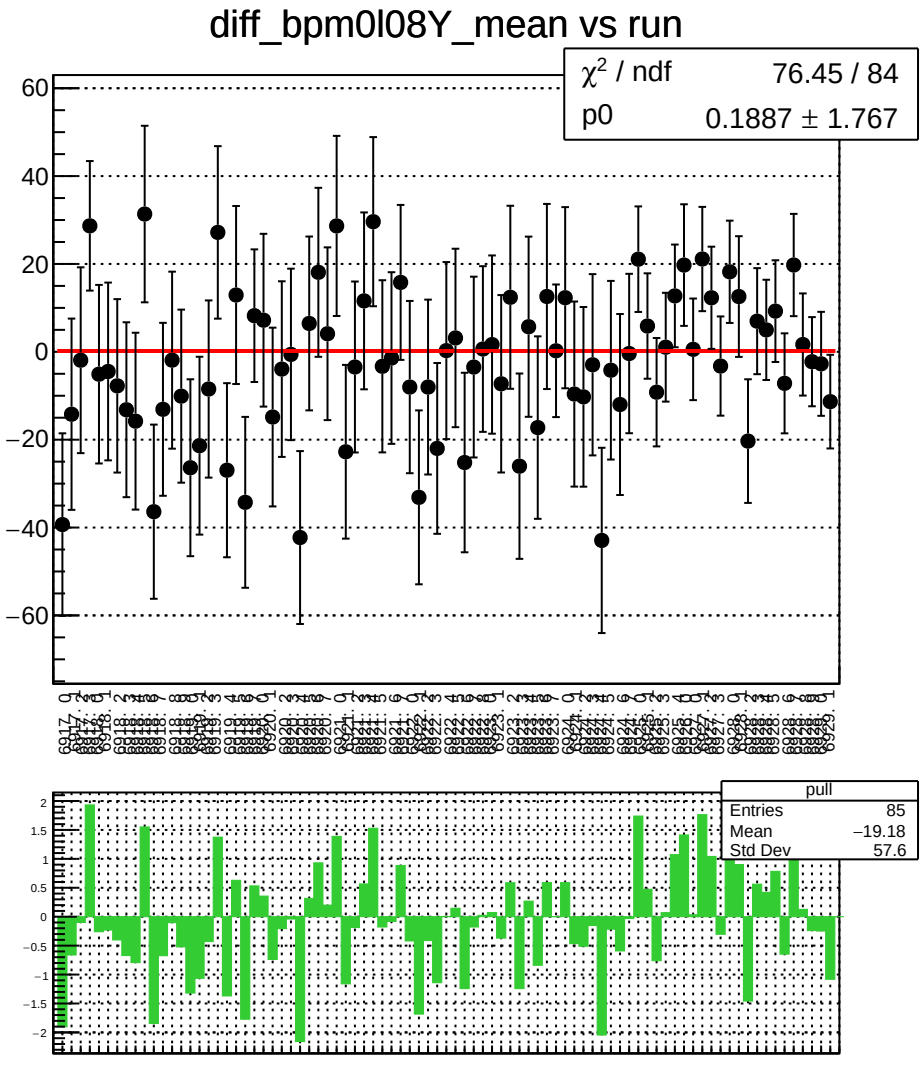

pull1D
Entries 85
Mean −0.1022
Std Dev 0.9396

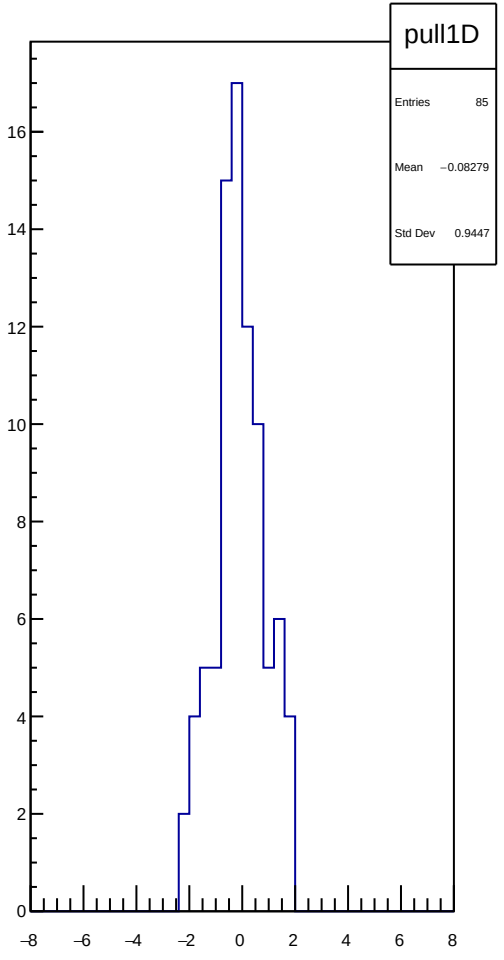

diff_bpm0l07Y_rms vs run
χ² / ndf 1.349e+05 / 84
p0 1372 ± 1.135
2000
1800
1600
1400
1200
1000

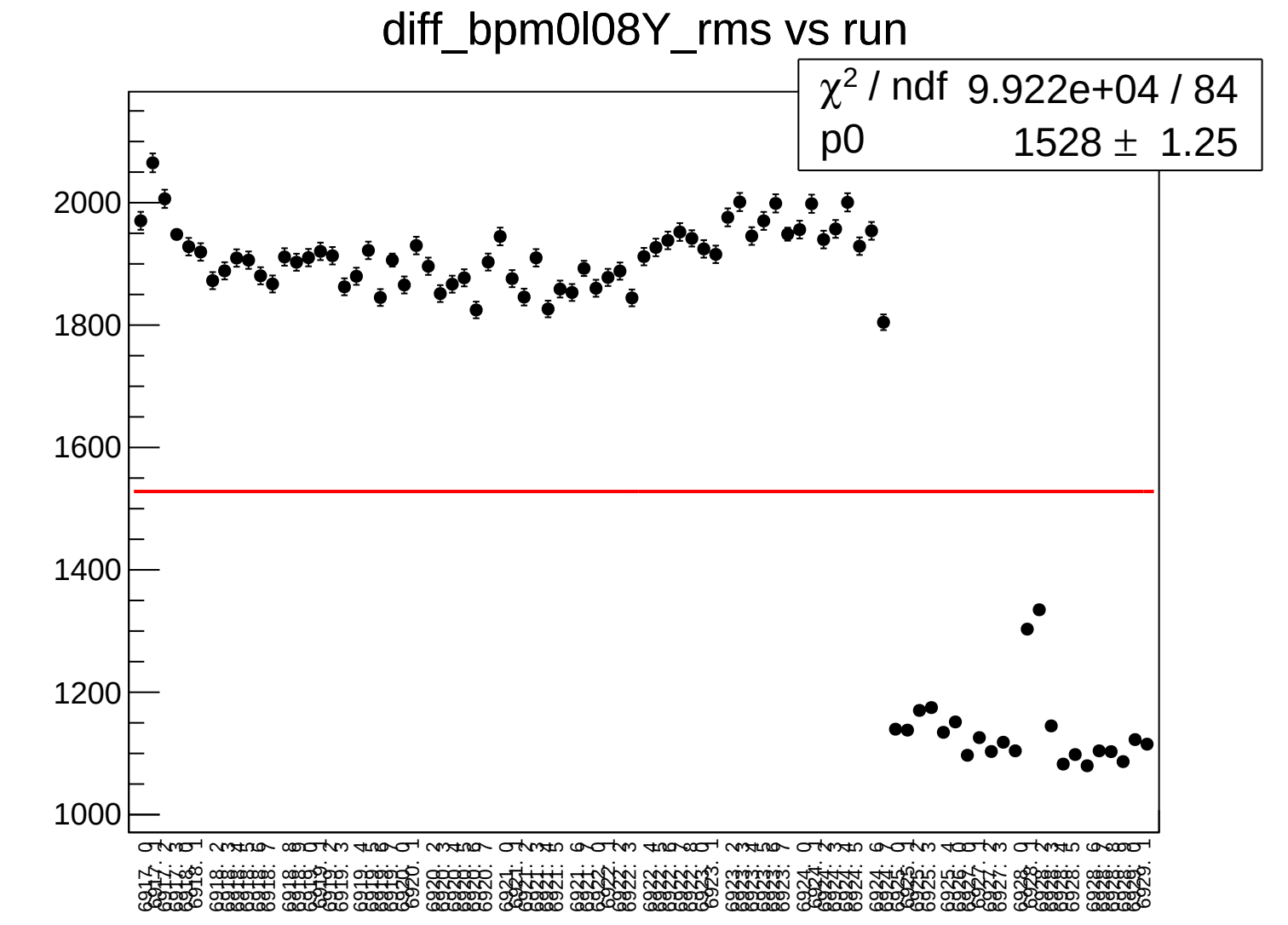

diff_bpm0l08X_mean vs run
χ² / ndf 79.73 / 84
p0 −4.77 ± 10.36
pull
Entries 85
Mean 20.64
Std Dev 45.48

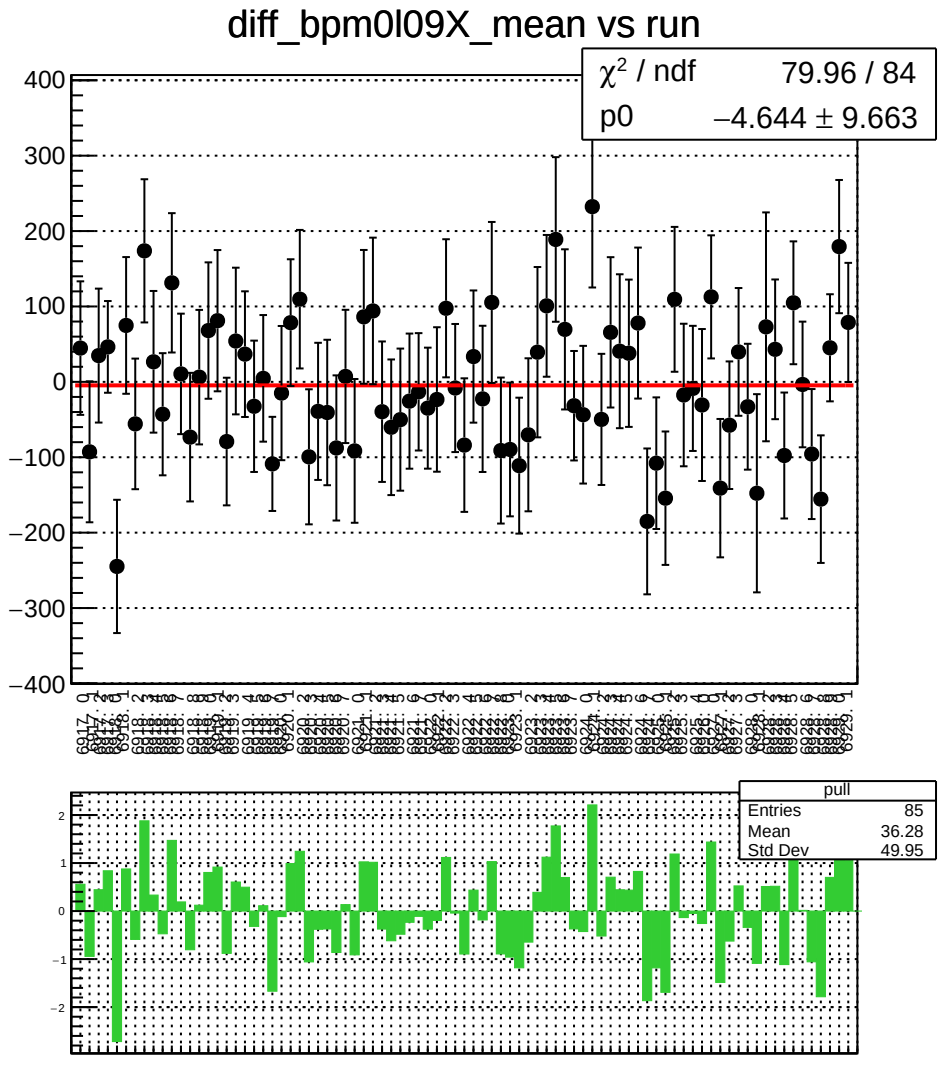

pull1D
Entries 85
Mean 0.01563
Std Dev 0.9684

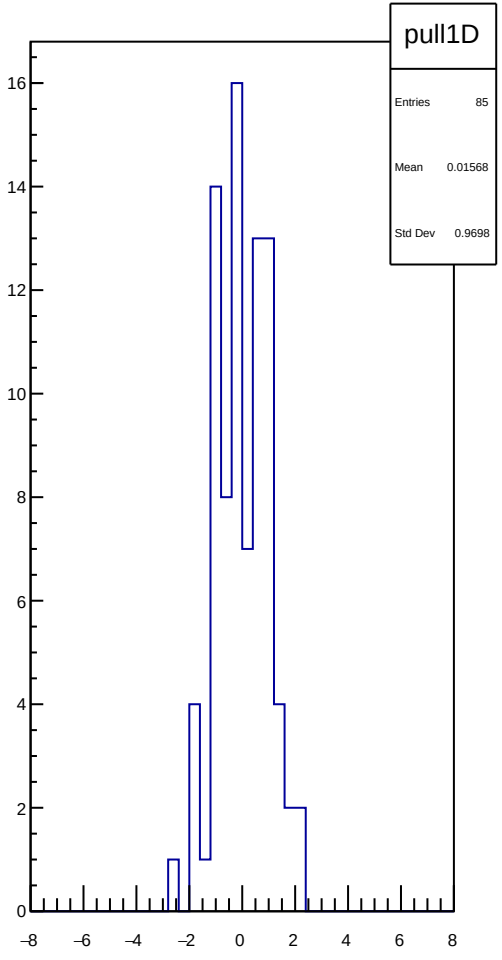

diff_bpm0l08X_rms vs run
χ² / ndf 1.343e+04 / 84
p0 9208 ± 7.323
16000
15000
14000
13000
12000
11000
10000
9000
8000

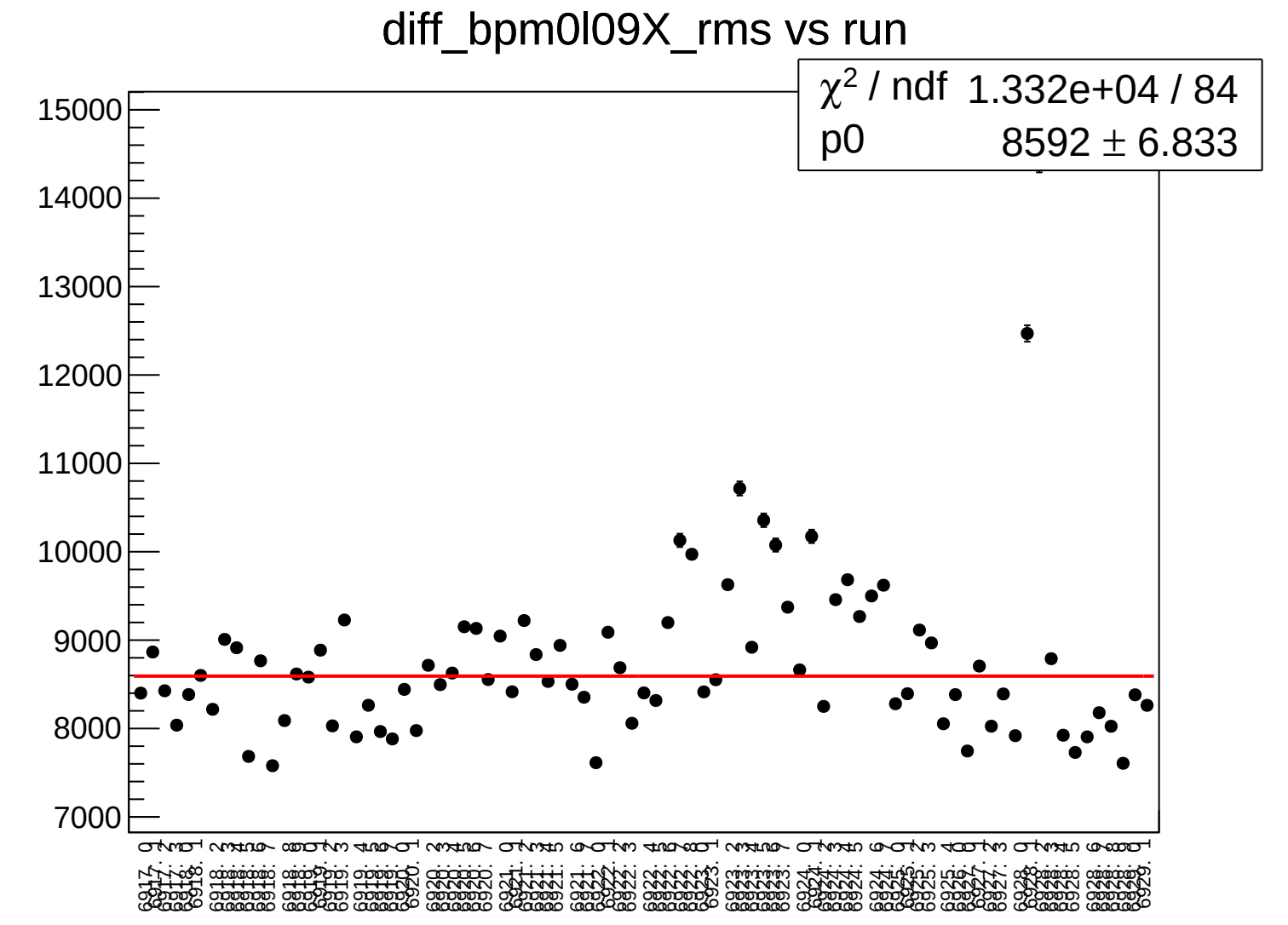

diff_bpm0l08Y_mean vs run
χ² / ndf 76.45 / 84
p0 0.1887 ± 1.767
pull
Entries 85
Mean −19.18
Std Dev 57.6

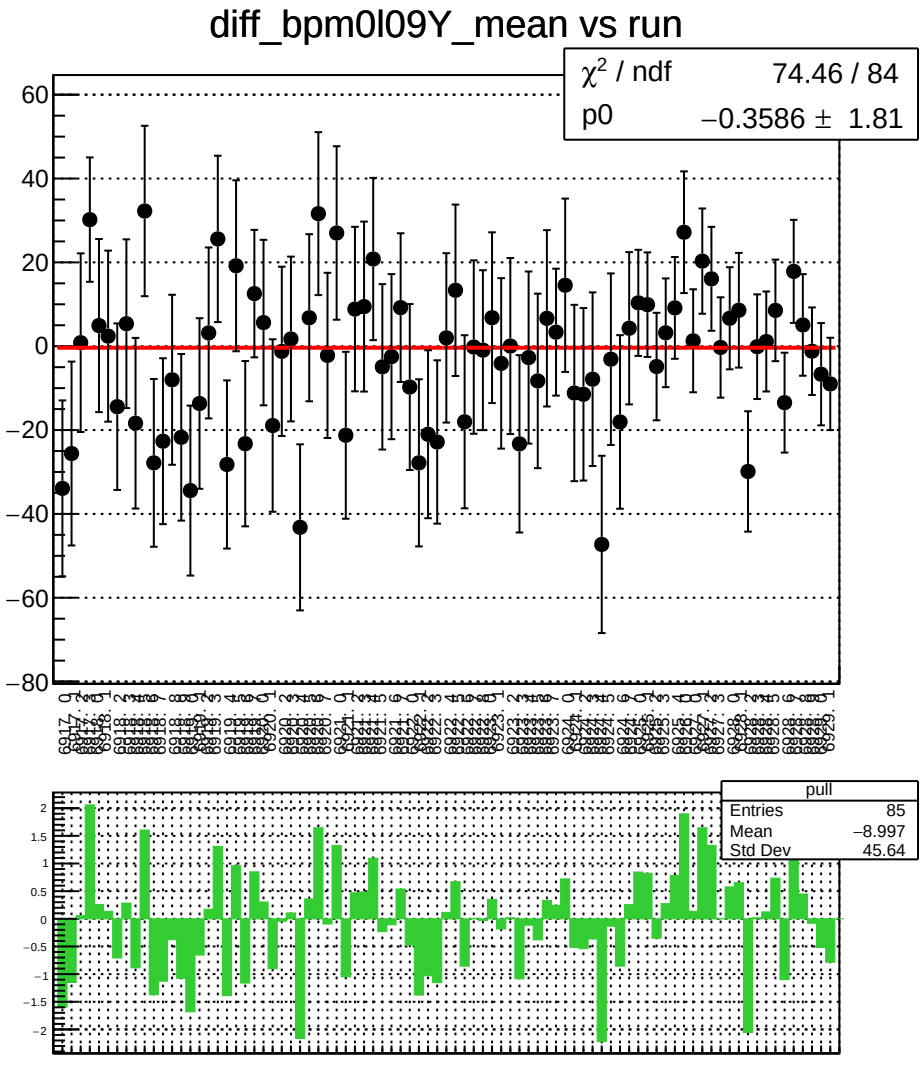

pull1D
Entries 85
Mean −0.08279
Std Dev 0.9447

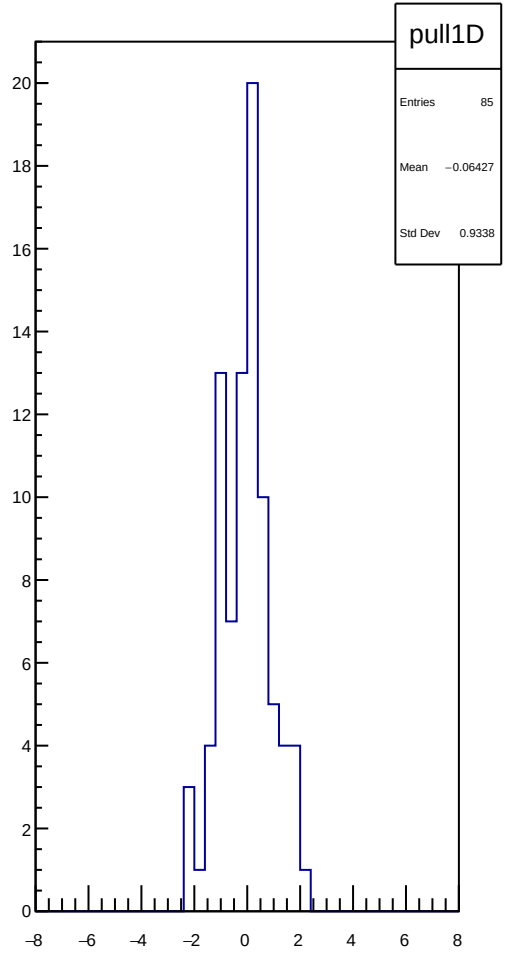

diff_bpm0l08Y_rms vs run
χ² / ndf 9.922e+04 / 84
p0 1528 ± 1.25
2000
1800
1600
1400
1200
1000

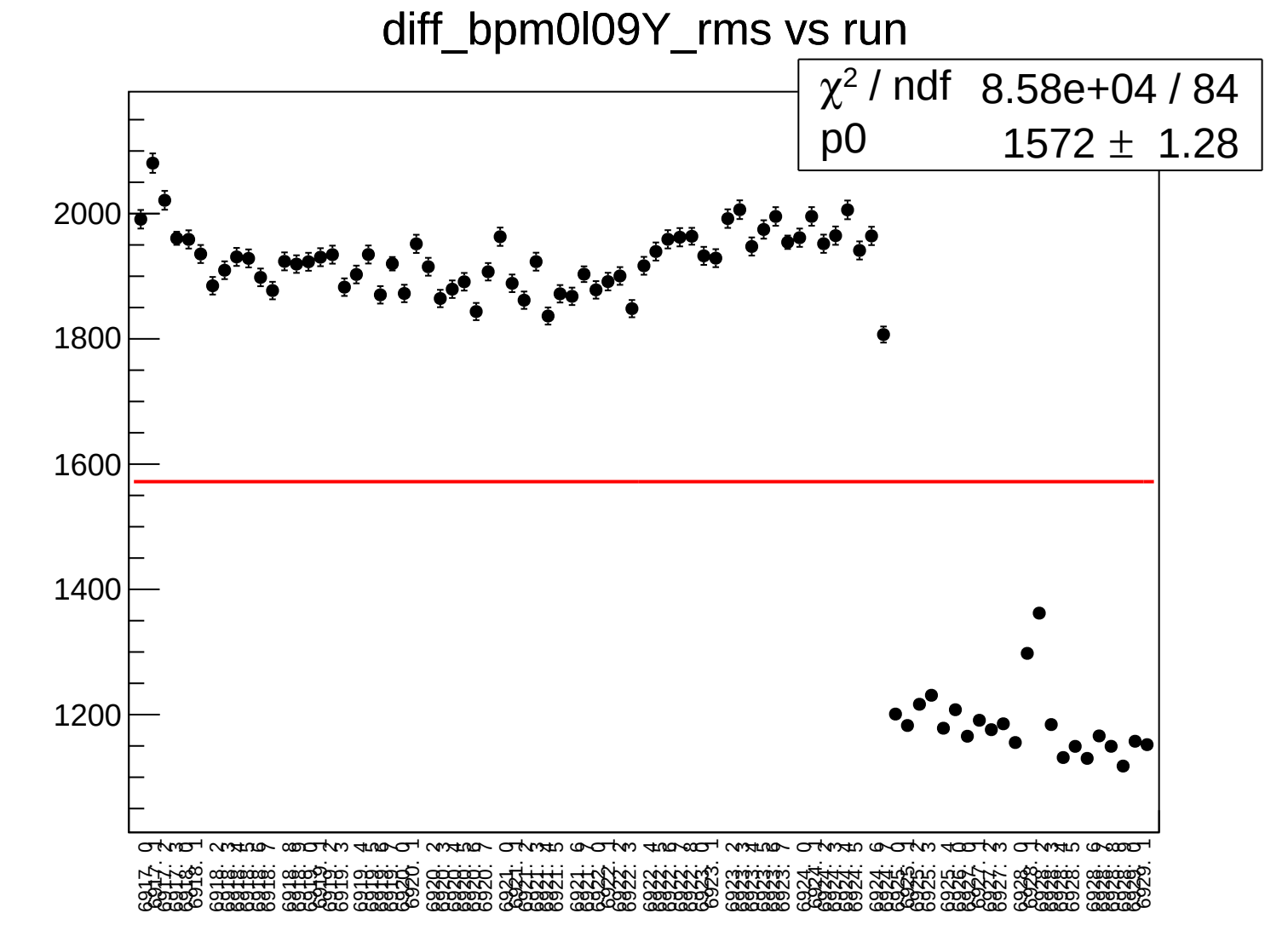

diff_bpm0l09X_mean vs run
χ² / ndf 79.96 / 84
p0 −4.644 ± 9.663
pull
Entries 85
Mean 36.28
Std Dev 49.95

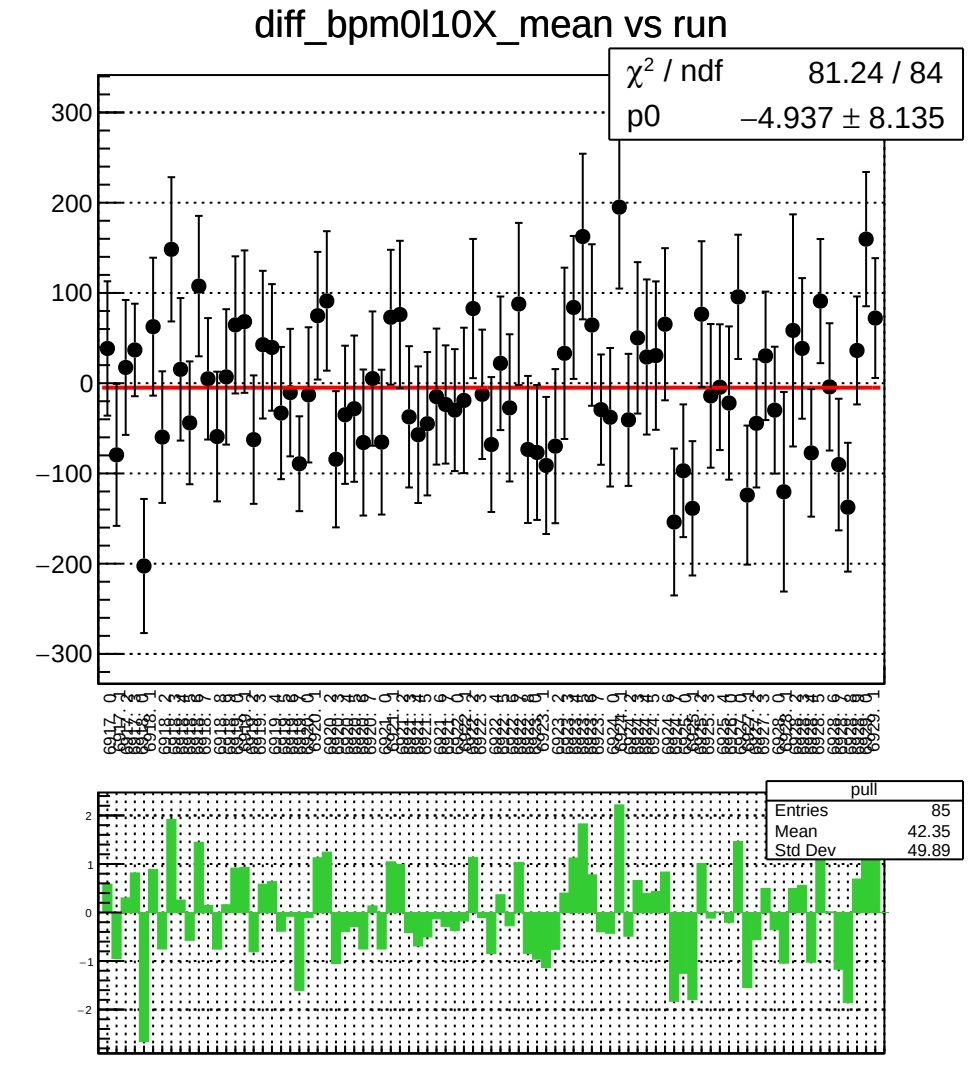

pull1D
Entries 85
Mean 0.01568
Std Dev 0.9698

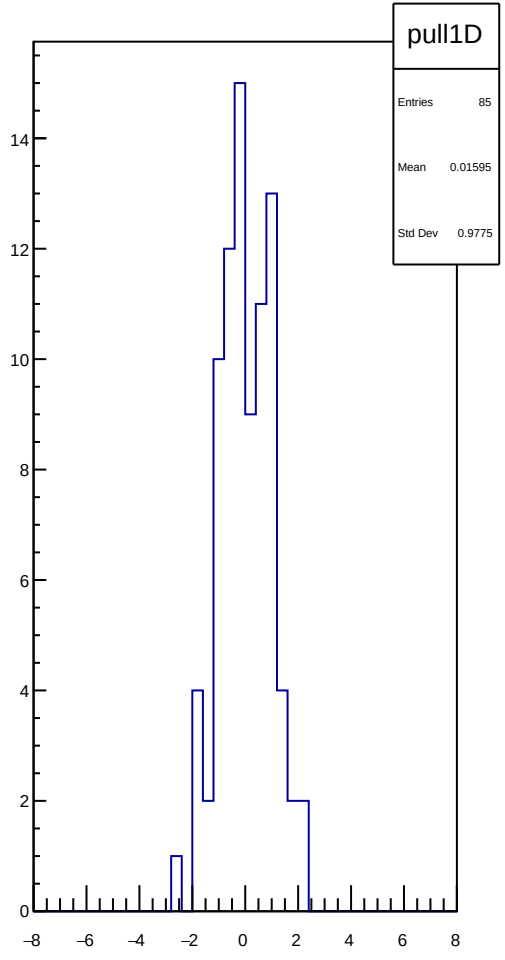

diff_bpm0l09X_rms vs run
χ² / ndf 1.332e+04 / 84
p0 8592 ± 6.833
15000
14000
13000
12000
11000
10000
9000
8000
7000

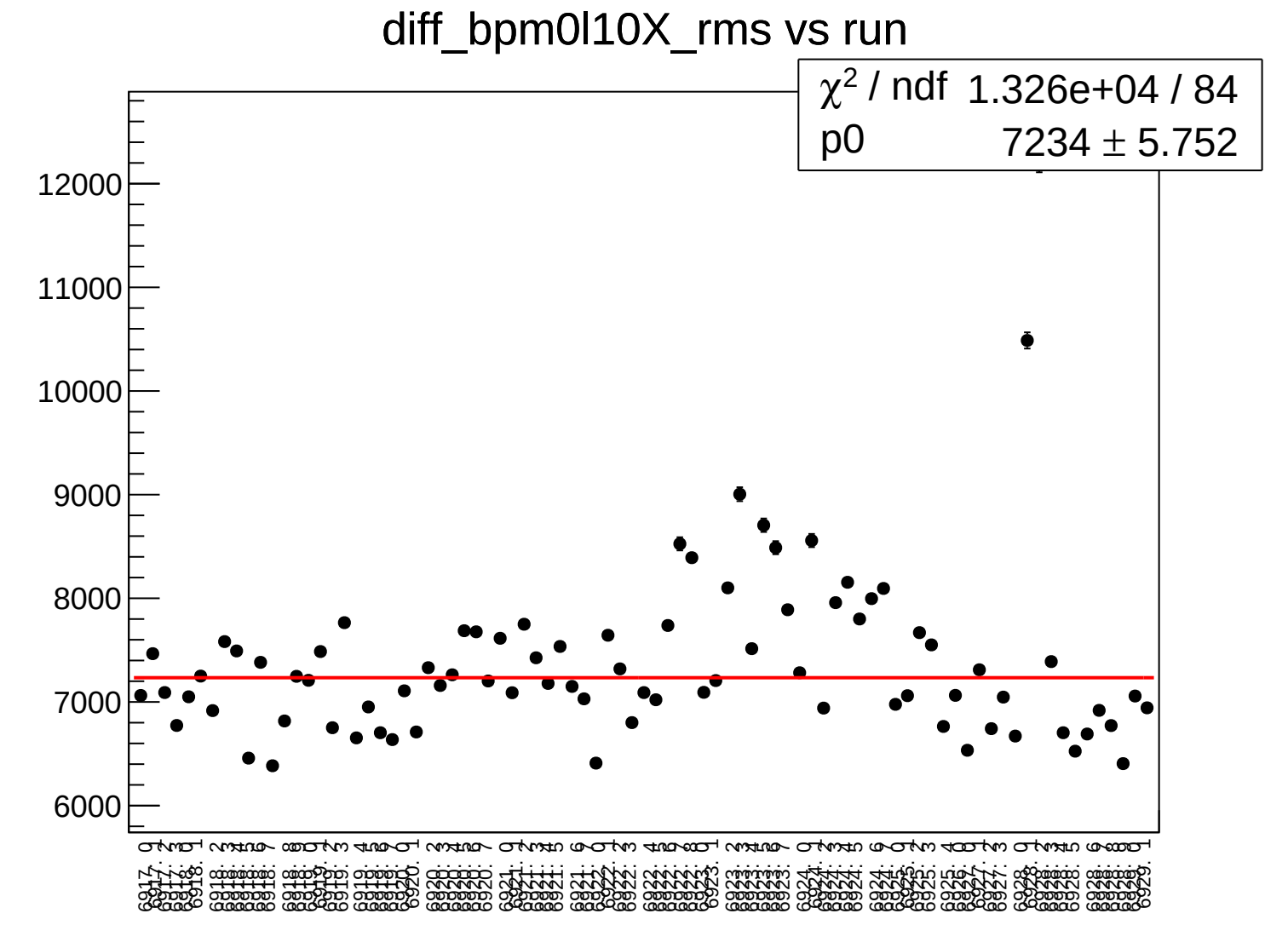

diff_bpm0l09Y_mean vs run
χ² / ndf 74.46 / 84
p0 −0.3586 ± 1.81
pull
Entries 85
Mean −8.997
Std Dev 45.64

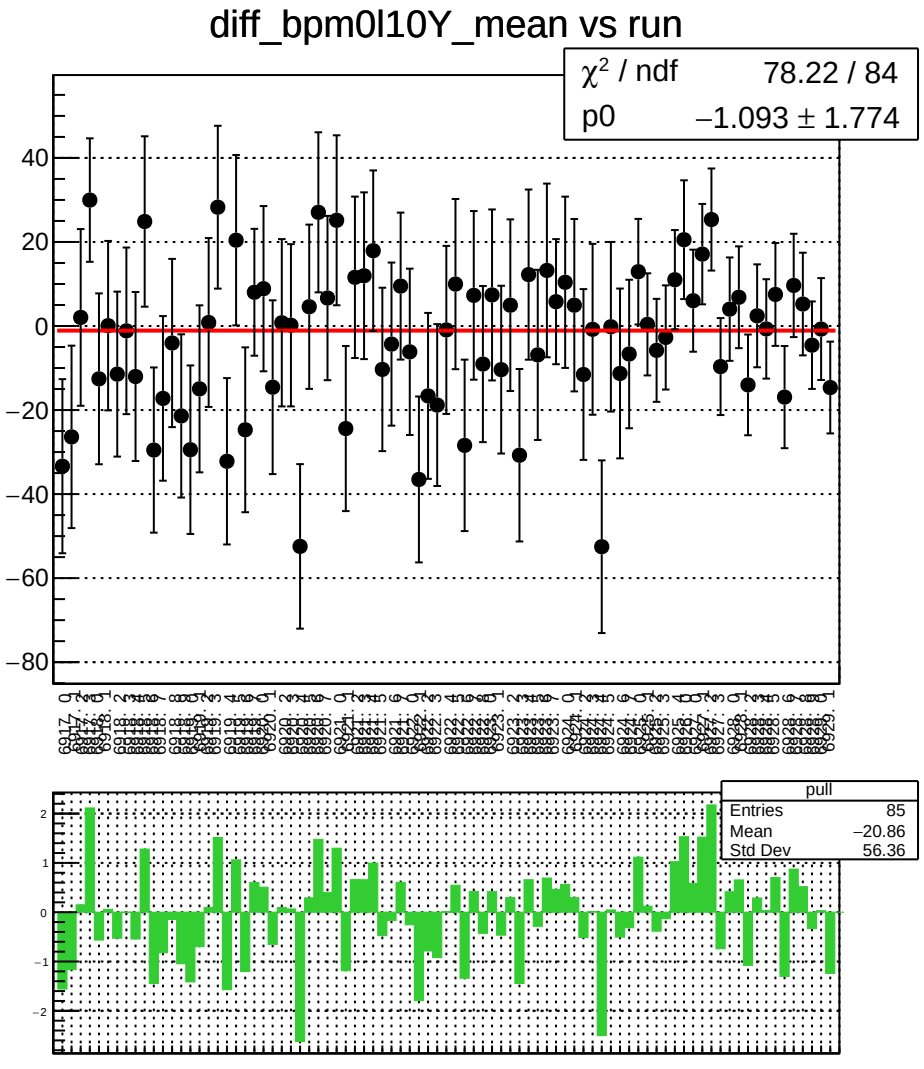

pull1D
Entries 85
Mean −0.06427
Std Dev 0.9338

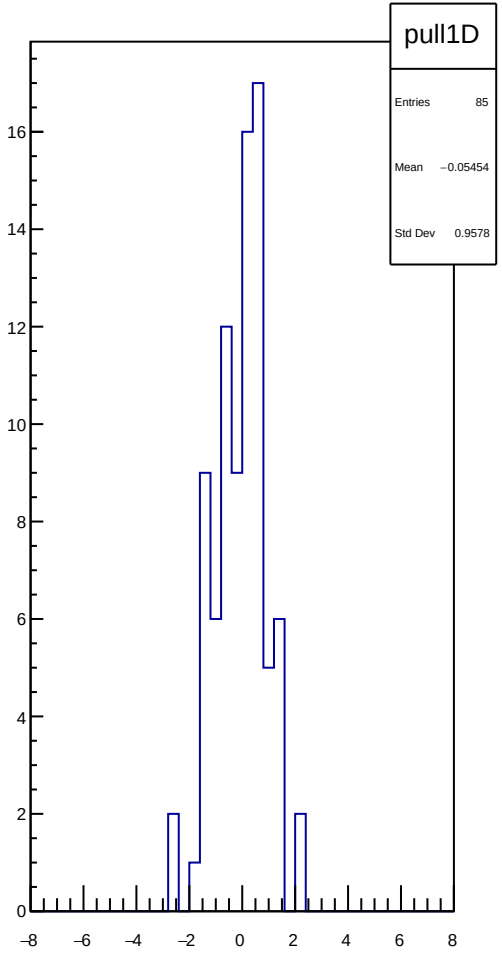

diff_bpm0l09Y_rms vs run
χ² / ndf 8.58e+04 / 84
p0 1572 ± 1.28
2000
1800
1600
1400
1200

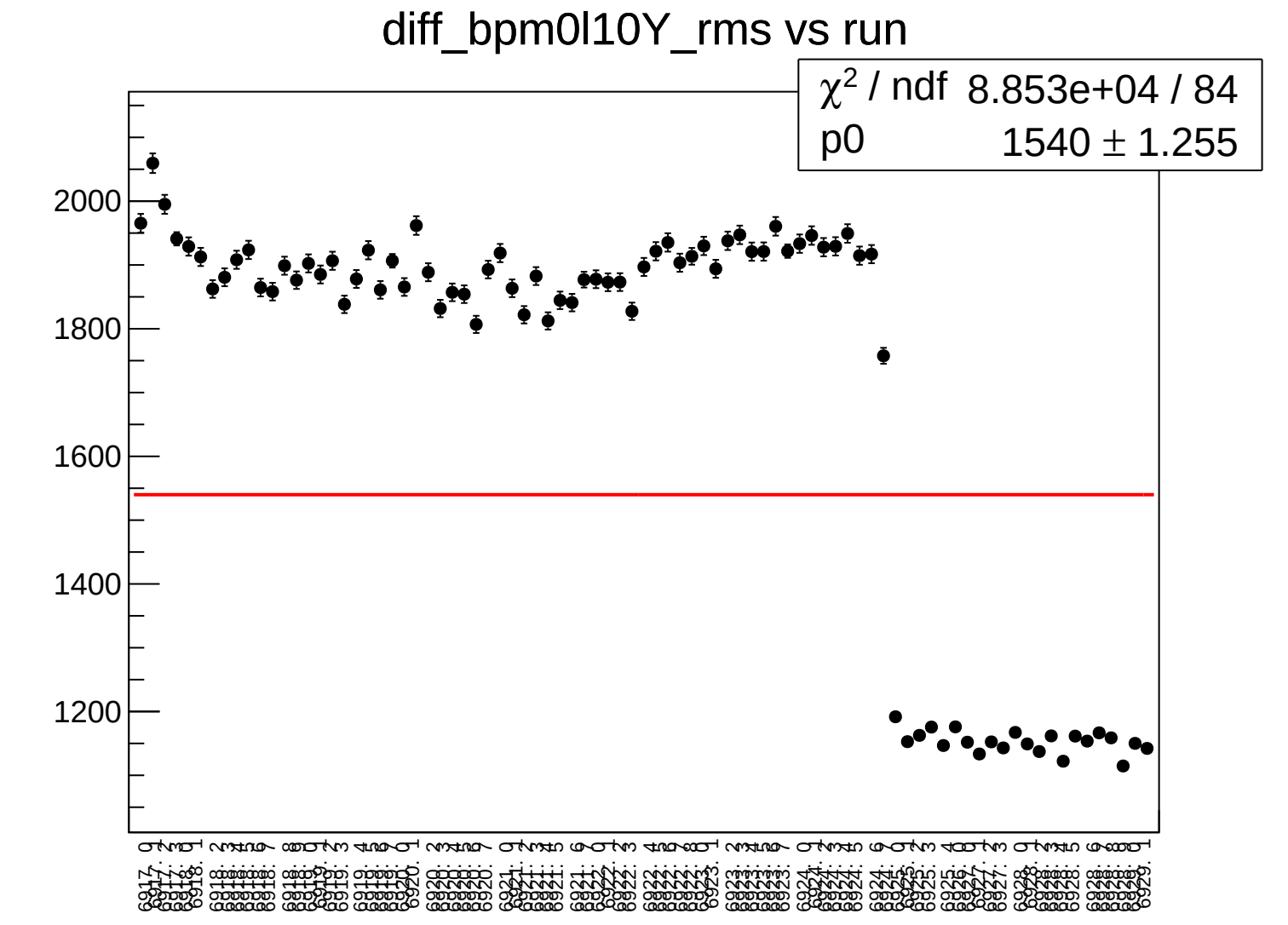

diff_bpm0l10X_mean vs run
χ² / ndf 81.24 / 84
p0 −4.937 ± 8.135
pull
Entries 85
Mean 42.35
Std Dev 49.89

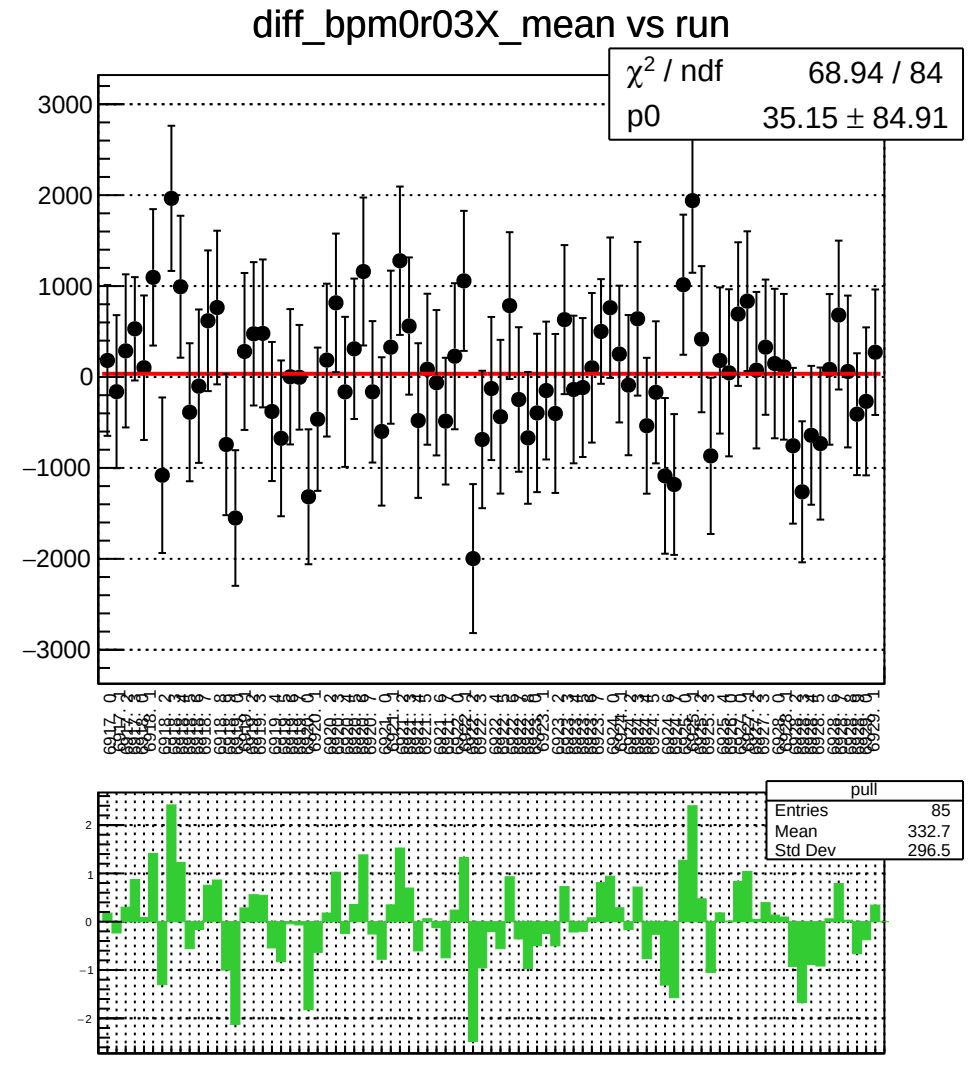

pull1D
Entries 85
Mean 0.01595
Std Dev 0.9775

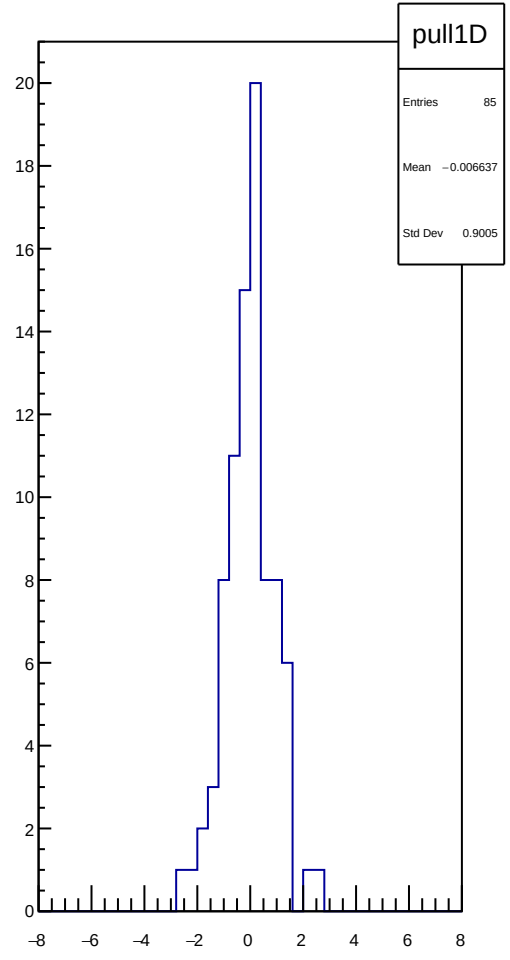

diff_bpm0l10X_rms vs run
χ² / ndf 1.326e+04 / 84
p0 7234 ± 5.752
12000
11000
10000
9000
8000
7000
6000

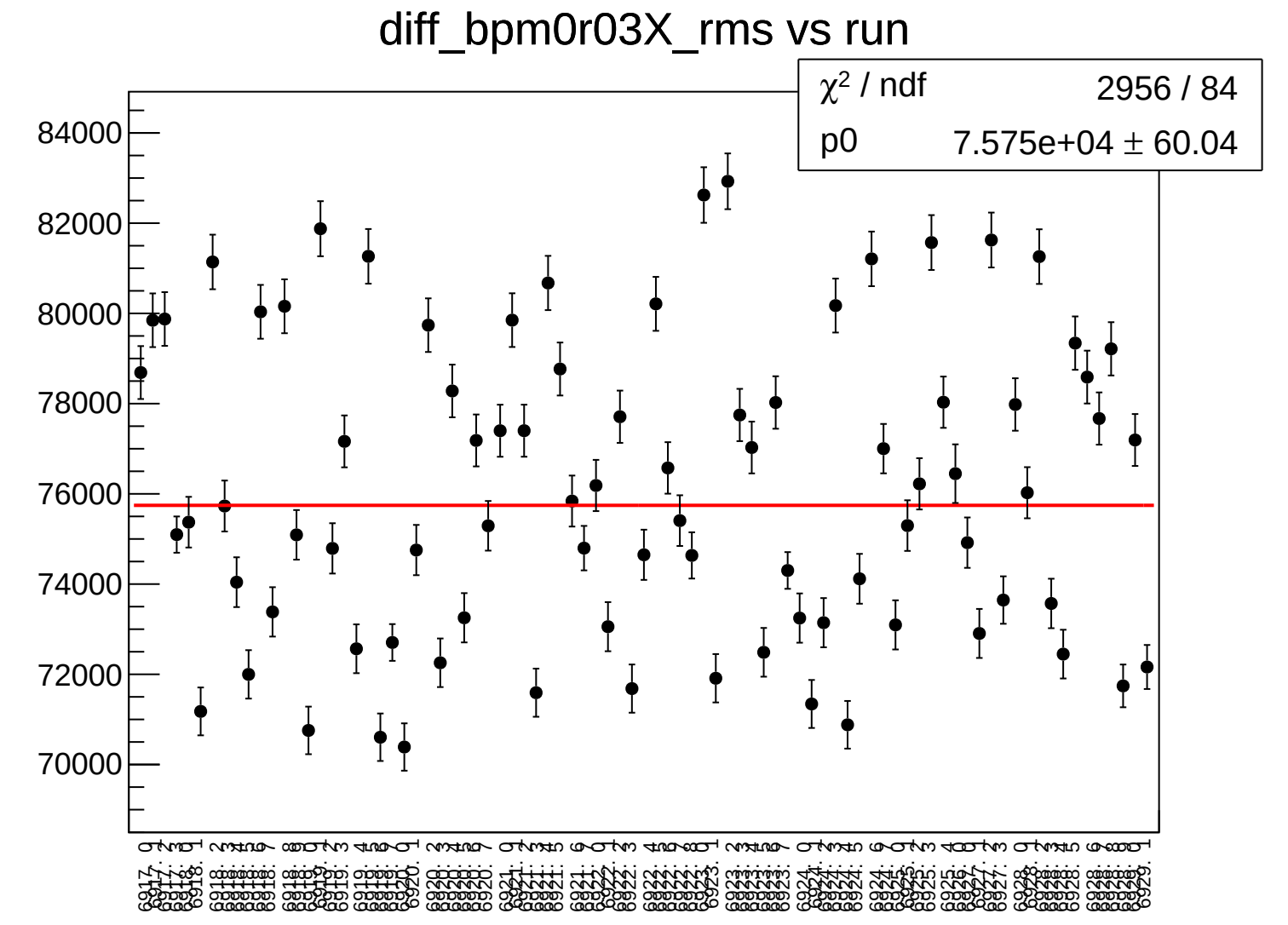

diff_bpm0l10Y_mean vs run
χ² / ndf 78.22 / 84
p0 −1.093 ± 1.774
pull
Entries 85
Mean −20.86
Std Dev 56.36

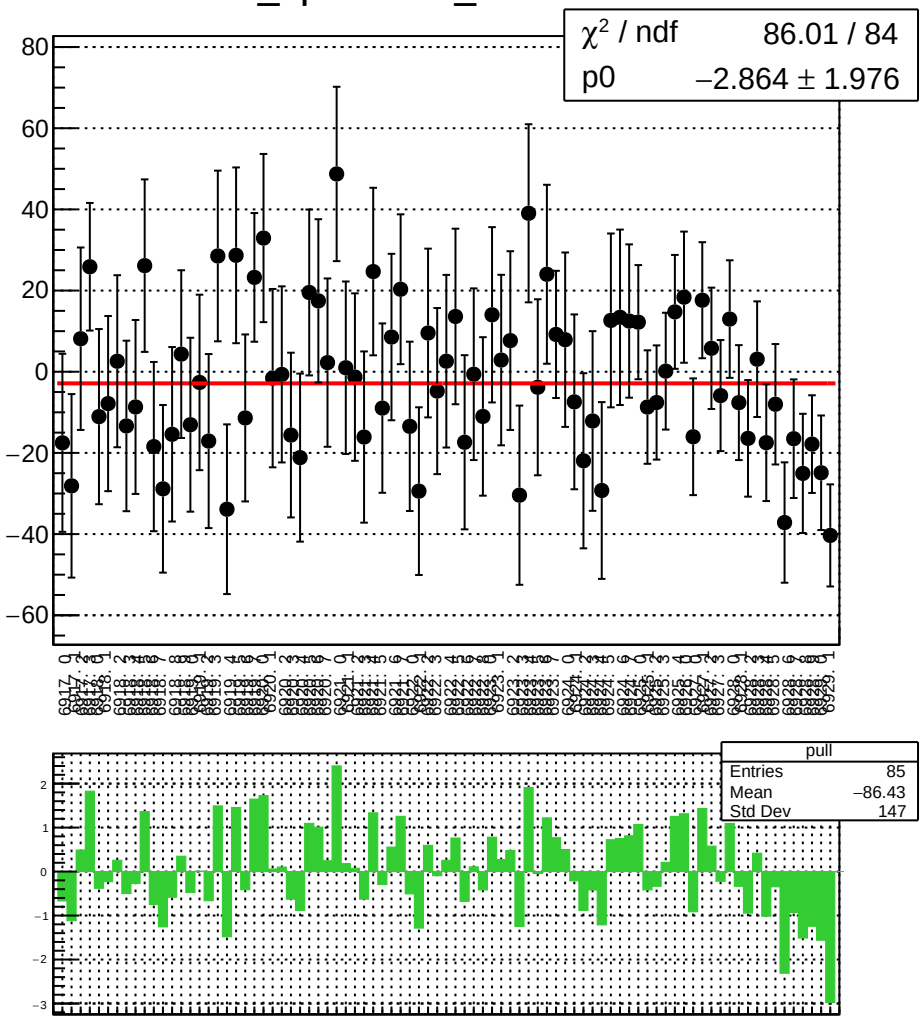

pull1D
Entries 85
Mean −0.05454
Std Dev 0.9578

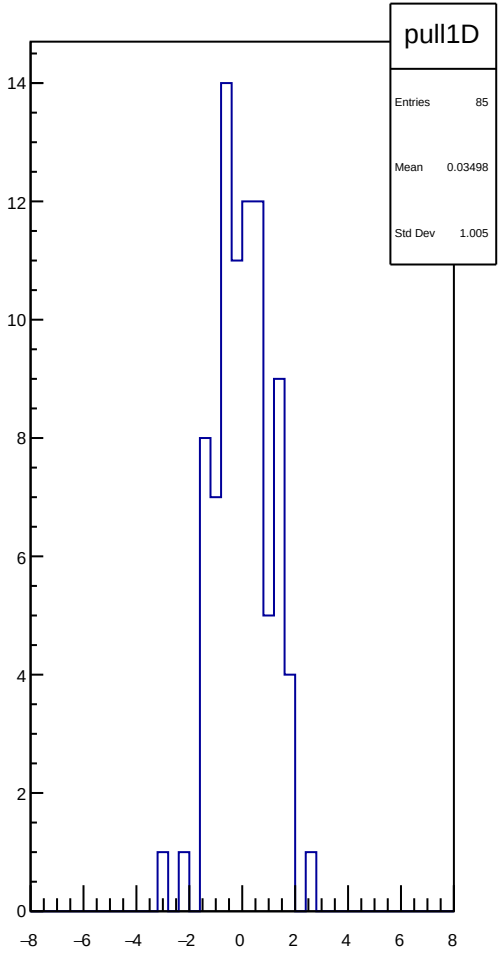

diff_bpm0l10Y_rms vs run
χ² / ndf 8.853e+04 / 84
p0 1540 ± 1.255
2000
1800
1600
1400
1200

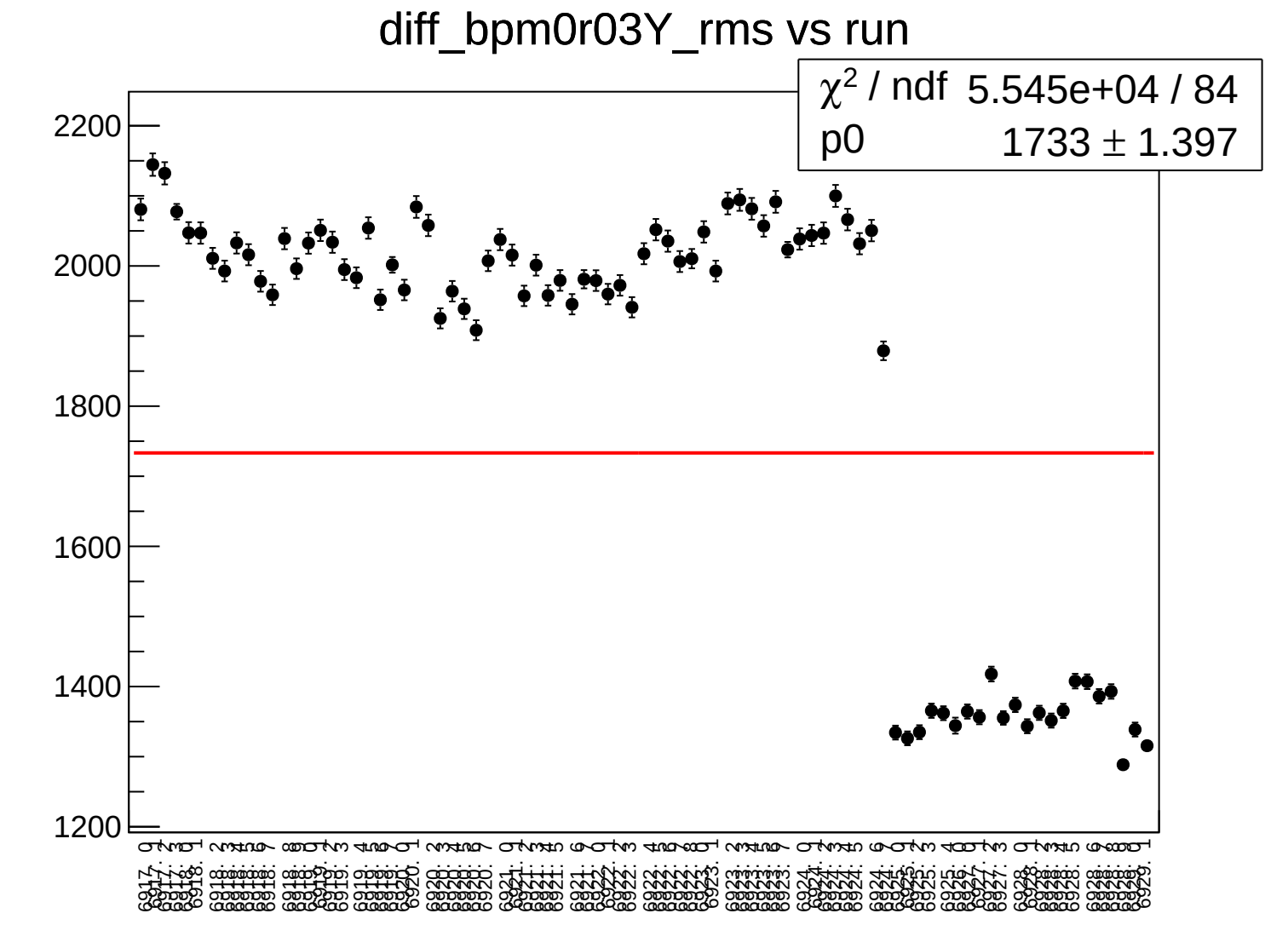

diff_bpm0r03X_mean vs run
χ² / ndf 68.94 / 84
p0 35.15 ± 84.91
pull
Entries 85
Mean 332.7
Std Dev 296.5

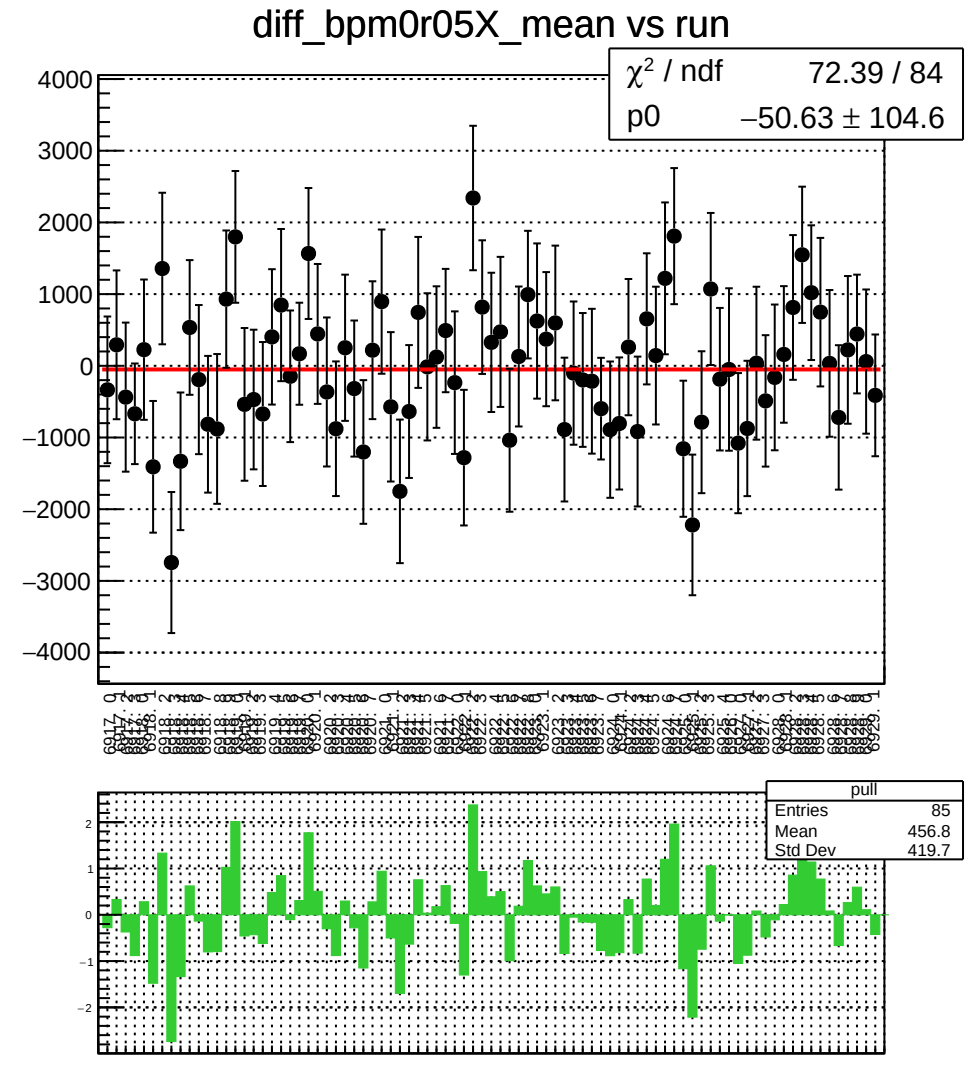

pull1D
Entries 85
Mean −0.006637
Std Dev 0.9005

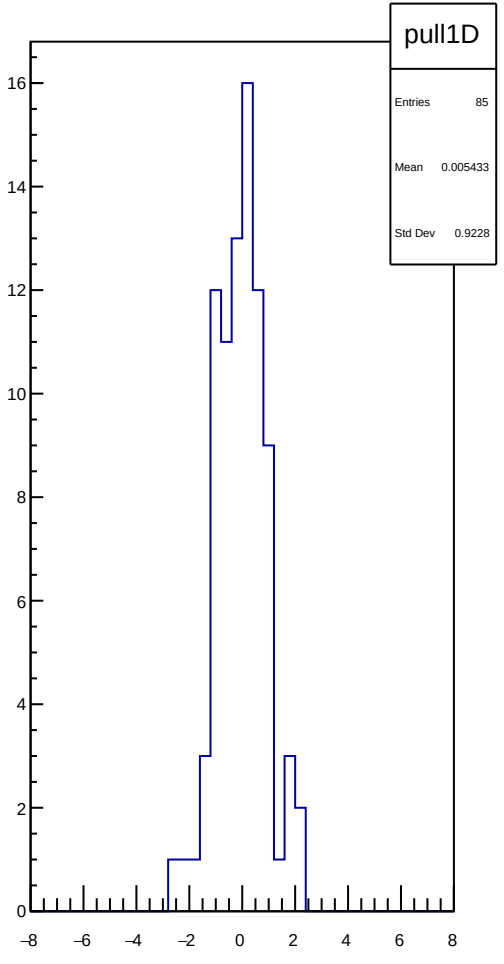

diff_bpm0r03X_rms vs run
χ² / ndf 2956 / 84
p0 7.575e+04 ± 60.04
84000
82000
80000
78000
76000
74000
72000
70000

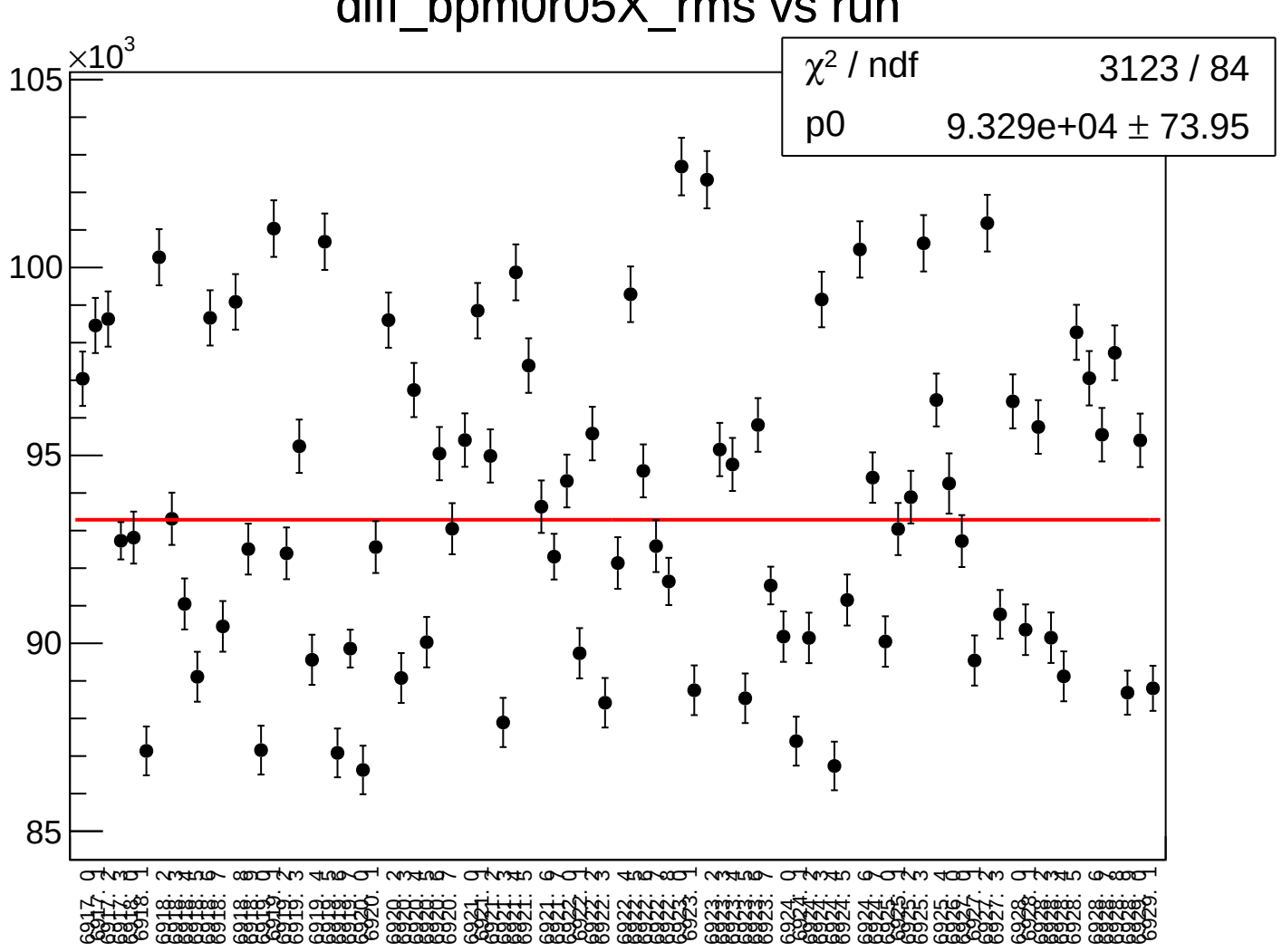

diff_bpm0r03Y_mean vs run
χ² / ndf 86.01 / 84
p0 −2.864 ± 1.976
pull
Entries 85
Mean −86.43
Std Dev 147

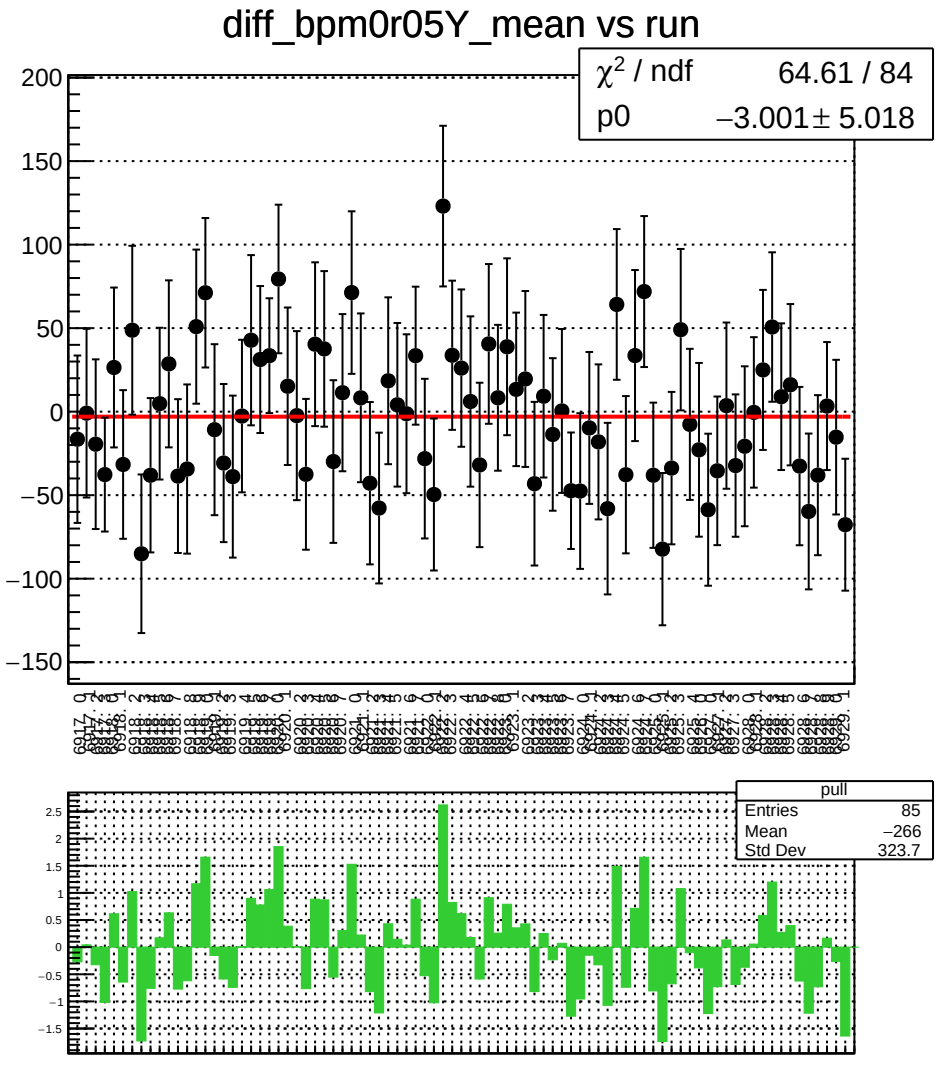

pull1D
Entries 85
Mean 0.03498
Std Dev 1.005

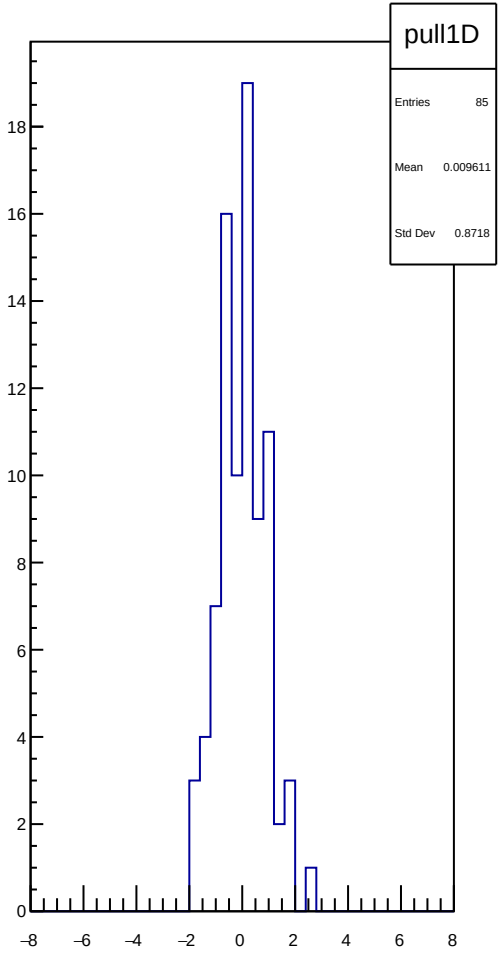

diff_bpm0r03Y_rms vs run
χ² / ndf 5.545e+04 / 84
p0 1733 ± 1.397
2200
2000
1800
1600
1400
1200

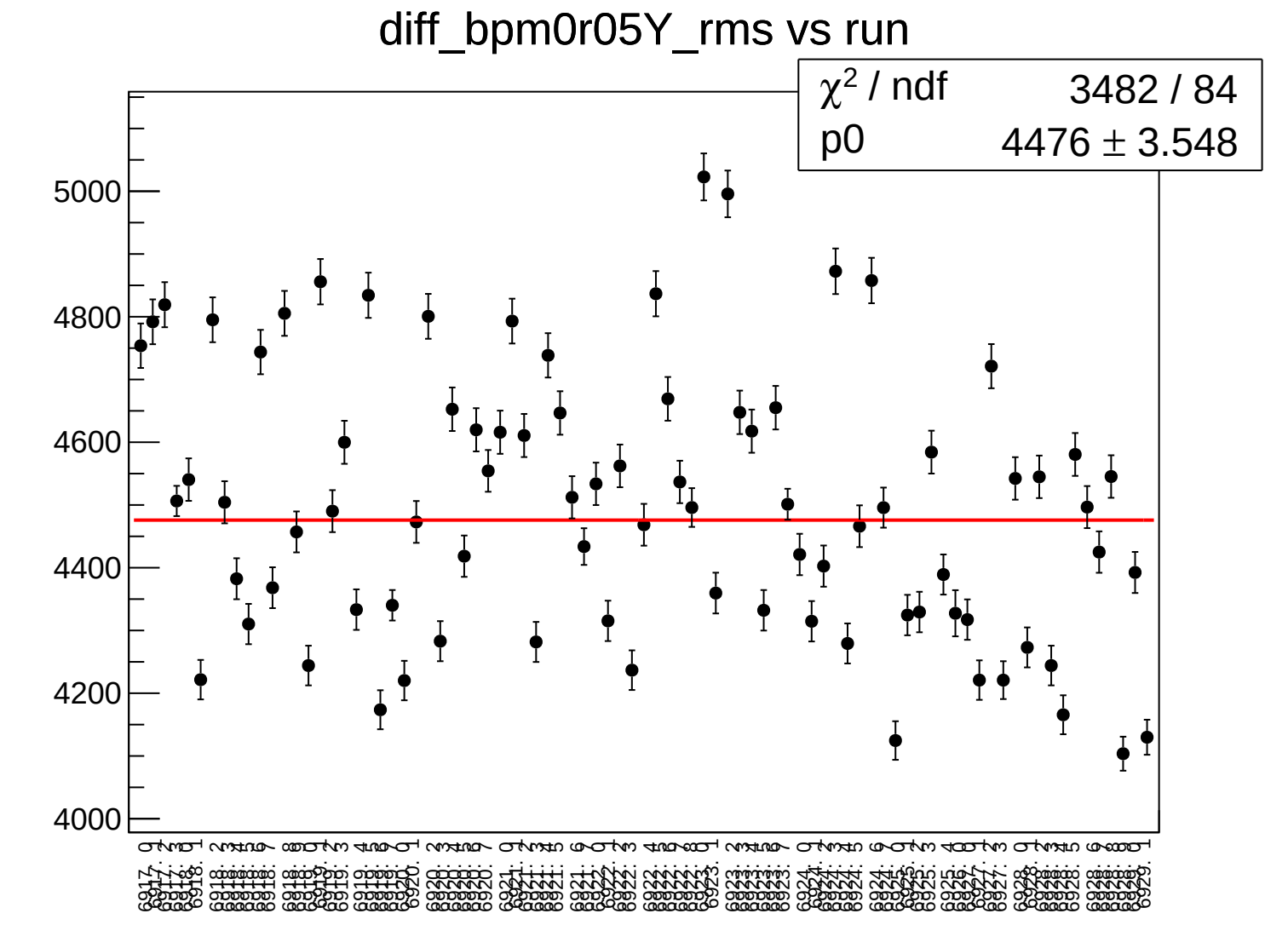

diff_bpm0r05X_mean vs run
χ² / ndf 72.39 / 84
p0 −50.63 ± 104.6
pull
Entries 85
Mean 456.8
Std Dev 419.7

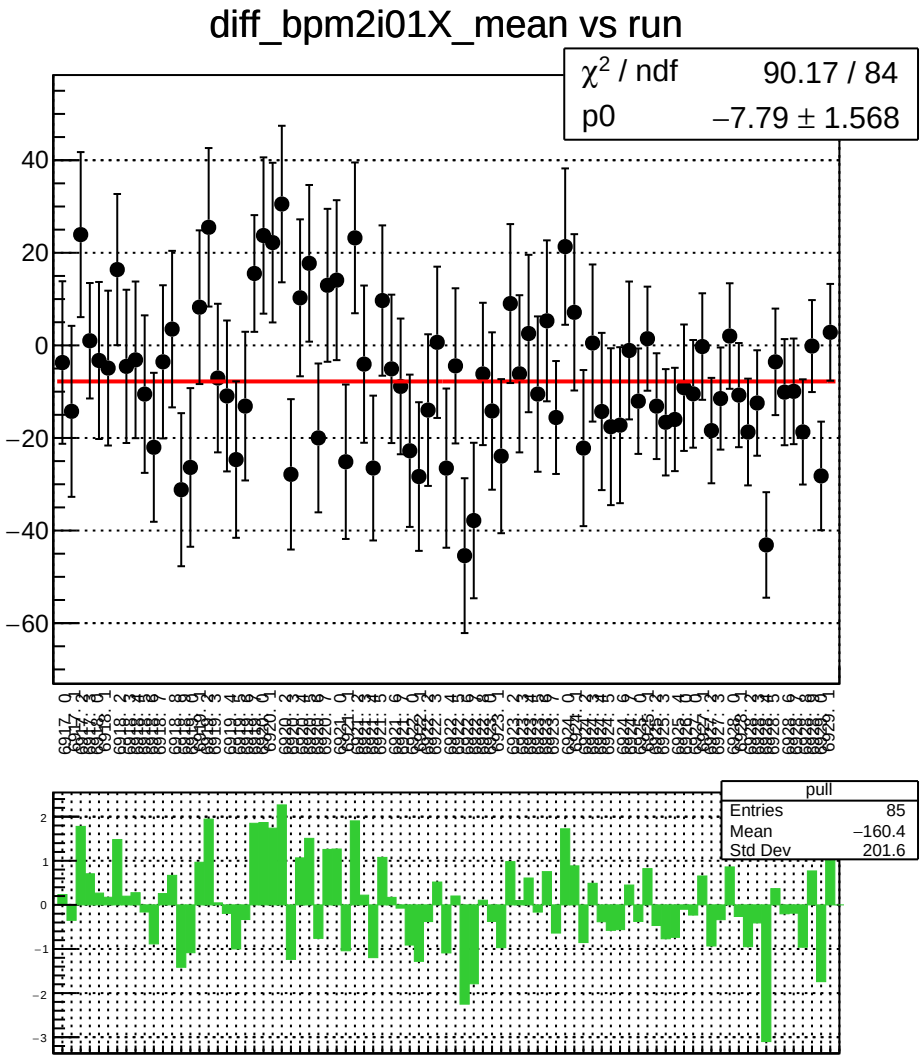

pull1D
Entries 85
Mean 0.005433
Std Dev 0.9228

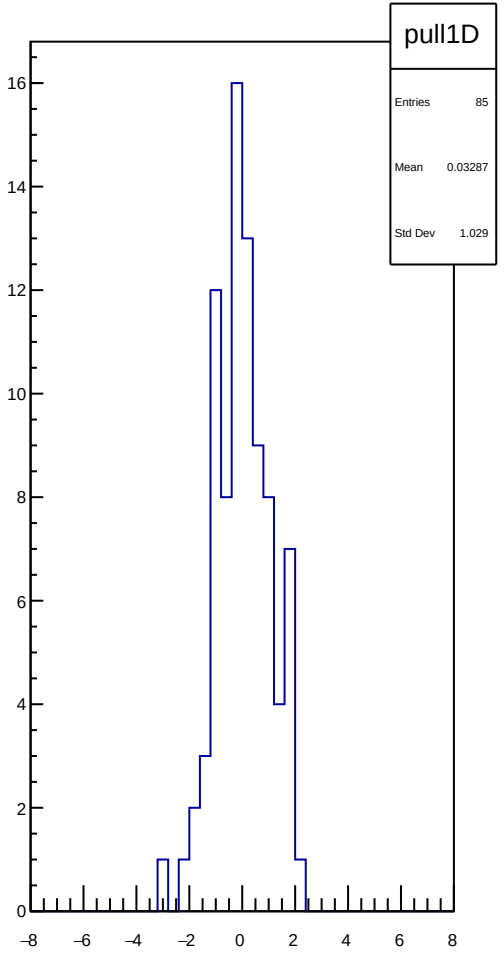

diff_bpm0r05X_rms vs run
×10^3
105
100
95
90
85
χ² / ndf 3123 / 84
p0 9.329e+04 ± 73.95

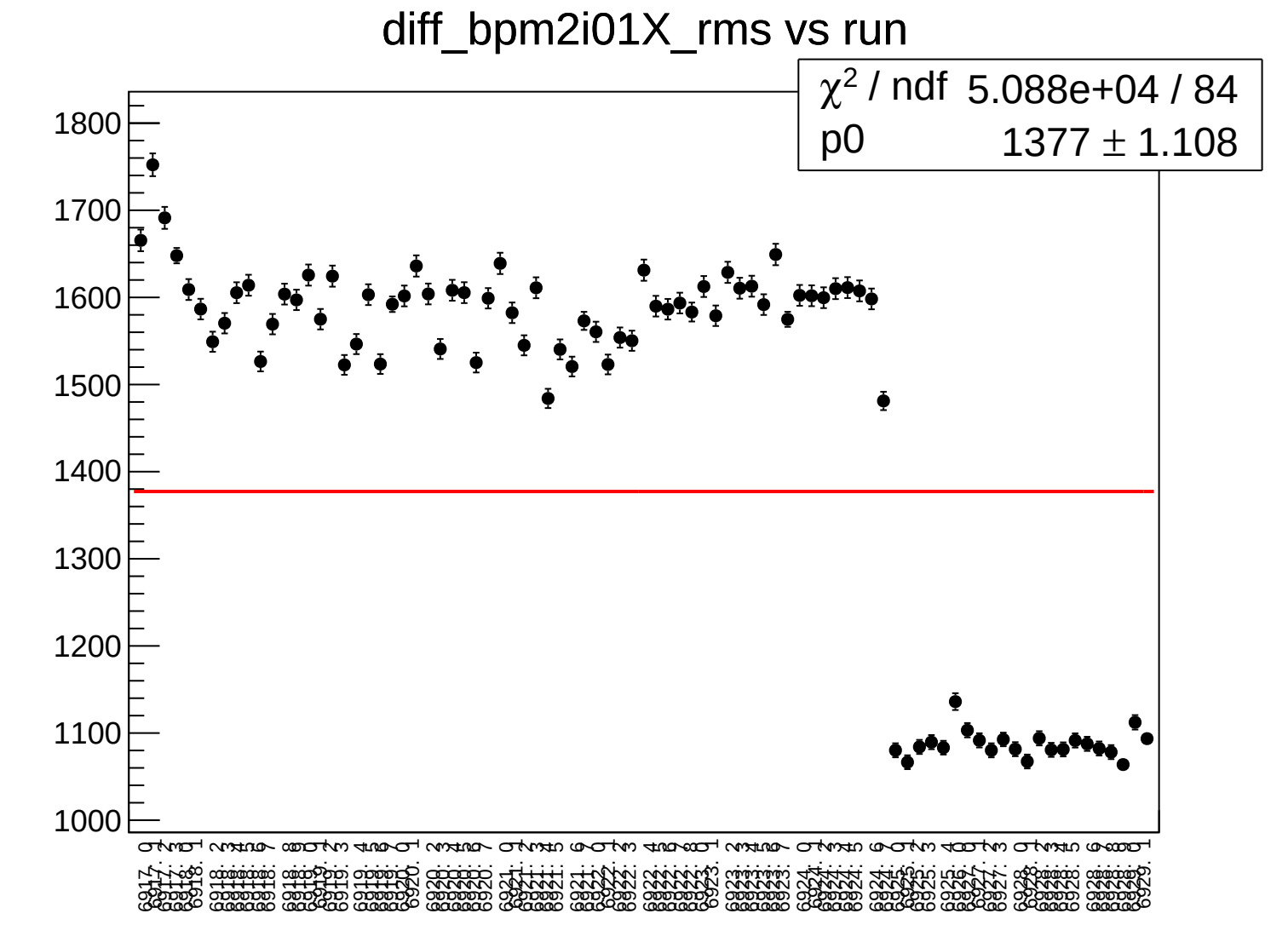

diff_bpm0r05Y_mean vs run
χ² / ndf 64.61 / 84
p0 −3.001 ± 5.018
pull
Entries 85
Mean −266
Std Dev 323.7

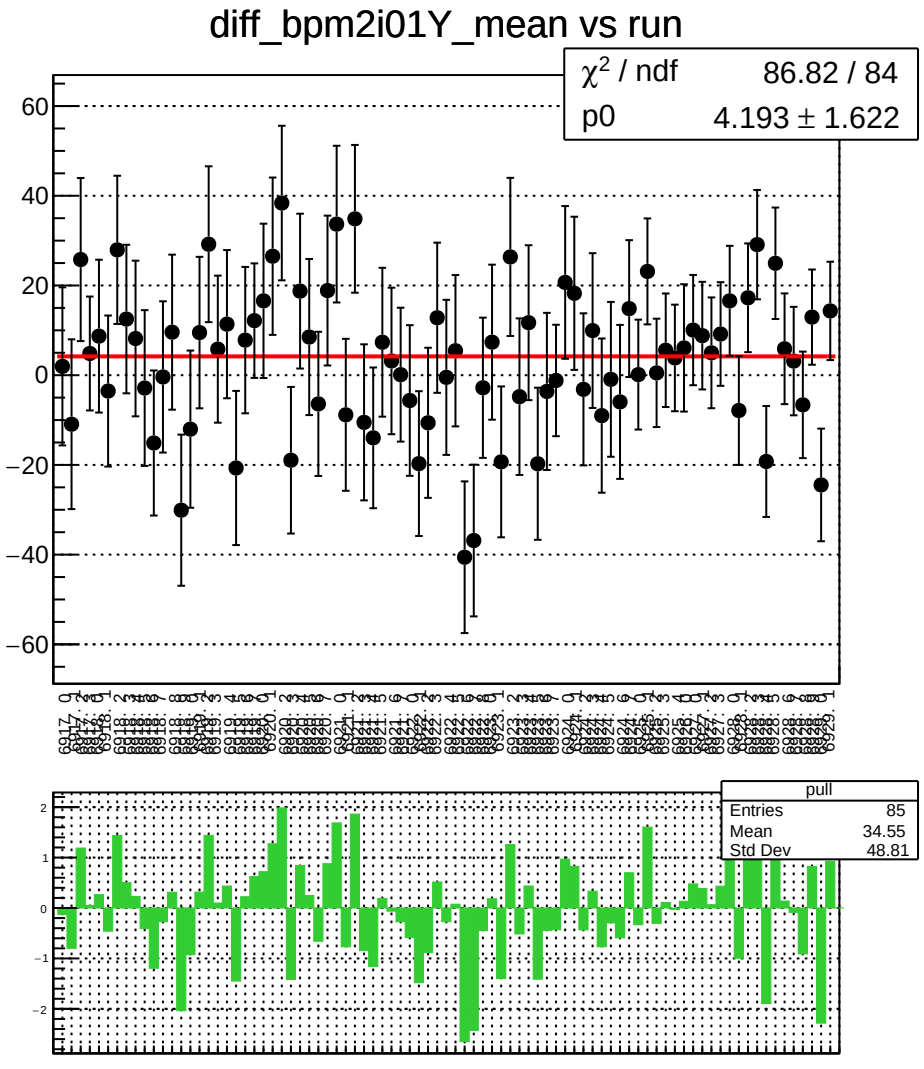

pull1D
Entries 85
Mean 0.009611
Std Dev 0.8718

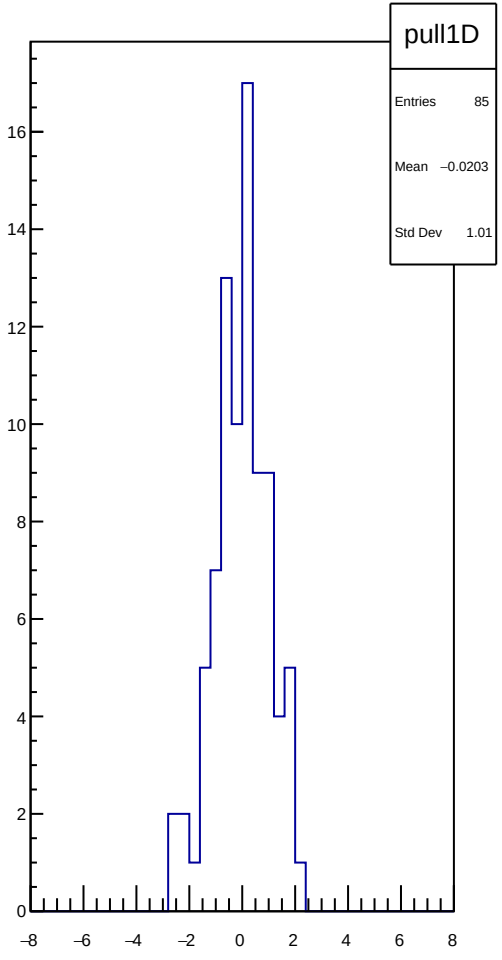

diff_bpm0r05Y_rms vs run
χ² / ndf 3482 / 84
p0 4476 ± 3.548
5000
4800
4600
4400
4200
4000

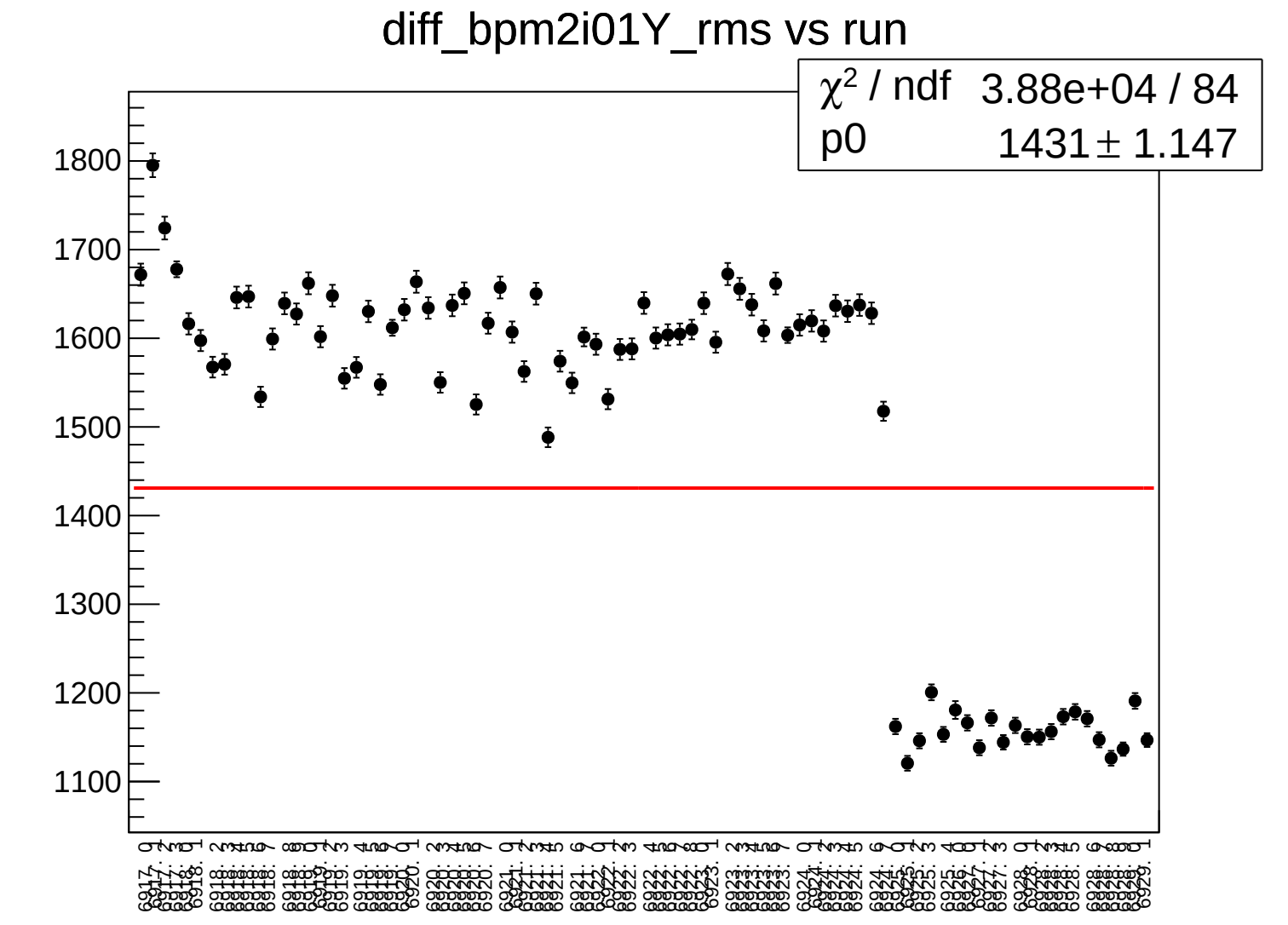

diff_bpm2i01X_mean vs run
χ^2 / ndf 90.17 / 84
p0 −7.79 ± 1.568
pull
Entries 85
Mean −160.4
Std Dev 201.6

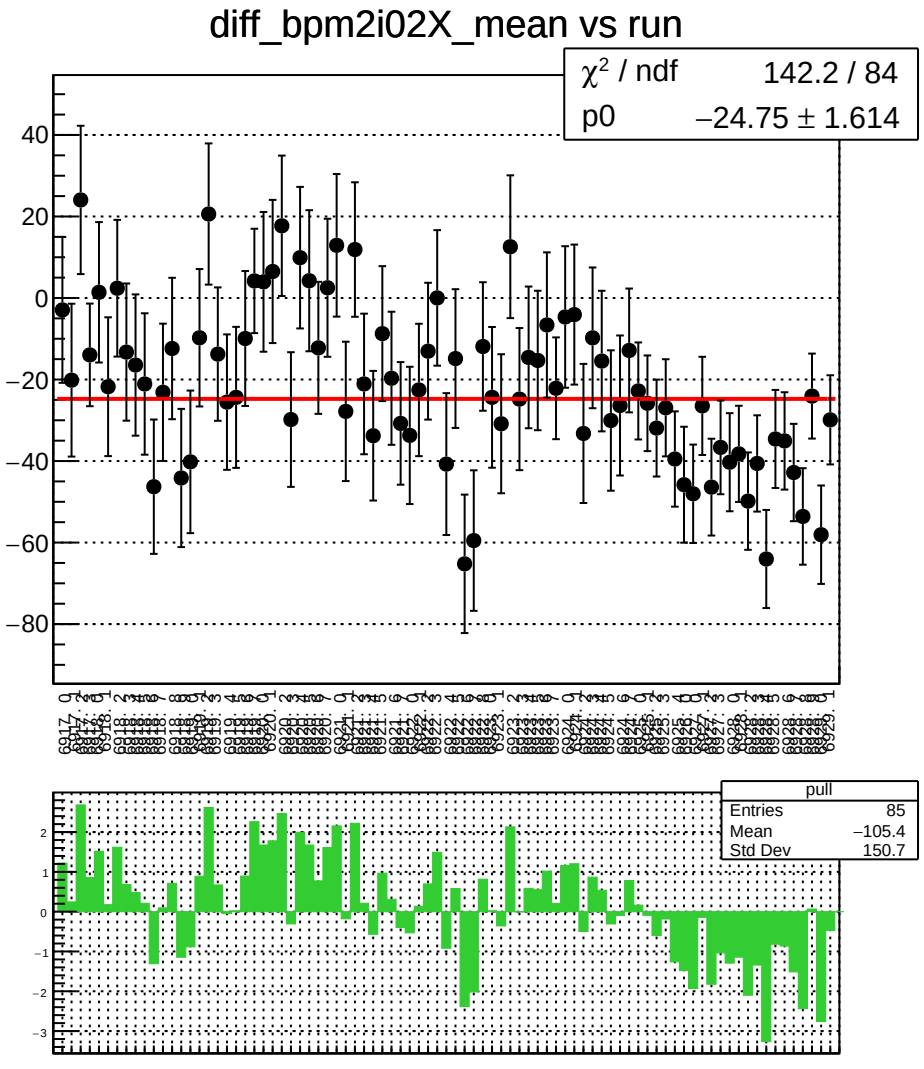

pull1D
Entries 85
Mean 0.03287
Std Dev 1.029

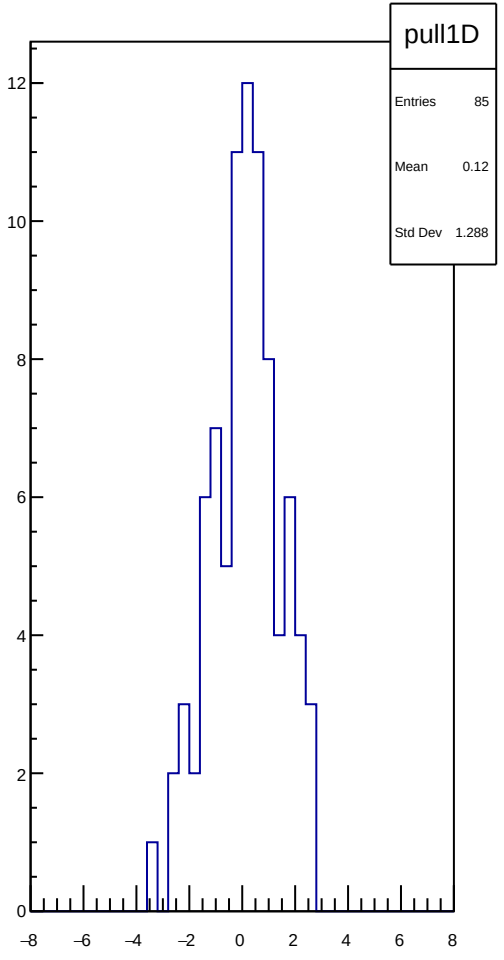

diff_bpm2i01X_rms vs run
χ² / ndf 5.088e+04 / 84
p0 1377 ± 1.108
1800
1700
1600
1500
1400
1300
1200
1100
1000

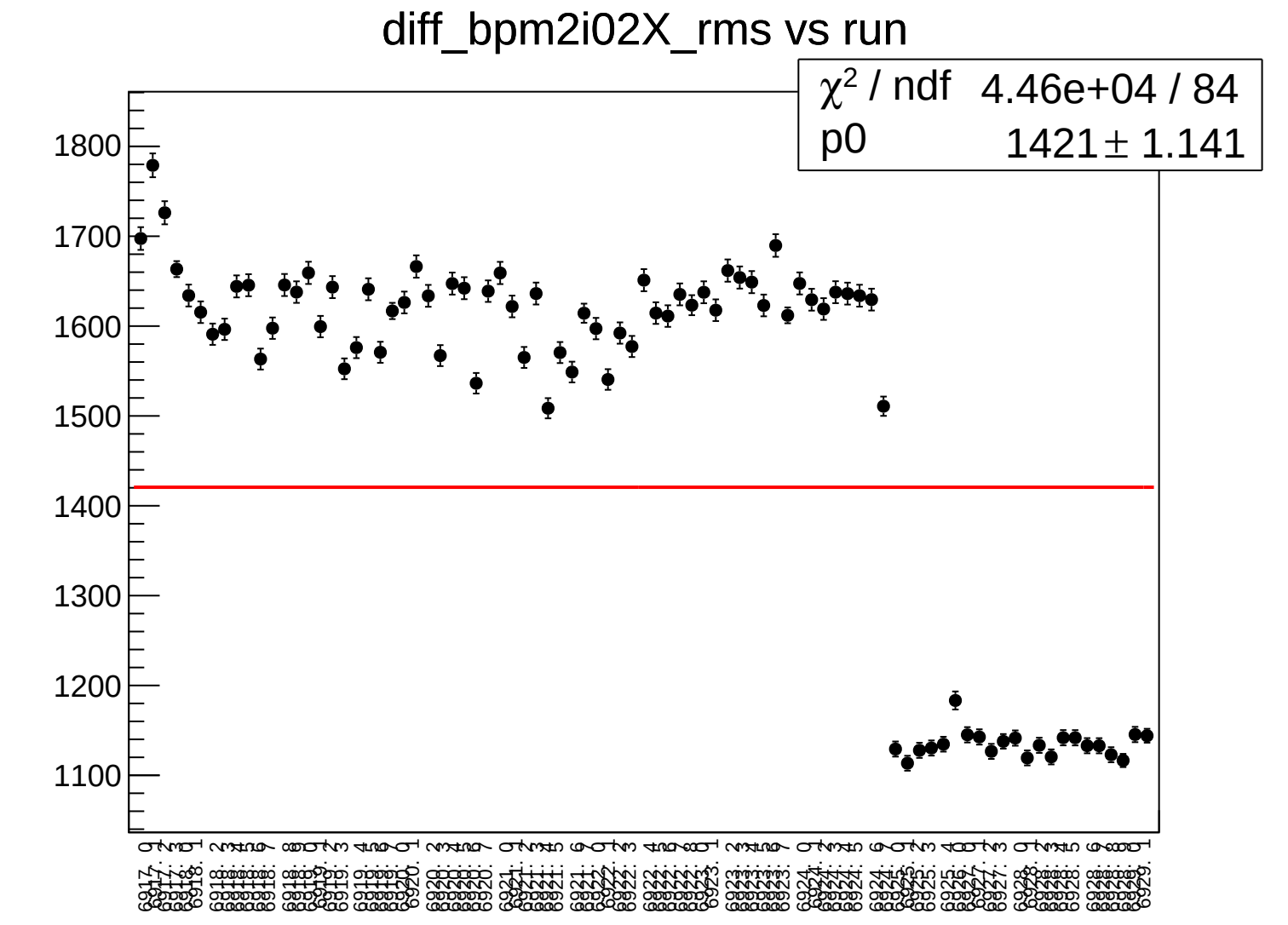

diff_bpm2i01Y_mean vs run
χ^2 / ndf 86.82 / 84
p0 4.193 ± 1.622
pull
Entries 85
Mean 34.55
Std Dev 48.81

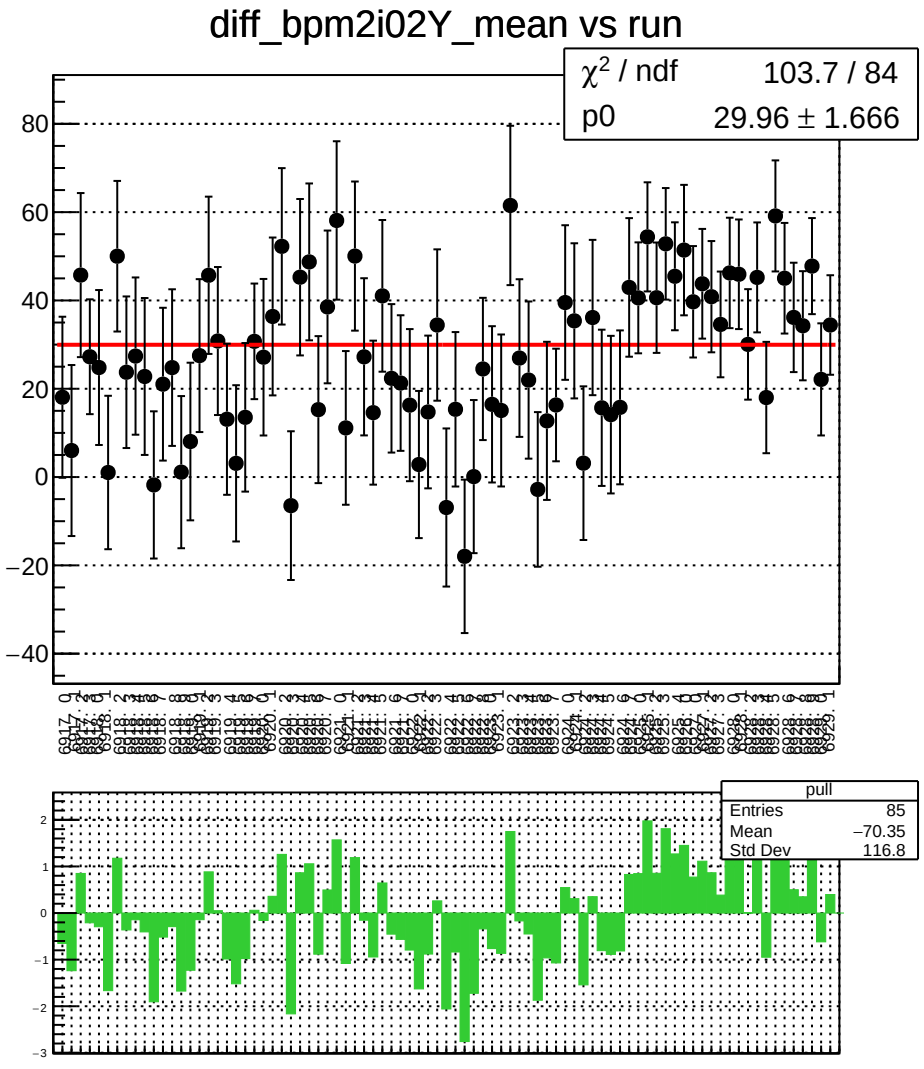

pull1D
Entries 85
Mean −0.0203
Std Dev 1.01

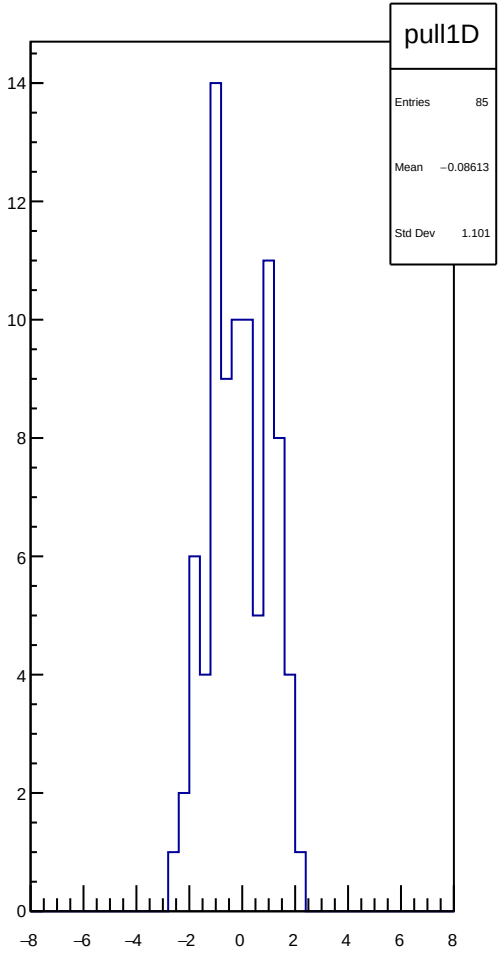

diff_bpm2i01Y_rms vs run
χ² / ndf 3.88e+04 / 84
p0 1431 ± 1.147
1800
1700
1600
1500
1400
1300
1200
1100

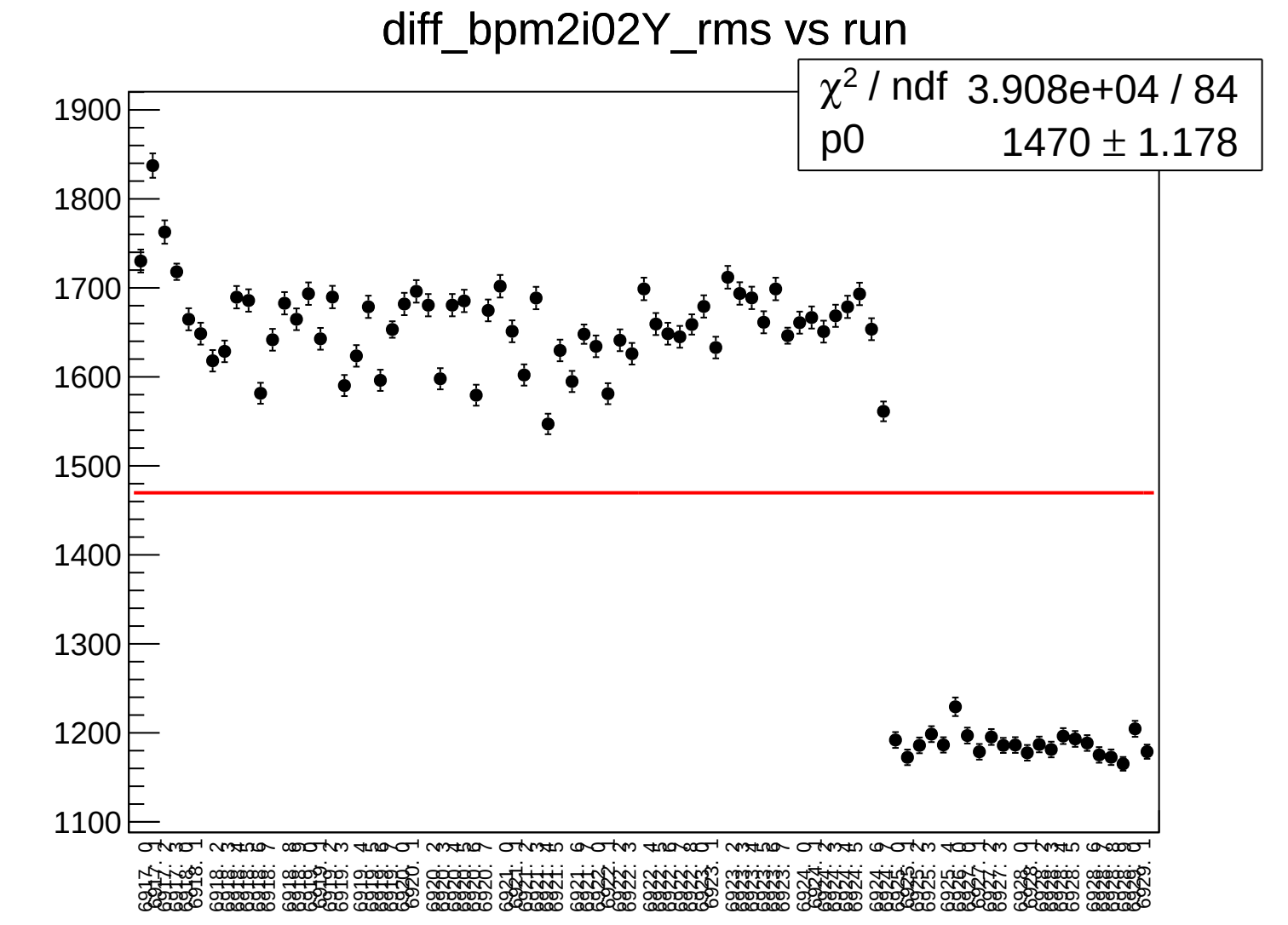

diff_bpm2i02X_mean vs run
χ^2 / ndf 142.2 / 84
p0 −24.75 ± 1.614
pull
Entries 85
Mean −105.4
Std Dev 150.7

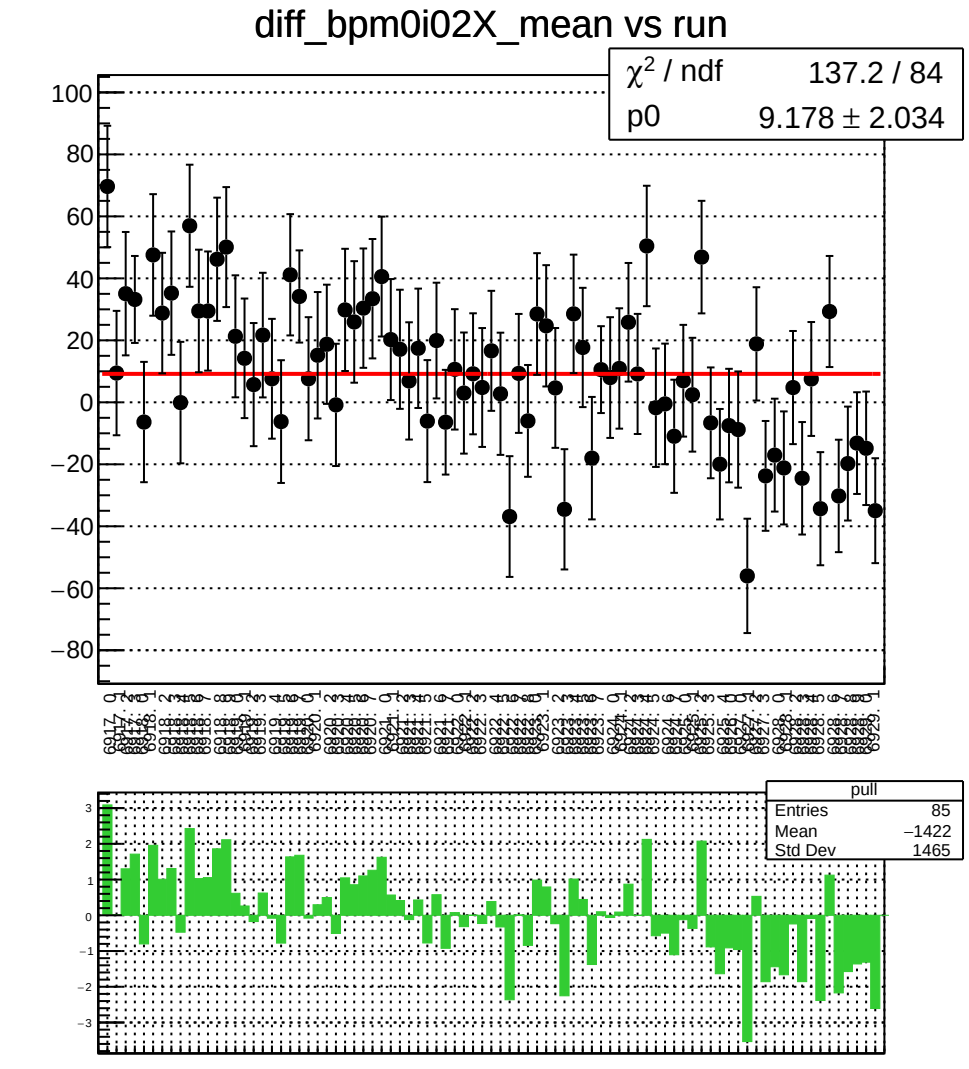

pull1D
Entries 85
Mean 0.12
Std Dev 1.288

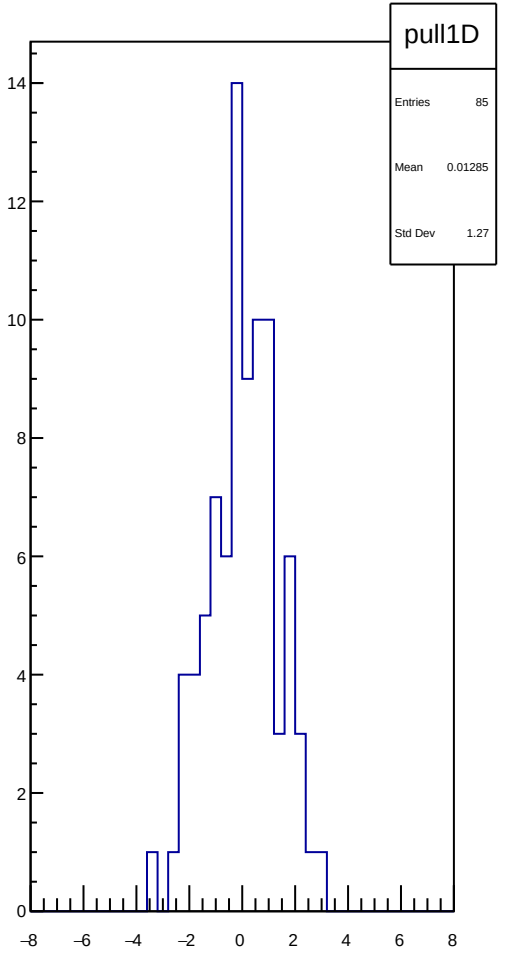

diff_bpm2i02X_rms vs run
χ² / ndf 4.46e+04 / 84
p0 1421 ± 1.141
1800
1700
1600
1500
1400
1300
1200
1100

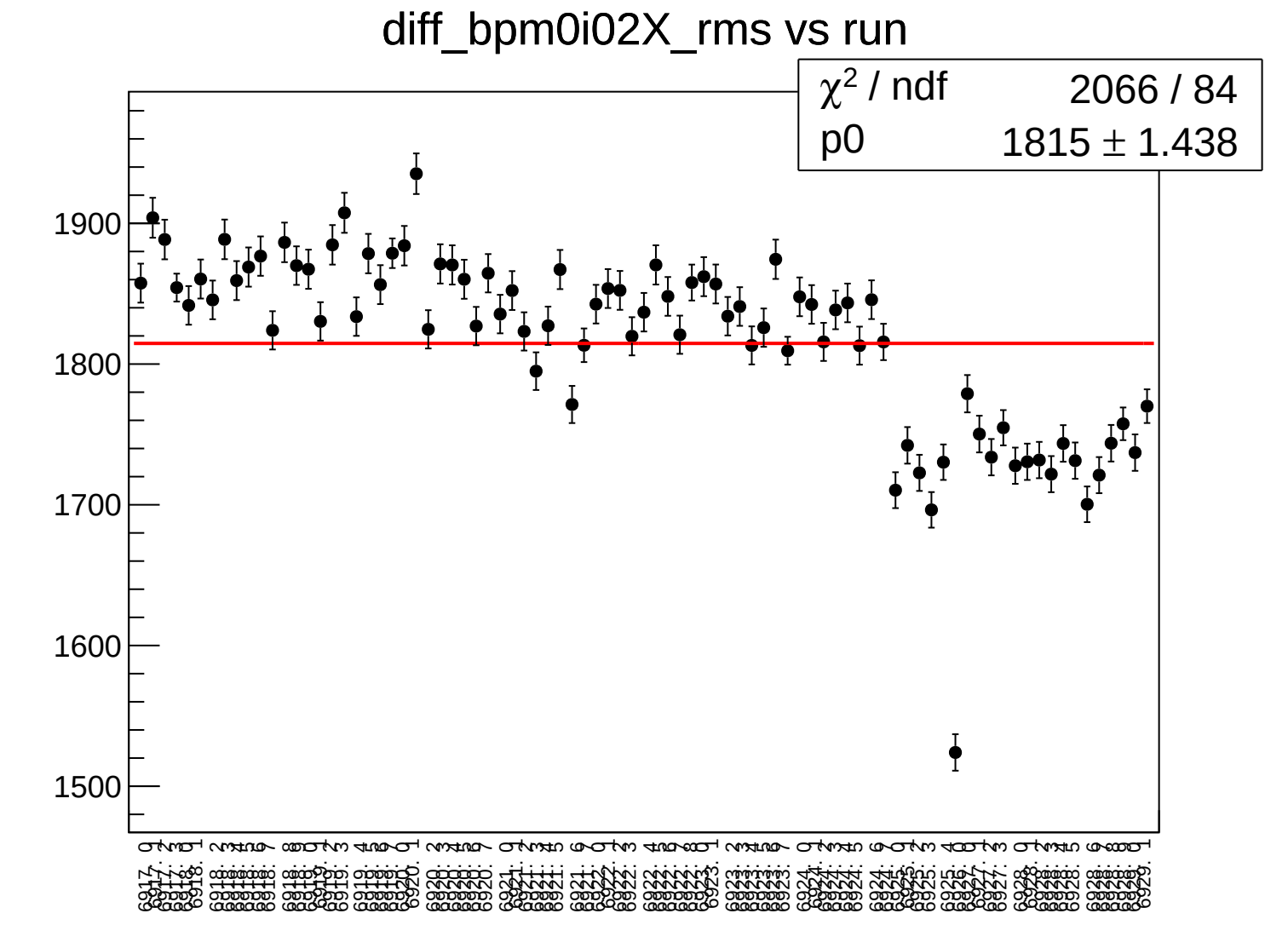

diff_bpm2i02Y_mean vs run
χ² / ndf 103.7 / 84
p0 29.96 ± 1.666
pull
Entries 85
Mean −70.35
Std Dev 116.8

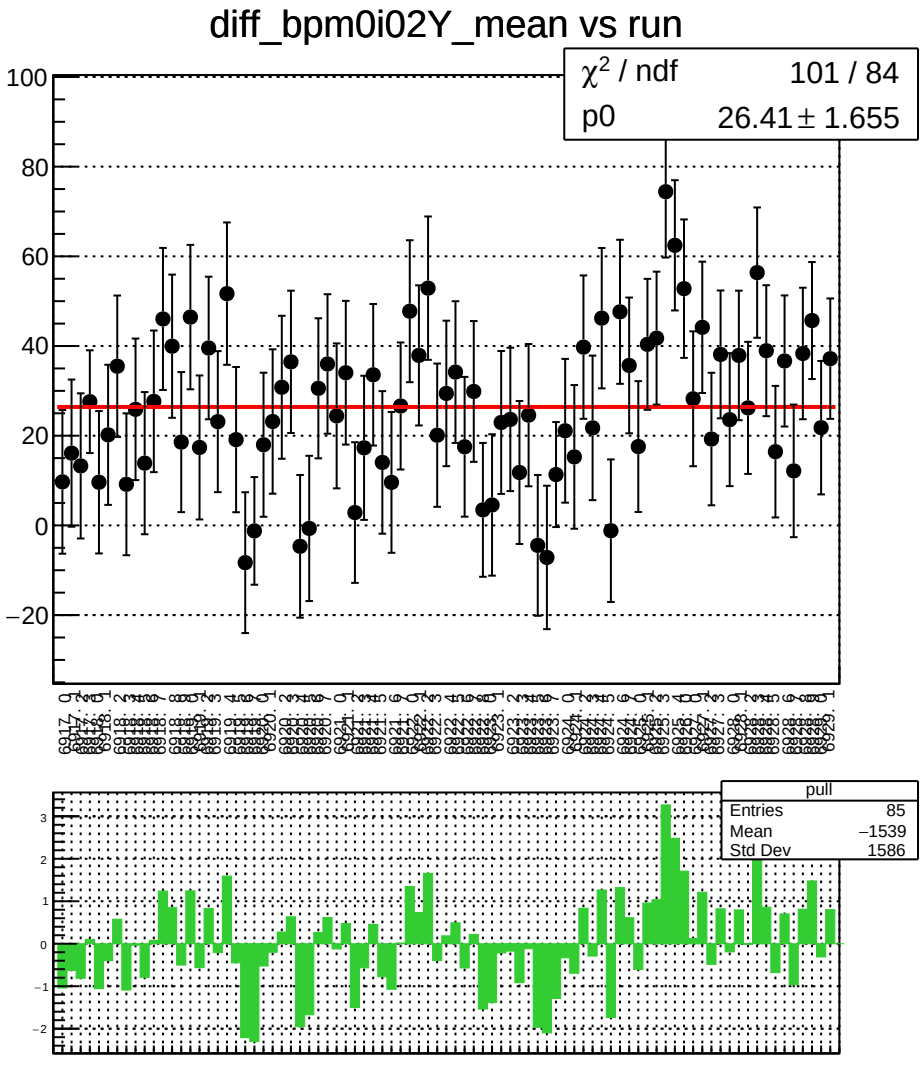

pull1D
Entries 85
Mean −0.08613
Std Dev 1.101

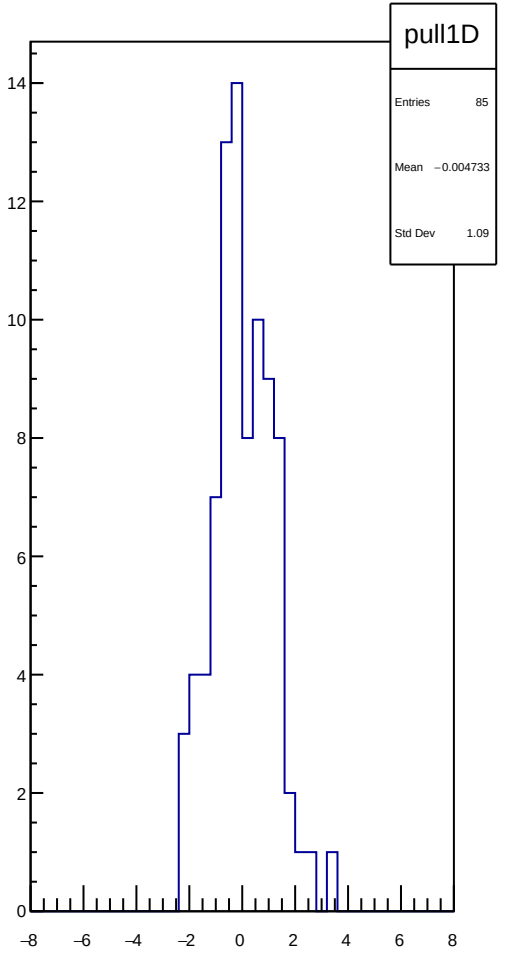

diff_bpm2i02Y_rms vs run
χ² / ndf 3.908e+04 / 84
p0 1470 ± 1.178
1900
1800
1700
1600
1500
1400
1300
1200
1100

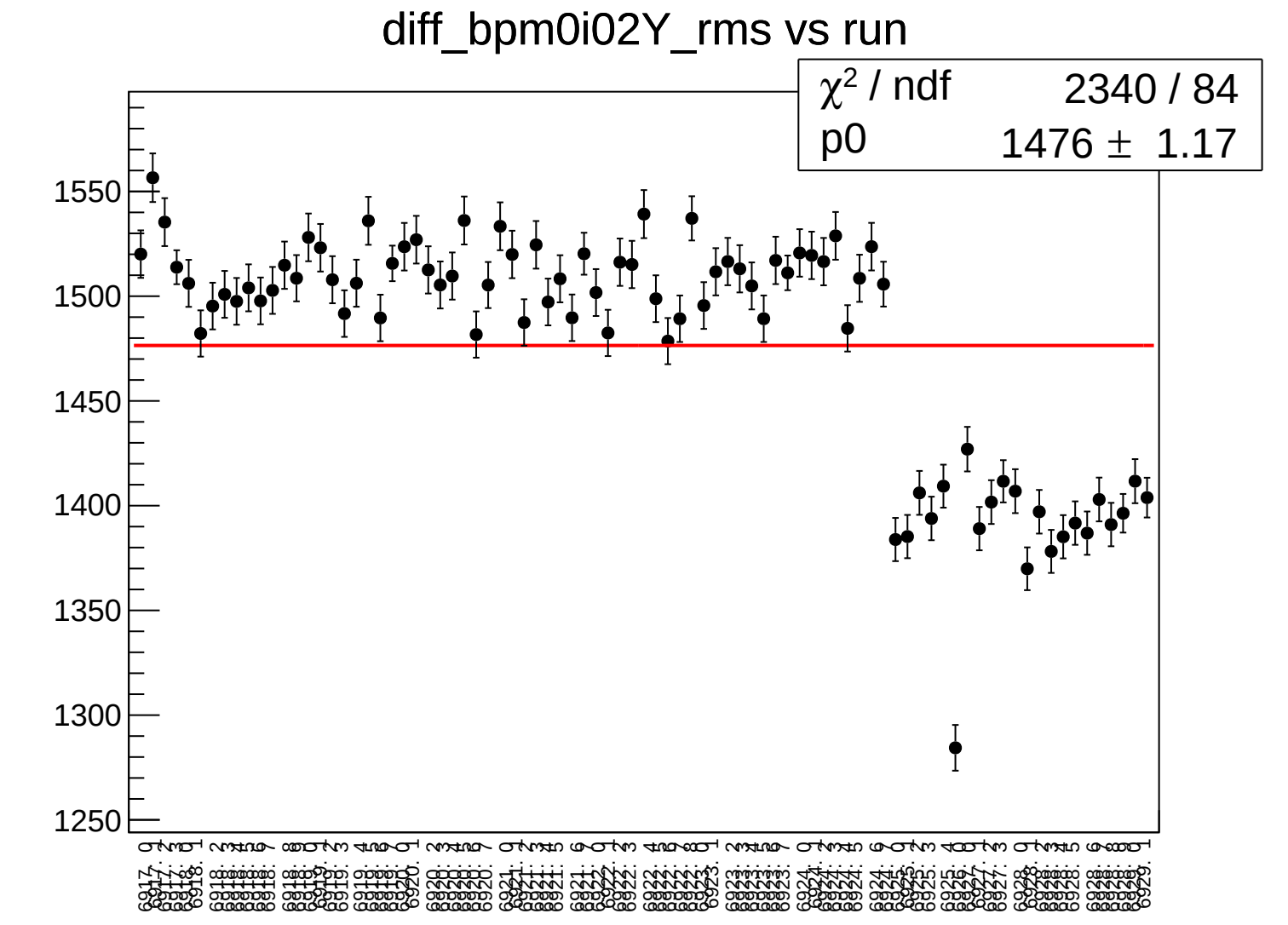

diff_bpm0i02X_mean vs run
χ² / ndf 137.2 / 84
p0 9.178 ± 2.034
pull
Entries 85
Mean −1422
Std Dev 1465

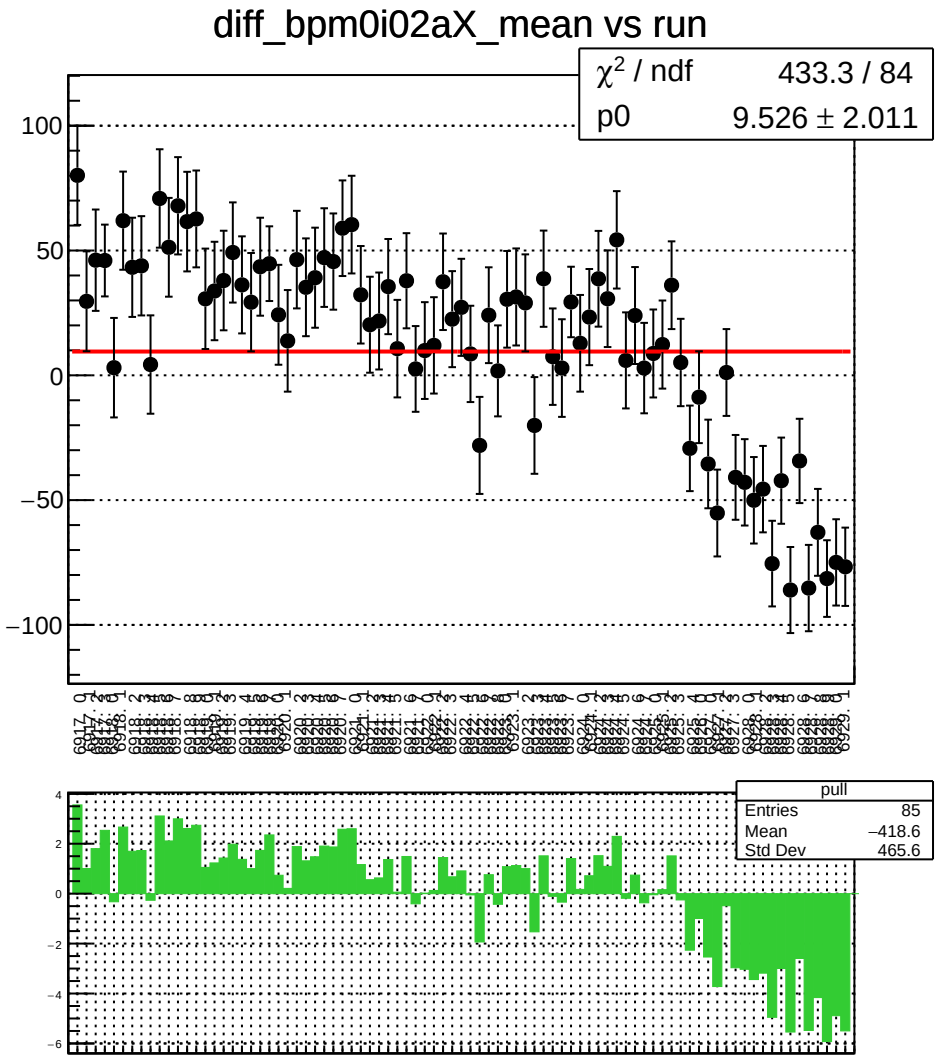

pull1D
Entries 85
Mean 0.01285
Std Dev 1.27

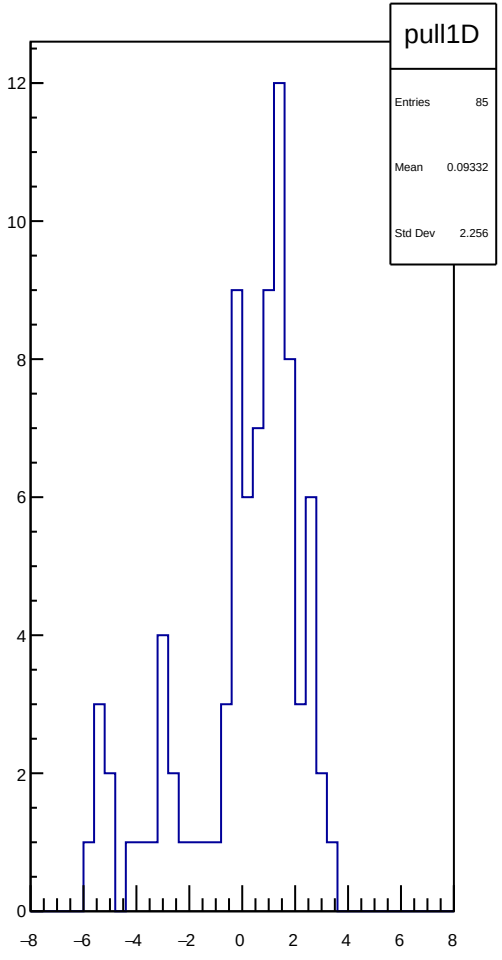

diff_bpm0i02X_rms vs run
χ^2 / ndf 2066 / 84
p0 1815 ± 1.438
1900
1800
1700
1600
1500

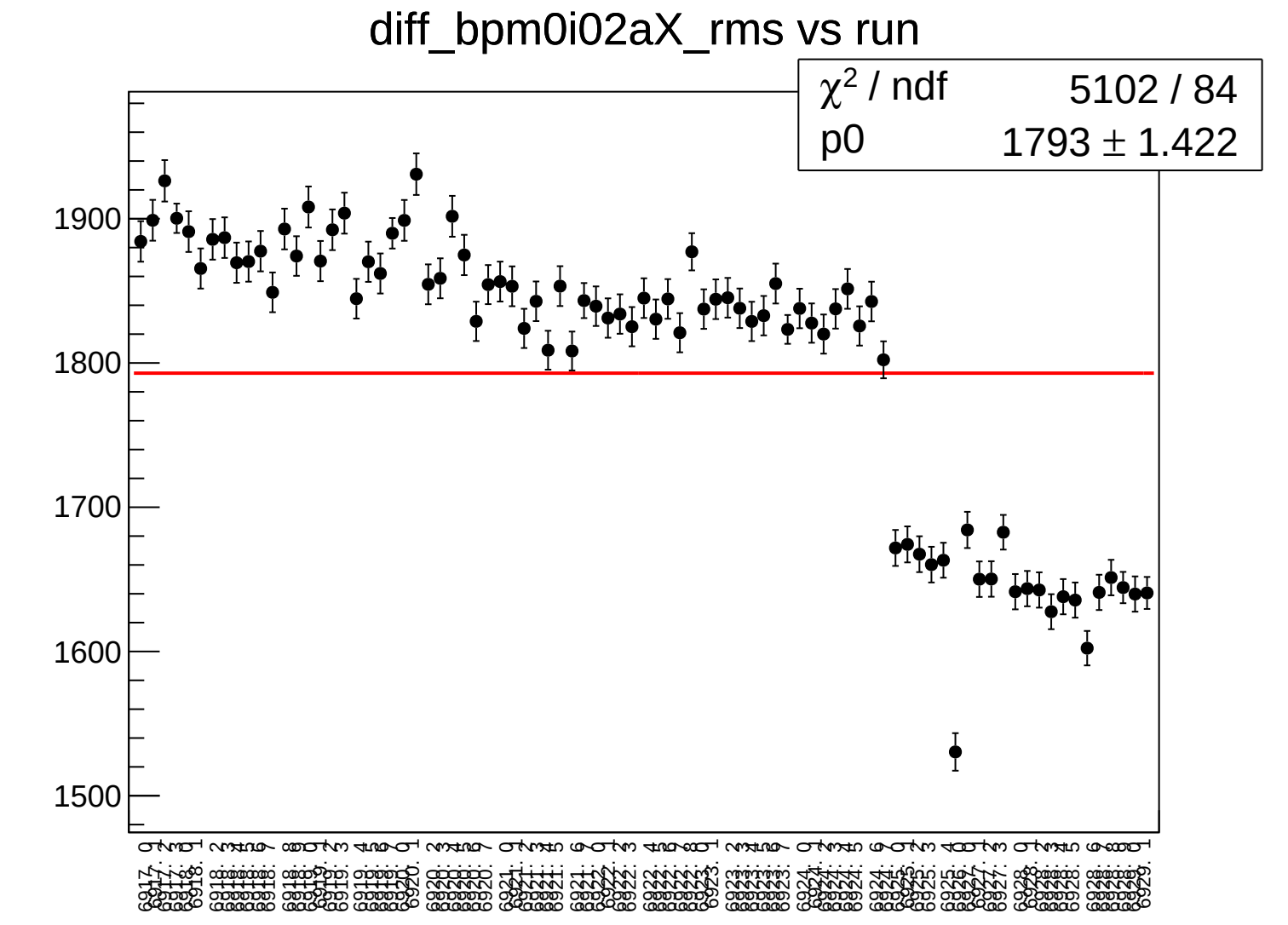

diff_bpm0i02Y_mean vs run
χ² / ndf 101 / 84
p0 26.41 ± 1.655
pull
Entries 85
Mean −1539
Std Dev 1586

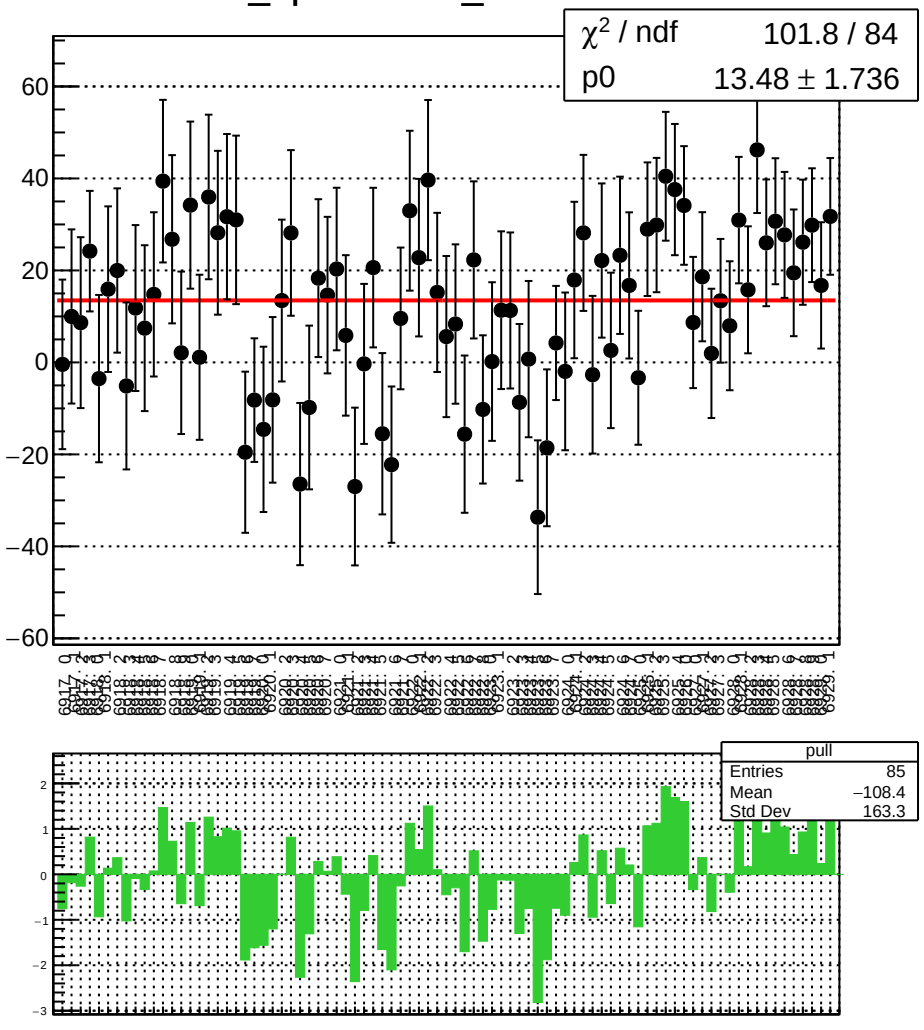

pull1D
Entries 85
Mean −0.004733
Std Dev 1.09

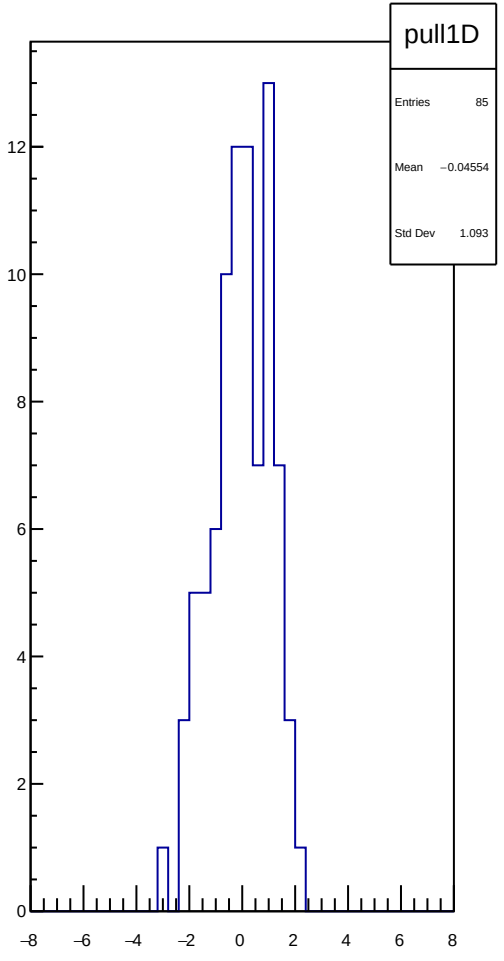

diff_bpm0i02Y_rms vs run
χ² / ndf 2340 / 84
p0 1476 ± 1.17
1550
1500
1450
1400
1350
1300
1250

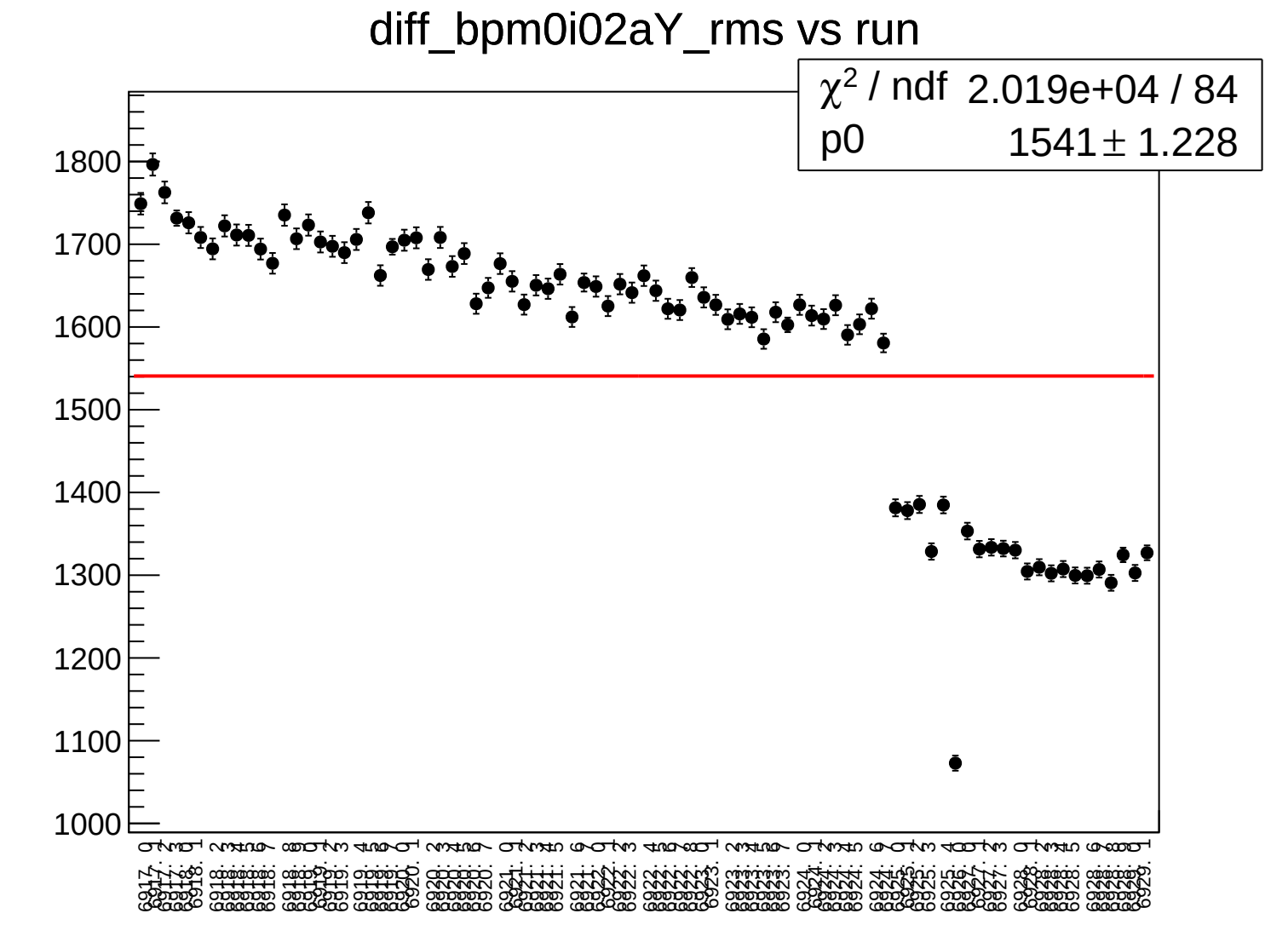

diff_bpm0i02aX_mean vs run
χ^2 / ndf 433.3 / 84
p0 9.526 ± 2.011
100
50
0
−50
−100
pull
Entries 85
Mean −418.6
Std Dev 465.6
4
2
0
−2
−4
−6

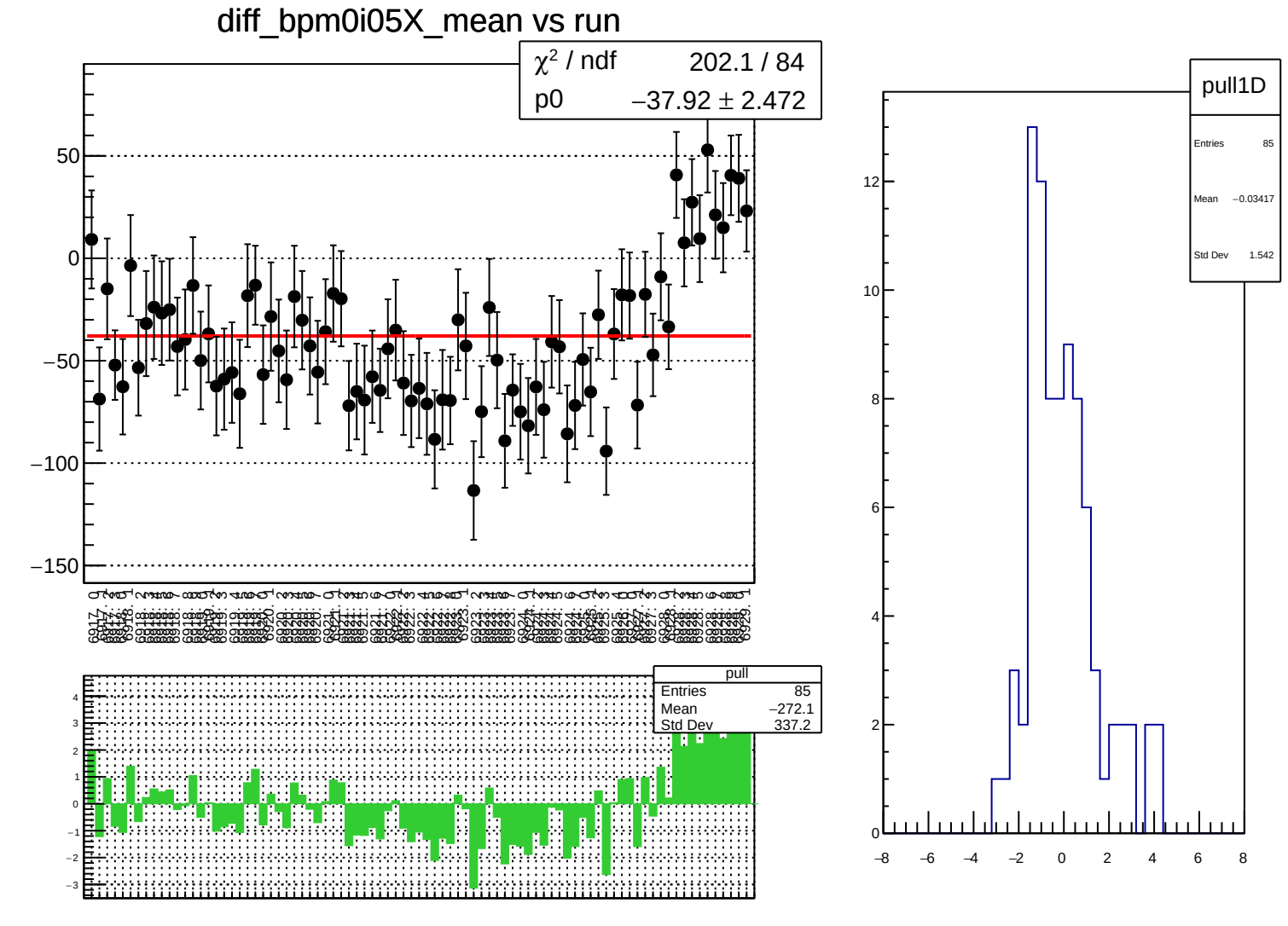

pull1D
Entries 85
Mean 0.09332
Std Dev 2.256
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

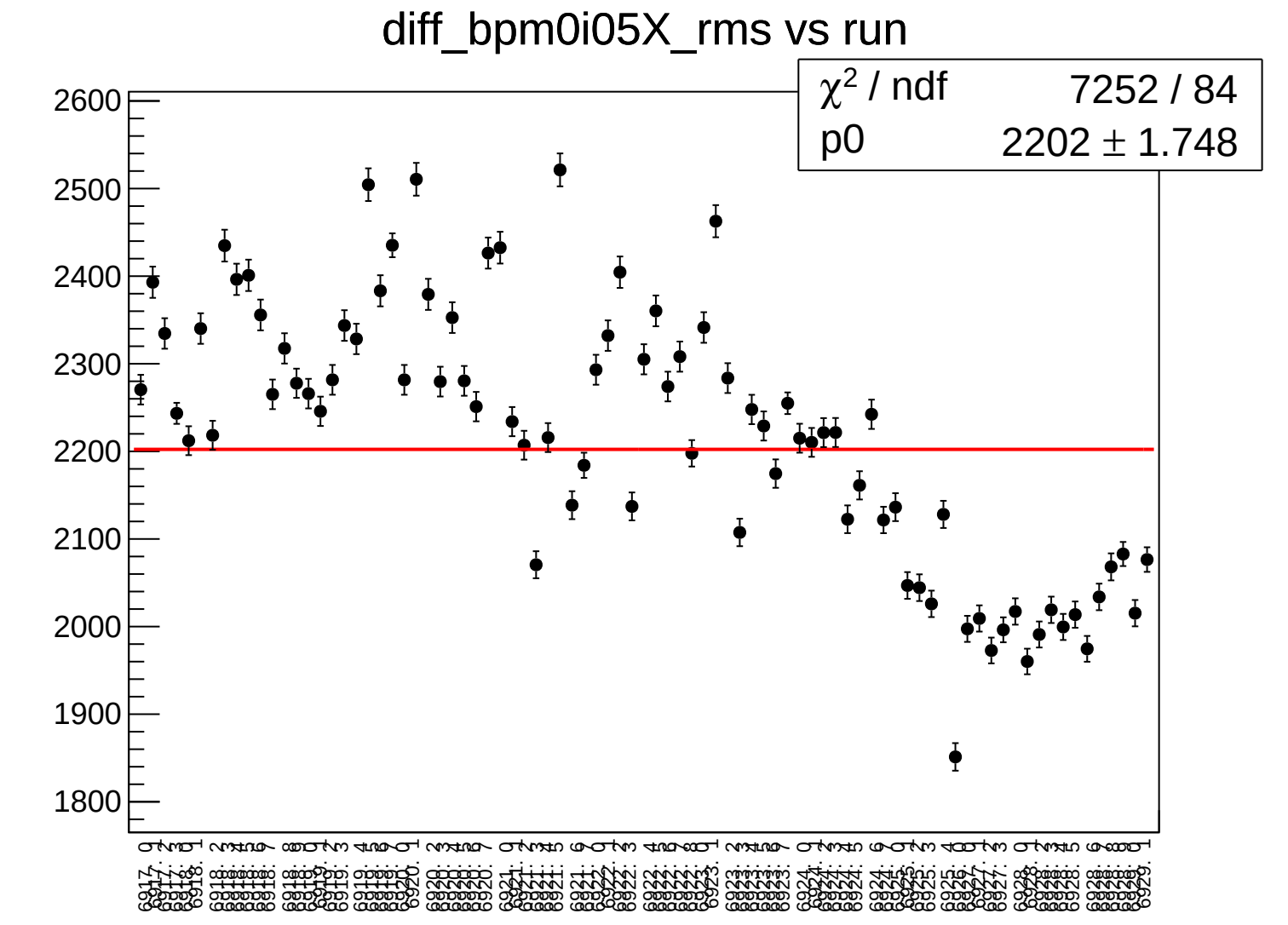

diff_bpm0i02aX_rms vs run
χ² / ndf 5102 / 84
p0 1793 ± 1.422
1900
1800
1700
1600
1500

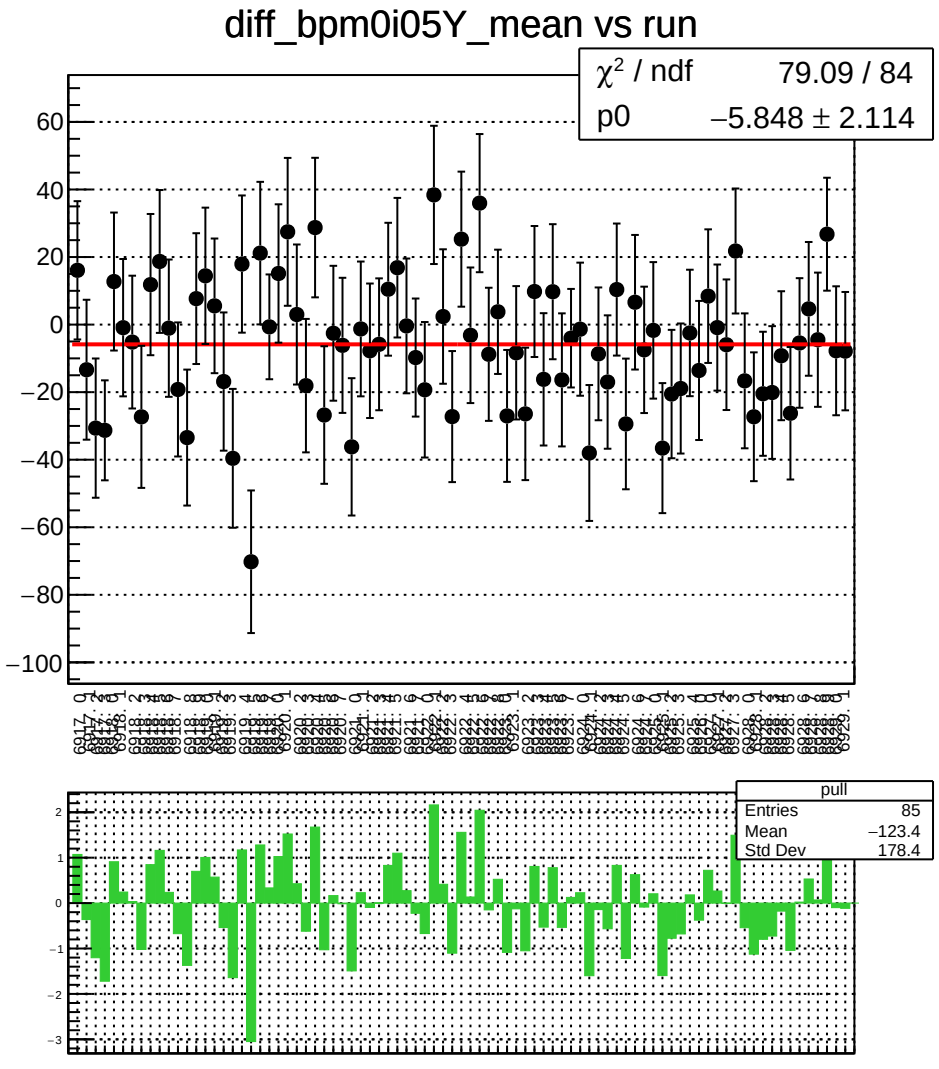

diff_bpm0i02aY_mean vs run
χ² / ndf 101.8 / 84
p0 13.48 ± 1.736
pull
Entries 85
Mean −108.4
Std Dev 163.3

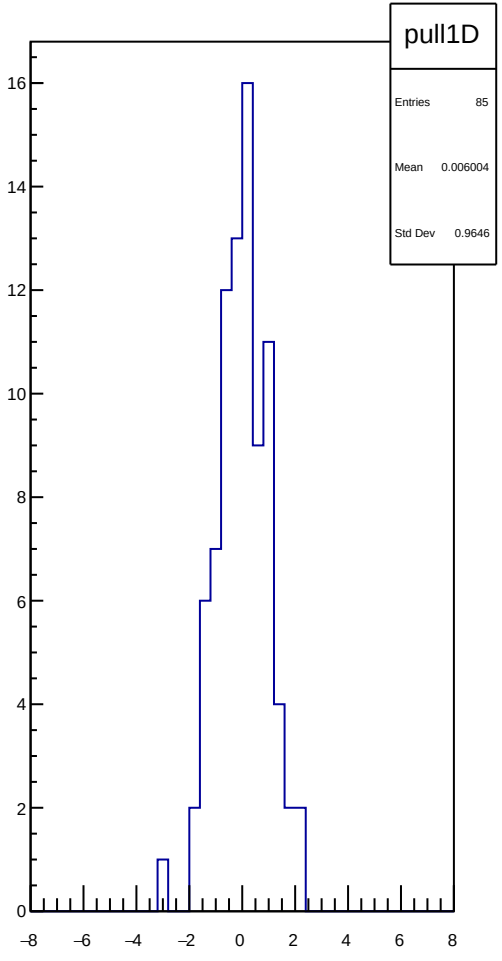

pull1D
Entries 85
Mean −0.04554
Std Dev 1.093

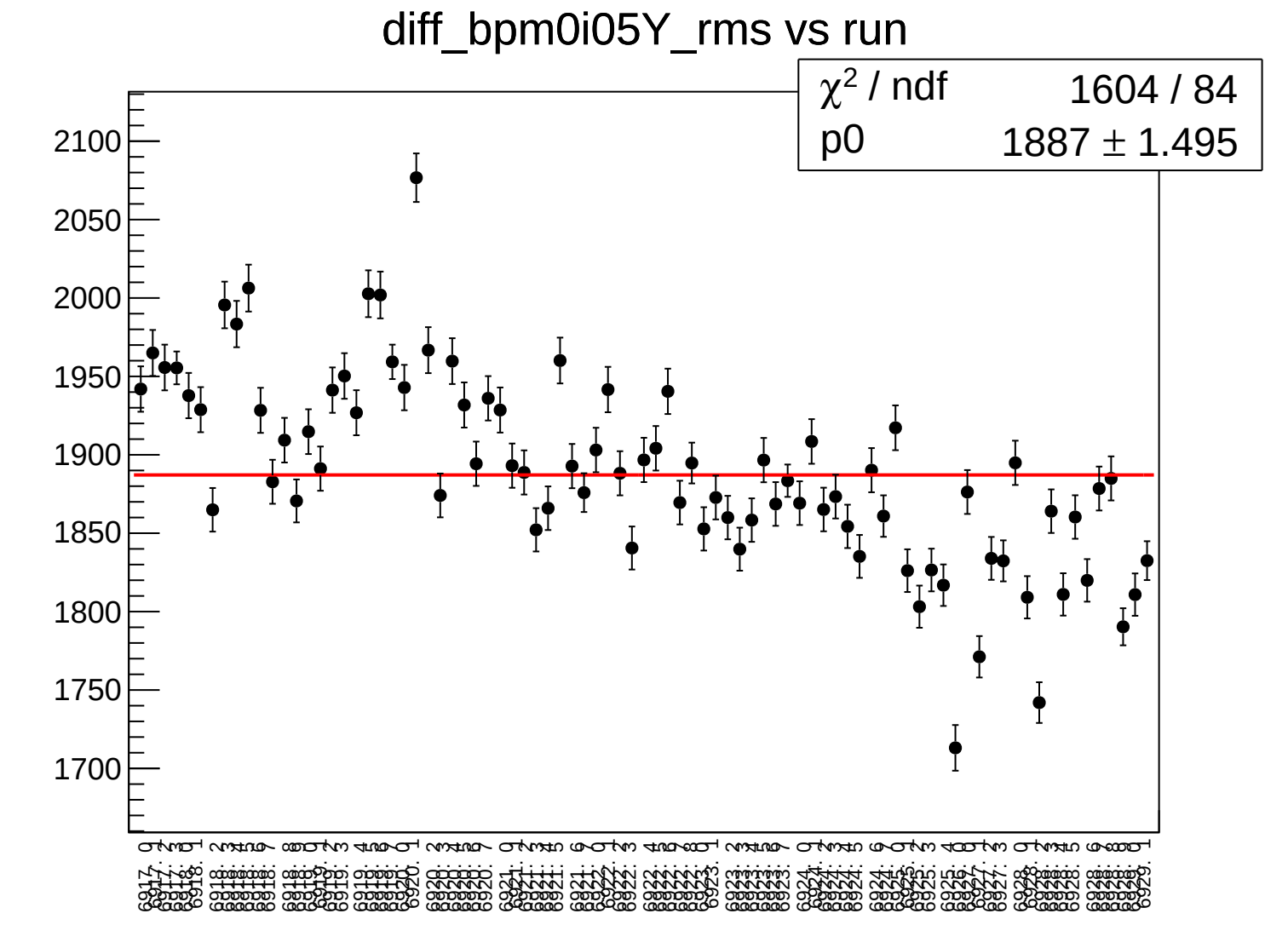

diff_bpm0i02aY_rms vs run
χ² / ndf 2.019e+04 / 84
p0 1541 ± 1.228
1800
1700
1600
1500
1400
1300
1200
1100
1000

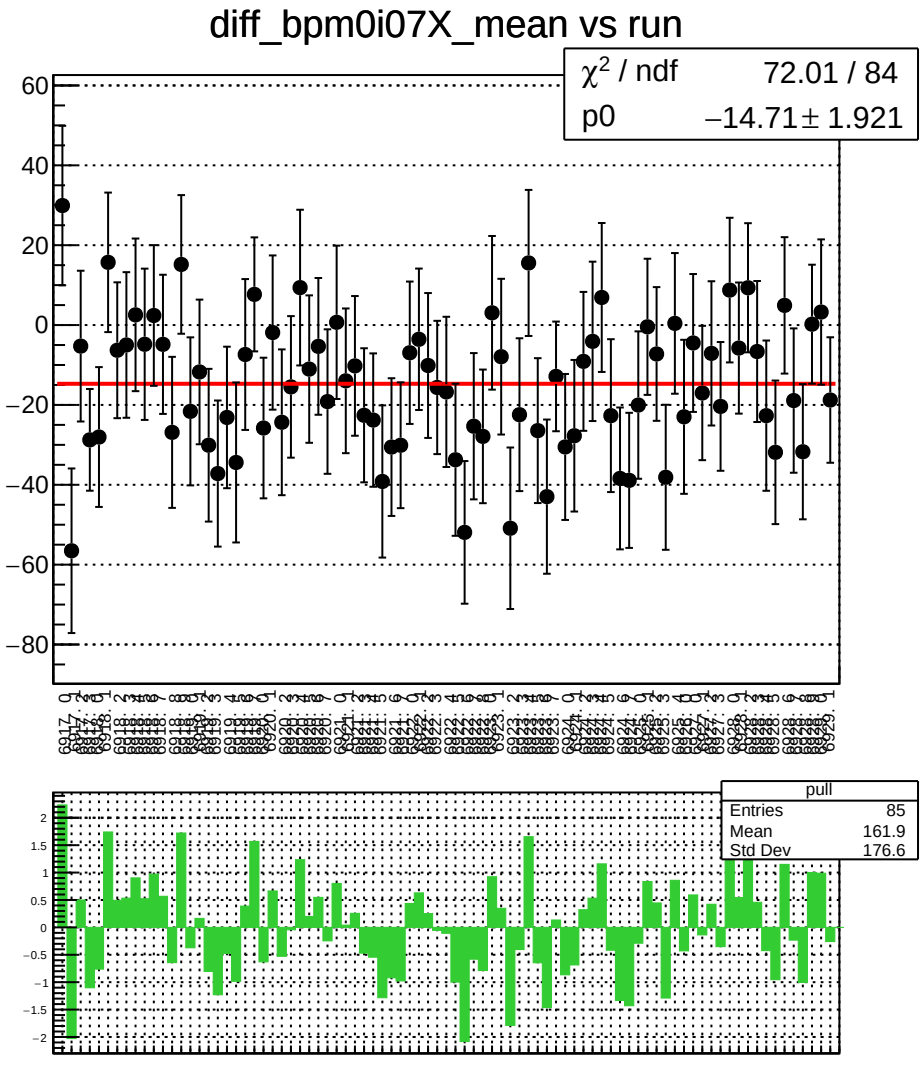

diff_bpm0i05X_mean vs run
χ² / ndf 202.1 / 84
p0 −37.92 ± 2.472
50
0
−50
−100
−150
pull
Entries 85
Mean −272.1
Std Dev 337.2
4
3
2
1
0
−1
−2
−3
pull1D
Entries 85
Mean −0.03417
Std Dev 1.542
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

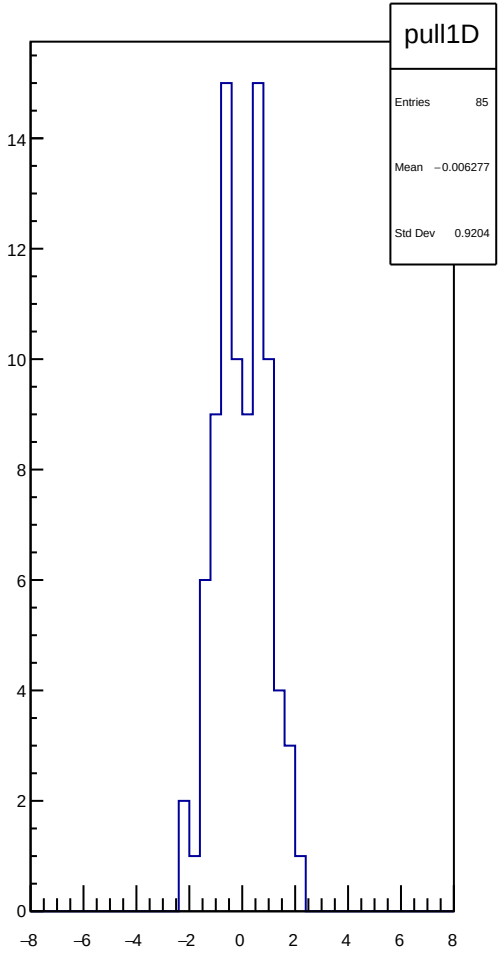

diff_bpm0i05X_rms vs run
χ² / ndf 7252 / 84
p0 2202 ± 1.748
2600
2500
2400
2300
2200
2100
2000
1900
1800

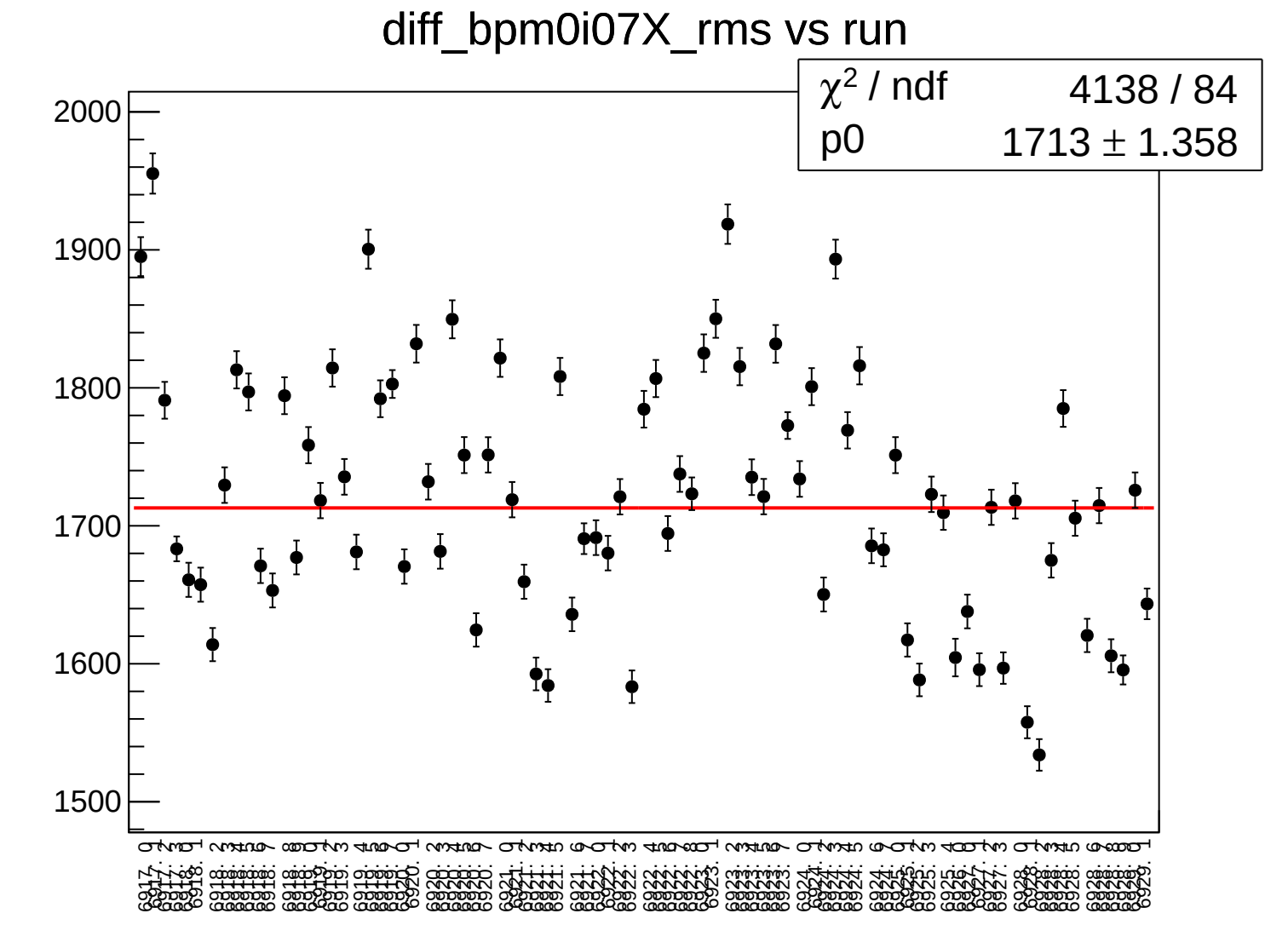

diff_bpm0i05Y_mean vs run
χ² / ndf 79.09 / 84
p0 −5.848 ± 2.114
pull
Entries 85
Mean −123.4
Std Dev 178.4

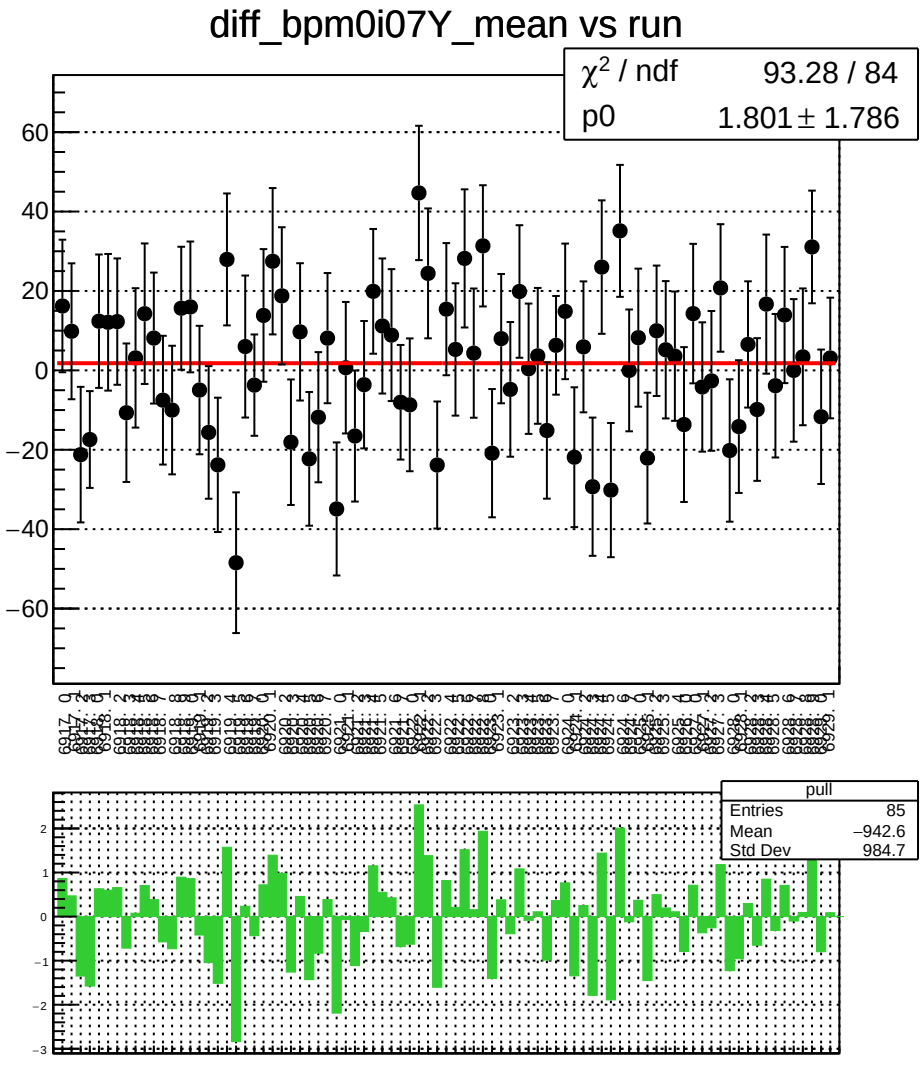

pull1D
Entries 85
Mean 0.006004
Std Dev 0.9646

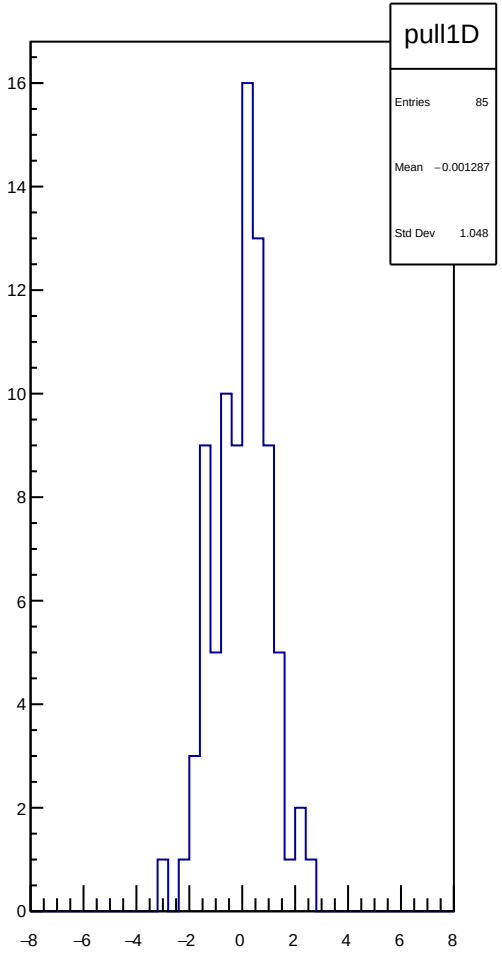

diff_bpm0i05Y_rms vs run
χ² / ndf 1604 / 84
p0 1887 ± 1.495
2100
2050
2000
1950
1900
1850
1800
1750
1700

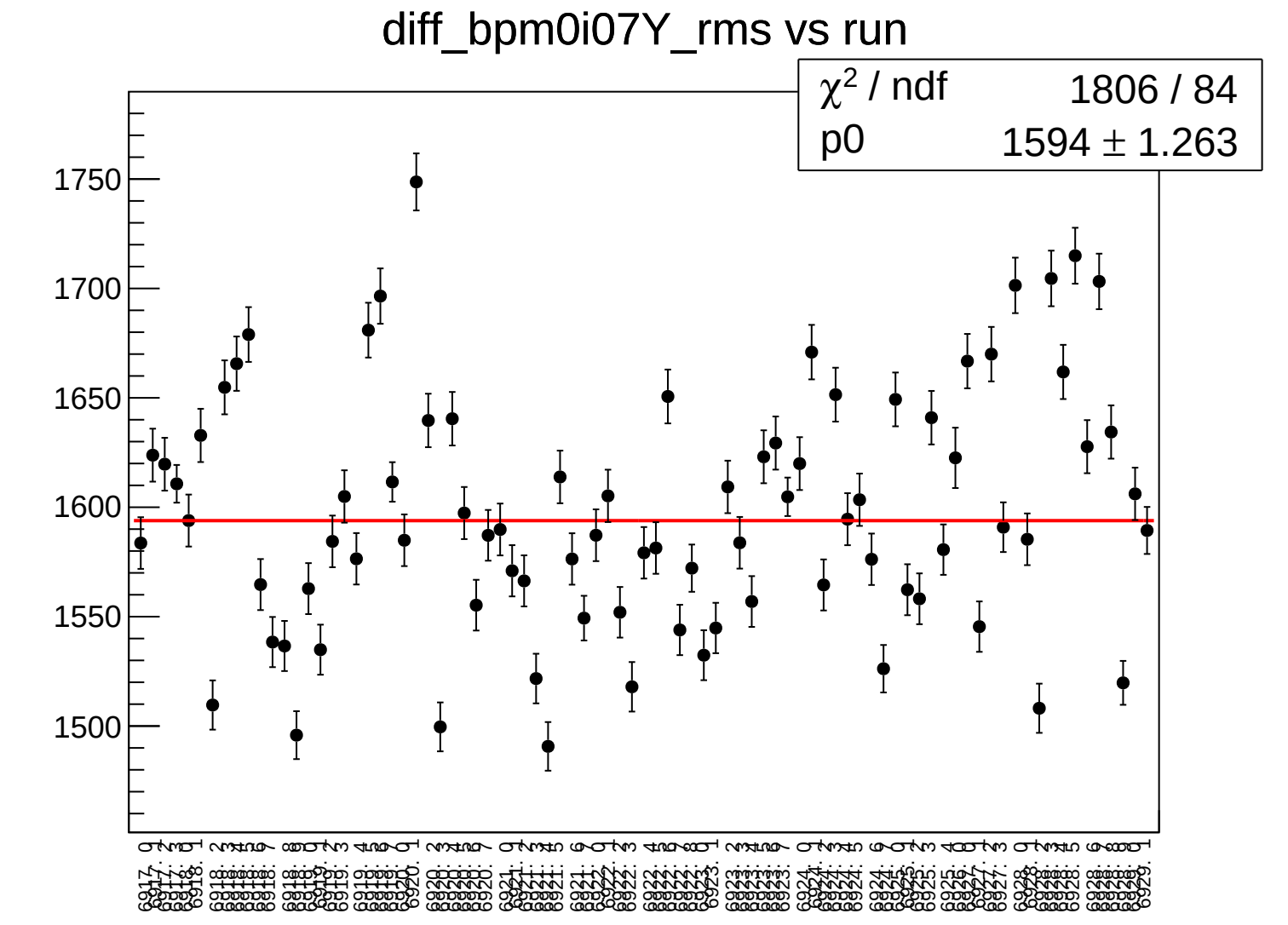

diff_bpm0i07X_mean vs run
χ² / ndf 72.01 / 84
p0 −14.71 ± 1.921
pull
Entries 85
Mean 161.9
Std Dev 176.6

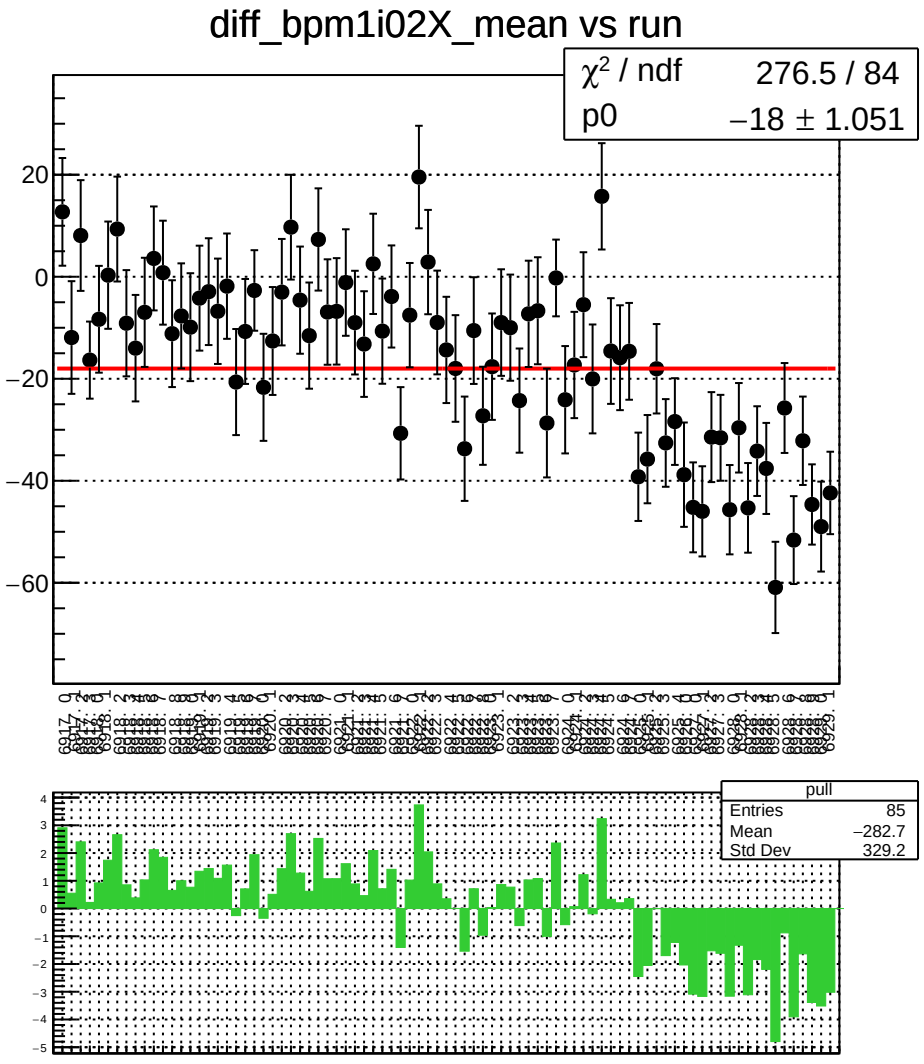

pull1D
Entries 85
Mean −0.006277
Std Dev 0.9204

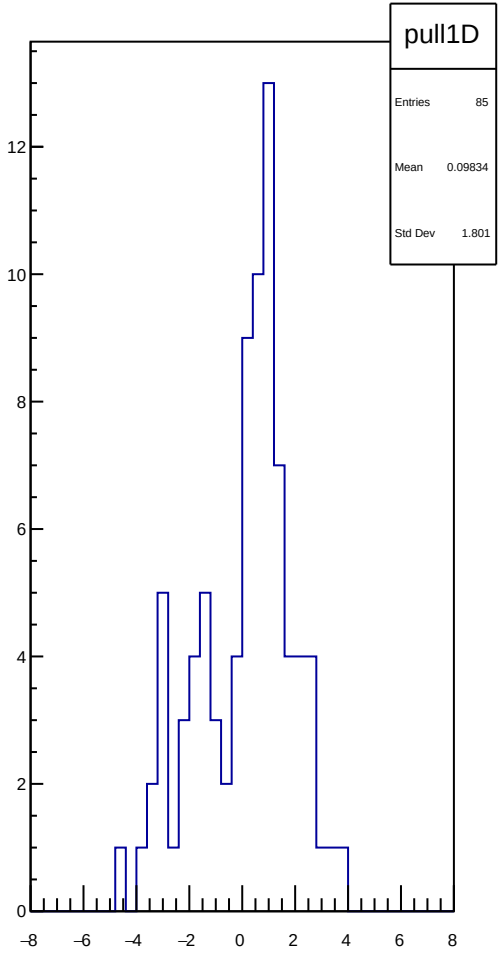

diff_bpm0i07X_rms vs run
χ² / ndf 4138 / 84
p0 1713 ± 1.358
2000
1900
1800
1700
1600
1500

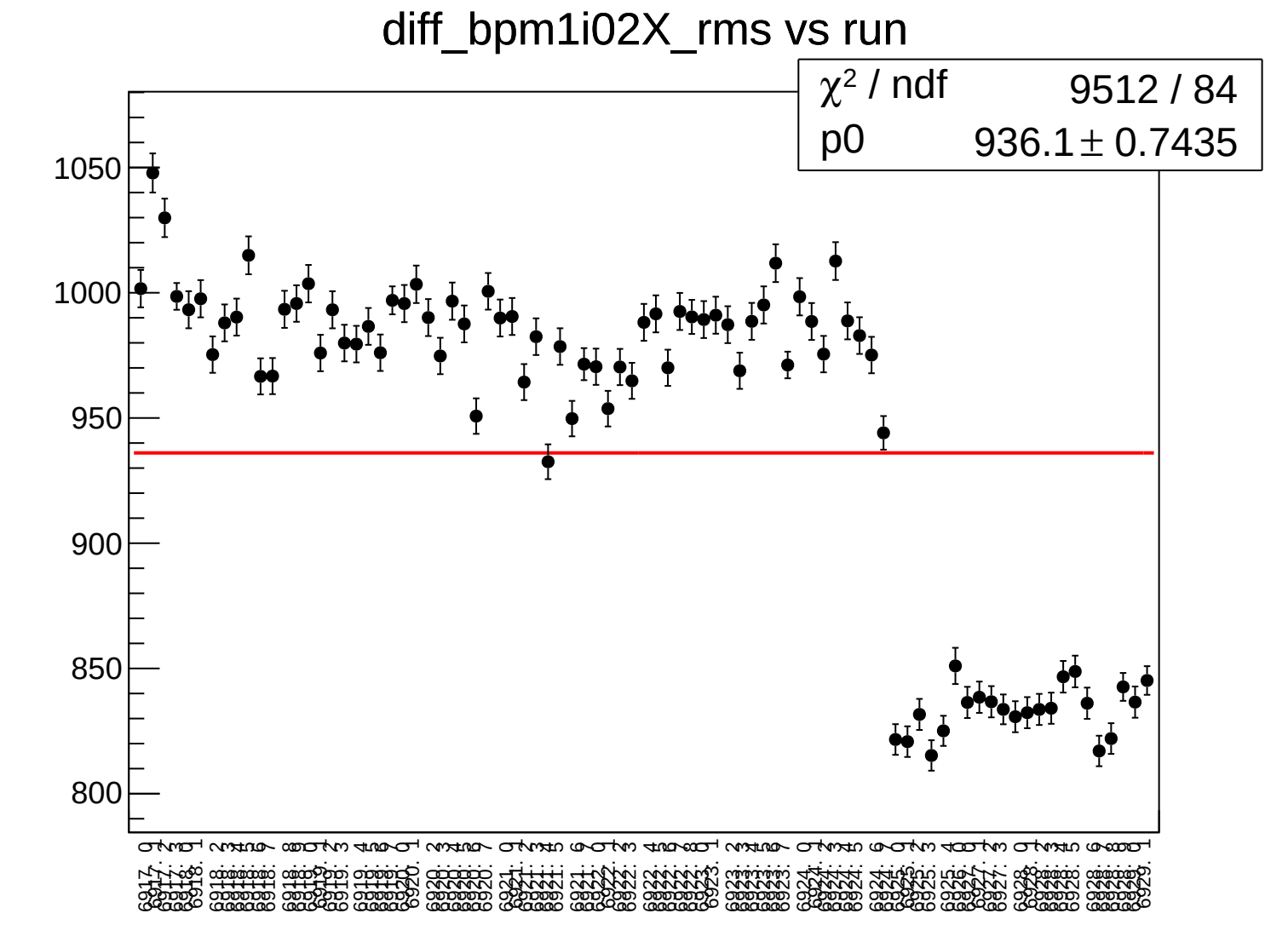

diff_bpm0i07Y_mean vs run
χ^2 / ndf 93.28 / 84
p0 1.801 ± 1.786
pull
Entries 85
Mean −942.6
Std Dev 984.7

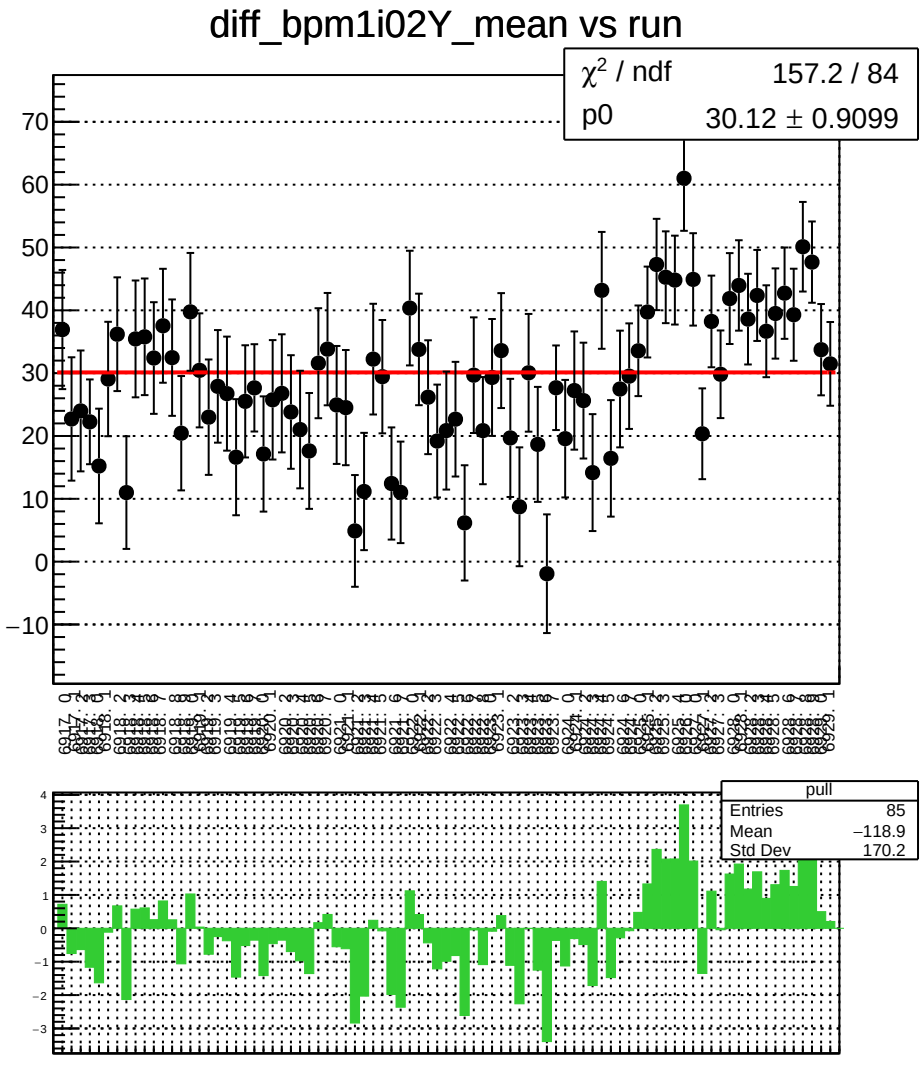

pull1D
Entries 85
Mean −0.001287
Std Dev 1.048

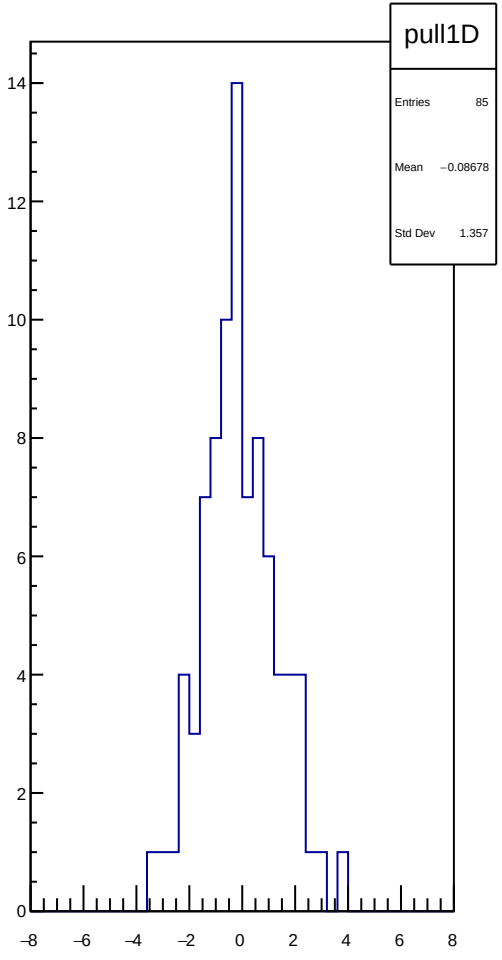

diff_bpm0i07Y_rms vs run
χ² / ndf 1806 / 84
p0 1594 ± 1.263
1750
1700
1650
1600
1550
1500

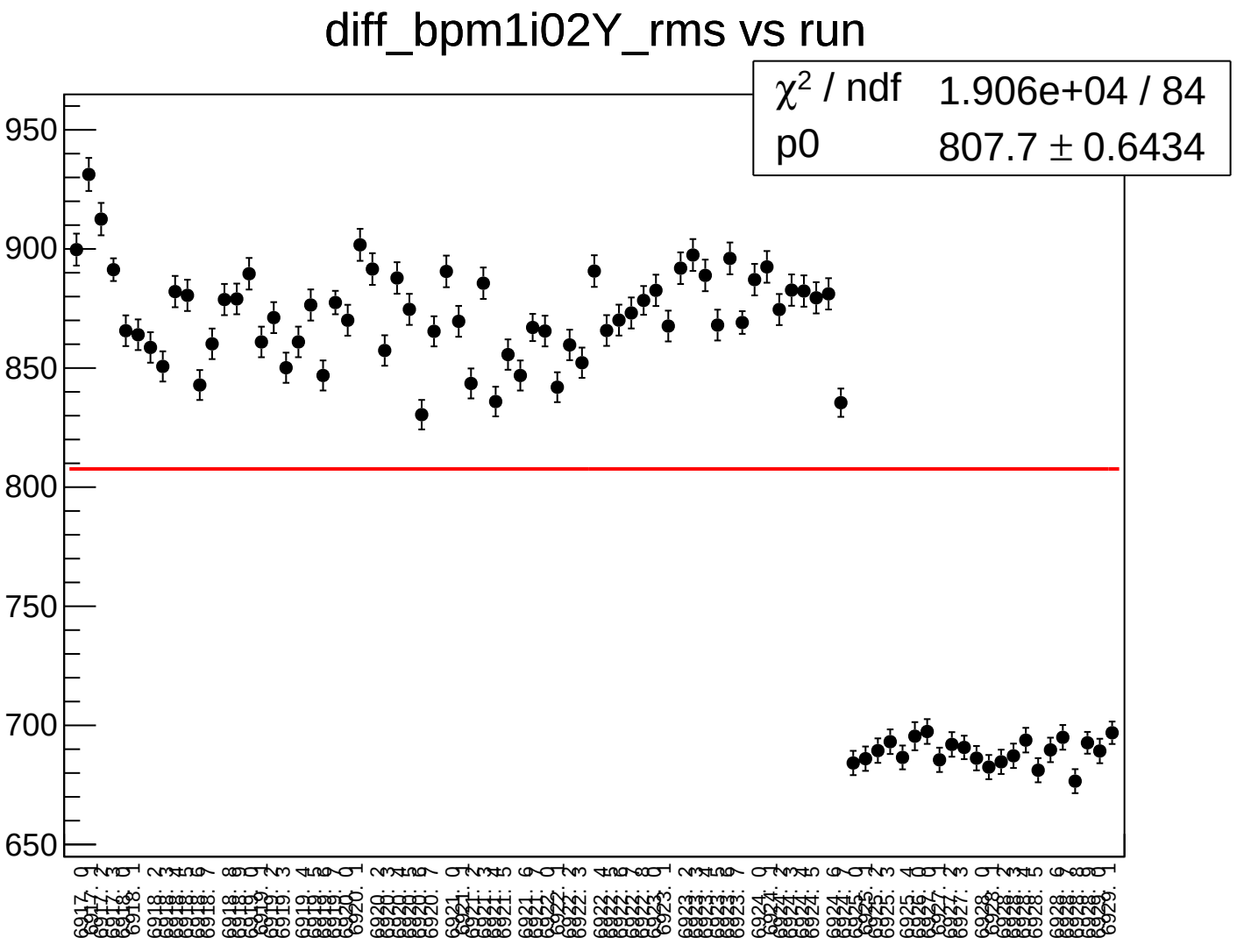

diff_bpm1i02X_mean vs run
χ² / ndf 276.5 / 84
p0 −18 ± 1.051
pull
Entries 85
Mean −282.7
Std Dev 329.2

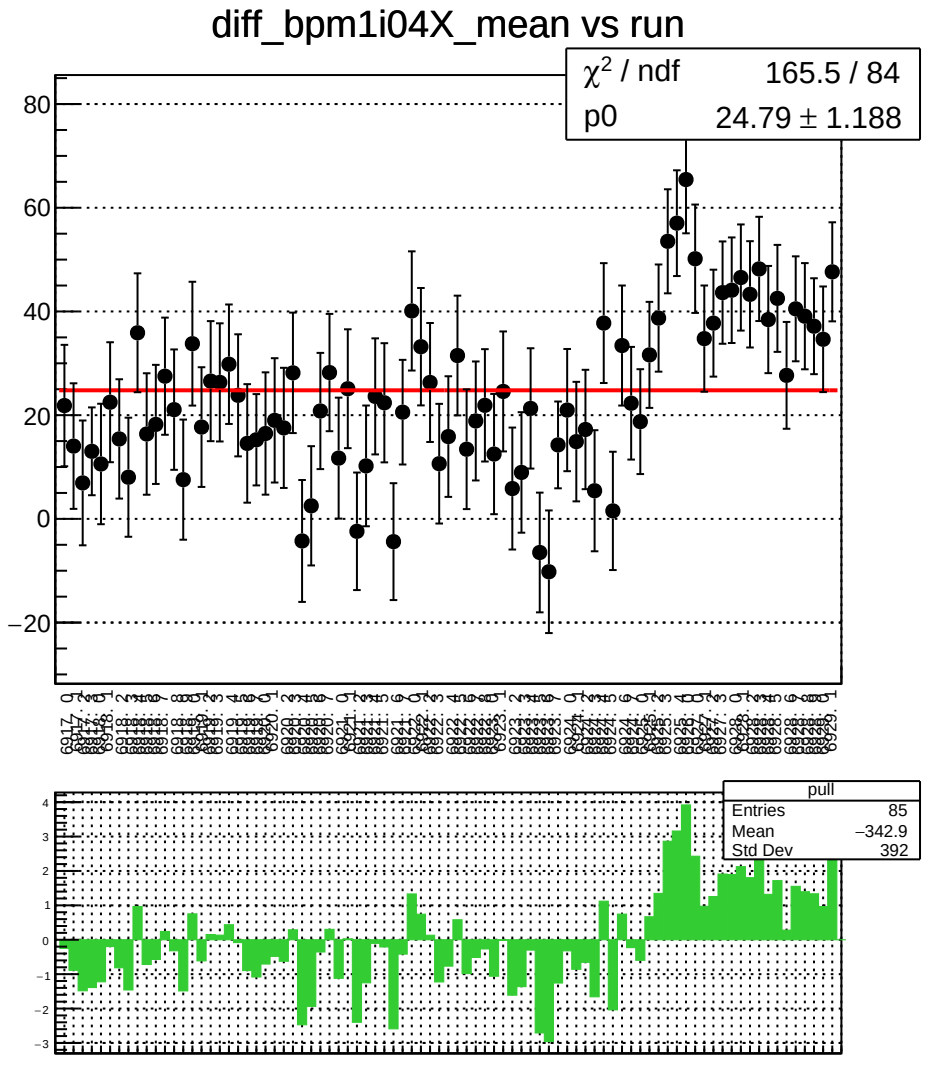

pull1D
Entries 85
Mean 0.09834
Std Dev 1.801

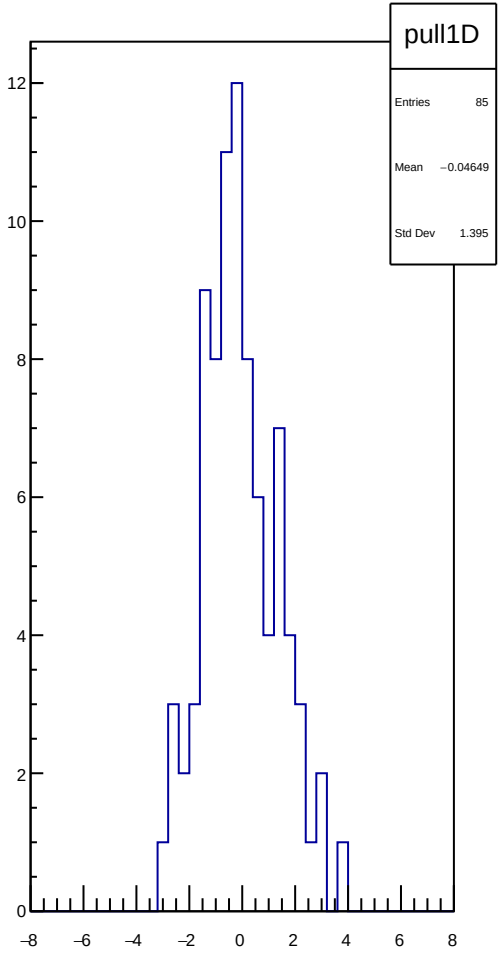

diff_bpm1i02X_rms vs run
χ² / ndf 9512 / 84
p0 936.1 ± 0.7435
1050
1000
950
900
850
800

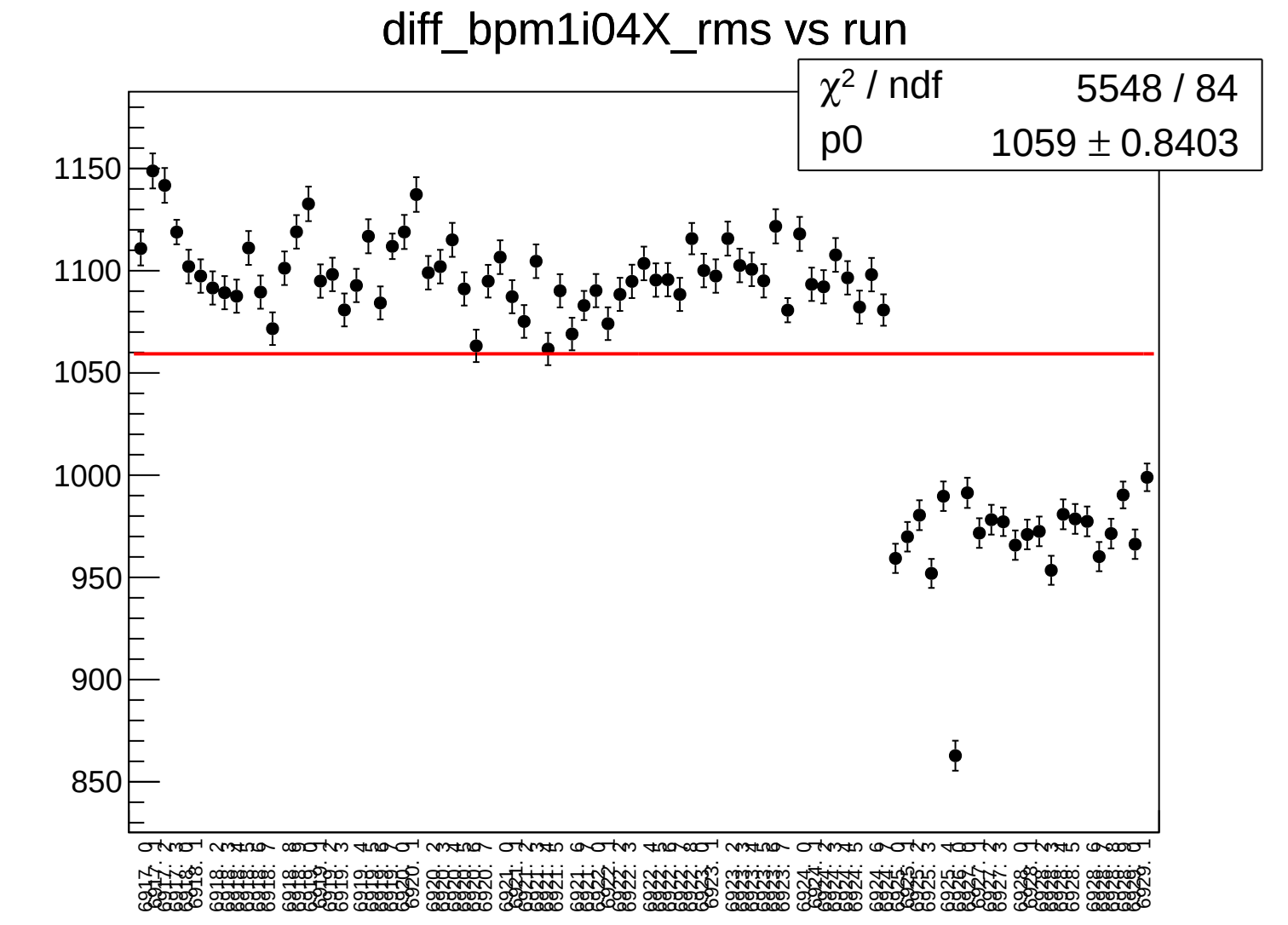

diff_bpm1i02Y_mean vs run
χ² / ndf 157.2 / 84
p0 30.12 ± 0.9099
pull
Entries 85
Mean −118.9
Std Dev 170.2

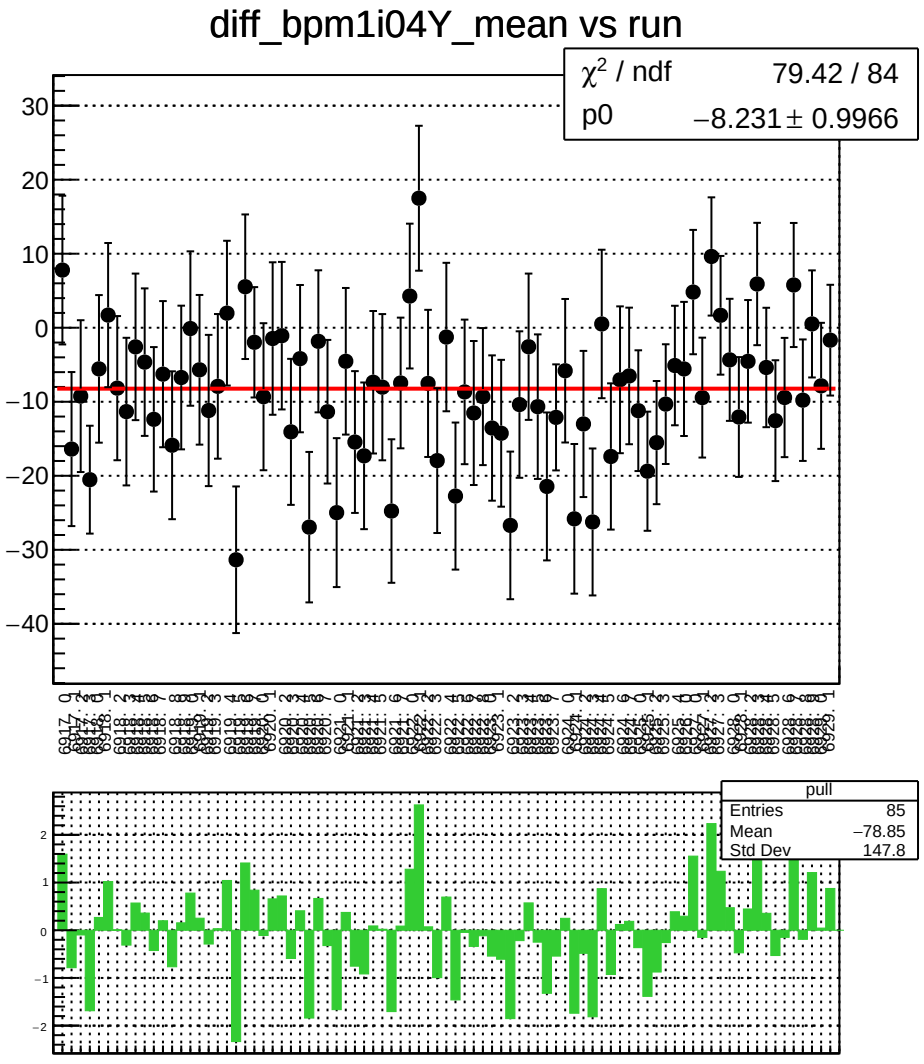

pull1D
Entries 85
Mean −0.08678
Std Dev 1.357

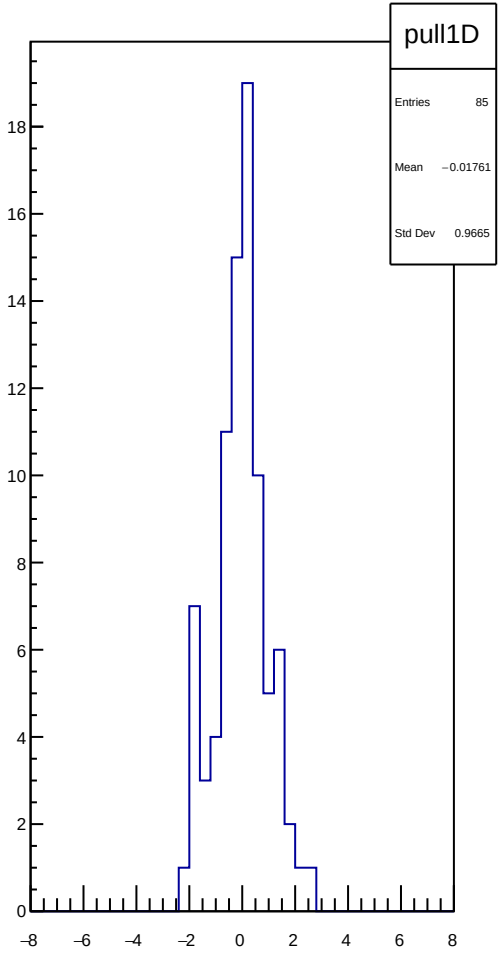

diff_bpm1i02Y_rms vs run
χ² / ndf 1.906e+04 / 84
p0 807.7 ± 0.6434
950
900
850
800
750
700
650

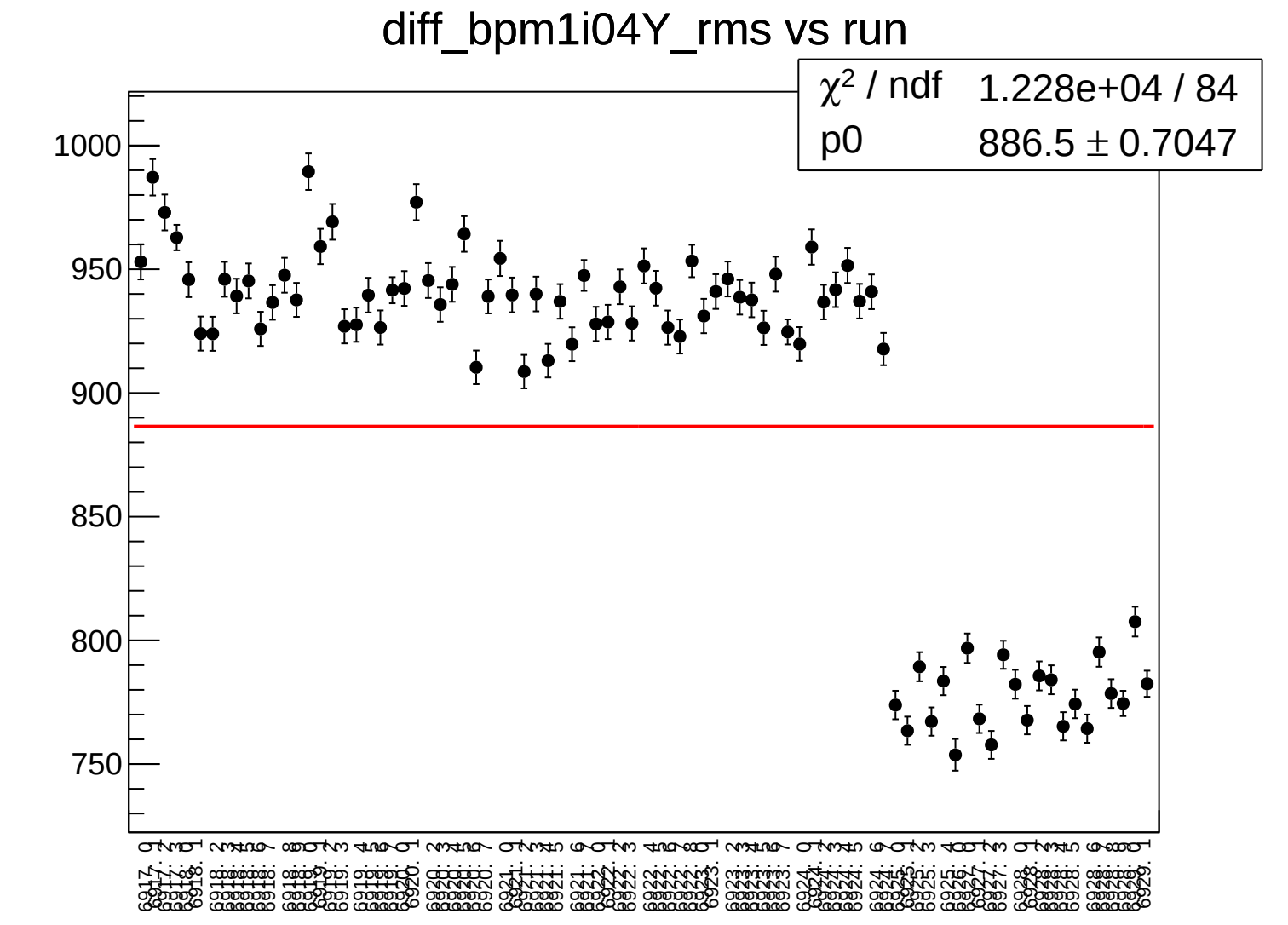

diff_bpm1i04X_mean vs run
χ^2 / ndf 165.5 / 84
p0 24.79 ± 1.188
pull
Entries 85
Mean −342.9
Std Dev 392

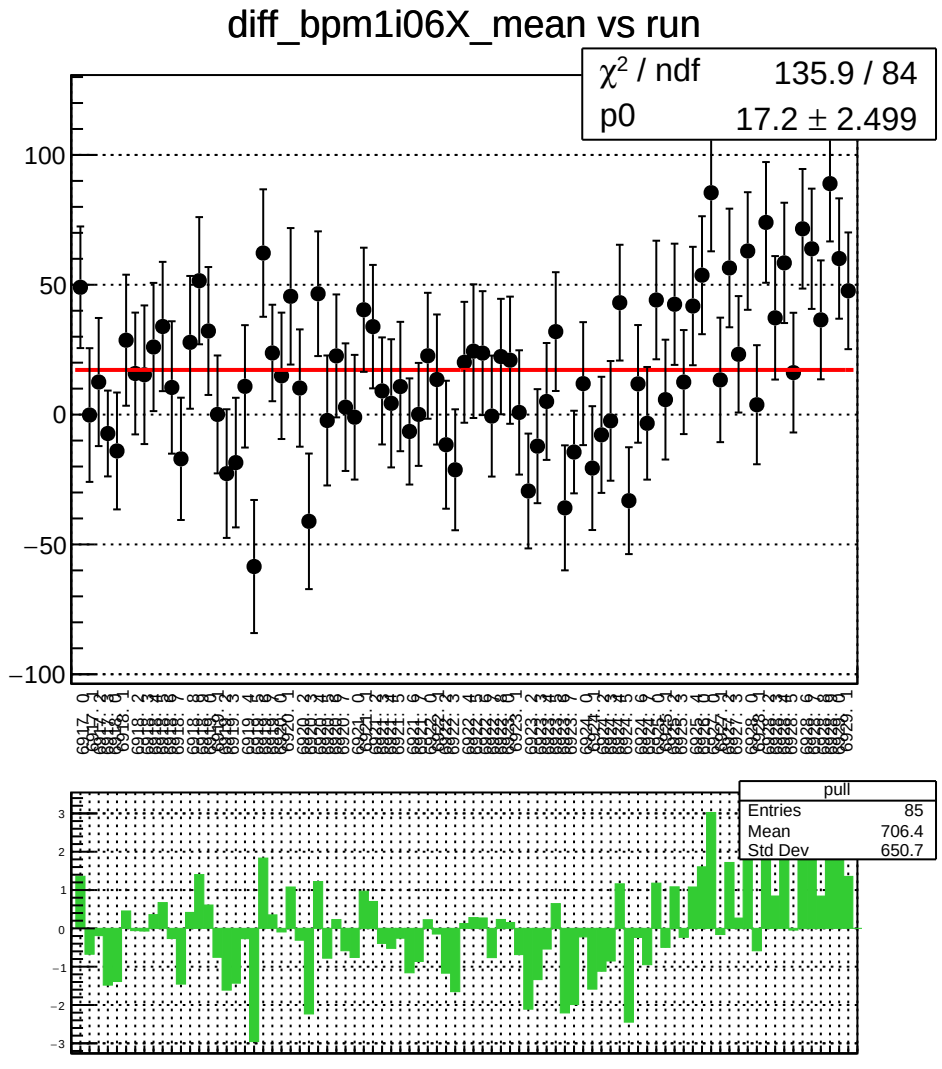

pull1D
Entries 85
Mean −0.04649
Std Dev 1.395

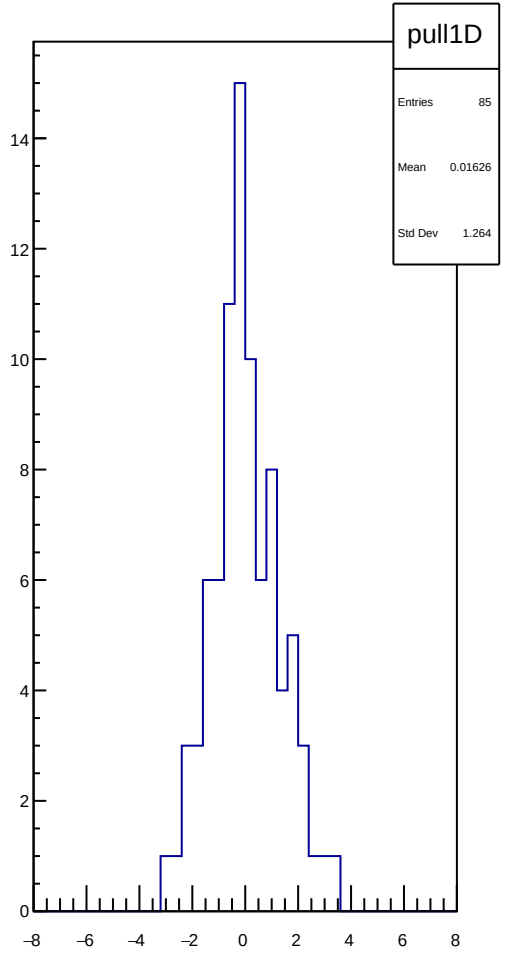

diff_bpm1i04X_rms vs run
χ² / ndf 5548 / 84
p0 1059 ± 0.8403
1150
1100
1050
1000
950
900
850

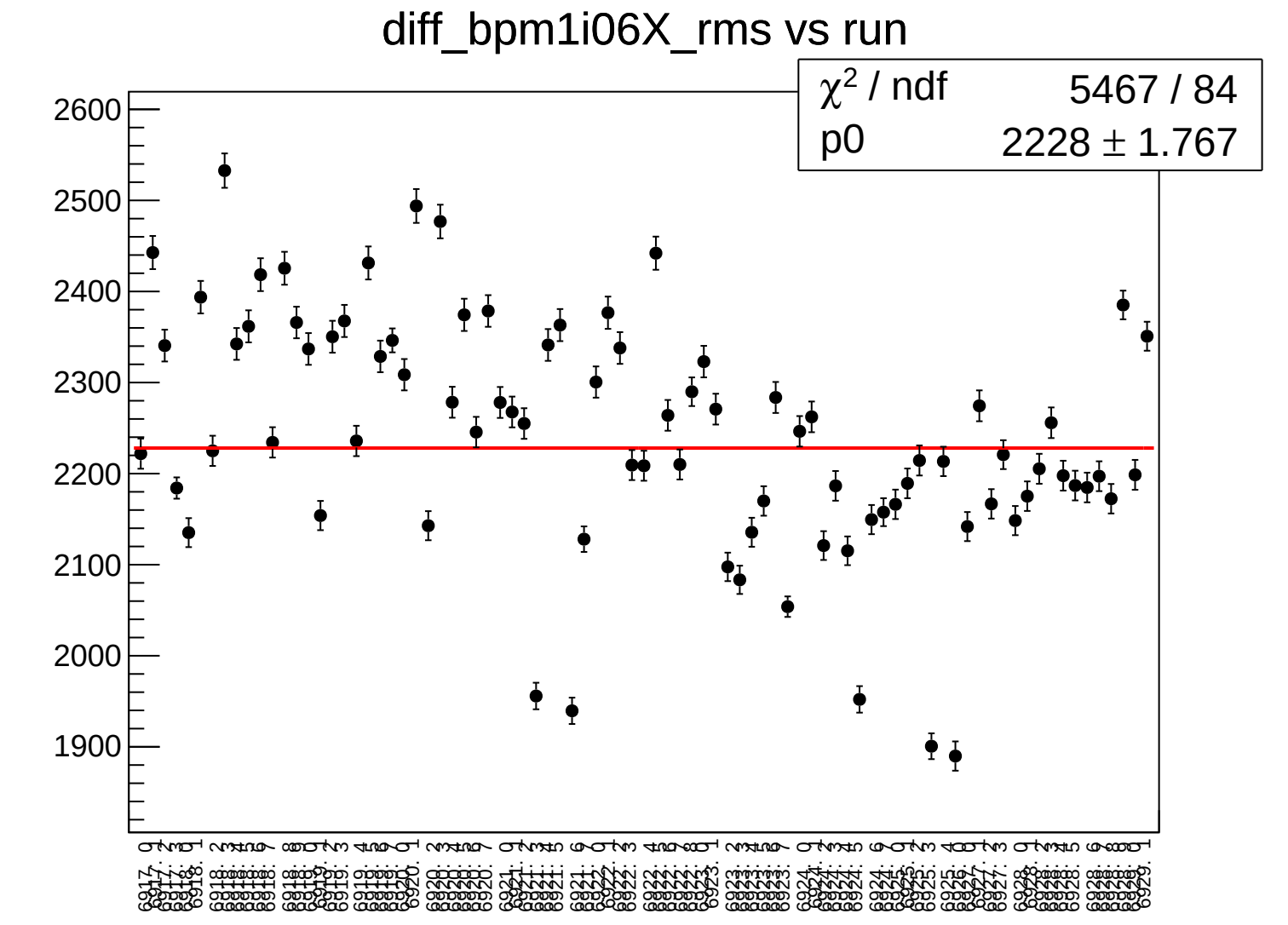

diff_bpm1i04Y_mean vs run
χ² / ndf 79.42 / 84
p0 −8.231 ± 0.9966
pull
Entries 85
Mean −78.85
Std Dev 147.8

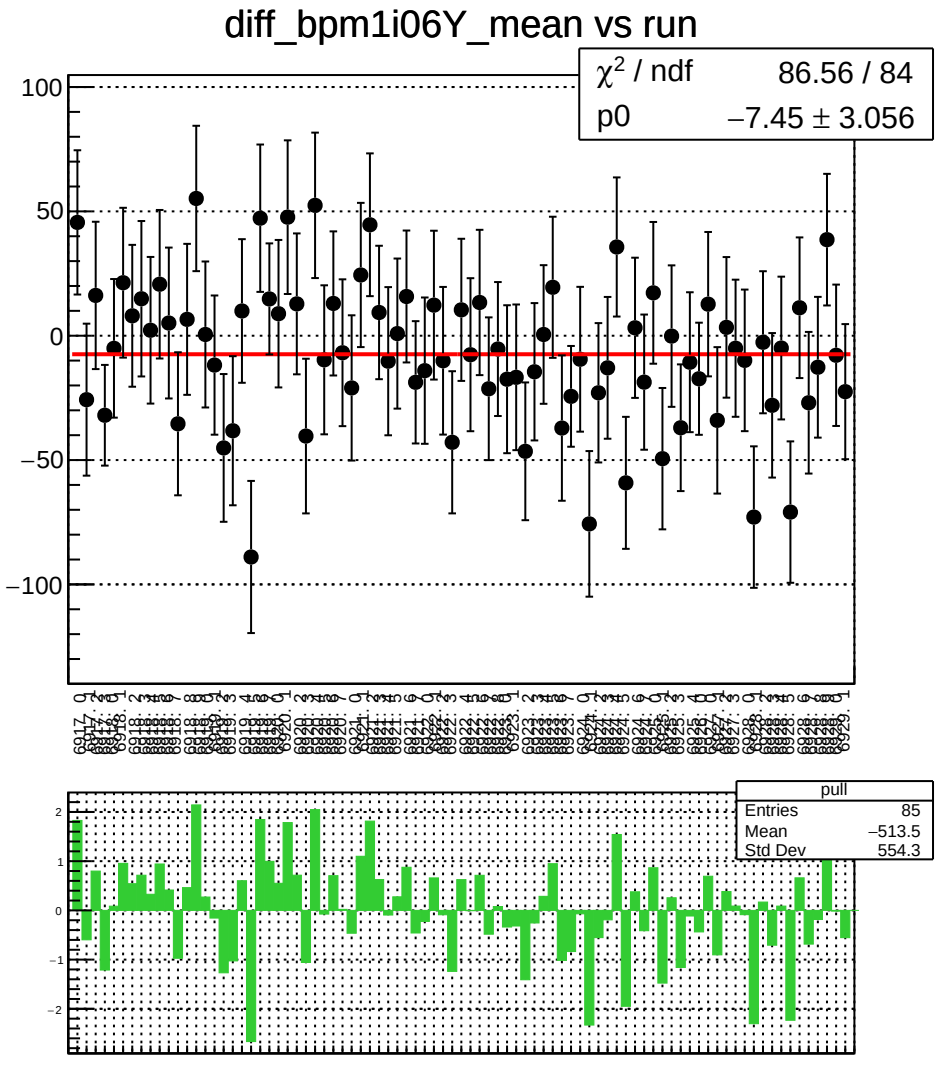

pull1D
Entries 85
Mean −0.01761
Std Dev 0.9665

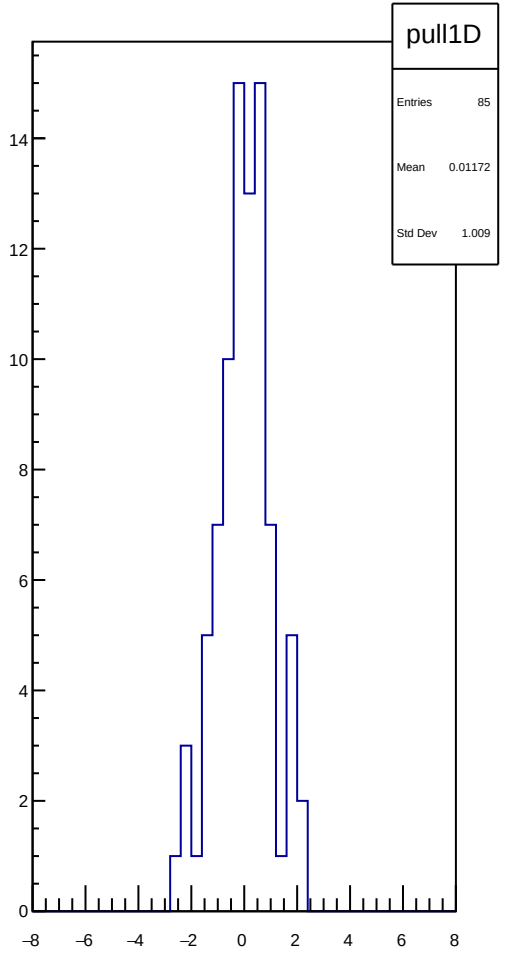

diff_bpm1i04Y_rms vs run
χ² / ndf 1.228e+04 / 84
p0 886.5 ± 0.7047
1000
950
900
850
800
750

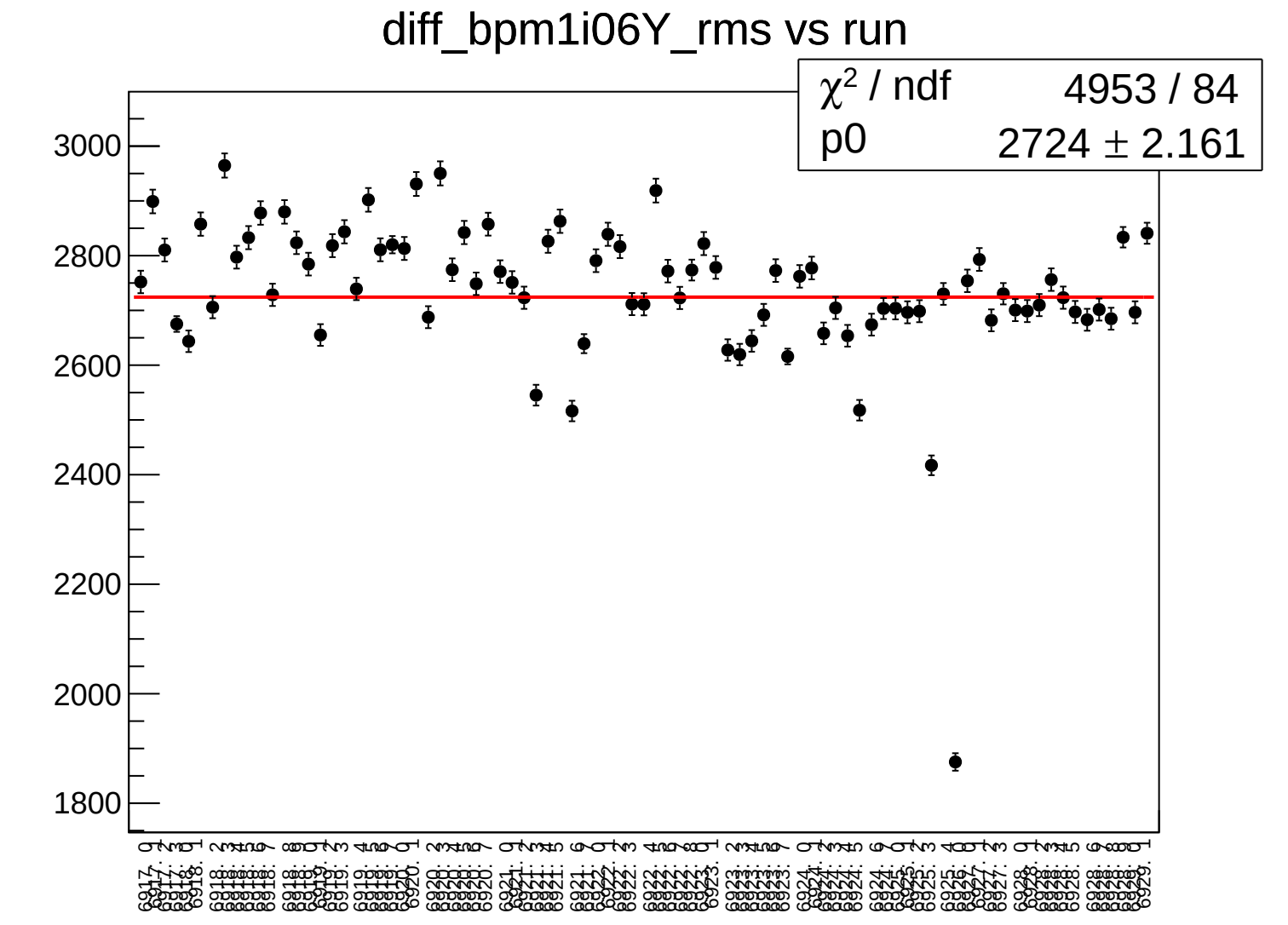

diff_bpm1i06X_mean vs run
χ² / ndf 135.9 / 84
p0 17.2 ± 2.499
100
50
0
−50
−100
pull
Entries 85
Mean 706.4
Std Dev 650.7
3
2
1
0
−1
−2
−3

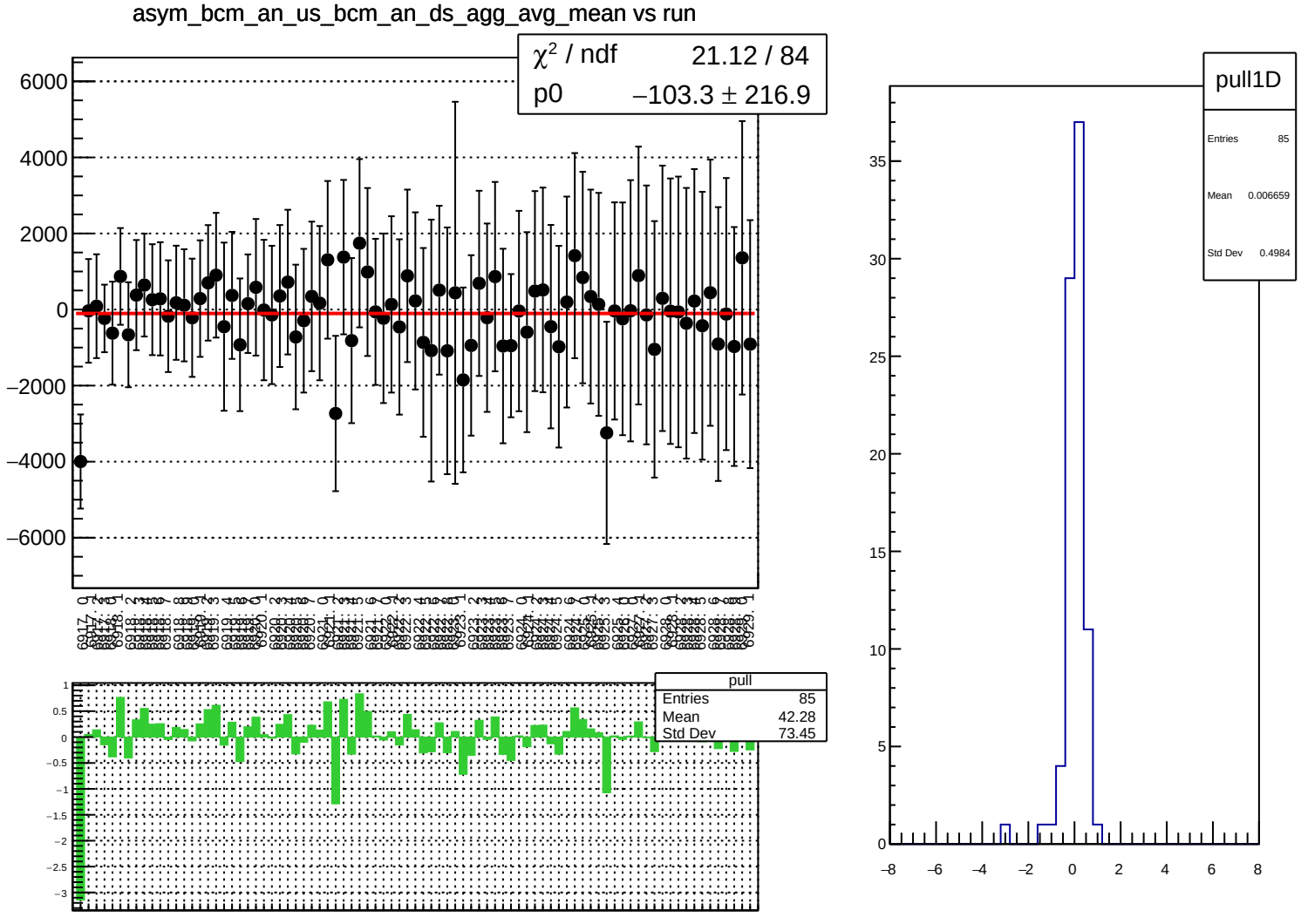

pull1D
Entries 85
Mean 0.01626
Std Dev 1.264
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

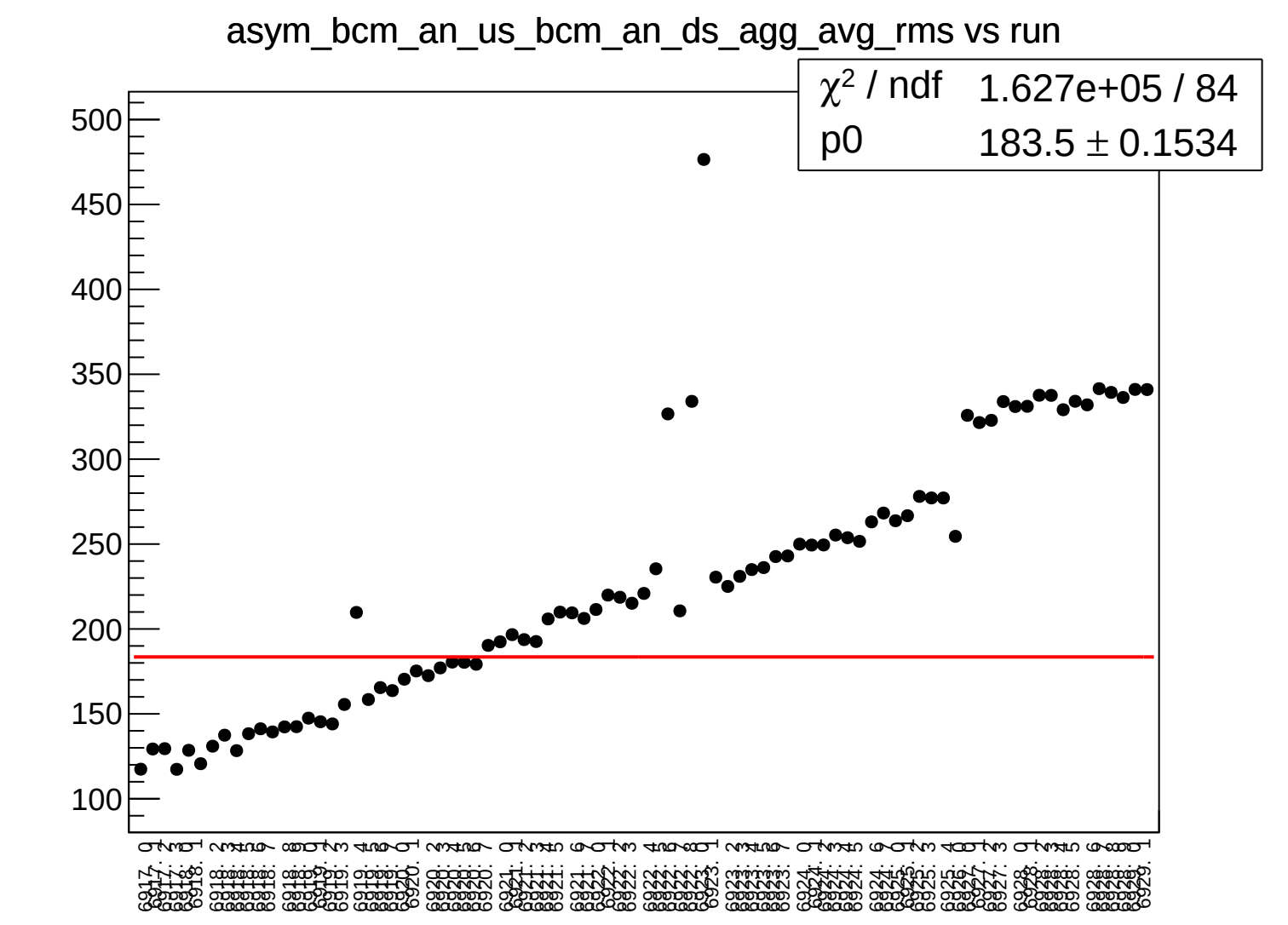

diff_bpm1i06X_rms vs run
χ² / ndf 5467 / 84
p0 2228 ± 1.767
2600
2500
2400
2300
2200
2100
2000
1900

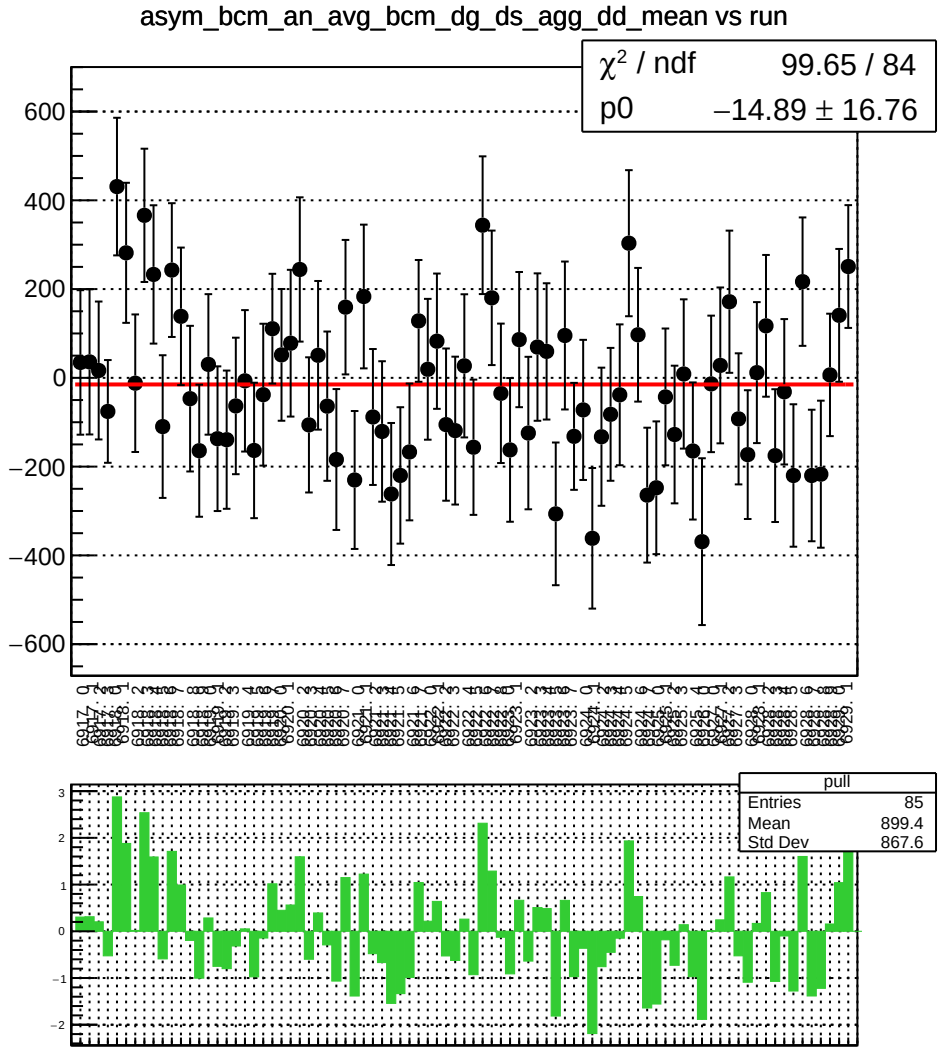

diff_bpm1i06Y_mean vs run
χ^2 / ndf 86.56 / 84
p0 −7.45 ± 3.056
100
50
0
−50
−100
pull
Entries 85
Mean −513.5
Std Dev 554.3
2
1
0
−1
−2

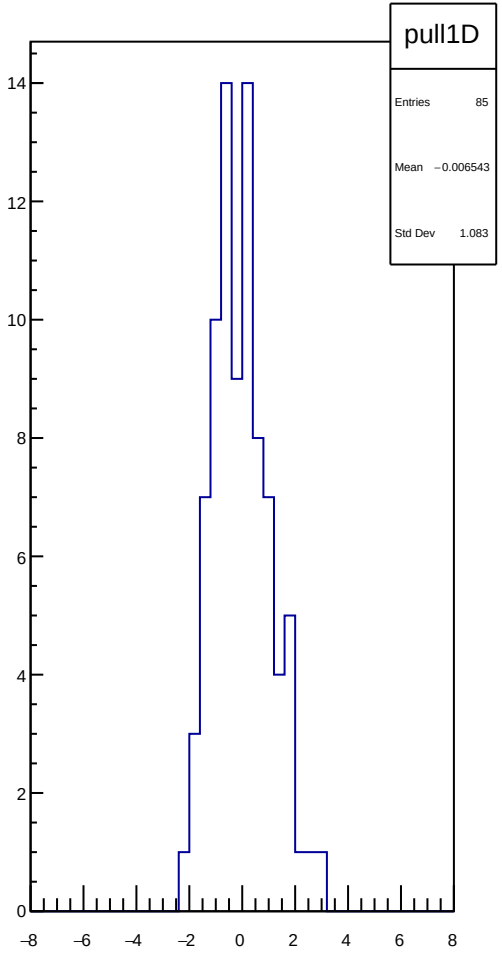

pull1D
Entries 85
Mean 0.01172
Std Dev 1.009
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

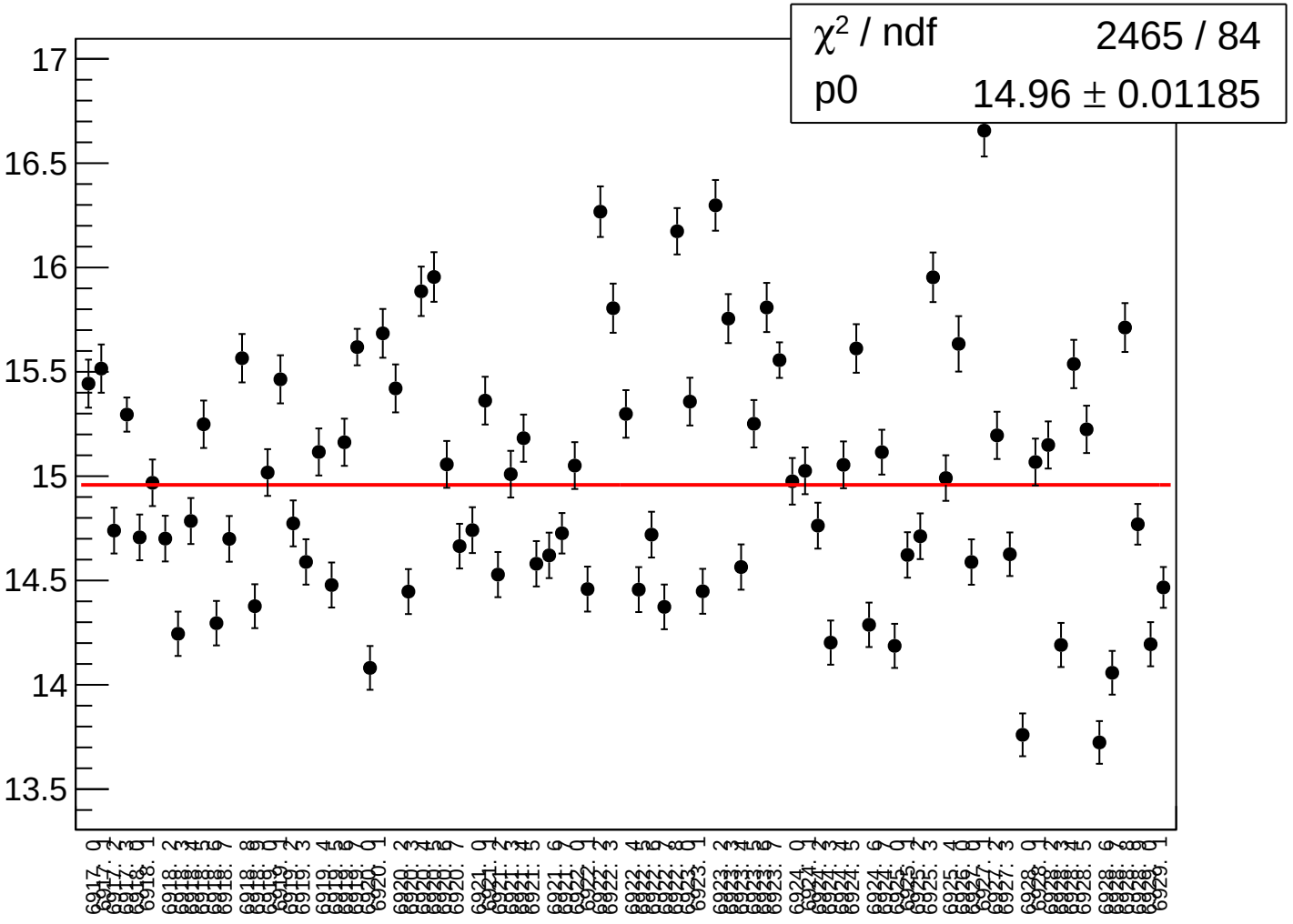

diff_bpm1i06Y_rms vs run
χ² / ndf 4953 / 84
p0 2724 ± 2.161
3000
2800
2600
2400
2200
2000
1800

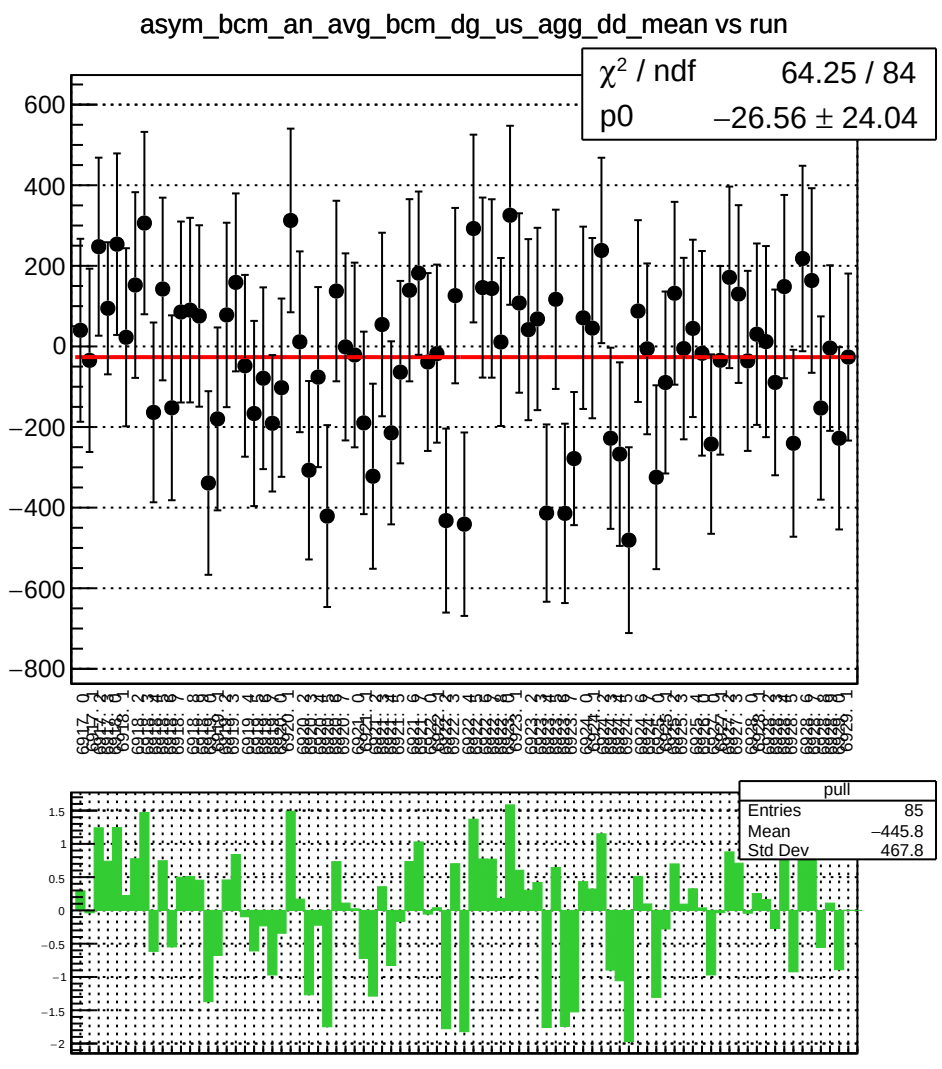

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 21.12 / 84
p0 −103.3 ± 216.9
pull
Entries 85
Mean 42.28
Std Dev 73.45
pull1D
Entries 85
Mean 0.006659
Std Dev 0.4984

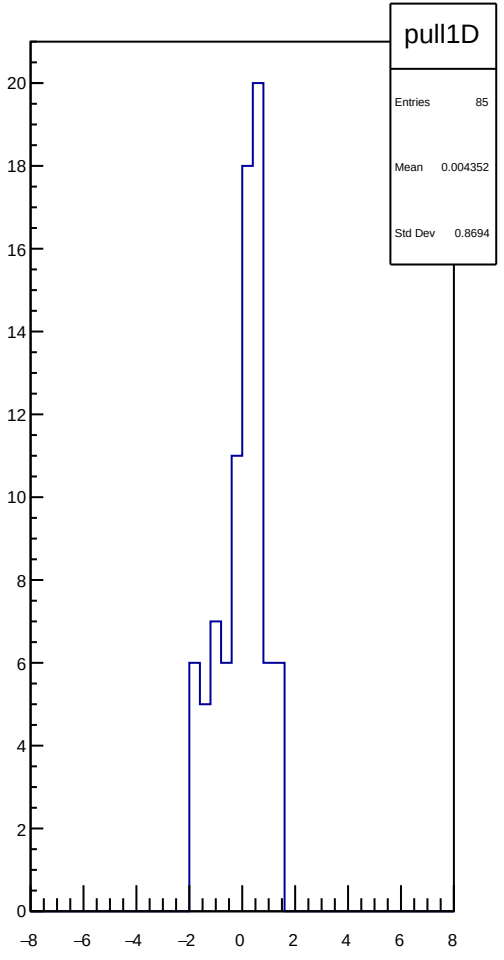

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.627e+05 / 84
p0 183.5 ± 0.1534
500
450
400
350
300
250
200
150
100

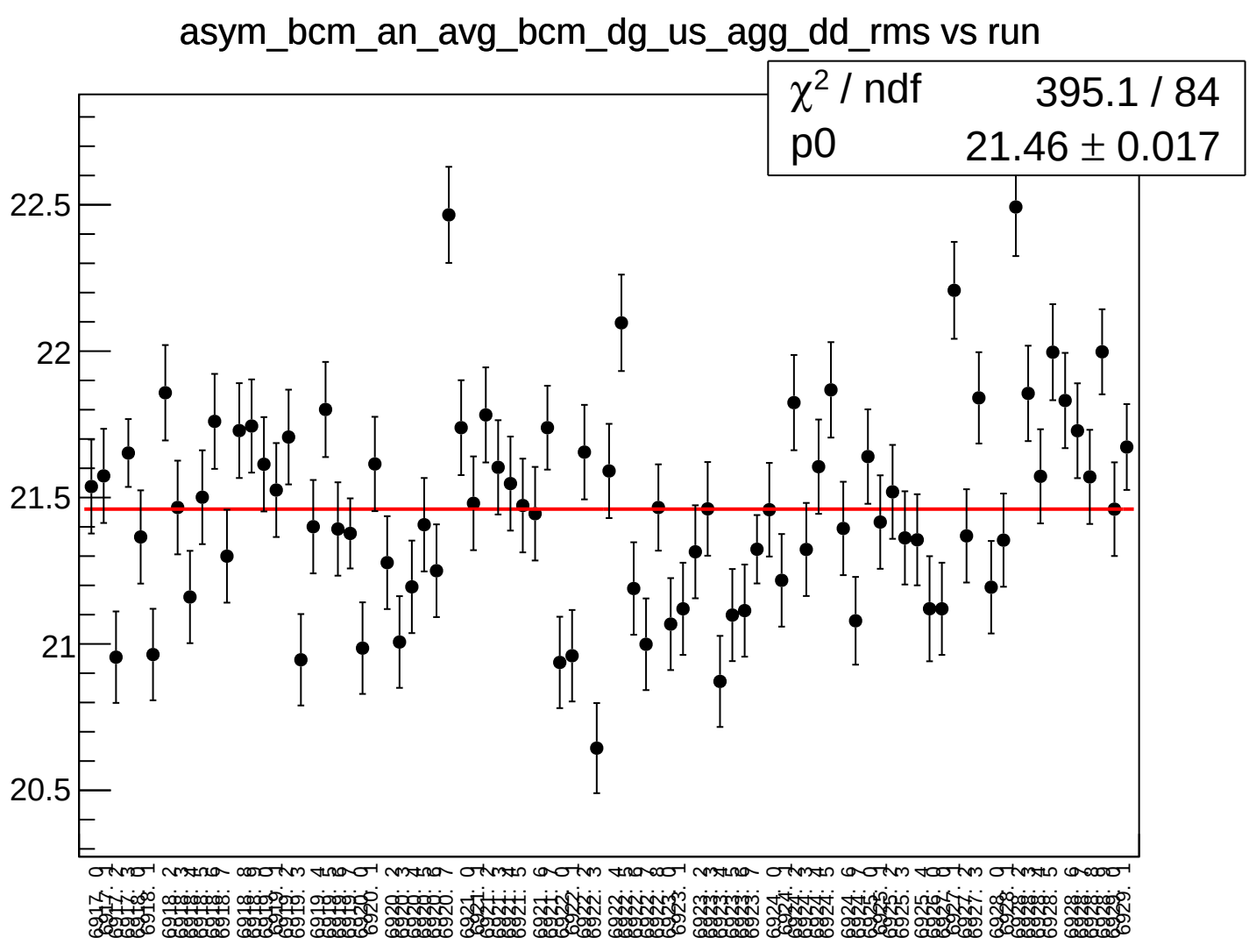

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 99.65 / 84
p0 −14.89 ± 16.76
pull
Entries 85
Mean 899.4
Std Dev 867.6

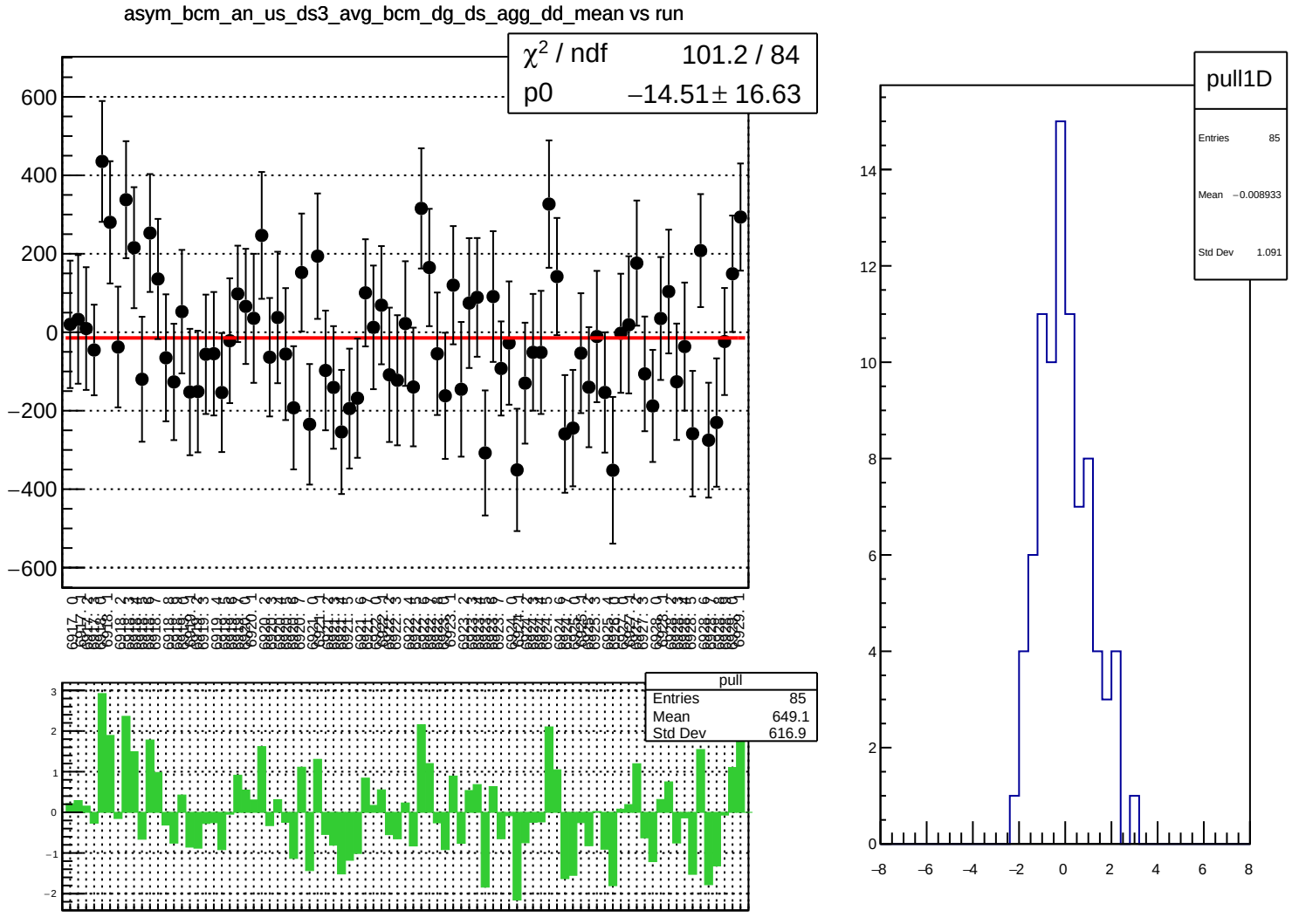

pull1D
Entries 85
Mean −0.006543
Std Dev 1.083

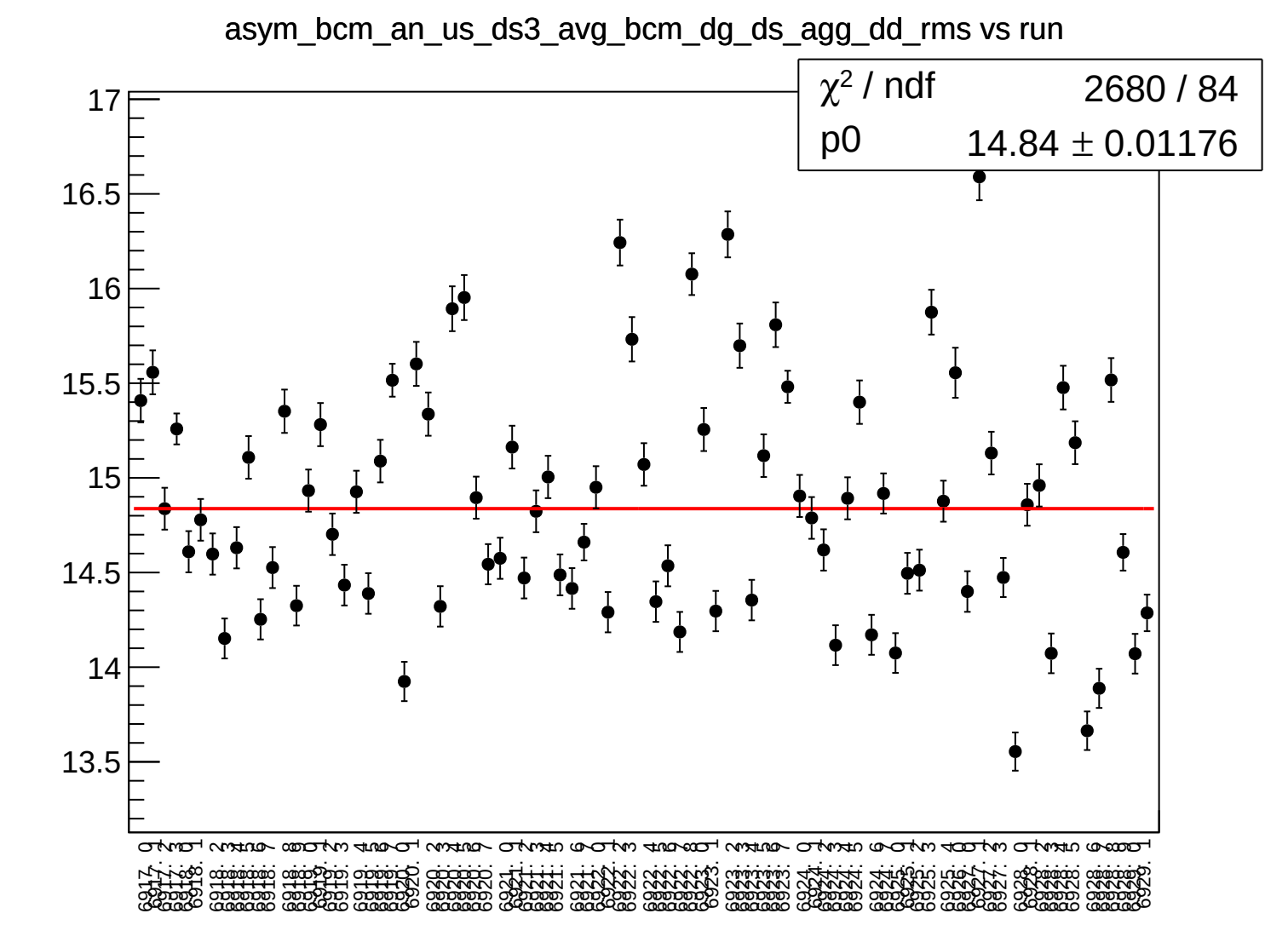

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2465 / 84
p0 14.96 ± 0.01185
17
16.5
16
15.5
15
14.5
14
13.5

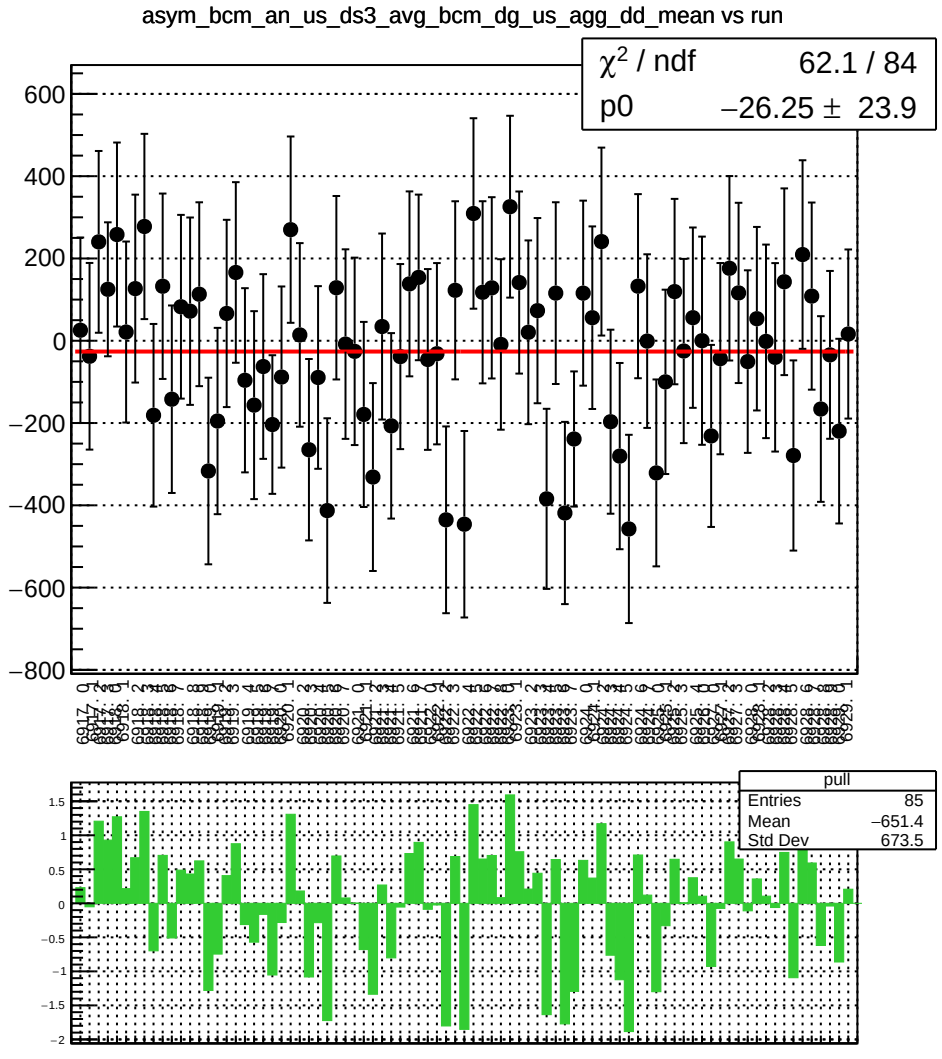

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 64.25 / 84
p0 −26.56 ± 24.04
pull
Entries 85
Mean −445.8
Std Dev 467.8

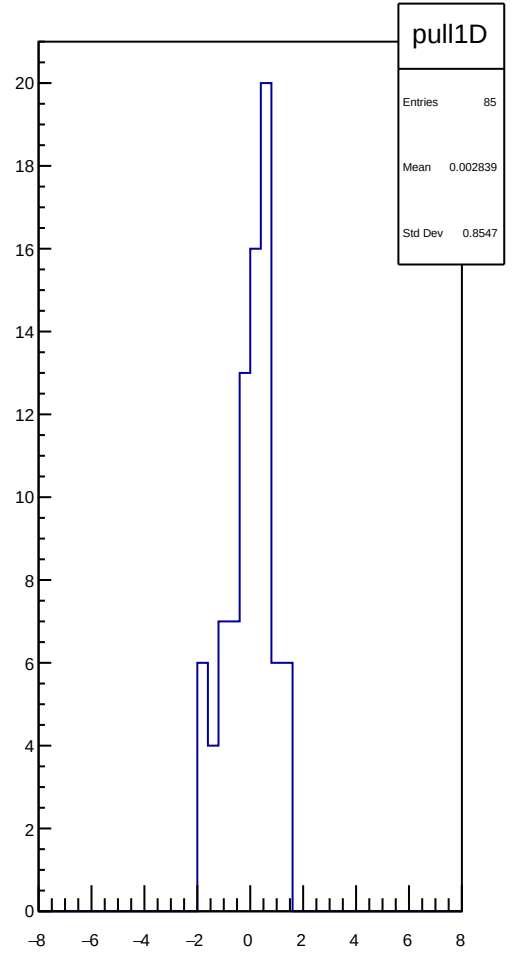

pull1D
Entries 85
Mean 0.004352
Std Dev 0.8694

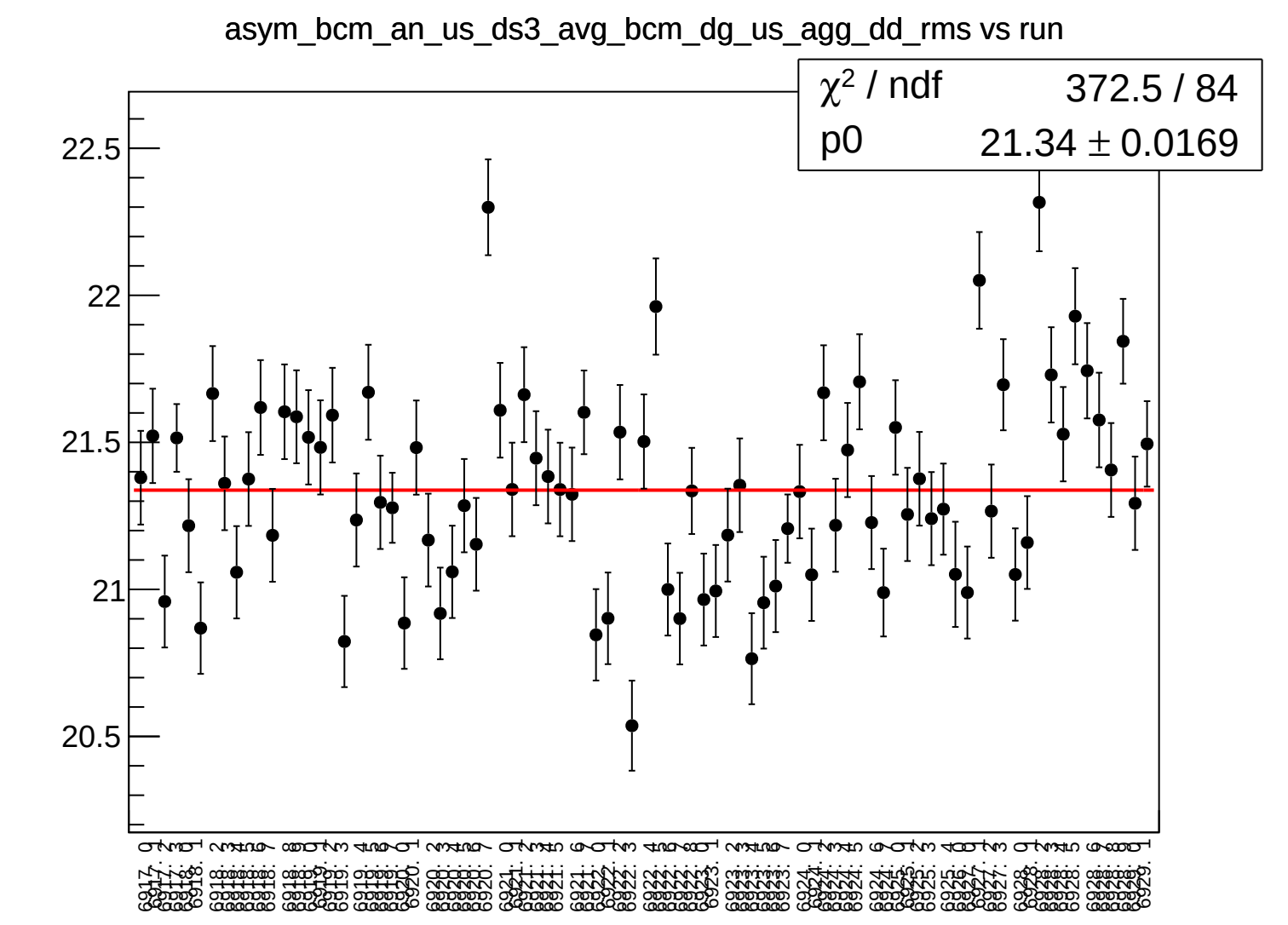

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 395.1 / 84
p0 21.46 ± 0.017
22.5
22
21.5
21
20.5

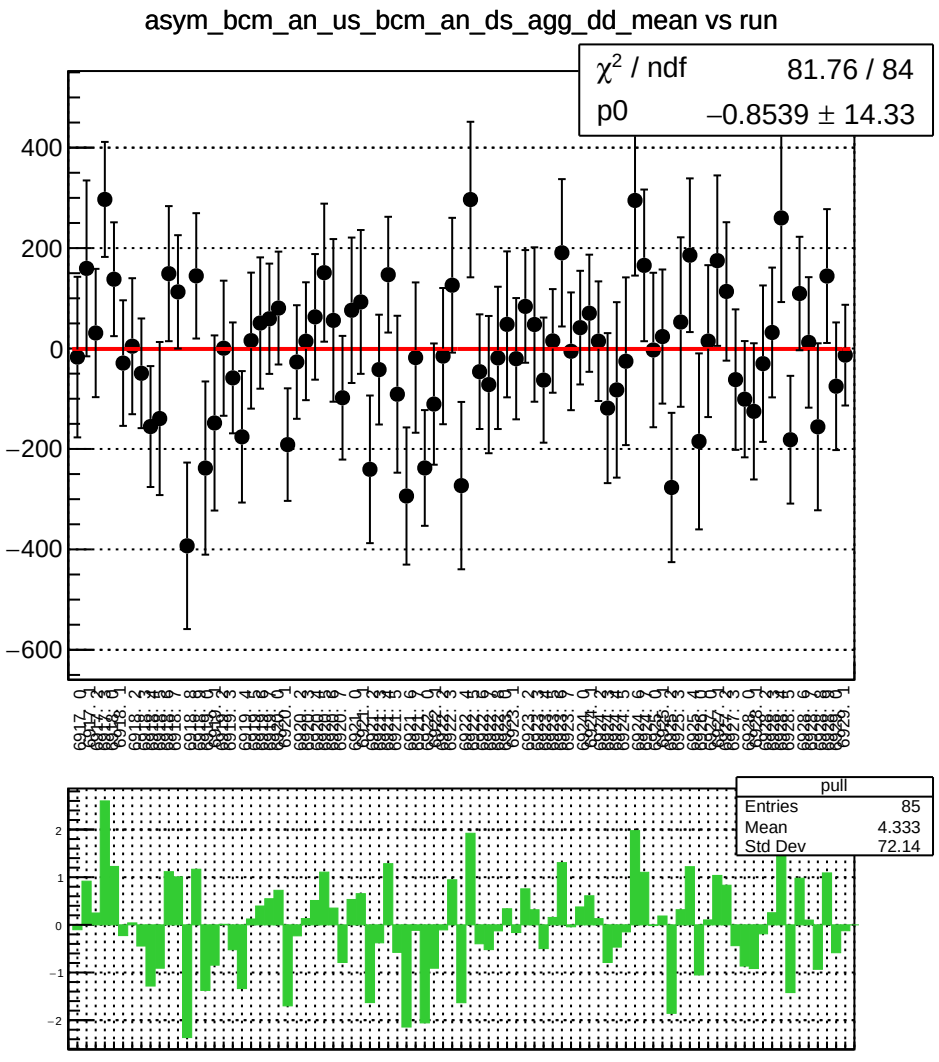

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 101.2 / 84
p0 −14.51 ± 16.63
pull
Entries 85
Mean 649.1
Std Dev 616.9
pull1D
Entries 85
Mean −0.008933
Std Dev 1.091

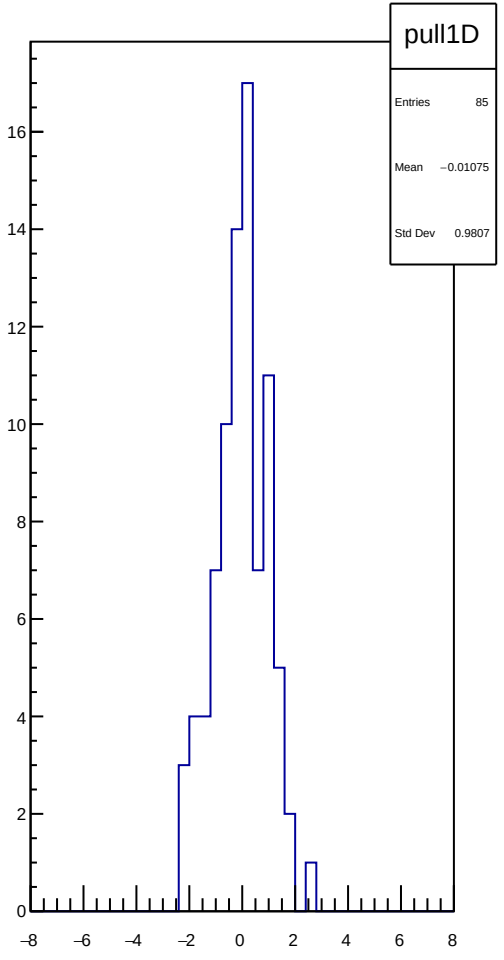

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2680 / 84
p0 14.84 ± 0.01176
17
16.5
16
15.5
15
14.5
14
13.5

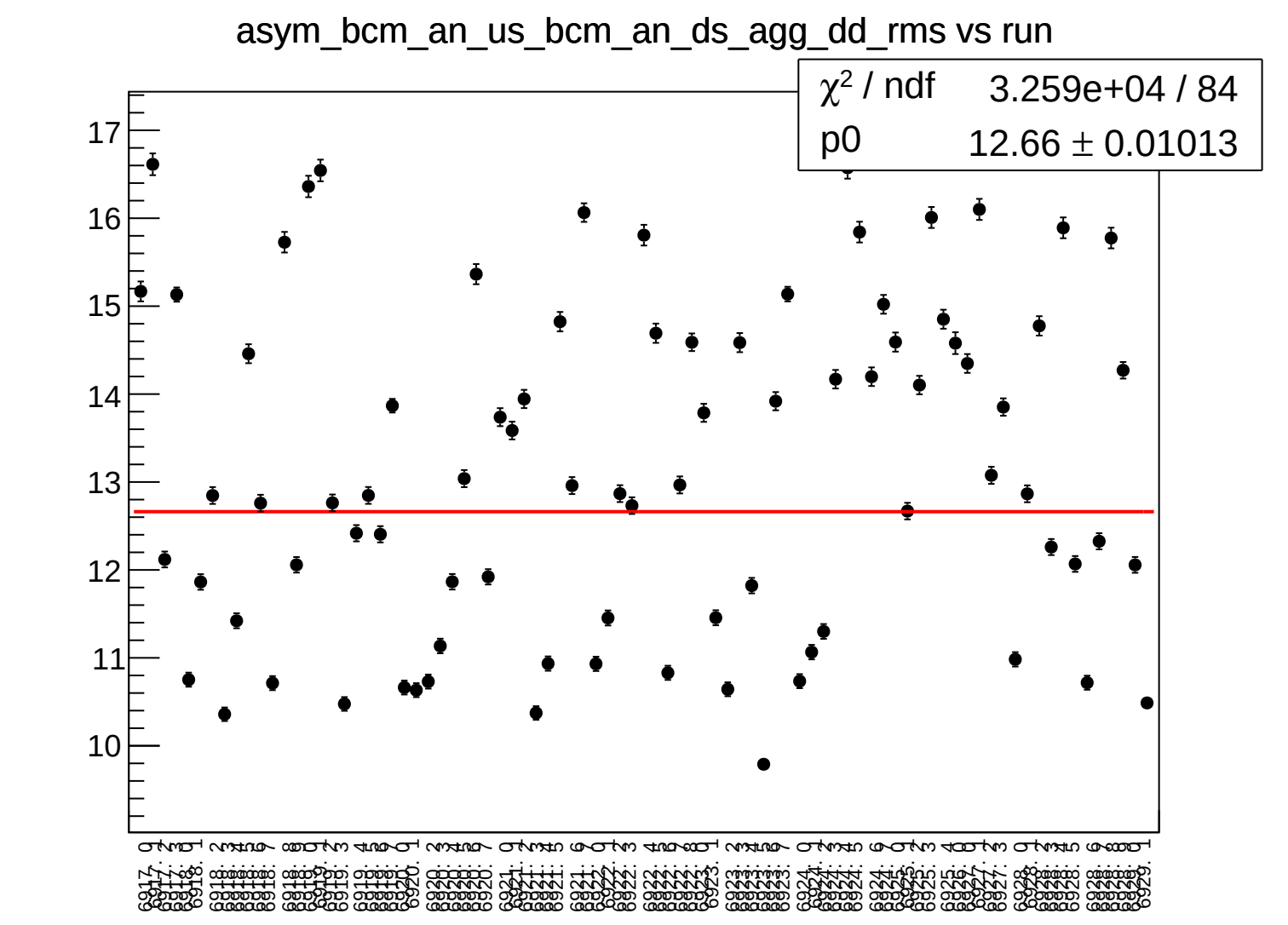

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 62.1 / 84
p0 −26.25 ± 23.9
pull
Entries 85
Mean −651.4
Std Dev 673.5

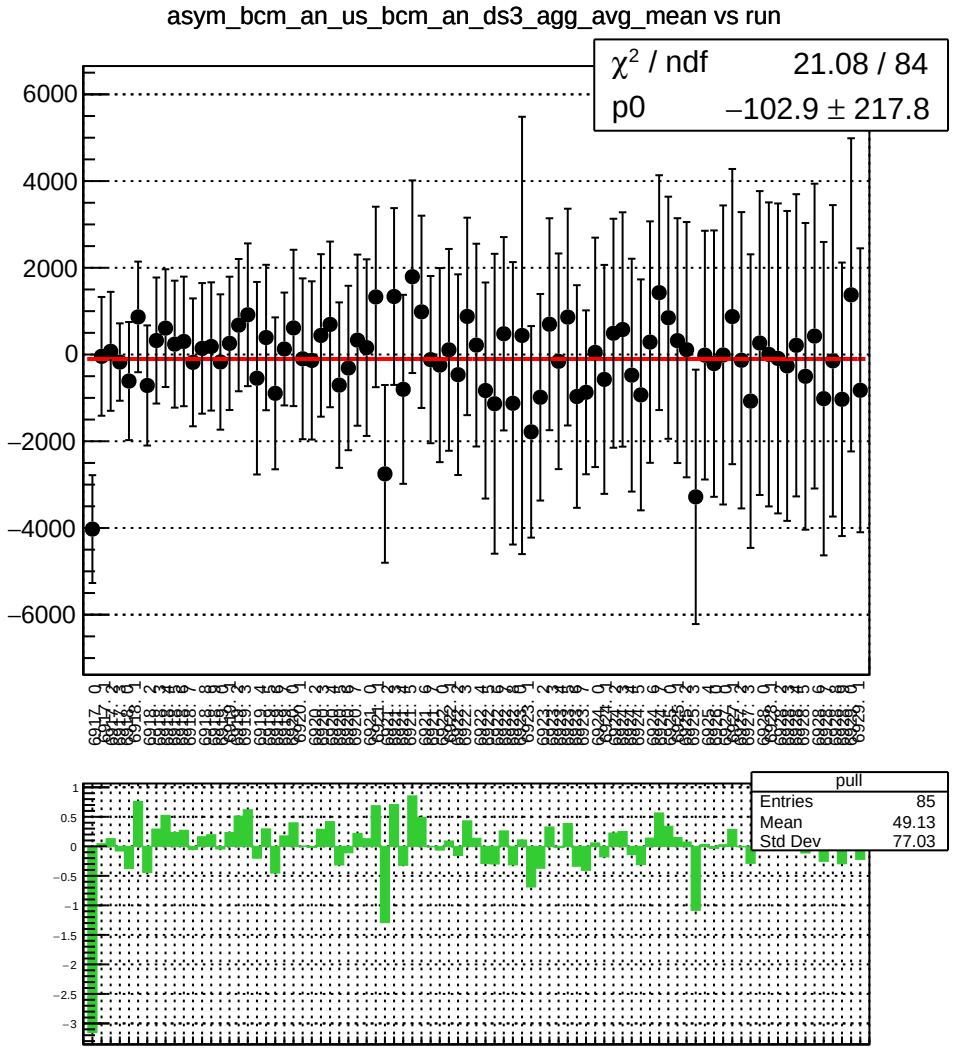

pull1D
Entries 85
Mean 0.002839
Std Dev 0.8547

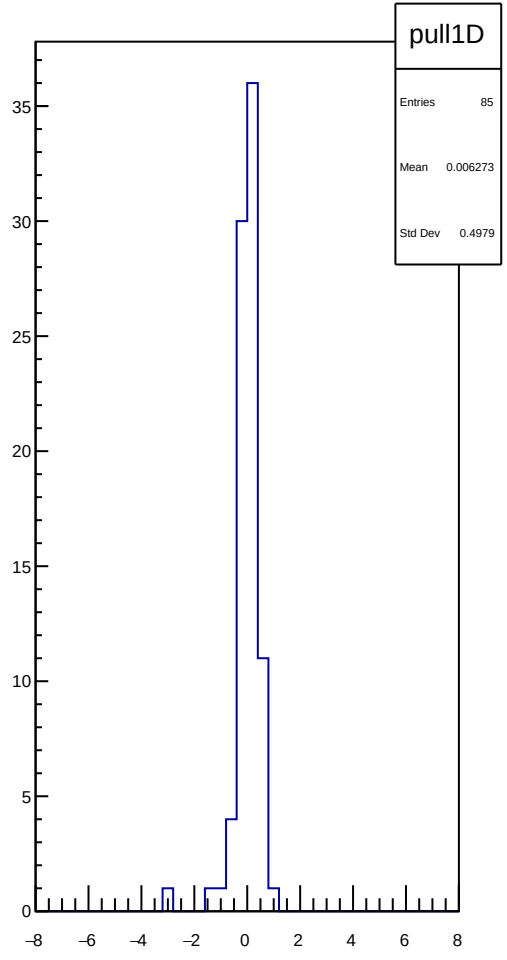

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 372.5 / 84
p0 21.34 ± 0.0169
22.5
22
21.5
21
20.5

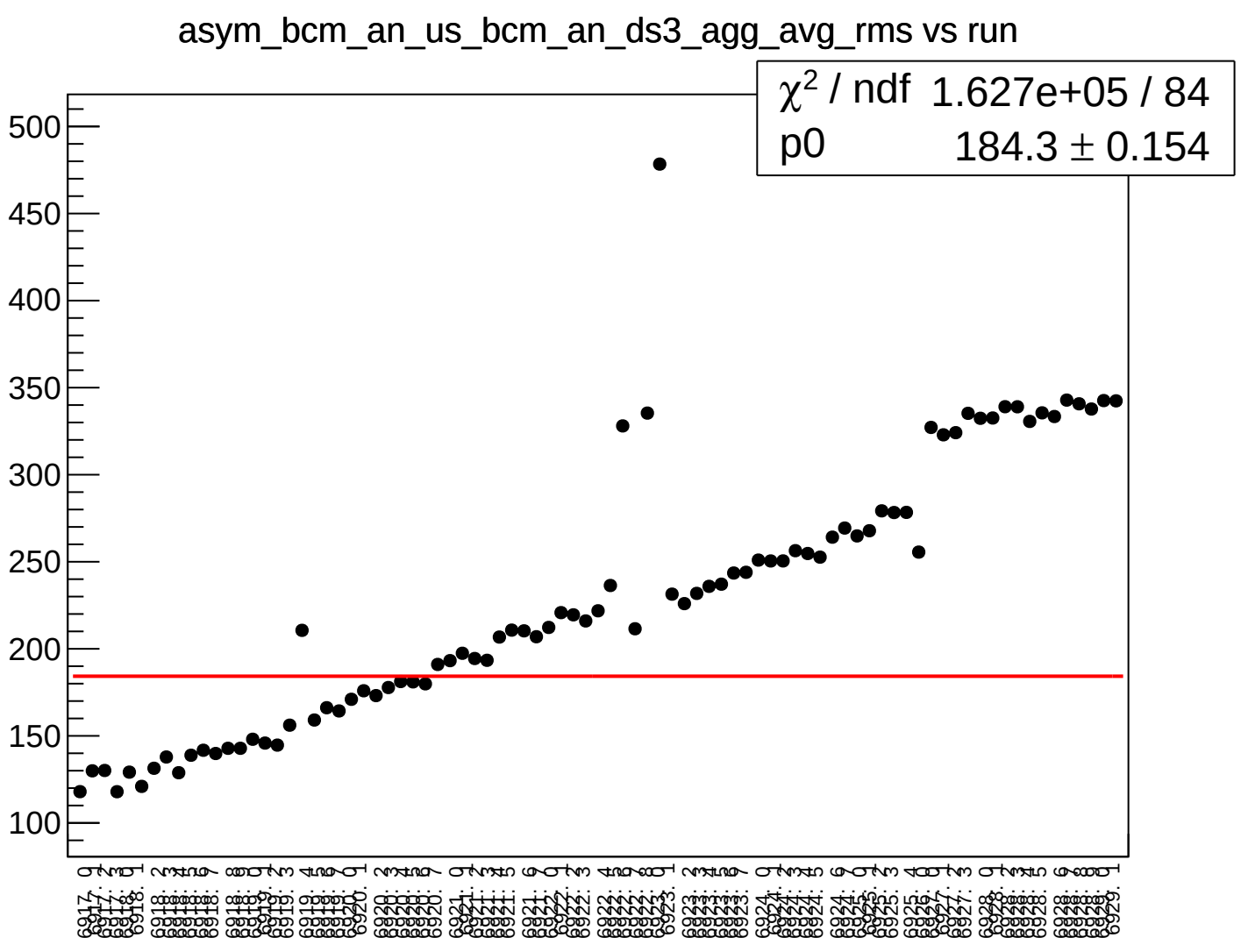

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.76 / 84
p0 −0.8539 ± 14.33
pull
Entries 85
Mean 4.333
Std Dev 72.14

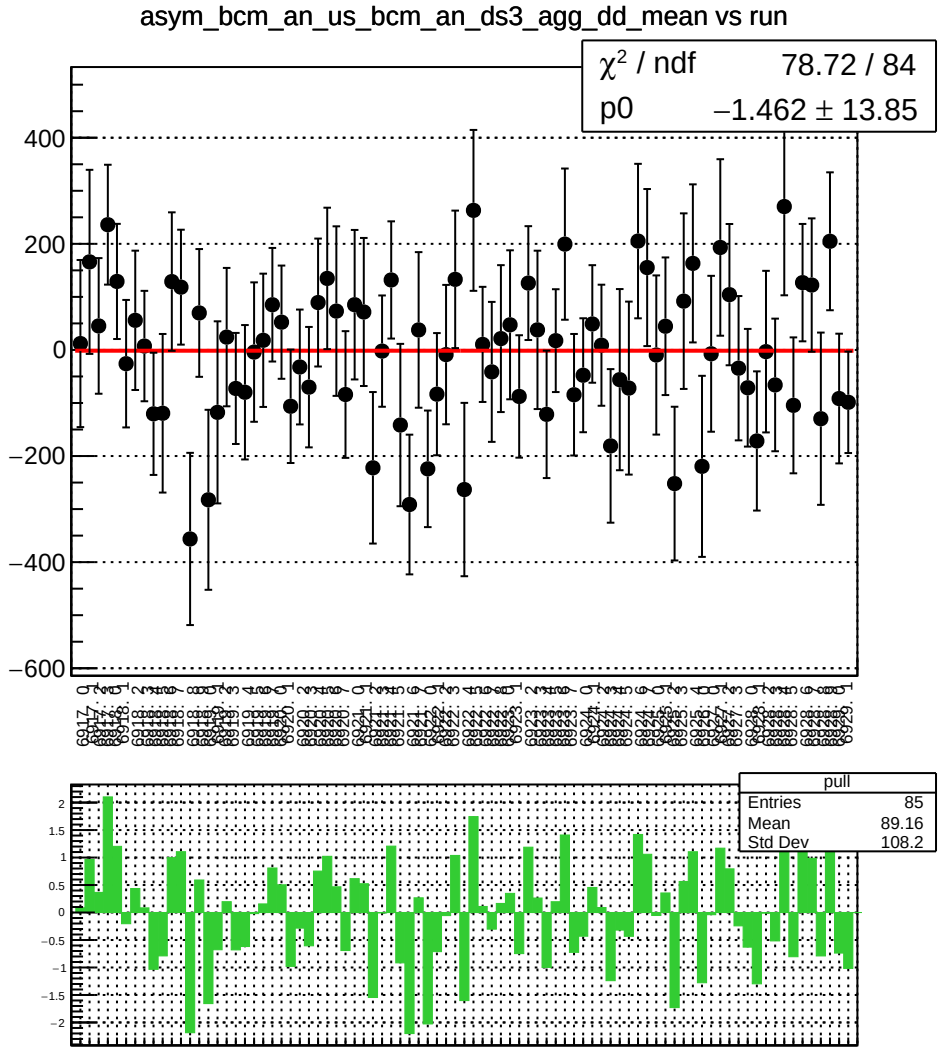

pull1D
Entries 85
Mean −0.01075
Std Dev 0.9807

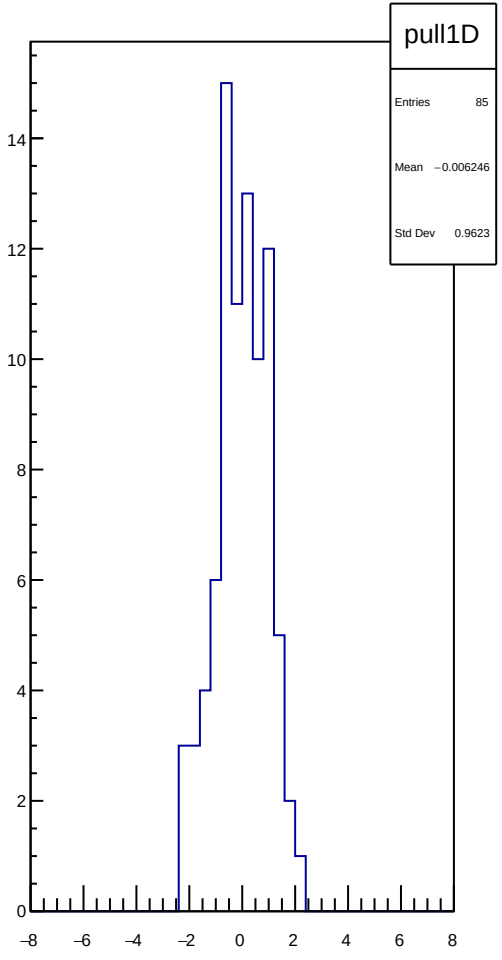

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3.259e+04 / 84
p0 12.66 ± 0.01013
17
16
15
14
13
12
11
10

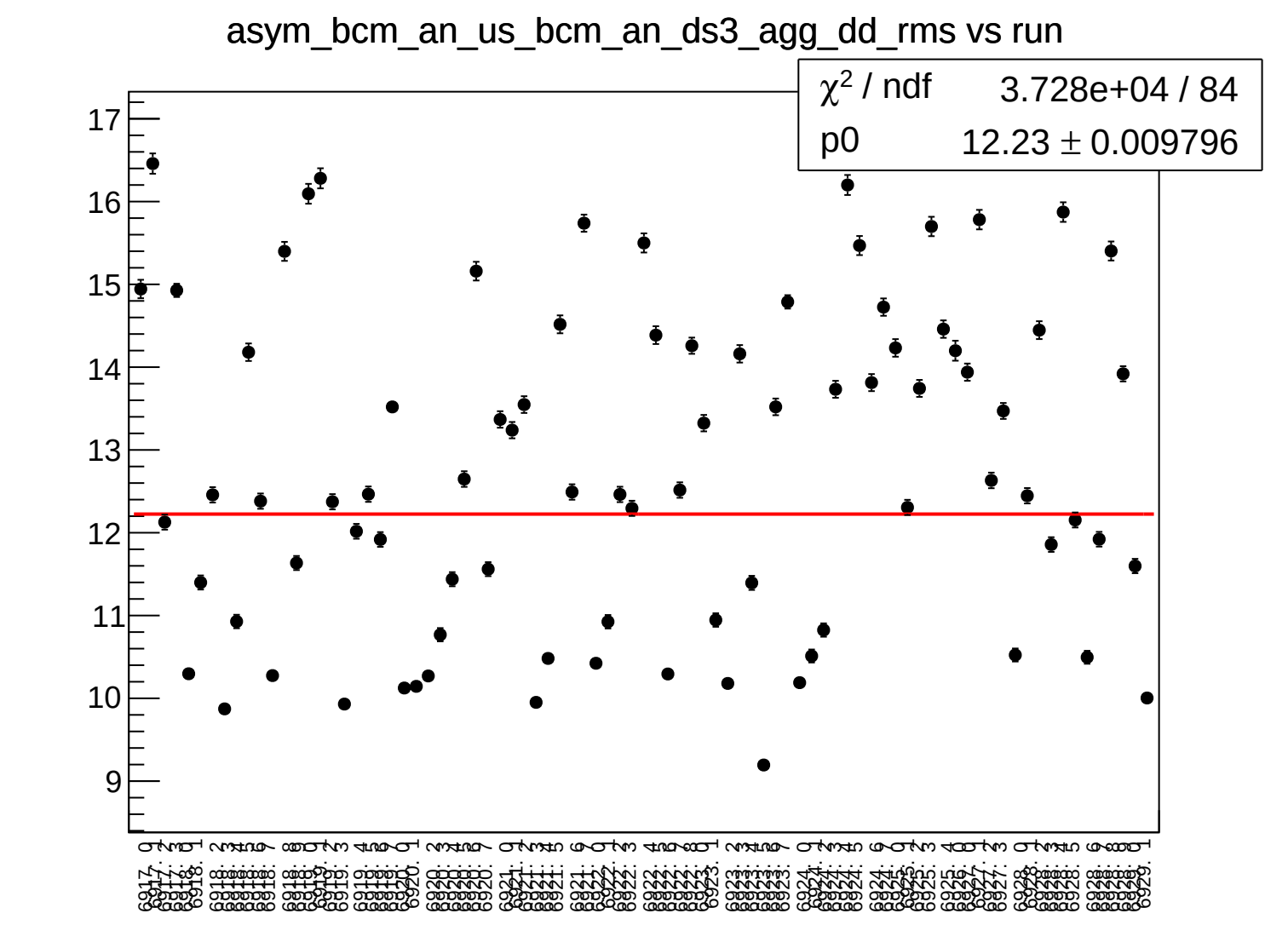

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 21.08 / 84
p0 −102.9 ± 217.8
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 49.13
Std Dev 77.03
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3

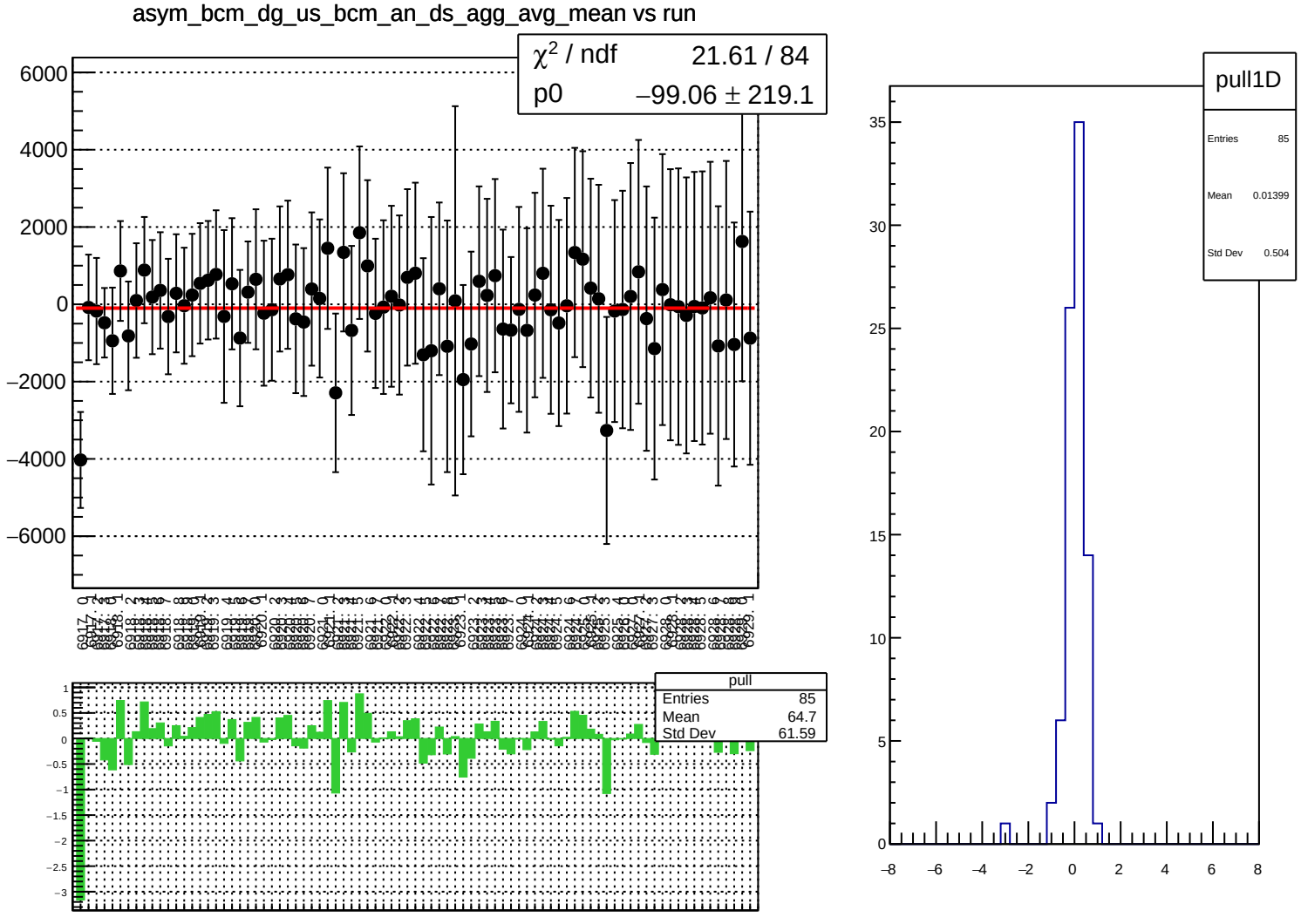

pull1D
Entries 85
Mean 0.006273
Std Dev 0.4979
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

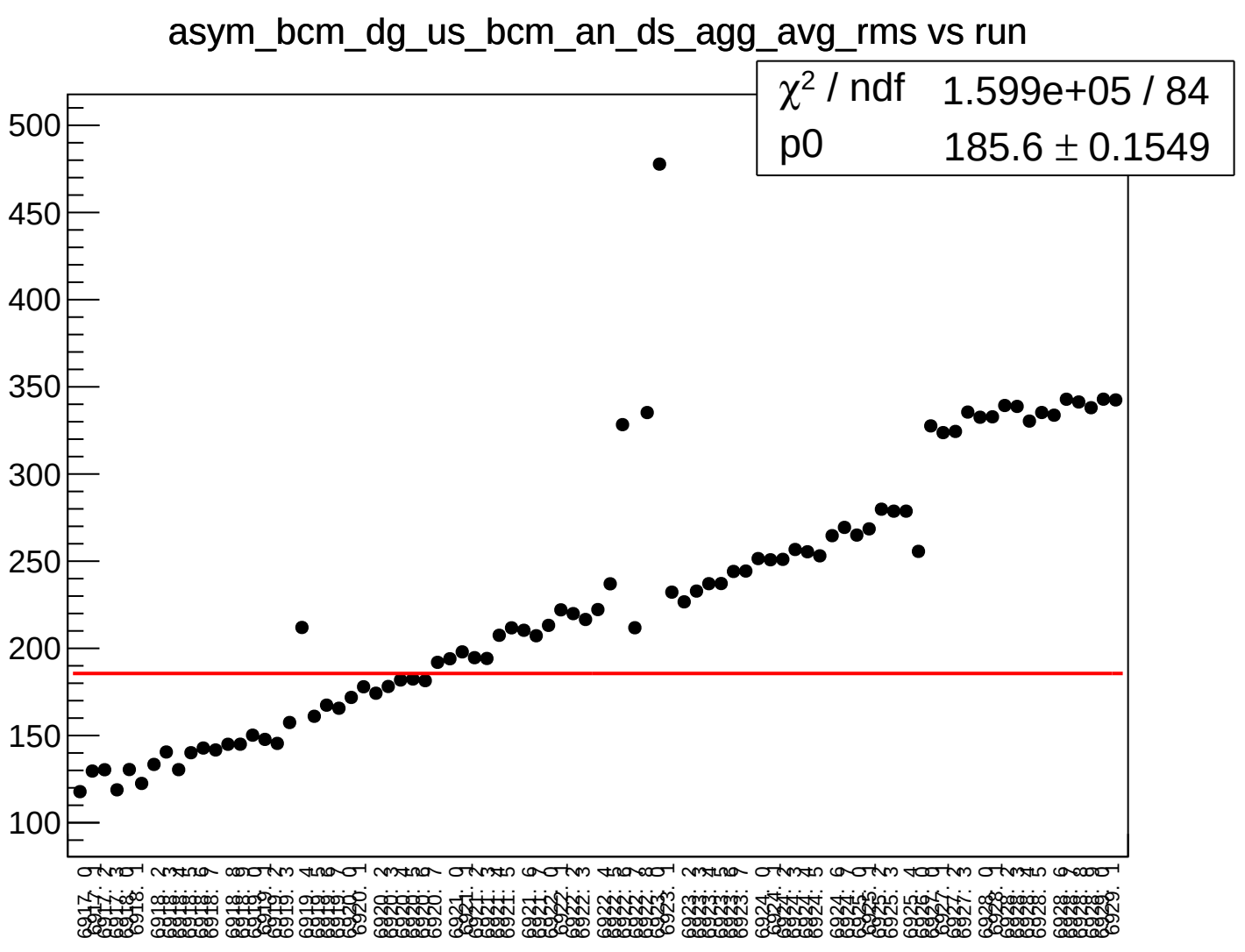

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.627e+05 / 84
p0 184.3 ± 0.154
500
450
400
350
300
250
200
150
100

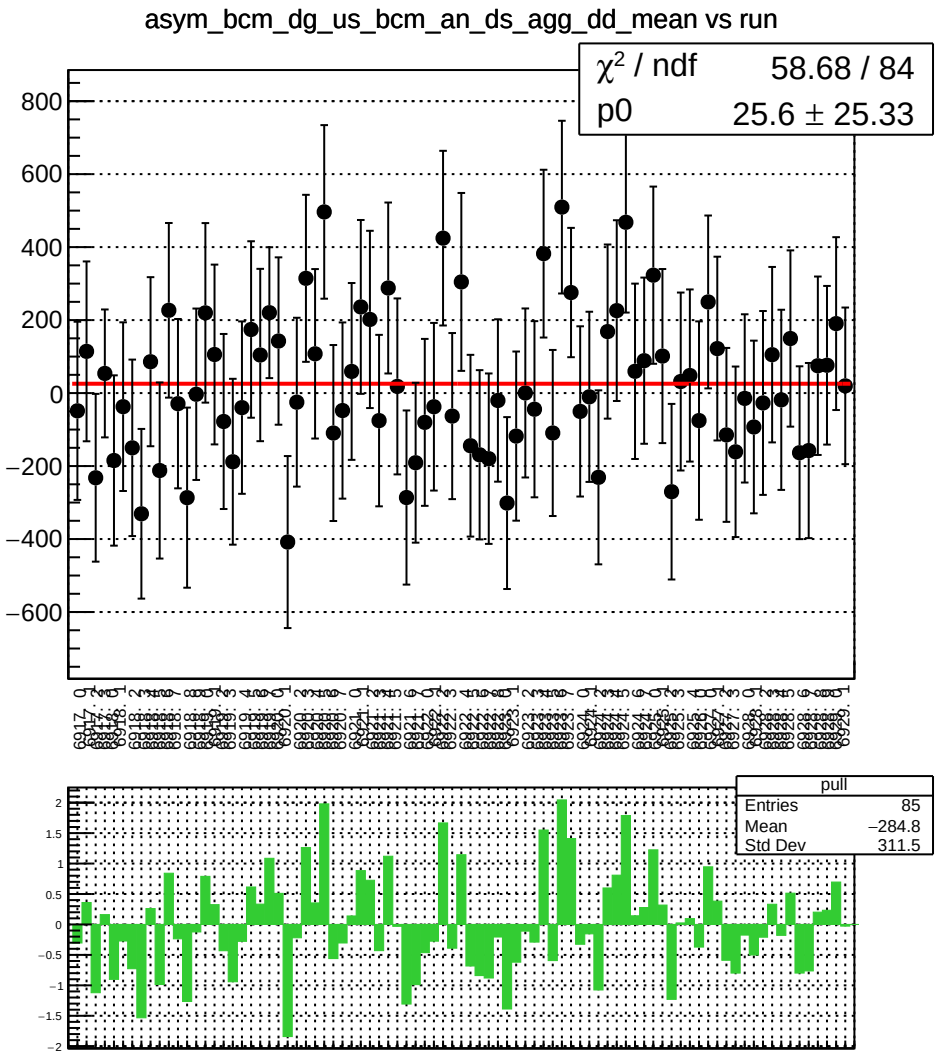

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 78.72 / 84
p0 −1.462 ± 13.85
pull
Entries 85
Mean 89.16
Std Dev 108.2

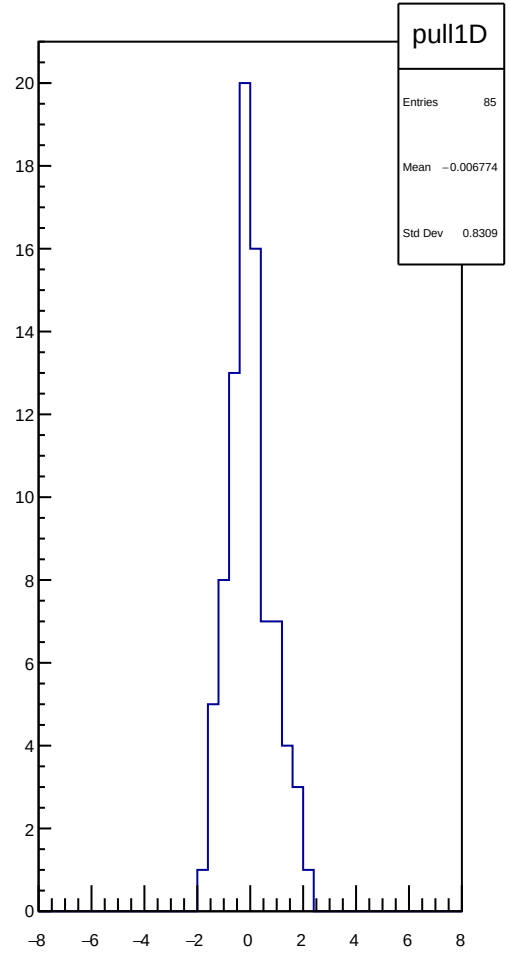

pull1D
Entries 85
Mean −0.006246
Std Dev 0.9623

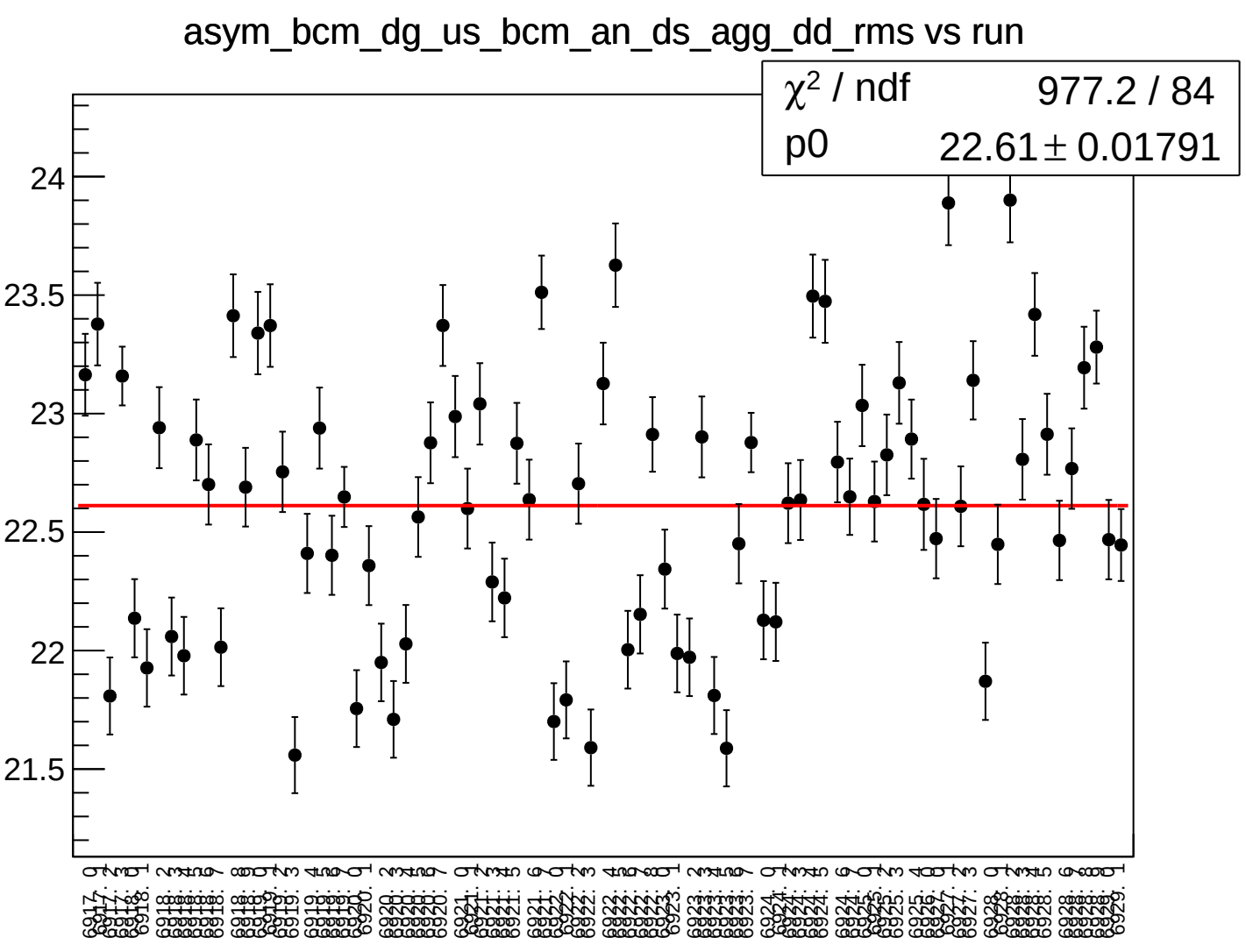

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 3.728e+04 / 84
p0 12.23 ± 0.009796
17
16
15
14
13
12
11
10
9

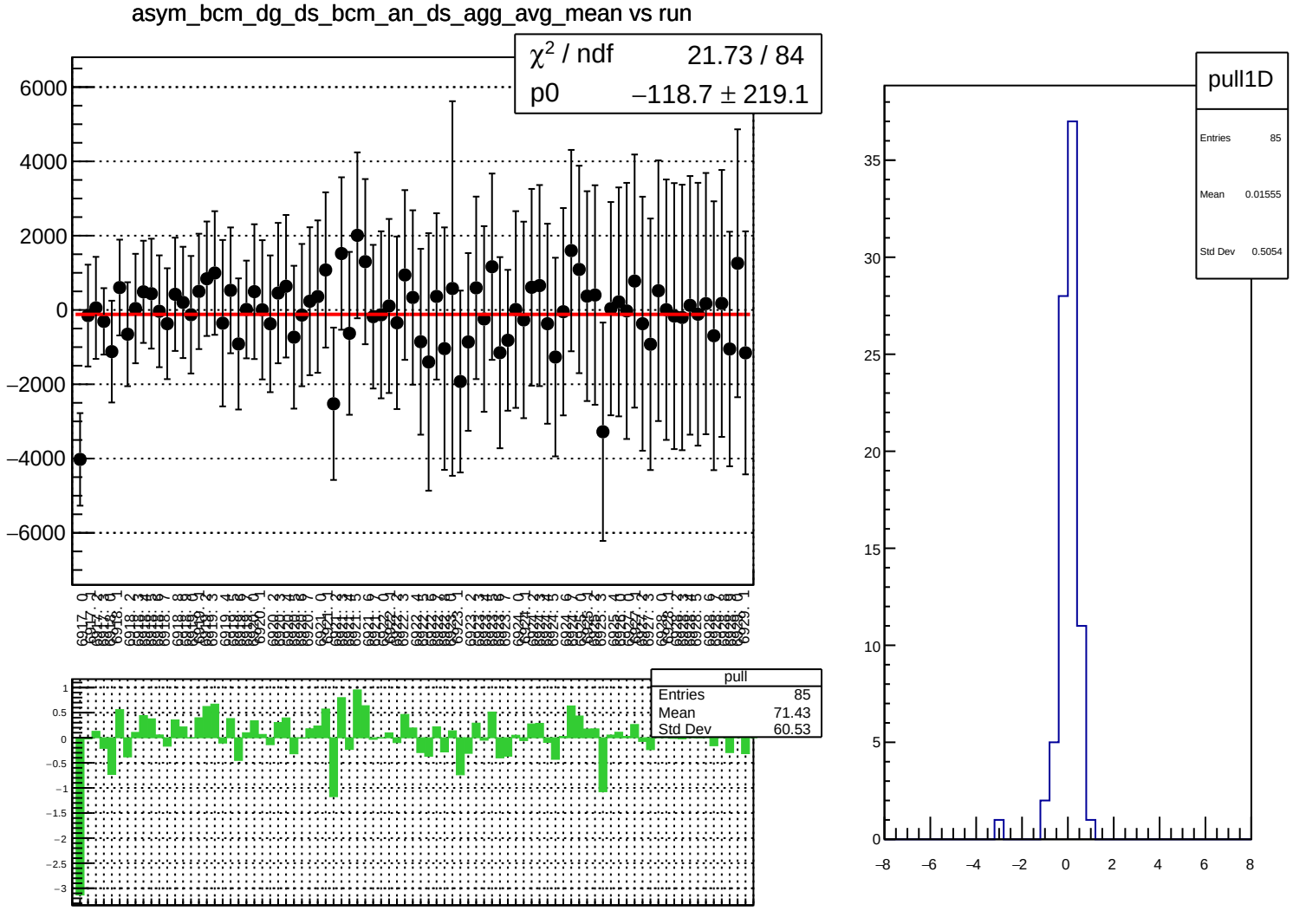

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 21.61 / 84
p0 −99.06 ± 219.1
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 64.7
Std Dev 61.59
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
pull1D
Entries 85
Mean 0.01399
Std Dev 0.504
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

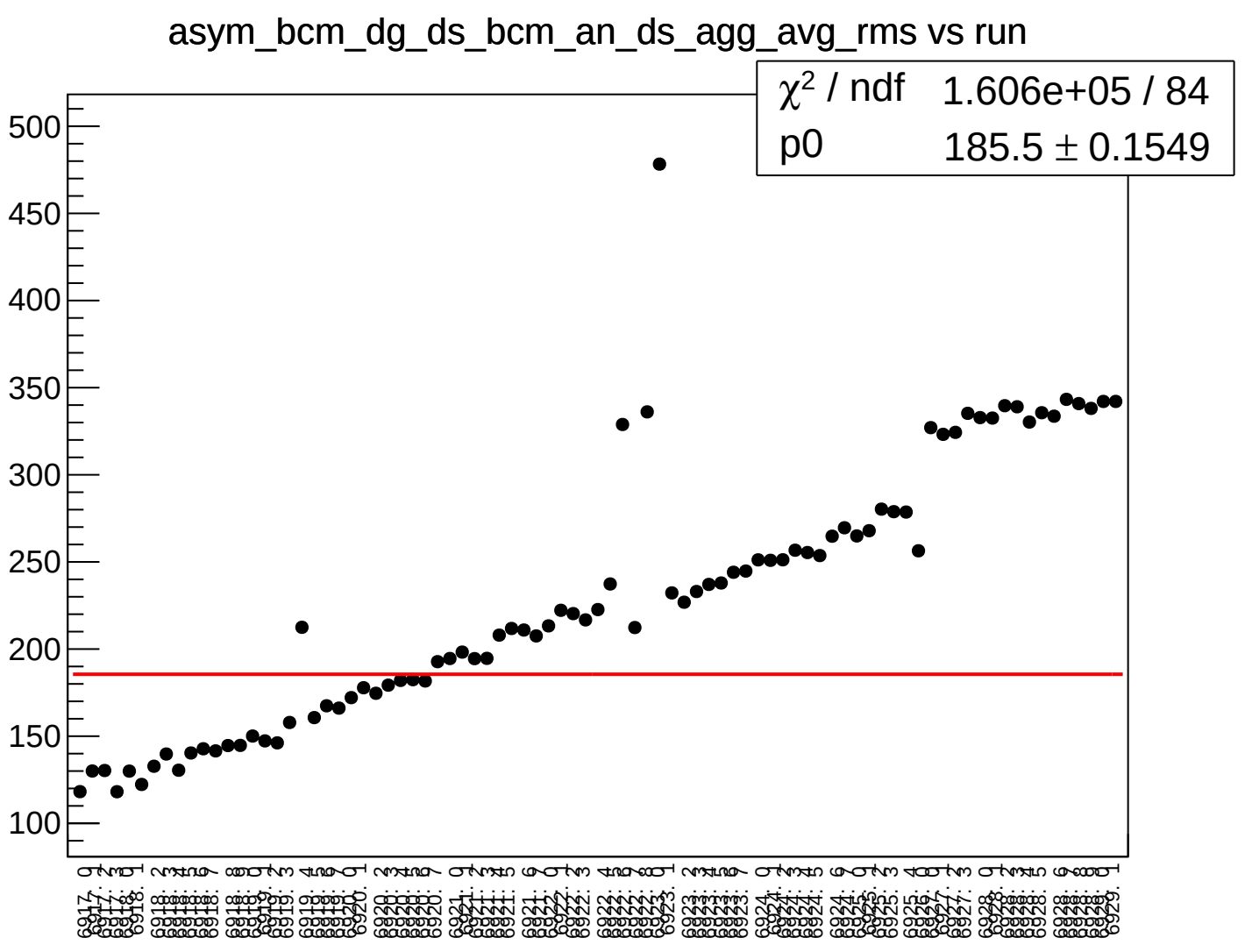

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.599e+05 / 84
p0 185.6 ± 0.1549
500
450
400
350
300
250
200
150
100

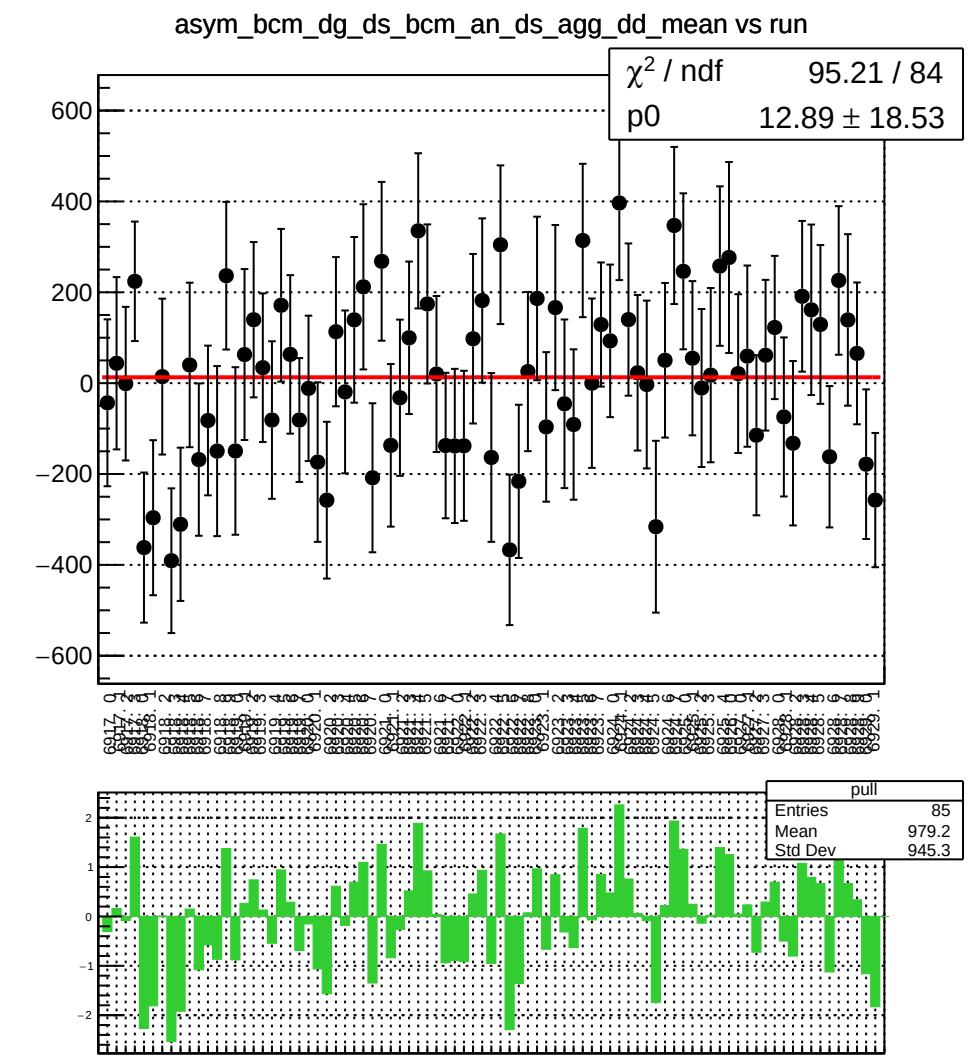

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 58.68 / 84
p0 25.6 ± 25.33
pull
Entries 85
Mean −284.8
Std Dev 311.5

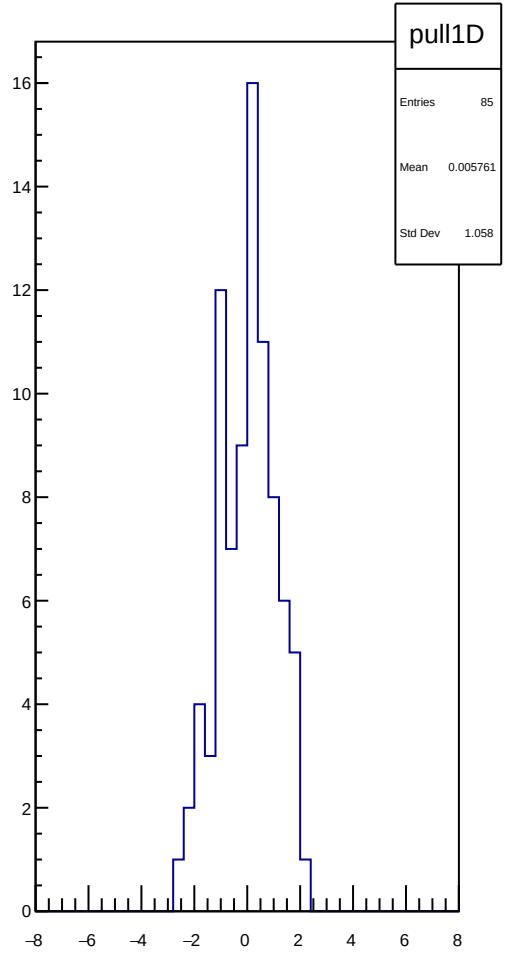

pull1D
Entries 85
Mean −0.006774
Std Dev 0.8309

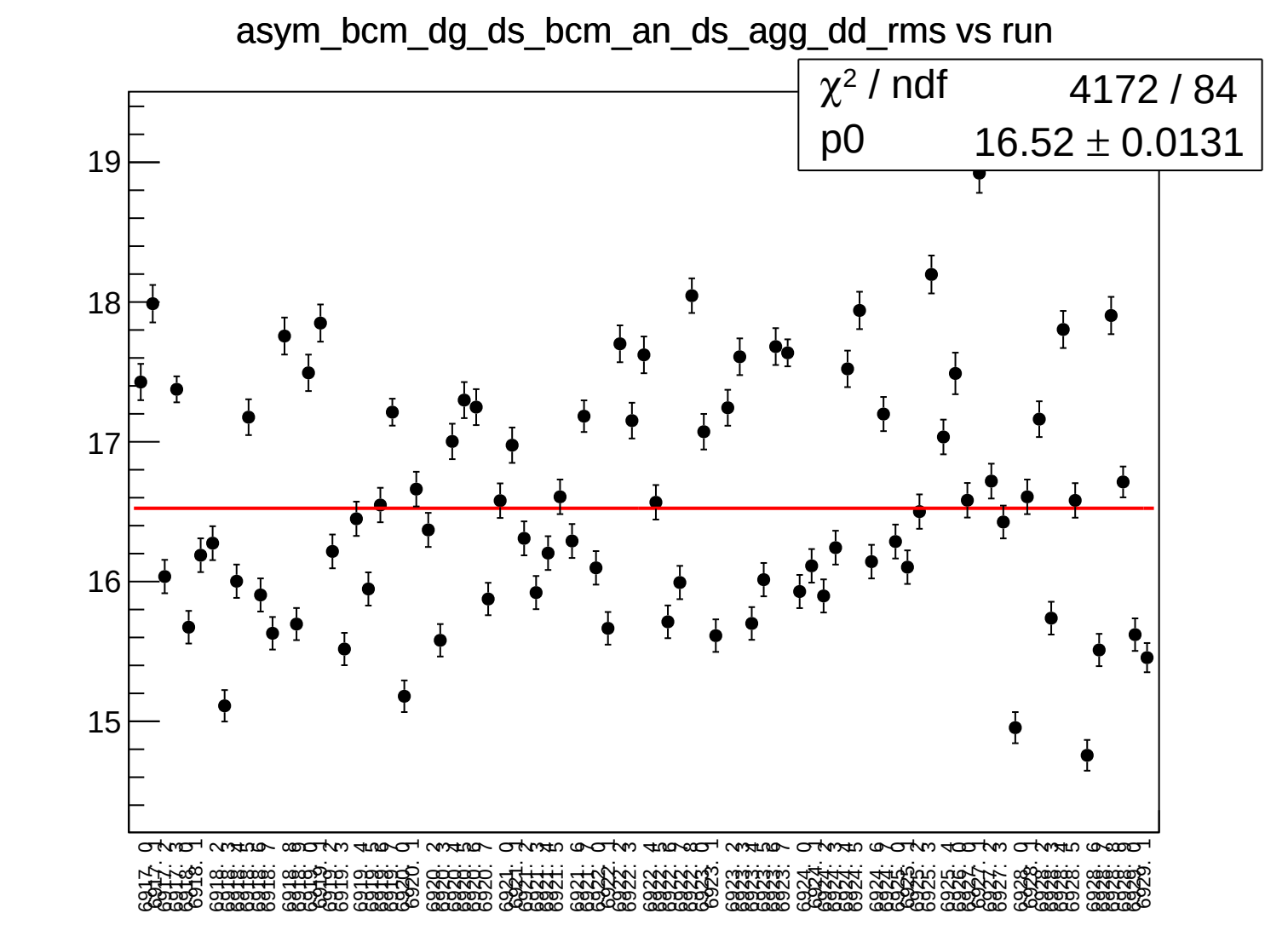

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 977.2 / 84
p0 22.61 ± 0.01791
24
23.5
23
22.5
22
21.5

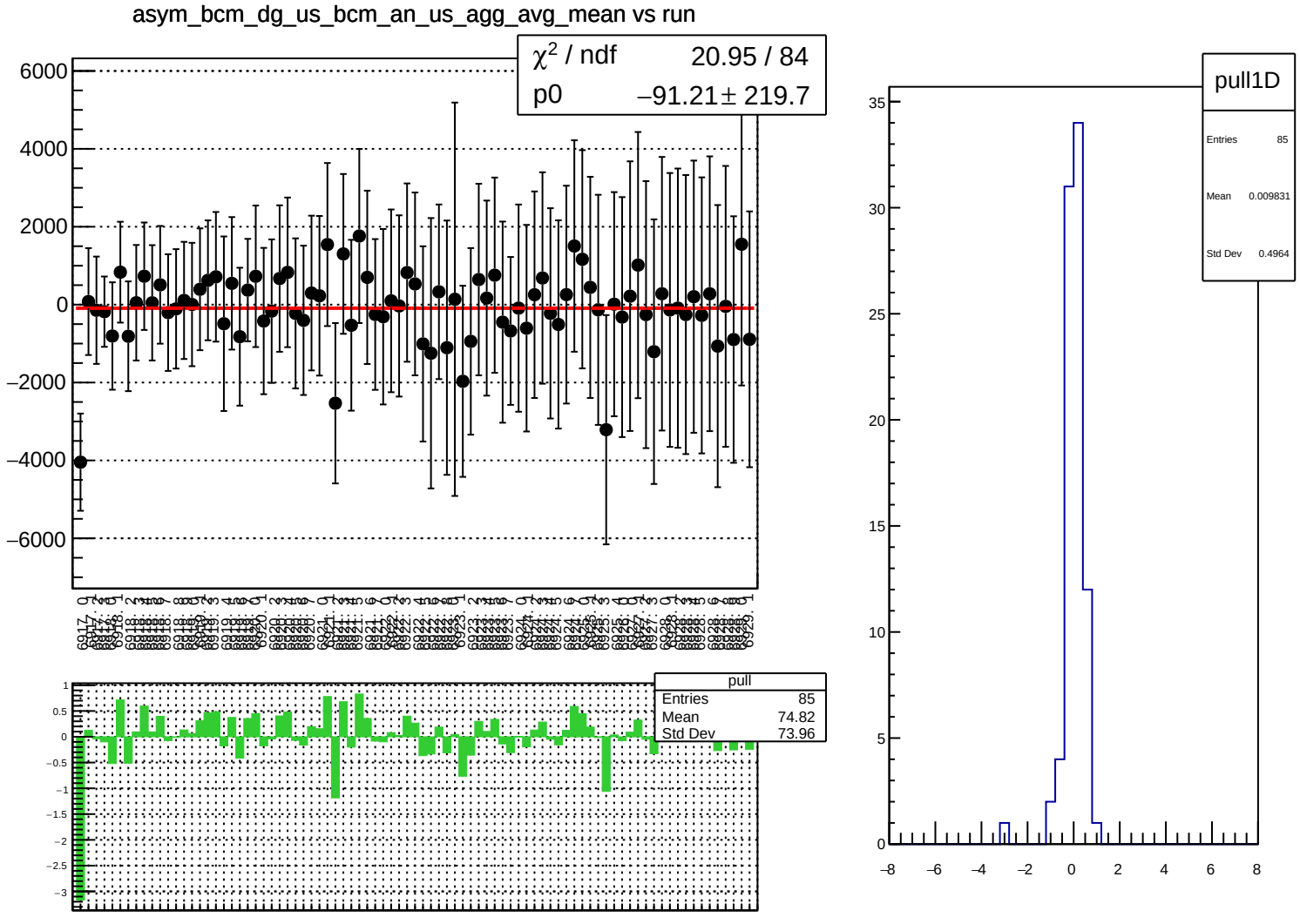

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 21.73 / 84
p0 −118.7 ± 219.1
pull
Entries 85
Mean 71.43
Std Dev 60.53
pull1D
Entries 85
Mean 0.01555
Std Dev 0.5054

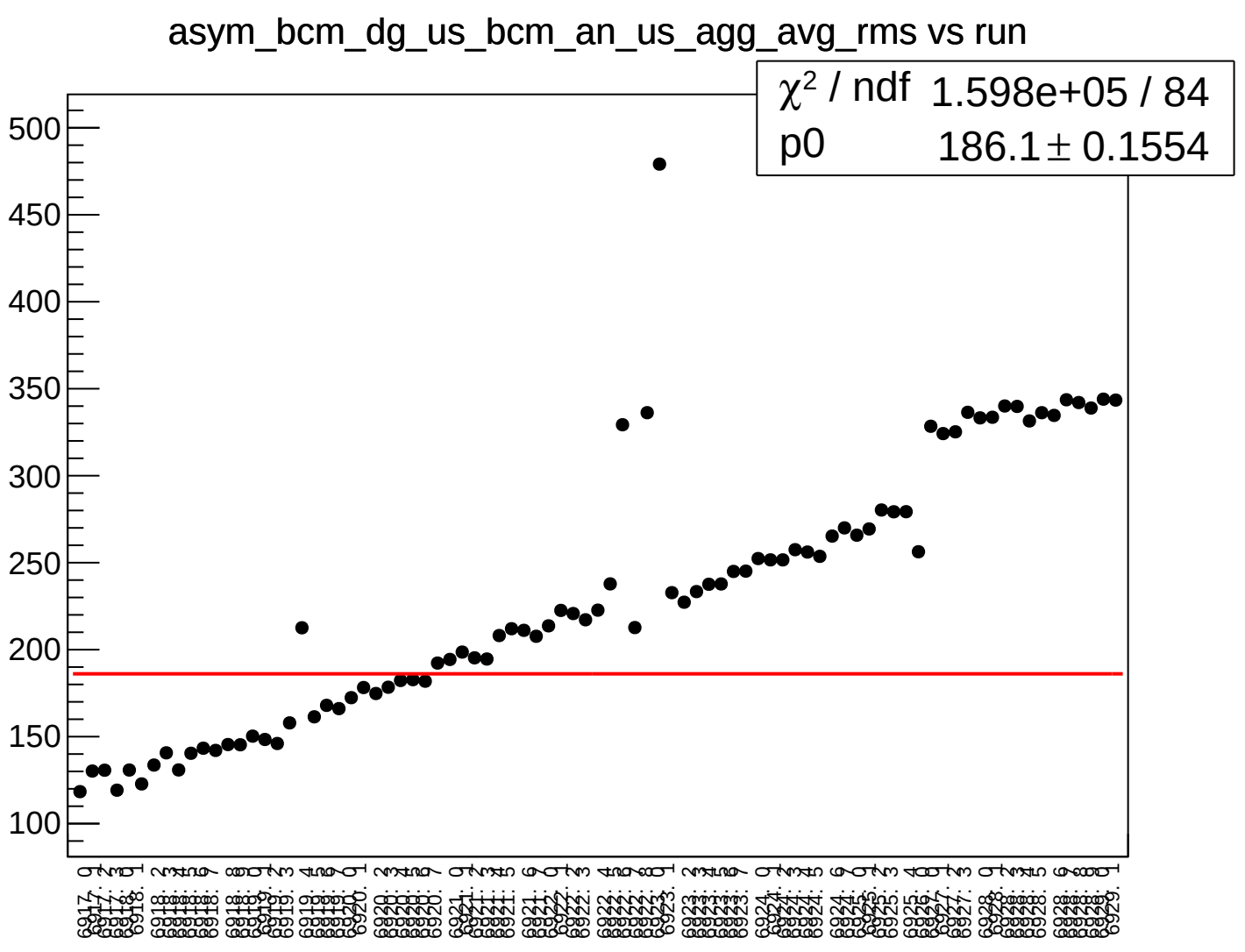

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.606e+05 / 84
p0 185.5 ± 0.1549
500
450
400
350
300
250
200
150
100

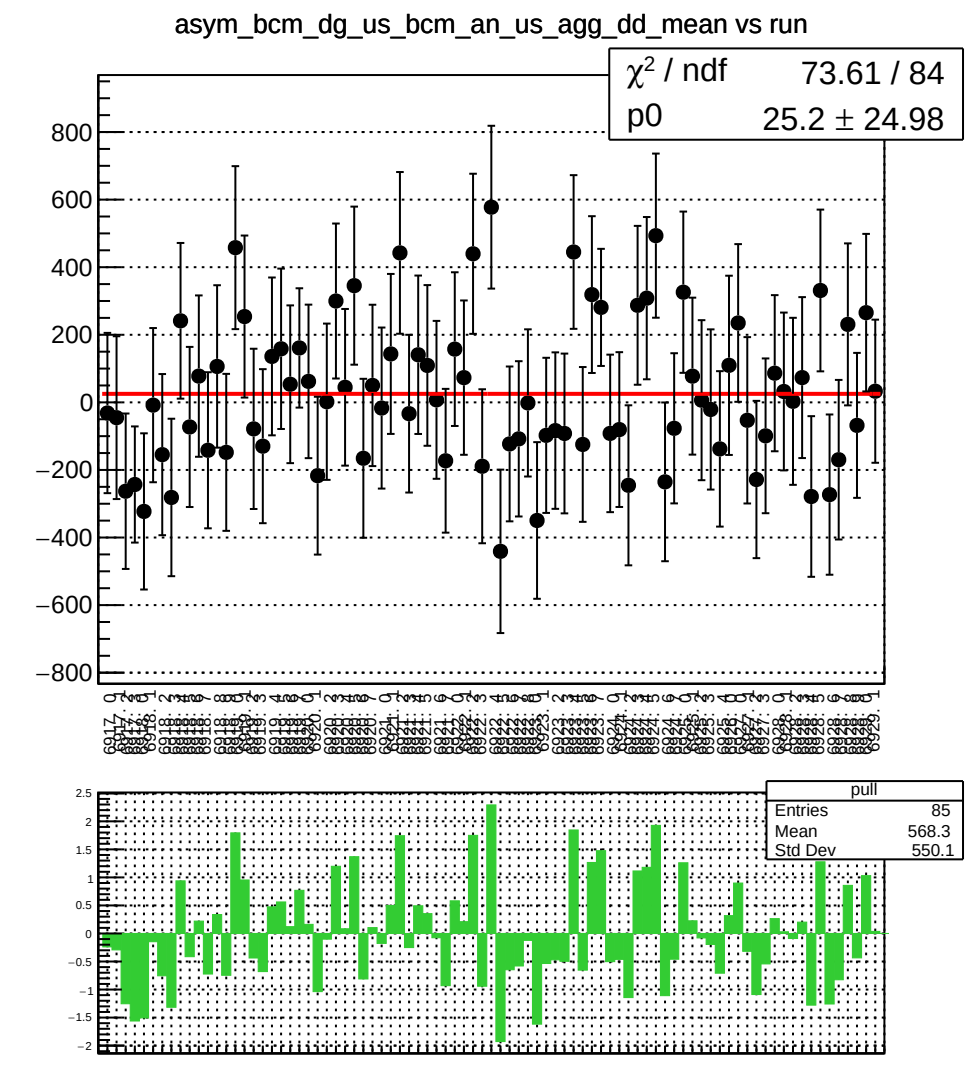

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 95.21 / 84
p0 12.89 ± 18.53
pull
Entries 85
Mean 979.2
Std Dev 945.3

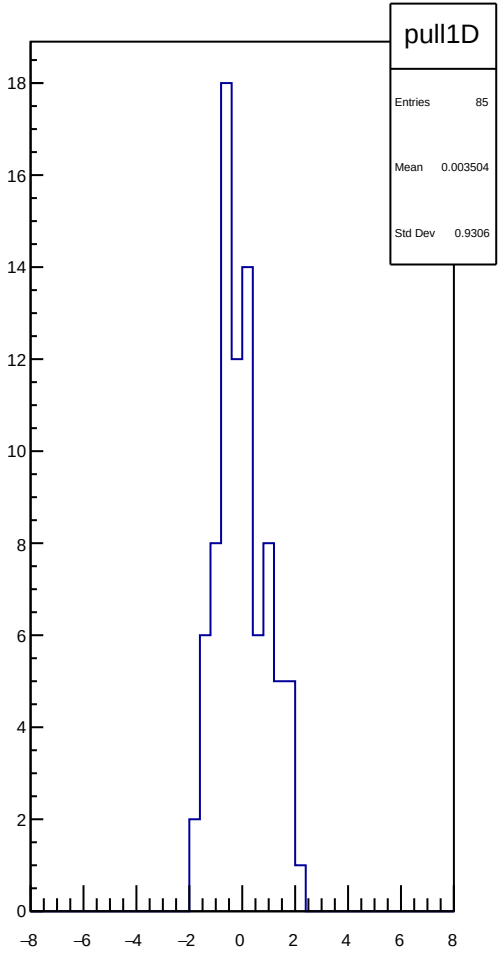

pull1D
Entries 85
Mean 0.005761
Std Dev 1.058

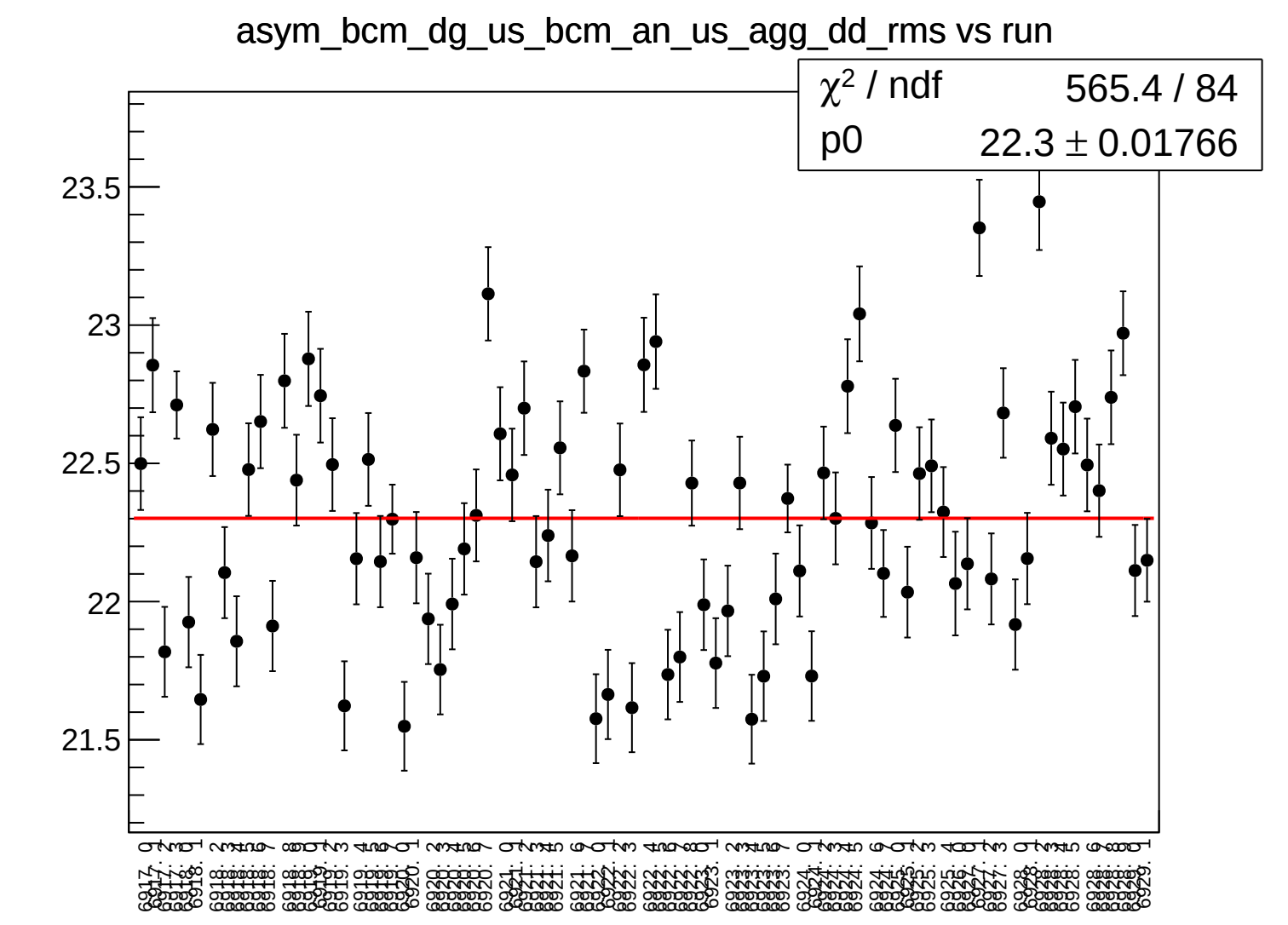

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4172 / 84
p0 16.52 ± 0.0131
19
18
17
16
15

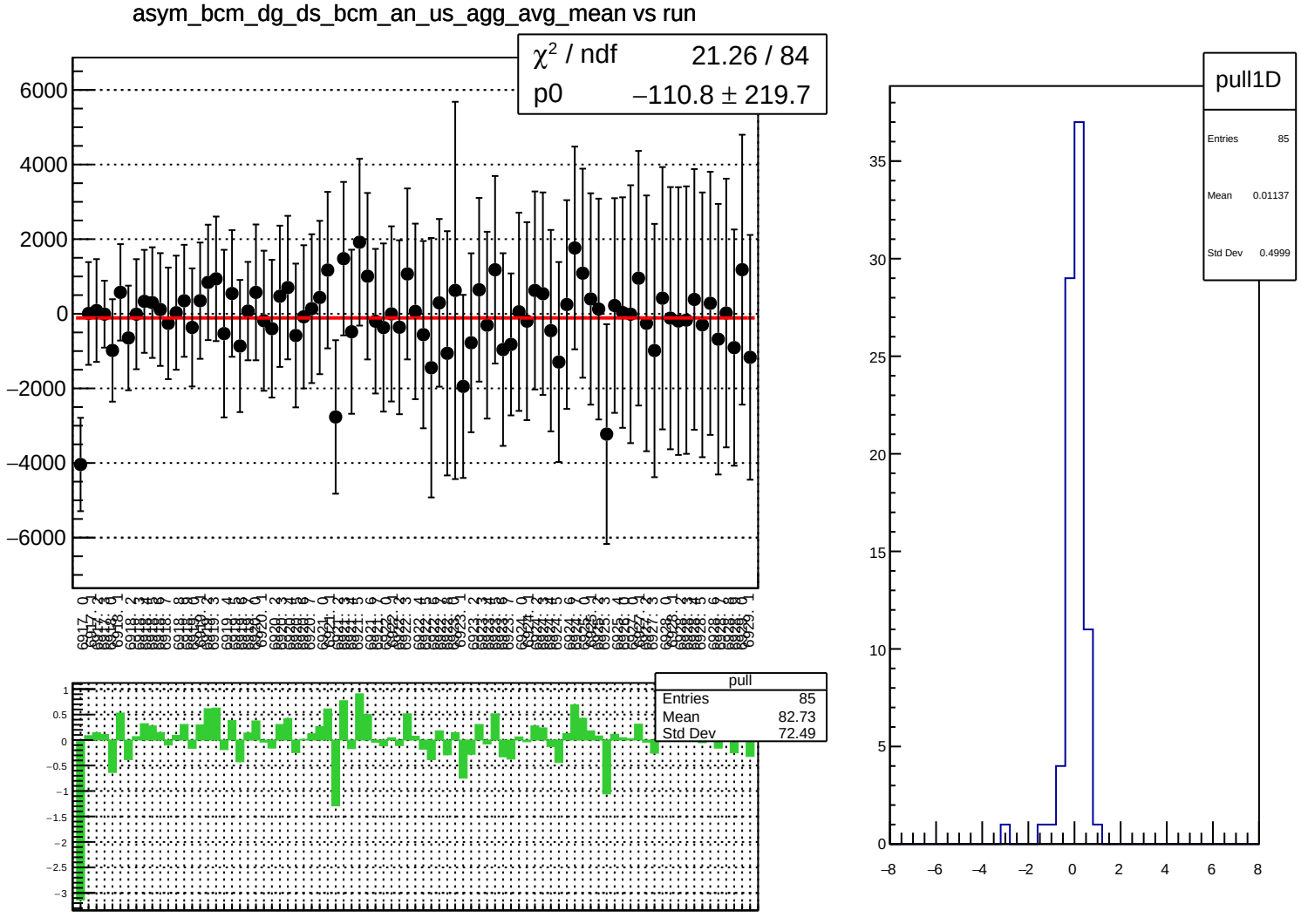

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 20.95 / 84
p0 −91.21 ± 219.7
pull
Entries 85
Mean 74.82
Std Dev 73.96
pull1D
Entries 85
Mean 0.009831
Std Dev 0.4964

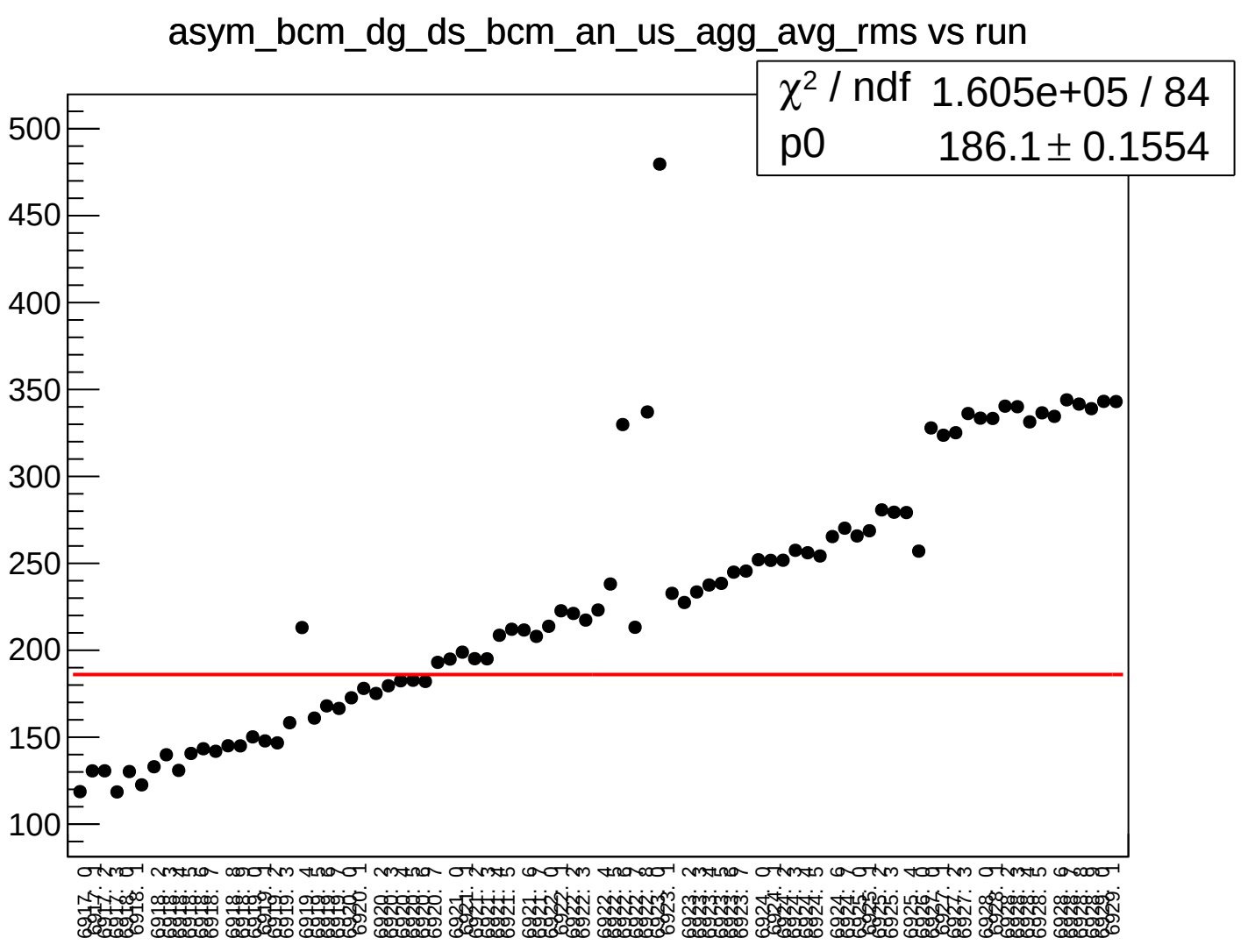

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.598e+05 / 84
p0 186.1 ± 0.1554
500
450
400
350
300
250
200
150
100

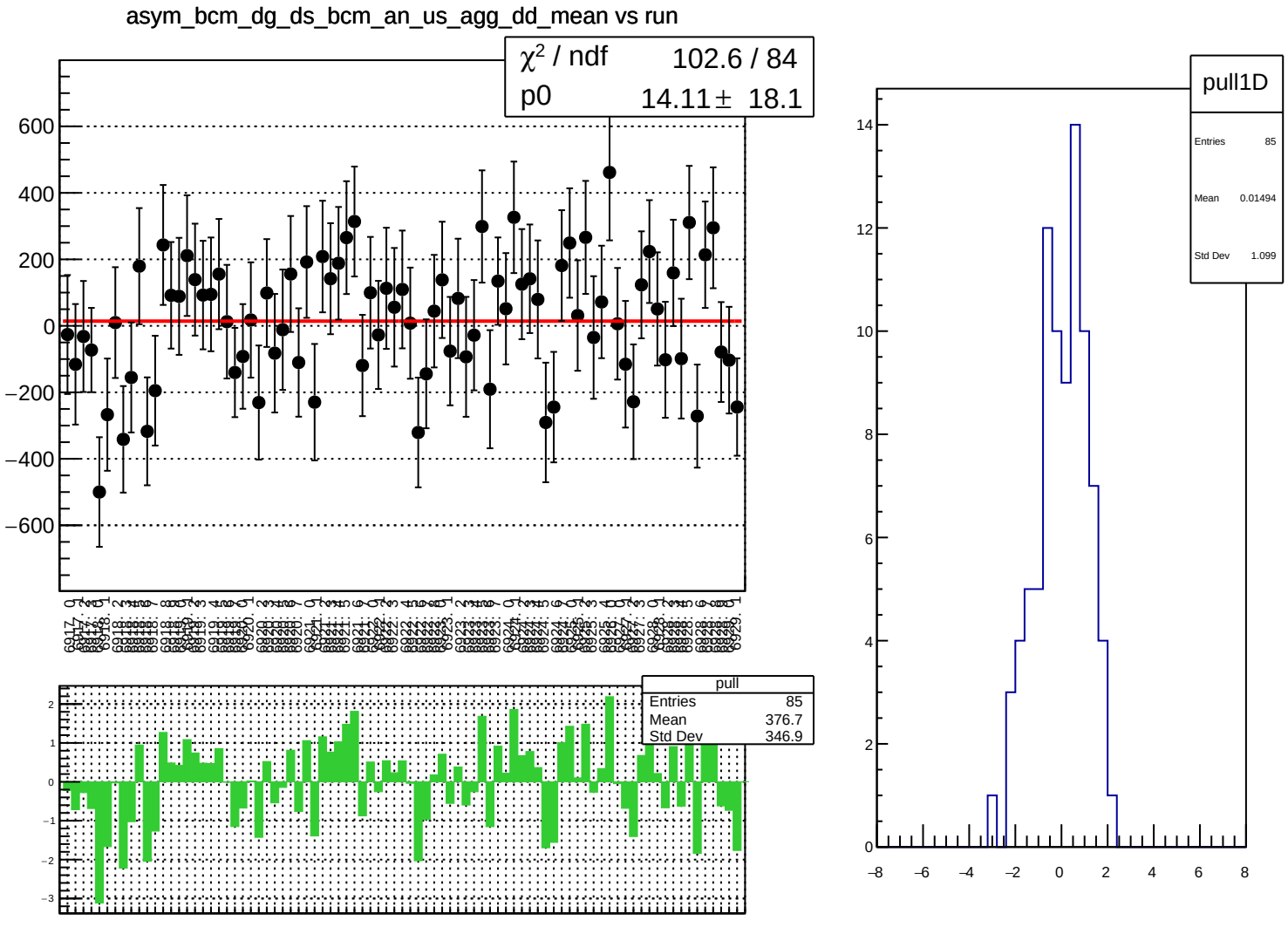

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 73.61 / 84
p0 25.2 ± 24.98
pull
Entries 85
Mean 568.3
Std Dev 550.1

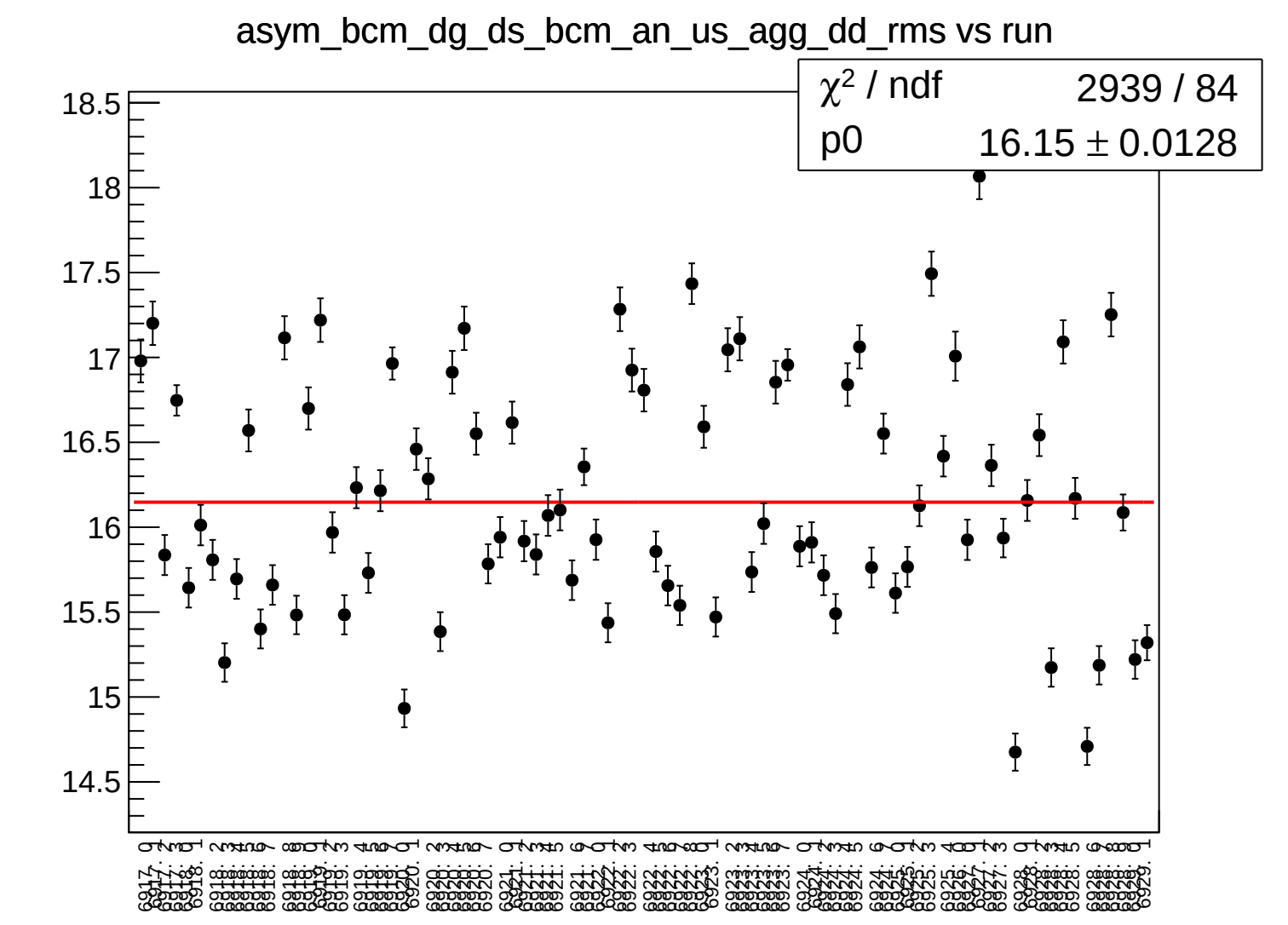

pull1D
Entries 85
Mean 0.003504
Std Dev 0.9306

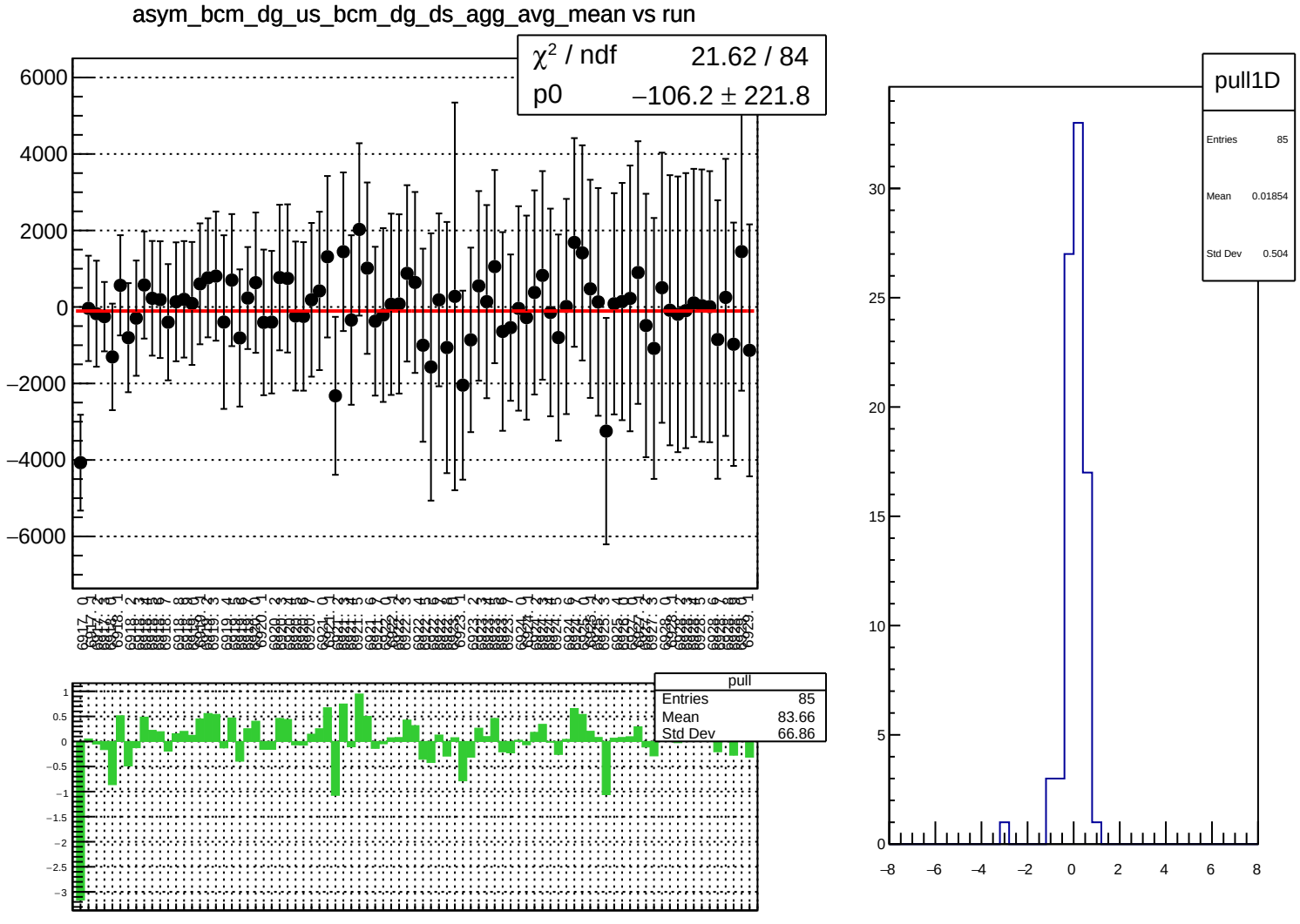

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 565.4 / 84
p0 22.3 ± 0.01766
23.5
23
22.5
22
21.5

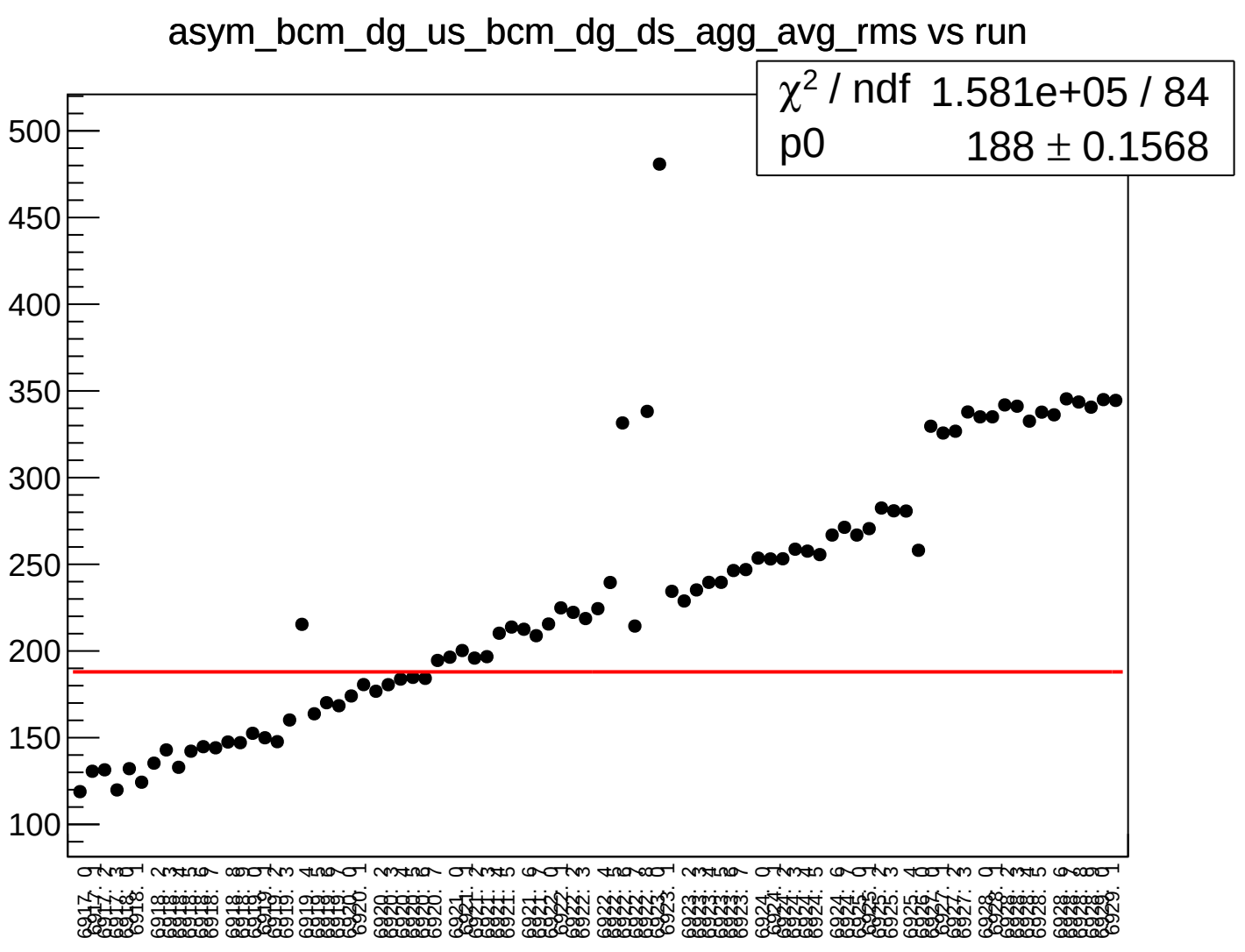

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 21.26 / 84
p0 −110.8 ± 219.7
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 82.73
Std Dev 72.49
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
pull1D
Entries 85
Mean 0.01137
Std Dev 0.4999
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

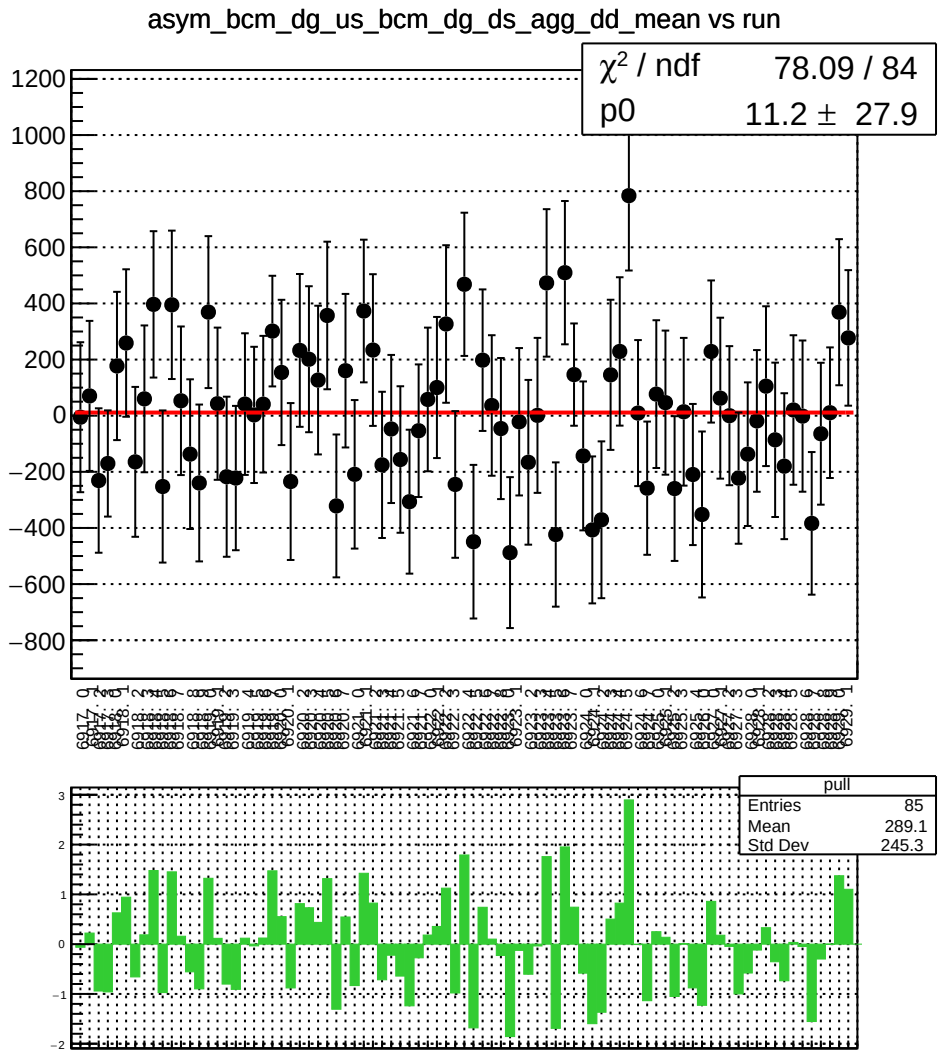

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.605e+05 / 84
p0 186.1 ± 0.1554
500
450
400
350
300
250
200
150
100

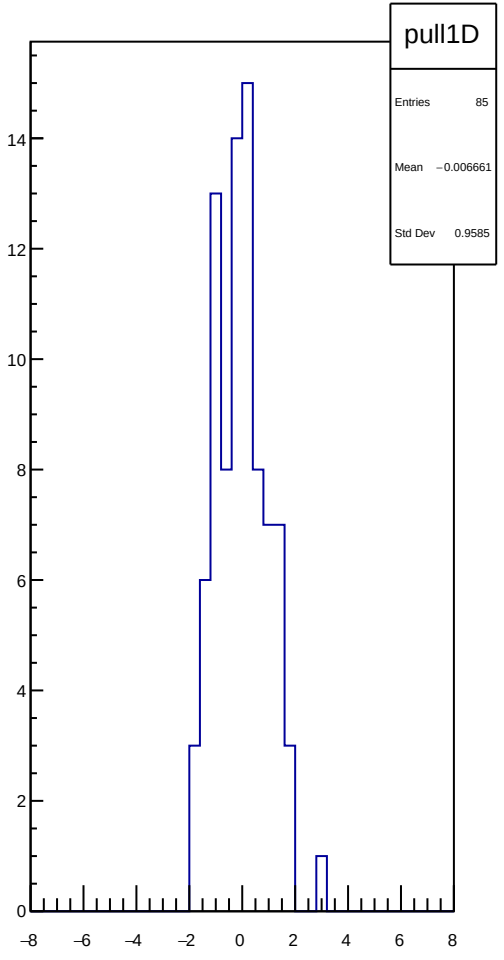

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 102.6 / 84
p0 14.11 ± 18.1
pull
Entries 85
Mean 376.7
Std Dev 346.9
pull1D
Entries 85
Mean 0.01494
Std Dev 1.099

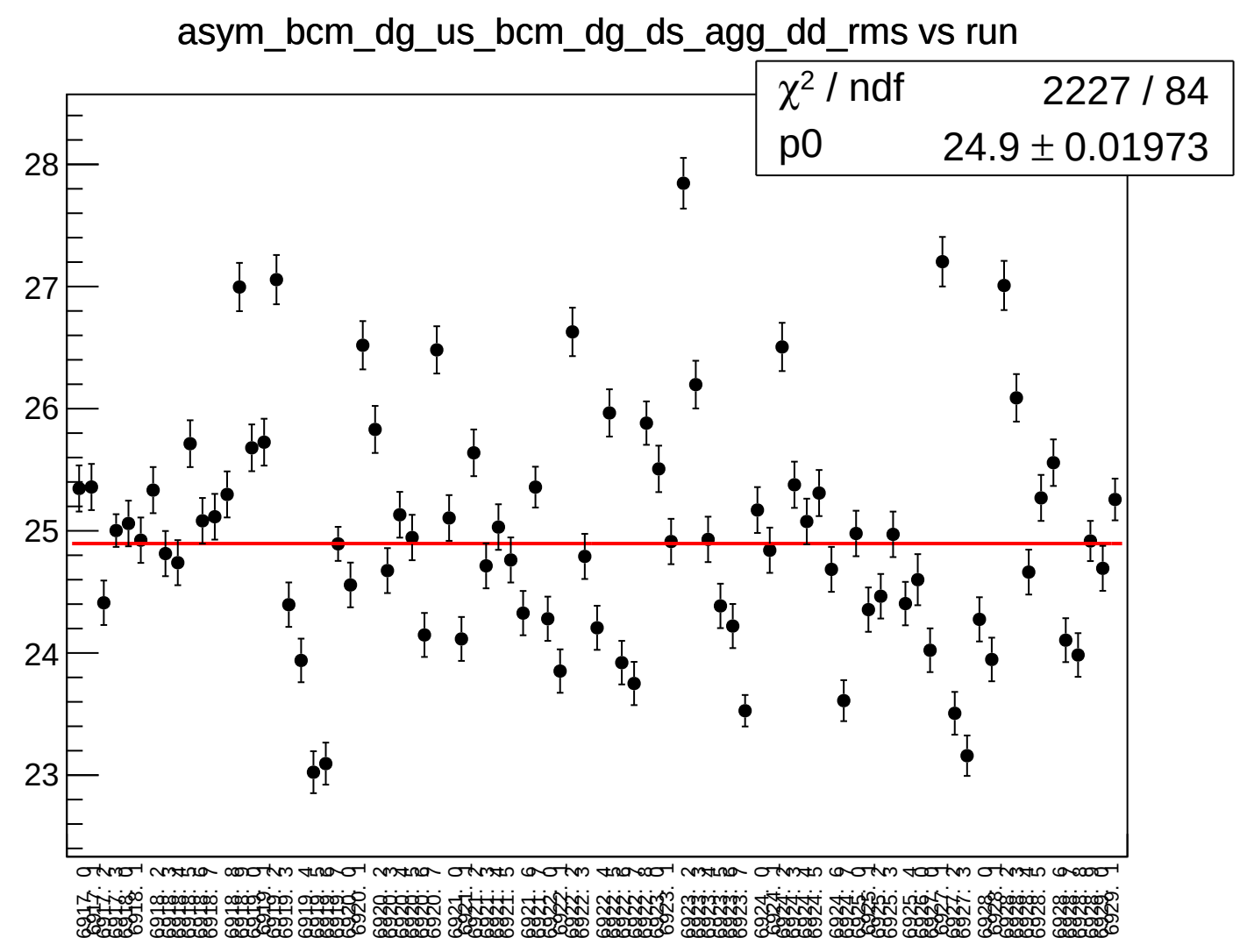

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2939 / 84
p0 16.15 ± 0.0128
18.5
18
17.5
17
16.5
16
15.5
15
14.5

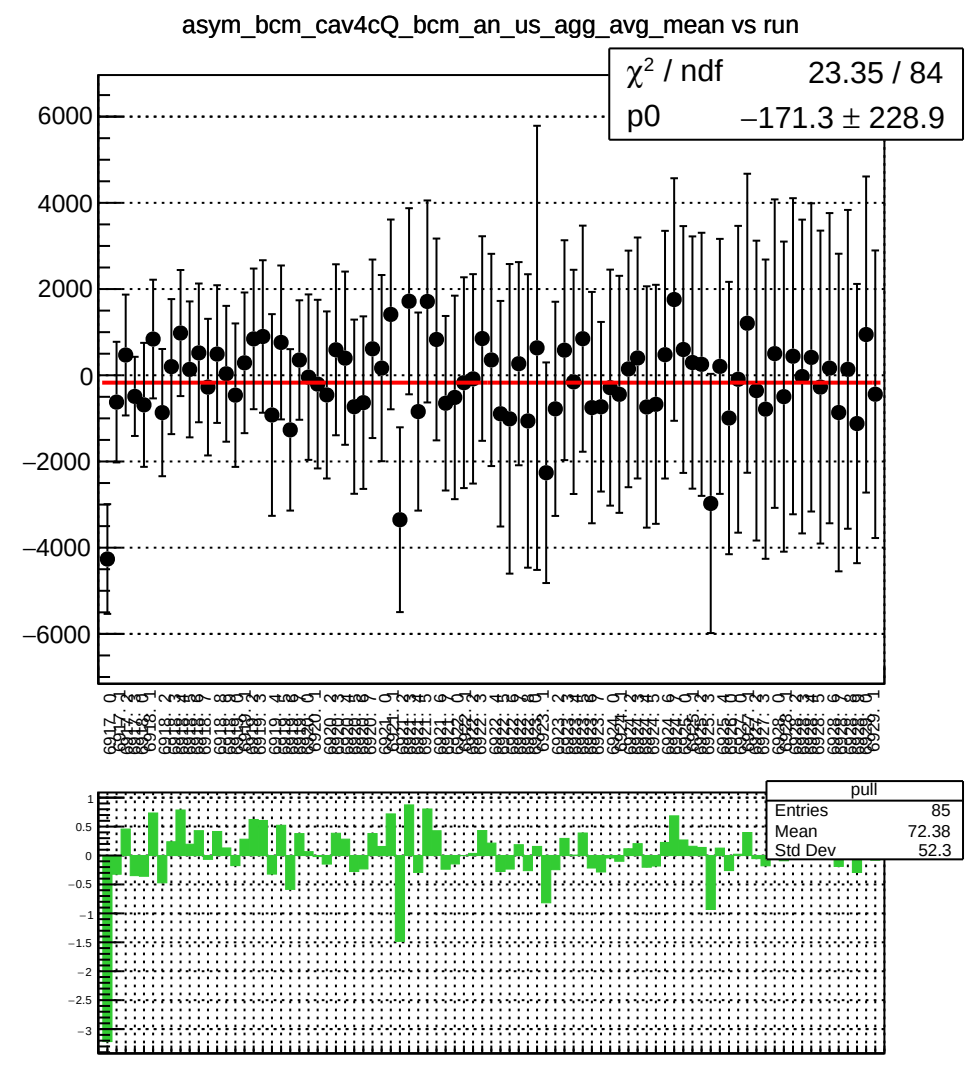

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 21.62 / 84
p0 −106.2 ± 221.8
pull
Entries 85
Mean 83.66
Std Dev 66.86
pull1D
Entries 85
Mean 0.01854
Std Dev 0.504

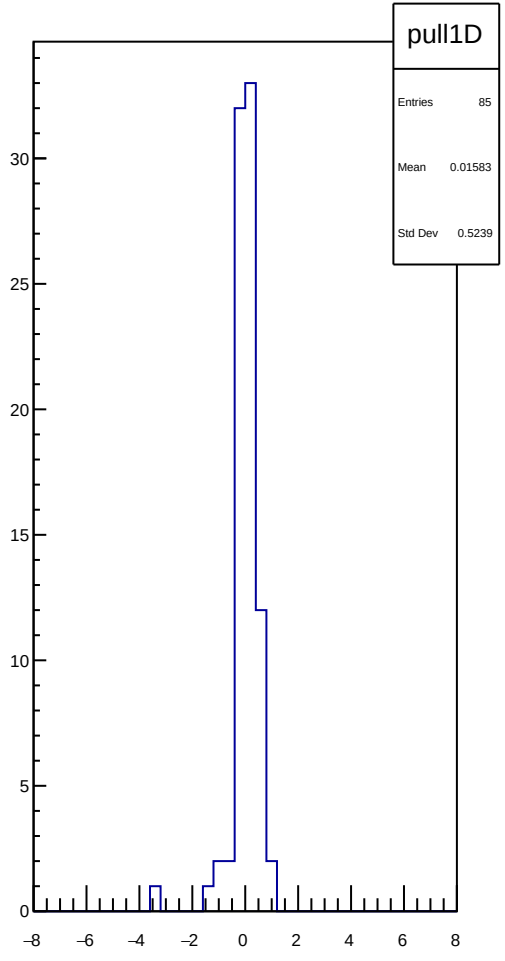

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.581e+05 / 84
p0 188 ± 0.1568
500
450
400
350
300
250
200
150
100

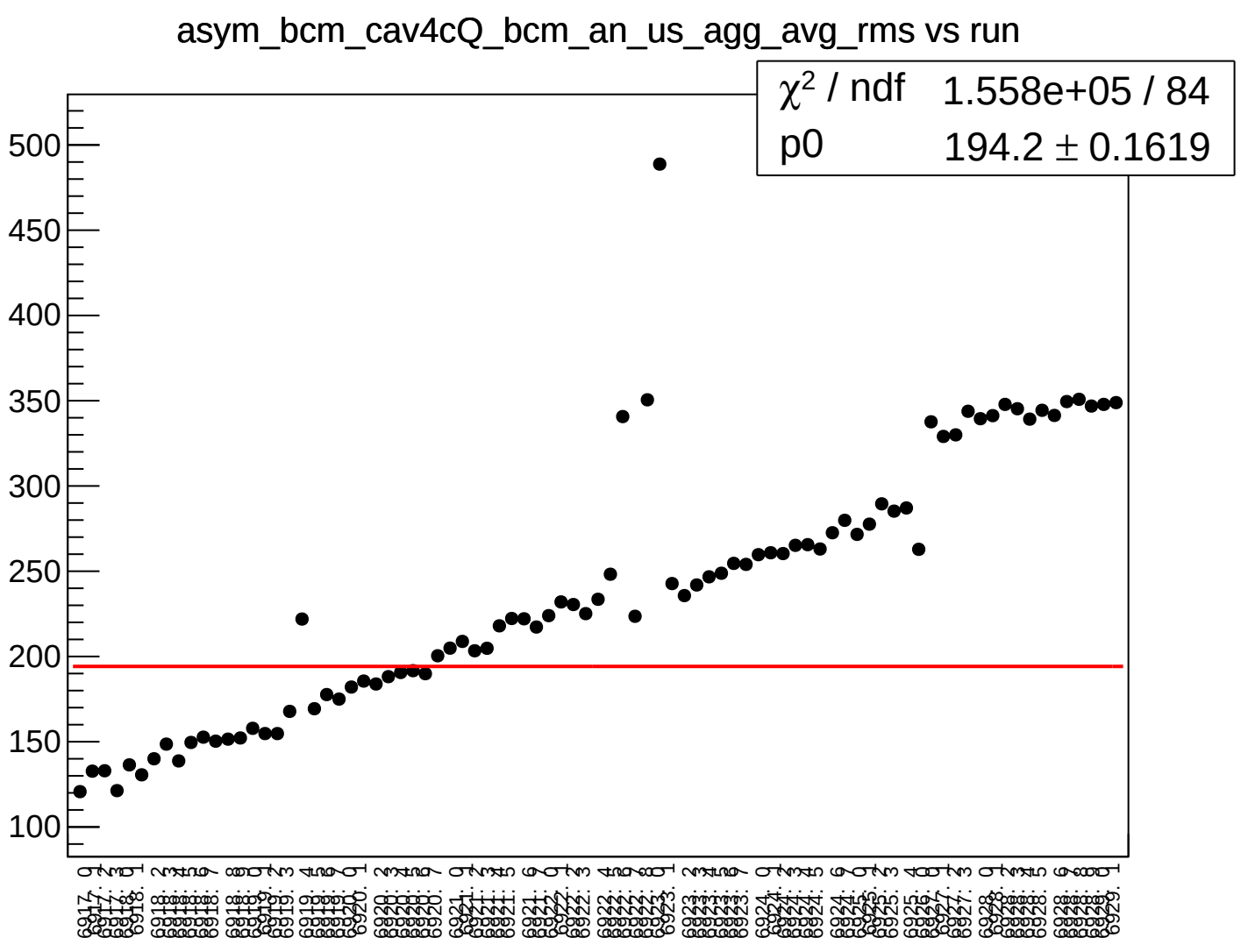

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 78.09 / 84
p0 11.2 ± 27.9
pull
Entries 85
Mean 289.1
Std Dev 245.3

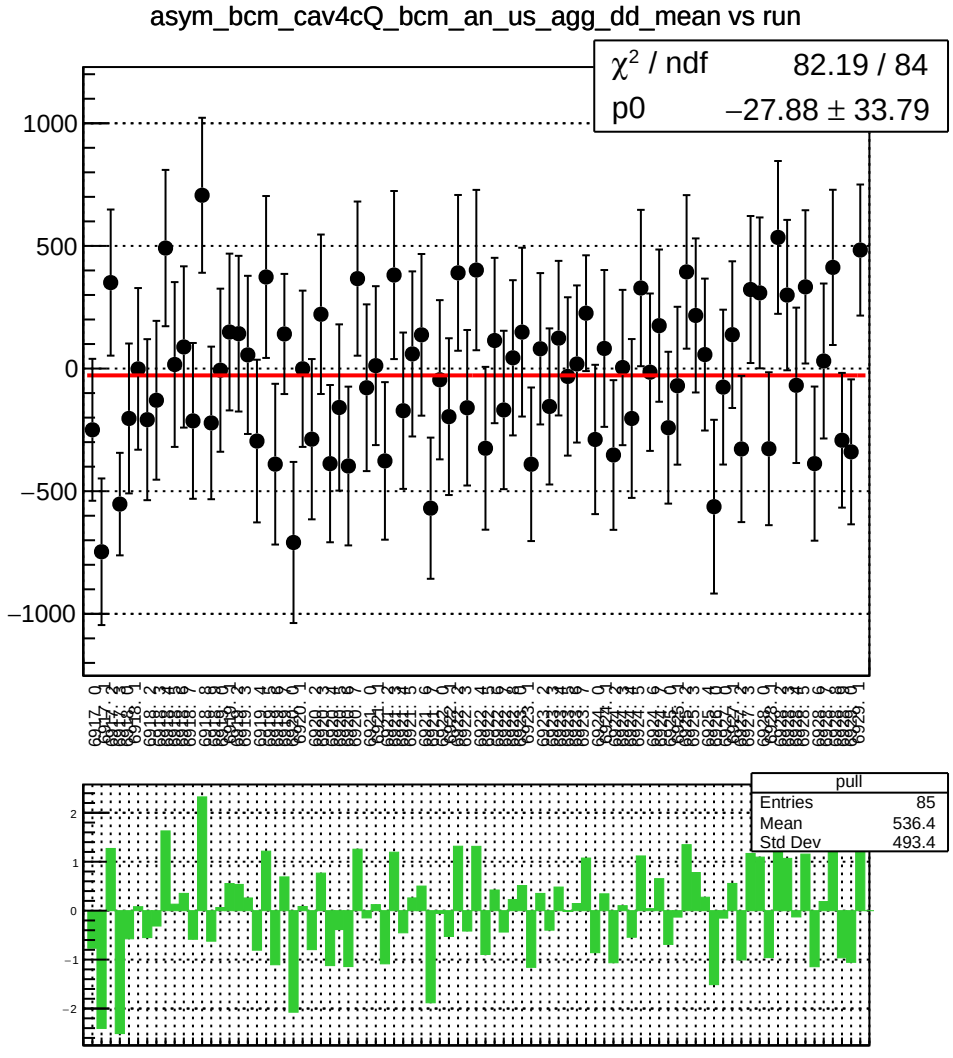

pull1D
Entries 85
Mean −0.006661
Std Dev 0.9585

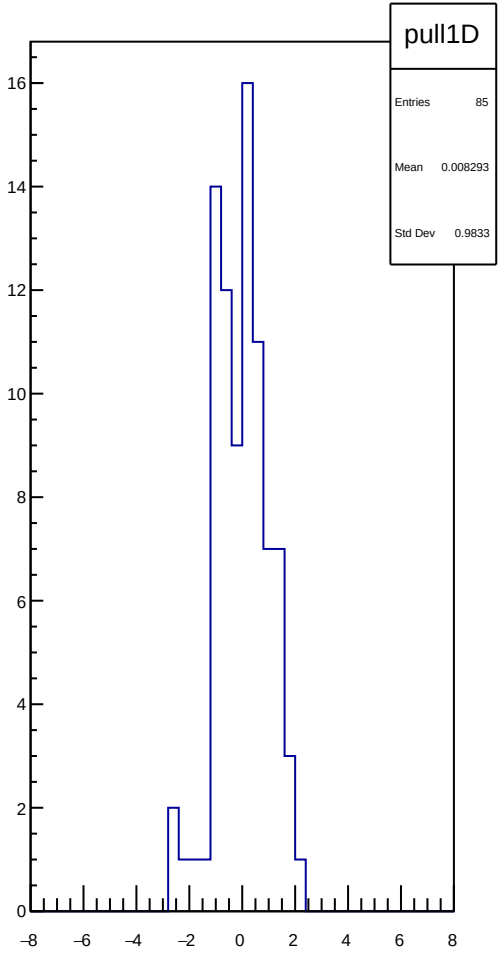

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2227 / 84
p0 24.9 ± 0.01973
28
27
26
25
24
23

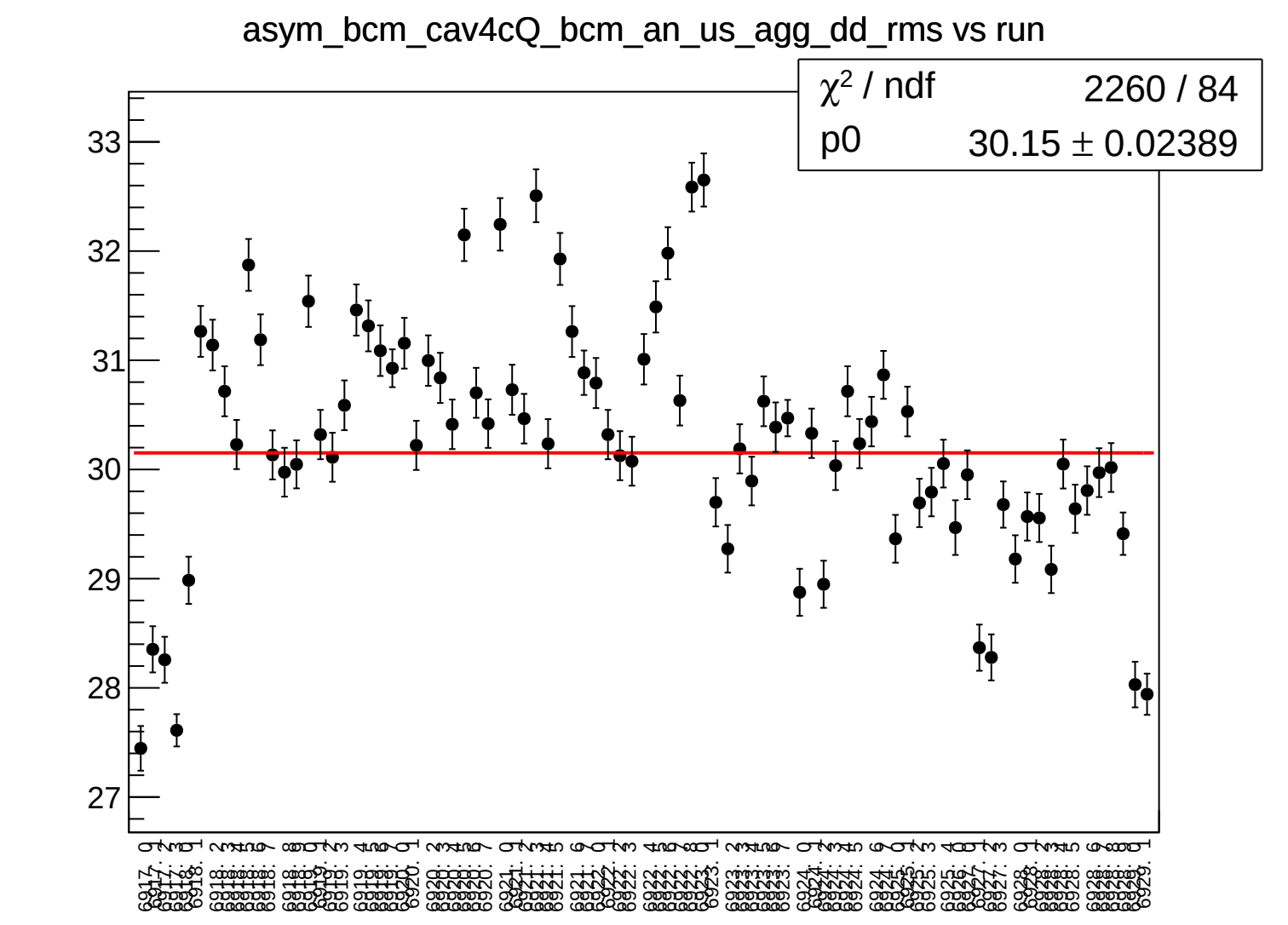

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 23.35 / 84
p0 −171.3 ± 228.9
pull
Entries 85
Mean 72.38
Std Dev 52.3

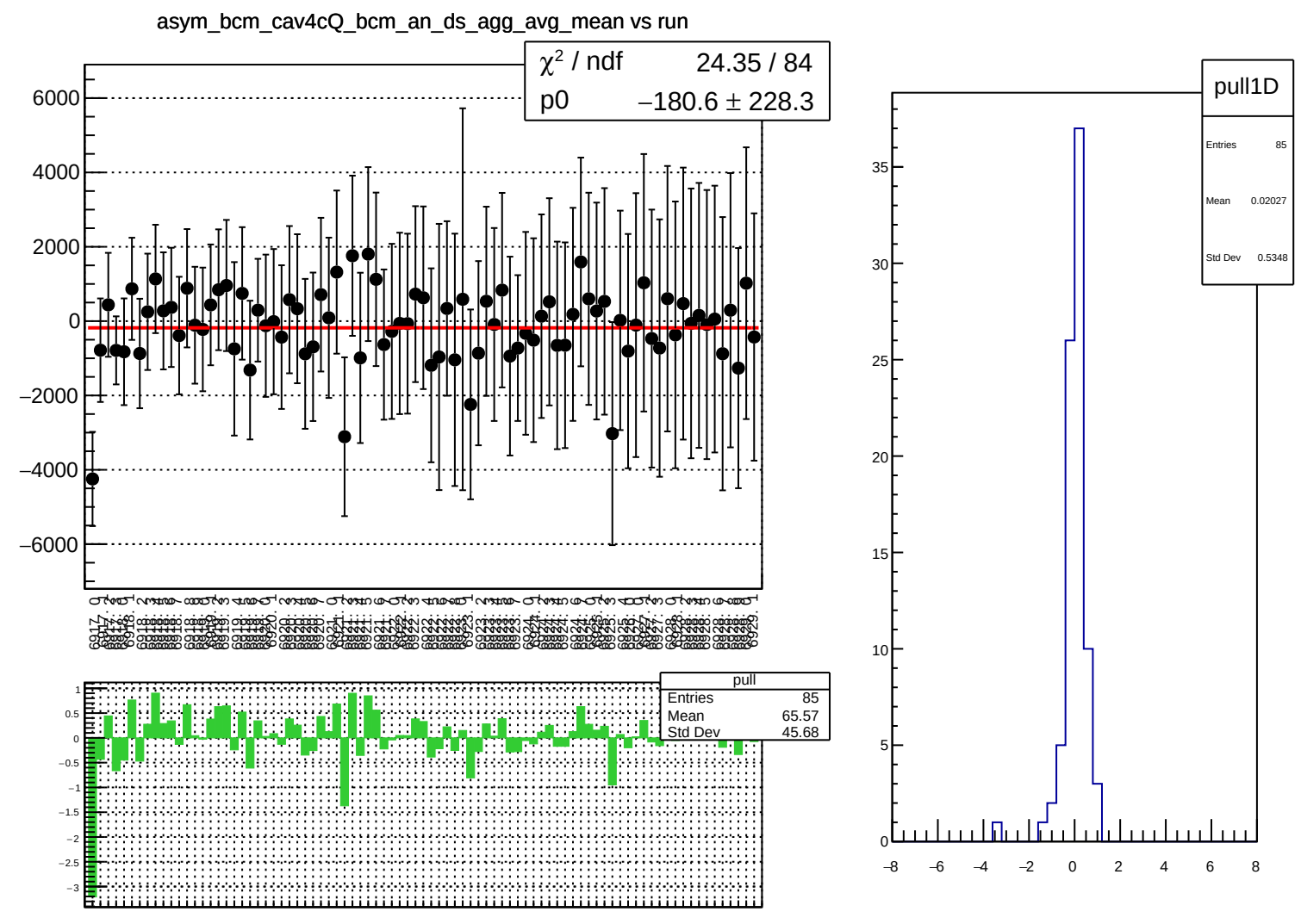

pull1D
Entries 85
Mean 0.01583
Std Dev 0.5239

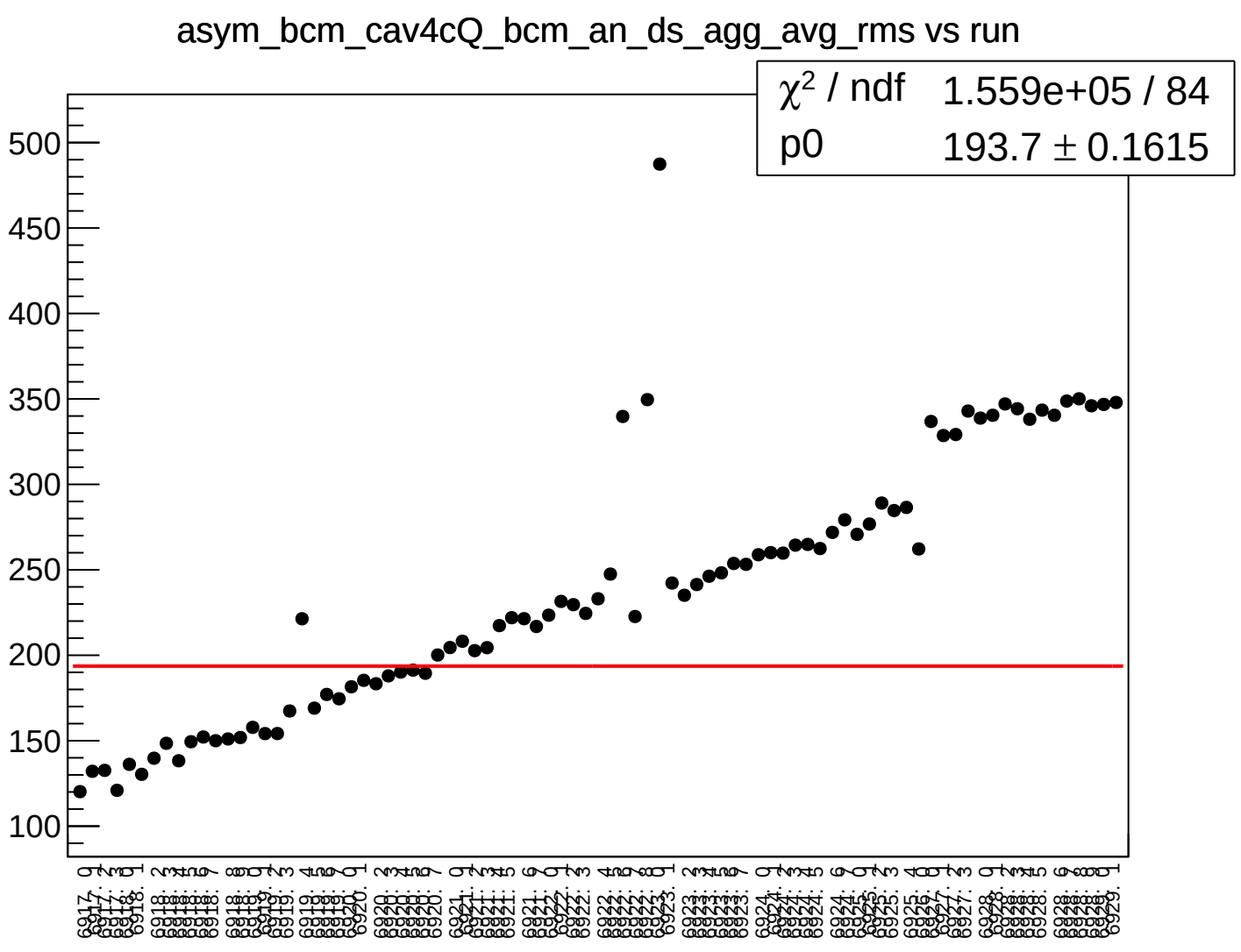

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.558e+05 / 84
p0 194.2 ± 0.1619
500
450
400
350
300
250
200
150
100

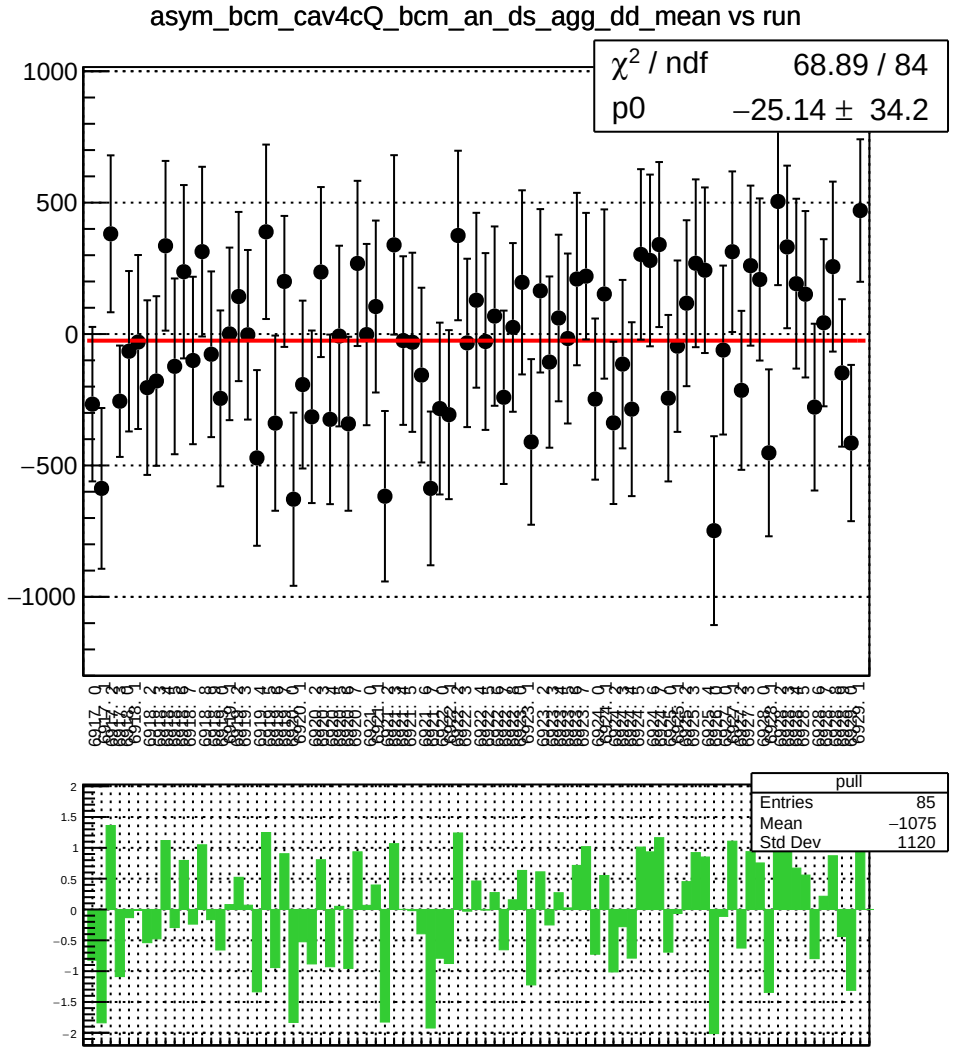

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 82.19 / 84
p0 −27.88 ± 33.79
1000
500
0
−500
−1000
pull
Entries 85
Mean 536.4
Std Dev 493.4
2
1
0
−1
−2

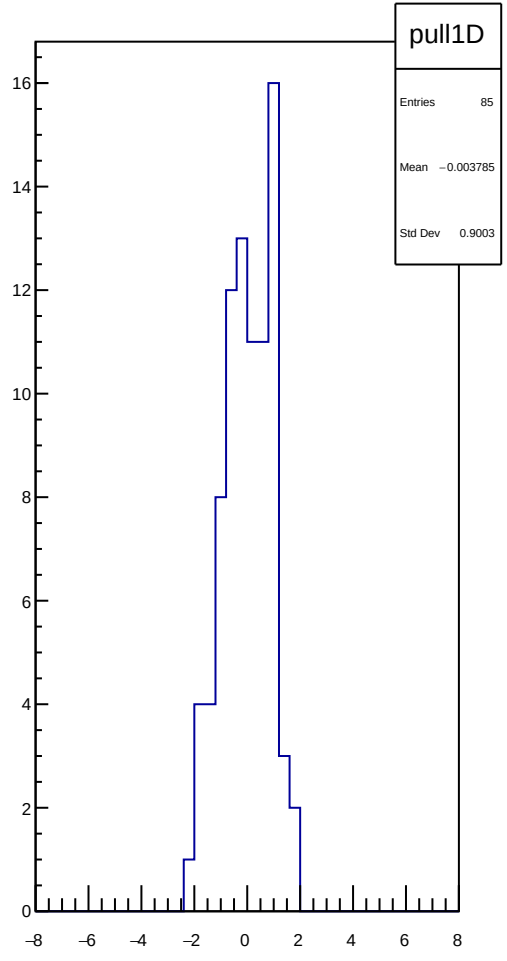

pull1D
Entries 85
Mean 0.008293
Std Dev 0.9833
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

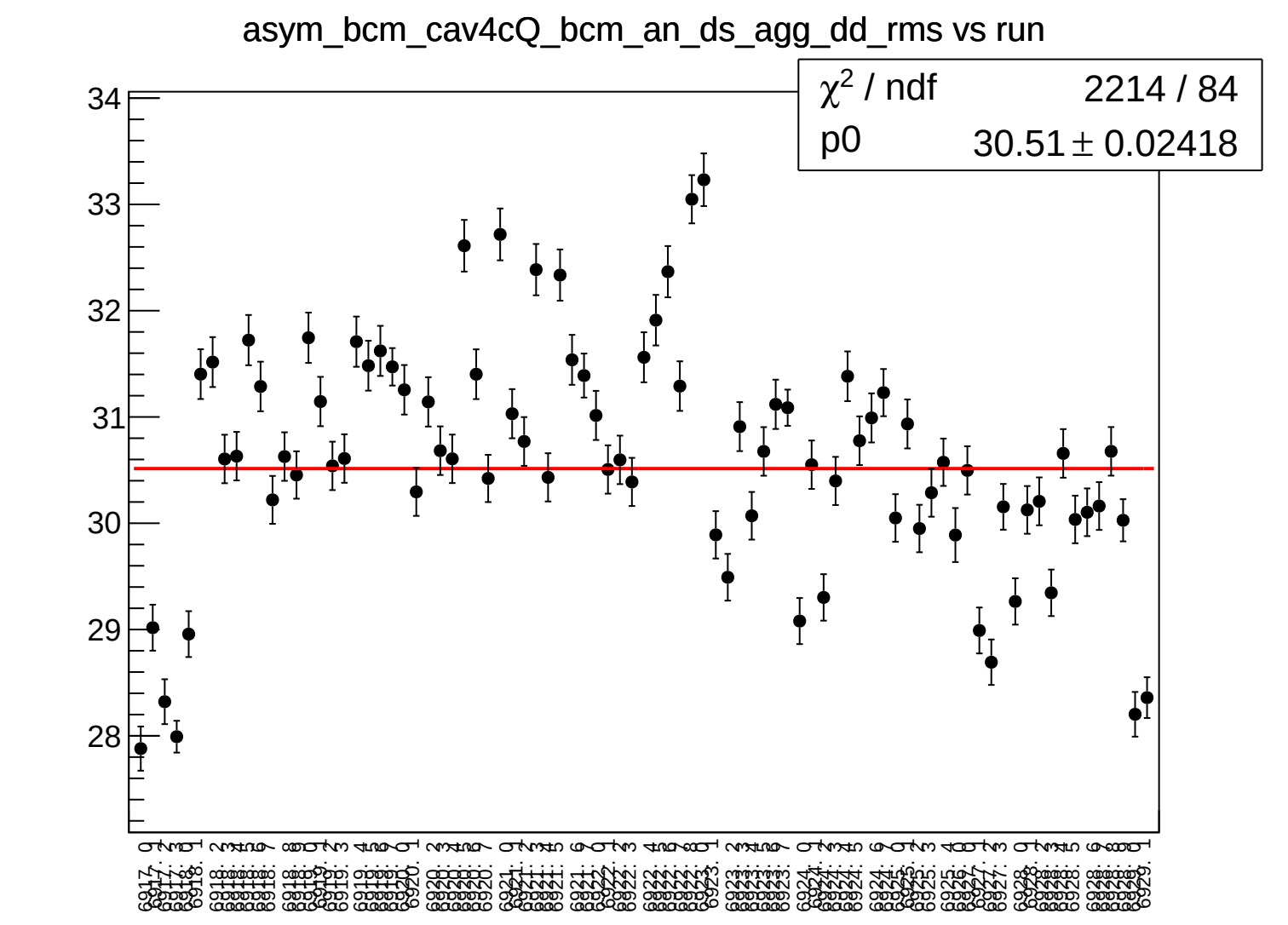

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2260 / 84
p0 30.15 ± 0.02389
33
32
31
30
29
28
27

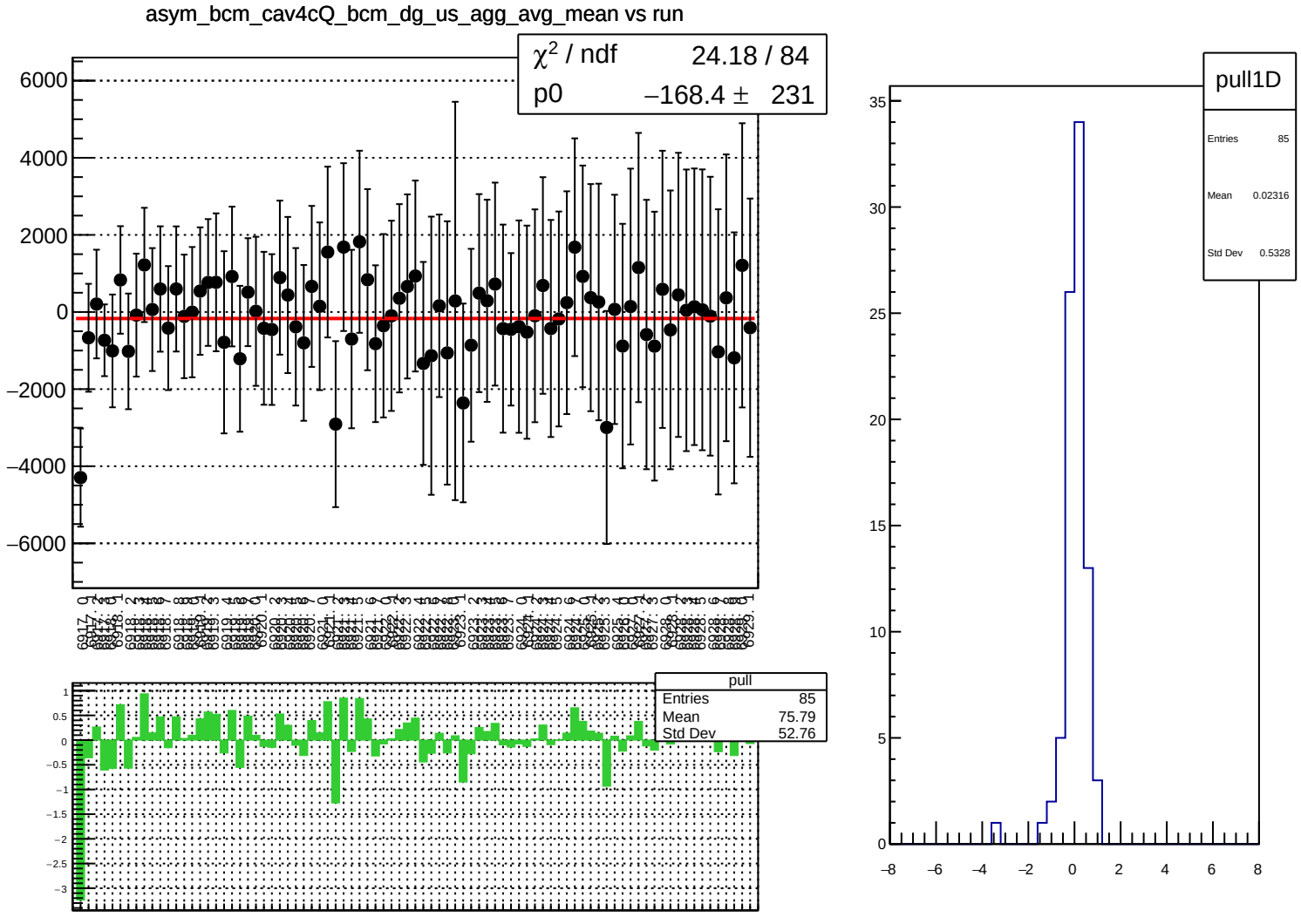

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 24.35 / 84
p0 −180.6 ± 228.3
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 65.57
Std Dev 45.68
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
pull1D
Entries 85
Mean 0.02027
Std Dev 0.5348
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

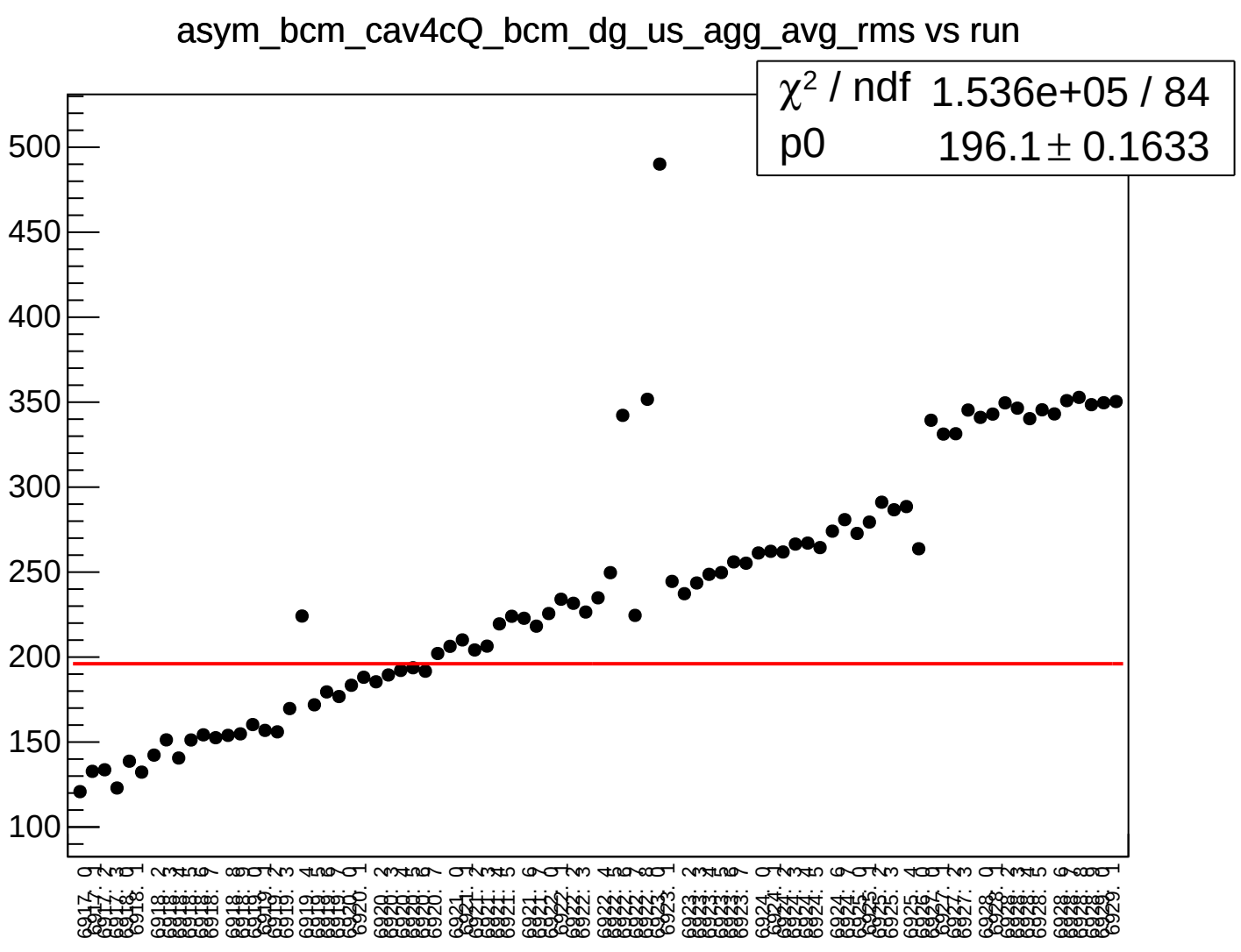

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.559e+05 / 84
p0 193.7 ± 0.1615
500
450
400
350
300
250
200
150
100

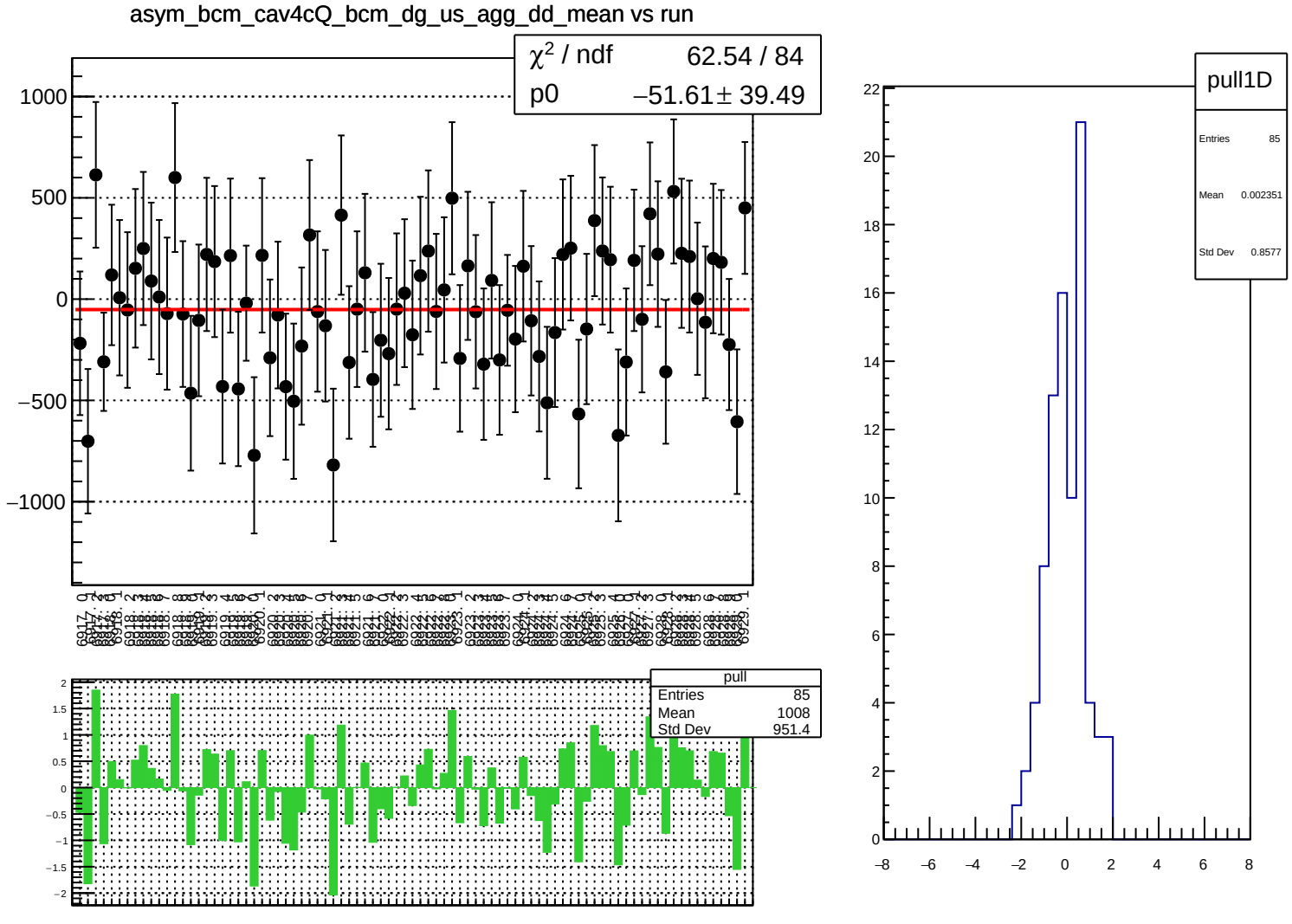

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.89 / 84
p0 −25.14 ± 34.2
1000
500
0
−500
−1000
pull
Entries 85
Mean −1075
Std Dev 1120
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

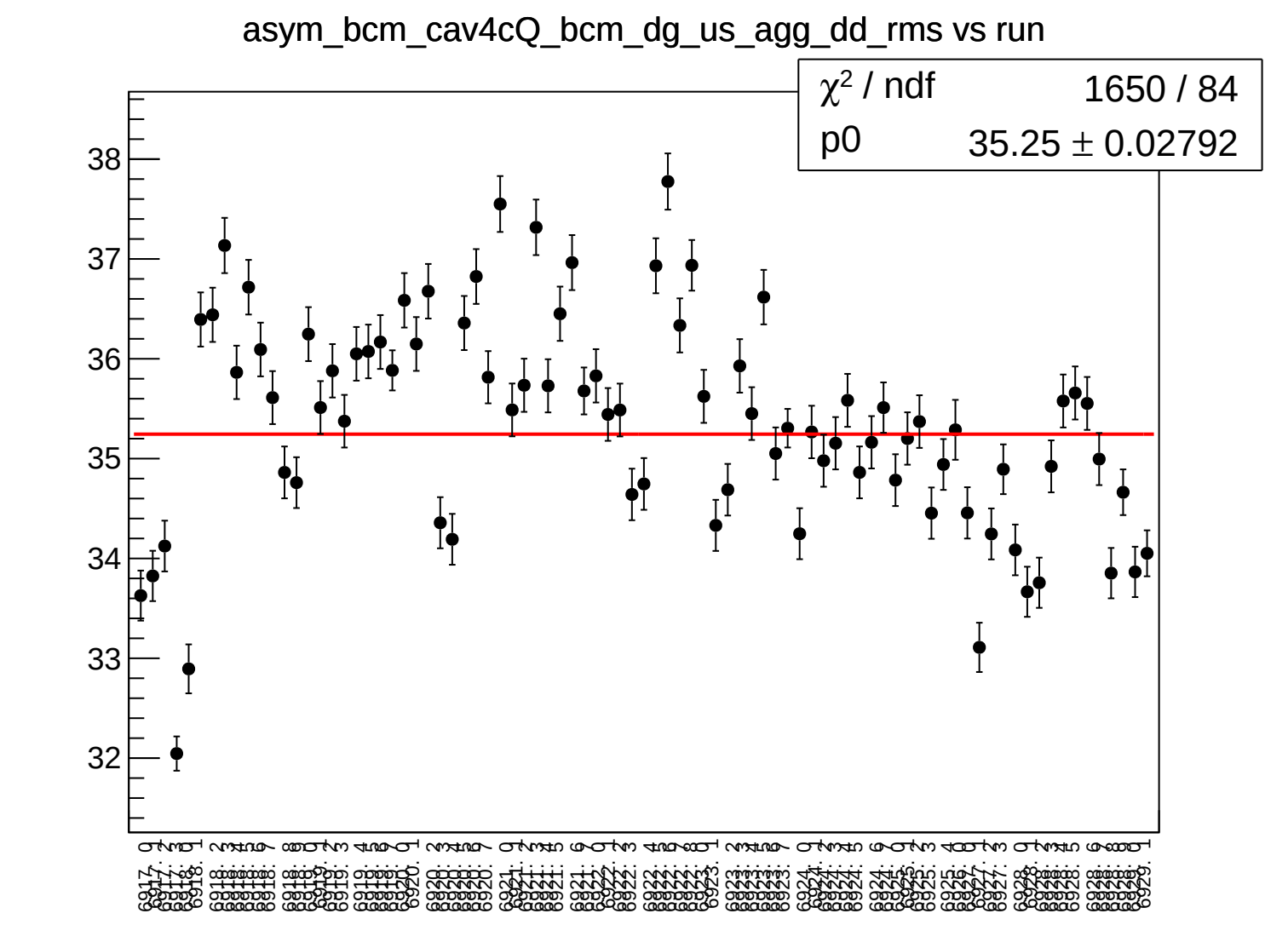

pull1D
Entries 85
Mean −0.003785
Std Dev 0.9003
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

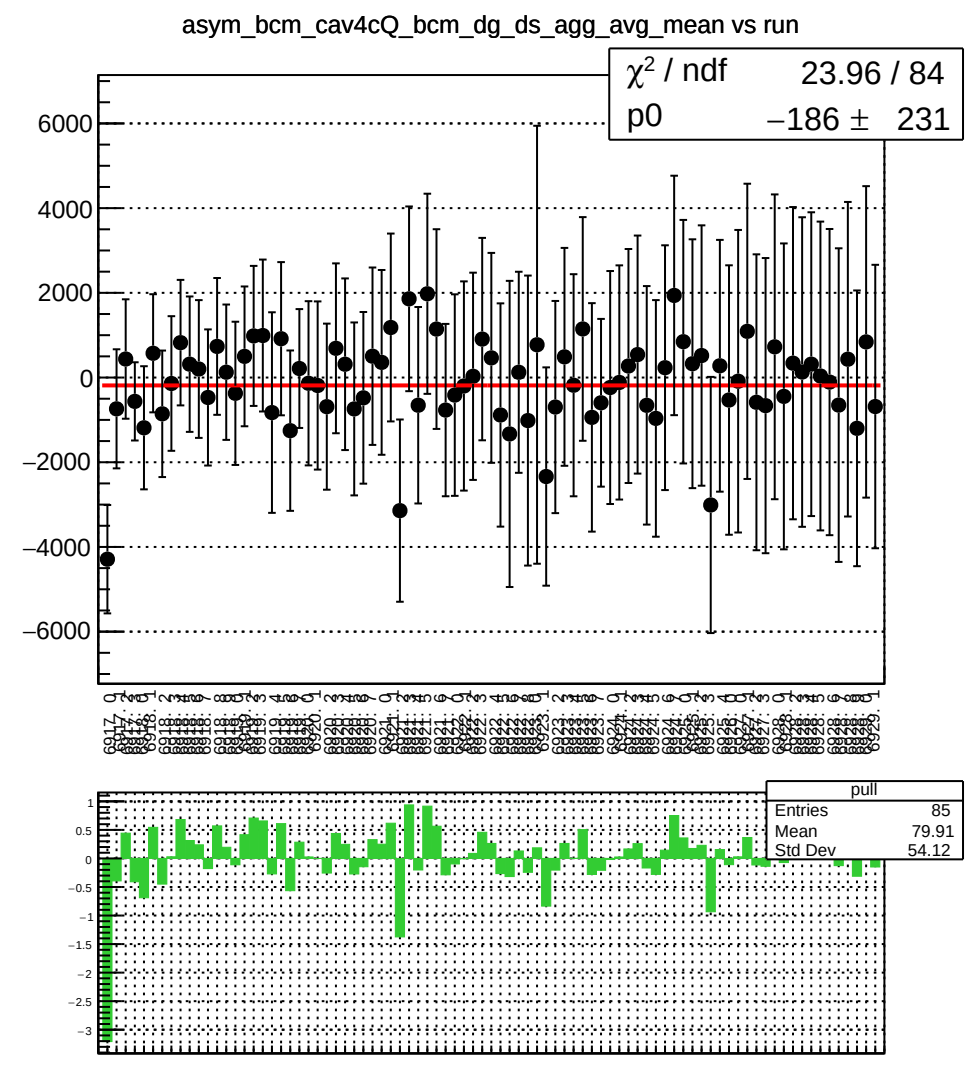

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2214 / 84
p0 30.51 ± 0.02418
34
33
32
31
30
29
28

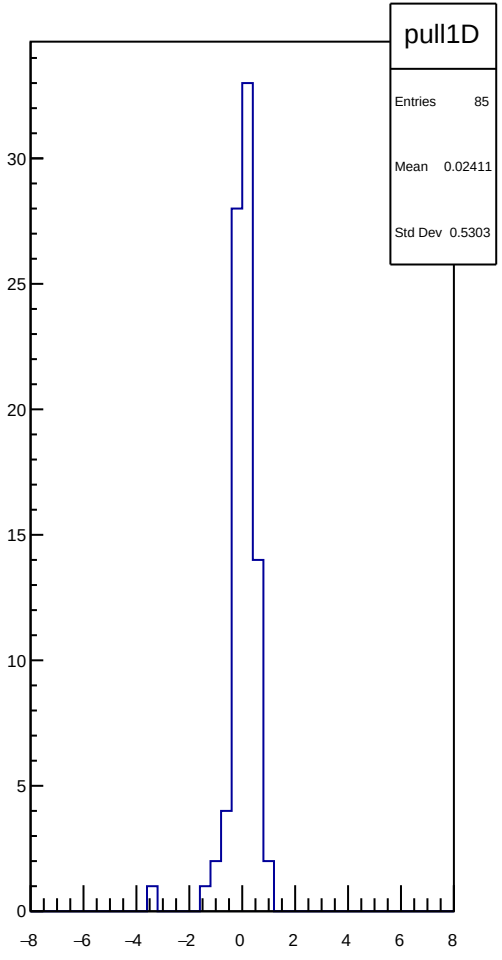

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 24.18 / 84
p0 −168.4 ± 231
pull
Entries 85
Mean 75.79
Std Dev 52.76
pull1D
Entries 85
Mean 0.02316
Std Dev 0.5328

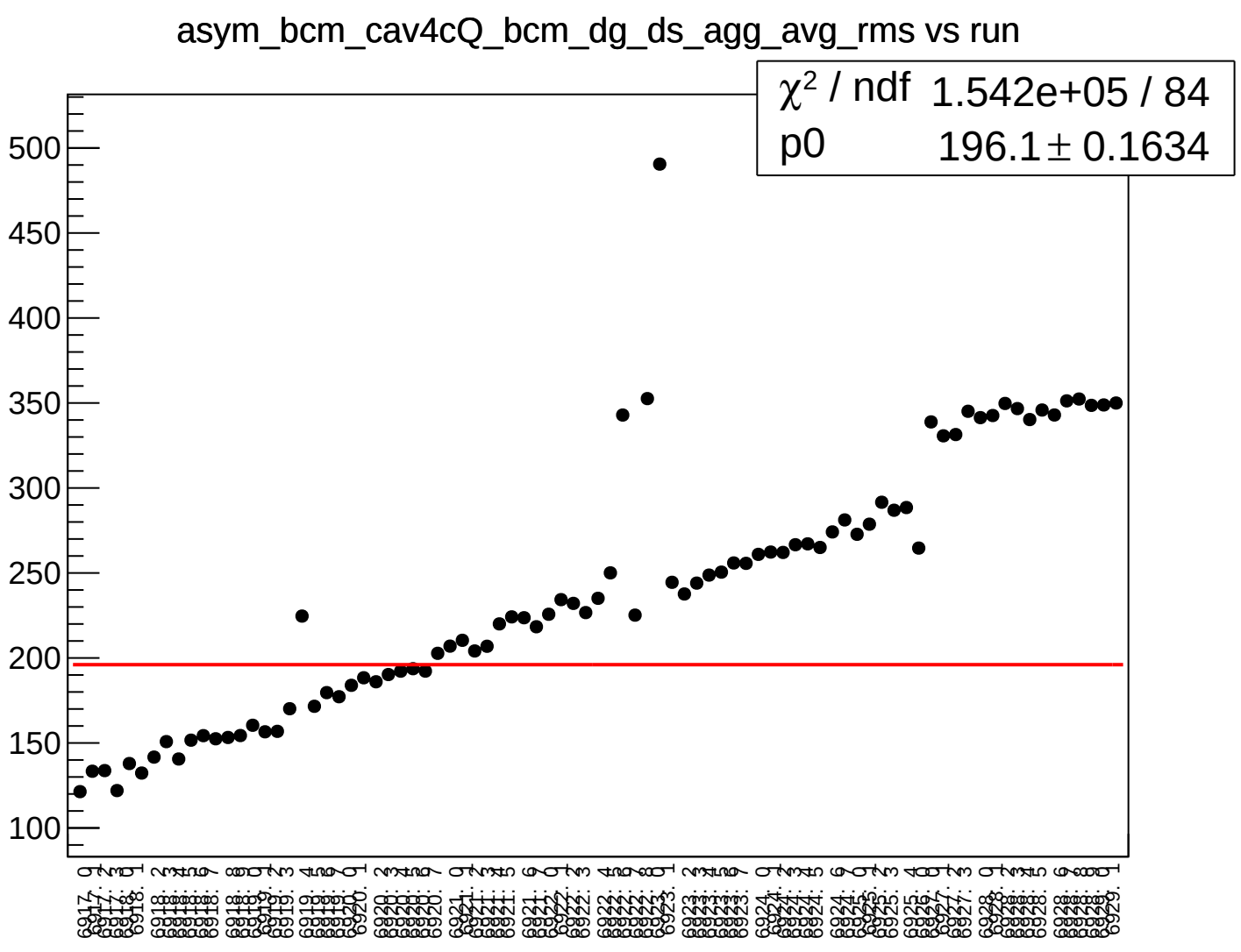

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.536e+05 / 84
p0 196.1 ± 0.1633
500
450
400
350
300
250
200
150
100

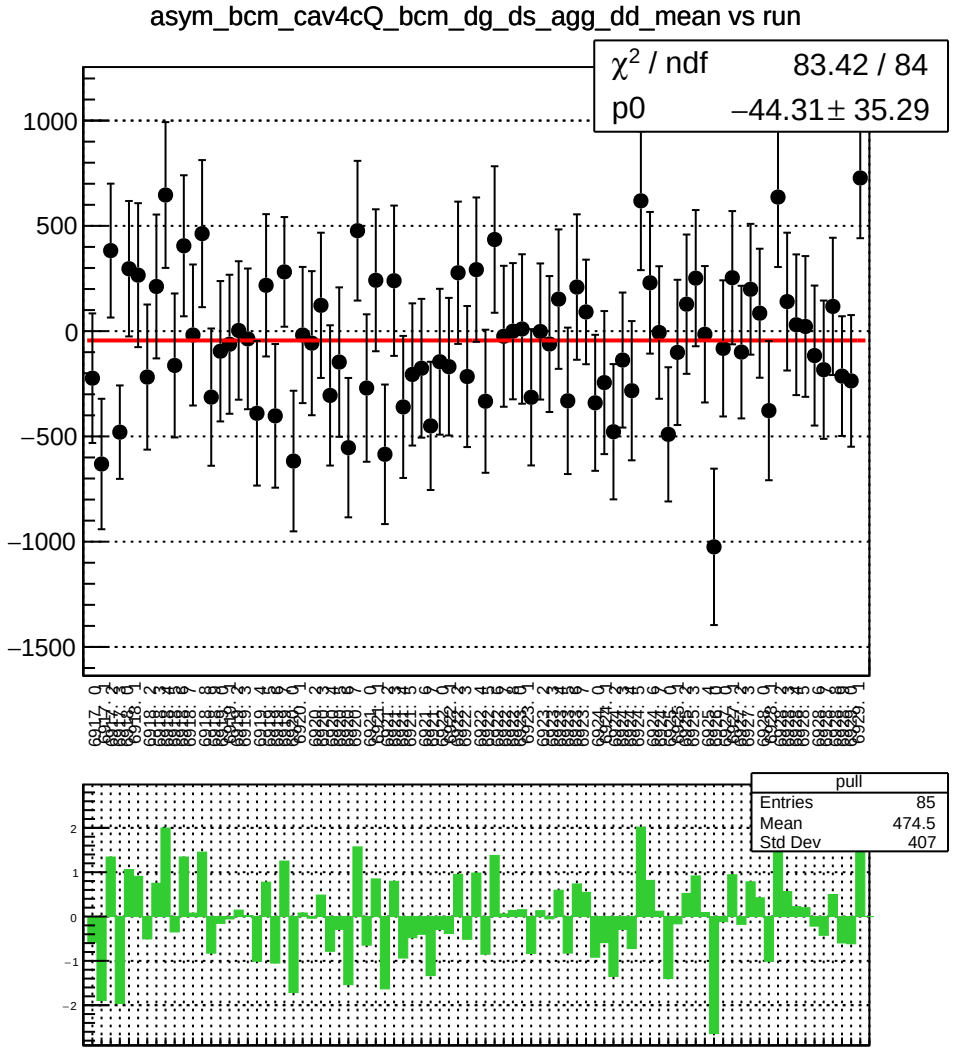

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 62.54 / 84
p0 −51.61 ± 39.49
1000
500
0
−500
−1000
pull
Entries 85
Mean 1008
Std Dev 951.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 85
Mean 0.002351
Std Dev 0.8577
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

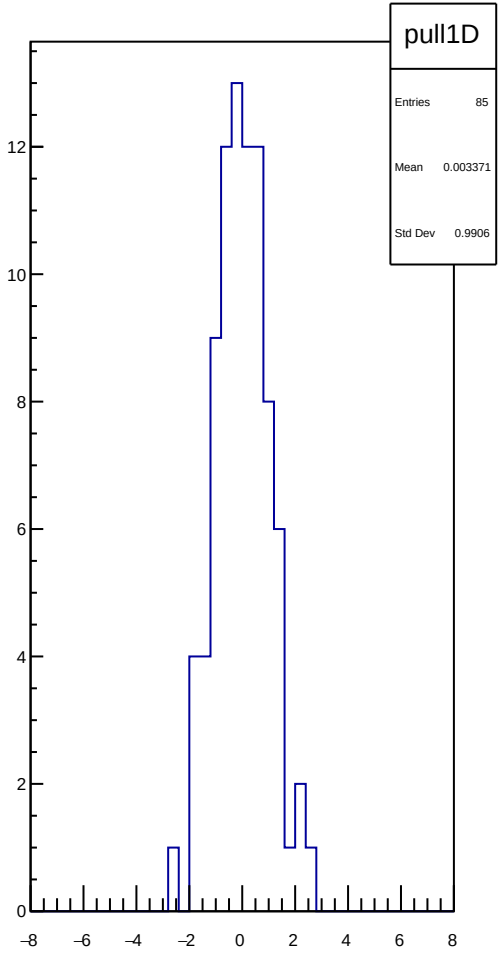

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1650 / 84
p0 35.25 ± 0.02792
38
37
36
35
34
33
32

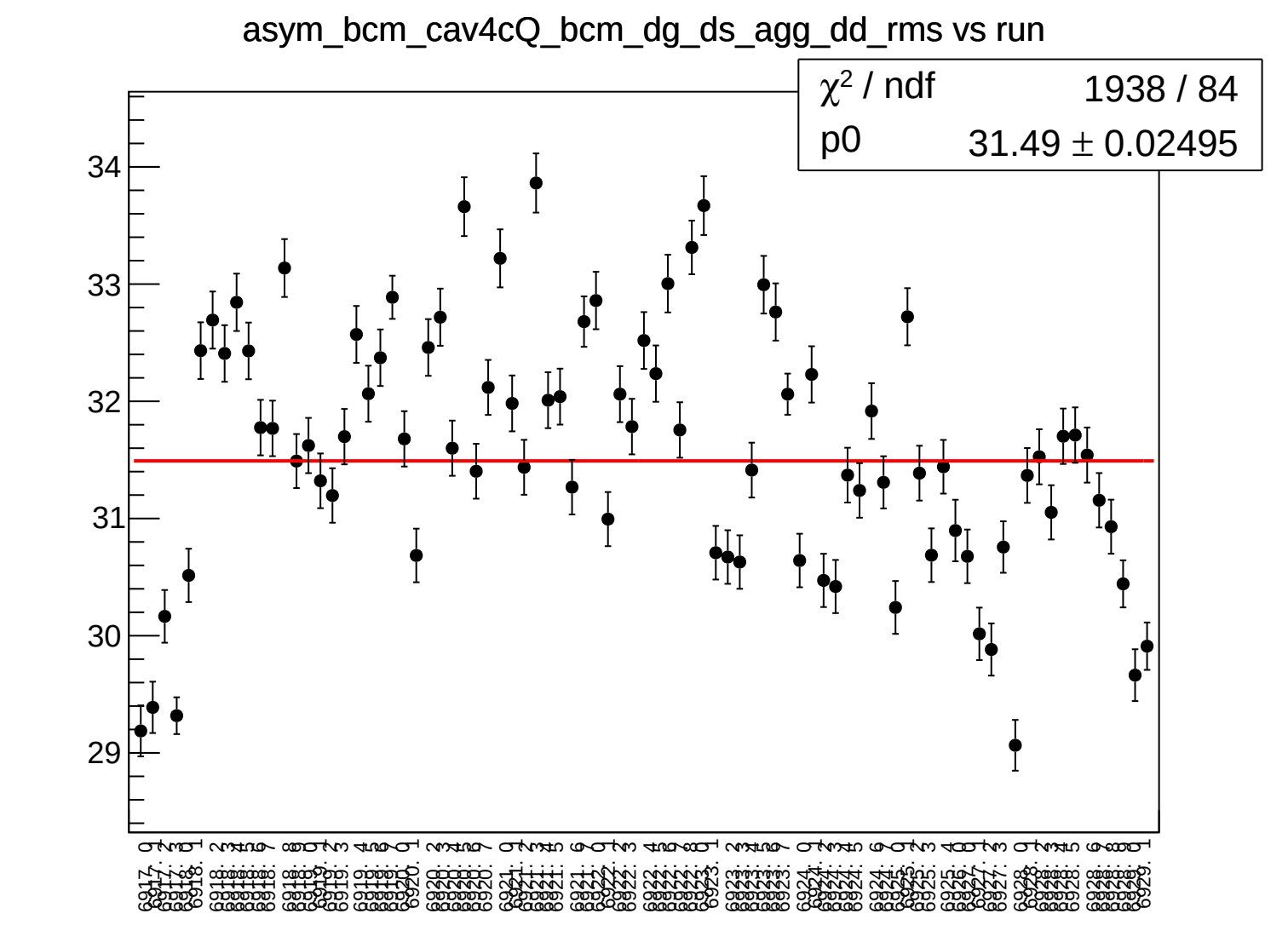

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 23.96 / 84
p0 −186 ± 231
pull
Entries 85
Mean 79.91
Std Dev 54.12

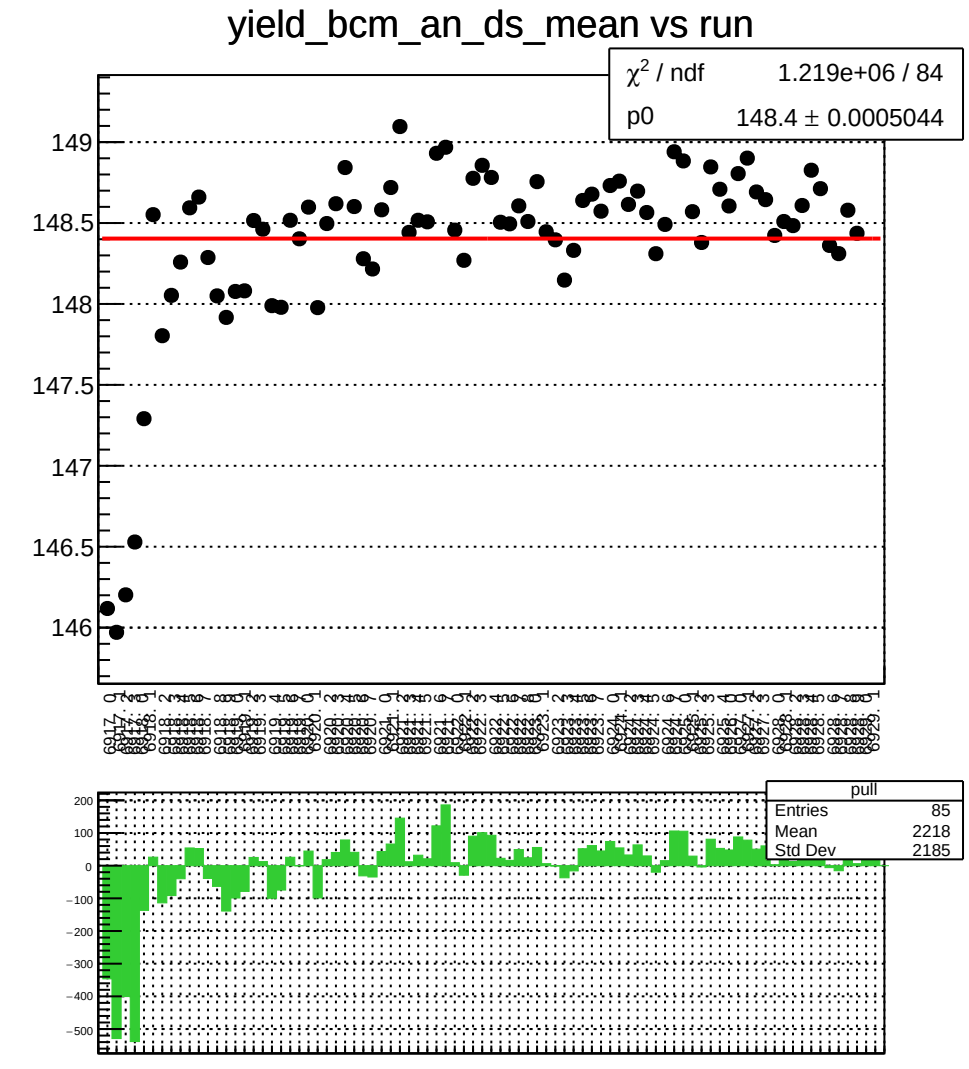

pull1D
Entries 85
Mean 0.02411
Std Dev 0.5303

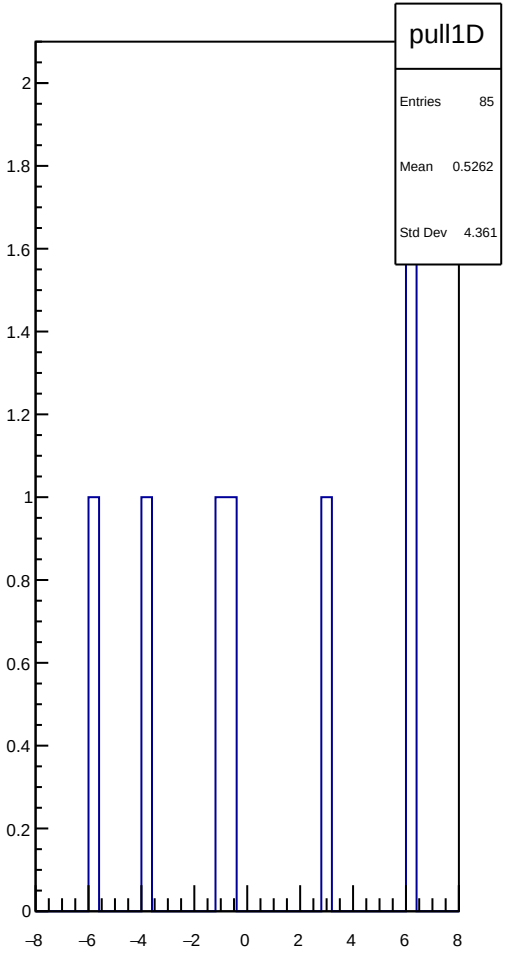

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.542e+05 / 84
p0 196.1 ± 0.1634
500
450
400
350
300
250
200
150
100

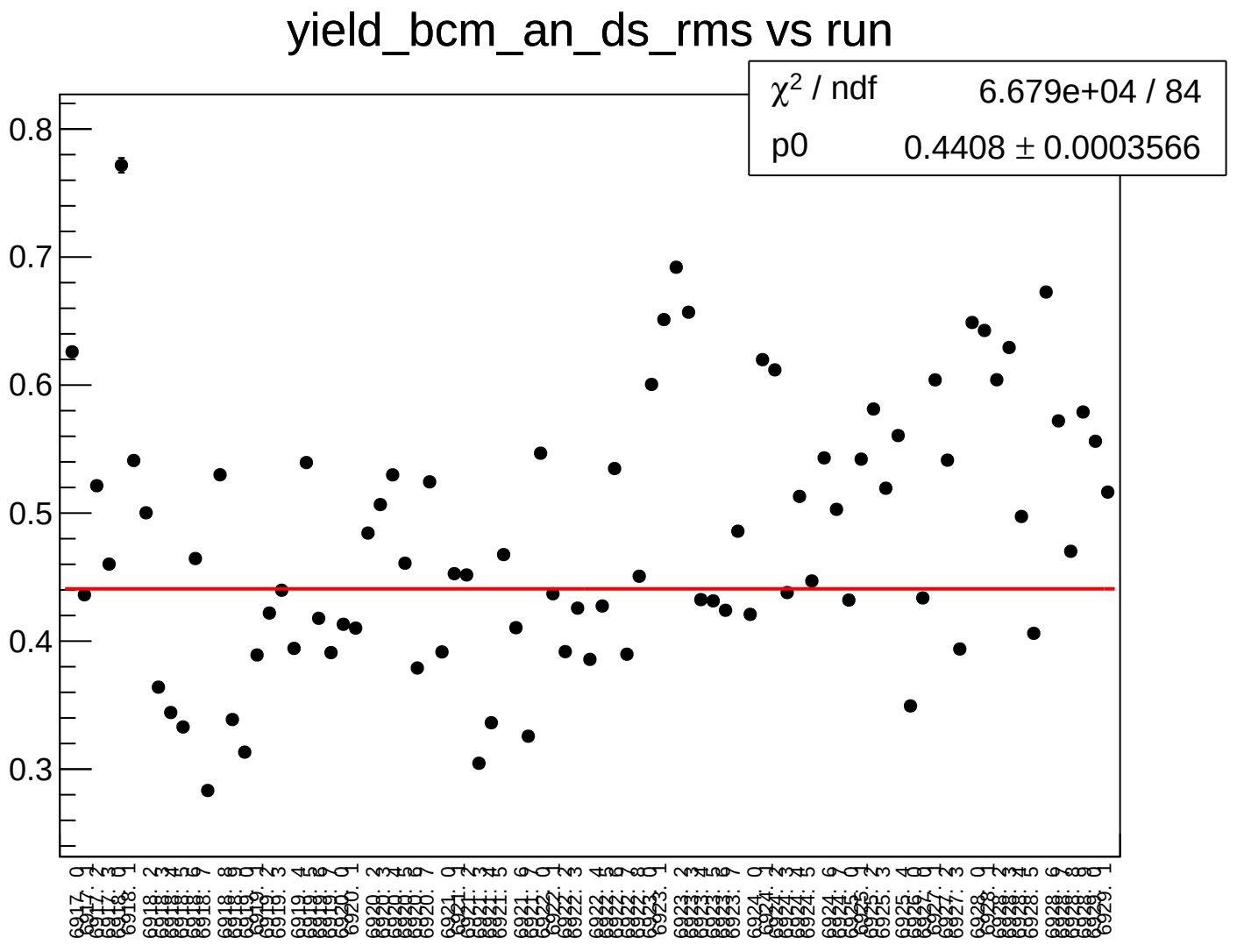

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 83.42 / 84
p0 −44.31 ± 35.29
1000
500
0
−500
−1000
−1500
pull
Entries 85
Mean 474.5
Std Dev 407
2
1
0
−1
−2

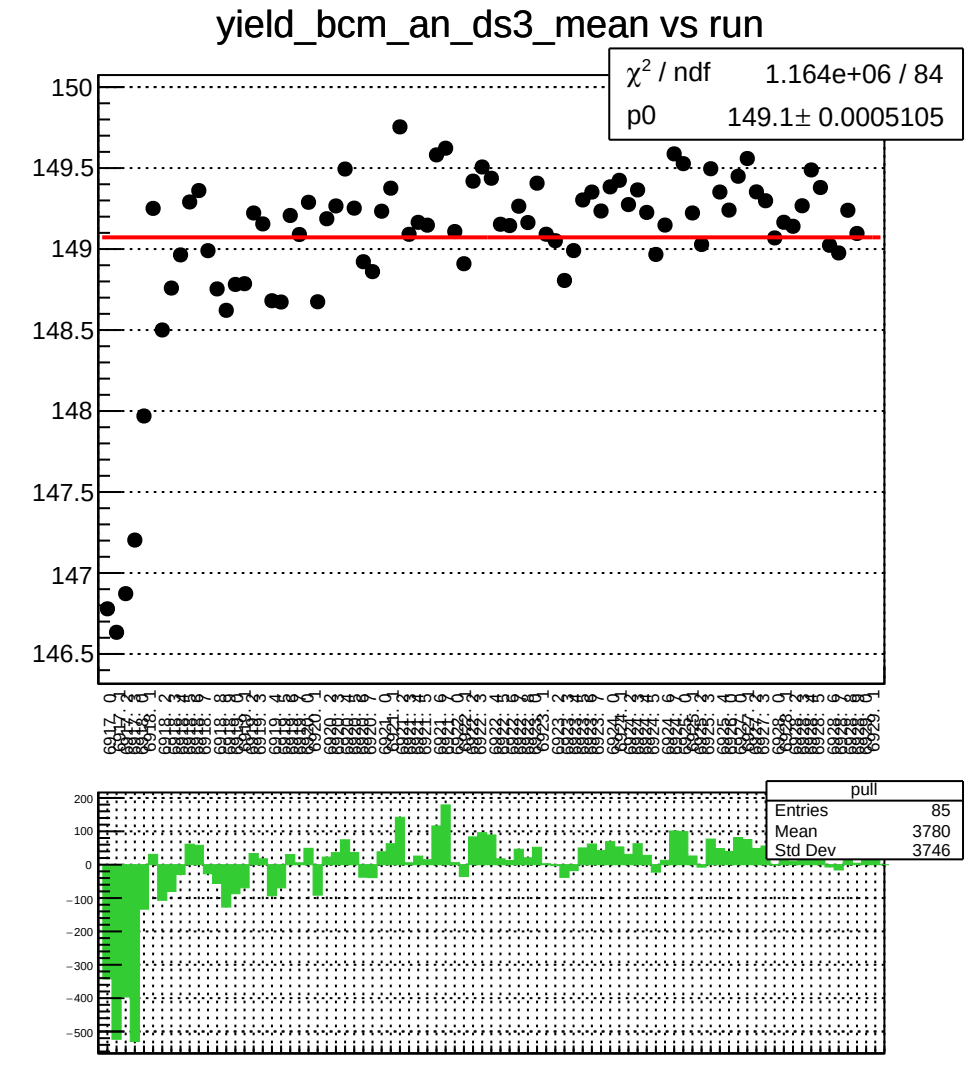

pull1D
Entries 85
Mean 0.003371
Std Dev 0.9906
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

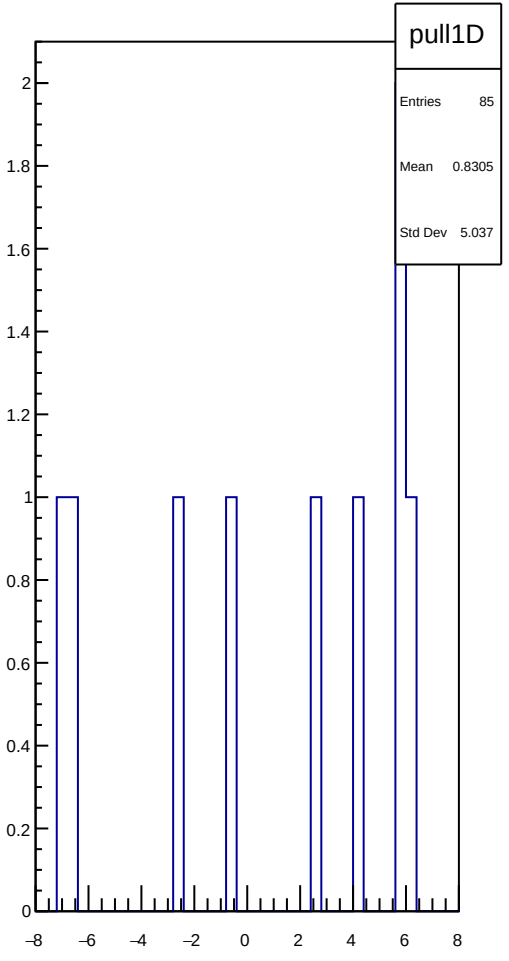

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1938 / 84
p0 31.49 ± 0.02495
34
33
32
31
30
29

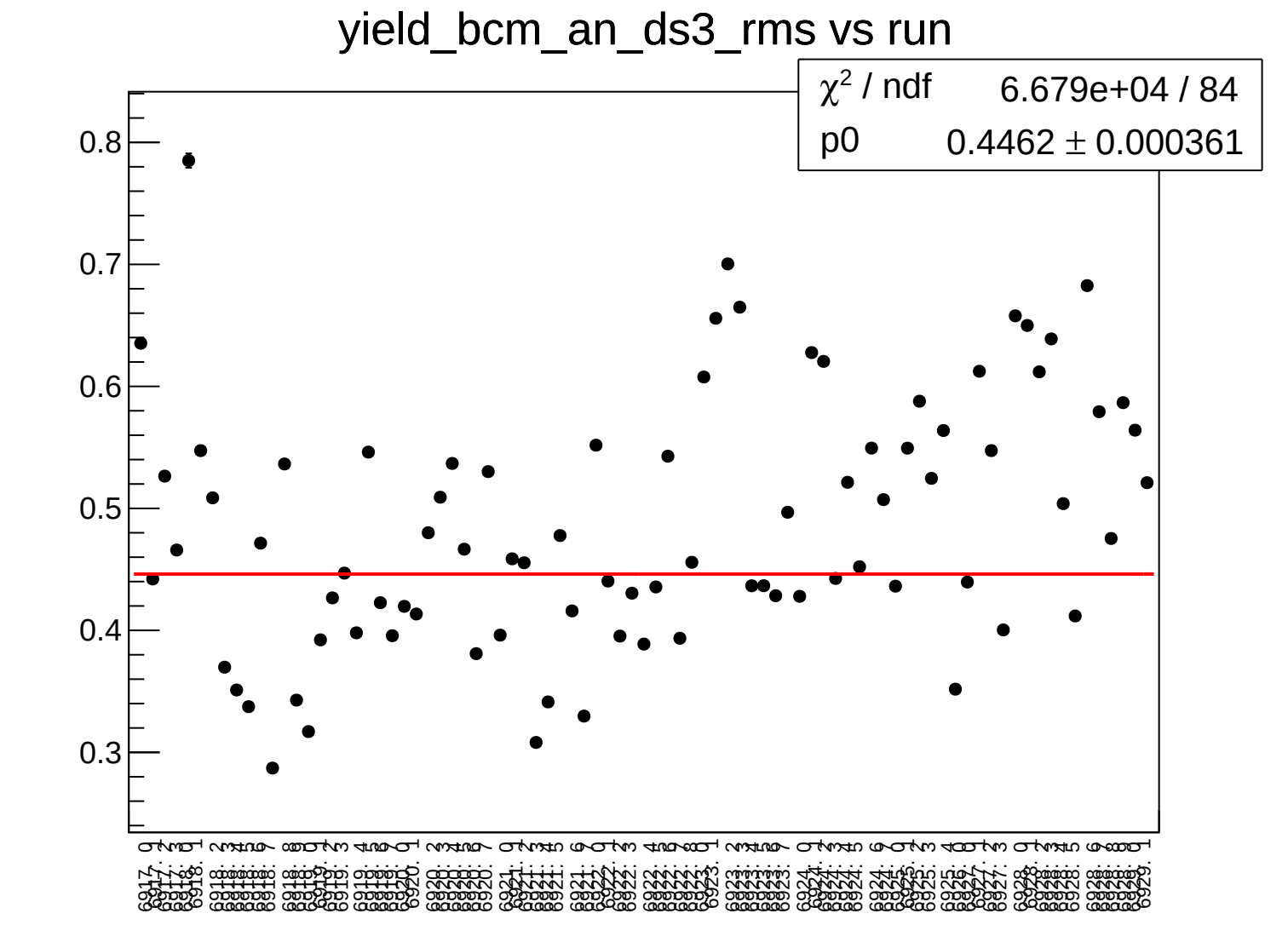

yield_bcm_an_ds_mean vs run
χ² / ndf 1.219e+06 / 84
p0 148.4 ± 0.0005044
149
148.5
148
147.5
147
146.5
146
pull
Entries 85
Mean 2218
Std Dev 2185
200
100
0
−100
−200
−300
−400
−500

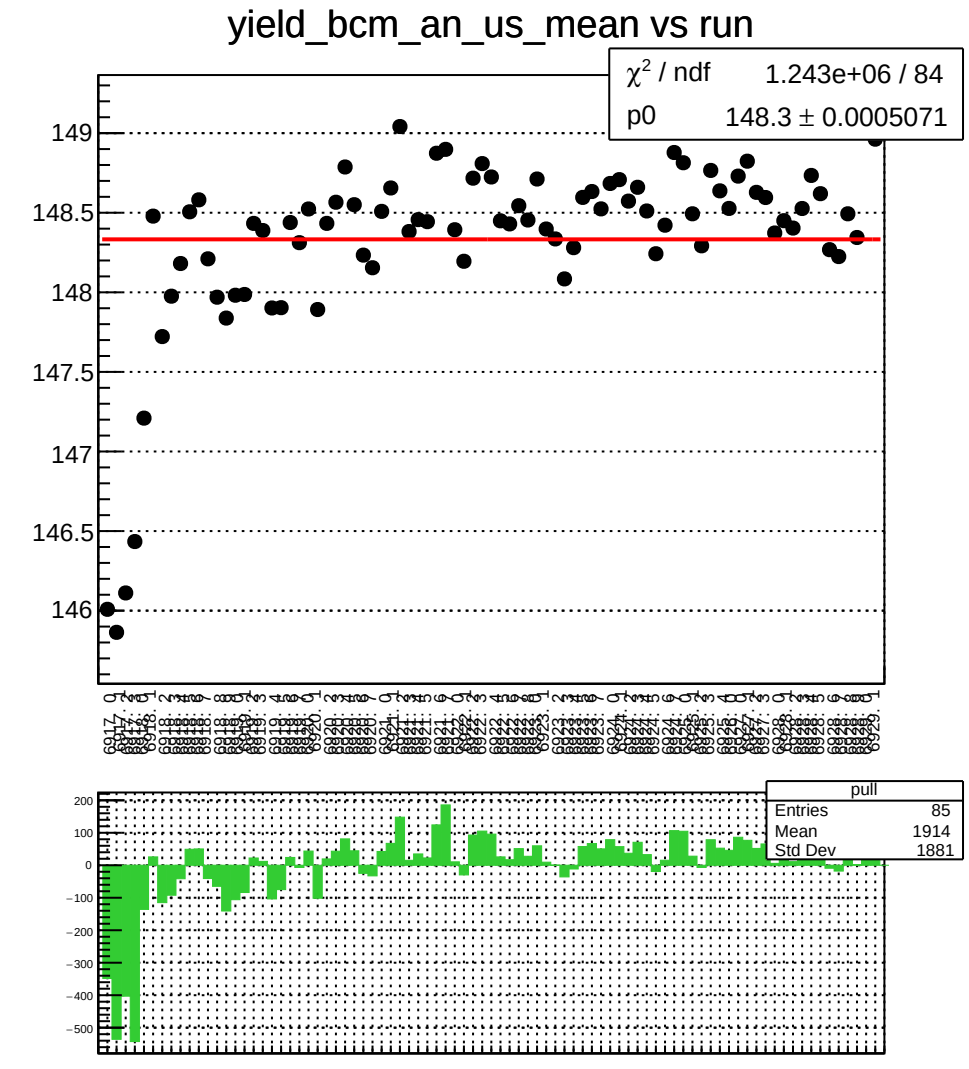

pull1D
Entries 85
Mean 0.5262
Std Dev 4.361
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

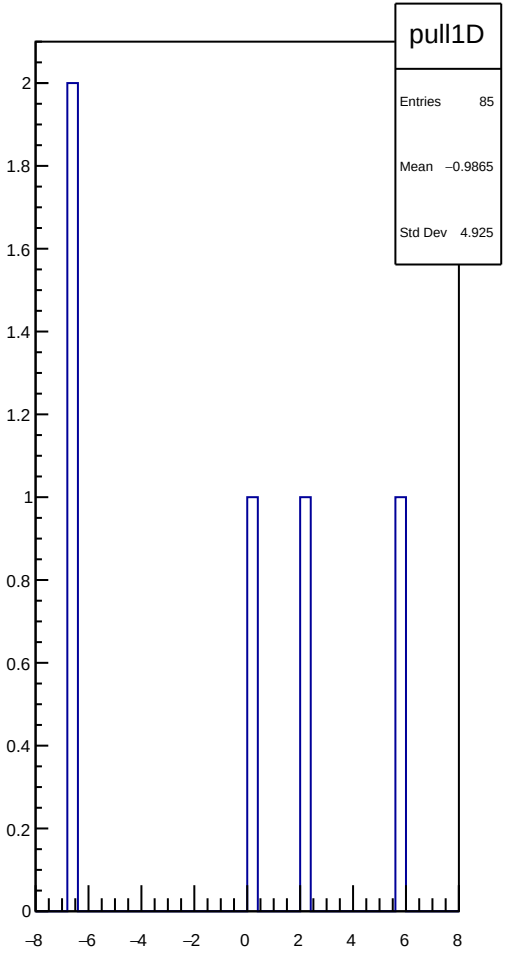

yield_bcm_an_ds_rms vs run
χ² / ndf 6.679e+04 / 84
p0 0.4408 ± 0.0003566
0.8
0.7
0.6
0.5
0.4
0.3

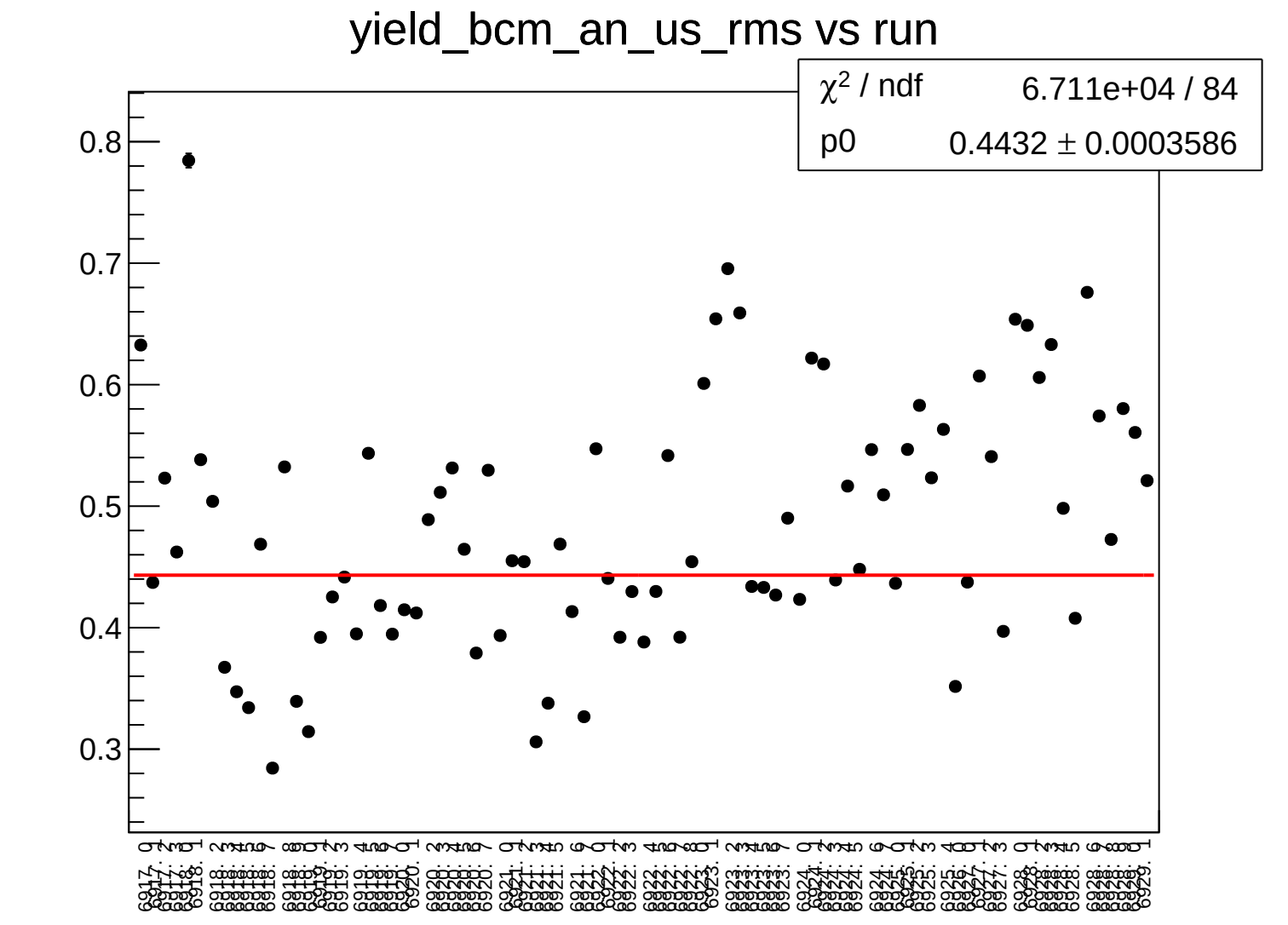

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.164e+06 / 84
p0 149.1± 0.0005105
150
149.5
149
148.5
148
147.5
147
146.5
pull
Entries 85
Mean 3780
Std Dev 3746
200
100
0
−100
−200
−300
−400
−500

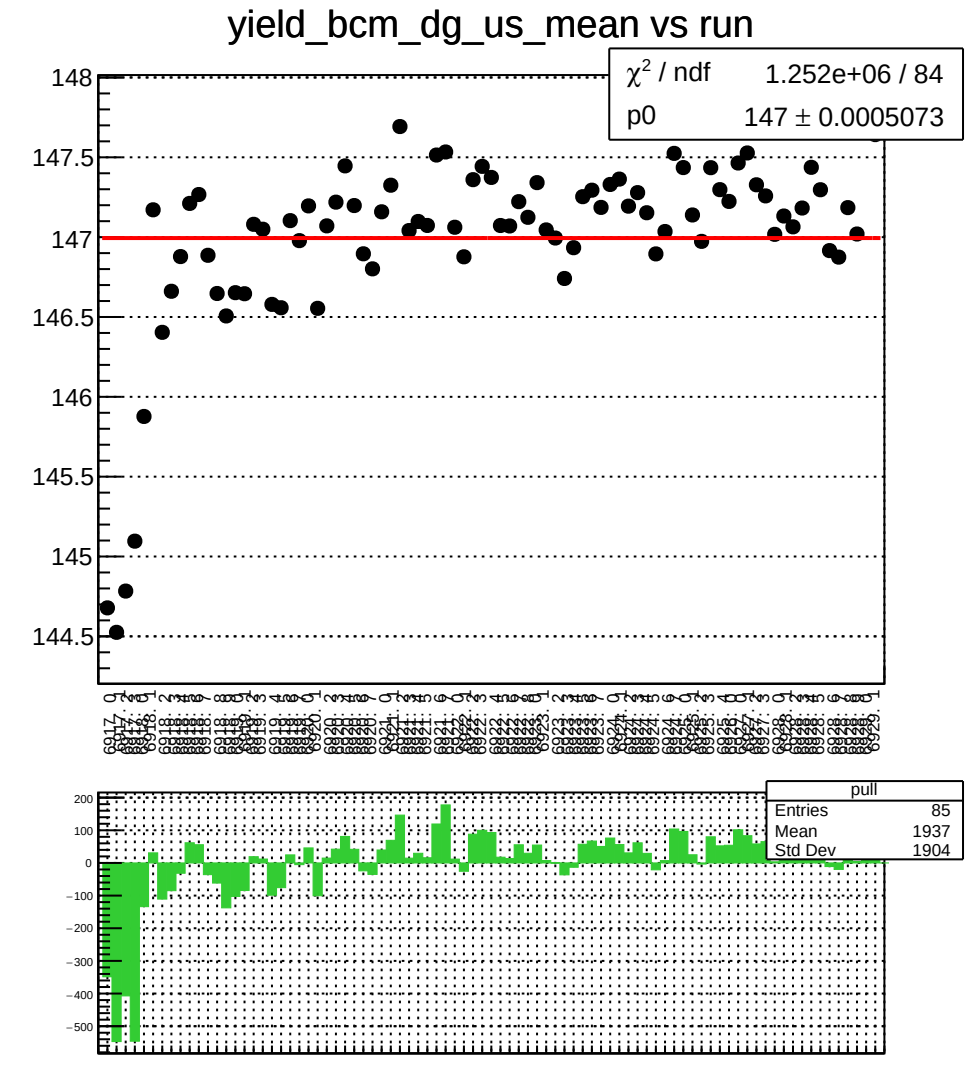

pull1D
Entries 85
Mean 0.8305
Std Dev 5.037
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

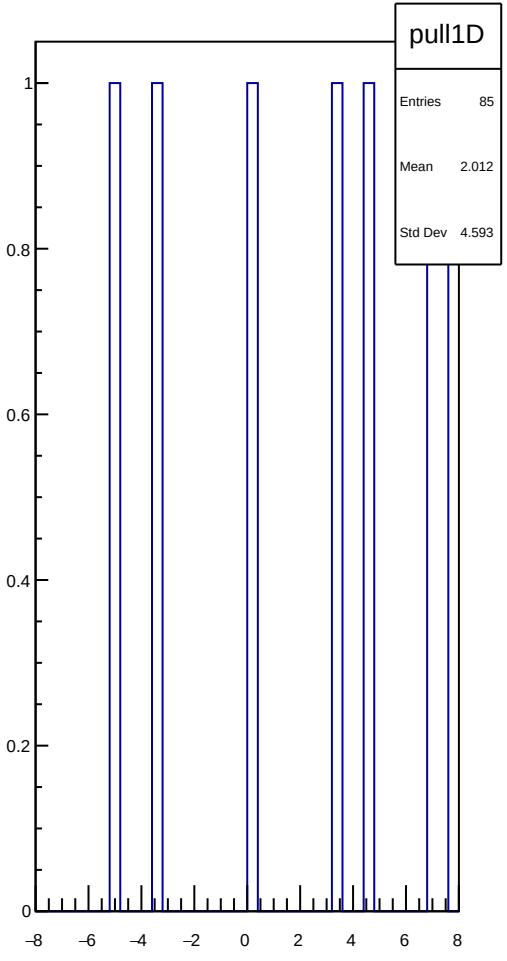

yield_bcm_an_ds3_rms vs run
χ^2 / ndf 6.679e+04 / 84
p0 0.4462 ± 0.000361
0.8
0.7
0.6
0.5
0.4
0.3

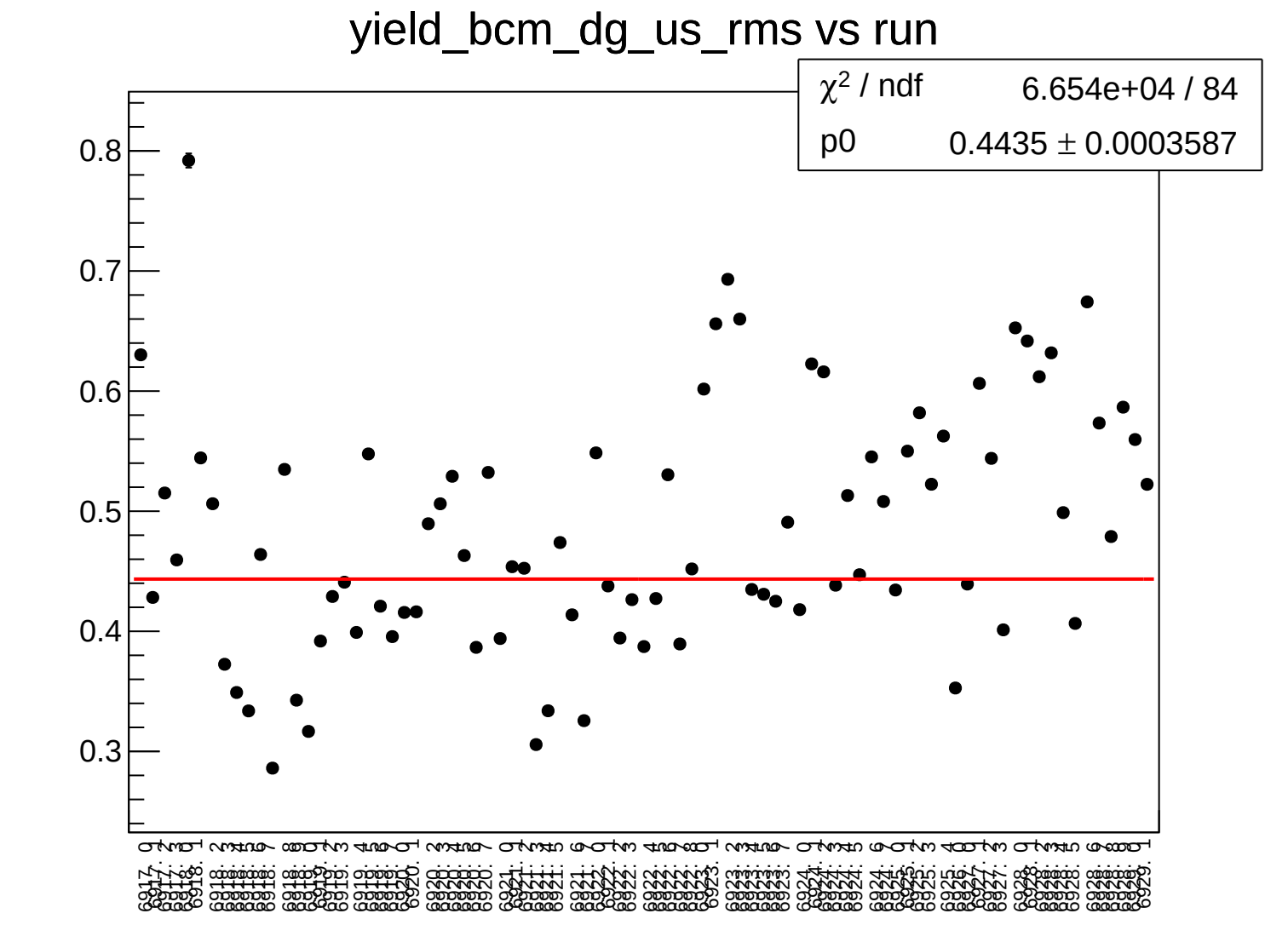

yield_bcm_an_us_mean vs run
χ² / ndf 1.243e+06 / 84
p0 148.3 ± 0.0005071
149
148.5
148
147.5
147
146.5
146
pull
Entries 85
Mean 1914
Std Dev 1881
200
100
0
−100
−200
−300
−400
−500

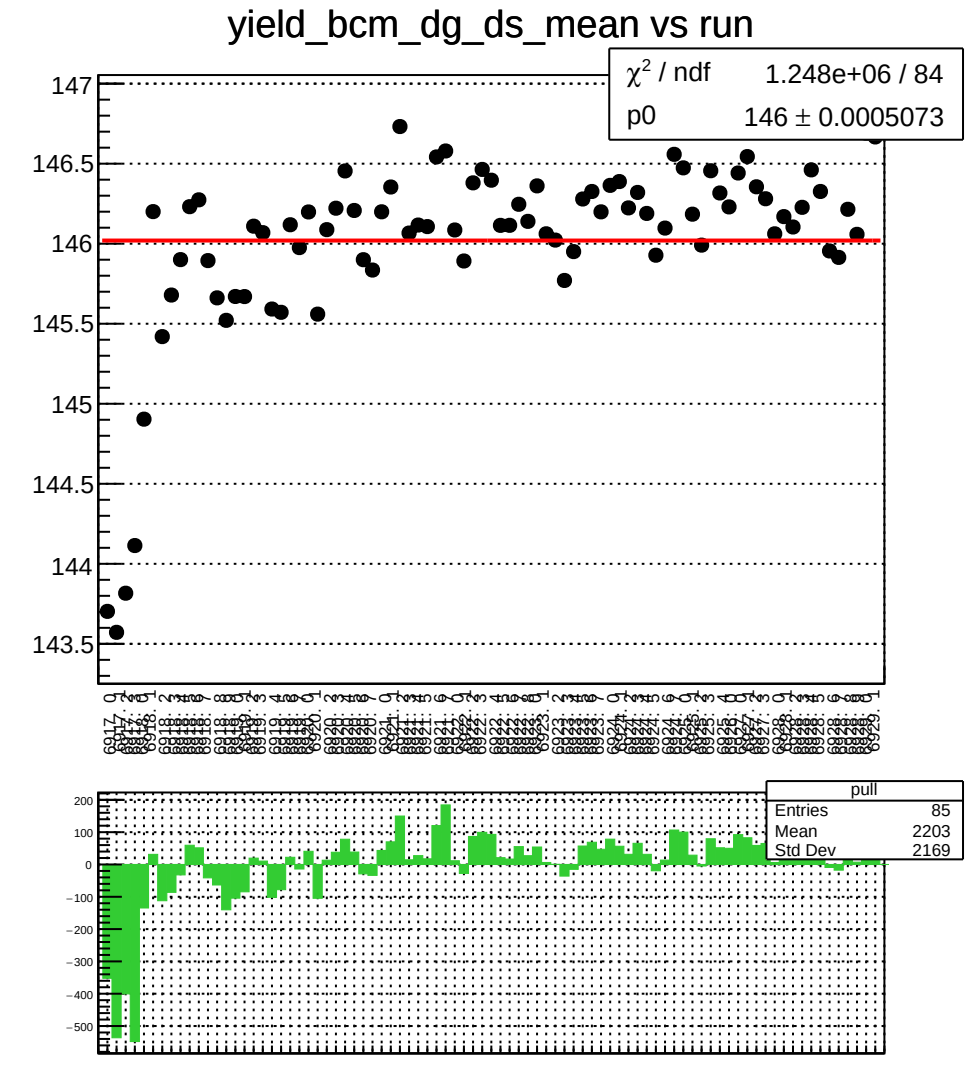

pull1D
Entries 85
Mean −0.9865
Std Dev 4.925
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

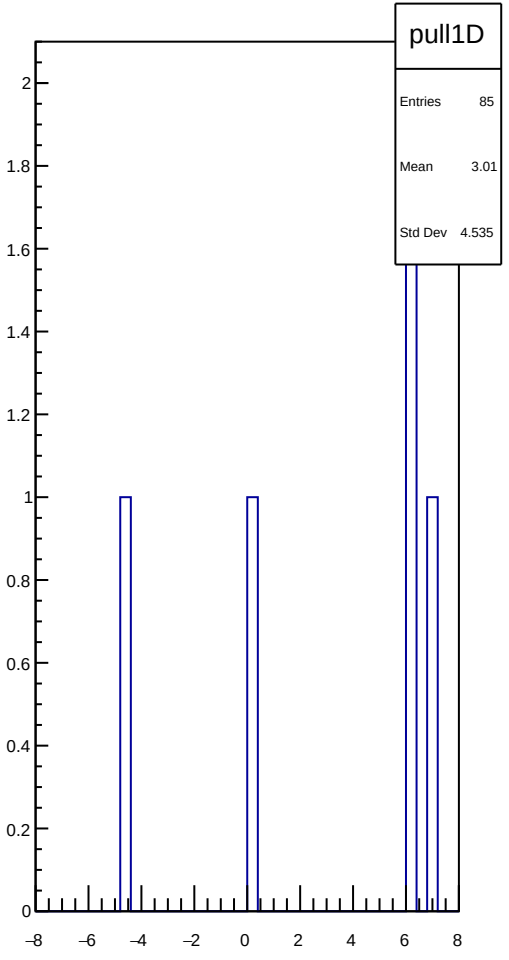

yield_bcm_an_us_rms vs run
χ² / ndf 6.711e+04 / 84
p0 0.4432 ± 0.0003586
0.8
0.7
0.6
0.5
0.4
0.3

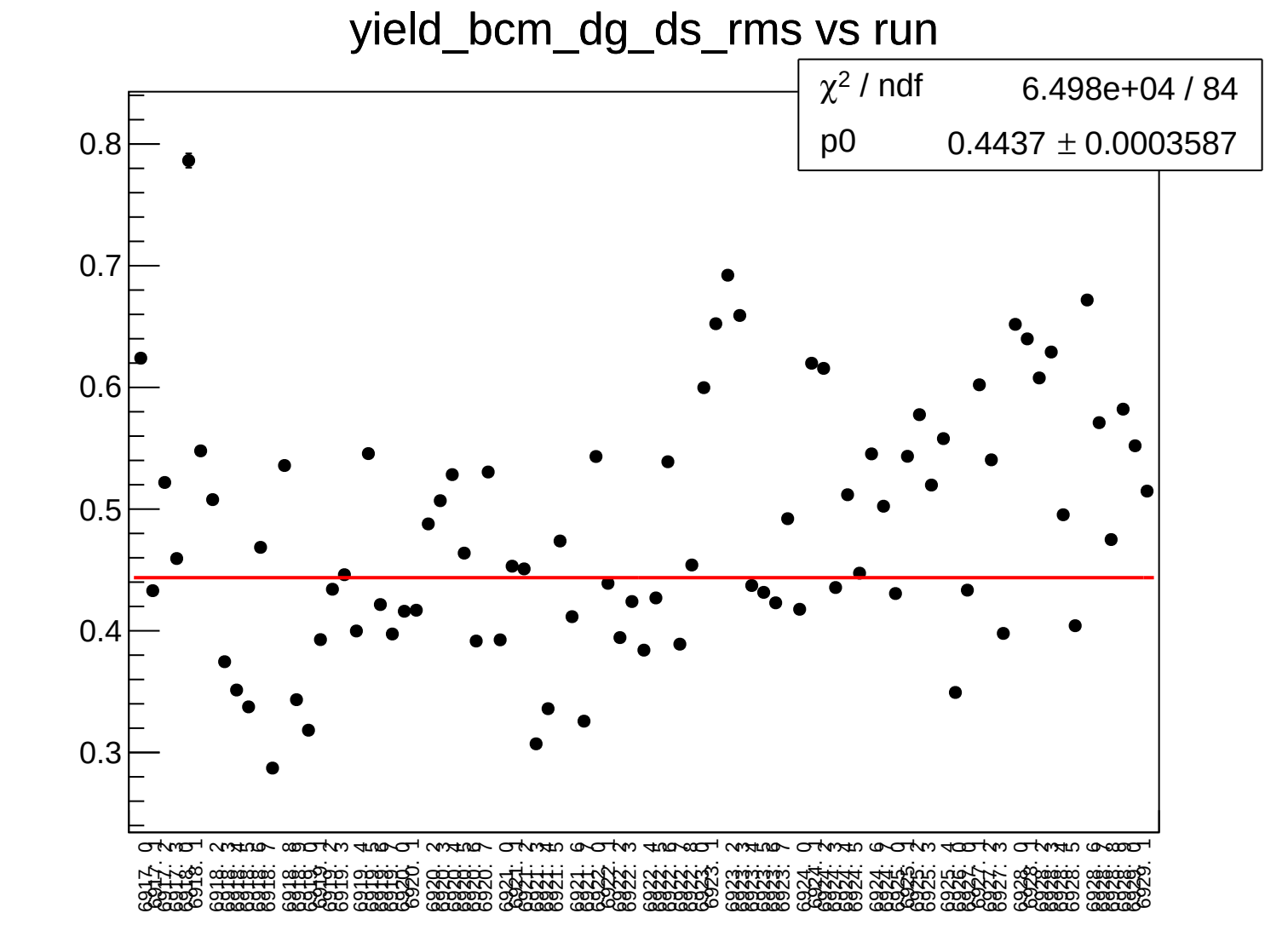

yield_bcm_dg_us_mean vs run
χ² / ndf 1.252e+06 / 84
p0 147 ± 0.0005073
148
147.5
147
146.5
146
145.5
145
144.5
pull
Entries 85
Mean 1937
Std Dev 1904
200
100
0
−100
−200
−300
−400
−500

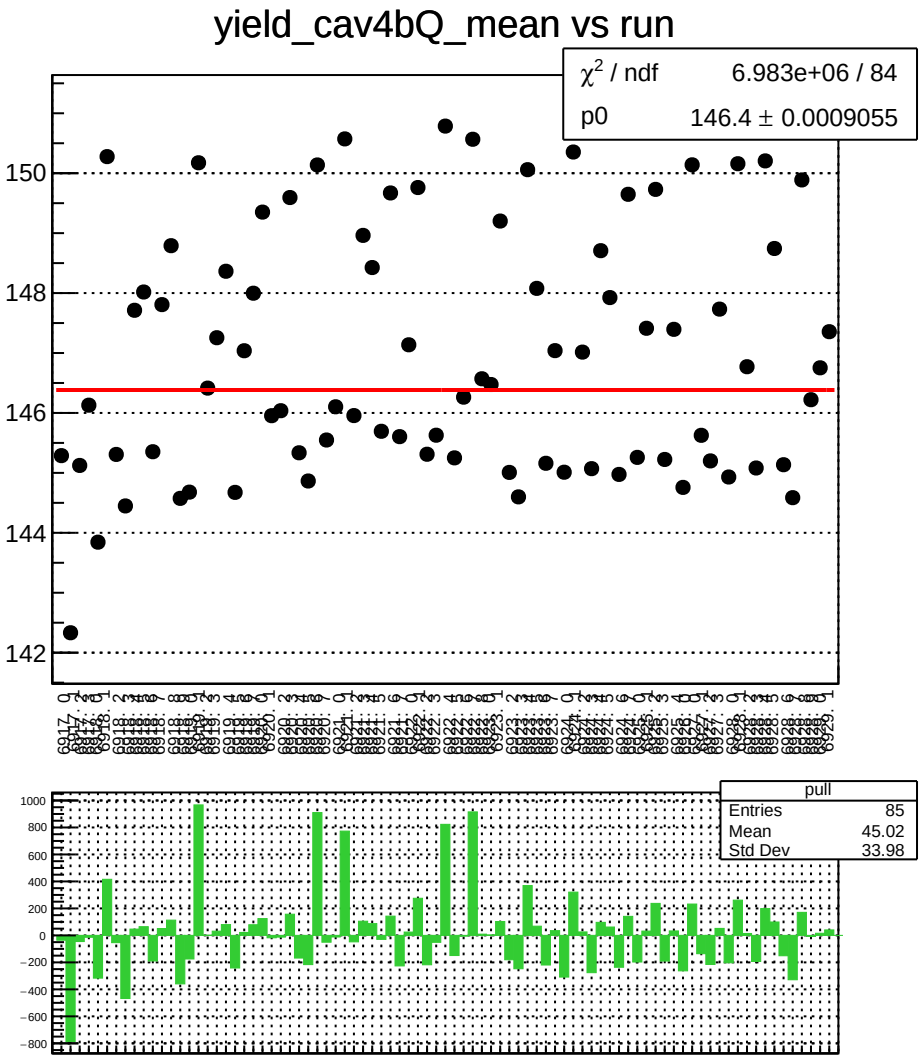

pull1D
Entries 85
Mean 2.012
Std Dev 4.593
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

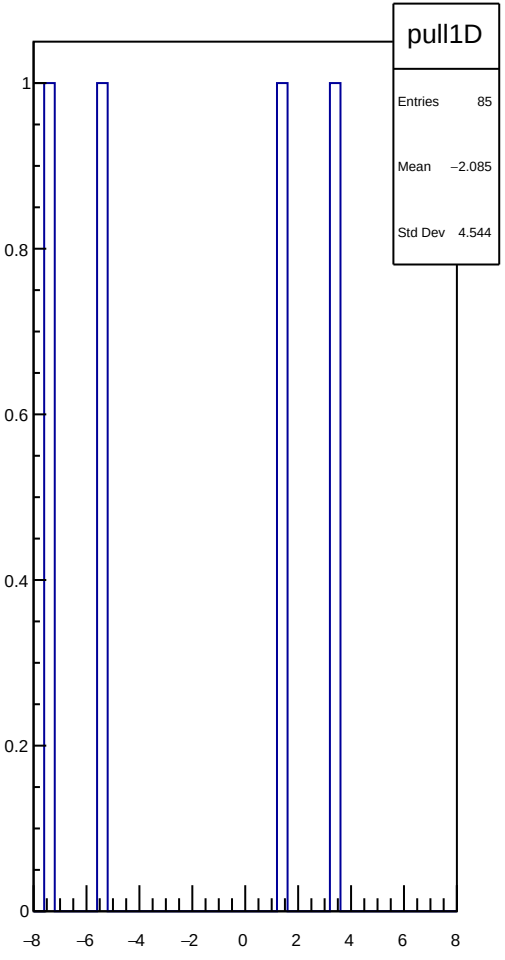

yield_bcm_dg_us_rms vs run
χ² / ndf 6.654e+04 / 84
p0 0.4435 ± 0.0003587
0.8
0.7
0.6
0.5
0.4
0.3

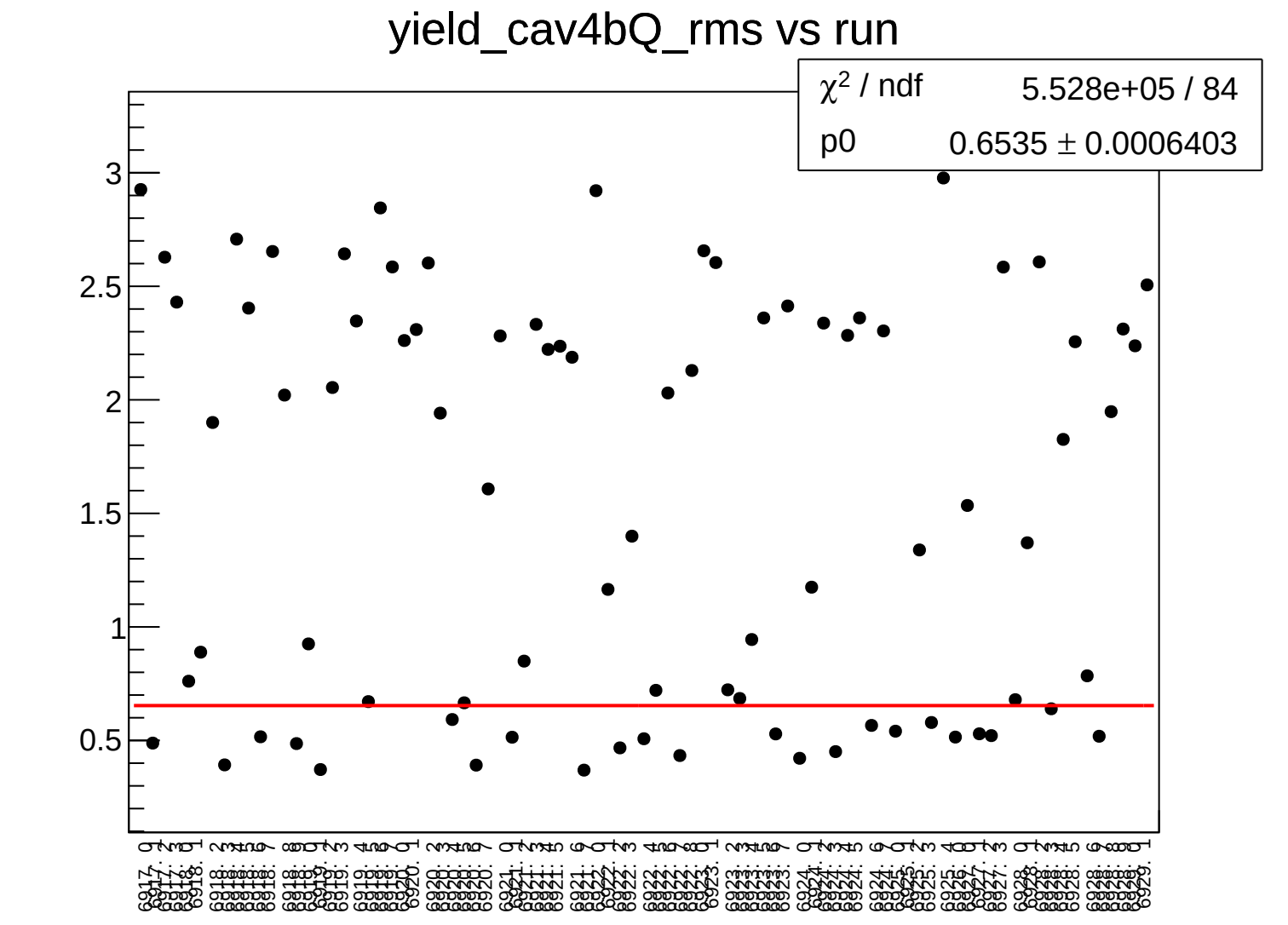

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.248e+06 / 84
p0 146 ± 0.0005073
147
146.5
146
145.5
145
144.5
144
143.5
pull
Entries 85
Mean 2203
Std Dev 2169
200
100
0
−100
−200
−300
−400
−500

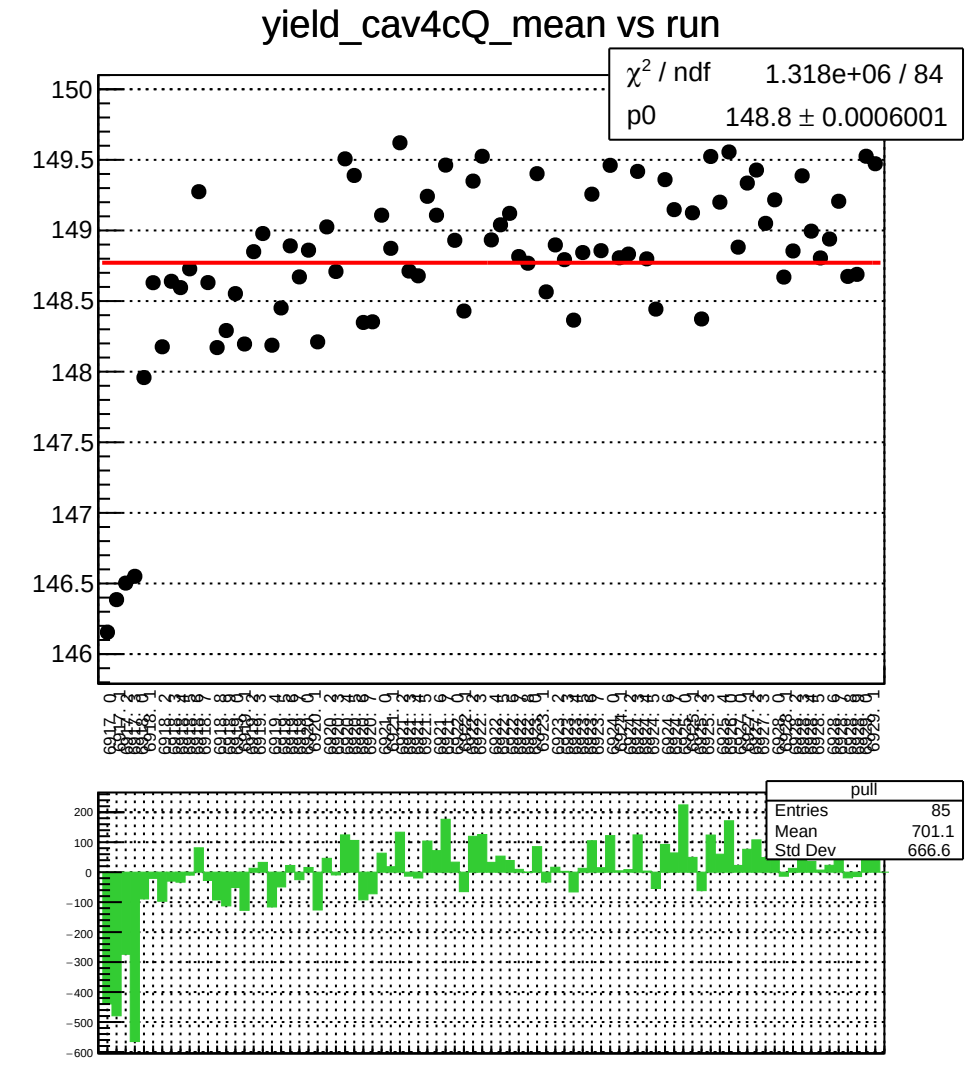

pull1D
Entries 85
Mean 3.01
Std Dev 4.535
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

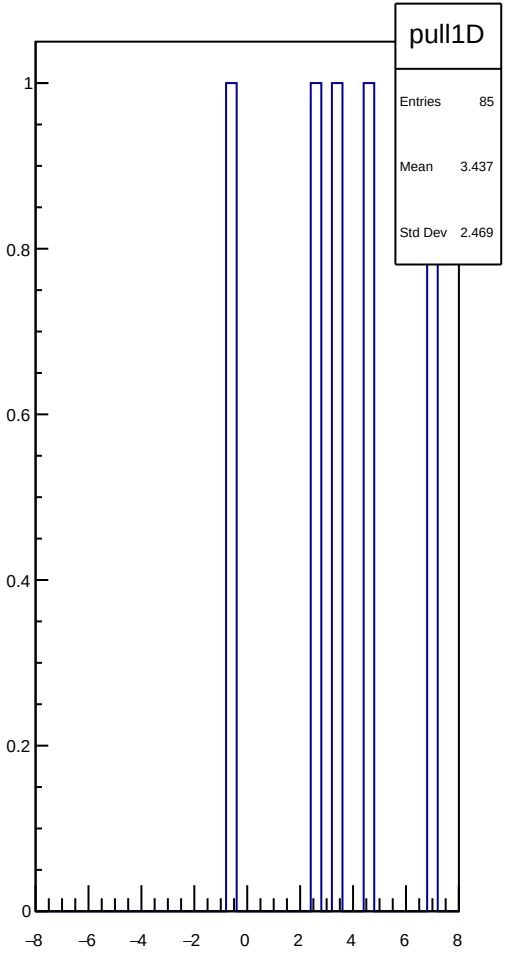

yield_bcm_dg_ds_rms vs run
χ² / ndf 6.498e+04 / 84
p0 0.4437 ± 0.0003587
0.8
0.7
0.6
0.5
0.4
0.3

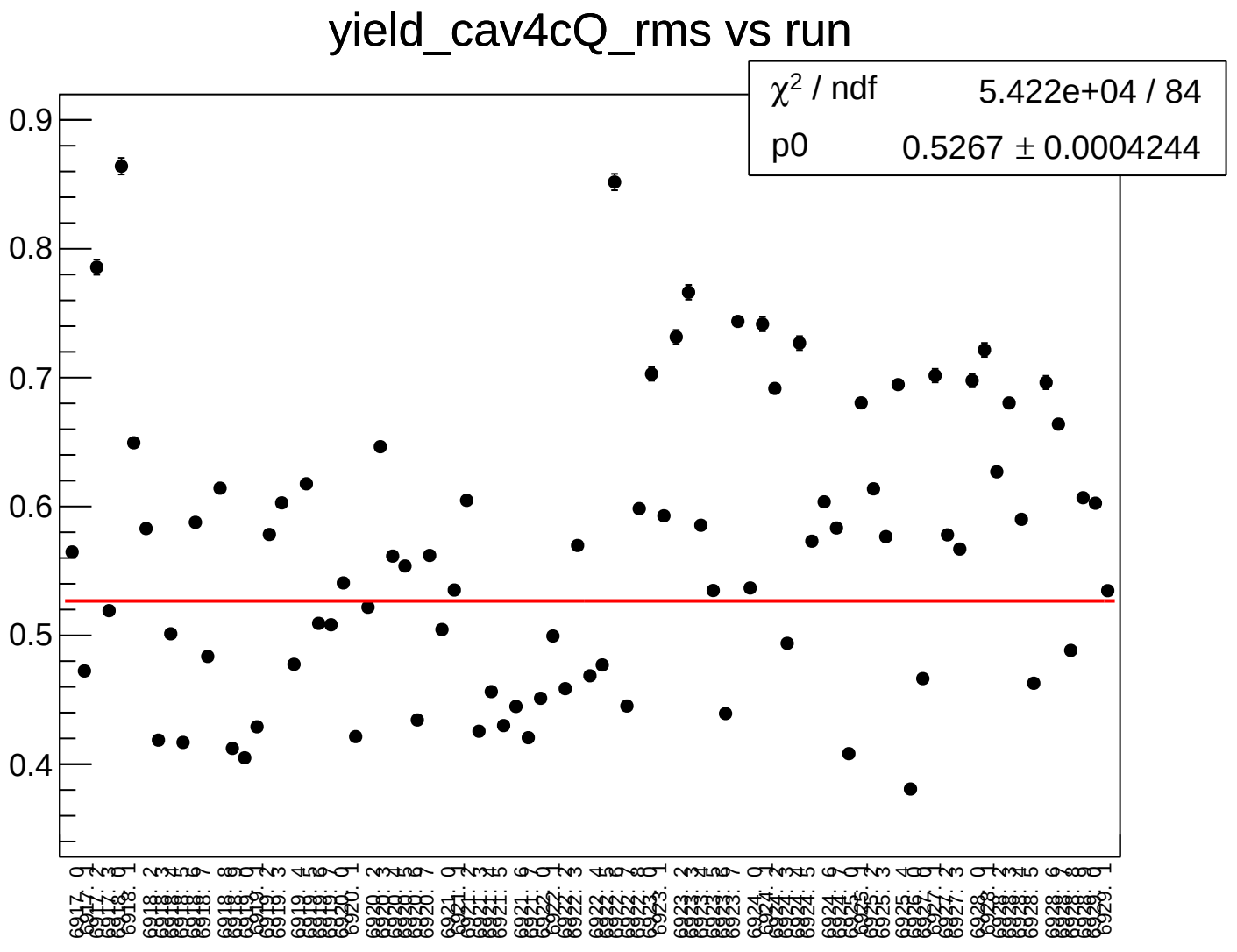

yield_cav4bQ_mean vs run
χ² / ndf 6.983e+06 / 84
p0 146.4 ± 0.0009055
150
148
146
144
142
pull
Entries 85
Mean 45.02
Std Dev 33.98
1000
800
600
400
200
0
−200
−400
−600
−800

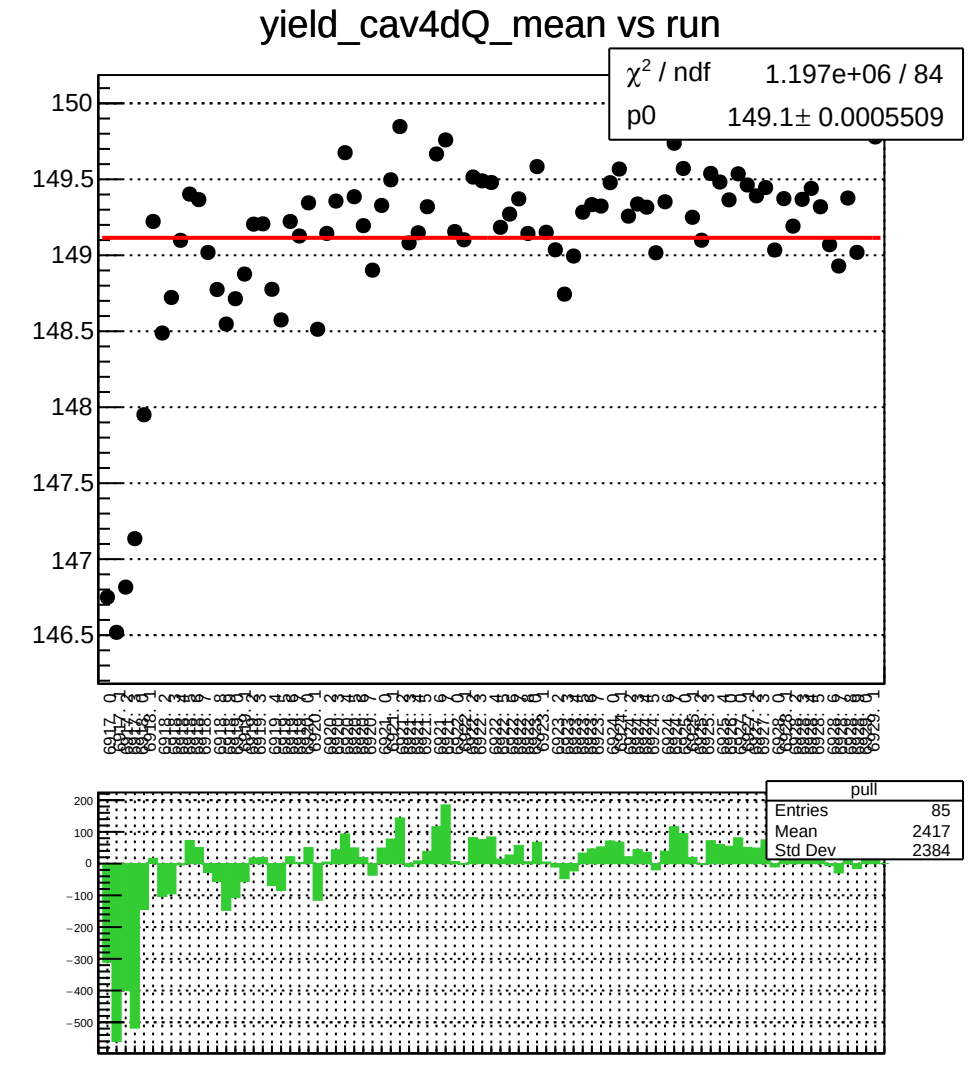

pull1D
Entries 85
Mean −2.085
Std Dev 4.544
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

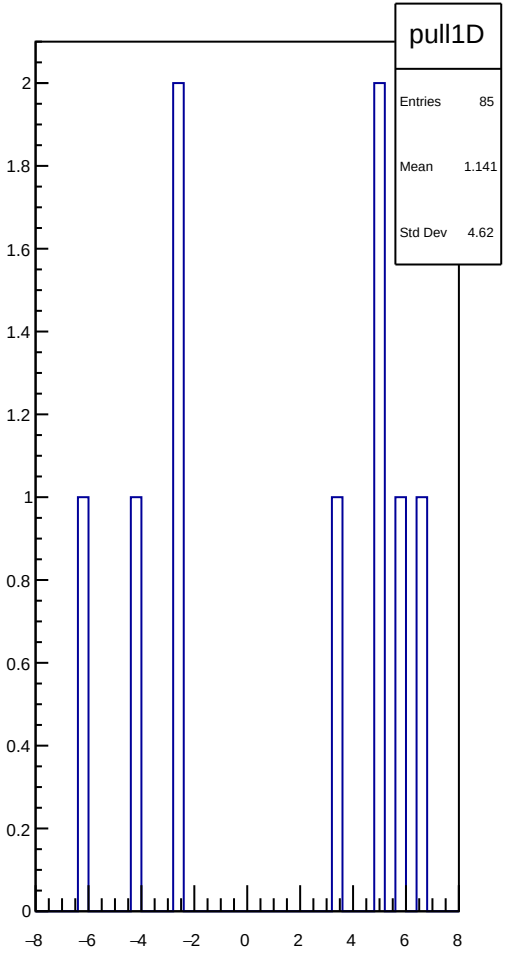

yield_cav4bQ_rms vs run
χ^2 / ndf 5.528e+05 / 84
p0 0.6535 ± 0.0006403
3
2.5
2
1.5
1
0.5

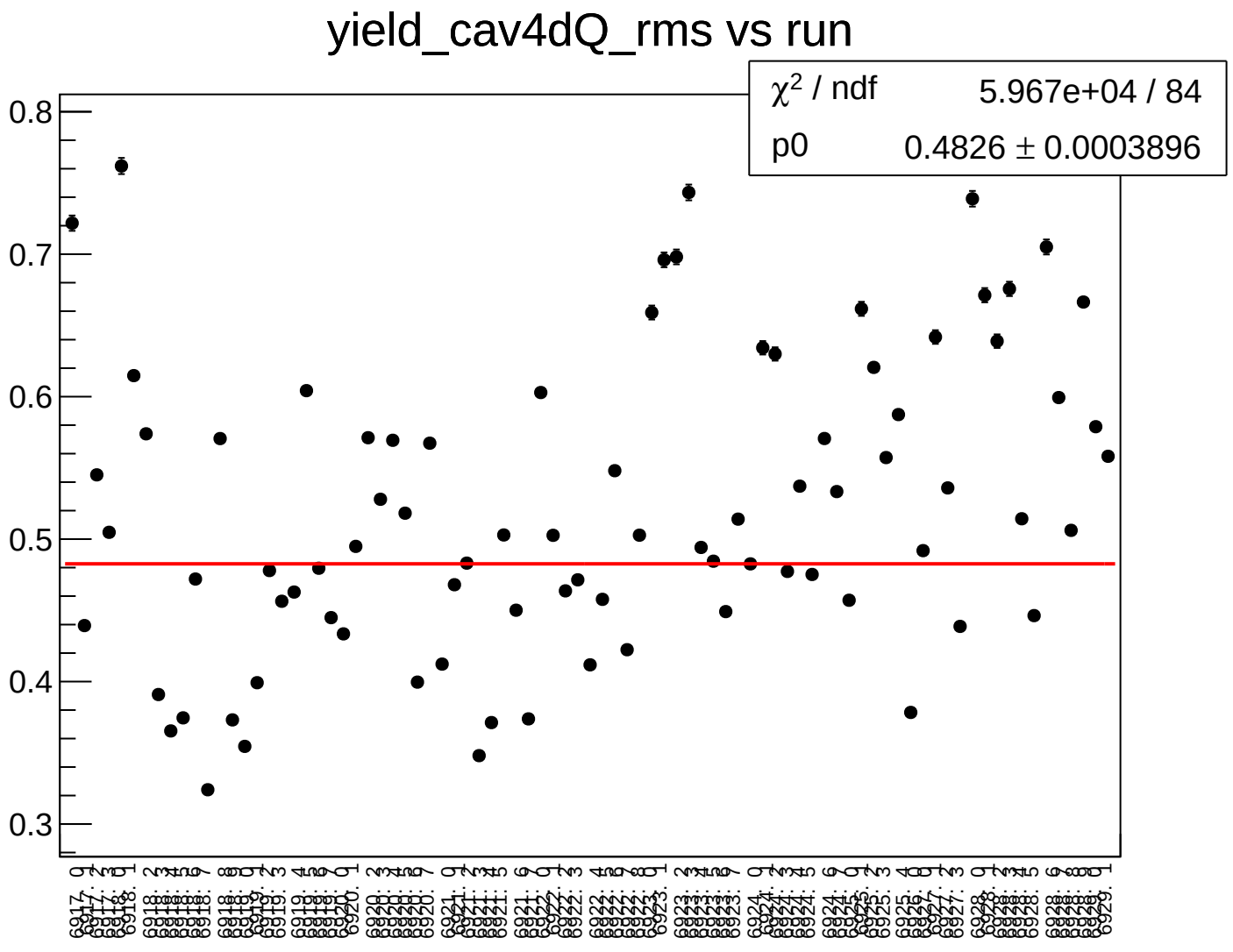

yield_cav4cQ_mean vs run
χ² / ndf 1.318e+06 / 84
p0 148.8 ± 0.0006001
150
149.5
149
148.5
148
147.5
147
146.5
146
pull
Entries 85
Mean 701.1
Std Dev 666.6
200
100
0
−100
−200
−300
−400
−500
−600

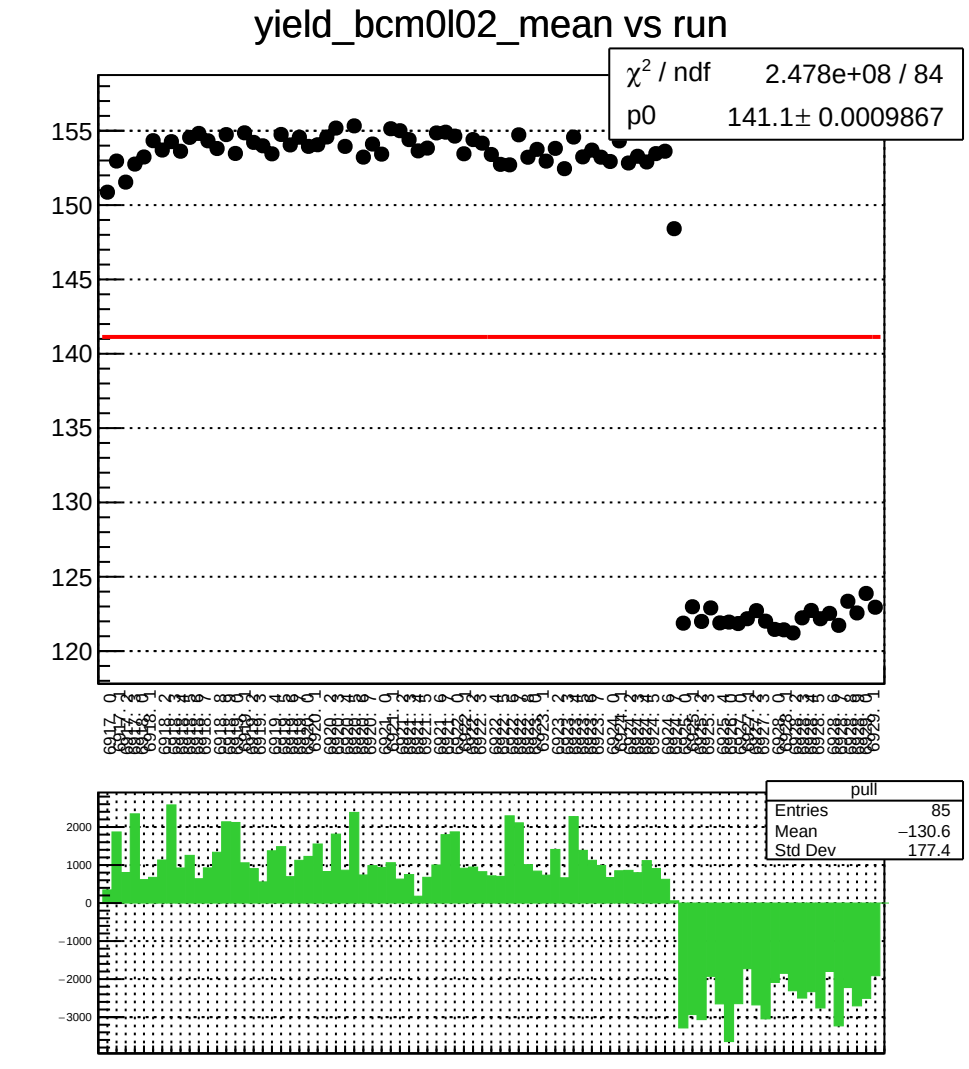

pull1D
Entries 85
Mean 3.437
Std Dev 2.469
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

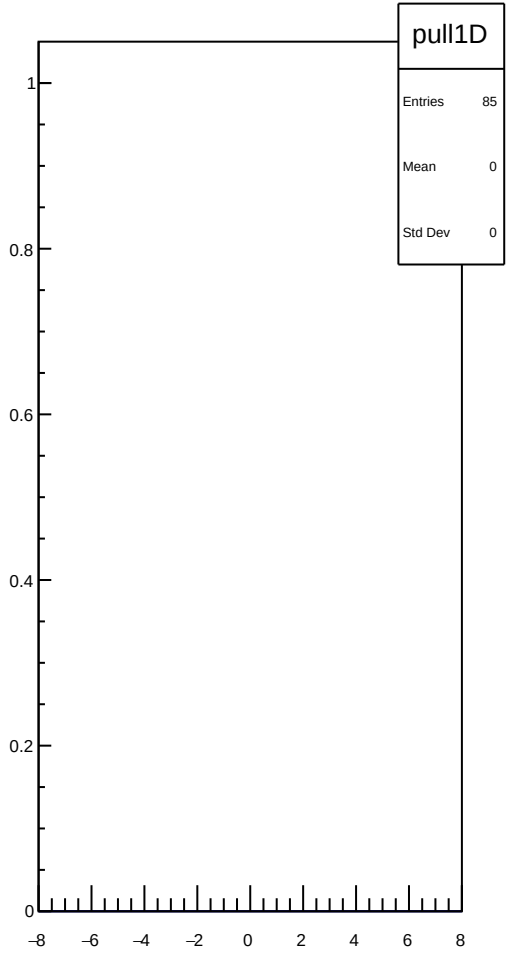

yield_cav4cQ_rms vs run
χ² / ndf 5.422e+04 / 84
p0 0.5267 ± 0.0004244
0.9
0.8
0.7
0.6
0.5
0.4

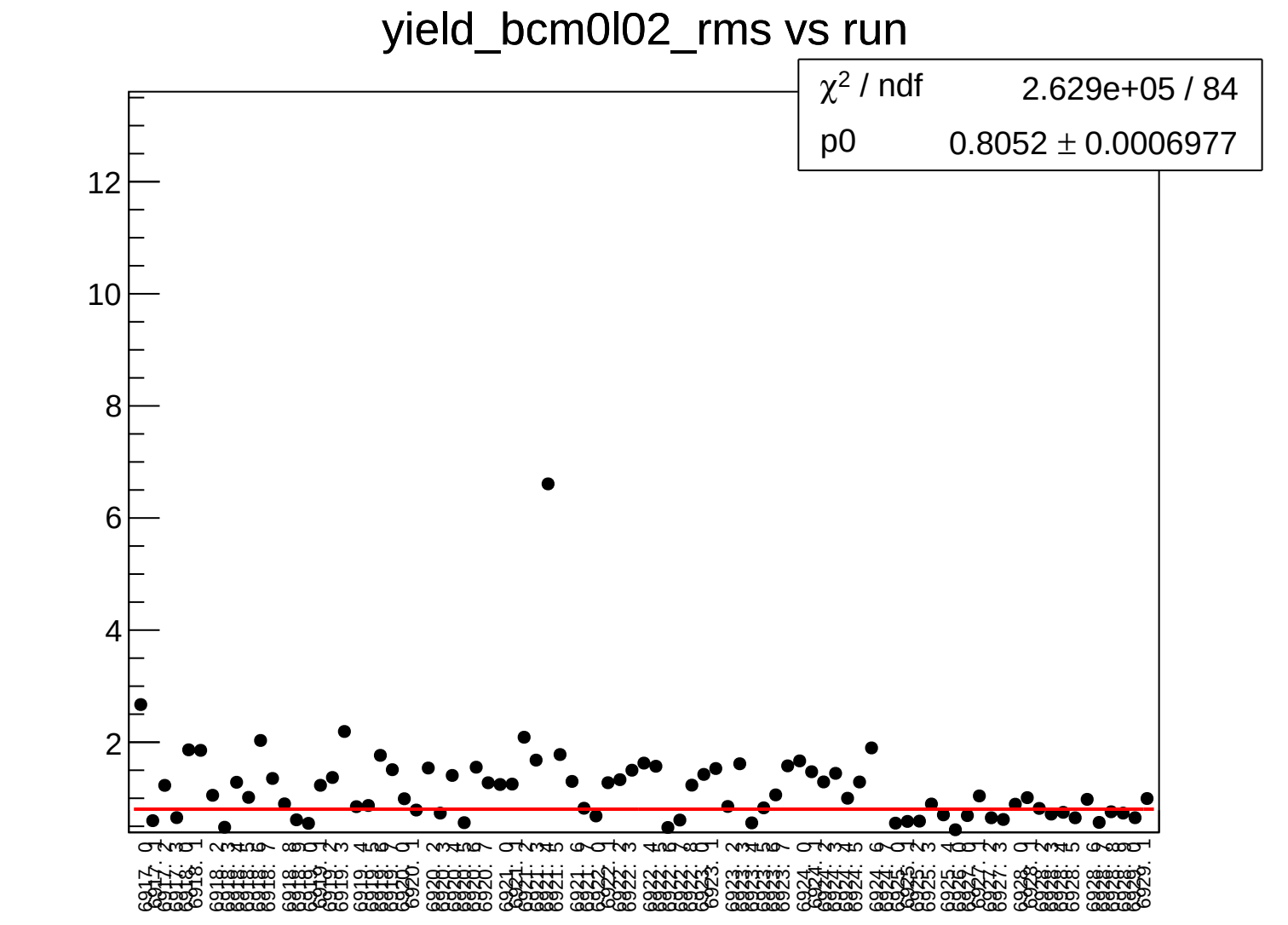

yield_cav4dQ_mean vs run
χ² / ndf 1.197e+06 / 84
p0 149.1± 0.0005509
150
149.5
149
148.5
148
147.5
147
146.5
pull
Entries 85
Mean 2417
Std Dev 2384
200
100
0
−100
−200
−300
−400
−500

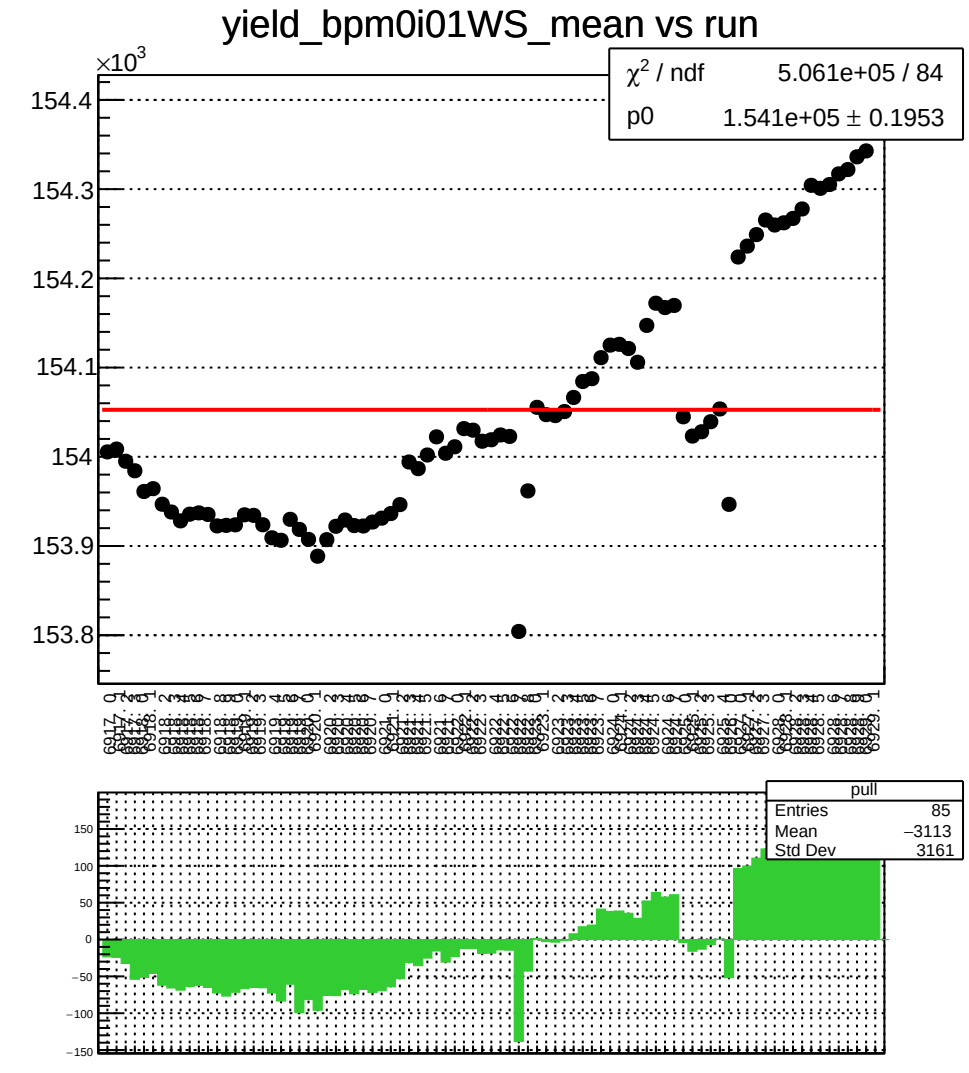

pull1D
Entries 85
Mean 1.141
Std Dev 4.62
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

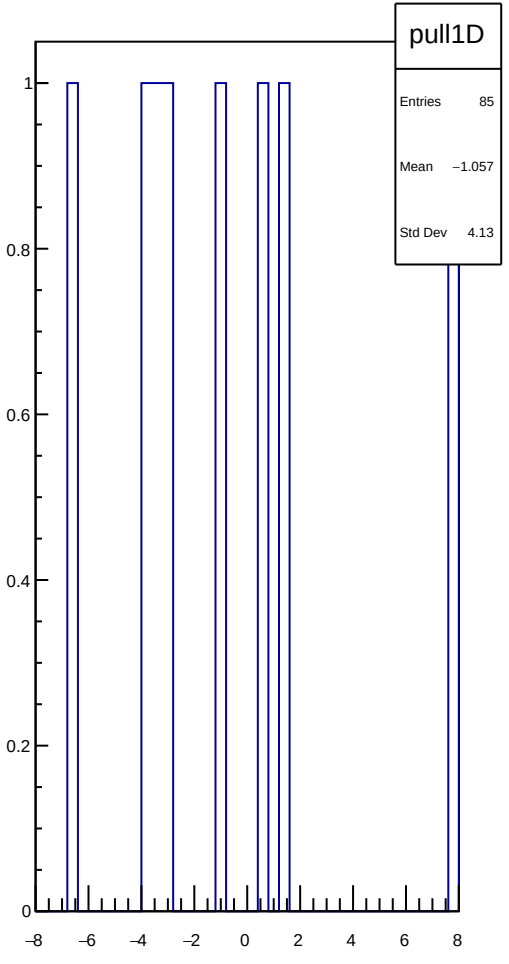

yield_cav4dQ_rms vs run
χ² / ndf 5.967e+04 / 84
p0 0.4826 ± 0.0003896
0.8
0.7
0.6
0.5
0.4
0.3

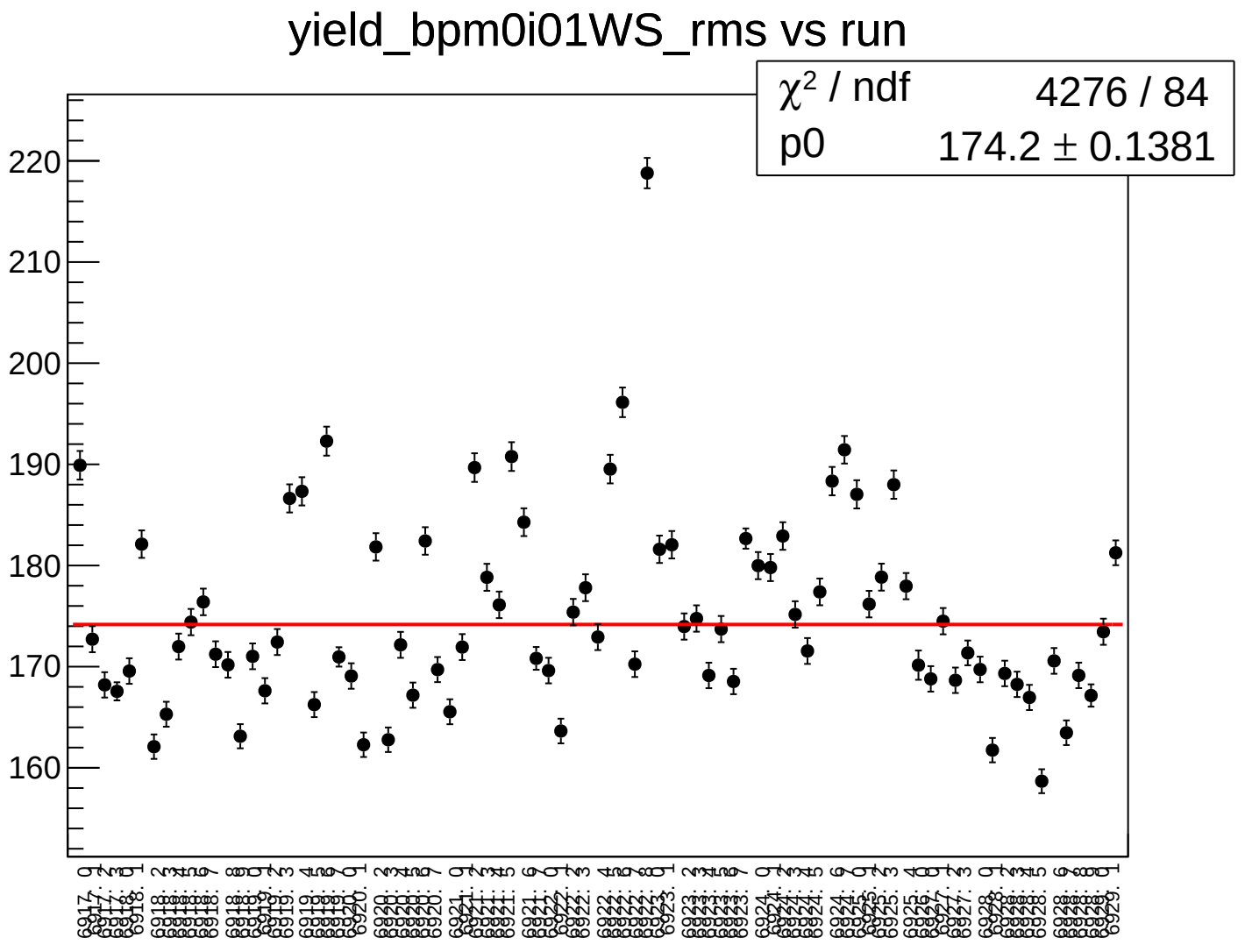

yield_bcm0l02_mean vs run
χ² / ndf 2.478e+08 / 84
p0 141.1± 0.0009867
155
150
145
140
135
130
125
120
pull
Entries 85
Mean −130.6
Std Dev 177.4
2000
1000
0
−1000
−2000
−3000

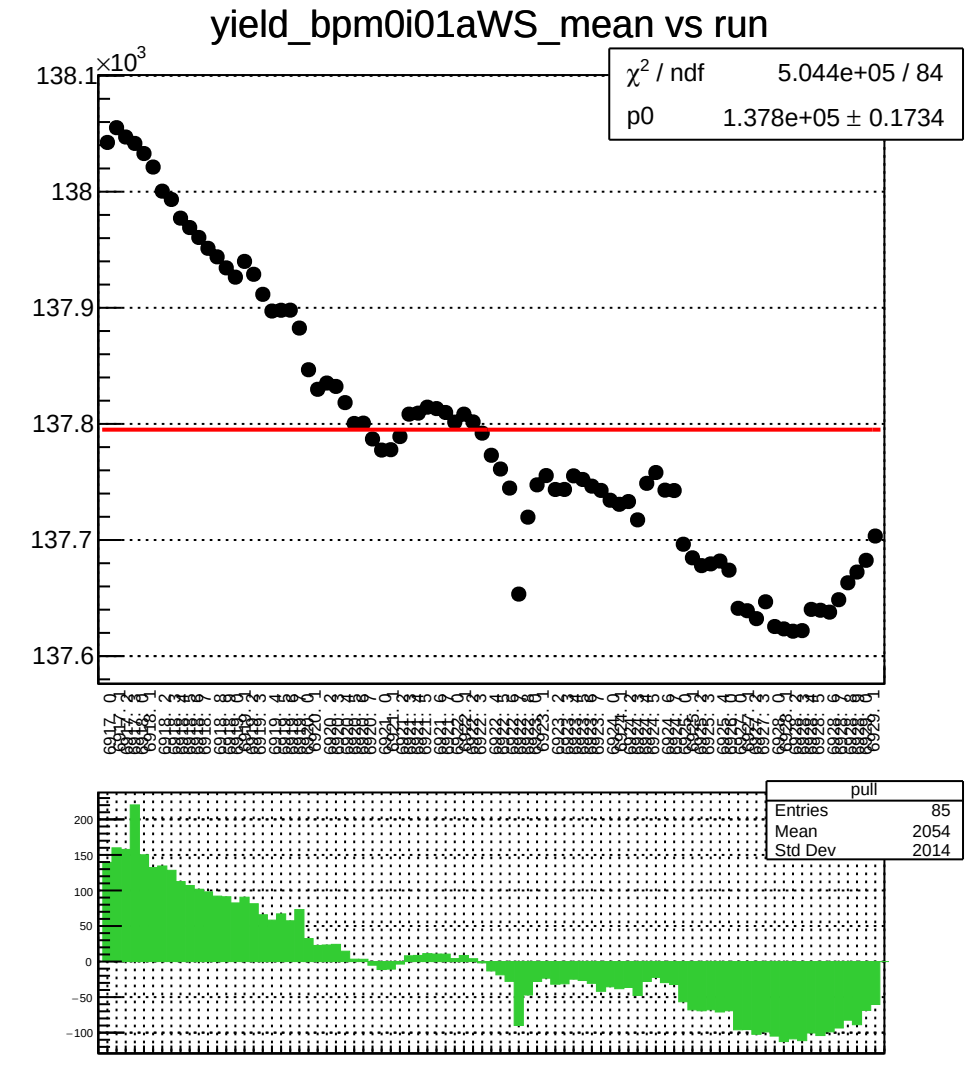

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

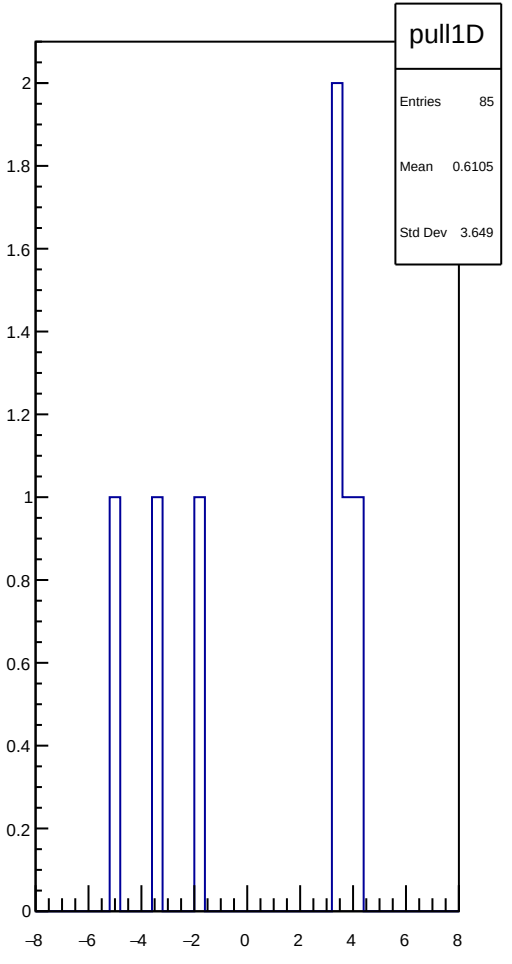

yield_bcm0l02_rms vs run
χ² / ndf 2.629e+05 / 84
p0 0.8052 ± 0.0006977
12
10
8
6
4
2

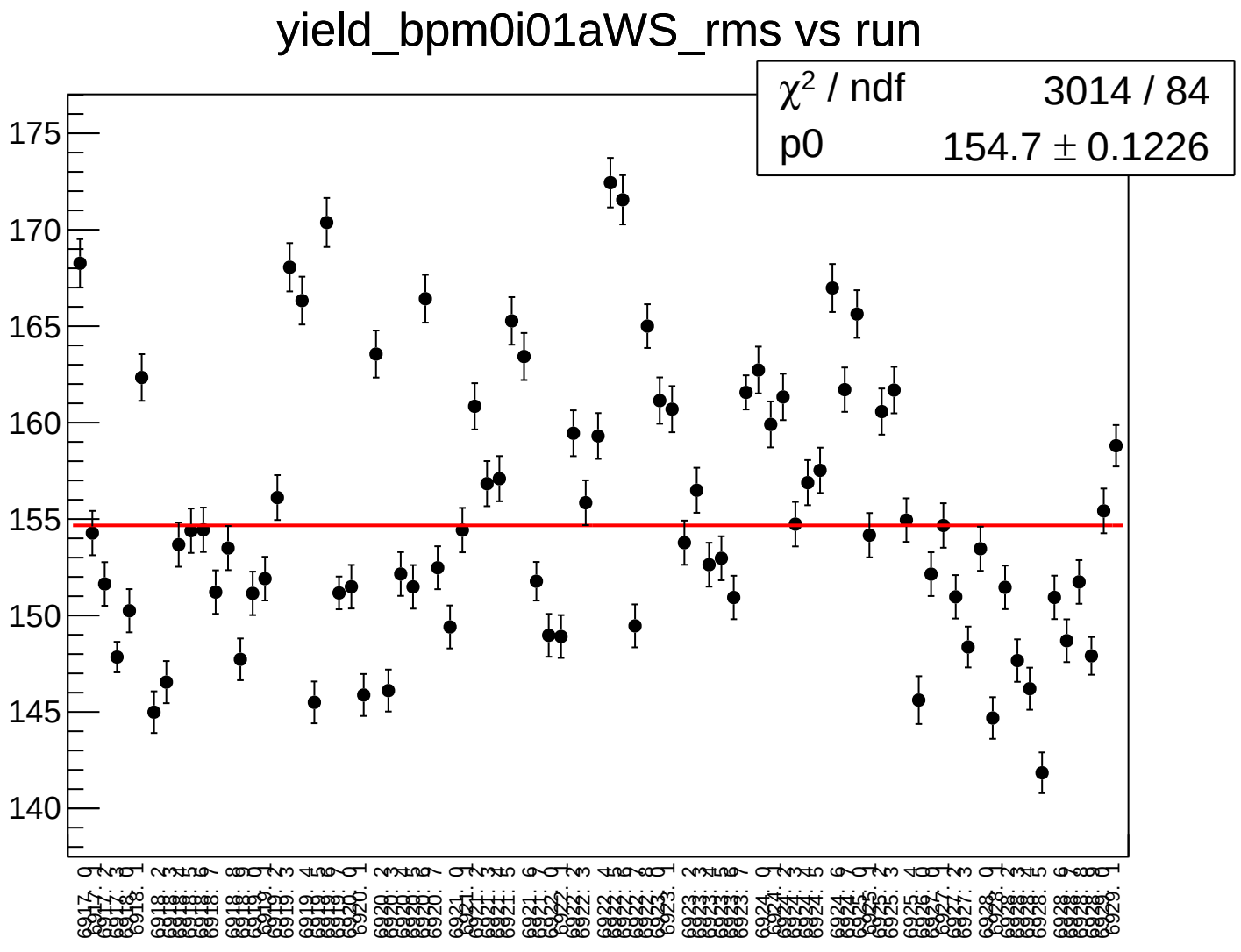

yield_bpm0i01WS_mean vs run
χ² / ndf 5.061e+05 / 84
p0 1.541e+05 ± 0.1953
×10³
154.4
154.3
154.2
154.1
154
153.9
153.8
pull
Entries 85
Mean −3113
Std Dev 3161
150
100
50
0
−50
−100
−150

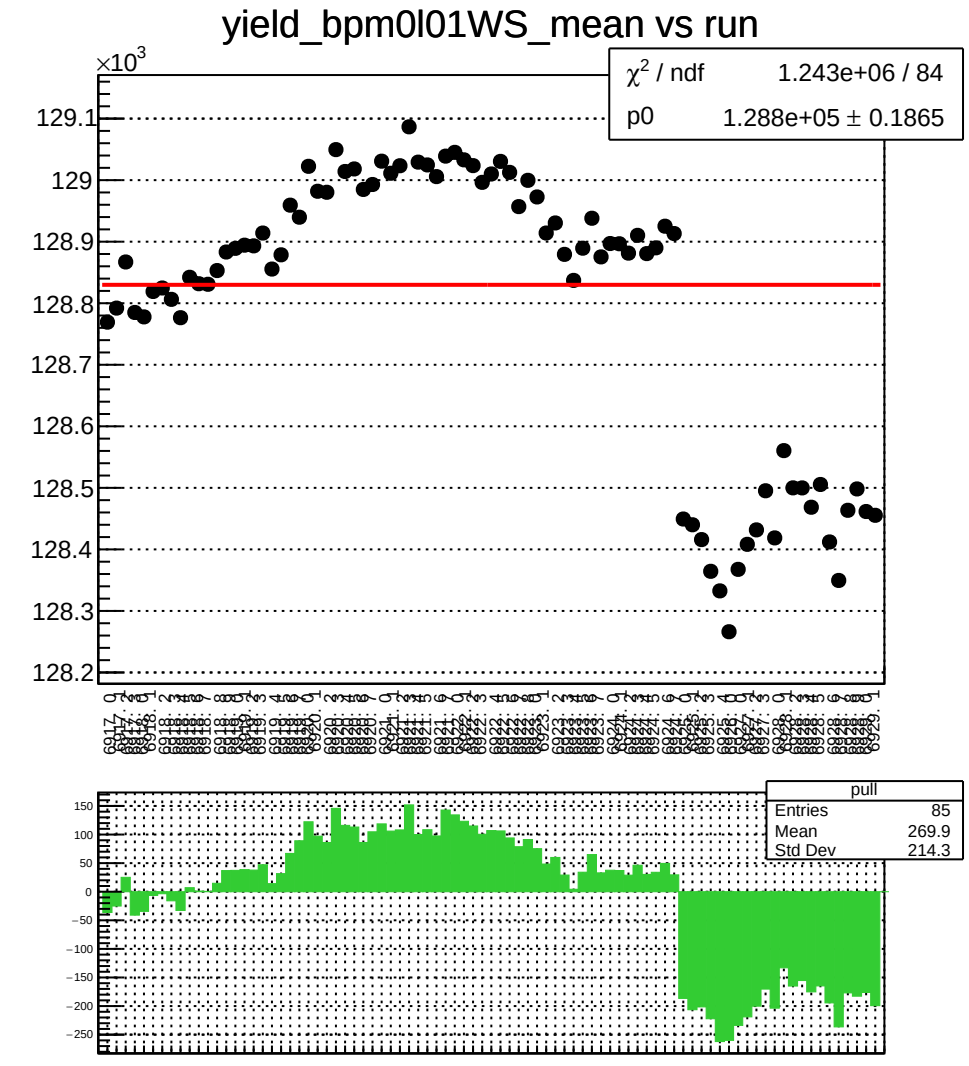

pull1D
Entries 85
Mean −1.057
Std Dev 4.13
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

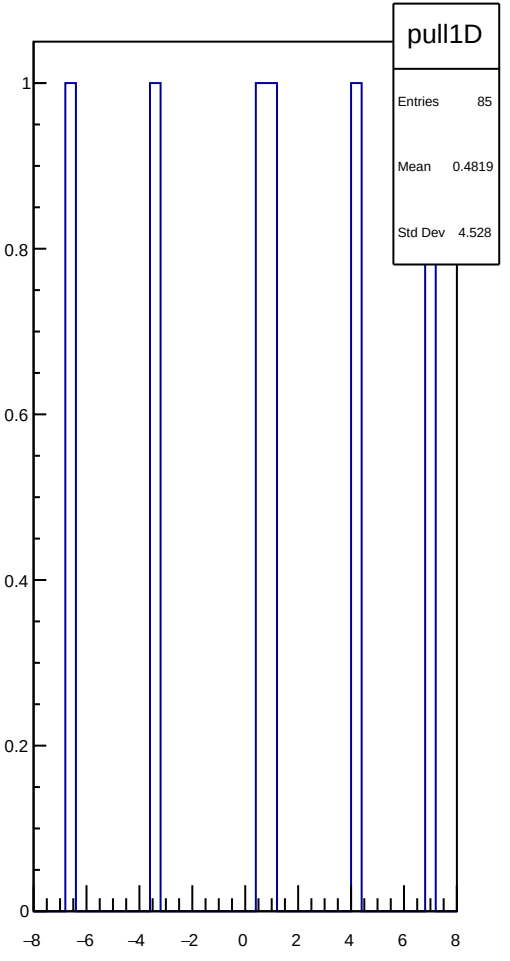

yield_bpm0i01WS_rms vs run
χ² / ndf 4276 / 84
p0 174.2 ± 0.1381
220
210
200
190
180
170
160

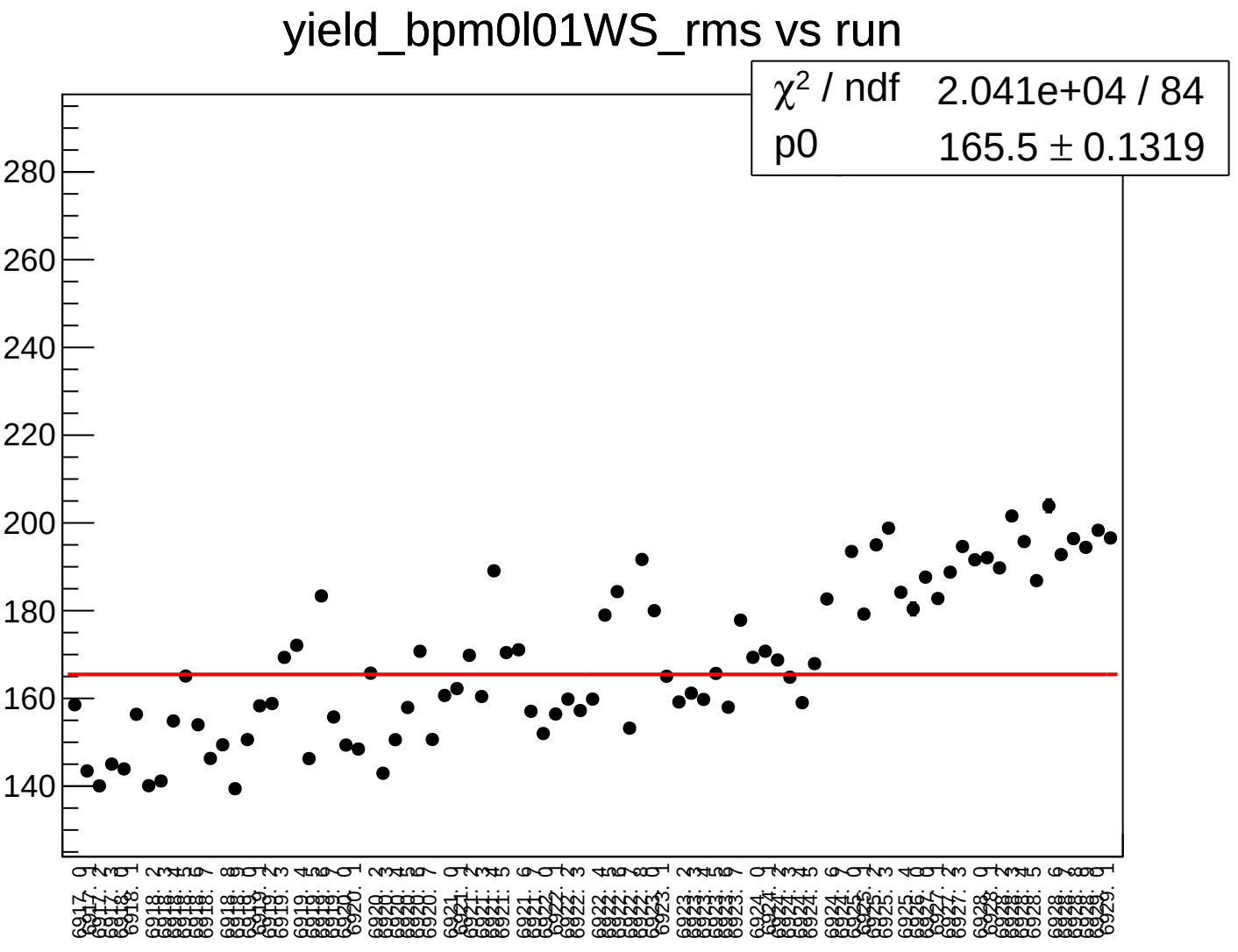

yield_bpm0i01aWS_mean vs run
χ^2 / ndf 5.044e+05 / 84
p0 1.378e+05 ± 0.1734
×10^3
138.1
138
137.9
137.8
137.7
137.6
pull
Entries 85
Mean 2054
Std Dev 2014
200
150
100
50
0
−50
−100

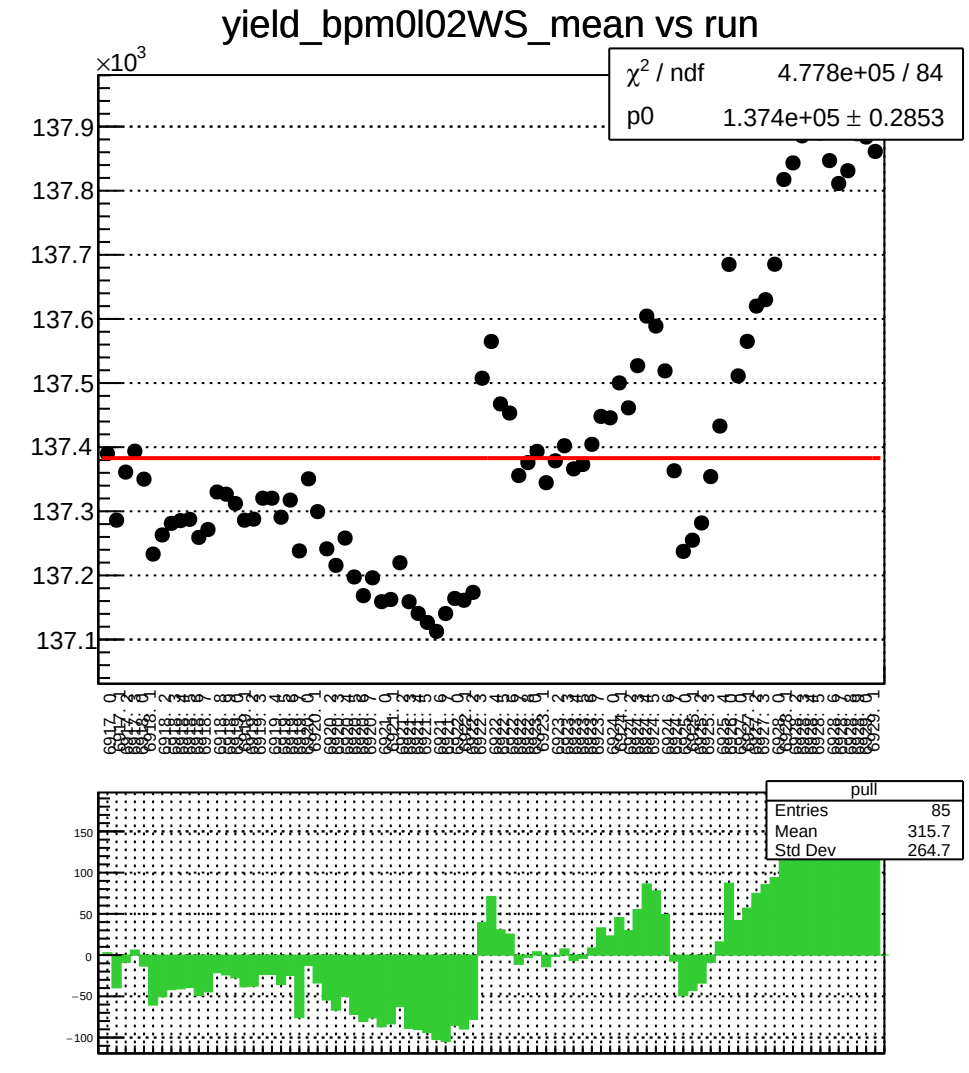

pull1D
Entries 85
Mean 0.6105
Std Dev 3.649
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

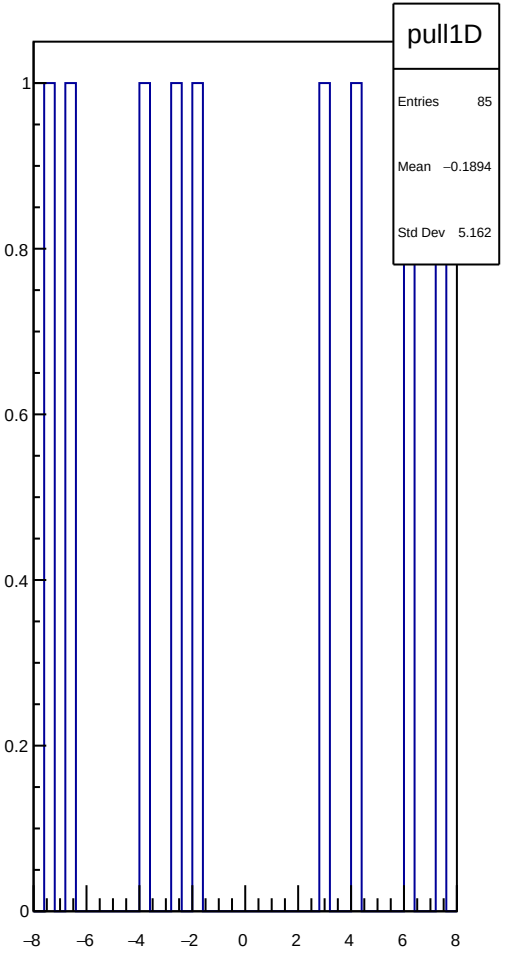

yield_bpm0i01aWS_rms vs run
χ² / ndf 3014 / 84
p0 154.7 ± 0.1226
175
170
165
160
155
150
145
140

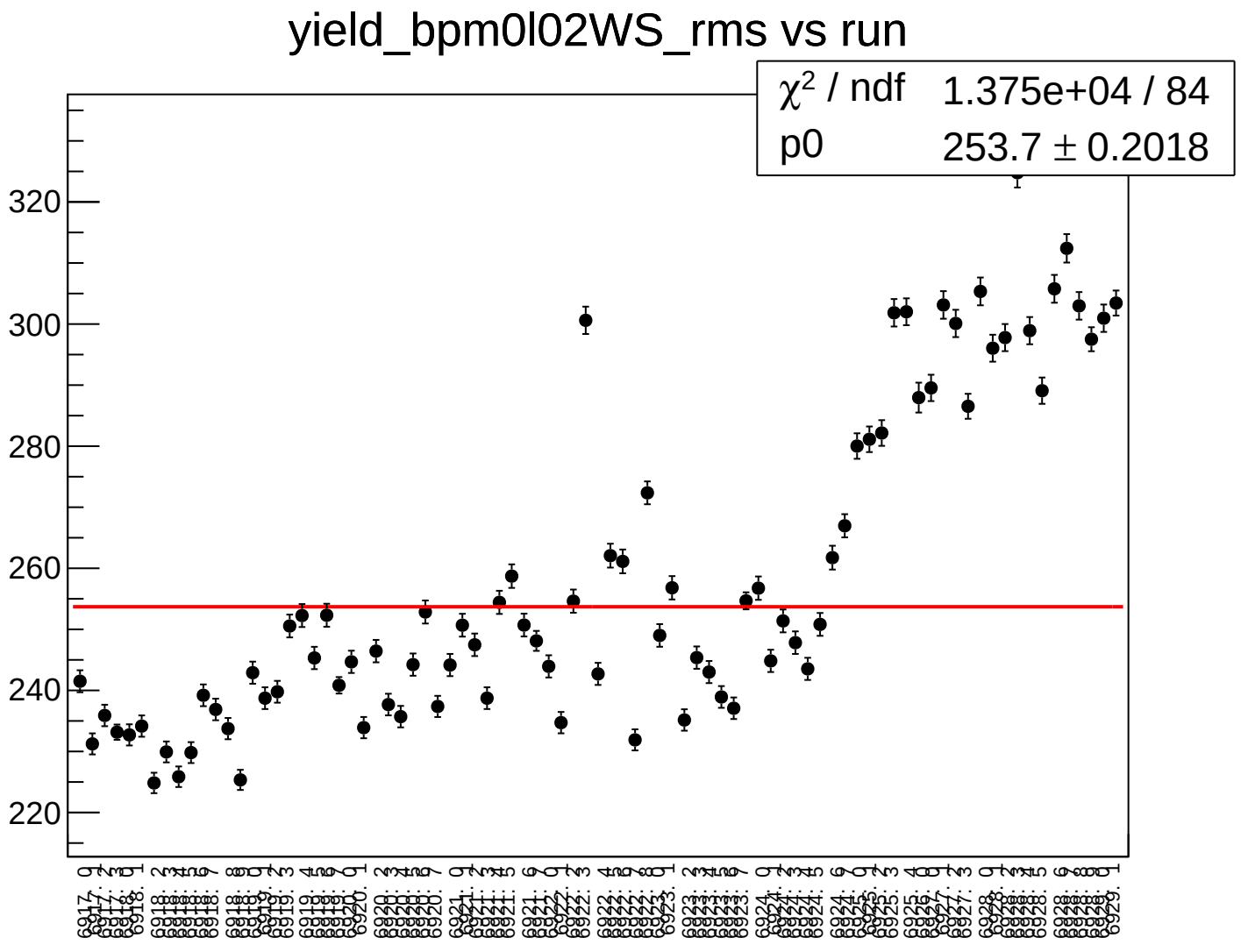

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 1.243e+06 / 84
p0 1.288e+05 ± 0.1865
129.1
129
128.9
128.8
128.7
128.6
128.5
128.4
128.3
128.2
pull
Entries 85
Mean 269.9
Std Dev 214.3
150
100
50
0
−50
−100
−150
−200
−250

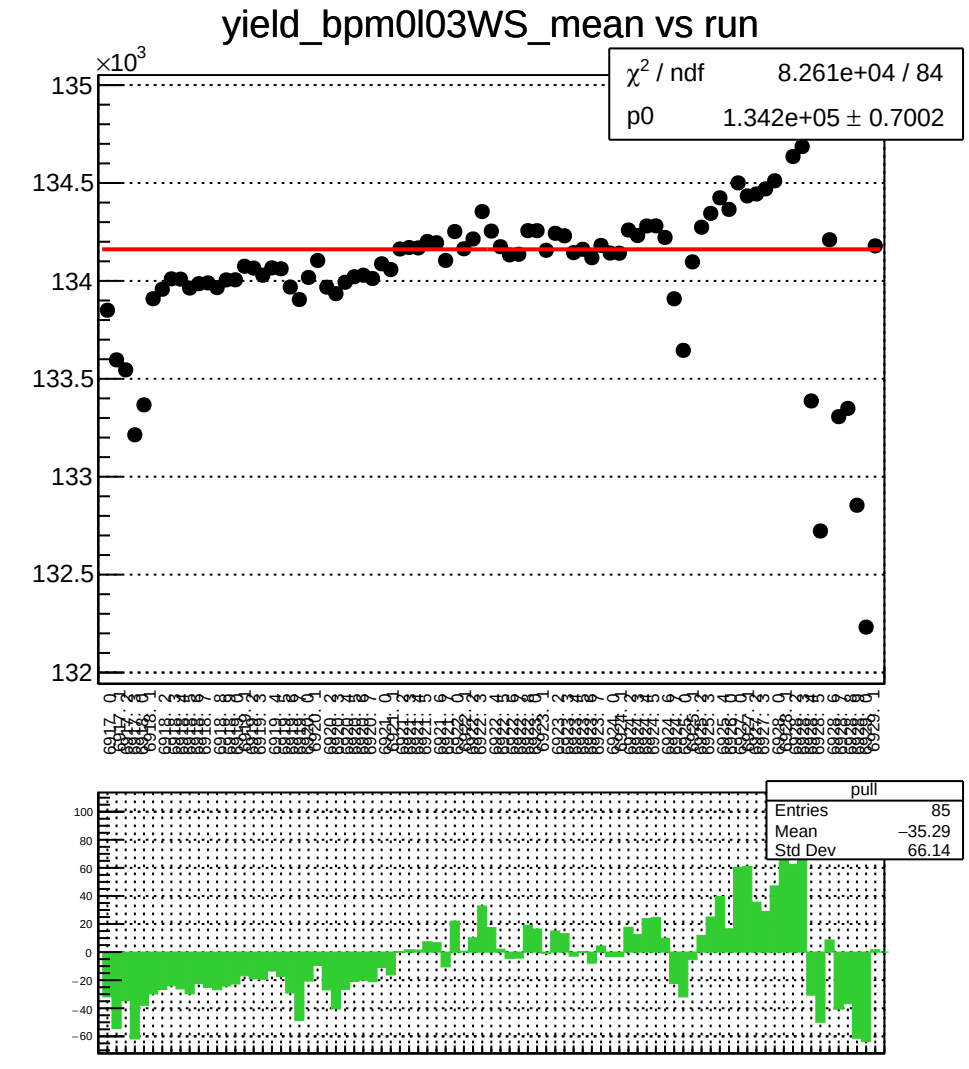

pull1D
Entries 85
Mean 0.4819
Std Dev 4.528
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

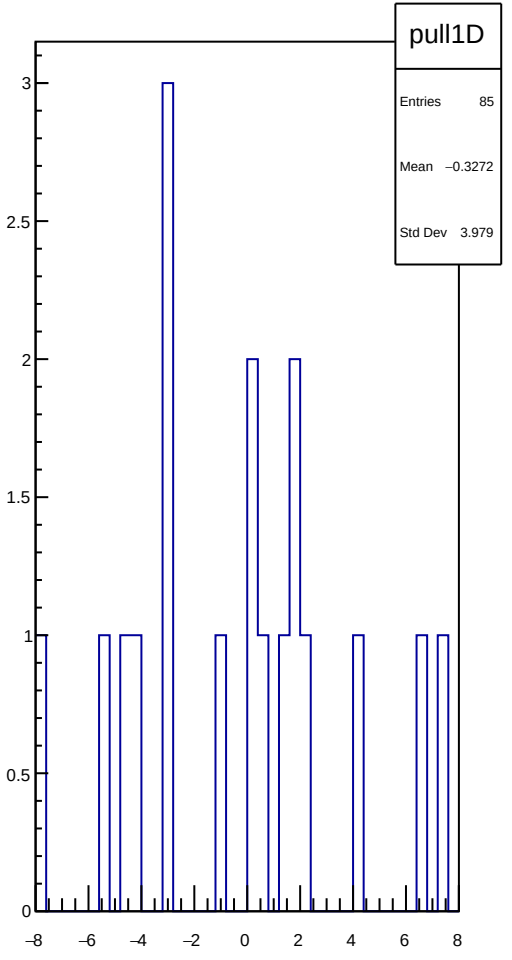

yield_bpm0l01WS_rms vs run
χ² / ndf 2.041e+04 / 84
p0 165.5 ± 0.1319
280
260
240
220
200
180
160
140

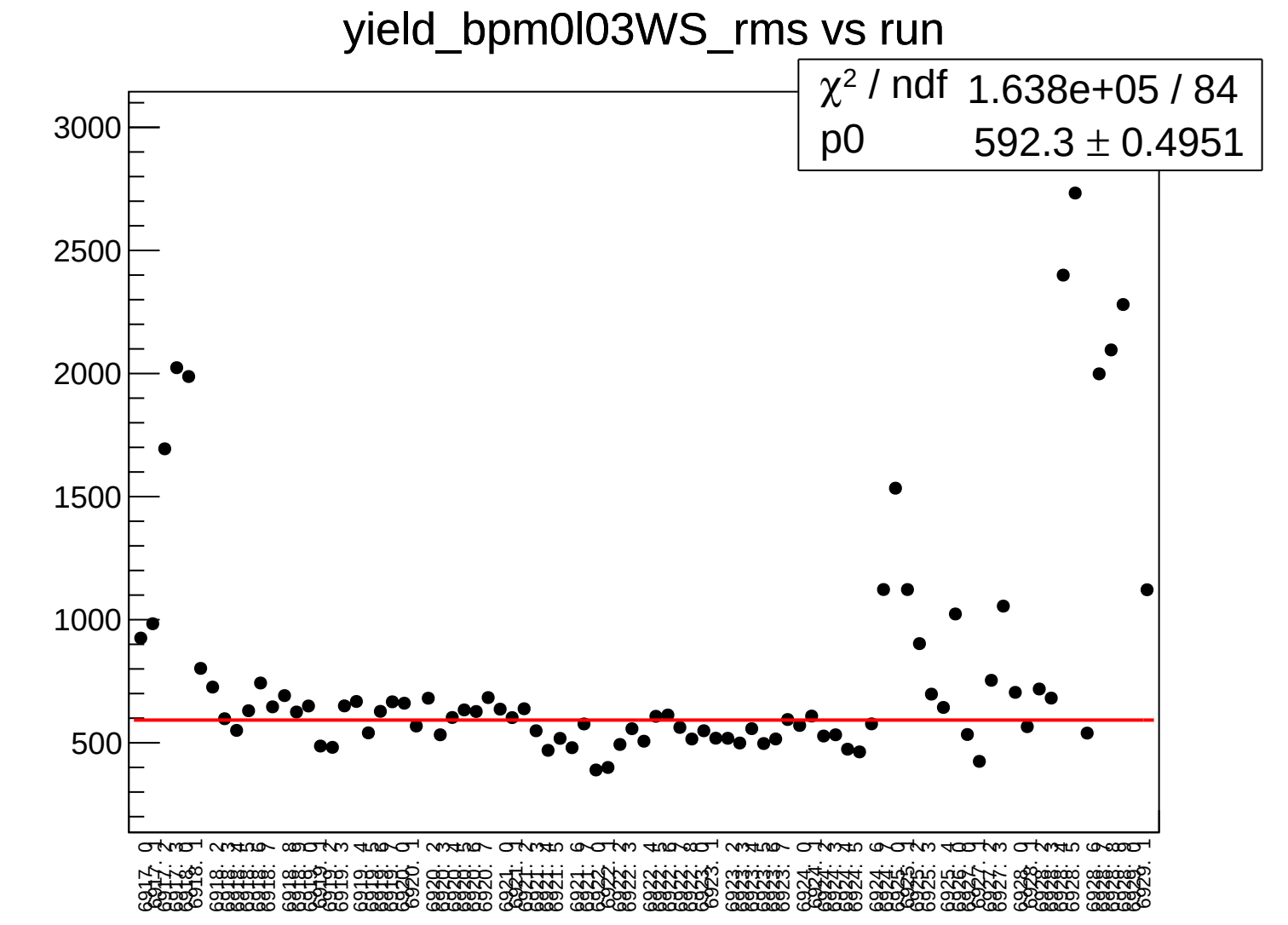

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 4.778e+05 / 84
p0 1.374e+05 ± 0.2853
137.9
137.8
137.7
137.6
137.5
137.4
137.3
137.2
137.1
pull
Entries 85
Mean 315.7
Std Dev 264.7
150
100
50
0
−50
−100

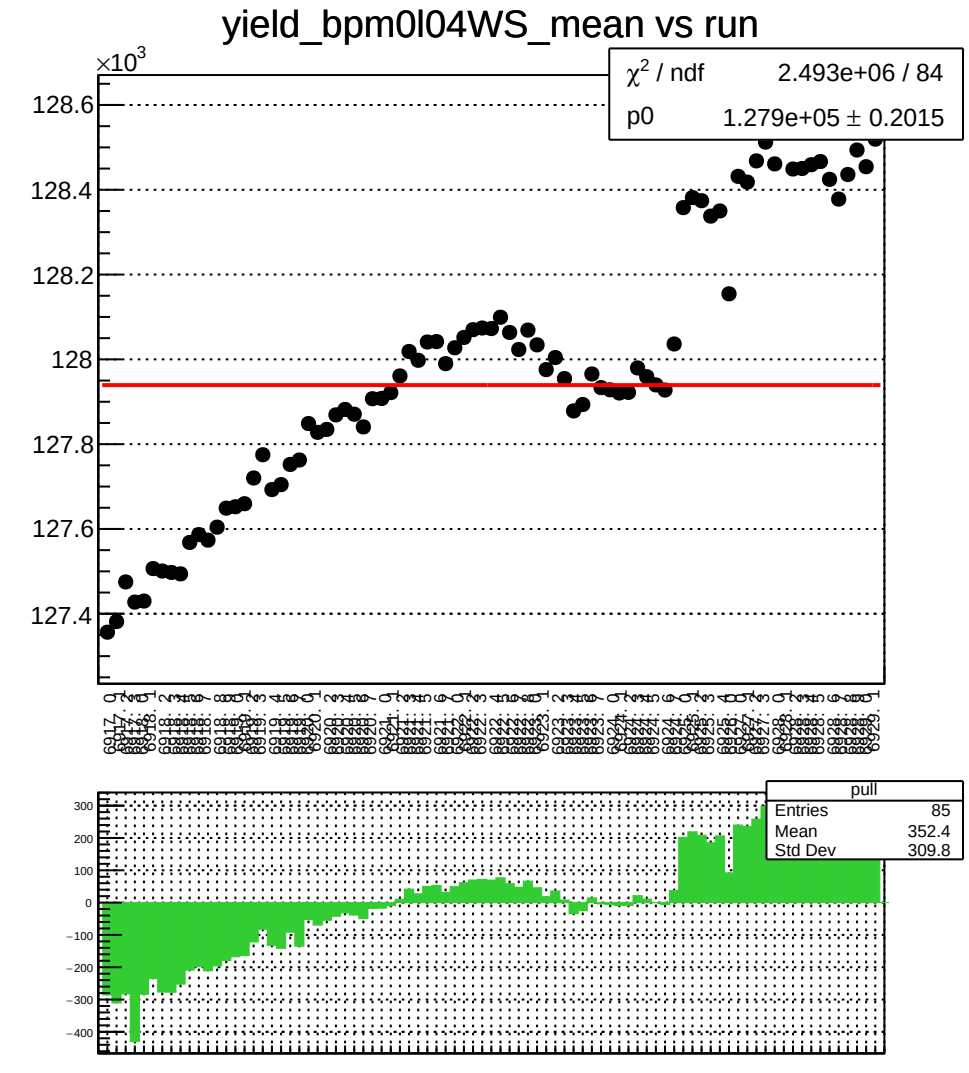

pull1D
Entries 85
Mean −0.1894
Std Dev 5.162
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

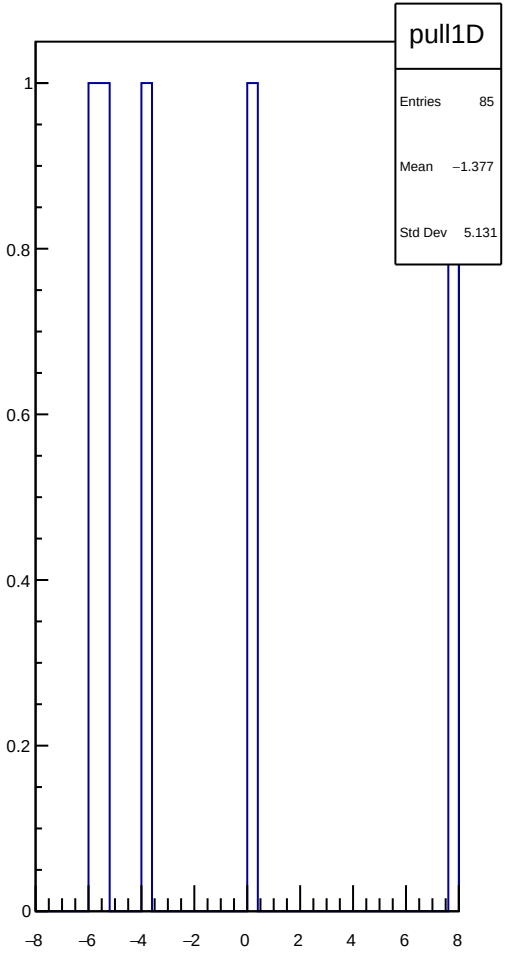

yield_bpm0l02WS_rms vs run
χ² / ndf 1.375e+04 / 84
p0 253.7 ± 0.2018
320
300
280
260
240
220

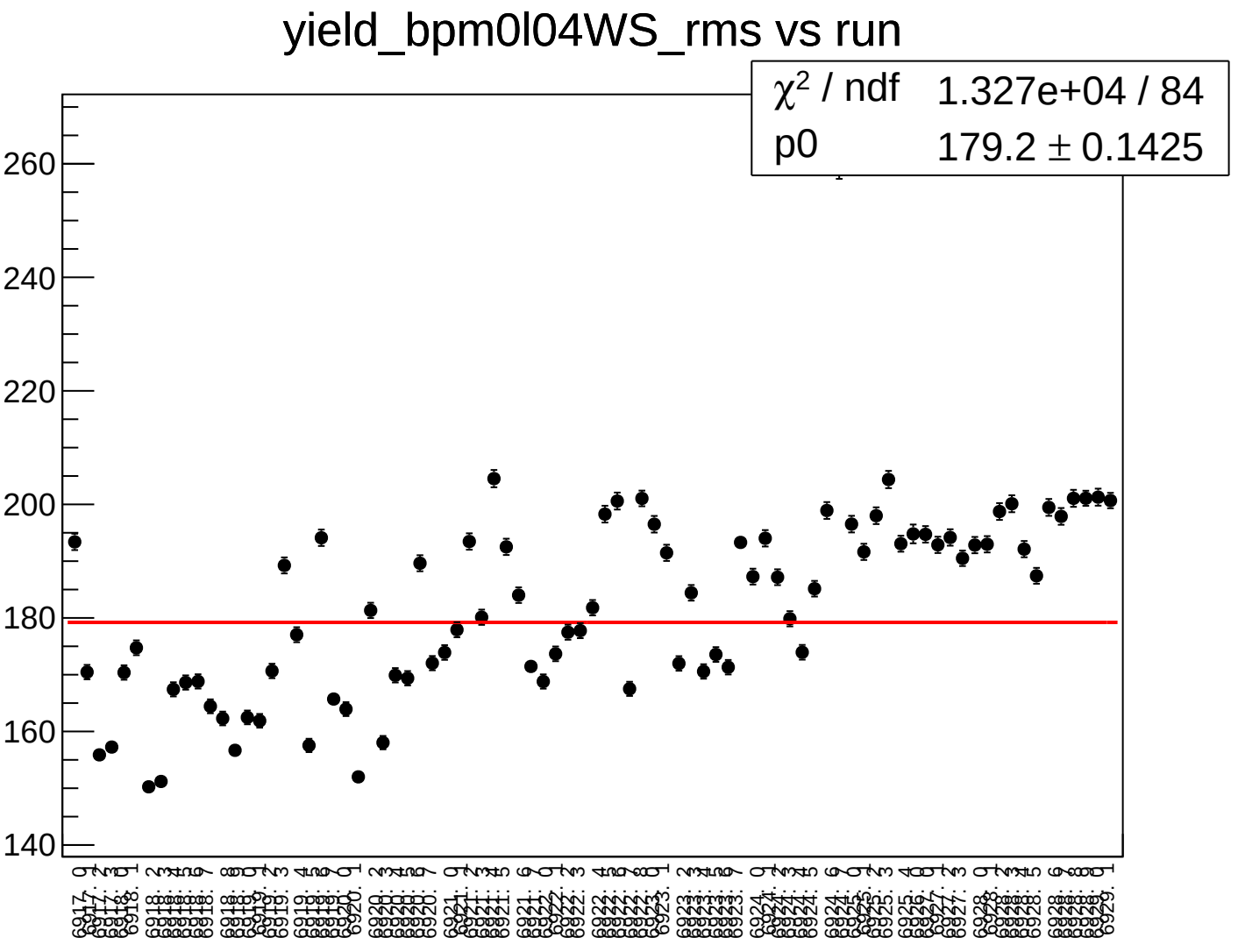

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 8.261e+04 / 84
p0 1.342e+05 ± 0.7002
135
134.5
134
133.5
133
132.5
132
pull
Entries 85
Mean −35.29
Std Dev 66.14
100
80
60
40
20
0
−20
−40
−60

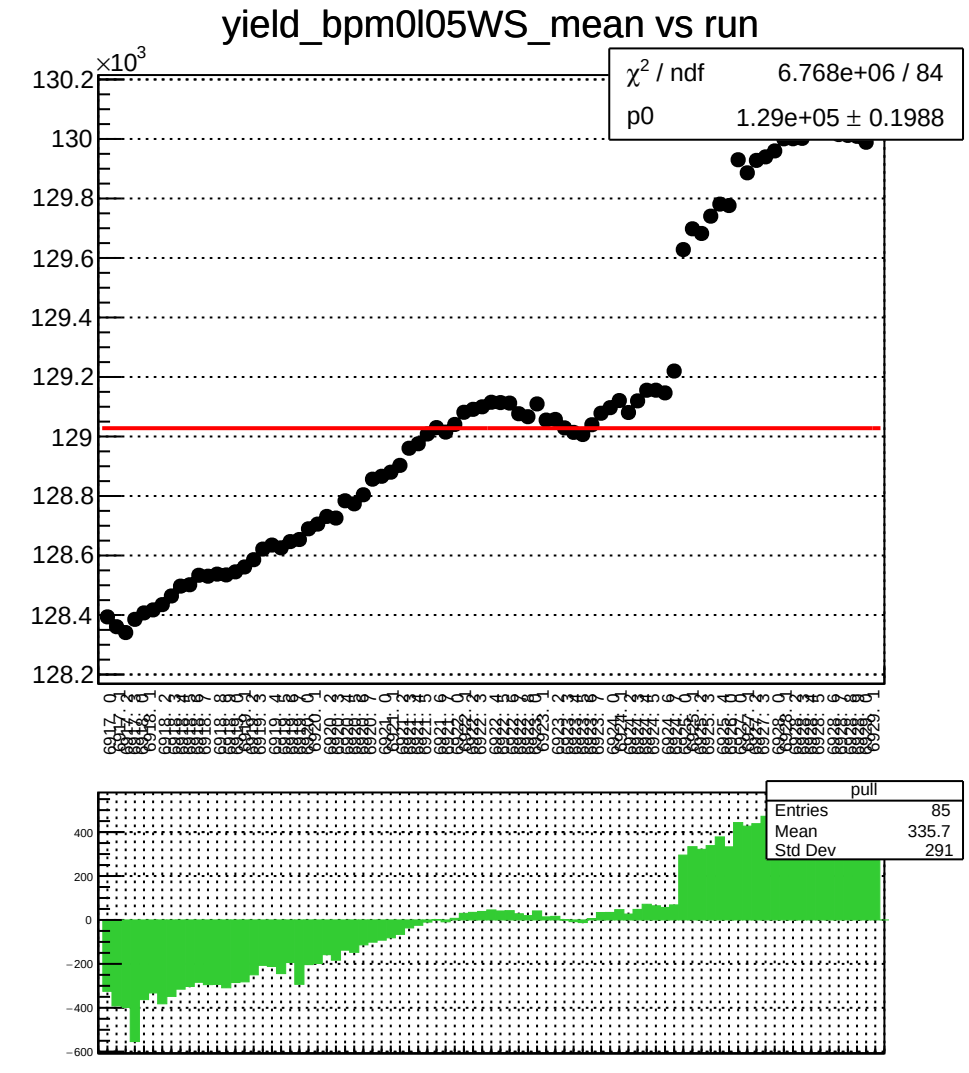

pull1D
Entries 85
Mean −0.3272
Std Dev 3.979
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

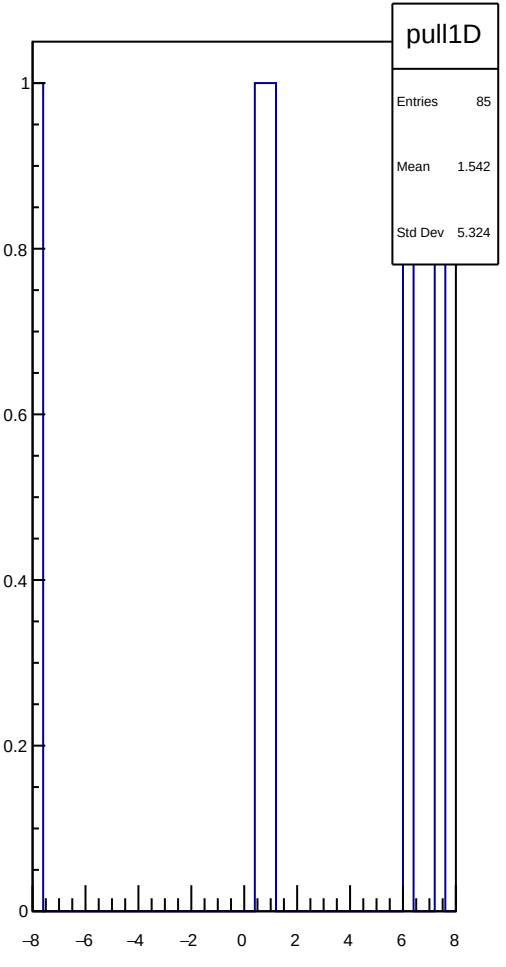

yield_bpm0l03WS_rms vs run
χ² / ndf 1.638e+05 / 84
p0 592.3 ± 0.4951
3000
2500
2000
1500
1000
500

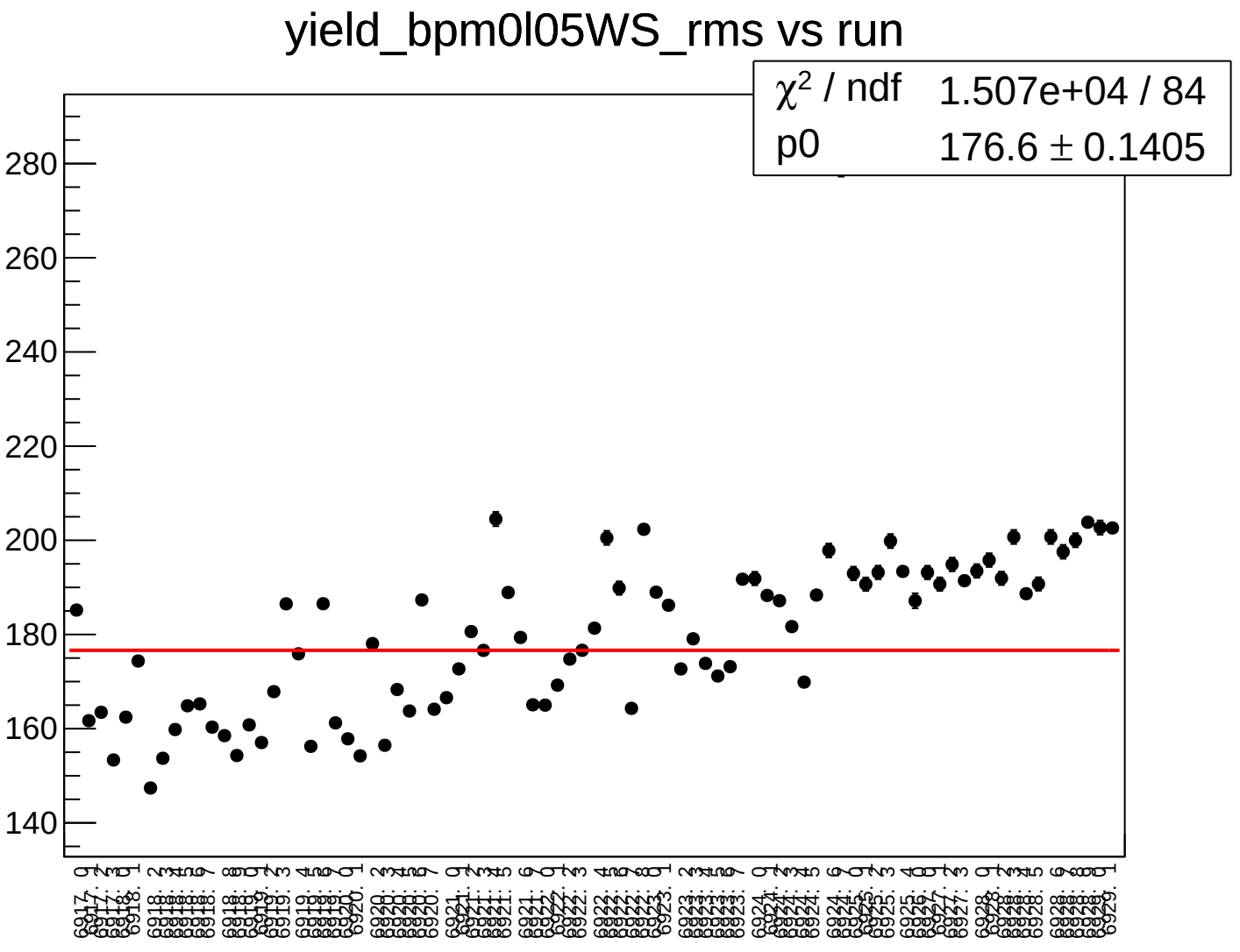

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 2.493e+06 / 84
p0 1.279e+05 ± 0.2015
128.6
128.4
128.2
128
127.8
127.6
127.4
pull
Entries 85
Mean 352.4
Std Dev 309.8
300
200
100
0
−100
−200
−300
−400

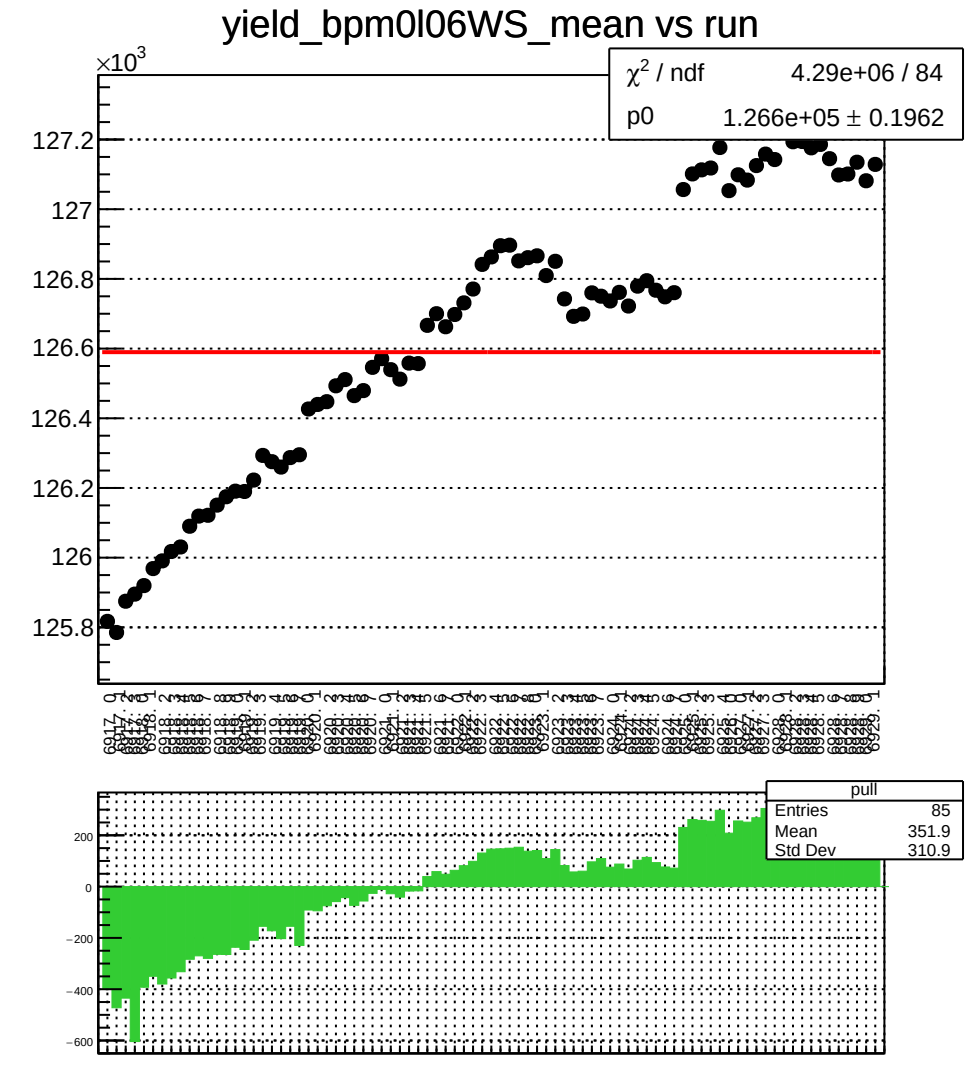

pull1D
Entries 85
Mean −1.377
Std Dev 5.131
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

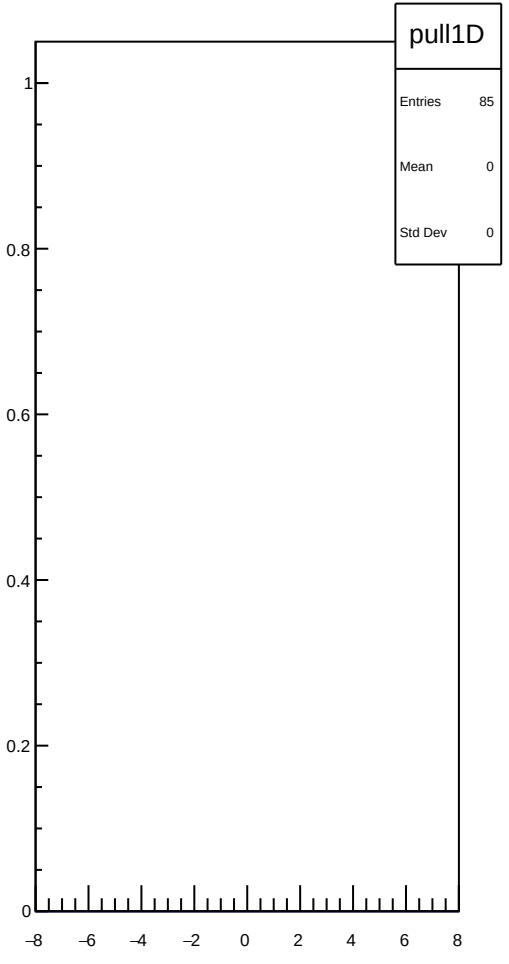

yield_bpm0l04WS_rms vs run
χ² / ndf 1.327e+04 / 84
p0 179.2 ± 0.1425
260
240
220
200
180
160
140

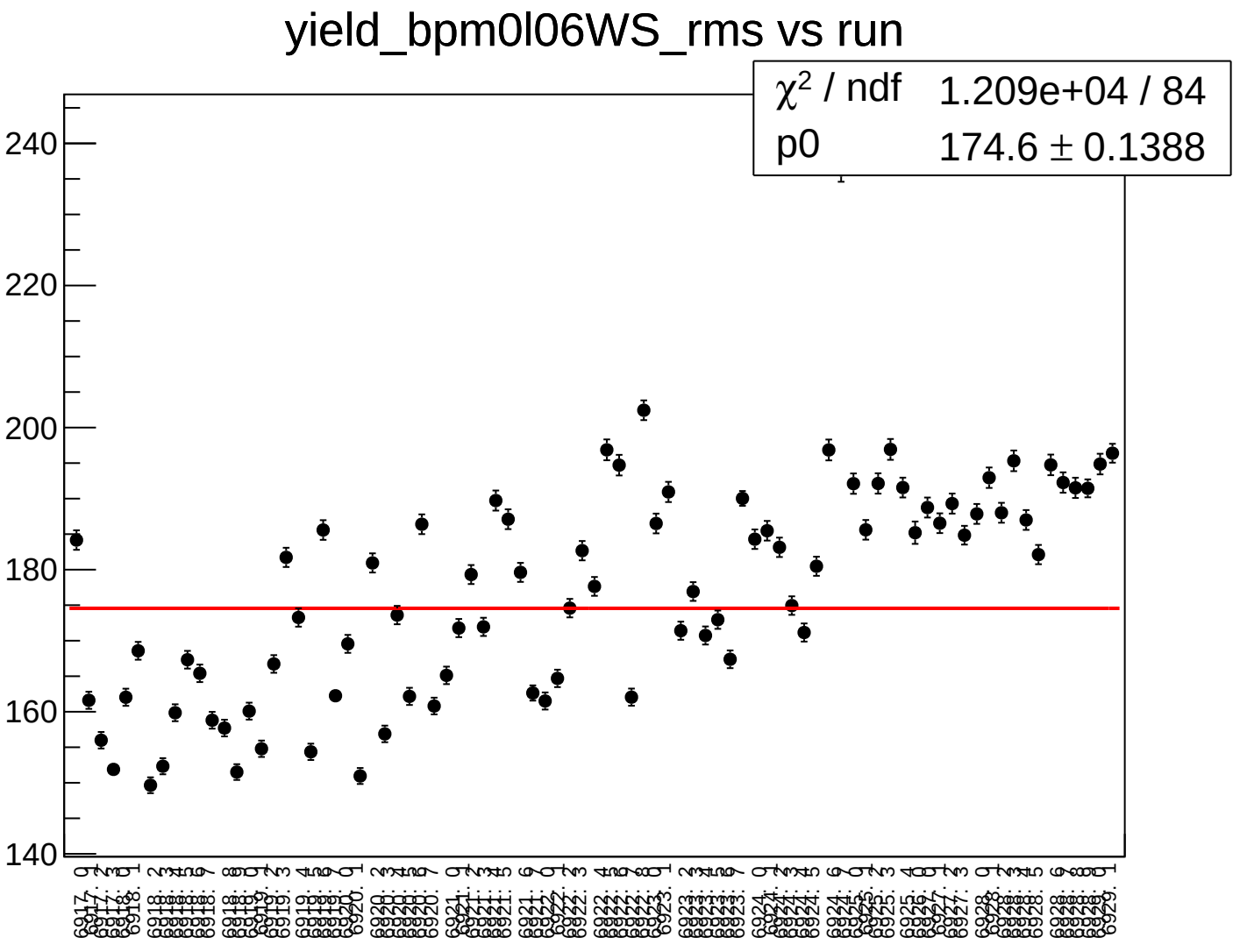

yield_bpm0l05WS_mean vs run
×10^3
130.2
130
129.8
129.6
129.4
129.2
129
128.8
128.6
128.4
128.2
χ² / ndf 6.768e+06 / 84
p0 1.29e+05 ± 0.1988
pull
Entries 85
Mean 335.7
Std Dev 291
400
200
0
−200
−400
−600

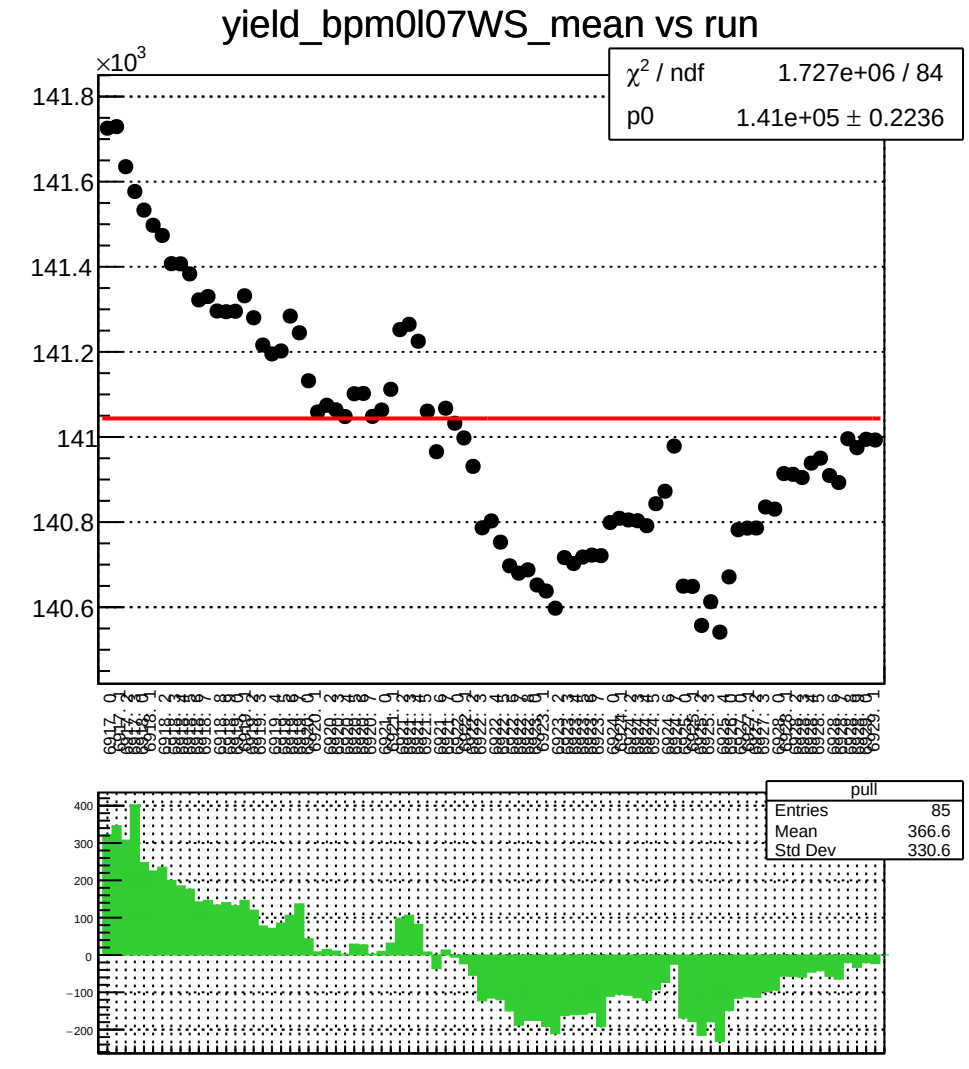

pull1D
Entries 85
Mean 1.542
Std Dev 5.324
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

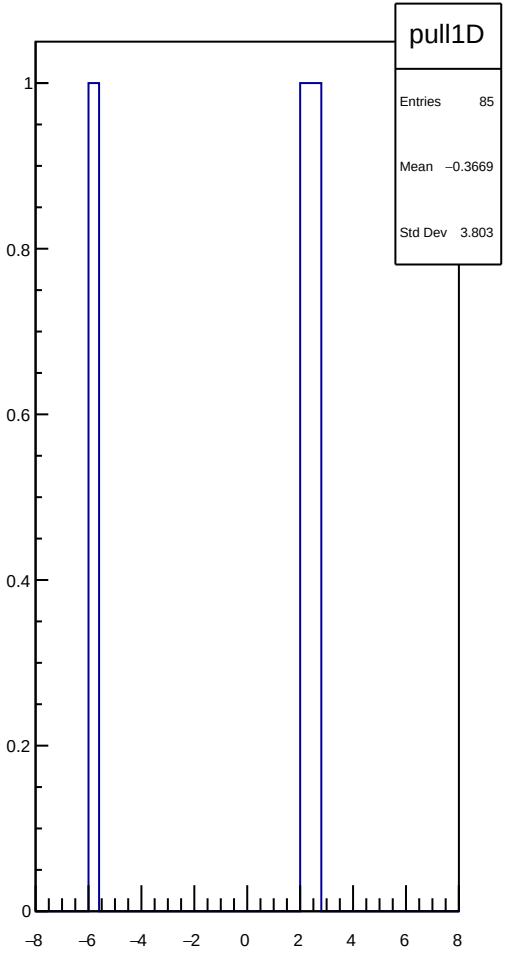

yield_bpm0l05WS_rms vs run
χ² / ndf 1.507e+04 / 84
p0 176.6 ± 0.1405
280
260
240
220
200
180
160
140

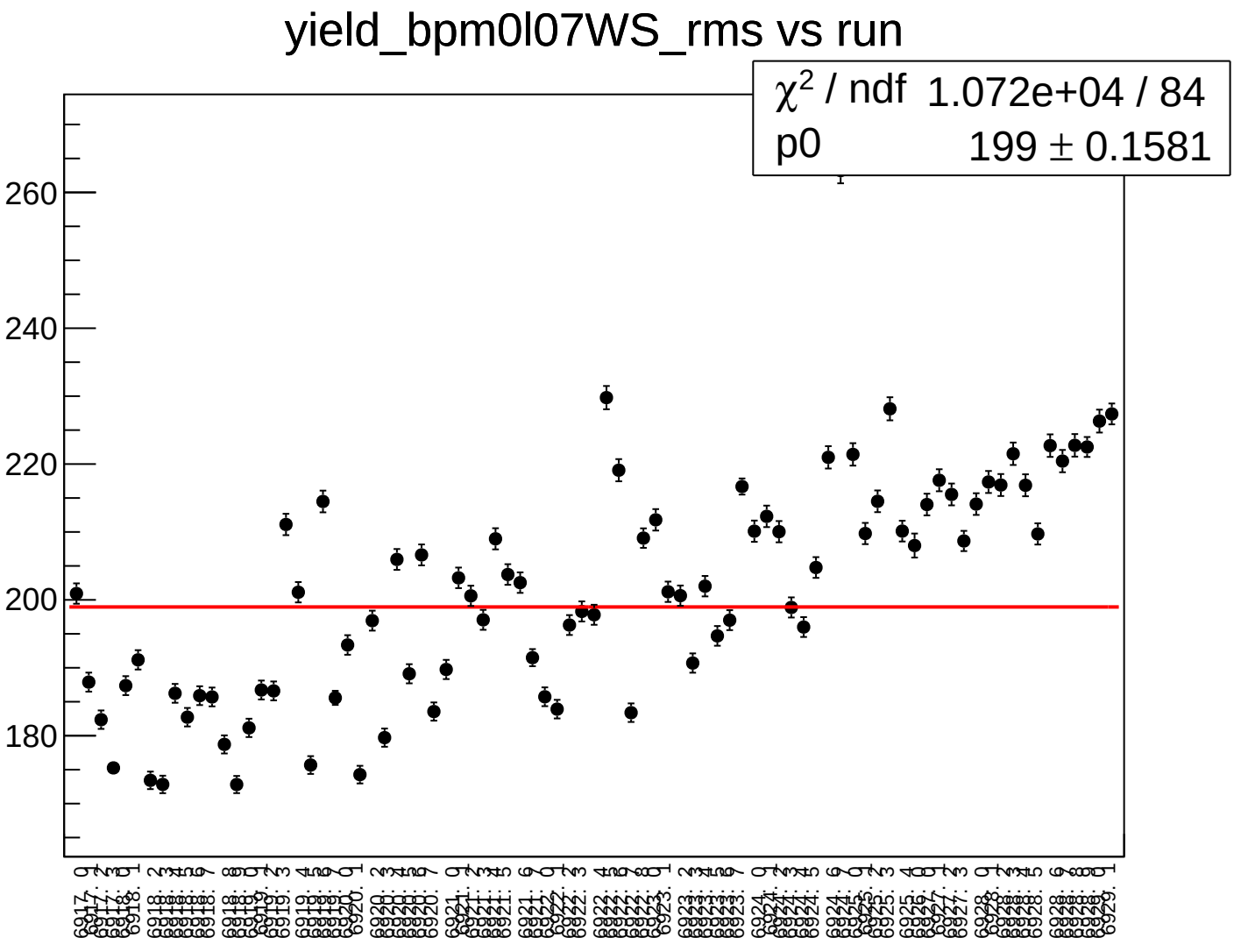

yield_bpm0l06WS_mean vs run
×10^3
χ^2 / ndf 4.29e+06 / 84
p0 1.266e+05 ± 0.1962
127.2
127
126.8
126.6
126.4
126.2
126
125.8
pull
Entries 85
Mean 351.9
Std Dev 310.9
200
0
−200
−400
−600

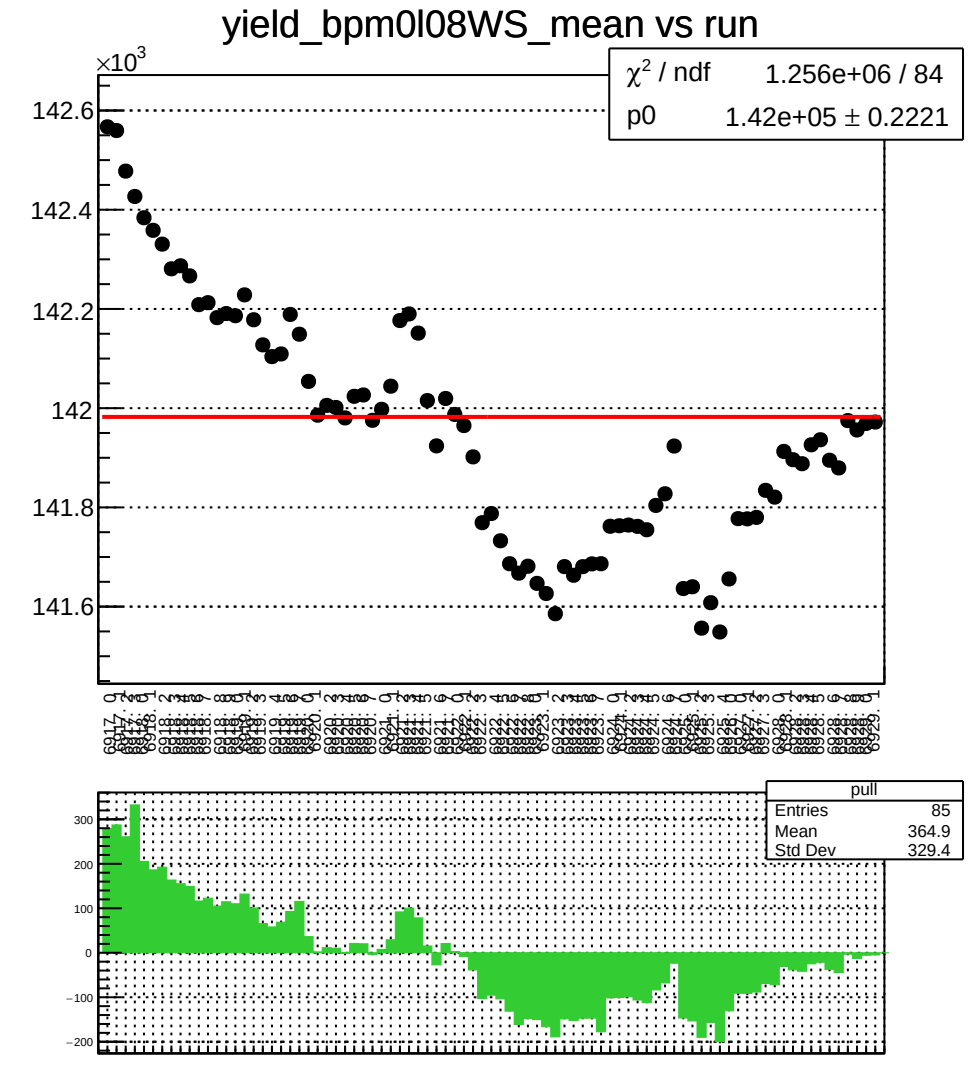

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

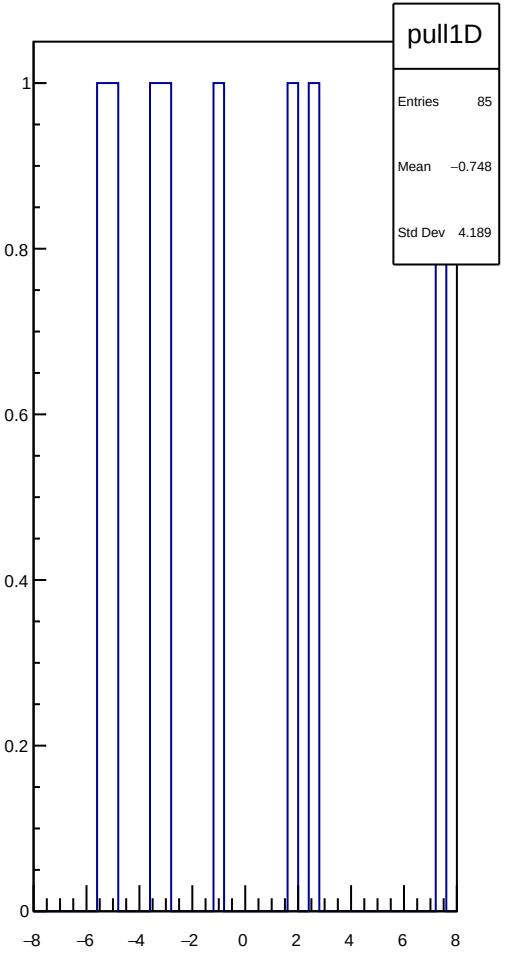

yield_bpm0l06WS_rms vs run
χ² / ndf 1.209e+04 / 84
p0 174.6 ± 0.1388
240
220
200
180
160
140

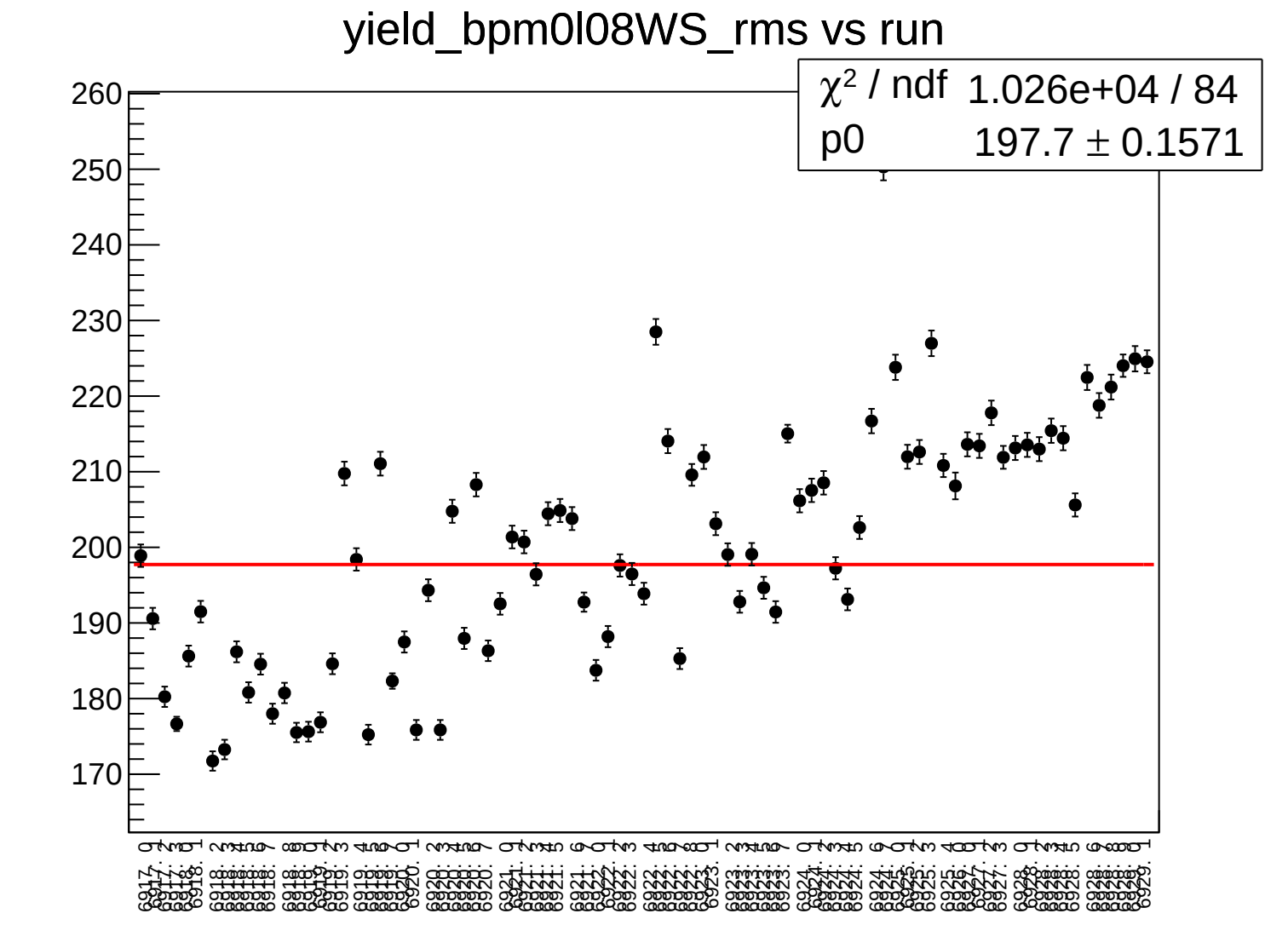

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 1.727e+06 / 84
p0 1.41e+05 ± 0.2236
141.8
141.6
141.4
141.2
141
140.8
140.6
pull
Entries 85
Mean 366.6
Std Dev 330.6
400
300
200
100
0
−100
−200

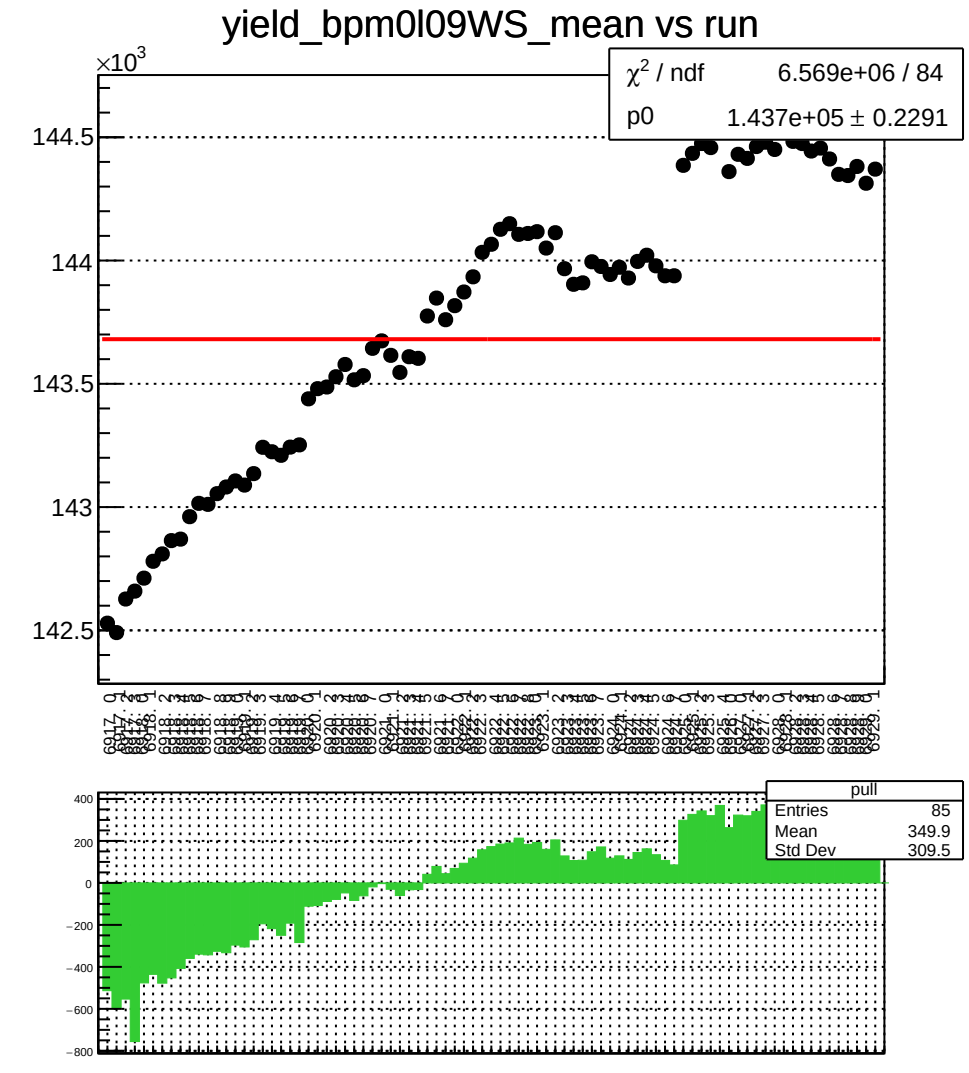

pull1D
Entries 85
Mean −0.3669
Std Dev 3.803
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

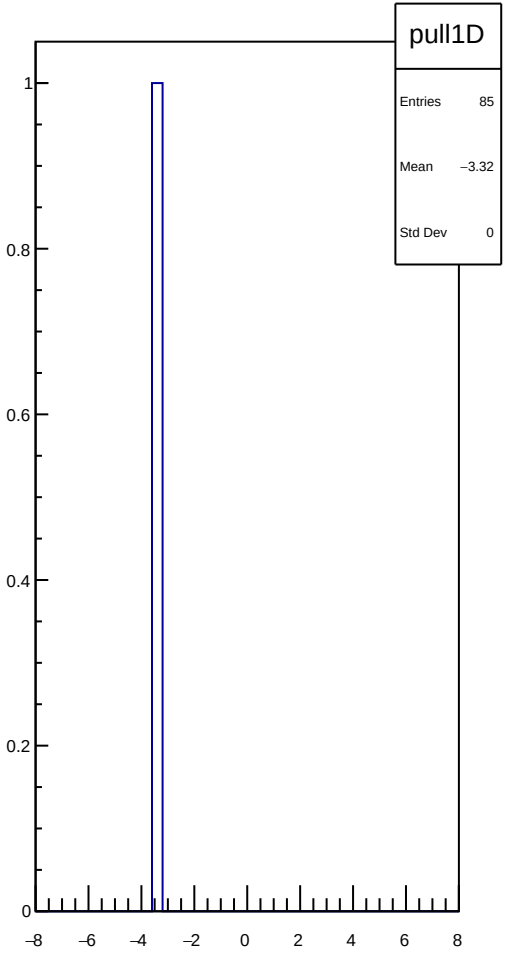

yield_bpm0l07WS_rms vs run
χ² / ndf 1.072e+04 / 84
p0 199 ± 0.1581
260
240
220
200
180

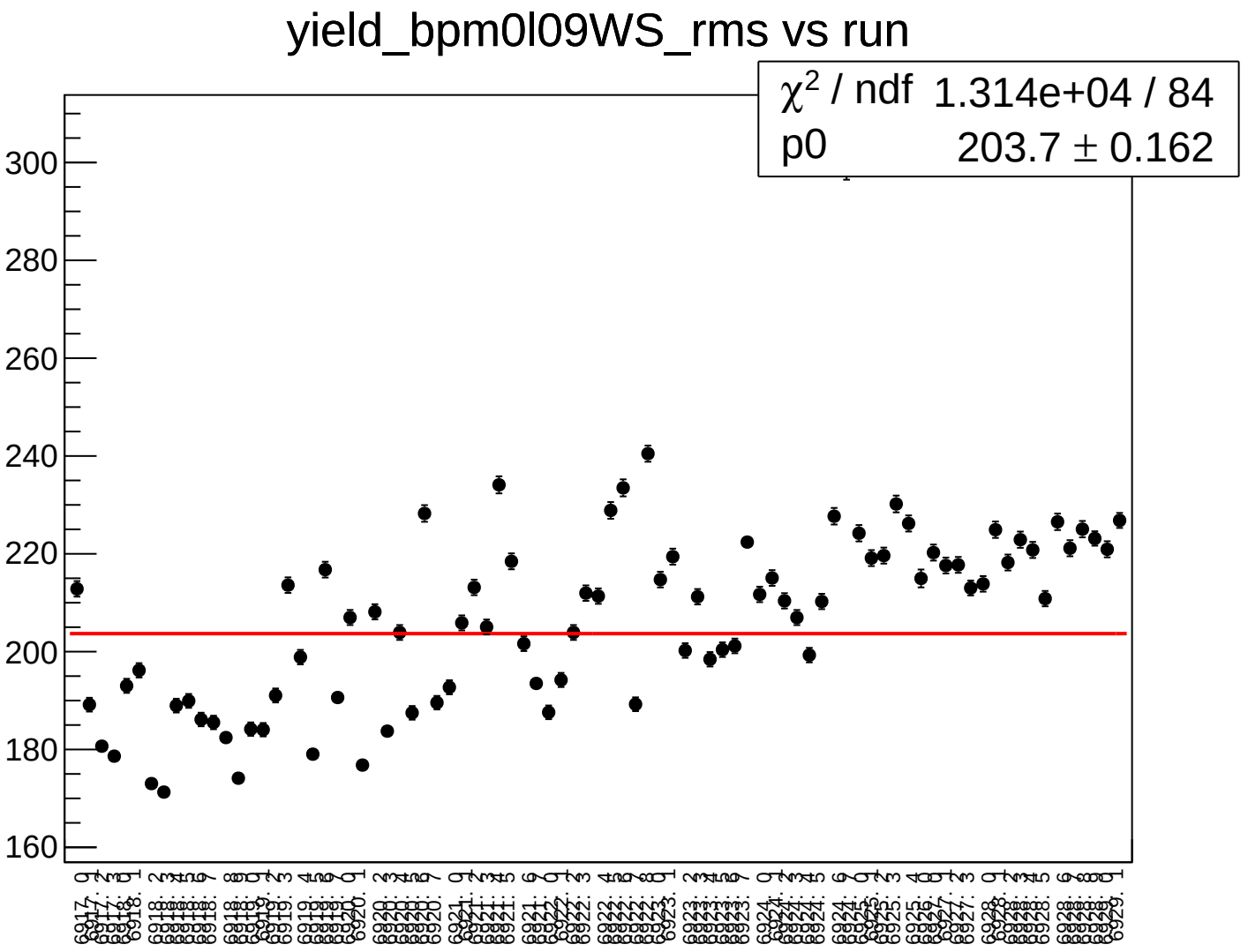

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 1.256e+06 / 84
p0 1.42e+05 ± 0.2221
142.6
142.4
142.2
142
141.8
141.6
pull
Entries 85
Mean 364.9
Std Dev 329.4
300
200
100
0
−100
−200

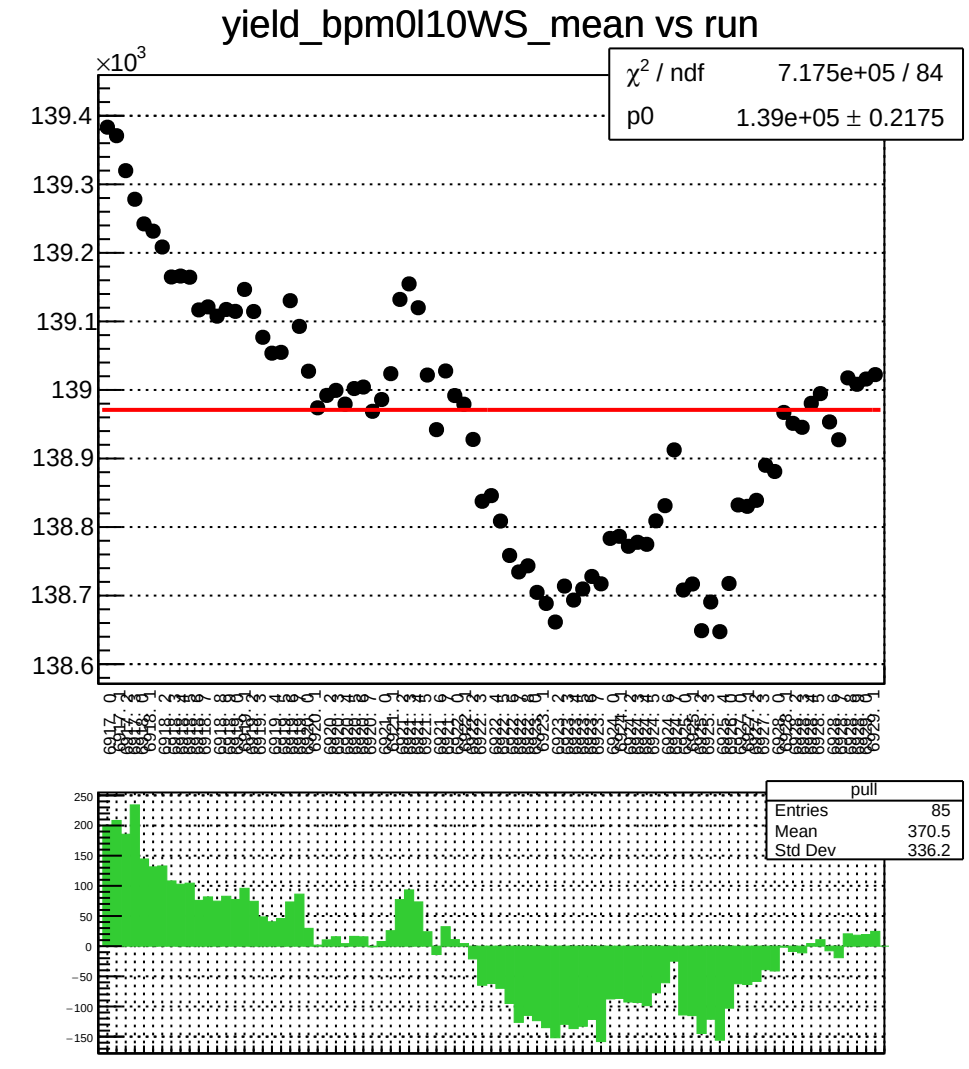

pull1D
Entries 85
Mean −0.748
Std Dev 4.189
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

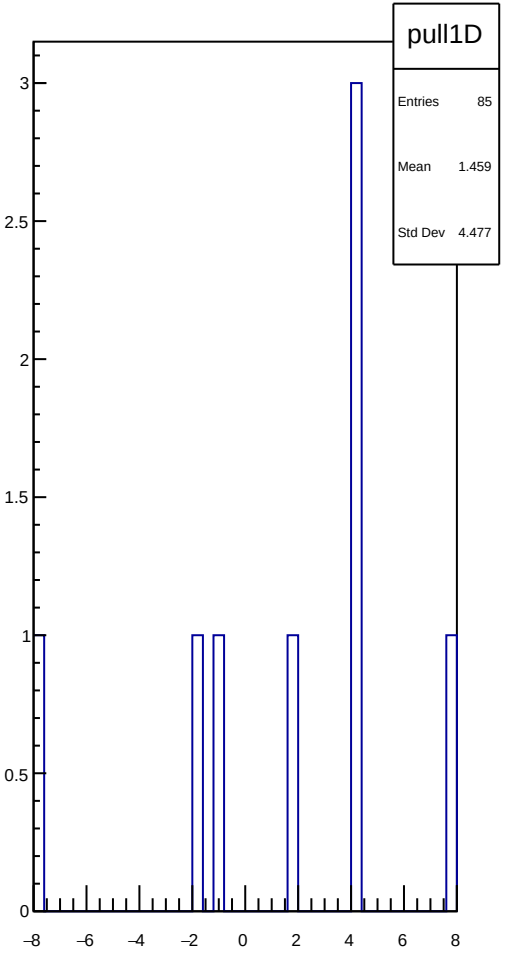

yield_bpm0l08WS_rms vs run
χ² / ndf 1.026e+04 / 84
p0 197.7 ± 0.1571
260
250
240
230
220
210
200
190
180
170

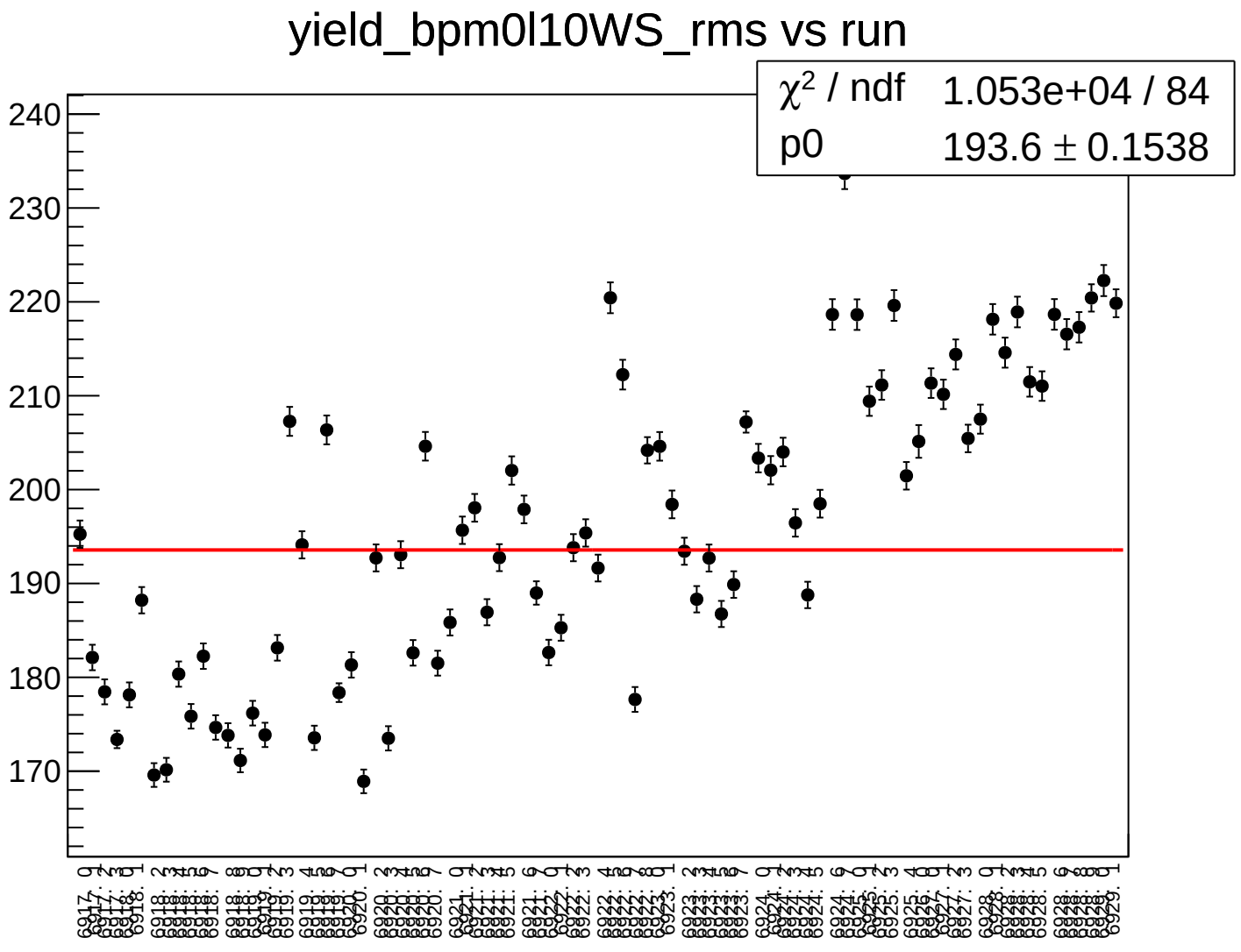

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 6.569e+06 / 84
p0 1.437e+05 ± 0.2291
144.5
144
143.5
143
142.5
pull
Entries 85
Mean 349.9
Std Dev 309.5
400
200
0
−200
−400
−600
−800

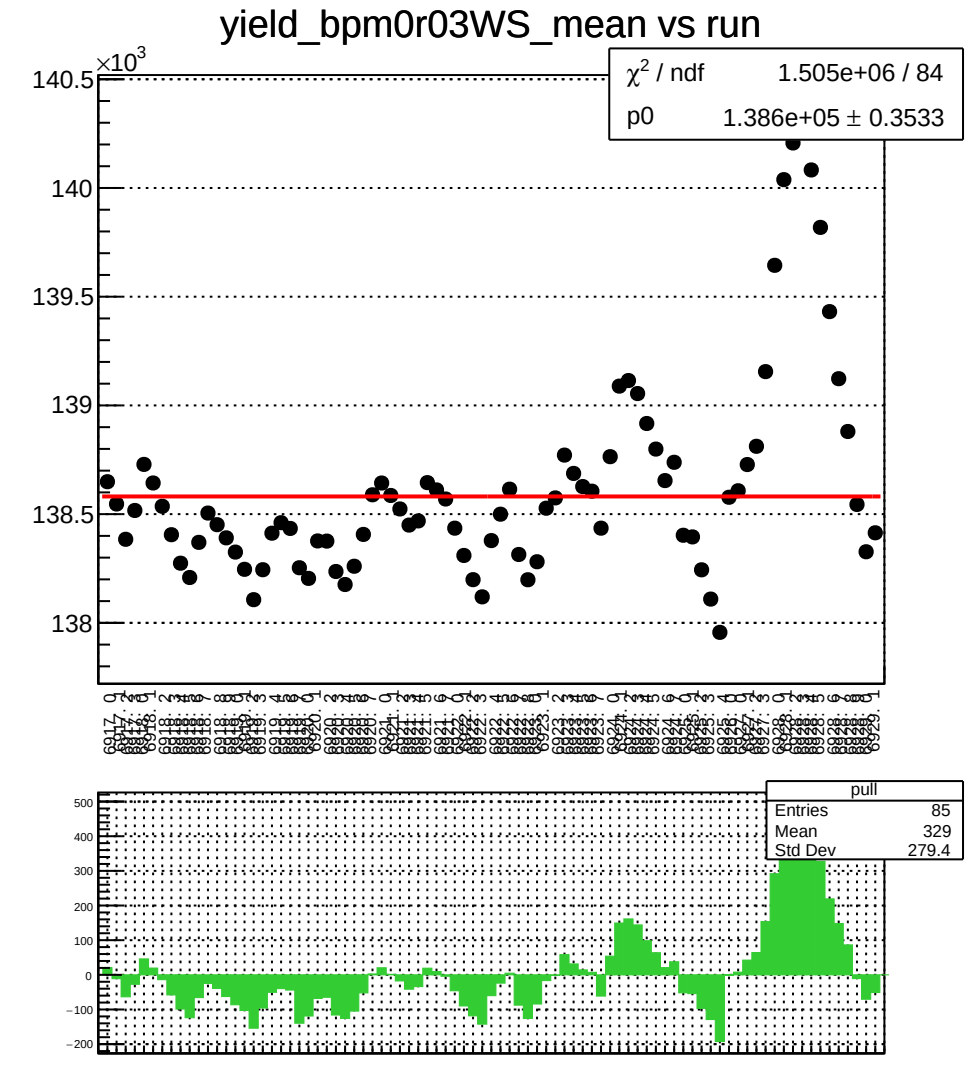

pull1D
Entries 85
Mean −3.32
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

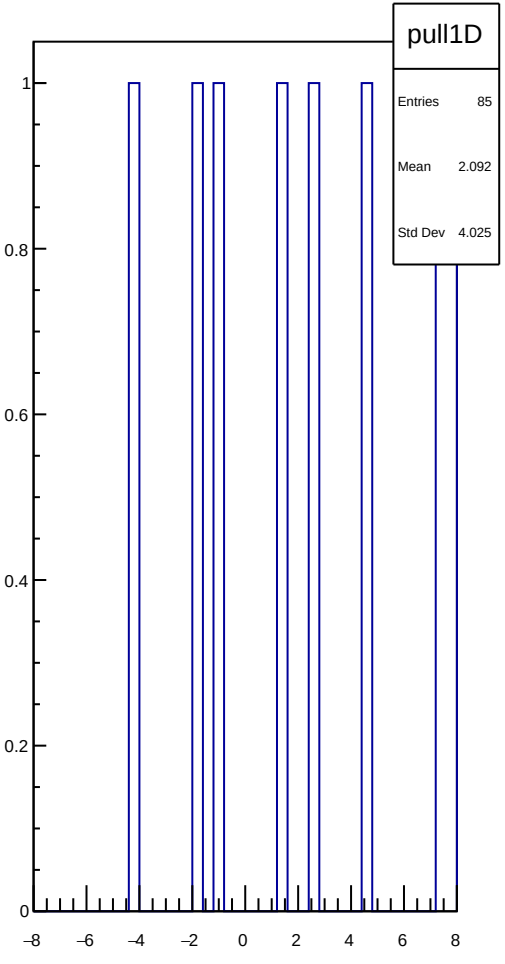

yield_bpm0l09WS_rms vs run
χ² / ndf 1.314e+04 / 84
p0 203.7 ± 0.162
300
280
260
240
220
200
180
160

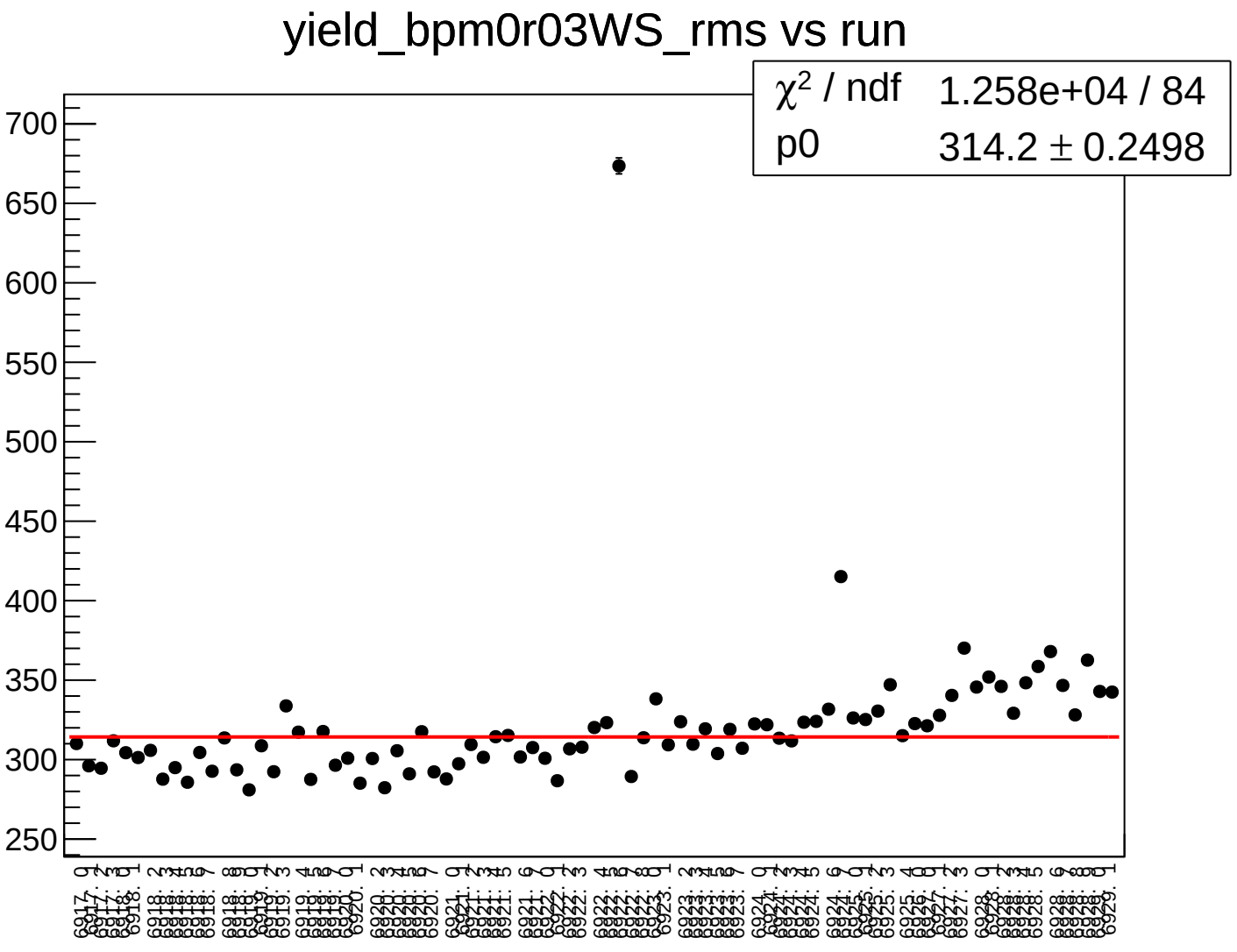

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 7.175e+05 / 84
p0 1.39e+05 ± 0.2175
139.4
139.3
139.2
139.1
139
138.9
138.8
138.7
138.6
pull
Entries 85
Mean 370.5
Std Dev 336.2
250
200
150
100
50
0
−50
−100
−150

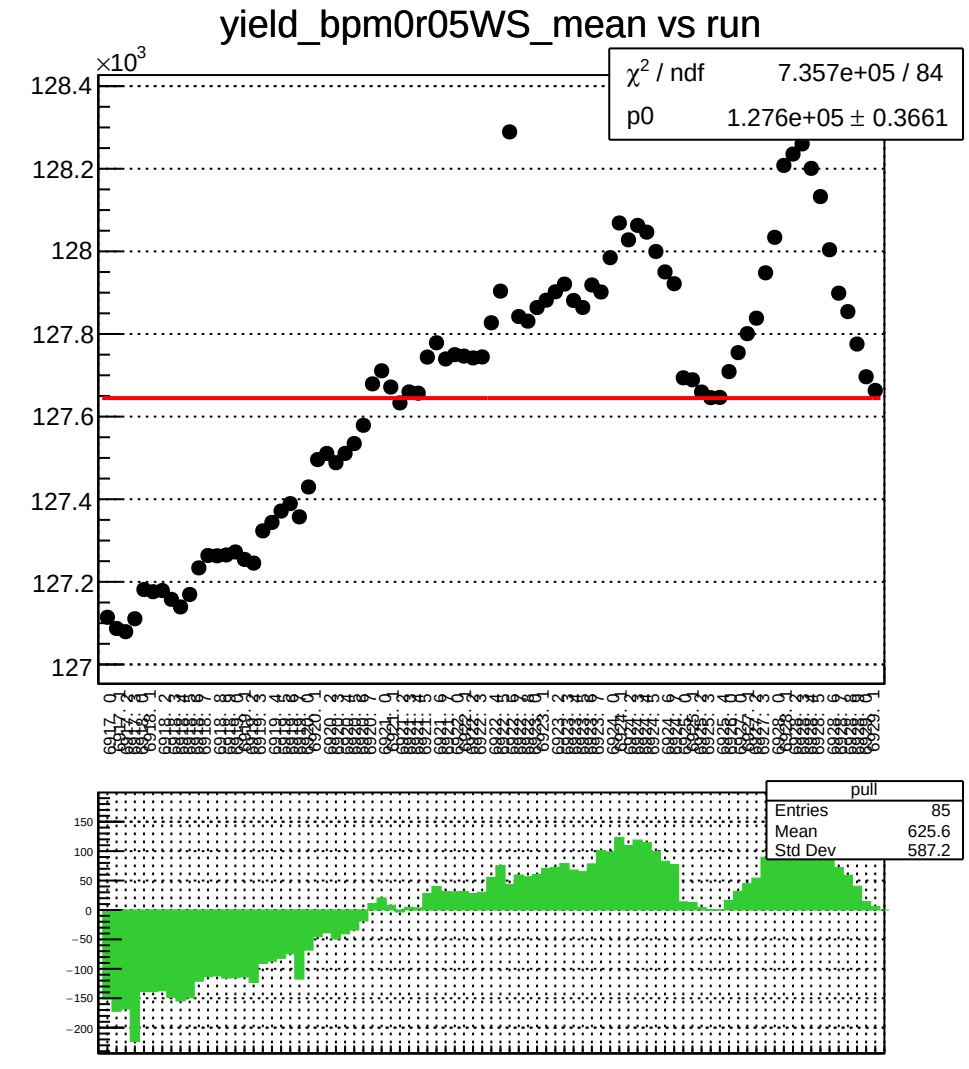

pull1D
Entries 85
Mean 1.459
Std Dev 4.477
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

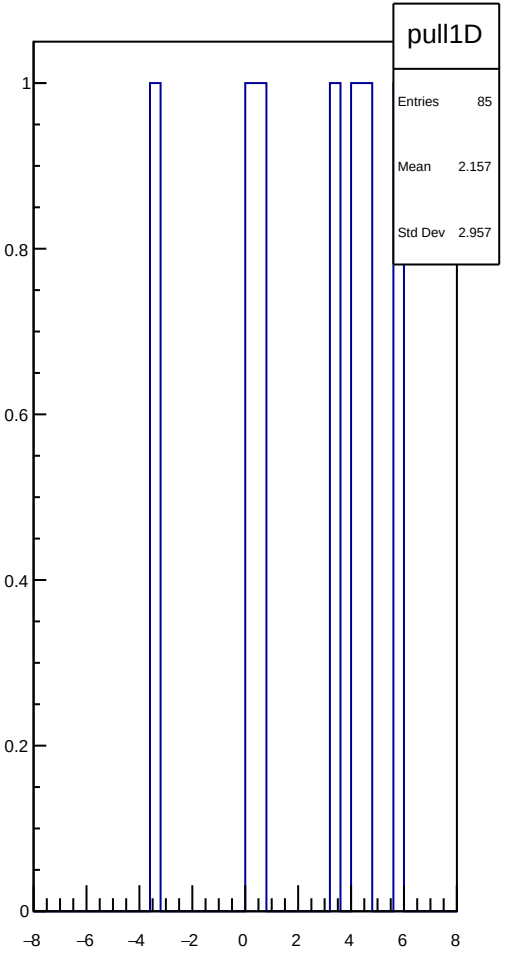

yield_bpm0l10WS_rms vs run
χ² / ndf 1.053e+04 / 84
p0 193.6 ± 0.1538
240
230
220
210
200
190
180
170

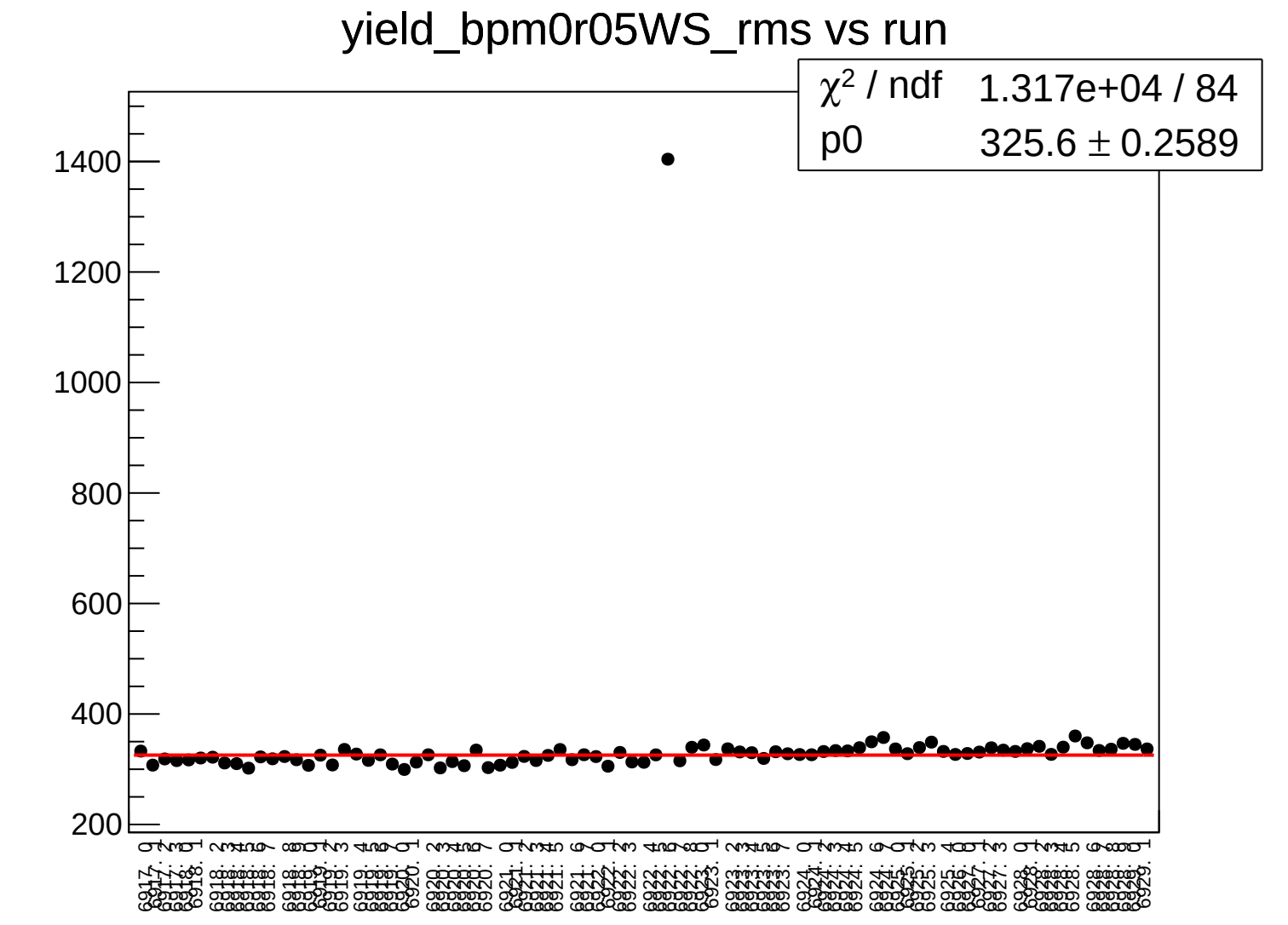

yield_bpm0r03WS_mean vs run
×10^3
140.5
140
139.5
139
138.5
138
χ² / ndf 1.505e+06 / 84
p0 1.386e+05 ± 0.3533
pull
Entries 85
Mean 329
Std Dev 279.4
500
400
300
200
100
0
−100
−200

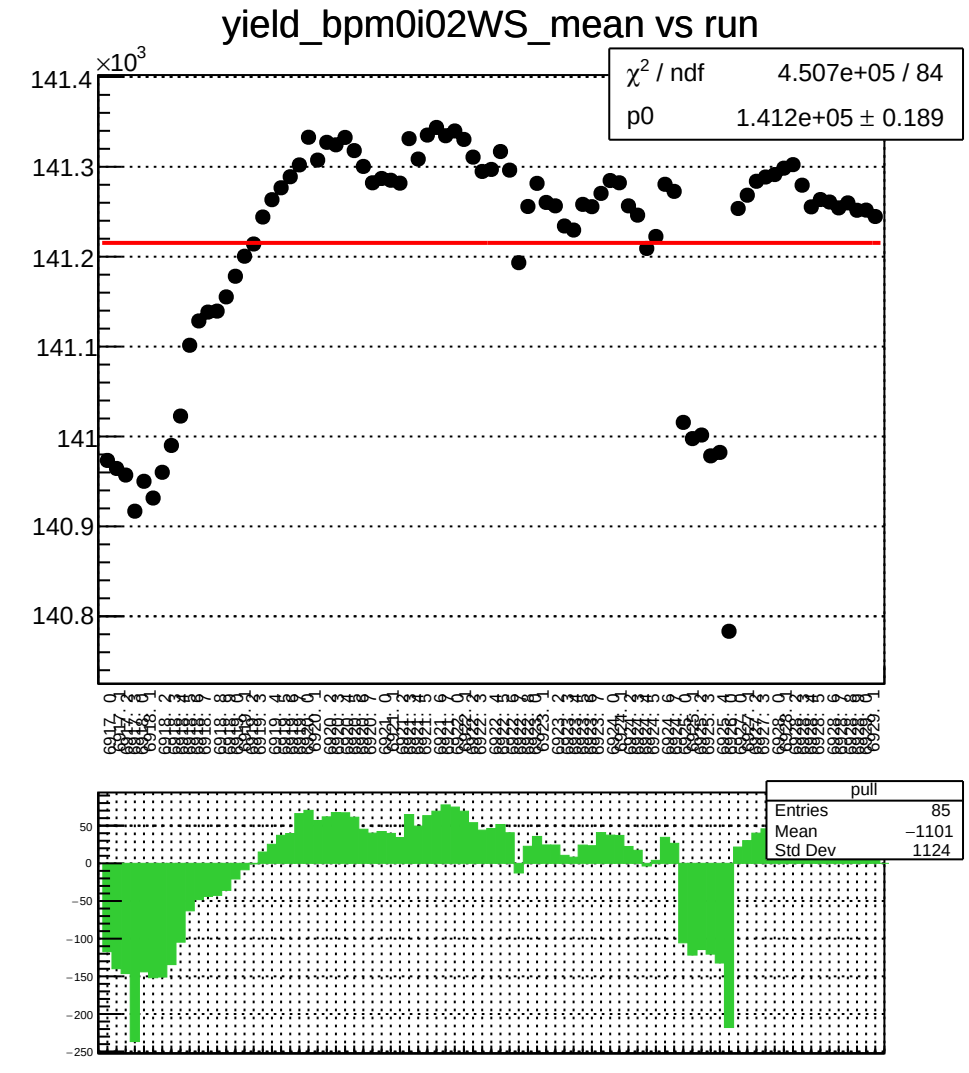

pull1D
Entries 85
Mean 2.092
Std Dev 4.025
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

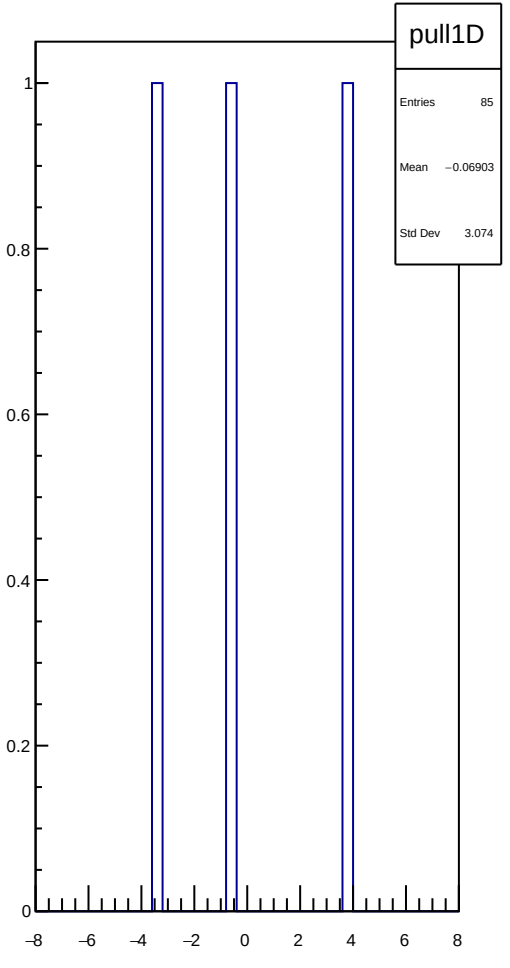

yield_bpm0r03WS_rms vs run
χ² / ndf 1.258e+04 / 84
p0 314.2 ± 0.2498
700
650
600
550
500
450
400
350
300
250

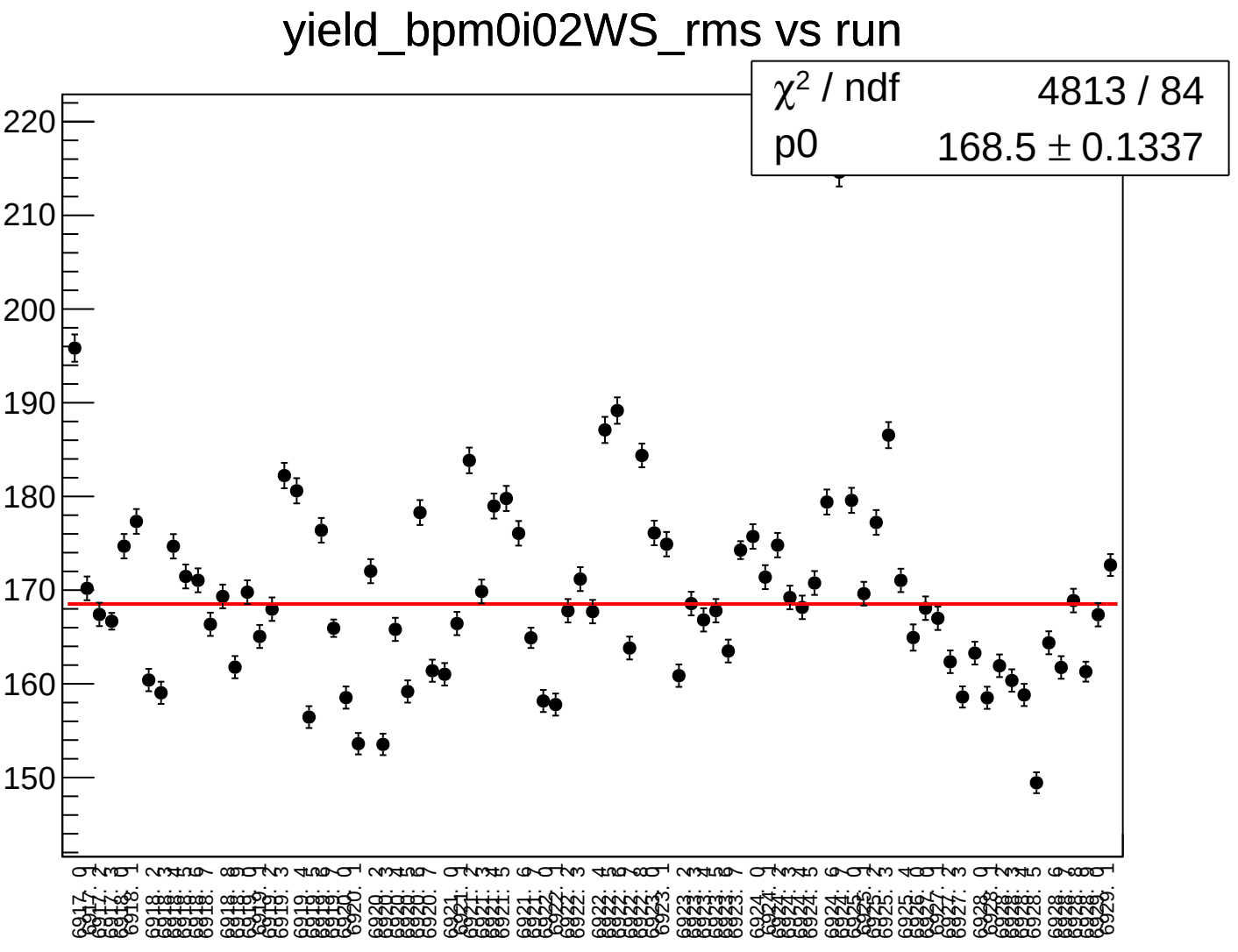

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 7.357e+05 / 84
p0 1.276e+05 ± 0.3661
128.4
128.2
128
127.8
127.6
127.4
127.2
127
pull
Entries 85
Mean 625.6
Std Dev 587.2
150
100
50
0
−50
−100
−150
−200

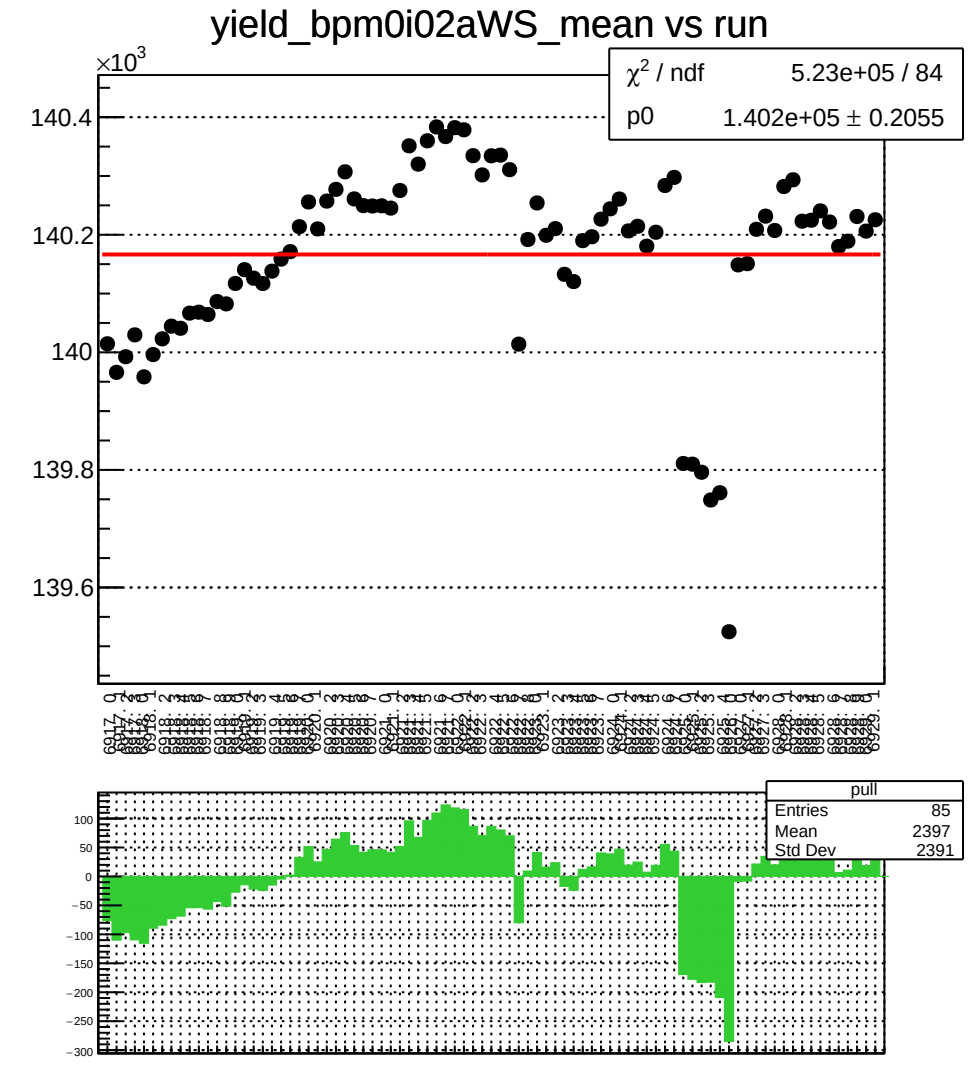

pull1D
Entries 85
Mean 2.157
Std Dev 2.957
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

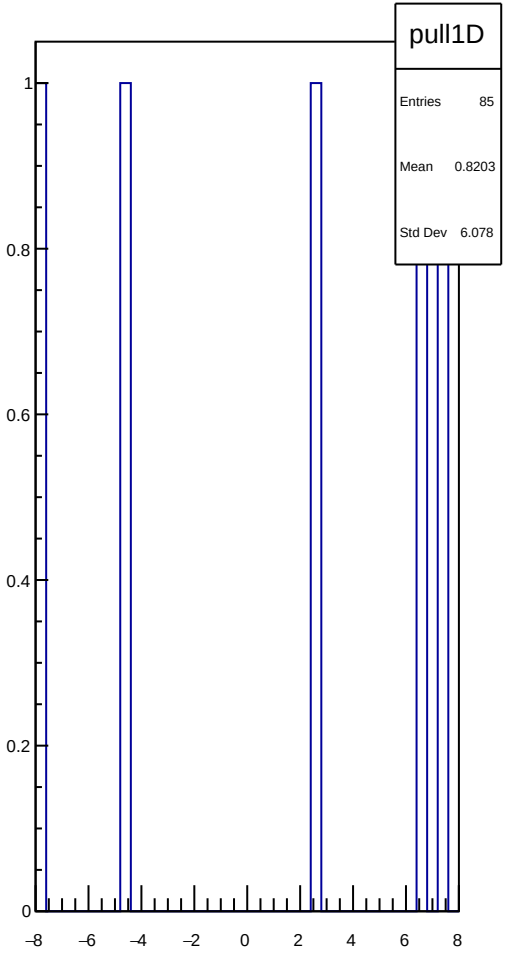

yield_bpm0r05WS_rms vs run
χ² / ndf 1.317e+04 / 84
p0 325.6 ± 0.2589
1400
1200
1000
800
600
400
200

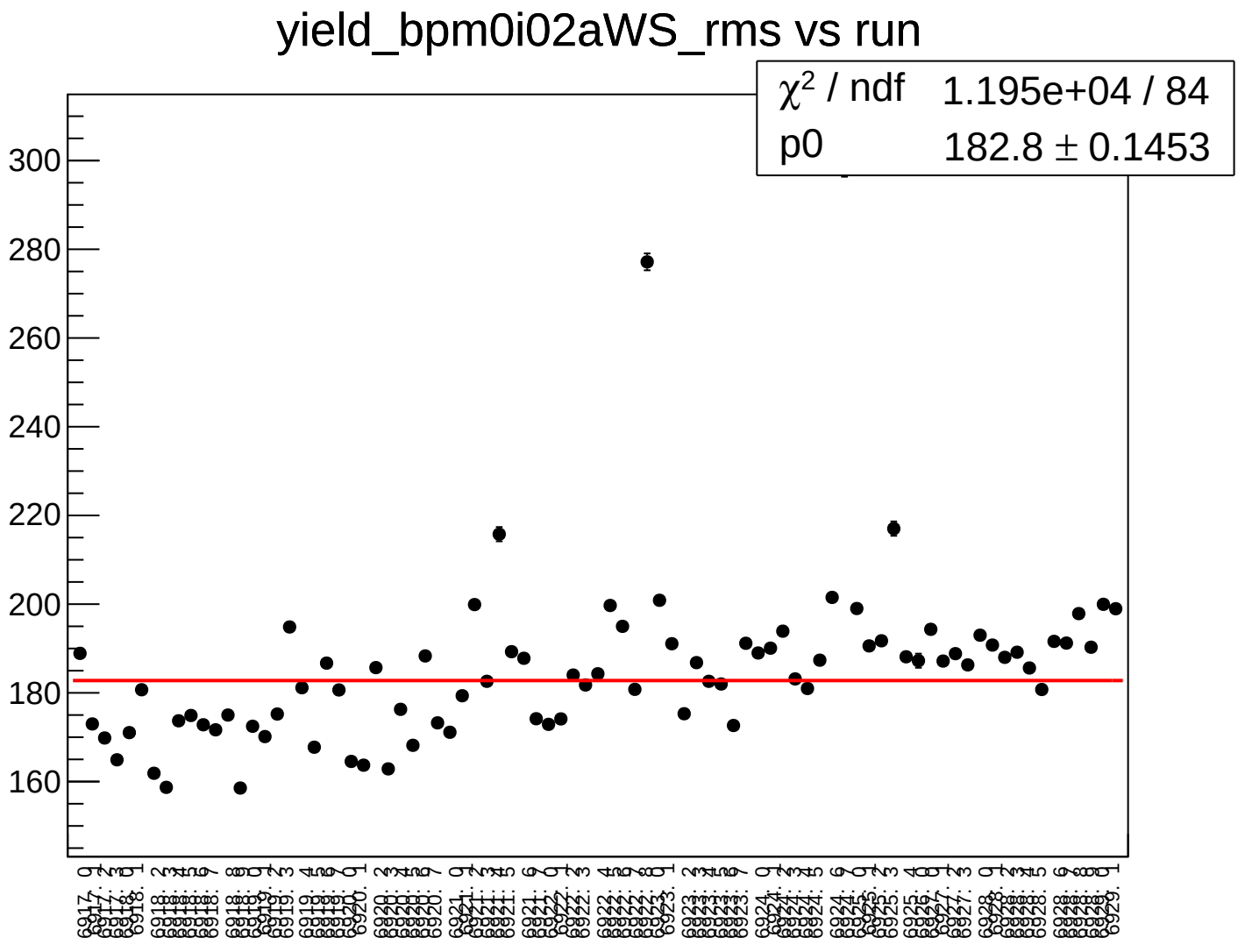

yield_bpm0i02WS_mean vs run
×10^3
141.4
141.3
141.2
141.1
141
140.9
140.8
χ² / ndf 4.507e+05 / 84
p0 1.412e+05 ± 0.189
pull
Entries 85
Mean −1101
Std Dev 1124
50
0
−50
−100
−150
−200
−250

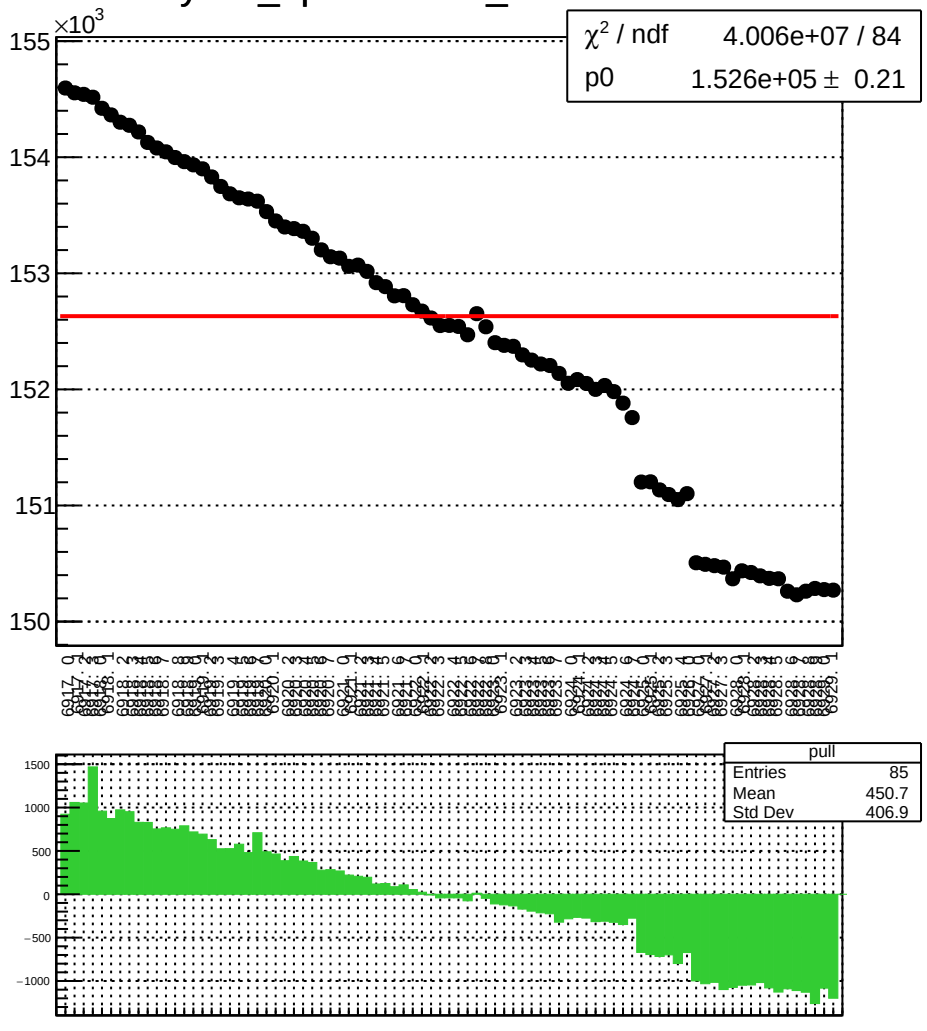

pull1D
Entries 85
Mean −0.06903
Std Dev 3.074
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

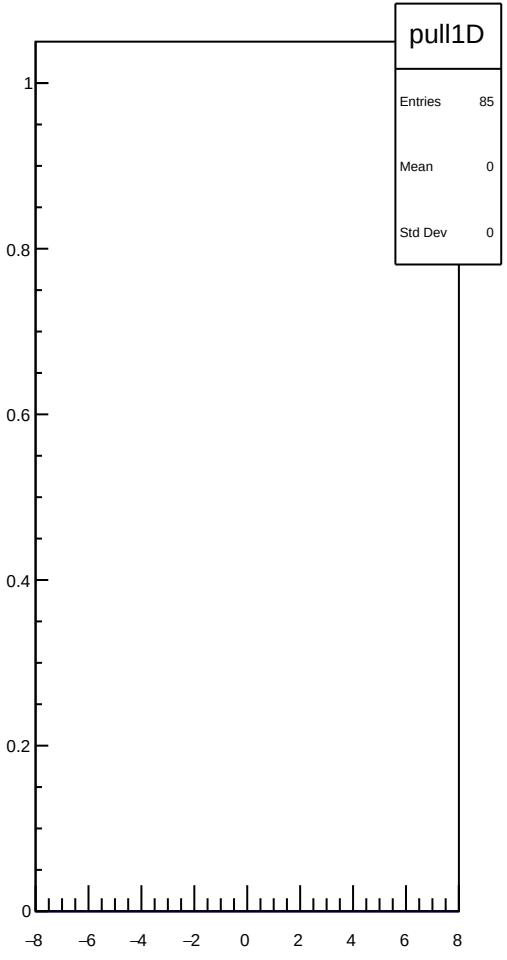

yield_bpm0i02WS_rms vs run
χ² / ndf 4813 / 84
p0 168.5 ± 0.1337
220
210
200
190
180
170
160
150

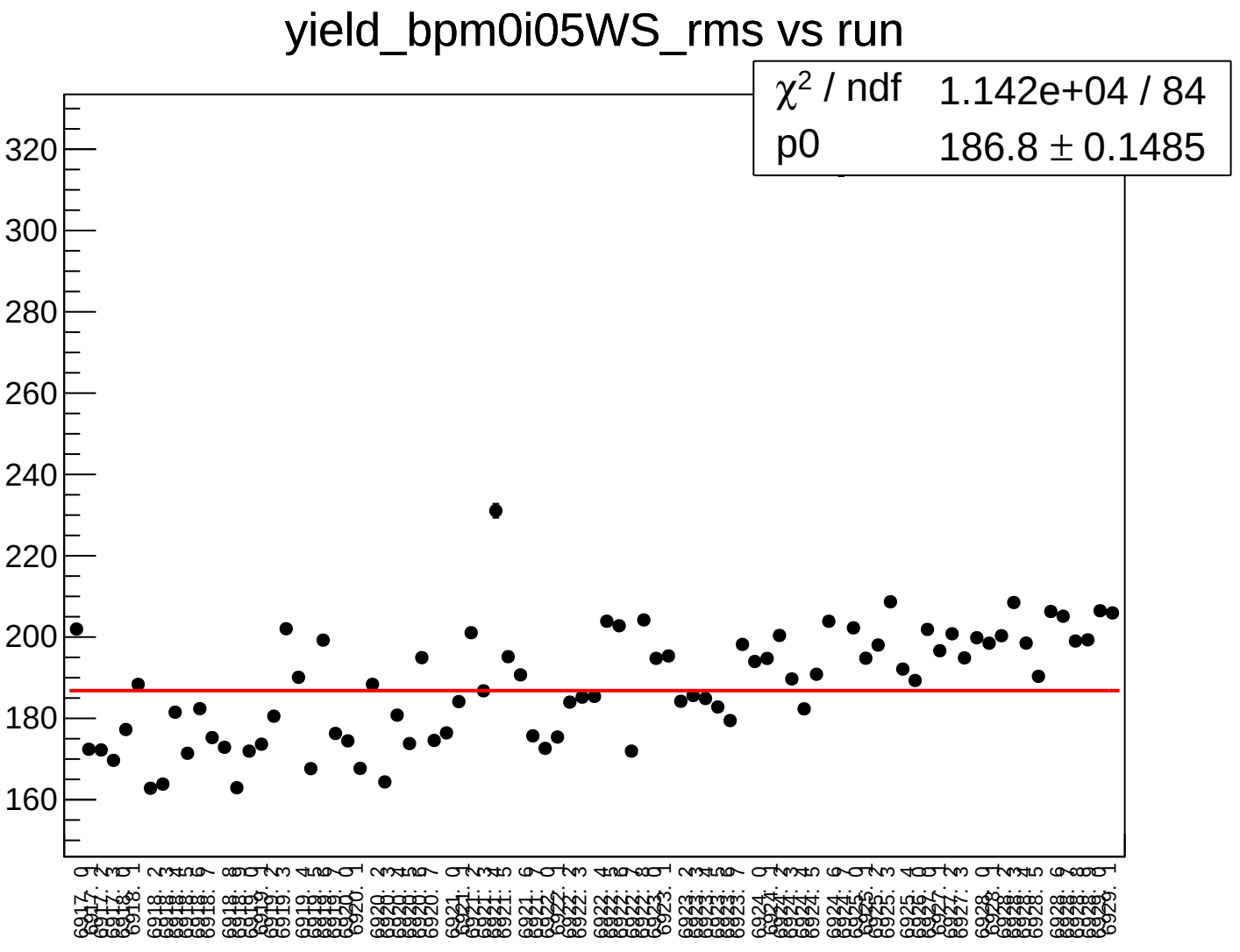

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 5.23e+05 / 84
p0 1.402e+05 ± 0.2055
140.4
140.2
140
139.8
139.6
pull
Entries 85
Mean 2397
Std Dev 2391
100
50
0
−50
−100
−150
−200
−250
−300

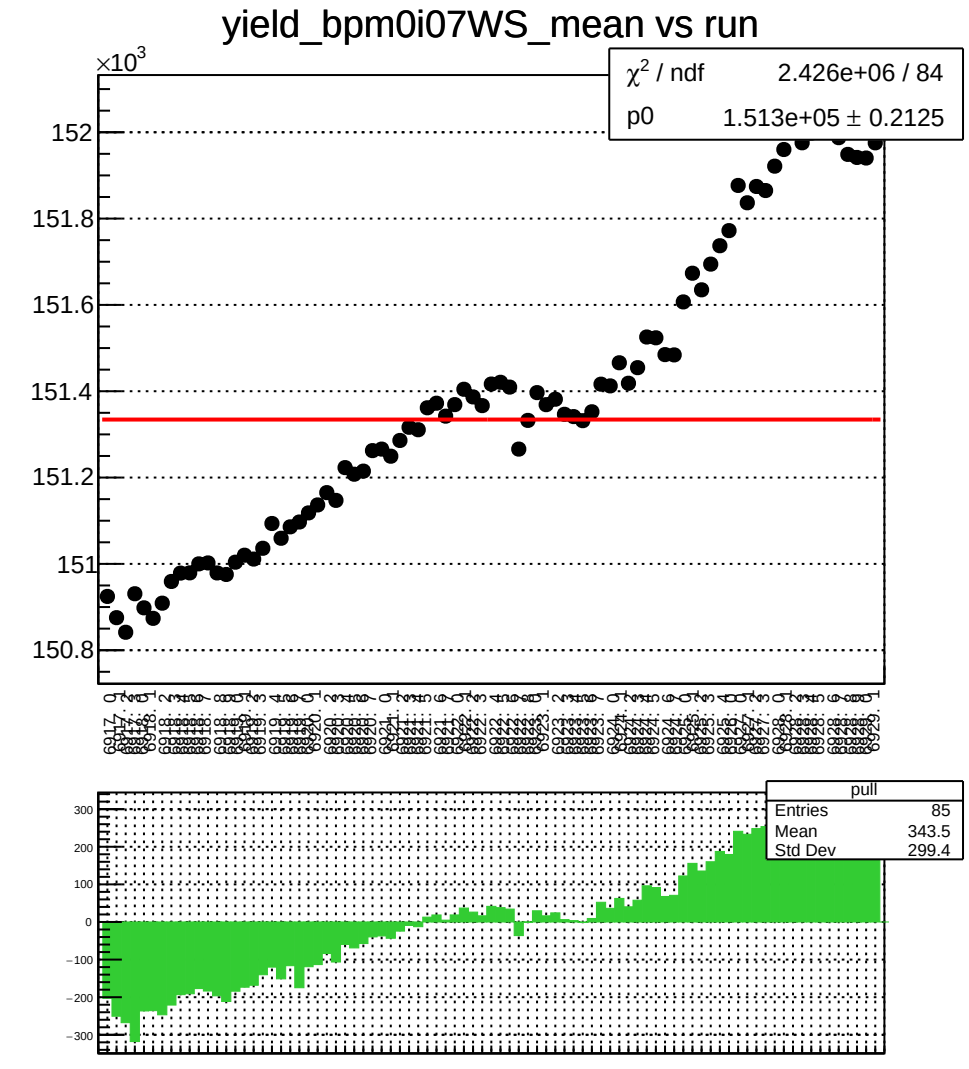

pull1D
Entries 85
Mean 0.8203
Std Dev 6.078
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

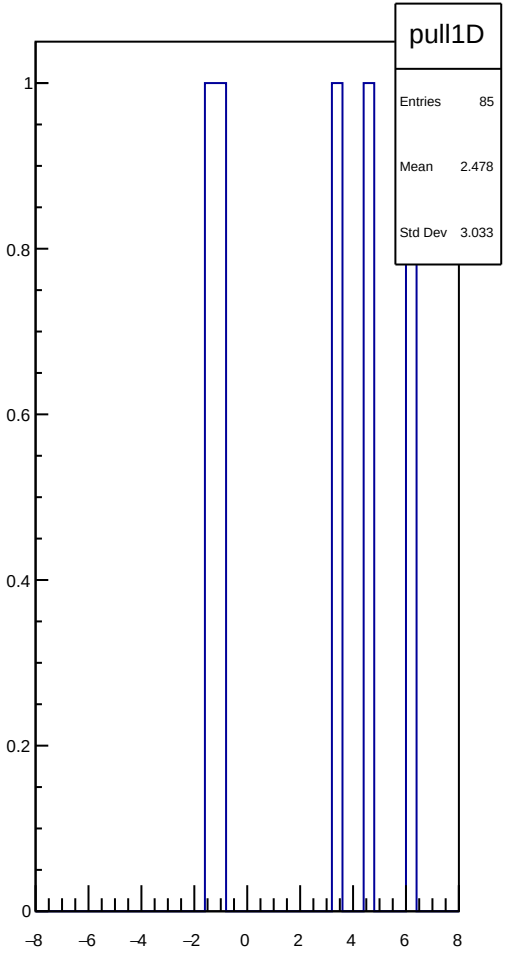

yield_bpm0i02aWS_rms vs run
χ² / ndf 1.195e+04 / 84
p0 182.8 ± 0.1453
300
280
260
240
220
200
180
160

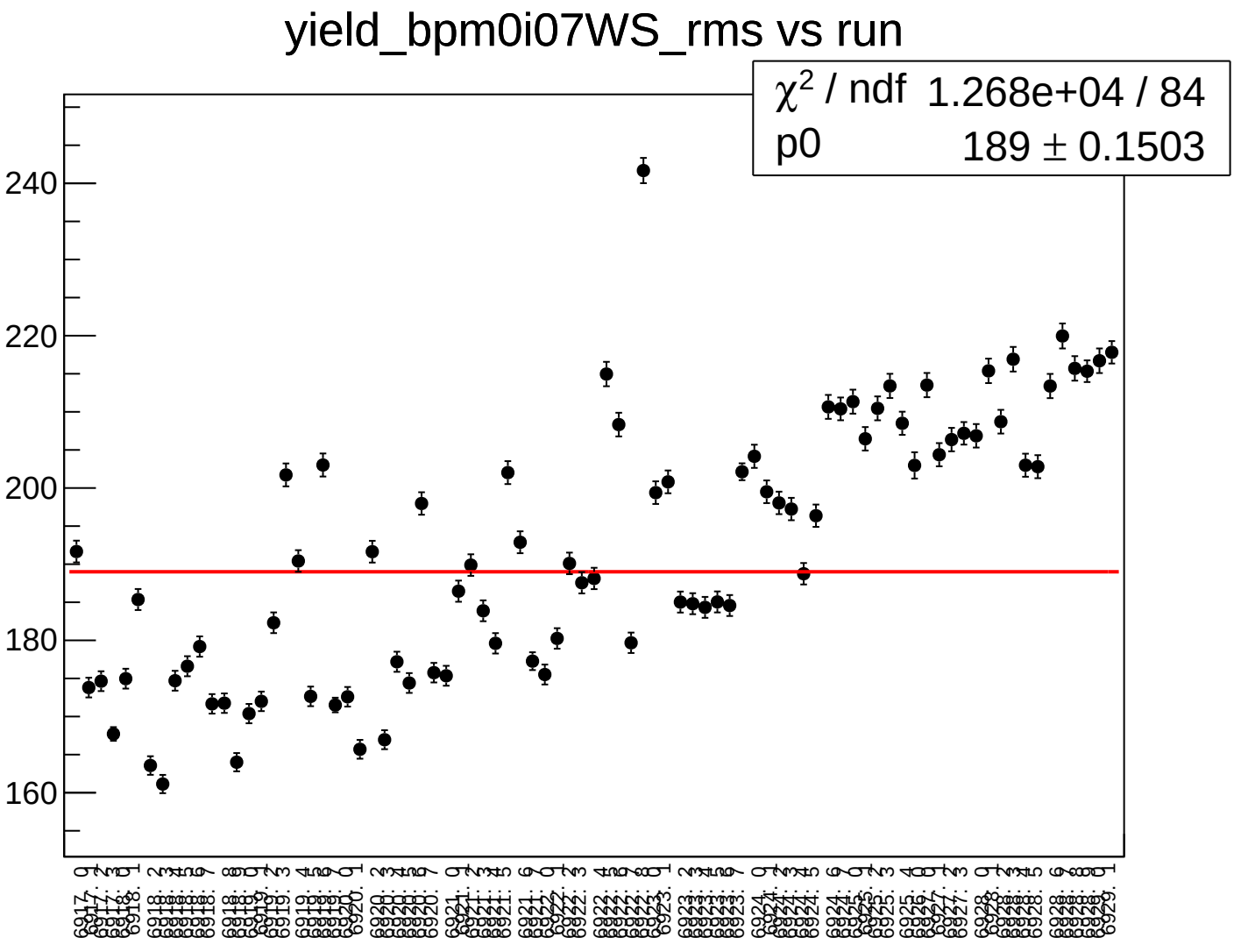

yield_bpm0i05WS_mean vs run
χ² / ndf 4.006e+07 / 84
p0 1.526e+05 ± 0.21
×10³
155
154
153
152
151
150
pull
Entries 85
Mean 450.7
Std Dev 406.9
1500
1000
500
0
−500
−1000

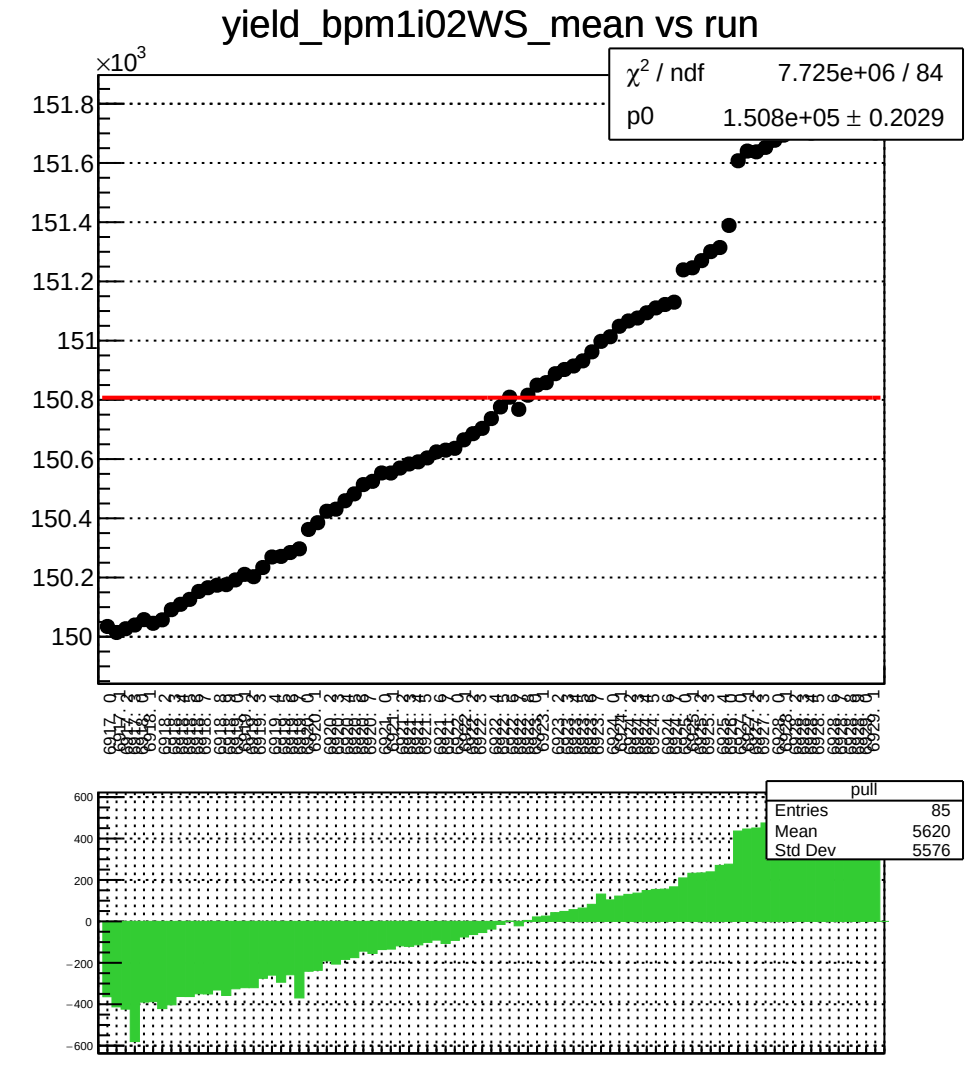

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

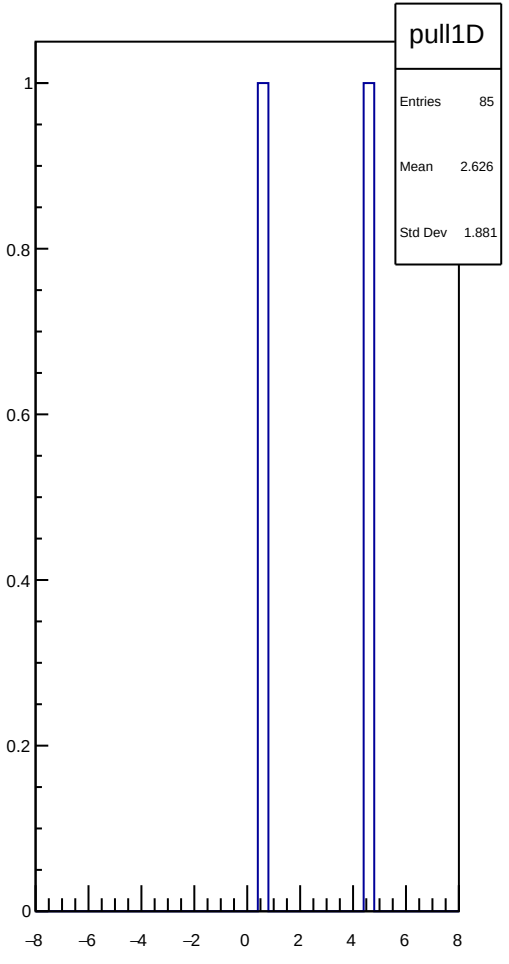

yield_bpm0i05WS_rms vs run
χ² / ndf 1.142e+04 / 84
p0 186.8 ± 0.1485
320
300
280
260
240
220
200
180
160

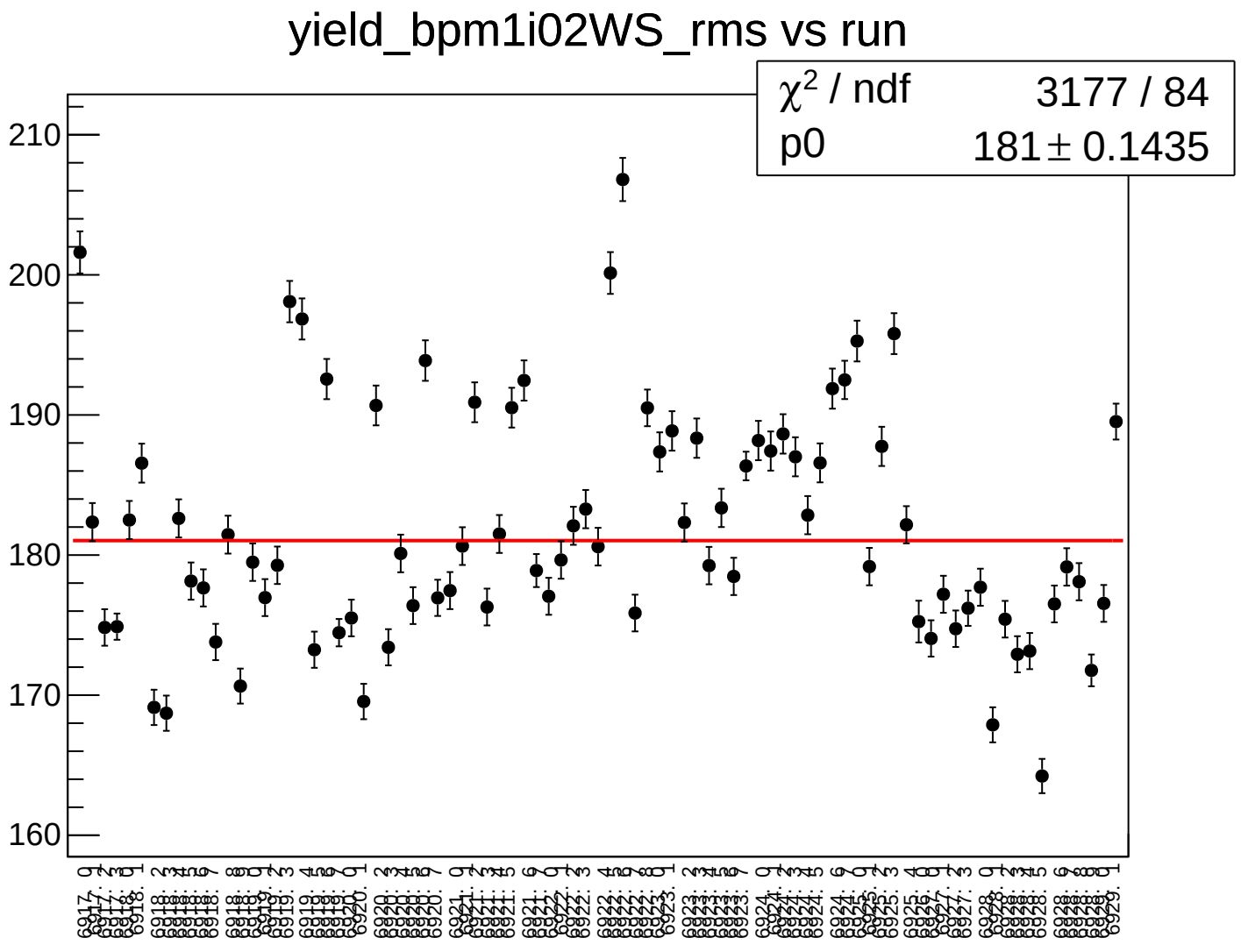

yield_bpm0i07WS_mean vs run
χ² / ndf 2.426e+06 / 84
p0 1.513e+05 ± 0.2125
×10³
152
151.8
151.6
151.4
151.2
151
150.8
pull
Entries 85
Mean 343.5
Std Dev 299.4
300
200
100
0
−100
−200
−300

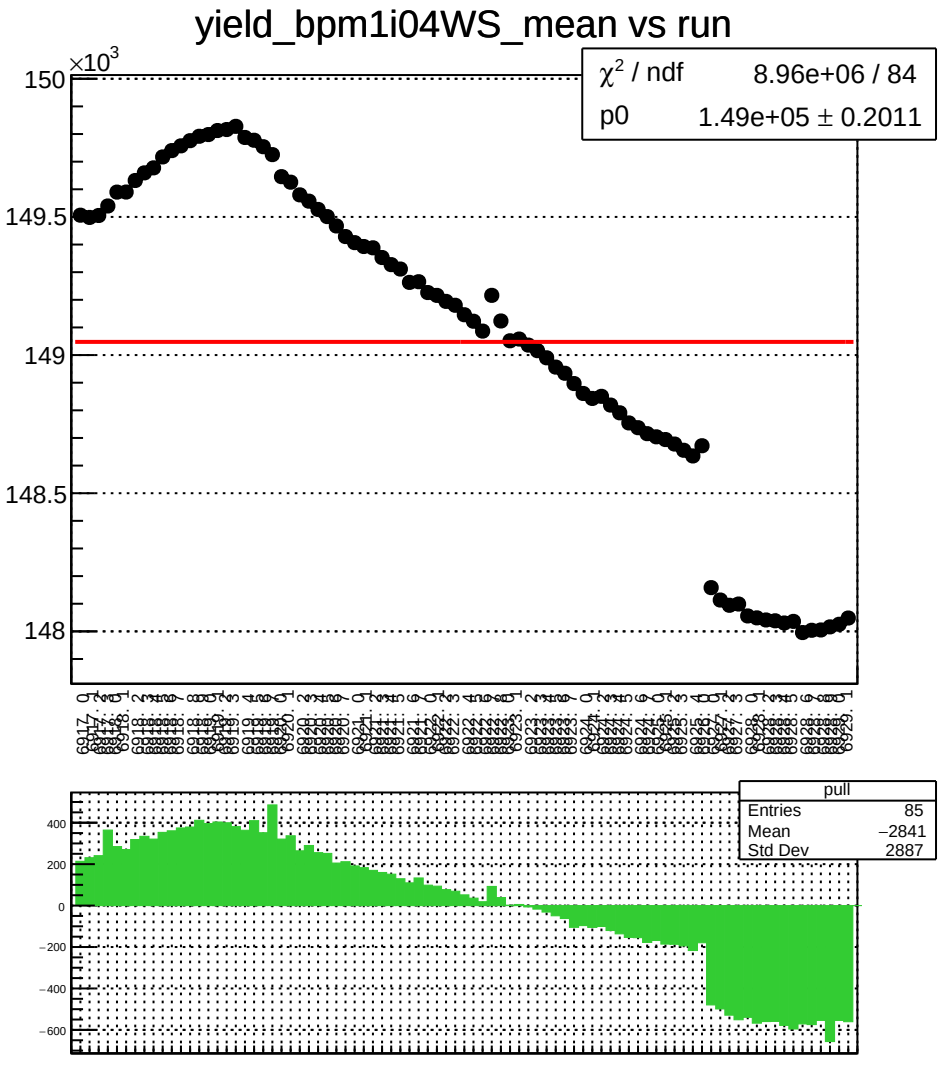

pull1D
Entries 85
Mean 2.478
Std Dev 3.033
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

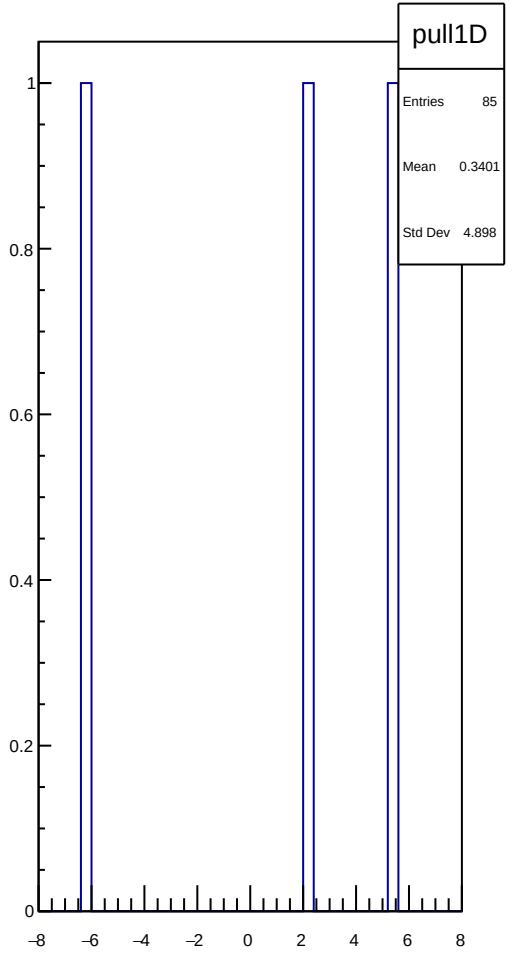

yield_bpm0i07WS_rms vs run
χ² / ndf 1.268e+04 / 84
p0 189 ± 0.1503
240
220
200
180
160

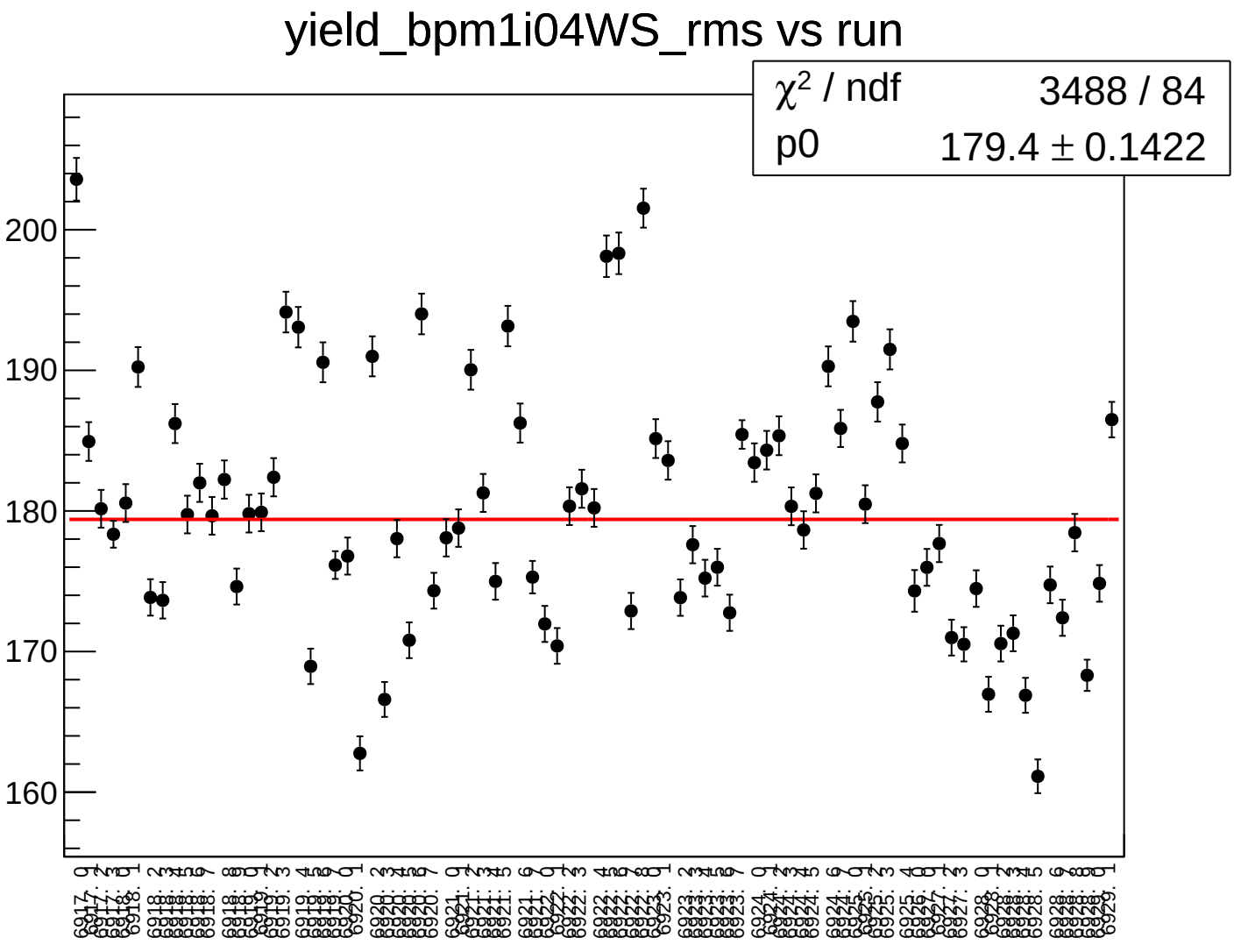

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 7.725e+06 / 84
p0 1.508e+05 ± 0.2029
151.8
151.6
151.4
151.2
151
150.8
150.6
150.4
150.2
150
pull
Entries 85
Mean 5620
Std Dev 5576
600
400
200
0
−200
−400
−600

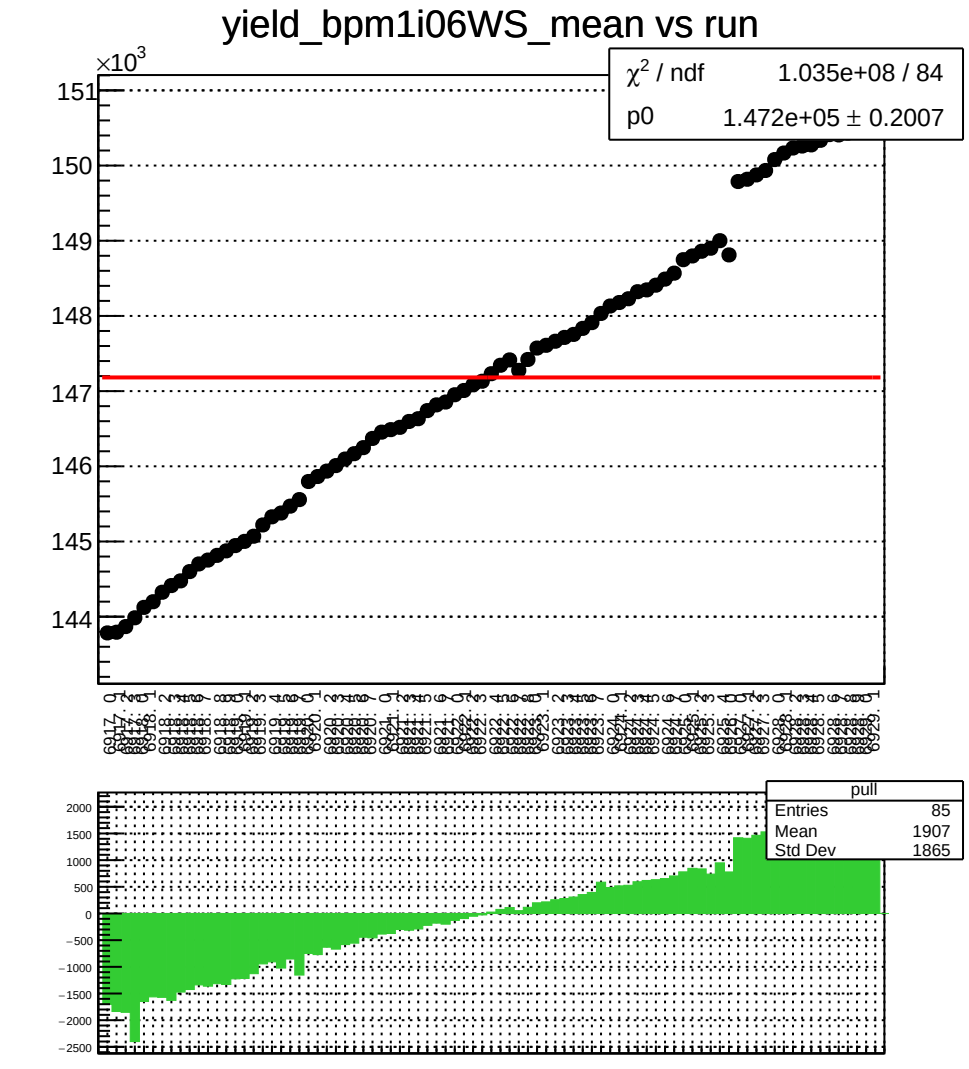

pull1D
Entries 85
Mean 2.626
Std Dev 1.881
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

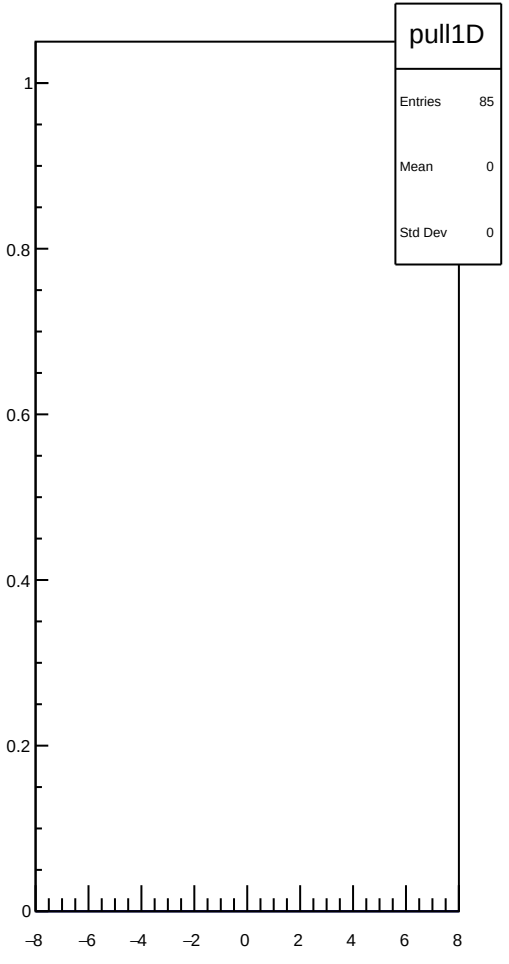

yield_bpm1i02WS_rms vs run
χ^2 / ndf 3177 / 84
p0 181 ± 0.1435
210
200
190
180
170
160

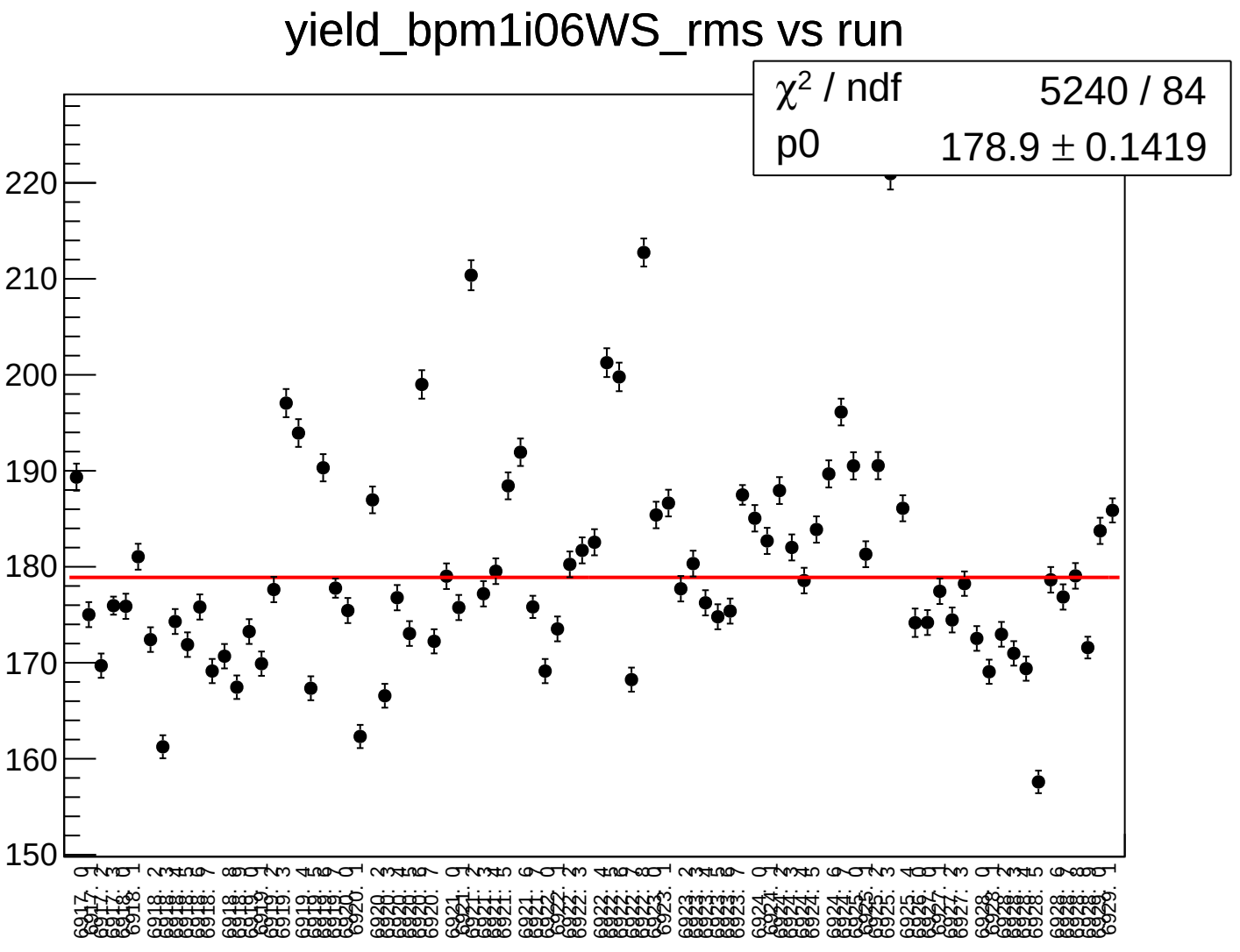

yield_bpm1i04WS_mean vs run
×10^3
150
149.5
149
148.5
148
χ² / ndf 8.96e+06 / 84
p0 1.49e+05 ± 0.2011
pull
Entries 85
Mean −2841
Std Dev 2887
400
200
0
−200
−400
−600

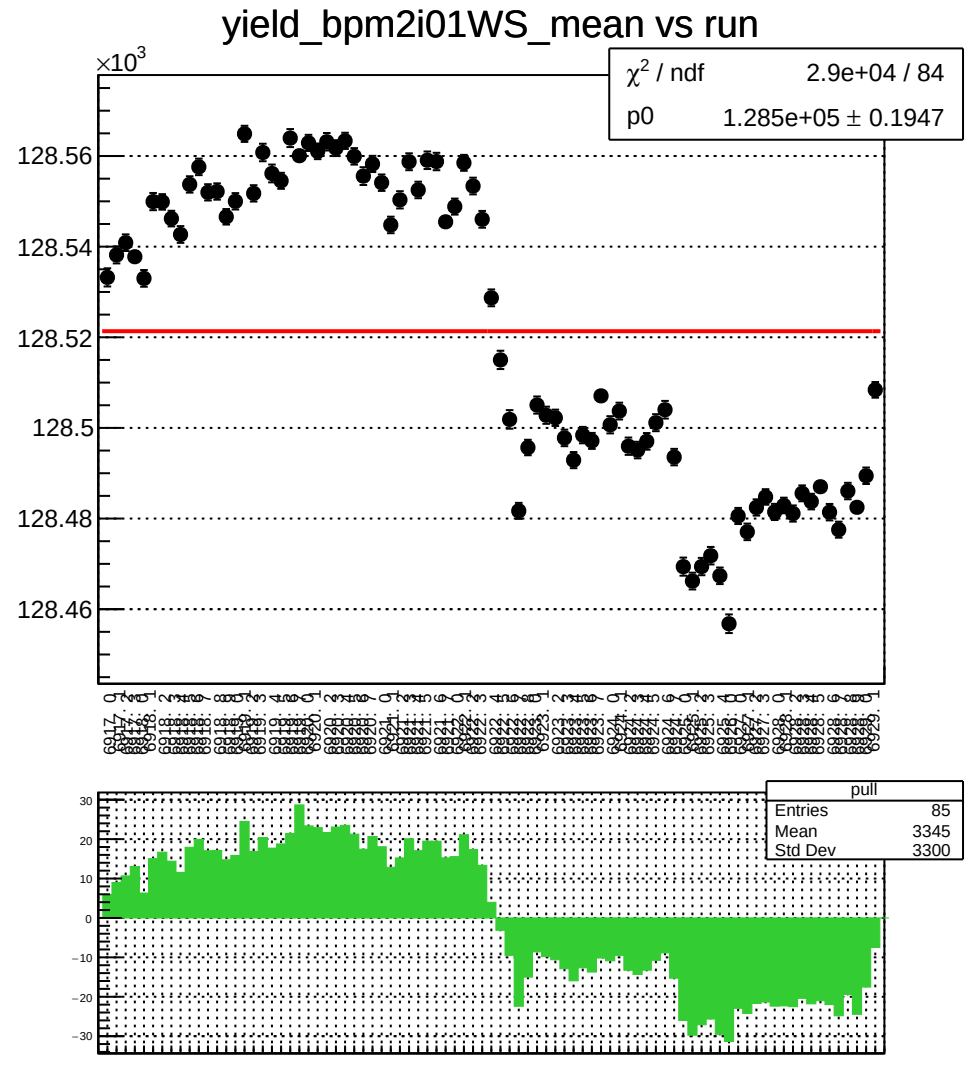

pull1D
Entries 85
Mean 0.3401
Std Dev 4.898
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

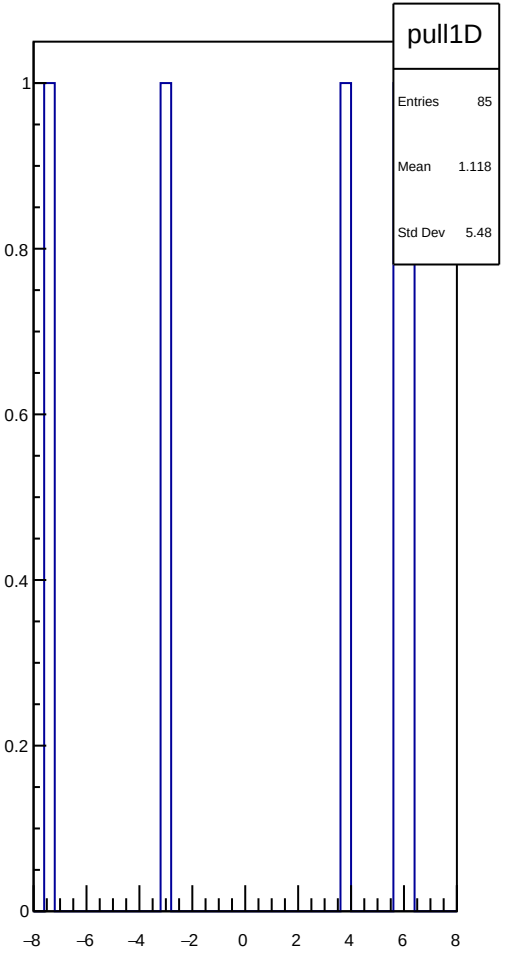

yield_bpm1i04WS_rms vs run
χ² / ndf 3488 / 84
p0 179.4 ± 0.1422
200
190
180
170
160

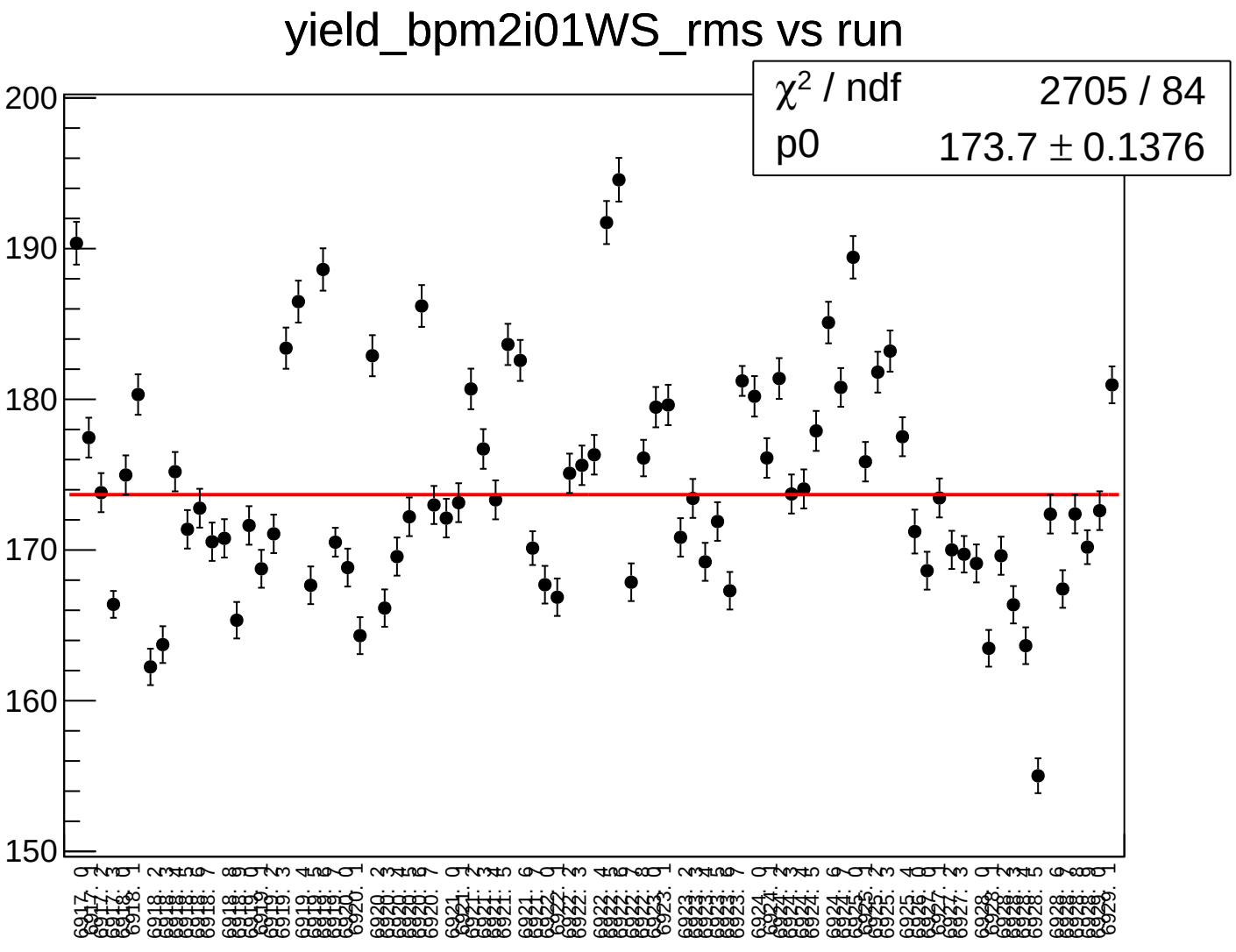

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 1.035e+08 / 84
p0 1.472e+05 ± 0.2007
151
150
149
148
147
146
145
144
pull
Entries 85
Mean 1907
Std Dev 1865
2000
1500
1000
500
0
−500
−1000
−1500
−2000
−2500

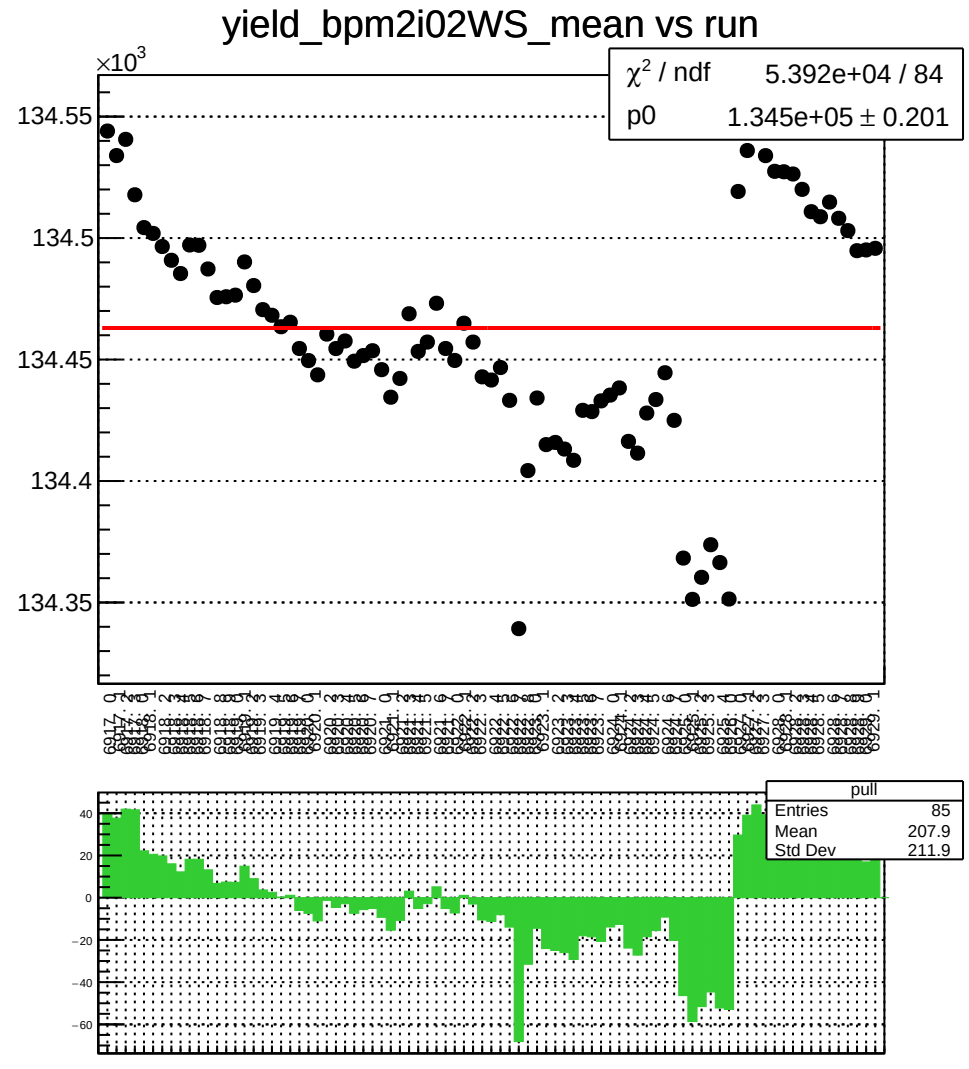

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

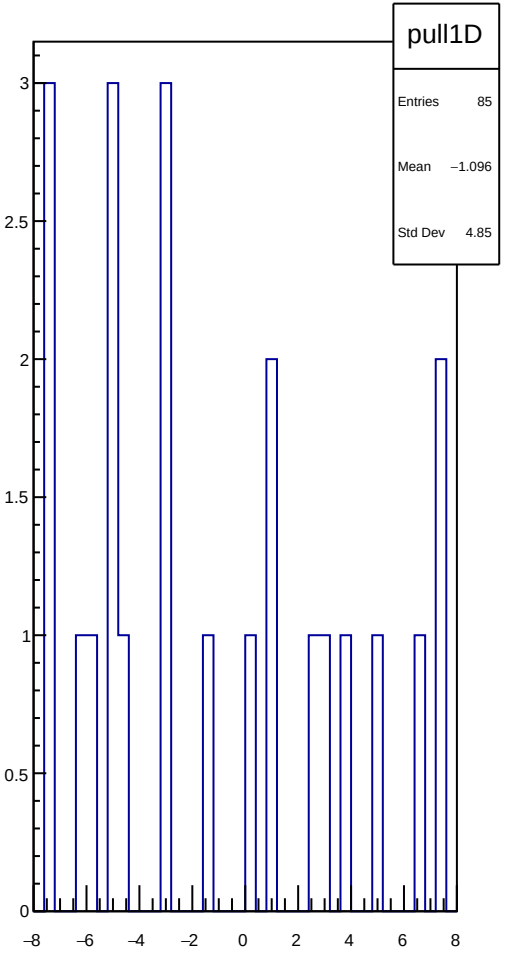

yield_bpm1i06WS_rms vs run
χ² / ndf 5240 / 84
p0 178.9 ± 0.1419
220
210
200
190
180
170
160
150

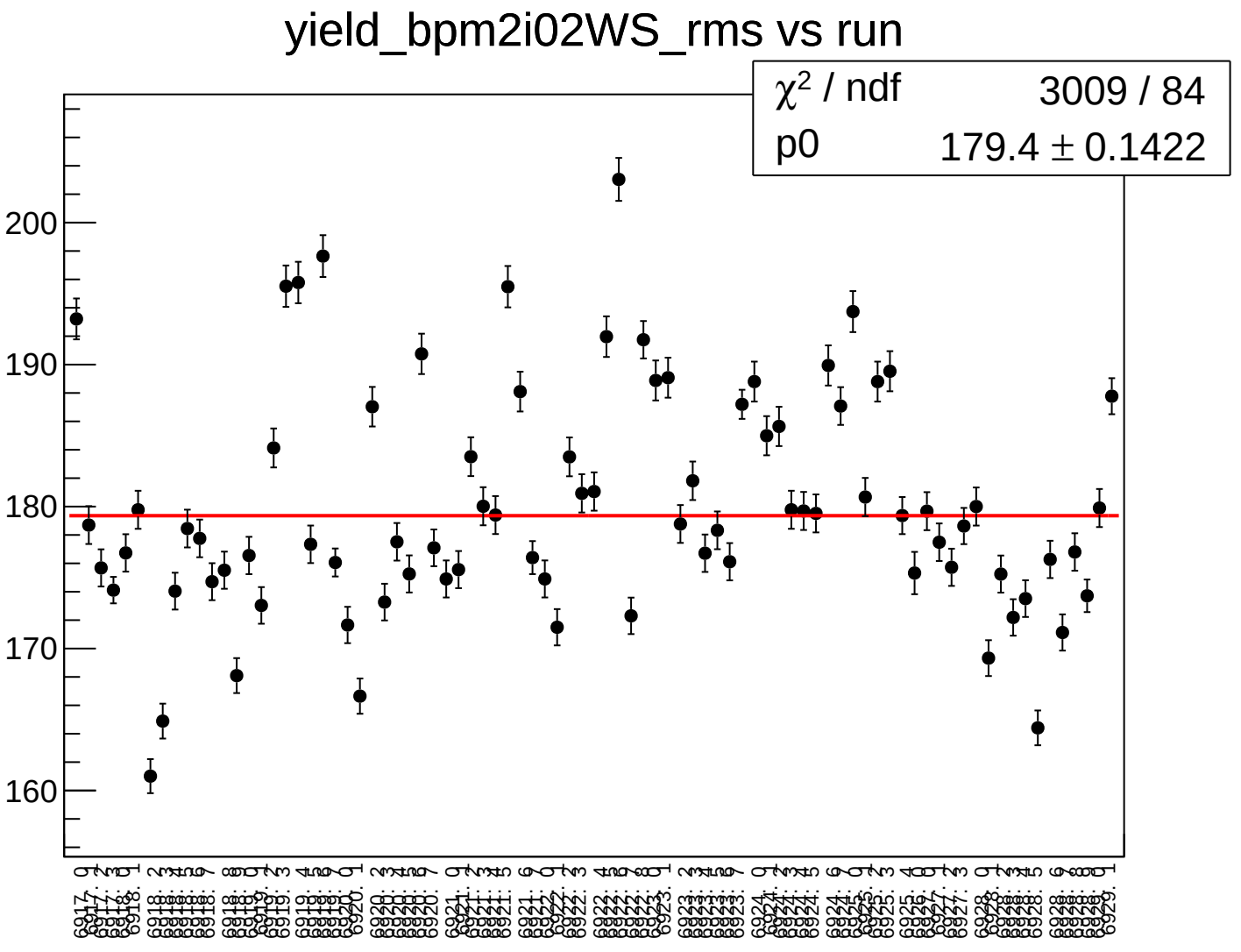

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 2.9e+04 / 84
p0 1.285e+05 ± 0.1947
128.56
128.54
128.52
128.5
128.48
128.46
pull
Entries 85
Mean 3345
Std Dev 3300
30
20
10
0
−10
−20
−30

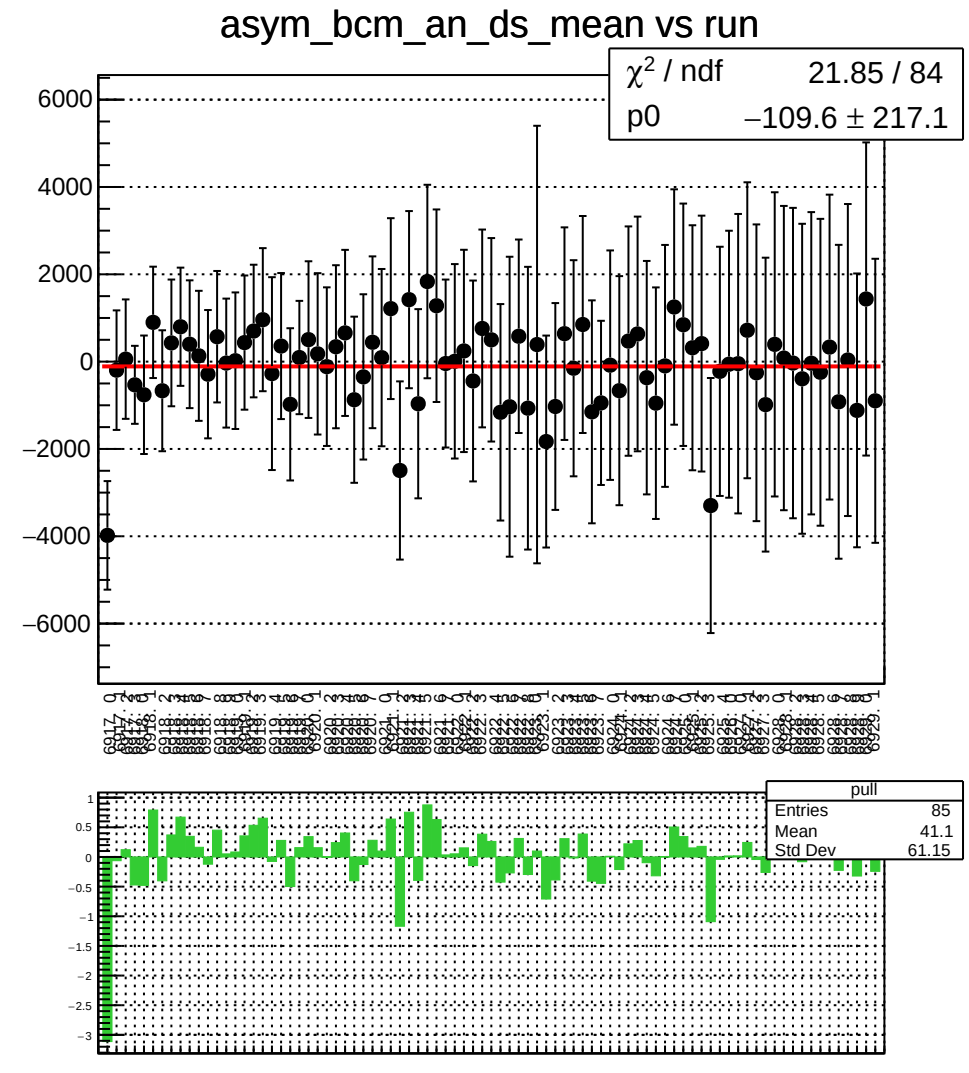

pull1D
Entries 85
Mean 1.118
Std Dev 5.48
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

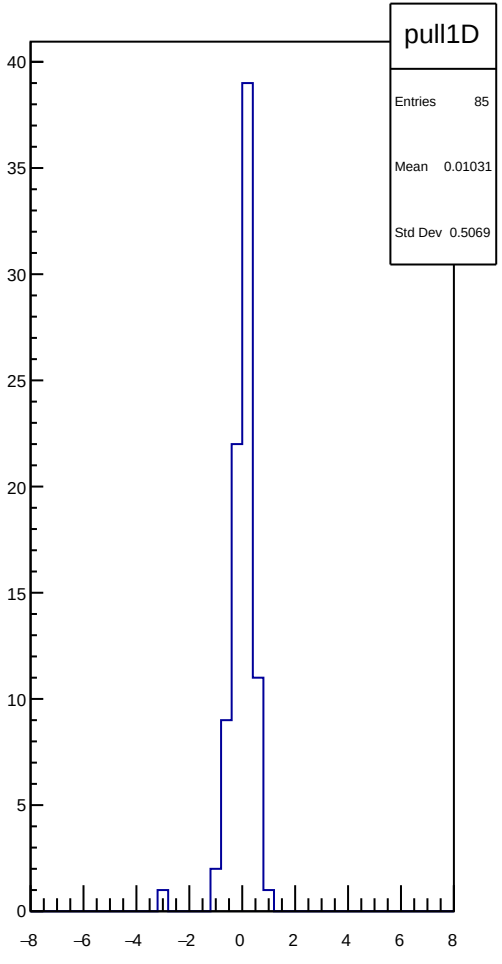

yield_bpm2i01WS_rms vs run
χ² / ndf 2705 / 84
p0 173.7 ± 0.1376
200
190
180
170
160
150

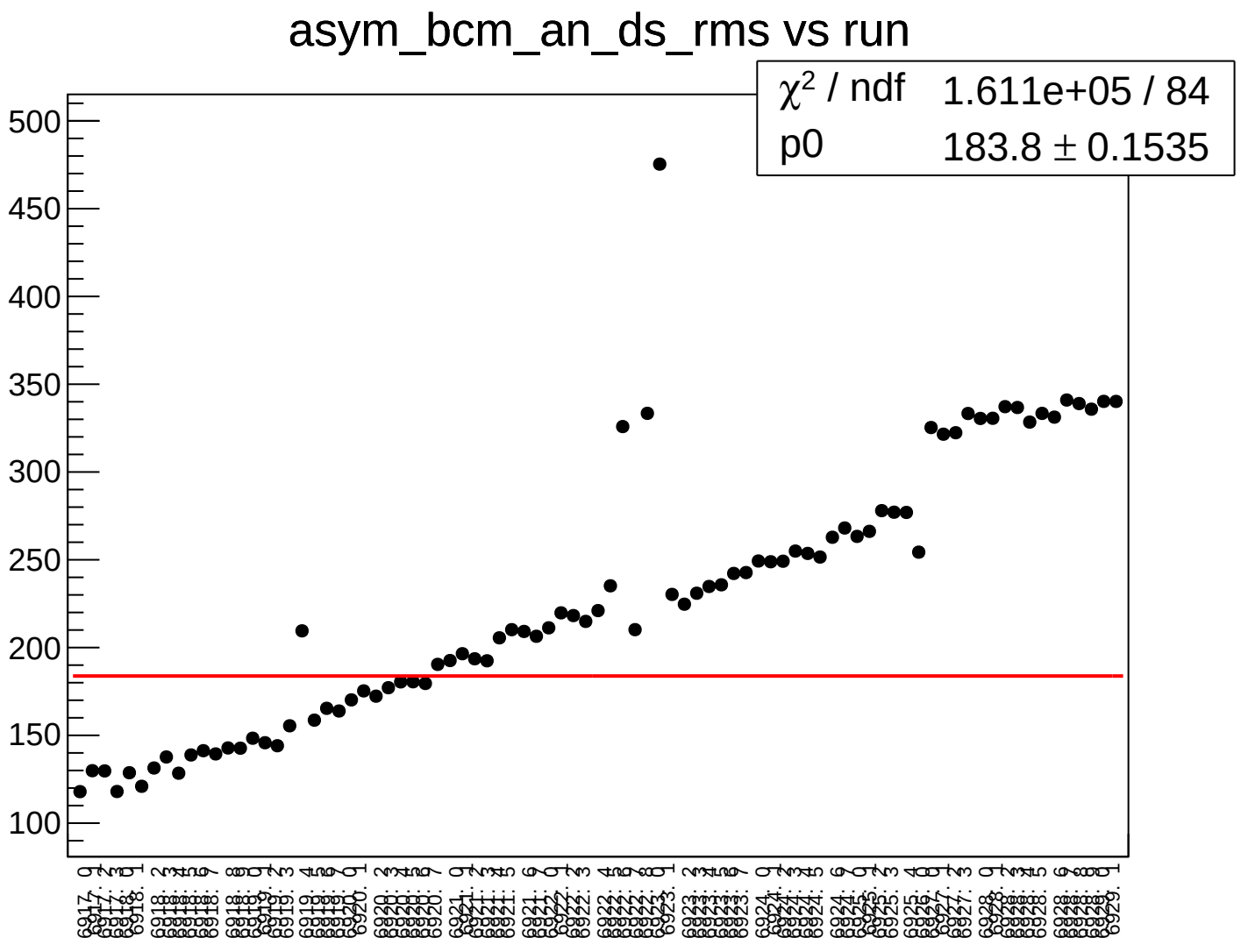

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 5.392e+04 / 84
p0 1.345e+05 ± 0.201
134.55
134.5
134.45
134.4
134.35
pull
Entries 85
Mean 207.9
Std Dev 211.9
40
20
0
−20
−40
−60

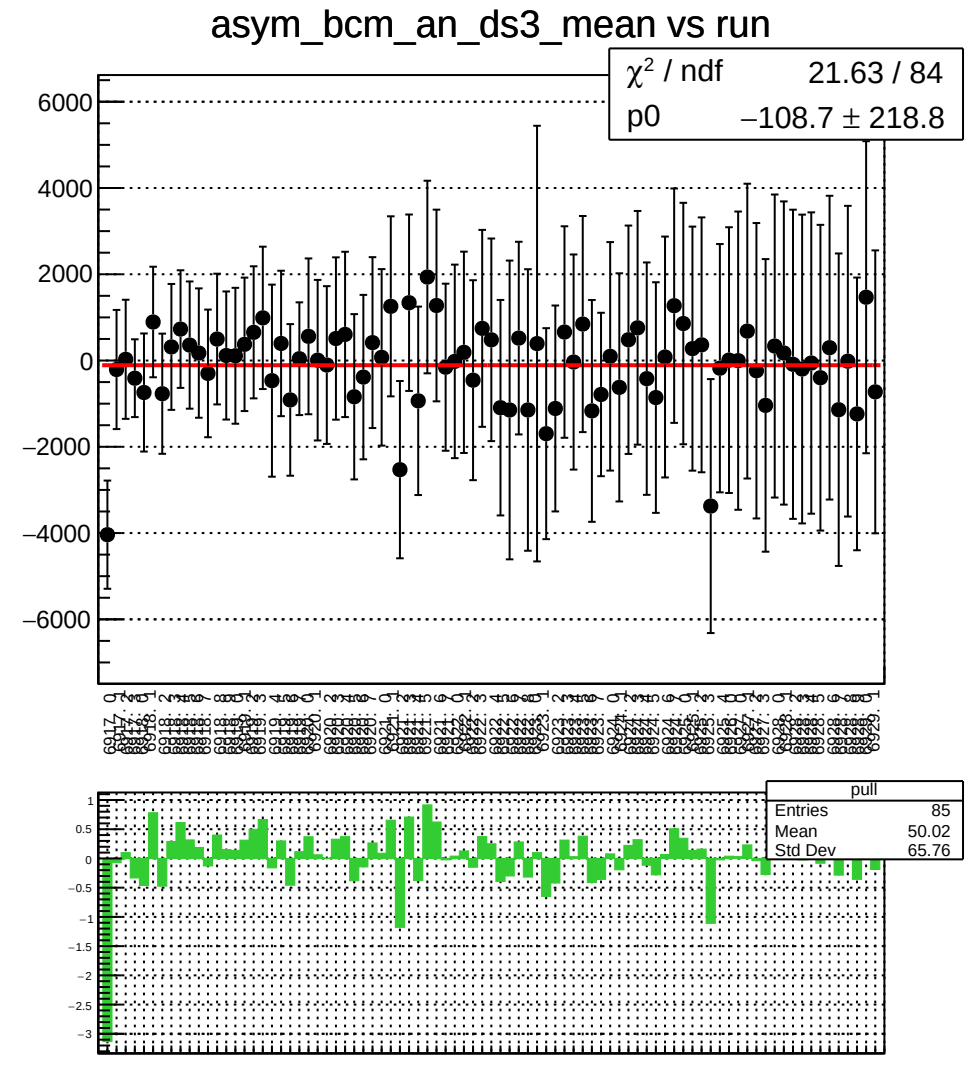

pull1D
Entries 85
Mean −1.096
Std Dev 4.85
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

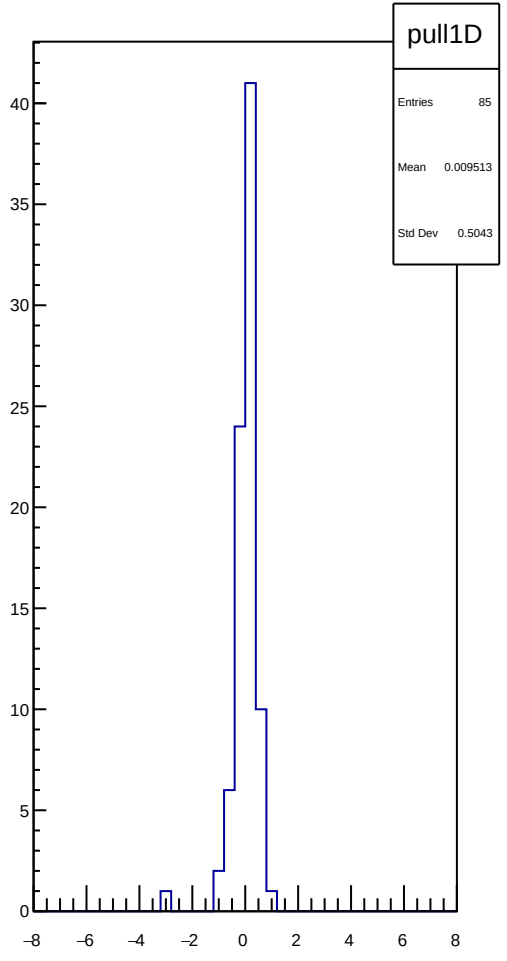

yield_bpm2i02WS_rms vs run
χ² / ndf 3009 / 84
p0 179.4 ± 0.1422
200
190
180
170
160

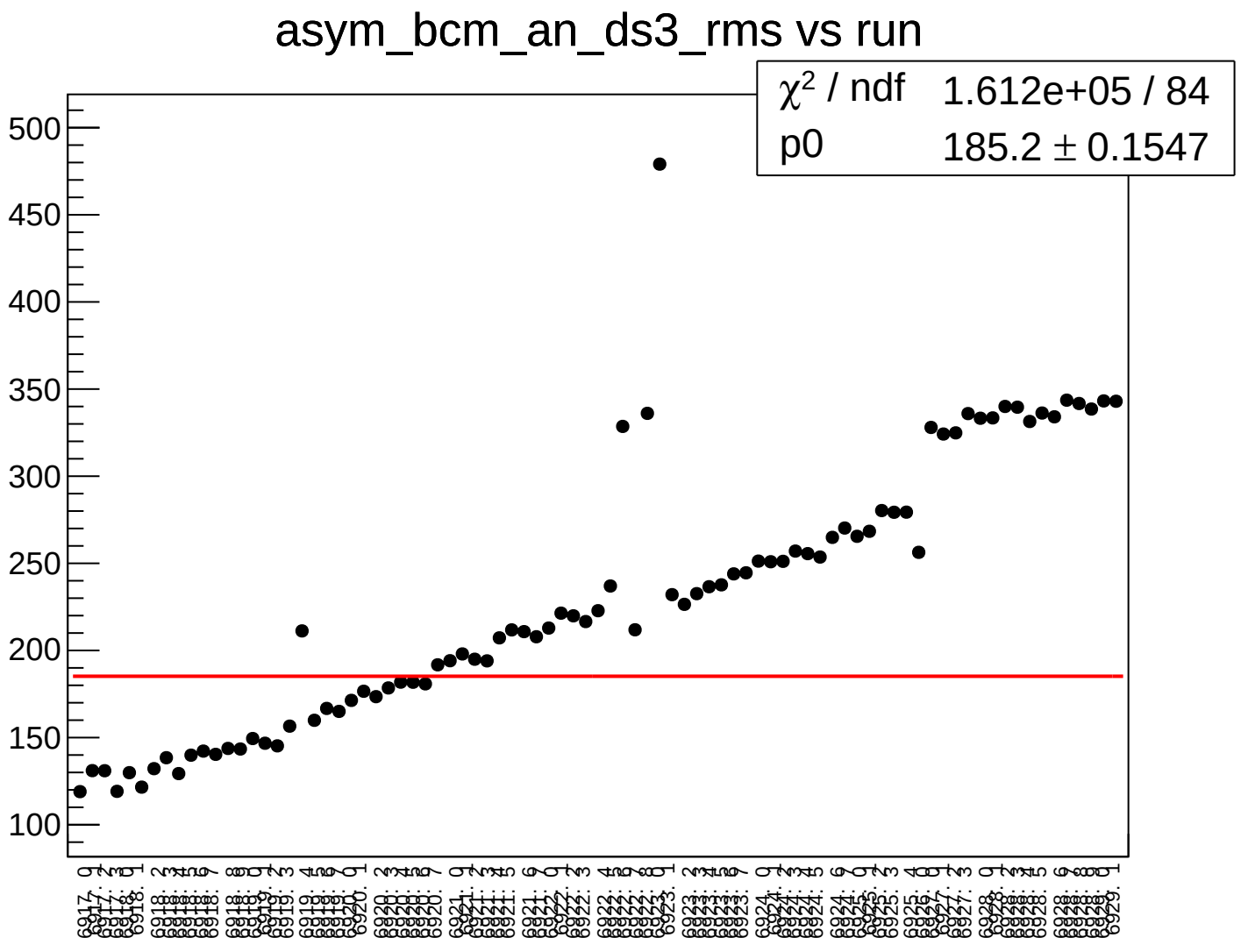

asym_bcm_an_ds_mean vs run
χ² / ndf 21.85 / 84
p0 −109.6 ± 217.1
pull
Entries 85
Mean 41.1
Std Dev 61.15

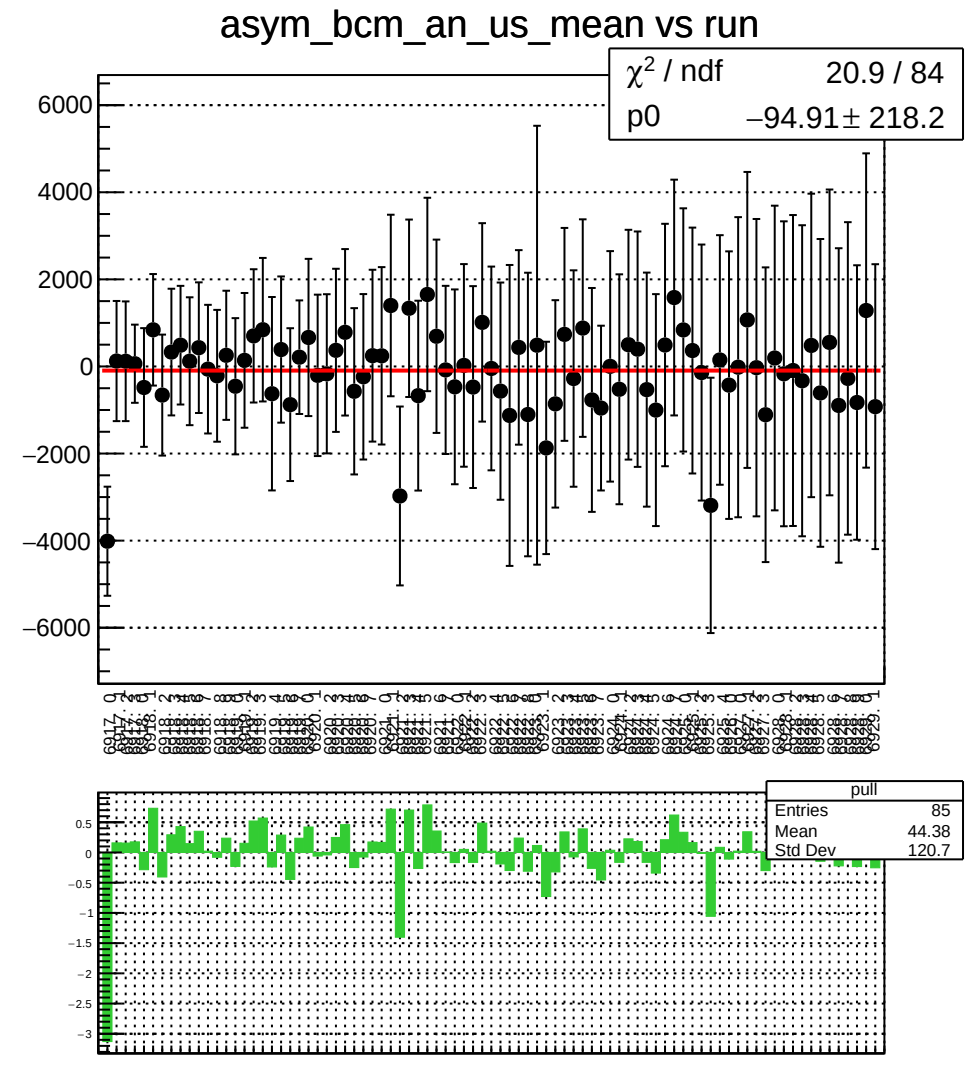

pull1D
Entries 85
Mean 0.01031
Std Dev 0.5069

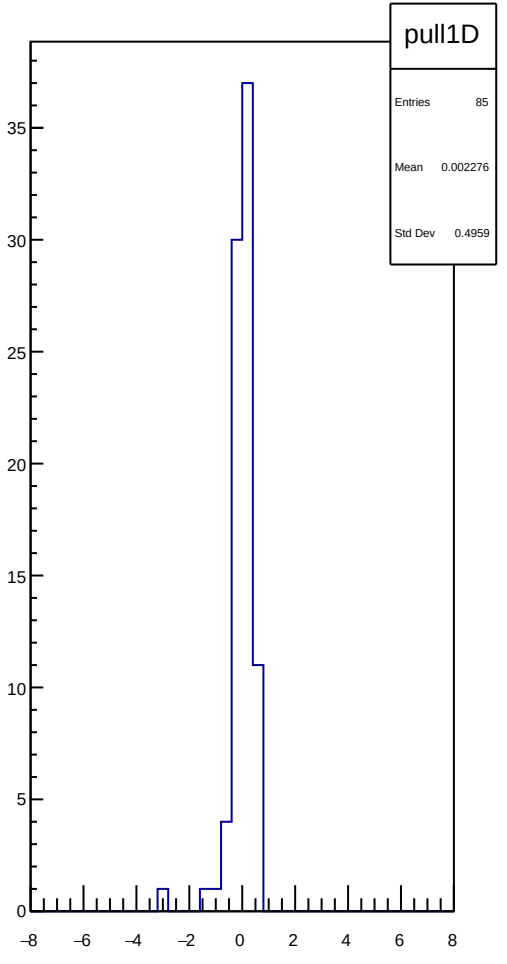

asym_bcm_an_ds_rms vs run
χ² / ndf 1.611e+05 / 84
p0 183.8 ± 0.1535
500
450
400
350
300
250
200
150
100

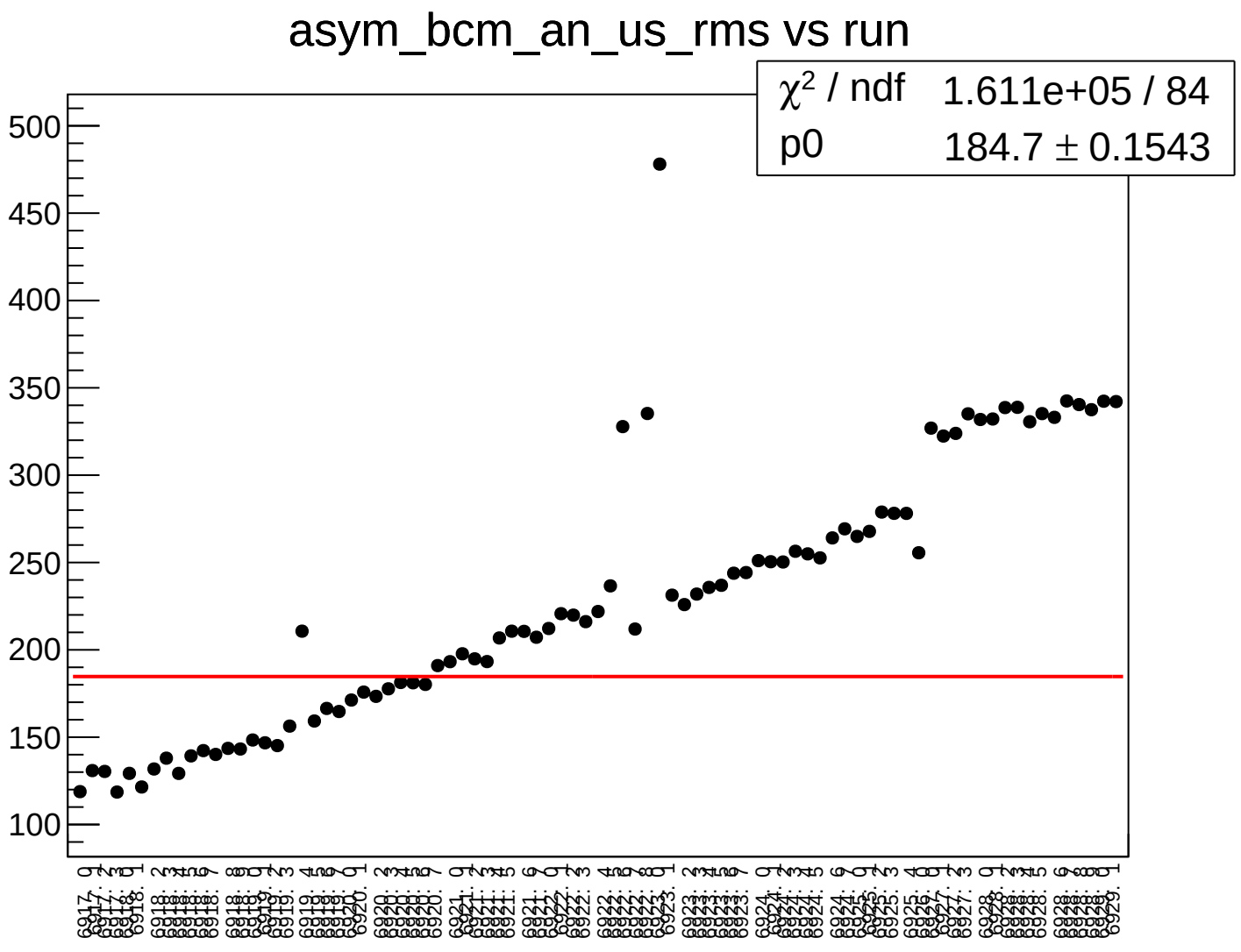

asym_bcm_an_ds3_mean vs run
χ² / ndf 21.63 / 84
p0 −108.7 ± 218.8
pull
Entries 85
Mean 50.02
Std Dev 65.76

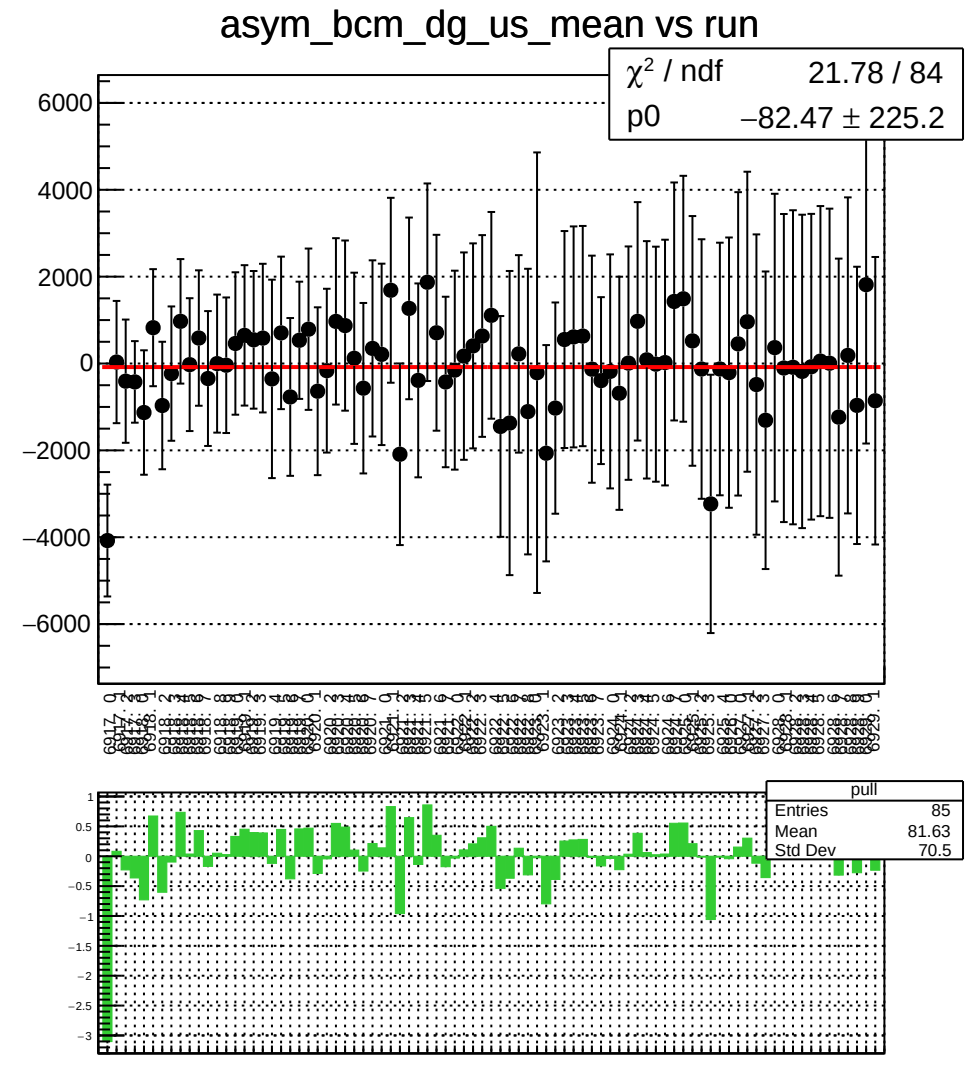

pull1D
Entries 85
Mean 0.009513
Std Dev 0.5043

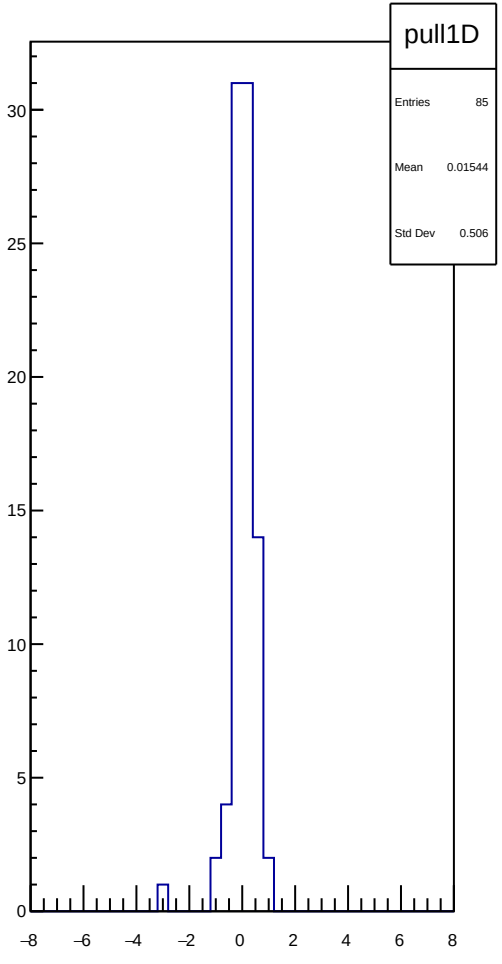

asym_bcm_an_ds3_rms vs run
χ² / ndf 1.612e+05 / 84
p0 185.2 ± 0.1547
500
450
400
350
300
250
200
150
100

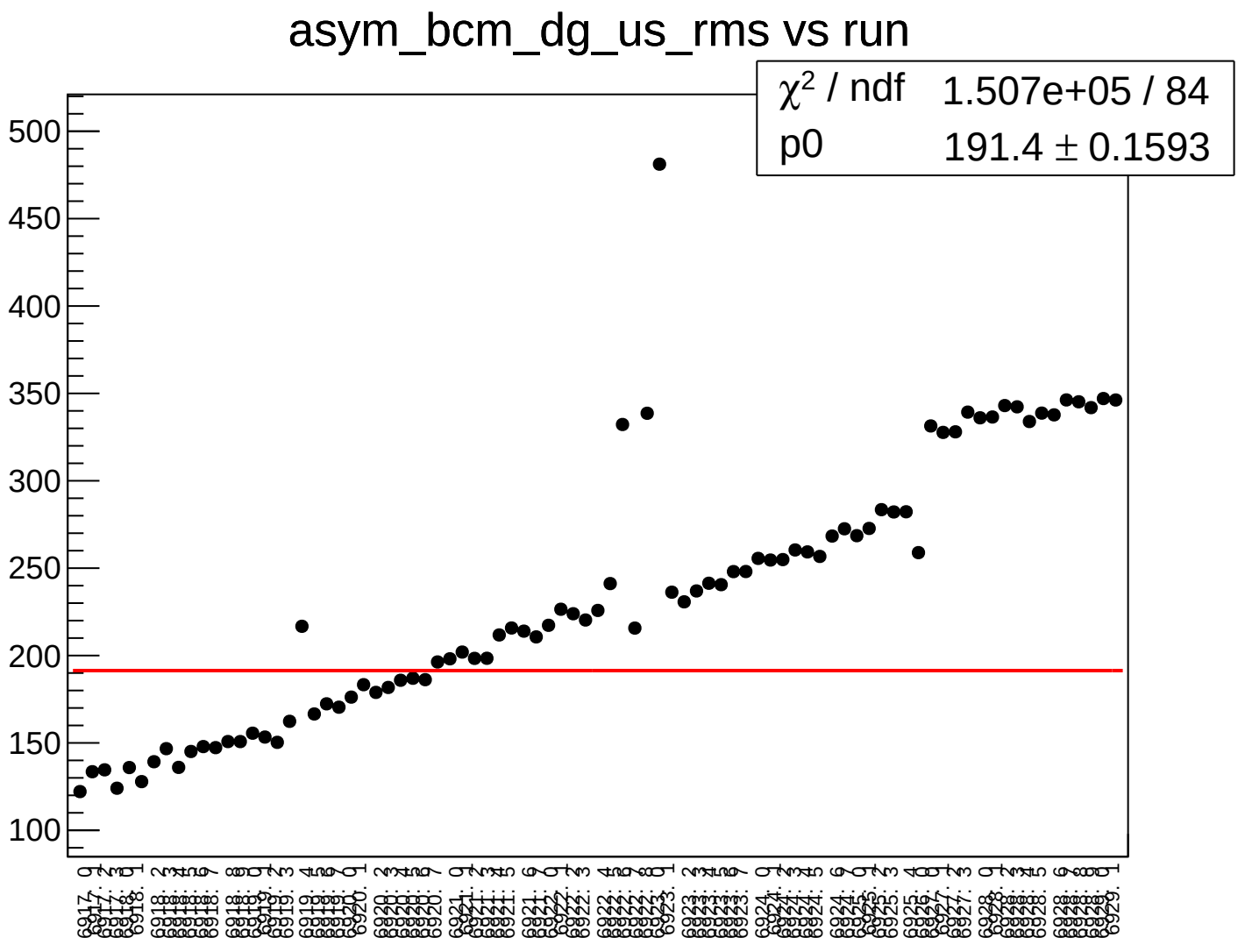

asym_bcm_an_us_mean vs run
χ² / ndf 20.9 / 84
p0 −94.91± 218.2
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 85
Mean 44.38
Std Dev 120.7
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3

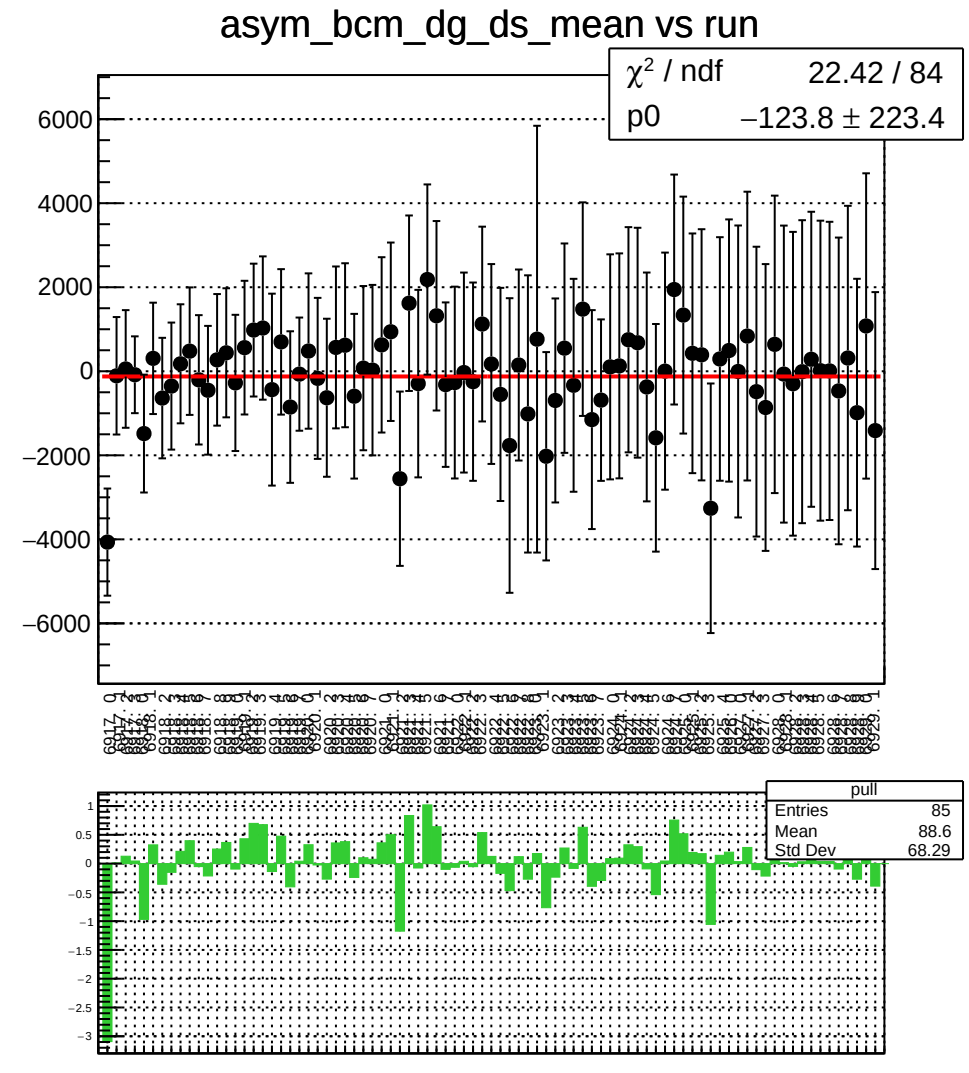

pull1D
Entries 85
Mean 0.002276
Std Dev 0.4959
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

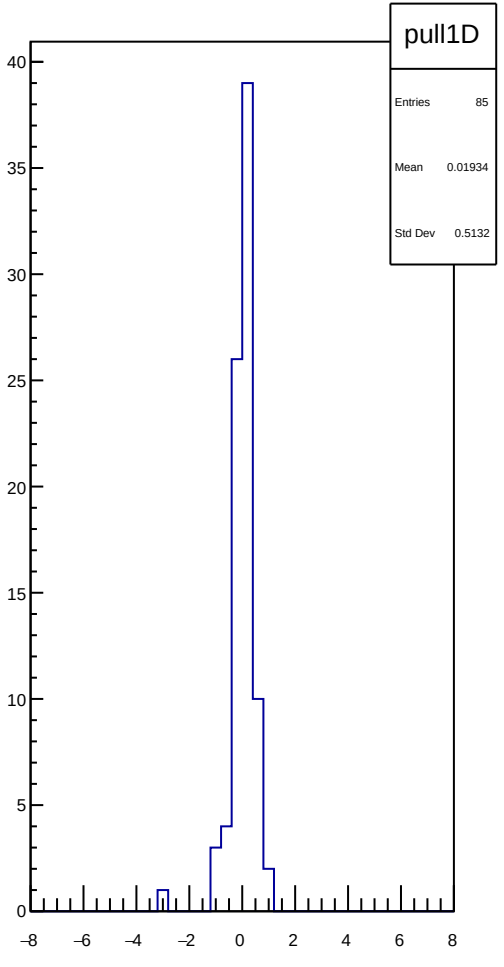

asym_bcm_an_us_rms vs run
χ^2 / ndf 1.611e+05 / 84
p0 184.7 ± 0.1543
500
450
400
350
300
250
200
150
100

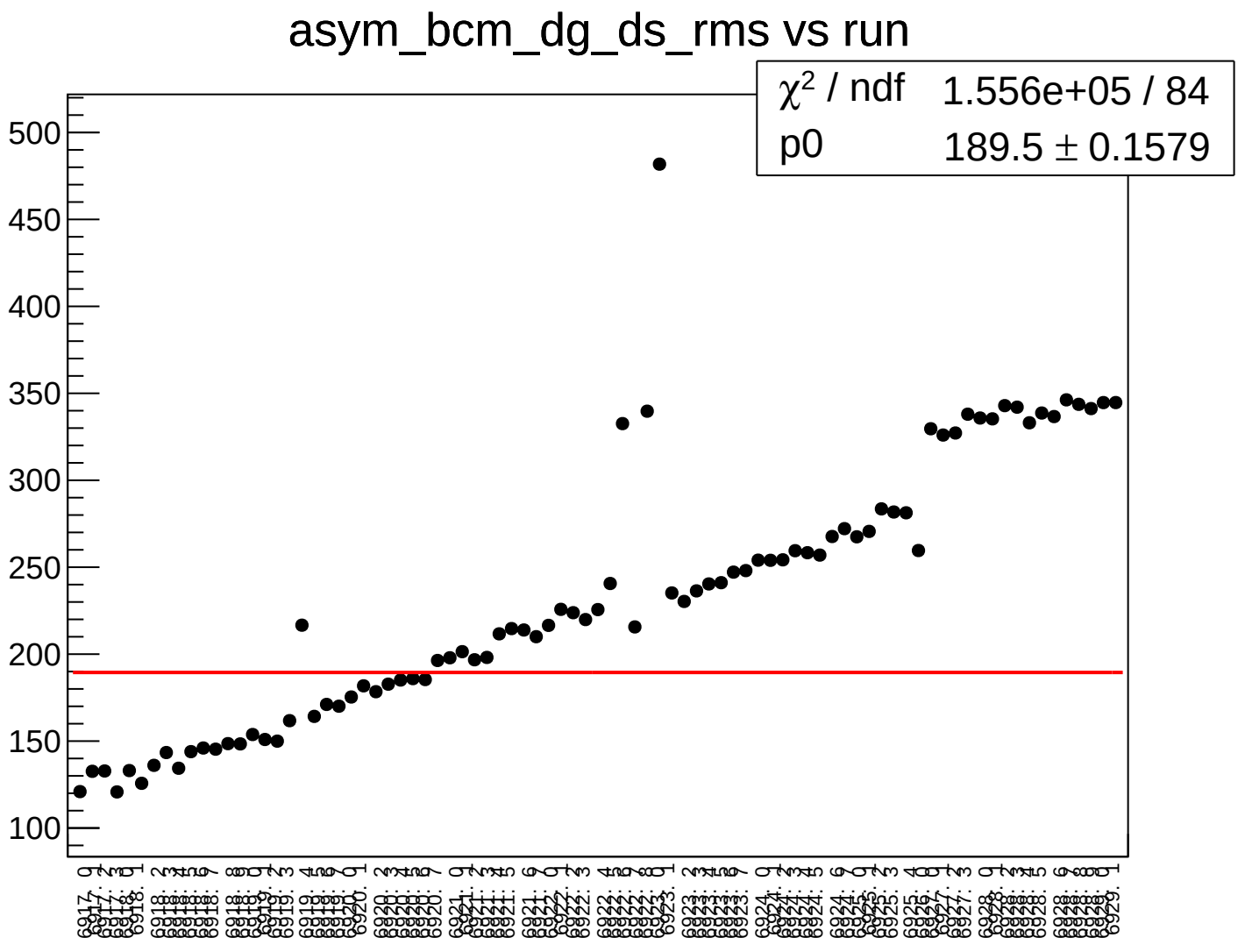

asym_bcm_dg_us_mean vs run
χ² / ndf 21.78 / 84
p0 −82.47 ± 225.2
pull
Entries 85
Mean 81.63
Std Dev 70.5

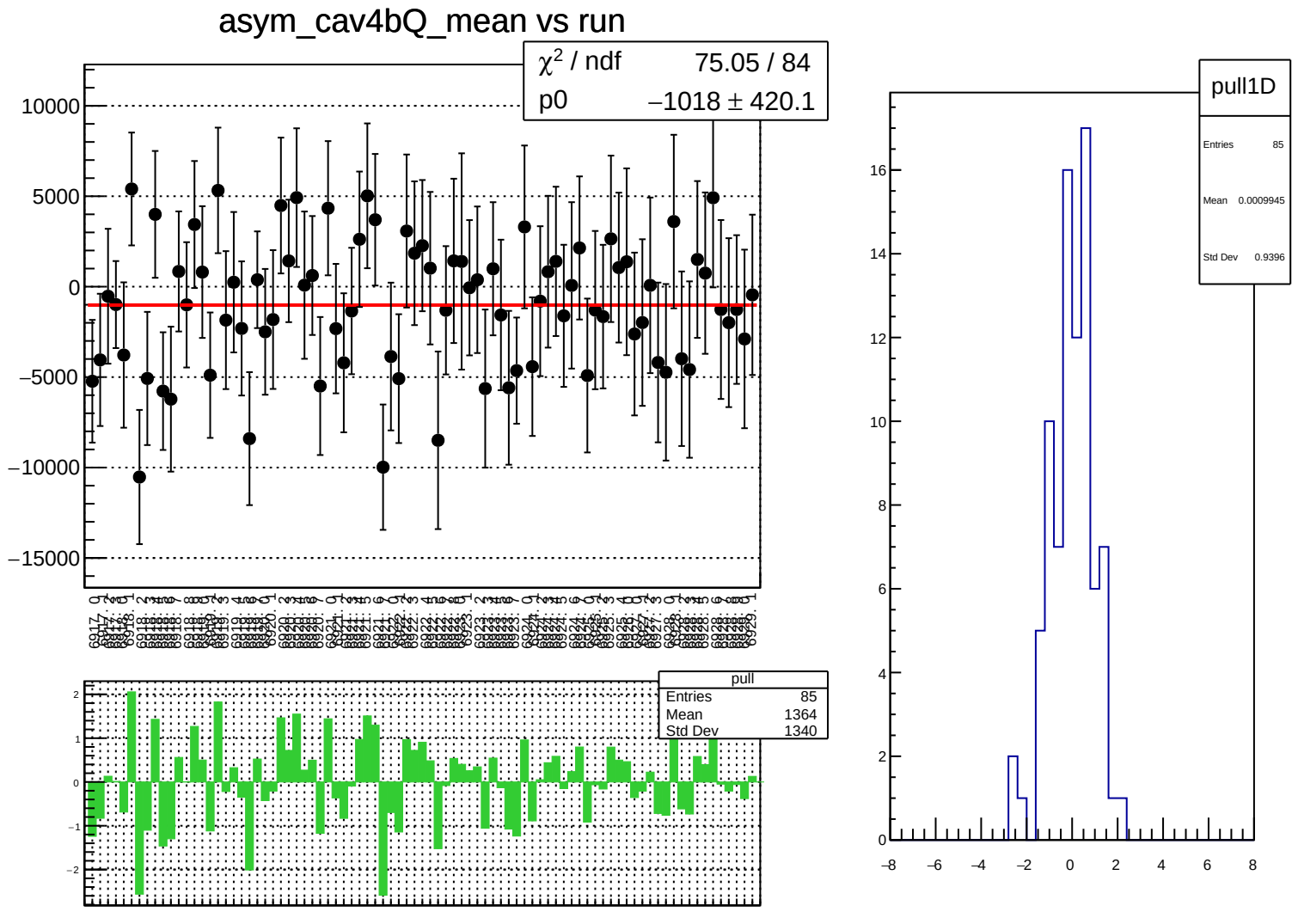

pull1D
Entries 85
Mean 0.01544
Std Dev 0.506

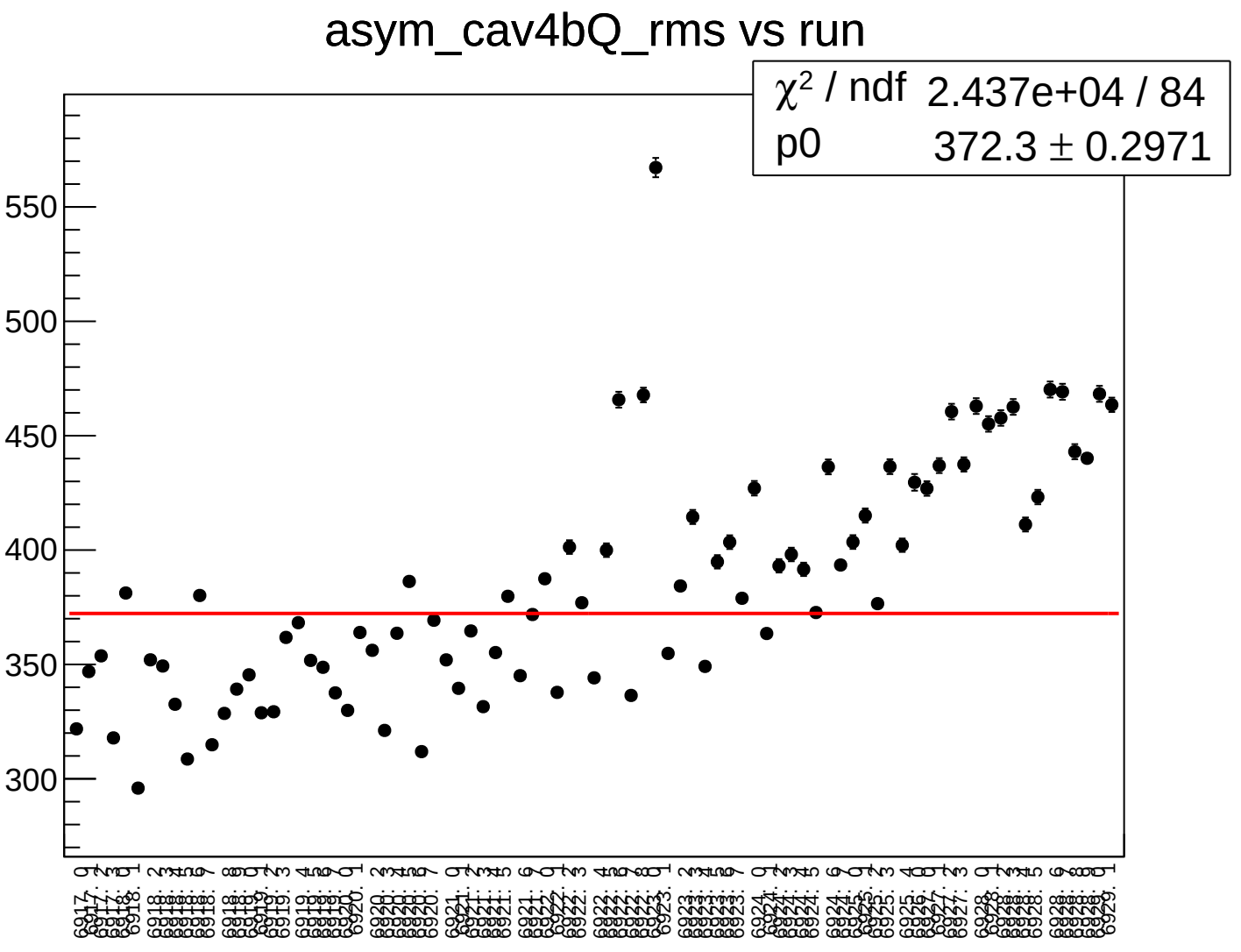

asym_bcm_dg_us_rms vs run
χ² / ndf 1.507e+05 / 84
p0 191.4 ± 0.1593
500
450
400
350
300
250
200
150
100

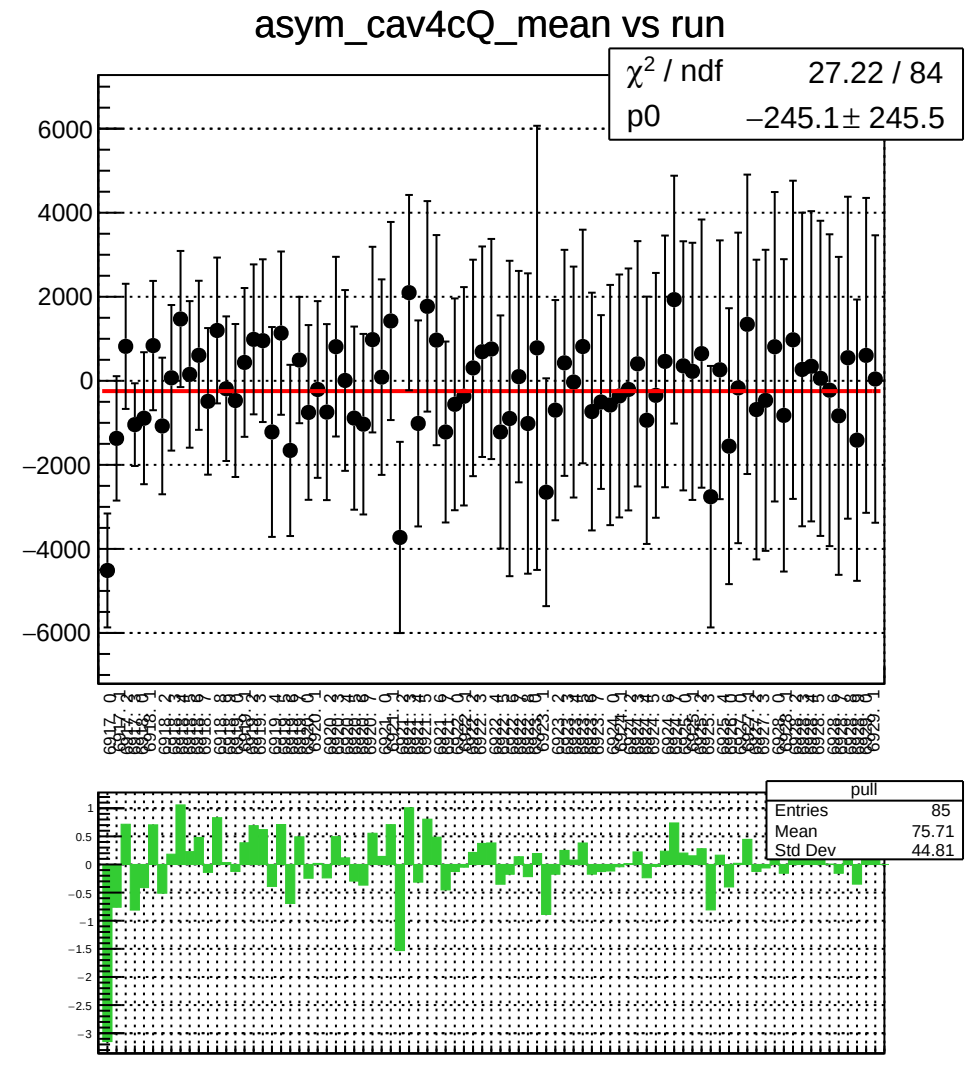

asym_bcm_dg_ds_mean vs run
χ² / ndf 22.42 / 84
p0 −123.8 ± 223.4
pull
Entries 85
Mean 88.6
Std Dev 68.29

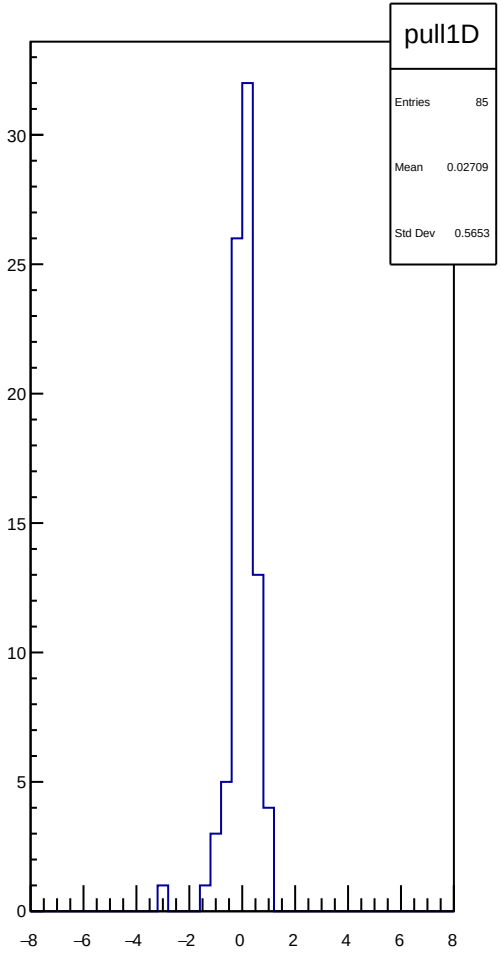

pull1D
Entries 85
Mean 0.01934
Std Dev 0.5132

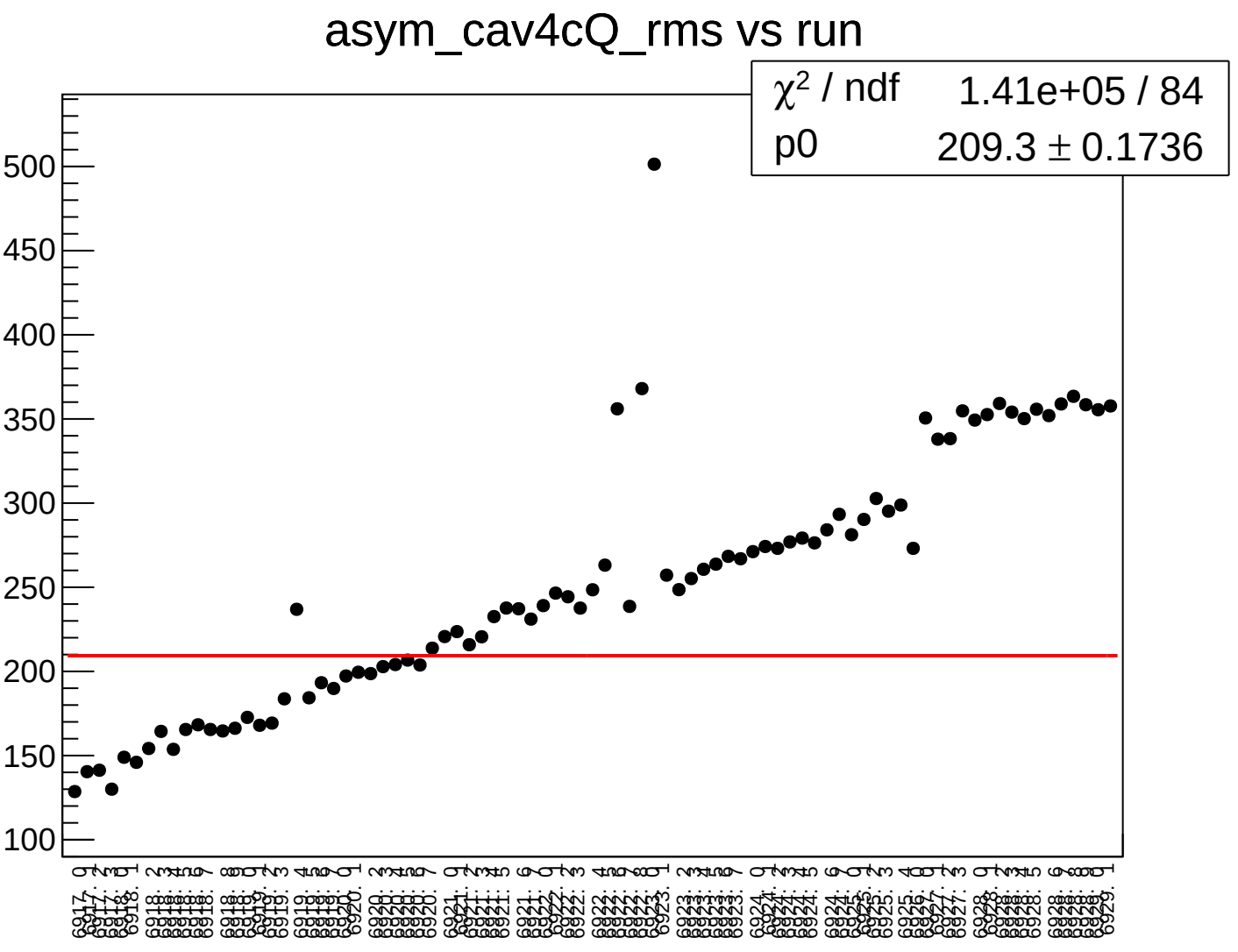

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.556e+05 / 84
p0 189.5 ± 0.1579
500
450
400
350
300
250
200
150
100

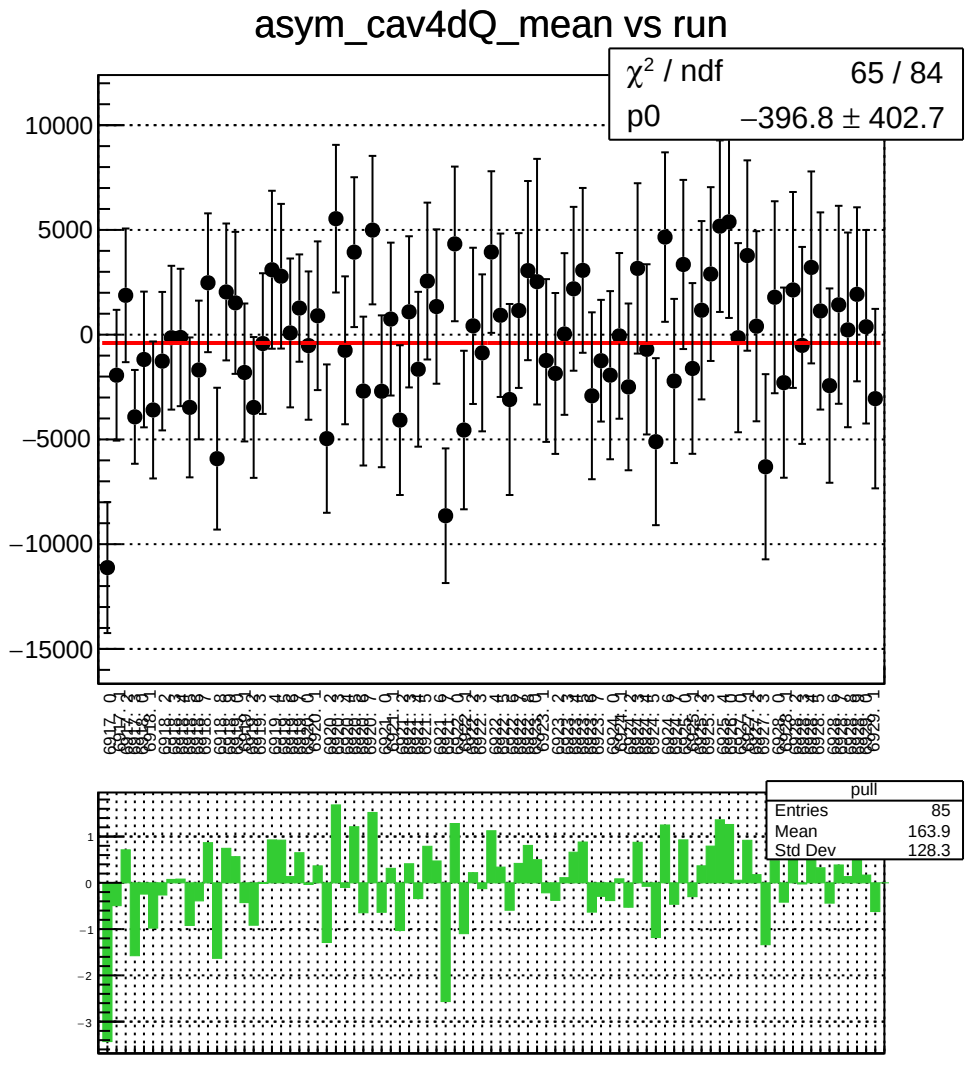

asym_cav4bQ_mean vs run
χ² / ndf 75.05 / 84
p0 −1018 ± 420.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 1364
Std Dev 1340
2
1
0
−1
−2
pull1D
Entries 85
Mean 0.0009945
Std Dev 0.9396
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

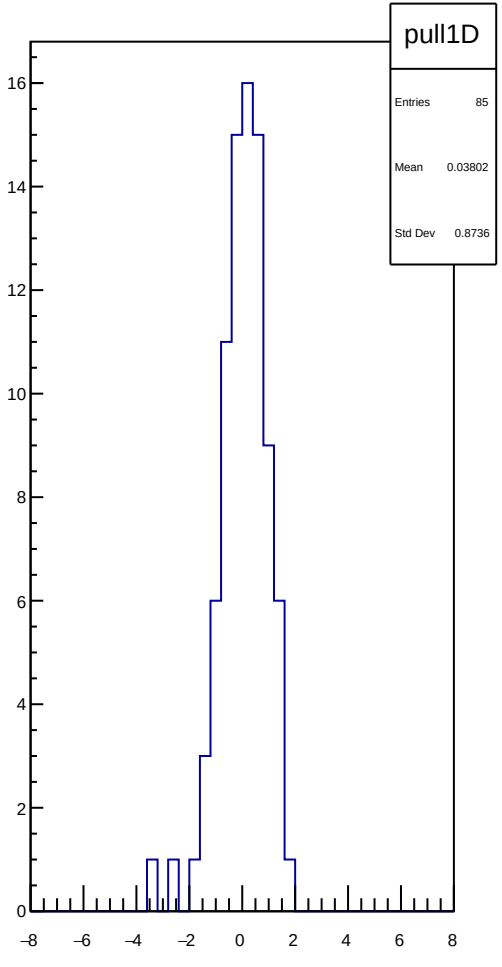

asym_cav4bQ_rms vs run
χ² / ndf 2.437e+04 / 84
p0 372.3 ± 0.2971
550
500
450
400
350
300


asym_cav4cQ_mean vs run
χ² / ndf 27.22 / 84
p0 −245.1 ± 245.5
pull
Entries 85
Mean 75.71
Std Dev 44.81


pull1D
Entries 85
Mean 0.02709
Std Dev 0.5653


asym_cav4cQ_rms vs run
χ² / ndf 1.41e+05 / 84
p0 209.3 ± 0.1736
500
450
400
350
300
250
200
150
100


asym_cav4dQ_mean vs run
χ² / ndf 65 / 84
p0 −396.8 ± 402.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 163.9
Std Dev 128.3
1
0
−1
−2
−3


pull1D
Entries 85
Mean 0.03802
Std Dev 0.8736
16
14
12
10
8
6
4
2
0
−8
−6
−4
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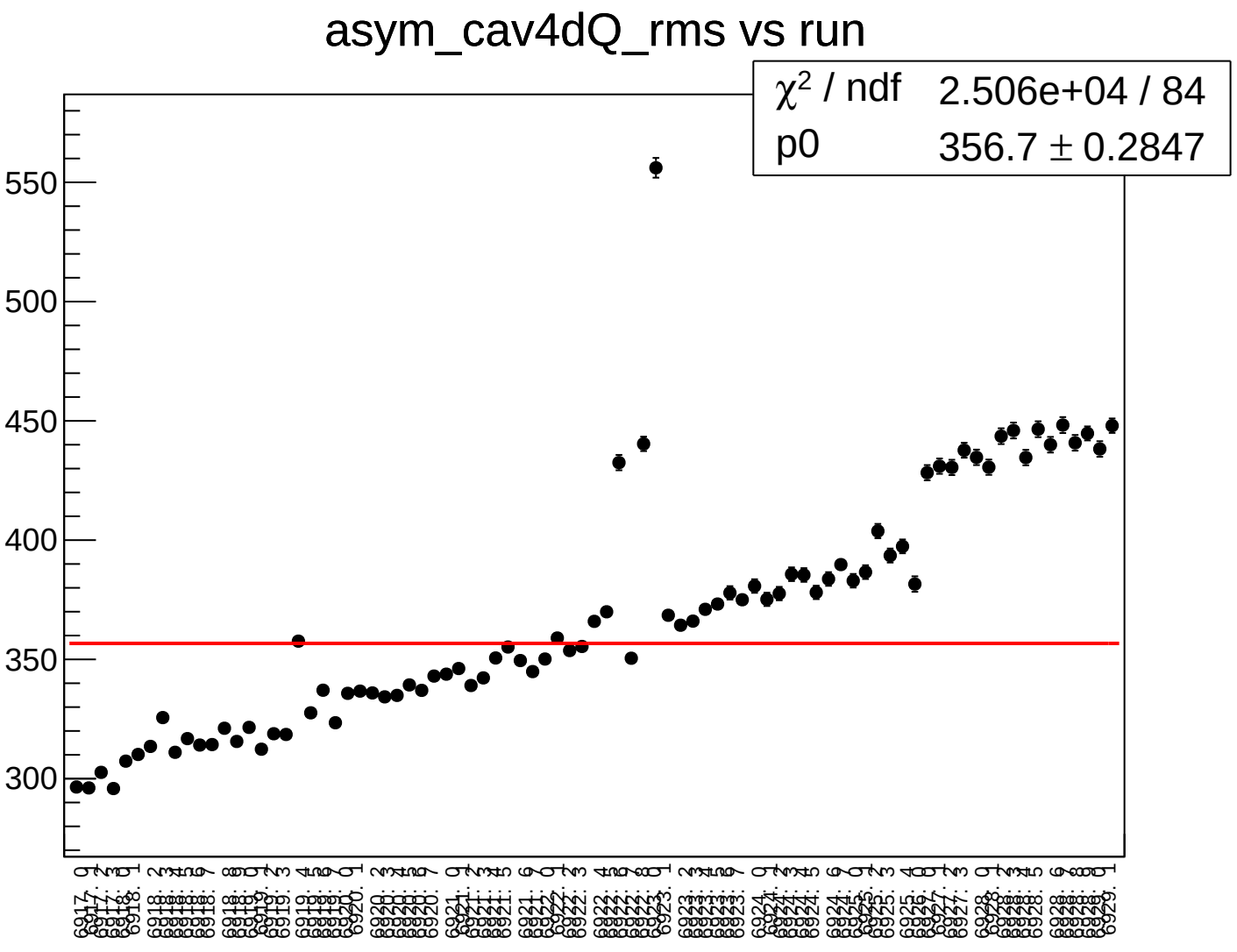
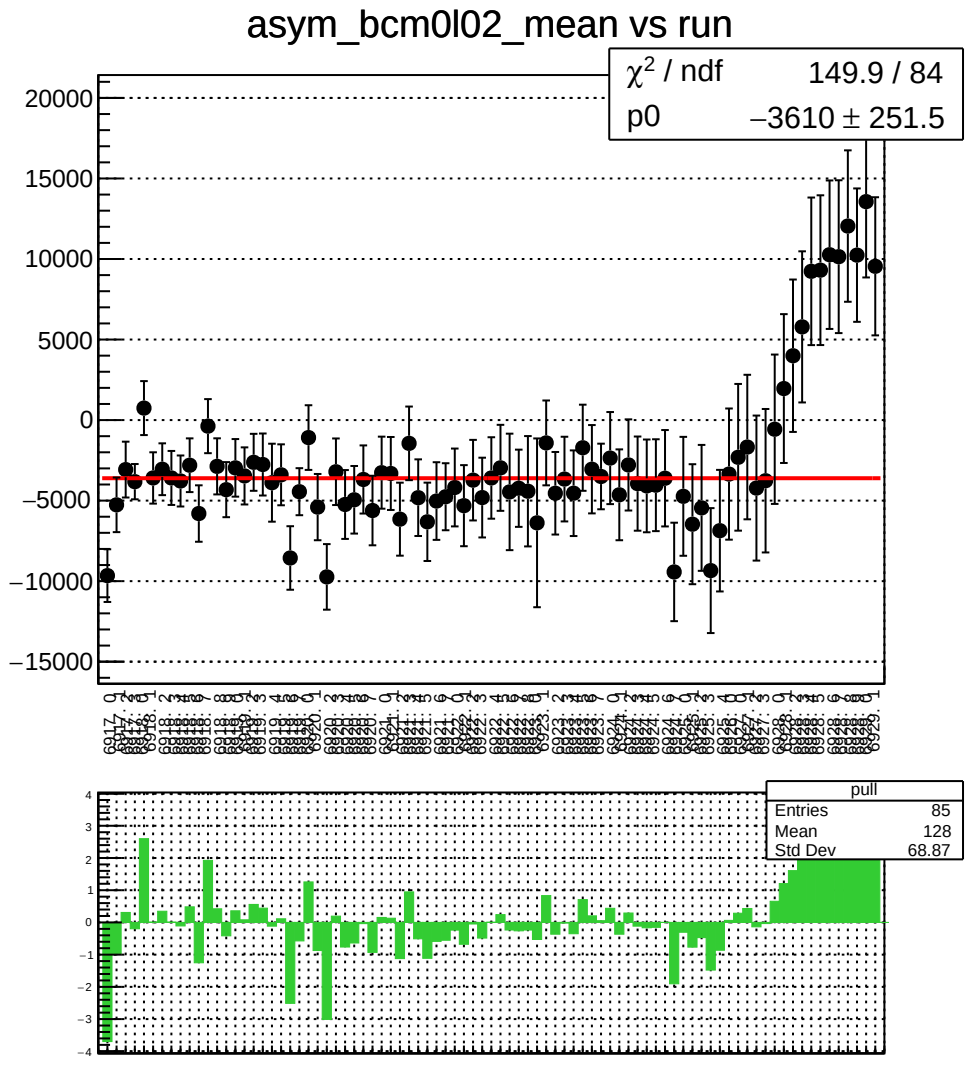
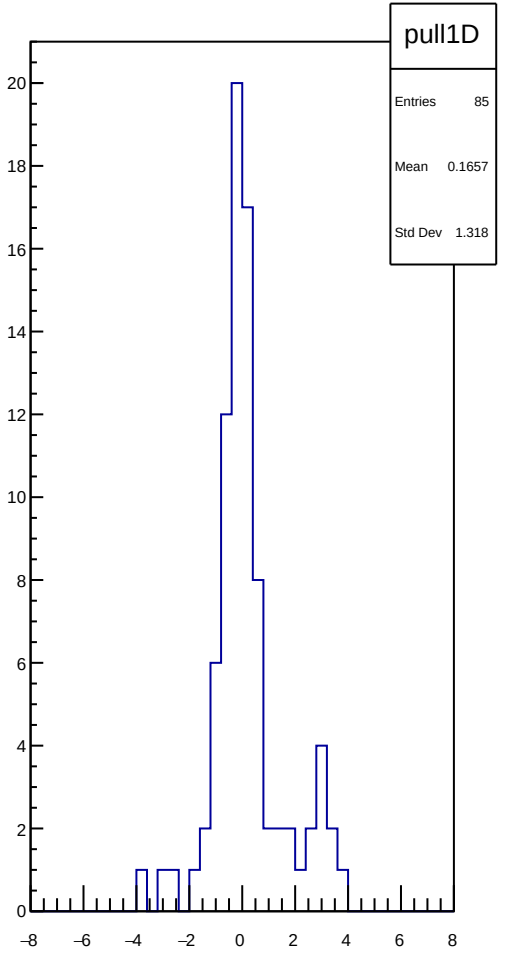
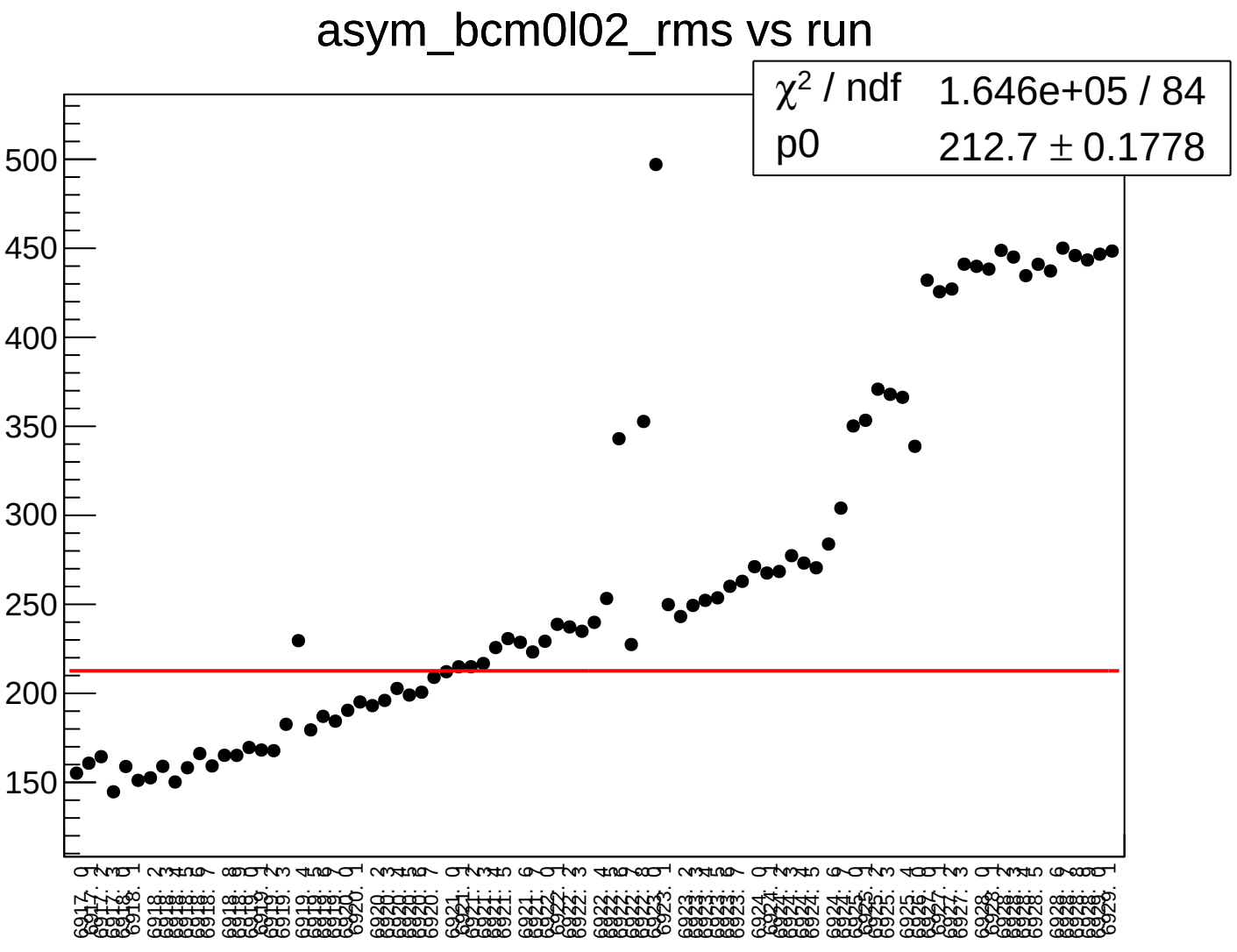
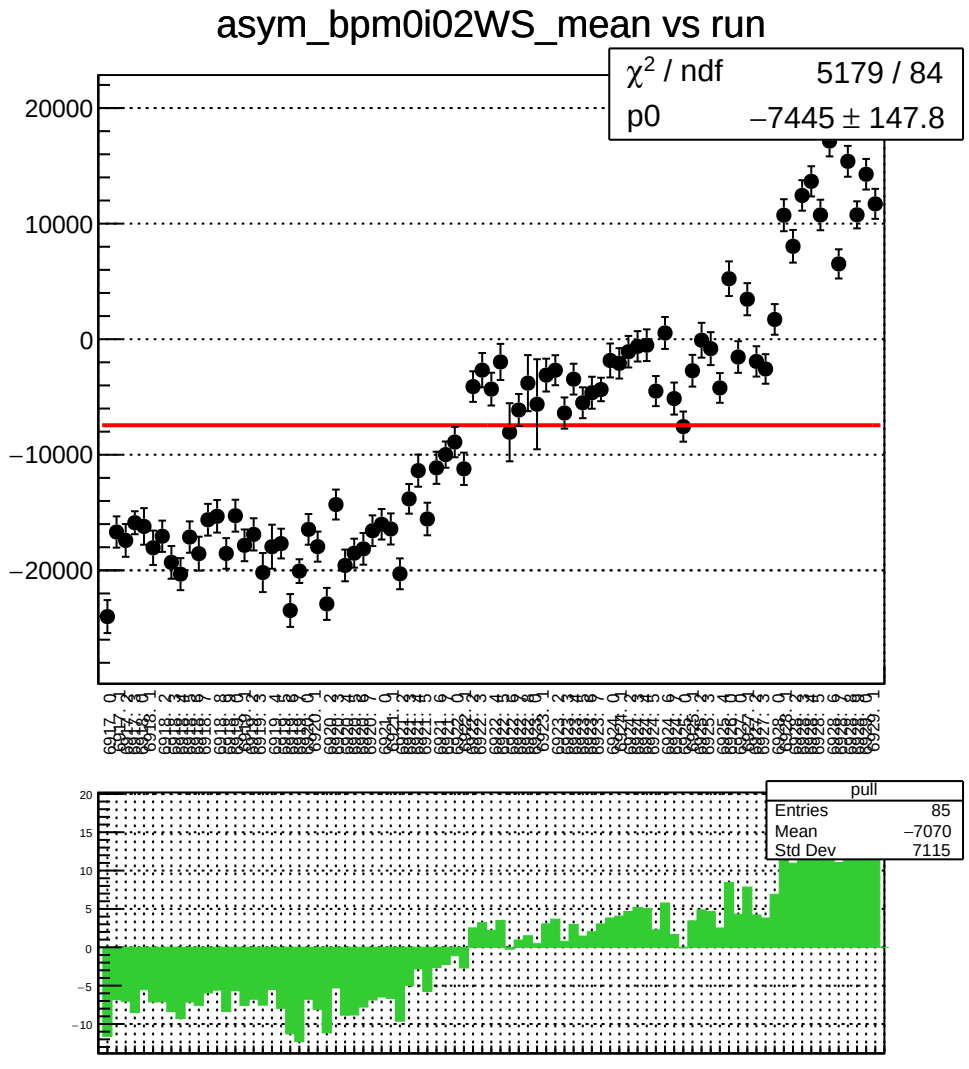
0
2
4
6
8

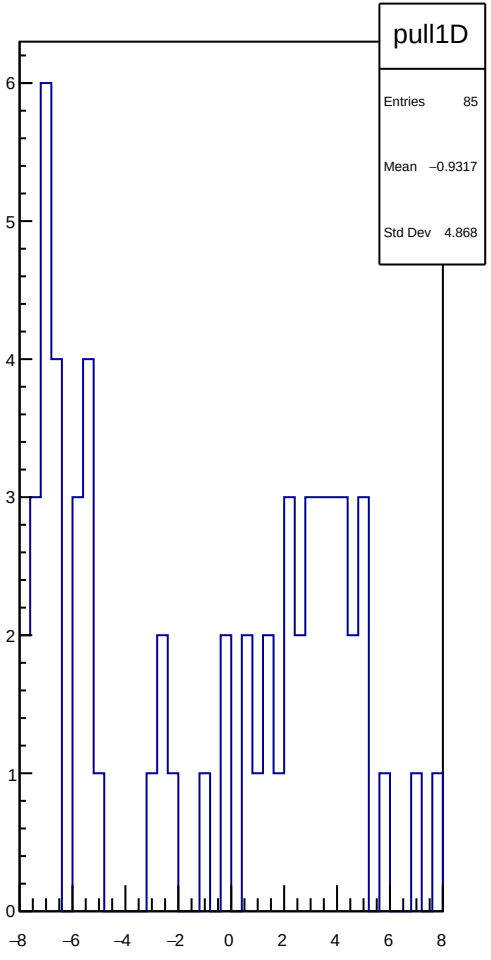

asym_cav4dQ_rms vs run
χ² / ndf 2.506e+04 / 84
p0 356.7 ± 0.2847
550
500
450
400
350
300

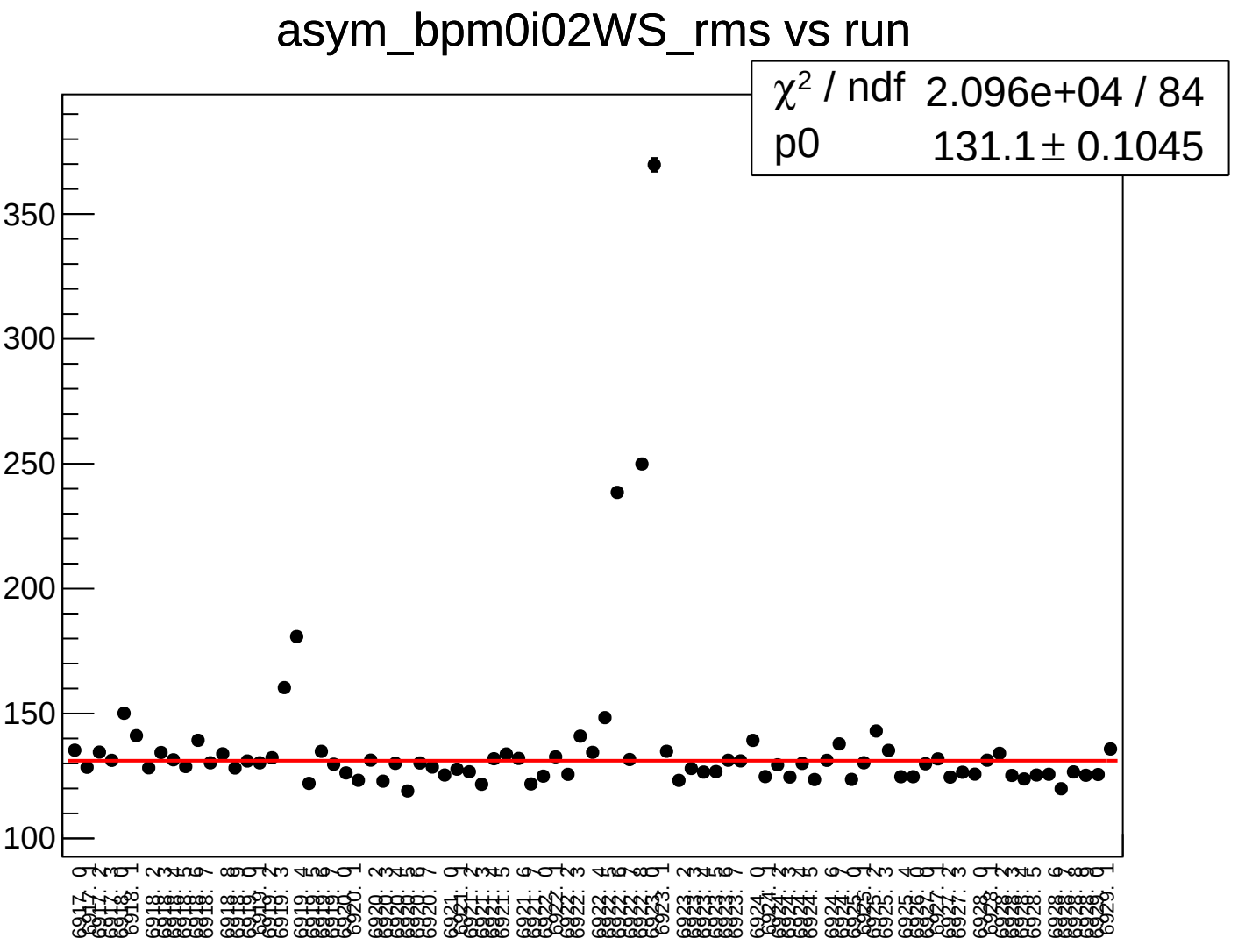

asym_bcm0l02_mean vs run
χ² / ndf 149.9 / 84
p0 −3610 ± 251.5
pull
Entries 85
Mean 128
Std Dev 68.87

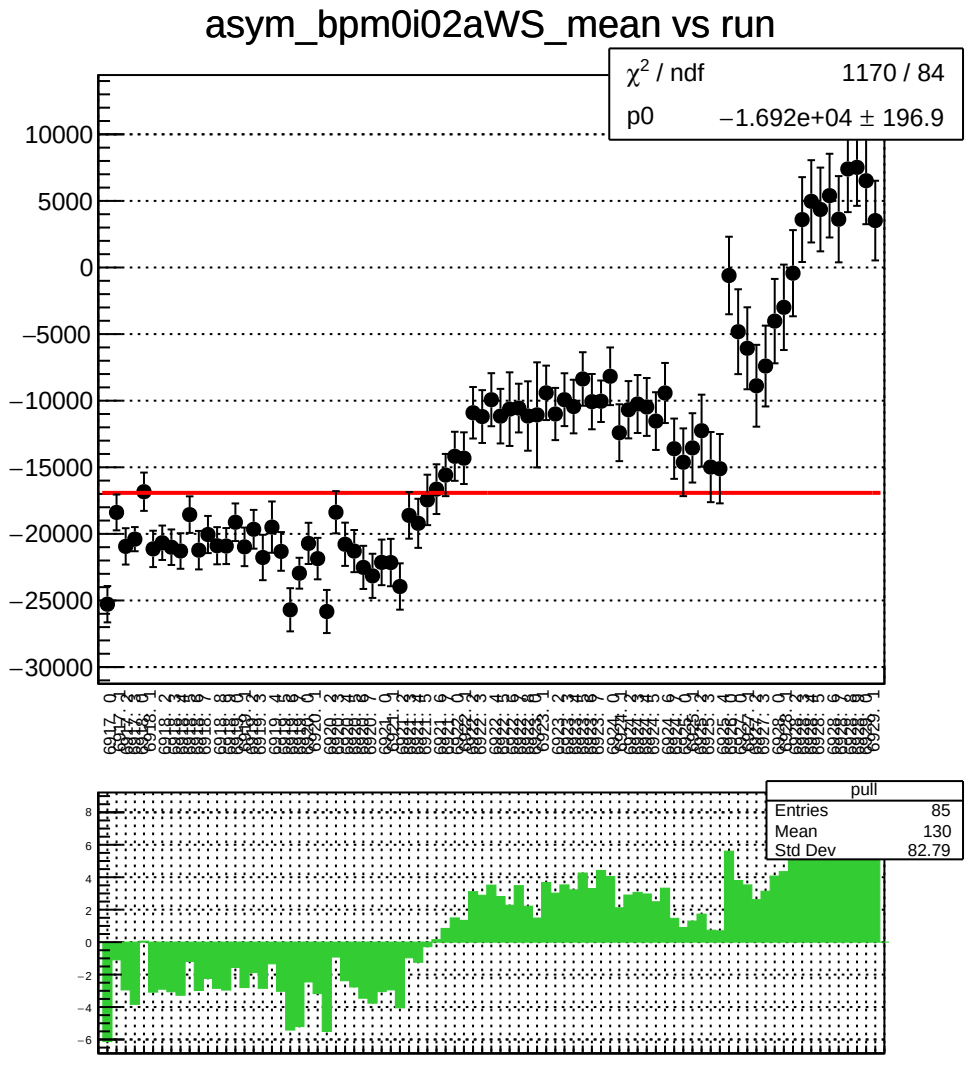

pull1D
Entries 85
Mean 0.1657
Std Dev 1.318

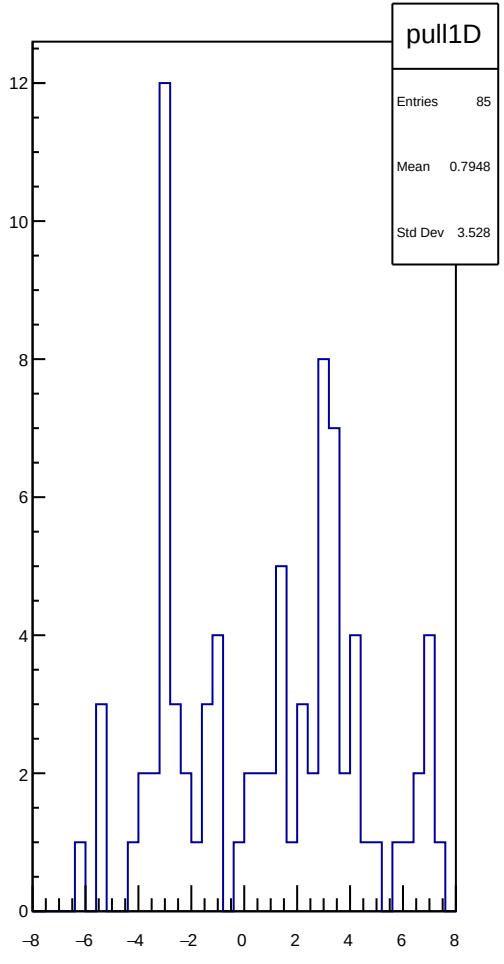

asym_bcm0l02_rms vs run
χ^2 / ndf 1.646e+05 / 84
p0 212.7 ± 0.1778
500
450
400
350
300
250
200
150

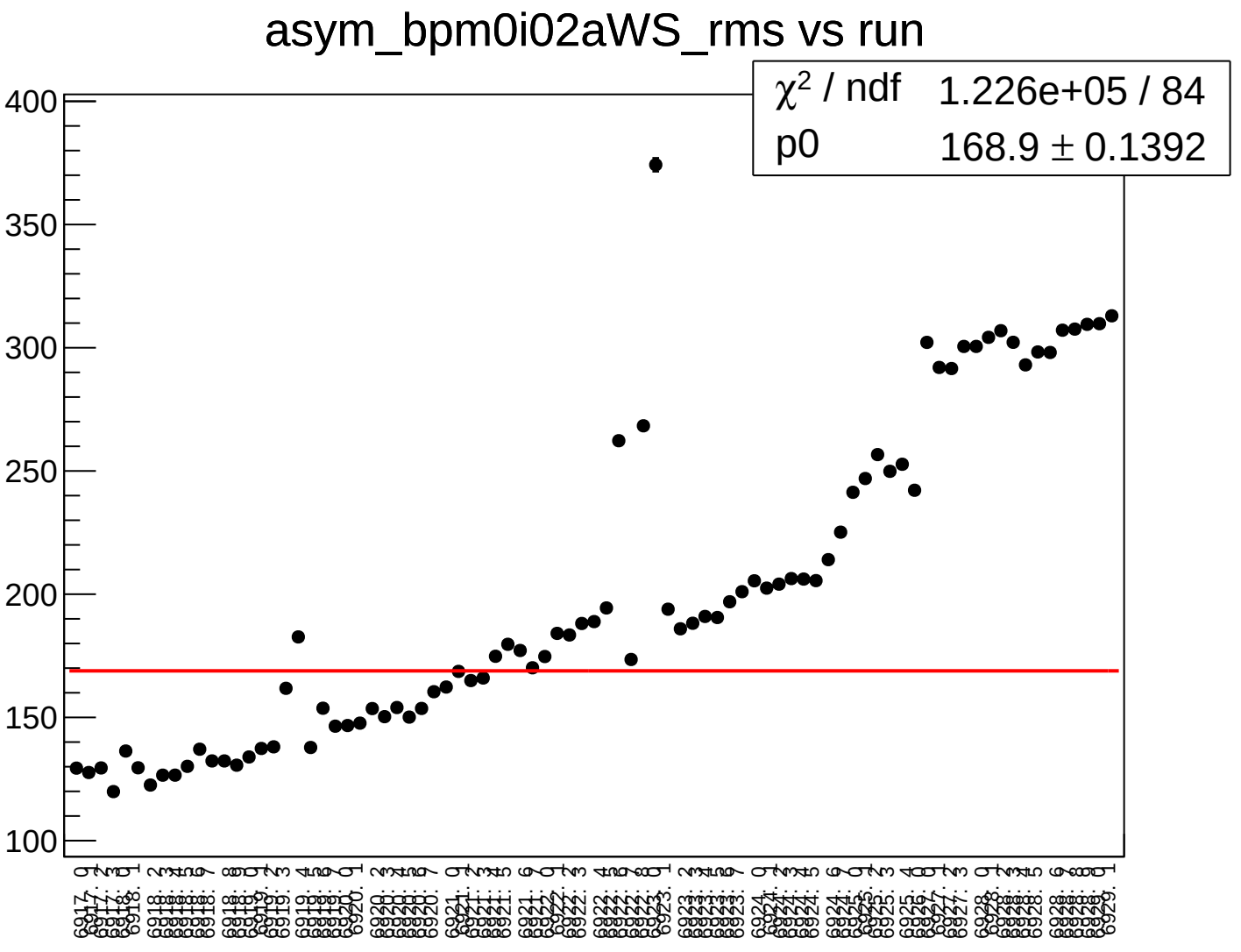

asym_bpm0i02WS_mean vs run
χ² / ndf 5179 / 84
p0 −7445 ± 147.8
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −7070
Std Dev 7115
20
15
10
5
0
−5
−10

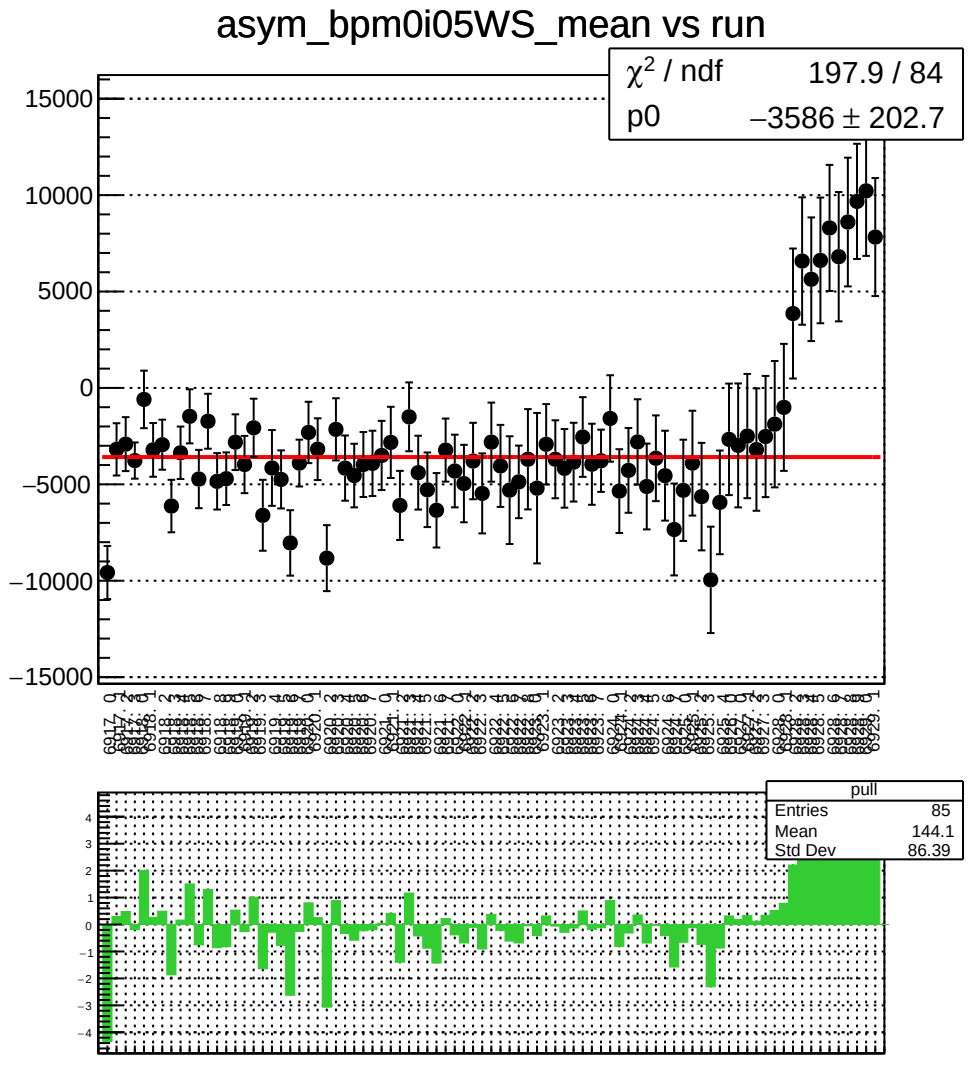

pull1D
Entries 85
Mean −0.9317
Std Dev 4.868
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

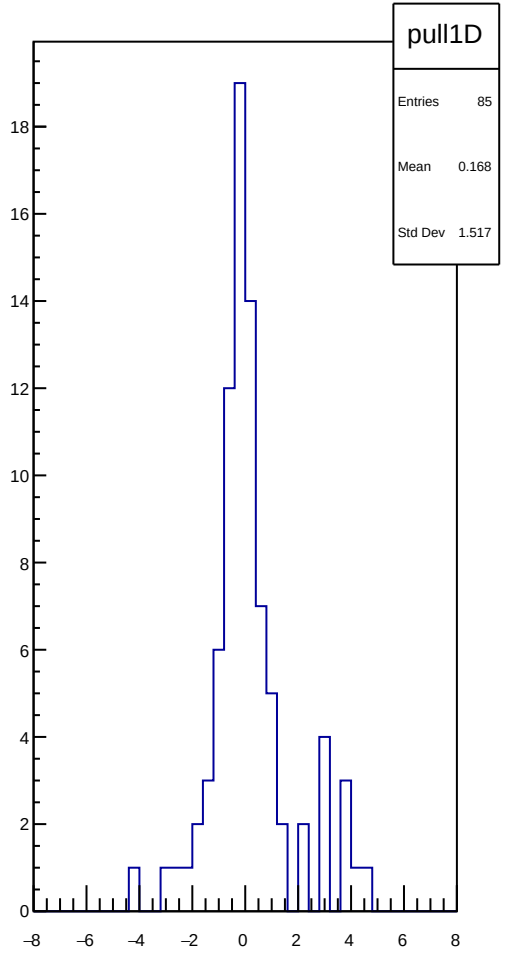

asym_bpm0i02WS_rms vs run
χ² / ndf 2.096e+04 / 84
p0 131.1 ± 0.1045
350
300
250
200
150
100

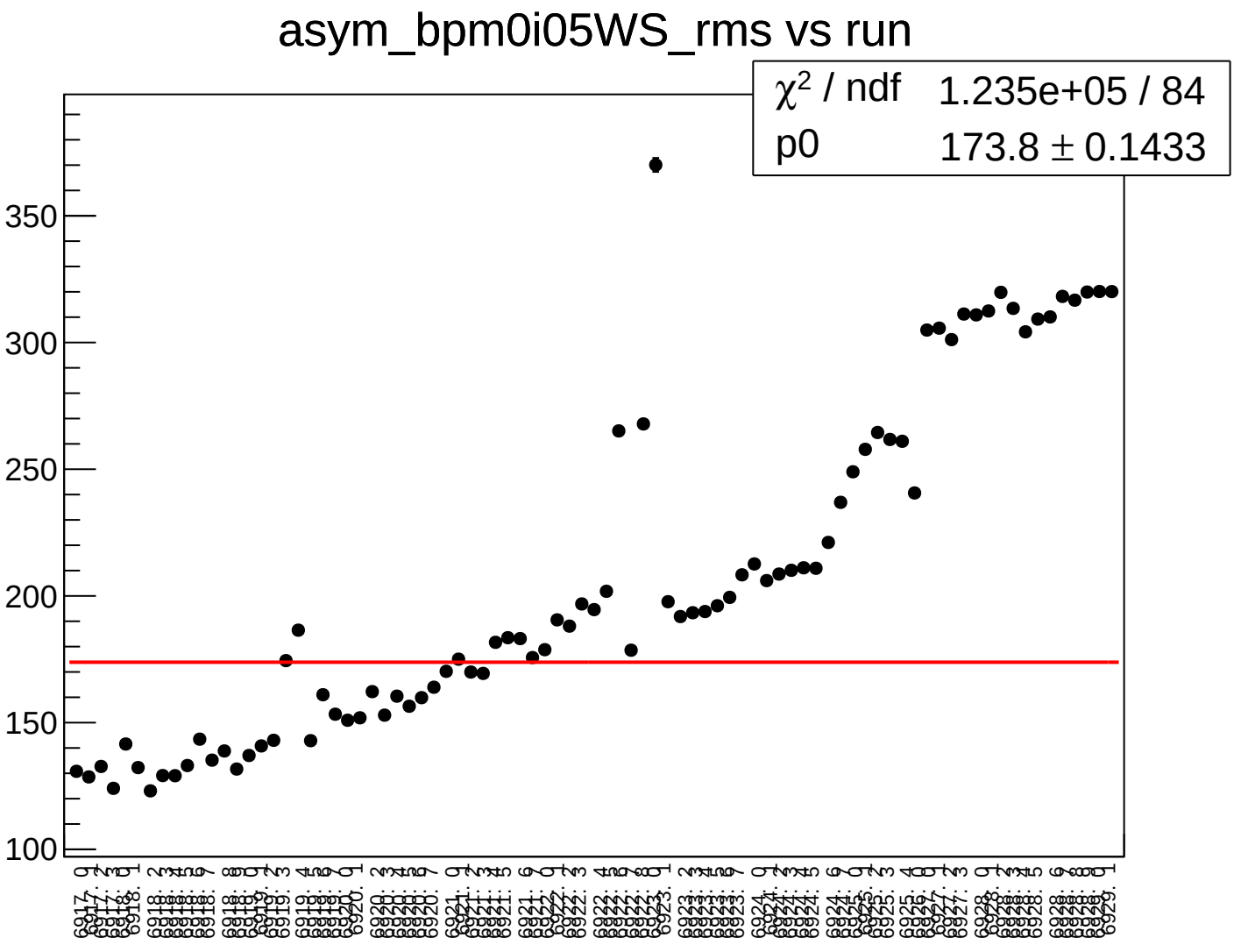

asym_bpm0i02aWS_mean vs run
χ² / ndf 1170 / 84
p0 −1.692e+04 ± 196.9
pull
Entries 85
Mean 130
Std Dev 82.79

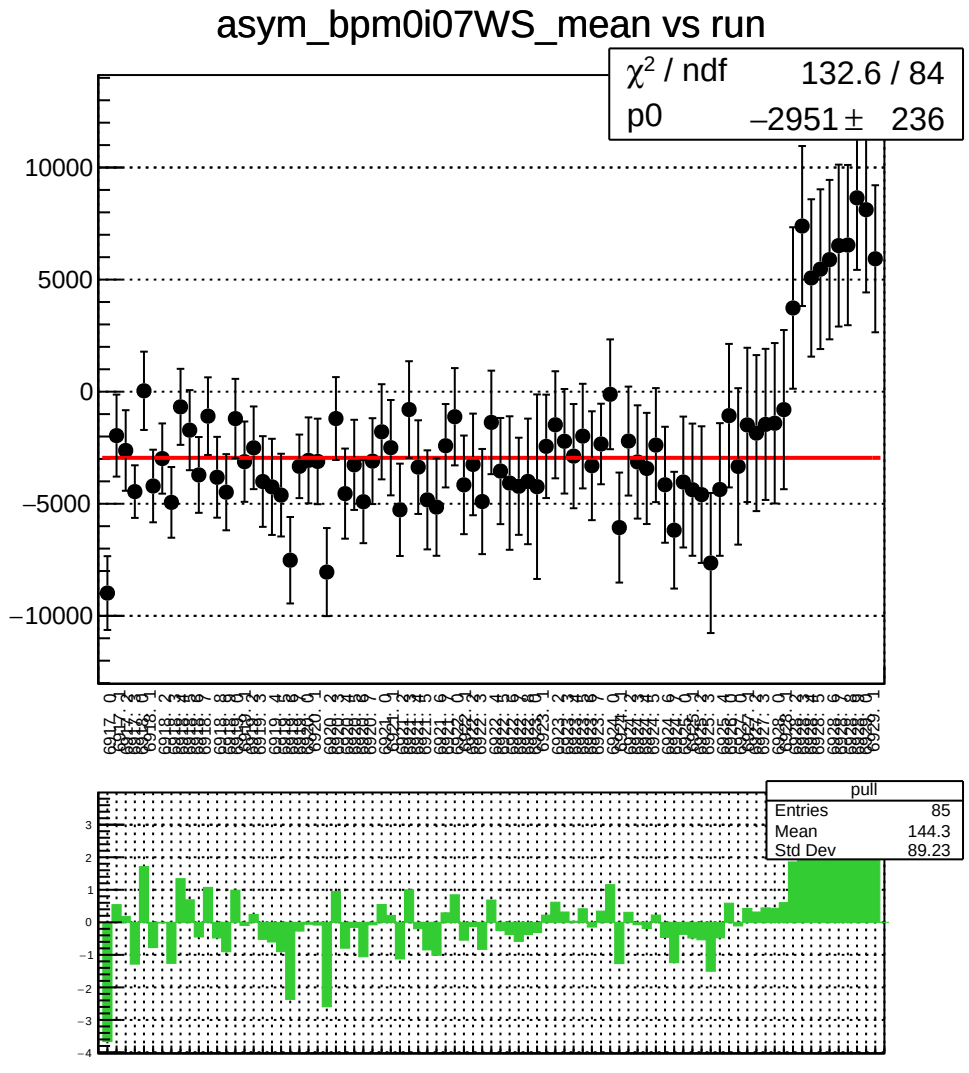

pull1D
Entries 85
Mean 0.7948
Std Dev 3.528

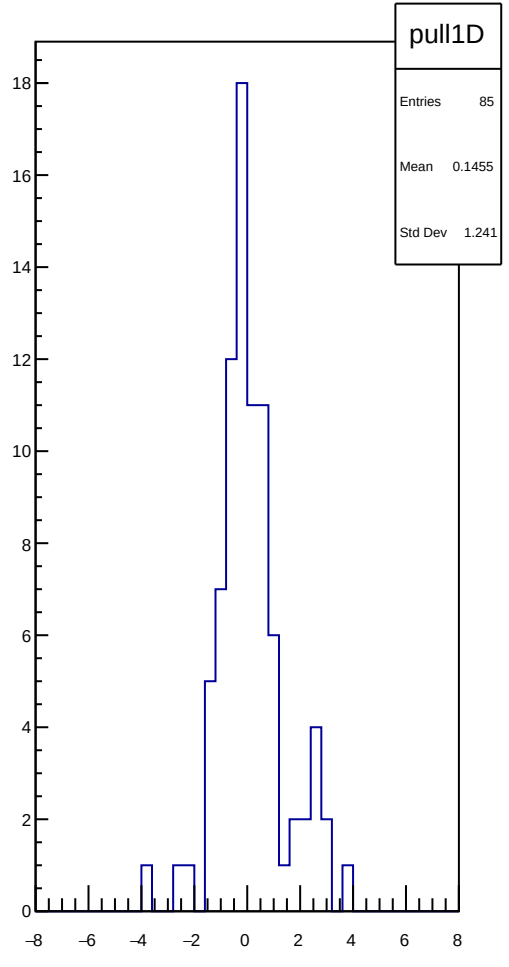

asym_bpm0i02aWS_rms vs run
χ² / ndf 1.226e+05 / 84
p0 168.9 ± 0.1392
400
350
300
250
200
150
100

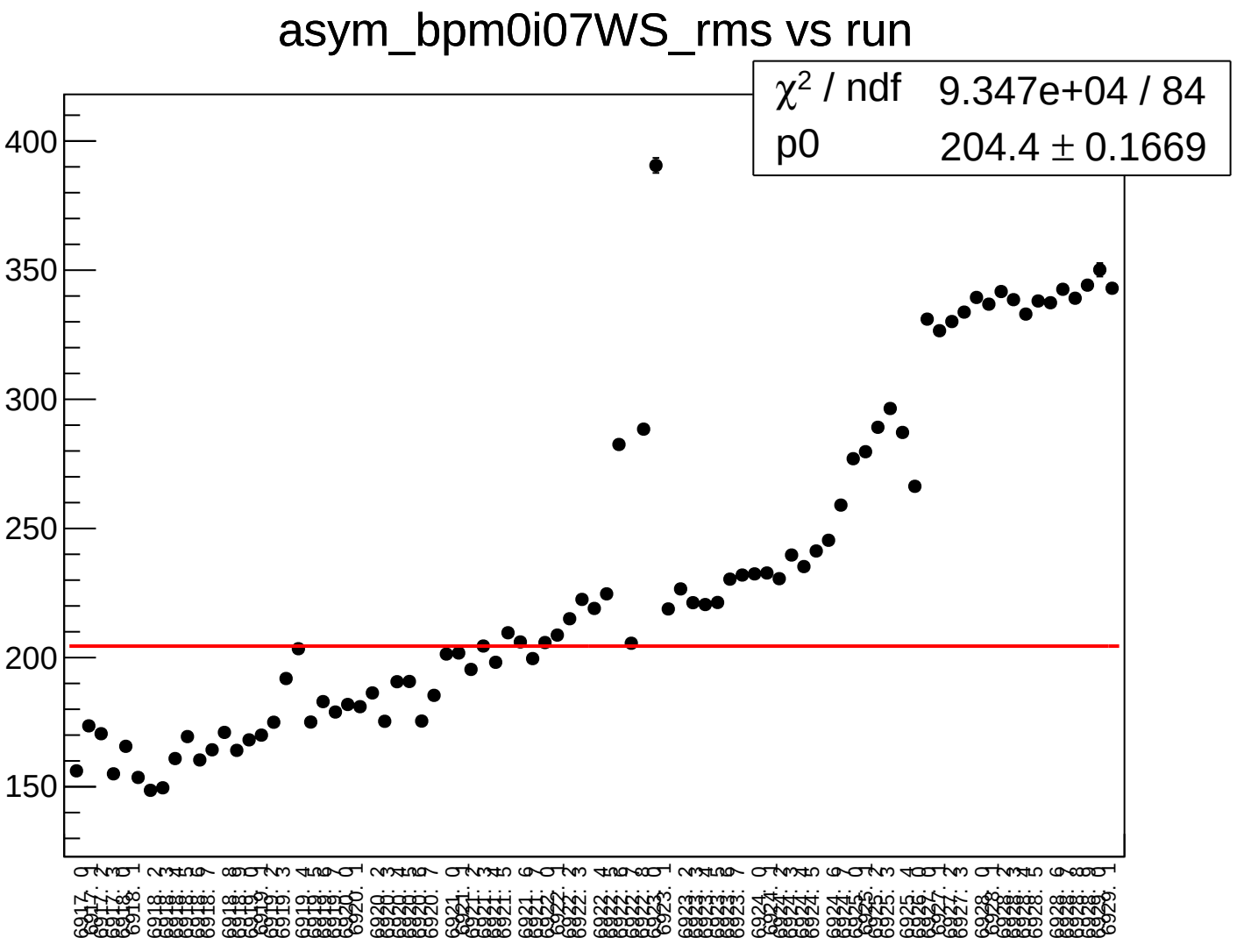

asym_bpm0i05WS_mean vs run
χ² / ndf 197.9 / 84
p0 −3586 ± 202.7
pull
Entries 85
Mean 144.1
Std Dev 86.39

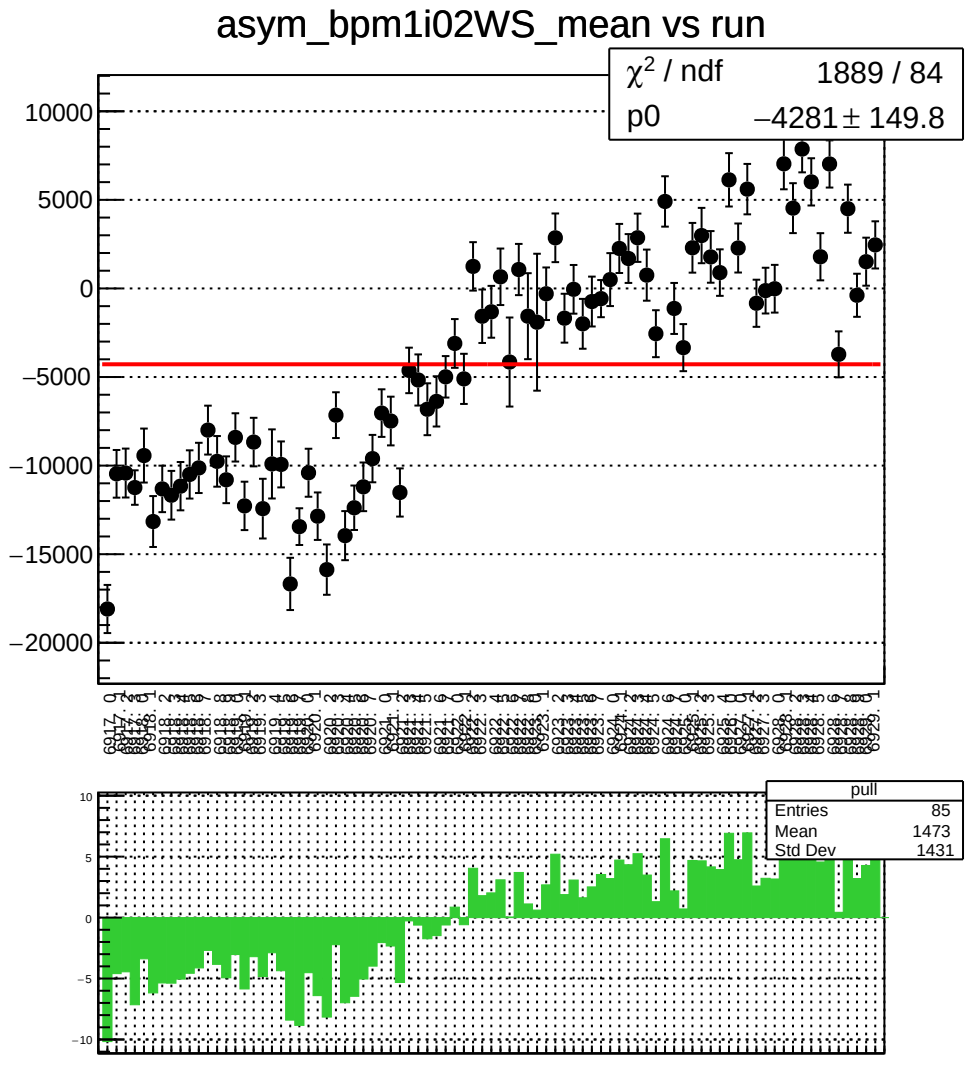

pull1D
Entries 85
Mean 0.168
Std Dev 1.517

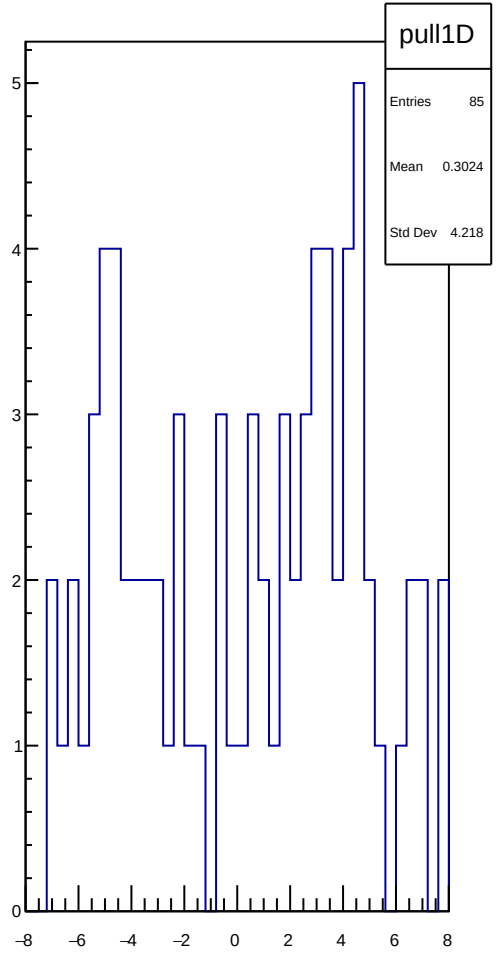

asym_bpm0i05WS_rms vs run
χ^2 / ndf 1.235e+05 / 84
p0 173.8 ± 0.1433
350
300
250
200
150
100

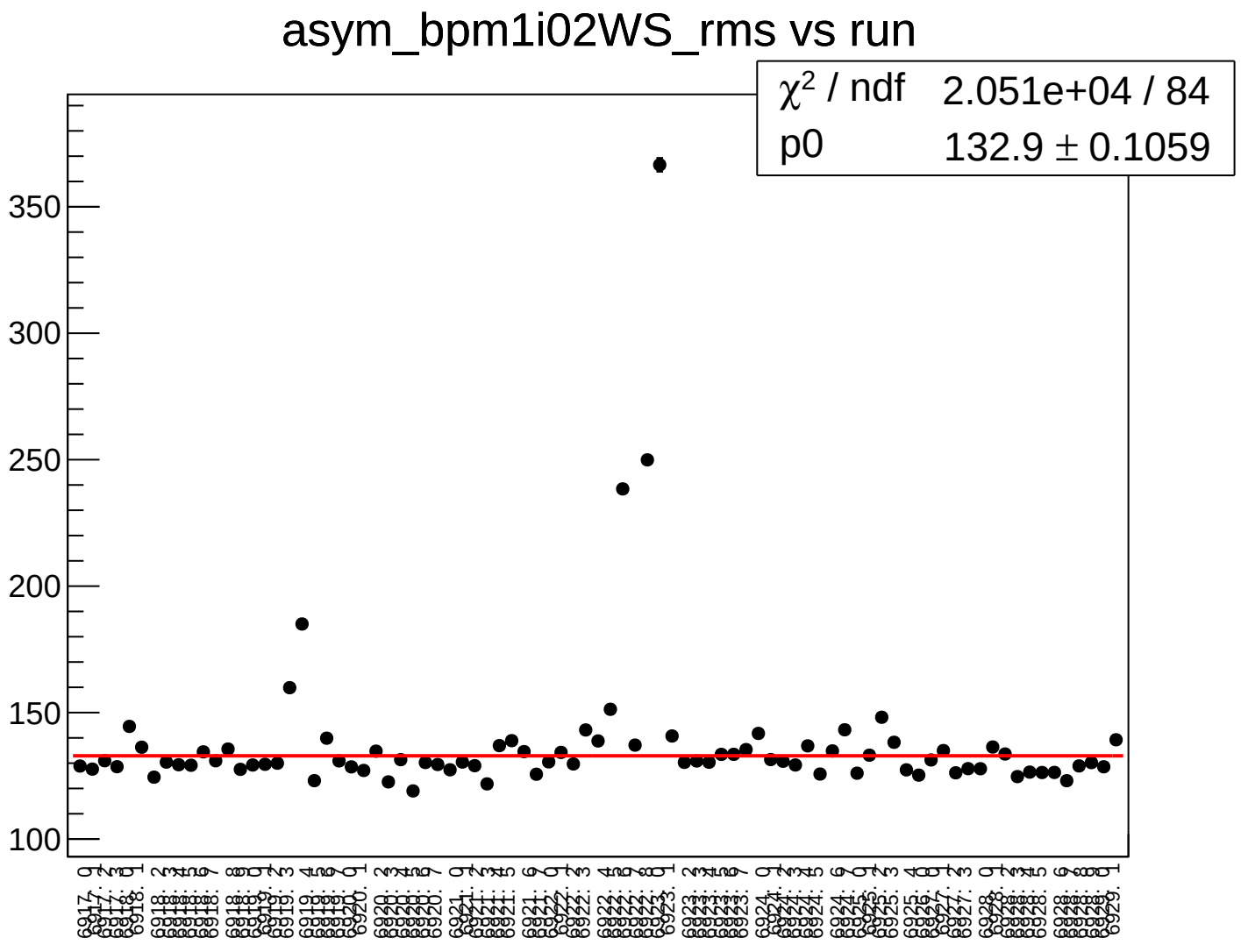

asym_bpm0i07WS_mean vs run
χ² / ndf 132.6 / 84
p0 −2951 ± 236
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 144.3
Std Dev 89.23
3
2
1
0
−1
−2
−3
−4

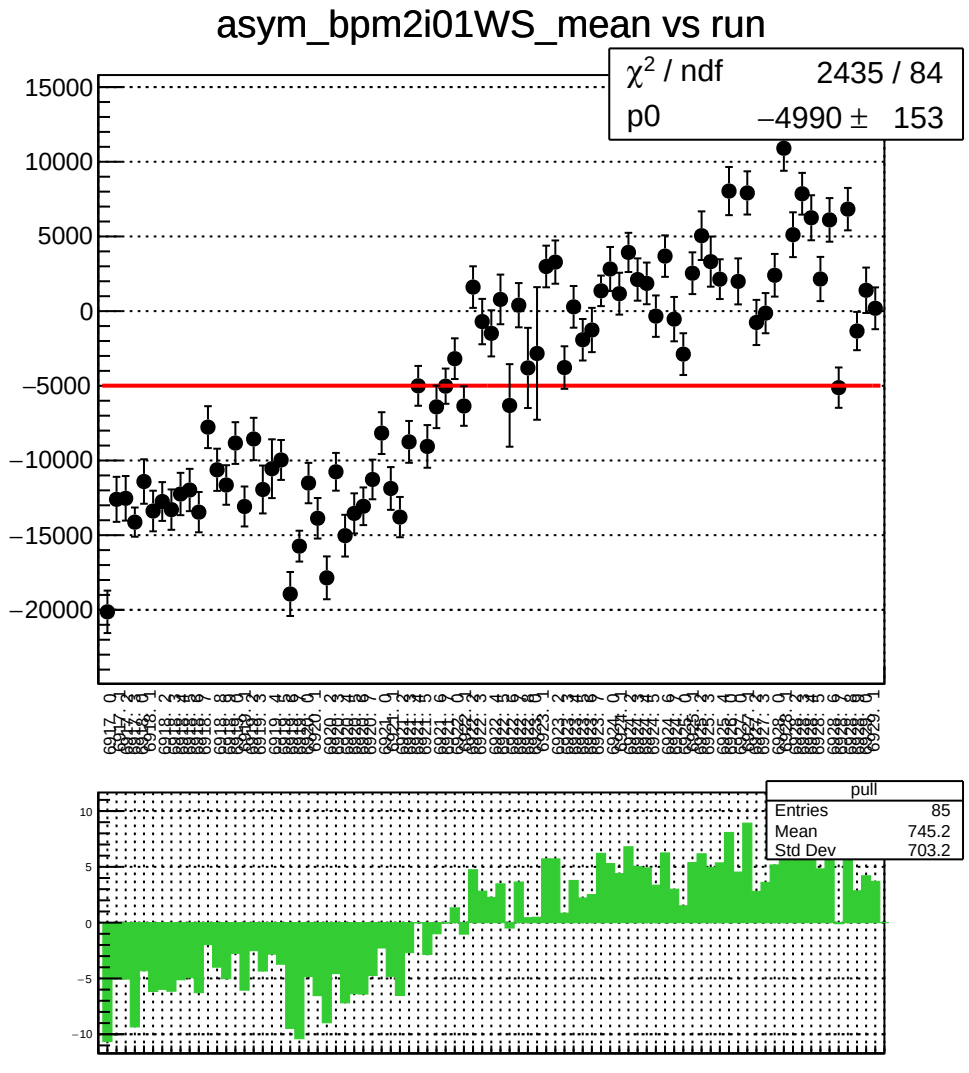

pull1D
Entries 85
Mean 0.1455
Std Dev 1.241
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

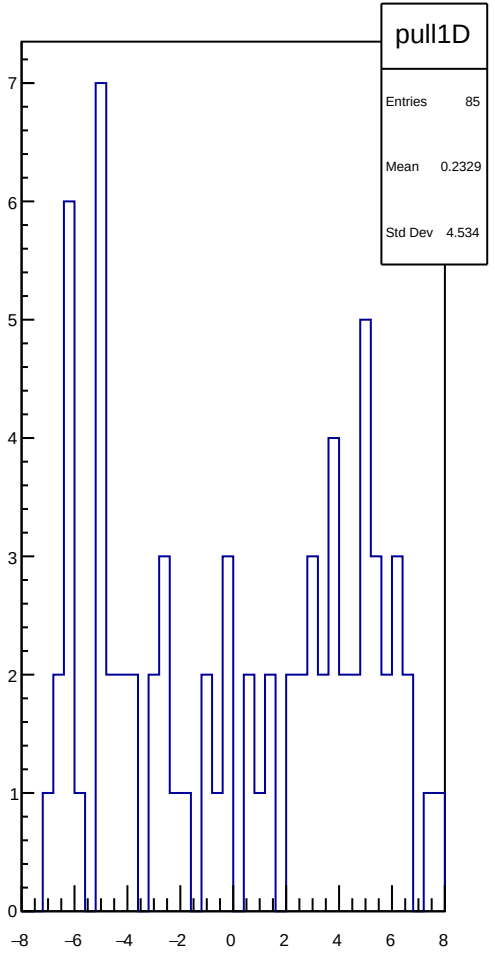

asym_bpm0i07WS_rms vs run
χ² / ndf 9.347e+04 / 84
p0 204.4 ± 0.1669
400
350
300
250
200
150

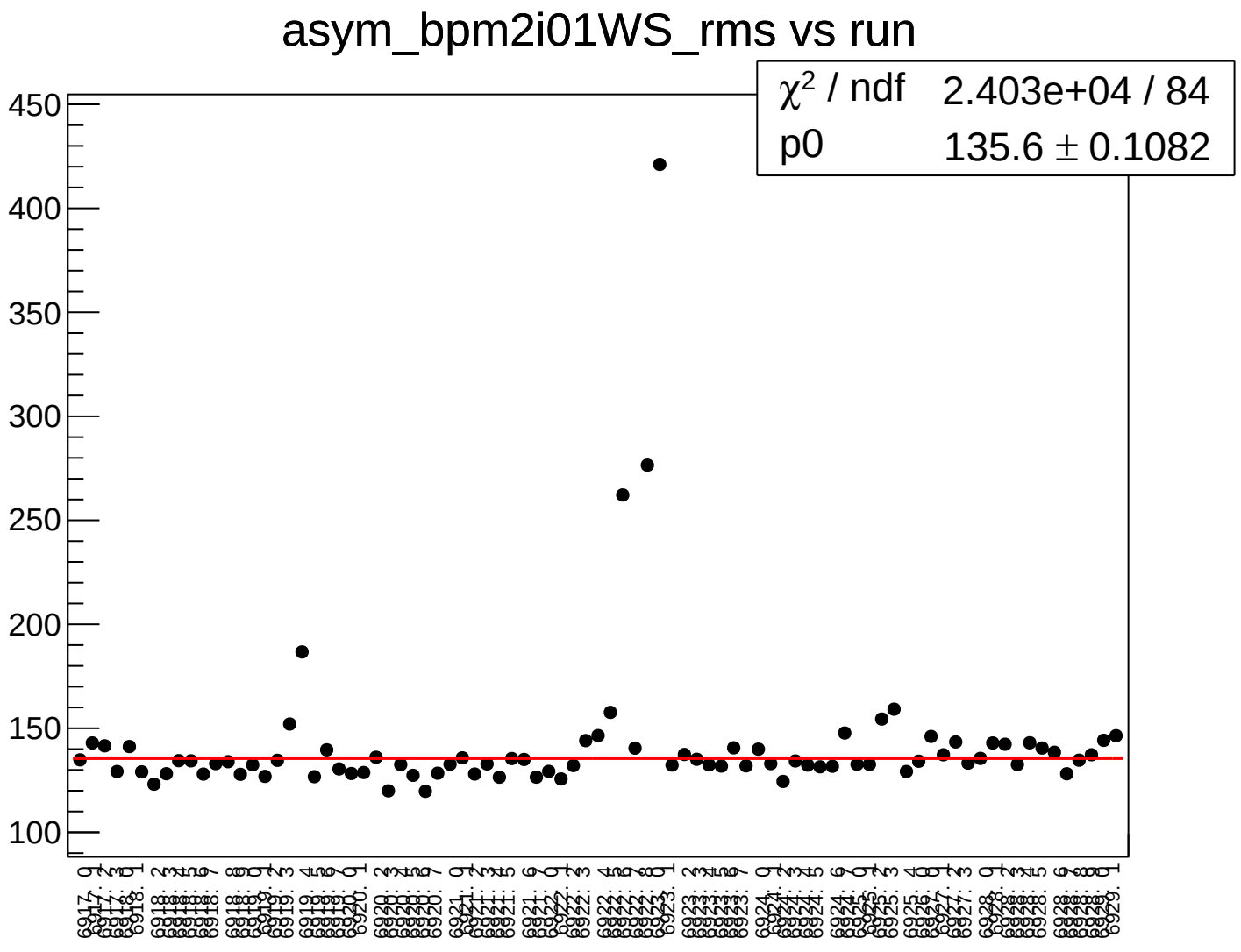

asym_bpm1i02WS_mean vs run
χ² / ndf 1889 / 84
p0 −4281 ± 149.8
pull
Entries 85
Mean 1473
Std Dev 1431

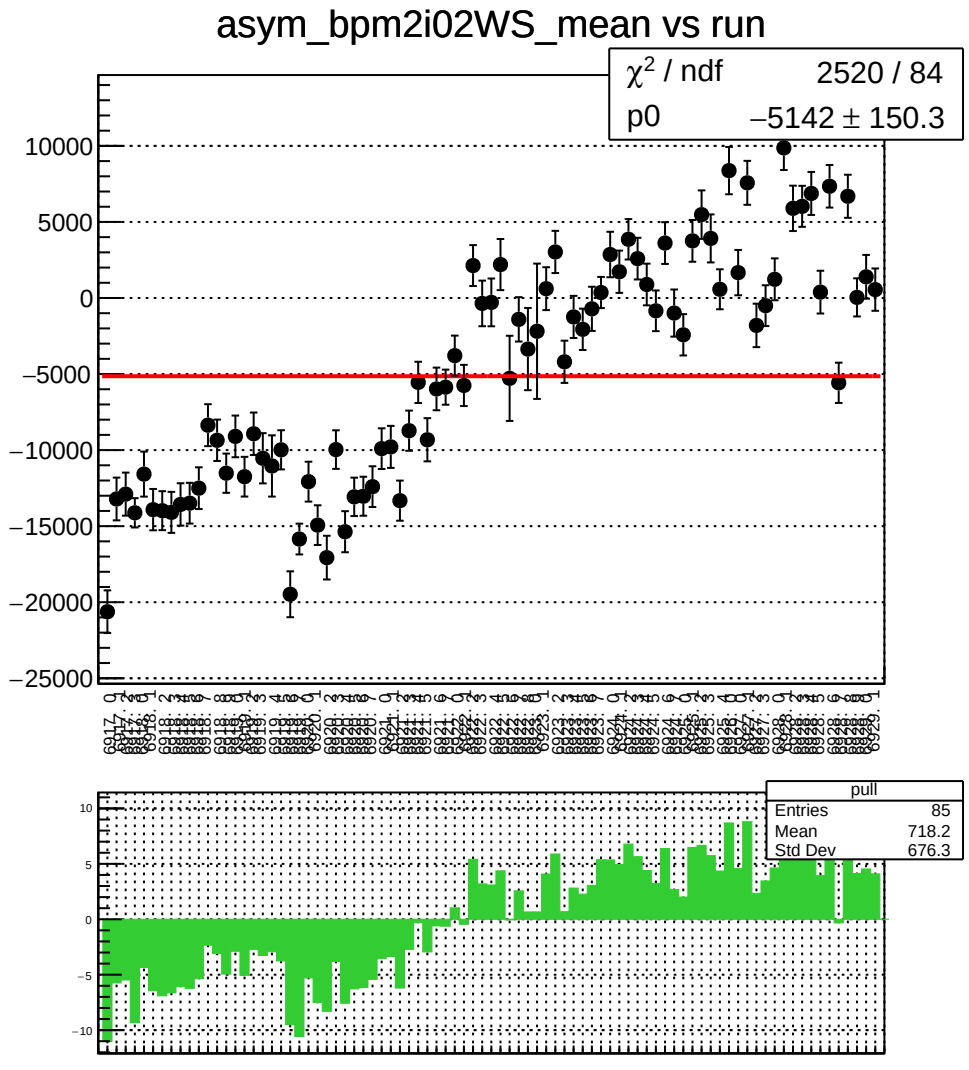

pull1D
Entries 85
Mean 0.3024
Std Dev 4.218

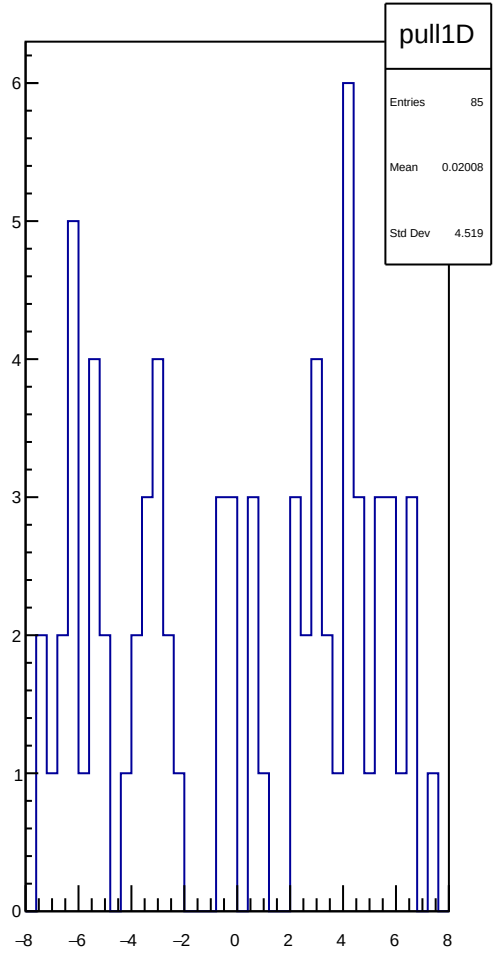

asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.051e+04 / 84
p0 132.9 ± 0.1059
350
300
250
200
150
100

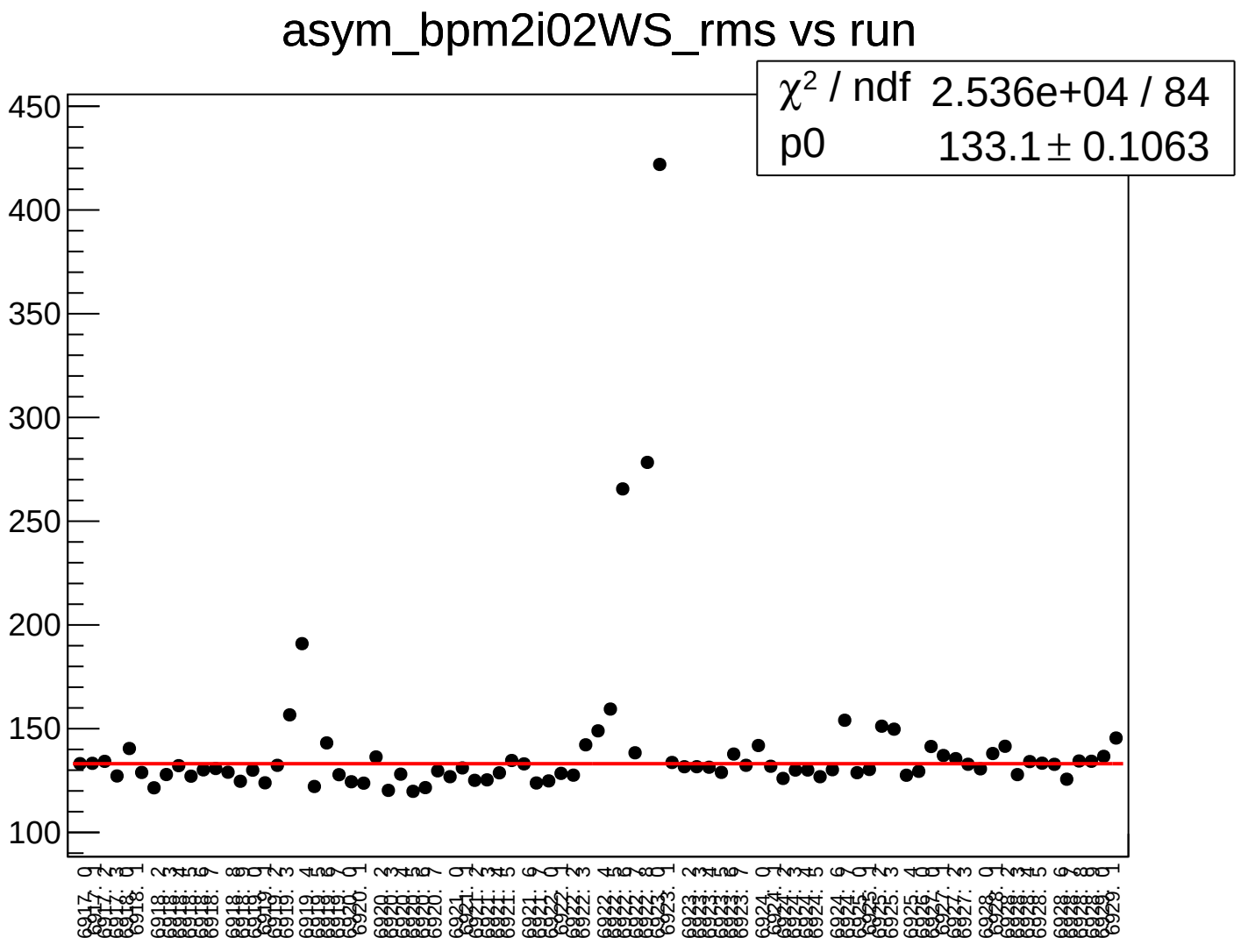

asym_bpm2i01WS_mean vs run
χ² / ndf 2435 / 84
p0 −4990 ± 153
pull
Entries 85
Mean 745.2
Std Dev 703.2

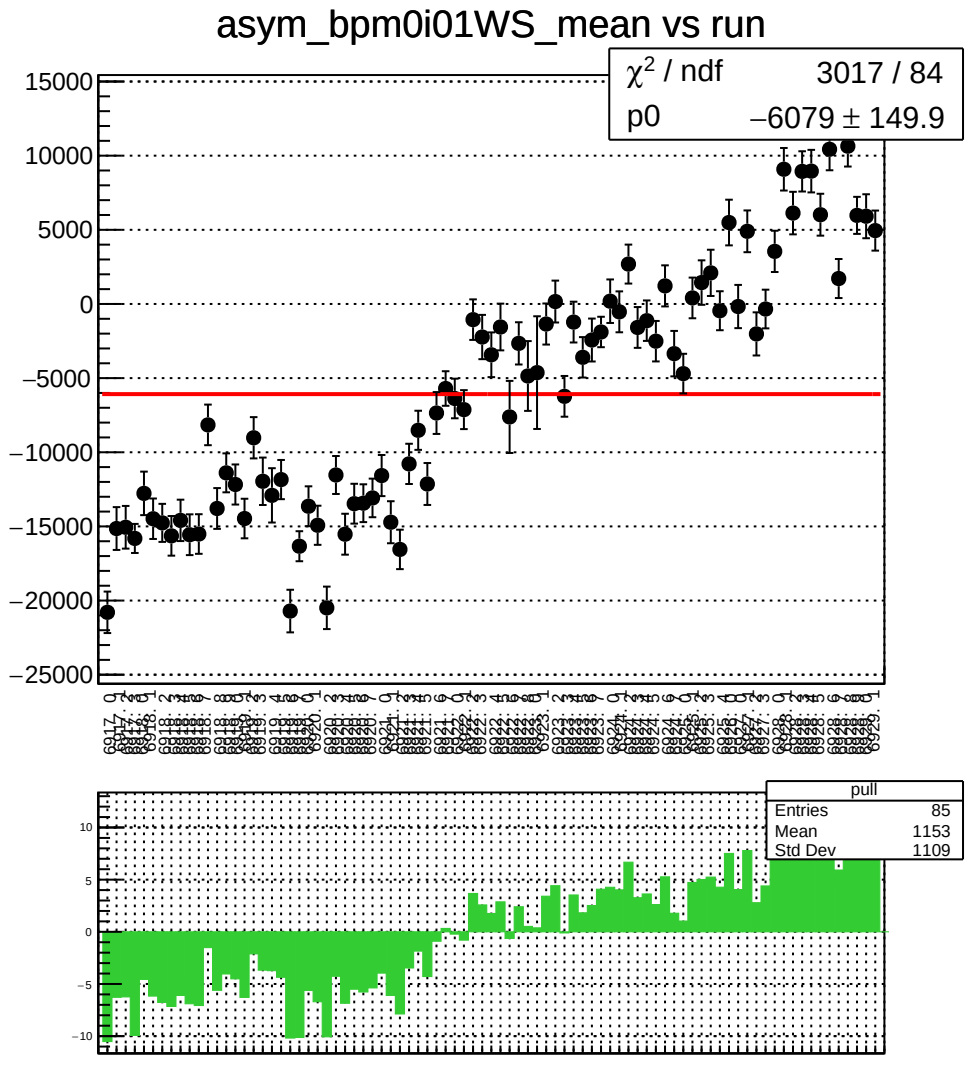

pull1D
Entries 85
Mean 0.2329
Std Dev 4.534

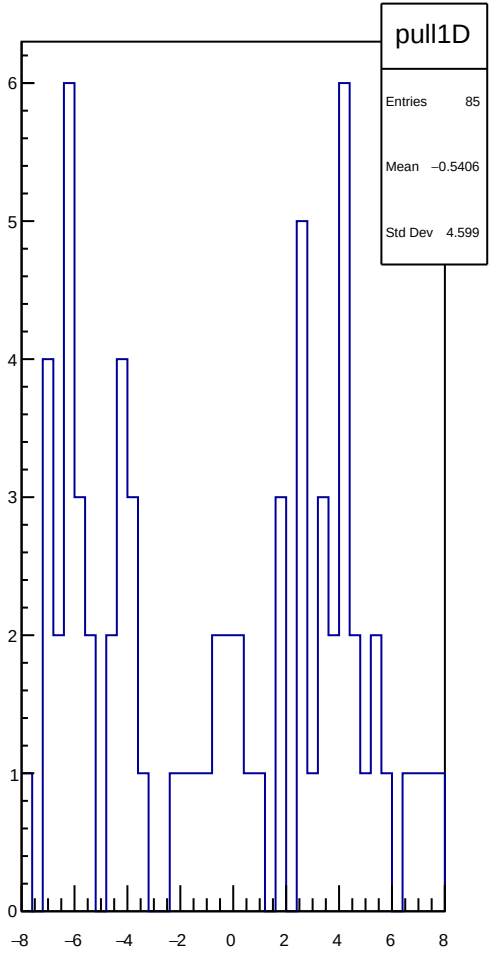

asym_bpm2i01WS_rms vs run
χ^2 / ndf 2.403e+04 / 84
p0 135.6 ± 0.1082
450
400
350
300
250
200
150
100

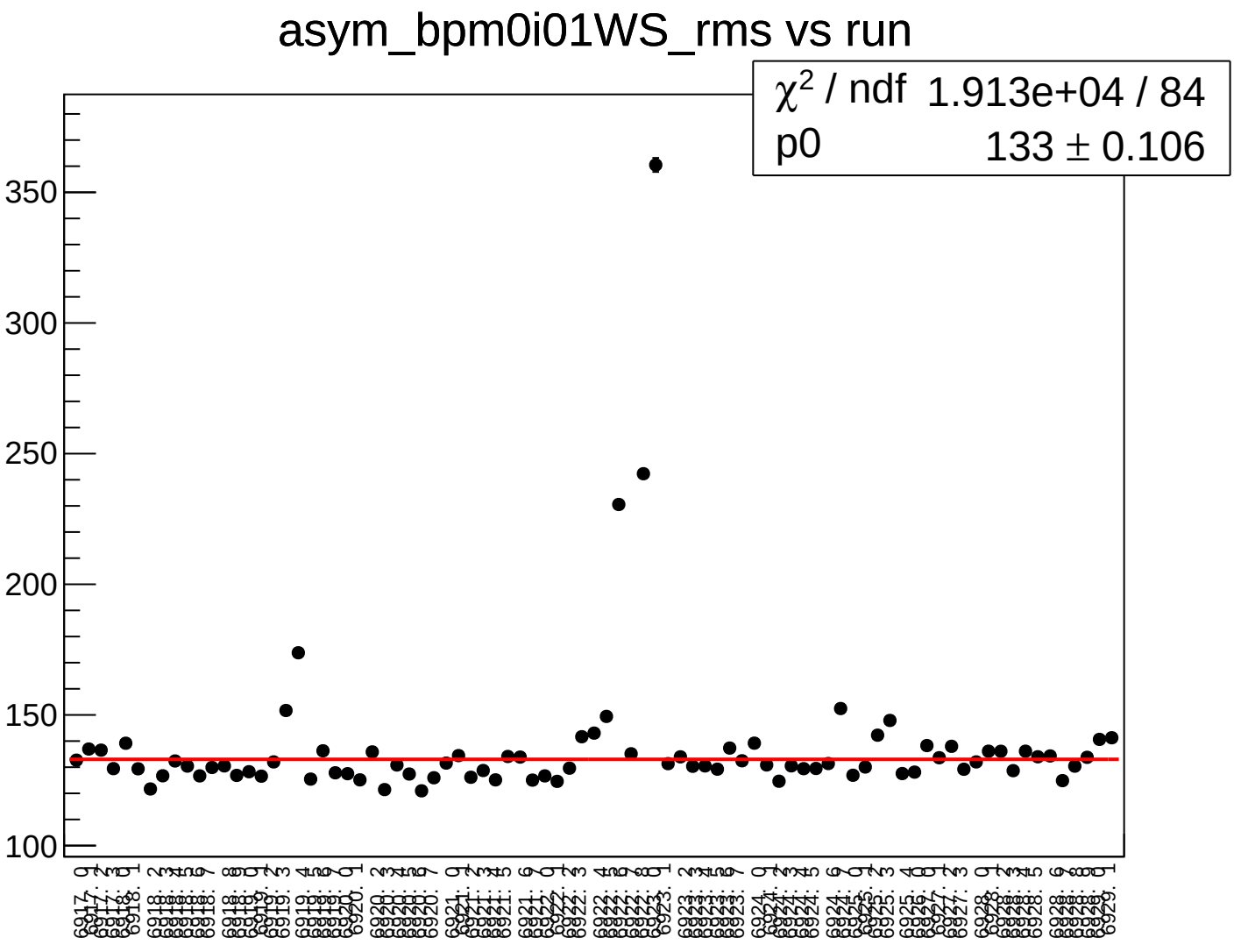

asym_bpm2i02WS_mean vs run
χ² / ndf 2520 / 84
p0 −5142 ± 150.3
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 85
Mean 718.2
Std Dev 676.3
10
5
0
−5
−10

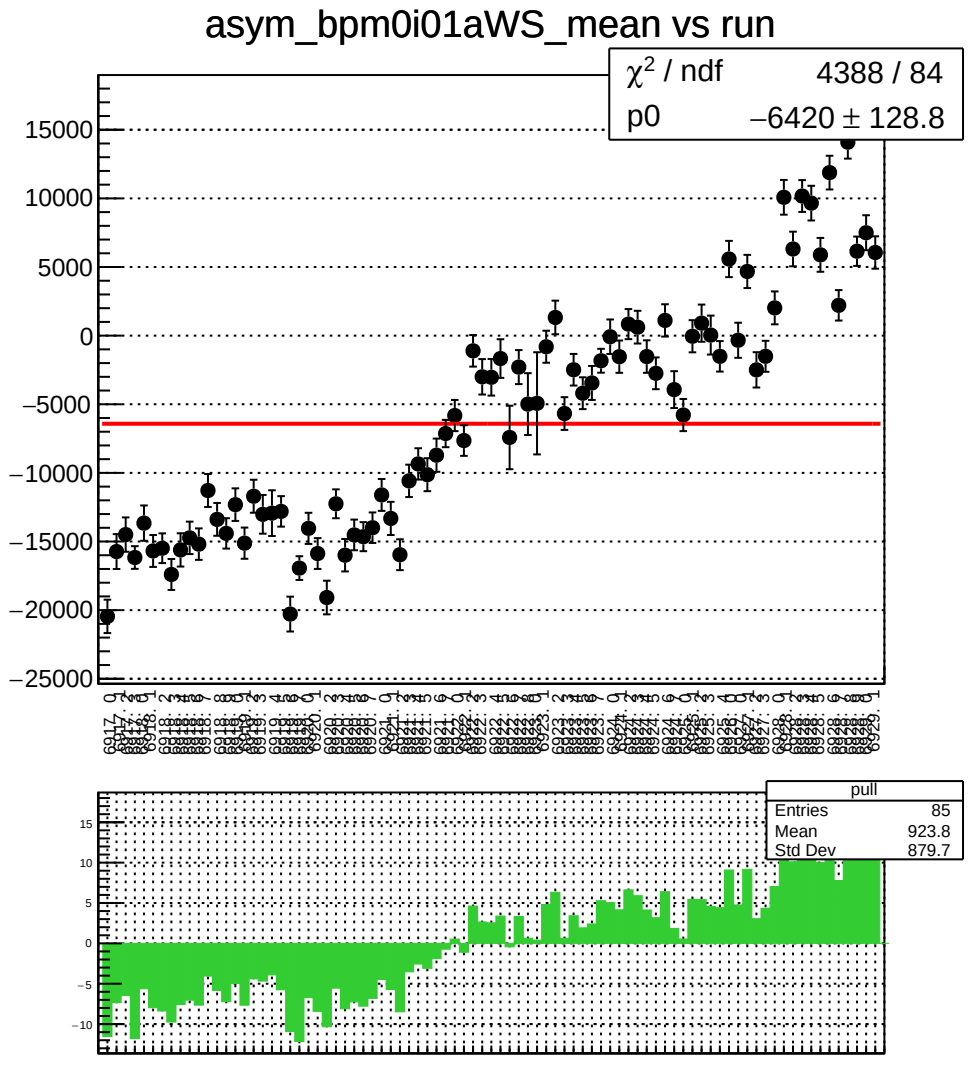

pull1D
Entries 85
Mean 0.02008
Std Dev 4.519
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

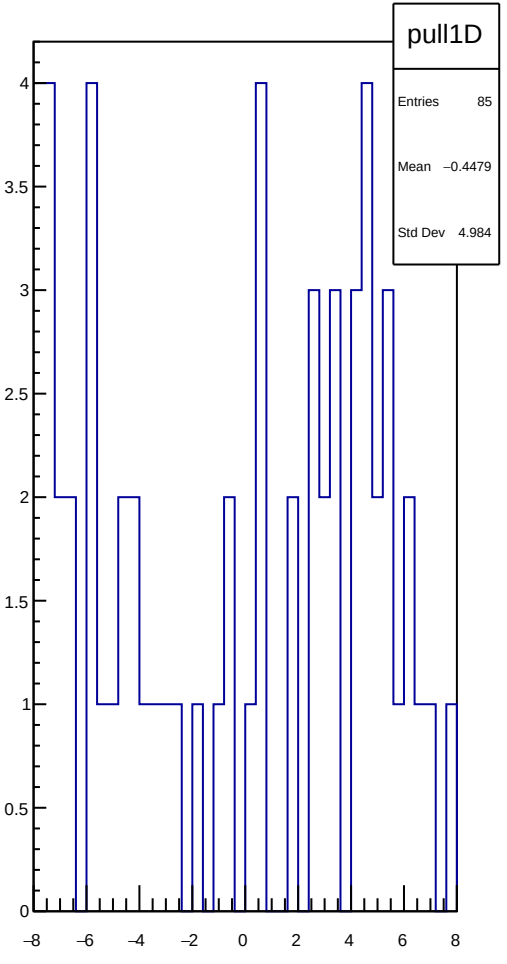

asym_bpm2i02WS_rms vs run
χ² / ndf 2.536e+04 / 84
p0 133.1 ± 0.1063
450
400
350
300
250
200
150
100

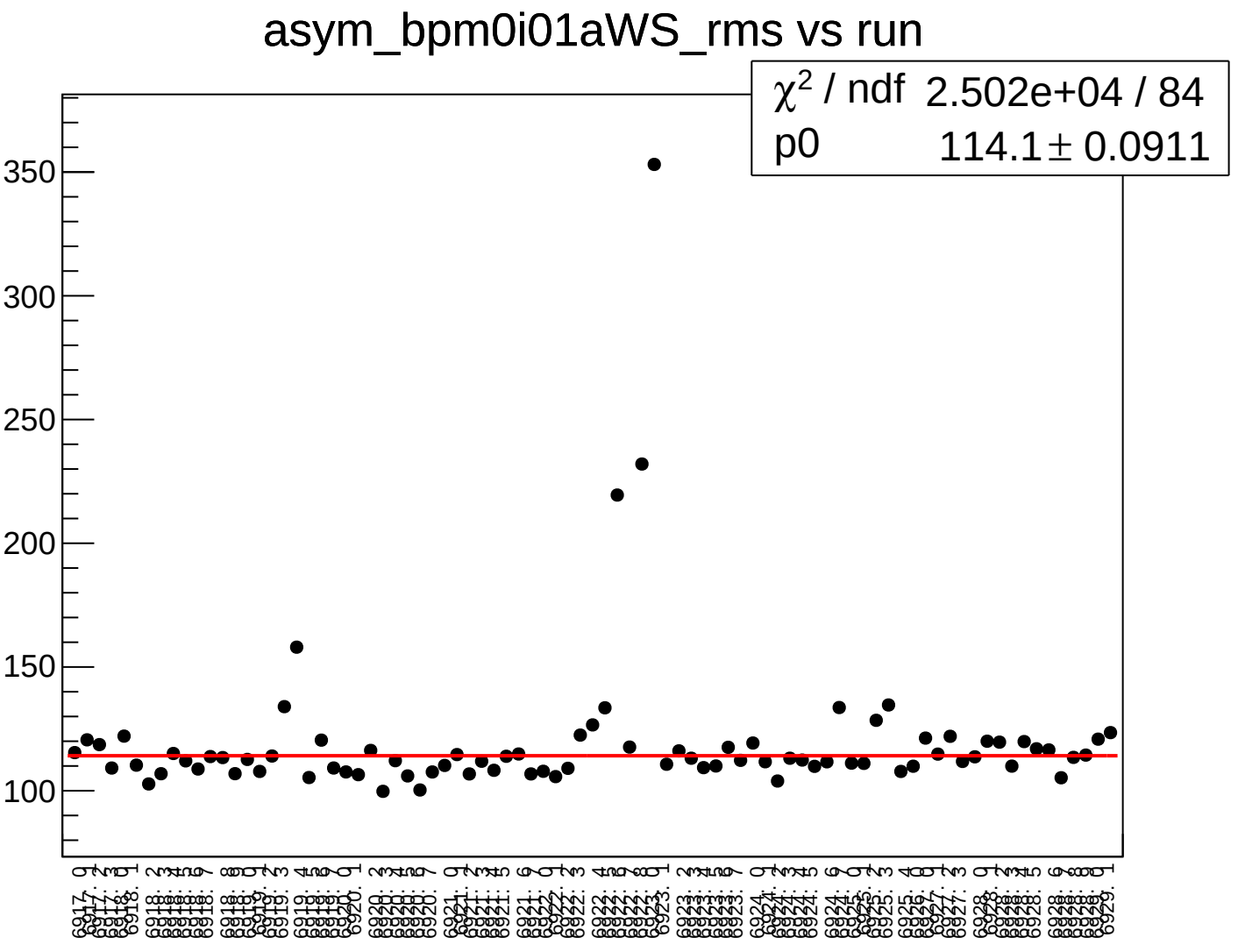

asym_bpm0i01WS_mean vs run
χ² / ndf 3017 / 84
p0 −6079 ± 149.9
pull
Entries 85
Mean 1153
Std Dev 1109

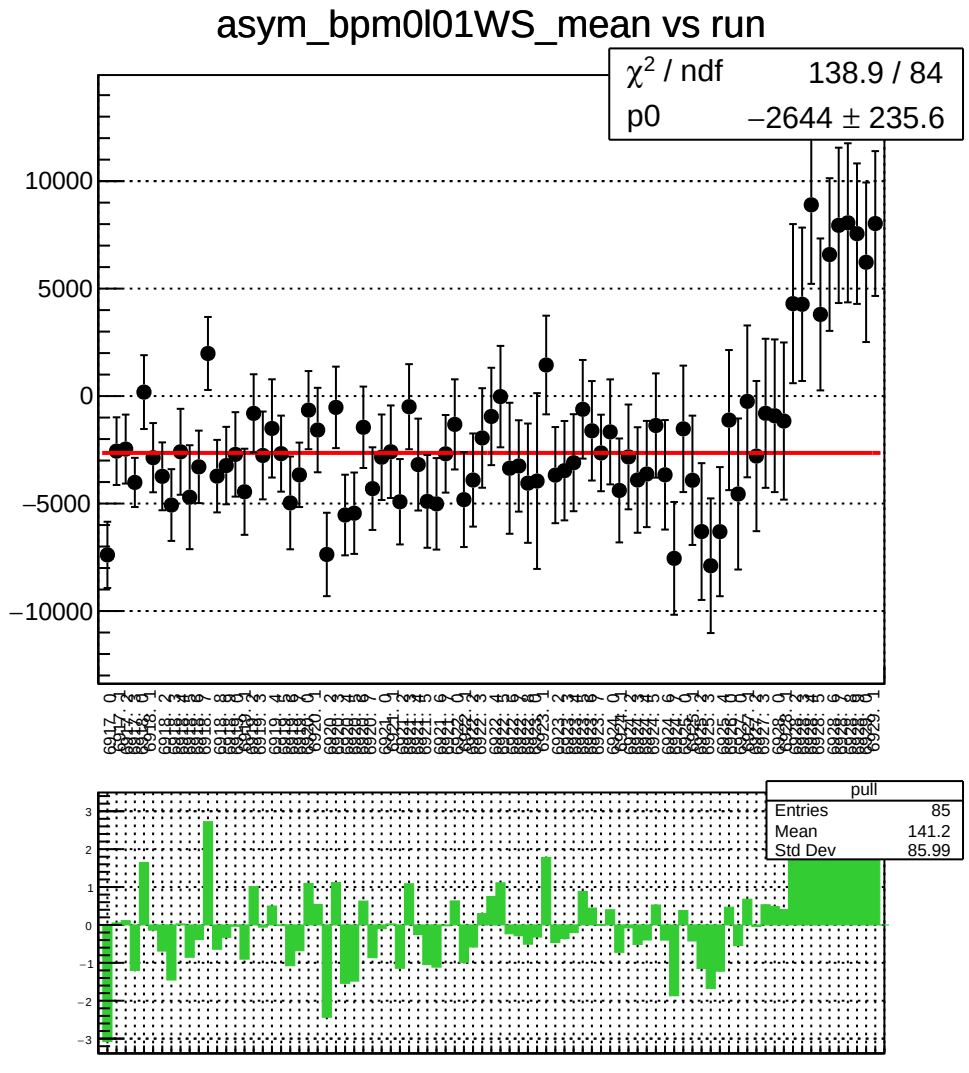

pull1D
Entries 85
Mean −0.5406
Std Dev 4.599

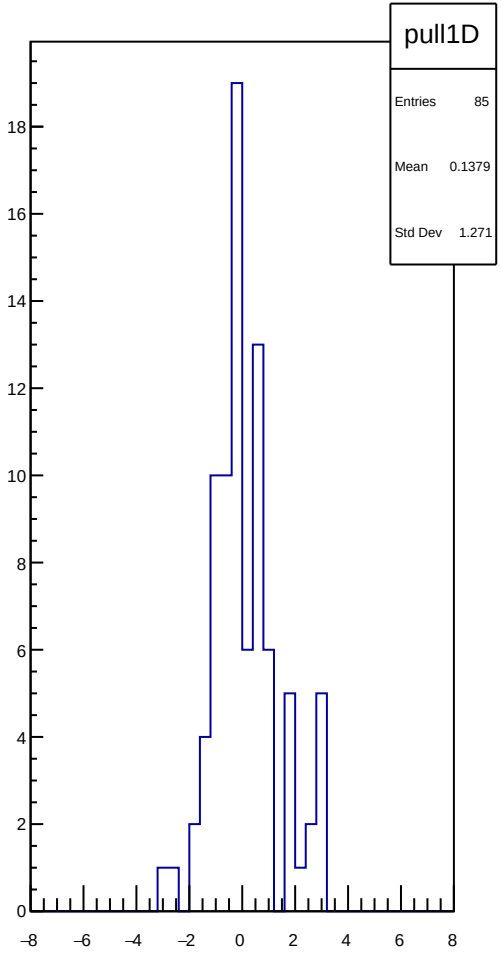

asym_bpm0i01WS_rms vs run
χ^2 / ndf 1.913e+04 / 84
p0 133 ± 0.106
350
300
250
200
150
100

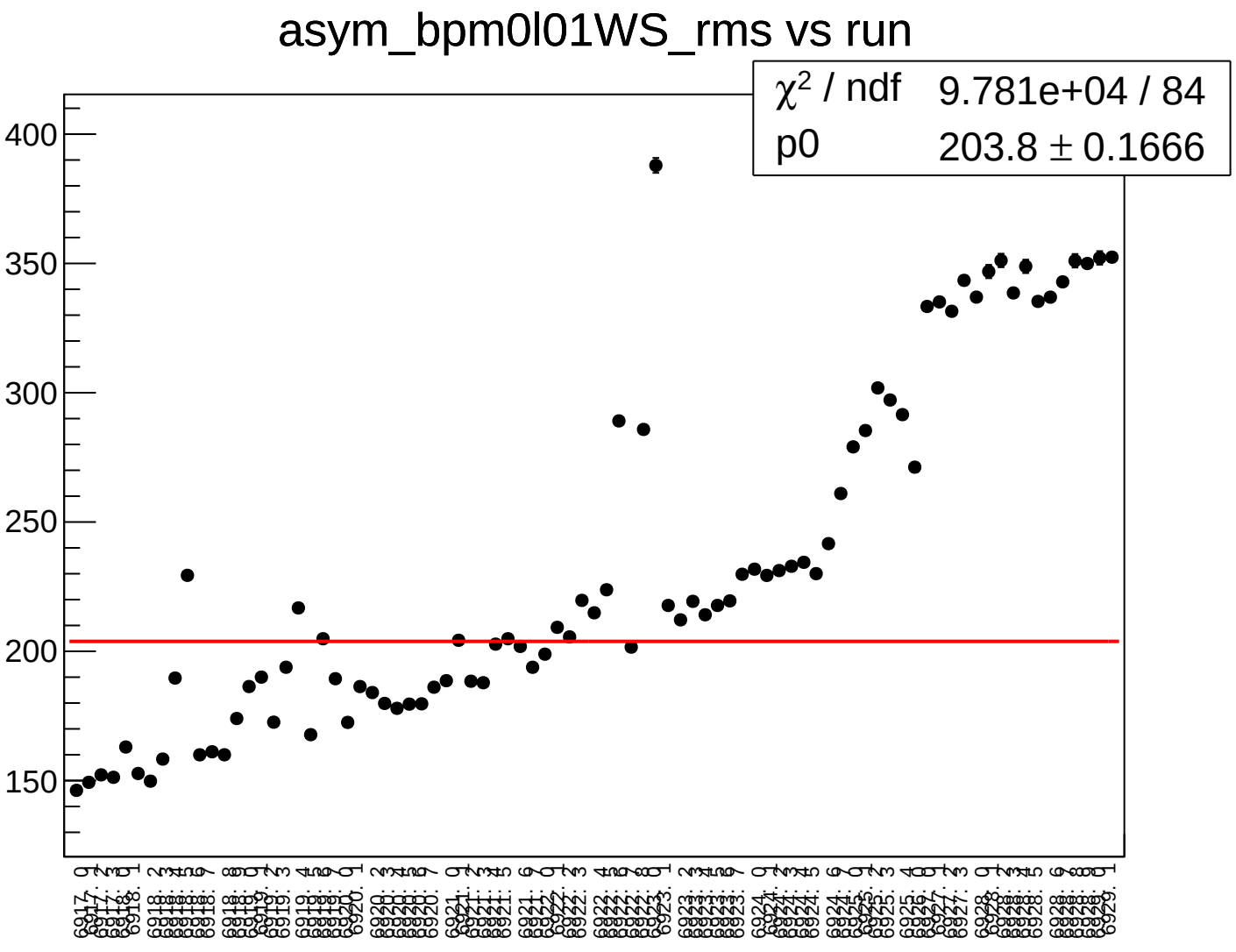

asym_bpm0i01aWS_mean vs run
χ² / ndf 4388 / 84
p0 −6420 ± 128.8
pull
Entries 85
Mean 923.8
Std Dev 879.7

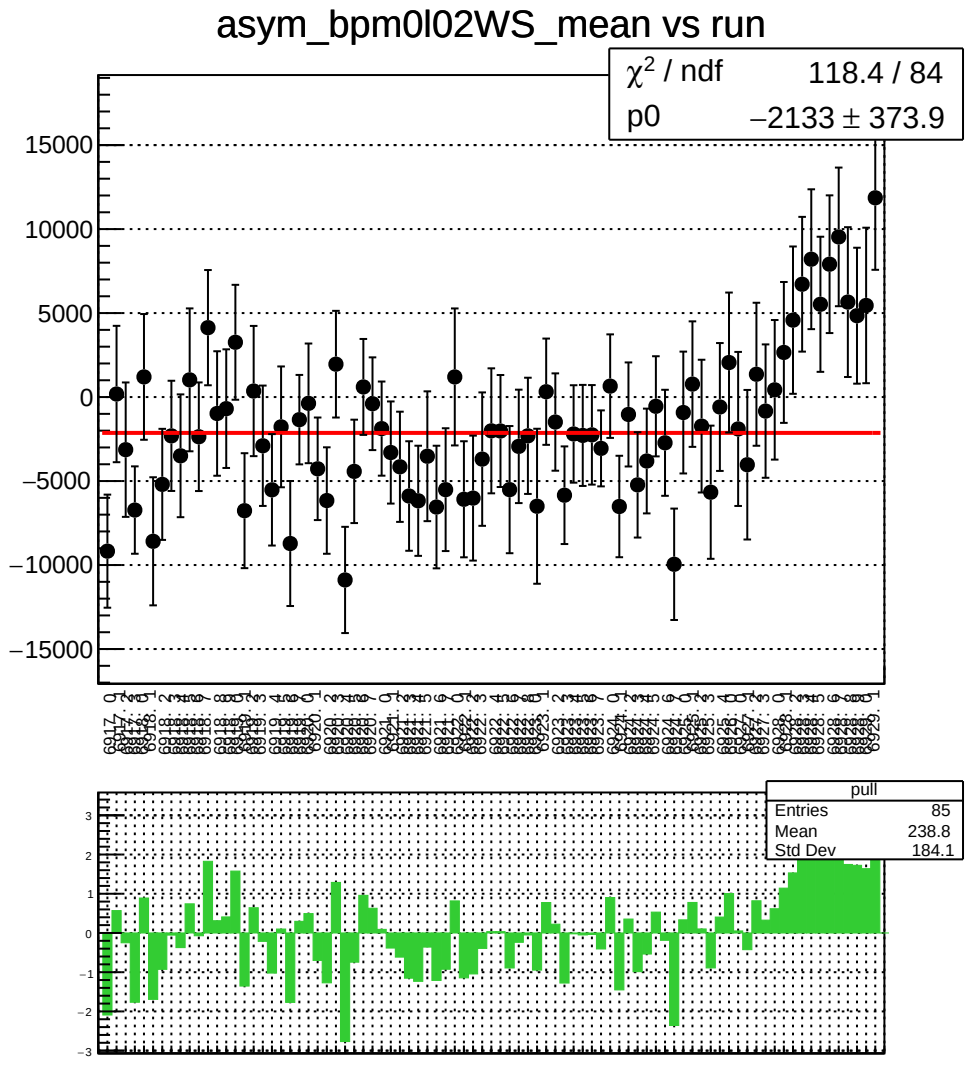

pull1D
Entries 85
Mean −0.4479
Std Dev 4.984

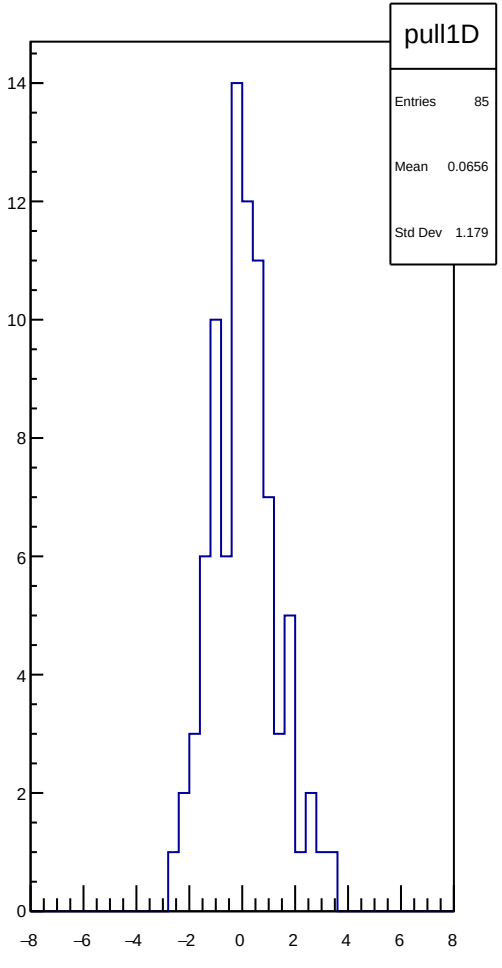

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 2.502e+04 / 84
p0 114.1 ± 0.0911
350
300
250
200
150
100

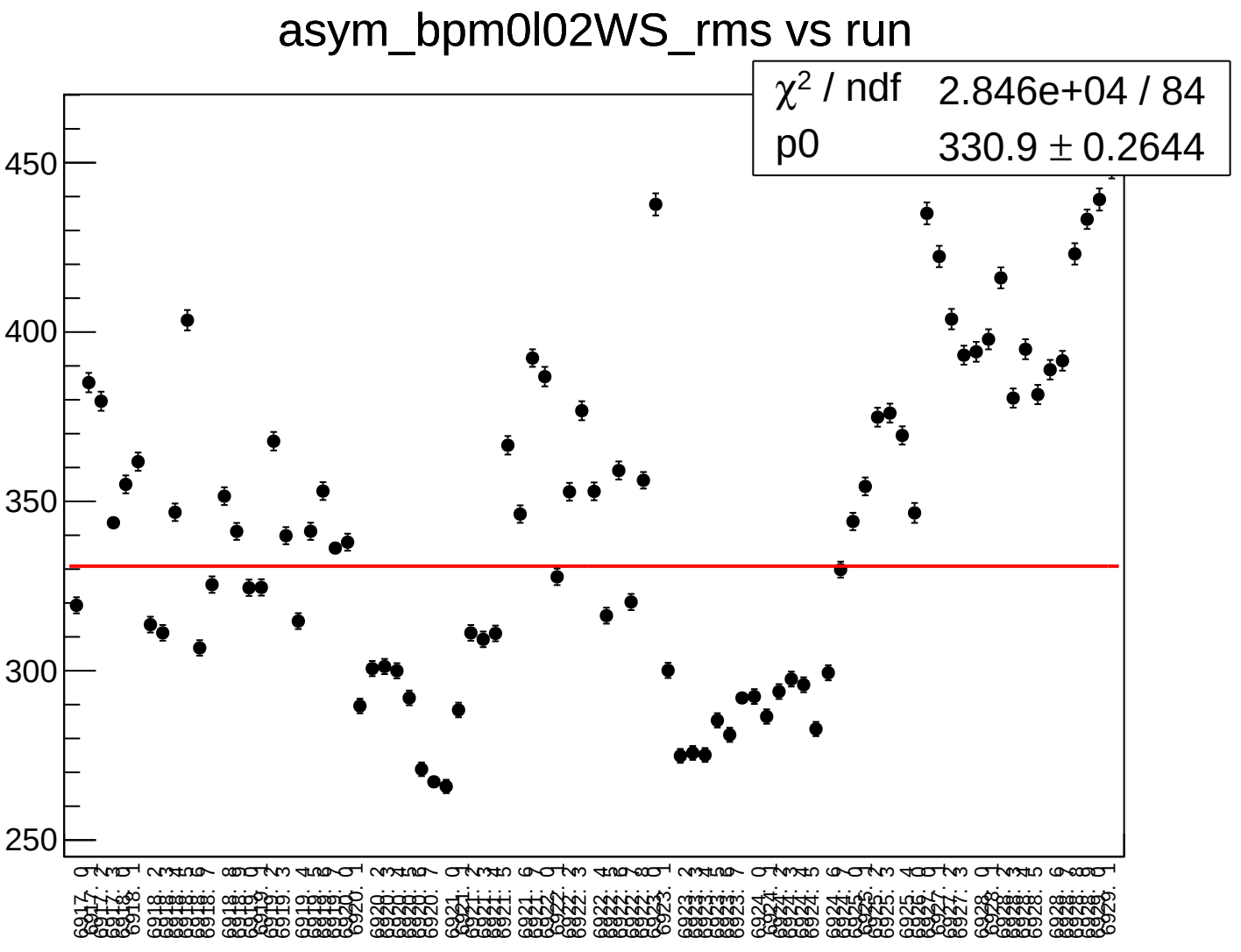

asym_bpm0l01WS_mean vs run
χ² / ndf 138.9 / 84
p0 −2644 ± 235.6
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 141.2
Std Dev 85.99
3
2
1
0
−1
−2
−3

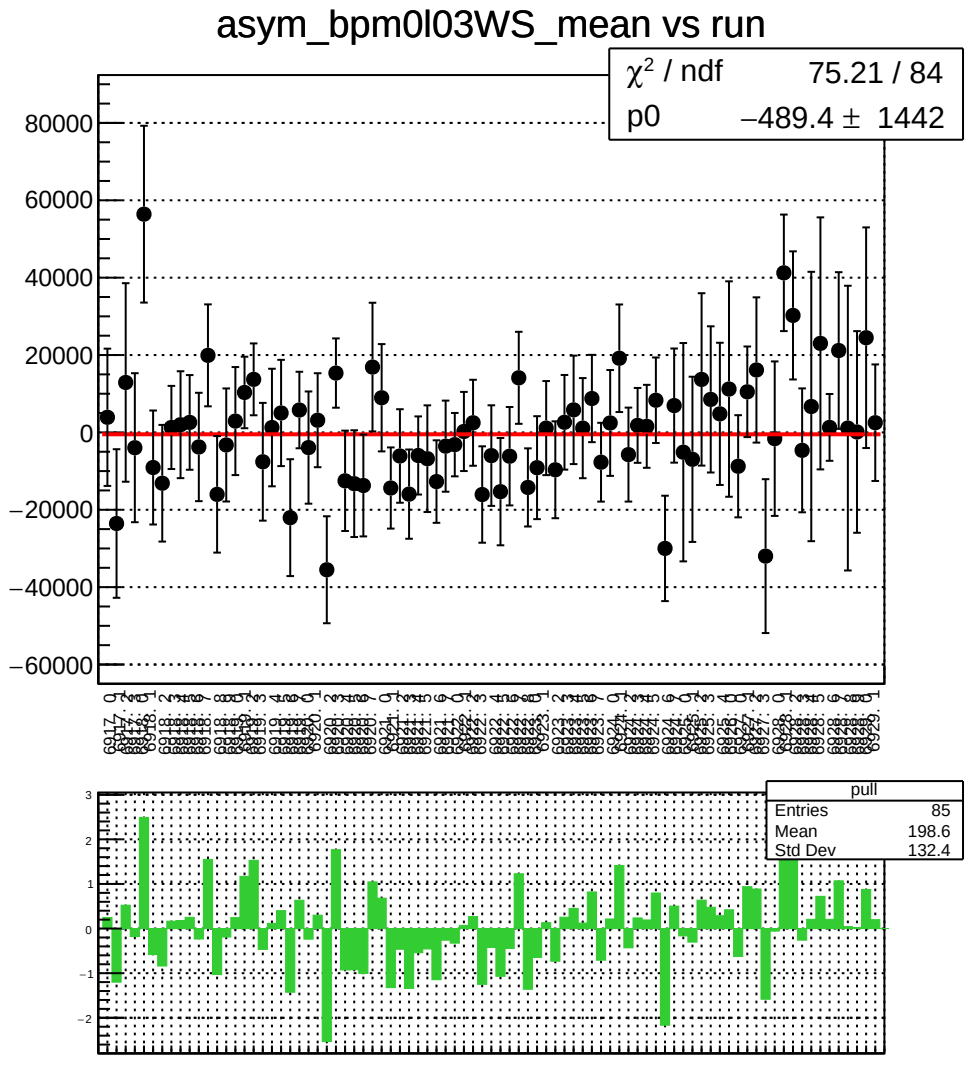

pull1D
Entries 85
Mean 0.1379
Std Dev 1.271
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

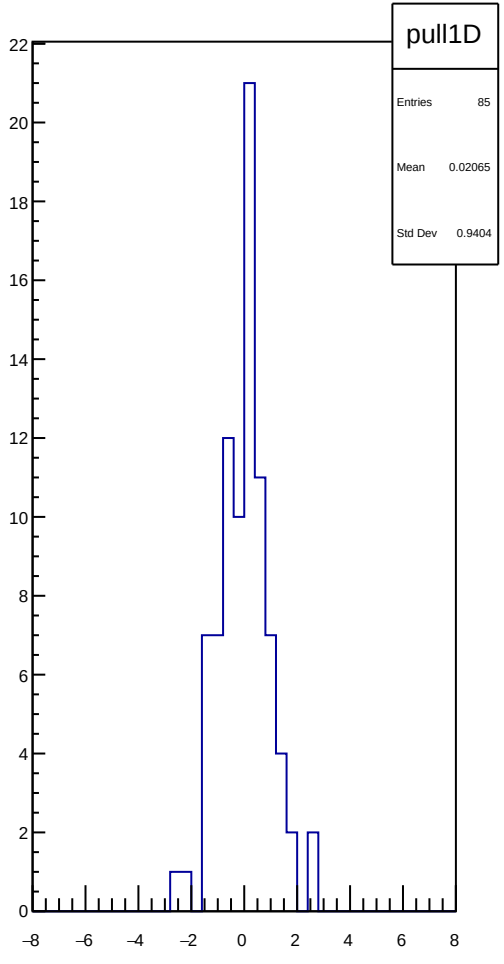

asym_bpm0l01WS_rms vs run
χ² / ndf 9.781e+04 / 84
p0 203.8 ± 0.1666
400
350
300
250
200
150

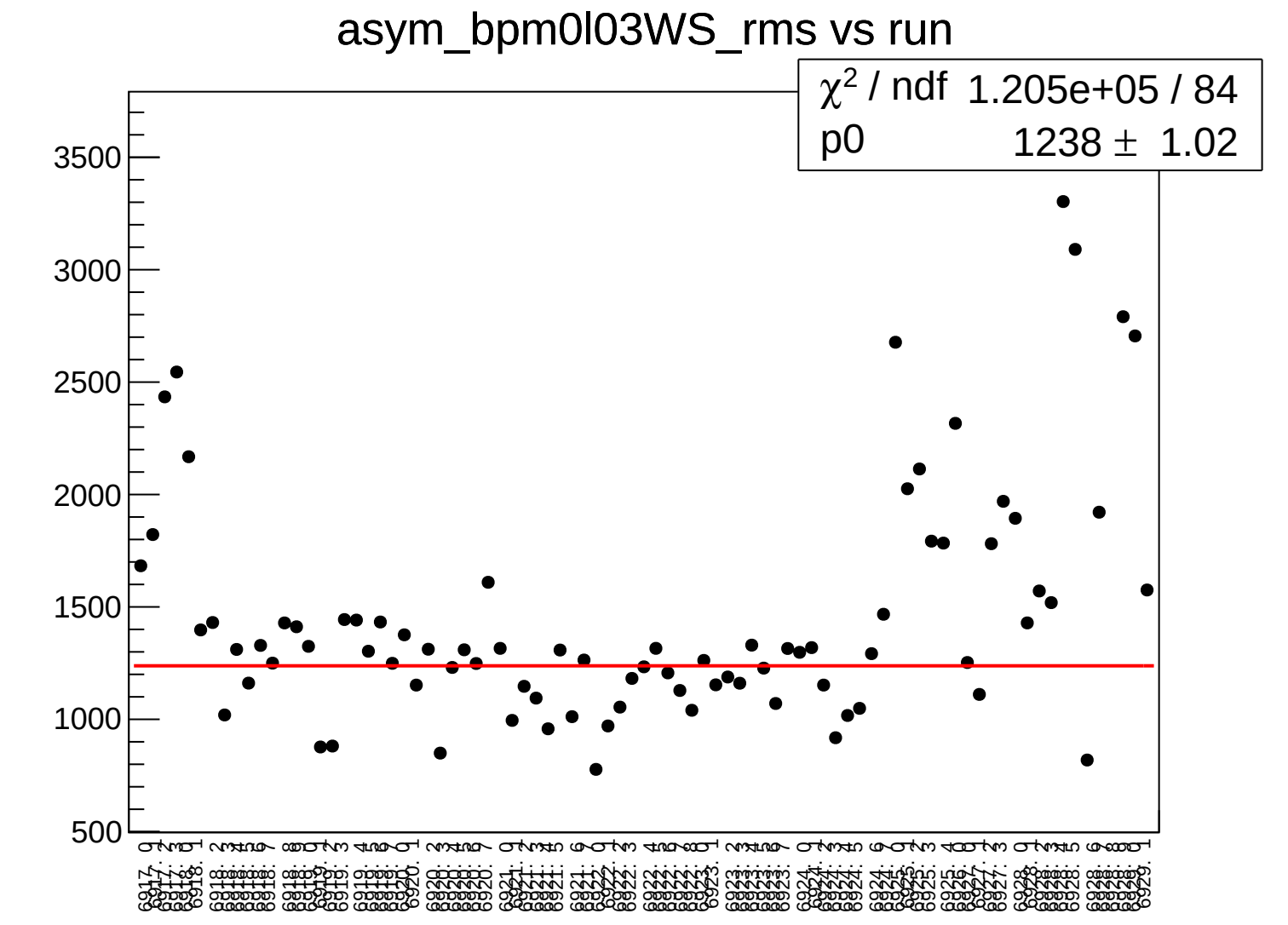

asym_bpm0l02WS_mean vs run
χ² / ndf 118.4 / 84
p0 −2133 ± 373.9
pull
Entries 85
Mean 238.8
Std Dev 184.1

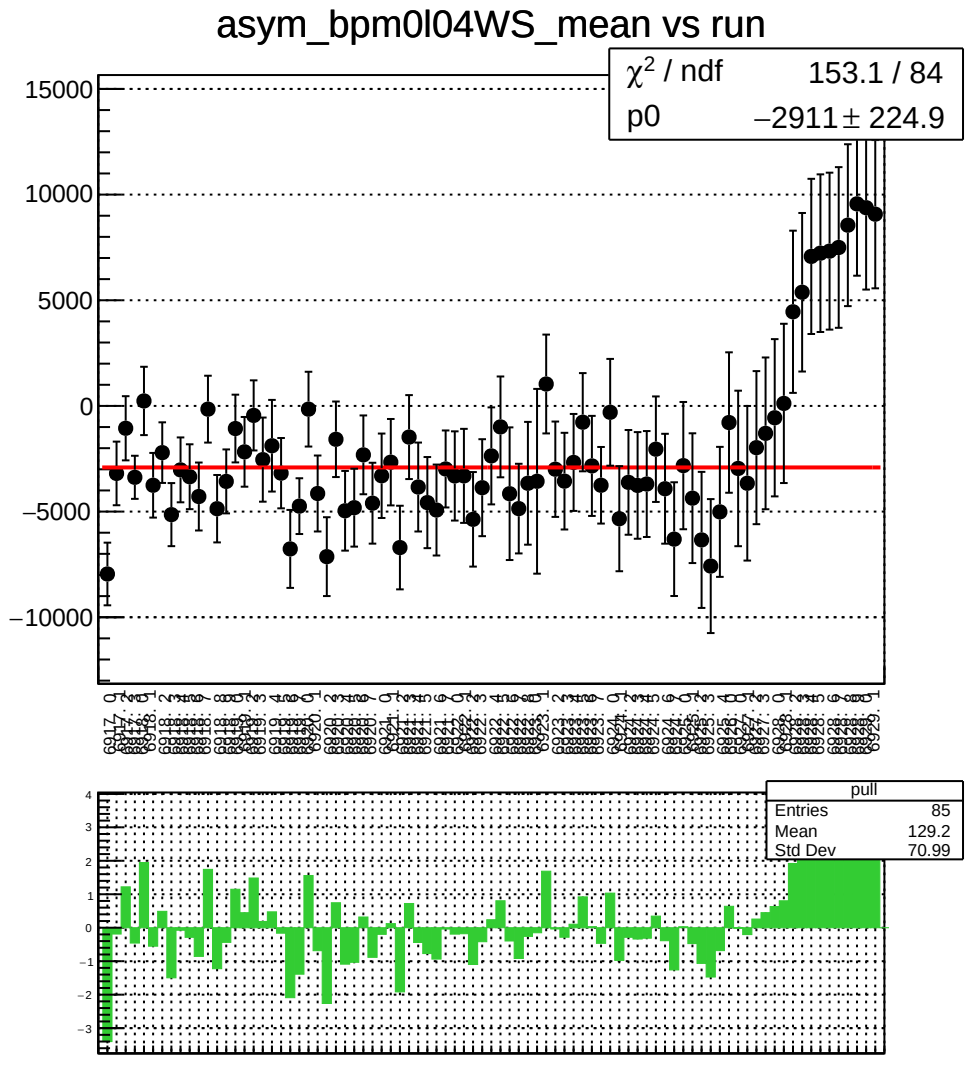

pull1D
Entries 85
Mean 0.0656
Std Dev 1.179

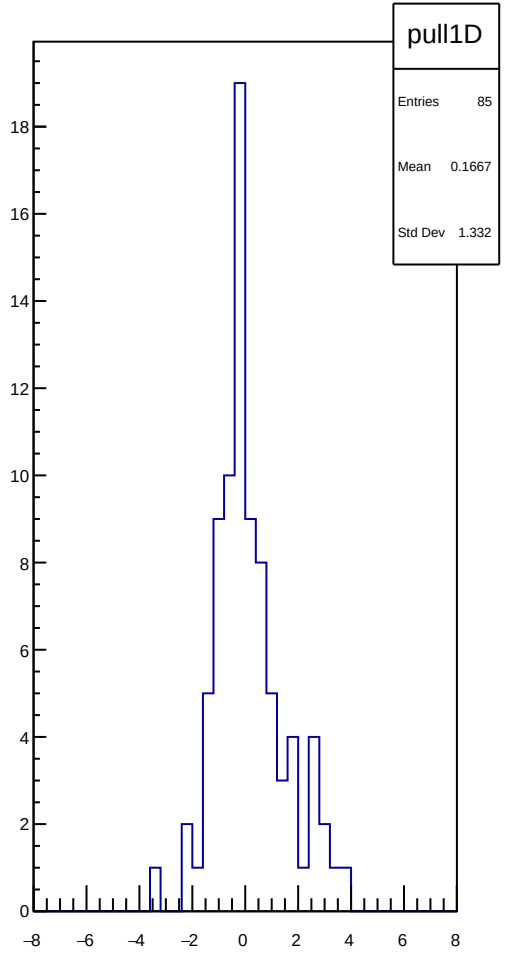

asym_bpm0l02WS_rms vs run
χ² / ndf 2.846e+04 / 84
p0 330.9 ± 0.2644
450
400
350
300
250


asym_bpm0l03WS_mean vs run
χ² / ndf 75.21 / 84
p0 −489.4 ± 1442
pull
Entries 85
Mean 198.6
Std Dev 132.4


pull1D
Entries 85
Mean 0.02065
Std Dev 0.9404


asym_bpm0l03WS_rms vs run
χ² / ndf 1.205e+05 / 84
p0 1238 ± 1.02
3500
3000
2500
2000
1500
1000
500


asym_bpm0l04WS_mean vs run
χ² / ndf 153.1 / 84
p0 −2911 ± 224.9
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 129.2
Std Dev 70.99
4
3
2
1
0
−1
−2
−3


pull1D
Entries 85
Mean 0.1667
Std Dev 1.332
18
16
14
12
10
8
6
4
2
0
−8
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−4
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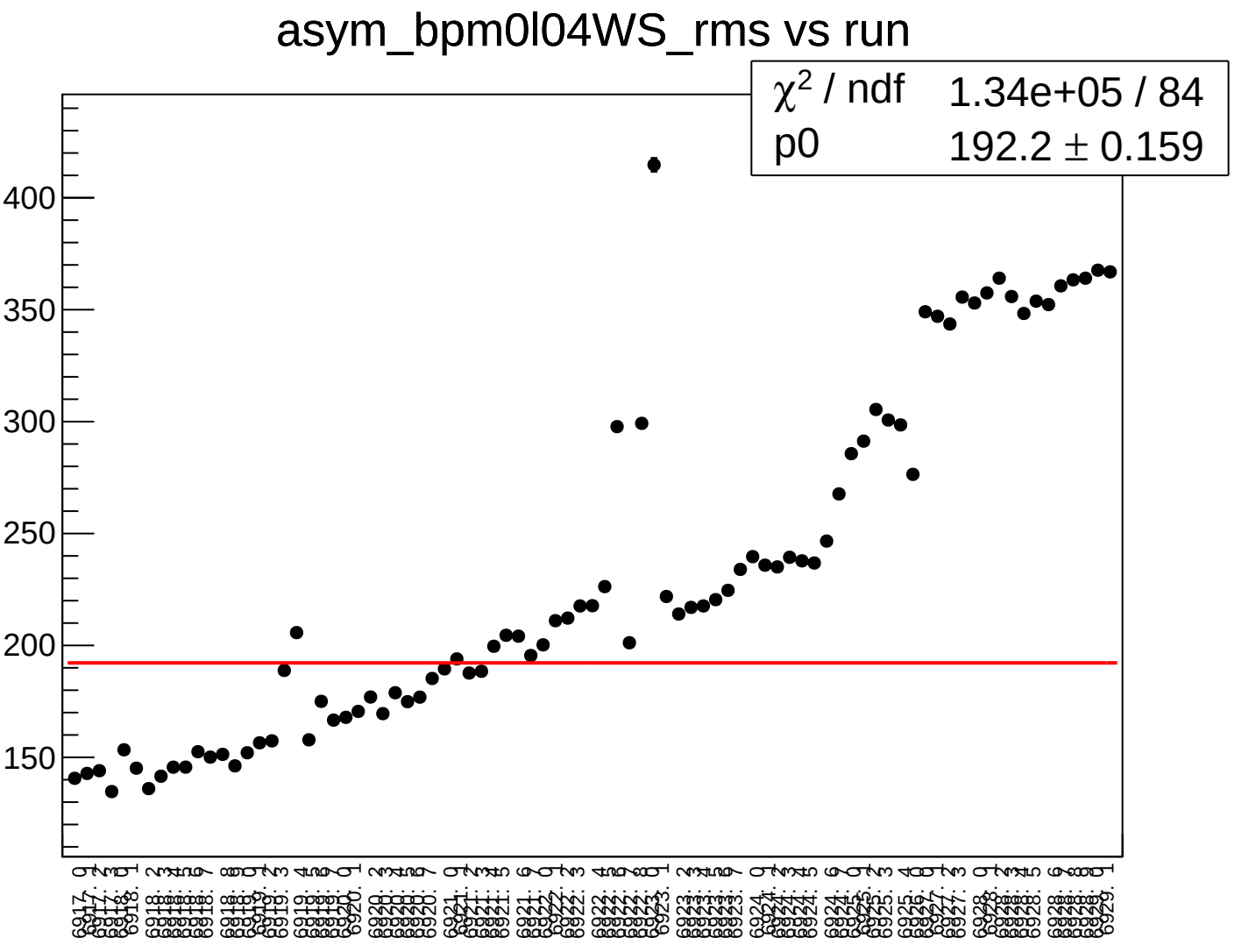
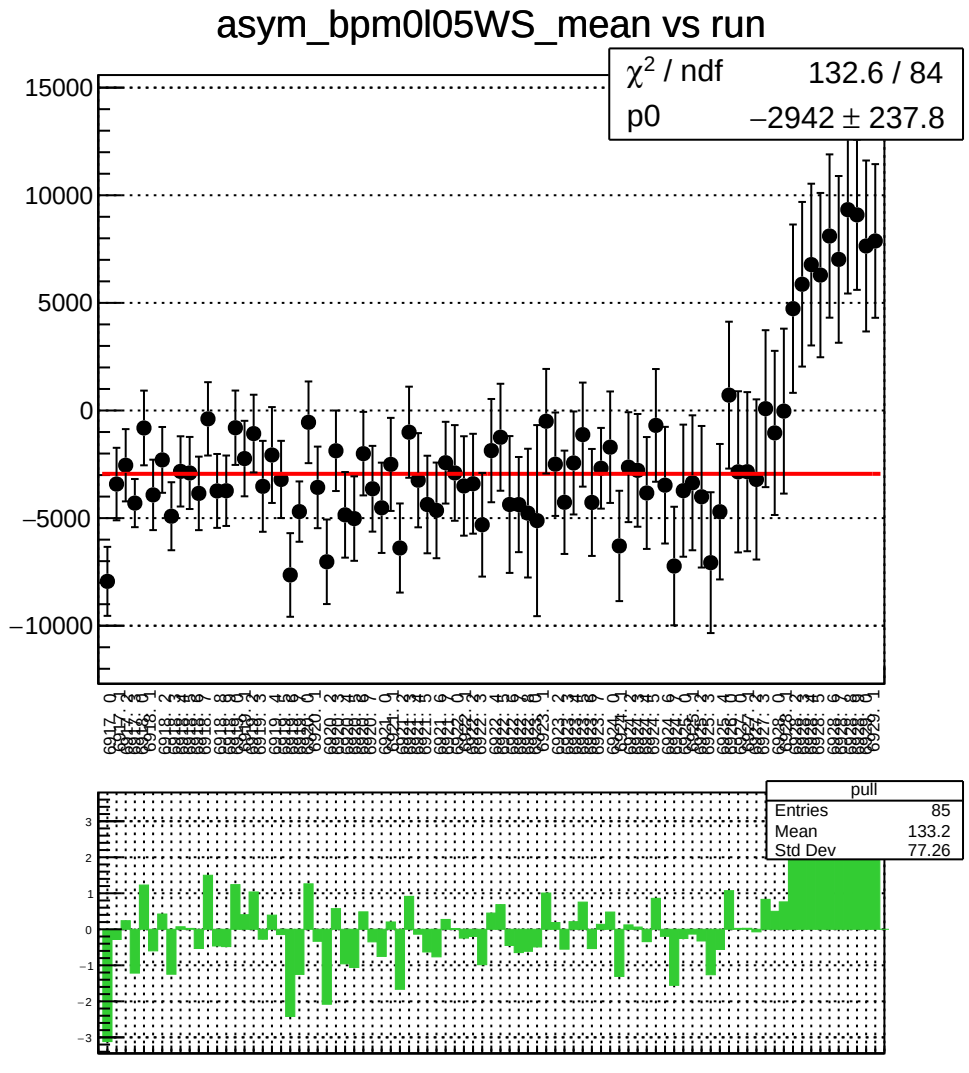
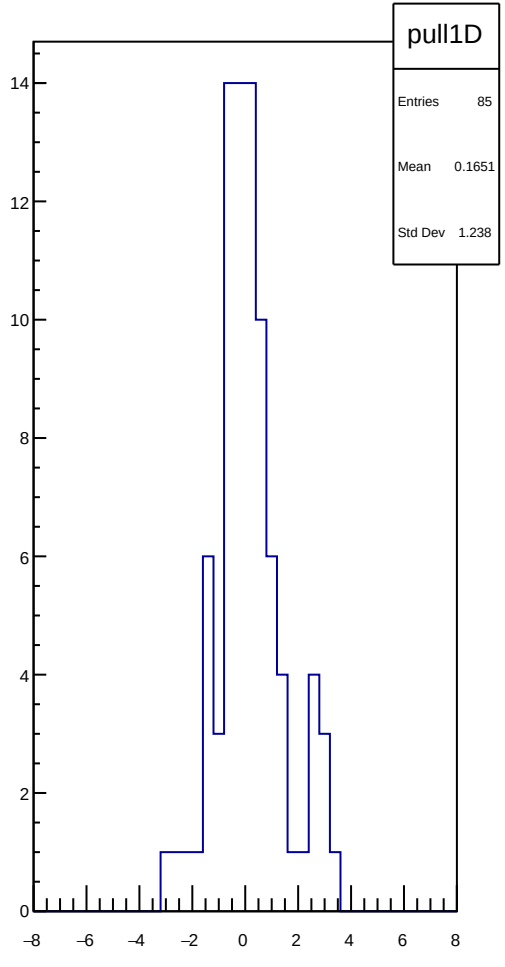
0
2
4
6
8


asym_bpm0l04WS_rms vs run
χ² / ndf 1.34e+05 / 84
p0 192.2 ± 0.159
400
350
300
250
200
150


asym_bpm0l05WS_mean vs run
χ² / ndf 132.6 / 84
p0 −2942 ± 237.8
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 133.2
Std Dev 77.26
3
2
1
0
−1
−2
−3


pull1D
Entries 85
Mean 0.1651
Std Dev 1.238
14
12
10
8
6
4
2
0
−8
−6
−4
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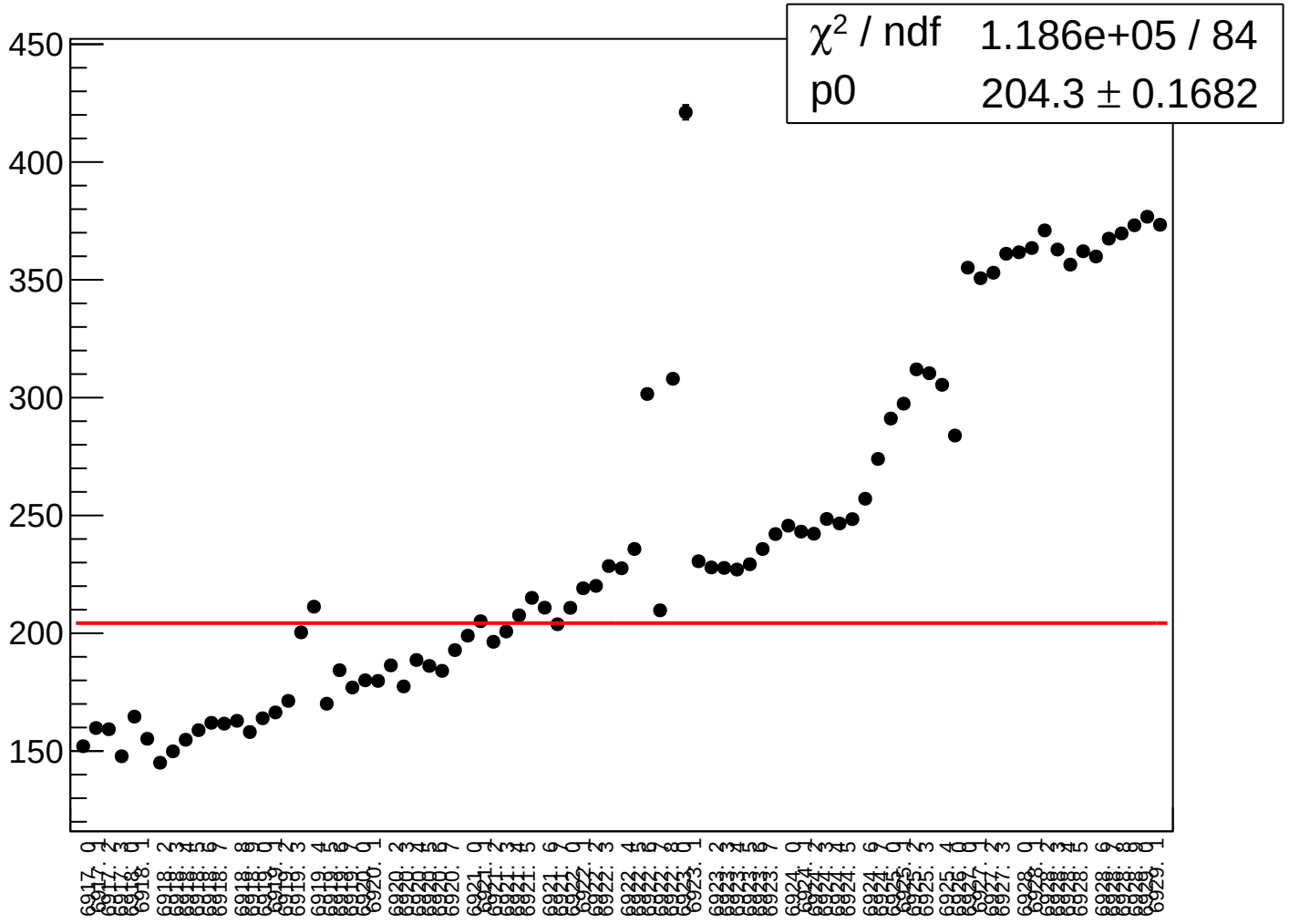
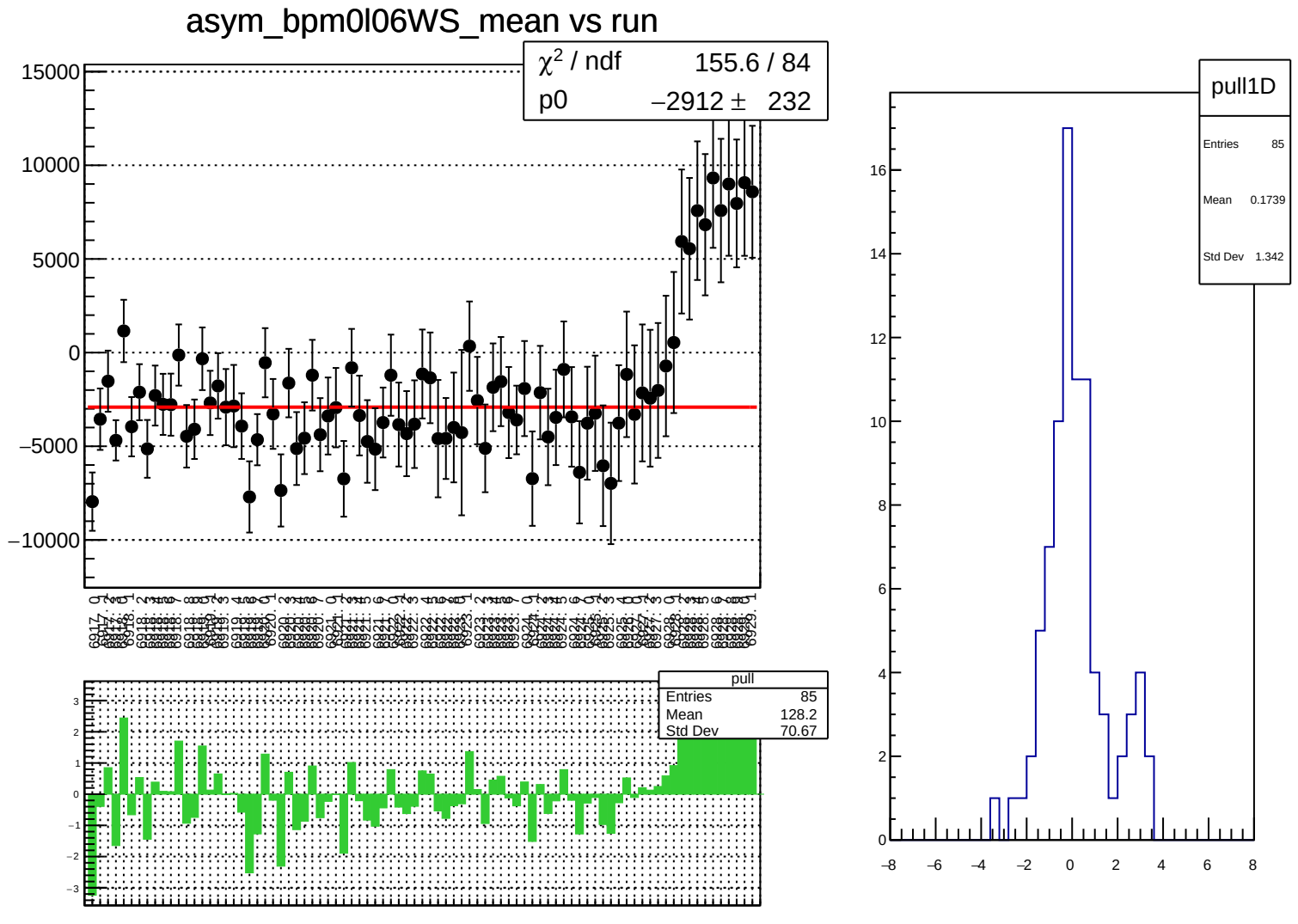
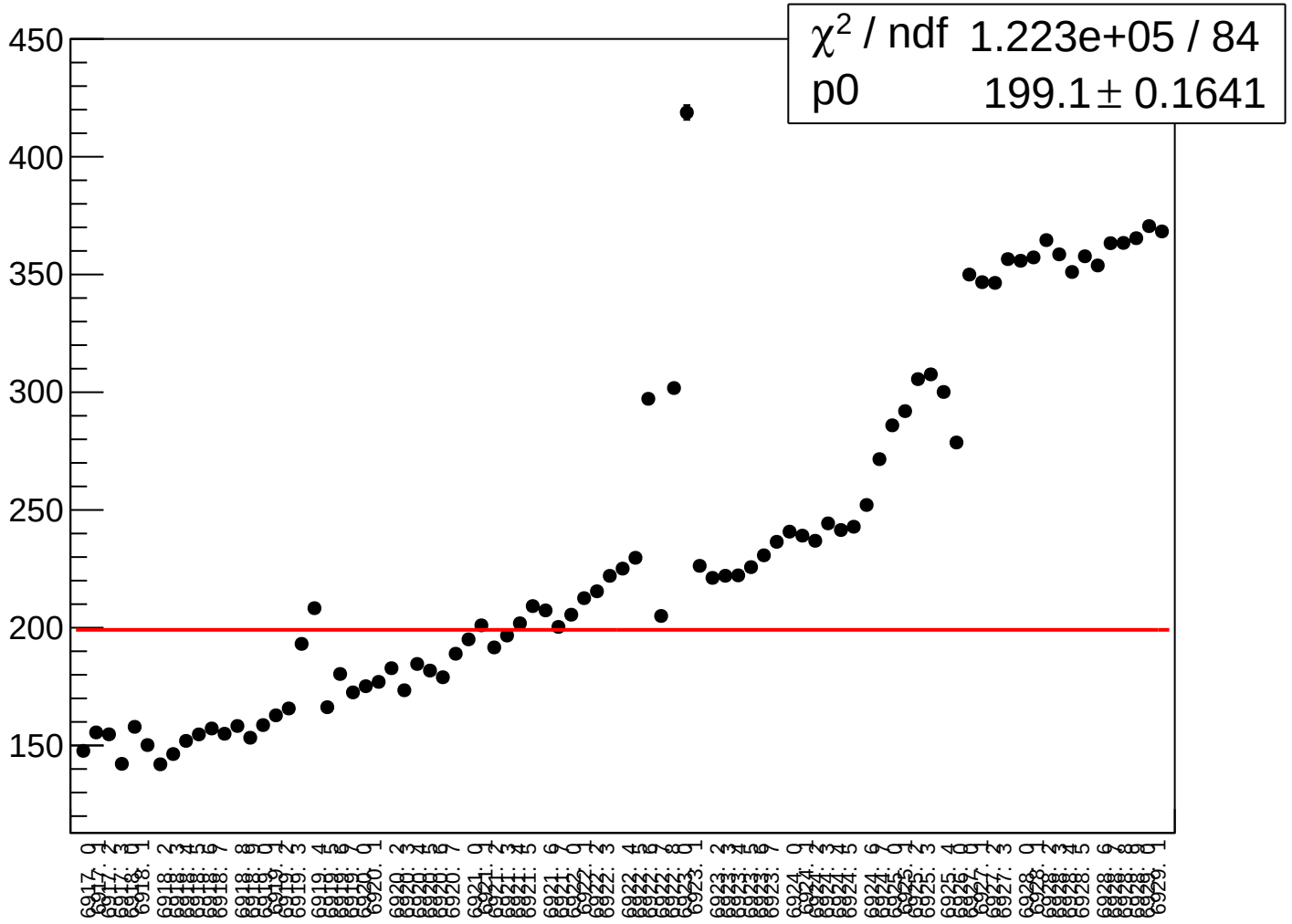
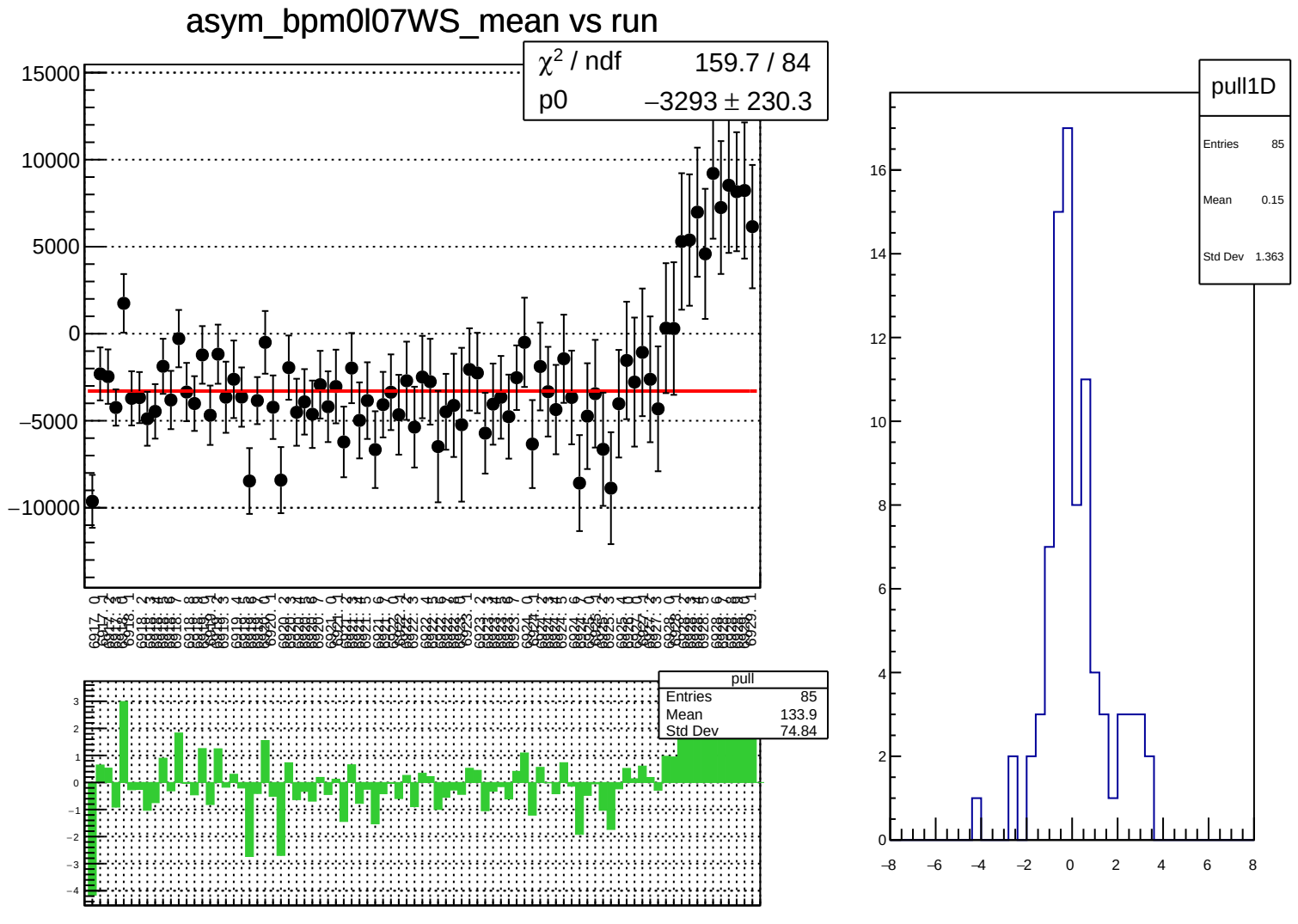
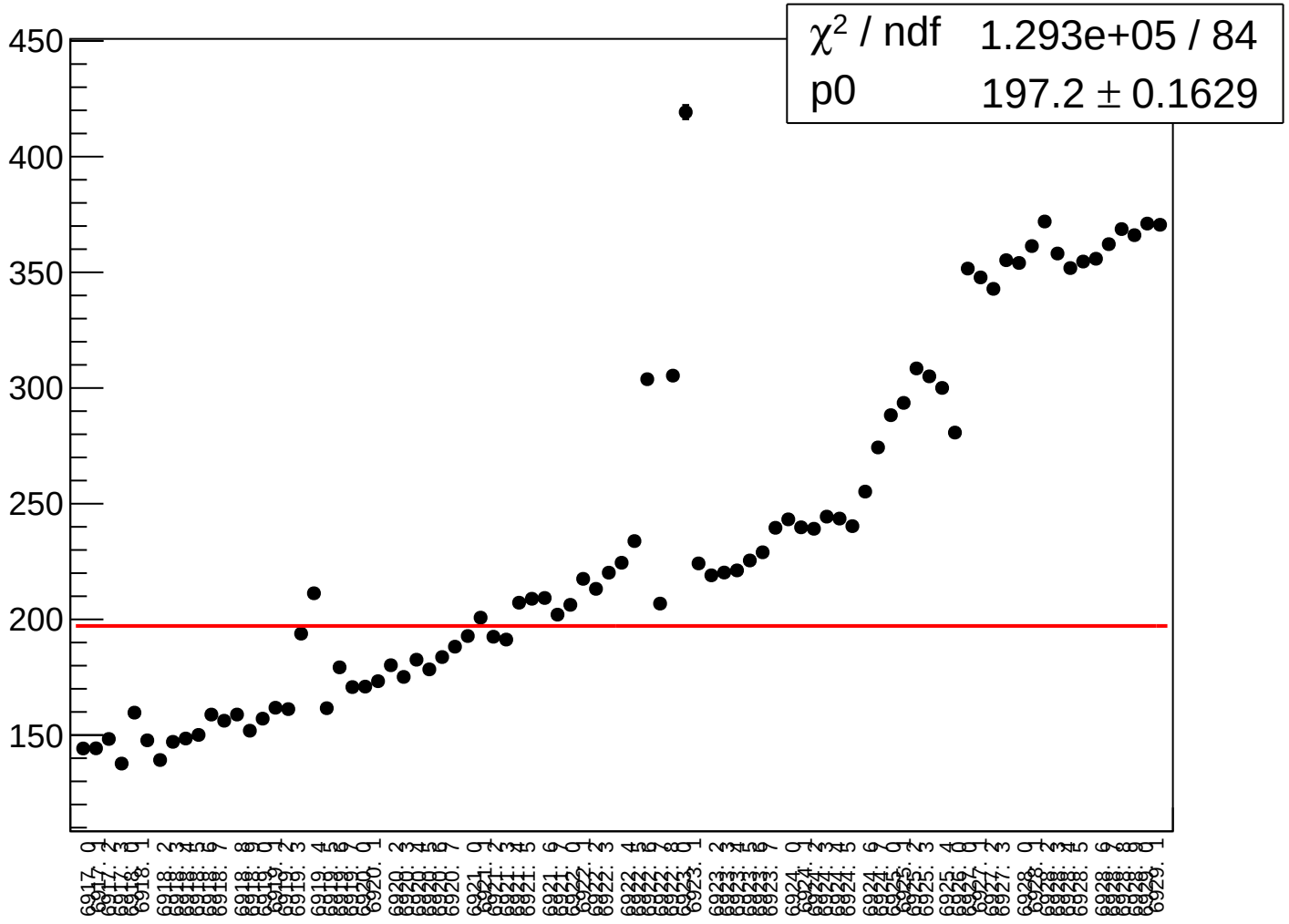
0
2
4
6
8

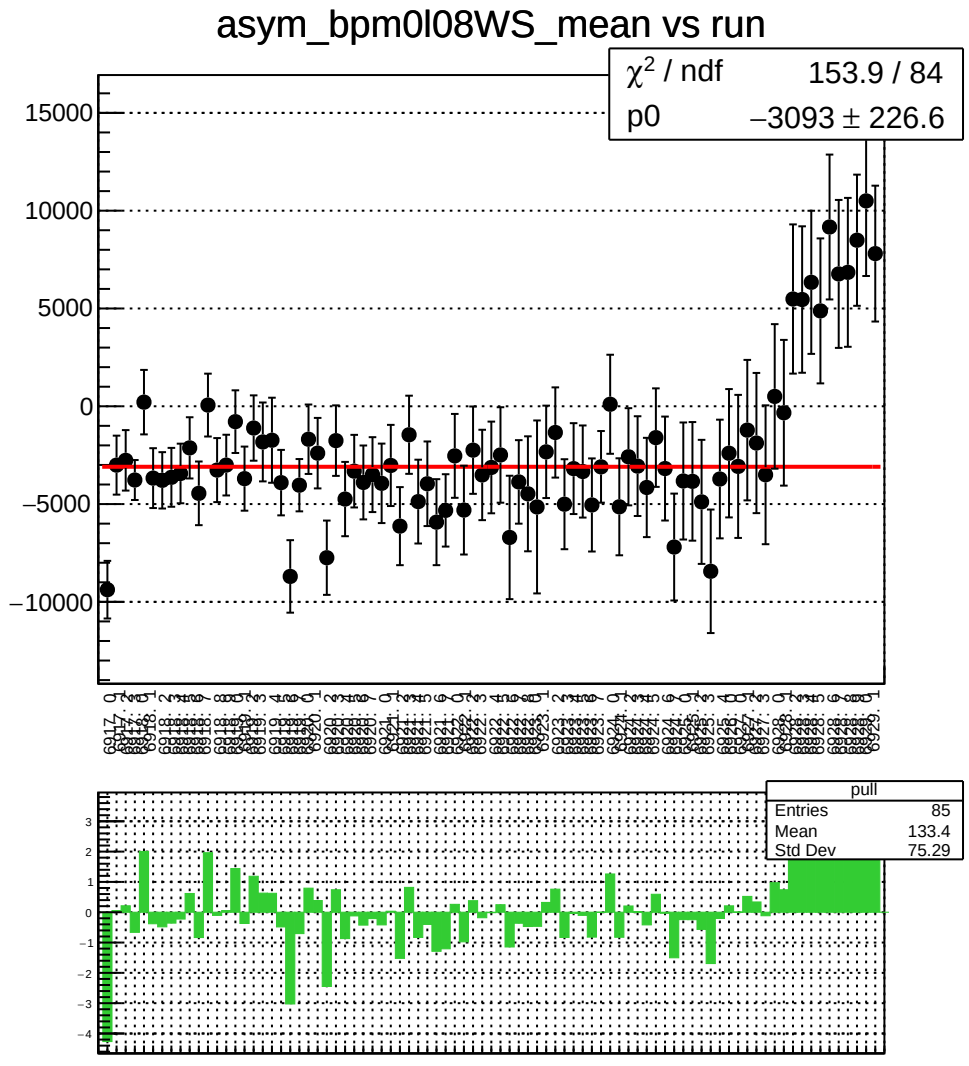

asym_bpm0l05WS_rms vs run
χ² / ndf 1.186e+05 / 84
p0 204.3 ± 0.1682
450
400
350
300
250
200
150

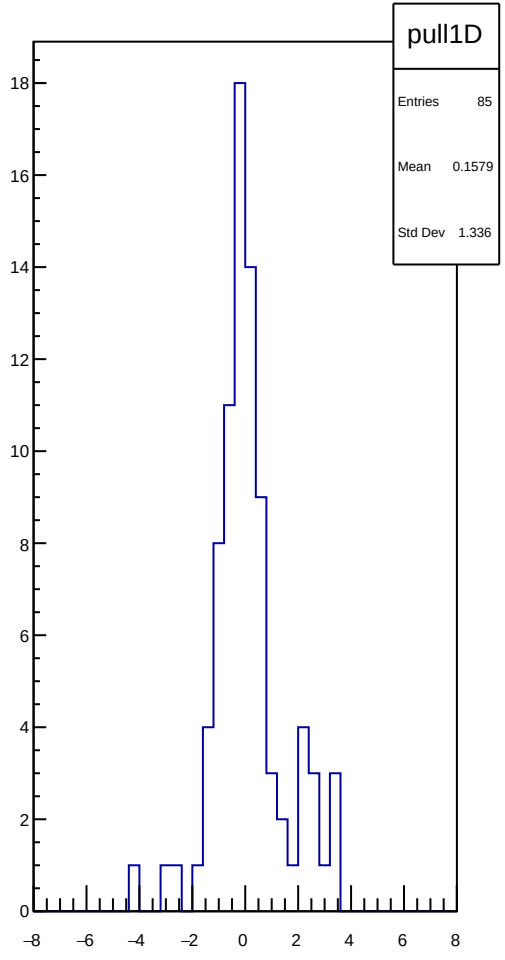

asym_bpm0l06WS_mean vs run
χ² / ndf 155.6 / 84
p0 −2912 ± 232
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 128.2
Std Dev 70.67
pull1D
Entries 85
Mean 0.1739
Std Dev 1.342

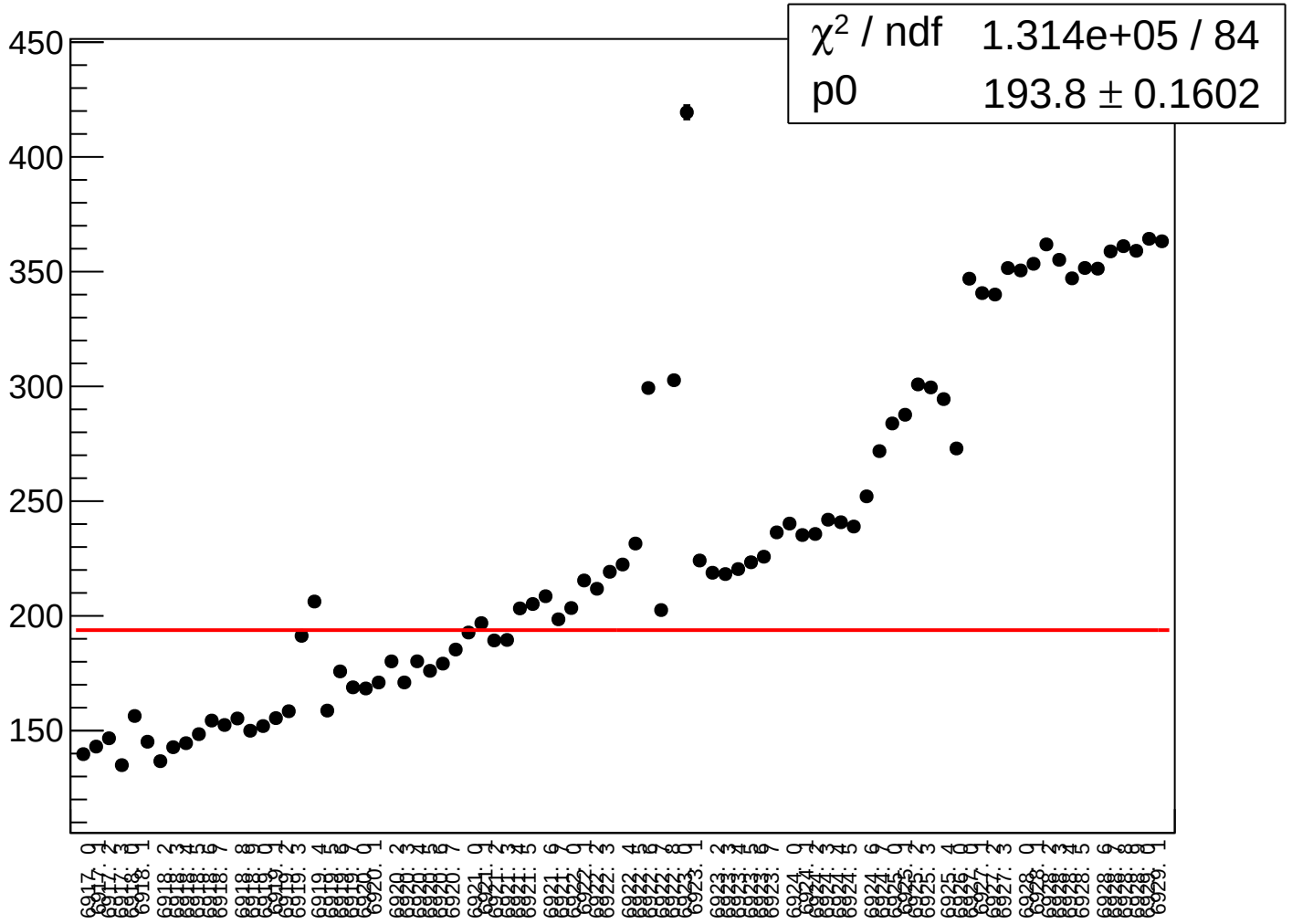

asym_bpm0l06WS_rms vs run
χ^2 / ndf 1.223e+05 / 84
p0 199.1 ± 0.1641
450
400
350
300
250
200
150

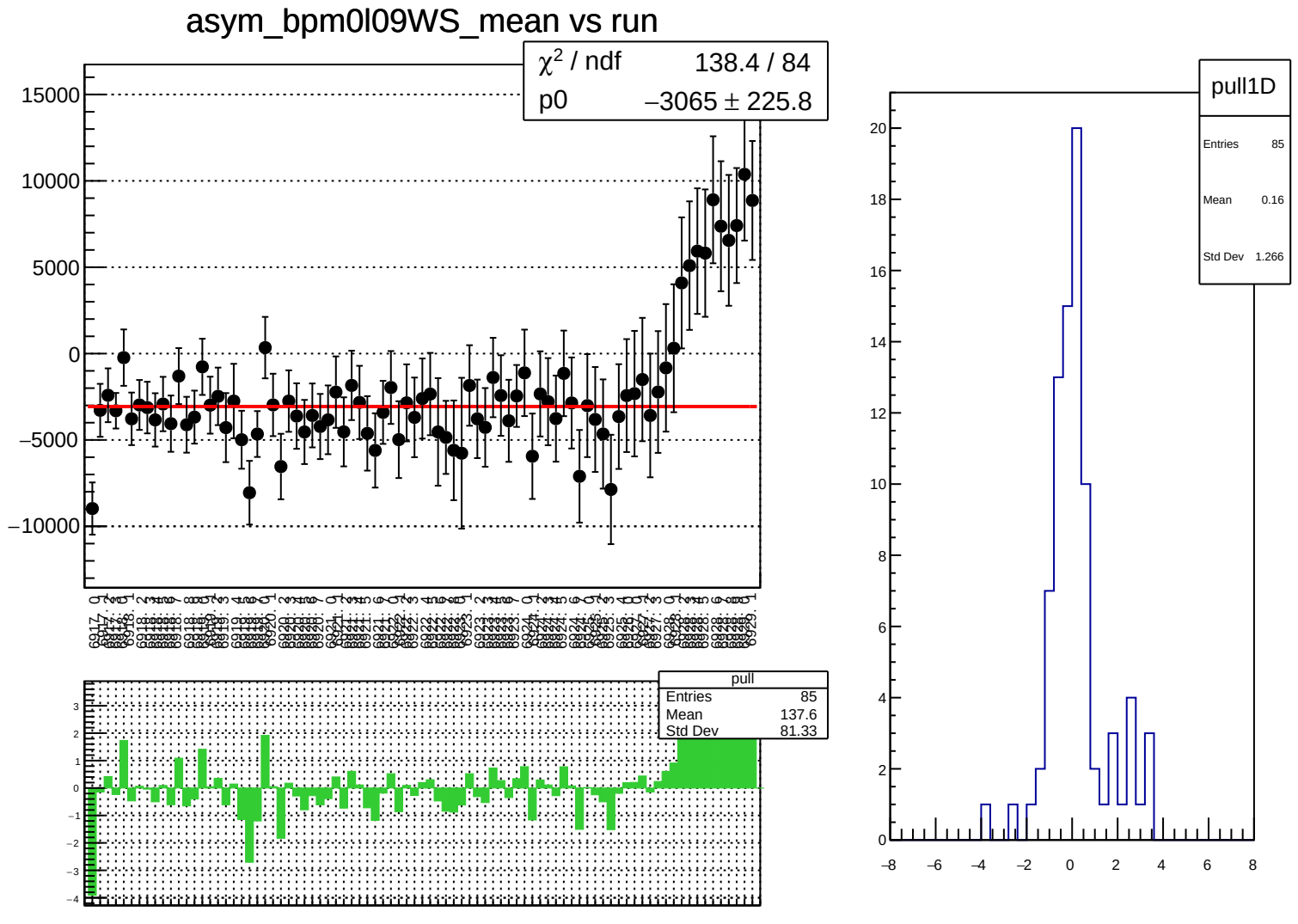

asym_bpm0l07WS_mean vs run
χ² / ndf 159.7 / 84
p0 −3293 ± 230.3
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 133.9
Std Dev 74.84
pull1D
Entries 85
Mean 0.15
Std Dev 1.363

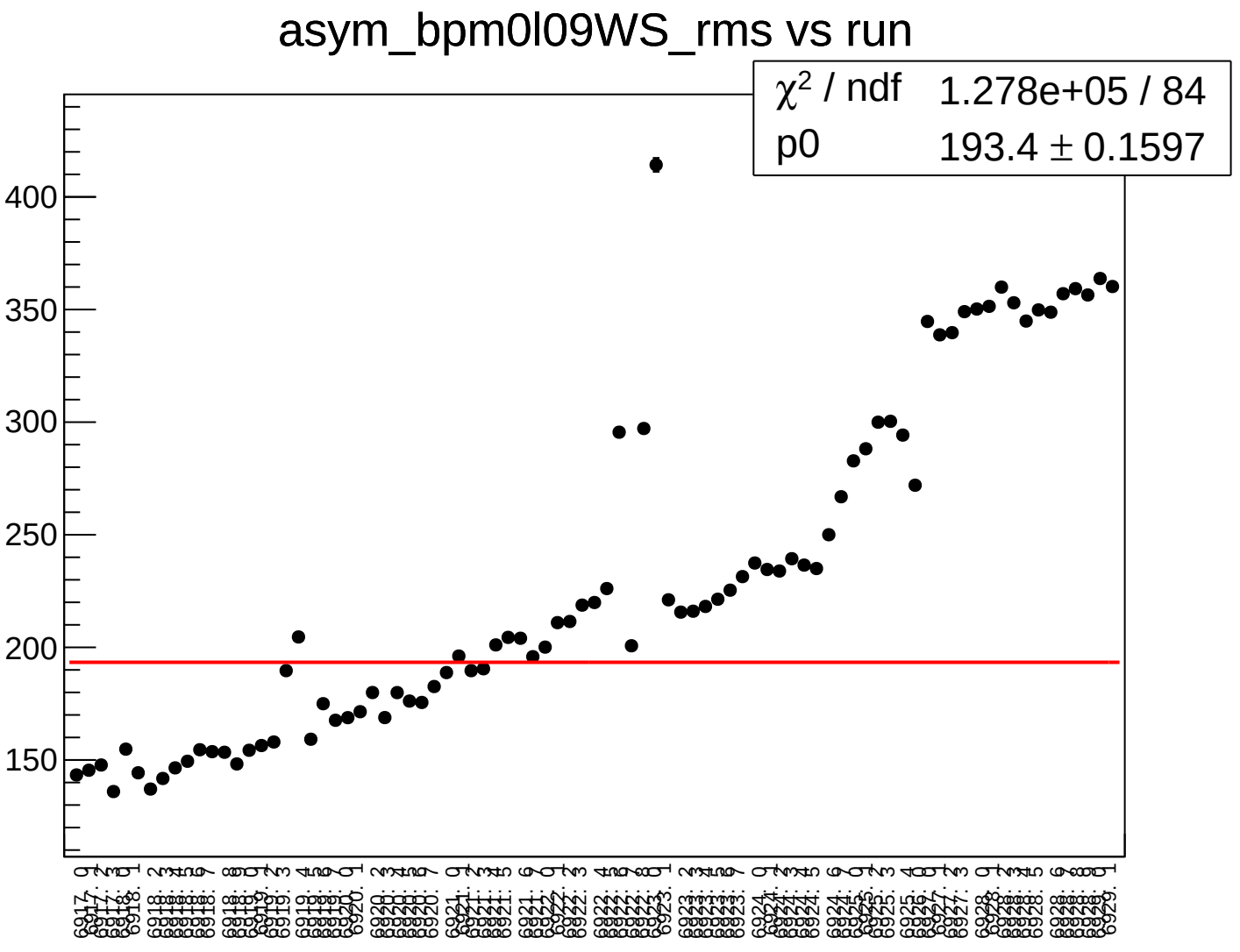

asym_bpm0l07WS_rms vs run
χ^2 / ndf 1.293e+05 / 84
p0 197.2 ± 0.1629
450
400
350
300
250
200
150

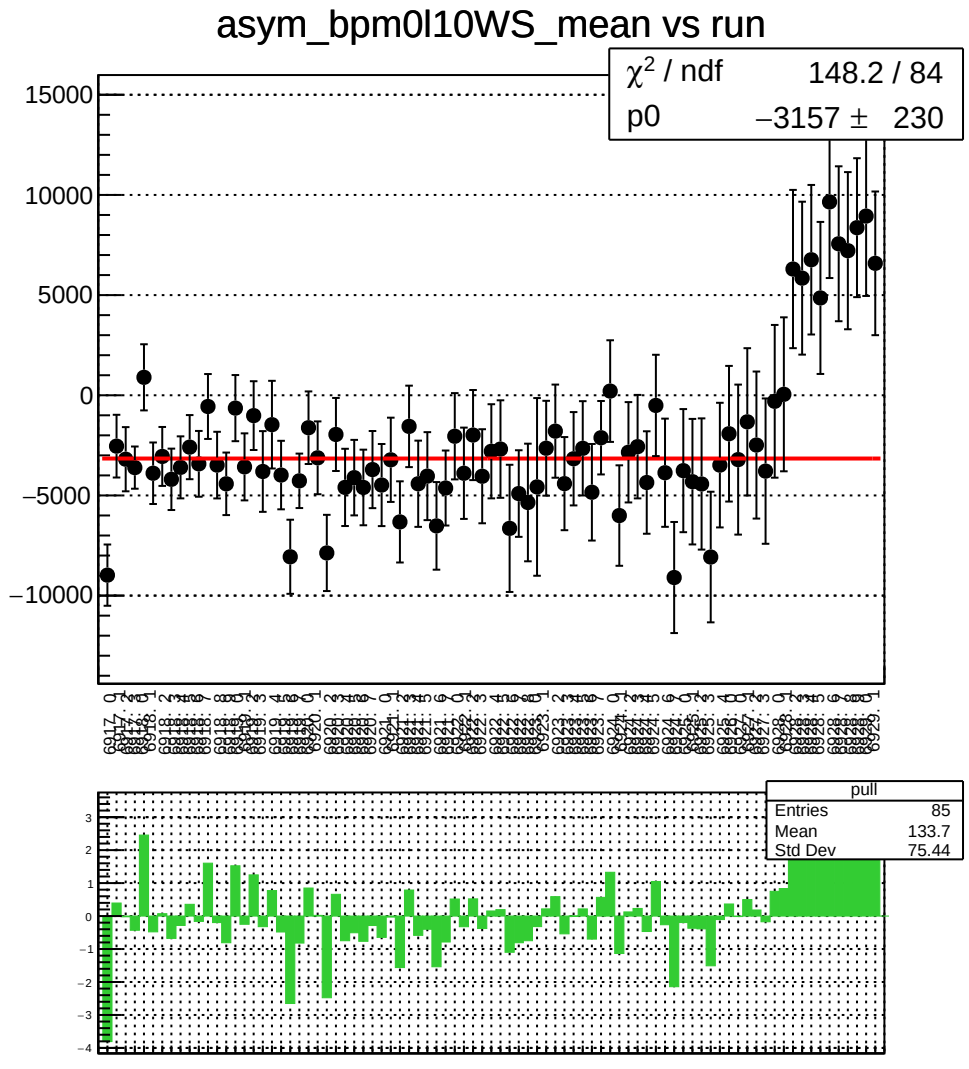

asym_bpm0l08WS_mean vs run
χ² / ndf 153.9 / 84
p0 −3093 ± 226.6
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 133.4
Std Dev 75.29
3
2
1
0
−1
−2
−3
−4

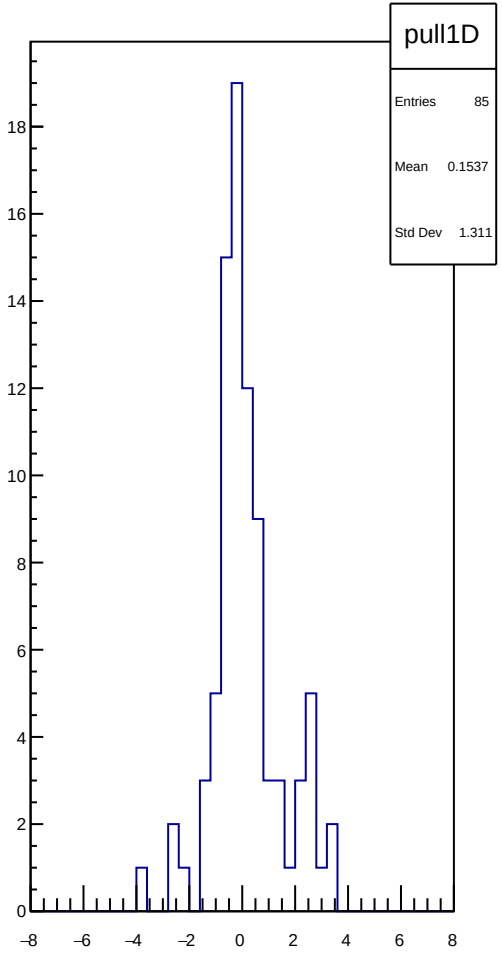

pull1D
Entries 85
Mean 0.1579
Std Dev 1.336
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

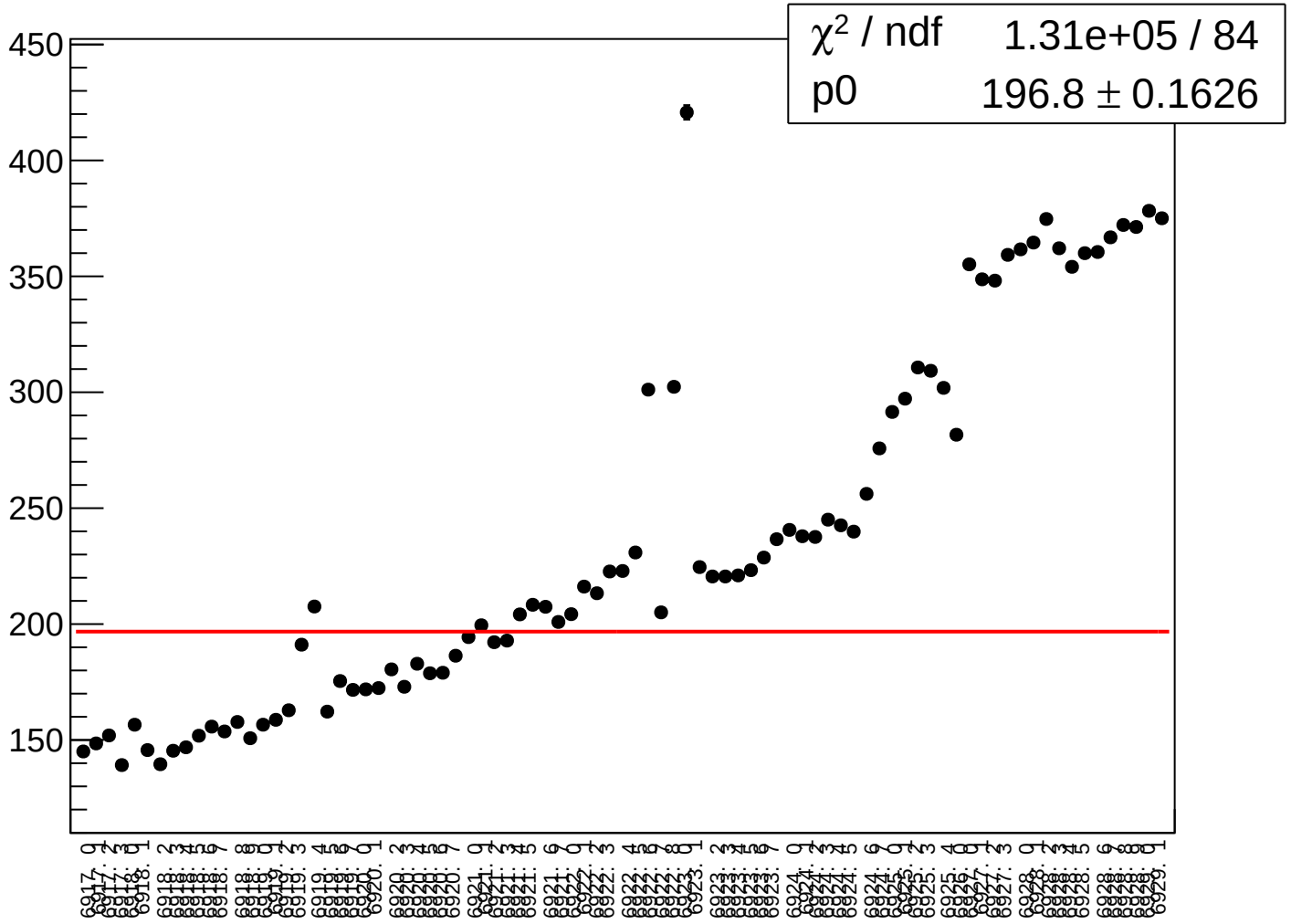

asym_bpm0l08WS_rms vs run
χ^2 / ndf 1.314e+05 / 84
p0 193.8 ± 0.1602
450
400
350
300
250
200
150

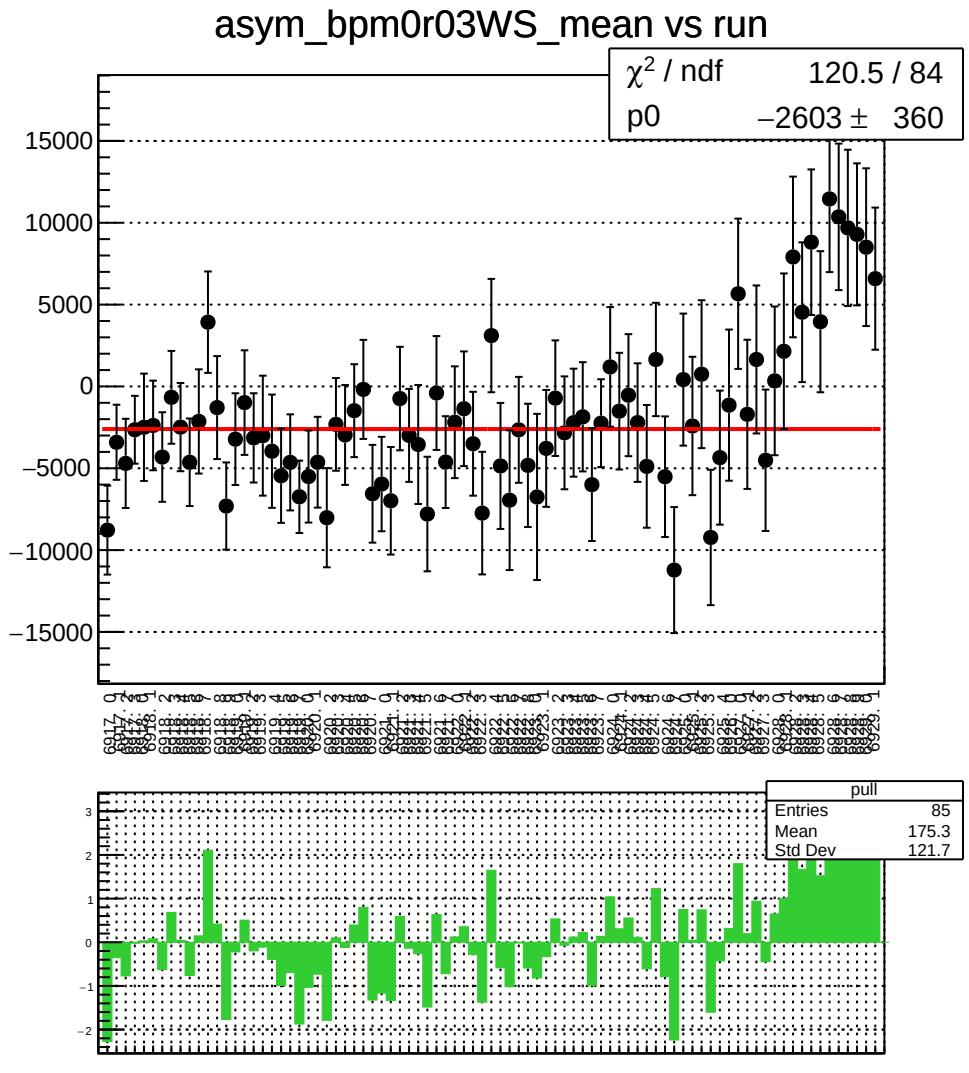

asym_bpm0l09WS_mean vs run
χ² / ndf 138.4 / 84
p0 −3065 ± 225.8
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 137.6
Std Dev 81.33
pull1D
Entries 85
Mean 0.16
Std Dev 1.266
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

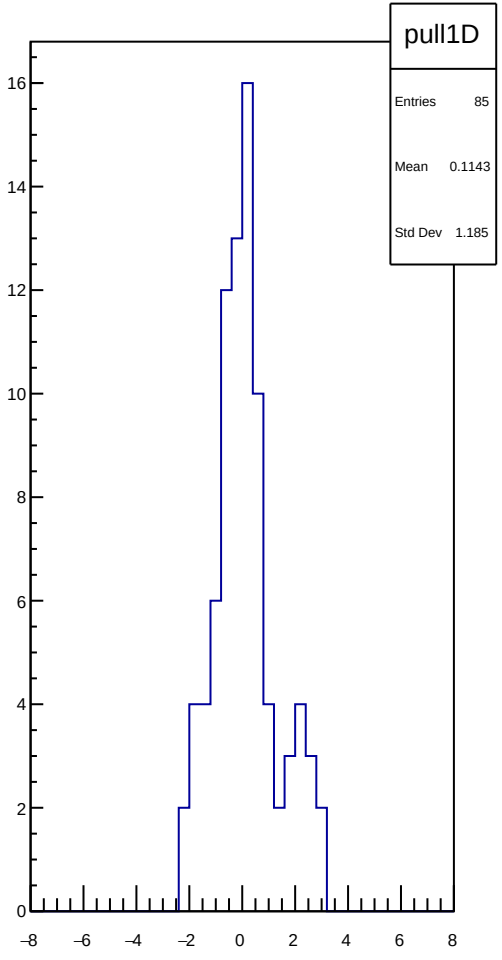

asym_bpm0l09WS_rms vs run
χ² / ndf 1.278e+05 / 84
p0 193.4 ± 0.1597
400
350
300
250
200
150

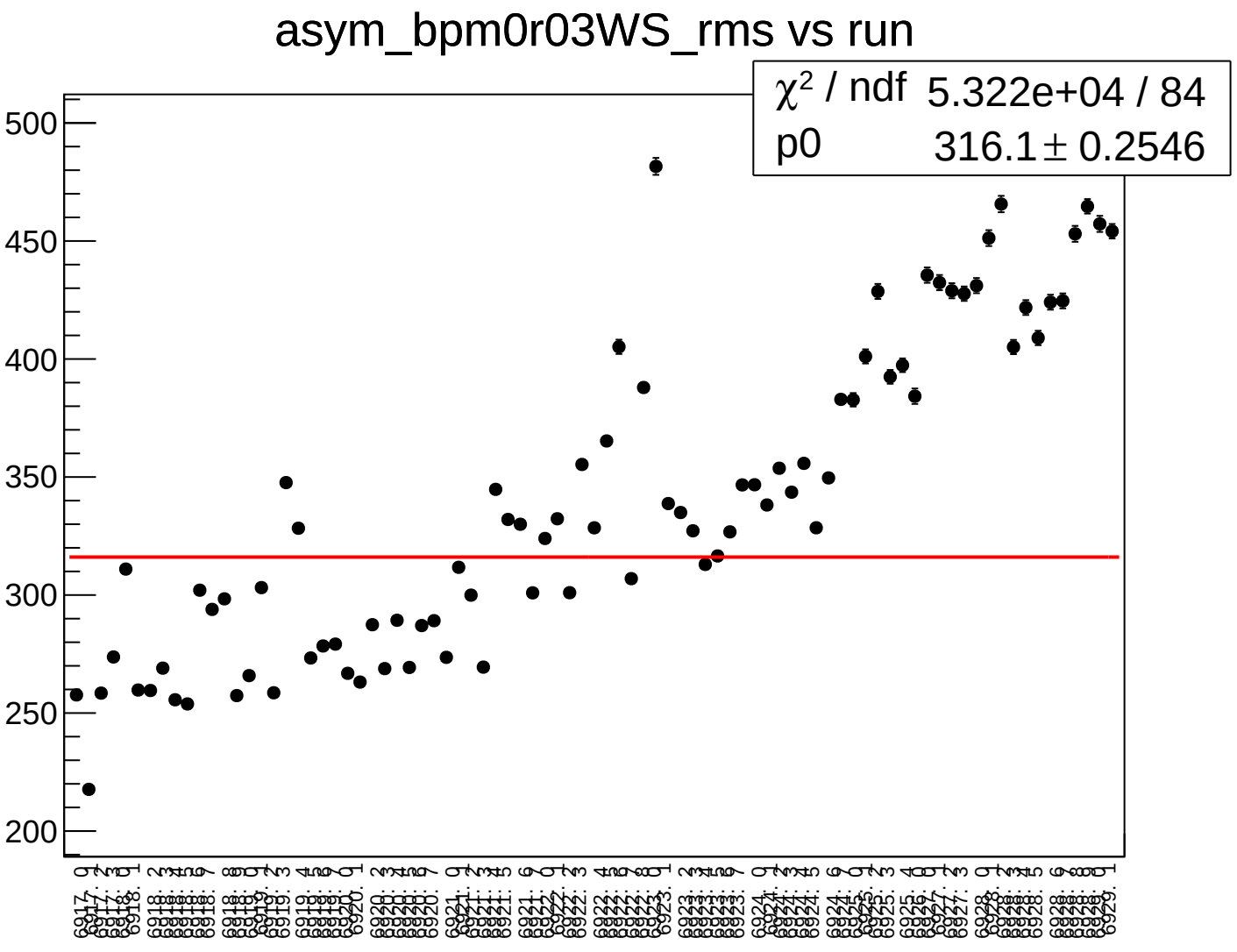

asym_bpm0l10WS_mean vs run
χ² / ndf 148.2 / 84
p0 −3157 ± 230
15000
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 133.7
Std Dev 75.44
3
2
1
0
−1
−2
−3
−4

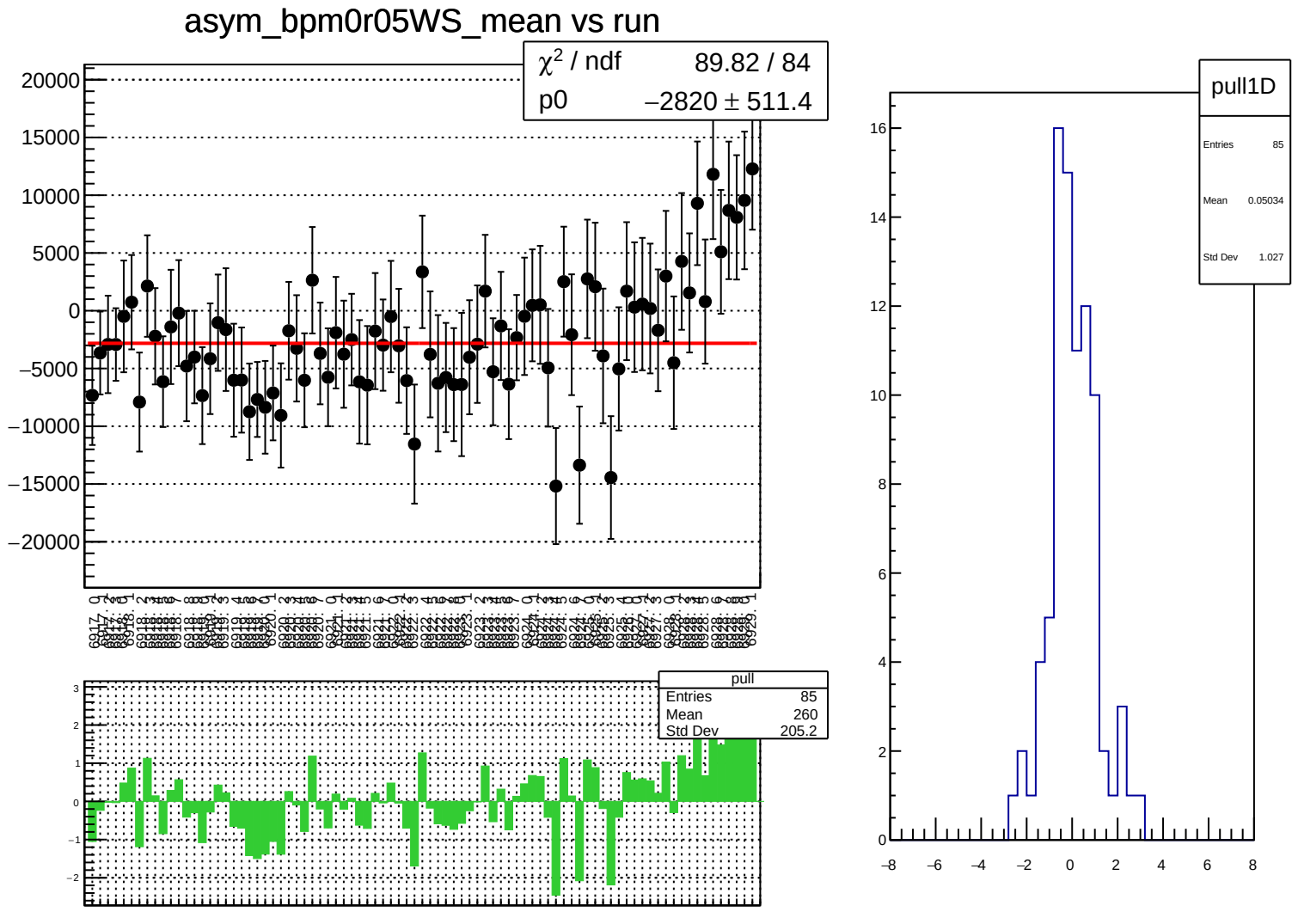

pull1D
Entries 85
Mean 0.1537
Std Dev 1.311
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

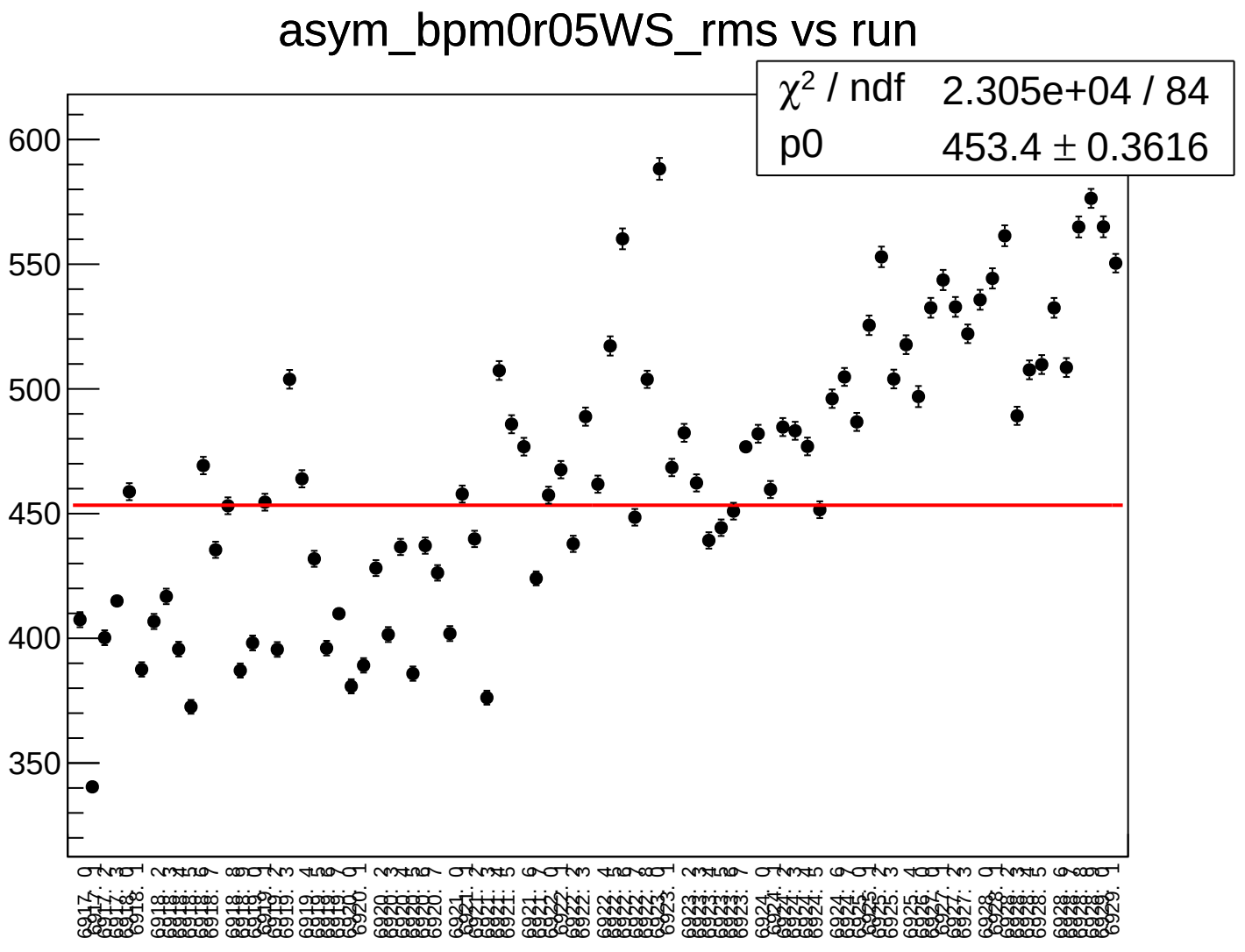

asym_bpm0l10WS_rms vs run
χ^2 / ndf 1.31e+05 / 84
p0 196.8 ± 0.1626
450
400
350
300
250
200
150

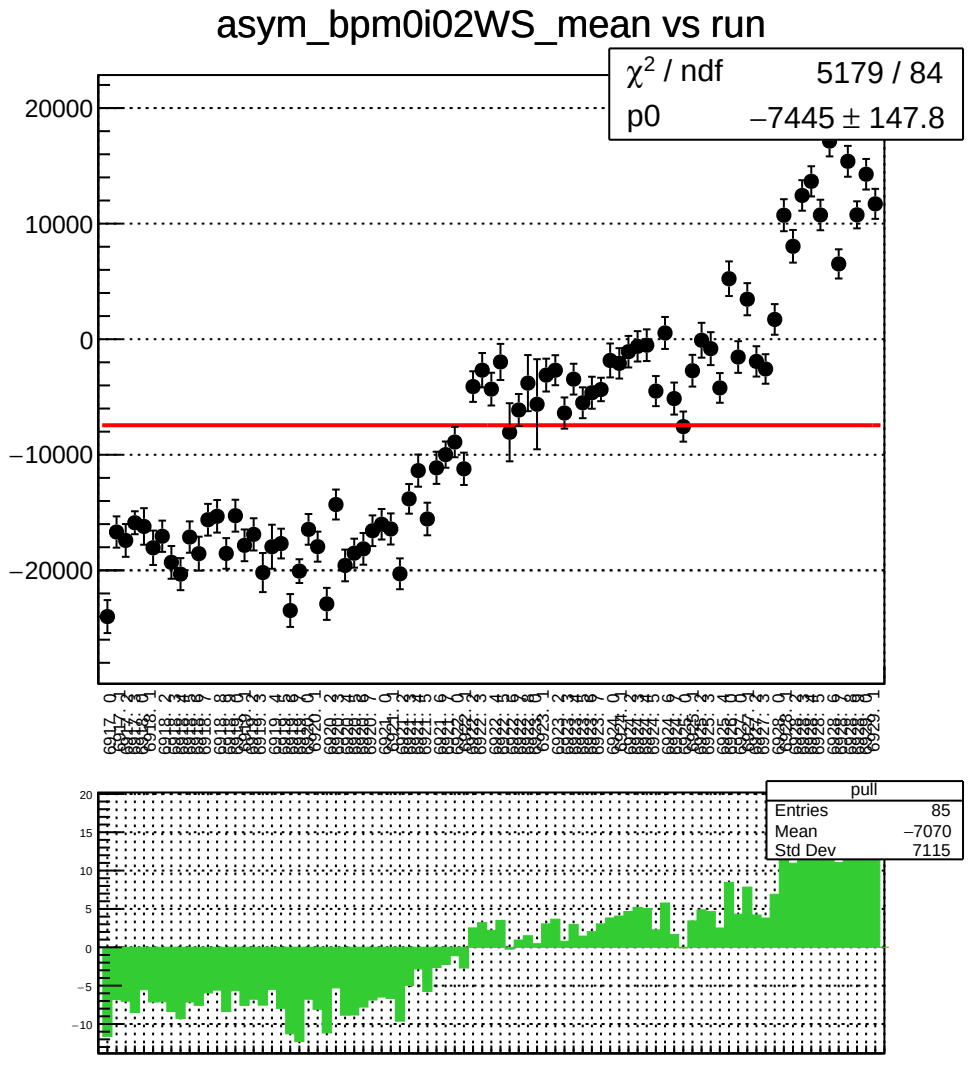

asym_bpm0r03WS_mean vs run
χ² / ndf 120.5 / 84
p0 −2603 ± 360
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 85
Mean 175.3
Std Dev 121.7
3
2
1
0
−1
−2

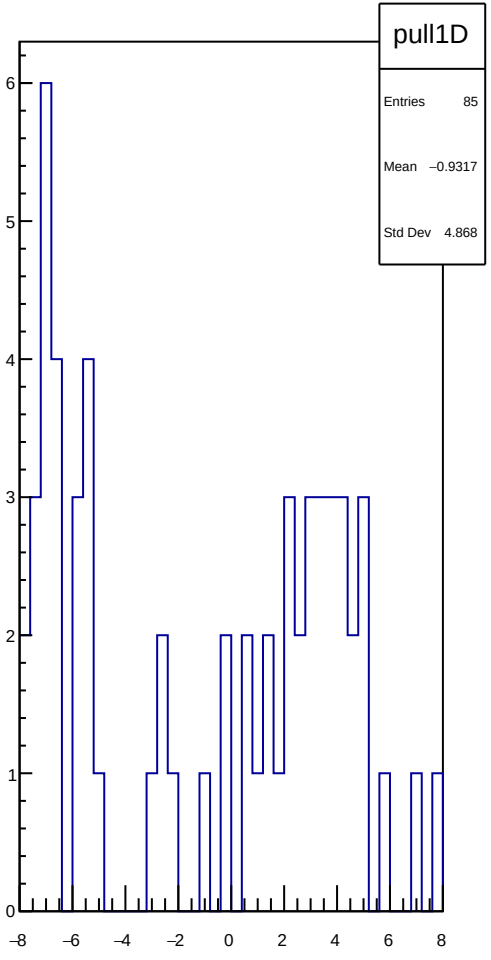

pull1D
Entries 85
Mean 0.1143
Std Dev 1.185
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

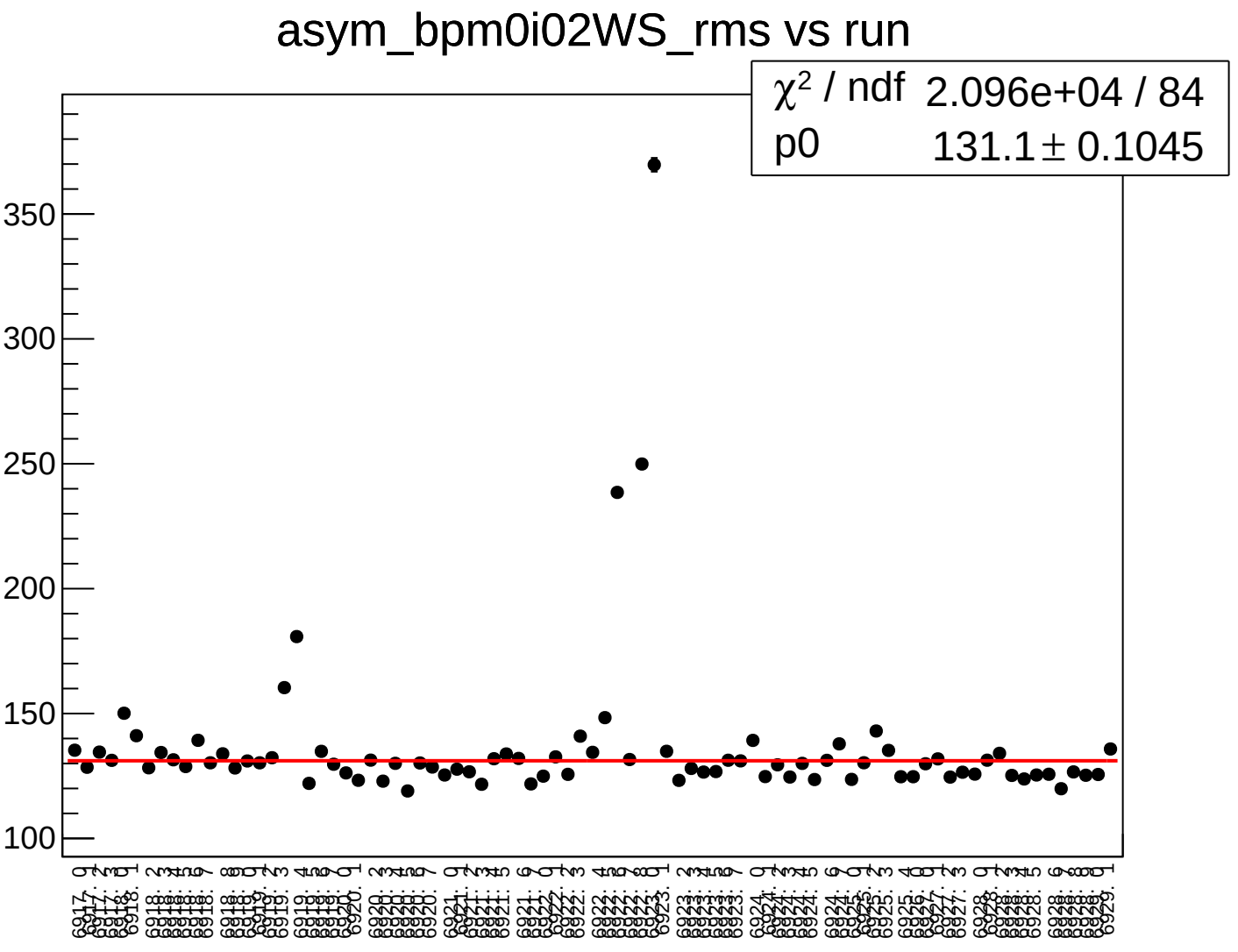

asym_bpm0r03WS_rms vs run
χ² / ndf 5.322e+04 / 84
p0 316.1 ± 0.2546
500
450
400
350
300
250
200

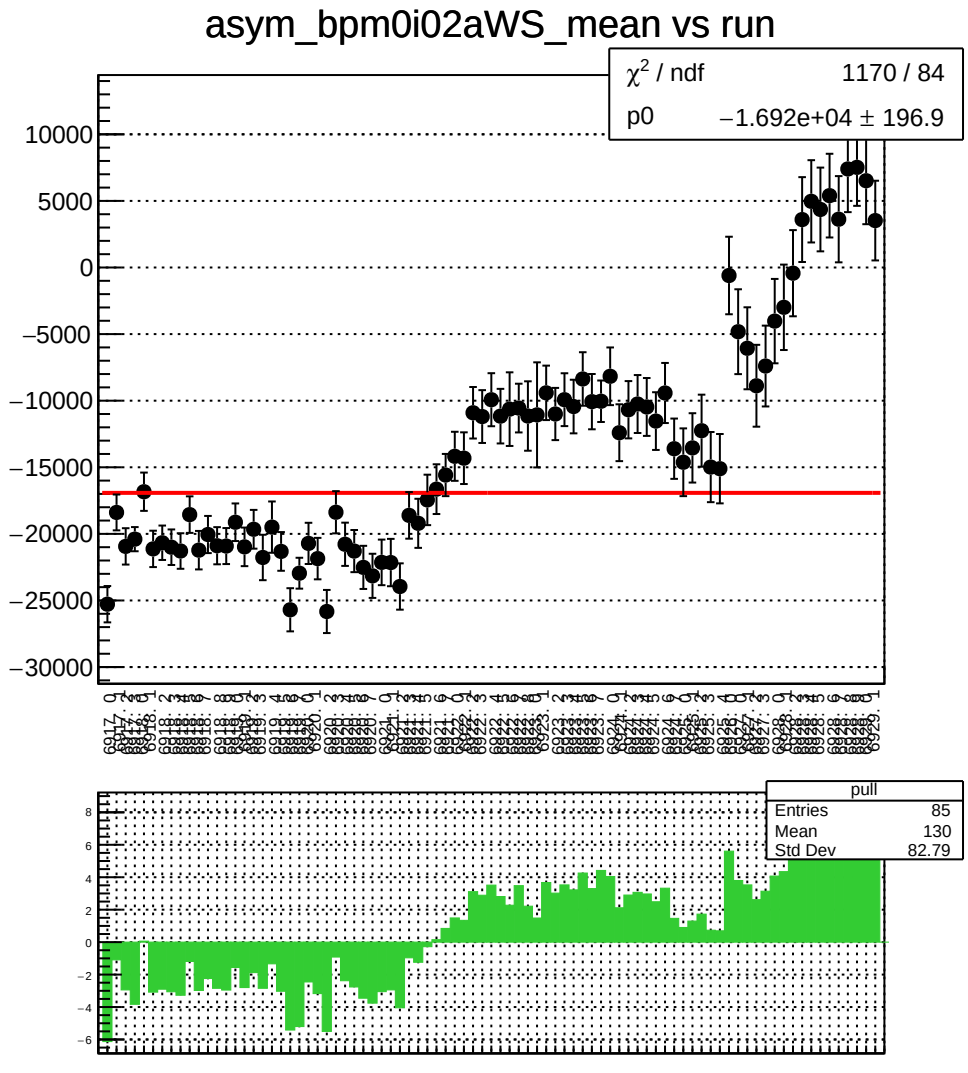

asym_bpm0r05WS_mean vs run
χ² / ndf 89.82 / 84
p0 −2820 ± 511.4
pull
Entries 85
Mean 260
Std Dev 205.2
pull1D
Entries 85
Mean 0.05034
Std Dev 1.027

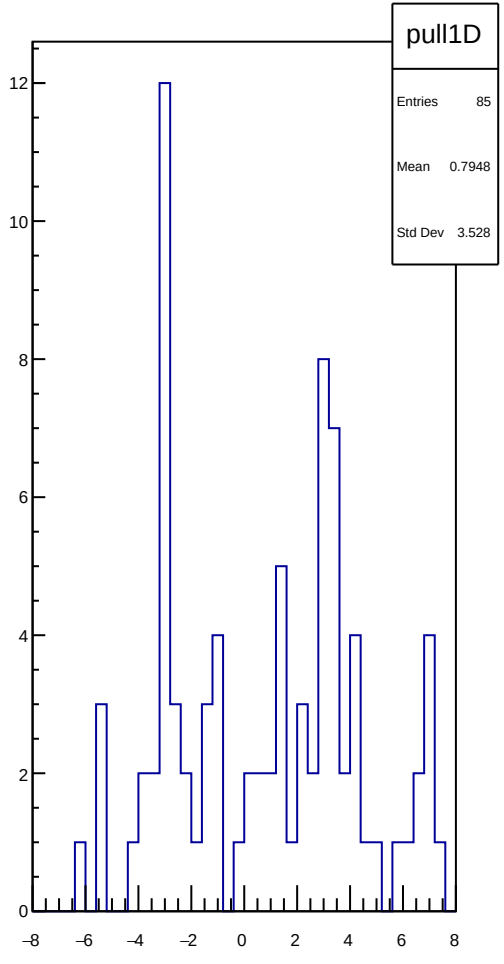

asym_bpm0r05WS_rms vs run
χ^2 / ndf 2.305e+04 / 84
p0 453.4 ± 0.3616
600
550
500
450
400
350

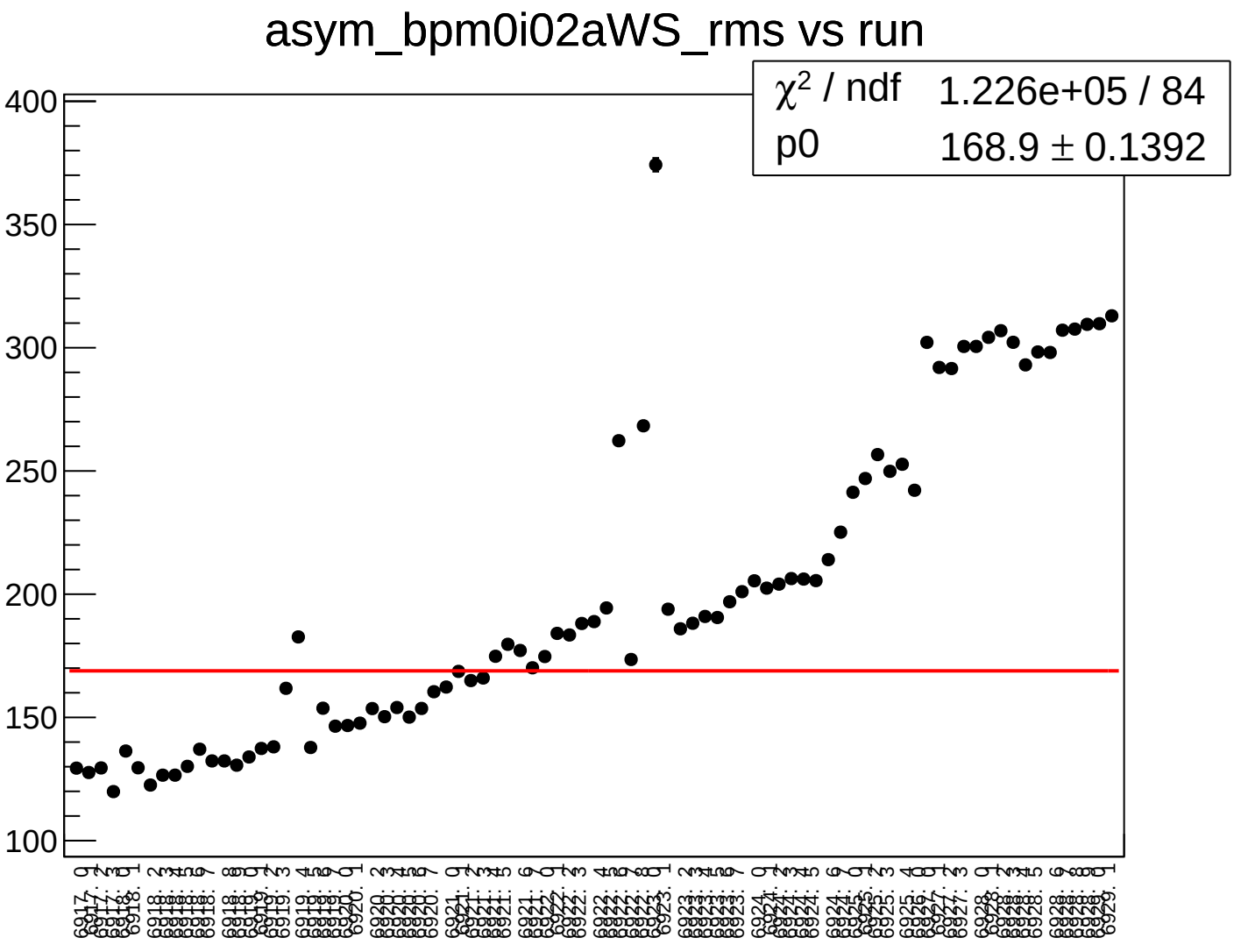

asym_bpm0i02WS_mean vs run
χ² / ndf 5179 / 84
p0 −7445 ± 147.8
20000
10000
0
−10000
−20000
pull
Entries 85
Mean −7070
Std Dev 7115
20
15
10
5
0
−5
−10

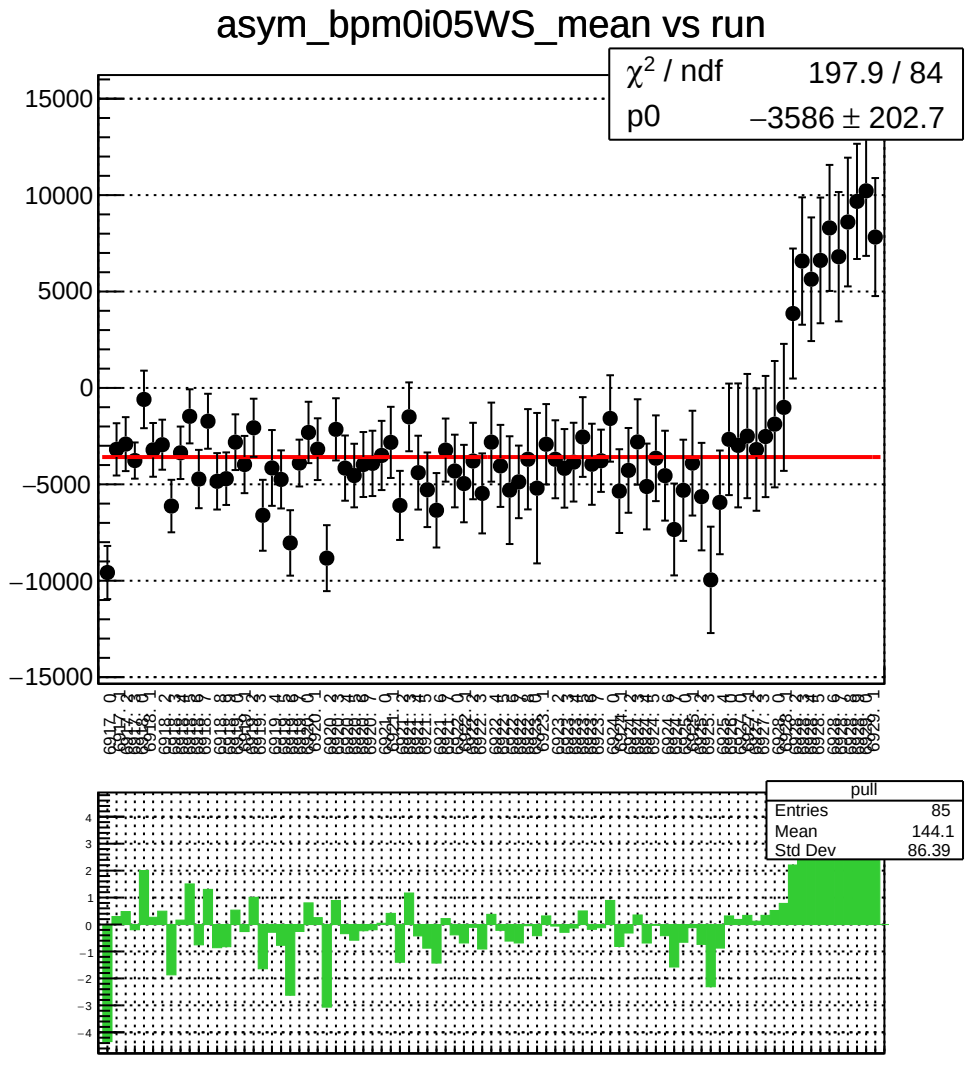

pull1D
Entries 85
Mean −0.9317
Std Dev 4.868
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

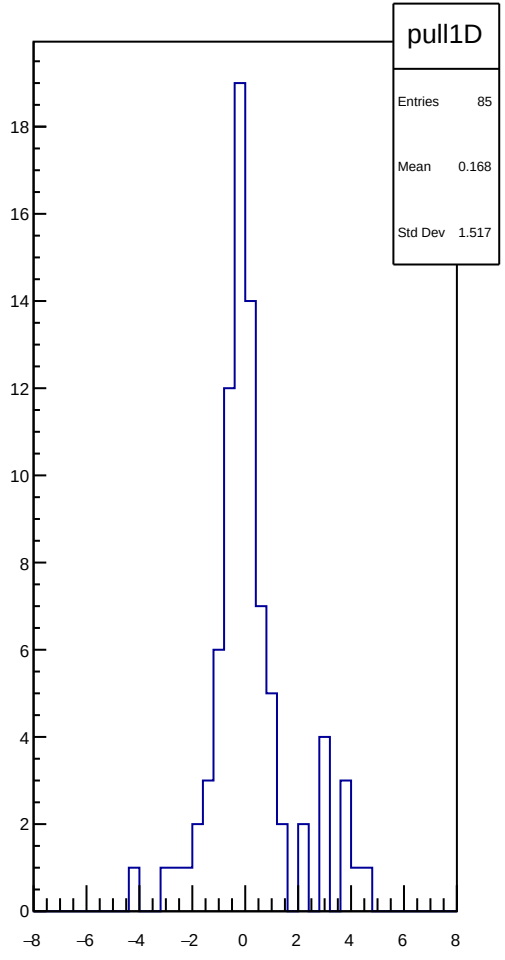

asym_bpm0i02WS_rms vs run
χ² / ndf 2.096e+04 / 84
p0 131.1 ± 0.1045
350
300
250
200
150
100

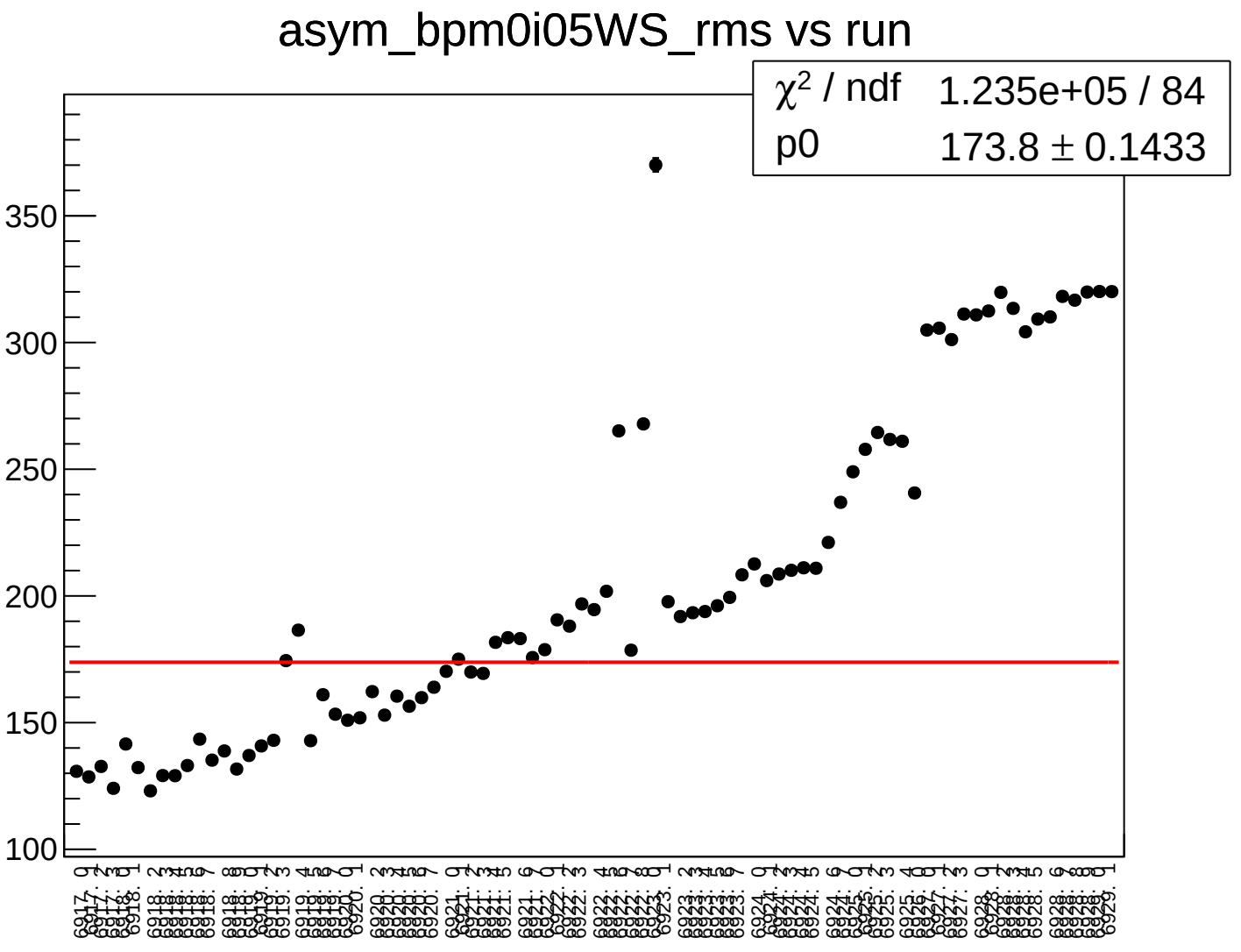

asym_bpm0i02aWS_mean vs run
χ² / ndf 1170 / 84
p0 −1.692e+04 ± 196.9
pull
Entries 85
Mean 130
Std Dev 82.79

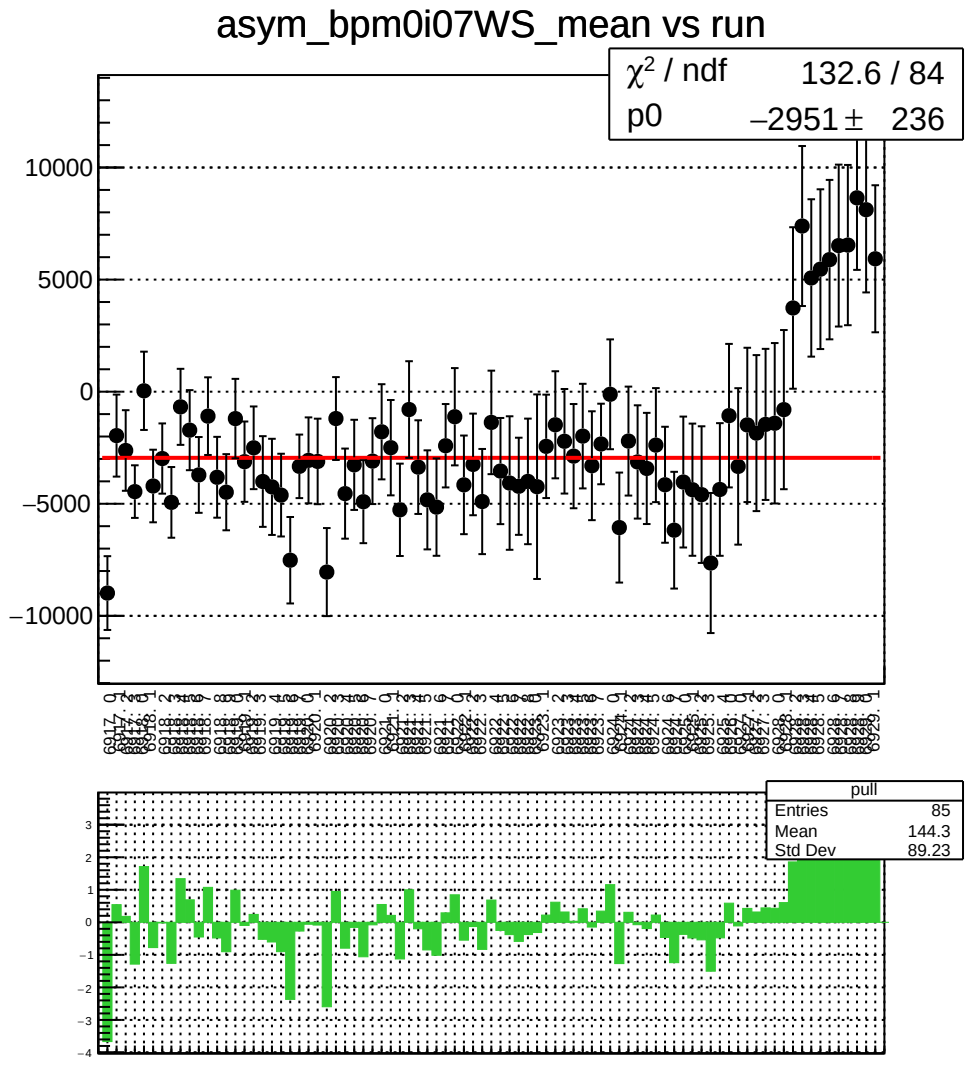

pull1D
Entries 85
Mean 0.7948
Std Dev 3.528

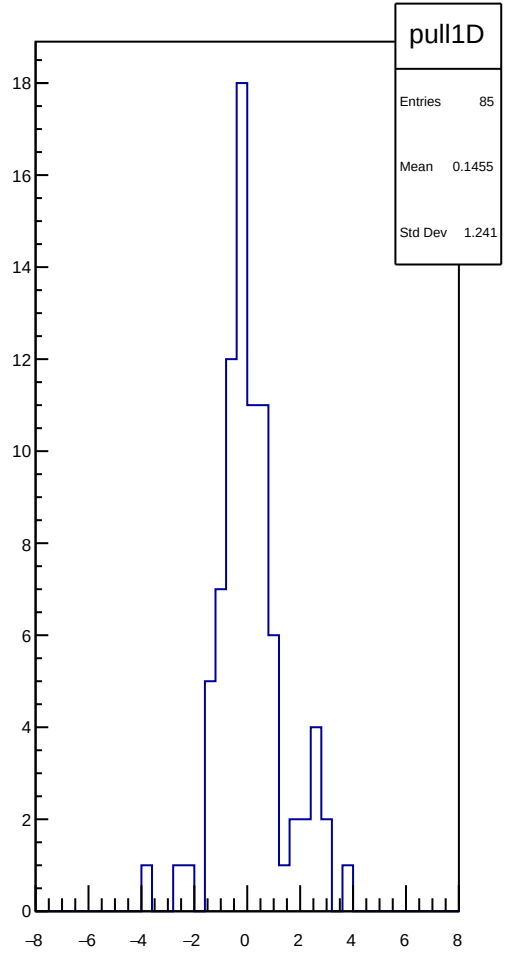

asym_bpm0i02aWS_rms vs run
χ² / ndf 1.226e+05 / 84
p0 168.9 ± 0.1392
400
350
300
250
200
150
100

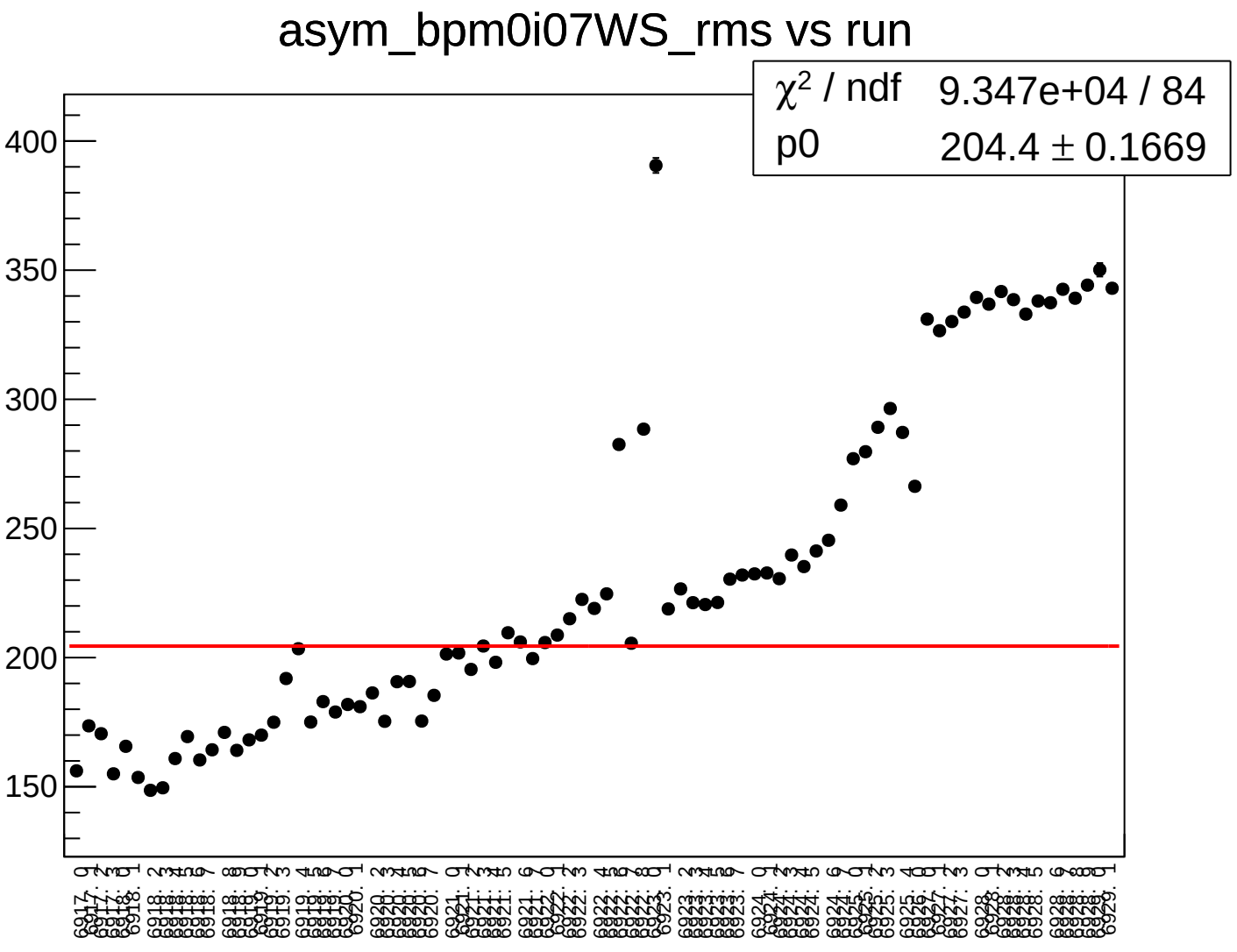

asym_bpm0i05WS_mean vs run
χ² / ndf 197.9 / 84
p0 −3586 ± 202.7
pull
Entries 85
Mean 144.1
Std Dev 86.39

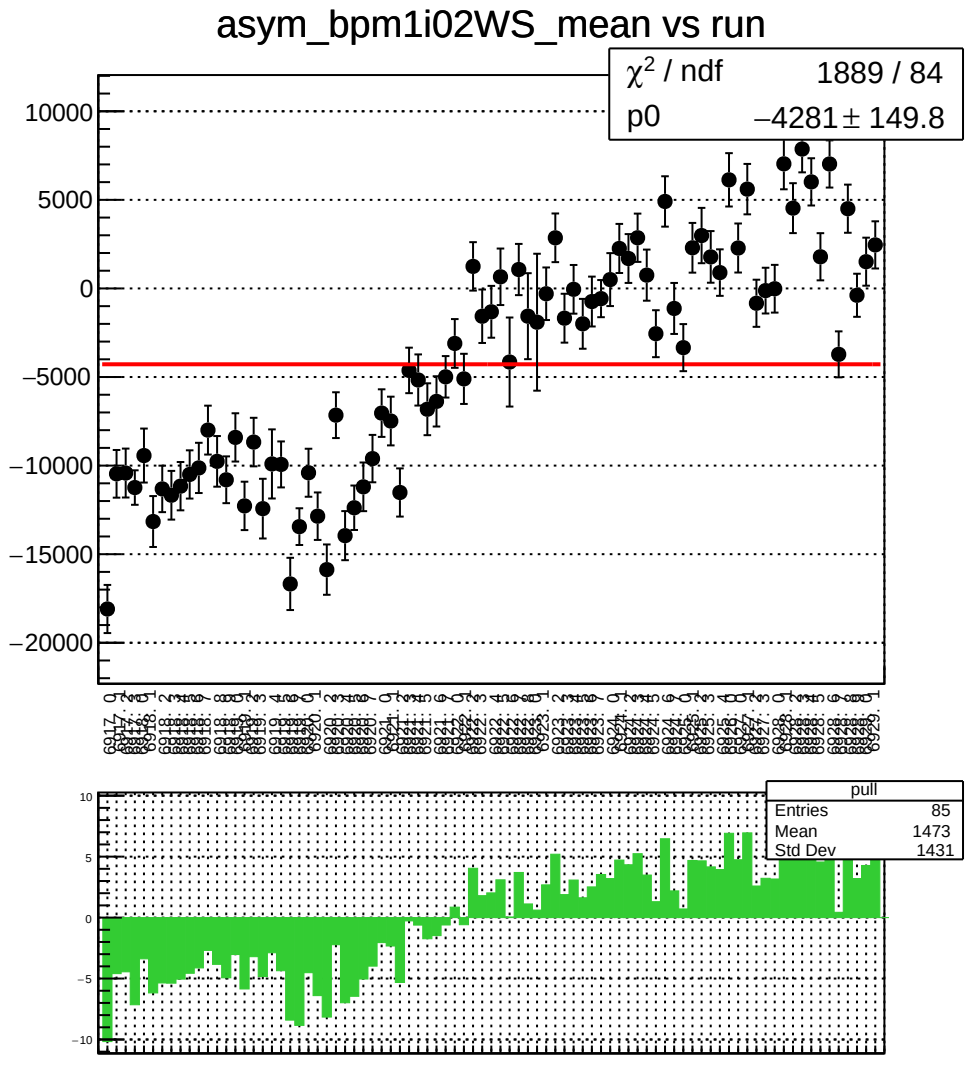

pull1D
Entries 85
Mean 0.168
Std Dev 1.517

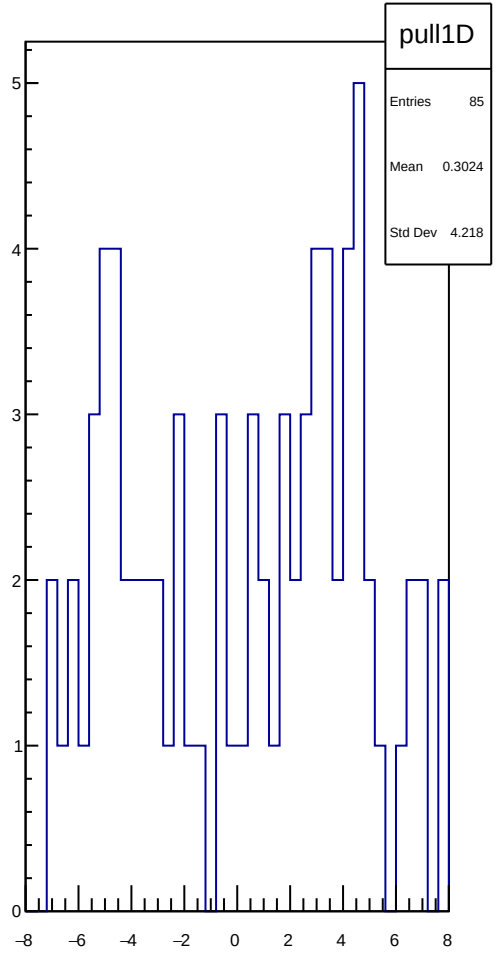

asym_bpm0i05WS_rms vs run
χ^2 / ndf 1.235e+05 / 84
p0 173.8 ± 0.1433
350
300
250
200
150
100

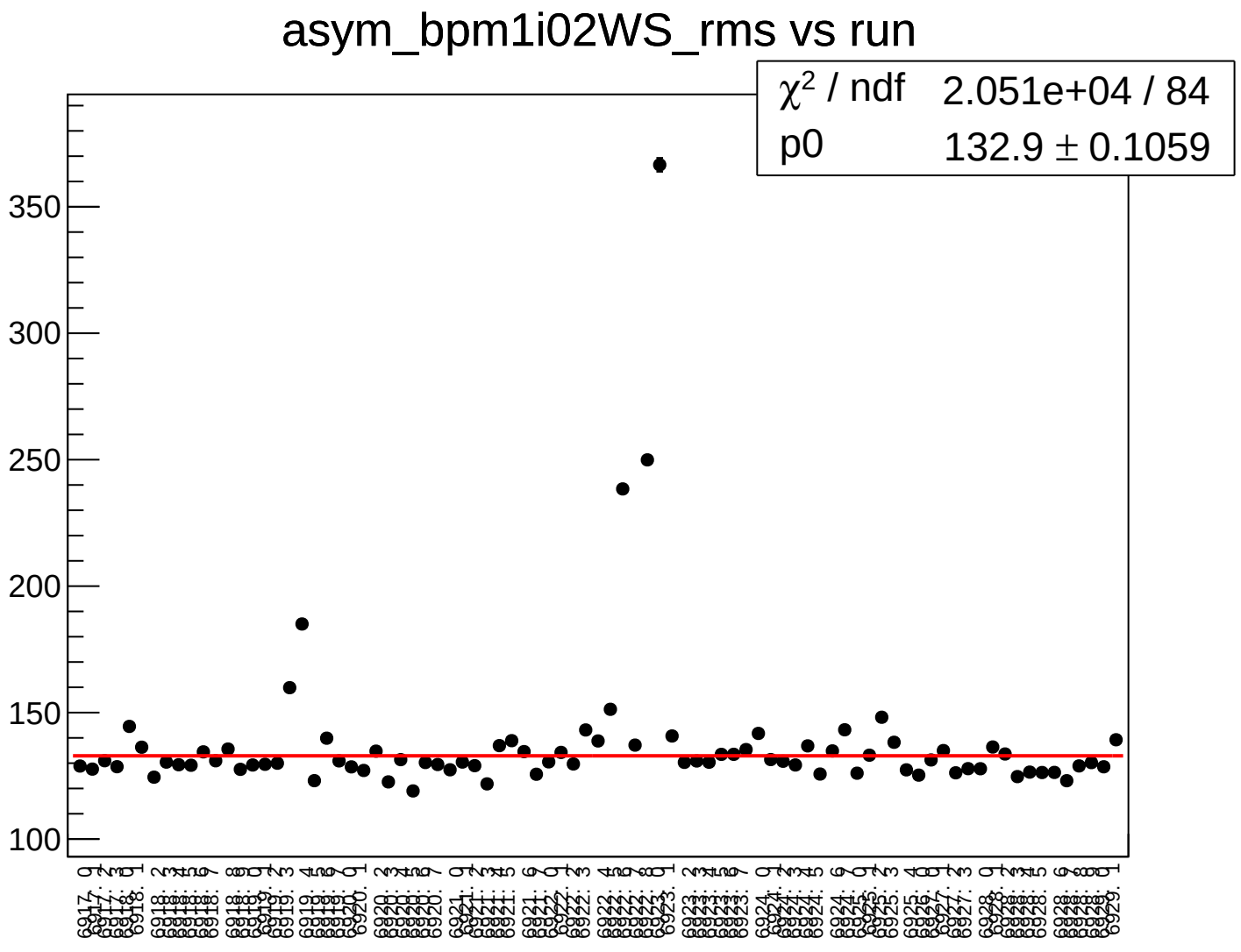

asym_bpm0i07WS_mean vs run
χ² / ndf 132.6 / 84
p0 −2951 ± 236
10000
5000
0
−5000
−10000
pull
Entries 85
Mean 144.3
Std Dev 89.23
3
2
1
0
−1
−2
−3
−4

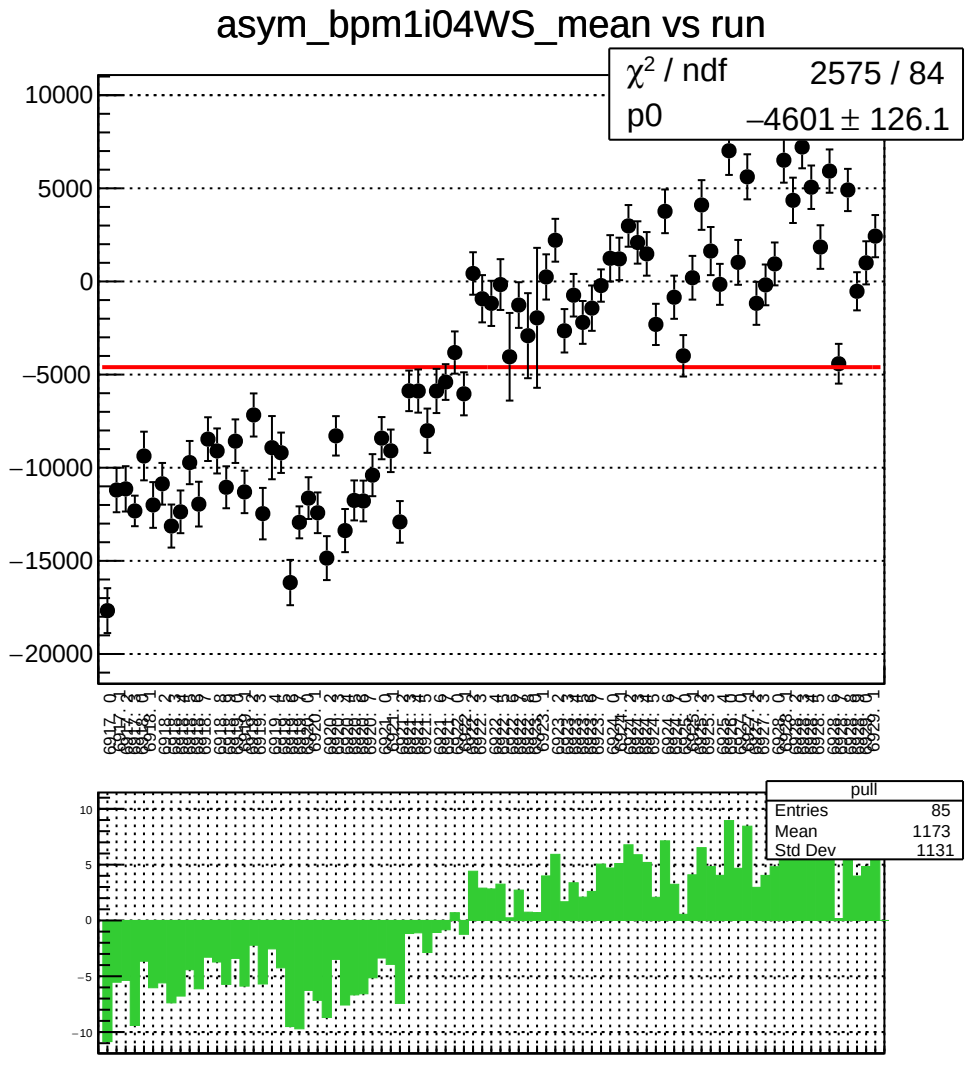

pull1D
Entries 85
Mean 0.1455
Std Dev 1.241
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

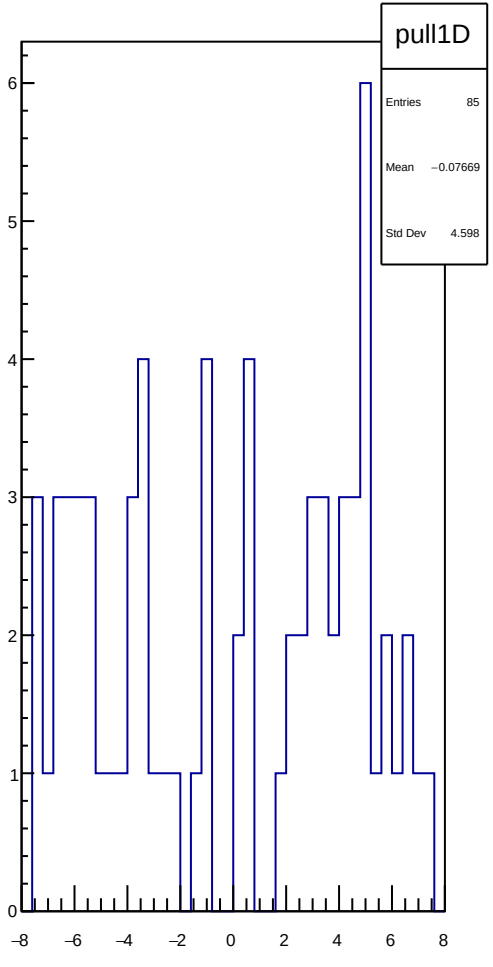

asym_bpm0i07WS_rms vs run
χ² / ndf 9.347e+04 / 84
p0 204.4 ± 0.1669
400
350
300
250
200
150

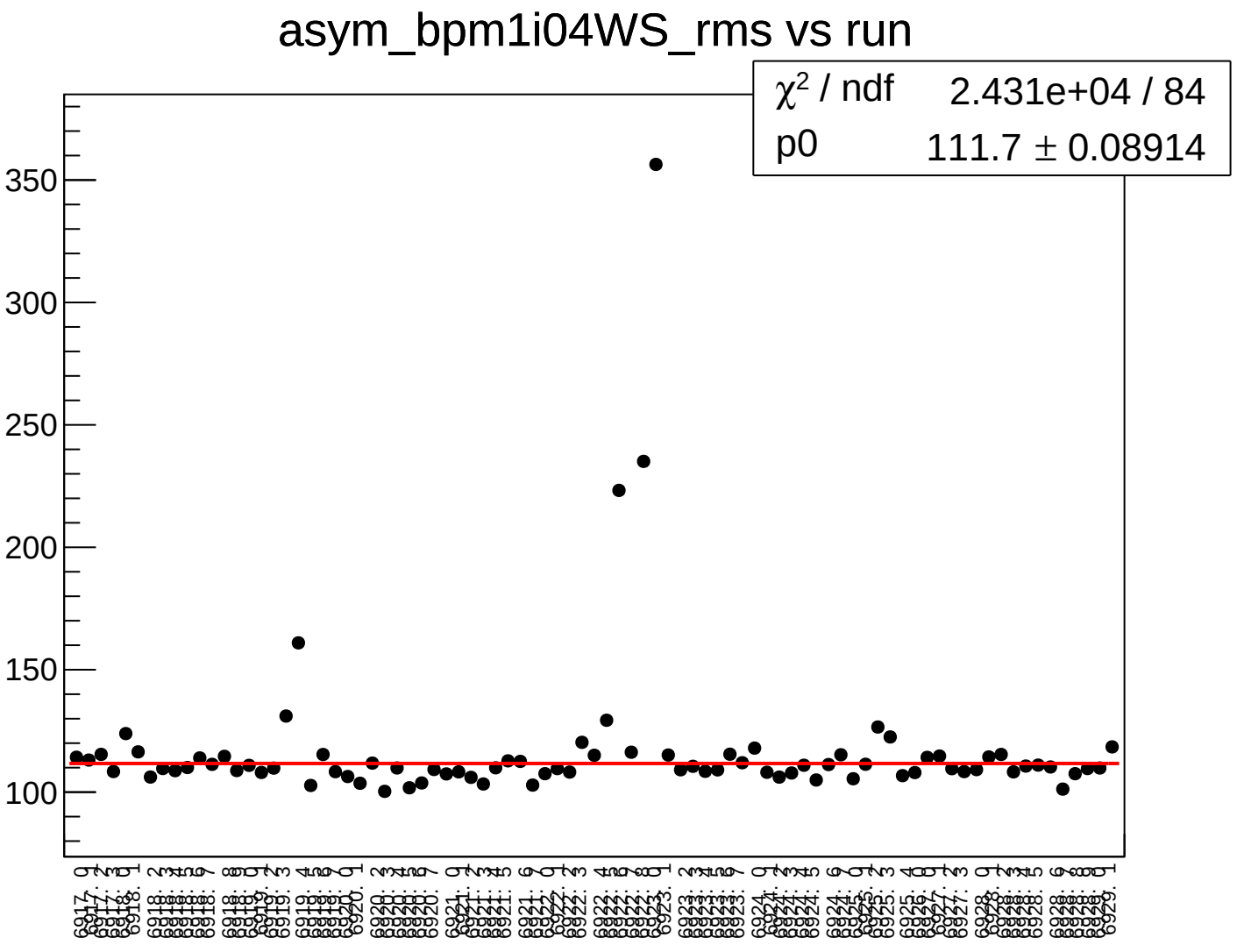

asym_bpm1i02WS_mean vs run
χ² / ndf 1889 / 84
p0 −4281 ± 149.8
pull
Entries 85
Mean 1473
Std Dev 1431

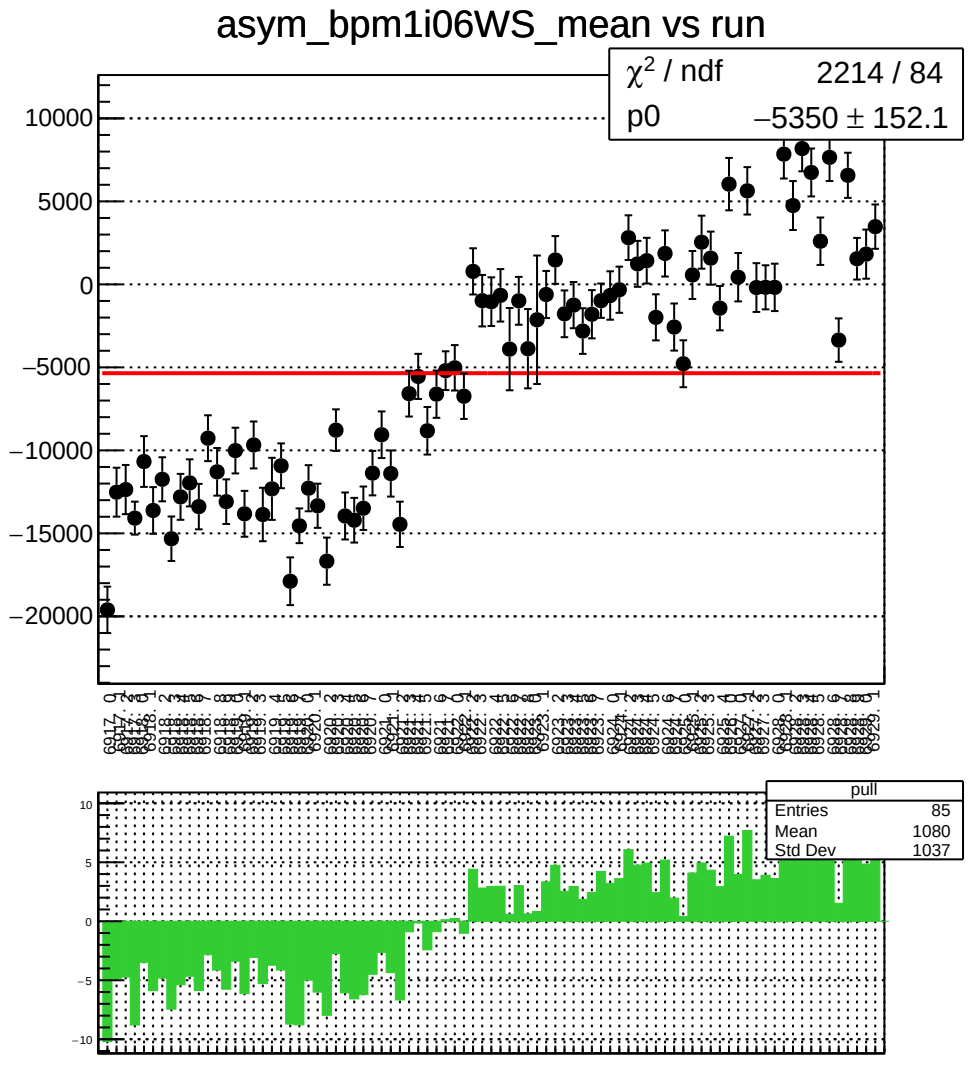

pull1D
Entries 85
Mean 0.3024
Std Dev 4.218

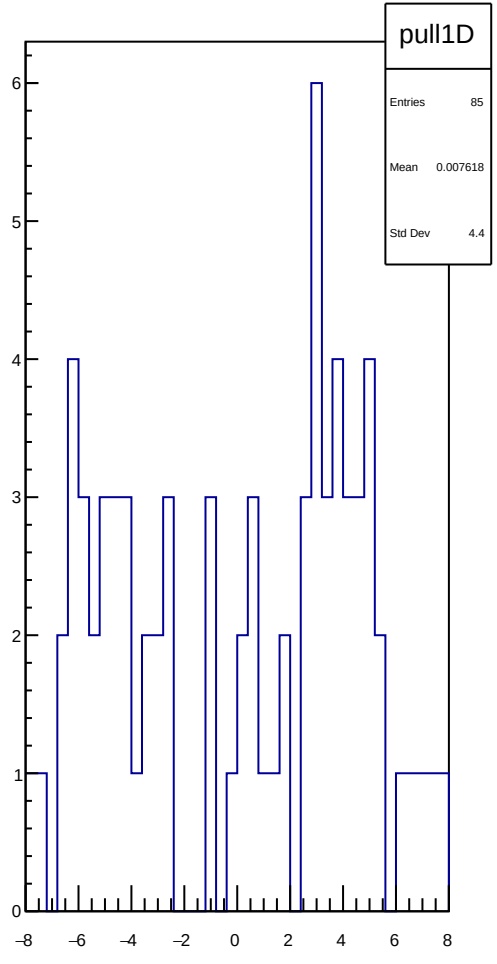

asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.051e+04 / 84
p0 132.9 ± 0.1059
350
300
250
200
150
100

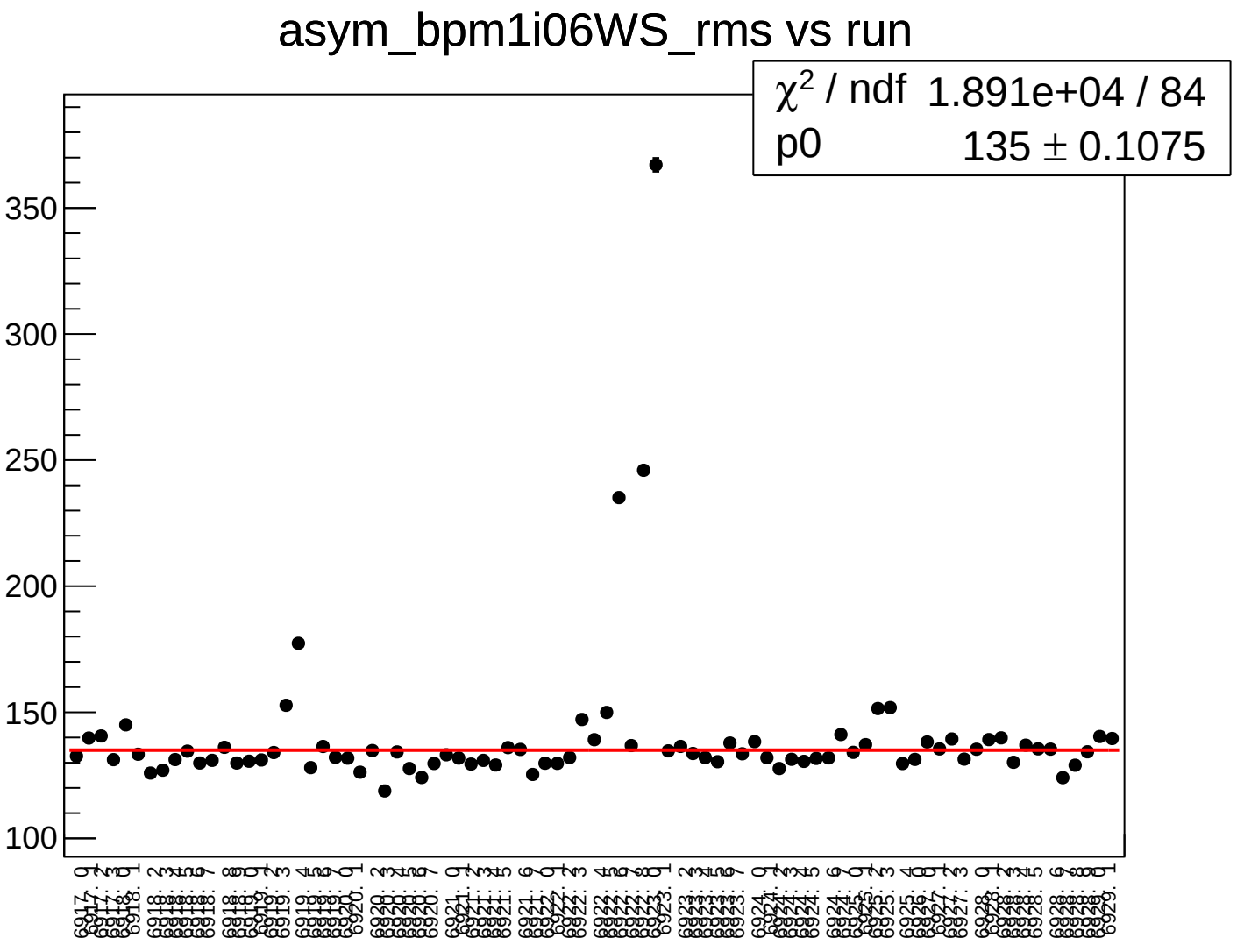

asym_bpm1i04WS_mean vs run
χ² / ndf 2575 / 84
p0 −4601 ± 126.1
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 85
Mean 1173
Std Dev 1131
10
5
0
−5
−10

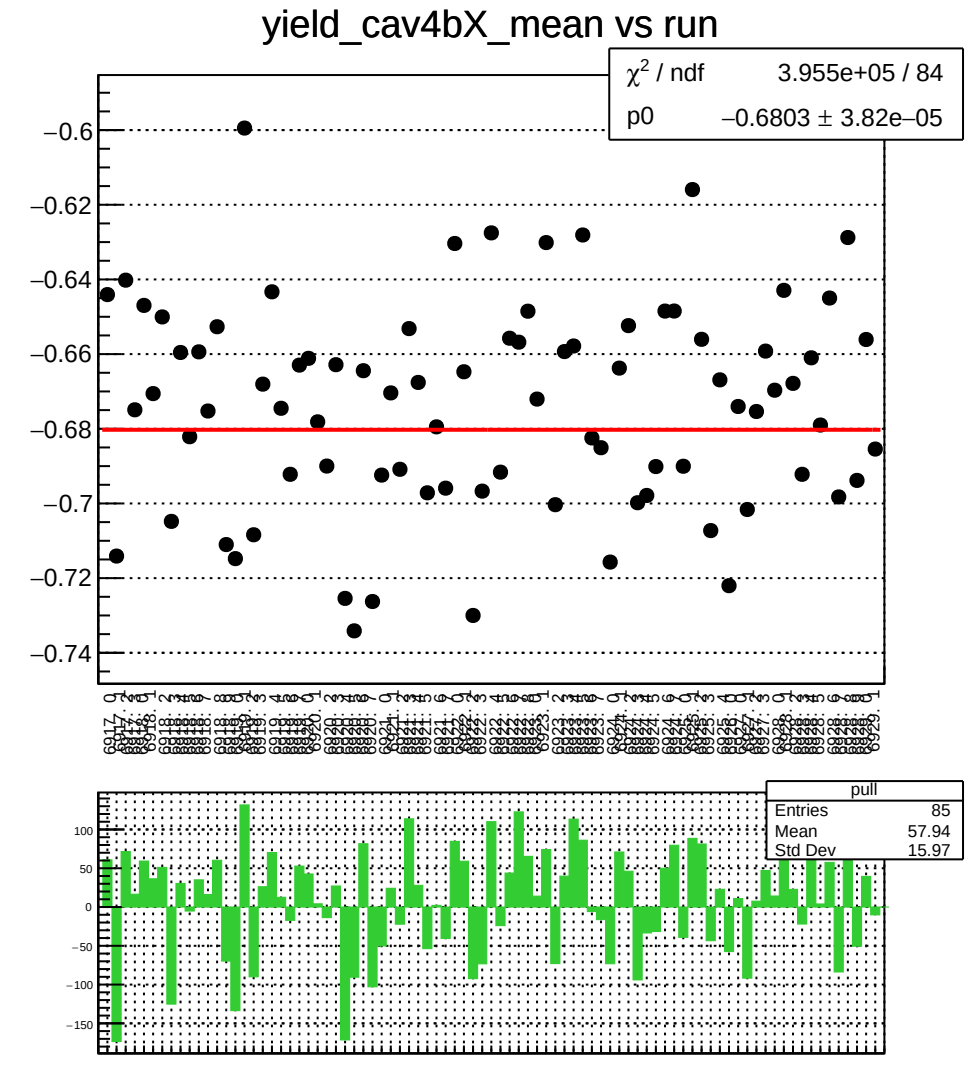

pull1D
Entries 85
Mean −0.07669
Std Dev 4.598
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

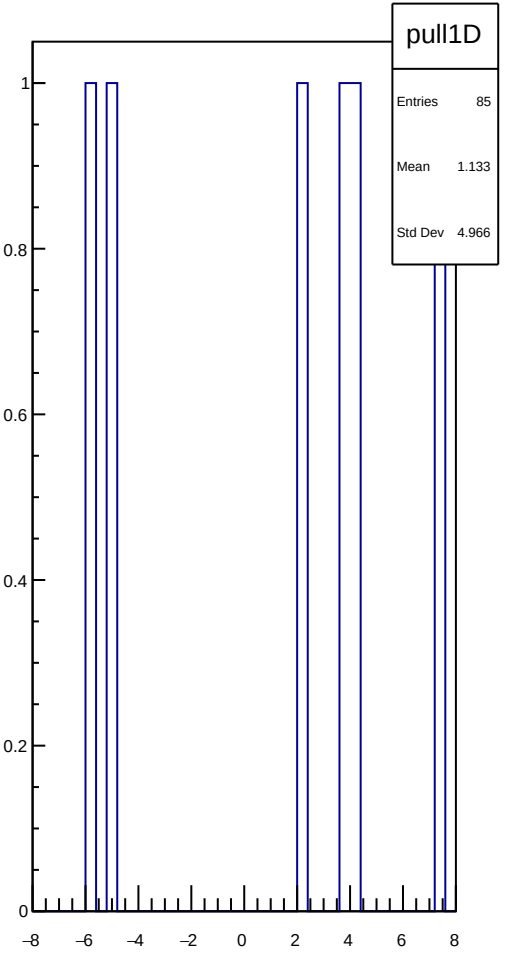

asym_bpm1i04WS_rms vs run
χ² / ndf 2.431e+04 / 84
p0 111.7 ± 0.08914
350
300
250
200
150
100

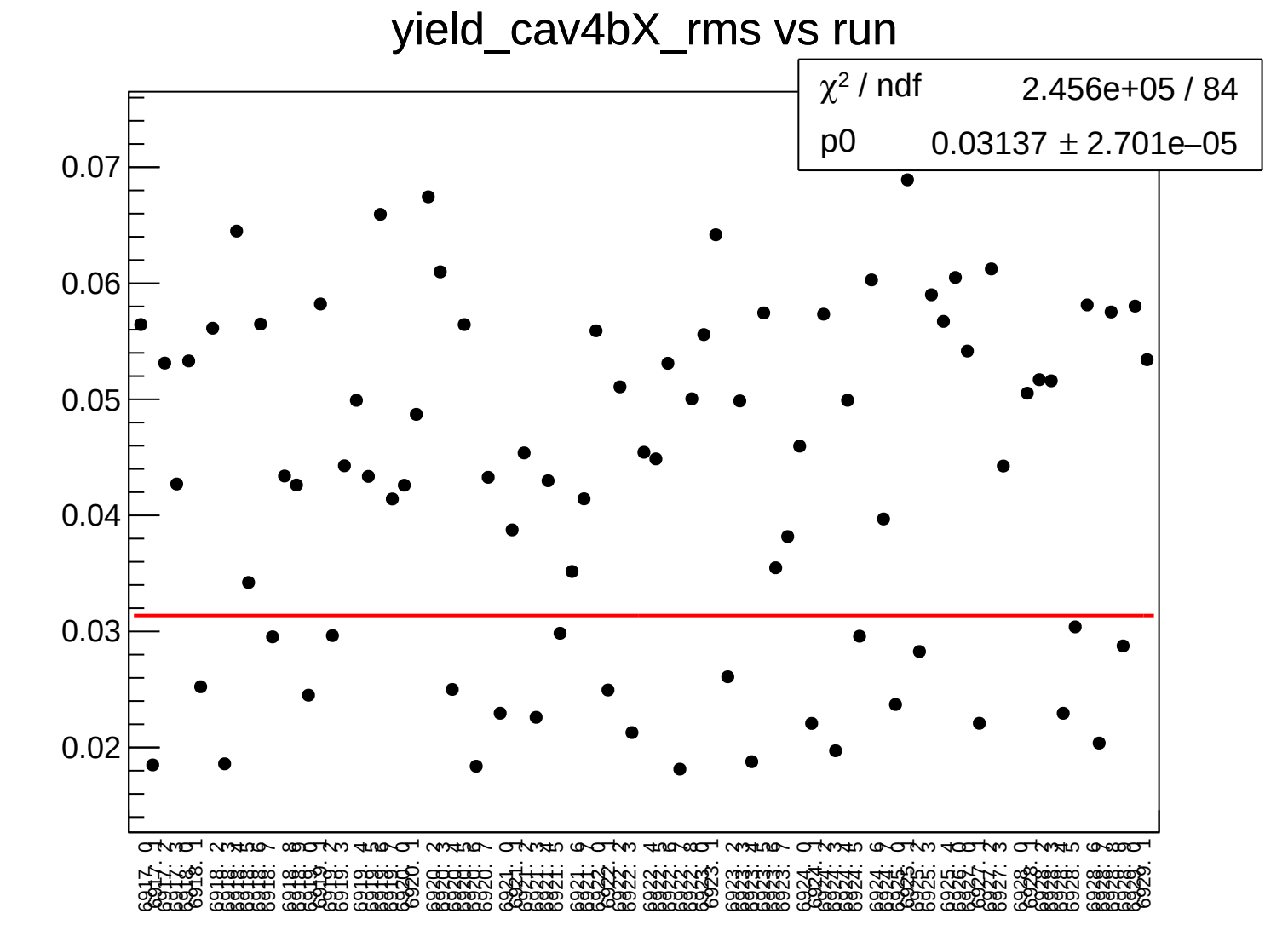

asym_bpm1i06WS_mean vs run
χ² / ndf 2214 / 84
p0 −5350 ± 152.1
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 85
Mean 1080
Std Dev 1037
10
5
0
−5
−10

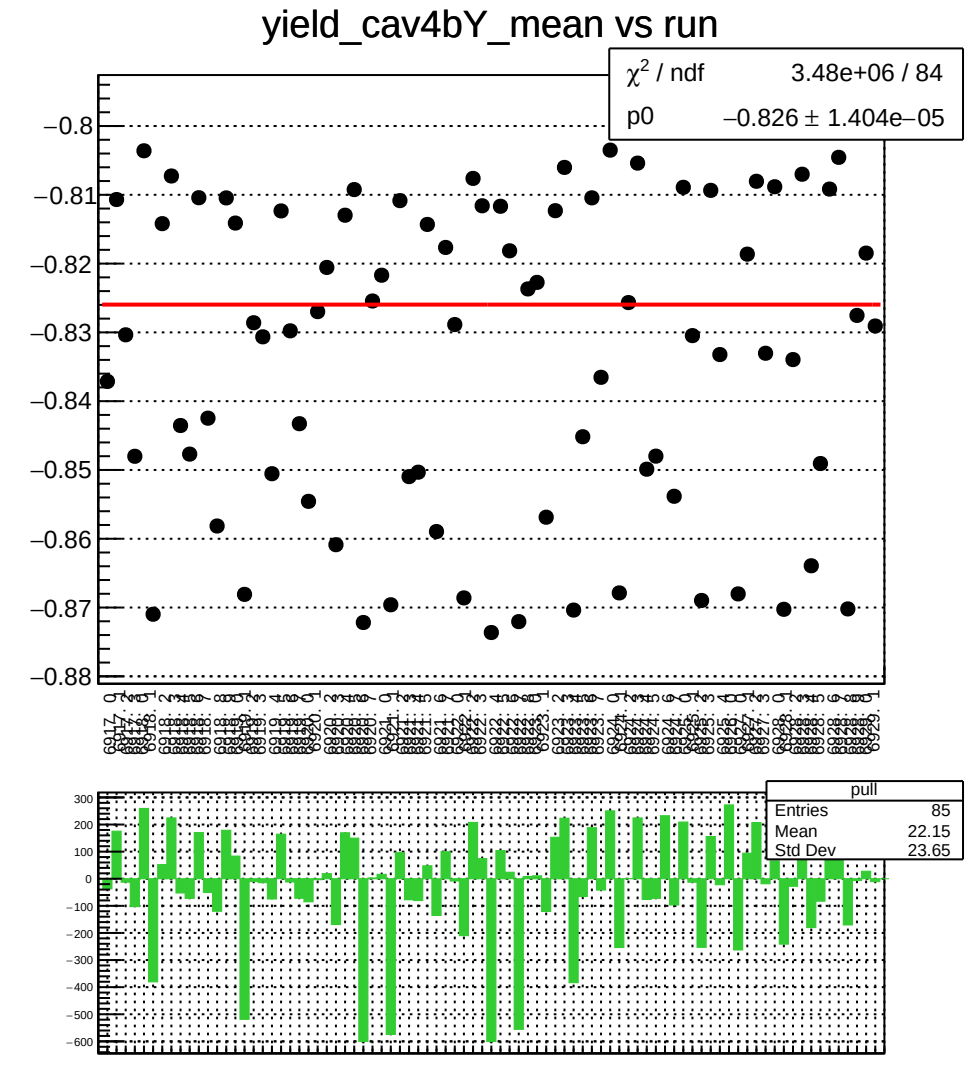

pull1D
Entries 85
Mean 0.007618
Std Dev 4.4
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

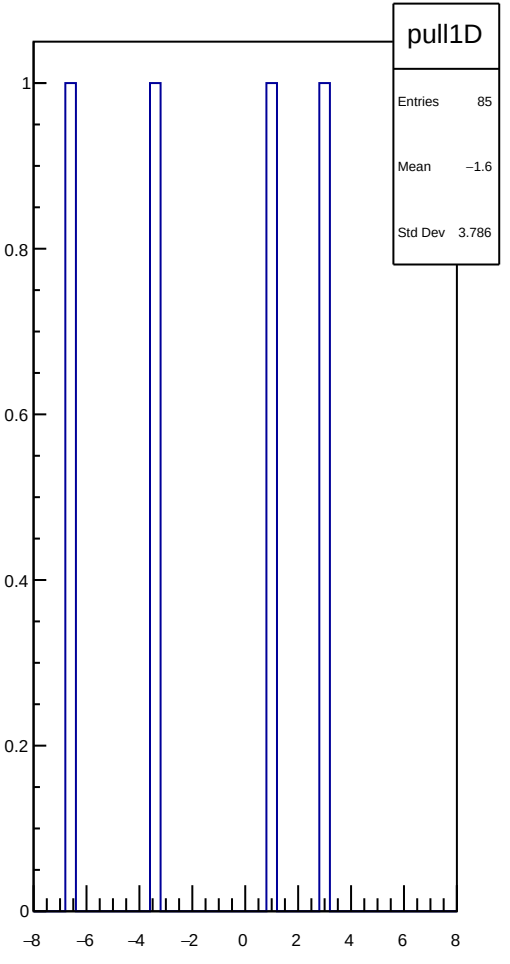

asym_bpm1i06WS_rms vs run
χ^2 / ndf 1.891e+04 / 84
p0 135 ± 0.1075
350
300
250
200
150
100

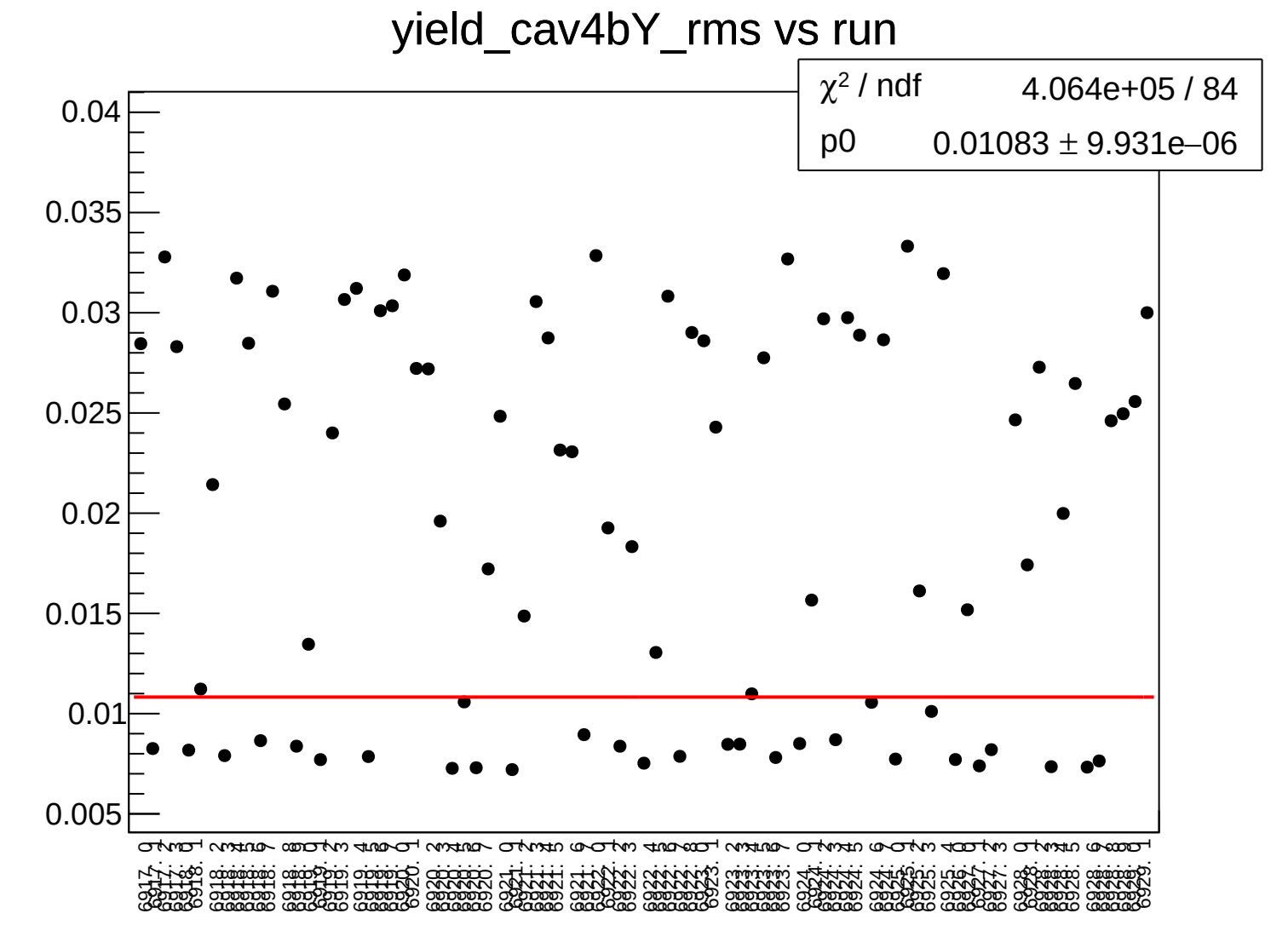

yield_cav4bX_mean vs run
χ² / ndf 3.955e+05 / 84
p0 −0.6803 ± 3.82e−05
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
−0.74
pull
Entries 85
Mean 57.94
Std Dev 15.97
100
50
0
−50
−100
−150

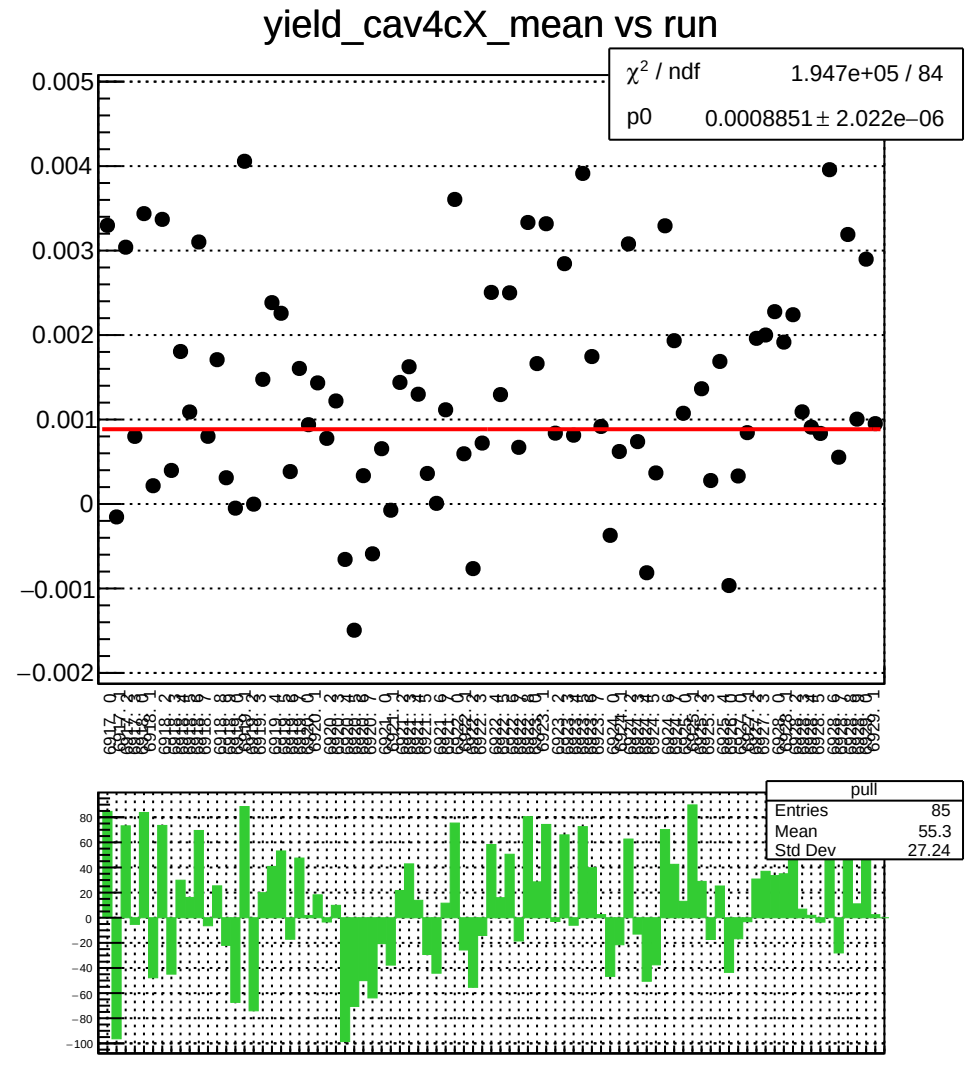

pull1D
Entries 85
Mean 1.133
Std Dev 4.966
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

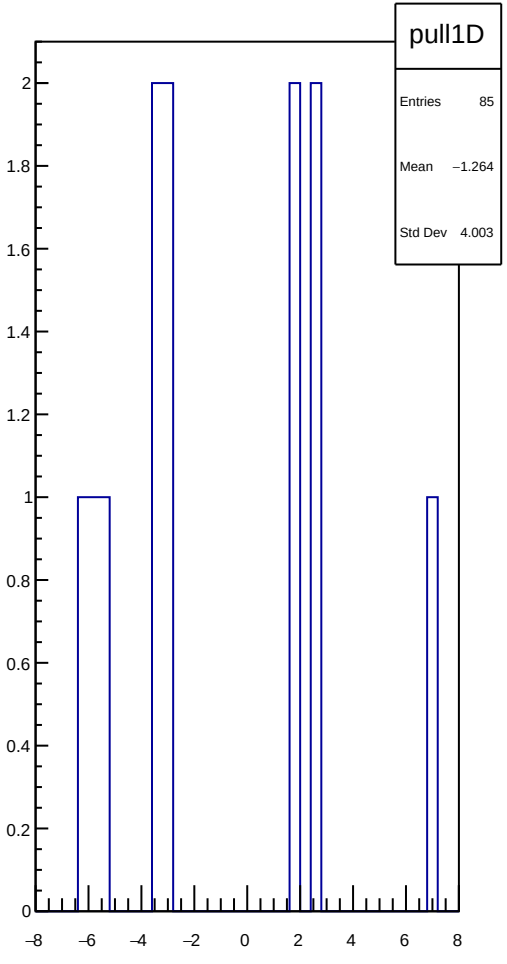

yield_cav4bX_rms vs run
χ² / ndf 2.456e+05 / 84
p0 0.03137 ± 2.701e−05
0.07
0.06
0.05
0.04
0.03
0.02

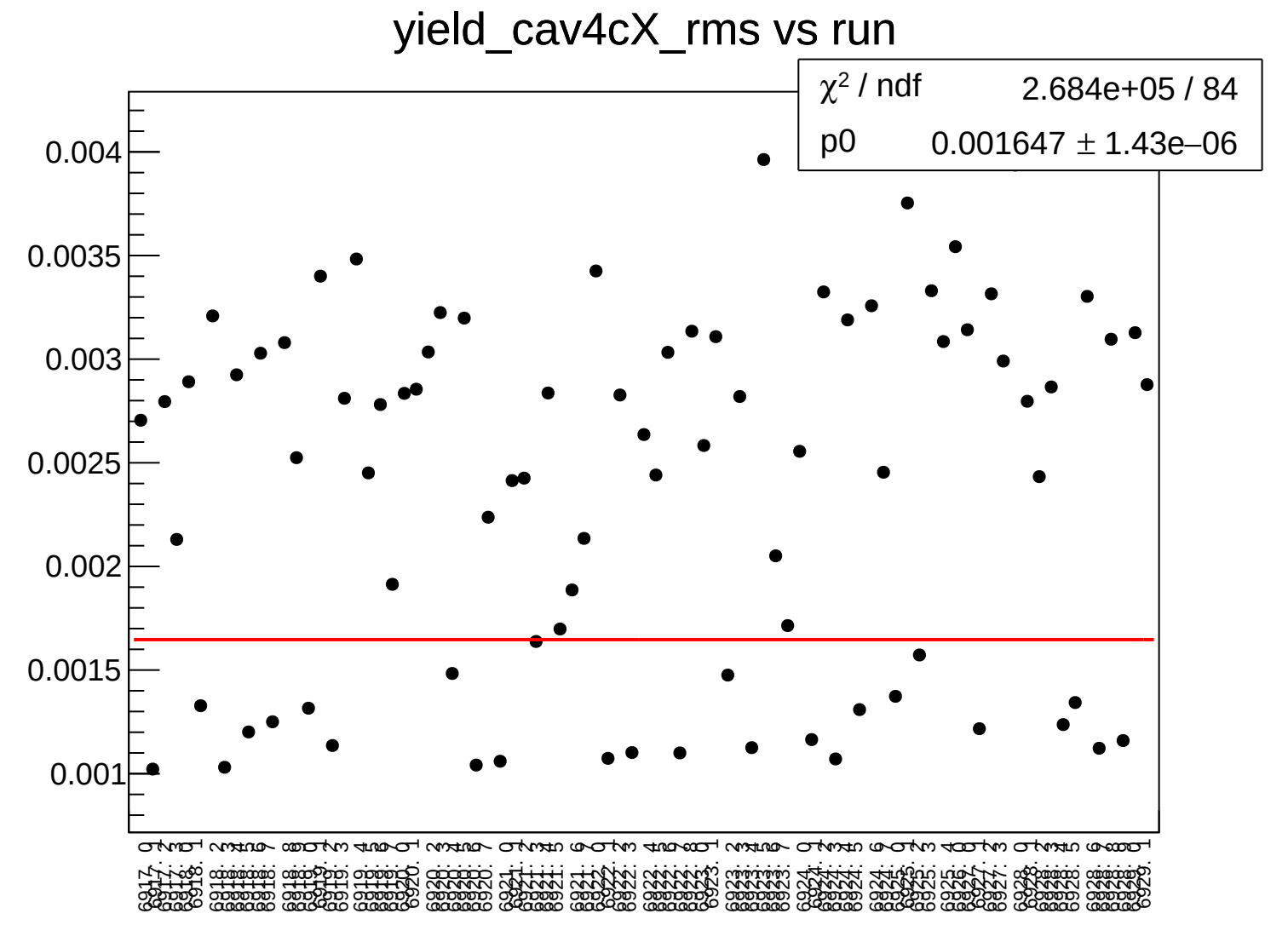

yield_cav4bY_mean vs run
χ² / ndf 3.48e+06 / 84
p0 −0.826 ± 1.404e−05
−0.8
−0.81
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
pull
Entries 85
Mean 22.15
Std Dev 23.65
300
200
100
0
−100
−200
−300
−400
−500
−600

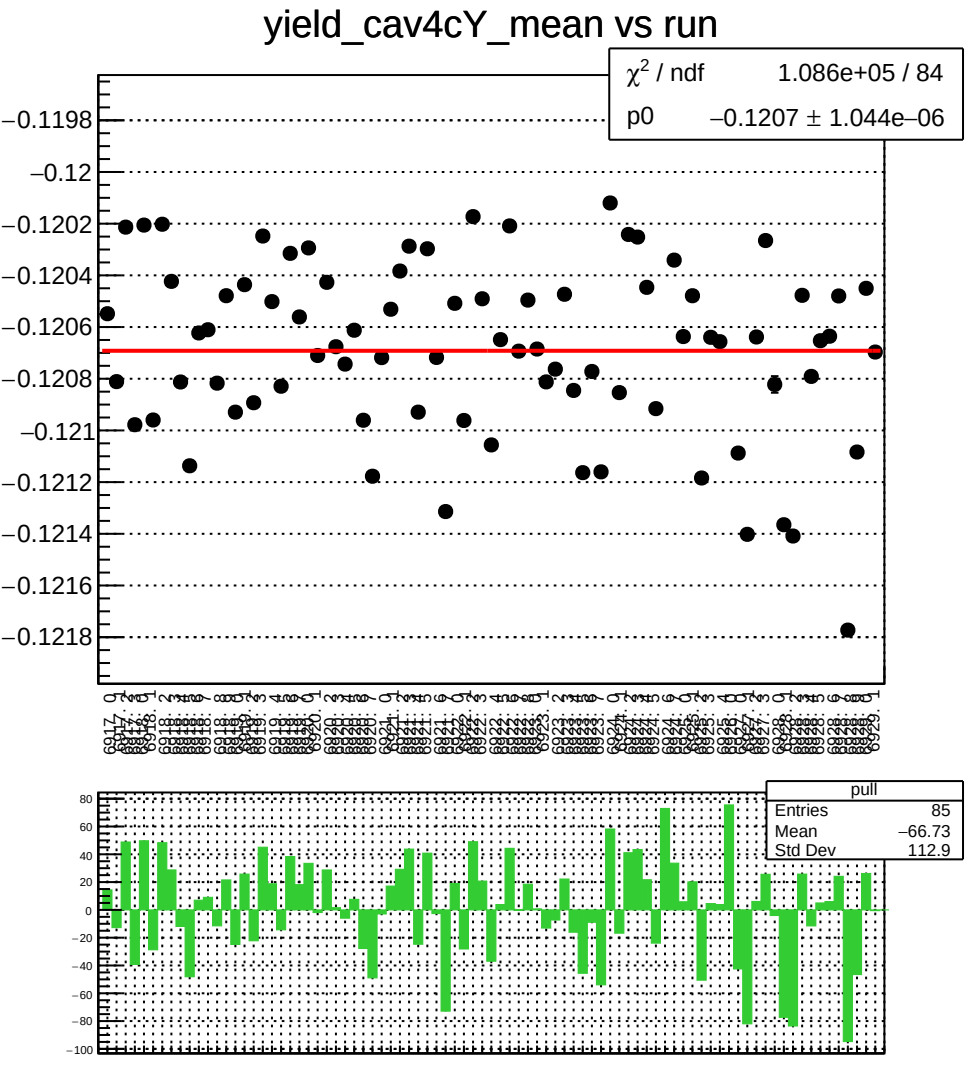

pull1D
Entries 85
Mean −1.6
Std Dev 3.786
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

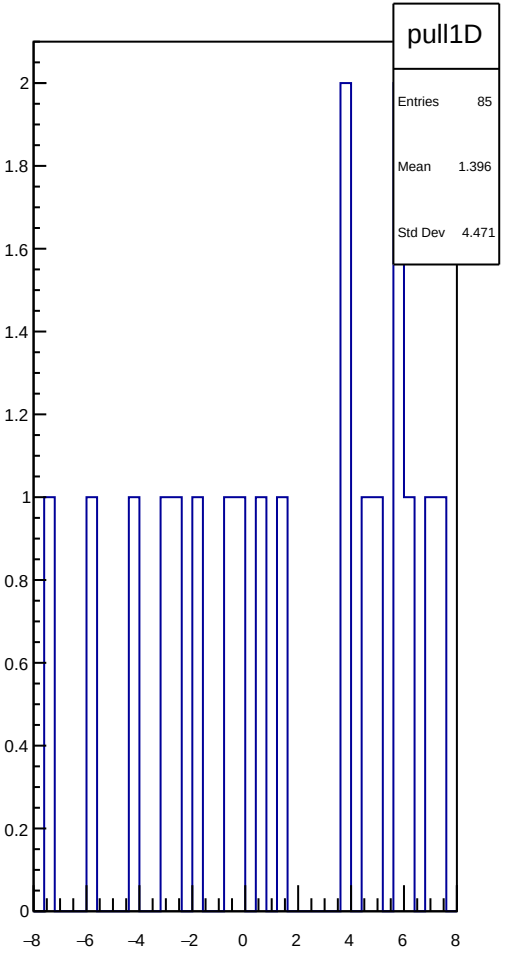

yield_cav4bY_rms vs run
χ² / ndf 4.064e+05 / 84
p0 0.01083 ± 9.931e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

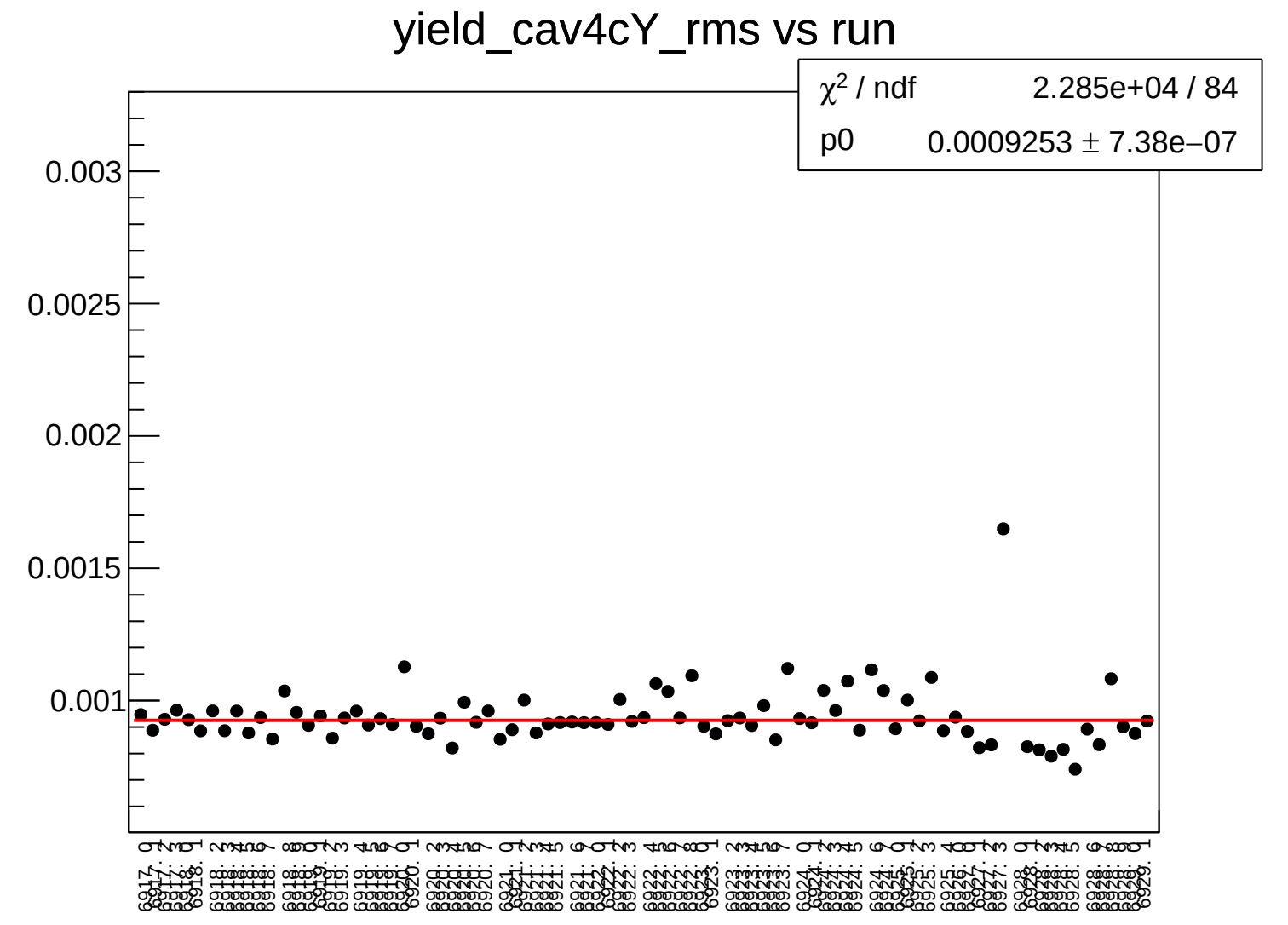

yield_cav4cX_mean vs run
χ² / ndf 1.947e+05 / 84
p0 0.0008851 ± 2.022e−06
pull
Entries 85
Mean 55.3
Std Dev 27.24

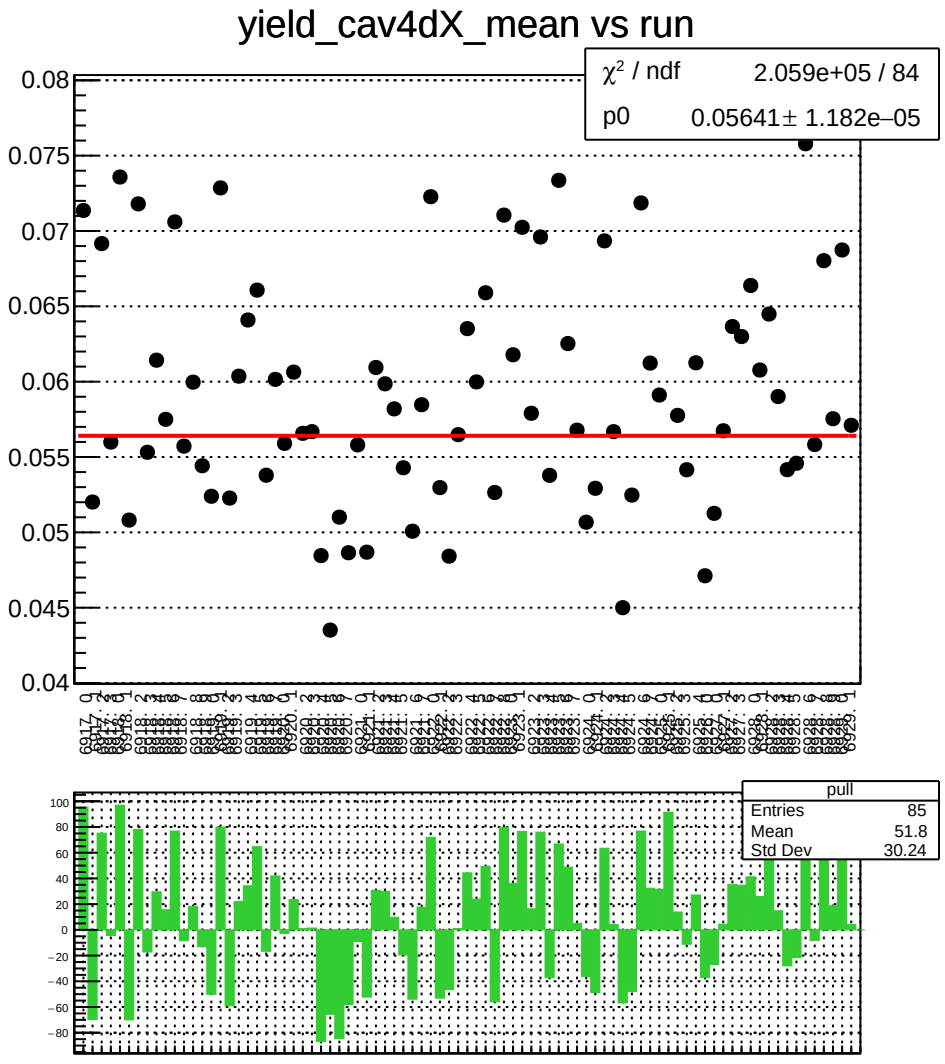

pull1D
Entries 85
Mean −1.264
Std Dev 4.003

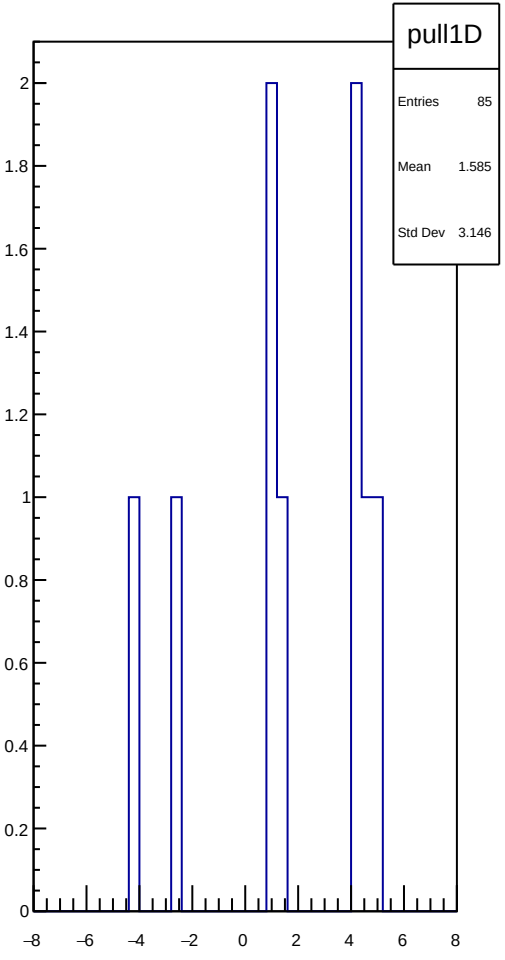

yield_cav4cX_rms vs run
χ² / ndf 2.684e+05 / 84
p0 0.001647 ± 1.43e−06
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

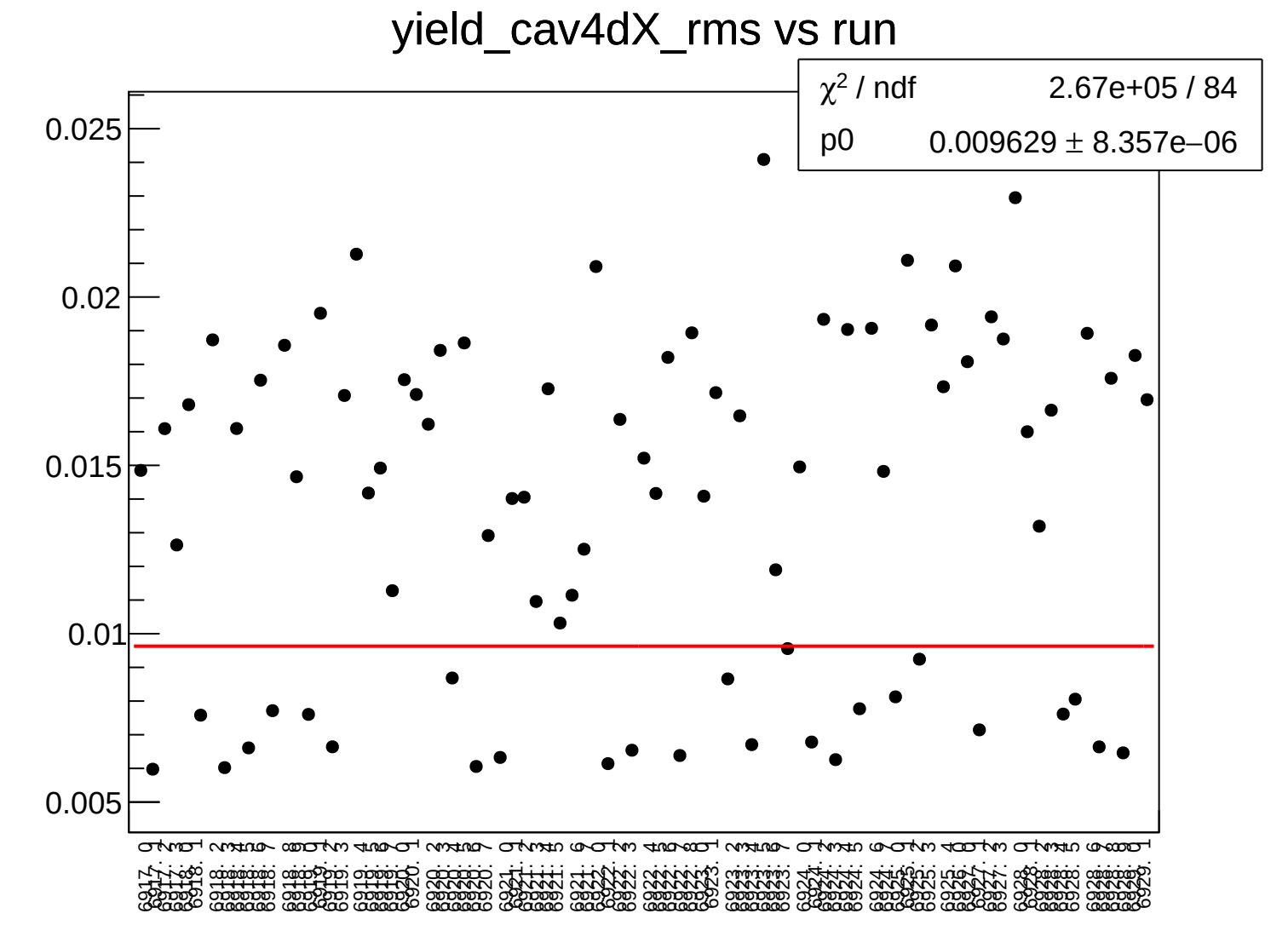

yield_cav4cY_mean vs run
χ² / ndf 1.086e+05 / 84
p0 −0.1207 ± 1.044e−06
−0.1198
−0.12
−0.1202
−0.1204
−0.1206
−0.1208
−0.121
−0.1212
−0.1214
−0.1216
−0.1218
pull
Entries 85
Mean −66.73
Std Dev 112.9
80
60
40
20
0
−20
−40
−60
−80
−100

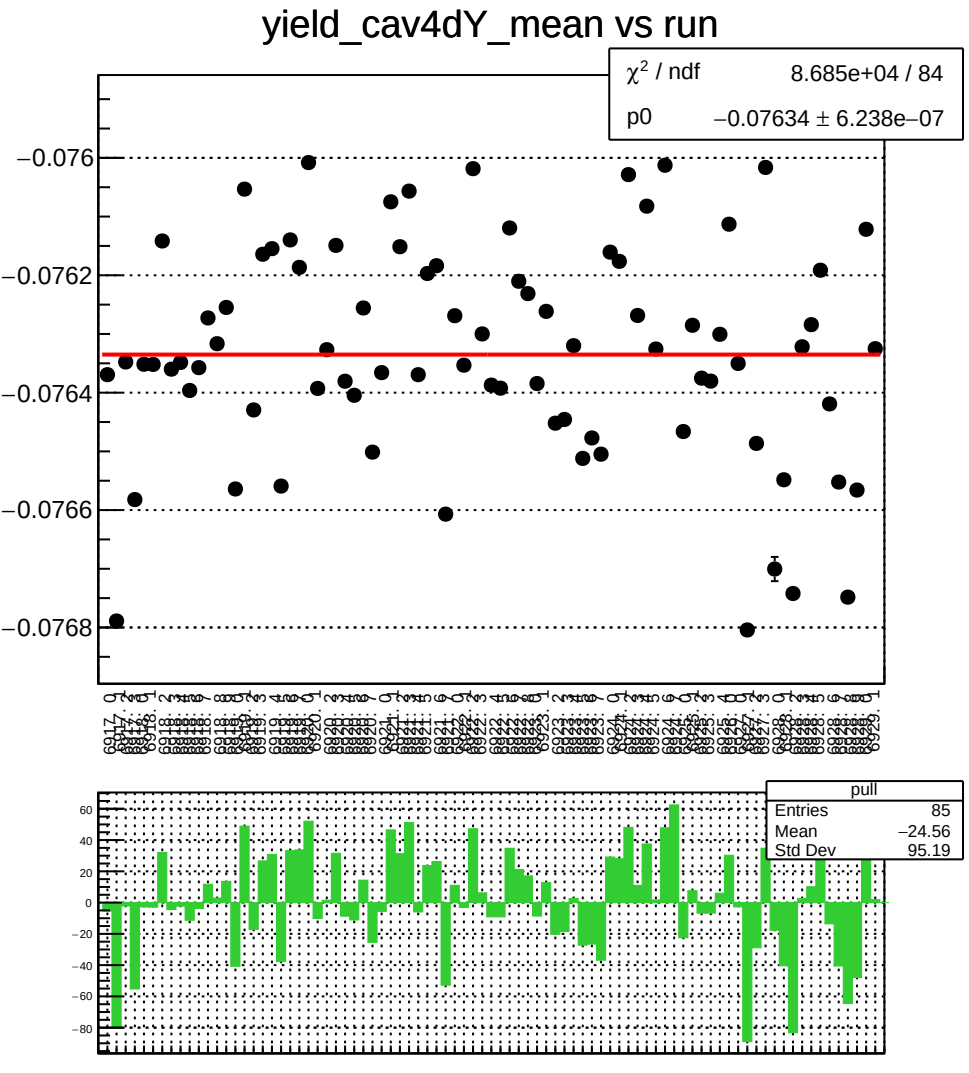

pull1D
Entries 85
Mean 1.396
Std Dev 4.471
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

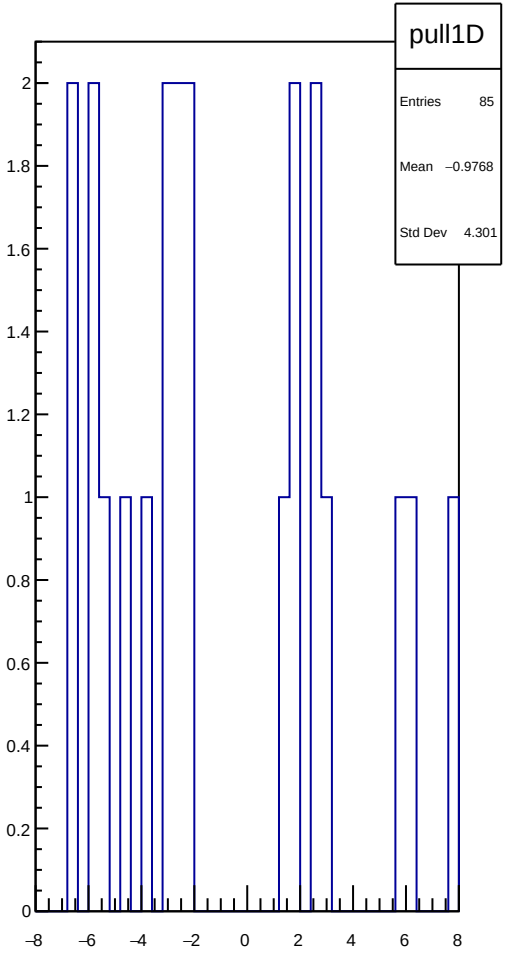

yield_cav4cY_rms vs run
χ² / ndf 2.285e+04 / 84
p0 0.0009253 ± 7.38e−07
0.003
0.0025
0.002
0.0015
0.001

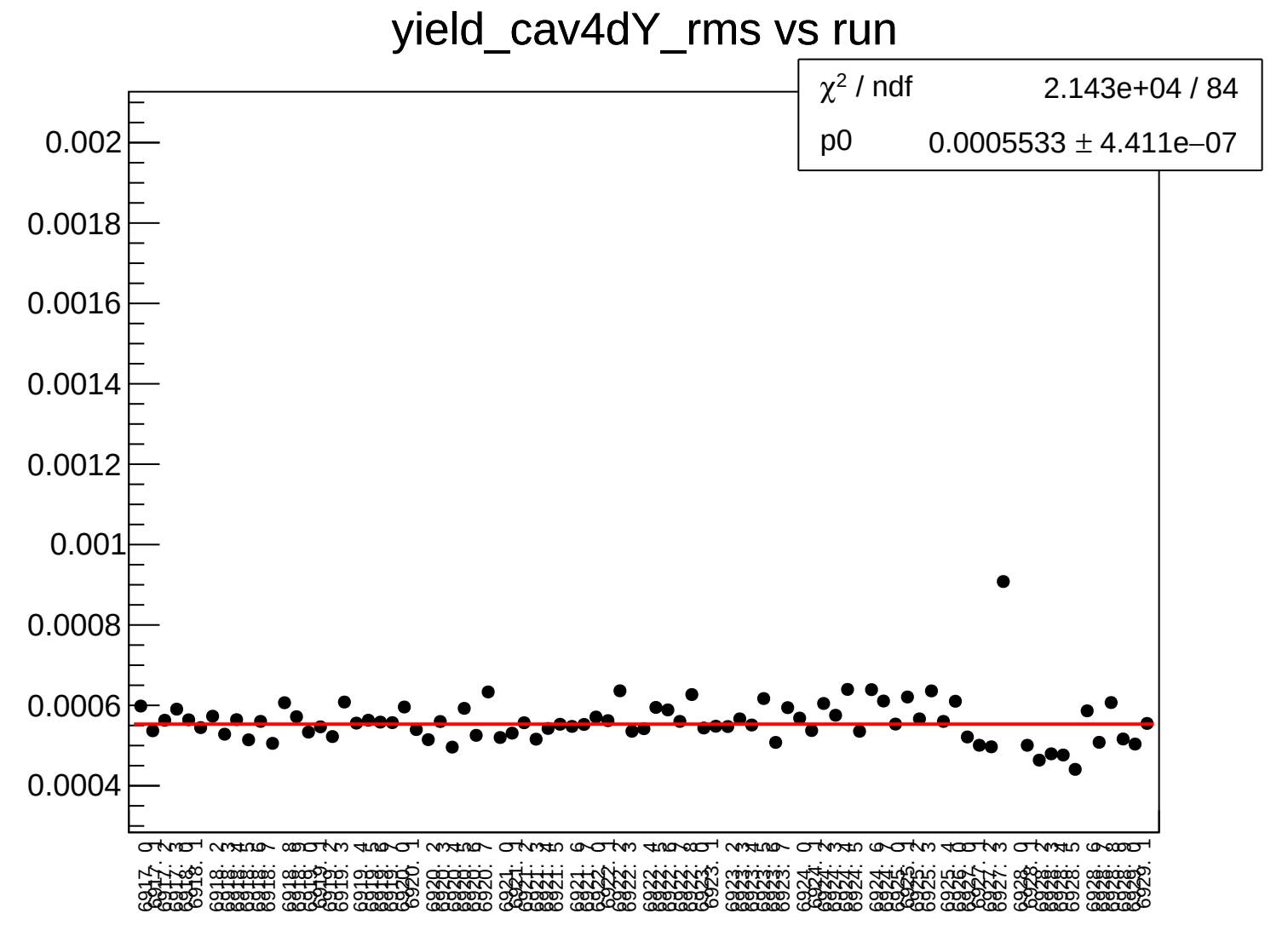

yield_cav4dX_mean vs run
χ² / ndf 2.059e+05 / 84
p0 0.05641± 1.182e−05
pull
Entries 85
Mean 51.8
Std Dev 30.24

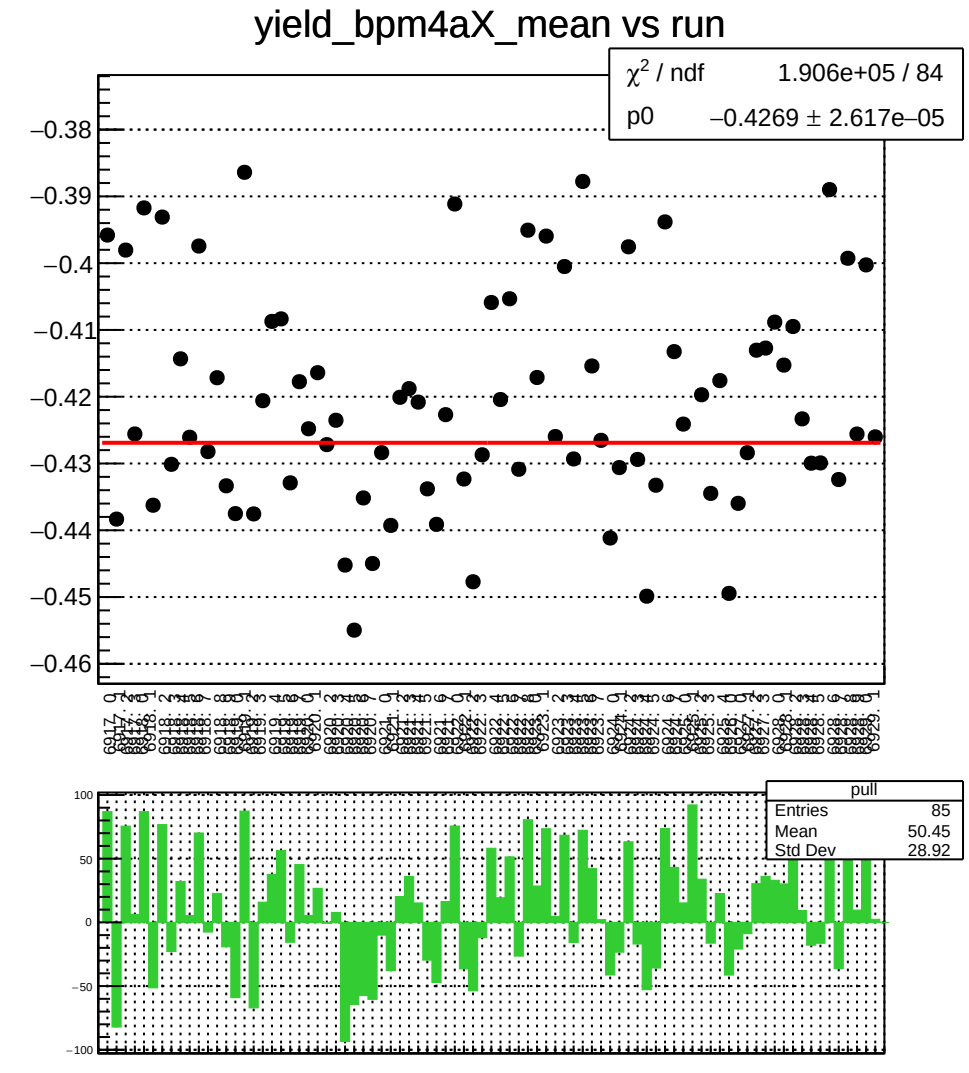

pull1D
Entries 85
Mean 1.585
Std Dev 3.146

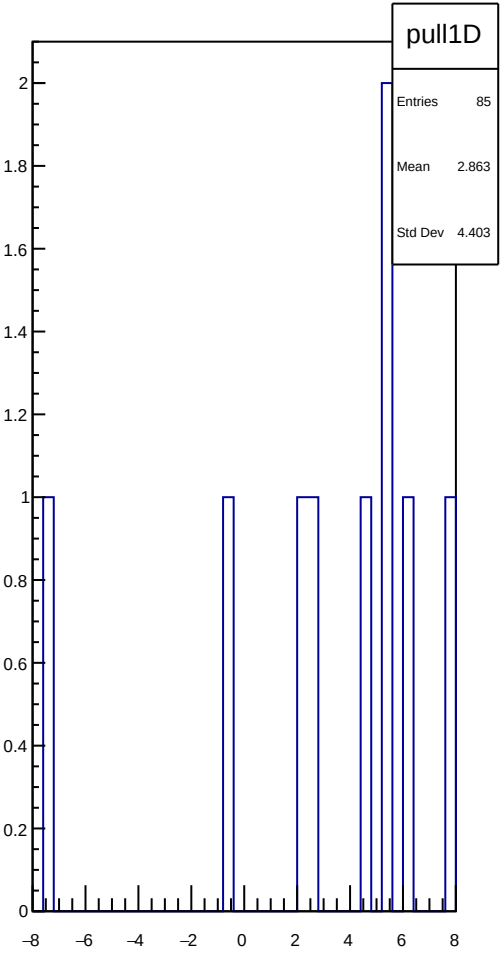

yield_cav4dX_rms vs run
χ² / ndf 2.67e+05 / 84
p0 0.009629 ± 8.357e−06
0.025
0.02
0.015
0.01
0.005

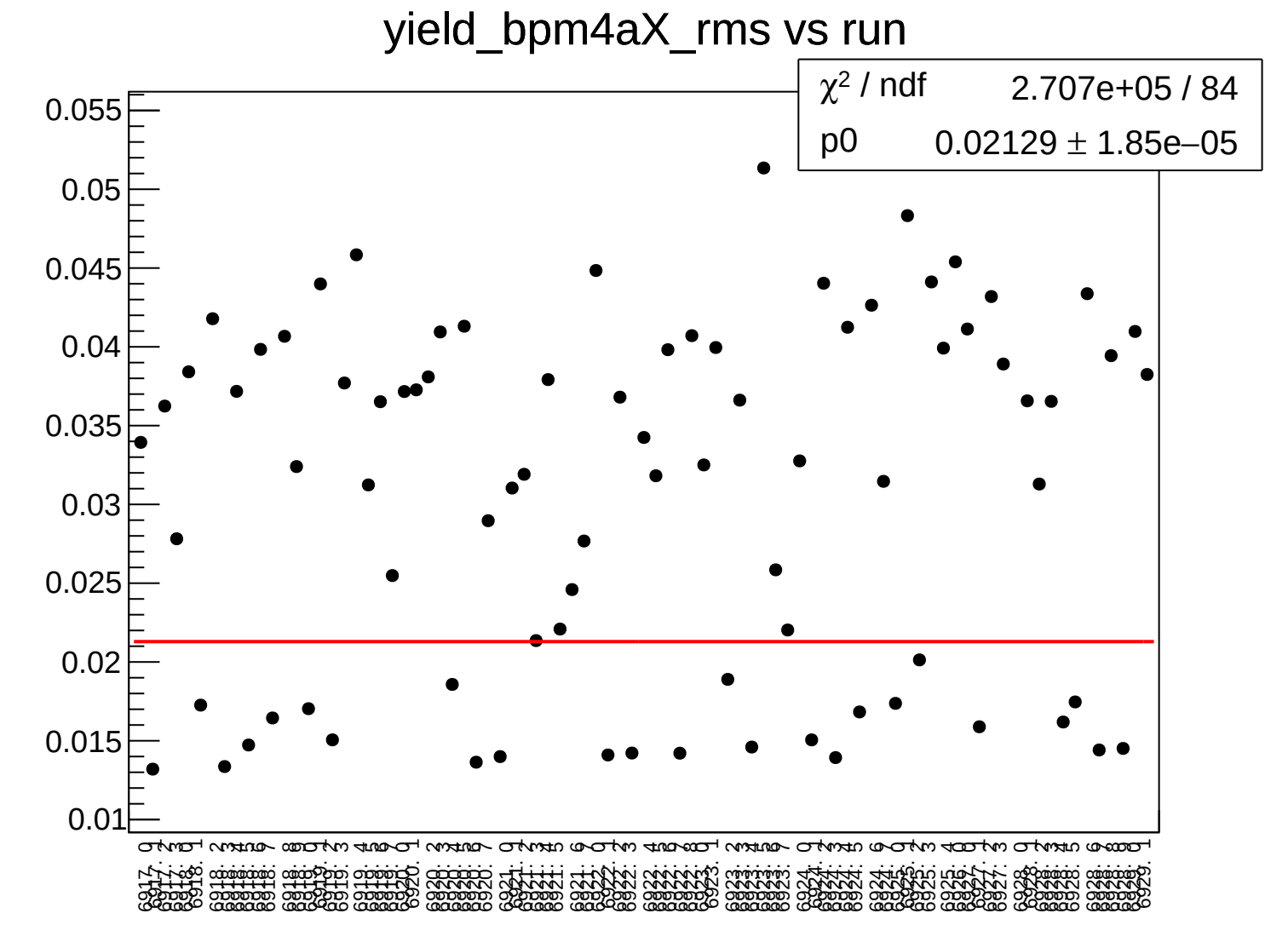

yield_cav4dY_mean vs run
χ² / ndf 8.685e+04 / 84
p0 −0.07634 ± 6.238e−07
−0.076
−0.0762
−0.0764
−0.0766
−0.0768
pull
Entries 85
Mean −24.56
Std Dev 95.19
60
40
20
0
−20
−40
−60
−80

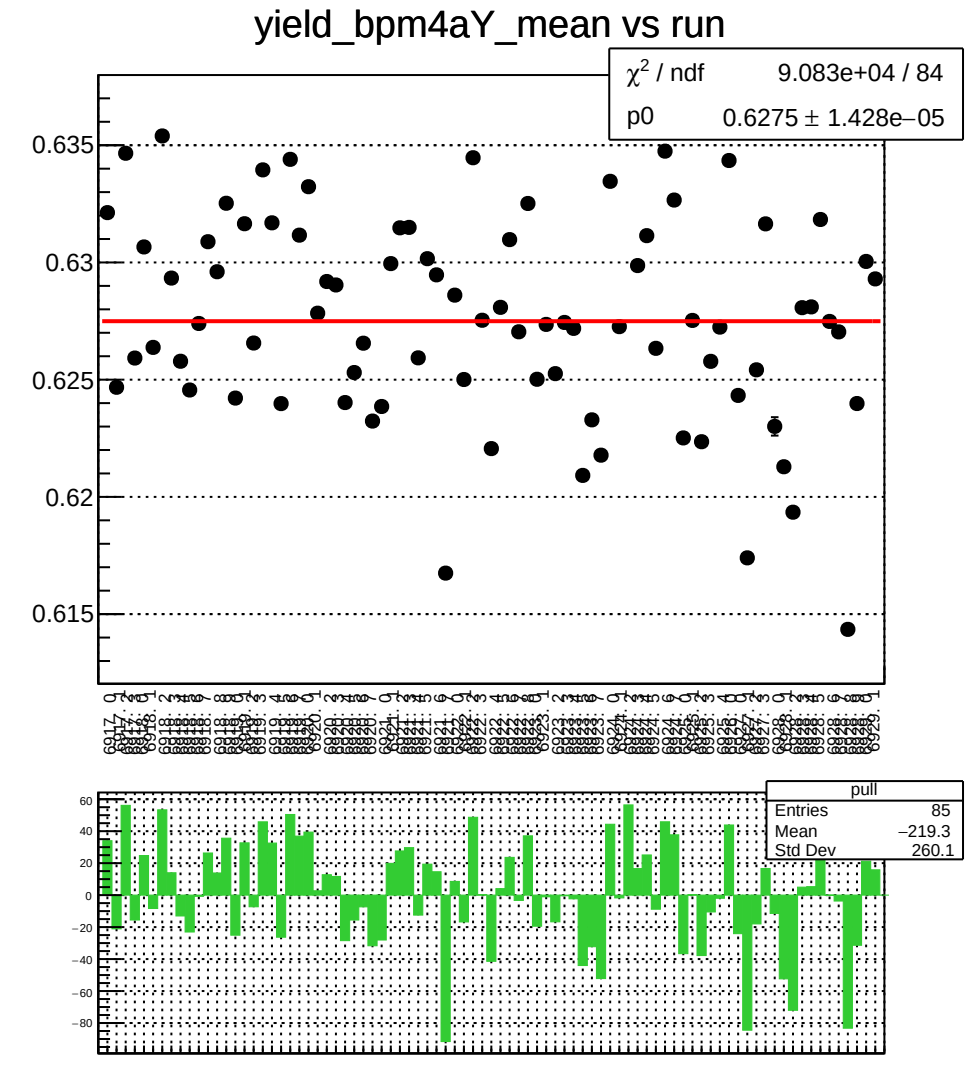

pull1D
Entries 85
Mean −0.9768
Std Dev 4.301
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

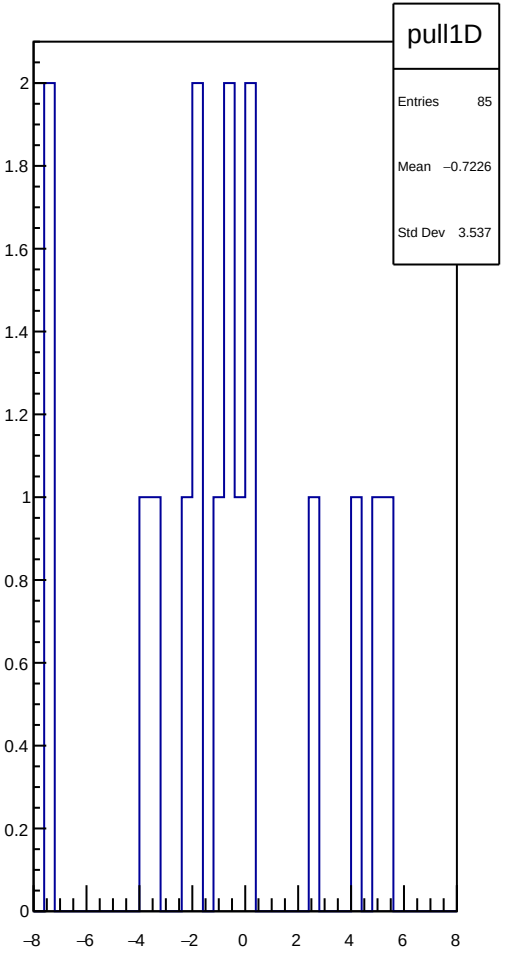

yield_cav4dY_rms vs run
χ² / ndf 2.143e+04 / 84
p0 0.0005533 ± 4.411e−07
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

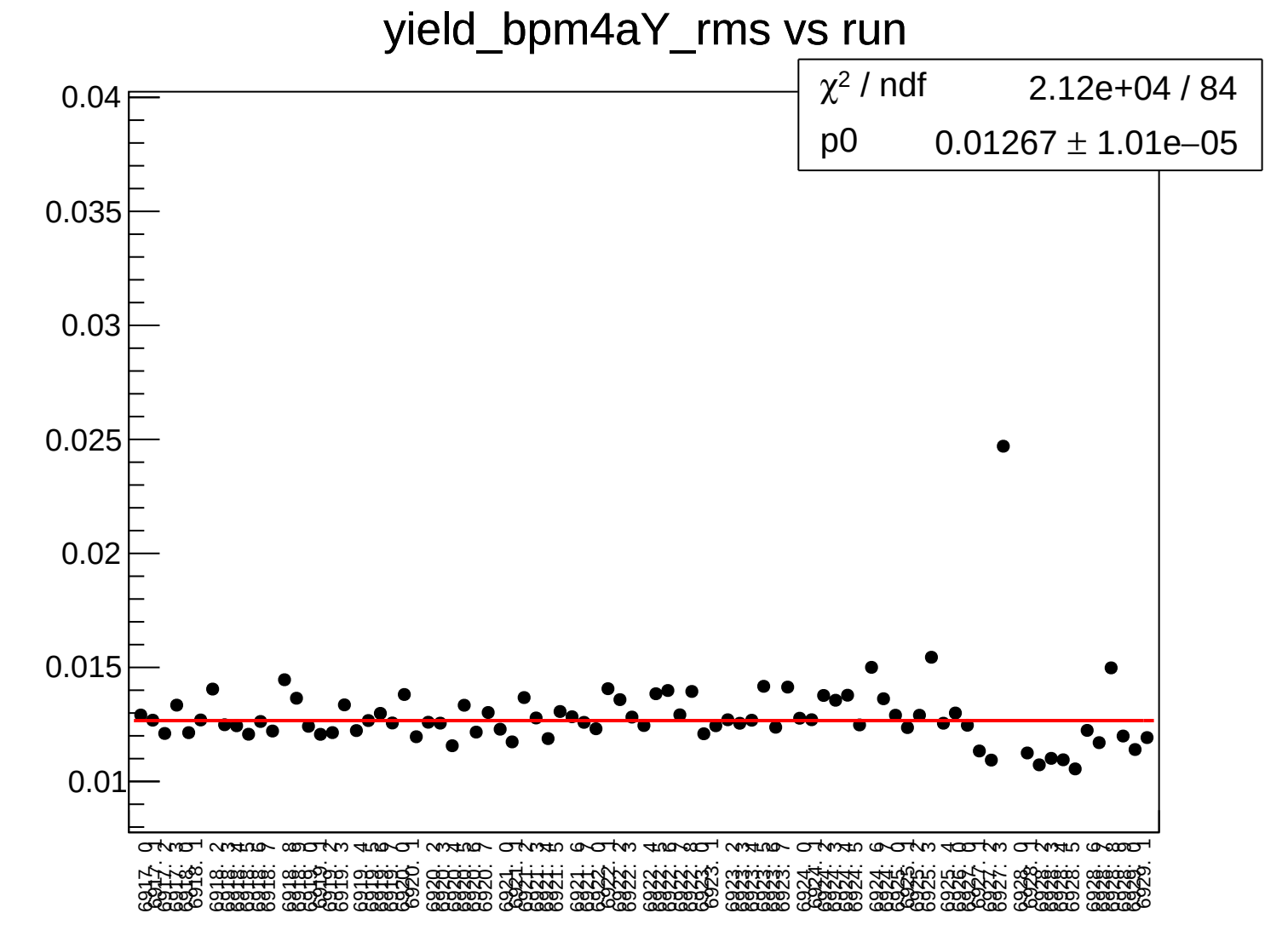

yield_bpm4aX_mean vs run
χ² / ndf 1.906e+05 / 84
p0 −0.4269 ± 2.617e−05
pull
Entries 85
Mean 50.45
Std Dev 28.92

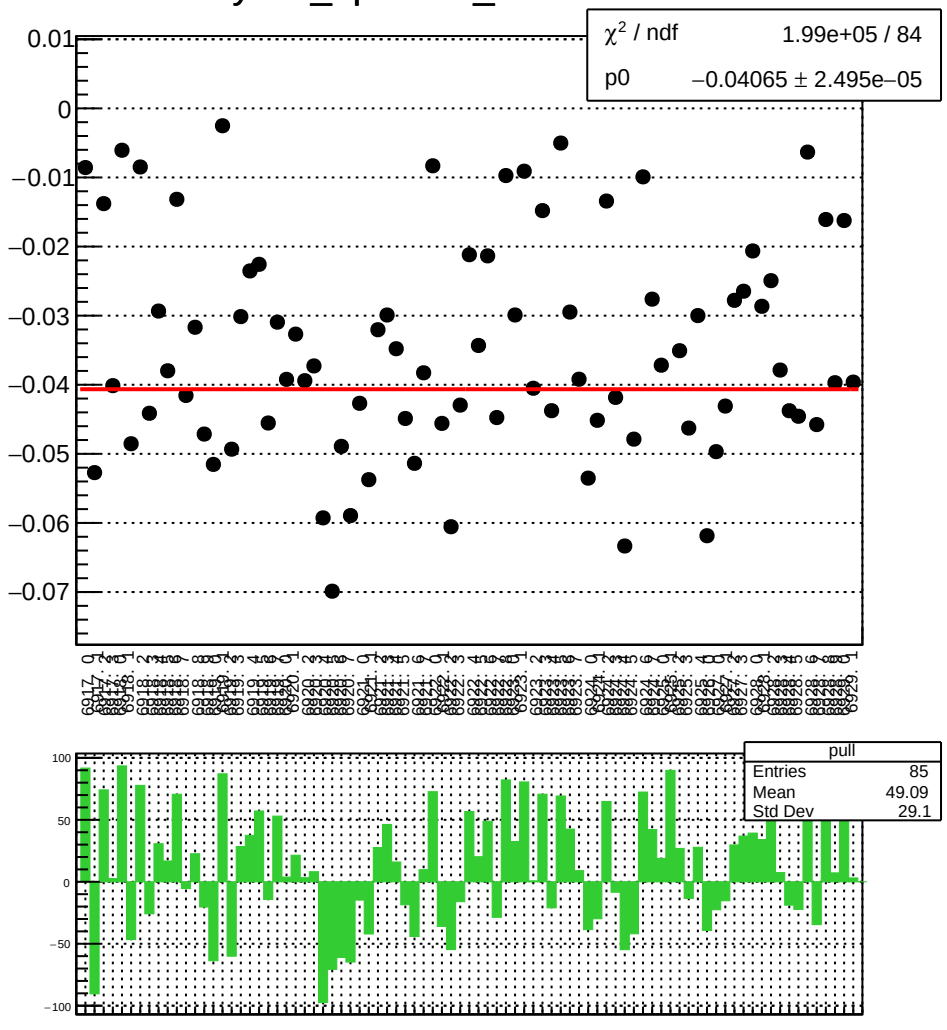

pull1D
Entries 85
Mean 2.863
Std Dev 4.403

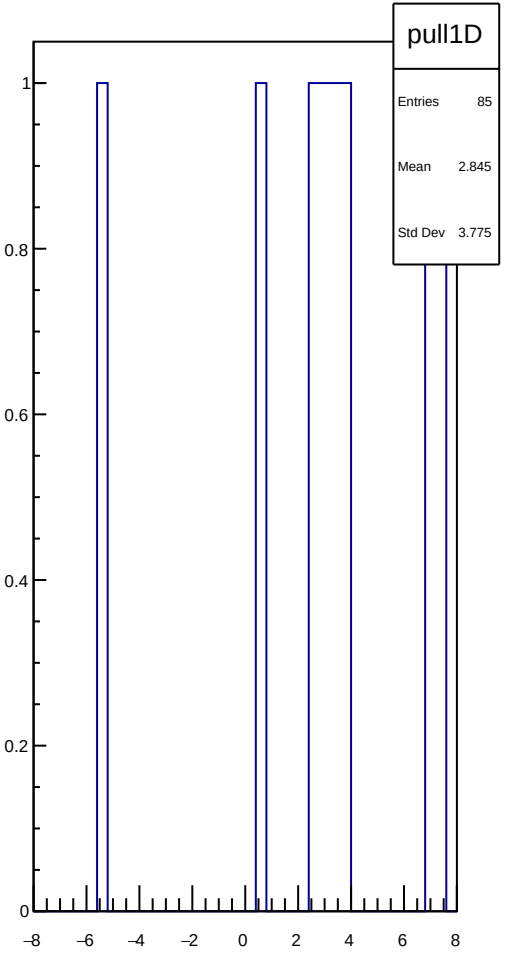

yield_bpm4aX_rms vs run
χ² / ndf 2.707e+05 / 84
p0 0.02129 ± 1.85e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

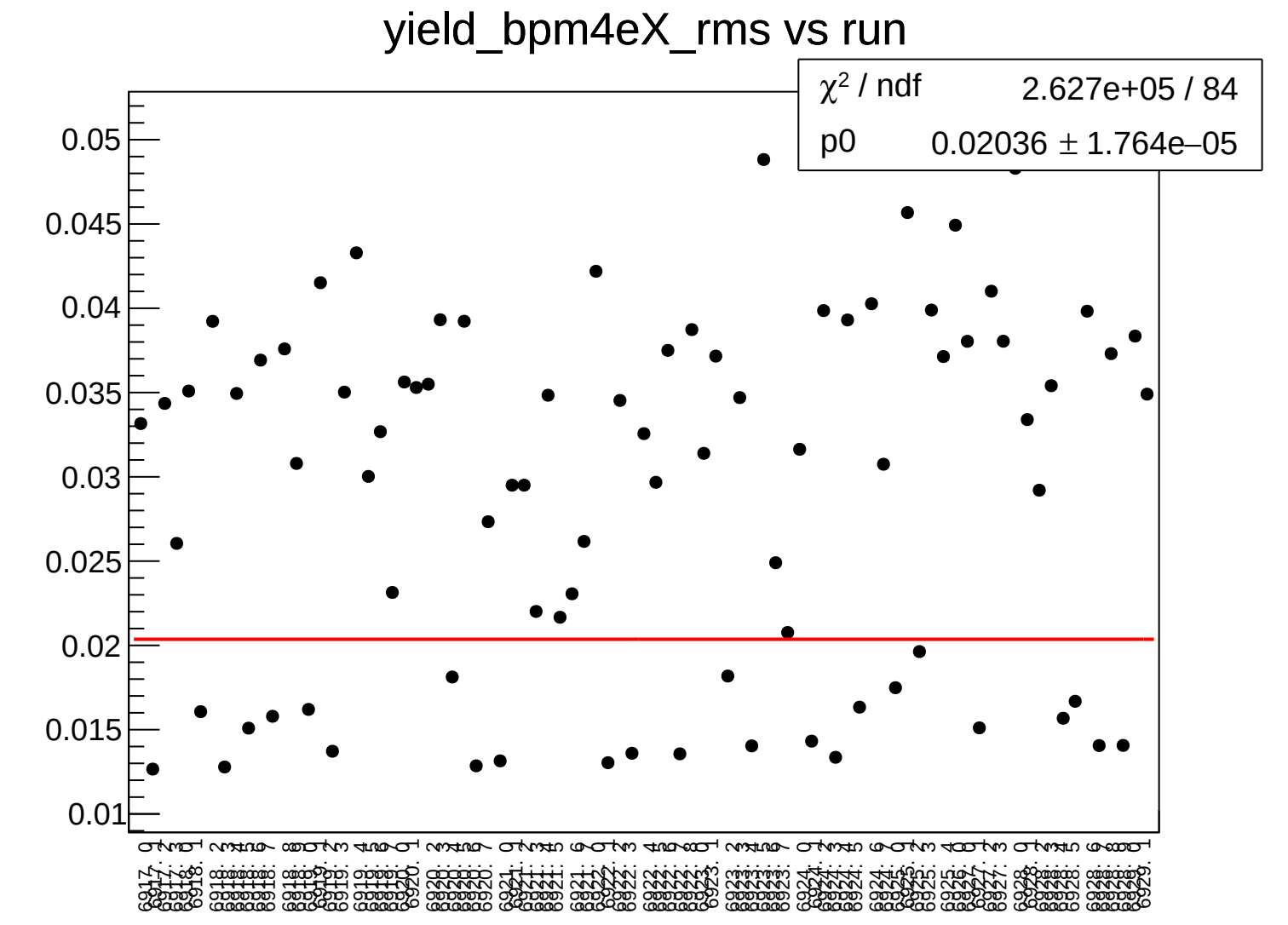

yield_bpm4aY_mean vs run
χ² / ndf 9.083e+04 / 84
p0 0.6275 ± 1.428e−05
0.635
0.63
0.625
0.62
0.615
pull
Entries 85
Mean −219.3
Std Dev 260.1
60
40
20
0
−20
−40
−60
−80

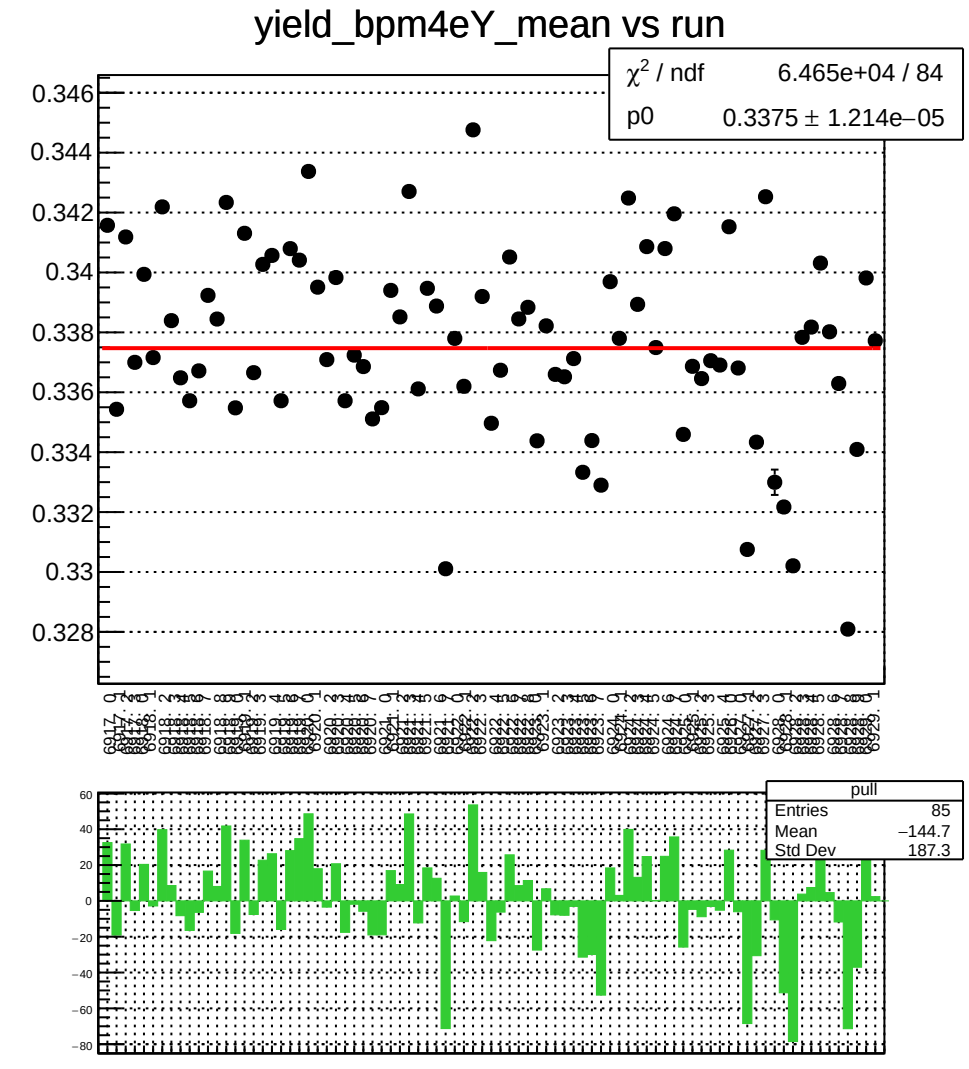

pull1D
Entries 85
Mean −0.7226
Std Dev 3.537
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

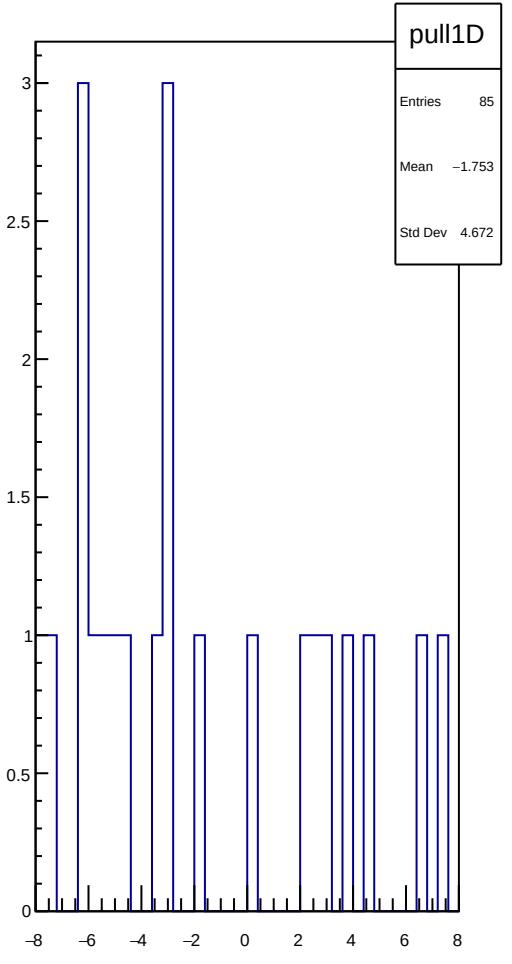

yield_bpm4aY_rms vs run
χ² / ndf 2.12e+04 / 84
p0 0.01267 ± 1.01e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

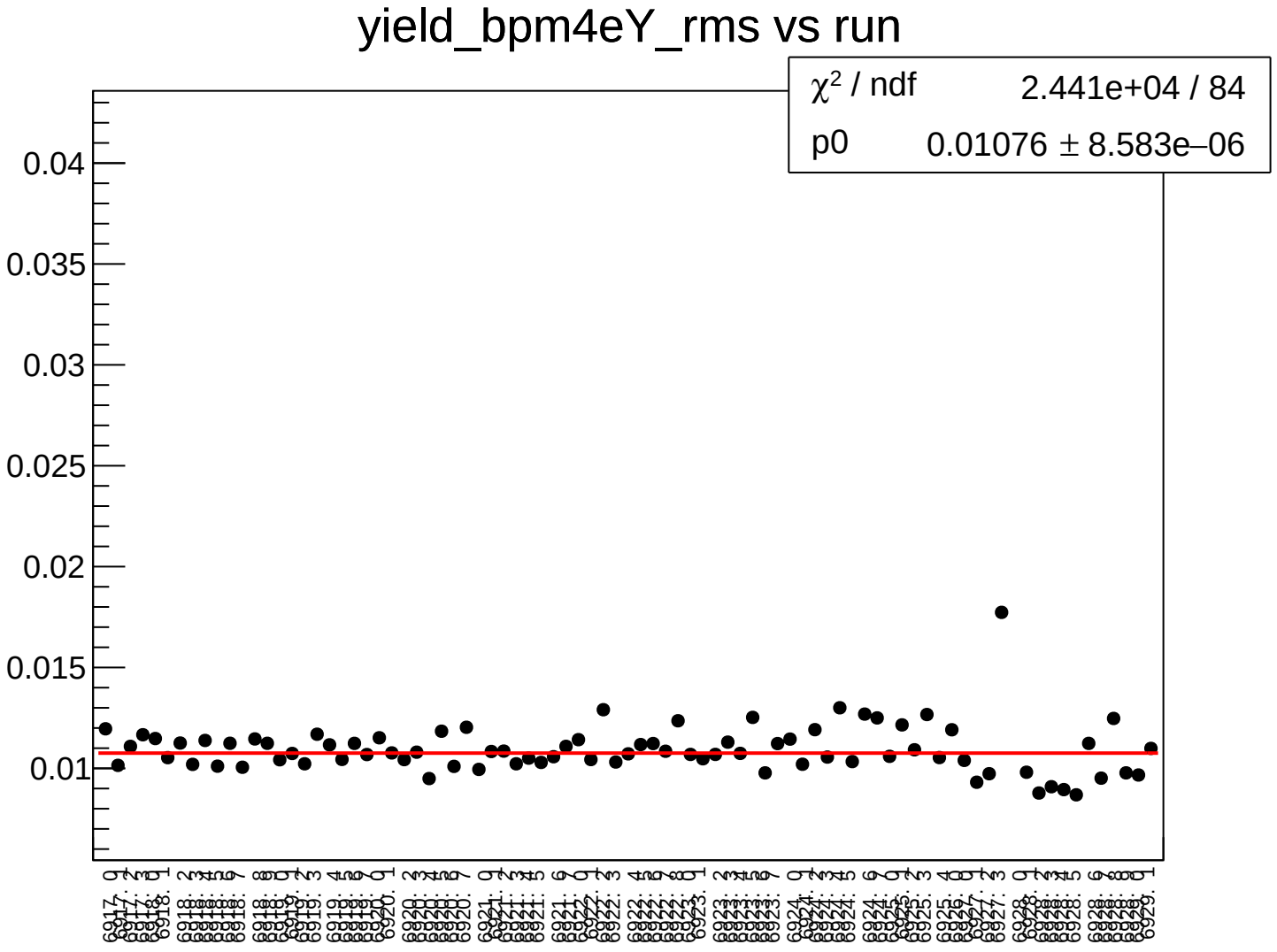

yield_bpm4eX_mean vs run
χ² / ndf 1.99e+05 / 84
p0 −0.04065 ± 2.495e−05
pull
Entries 85
Mean 49.09
Std Dev 29.1

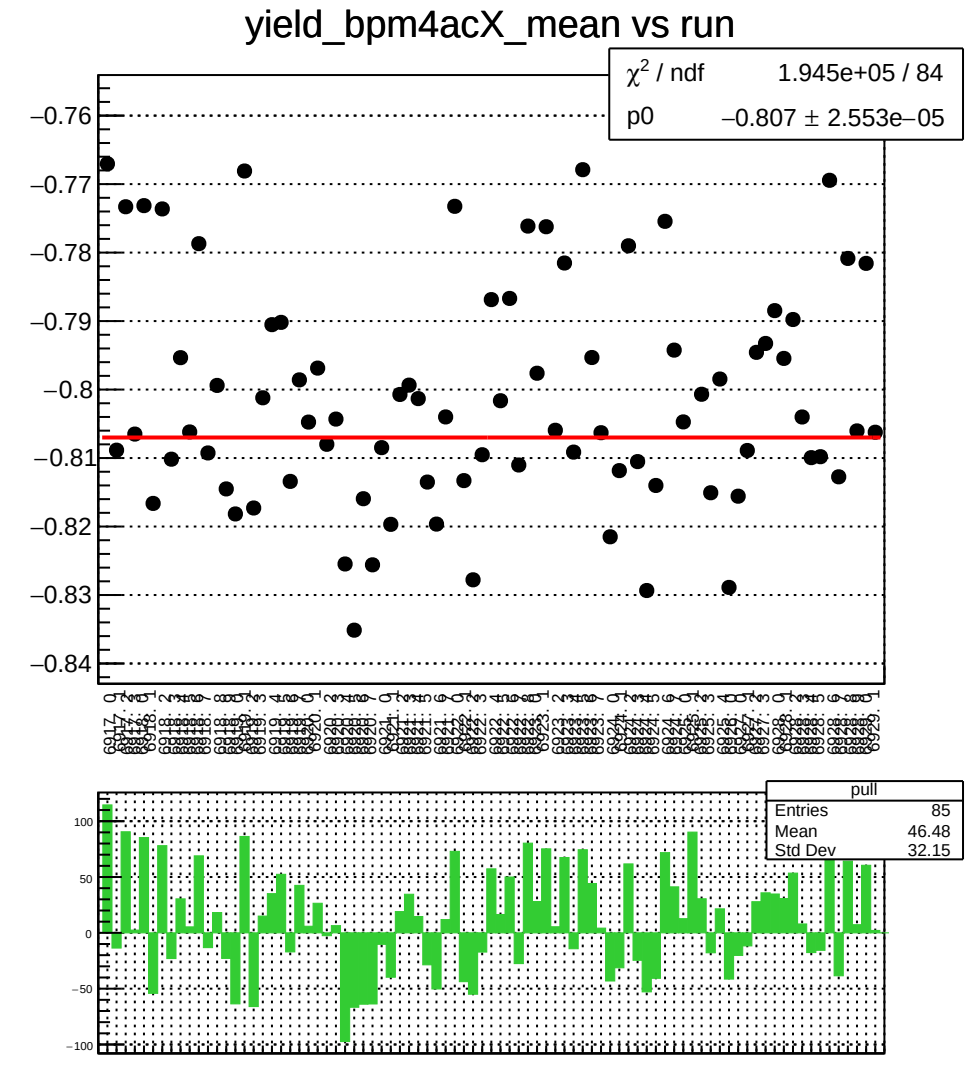

pull1D
Entries 85
Mean 2.845
Std Dev 3.775

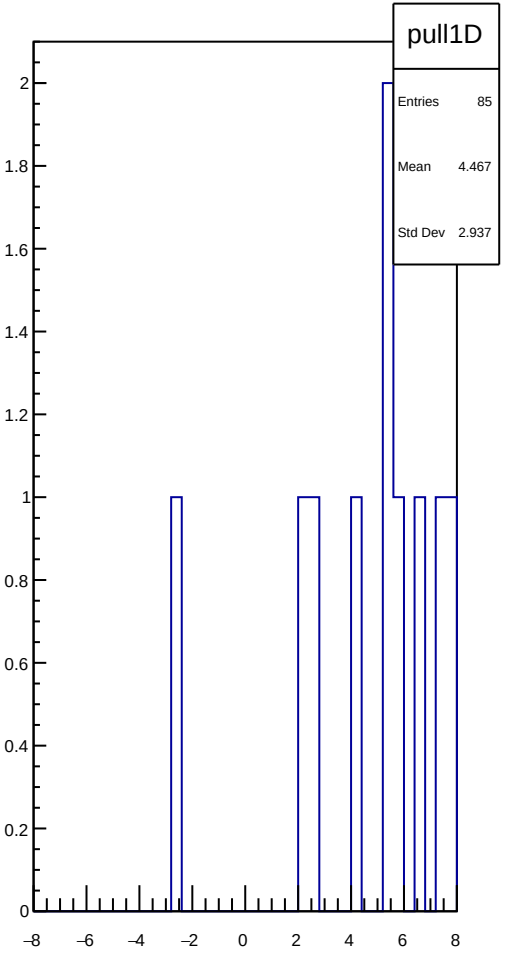

yield_bpm4eX_rms vs run
χ² / ndf 2.627e+05 / 84
p0 0.02036 ± 1.764e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

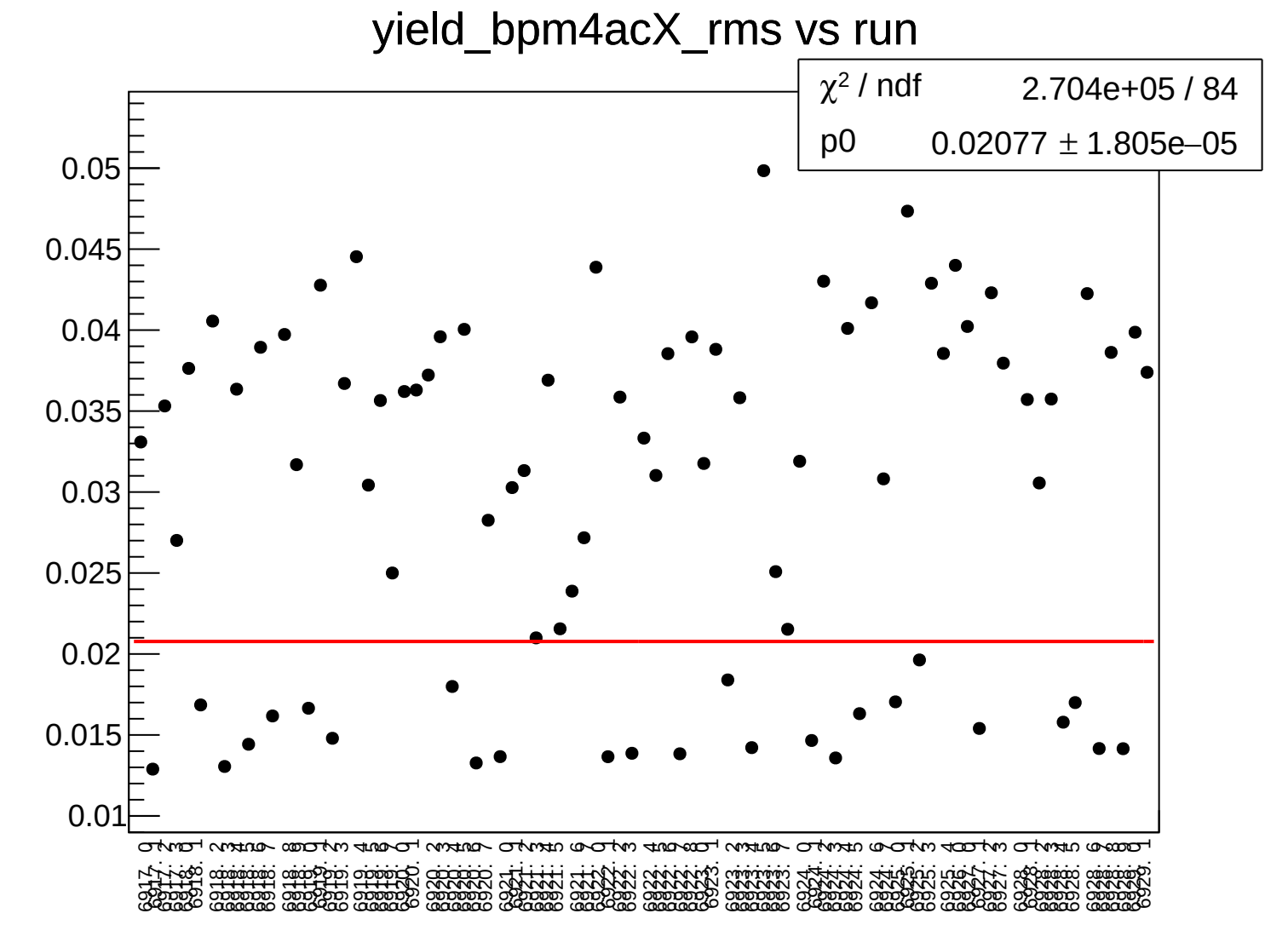

yield_bpm4eY_mean vs run
χ² / ndf 6.465e+04 / 84
p0 0.3375 ± 1.214e−05
0.346
0.344
0.342
0.34
0.338
0.336
0.334
0.332
0.33
0.328
pull
Entries 85
Mean −144.7
Std Dev 187.3
60
40
20
0
−20
−40
−60
−80

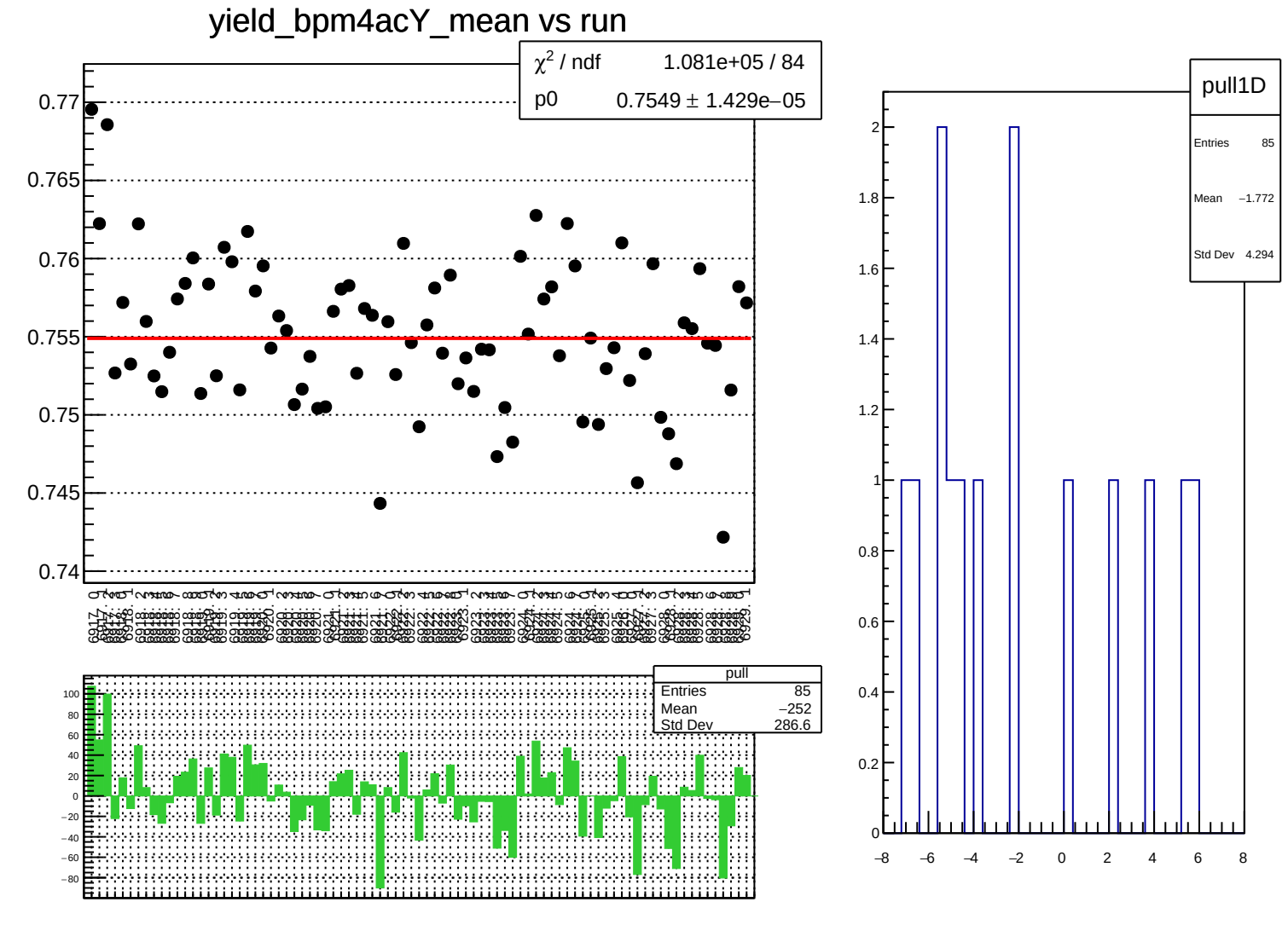

pull1D
Entries 85
Mean −1.753
Std Dev 4.672
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

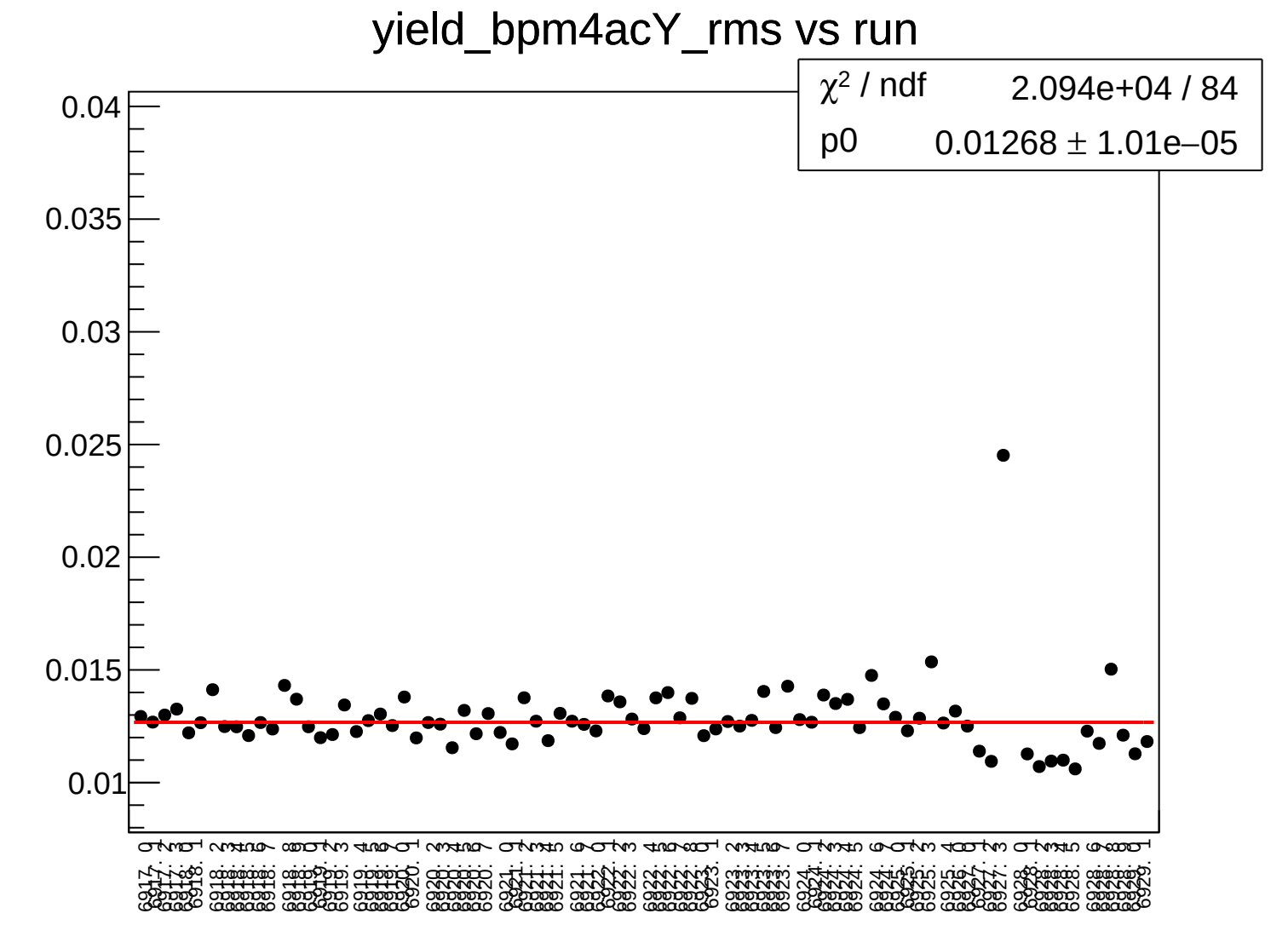

yield_bpm4eY_rms vs run
χ² / ndf 2.441e+04 / 84
p0 0.01076 ± 8.583e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

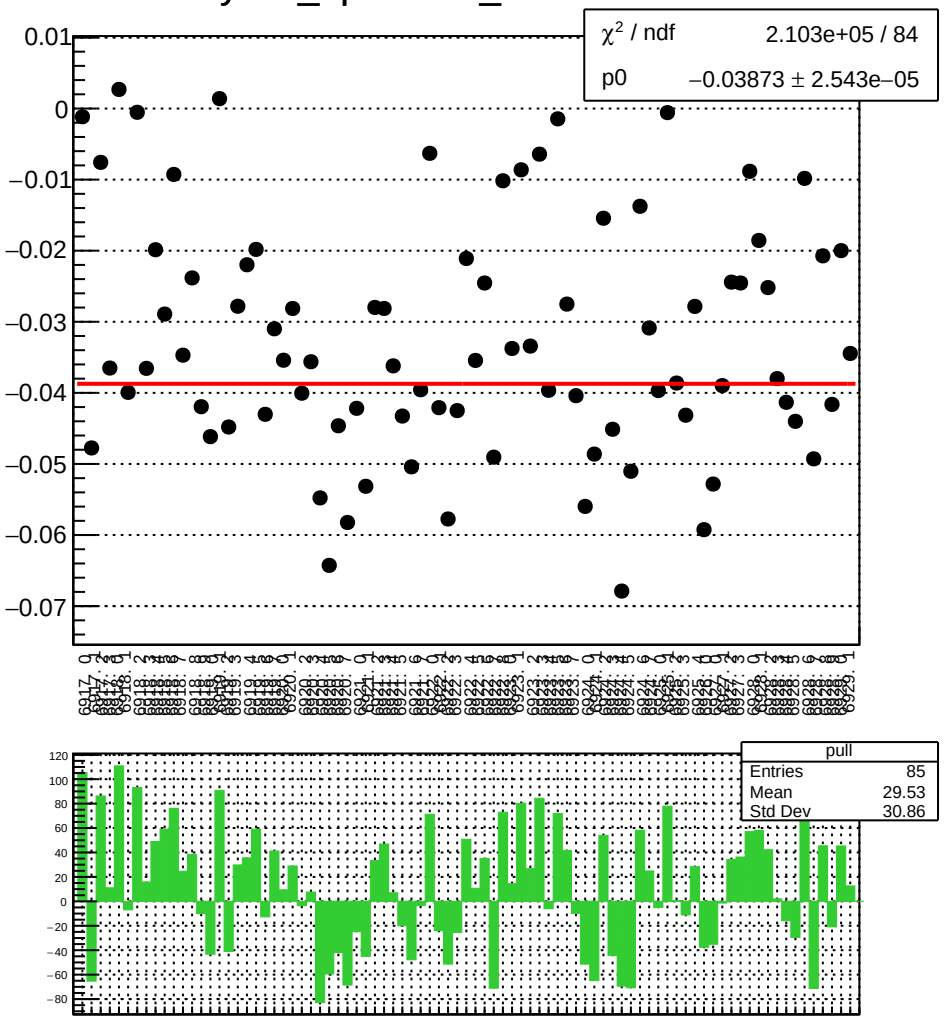

yield_bpm4acX_mean vs run
χ² / ndf 1.945e+05 / 84
p0 −0.807 ± 2.553e−05
−0.76
−0.77
−0.78
−0.79
−0.8
−0.81
−0.82
−0.83
−0.84
pull
Entries 85
Mean 46.48
Std Dev 32.15
100
50
0
−50
−100

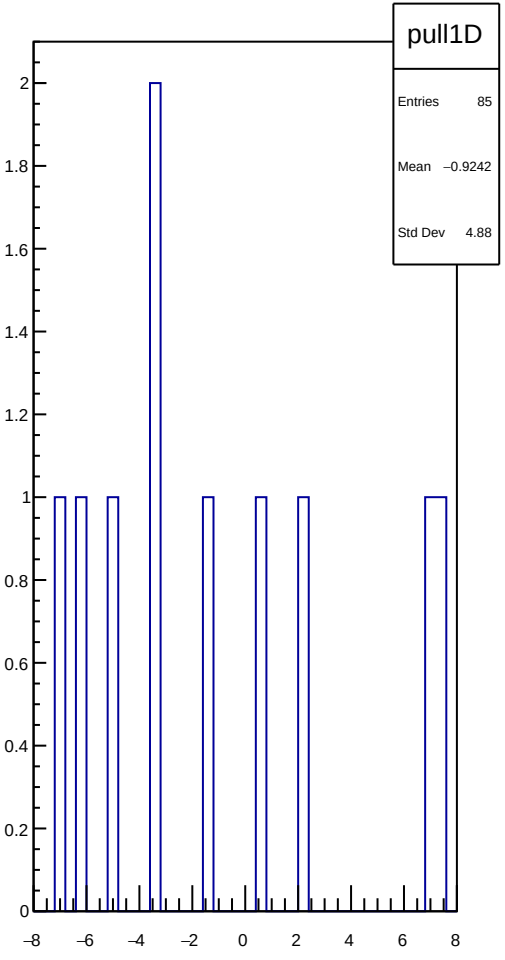

pull1D
Entries 85
Mean 4.467
Std Dev 2.937
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

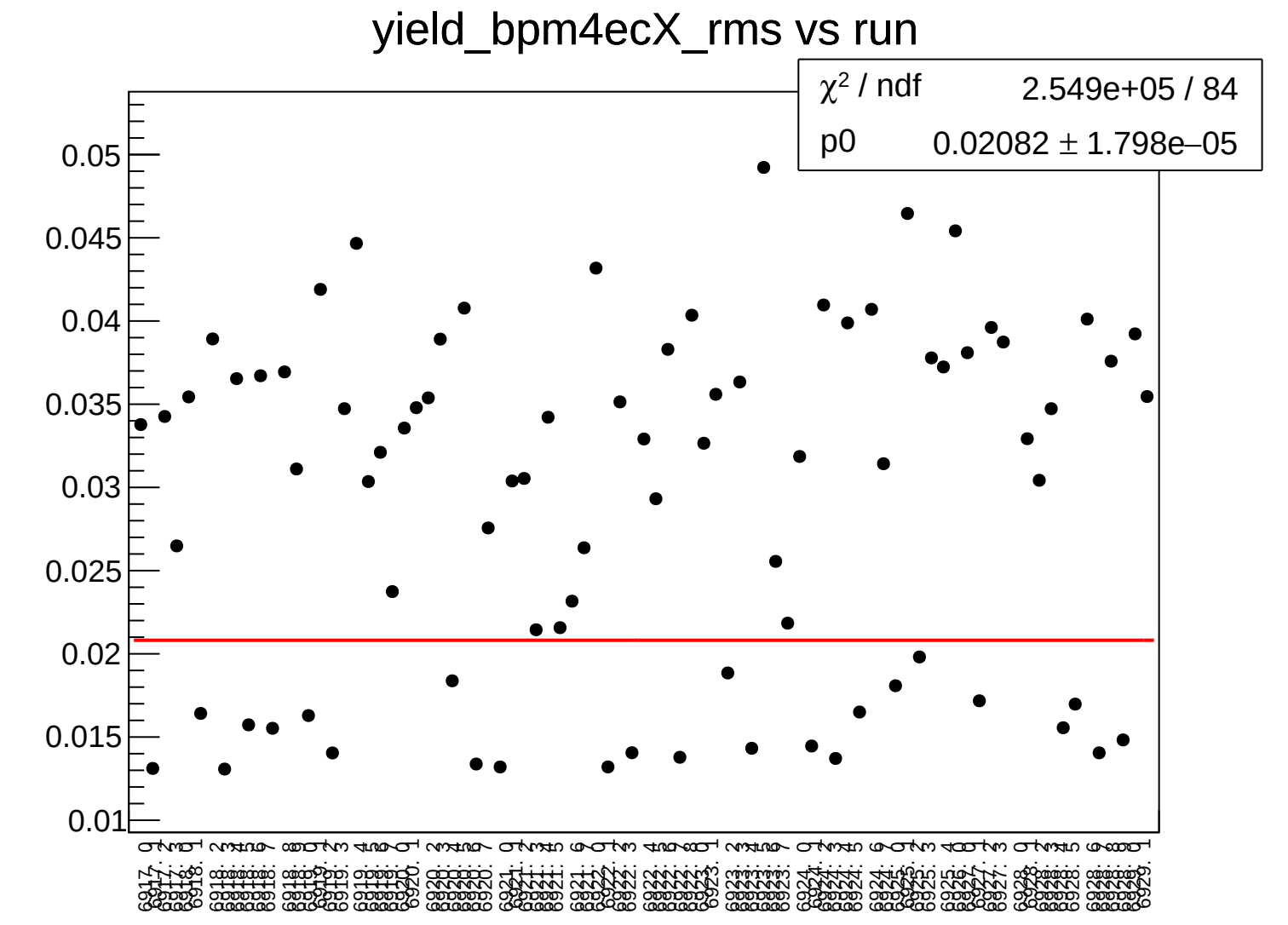

yield_bpm4acX_rms vs run
χ² / ndf 2.704e+05 / 84
p0 0.02077 ± 1.805e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

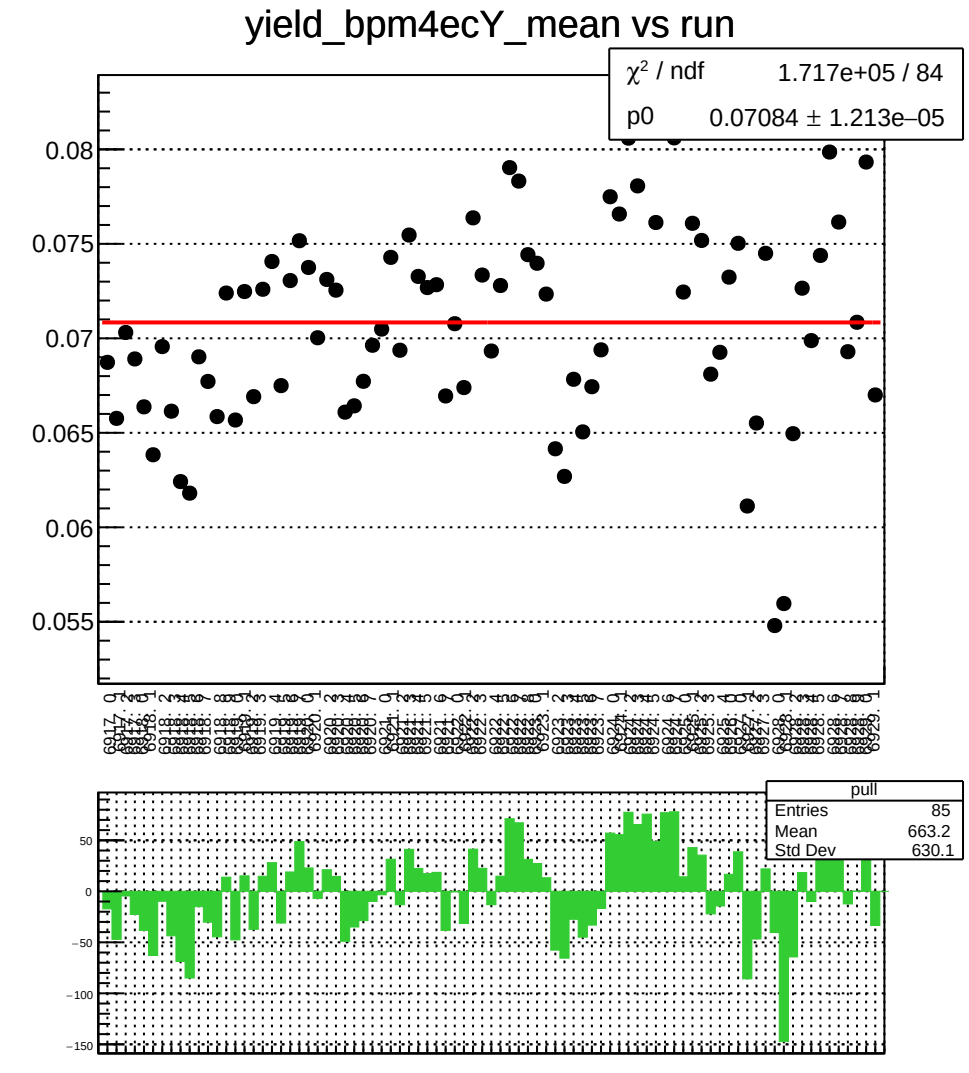

yield_bpm4acY_mean vs run
χ² / ndf 1.081e+05 / 84
p0 0.7549 ± 1.429e−05
0.77
0.765
0.76
0.755
0.75
0.745
0.74
pull
Entries 85
Mean −252
Std Dev 286.6
100
80
60
40
20
0
−20
−40
−60
−80
pull1D
Entries 85
Mean −1.772
Std Dev 4.294
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

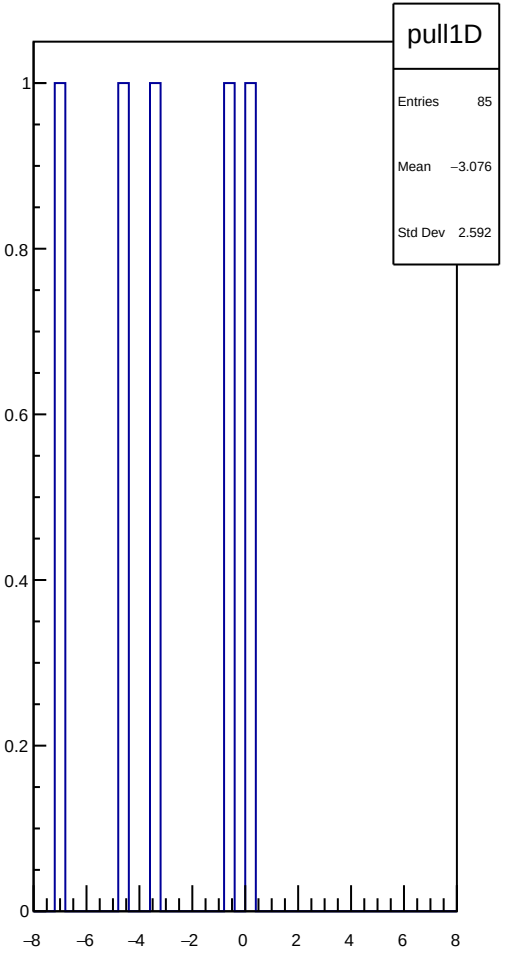

yield_bpm4acY_rms vs run
χ² / ndf 2.094e+04 / 84
p0 0.01268 ± 1.01e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

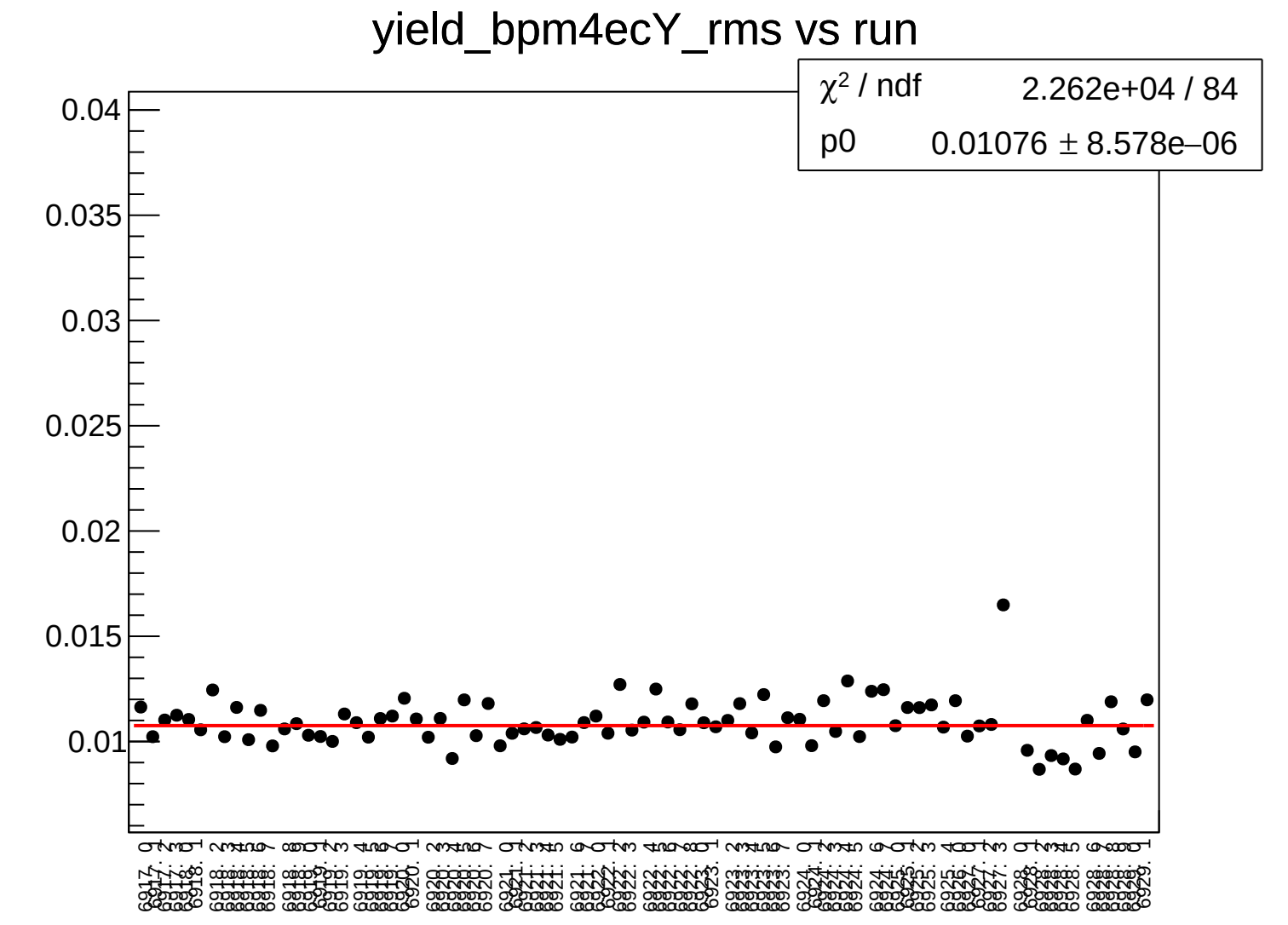

yield_bpm4ecX_mean vs run
χ² / ndf 2.103e+05 / 84
p0 −0.03873 ± 2.543e−05
pull
Entries 85
Mean 29.53
Std Dev 30.86

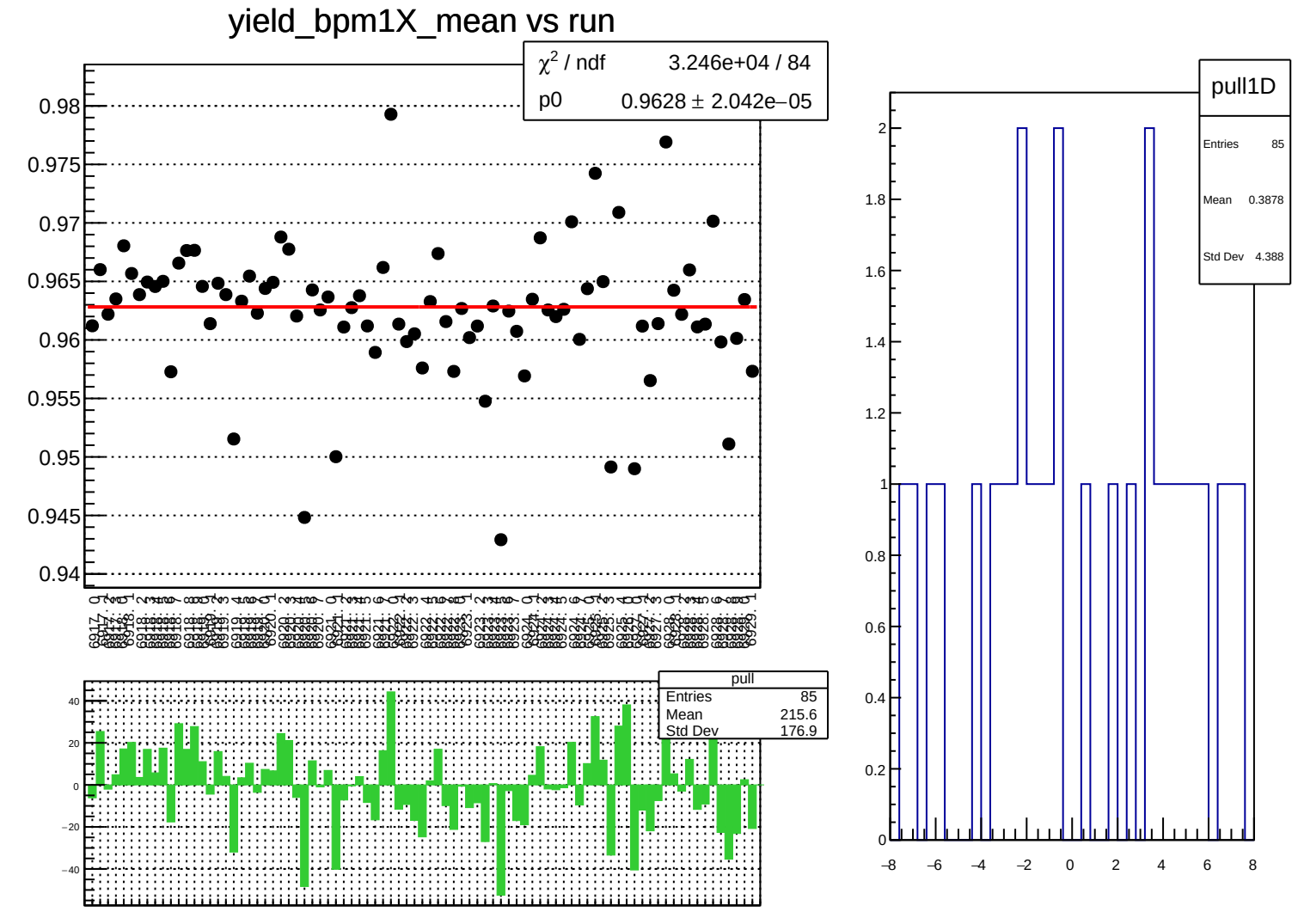

pull1D
Entries 85
Mean −0.9242
Std Dev 4.88

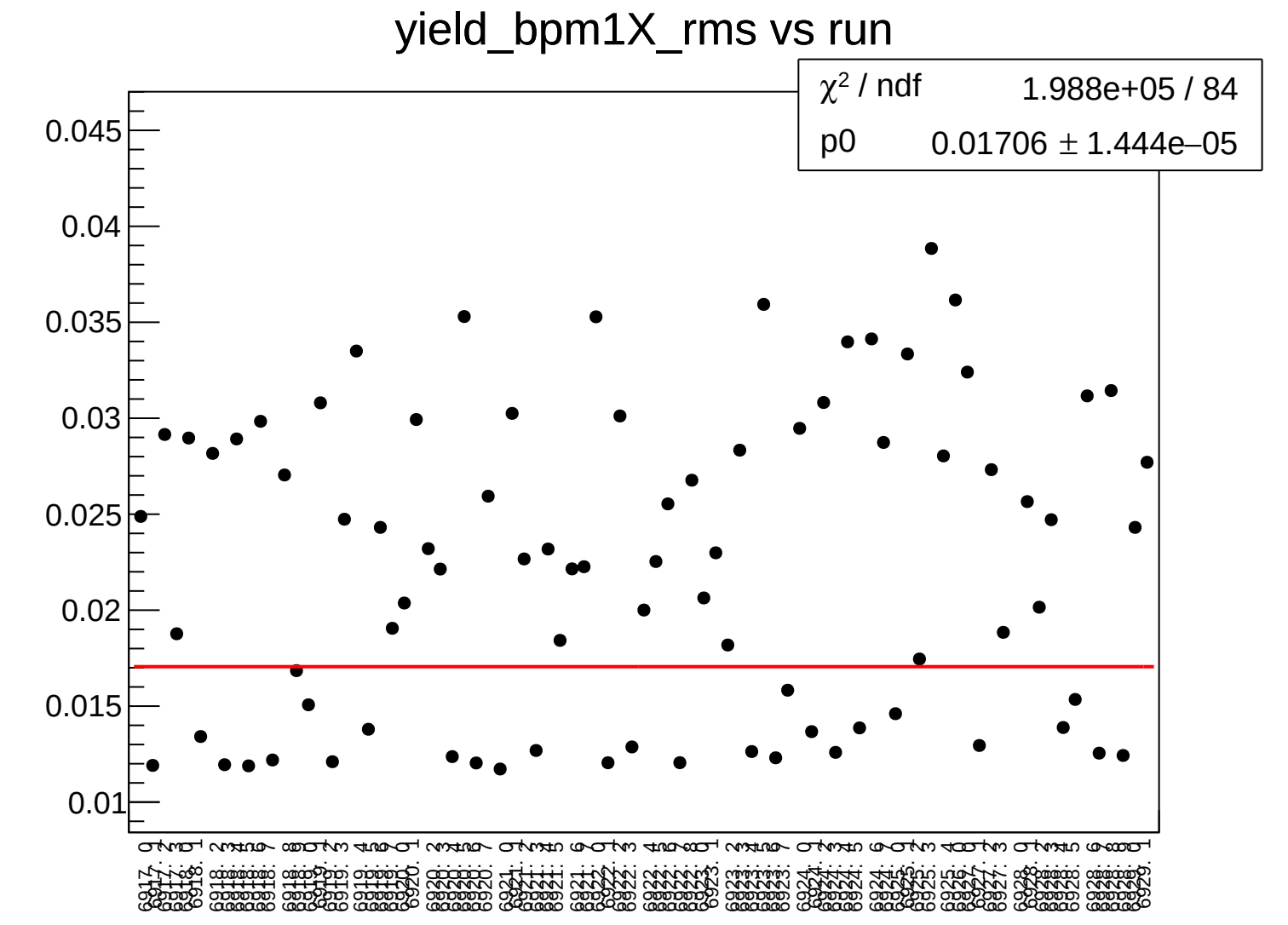

yield_bpm4ecX_rms vs run
χ² / ndf 2.549e+05 / 84
p0 0.02082 ± 1.798e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

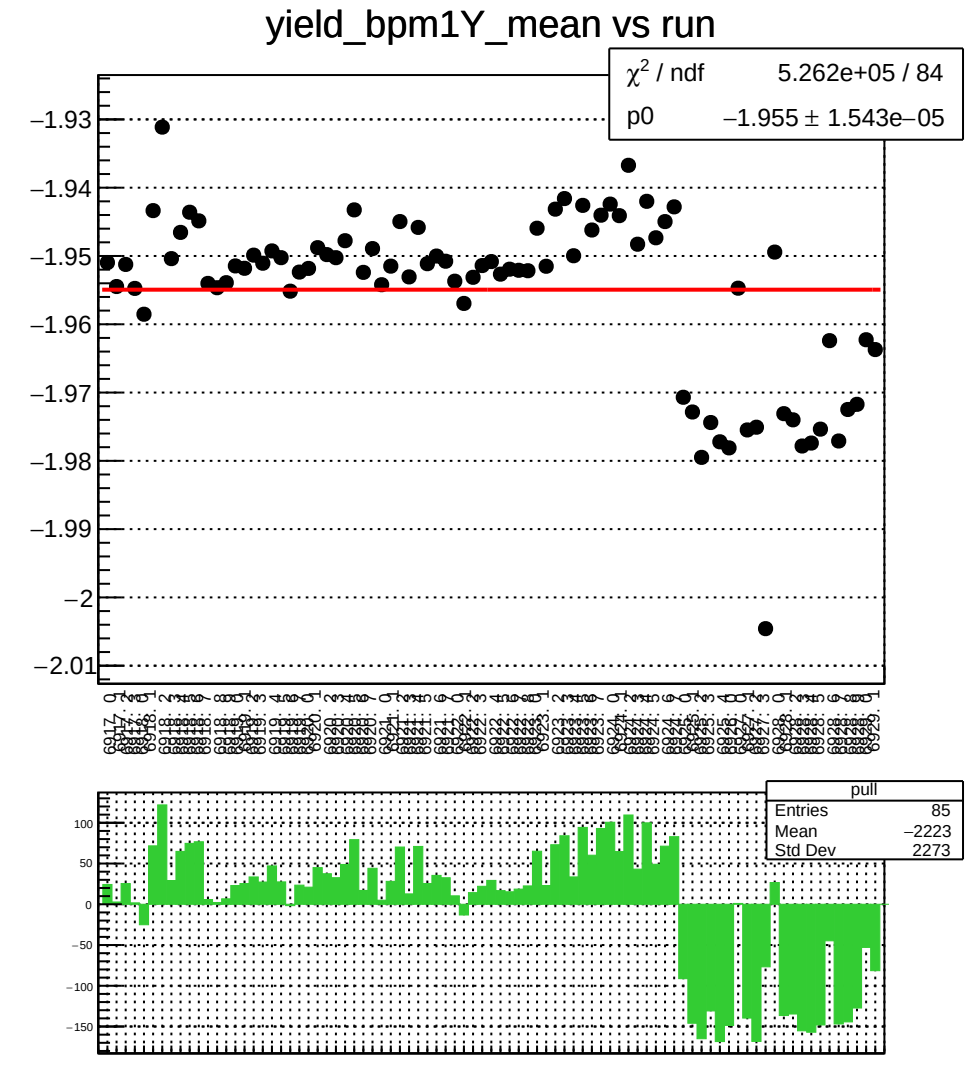

yield_bpm4ecY_mean vs run
χ² / ndf 1.717e+05 / 84
p0 0.07084 ± 1.213e−05
0.08
0.075
0.07
0.065
0.06
0.055
pull
Entries 85
Mean 663.2
Std Dev 630.1
50
0
−50
−100
−150

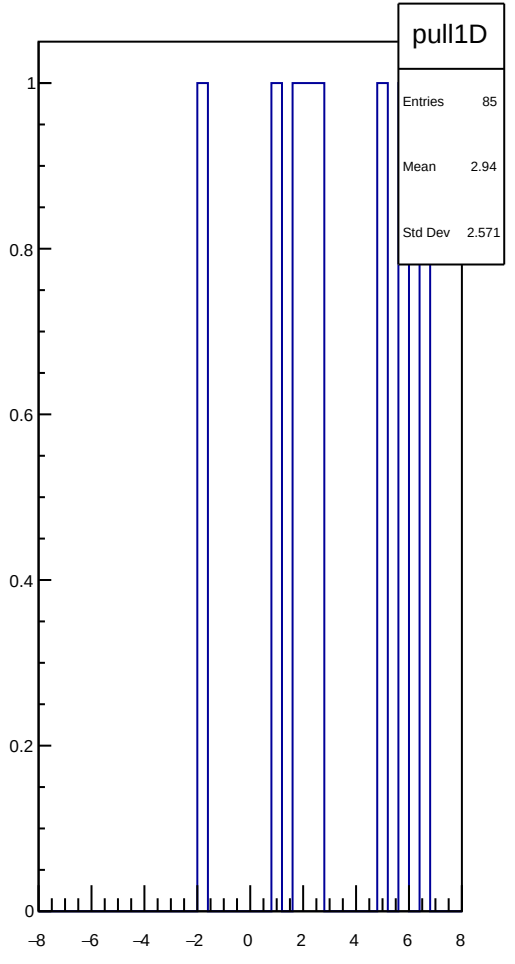

pull1D
Entries 85
Mean −3.076
Std Dev 2.592
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

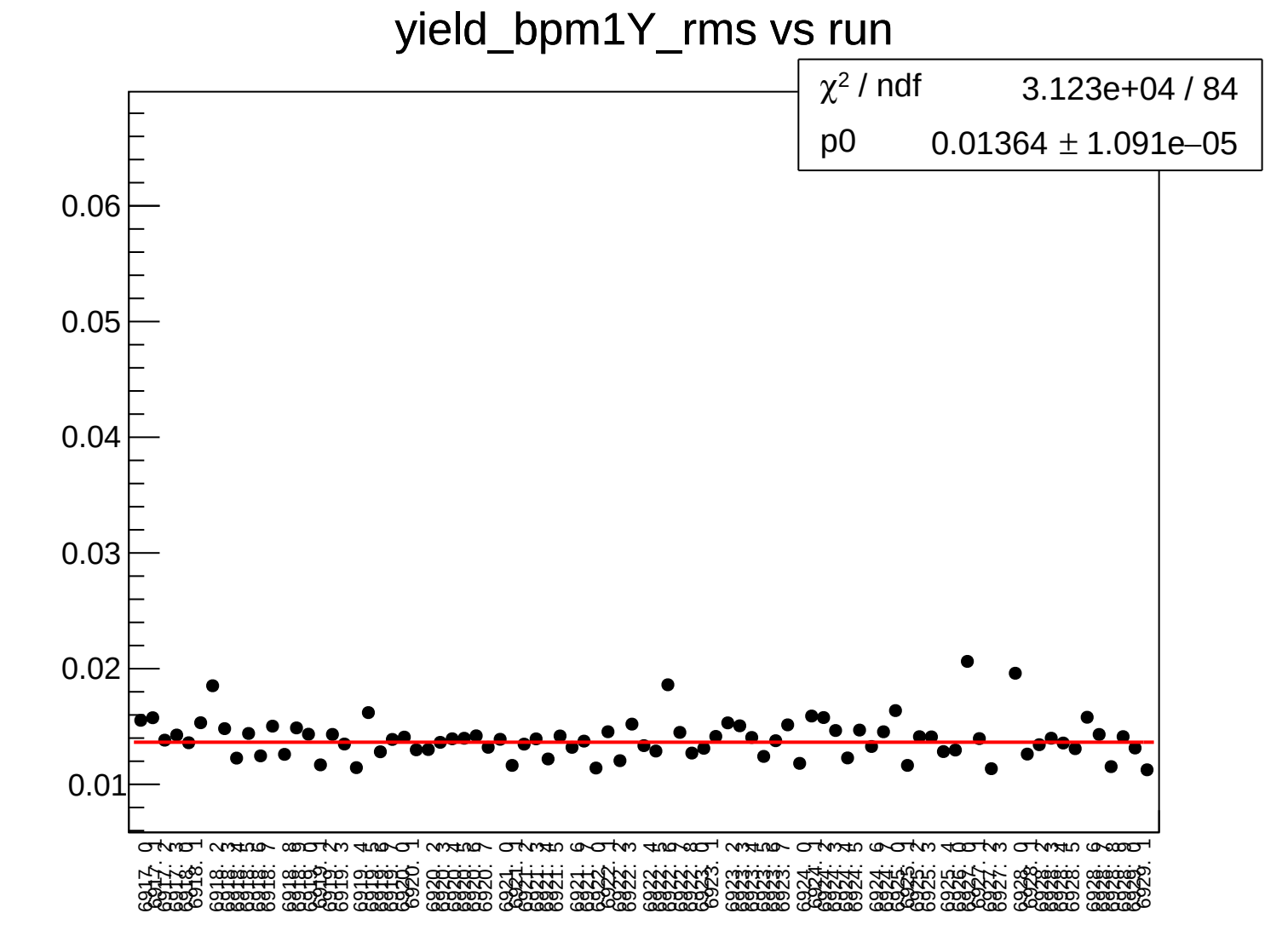

yield_bpm4ecY_rms vs run
χ² / ndf 2.262e+04 / 84
p0 0.01076 ± 8.578e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

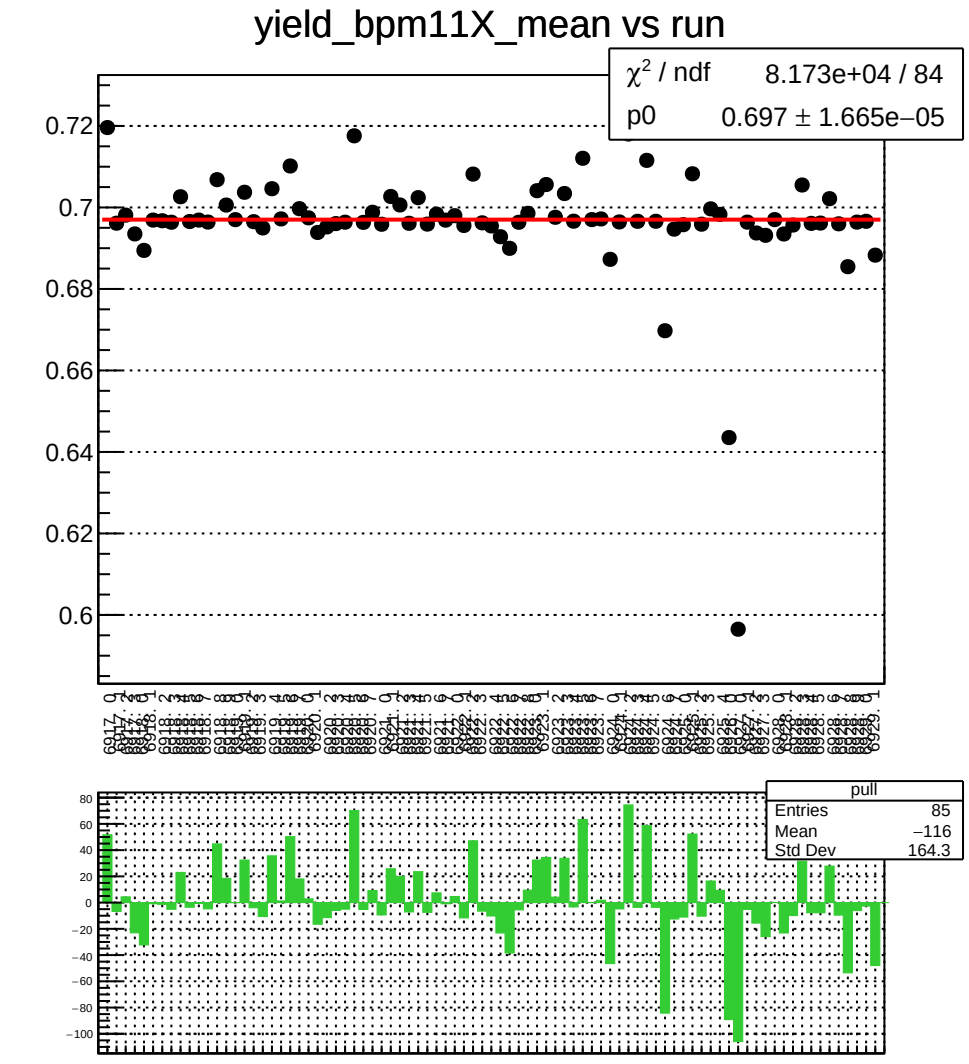

yield_bpm1X_mean vs run
χ² / ndf 3.246e+04 / 84
p0 0.9628 ± 2.042e−05
0.98
0.975
0.97
0.965
0.96
0.955
0.95
0.945
0.94
pull
Entries 85
Mean 215.6
Std Dev 176.9
40
20
0
−20
−40
pull1D
Entries 85
Mean 0.3878
Std Dev 4.388
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

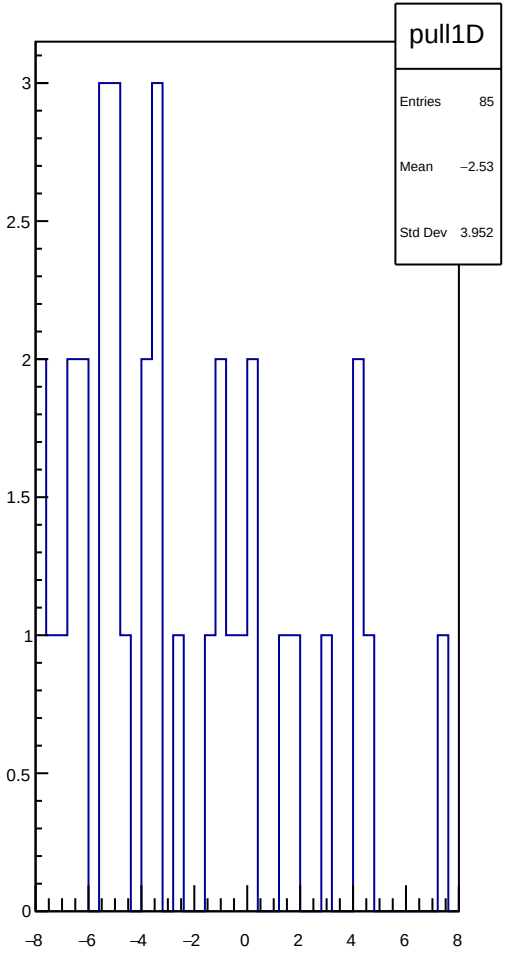

yield_bpm1X_rms vs run
χ² / ndf 1.988e+05 / 84
p0 0.01706 ± 1.444e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

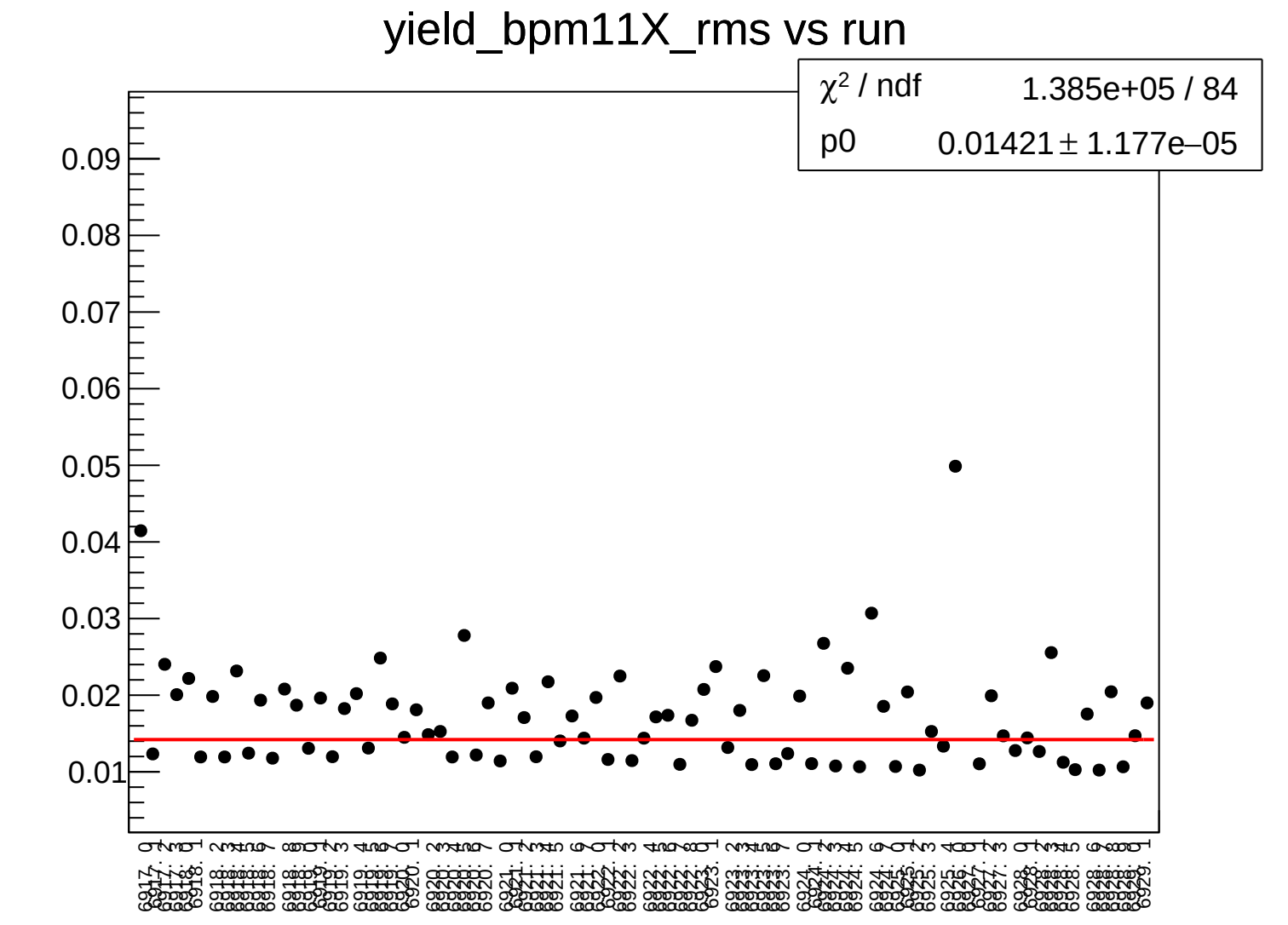

yield_bpm1Y_mean vs run
χ² / ndf 5.262e+05 / 84
p0 −1.955 ± 1.543e−05
−1.93
−1.94
−1.95
−1.96
−1.97
−1.98
−1.99
−2
−2.01
pull
Entries 85
Mean −2223
Std Dev 2273
100
50
0
−50
−100
−150

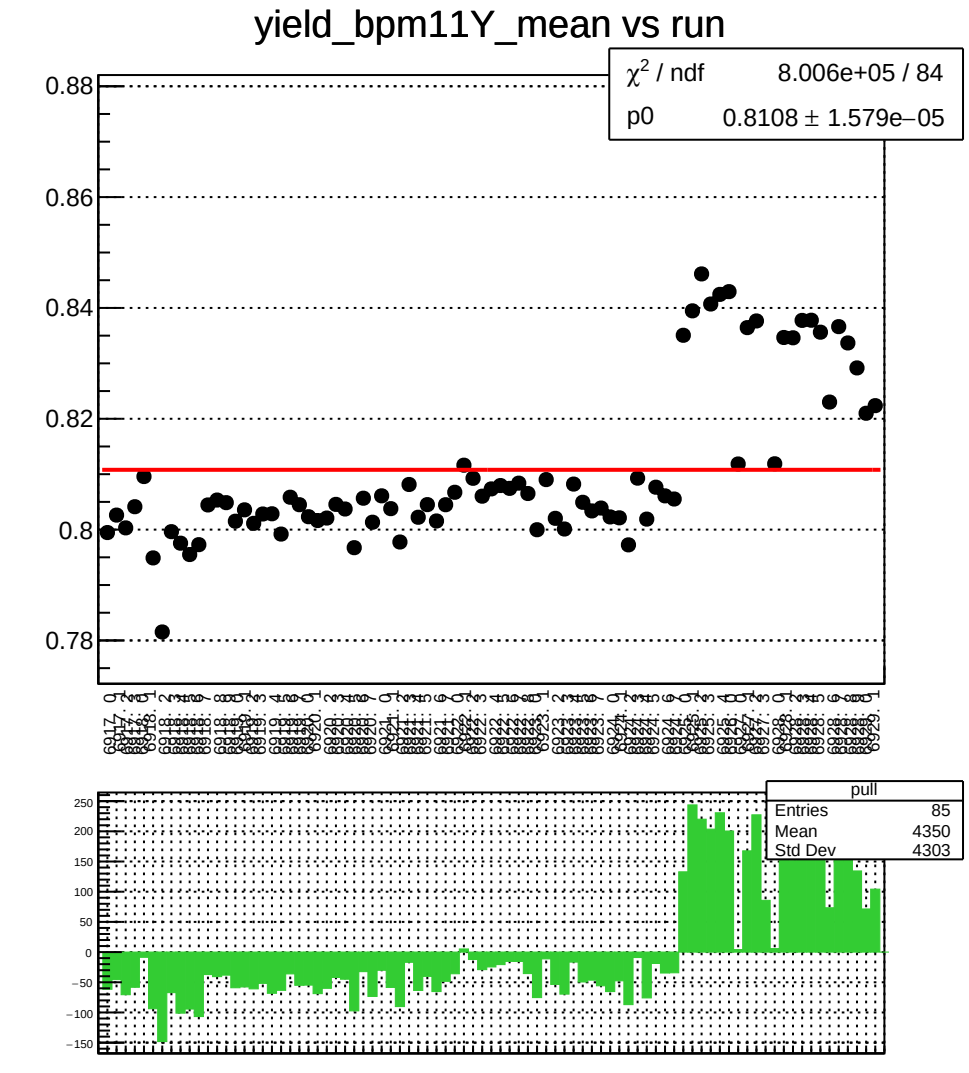

pull1D
Entries 85
Mean 2.94
Std Dev 2.571
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

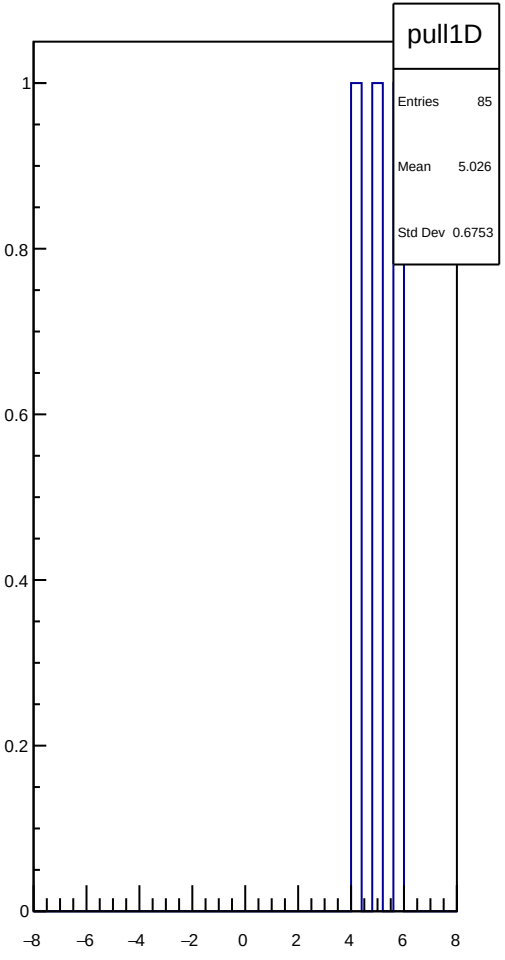

yield_bpm1Y_rms vs run
χ² / ndf 3.123e+04 / 84
p0 0.01364 ± 1.091e−05
0.06
0.05
0.04
0.03
0.02
0.01

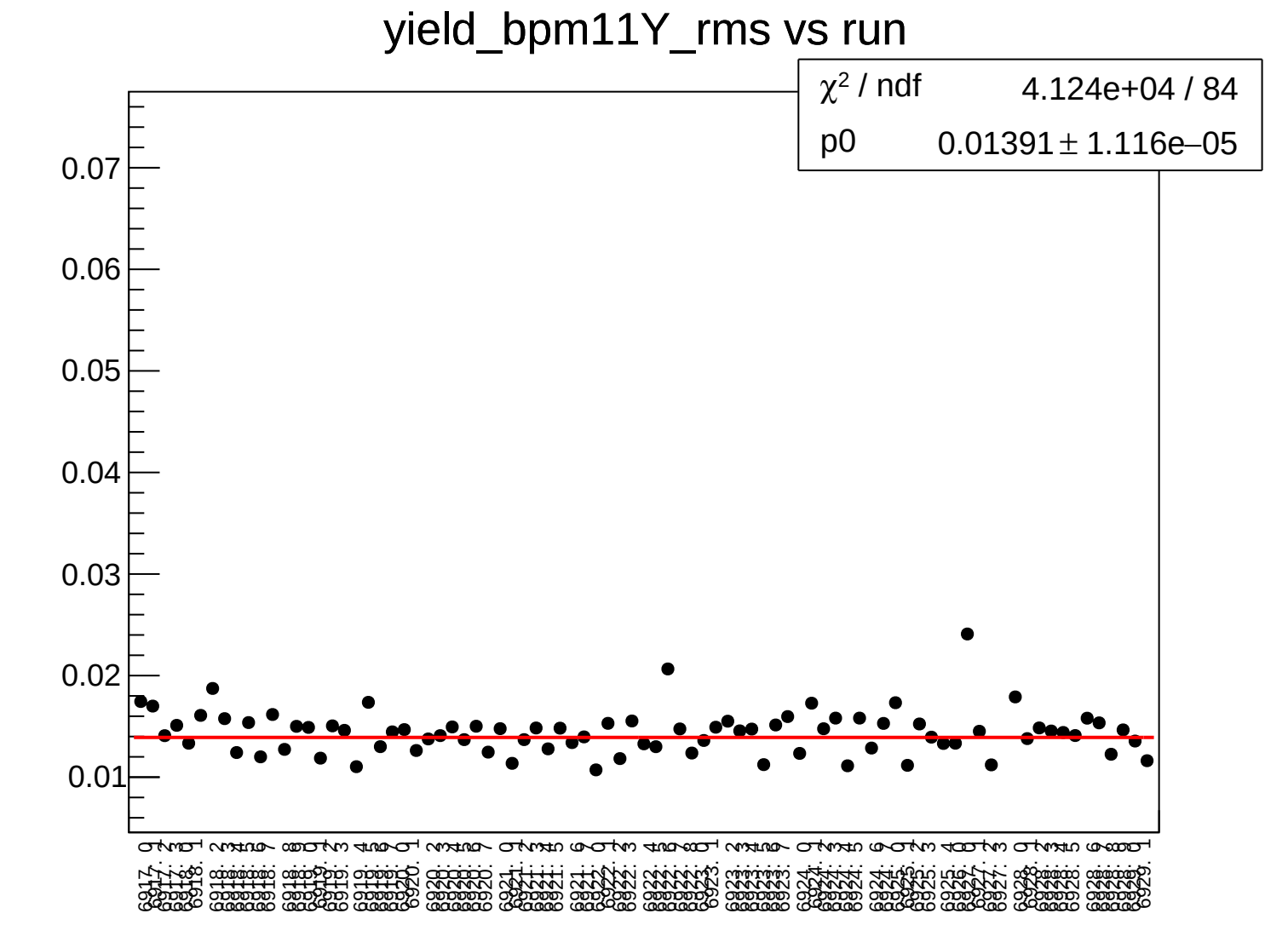

yield_bpm11X_mean vs run
χ² / ndf 8.173e+04 / 84
p0 0.697 ± 1.665e−05
0.72
0.7
0.68
0.66
0.64
0.62
0.6
pull
Entries 85
Mean −116
Std Dev 164.3
80
60
40
20
0
−20
−40
−60
−80
−100

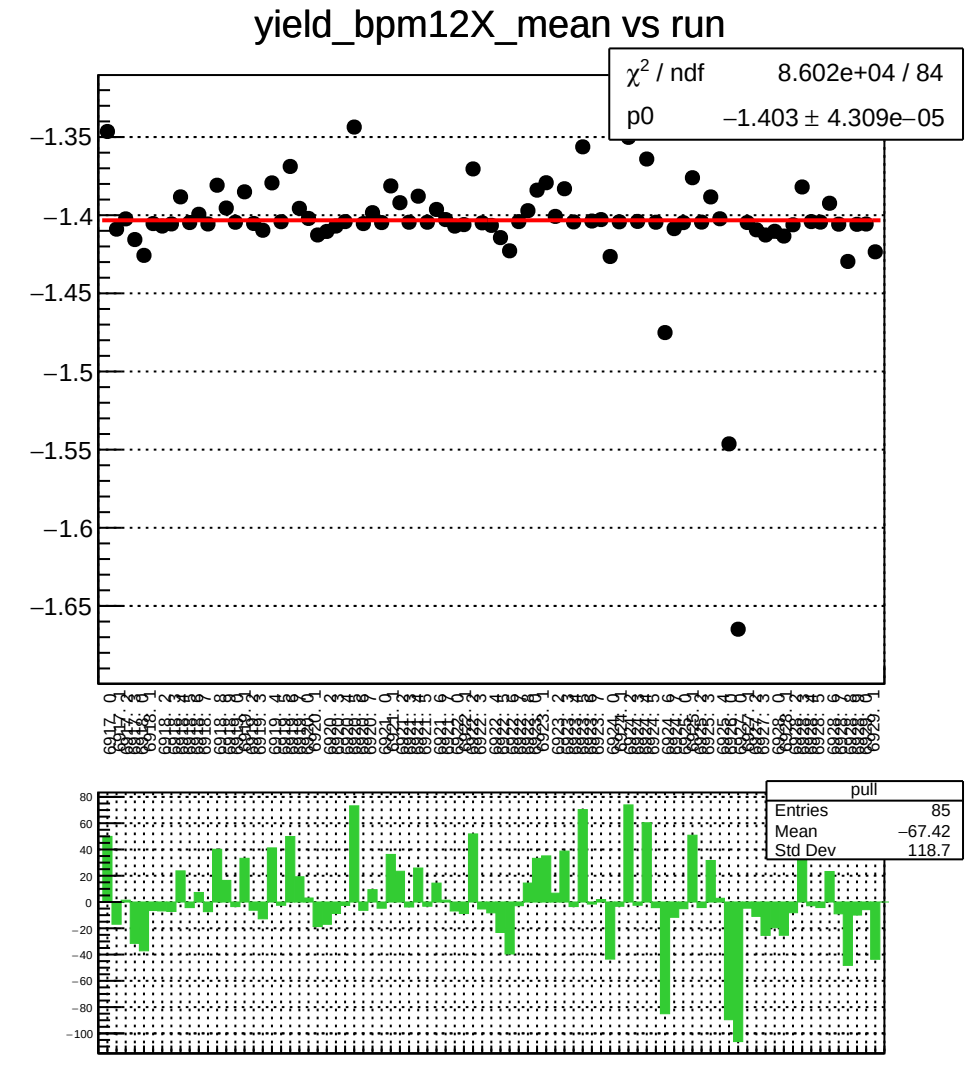

pull1D
Entries 85
Mean −2.53
Std Dev 3.952
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

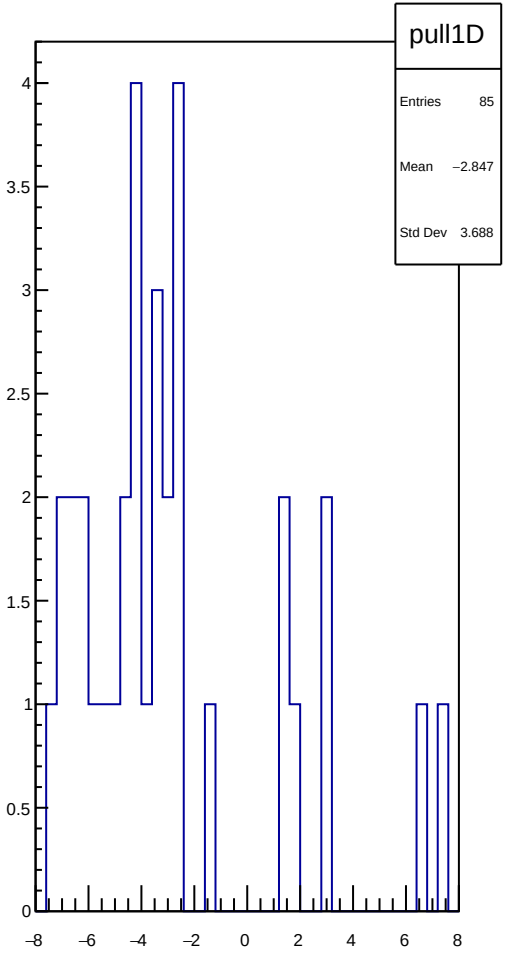

yield_bpm11X_rms vs run
χ^2 / ndf 1.385e+05 / 84
p0 0.01421 ± 1.177e–05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

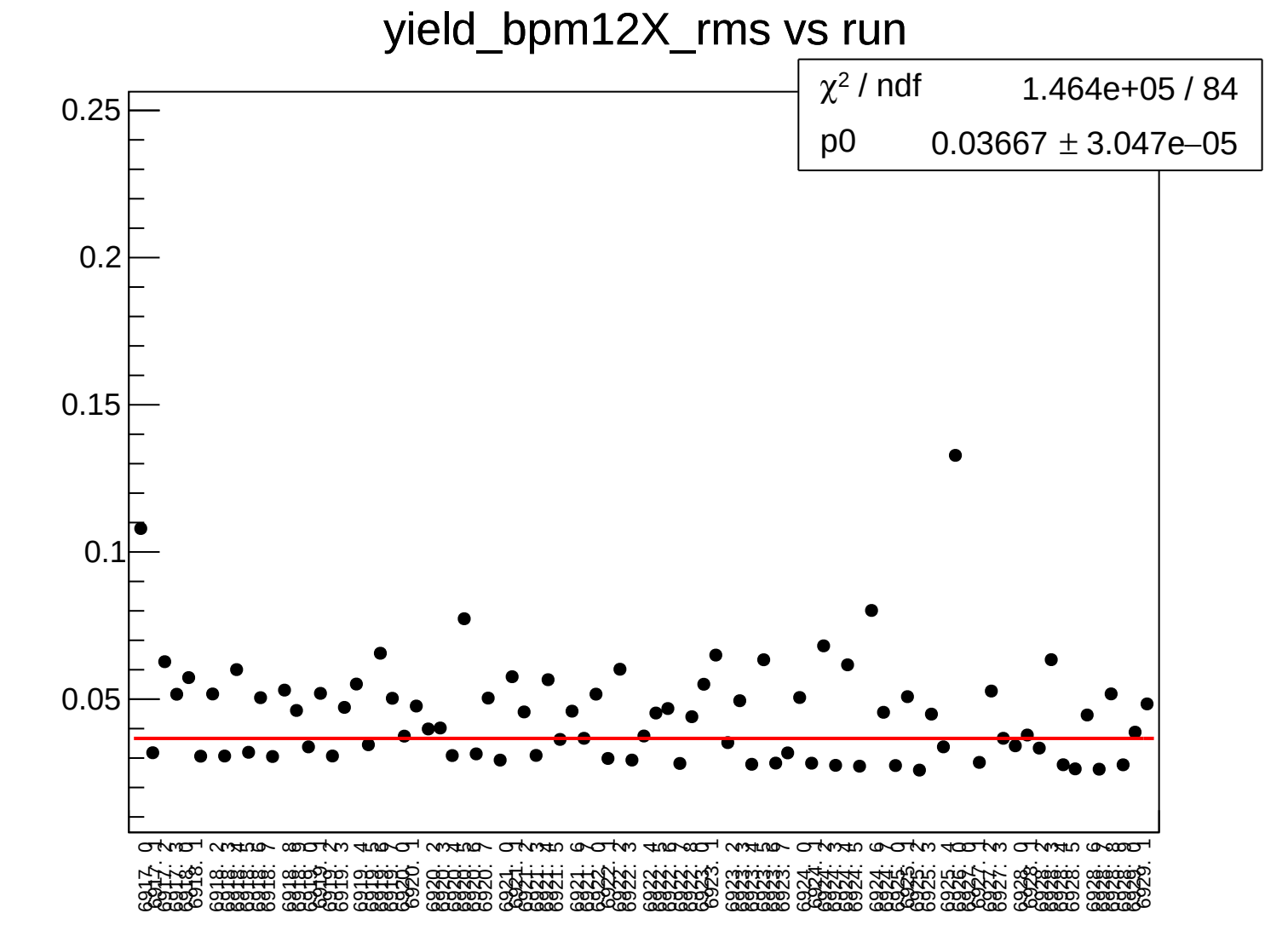

yield_bpm11Y_mean vs run
χ² / ndf 8.006e+05 / 84
p0 0.8108 ± 1.579e−05
0.88
0.86
0.84
0.82
0.8
0.78
pull
Entries 85
Mean 4350
Std Dev 4303
250
200
150
100
50
0
−50
−100
−150

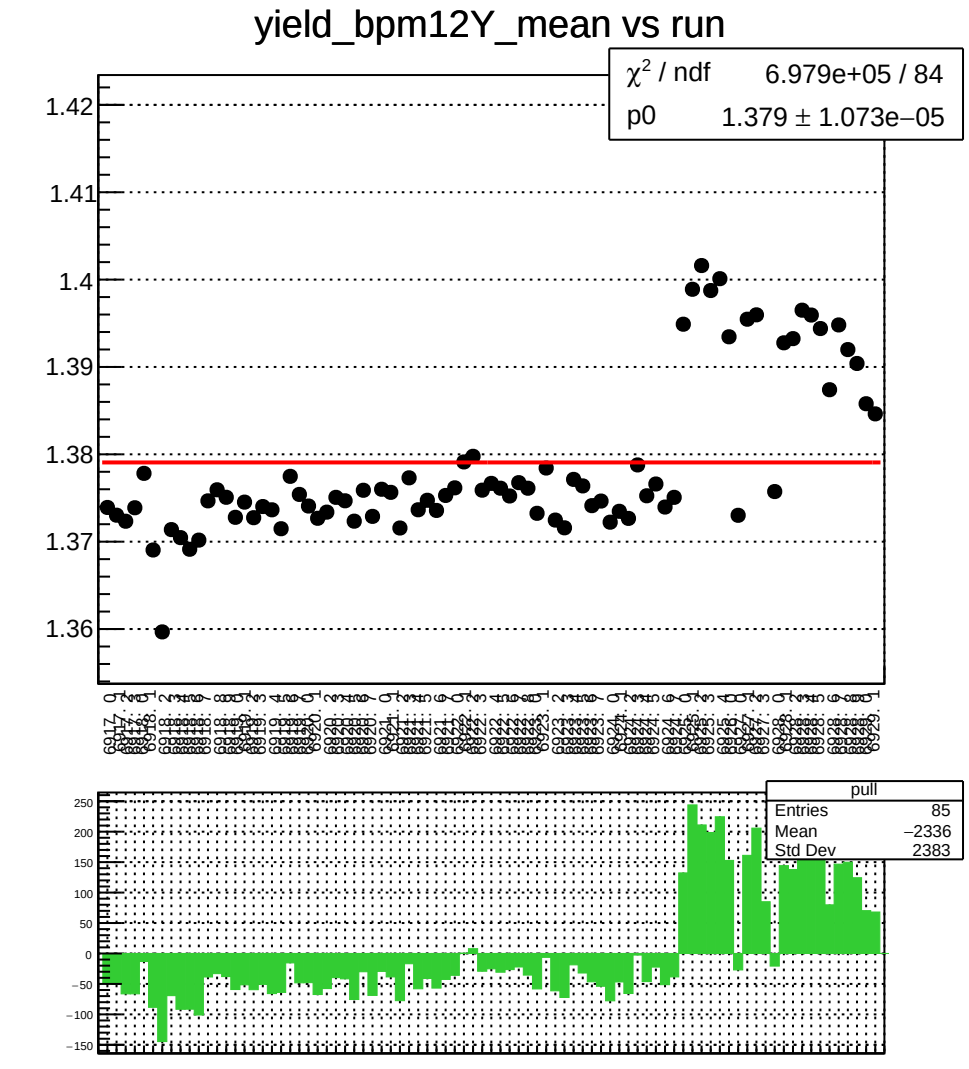

pull1D
Entries 85
Mean 5.026
Std Dev 0.6753
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

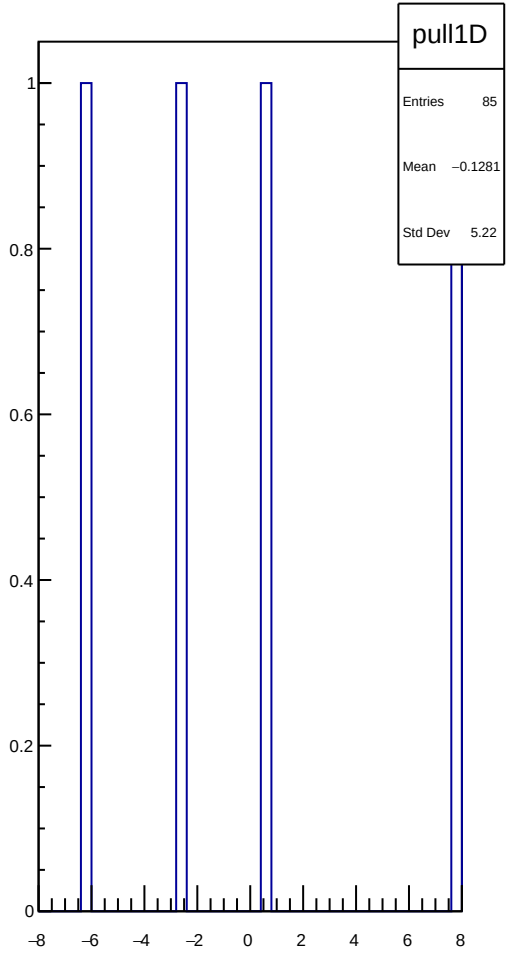

yield_bpm11Y_rms vs run
χ² / ndf 4.124e+04 / 84
p0 0.01391 ± 1.116e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

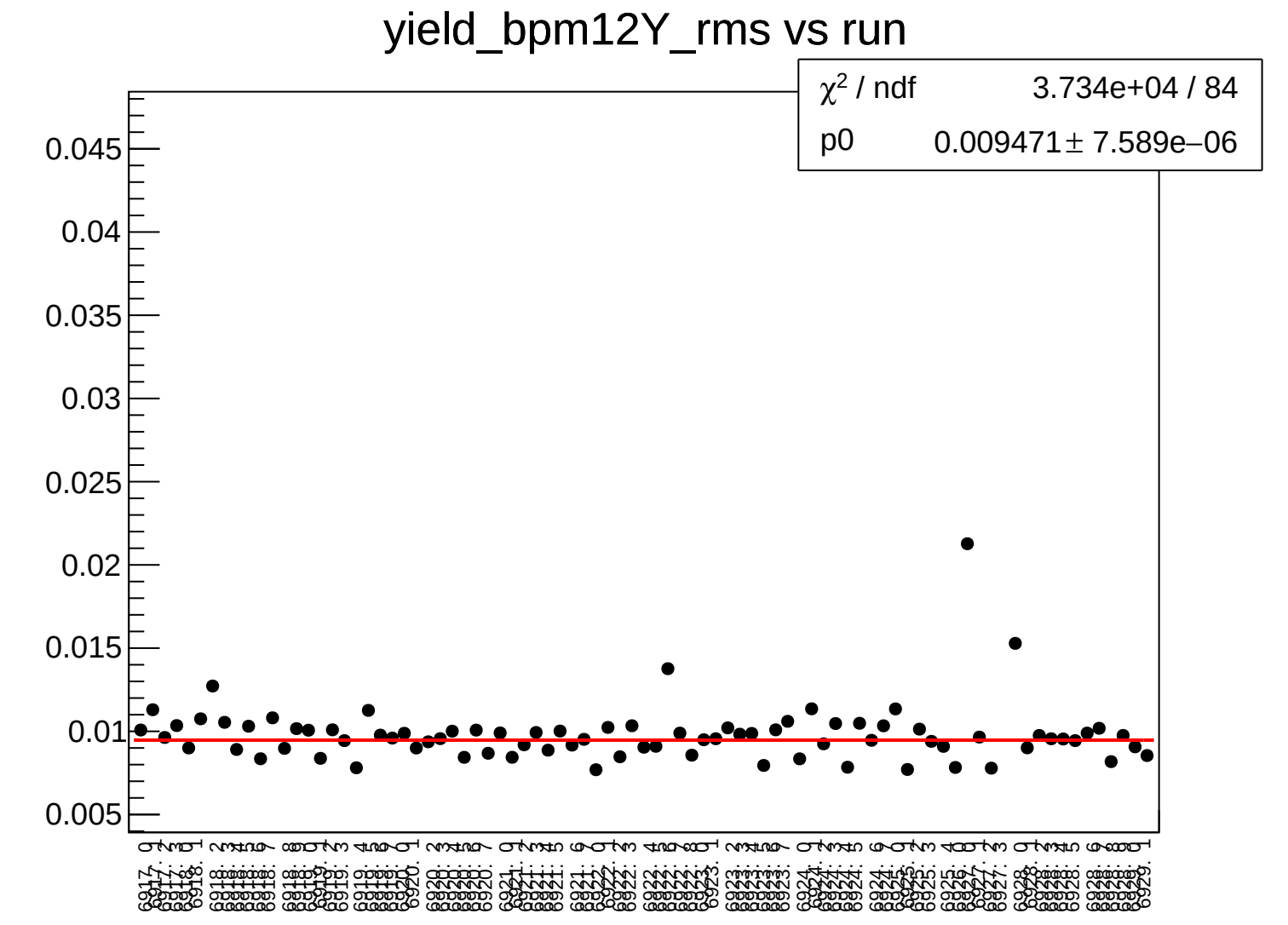

yield_bpm12X_mean vs run
χ² / ndf 8.602e+04 / 84
p0 −1.403 ± 4.309e−05
−1.35
−1.4
−1.45
−1.5
−1.55
−1.6
−1.65
pull
Entries 85
Mean −67.42
Std Dev 118.7
80
60
40
20
0
−20
−40
−60
−80
−100

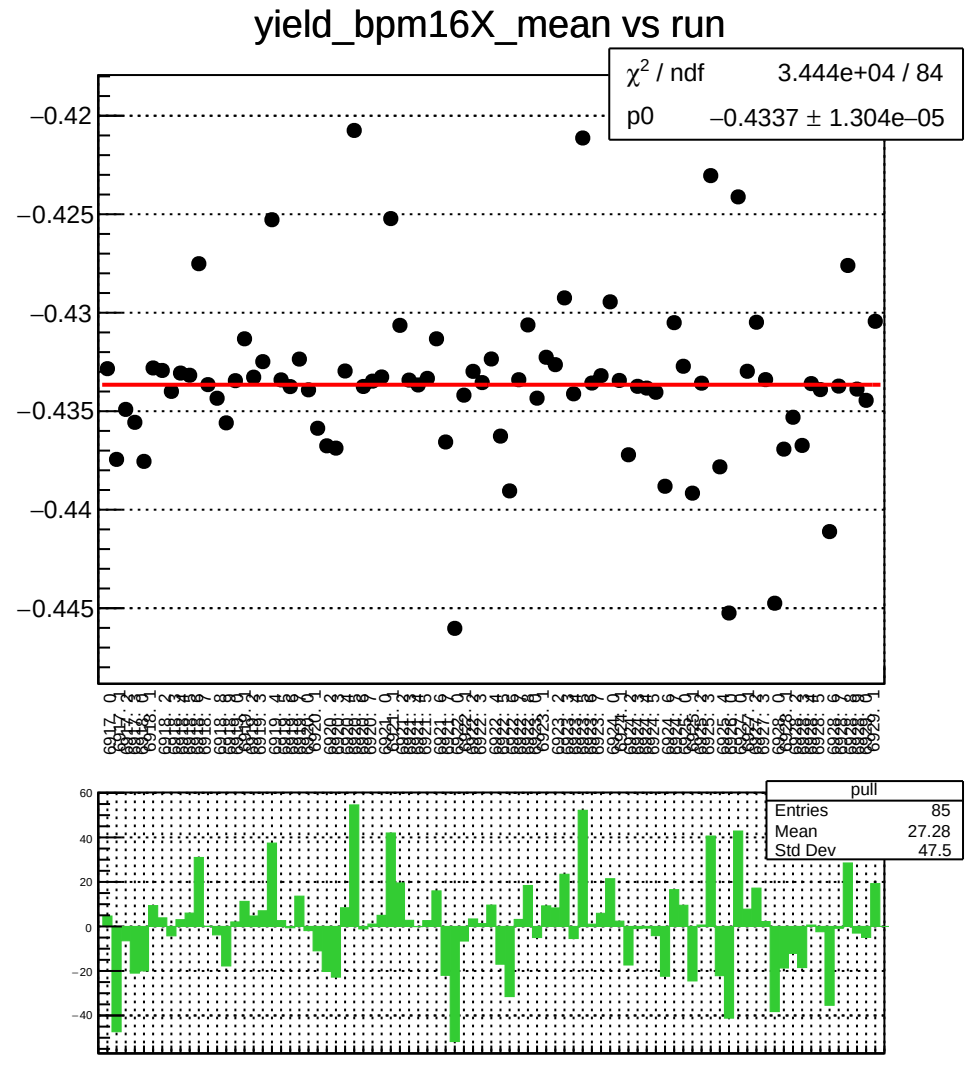

pull1D
Entries 85
Mean −2.847
Std Dev 3.688
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

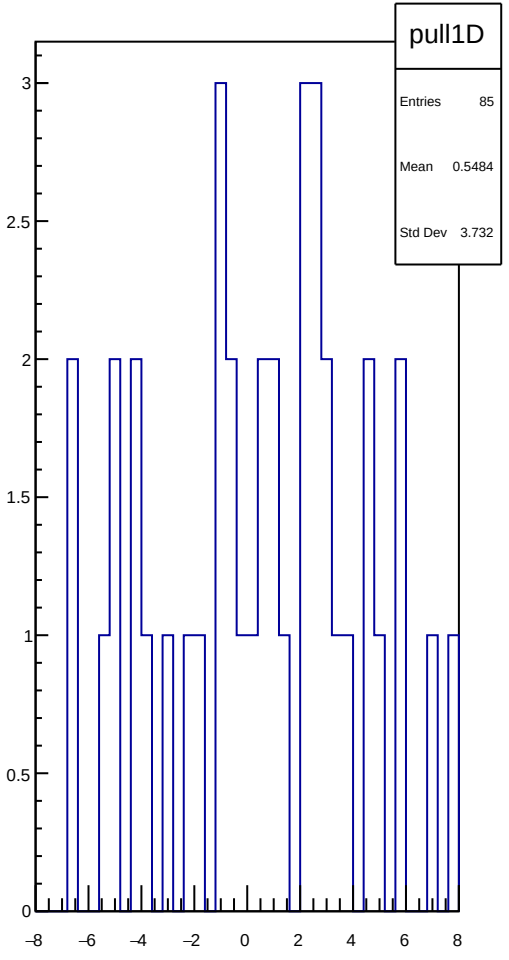

yield_bpm12X_rms vs run
χ² / ndf 1.464e+05 / 84
p0 0.03667 ± 3.047e–05
0.25
0.2
0.15
0.1
0.05

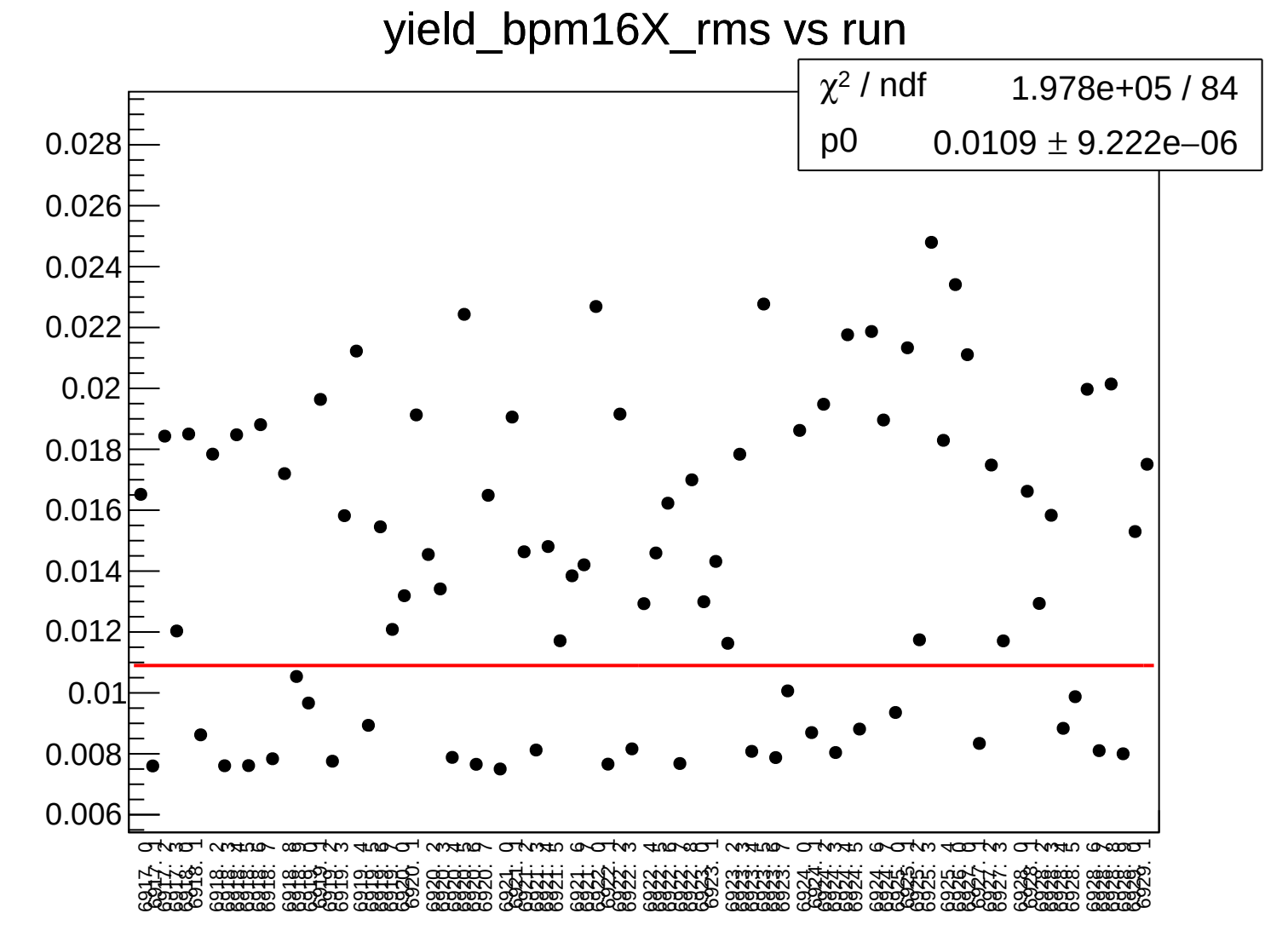

yield_bpm12Y_mean vs run
χ² / ndf 6.979e+05 / 84
p0 1.379 ± 1.073e−05
1.42
1.41
1.4
1.39
1.38
1.37
1.36
pull
Entries 85
Mean −2336
Std Dev 2383
250
200
150
100
50
0
−50
−100
−150

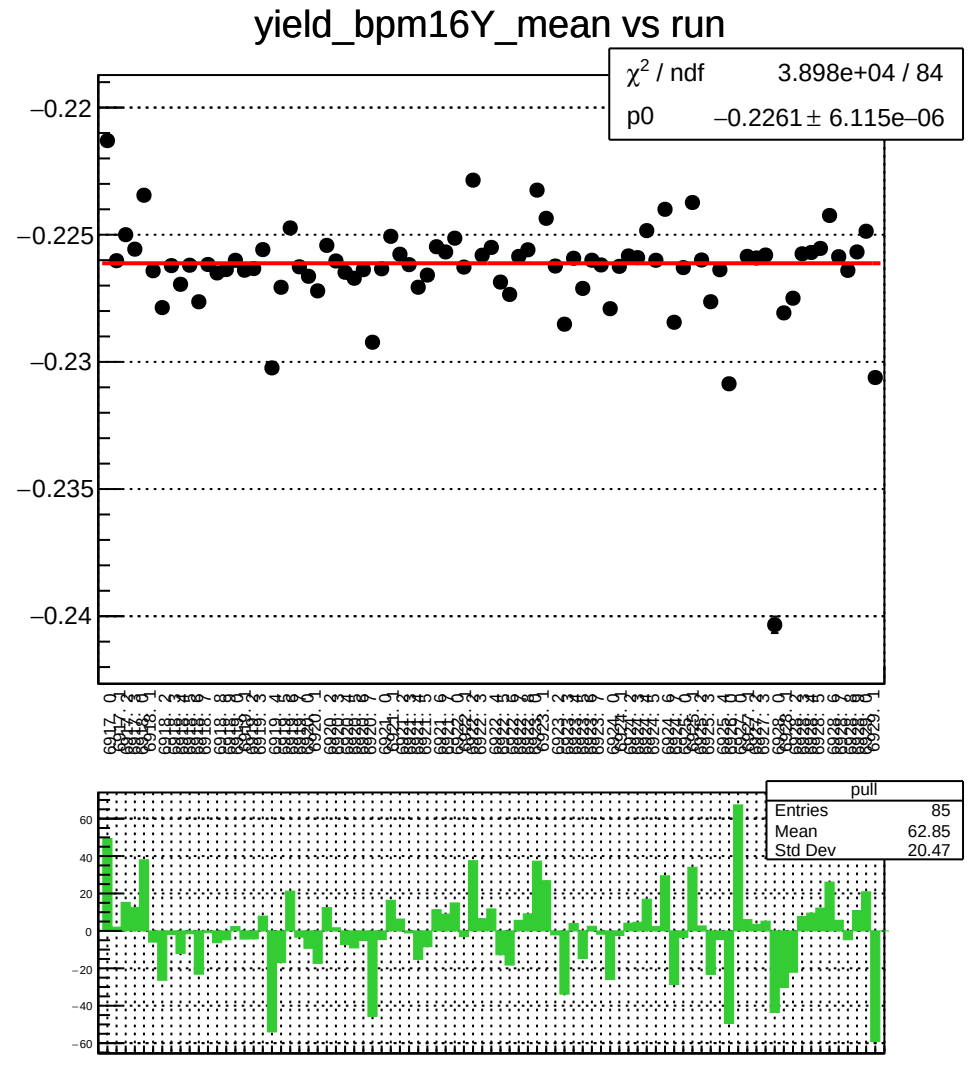

pull1D
Entries 85
Mean −0.1281
Std Dev 5.22
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

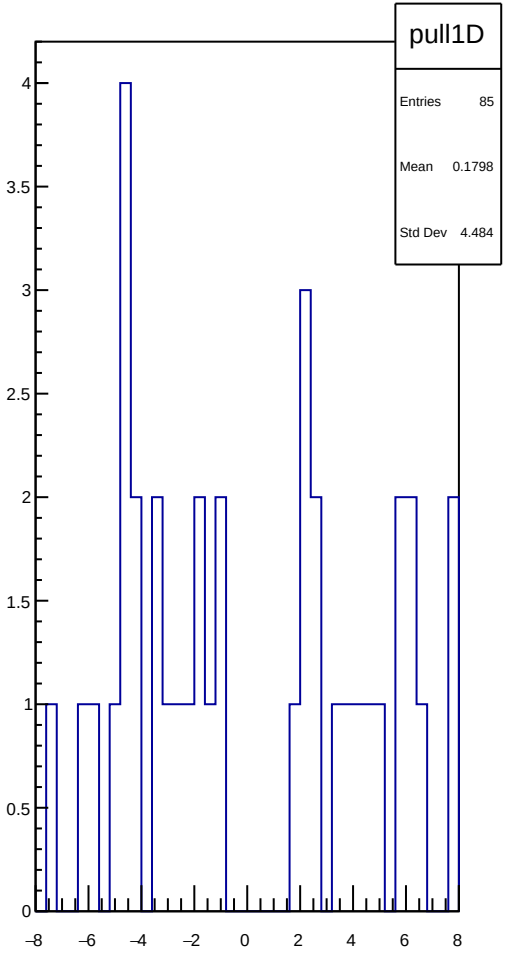

yield_bpm12Y_rms vs run
χ^2 / ndf 3.734e+04 / 84
p0 0.009471 ± 7.589e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

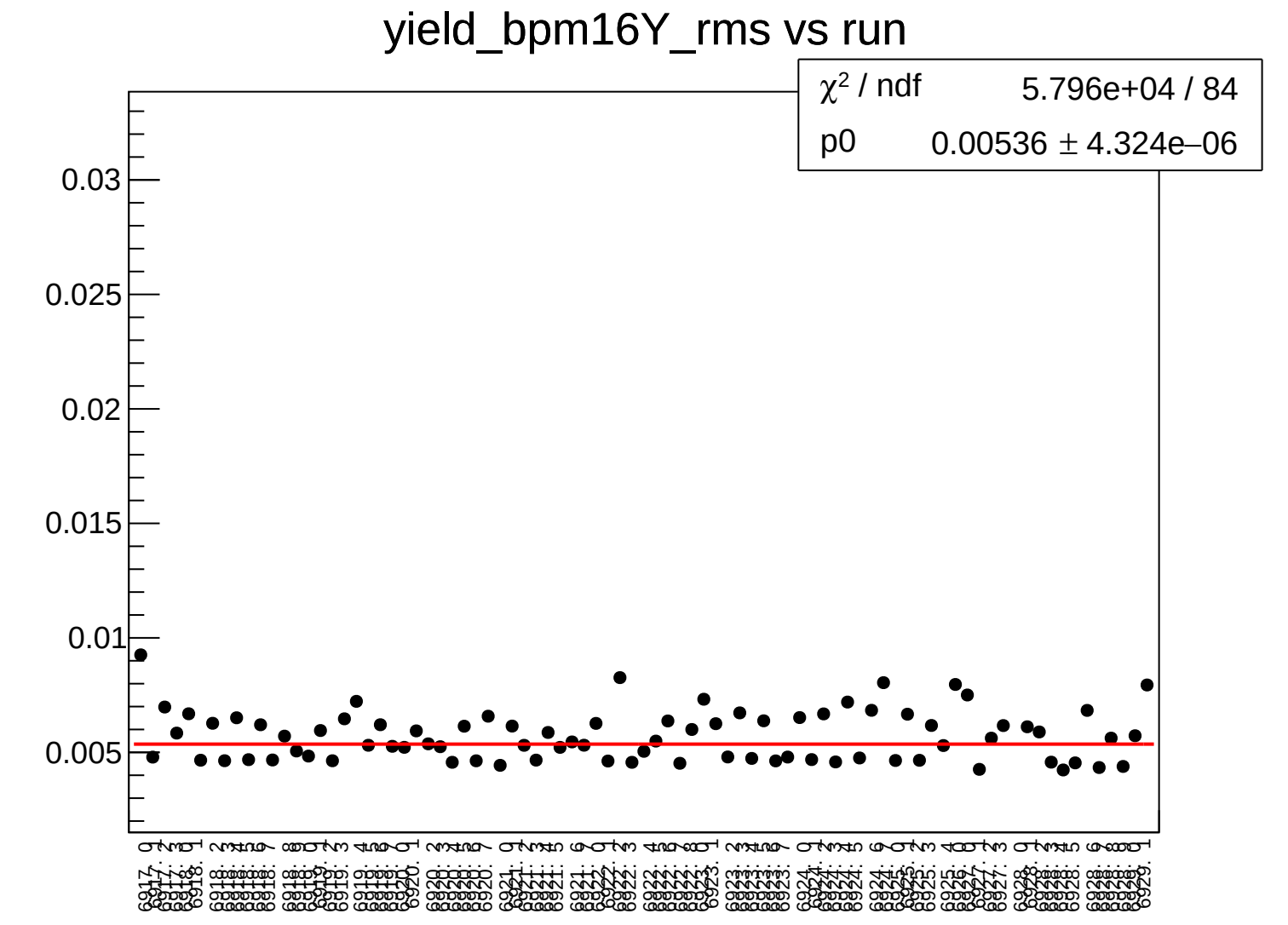

yield_bpm16X_mean vs run
χ² / ndf 3.444e+04 / 84
p0 −0.4337 ± 1.304e−05
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
pull
Entries 85
Mean 27.28
Std Dev 47.5
60
40
20
0
−20
−40

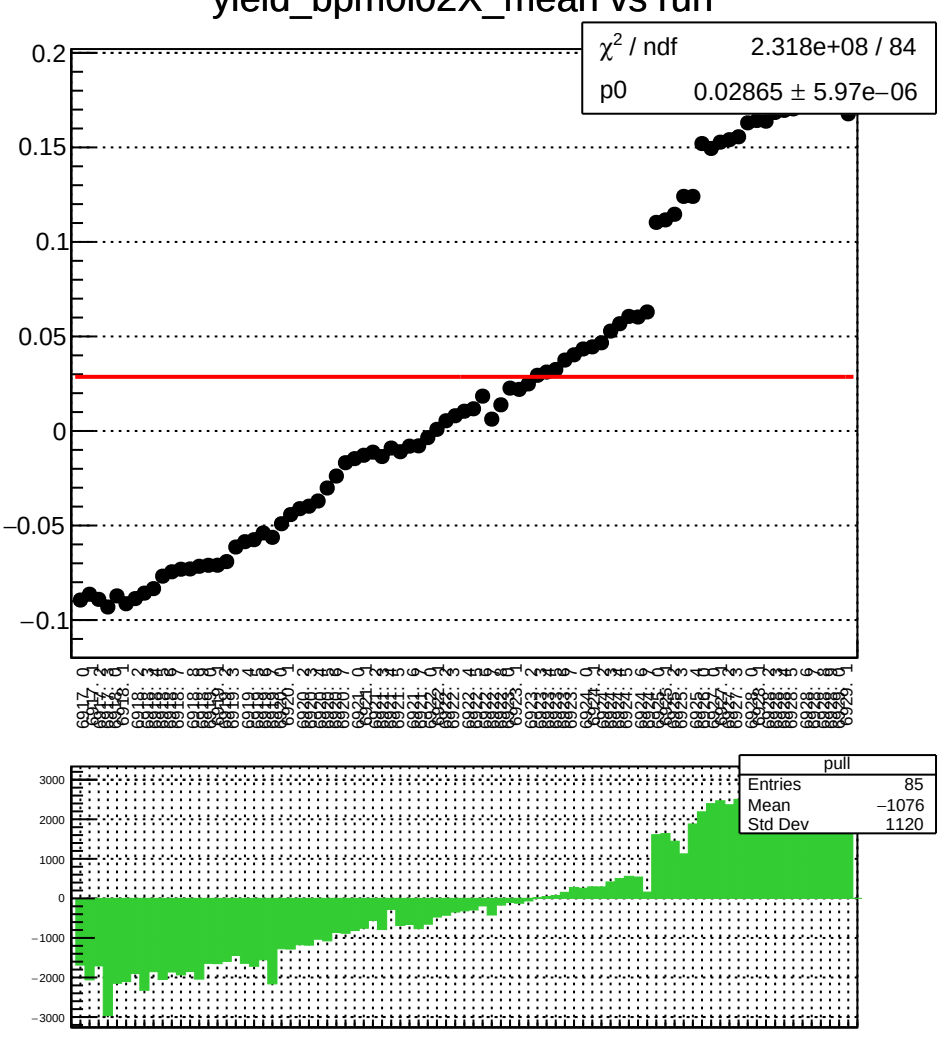

pull1D
Entries 85
Mean 0.5484
Std Dev 3.732
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

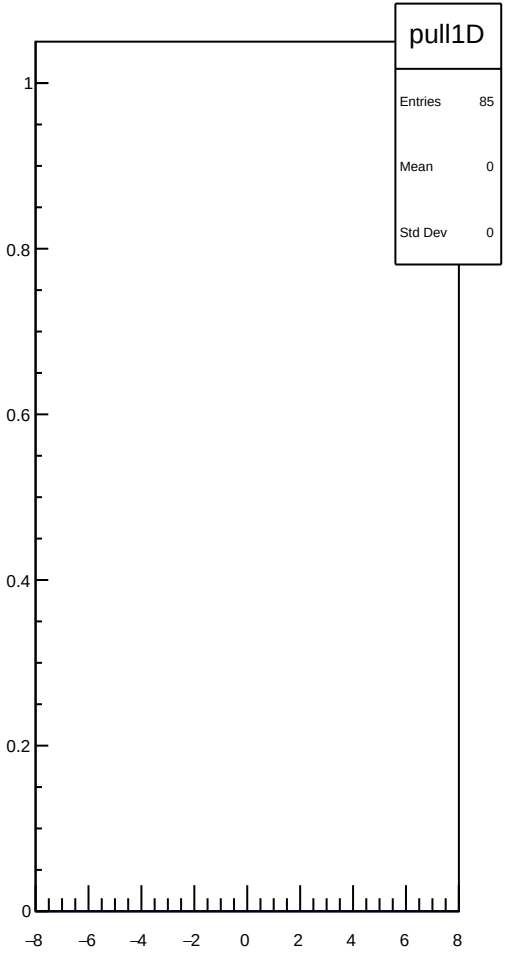

yield_bpm16X_rms vs run
χ² / ndf 1.978e+05 / 84
p0 0.0109 ± 9.222e−06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

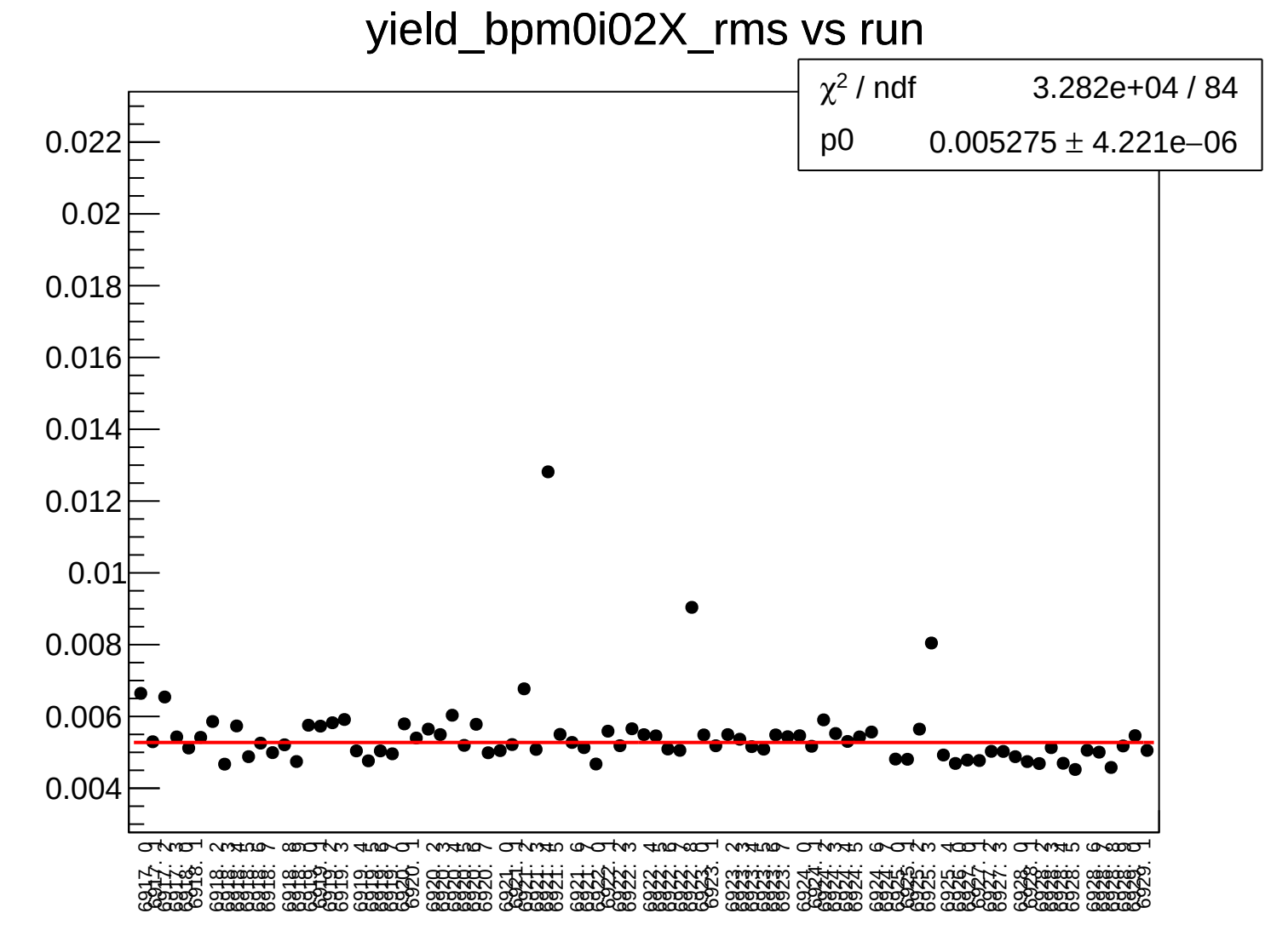

yield_bpm16Y_mean vs run
χ² / ndf 3.898e+04 / 84
p0 −0.2261 ± 6.115e−06
−0.22
−0.225
−0.23
−0.235
−0.24
pull
Entries 85
Mean 62.85
Std Dev 20.47
60
40
20
0
−20
−40
−60

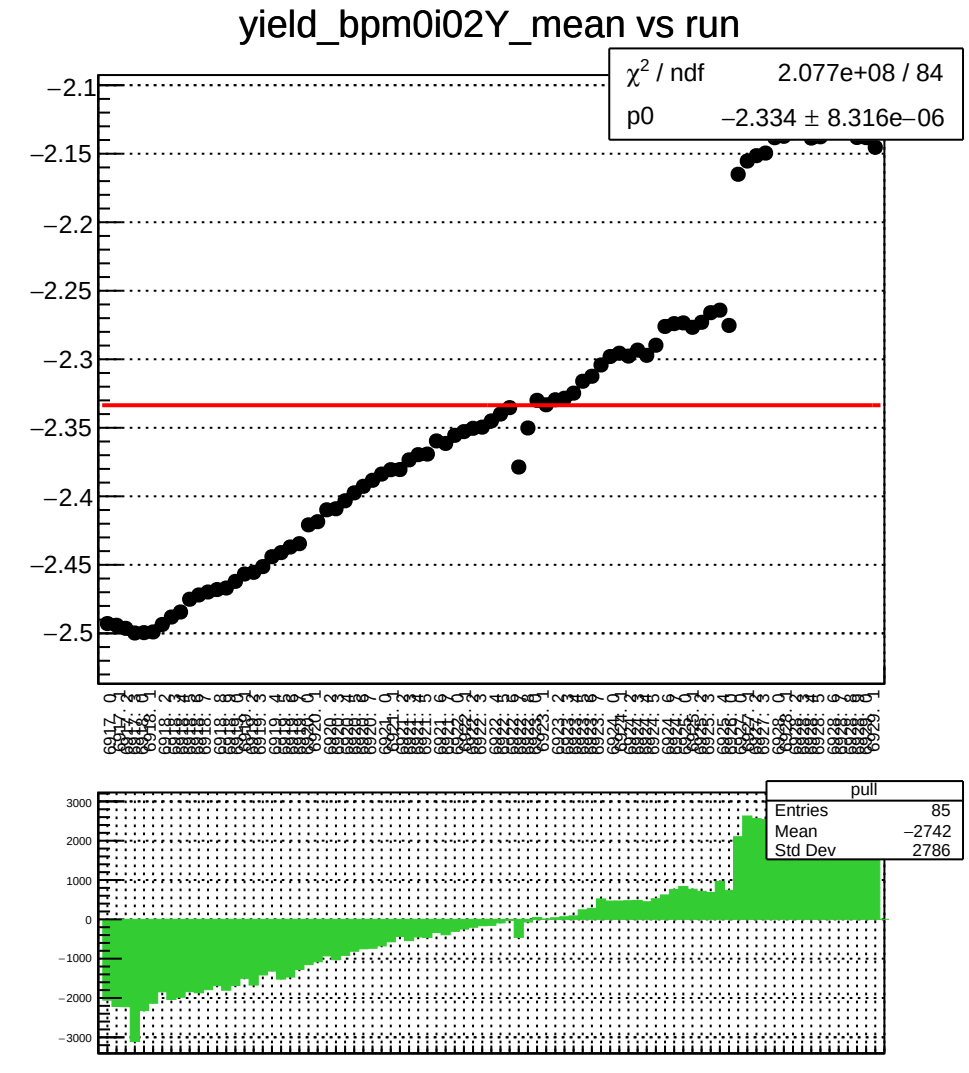

pull1D
Entries 85
Mean 0.1798
Std Dev 4.484
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

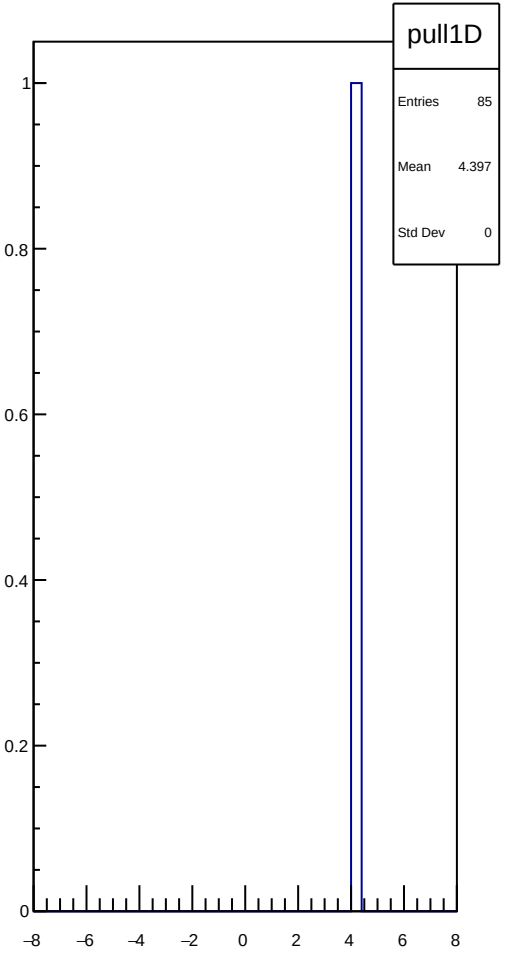

yield_bpm16Y_rms vs run
χ² / ndf 5.796e+04 / 84
p0 0.00536 ± 4.324e–06
0.03
0.025
0.02
0.015
0.01
0.005

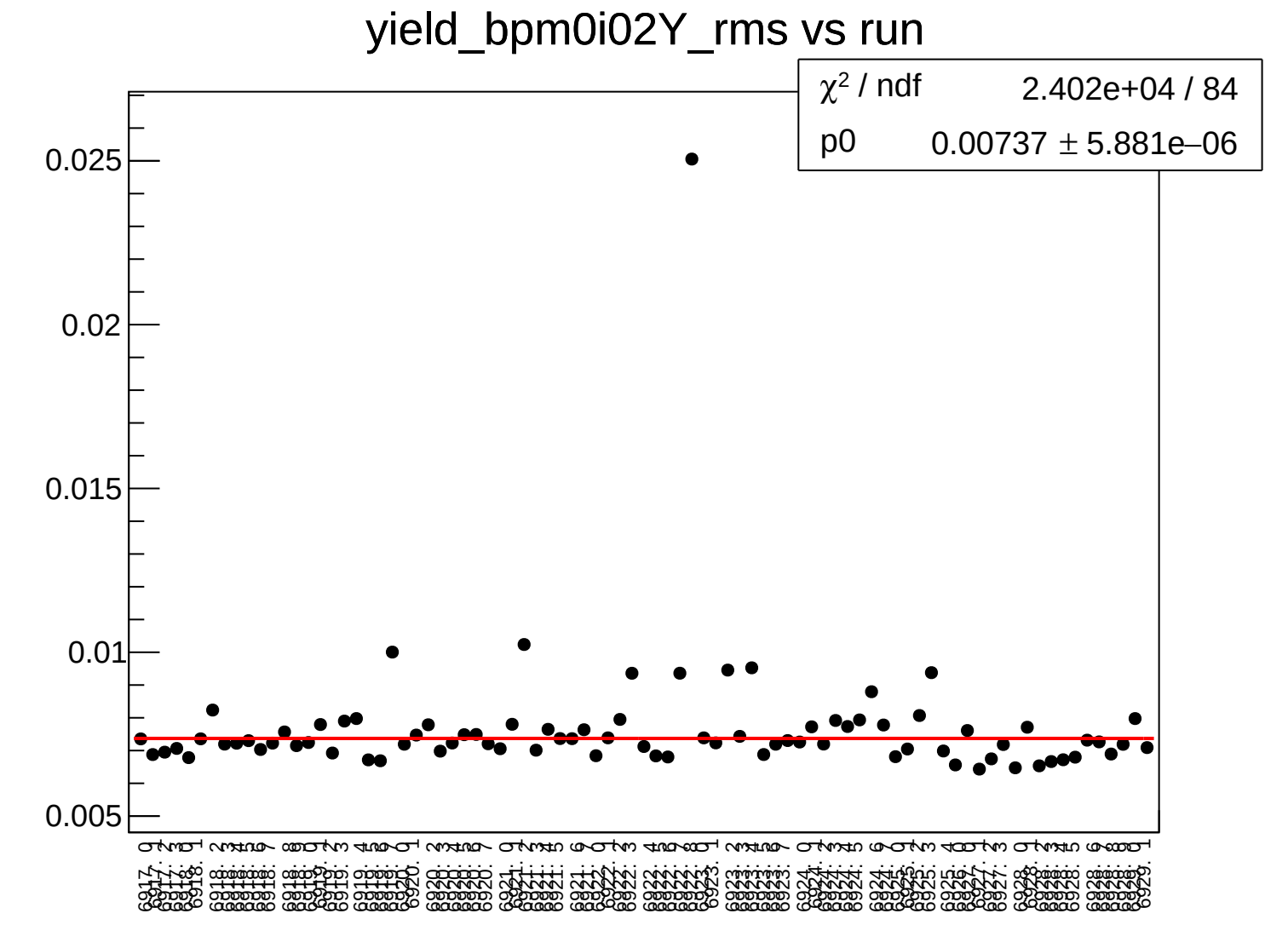

yield_bpm0i02X_mean vs run
χ² / ndf 2.318e+08 / 84
p0 0.02865 ± 5.97e−06
pull
Entries 85
Mean −1076
Std Dev 1120

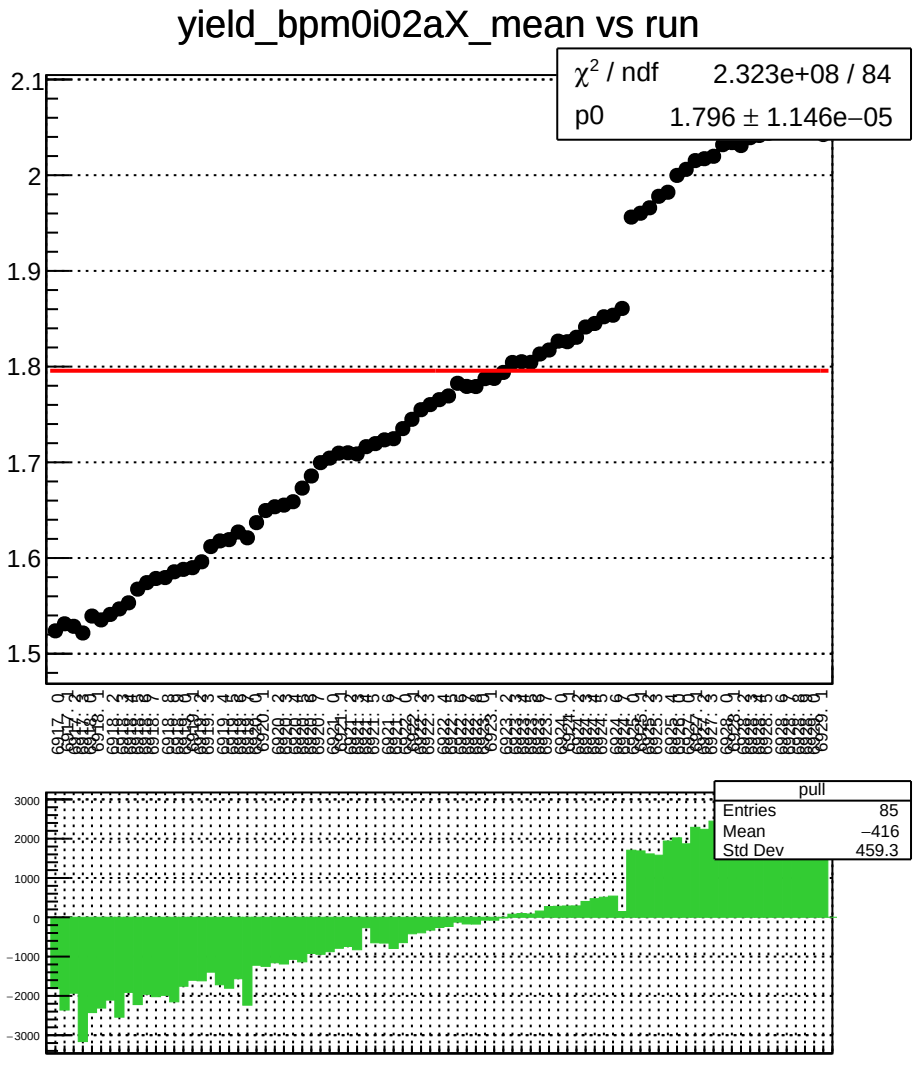

pull1D
Entries 85
Mean 0
Std Dev 0

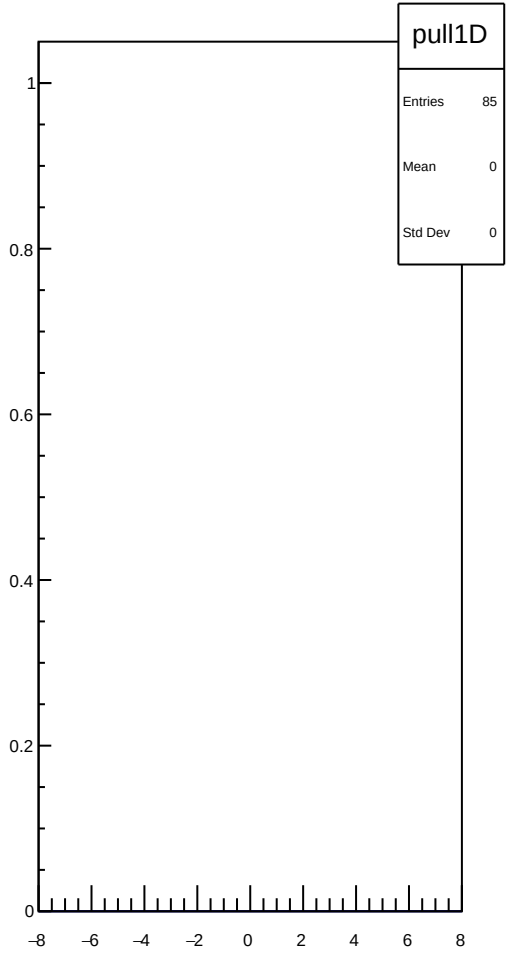

yield_bpm0i02X_rms vs run
χ² / ndf 3.282e+04 / 84
p0 0.005275 ± 4.221e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

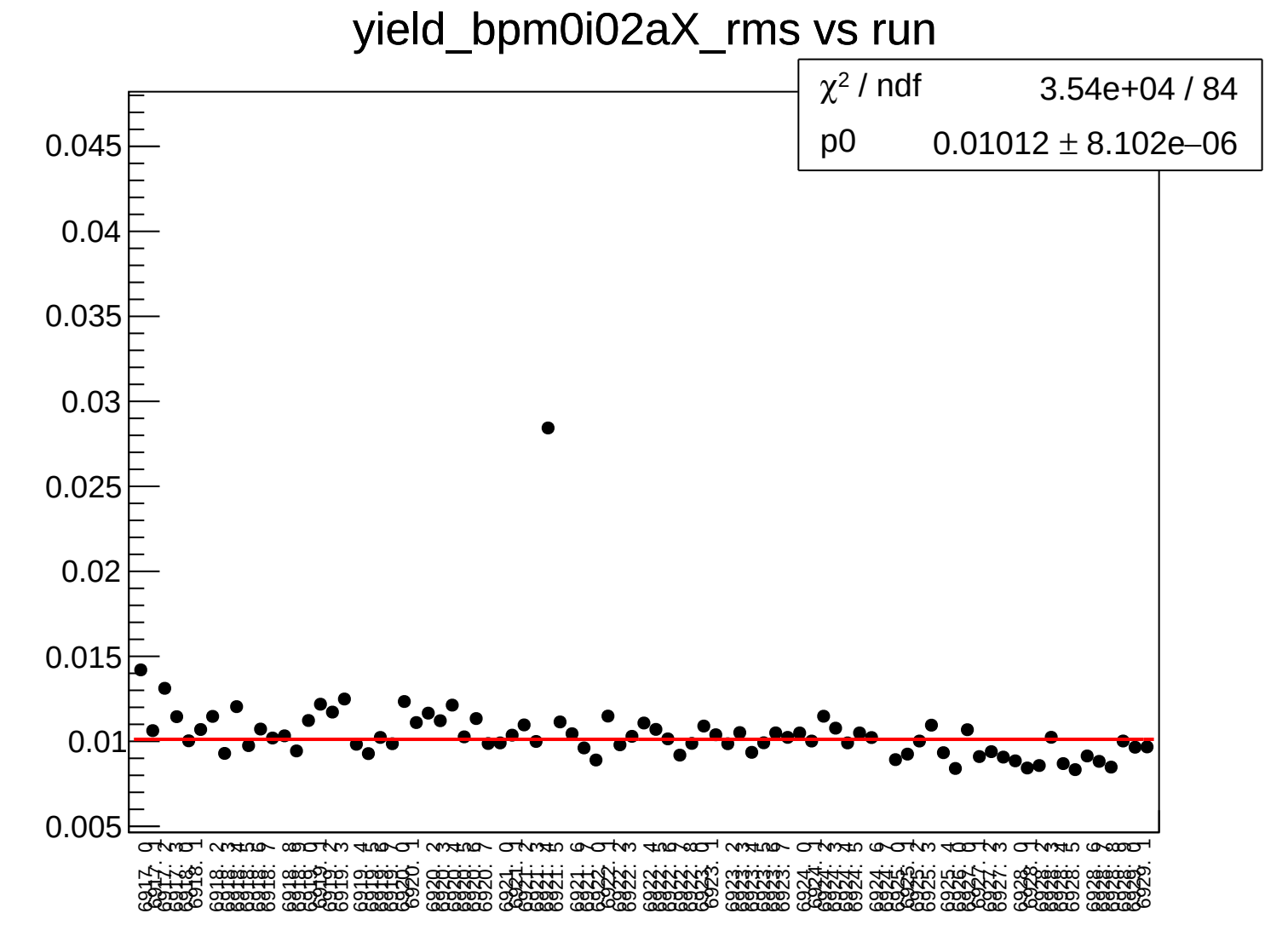

yield_bpm0i02Y_mean vs run
χ² / ndf 2.077e+08 / 84
p0 −2.334 ± 8.316e−06
pull
Entries 85
Mean −2742
Std Dev 2786

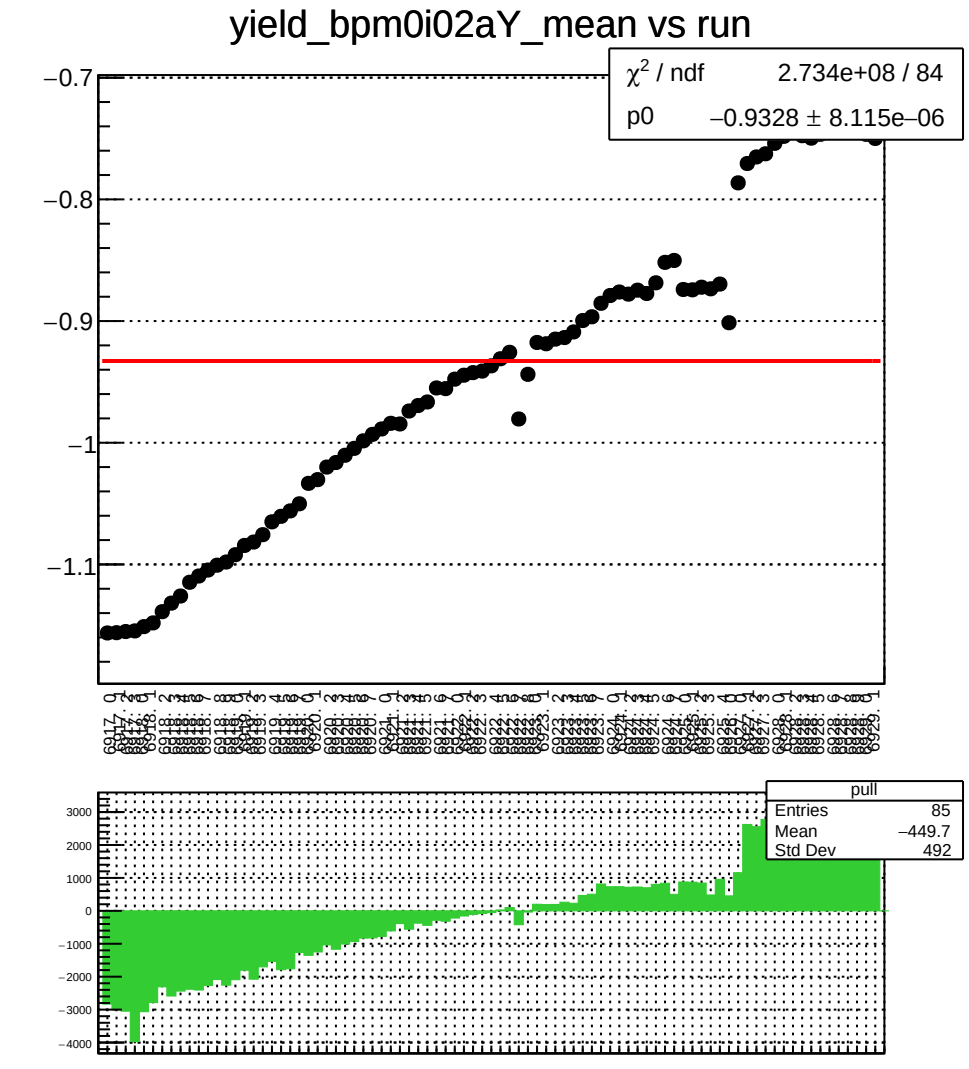

pull1D
Entries 85
Mean 4.397
Std Dev 0

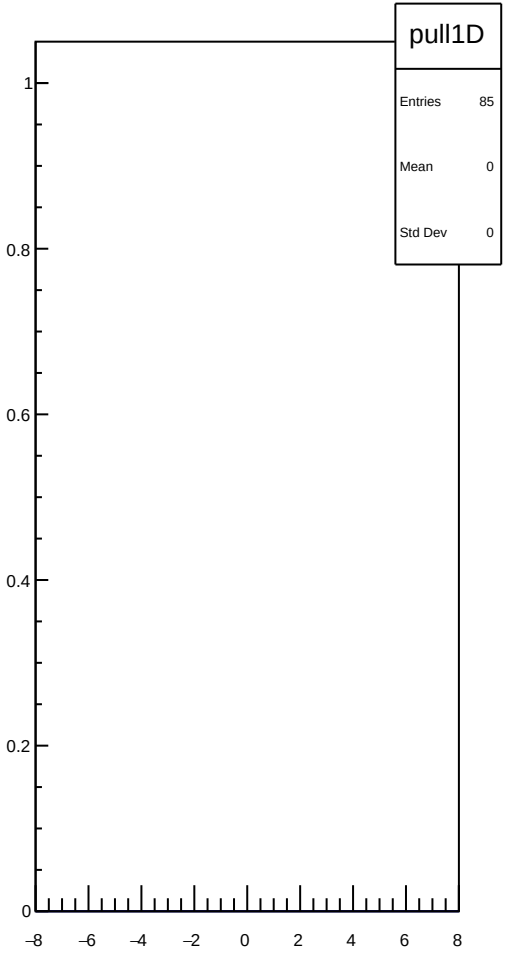

yield_bpm0i02Y_rms vs run
χ² / ndf 2.402e+04 / 84
p0 0.00737 ± 5.881e–06
0.025
0.02
0.015
0.01
0.005

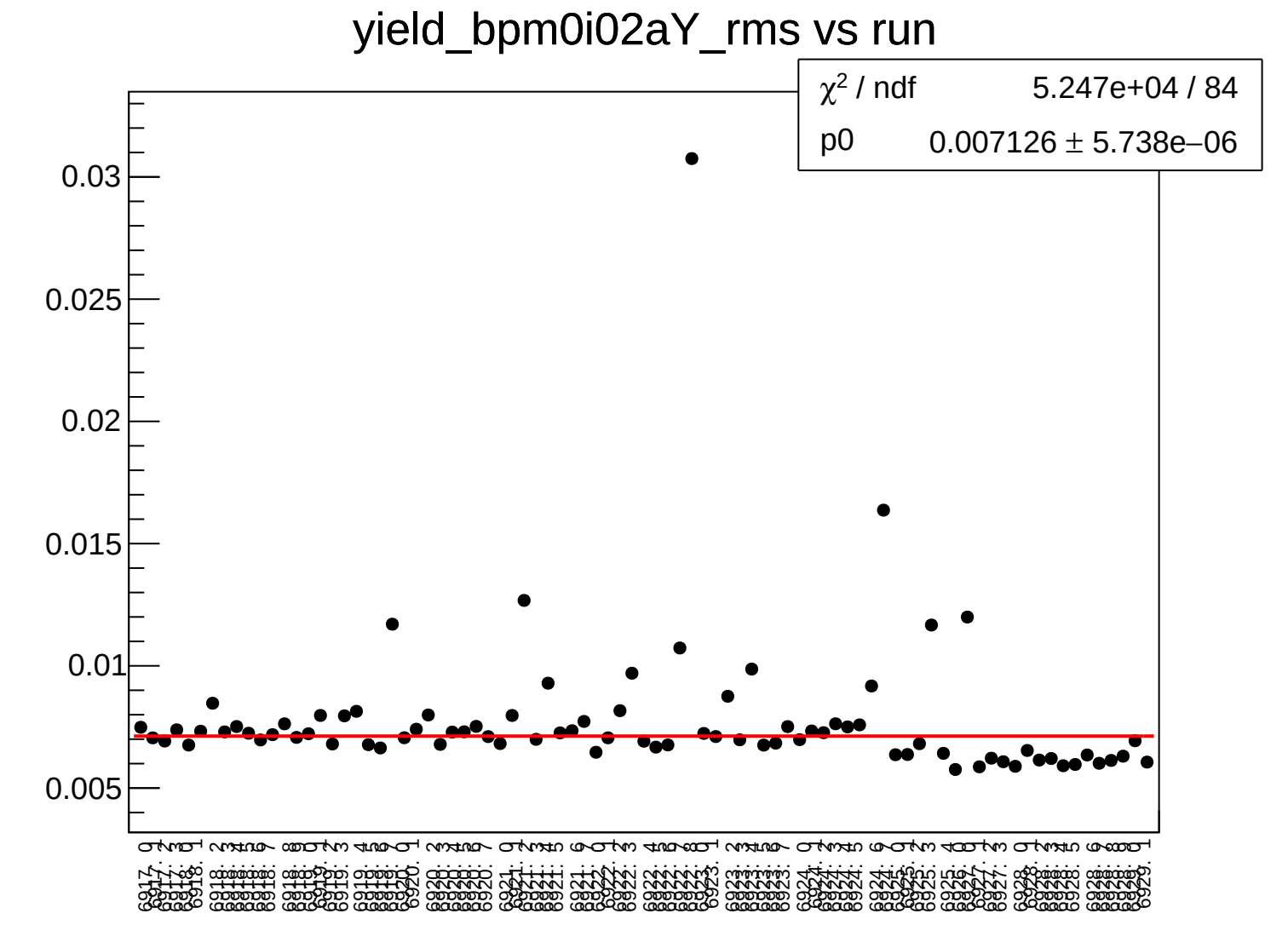

yield_bpm0i02aX_mean vs run
χ² / ndf 2.323e+08 / 84
p0 1.796 ± 1.146e−05
pull
Entries 85
Mean −416
Std Dev 459.3

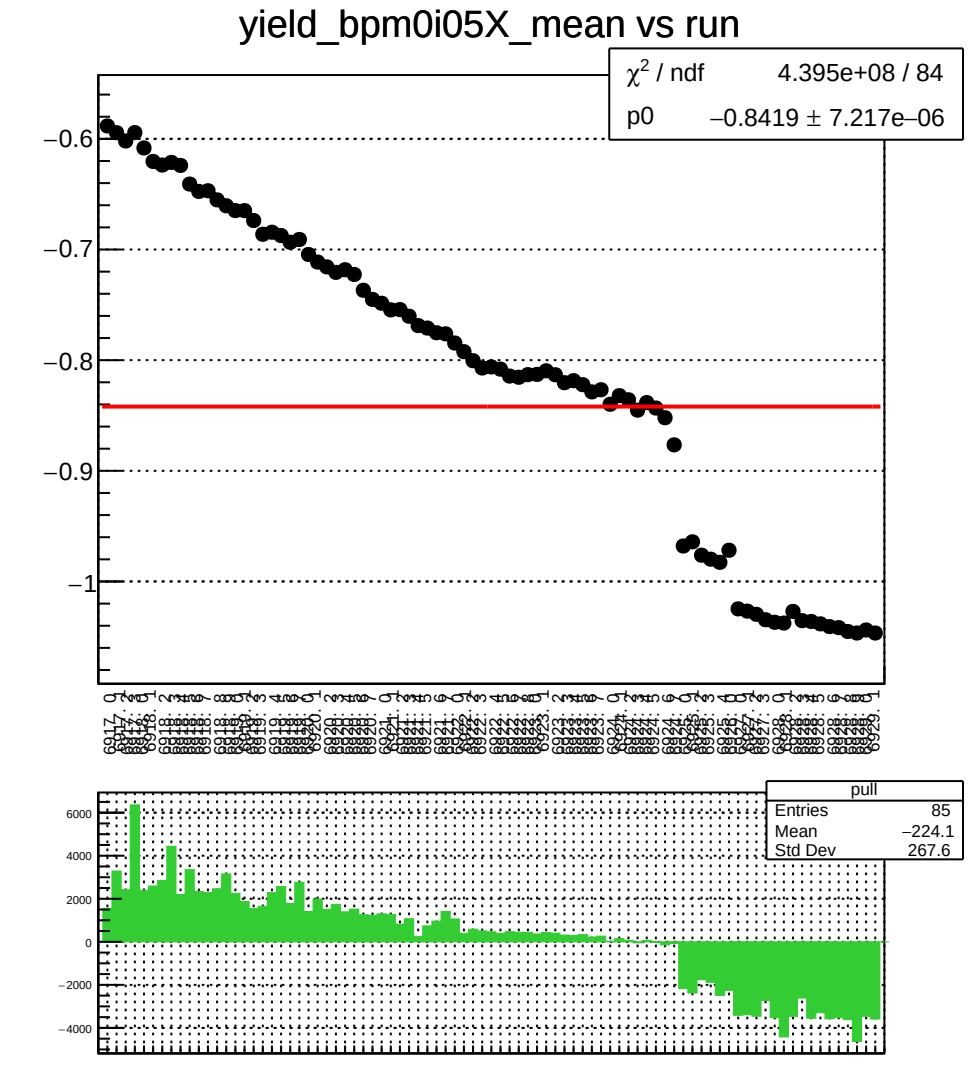

pull1D
Entries 85
Mean 0
Std Dev 0

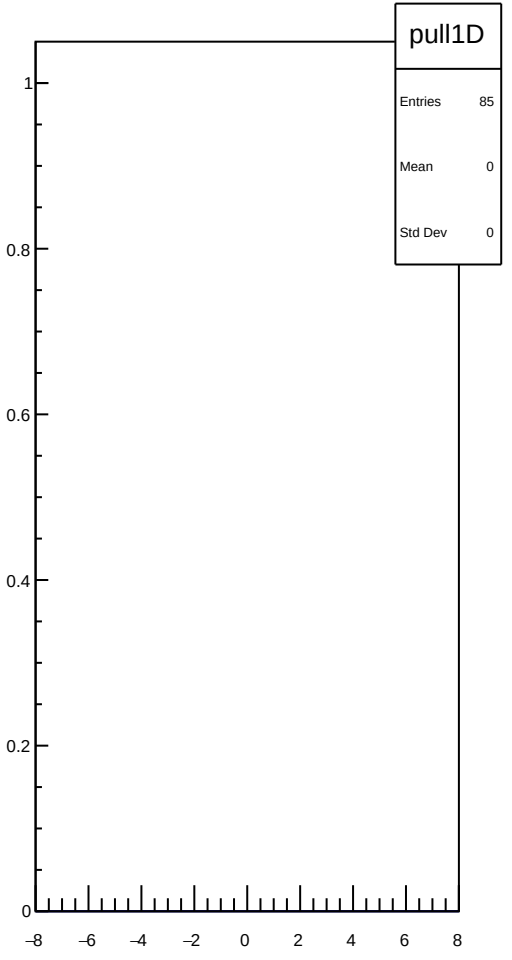

yield_bpm0i02aX_rms vs run
χ² / ndf 3.54e+04 / 84
p0 0.01012 ± 8.102e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

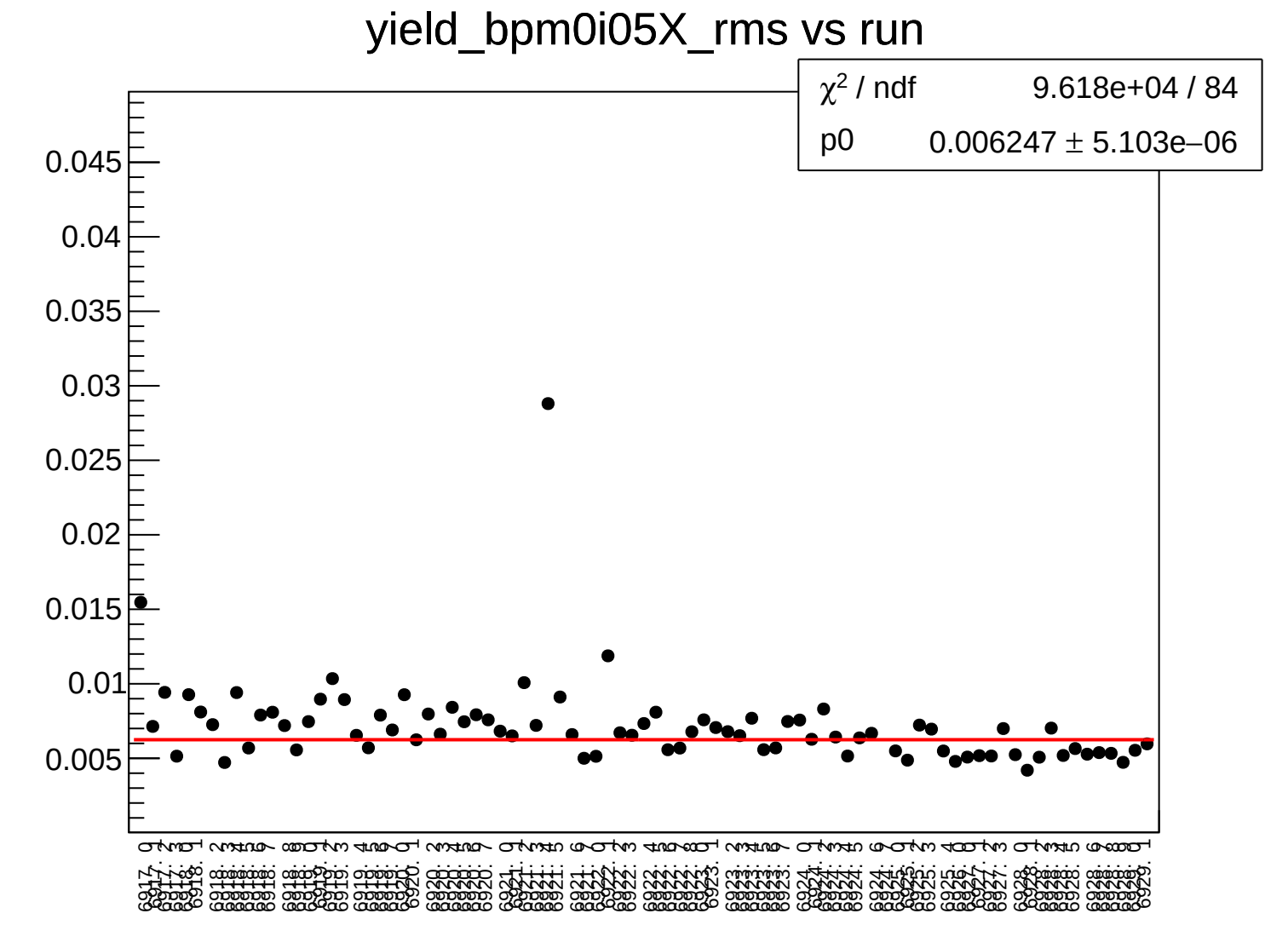

yield_bpm0i02aY_mean vs run
χ² / ndf 2.734e+08 / 84
p0 −0.9328 ± 8.115e−06
−0.7
−0.8
−0.9
−1
−1.1
pull
Entries 85
Mean −449.7
Std Dev 492
3000
2000
1000
0
−1000
−2000
−3000
−4000

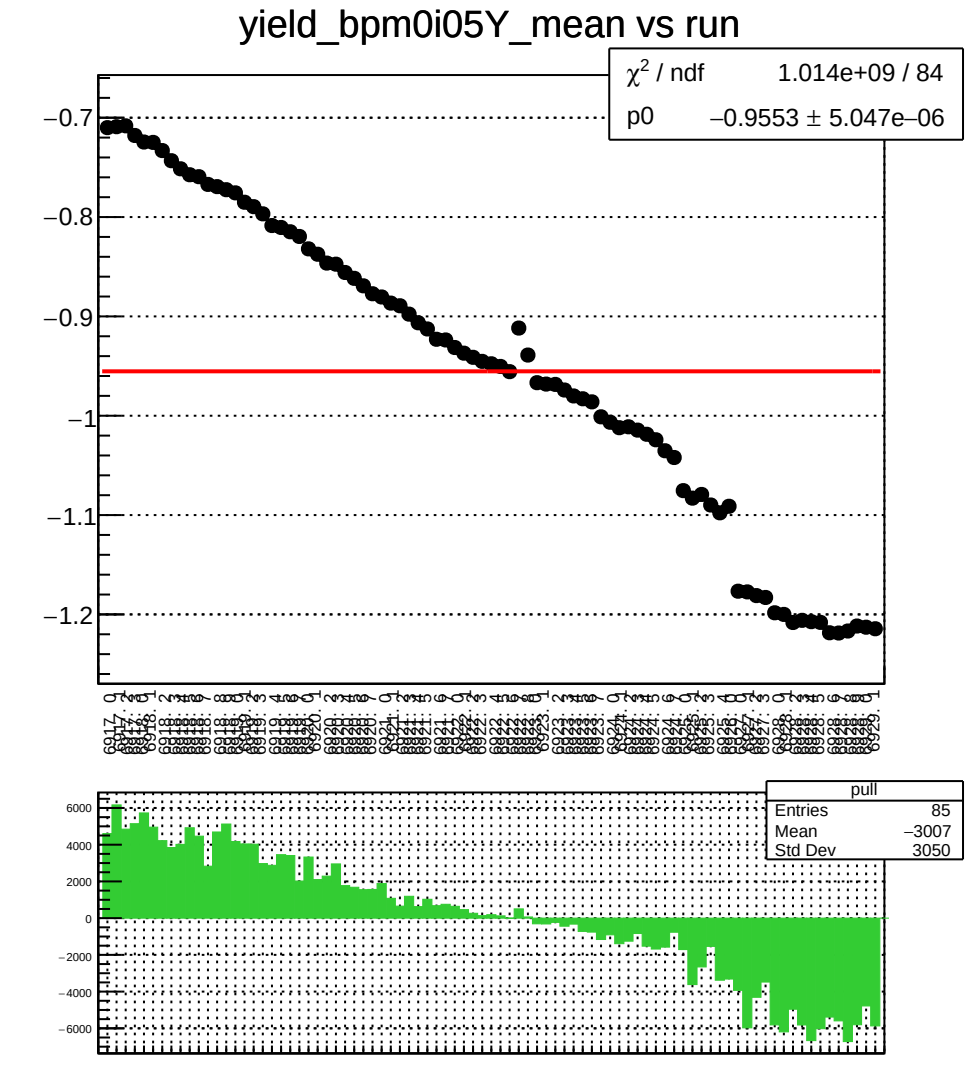

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

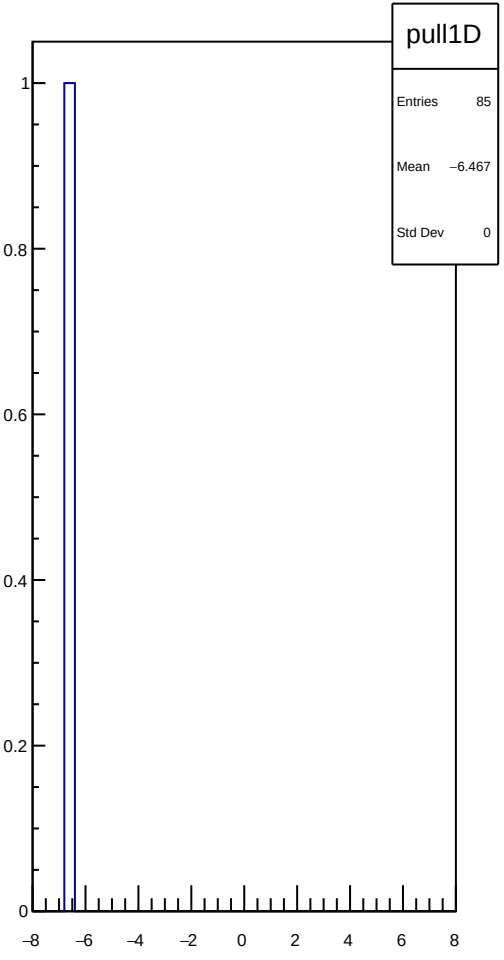

yield_bpm0i02aY_rms vs run
χ^2 / ndf 5.247e+04 / 84
p0 0.007126 ± 5.738e−06
0.03
0.025
0.02
0.015
0.01
0.005

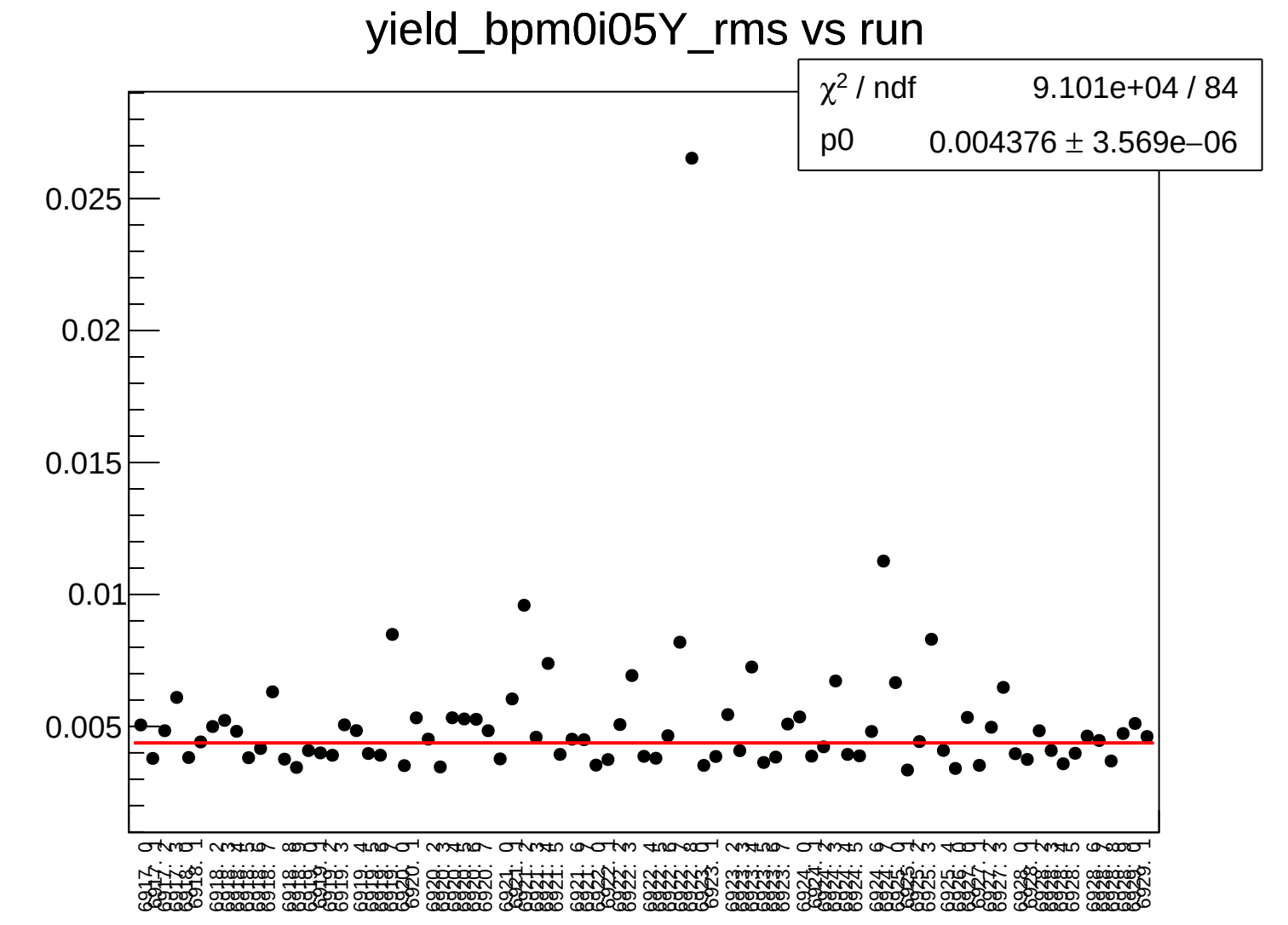

yield_bpm0i05X_mean vs run
χ² / ndf 4.395e+08 / 84
p0 −0.8419 ± 7.217e−06
−0.6
−0.7
−0.8
−0.9
−1
pull
Entries 85
Mean −224.1
Std Dev 267.6
6000
4000
2000
0
−2000
−4000

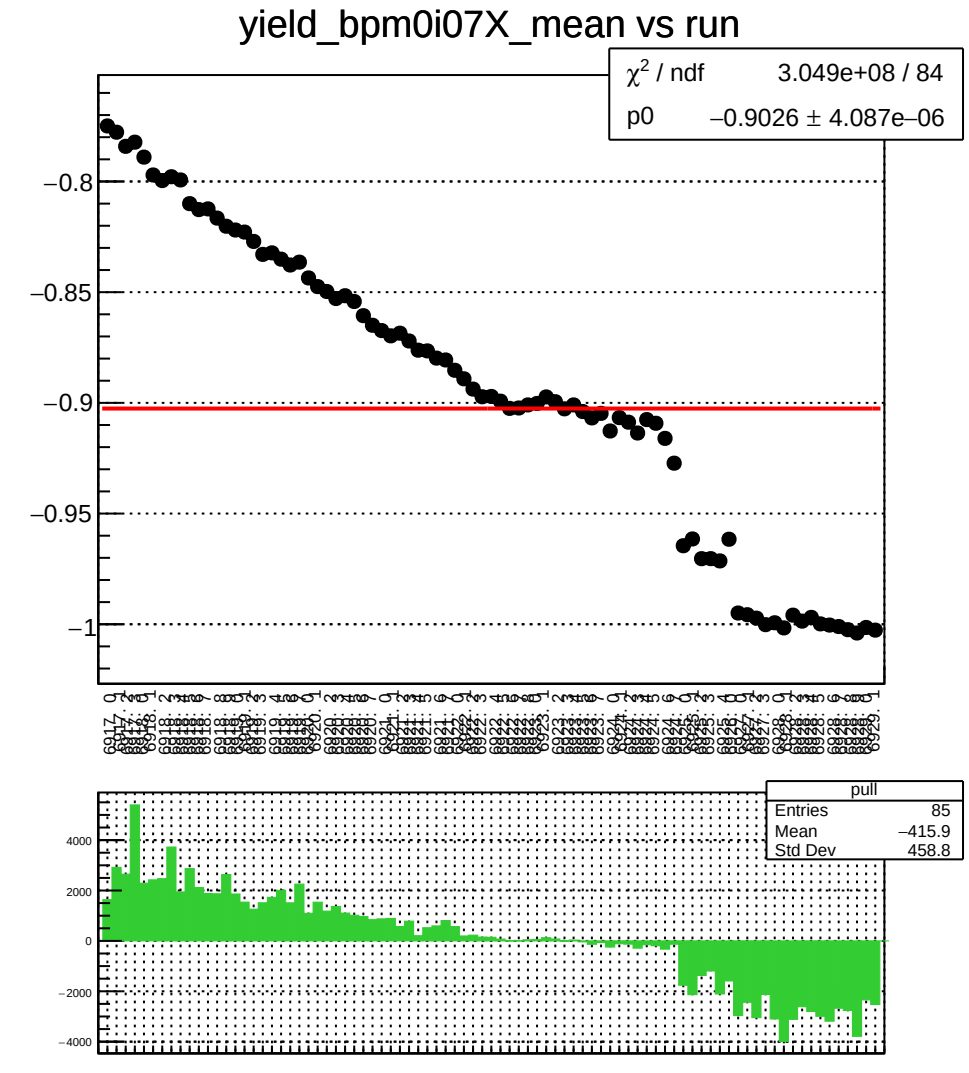

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

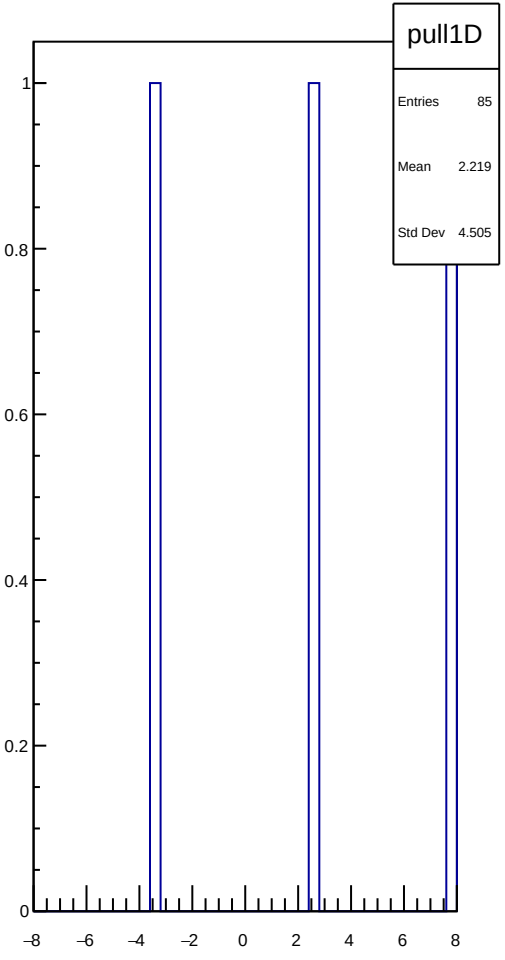

yield_bpm0i05X_rms vs run
χ^2 / ndf 9.618e+04 / 84
p0 0.006247 ± 5.103e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

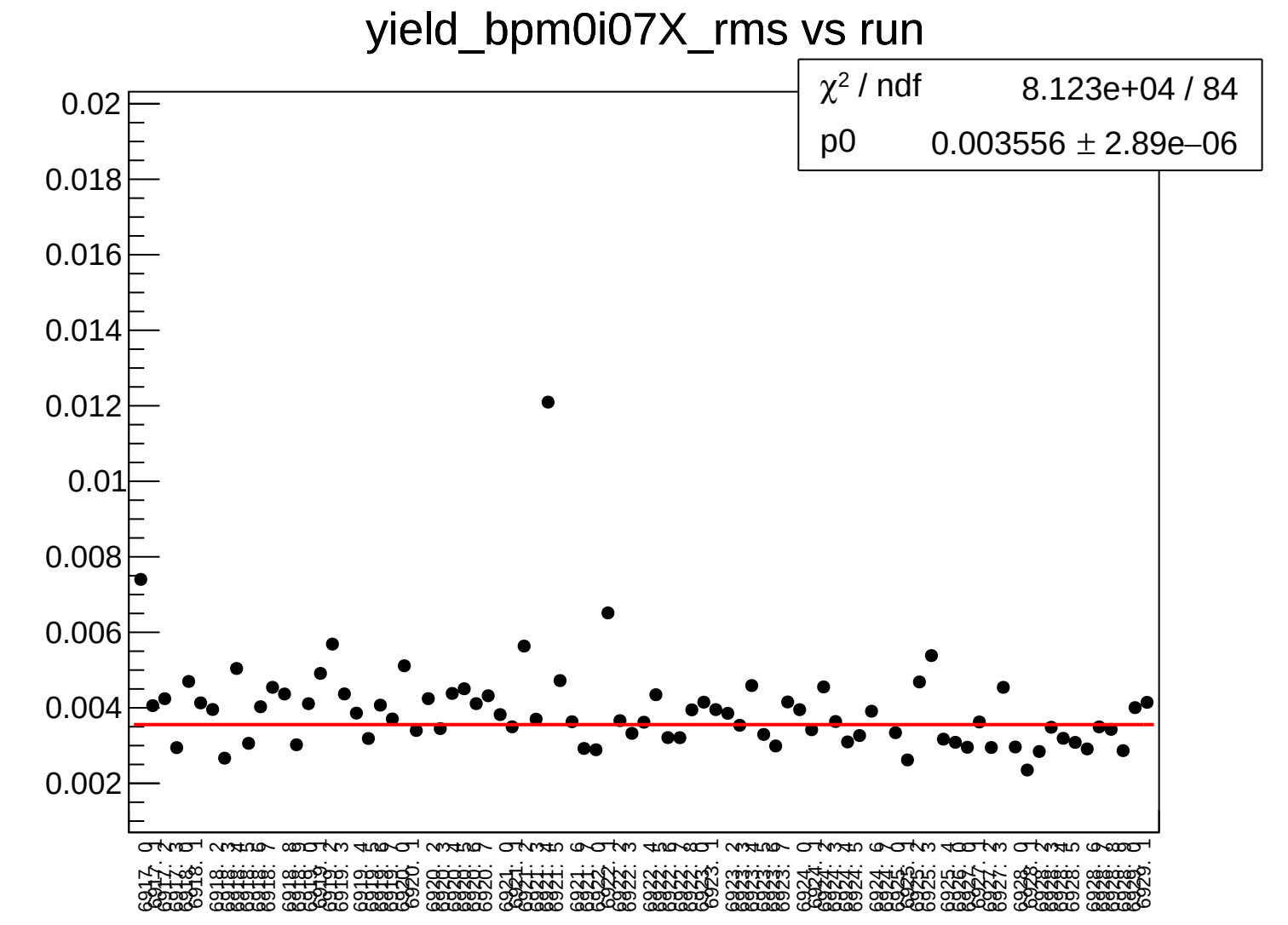

yield_bpm0i05Y_mean vs run
χ² / ndf 1.014e+09 / 84
p0 −0.9553 ± 5.047e−06
−0.7
−0.8
−0.9
−1
−1.1
−1.2
pull
Entries 85
Mean −3007
Std Dev 3050
6000
4000
2000
0
−2000
−4000
−6000

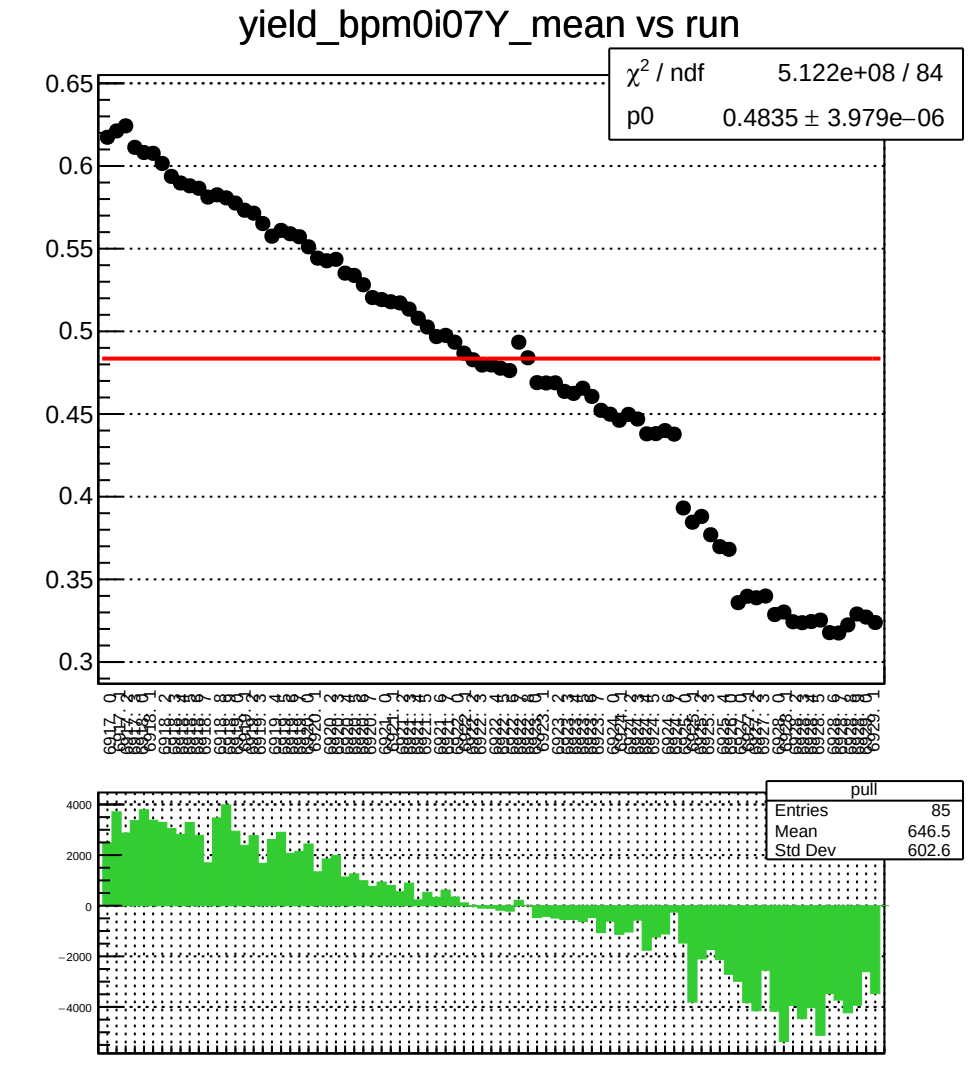

pull1D
Entries 85
Mean −6.467
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

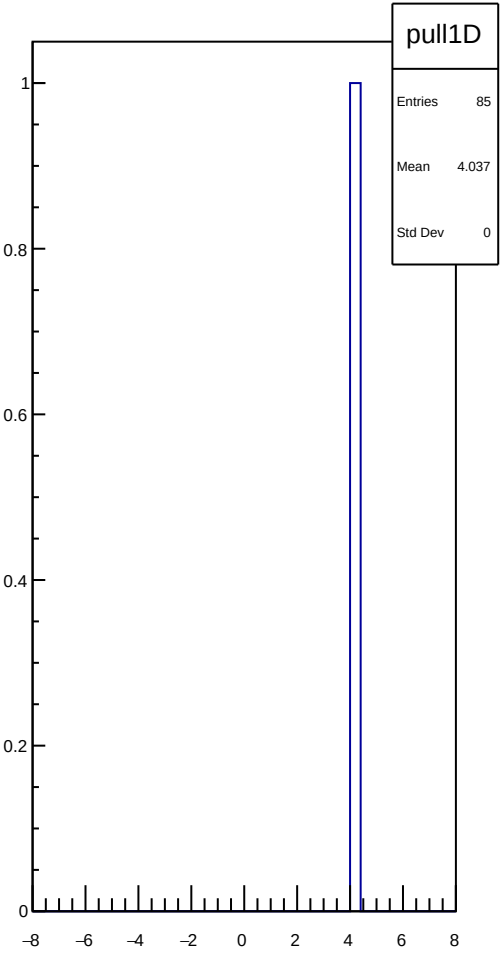

yield_bpm0i05Y_rms vs run
χ² / ndf 9.101e+04 / 84
p0 0.004376 ± 3.569e−06
0.025
0.02
0.015
0.01
0.005

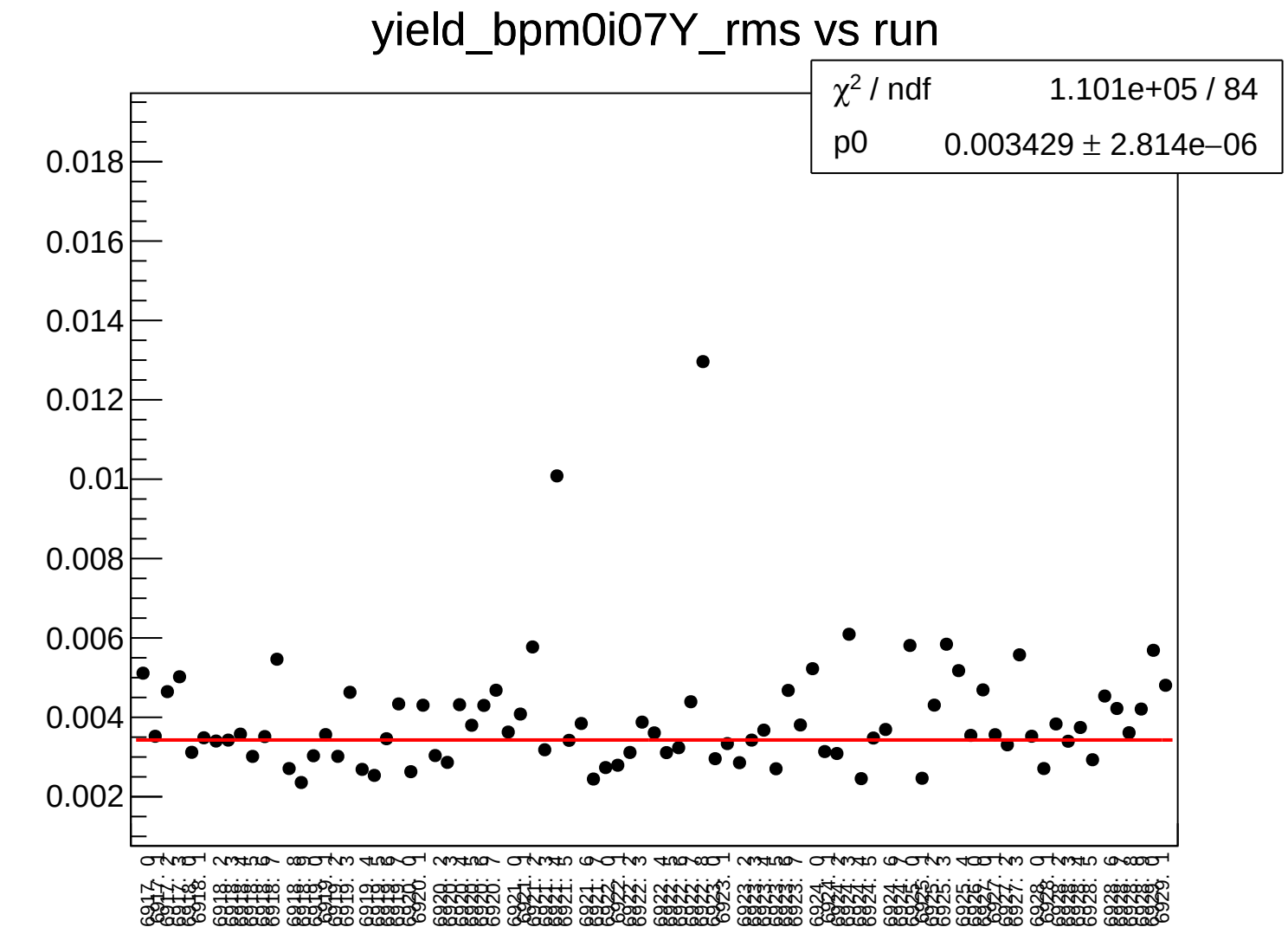

yield_bpm0i07X_mean vs run
χ² / ndf 3.049e+08 / 84
p0 −0.9026 ± 4.087e−06
−0.8
−0.85
−0.9
−0.95
−1
pull
Entries 85
Mean −415.9
Std Dev 458.8
4000
2000
0
−2000
−4000

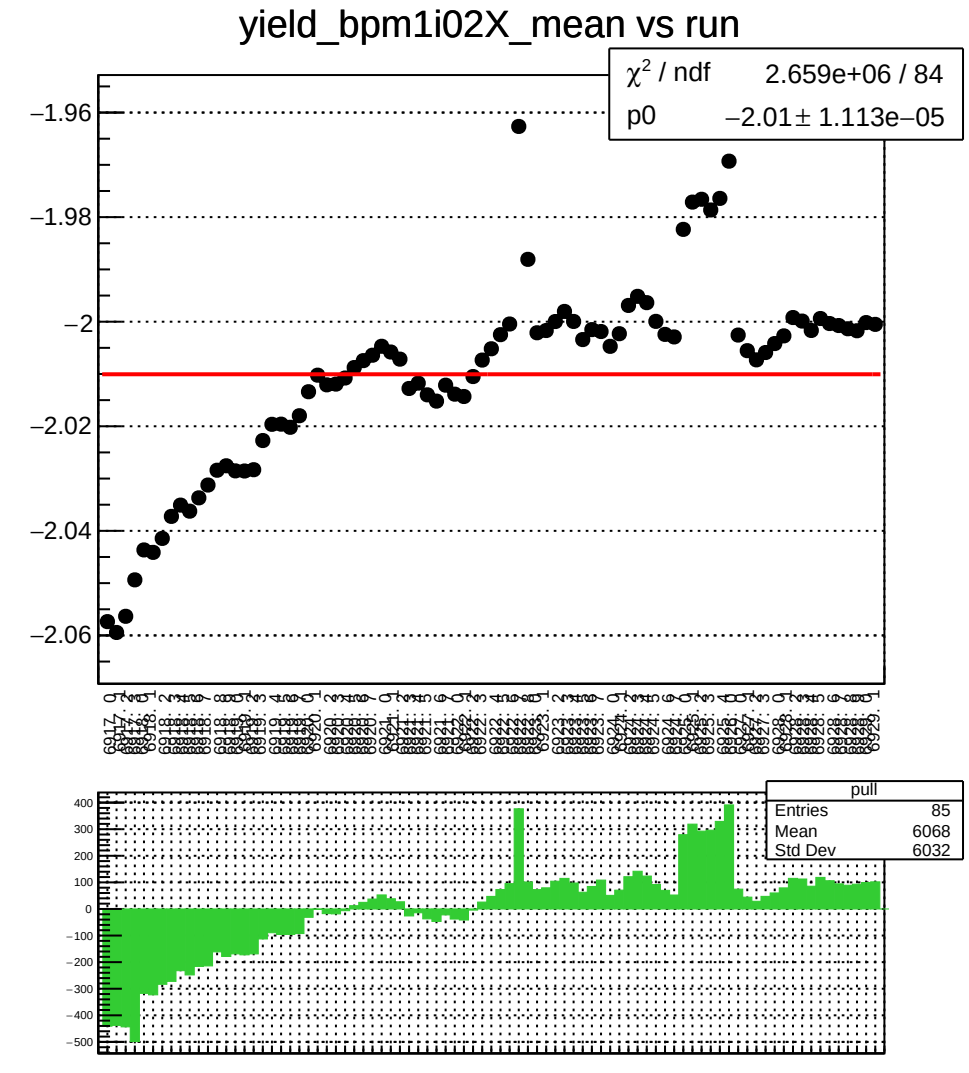

pull1D
Entries 85
Mean 2.219
Std Dev 4.505
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

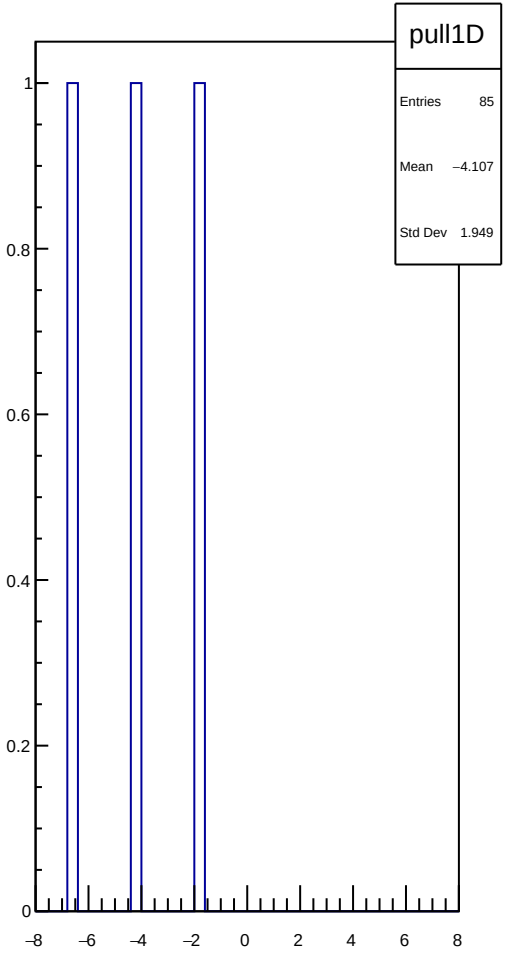

yield_bpm0i07X_rms vs run
χ² / ndf 8.123e+04 / 84
p0 0.003556 ± 2.89e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

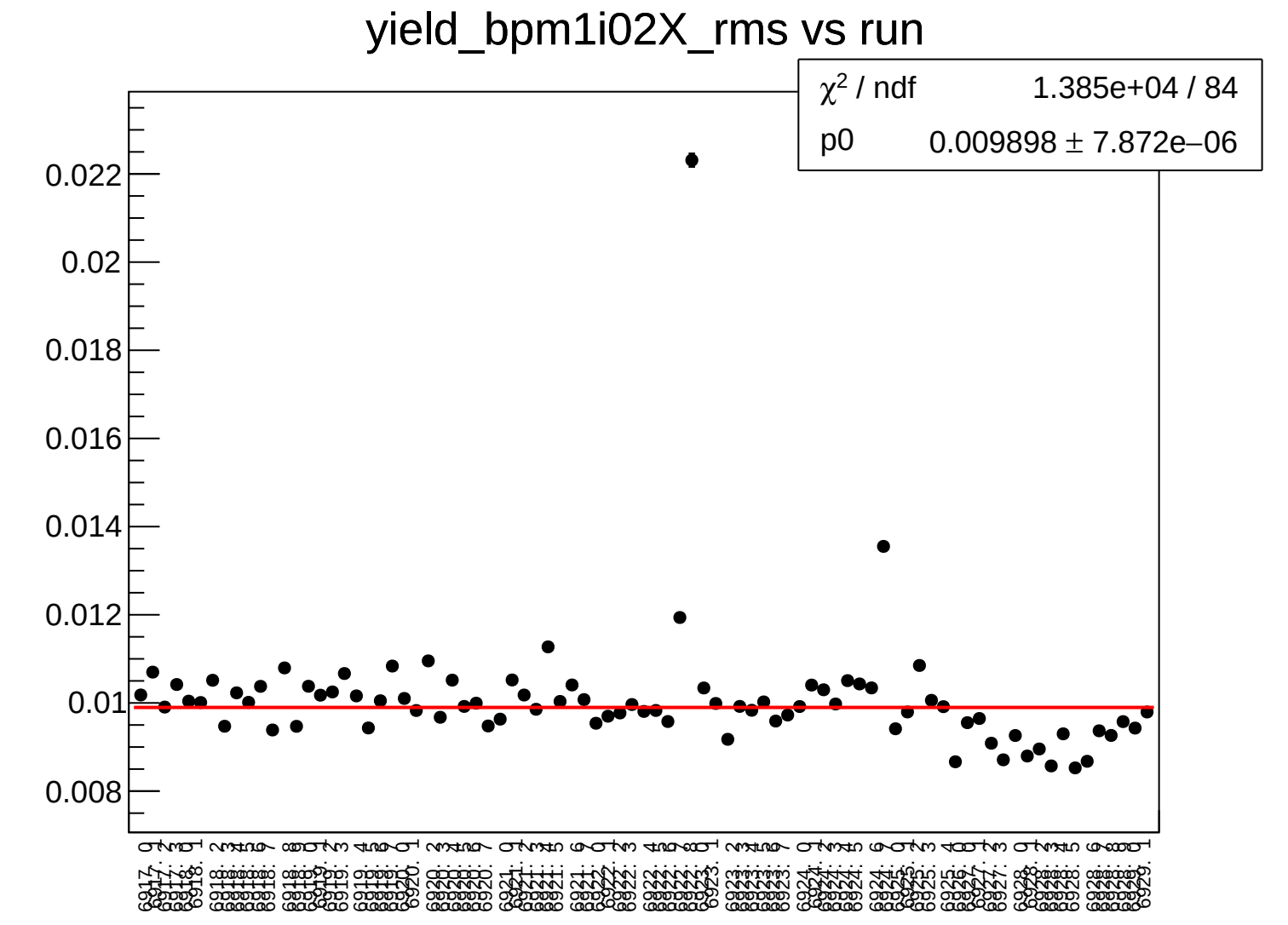

yield_bpm0i07Y_mean vs run
χ² / ndf 5.122e+08 / 84
p0 0.4835 ± 3.979e−06
pull
Entries 85
Mean 646.5
Std Dev 602.6

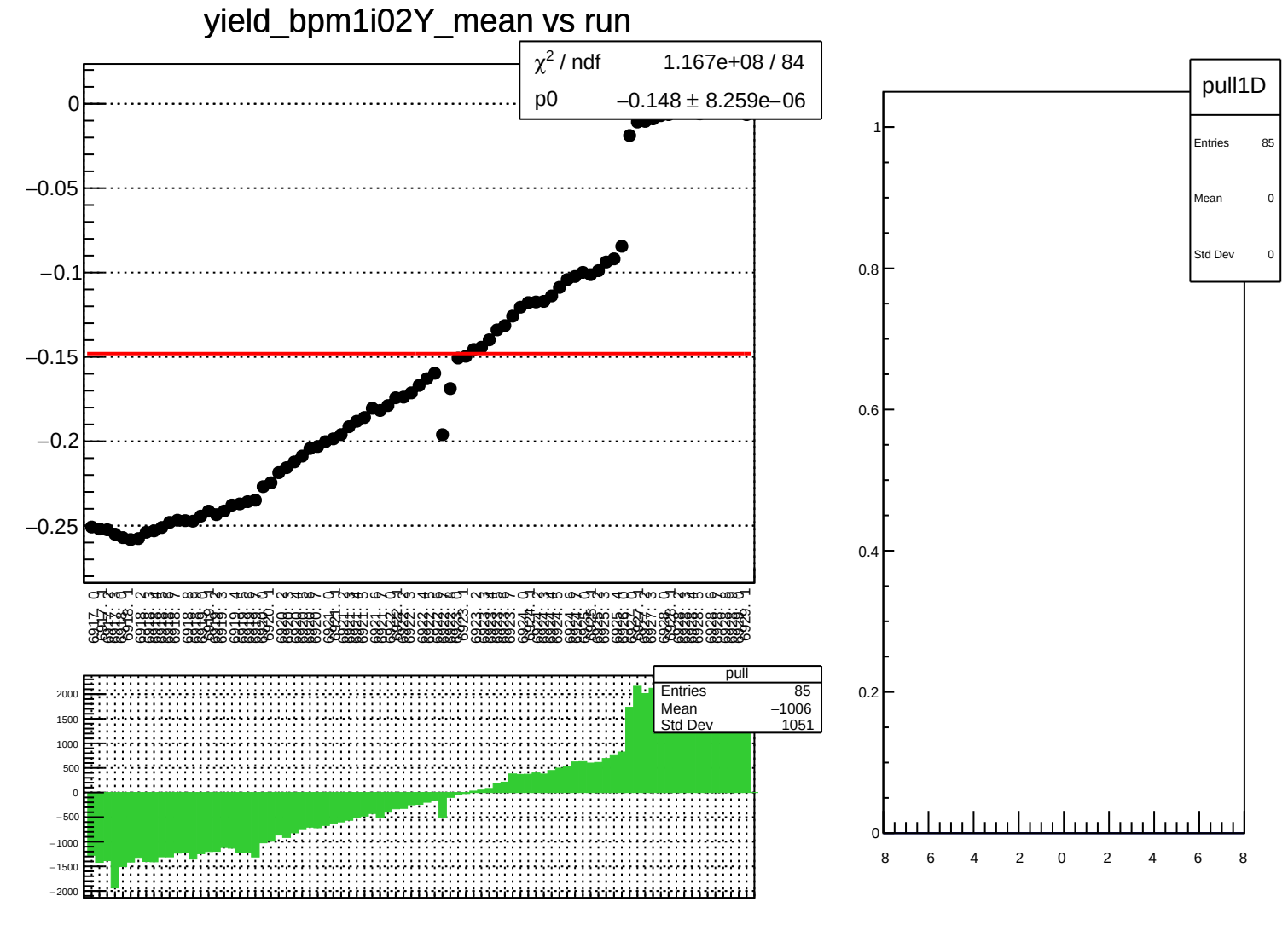

pull1D
Entries 85
Mean 4.037
Std Dev 0

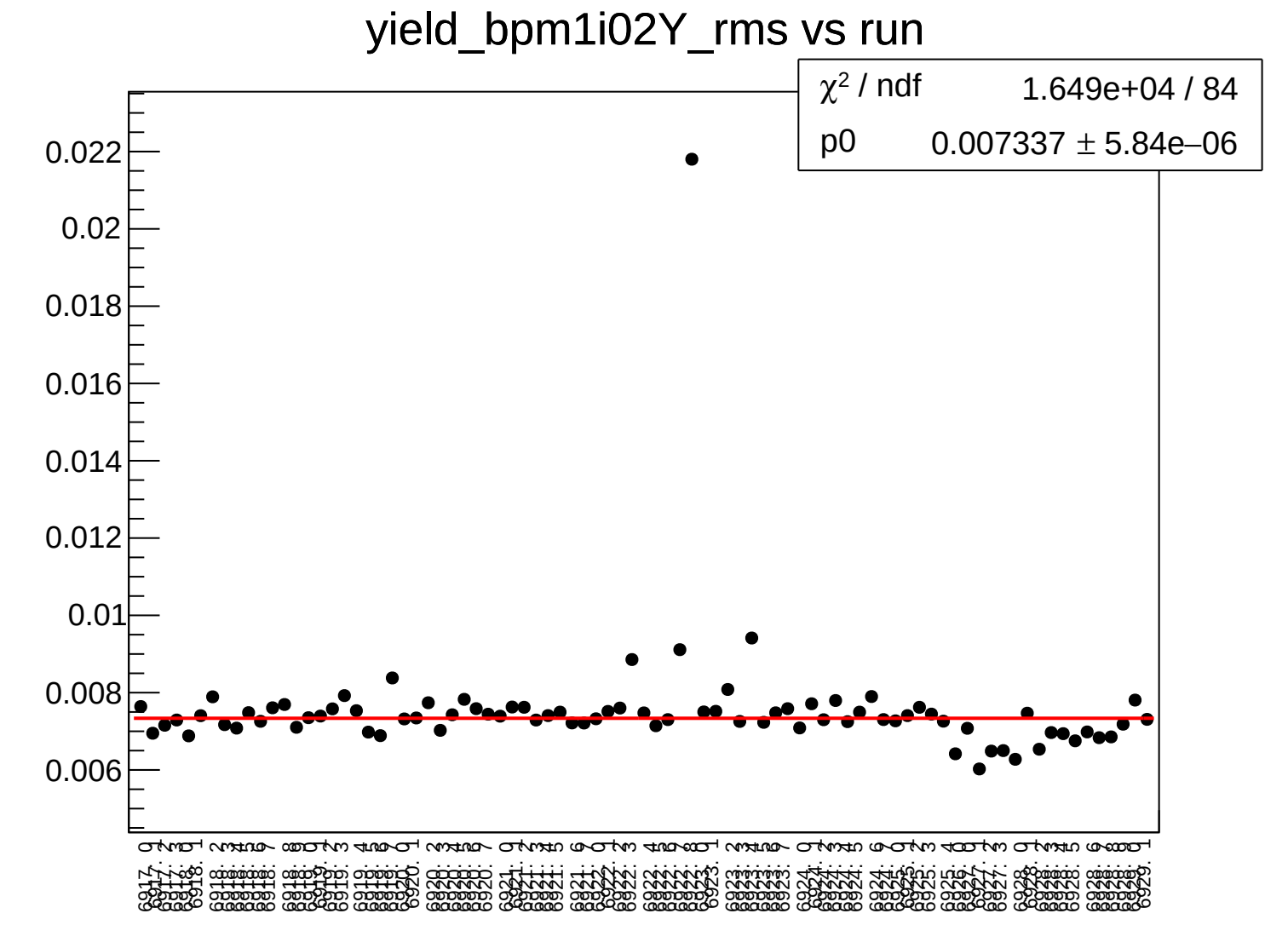

yield_bpm0i07Y_rms vs run
χ^2 / ndf 1.101e+05 / 84
p0 0.003429 ± 2.814e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

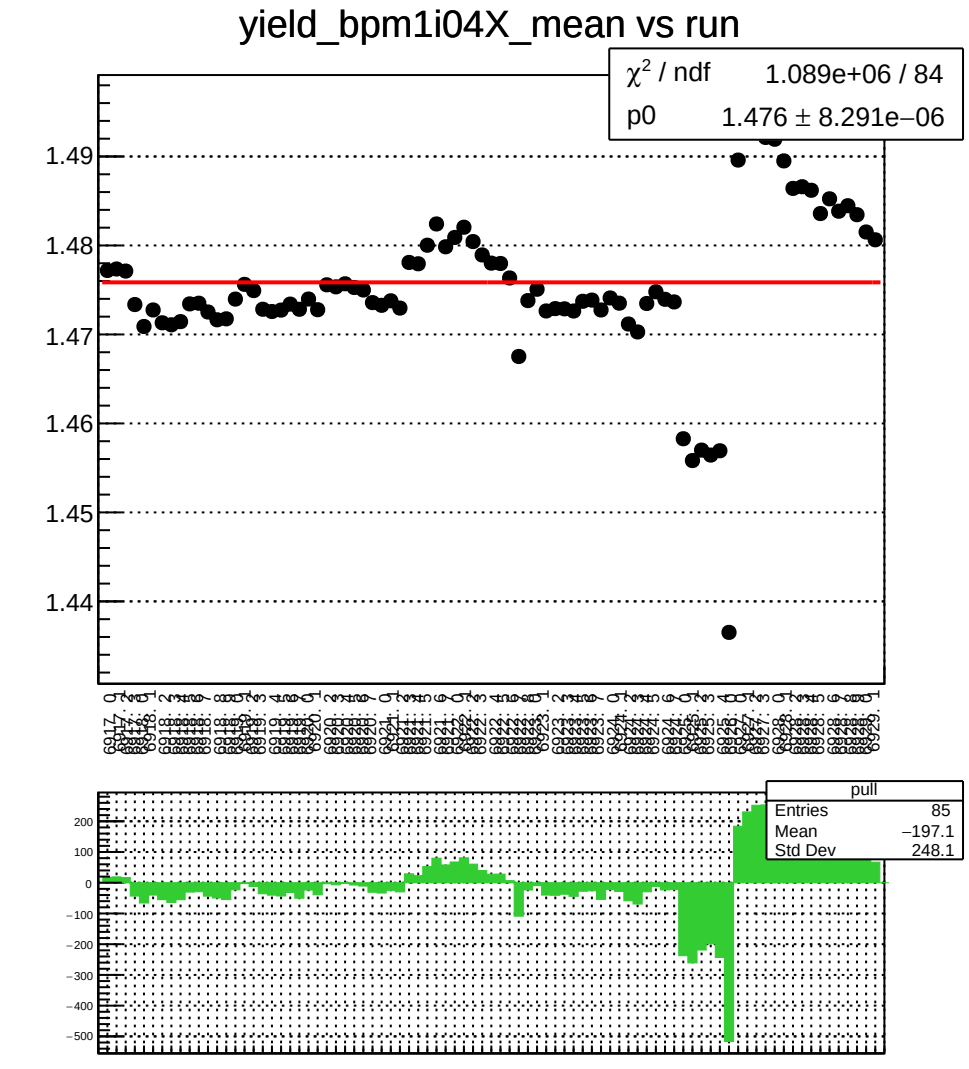

yield_bpm1i02X_mean vs run
χ² / ndf 2.659e+06 / 84
p0 −2.01 ± 1.113e−05
−1.96
−1.98
−2
−2.02
−2.04
−2.06
pull
Entries 85
Mean 6068
Std Dev 6032
400
300
200
100
0
−100
−200
−300
−400
−500

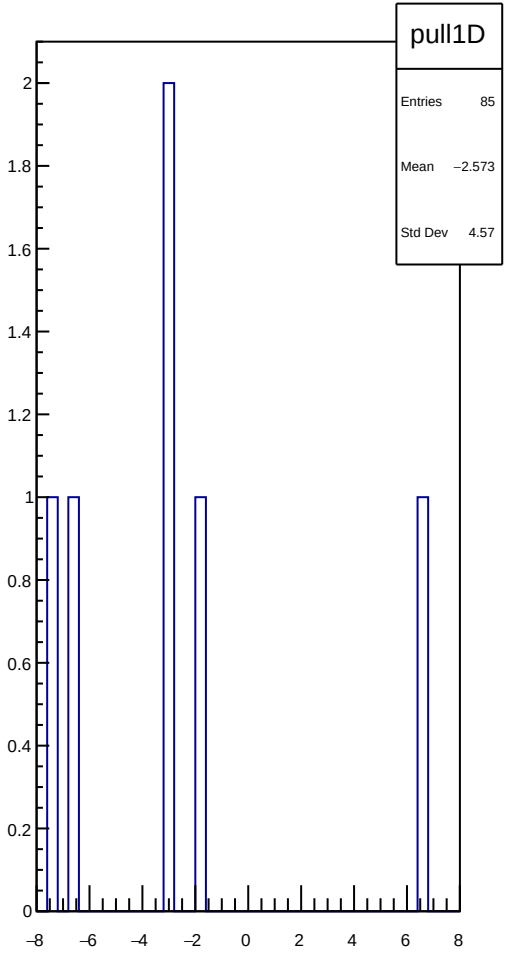

pull1D
Entries 85
Mean −4.107
Std Dev 1.949
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

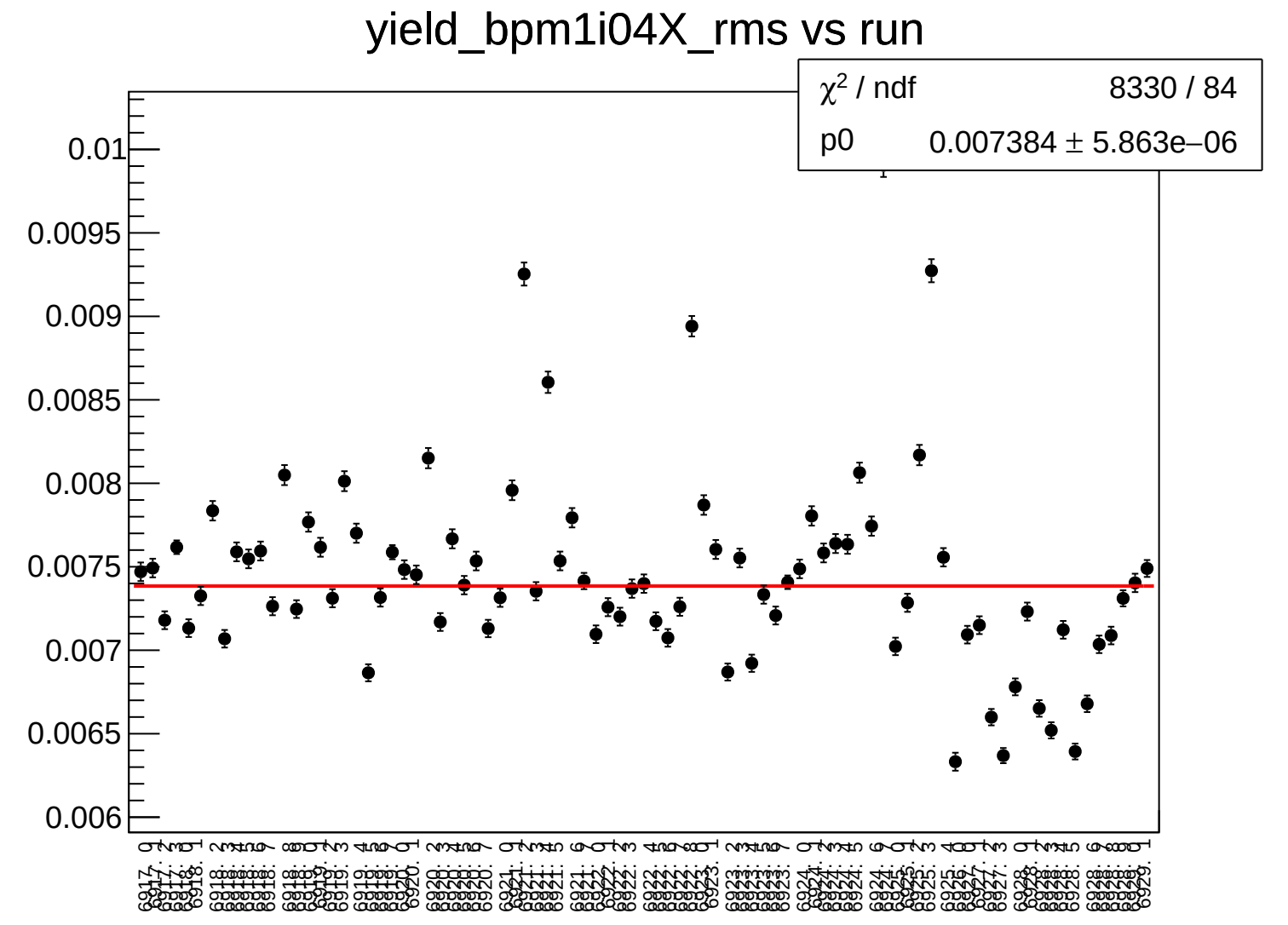

yield_bpm1i02X_rms vs run
χ² / ndf 1.385e+04 / 84
p0 0.009898 ± 7.872e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

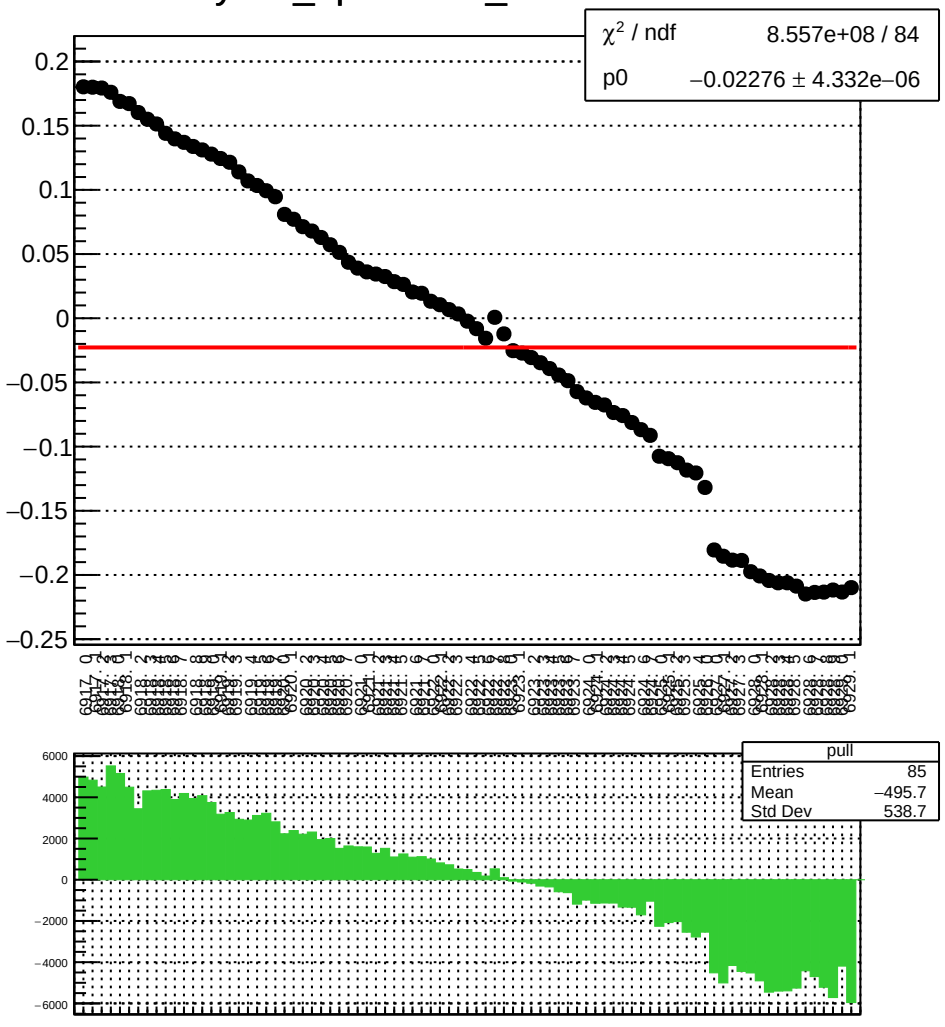

yield_bpm1i02Y_mean vs run
χ² / ndf 1.167e+08 / 84
p0 −0.148 ± 8.259e−06
0
−0.05
−0.1
−0.15
−0.2
−0.25
pull
Entries 85
Mean −1006
Std Dev 1051
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

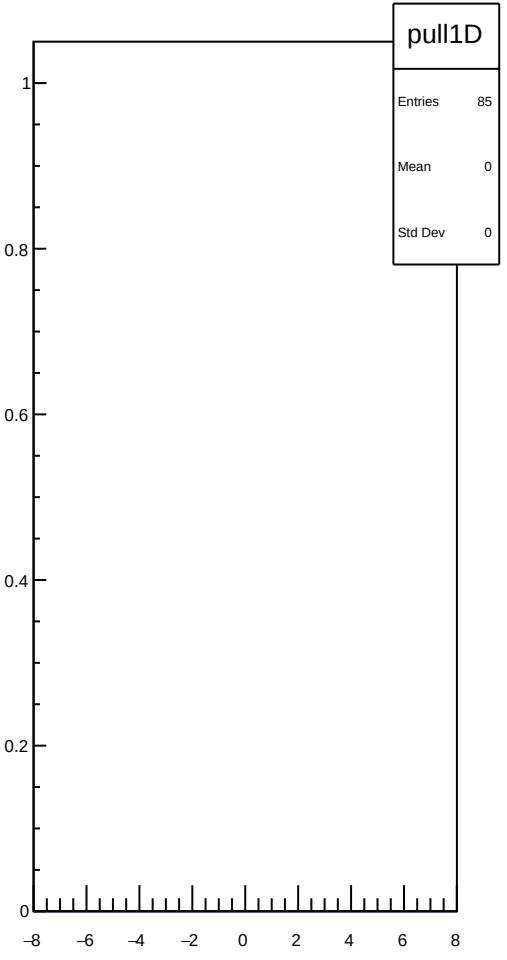

yield_bpm1i02Y_rms vs run
χ² / ndf 1.649e+04 / 84
p0 0.007337 ± 5.84e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

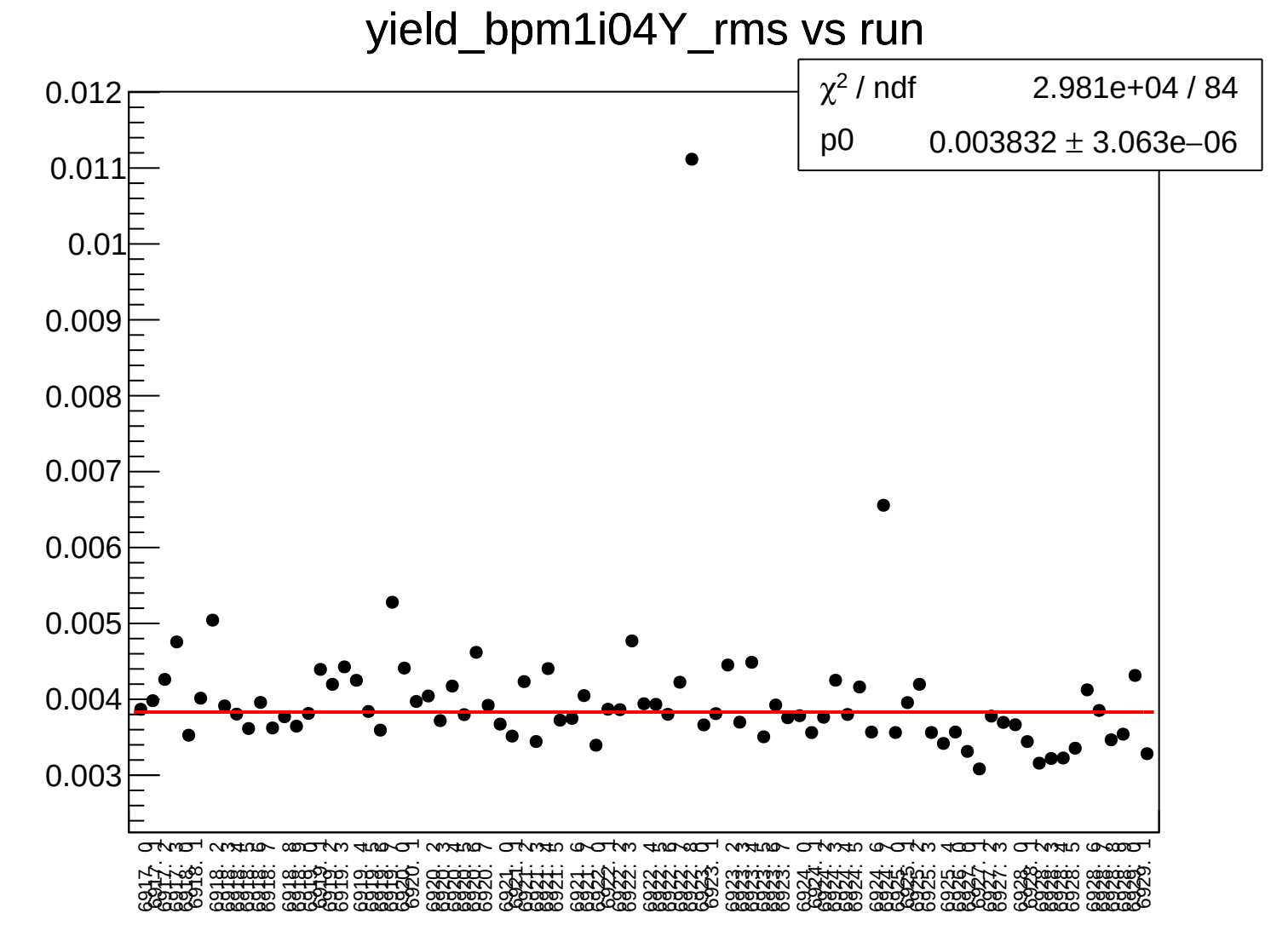

yield_bpm1i04X_mean vs run
χ² / ndf 1.089e+06 / 84
p0 1.476 ± 8.291e−06
1.49
1.48
1.47
1.46
1.45
1.44
pull
Entries 85
Mean −197.1
Std Dev 248.1
200
100
0
−100
−200
−300
−400
−500

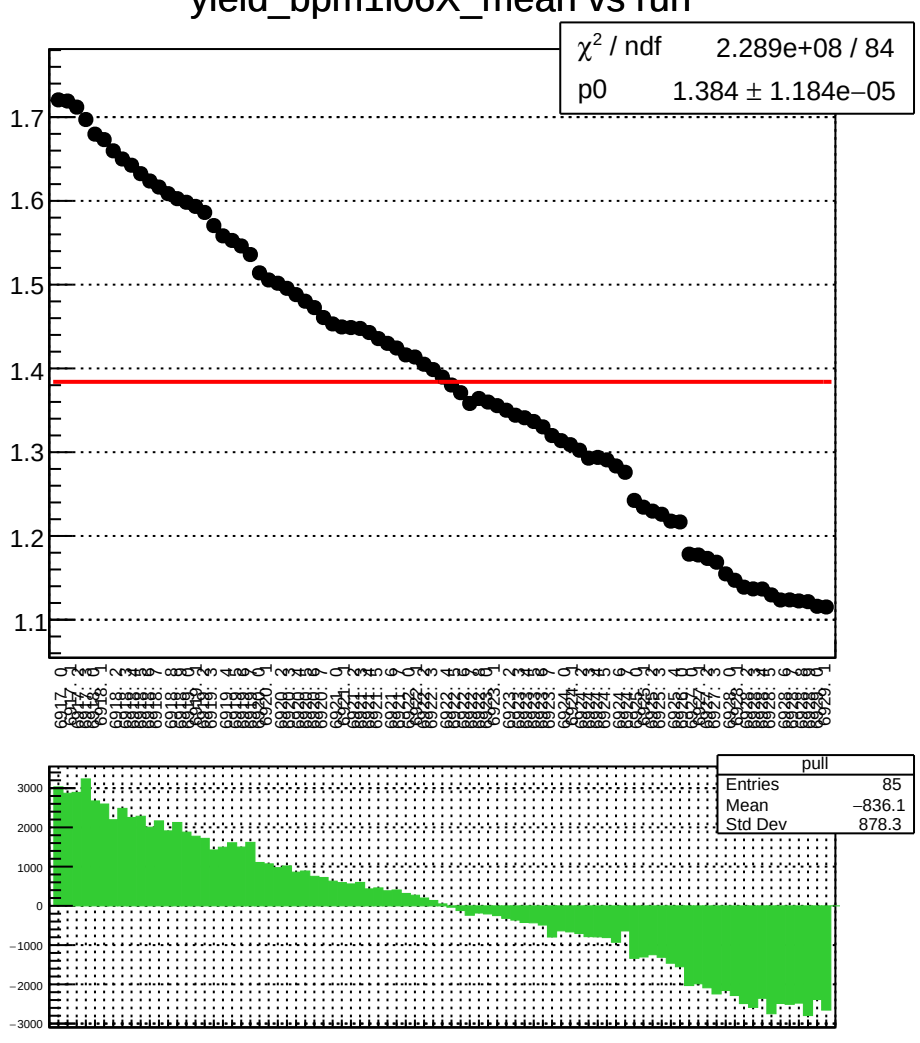

pull1D
Entries 85
Mean −2.573
Std Dev 4.57
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

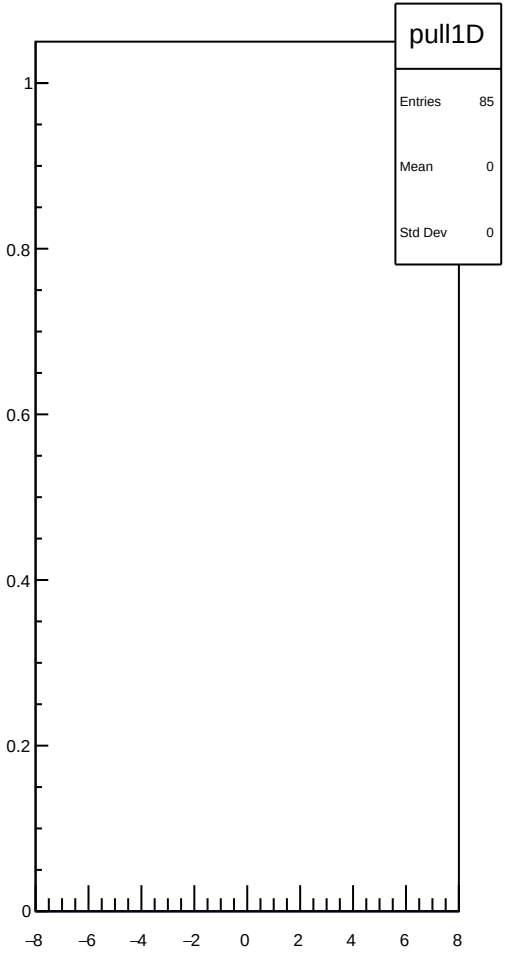

yield_bpm1i04X_rms vs run
χ² / ndf 8330 / 84
p0 0.007384 ± 5.863e−06
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006

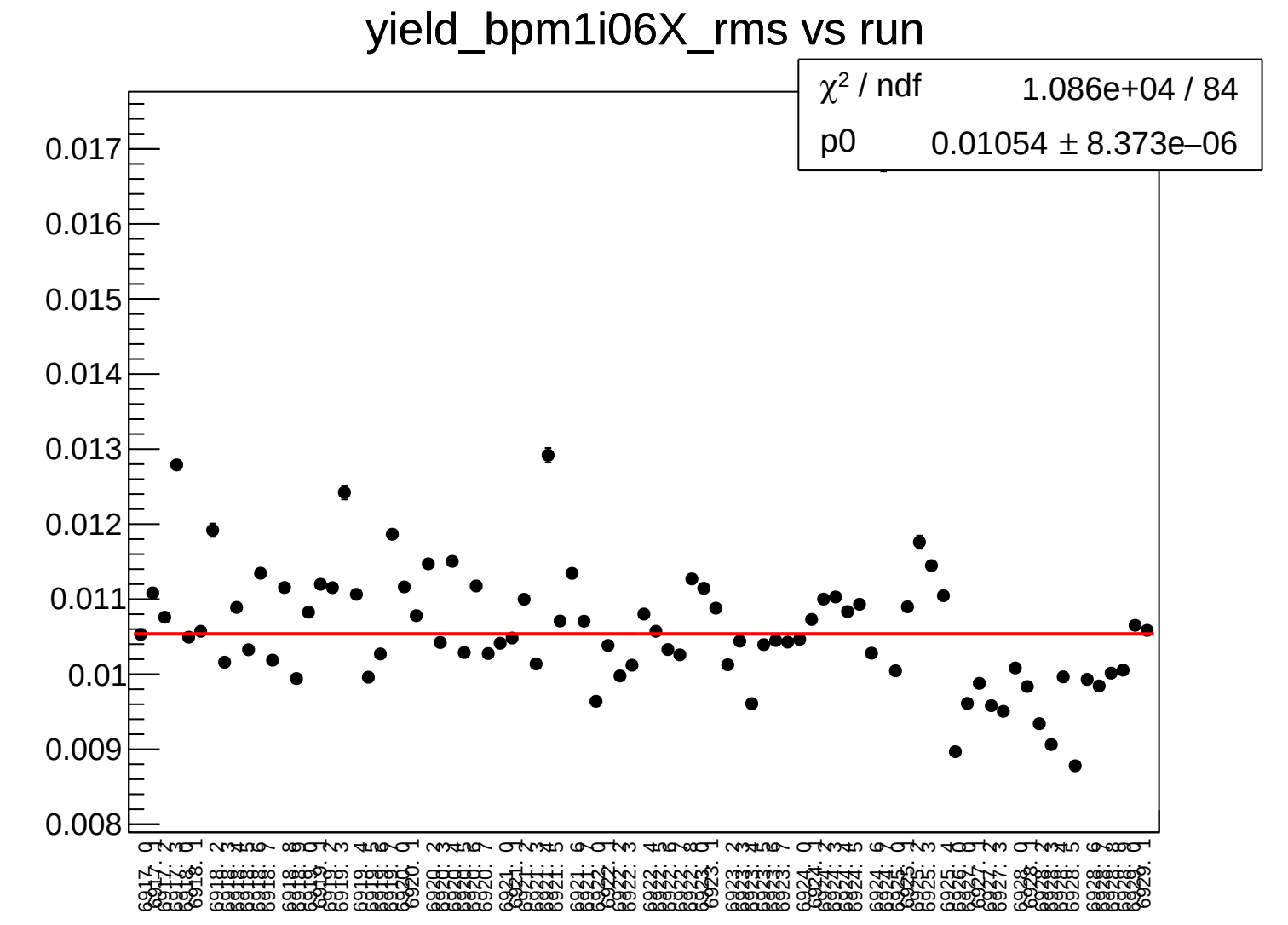

yield_bpm1i04Y_mean vs run
χ² / ndf 8.557e+08 / 84
p0 −0.02276 ± 4.332e−06
pull
Entries 85
Mean −495.7
Std Dev 538.7

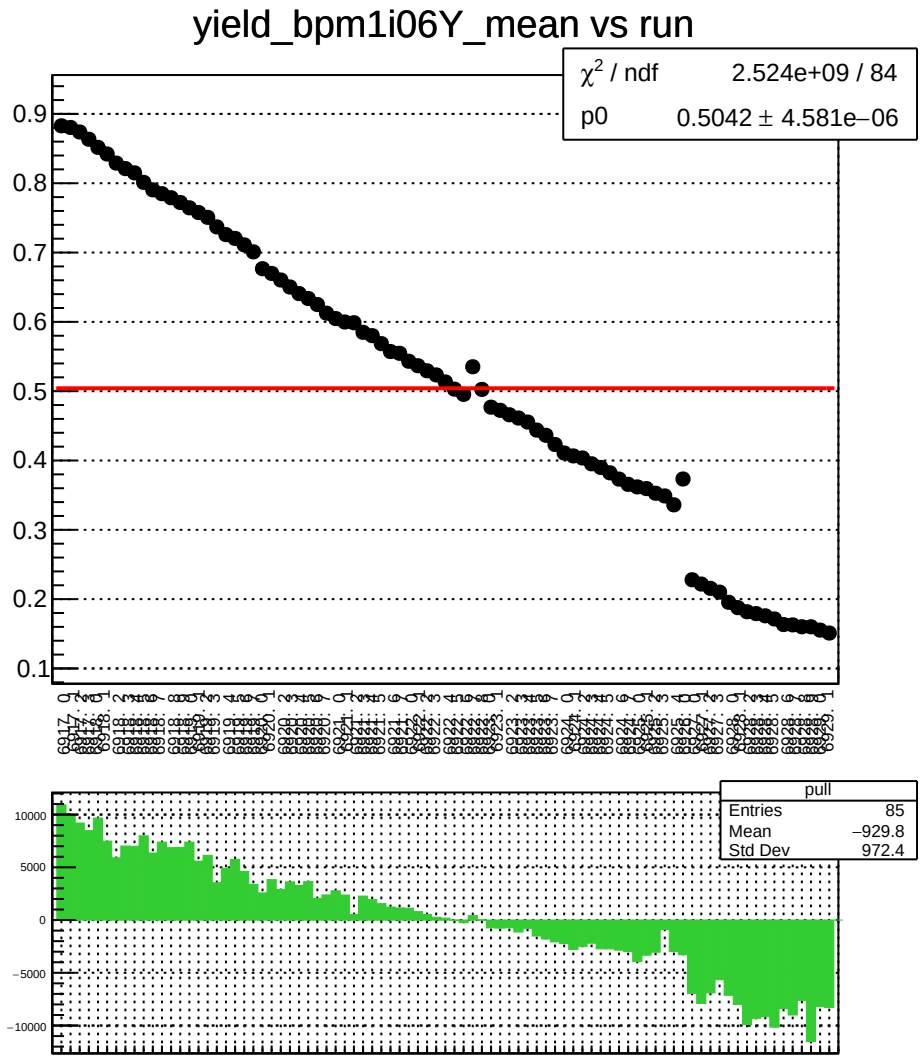

pull1D
Entries 85
Mean 0
Std Dev 0

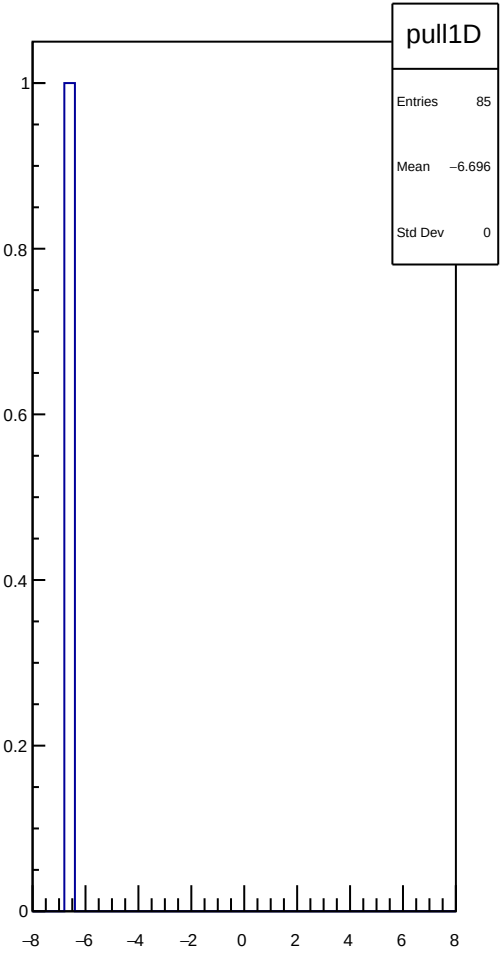

yield_bpm1i04Y_rms vs run
χ² / ndf 2.981e+04 / 84
p0 0.003832 ± 3.063e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

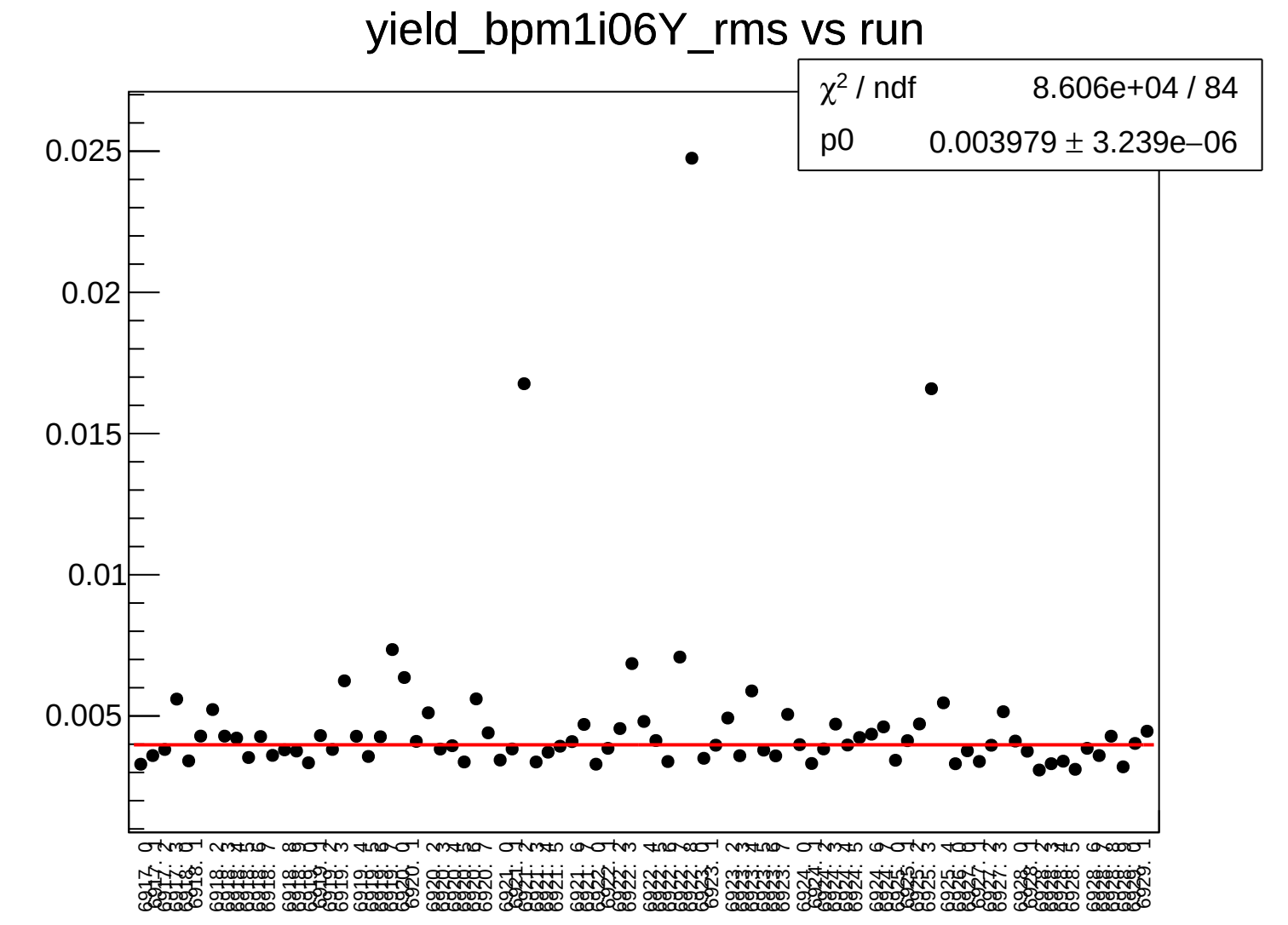

yield_bpm1i06X_mean vs run
χ² / ndf 2.289e+08 / 84
p0 1.384 ± 1.184e−05
1.7
1.6
1.5
1.4
1.3
1.2
1.1
pull
Entries 85
Mean −836.1
Std Dev 878.3
3000
2000
1000
0
−1000
−2000
−3000

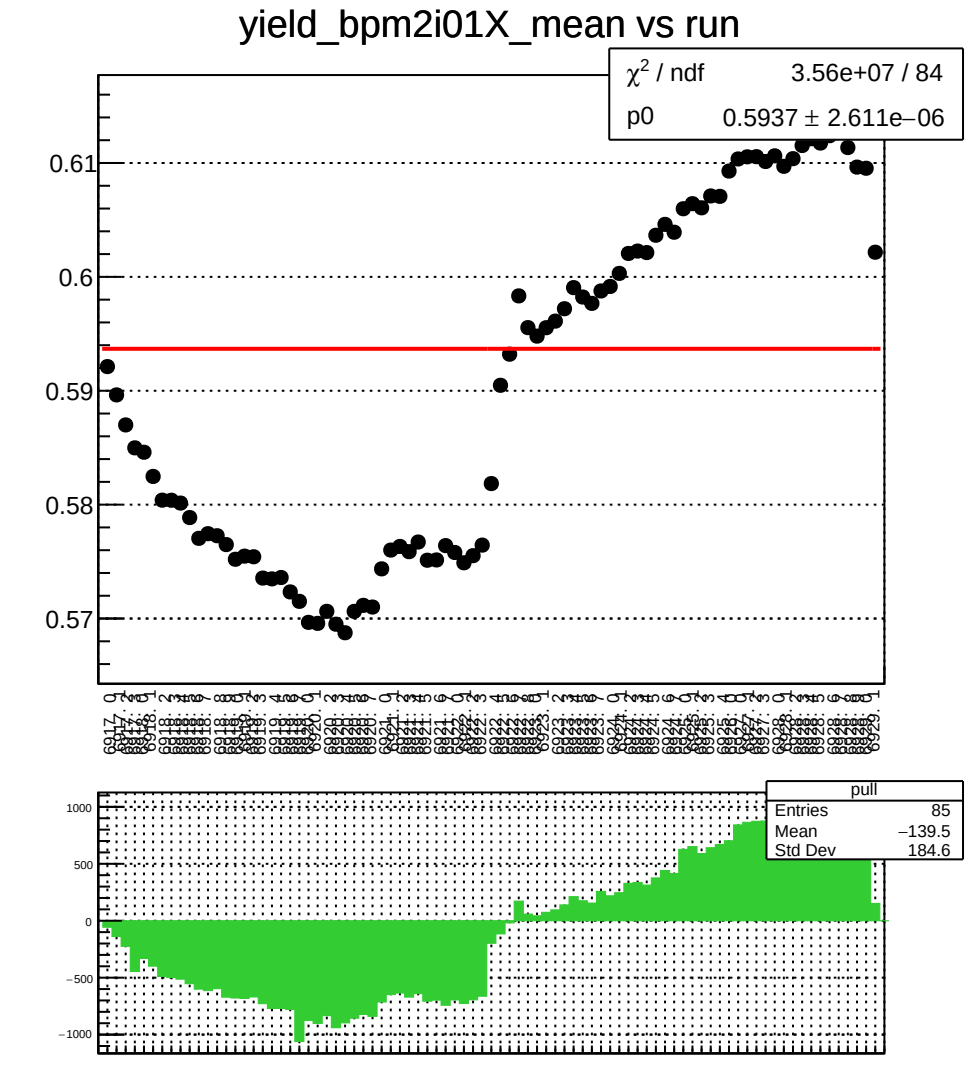

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

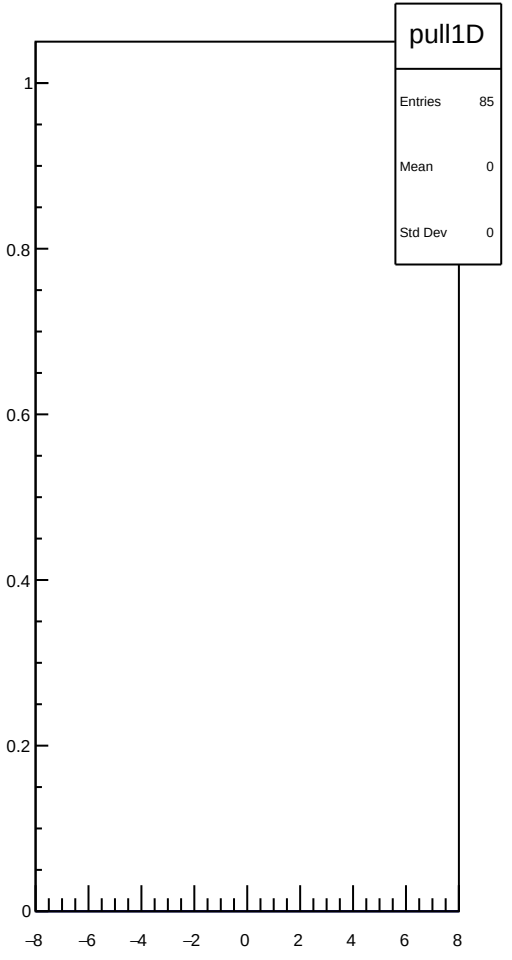

yield_bpm1i06X_rms vs run
χ² / ndf 1.086e+04 / 84
p0 0.01054 ± 8.373e–06
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

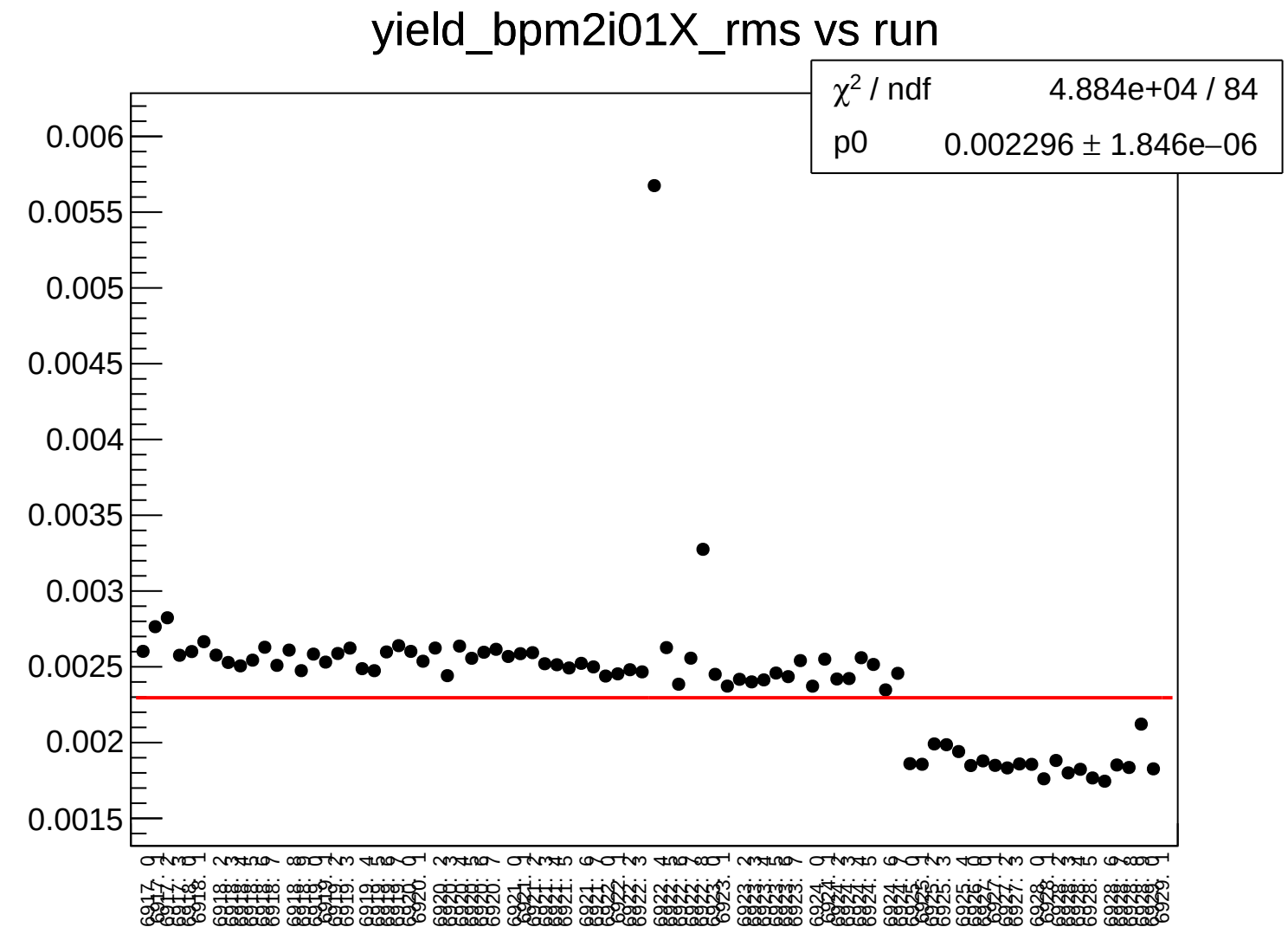

yield_bpm1i06Y_mean vs run
χ² / ndf 2.524e+09 / 84
p0 0.5042 ± 4.581e−06
pull
Entries 85
Mean −929.8
Std Dev 972.4

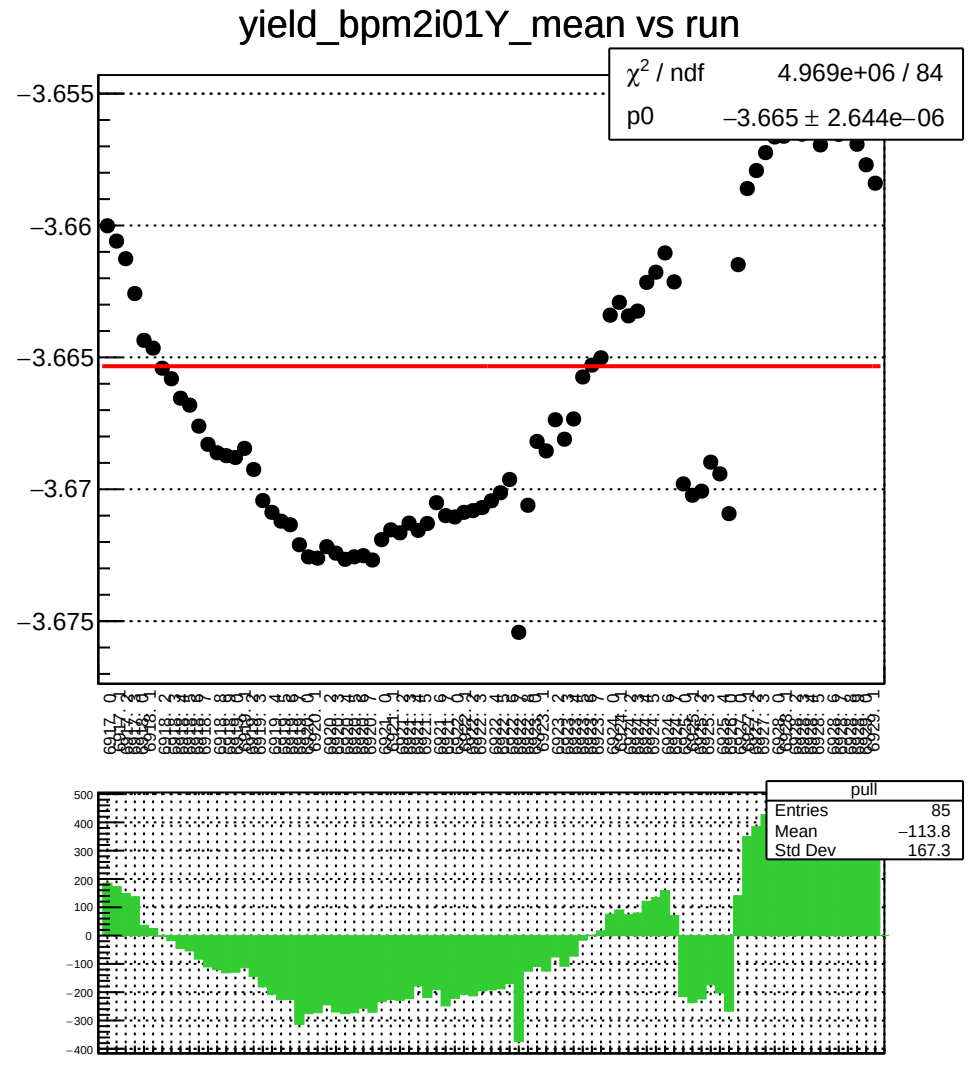

pull1D
Entries 85
Mean −6.696
Std Dev 0

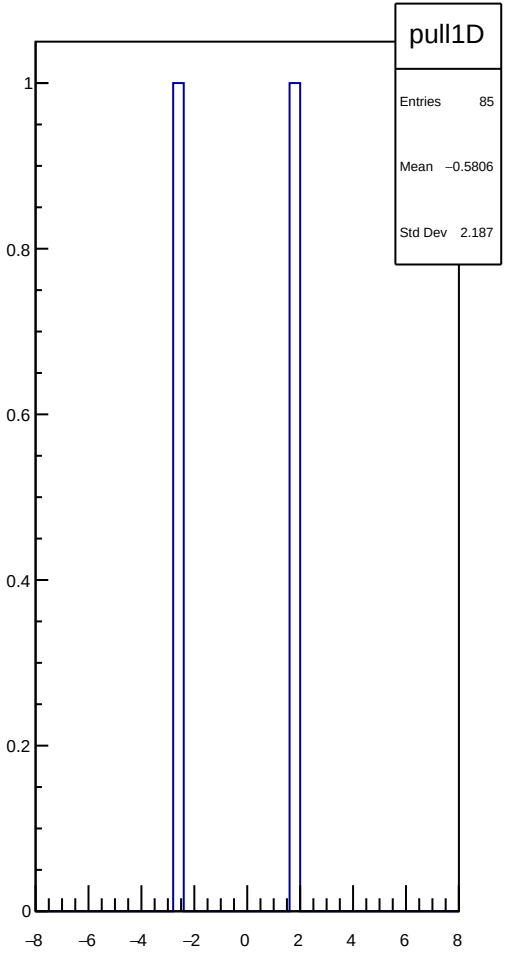

yield_bpm1i06Y_rms vs run
χ² / ndf 8.606e+04 / 84
p0 0.003979 ± 3.239e−06
0.025
0.02
0.015
0.01
0.005

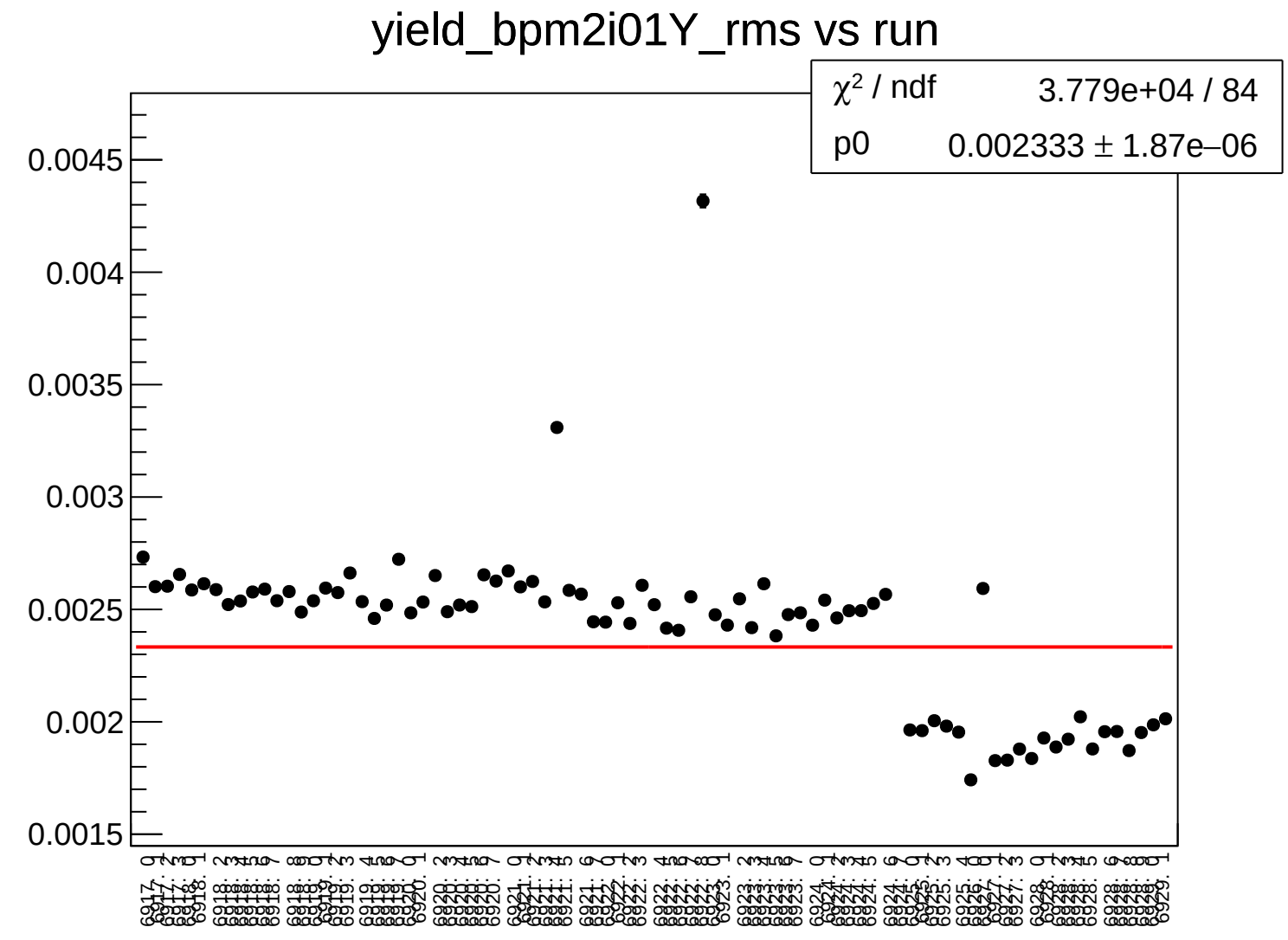

yield_bpm2i01X_mean vs run
χ² / ndf 3.56e+07 / 84
p0 0.5937 ± 2.611e−06
0.61
0.6
0.59
0.58
0.57
pull
Entries 85
Mean −139.5
Std Dev 184.6
1000
500
0
−500
−1000

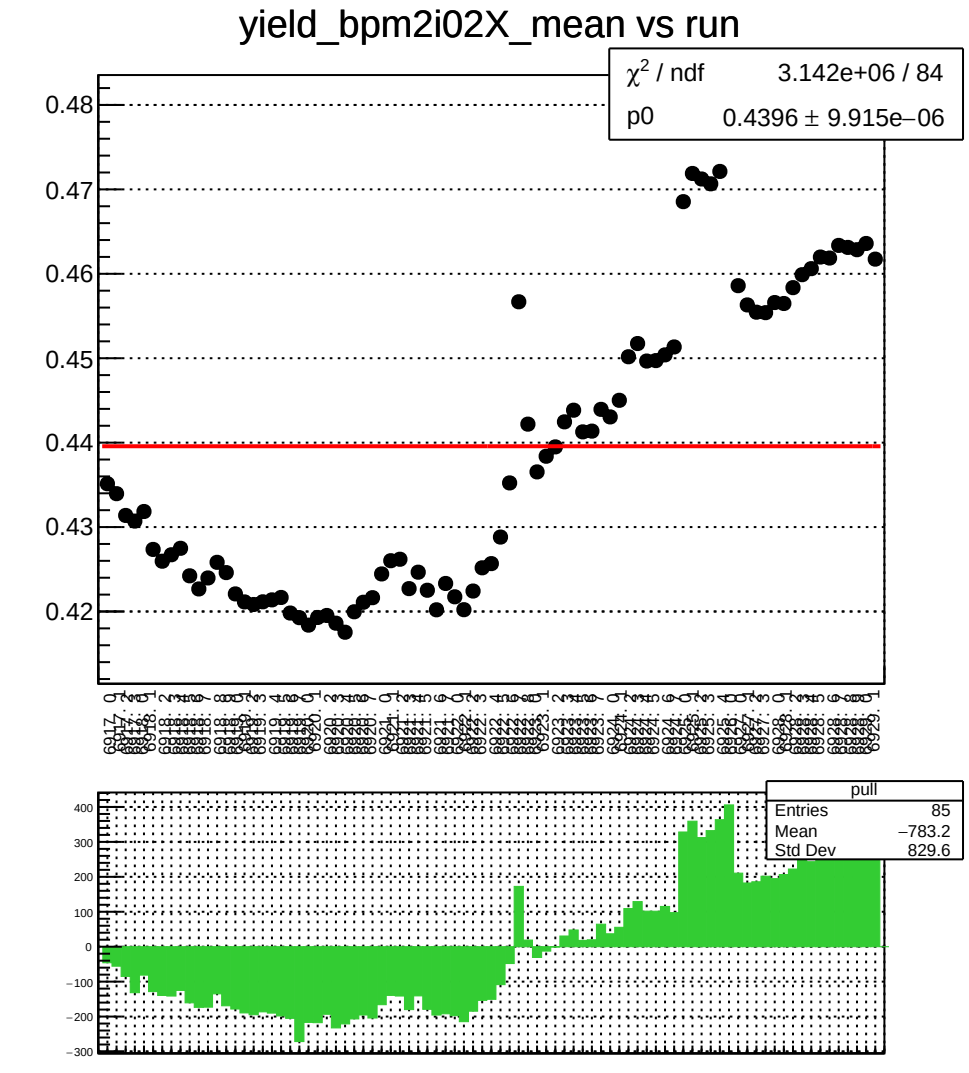

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

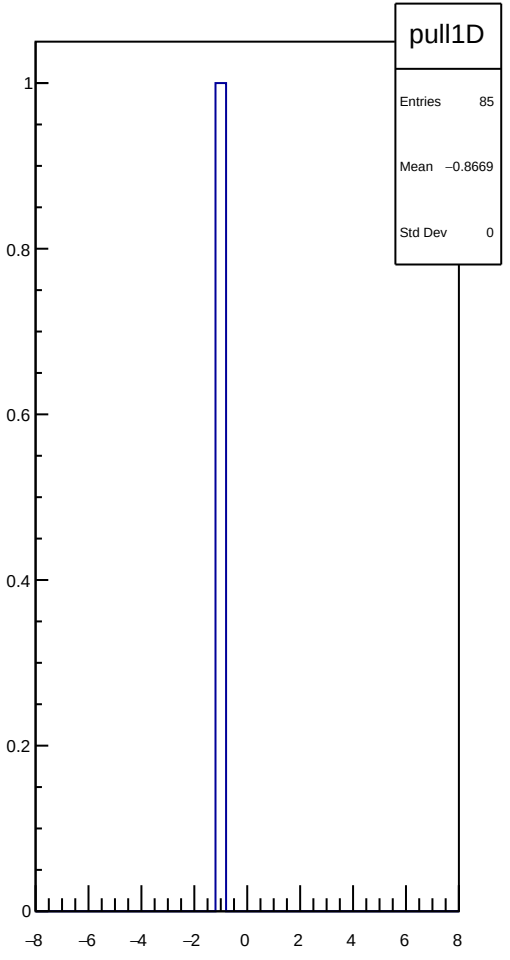

yield_bpm2i01X_rms vs run
χ² / ndf 4.884e+04 / 84
p0 0.002296 ± 1.846e−06
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015

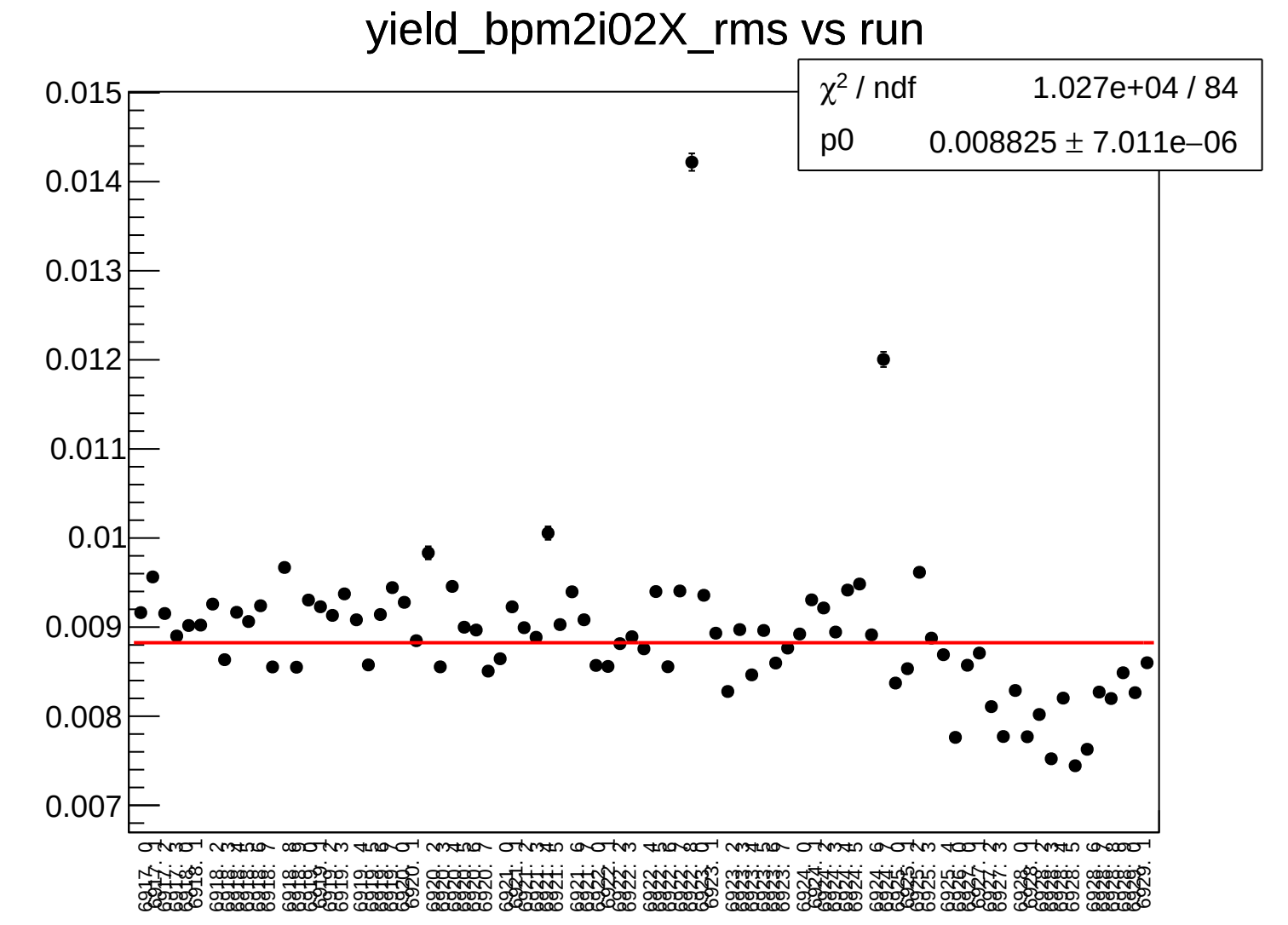

yield_bpm2i01Y_mean vs run
χ² / ndf 4.969e+06 / 84
p0 −3.665 ± 2.644e−06
−3.655
−3.66
−3.665
−3.67
−3.675
pull
Entries 85
Mean −113.8
Std Dev 167.3
500
400
300
200
100
0
−100
−200
−300
−400

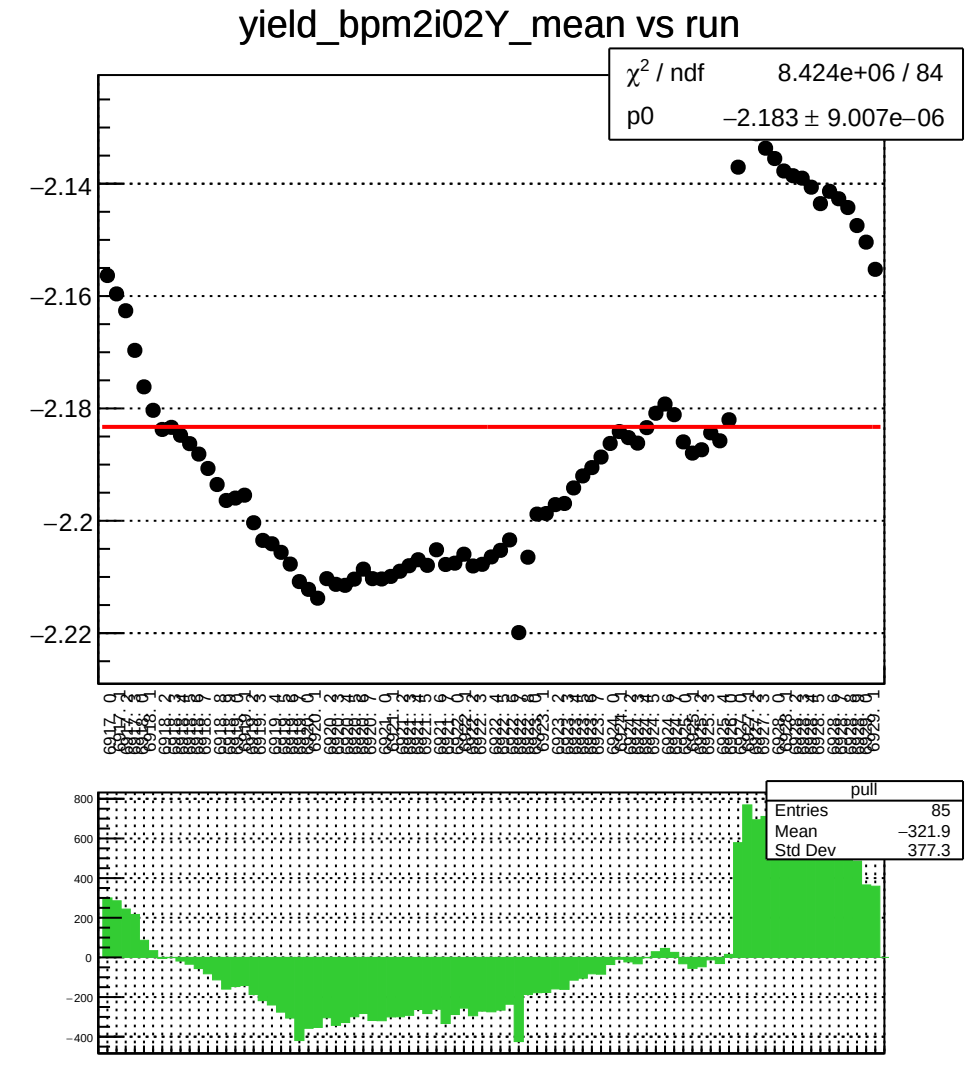

pull1D
Entries 85
Mean −0.5806
Std Dev 2.187
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

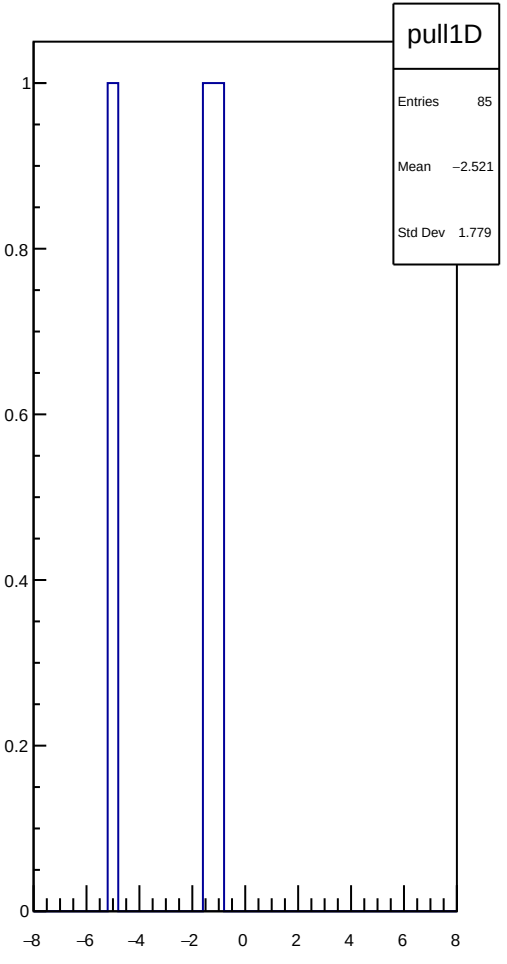

yield_bpm2i01Y_rms vs run
χ² / ndf 3.779e+04 / 84
p0 0.002333 ± 1.87e–06
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015

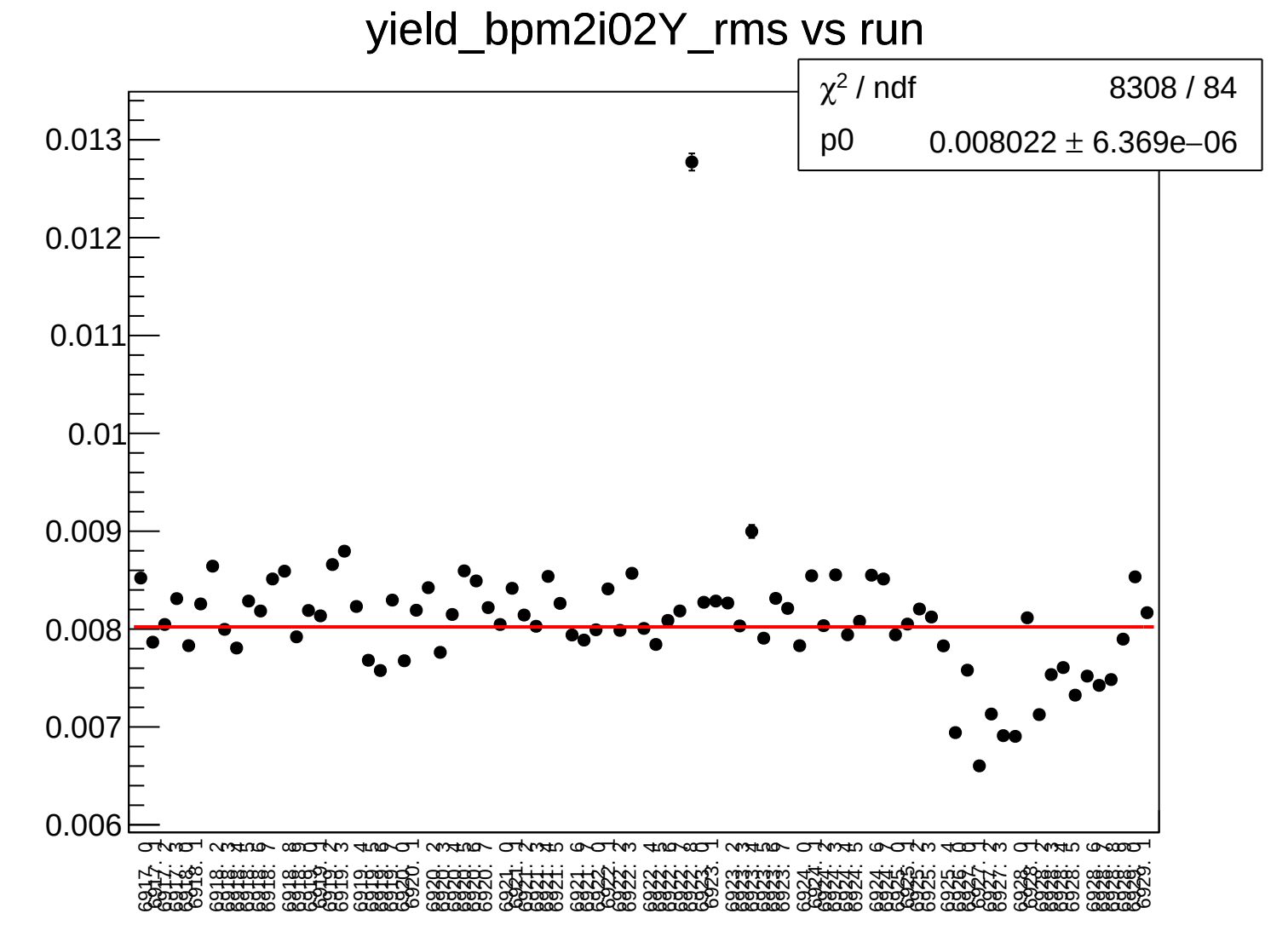

yield_bpm2i02X_mean vs run
χ² / ndf 3.142e+06 / 84
p0 0.4396 ± 9.915e−06
0.48
0.47
0.46
0.45
0.44
0.43
0.42
pull
Entries 85
Mean −783.2
Std Dev 829.6
400
300
200
100
0
−100
−200
−300

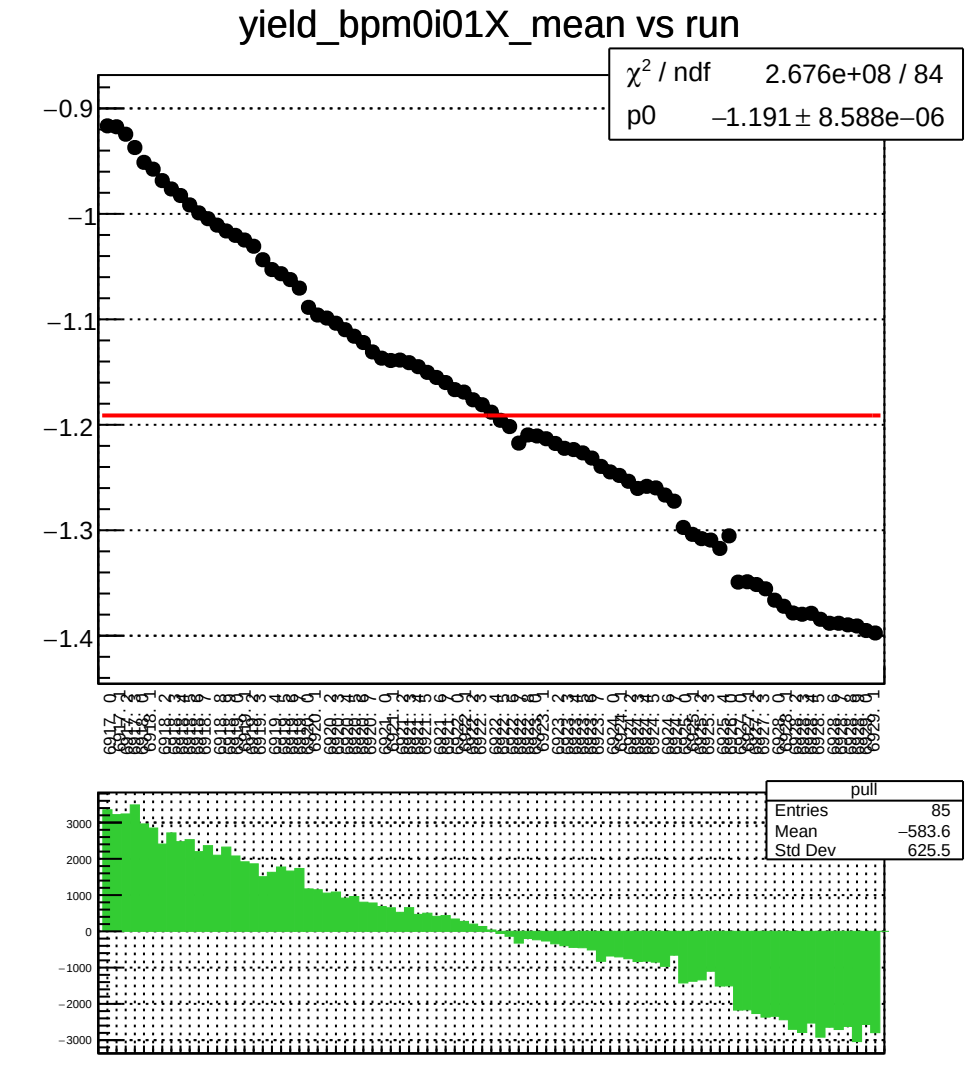

pull1D
Entries 85
Mean −0.8669
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

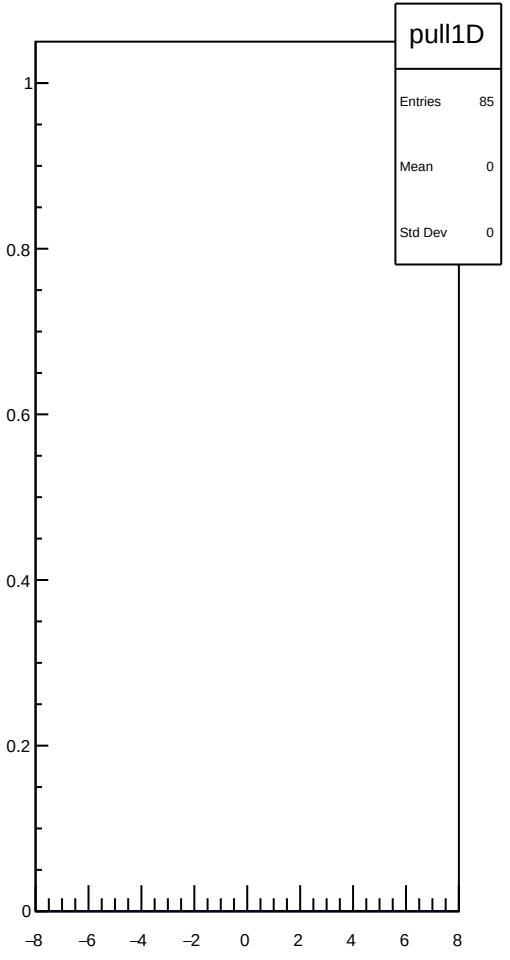

yield_bpm2i02X_rms vs run
χ² / ndf 1.027e+04 / 84
p0 0.008825 ± 7.011e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

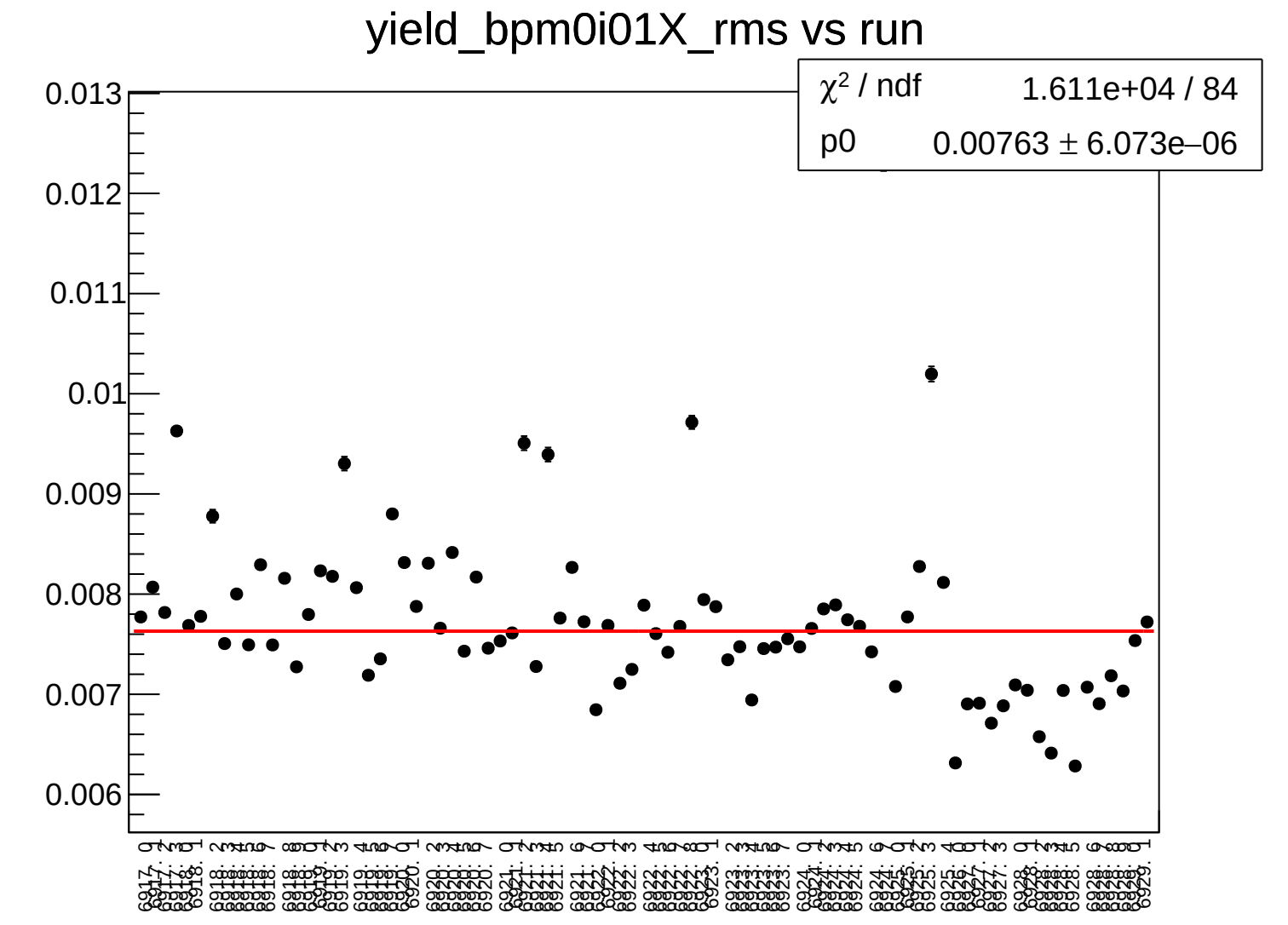

yield_bpm2i02Y_mean vs run
χ² / ndf 8.424e+06 / 84
p0 −2.183 ± 9.007e−06
−2.14
−2.16
−2.18
−2.2
−2.22
pull
Entries 85
Mean −321.9
Std Dev 377.3
800
600
400
200
0
−200
−400

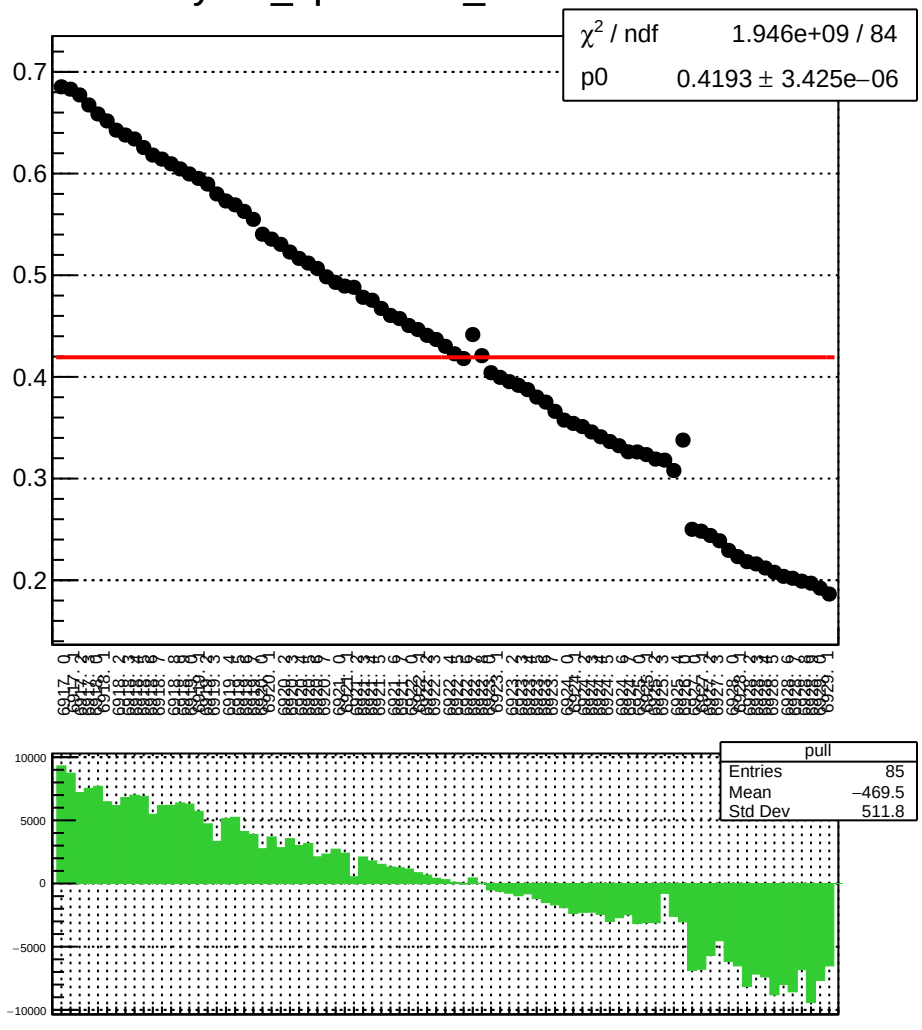

pull1D
Entries 85
Mean −2.521
Std Dev 1.779
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

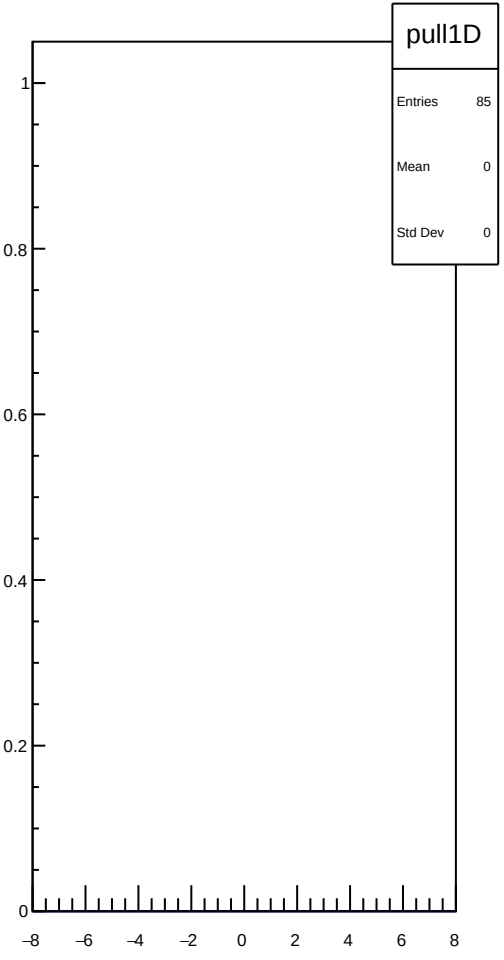

yield_bpm2i02Y_rms vs run
χ^2 / ndf 8308 / 84
p0 0.008022 ± 6.369e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

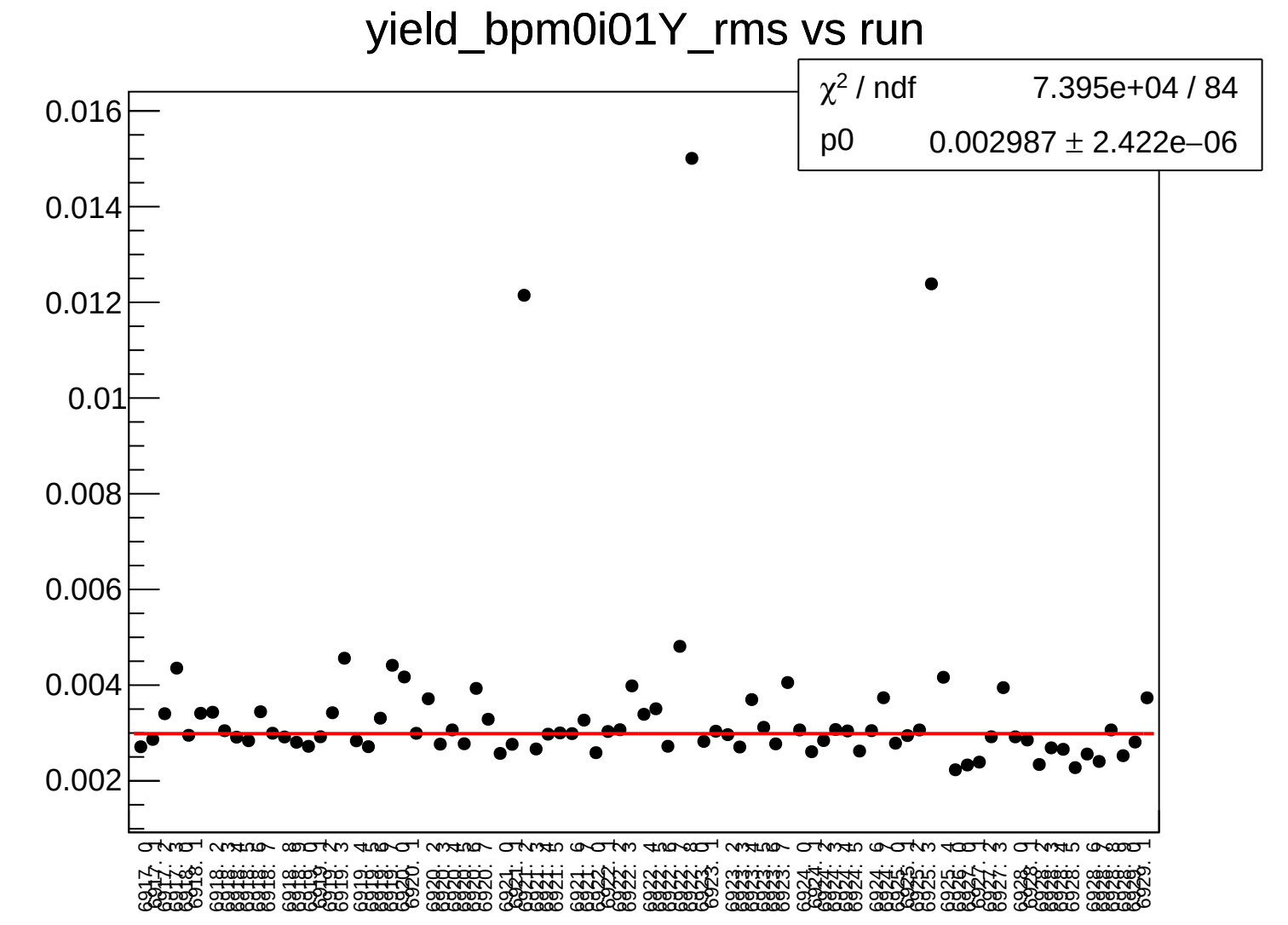

yield_bpm0i01X_mean vs run
χ² / ndf 2.676e+08 / 84
p0 −1.191 ± 8.588e−06
−0.9
−1
−1.1
−1.2
−1.3
−1.4
pull
Entries 85
Mean −583.6
Std Dev 625.5
3000
2000
1000
0
−1000
−2000
−3000

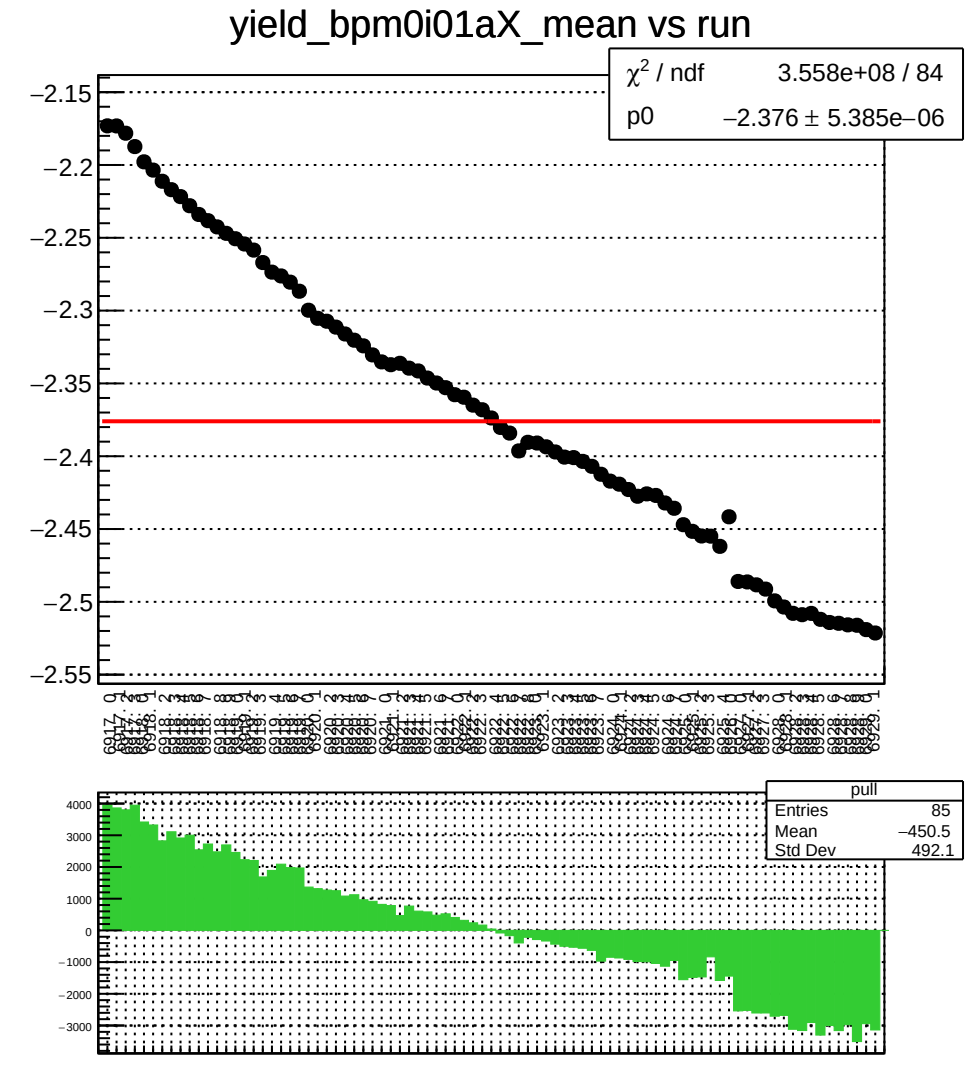

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

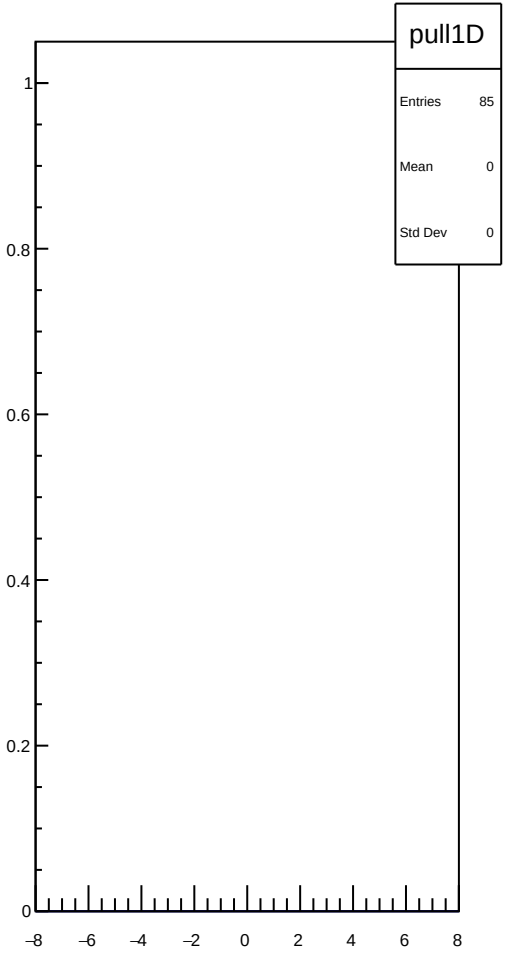

yield_bpm0i01X_rms vs run
χ² / ndf 1.611e+04 / 84
p0 0.00763 ± 6.073e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

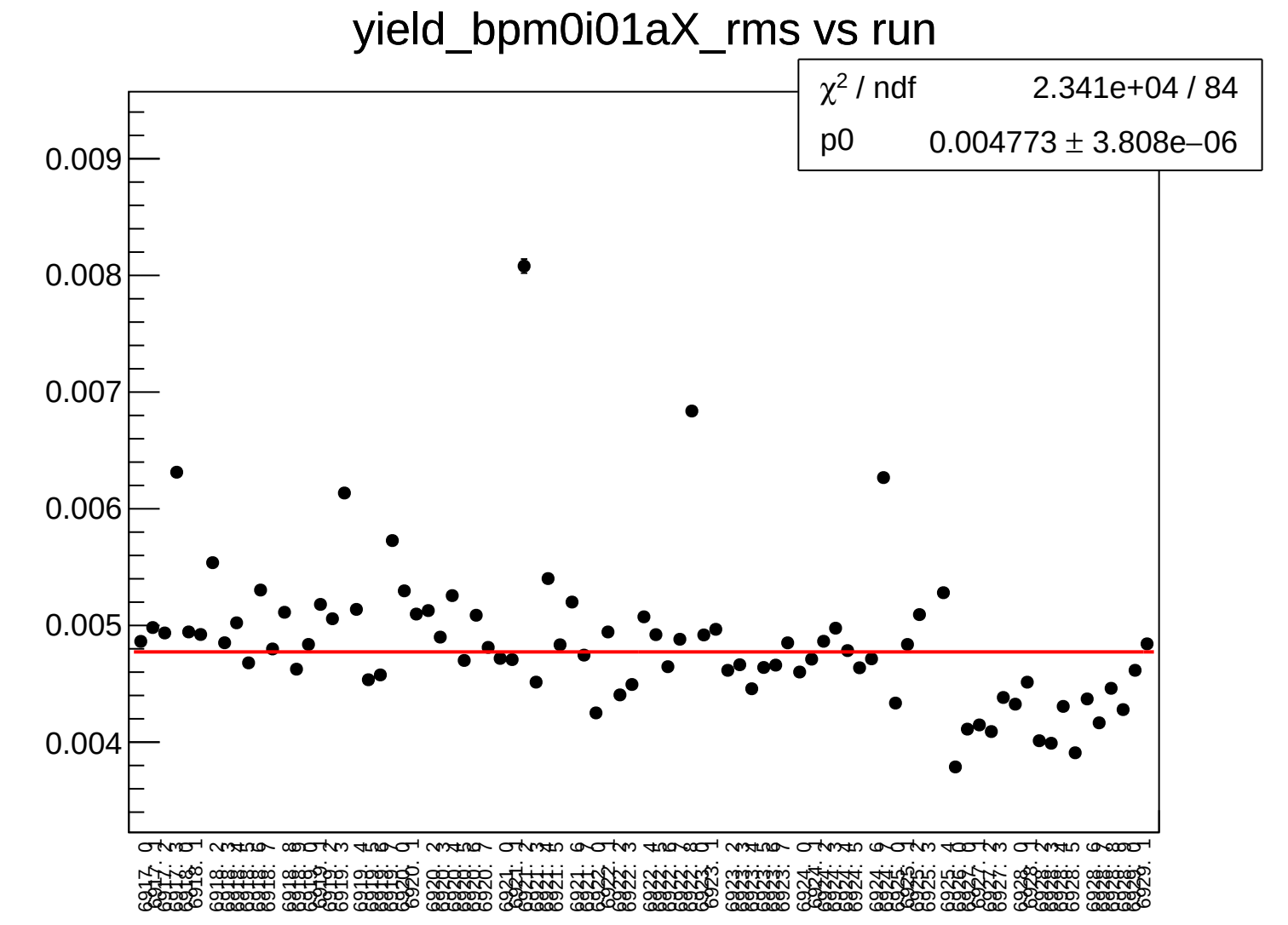

yield_bpm0i01Y_mean vs run
χ² / ndf 1.946e+09 / 84
p0 0.4193 ± 3.425e−06
pull
Entries 85
Mean −469.5
Std Dev 511.8

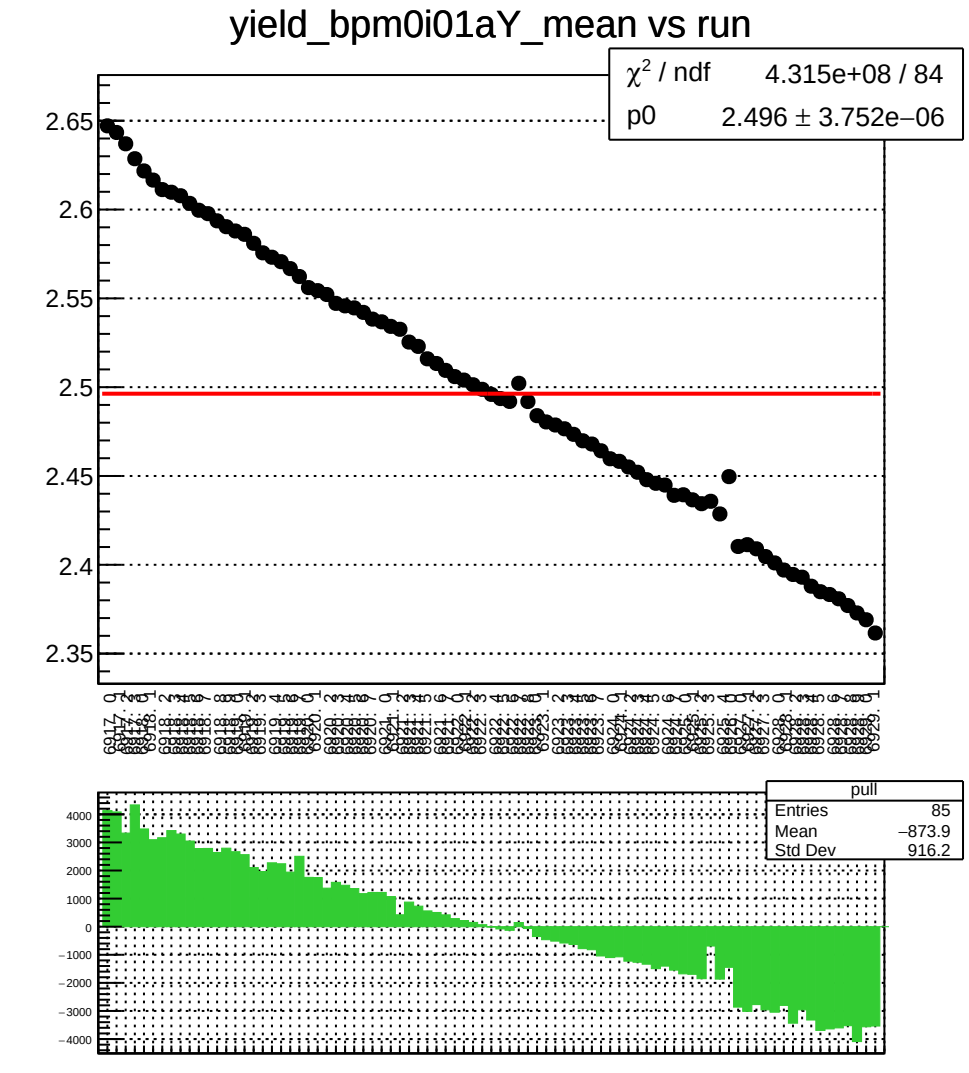

pull1D
Entries 85
Mean 0
Std Dev 0

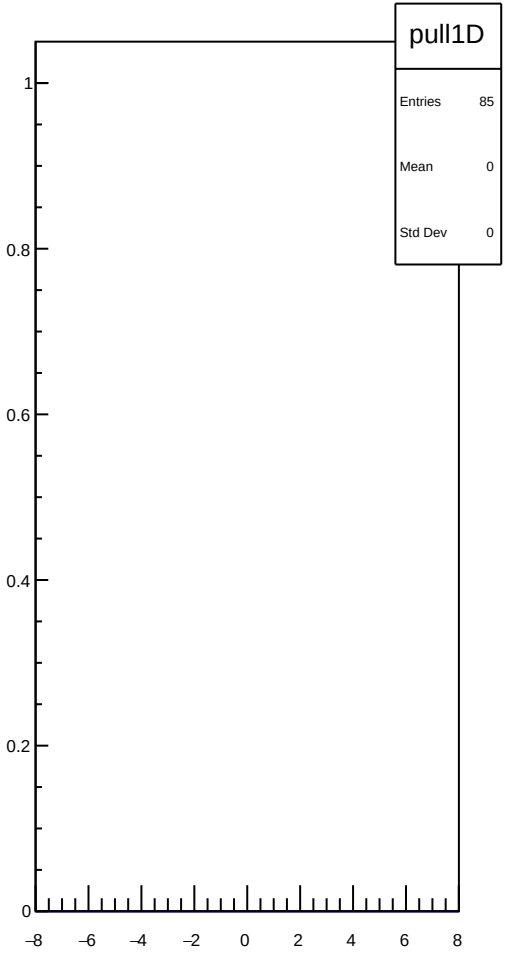

yield_bpm0i01Y_rms vs run
χ^2 / ndf 7.395e+04 / 84
p0 0.002987 ± 2.422e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

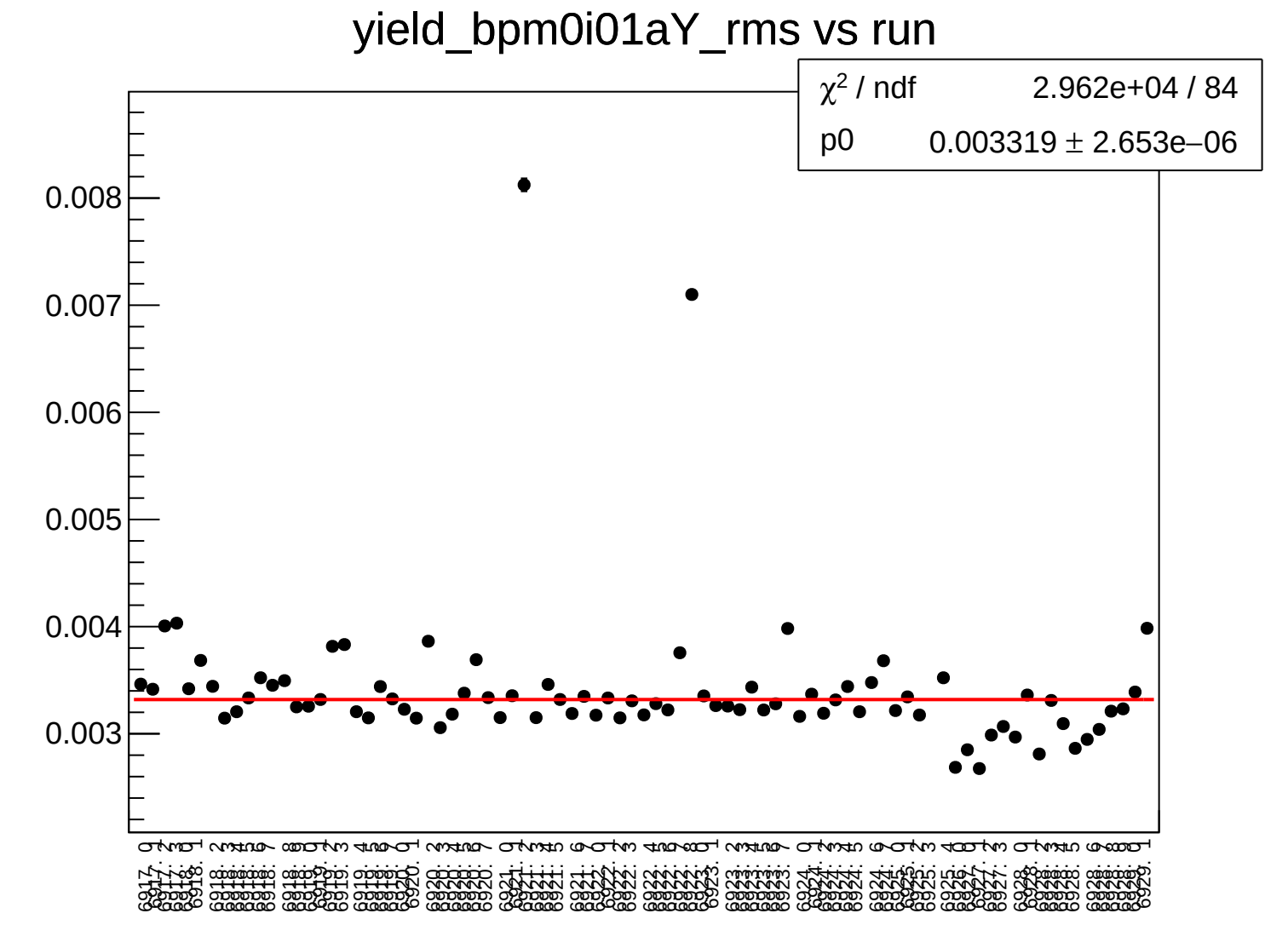

yield_bpm0i01aX_mean vs run
χ² / ndf 3.558e+08 / 84
p0 −2.376 ± 5.385e−06
−2.15
−2.2
−2.25
−2.3
−2.35
−2.4
−2.45
−2.5
−2.55
pull
Entries 85
Mean −450.5
Std Dev 492.1
4000
3000
2000
1000
0
−1000
−2000
−3000

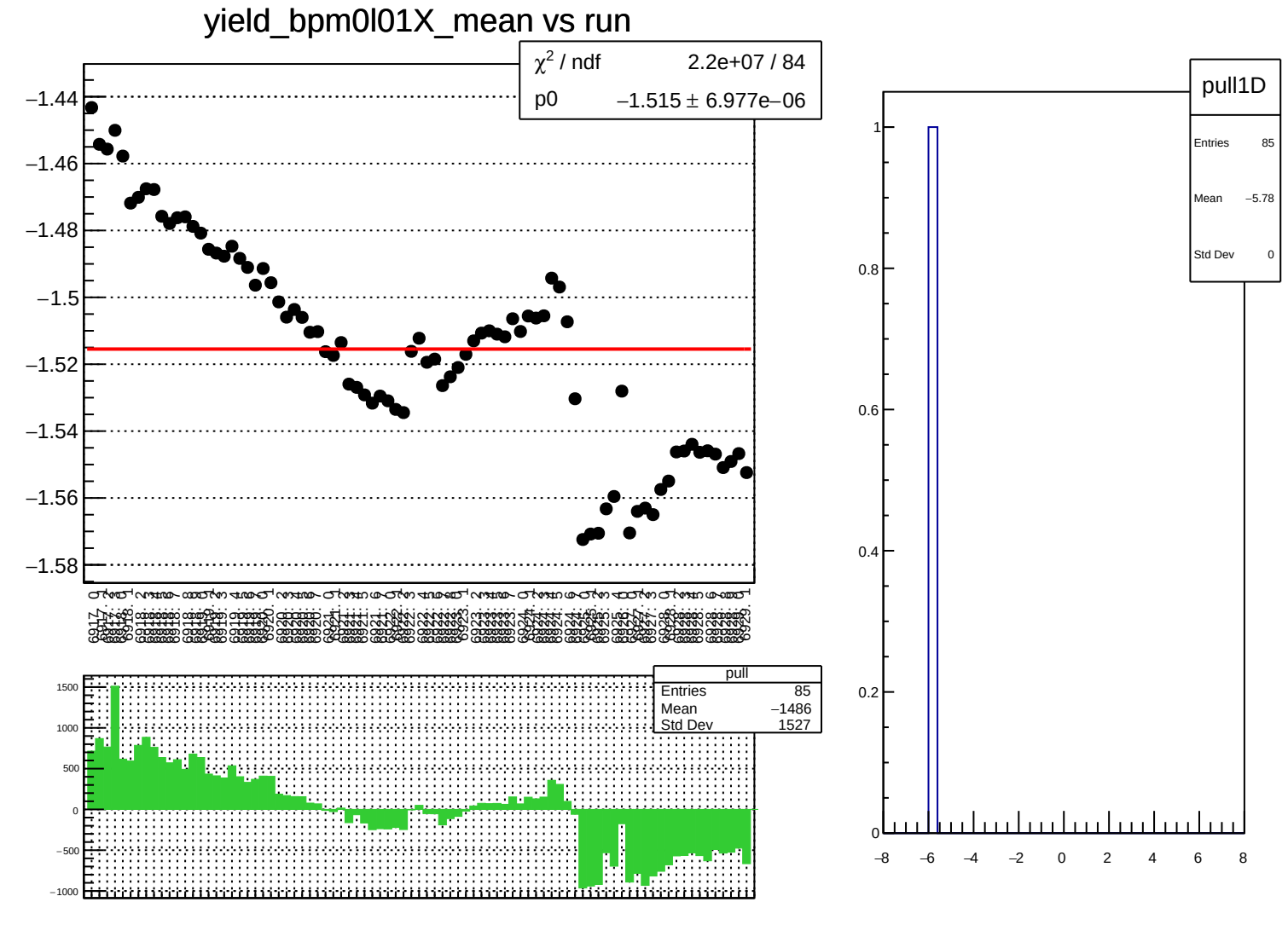

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

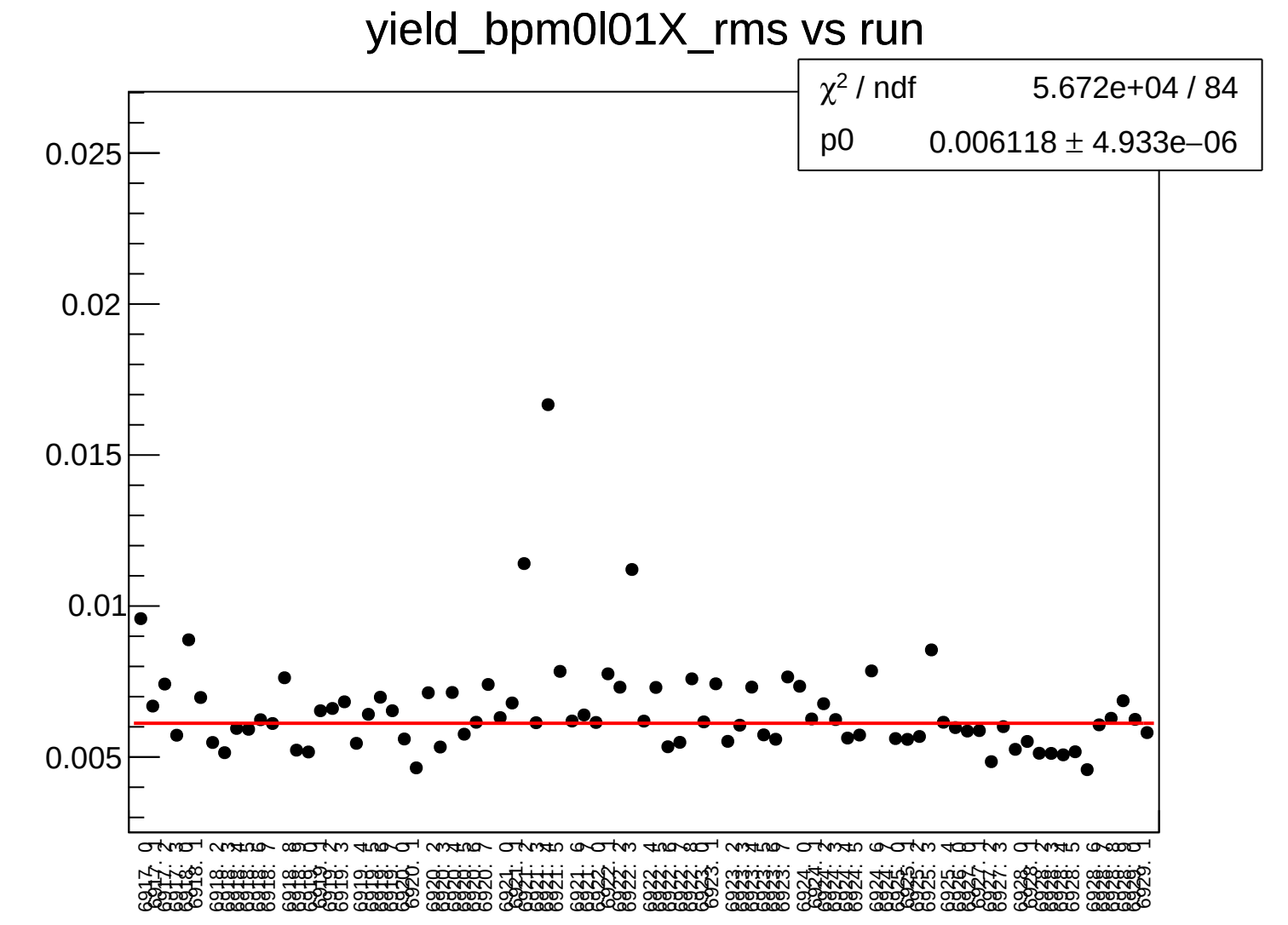

yield_bpm0i01aX_rms vs run
χ² / ndf 2.341e+04 / 84
p0 0.004773 ± 3.808e−06
0.009
0.008
0.007
0.006
0.005
0.004

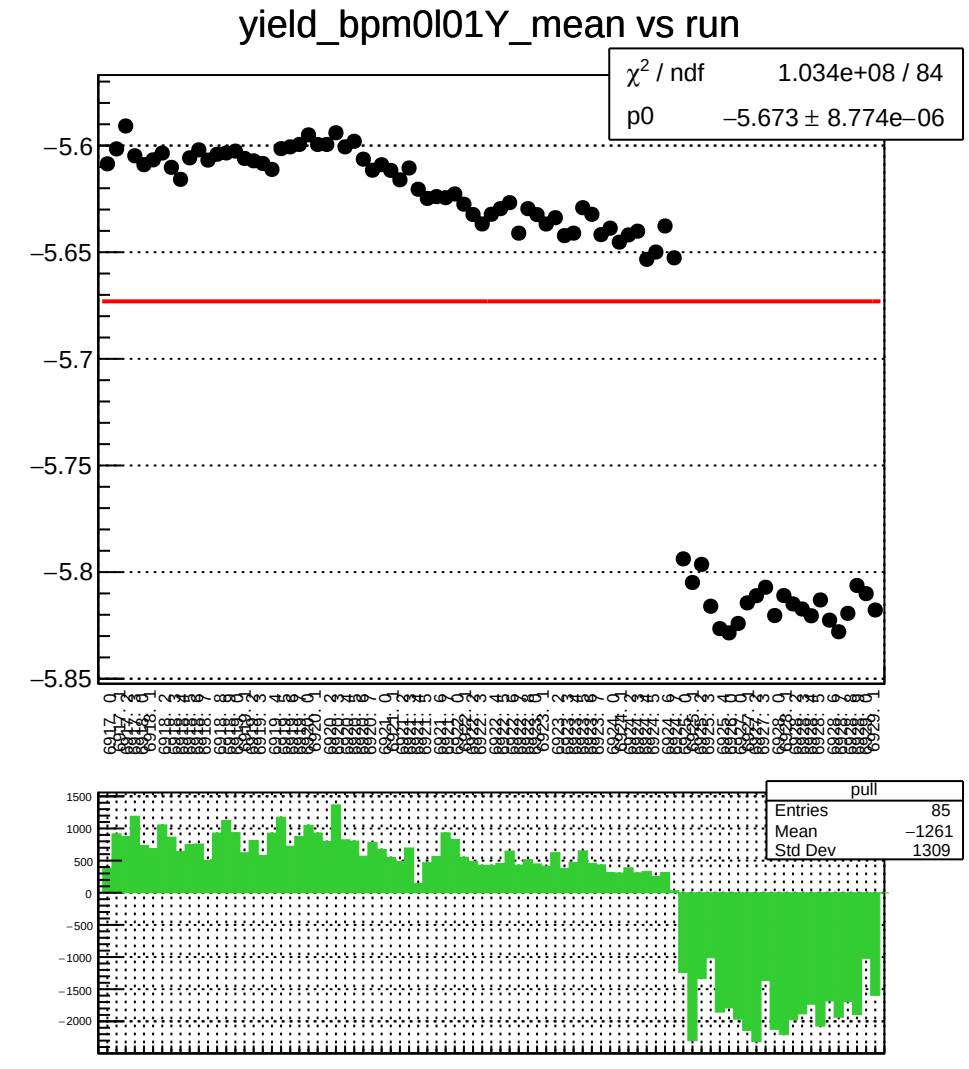

yield_bpm0i01aY_mean vs run
χ² / ndf 4.315e+08 / 84
p0 2.496 ± 3.752e−06
2.65
2.6
2.55
2.5
2.45
2.4
2.35
pull
Entries 85
Mean −873.9
Std Dev 916.2
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000

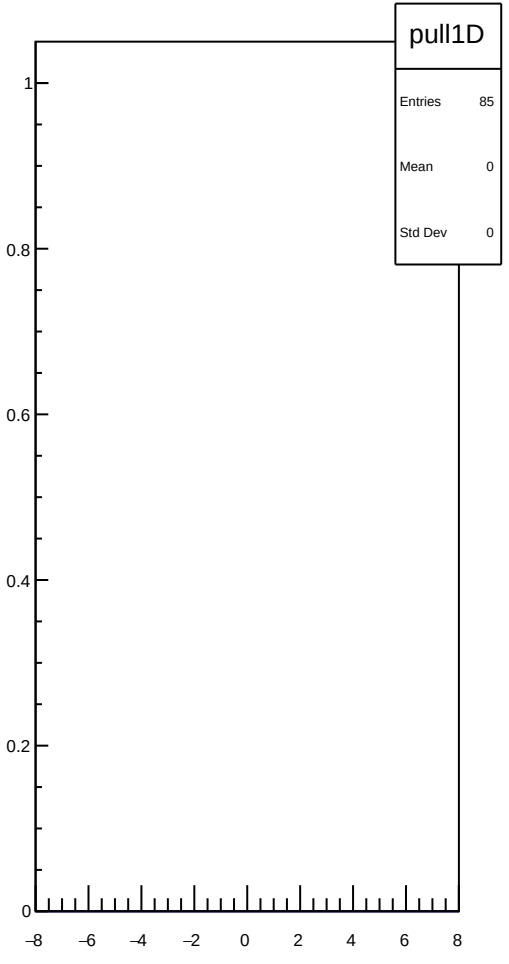

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

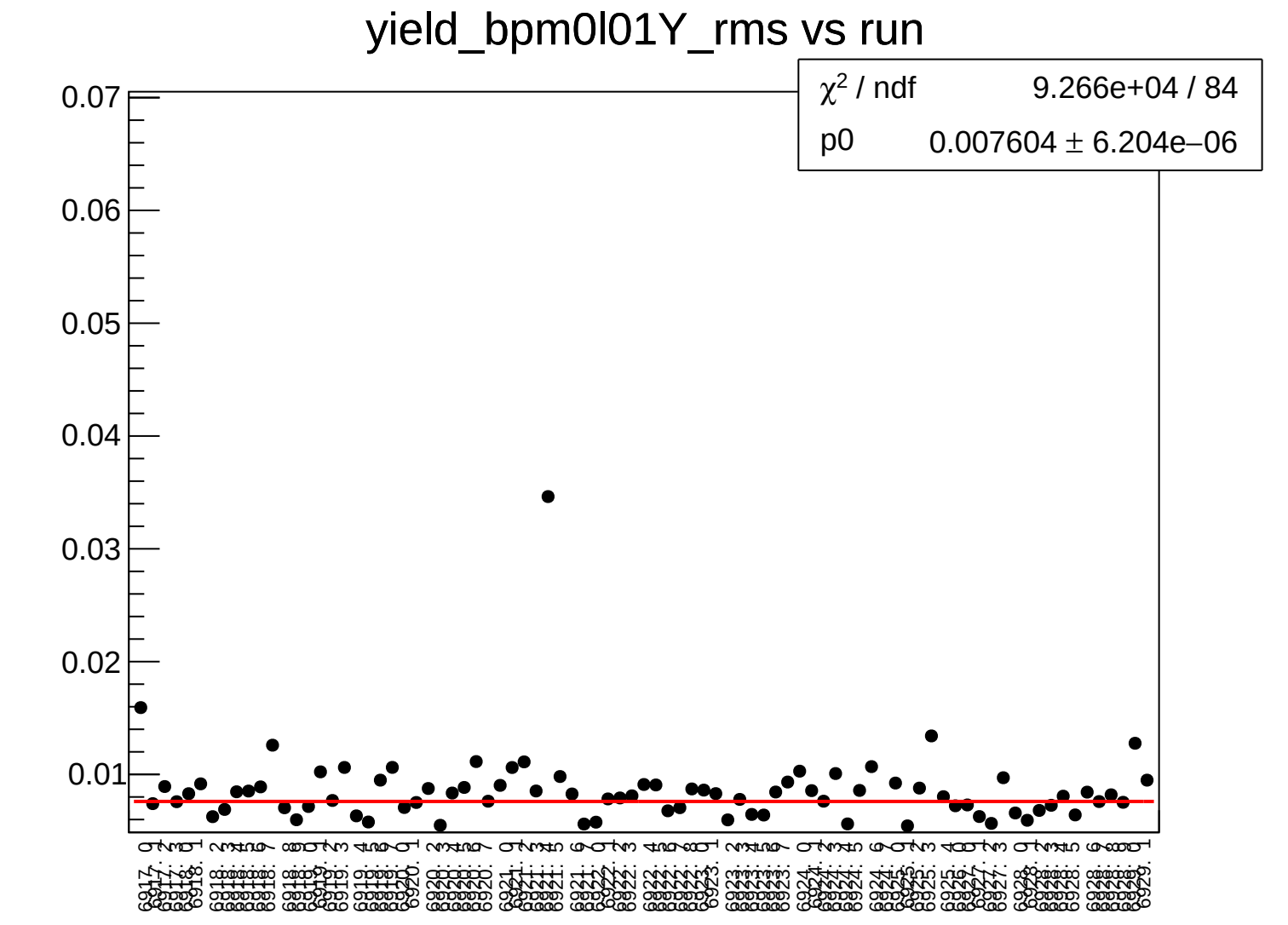

yield_bpm0i01aY_rms vs run
χ² / ndf 2.962e+04 / 84
p0 0.003319 ± 2.653e−06
0.008
0.007
0.006
0.005
0.004
0.003

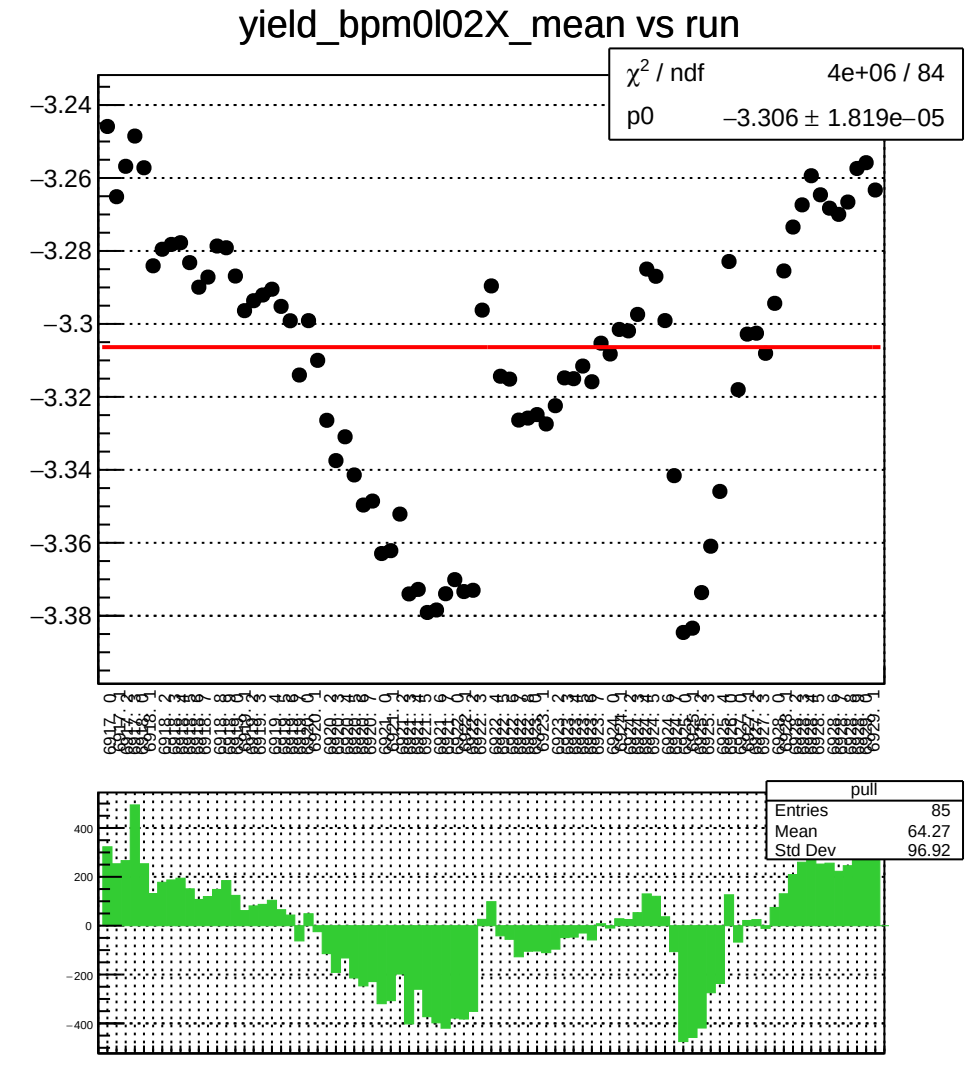

yield_bpm0l01X_mean vs run
χ² / ndf 2.2e+07 / 84
p0 −1.515 ± 6.977e−06
−1.44
−1.46
−1.48
−1.5
−1.52
−1.54
−1.56
−1.58
pull
Entries 85
Mean −1486
Std Dev 1527
1500
1000
500
0
−500
−1000
pull1D
Entries 85
Mean −5.78
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

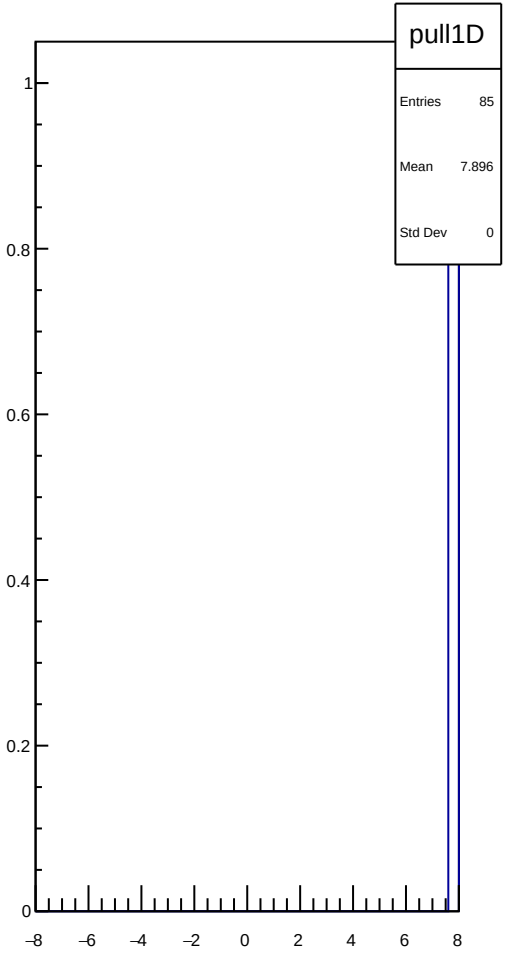

yield_bpm0l01X_rms vs run
χ² / ndf 5.672e+04 / 84
p0 0.006118 ± 4.933e−06
0.025
0.02
0.015
0.01
0.005

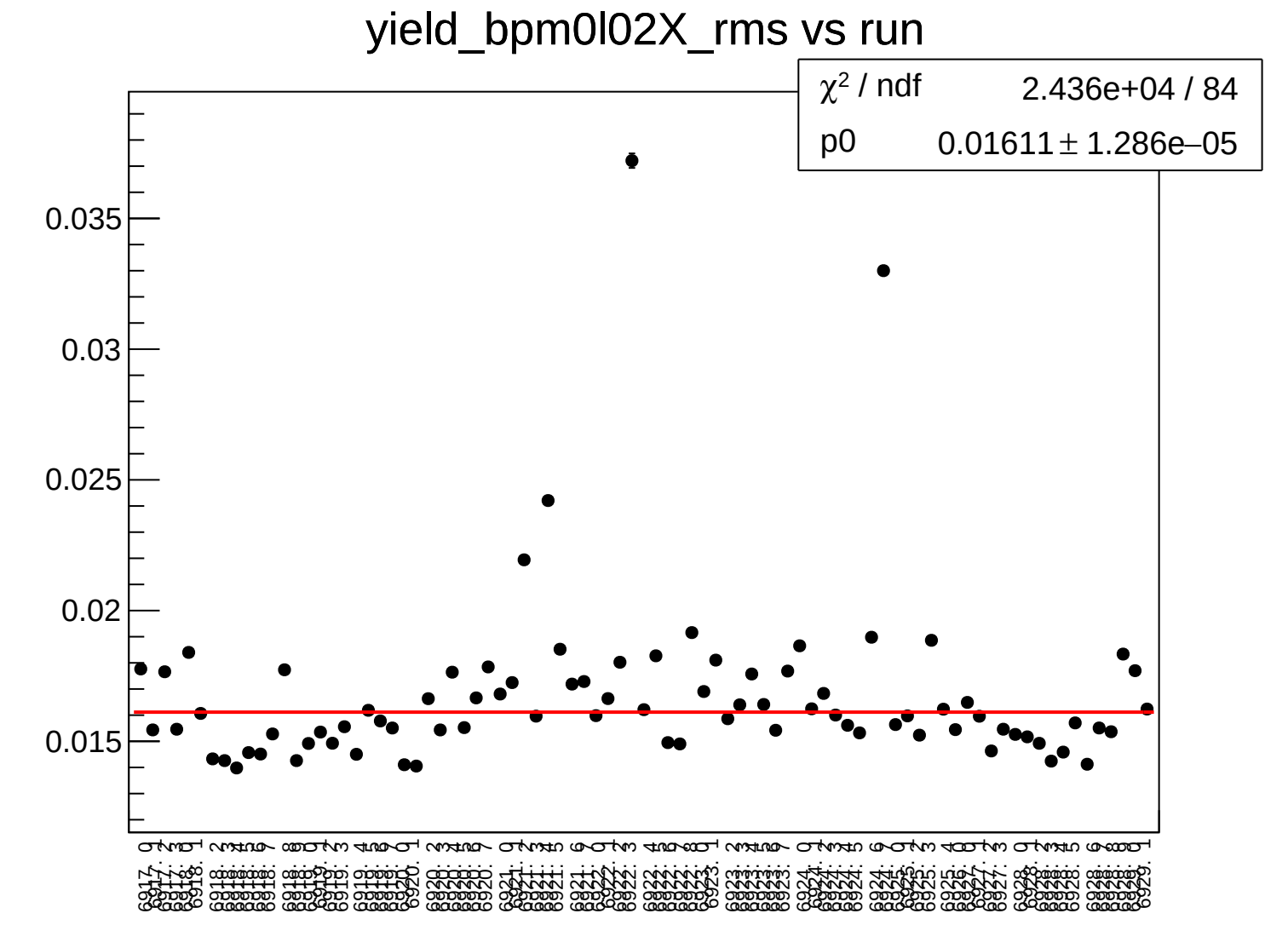

yield_bpm0l01Y_mean vs run
χ² / ndf 1.034e+08 / 84
p0 −5.673 ± 8.774e−06
−5.6
−5.65
−5.7
−5.75
−5.8
−5.85
pull
Entries 85
Mean −1261
Std Dev 1309
1500
1000
500
0
−500
−1000
−1500
−2000

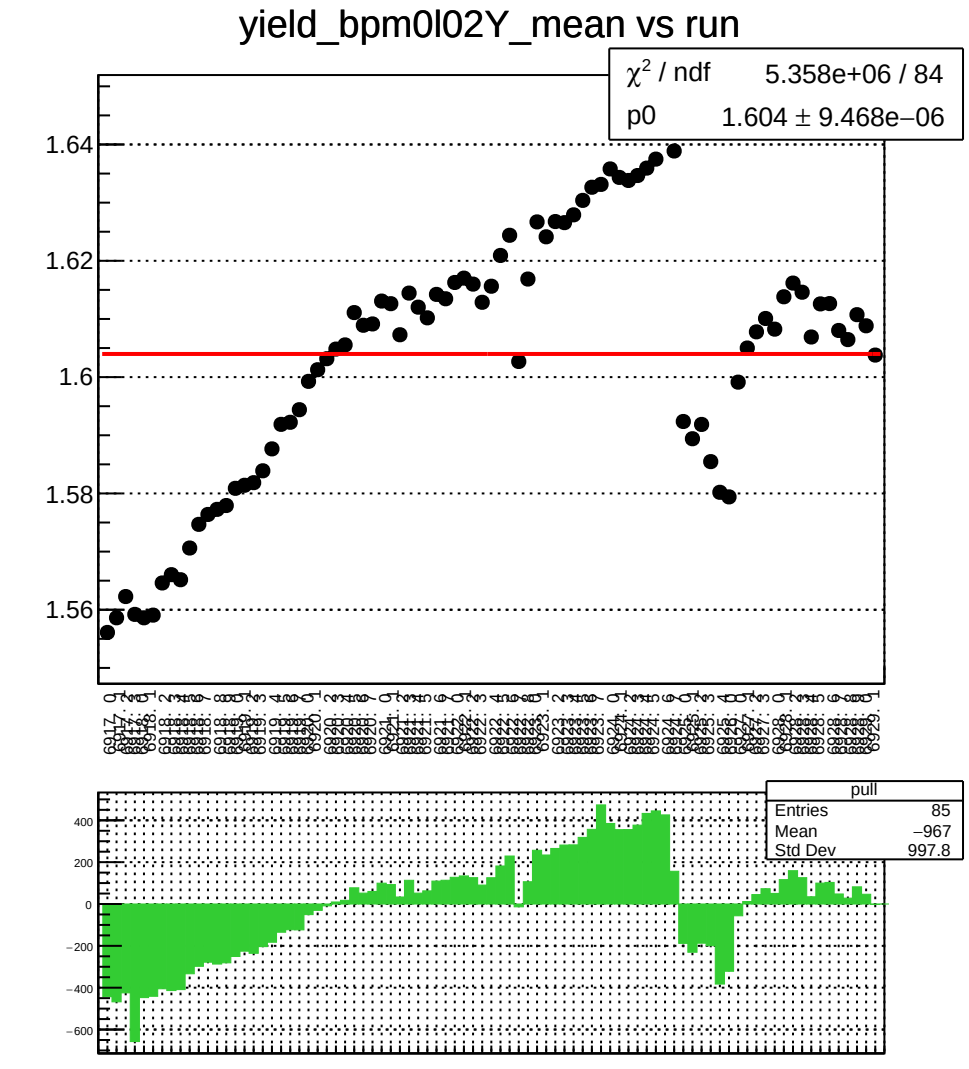

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

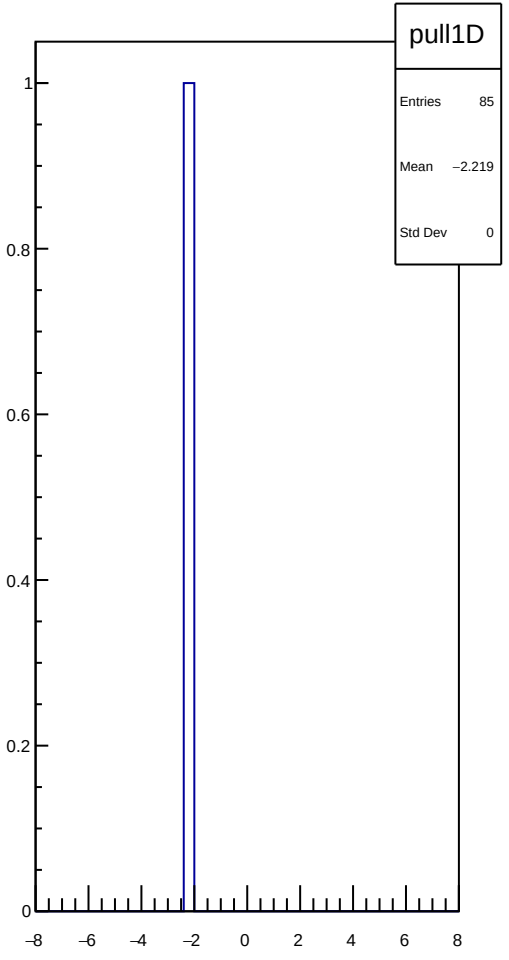

yield_bpm0l01Y_rms vs run
χ^2 / ndf 9.266e+04 / 84
p0 0.007604 ± 6.204e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

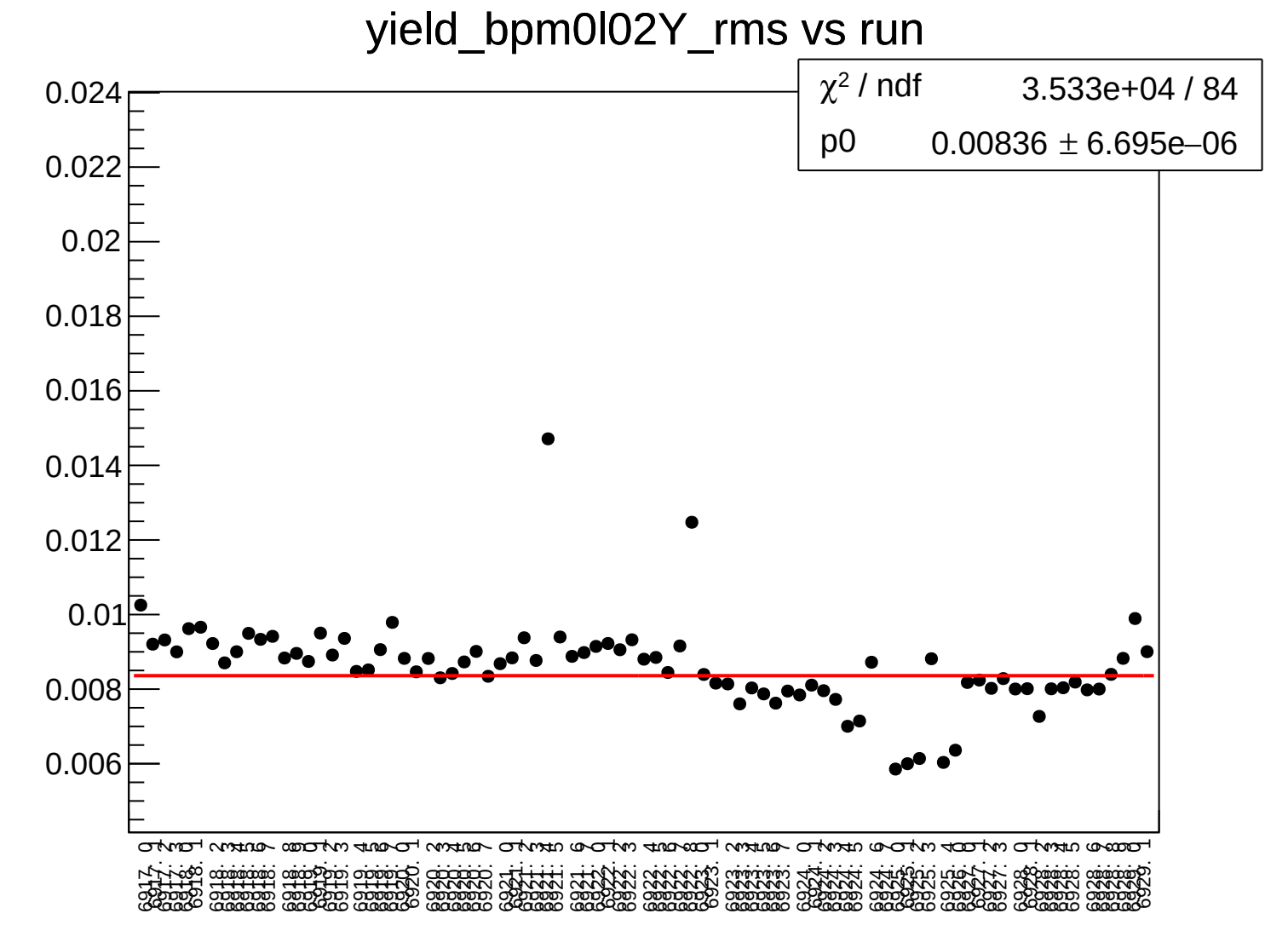

yield_bpm0l02X_mean vs run
χ² / ndf 4e+06 / 84
p0 −3.306 ± 1.819e−05
−3.24
−3.26
−3.28
−3.3
−3.32
−3.34
−3.36
−3.38
pull
Entries 85
Mean 64.27
Std Dev 96.92
400
200
0
−200
−400

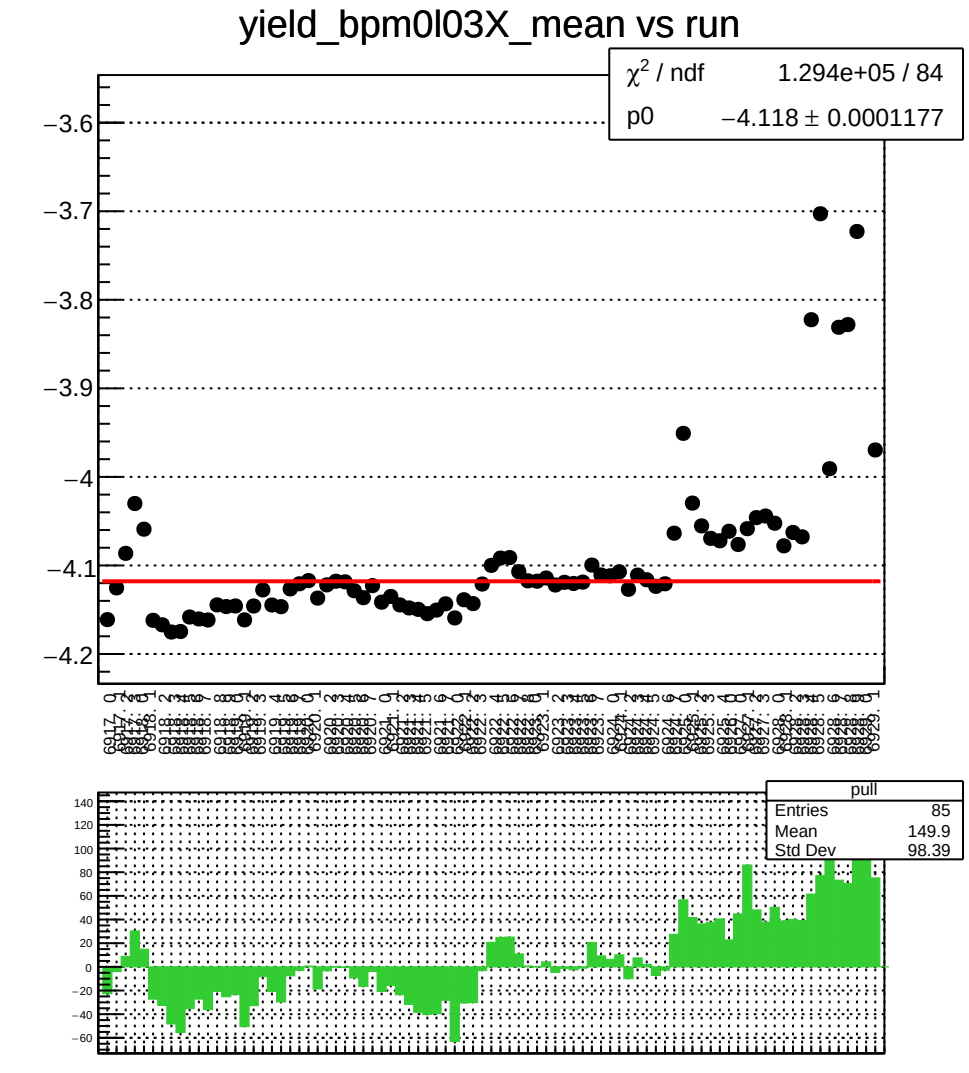

pull1D
Entries 85
Mean 7.896
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

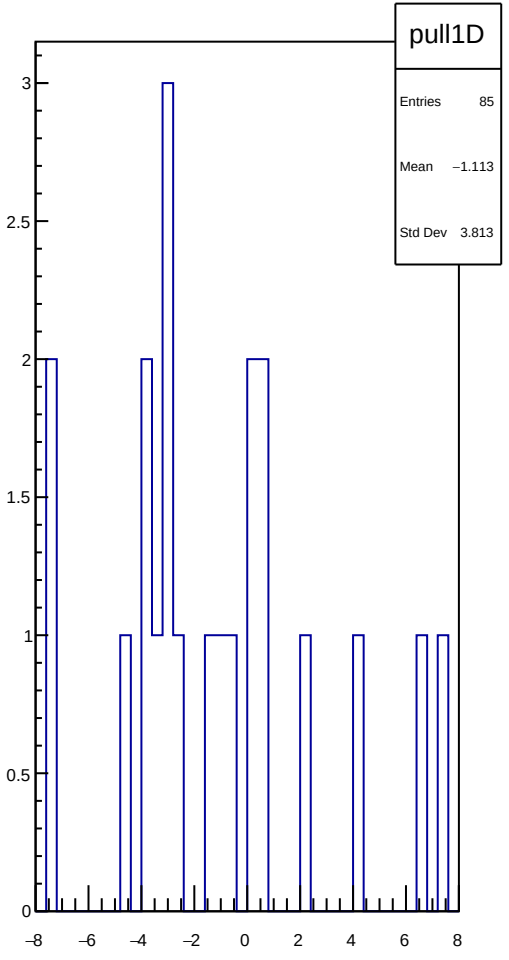

yield_bpm0l02X_rms vs run
χ² / ndf 2.436e+04 / 84
p0 0.01611 ± 1.286e–05
0.035
0.03
0.025
0.02
0.015

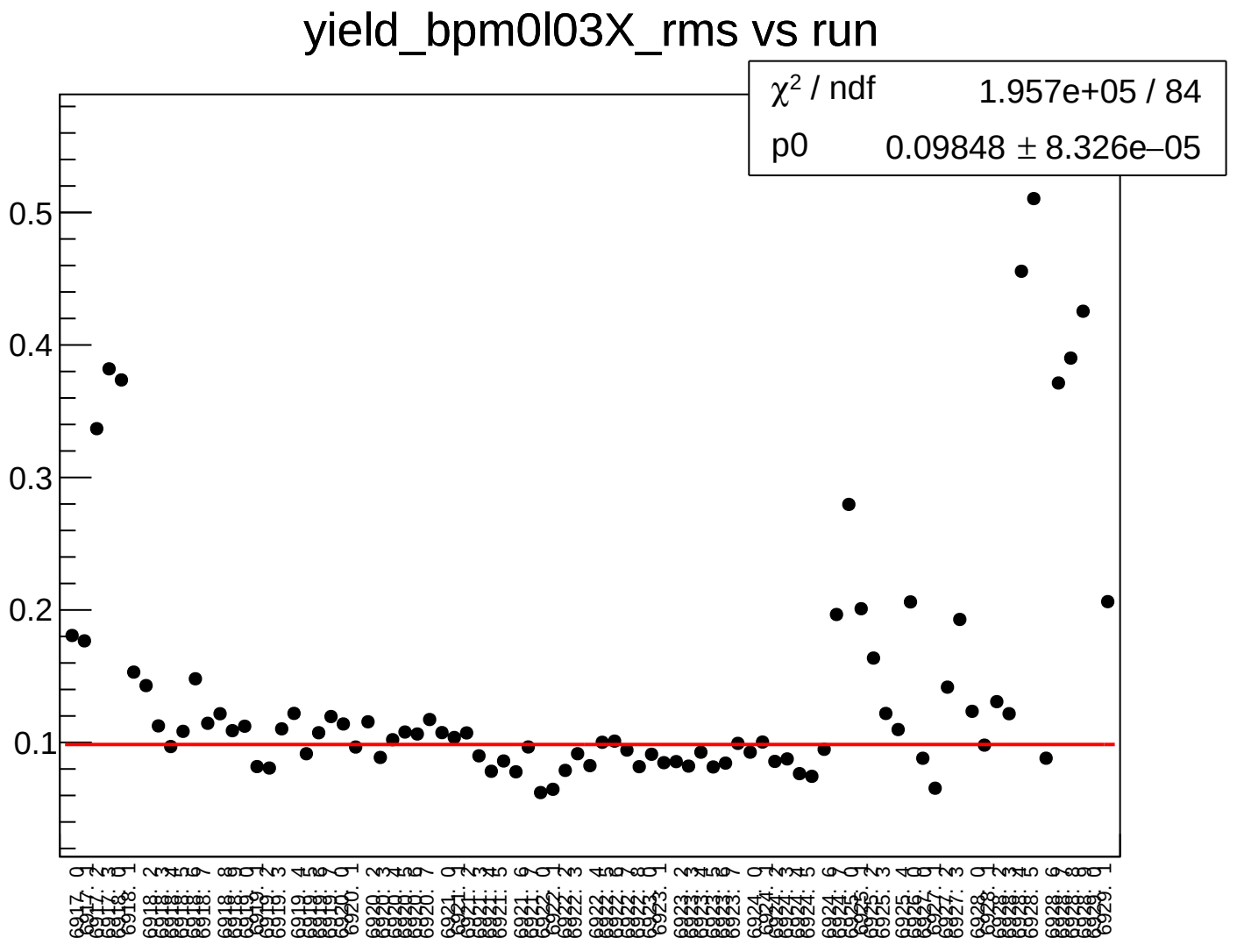

yield_bpm0l02Y_mean vs run
χ² / ndf 5.358e+06 / 84
p0 1.604 ± 9.468e−06
1.64
1.62
1.6
1.58
1.56
pull
Entries 85
Mean −967
Std Dev 997.8
400
200
0
−200
−400
−600

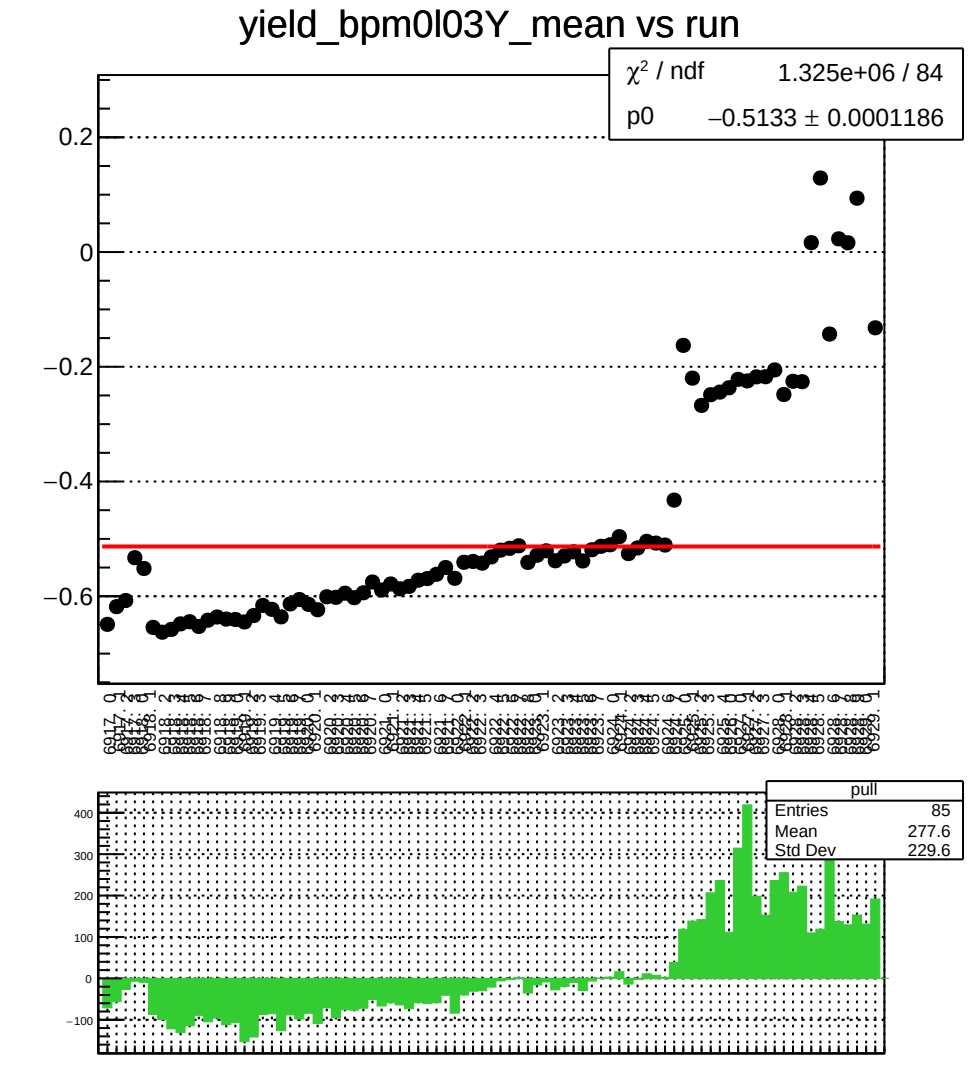

pull1D
Entries 85
Mean −2.219
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

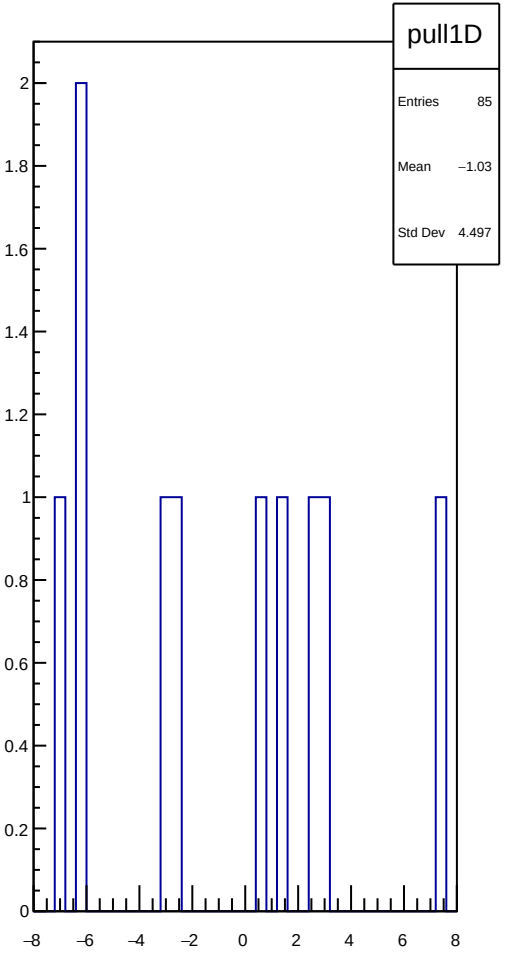

yield_bpm0l02Y_rms vs run
χ² / ndf 3.533e+04 / 84
p0 0.00836 ± 6.695e–06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

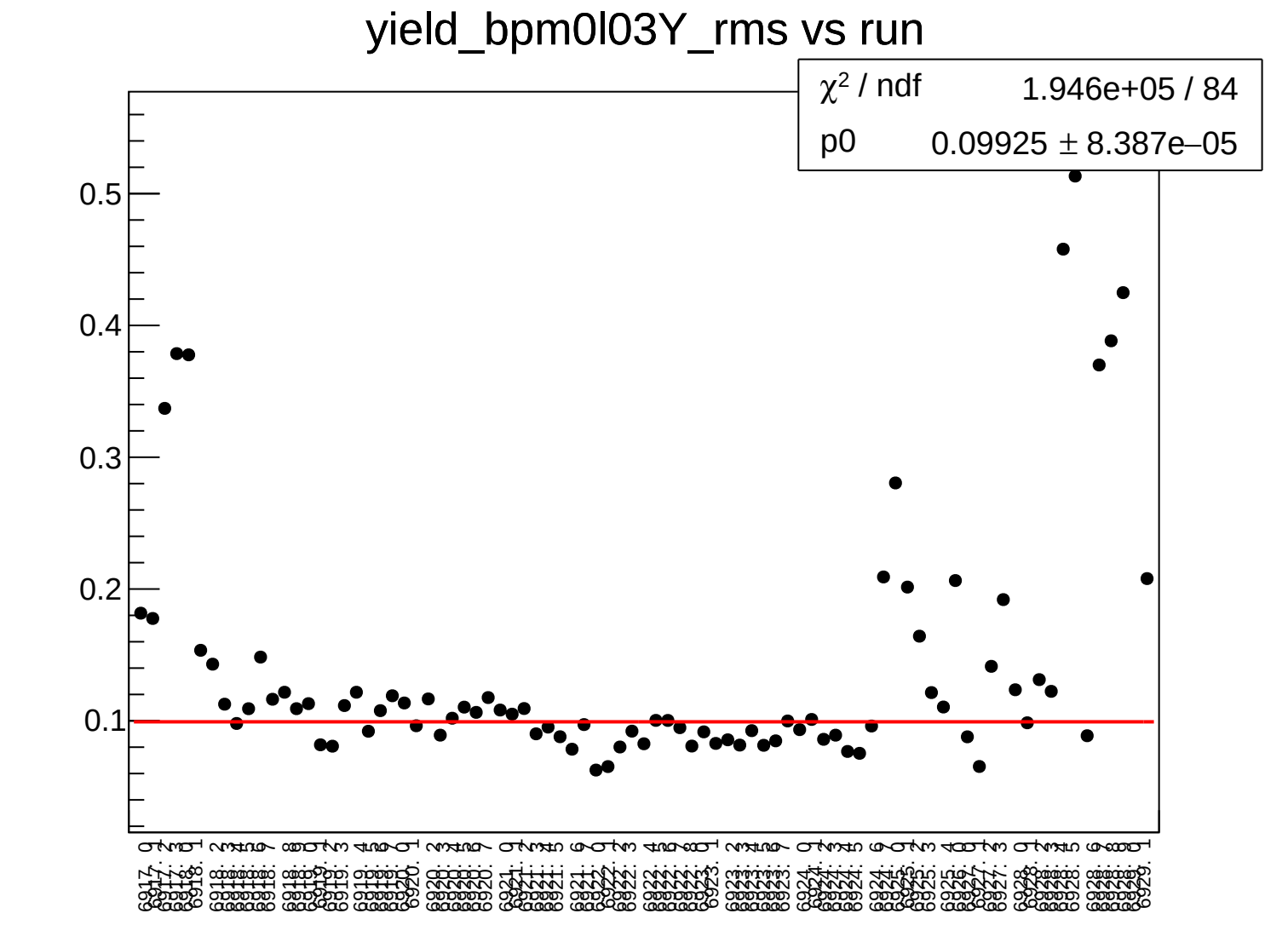

yield_bpm0l03X_mean vs run
χ² / ndf 1.294e+05 / 84
p0 −4.118 ± 0.0001177
−3.6
−3.7
−3.8
−3.9
−4
−4.1
−4.2
pull
Entries 85
Mean 149.9
Std Dev 98.39
140
120
100
80
60
40
20
0
−20
−40
−60

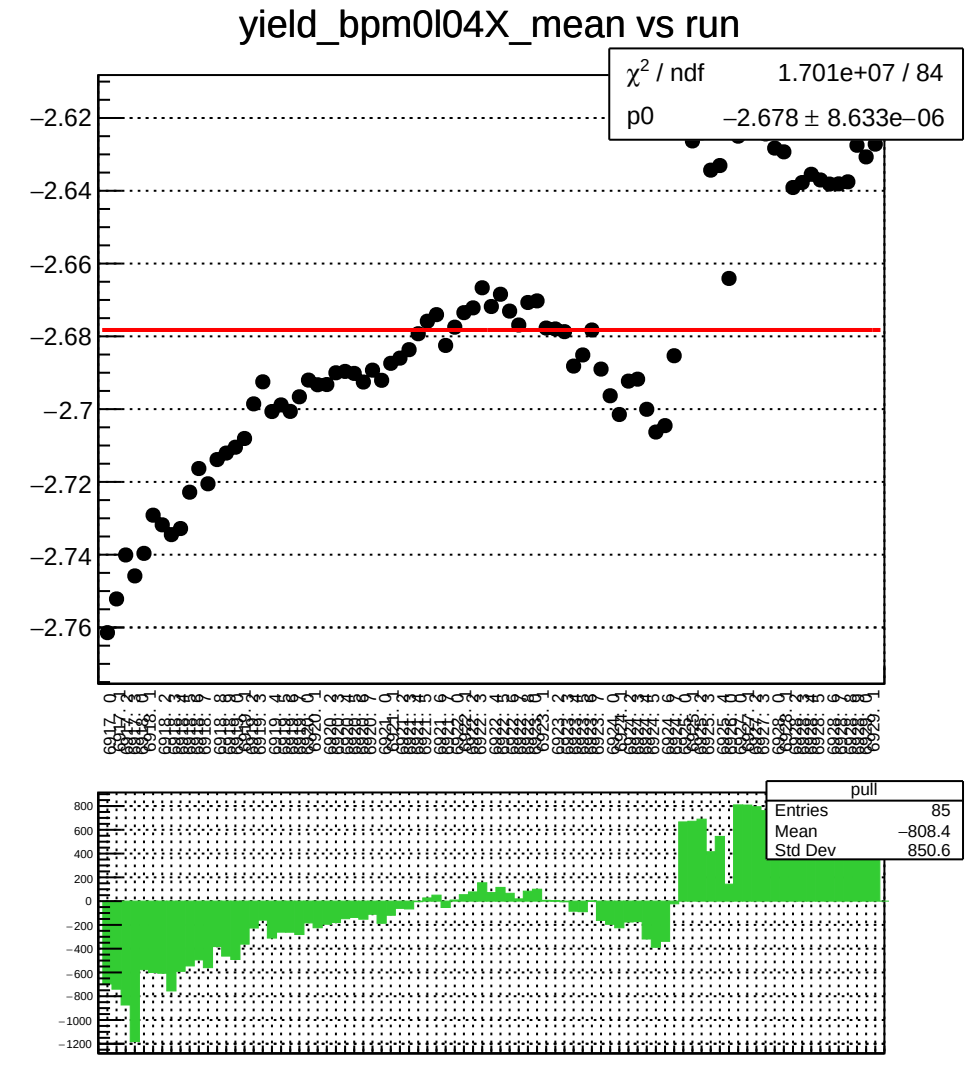

pull1D
Entries 85
Mean −1.113
Std Dev 3.813
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

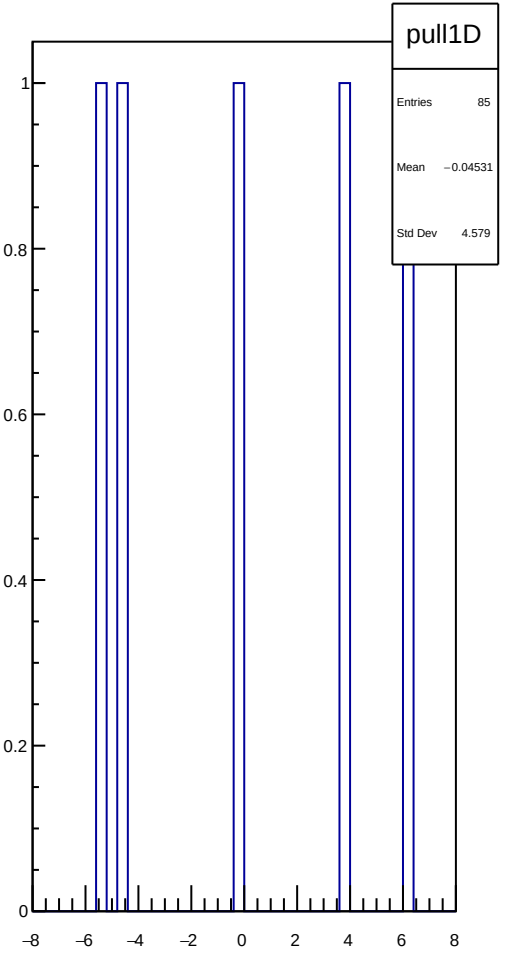

yield_bpm0l03X_rms vs run
χ² / ndf 1.957e+05 / 84
p0 0.09848 ± 8.326e–05
0.5
0.4
0.3
0.2
0.1


yield_bpm0l03Y_mean vs run
χ² / ndf 1.325e+06 / 84
p0 −0.5133 ± 0.0001186
pull
Entries 85
Mean 277.6
Std Dev 229.6

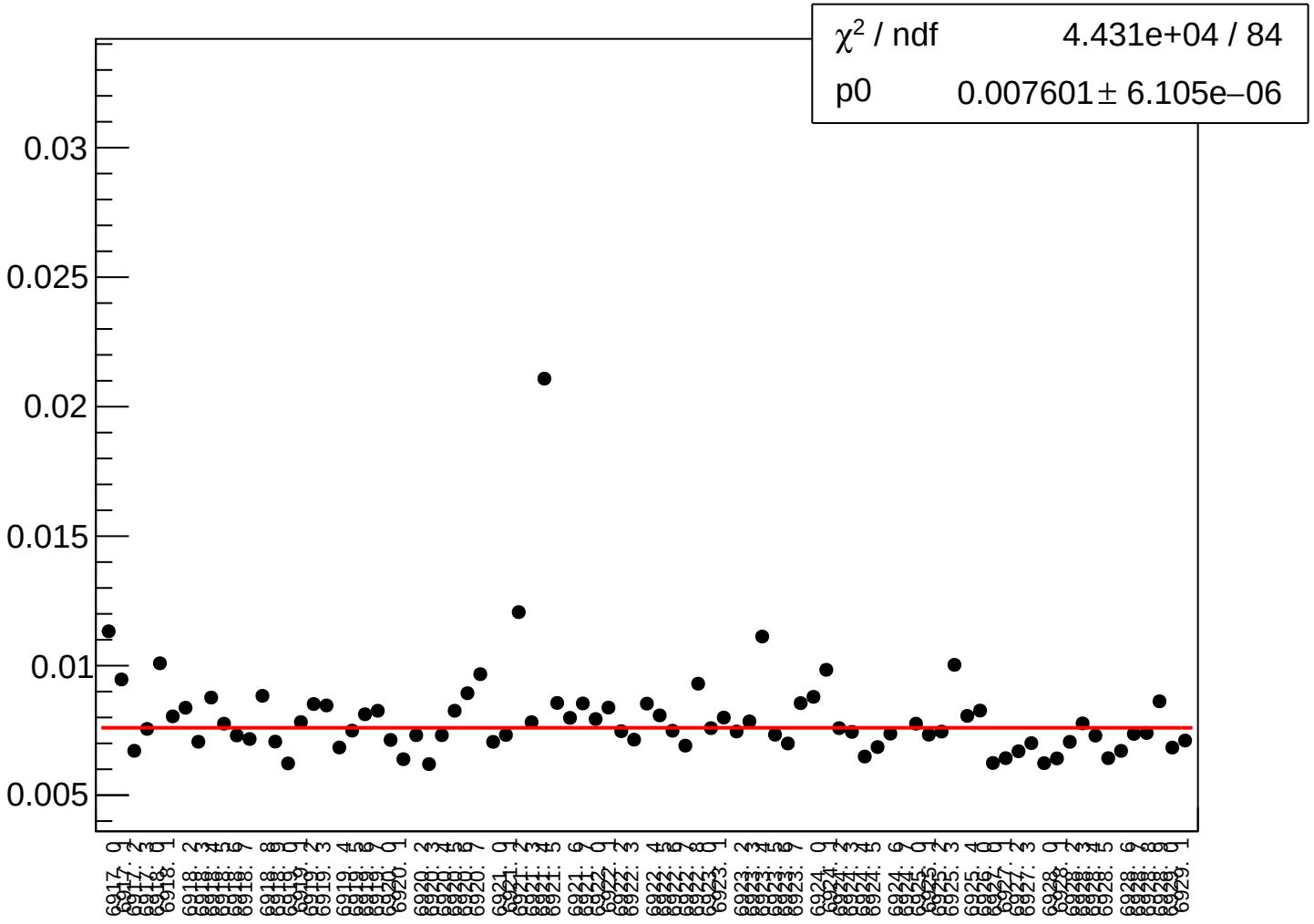

pull1D
Entries 85
Mean −1.03
Std Dev 4.497

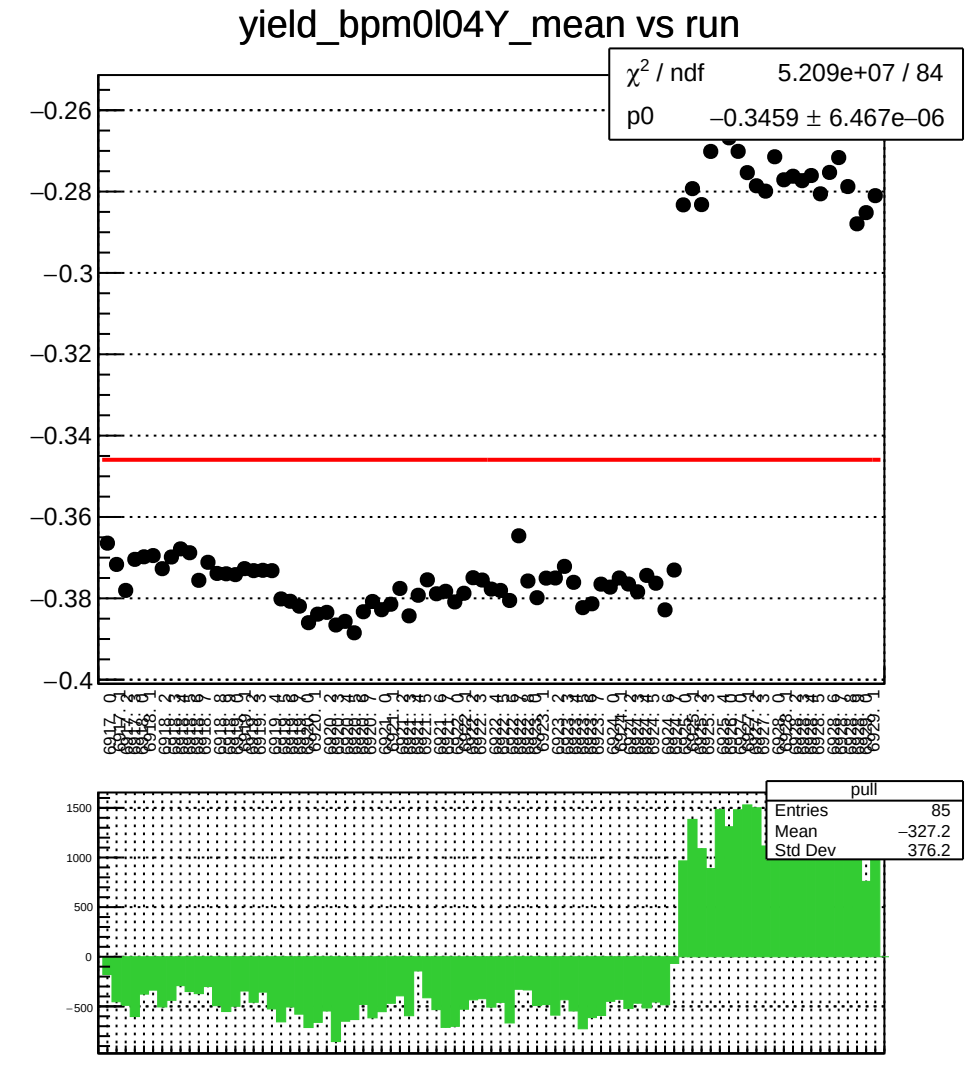

yield_bpm0l03Y_rms vs run
χ² / ndf 1.946e+05 / 84
p0 0.09925 ± 8.387e–05
0.5
0.4
0.3
0.2
0.1

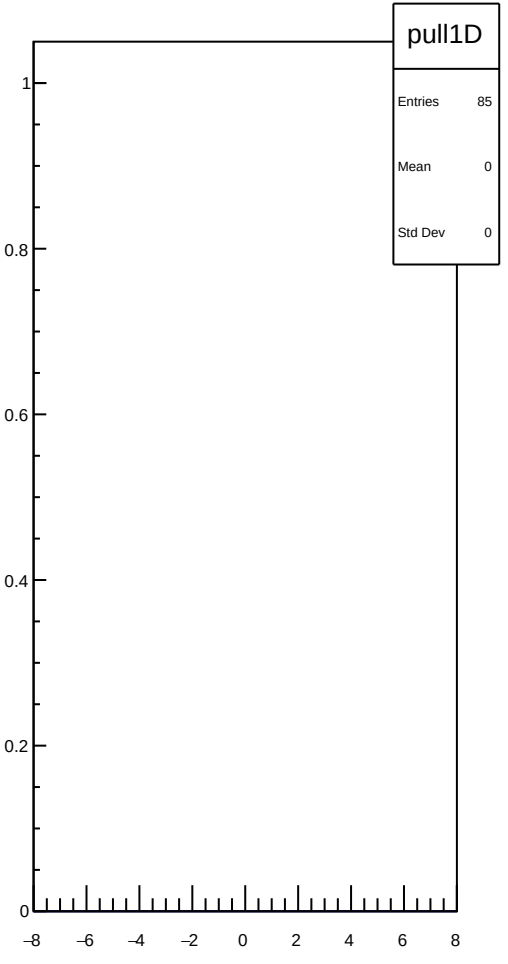

yield_bpm0l04X_mean vs run
χ² / ndf 1.701e+07 / 84
p0 −2.678 ± 8.633e−06
−2.62
−2.64
−2.66
−2.68
−2.7
−2.72
−2.74
−2.76
pull
Entries 85
Mean −808.4
Std Dev 850.6
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

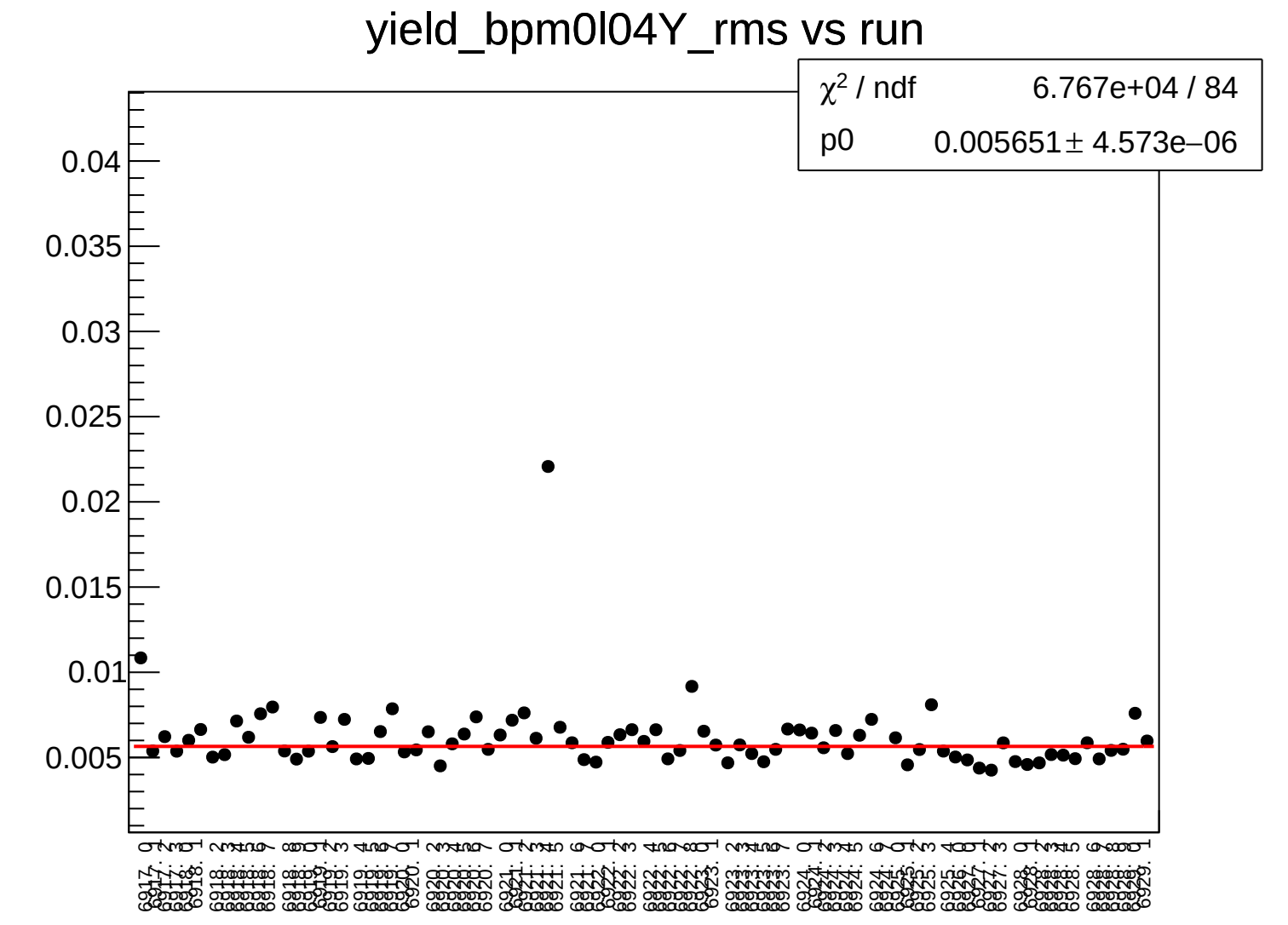

pull1D
Entries 85
Mean −0.04531
Std Dev 4.579
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

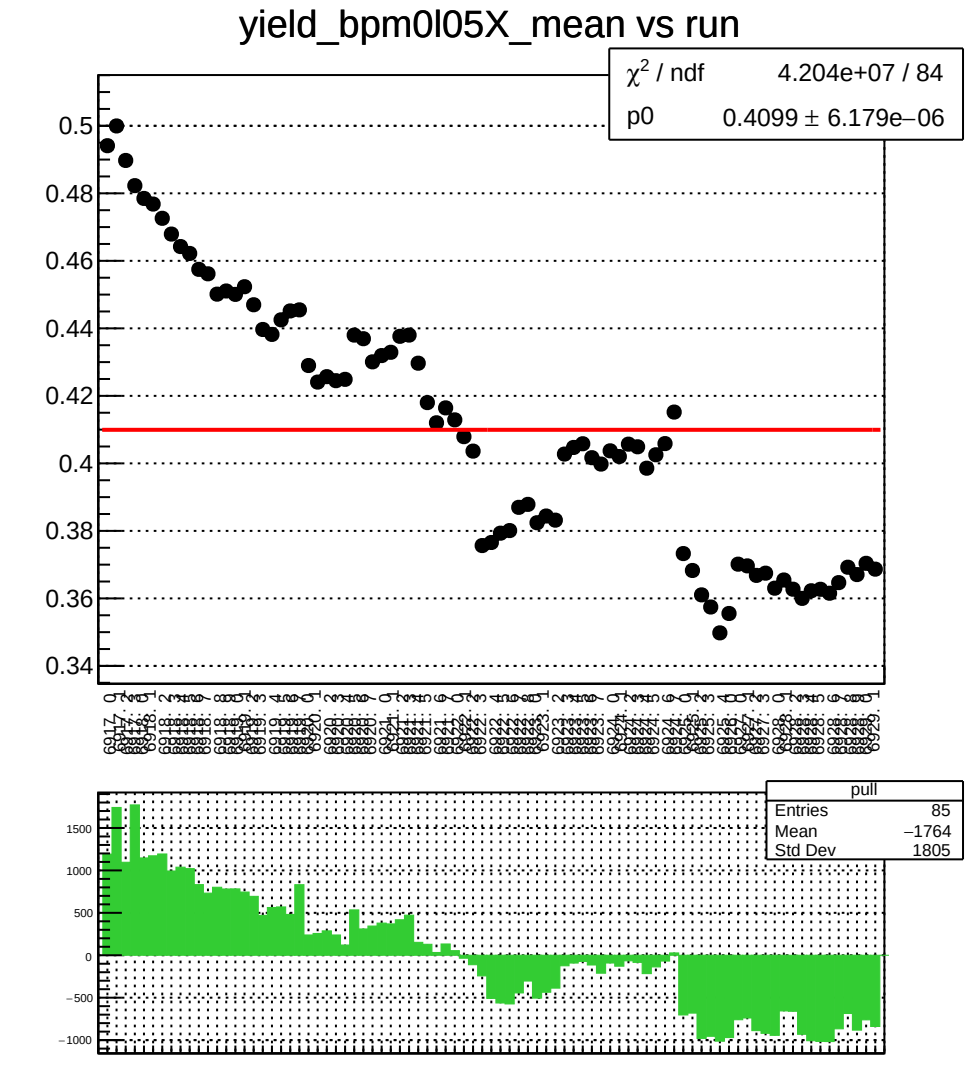
yield_bpm0l04X_rms vs run

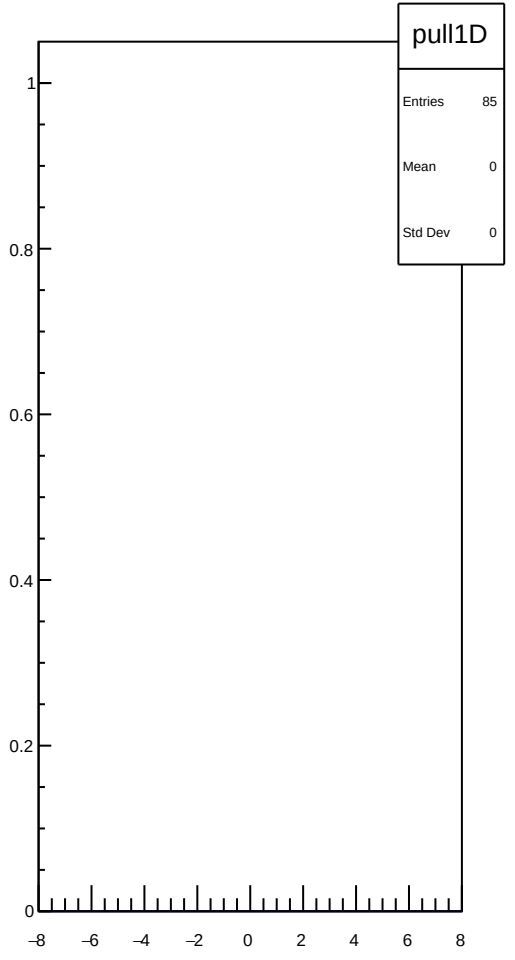


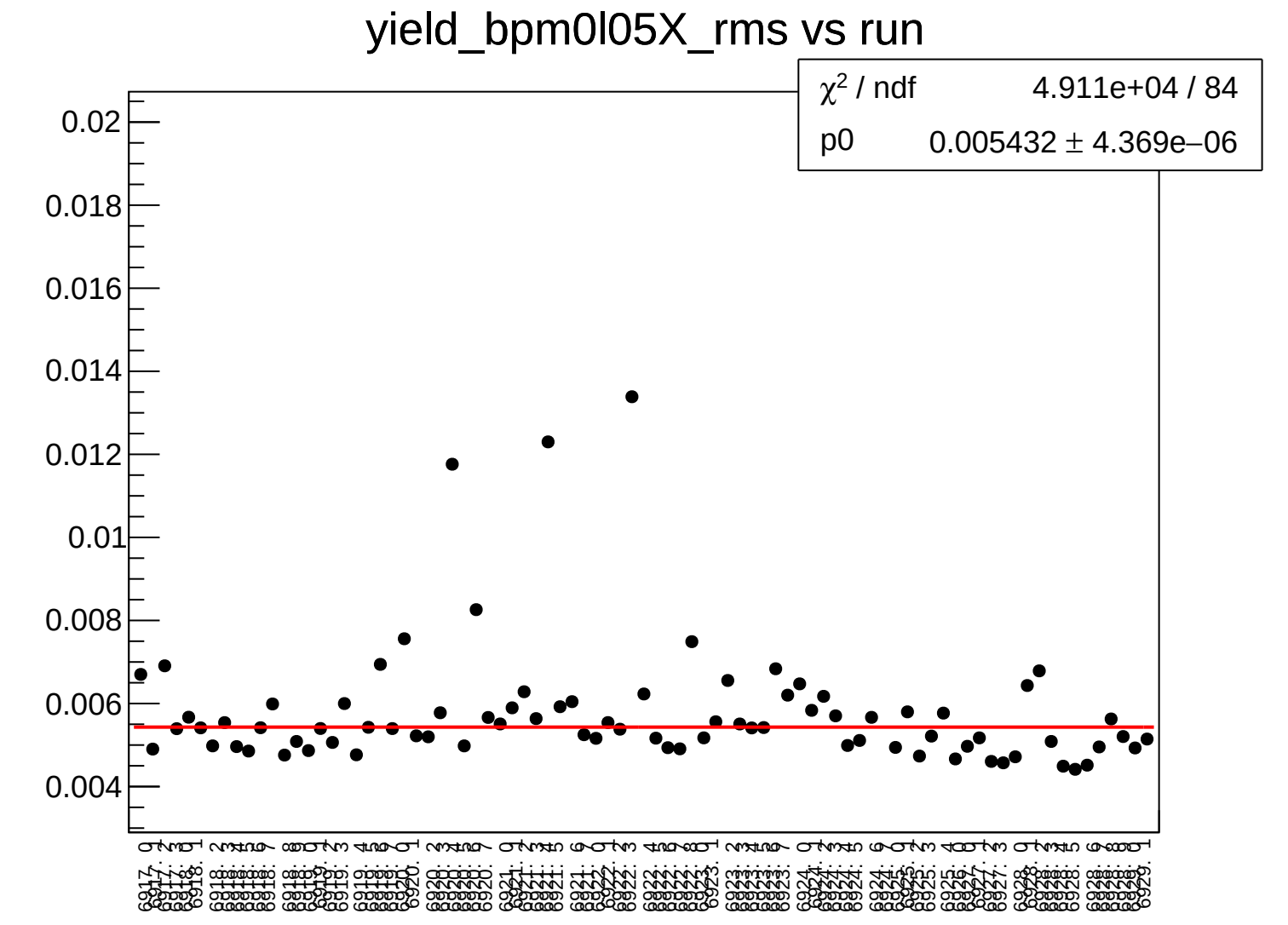

yield_bpm0l04Y_mean vs run
χ² / ndf 5.209e+07 / 84
p0 −0.3459 ± 6.467e−06
−0.26
−0.28
−0.3
−0.32
−0.34
−0.36
−0.38
−0.4
pull
Entries 85
Mean −327.2
Std Dev 376.2
1500
1000
500
0
−500

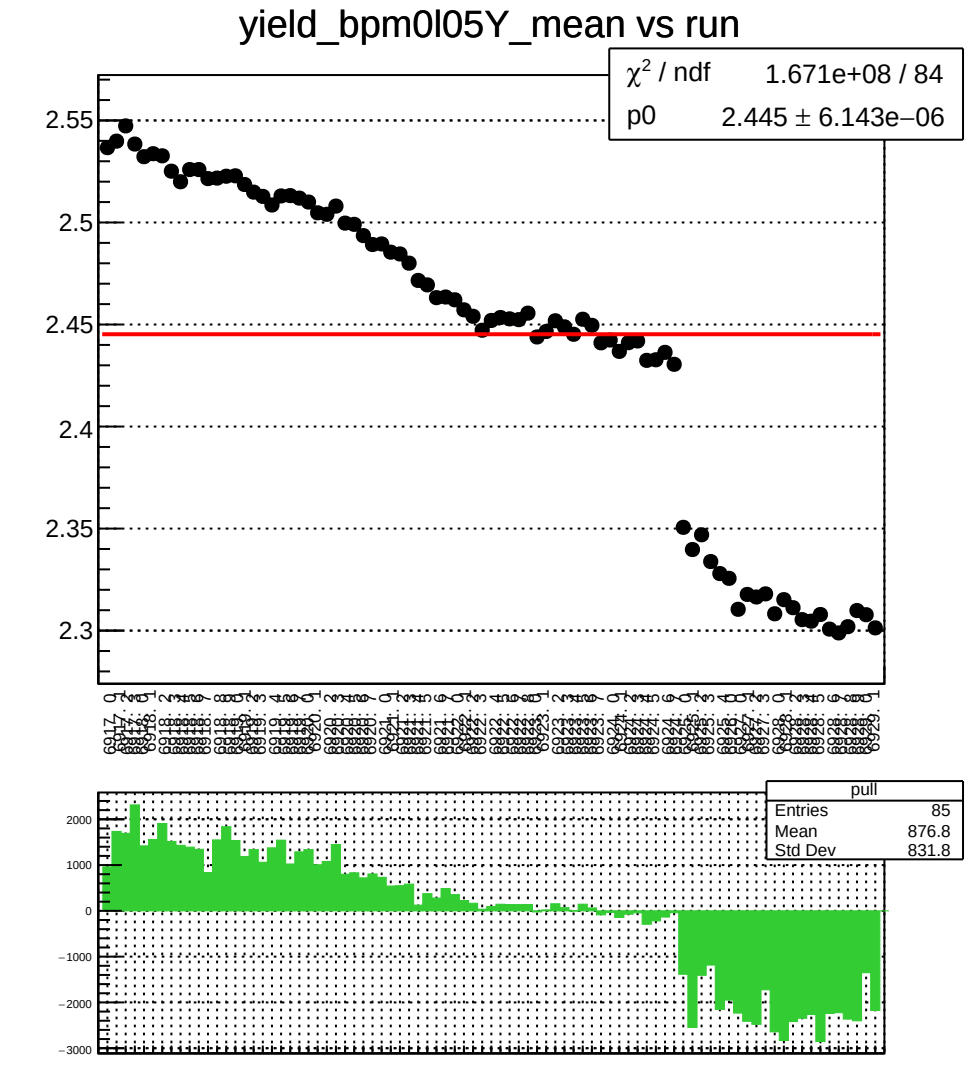

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

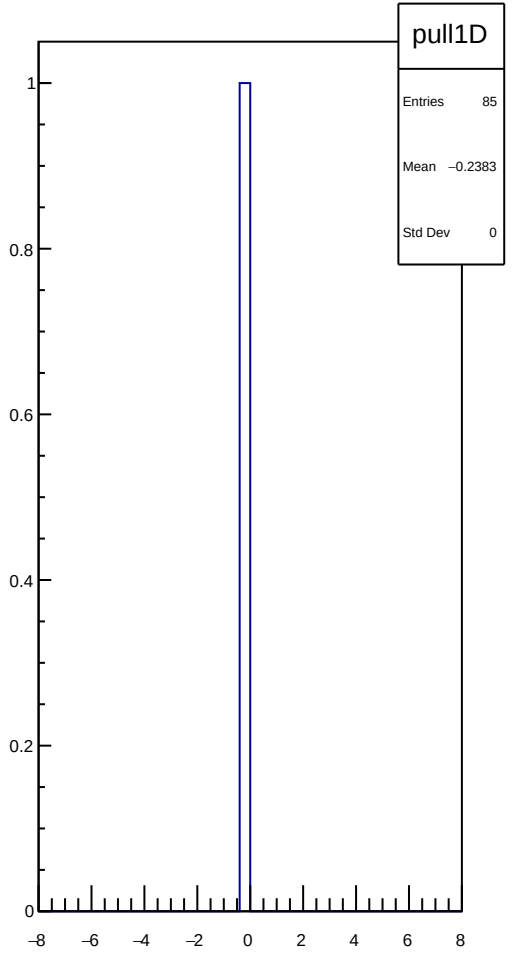

yield_bpm0l04Y_rms vs run
χ² / ndf 6.767e+04 / 84
p0 0.005651 ± 4.573e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

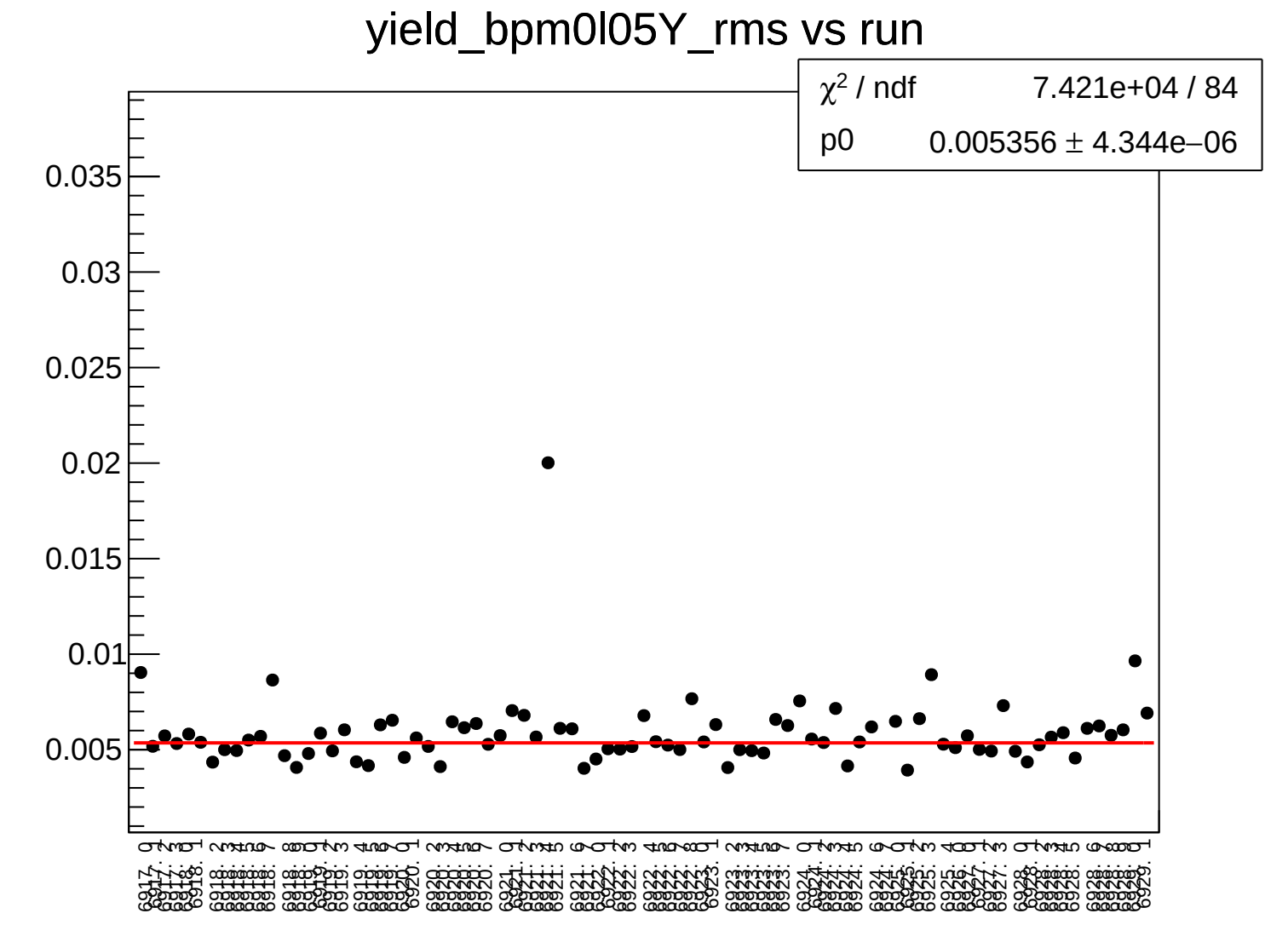

yield_bpm0l05X_mean vs run
χ² / ndf 4.204e+07 / 84
p0 0.4099 ± 6.179e−06
pull
Entries 85
Mean −1764
Std Dev 1805

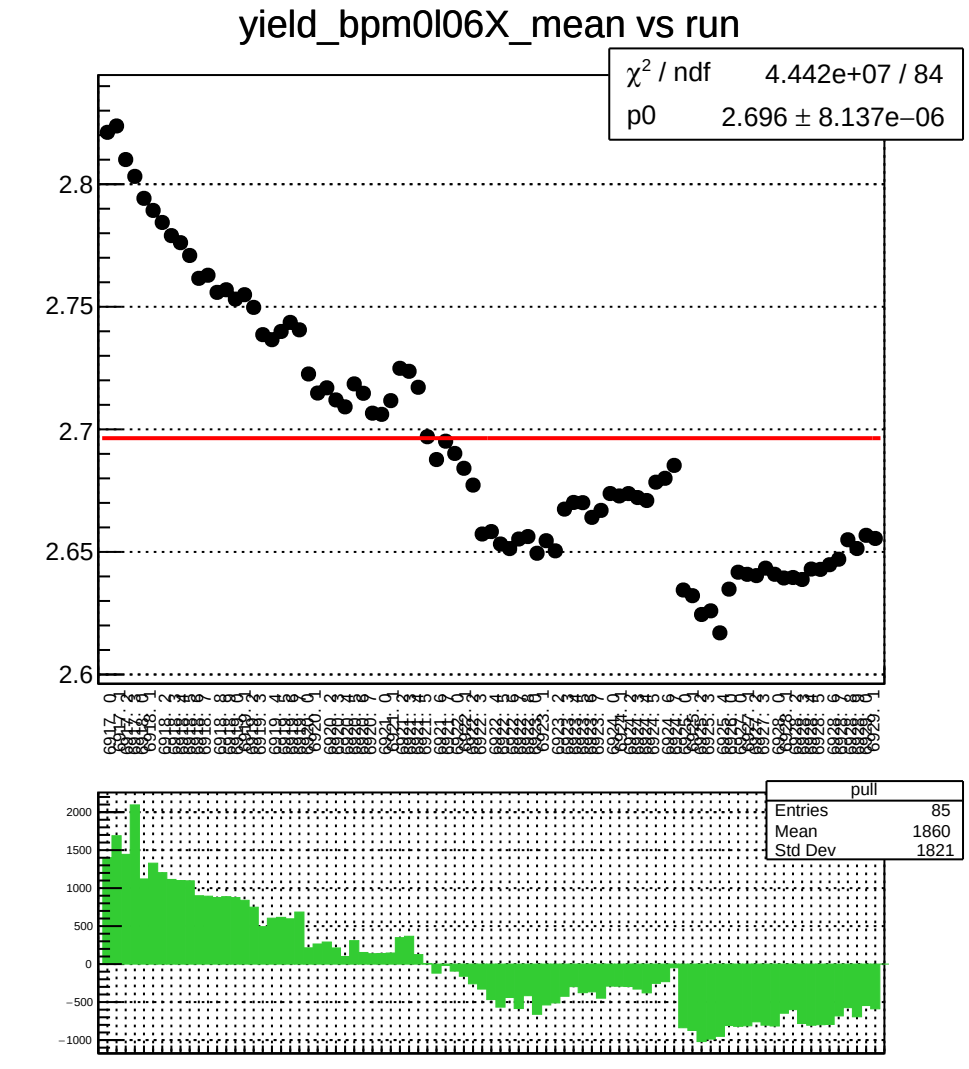

pull1D
Entries 85
Mean 0
Std Dev 0

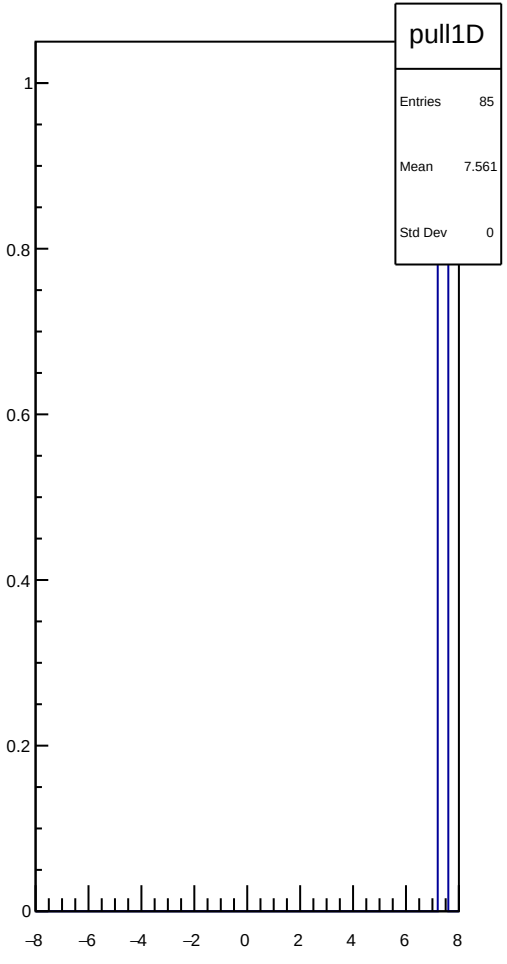

yield_bpm0l05X_rms vs run
χ^2 / ndf 4.911e+04 / 84
p0 0.005432 ± 4.369e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

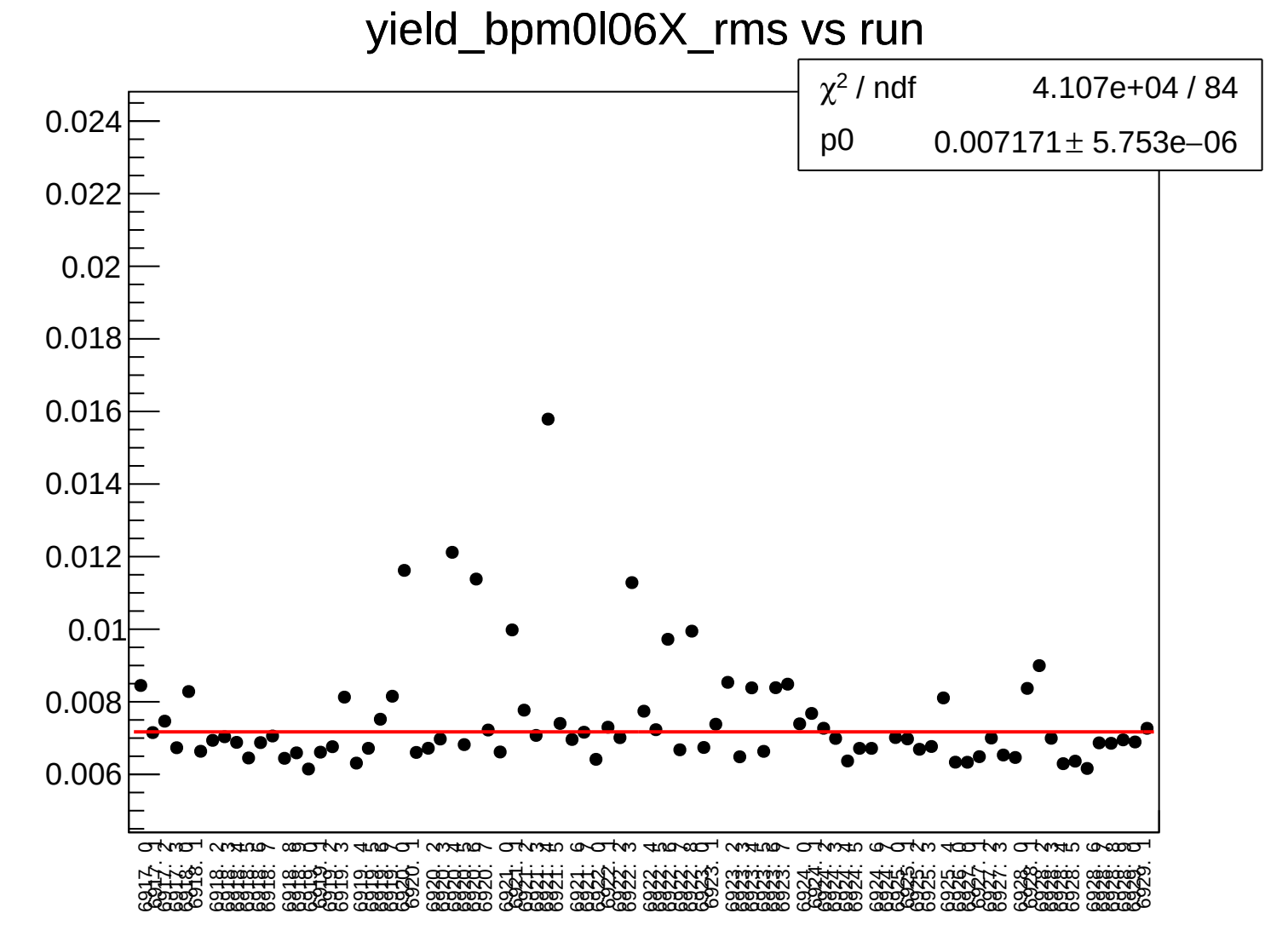

yield_bpm0l05Y_mean vs run
χ² / ndf 1.671e+08 / 84
p0 2.445 ± 6.143e−06
2.55
2.5
2.45
2.4
2.35
2.3
pull
Entries 85
Mean 876.8
Std Dev 831.8
2000
1000
0
−1000
−2000
−3000

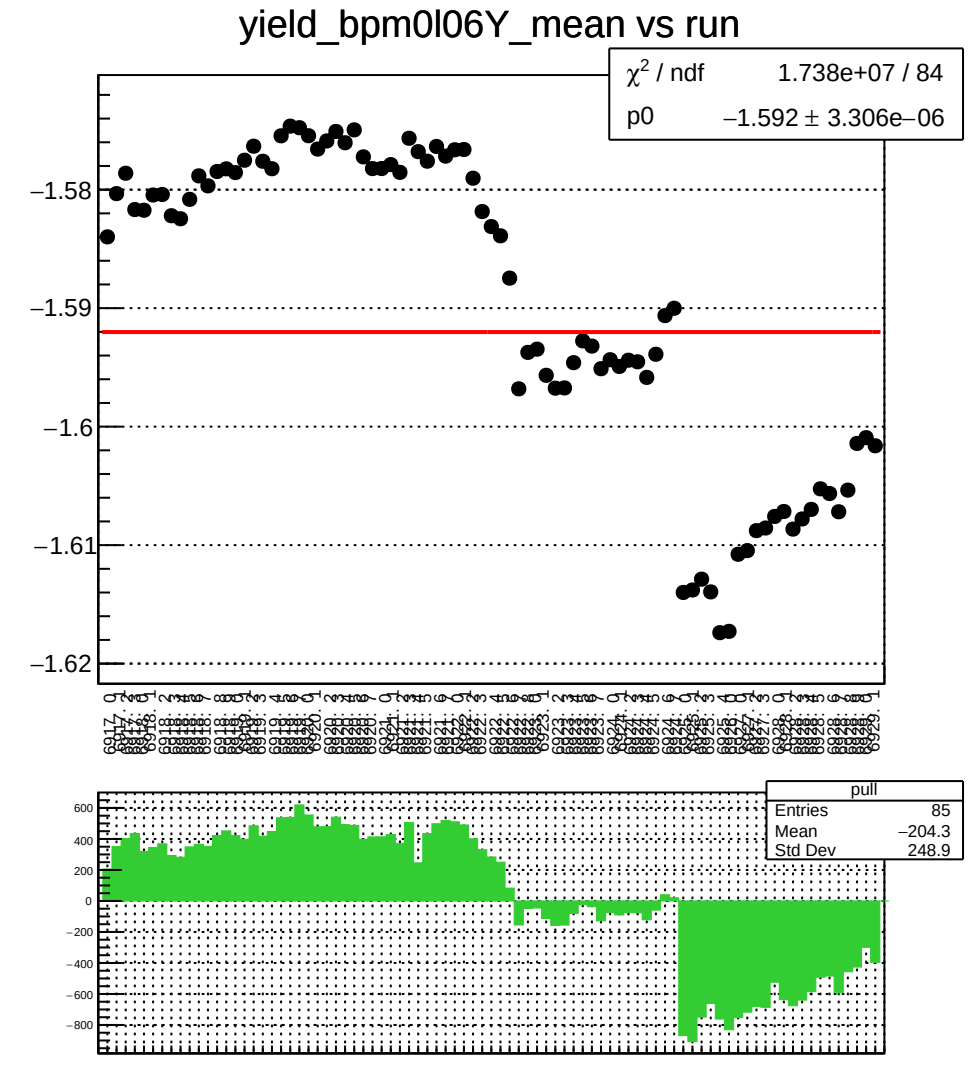

pull1D
Entries 85
Mean −0.2383
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

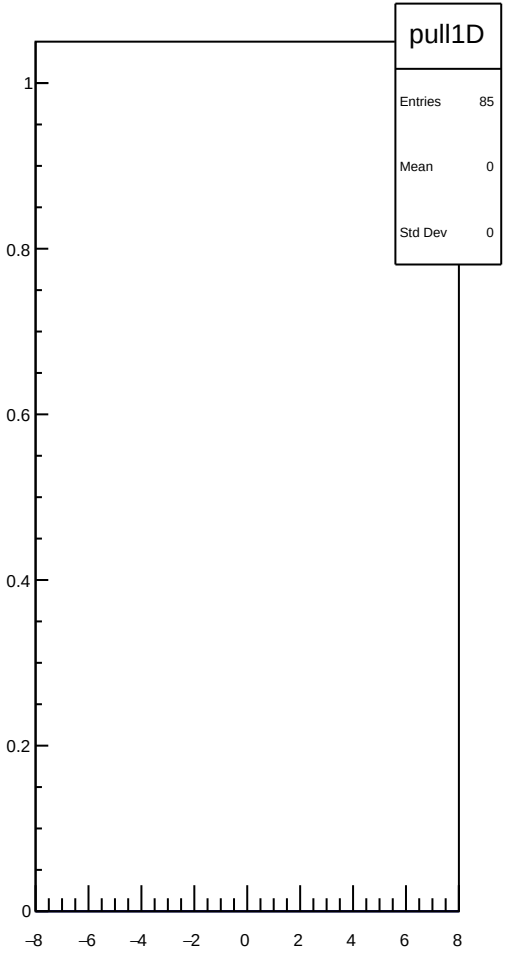

yield_bpm0l05Y_rms vs run
χ² / ndf 7.421e+04 / 84
p0 0.005356 ± 4.344e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

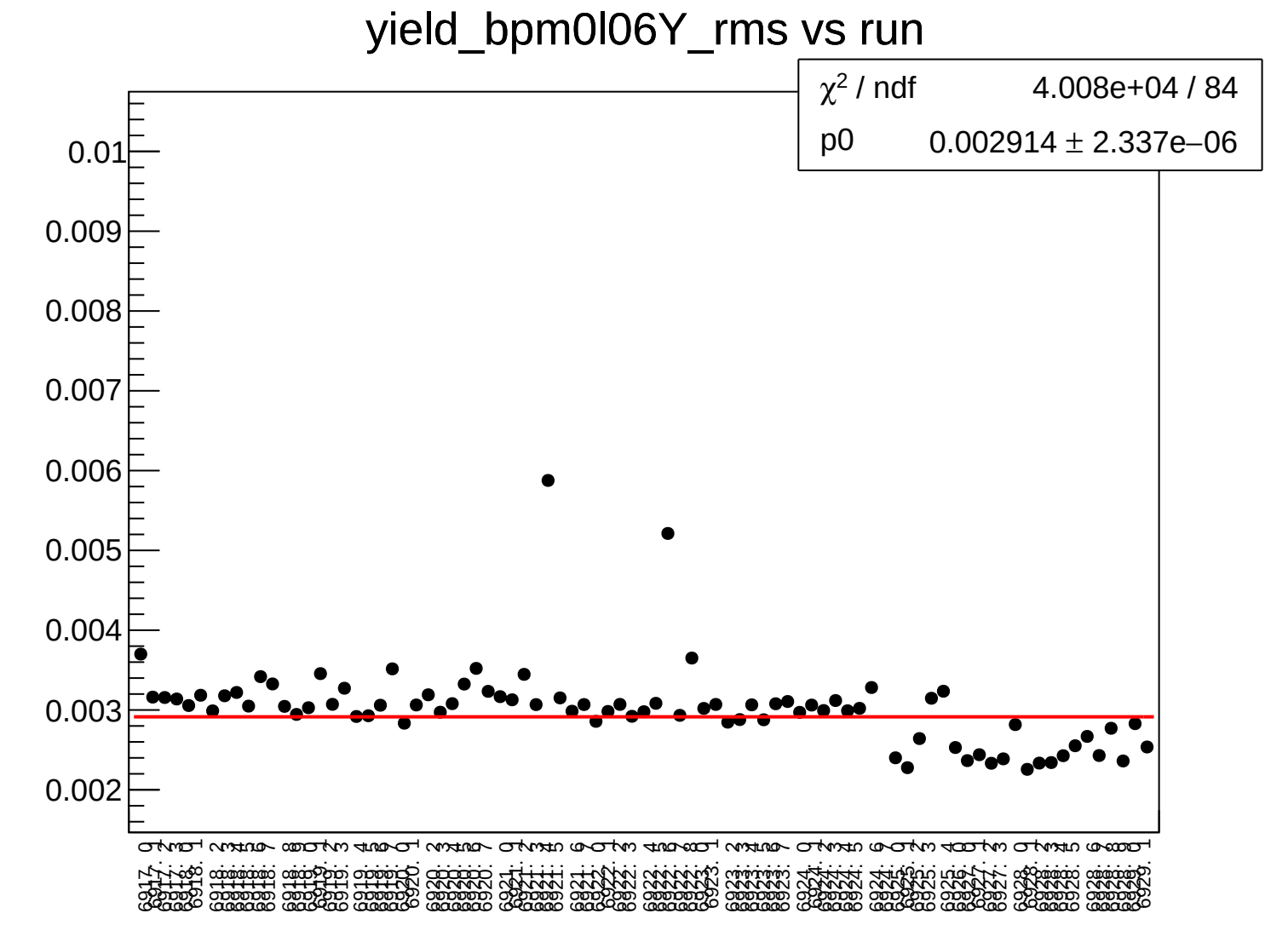

yield_bpm0l06X_mean vs run
χ² / ndf 4.442e+07 / 84
p0 2.696 ± 8.137e−06
2.8
2.75
2.7
2.65
2.6
pull
Entries 85
Mean 1860
Std Dev 1821
2000
1500
1000
500
0
−500
−1000

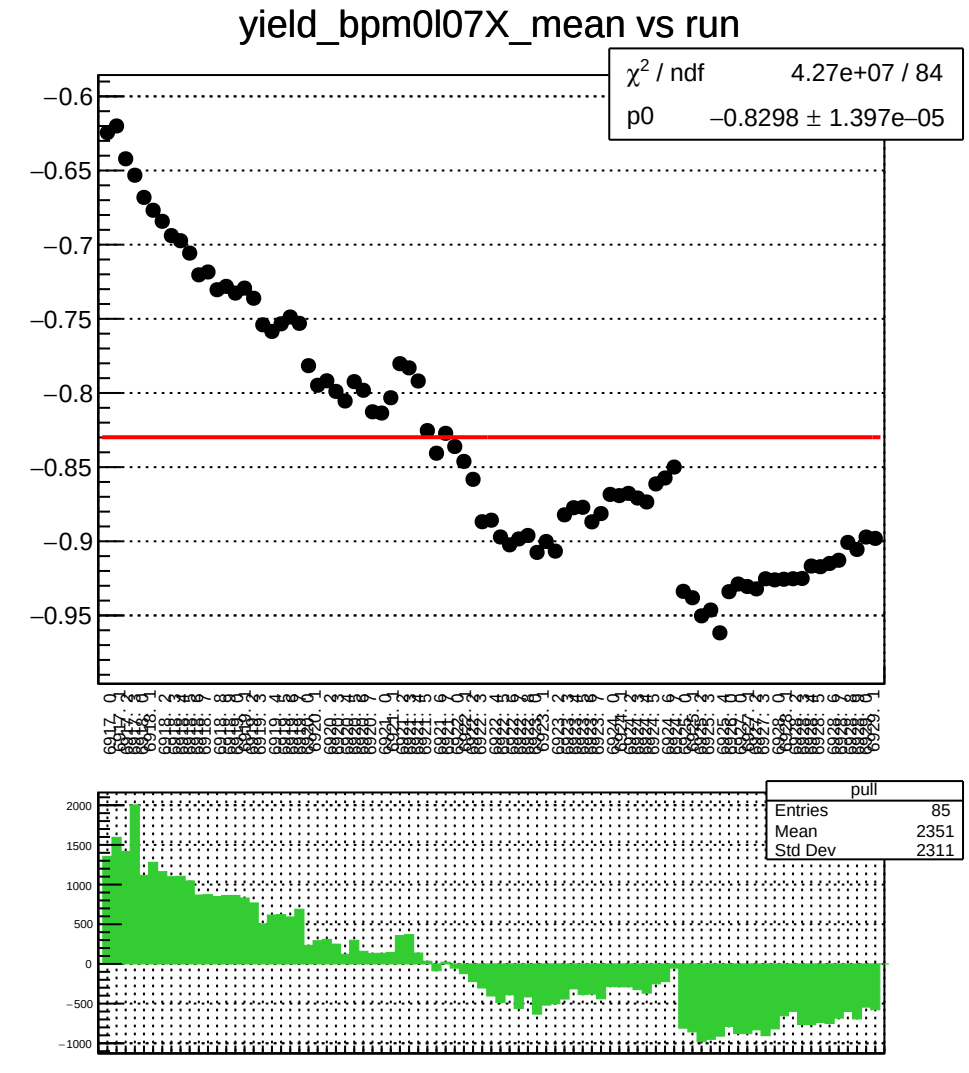

pull1D
Entries 85
Mean 7.561
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

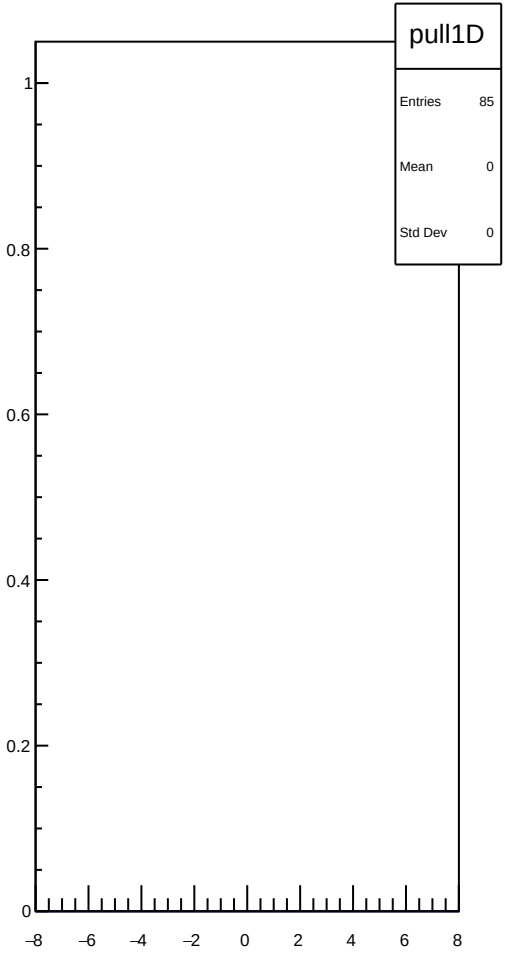

yield_bpm0l06X_rms vs run
χ² / ndf 4.107e+04 / 84
p0 0.007171 ± 5.753e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

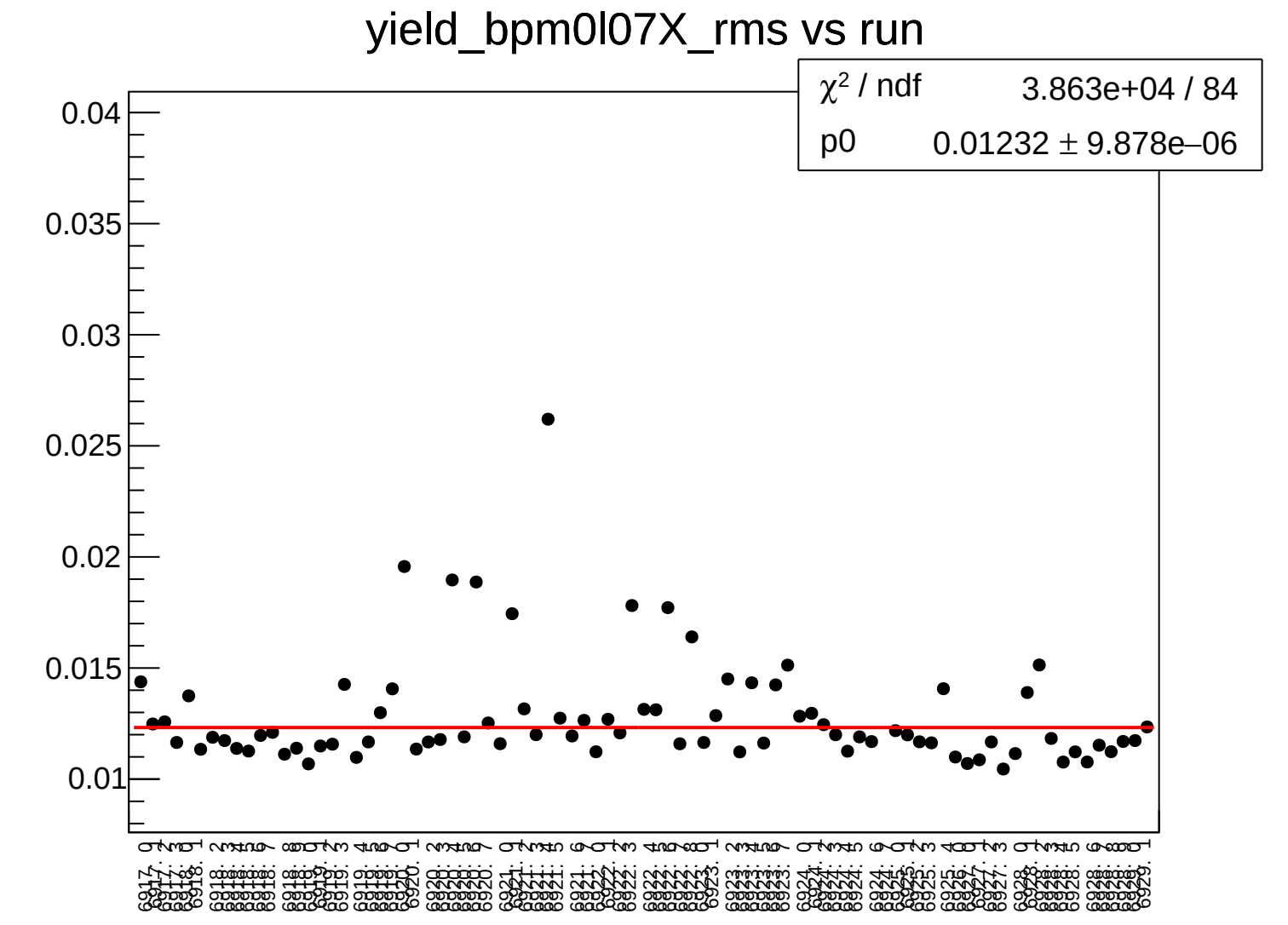

yield_bpm0l06Y_mean vs run
χ² / ndf 1.738e+07 / 84
p0 −1.592 ± 3.306e−06
−1.58
−1.59
−1.6
−1.61
−1.62
pull
Entries 85
Mean −204.3
Std Dev 248.9
600
400
200
0
−200
−400
−600
−800

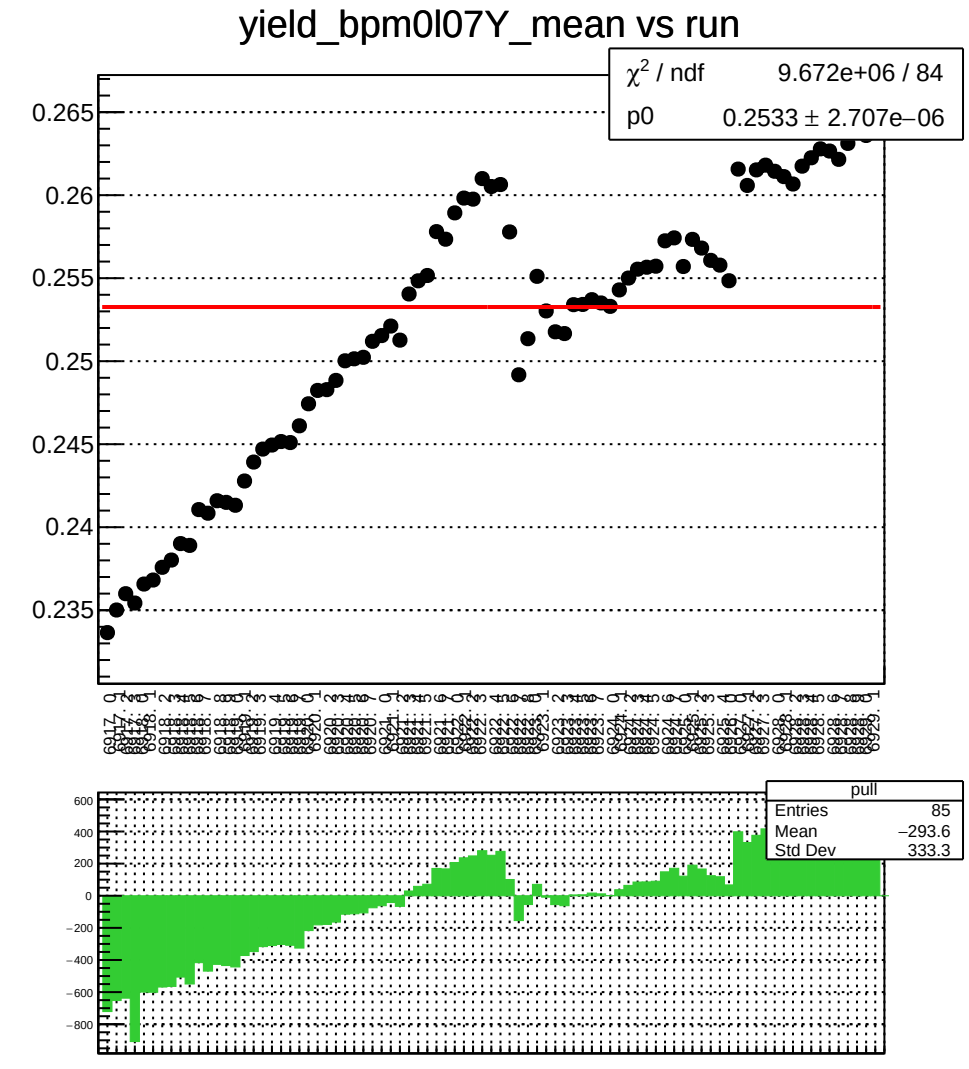

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

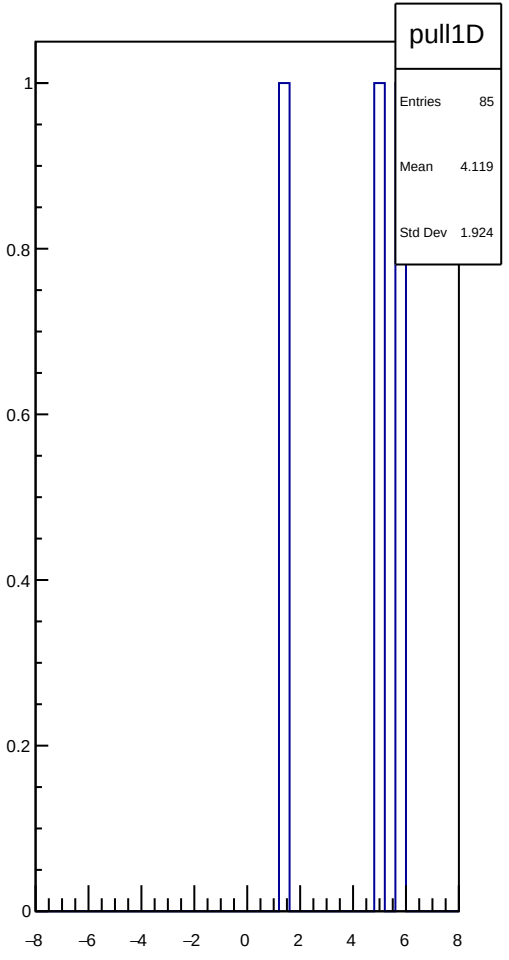

yield_bpm0l06Y_rms vs run
χ² / ndf 4.008e+04 / 84
p0 0.002914 ± 2.337e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

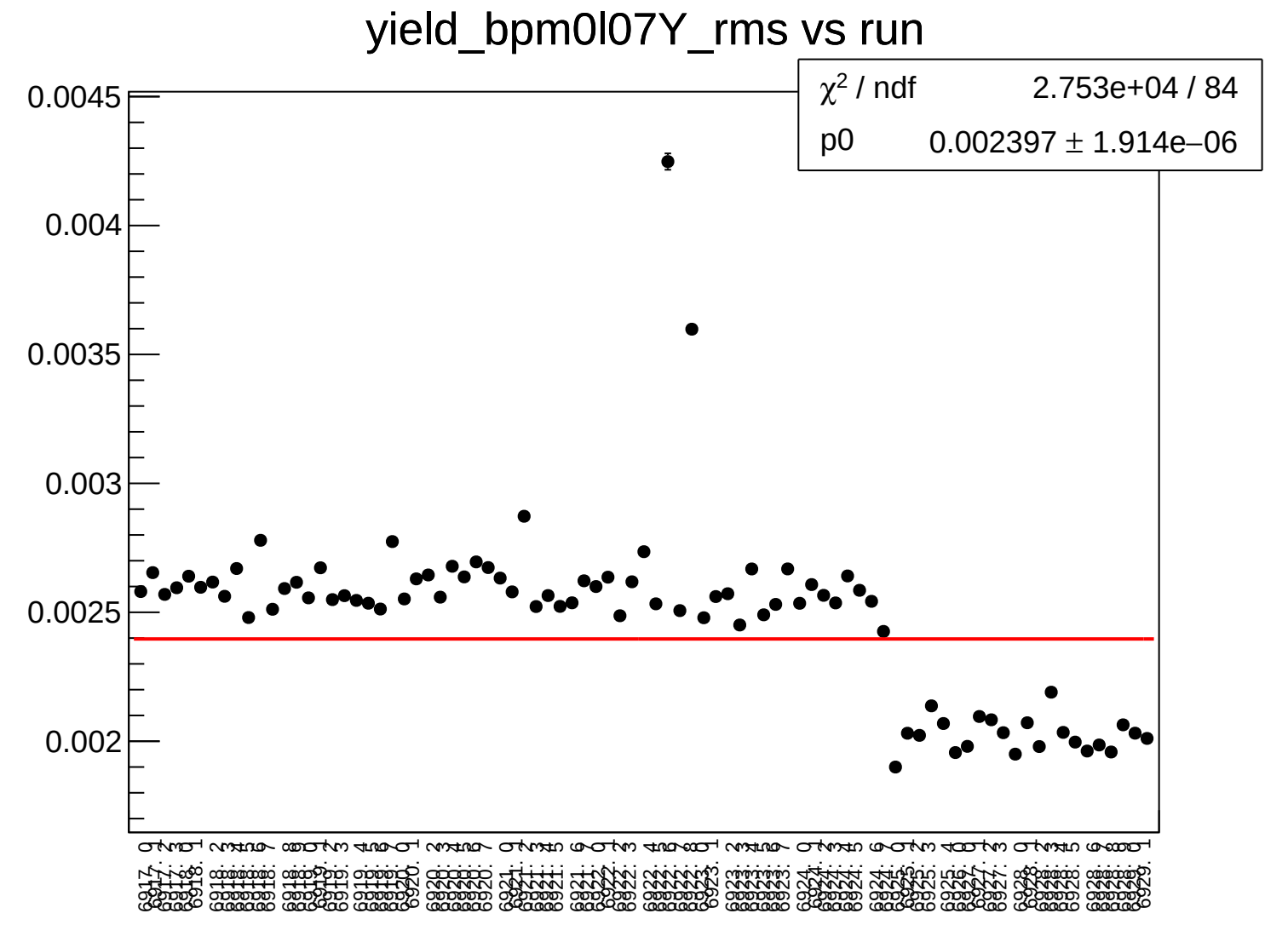

yield_bpm0l07X_mean vs run
χ² / ndf 4.27e+07 / 84
p0 −0.8298 ± 1.397e−05
pull
Entries 85
Mean 2351
Std Dev 2311

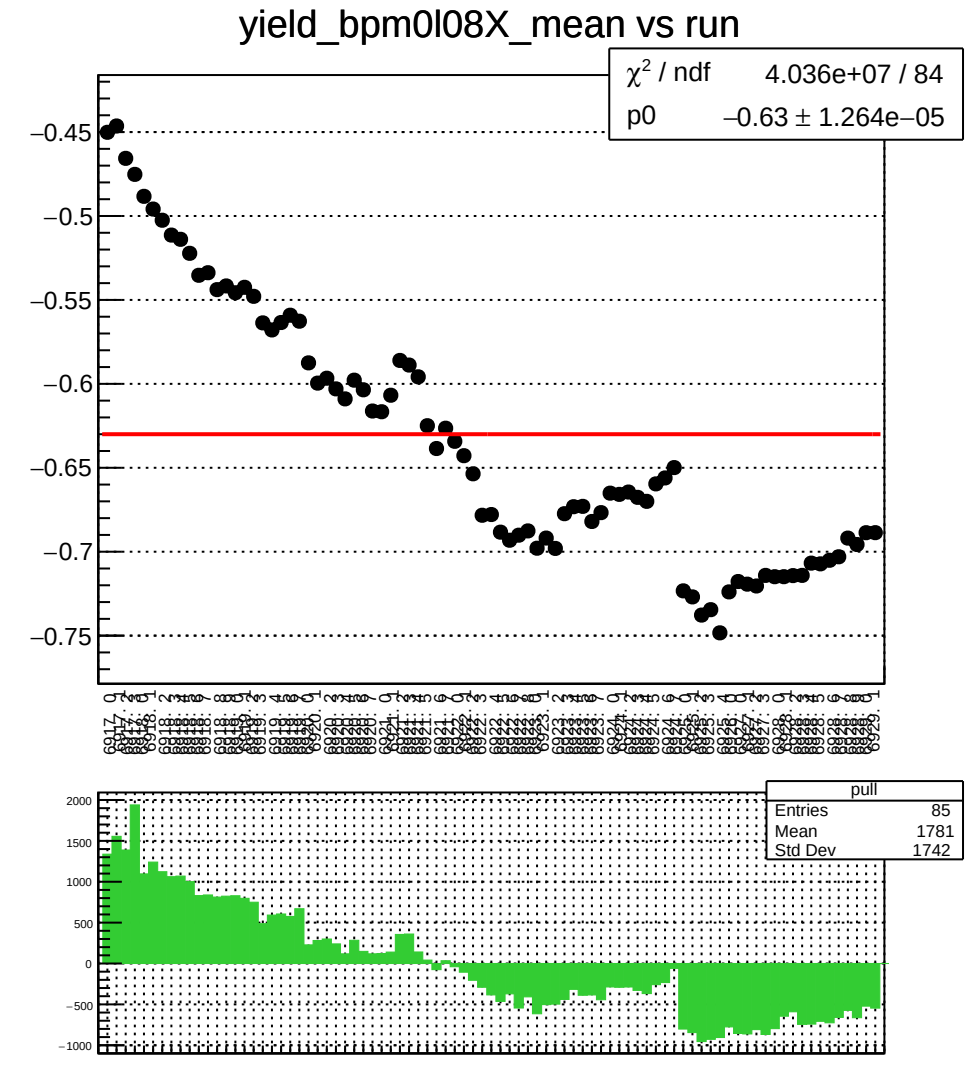

pull1D
Entries 85
Mean 0
Std Dev 0

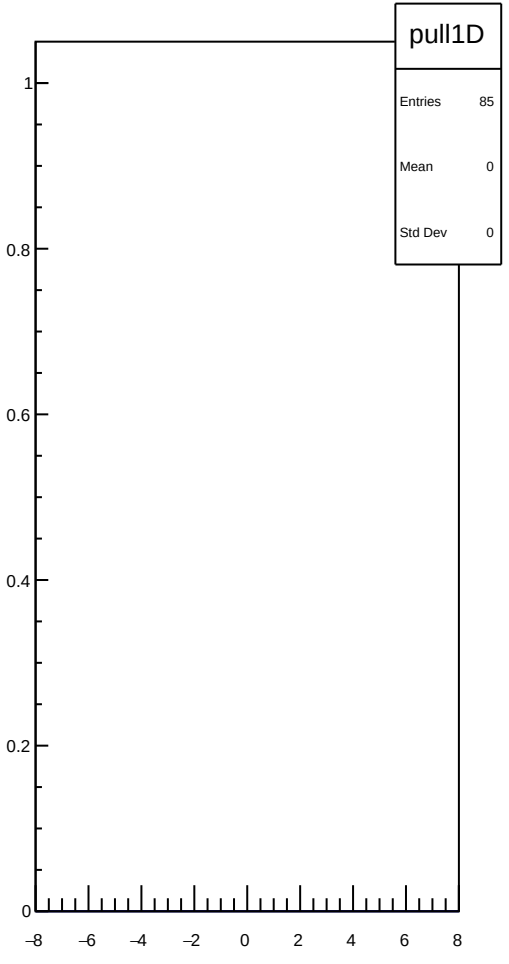

yield_bpm0l07X_rms vs run
χ² / ndf 3.863e+04 / 84
p0 0.01232 ± 9.878e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

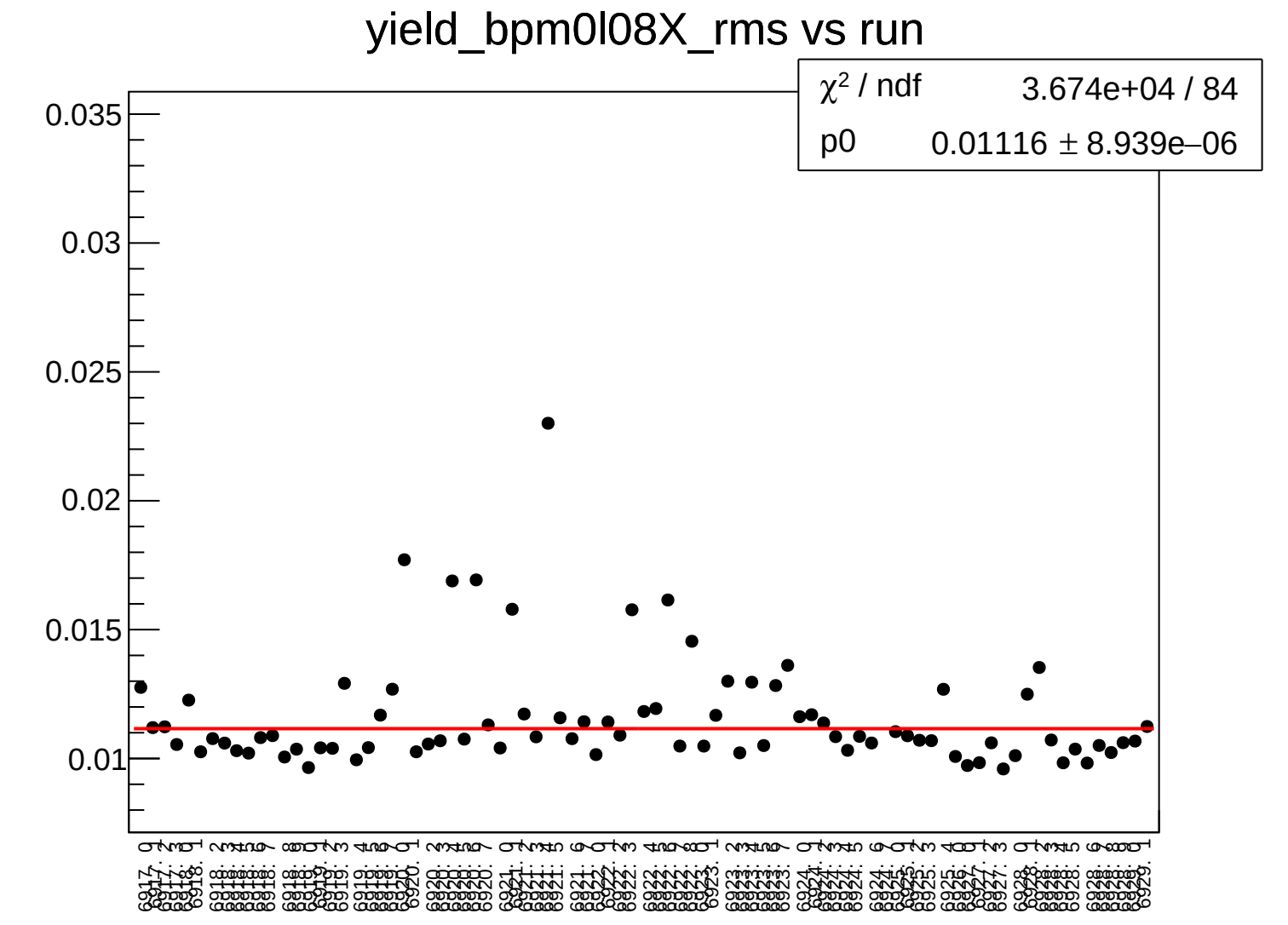

yield_bpm0l07Y_mean vs run
χ² / ndf 9.672e+06 / 84
p0 0.2533 ± 2.707e−06
0.265
0.26
0.255
0.25
0.245
0.24
0.235
pull
Entries 85
Mean −293.6
Std Dev 333.3
600
400
200
0
−200
−400
−600
−800

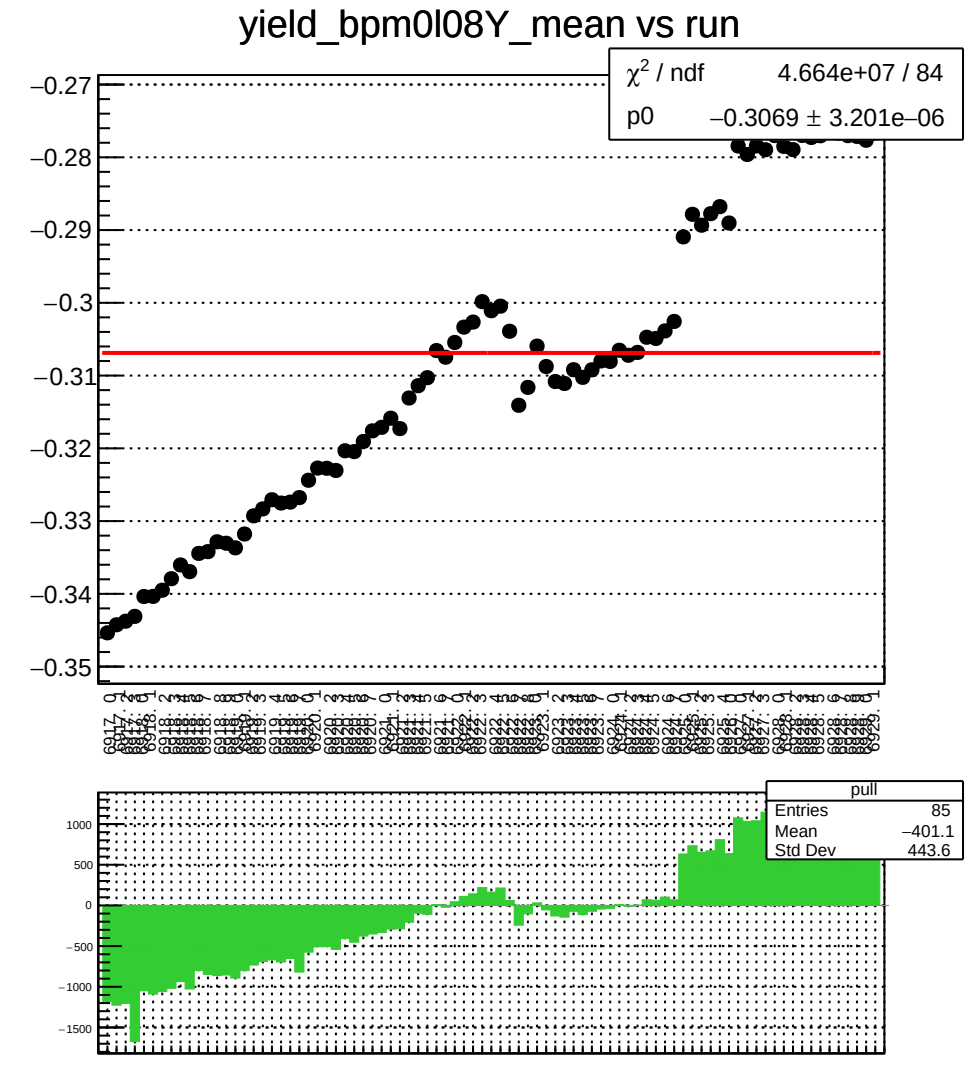

pull1D
Entries 85
Mean 4.119
Std Dev 1.924
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

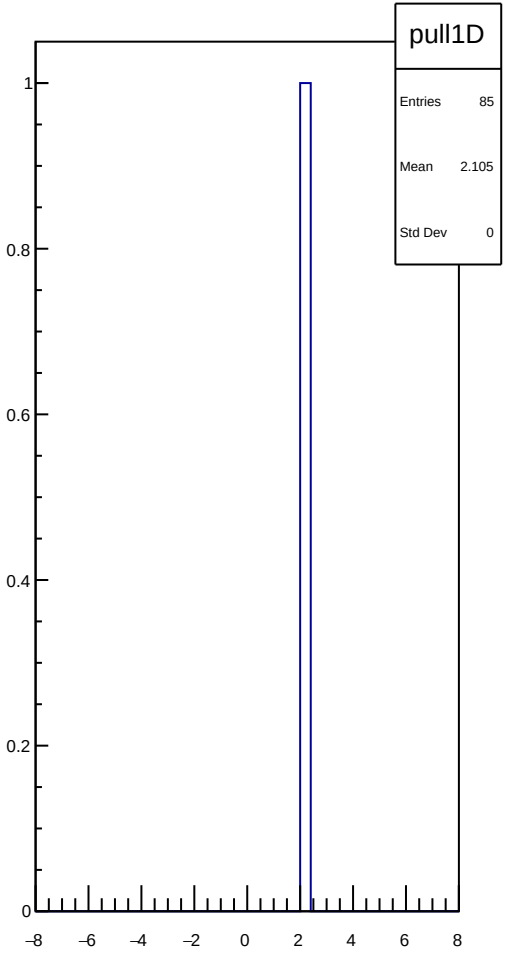

yield_bpm0l07Y_rms vs run
χ^2 / ndf 2.753e+04 / 84
p0 0.002397 ± 1.914e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002

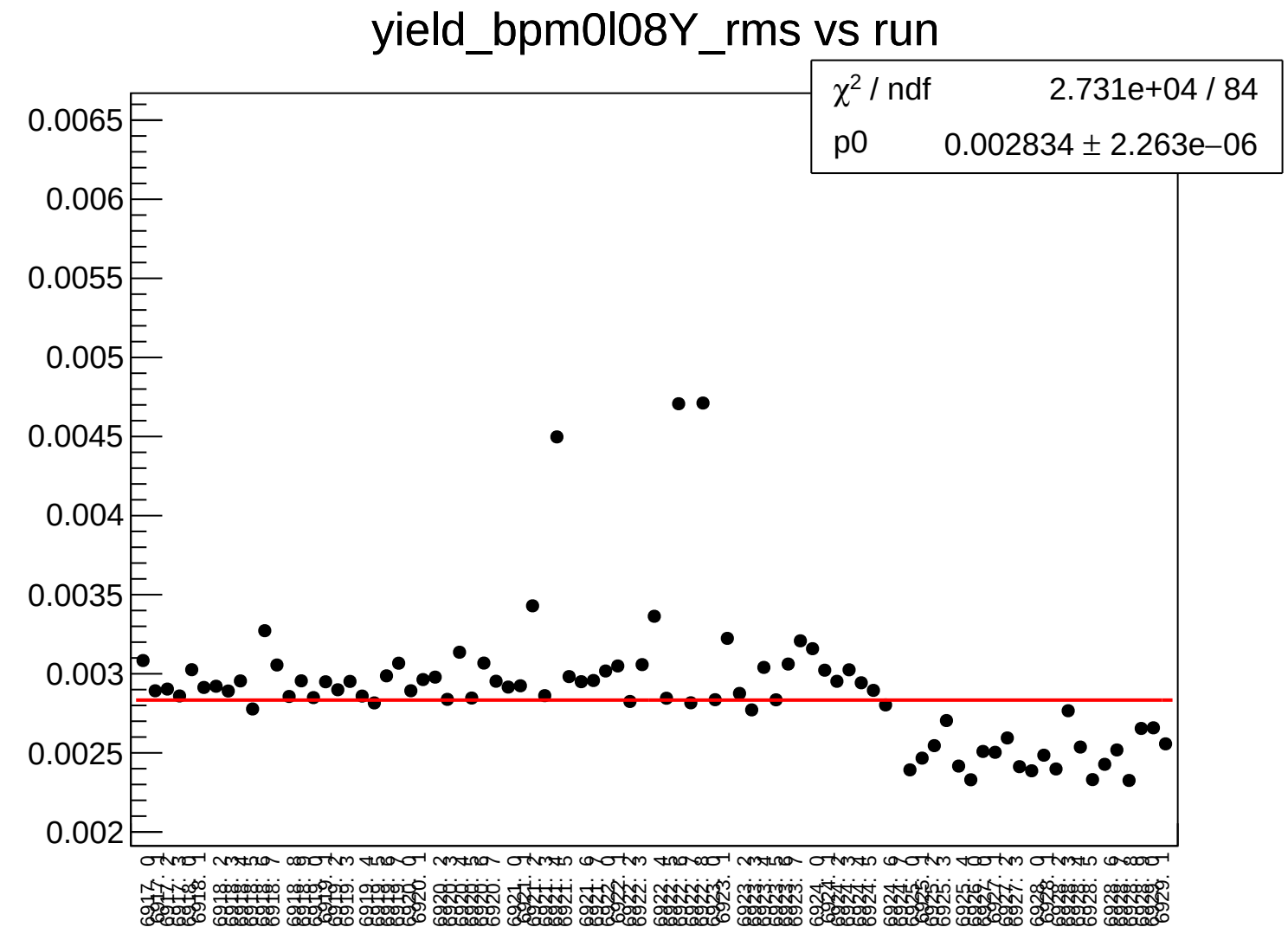

yield_bpm0l08X_mean vs run
χ² / ndf 4.036e+07 / 84
p0 −0.63 ± 1.264e−05
−0.45
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 85
Mean 1781
Std Dev 1742
2000
1500
1000
500
0
−500
−1000

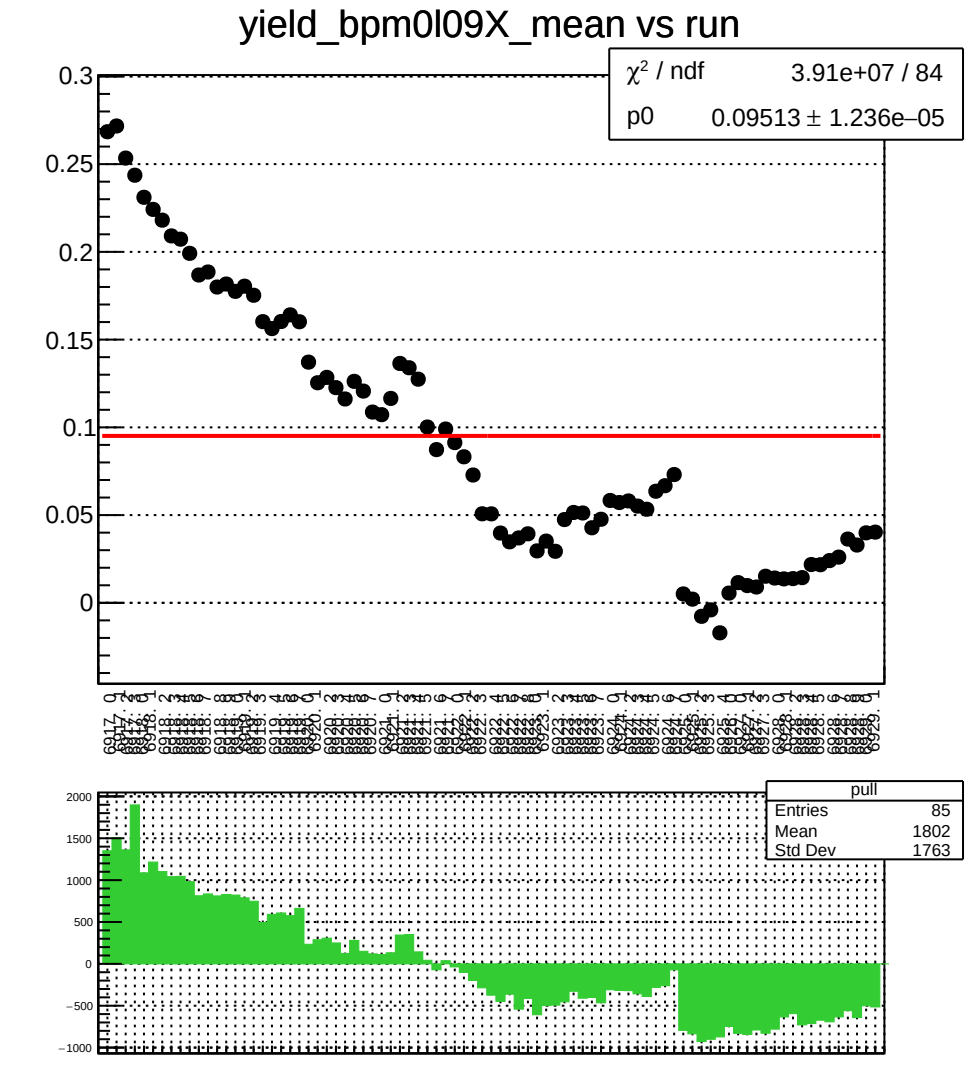

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

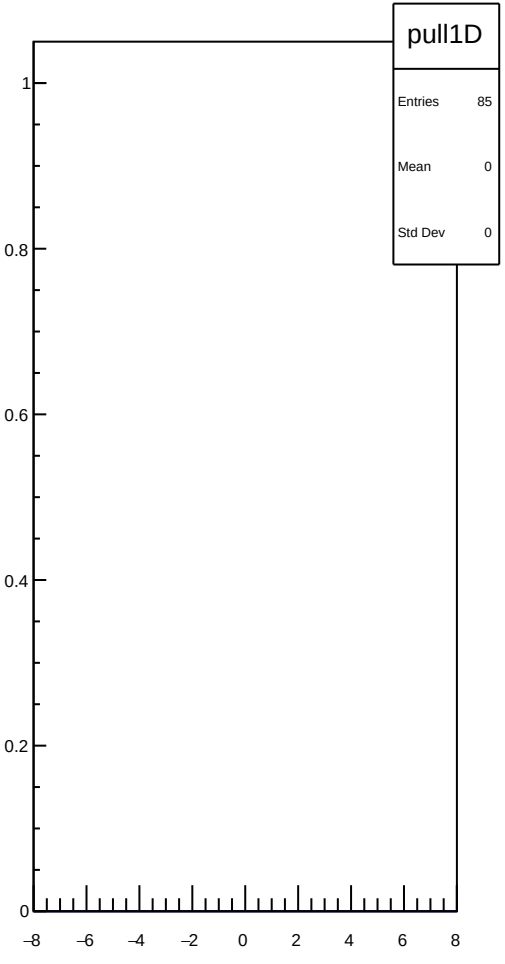

yield_bpm0l08X_rms vs run
χ² / ndf 3.674e+04 / 84
p0 0.01116 ± 8.939e–06
0.035
0.03
0.025
0.02
0.015
0.01

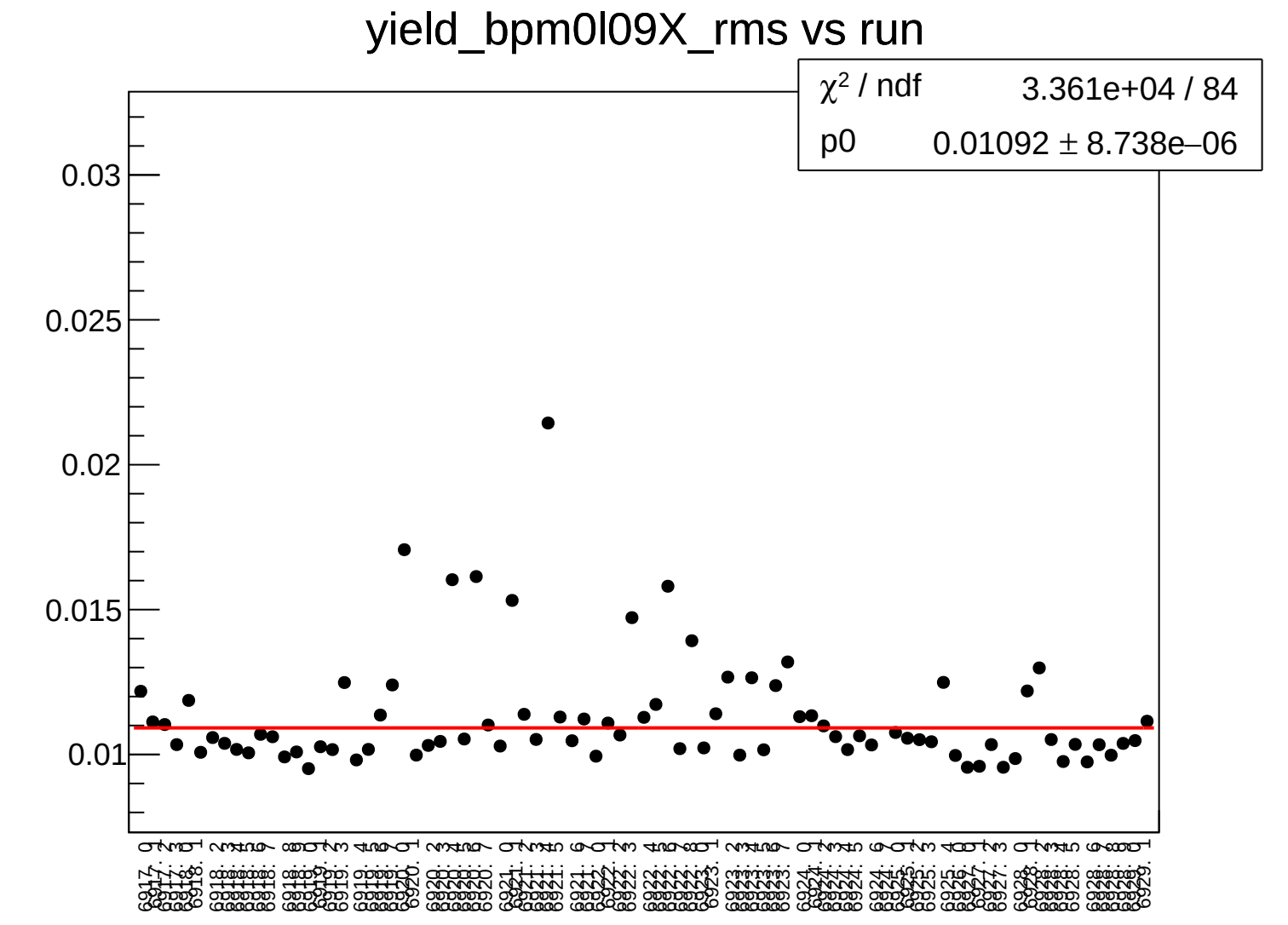

yield_bpm0l08Y_mean vs run
χ² / ndf 4.664e+07 / 84
p0 −0.3069 ± 3.201e−06
−0.27
−0.28
−0.29
−0.3
−0.31
−0.32
−0.33
−0.34
−0.35
pull
Entries 85
Mean −401.1
Std Dev 443.6
1000
500
0
−500
−1000
−1500

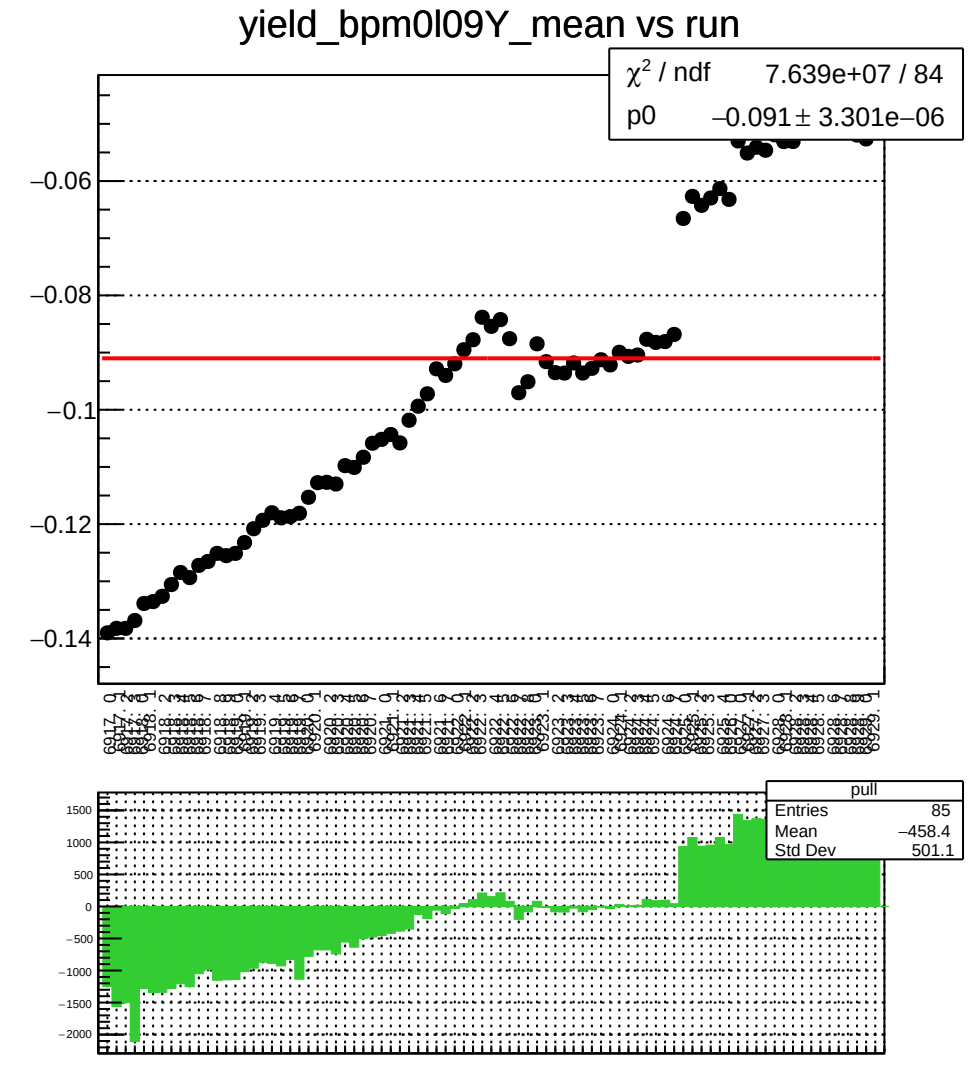

pull1D
Entries 85
Mean 2.105
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

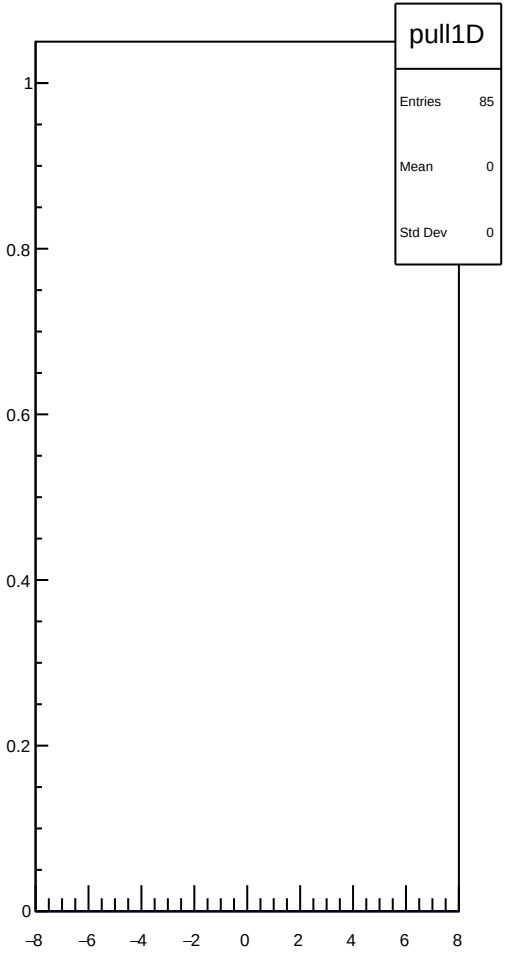

yield_bpm0l08Y_rms vs run
χ² / ndf 2.731e+04 / 84
p0 0.002834 ± 2.263e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

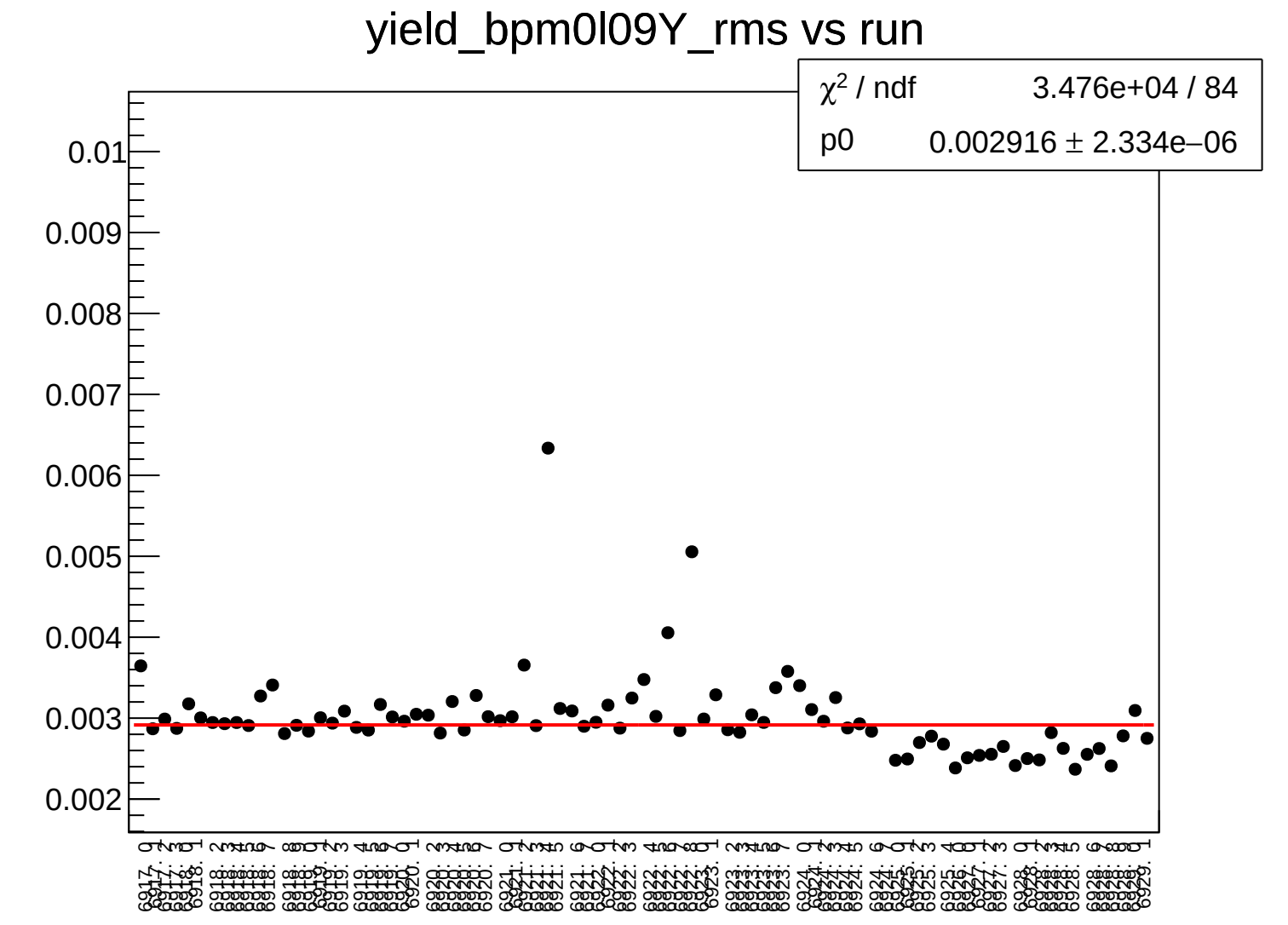

yield_bpm0l09X_mean vs run
χ² / ndf 3.91e+07 / 84
p0 0.09513 ± 1.236e−05
pull
Entries 85
Mean 1802
Std Dev 1763

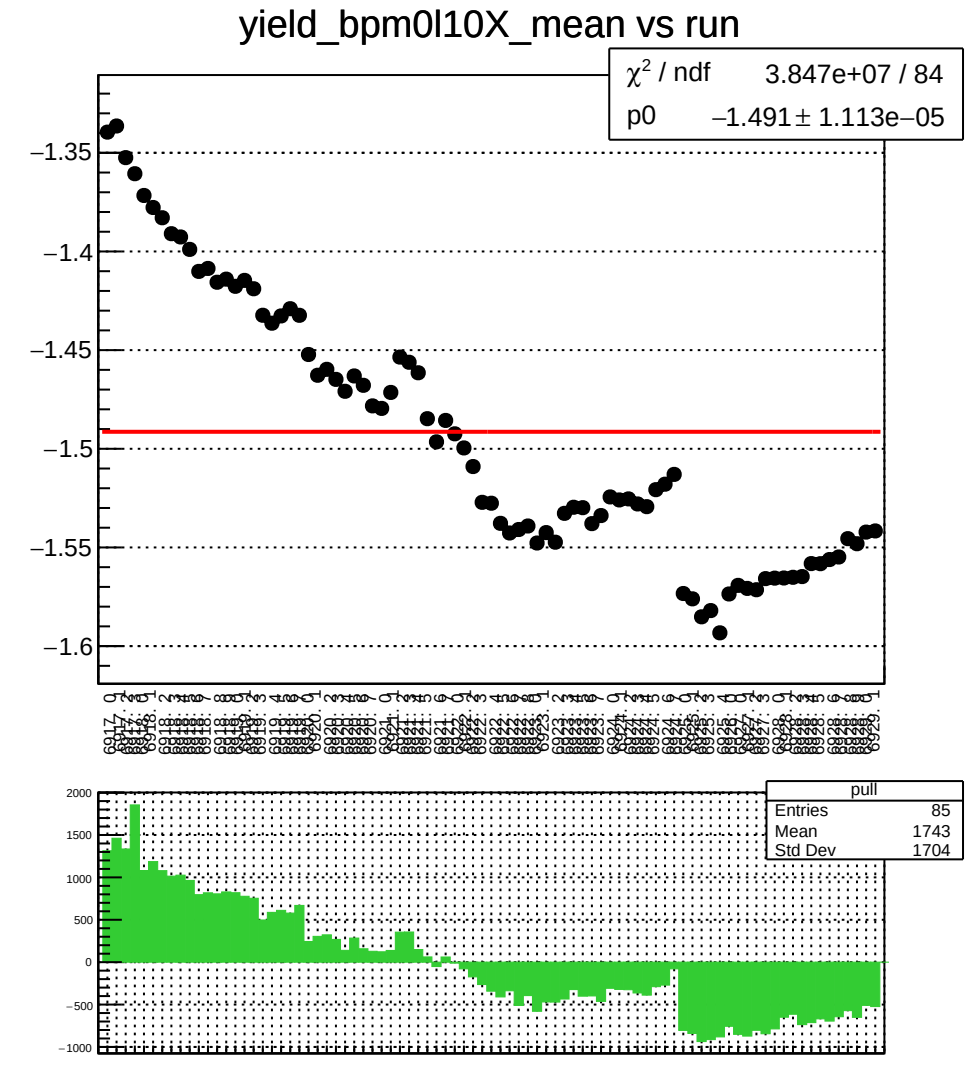

pull1D
Entries 85
Mean 0
Std Dev 0

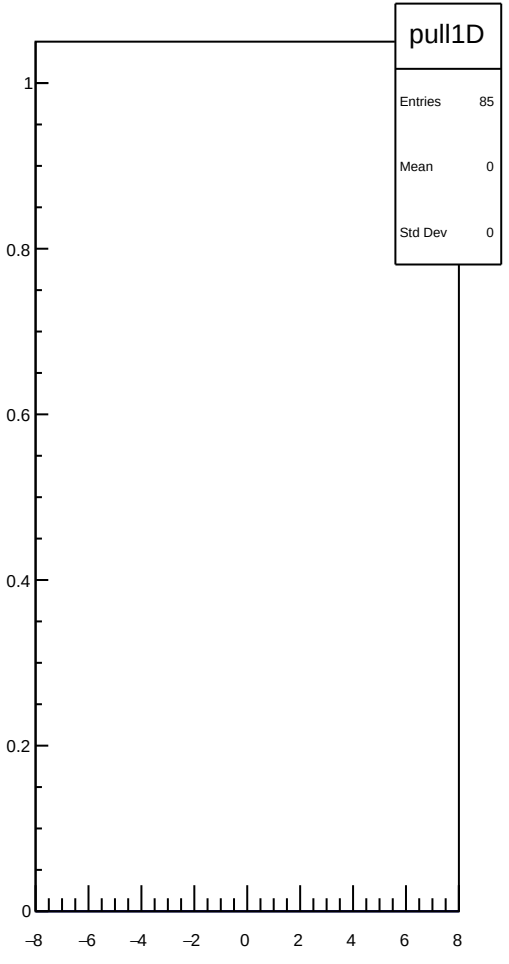

yield_bpm0l09X_rms vs run
χ² / ndf 3.361e+04 / 84
p0 0.01092 ± 8.738e–06
0.03
0.025
0.02
0.015
0.01

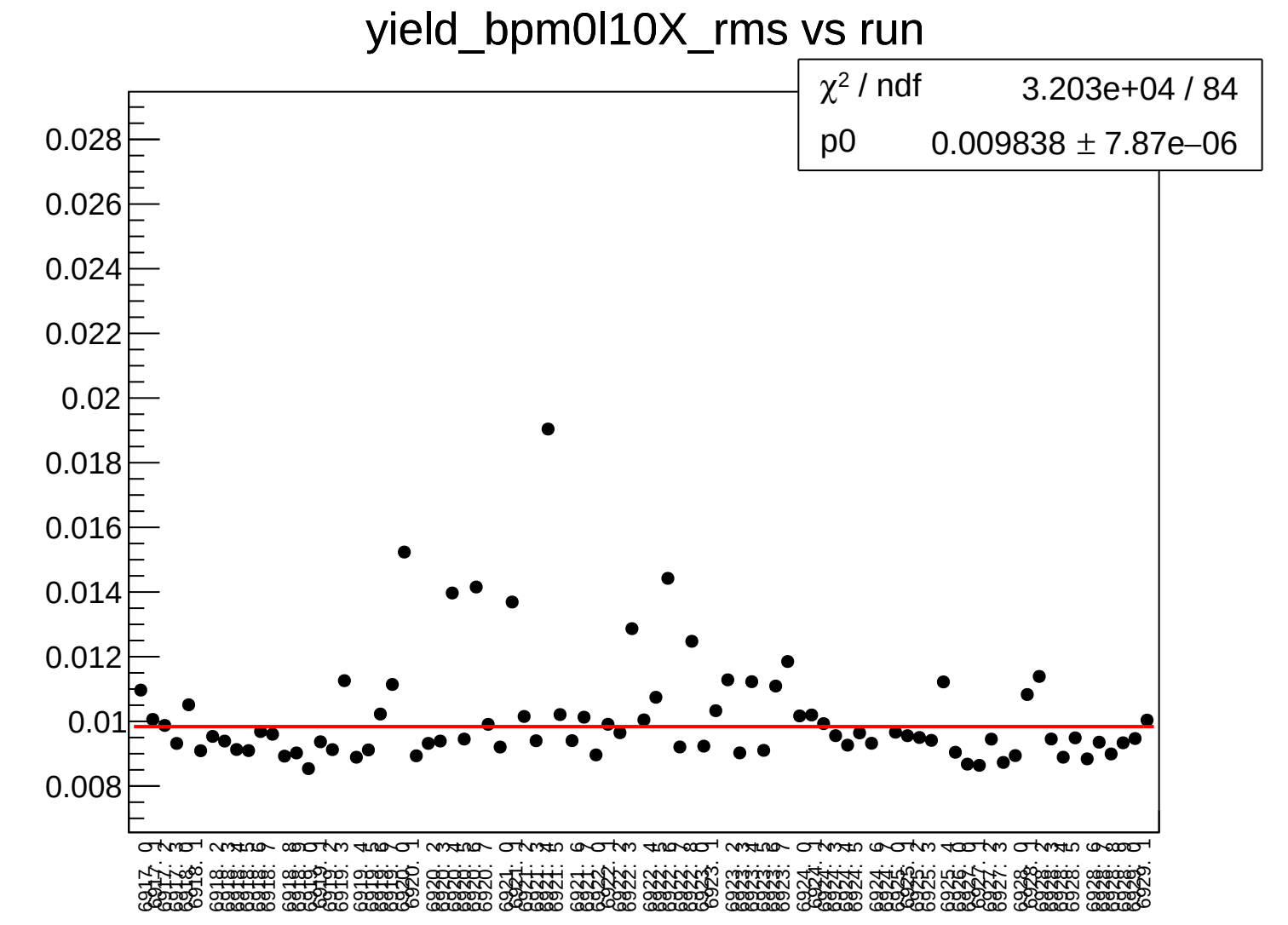

yield_bpm0l09Y_mean vs run
χ² / ndf 7.639e+07 / 84
p0 −0.091 ± 3.301e−06
−0.06
−0.08
−0.1
−0.12
−0.14
pull
Entries 85
Mean −458.4
Std Dev 501.1
1500
1000
500
0
−500
−1000
−1500
−2000

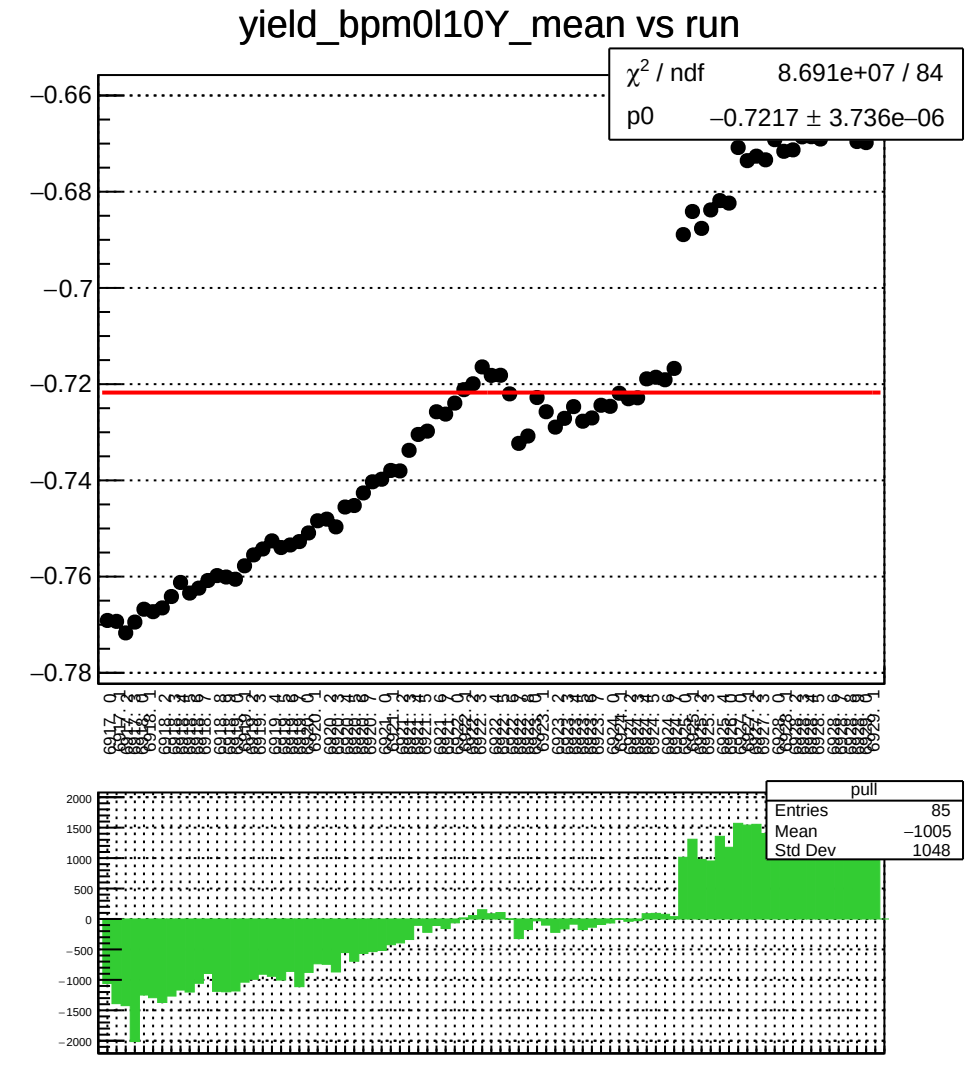

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

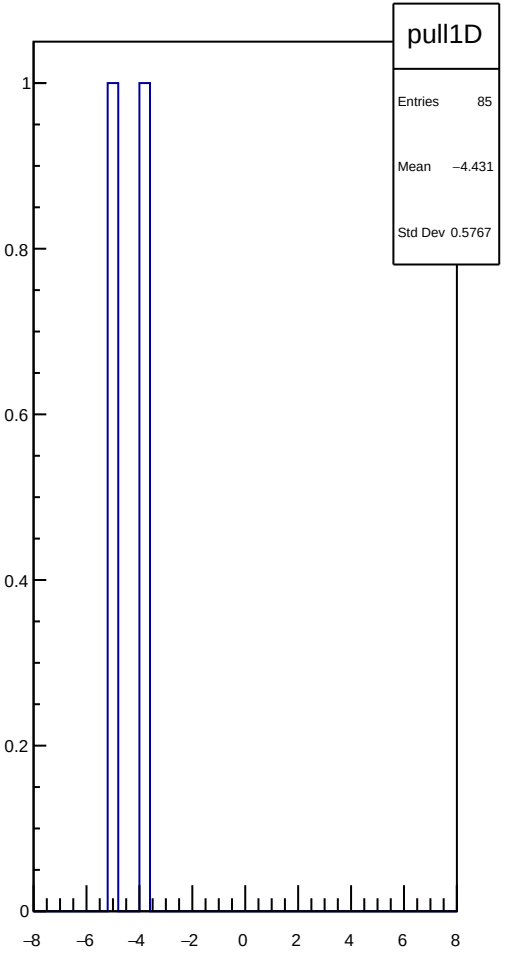

yield_bpm0l09Y_rms vs run
χ^2 / ndf 3.476e+04 / 84
p0 0.002916 ± 2.334e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

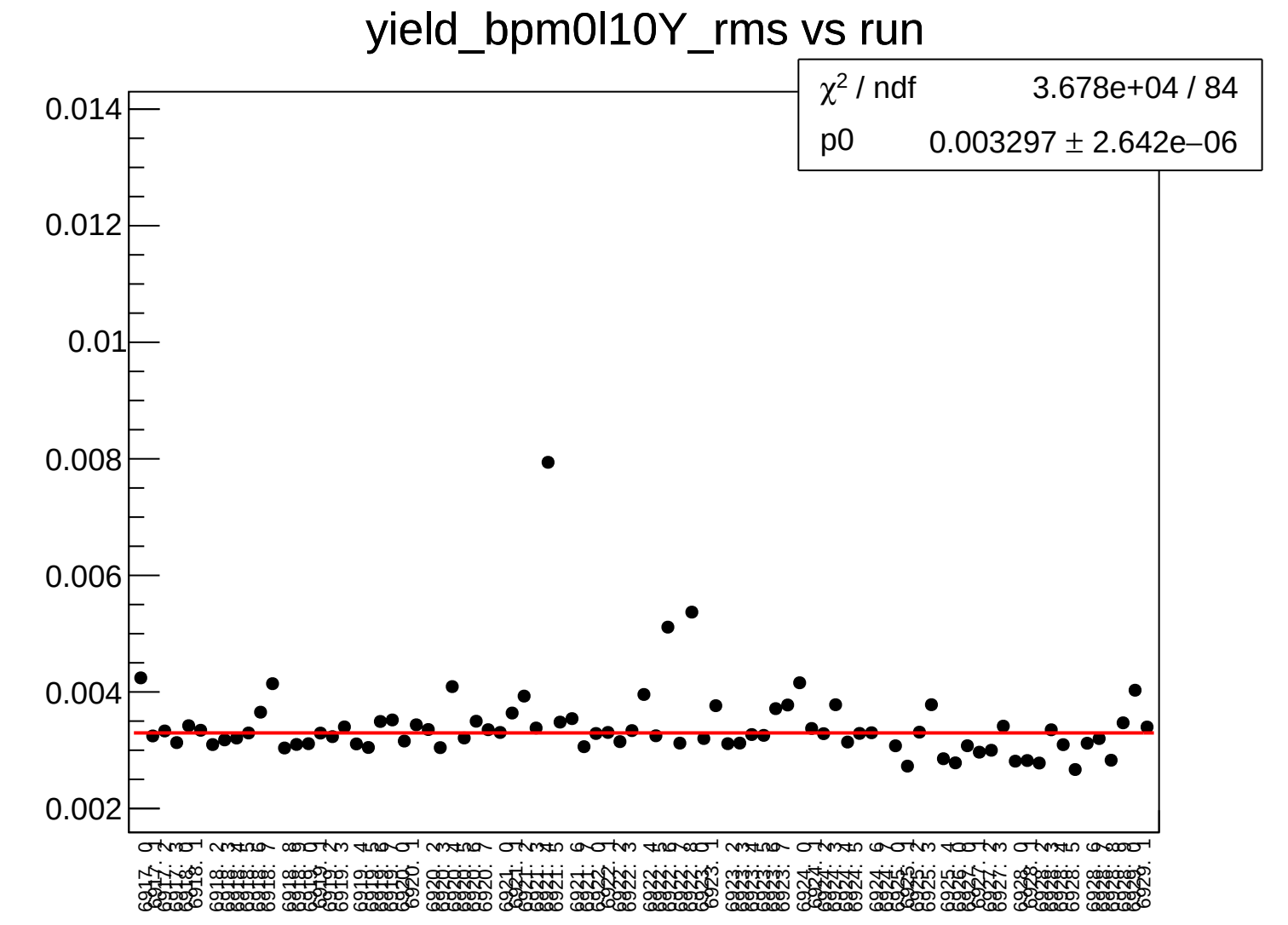

yield_bpm0l10X_mean vs run
χ² / ndf 3.847e+07 / 84
p0 −1.491 ± 1.113e−05
−1.35
−1.4
−1.45
−1.5
−1.55
−1.6
pull
Entries 85
Mean 1743
Std Dev 1704
2000
1500
1000
500
0
−500
−1000

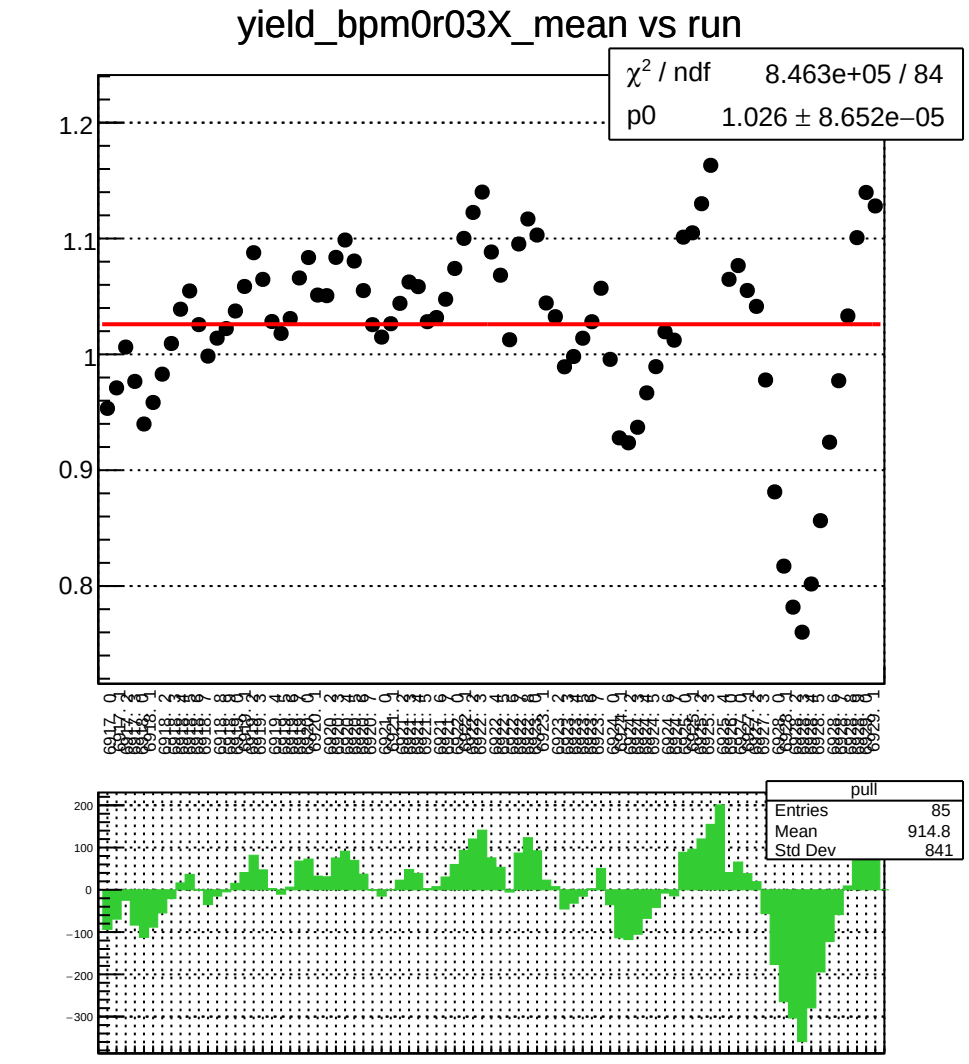

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

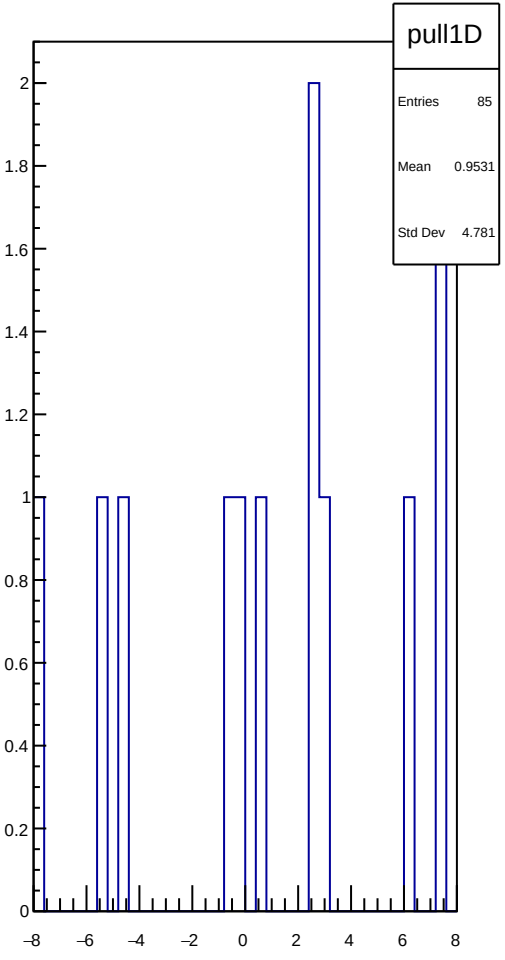

yield_bpm0l10X_rms vs run
χ² / ndf 3.203e+04 / 84
p0 0.009838 ± 7.87e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

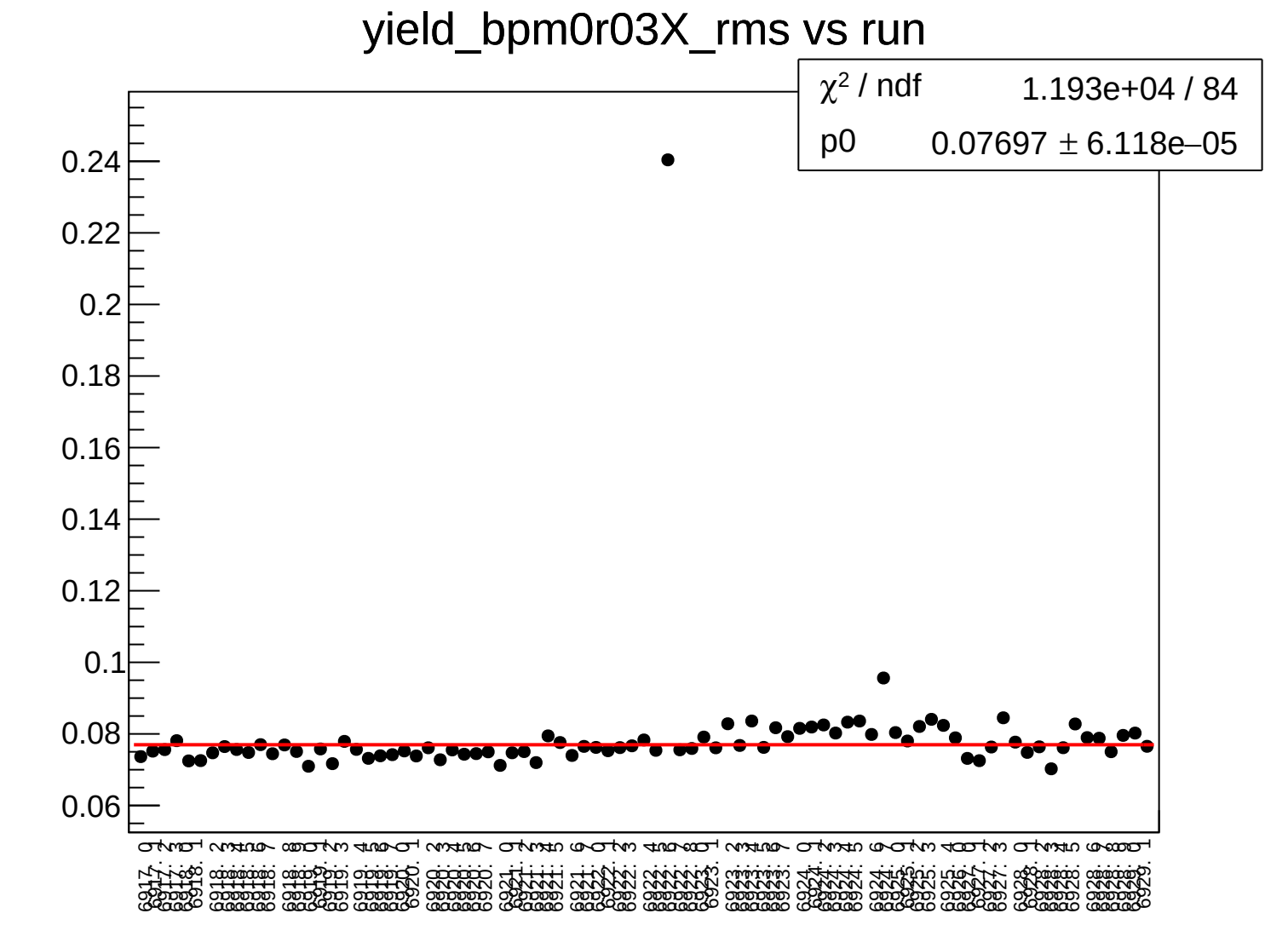

yield_bpm0l10Y_mean vs run
χ² / ndf 8.691e+07 / 84
p0 −0.7217 ± 3.736e−06
pull
Entries 85
Mean −1005
Std Dev 1048

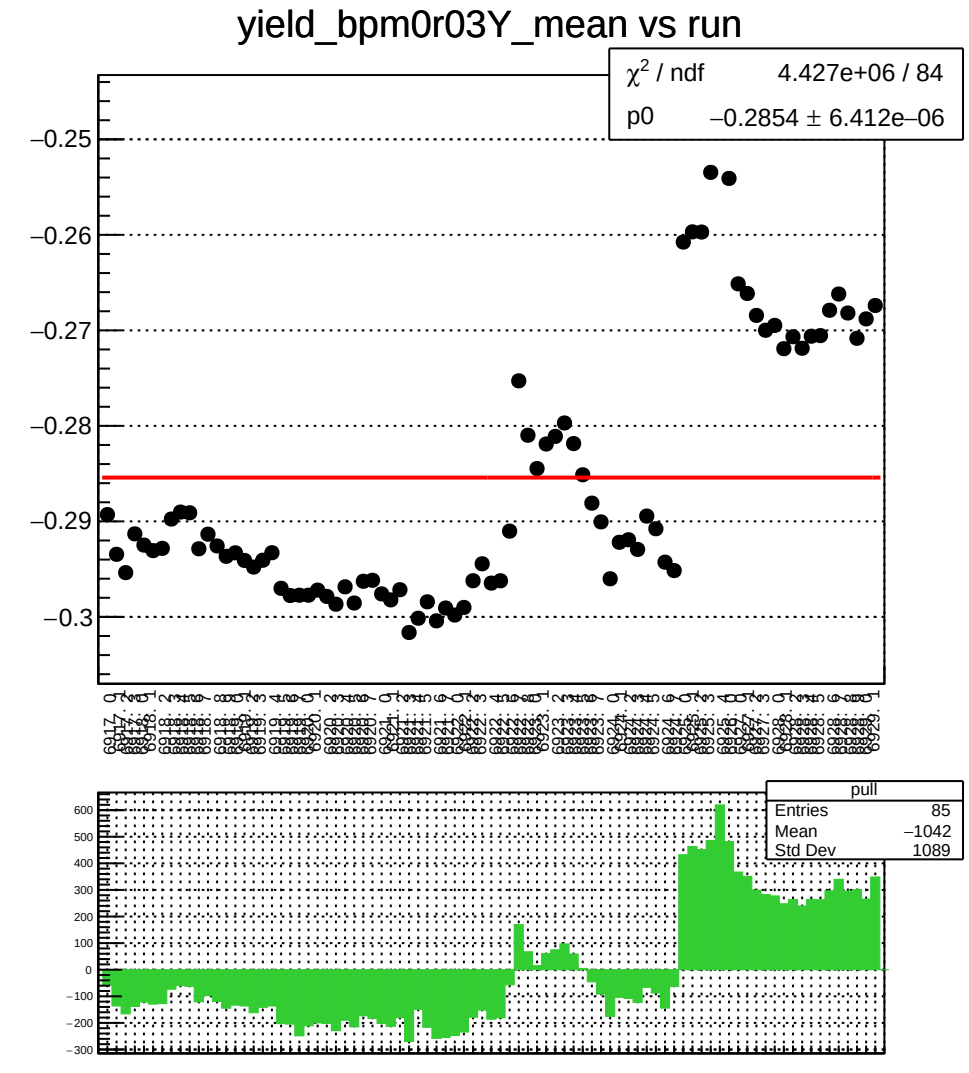

pull1D
Entries 85
Mean −4.431
Std Dev 0.5767

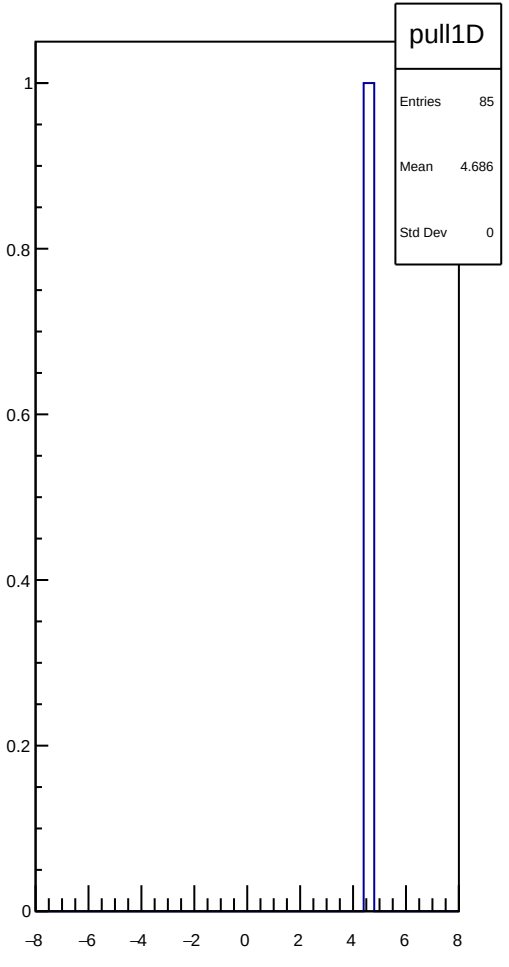

yield_bpm0l10Y_rms vs run
χ^2 / ndf 3.678e+04 / 84
p0 0.003297 ± 2.642e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

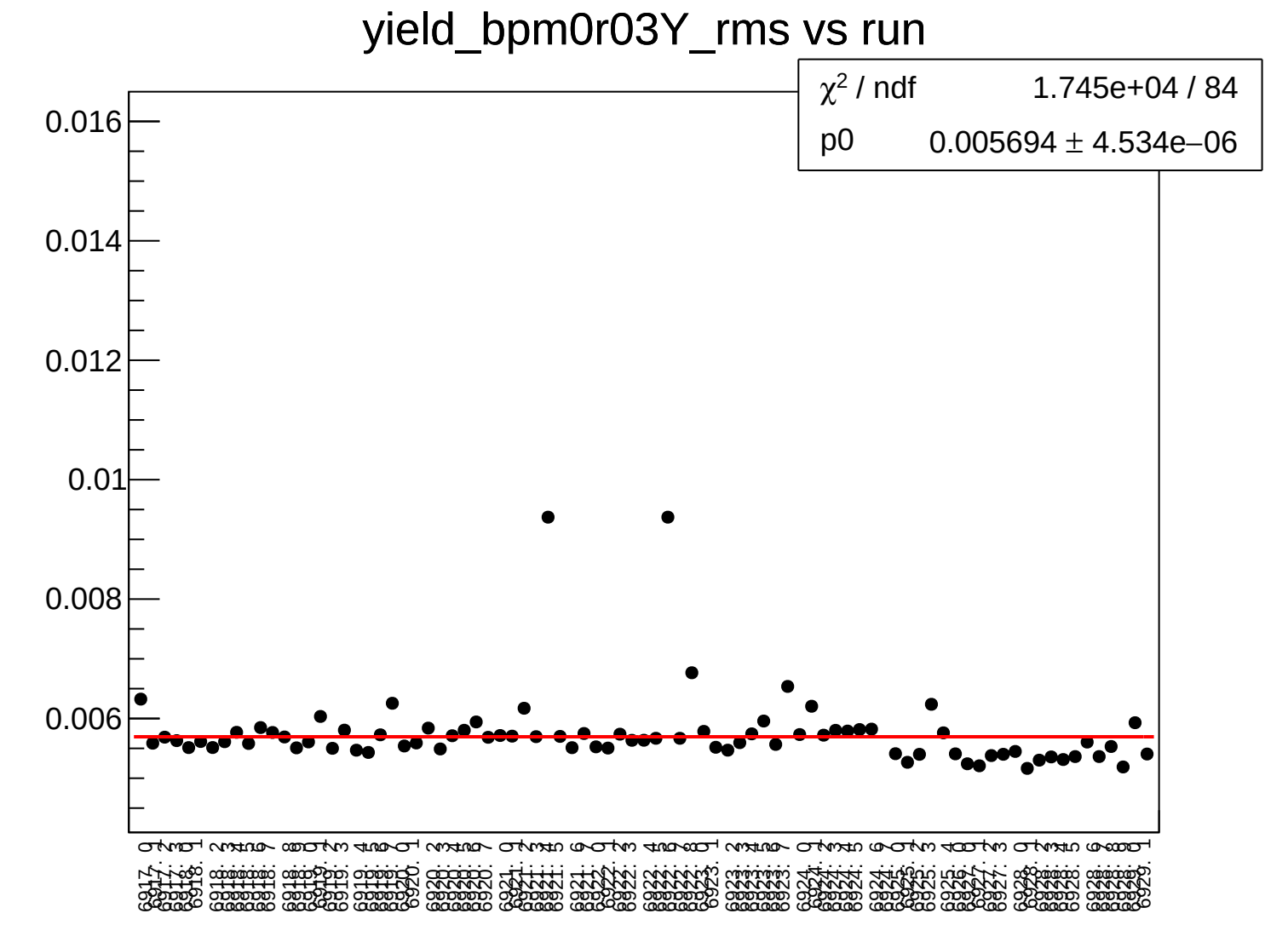

yield_bpm0r03X_mean vs run
χ² / ndf 8.463e+05 / 84
p0 1.026 ± 8.652e−05
pull
Entries 85
Mean 914.8
Std Dev 841

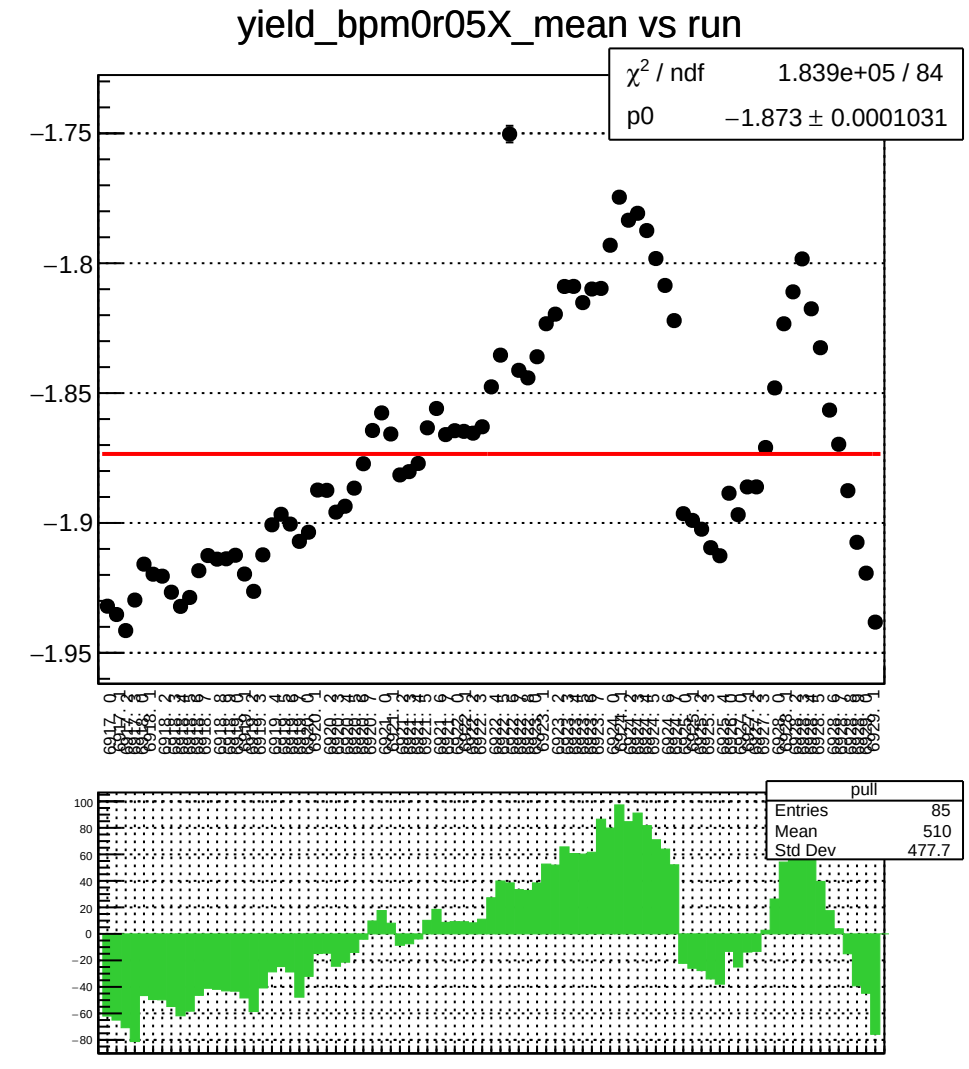

pull1D
Entries 85
Mean 0.9531
Std Dev 4.781

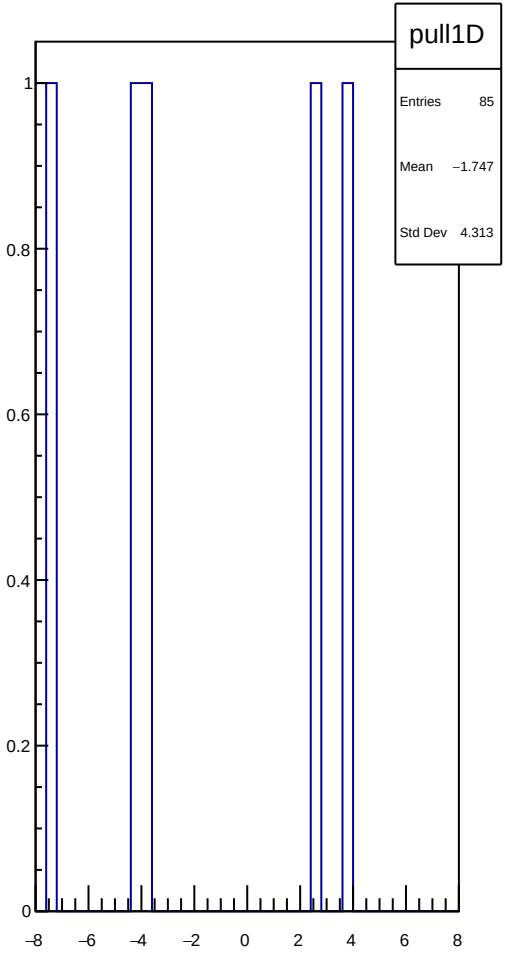

yield_bpm0r03X_rms vs run
χ² / ndf 1.193e+04 / 84
p0 0.07697 ± 6.118e–05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

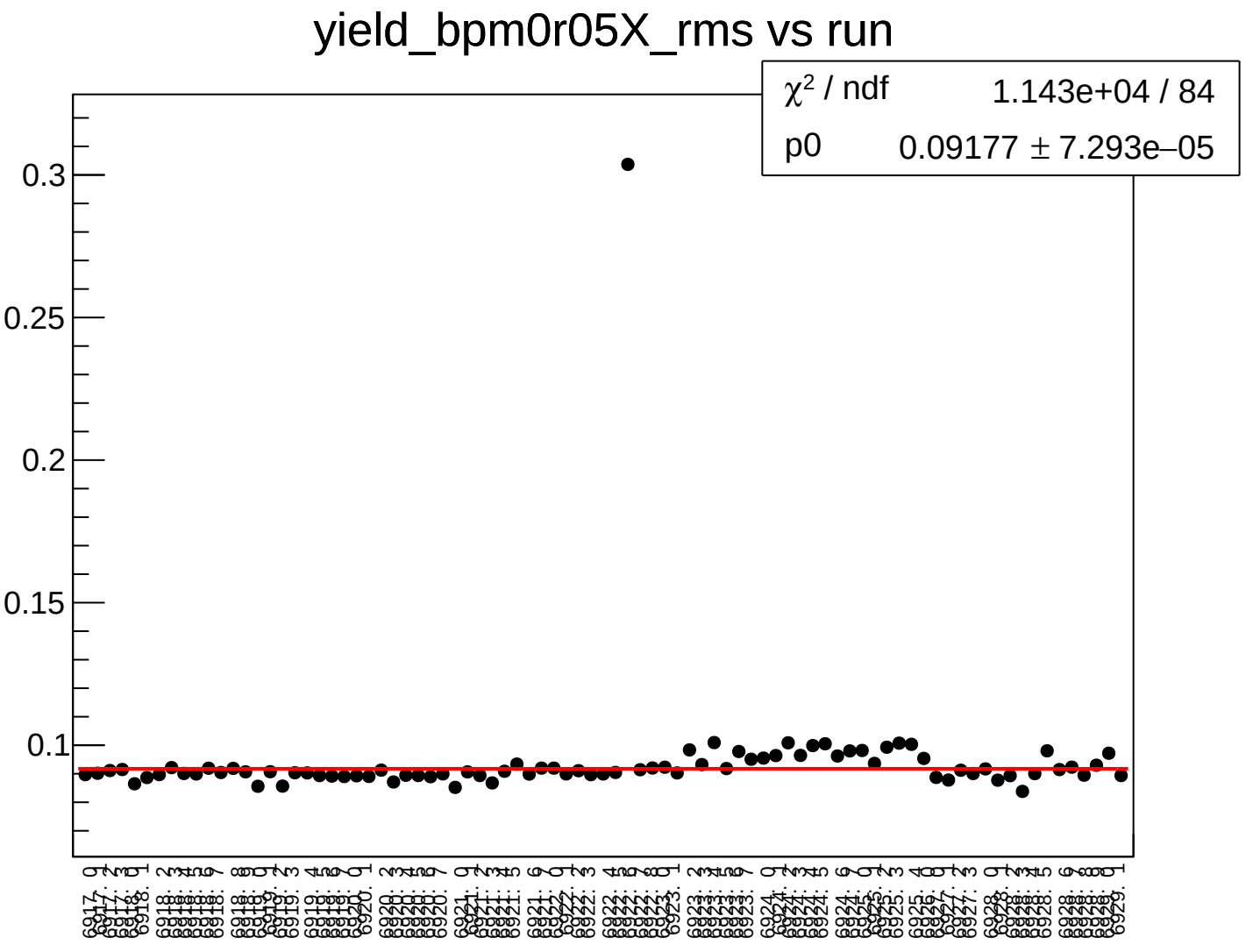

yield_bpm0r03Y_mean vs run
χ² / ndf 4.427e+06 / 84
p0 −0.2854 ± 6.412e−06
−0.25
−0.26
−0.27
−0.28
−0.29
−0.3
pull
Entries 85
Mean −1042
Std Dev 1089
600
500
400
300
200
100
0
−100
−200
−300

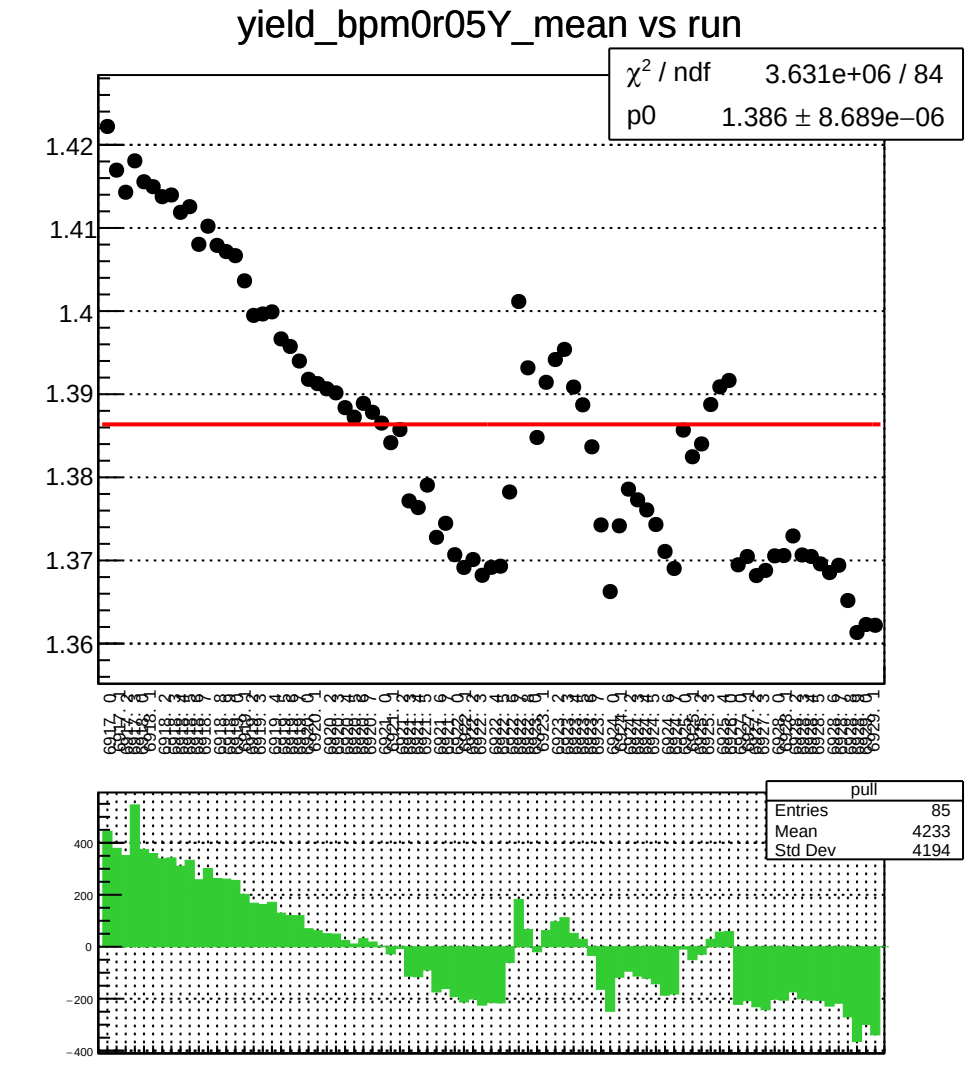

pull1D
Entries 85
Mean 4.686
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

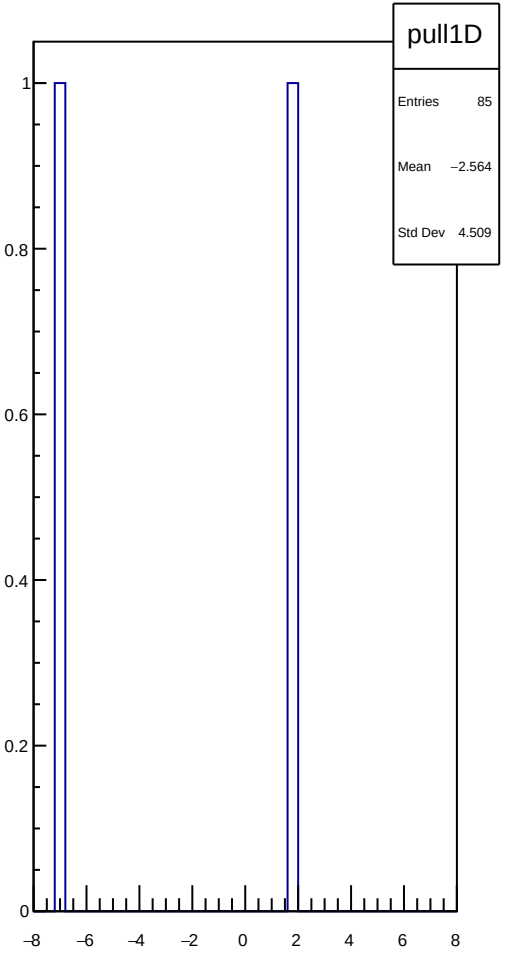

yield_bpm0r03Y_rms vs run
χ² / ndf 1.745e+04 / 84
p0 0.005694 ± 4.534e−06
0.016
0.014
0.012
0.01
0.008
0.006

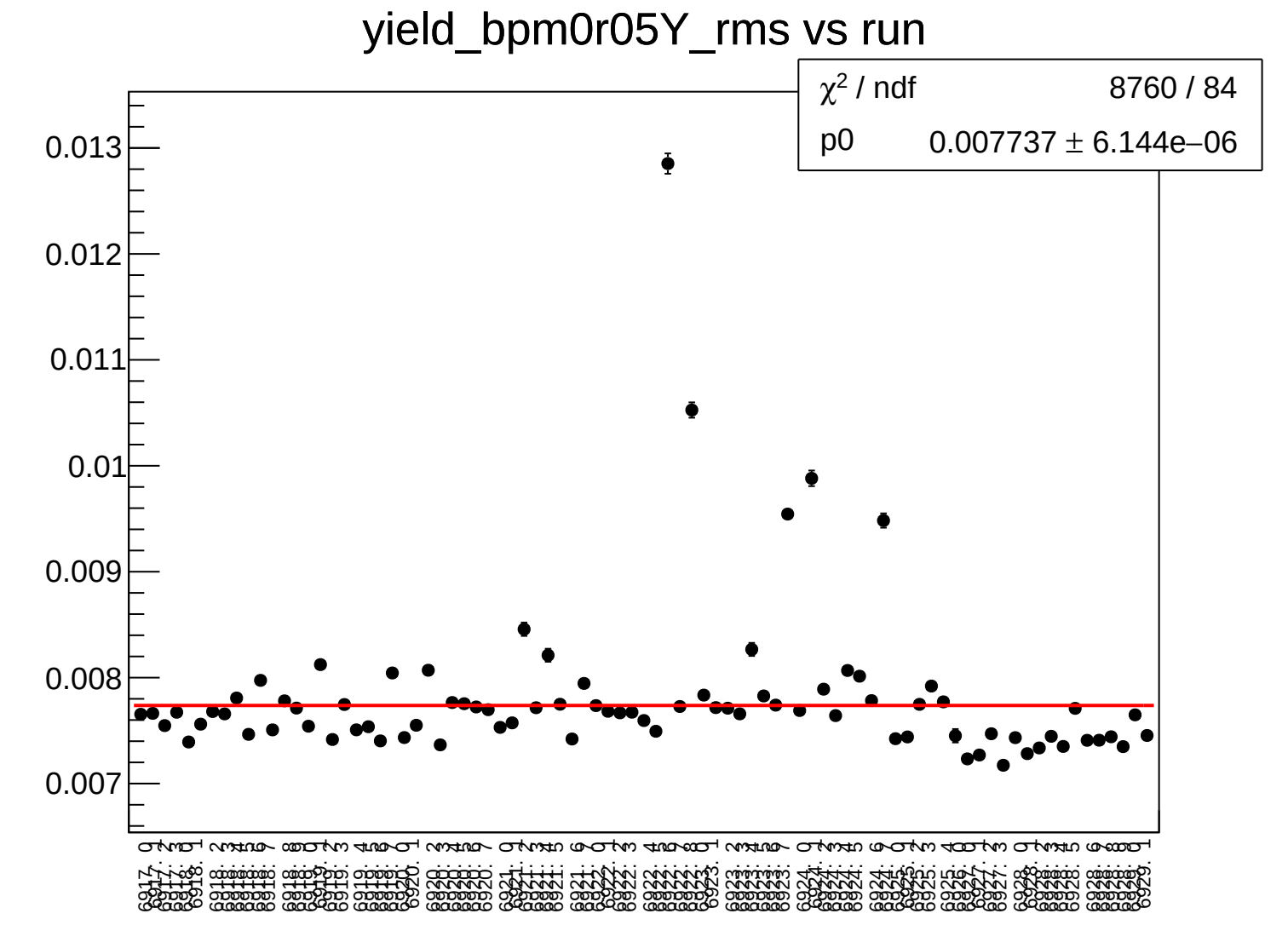

yield_bpm0r05X_mean vs run
χ² / ndf 1.839e+05 / 84
p0 −1.873 ± 0.0001031
−1.75
−1.8
−1.85
−1.9
−1.95
pull
Entries 85
Mean 510
Std Dev 477.7
100
80
60
40
20
0
−20
−40
−60
−80

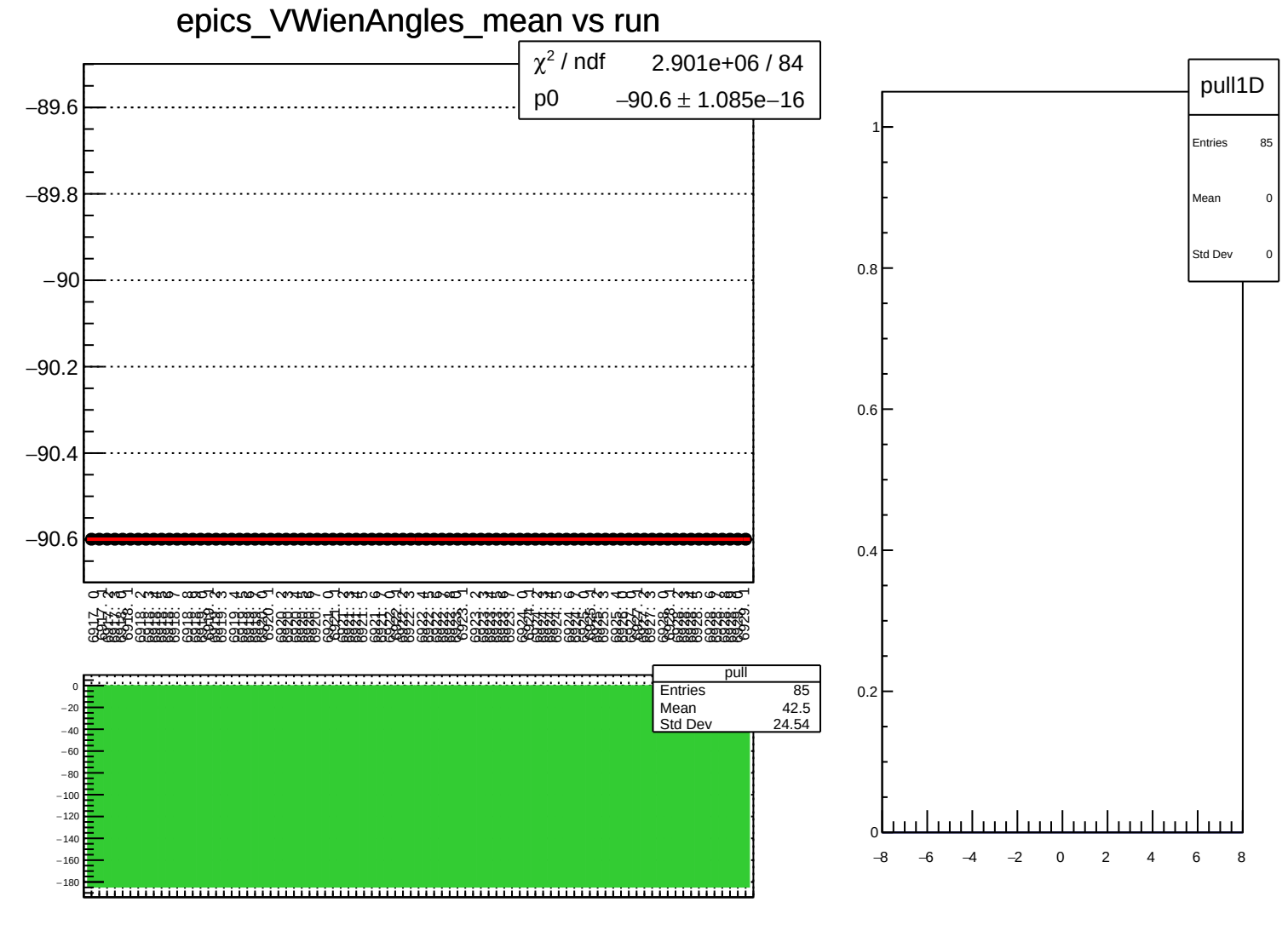

pull1D
Entries 85
Mean −1.747
Std Dev 4.313
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

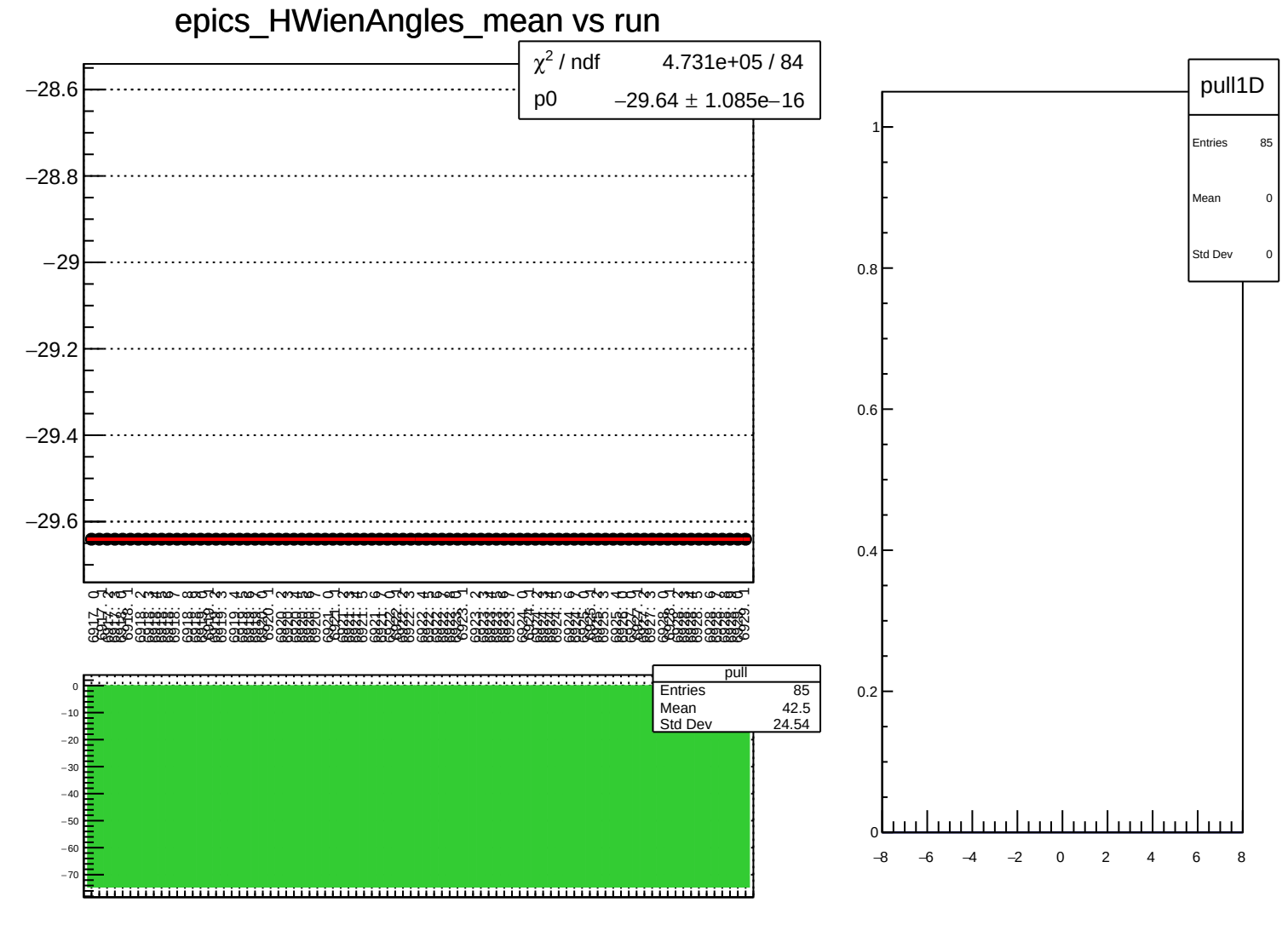

yield_bpm0r05X_rms vs run
χ² / ndf 1.143e+04 / 84
p0 0.09177 ± 7.293e–05
0.3
0.25
0.2
0.15
0.1

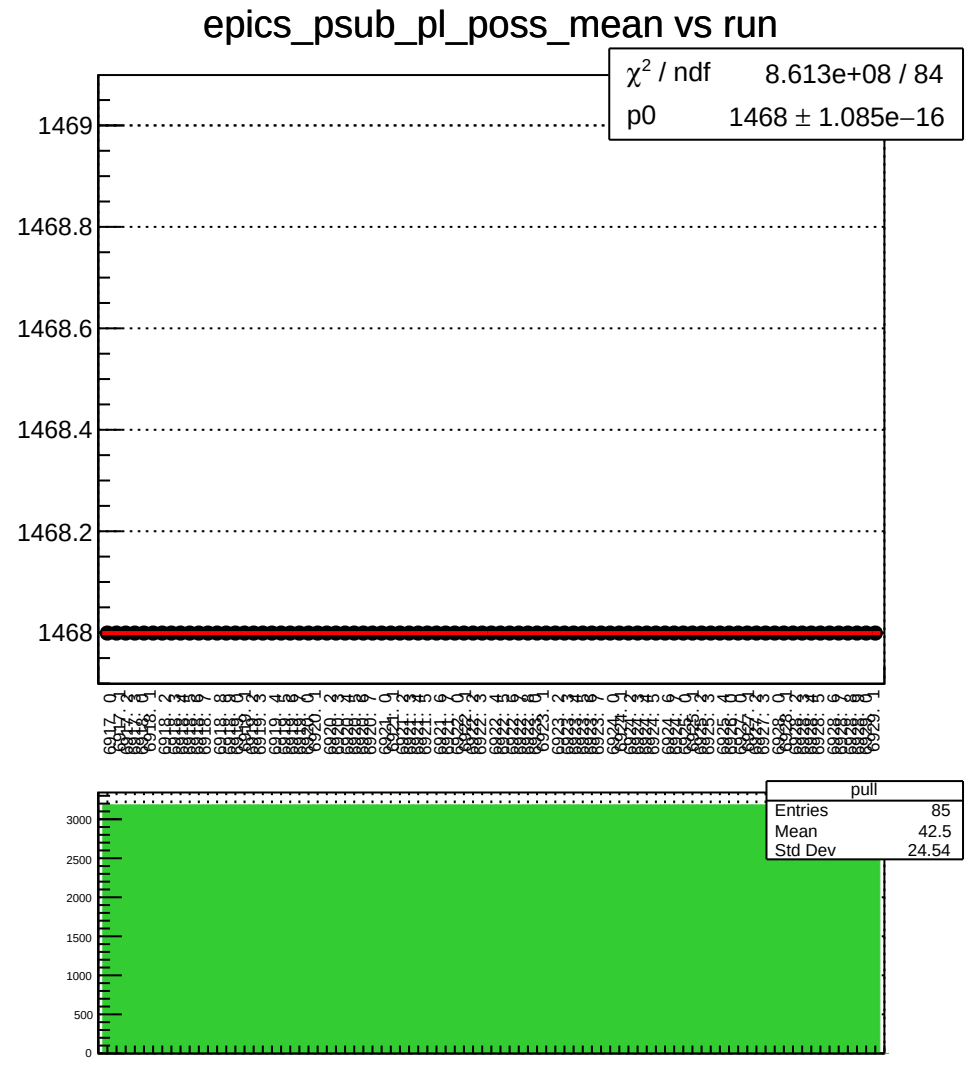

yield_bpm0r05Y_mean vs run
χ² / ndf 3.631e+06 / 84
p0 1.386 ± 8.689e−06
1.42
1.41
1.4
1.39
1.38
1.37
1.36
pull
Entries 85
Mean 4233
Std Dev 4194
400
200
0
−200
−400

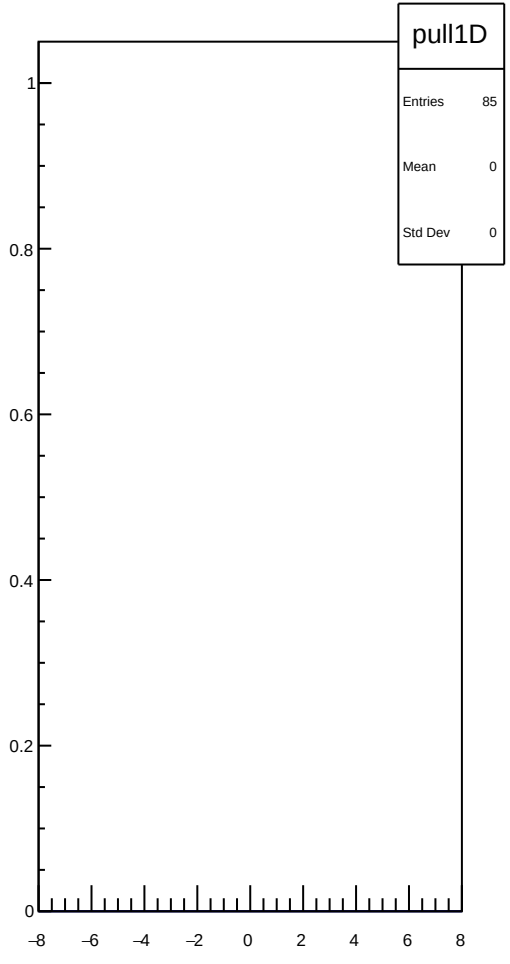

pull1D
Entries 85
Mean −2.564
Std Dev 4.509
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

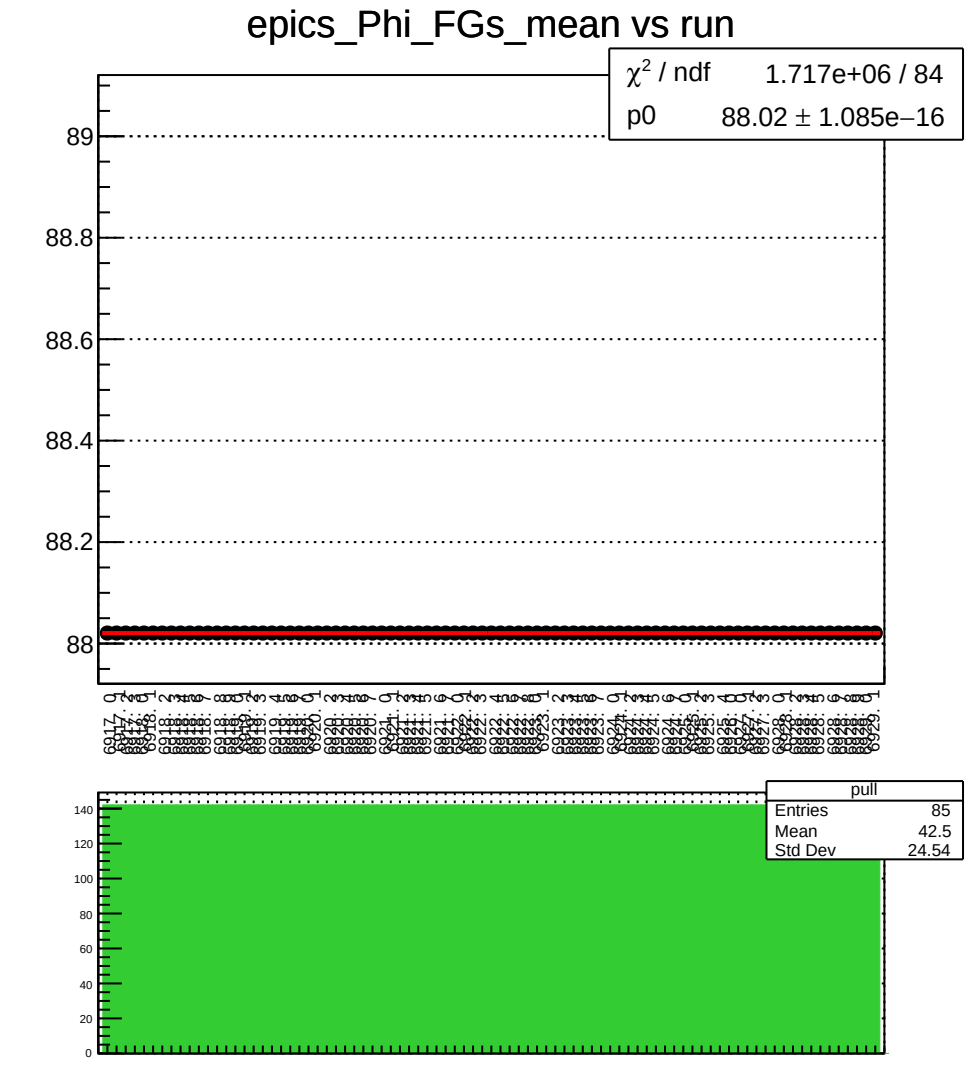

yield_bpm0r05Y_rms vs run
χ² / ndf 8760 / 84
p0 0.007737 ± 6.144e−06
0.013
0.012
0.011
0.01
0.009
0.008
0.007

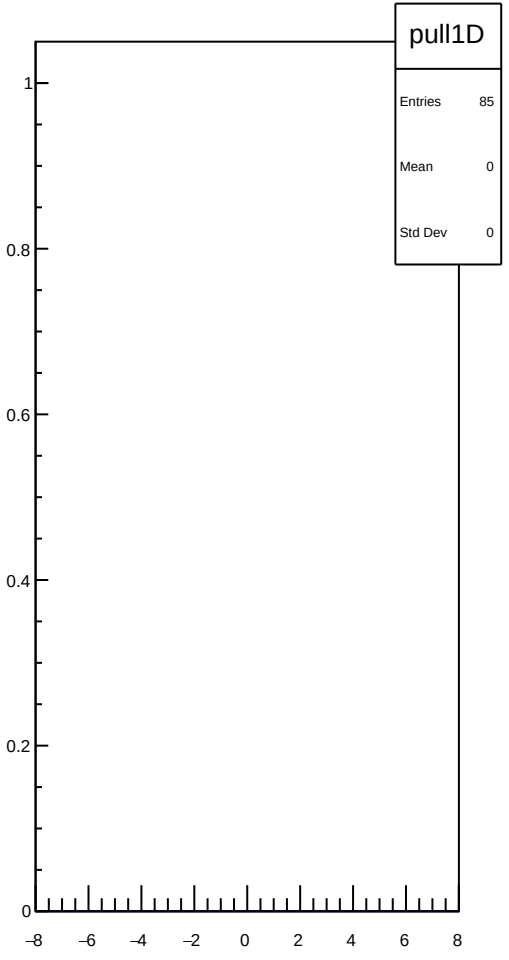

epics_VWienAngles_mean vs run
χ² / ndf 2.901e+06 / 84
p0 −90.6 ± 1.085e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−20
−40
−60
−80
−100
−120
−140
−160
−180
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

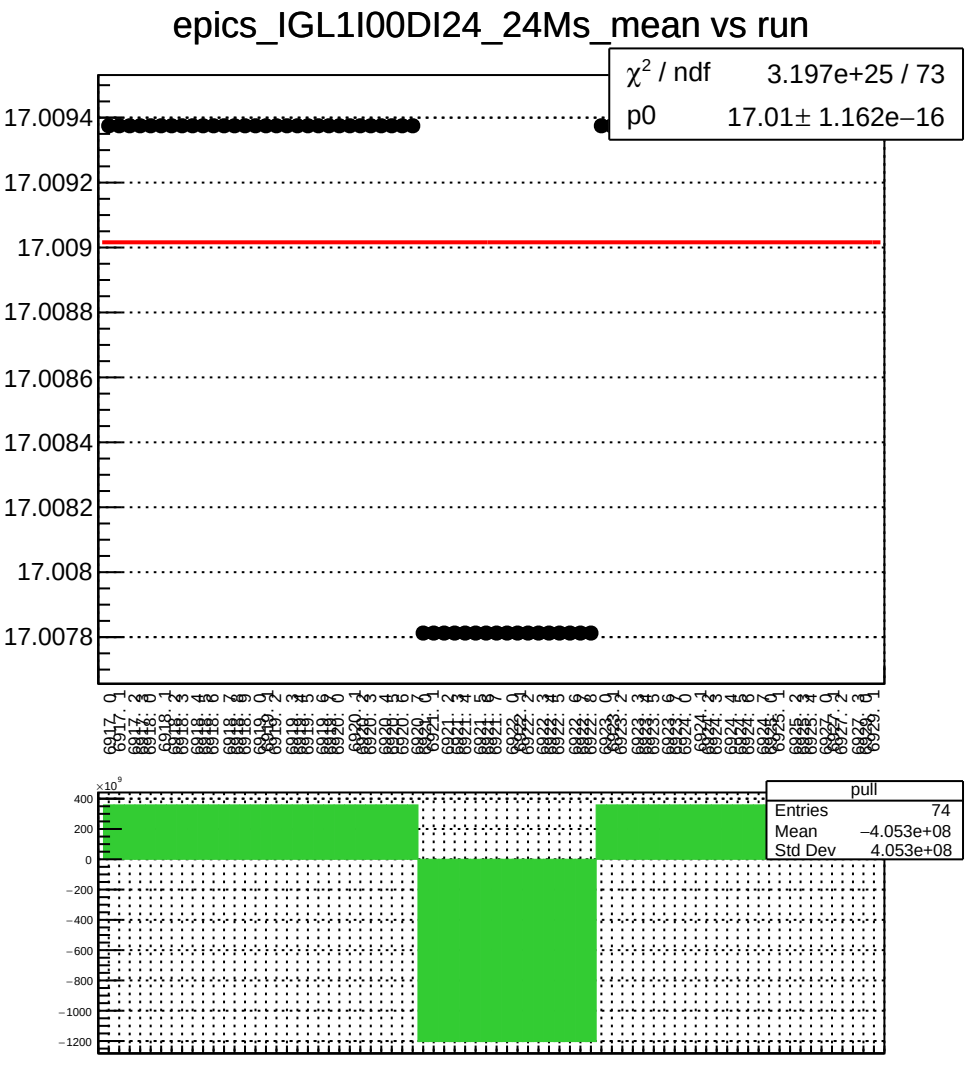

epics_HWienAngles_mean vs run
χ² / ndf 4.731e+05 / 84
p0 −29.64 ± 1.085e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 85
Mean 42.5
Std Dev 24.54
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

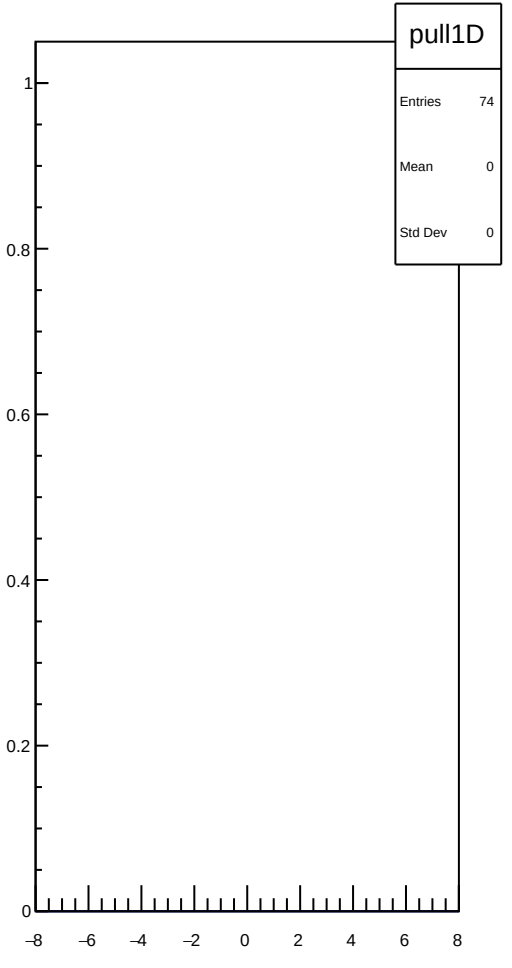

epics_psub_pl_poss_mean vs run
χ² / ndf 8.613e+08 / 84
p0 1468 ± 1.085e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 85
Mean 42.5
Std Dev 24.54
3000
2500
2000
1500
1000
500
0

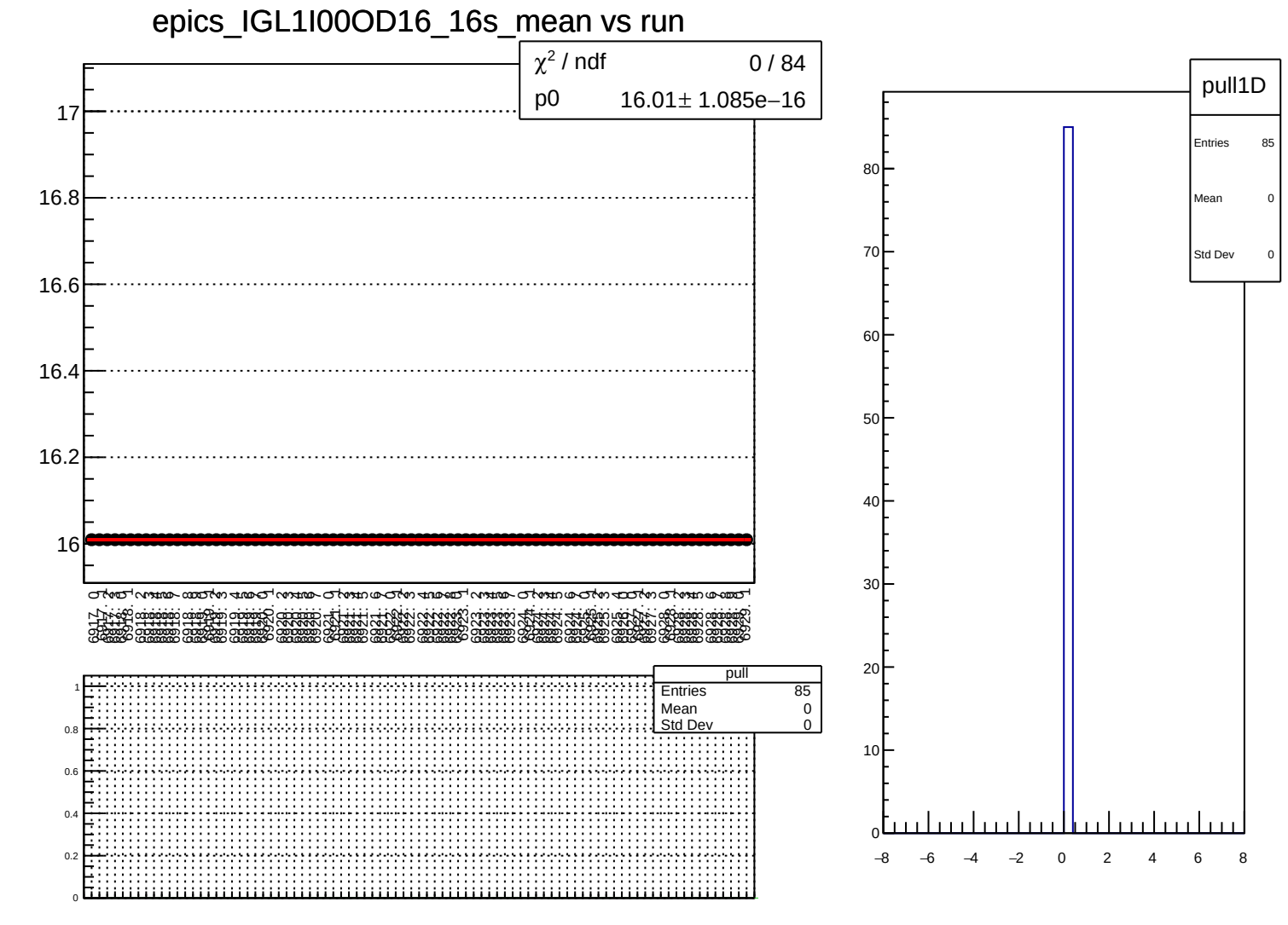

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

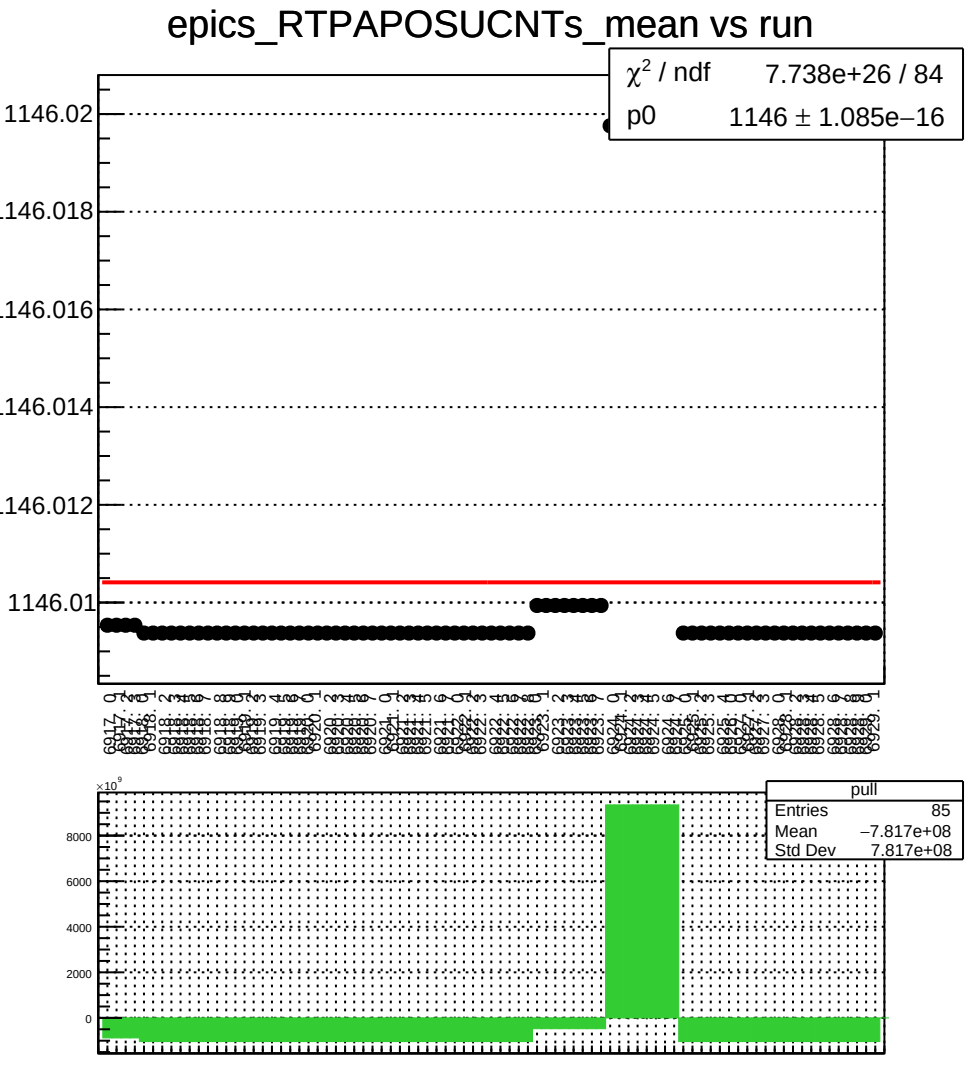

epics_Phi_FGs_mean vs run
χ² / ndf 1.717e+06 / 84
p0 88.02 ± 1.085e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 85
Mean 42.5
Std Dev 24.54
140
120
100
80
60
40
20
0

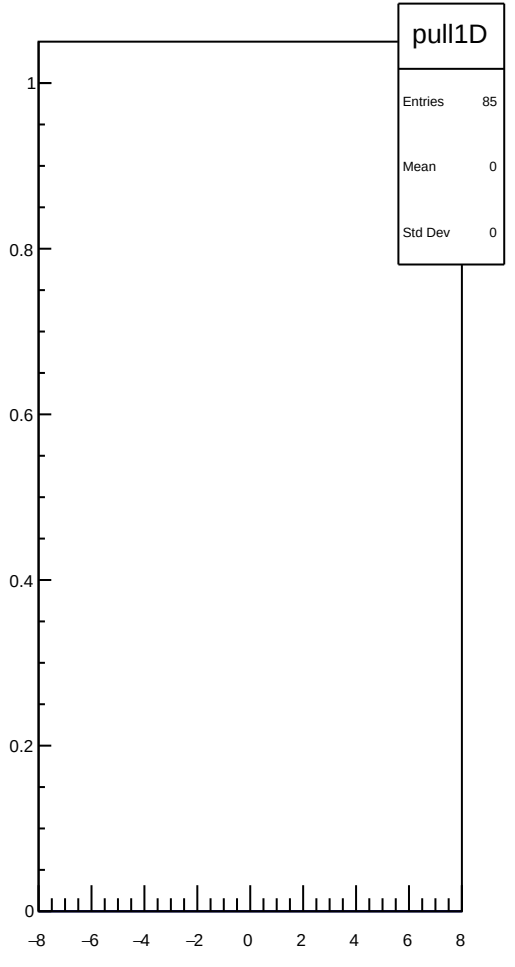

pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

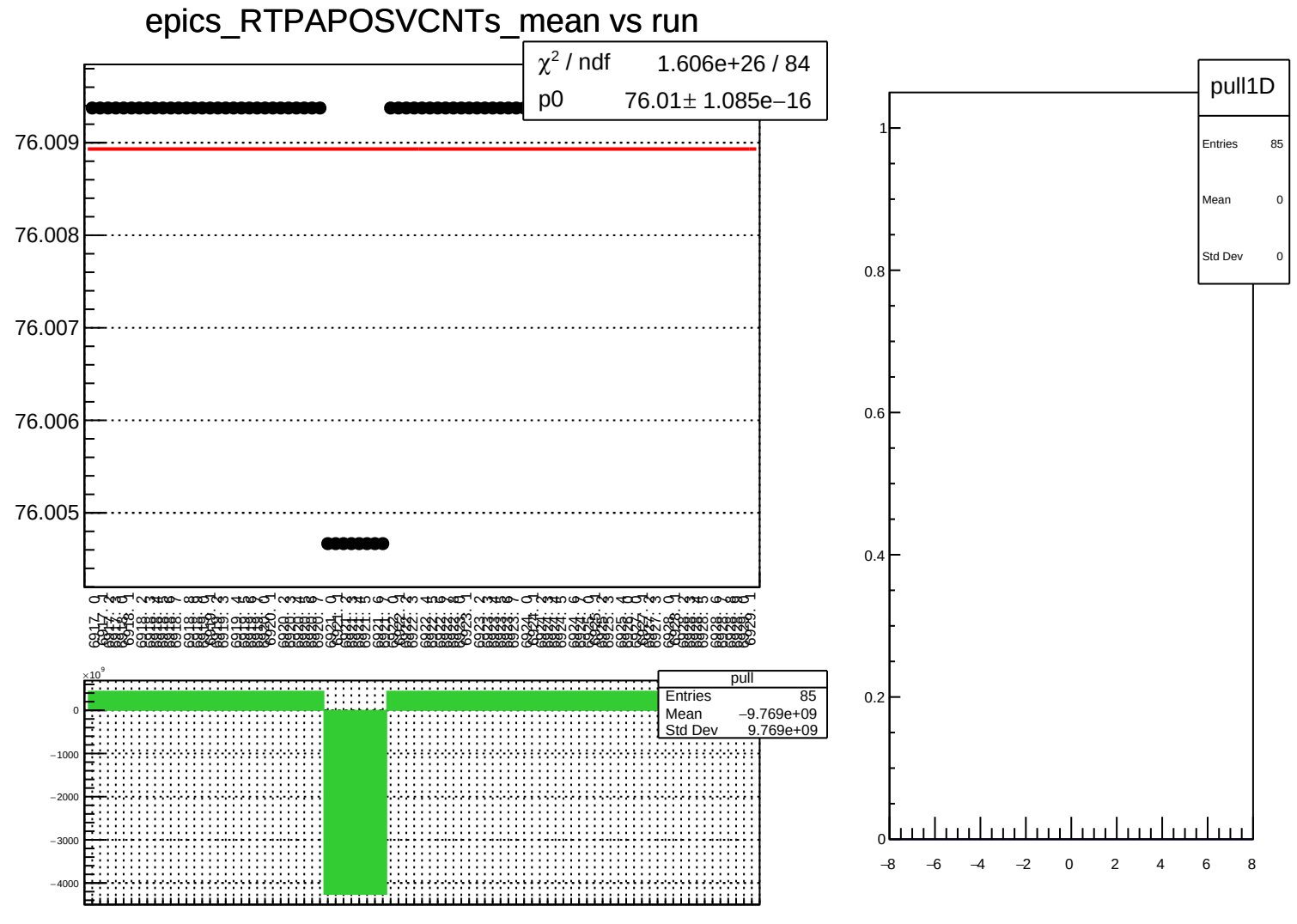

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 3.197e+25 / 73
p0 17.01± 1.162e−16
17.0094
17.0092
17.009
17.0088
17.0086
17.0084
17.0082
17.008
17.0078
pull
Entries 74
Mean −4.053e+08
Std Dev 4.053e+08
×10⁹
400
200
0
−200
−400
−600
−800
−1000
−1200


pull1D
Entries 74
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 0 / 84
p0 16.01± 1.085e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 85
Mean 0
Std Dev 0
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 7.738e+26 / 84
p0 1146 ± 1.085e−16
1146.02
1146.018
1146.016
1146.014
1146.012
1146.01
pull
Entries 85
Mean −7.817e+08
Std Dev 7.817e+08
×10⁹
8000
6000
4000
2000
0


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


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 1.606e+26 / 84
p0 76.01± 1.085e−16
76.009
76.008
76.007
76.006
76.005
pull
Entries 85
Mean −9.769e+09
Std Dev 9.769e+09
×10⁹
0
−1000
−2000
−3000
−4000
pull1D
Entries 85
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8