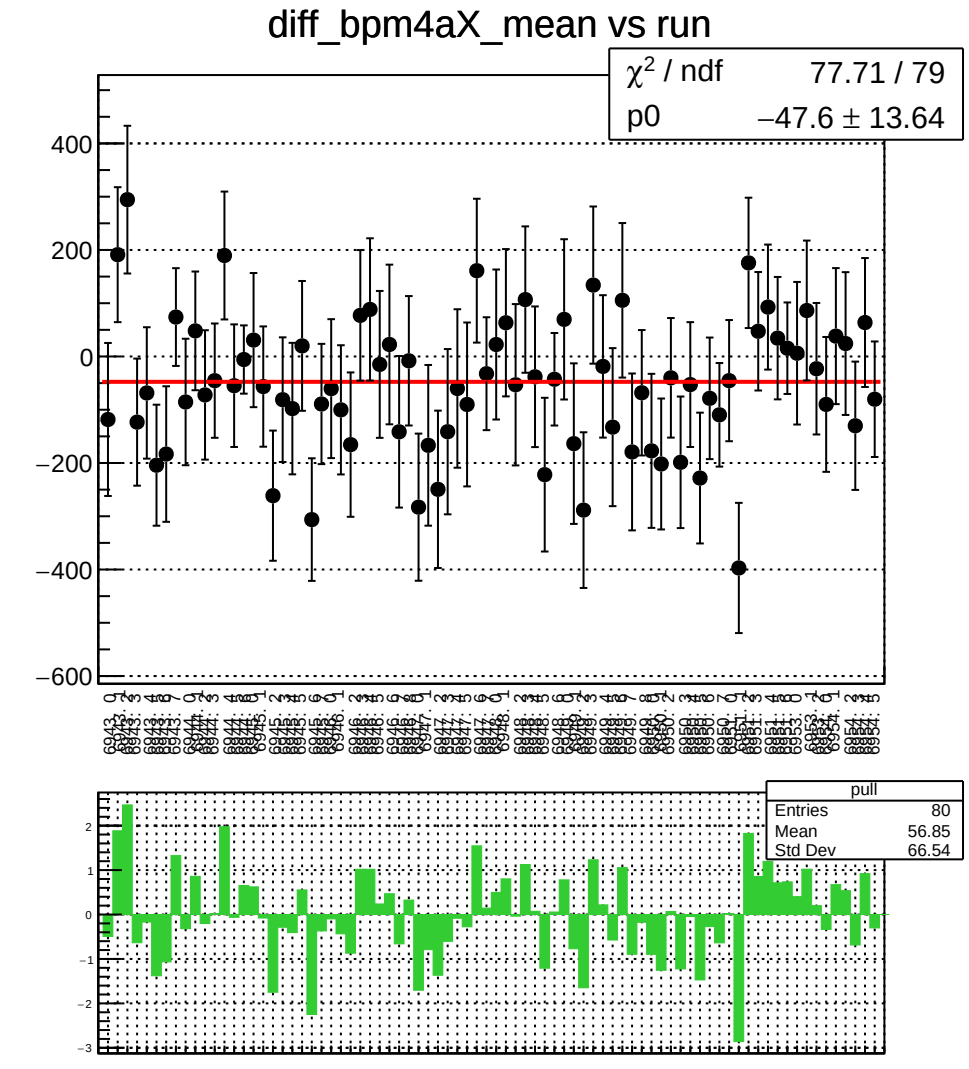
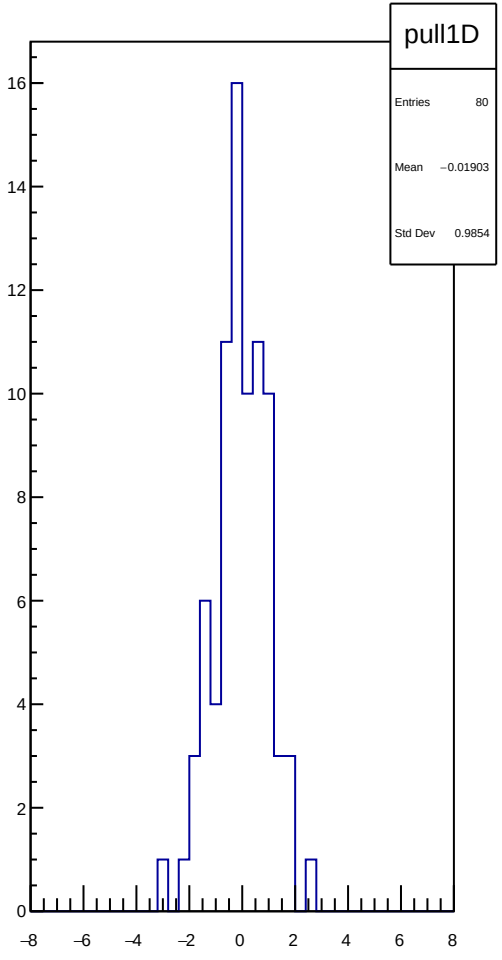
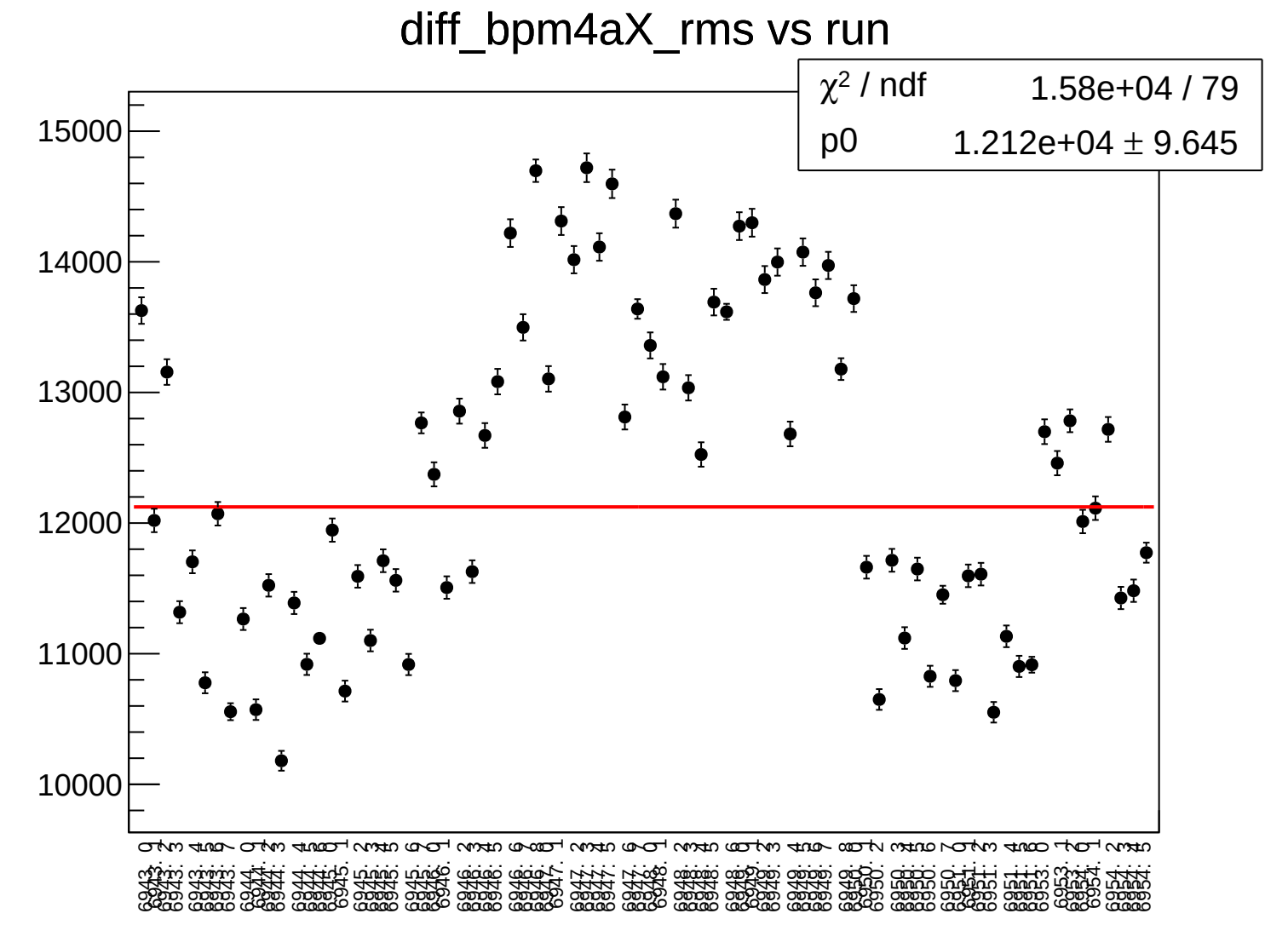
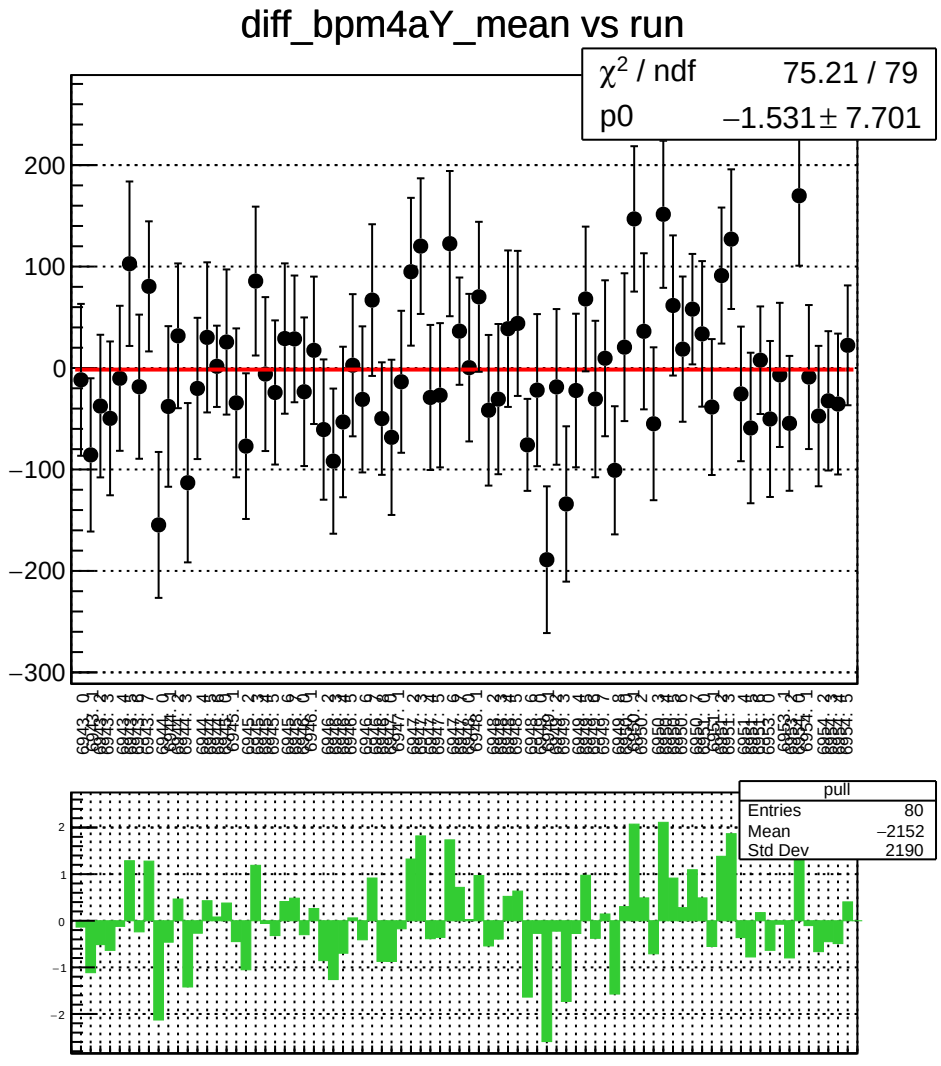
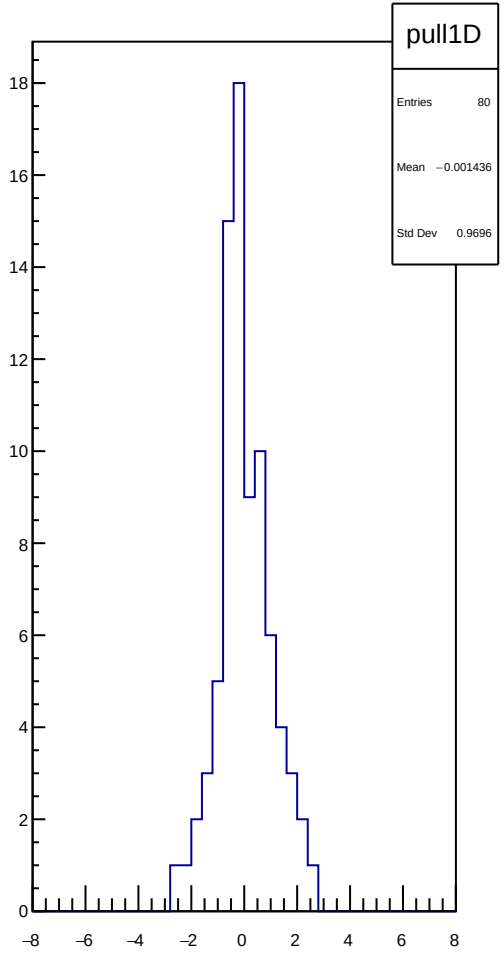
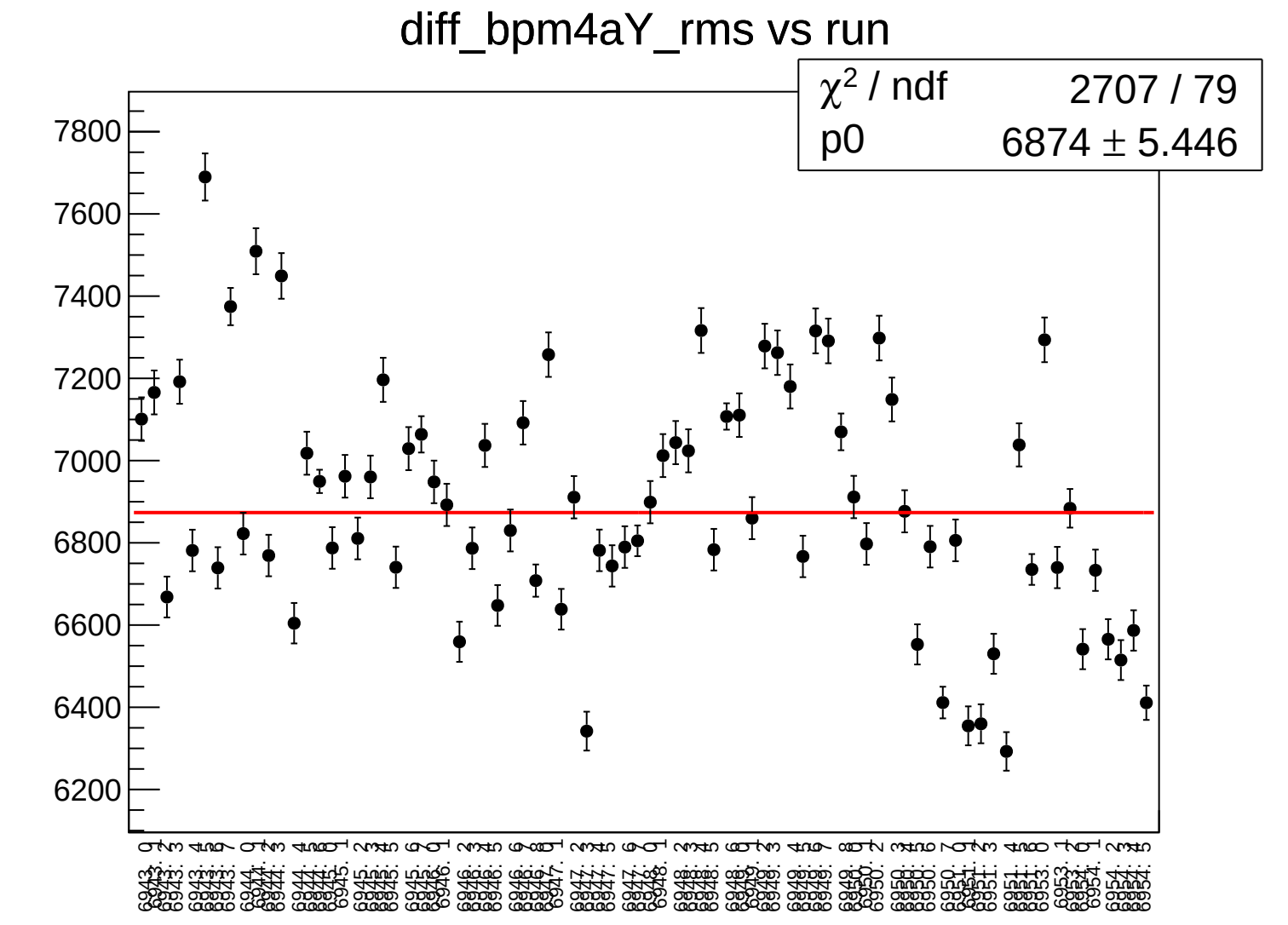

diff_bpm4aX_mean vs run
χ² / ndf 77.71 / 79
p0 −47.6 ± 13.64
pull
Entries 80
Mean 56.85
Std Dev 66.54

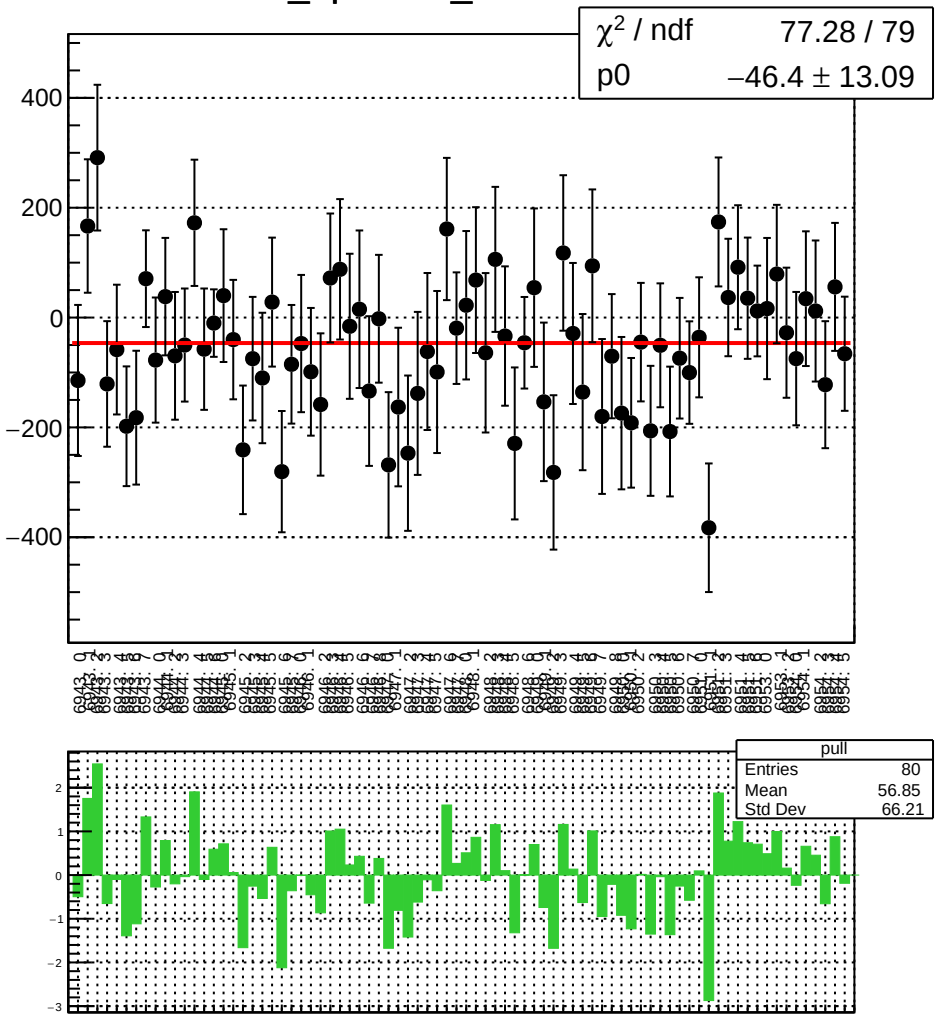

pull1D
Entries 80
Mean −0.01903
Std Dev 0.9854

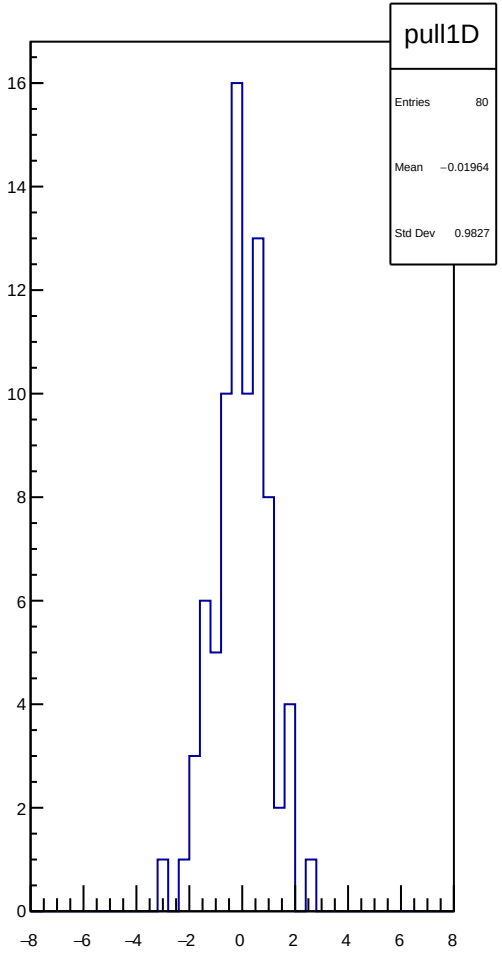

diff_bpm4aX_rms vs run
χ² / ndf 1.58e+04 / 79
p0 1.212e+04 ± 9.645
15000
14000
13000
12000
11000
10000

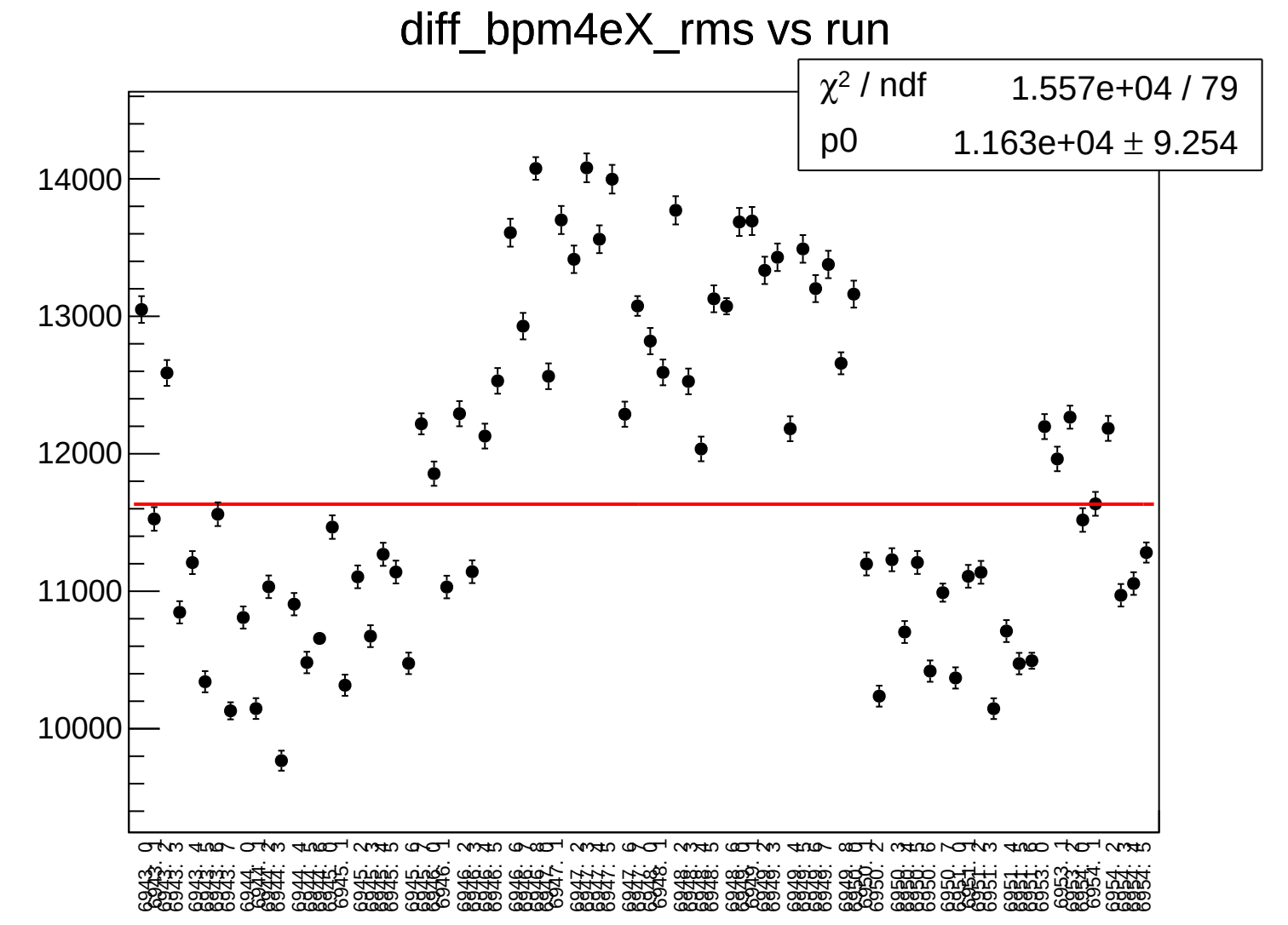

diff_bpm4aY_mean vs run
χ² / ndf 75.21 / 79
p0 −1.531 ± 7.701
pull
Entries 80
Mean −2152
Std Dev 2190

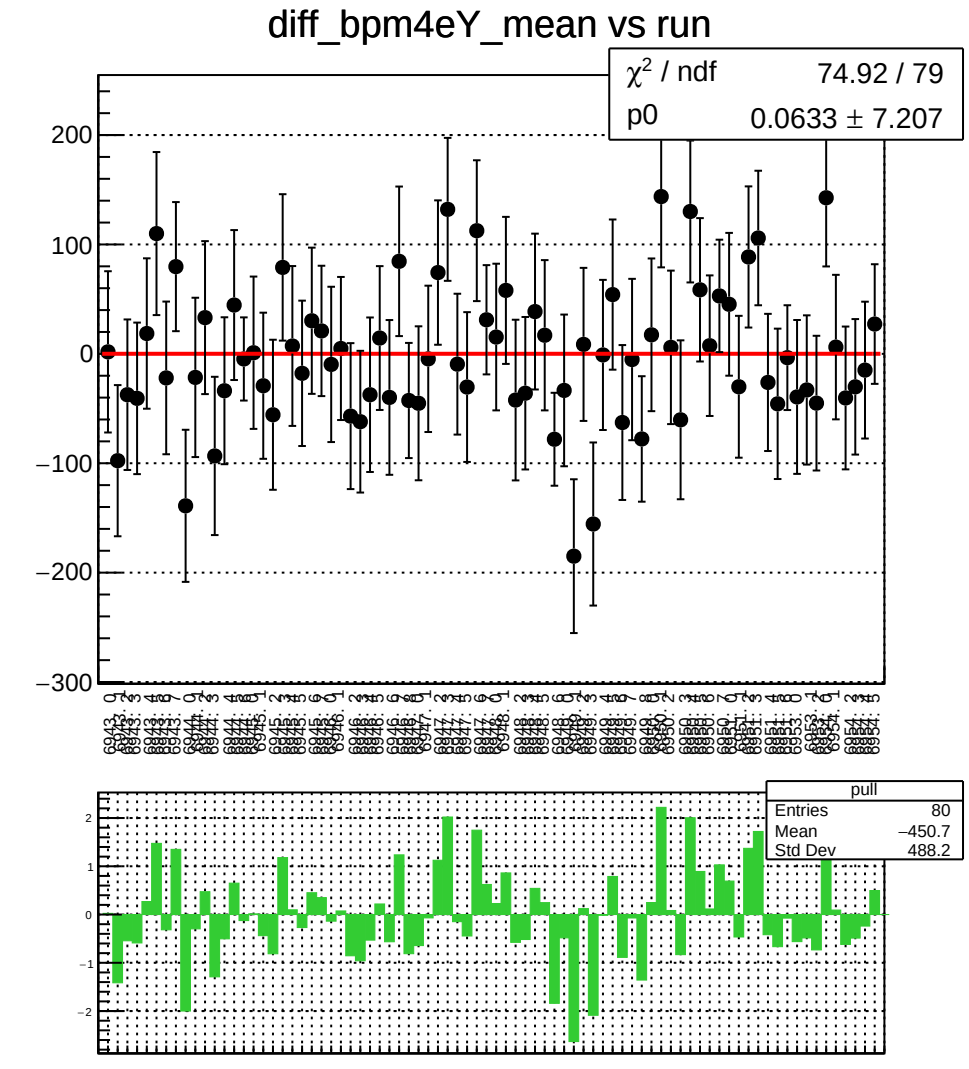

pull1D
Entries 80
Mean −0.001436
Std Dev 0.9696

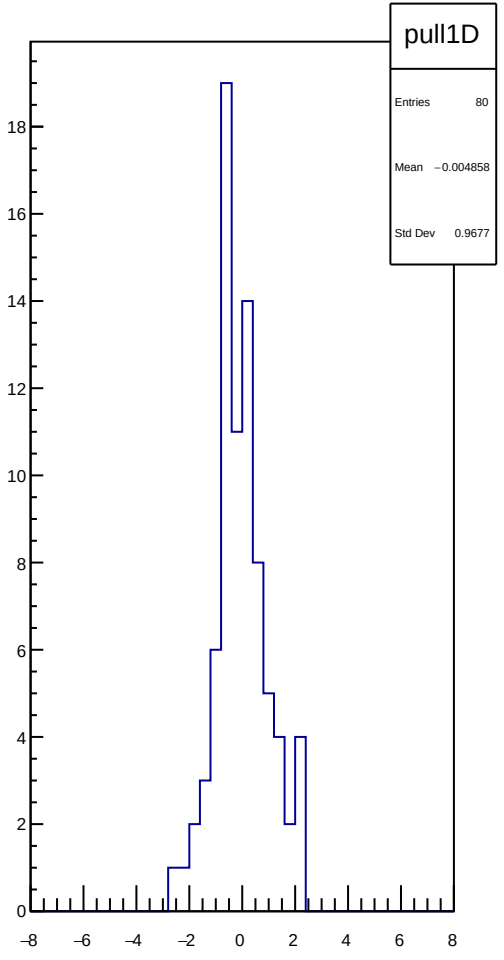

diff_bpm4aY_rms vs run
χ^2 / ndf 2707 / 79
p0 6874 ± 5.446
7800
7600
7400
7200
7000
6800
6600
6400
6200

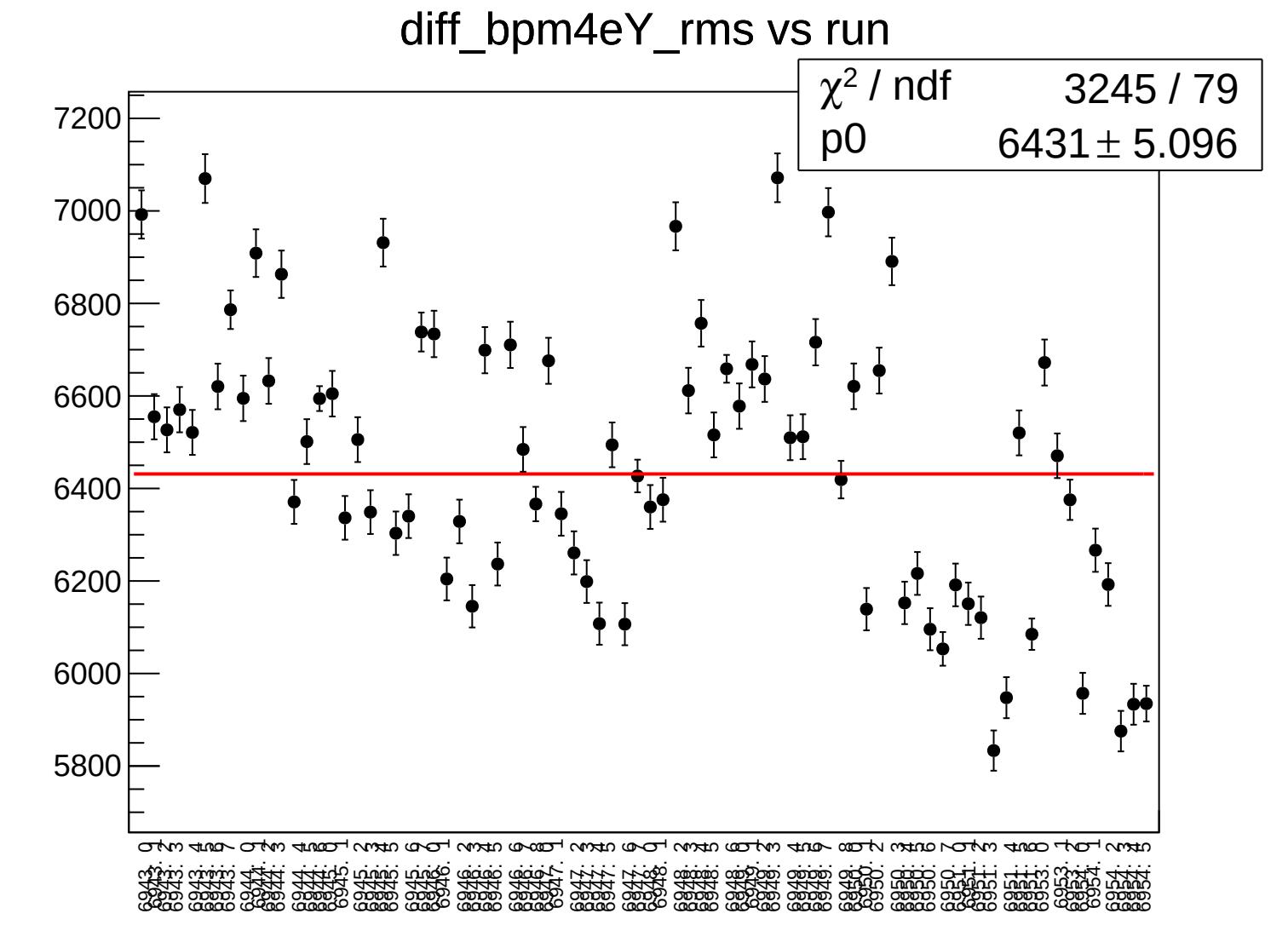

diff_bpm4eX_mean vs run
χ^2 / ndf 77.28 / 79
p0 −46.4 ± 13.09
400
200
0
−200
−400
pull
Entries 80
Mean 56.85
Std Dev 66.21
2
1
0
−1
−2
−3

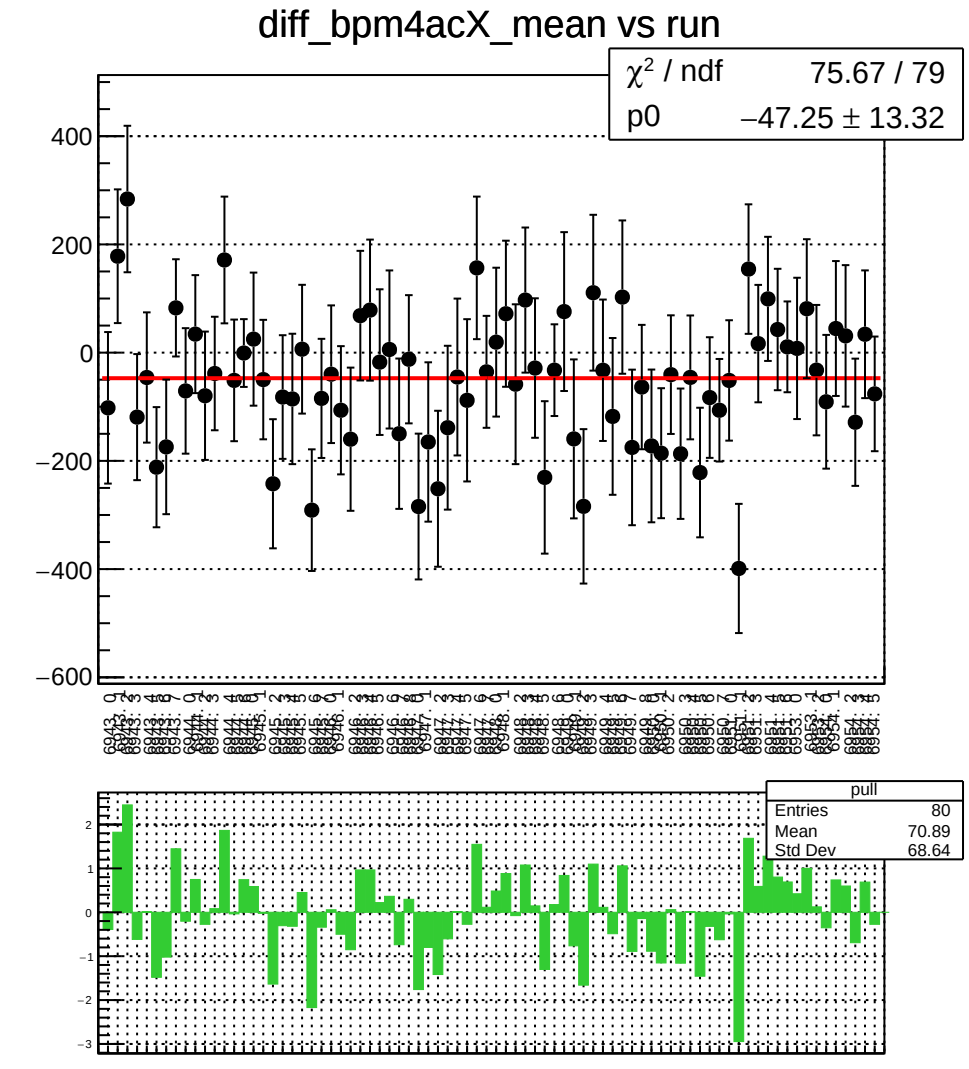

pull1D
Entries 80
Mean −0.01964
Std Dev 0.9827
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

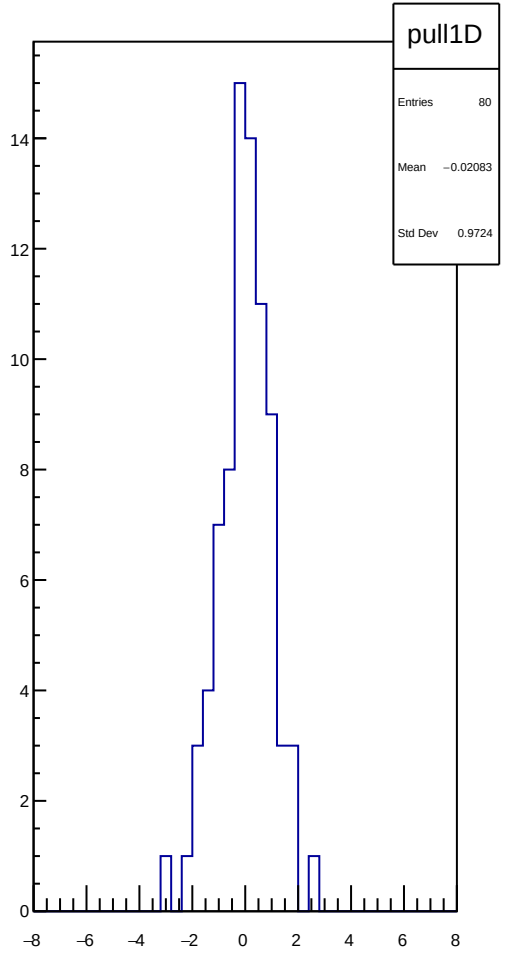

diff_bpm4eX_rms vs run
χ² / ndf 1.557e+04 / 79
p0 1.163e+04 ± 9.254
14000
13000
12000
11000
10000


diff_bpm4eY_mean vs run
χ² / ndf 74.92 / 79
p0 0.0633 ± 7.207
pull
Entries 80
Mean −450.7
Std Dev 488.2

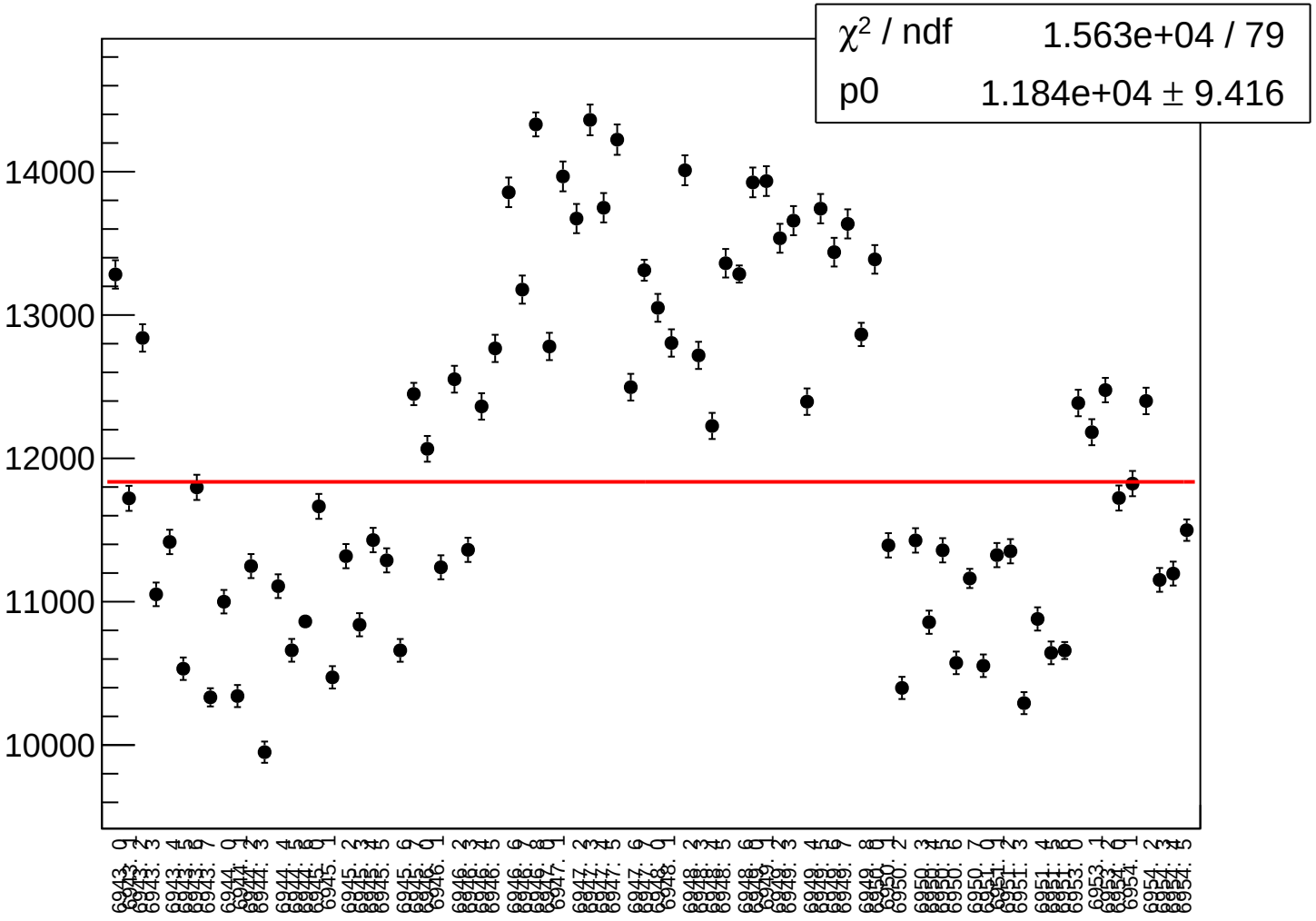

pull1D
Entries 80
Mean −0.004858
Std Dev 0.9677

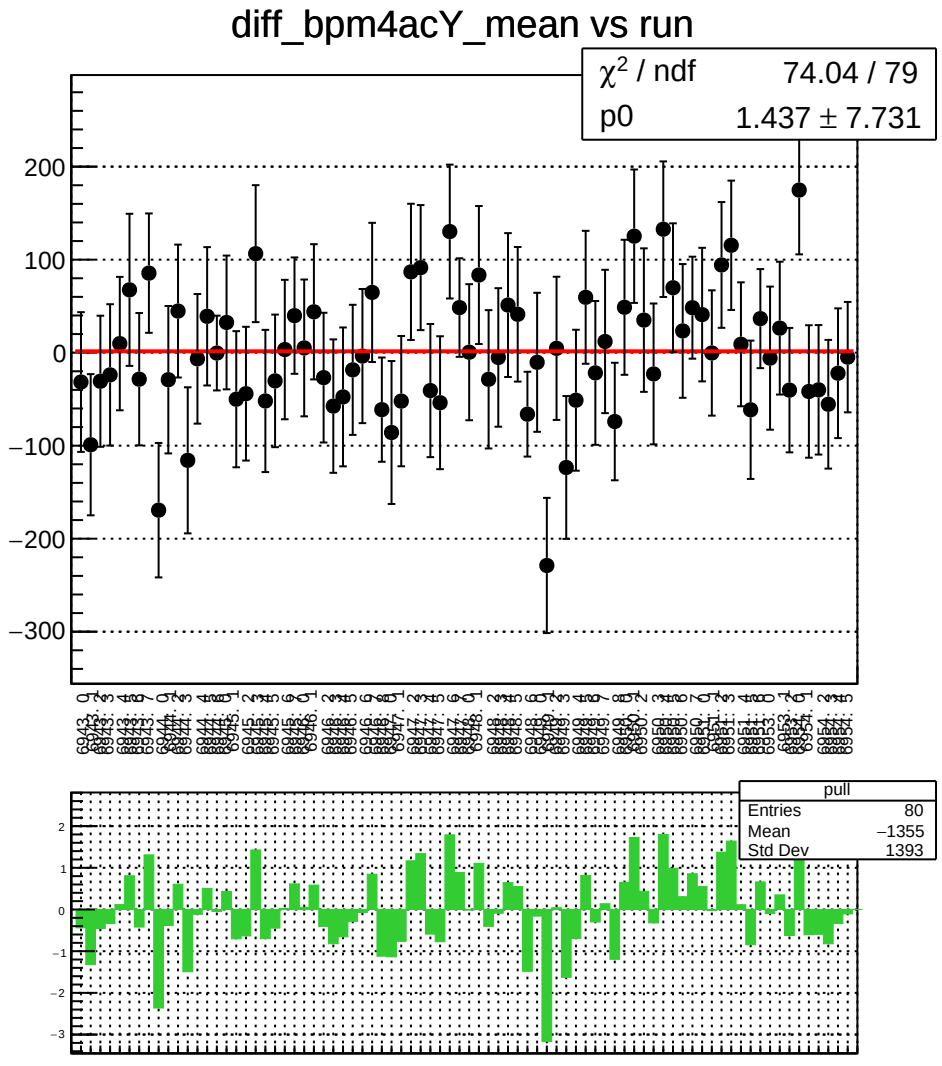

diff_bpm4eY_rms vs run
χ² / ndf 3245 / 79
p0 6431 ± 5.096
7200
7000
6800
6600
6400
6200
6000
5800

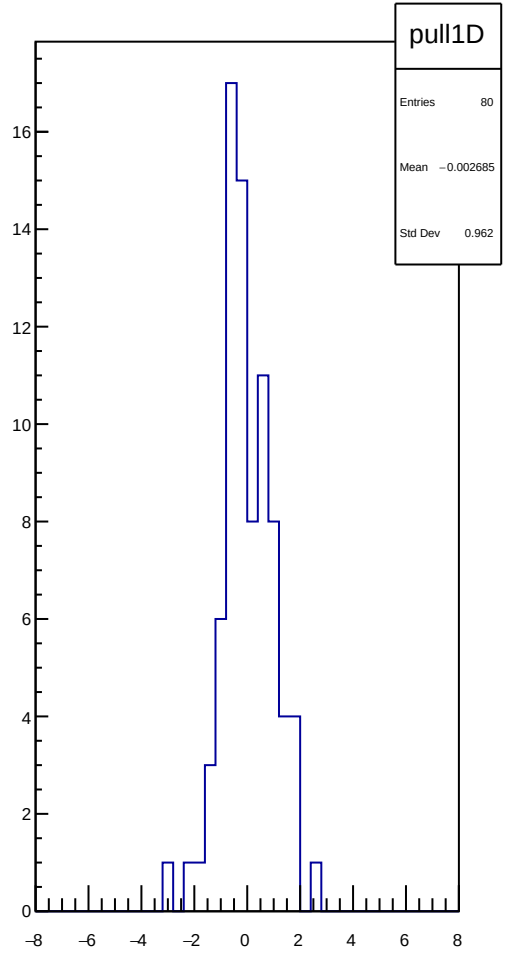

diff_bpm4acX_mean vs run
χ² / ndf 75.67 / 79
p0 −47.25 ± 13.32
pull
Entries 80
Mean 70.89
Std Dev 68.64

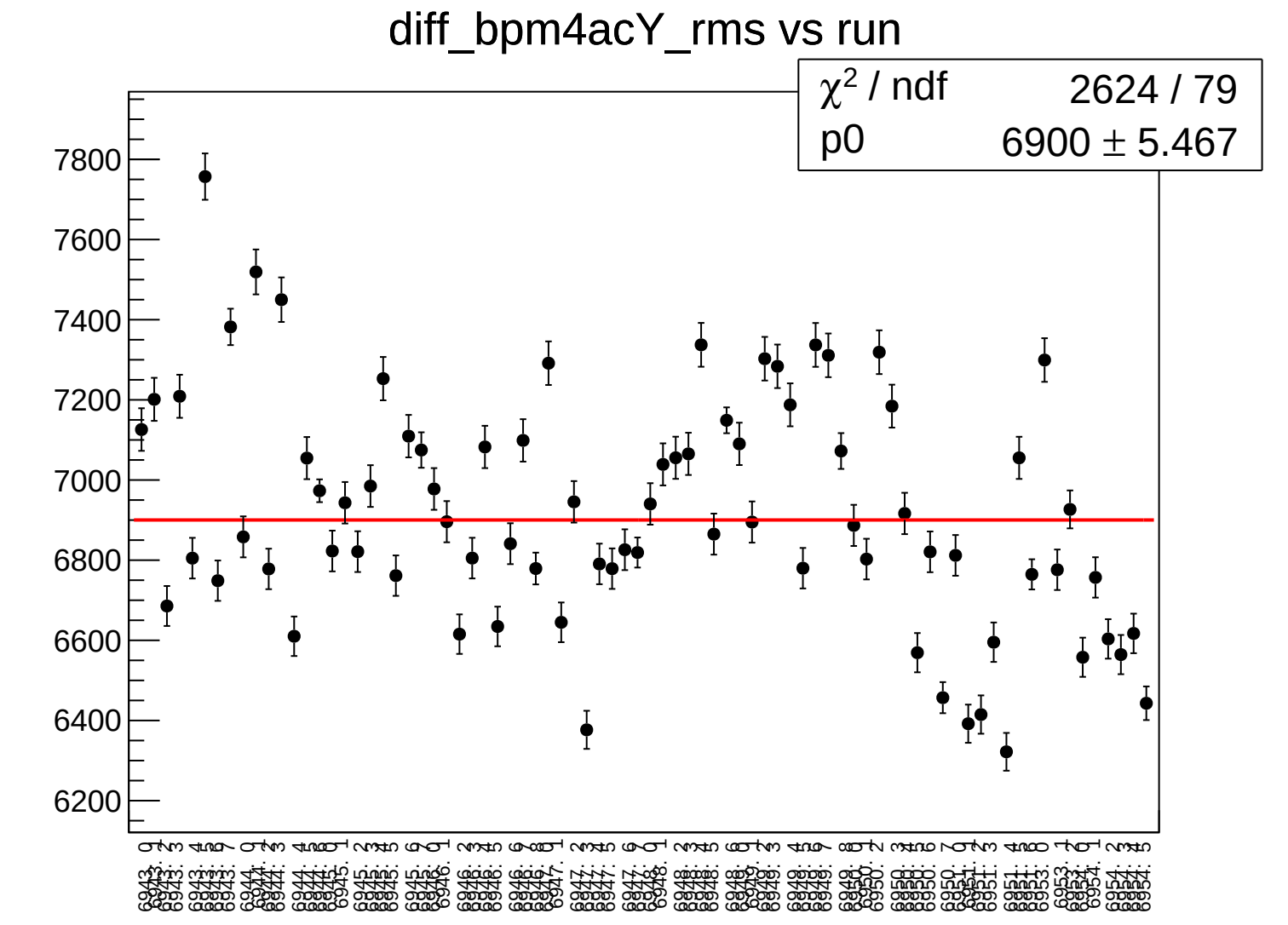

pull1D
Entries 80
Mean −0.02083
Std Dev 0.9724

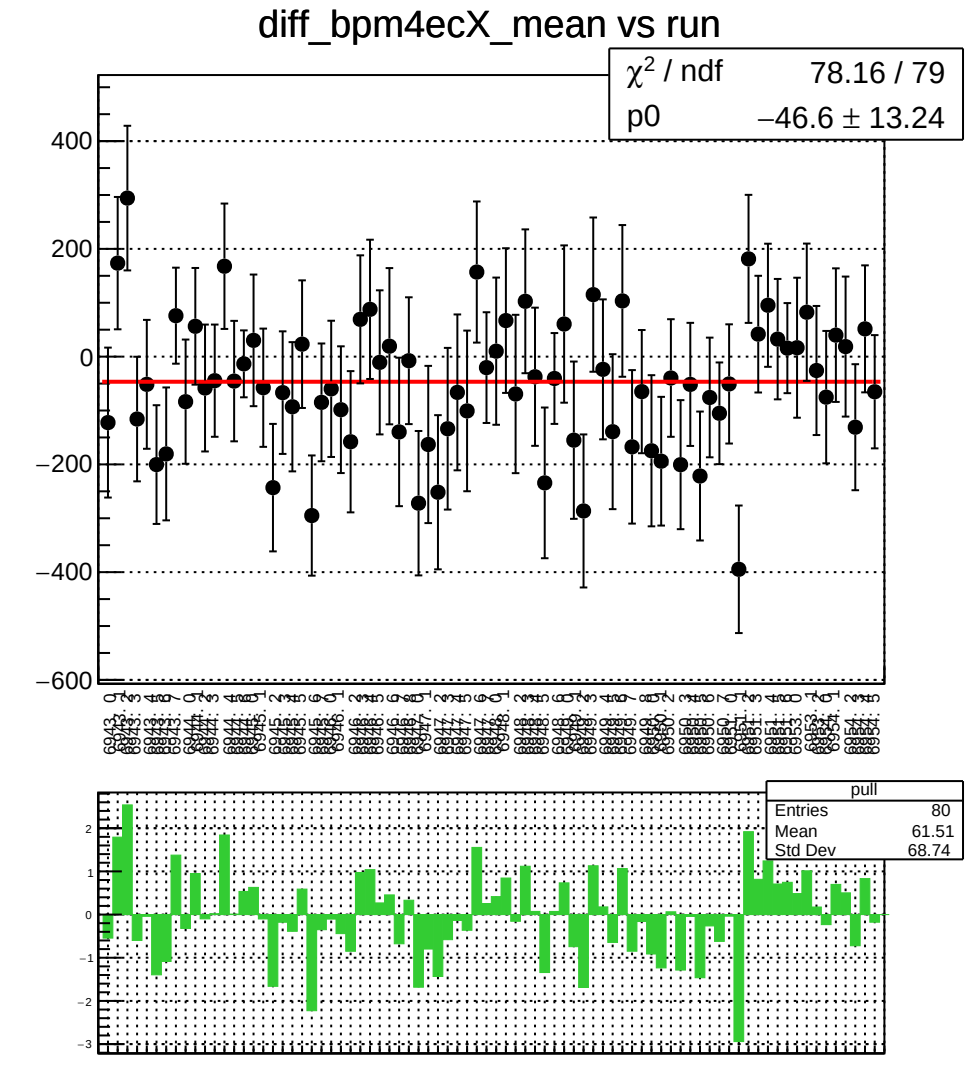
diff_bpm4acX_rms vs run

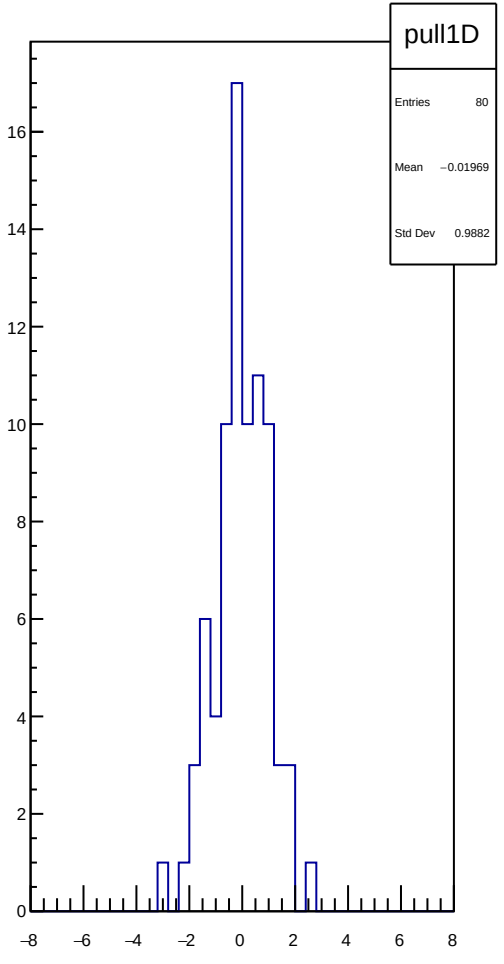


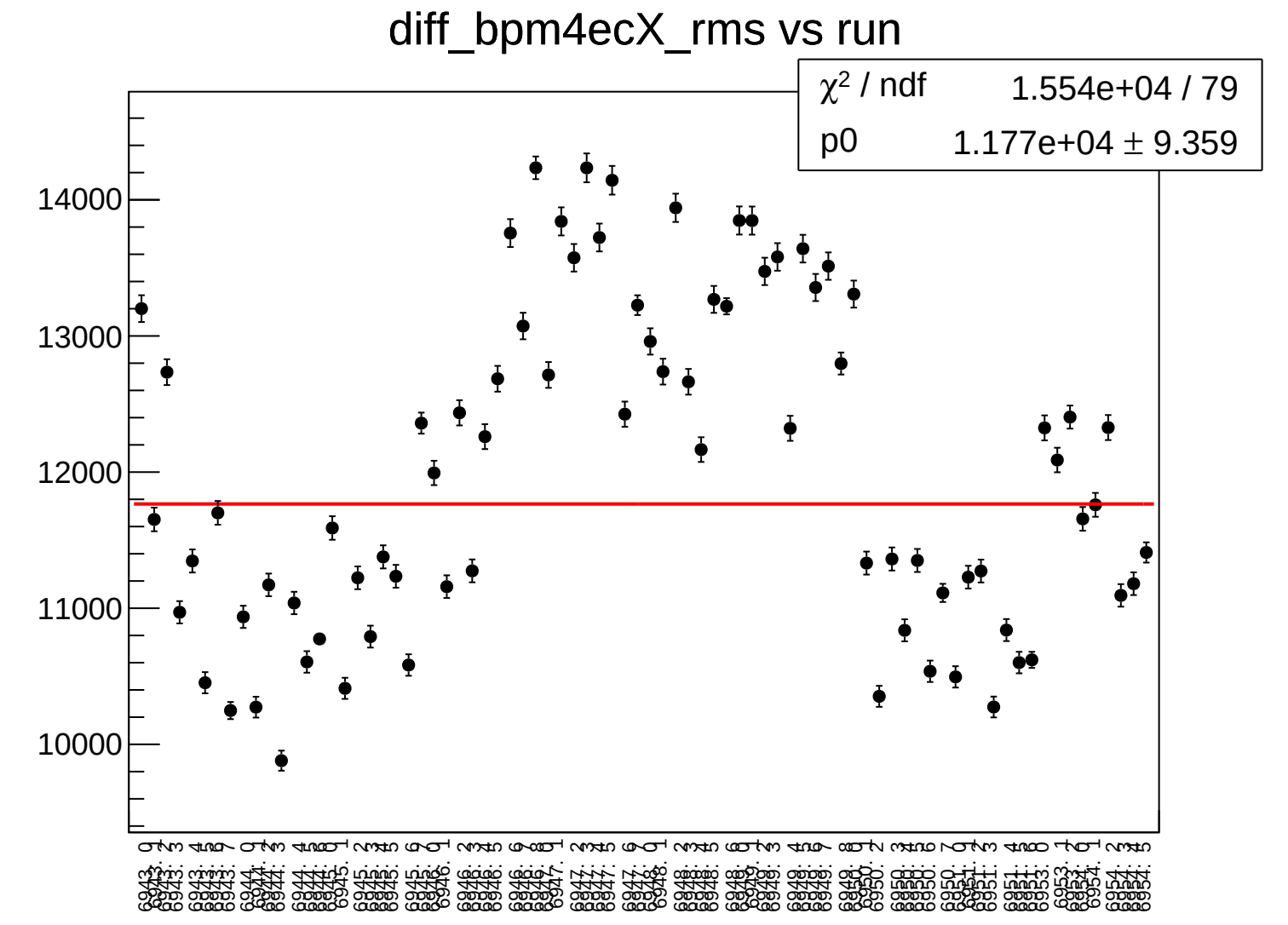

diff_bpm4acY_mean vs run
χ^2 / ndf 74.04 / 79
p0 1.437 ± 7.731
200
100
0
−100
−200
−300
pull
Entries 80
Mean −1355
Std Dev 1393
2
1
0
−1
−2
−3

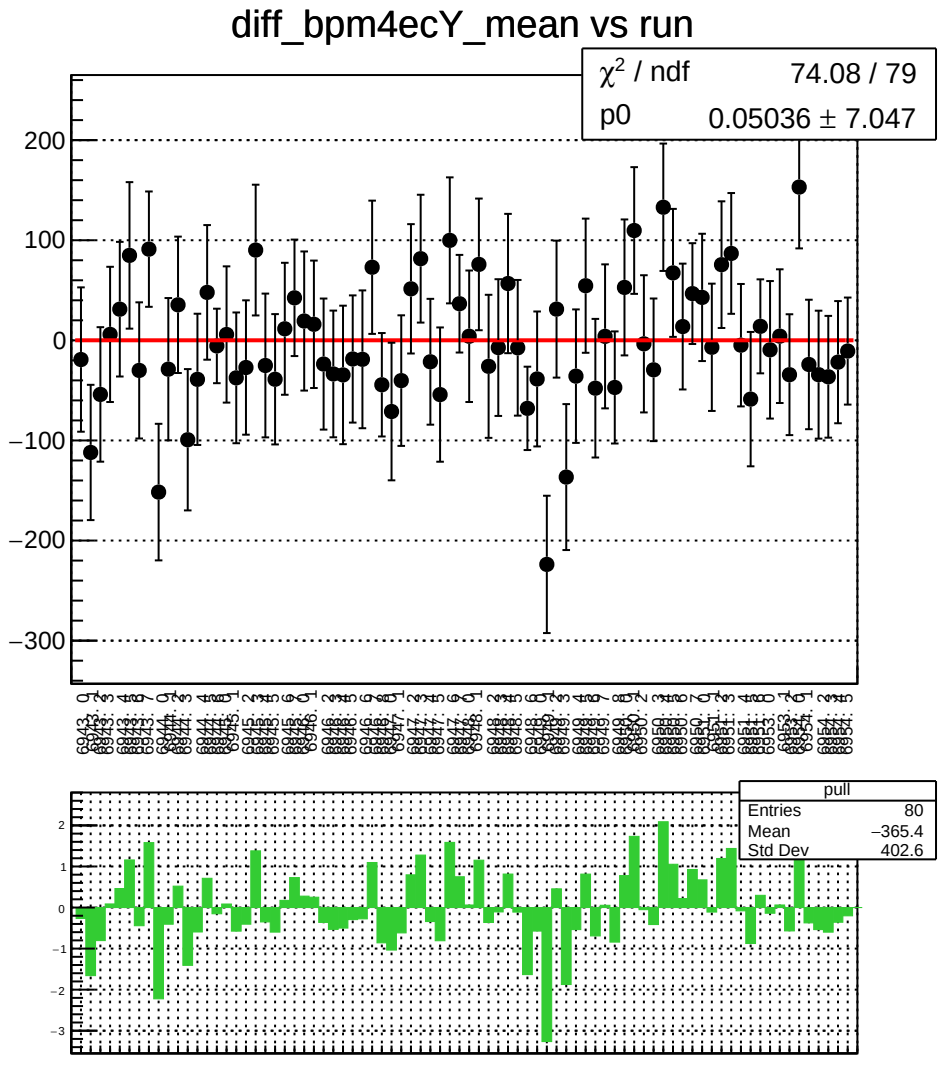

pull1D
Entries 80
Mean −0.002685
Std Dev 0.962
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

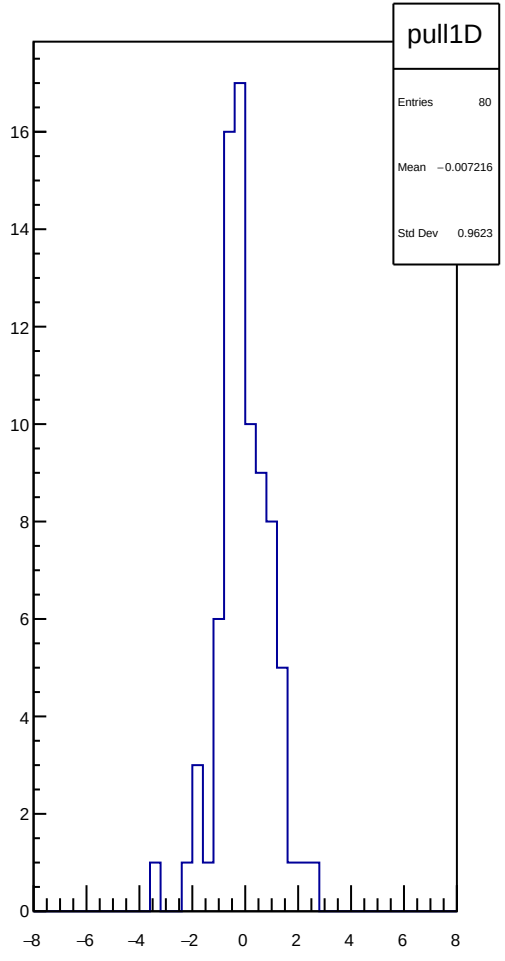

diff_bpm4acY_rms vs run
χ² / ndf 2624 / 79
p0 6900 ± 5.467
7800
7600
7400
7200
7000
6800
6600
6400
6200

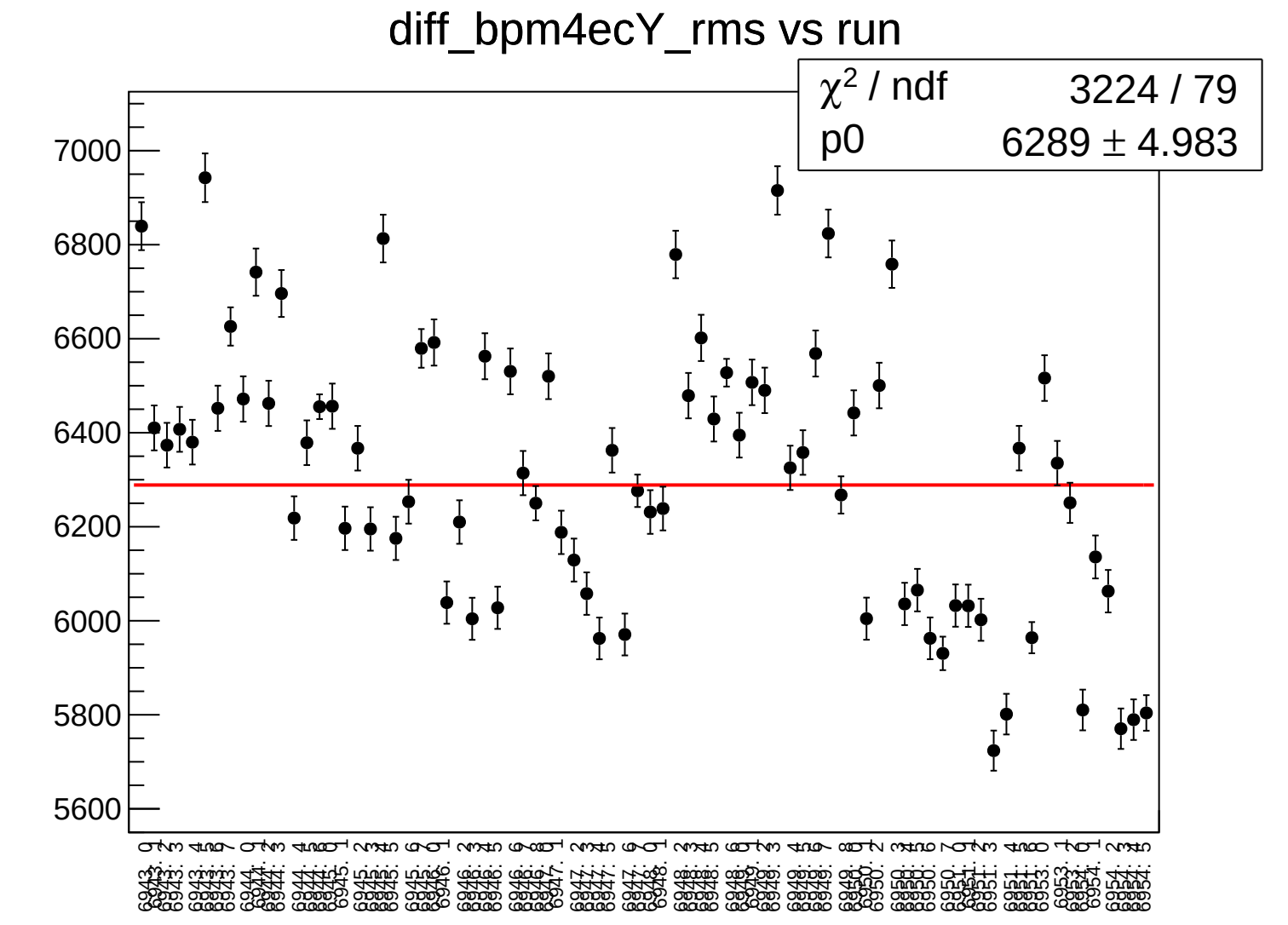

diff_bpm4ecX_mean vs run
χ² / ndf 78.16 / 79
p0 −46.6 ± 13.24
pull
Entries 80
Mean 61.51
Std Dev 68.74

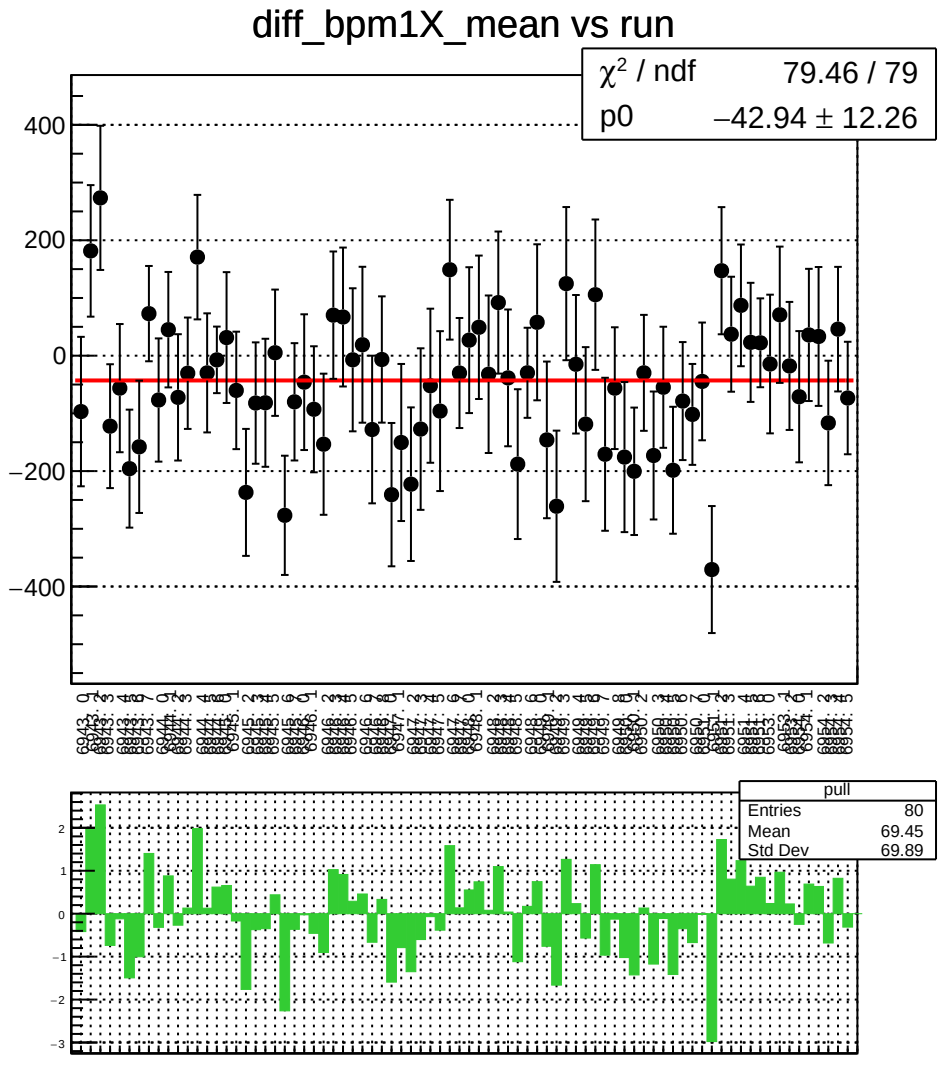

pull1D
Entries 80
Mean −0.01969
Std Dev 0.9882

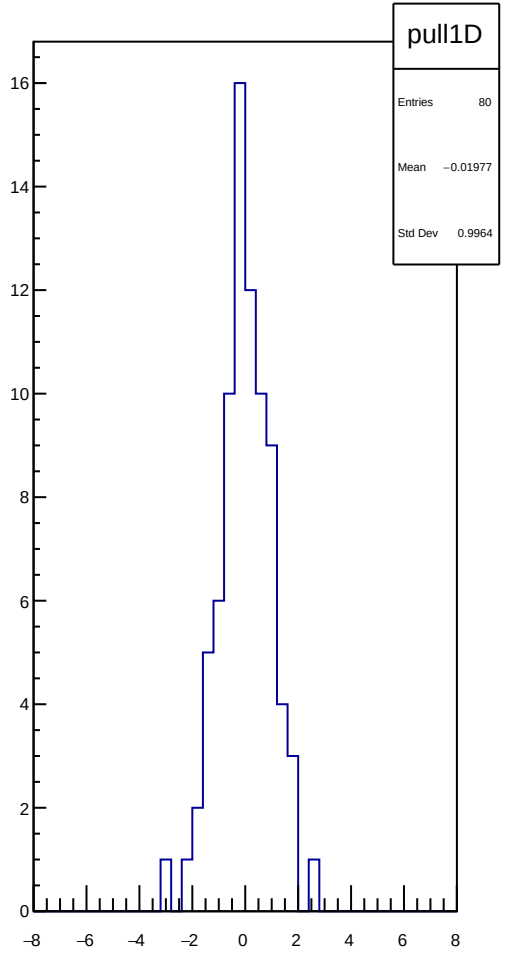

diff_bpm4ecX_rms vs run
χ² / ndf 1.554e+04 / 79
p0 1.177e+04 ± 9.359
14000
13000
12000
11000
10000

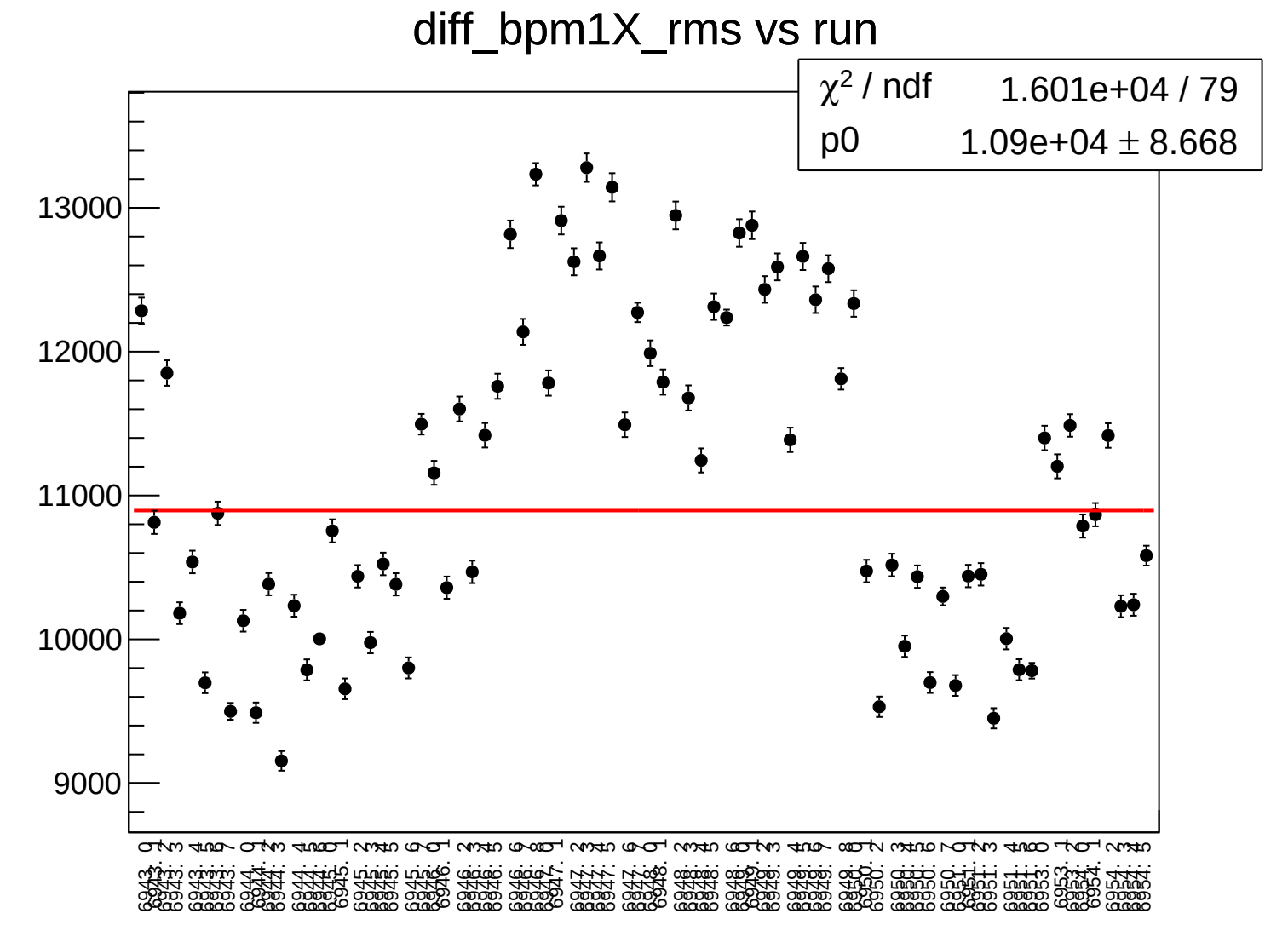

diff_bpm4ecY_mean vs run
χ² / ndf 74.08 / 79
p0 0.05036 ± 7.047
200
100
0
−100
−200
−300
pull
Entries 80
Mean −365.4
Std Dev 402.6
2
1
0
−1
−2
−3

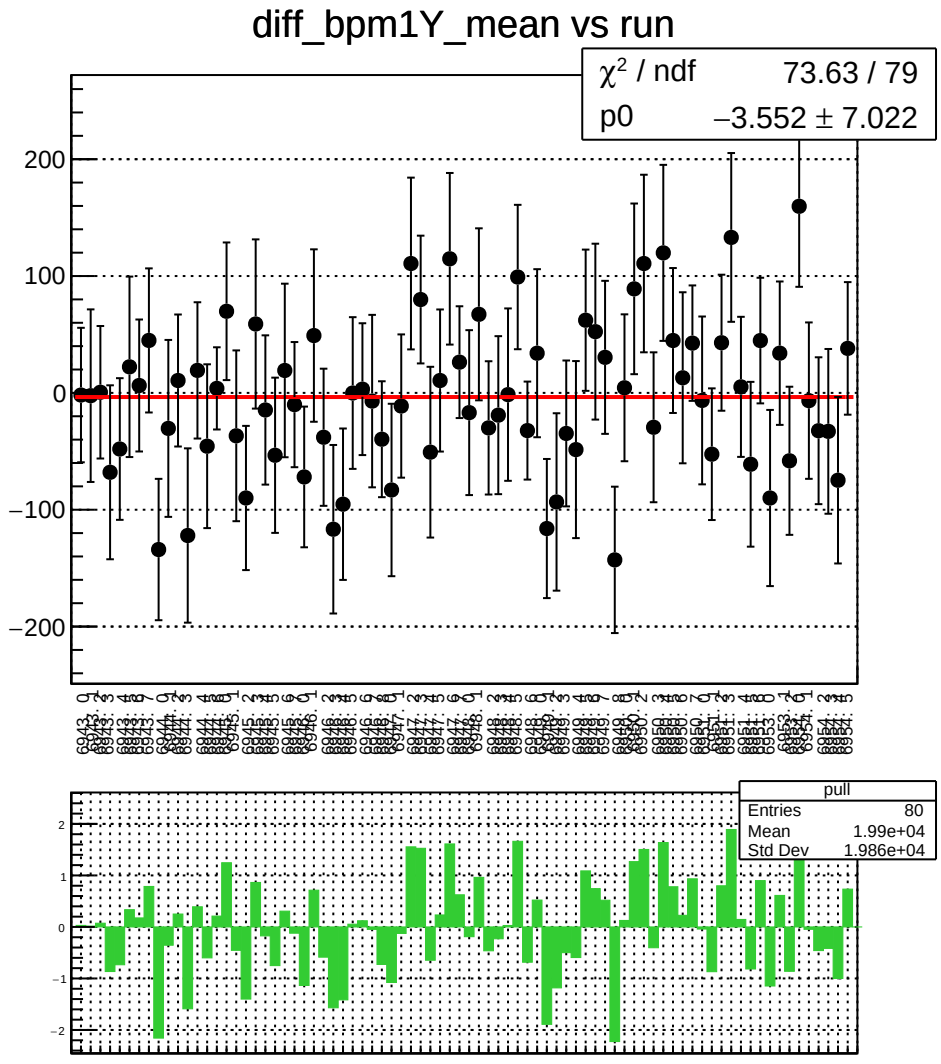

pull1D
Entries 80
Mean −0.007216
Std Dev 0.9623
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

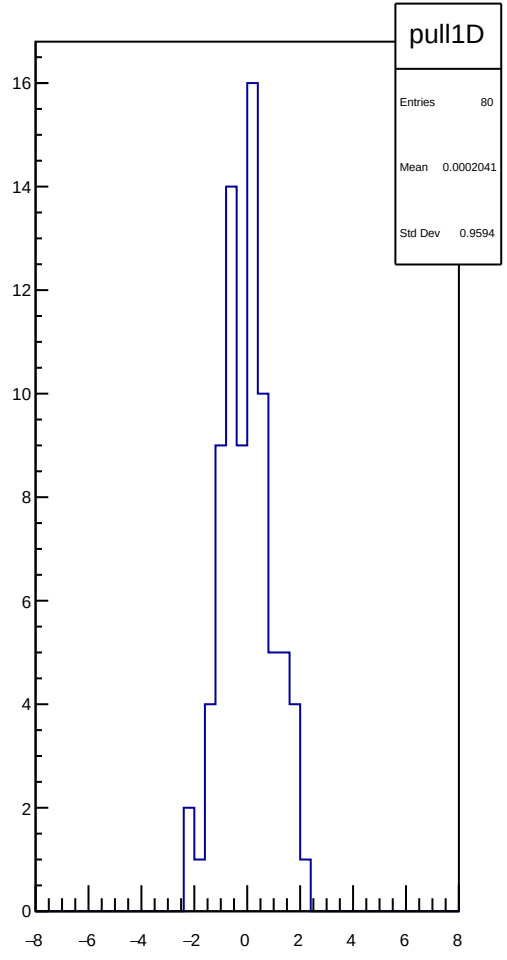

diff_bpm4ecY_rms vs run
χ² / ndf 3224 / 79
p0 6289 ± 4.983
7000
6800
6600
6400
6200
6000
5800
5600

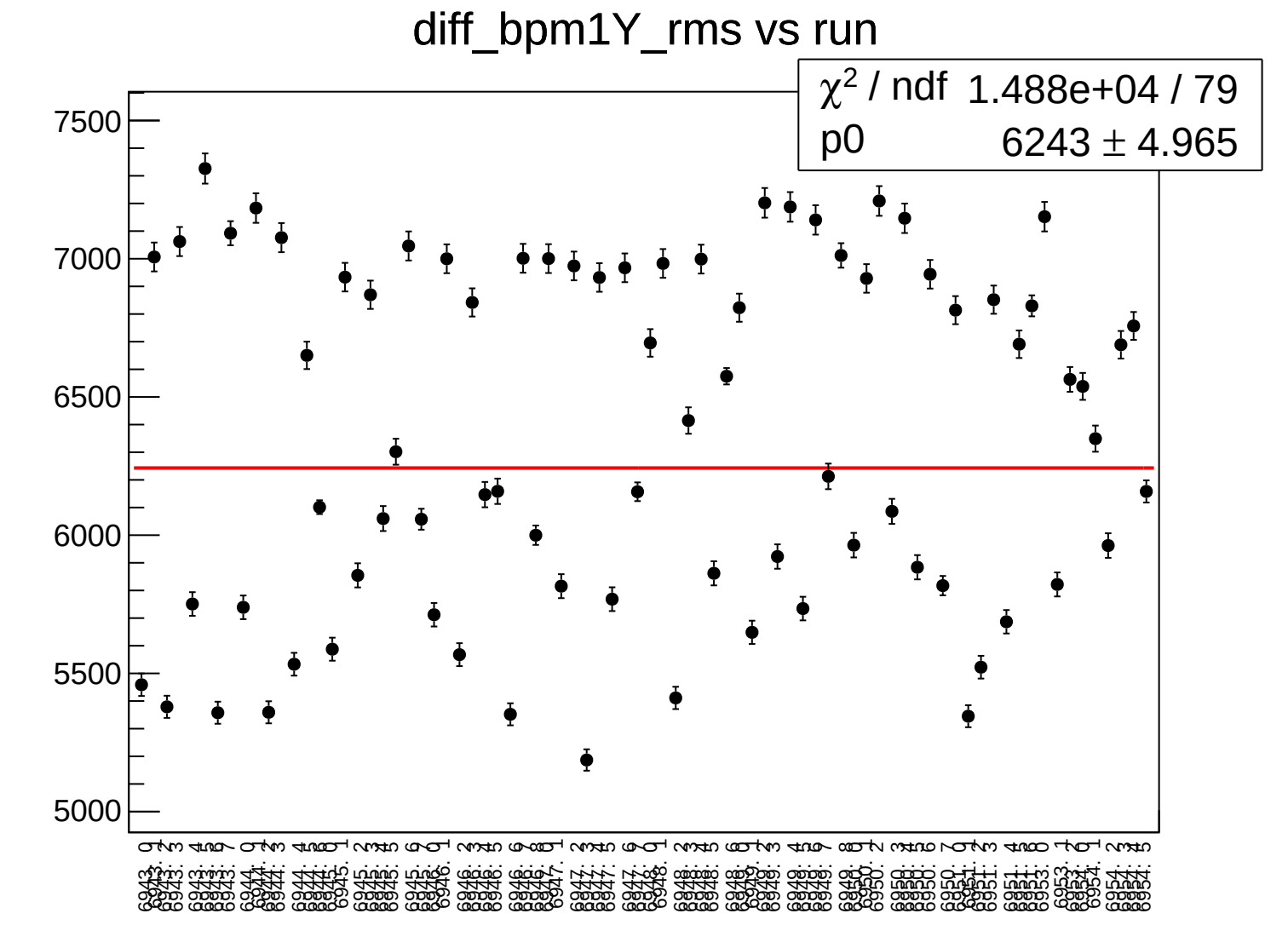

diff_bpm1X_mean vs run
χ² / ndf 79.46 / 79
p0 −42.94 ± 12.26
400
200
0
−200
−400
pull
Entries 80
Mean 69.45
Std Dev 69.89
2
1
0
−1
−2
−3

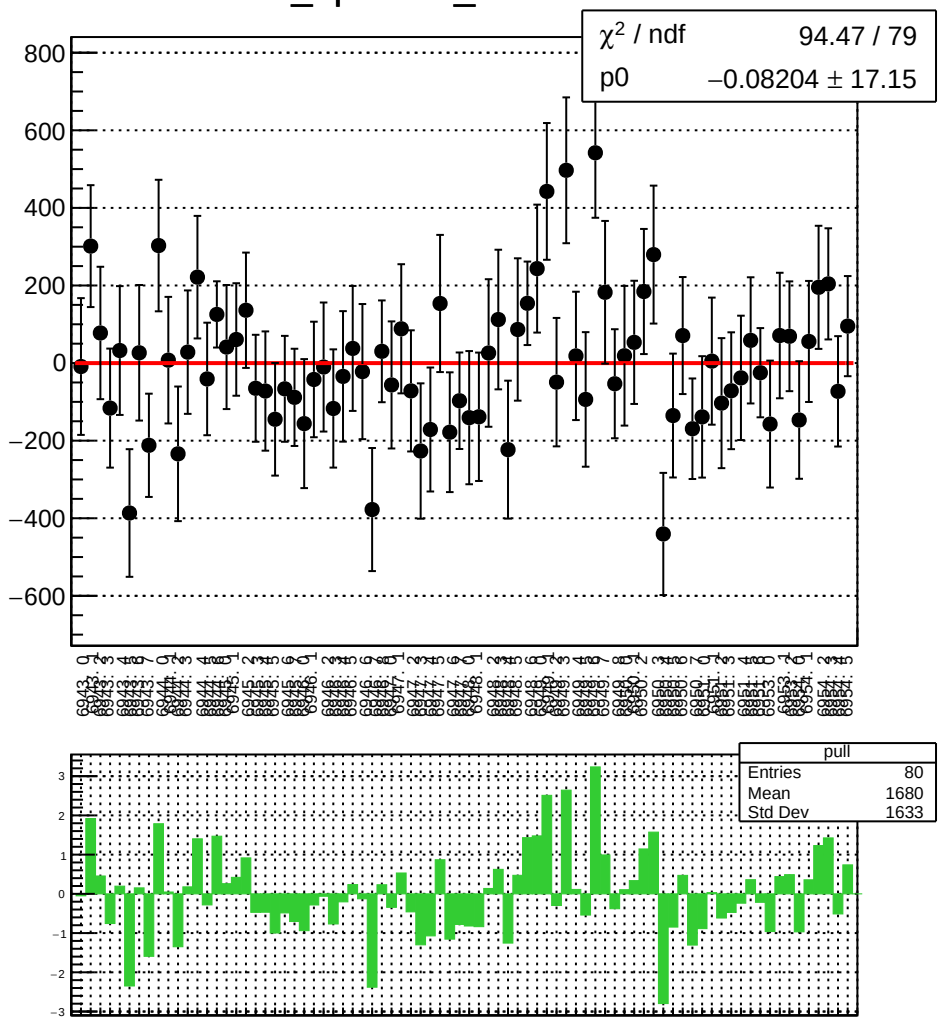

pull1D
Entries 80
Mean −0.01977
Std Dev 0.9964
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

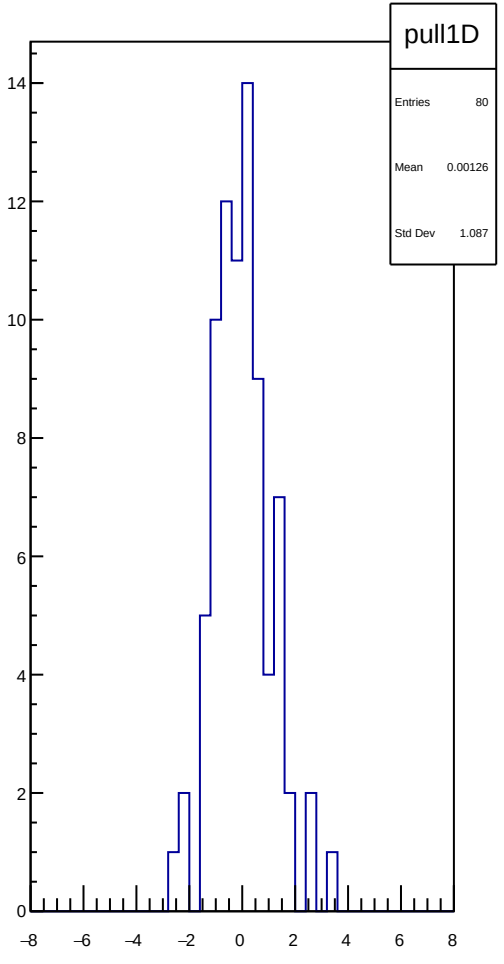

diff_bpm1X_rms vs run
χ² / ndf 1.601e+04 / 79
p0 1.09e+04 ± 8.668
13000
12000
11000
10000
9000

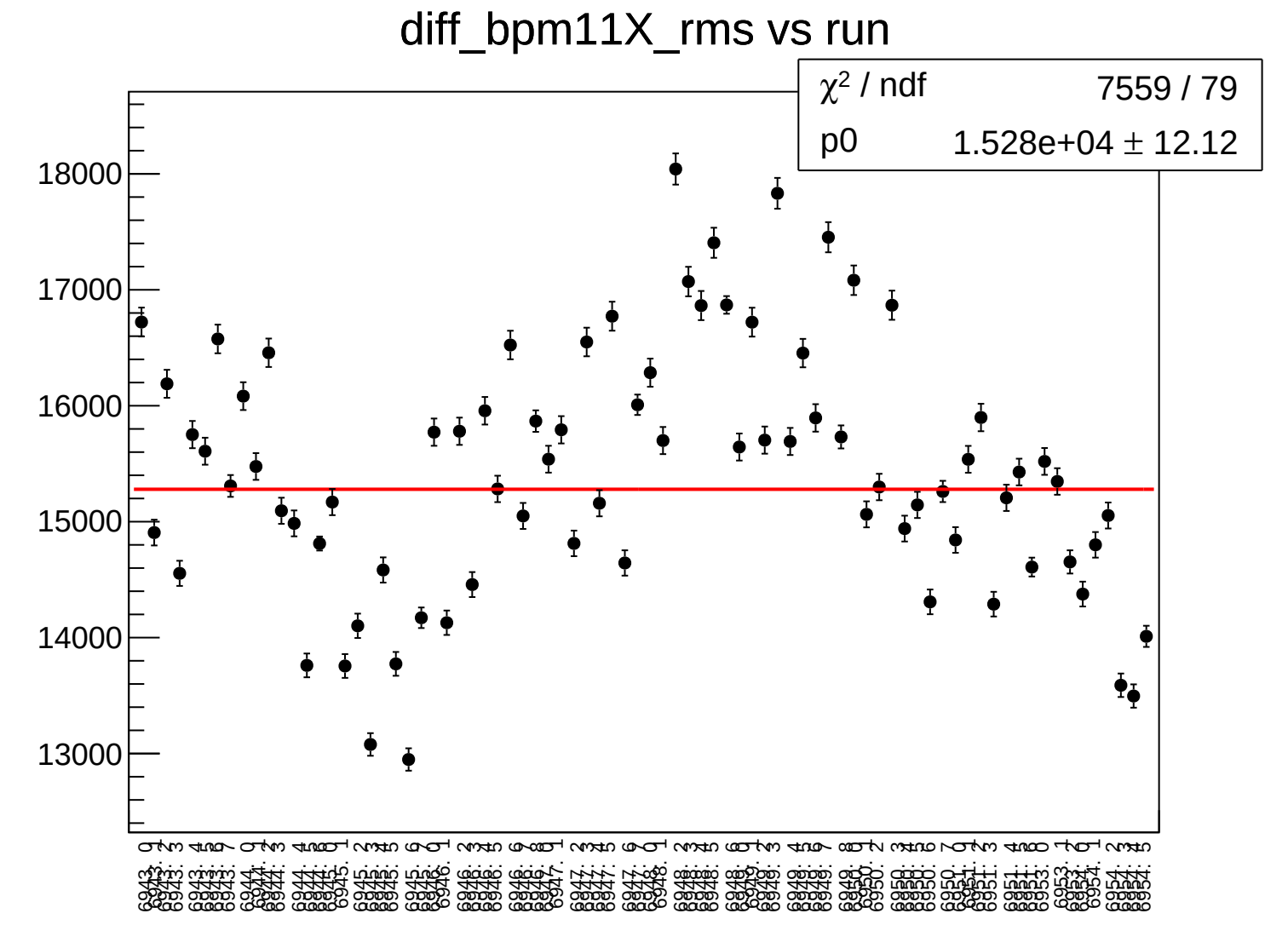

diff_bpm1Y_mean vs run
χ² / ndf 73.63 / 79
p0 −3.552 ± 7.022
200
100
0
−100
−200
pull
Entries 80
Mean 1.99e+04
Std Dev 1.986e+04
2
1
0
−1
−2

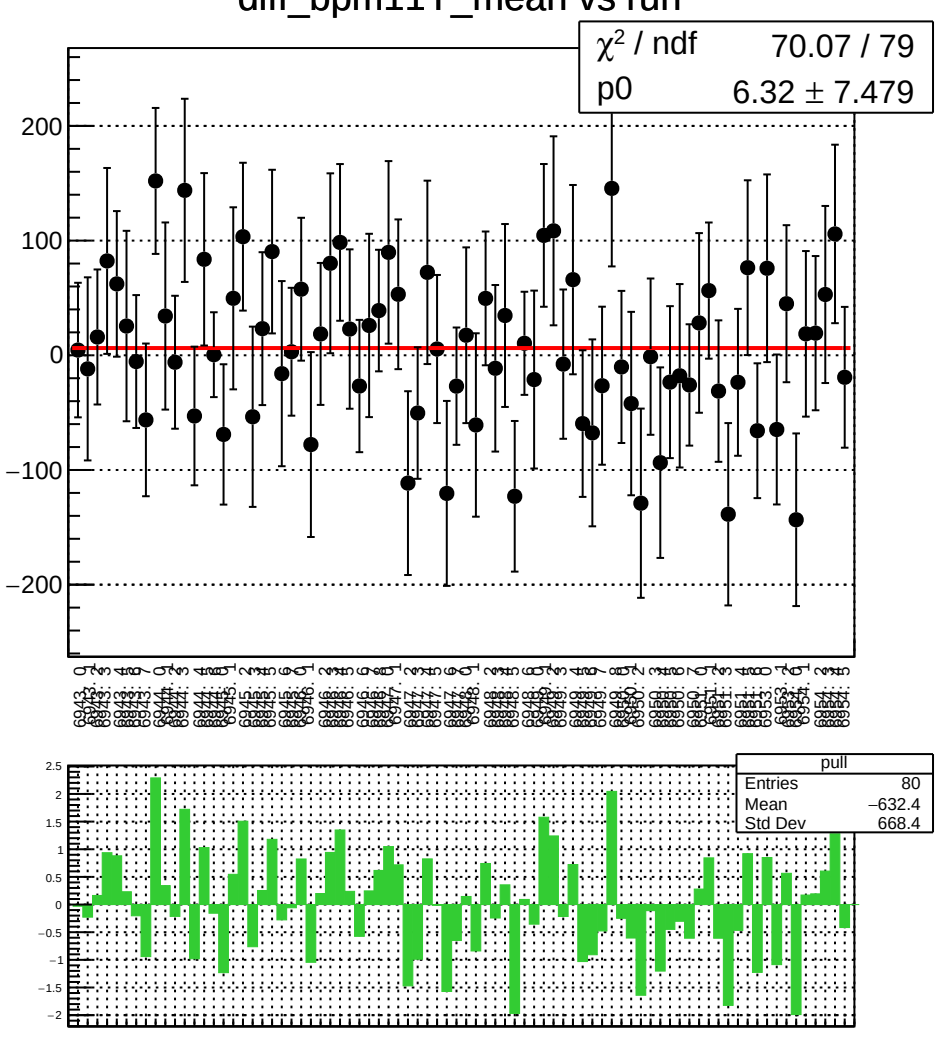

pull1D
Entries 80
Mean 0.0002041
Std Dev 0.9594
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

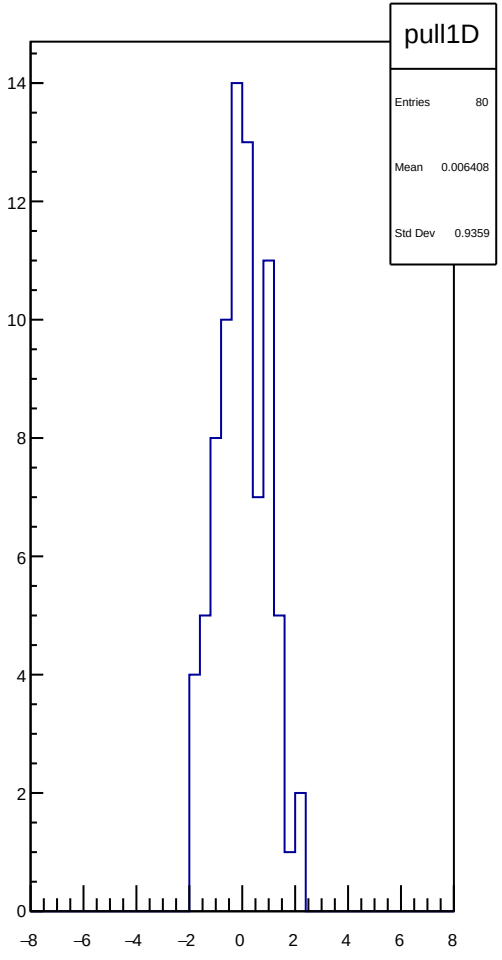

diff_bpm1Y_rms vs run
χ² / ndf 1.488e+04 / 79
p0 6243 ± 4.965
7500
7000
6500
6000
5500
5000

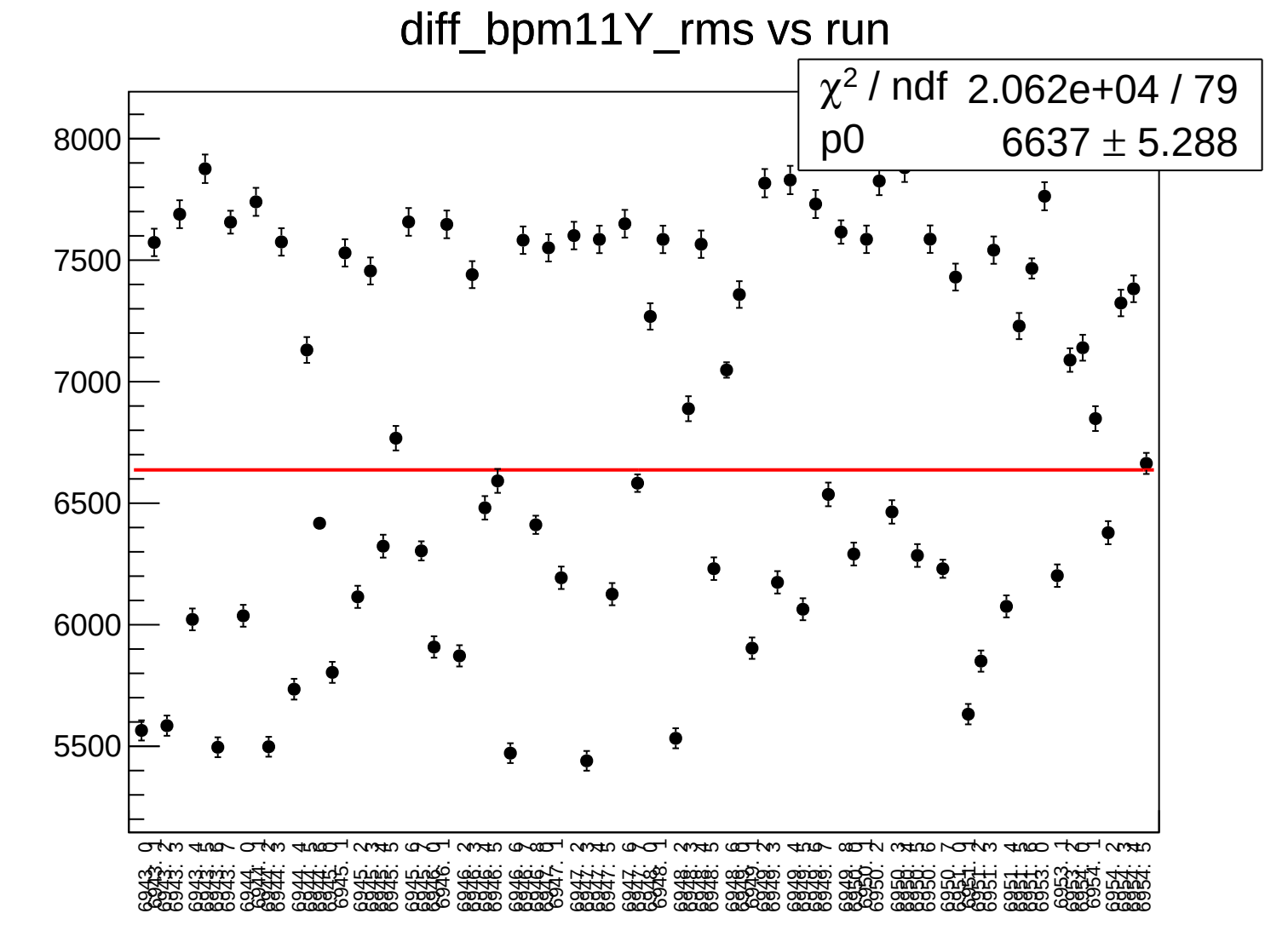

diff_bpm11X_mean vs run
χ² / ndf 94.47 / 79
p0 −0.08204 ± 17.15
pull
Entries 80
Mean 1680
Std Dev 1633

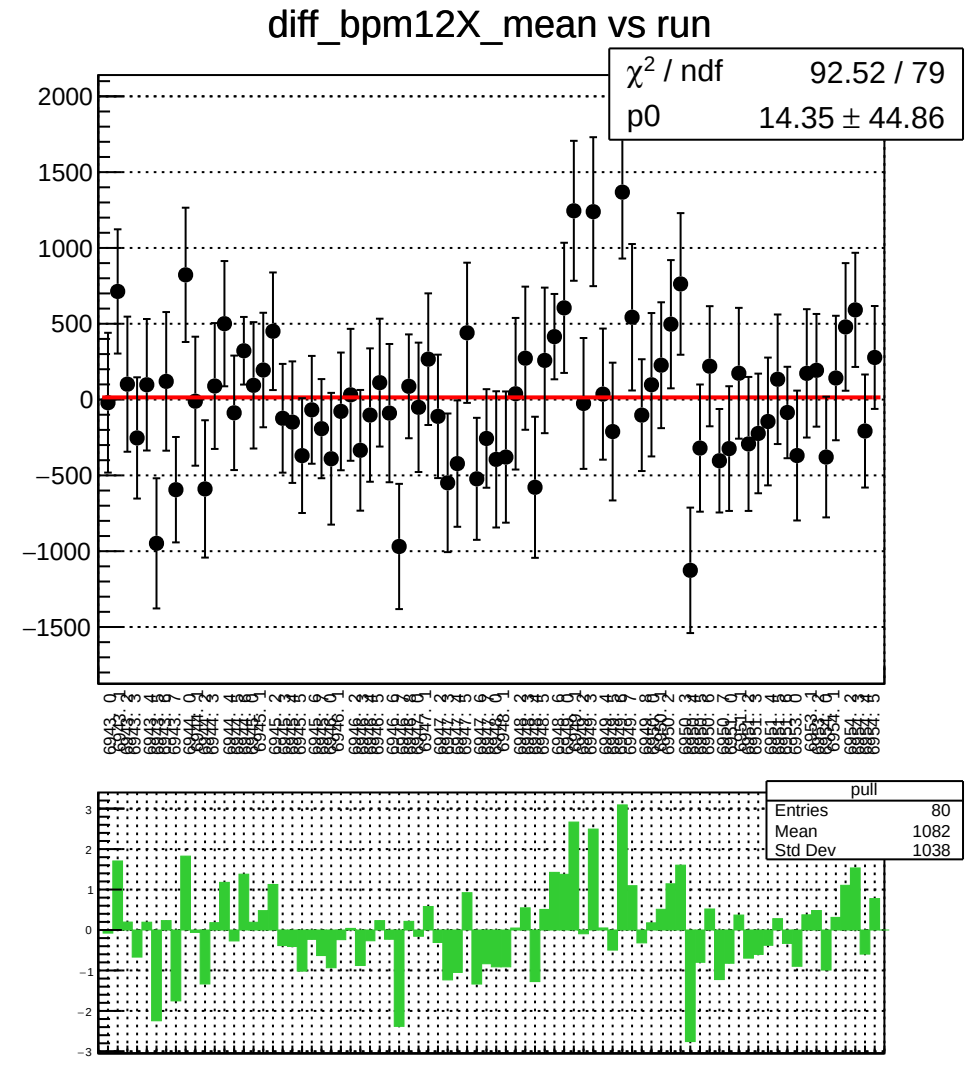

pull1D
Entries 80
Mean 0.00126
Std Dev 1.087

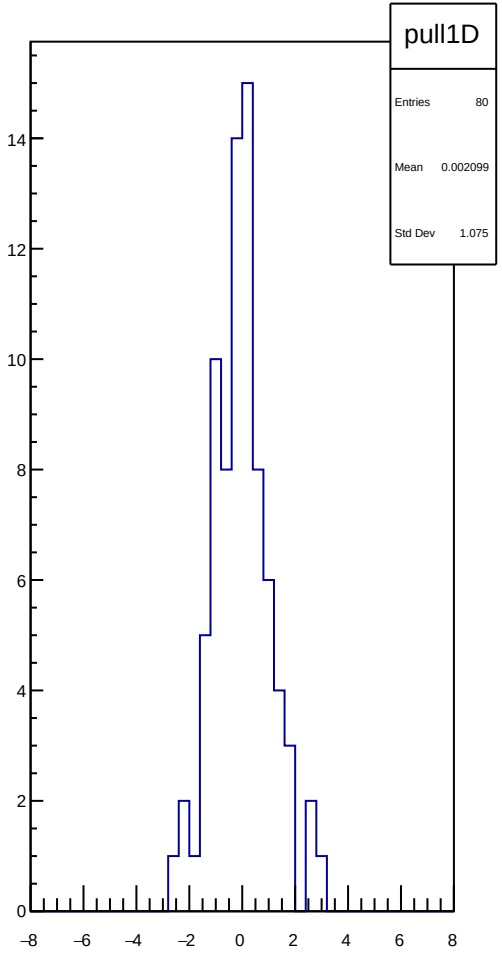

diff_bpm11X_rms vs run
χ² / ndf 7559 / 79
p0 1.528e+04 ± 12.12
18000
17000
16000
15000
14000
13000

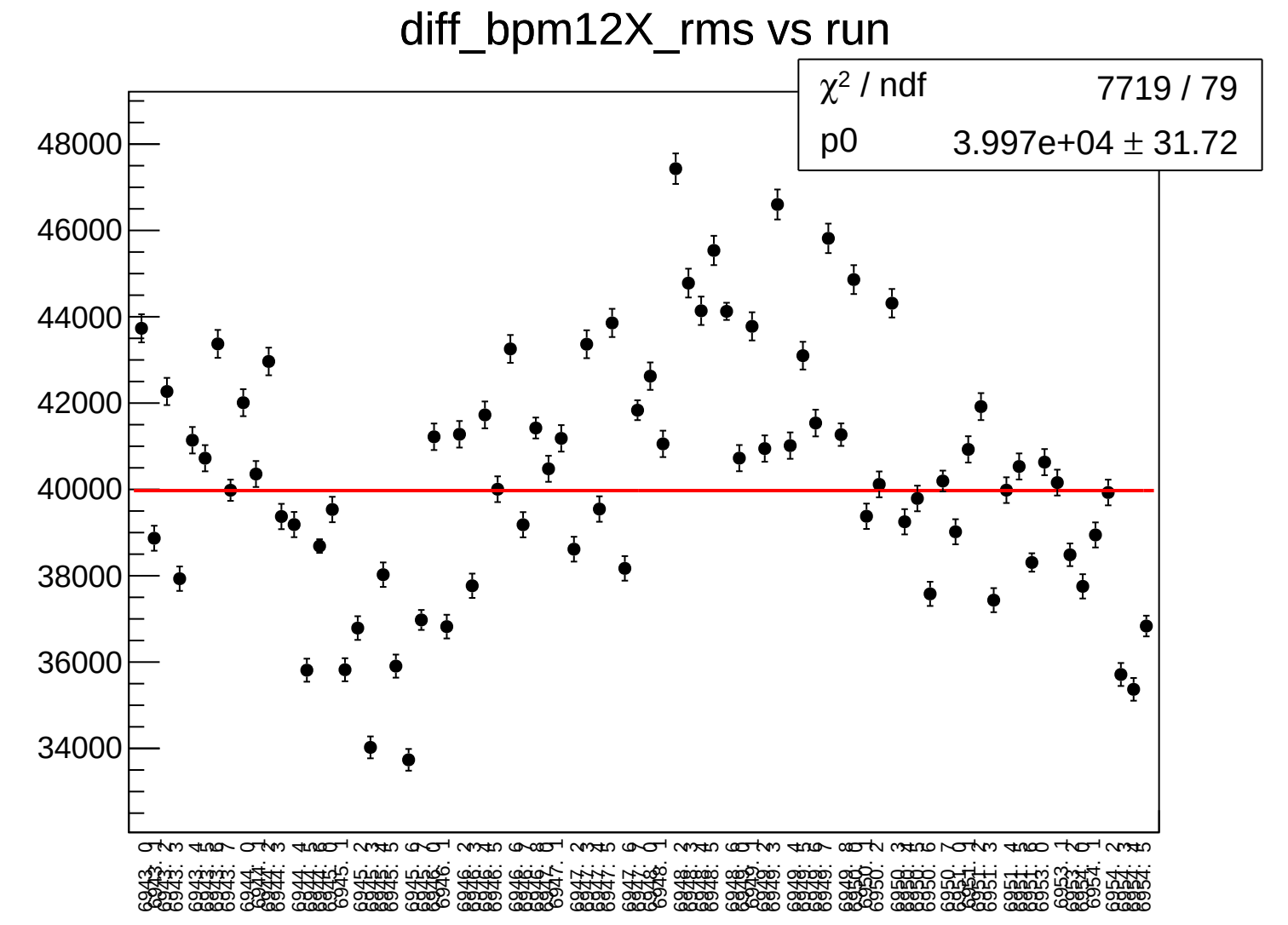

diff_bpm11Y_mean vs run
χ^2 / ndf 70.07 / 79
p0 6.32 ± 7.479
pull
Entries 80
Mean −632.4
Std Dev 668.4

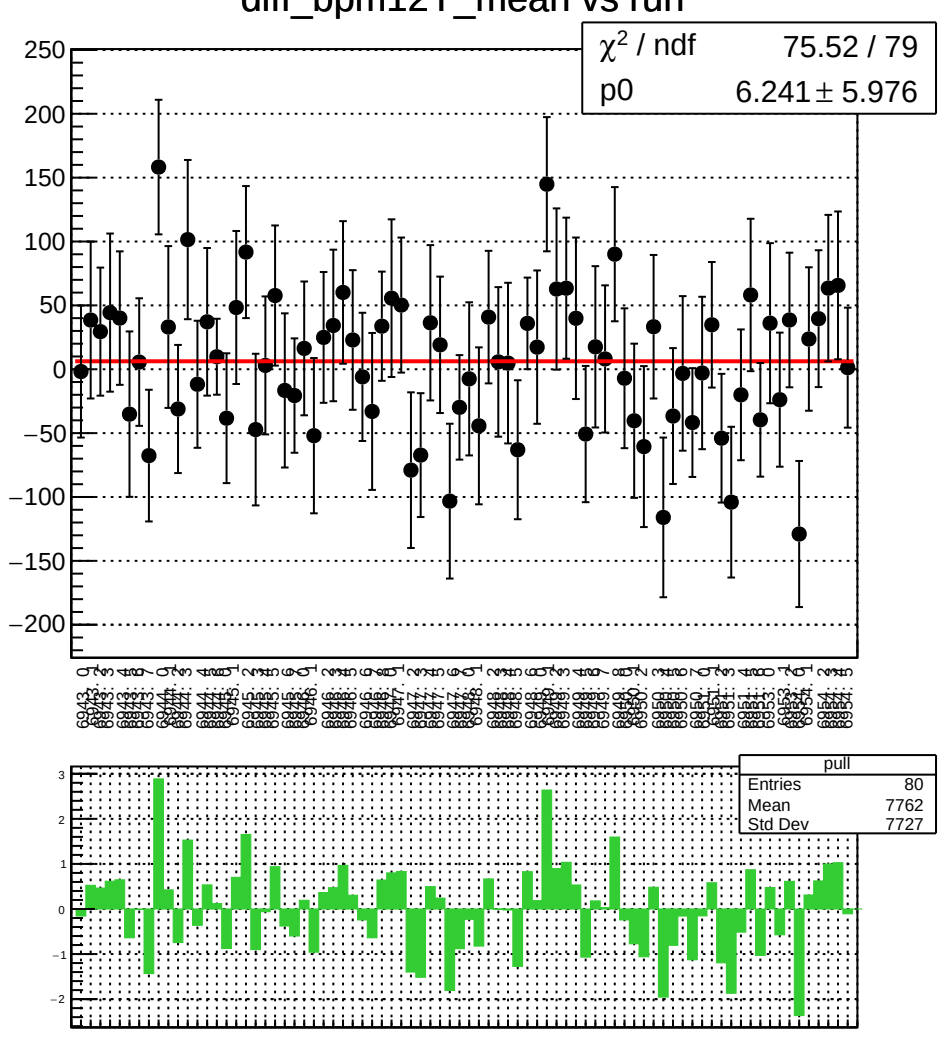

pull1D
Entries 80
Mean 0.006408
Std Dev 0.9359

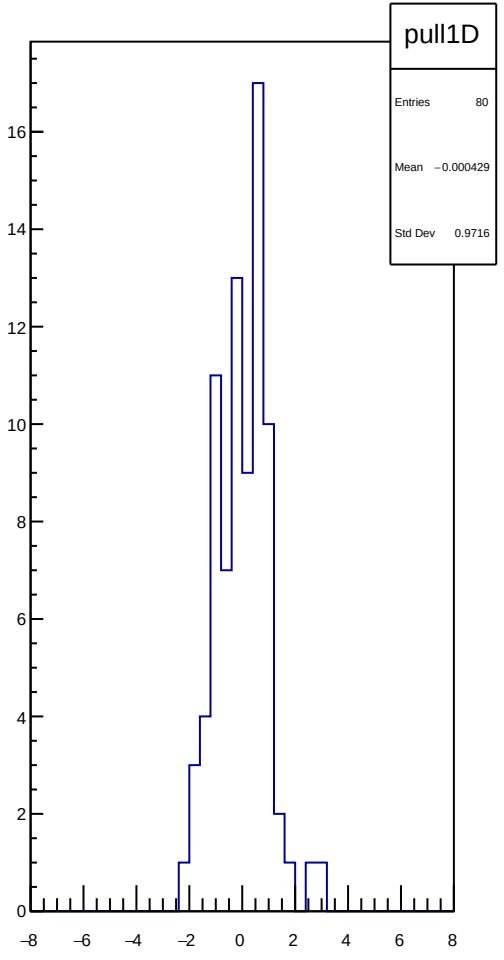

diff_bpm11Y_rms vs run
χ² / ndf 2.062e+04 / 79
p0 6637 ± 5.288
8000
7500
7000
6500
6000
5500

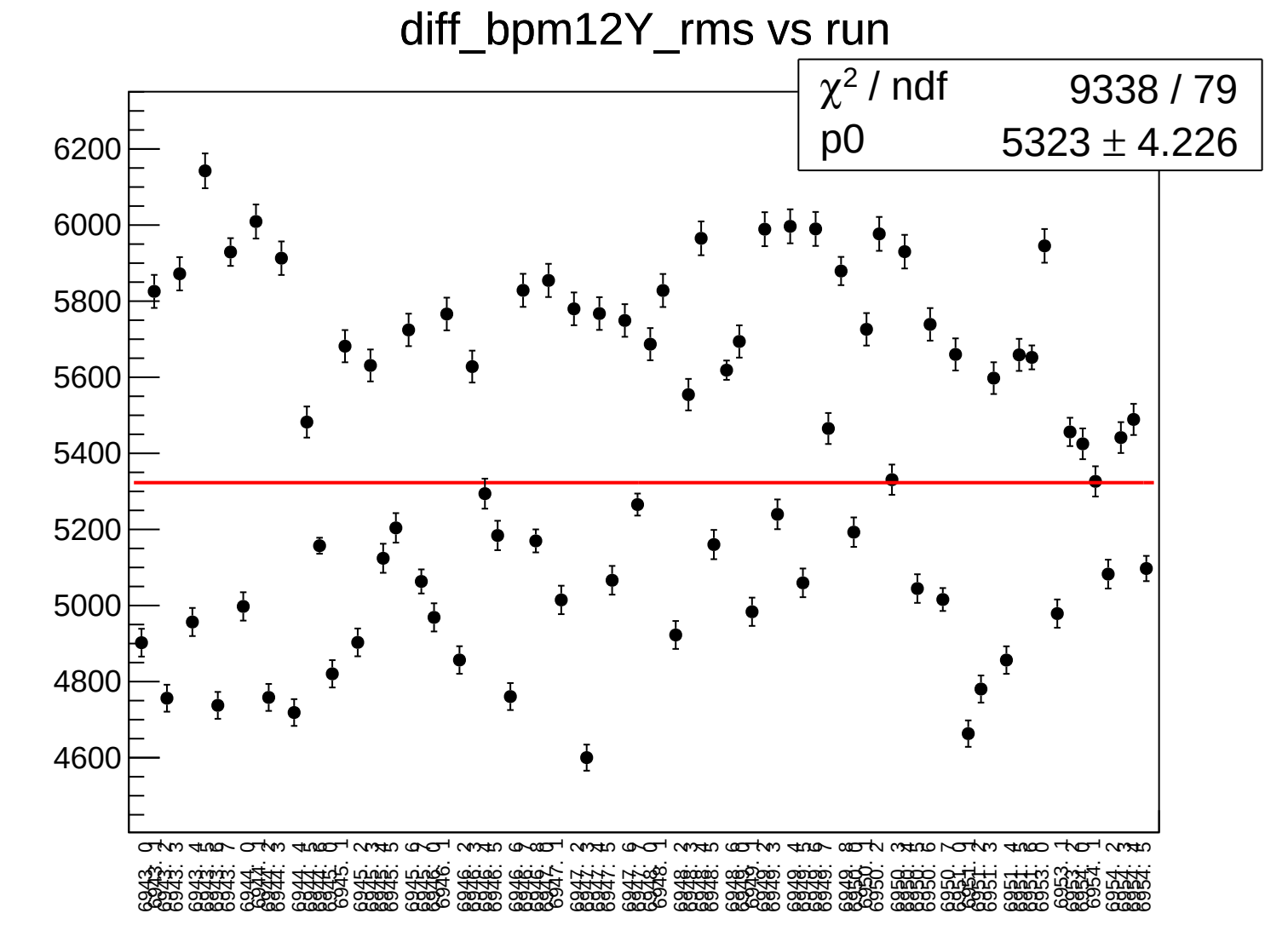

diff_bpm12X_mean vs run
χ^2 / ndf 92.52 / 79
p0 14.35 ± 44.86
pull
Entries 80
Mean 1082
Std Dev 1038

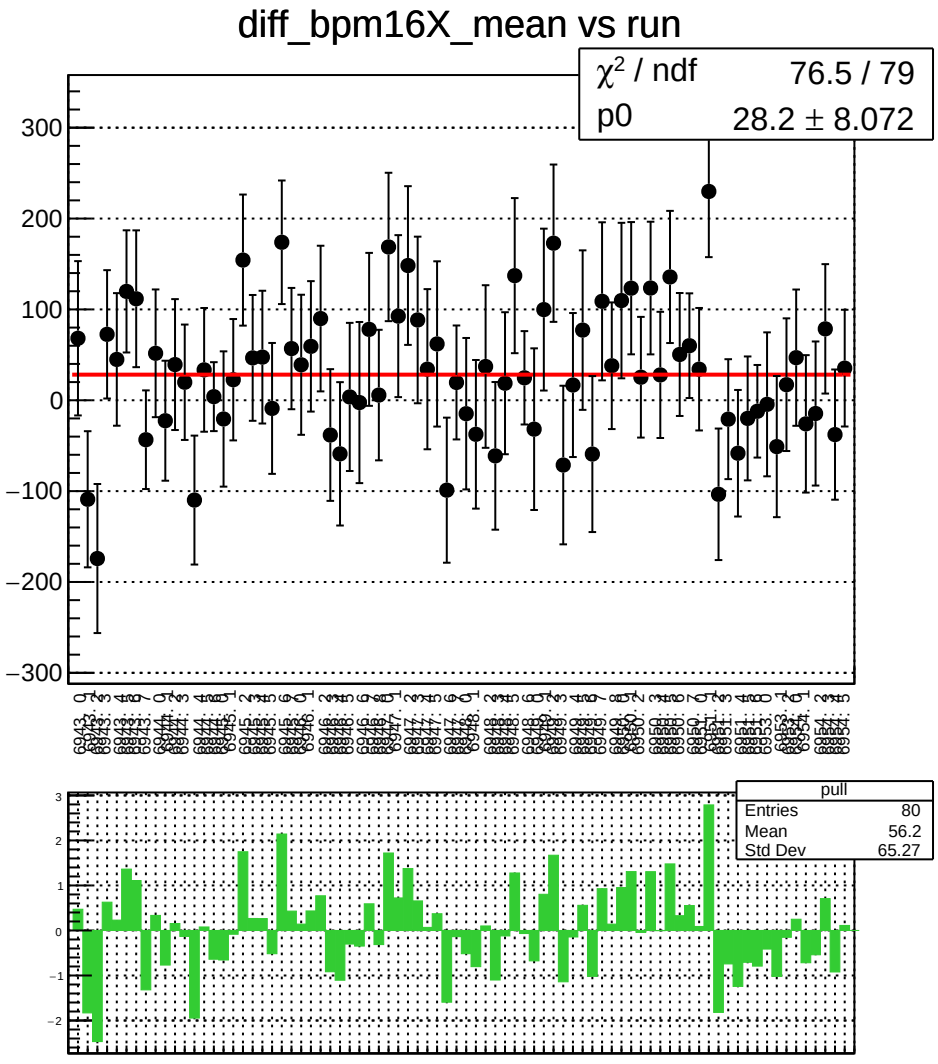

pull1D
Entries 80
Mean 0.002099
Std Dev 1.075

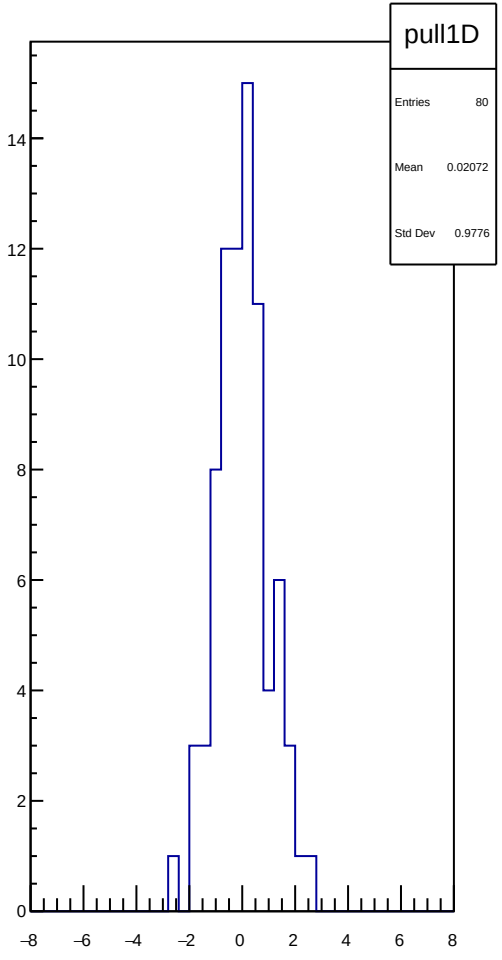

diff_bpm12X_rms vs run
χ² / ndf 7719 / 79
p0 3.997e+04 ± 31.72
48000
46000
44000
42000
40000
38000
36000
34000

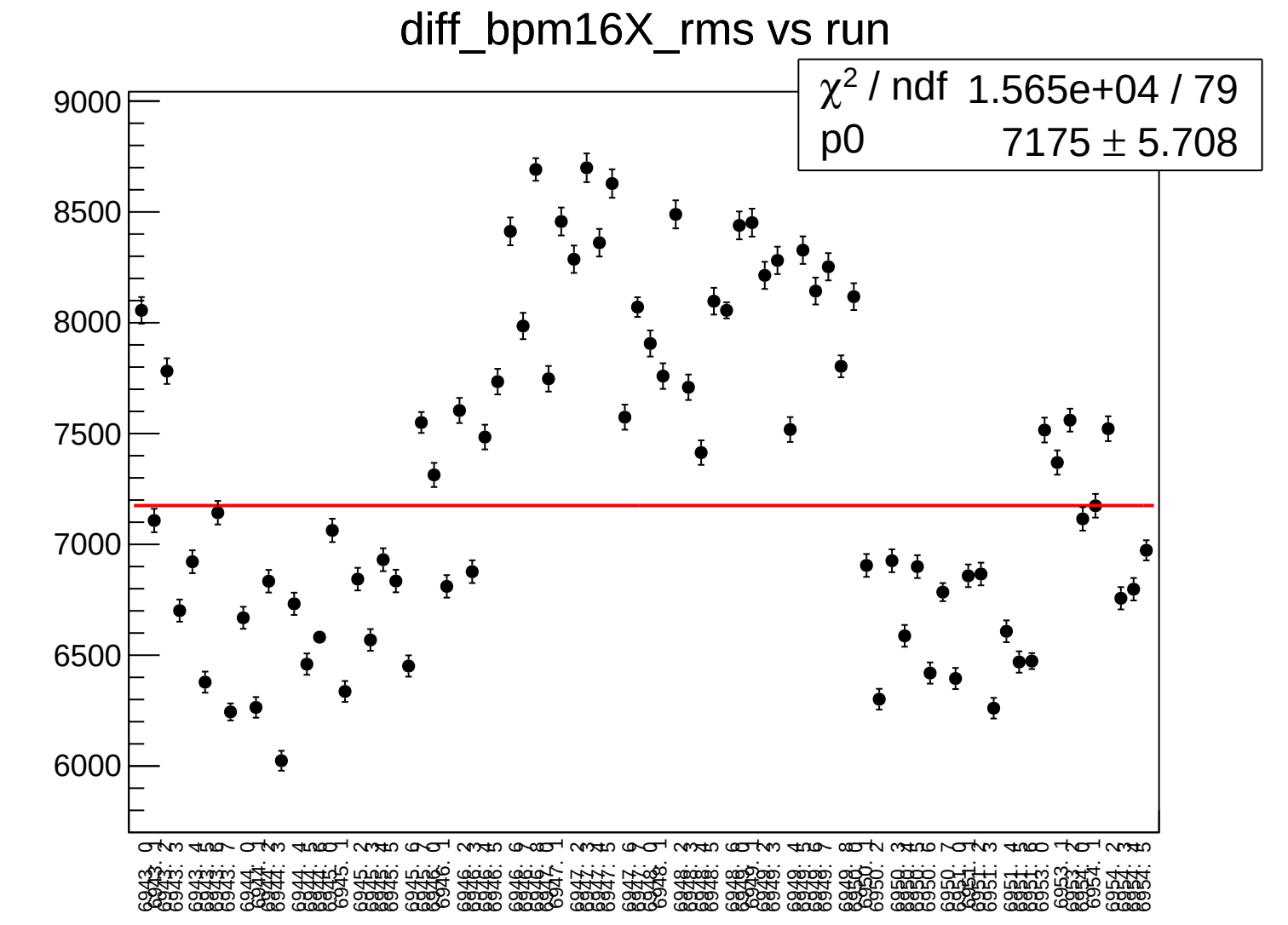

diff_bpm12Y_mean vs run
χ^2 / ndf 75.52 / 79
p0 6.241 ± 5.976
pull
Entries 80
Mean 7762
Std Dev 7727

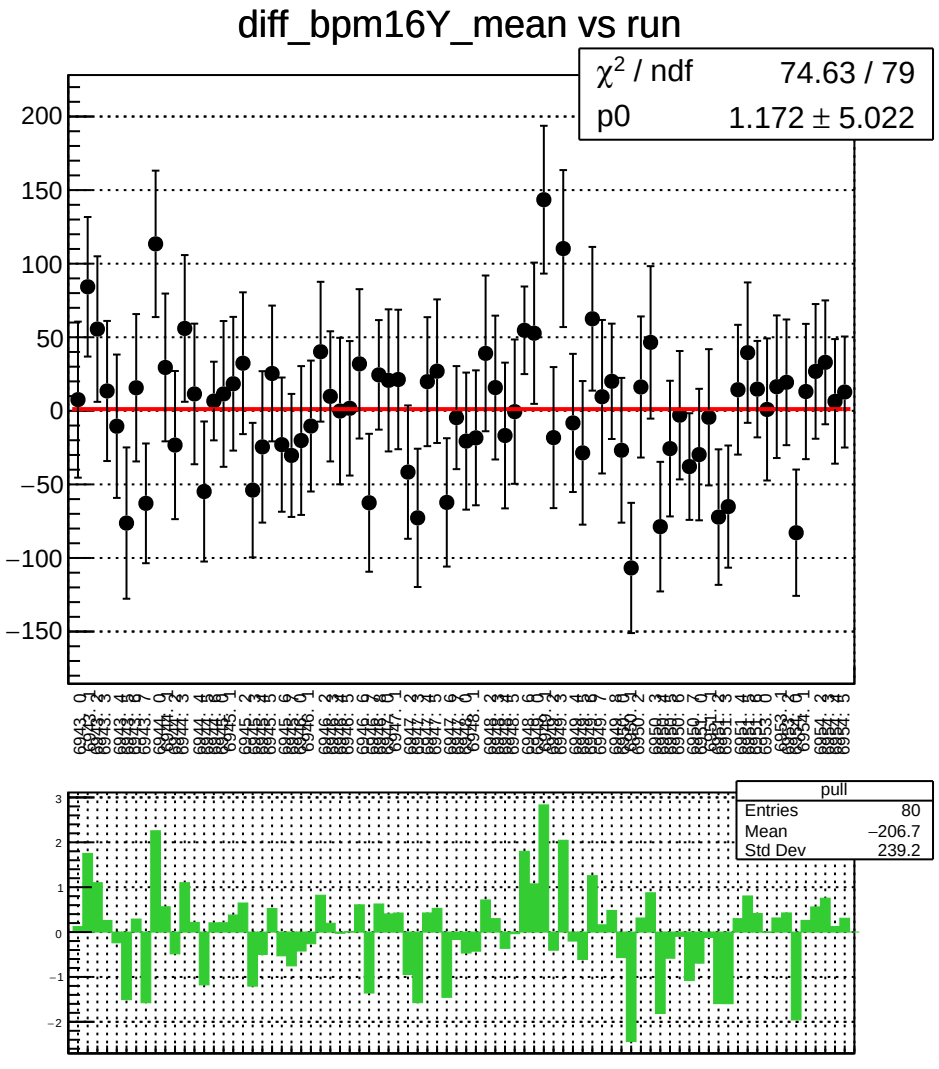

pull1D
Entries 80
Mean −0.000429
Std Dev 0.9716

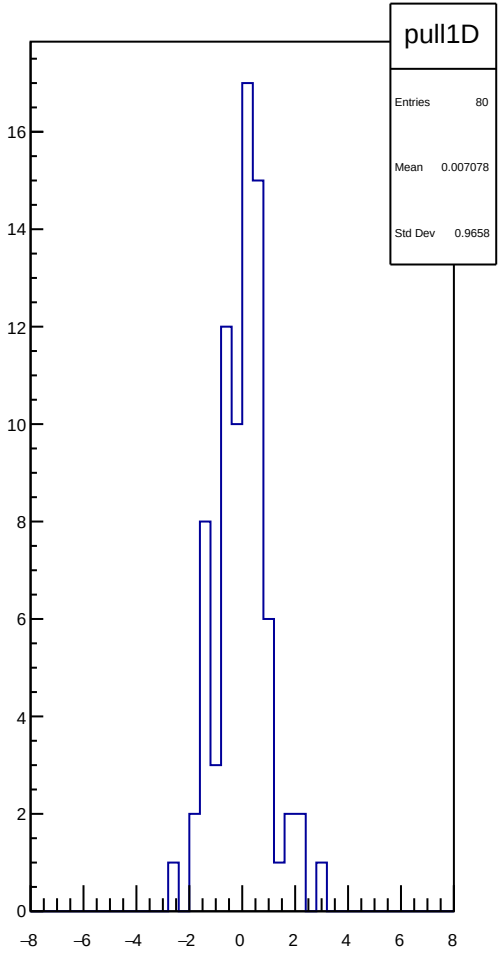

diff_bpm12Y_rms vs run
χ^2 / ndf 9338 / 79
p0 5323 ± 4.226
6200
6000
5800
5600
5400
5200
5000
4800
4600

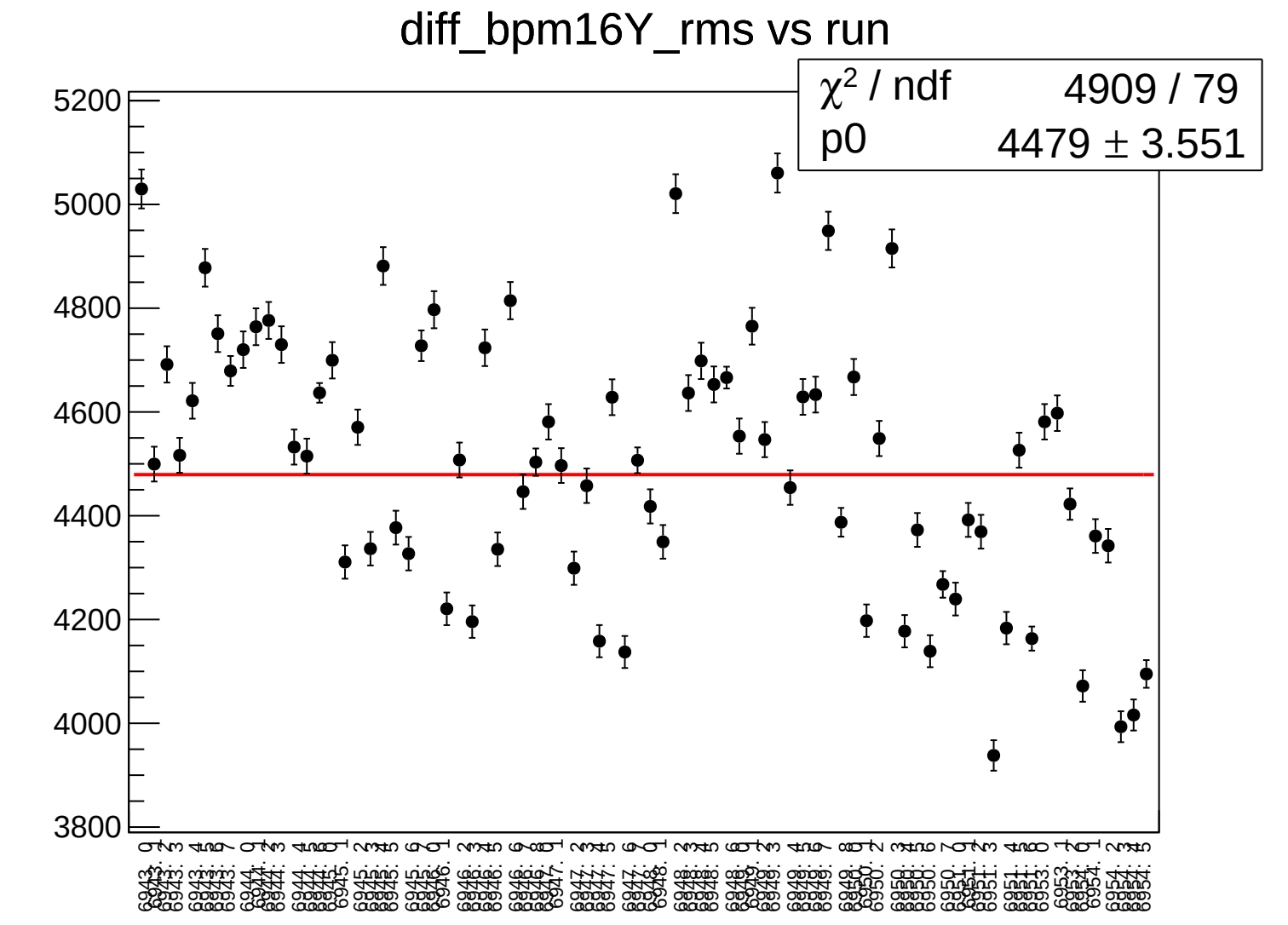

diff_bpm16X_mean vs run
χ² / ndf 76.5 / 79
p0 28.2 ± 8.072
pull
Entries 80
Mean 56.2
Std Dev 65.27

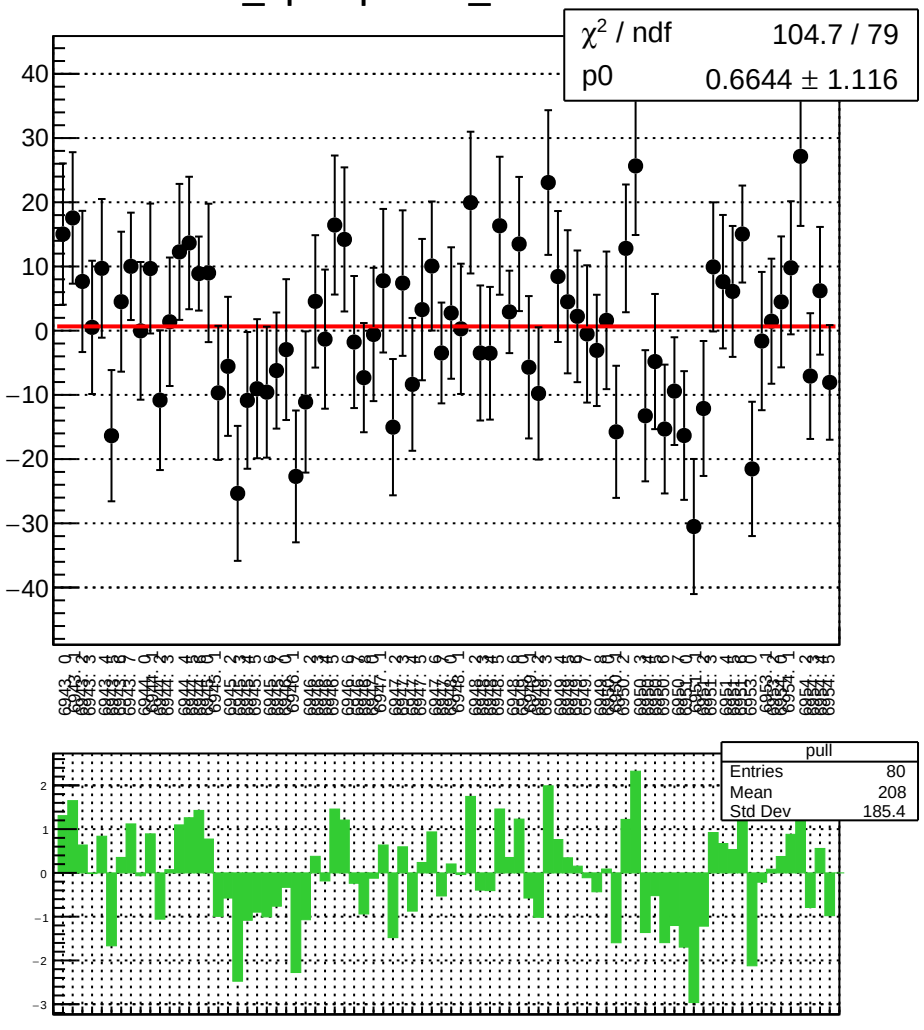

pull1D
Entries 80
Mean 0.02072
Std Dev 0.9776

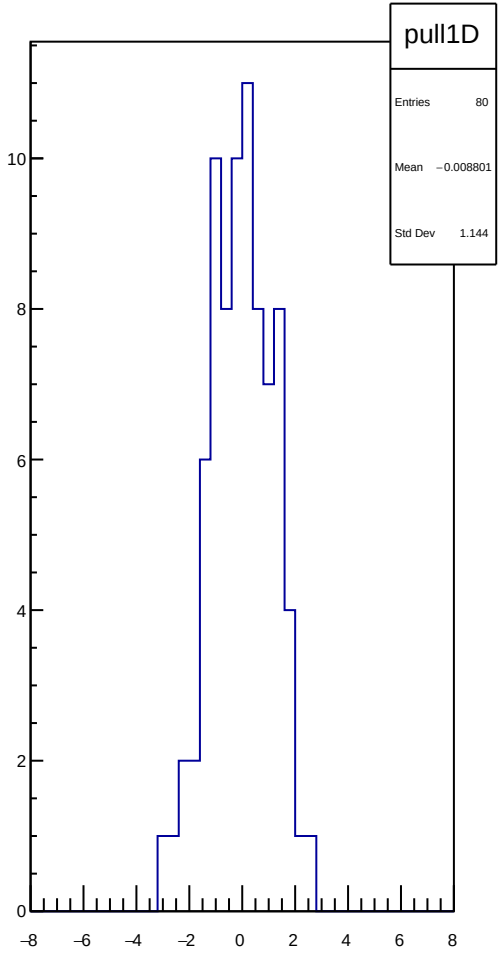

diff_bpm16X_rms vs run
χ² / ndf 1.565e+04 / 79
p0 7175 ± 5.708
9000
8500
8000
7500
7000
6500
6000

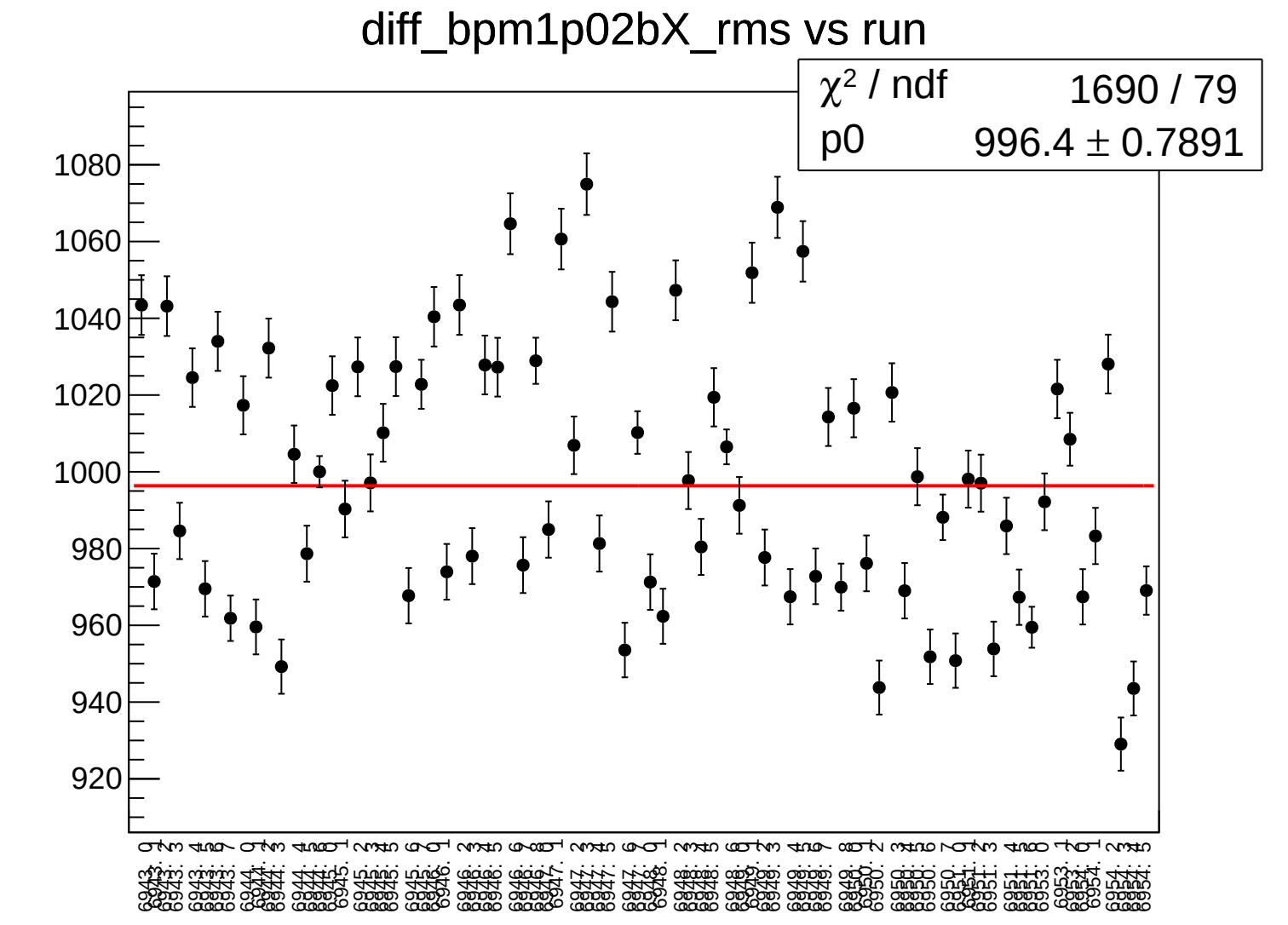

diff_bpm16Y_mean vs run
χ² / ndf 74.63 / 79
p0 1.172 ± 5.022
pull
Entries 80
Mean −206.7
Std Dev 239.2

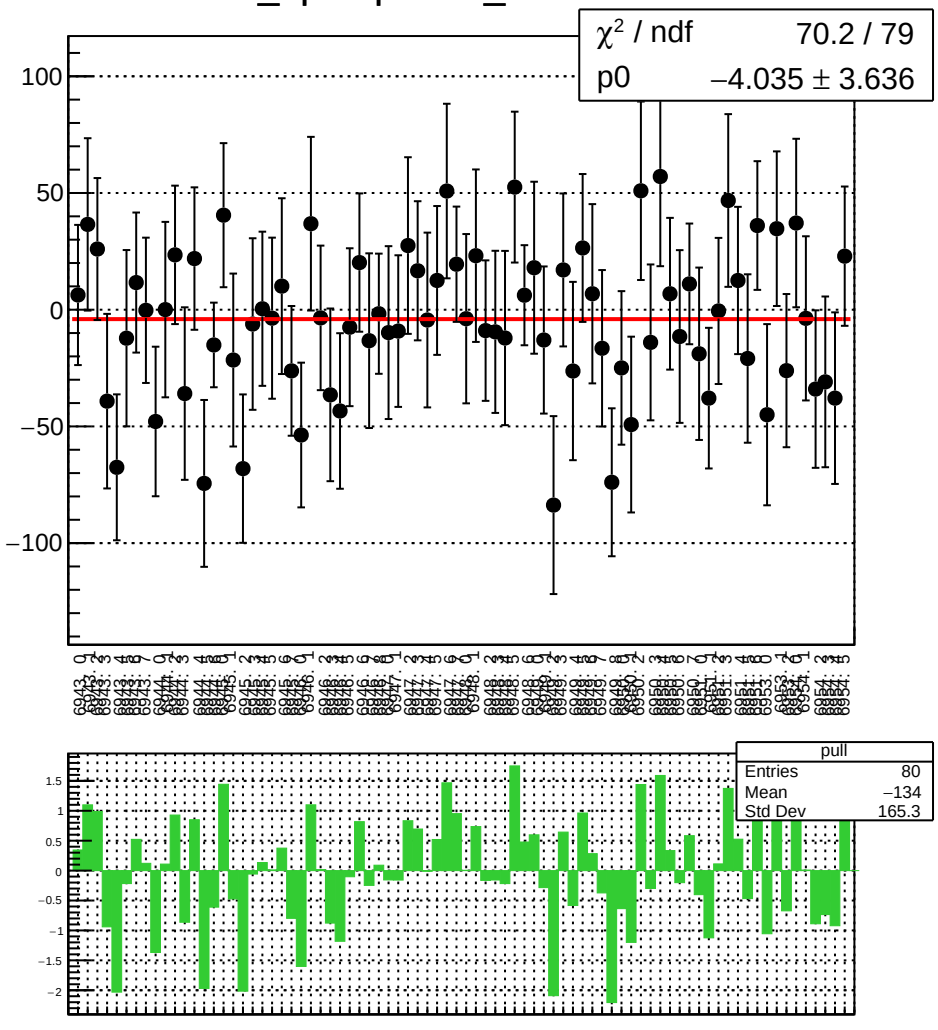

pull1D
Entries 80
Mean 0.007078
Std Dev 0.9658

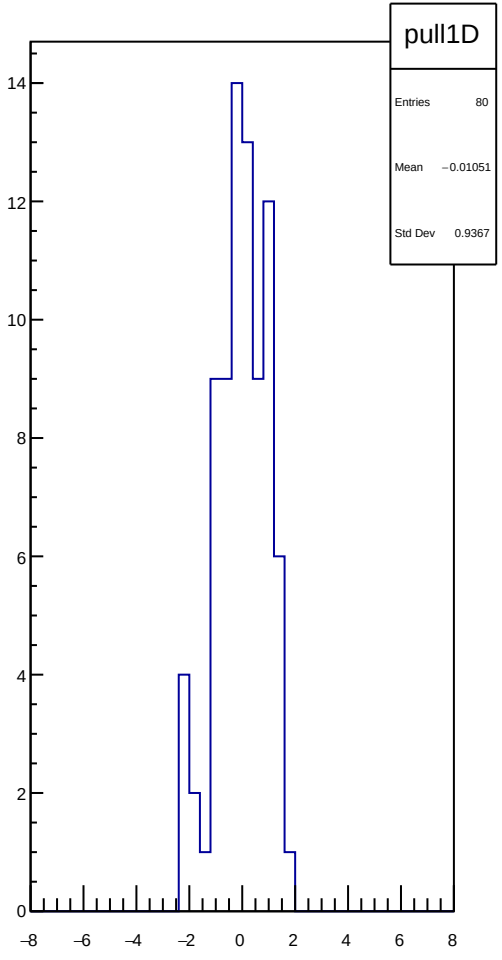

diff_bpm16Y_rms vs run
χ² / ndf 4909 / 79
p0 4479 ± 3.551
5200
5000
4800
4600
4400
4200
4000
3800

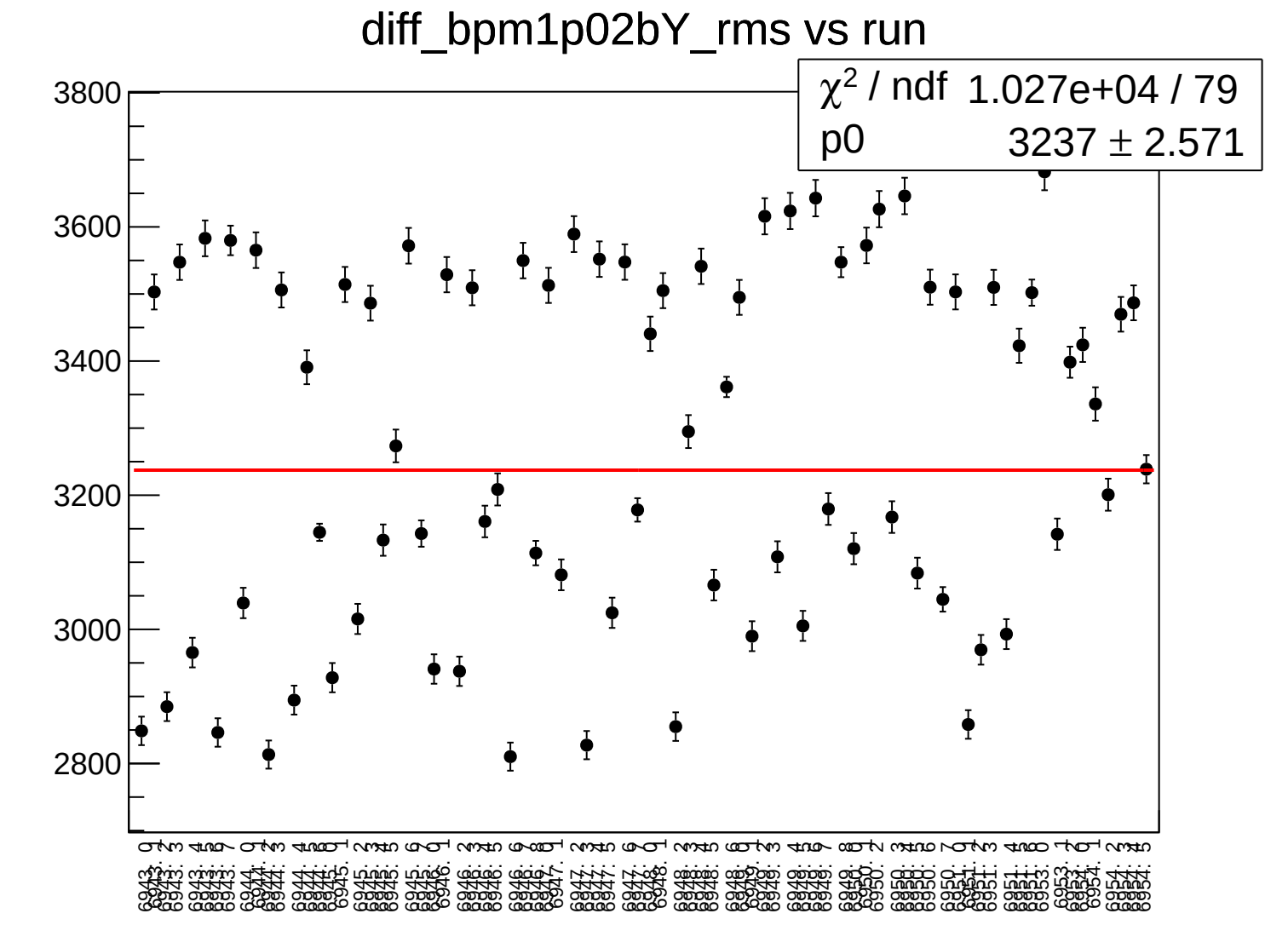

diff_bpm1p02bX_mean vs run
χ² / ndf 104.7 / 79
p0 0.6644 ± 1.116
pull
Entries 80
Mean 208
Std Dev 185.4

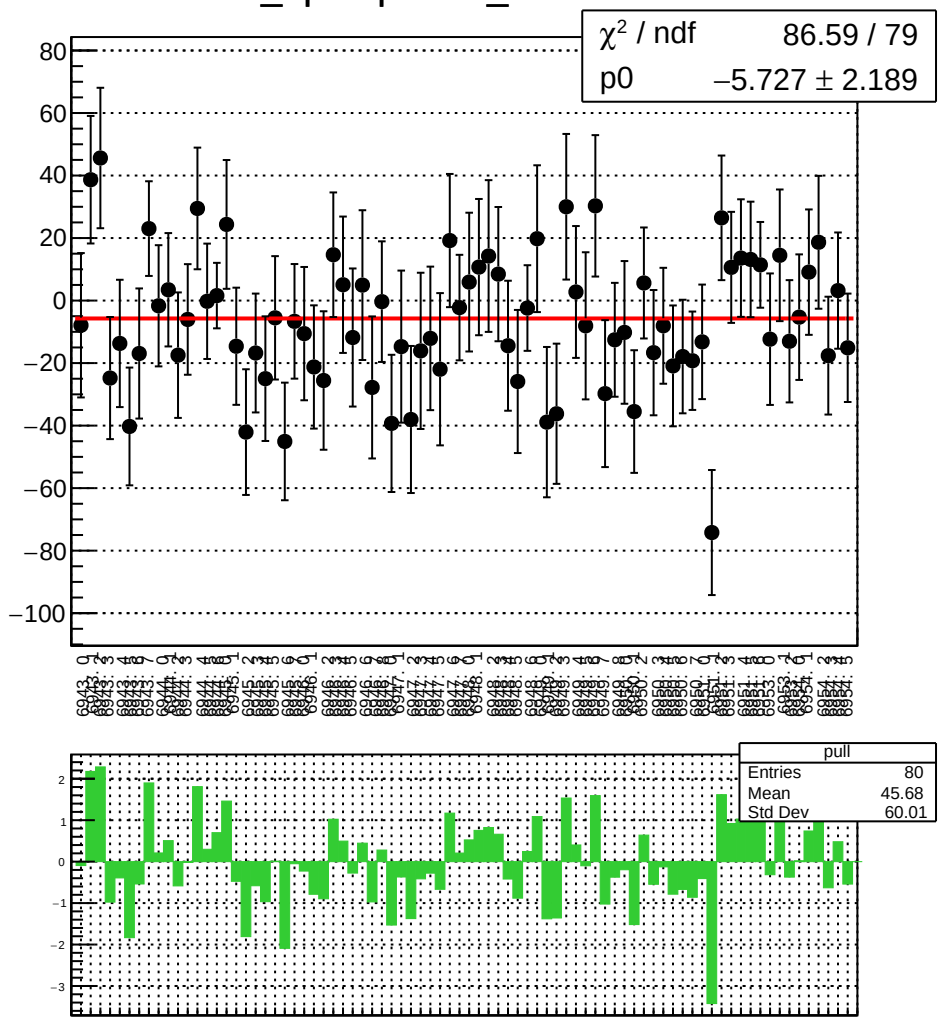

pull1D
Entries 80
Mean −0.008801
Std Dev 1.144

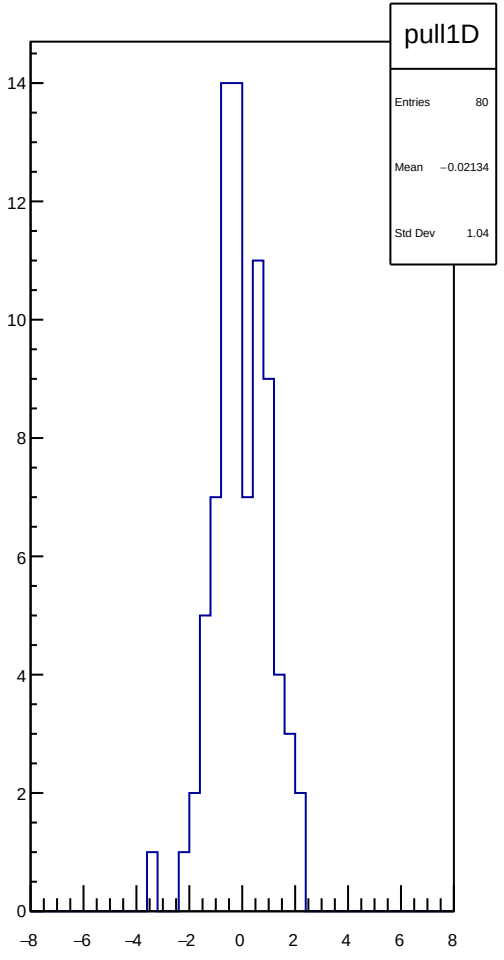

diff_bpm1p02bX_rms vs run
χ² / ndf 1690 / 79
p0 996.4 ± 0.7891
1080
1060
1040
1020
1000
980
960
940
920

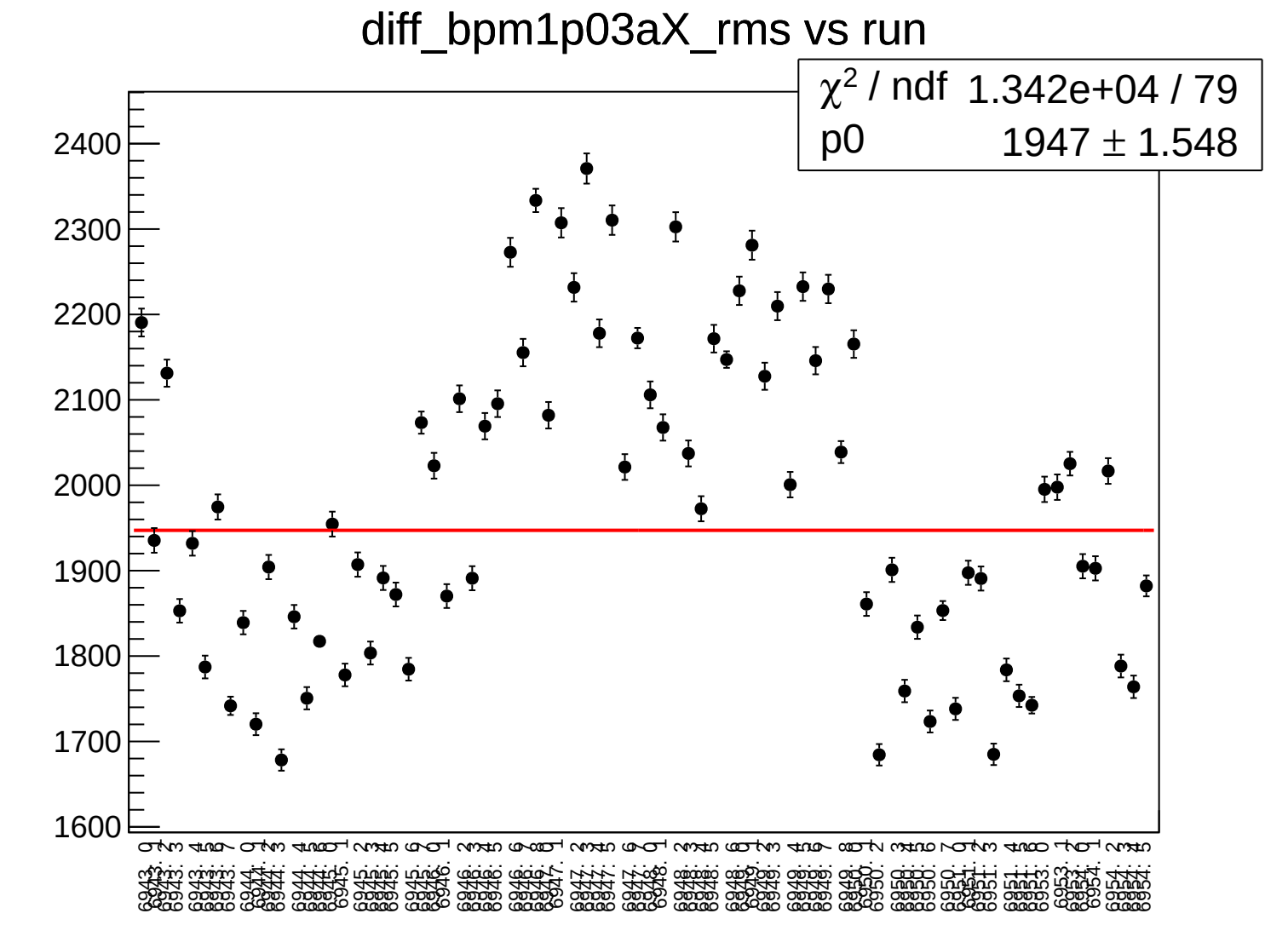

diff_bpm1p02bY_mean vs run
χ² / ndf 70.2 / 79
p0 −4.035 ± 3.636
pull
Entries 80
Mean −134
Std Dev 165.3

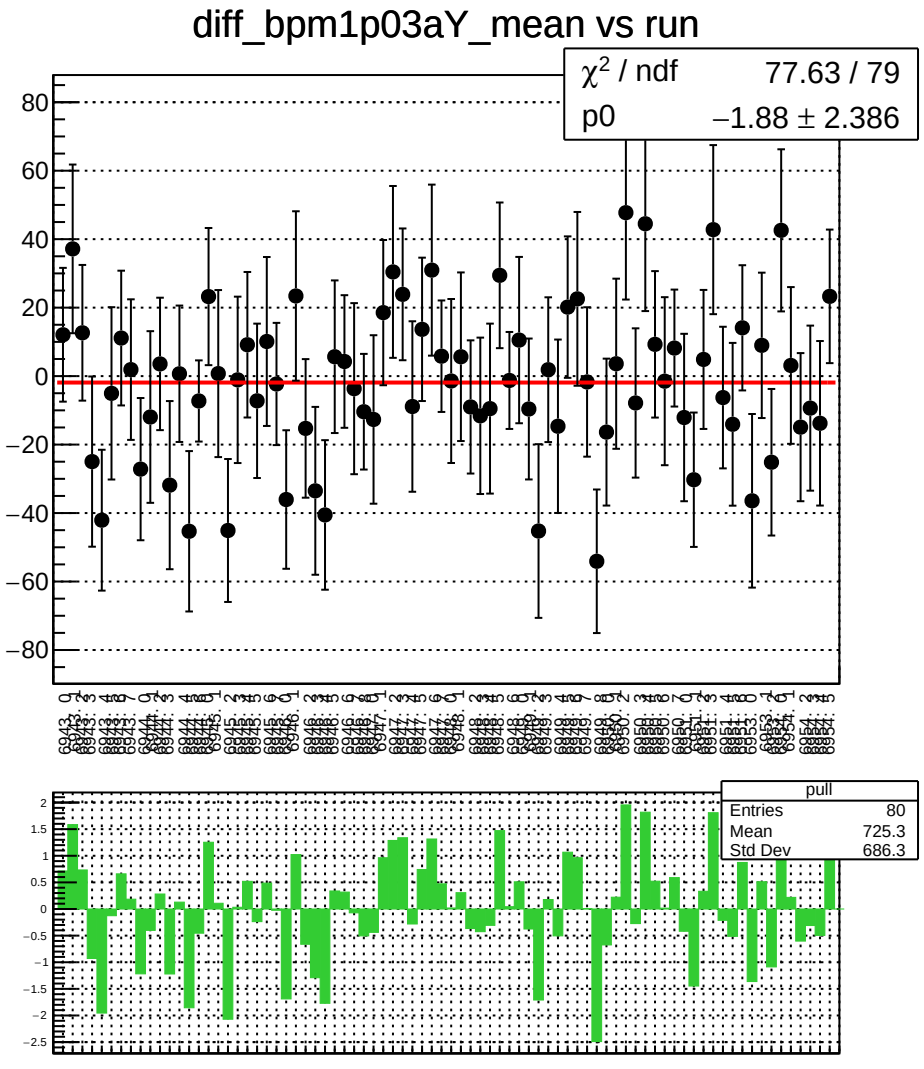

pull1D
Entries 80
Mean −0.01051
Std Dev 0.9367

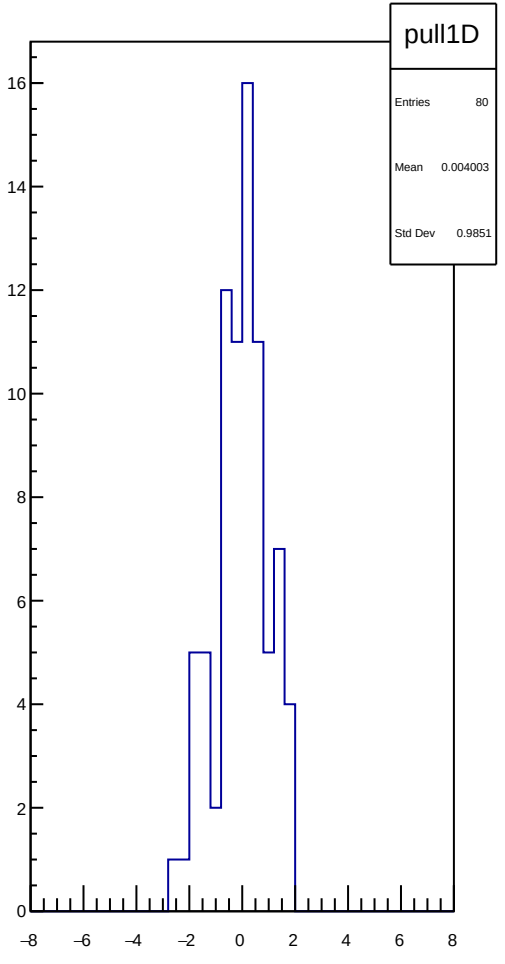

diff_bpm1p02bY_rms vs run
χ² / ndf 1.027e+04 / 79
p0 3237 ± 2.571
3800
3600
3400
3200
3000
2800

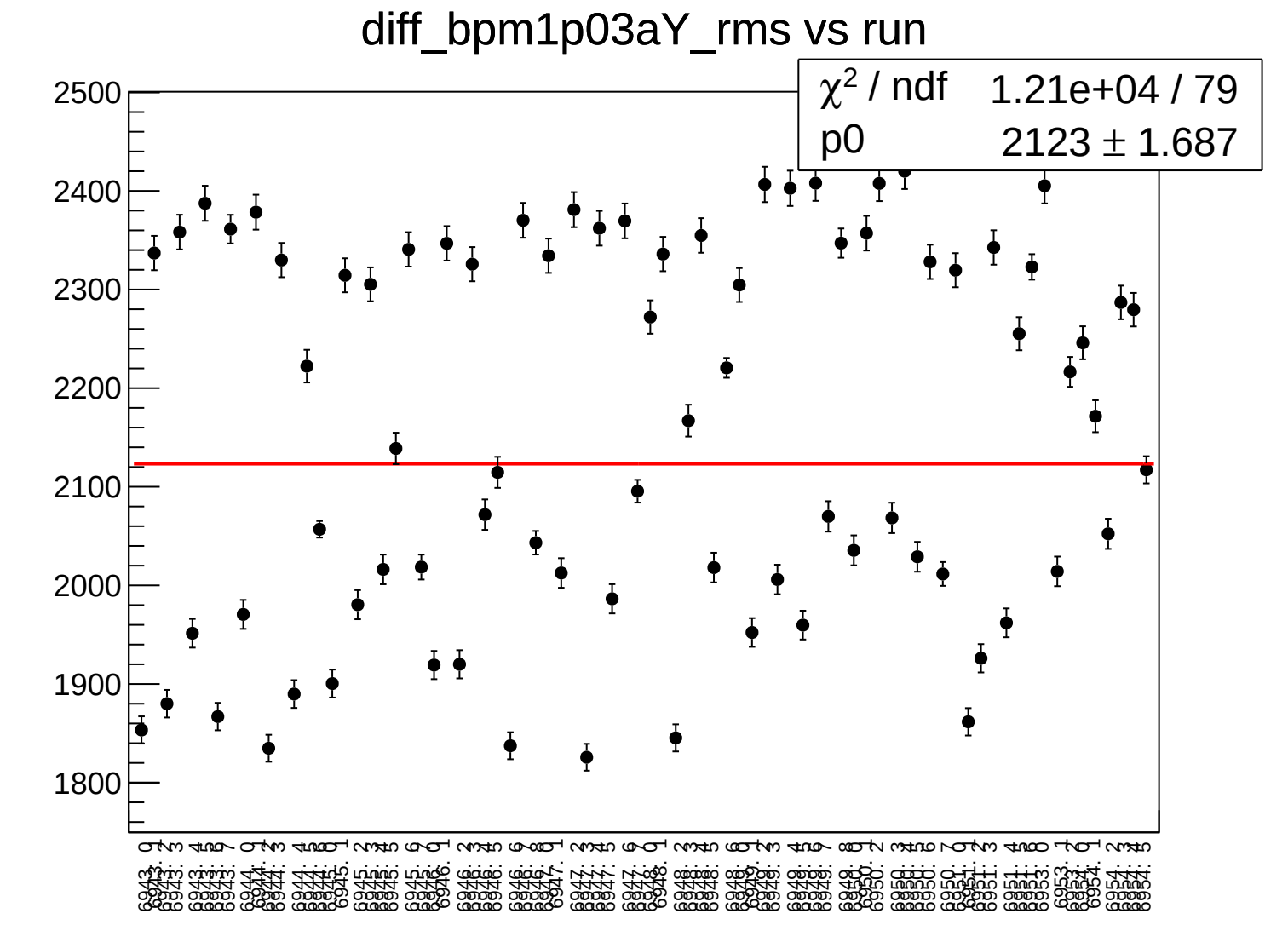

diff_bpm1p03aX_mean vs run
χ² / ndf 86.59 / 79
p0 −5.727 ± 2.189
pull
Entries 80
Mean 45.68
Std Dev 60.01

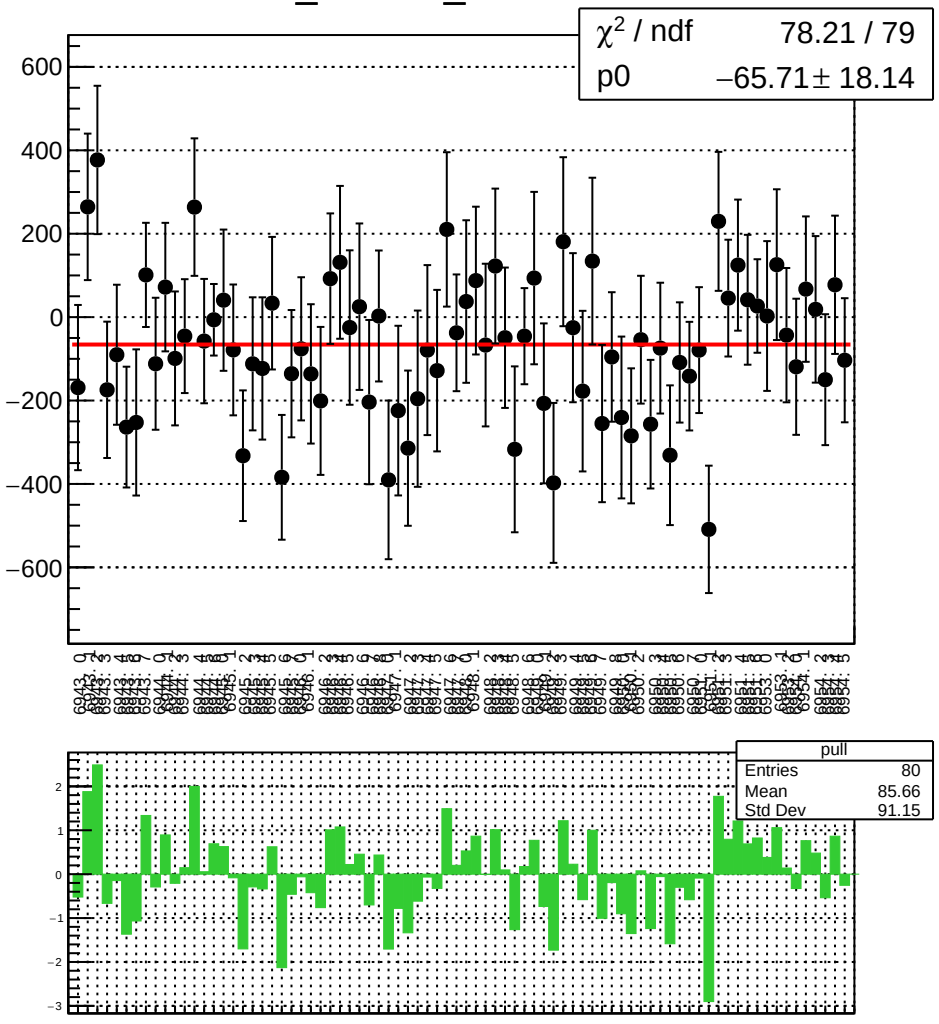

pull1D
Entries 80
Mean −0.02134
Std Dev 1.04

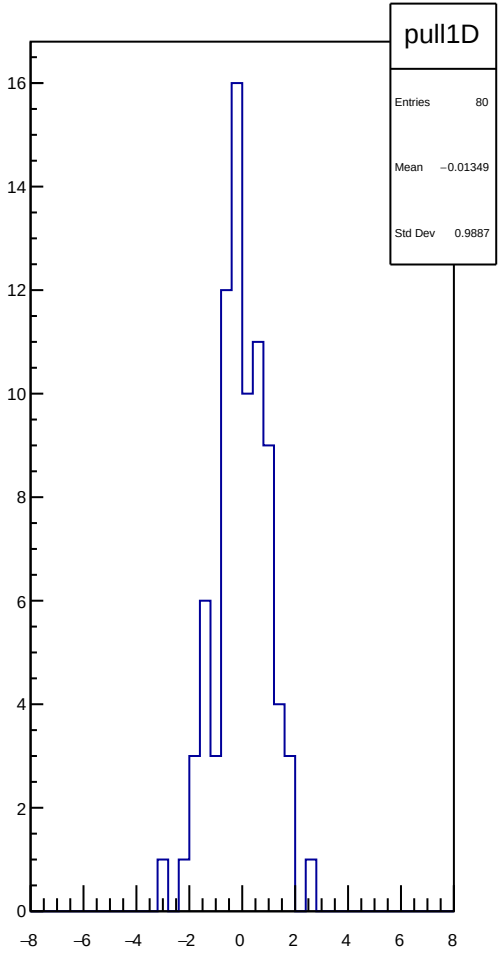

diff_bpm1p03aX_rms vs run
χ² / ndf 1.342e+04 / 79
p0 1947 ± 1.548
2400
2300
2200
2100
2000
1900
1800
1700
1600

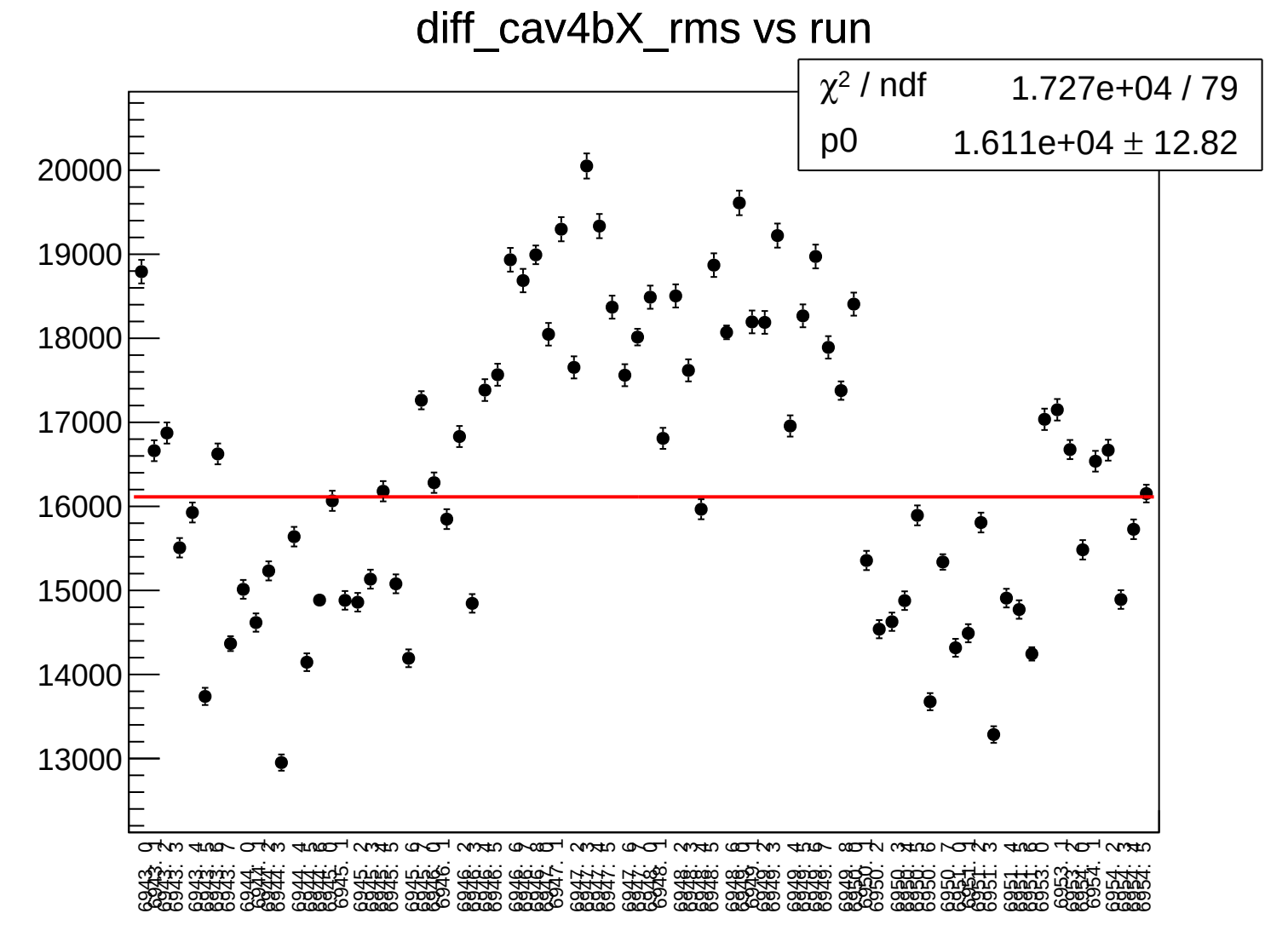

diff_bpm1p03aY_mean vs run
χ² / ndf 77.63 / 79
p0 −1.88 ± 2.386
pull
Entries 80
Mean 725.3
Std Dev 686.3

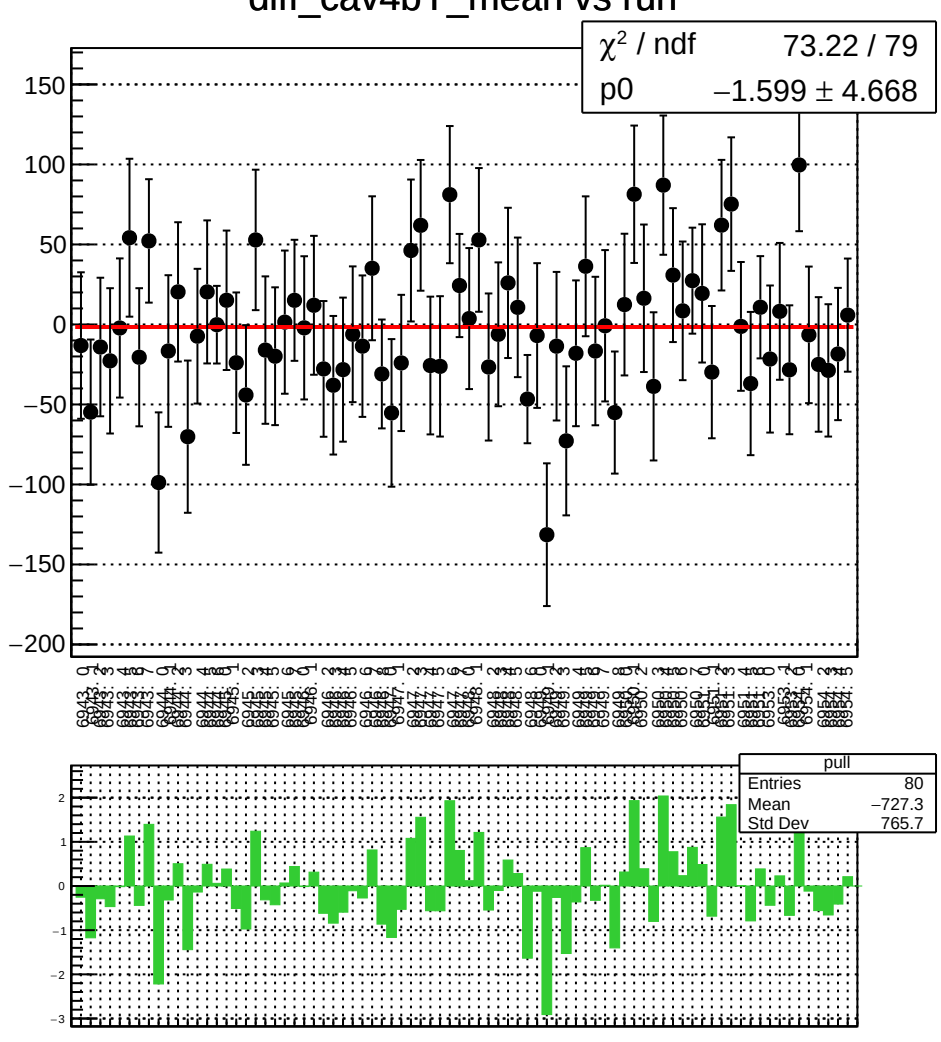

pull1D
Entries 80
Mean 0.004003
Std Dev 0.9851

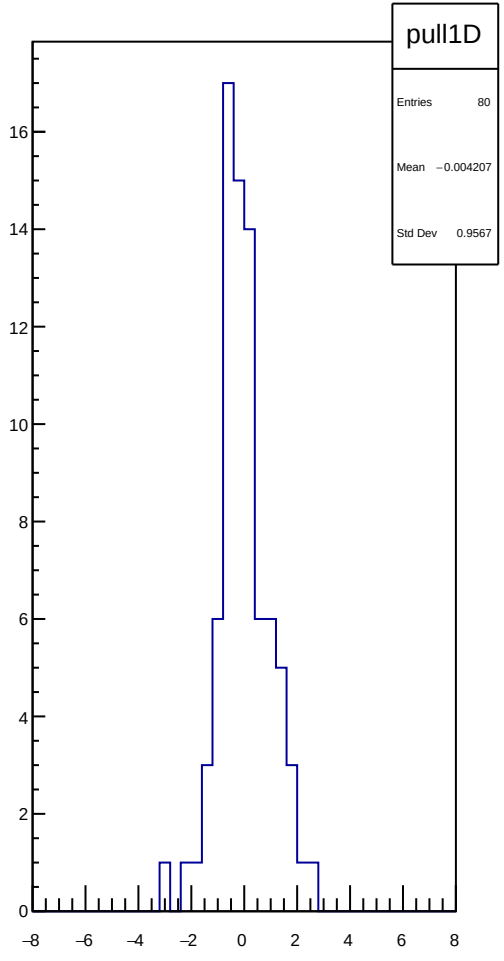

diff_bpm1p03aY_rms vs run
χ² / ndf 1.21e+04 / 79
p0 2123 ± 1.687
2500
2400
2300
2200
2100
2000
1900
1800

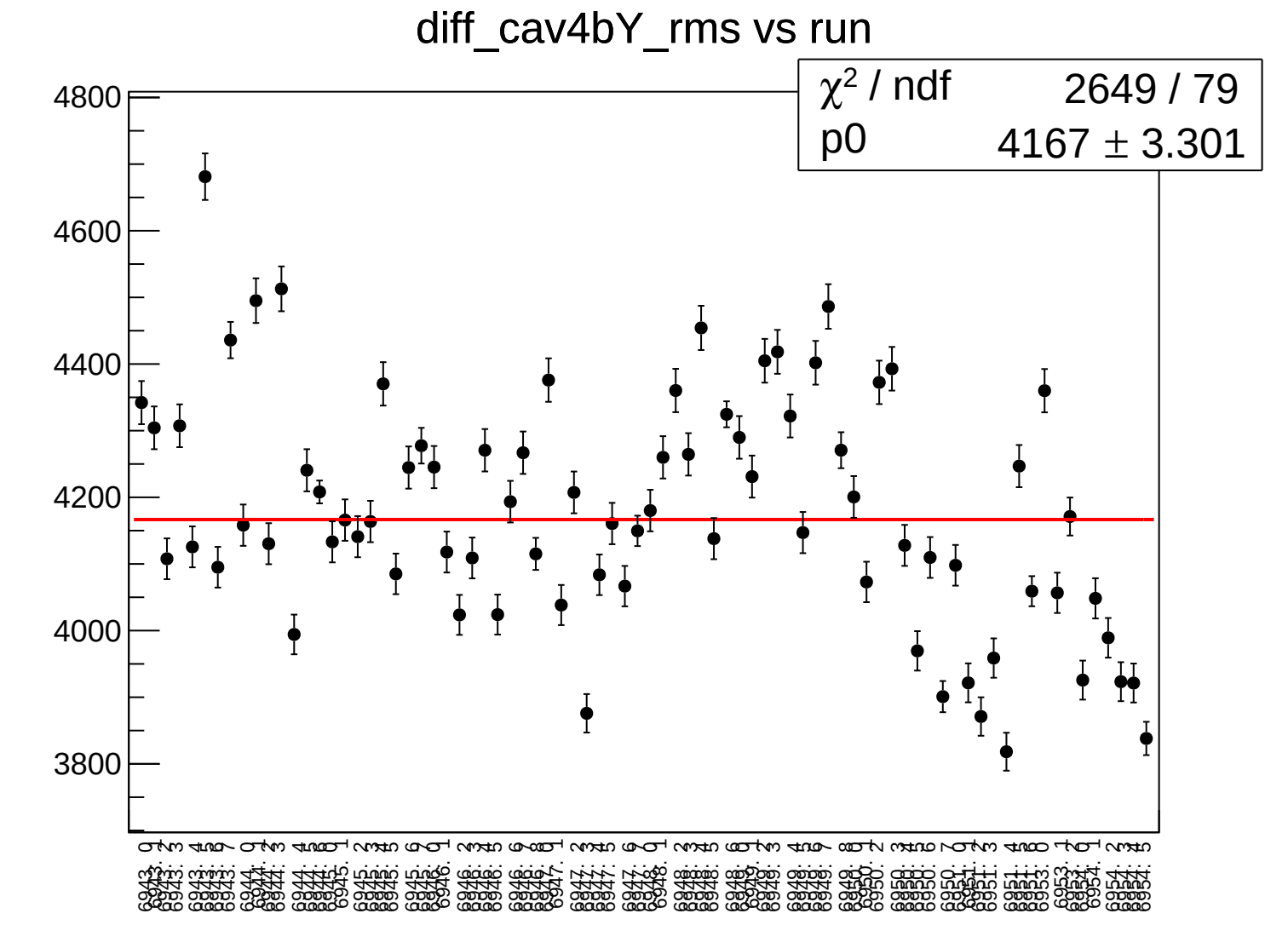

diff_cav4bX_mean vs run
χ^2 / ndf 78.21 / 79
p0 −65.71± 18.14
600
400
200
0
−200
−400
−600
pull
Entries 80
Mean 85.66
Std Dev 91.15
2
1
0
−1
−2
−3

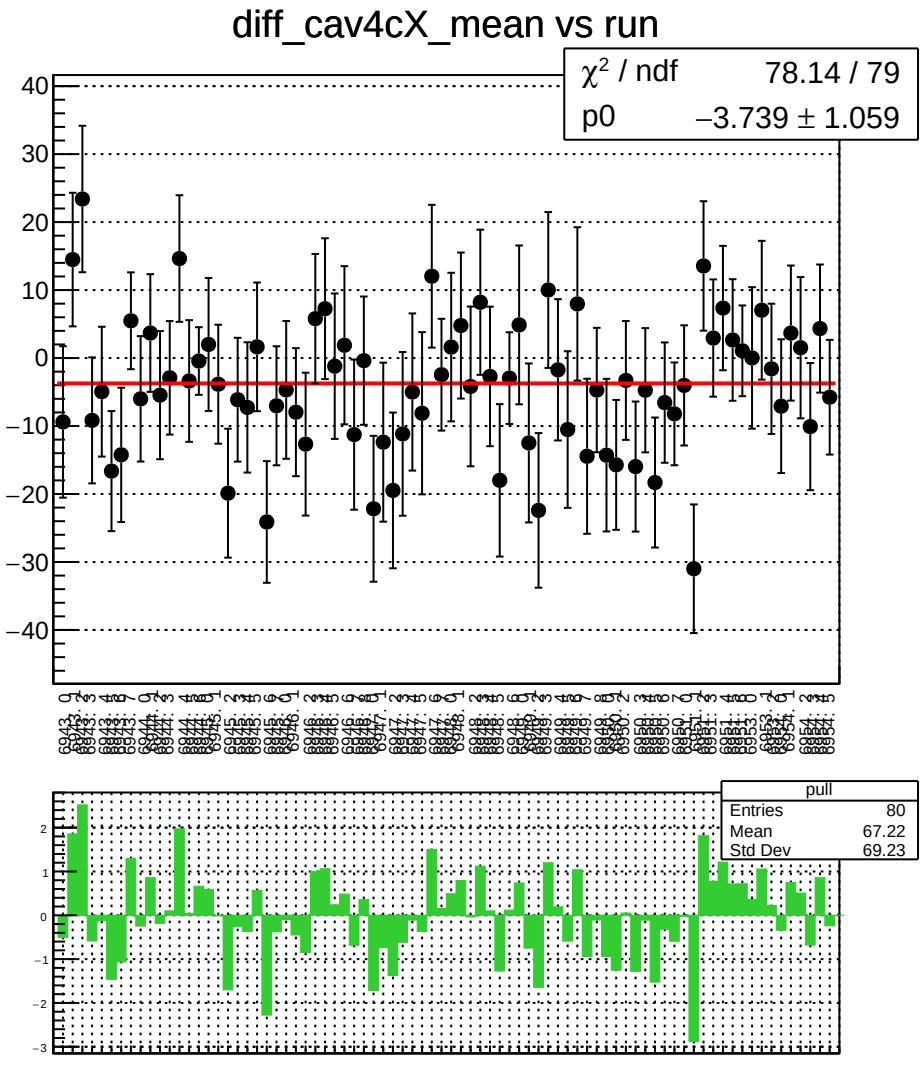

pull1D
Entries 80
Mean −0.01349
Std Dev 0.9887
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

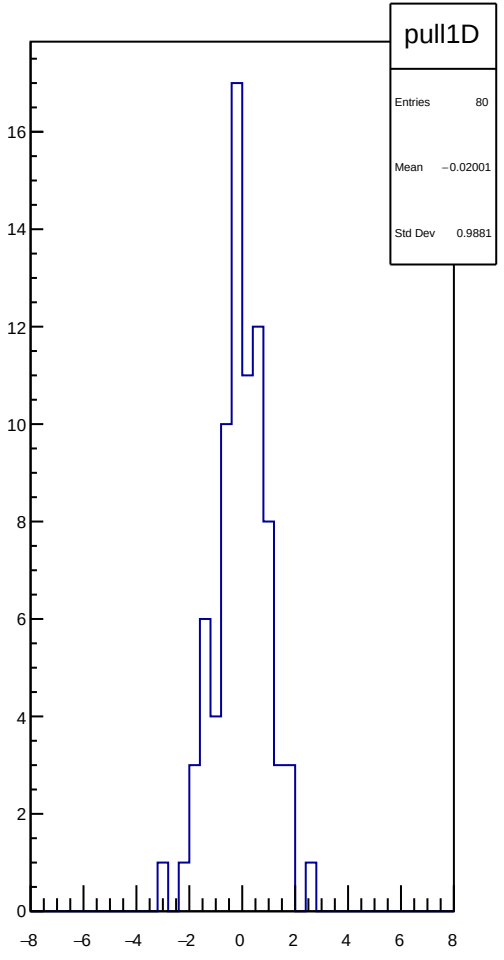

diff_cav4bX_rms vs run
χ² / ndf 1.727e+04 / 79
p0 1.611e+04 ± 12.82
20000
19000
18000
17000
16000
15000
14000
13000

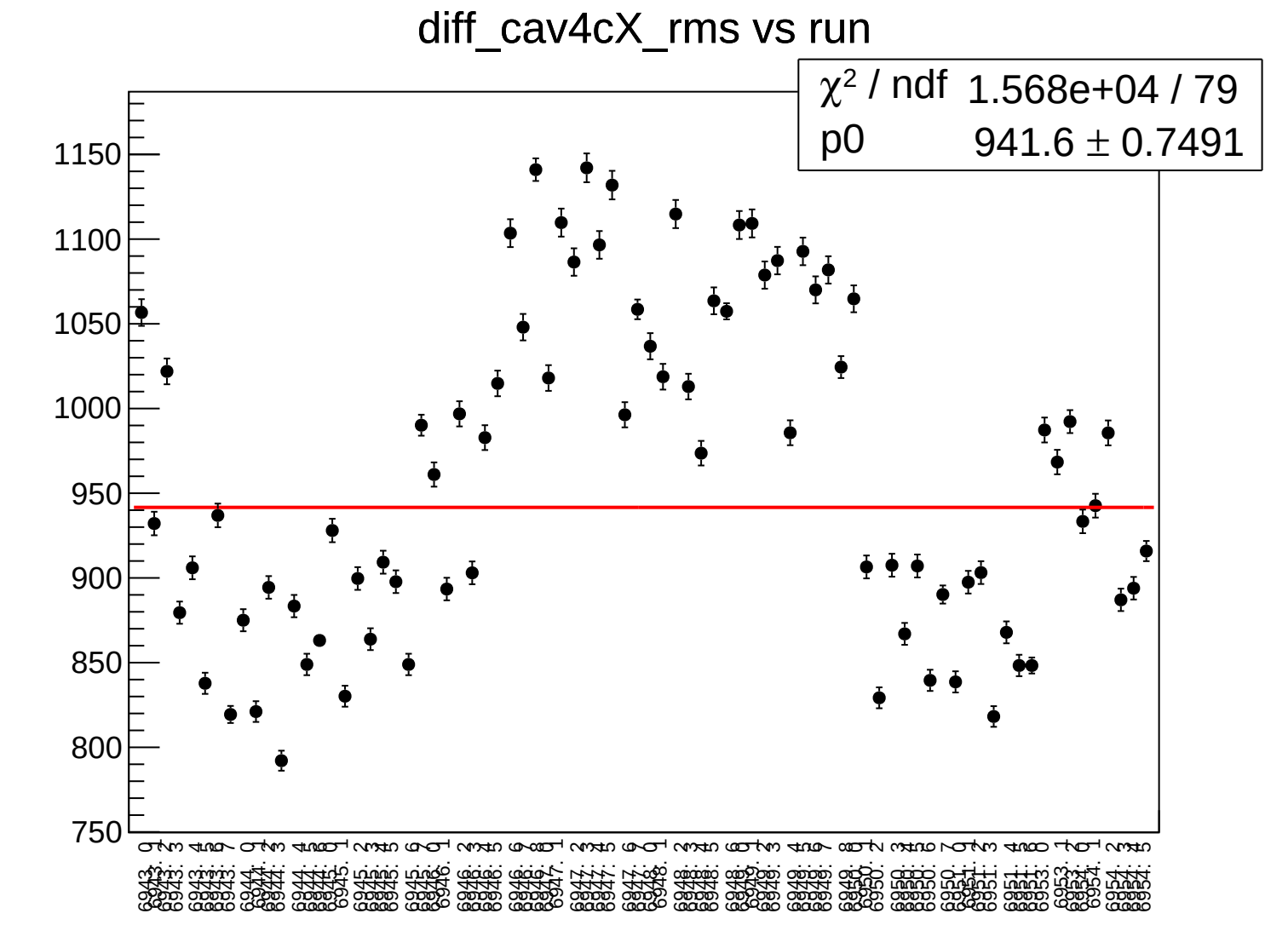

diff_cav4bY_mean vs run
χ^2 / ndf 73.22 / 79
p0 −1.599 ± 4.668
150
100
50
0
−50
−100
−150
−200
pull
Entries 80
Mean −727.3
Std Dev 765.7
2
1
0
−1
−2
−3

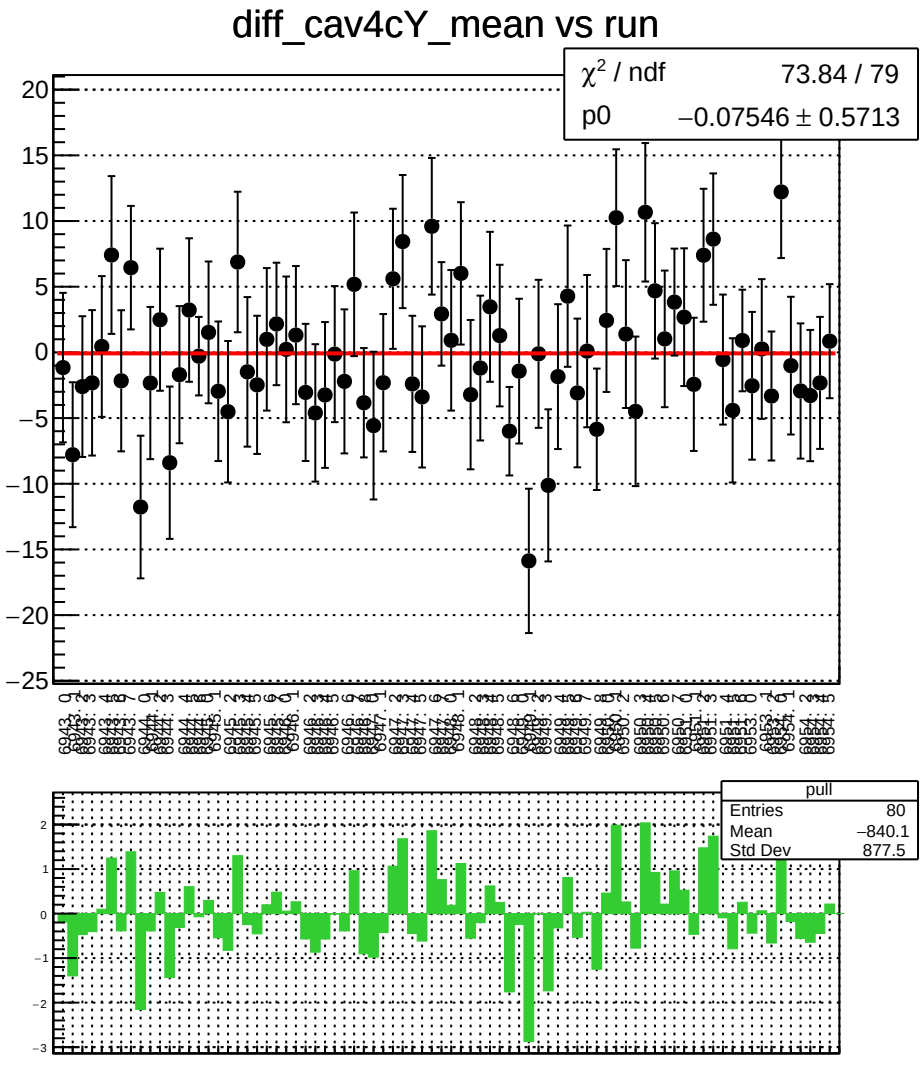

pull1D
Entries 80
Mean −0.004207
Std Dev 0.9567
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

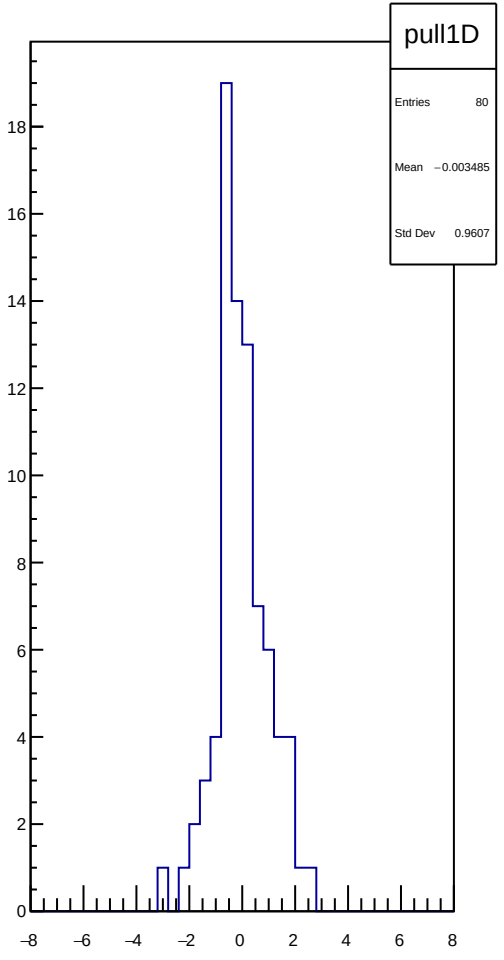

diff_cav4bY_rms vs run
χ² / ndf 2649 / 79
p0 4167 ± 3.301
4800
4600
4400
4200
4000
3800

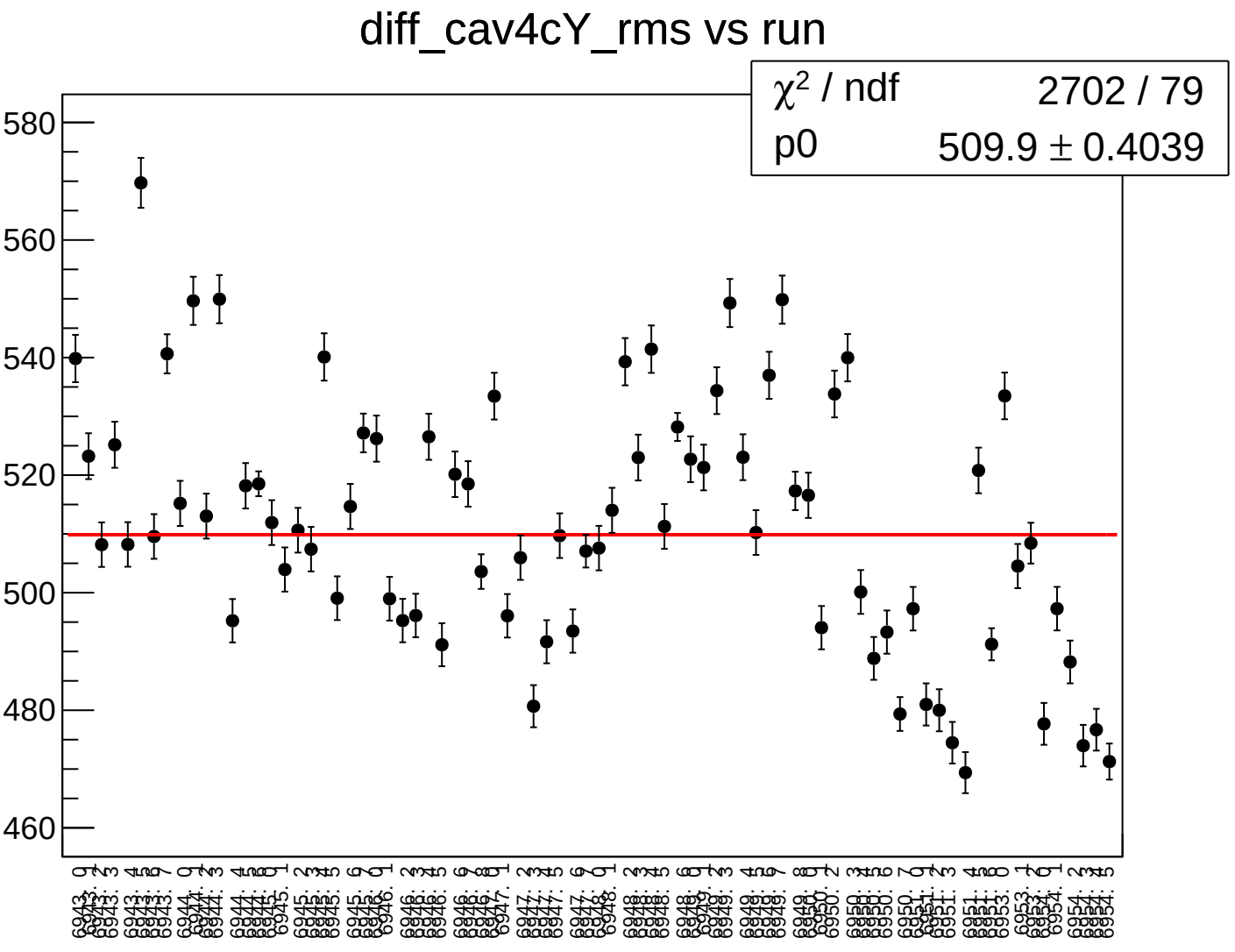

diff_cav4cX_mean vs run
χ² / ndf 78.14 / 79
p0 −3.739 ± 1.059
pull
Entries 80
Mean 67.22
Std Dev 69.23

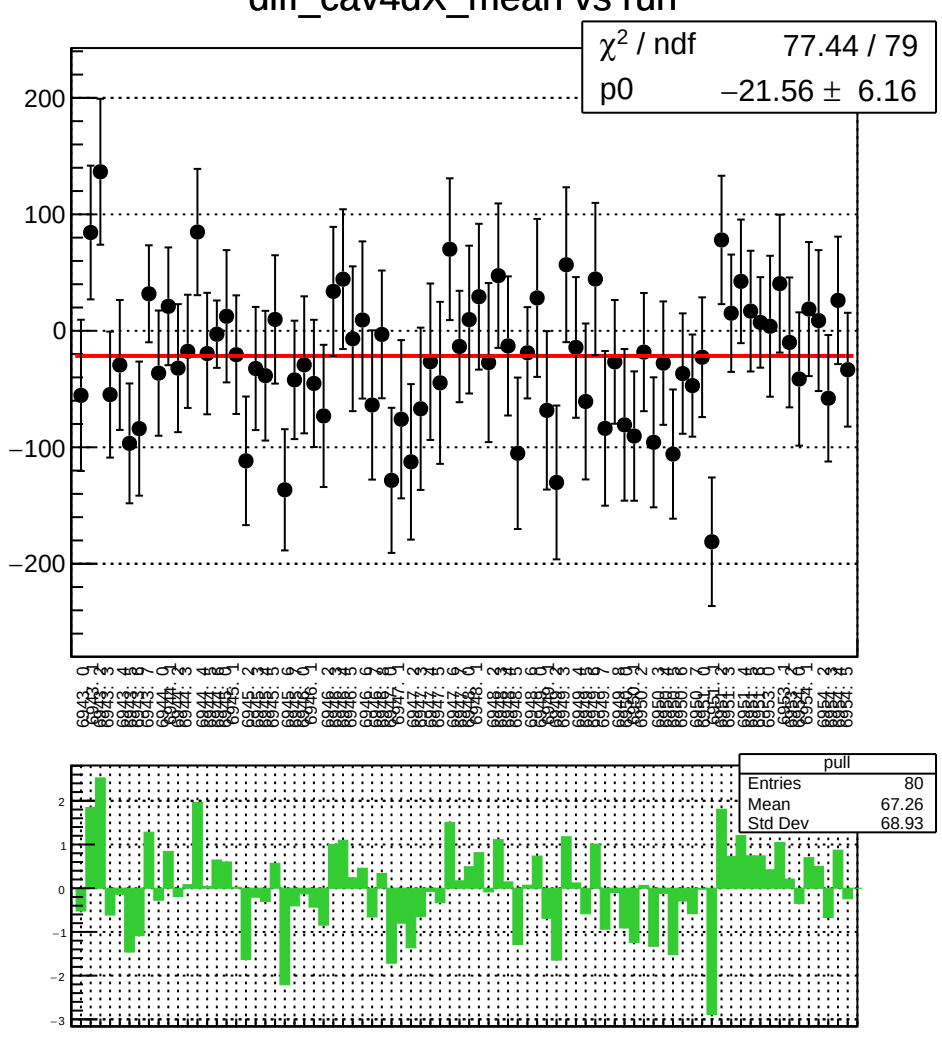

pull1D
Entries 80
Mean −0.02001
Std Dev 0.9881

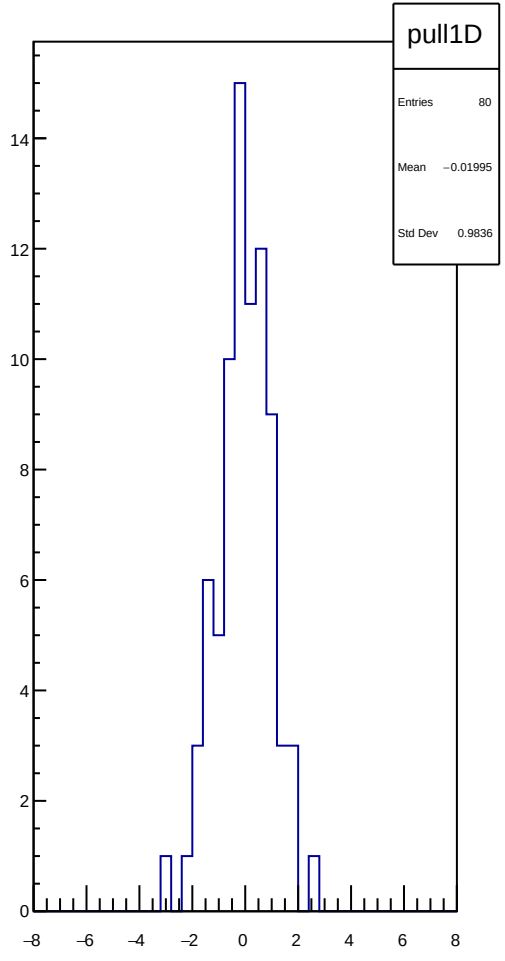

diff_cav4cX_rms vs run
χ² / ndf 1.568e+04 / 79
p0 941.6 ± 0.7491
1150
1100
1050
1000
950
900
850
800
750

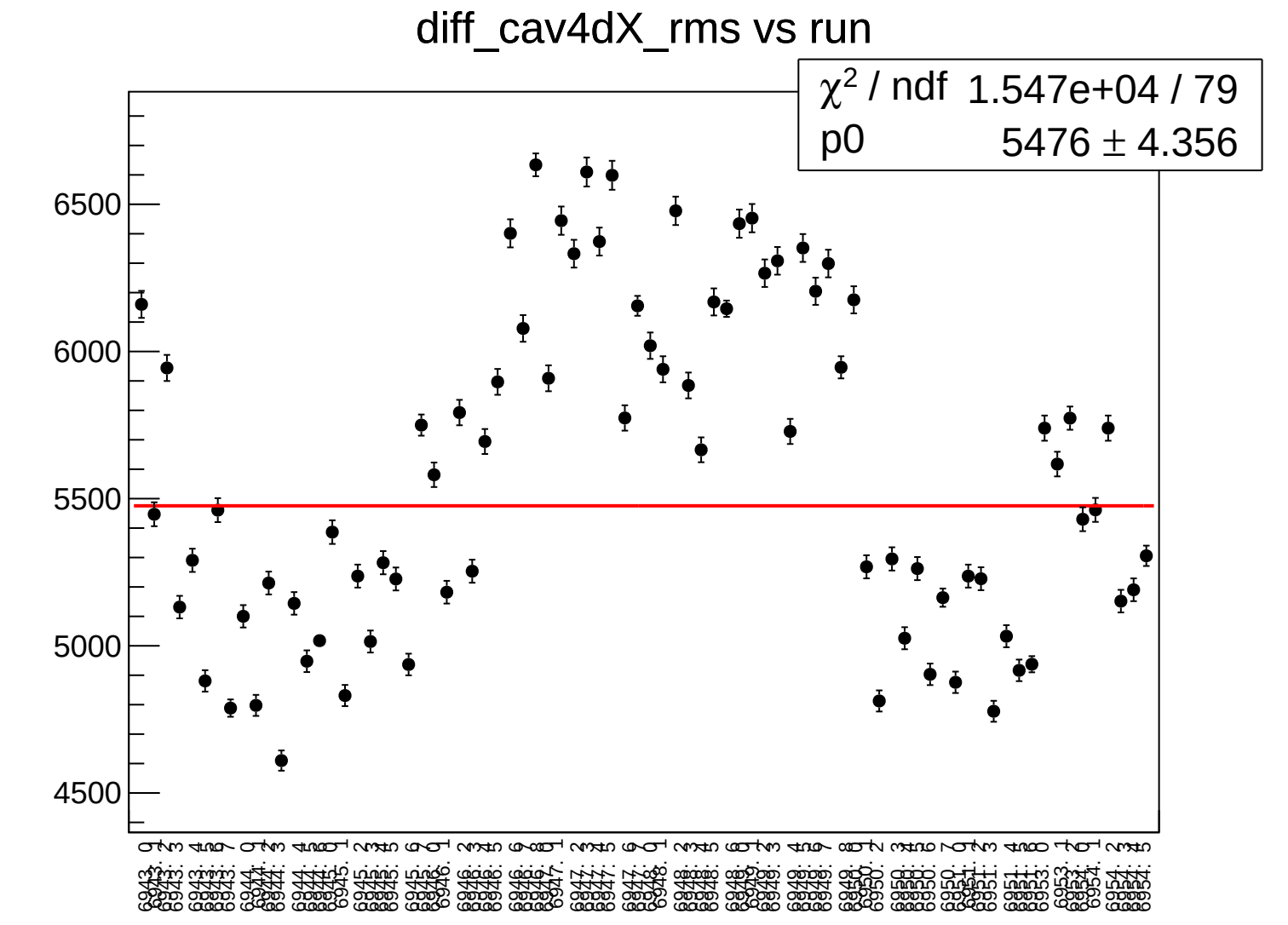

diff_cav4cY_mean vs run
χ^2 / ndf 73.84 / 79
p0 −0.07546 ± 0.5713
pull
Entries 80
Mean −840.1
Std Dev 877.5

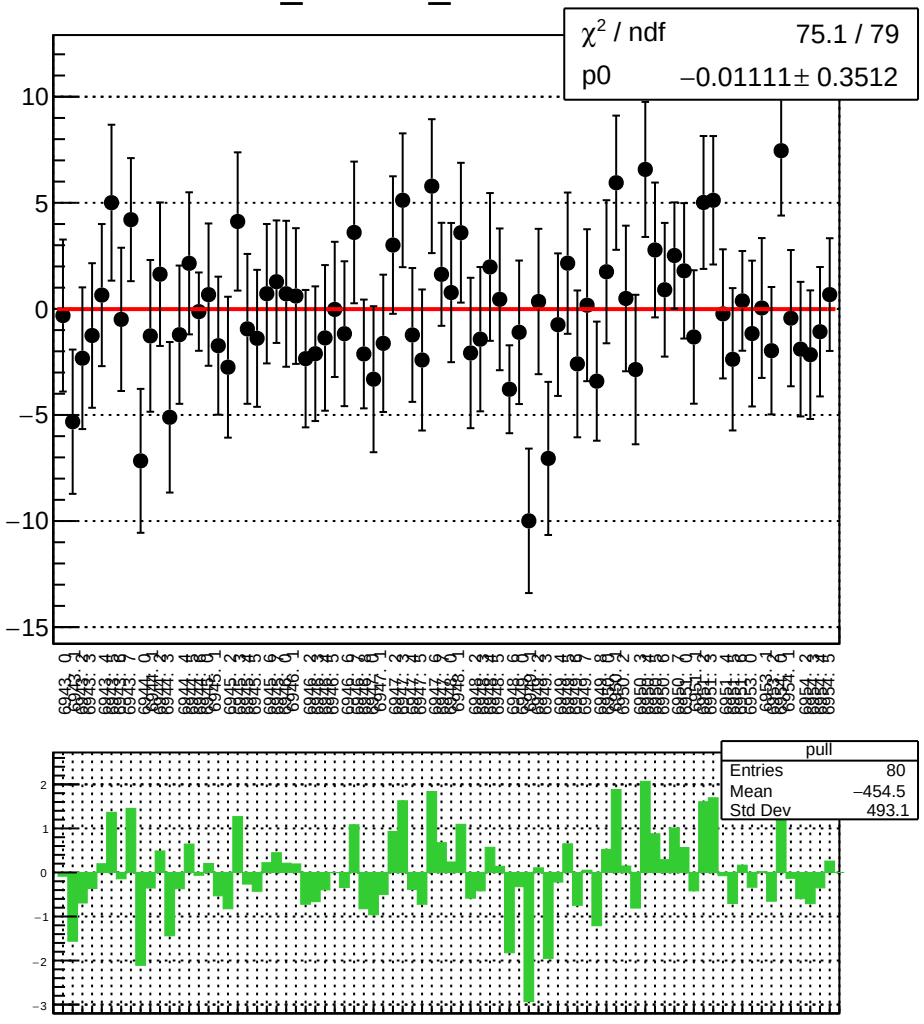

pull1D
Entries 80
Mean −0.003485
Std Dev 0.9607

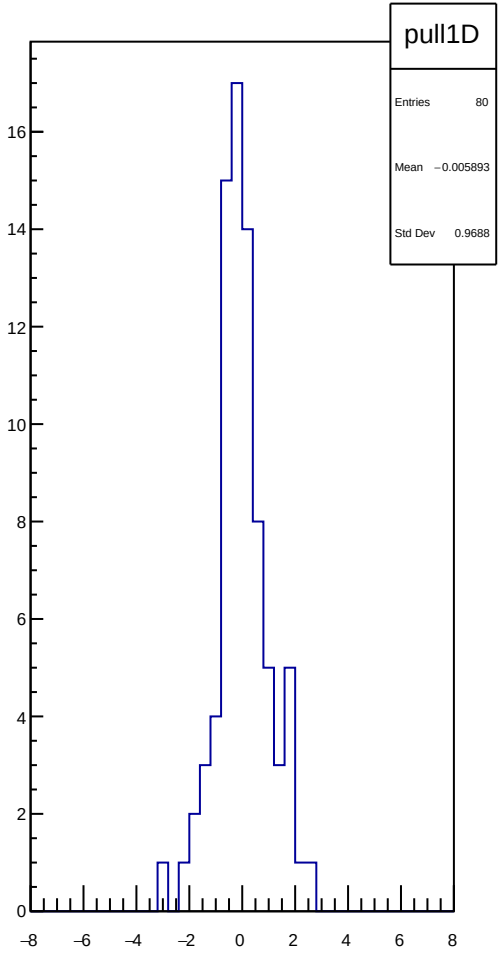

diff_cav4cY_rms vs run
χ² / ndf 2702 / 79
p0 509.9 ± 0.4039
580
560
540
520
500
480
460

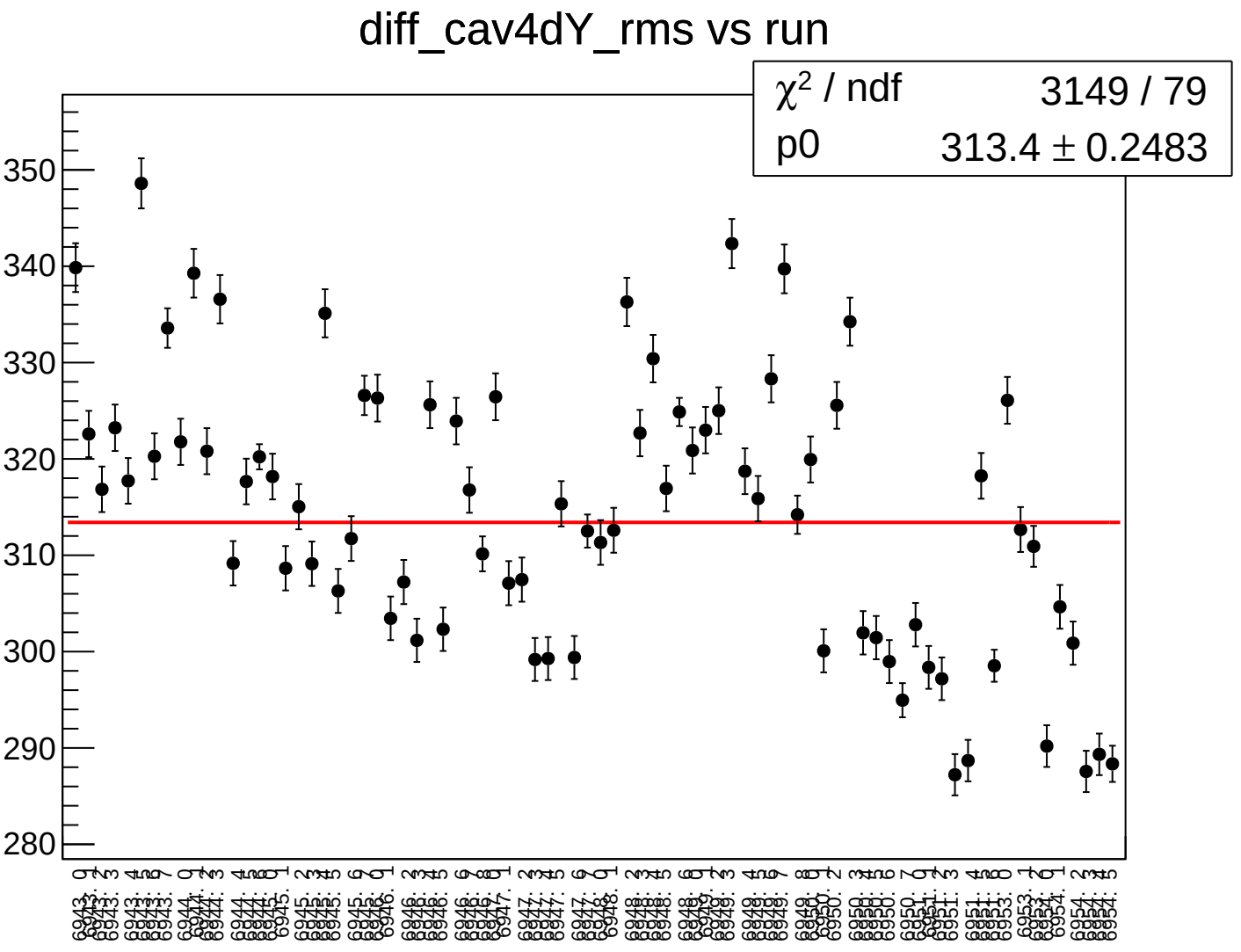

diff_cav4dX_mean vs run
χ^2 / ndf 77.44 / 79
p0 −21.56 ± 6.16
200
100
0
−100
−200
pull
Entries 80
Mean 67.26
Std Dev 68.93
2
1
0
−1
−2
−3

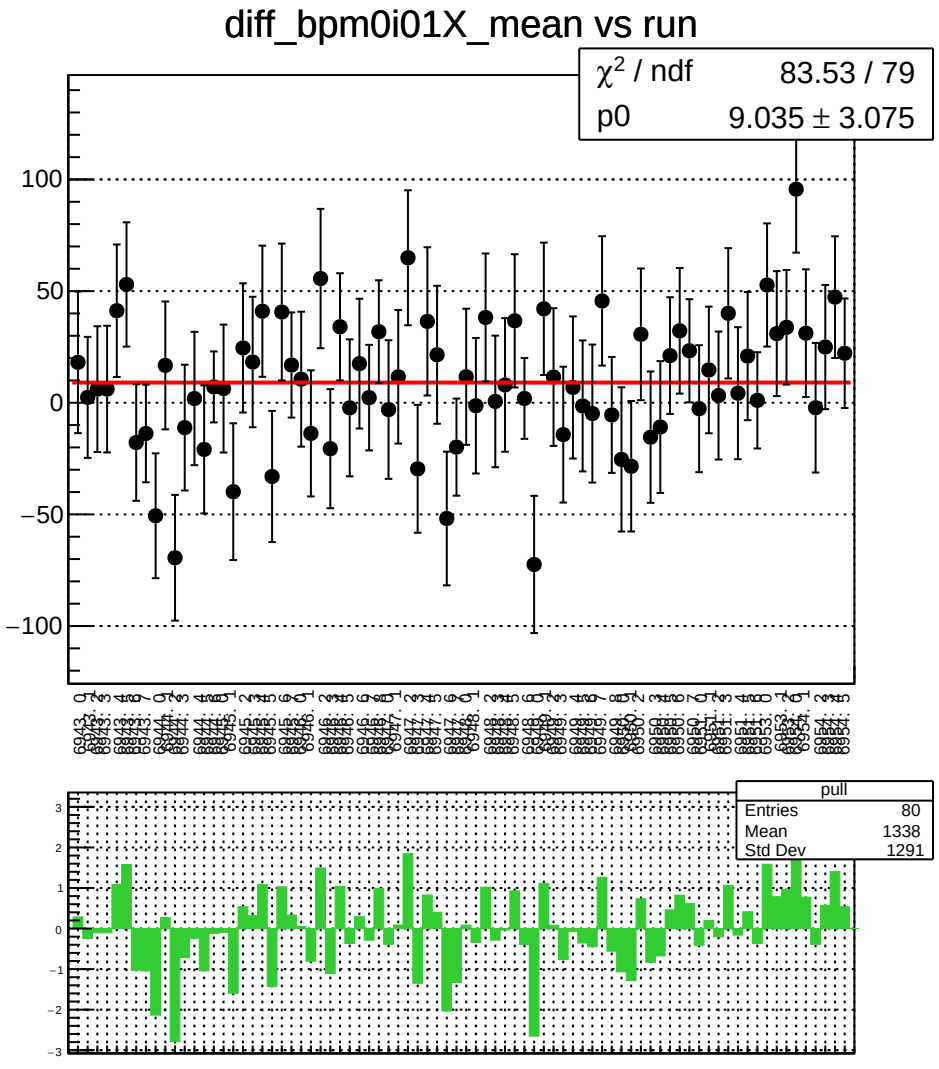

pull1D
Entries 80
Mean −0.01995
Std Dev 0.9836
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

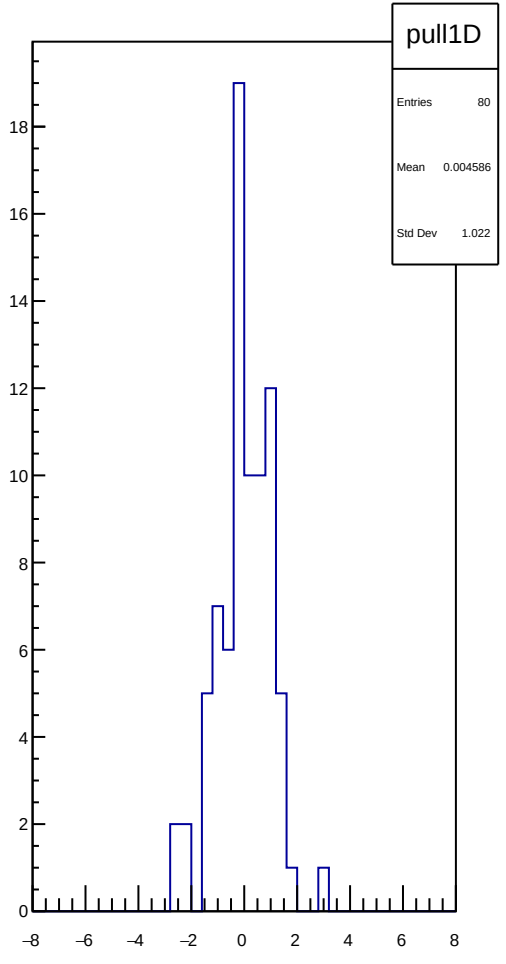

diff_cav4dX_rms vs run
χ^2 / ndf 1.547e+04 / 79
p0 5476 ± 4.356
6500
6000
5500
5000
4500

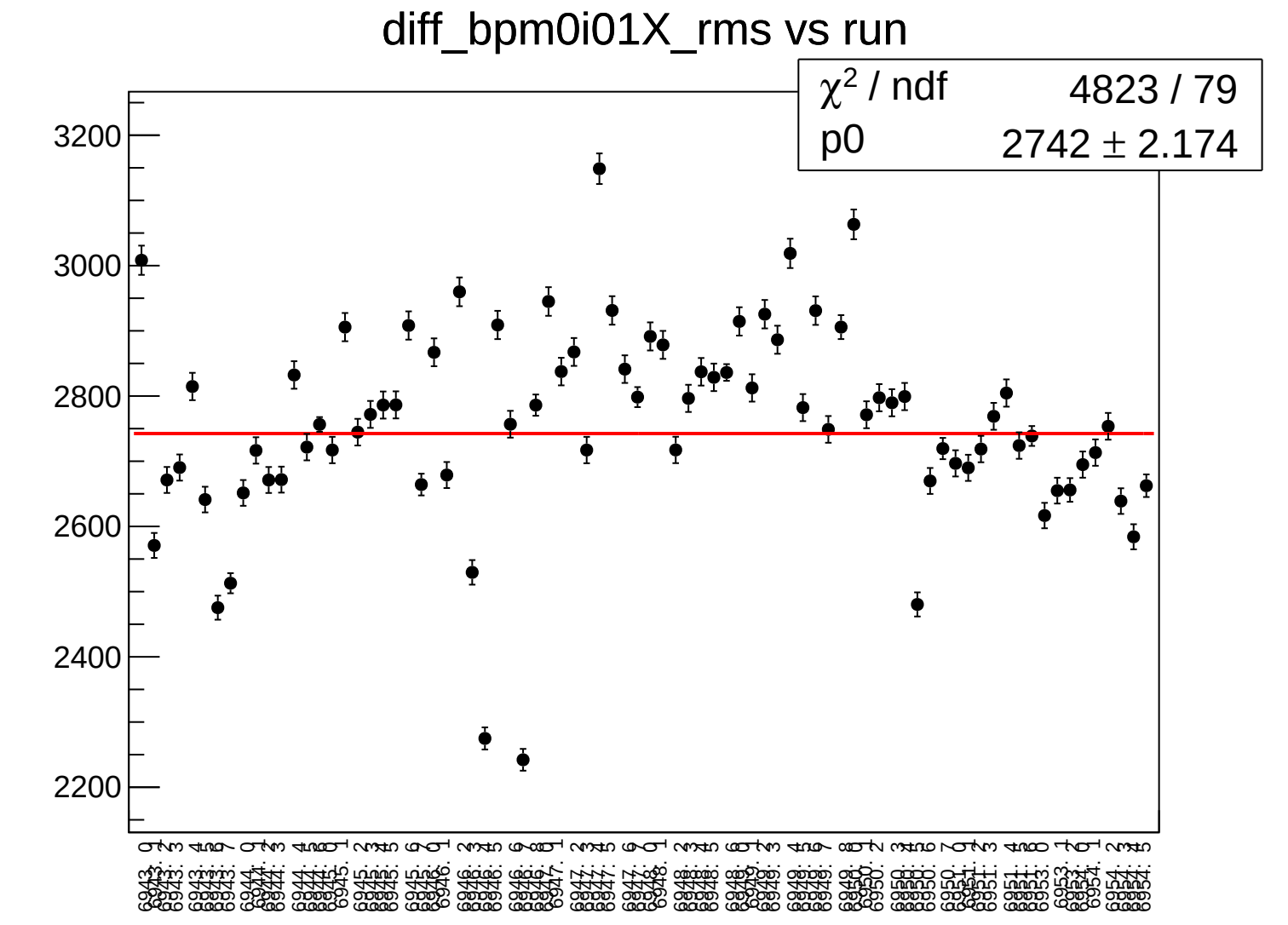

diff_cav4dY_mean vs run
χ^2 / ndf 75.1 / 79
p0 −0.01111± 0.3512
pull
Entries 80
Mean −454.5
Std Dev 493.1

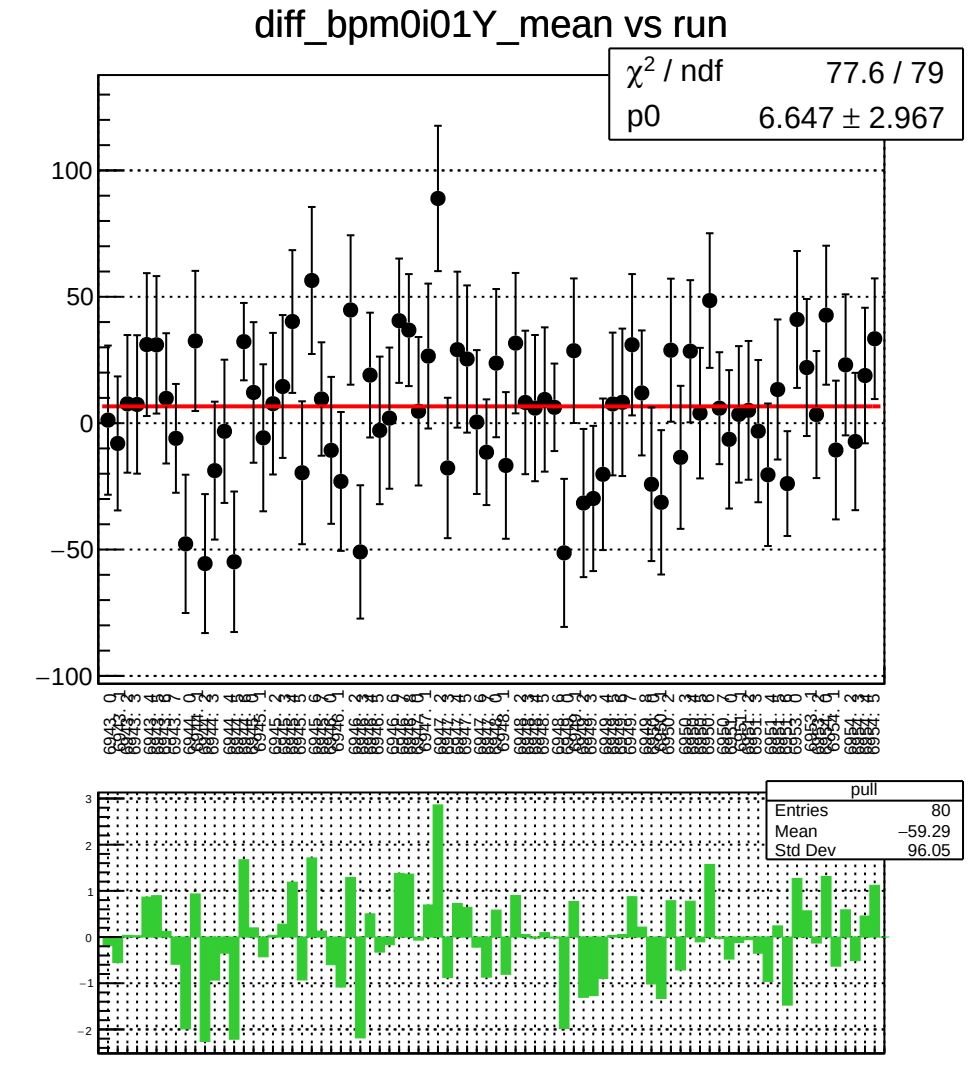

pull1D
Entries 80
Mean −0.005893
Std Dev 0.9688

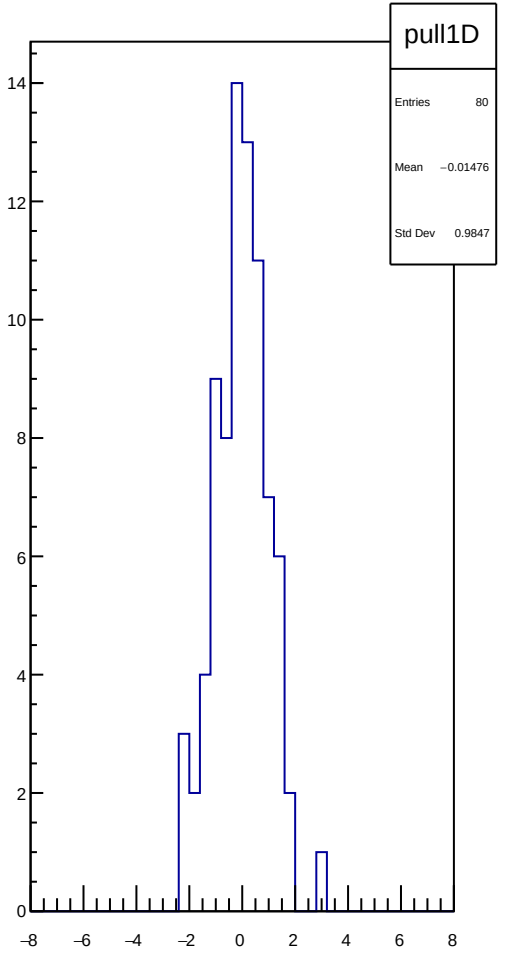

diff_cav4dY_rms vs run
χ² / ndf 3149 / 79
p0 313.4 ± 0.2483
350
340
330
320
310
300
290
280

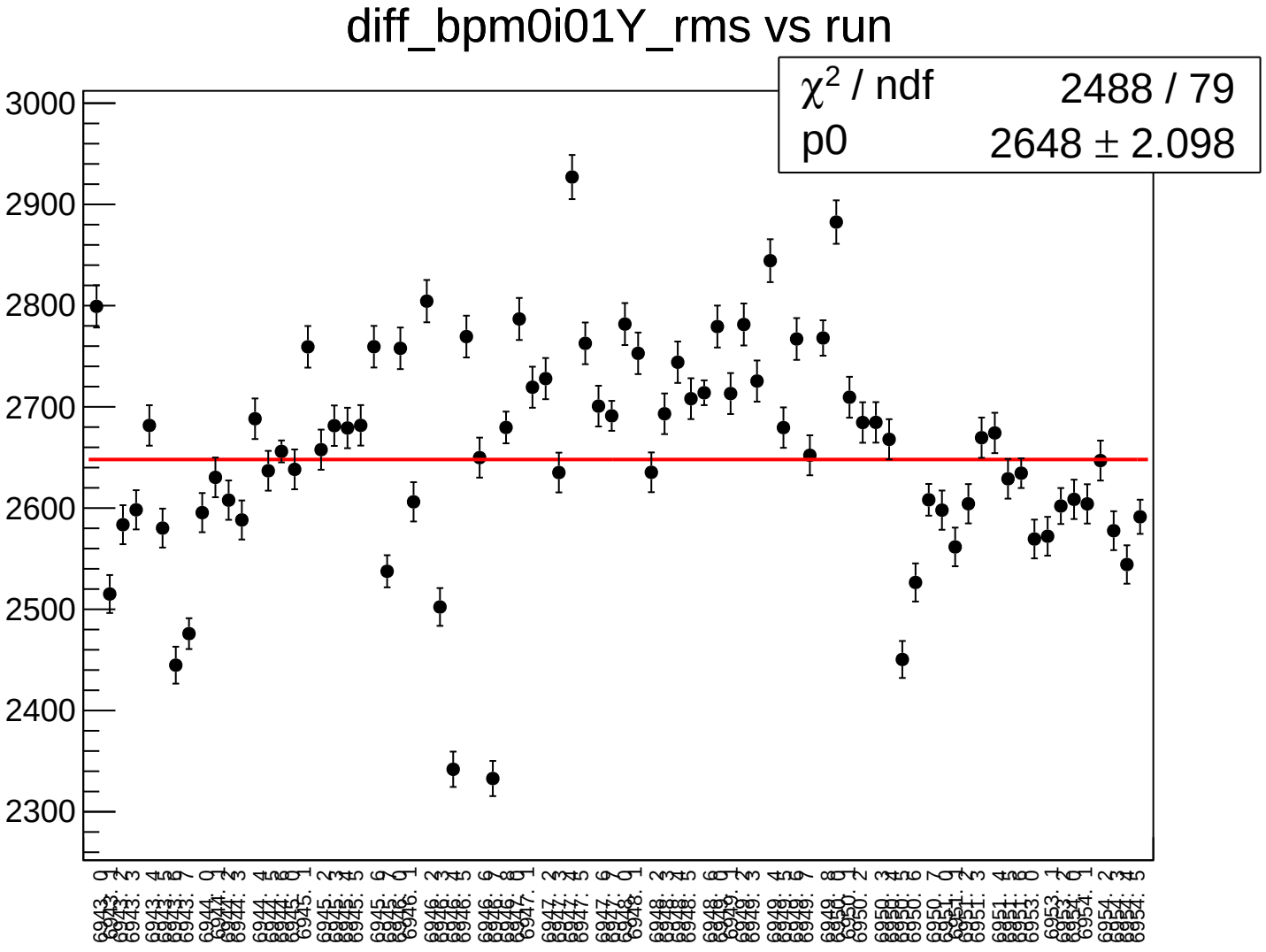

diff_bpm0i01X_mean vs run
χ^2 / ndf 83.53 / 79
p0 9.035 ± 3.075
100
50
0
−50
−100
pull
Entries 80
Mean 1338
Std Dev 1291
3
2
1
0
−1
−2
−3

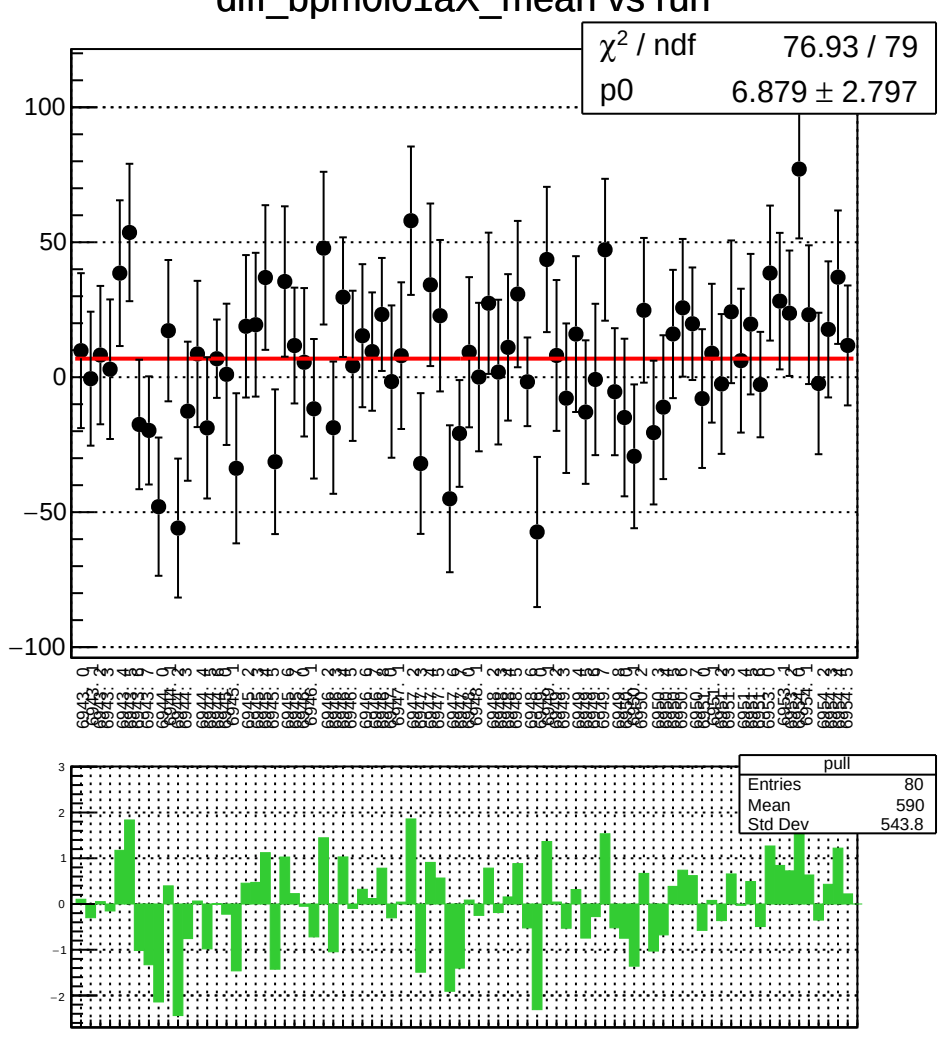

pull1D
Entries 80
Mean 0.004586
Std Dev 1.022
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

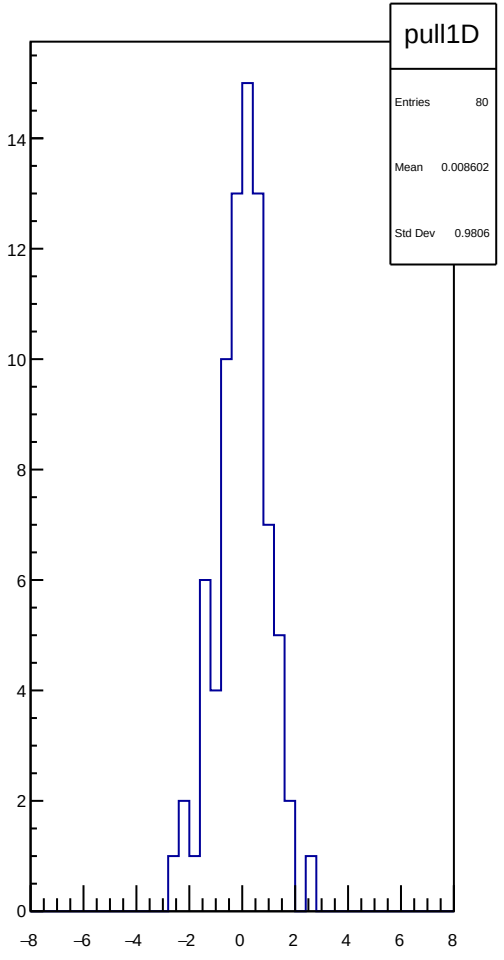

diff_bpm0i01X_rms vs run
χ² / ndf 4823 / 79
p0 2742 ± 2.174
3200
3000
2800
2600
2400
2200

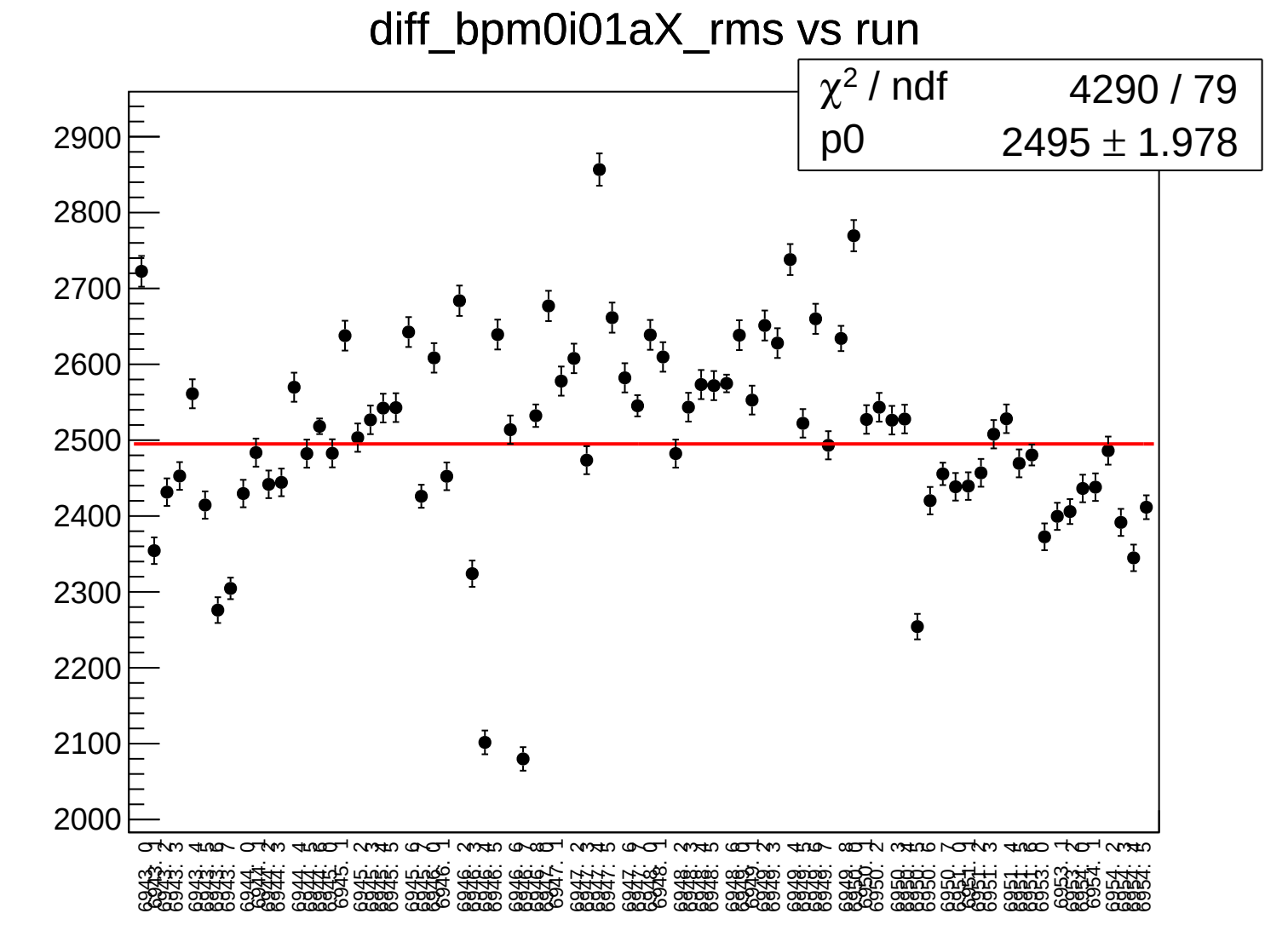

diff_bpm0i01Y_mean vs run
χ² / ndf 77.6 / 79
p0 6.647 ± 2.967
pull
Entries 80
Mean −59.29
Std Dev 96.05

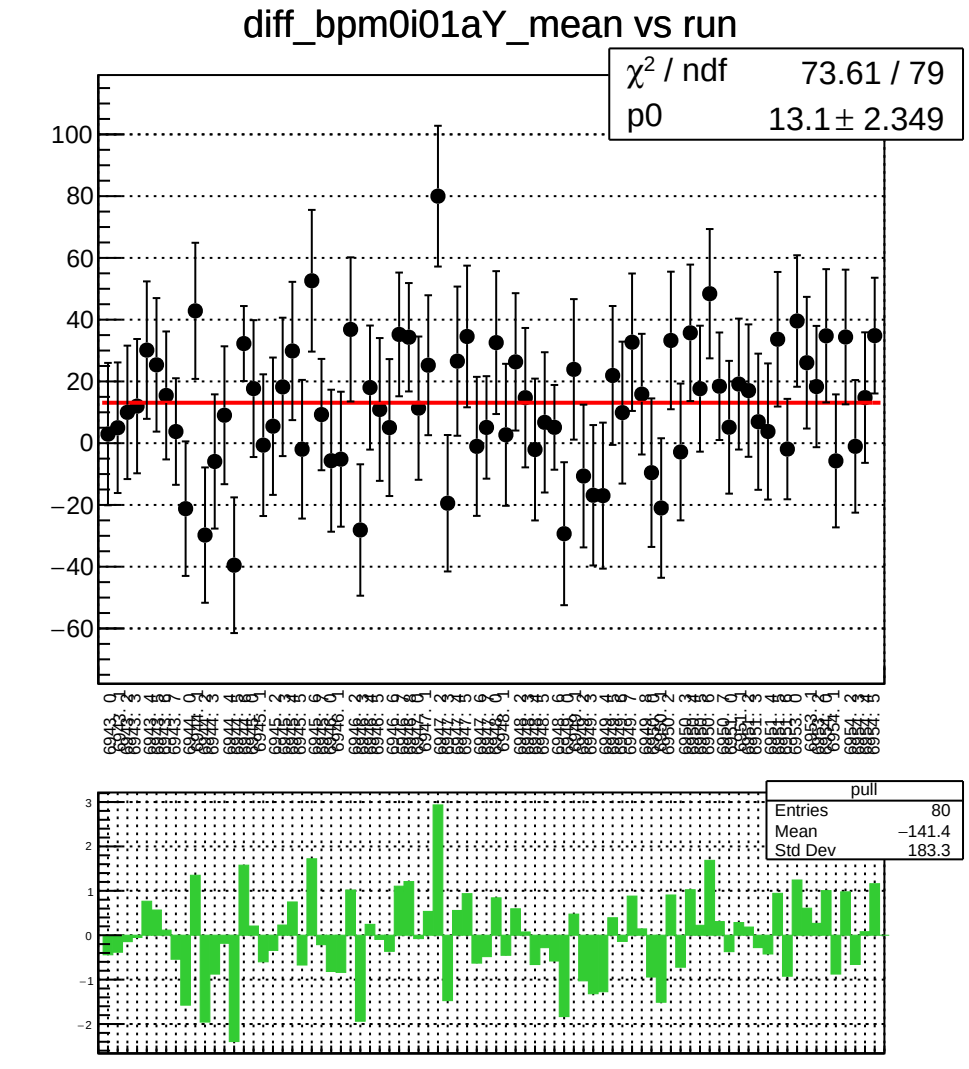

pull1D
Entries 80
Mean −0.01476
Std Dev 0.9847

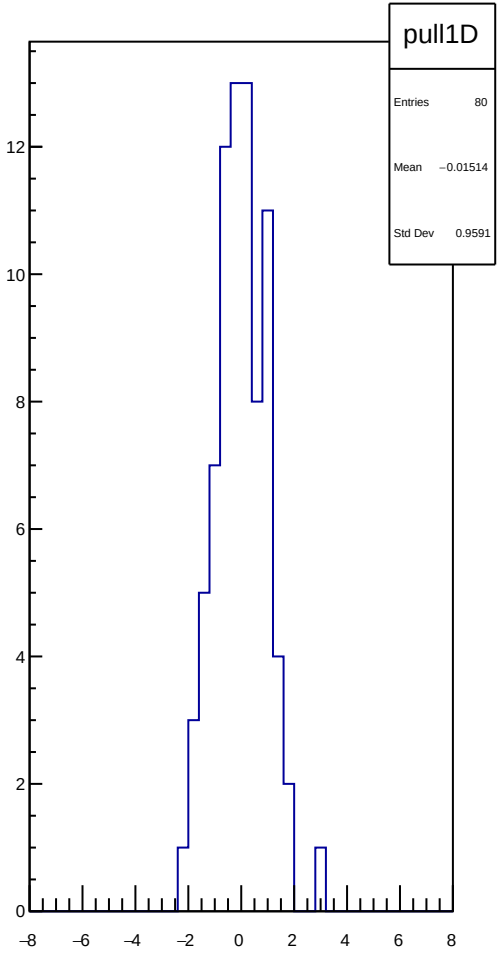

diff_bpm0i01Y_rms vs run
χ² / ndf 2488 / 79
p0 2648 ± 2.098
3000
2900
2800
2700
2600
2500
2400
2300

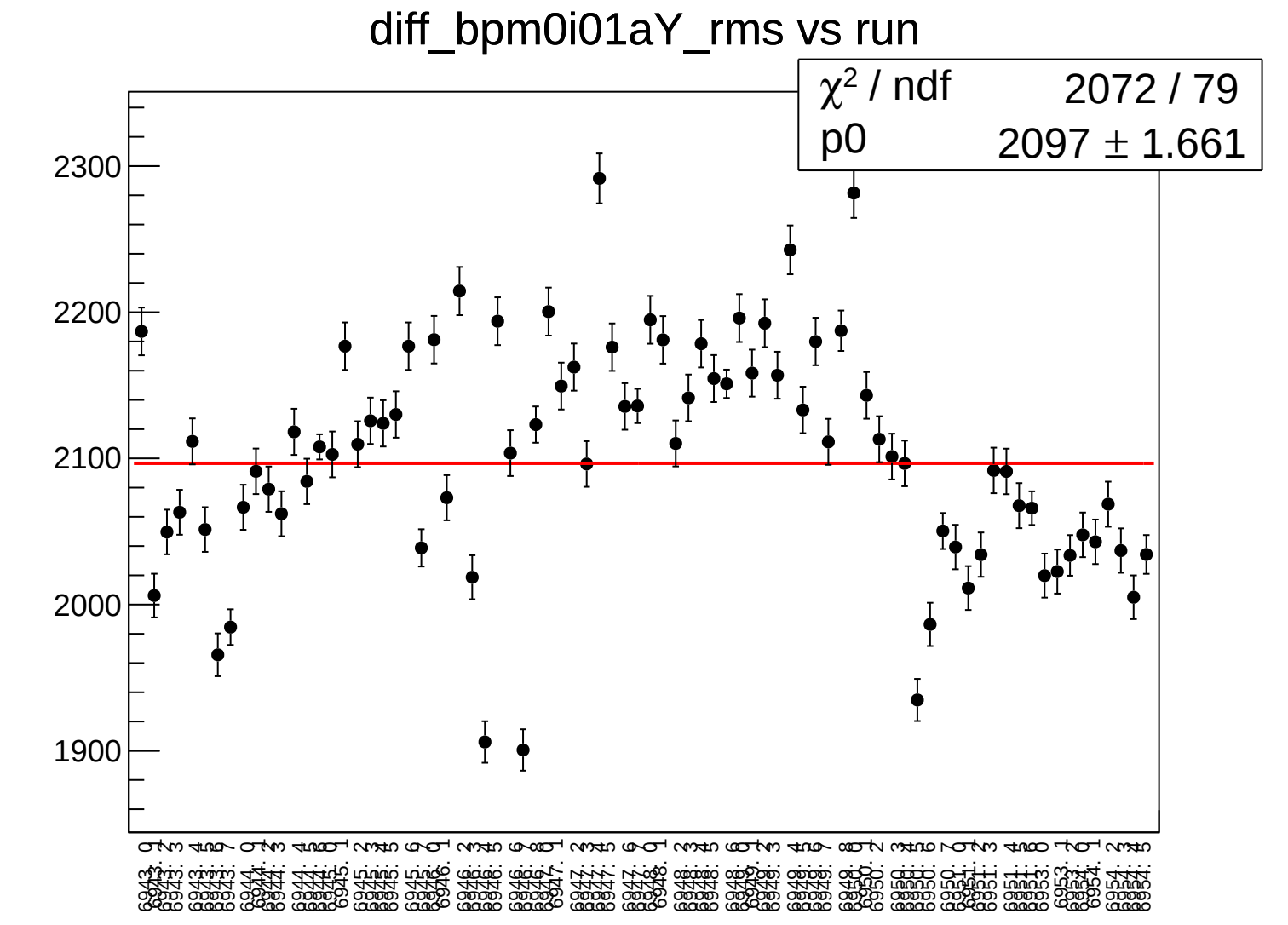

diff_bpm0i01aX_mean vs run
χ^2 / ndf 76.93 / 79
p0 6.879 ± 2.797
100
50
0
−50
−100
pull
Entries 80
Mean 590
Std Dev 543.8
3
2
1
0
−1
−2

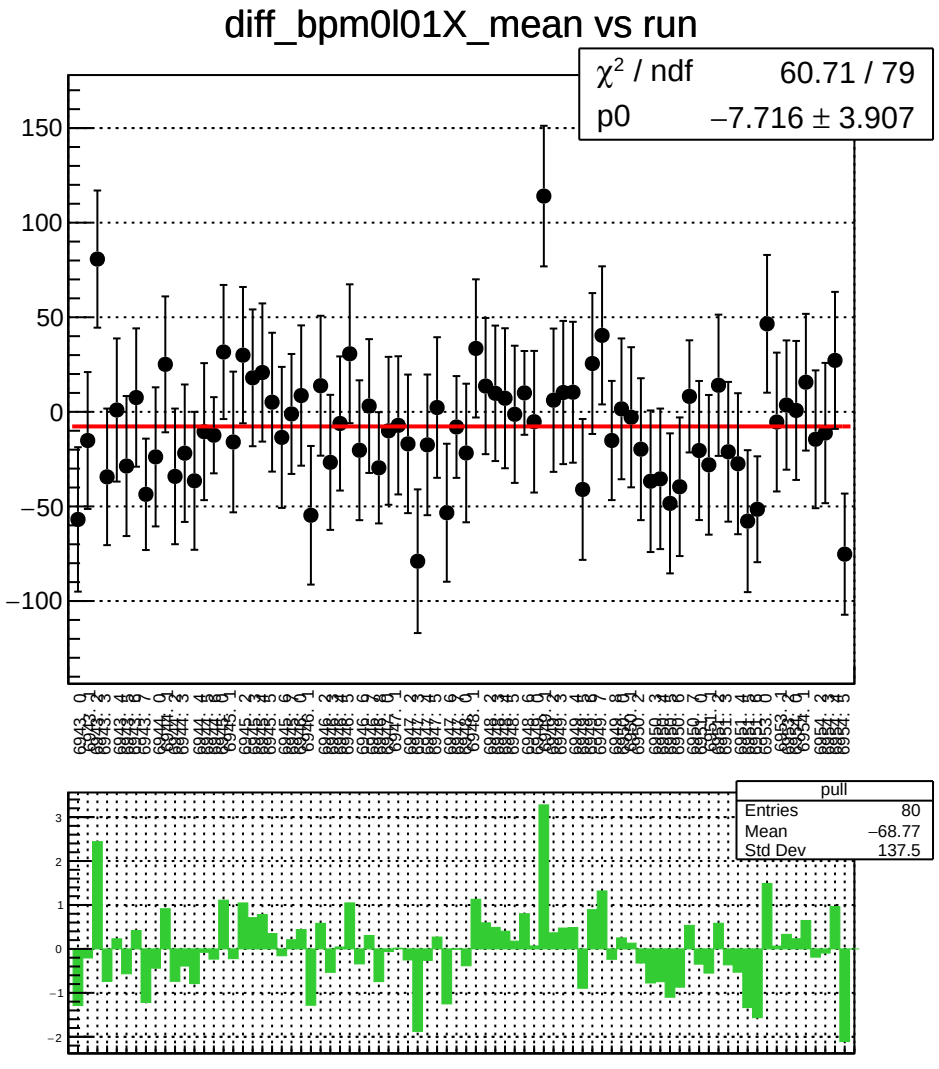

pull1D
Entries 80
Mean 0.008602
Std Dev 0.9806
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

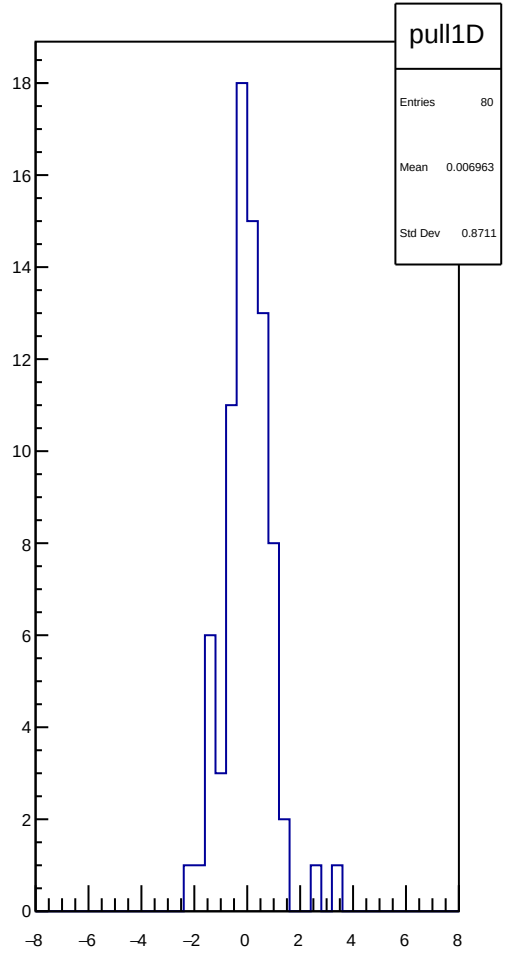

diff_bpm0i01aX_rms vs run
χ² / ndf 4290 / 79
p0 2495 ± 1.978
2900
2800
2700
2600
2500
2400
2300
2200
2100
2000

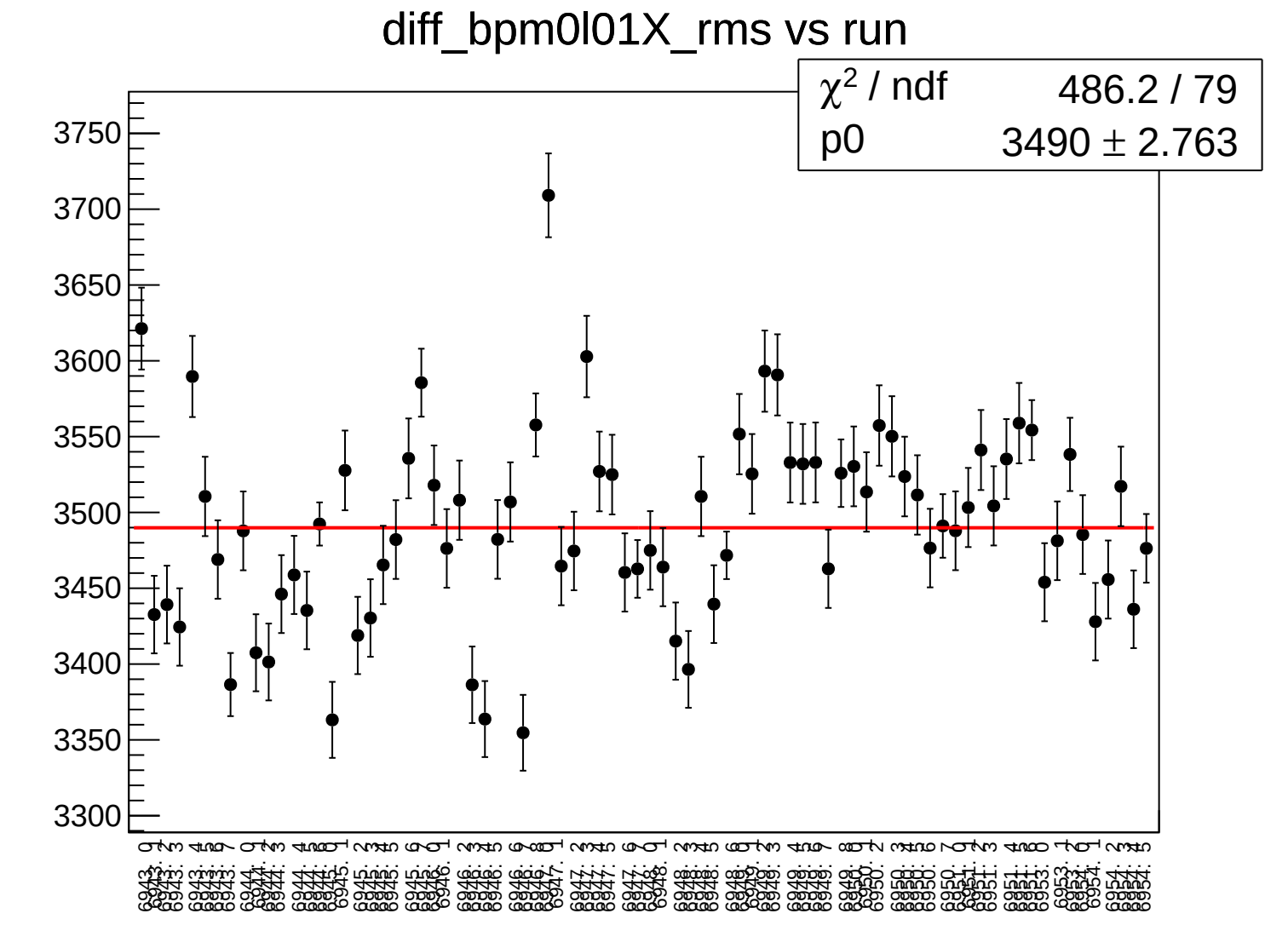

diff_bpm0i01aY_mean vs run
χ² / ndf 73.61 / 79
p0 13.1 ± 2.349
pull
Entries 80
Mean −141.4
Std Dev 183.3

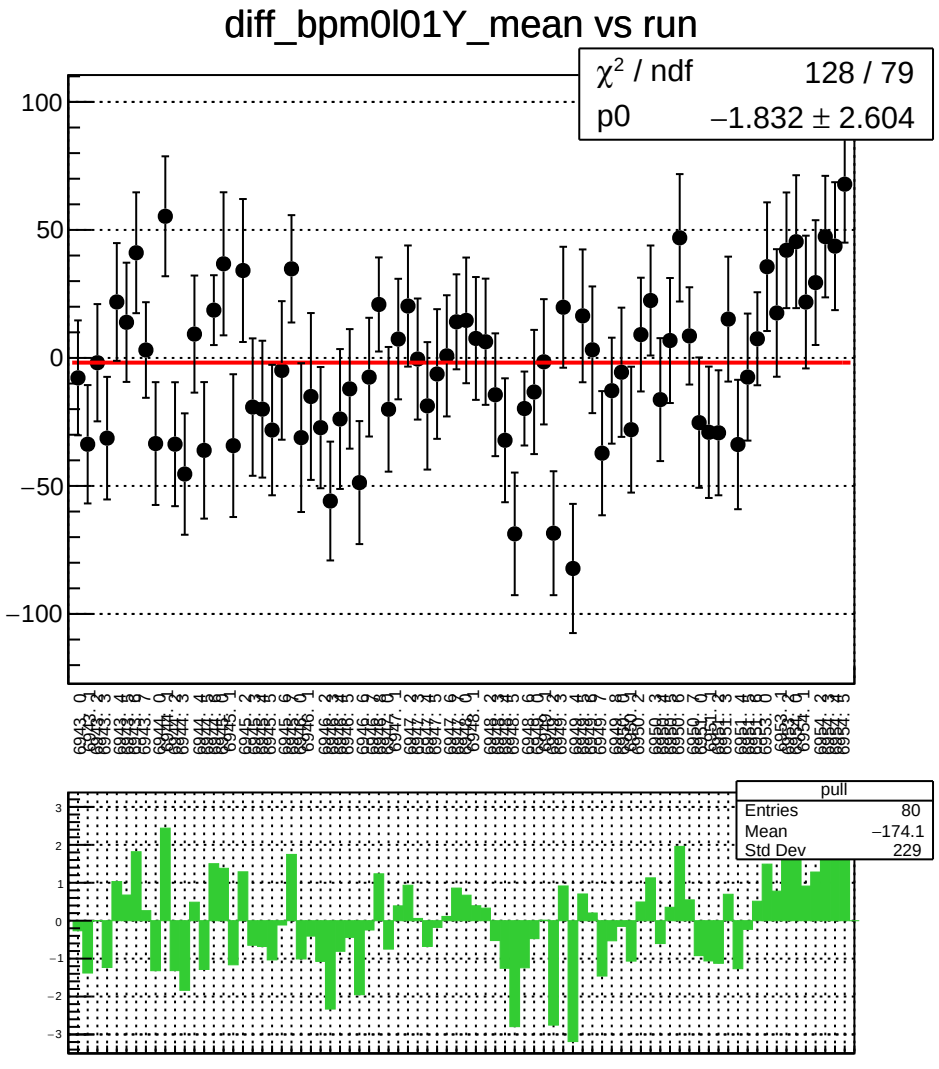

pull1D
Entries 80
Mean −0.01514
Std Dev 0.9591

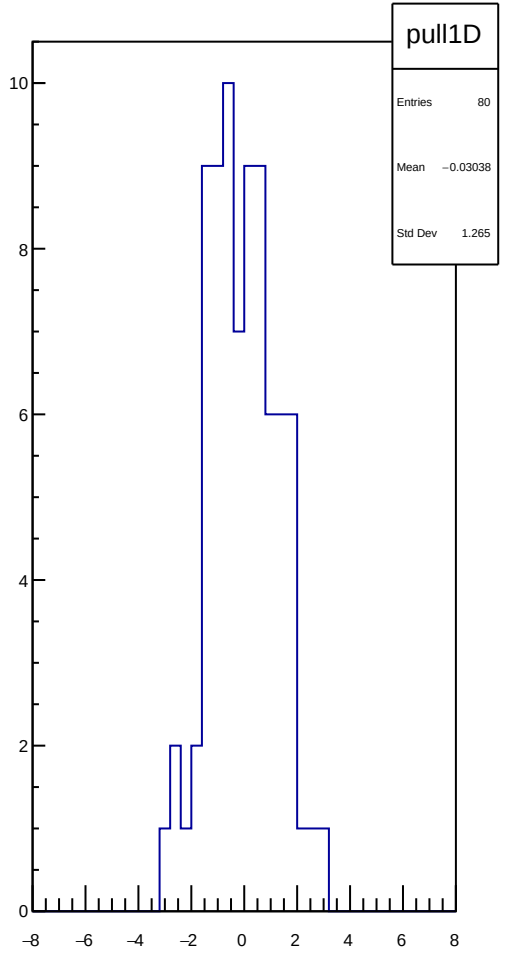

diff_bpm0i01aY_rms vs run
χ² / ndf 2072 / 79
p0 2097 ± 1.661
2300
2200
2100
2000
1900

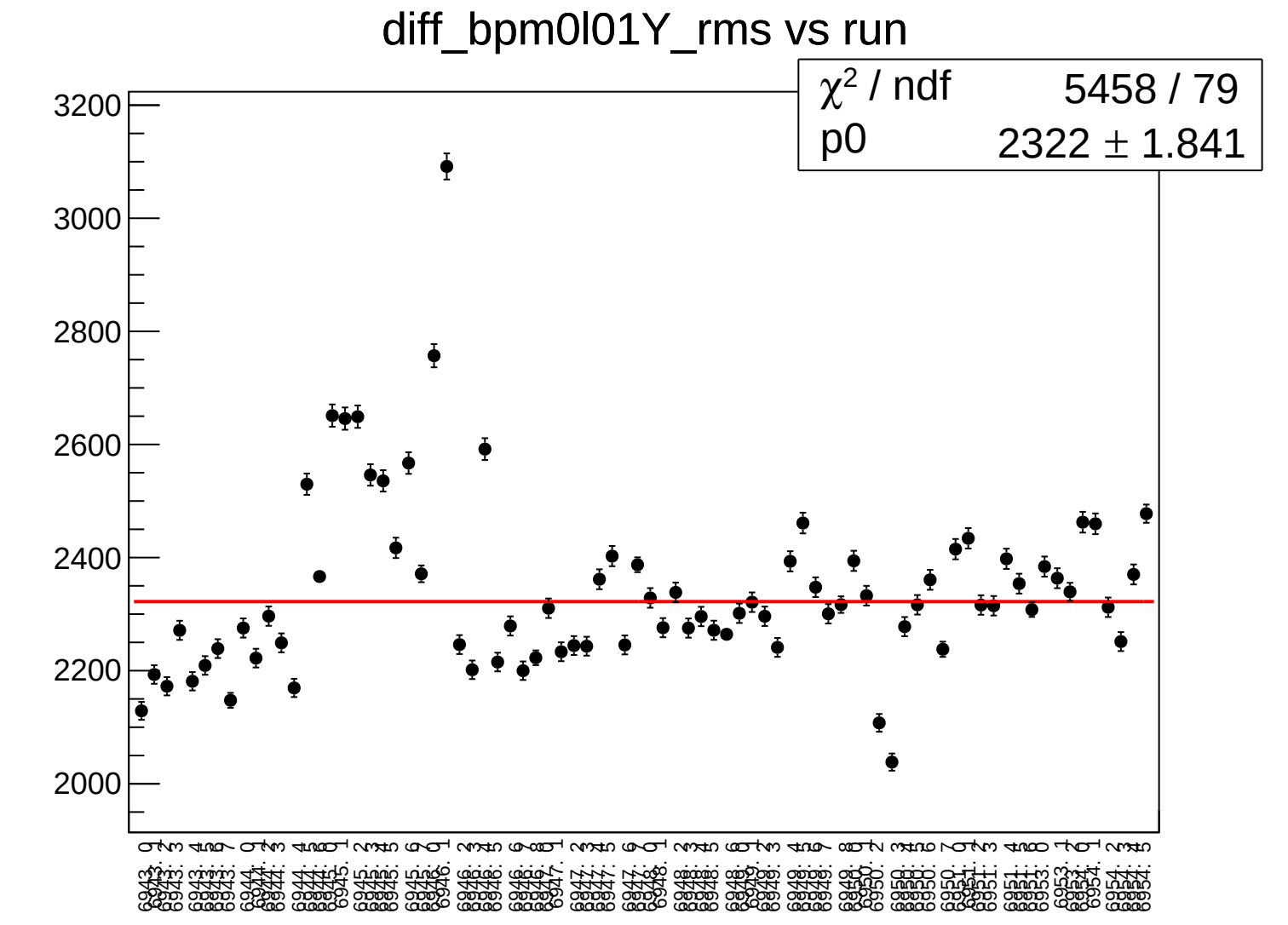

diff_bpm0l01X_mean vs run
χ² / ndf 60.71 / 79
p0 −7.716 ± 3.907
150
100
50
0
−50
−100
pull
Entries 80
Mean −68.77
Std Dev 137.5
3
2
1
0
−1
−2

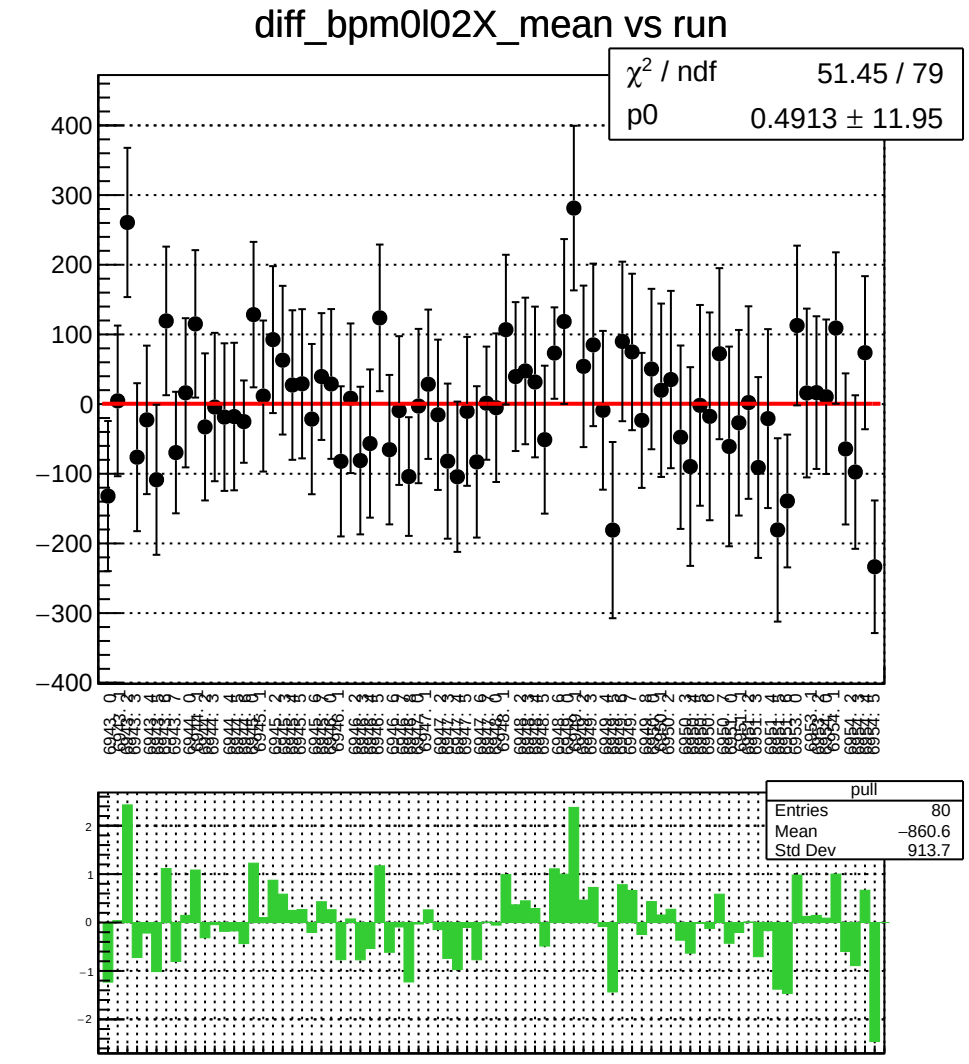

pull1D
Entries 80
Mean 0.006963
Std Dev 0.8711
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

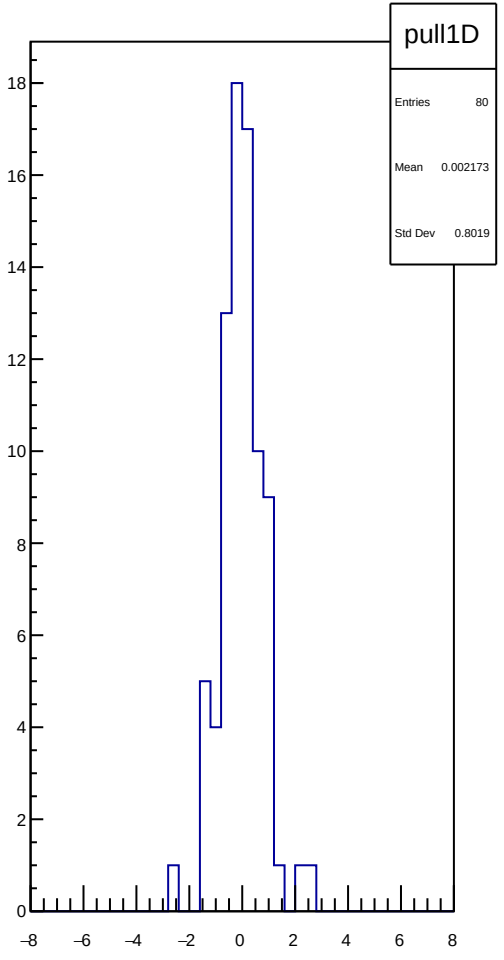

diff_bpm0l01X_rms vs run
χ² / ndf 486.2 / 79
p0 3490 ± 2.763
3750
3700
3650
3600
3550
3500
3450
3400
3350
3300

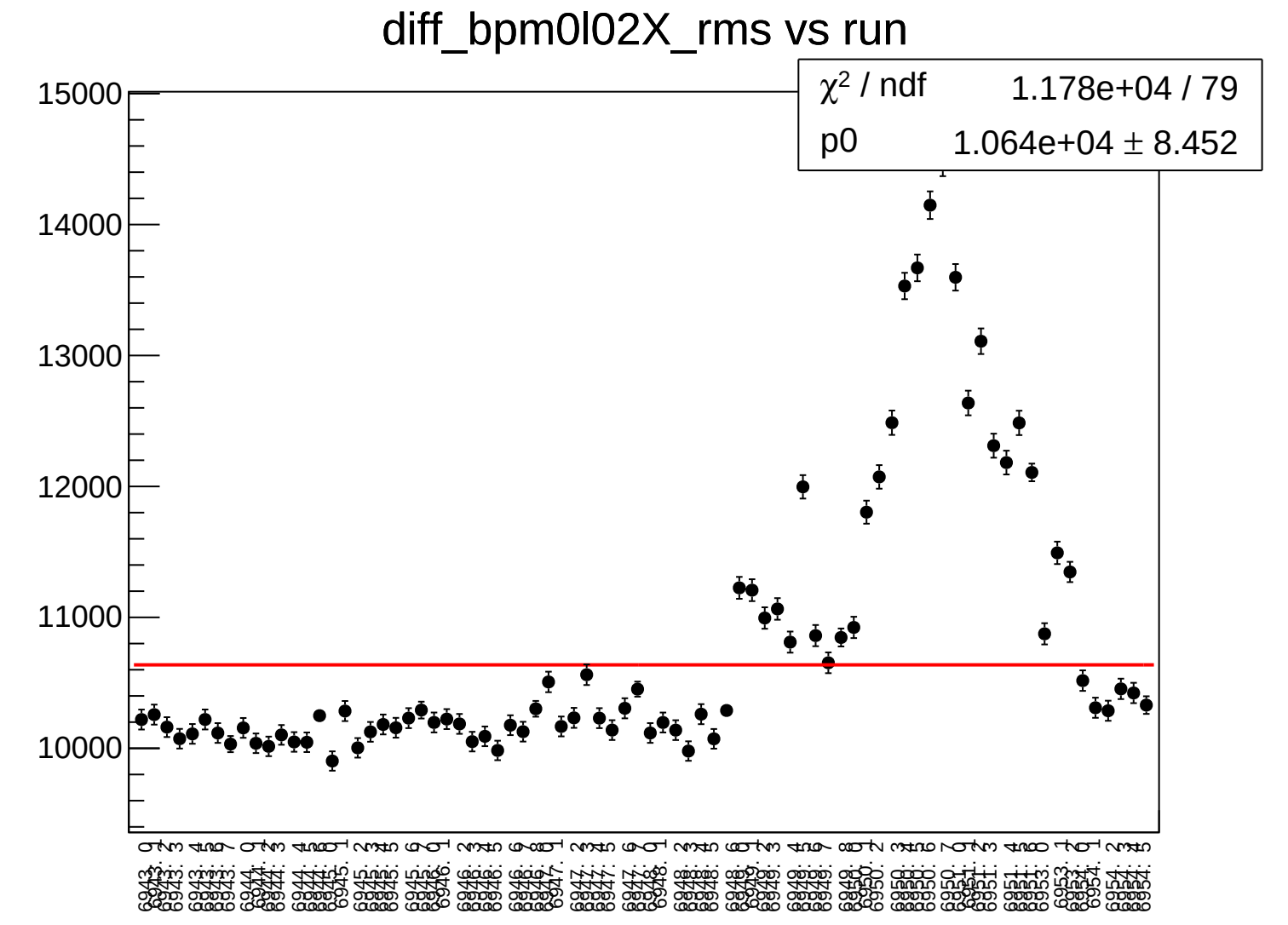

diff_bpm0l01Y_mean vs run
χ² / ndf 128 / 79
p0 −1.832 ± 2.604
100
50
0
−50
−100
pull
Entries 80
Mean −174.1
Std Dev 229
3
2
1
0
−1
−2
−3

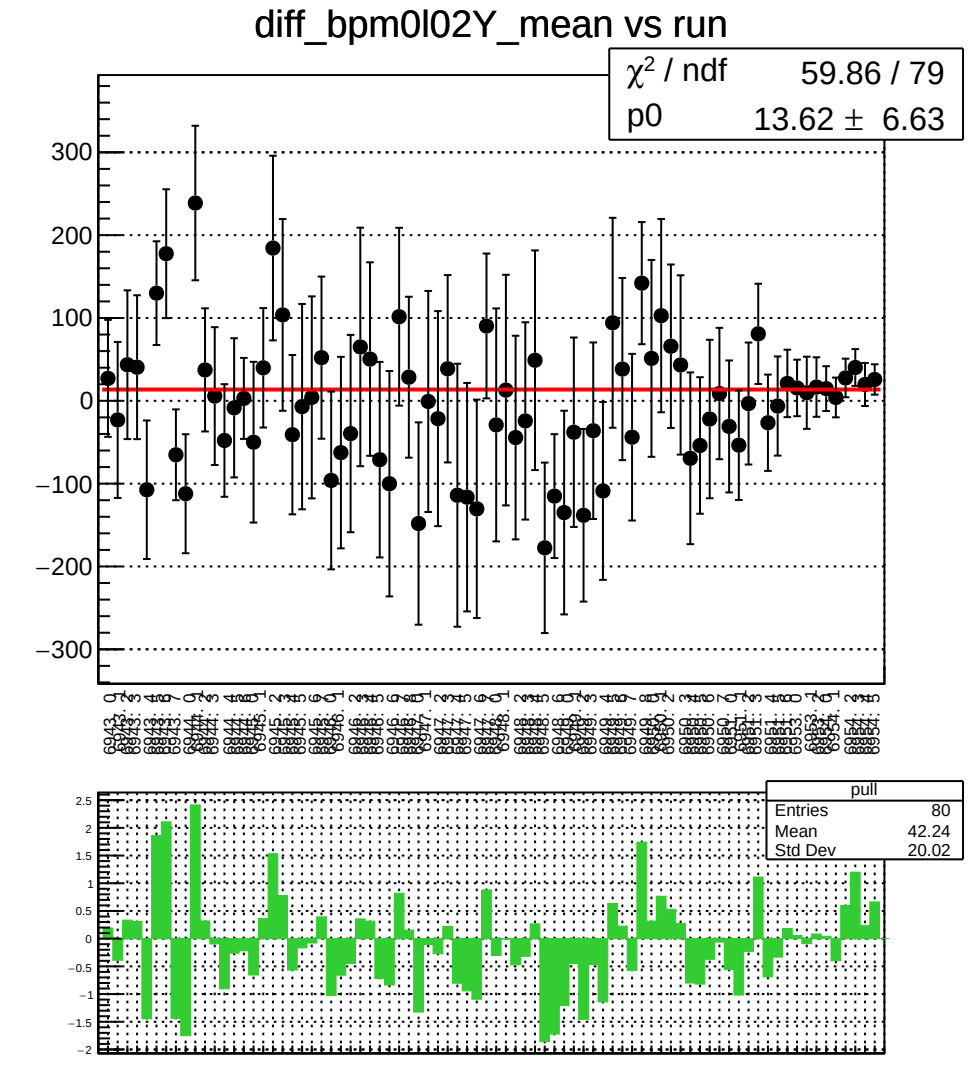

pull1D
Entries 80
Mean −0.03038
Std Dev 1.265
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

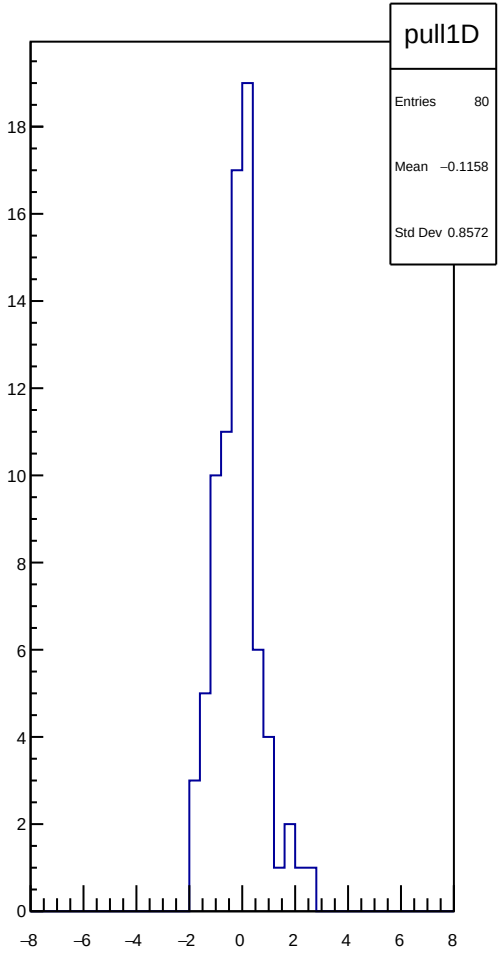

diff_bpm0l01Y_rms vs run
χ² / ndf 5458 / 79
p0 2322 ± 1.841
3200
3000
2800
2600
2400
2200
2000

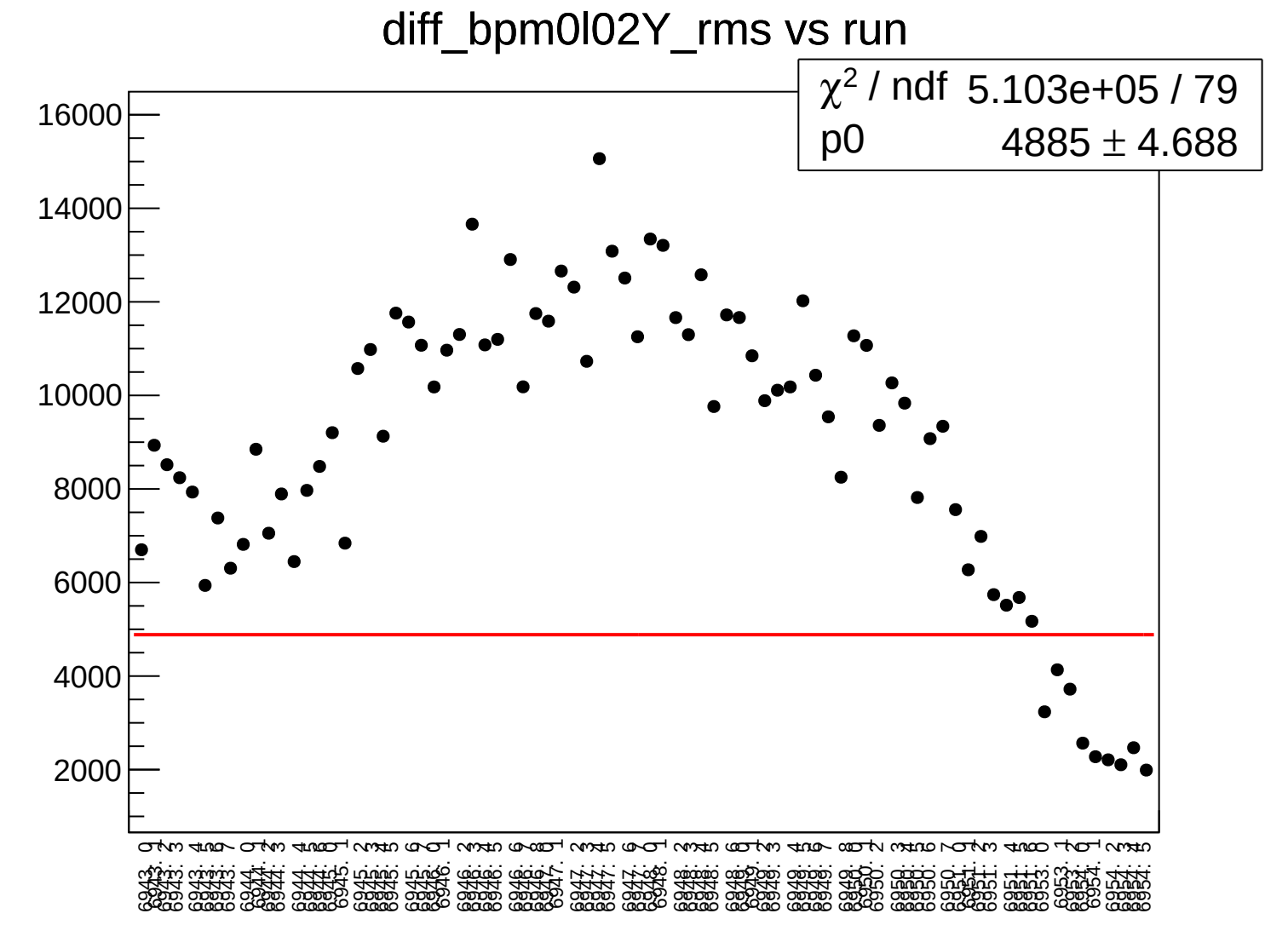

diff_bpm0l02X_mean vs run
χ² / ndf 51.45 / 79
p0 0.4913 ± 11.95
pull
Entries 80
Mean −860.6
Std Dev 913.7

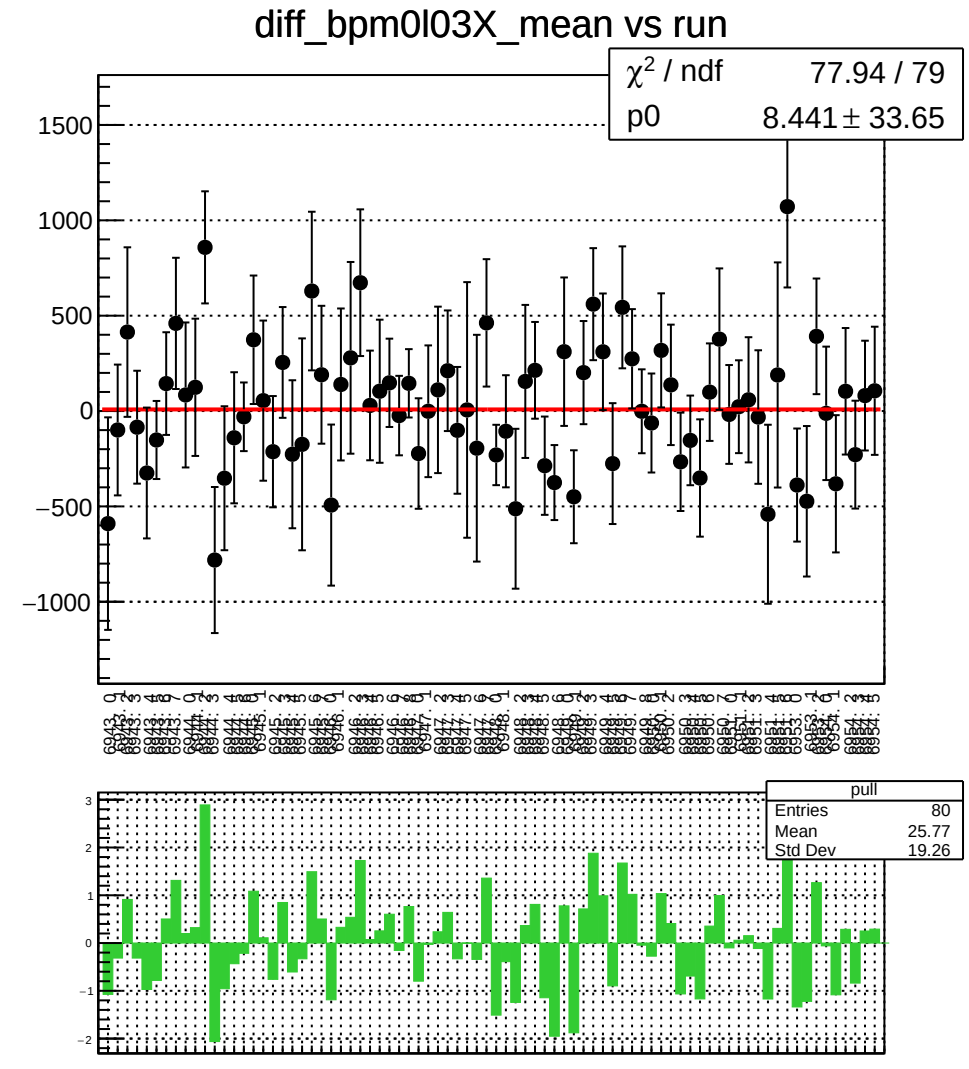

pull1D
Entries 80
Mean 0.002173
Std Dev 0.8019

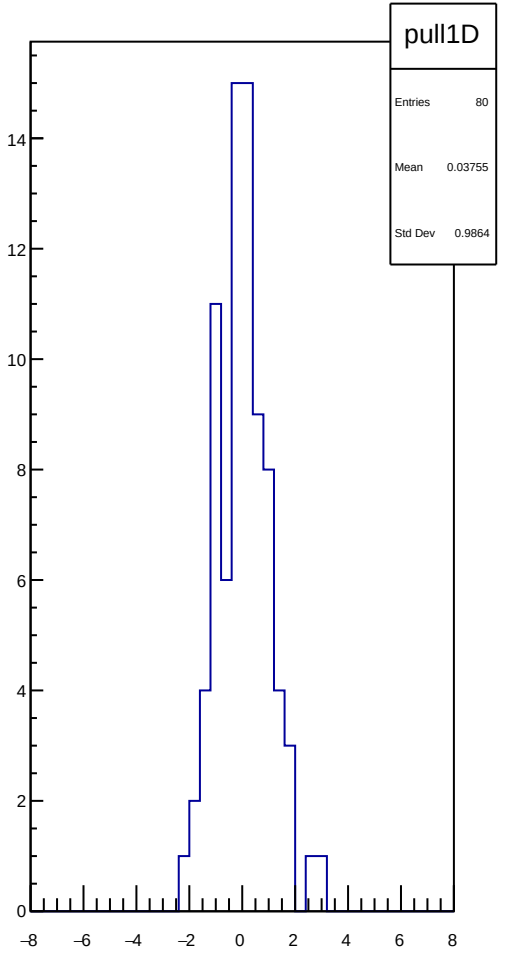

diff_bpm0l02X_rms vs run
χ² / ndf 1.178e+04 / 79
p0 1.064e+04 ± 8.452
15000
14000
13000
12000
11000
10000

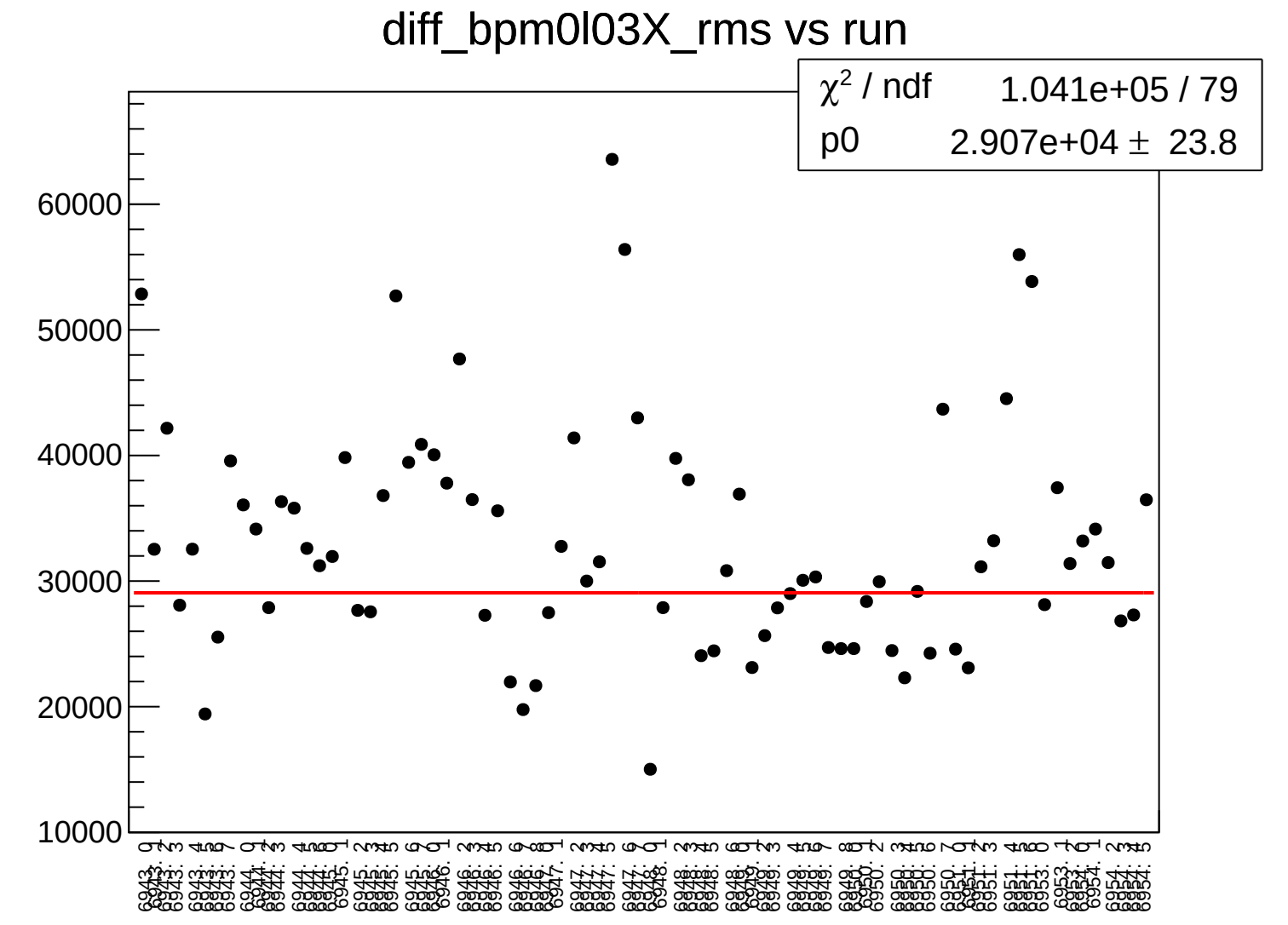

diff_bpm0l02Y_mean vs run
χ² / ndf 59.86 / 79
p0 13.62 ± 6.63
pull
Entries 80
Mean 42.24
Std Dev 20.02

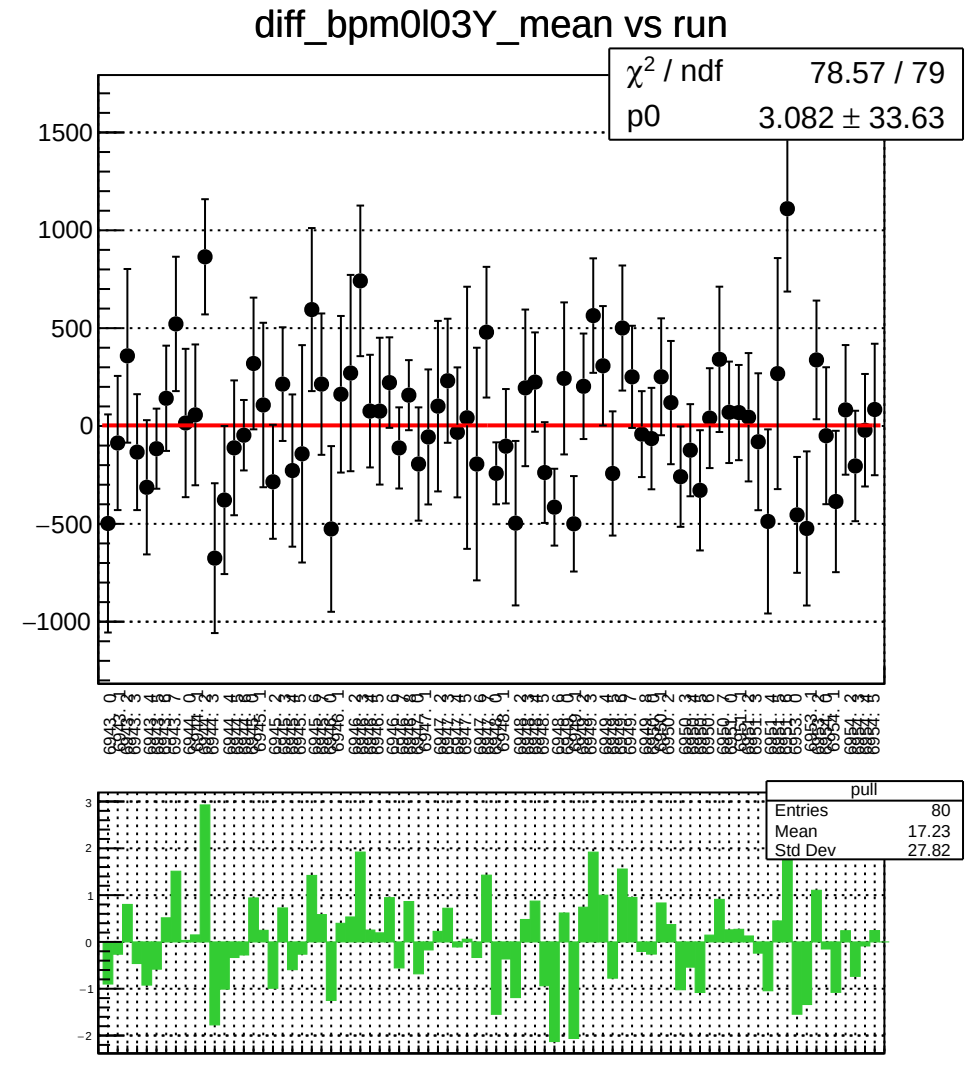

pull1D
Entries 80
Mean −0.1158
Std Dev 0.8572

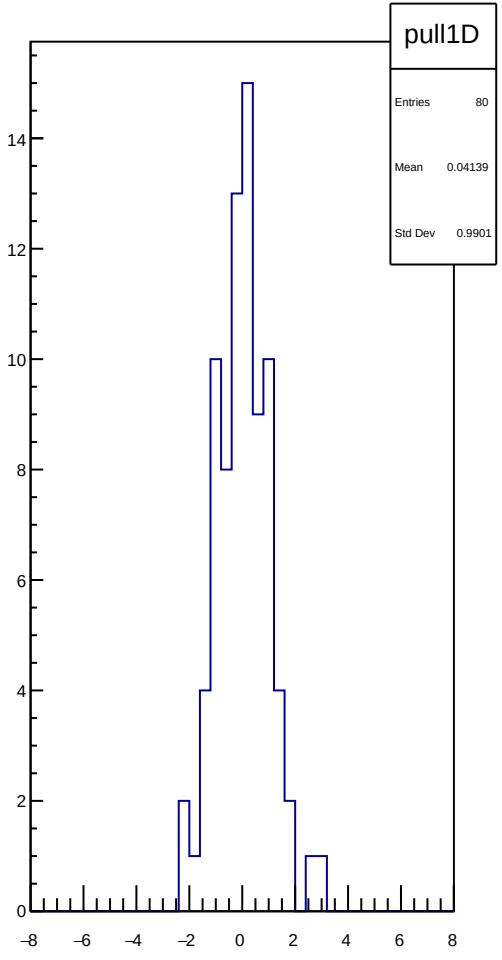

diff_bpm0l02Y_rms vs run
χ² / ndf 5.103e+05 / 79
p0 4885 ± 4.688
16000
14000
12000
10000
8000
6000
4000
2000

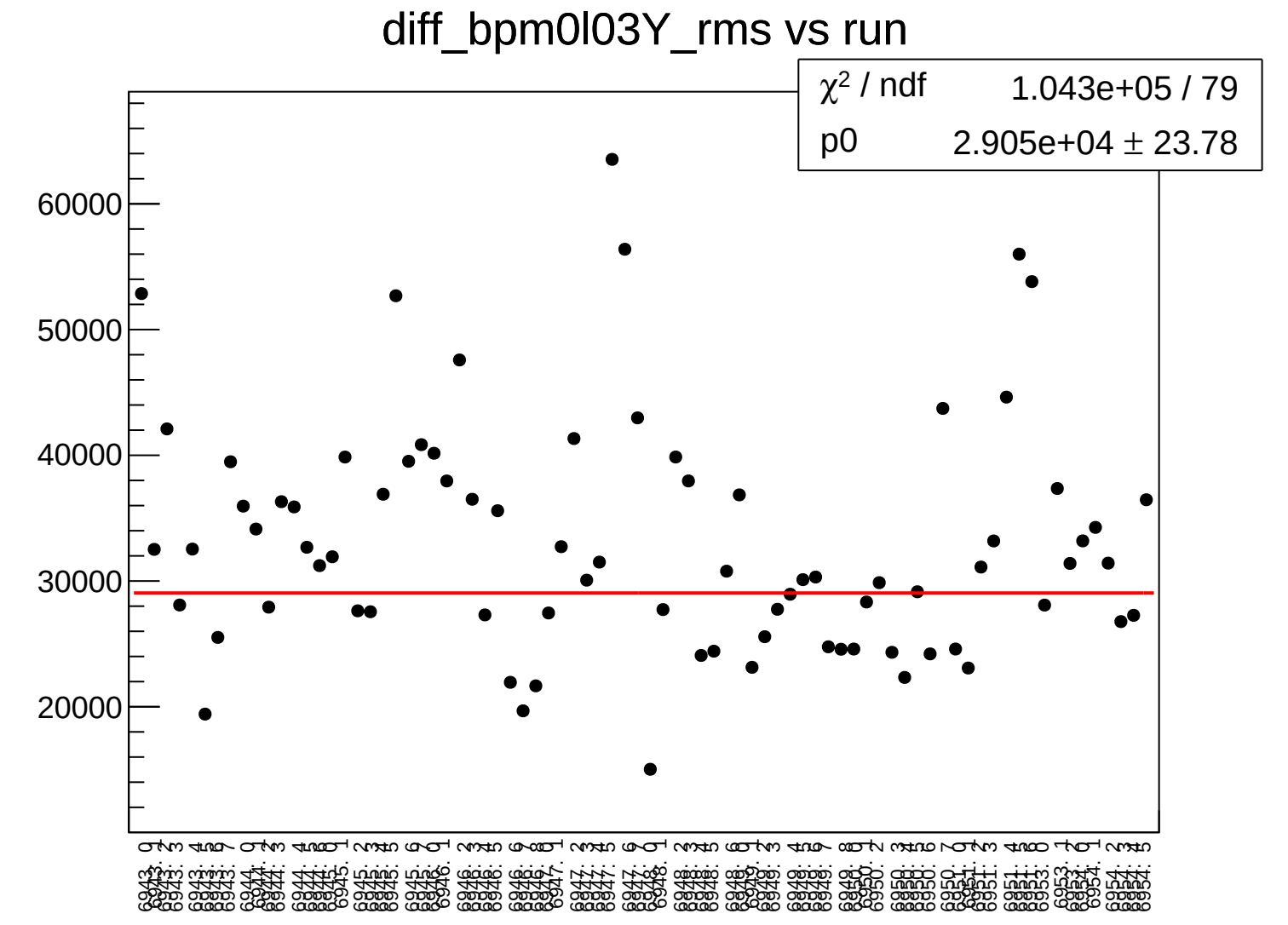

diff_bpm0l03X_mean vs run
χ^2 / ndf 77.94 / 79
p0 8.441 ± 33.65
1500
1000
500
0
−500
−1000
pull
Entries 80
Mean 25.77
Std Dev 19.26
3
2
1
0
−1
−2

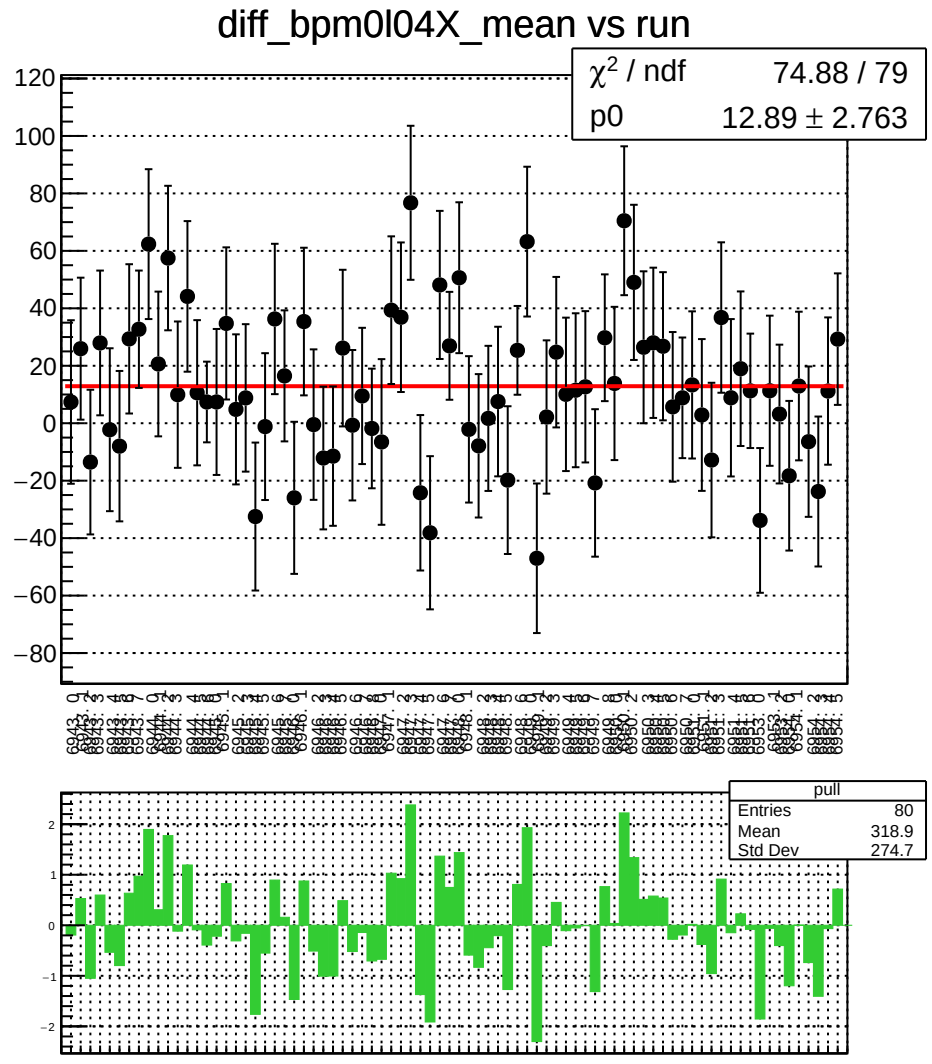

pull1D
Entries 80
Mean 0.03755
Std Dev 0.9864
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

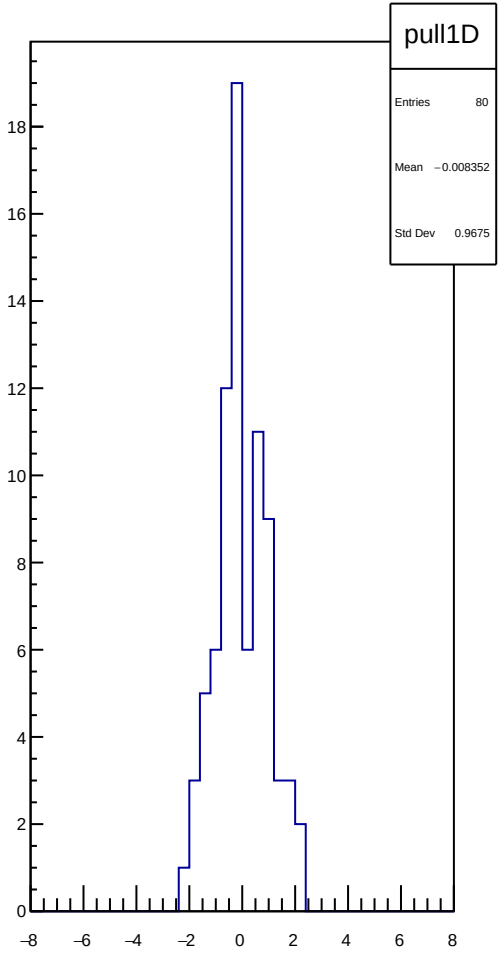

diff_bpm0l03X_rms vs run
χ^2 / ndf 1.041e+05 / 79
p0 2.907e+04 ± 23.8
60000
50000
40000
30000
20000
10000

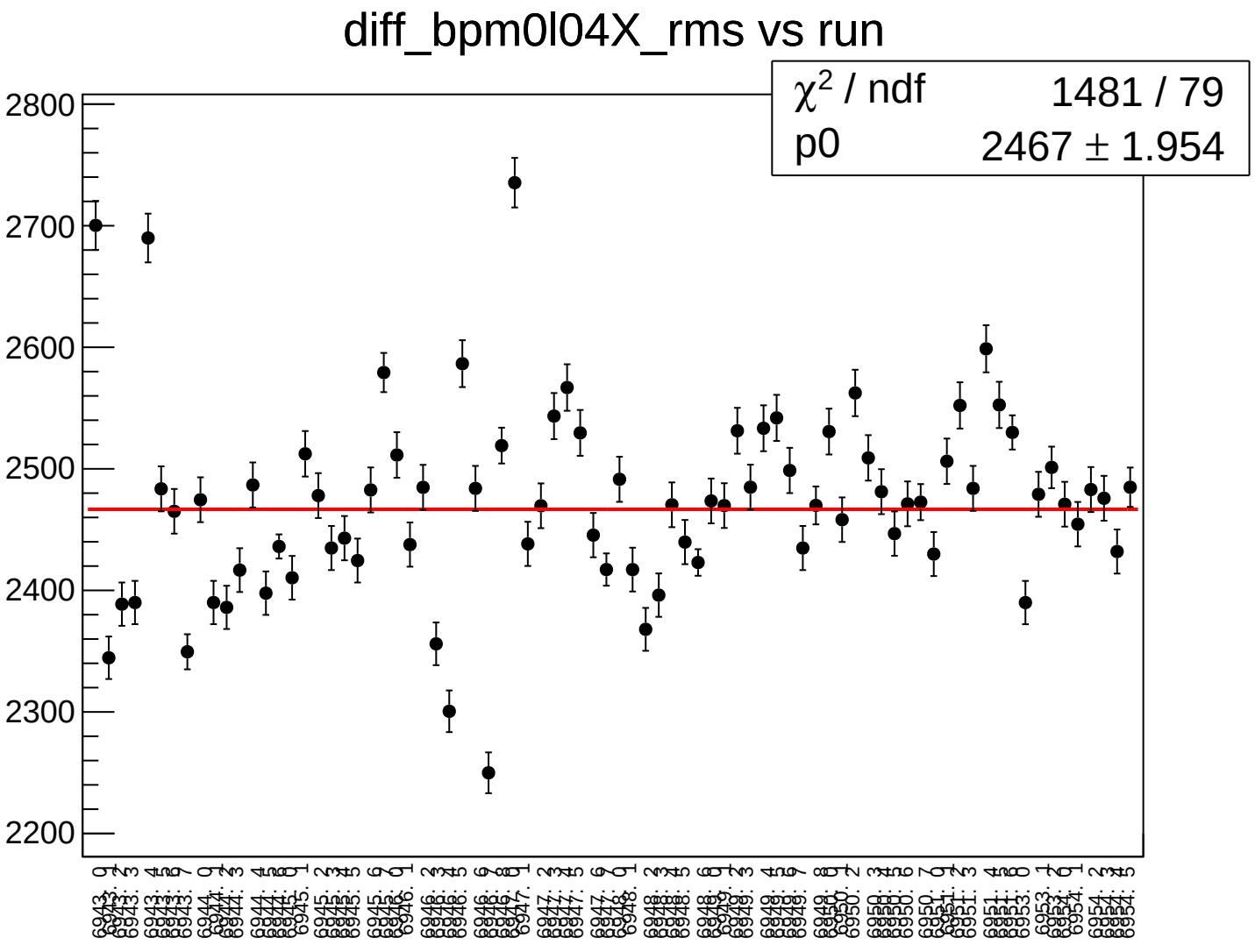

diff_bpm0l03Y_mean vs run
χ² / ndf 78.57 / 79
p0 3.082 ± 33.63
1500
1000
500
0
−500
−1000
pull
Entries 80
Mean 17.23
Std Dev 27.82
3
2
1
0
−1
−2

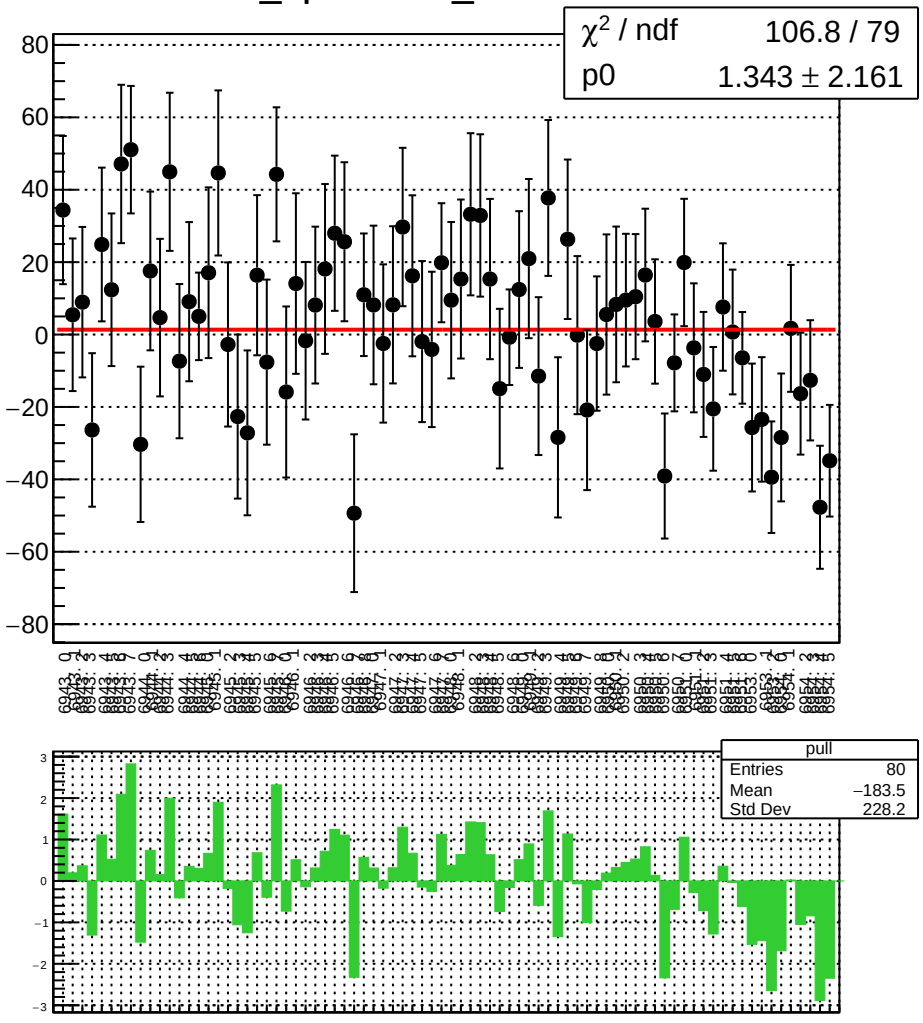

pull1D
Entries 80
Mean 0.04139
Std Dev 0.9901
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

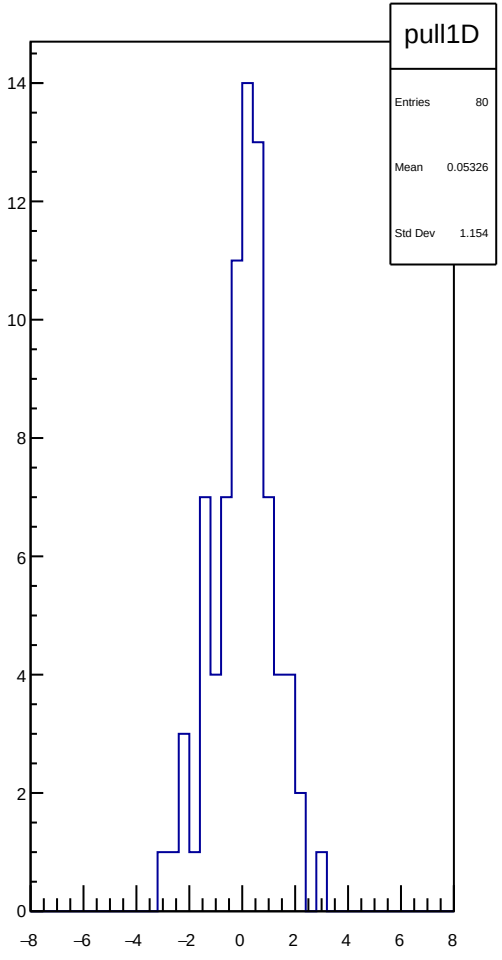

diff_bpm0l03Y_rms vs run
χ² / ndf 1.043e+05 / 79
p0 2.905e+04 ± 23.78
60000
50000
40000
30000
20000

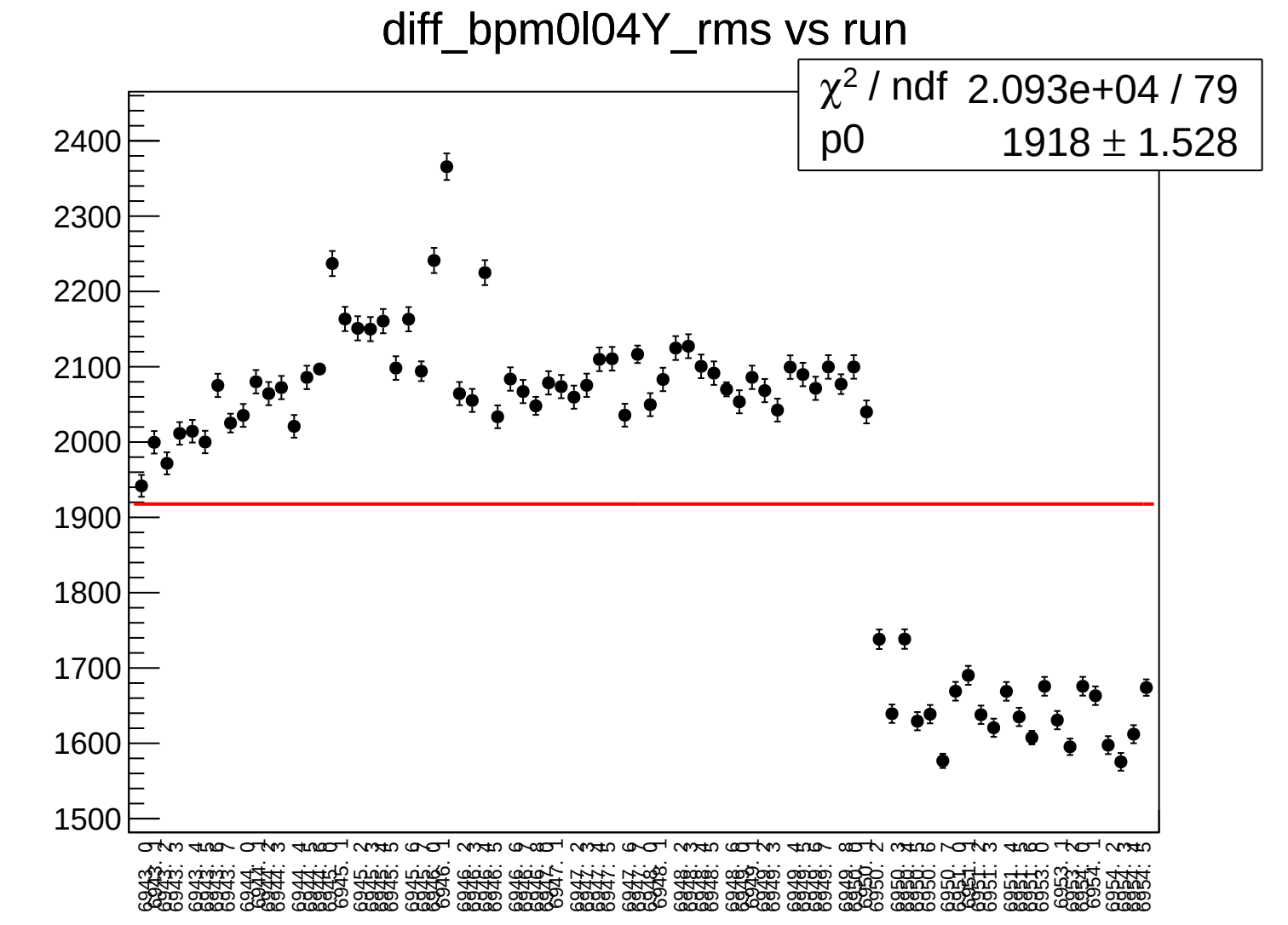

diff_bpm0l04X_mean vs run
χ^2 / ndf 74.88 / 79
p0 12.89 ± 2.763
pull
Entries 80
Mean 318.9
Std Dev 274.7

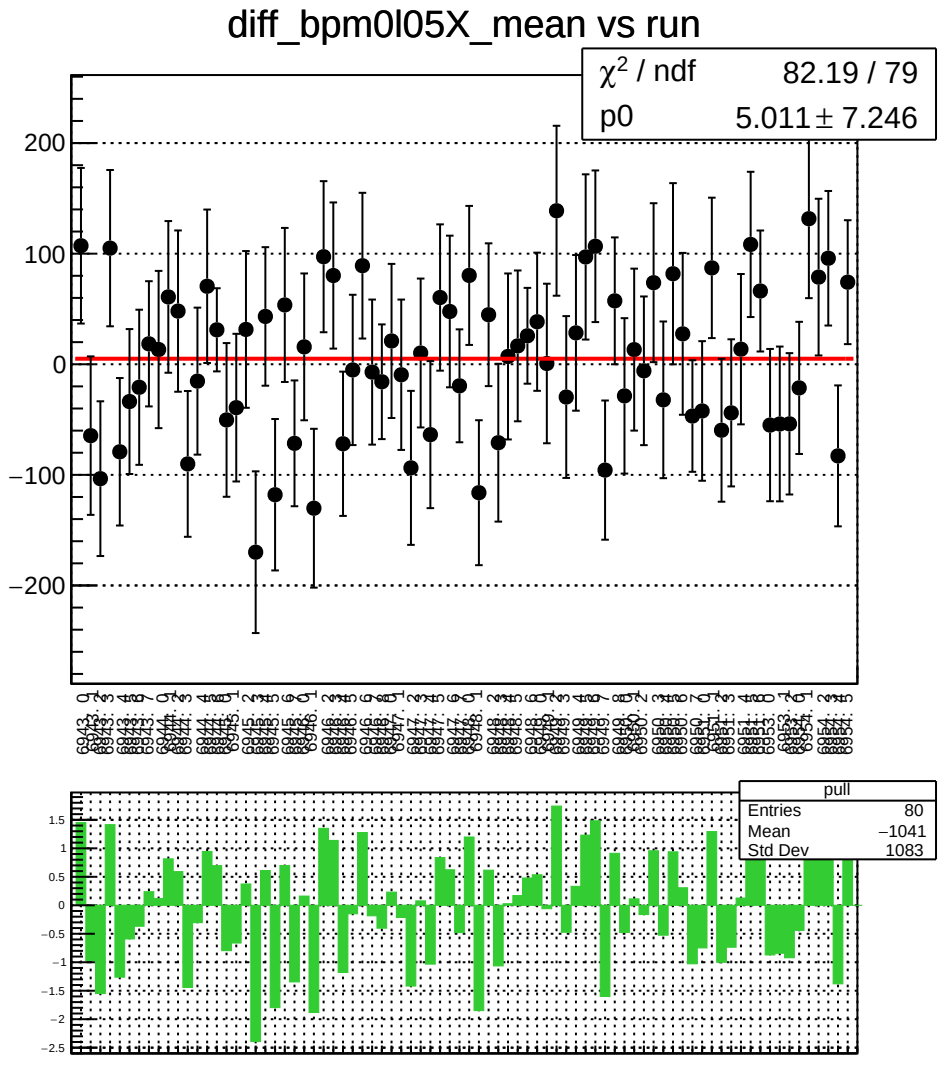

pull1D
Entries 80
Mean −0.008352
Std Dev 0.9675

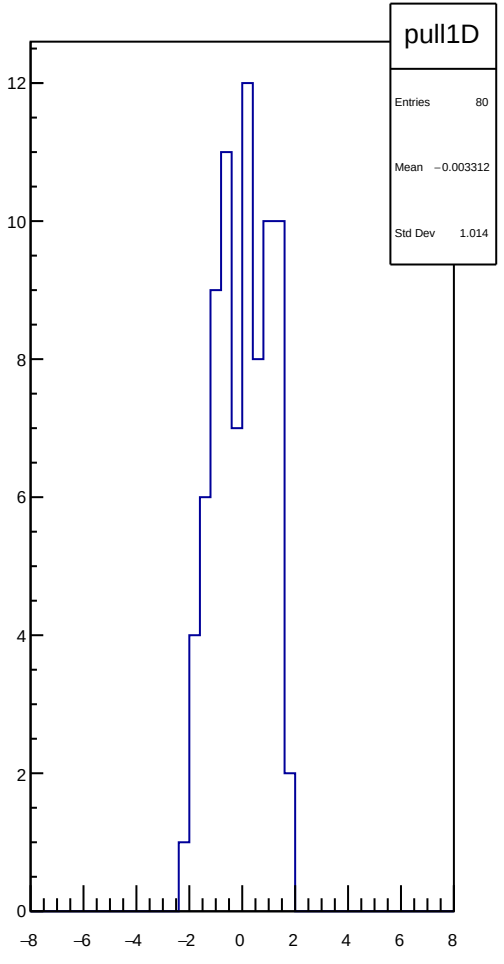

diff_bpm0l04X_rms vs run
χ² / ndf 1481 / 79
p0 2467 ± 1.954
2800
2700
2600
2500
2400
2300
2200

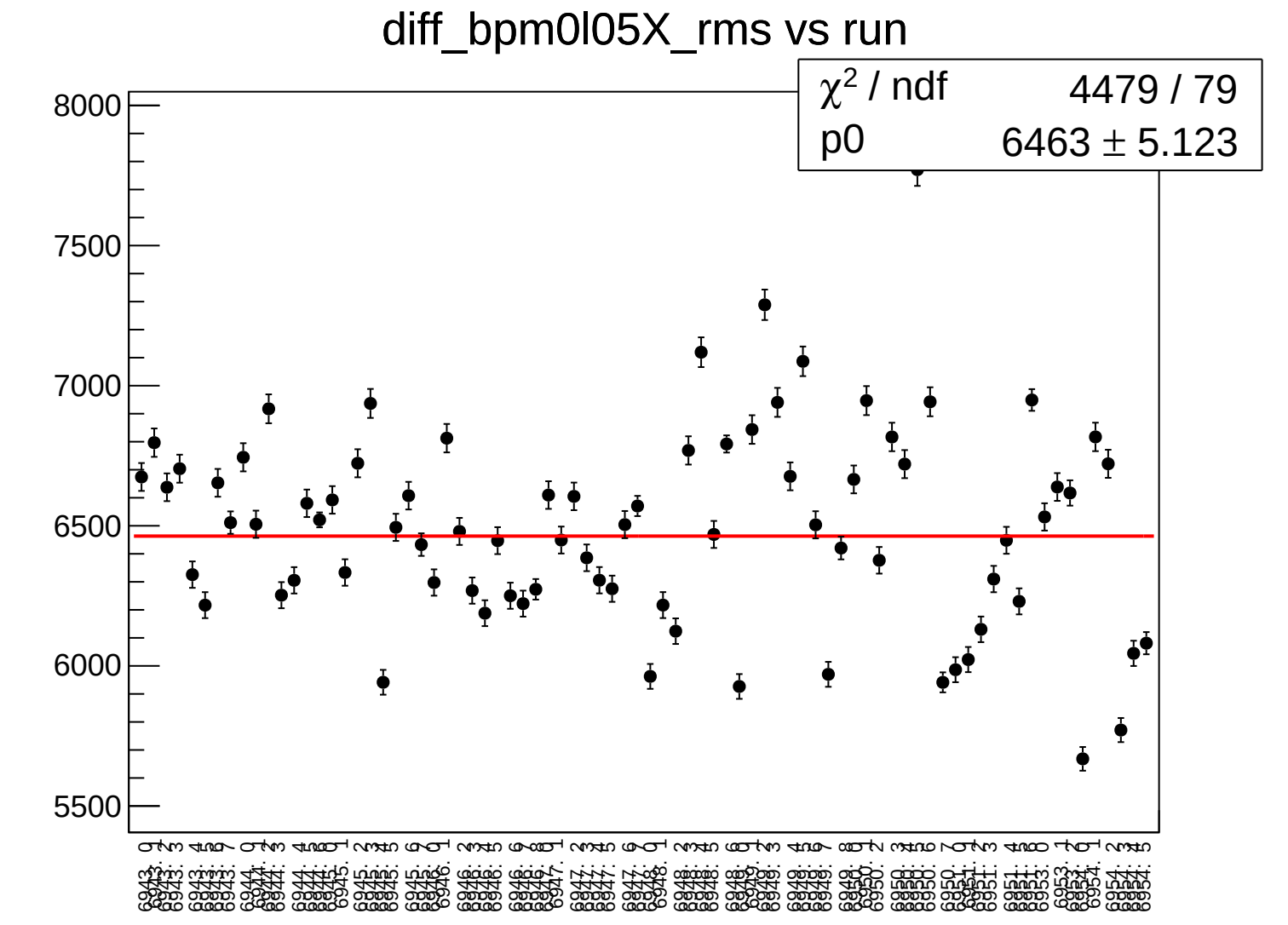

diff_bpm0l04Y_mean vs run
χ² / ndf 106.8 / 79
p0 1.343 ± 2.161
pull
Entries 80
Mean −183.5
Std Dev 228.2

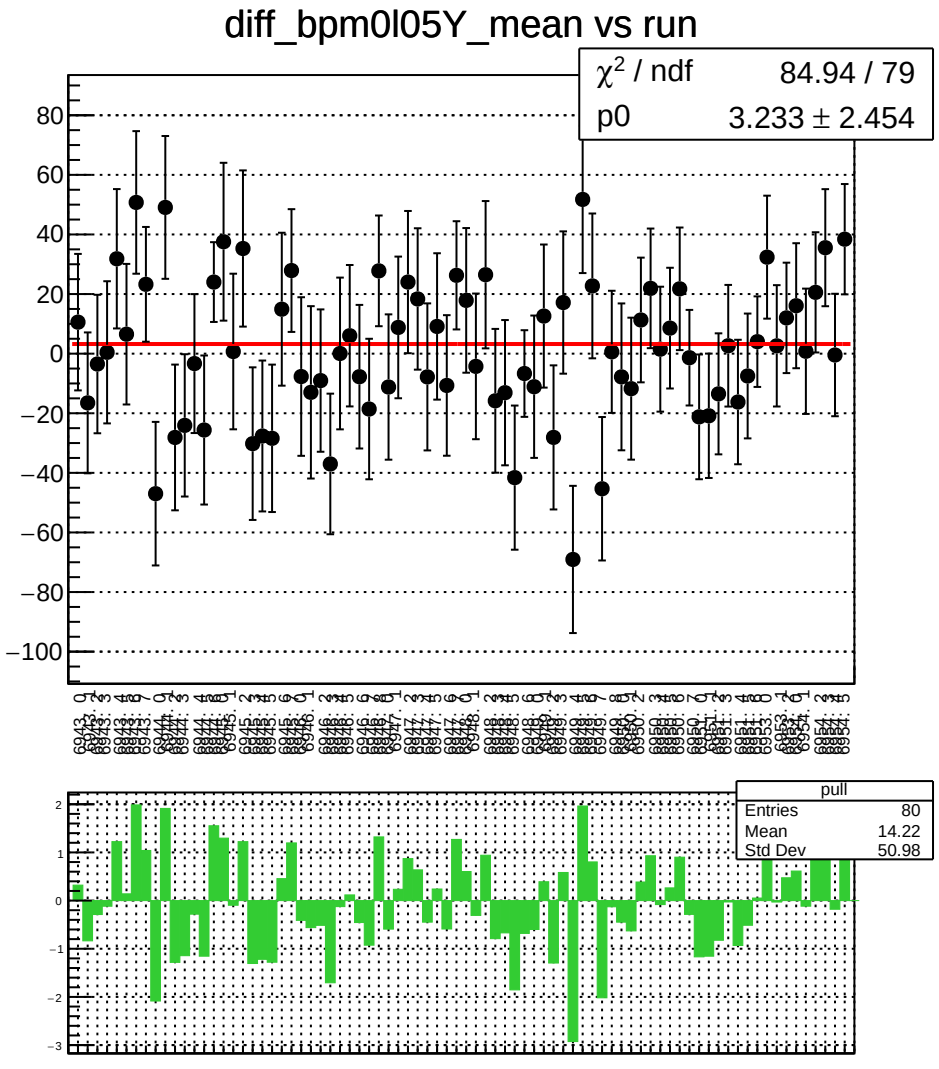

pull1D
Entries 80
Mean 0.05326
Std Dev 1.154

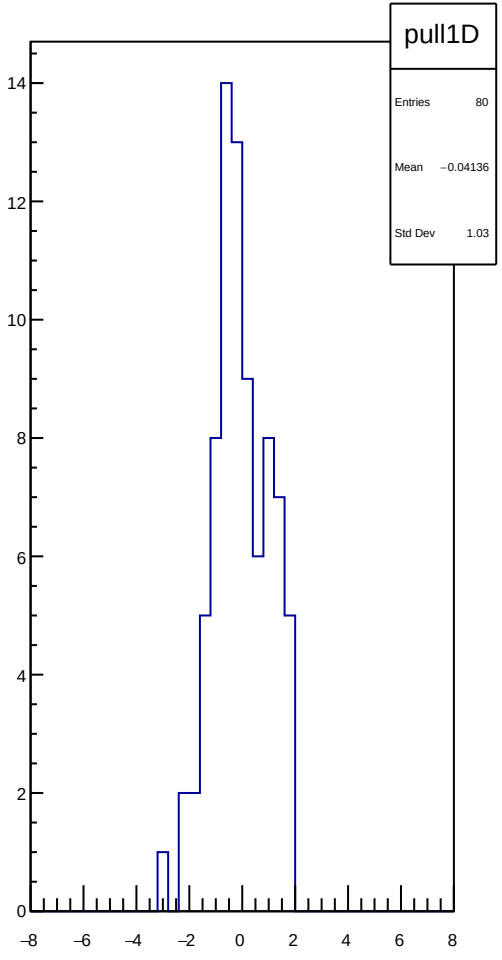

diff_bpm0l04Y_rms vs run
χ² / ndf 2.093e+04 / 79
p0 1918 ± 1.528
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500

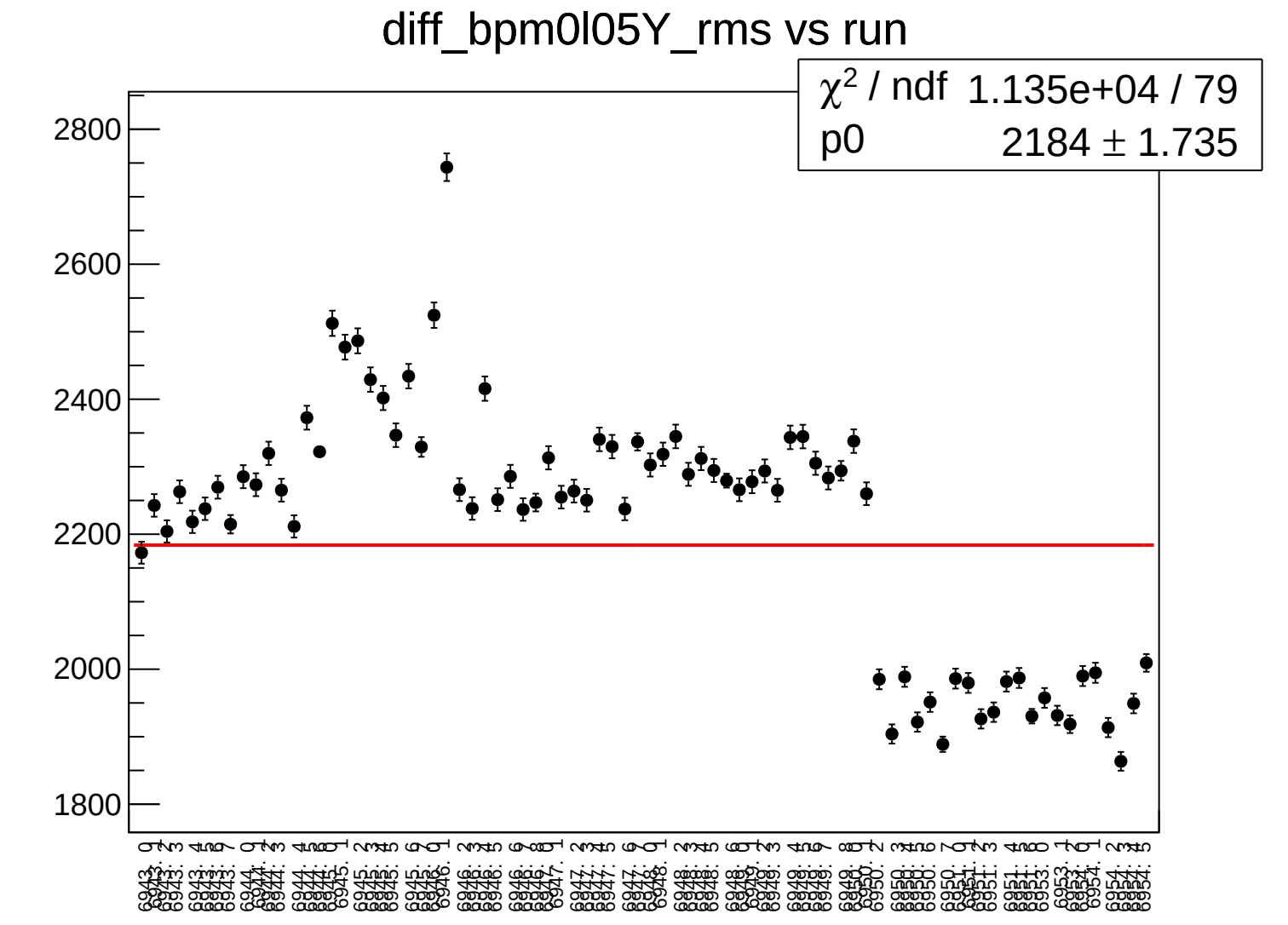

diff_bpm0l05X_mean vs run
χ² / ndf 82.19 / 79
p0 5.011 ± 7.246
pull
Entries 80
Mean −1041
Std Dev 1083

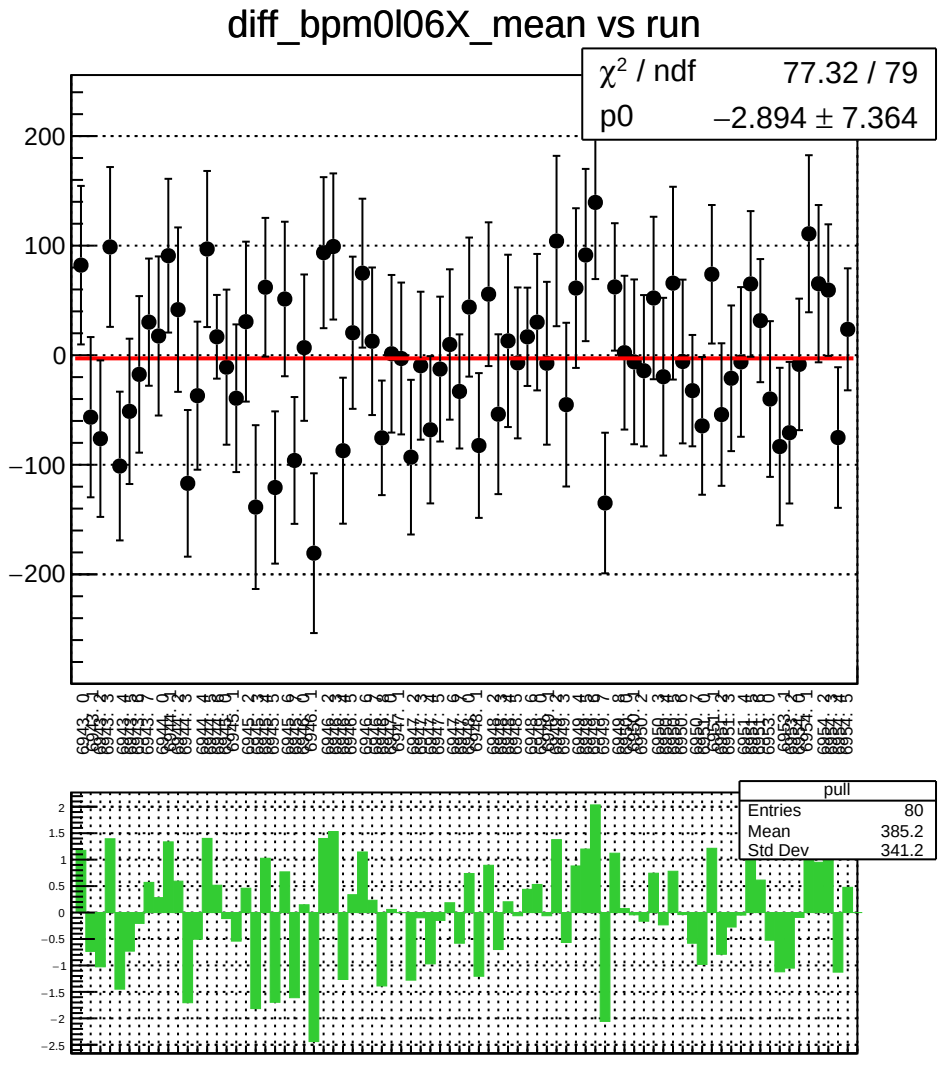

pull1D
Entries 80
Mean −0.003312
Std Dev 1.014

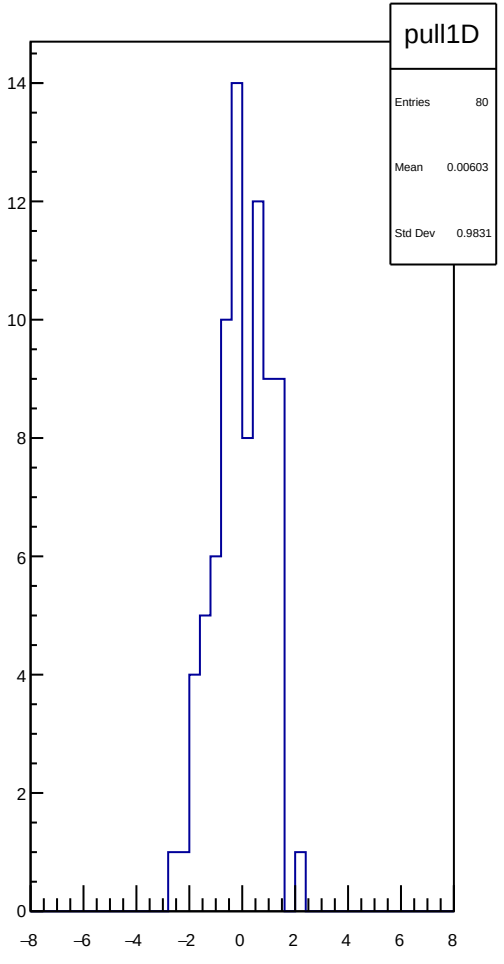

diff_bpm0l05X_rms vs run
χ² / ndf 4479 / 79
p0 6463 ± 5.123
8000
7500
7000
6500
6000
5500

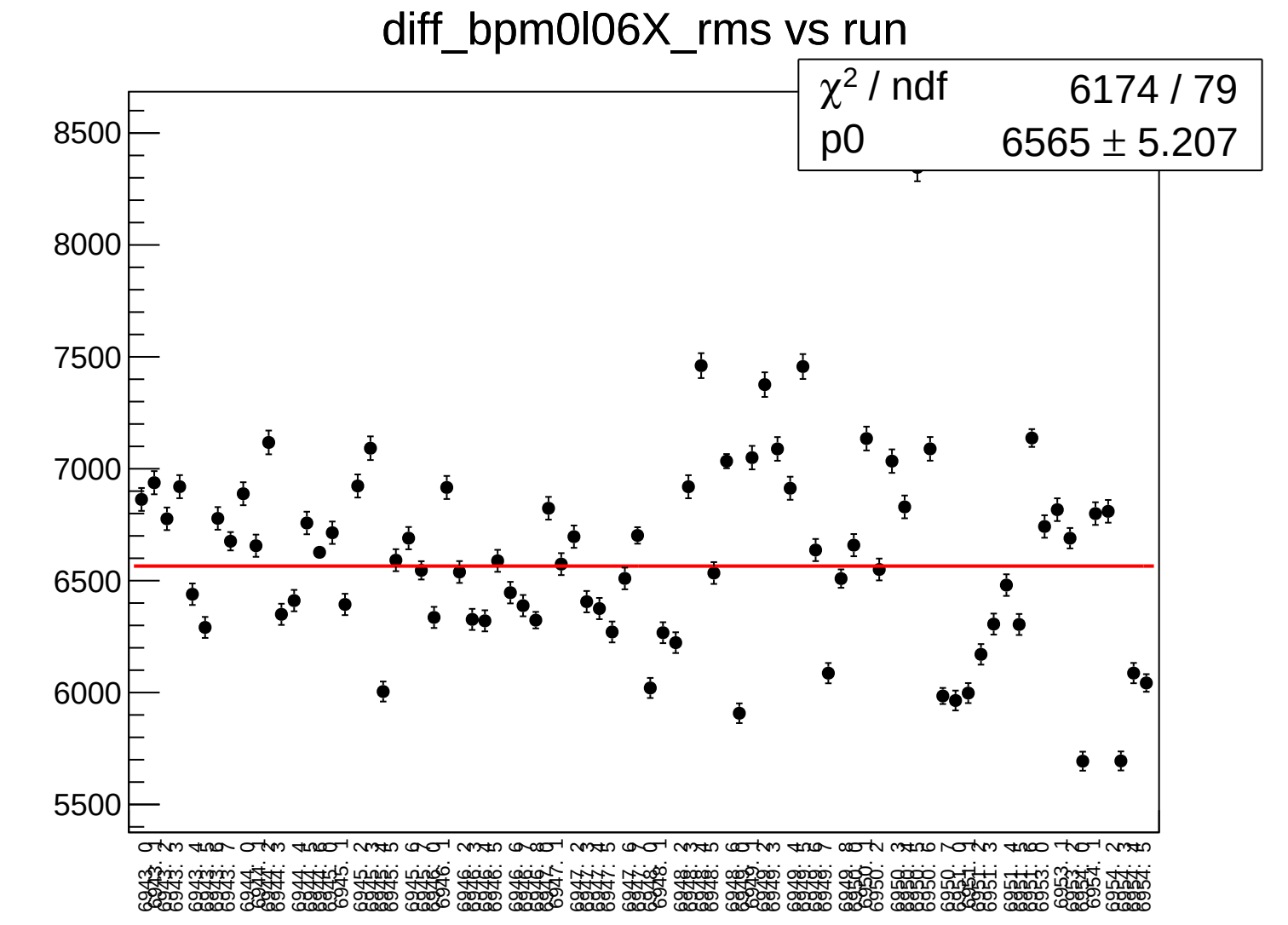

diff_bpm0l05Y_mean vs run
χ^2 / ndf 84.94 / 79
p0 3.233 ± 2.454
pull
Entries 80
Mean 14.22
Std Dev 50.98

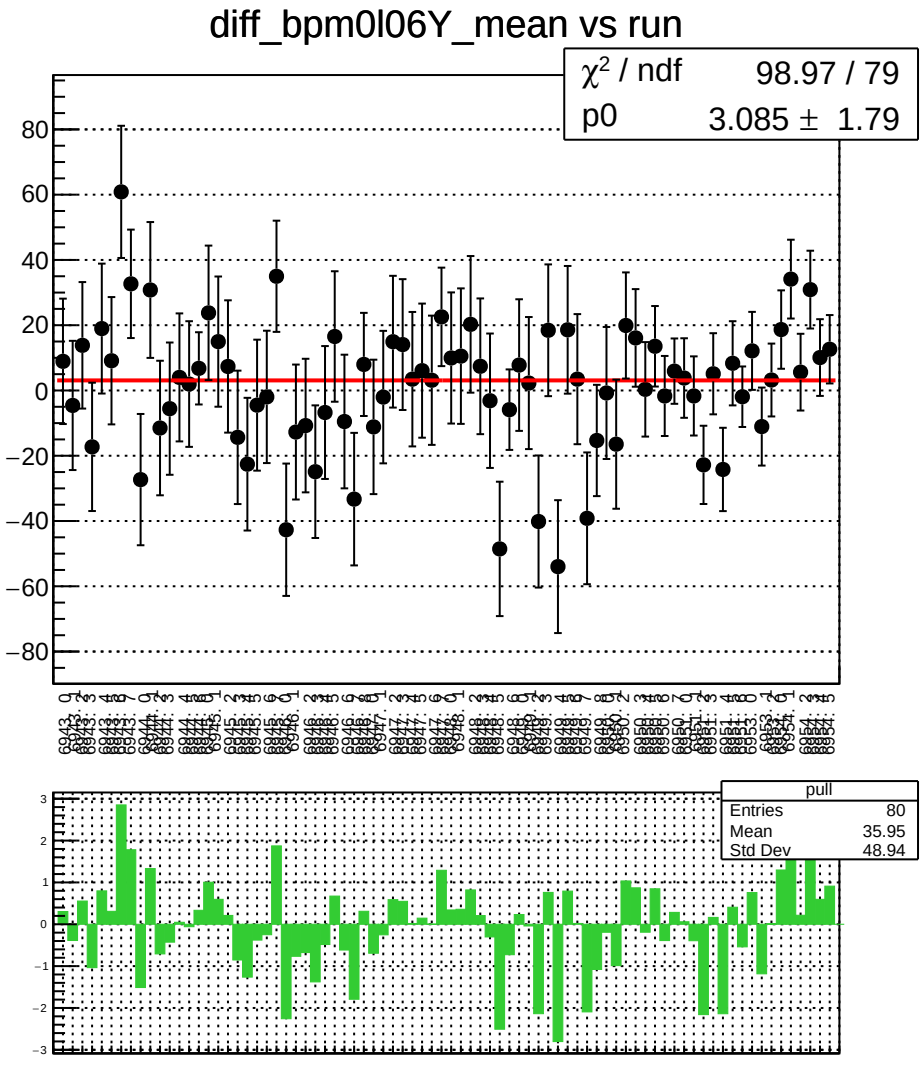

pull1D
Entries 80
Mean −0.04136
Std Dev 1.03

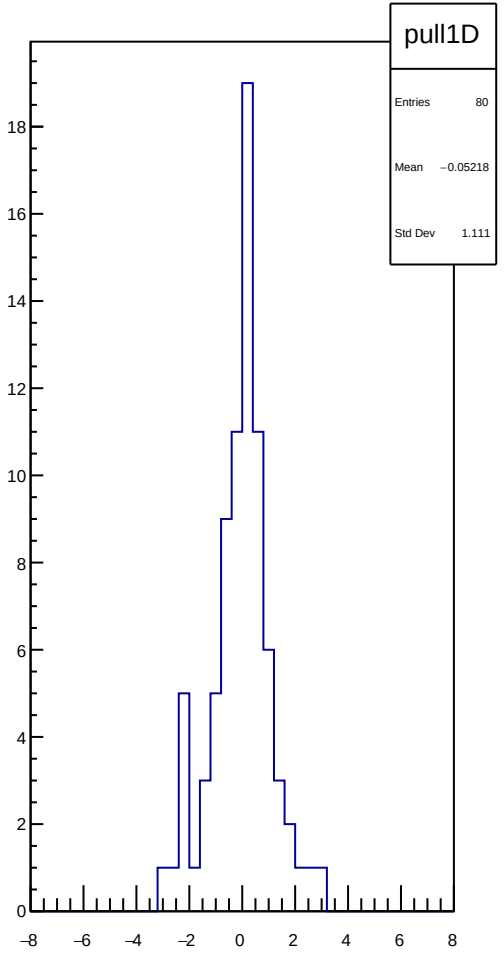

diff_bpm0l05Y_rms vs run
χ² / ndf 1.135e+04 / 79
p0 2184 ± 1.735
2800
2600
2400
2200
2000
1800

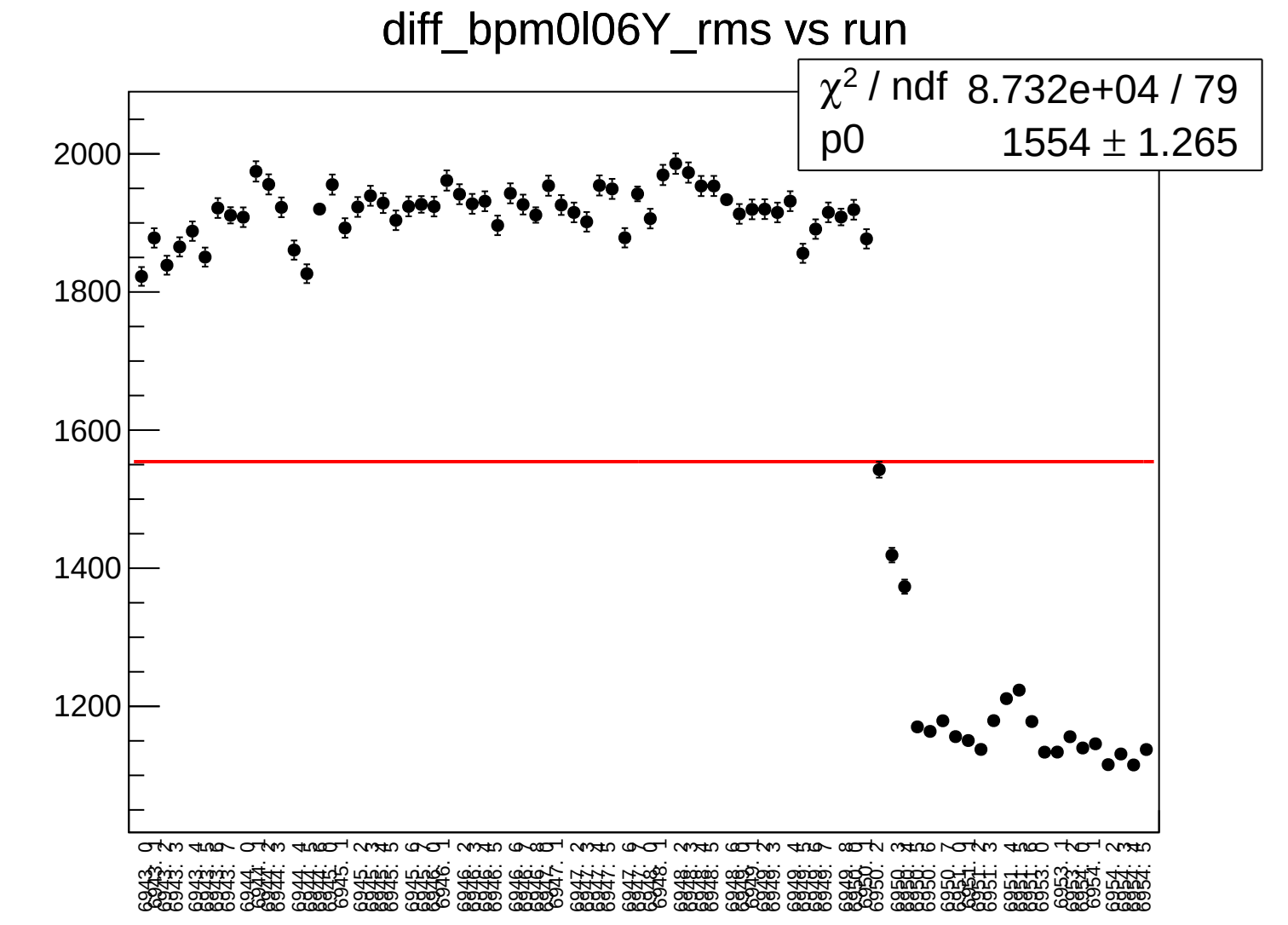

diff_bpm0l06X_mean vs run
χ² / ndf 77.32 / 79
p0 −2.894 ± 7.364
pull
Entries 80
Mean 385.2
Std Dev 341.2

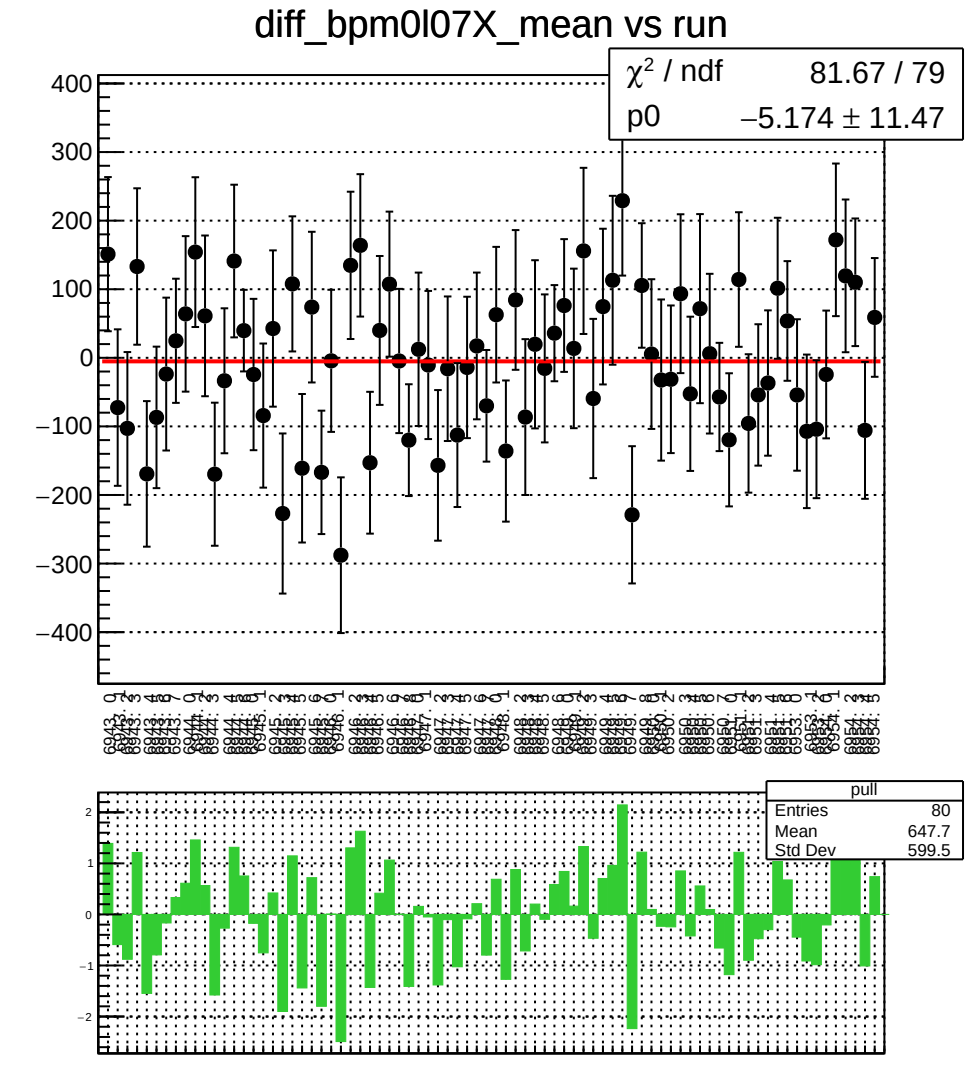

pull1D
Entries 80
Mean 0.00603
Std Dev 0.9831

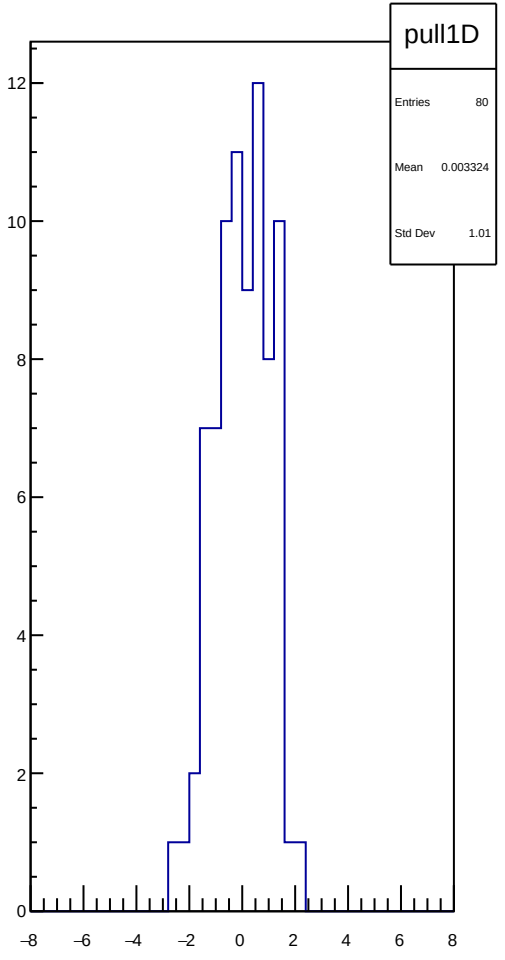

diff_bpm0l06X_rms vs run
χ^2 / ndf 6174 / 79
p0 6565 ± 5.207
8500
8000
7500
7000
6500
6000
5500

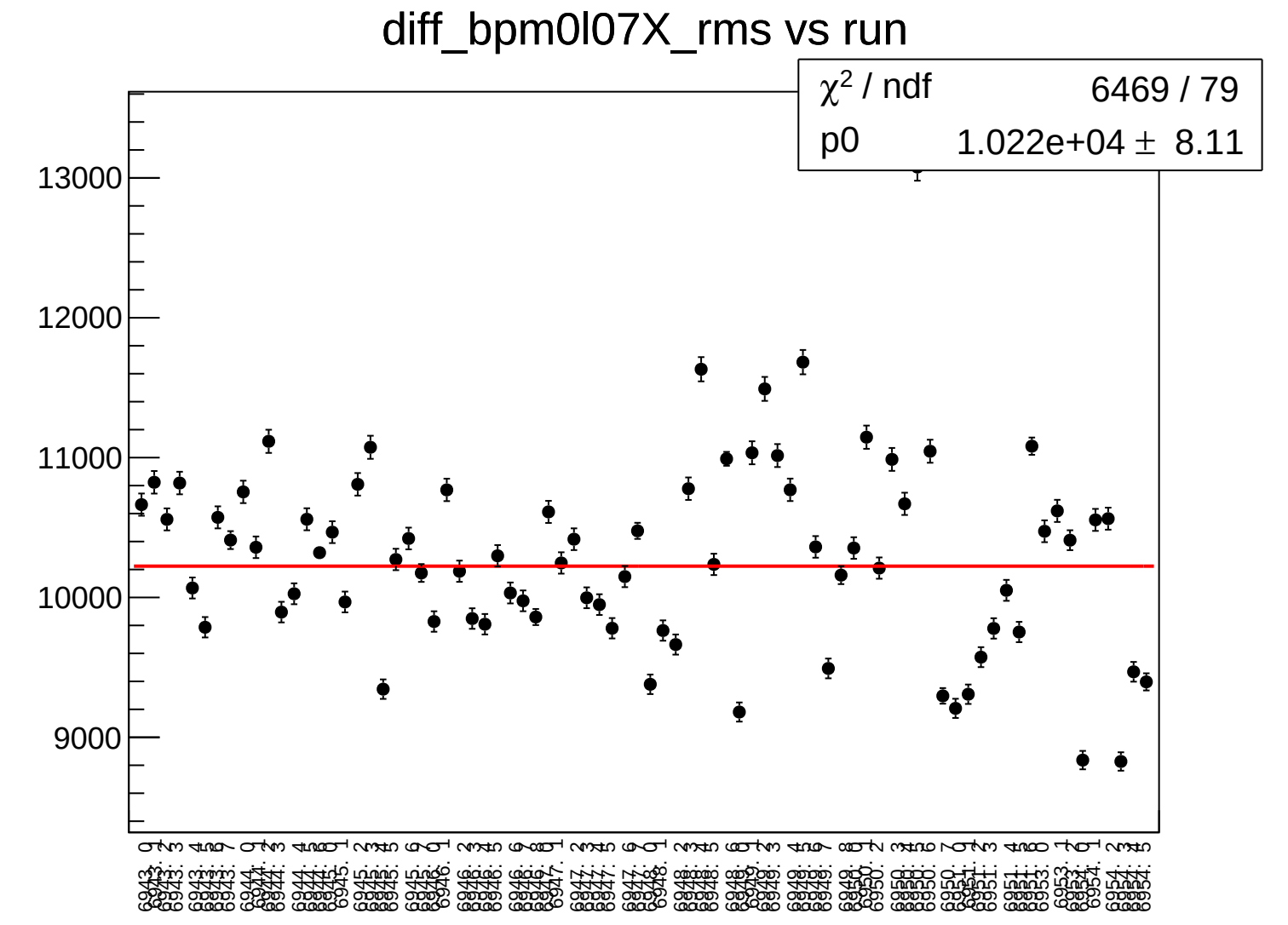

diff_bpm0l06Y_mean vs run
χ² / ndf 98.97 / 79
p0 3.085 ± 1.79
pull
Entries 80
Mean 35.95
Std Dev 48.94

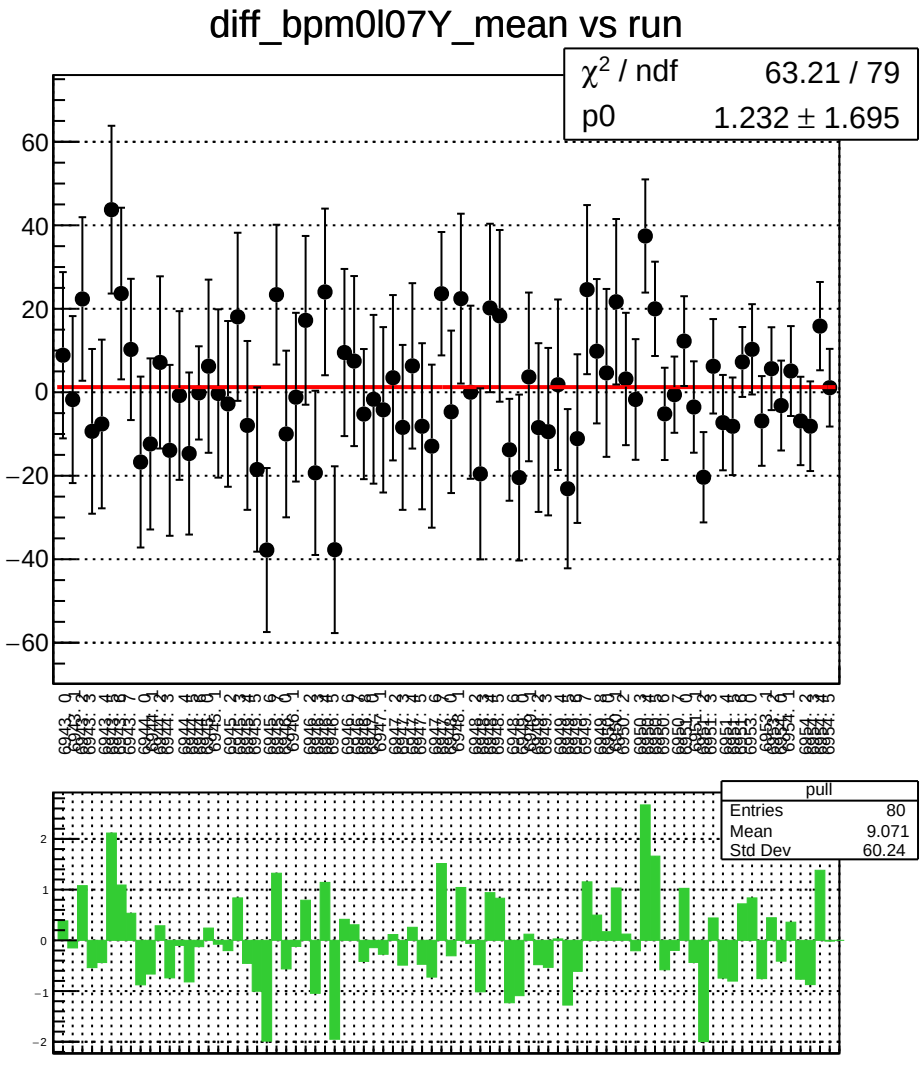

pull1D
Entries 80
Mean −0.05218
Std Dev 1.111

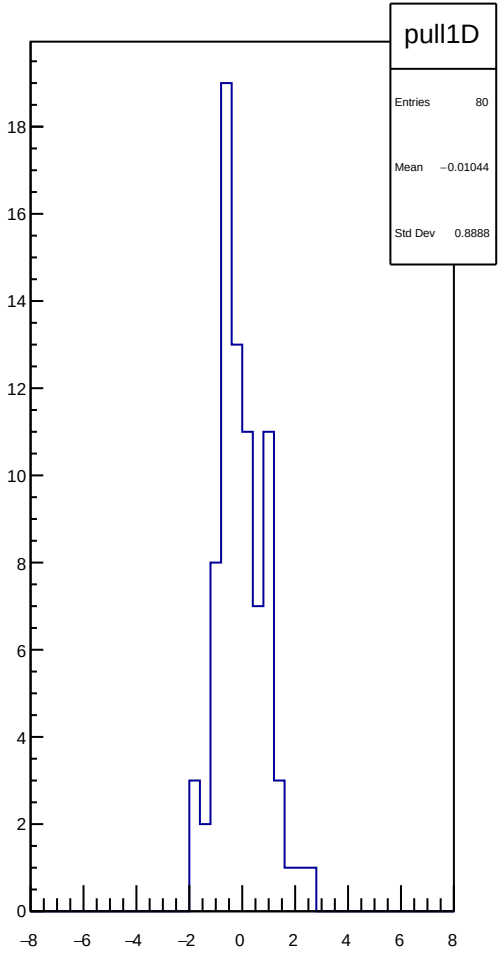

diff_bpm0l06Y_rms vs run
χ² / ndf 8.732e+04 / 79
p0 1554 ± 1.265
2000
1800
1600
1400
1200

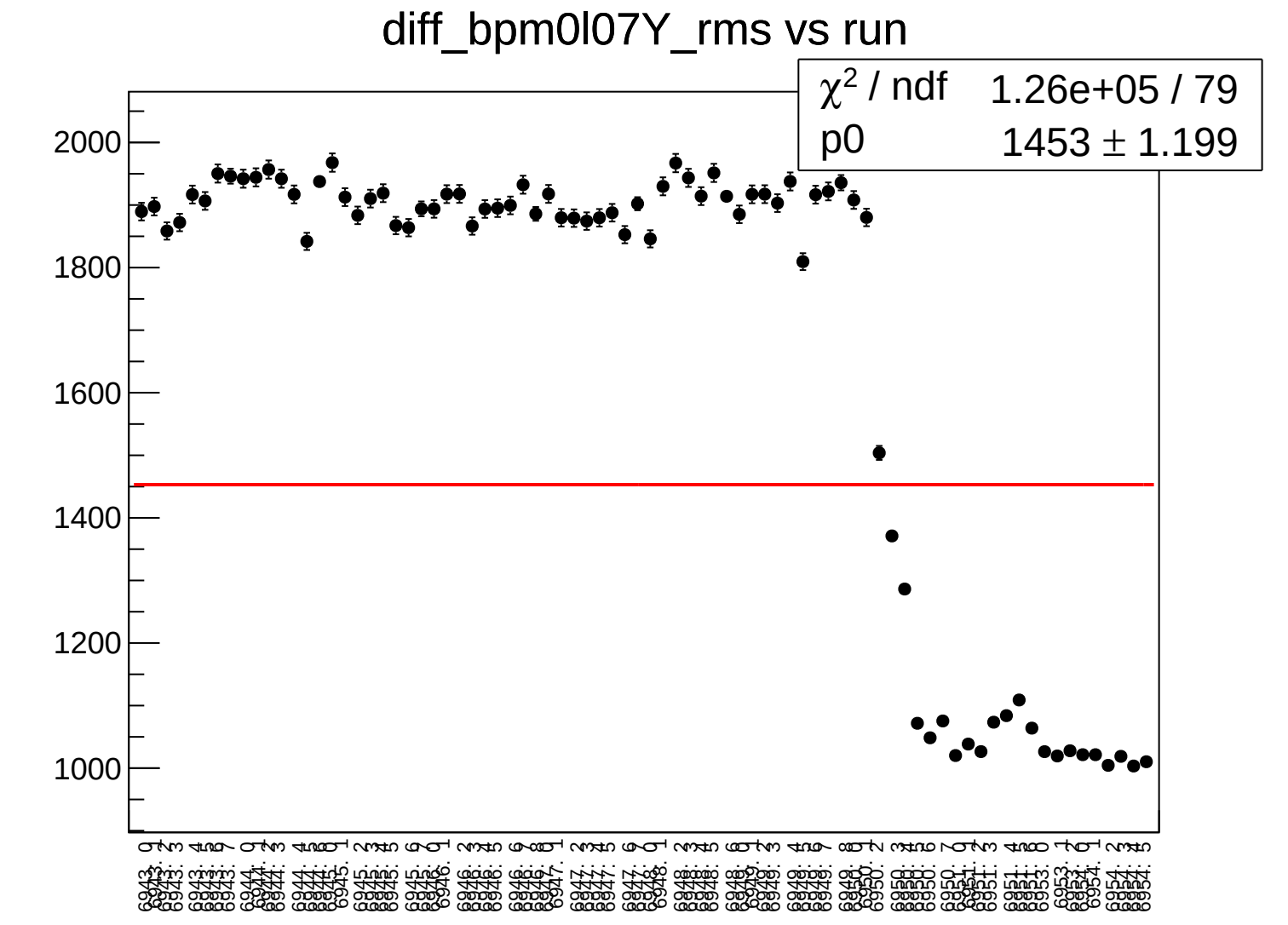

diff_bpm0l07X_mean vs run
χ² / ndf 81.67 / 79
p0 −5.174 ± 11.47
pull
Entries 80
Mean 647.7
Std Dev 599.5

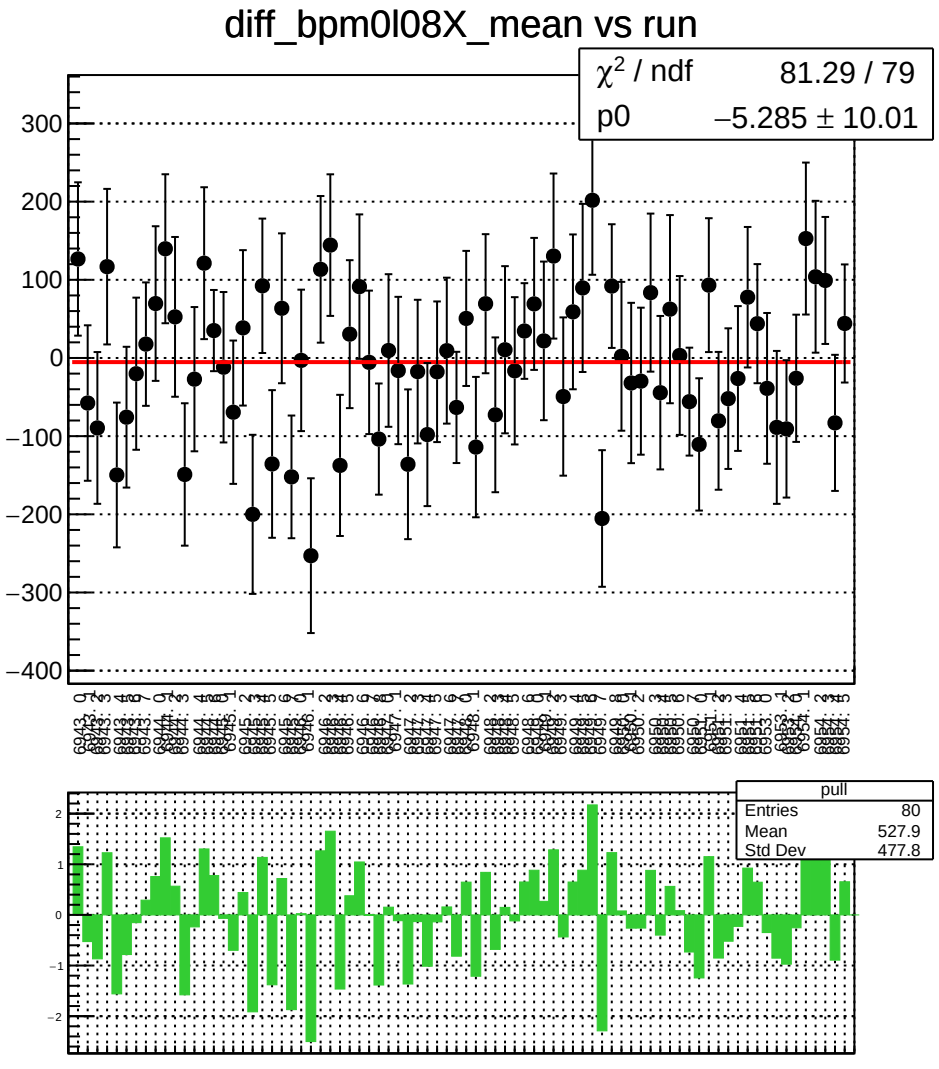

pull1D
Entries 80
Mean 0.003324
Std Dev 1.01

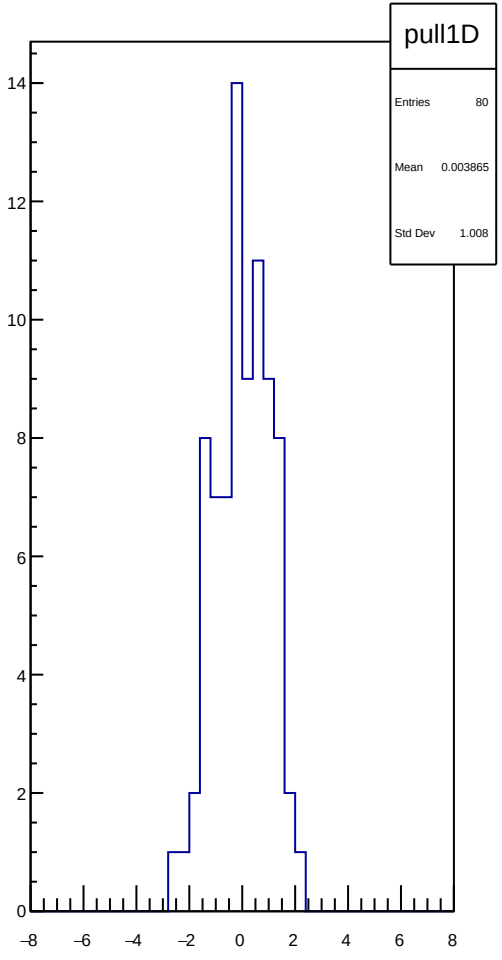

diff_bpm0l07X_rms vs run
χ² / ndf 6469 / 79
p0 1.022e+04 ± 8.11
13000
12000
11000
10000
9000

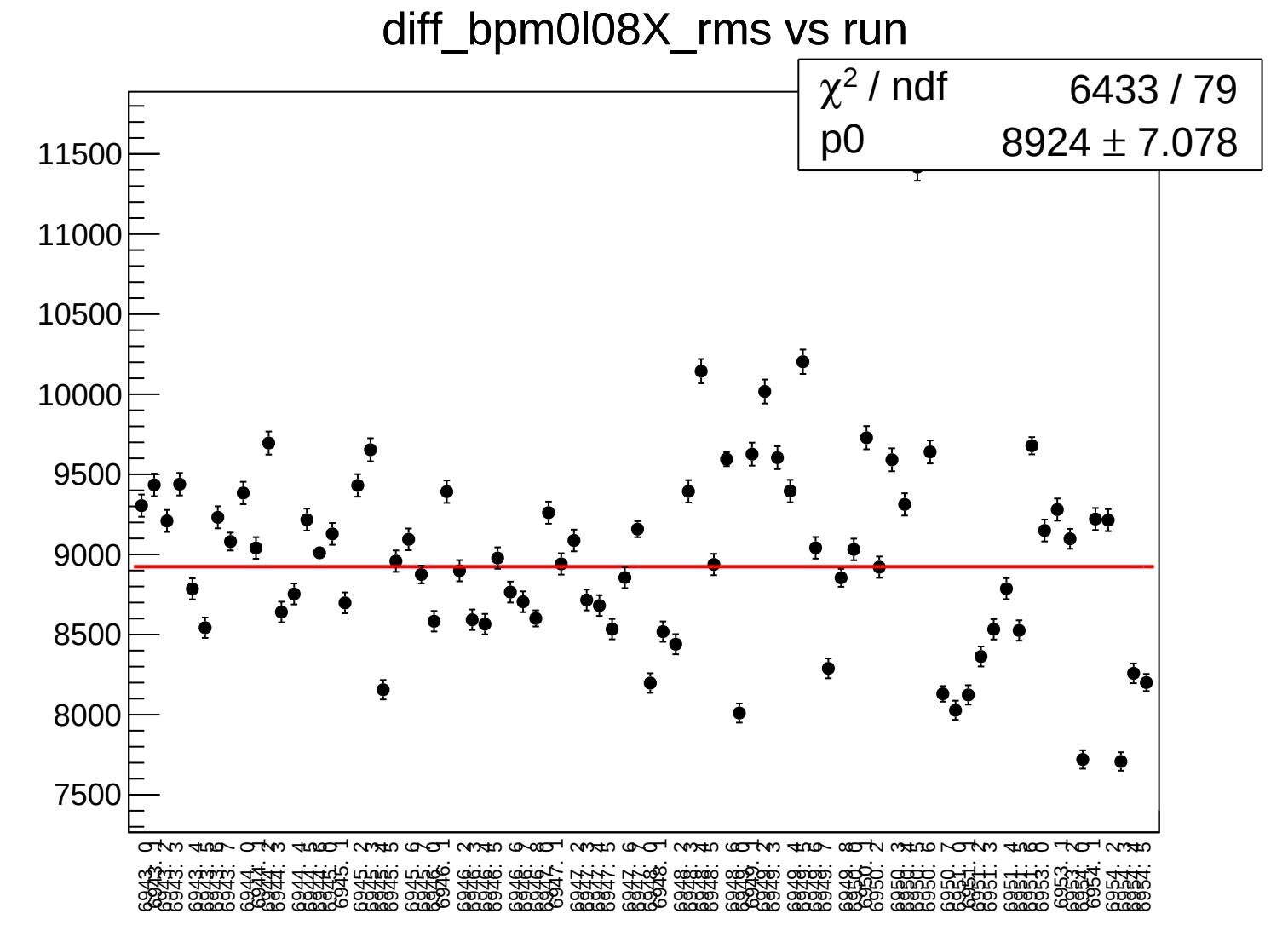

diff_bpm0l07Y_mean vs run
χ² / ndf 63.21 / 79
p0 1.232 ± 1.695
pull
Entries 80
Mean 9.071
Std Dev 60.24

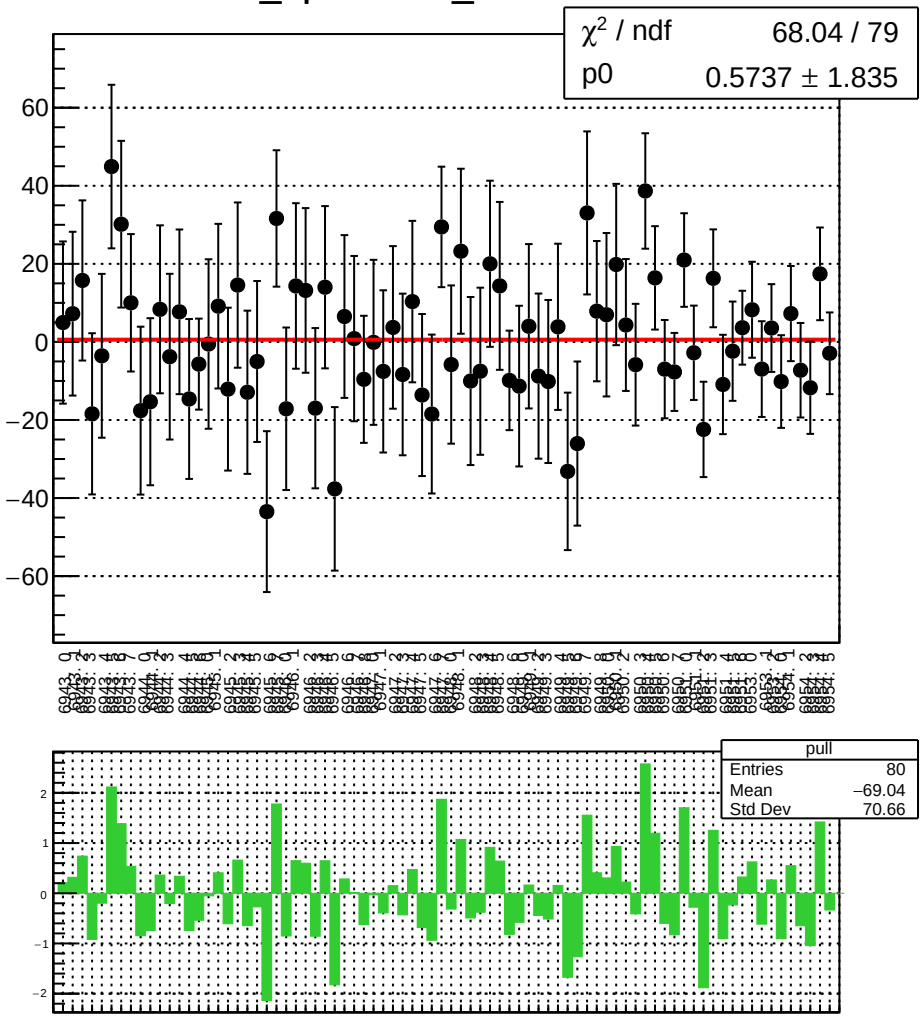

pull1D
Entries 80
Mean −0.01044
Std Dev 0.8888

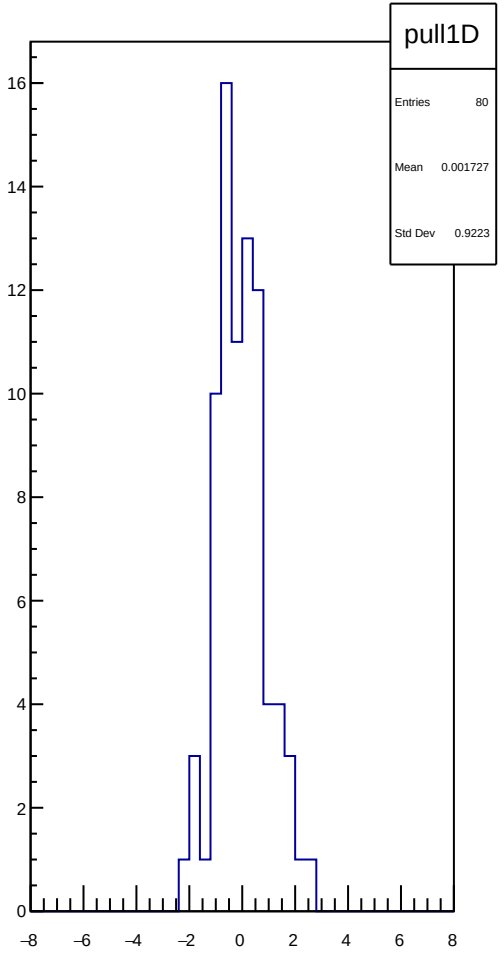

diff_bpm0l07Y_rms vs run
χ² / ndf 1.26e+05 / 79
p0 1453 ± 1.199
2000
1800
1600
1400
1200
1000

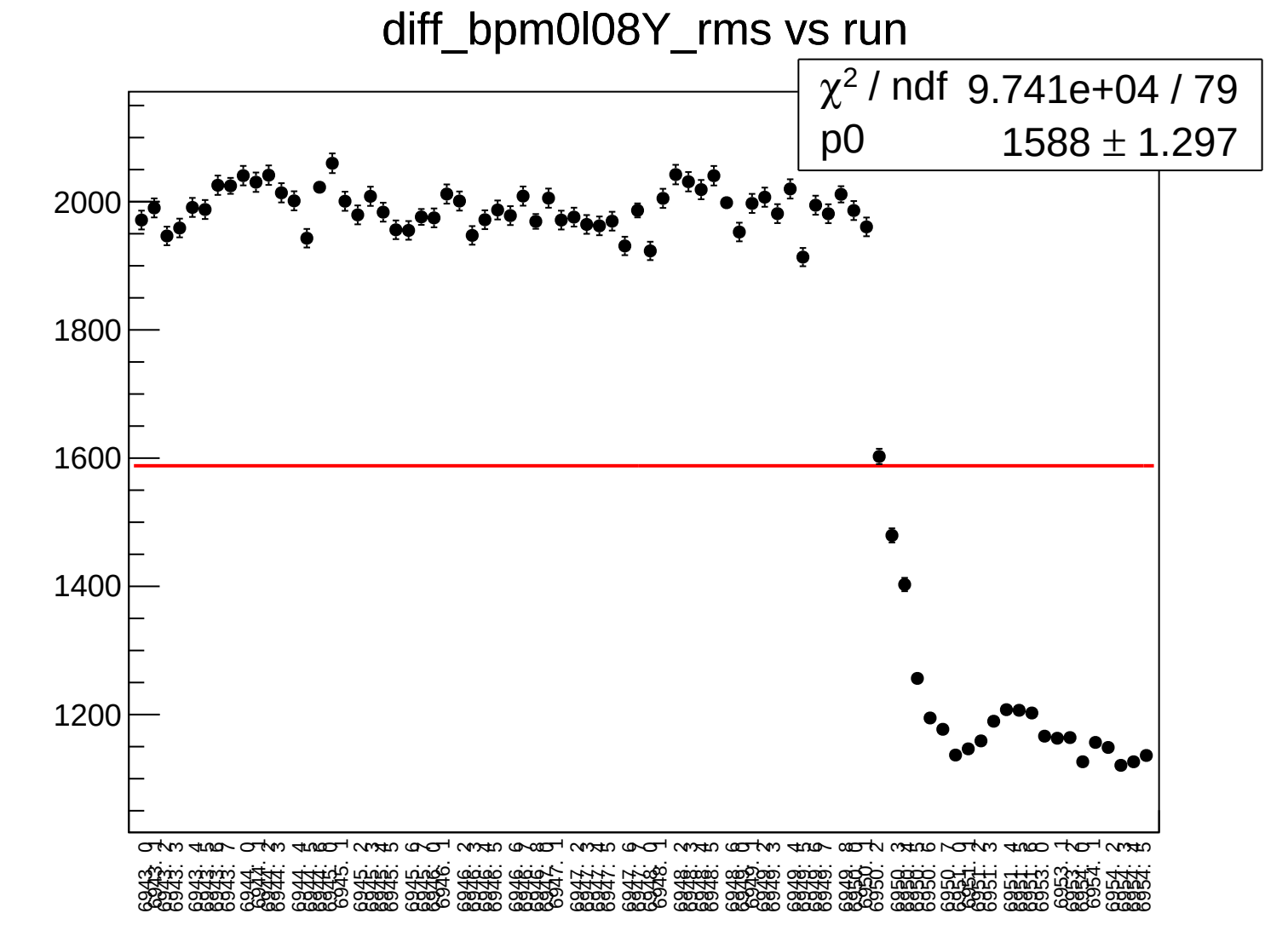

diff_bpm0l08X_mean vs run
χ² / ndf 81.29 / 79
p0 −5.285 ± 10.01
pull
Entries 80
Mean 527.9
Std Dev 477.8

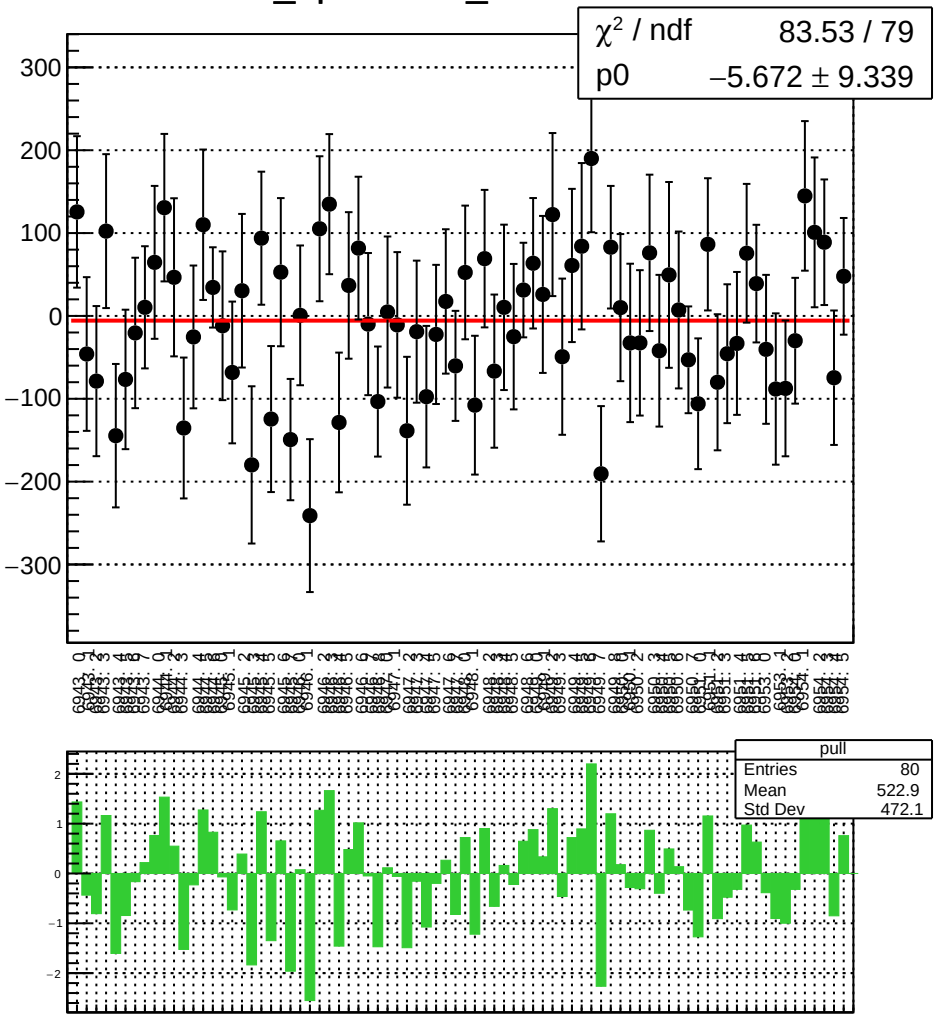

pull1D
Entries 80
Mean 0.003865
Std Dev 1.008

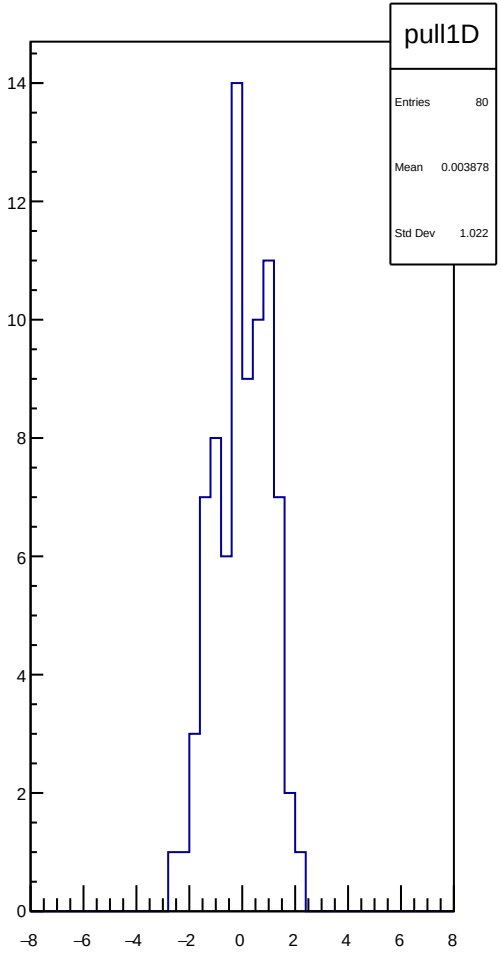

diff_bpm0l08X_rms vs run
χ² / ndf 6433 / 79
p0 8924 ± 7.078
11500
11000
10500
10000
9500
9000
8500
8000
7500


diff_bpm0l08Y_mean vs run
χ² / ndf 68.04 / 79
p0 0.5737 ± 1.835
pull
Entries 80
Mean −69.04
Std Dev 70.66

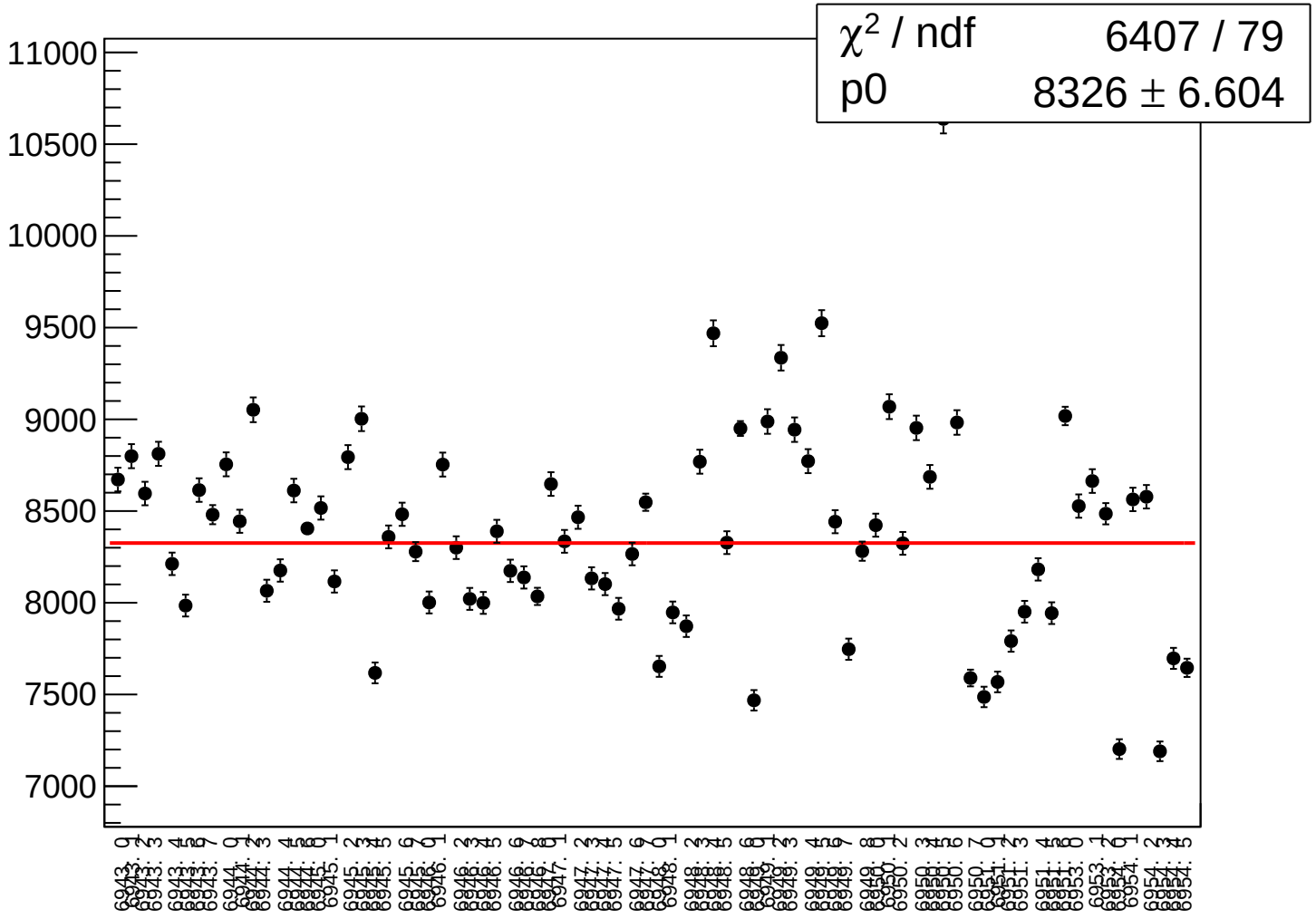

pull1D
Entries 80
Mean 0.001727
Std Dev 0.9223

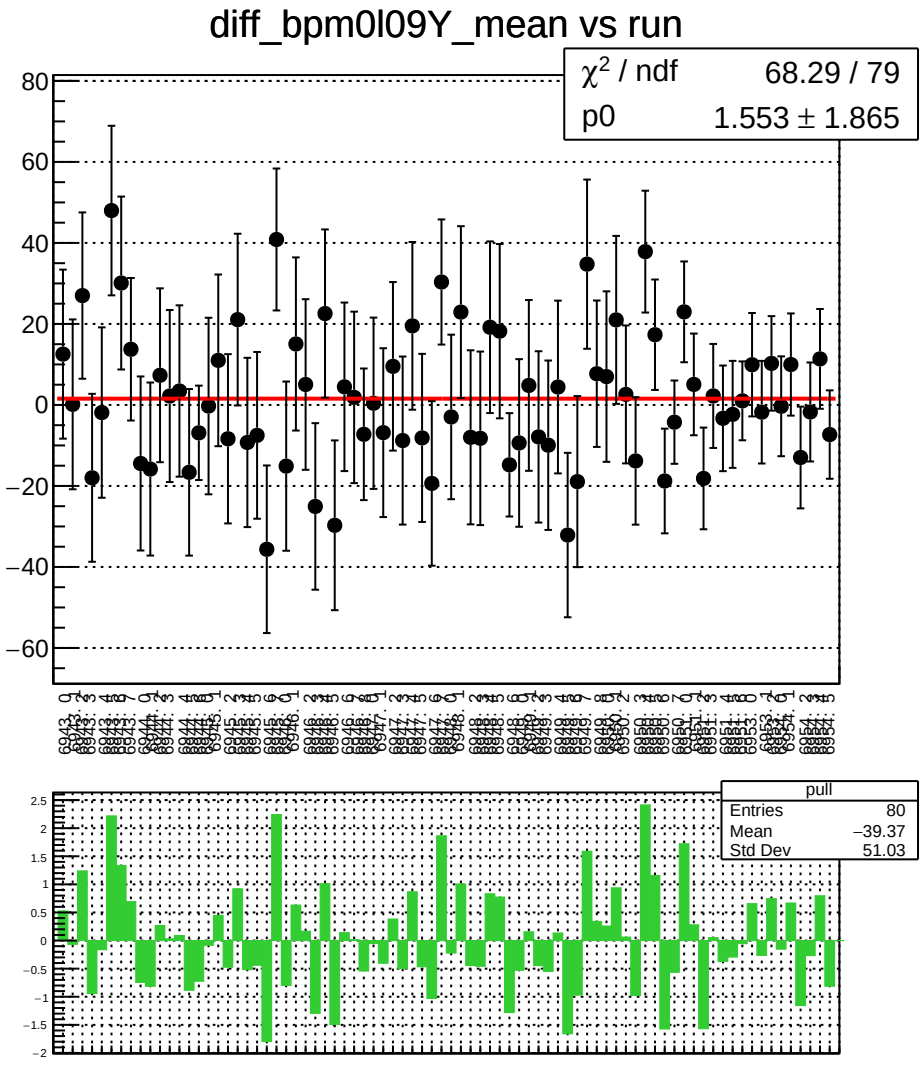

diff_bpm0l08Y_rms vs run
χ² / ndf 9.741e+04 / 79
p0 1588 ± 1.297
2000
1800
1600
1400
1200

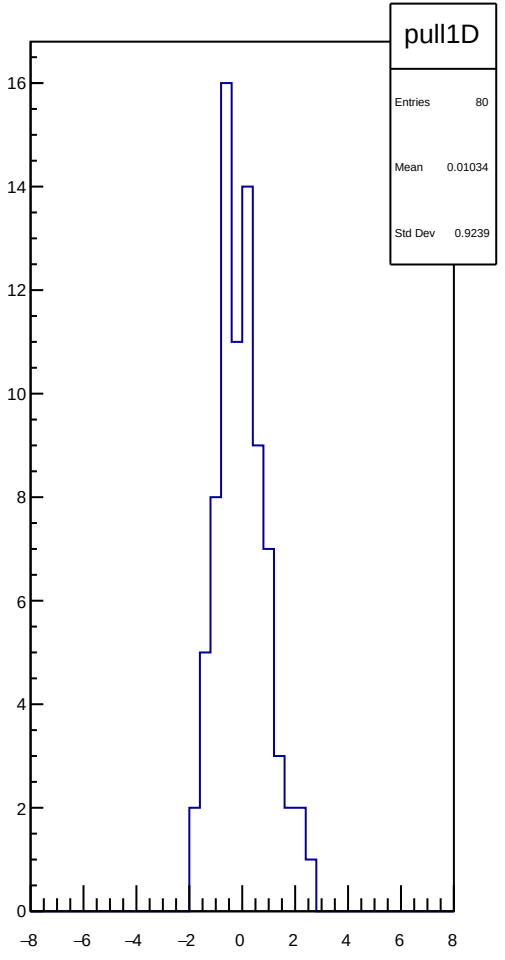

diff_bpm0l09X_mean vs run
χ² / ndf 83.53 / 79
p0 −5.672 ± 9.339
pull
Entries 80
Mean 522.9
Std Dev 472.1

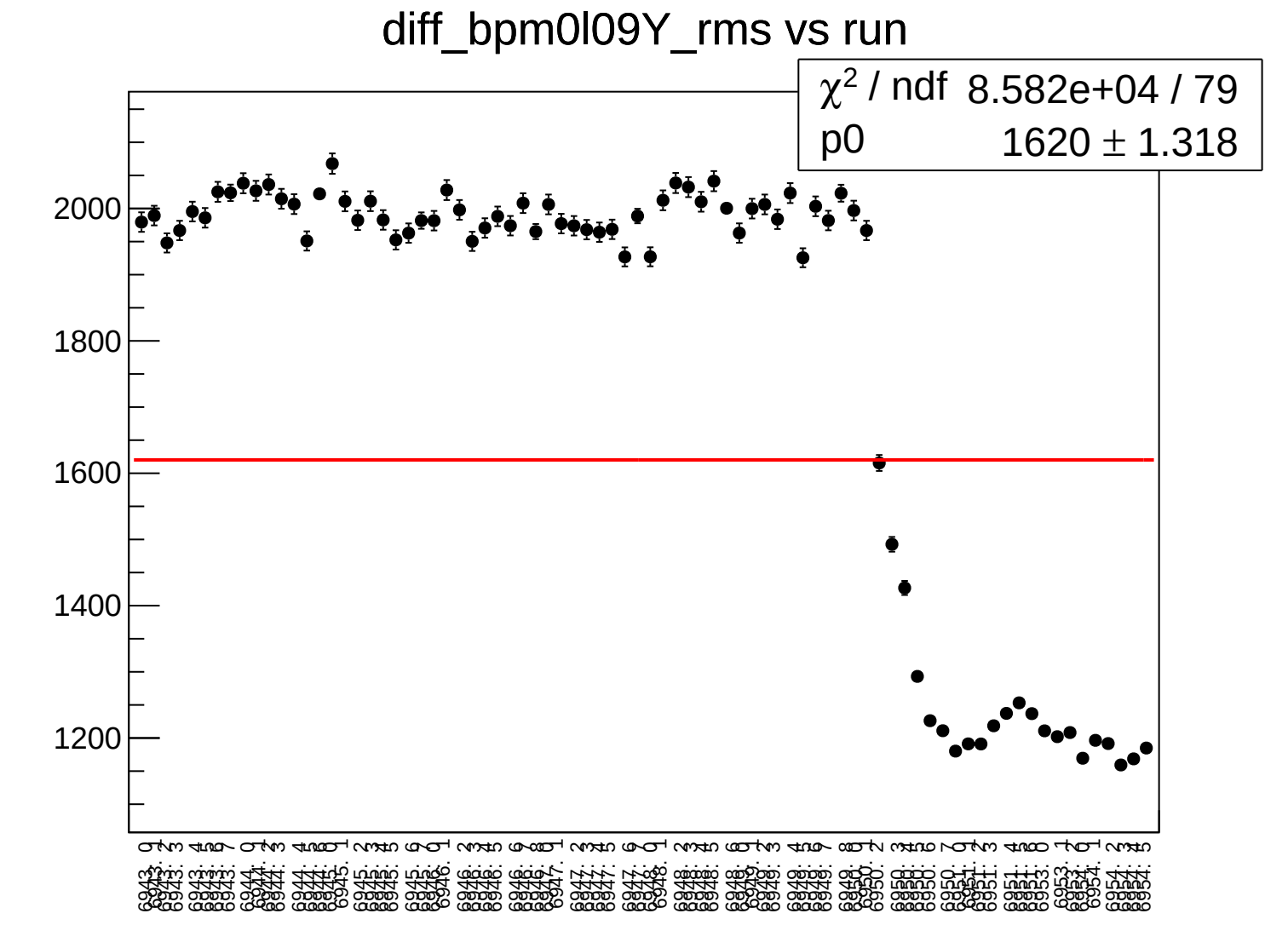

pull1D
Entries 80
Mean 0.003878
Std Dev 1.022

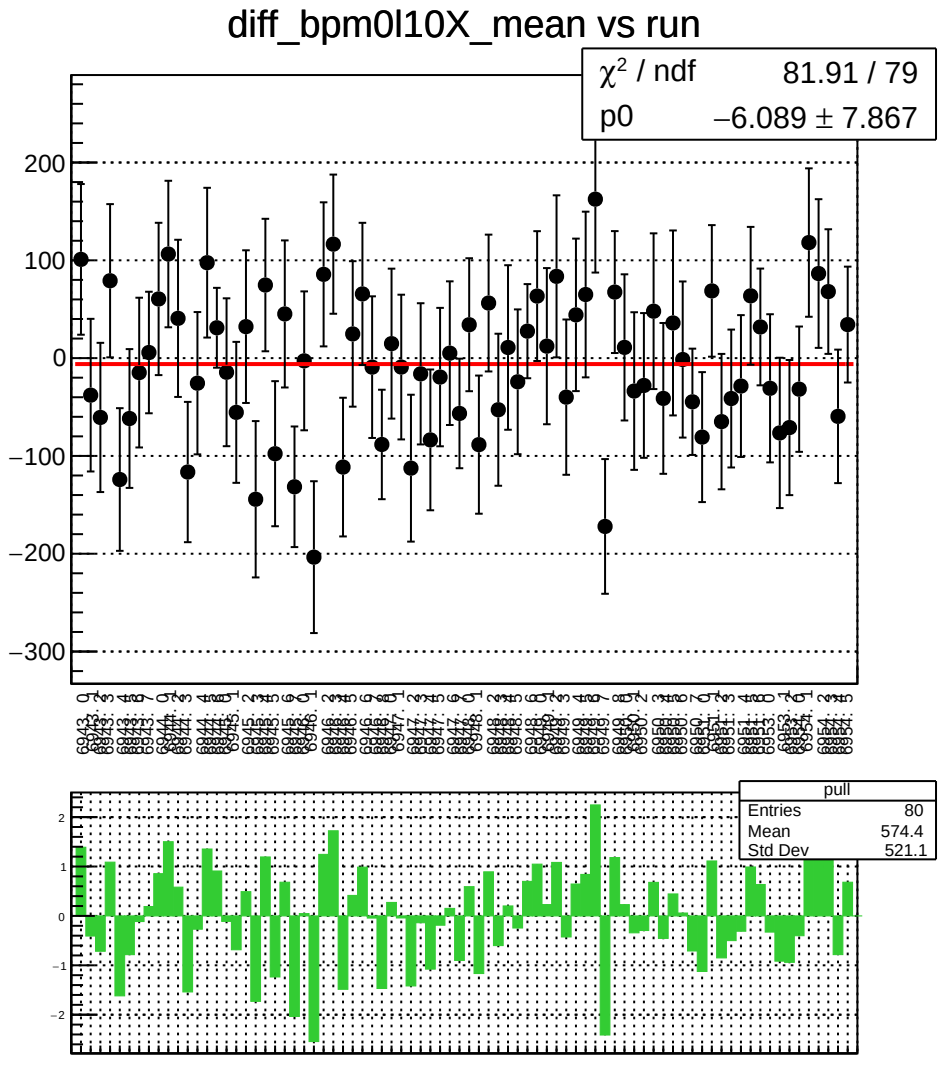
diff_bpm0l09X_rms vs run

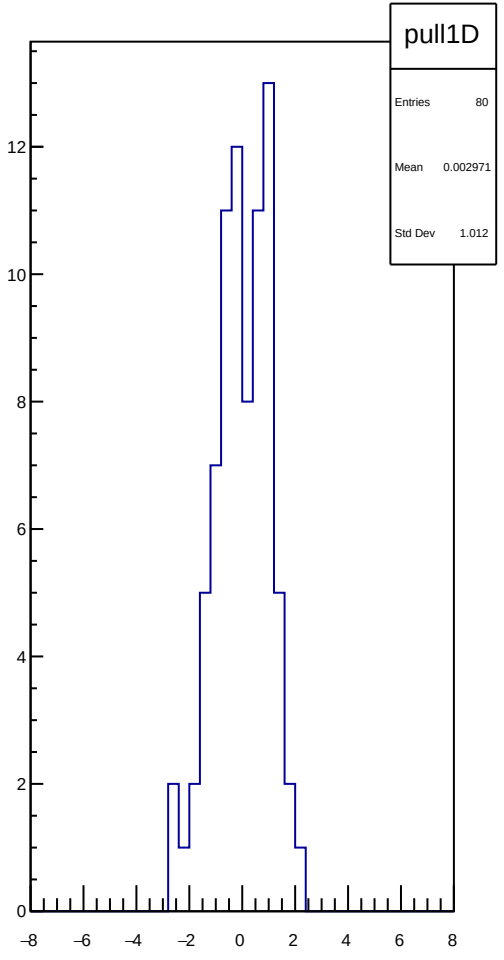


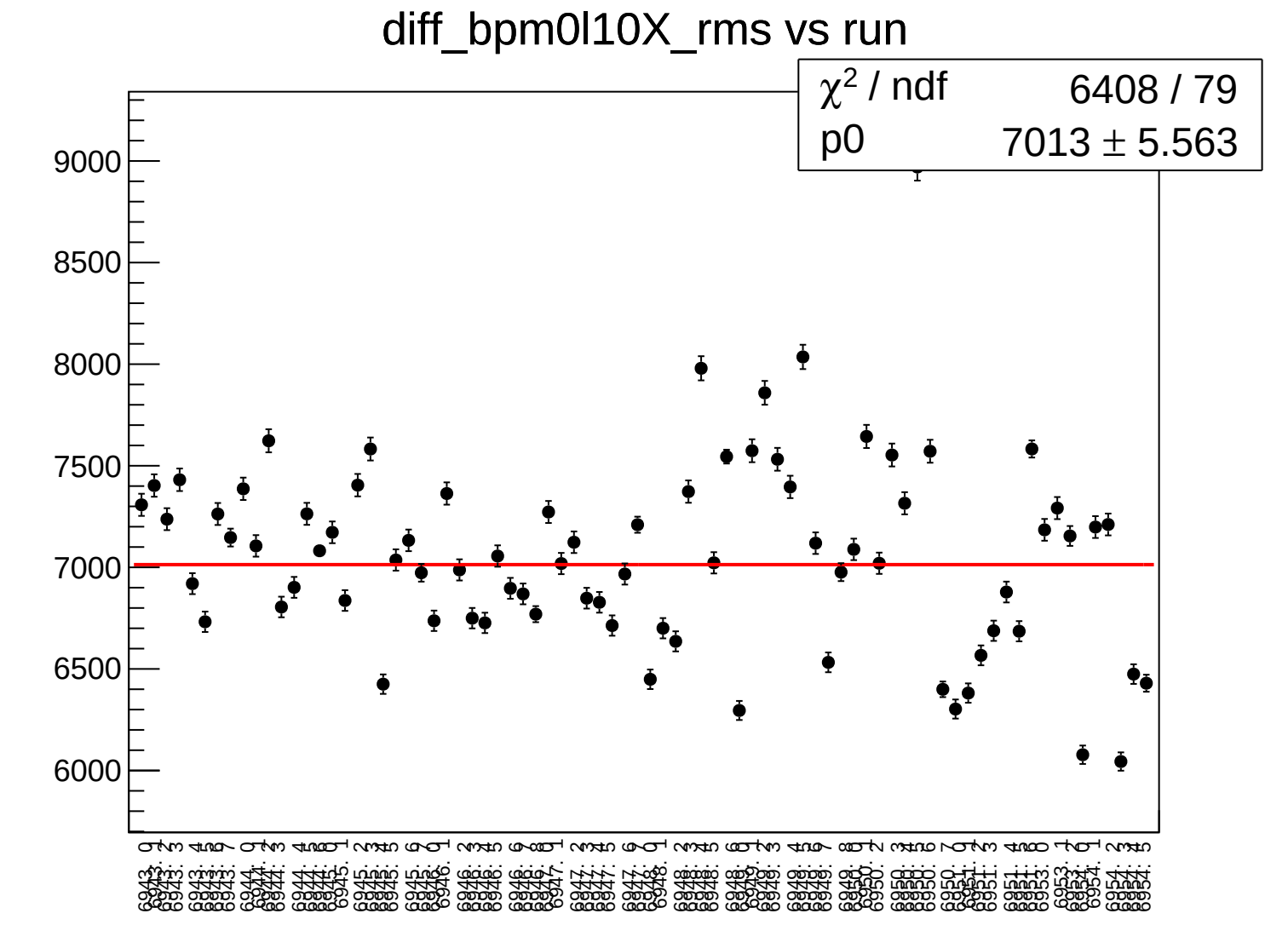

diff_bpm0l09Y_mean vs run
χ^2 / ndf 68.29 / 79
p0 1.553 ± 1.865
pull
Entries 80
Mean −39.37
Std Dev 51.03

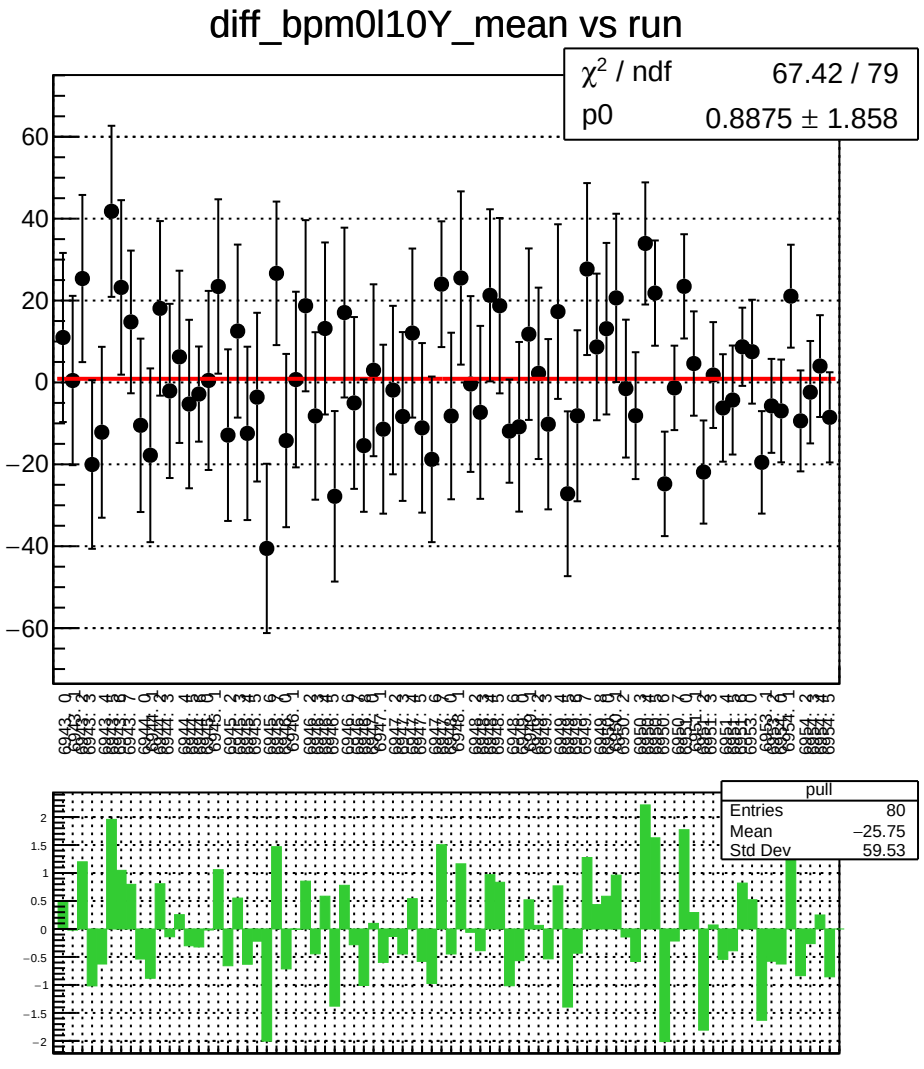

pull1D
Entries 80
Mean 0.01034
Std Dev 0.9239

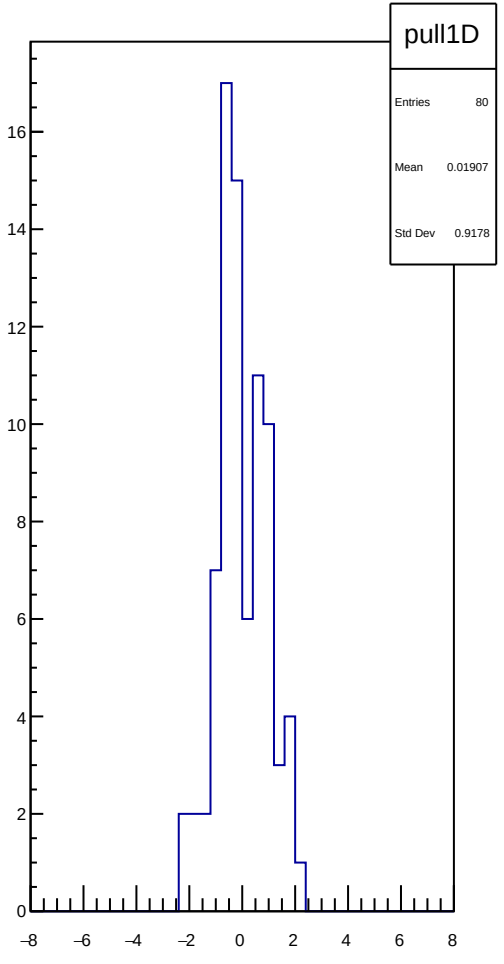

diff_bpm0l09Y_rms vs run
χ^2 / ndf 8.582e+04 / 79
p0 1620 ± 1.318
2000
1800
1600
1400
1200

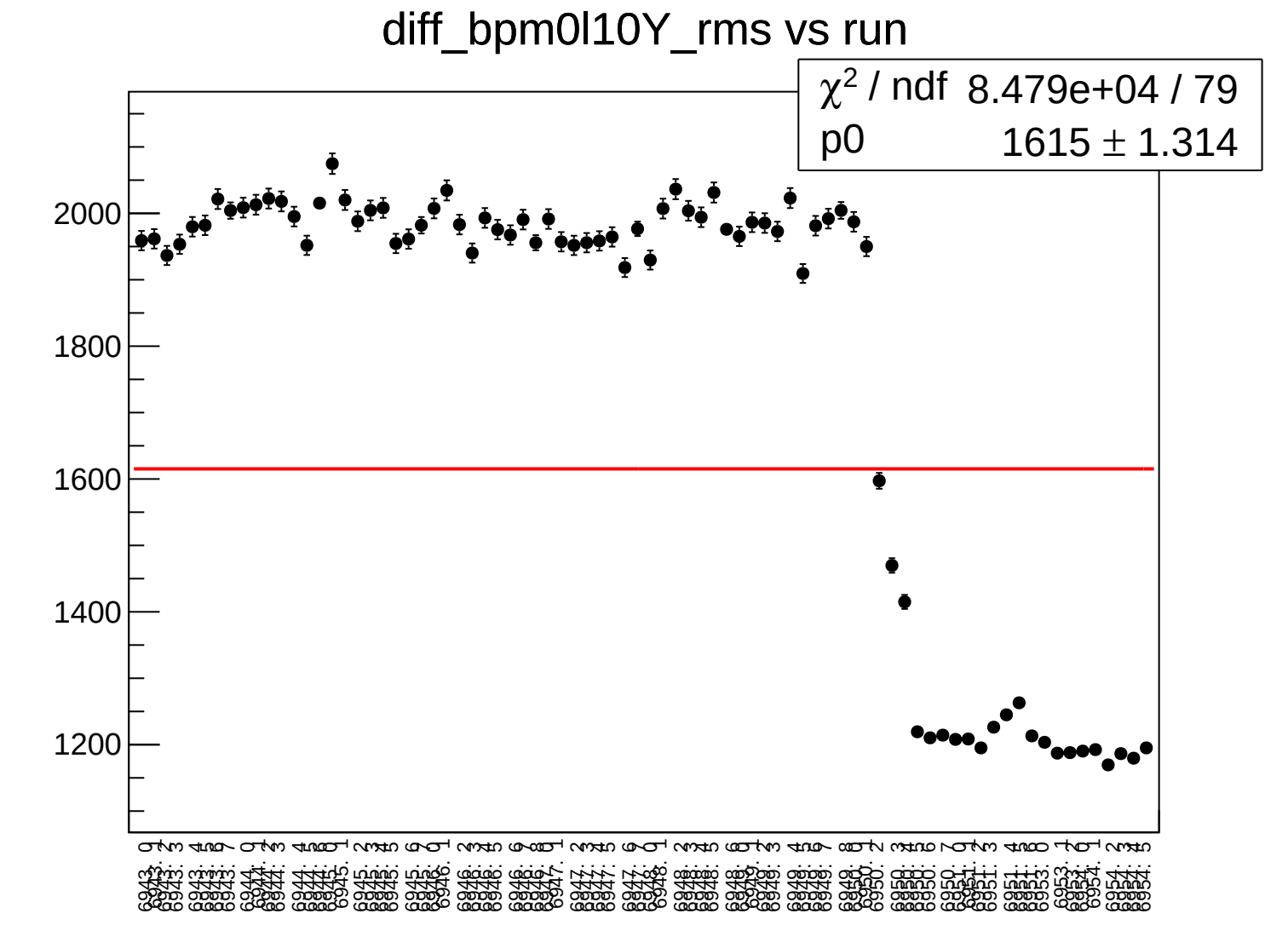

diff_bpm0l10X_mean vs run
χ² / ndf 81.91 / 79
p0 −6.089 ± 7.867
200
100
0
−100
−200
−300
pull
Entries 80
Mean 574.4
Std Dev 521.1
2
1
0
−1
−2

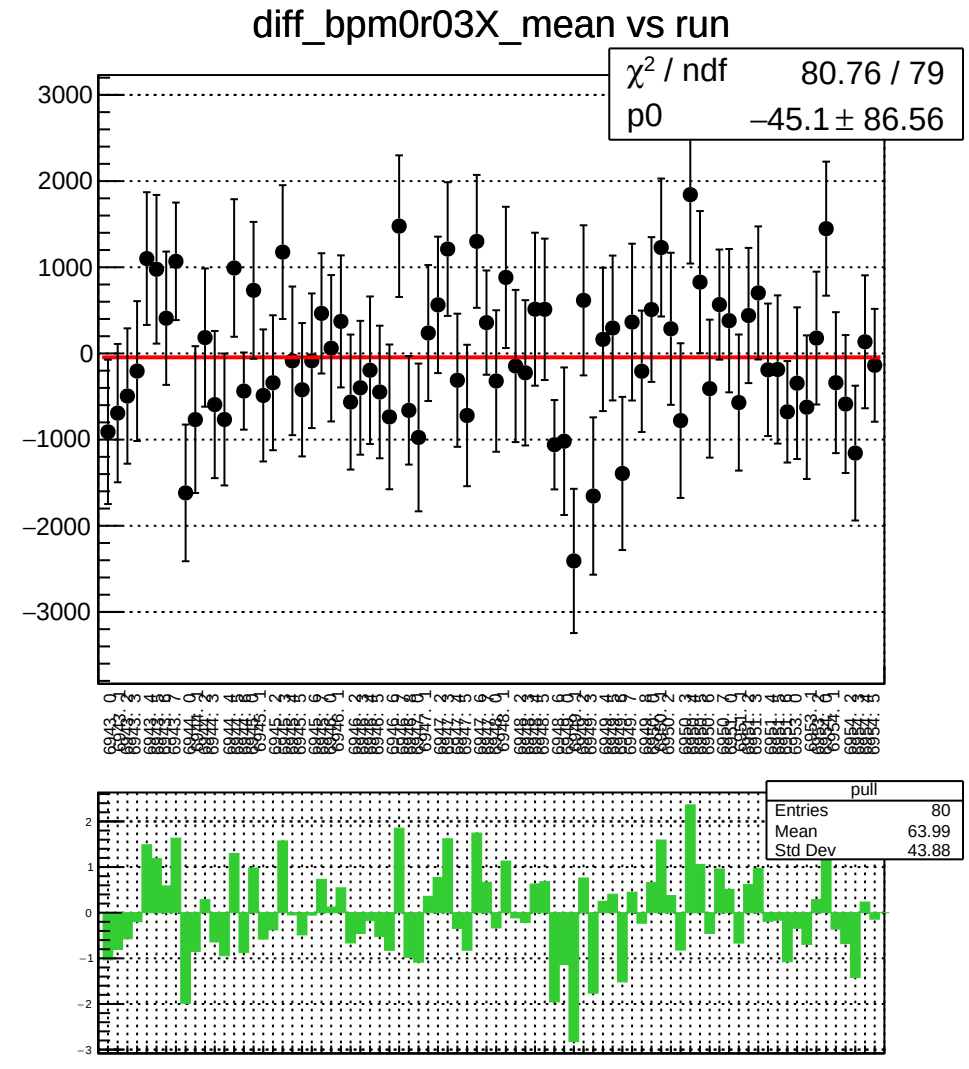

pull1D
Entries 80
Mean 0.002971
Std Dev 1.012
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

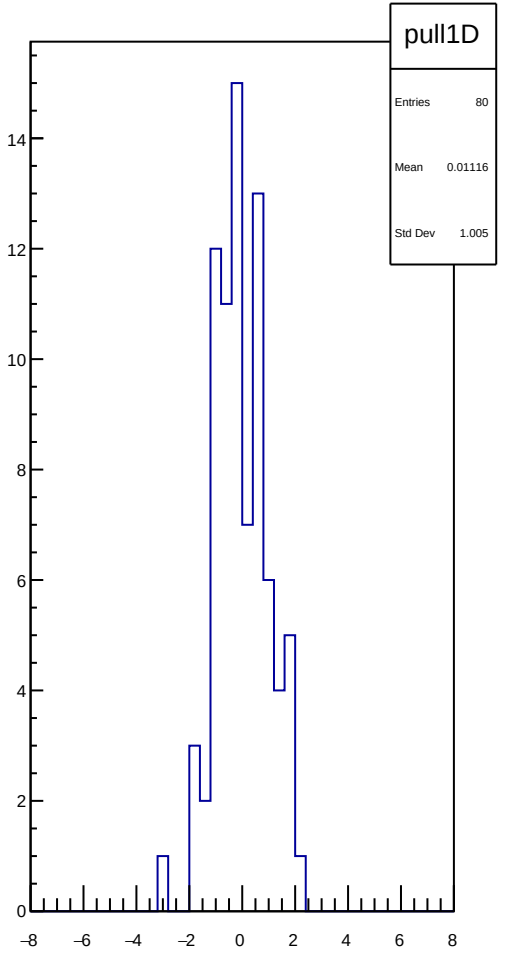

diff_bpm0l10X_rms vs run
χ² / ndf 6408 / 79
p0 7013 ± 5.563
9000
8500
8000
7500
7000
6500
6000

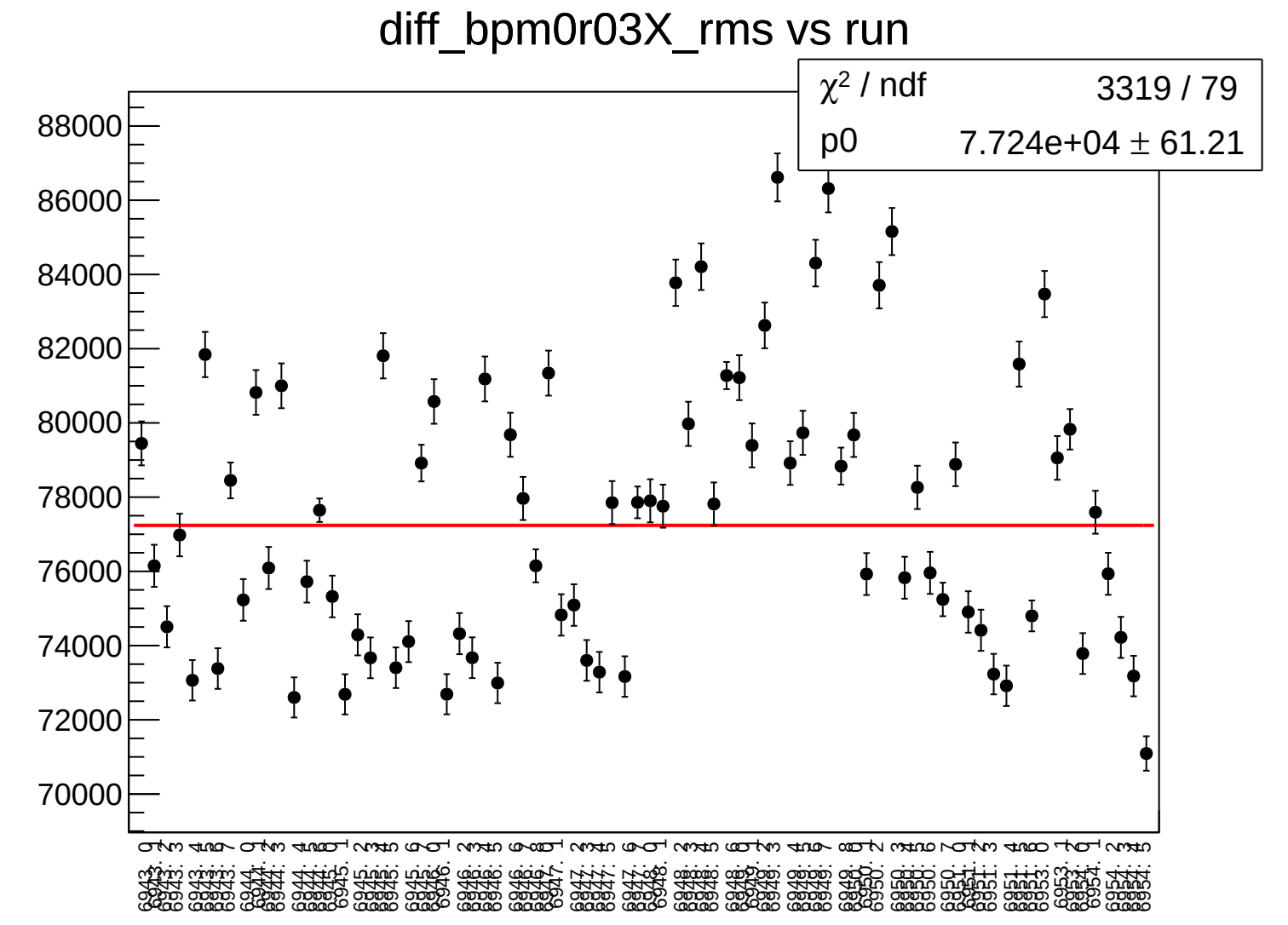

diff_bpm0l10Y_mean vs run
χ² / ndf 67.42 / 79
p0 0.8875 ± 1.858
pull
Entries 80
Mean −25.75
Std Dev 59.53

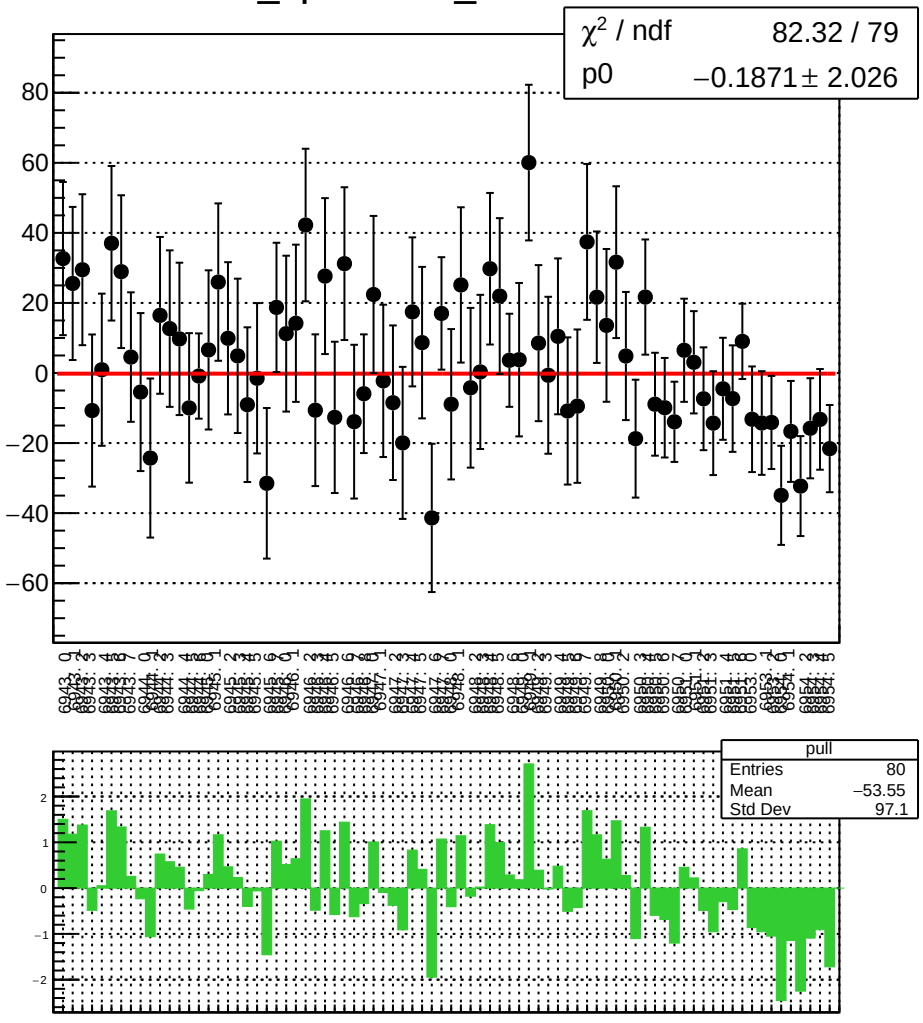

pull1D
Entries 80
Mean 0.01907
Std Dev 0.9178

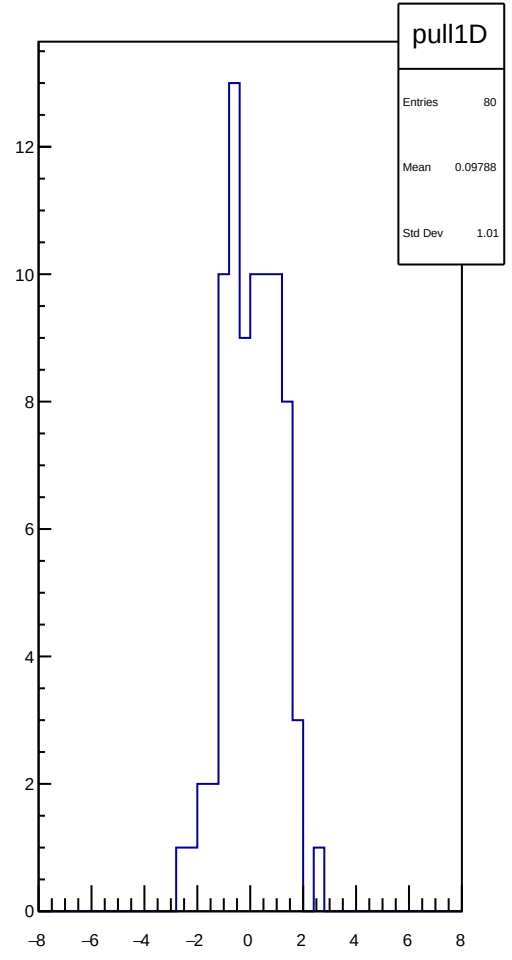

diff_bpm0l10Y_rms vs run
χ² / ndf 8.479e+04 / 79
p0 1615 ± 1.314
2000
1800
1600
1400
1200

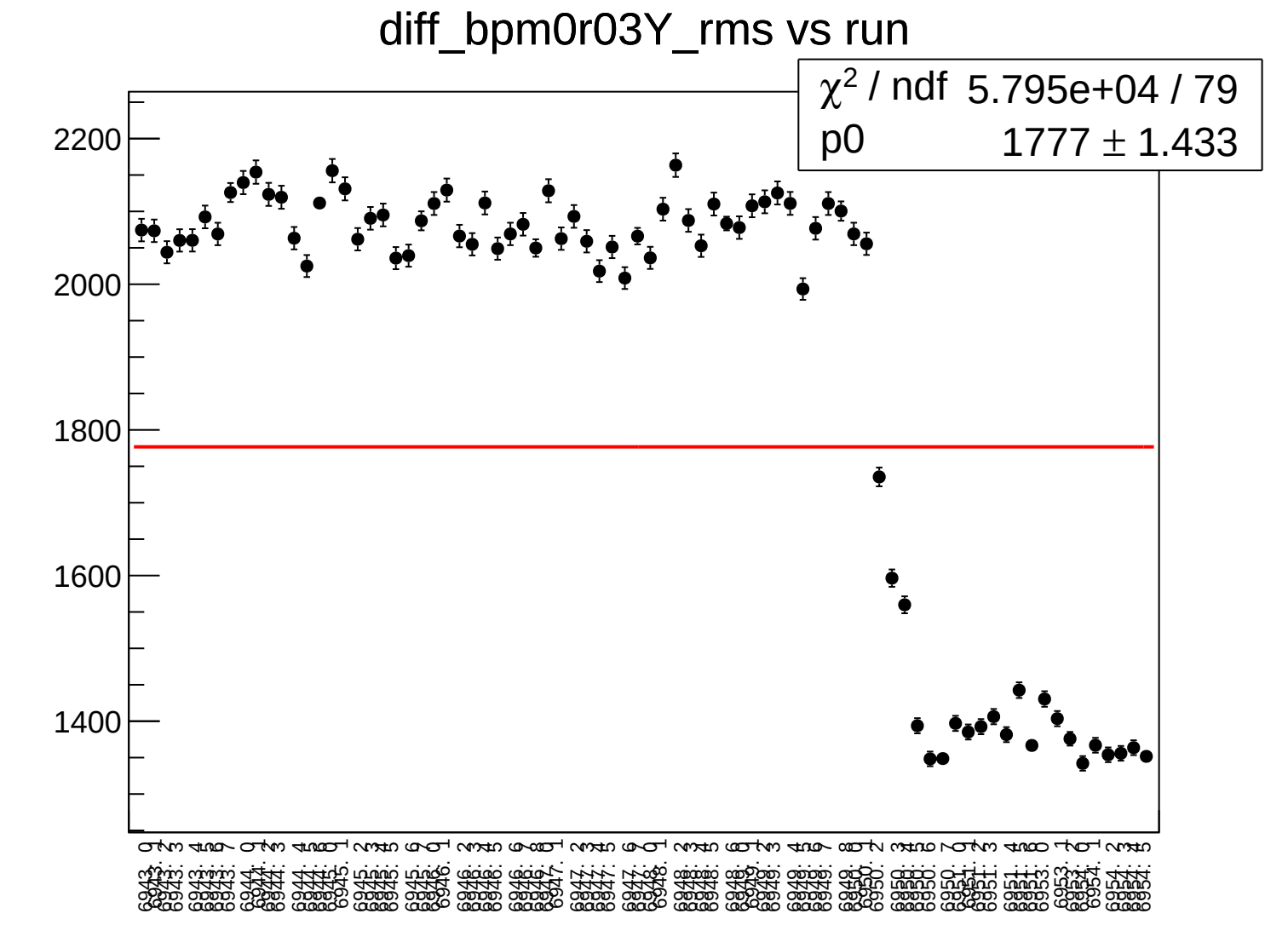

diff_bpm0r03X_mean vs run
χ² / ndf 80.76 / 79
p0 −45.1 ± 86.56
pull
Entries 80
Mean 63.99
Std Dev 43.88

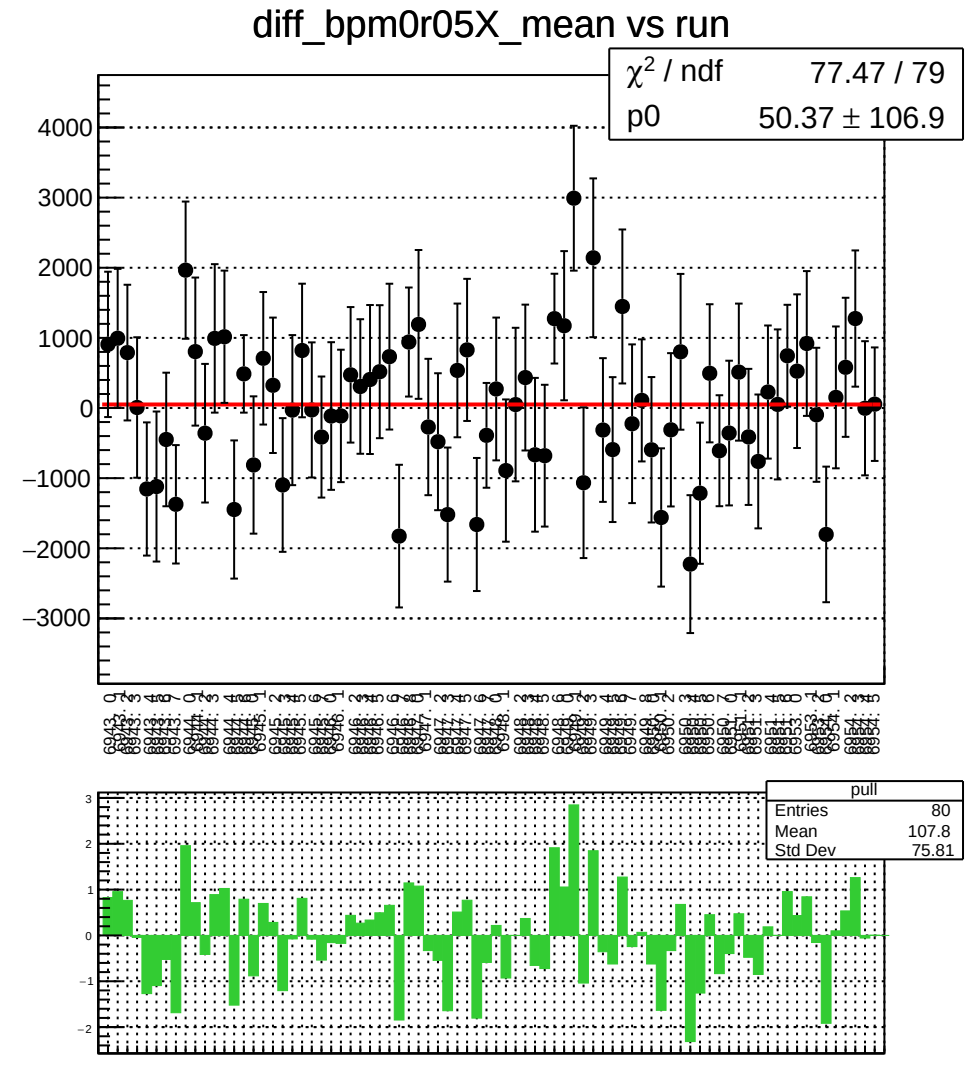

pull1D
Entries 80
Mean 0.01116
Std Dev 1.005

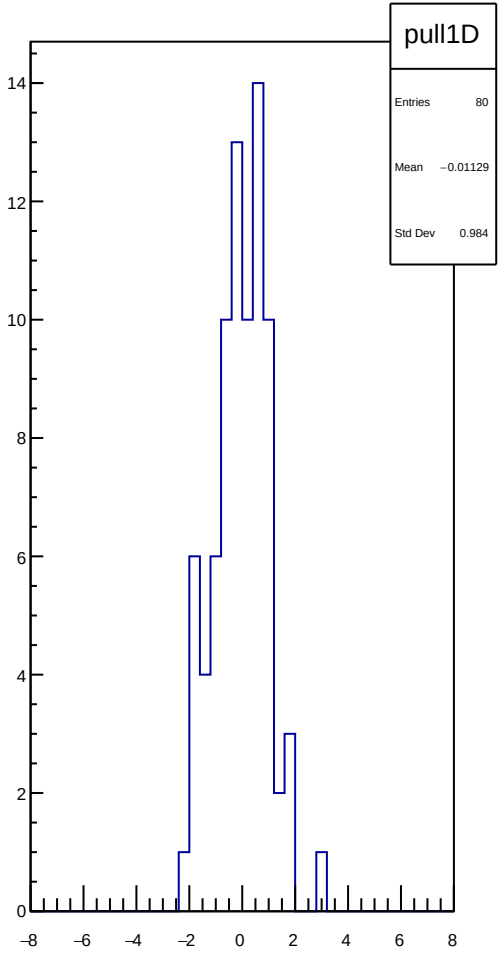

diff_bpm0r03X_rms vs run
χ² / ndf 3319 / 79
p0 7.724e+04 ± 61.21
88000
86000
84000
82000
80000
78000
76000
74000
72000
70000

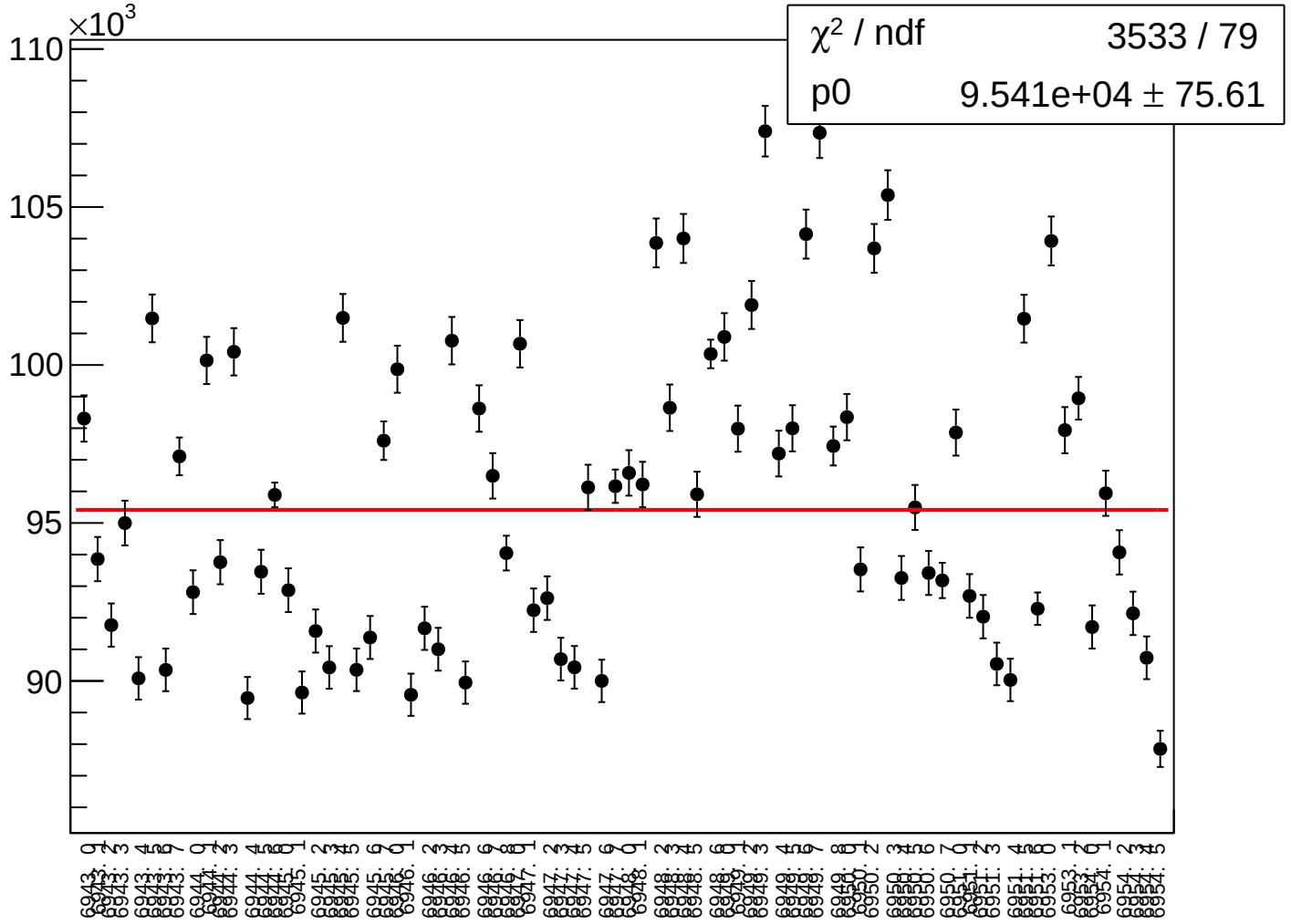

diff_bpm0r03Y_mean vs run
χ² / ndf 82.32 / 79
p0 −0.1871 ± 2.026
pull
Entries 80
Mean −53.55
Std Dev 97.1

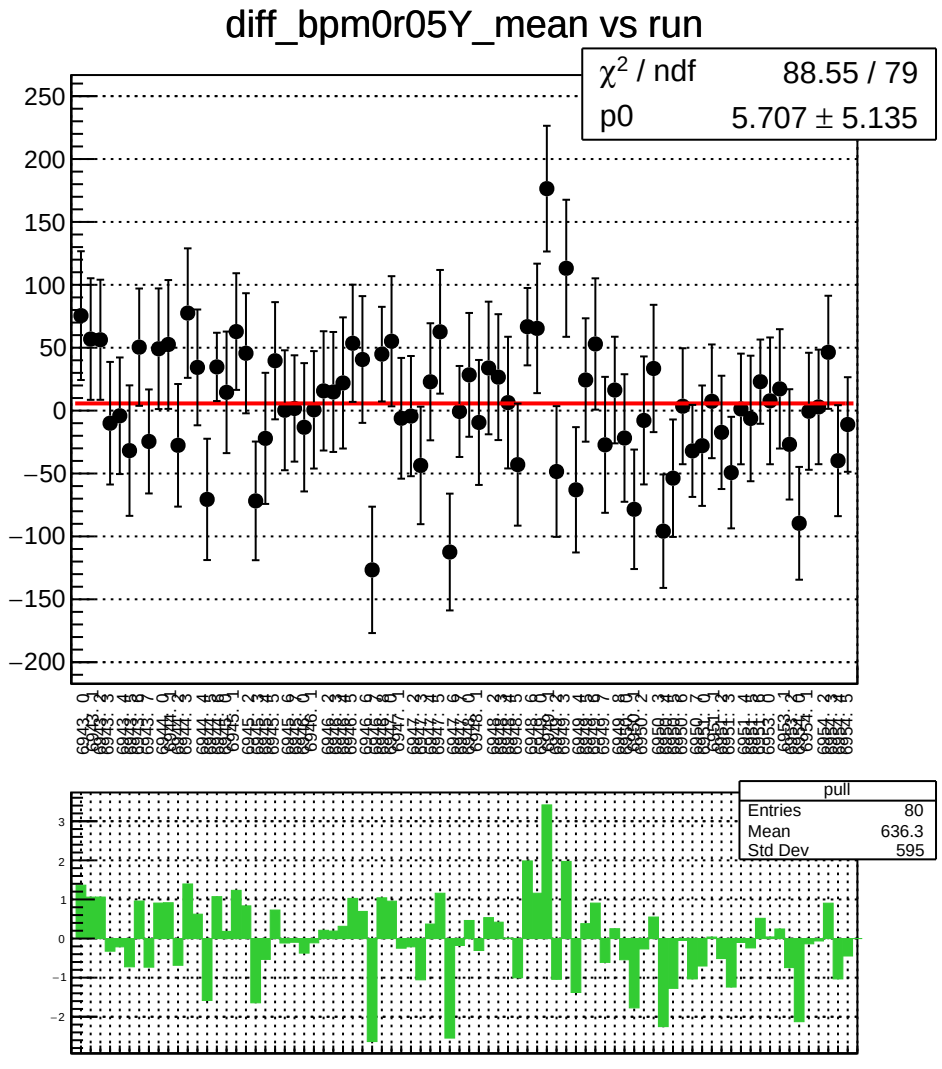

pull1D
Entries 80
Mean 0.09788
Std Dev 1.01

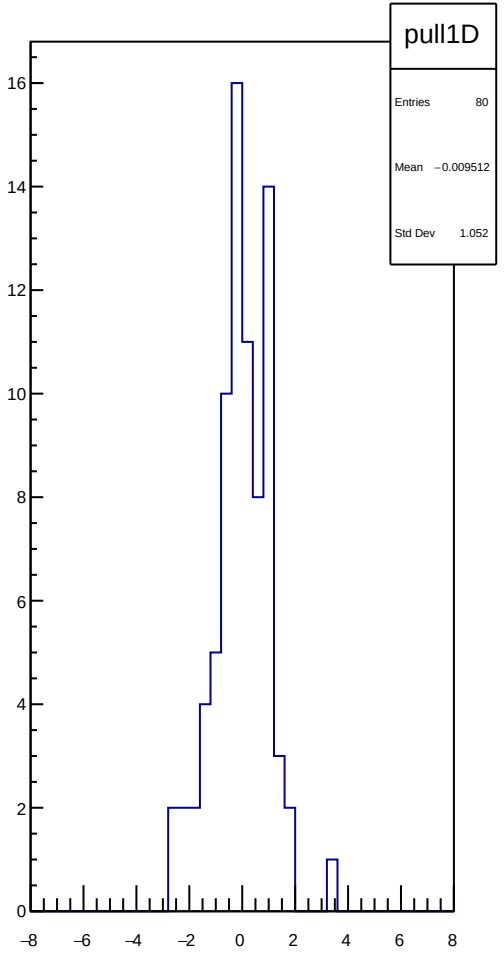

diff_bpm0r03Y_rms vs run
χ² / ndf 5.795e+04 / 79
p0 1777 ± 1.433
2200
2000
1800
1600
1400

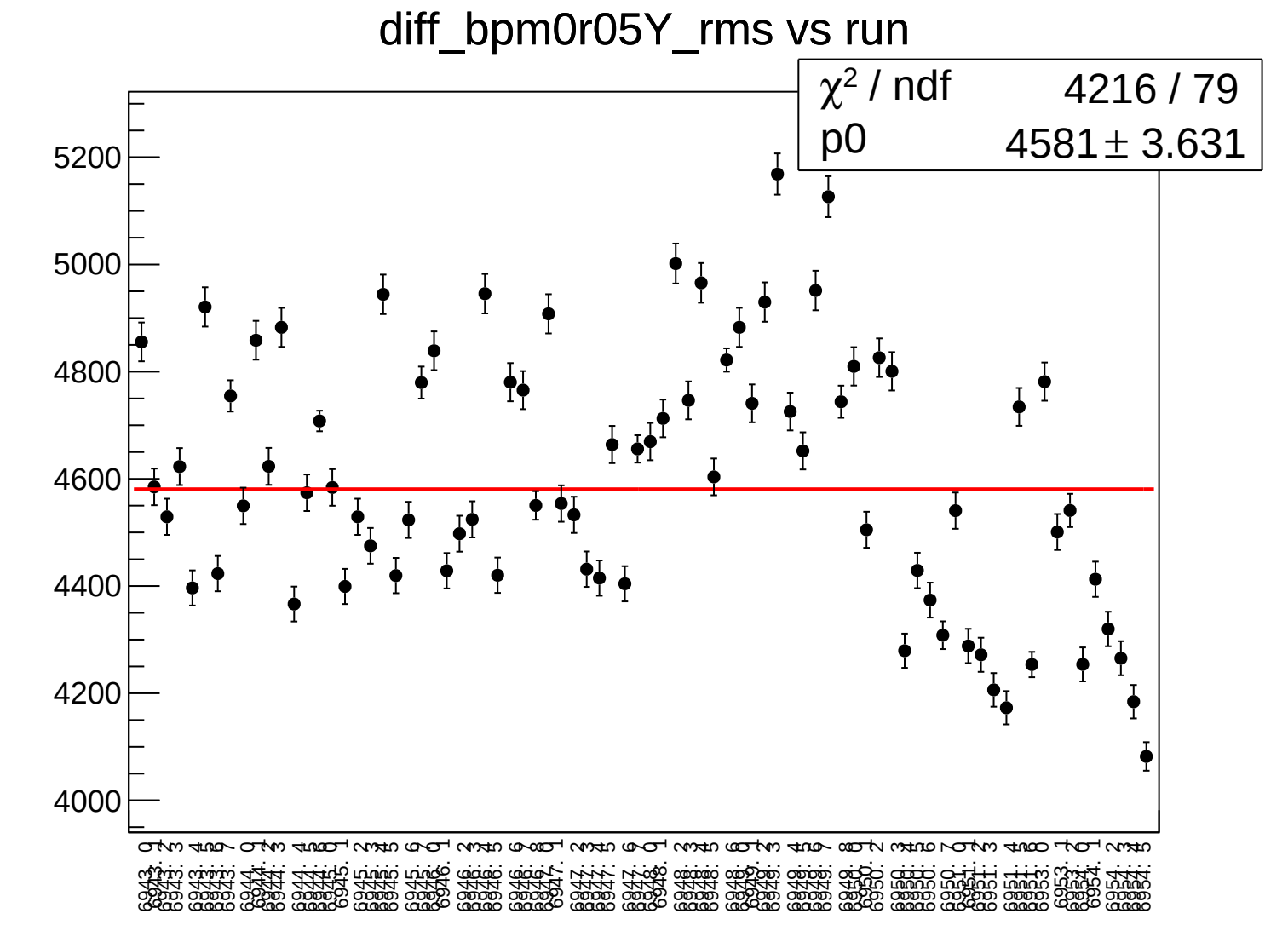

diff_bpm0r05X_mean vs run
χ^2 / ndf 77.47 / 79
p0 50.37 ± 106.9
4000
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 80
Mean 107.8
Std Dev 75.81
3
2
1
0
−1
−2

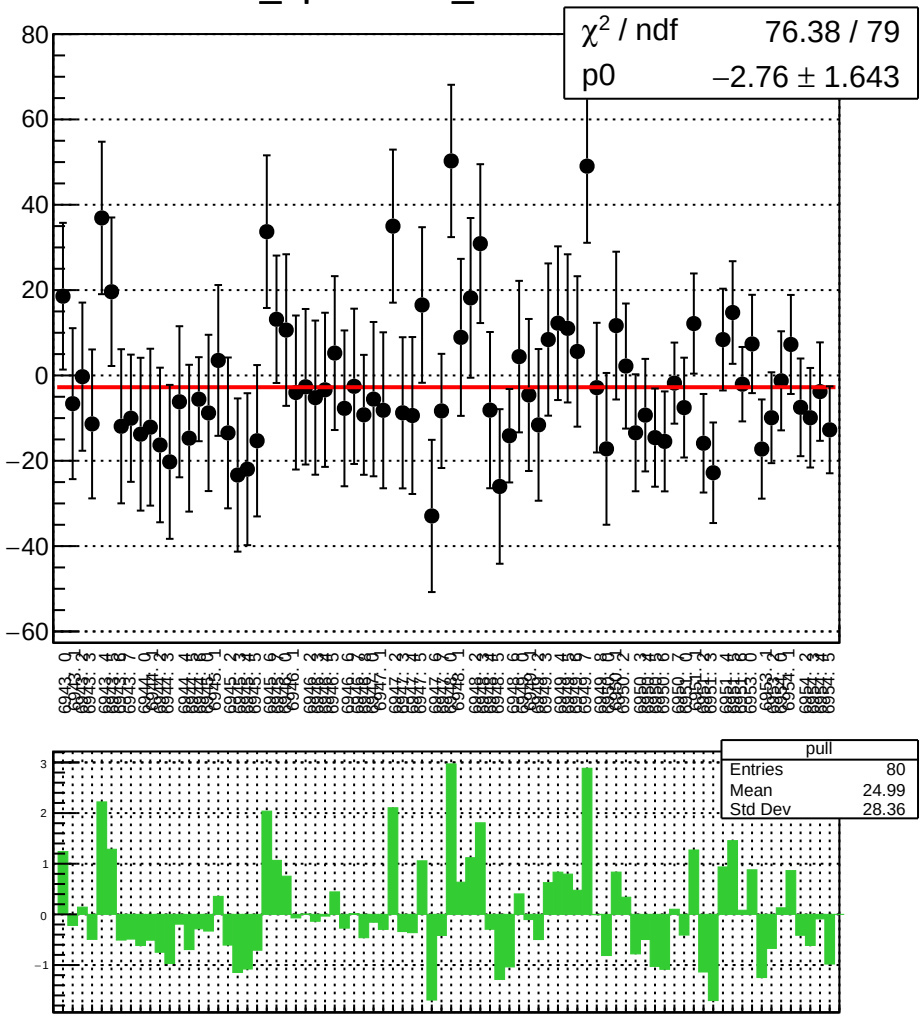

pull1D
Entries 80
Mean −0.01129
Std Dev 0.984
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

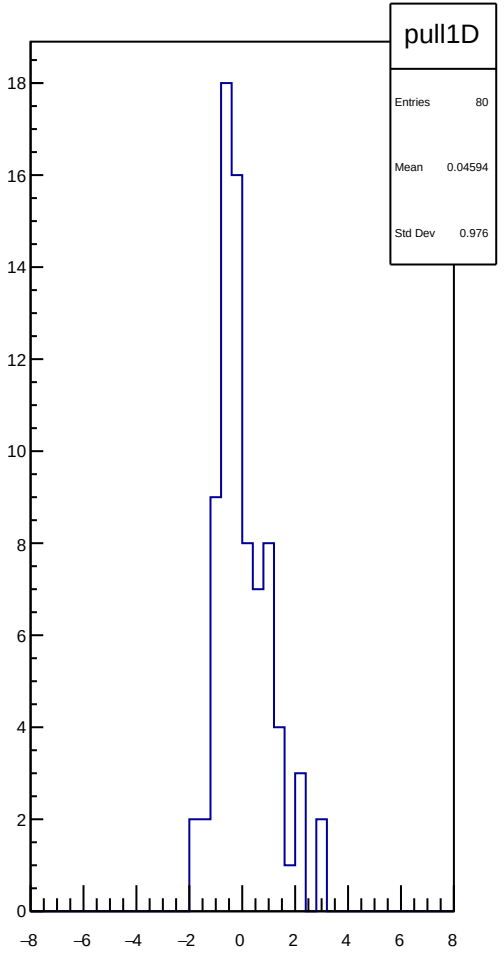

diff_bpm0r05X_rms vs run
×10^3
110
105
100
95
90
χ² / ndf 3533 / 79
p0 9.541e+04 ± 75.61

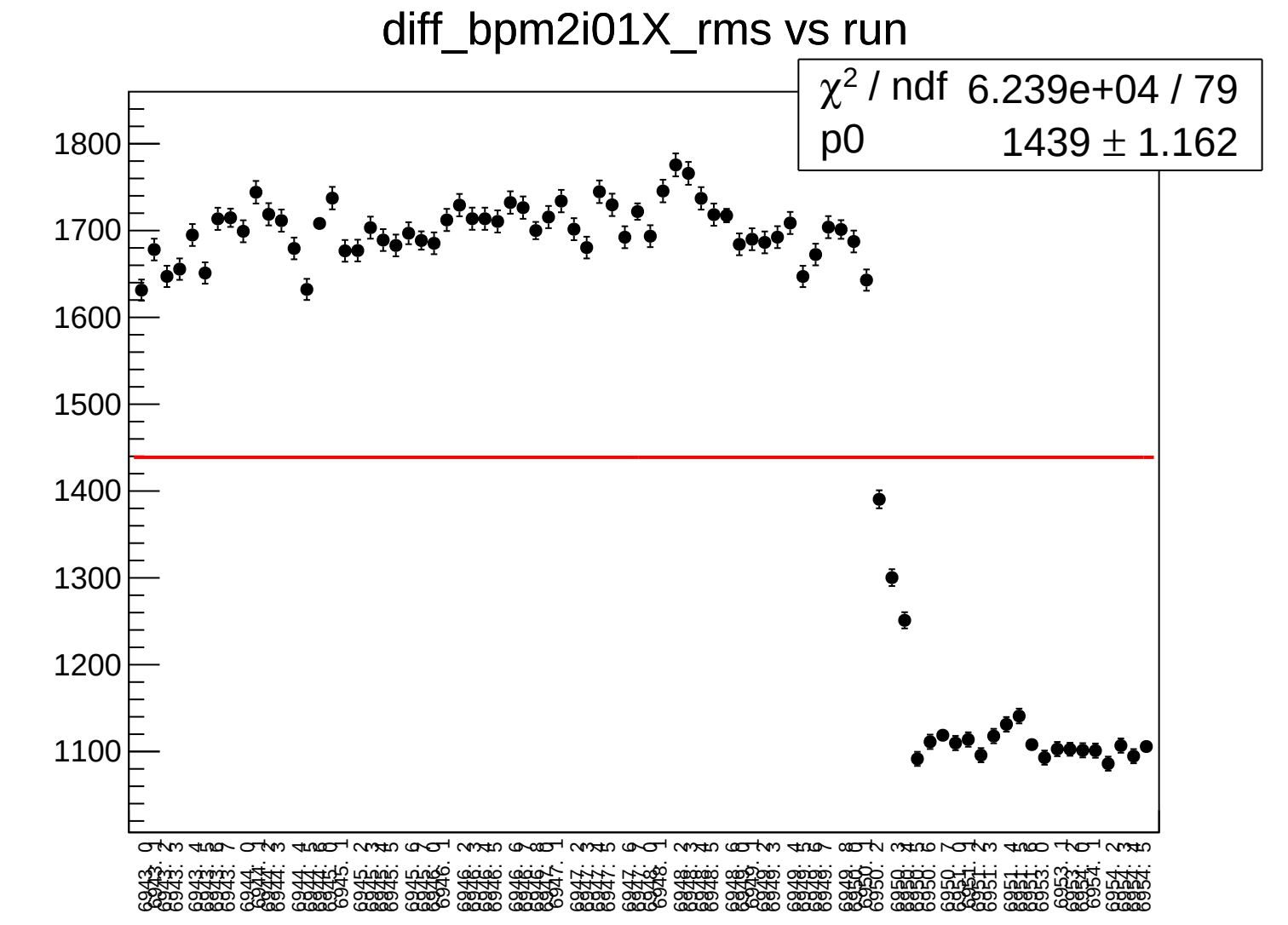

diff_bpm0r05Y_mean vs run
χ² / ndf 88.55 / 79
p0 5.707 ± 5.135
pull
Entries 80
Mean 636.3
Std Dev 595

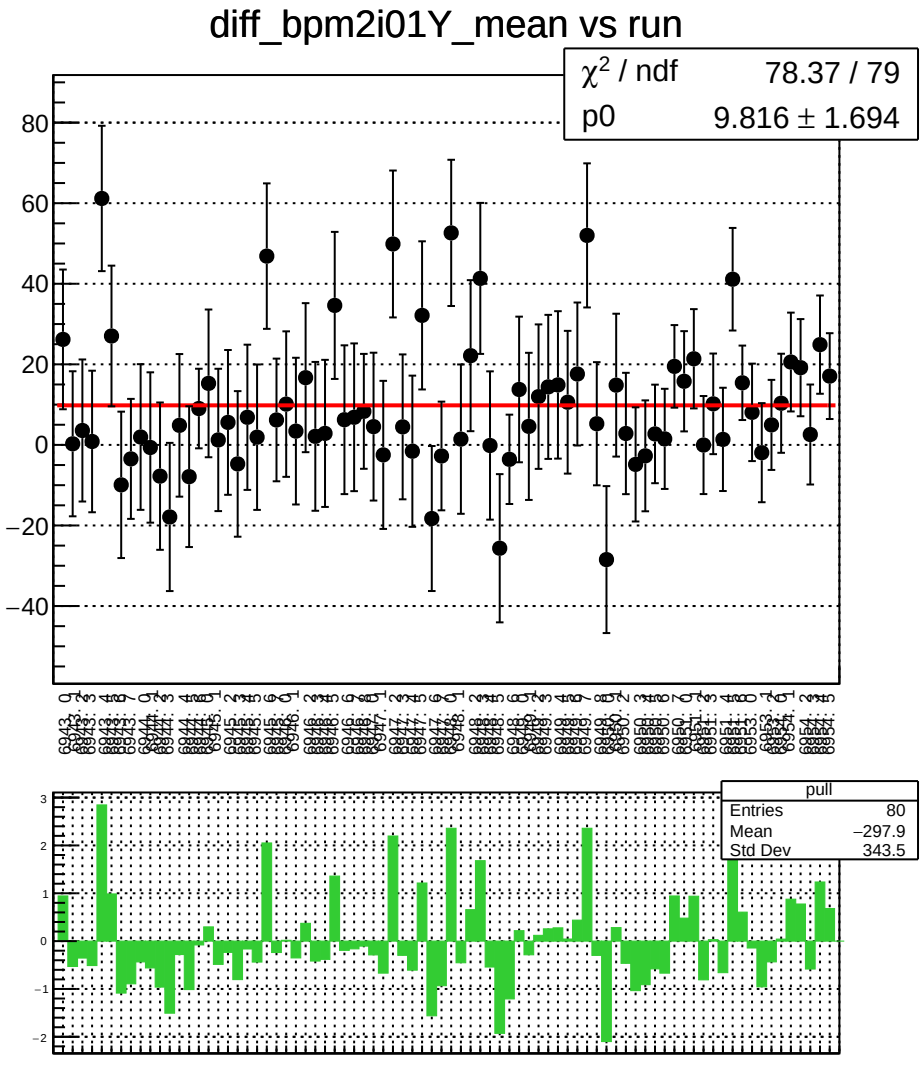

pull1D
Entries 80
Mean −0.009512
Std Dev 1.052

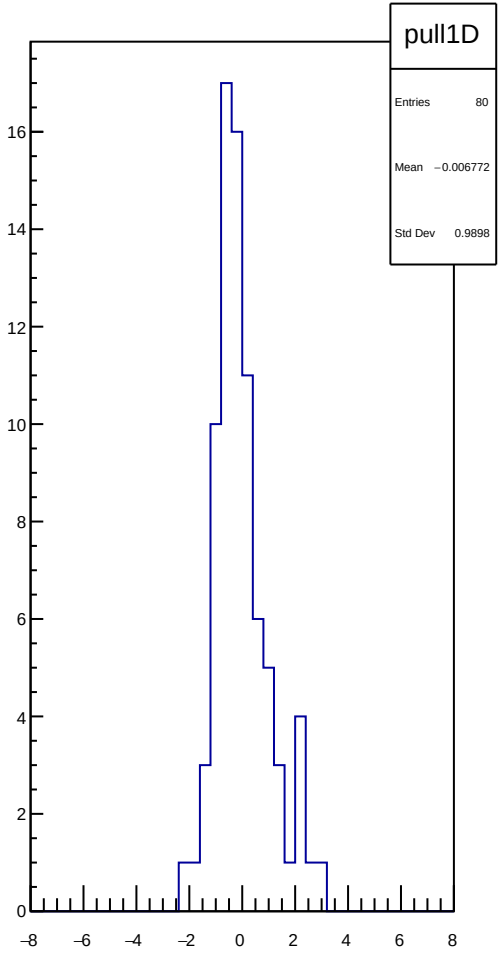

diff_bpm0r05Y_rms vs run
χ² / ndf 4216 / 79
p0 4581 ± 3.631
5200
5000
4800
4600
4400
4200
4000

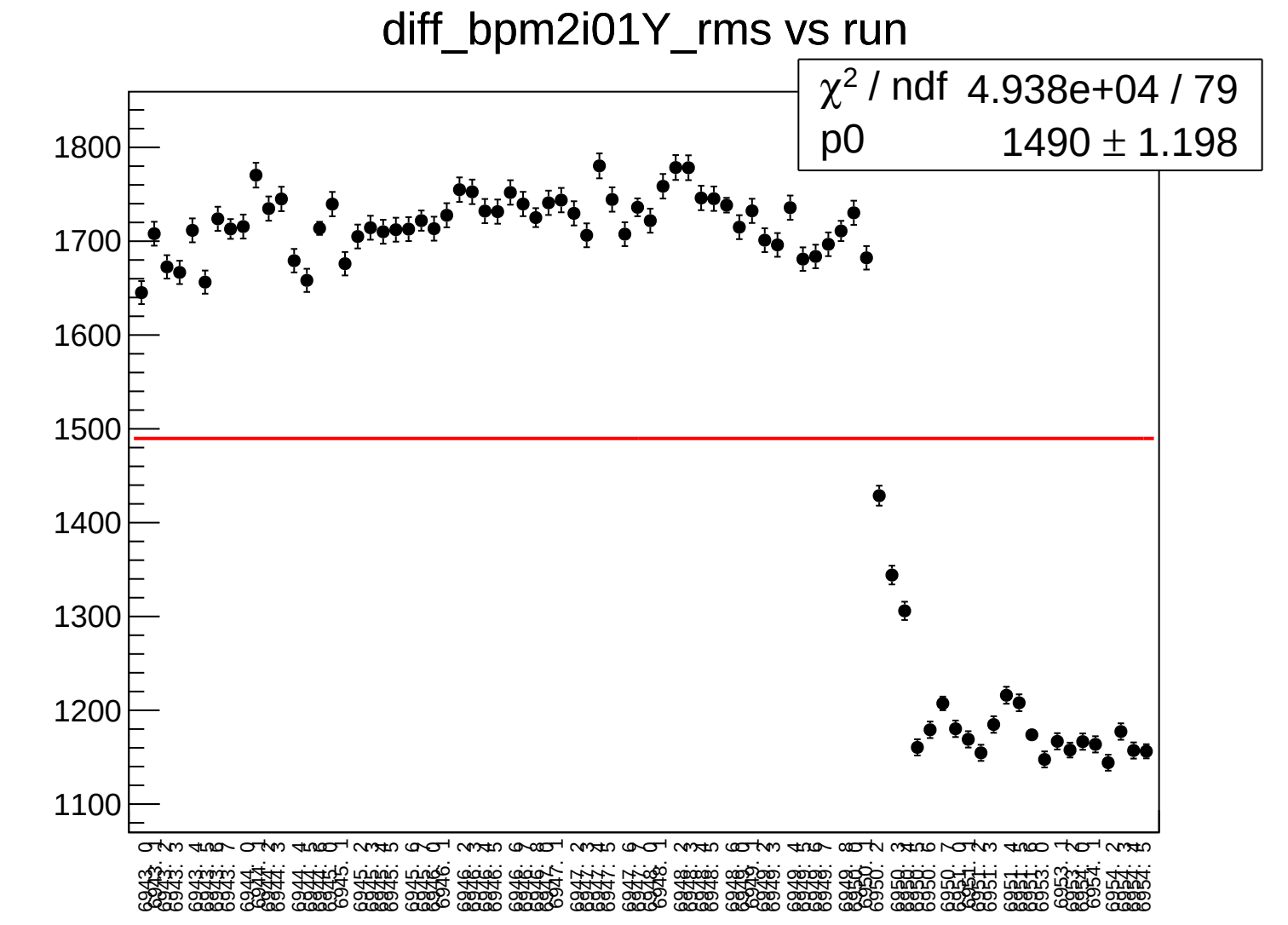

diff_bpm2i01X_mean vs run
χ² / ndf 76.38 / 79
p0 −2.76 ± 1.643
pull
Entries 80
Mean 24.99
Std Dev 28.36

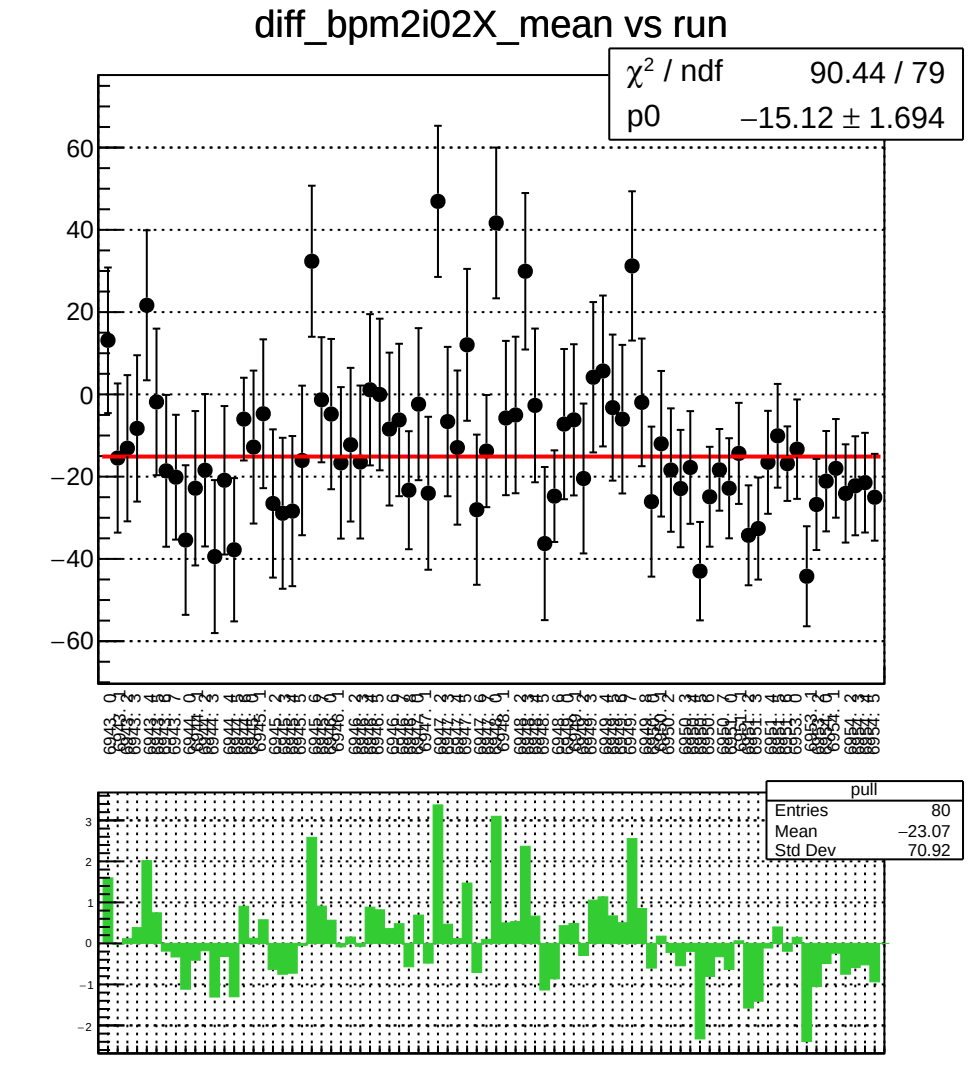

pull1D
Entries 80
Mean 0.04594
Std Dev 0.976

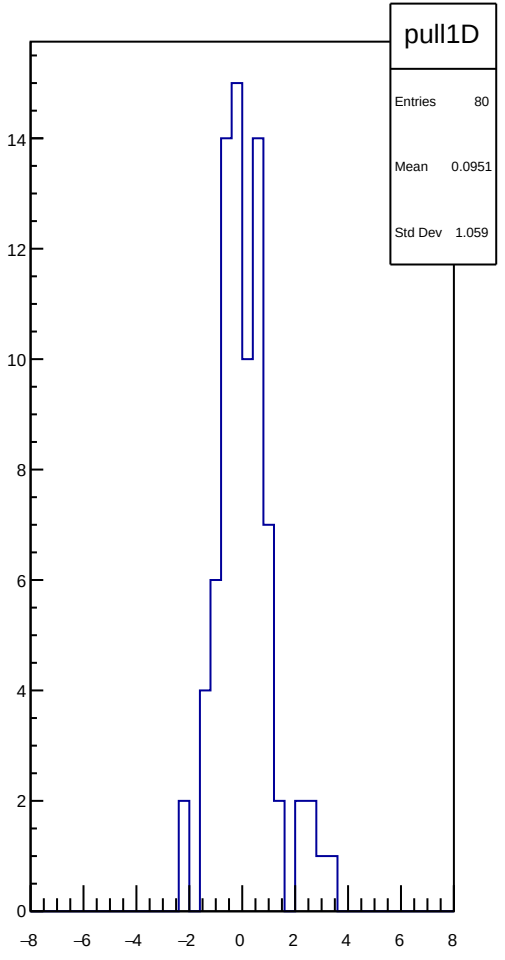

diff_bpm2i01X_rms vs run
χ² / ndf 6.239e+04 / 79
p0 1439 ± 1.162
1800
1700
1600
1500
1400
1300
1200
1100

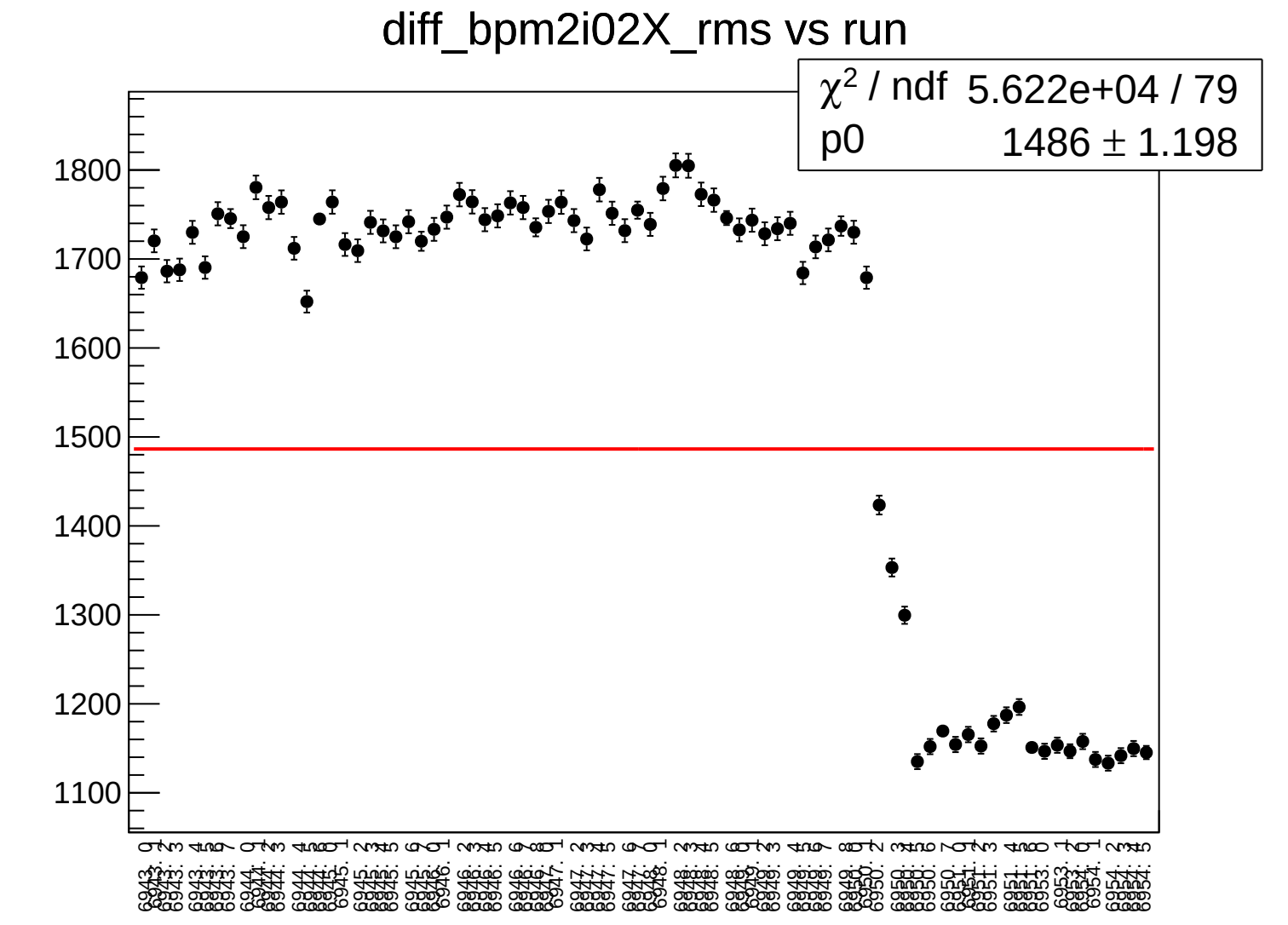

diff_bpm2i01Y_mean vs run
χ² / ndf 78.37 / 79
p0 9.816 ± 1.694
pull
Entries 80
Mean −297.9
Std Dev 343.5

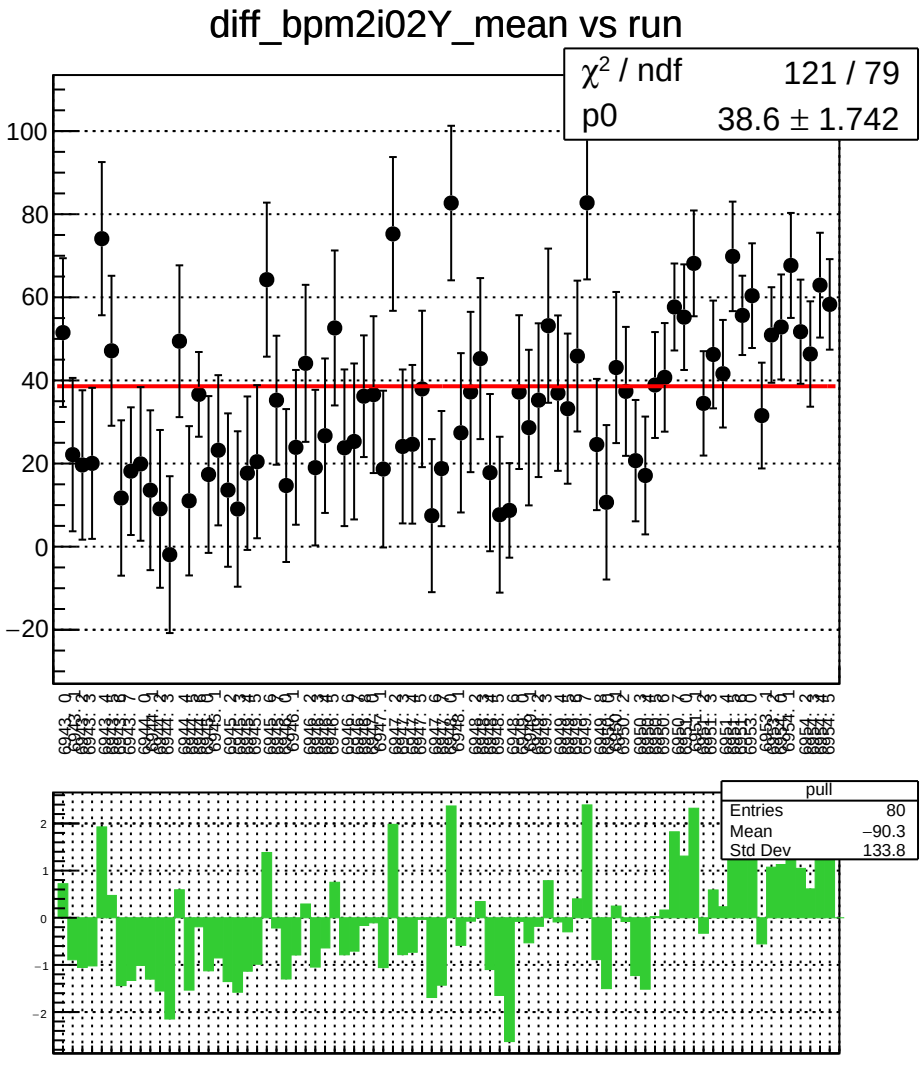

pull1D
Entries 80
Mean −0.006772
Std Dev 0.9898

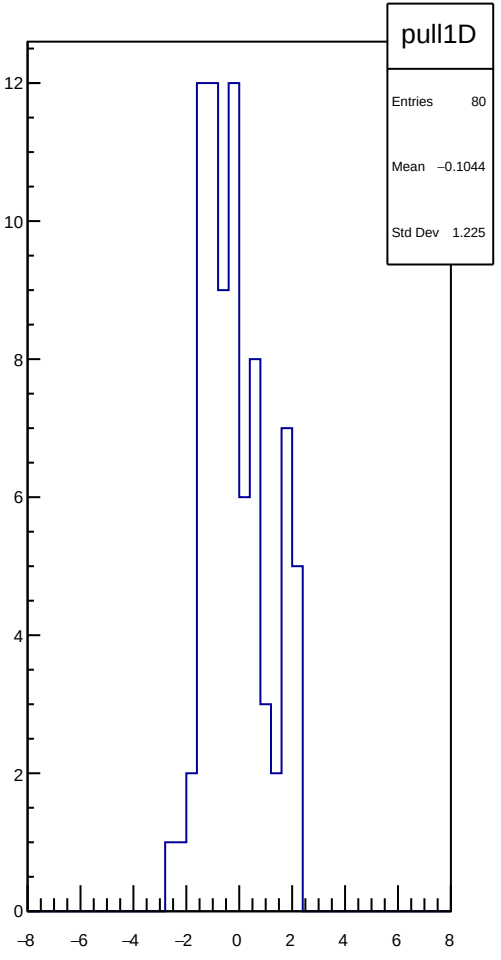

diff_bpm2i01Y_rms vs run
χ² / ndf 4.938e+04 / 79
p0 1490 ± 1.198
1800
1700
1600
1500
1400
1300
1200
1100

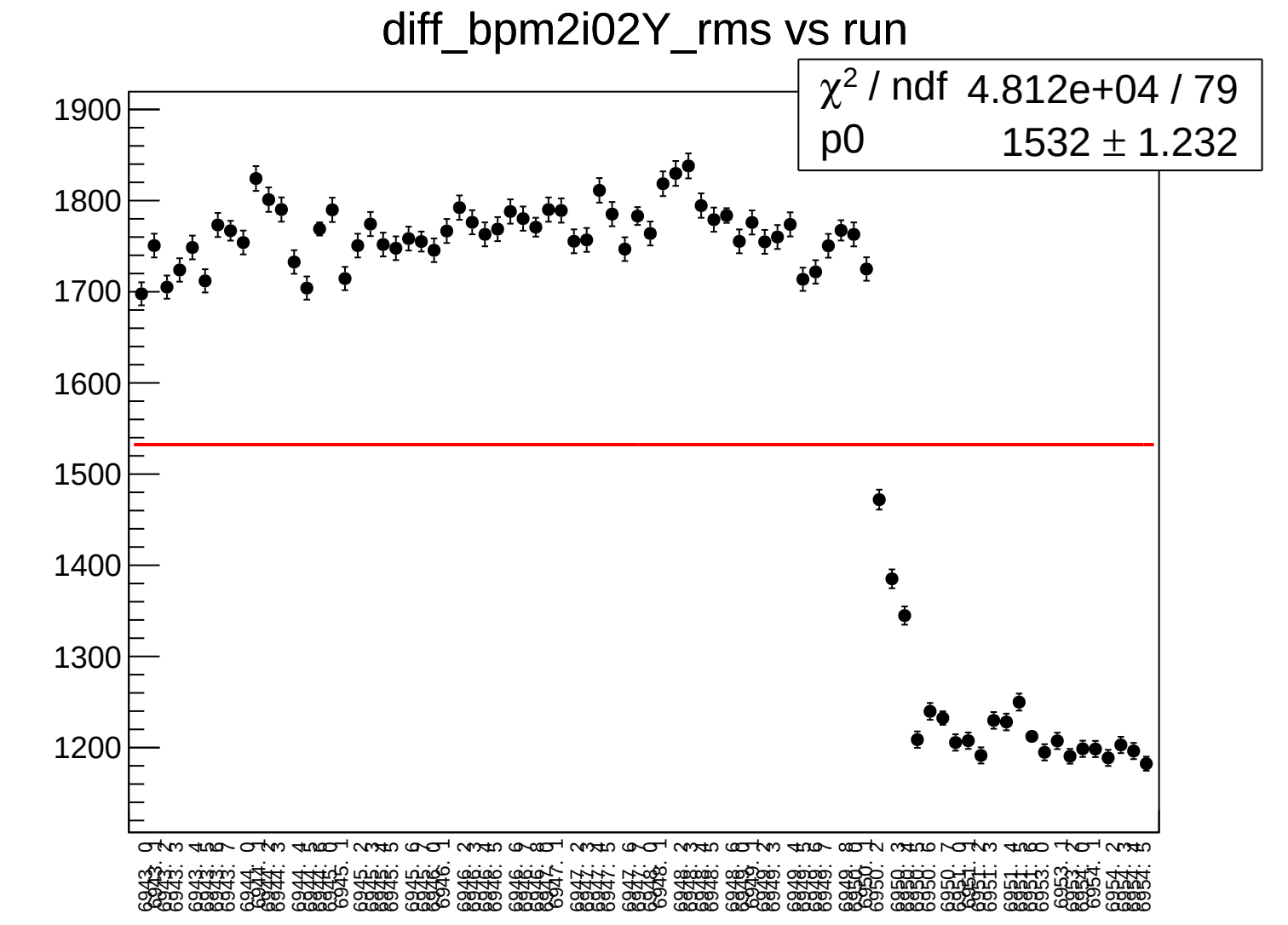

diff_bpm2i02X_mean vs run
χ² / ndf 90.44 / 79
p0 −15.12 ± 1.694
pull
Entries 80
Mean −23.07
Std Dev 70.92

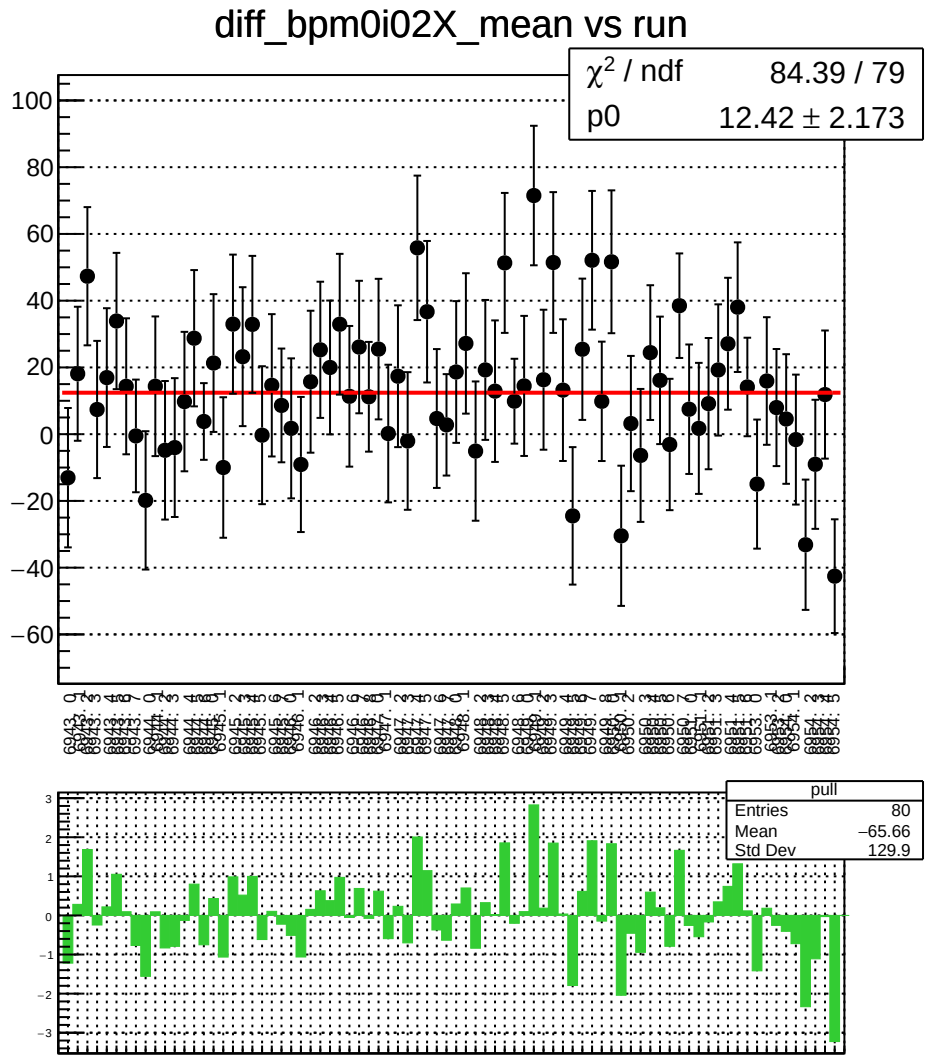

pull1D
Entries 80
Mean 0.0951
Std Dev 1.059

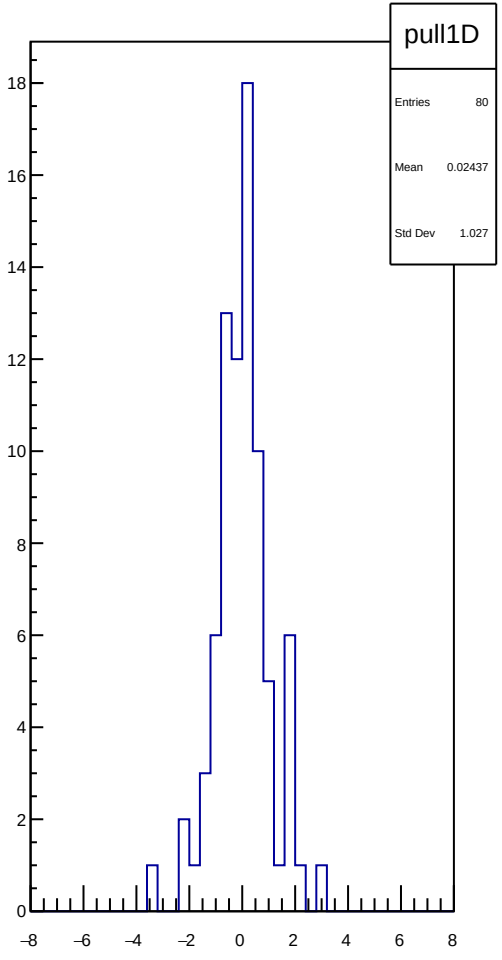

diff_bpm2i02X_rms vs run
χ² / ndf 5.622e+04 / 79
p0 1486 ± 1.198
1800
1700
1600
1500
1400
1300
1200
1100

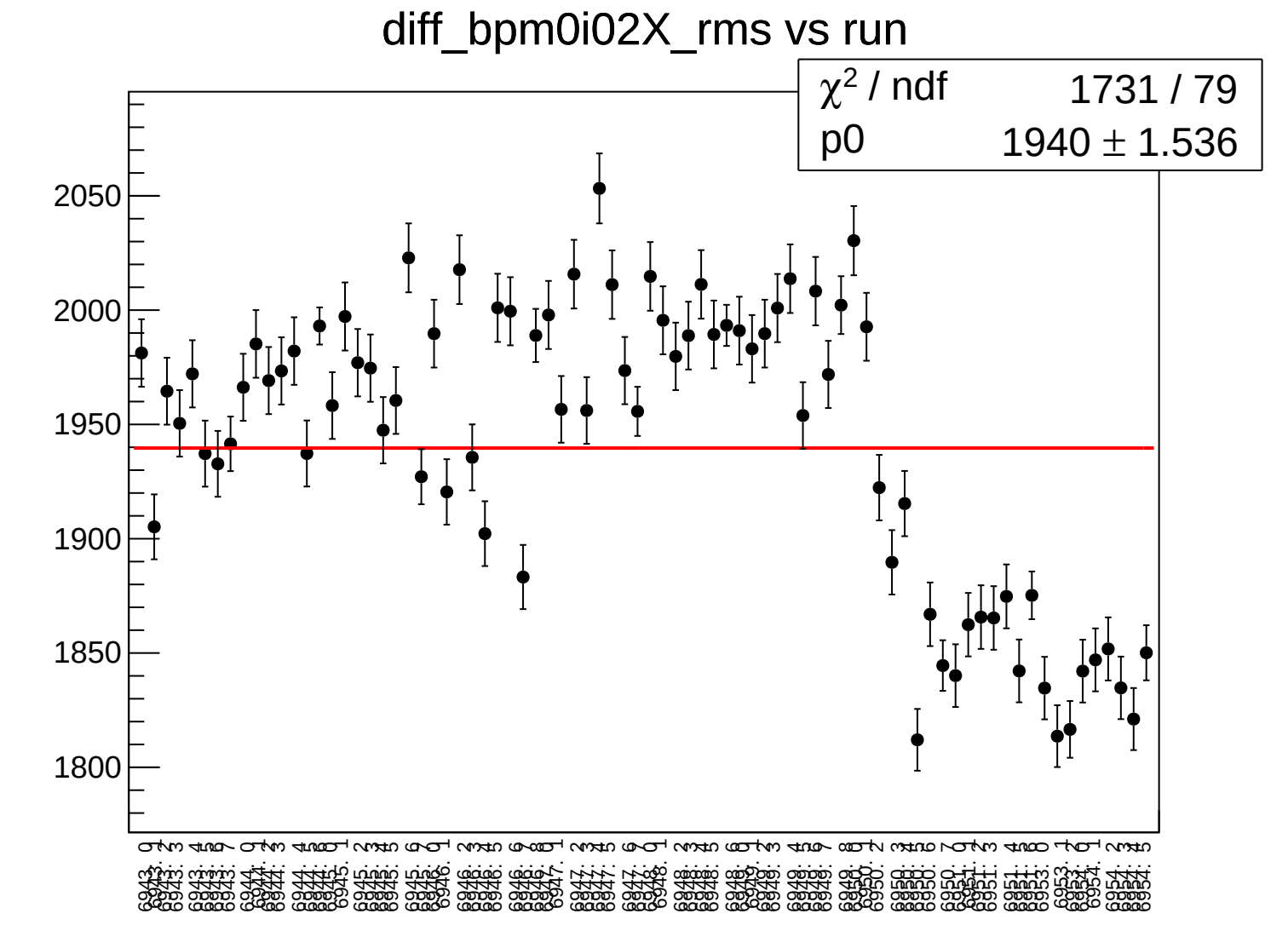

diff_bpm2i02Y_mean vs run
χ² / ndf 121 / 79
p0 38.6 ± 1.742
pull
Entries 80
Mean −90.3
Std Dev 133.8

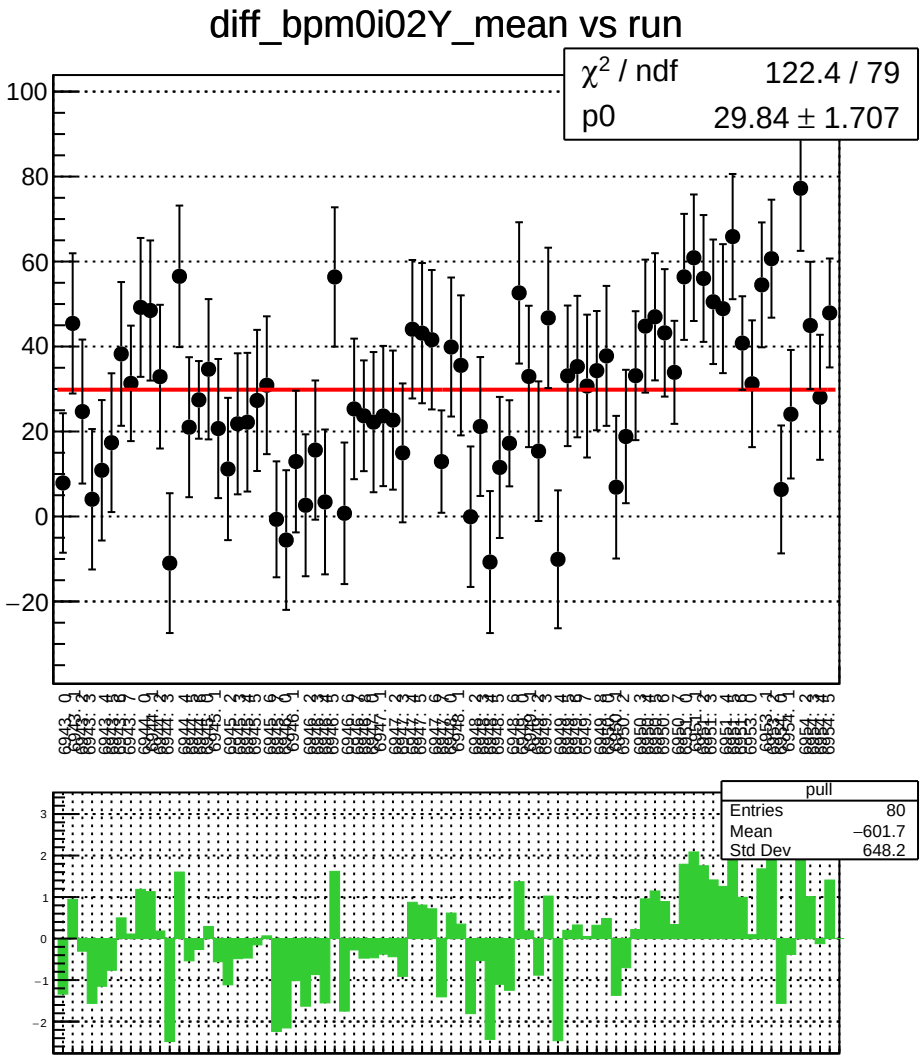

pull1D
Entries 80
Mean −0.1044
Std Dev 1.225

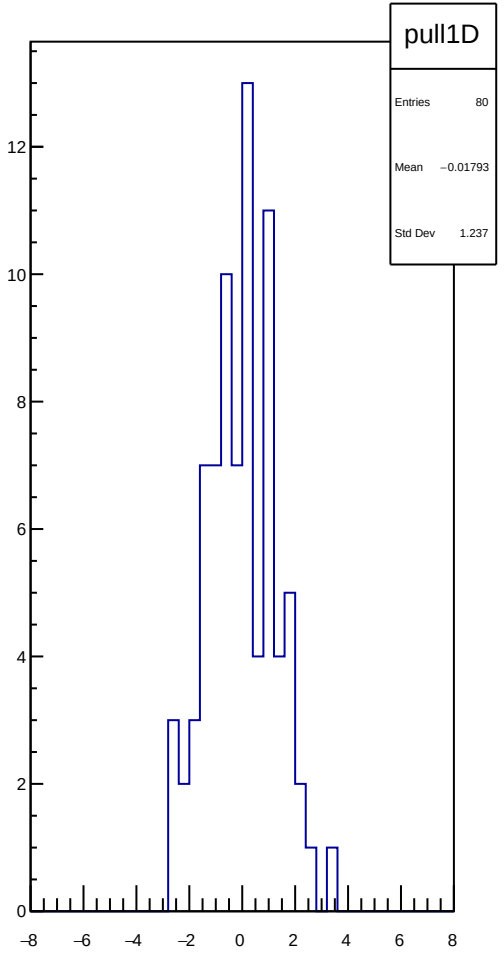

diff_bpm2i02Y_rms vs run
χ² / ndf 4.812e+04 / 79
p0 1532 ± 1.232
1900
1800
1700
1600
1500
1400
1300
1200

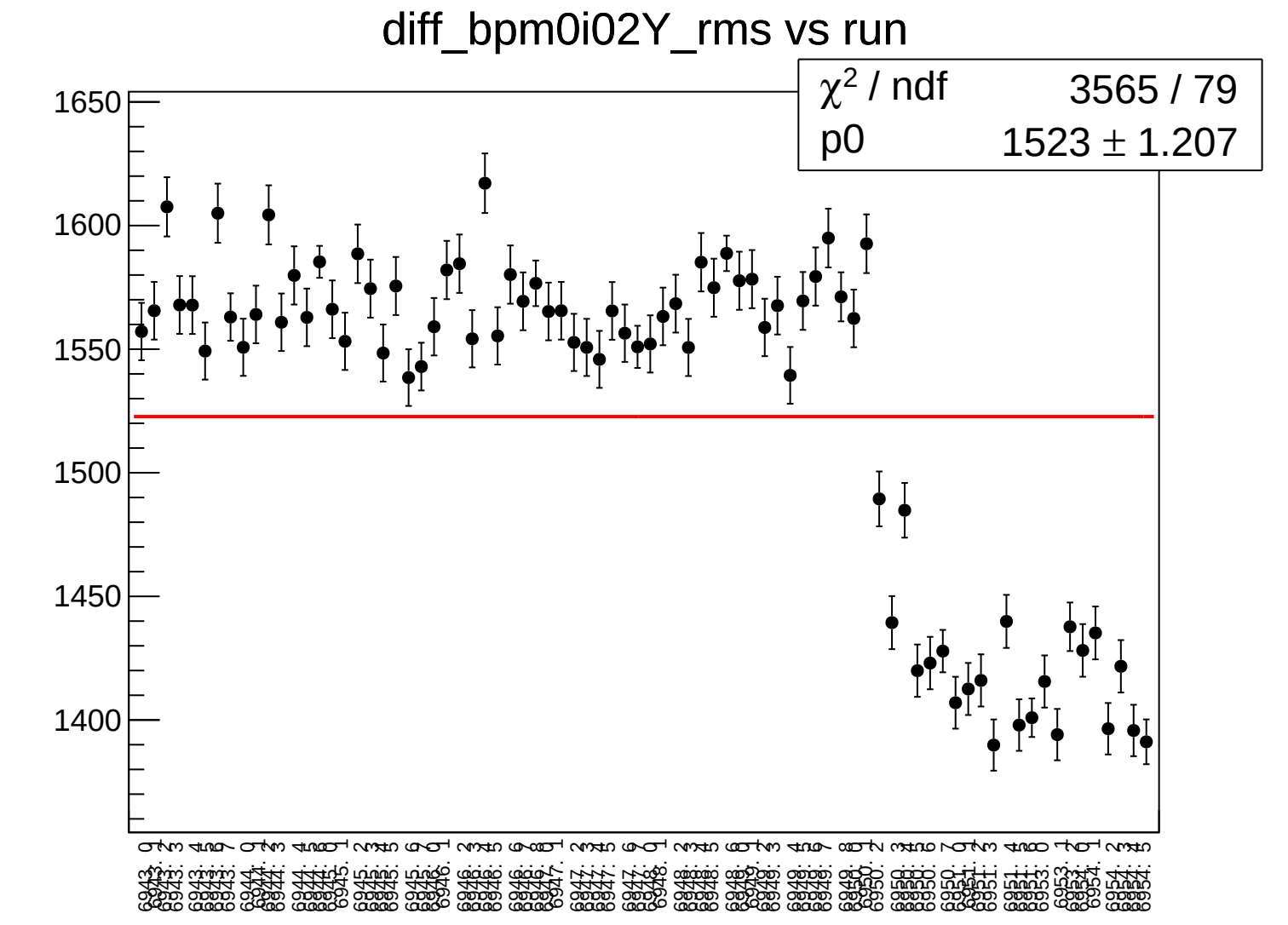

diff_bpm0i02X_mean vs run
χ^2 / ndf 84.39 / 79
p0 12.42 ± 2.173
pull
Entries 80
Mean −65.66
Std Dev 129.9

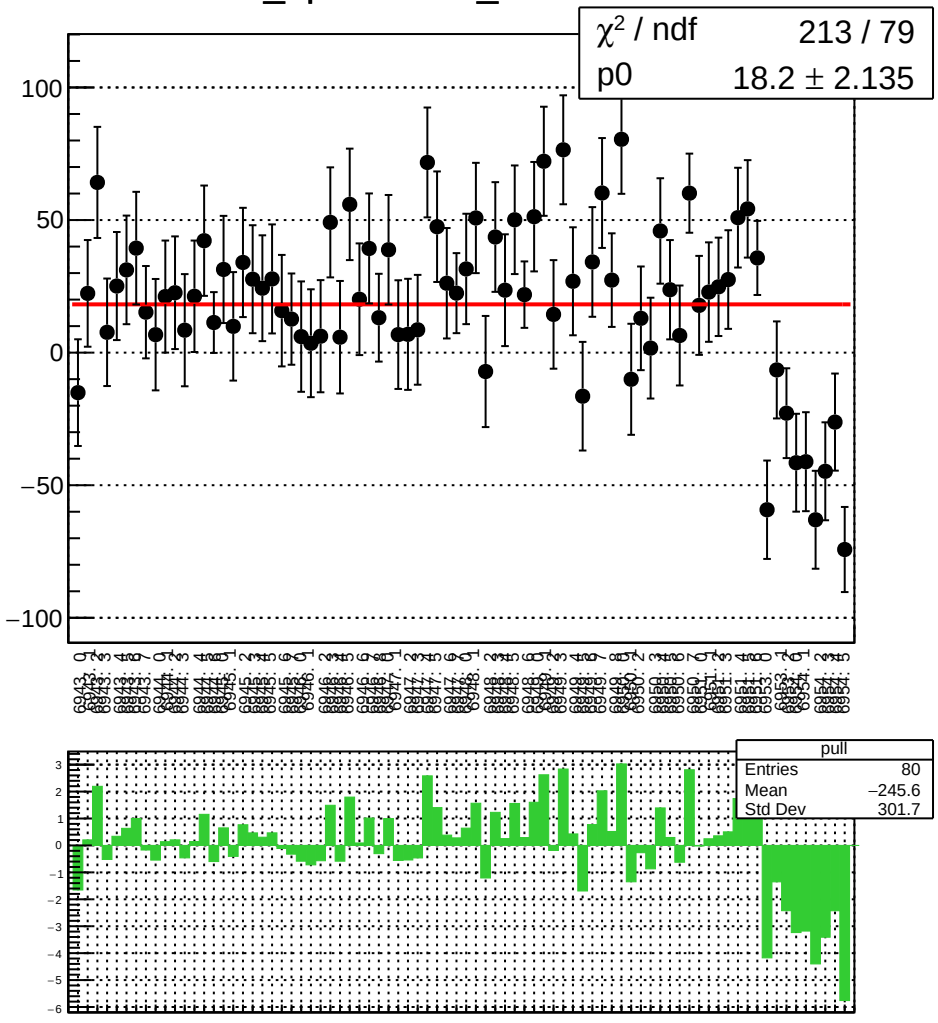

pull1D
Entries 80
Mean 0.02437
Std Dev 1.027

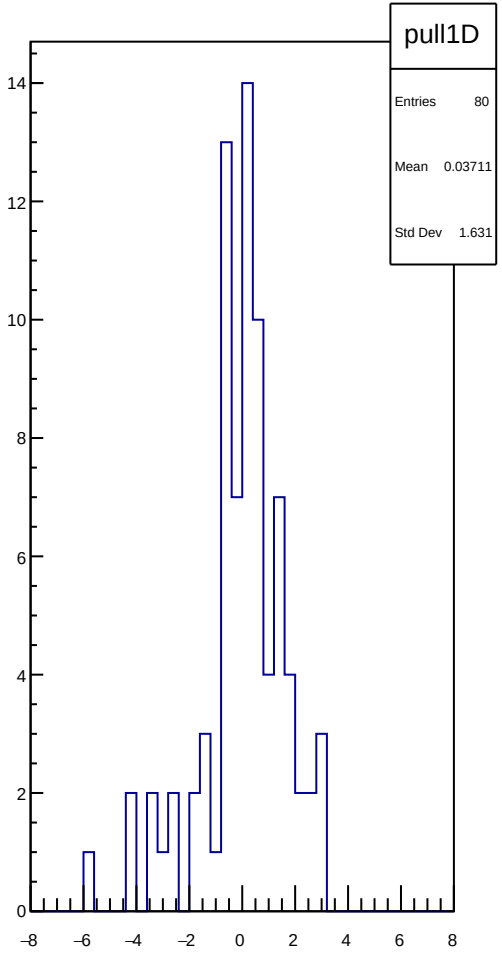

diff_bpm0i02X_rms vs run
χ² / ndf 1731 / 79
p0 1940 ± 1.536
2050
2000
1950
1900
1850
1800

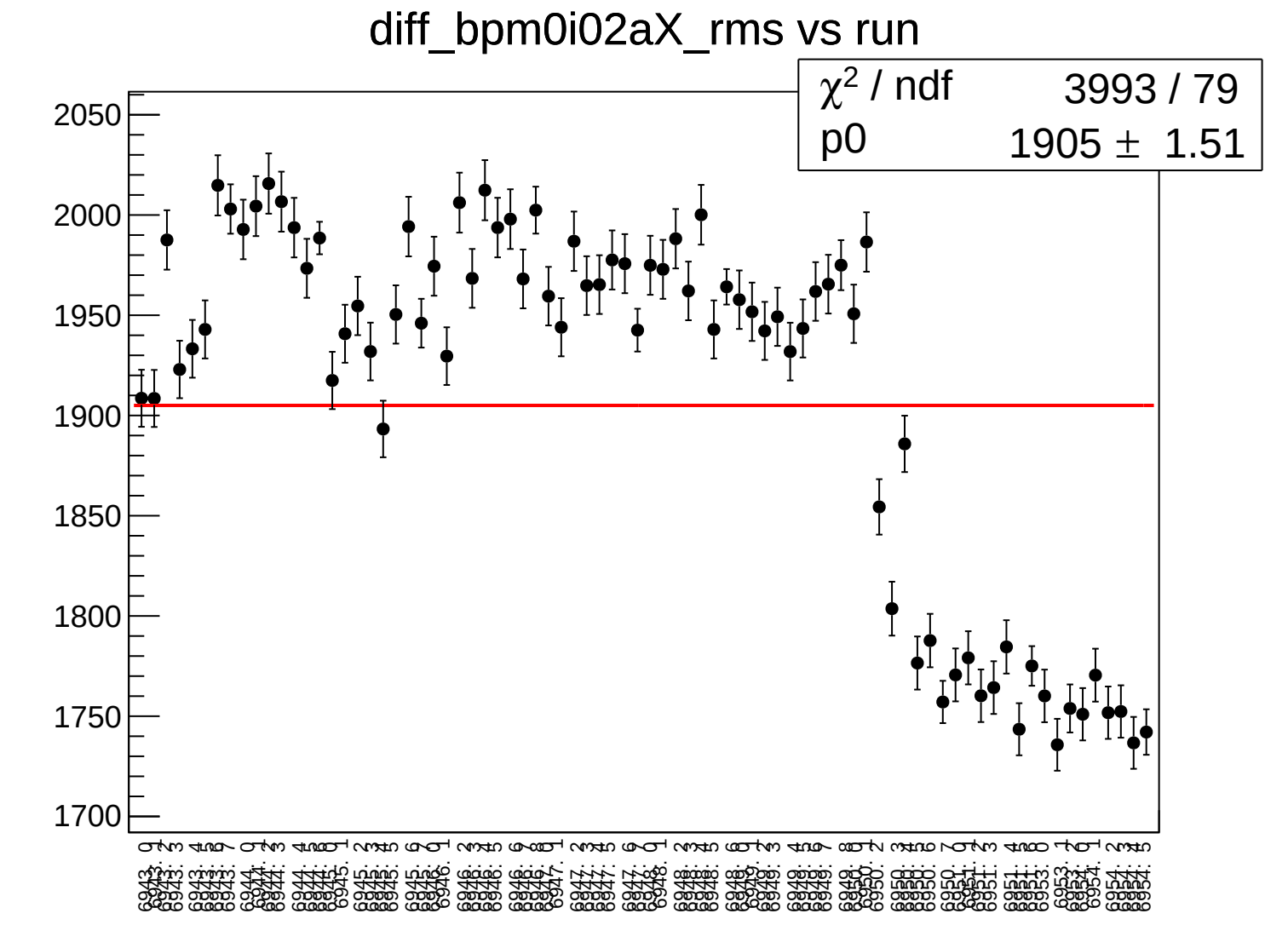

diff_bpm0i02Y_mean vs run
χ² / ndf 122.4 / 79
p0 29.84 ± 1.707
pull
Entries 80
Mean −601.7
Std Dev 648.2

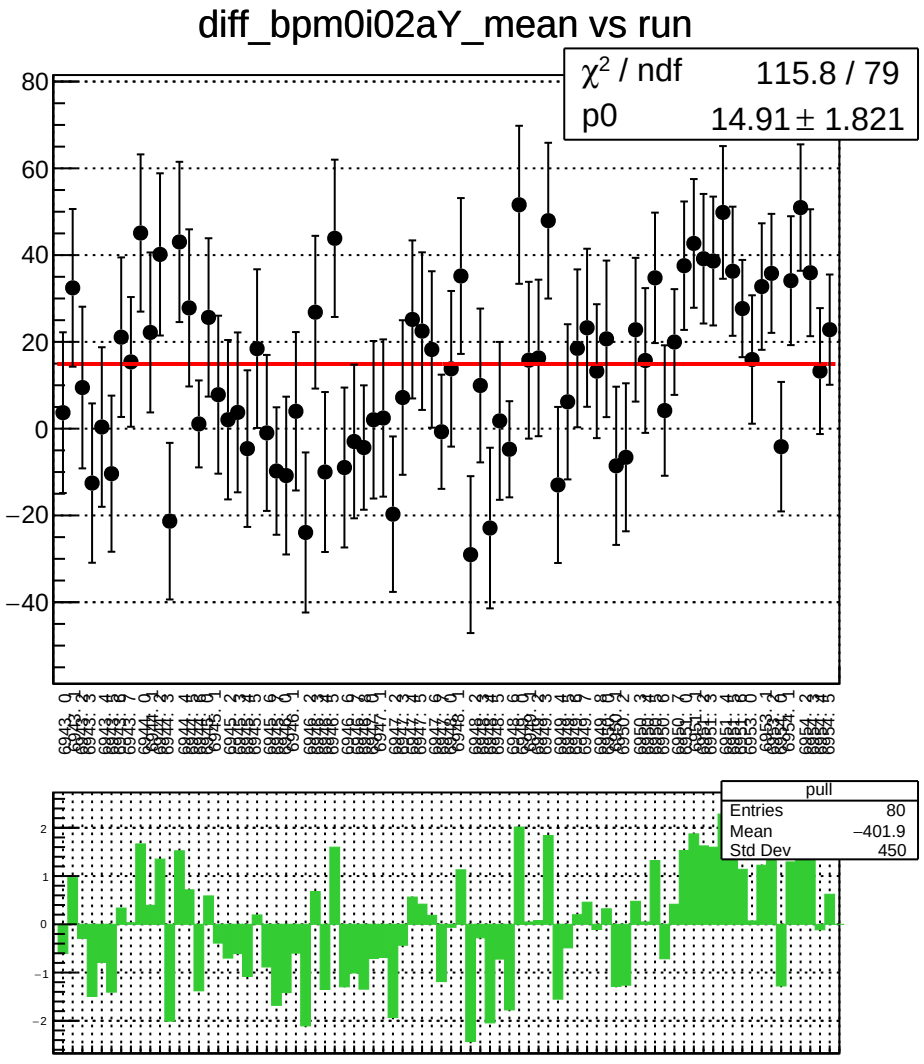

pull1D
Entries 80
Mean −0.01793
Std Dev 1.237

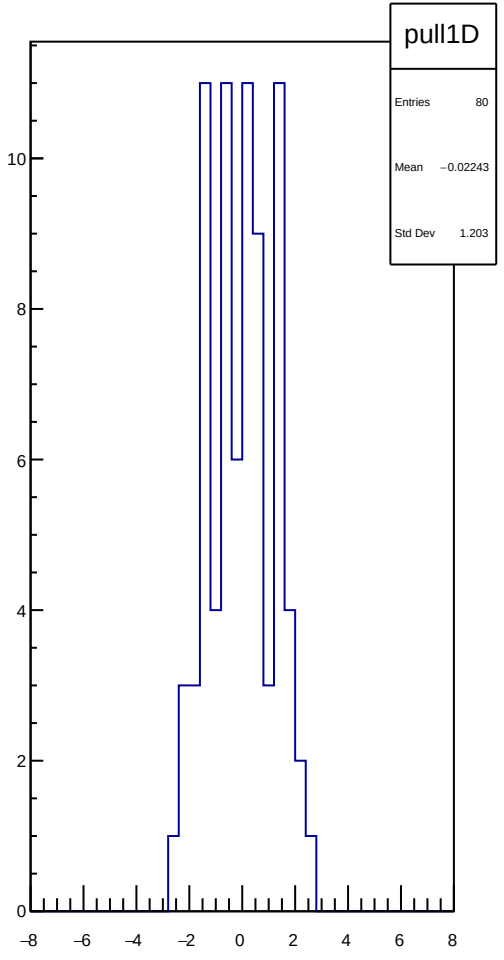

diff_bpm0i02Y_rms vs run
χ² / ndf 3565 / 79
p0 1523 ± 1.207
1650
1600
1550
1500
1450
1400

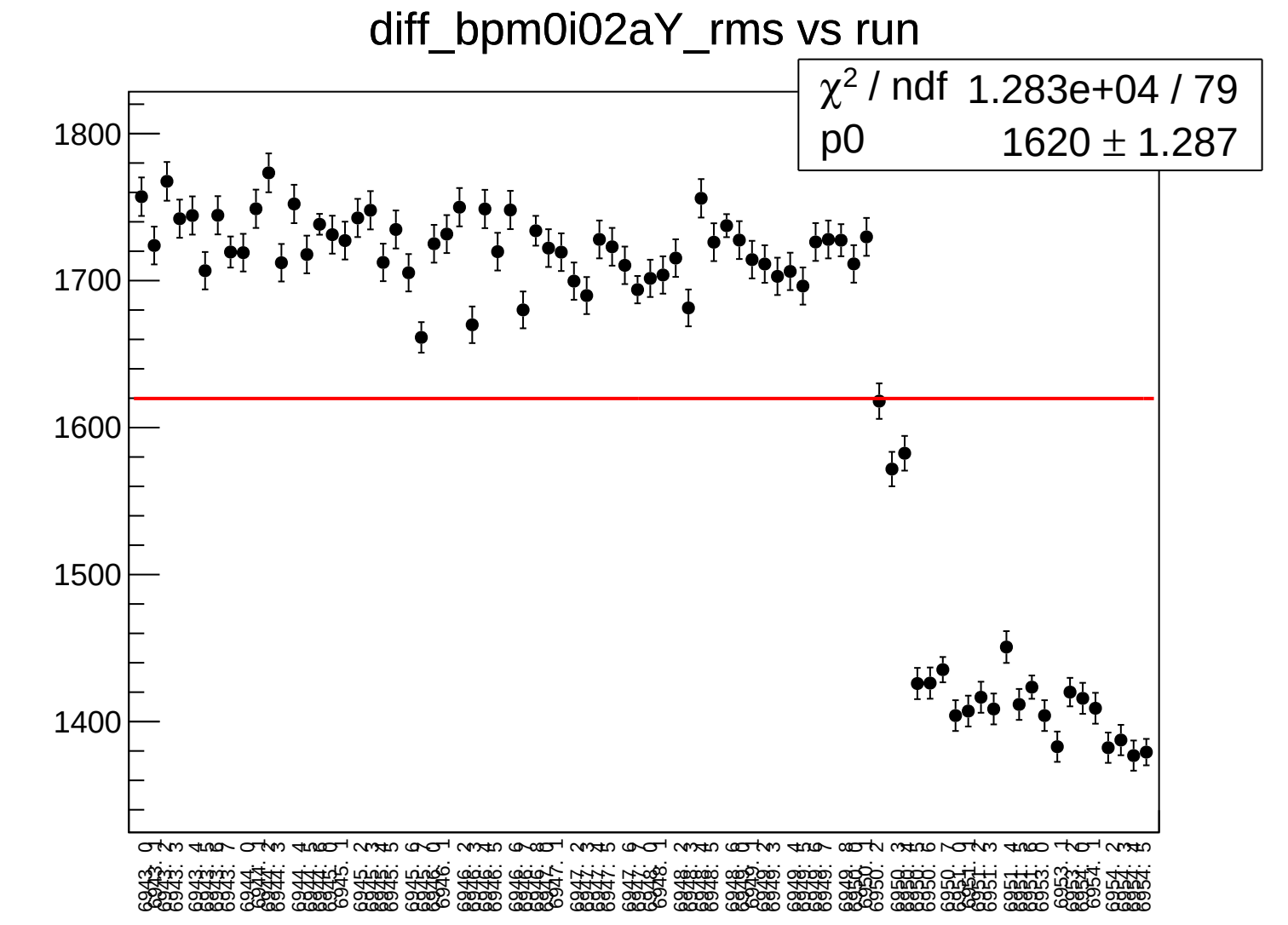

diff_bpm0i02aX_mean vs run
χ² / ndf 213 / 79
p0 18.2 ± 2.135
pull
Entries 80
Mean −245.6
Std Dev 301.7

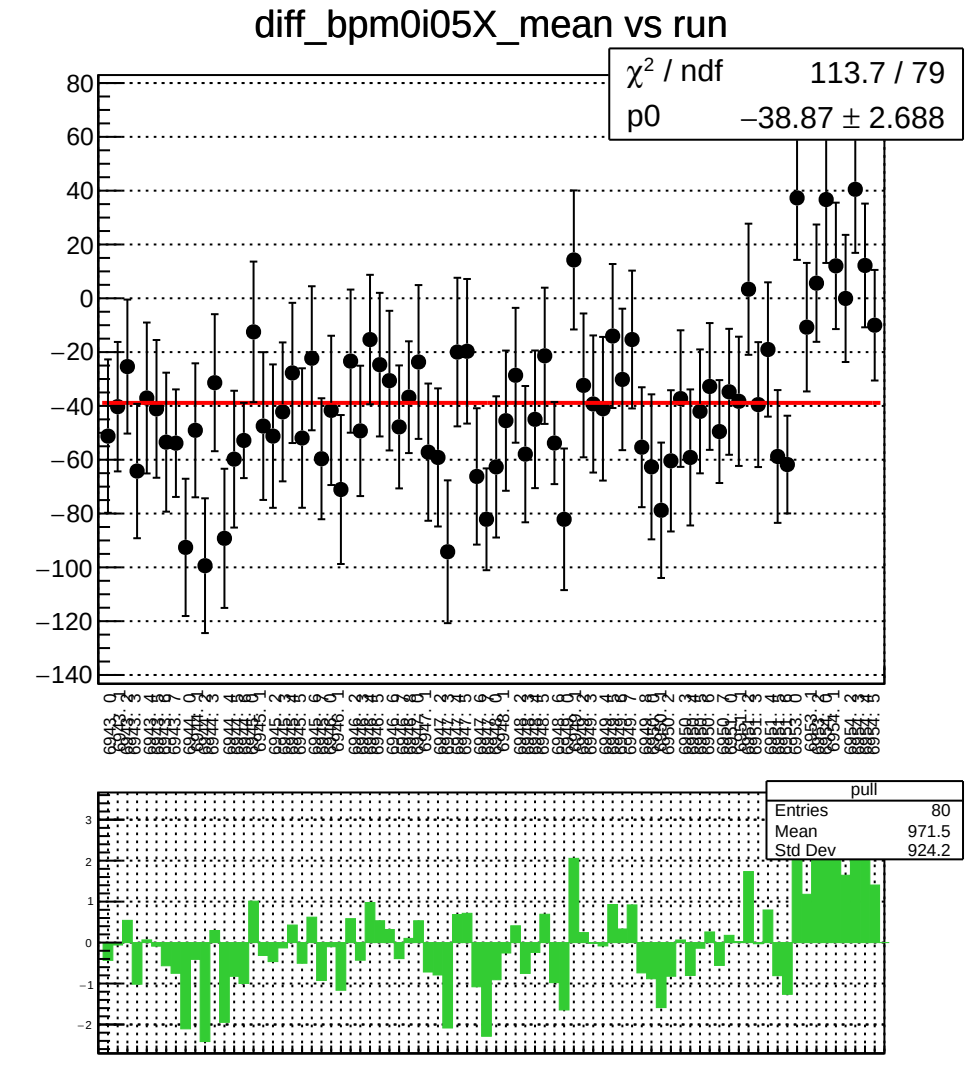

pull1D
Entries 80
Mean 0.03711
Std Dev 1.631

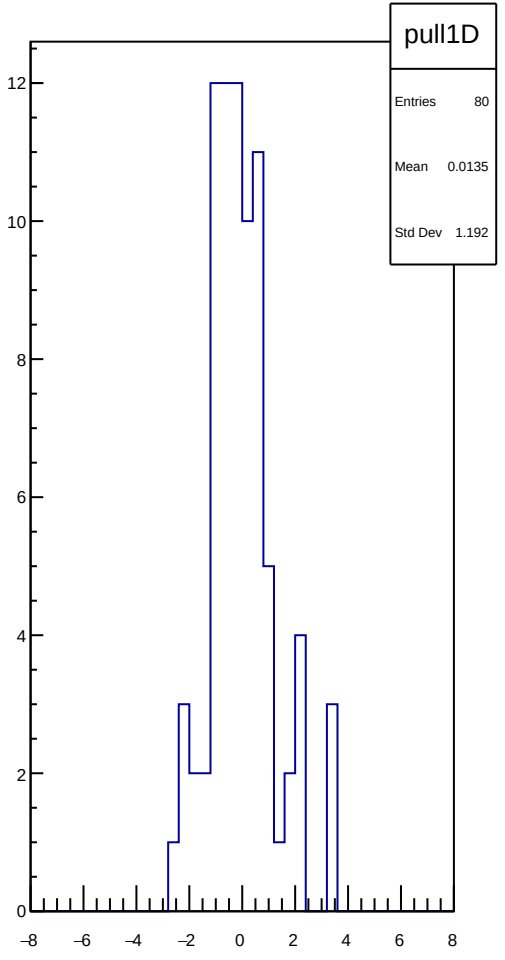

diff_bpm0i02aX_rms vs run
χ² / ndf 3993 / 79
p0 1905 ± 1.51
2050
2000
1950
1900
1850
1800
1750
1700

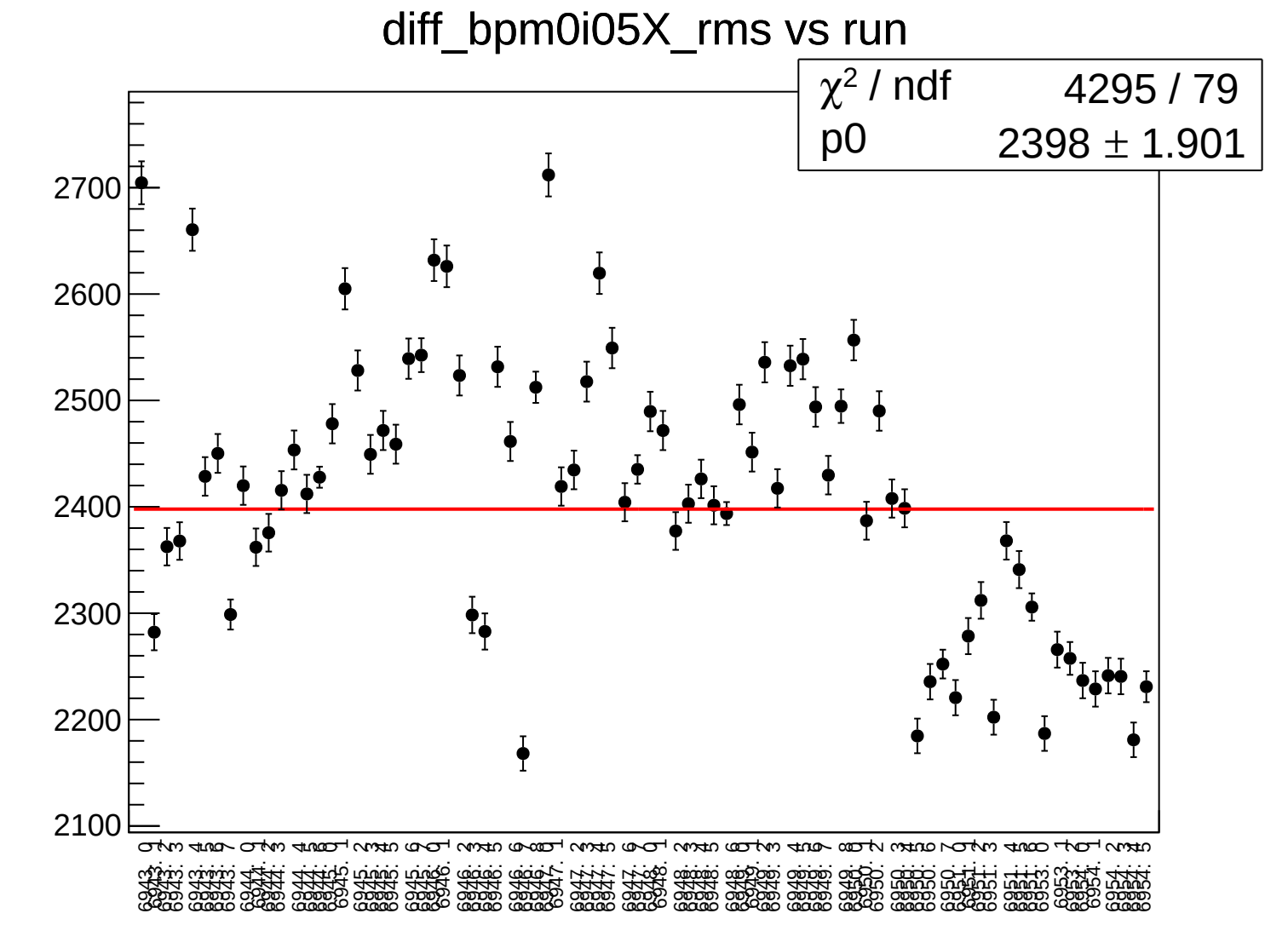

diff_bpm0i02aY_mean vs run
χ² / ndf 115.8 / 79
p0 14.91 ± 1.821
pull
Entries 80
Mean −401.9
Std Dev 450

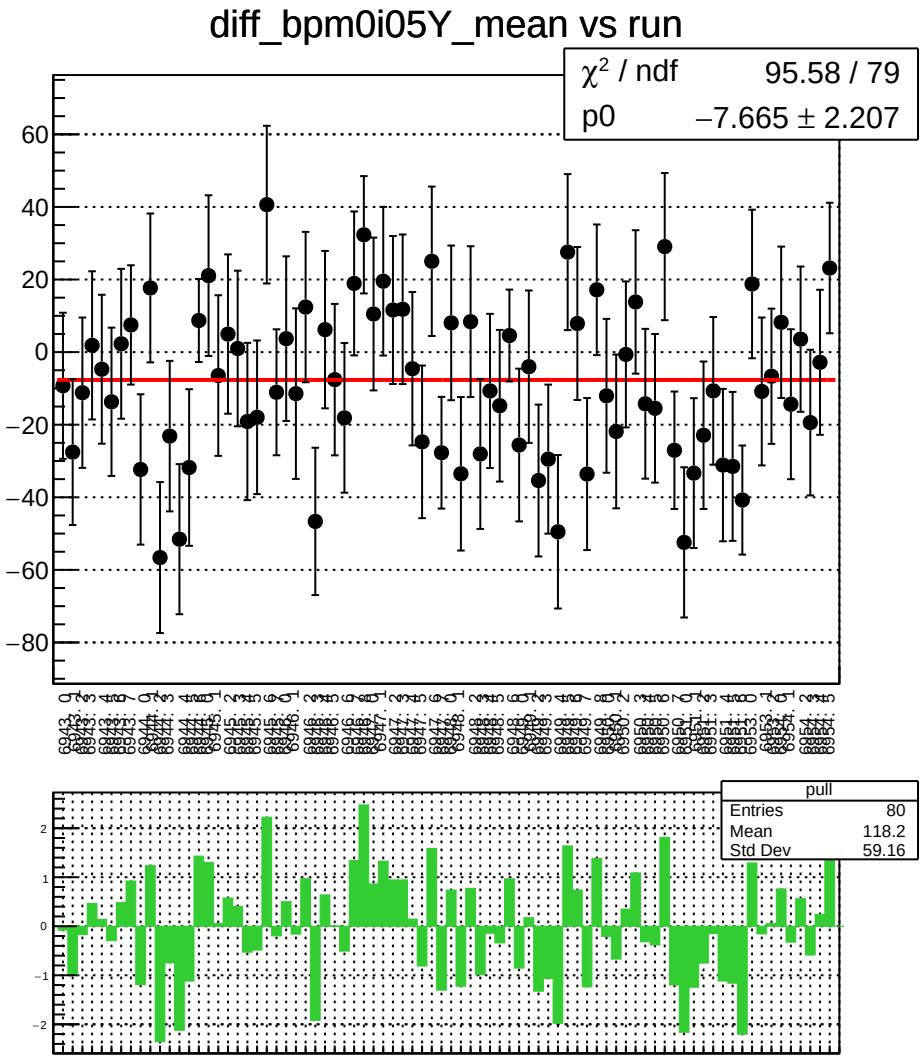

pull1D
Entries 80
Mean −0.02243
Std Dev 1.203

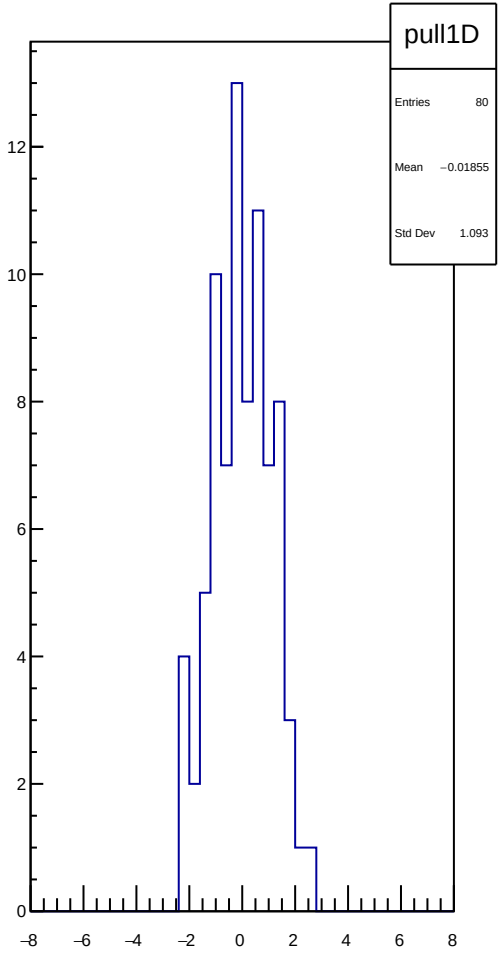

diff_bpm0i02aY_rms vs run
χ² / ndf 1.283e+04 / 79
p0 1620 ± 1.287
1800
1700
1600
1500
1400

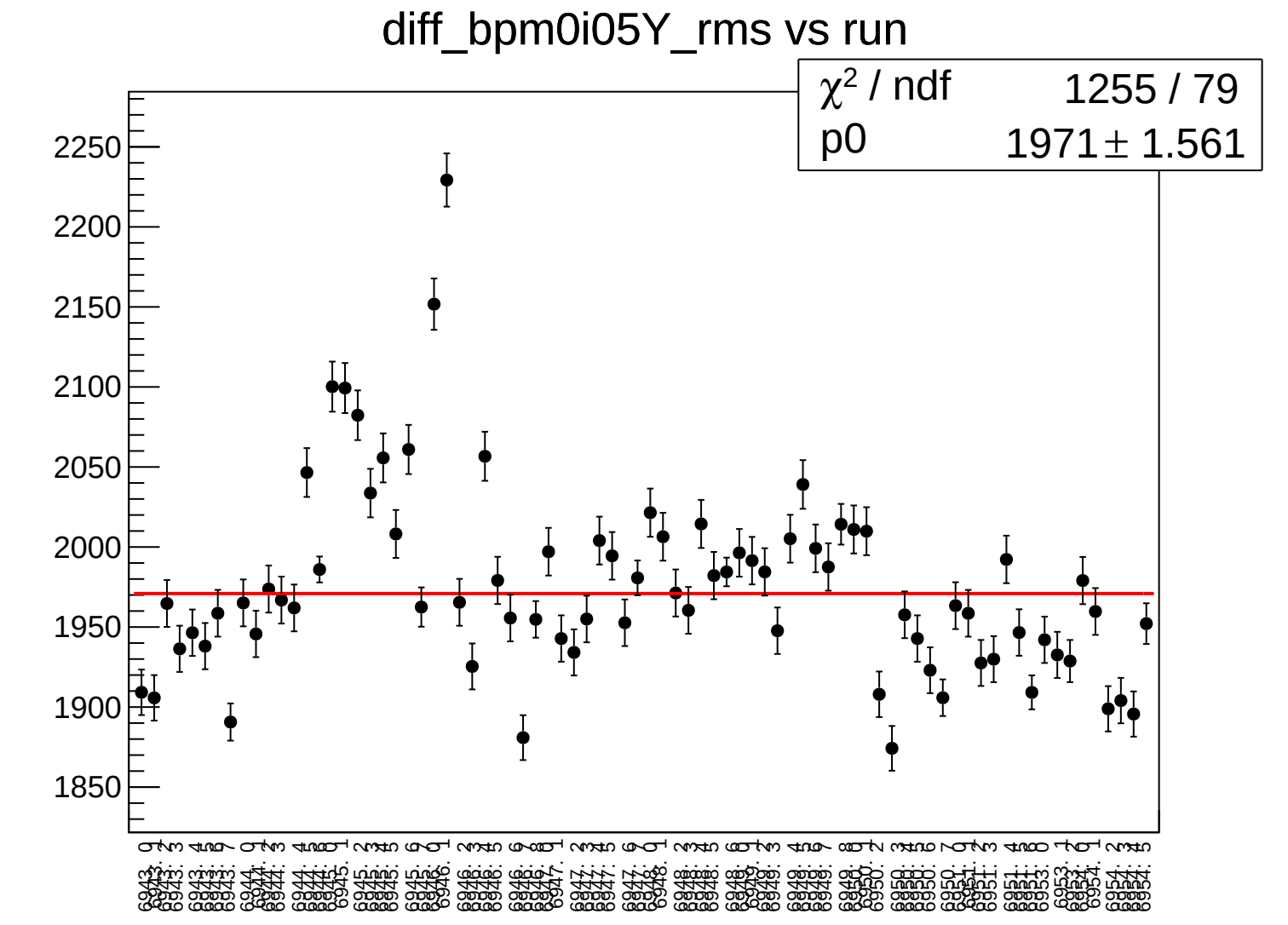

diff_bpm0i05X_mean vs run
χ² / ndf 113.7 / 79
p0 −38.87 ± 2.688
pull
Entries 80
Mean 971.5
Std Dev 924.2

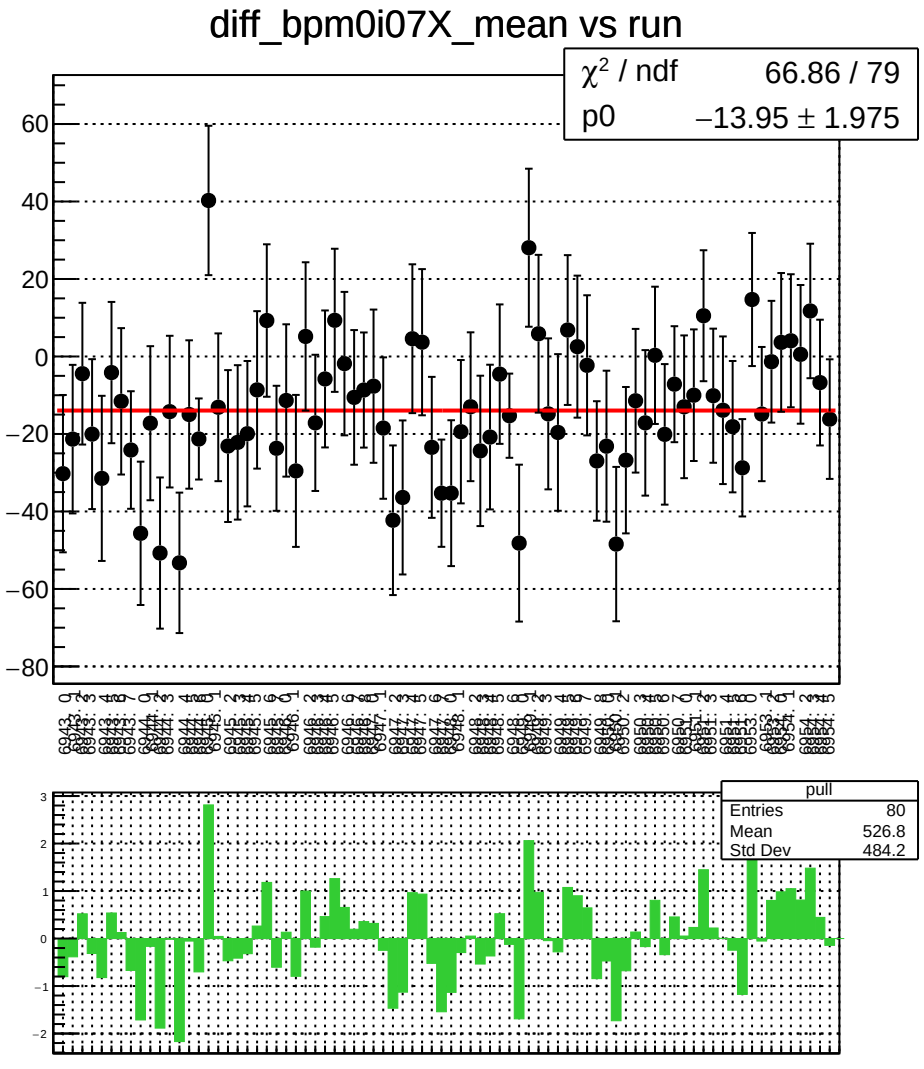

pull1D
Entries 80
Mean 0.0135
Std Dev 1.192

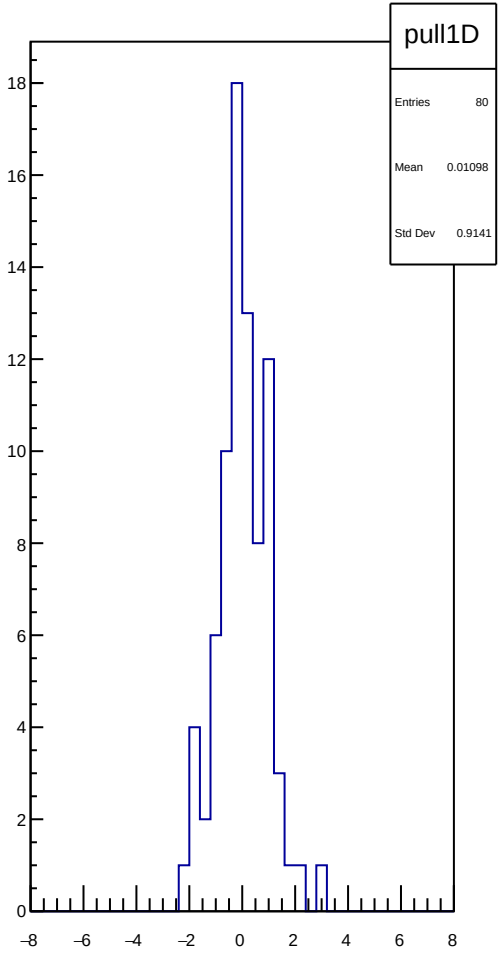

diff_bpm0i05X_rms vs run
χ² / ndf 4295 / 79
p0 2398 ± 1.901
2700
2600
2500
2400
2300
2200
2100

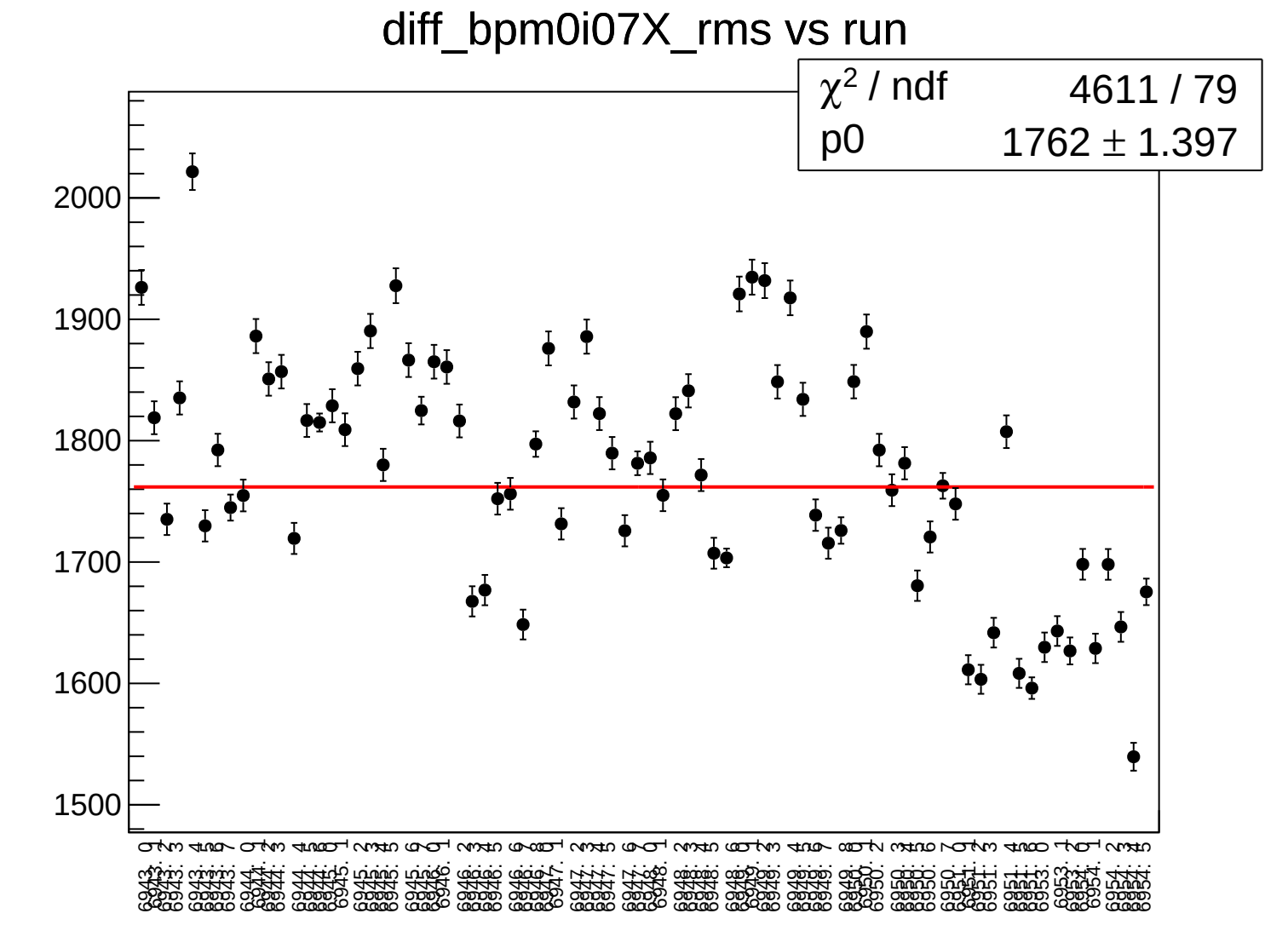

diff_bpm0i05Y_mean vs run
χ² / ndf 95.58 / 79
p0 −7.665 ± 2.207
pull
Entries 80
Mean 118.2
Std Dev 59.16

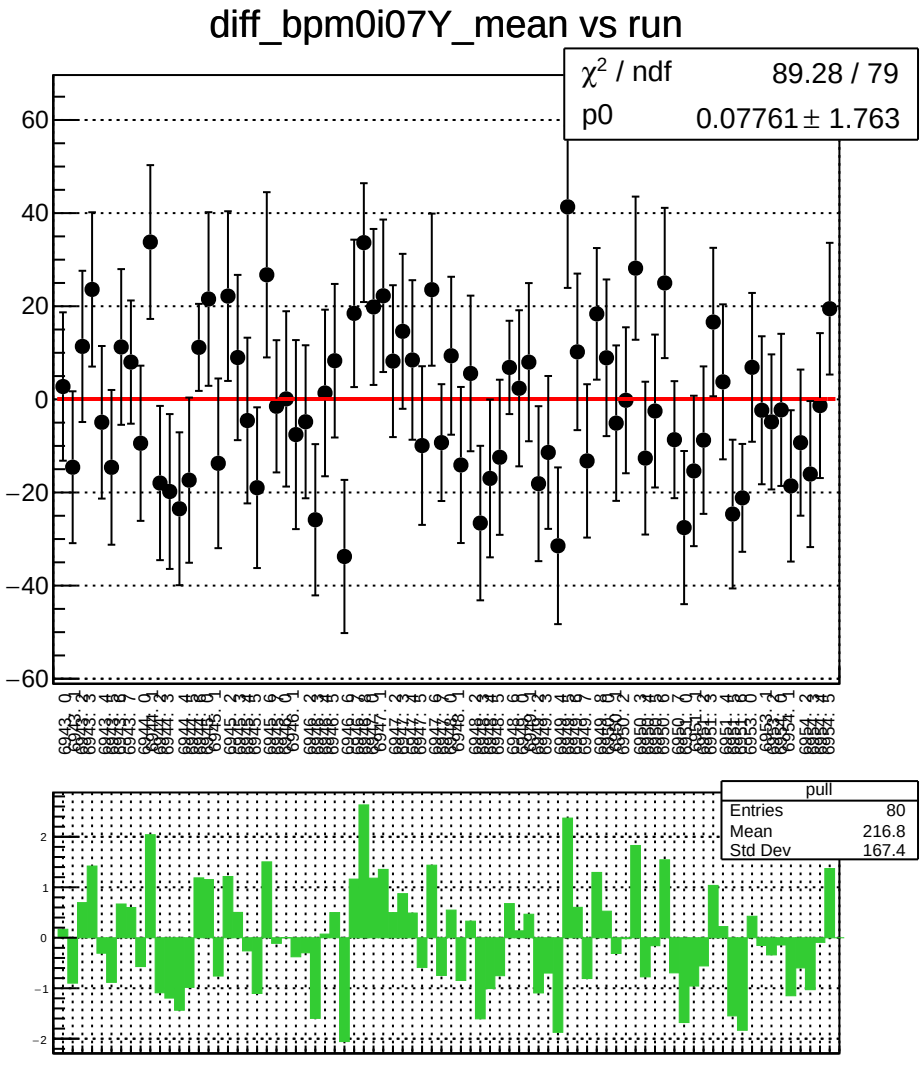

pull1D
Entries 80
Mean −0.01855
Std Dev 1.093

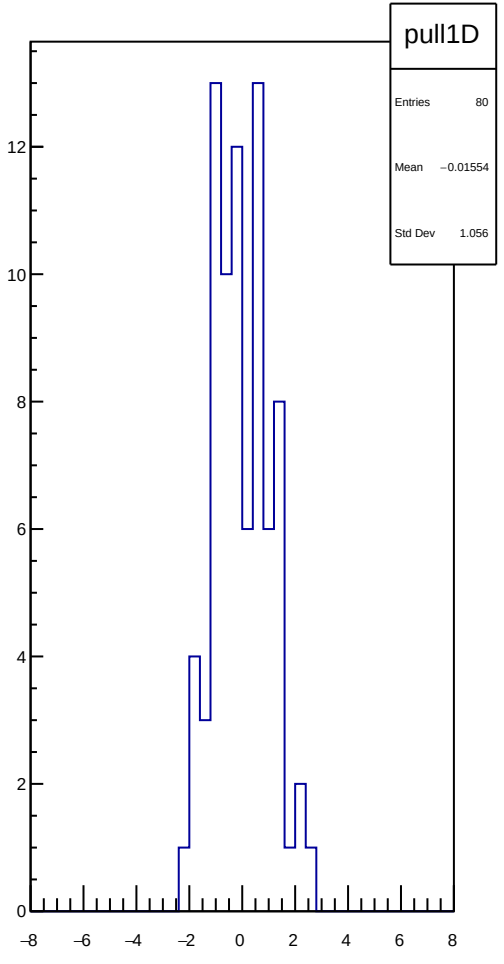

diff_bpm0i05Y_rms vs run
χ² / ndf 1255 / 79
p0 1971 ± 1.561
2250
2200
2150
2100
2050
2000
1950
1900
1850

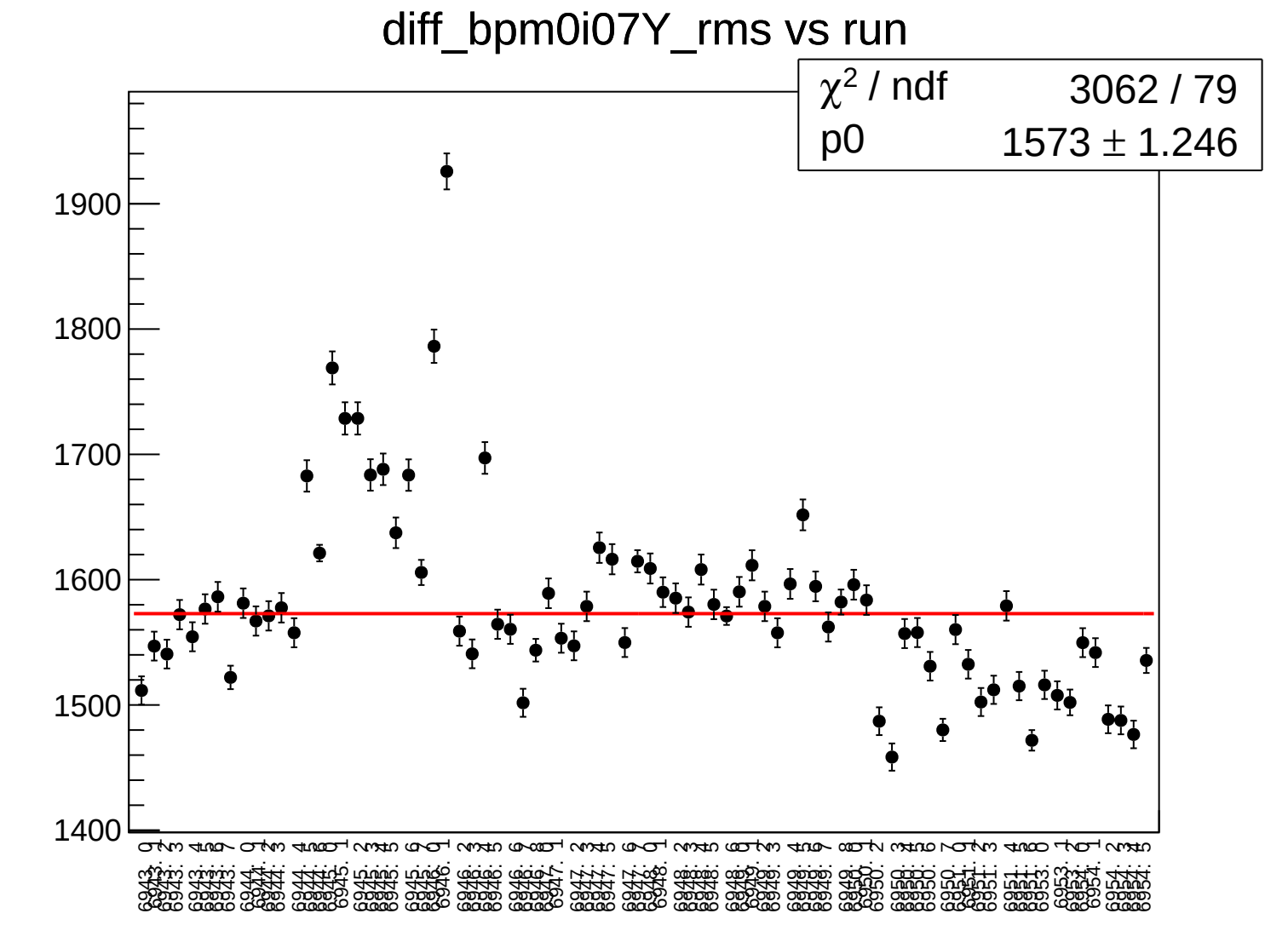

diff_bpm0i07X_mean vs run
χ² / ndf 66.86 / 79
p0 −13.95 ± 1.975
pull
Entries 80
Mean 526.8
Std Dev 484.2

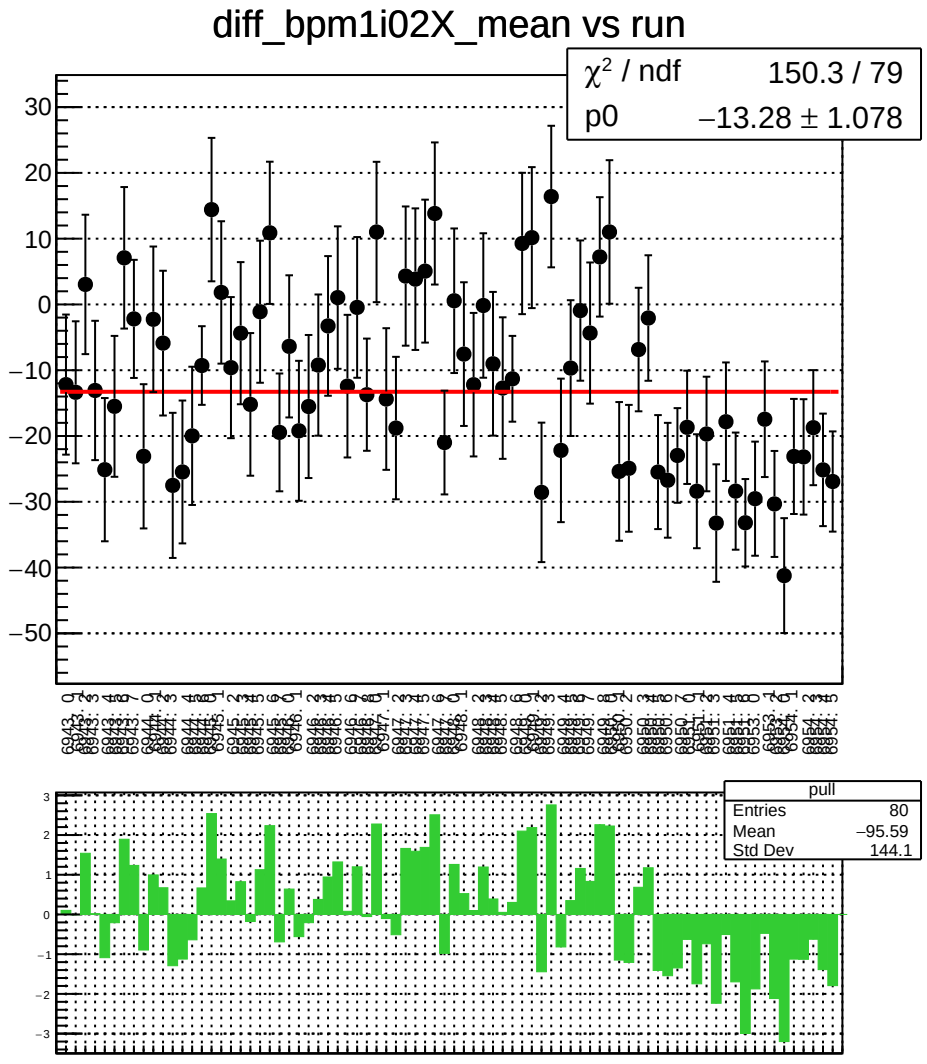

pull1D
Entries 80
Mean 0.01098
Std Dev 0.9141

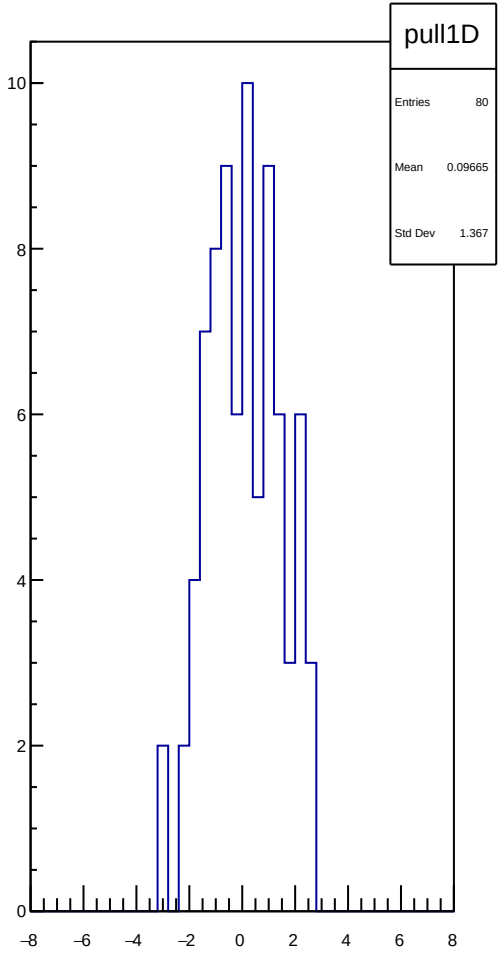

diff_bpm0i07X_rms vs run
χ² / ndf 4611 / 79
p0 1762 ± 1.397
2000
1900
1800
1700
1600
1500

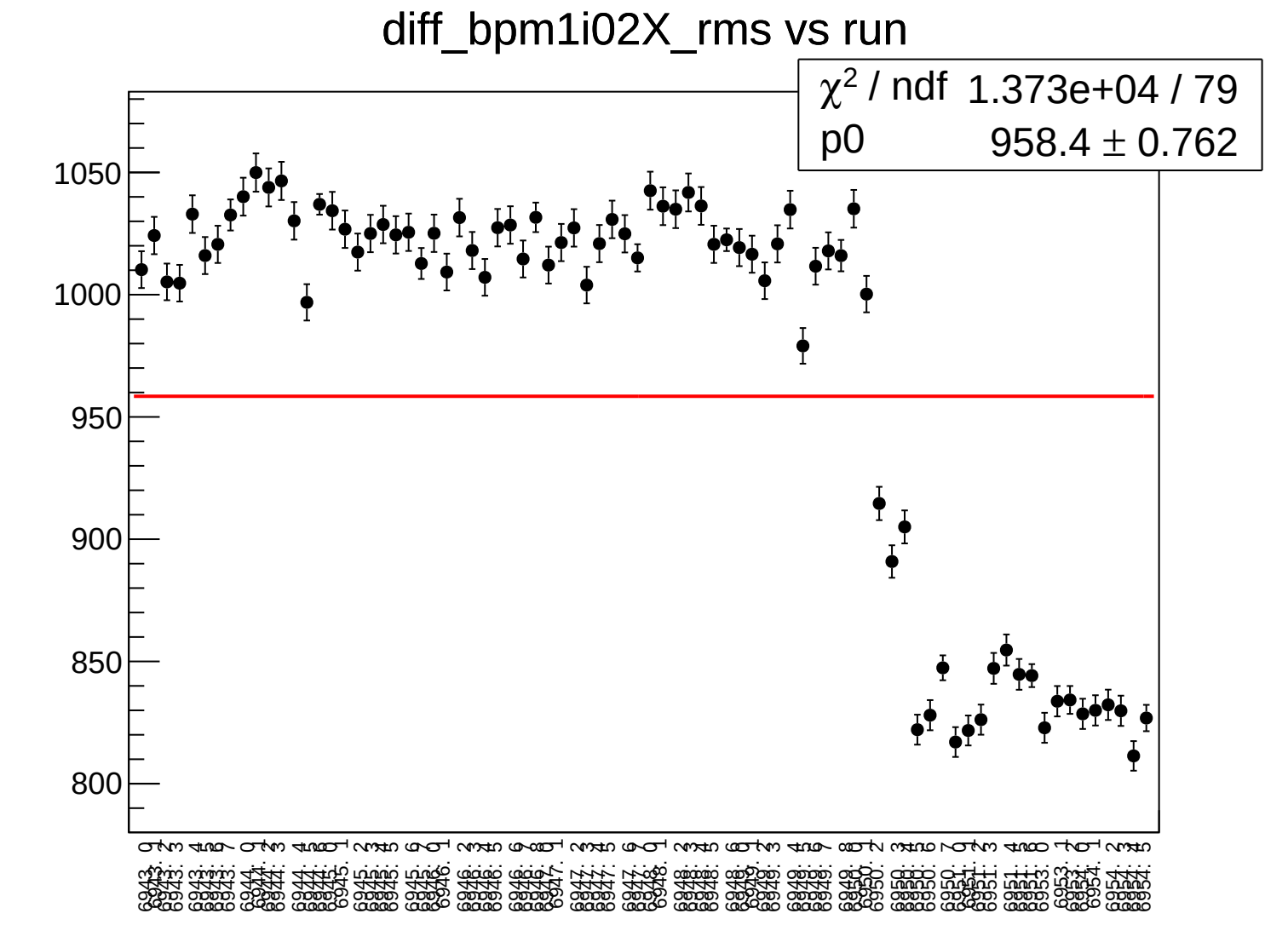

diff_bpm0i07Y_mean vs run
χ² / ndf 89.28 / 79
p0 0.07761 ± 1.763
pull
Entries 80
Mean 216.8
Std Dev 167.4

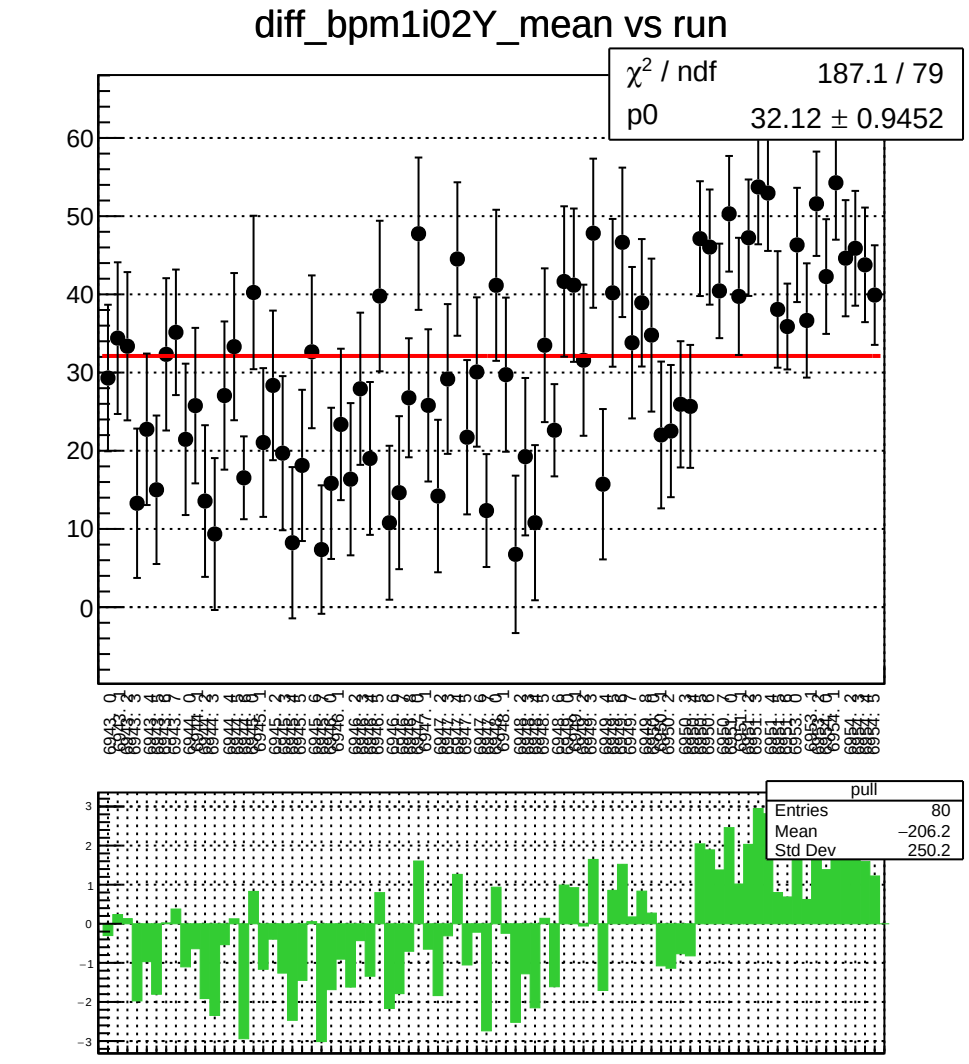

pull1D
Entries 80
Mean −0.01554
Std Dev 1.056

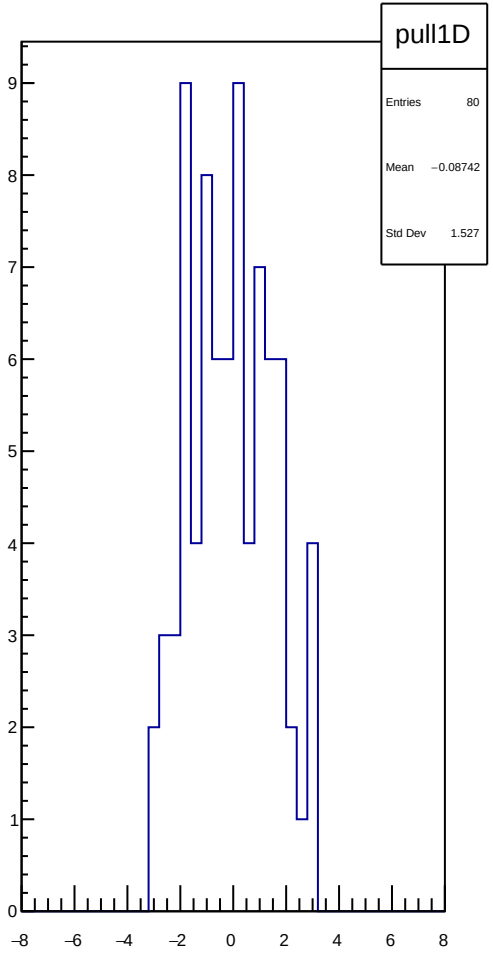

diff_bpm0i07Y_rms vs run
χ² / ndf 3062 / 79
p0 1573 ± 1.246
1900
1800
1700
1600
1500
1400

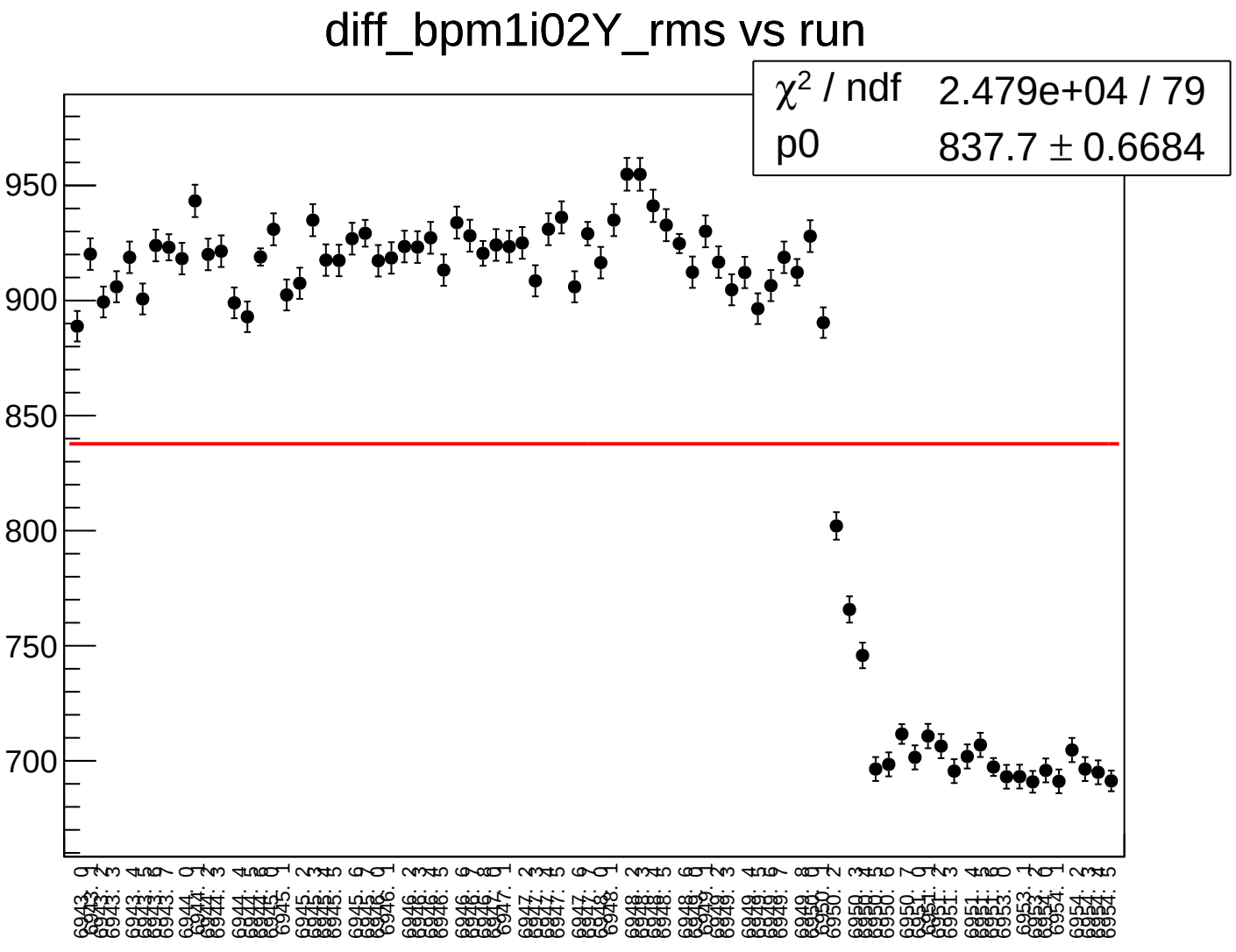

diff_bpm1i02X_mean vs run
χ² / ndf 150.3 / 79
p0 −13.28 ± 1.078
pull
Entries 80
Mean −95.59
Std Dev 144.1

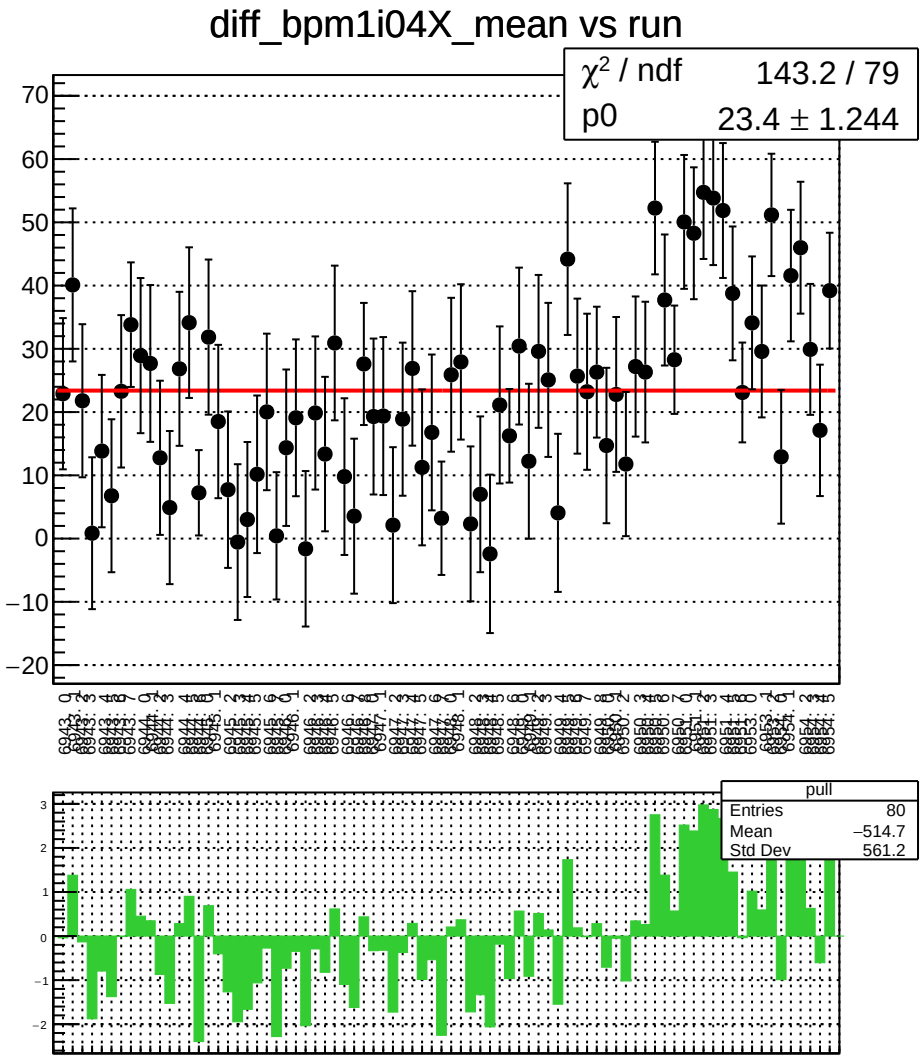

pull1D
Entries 80
Mean 0.09665
Std Dev 1.367

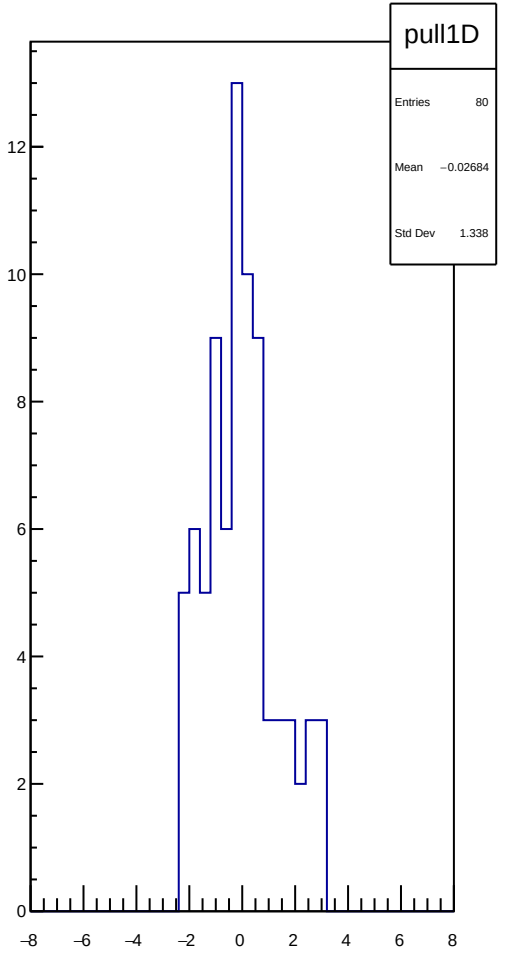

diff_bpm1i02X_rms vs run
χ² / ndf 1.373e+04 / 79
p0 958.4 ± 0.762
1050
1000
950
900
850
800

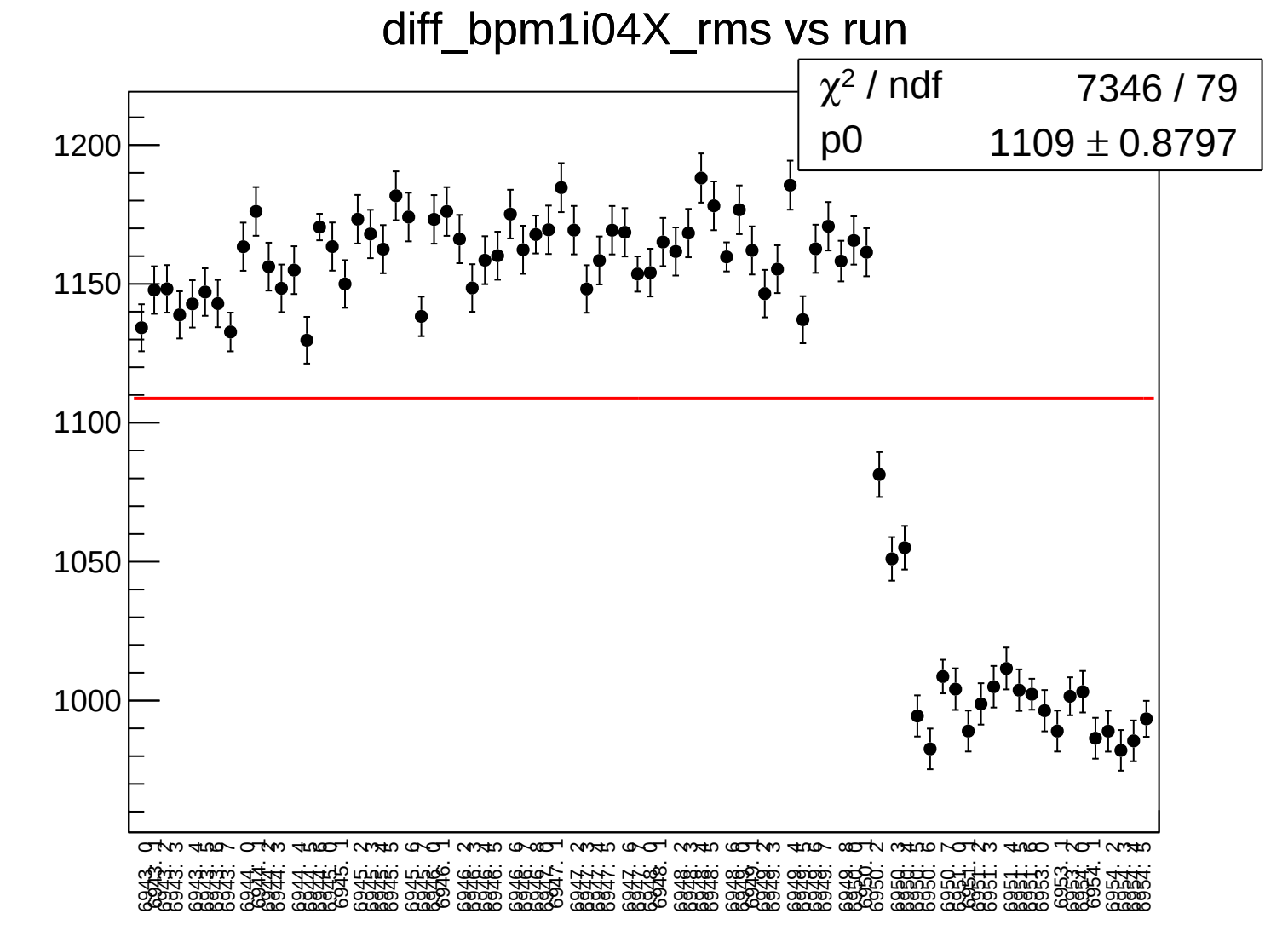

diff_bpm1i02Y_mean vs run
χ² / ndf 187.1 / 79
p0 32.12 ± 0.9452
pull
Entries 80
Mean −206.2
Std Dev 250.2

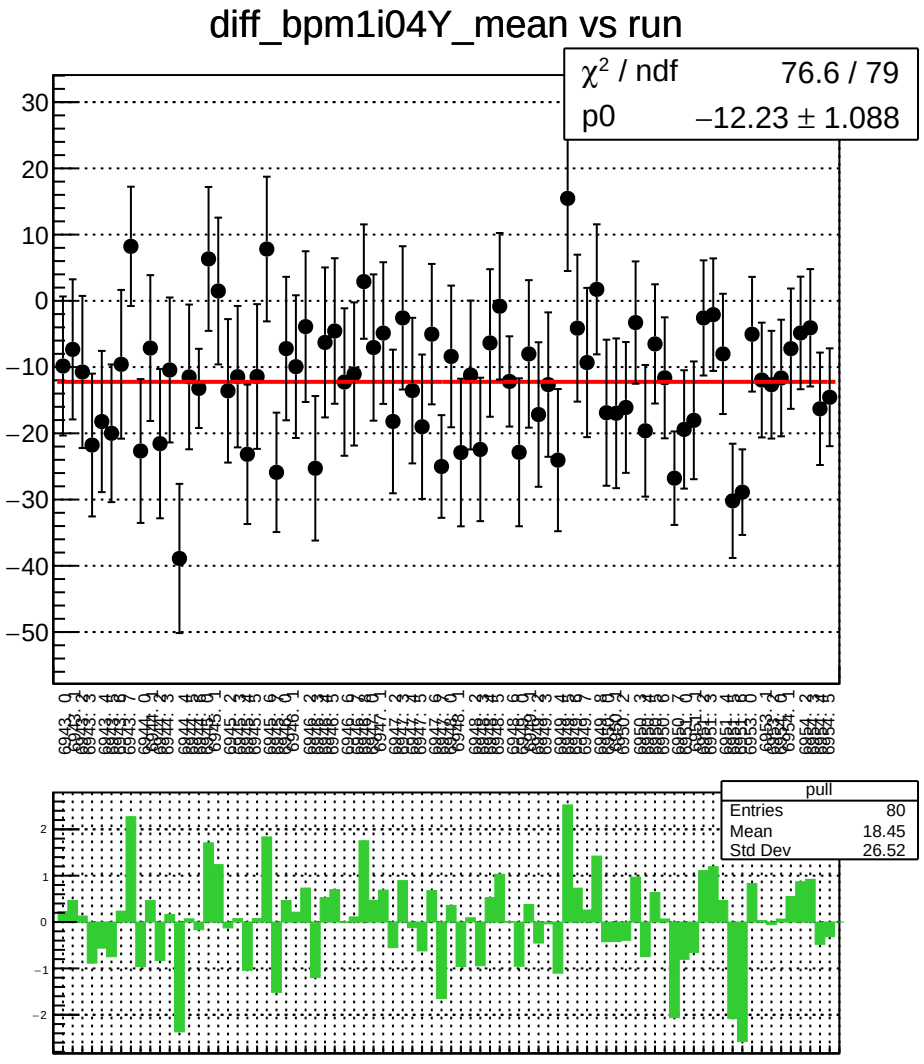

pull1D
Entries 80
Mean −0.08742
Std Dev 1.527

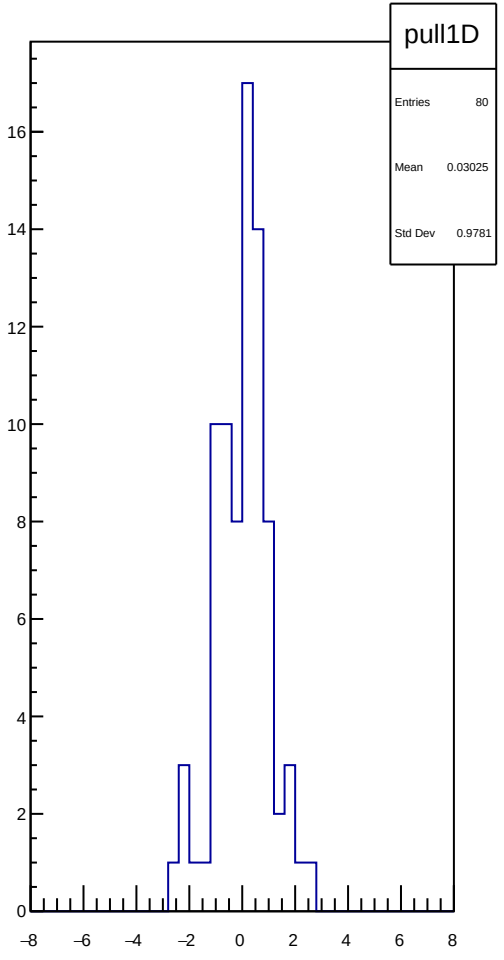

diff_bpm1i02Y_rms vs run
χ² / ndf 2.479e+04 / 79
p0 837.7 ± 0.6684
950
900
850
800
750
700

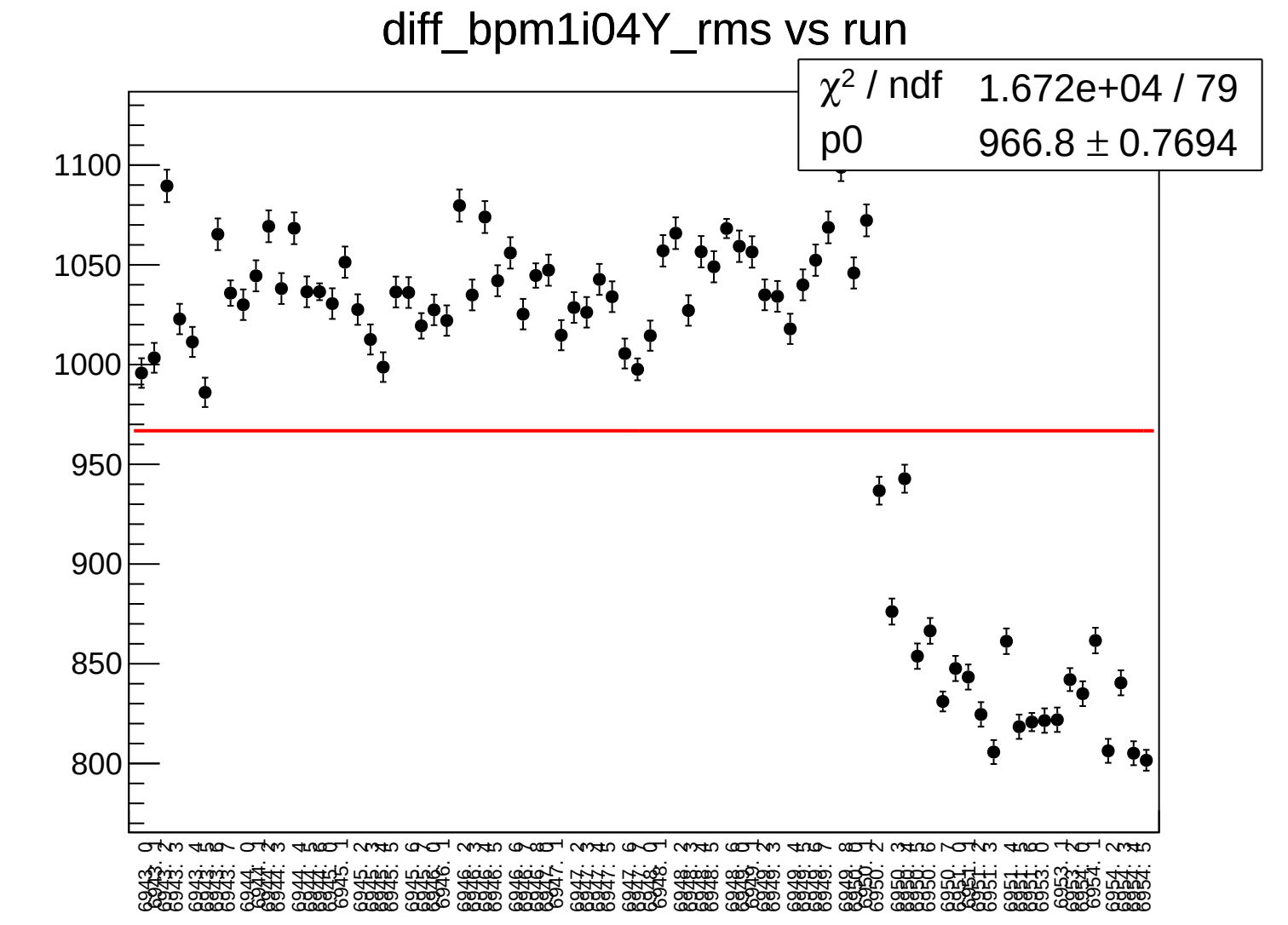

diff_bpm1i04X_mean vs run
χ^2 / ndf 143.2 / 79
p0 23.4 ± 1.244
pull
Entries 80
Mean −514.7
Std Dev 561.2

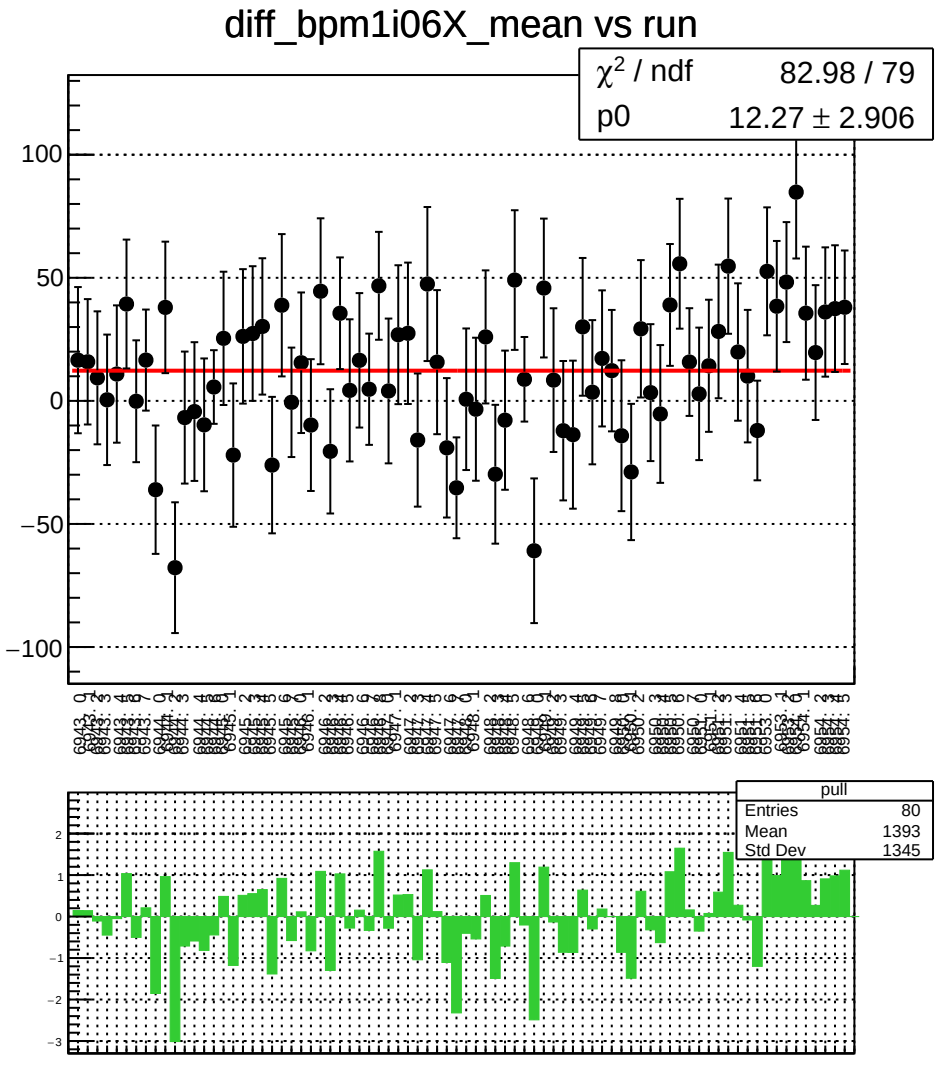

pull1D
Entries 80
Mean −0.02684
Std Dev 1.338

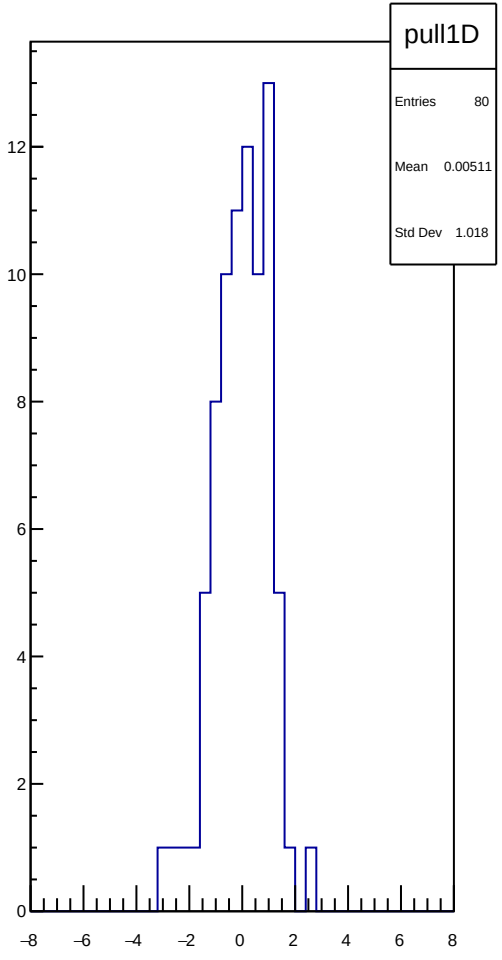

diff_bpm1i04X_rms vs run
χ² / ndf 7346 / 79
p0 1109 ± 0.8797
1200
1150
1100
1050
1000

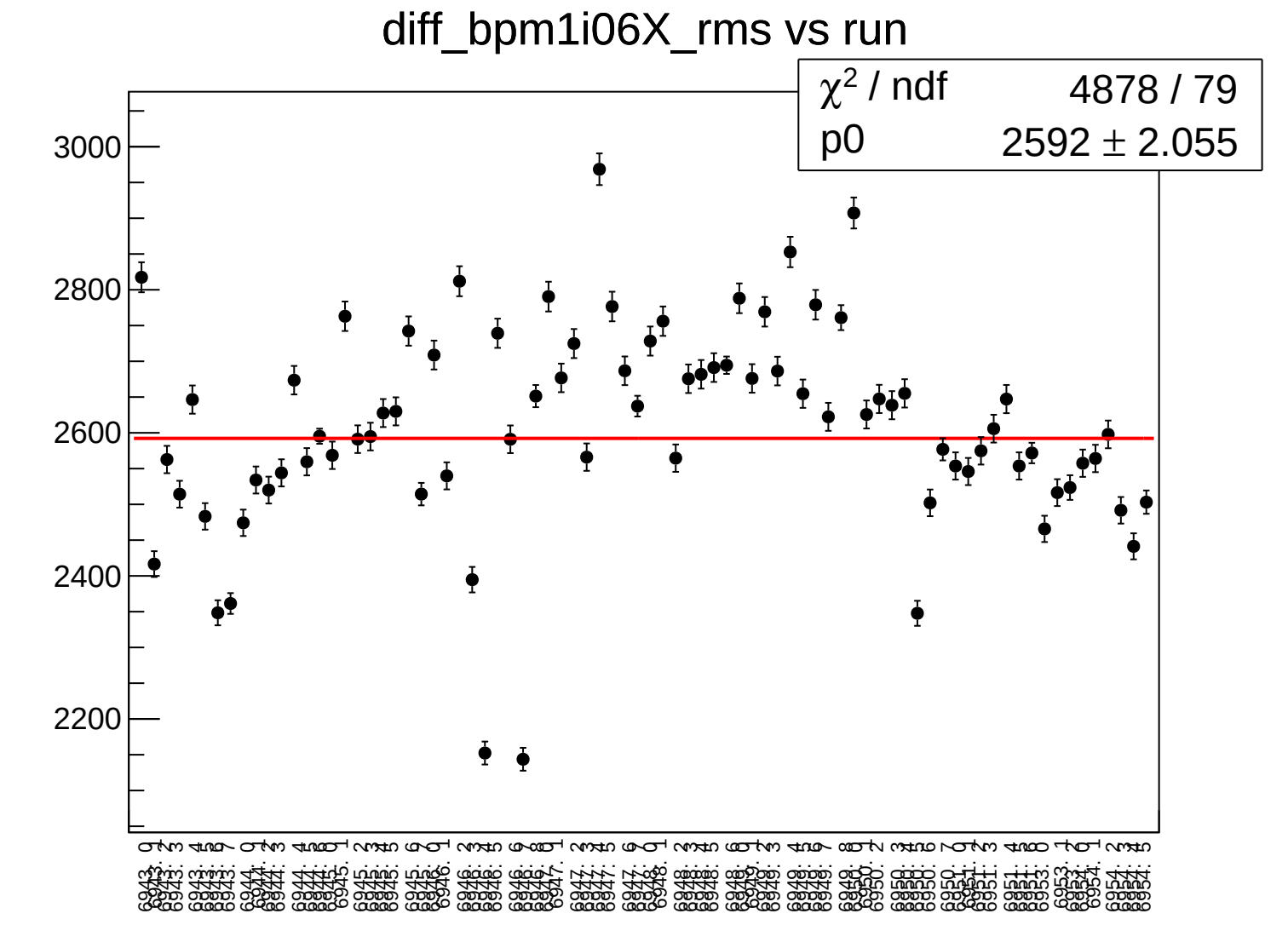

diff_bpm1i04Y_mean vs run
χ² / ndf 76.6 / 79
p0 −12.23 ± 1.088
pull
Entries 80
Mean 18.45
Std Dev 26.52

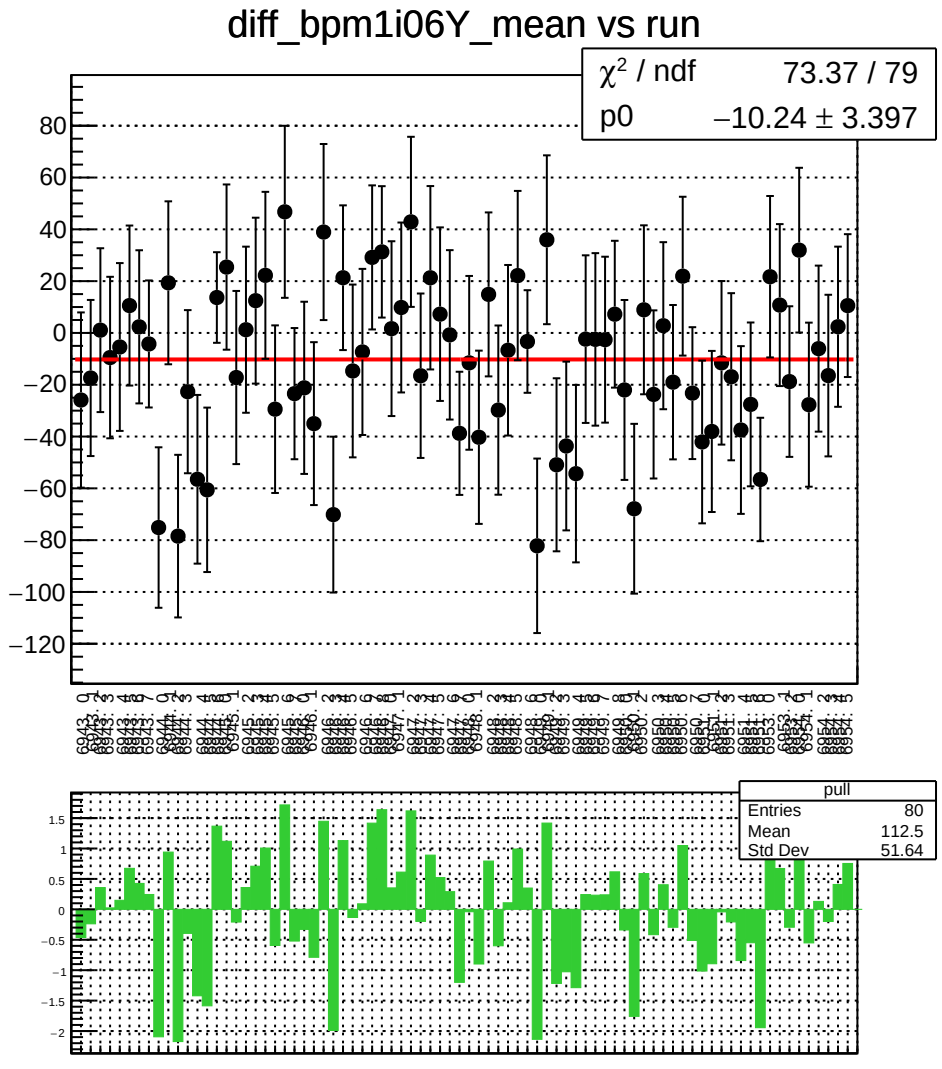

pull1D
Entries 80
Mean 0.03025
Std Dev 0.9781

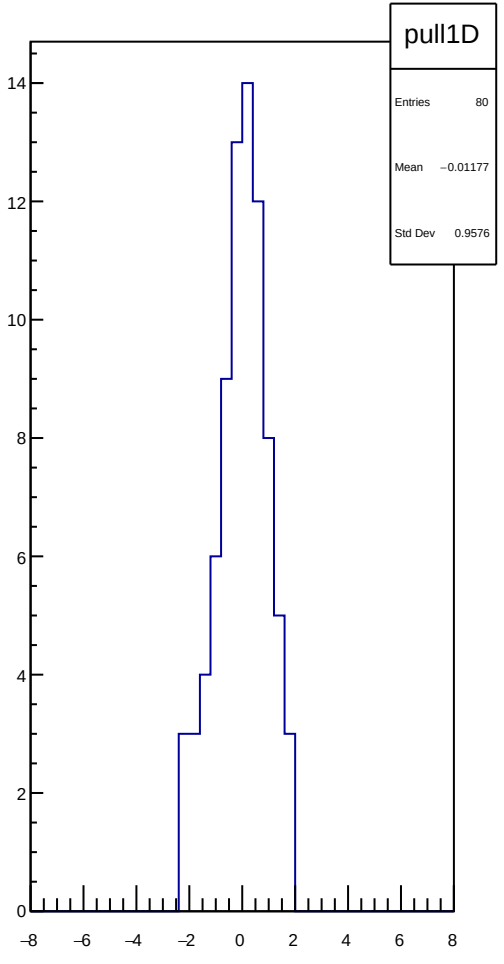

diff_bpm1i04Y_rms vs run
χ² / ndf 1.672e+04 / 79
p0 966.8 ± 0.7694
1100
1050
1000
950
900
850
800

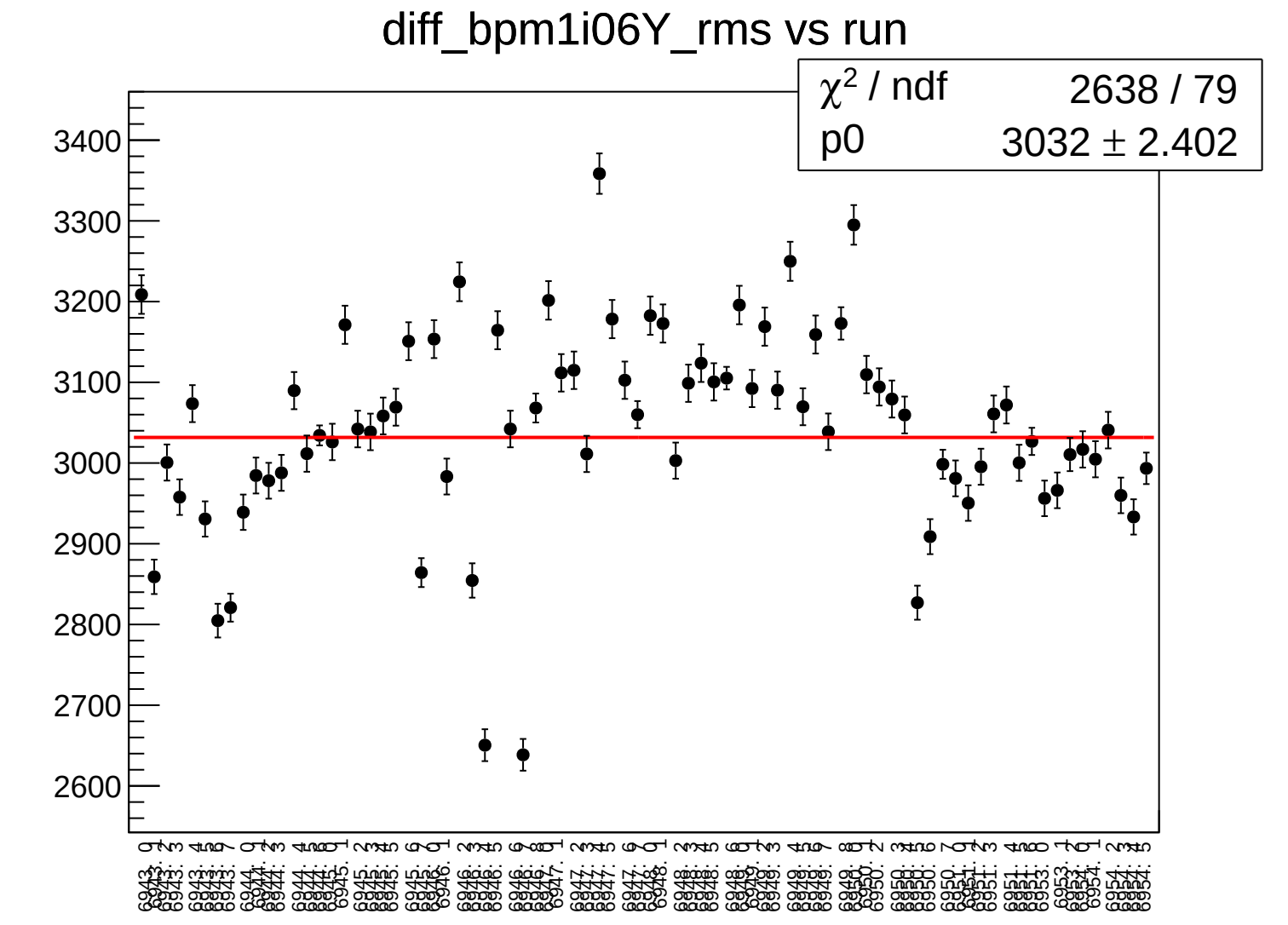

diff_bpm1i06X_mean vs run
χ^2 / ndf 82.98 / 79
p0 12.27 ± 2.906
100
50
0
−50
−100
pull
Entries 80
Mean 1393
Std Dev 1345
2
1
0
−1
−2
−3

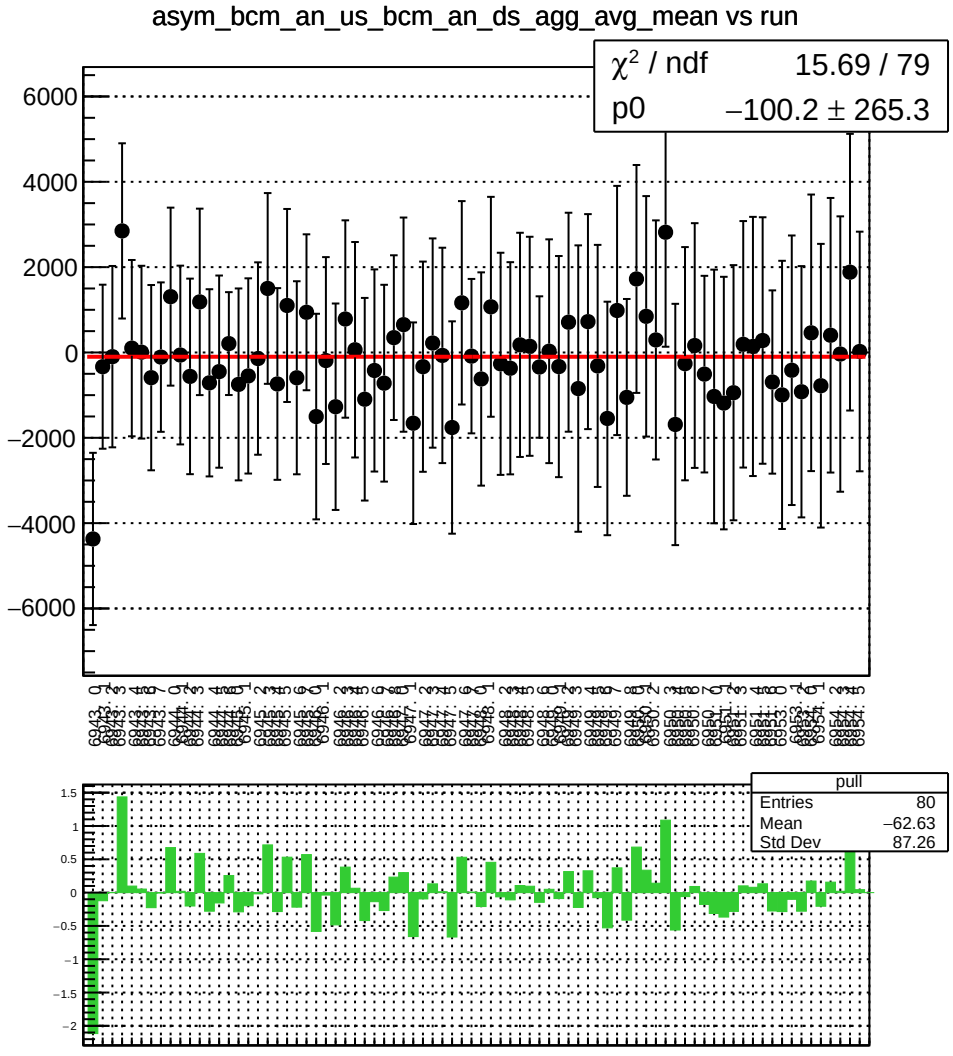

pull1D
Entries 80
Mean 0.00511
Std Dev 1.018
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

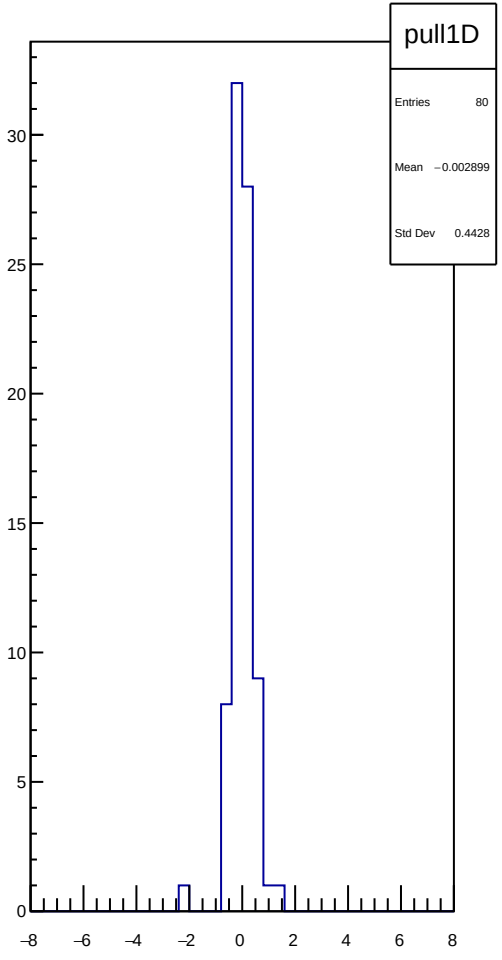

diff_bpm1i06X_rms vs run
χ² / ndf 4878 / 79
p0 2592 ± 2.055
3000
2800
2600
2400
2200

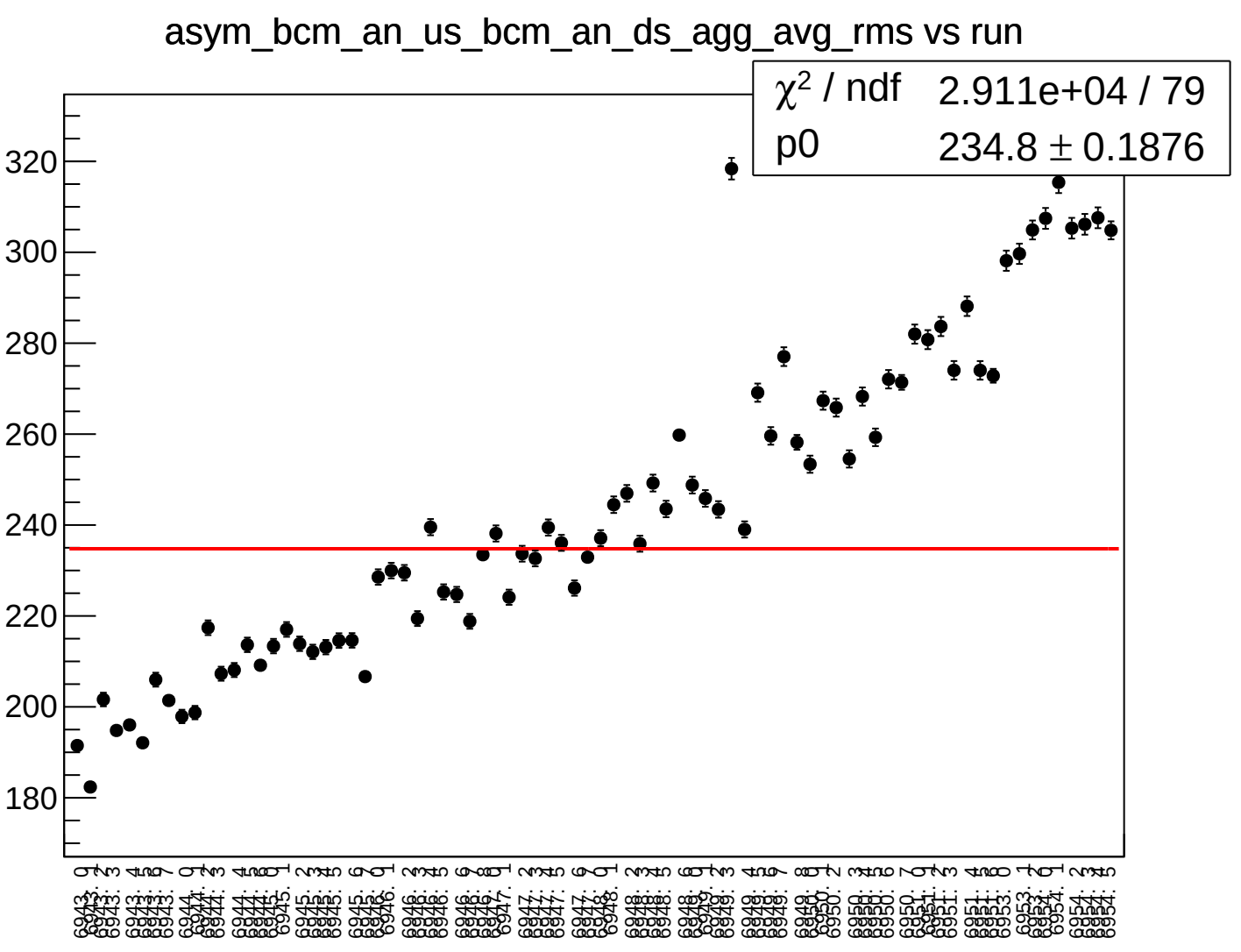

diff_bpm1i06Y_mean vs run
χ² / ndf 73.37 / 79
p0 −10.24 ± 3.397
pull
Entries 80
Mean 112.5
Std Dev 51.64

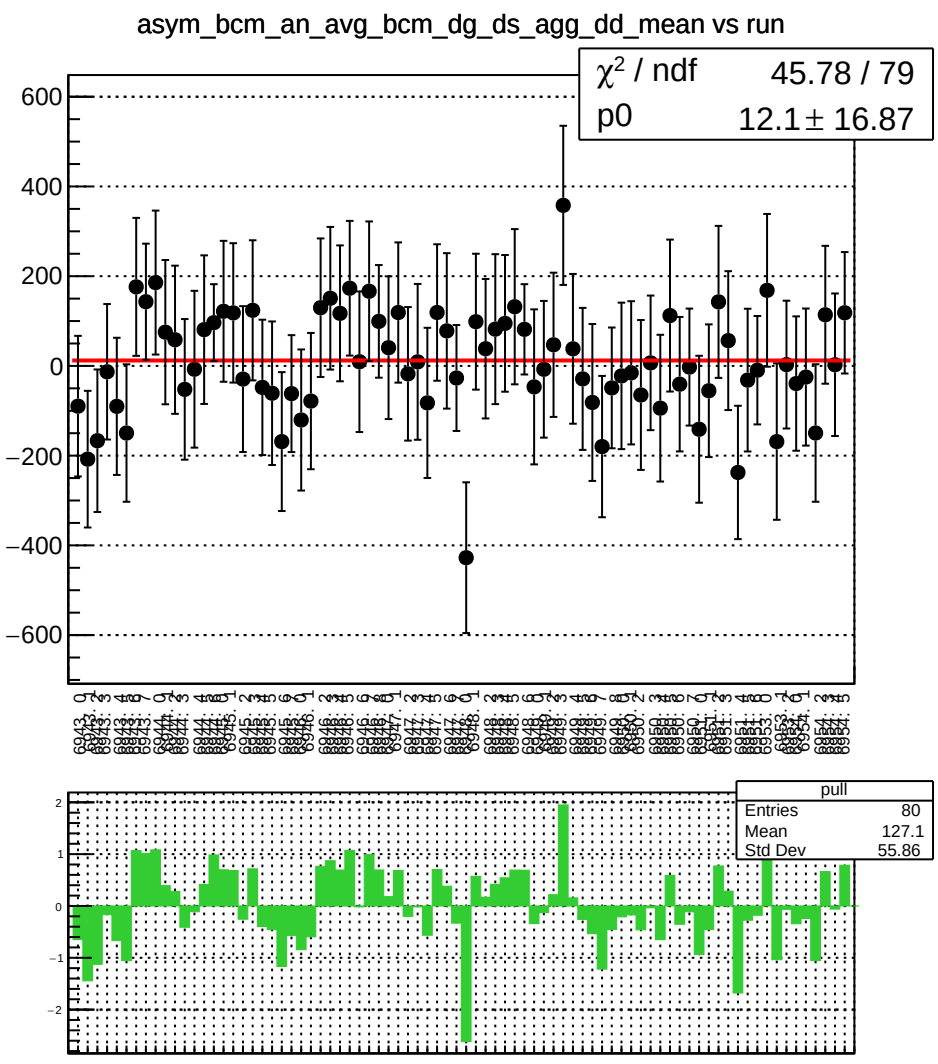

pull1D
Entries 80
Mean −0.01177
Std Dev 0.9576

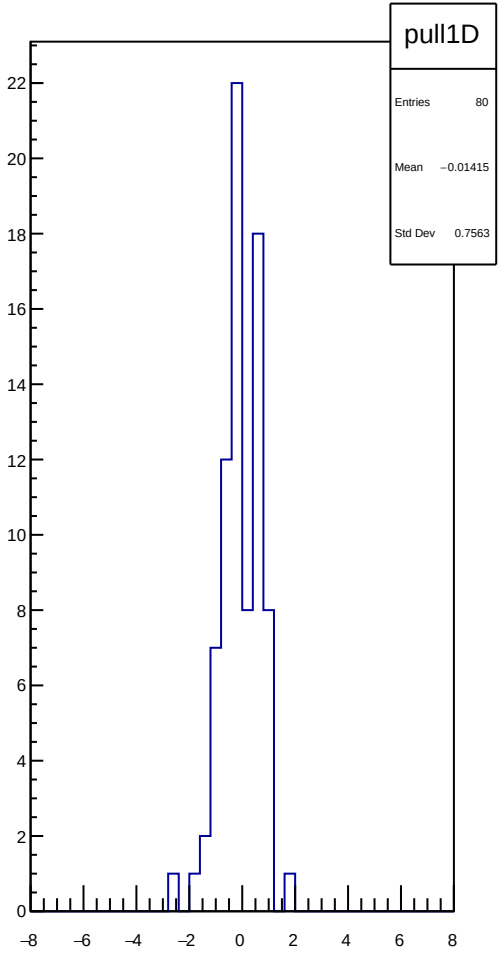

diff_bpm1i06Y_rms vs run
χ² / ndf 2638 / 79
p0 3032 ± 2.402
3400
3300
3200
3100
3000
2900
2800
2700
2600

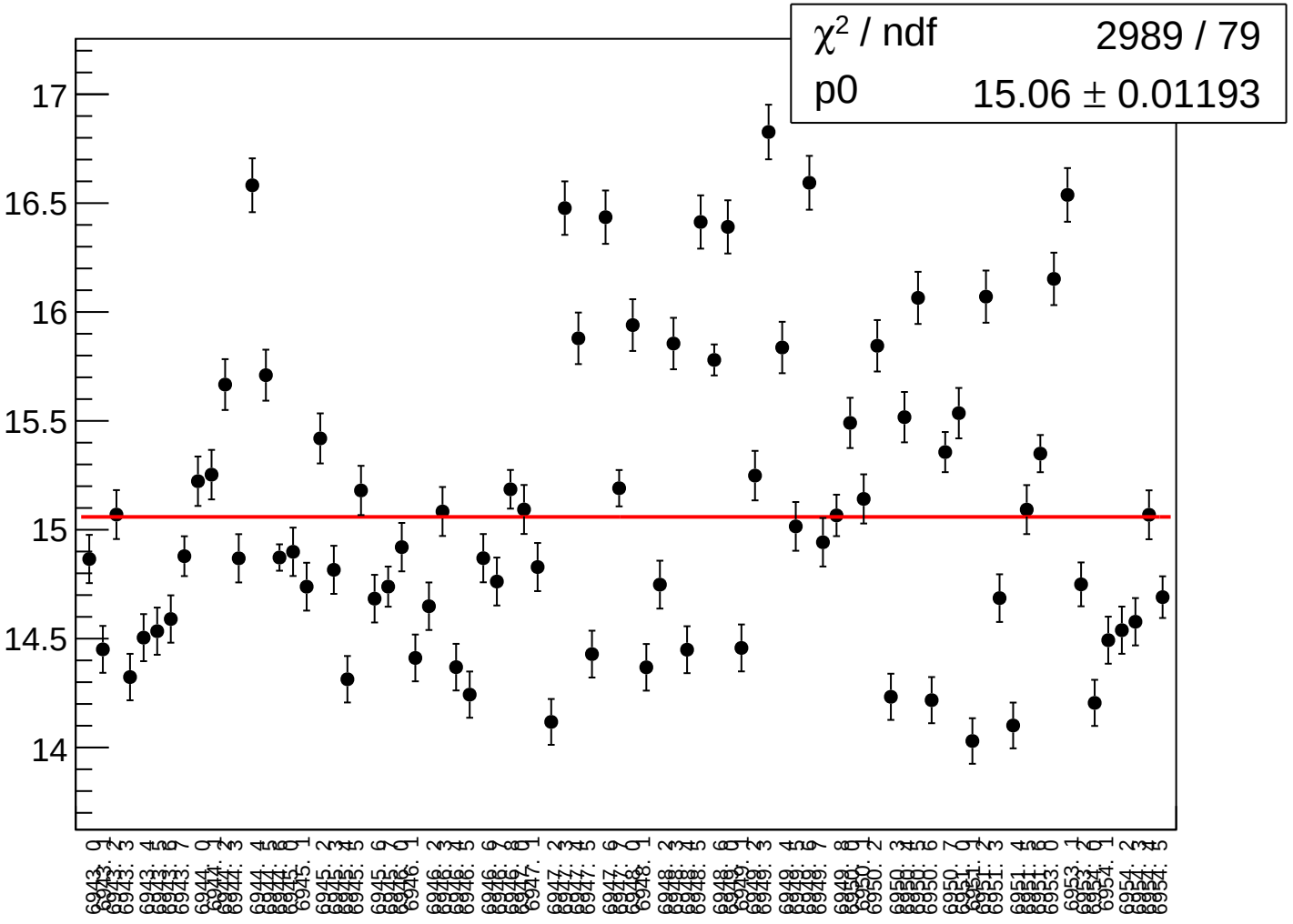

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.69 / 79
p0 −100.2 ± 265.3
pull
Entries 80
Mean −62.63
Std Dev 87.26

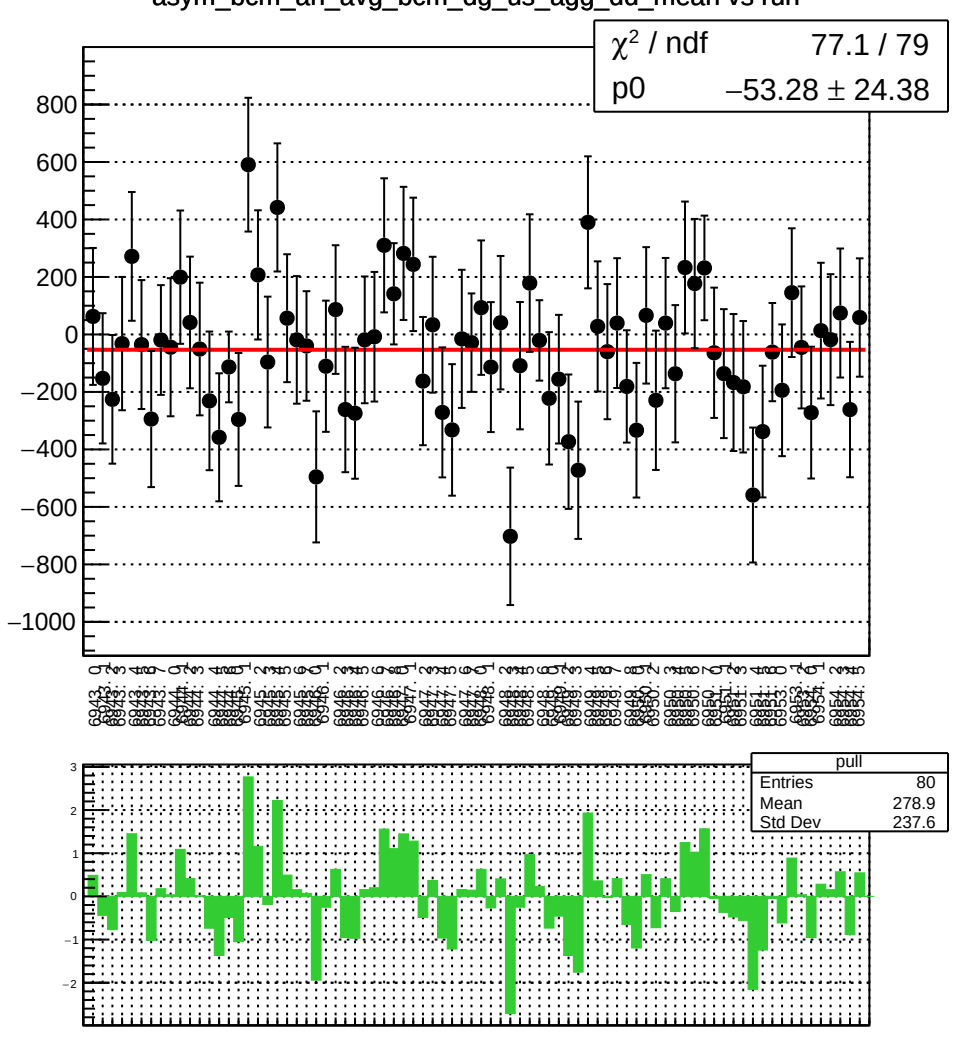

pull1D
Entries 80
Mean −0.002899
Std Dev 0.4428

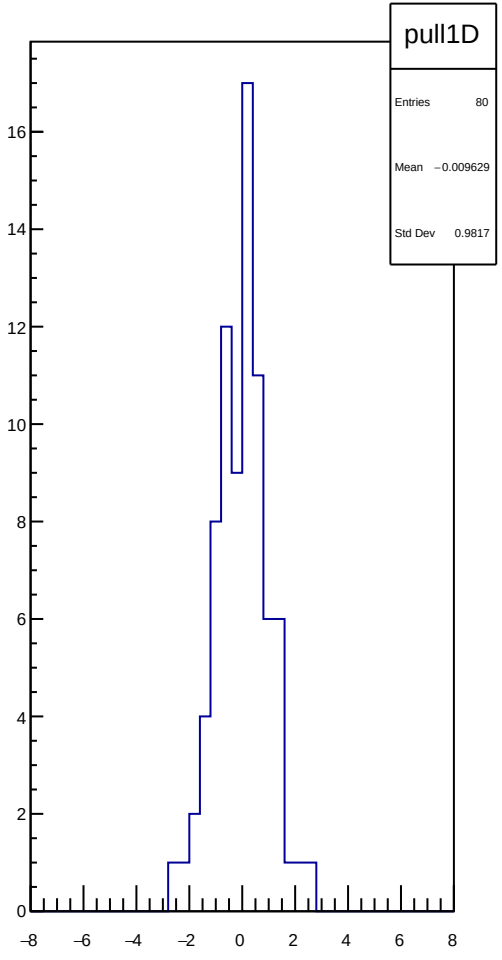

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.911e+04 / 79
p0 234.8 ± 0.1876
320
300
280
260
240
220
200
180

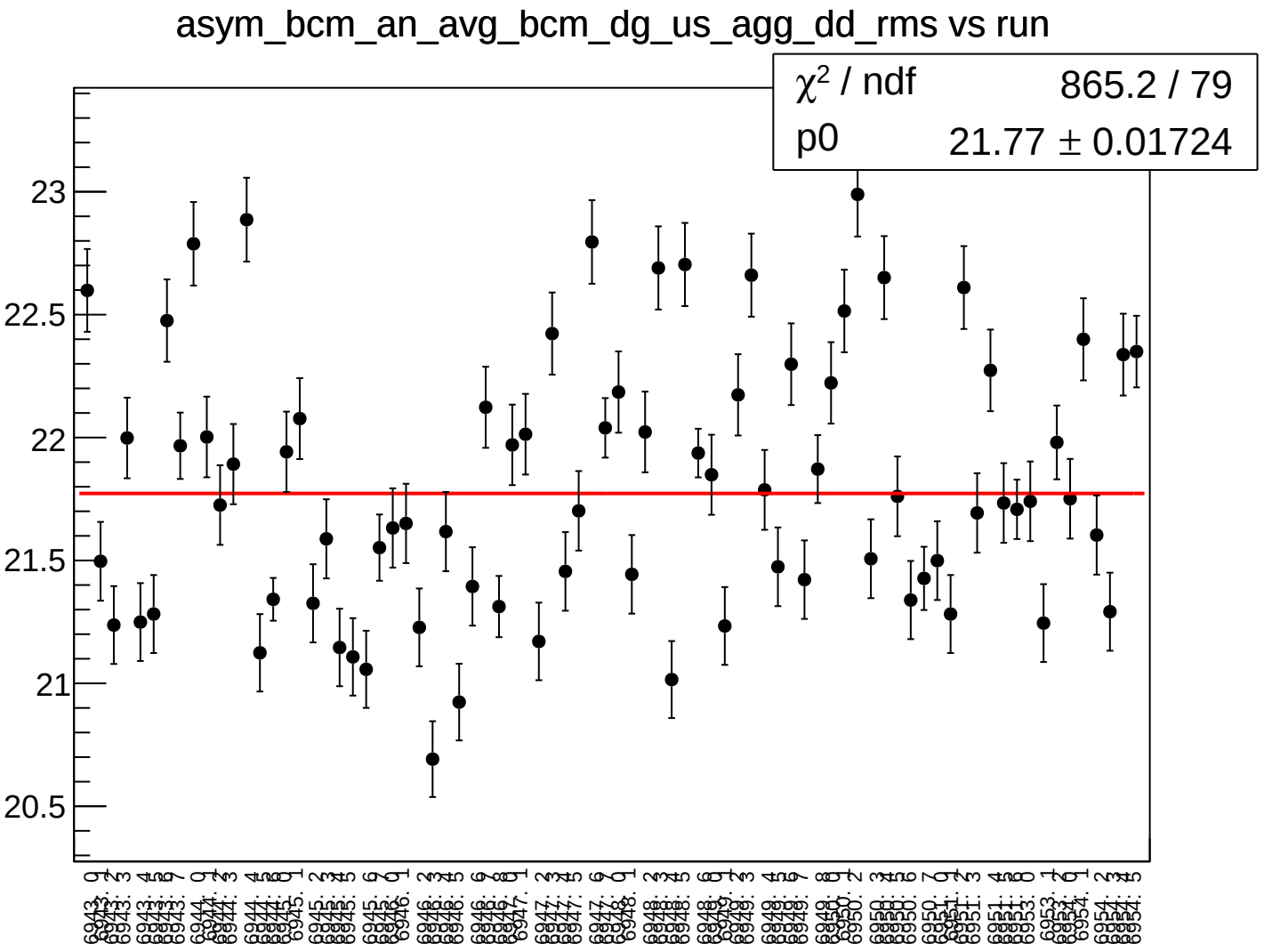

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 45.78 / 79
p0 12.1 ± 16.87
pull
Entries 80
Mean 127.1
Std Dev 55.86

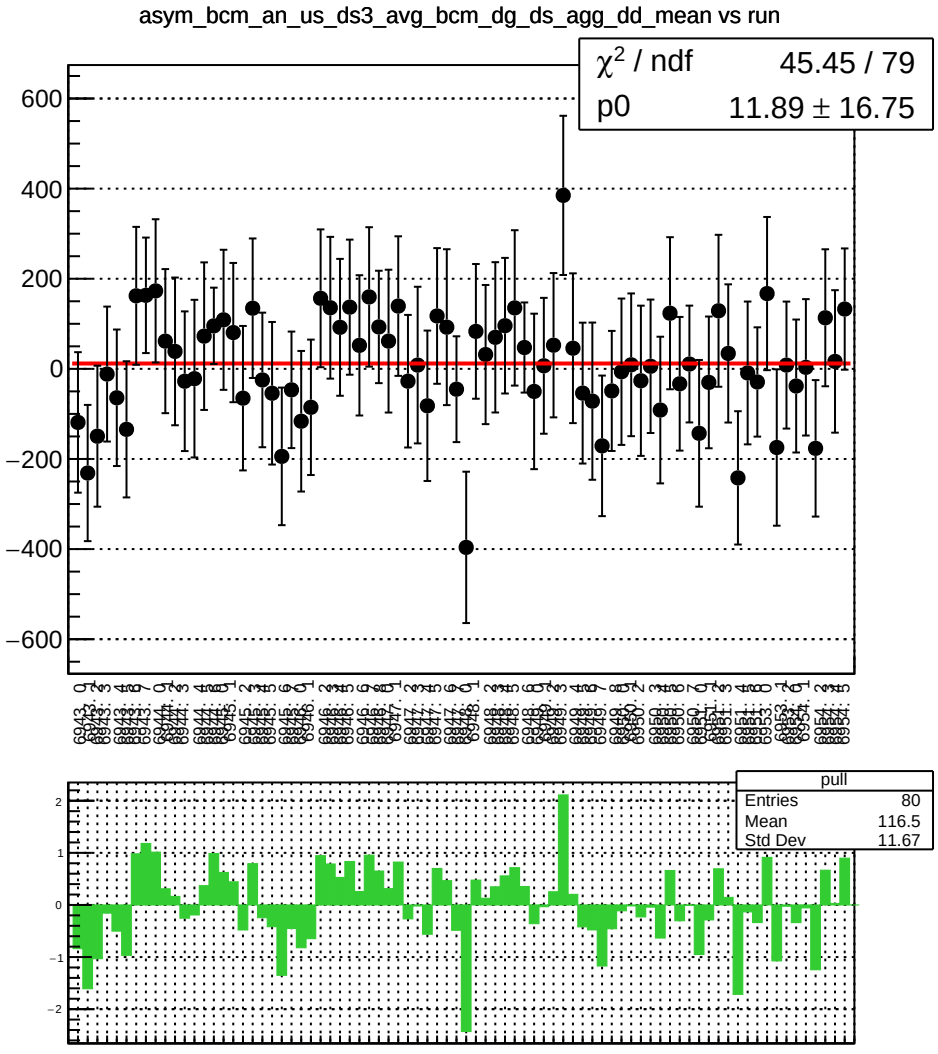

pull1D
Entries 80
Mean −0.01415
Std Dev 0.7563

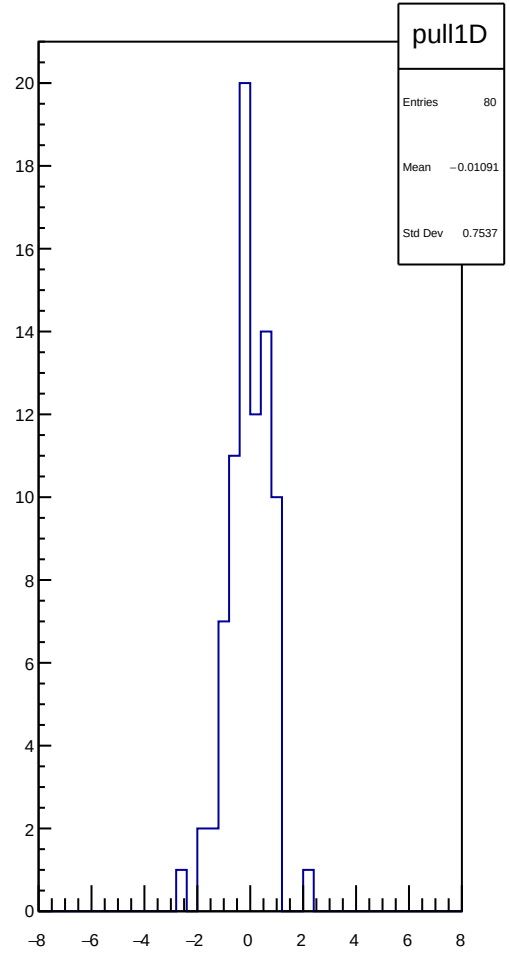

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2989 / 79
p0 15.06 ± 0.01193
17
16.5
16
15.5
15
14.5
14

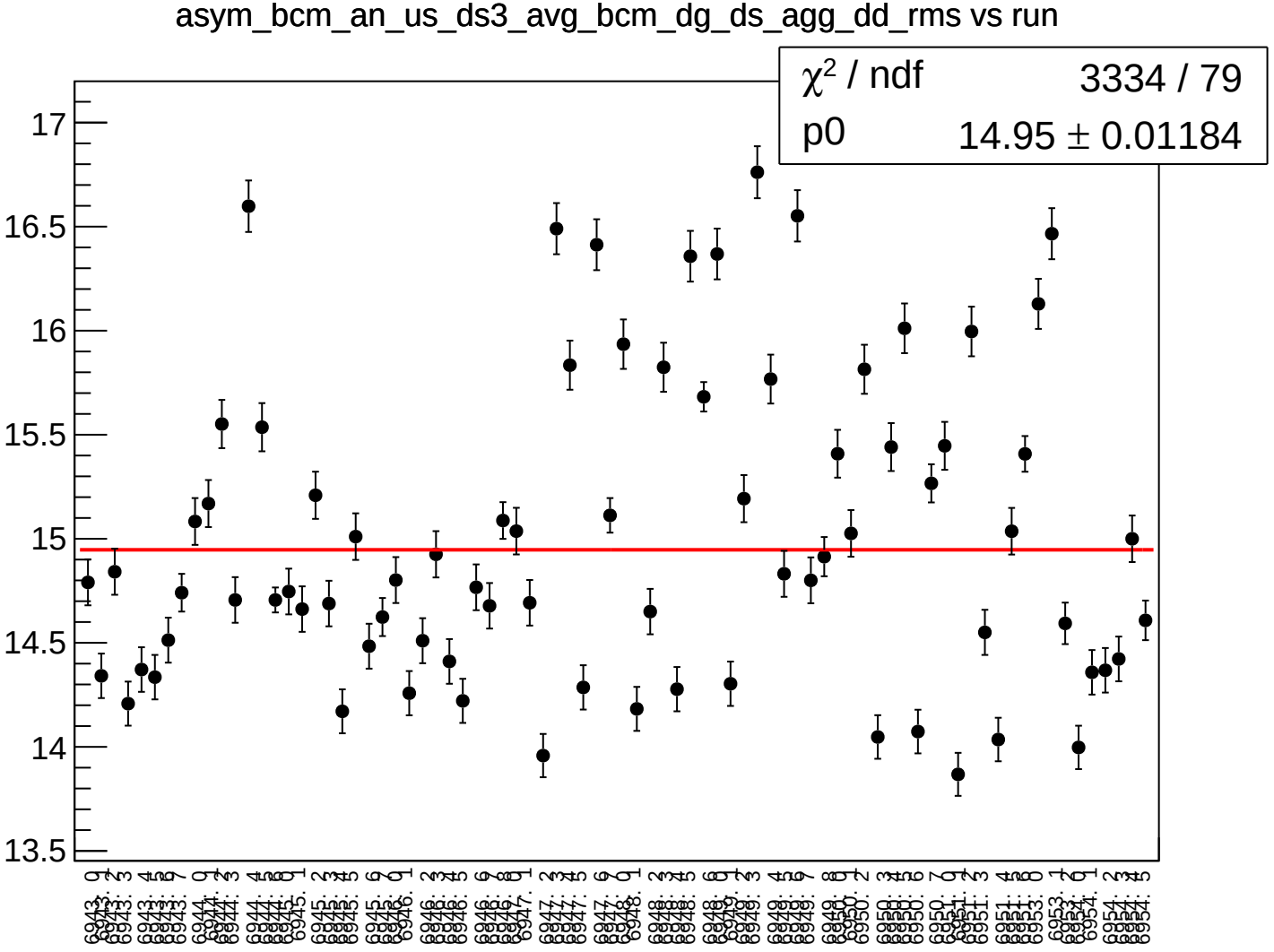

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 77.1 / 79
p0 −53.28 ± 24.38
pull
Entries 80
Mean 278.9
Std Dev 237.6

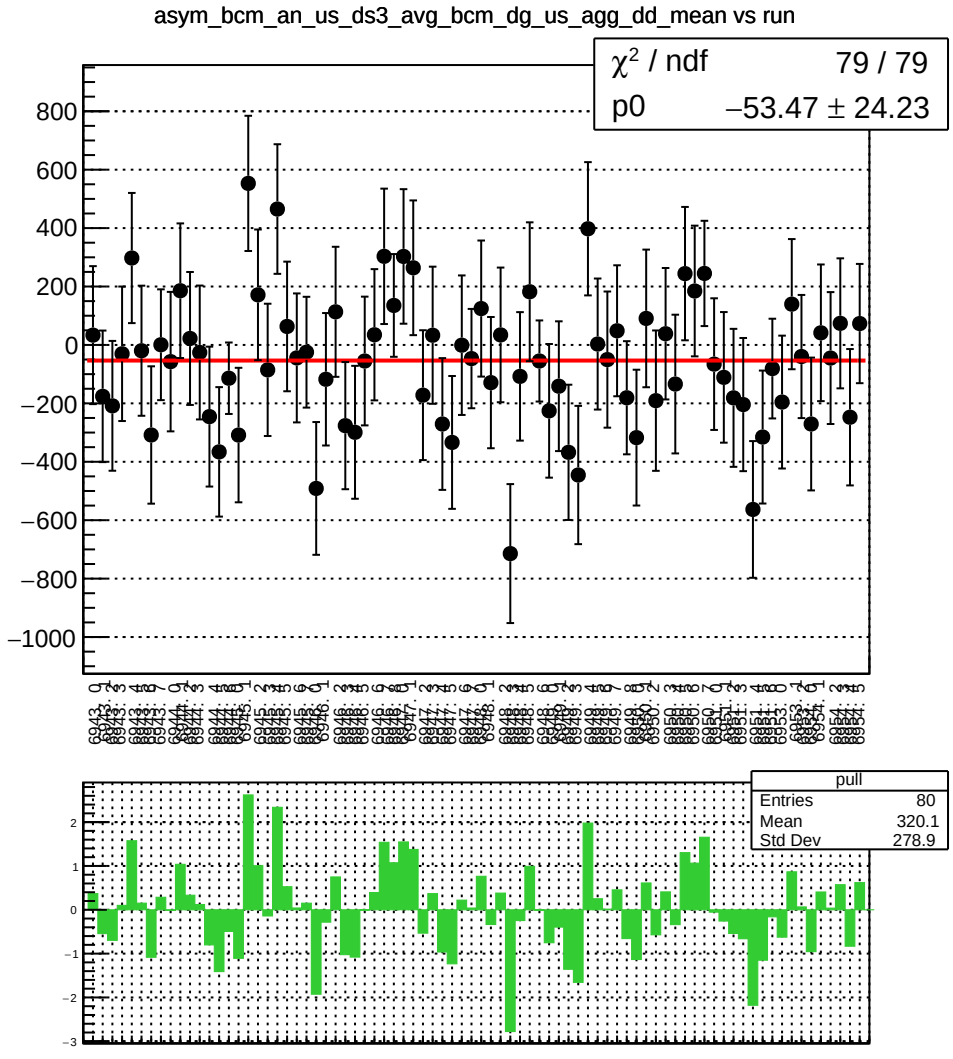

pull1D
Entries 80
Mean −0.009629
Std Dev 0.9817

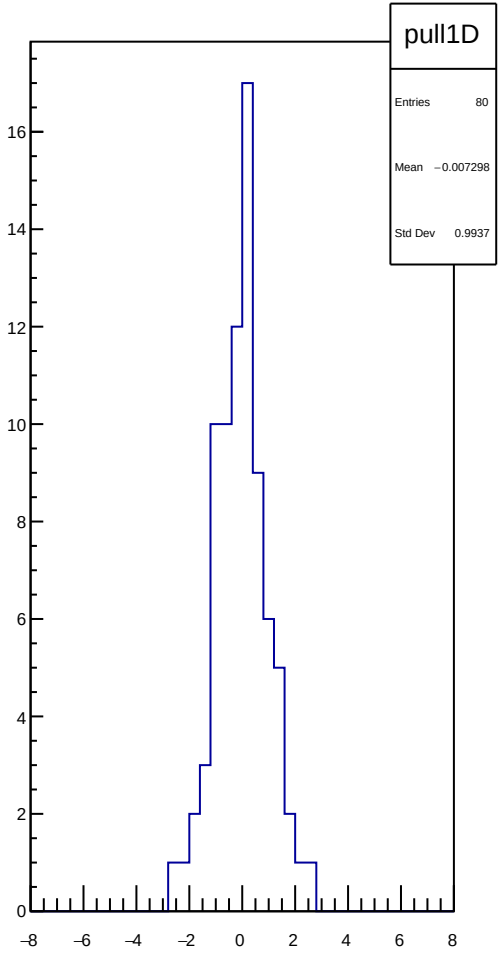

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 865.2 / 79
p0 21.77 ± 0.01724
23
22.5
22
21.5
21
20.5

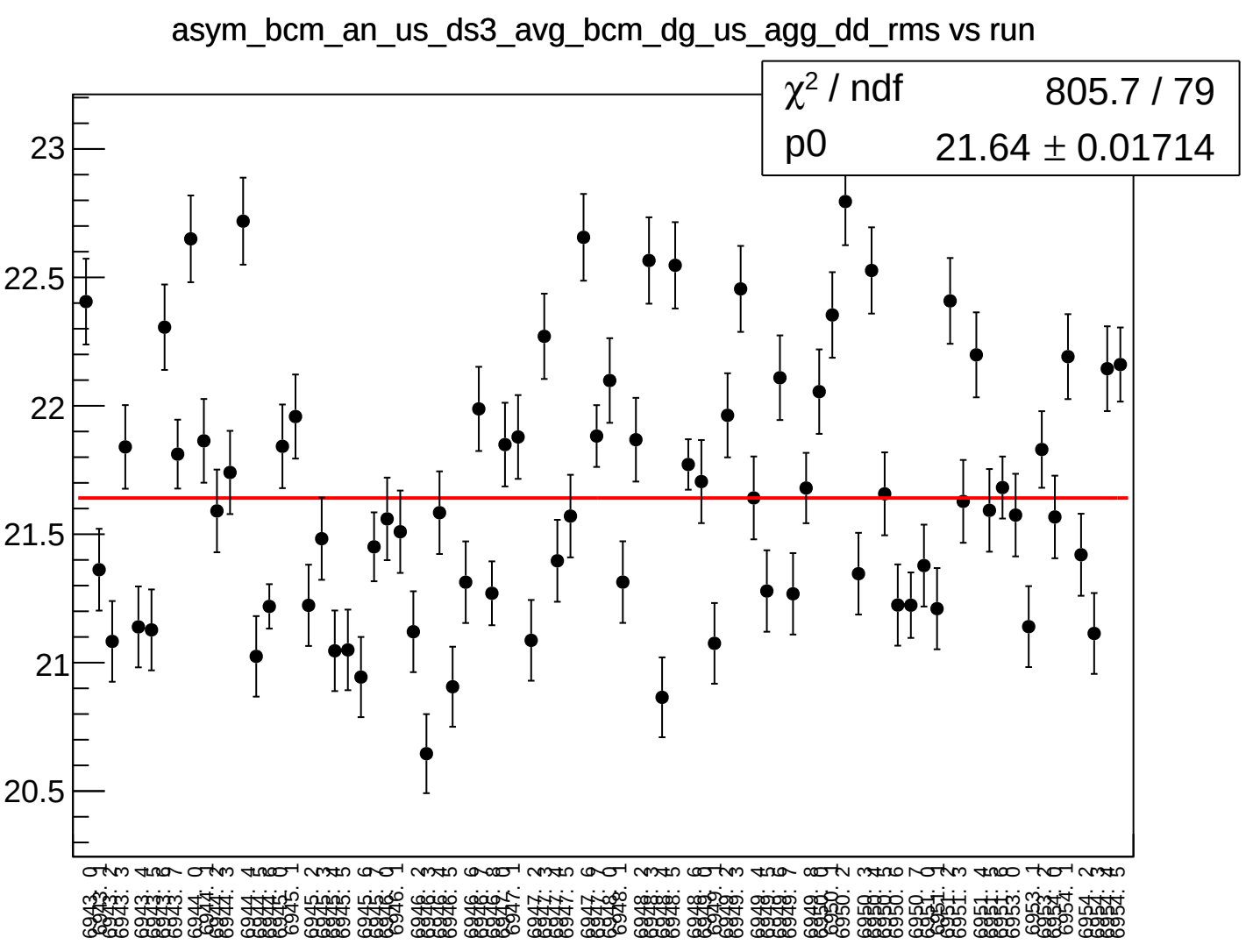

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 45.45 / 79
p0 11.89 ± 16.75
pull
Entries 80
Mean 116.5
Std Dev 11.67

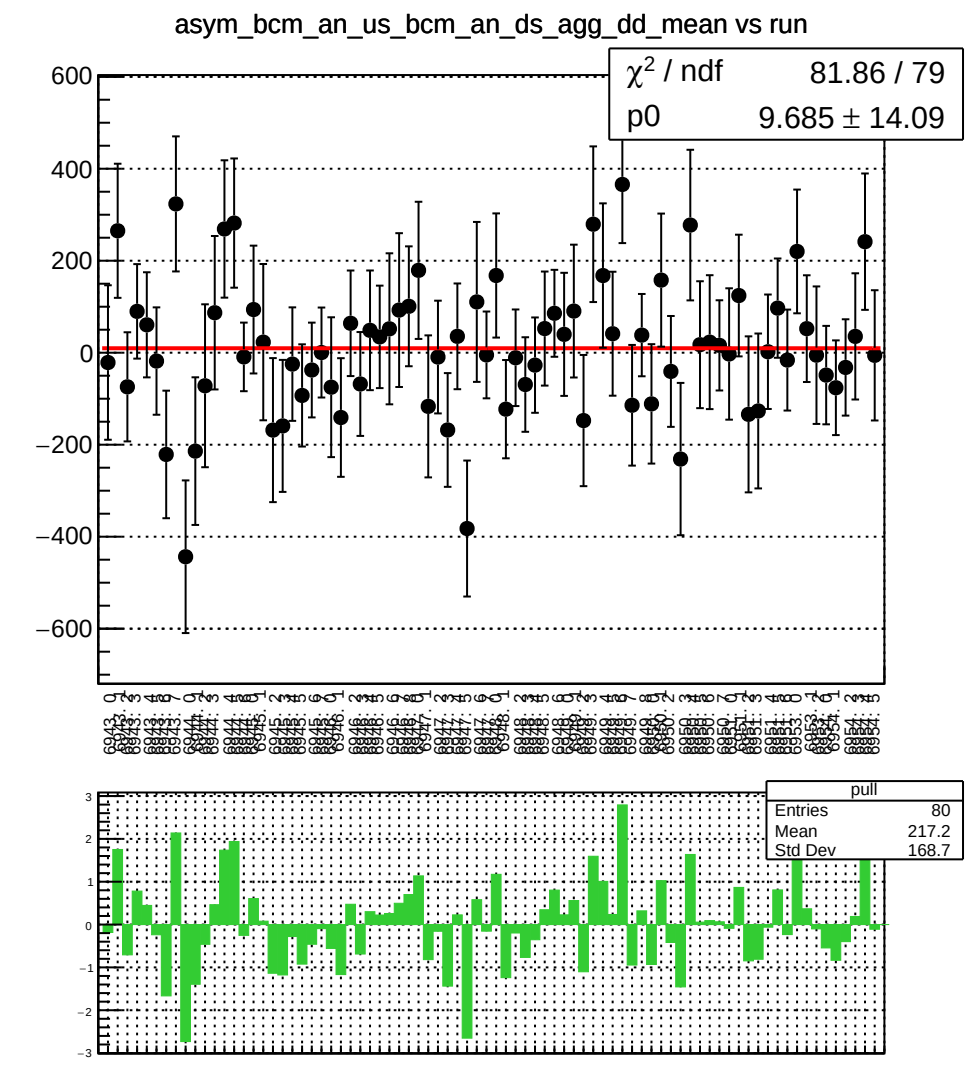

pull1D
Entries 80
Mean −0.01091
Std Dev 0.7537

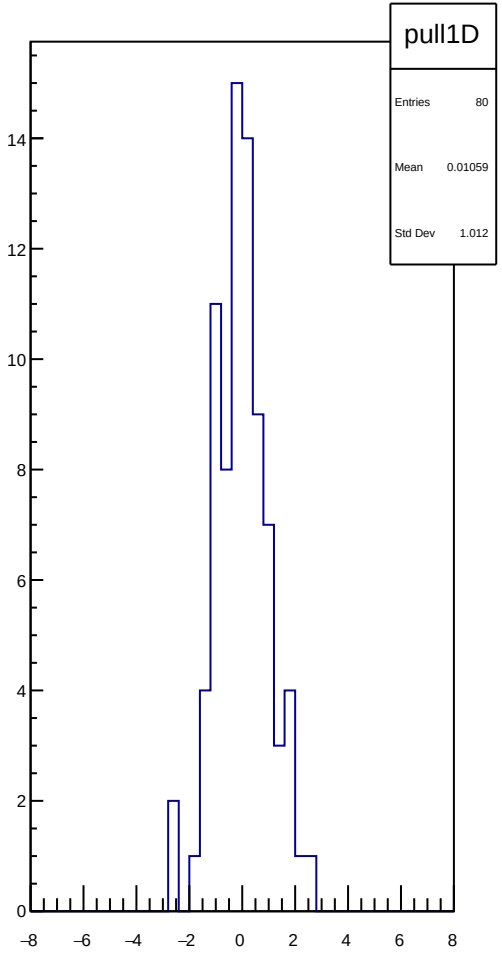

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3334 / 79
p0 14.95 ± 0.01184
17
16.5
16
15.5
15
14.5
14
13.5

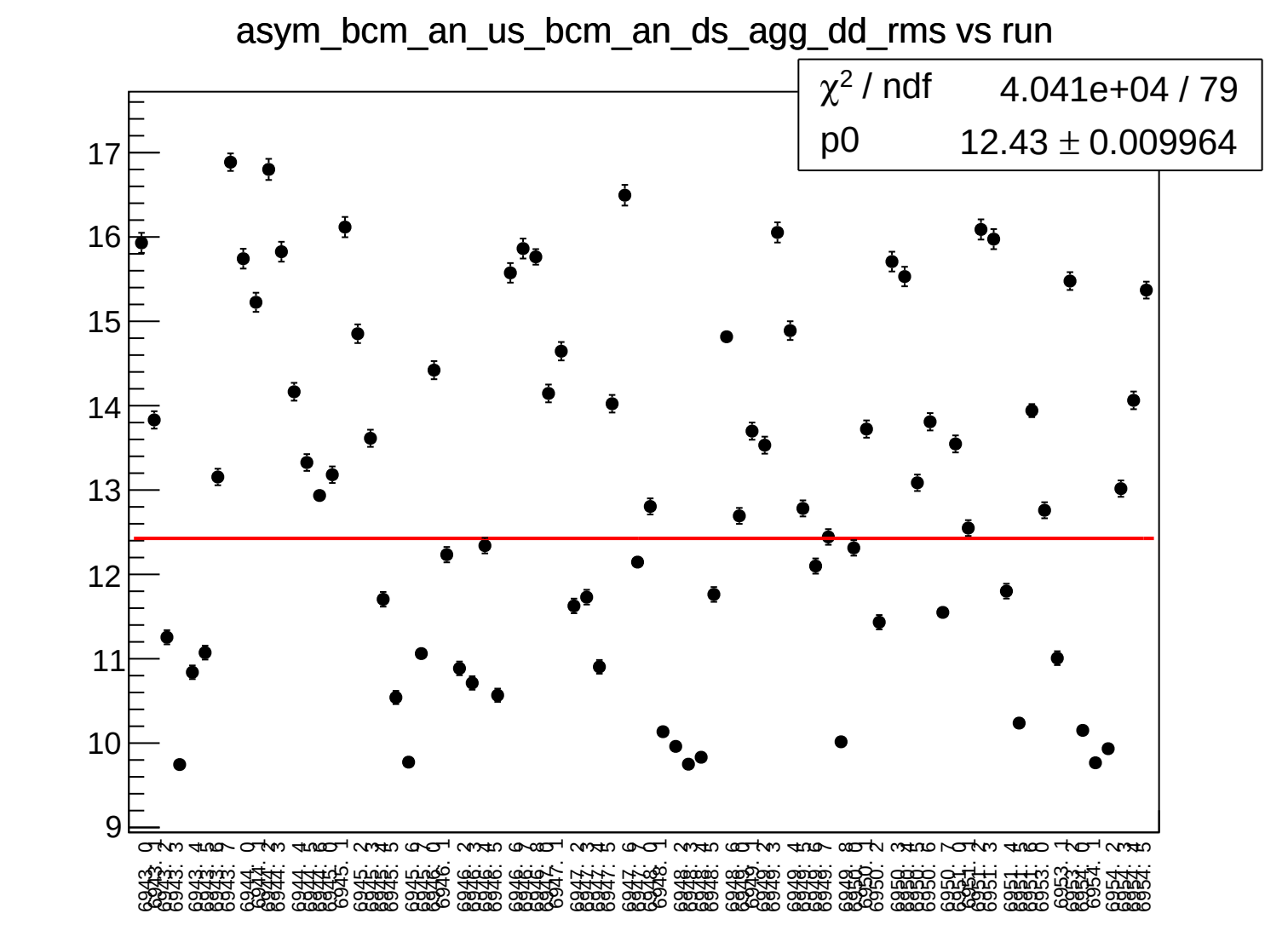

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 79 / 79
p0 −53.47 ± 24.23
pull
Entries 80
Mean 320.1
Std Dev 278.9

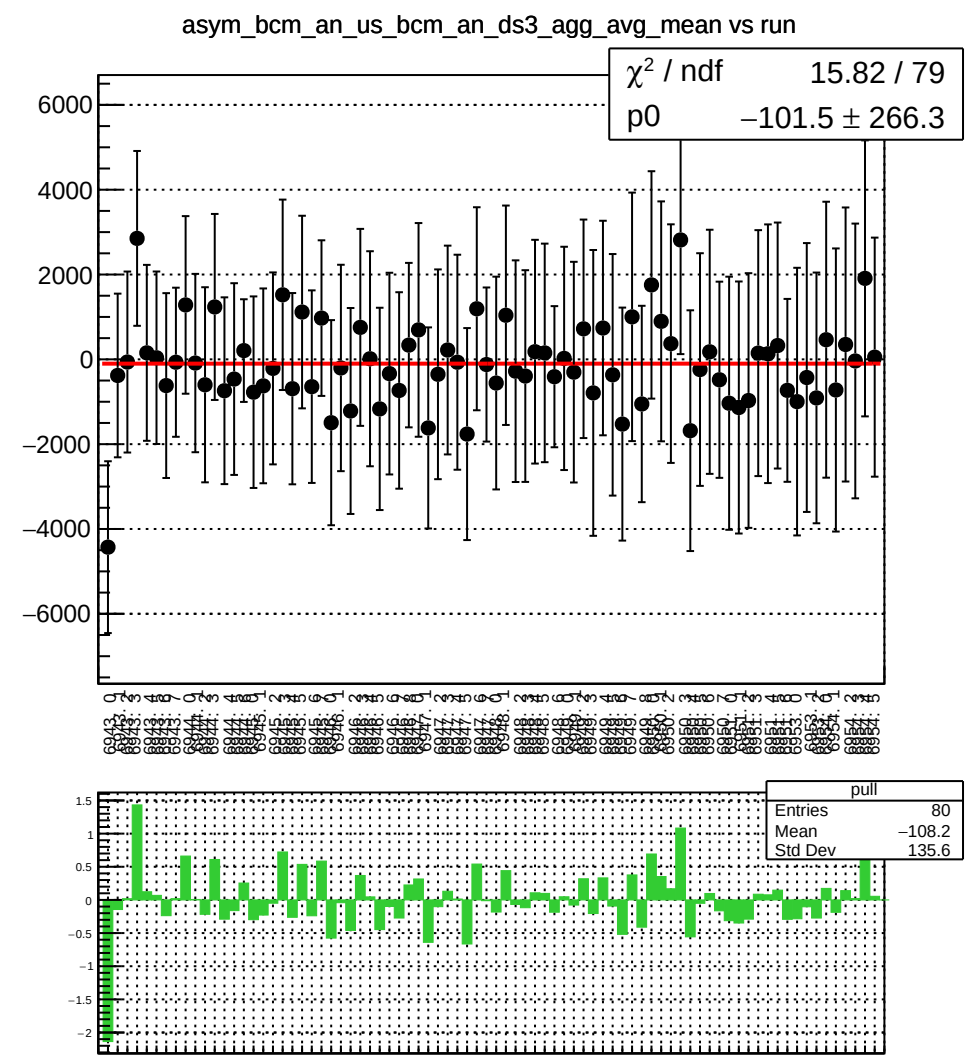

pull1D
Entries 80
Mean −0.007298
Std Dev 0.9937

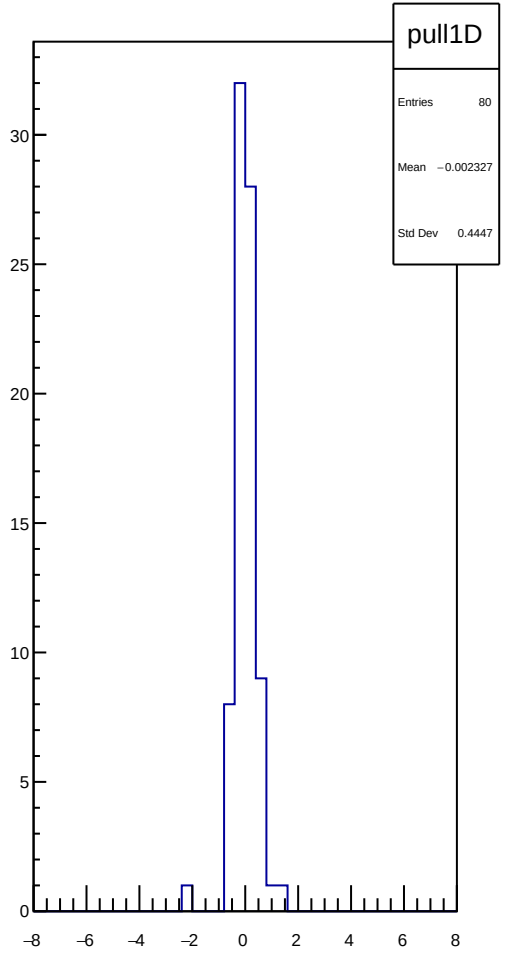

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 805.7 / 79
p0 21.64 ± 0.01714
23
22.5
22
21.5
21
20.5

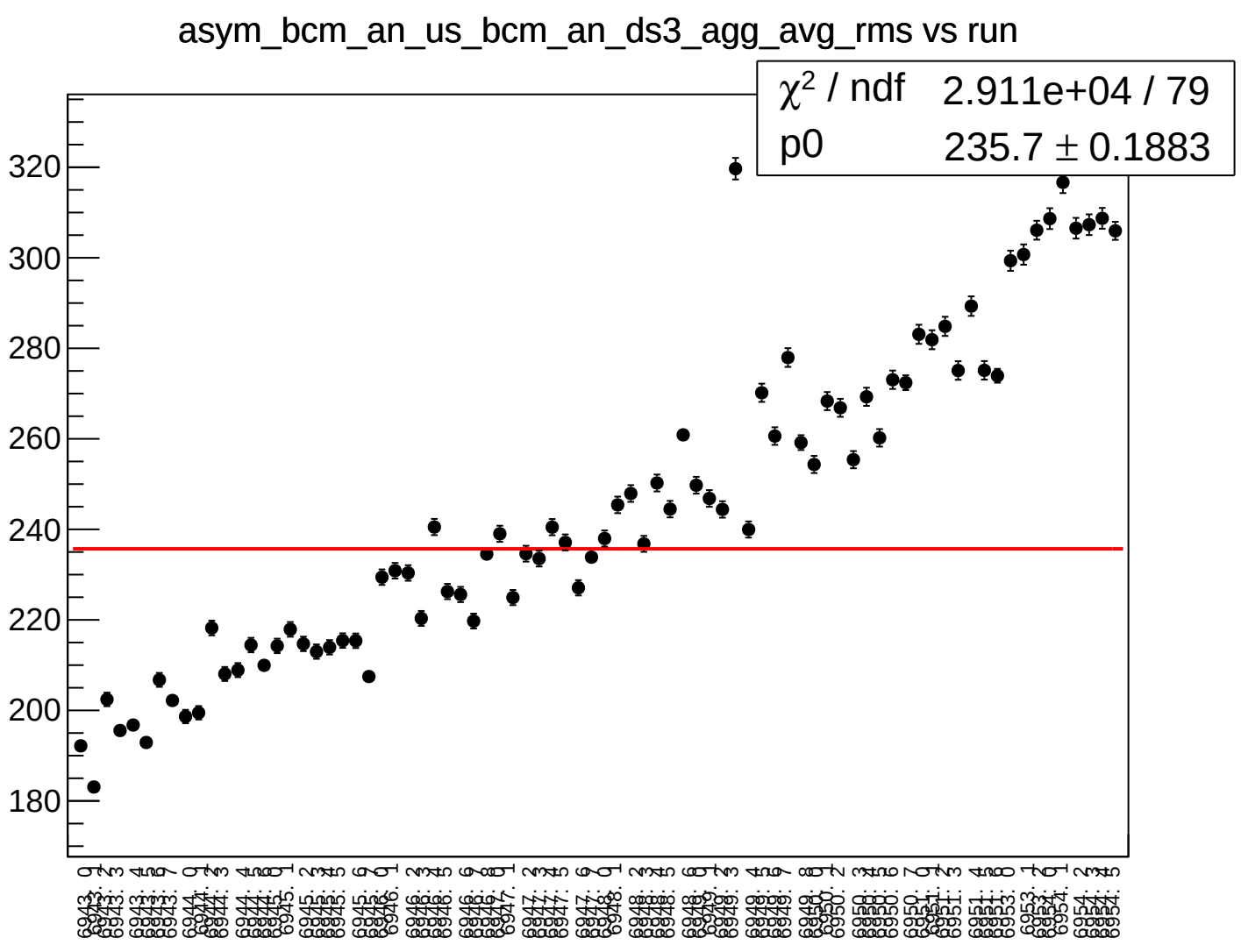

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.86 / 79
p0 9.685 ± 14.09
pull
Entries 80
Mean 217.2
Std Dev 168.7

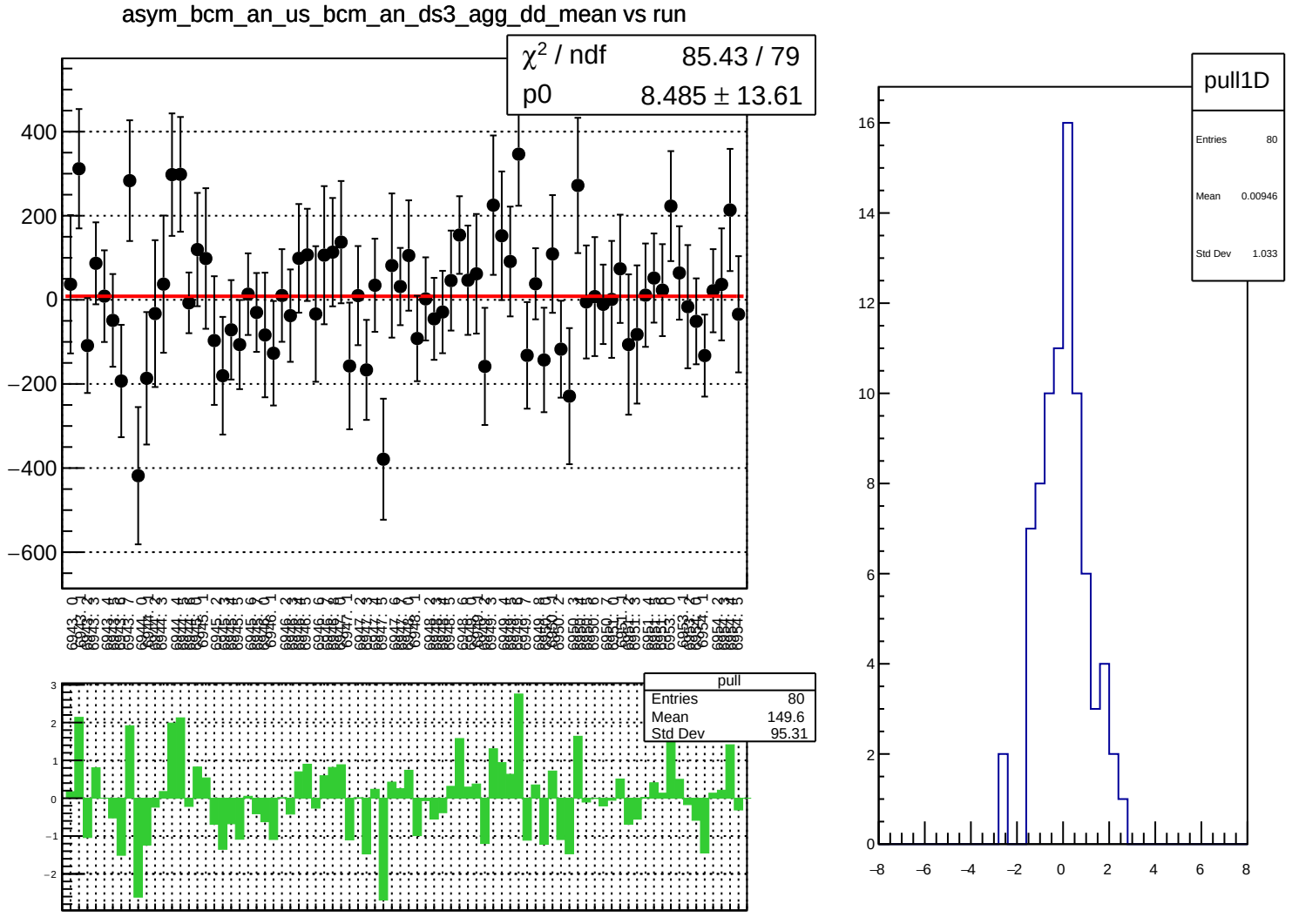

pull1D
Entries 80
Mean 0.01059
Std Dev 1.012

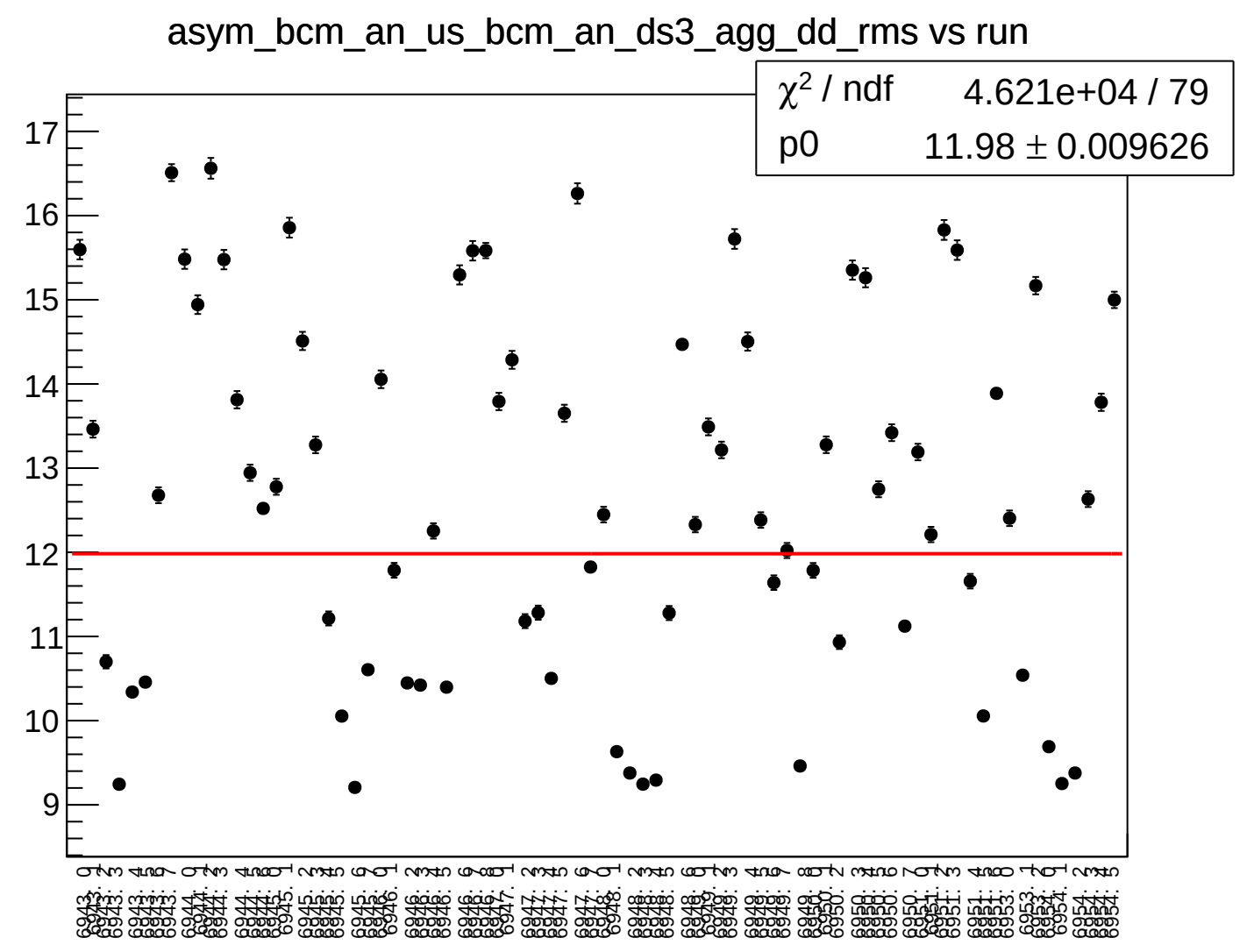

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4.041e+04 / 79
p0 12.43 ± 0.009964
17
16
15
14
13
12
11
10
9

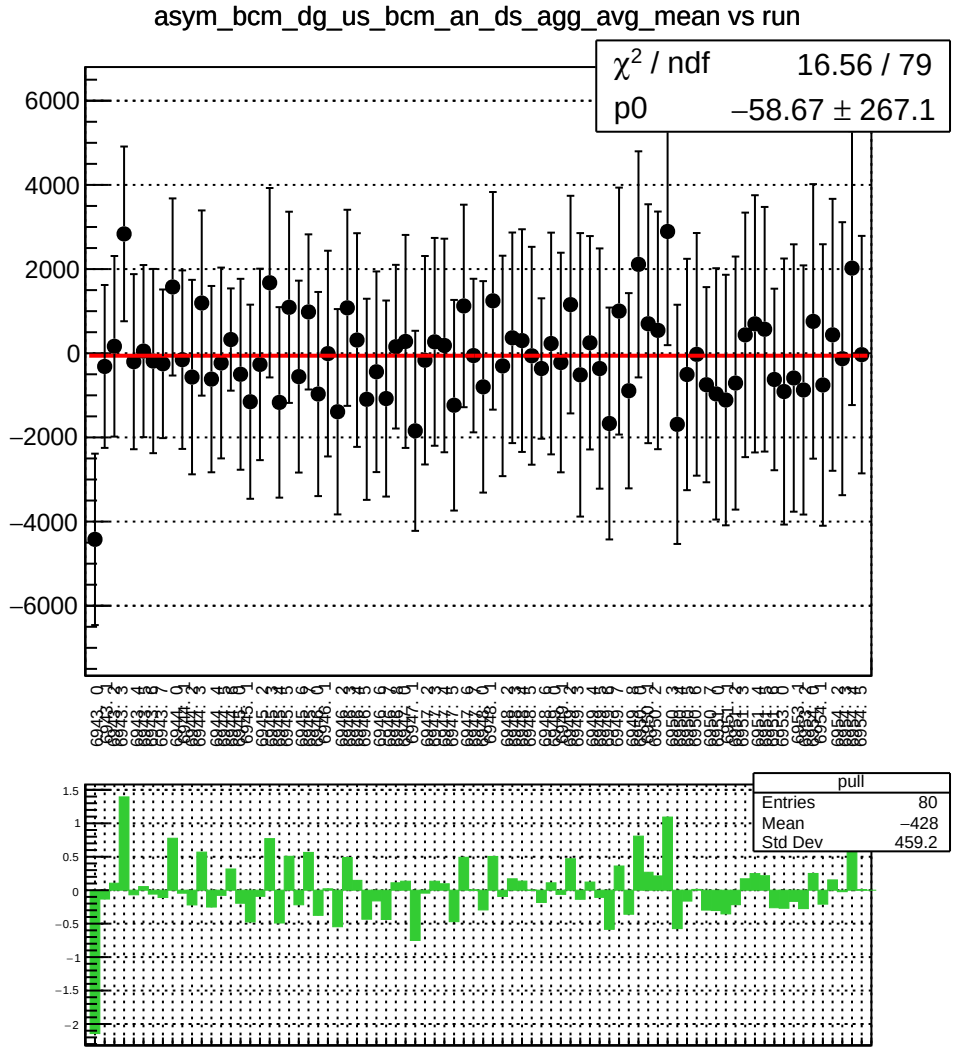

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 15.82 / 79
p0 −101.5 ± 266.3
pull
Entries 80
Mean −108.2
Std Dev 135.6

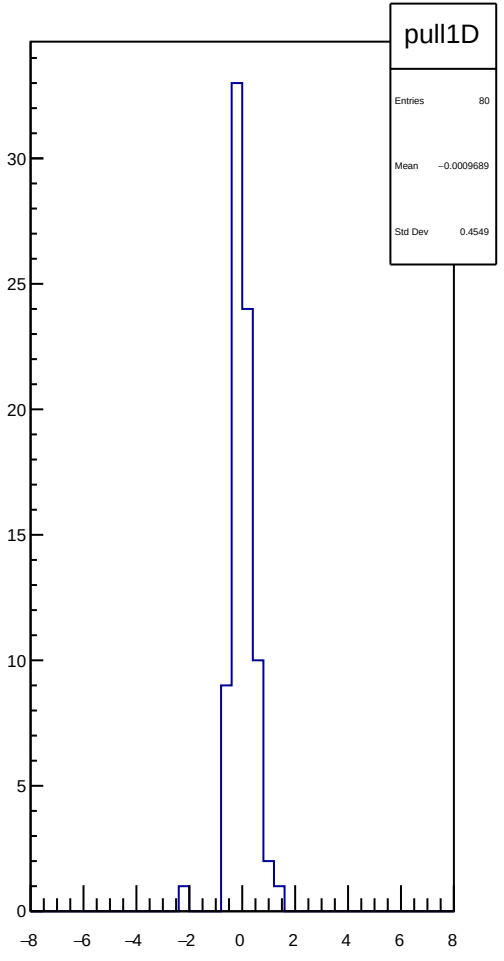

pull1D
Entries 80
Mean −0.002327
Std Dev 0.4447

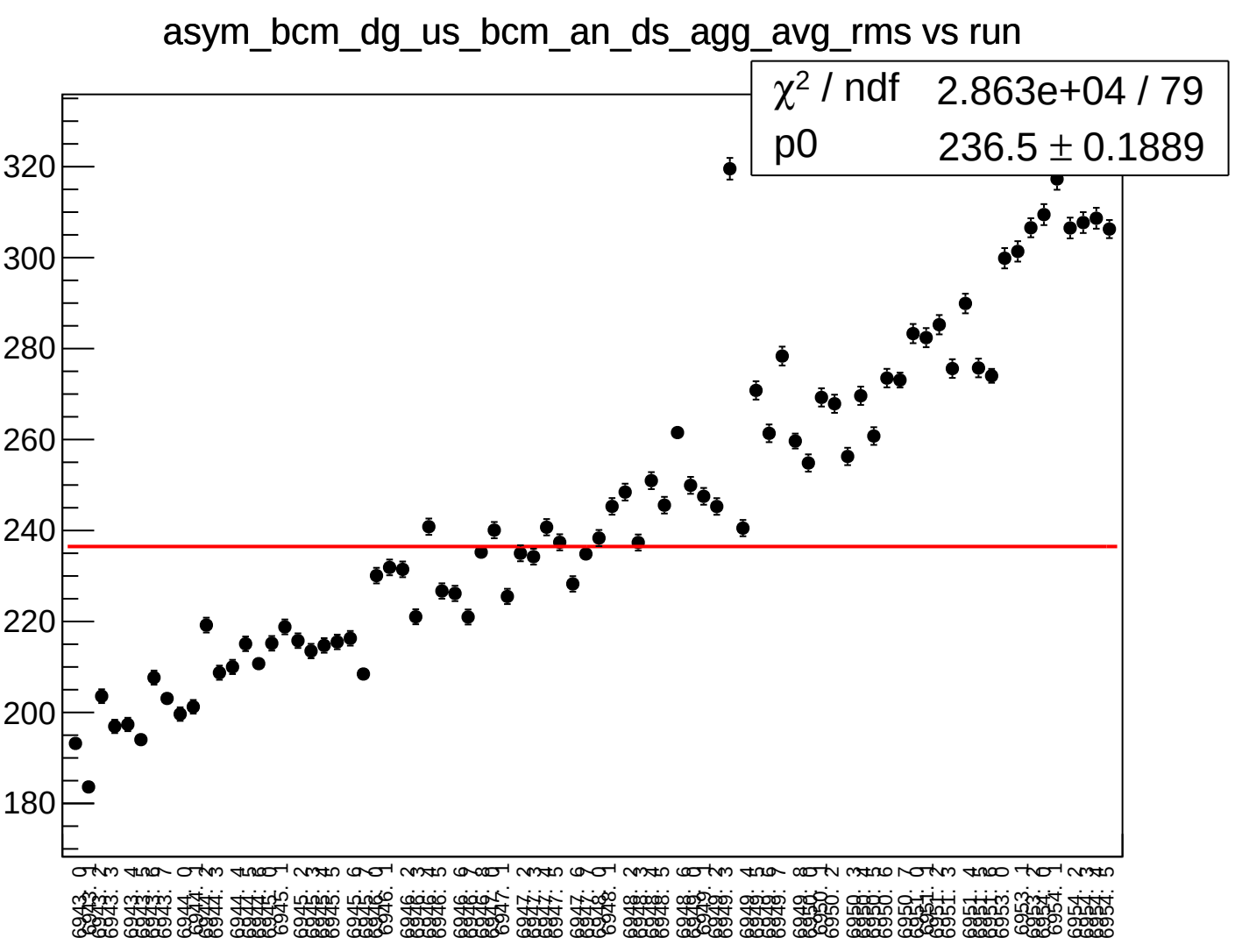

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2.911e+04 / 79
p0 235.7 ± 0.1883
320
300
280
260
240
220
200
180

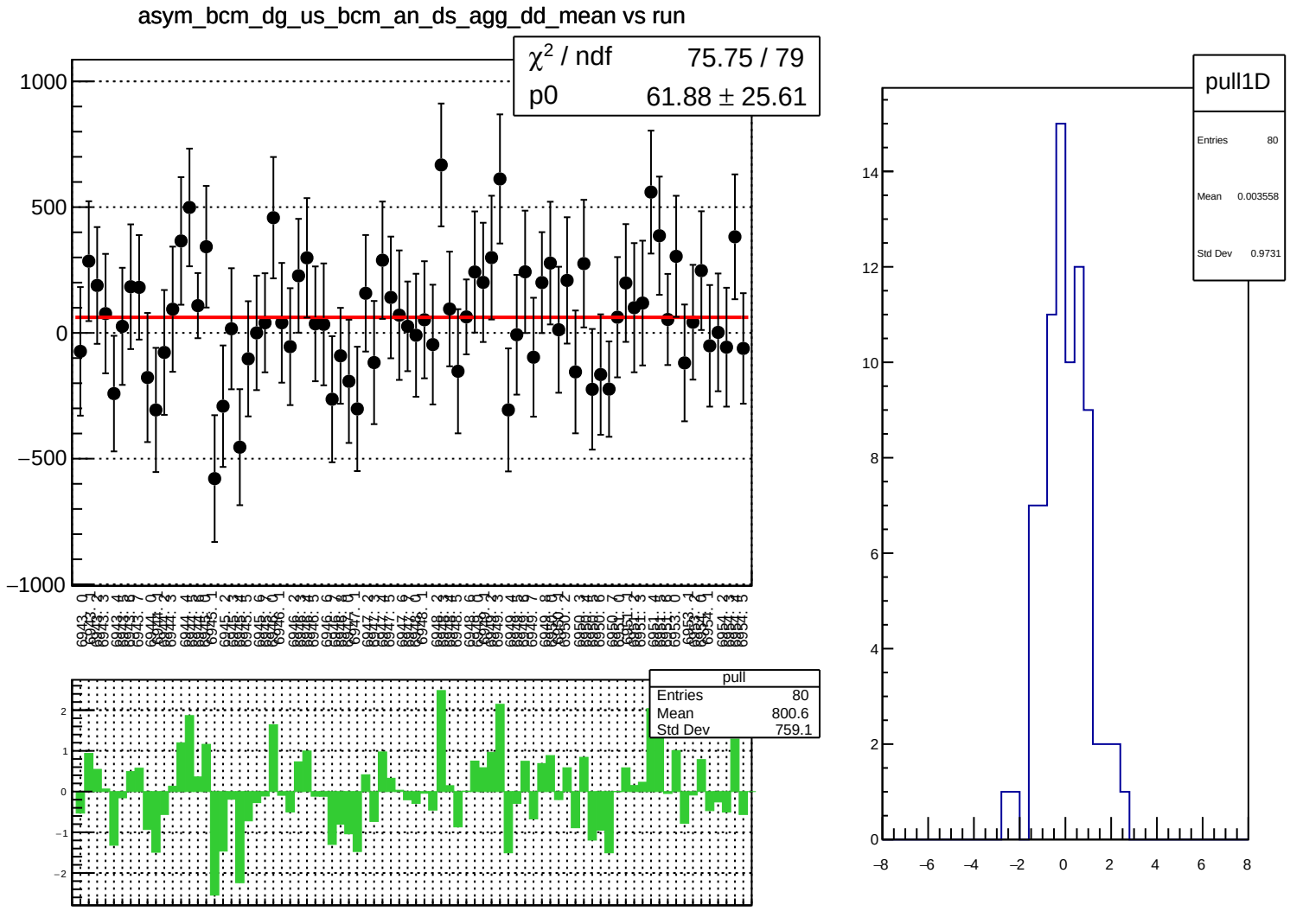

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 85.43 / 79
p0 8.485 ± 13.61
pull
Entries 80
Mean 149.6
Std Dev 95.31
pull1D
Entries 80
Mean 0.00946
Std Dev 1.033

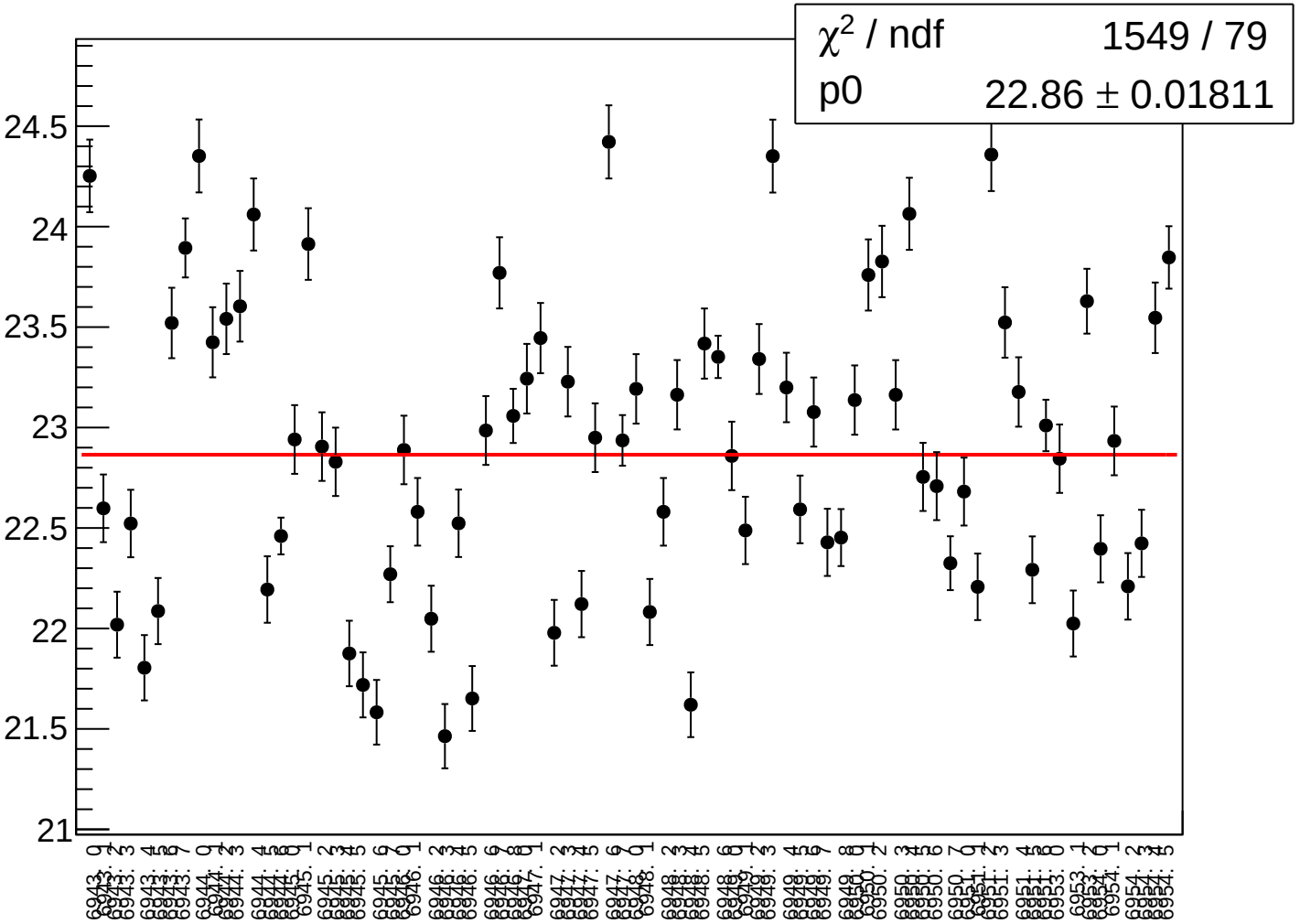

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 4.621e+04 / 79
p0 11.98 ± 0.009626
17
16
15
14
13
12
11
10
9

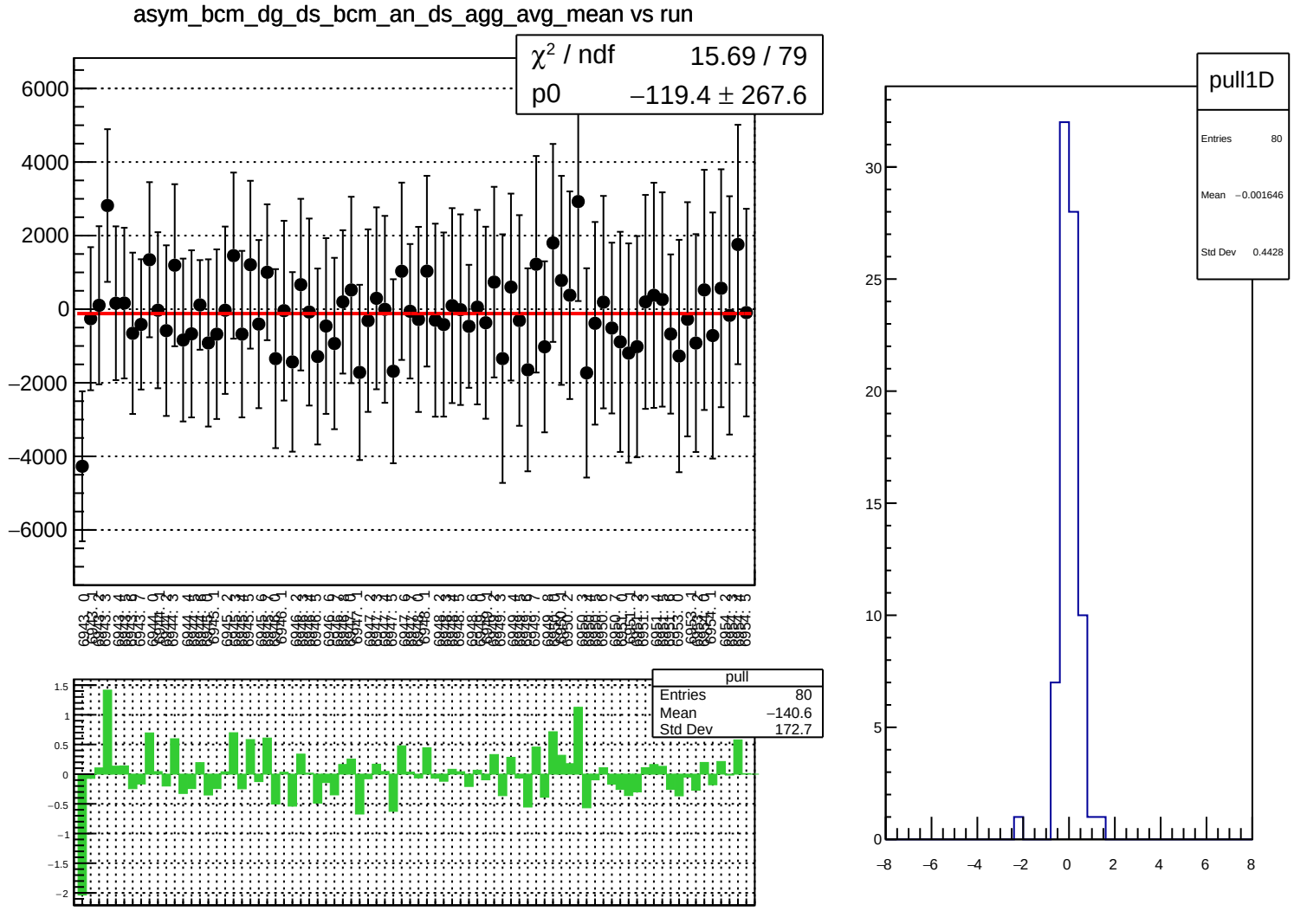

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.56 / 79
p0 −58.67 ± 267.1
pull
Entries 80
Mean −428
Std Dev 459.2

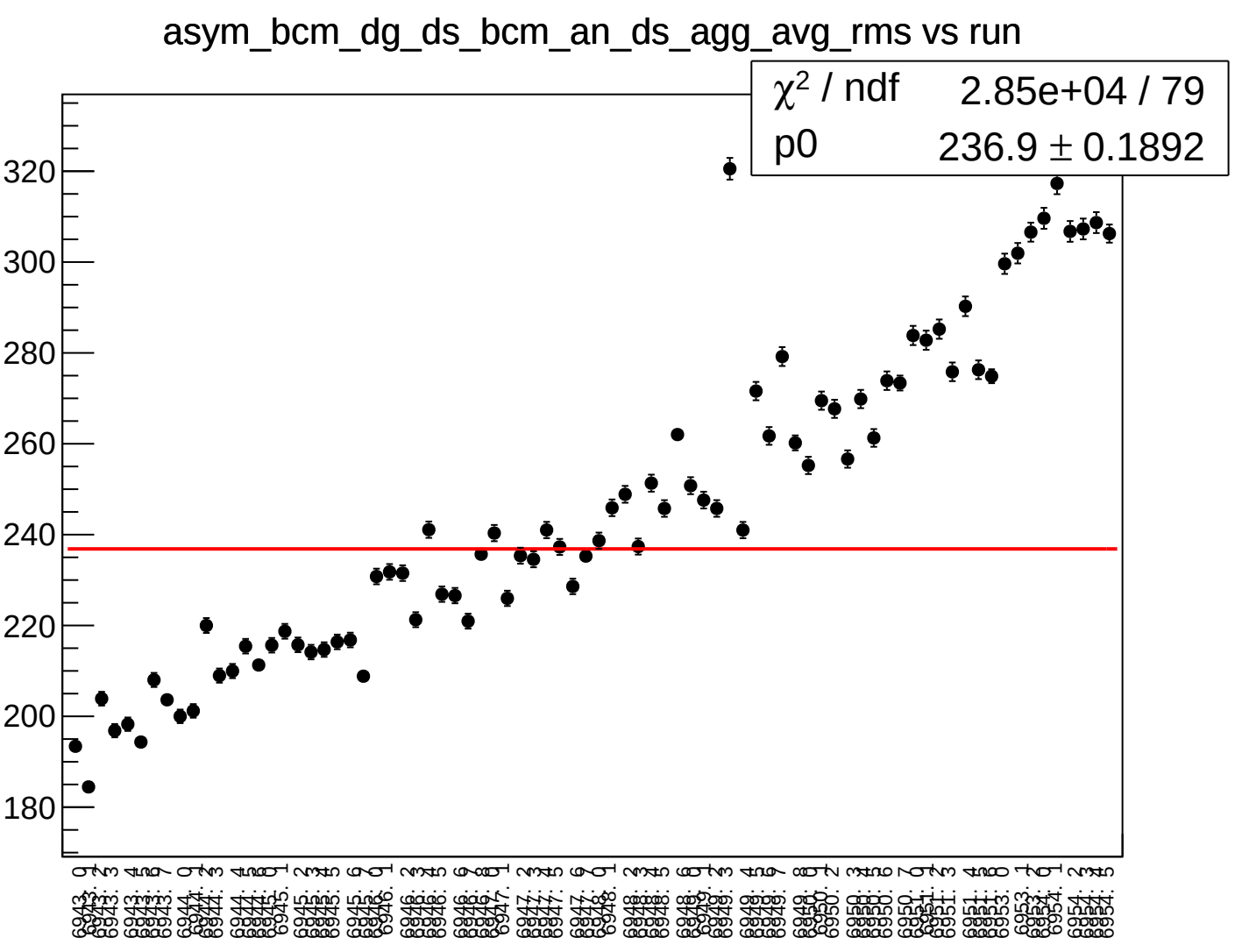

pull1D
Entries 80
Mean −0.0009689
Std Dev 0.4549

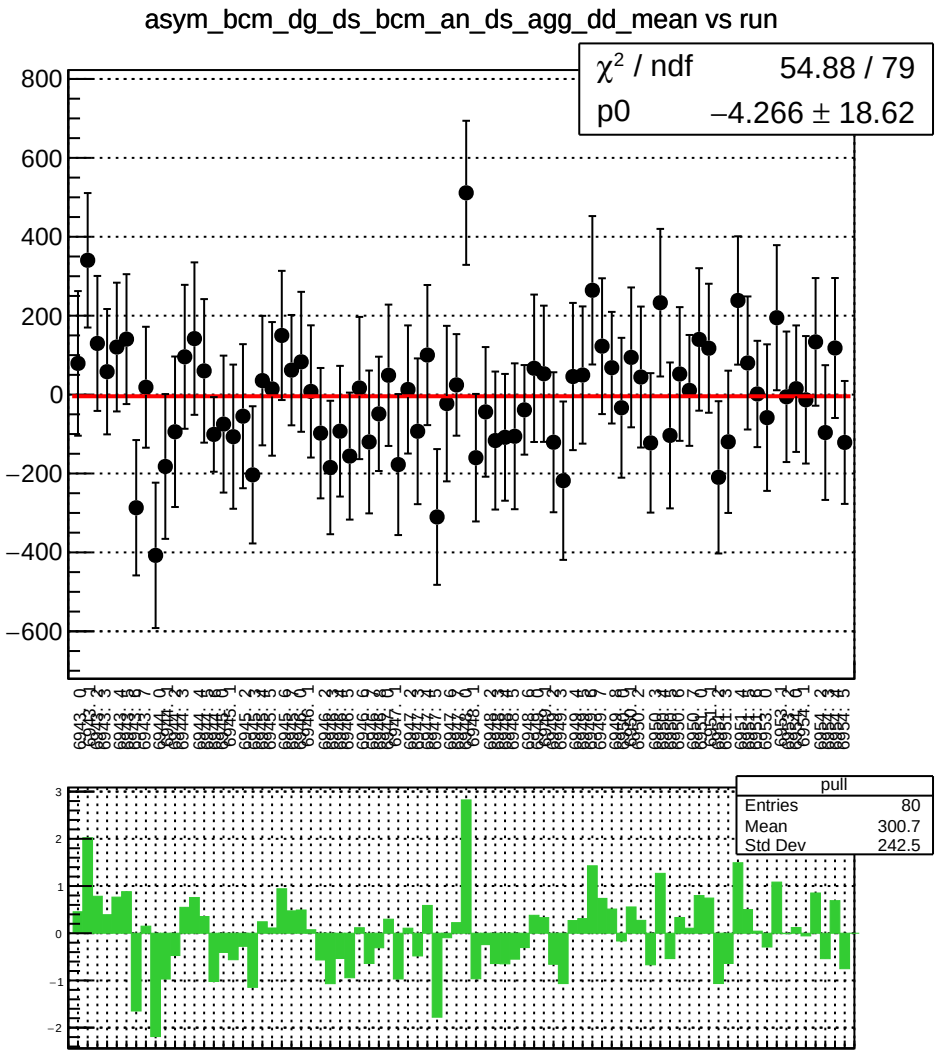

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.863e+04 / 79
p0 236.5 ± 0.1889
320
300
280
260
240
220
200
180

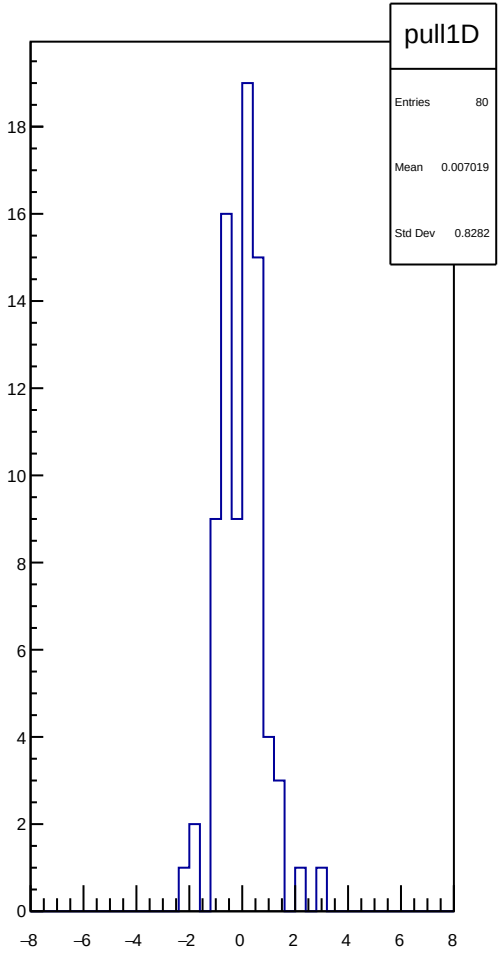

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 75.75 / 79
p0 61.88 ± 25.61
1000
500
0
−500
−1000
pull
Entries 80
Mean 800.6
Std Dev 759.1
2
1
0
−1
−2
pull1D
Entries 80
Mean 0.003558
Std Dev 0.9731
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

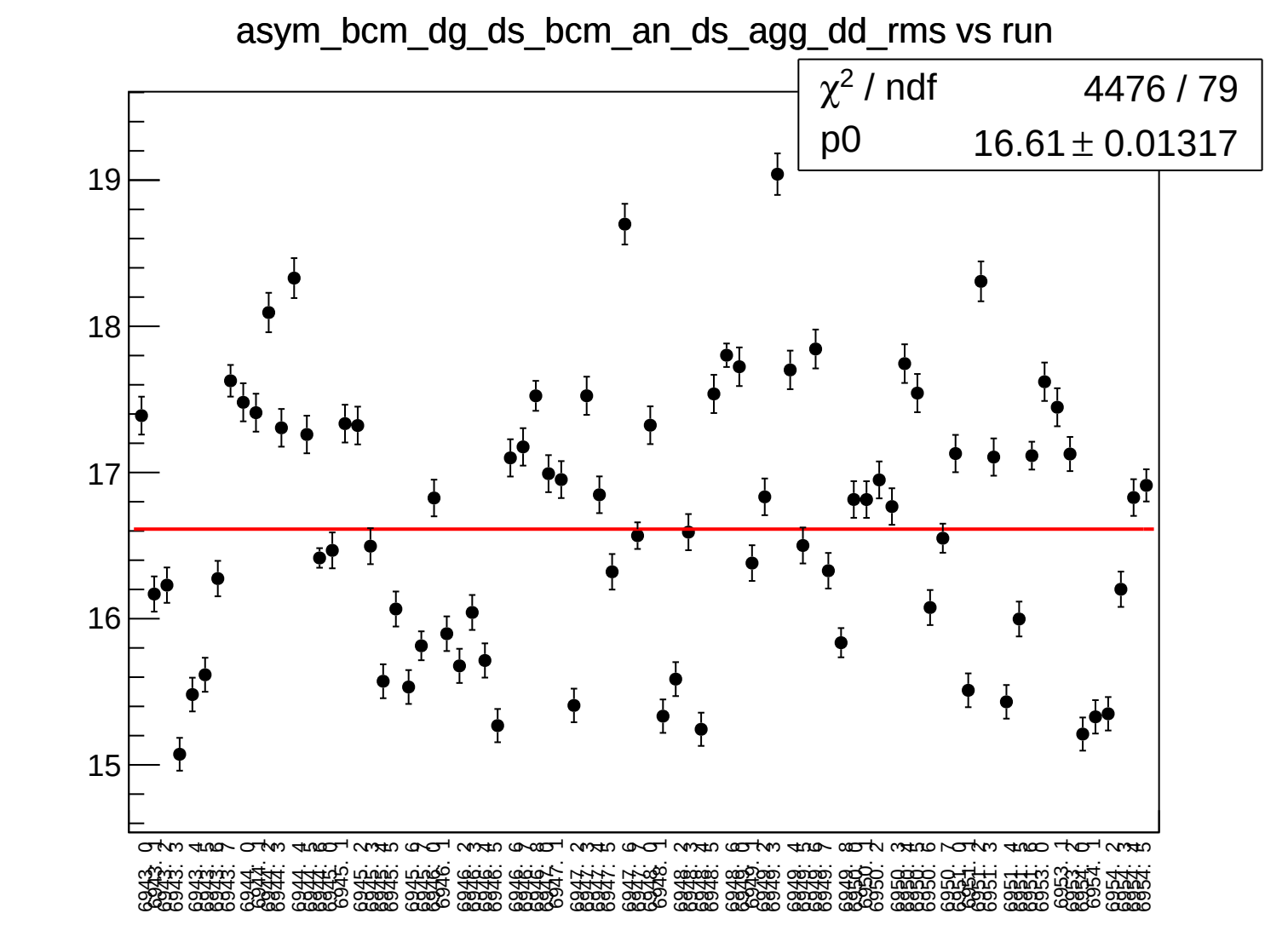

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1549 / 79
p0 22.86 ± 0.01811
24.5
24
23.5
23
22.5
22
21.5
21

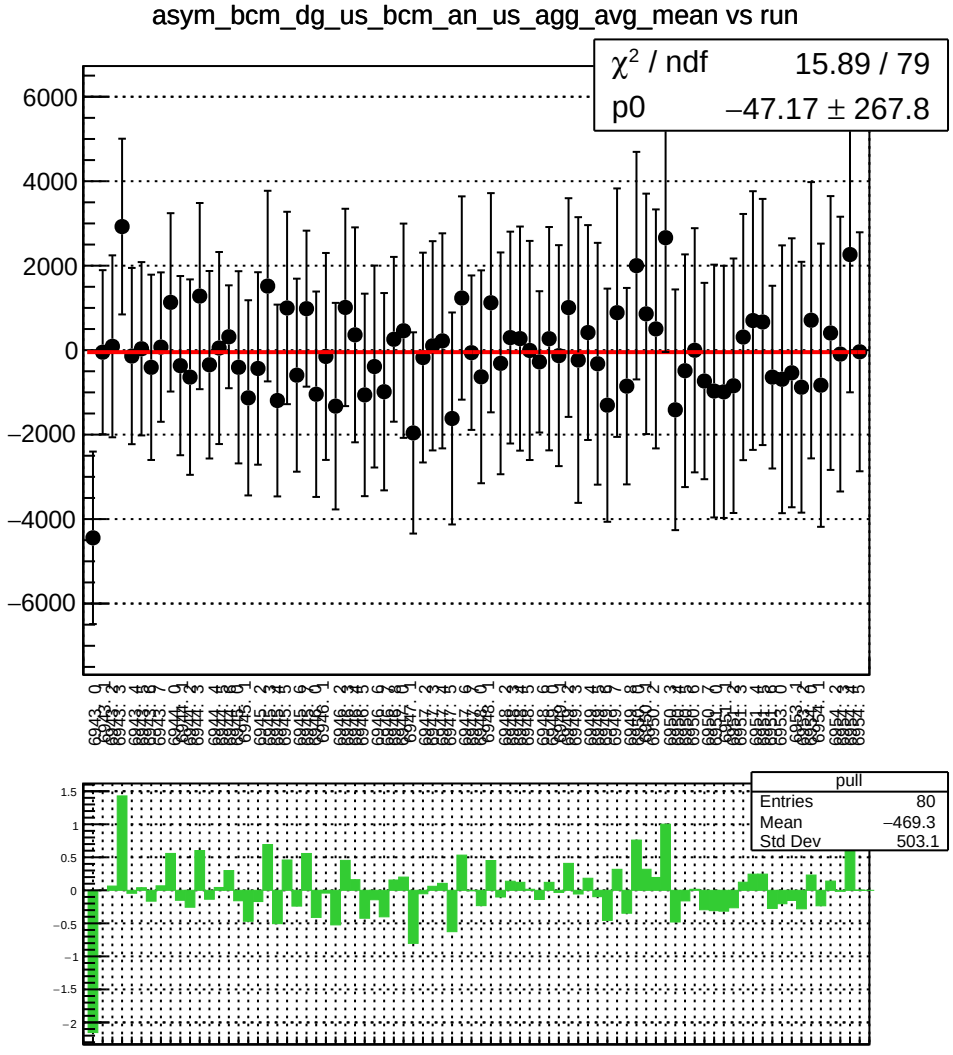

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 15.69 / 79
p0 −119.4 ± 267.6
pull
Entries 80
Mean −140.6
Std Dev 172.7
pull1D
Entries 80
Mean −0.001646
Std Dev 0.4428

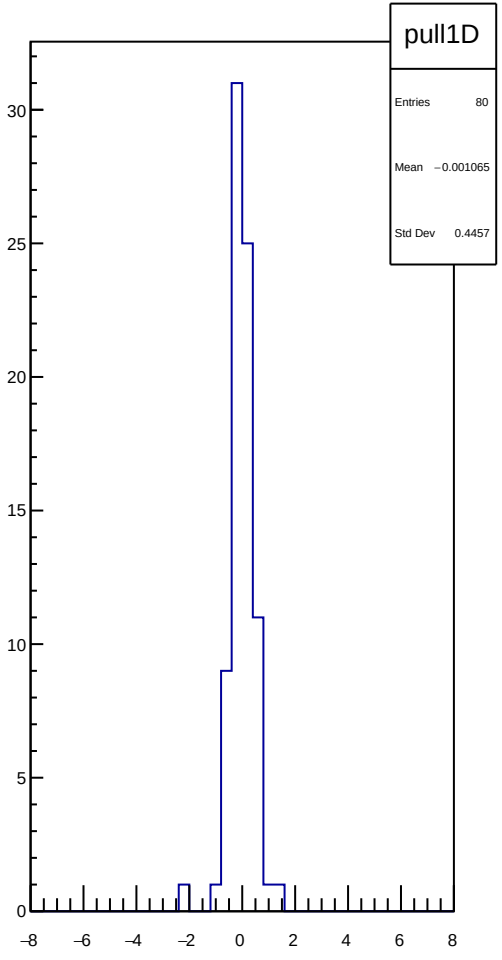

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.85e+04 / 79
p0 236.9 ± 0.1892
320
300
280
260
240
220
200
180

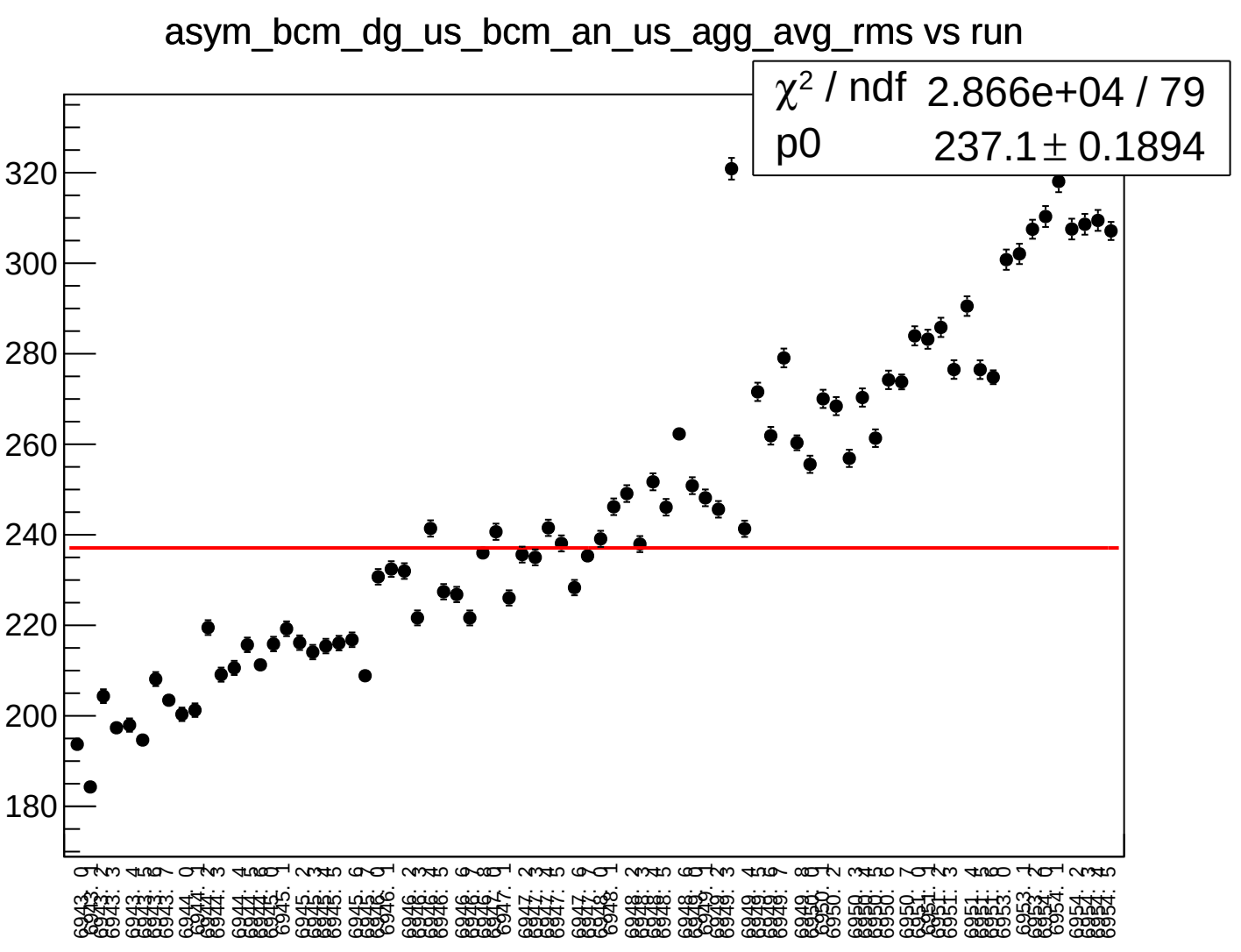

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 54.88 / 79
p0 −4.266 ± 18.62
pull
Entries 80
Mean 300.7
Std Dev 242.5

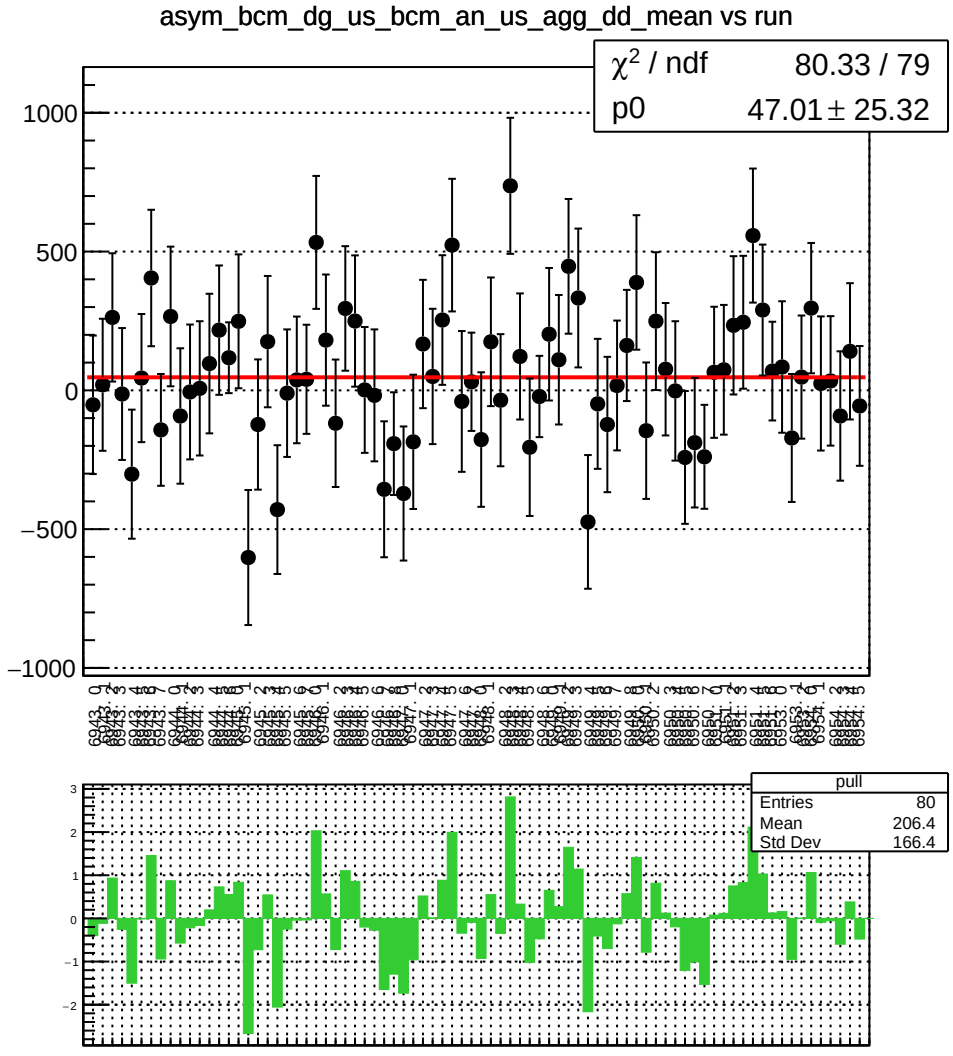

pull1D
Entries 80
Mean 0.007019
Std Dev 0.8282

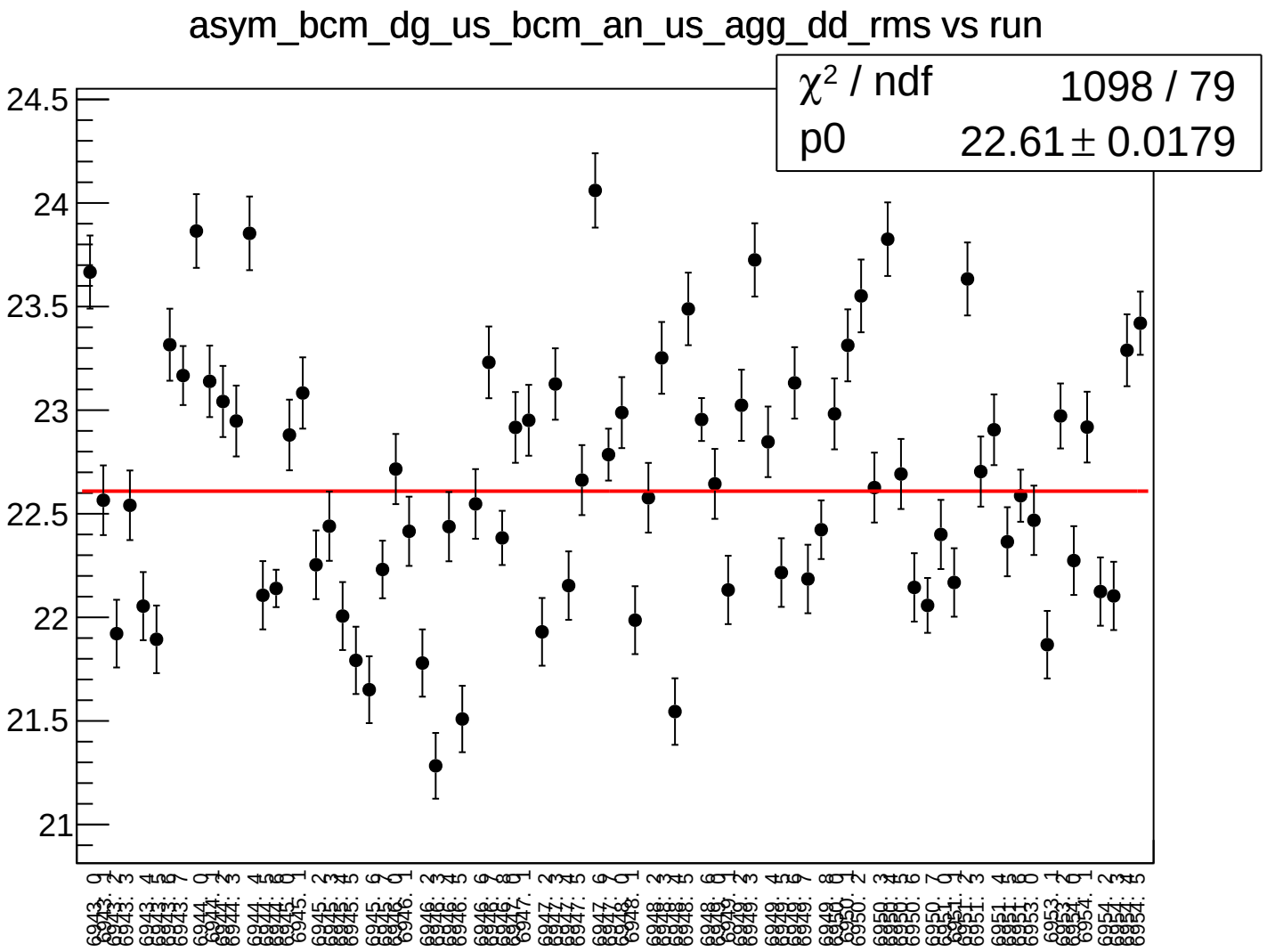

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ^2 / ndf 4476 / 79
p0 16.61 ± 0.01317
19
18
17
16
15

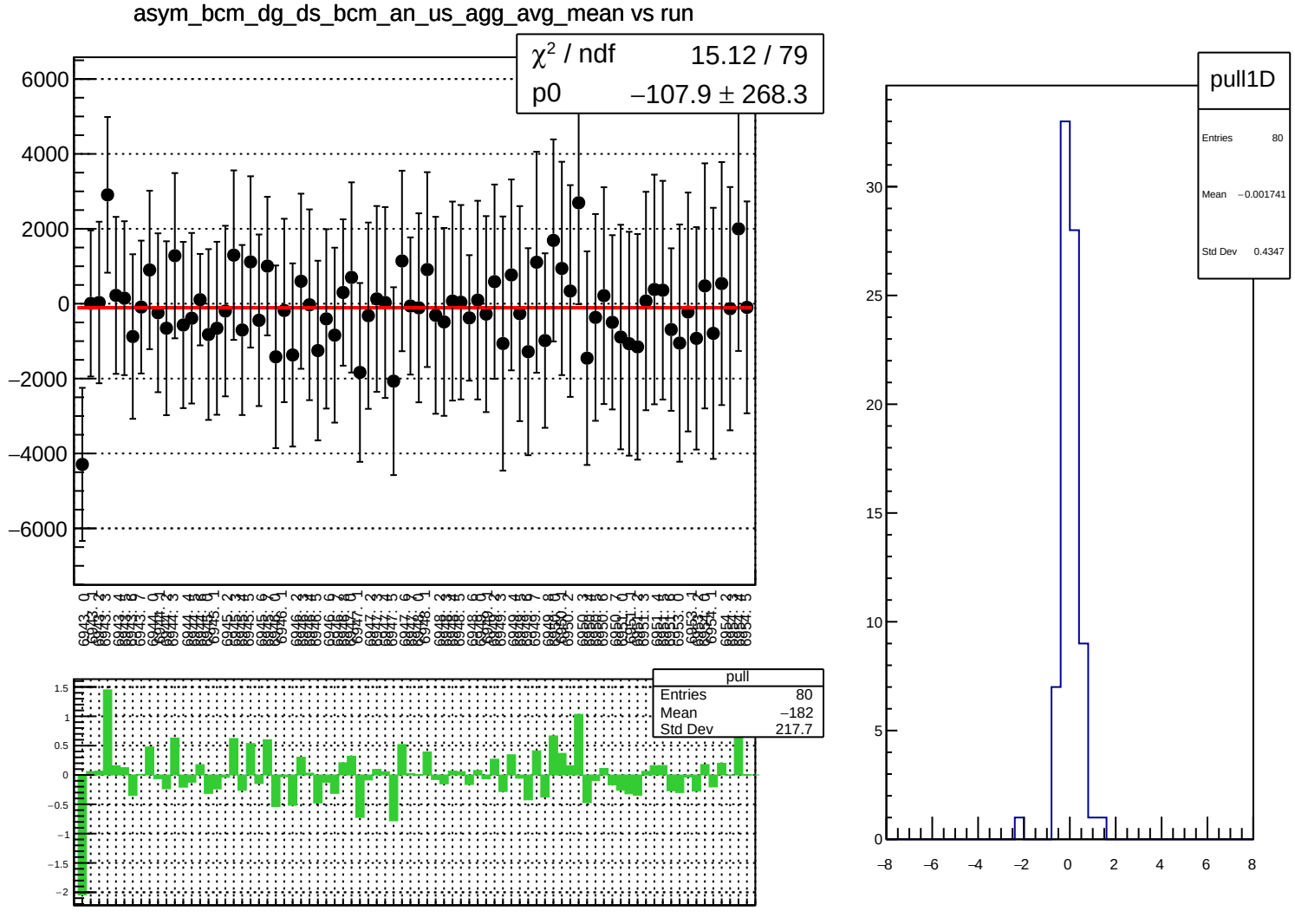

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.89 / 79
p0 −47.17 ± 267.8
pull
Entries 80
Mean −469.3
Std Dev 503.1

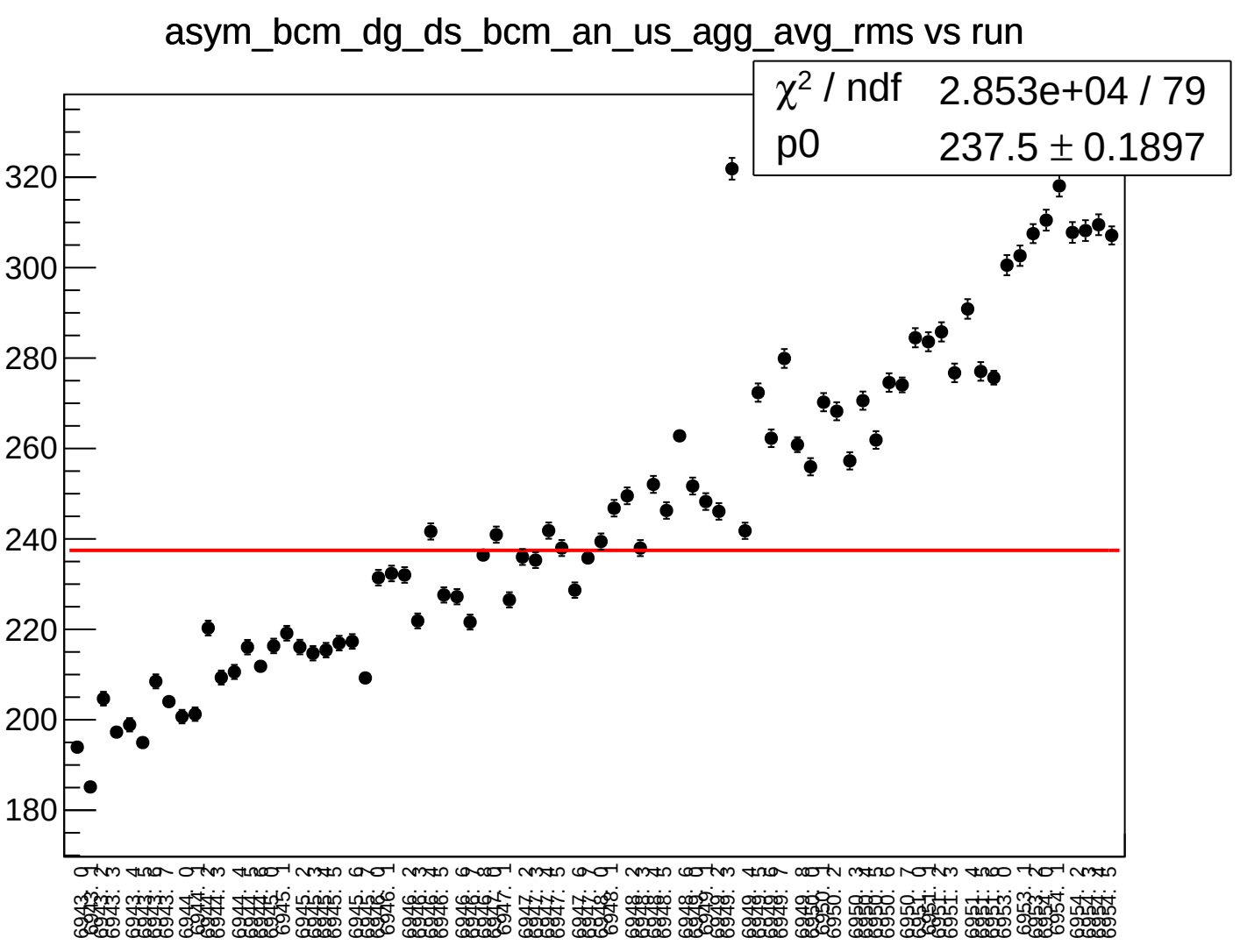

pull1D
Entries 80
Mean −0.001065
Std Dev 0.4457

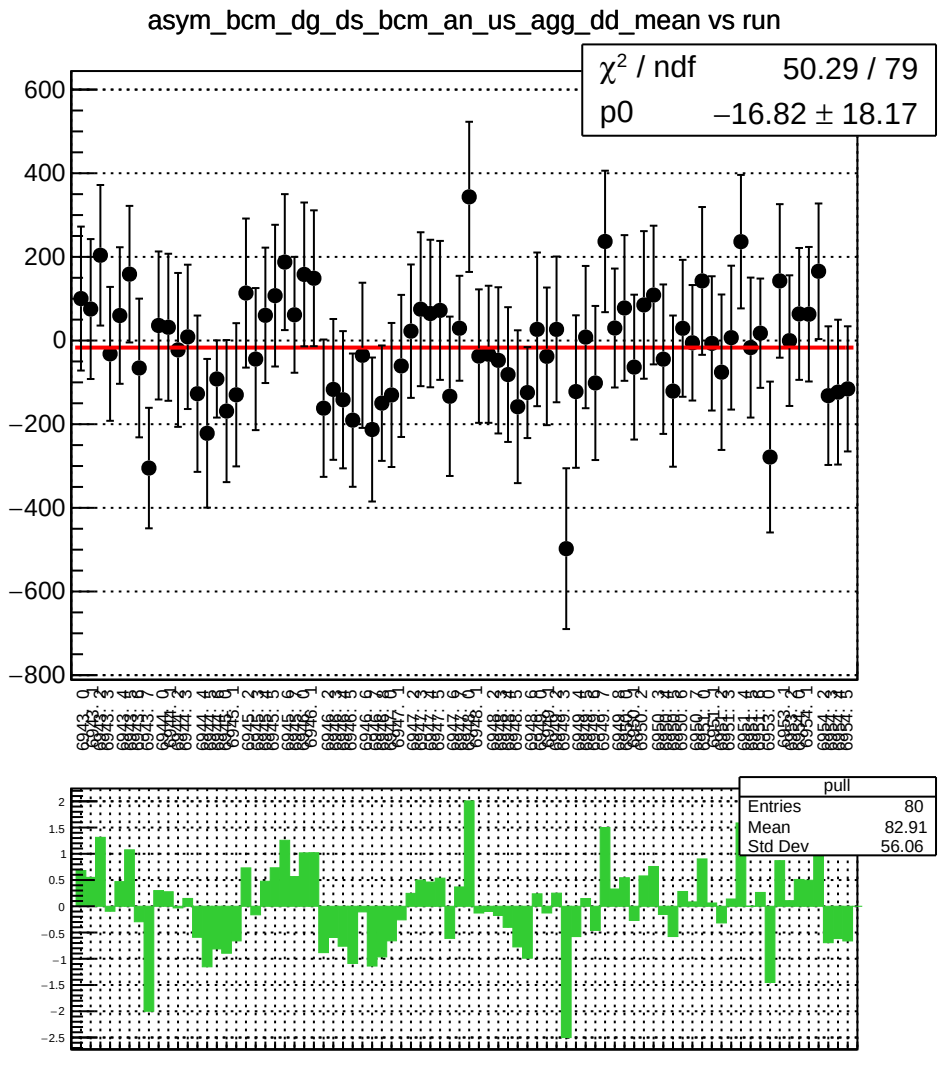

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.866e+04 / 79
p0 237.1 ± 0.1894
320
300
280
260
240
220
200
180

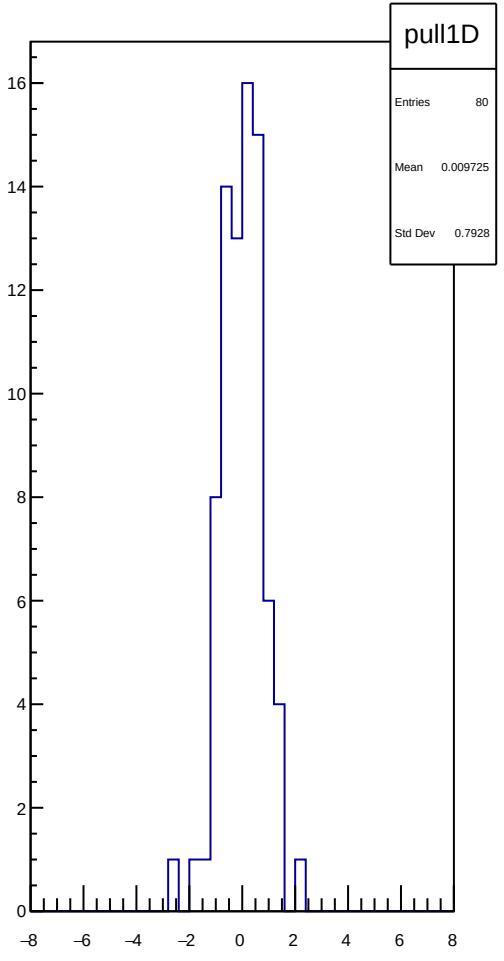

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 80.33 / 79
p0 47.01 ± 25.32
1000
500
0
−500
−1000
pull
Entries 80
Mean 206.4
Std Dev 166.4
3
2
1
0
−1
−2
pull1D
Entries 80
Mean 0.0101
Std Dev 1.002
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

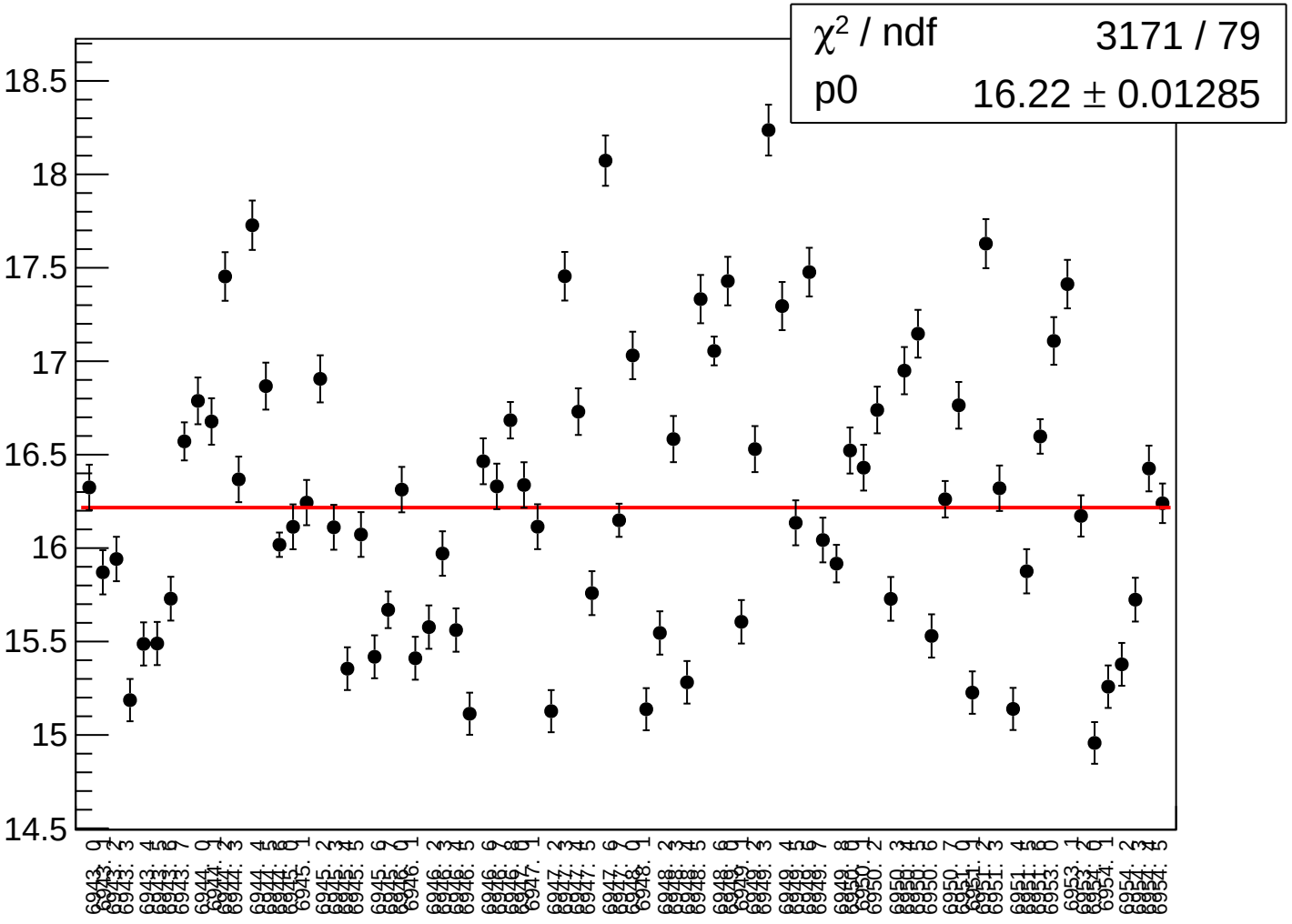

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1098 / 79
p0 22.61 ± 0.0179
24.5
24
23.5
23
22.5
22
21.5
21

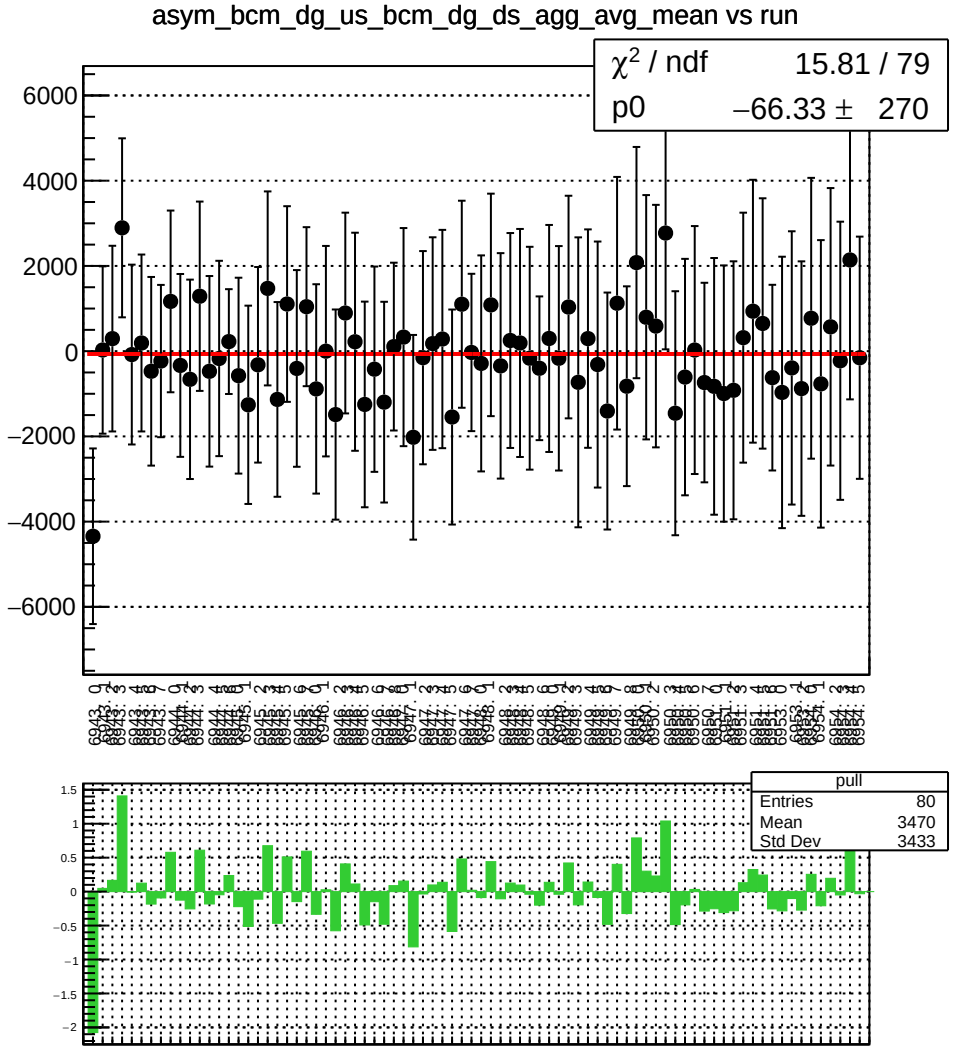

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.12 / 79
p0 −107.9 ± 268.3
pull
Entries 80
Mean −182
Std Dev 217.7
pull1D
Entries 80
Mean −0.001741
Std Dev 0.4347

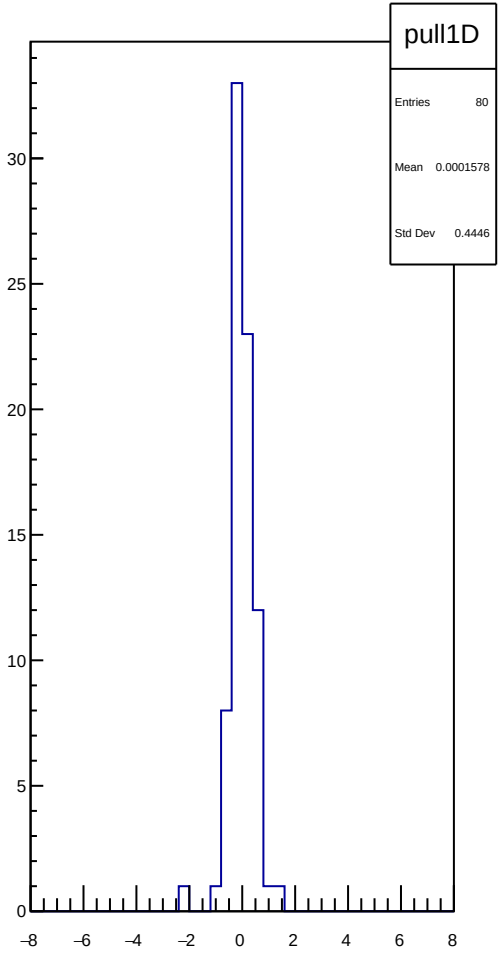

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.853e+04 / 79
p0 237.5 ± 0.1897
320
300
280
260
240
220
200
180

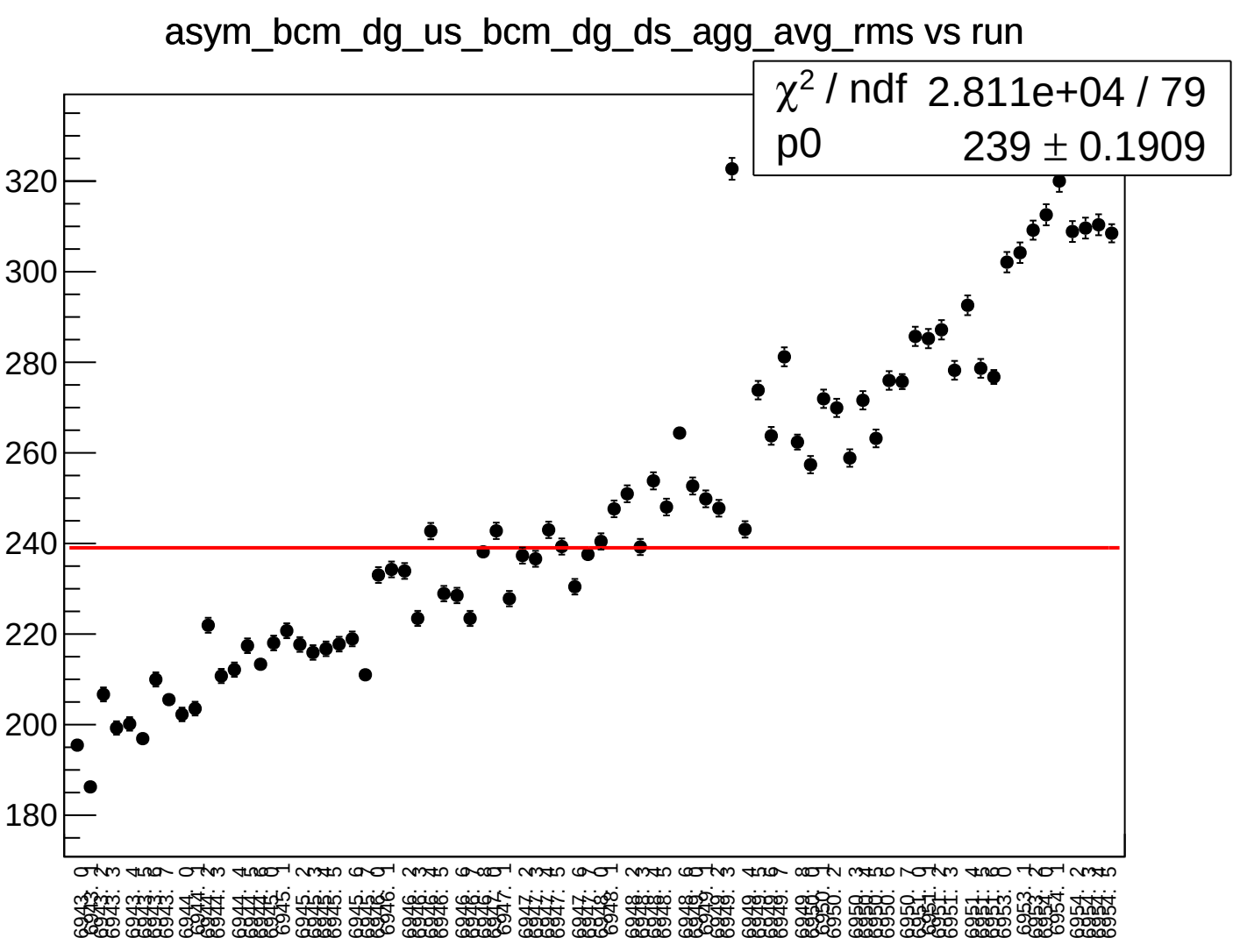

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 50.29 / 79
p0 −16.82 ± 18.17
pull
Entries 80
Mean 82.91
Std Dev 56.06

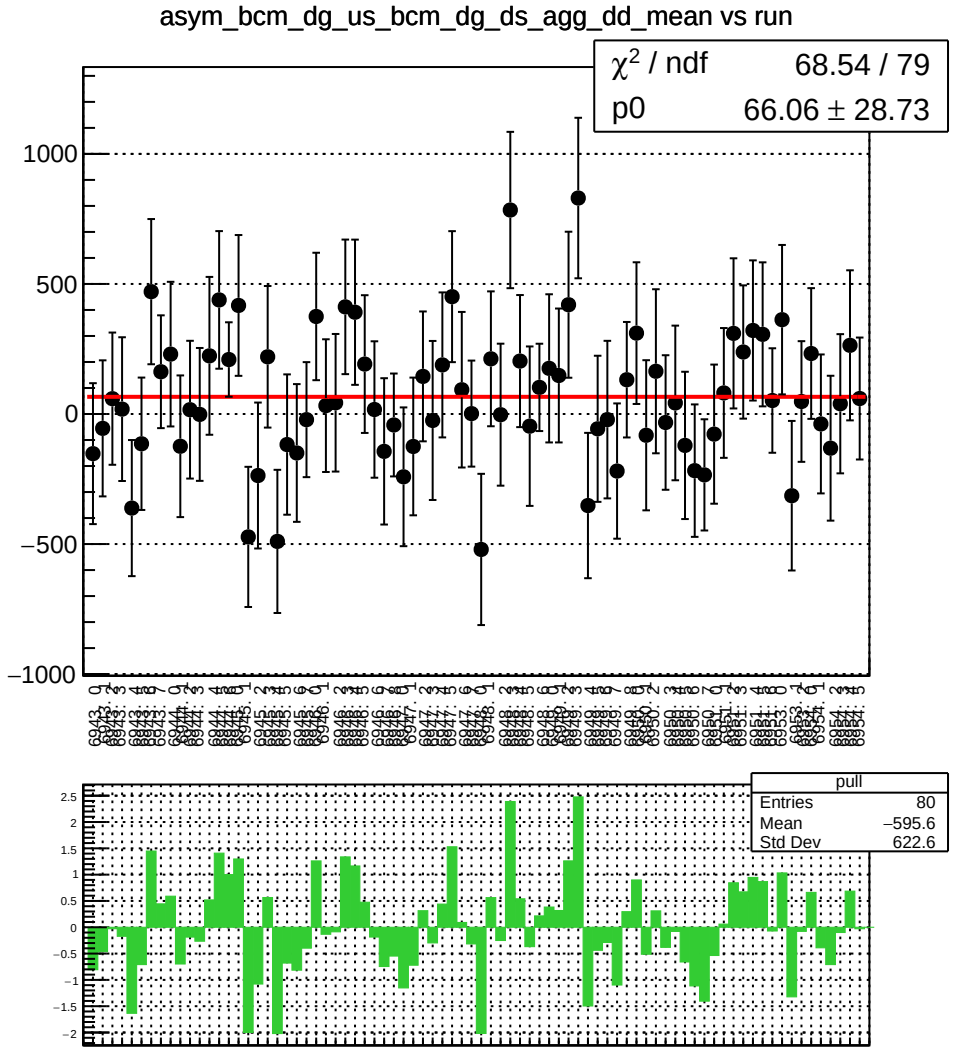

pull1D
Entries 80
Mean 0.009725
Std Dev 0.7928

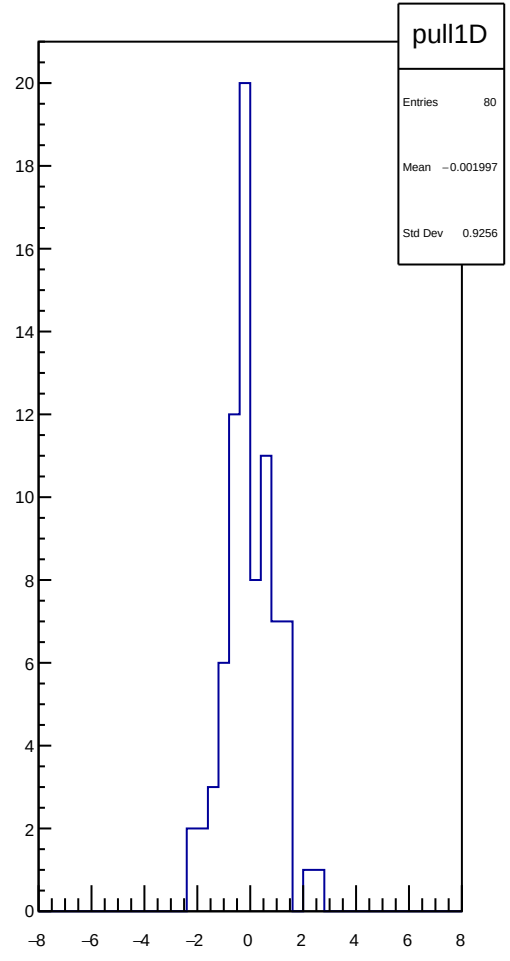

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3171 / 79
p0 16.22 ± 0.01285
18.5
18
17.5
17
16.5
16
15.5
15
14.5

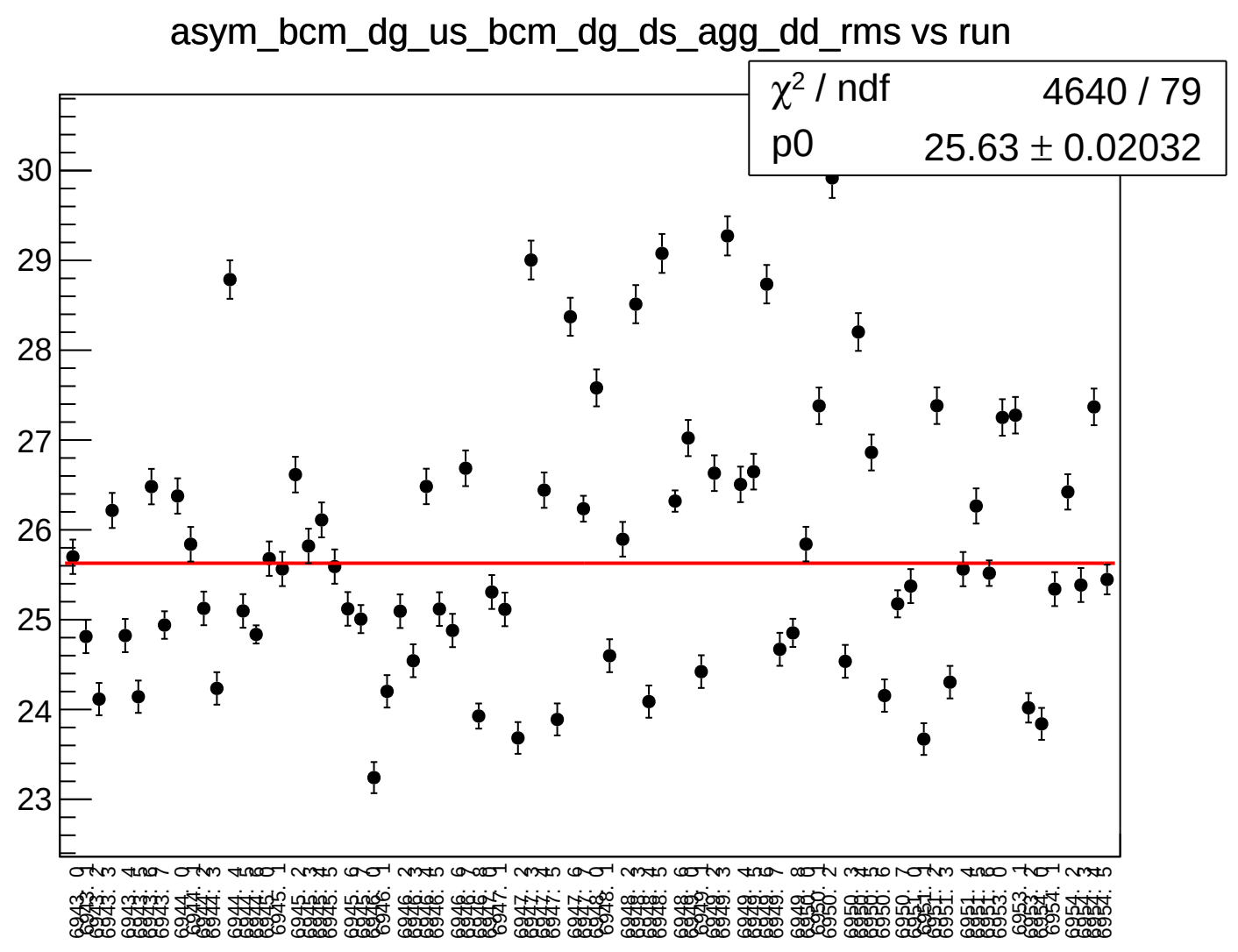

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 15.81 / 79
p0 −66.33 ± 270
pull
Entries 80
Mean 3470
Std Dev 3433

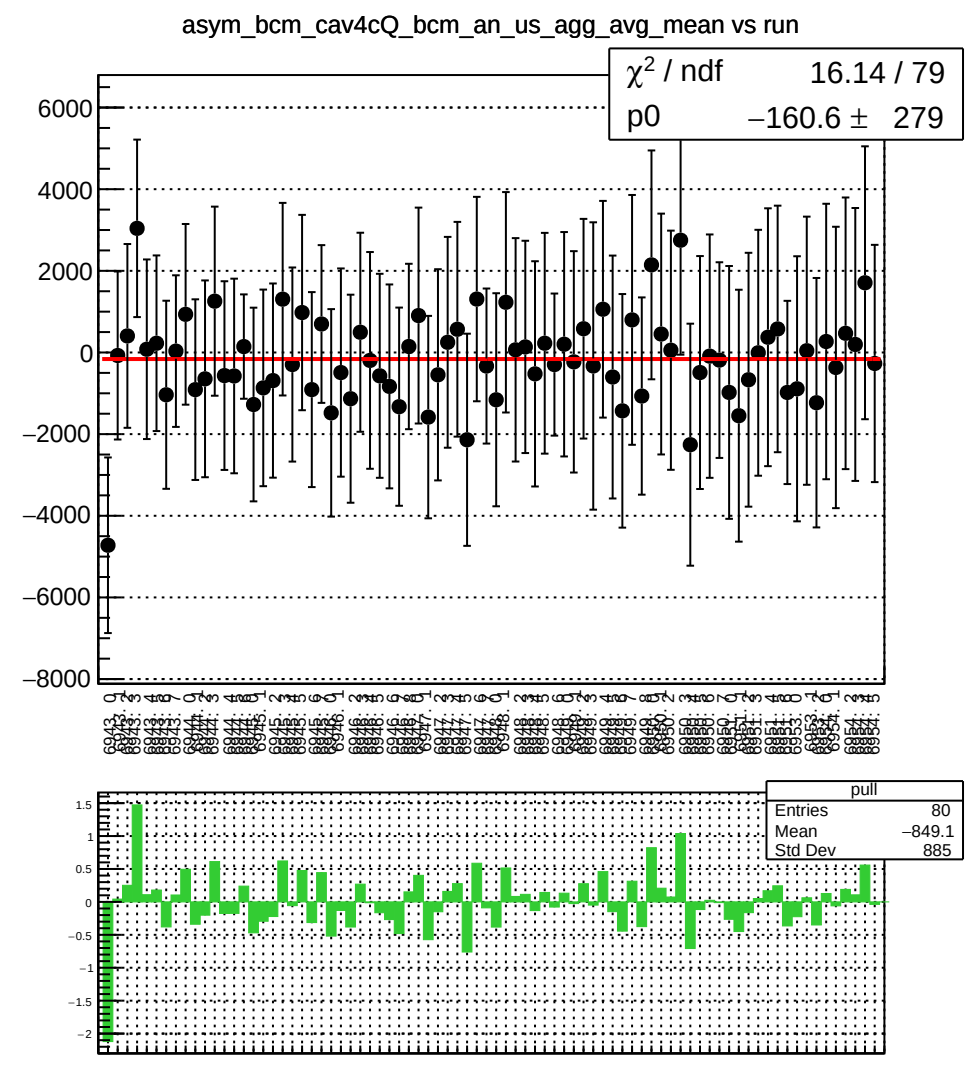

pull1D
Entries 80
Mean 0.0001578
Std Dev 0.4446

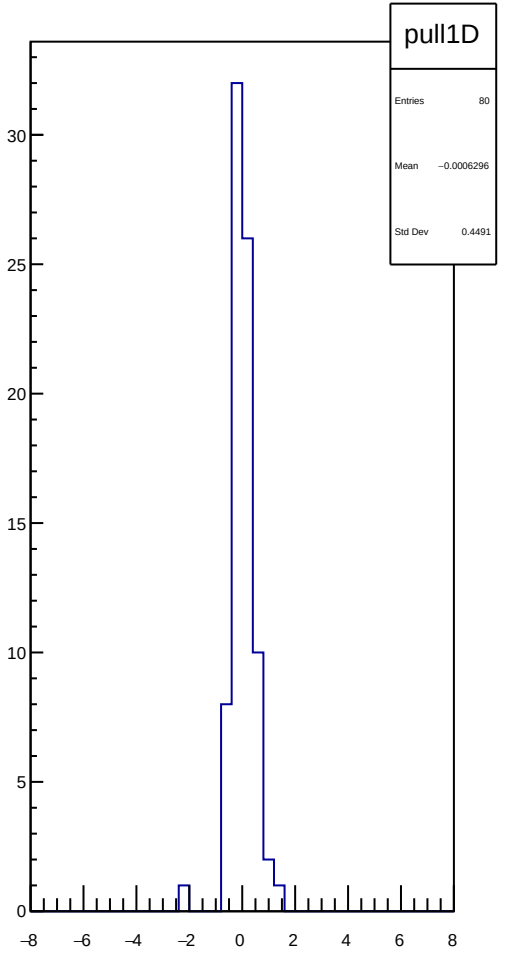

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.811e+04 / 79
p0 239 ± 0.1909
320
300
280
260
240
220
200
180

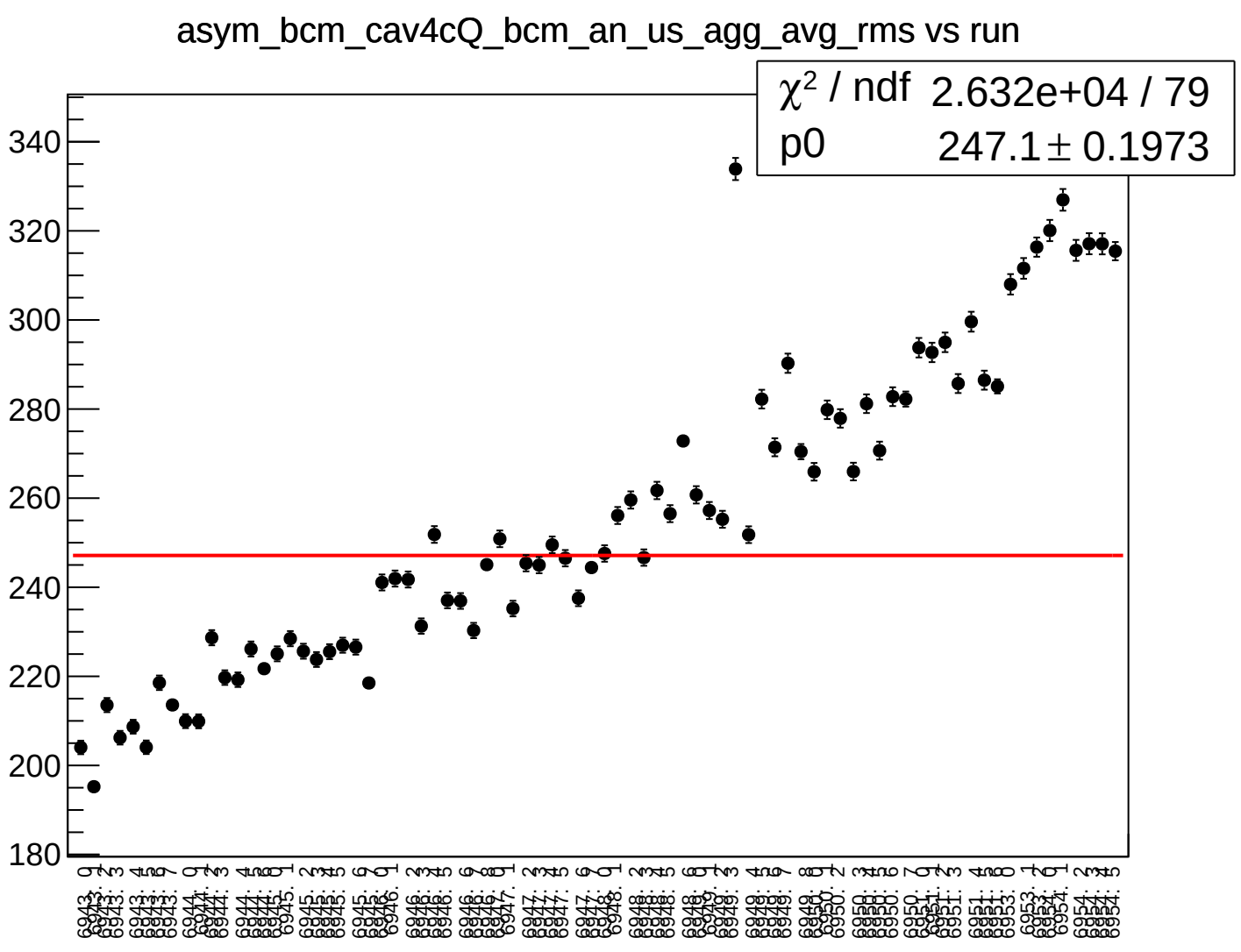

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 68.54 / 79
p0 66.06 ± 28.73
1000
500
0
−500
−1000
pull
Entries 80
Mean −595.6
Std Dev 622.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

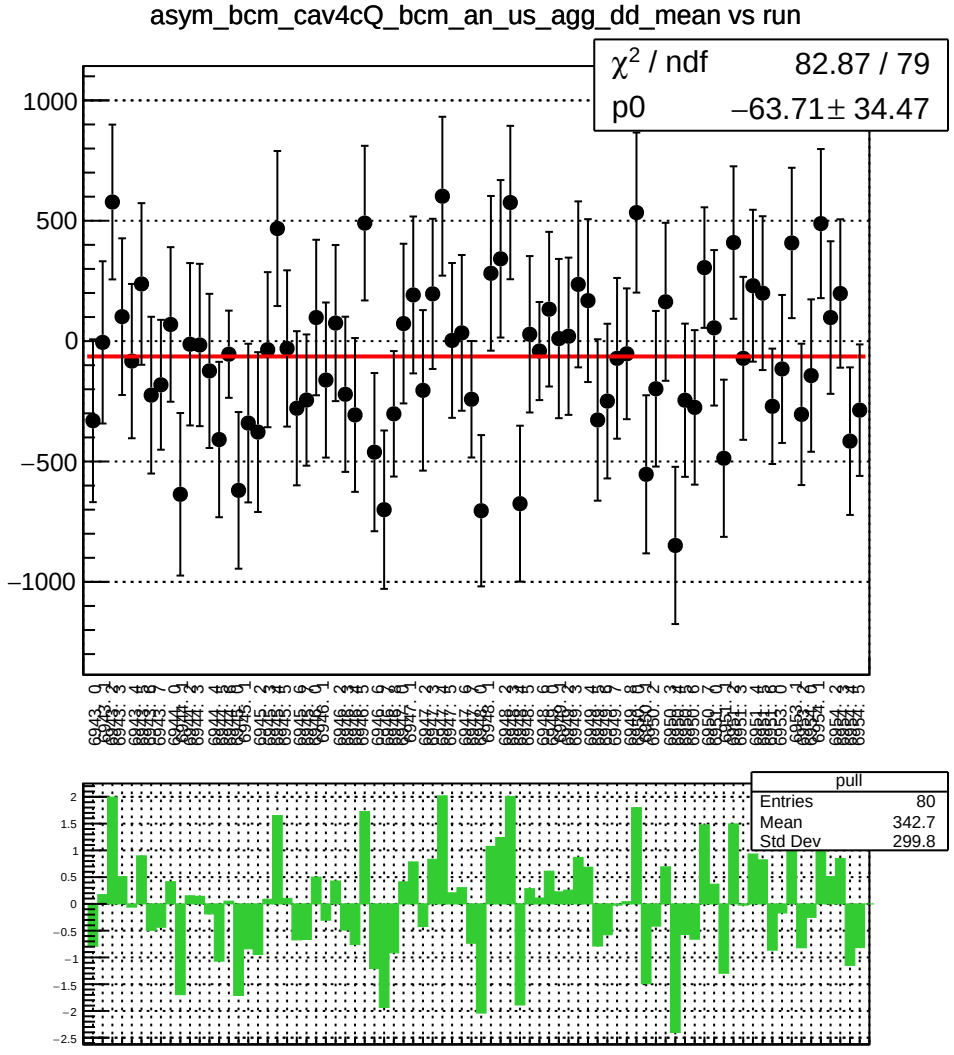

pull1D
Entries 80
Mean −0.001997
Std Dev 0.9256
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

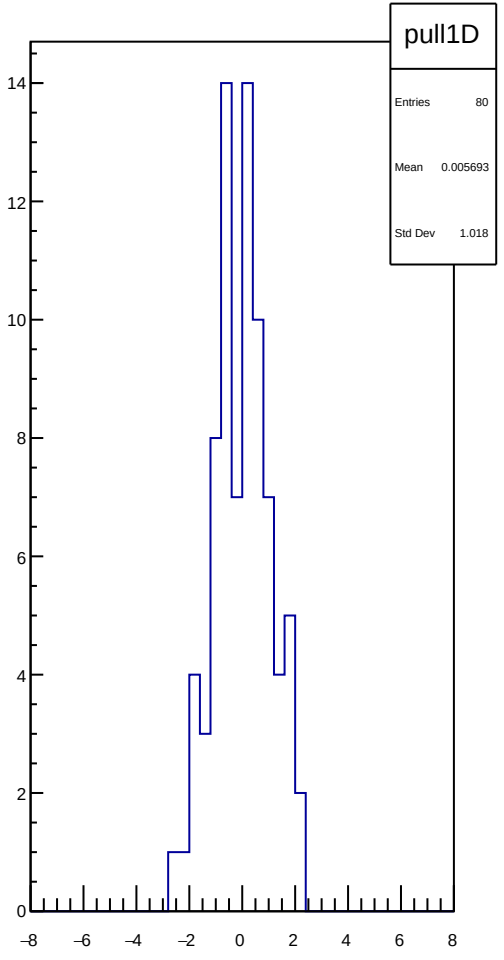

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4640 / 79
p0 25.63 ± 0.02032
30
29
28
27
26
25
24
23

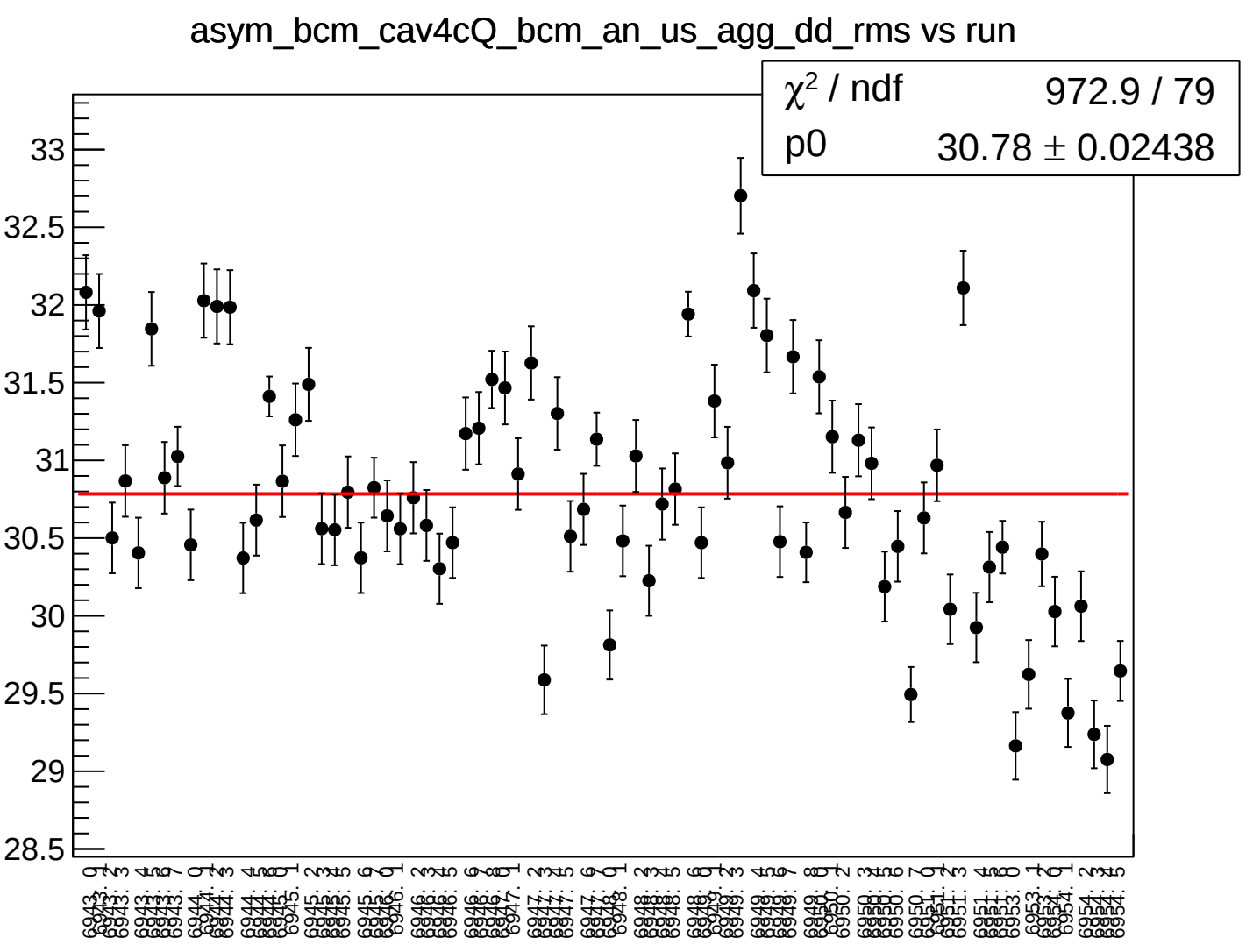

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.14 / 79
p0 −160.6 ± 279
pull
Entries 80
Mean −849.1
Std Dev 885

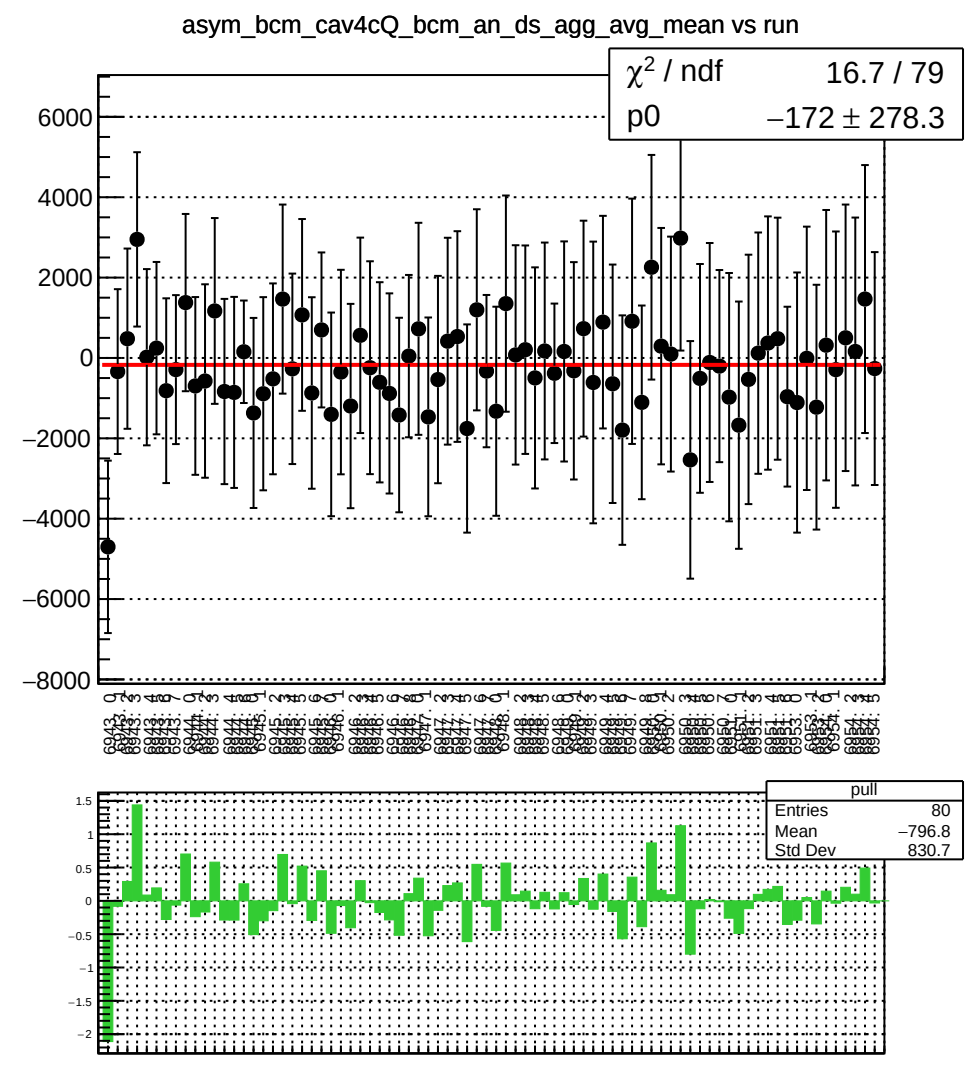

pull1D
Entries 80
Mean −0.0006296
Std Dev 0.4491

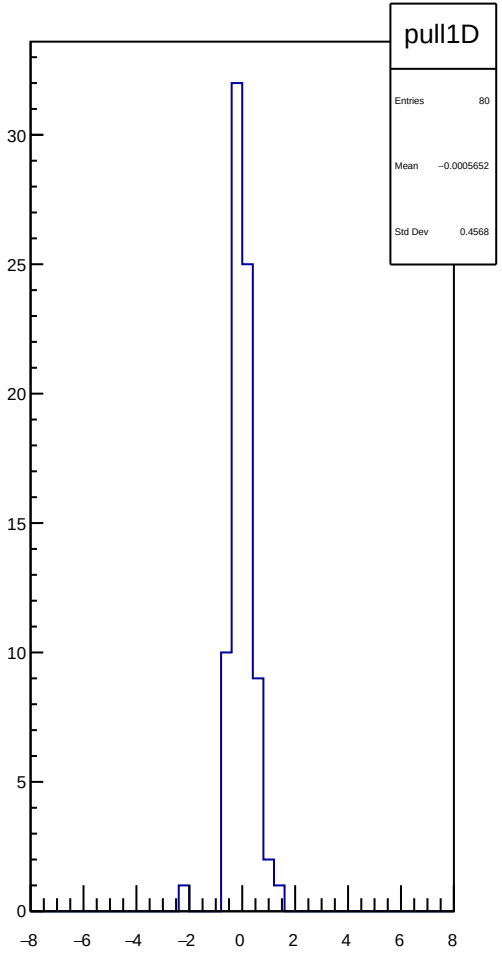

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2.632e+04 / 79
p0 247.1 ± 0.1973
340
320
300
280
260
240
220
200
180

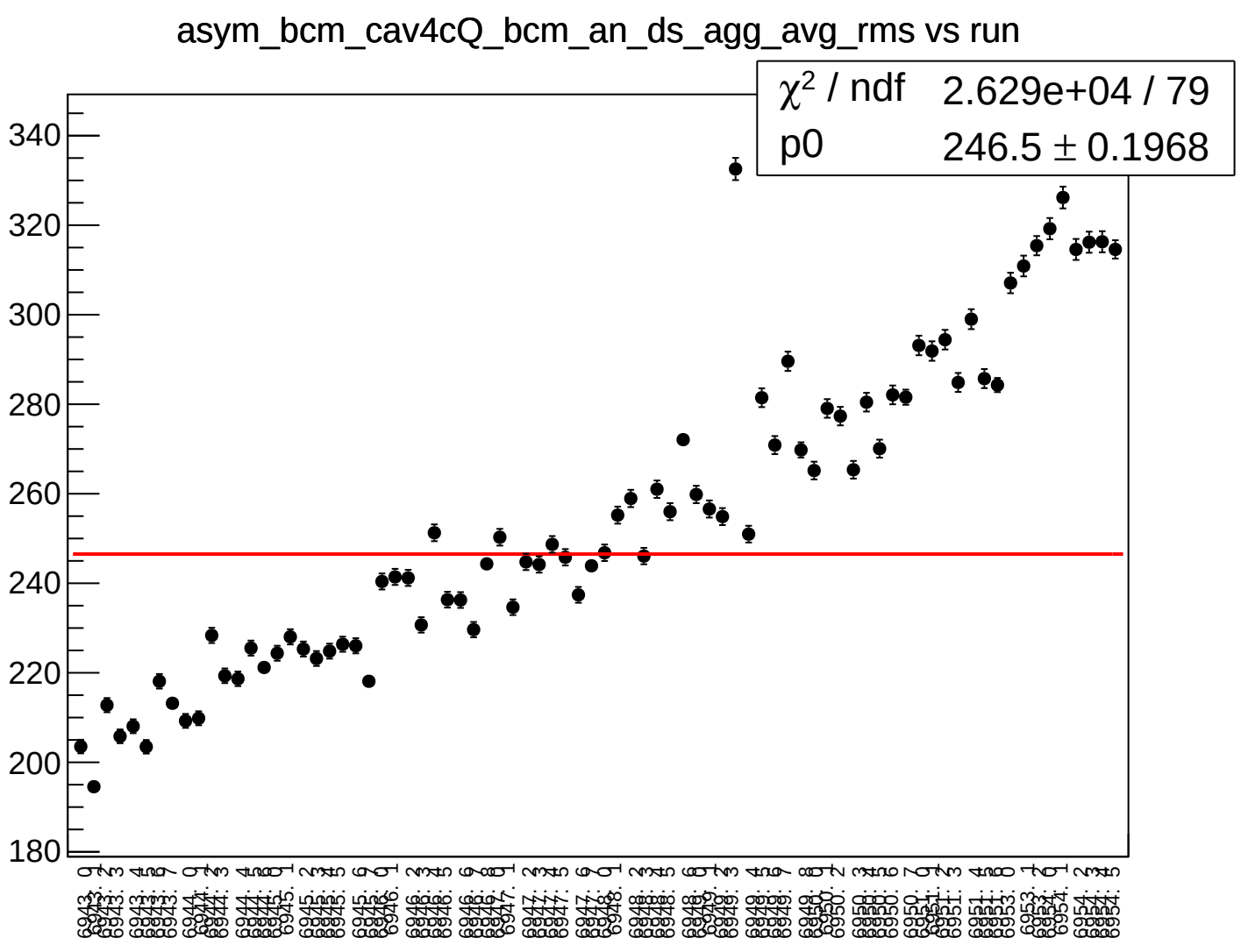

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 82.87 / 79
p0 −63.71 ± 34.47
1000
500
0
−500
−1000
pull
Entries 80
Mean 342.7
Std Dev 299.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

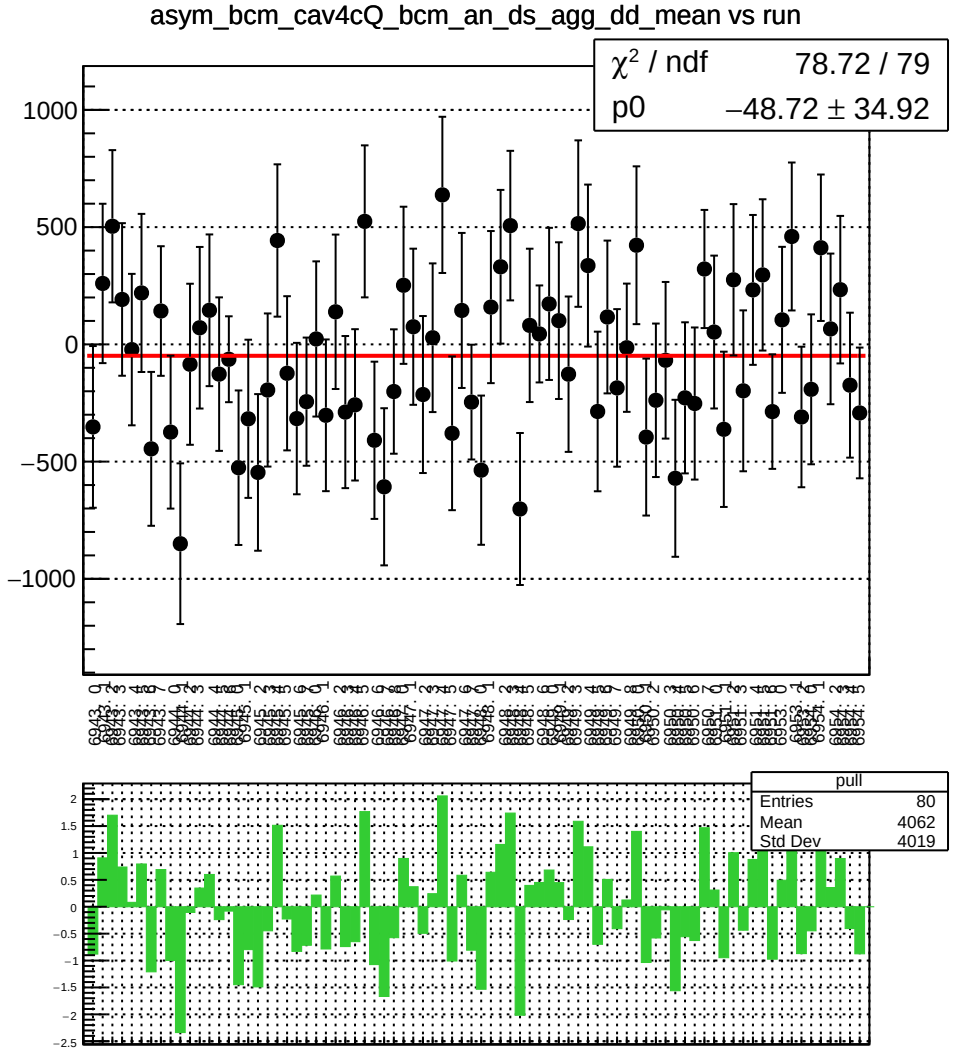

pull1D
Entries 80
Mean 0.005693
Std Dev 1.018
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

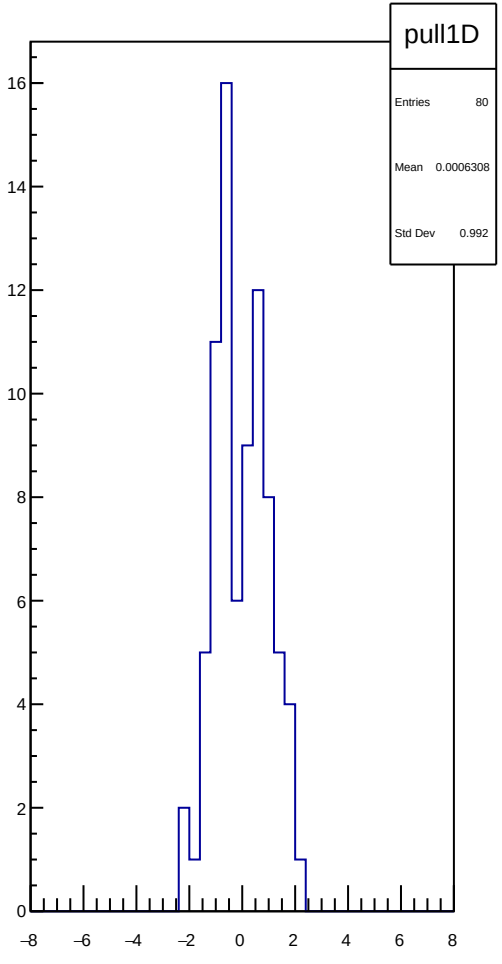

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 972.9 / 79
p0 30.78 ± 0.02438
33
32.5
32
31.5
31
30.5
30
29.5
29
28.5

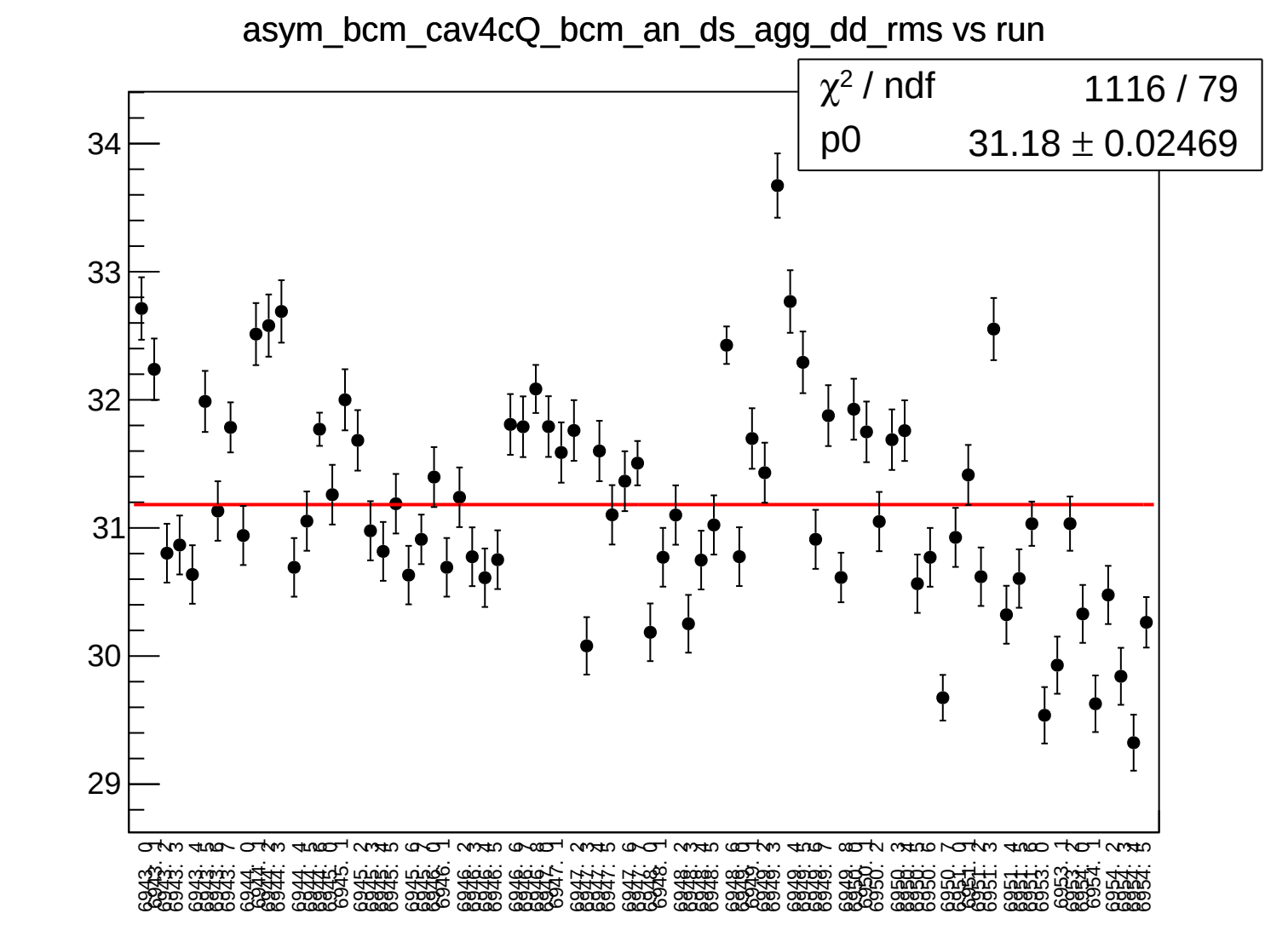

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.7 / 79
p0 −172 ± 278.3
pull
Entries 80
Mean −796.8
Std Dev 830.7

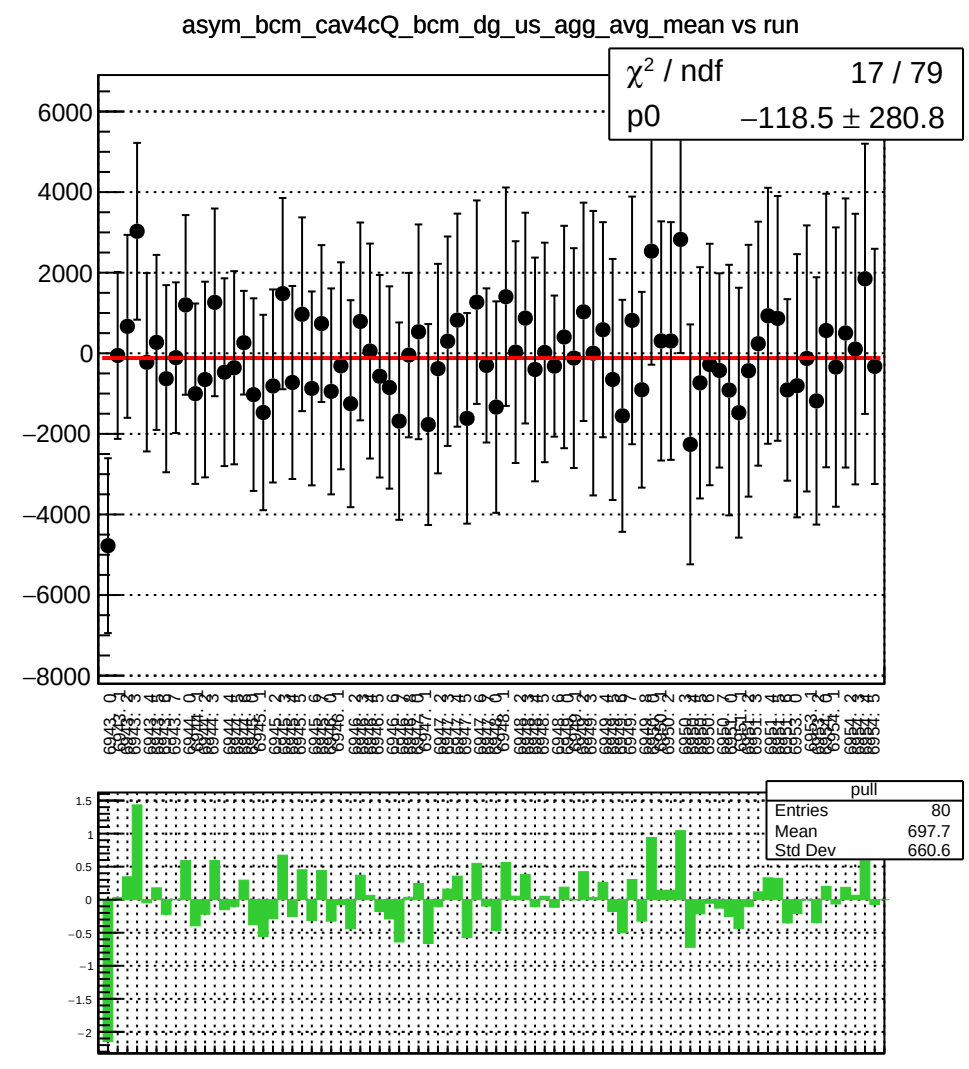

pull1D
Entries 80
Mean −0.0005652
Std Dev 0.4568

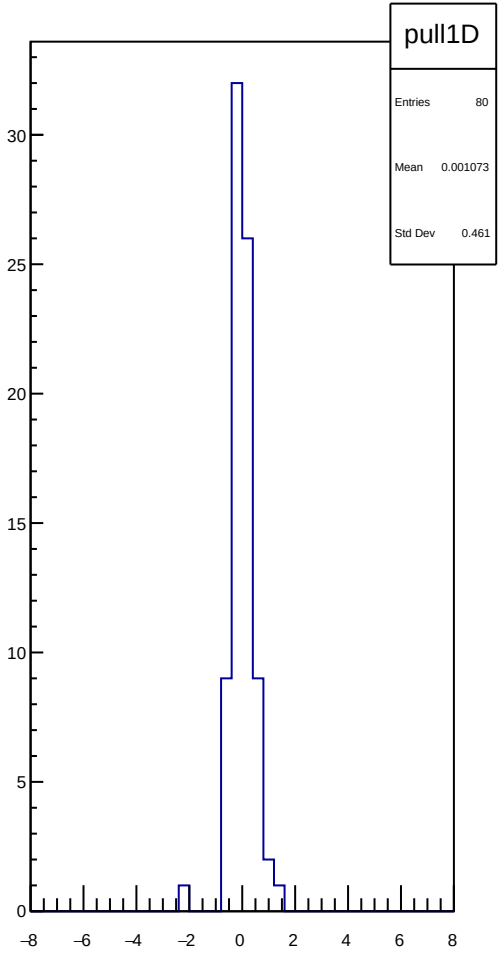

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2.629e+04 / 79
p0 246.5 ± 0.1968
340
320
300
280
260
240
220
200
180

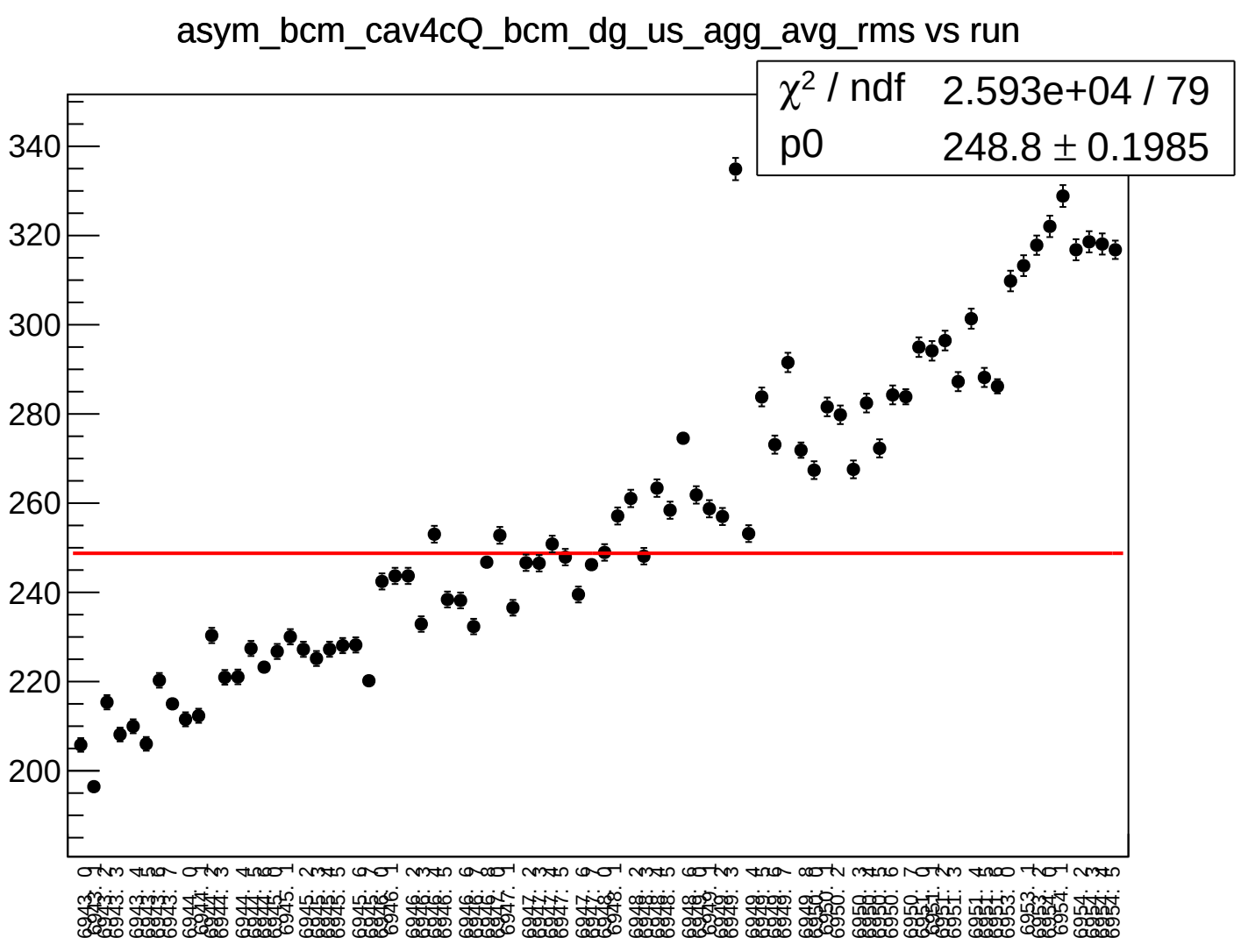

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 78.72 / 79
p0 −48.72 ± 34.92
1000
500
0
−500
−1000
pull
Entries 80
Mean 4062
Std Dev 4019
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

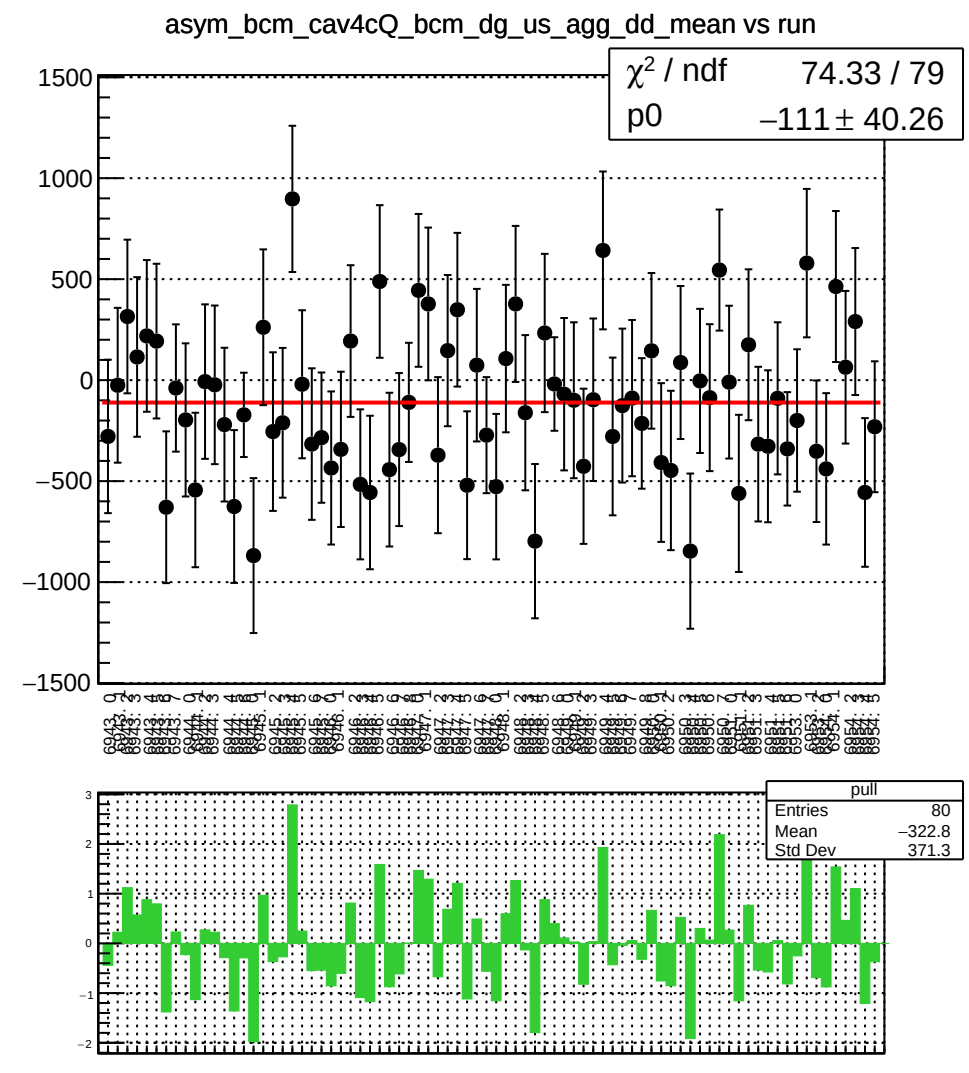

pull1D
Entries 80
Mean 0.0006308
Std Dev 0.992
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

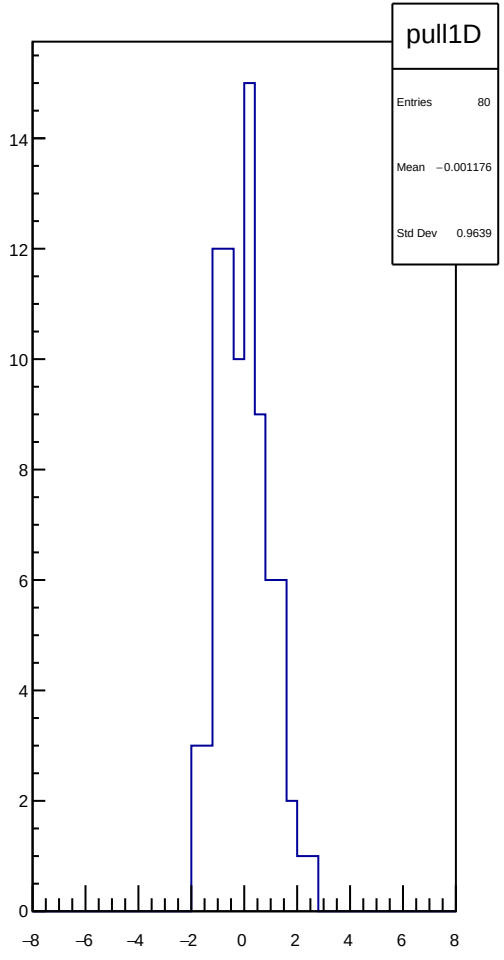

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1116 / 79
p0 31.18 ± 0.02469
34
33
32
31
30
29

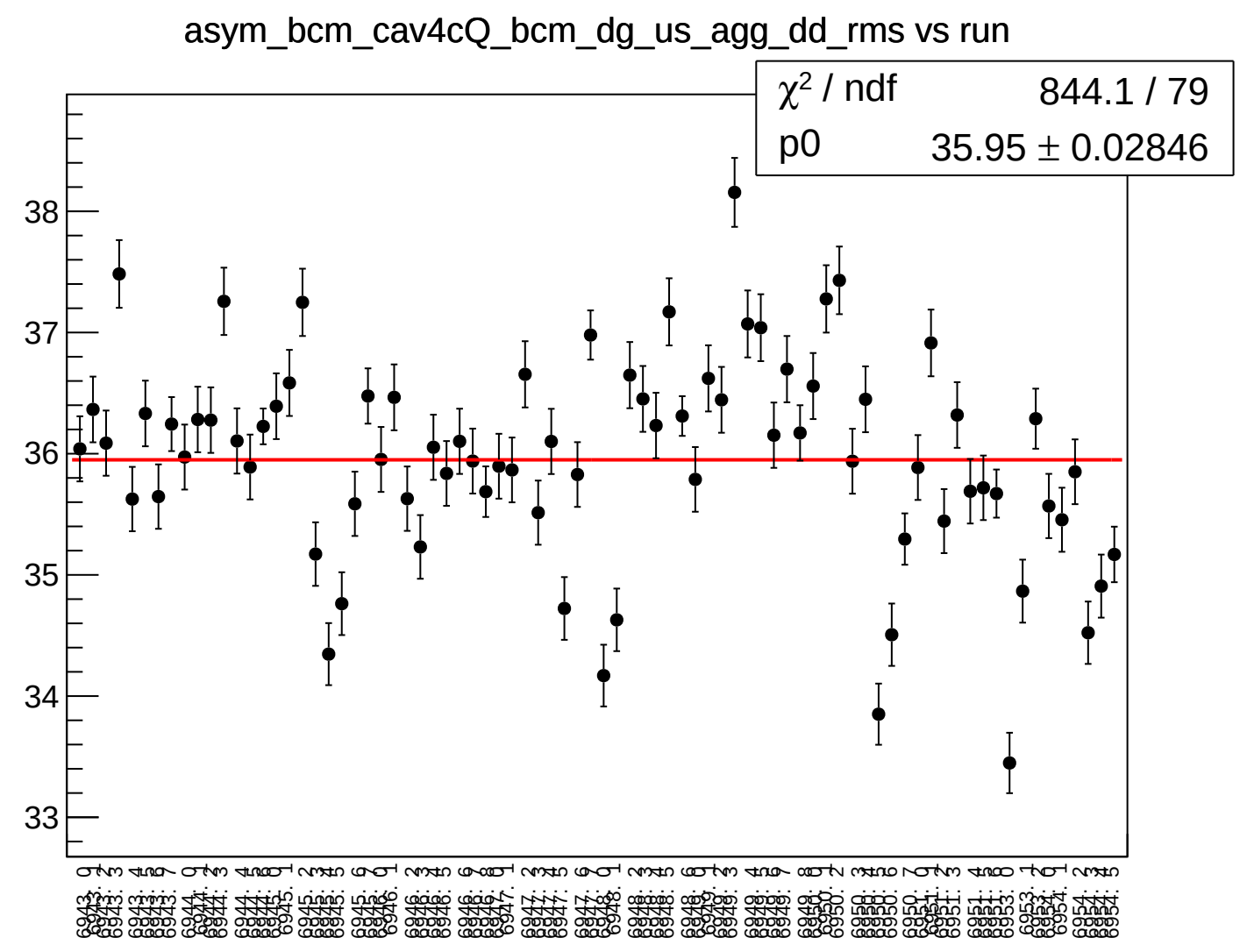

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 17 / 79
p0 −118.5 ± 280.8
pull
Entries 80
Mean 697.7
Std Dev 660.6

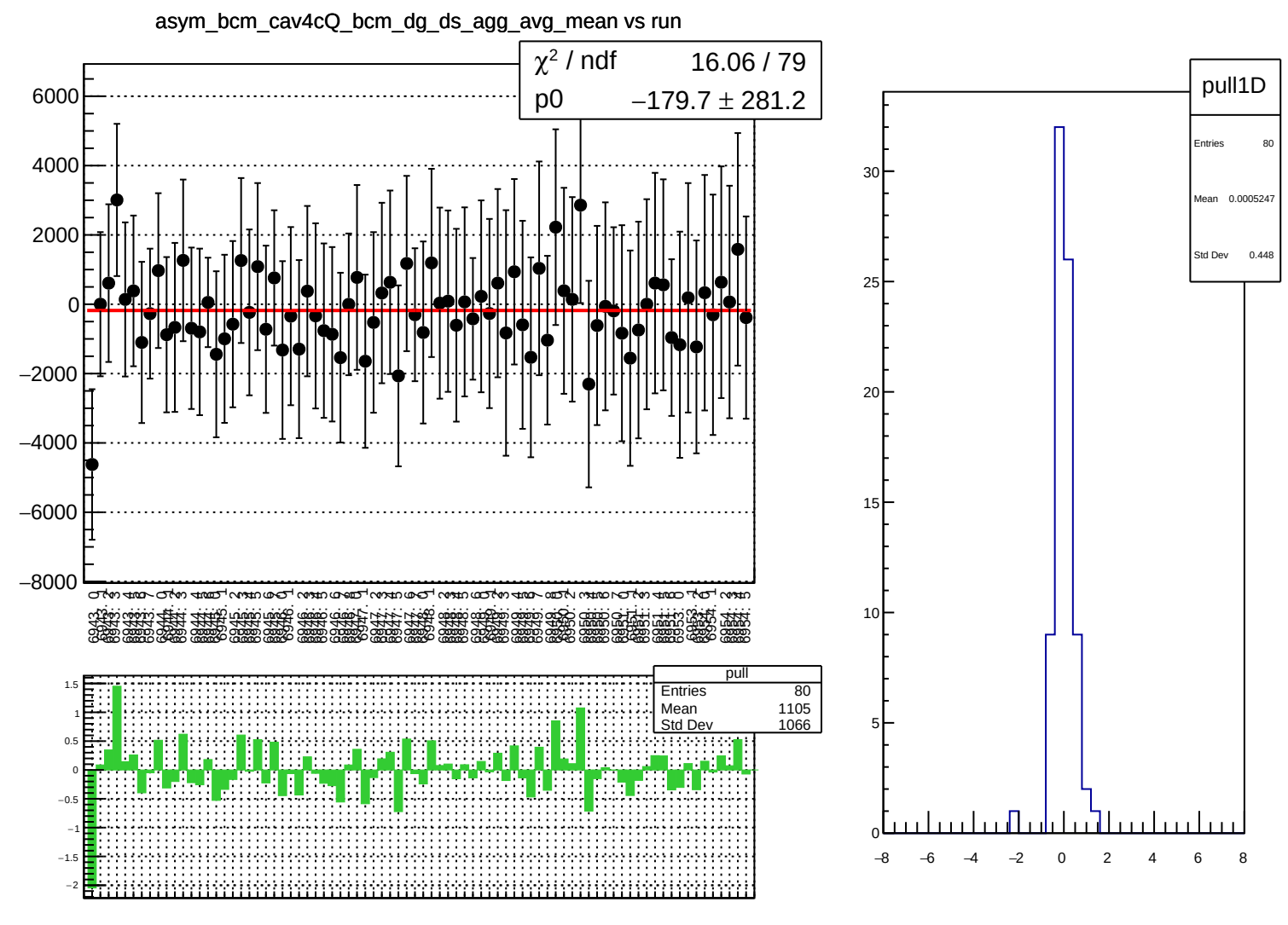

pull1D
Entries 80
Mean 0.001073
Std Dev 0.461

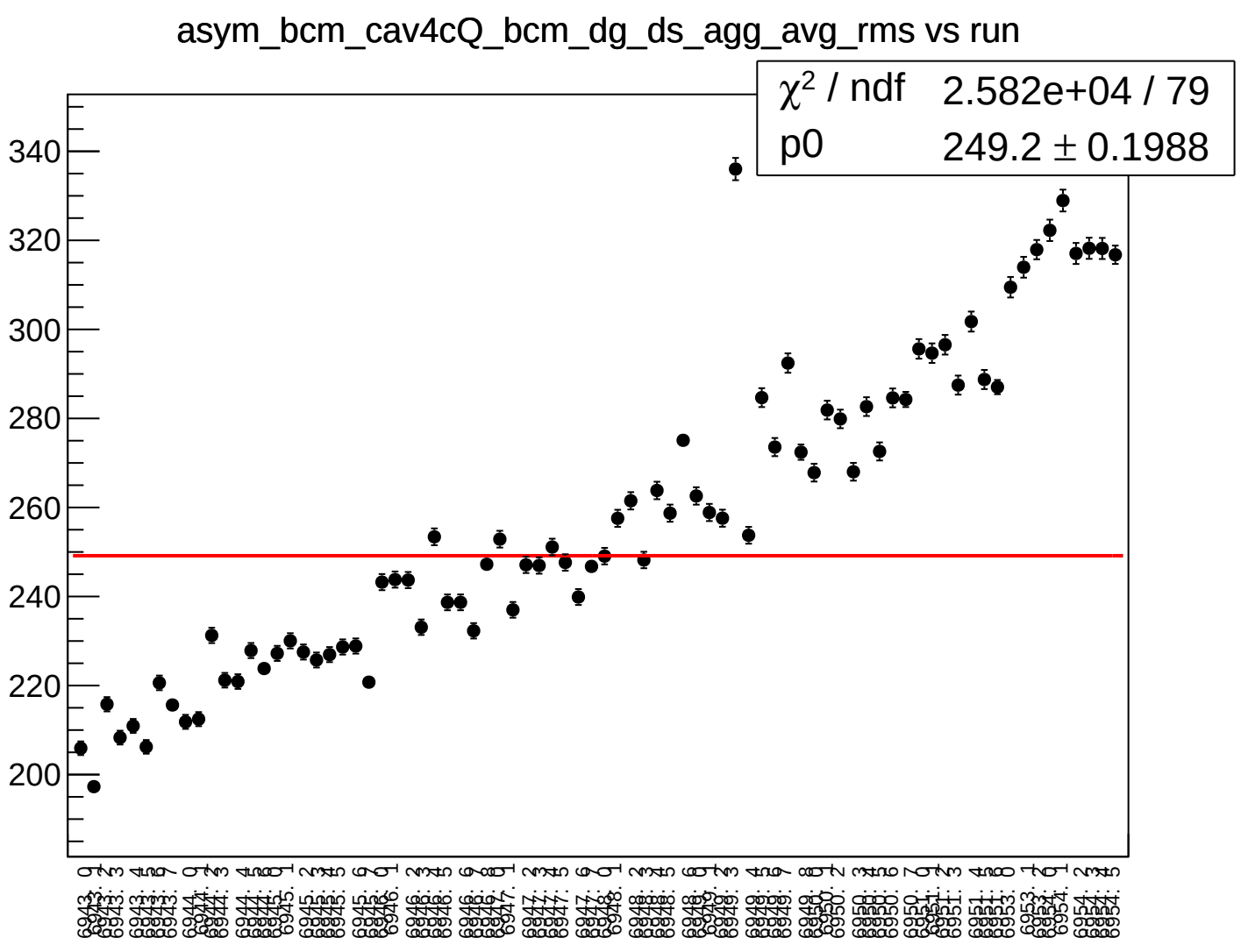

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2.593e+04 / 79
p0 248.8 ± 0.1985
340
320
300
280
260
240
220
200

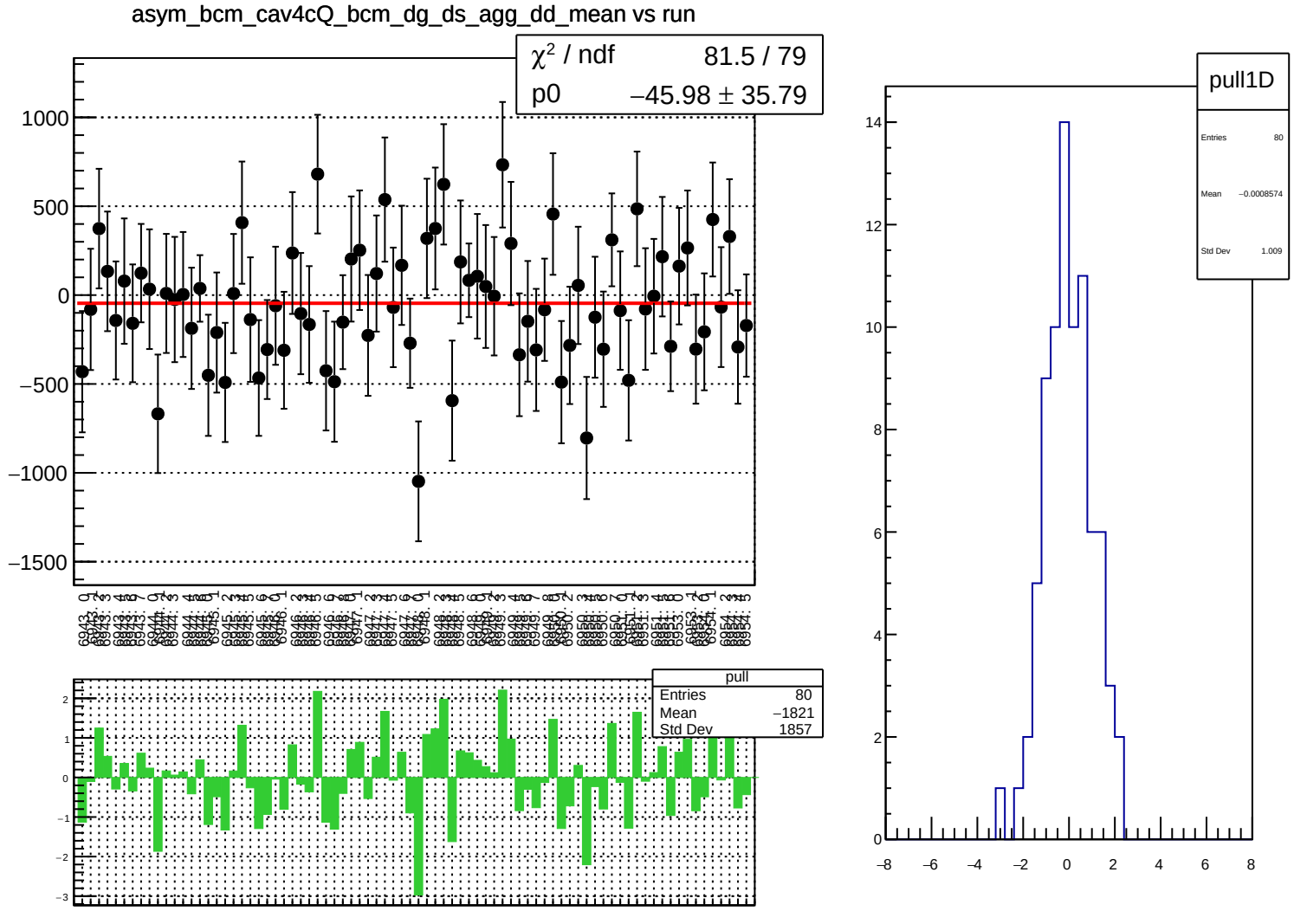

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 74.33 / 79
p0 −111 ± 40.26
pull
Entries 80
Mean −322.8
Std Dev 371.3

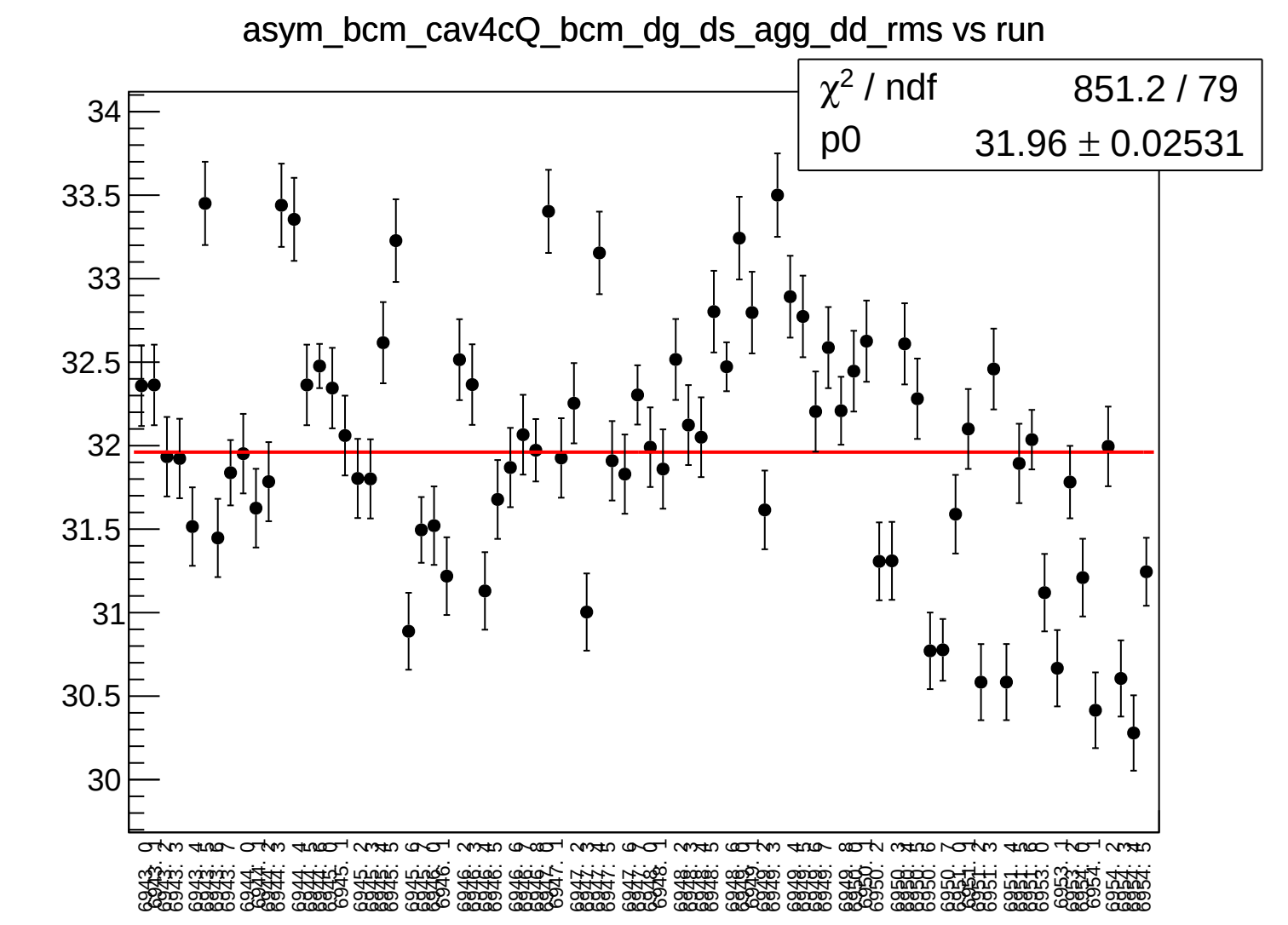

pull1D
Entries 80
Mean −0.001176
Std Dev 0.9639

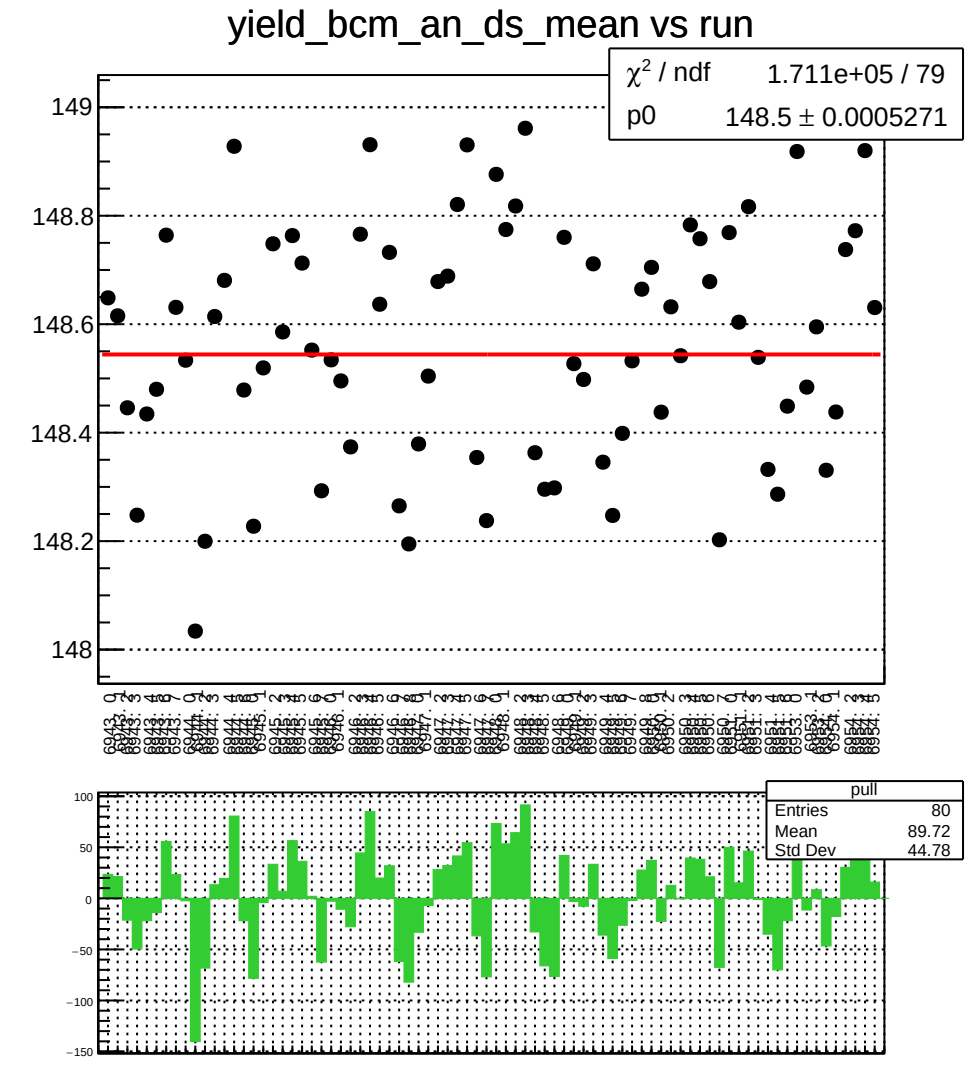

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 844.1 / 79
p0 35.95 ± 0.02846
38
37
36
35
34
33

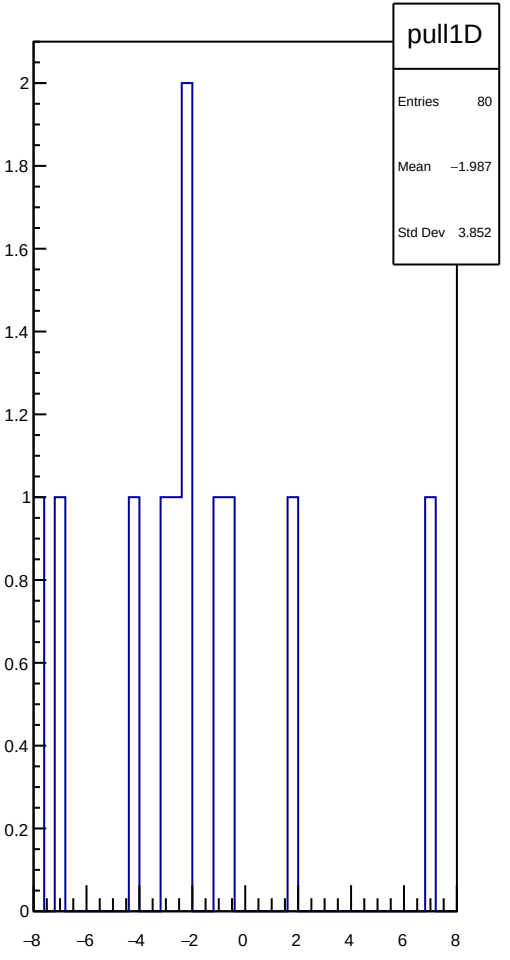

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 16.06 / 79
p0 −179.7 ± 281.2
pull
Entries 80
Mean 1105
Std Dev 1066
pull1D
Entries 80
Mean 0.0005247
Std Dev 0.448

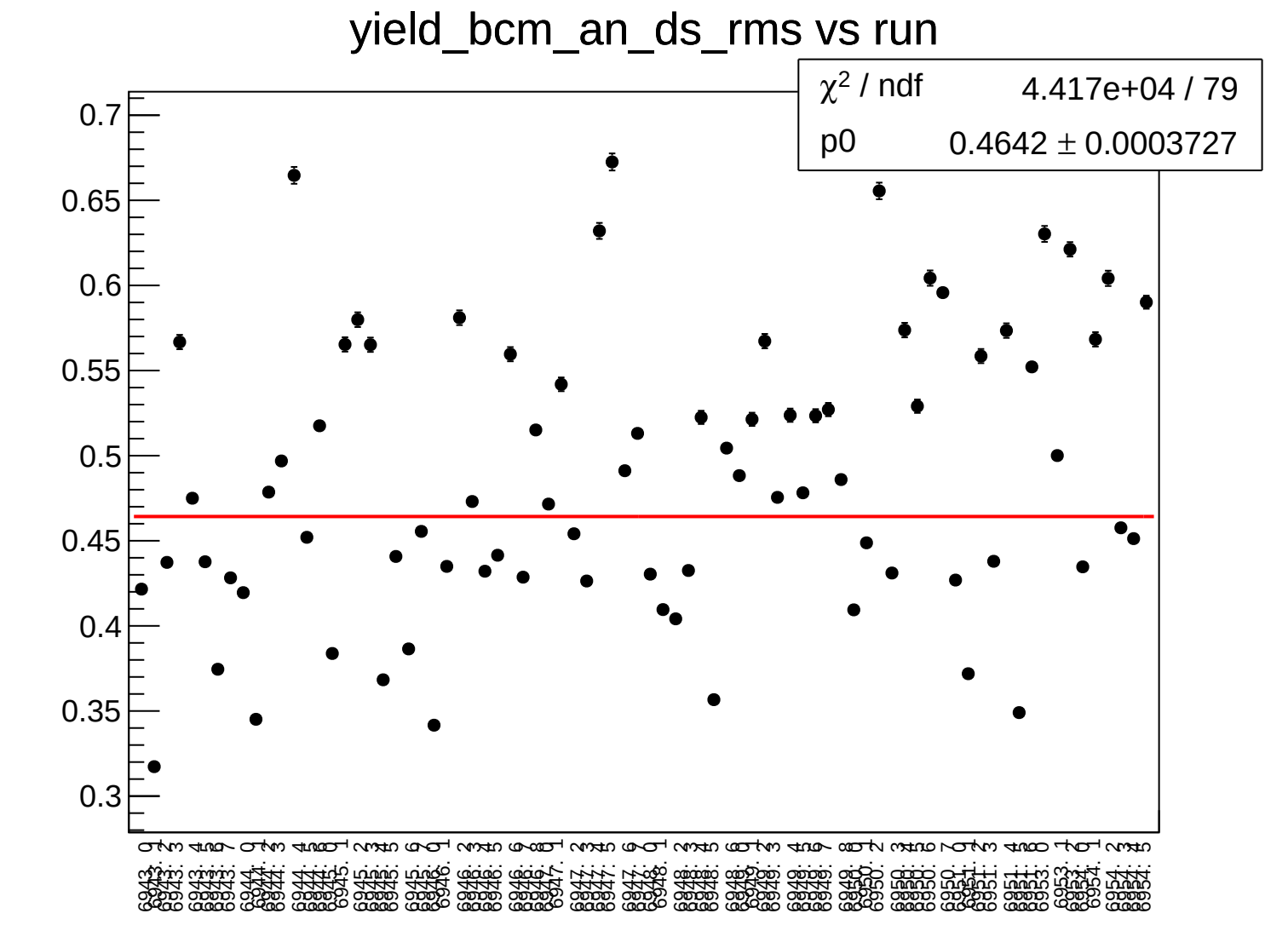

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2.582e+04 / 79
p0 249.2 ± 0.1988
340
320
300
280
260
240
220
200

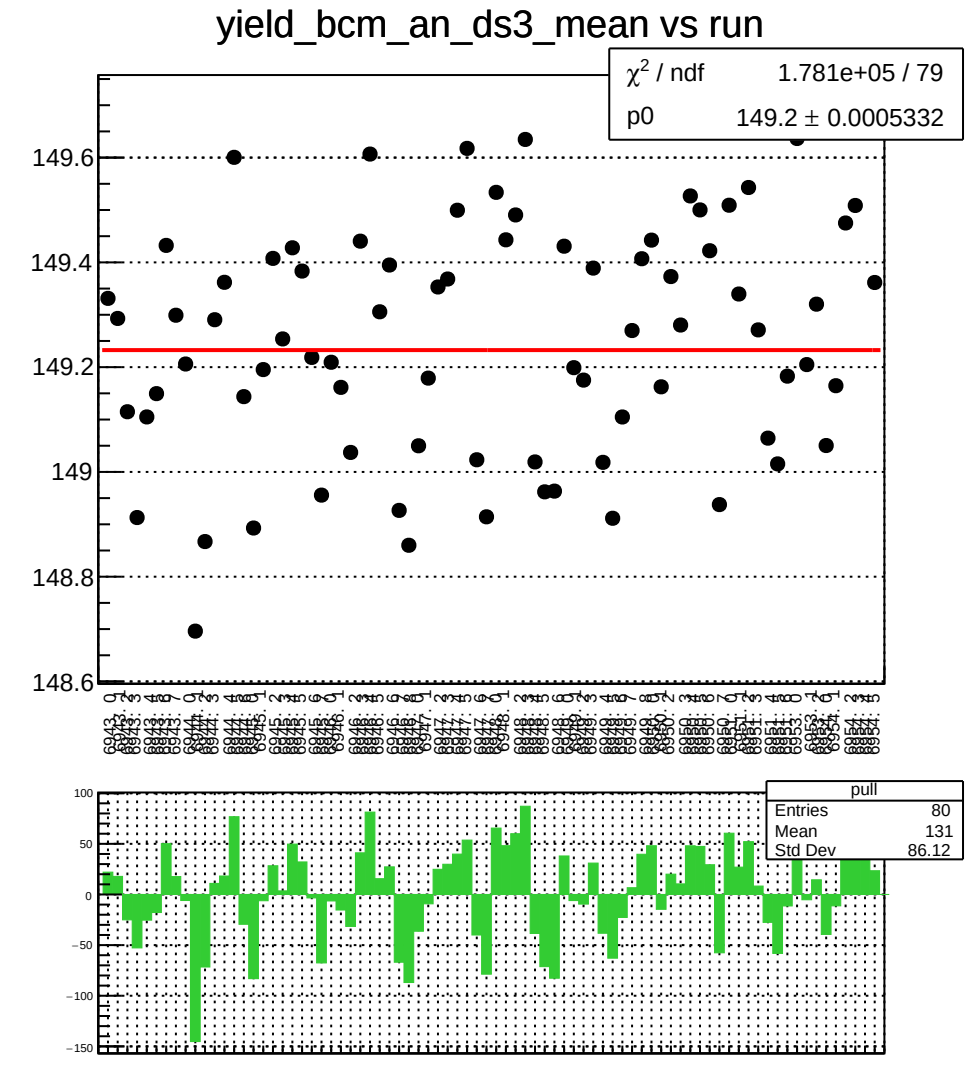

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 81.5 / 79
p0 −45.98 ± 35.79
1000
500
0
−500
−1000
−1500
pull
Entries 80
Mean −1821
Std Dev 1857
2
1
0
−1
−2
−3
pull1D
Entries 80
Mean −0.0008574
Std Dev 1.009
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

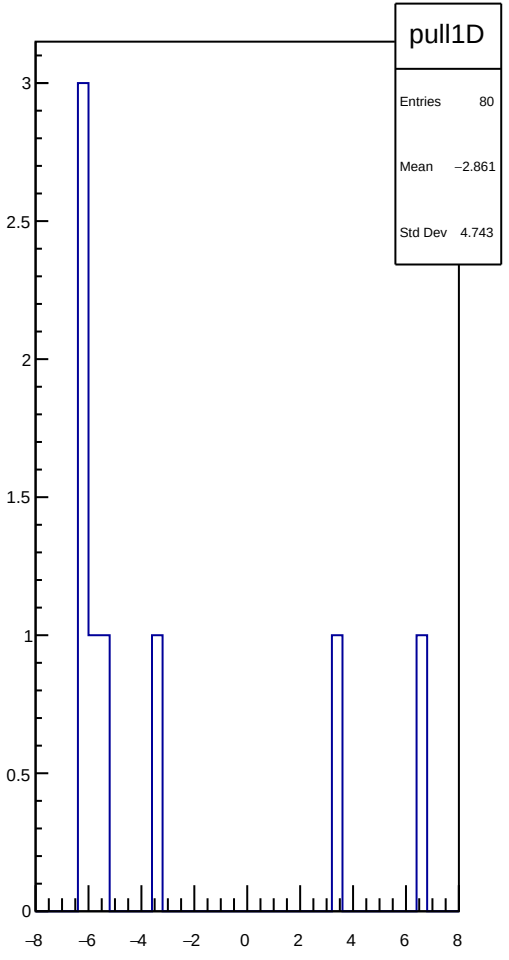

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 851.2 / 79
p0 31.96 ± 0.02531
34
33.5
33
32.5
32
31.5
31
30.5
30

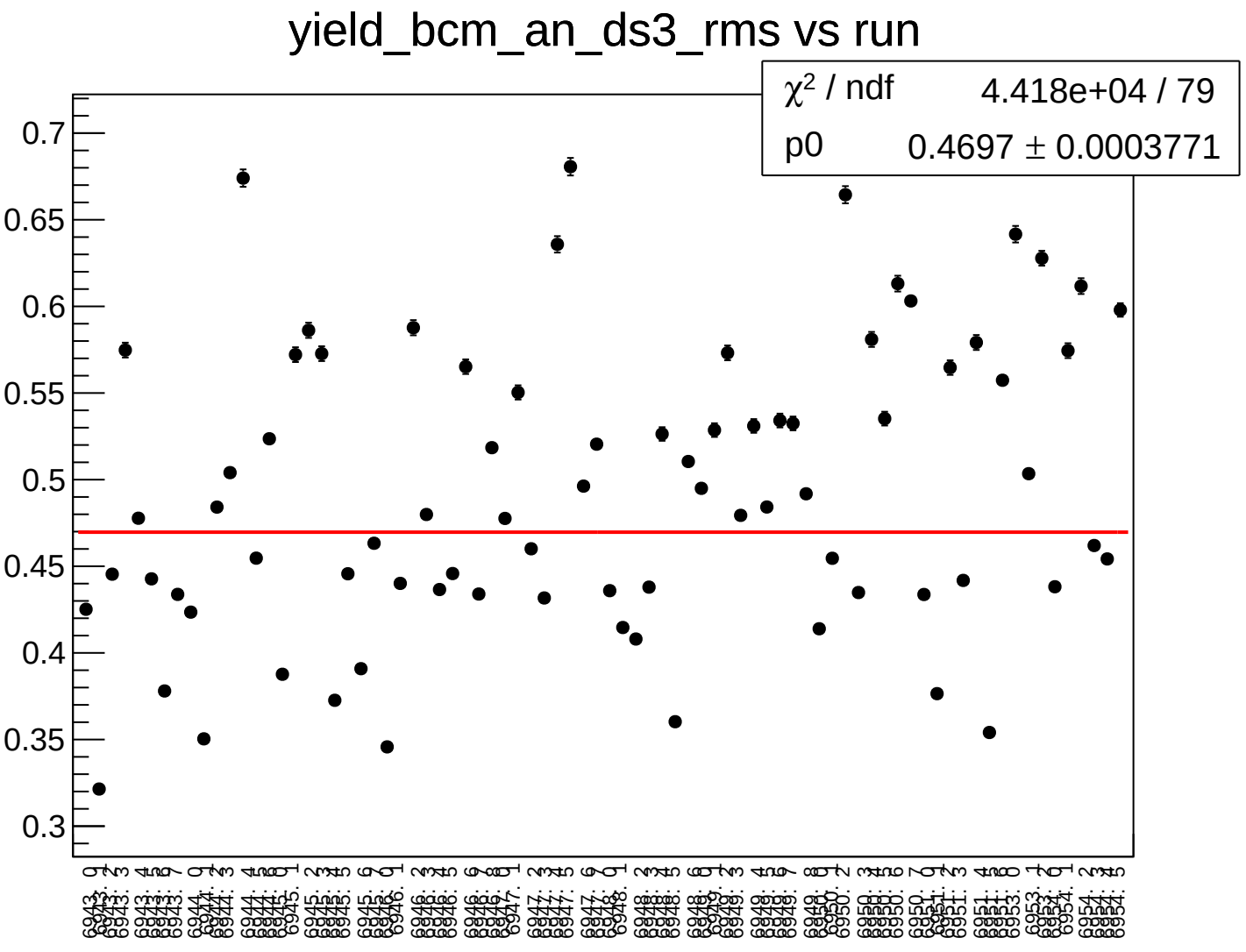

yield_bcm_an_ds_mean vs run
χ² / ndf 1.711e+05 / 79
p0 148.5 ± 0.0005271
149
148.8
148.6
148.4
148.2
148
pull
Entries 80
Mean 89.72
Std Dev 44.78
100
50
0
−50
−100
−150

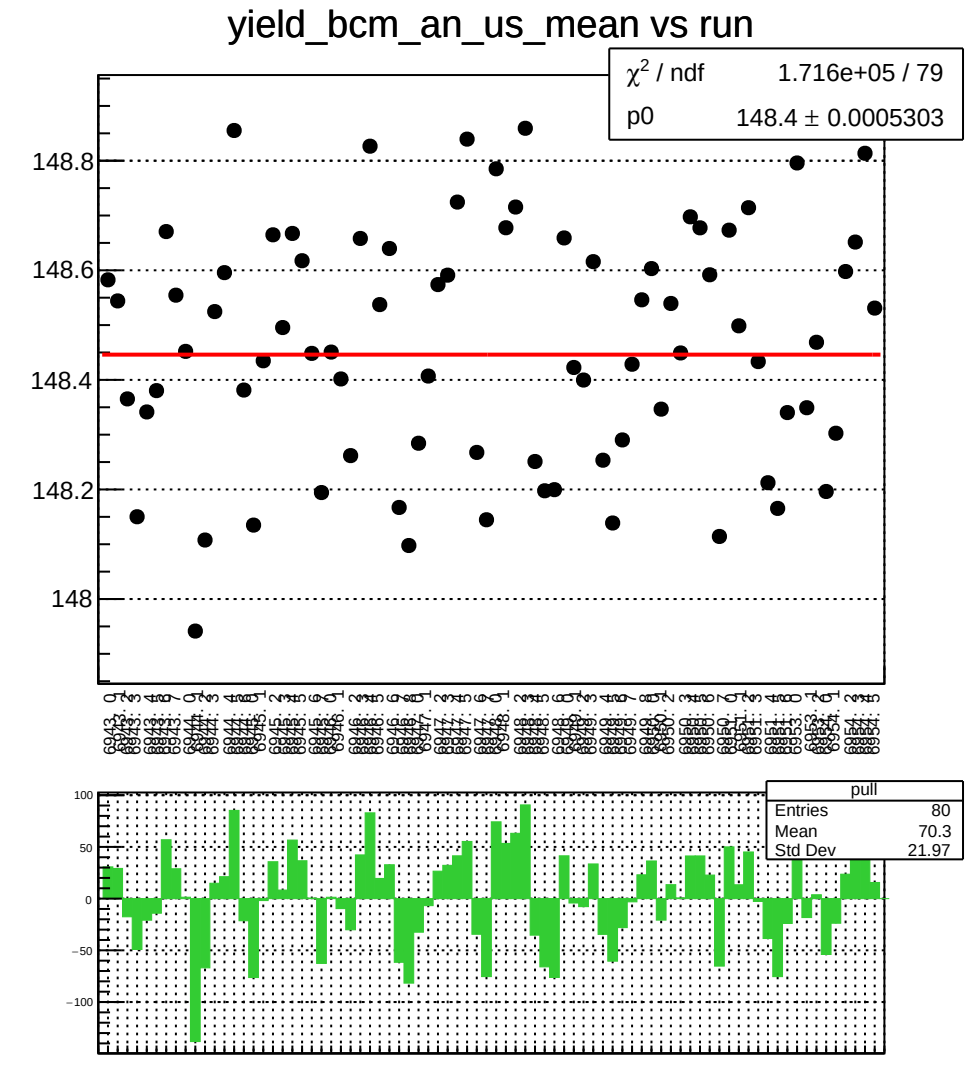

pull1D
Entries 80
Mean −1.987
Std Dev 3.852
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

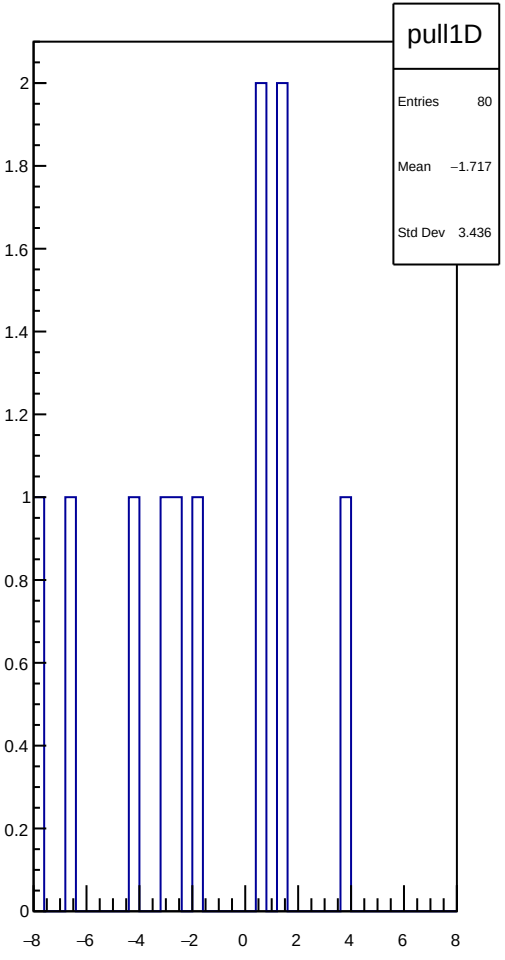

yield_bcm_an_ds_rms vs run
χ² / ndf 4.417e+04 / 79
p0 0.4642 ± 0.0003727
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

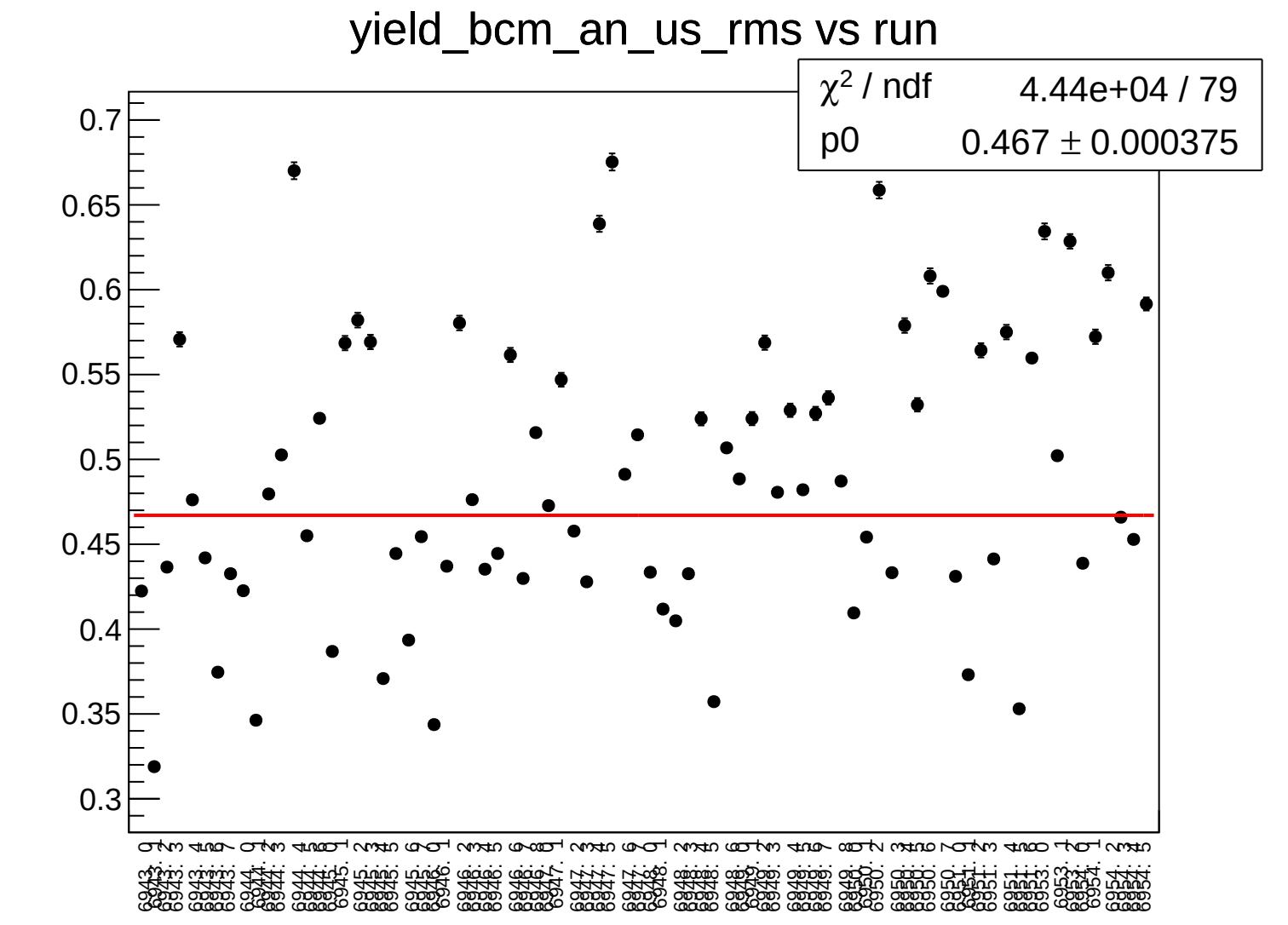

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.781e+05 / 79
p0 149.2 ± 0.0005332
149.6
149.4
149.2
149
148.8
148.6
pull
Entries 80
Mean 131
Std Dev 86.12
100
50
0
−50
−100
−150

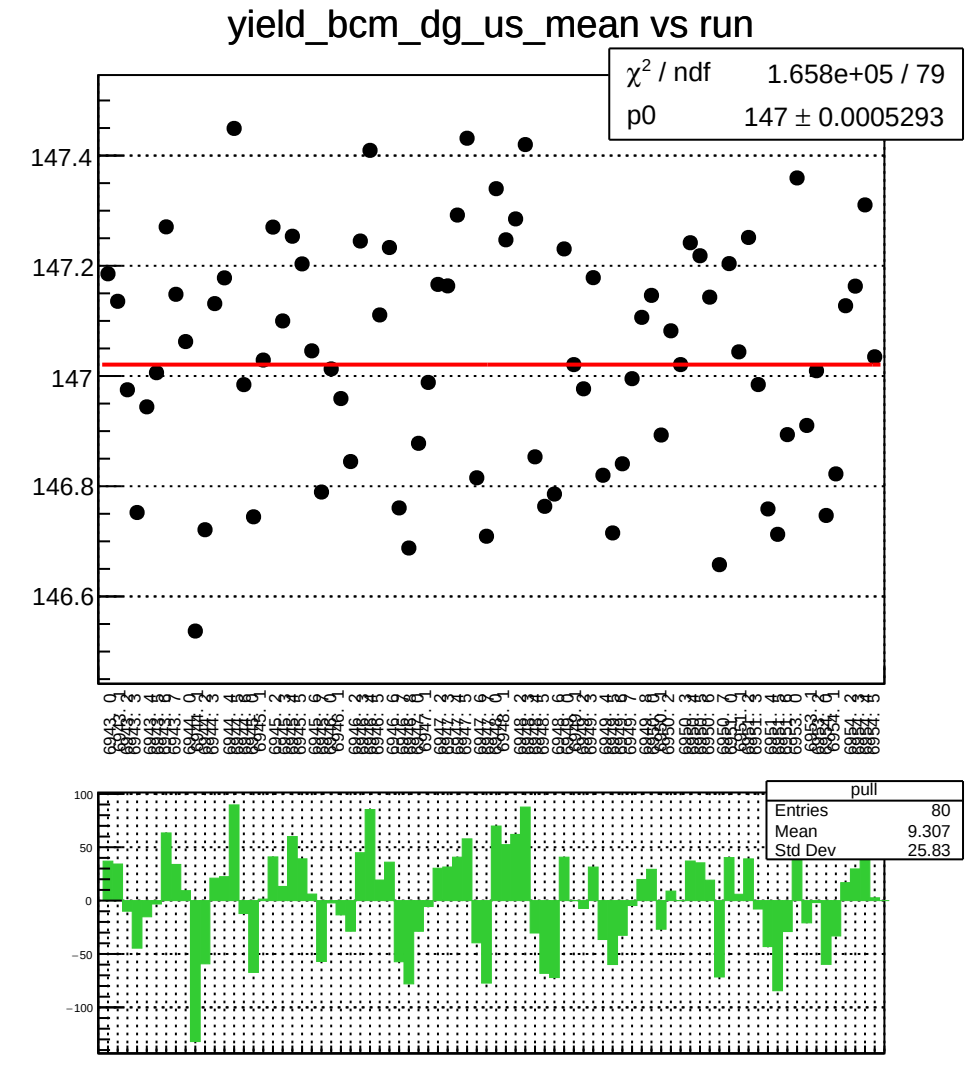

pull1D
Entries 80
Mean −2.861
Std Dev 4.743
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

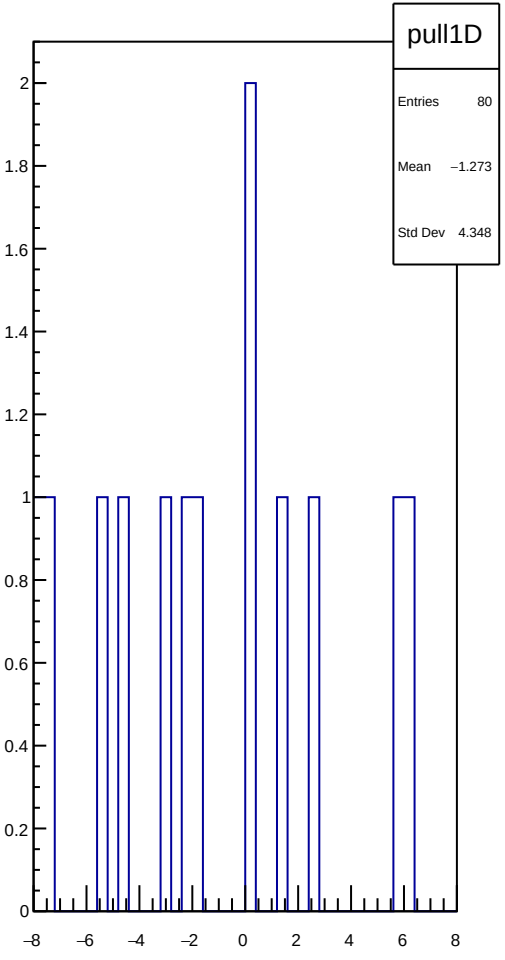

yield_bcm_an_ds3_rms vs run
χ² / ndf 4.418e+04 / 79
p0 0.4697 ± 0.0003771
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

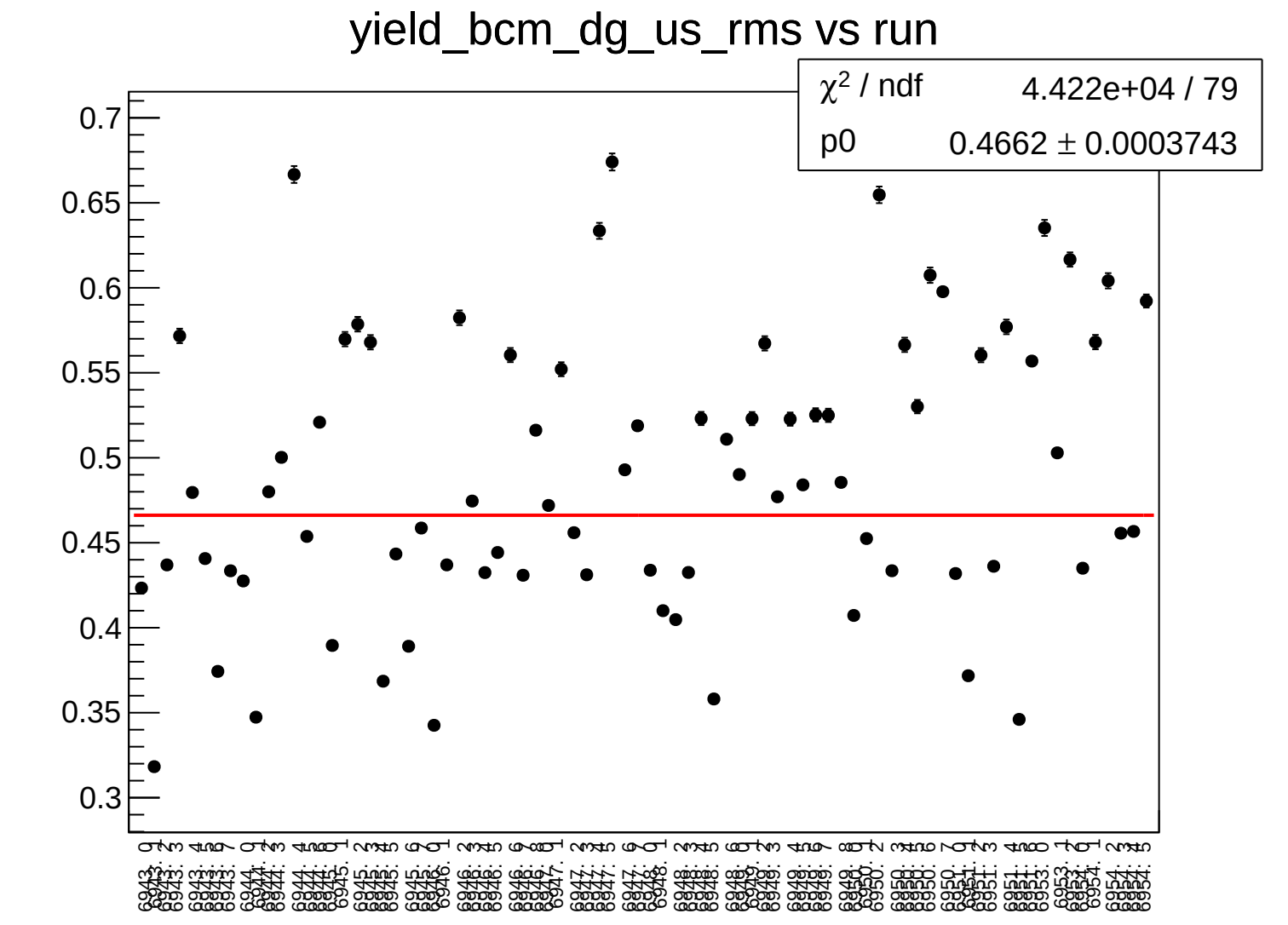

yield_bcm_an_us_mean vs run
χ² / ndf 1.716e+05 / 79
p0 148.4 ± 0.0005303
148.8
148.6
148.4
148.2
148
pull
Entries 80
Mean 70.3
Std Dev 21.97
100
50
0
−50
−100

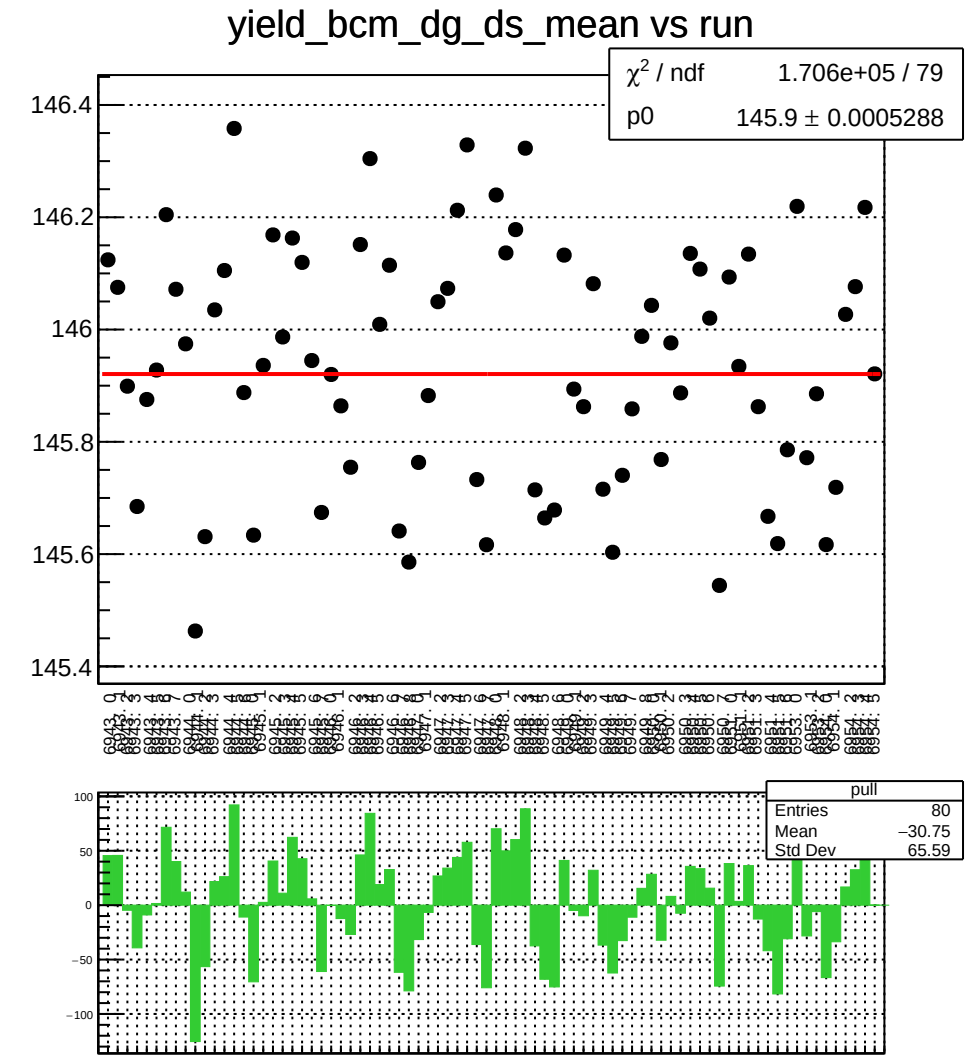

pull1D
Entries 80
Mean −1.717
Std Dev 3.436
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

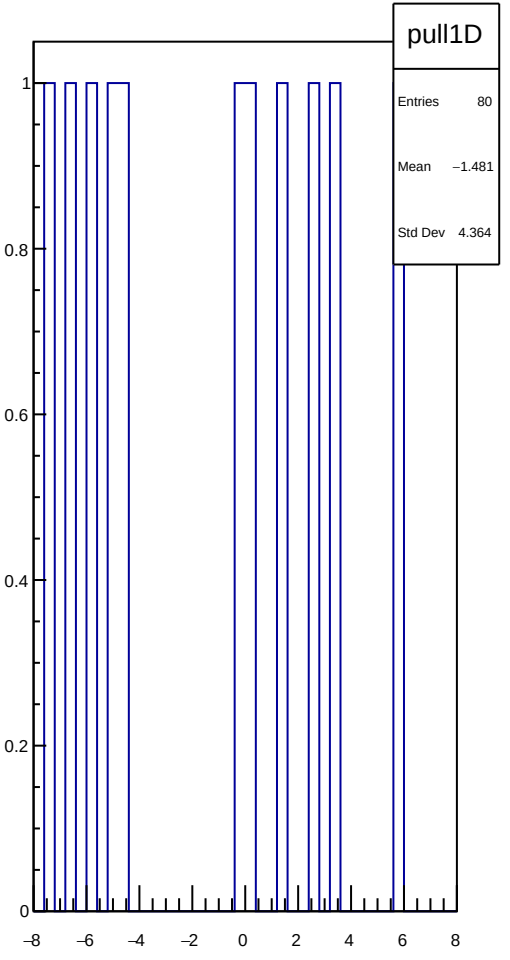

yield_bcm_an_us_rms vs run
χ² / ndf 4.44e+04 / 79
p0 0.467 ± 0.000375
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

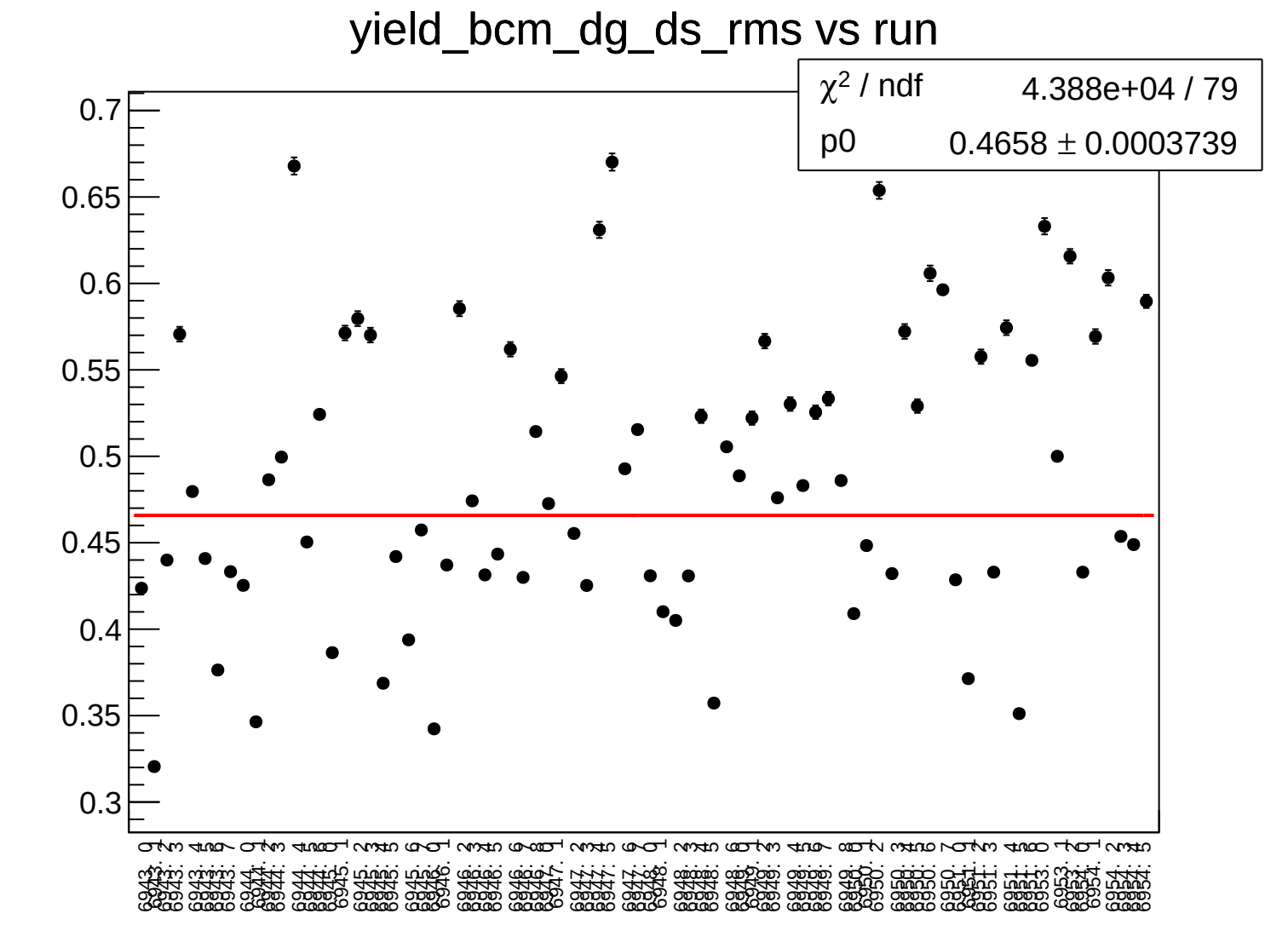

yield_bcm_dg_us_mean vs run
χ² / ndf 1.658e+05 / 79
p0 147 ± 0.0005293
147.4
147.2
147
146.8
146.6
pull
Entries 80
Mean 9.307
Std Dev 25.83
100
50
0
−50
−100

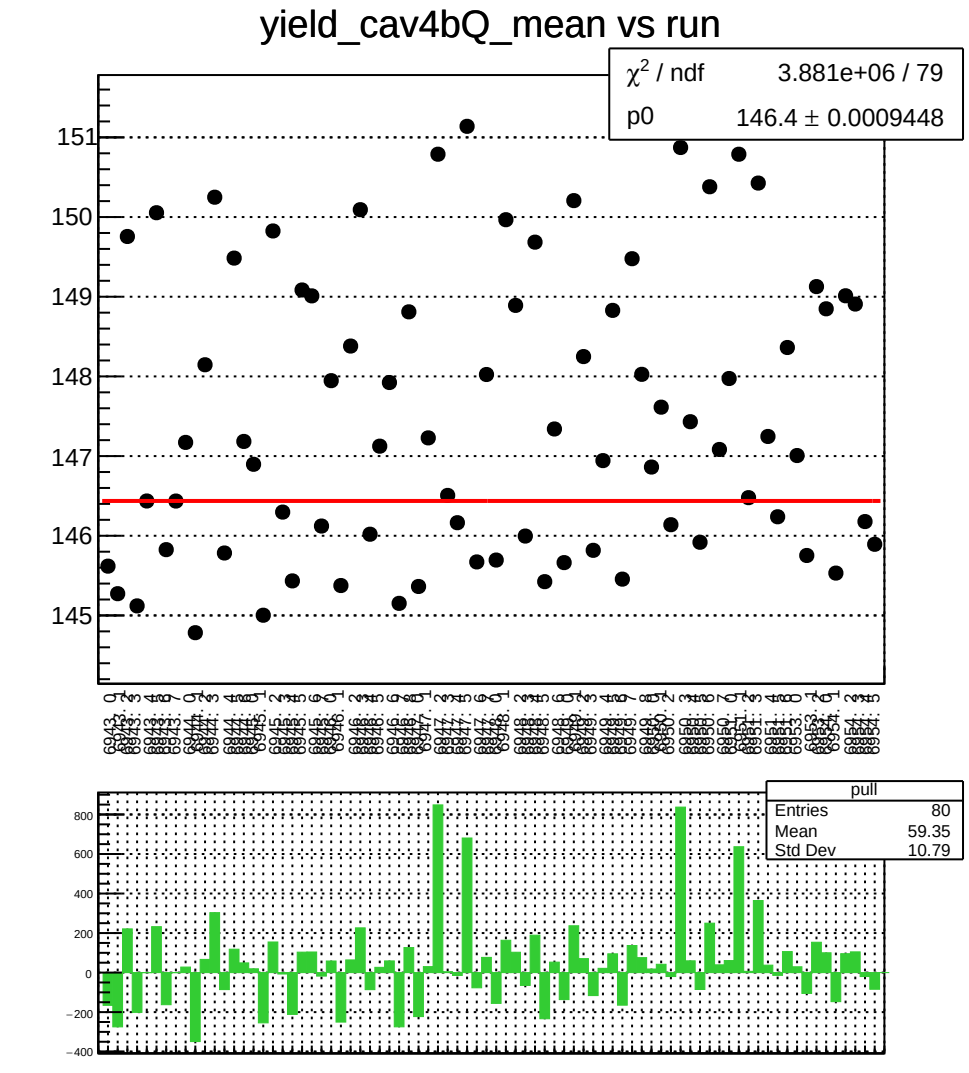

pull1D
Entries 80
Mean −1.273
Std Dev 4.348
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

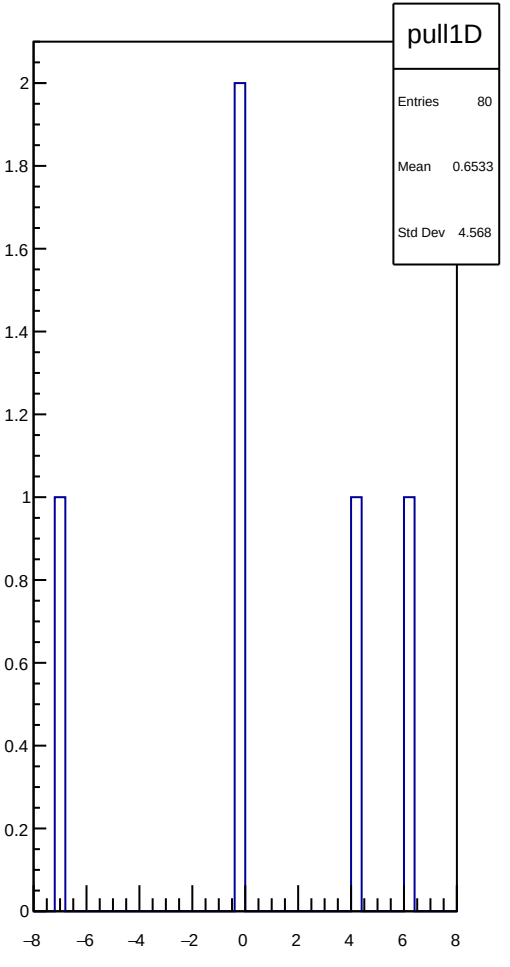

yield_bcm_dg_us_rms vs run
χ² / ndf 4.422e+04 / 79
p0 0.4662 ± 0.0003743
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

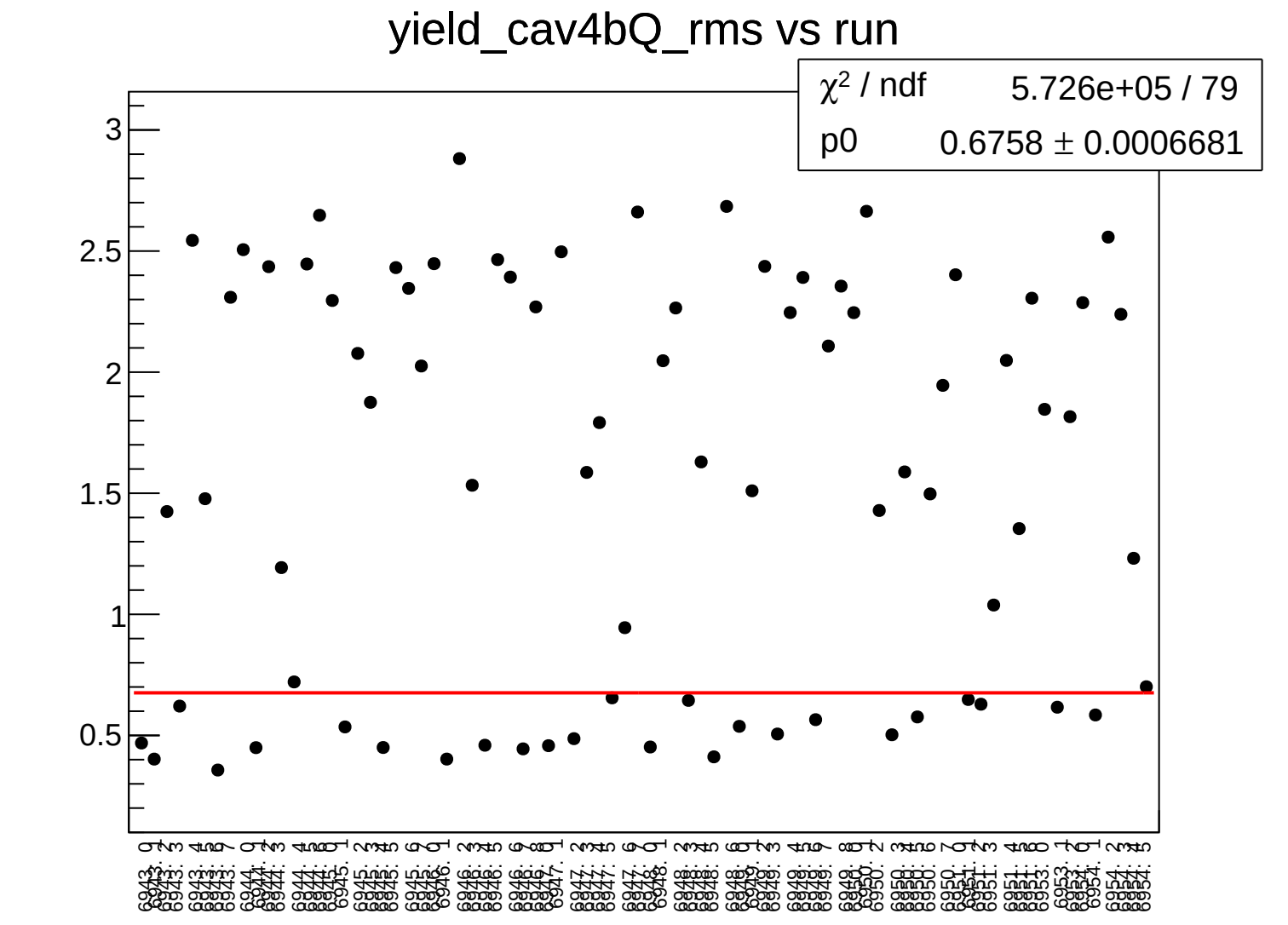

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.706e+05 / 79
p0 145.9 ± 0.0005288
146.4
146.2
146
145.8
145.6
145.4
pull
Entries 80
Mean −30.75
Std Dev 65.59
100
50
0
−50
−100

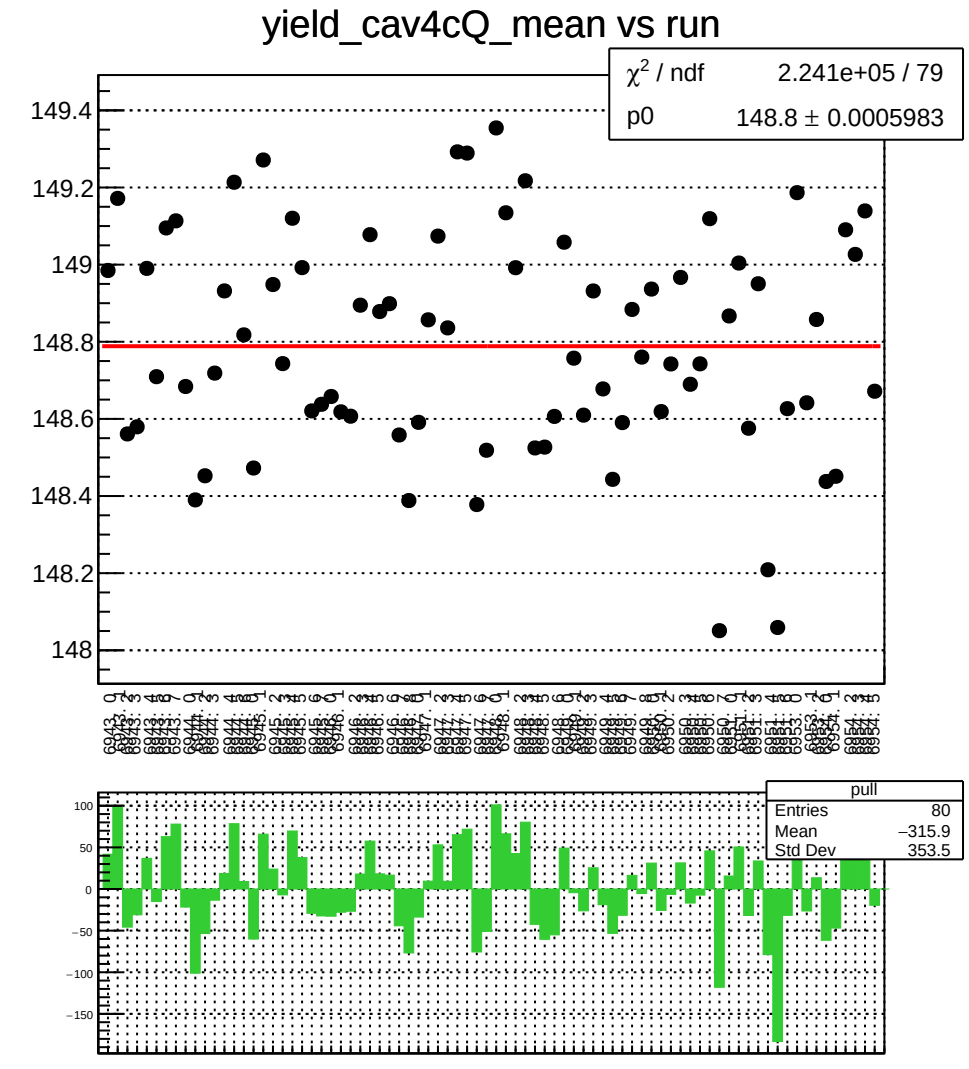

pull1D
Entries 80
Mean −1.481
Std Dev 4.364
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

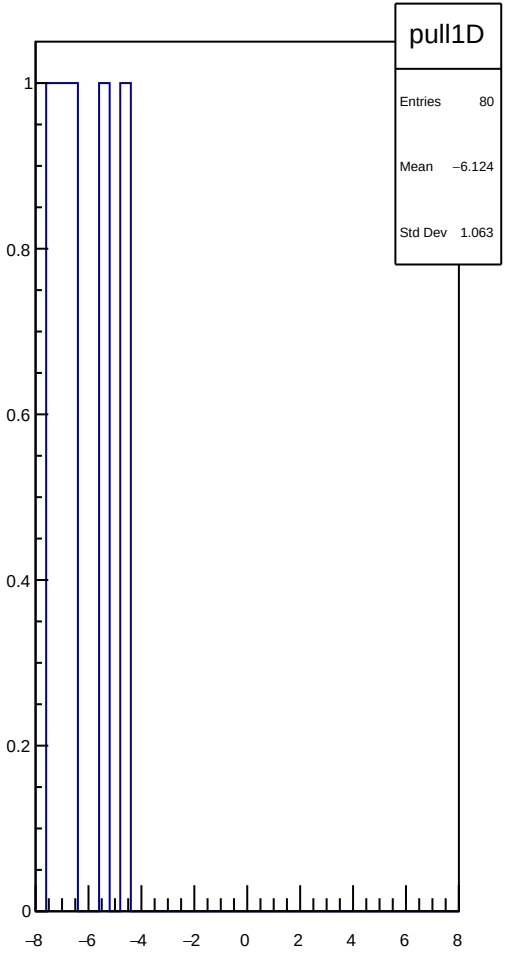

yield_bcm_dg_ds_rms vs run
χ² / ndf 4.388e+04 / 79
p0 0.4658 ± 0.0003739
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3

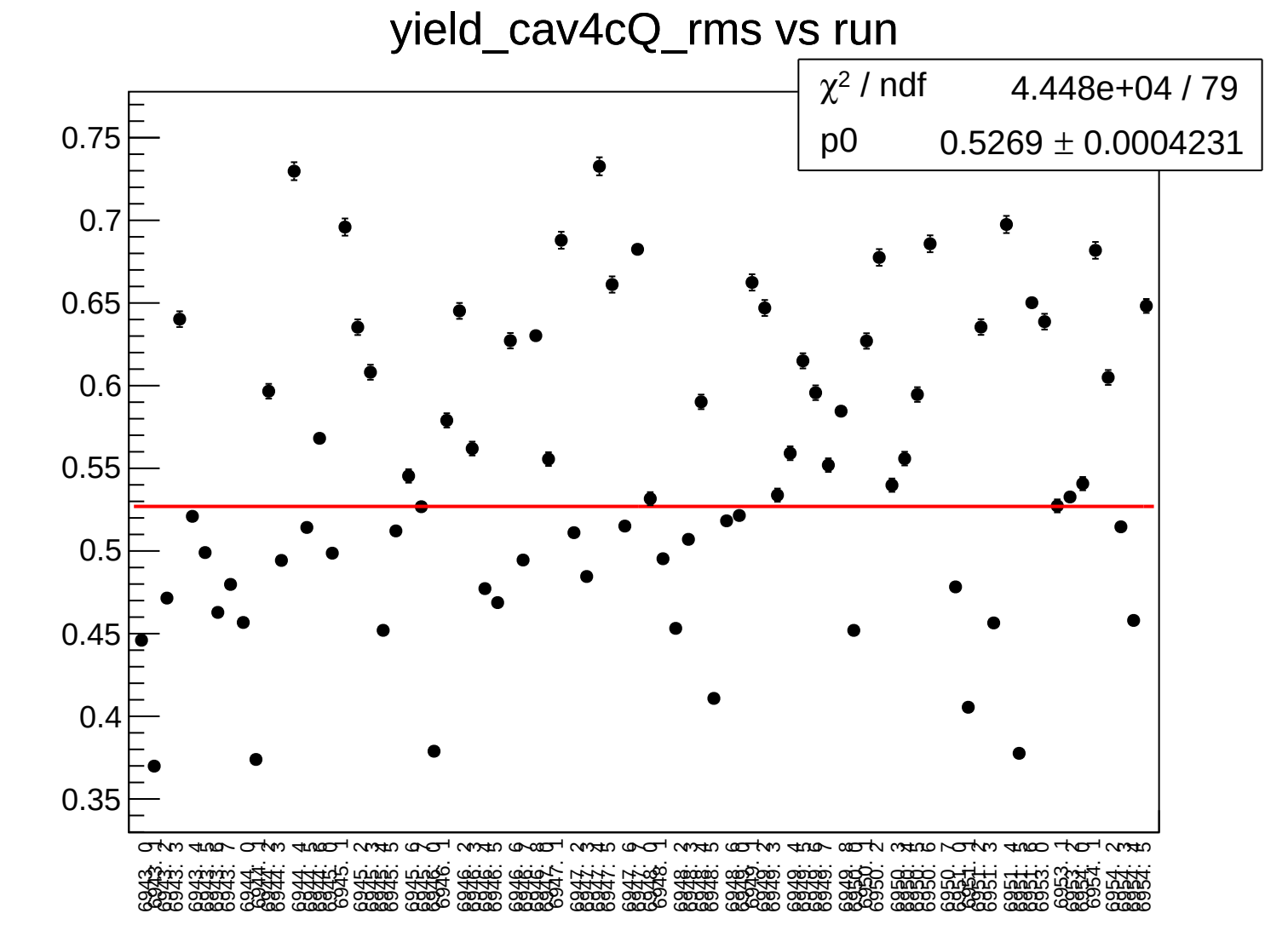

yield_cav4bQ_mean vs run
χ² / ndf 3.881e+06 / 79
p0 146.4 ± 0.0009448
151
150
149
148
147
146
145
pull
Entries 80
Mean 59.35
Std Dev 10.79
800
600
400
200
0
−200
−400

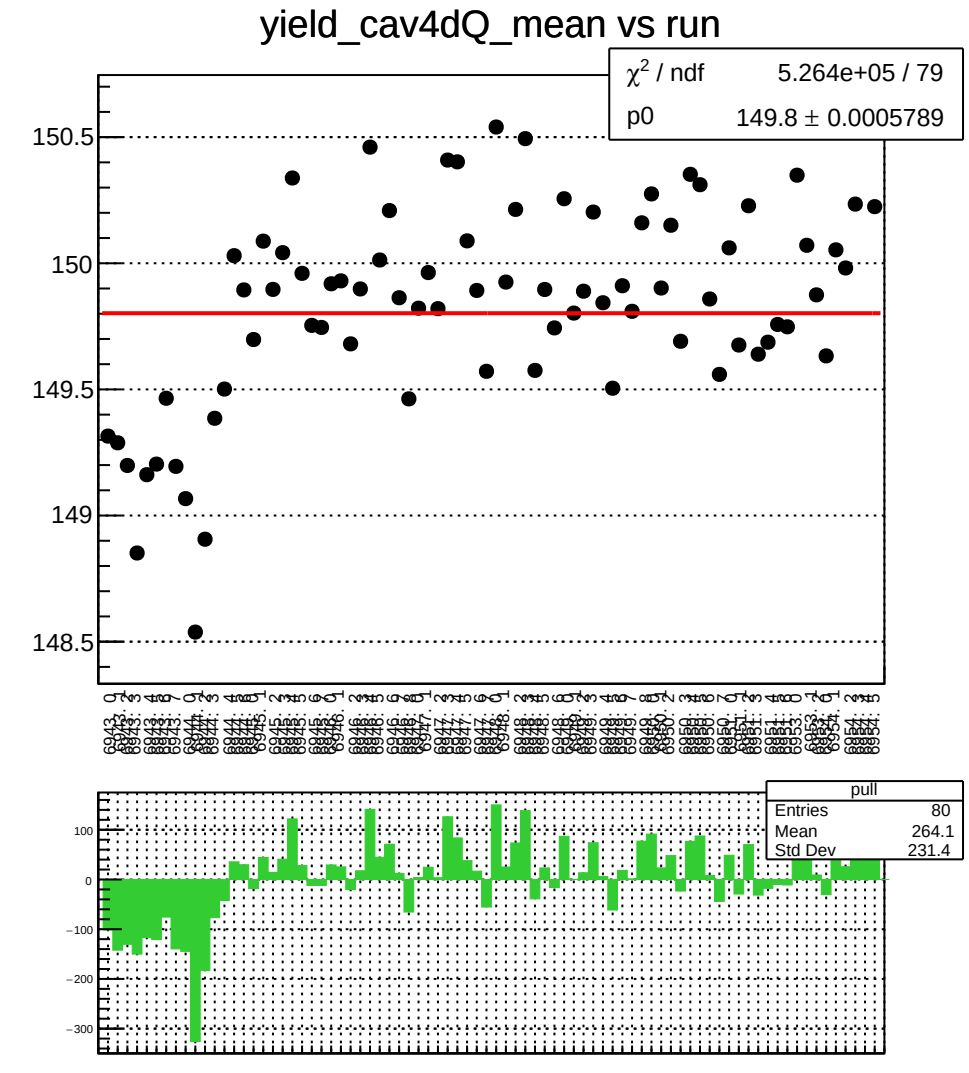

pull1D
Entries 80
Mean 0.6533
Std Dev 4.568
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

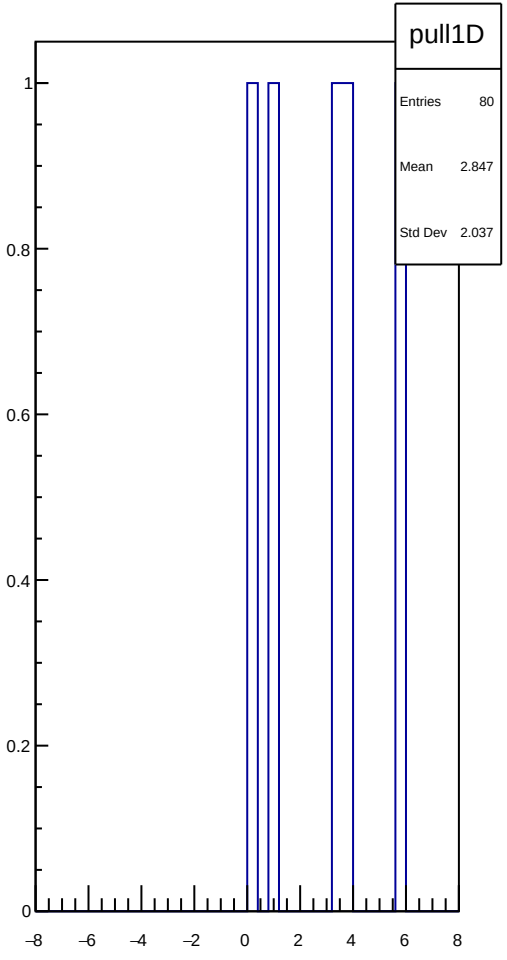

yield_cav4bQ_rms vs run
χ² / ndf 5.726e+05 / 79
p0 0.6758 ± 0.0006681
3
2.5
2
1.5
1
0.5

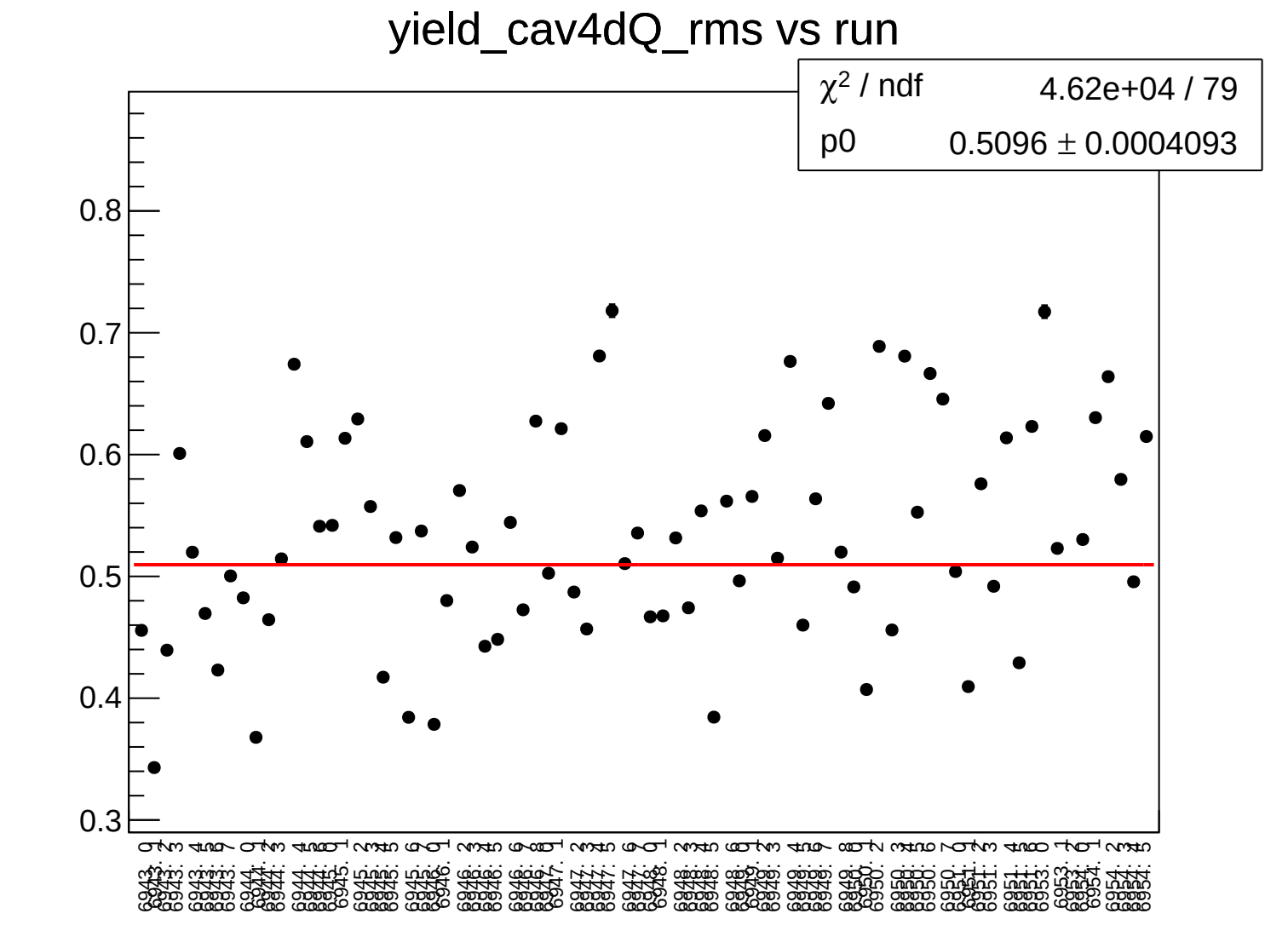

yield_cav4cQ_mean vs run
χ² / ndf 2.241e+05 / 79
p0 148.8 ± 0.0005983
149.4
149.2
149
148.8
148.6
148.4
148.2
148
pull
Entries 80
Mean −315.9
Std Dev 353.5
100
50
0
−50
−100
−150

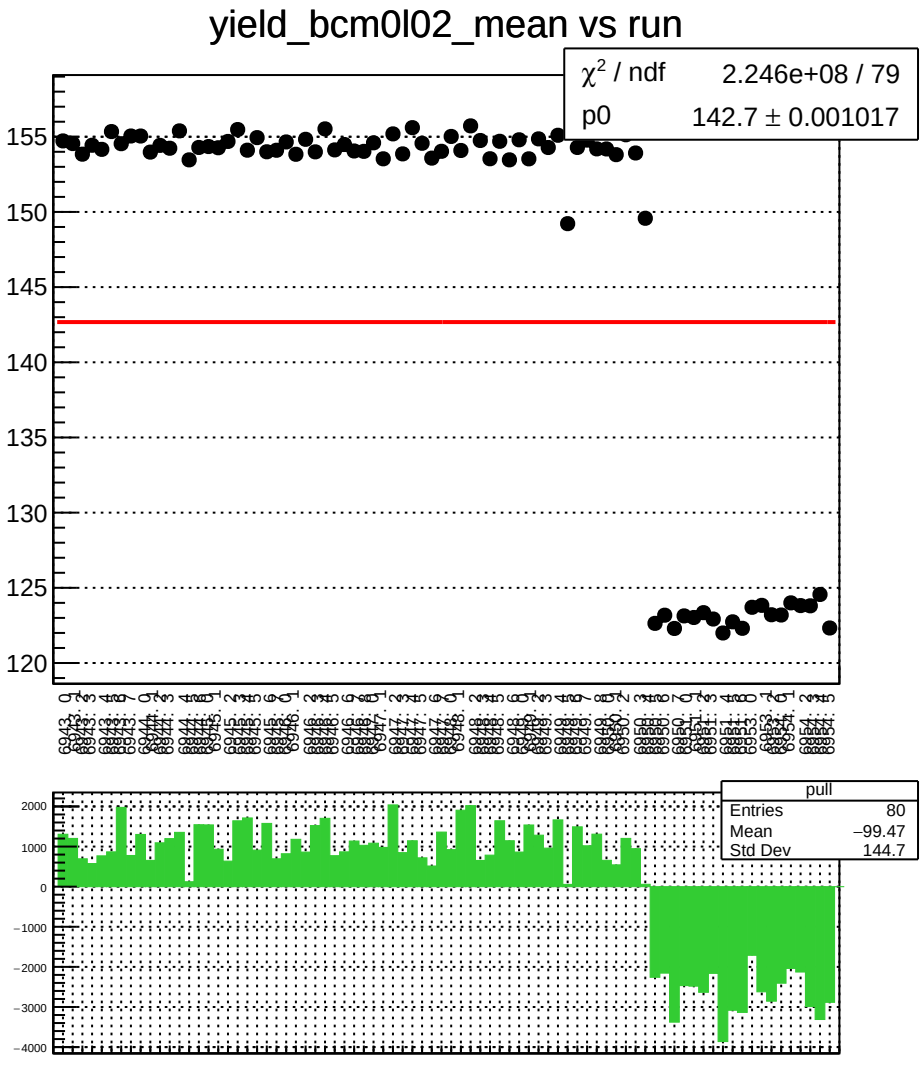

pull1D
Entries 80
Mean −6.124
Std Dev 1.063
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

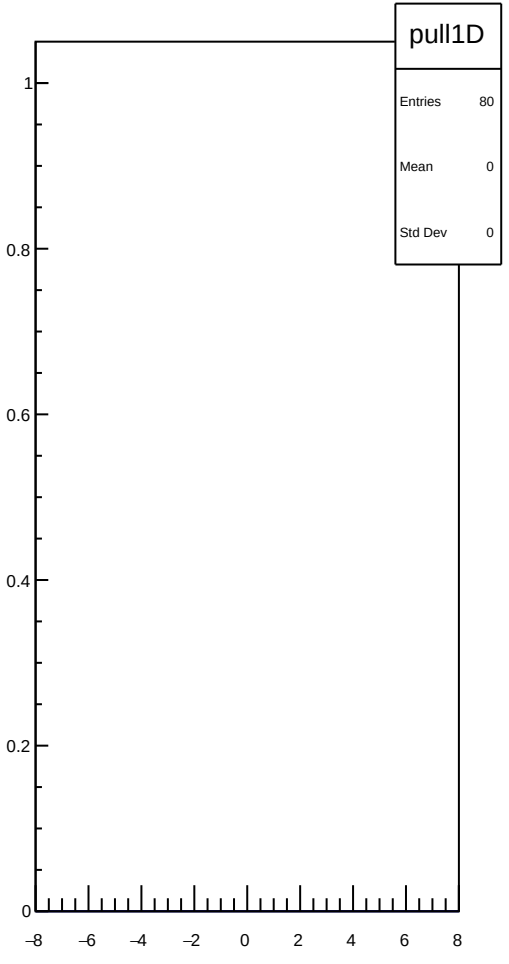

yield_cav4cQ_rms vs run
χ² / ndf 4.448e+04 / 79
p0 0.5269 ± 0.0004231
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35

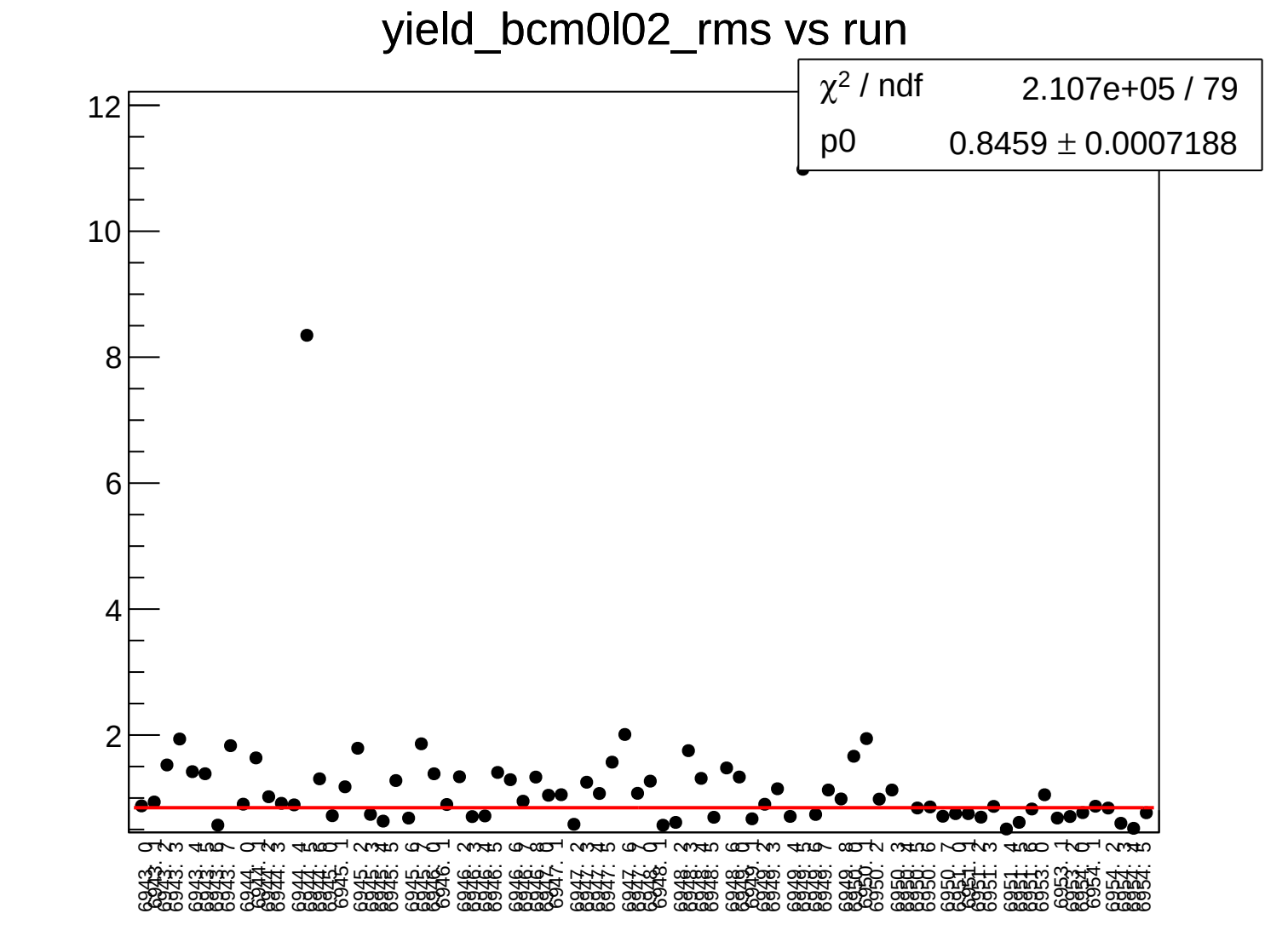

yield_cav4dQ_mean vs run
χ² / ndf 5.264e+05 / 79
p0 149.8 ± 0.0005789
150.5
150
149.5
149
148.5
pull
Entries 80
Mean 264.1
Std Dev 231.4
100
0
−100
−200
−300

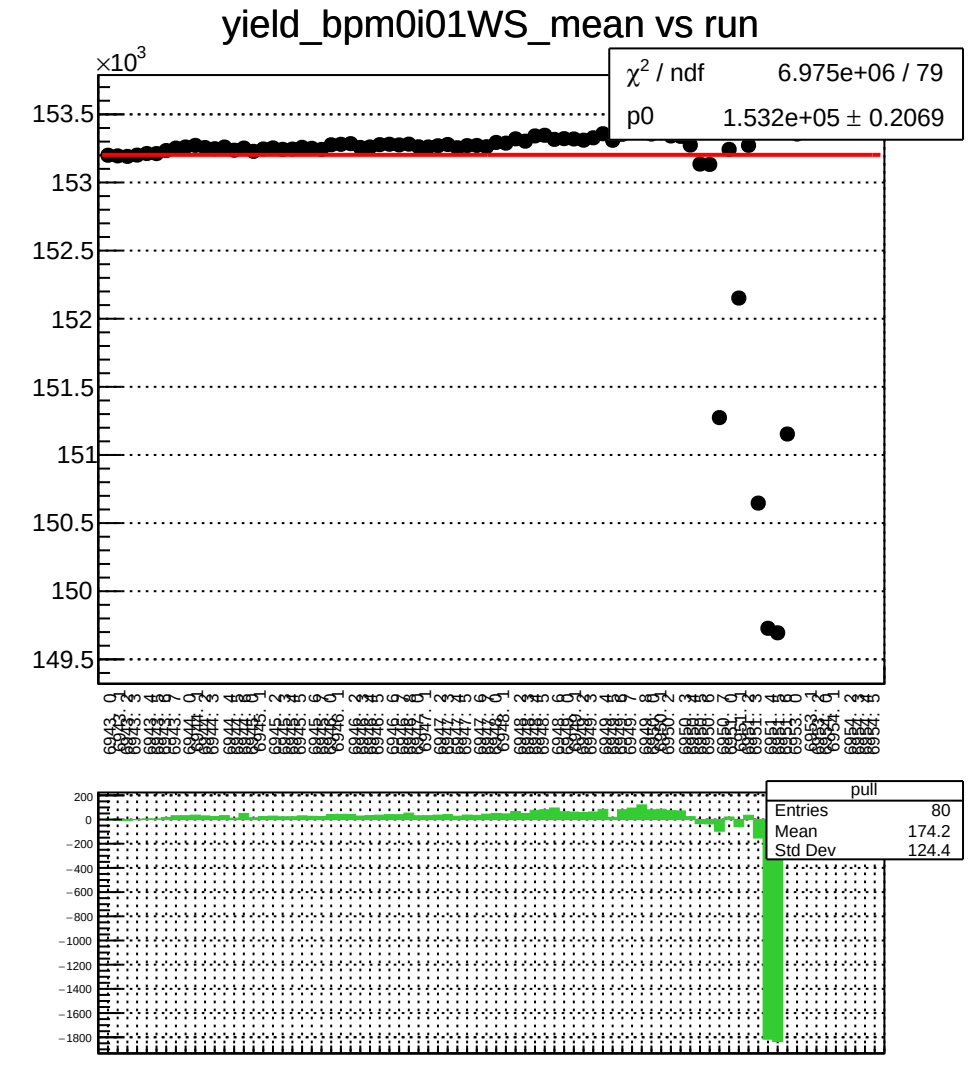

pull1D
Entries 80
Mean 2.847
Std Dev 2.037
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

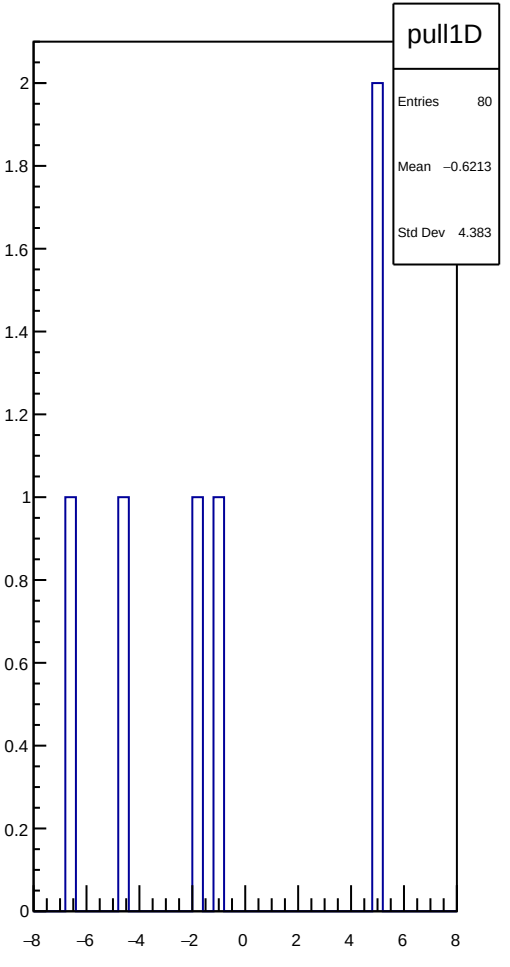

yield_cav4dQ_rms vs run
χ² / ndf 4.62e+04 / 79
p0 0.5096 ± 0.0004093
0.8
0.7
0.6
0.5
0.4
0.3

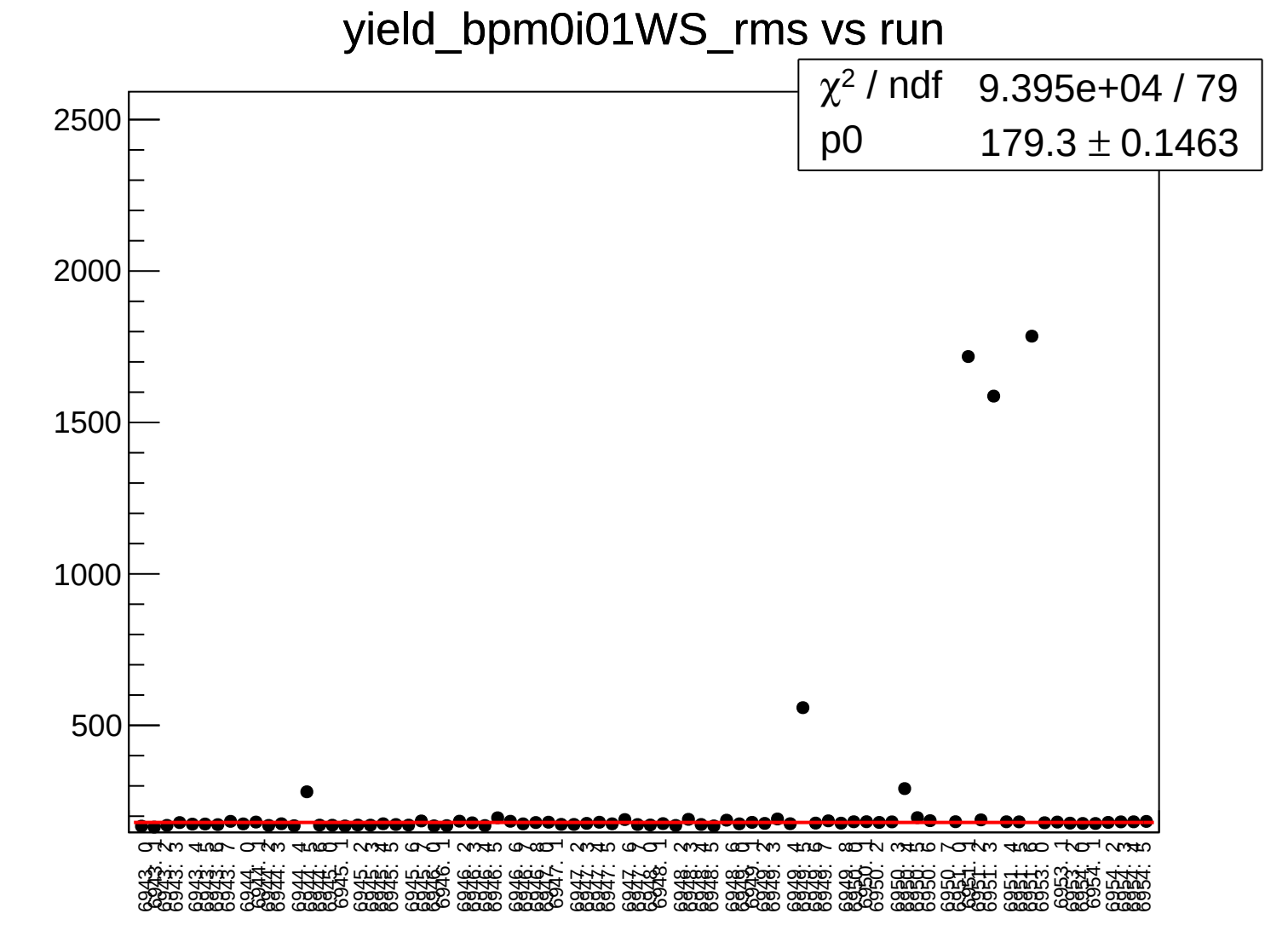

yield_bcm0l02_mean vs run
χ² / ndf 2.246e+08 / 79
p0 142.7 ± 0.001017
155
150
145
140
135
130
125
120
pull
Entries 80
Mean −99.47
Std Dev 144.7
2000
1000
0
−1000
−2000
−3000
−4000

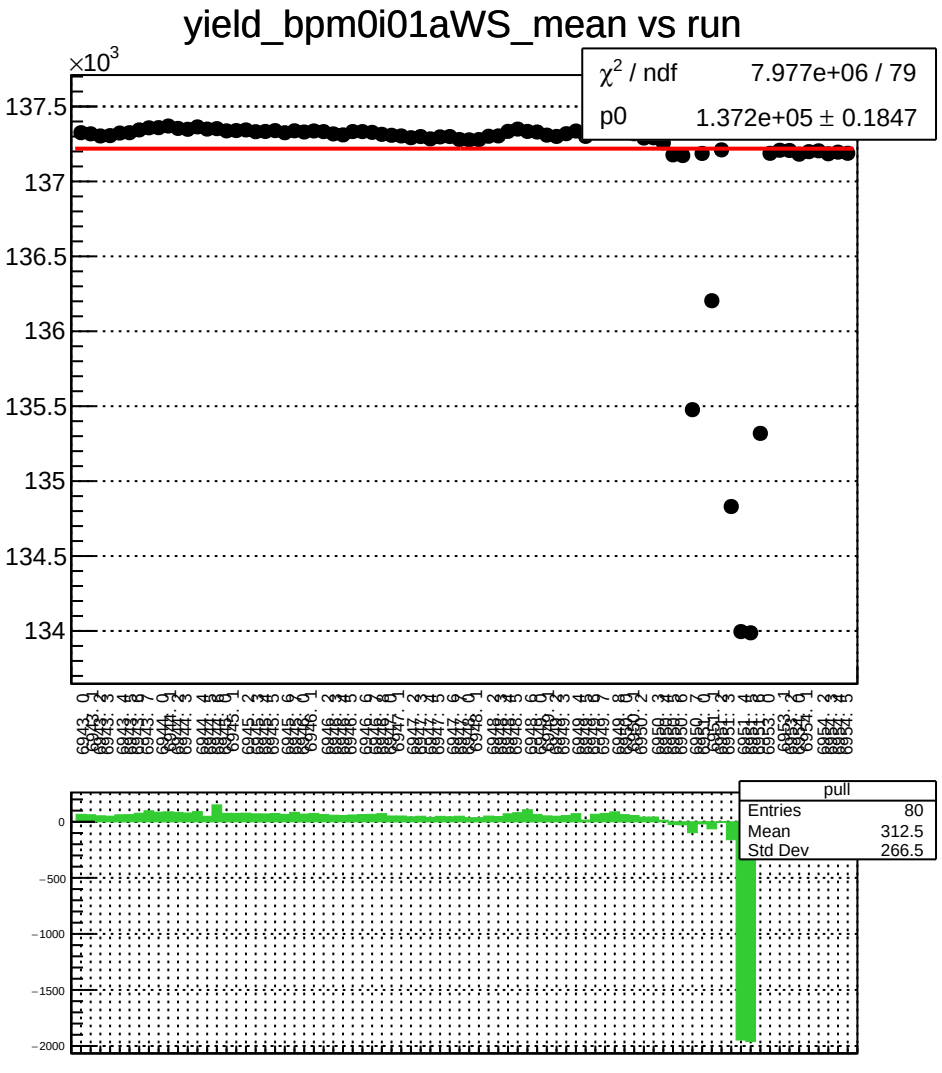

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

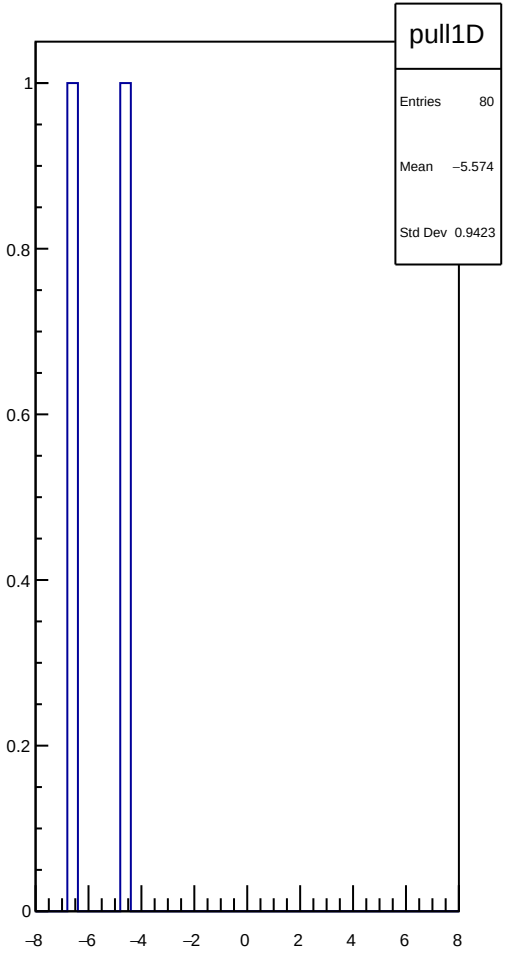

yield_bcm0l02_rms vs run
χ² / ndf 2.107e+05 / 79
p0 0.8459 ± 0.0007188
12
10
8
6
4
2

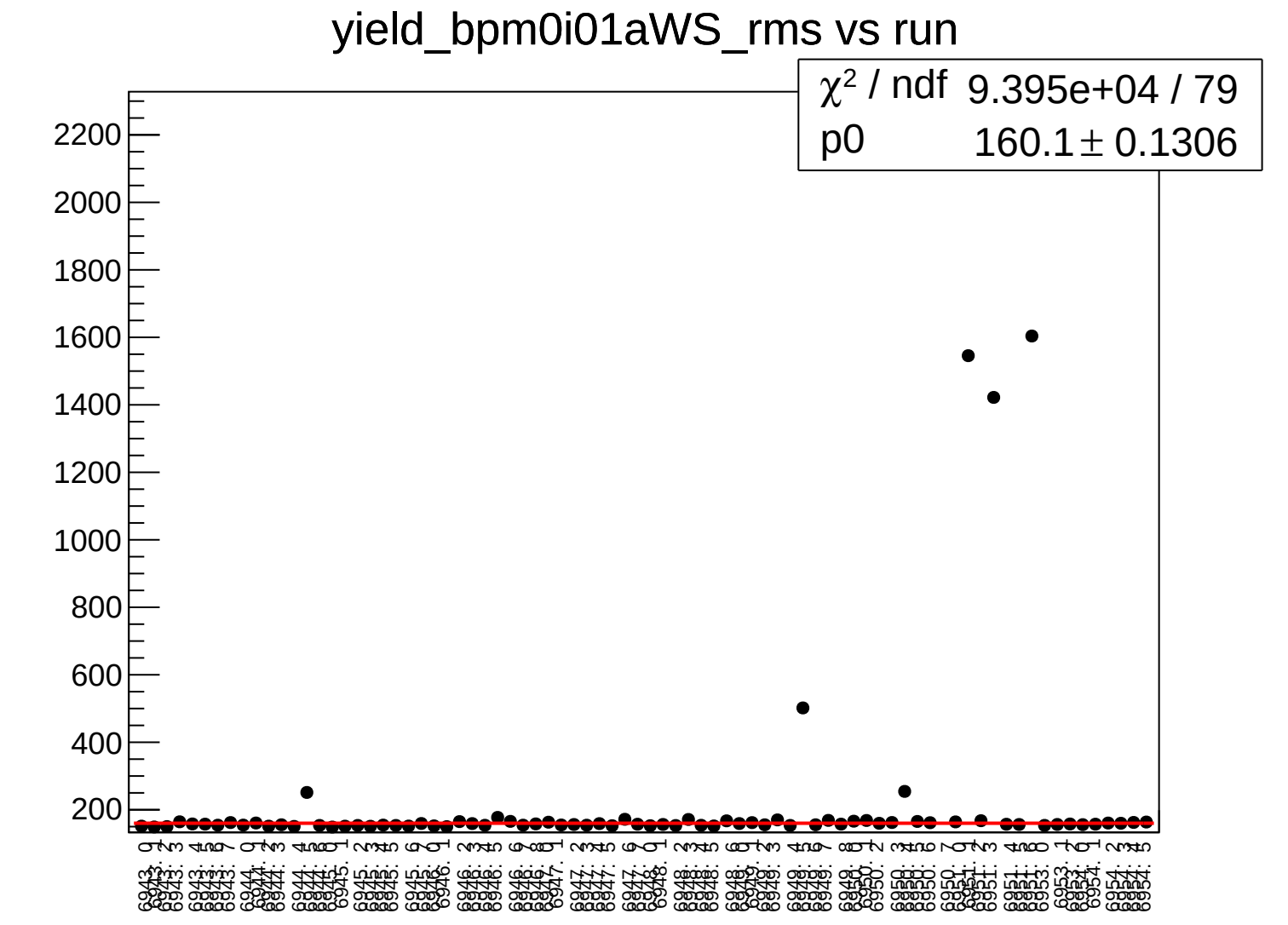

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 6.975e+06 / 79
p0 1.532e+05 ± 0.2069
153.5
153
152.5
152
151.5
151
150.5
150
149.5
pull
Entries 80
Mean 174.2
Std Dev 124.4
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

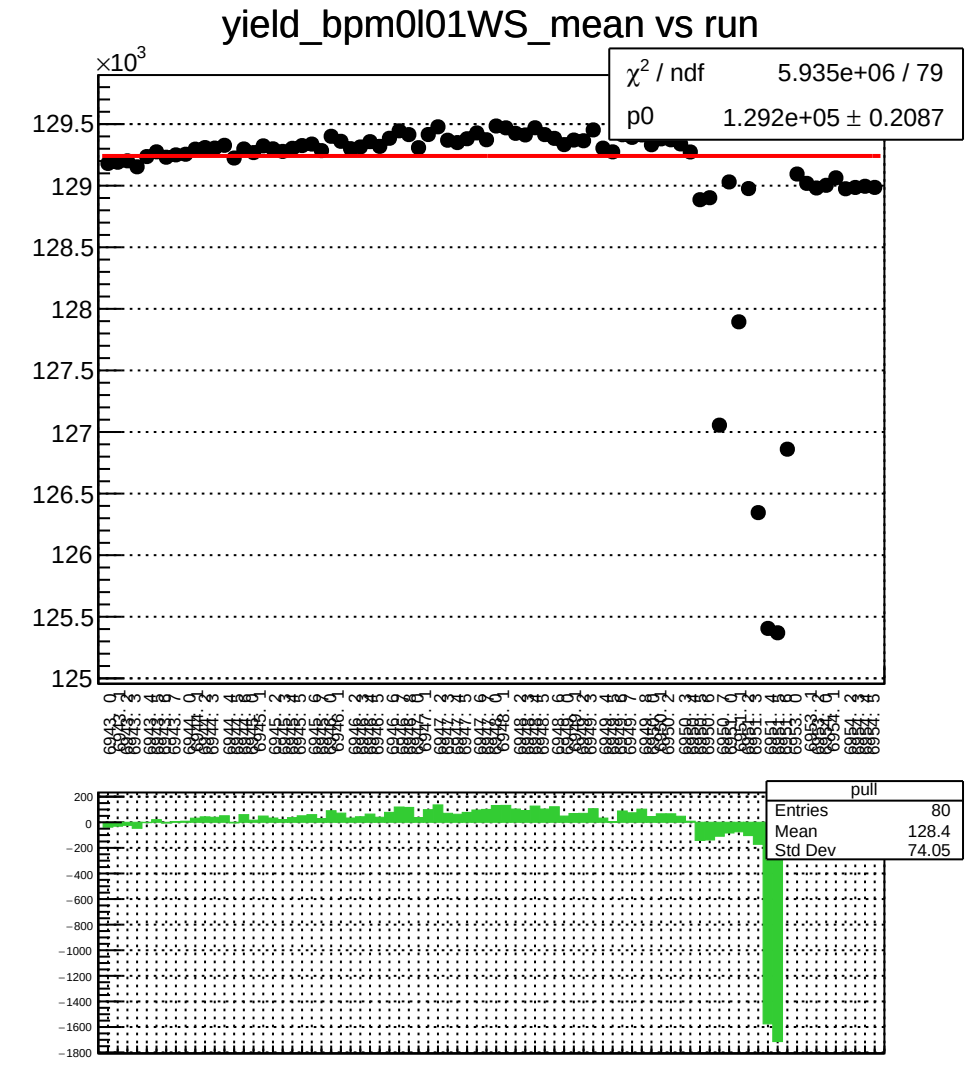

pull1D
Entries 80
Mean −0.6213
Std Dev 4.383
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

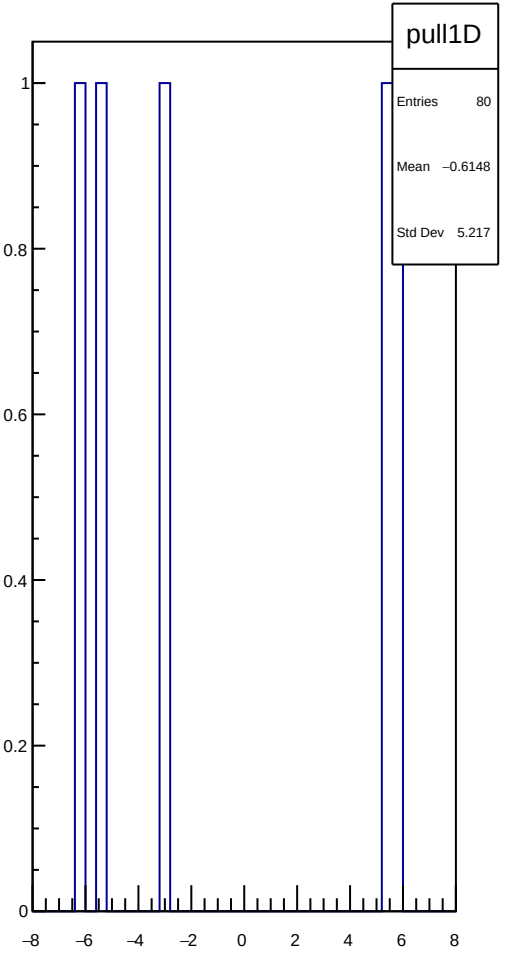

yield_bpm0i01WS_rms vs run
χ^2 / ndf 9.395e+04 / 79
p0 179.3 ± 0.1463
2500
2000
1500
1000
500

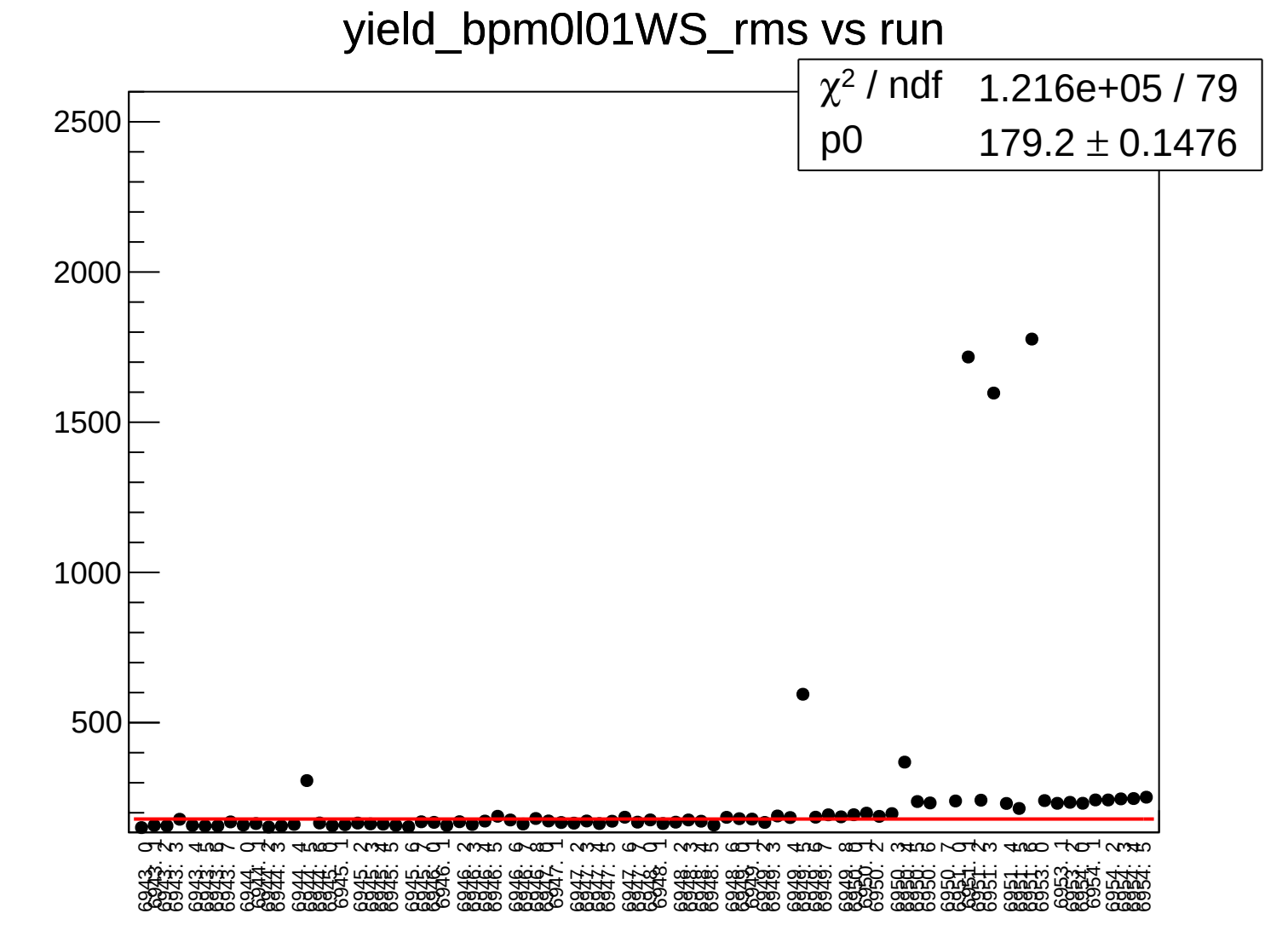

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 7.977e+06 / 79
p0 1.372e+05 ± 0.1847
137.5
137
136.5
136
135.5
135
134.5
134
pull
Entries 80
Mean 312.5
Std Dev 266.5
0
−500
−1000
−1500
−2000

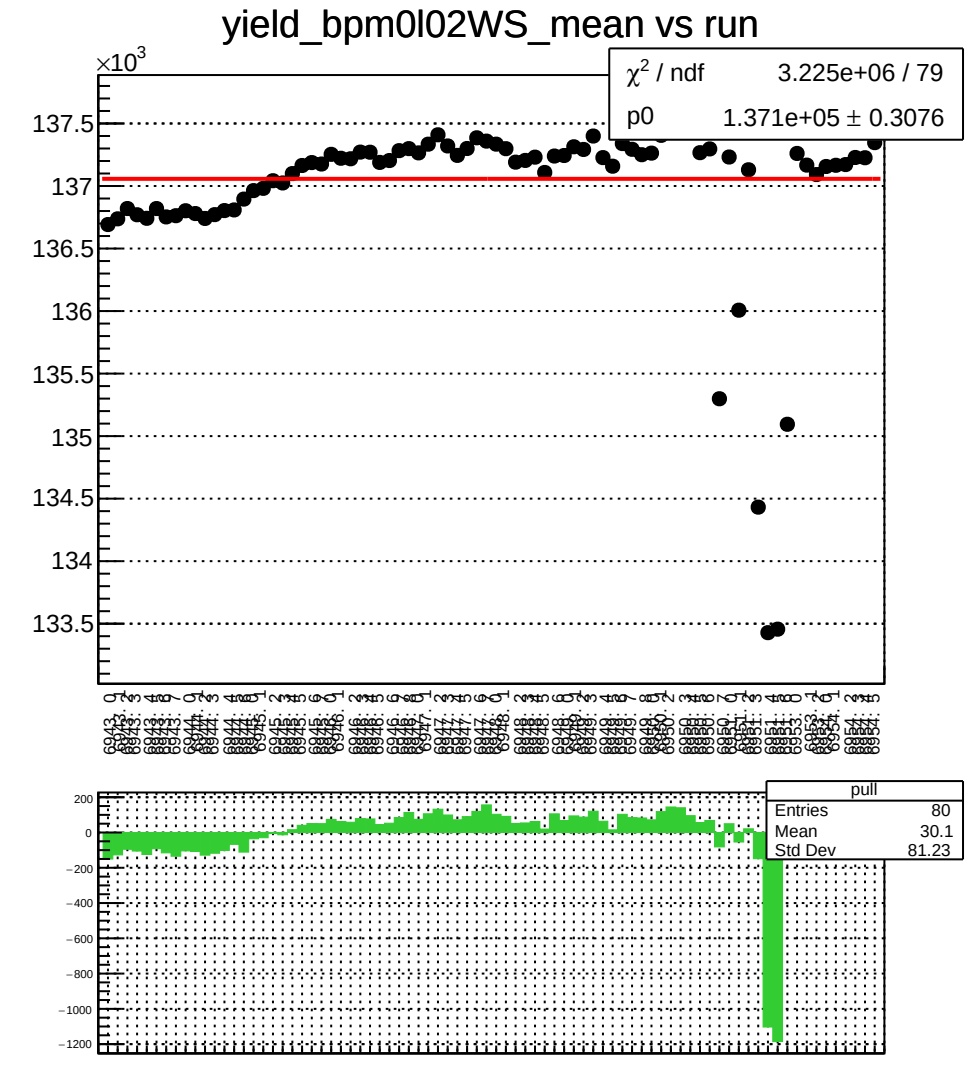

pull1D
Entries 80
Mean −5.574
Std Dev 0.9423
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

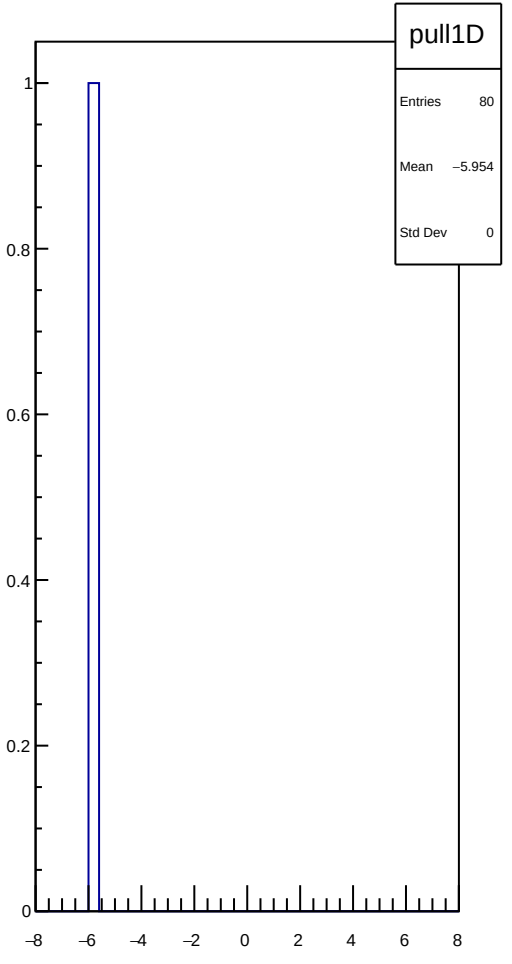

yield_bpm0i01aWS_rms vs run
χ² / ndf 9.395e+04 / 79
p0 160.1 ± 0.1306
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

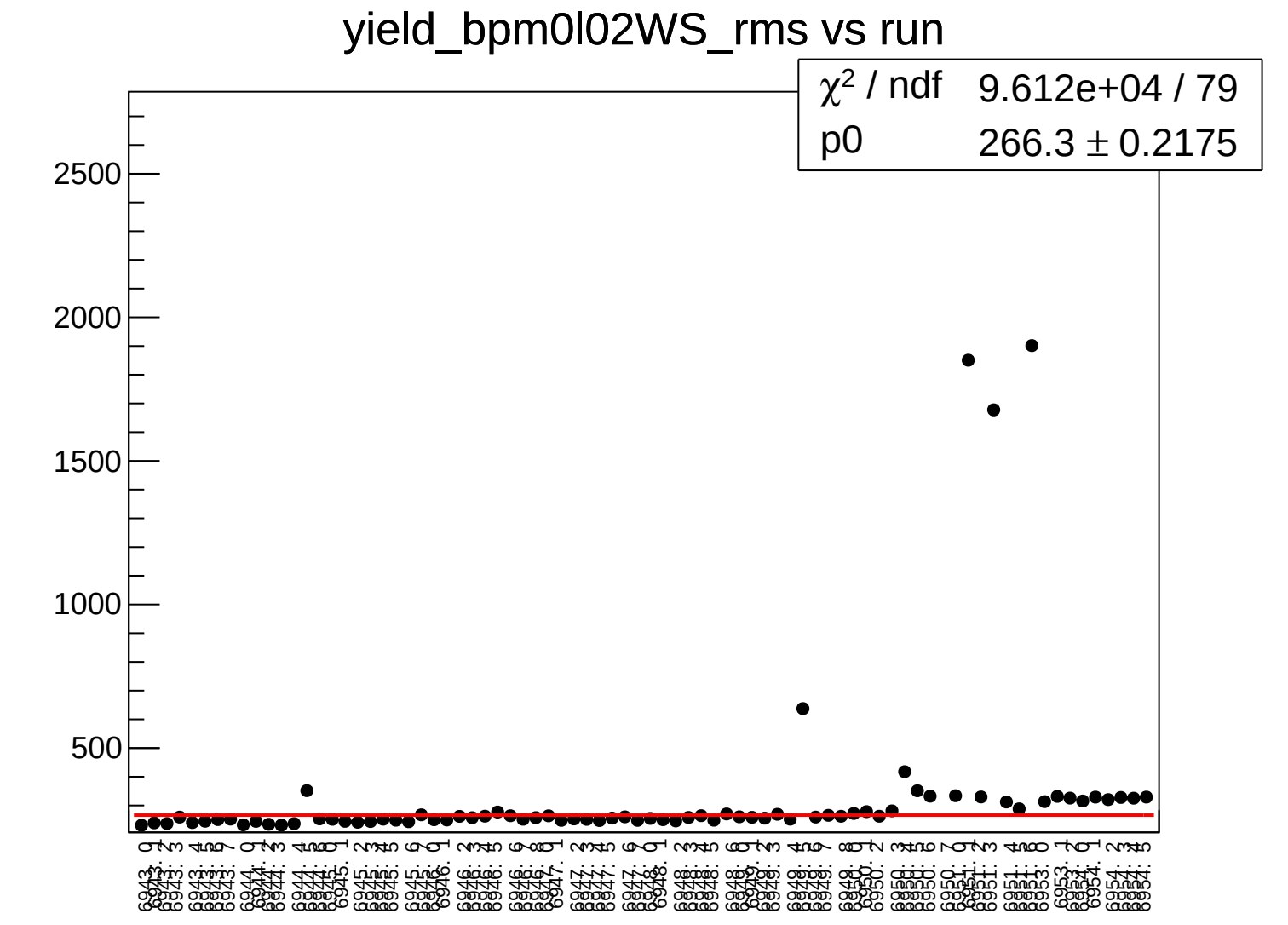

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 5.935e+06 / 79
p0 1.292e+05 ± 0.2087
129.5
129
128.5
128
127.5
127
126.5
126
125.5
125
pull
Entries 80
Mean 128.4
Std Dev 74.05
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

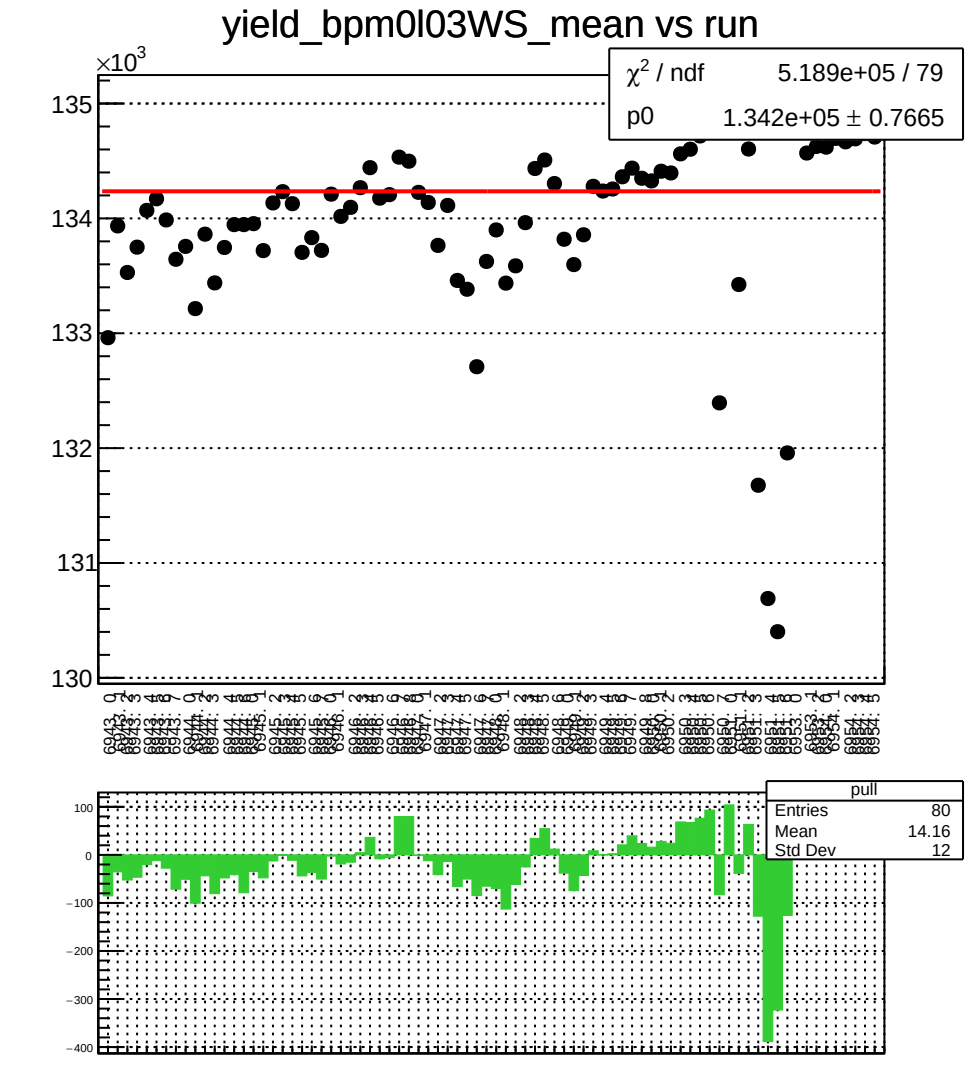

pull1D
Entries 80
Mean −0.6148
Std Dev 5.217
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

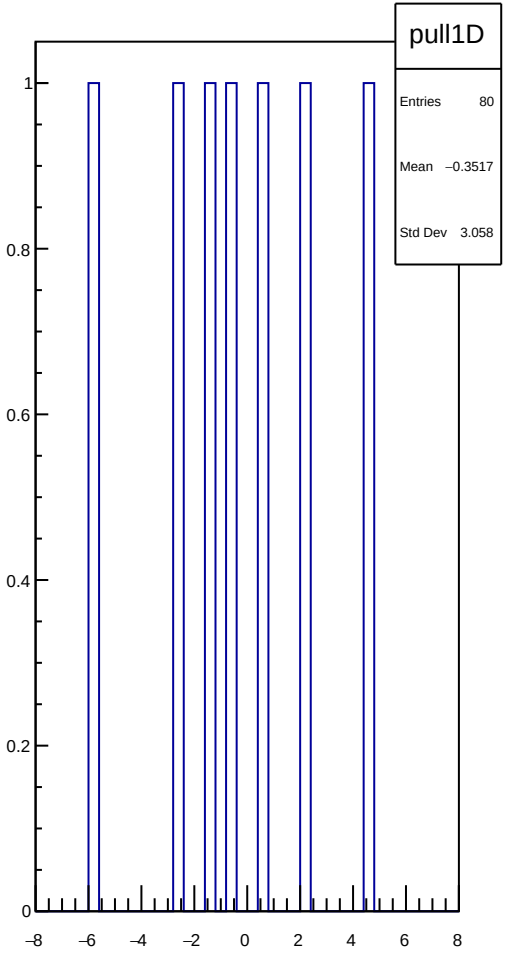

yield_bpm0l01WS_rms vs run
χ² / ndf 1.216e+05 / 79
p0 179.2 ± 0.1476
2500
2000
1500
1000
500

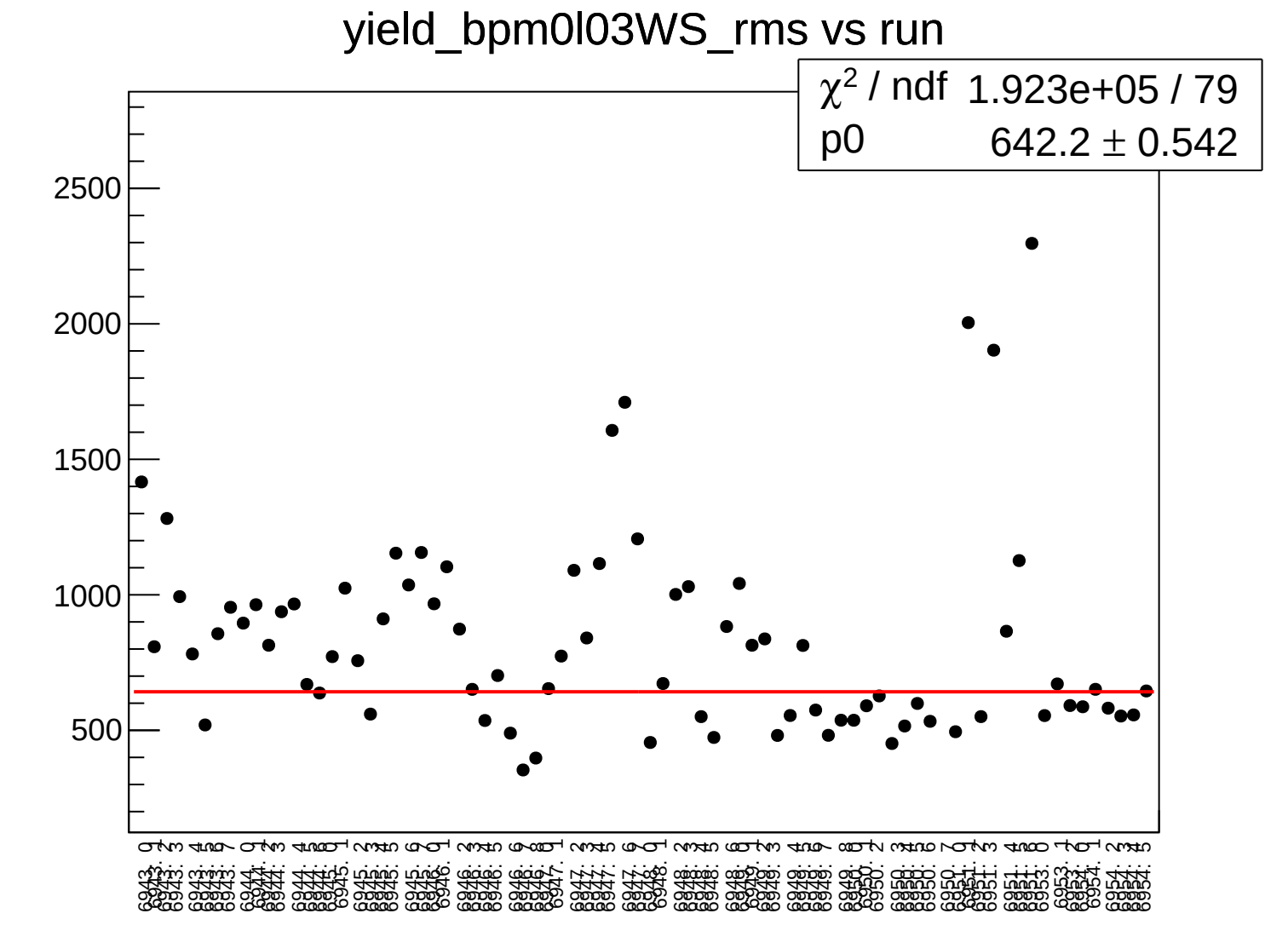

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 3.225e+06 / 79
p0 1.371e+05 ± 0.3076
137.5
137
136.5
136
135.5
135
134.5
134
133.5
pull
Entries 80
Mean 30.1
Std Dev 81.23
200
0
−200
−400
−600
−800
−1000
−1200

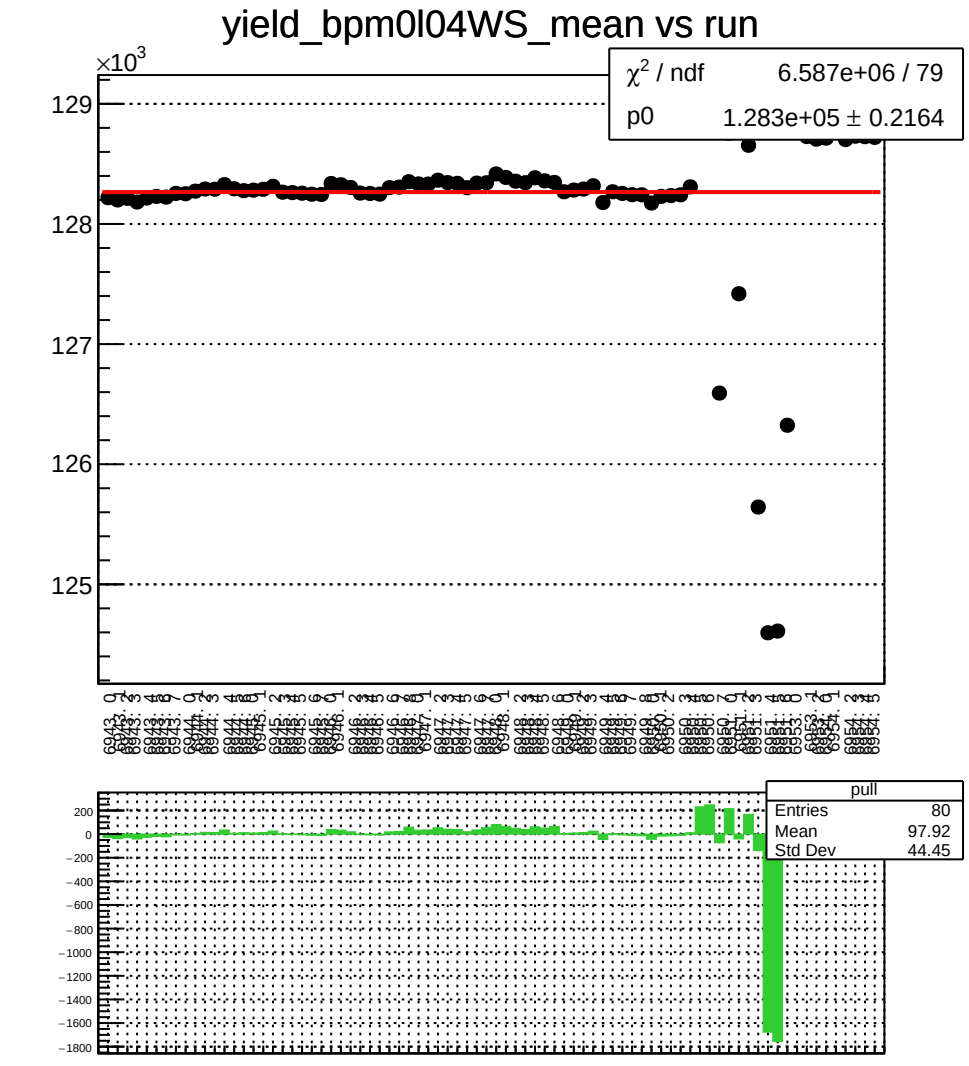

pull1D
Entries 80
Mean −5.954
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

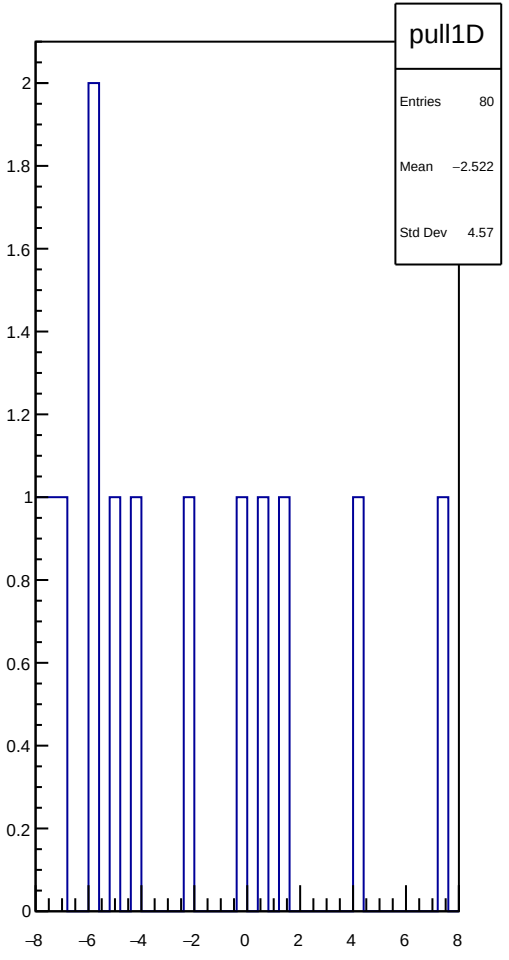

yield_bpm0l02WS_rms vs run
χ² / ndf 9.612e+04 / 79
p0 266.3 ± 0.2175
2500
2000
1500
1000
500

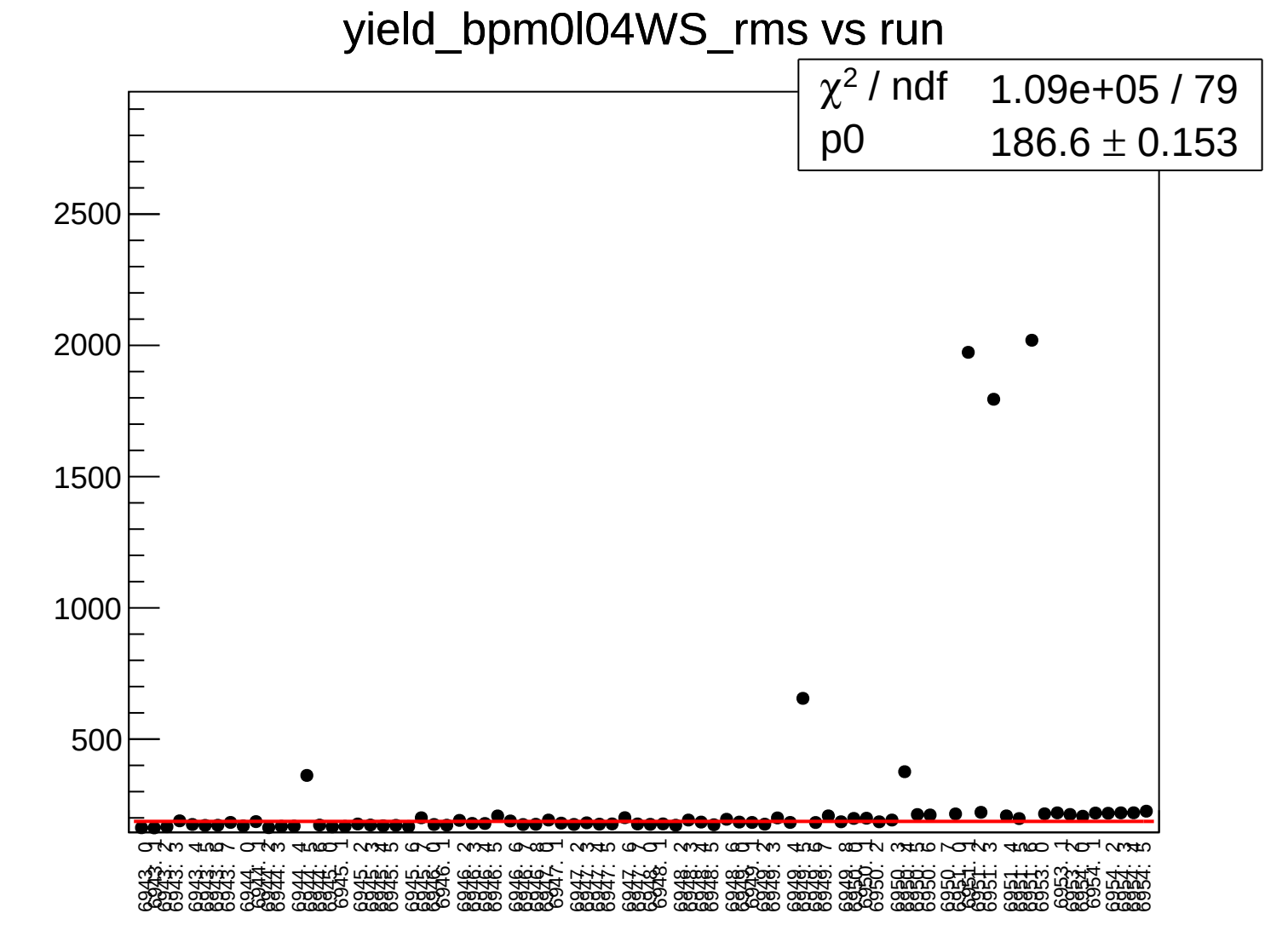

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 5.189e+05 / 79
p0 1.342e+05 ± 0.7665
135
134
133
132
131
130
pull
Entries 80
Mean 14.16
Std Dev 12
100
0
−100
−200
−300
−400

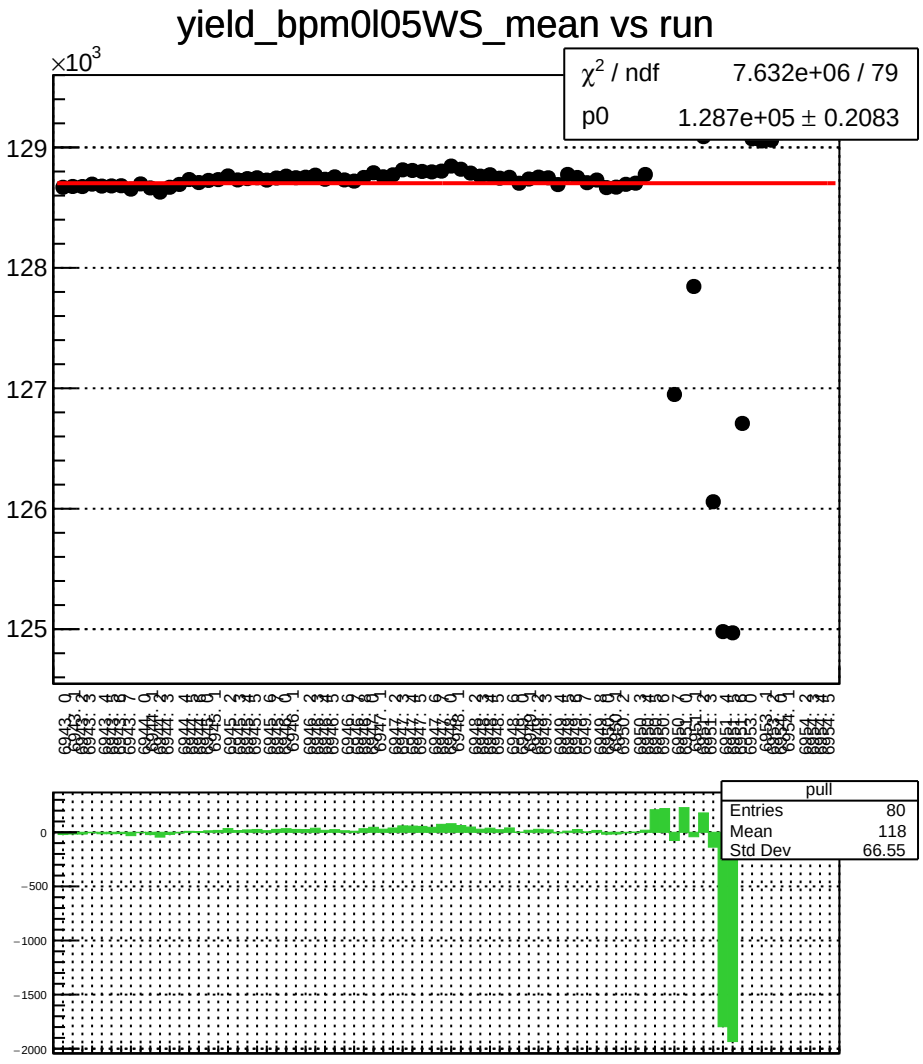

pull1D
Entries 80
Mean −0.3517
Std Dev 3.058
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

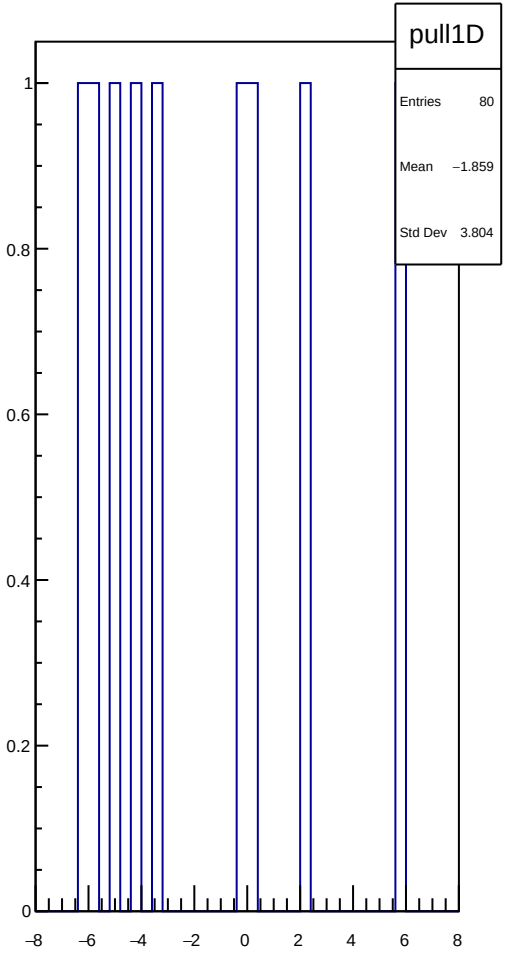

yield_bpm0l03WS_rms vs run
χ² / ndf 1.923e+05 / 79
p0 642.2 ± 0.542
2500
2000
1500
1000
500

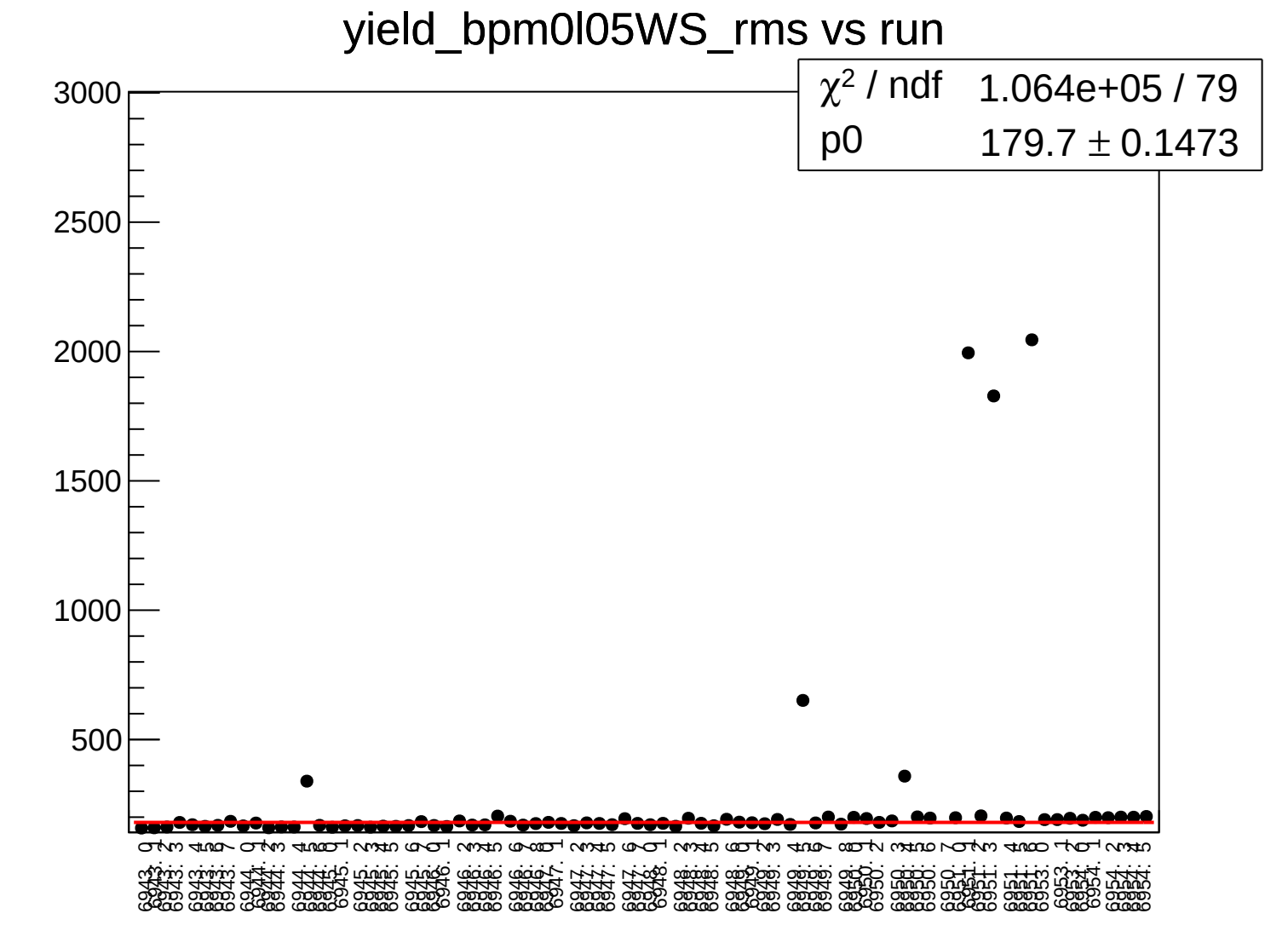

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 6.587e+06 / 79
p0 1.283e+05 ± 0.2164
129
128
127
126
125
pull
Entries 80
Mean 97.92
Std Dev 44.45
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

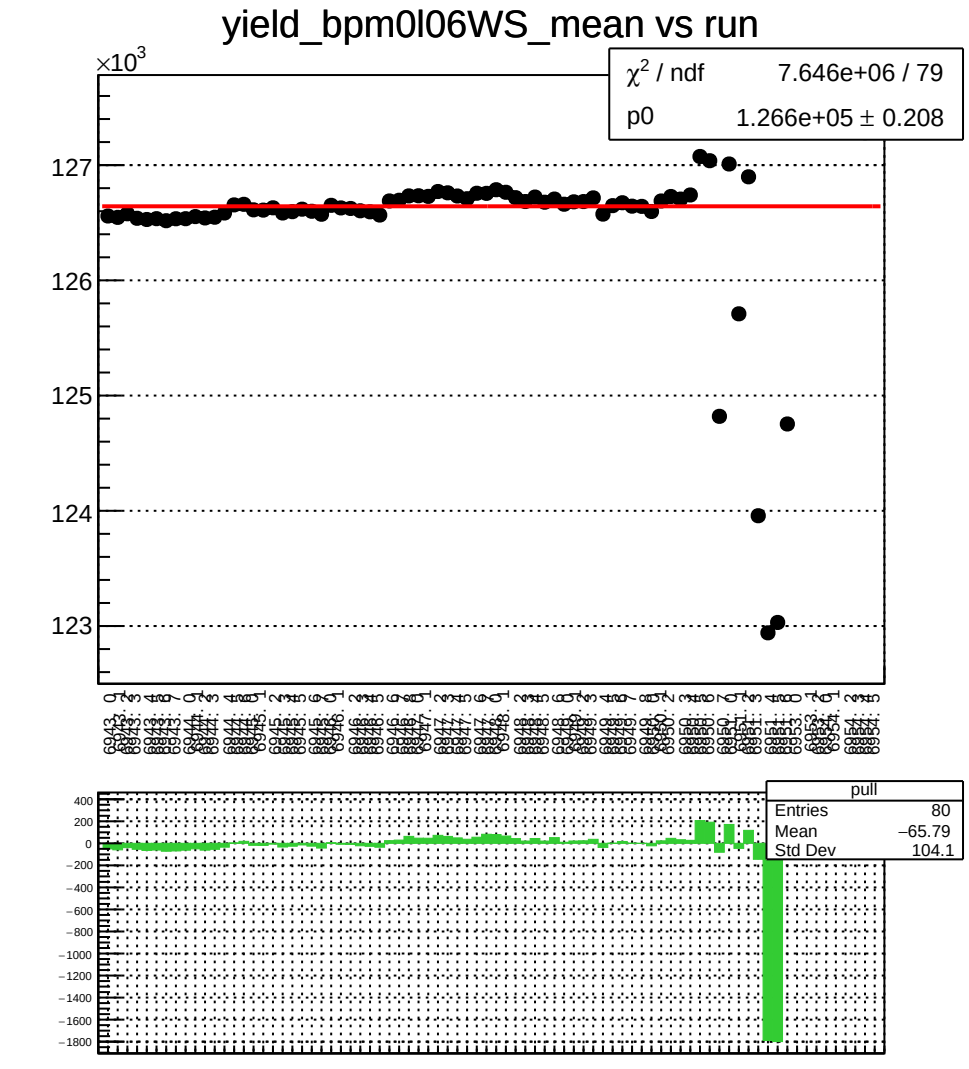

pull1D
Entries 80
Mean −2.522
Std Dev 4.57
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

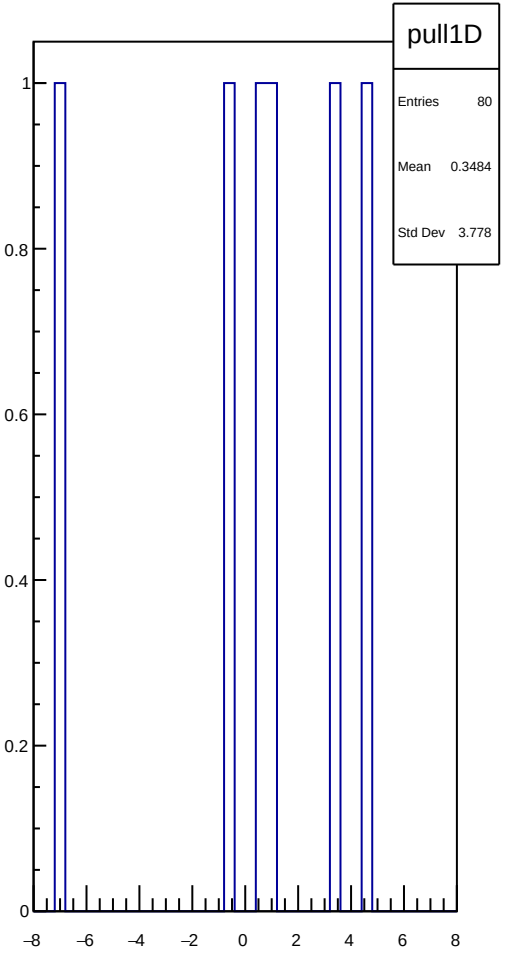

yield_bpm0l04WS_rms vs run
χ² / ndf 1.09e+05 / 79
p0 186.6 ± 0.153
2500
2000
1500
1000
500

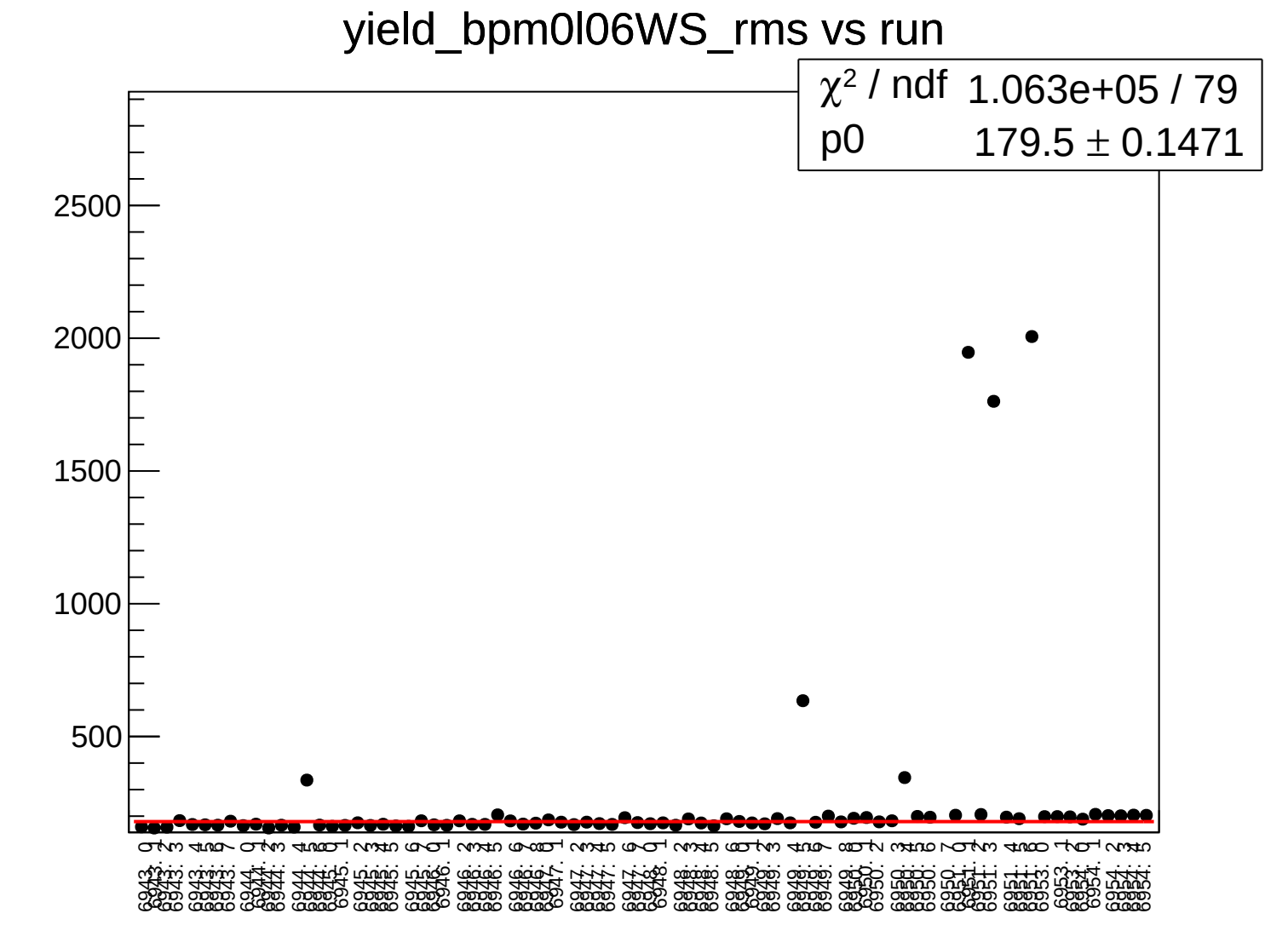

yield_bpm0l05WS_mean vs run
χ² / ndf 7.632e+06 / 79
p0 1.287e+05 ± 0.2083
×10³
129
128
127
126
125
pull
Entries 80
Mean 118
Std Dev 66.55
0
−500
−1000
−1500
−2000

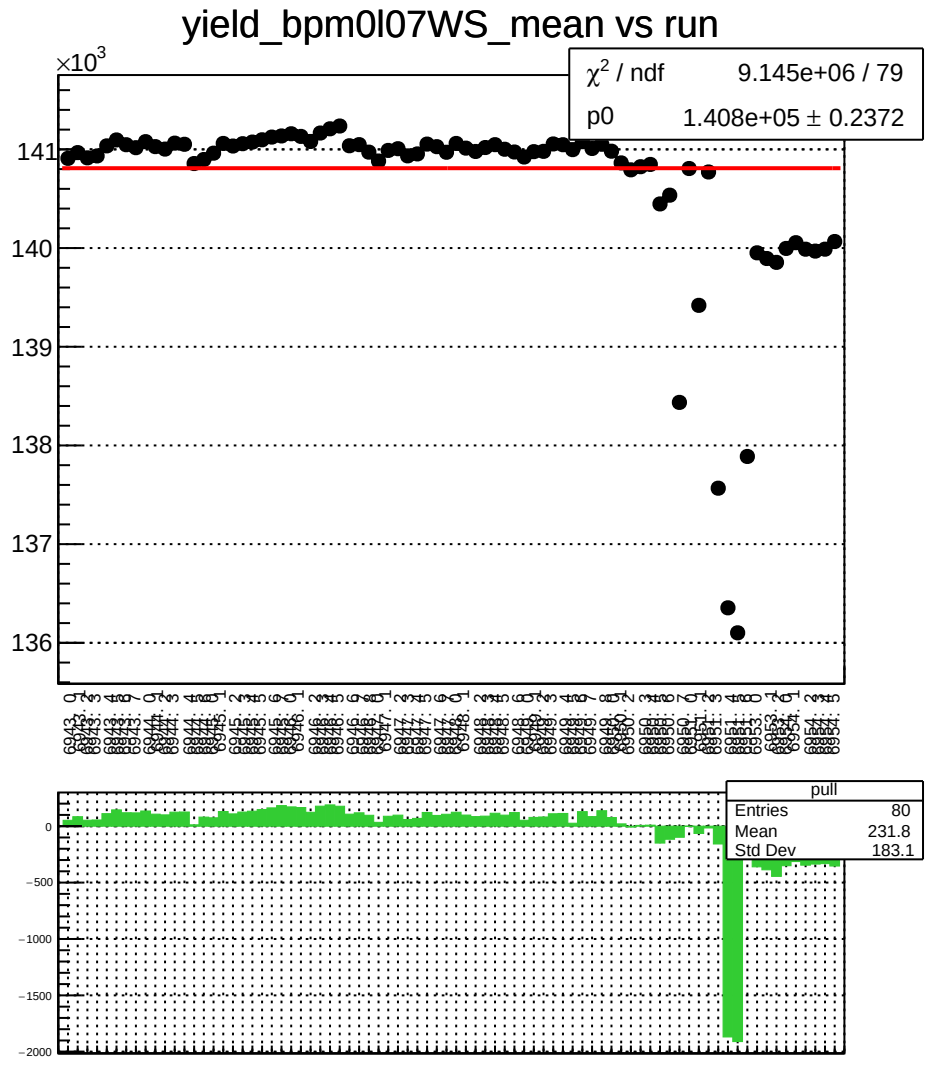

pull1D
Entries 80
Mean −1.859
Std Dev 3.804
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

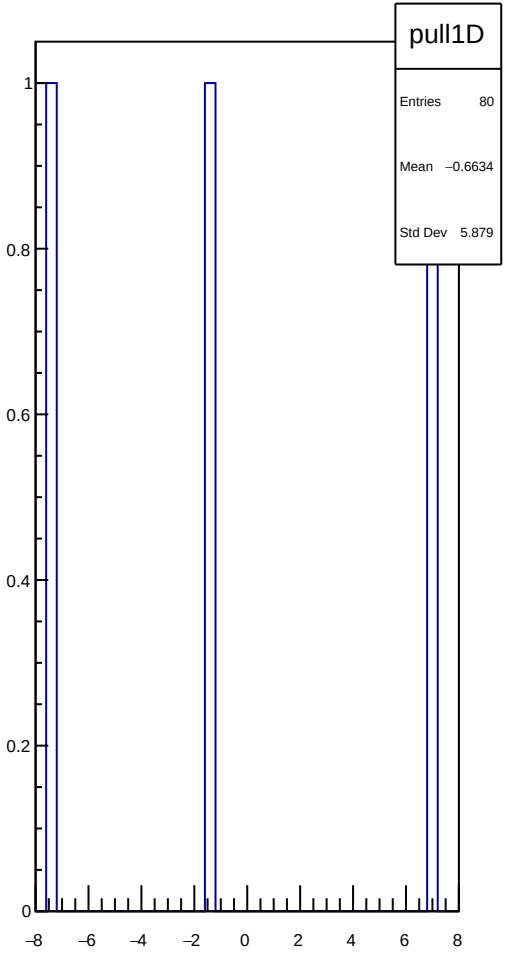

yield_bpm0l05WS_rms vs run
χ^2 / ndf 1.064e+05 / 79
p0 179.7 ± 0.1473
3000
2500
2000
1500
1000
500

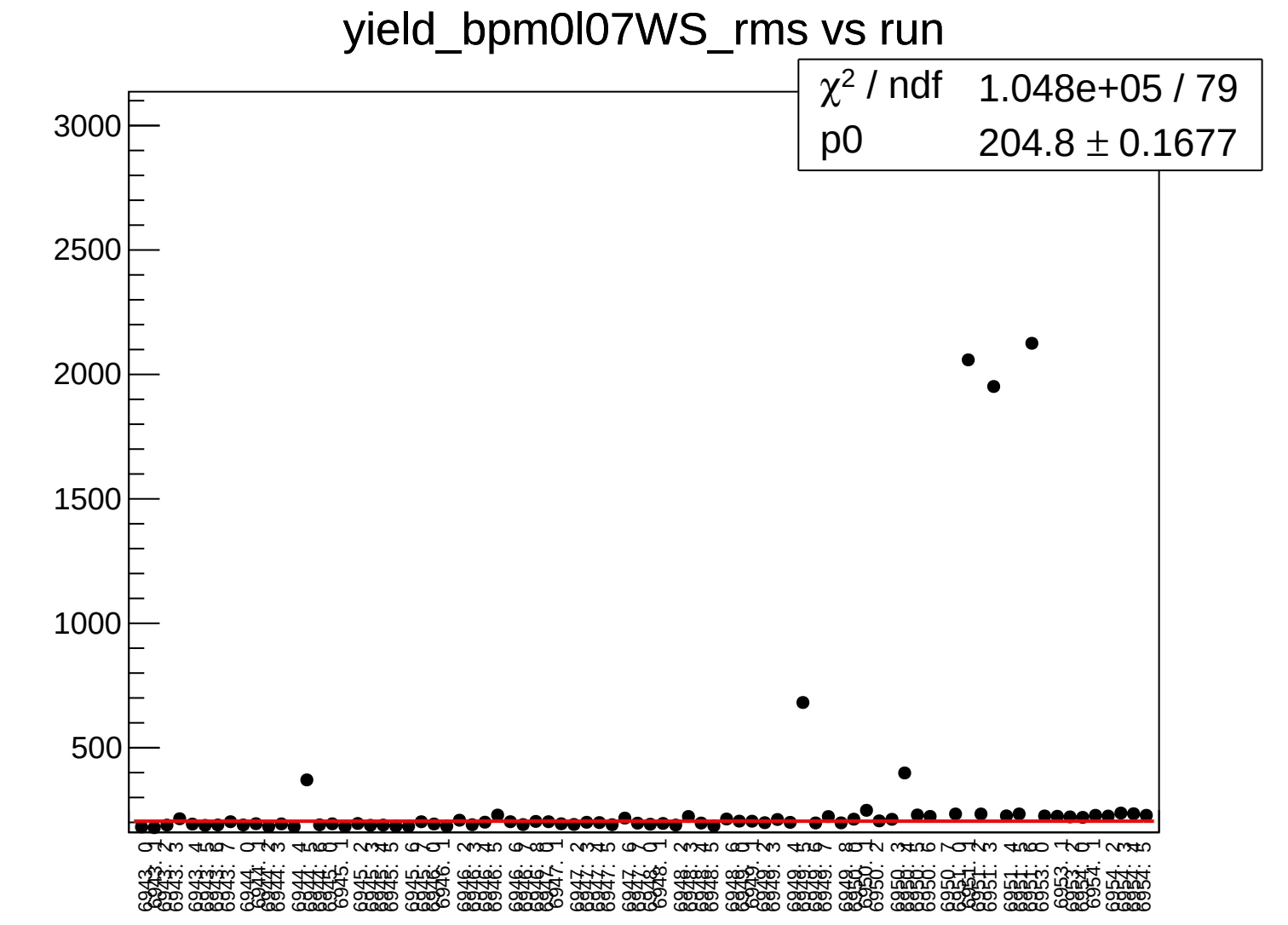

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 7.646e+06 / 79
p0 1.266e+05 ± 0.208
127
126
125
124
123
pull
Entries 80
Mean −65.79
Std Dev 104.1
400
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

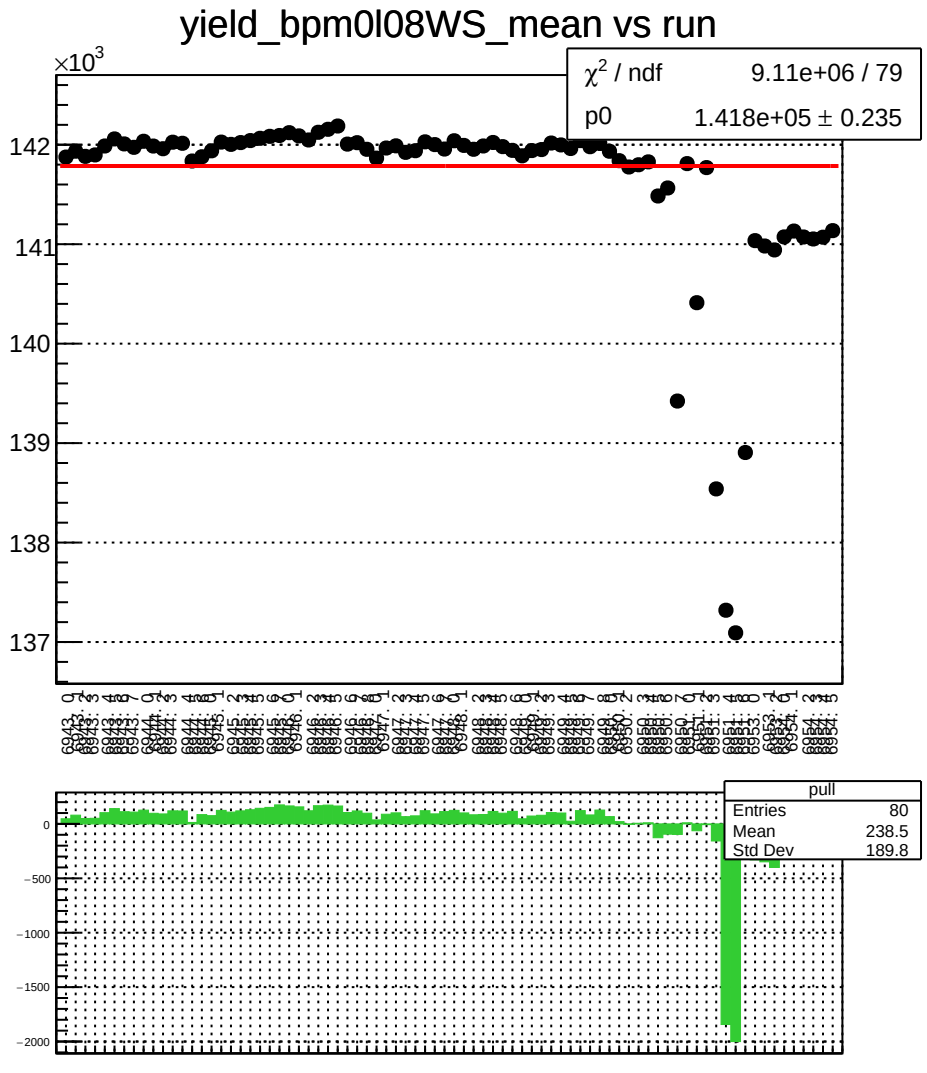

pull1D
Entries 80
Mean 0.3484
Std Dev 3.778
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

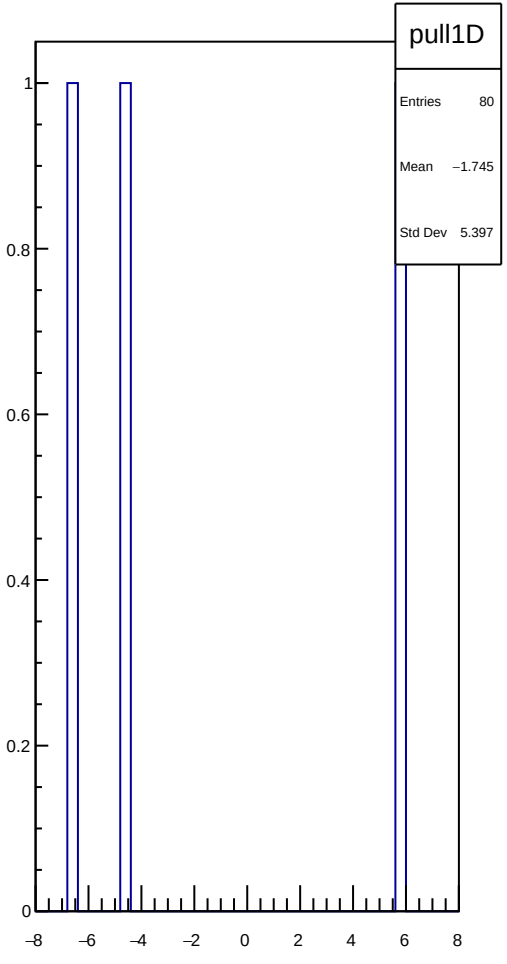

yield_bpm0l06WS_rms vs run
χ² / ndf 1.063e+05 / 79
p0 179.5 ± 0.1471
2500
2000
1500
1000
500

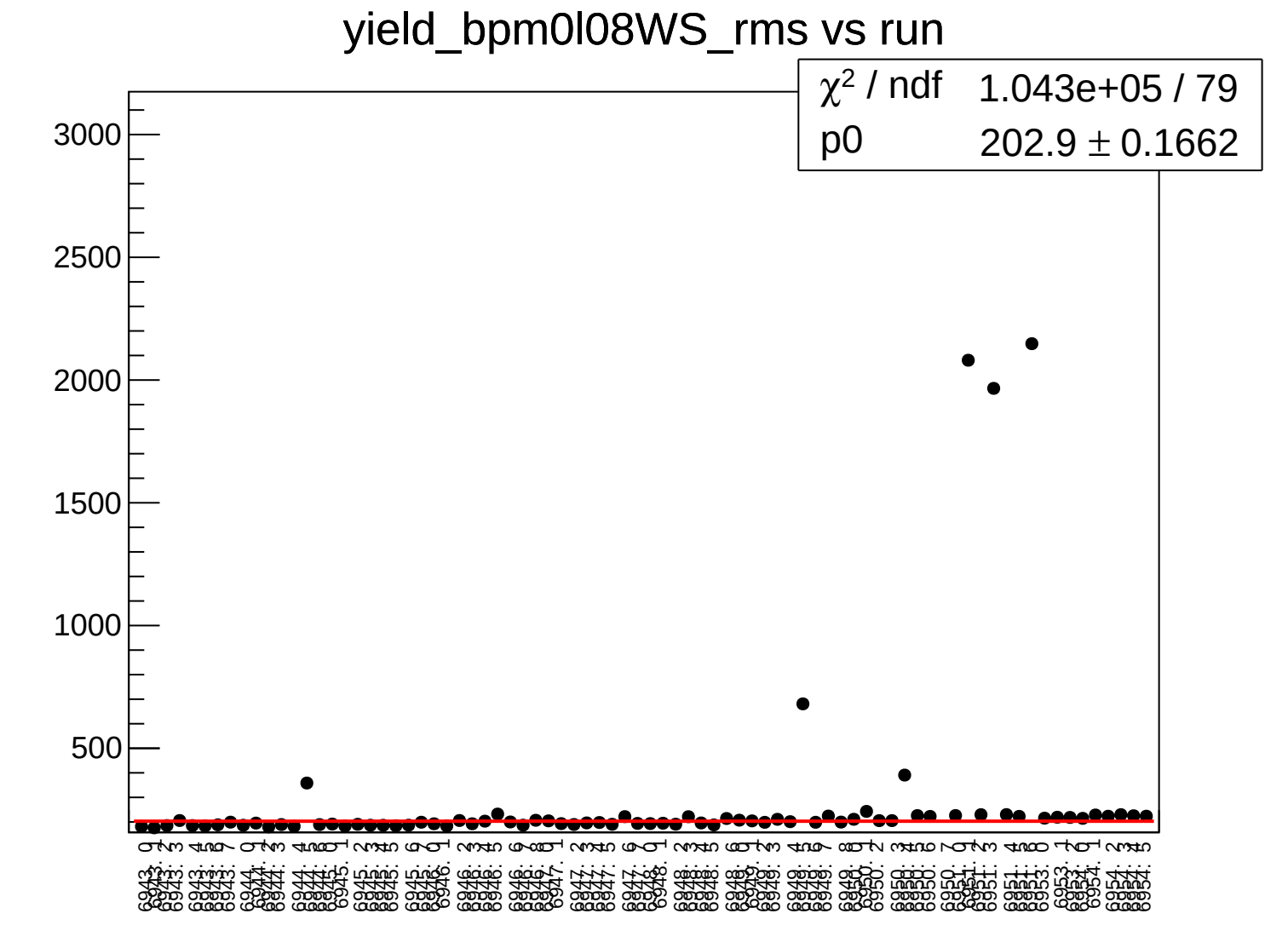

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 9.145e+06 / 79
p0 1.408e+05 ± 0.2372
141
140
139
138
137
136
pull
Entries 80
Mean 231.8
Std Dev 183.1
0
−500
−1000
−1500
−2000

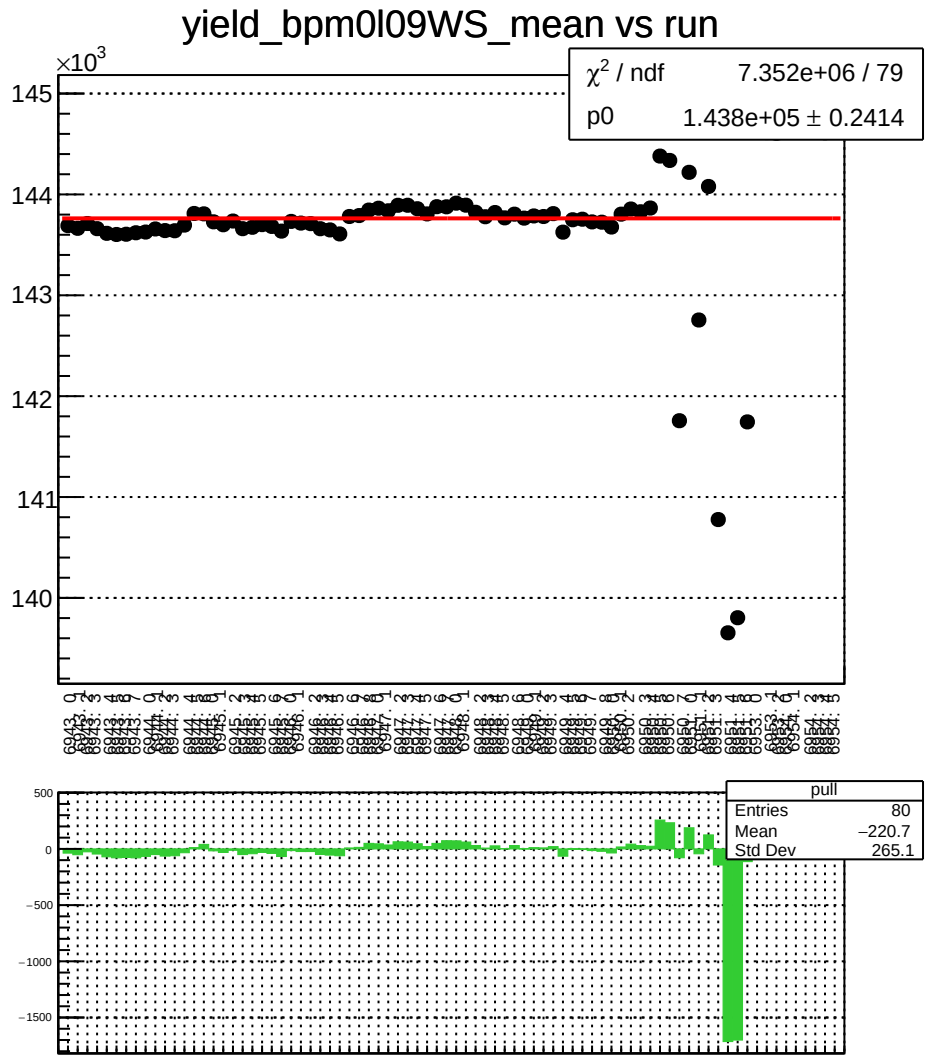

pull1D
Entries 80
Mean −0.6634
Std Dev 5.879
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

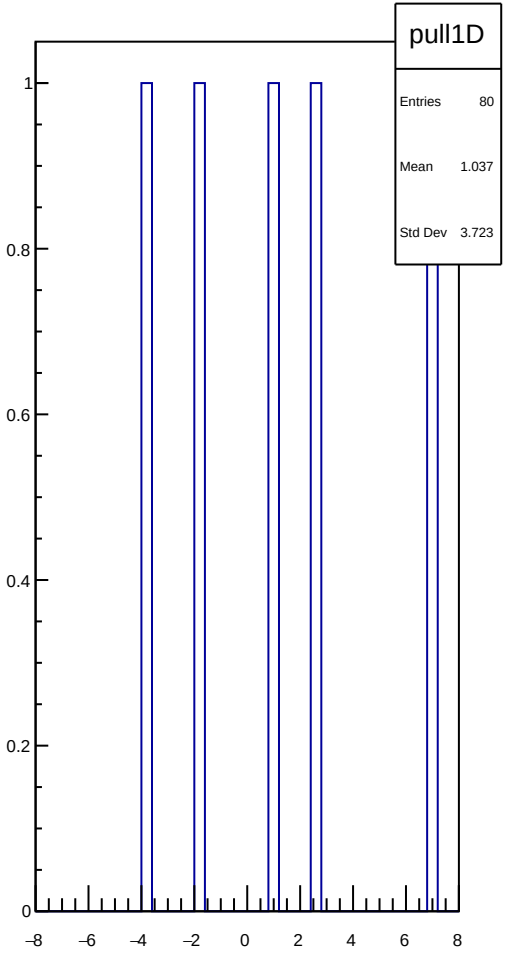

yield_bpm0l07WS_rms vs run
χ² / ndf 1.048e+05 / 79
p0 204.8 ± 0.1677
3000
2500
2000
1500
1000
500

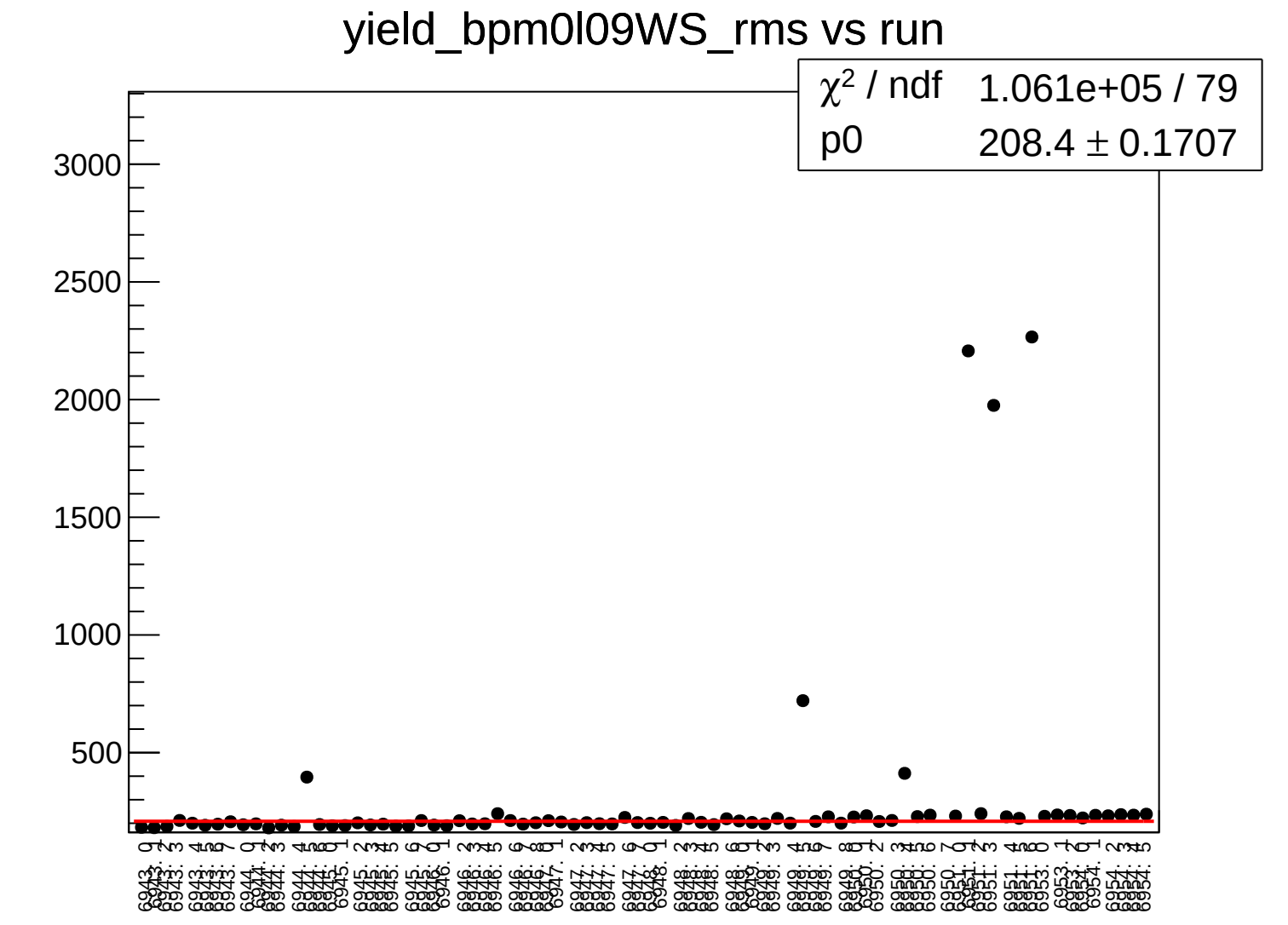

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 9.11e+06 / 79
p0 1.418e+05 ± 0.235
142
141
140
139
138
137
pull
Entries 80
Mean 238.5
Std Dev 189.8
0
−500
−1000
−1500
−2000

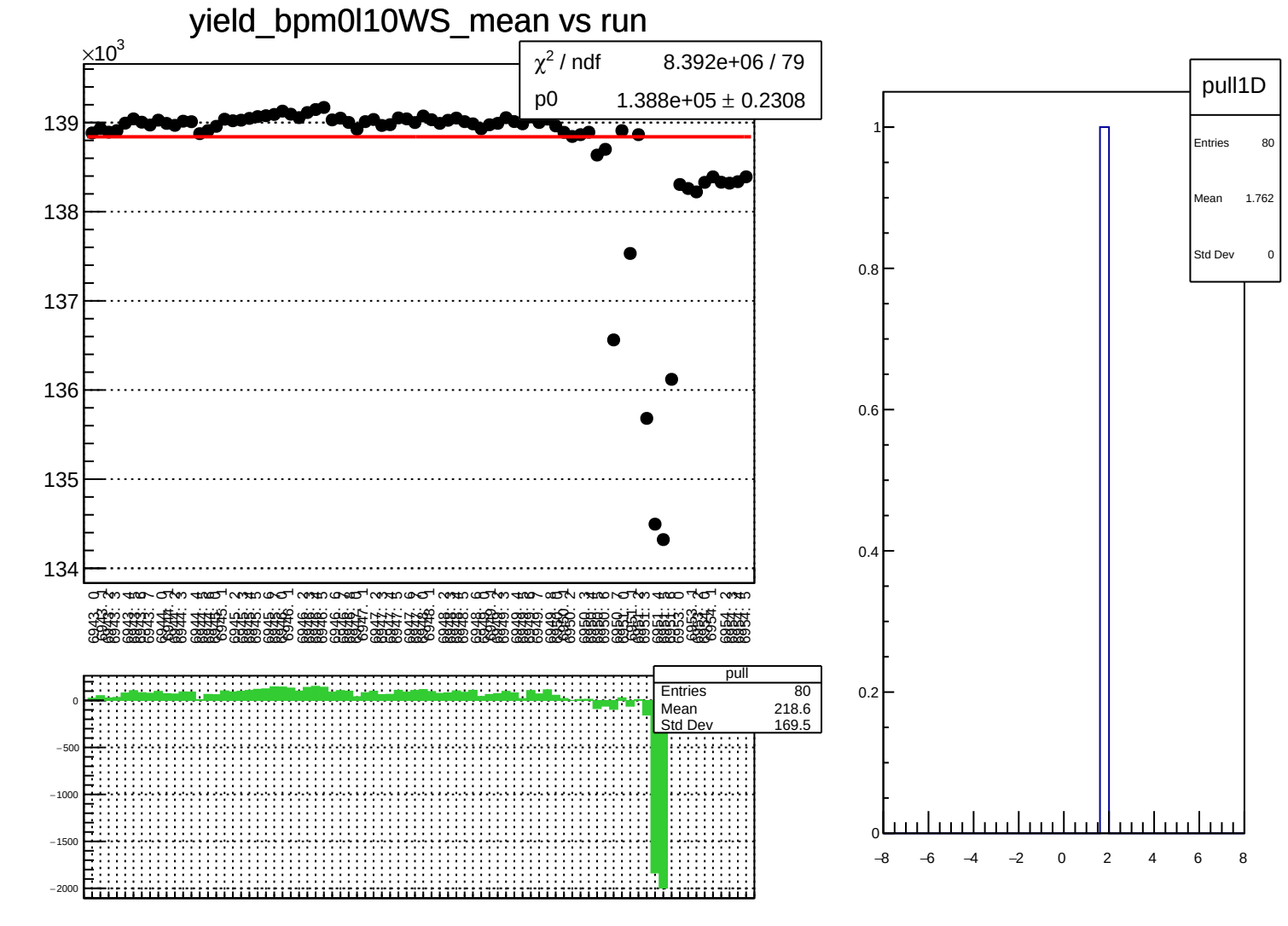

pull1D
Entries 80
Mean −1.745
Std Dev 5.397
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

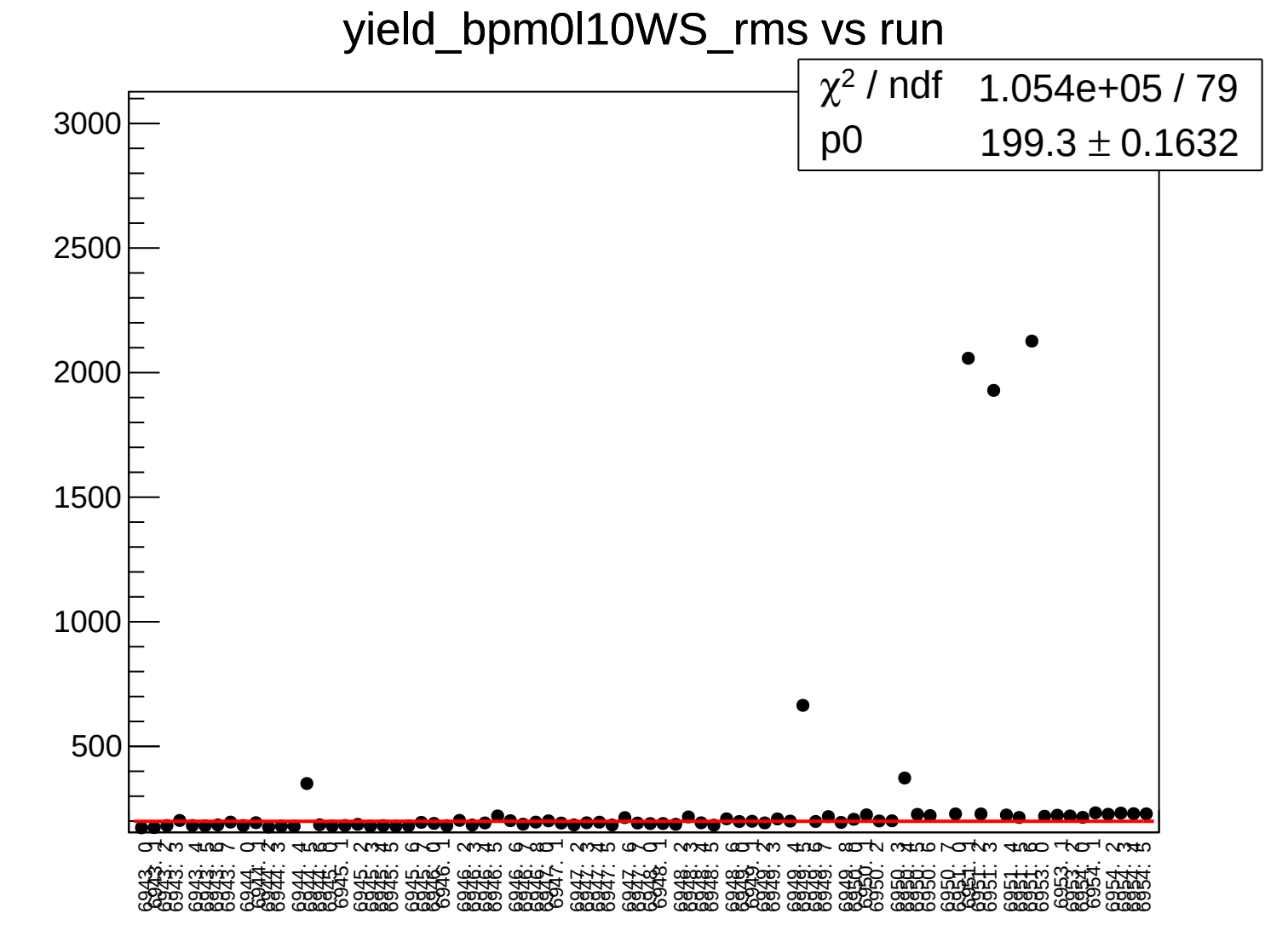

yield_bpm0l08WS_rms vs run
χ² / ndf 1.043e+05 / 79
p0 202.9 ± 0.1662
3000
2500
2000
1500
1000
500

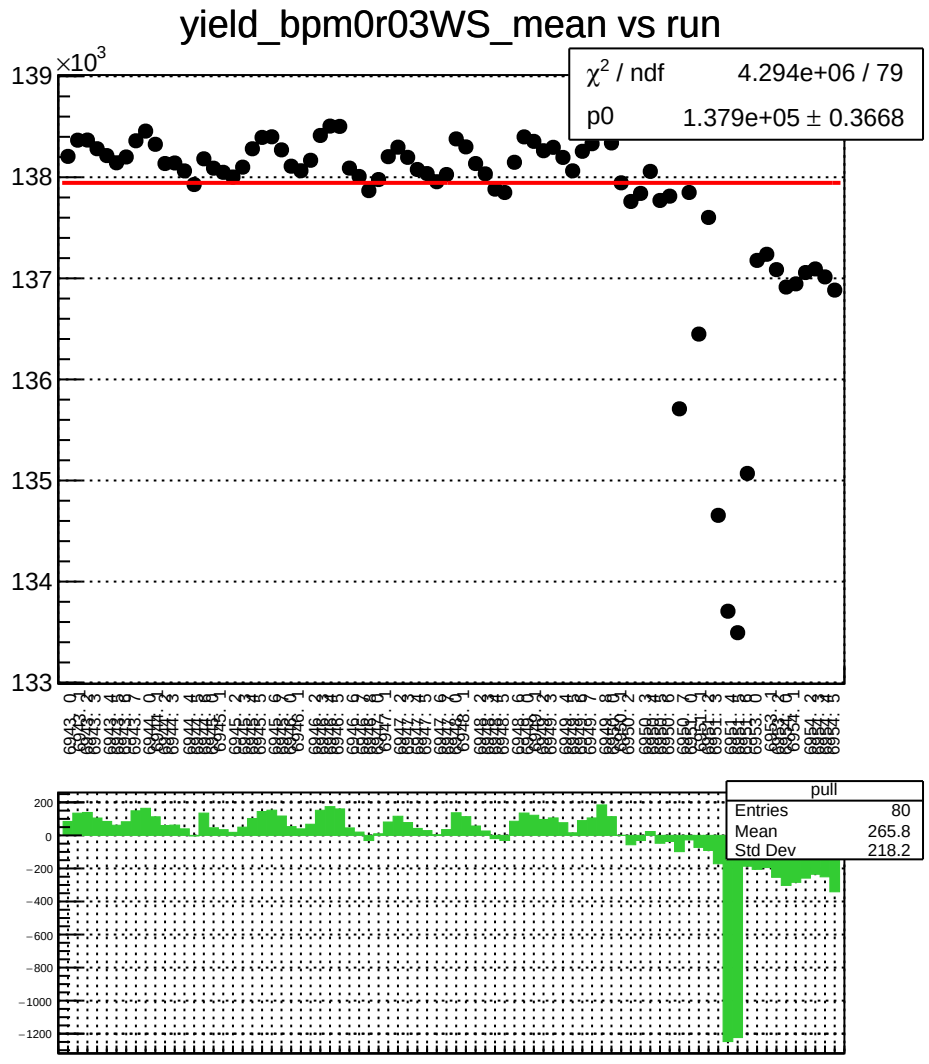

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 7.352e+06 / 79
p0 1.438e+05 ± 0.2414
145
144
143
142
141
140
pull
Entries 80
Mean −220.7
Std Dev 265.1
500
0
−500
−1000
−1500

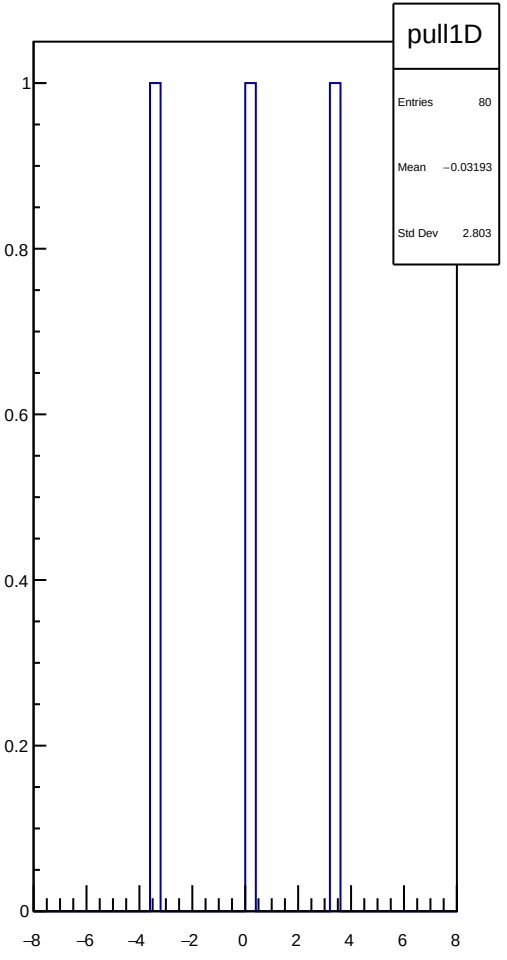

pull1D
Entries 80
Mean 1.037
Std Dev 3.723
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

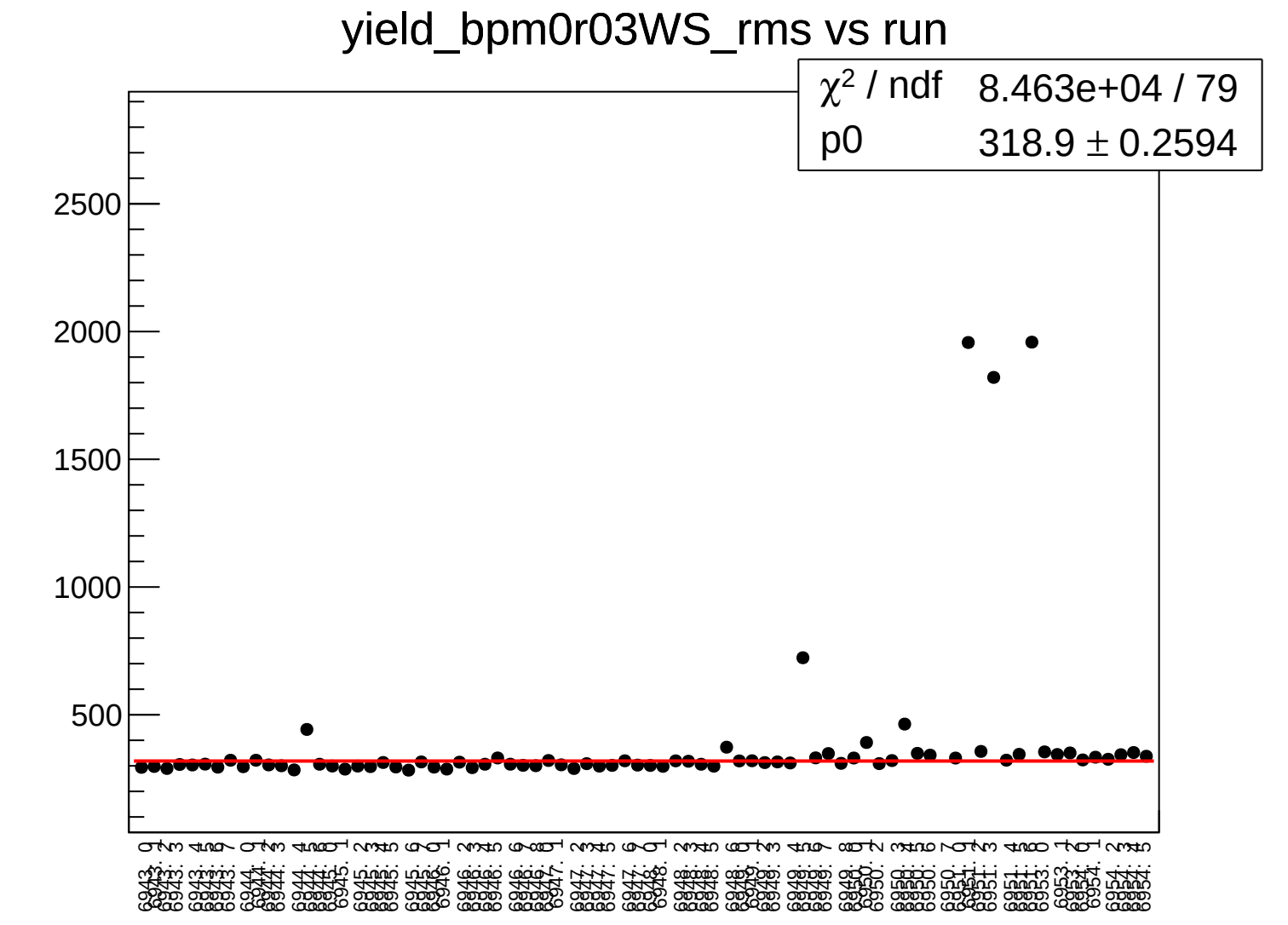

yield_bpm0l09WS_rms vs run
χ² / ndf 1.061e+05 / 79
p0 208.4 ± 0.1707
3000
2500
2000
1500
1000
500

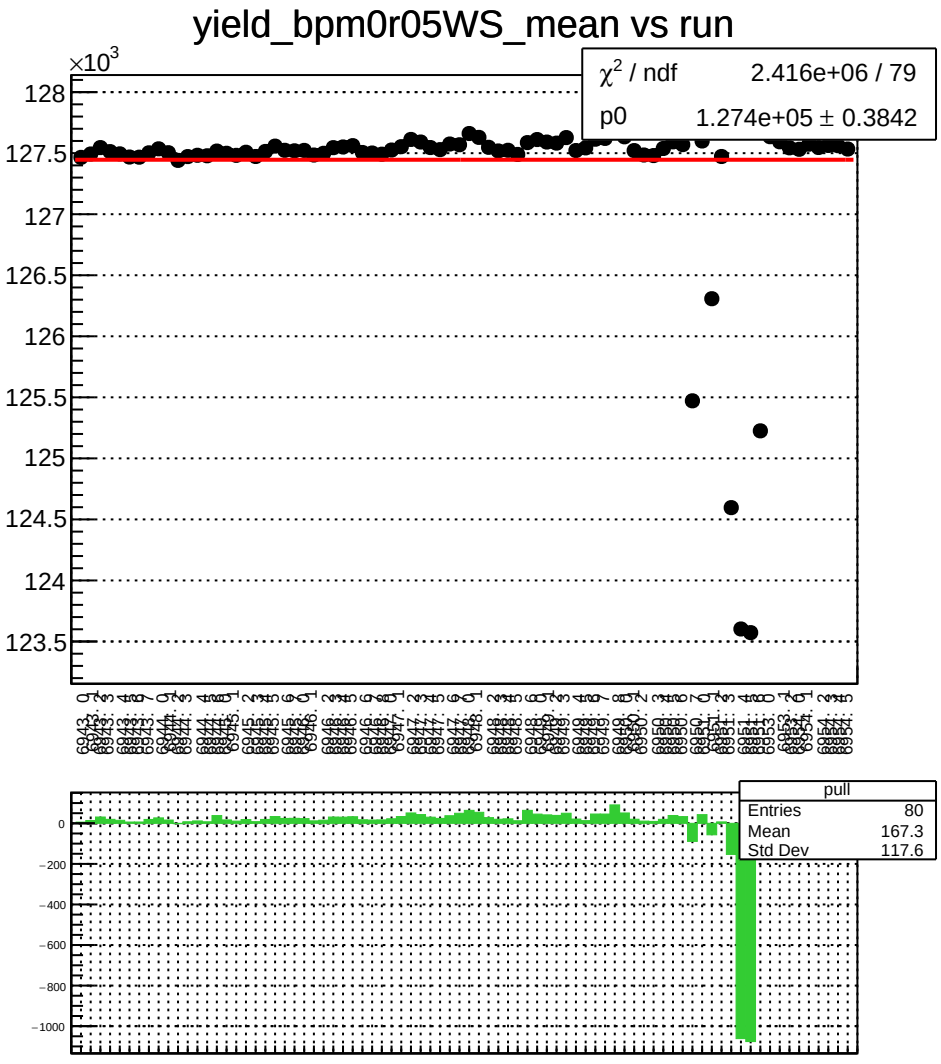

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 8.392e+06 / 79
p0 1.388e+05 ± 0.2308
139
138
137
136
135
134
pull
Entries 80
Mean 218.6
Std Dev 169.5
0
−500
−1000
−1500
−2000
pull1D
Entries 80
Mean 1.762
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

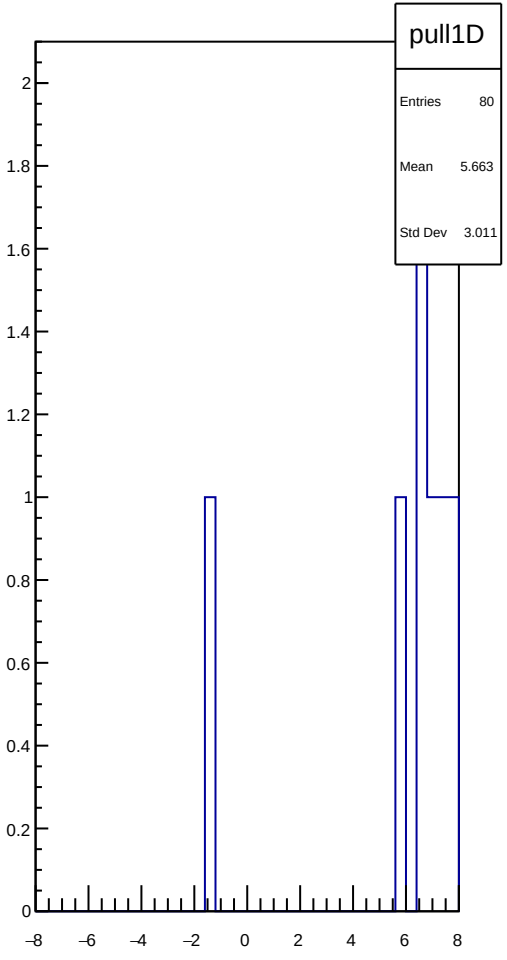

yield_bpm0l10WS_rms vs run
χ² / ndf 1.054e+05 / 79
p0 199.3 ± 0.1632
3000
2500
2000
1500
1000
500

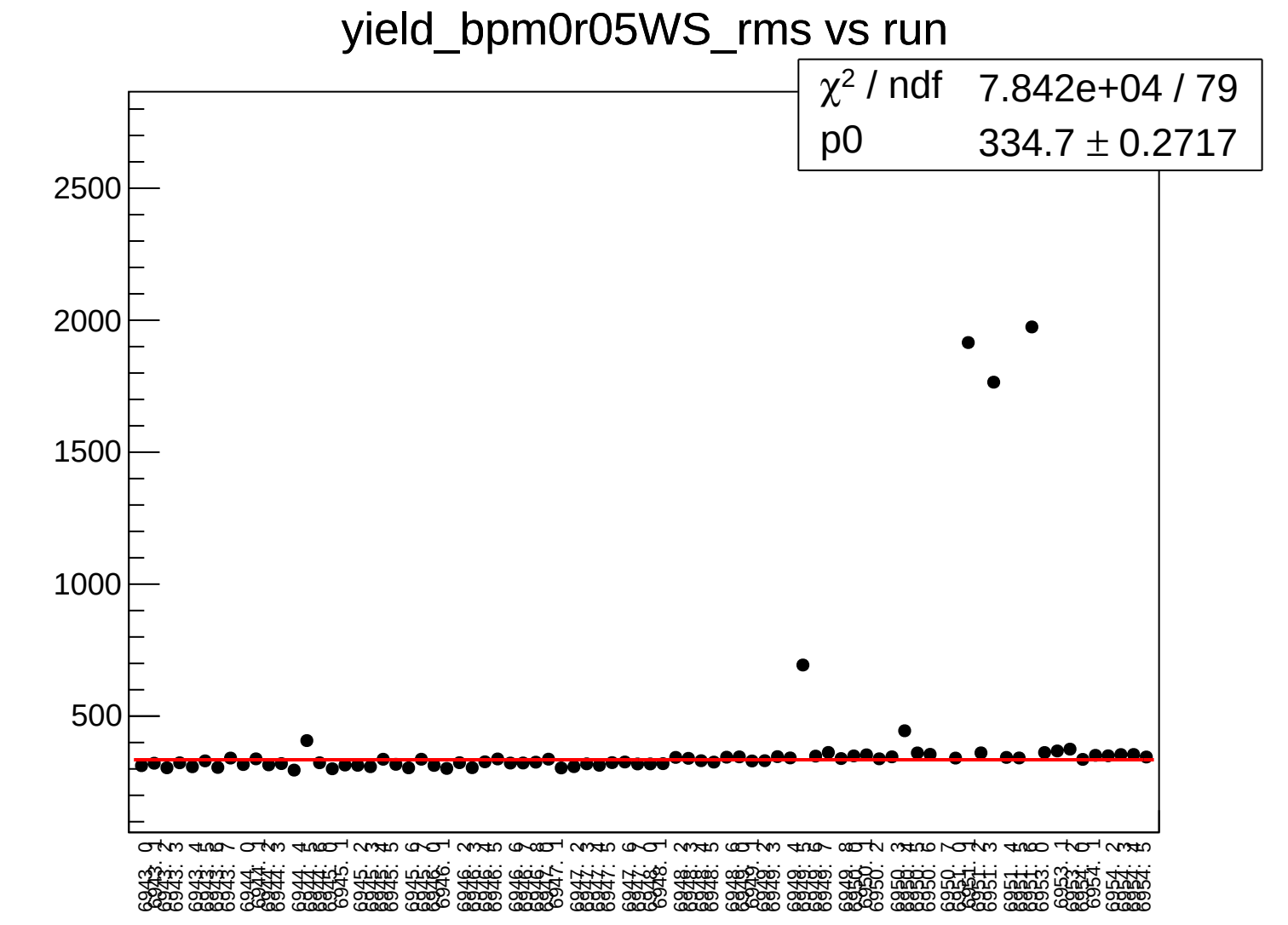

yield_bpm0r03WS_mean vs run
χ² / ndf 4.294e+06 / 79
p0 1.379e+05 ± 0.3668
×10³
pull
Entries 80
Mean 265.8
Std Dev 218.2

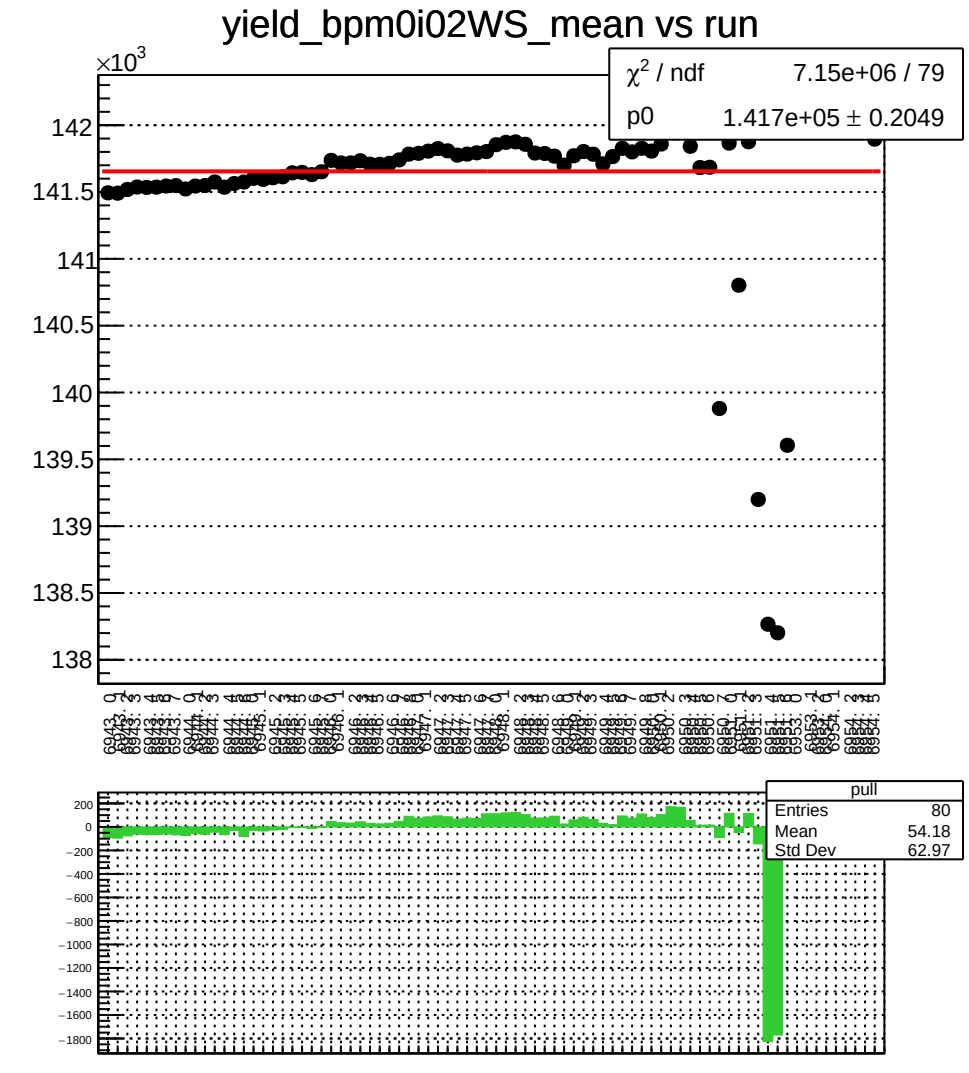

pull1D
Entries 80
Mean −0.03193
Std Dev 2.803

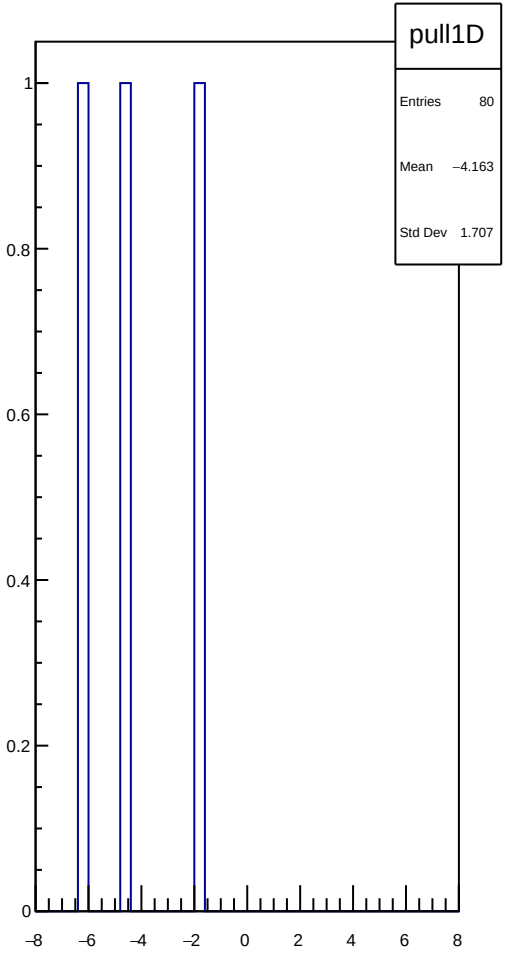

yield_bpm0r03WS_rms vs run
χ^2 / ndf 8.463e+04 / 79
p0 318.9 ± 0.2594
2500
2000
1500
1000
500

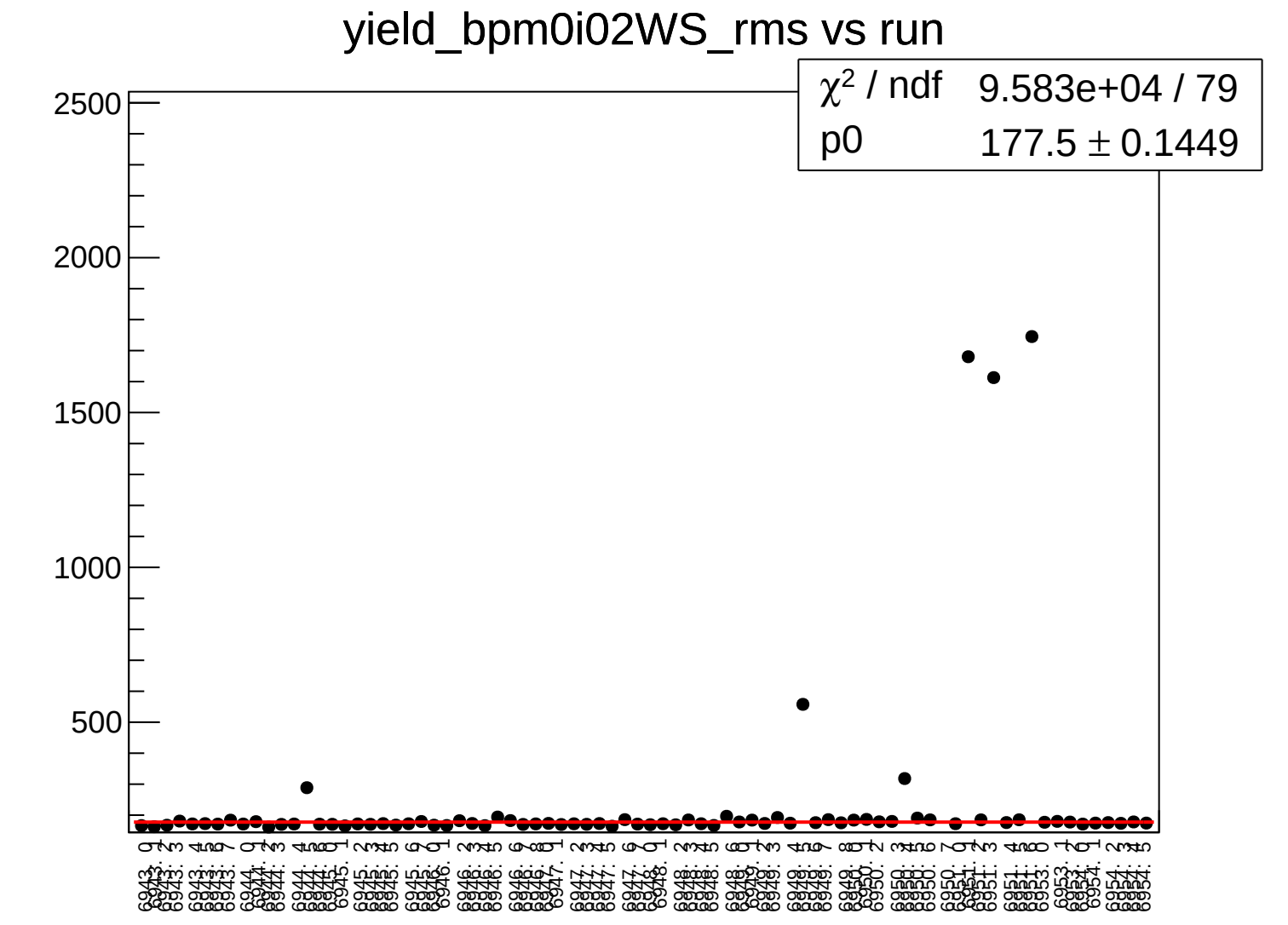

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 2.416e+06 / 79
p0 1.274e+05 ± 0.3842
128
127.5
127
126.5
126
125.5
125
124.5
124
123.5
pull
Entries 80
Mean 167.3
Std Dev 117.6
0
−200
−400
−600
−800
−1000

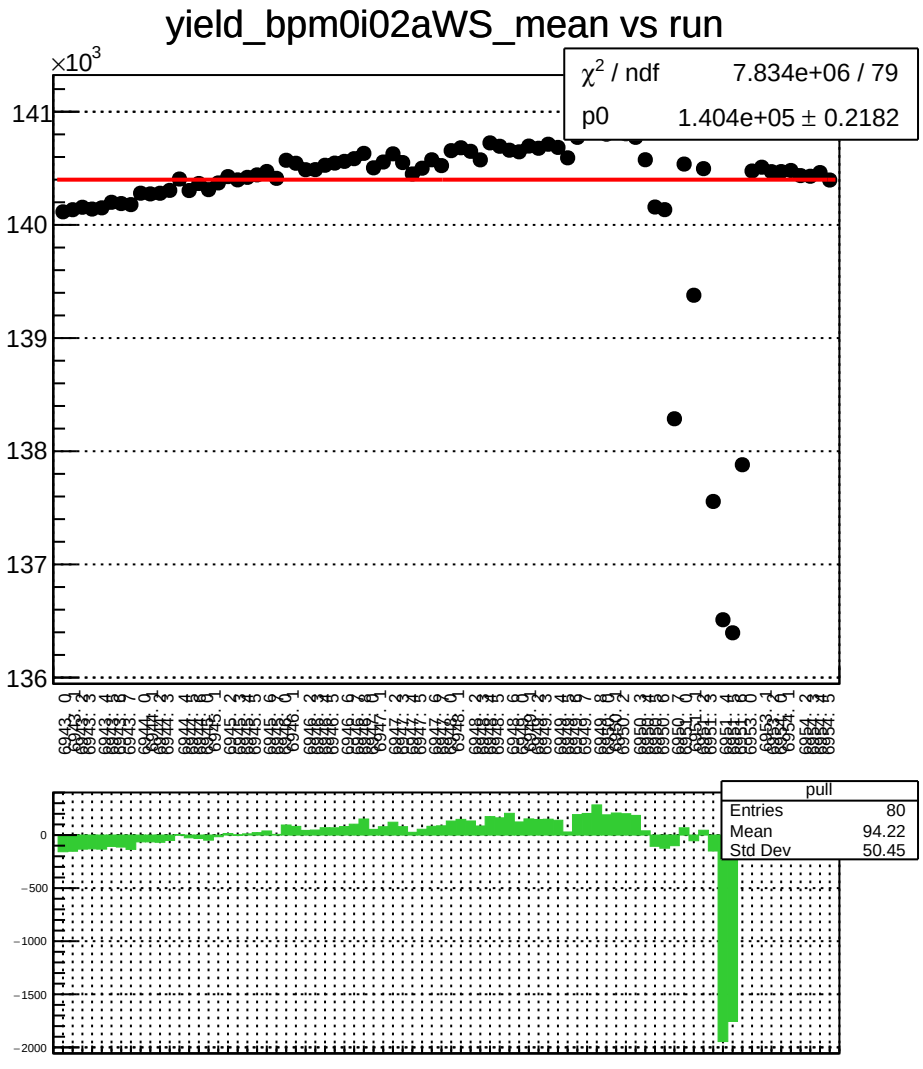

pull1D
Entries 80
Mean 5.663
Std Dev 3.011
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

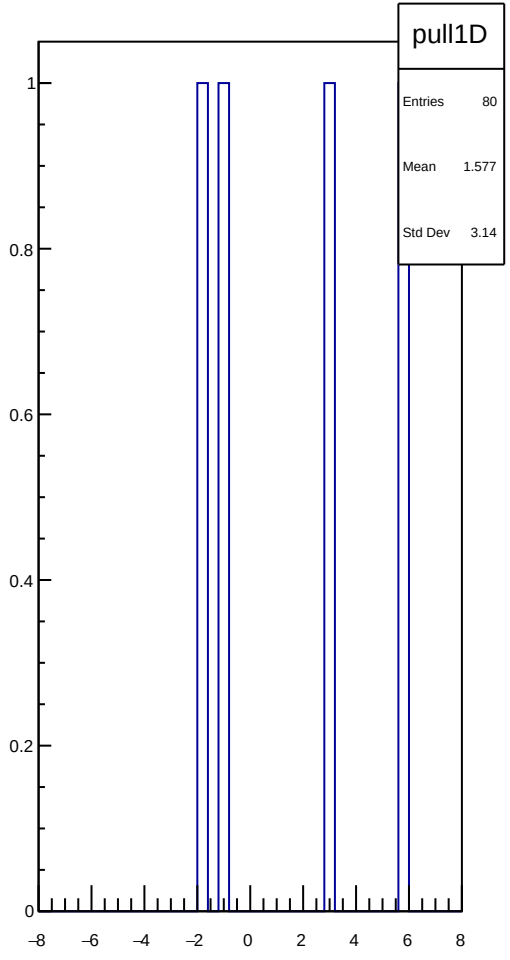

yield_bpm0r05WS_rms vs run
χ² / ndf 7.842e+04 / 79
p0 334.7 ± 0.2717
2500
2000
1500
1000
500

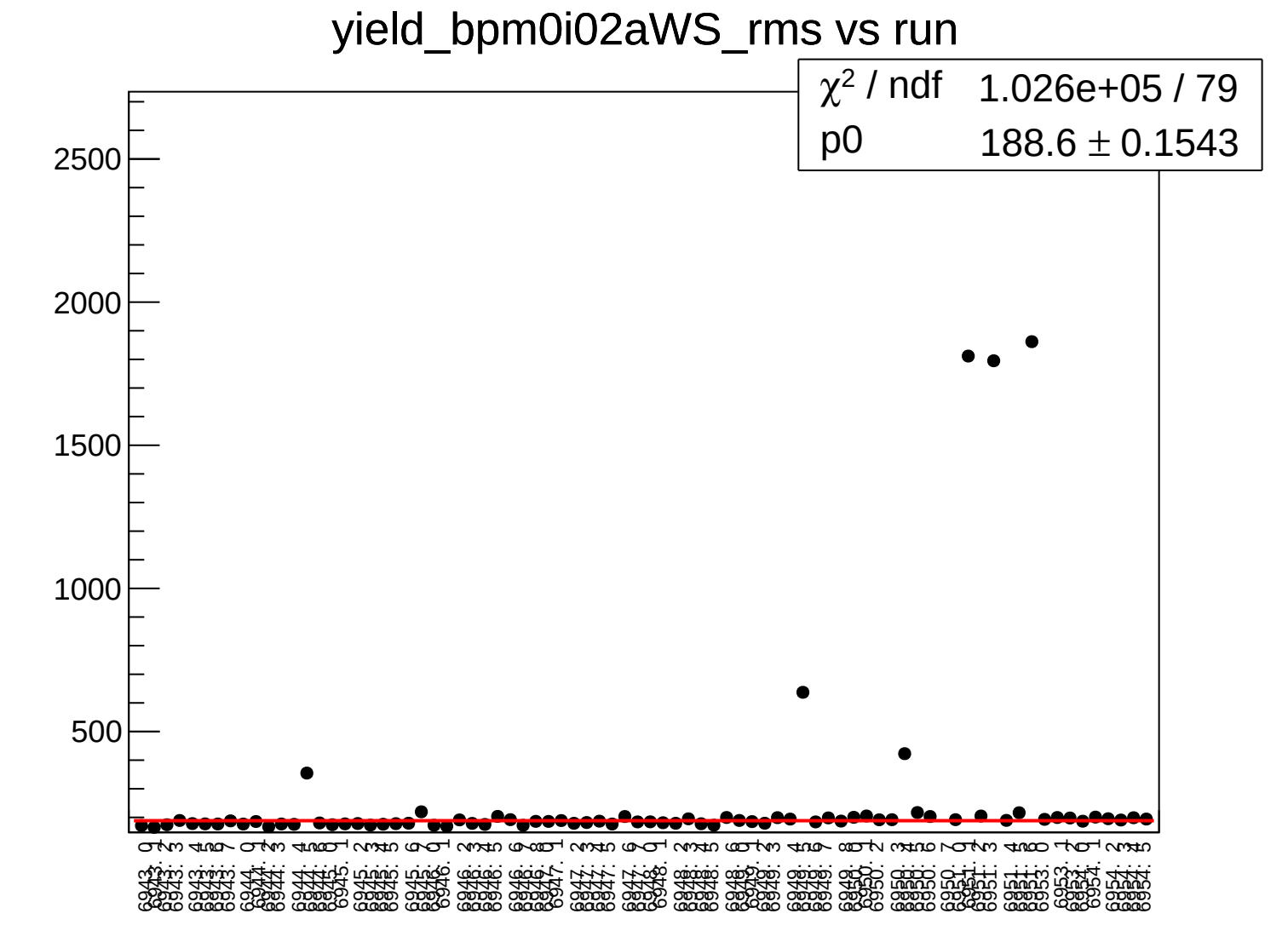

yield_bpm0i02WS_mean vs run
χ² / ndf 7.15e+06 / 79
p0 1.417e+05 ± 0.2049
×10³
142
141.5
141
140.5
140
139.5
139
138.5
138
pull
Entries 80
Mean 54.18
Std Dev 62.97
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

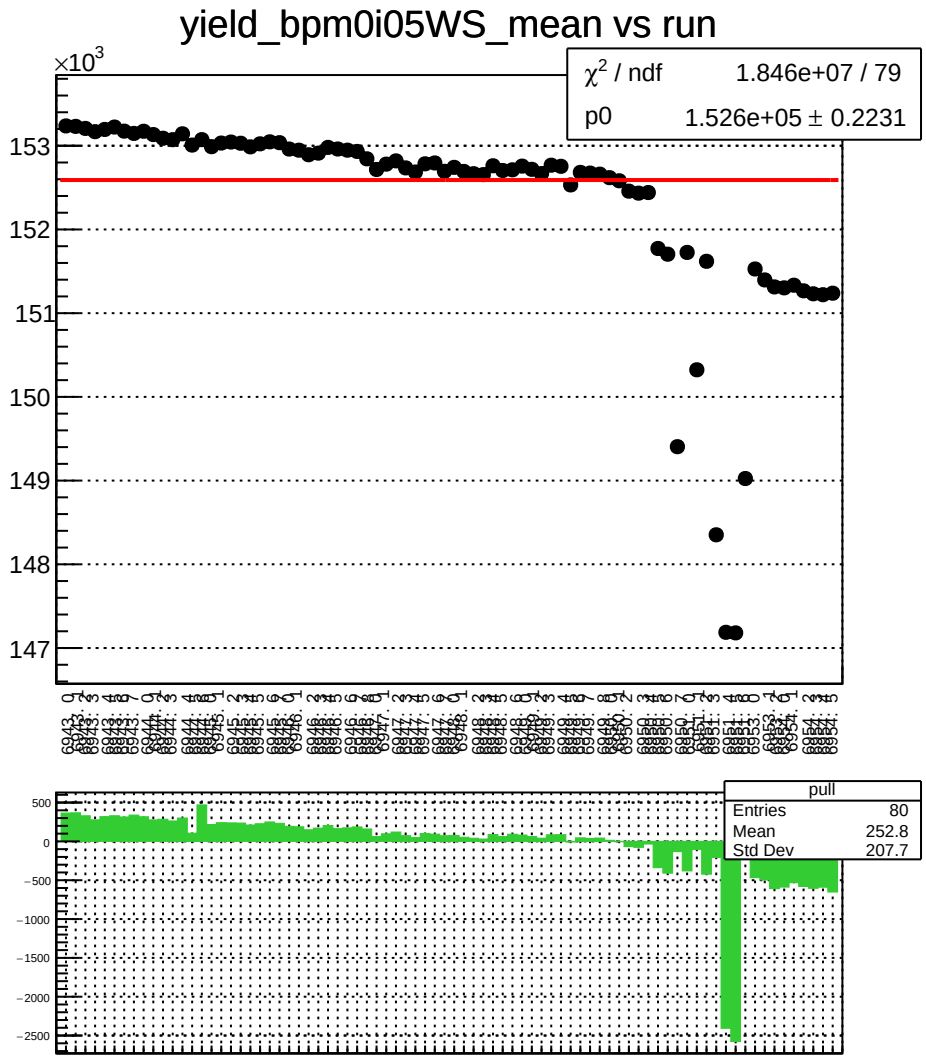

pull1D
Entries 80
Mean −4.163
Std Dev 1.707
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

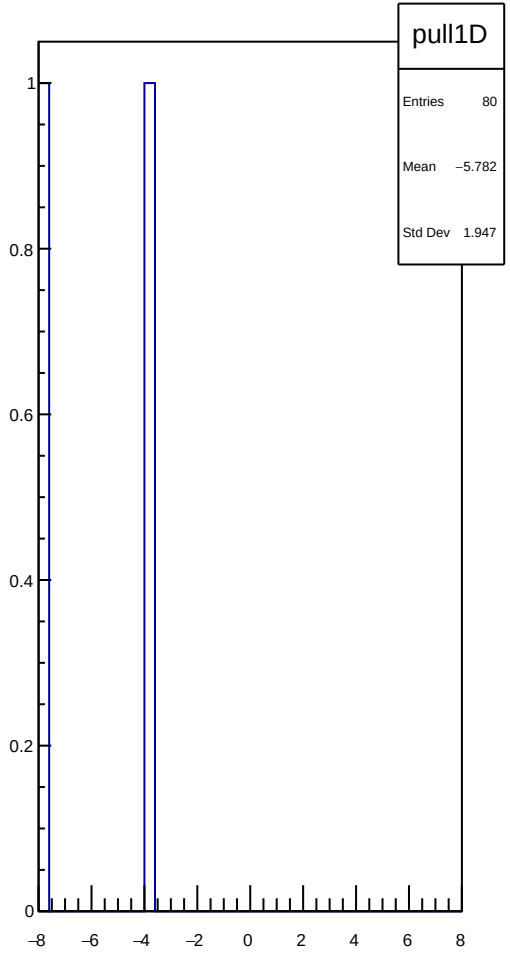

yield_bpm0i02WS_rms vs run
χ^2 / ndf 9.583e+04 / 79
p0 177.5 ± 0.1449
2500
2000
1500
1000
500

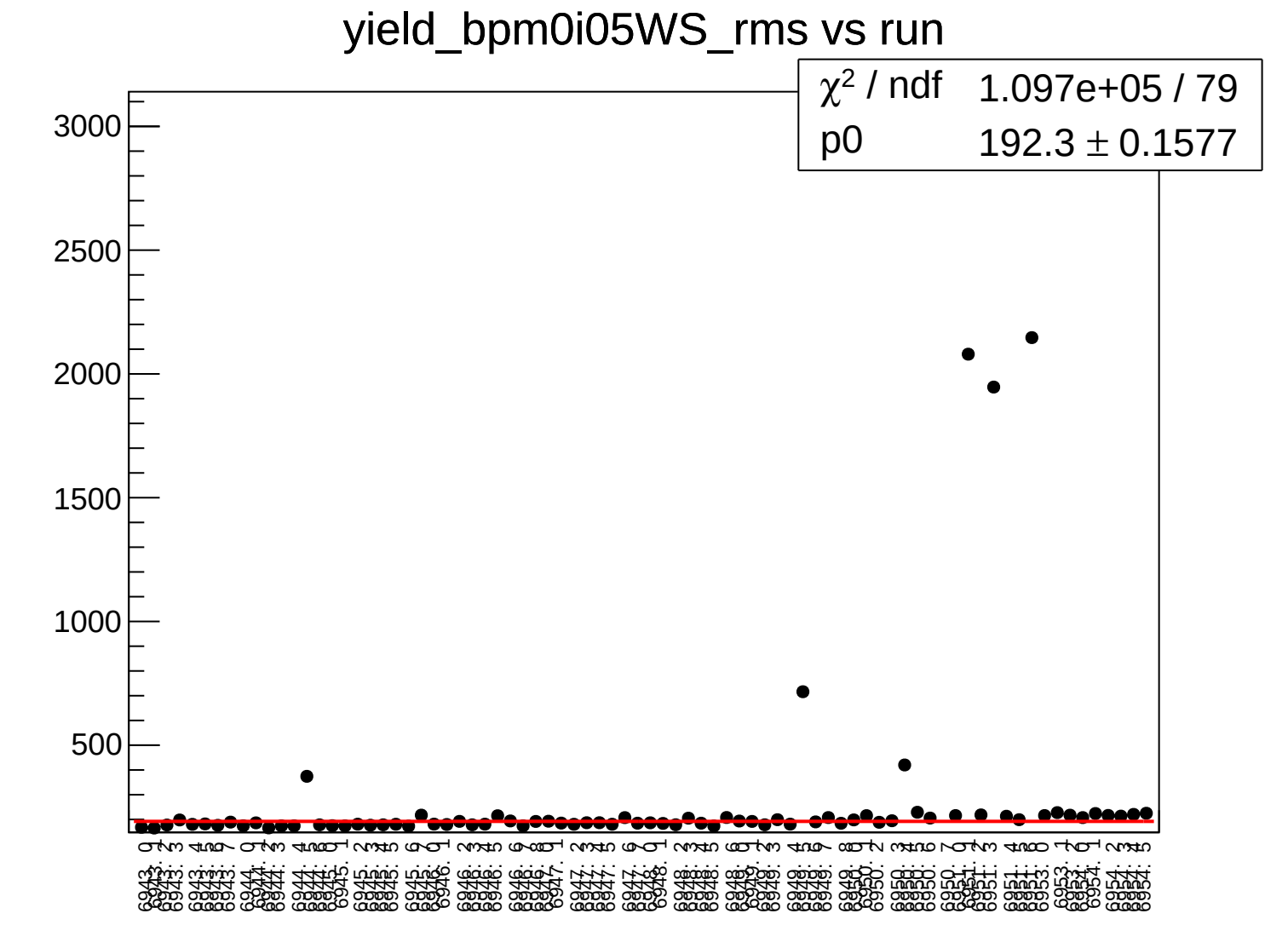

yield_bpm0i02aWS_mean vs run
χ² / ndf 7.834e+06 / 79
p0 1.404e+05 ± 0.2182
×10³
141
140
139
138
137
136
pull
Entries 80
Mean 94.22
Std Dev 50.45
0
−500
−1000
−1500
−2000

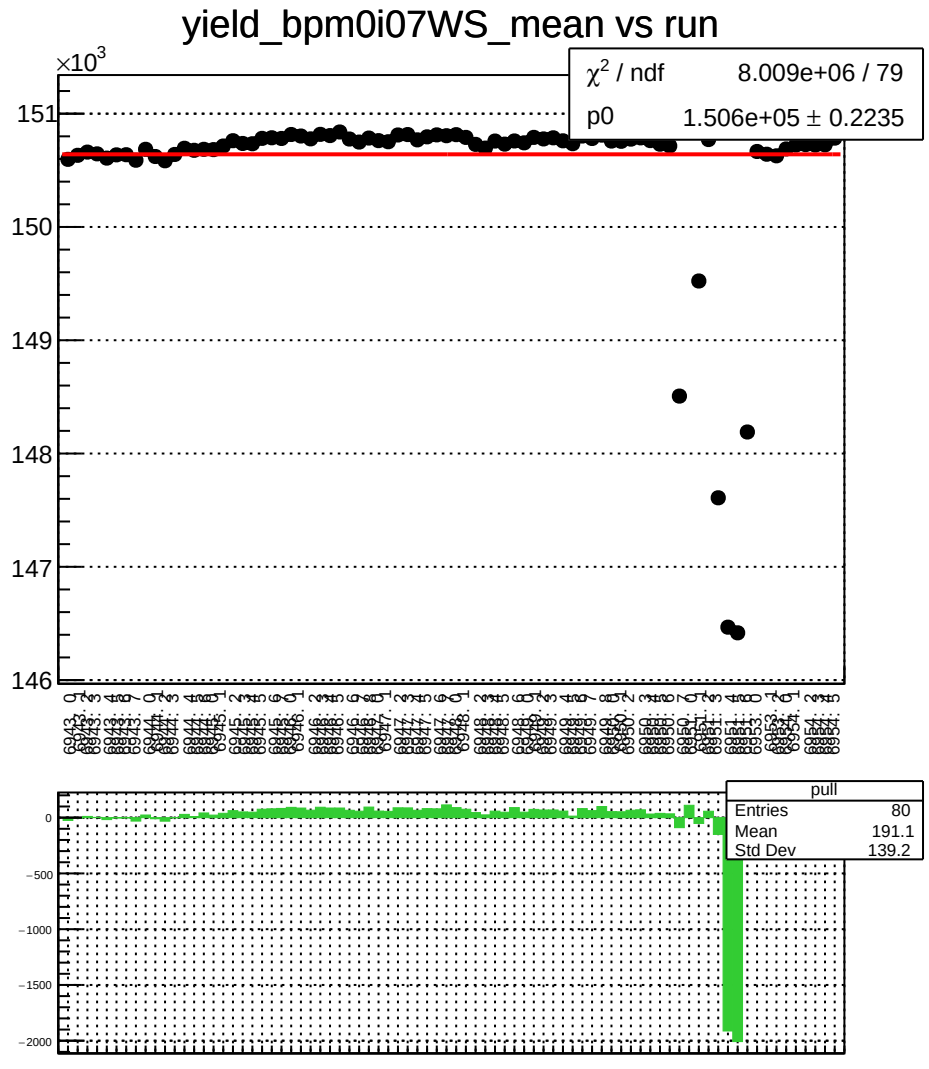

pull1D
Entries 80
Mean 1.577
Std Dev 3.14
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

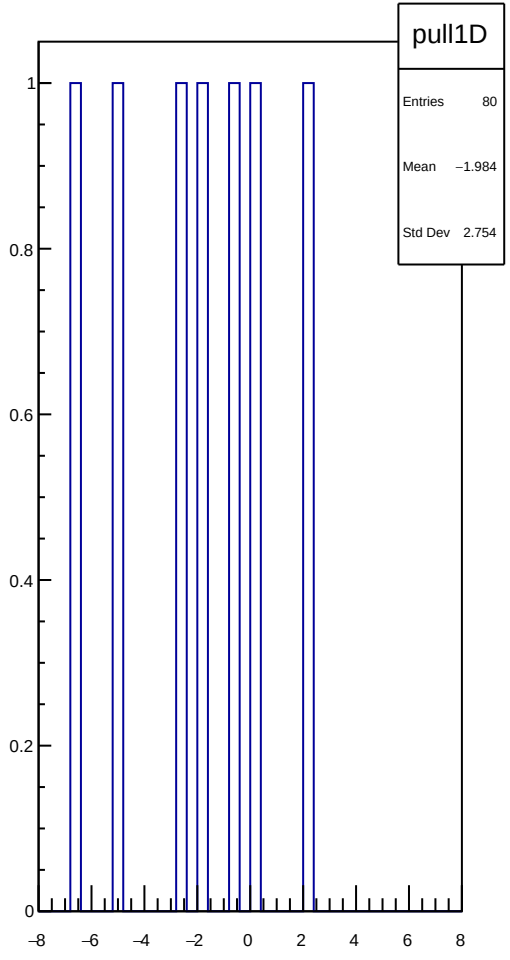

yield_bpm0i02aWS_rms vs run
χ² / ndf 1.026e+05 / 79
p0 188.6 ± 0.1543
2500
2000
1500
1000
500

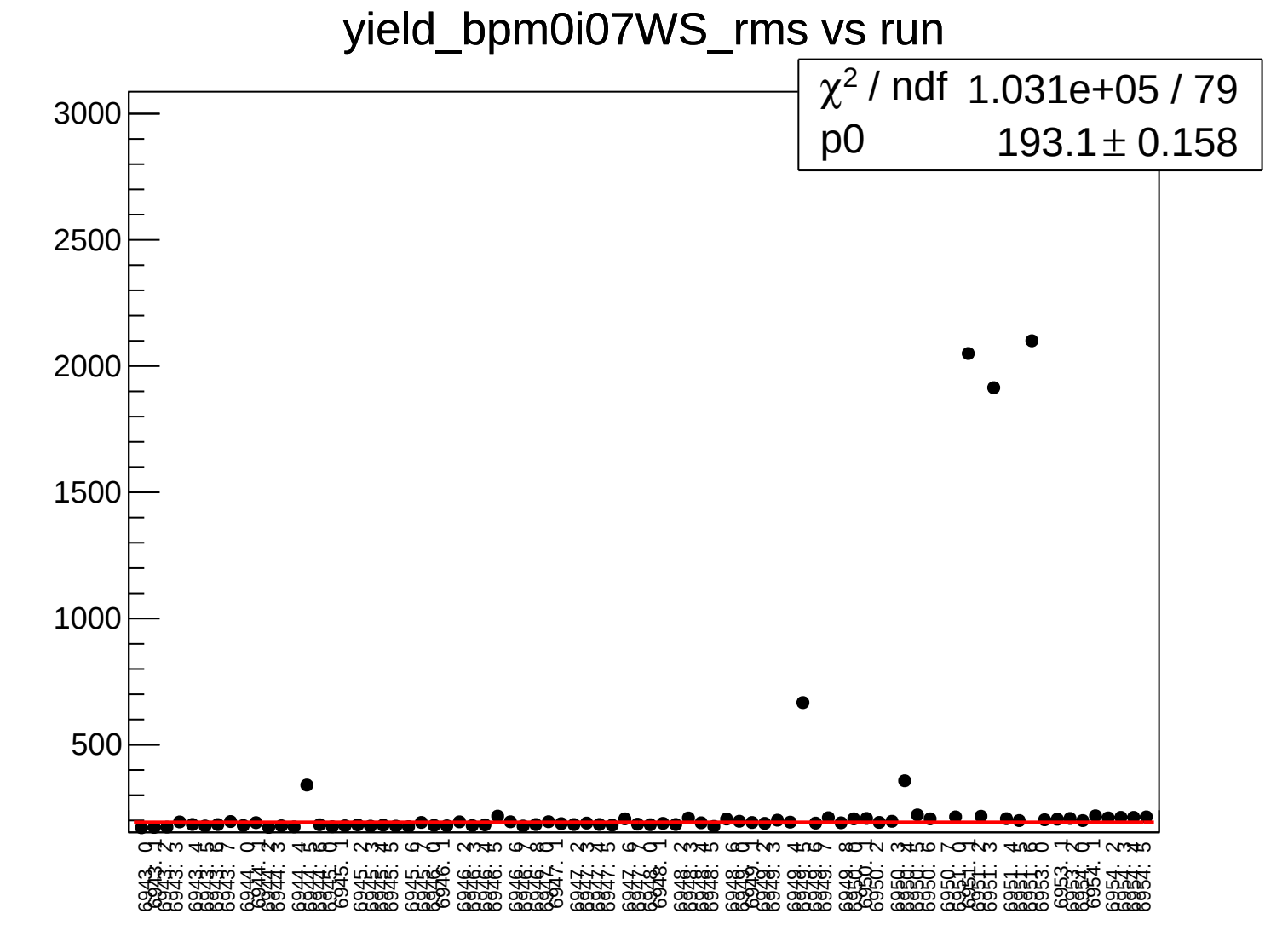

yield_bpm0i05WS_mean vs run
χ² / ndf 1.846e+07 / 79
p0 1.526e+05 ± 0.2231
pull
Entries 80
Mean 252.8
Std Dev 207.7

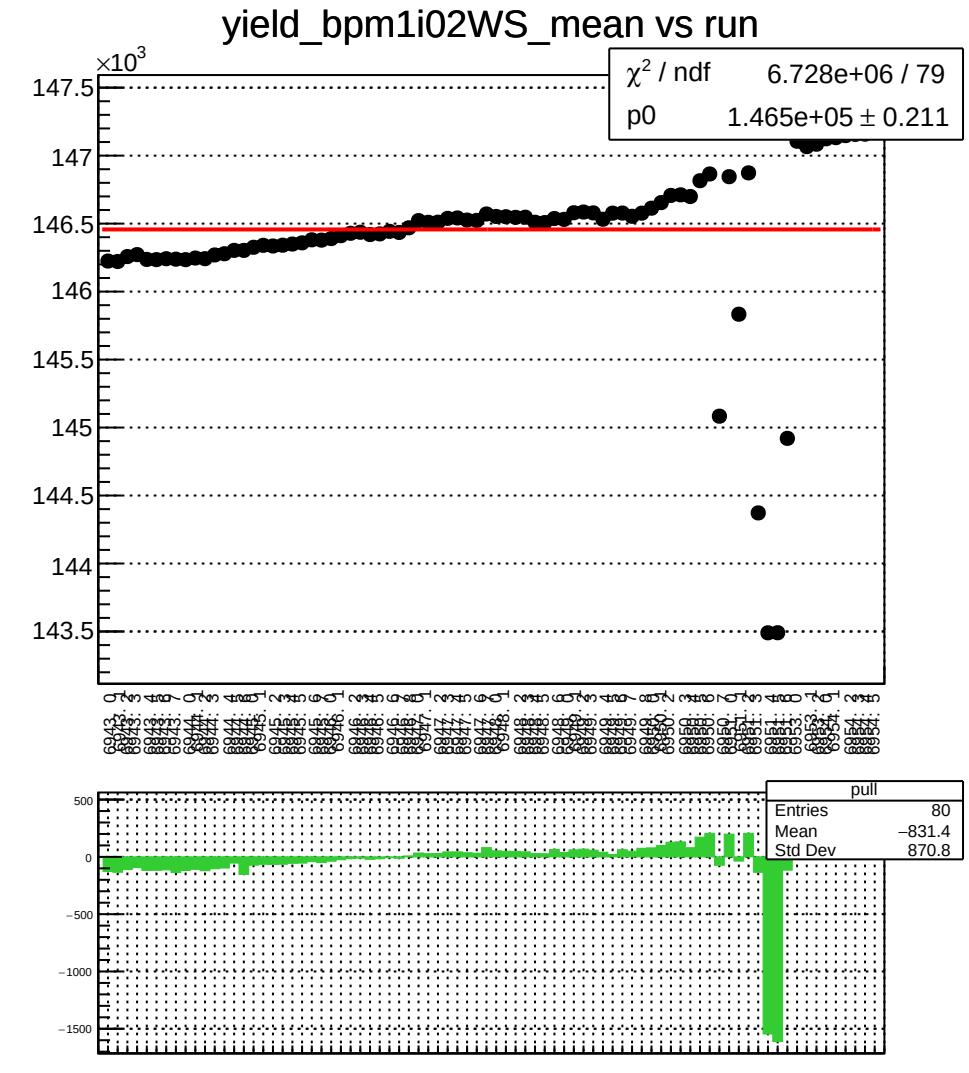

pull1D
Entries 80
Mean −5.782
Std Dev 1.947

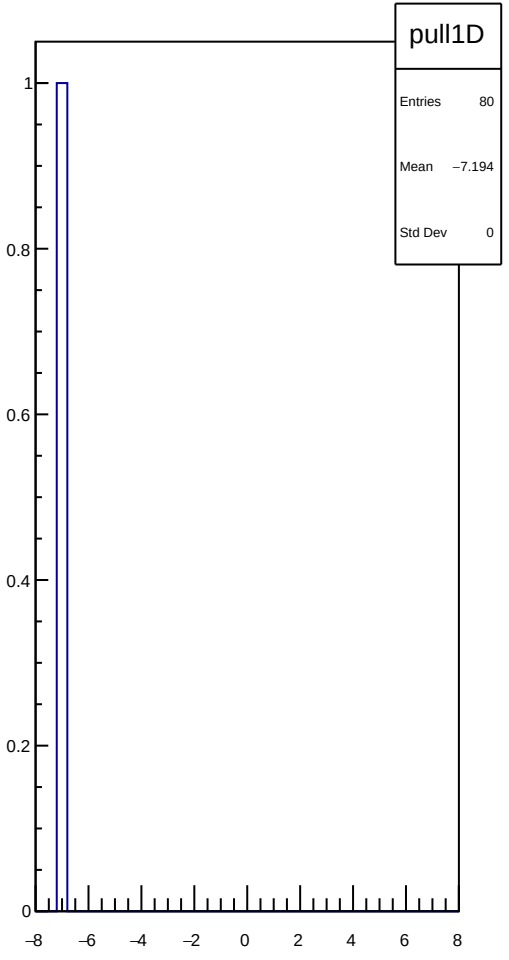

yield_bpm0i05WS_rms vs run
χ² / ndf 1.097e+05 / 79
p0 192.3 ± 0.1577
3000
2500
2000
1500
1000
500

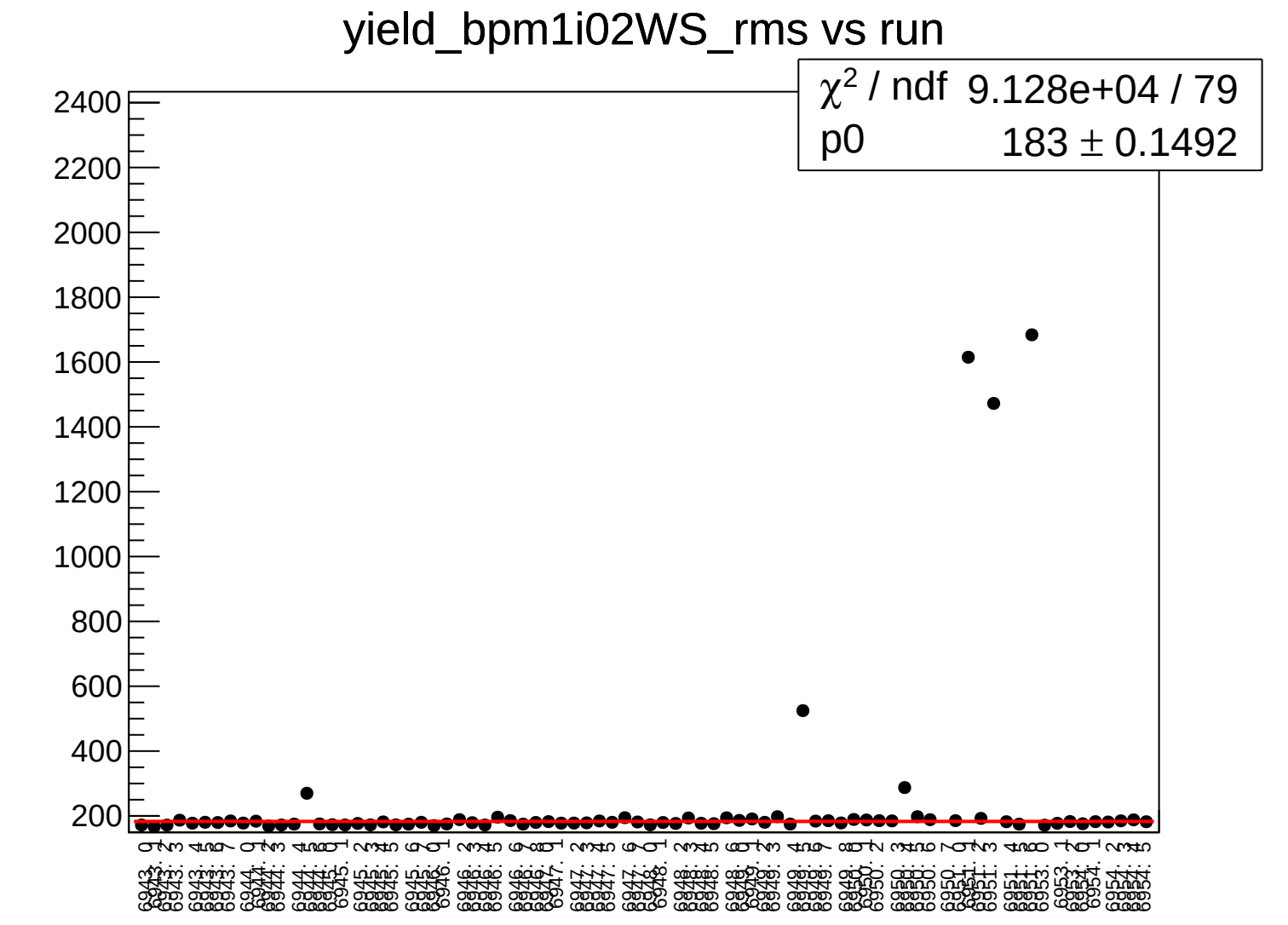

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 8.009e+06 / 79
p0 1.506e+05 ± 0.2235
151
150
149
148
147
146
pull
Entries 80
Mean 191.1
Std Dev 139.2
0
−500
−1000
−1500
−2000

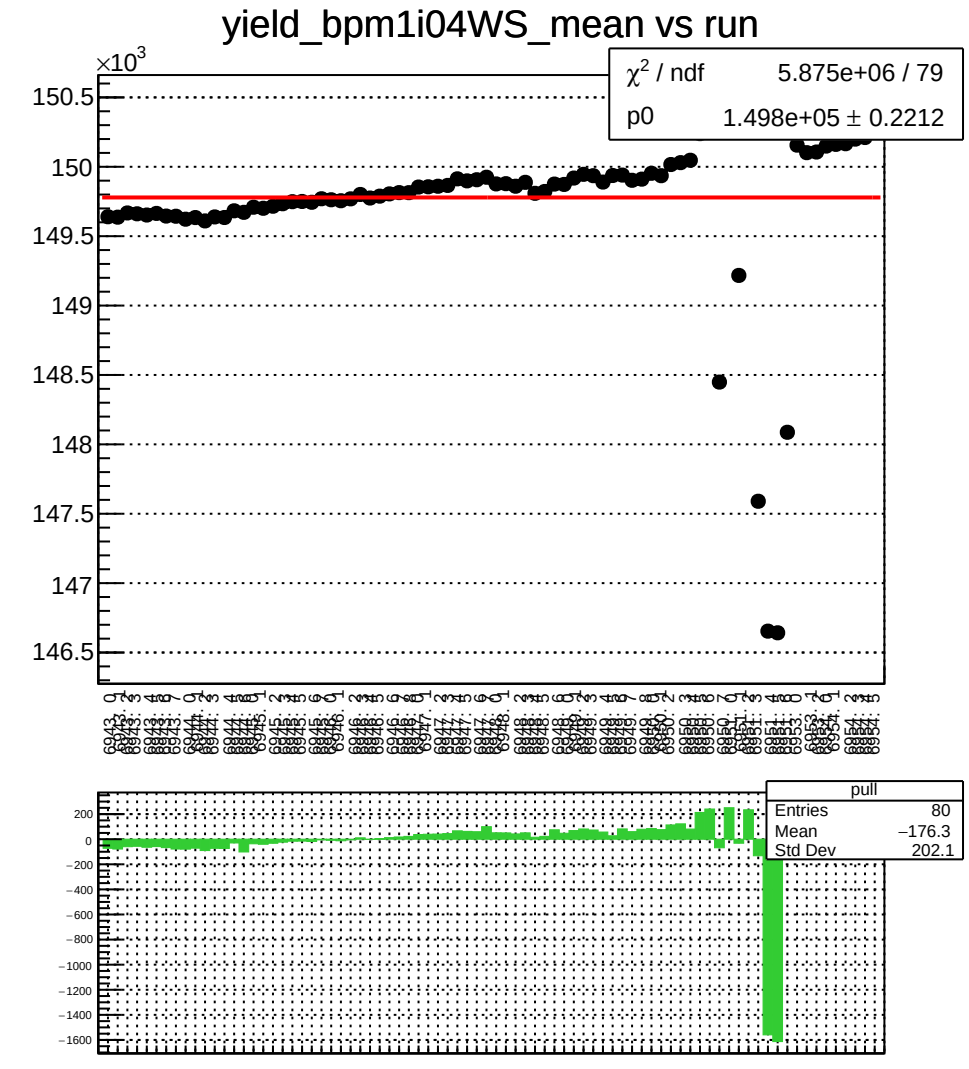

pull1D
Entries 80
Mean −1.984
Std Dev 2.754
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

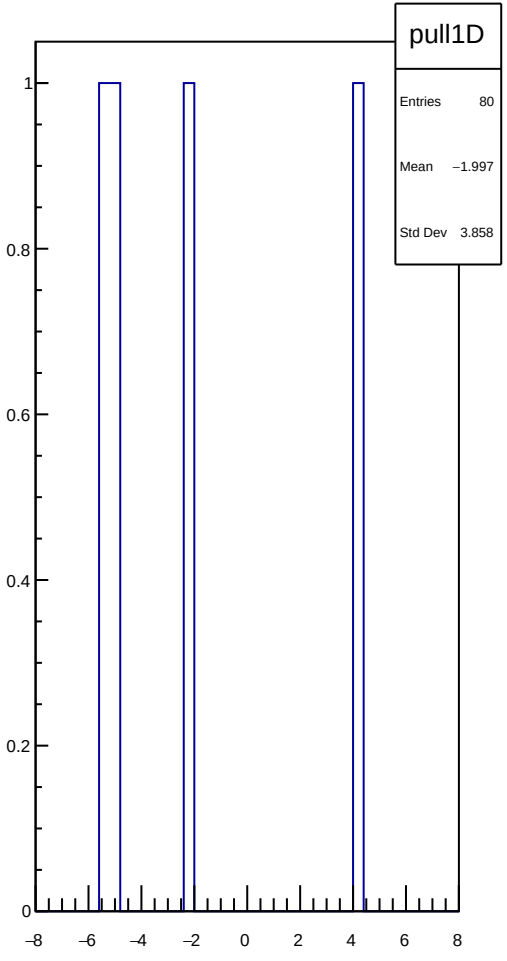

yield_bpm0i07WS_rms vs run
χ² / ndf 1.031e+05 / 79
p0 193.1 ± 0.158
3000
2500
2000
1500
1000
500

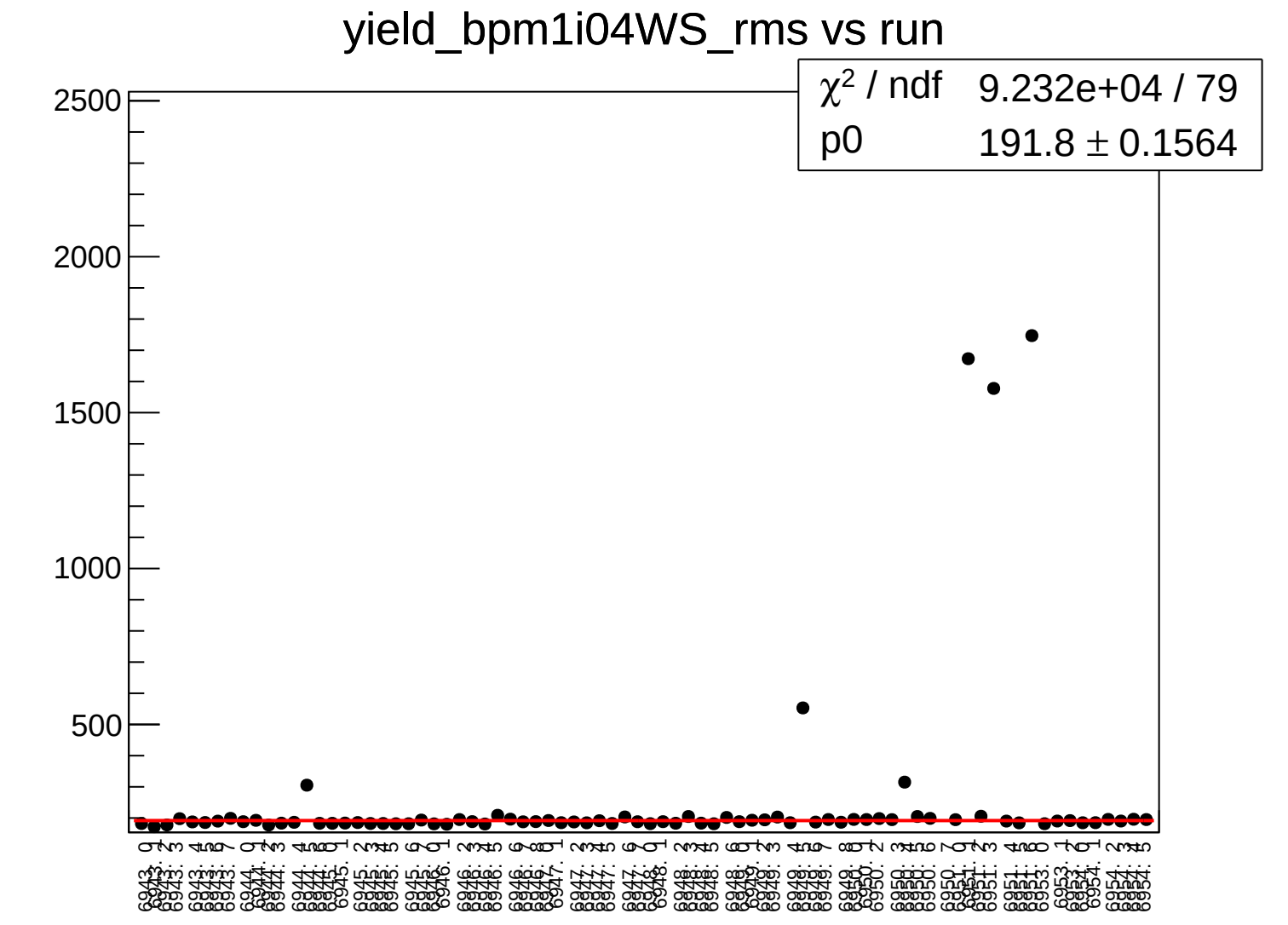

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 6.728e+06 / 79
p0 1.465e+05 ± 0.211
147.5
147
146.5
146
145.5
145
144.5
144
143.5
pull
Entries 80
Mean −831.4
Std Dev 870.8
500
0
−500
−1000
−1500

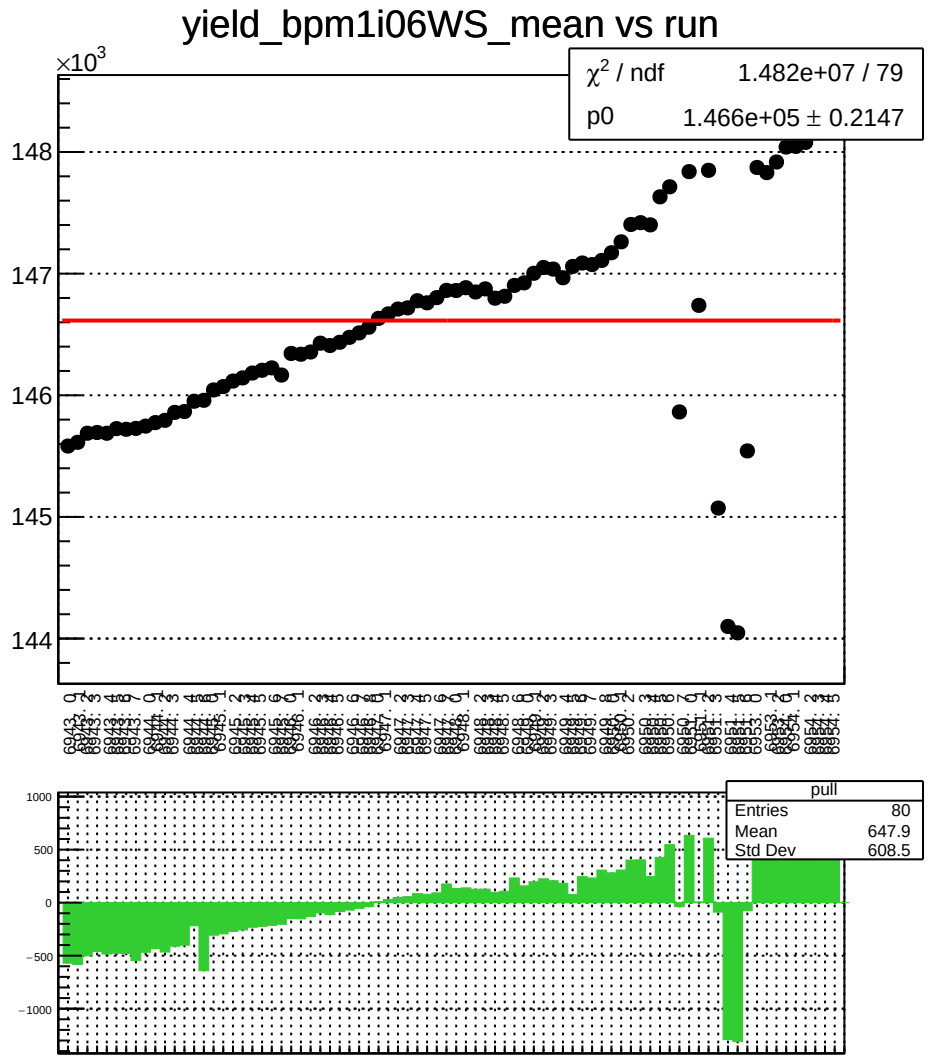

pull1D
Entries 80
Mean −7.194
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

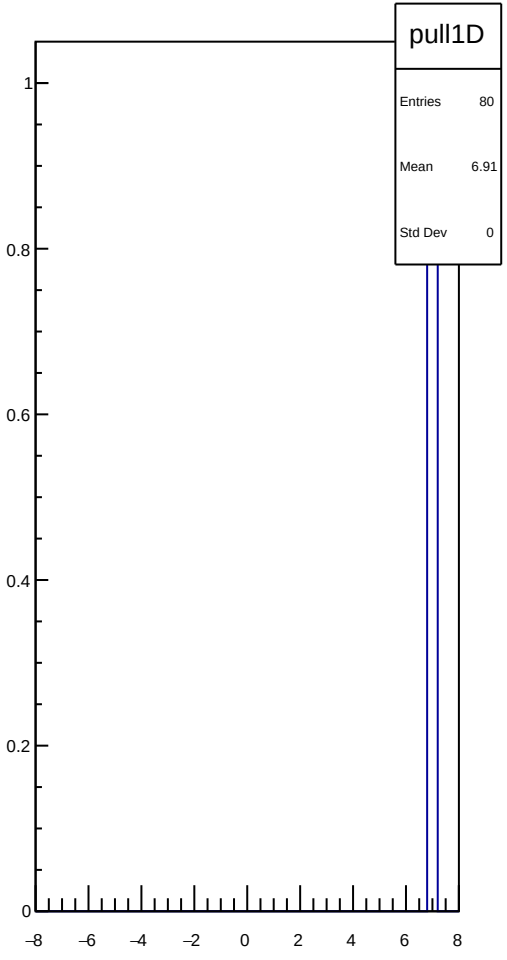

yield_bpm1i02WS_rms vs run
χ^2 / ndf 9.128e+04 / 79
p0 183 ± 0.1492
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

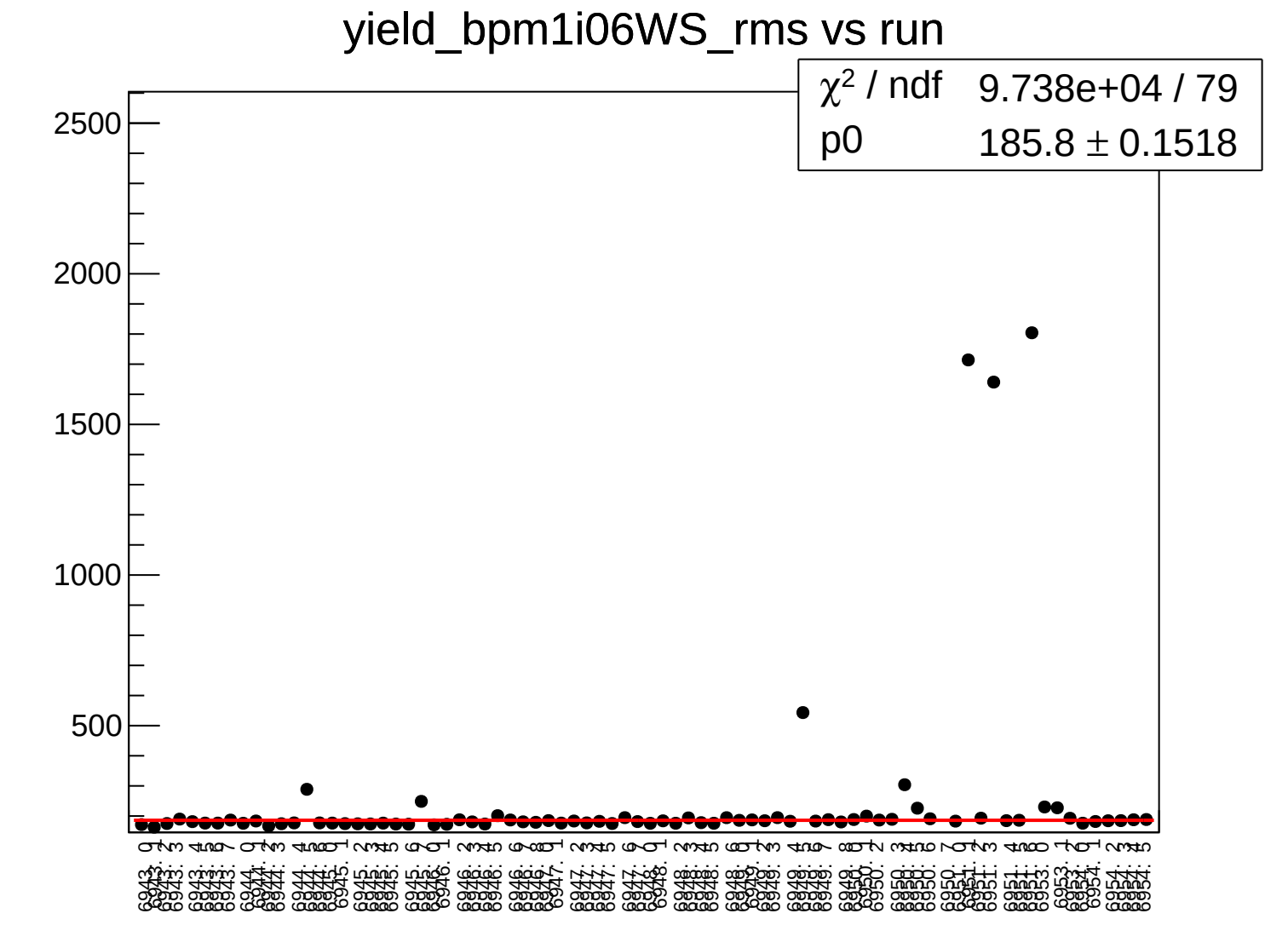

yield_bpm1i04WS_mean vs run
×10^3
χ^2 / ndf 5.875e+06 / 79
p0 1.498e+05 ± 0.2212
150.5
150
149.5
149
148.5
148
147.5
147
146.5
pull
Entries 80
Mean −176.3
Std Dev 202.1
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600

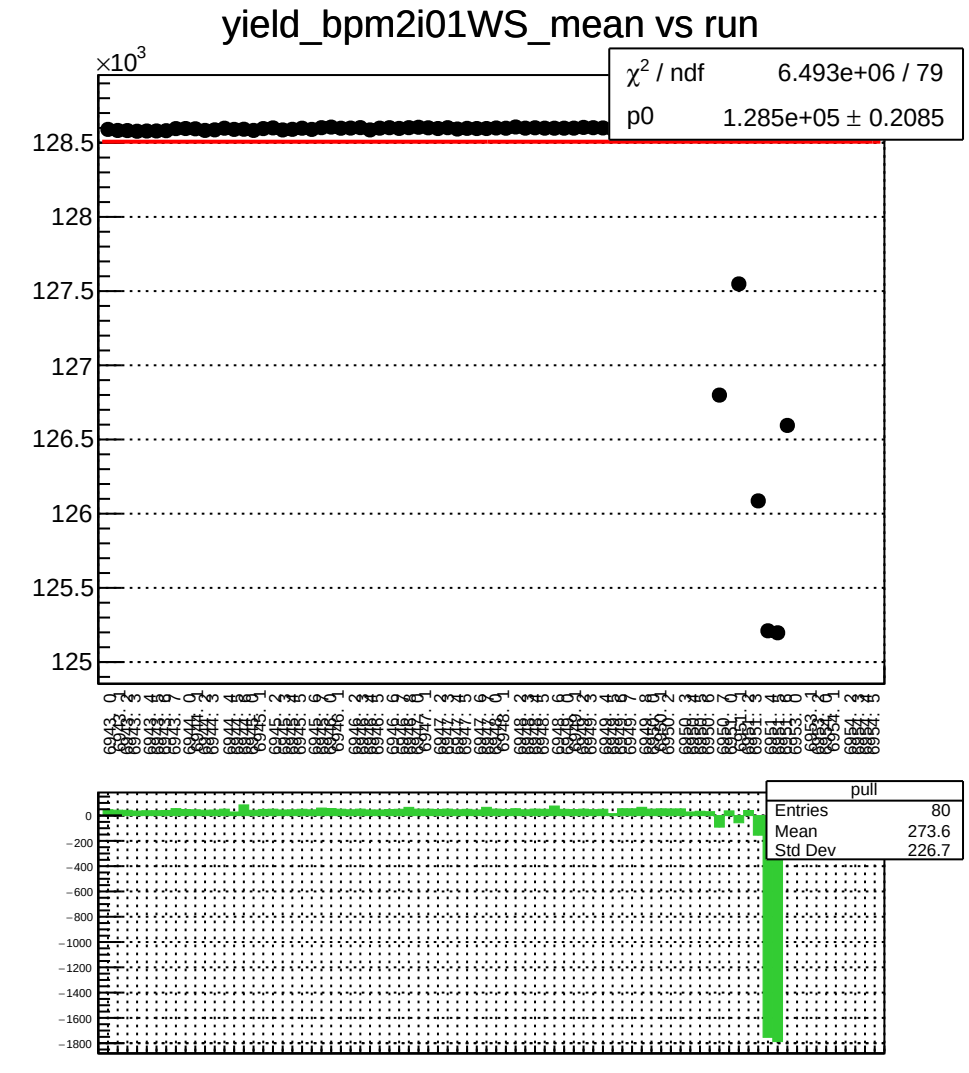

pull1D
Entries 80
Mean −1.997
Std Dev 3.858
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

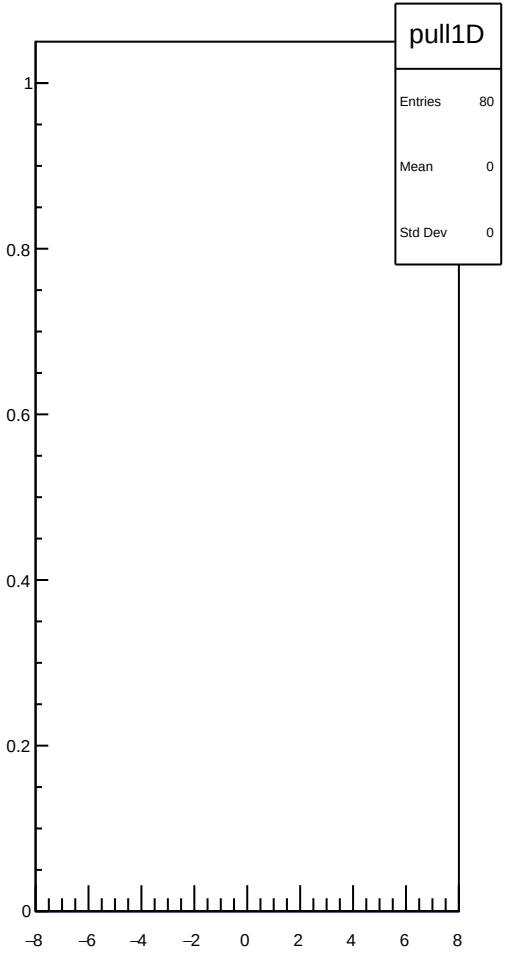

yield_bpm1i04WS_rms vs run
χ² / ndf 9.232e+04 / 79
p0 191.8 ± 0.1564
2500
2000
1500
1000
500

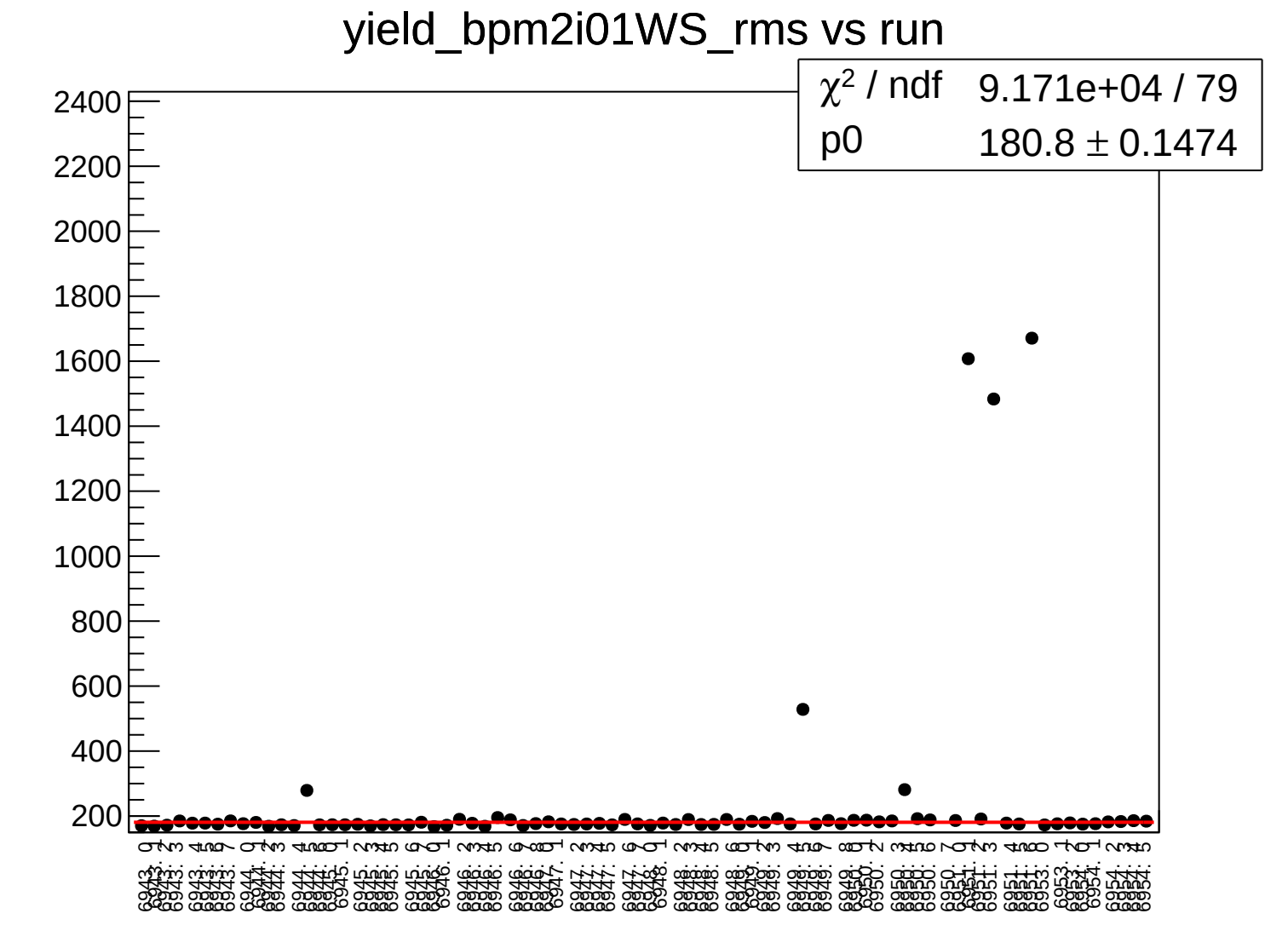

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 1.482e+07 / 79
p0 1.466e+05 ± 0.2147
148
147
146
145
144
pull
Entries 80
Mean 647.9
Std Dev 608.5
1000
500
0
−500
−1000

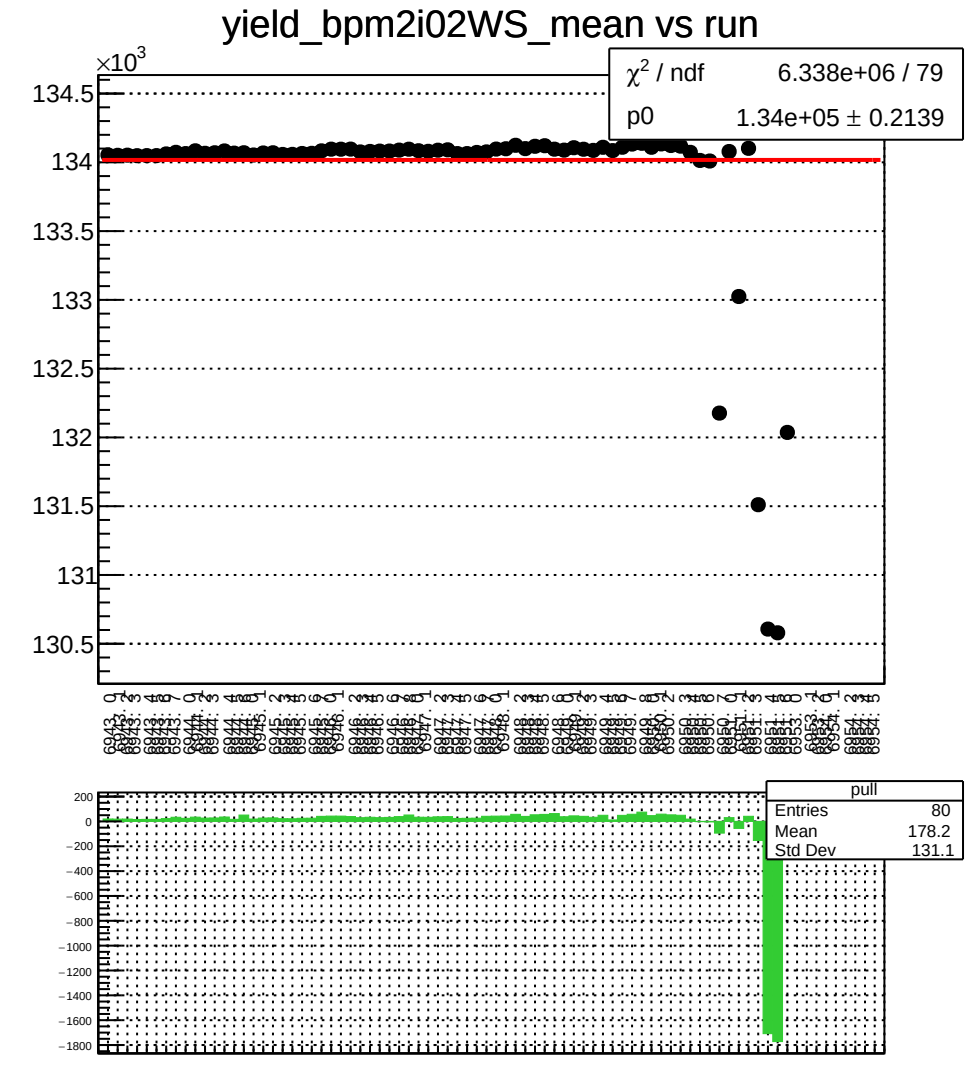

pull1D
Entries 80
Mean 6.91
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

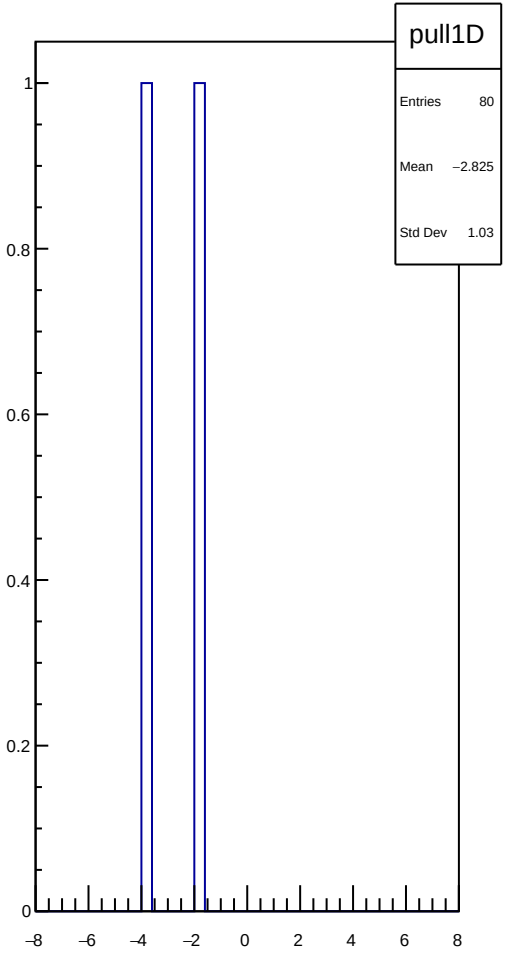

yield_bpm1i06WS_rms vs run
χ² / ndf 9.738e+04 / 79
p0 185.8 ± 0.1518
2500
2000
1500
1000
500

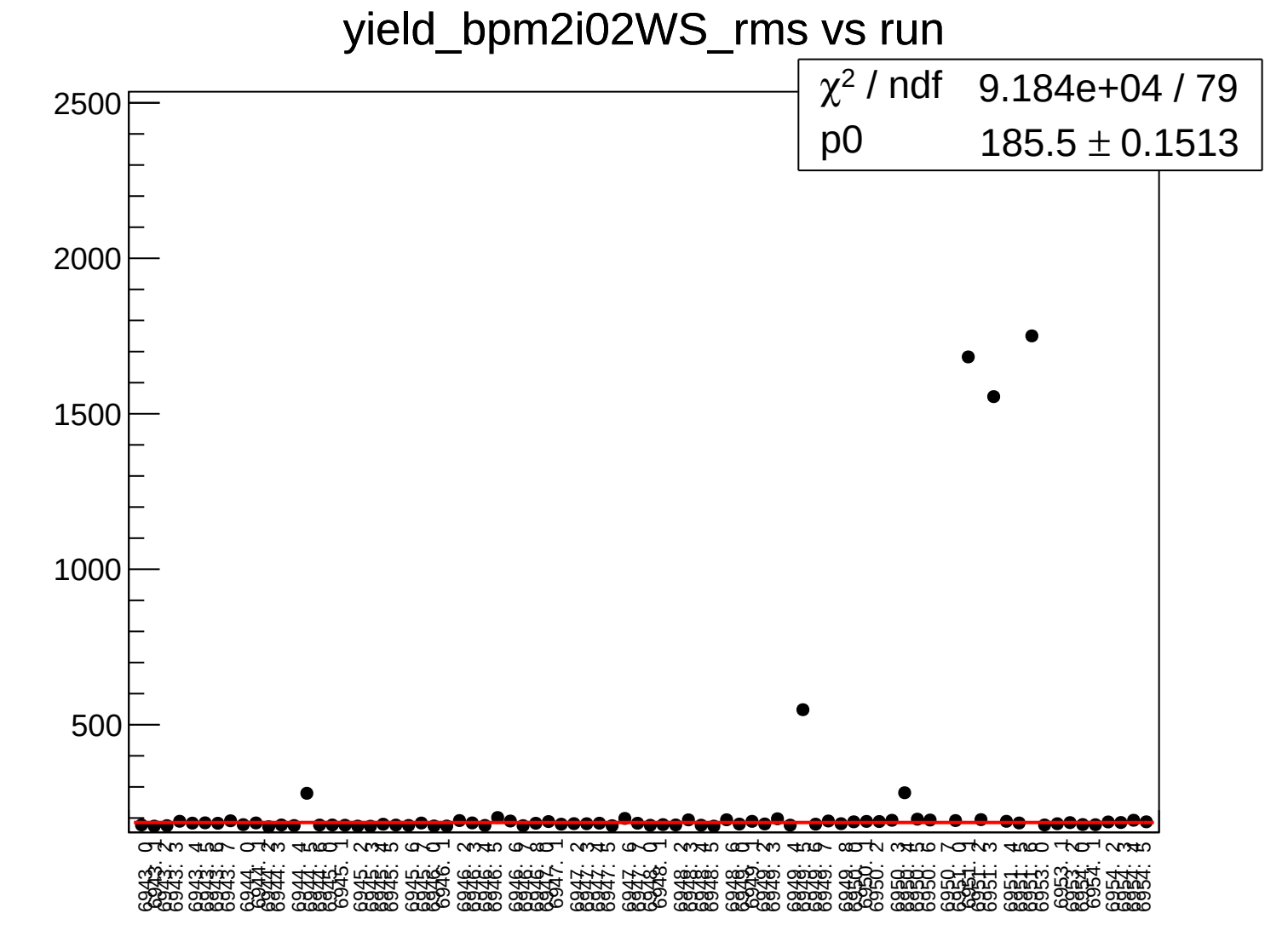

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 6.493e+06 / 79
p0 1.285e+05 ± 0.2085
128.5
128
127.5
127
126.5
126
125.5
125
pull
Entries 80
Mean 273.6
Std Dev 226.7
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

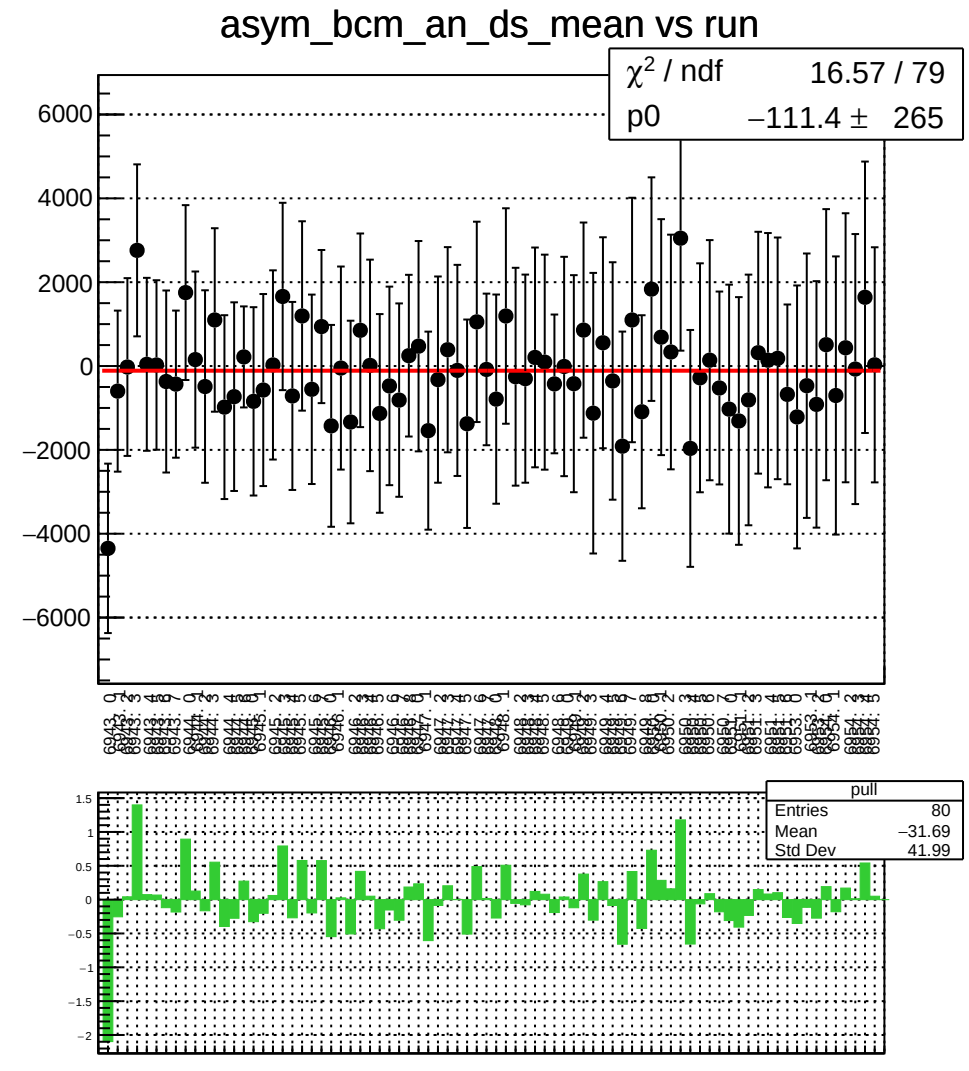

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

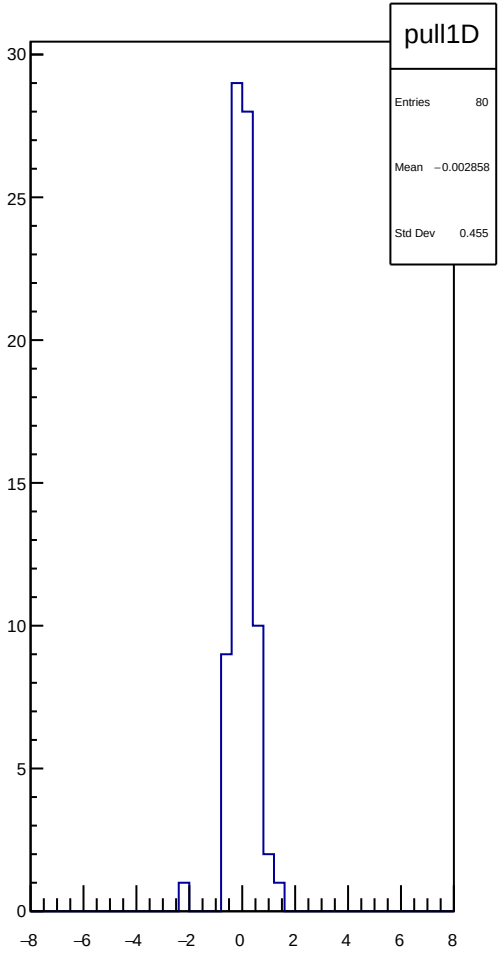

yield_bpm2i01WS_rms vs run
χ² / ndf 9.171e+04 / 79
p0 180.8 ± 0.1474
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

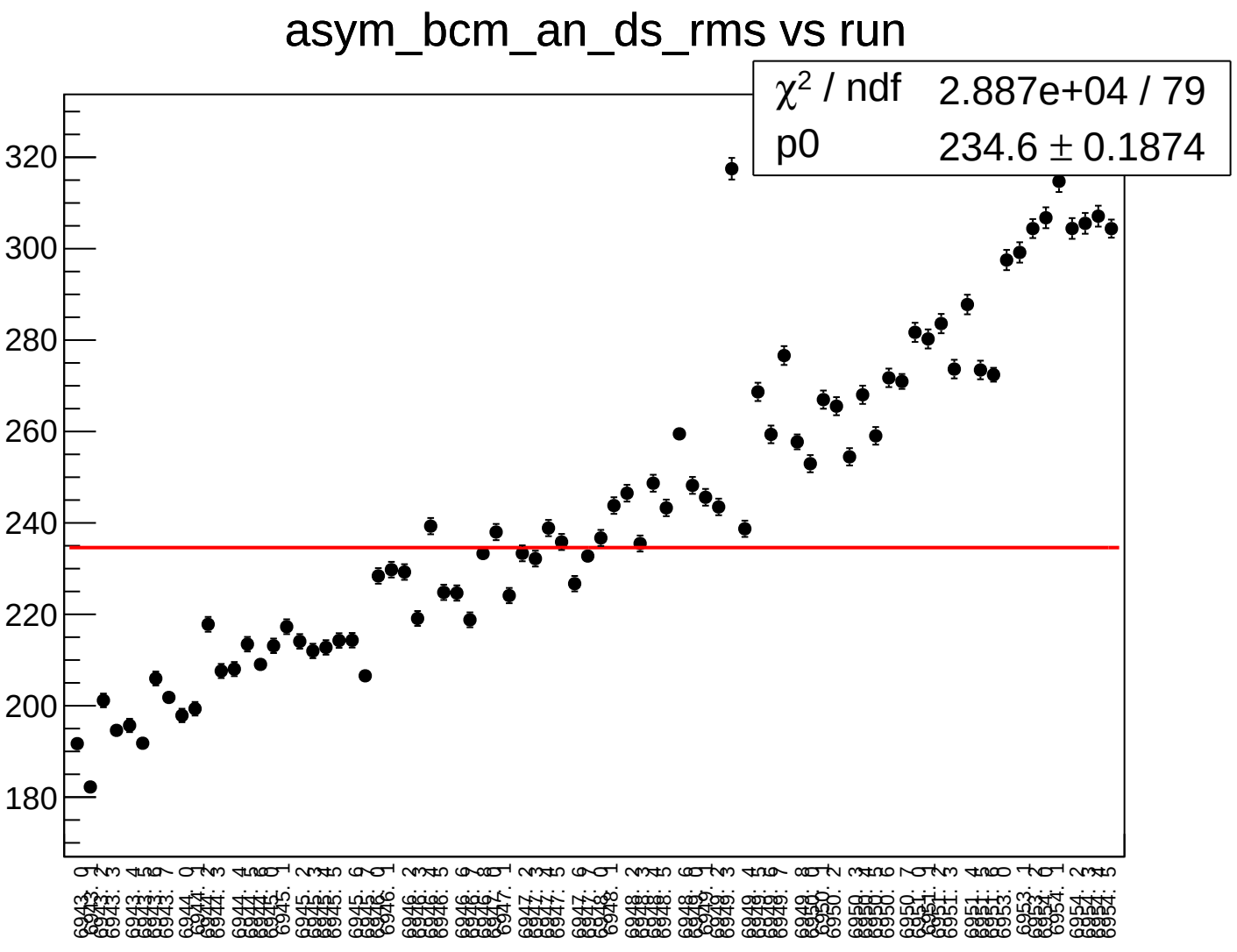

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 6.338e+06 / 79
p0 1.34e+05 ± 0.2139
134.5
134
133.5
133
132.5
132
131.5
131
130.5
pull
Entries 80
Mean 178.2
Std Dev 131.1
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

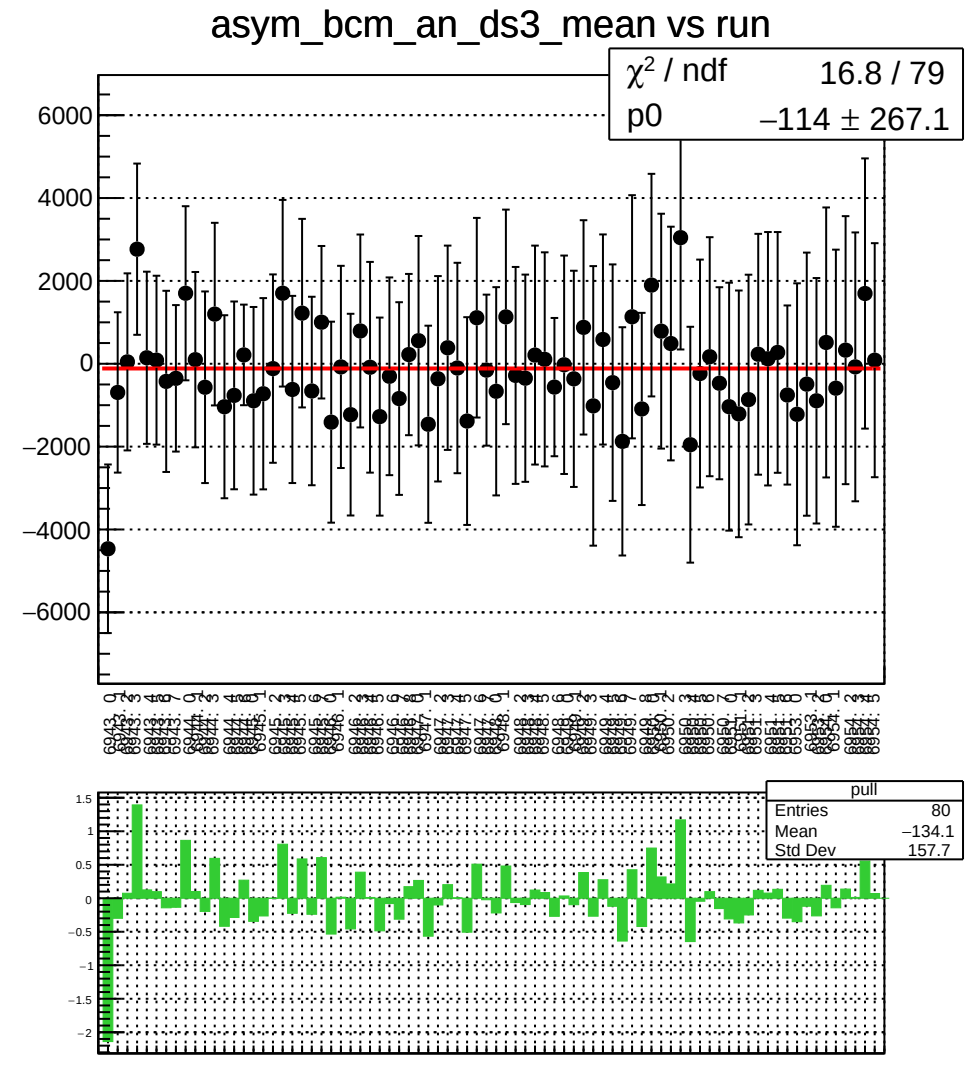

pull1D
Entries 80
Mean −2.825
Std Dev 1.03
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

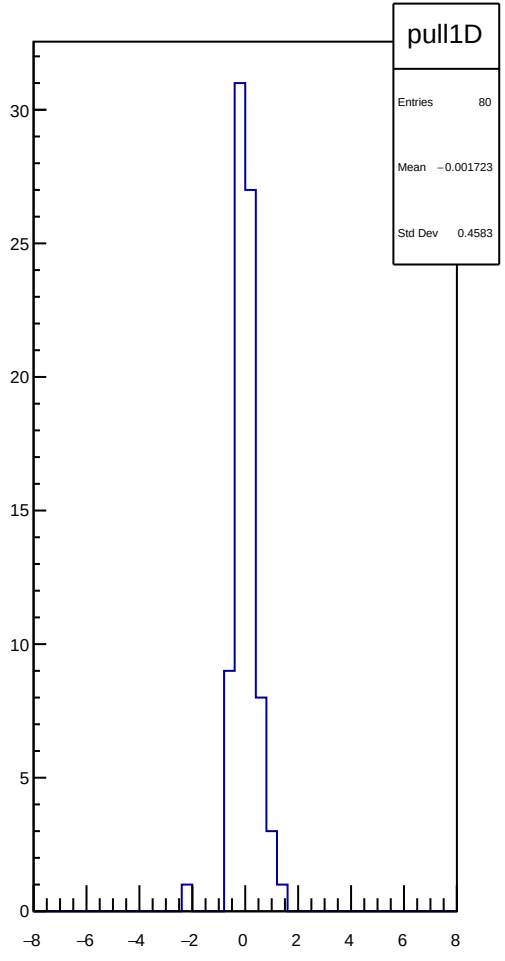

yield_bpm2i02WS_rms vs run
χ^2 / ndf 9.184e+04 / 79
p0 185.5 ± 0.1513
2500
2000
1500
1000
500

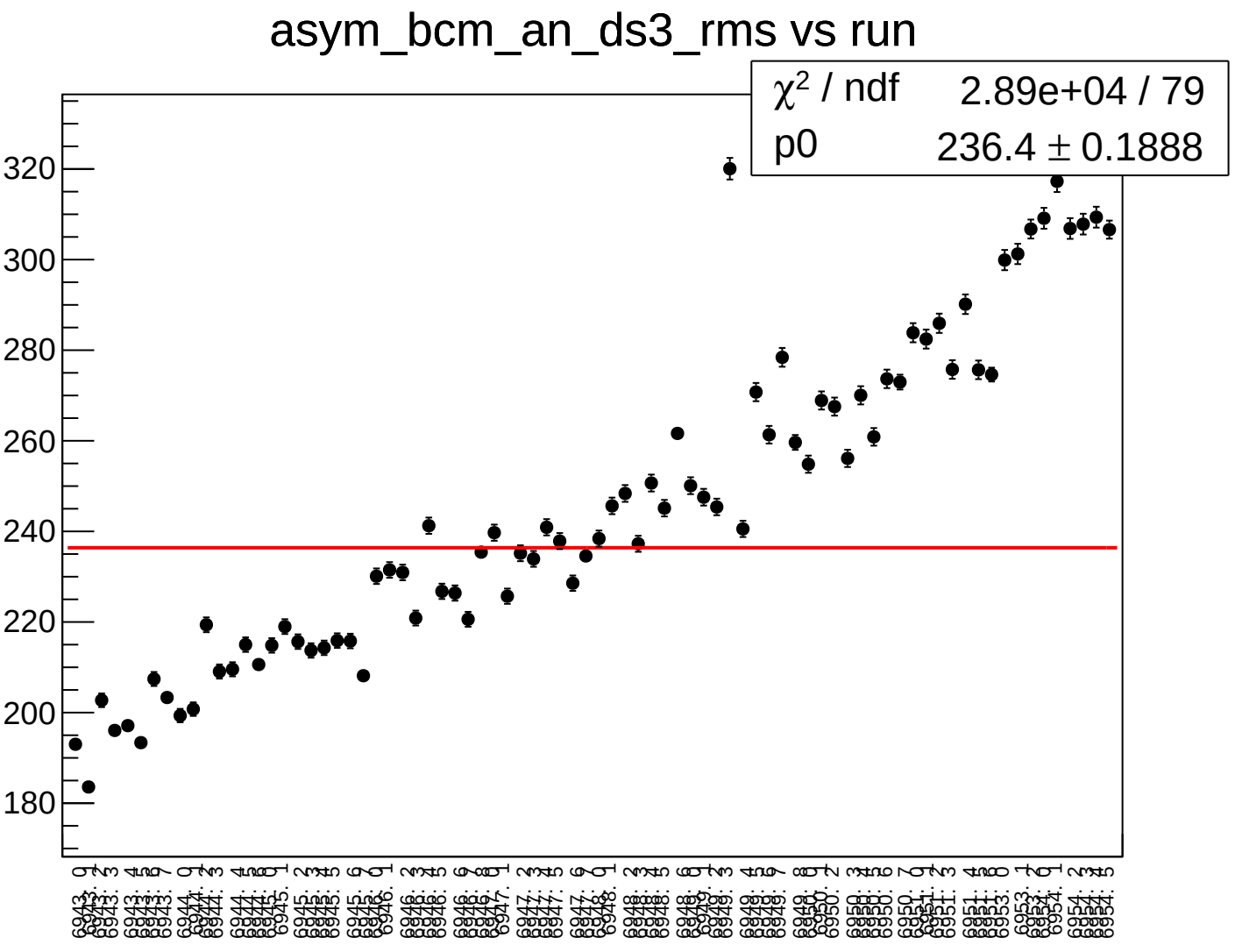

asym_bcm_an_ds_mean vs run
χ² / ndf 16.57 / 79
p0 −111.4 ± 265
pull
Entries 80
Mean −31.69
Std Dev 41.99

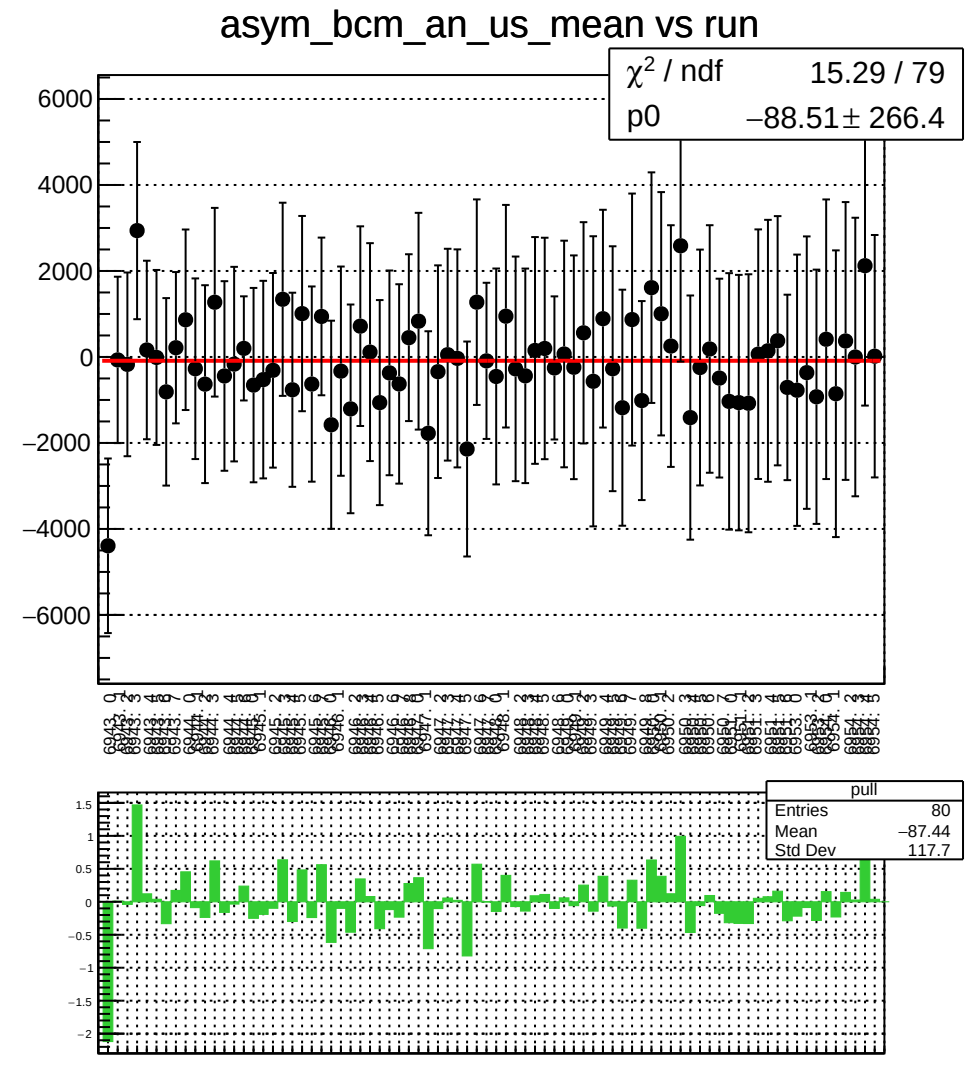

pull1D
Entries 80
Mean −0.002858
Std Dev 0.455

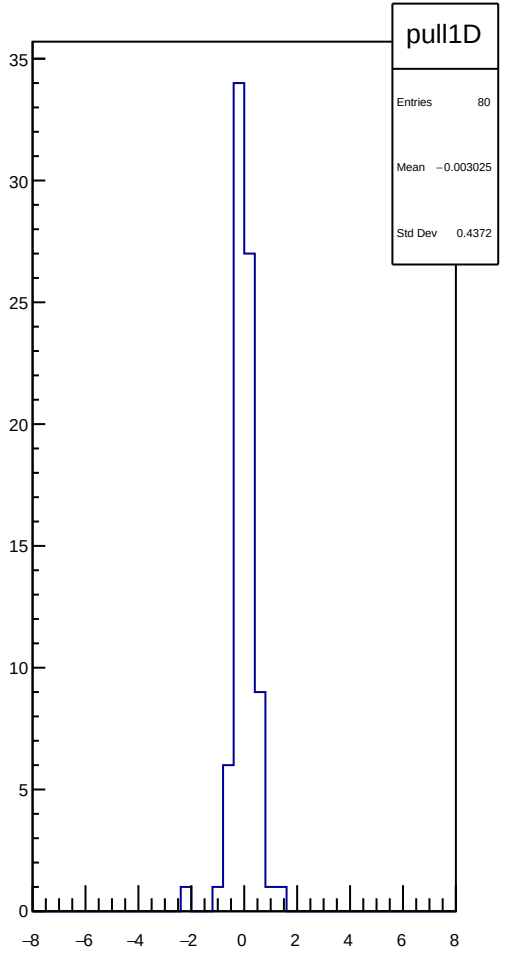

asym_bcm_an_ds_rms vs run
χ² / ndf 2.887e+04 / 79
p0 234.6 ± 0.1874
320
300
280
260
240
220
200
180

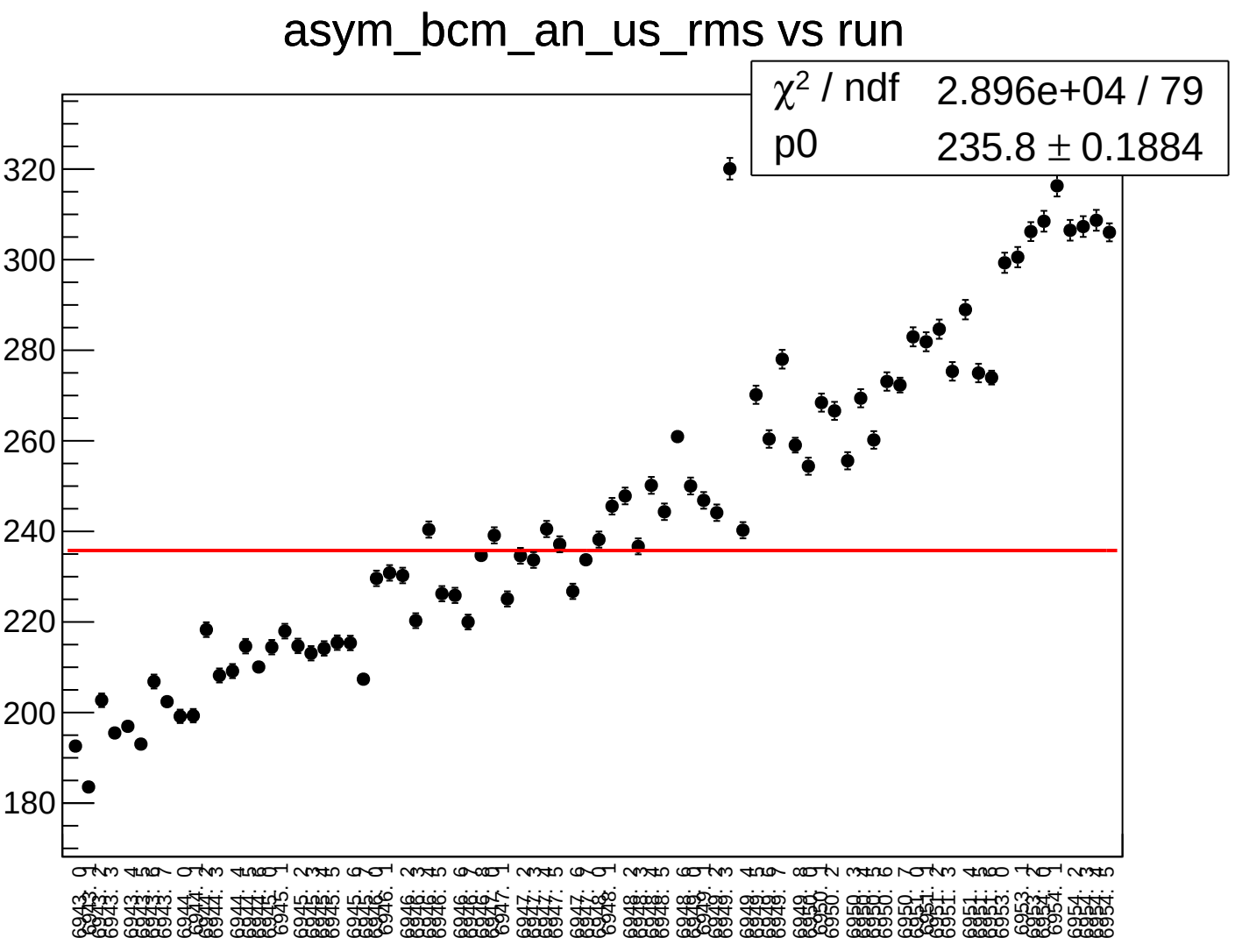

asym_bcm_an_ds3_mean vs run
χ² / ndf 16.8 / 79
p0 −114 ± 267.1
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 80
Mean −134.1
Std Dev 157.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2

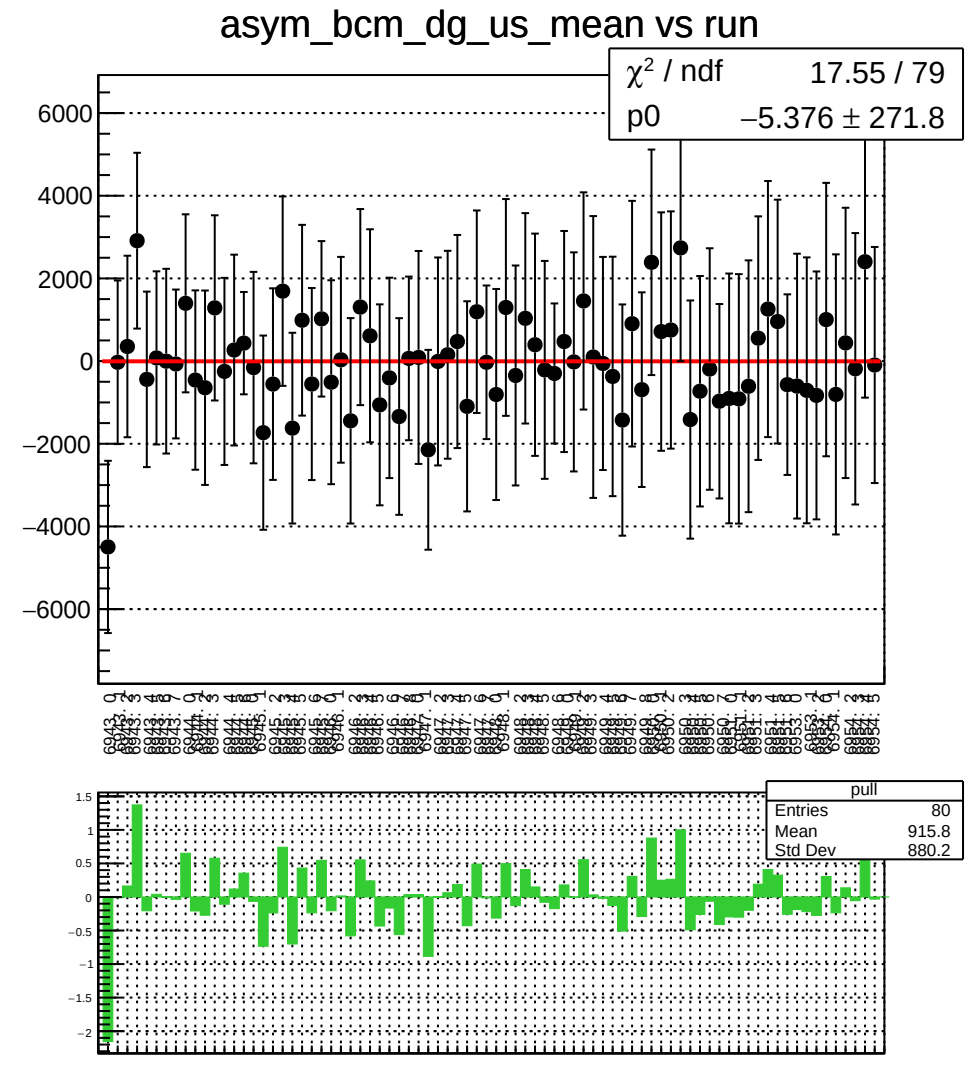

pull1D
Entries 80
Mean −0.001723
Std Dev 0.4583
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

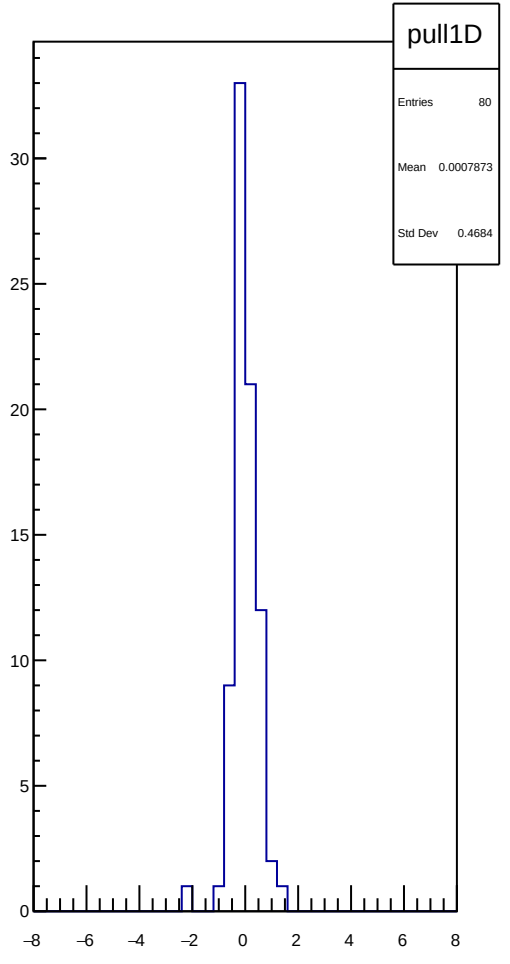

asym_bcm_an_ds3_rms vs run
χ² / ndf 2.89e+04 / 79
p0 236.4 ± 0.1888
320
300
280
260
240
220
200
180

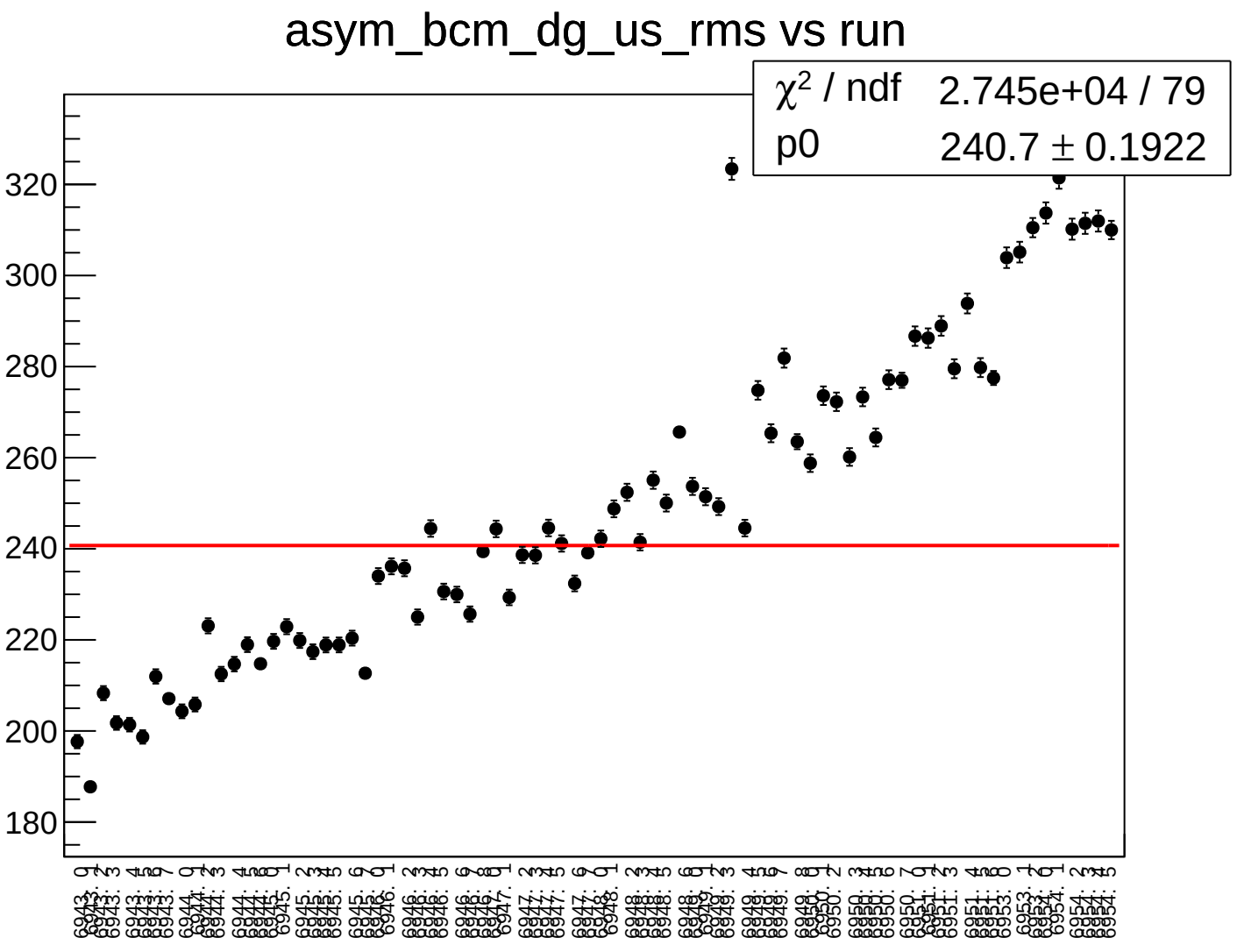

asym_bcm_an_us_mean vs run
χ² / ndf 15.29 / 79
p0 −88.51 ± 266.4
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 80
Mean −87.44
Std Dev 117.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2

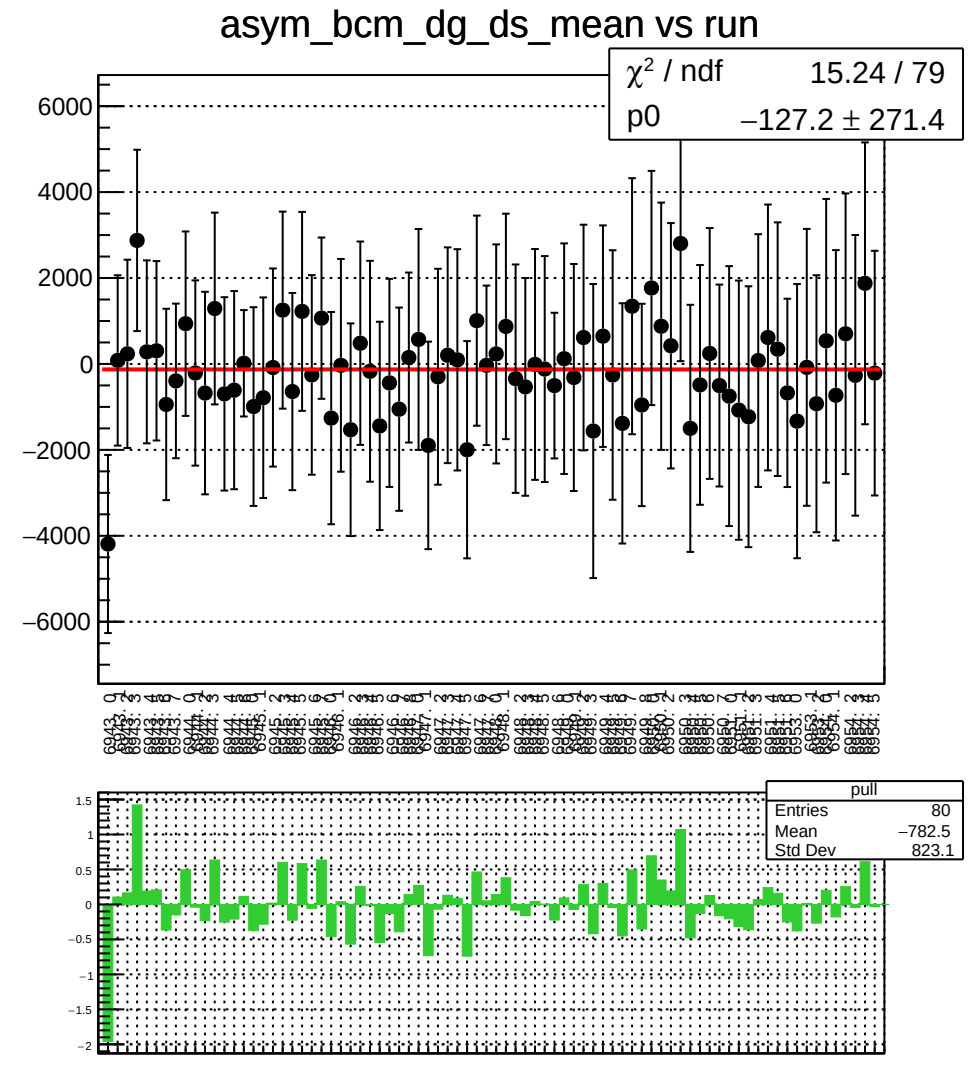

pull1D
Entries 80
Mean −0.003025
Std Dev 0.4372
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

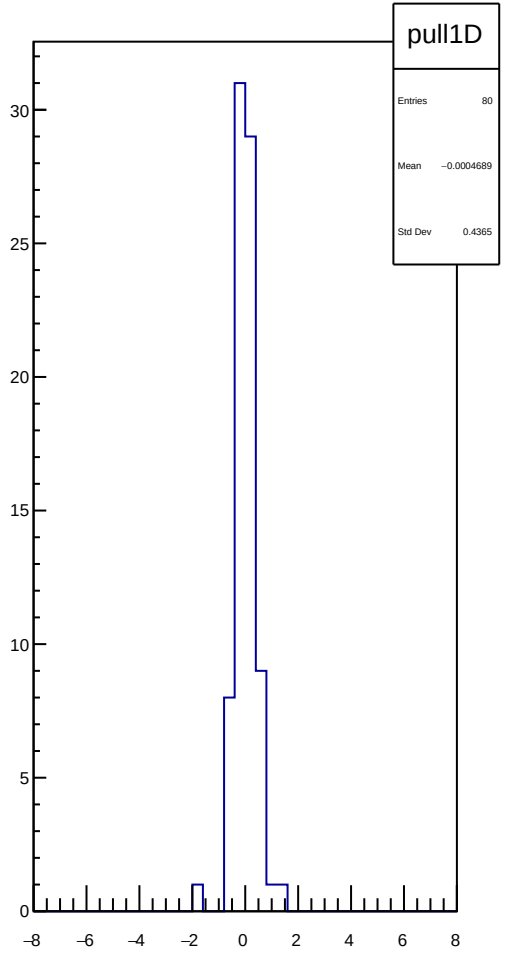

asym_bcm_an_us_rms vs run
χ² / ndf 2.896e+04 / 79
p0 235.8 ± 0.1884
320
300
280
260
240
220
200
180

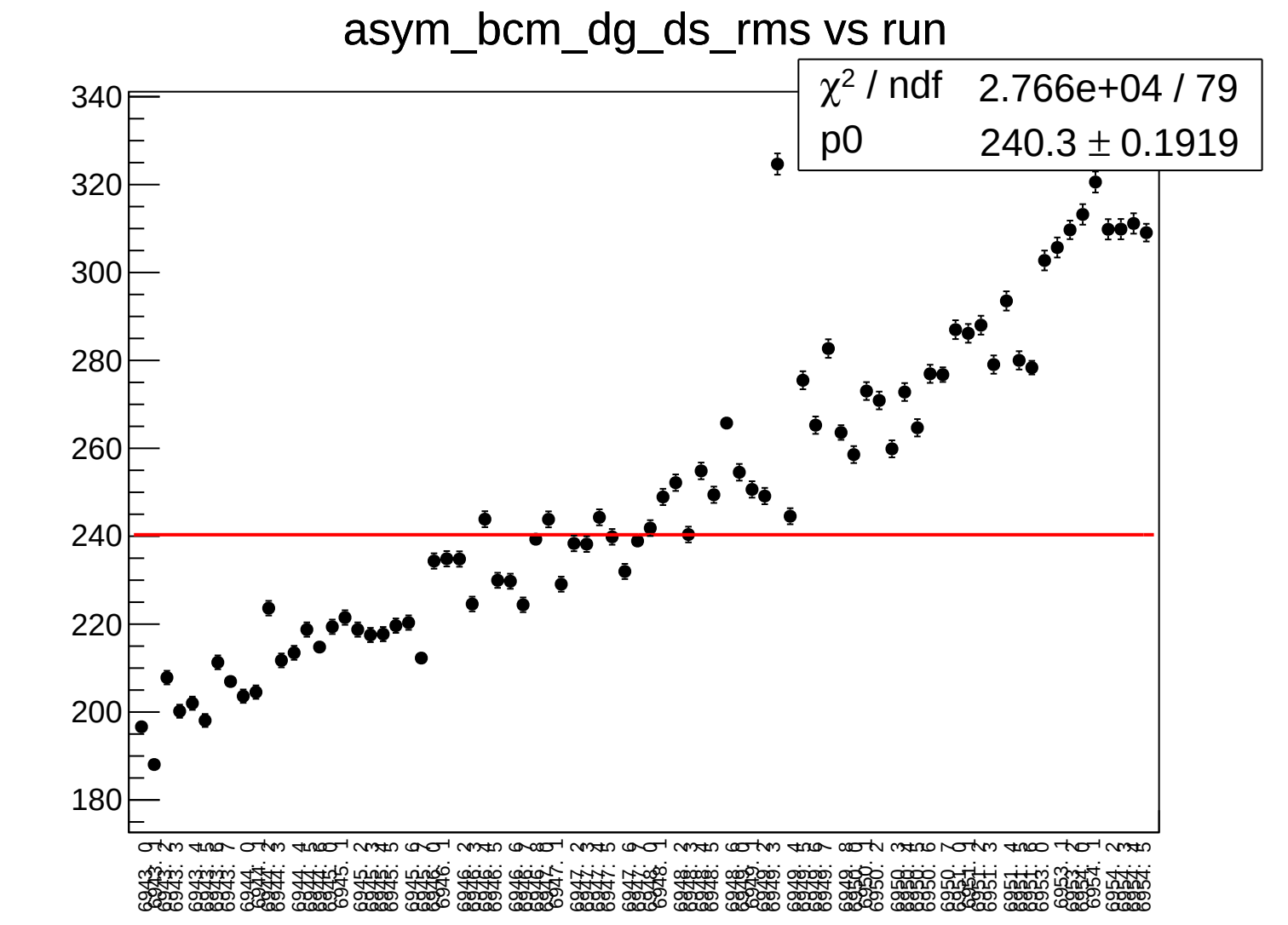

asym_bcm_dg_us_mean vs run
χ² / ndf 17.55 / 79
p0 −5.376 ± 271.8
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 80
Mean 915.8
Std Dev 880.2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

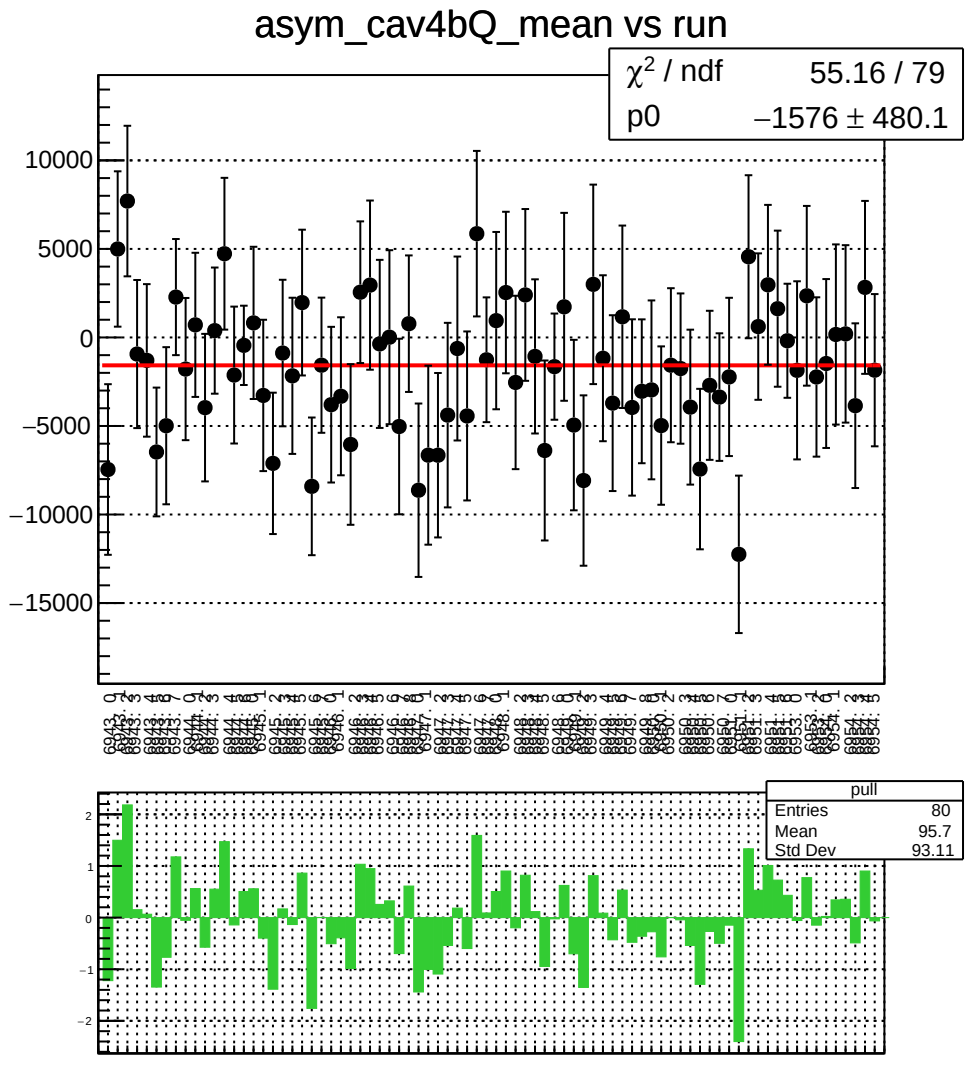

pull1D
Entries 80
Mean 0.0007873
Std Dev 0.4684
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

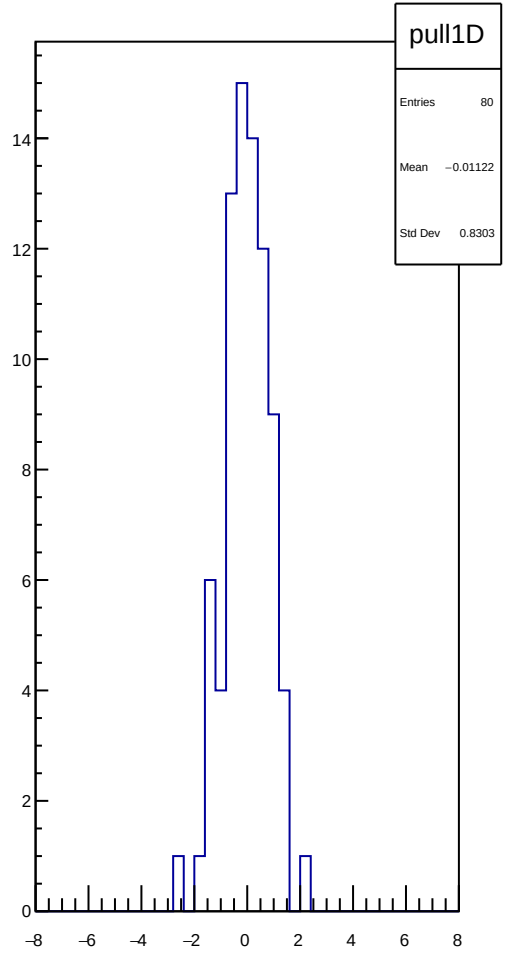

asym_bcm_dg_us_rms vs run
χ² / ndf 2.745e+04 / 79
p0 240.7 ± 0.1922
320
300
280
260
240
220
200
180

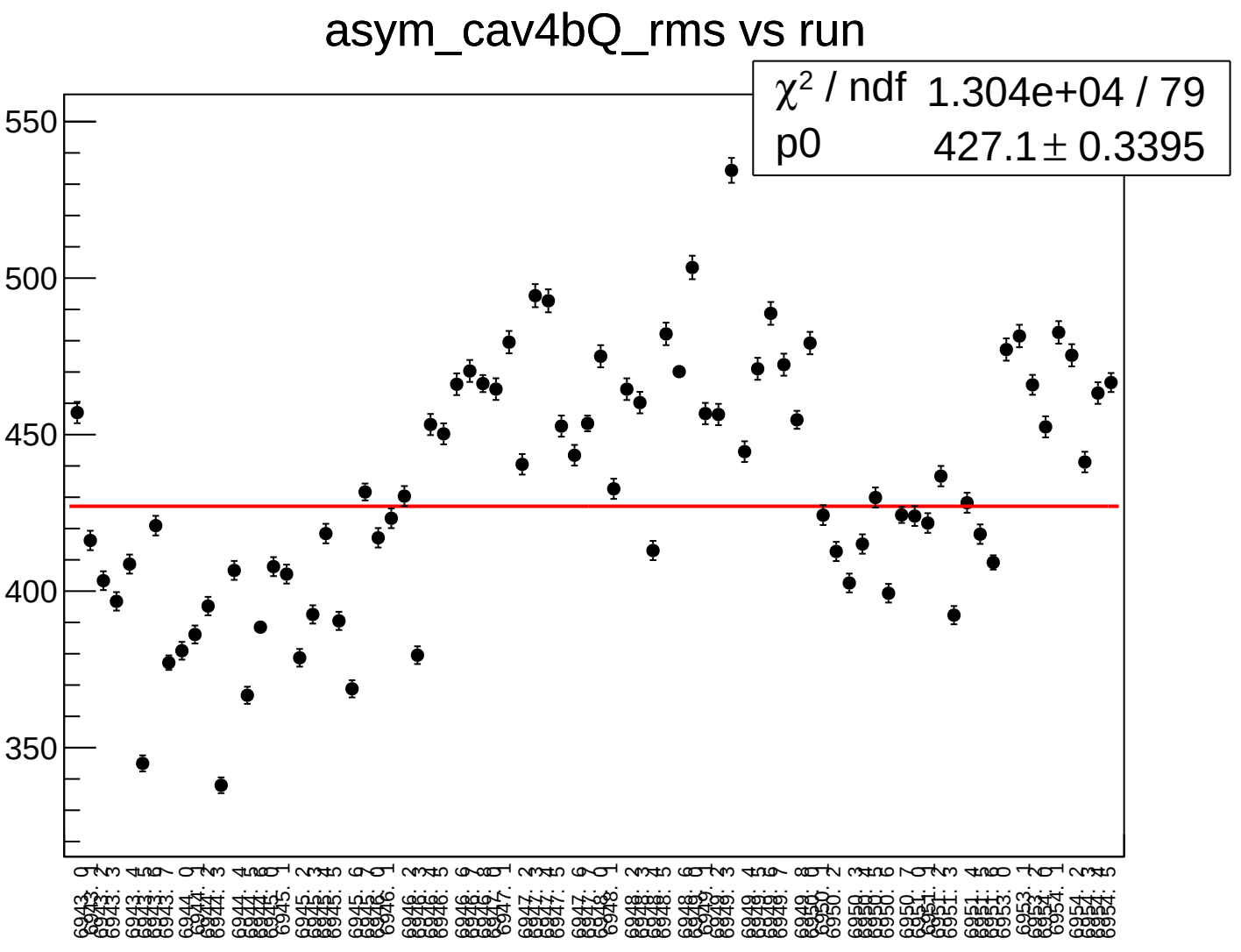

asym_bcm_dg_ds_mean vs run
χ² / ndf 15.24 / 79
p0 −127.2 ± 271.4
pull
Entries 80
Mean −782.5
Std Dev 823.1

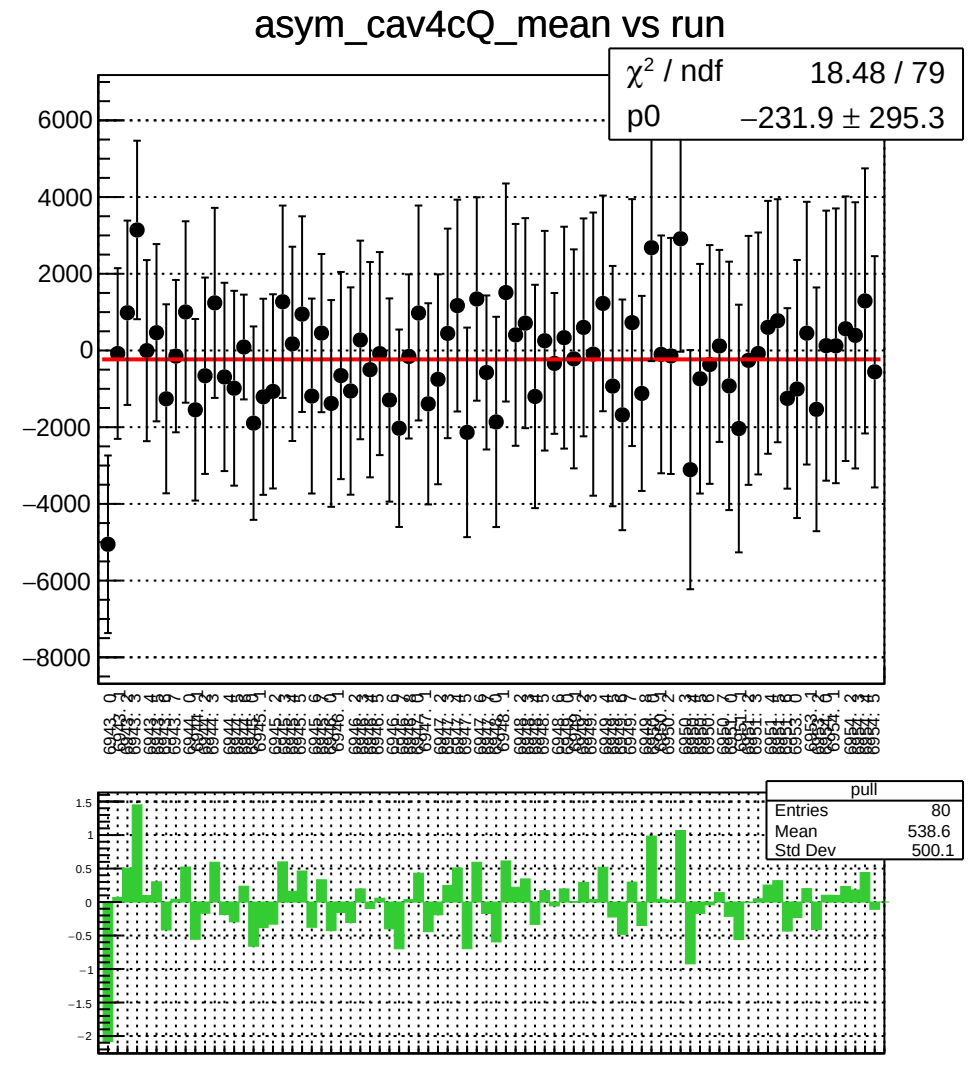

pull1D
Entries 80
Mean −0.0004689
Std Dev 0.4365

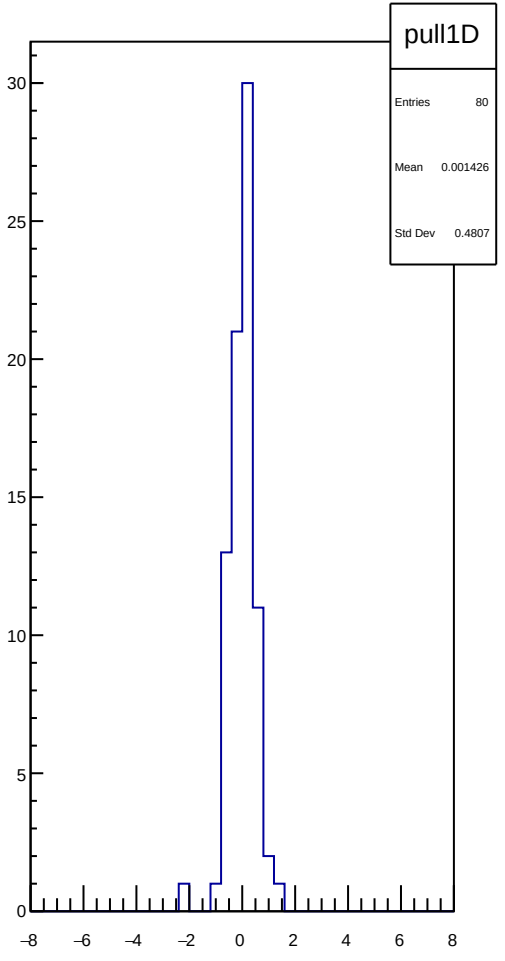

asym_bcm_dg_ds_rms vs run
χ² / ndf 2.766e+04 / 79
p0 240.3 ± 0.1919
340
320
300
280
260
240
220
200
180

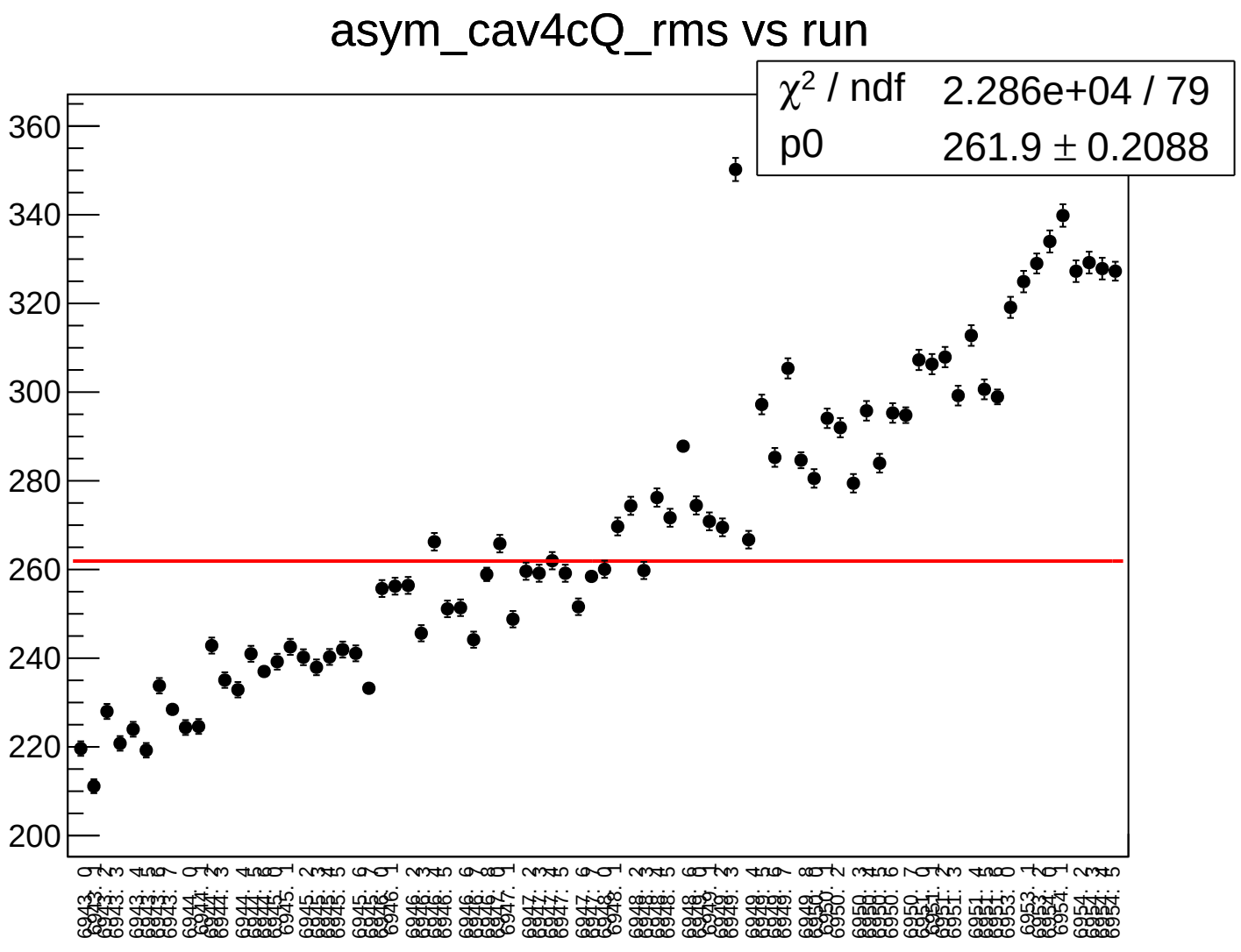

asym_cav4bQ_mean vs run
χ² / ndf 55.16 / 79
p0 −1576 ± 480.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 95.7
Std Dev 93.11
2
1
0
−1
−2

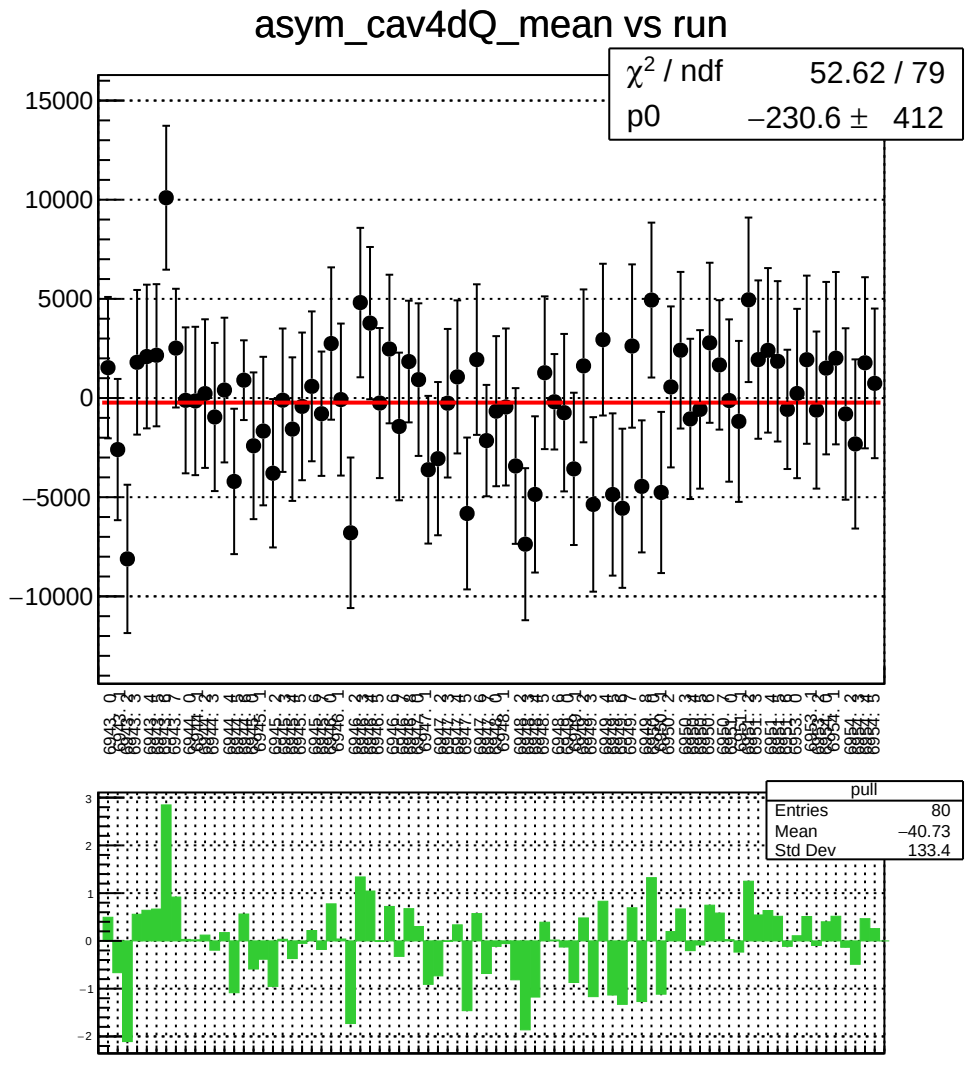

pull1D
Entries 80
Mean −0.01122
Std Dev 0.8303
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

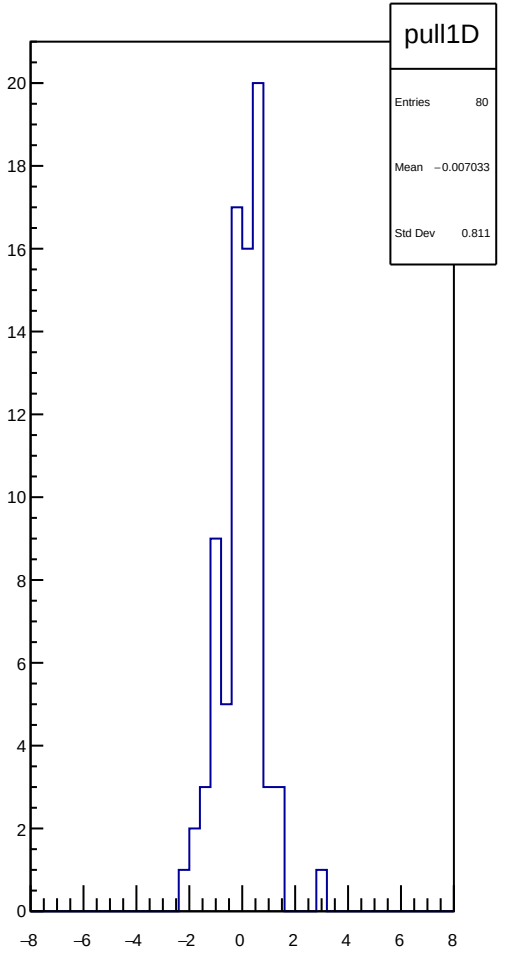

asym_cav4bQ_rms vs run
χ² / ndf 1.304e+04 / 79
p0 427.1 ± 0.3395
550
500
450
400
350

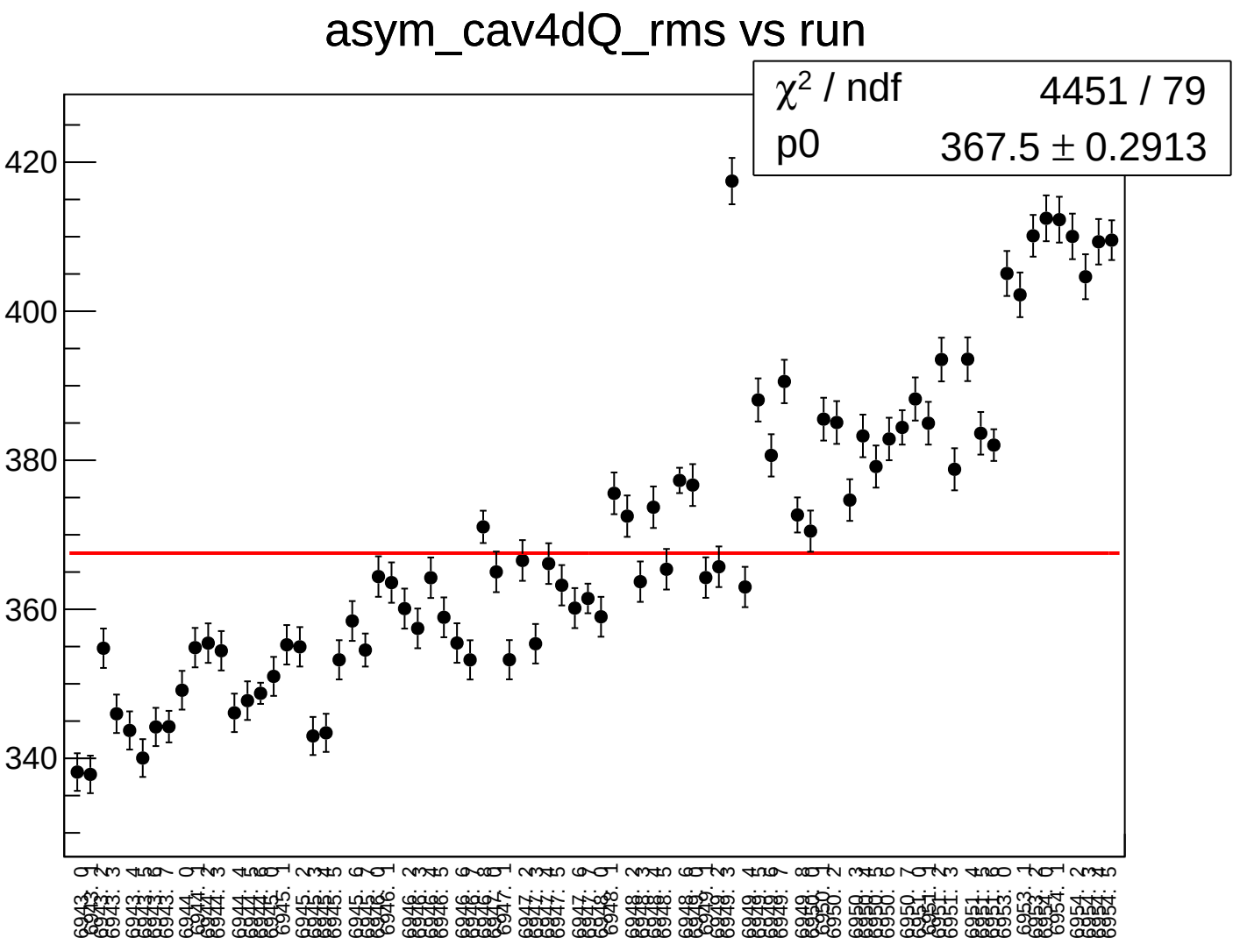

asym_cav4cQ_mean vs run
χ² / ndf 18.48 / 79
p0 −231.9 ± 295.3
pull
Entries 80
Mean 538.6
Std Dev 500.1

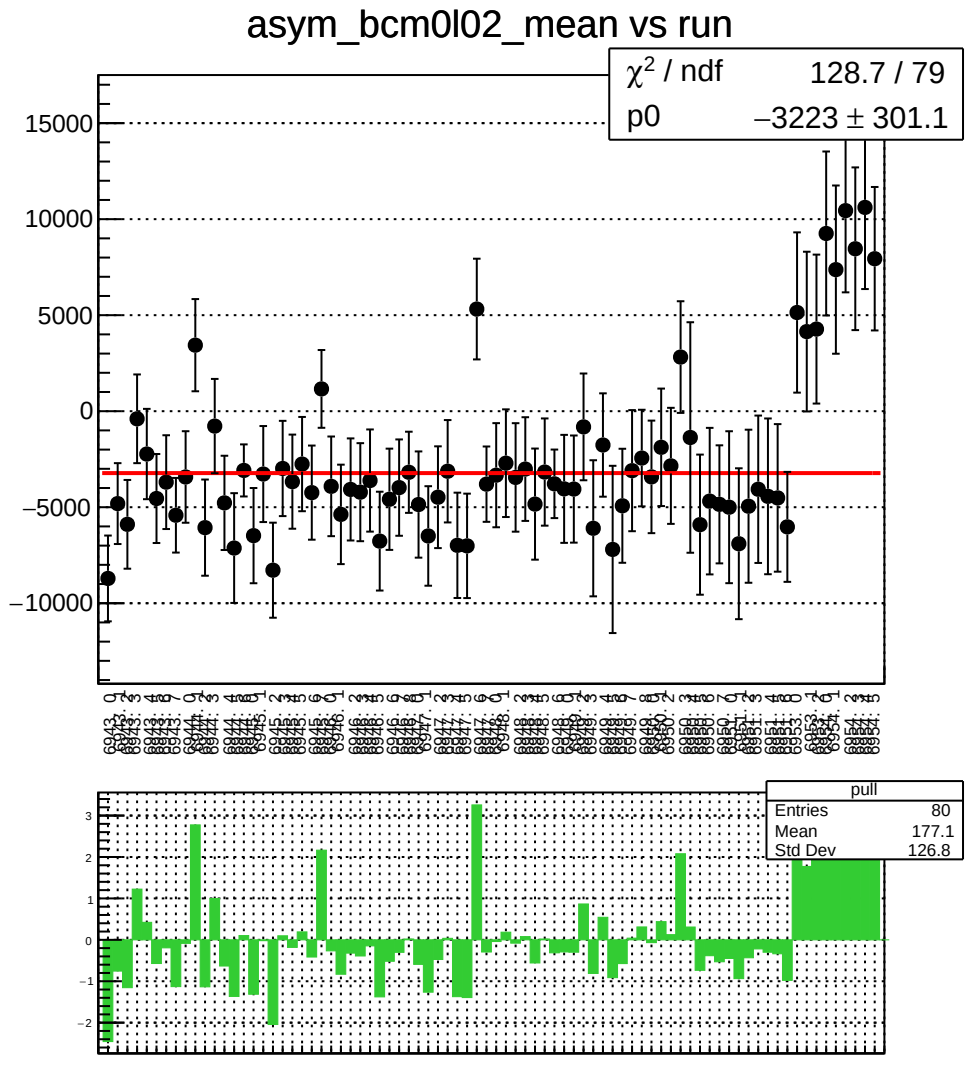

pull1D
Entries 80
Mean 0.001426
Std Dev 0.4807

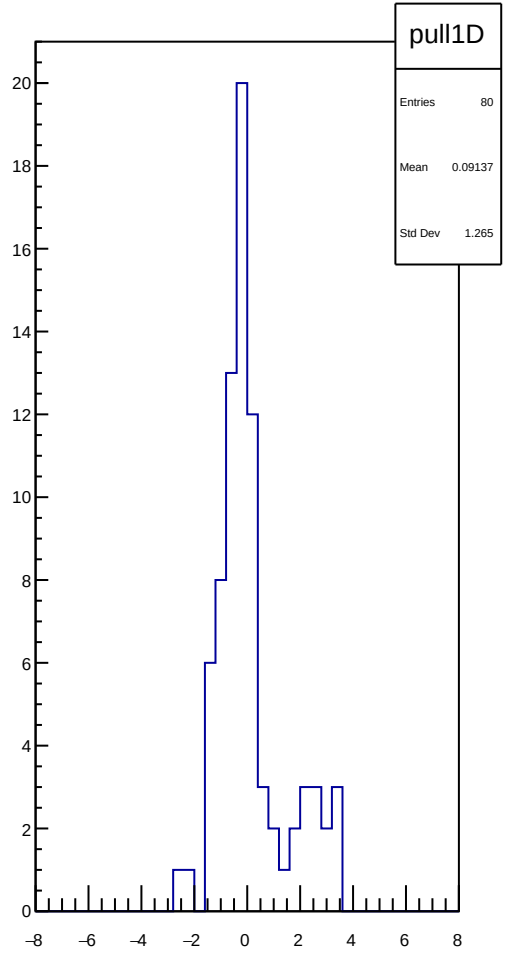

asym_cav4cQ_rms vs run
χ² / ndf 2.286e+04 / 79
p0 261.9 ± 0.2088
360
340
320
300
280
260
240
220
200

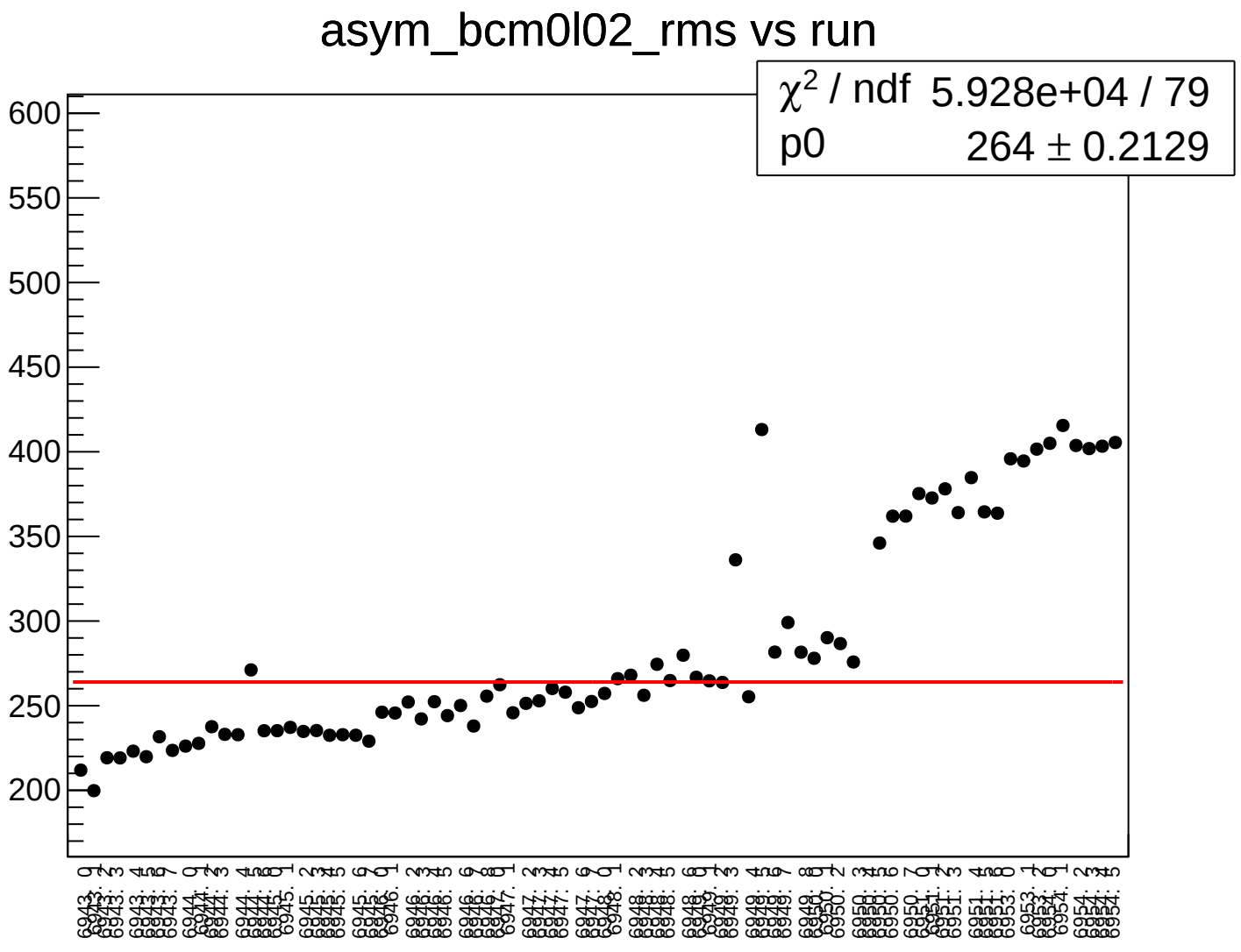

asym_cav4dQ_mean vs run
χ² / ndf 52.62 / 79
p0 −230.6 ± 412
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean −40.73
Std Dev 133.4
3
2
1
0
−1
−2

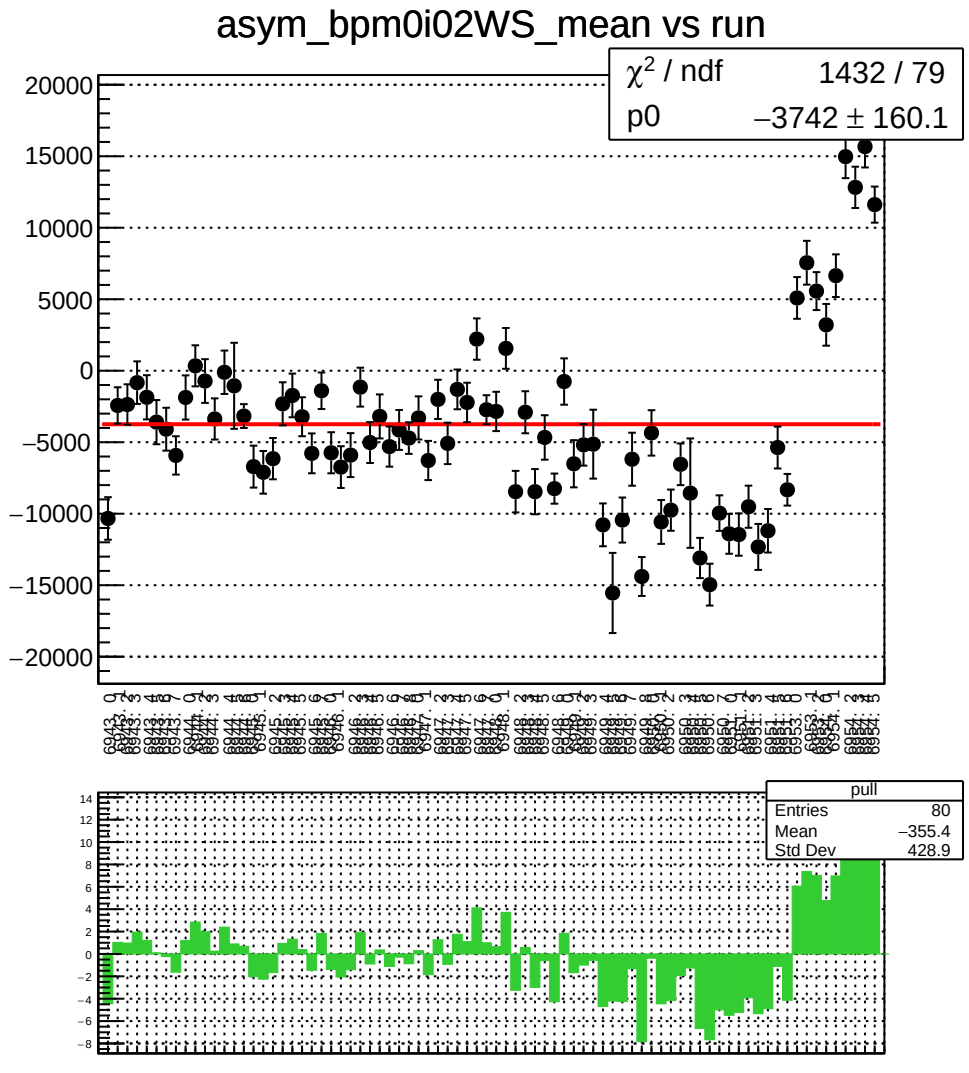

pull1D
Entries 80
Mean −0.007033
Std Dev 0.811
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

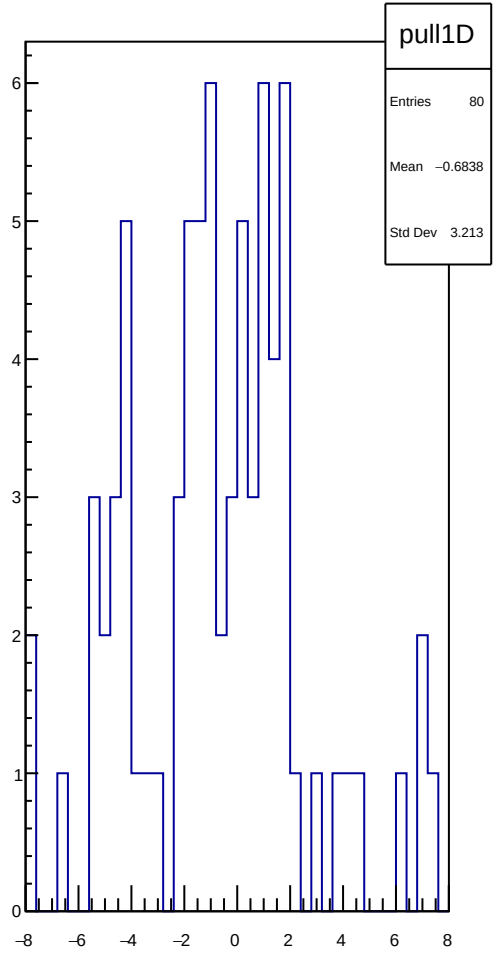

asym_cav4dQ_rms vs run
χ² / ndf 4451 / 79
p0 367.5 ± 0.2913
420
400
380
360
340

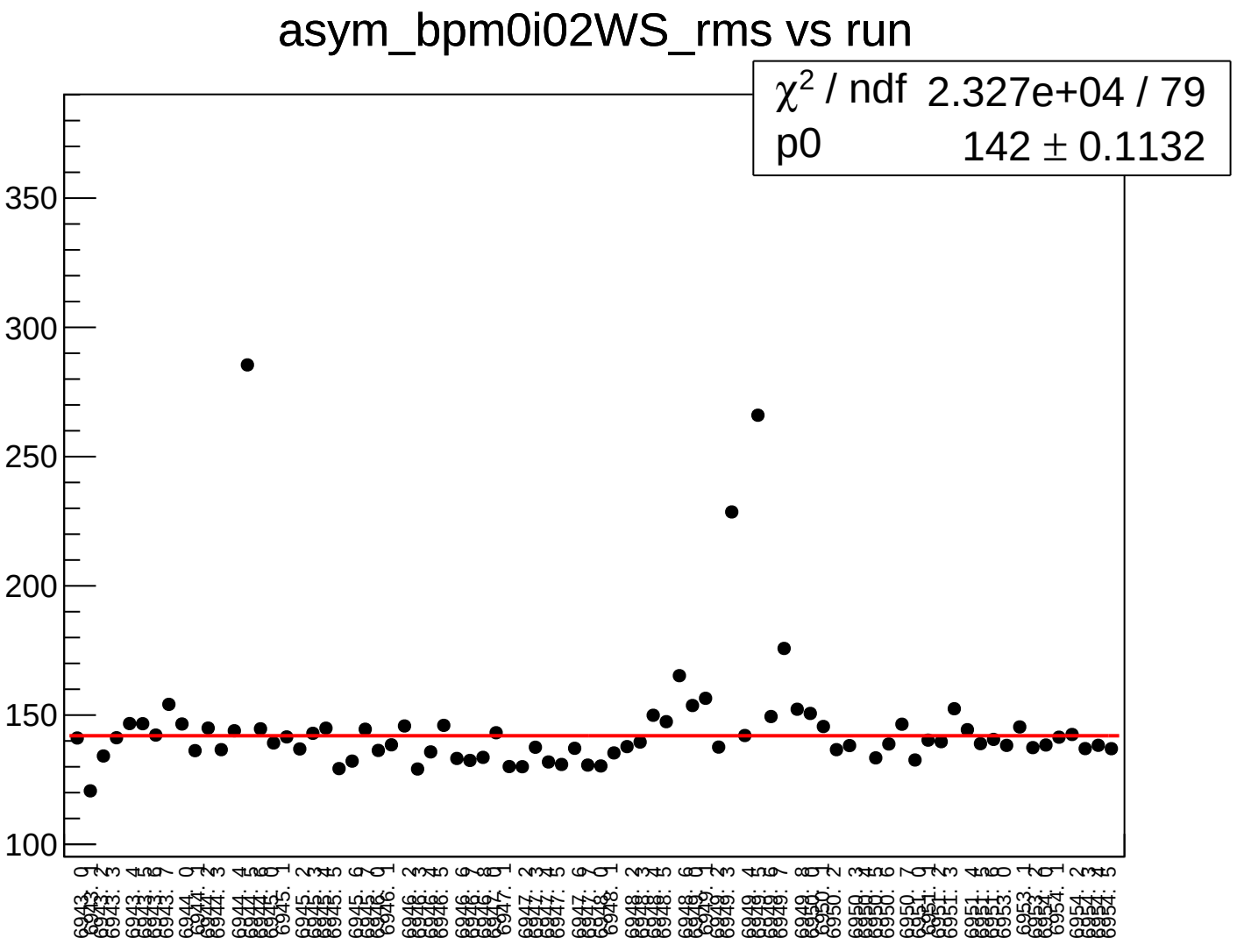

asym_bcm0l02_mean vs run
χ² / ndf 128.7 / 79
p0 −3223 ± 301.1
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 177.1
Std Dev 126.8
3
2
1
0
−1
−2

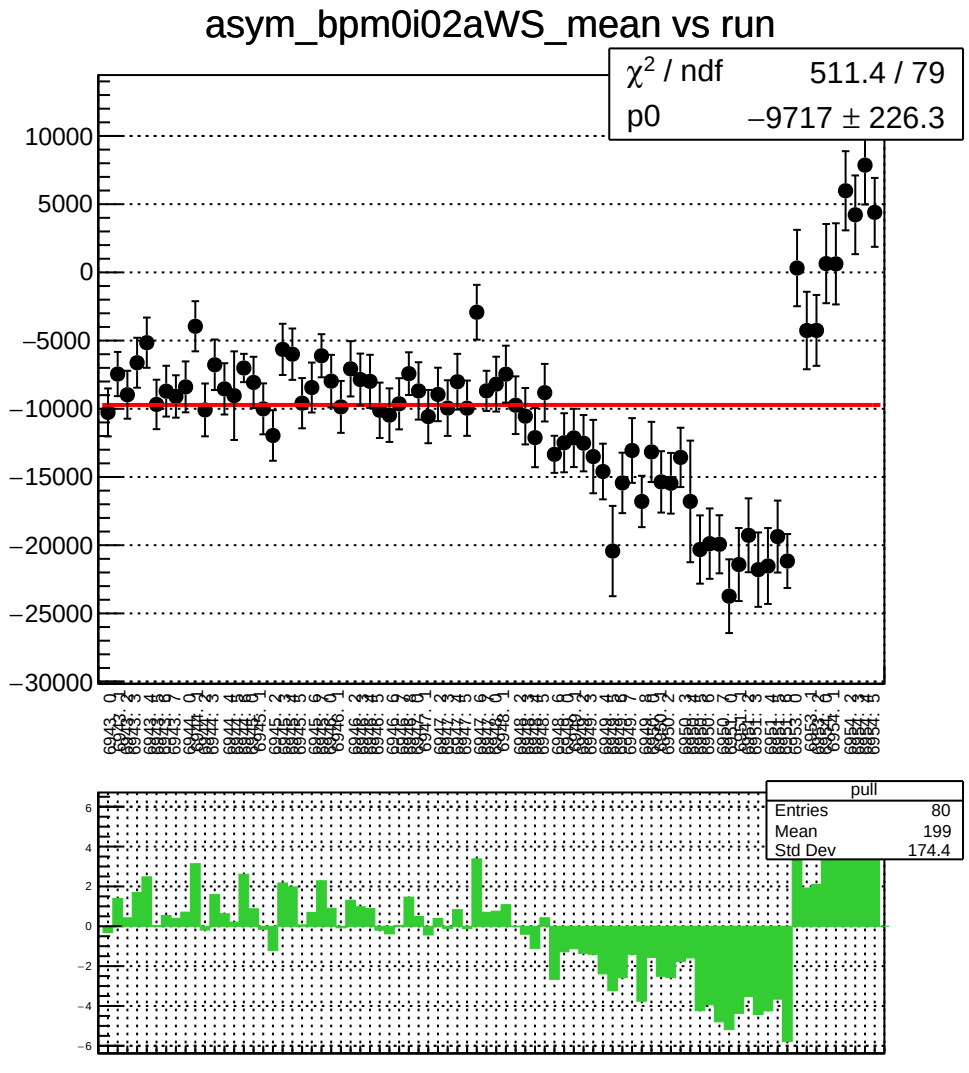

pull1D
Entries 80
Mean 0.09137
Std Dev 1.265
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

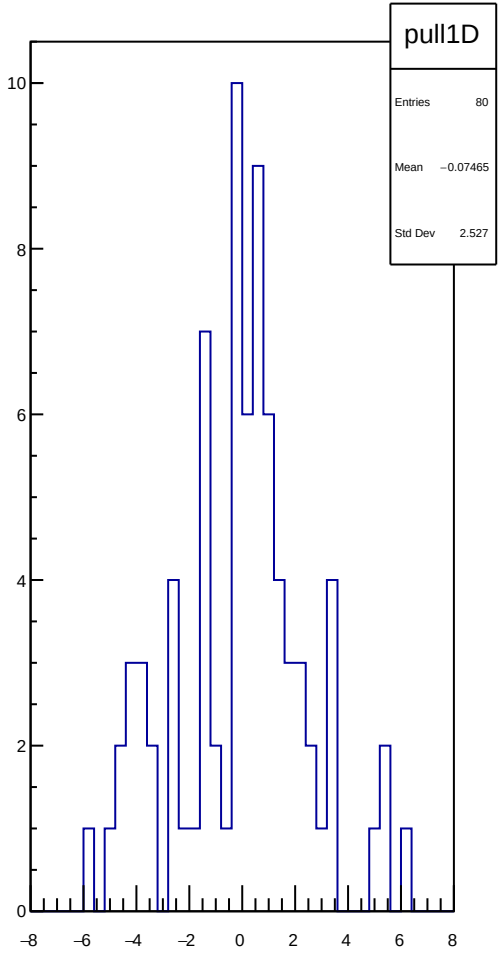

asym_bcm0l02_rms vs run
χ^2 / ndf 5.928e+04 / 79
p0 264 ± 0.2129
600
550
500
450
400
350
300
250
200

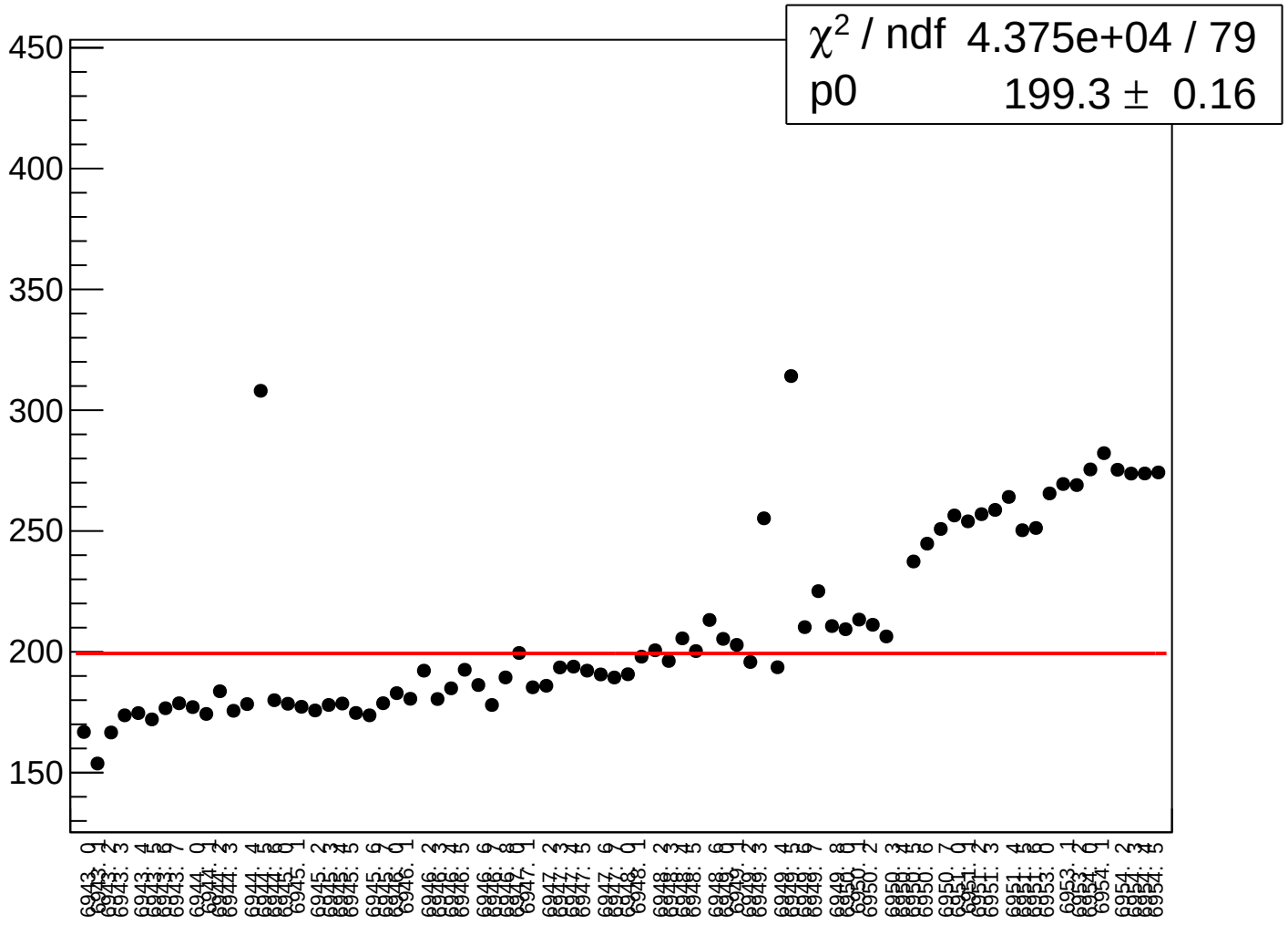

asym_bpm0i02WS_mean vs run
χ² / ndf 1432 / 79
p0 −3742 ± 160.1
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 80
Mean −355.4
Std Dev 428.9
14
12
10
8
6
4
2
0
−2
−4
−6
−8

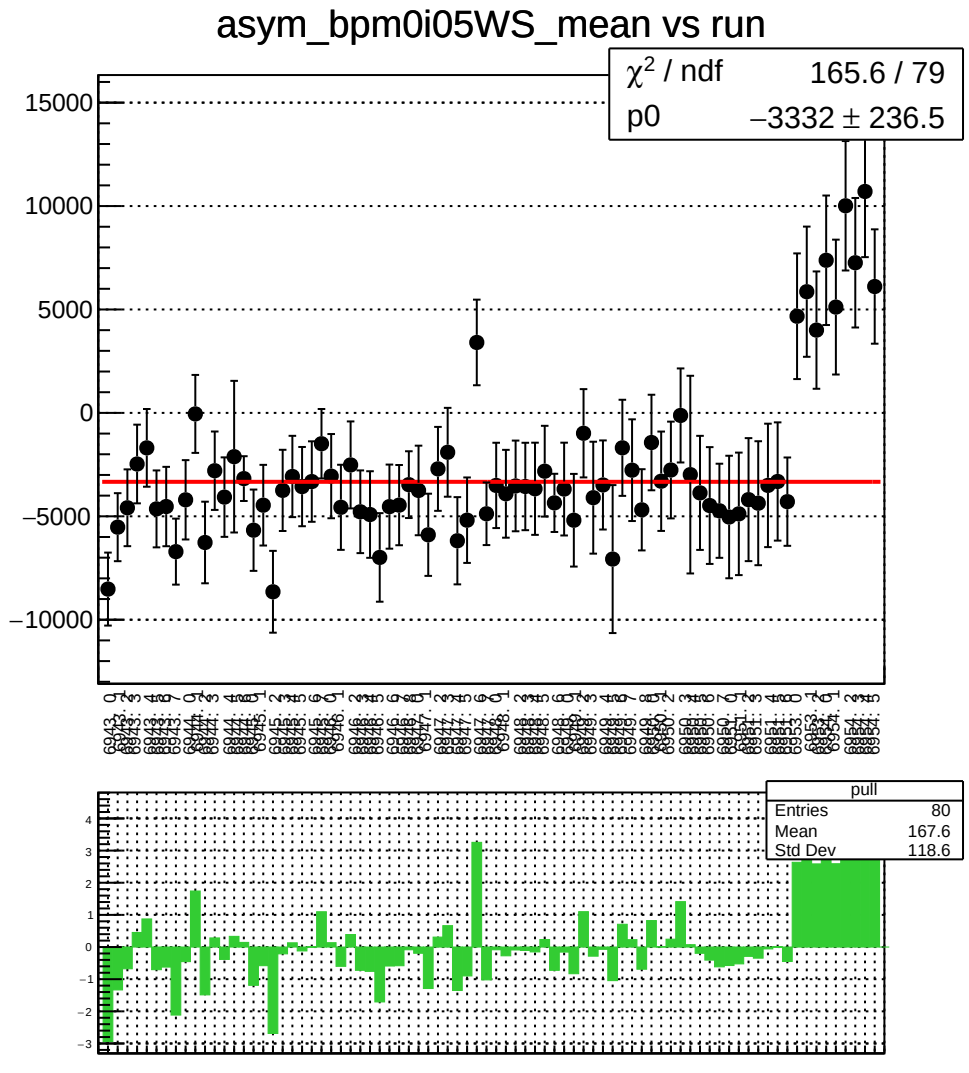

pull1D
Entries 80
Mean −0.6838
Std Dev 3.213
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

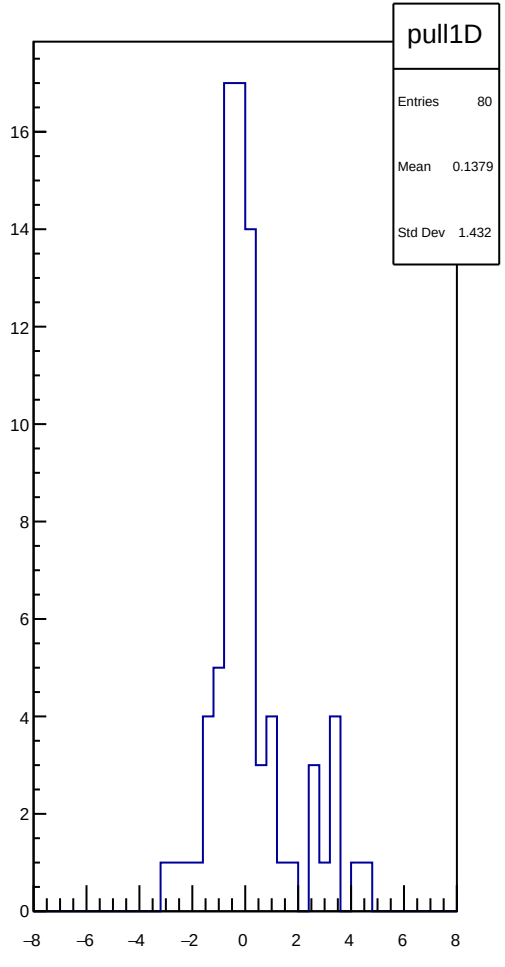

asym_bpm0i02WS_rms vs run
χ^2 / ndf 2.327e+04 / 79
p0 142 ± 0.1132
350
300
250
200
150
100

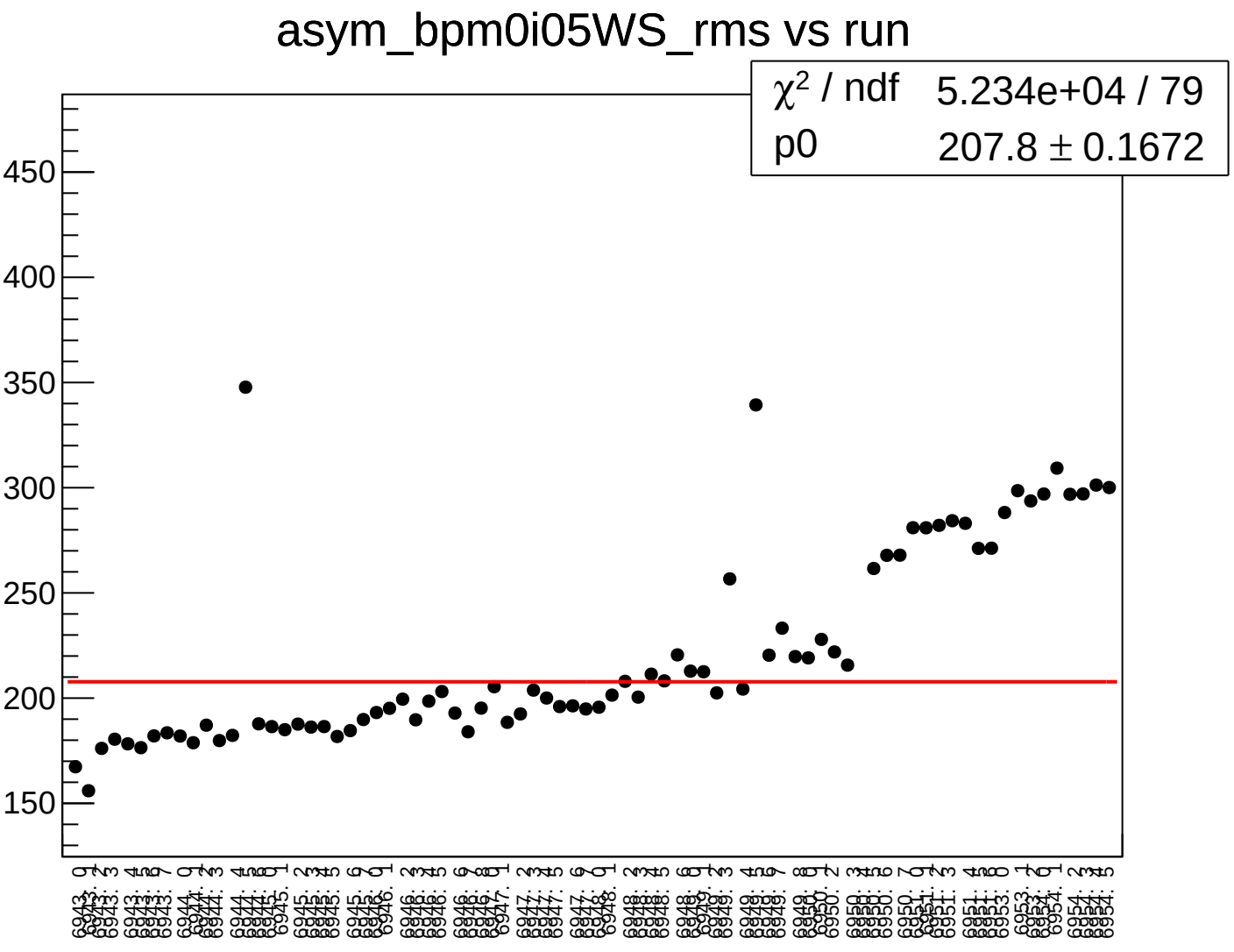

asym_bpm0i02aWS_mean vs run
χ² / ndf 511.4 / 79
p0 −9717 ± 226.3
pull
Entries 80
Mean 199
Std Dev 174.4

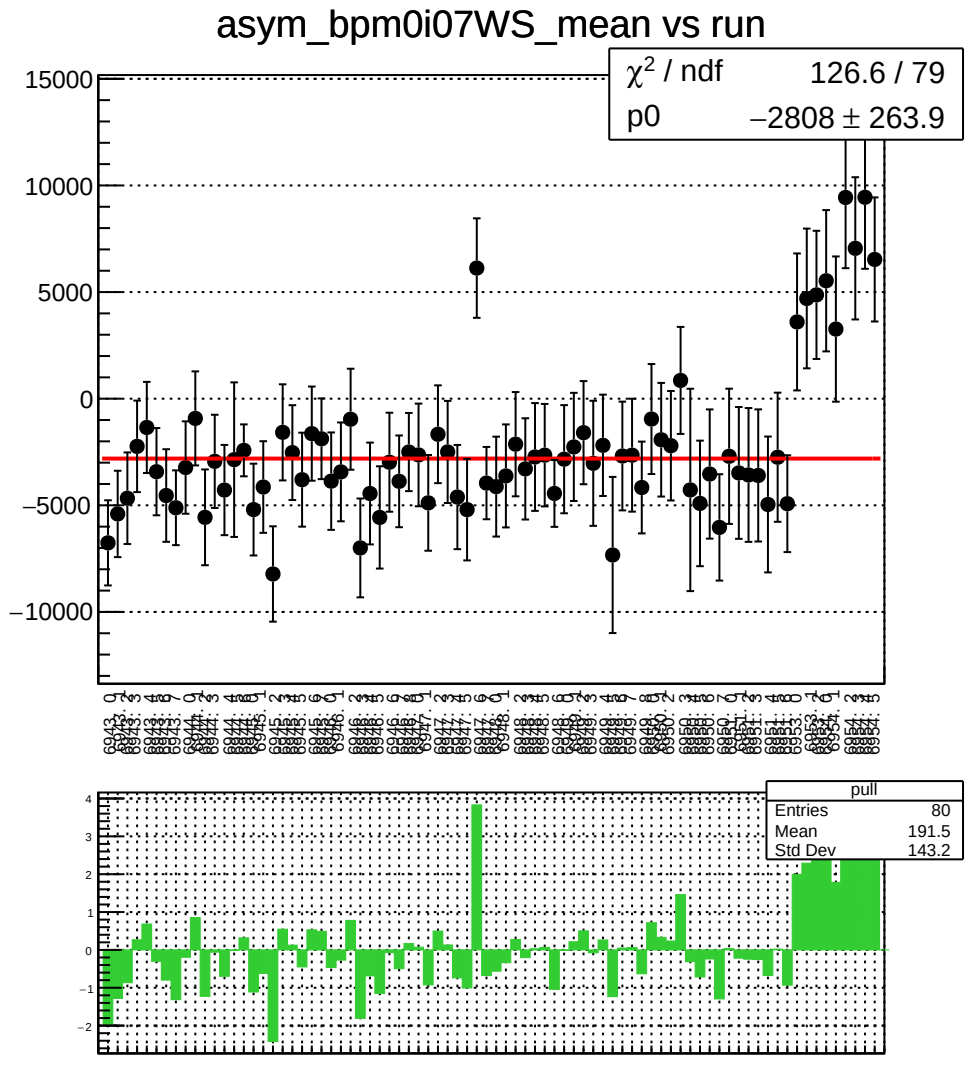

pull1D
Entries 80
Mean −0.07465
Std Dev 2.527

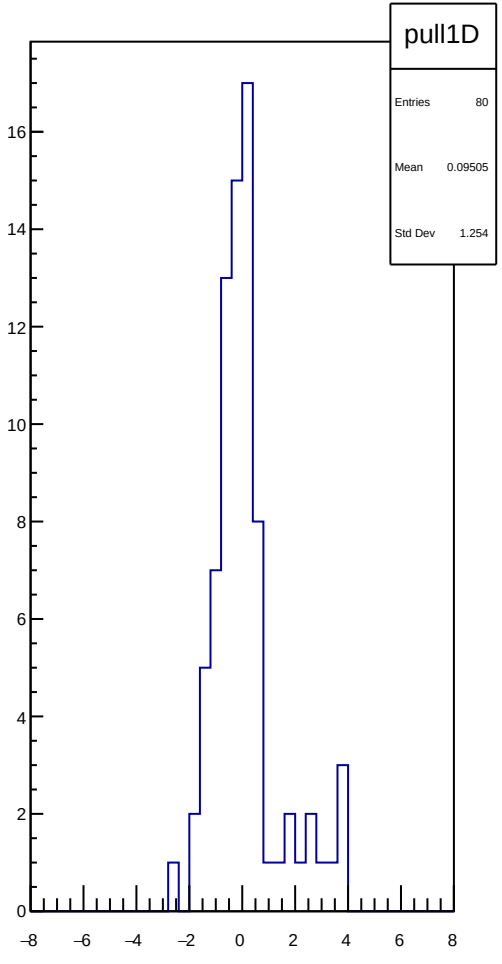

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 4.375e+04 / 79
p0 199.3 ± 0.16
450
400
350
300
250
200
150

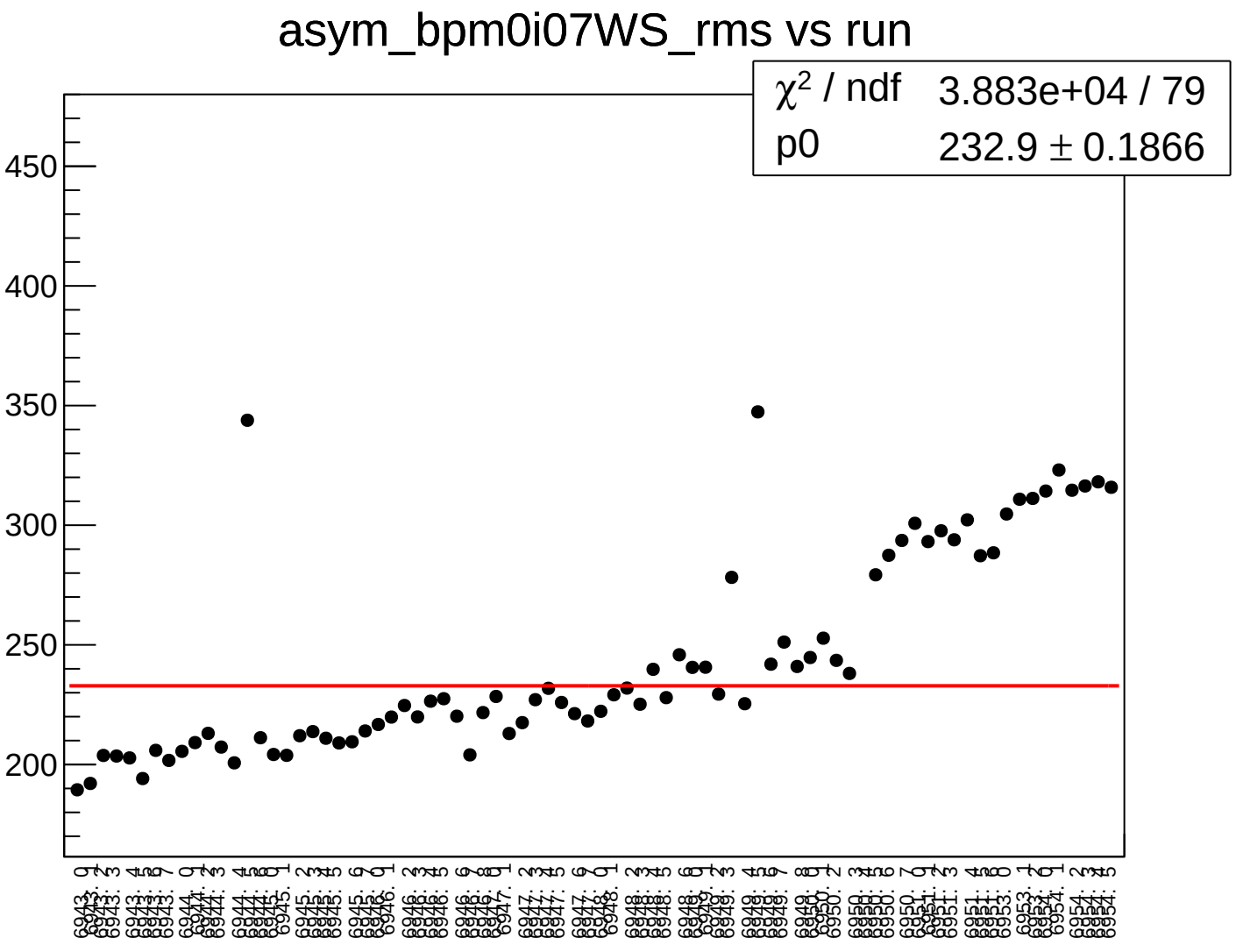

asym_bpm0i05WS_mean vs run
χ² / ndf 165.6 / 79
p0 −3332 ± 236.5
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 167.6
Std Dev 118.6
4
3
2
1
0
−1
−2
−3

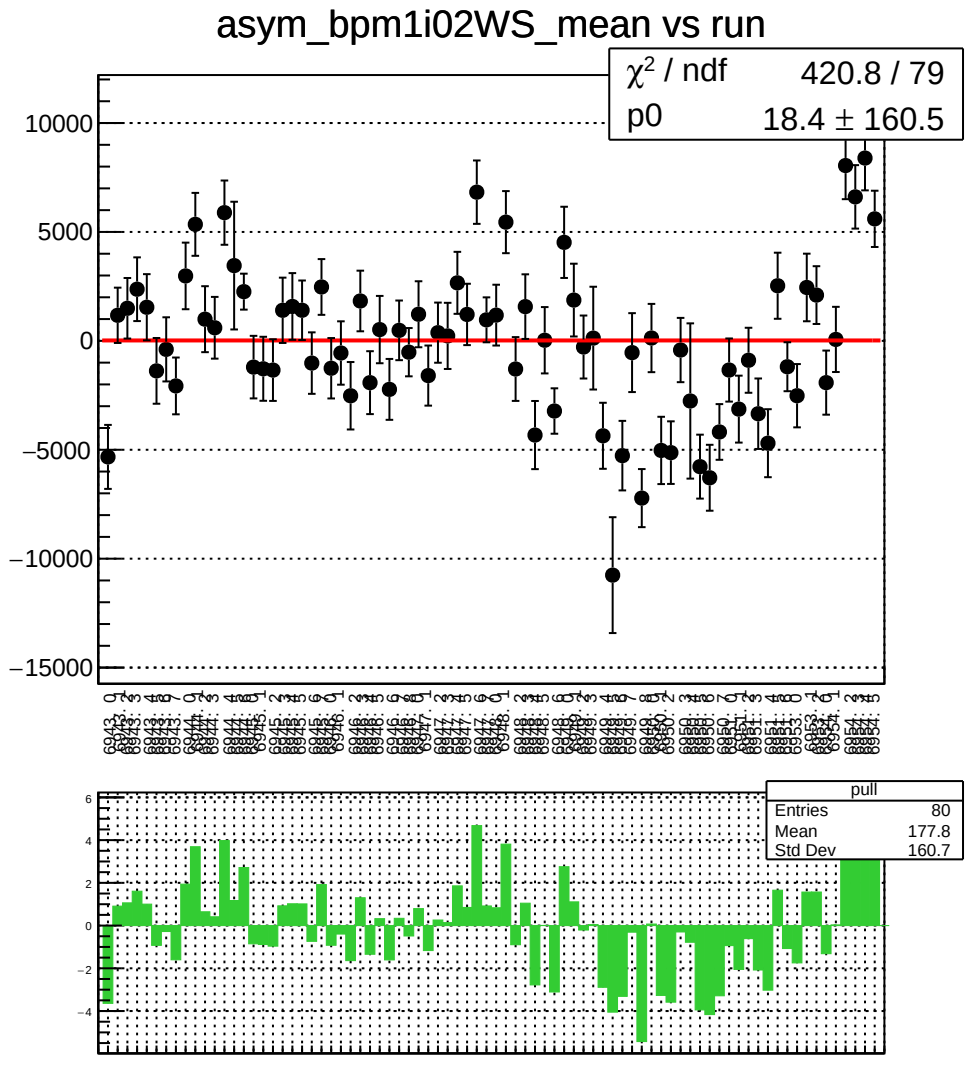

pull1D
Entries 80
Mean 0.1379
Std Dev 1.432
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

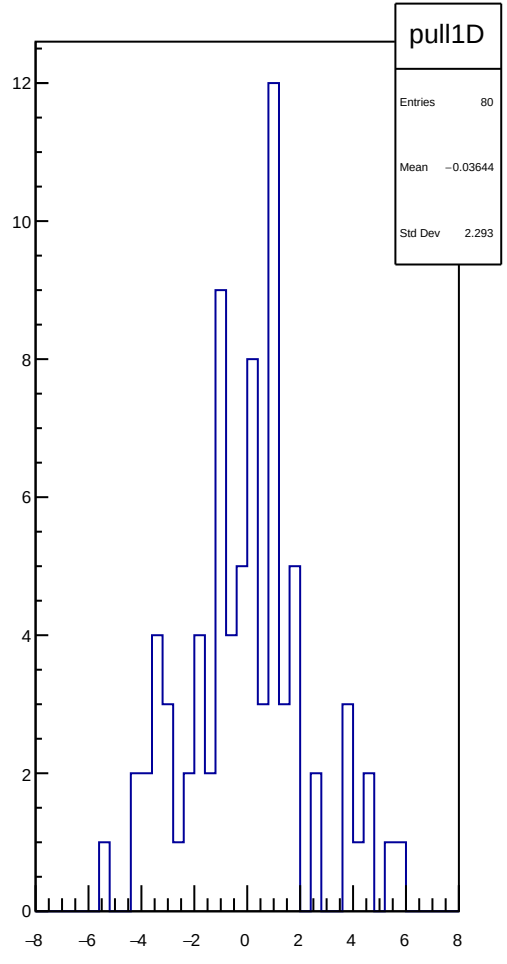

asym_bpm0i05WS_rms vs run
χ^2 / ndf 5.234e+04 / 79
p0 207.8 ± 0.1672
450
400
350
300
250
200
150

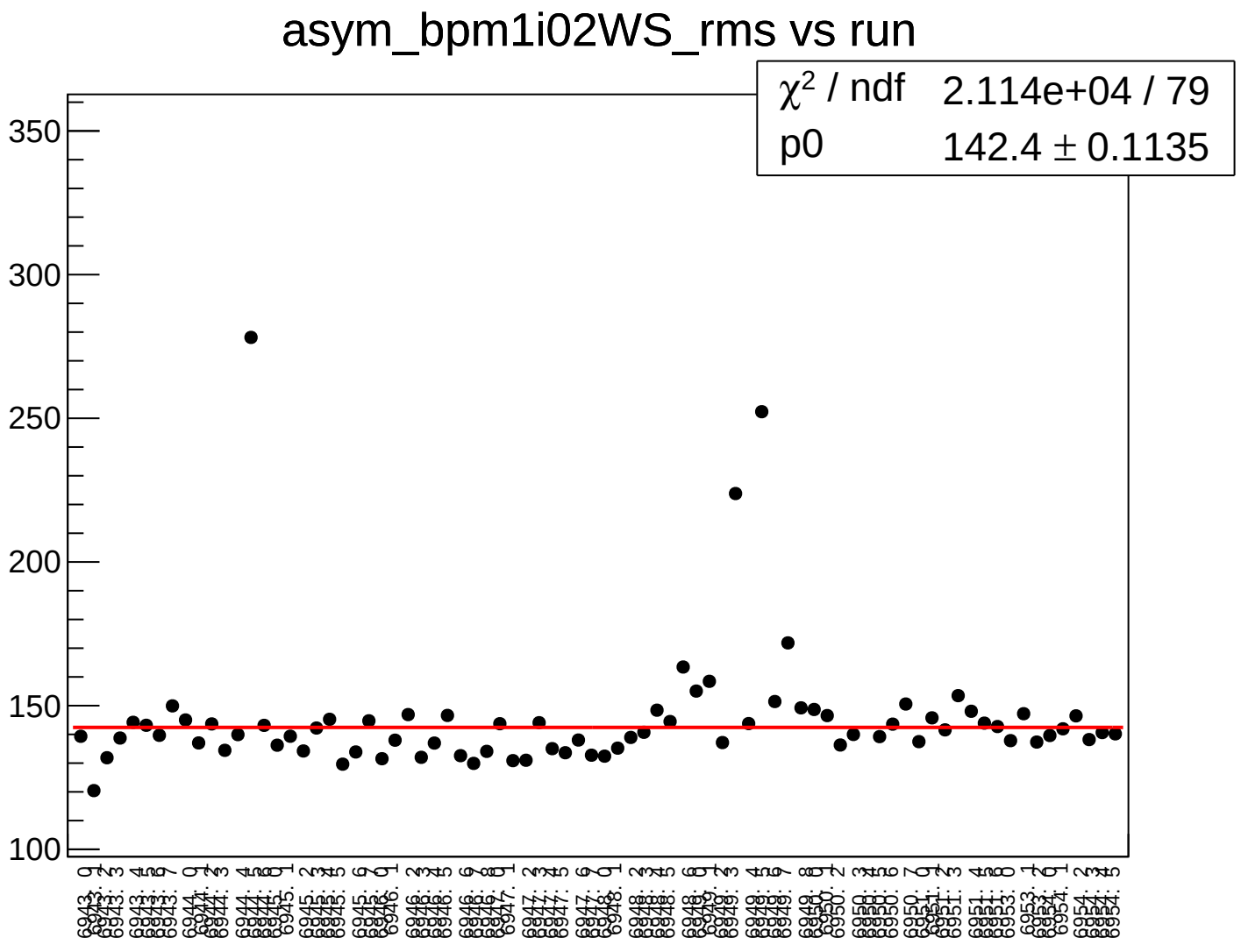

asym_bpm0i07WS_mean vs run
χ² / ndf 126.6 / 79
p0 −2808 ± 263.9
pull
Entries 80
Mean 191.5
Std Dev 143.2

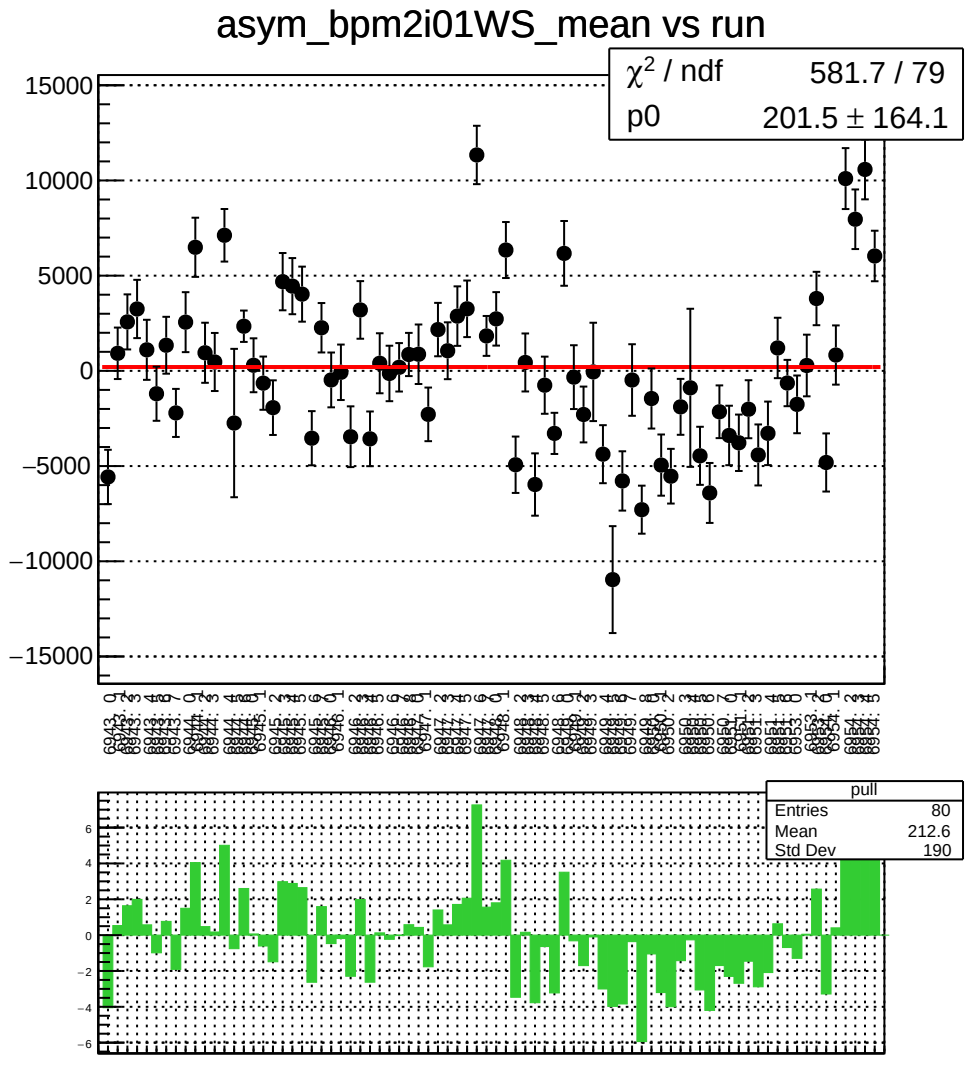

pull1D
Entries 80
Mean 0.09505
Std Dev 1.254

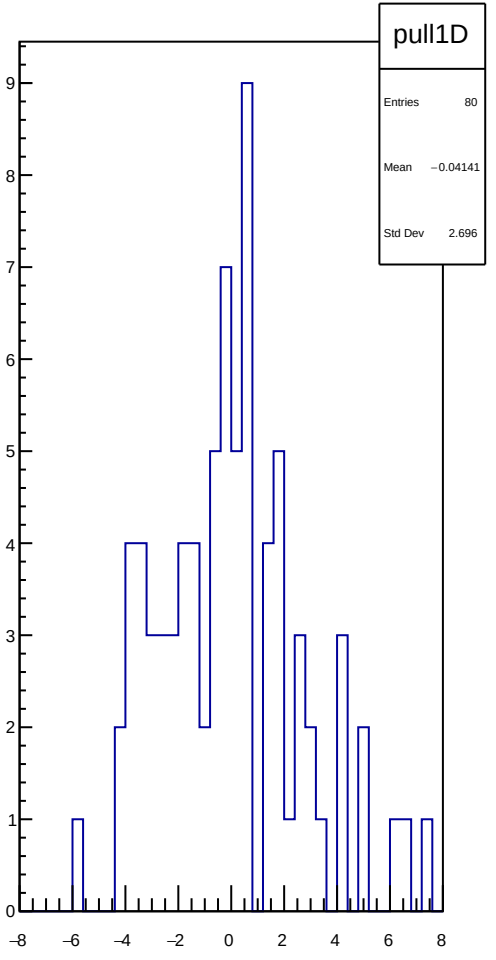

asym_bpm0i07WS_rms vs run
χ^2 / ndf 3.883e+04 / 79
p0 232.9 ± 0.1866
450
400
350
300
250
200


asym_bpm1i02WS_mean vs run
χ² / ndf 420.8 / 79
p0 18.4 ± 160.5
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 177.8
Std Dev 160.7
6
4
2
0
−2
−4


pull1D
Entries 80
Mean −0.03644
Std Dev 2.293
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.114e+04 / 79
p0 142.4 ± 0.1135
350
300
250
200
150
100


asym_bpm2i01WS_mean vs run
χ² / ndf 581.7 / 79
p0 201.5 ± 164.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 212.6
Std Dev 190
6
4
2
0
−2
−4
−6


pull1D
Entries 80
Mean −0.04141
Std Dev 2.696
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
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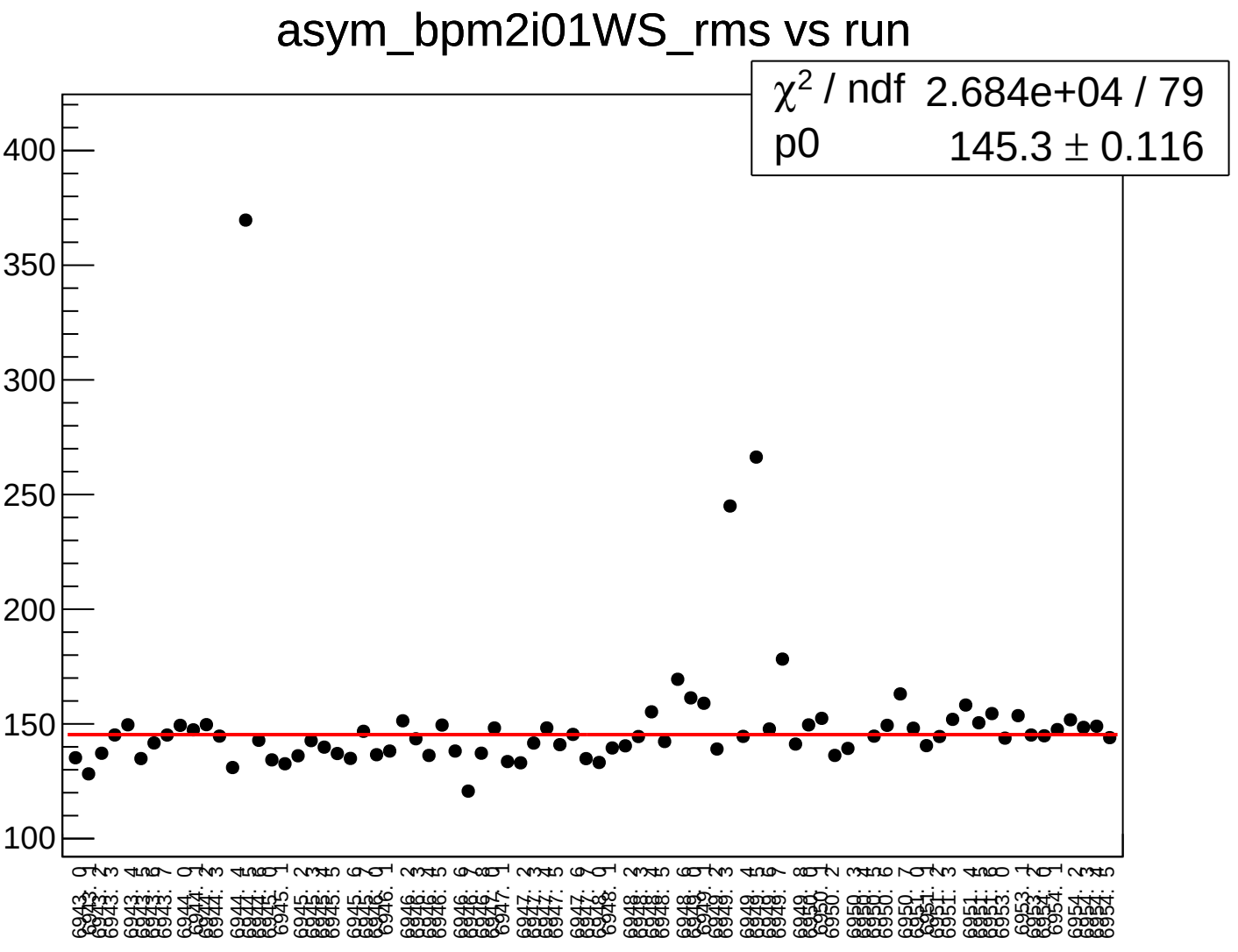
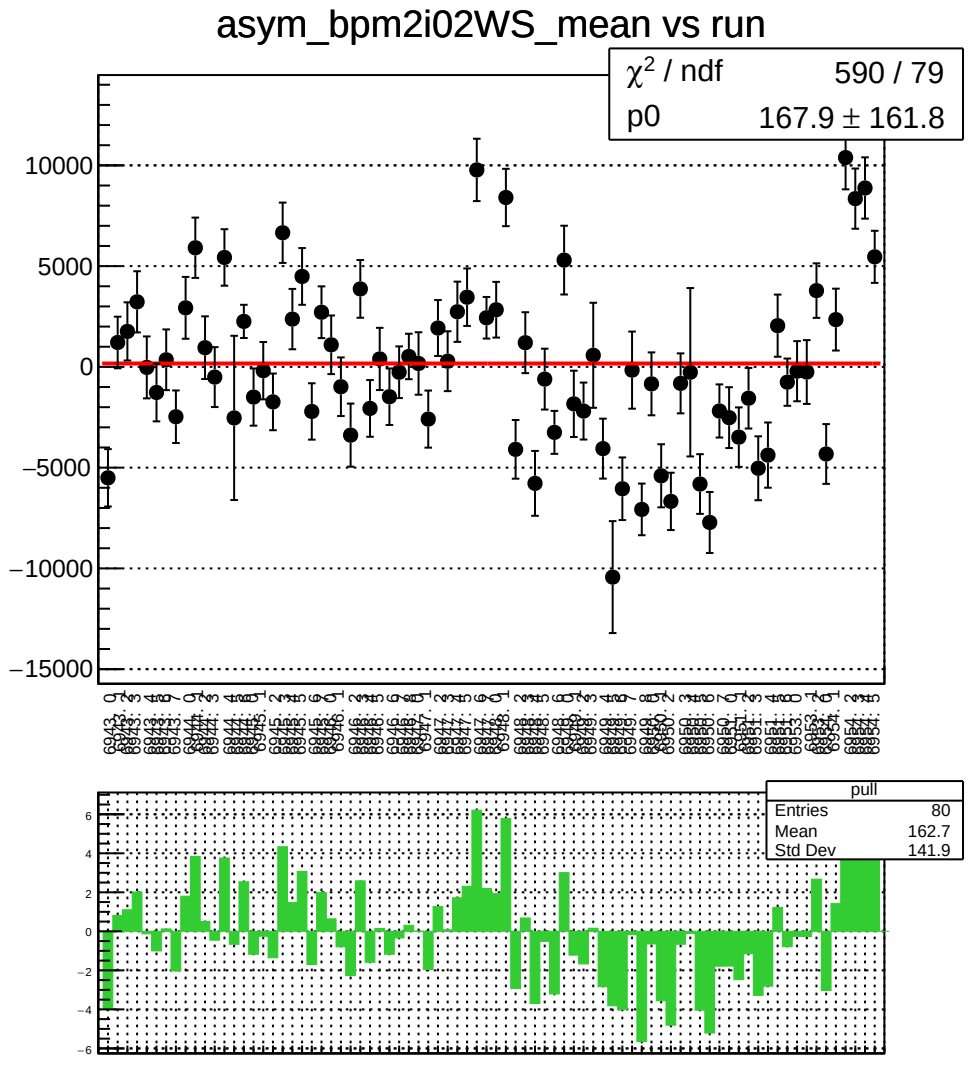
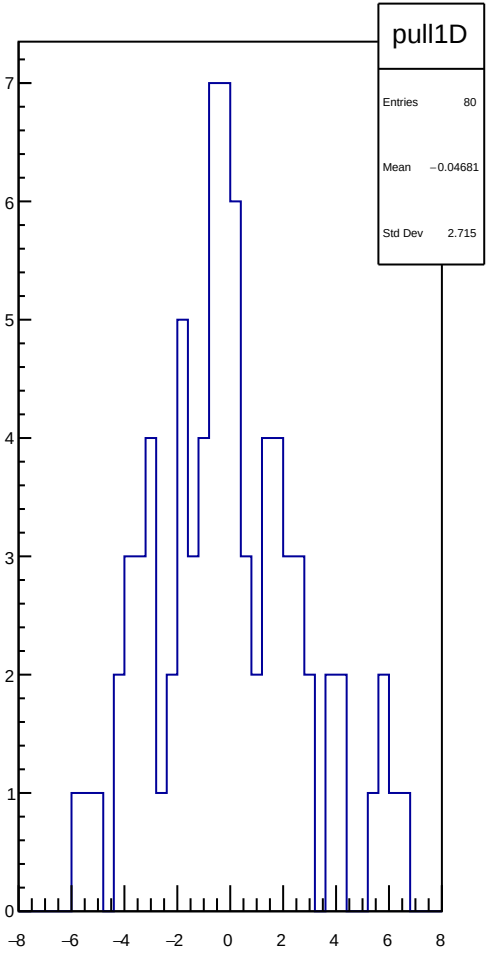
0
2
4
6
8


asym_bpm2i01WS_rms vs run
χ² / ndf 2.684e+04 / 79
p0 145.3 ± 0.116
400
350
300
250
200
150
100


asym_bpm2i02WS_mean vs run
χ² / ndf 590 / 79
p0 167.9 ± 161.8
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 162.7
Std Dev 141.9
6
4
2
0
−2
−4
−6


pull1D
Entries 80
Mean −0.04681
Std Dev 2.715
7
6
5
4
3
2
1
0
−8
−6
−4
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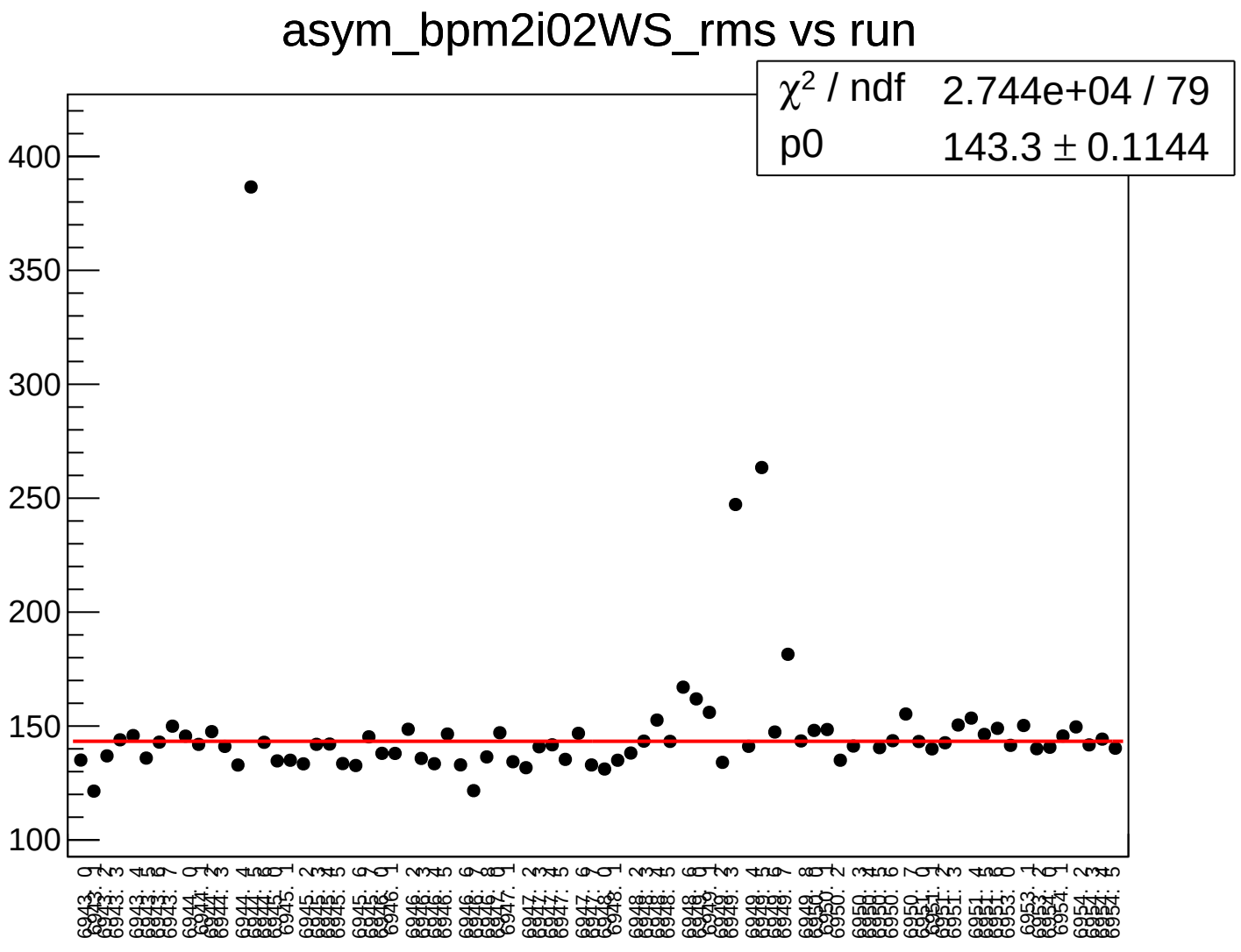
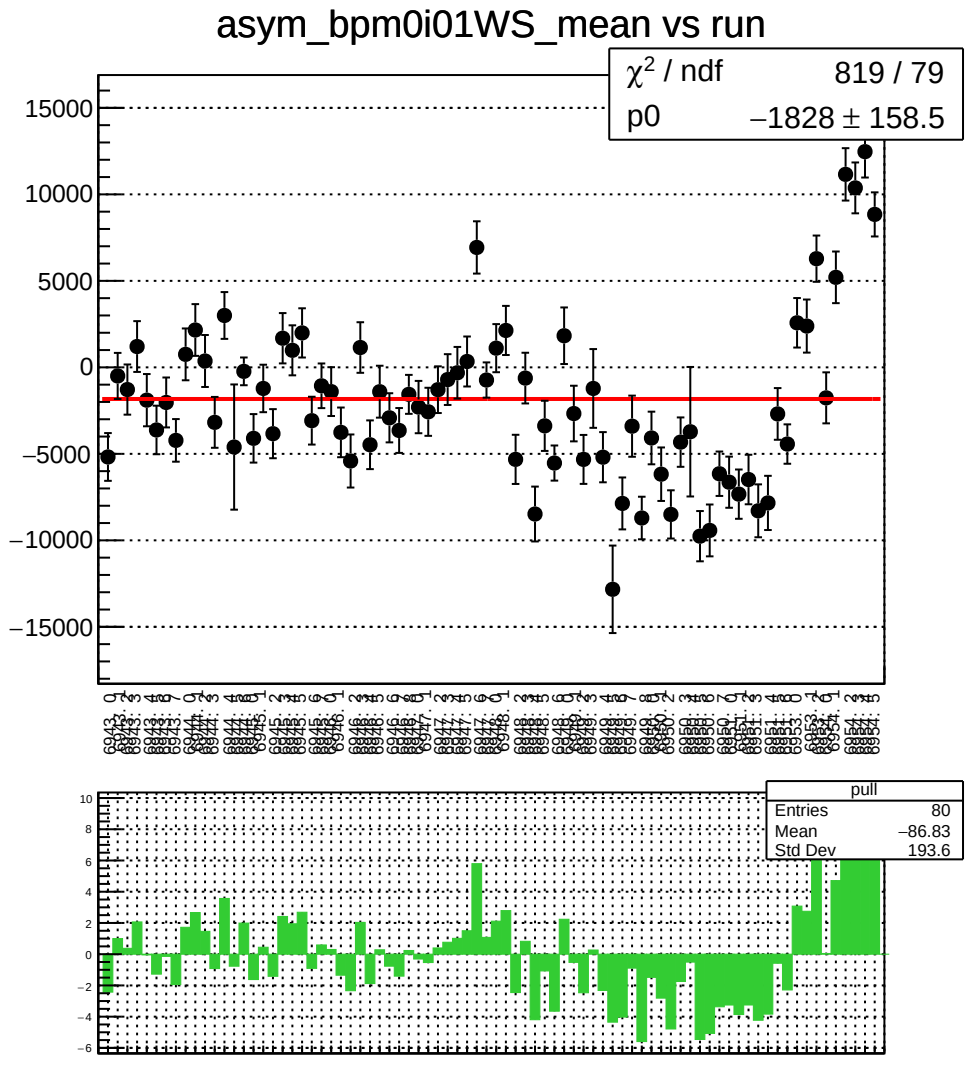
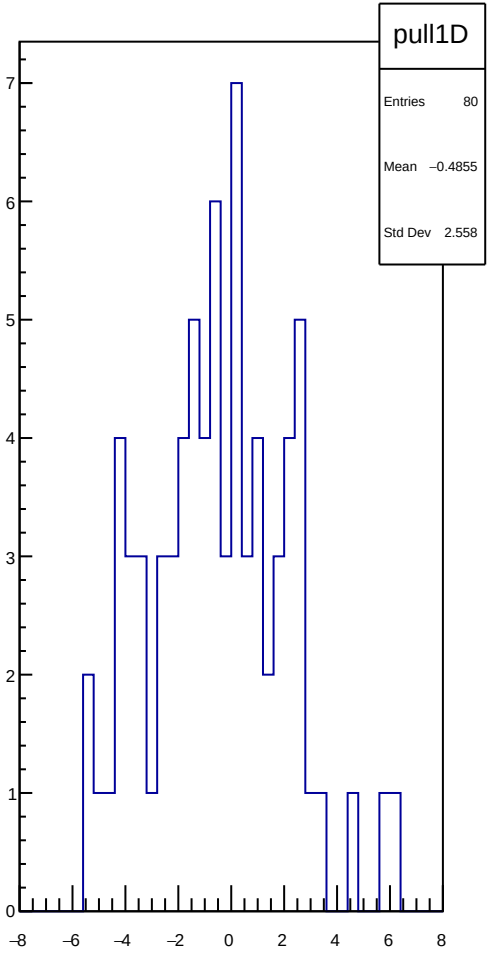
0
2
4
6
8


asym_bpm2i02WS_rms vs run
χ² / ndf 2.744e+04 / 79
p0 143.3 ± 0.1144
400
350
300
250
200
150
100


asym_bpm0i01WS_mean vs run
χ² / ndf 819 / 79
p0 −1828 ± 158.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean −86.83
Std Dev 193.6
10
8
6
4
2
0
−2
−4
−6


pull1D
Entries 80
Mean −0.4855
Std Dev 2.558
7
6
5
4
3
2
1
0
−8
−6
−4
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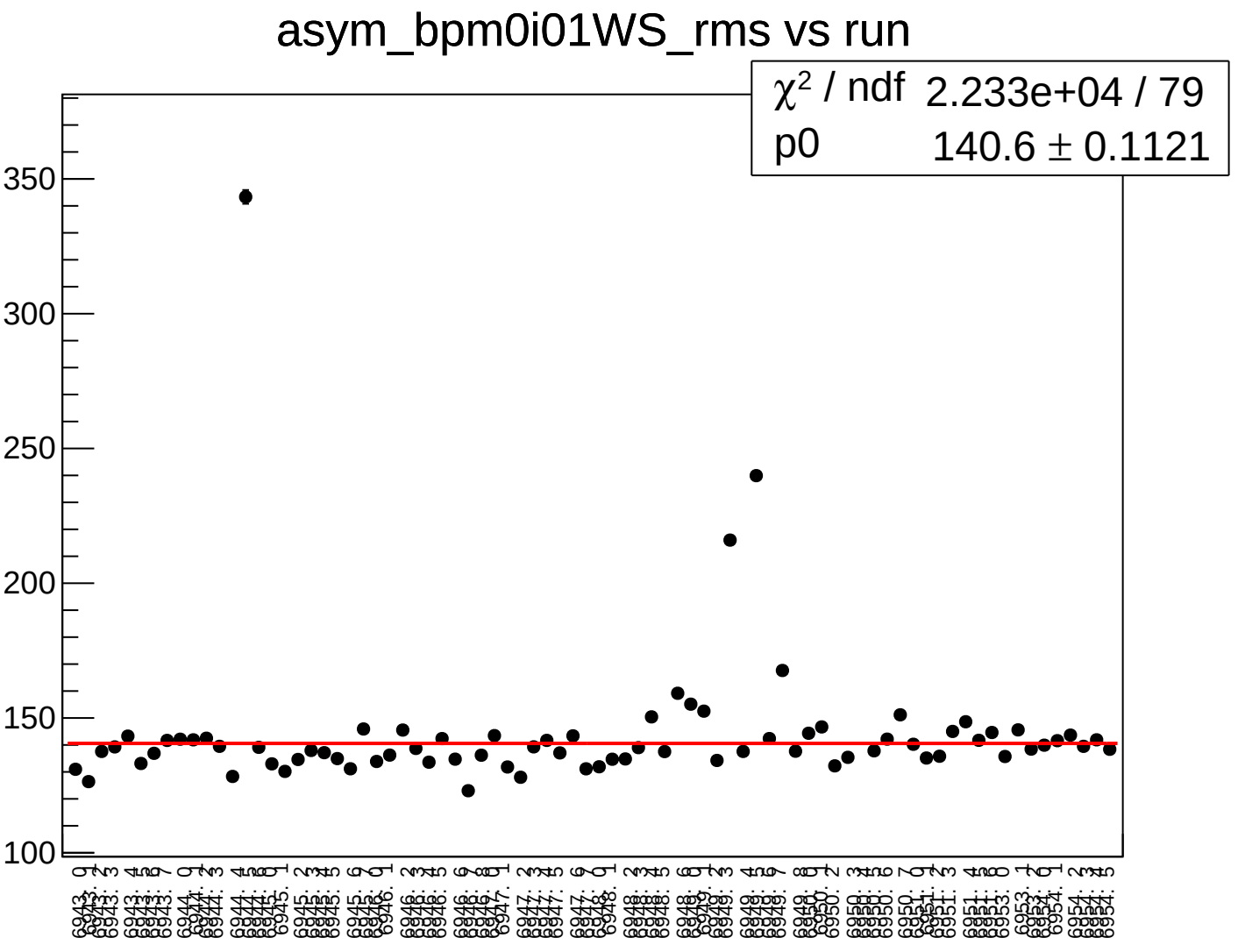
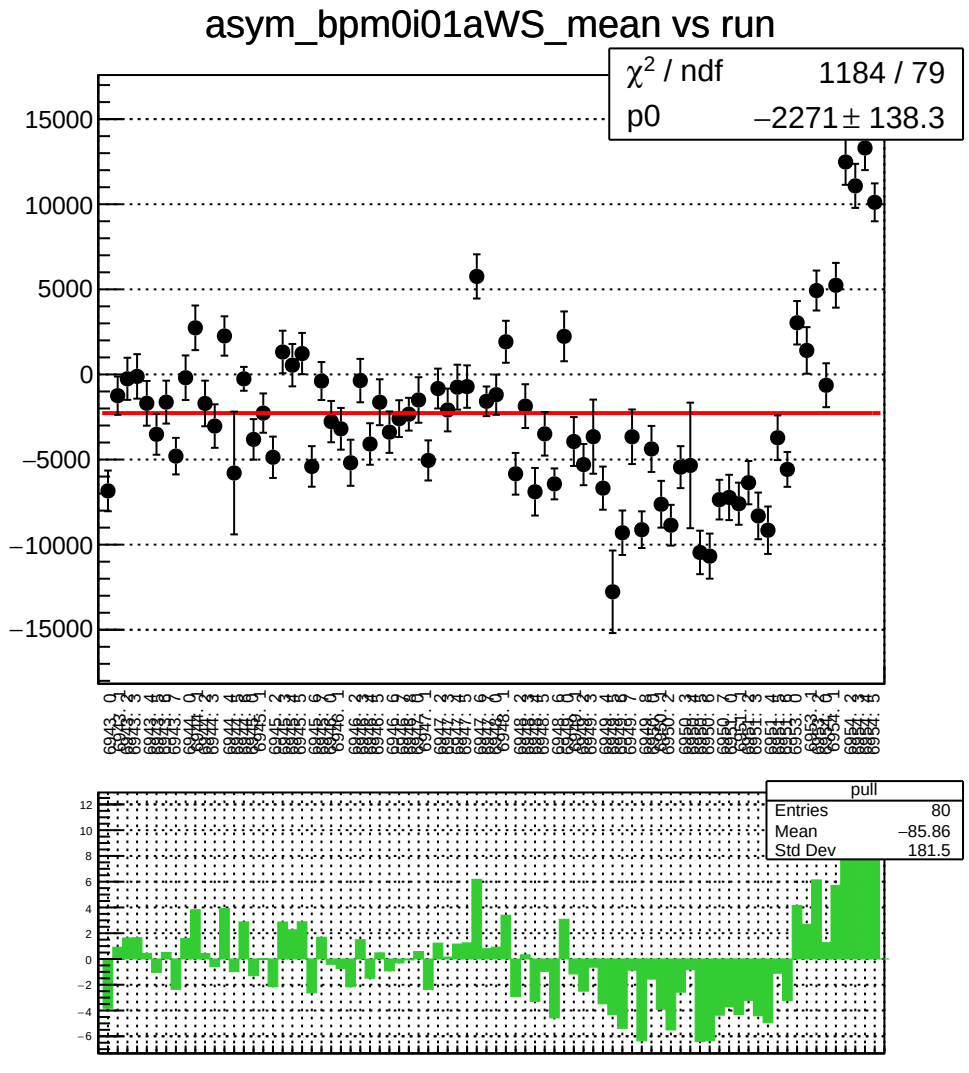
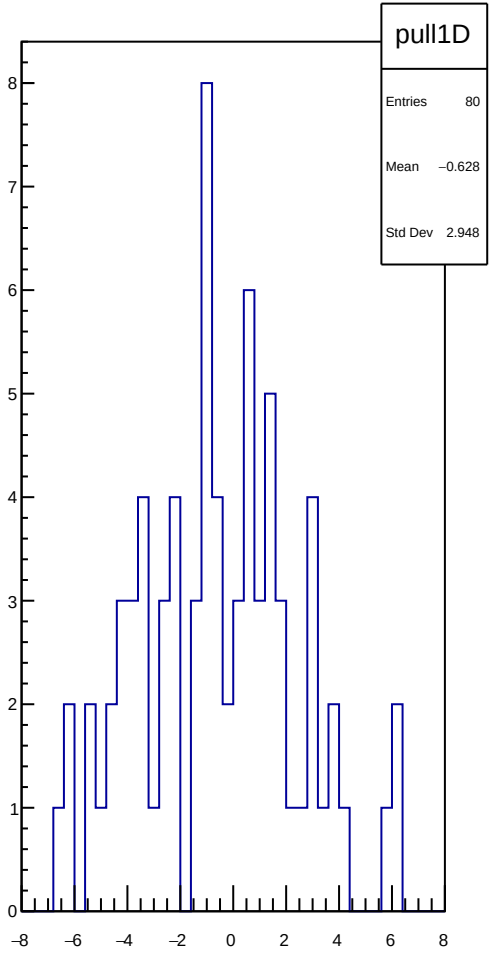
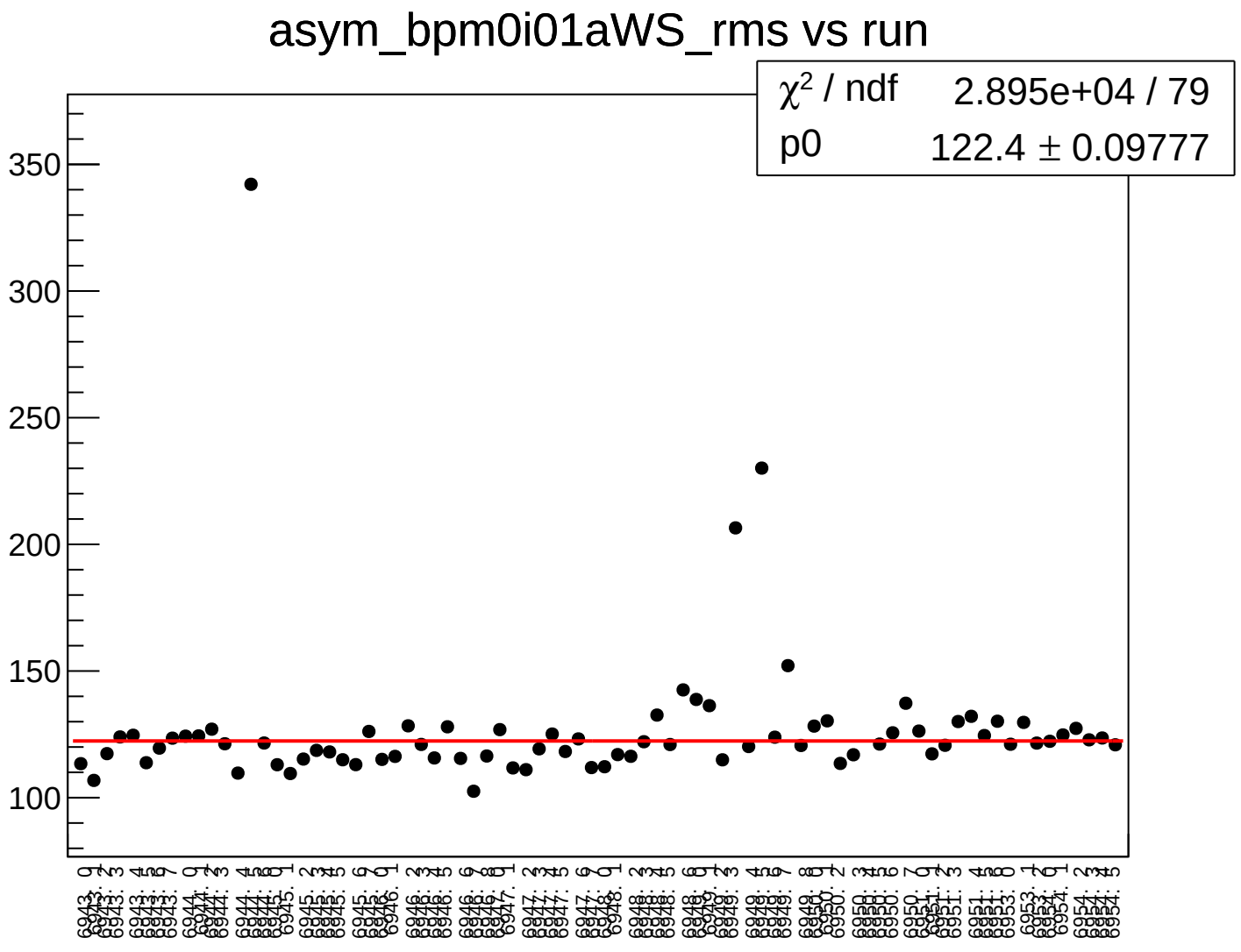
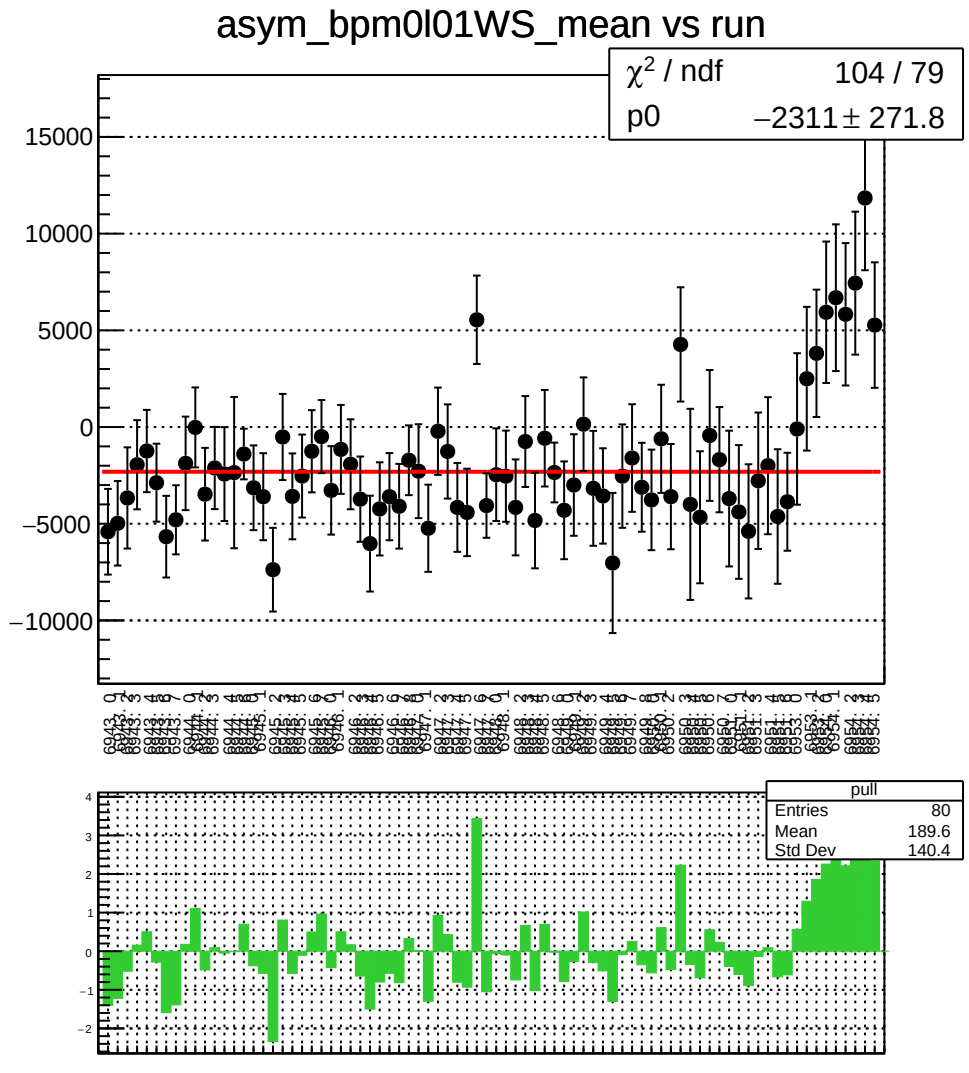
0
2
4
6
8

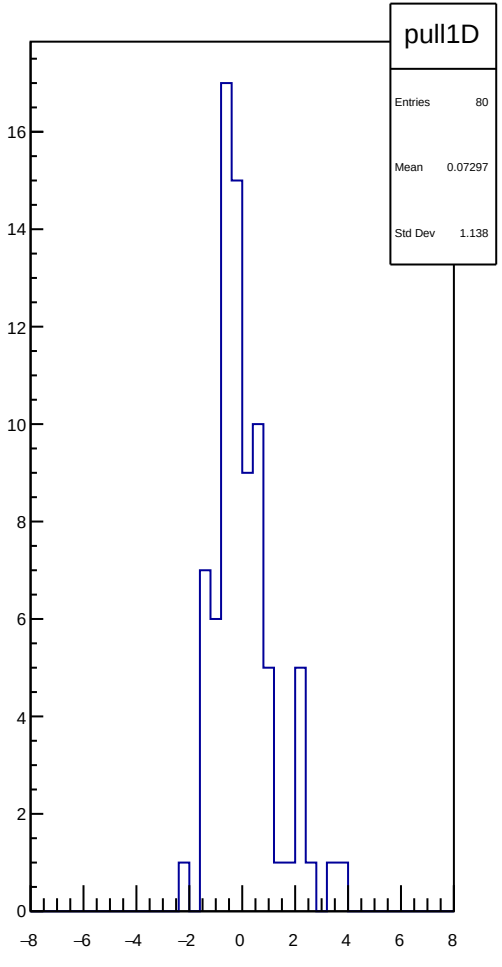

asym_bpm0i01WS_rms vs run
χ² / ndf 2.233e+04 / 79
p0 140.6 ± 0.1121
350
300
250
200
150
100

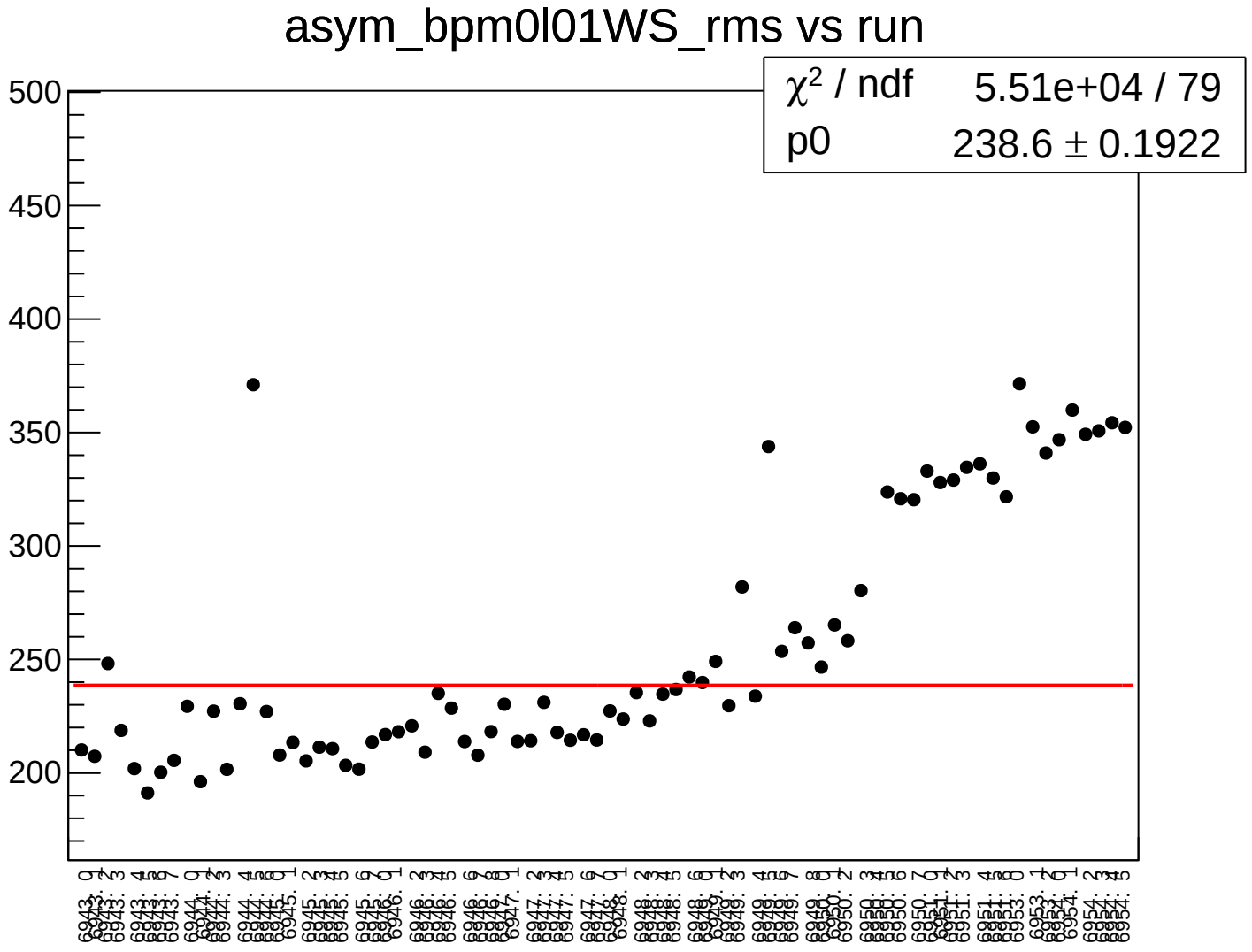

asym_bpm0i01aWS_mean vs run
χ² / ndf 1184 / 79
p0 −2271 ± 138.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean −85.86
Std Dev 181.5
12
10
8
6
4
2
0
−2
−4
−6

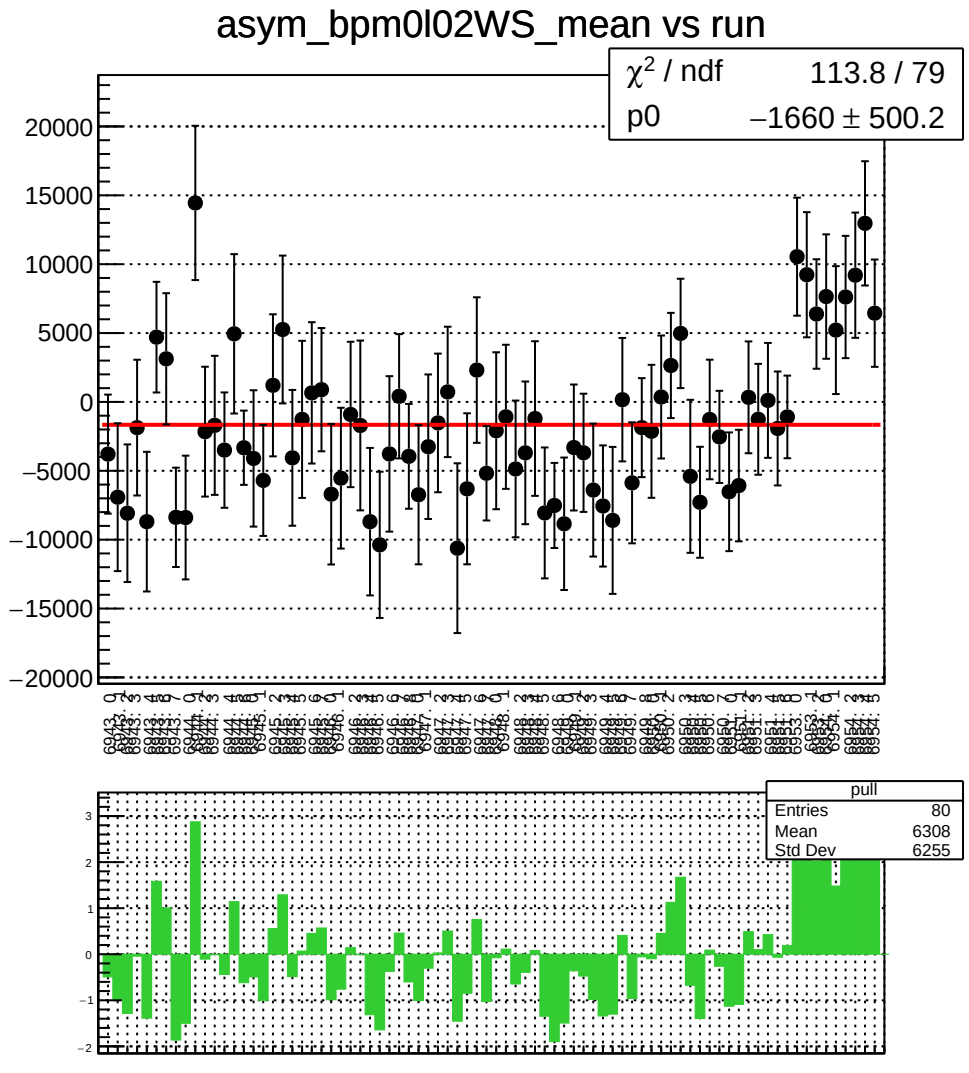

pull1D
Entries 80
Mean −0.628
Std Dev 2.948
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

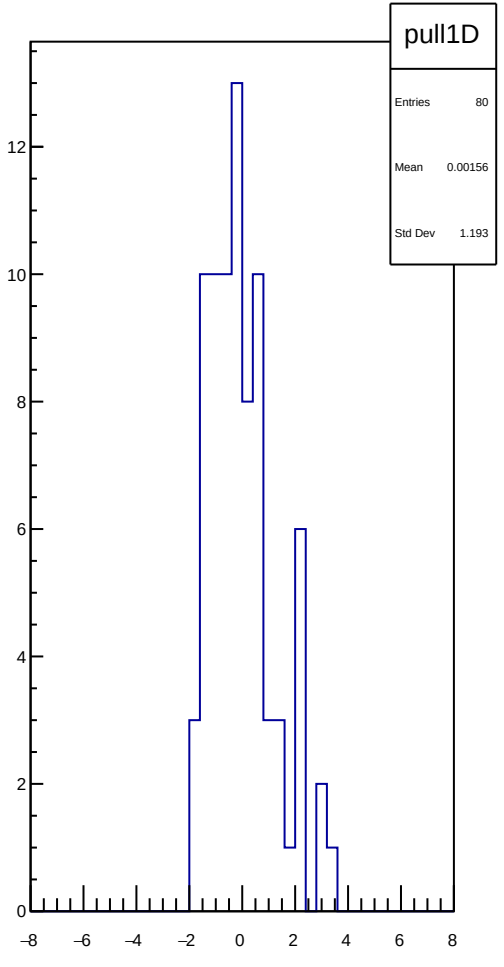

asym_bpm0i01aWS_rms vs run
χ² / ndf 2.895e+04 / 79
p0 122.4 ± 0.09777
350
300
250
200
150
100

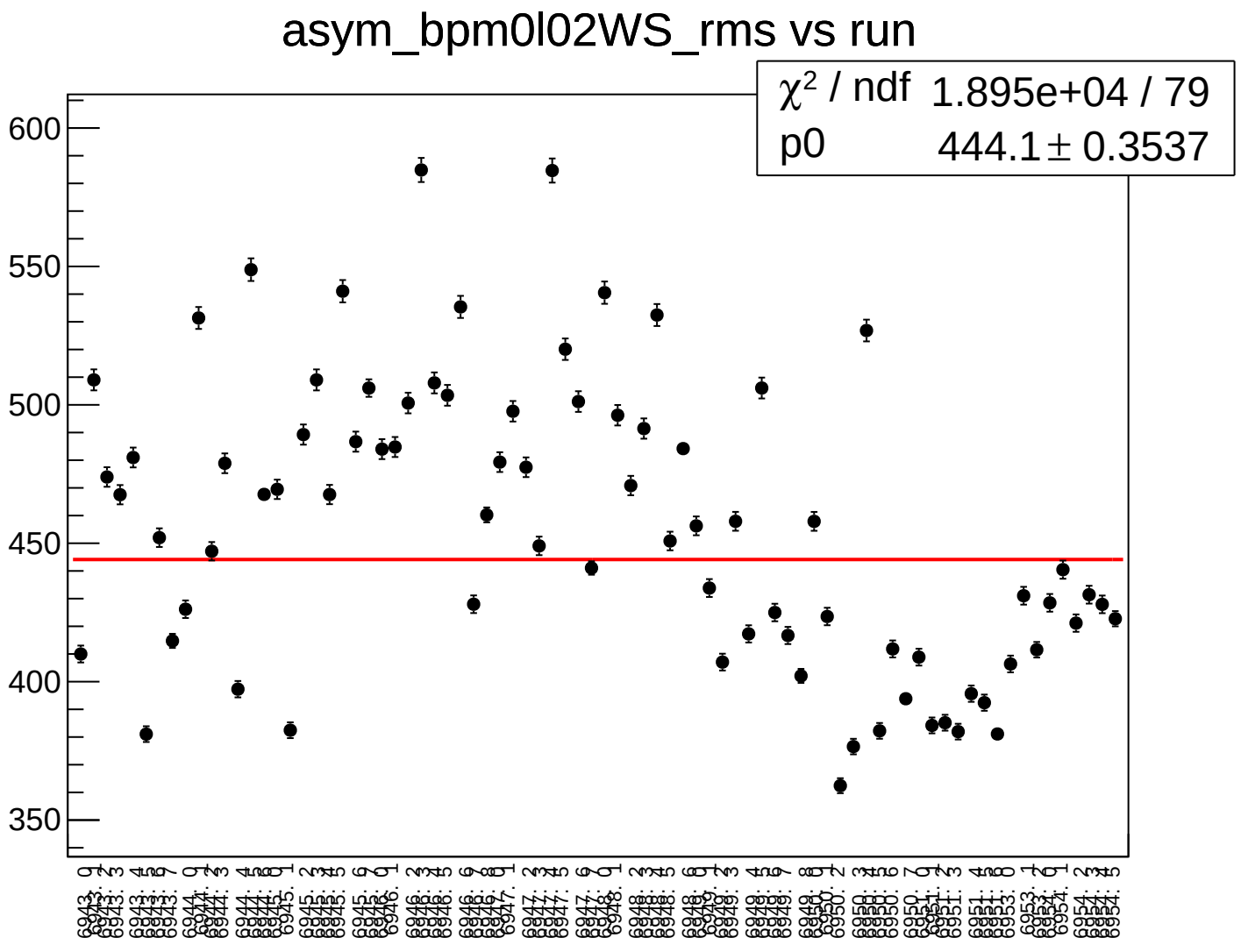

asym_bpm0l01WS_mean vs run
χ² / ndf 104 / 79
p0 −2311 ± 271.8
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 189.6
Std Dev 140.4
4
3
2
1
0
−1
−2

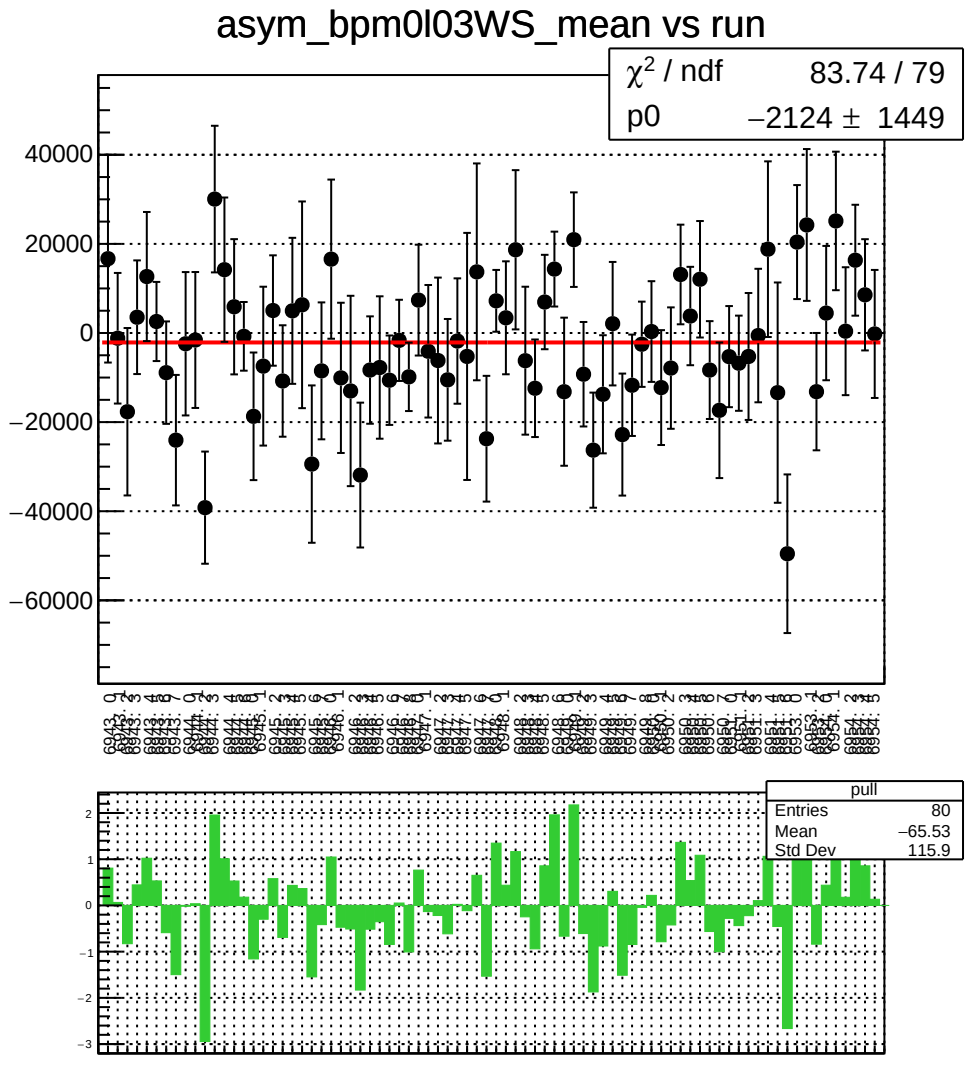

pull1D
Entries 80
Mean 0.07297
Std Dev 1.138
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

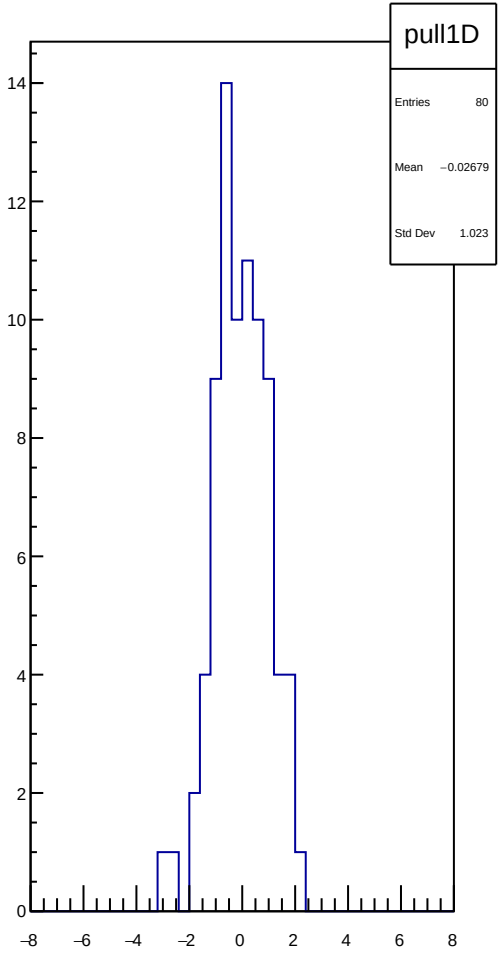

asym_bpm0l01WS_rms vs run
χ² / ndf 5.51e+04 / 79
p0 238.6 ± 0.1922
500
450
400
350
300
250
200

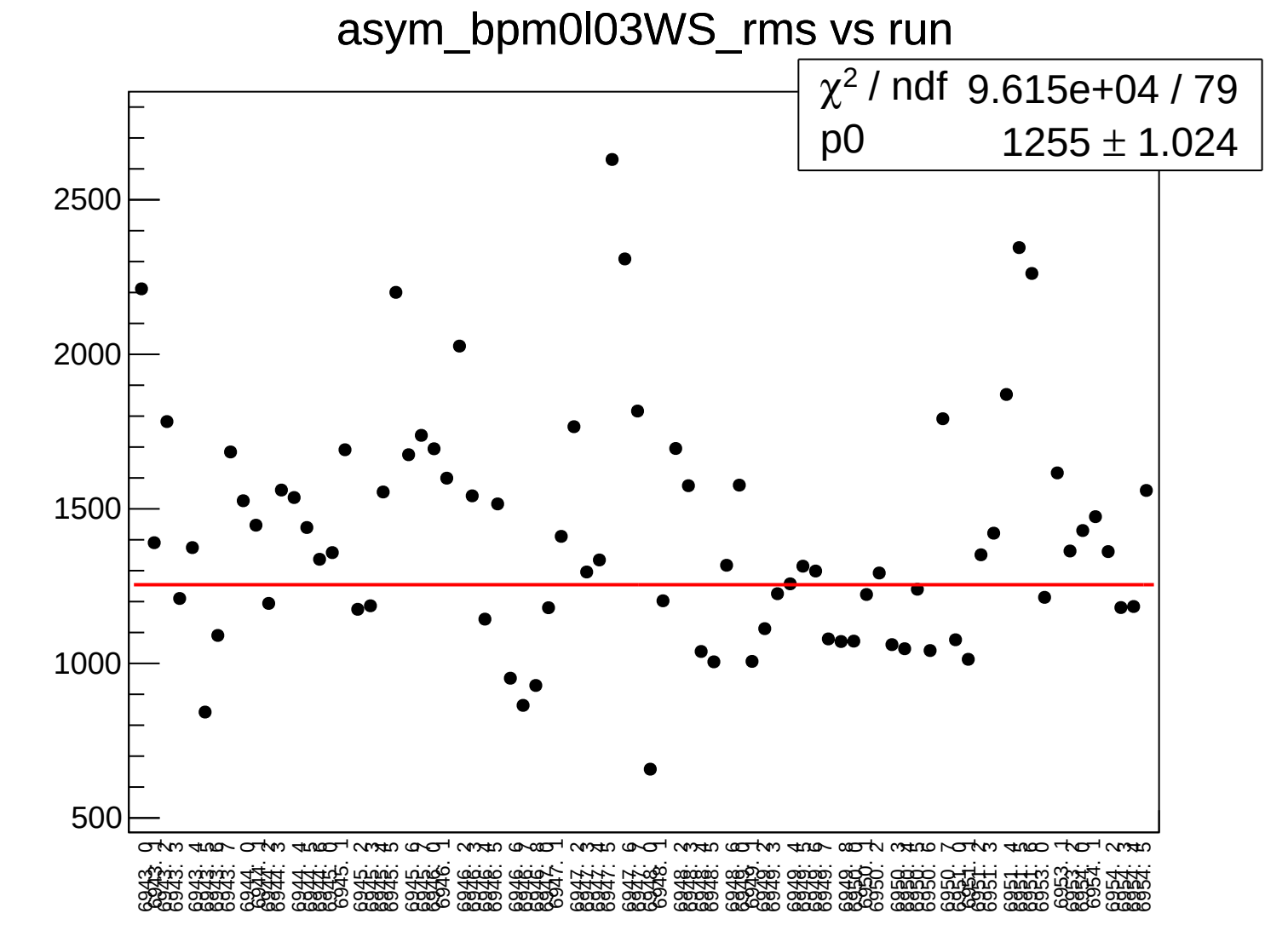

asym_bpm0l02WS_mean vs run
χ² / ndf 113.8 / 79
p0 −1660 ± 500.2
pull
Entries 80
Mean 6308
Std Dev 6255

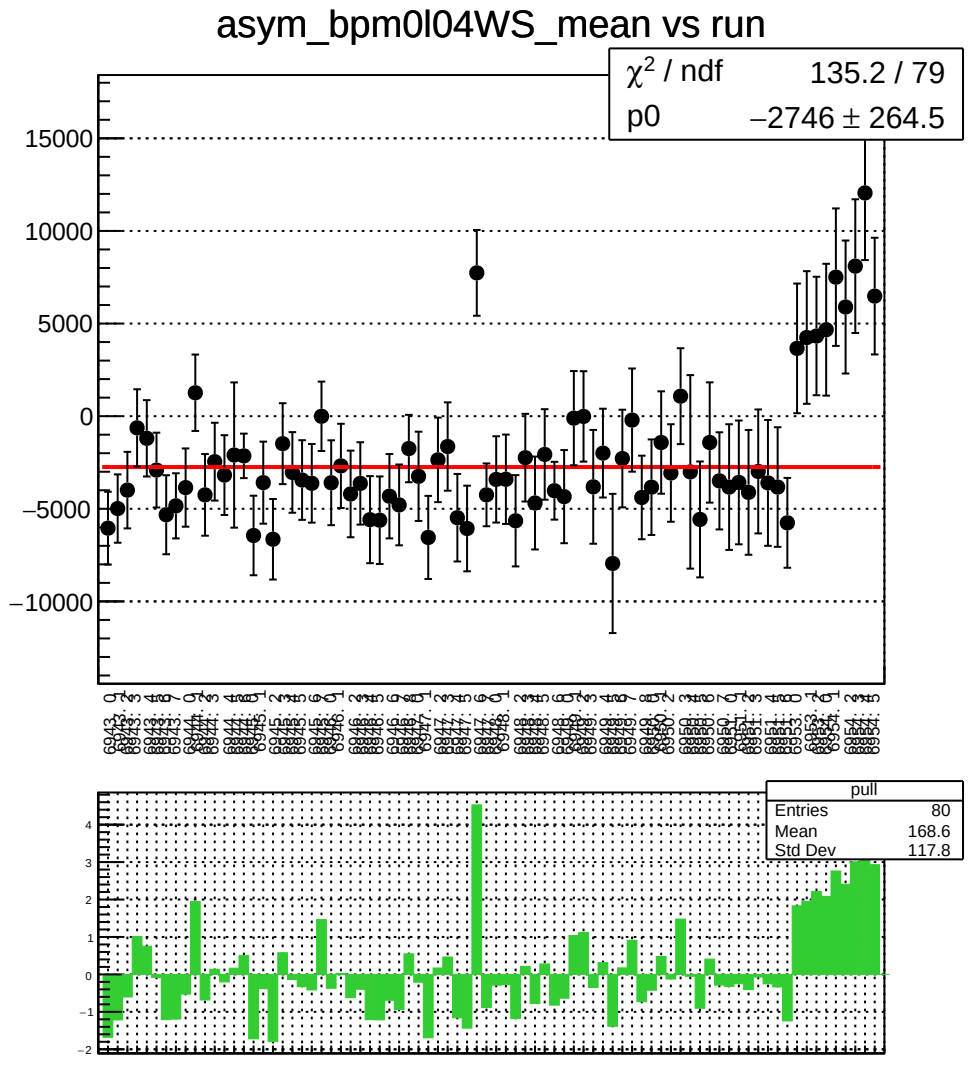

pull1D
Entries 80
Mean 0.00156
Std Dev 1.193

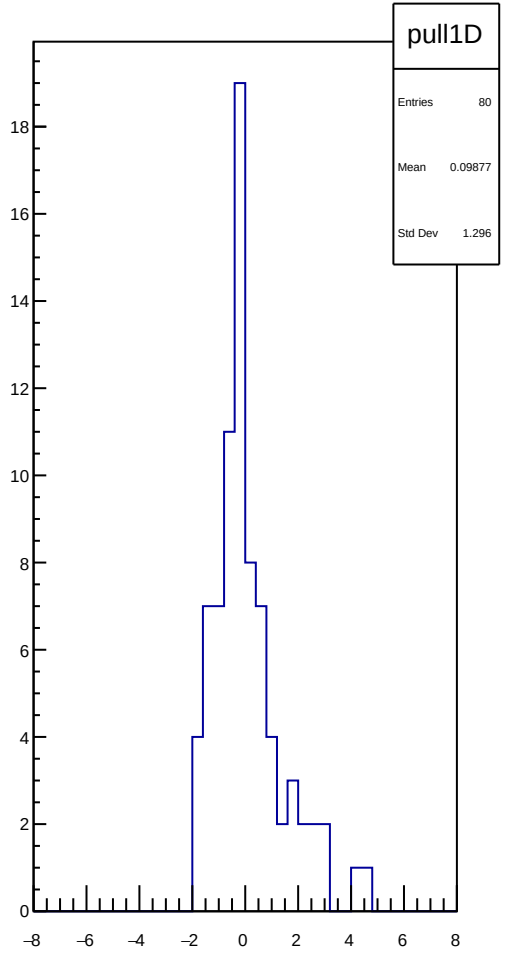

asym_bpm0l02WS_rms vs run
χ² / ndf 1.895e+04 / 79
p0 444.1 ± 0.3537
600
550
500
450
400
350

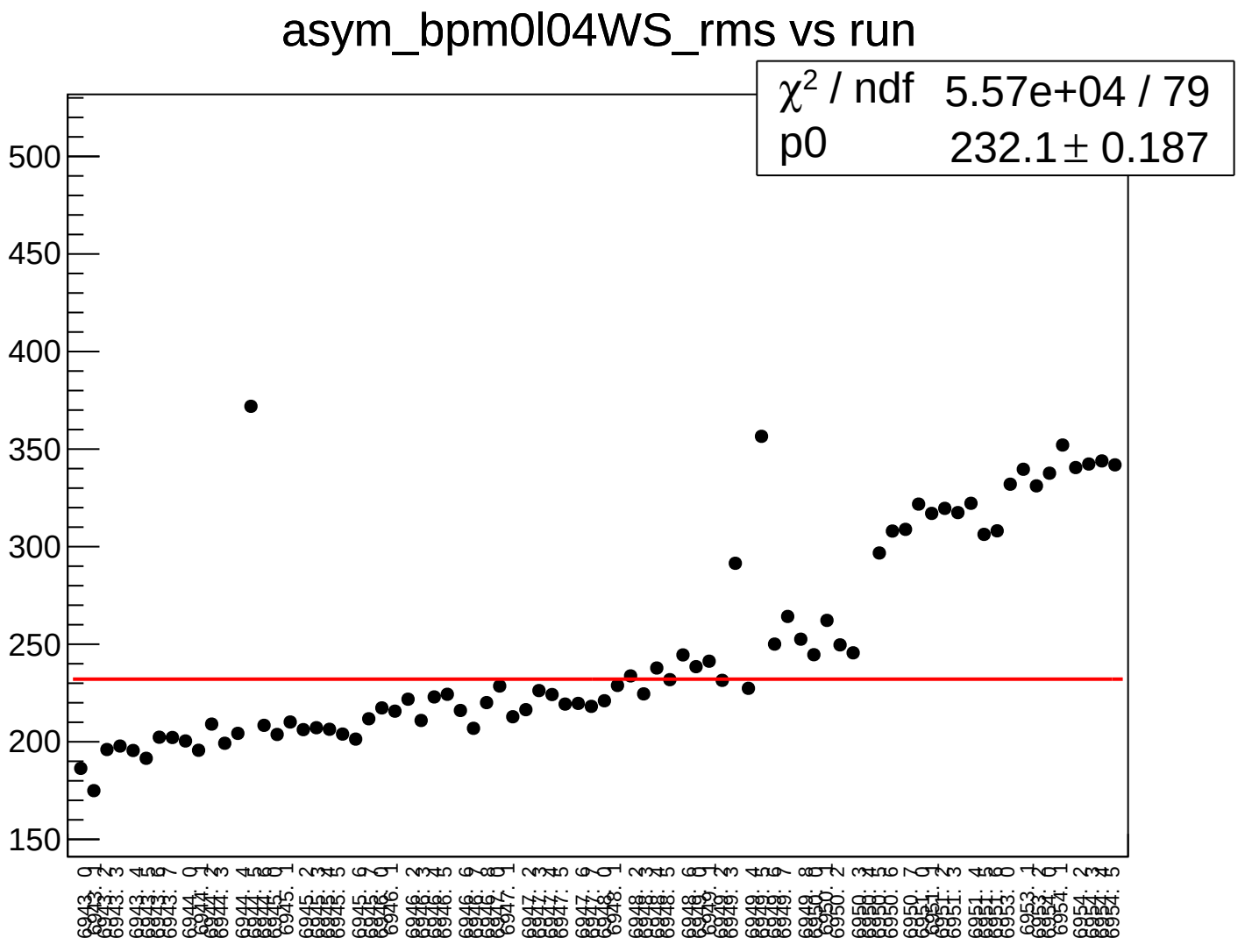

asym_bpm0l03WS_mean vs run
χ² / ndf 83.74 / 79
p0 −2124 ± 1449
40000
20000
0
−20000
−40000
−60000
pull
Entries 80
Mean −65.53
Std Dev 115.9
2
1
0
−1
−2
−3

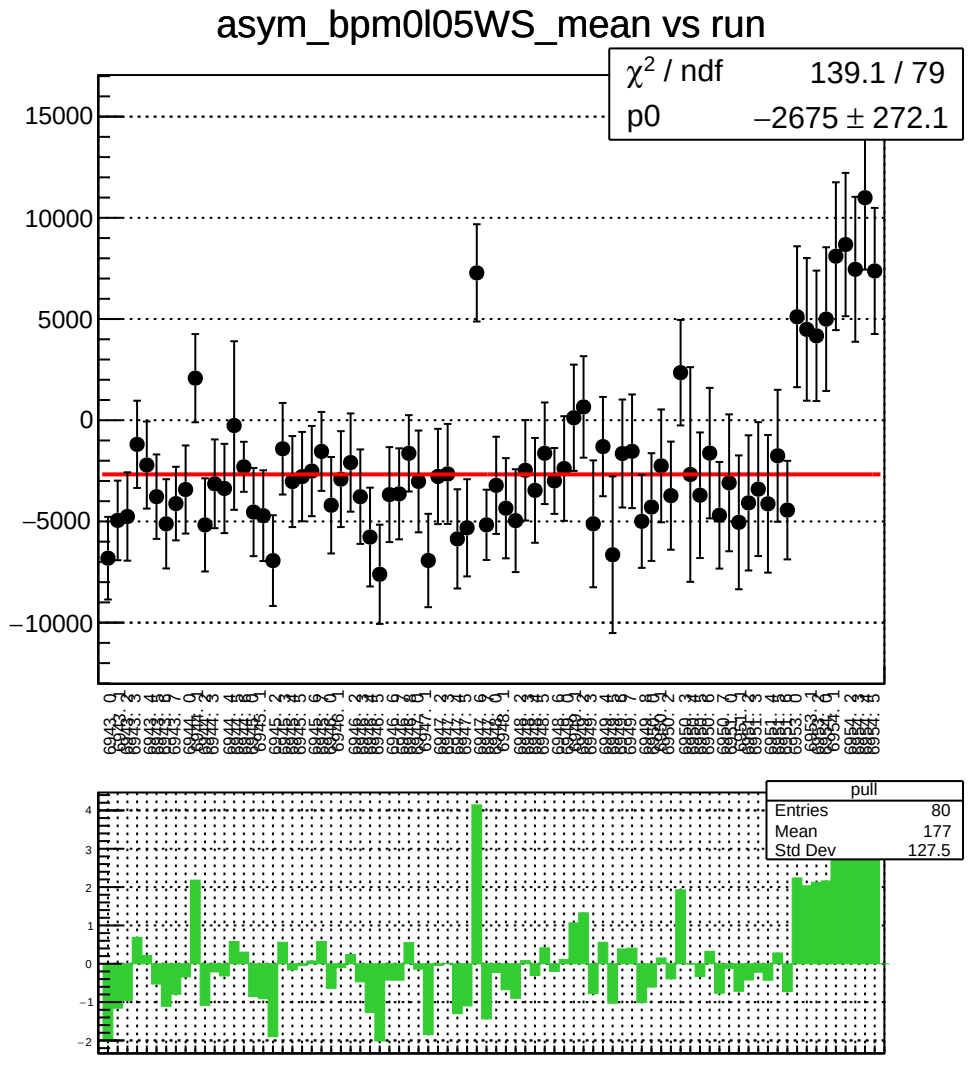

pull1D
Entries 80
Mean −0.02679
Std Dev 1.023
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

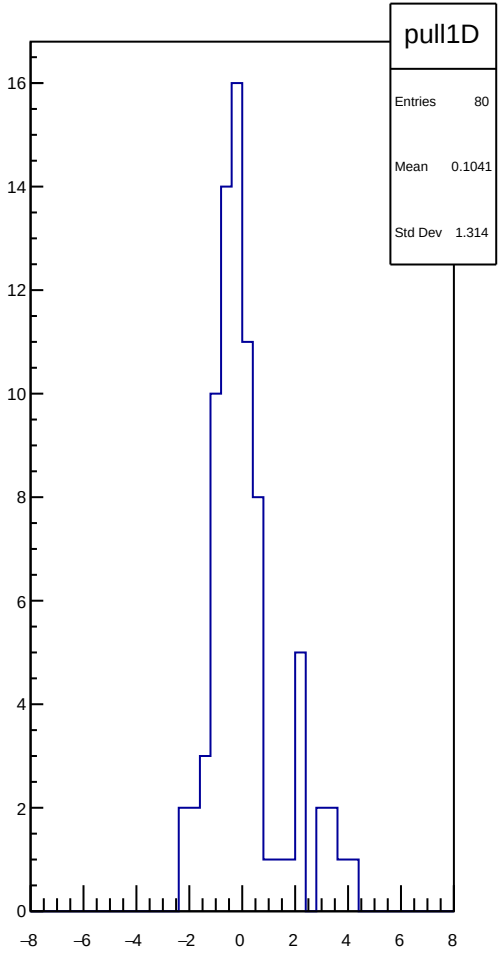

asym_bpm0l03WS_rms vs run
χ^2 / ndf 9.615e+04 / 79
p0 1255 ± 1.024
2500
2000
1500
1000
500

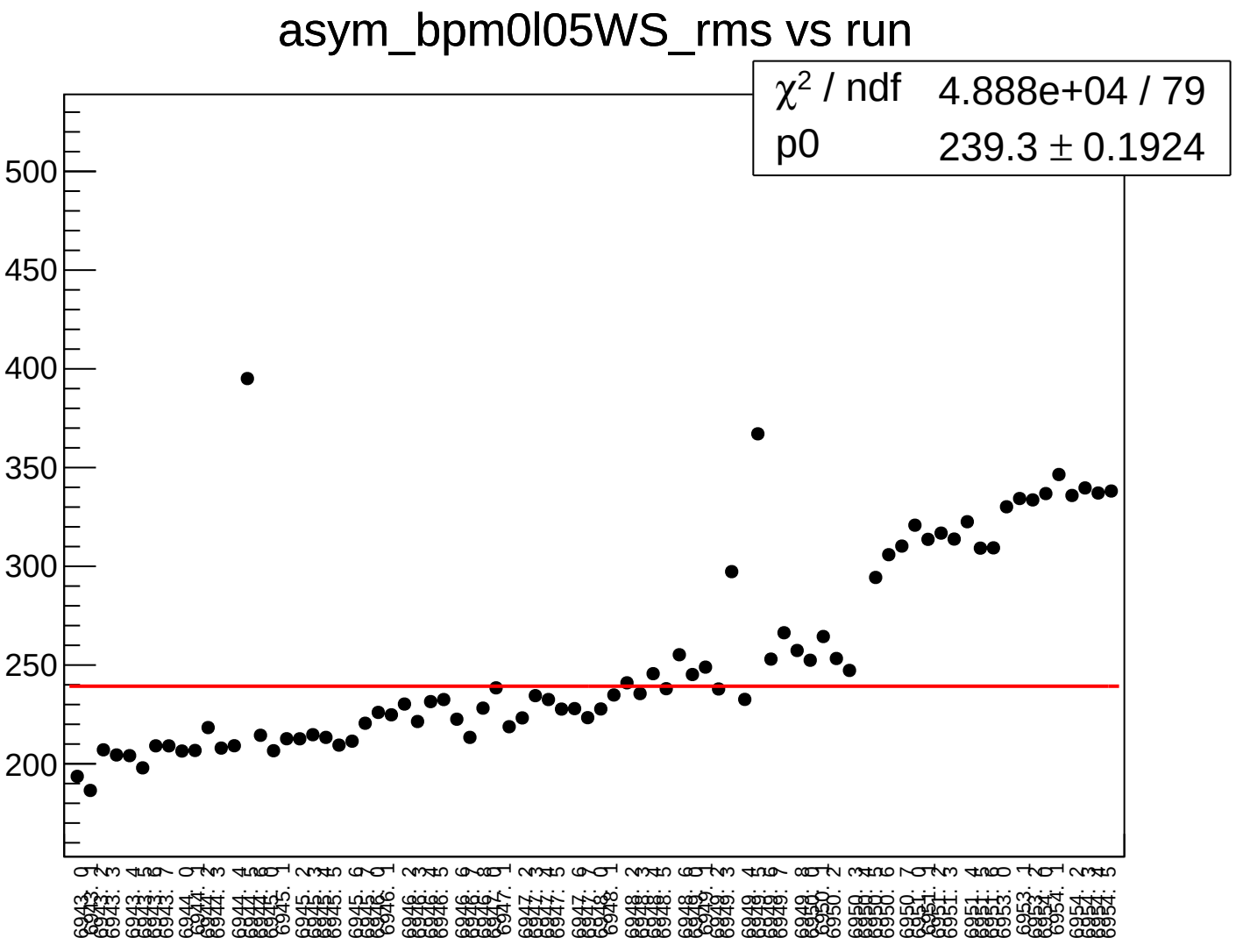

asym_bpm0l04WS_mean vs run
χ² / ndf 135.2 / 79
p0 −2746 ± 264.5
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 168.6
Std Dev 117.8
4
3
2
1
0
−1
−2

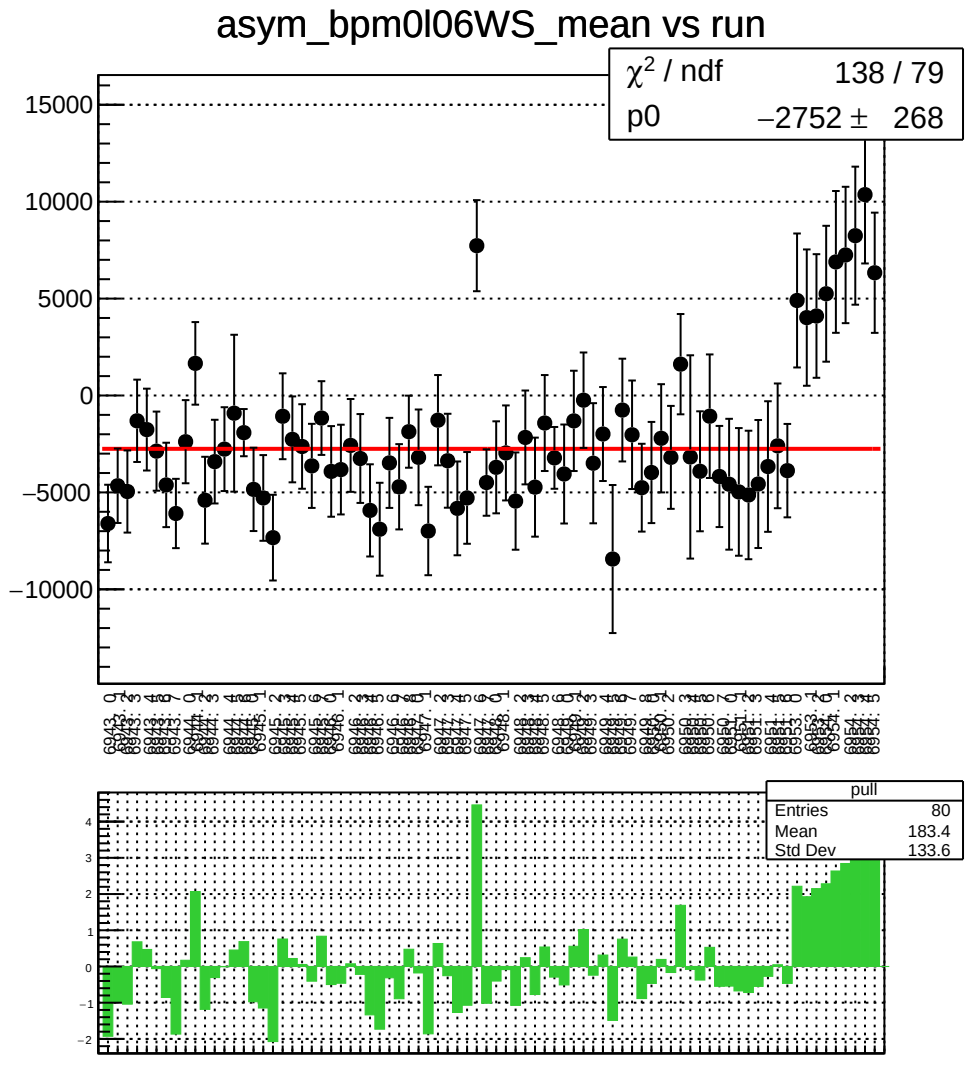

pull1D
Entries 80
Mean 0.09877
Std Dev 1.296
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

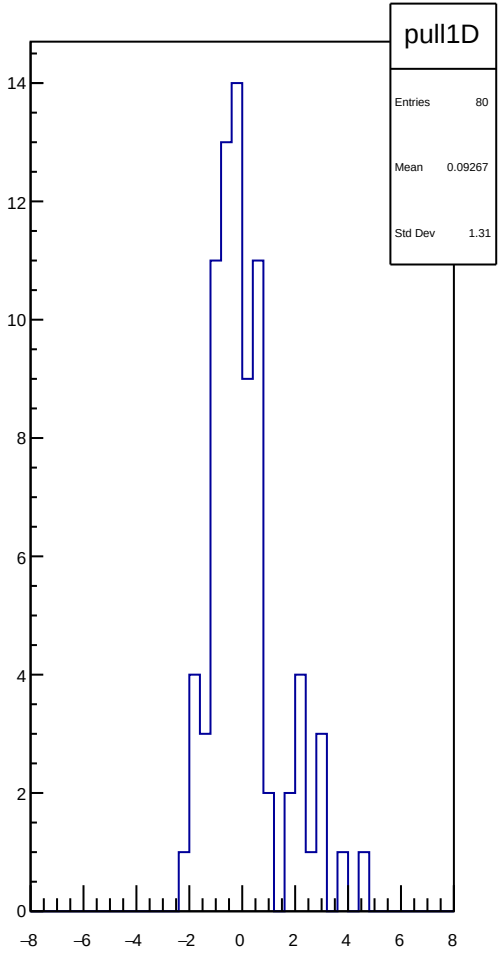

asym_bpm0l04WS_rms vs run
χ² / ndf 5.57e+04 / 79
p0 232.1 ± 0.187
500
450
400
350
300
250
200
150

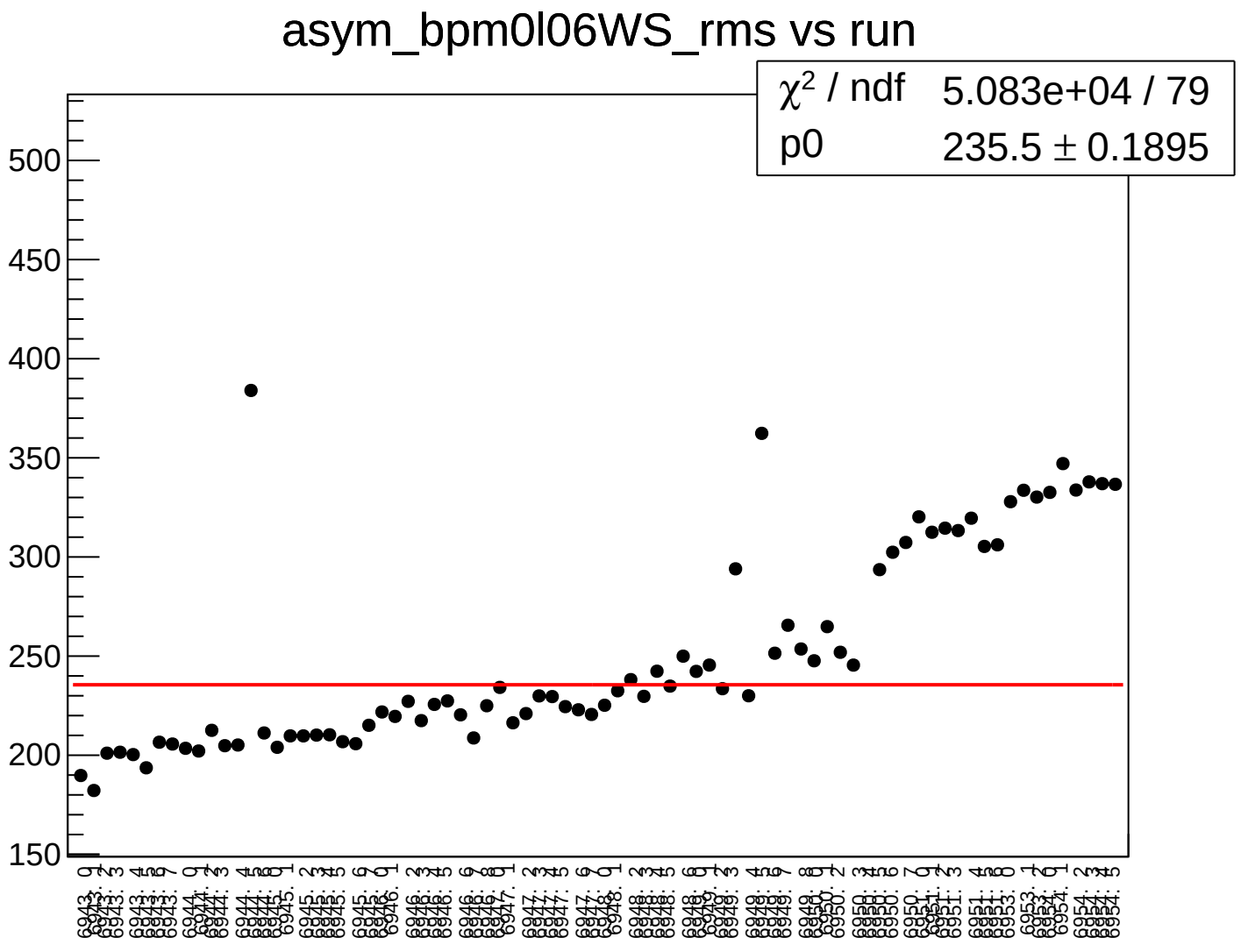

asym_bpm0l05WS_mean vs run
χ² / ndf 139.1 / 79
p0 −2675 ± 272.1
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 177
Std Dev 127.5
4
3
2
1
0
−1
−2

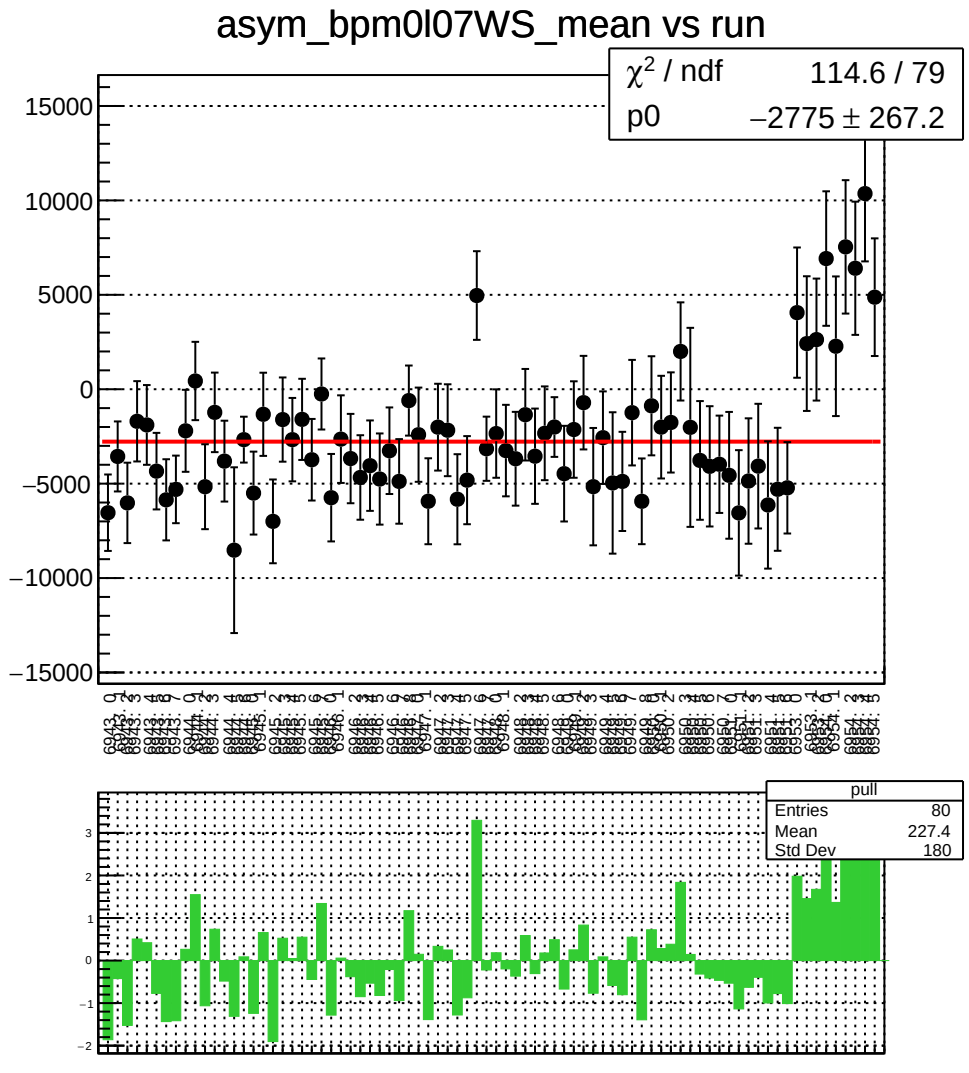

pull1D
Entries 80
Mean 0.1041
Std Dev 1.314
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

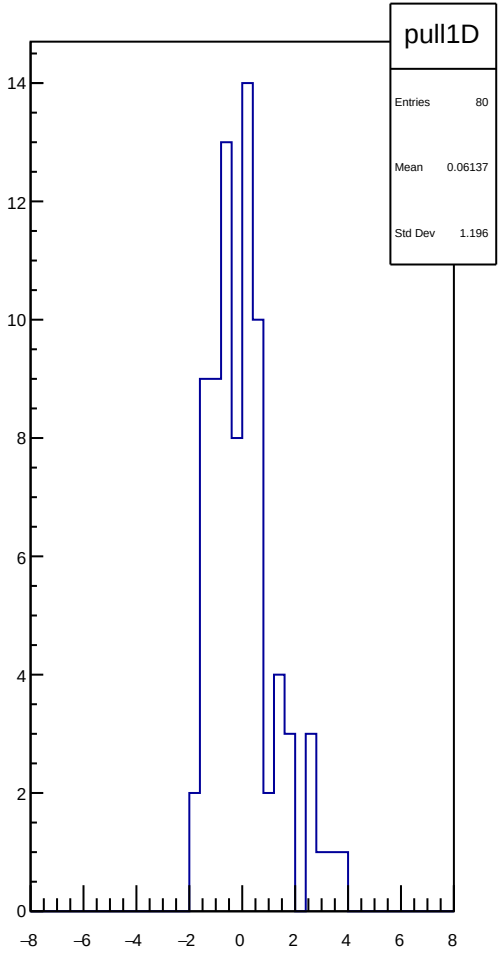

asym_bpm0l05WS_rms vs run
χ² / ndf 4.888e+04 / 79
p0 239.3 ± 0.1924
500
450
400
350
300
250
200

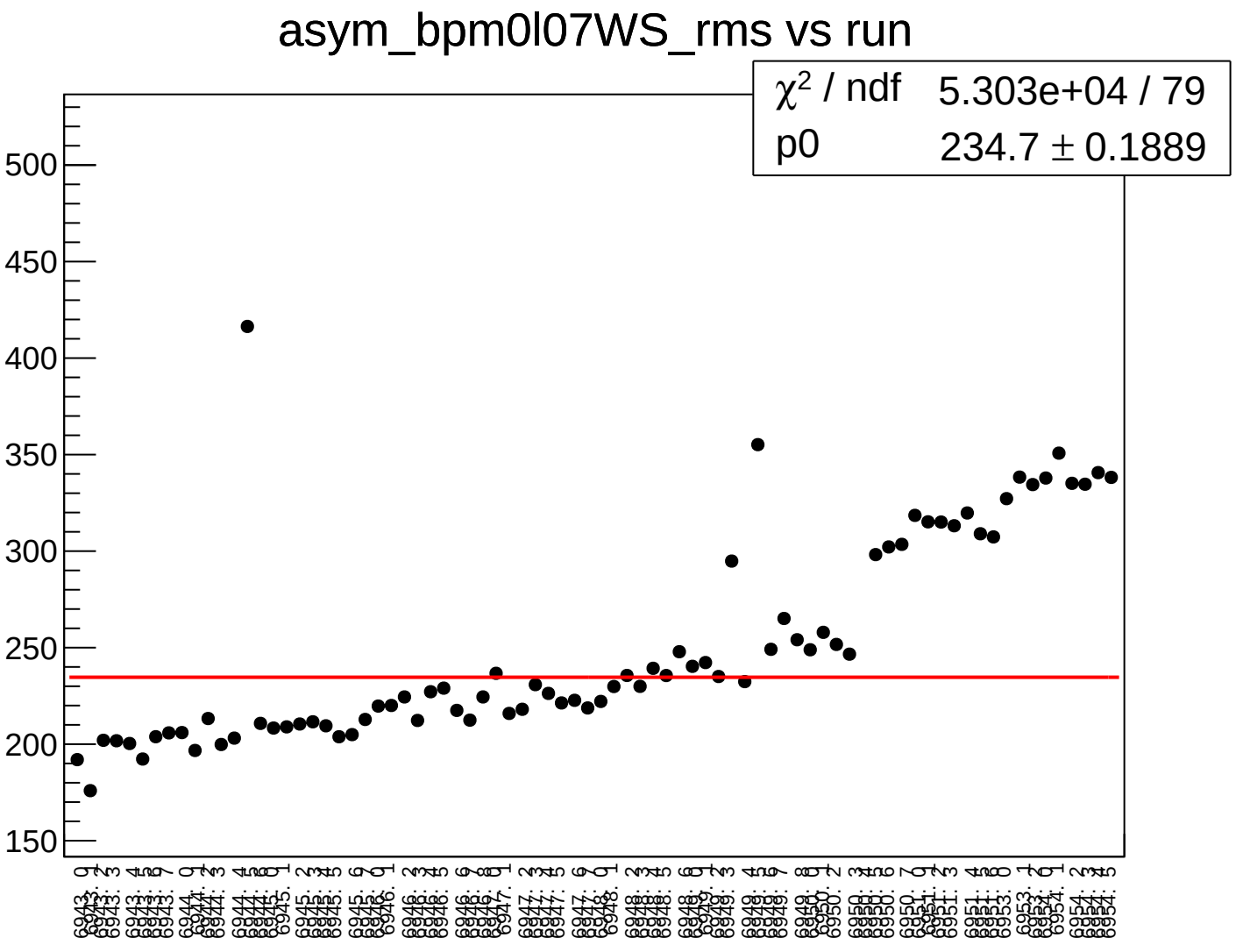

asym_bpm0l06WS_mean vs run
χ² / ndf 138 / 79
p0 −2752 ± 268
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 183.4
Std Dev 133.6
4
3
2
1
0
−1
−2

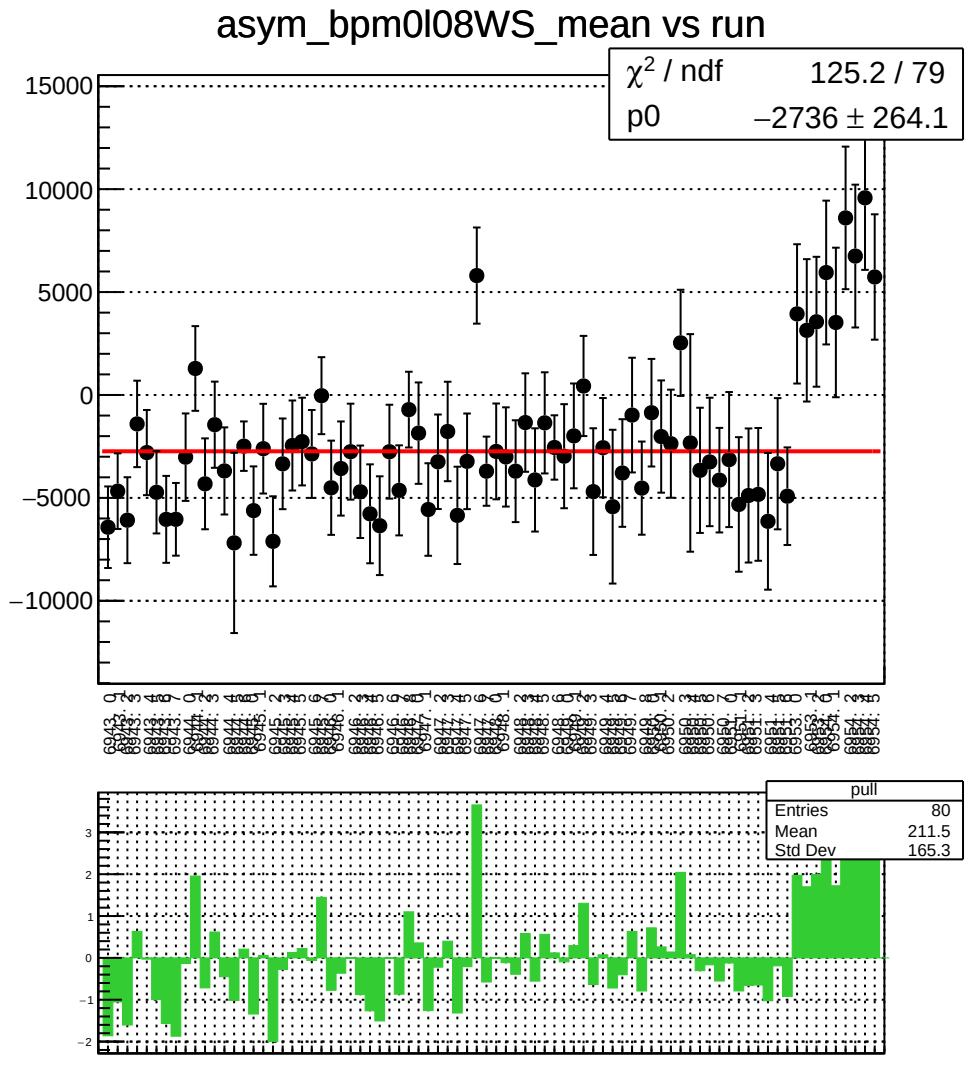

pull1D
Entries 80
Mean 0.09267
Std Dev 1.31
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

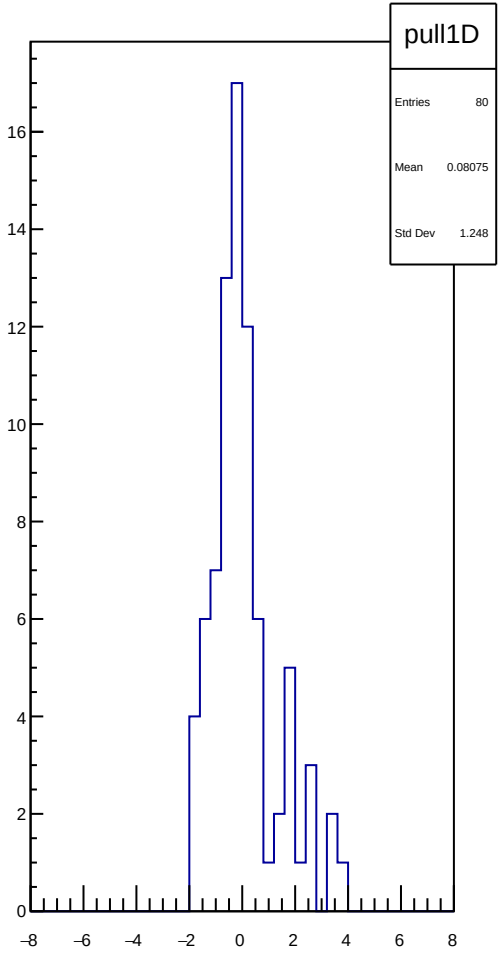

asym_bpm0l06WS_rms vs run
χ² / ndf 5.083e+04 / 79
p0 235.5 ± 0.1895
500
450
400
350
300
250
200
150

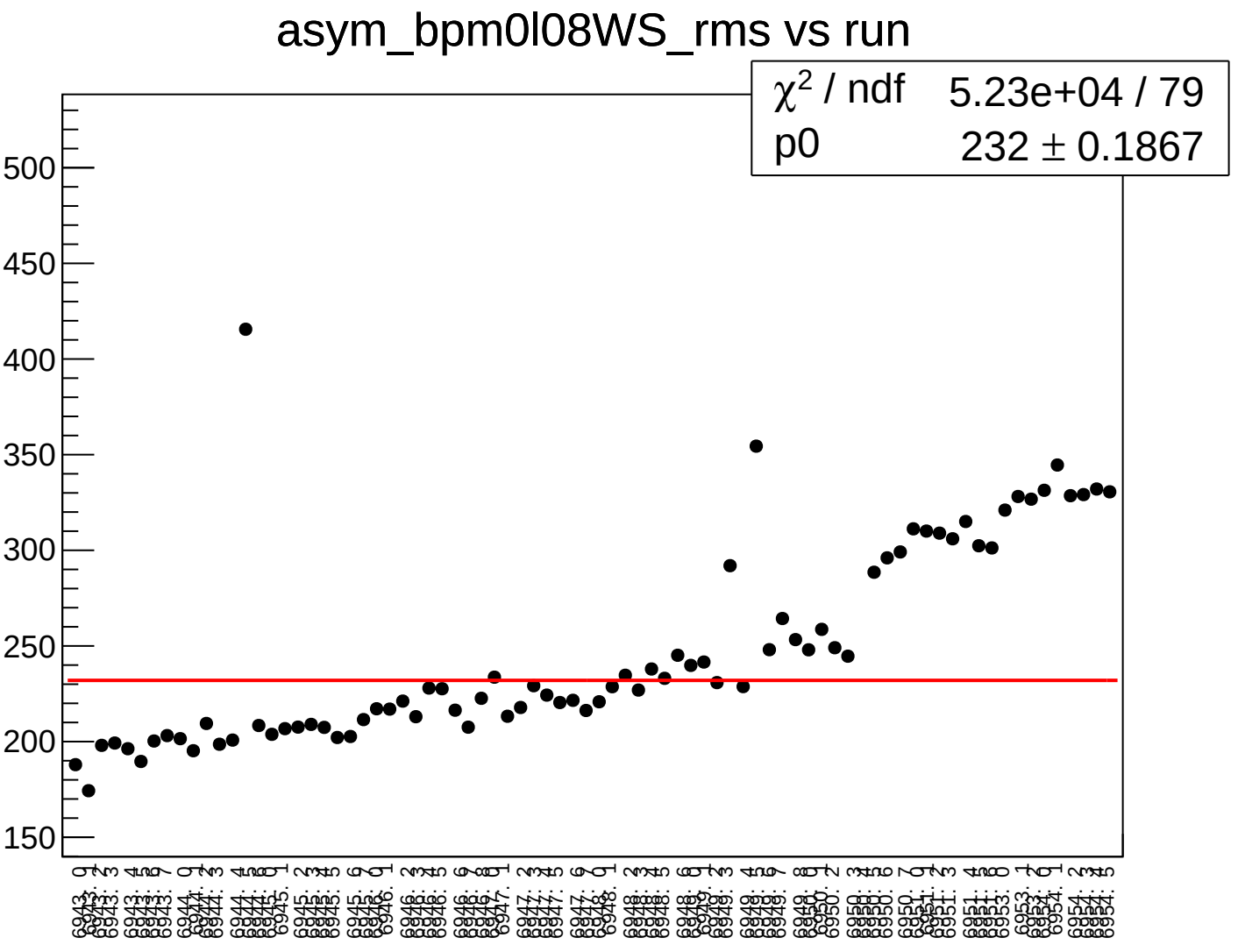

asym_bpm0l07WS_mean vs run
χ² / ndf 114.6 / 79
p0 −2775 ± 267.2
pull
Entries 80
Mean 227.4
Std Dev 180

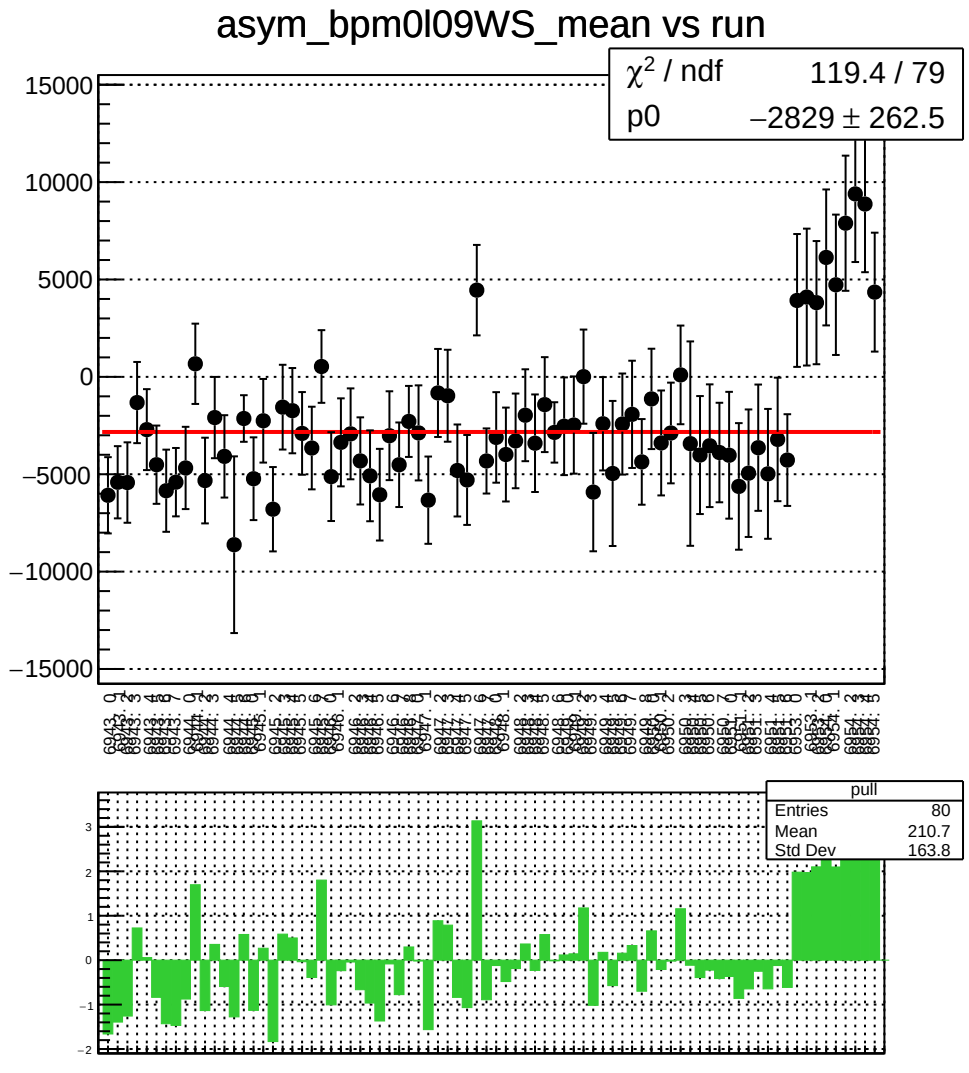

pull1D
Entries 80
Mean 0.06137
Std Dev 1.196

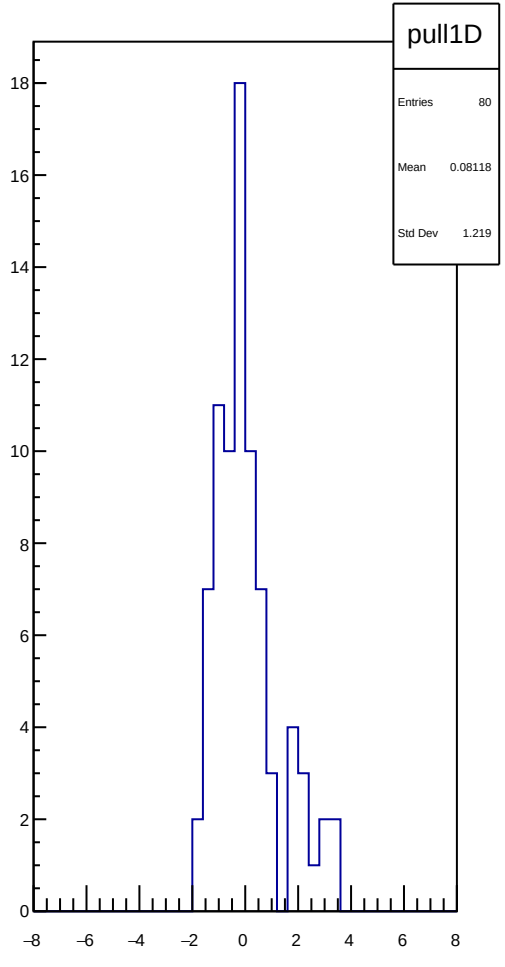

asym_bpm0l07WS_rms vs run
χ² / ndf 5.303e+04 / 79
p0 234.7 ± 0.1889
500
450
400
350
300
250
200
150


asym_bpm0l08WS_mean vs run
χ² / ndf 125.2 / 79
p0 −2736 ± 264.1
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 211.5
Std Dev 165.3
3
2
1
0
−1
−2


pull1D
Entries 80
Mean 0.08075
Std Dev 1.248
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


asym_bpm0l08WS_rms vs run
χ² / ndf 5.23e+04 / 79
p0 232 ± 0.1867
500
450
400
350
300
250
200
150


asym_bpm0l09WS_mean vs run
χ² / ndf 119.4 / 79
p0 −2829 ± 262.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 210.7
Std Dev 163.8
3
2
1
0
−1
−2


pull1D
Entries 80
Mean 0.08118
Std Dev 1.219
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
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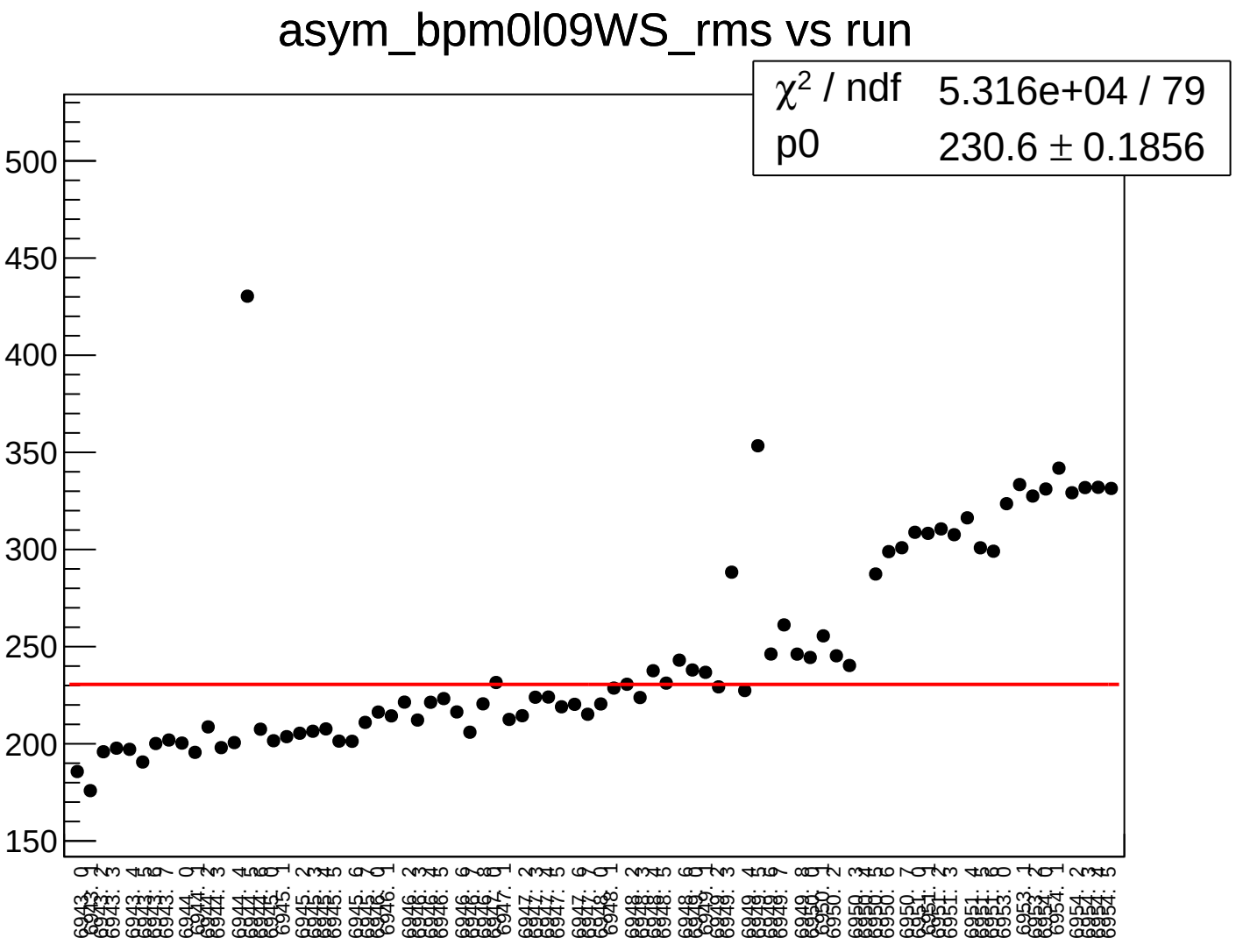
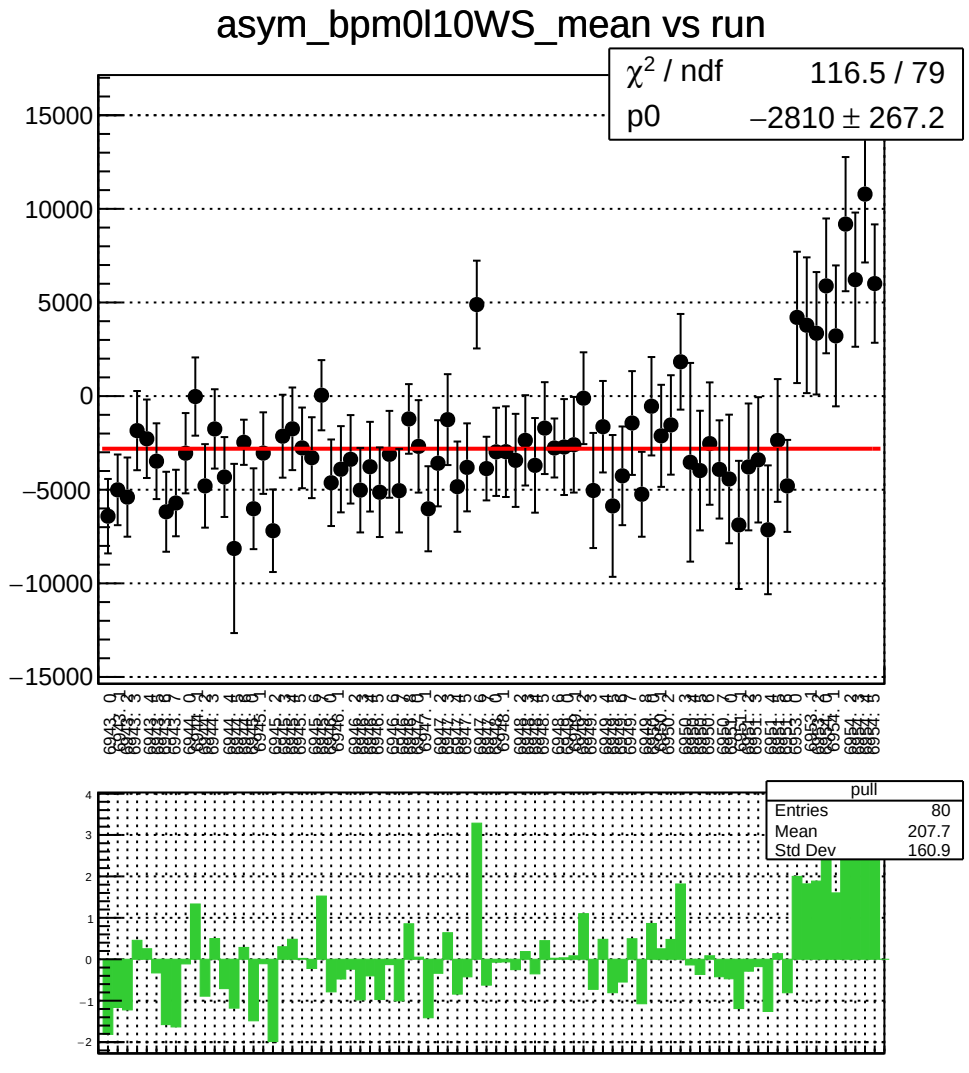
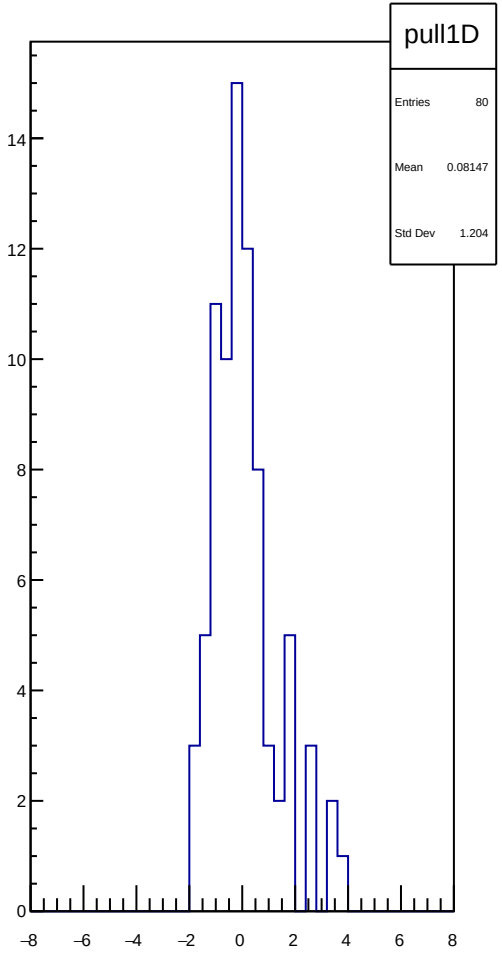
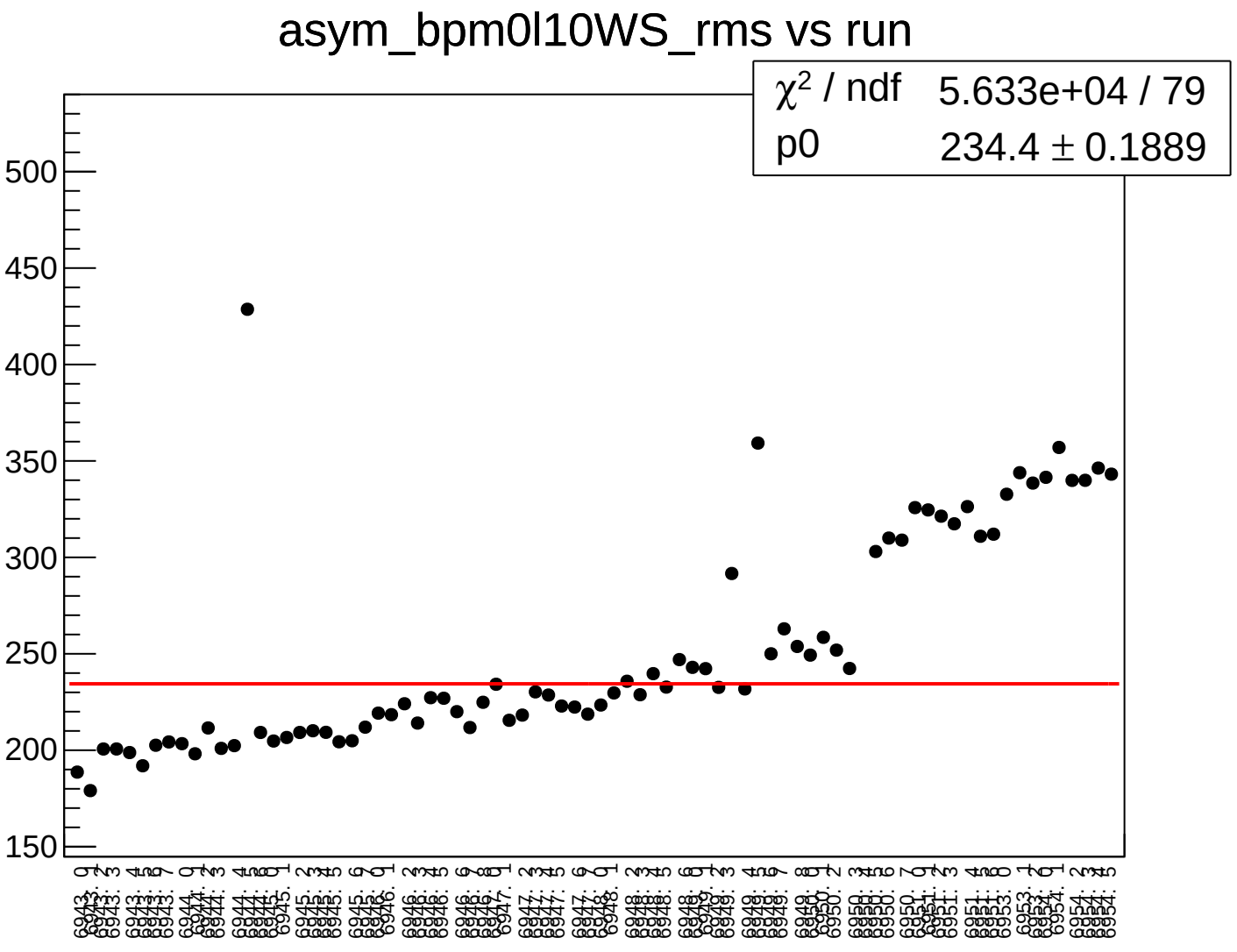
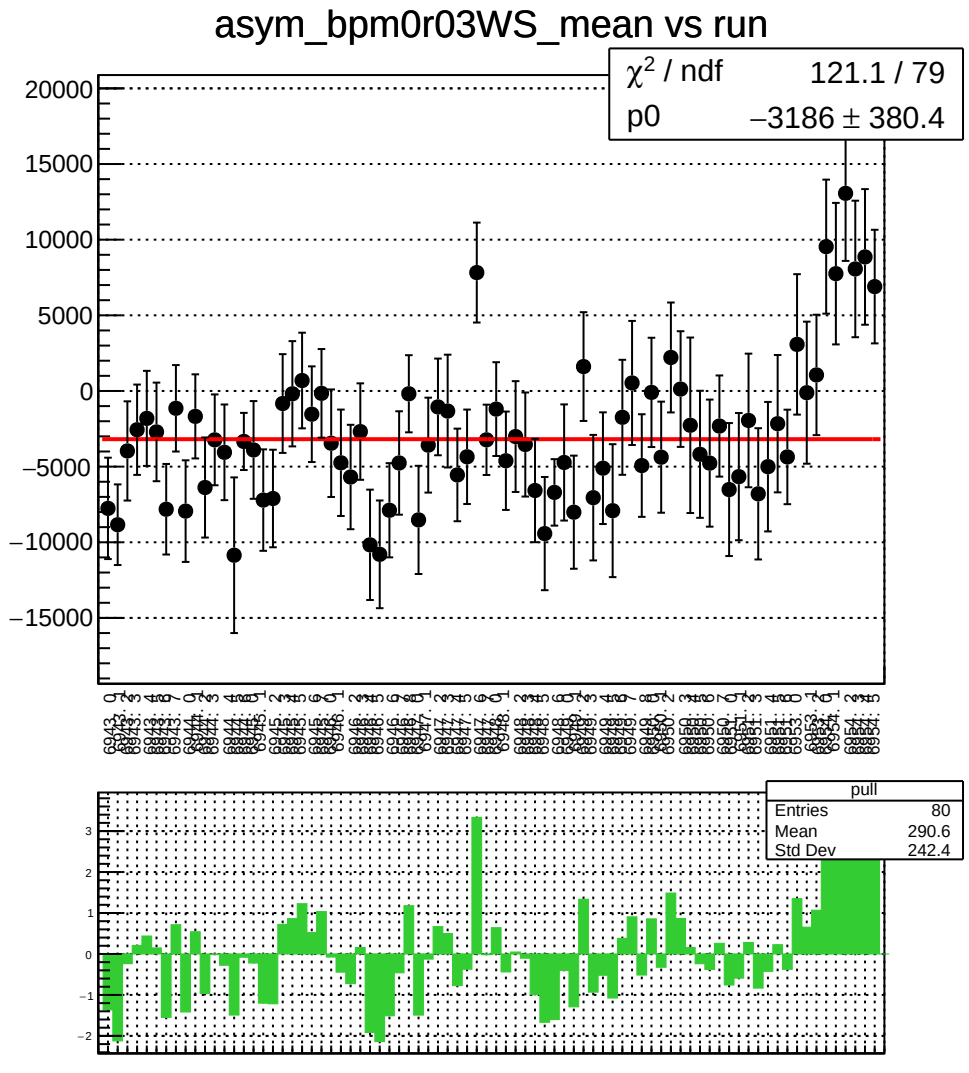
0
2
4
6
8

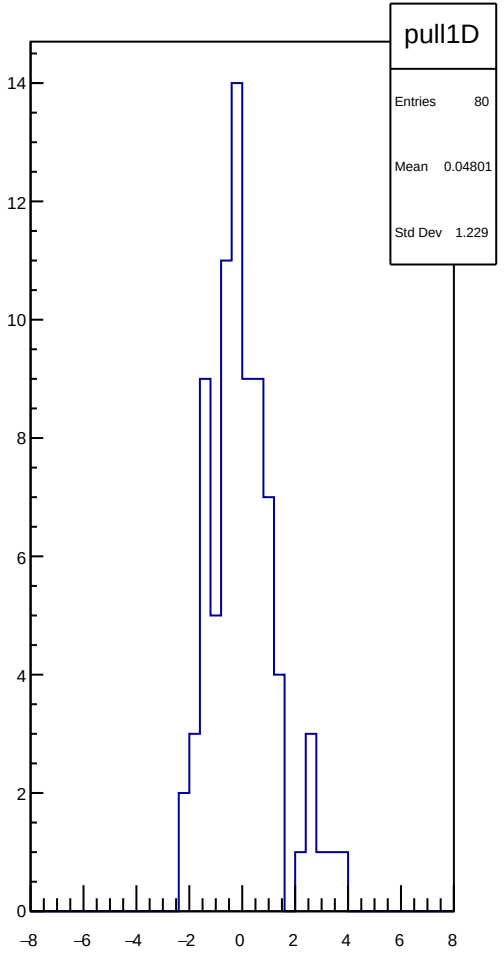

asym_bpm0l09WS_rms vs run
χ² / ndf 5.316e+04 / 79
p0 230.6 ± 0.1856
500
450
400
350
300
250
200
150

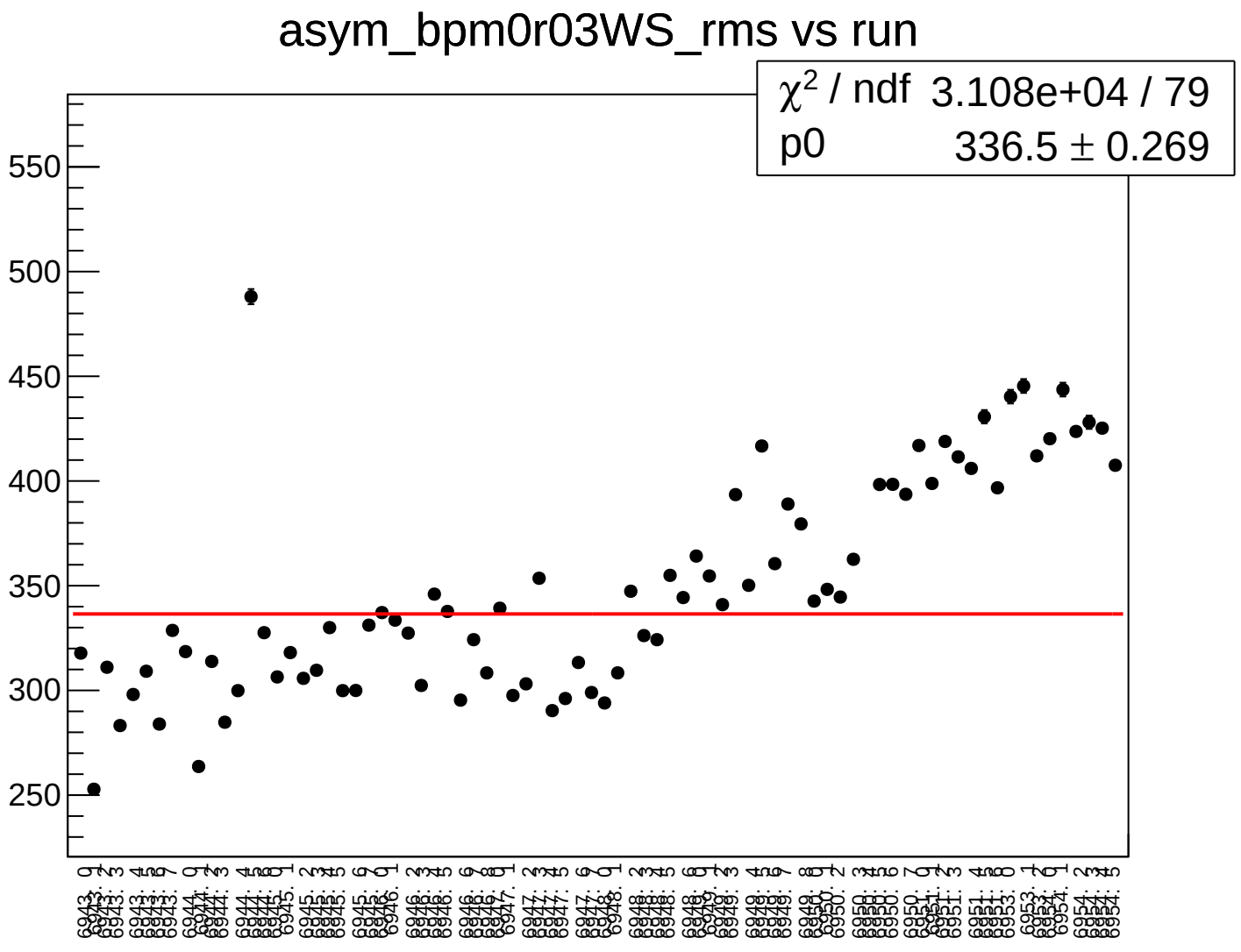

asym_bpm0l10WS_mean vs run
χ² / ndf 116.5 / 79
p0 −2810 ± 267.2
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 207.7
Std Dev 160.9
4
3
2
1
0
−1
−2

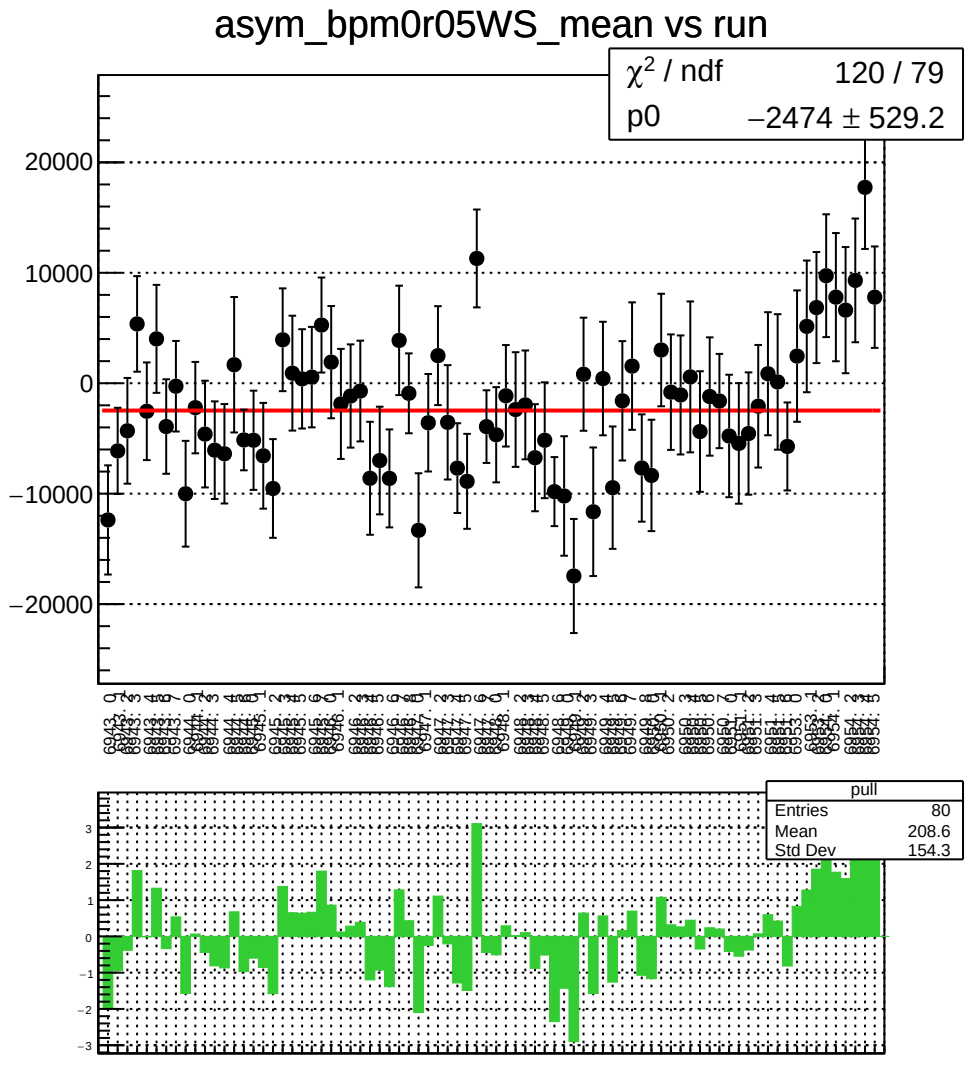

pull1D
Entries 80
Mean 0.08147
Std Dev 1.204
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

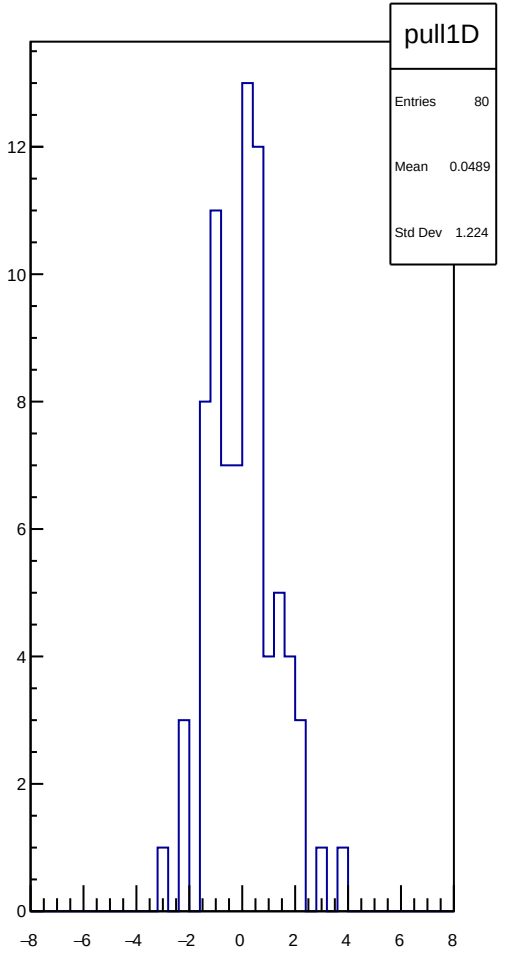

asym_bpm0l10WS_rms vs run
χ² / ndf 5.633e+04 / 79
p0 234.4 ± 0.1889
500
450
400
350
300
250
200
150

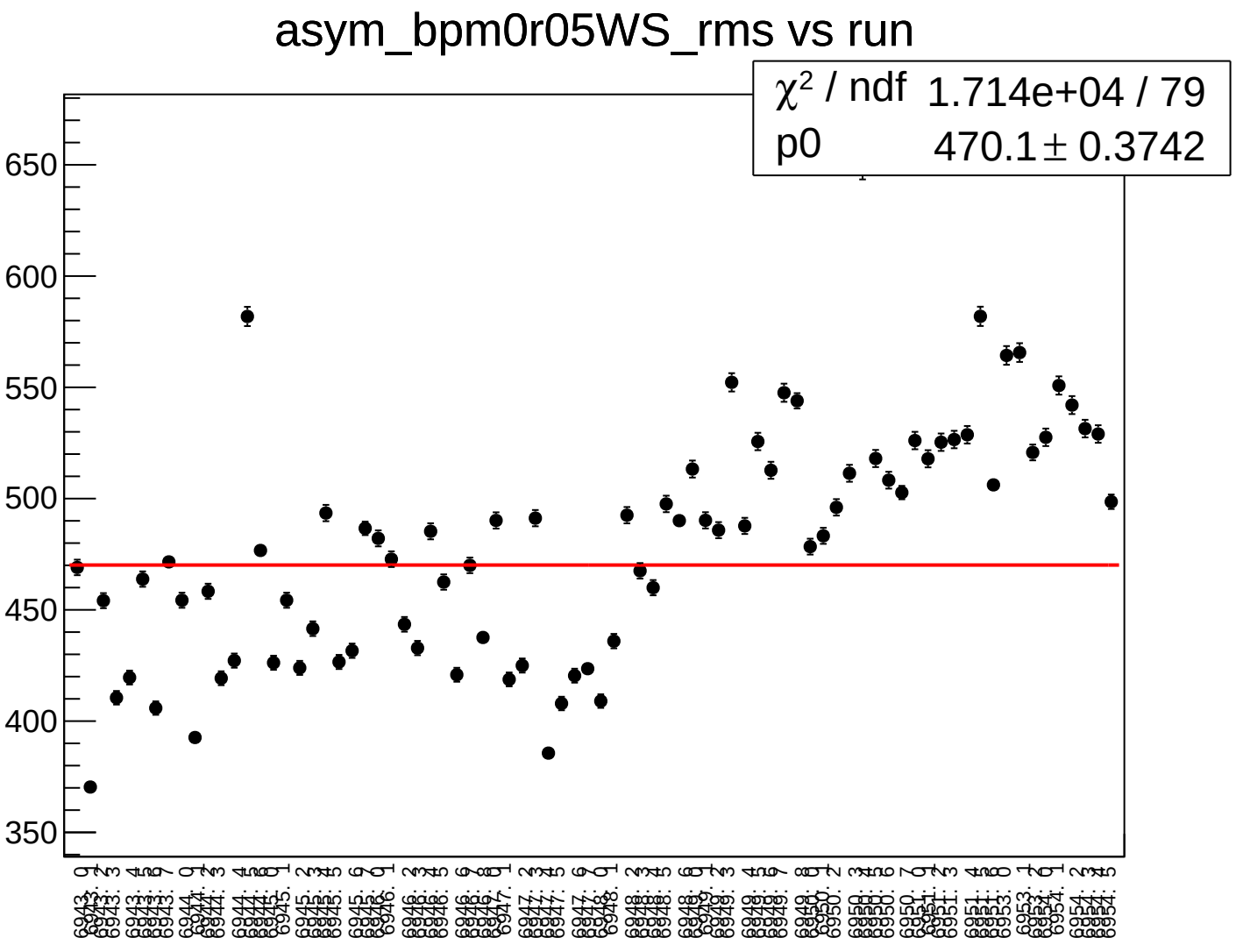

asym_bpm0r03WS_mean vs run
χ² / ndf 121.1 / 79
p0 −3186 ± 380.4
pull
Entries 80
Mean 290.6
Std Dev 242.4

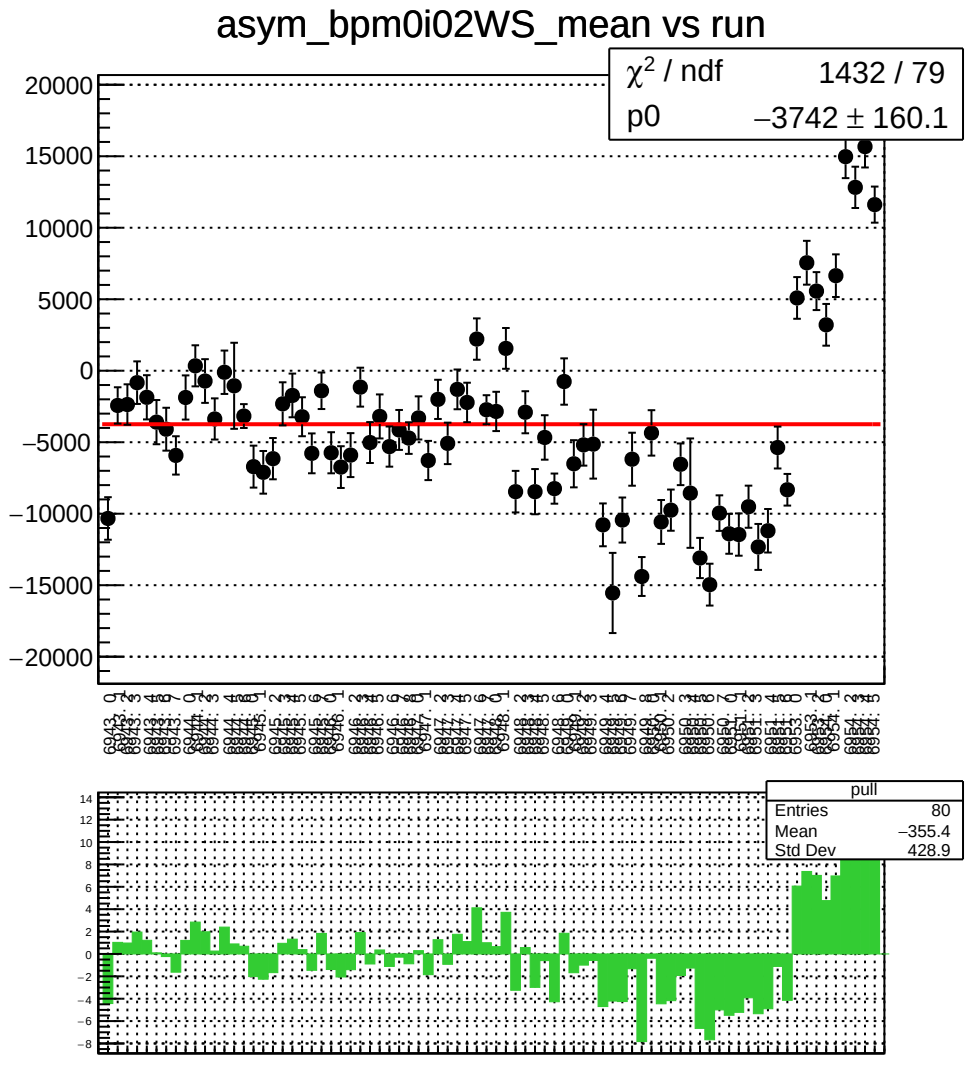

pull1D
Entries 80
Mean 0.04801
Std Dev 1.229

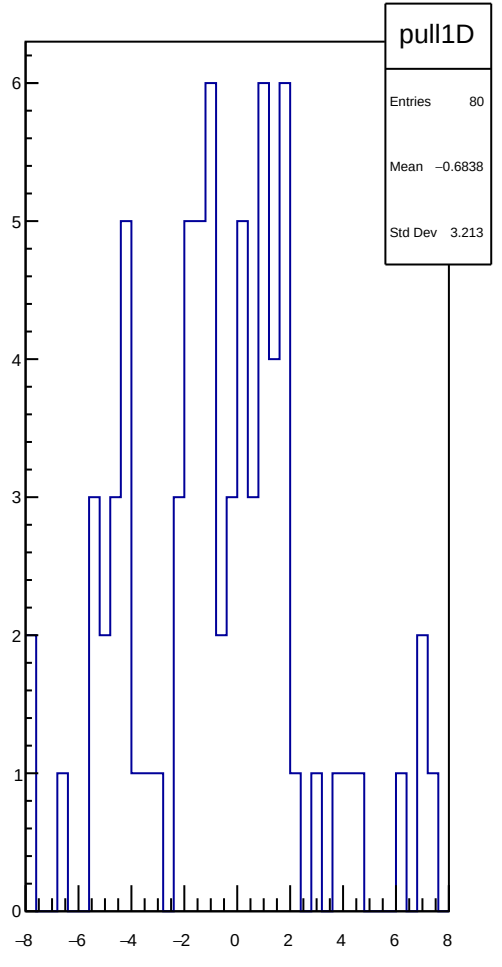

asym_bpm0r03WS_rms vs run
χ^2 / ndf 3.108e+04 / 79
p0 336.5 ± 0.269
550
500
450
400
350
300
250

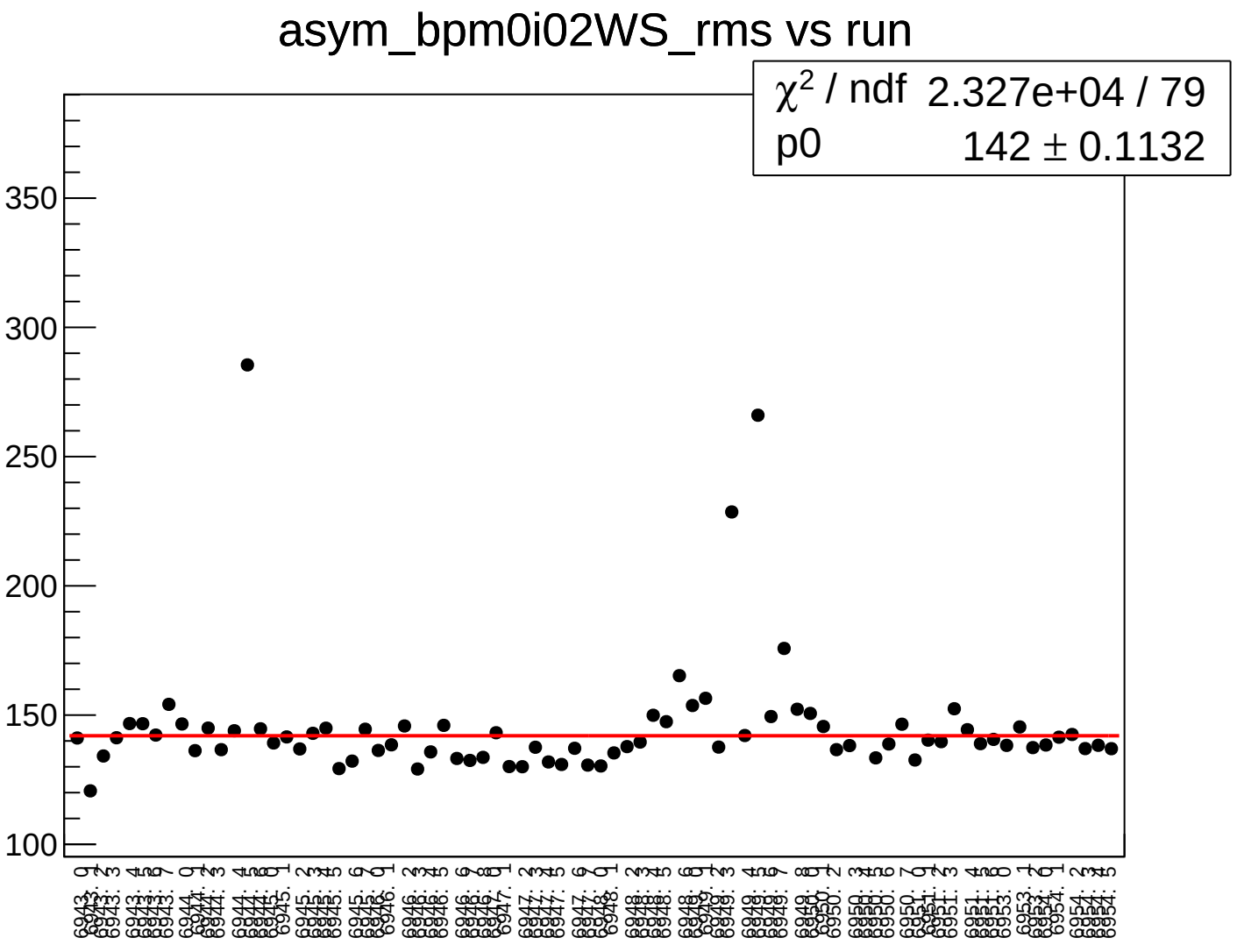

asym_bpm0r05WS_mean vs run
χ² / ndf 120 / 79
p0 −2474 ± 529.2
20000
10000
0
−10000
−20000
pull
Entries 80
Mean 208.6
Std Dev 154.3
3
2
1
0
−1
−2
−3

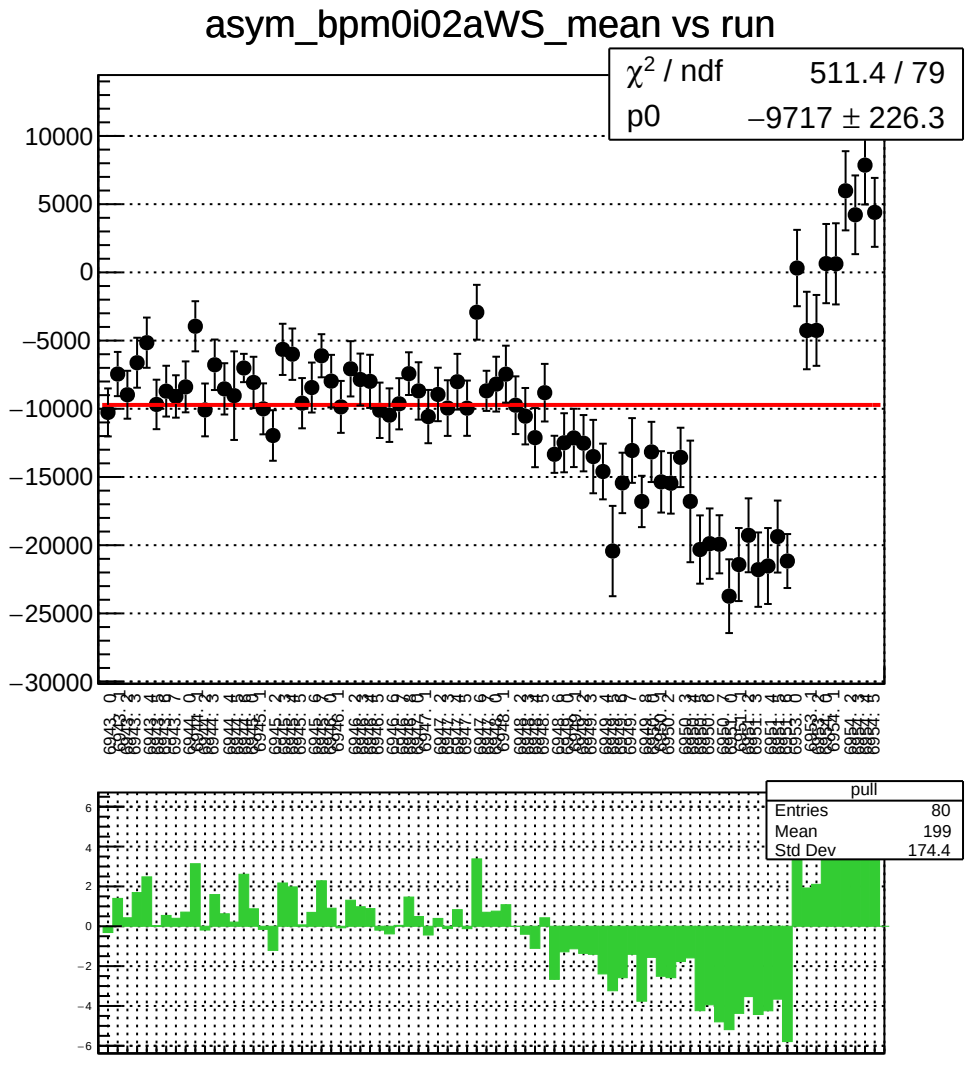

pull1D
Entries 80
Mean 0.0489
Std Dev 1.224
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

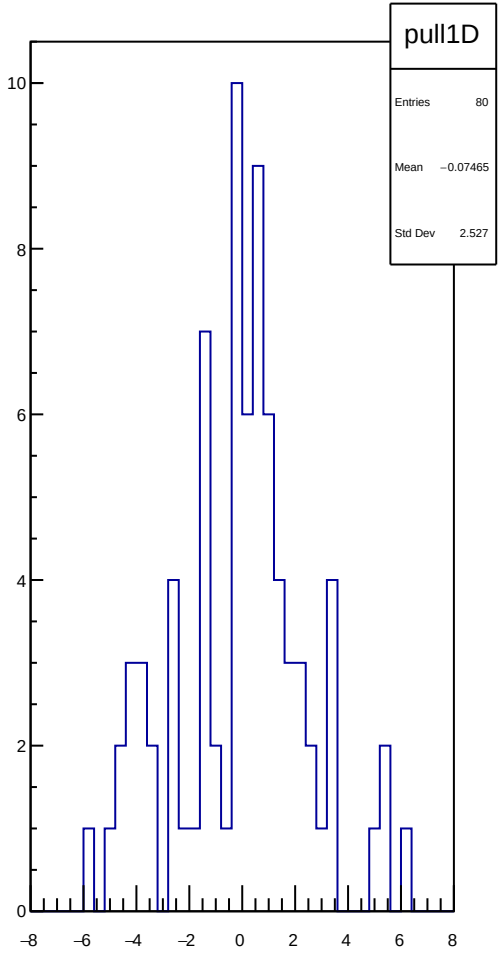

asym_bpm0r05WS_rms vs run
χ² / ndf 1.714e+04 / 79
p0 470.1 ± 0.3742
650
600
550
500
450
400
350

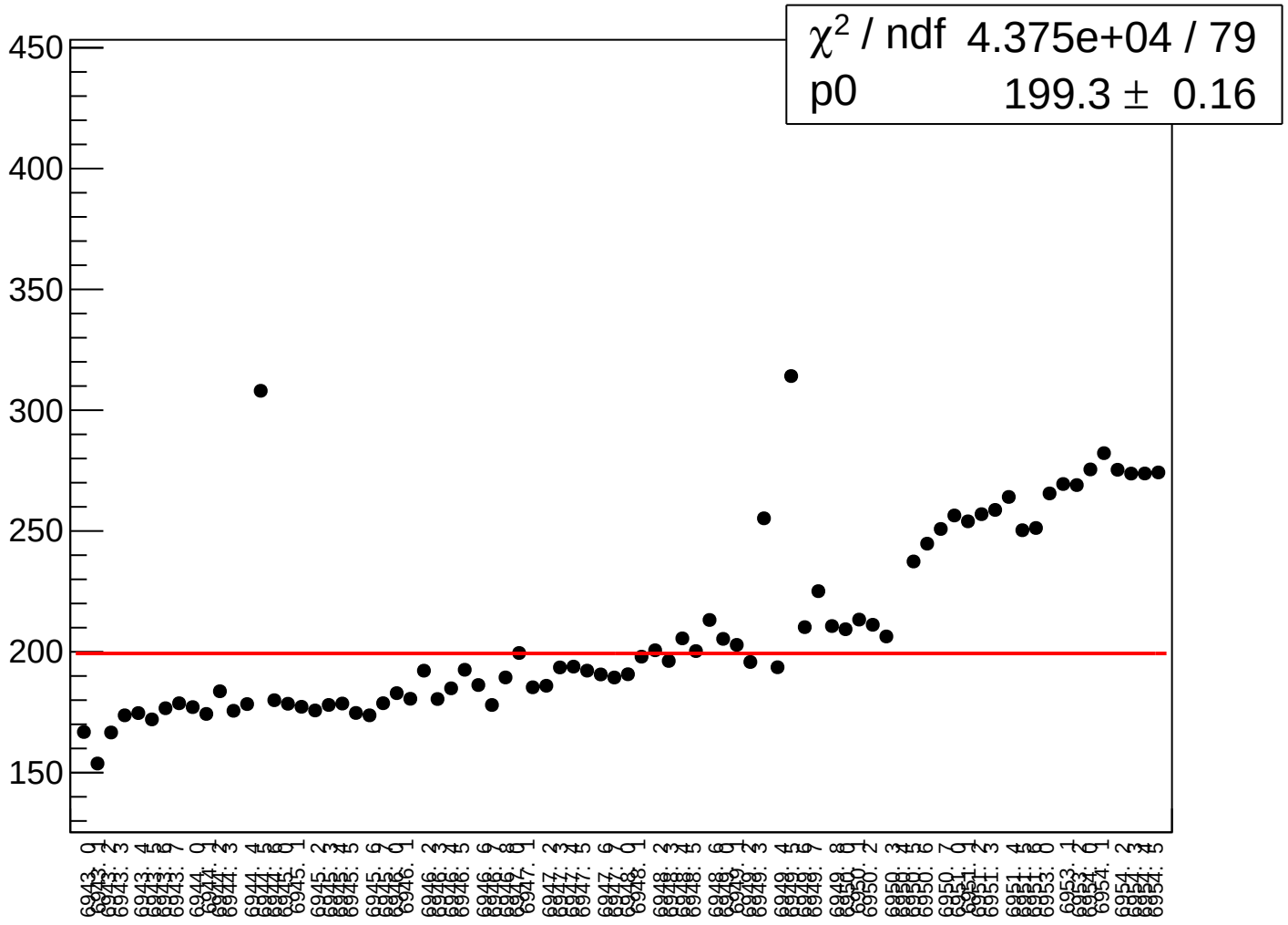

asym_bpm0i02WS_mean vs run
χ² / ndf 1432 / 79
p0 −3742 ± 160.1
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 80
Mean −355.4
Std Dev 428.9
14
12
10
8
6
4
2
0
−2
−4
−6
−8

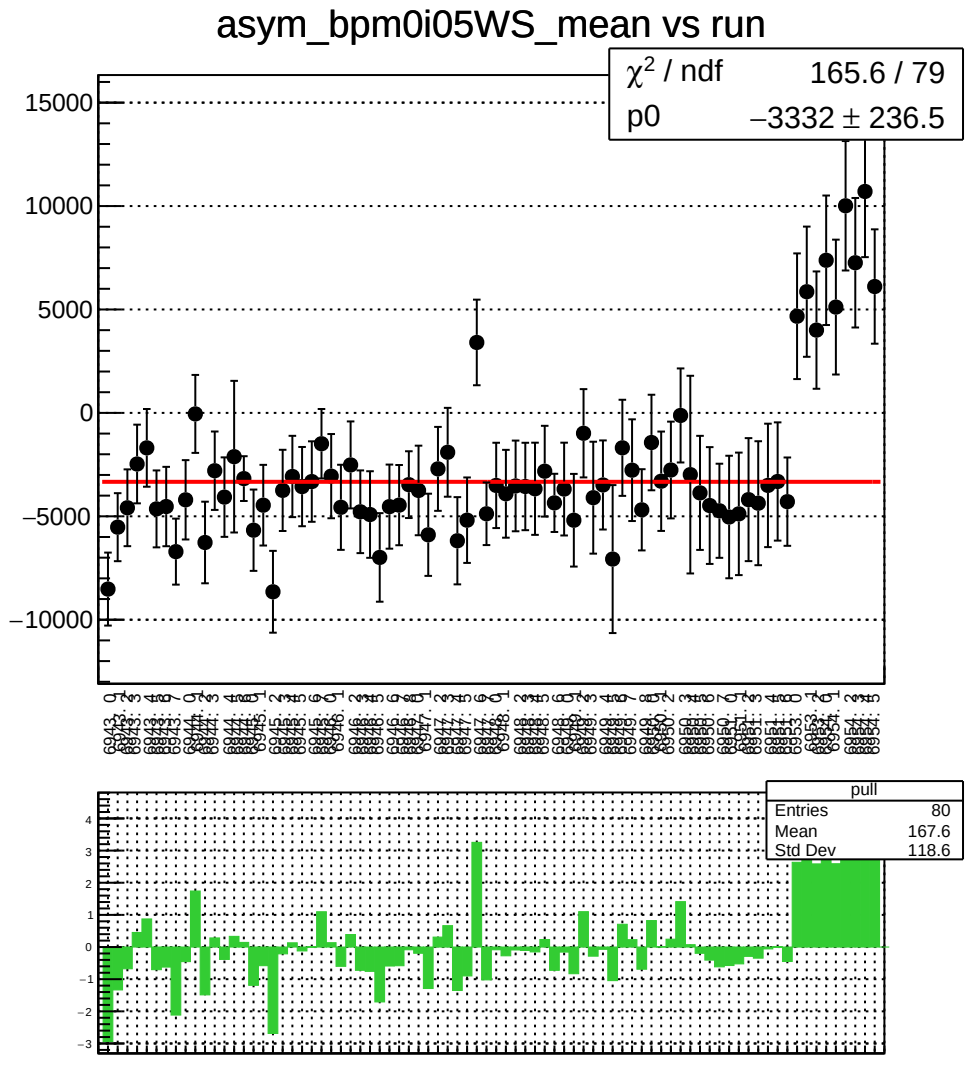

pull1D
Entries 80
Mean −0.6838
Std Dev 3.213
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

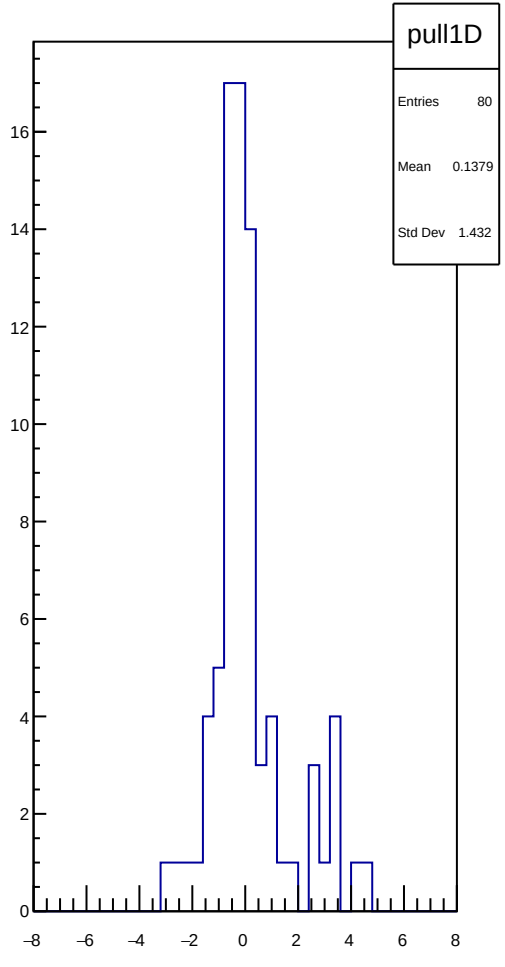

asym_bpm0i02WS_rms vs run
χ^2 / ndf 2.327e+04 / 79
p0 142 ± 0.1132
350
300
250
200
150
100

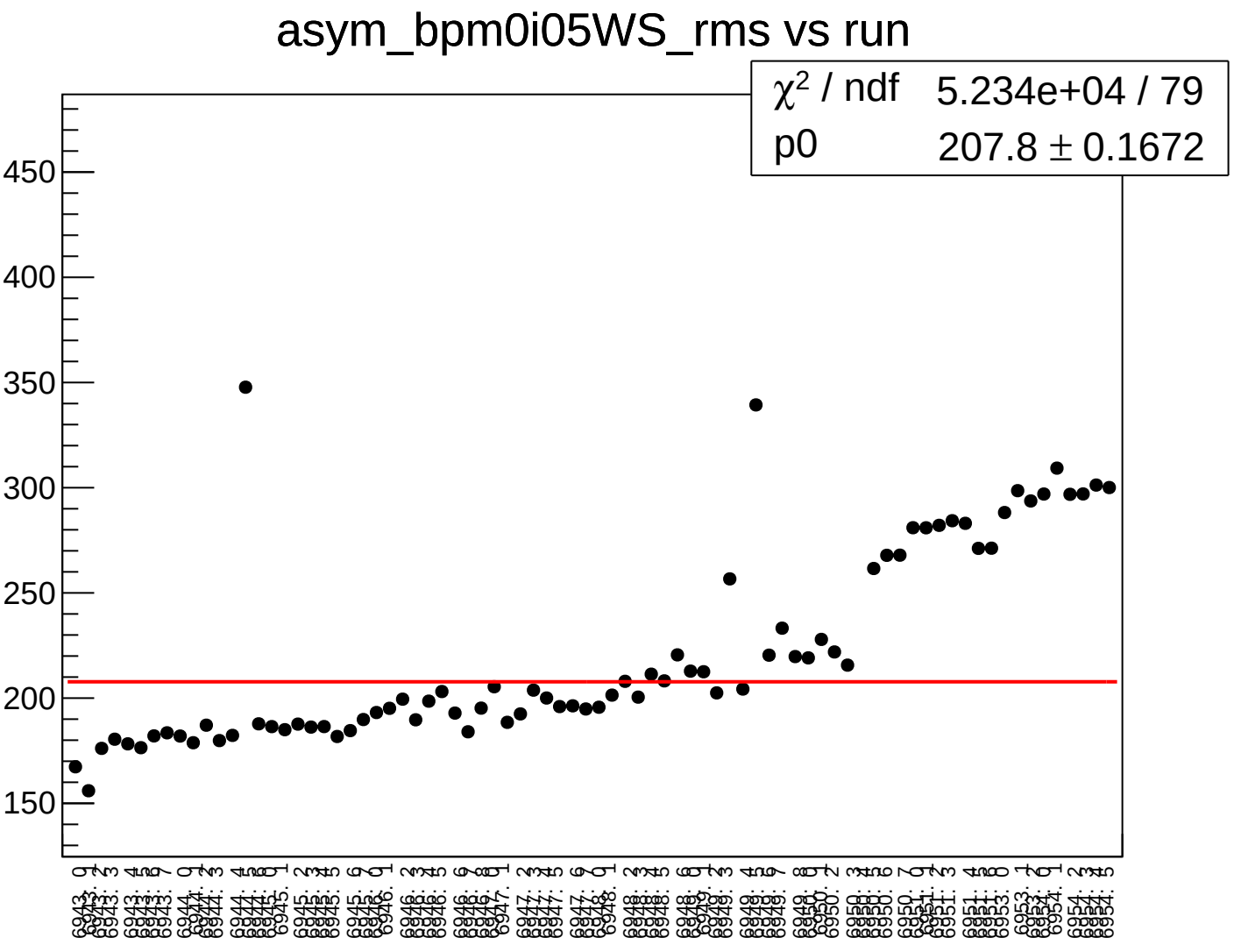

asym_bpm0i02aWS_mean vs run
χ² / ndf 511.4 / 79
p0 −9717 ± 226.3
pull
Entries 80
Mean 199
Std Dev 174.4

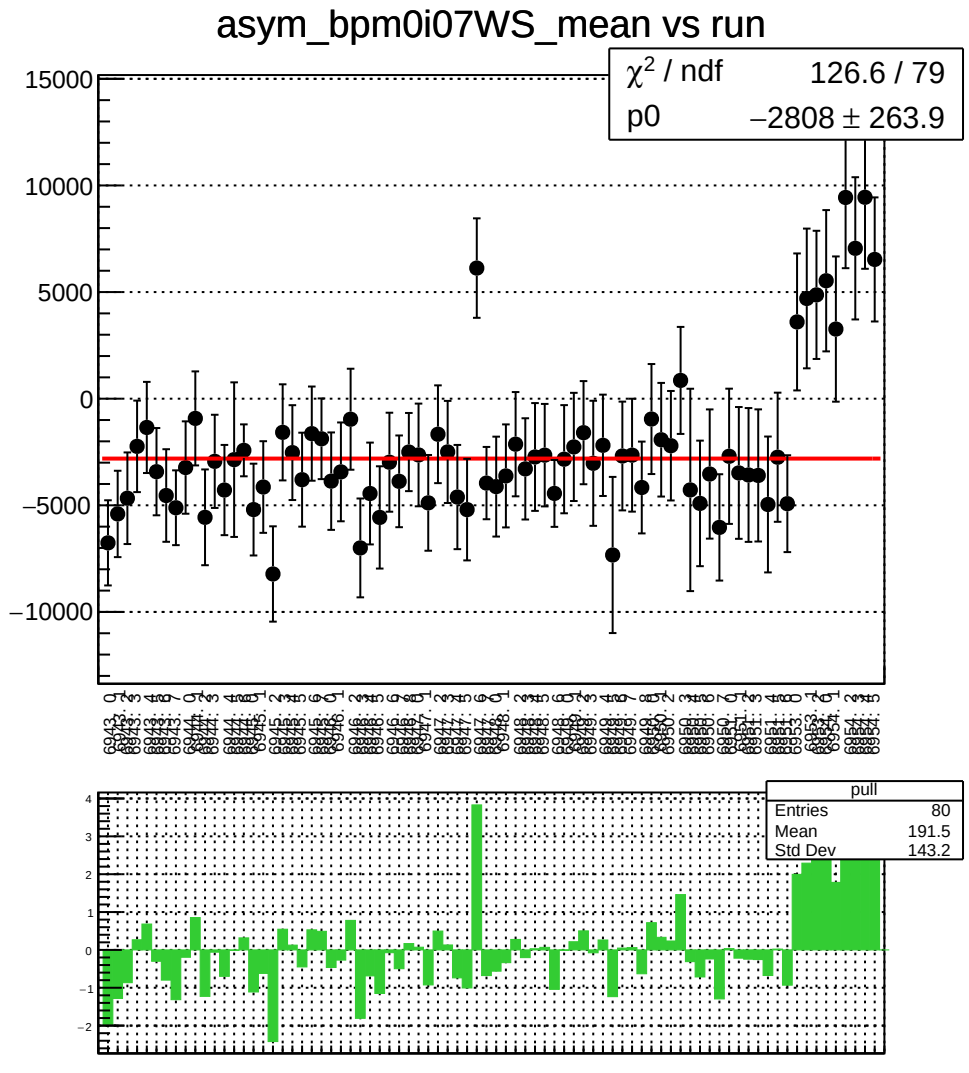

pull1D
Entries 80
Mean −0.07465
Std Dev 2.527

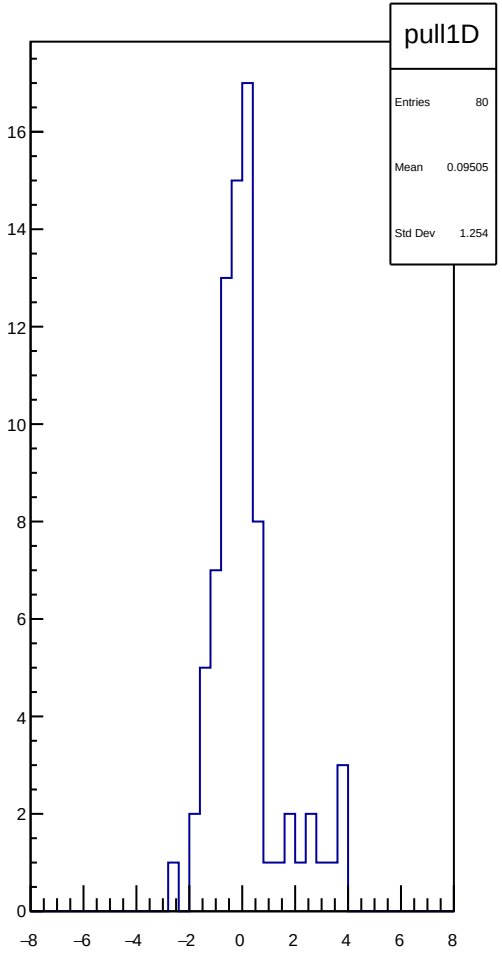

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 4.375e+04 / 79
p0 199.3 ± 0.16
450
400
350
300
250
200
150

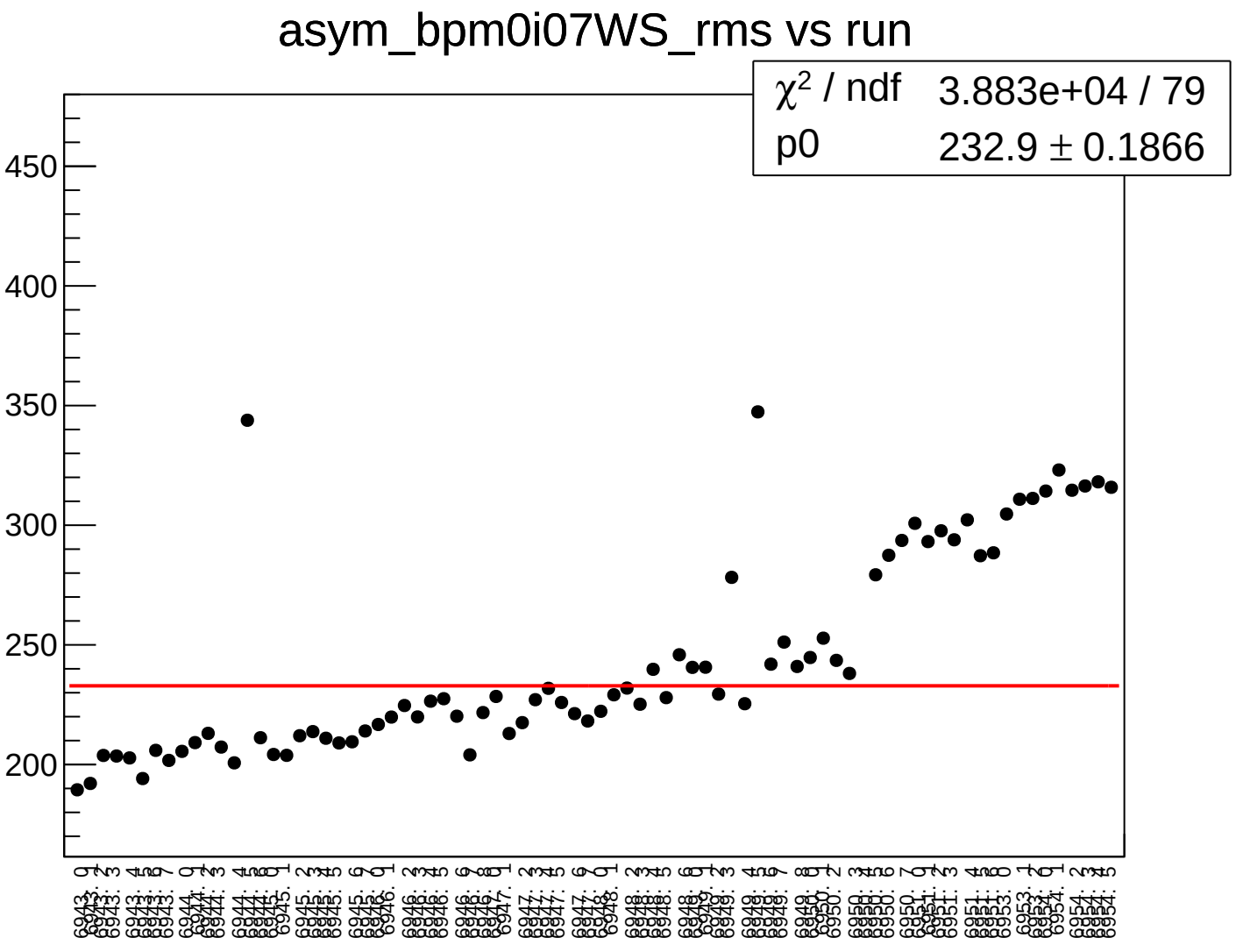

asym_bpm0i05WS_mean vs run
χ² / ndf 165.6 / 79
p0 −3332 ± 236.5
15000
10000
5000
0
−5000
−10000
pull
Entries 80
Mean 167.6
Std Dev 118.6
4
3
2
1
0
−1
−2
−3

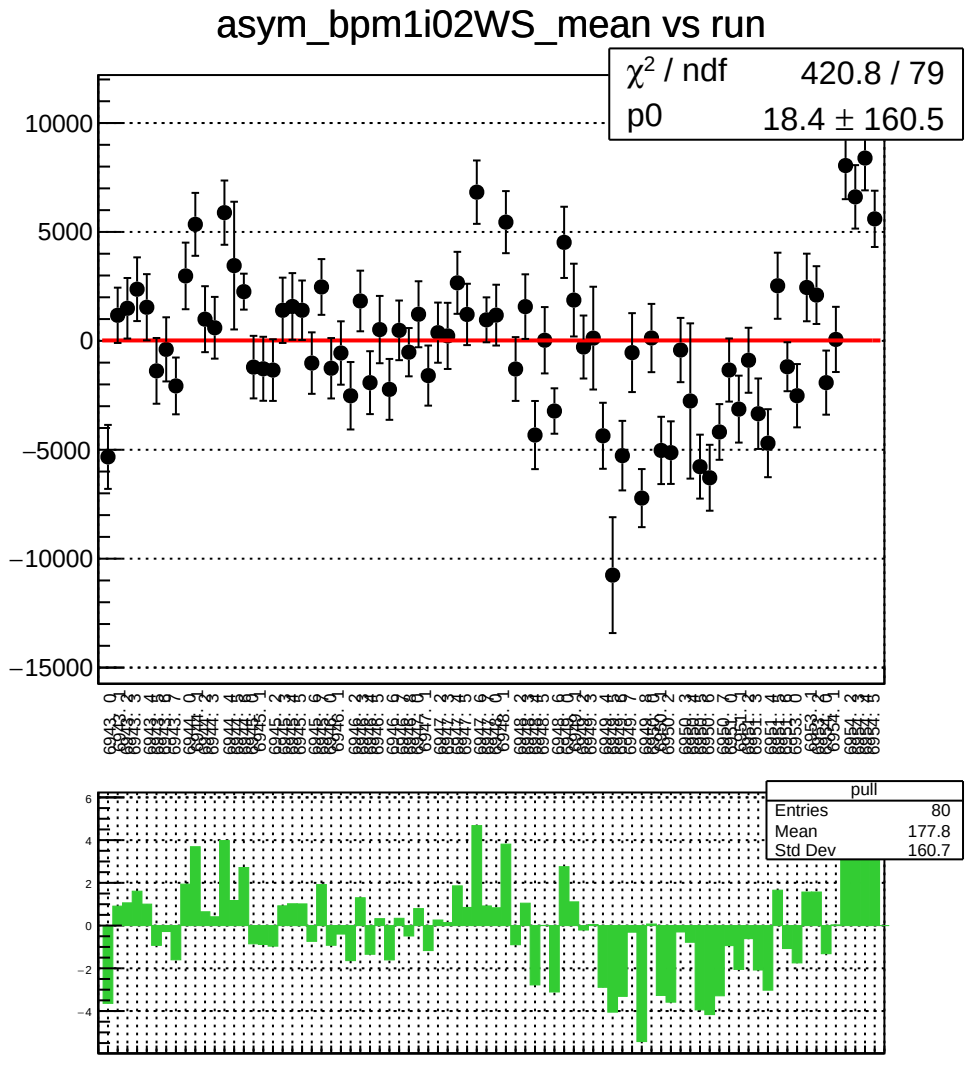

pull1D
Entries 80
Mean 0.1379
Std Dev 1.432
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

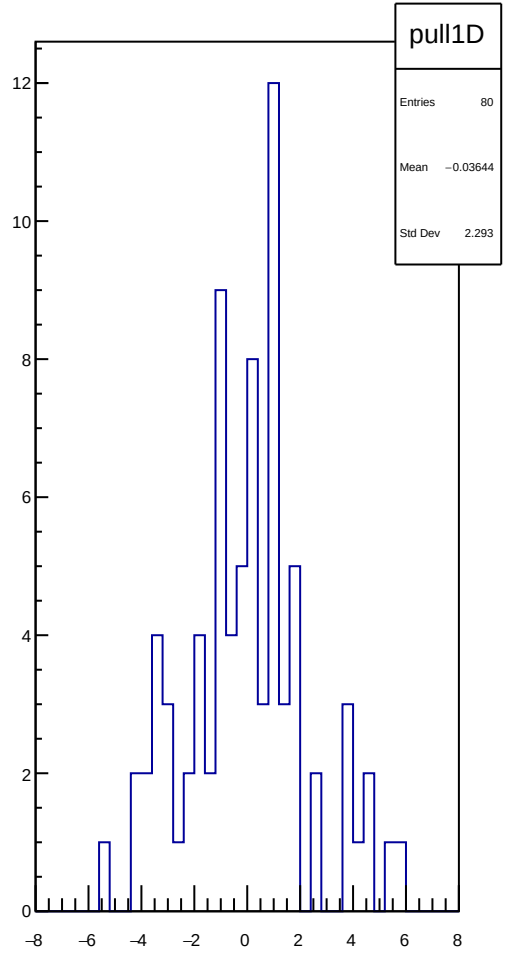

asym_bpm0i05WS_rms vs run
χ^2 / ndf 5.234e+04 / 79
p0 207.8 ± 0.1672
450
400
350
300
250
200
150

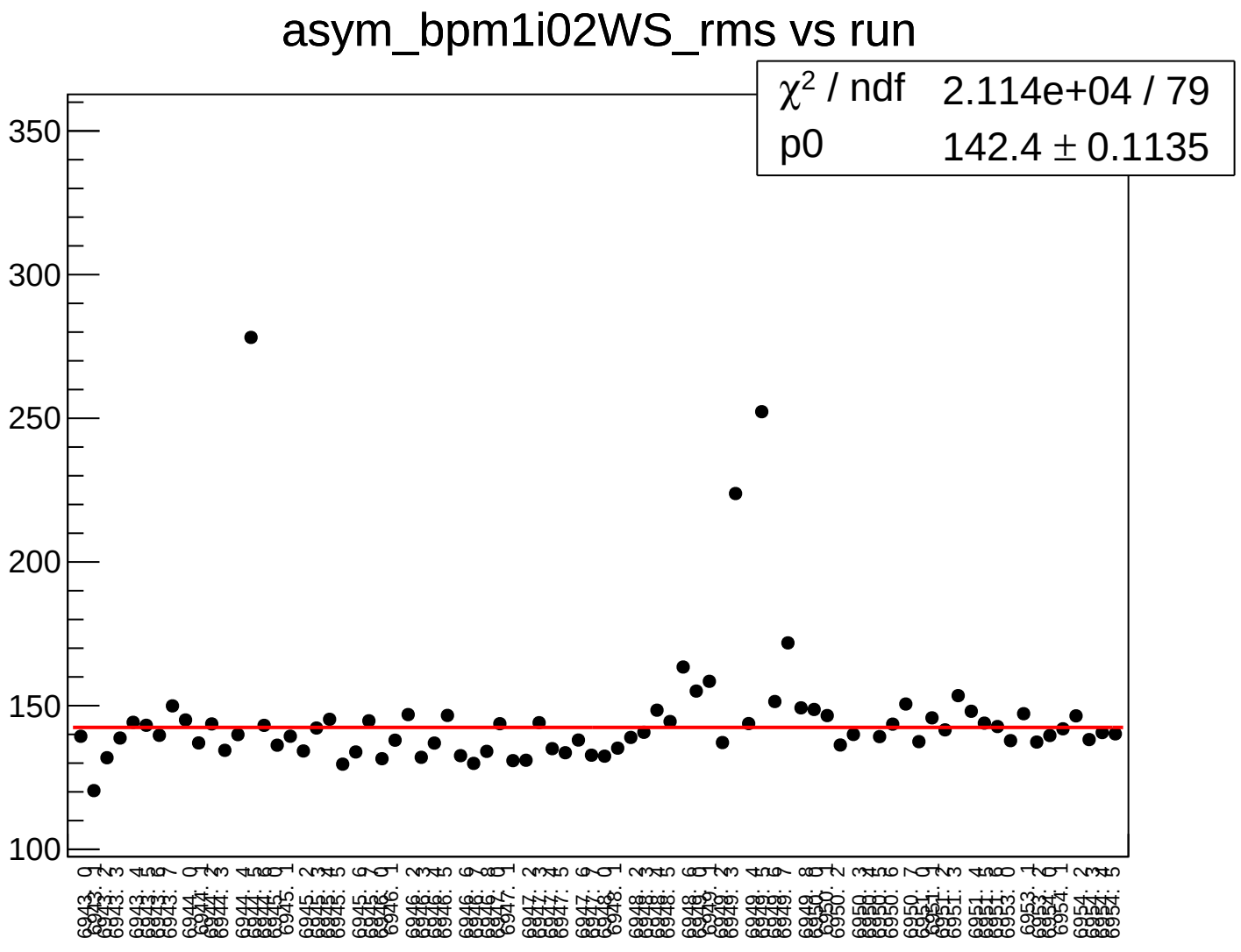

asym_bpm0i07WS_mean vs run
χ² / ndf 126.6 / 79
p0 −2808 ± 263.9
pull
Entries 80
Mean 191.5
Std Dev 143.2

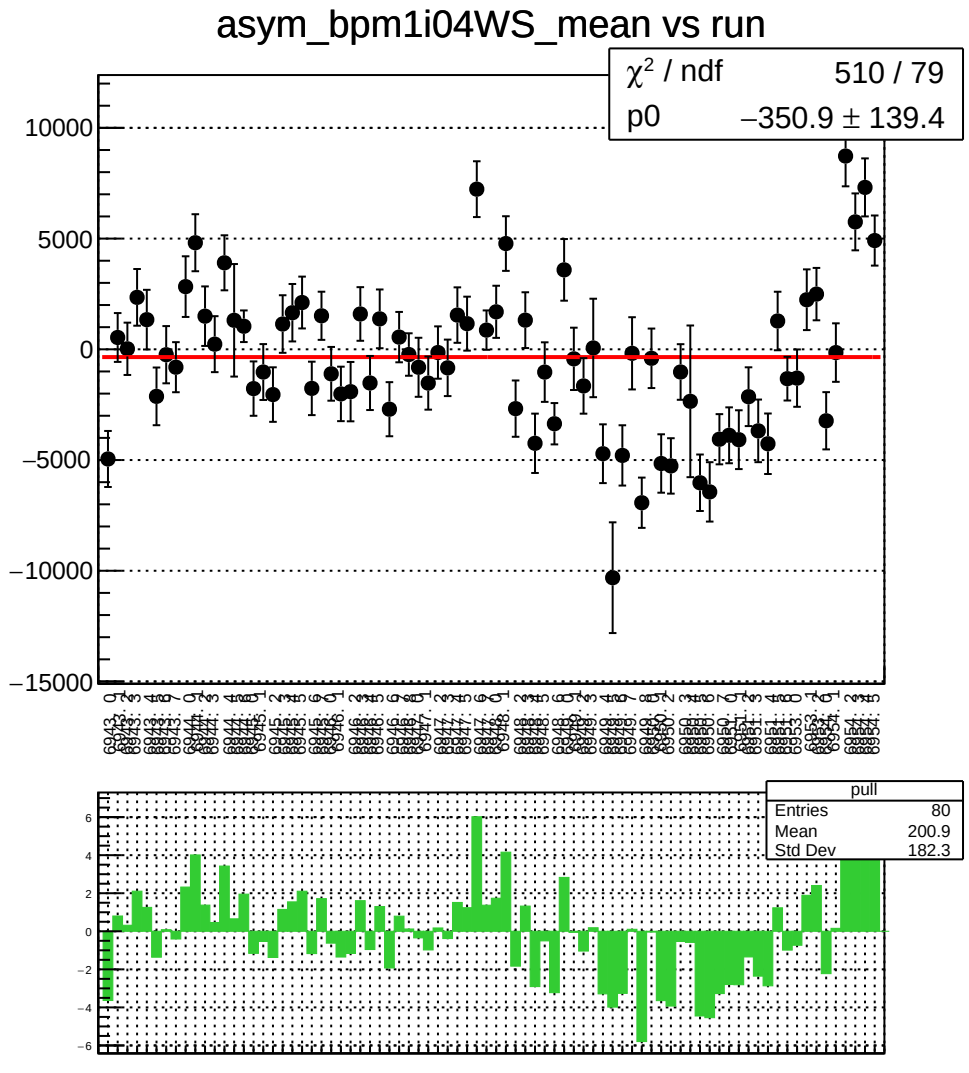

pull1D
Entries 80
Mean 0.09505
Std Dev 1.254

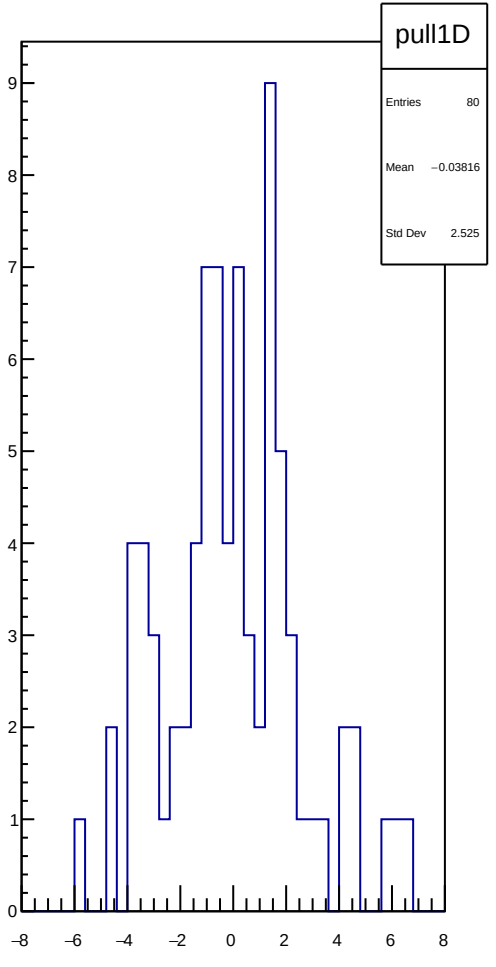

asym_bpm0i07WS_rms vs run
χ^2 / ndf 3.883e+04 / 79
p0 232.9 ± 0.1866
450
400
350
300
250
200

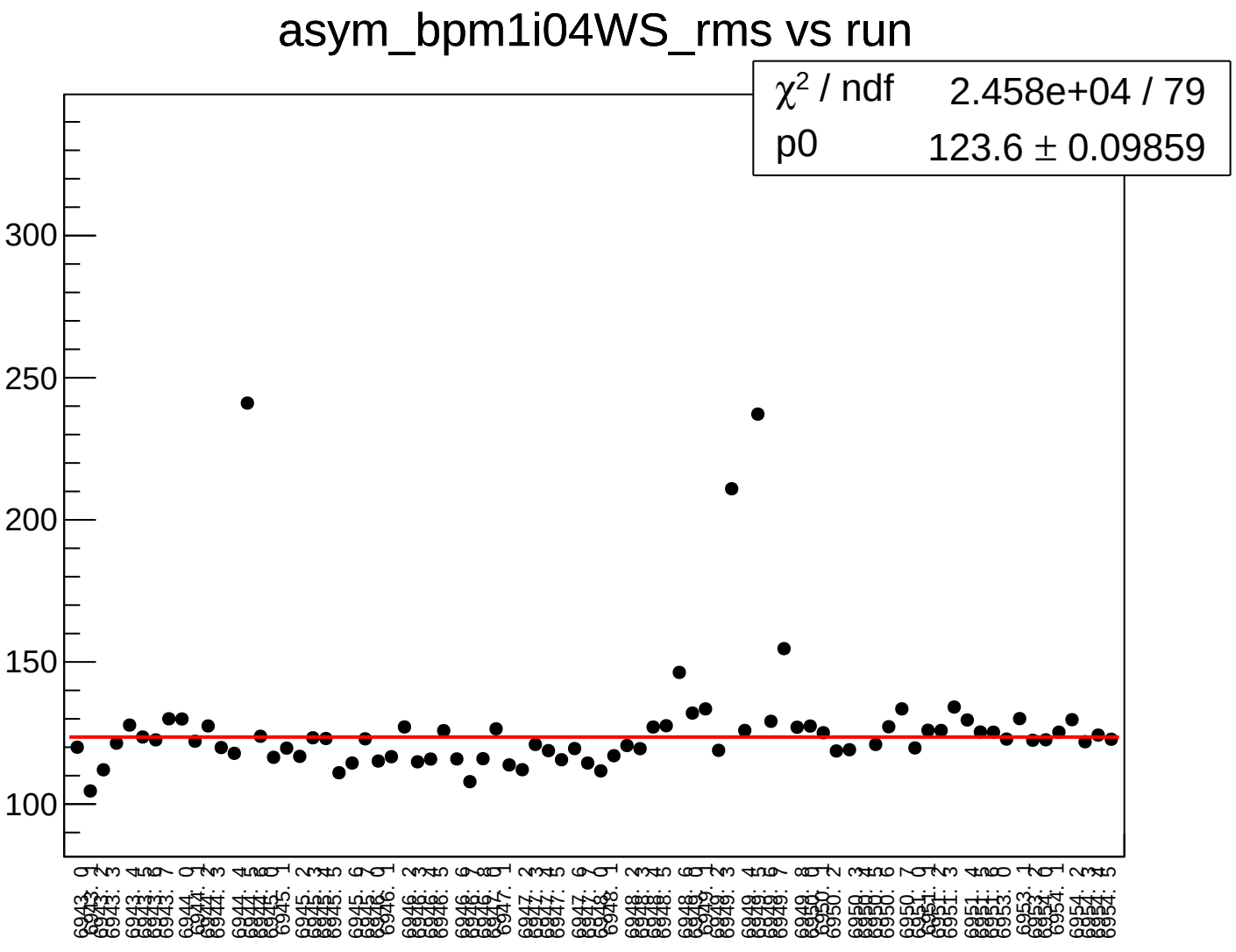

asym_bpm1i02WS_mean vs run
χ² / ndf 420.8 / 79
p0 18.4 ± 160.5
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 177.8
Std Dev 160.7
6
4
2
0
−2
−4

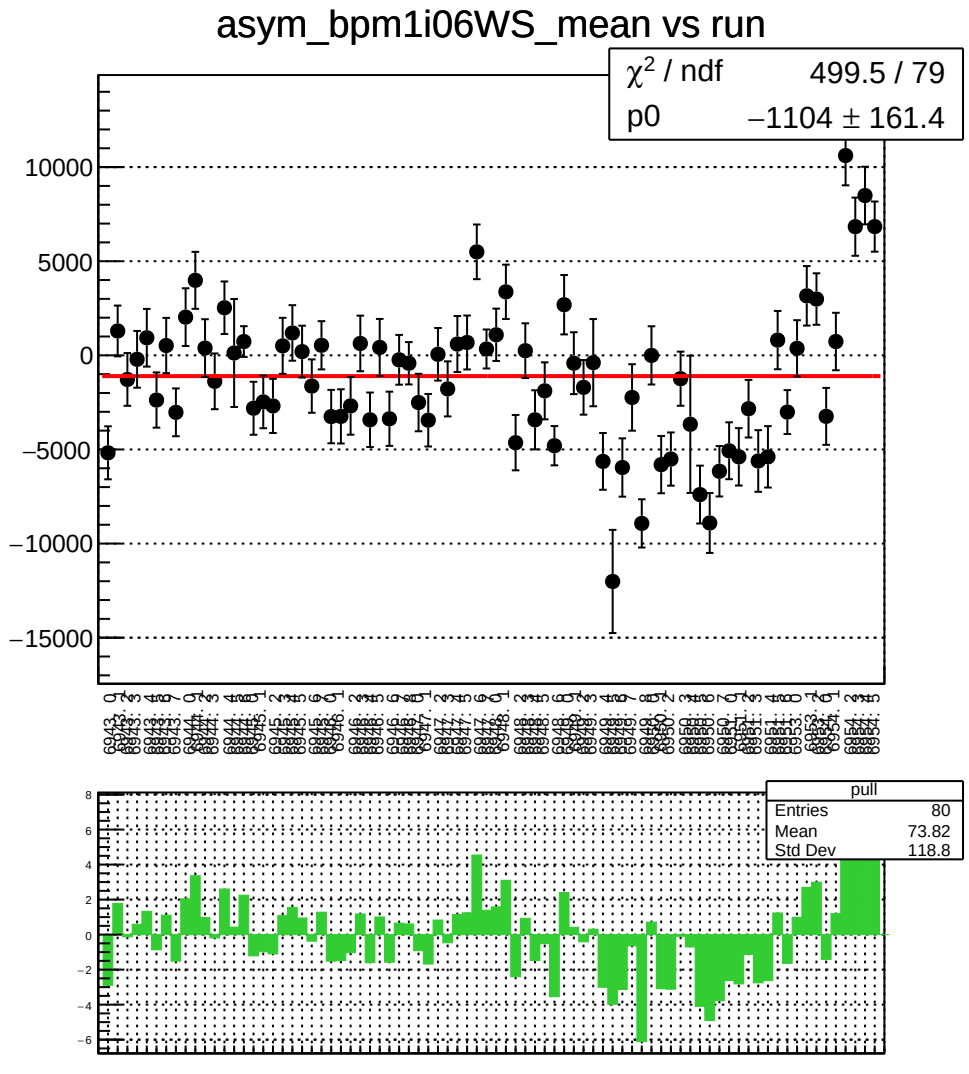

pull1D
Entries 80
Mean −0.03644
Std Dev 2.293
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

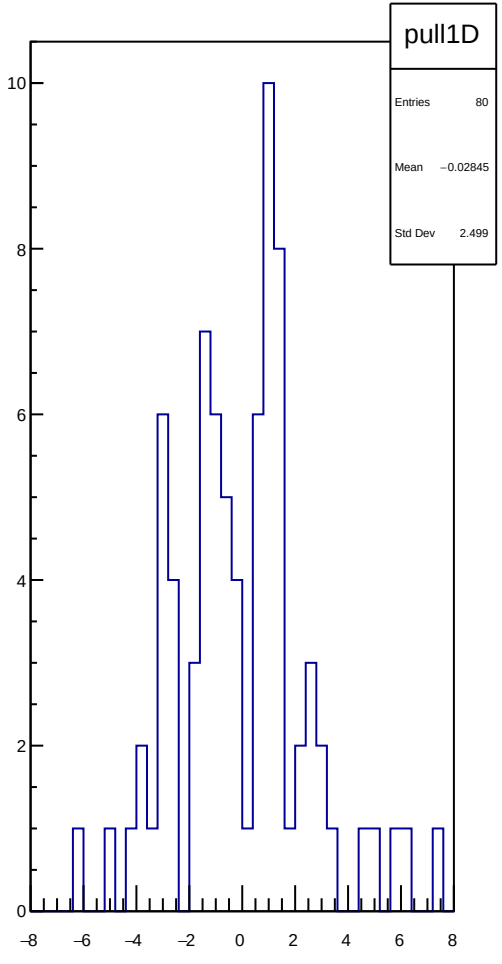

asym_bpm1i02WS_rms vs run
χ^2 / ndf 2.114e+04 / 79
p0 142.4 ± 0.1135
350
300
250
200
150
100

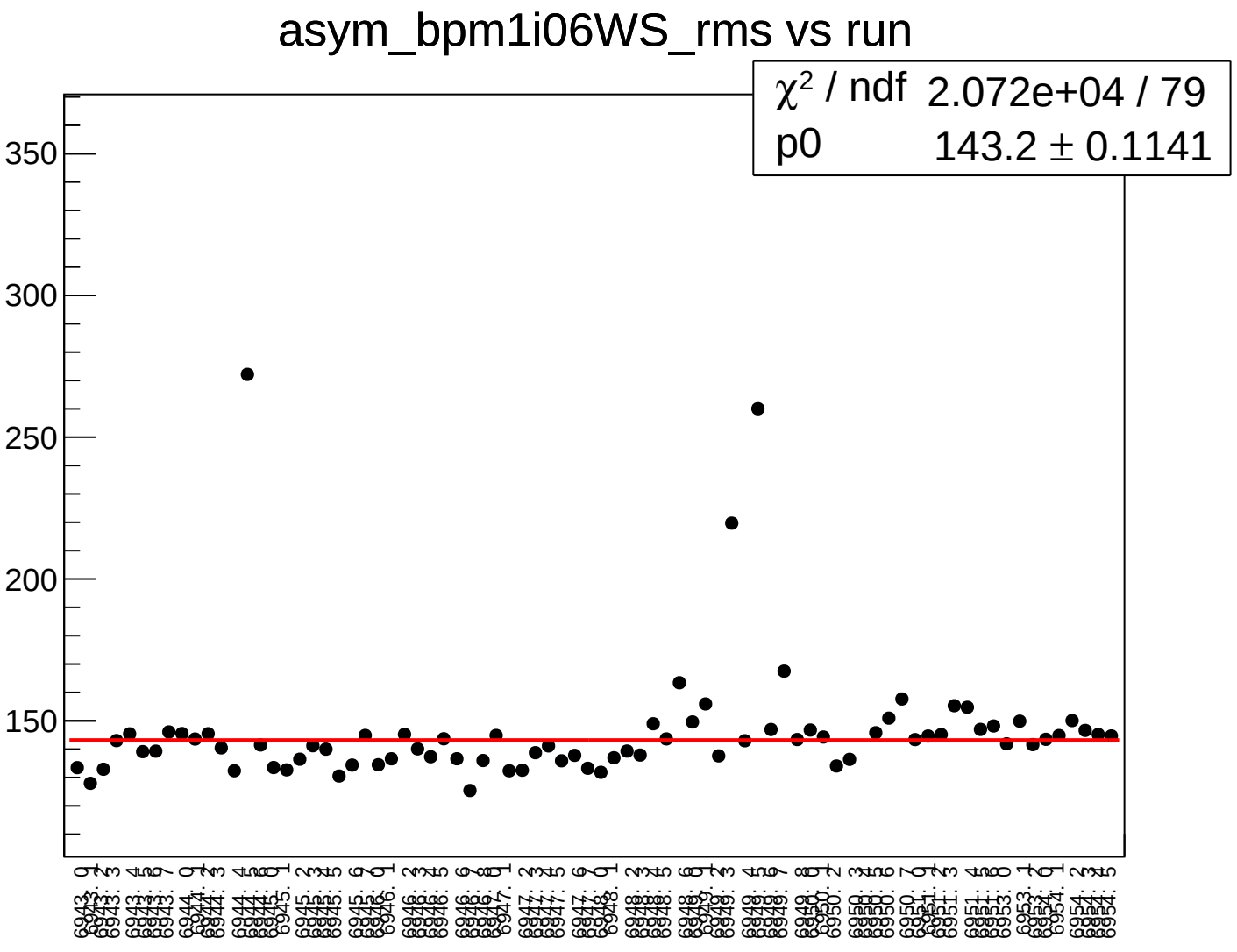

asym_bpm1i04WS_mean vs run
χ² / ndf 510 / 79
p0 −350.9 ± 139.4
pull
Entries 80
Mean 200.9
Std Dev 182.3

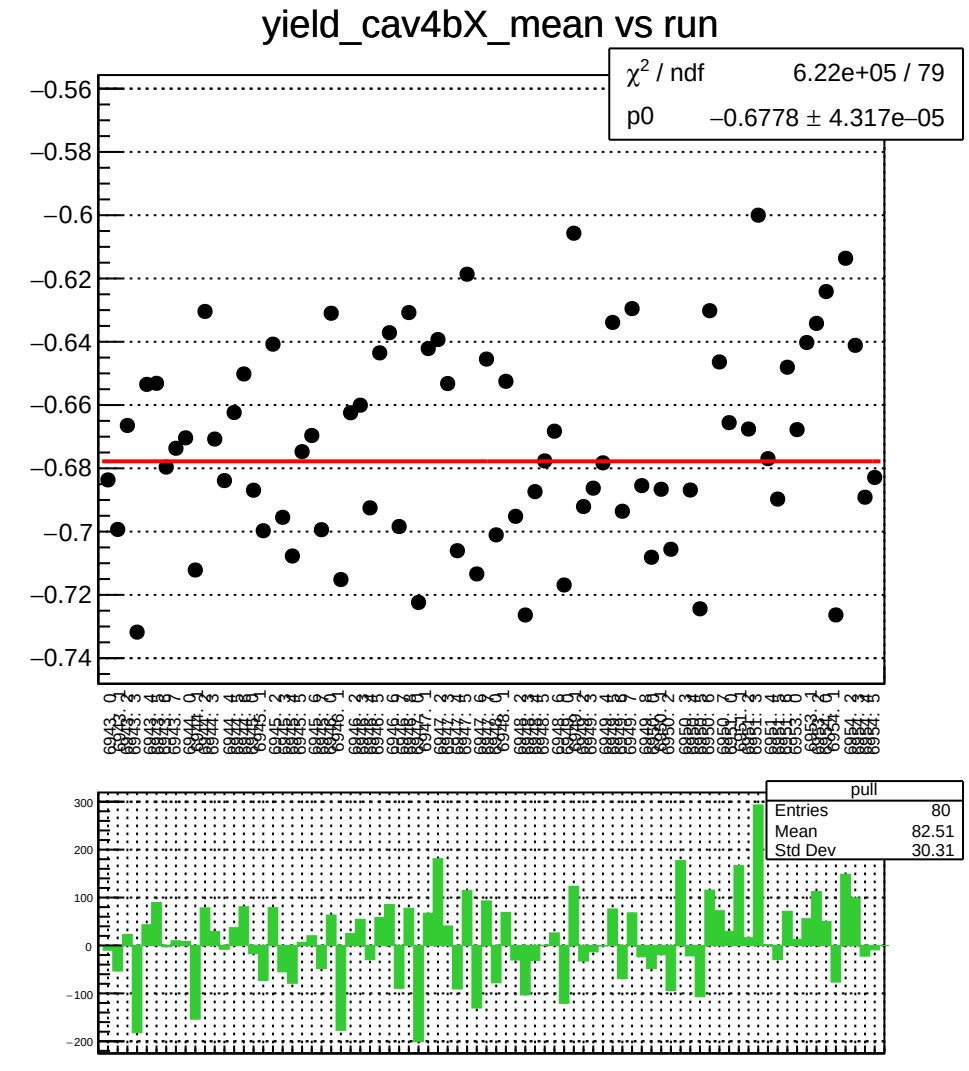

pull1D
Entries 80
Mean −0.03816
Std Dev 2.525

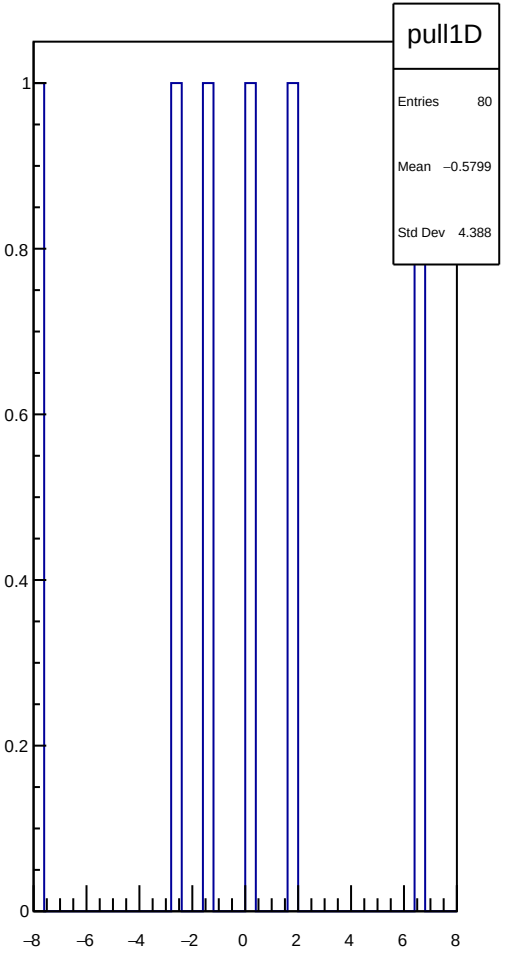

asym_bpm1i04WS_rms vs run
χ² / ndf 2.458e+04 / 79
p0 123.6 ± 0.09859
300
250
200
150
100

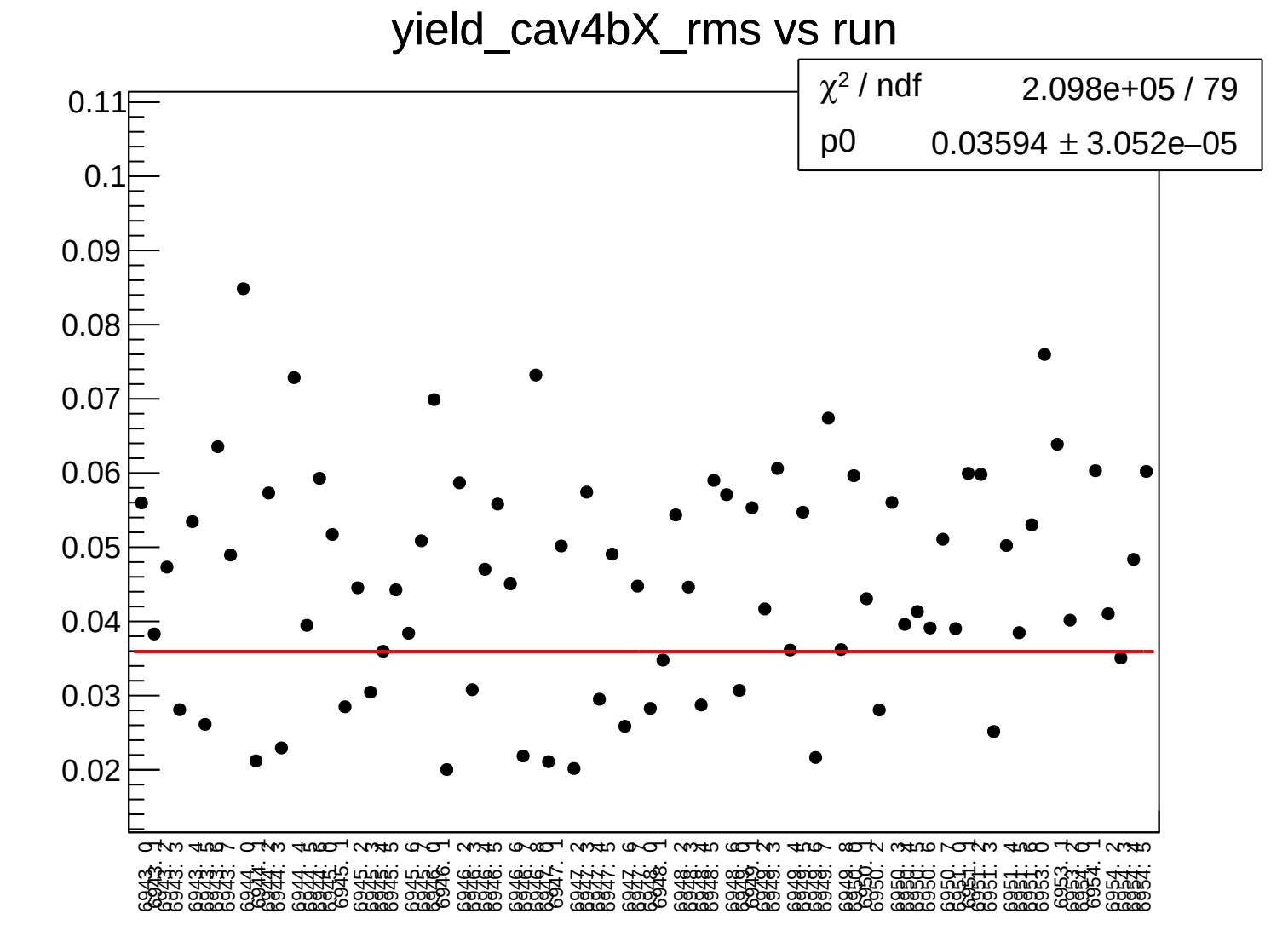

asym_bpm1i06WS_mean vs run
χ² / ndf 499.5 / 79
p0 −1104 ± 161.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 80
Mean 73.82
Std Dev 118.8
8
6
4
2
0
−2
−4
−6

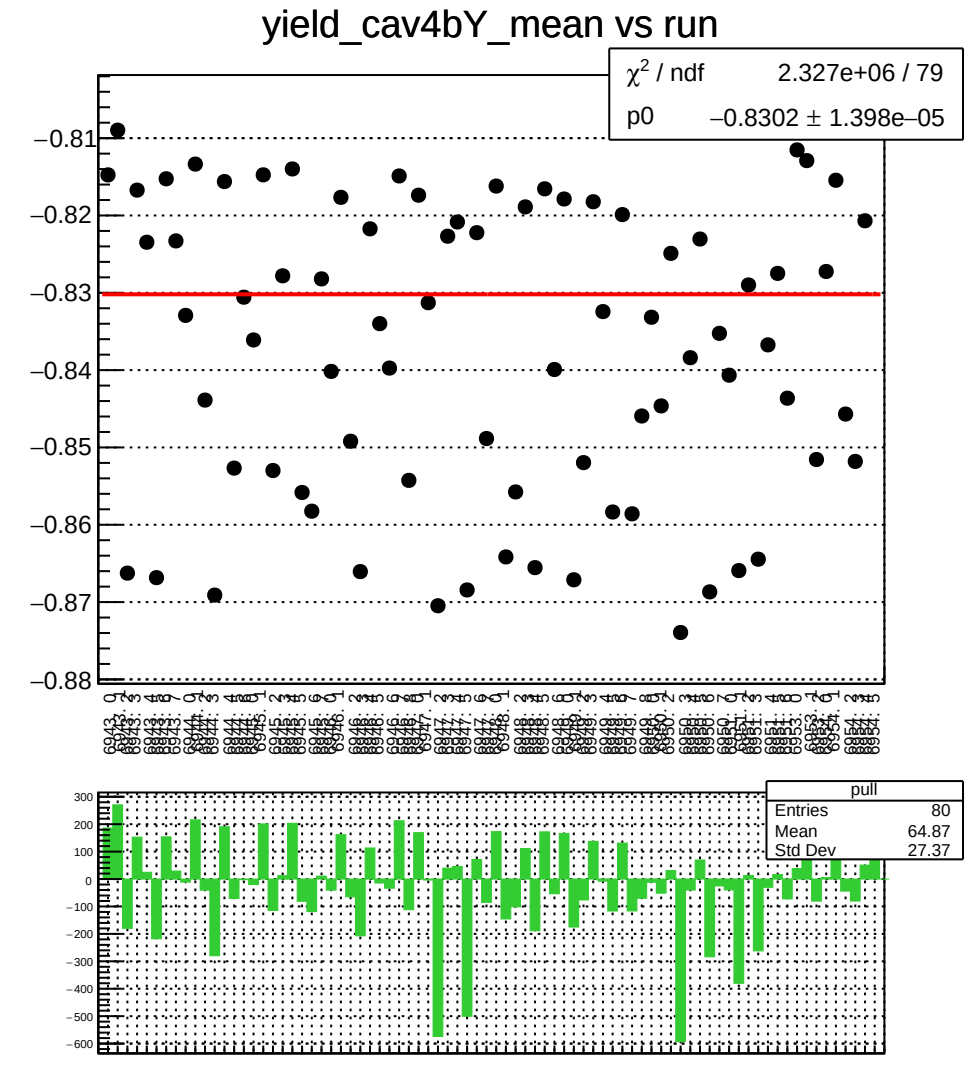

pull1D
Entries 80
Mean −0.02845
Std Dev 2.499
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

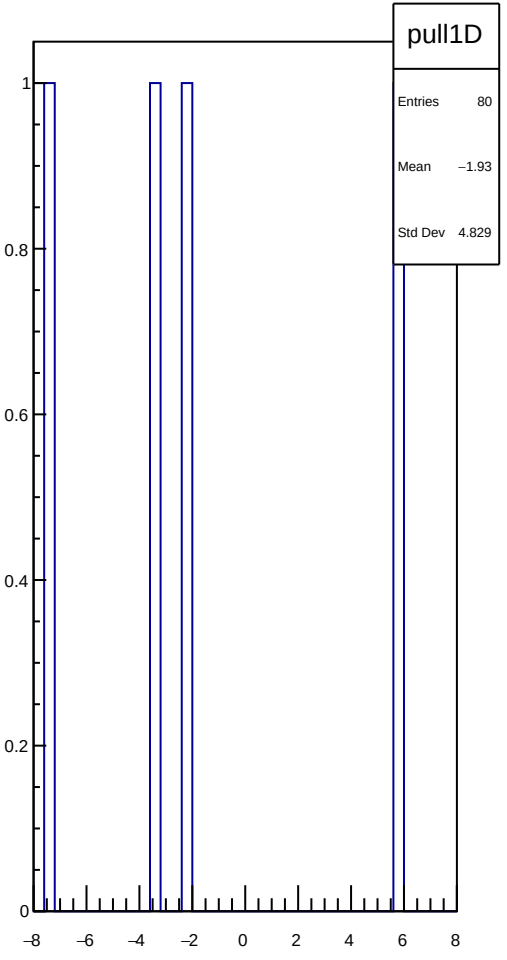

asym_bpm1i06WS_rms vs run
χ² / ndf 2.072e+04 / 79
p0 143.2 ± 0.1141
350
300
250
200
150

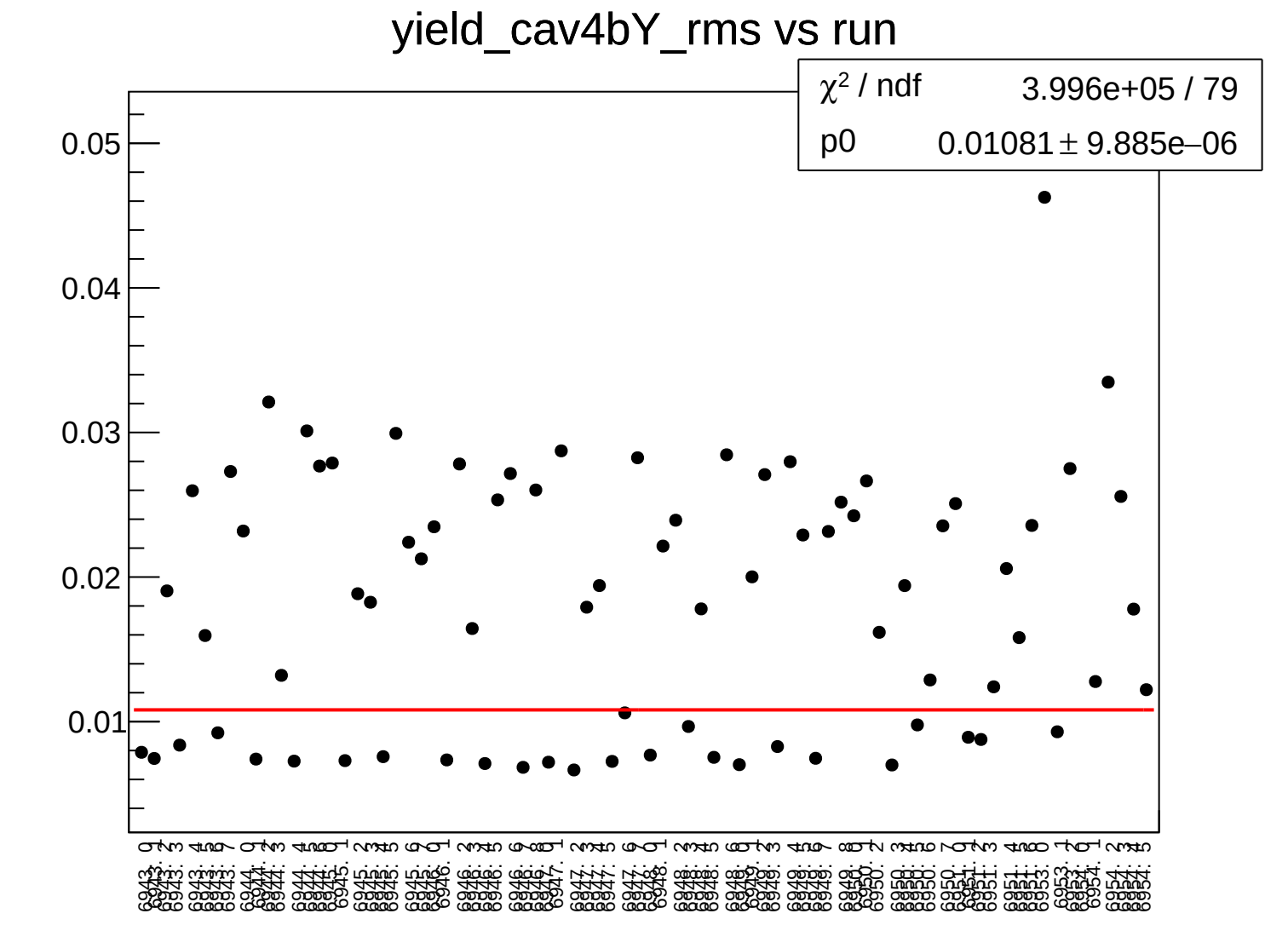

yield_cav4bX_mean vs run
χ² / ndf 6.22e+05 / 79
p0 −0.6778 ± 4.317e−05
pull
Entries 80
Mean 82.51
Std Dev 30.31

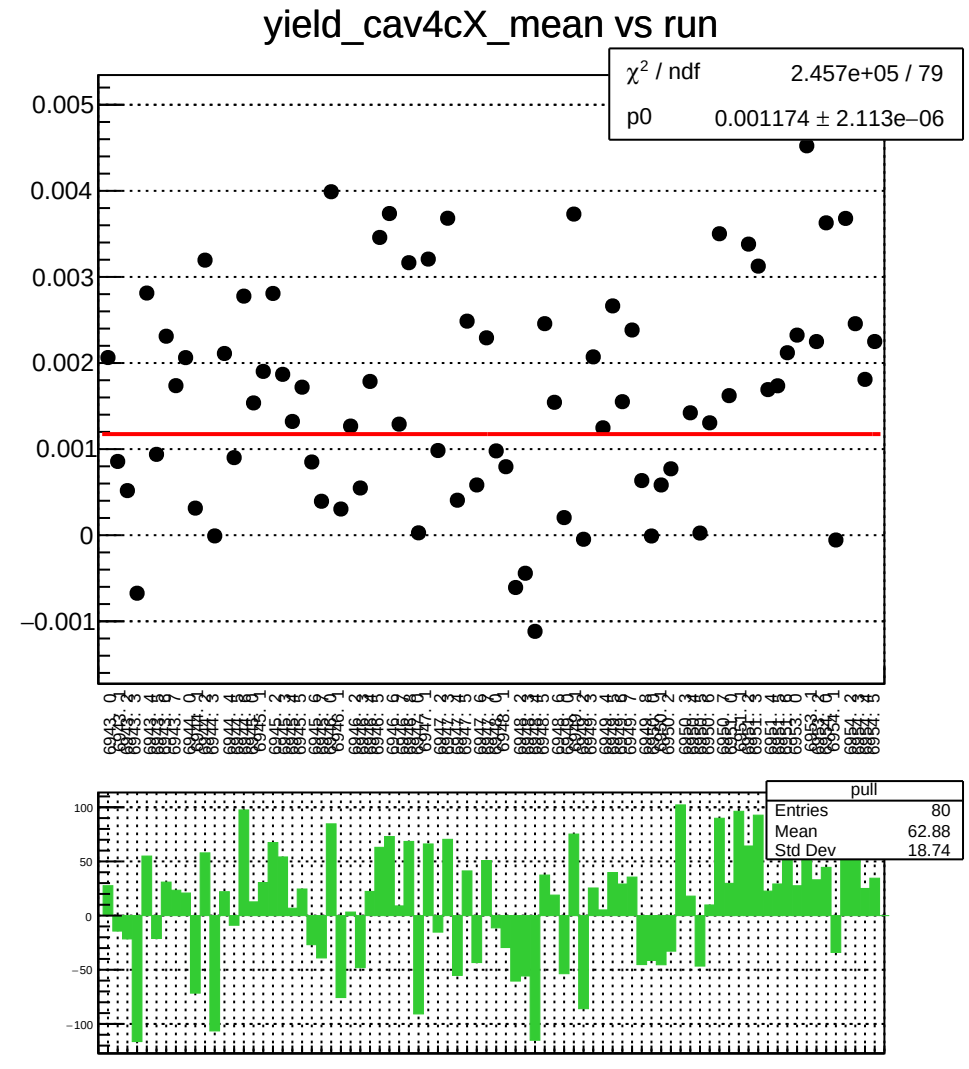

pull1D
Entries 80
Mean −0.5799
Std Dev 4.388

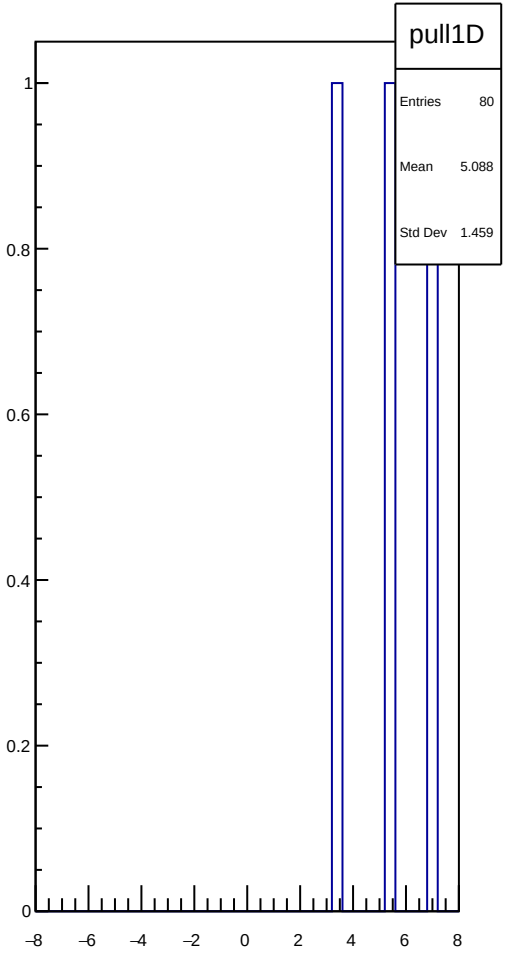

yield_cav4bX_rms vs run
χ² / ndf 2.098e+05 / 79
p0 0.03594 ± 3.052e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

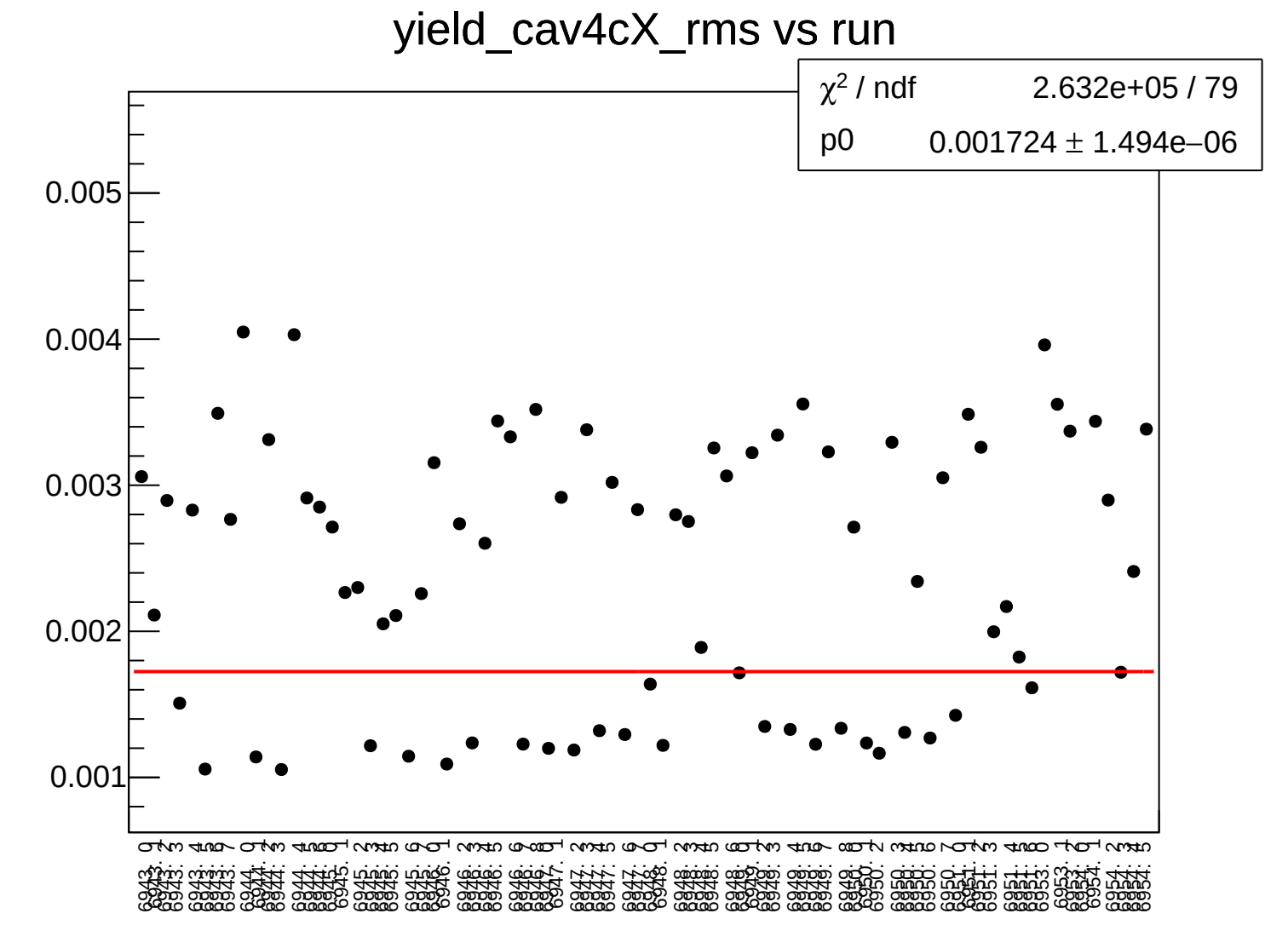

yield_cav4bY_mean vs run
χ² / ndf 2.327e+06 / 79
p0 −0.8302 ± 1.398e−05
−0.81
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
pull
Entries 80
Mean 64.87
Std Dev 27.37
300
200
100
0
−100
−200
−300
−400
−500
−600

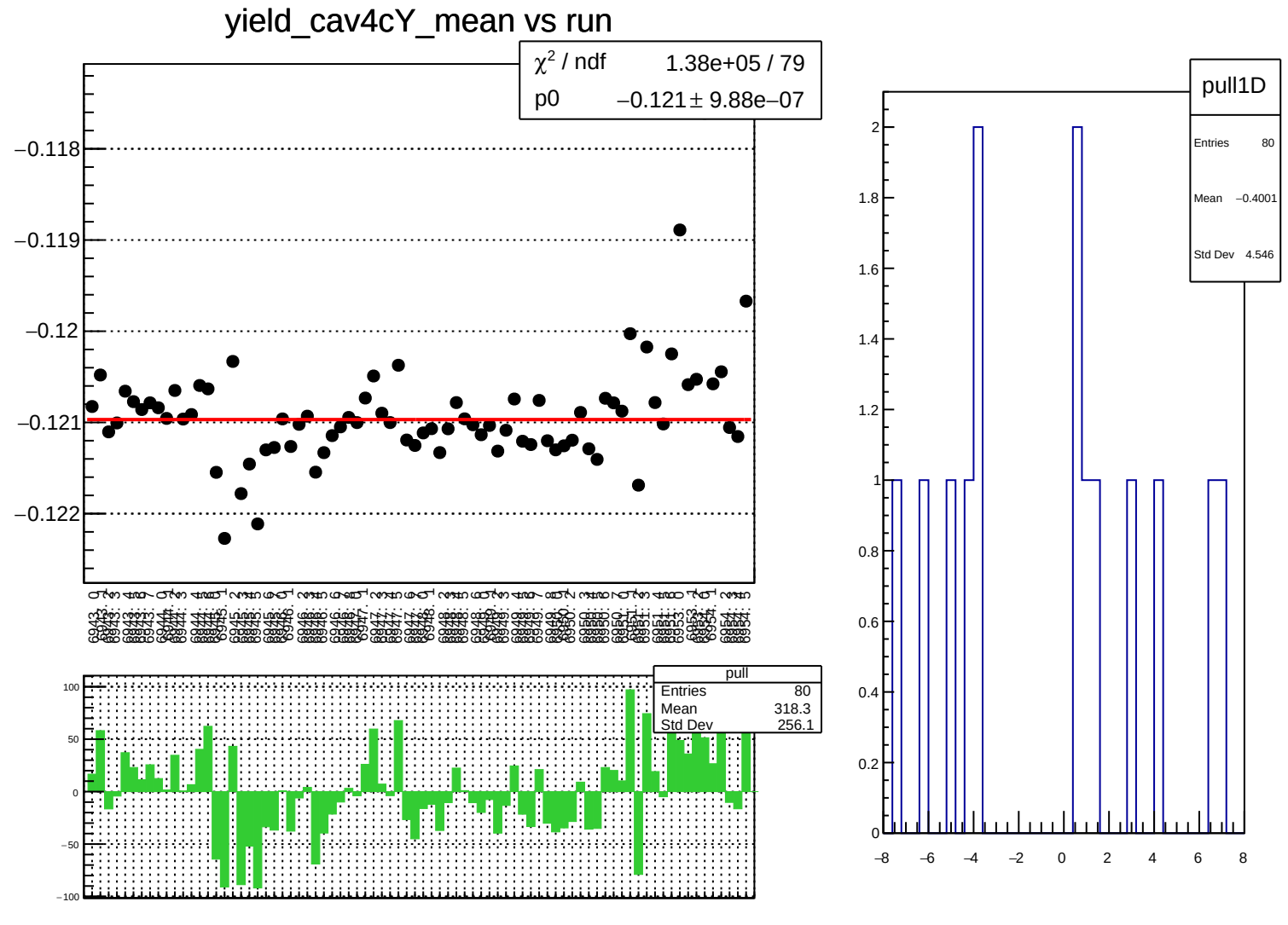

pull1D
Entries 80
Mean −1.93
Std Dev 4.829
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

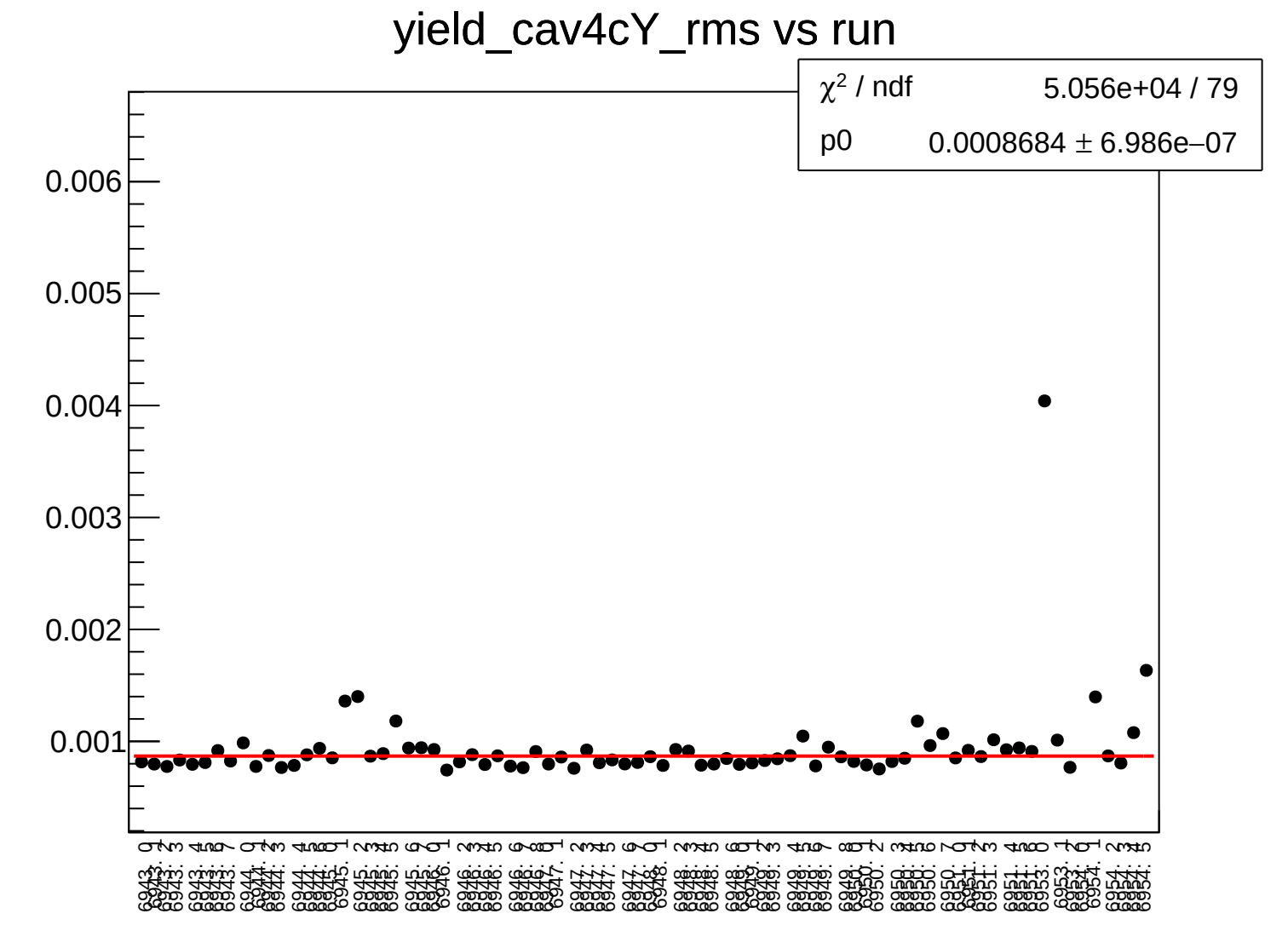

yield_cav4bY_rms vs run
χ² / ndf 3.996e+05 / 79
p0 0.01081 ± 9.885e–06
0.05
0.04
0.03
0.02
0.01

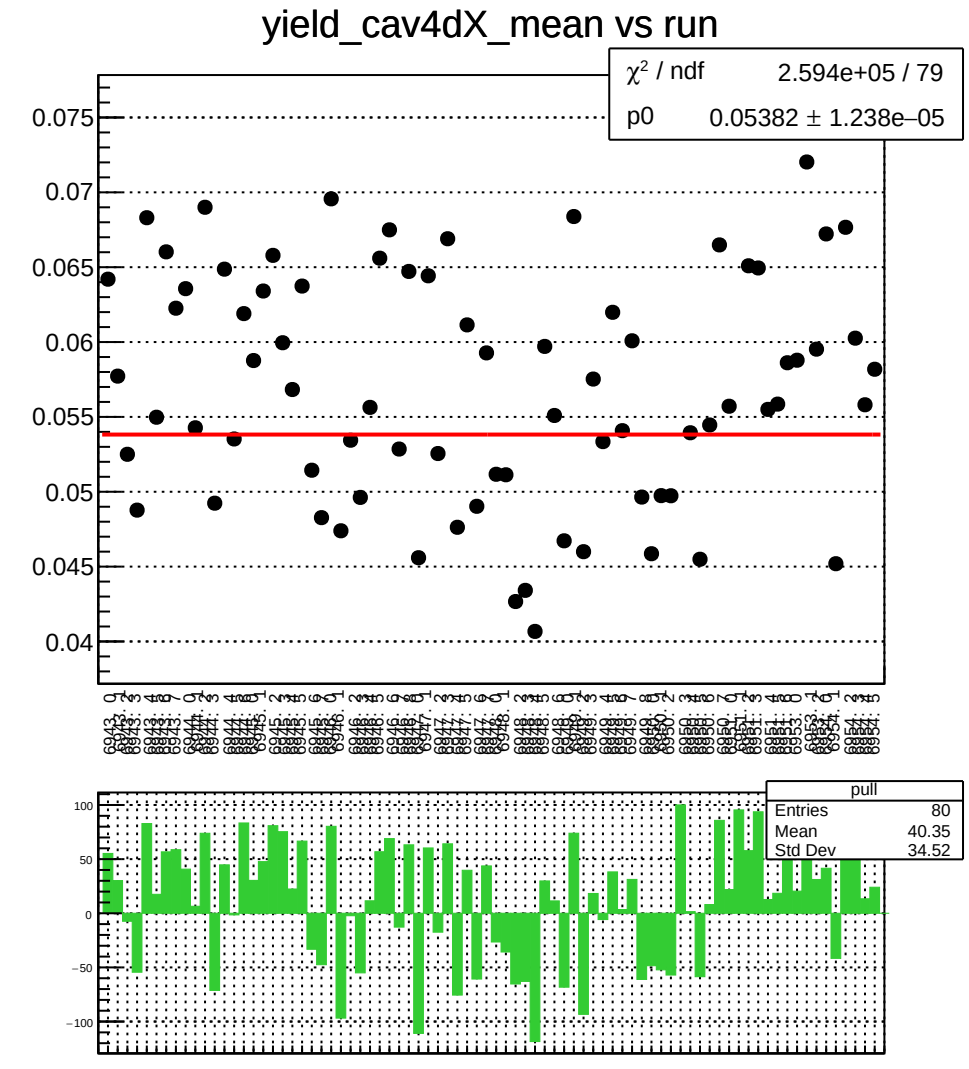

yield_cav4cX_mean vs run
χ² / ndf 2.457e+05 / 79
p0 0.001174 ± 2.113e−06
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 80
Mean 62.88
Std Dev 18.74
100
50
0
−50
−100

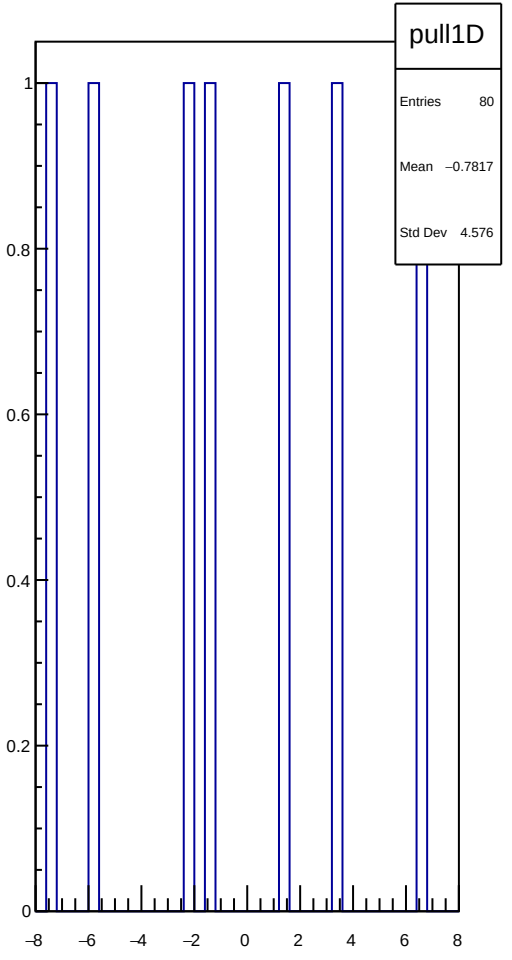

pull1D
Entries 80
Mean 5.088
Std Dev 1.459
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

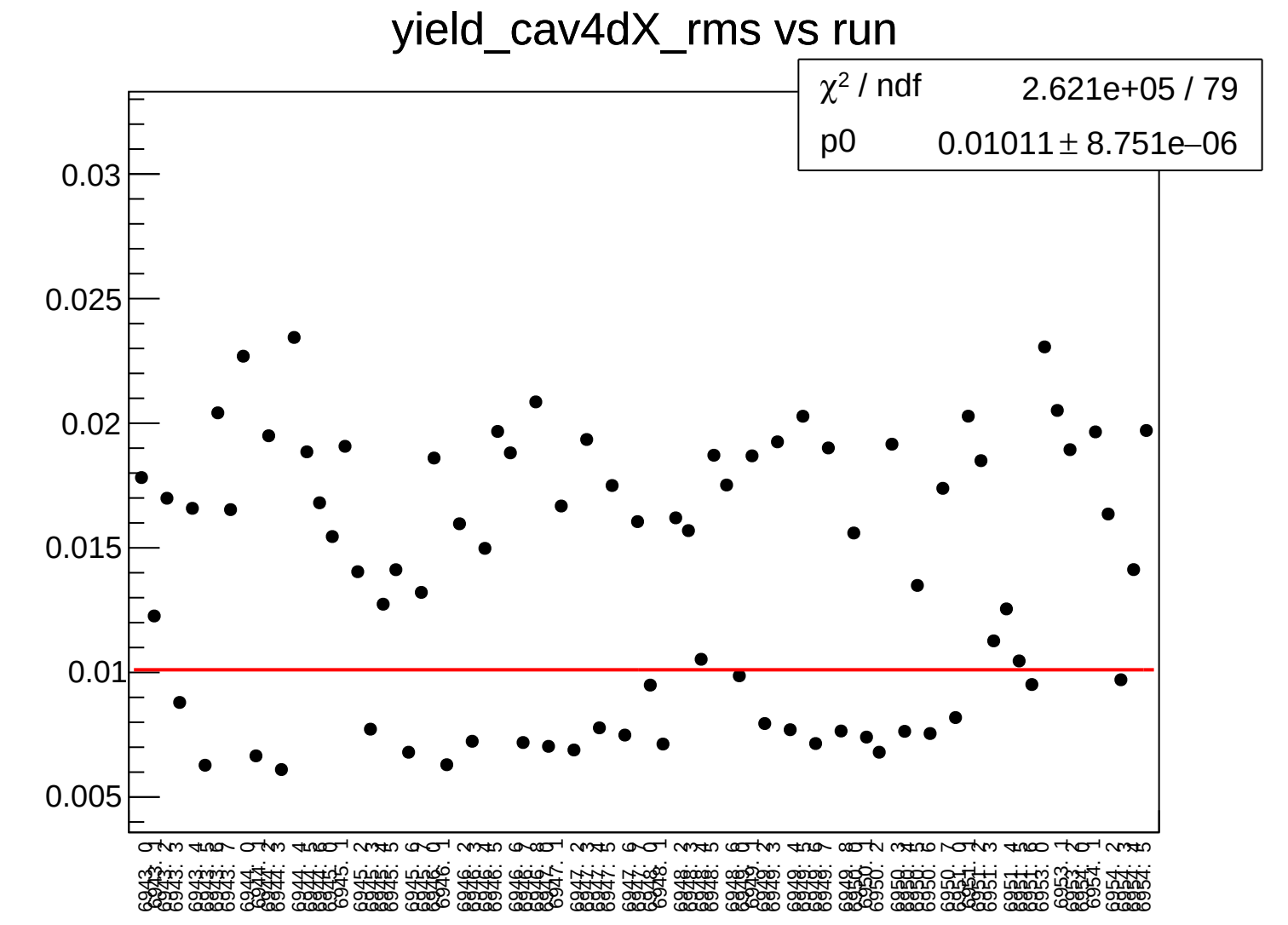

yield_cav4cX_rms vs run
χ² / ndf 2.632e+05 / 79
p0 0.001724 ± 1.494e−06
0.005
0.004
0.003
0.002
0.001

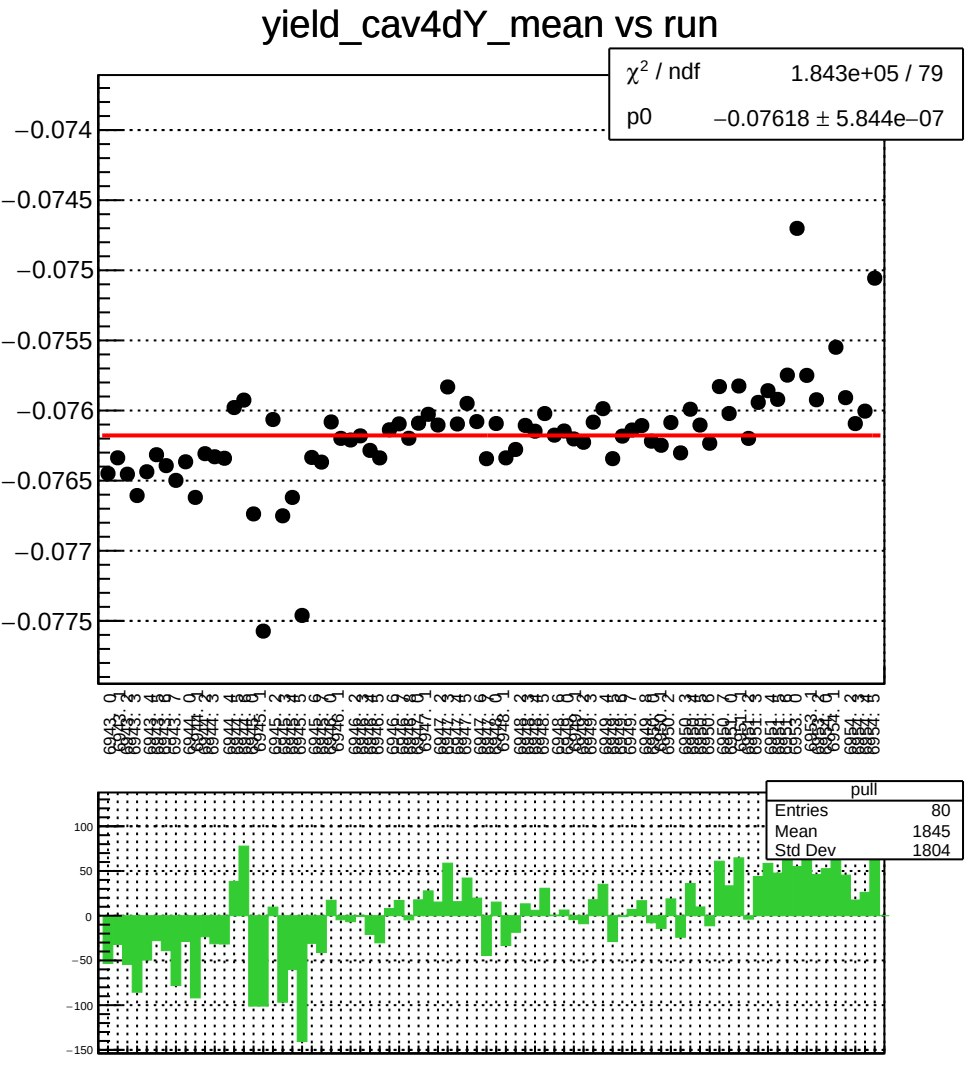

yield_cav4cY_mean vs run
χ² / ndf 1.38e+05 / 79
p0 −0.121 ± 9.88e−07
−0.118
−0.119
−0.12
−0.121
−0.122
pull
Entries 80
Mean 318.3
Std Dev 256.1
100
50
0
−50
−100
pull1D
Entries 80
Mean −0.4001
Std Dev 4.546
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

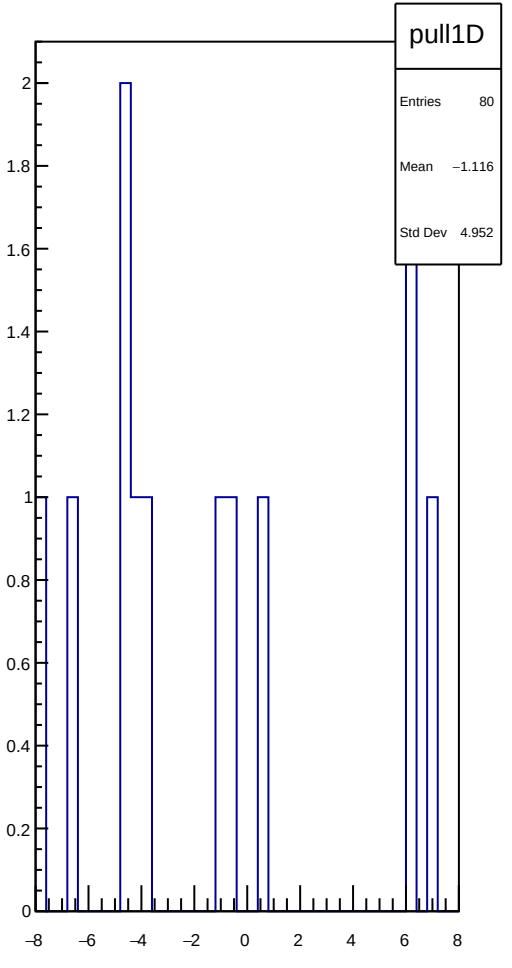

yield_cav4cY_rms vs run
χ² / ndf 5.056e+04 / 79
p0 0.0008684 ± 6.986e−07
0.006
0.005
0.004
0.003
0.002
0.001

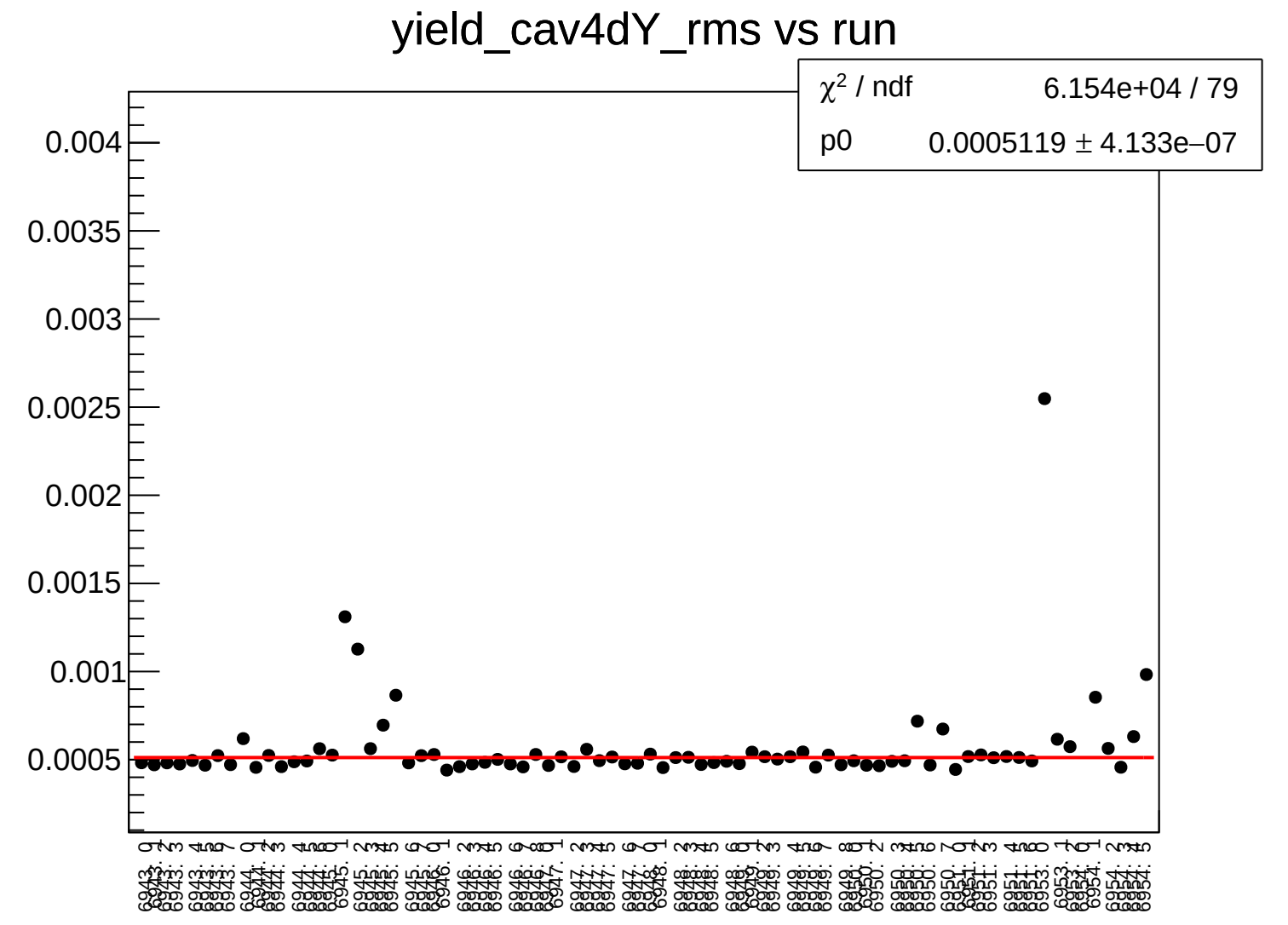

yield_cav4dX_mean vs run
χ² / ndf 2.594e+05 / 79
p0 0.05382 ± 1.238e−05
0.075
0.07
0.065
0.06
0.055
0.05
0.045
0.04
pull
Entries 80
Mean 40.35
Std Dev 34.52
100
50
0
−50
−100

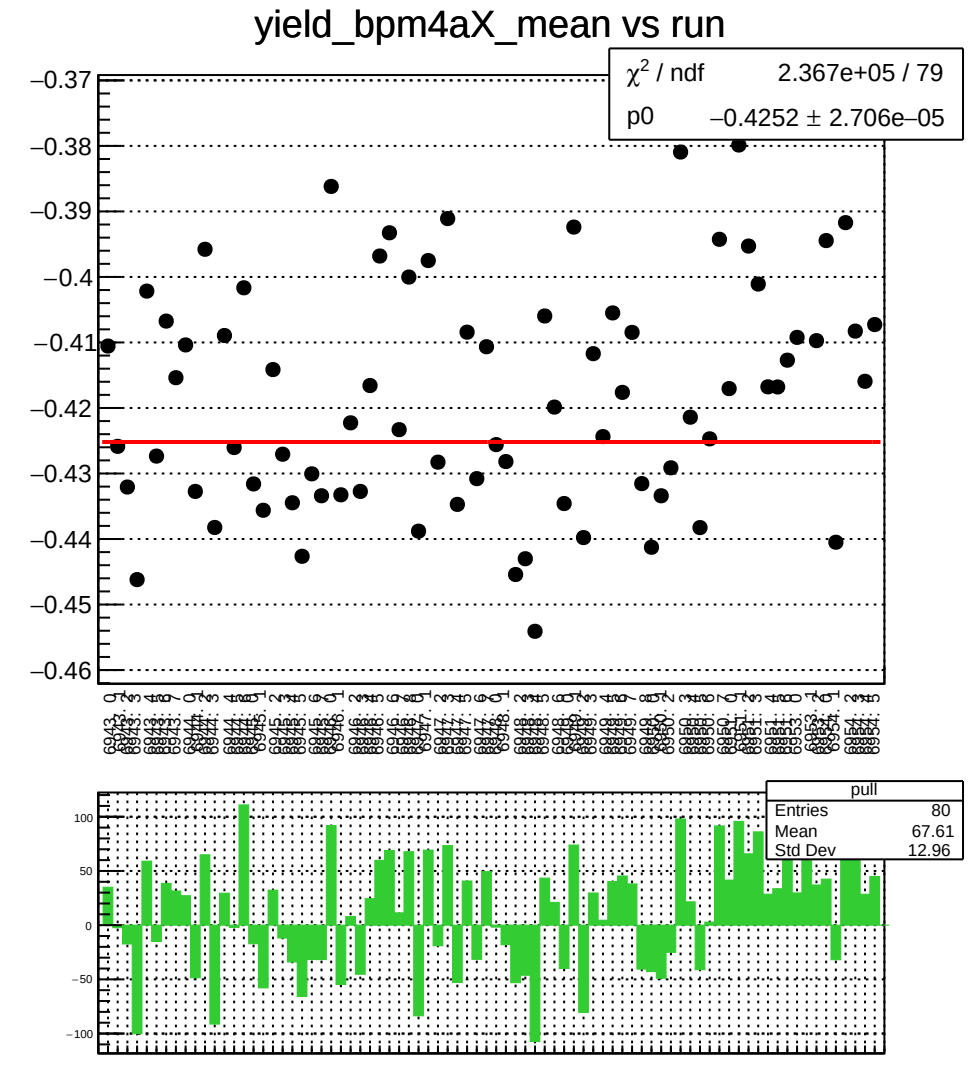

pull1D
Entries 80
Mean −0.7817
Std Dev 4.576
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

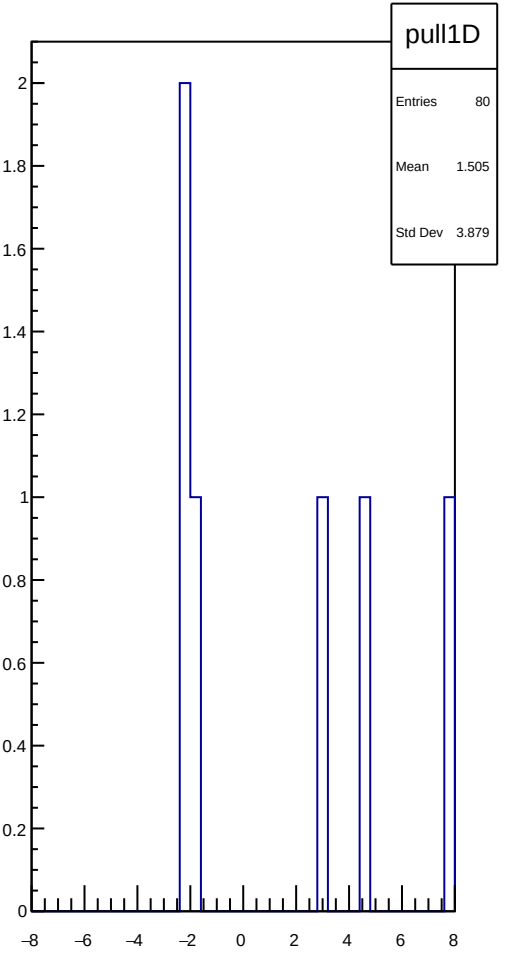

yield_cav4dX_rms vs run
χ² / ndf 2.621e+05 / 79
p0 0.01011 ± 8.751e–06
0.03
0.025
0.02
0.015
0.01
0.005

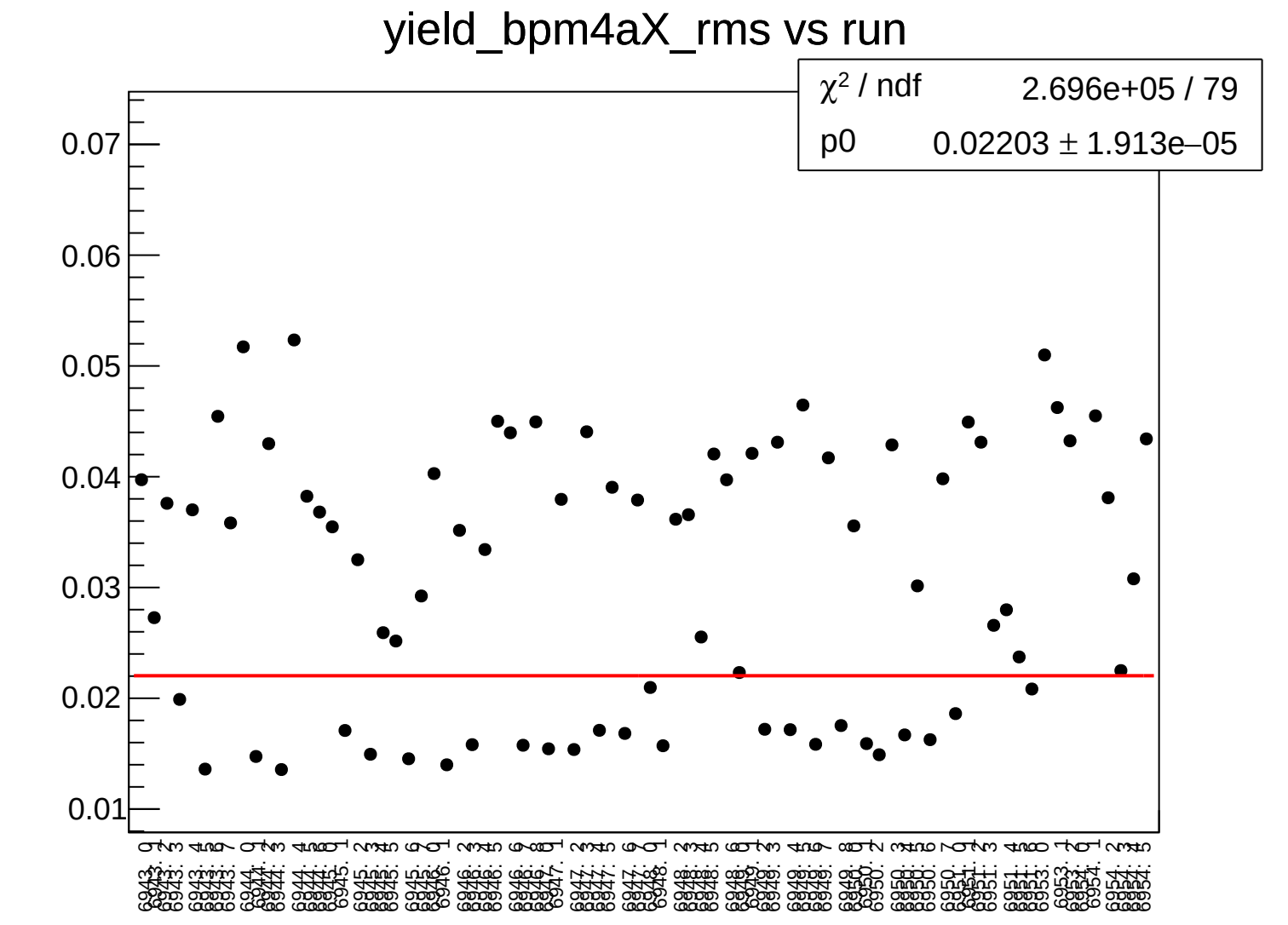

yield_cav4dY_mean vs run
χ² / ndf 1.843e+05 / 79
p0 −0.07618 ± 5.844e−07
−0.074
−0.0745
−0.075
−0.0755
−0.076
−0.0765
−0.077
−0.0775
pull
Entries 80
Mean 1845
Std Dev 1804
100
50
0
−50
−100
−150

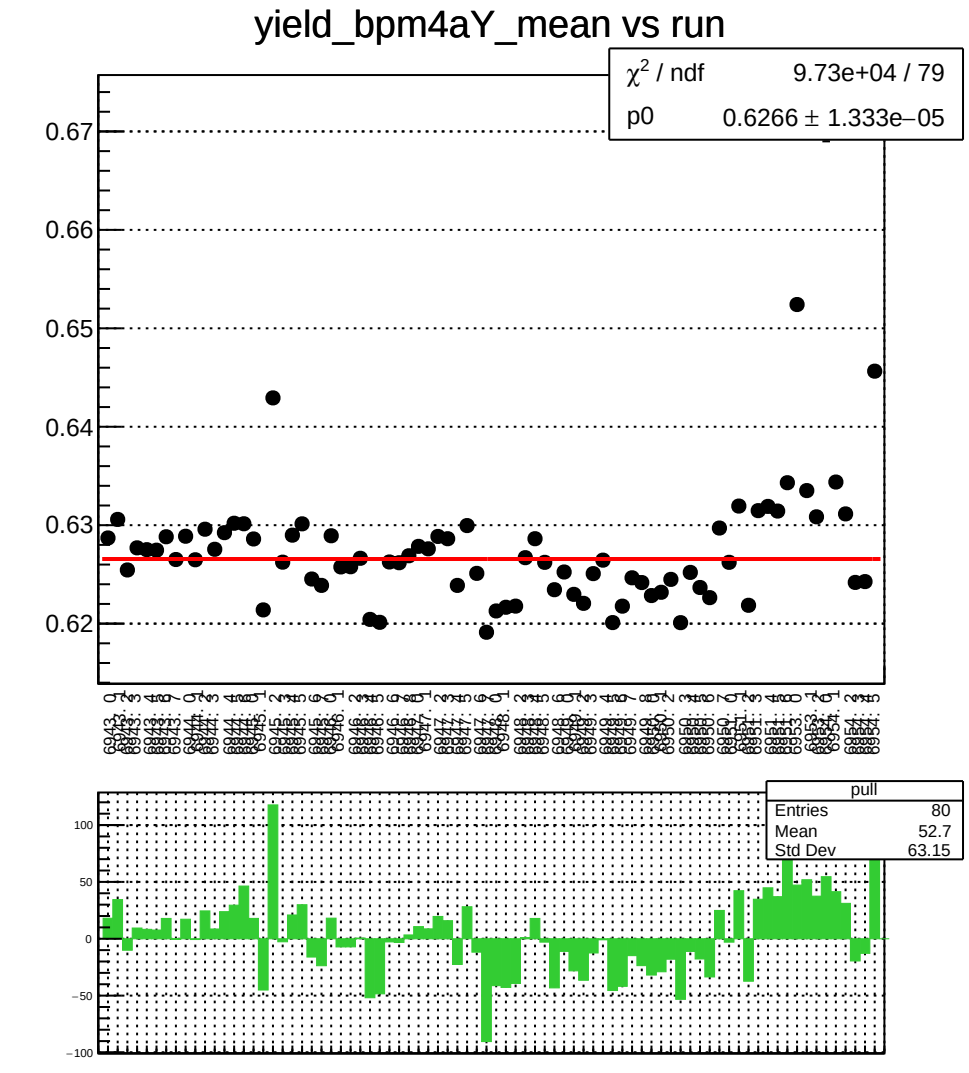

pull1D
Entries 80
Mean −1.116
Std Dev 4.952
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

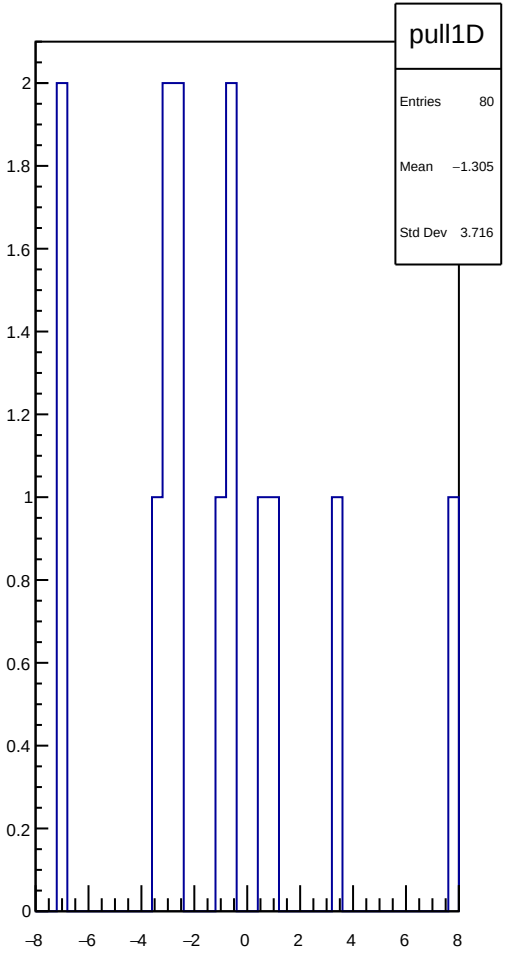

yield_cav4dY_rms vs run
χ² / ndf 6.154e+04 / 79
p0 0.0005119 ± 4.133e−07
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005

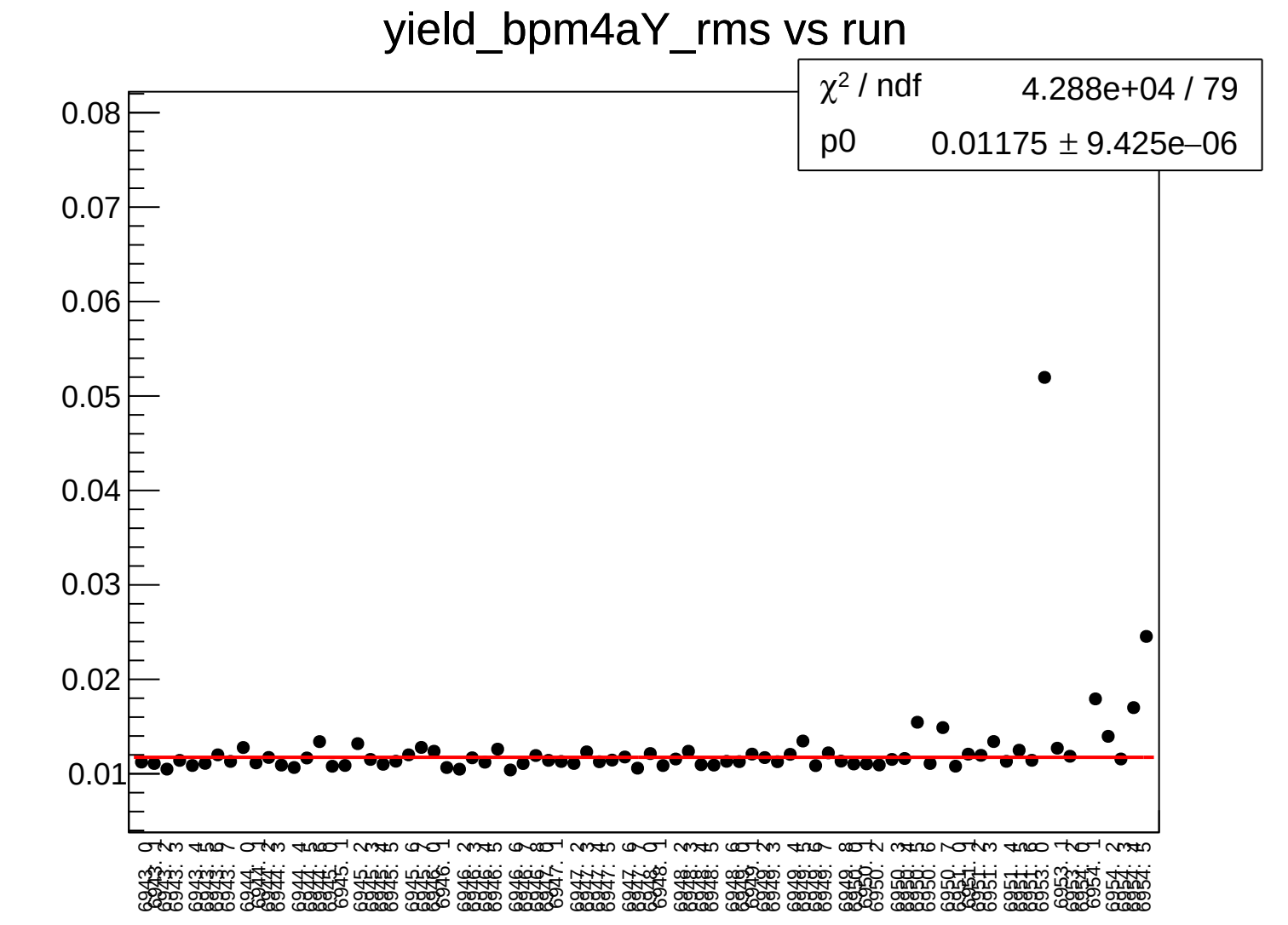

yield_bpm4aX_mean vs run
χ² / ndf 2.367e+05 / 79
p0 −0.4252 ± 2.706e−05
pull
Entries 80
Mean 67.61
Std Dev 12.96

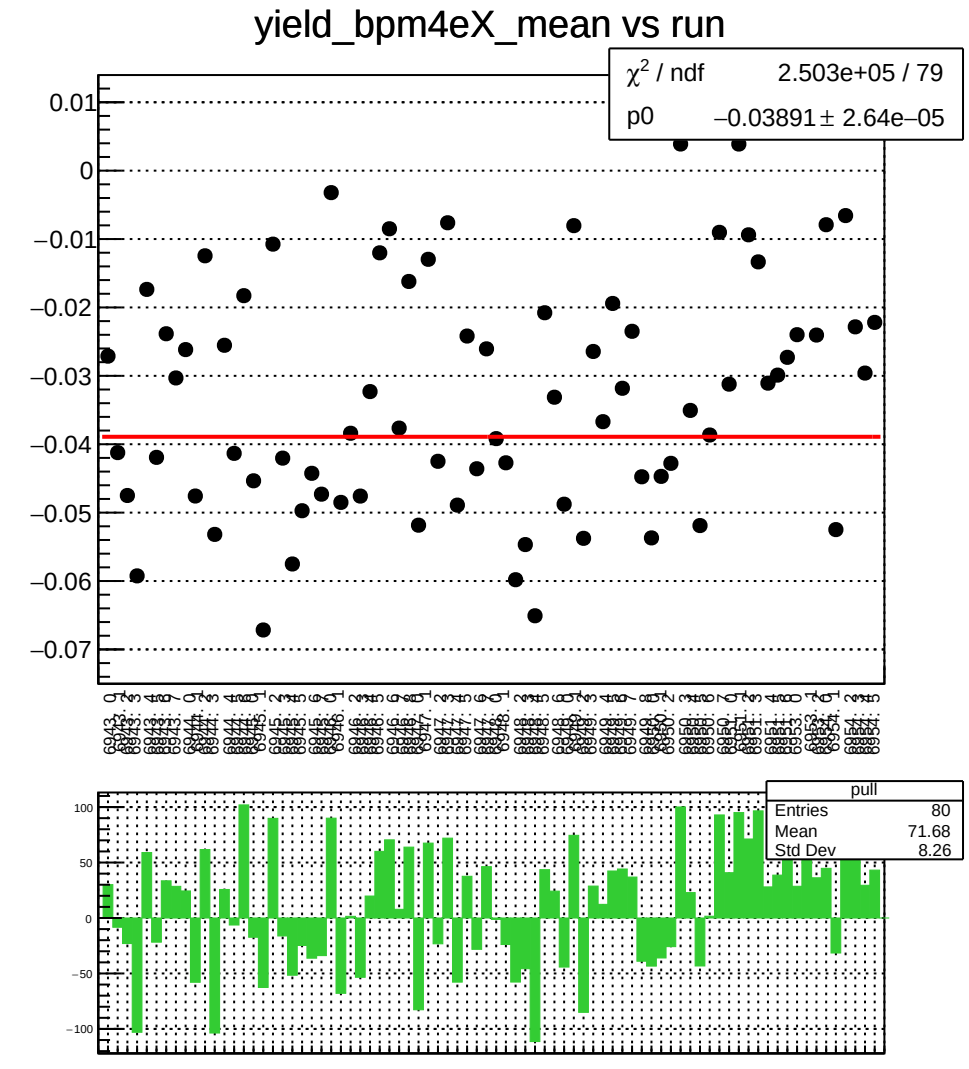

pull1D
Entries 80
Mean 1.505
Std Dev 3.879

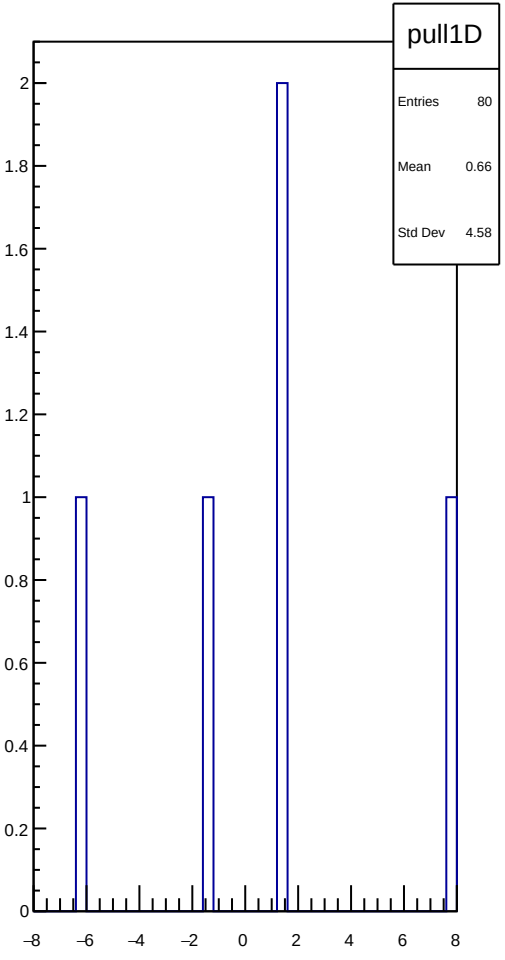

yield_bpm4aX_rms vs run
χ² / ndf 2.696e+05 / 79
p0 0.02203 ± 1.913e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

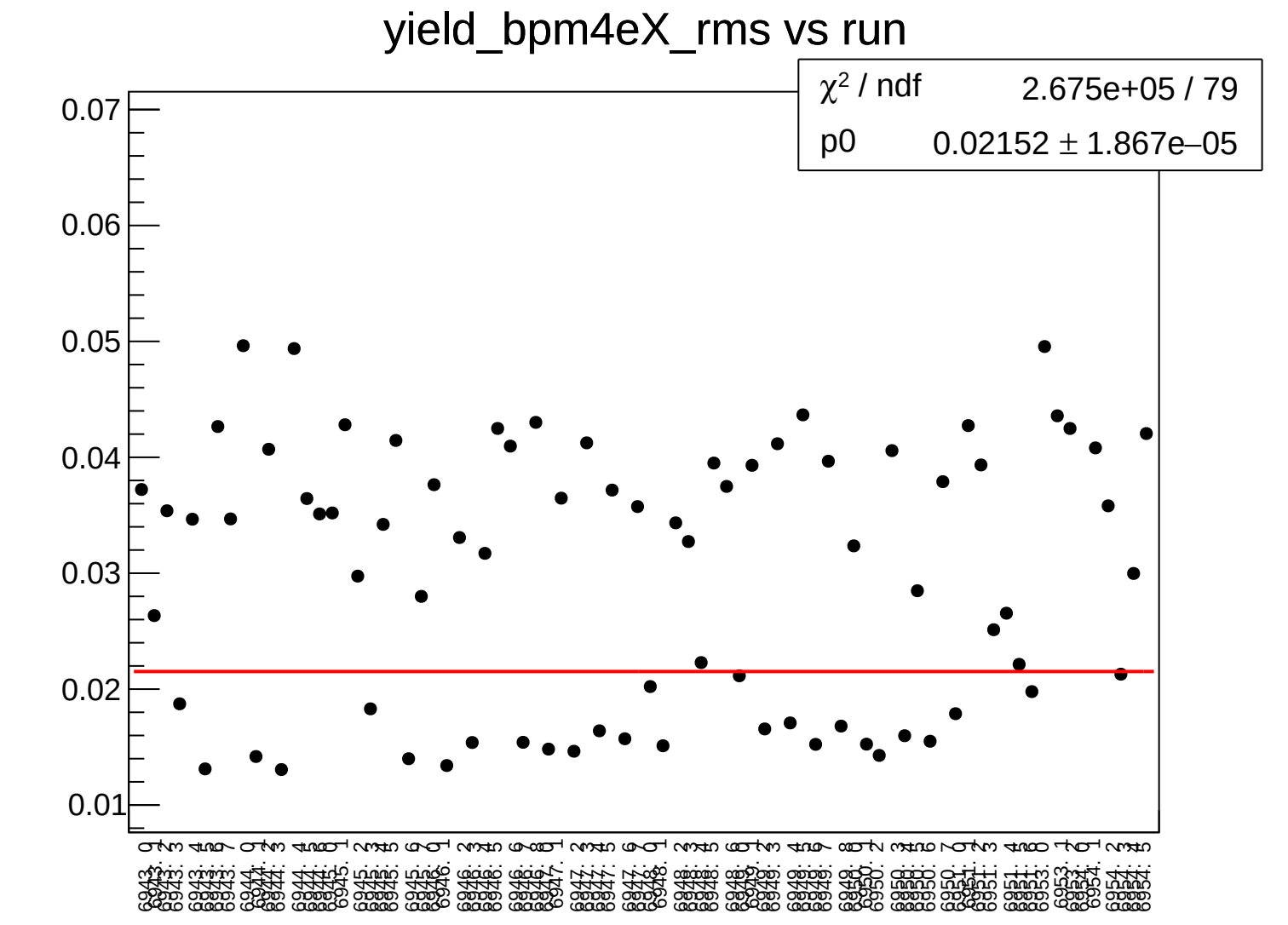

yield_bpm4aY_mean vs run
χ² / ndf 9.73e+04 / 79
p0 0.6266 ± 1.333e−05
0.67
0.66
0.65
0.64
0.63
0.62
pull
Entries 80
Mean 52.7
Std Dev 63.15
100
50
0
−50
−100

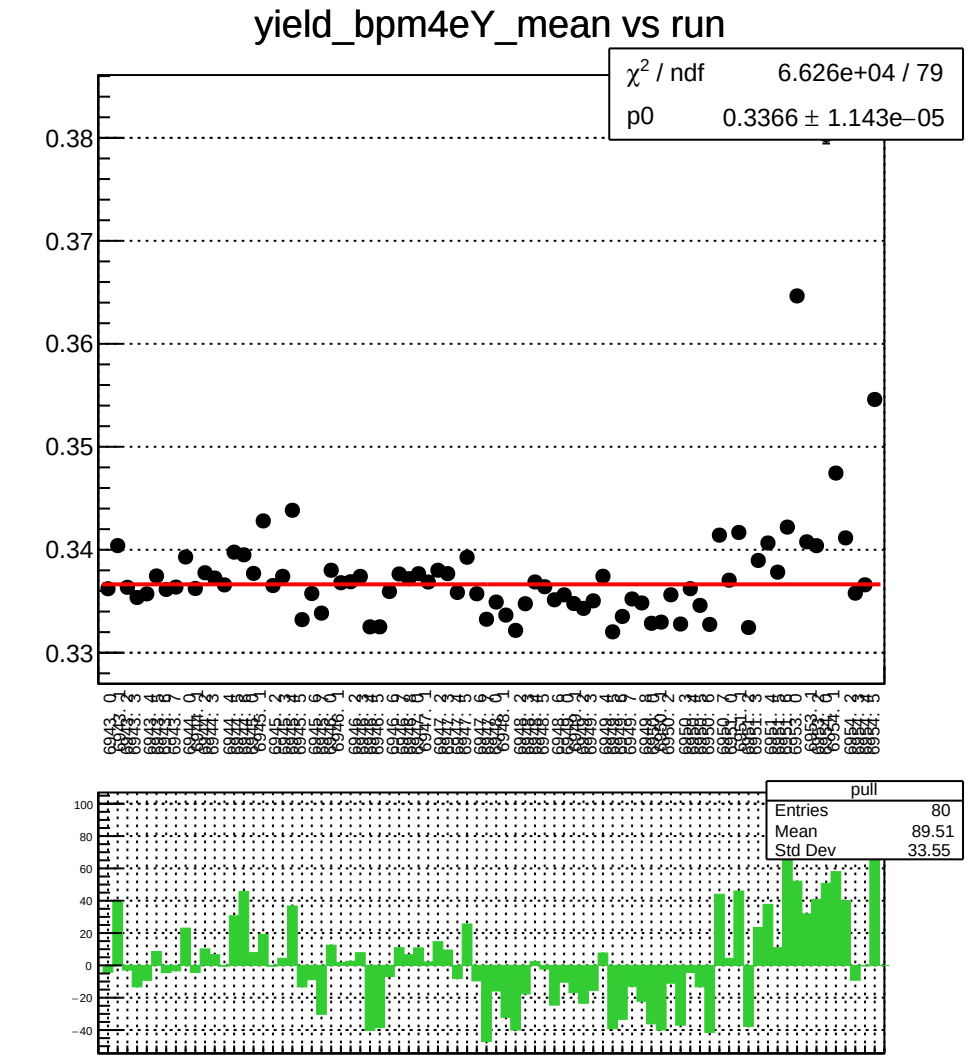

pull1D
Entries 80
Mean −1.305
Std Dev 3.716
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

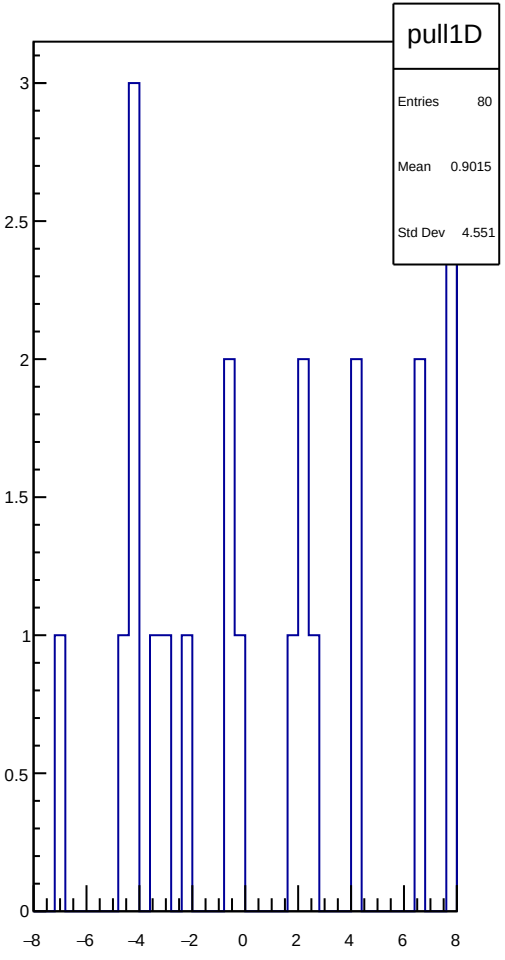

yield_bpm4aY_rms vs run
χ² / ndf 4.288e+04 / 79
p0 0.01175 ± 9.425e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

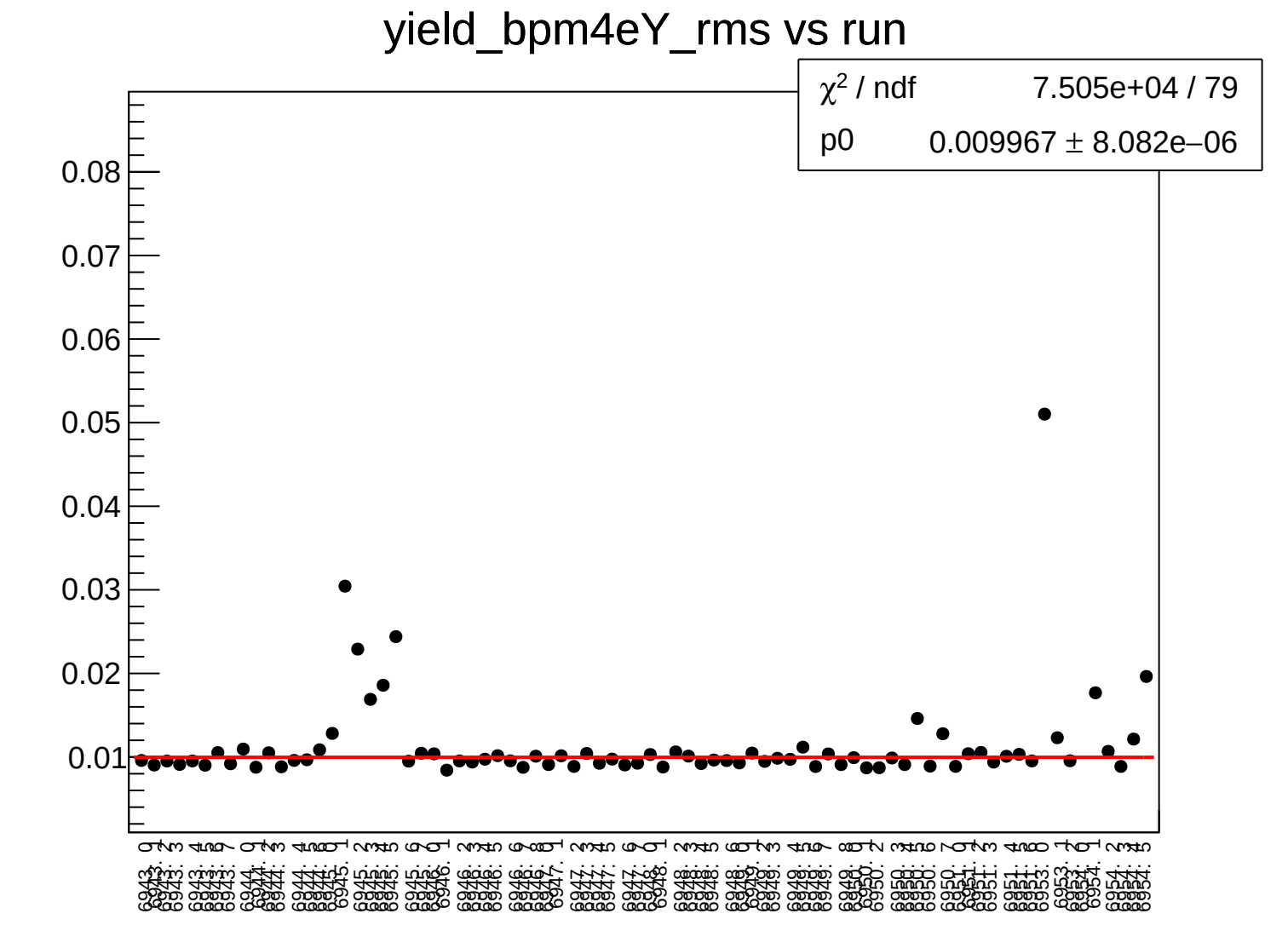

yield_bpm4eX_mean vs run
χ² / ndf 2.503e+05 / 79
p0 −0.03891 ± 2.64e−05
pull
Entries 80
Mean 71.68
Std Dev 8.26

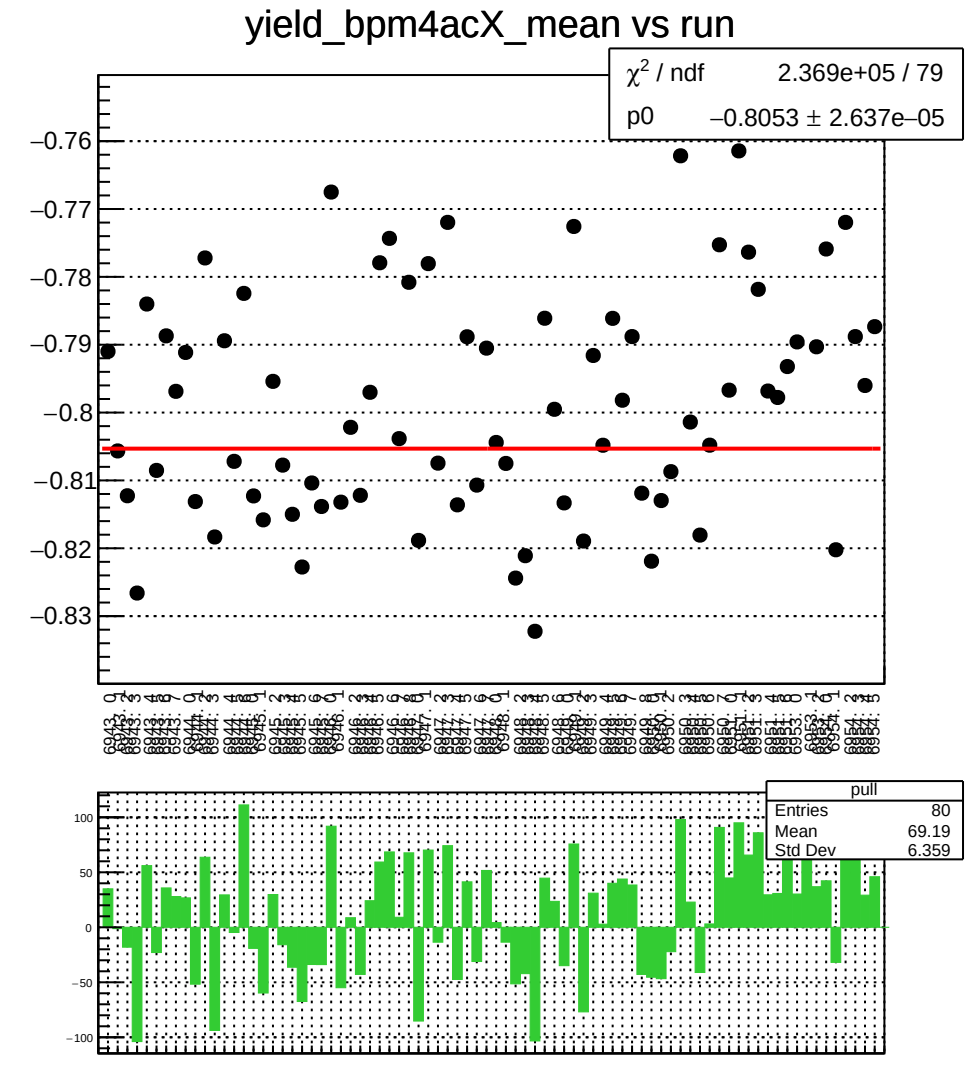

pull1D
Entries 80
Mean 0.66
Std Dev 4.58

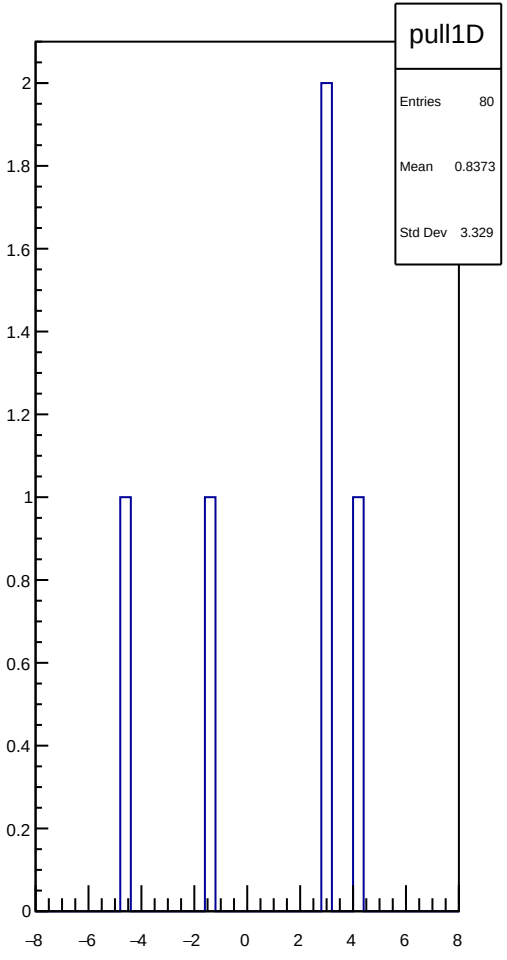

yield_bpm4eX_rms vs run
χ² / ndf 2.675e+05 / 79
p0 0.02152 ± 1.867e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

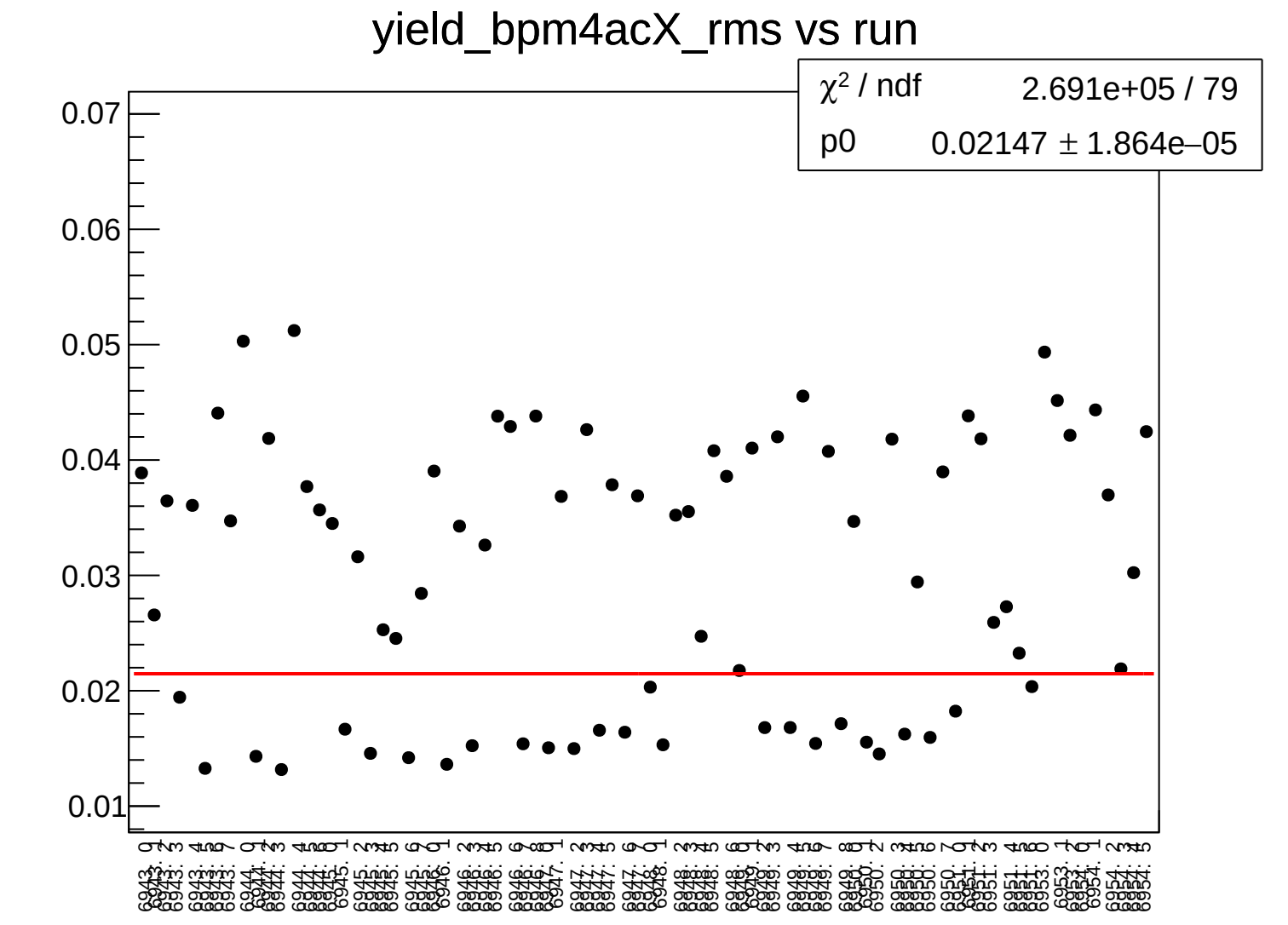

yield_bpm4eY_mean vs run
χ² / ndf 6.626e+04 / 79
p0 0.3366 ± 1.143e−05
0.38
0.37
0.36
0.35
0.34
0.33
pull
Entries 80
Mean 89.51
Std Dev 33.55
100
80
60
40
20
0
−20
−40

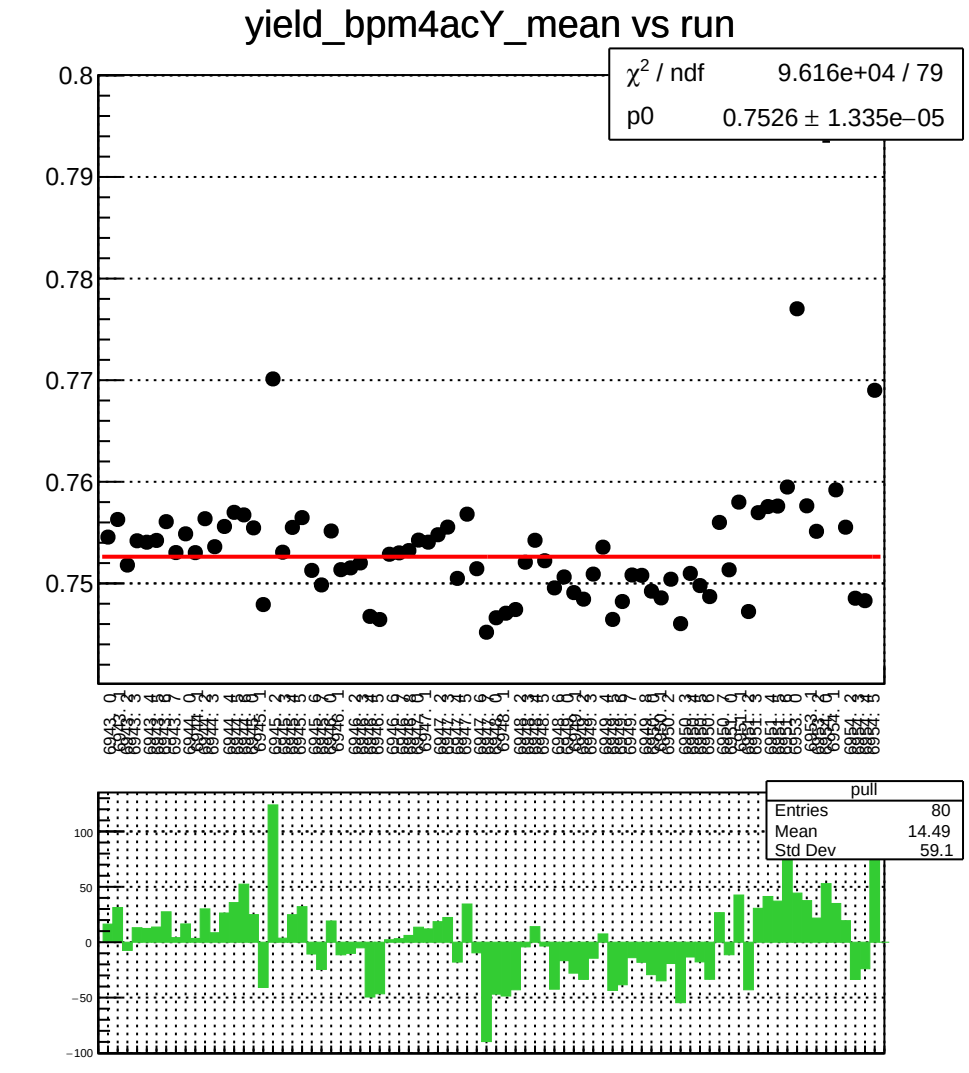

pull1D
Entries 80
Mean 0.9015
Std Dev 4.551
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

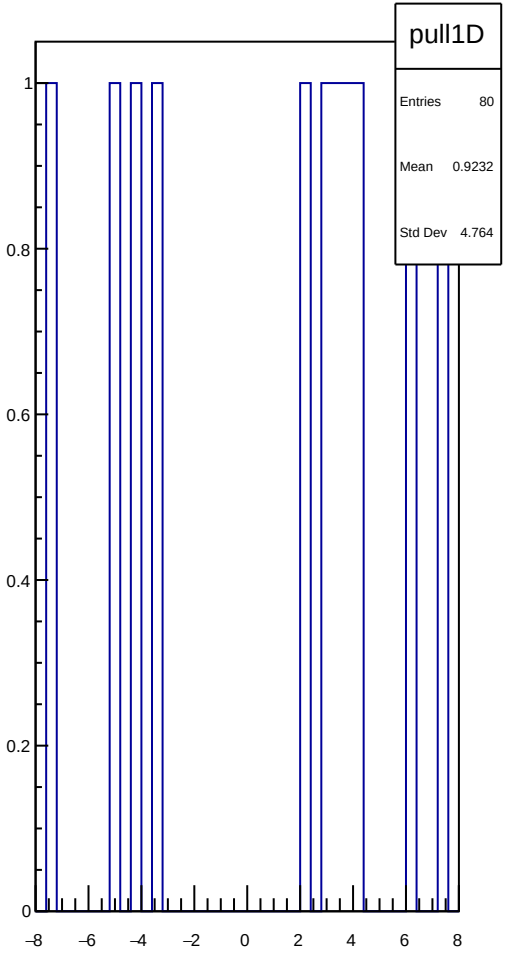

yield_bpm4eY_rms vs run
χ² / ndf 7.505e+04 / 79
p0 0.009967 ± 8.082e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

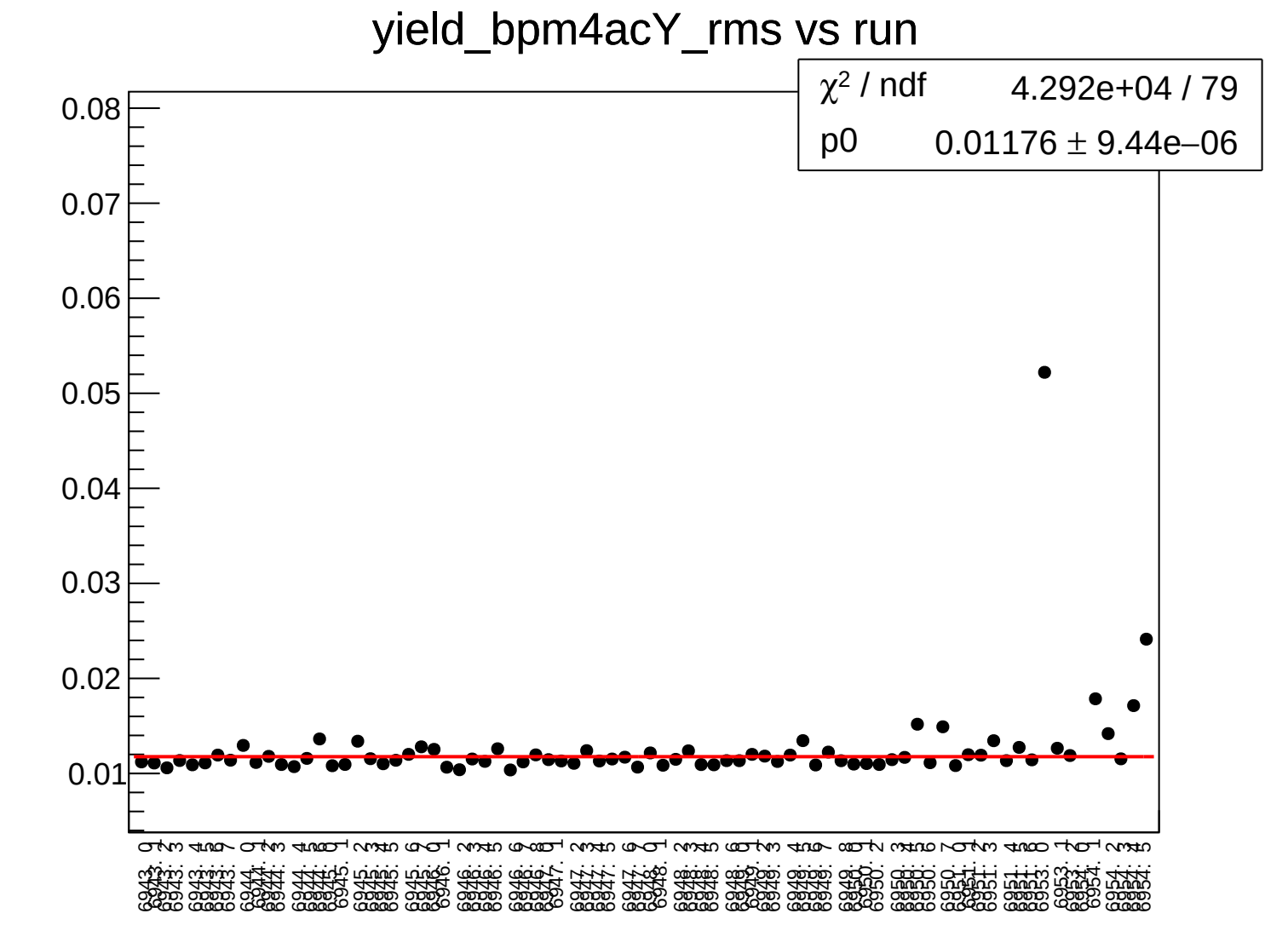

yield_bpm4acX_mean vs run
χ² / ndf 2.369e+05 / 79
p0 −0.8053 ± 2.637e−05
−0.76
−0.77
−0.78
−0.79
−0.8
−0.81
−0.82
−0.83
pull
Entries 80
Mean 69.19
Std Dev 6.359
100
50
0
−50
−100

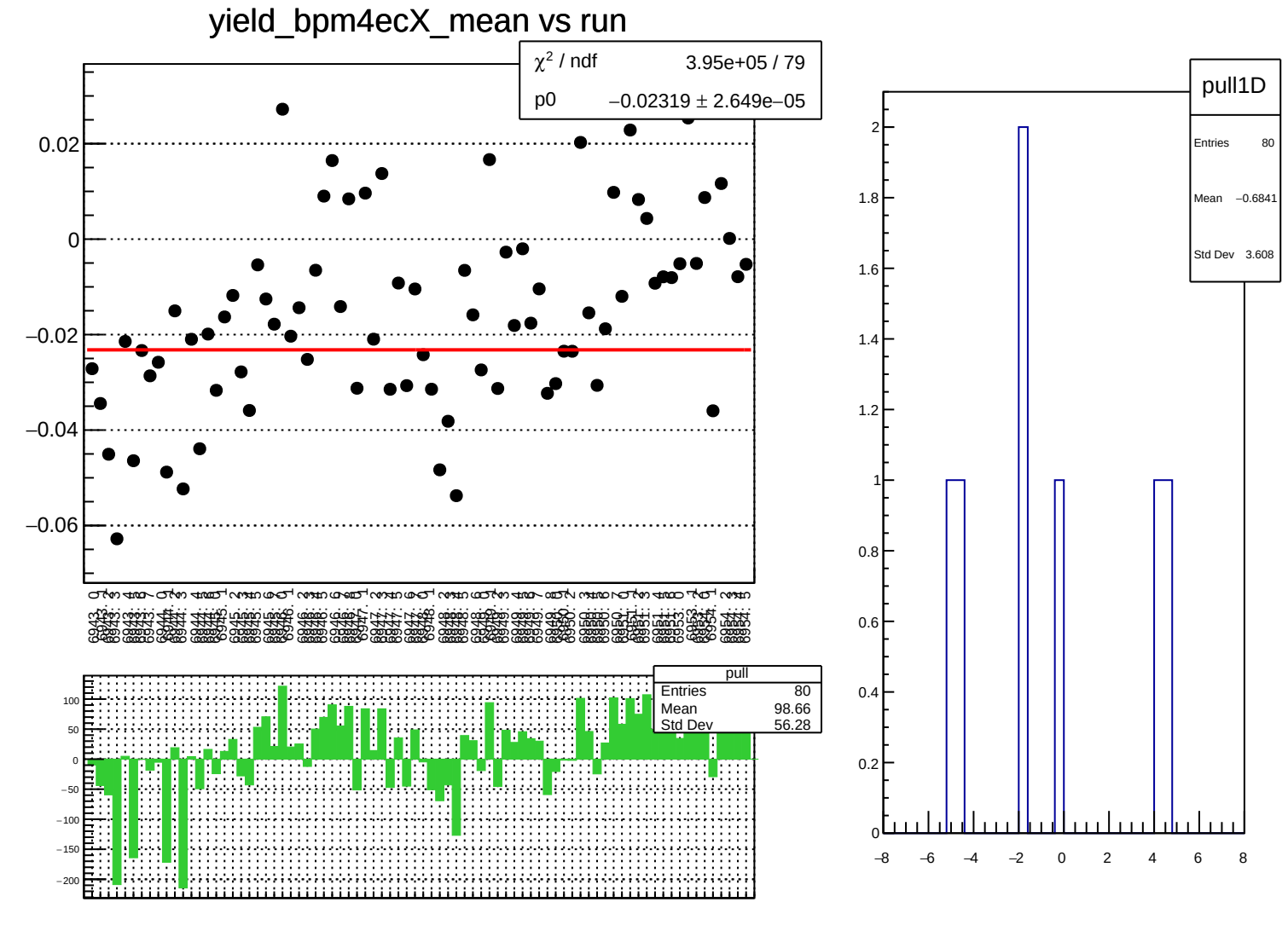

pull1D
Entries 80
Mean 0.8373
Std Dev 3.329
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

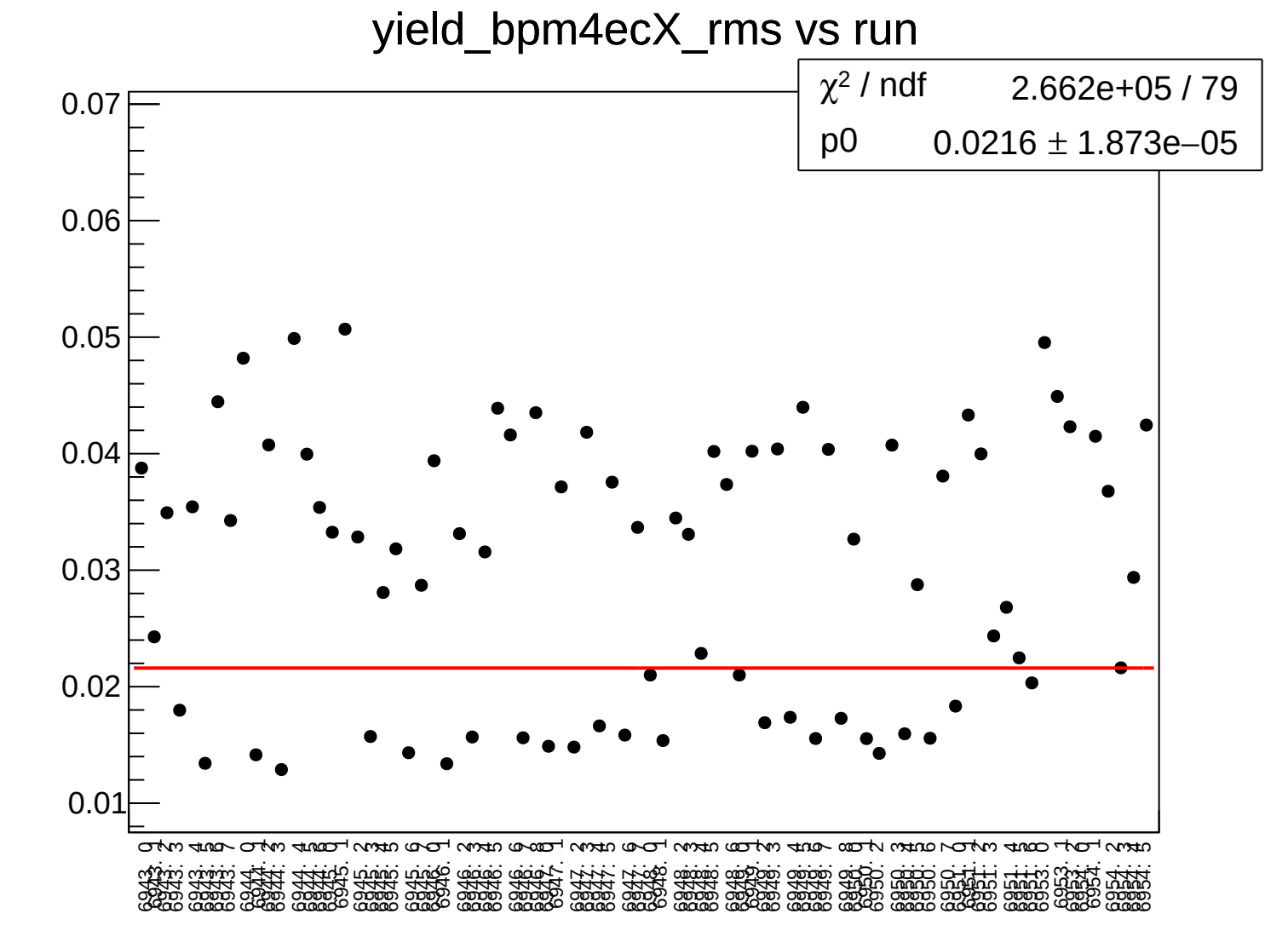

yield_bpm4acX_rms vs run
χ² / ndf 2.691e+05 / 79
p0 0.02147 ± 1.864e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

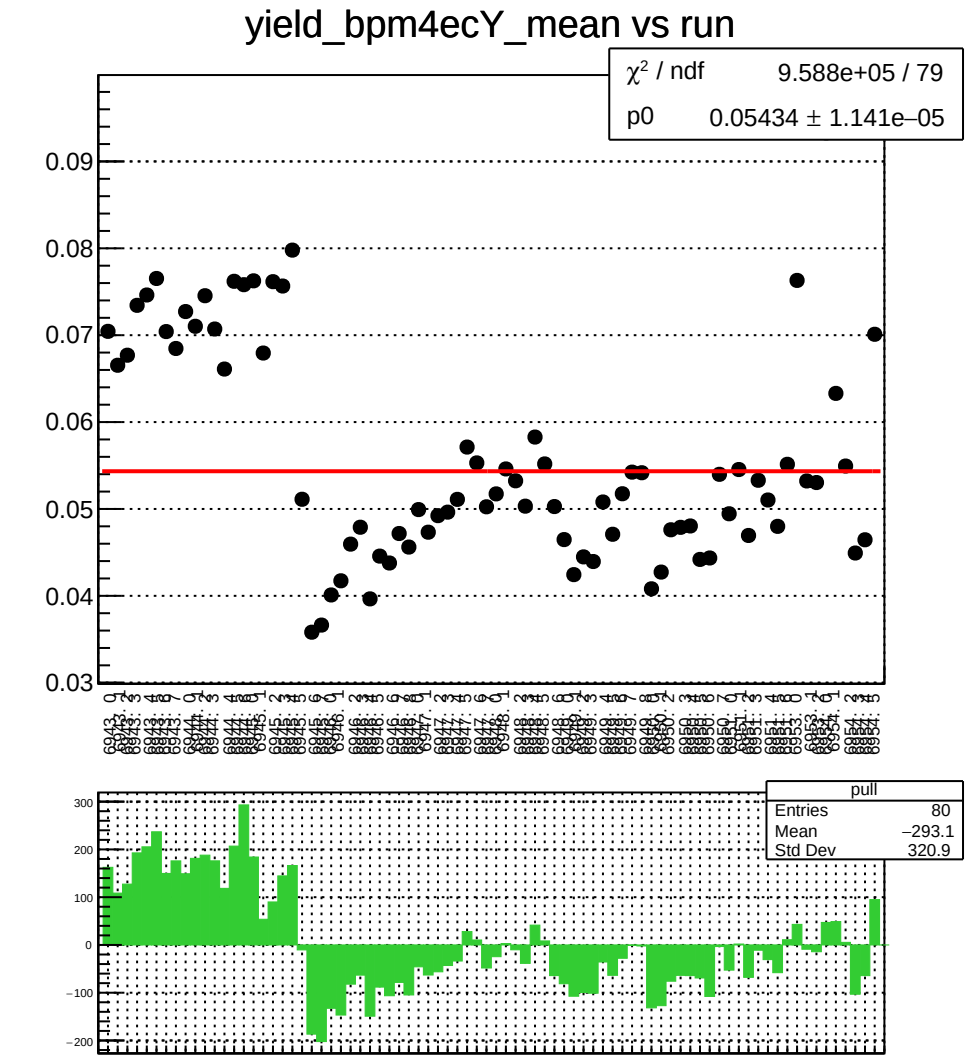

yield_bpm4acY_mean vs run
χ² / ndf 9.616e+04 / 79
p0 0.7526 ± 1.335e−05
0.8
0.79
0.78
0.77
0.76
0.75
pull
Entries 80
Mean 14.49
Std Dev 59.1
100
50
0
−50
−100

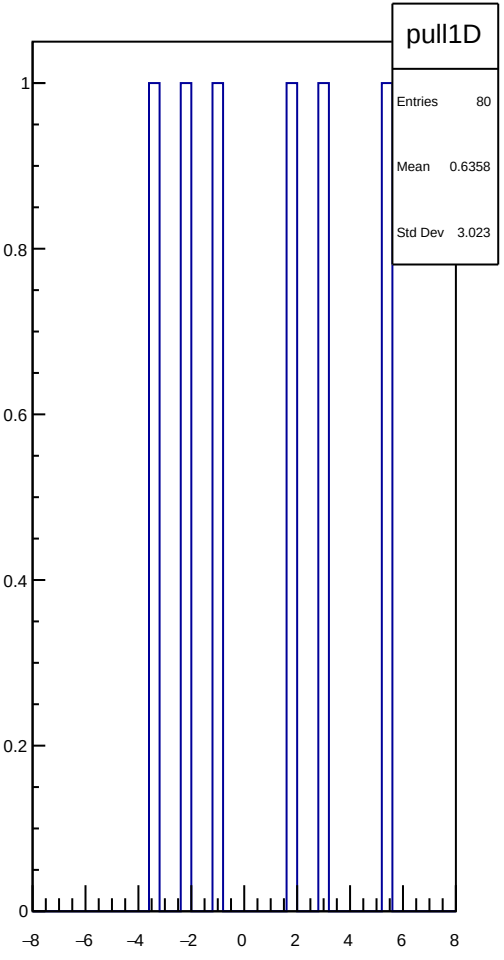

pull1D
Entries 80
Mean 0.9232
Std Dev 4.764
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

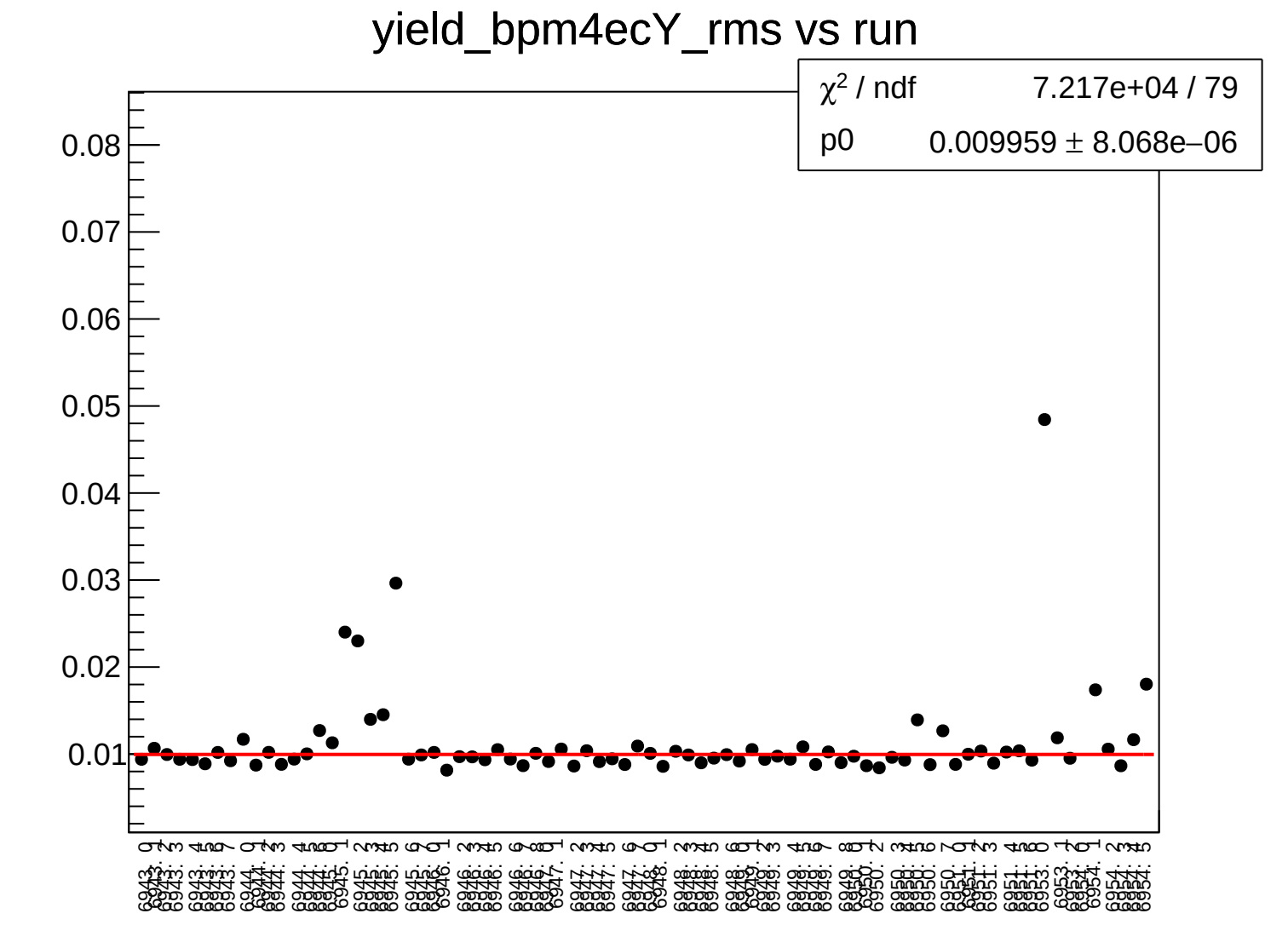

yield_bpm4acY_rms vs run
χ² / ndf 4.292e+04 / 79
p0 0.01176 ± 9.44e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

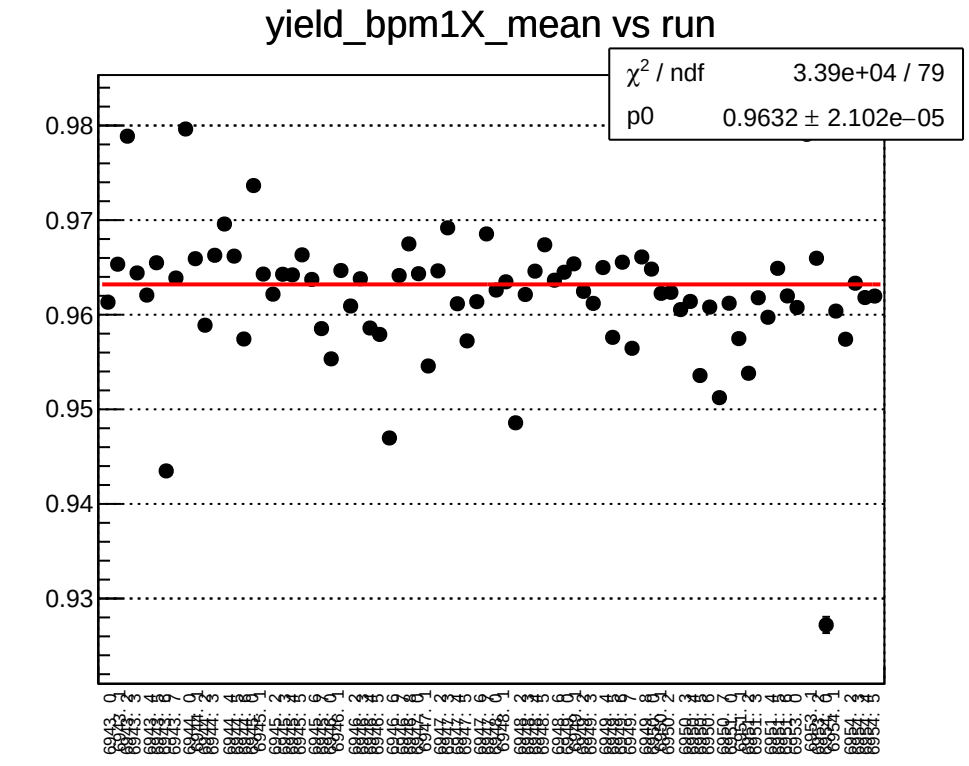

yield_bpm4ecX_mean vs run
χ² / ndf 3.95e+05 / 79
p0 −0.02319 ± 2.649e−05
0.02
0
−0.02
−0.04
−0.06
pull
Entries 80
Mean 98.66
Std Dev 56.28
100
50
0
−50
−100
−150
−200
pull1D
Entries 80
Mean −0.6841
Std Dev 3.608
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

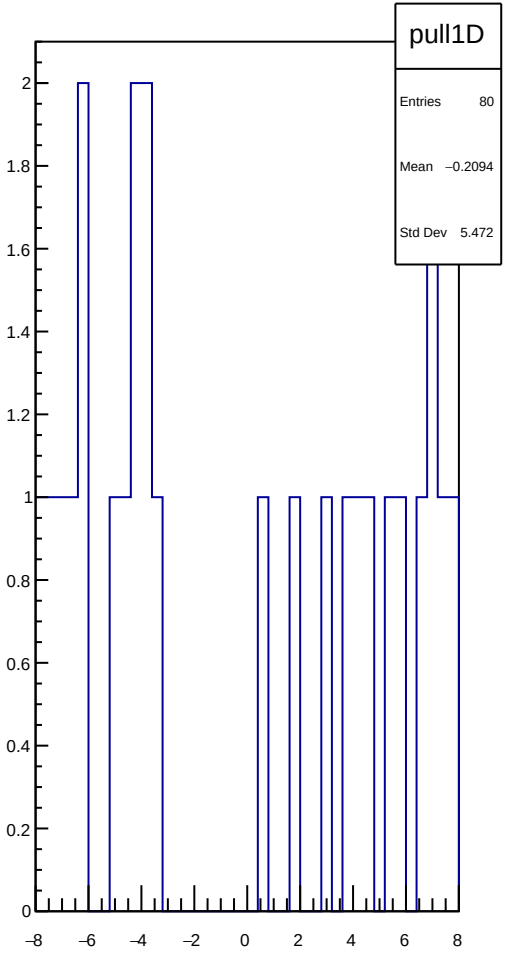

yield_bpm4ecX_rms vs run
χ² / ndf 2.662e+05 / 79
p0 0.0216 ± 1.873e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

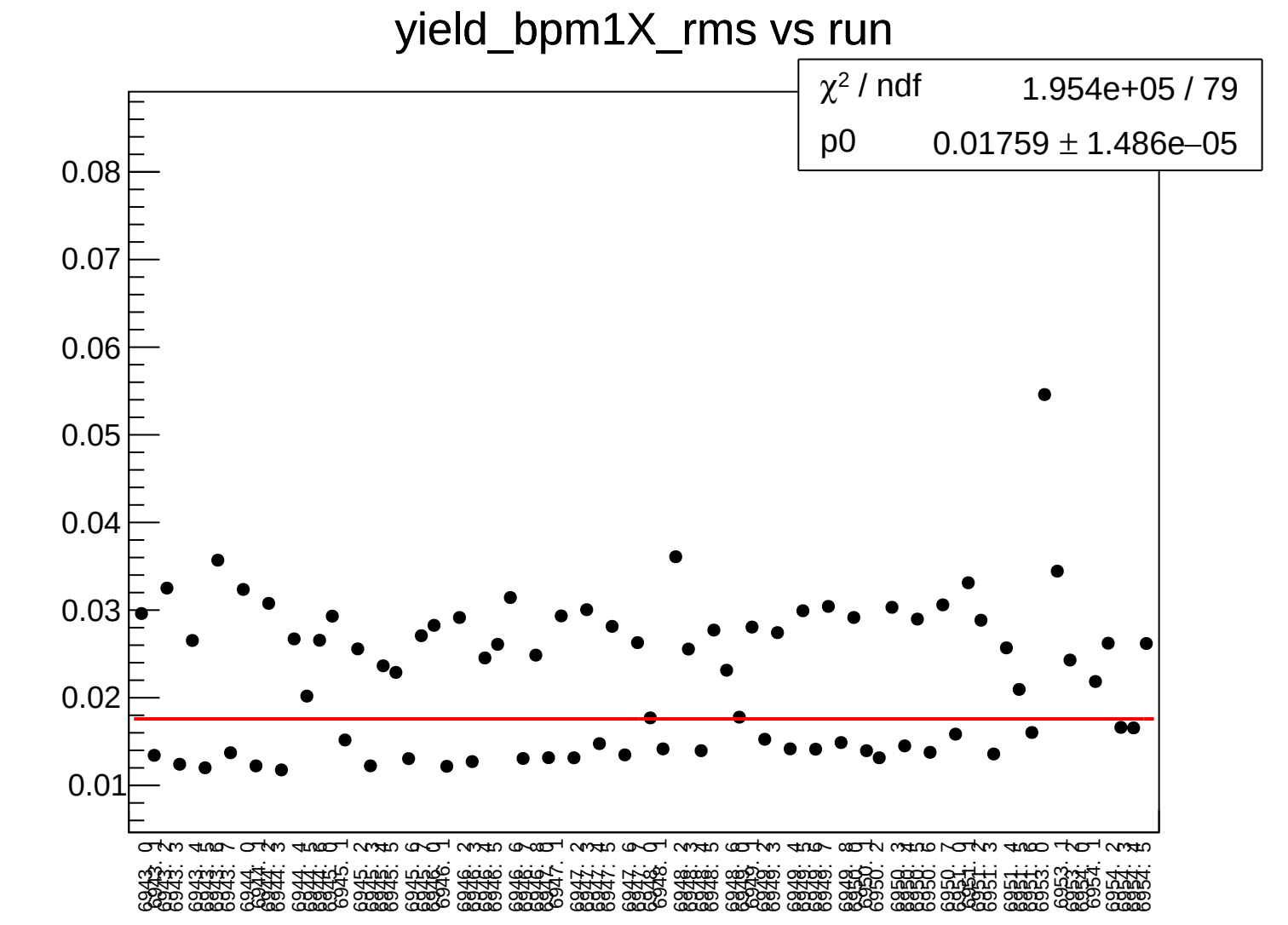

yield_bpm4ecY_mean vs run
χ² / ndf 9.588e+05 / 79
p0 0.05434 ± 1.141e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
pull
Entries 80
Mean −293.1
Std Dev 320.9
300
200
100
0
−100
−200

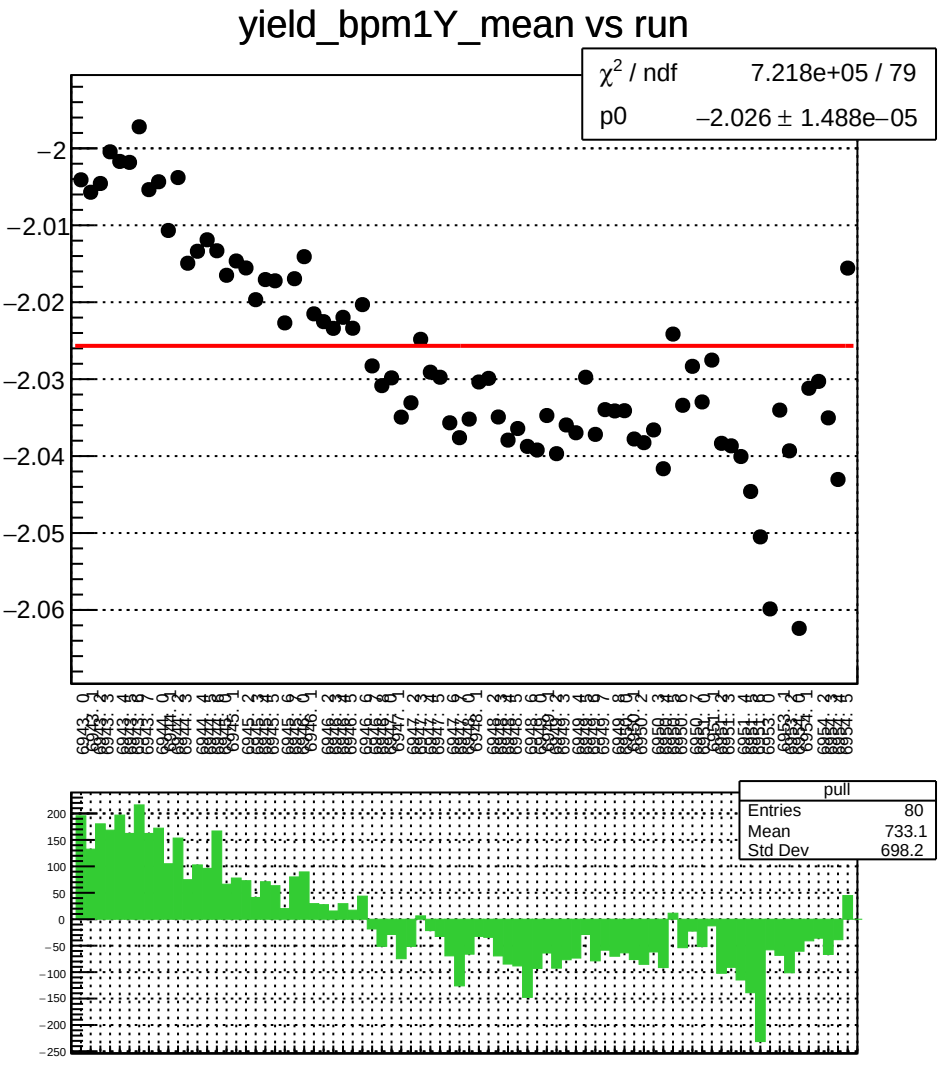

pull1D
Entries 80
Mean 0.6358
Std Dev 3.023
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

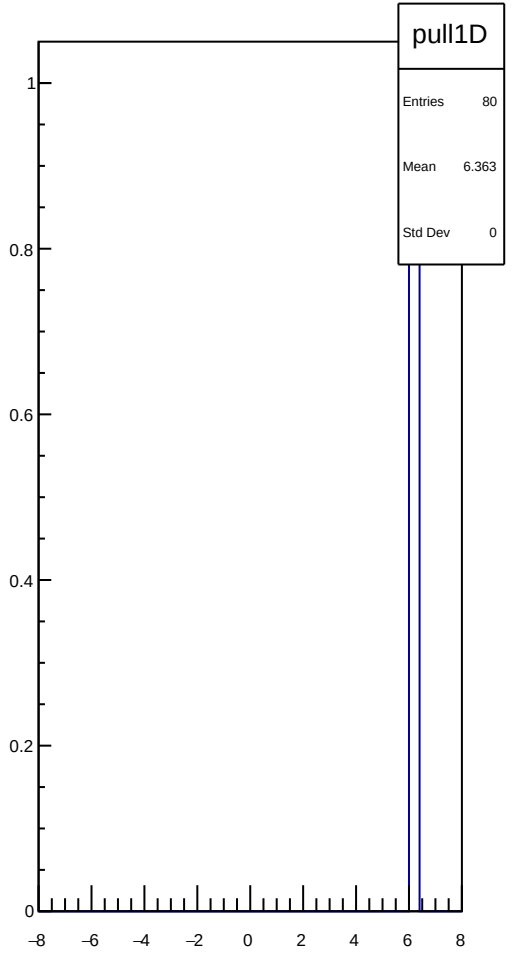

yield_bpm4ecY_rms vs run
χ^2 / ndf 7.217e+04 / 79
p0 0.009959 ± 8.068e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

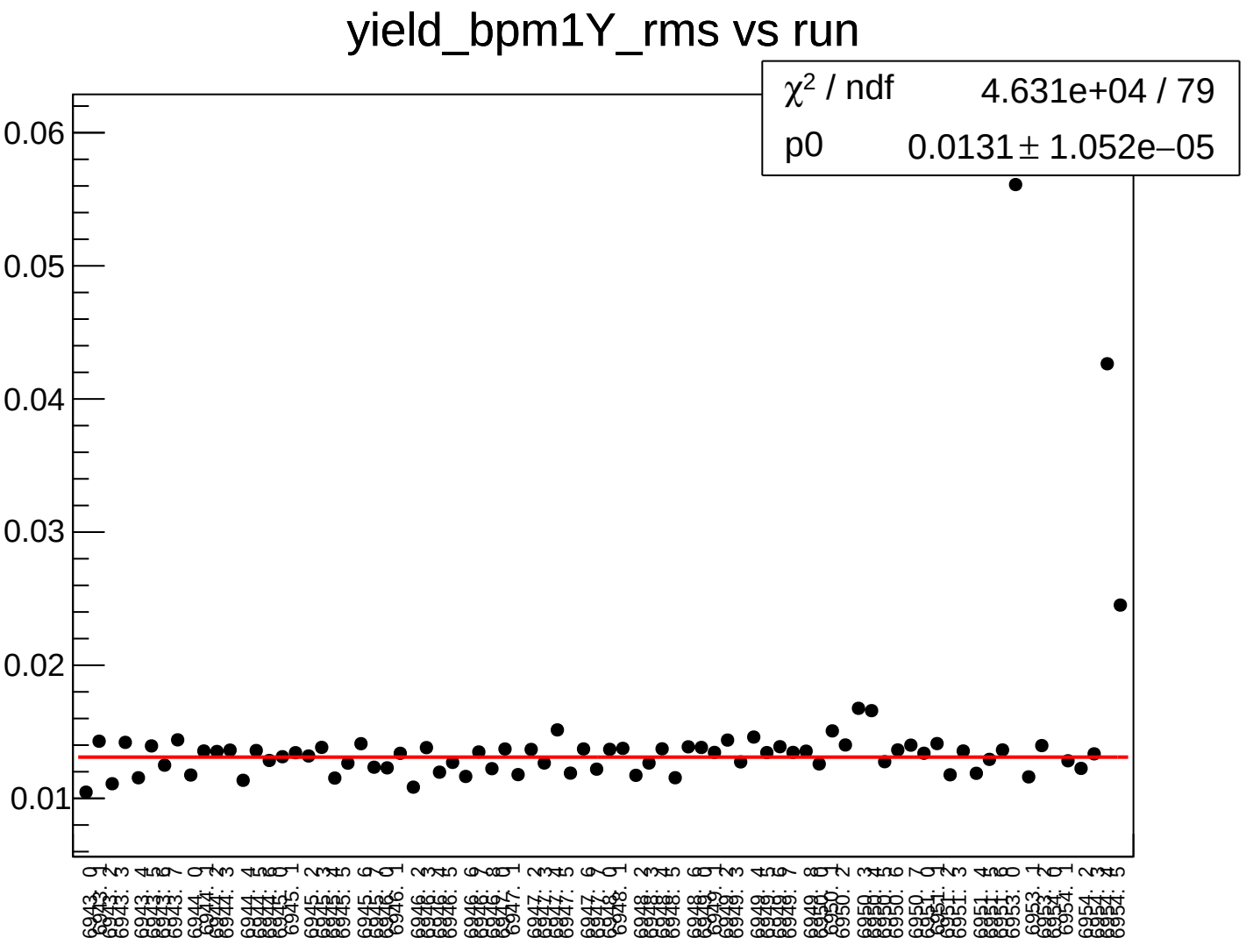

yield_bpm1X_mean vs run
χ² / ndf 3.39e+04 / 79
p0 0.9632 ± 2.102e−05
0.98
0.97
0.96
0.95
0.94
0.93
pull
Entries 80
Mean 97.46
Std Dev 56.07
40
20
0
−20
−40

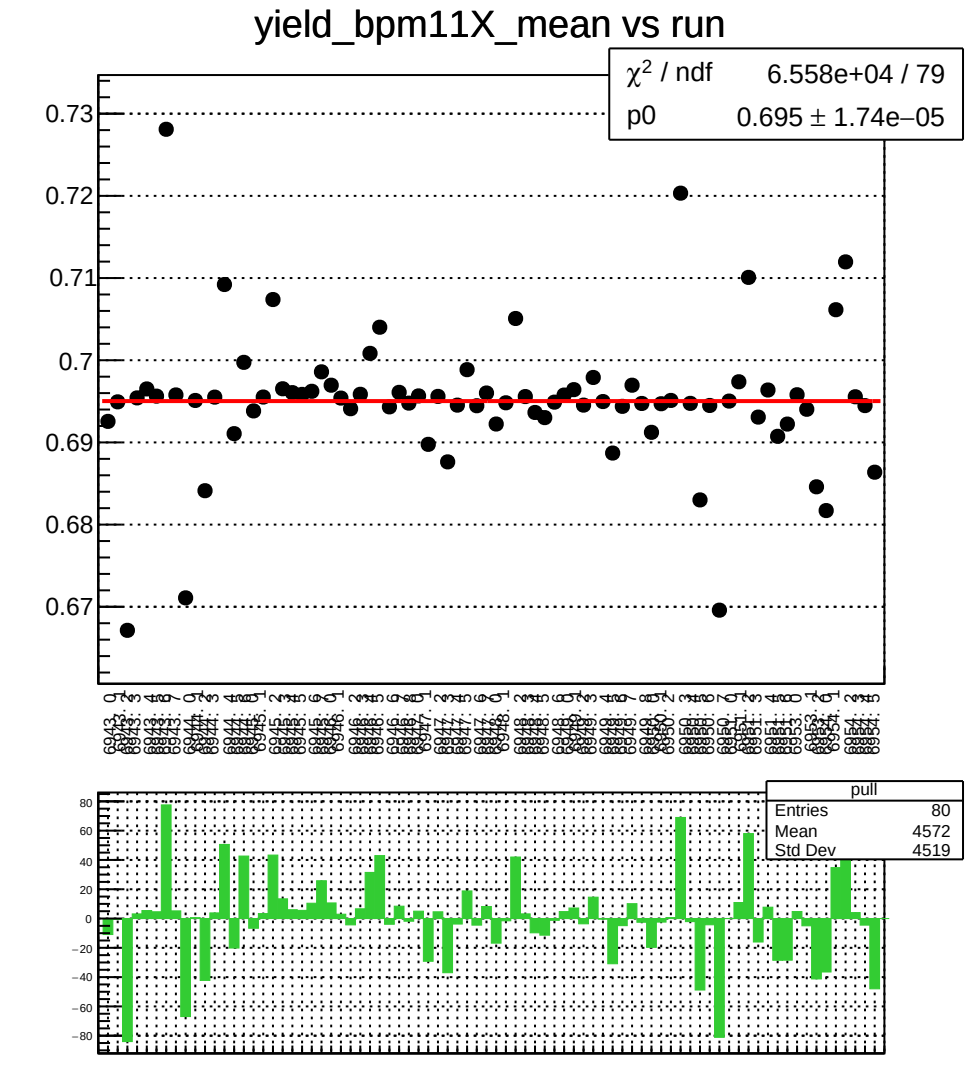

pull1D
Entries 80
Mean −0.2094
Std Dev 5.472
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

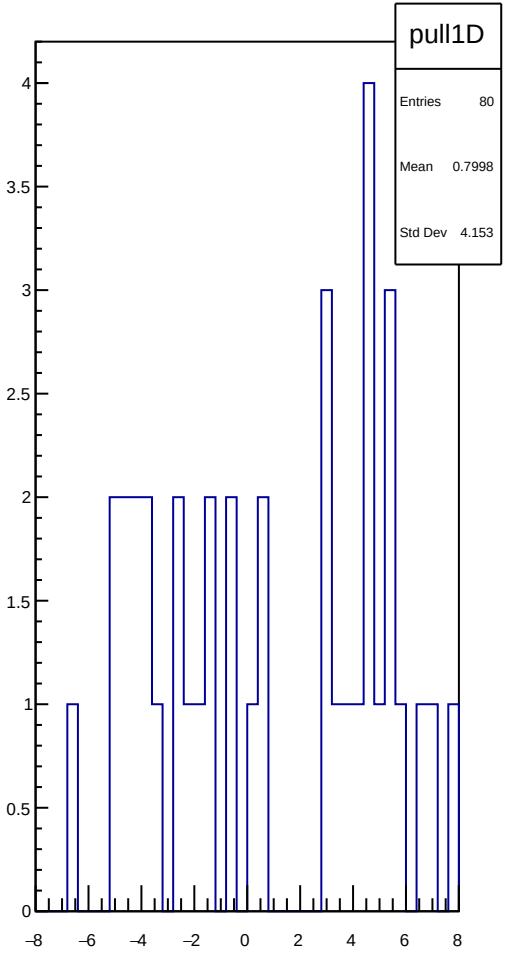

yield_bpm1X_rms vs run
χ² / ndf 1.954e+05 / 79
p0 0.01759 ± 1.486e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

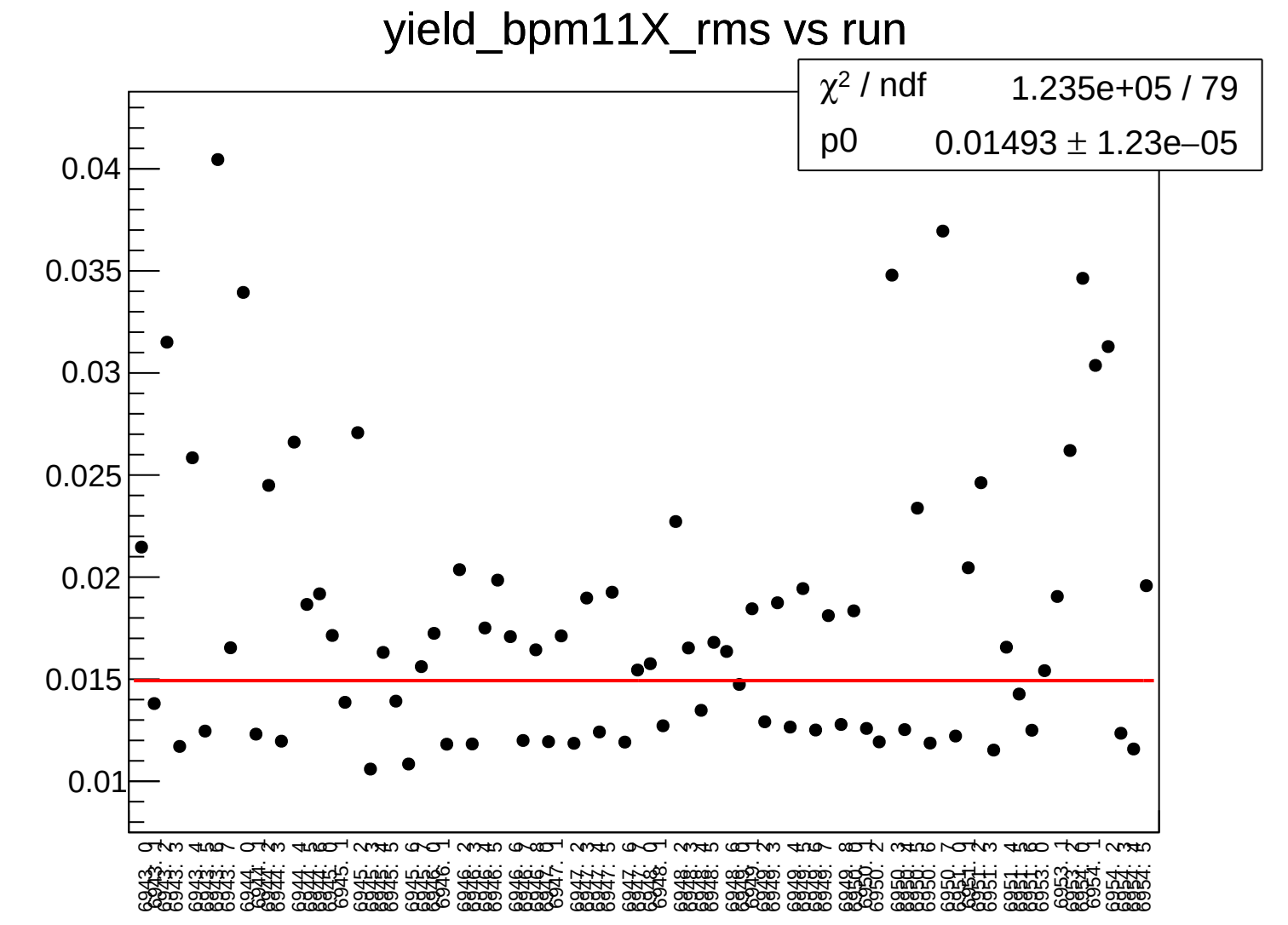

yield_bpm1Y_mean vs run
χ² / ndf 7.218e+05 / 79
p0 −2.026 ± 1.488e−05
pull
Entries 80
Mean 733.1
Std Dev 698.2

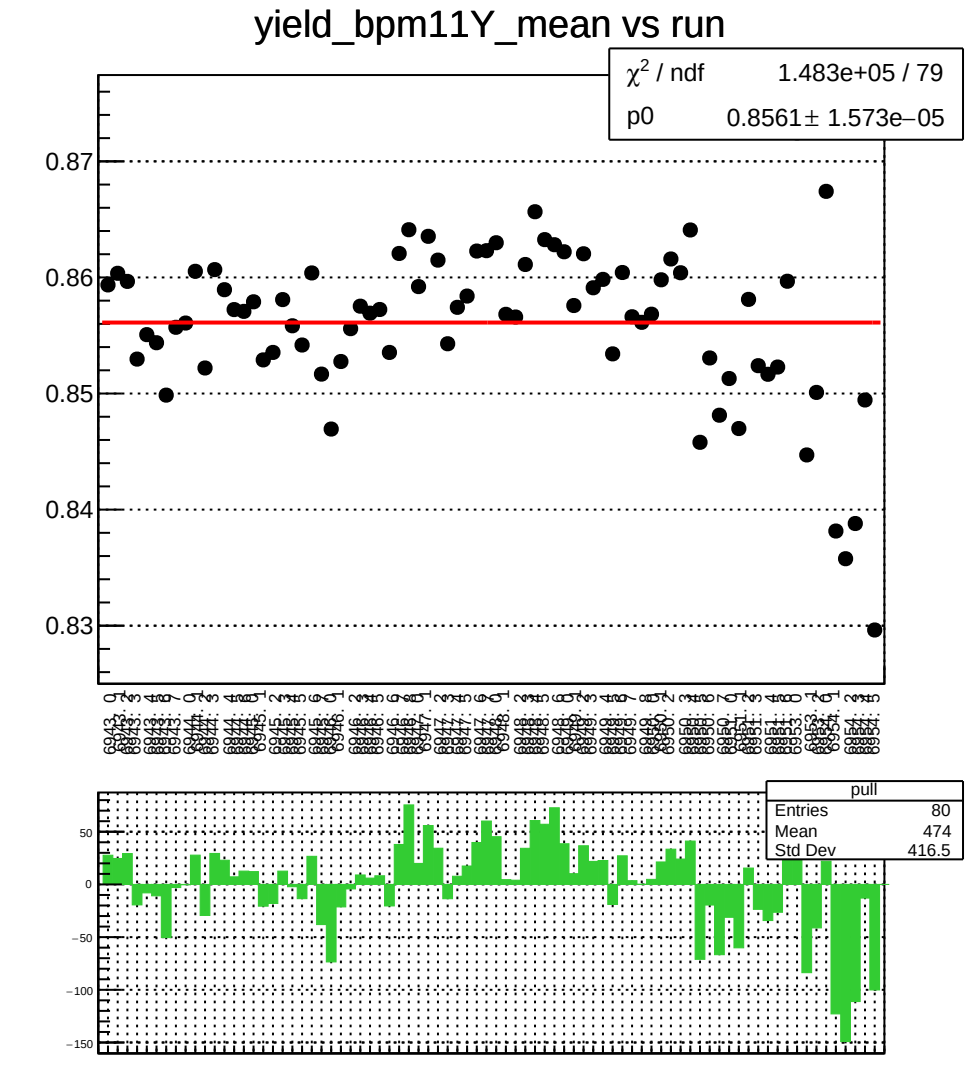

pull1D
Entries 80
Mean 6.363
Std Dev 0

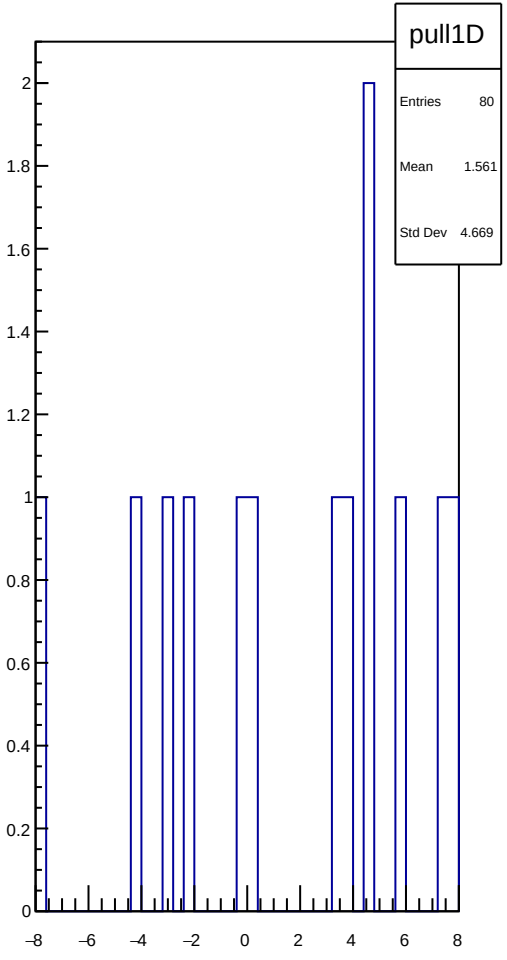

yield_bpm1Y_rms vs run
χ² / ndf 4.631e+04 / 79
p0 0.0131 ± 1.052e−05
0.06
0.05
0.04
0.03
0.02
0.01

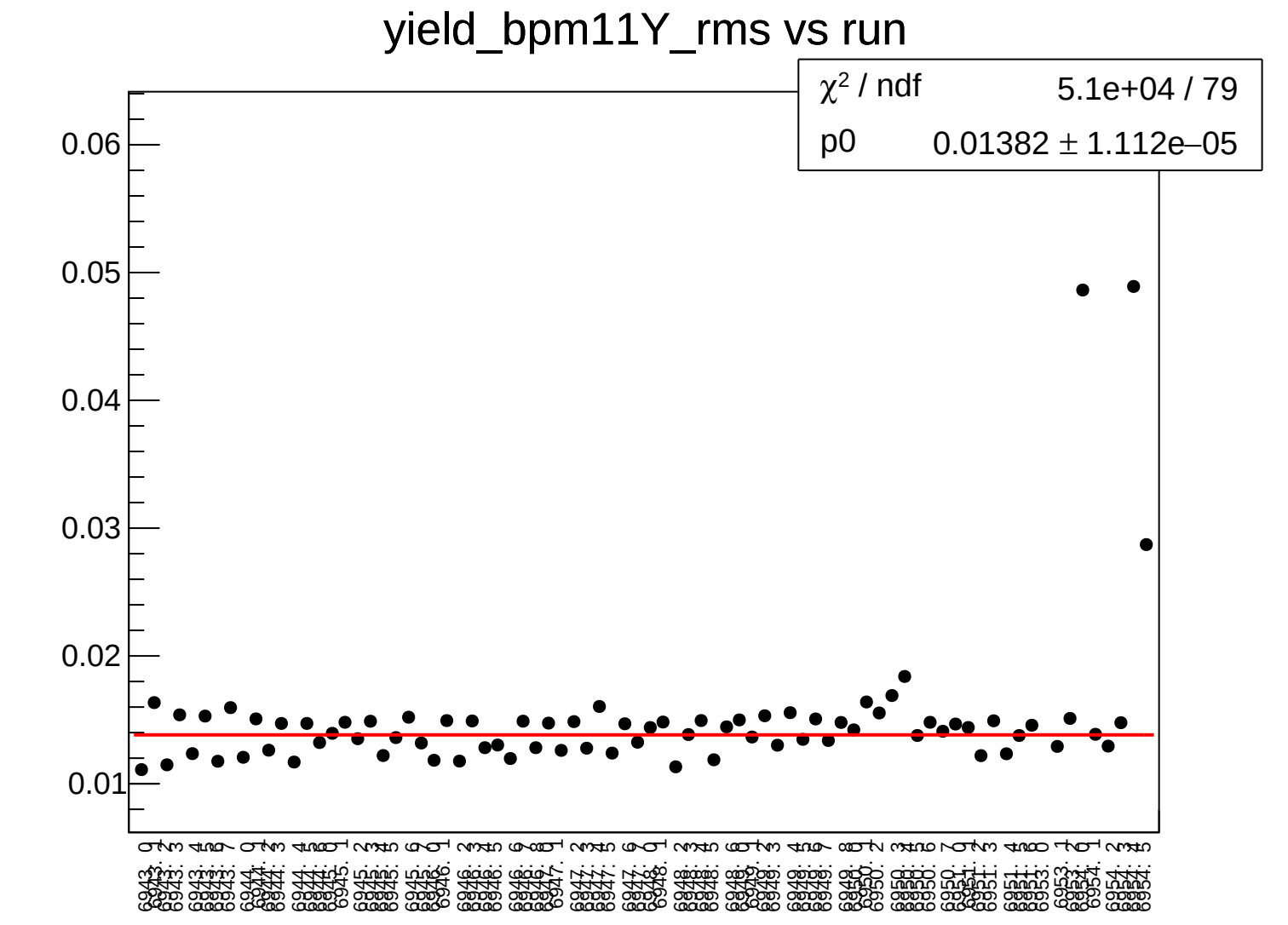

yield_bpm11X_mean vs run
χ² / ndf 6.558e+04 / 79
p0 0.695 ± 1.74e−05
0.73
0.72
0.71
0.7
0.69
0.68
0.67
pull
Entries 80
Mean 4572
Std Dev 4519
80
60
40
20
0
−20
−40
−60
−80

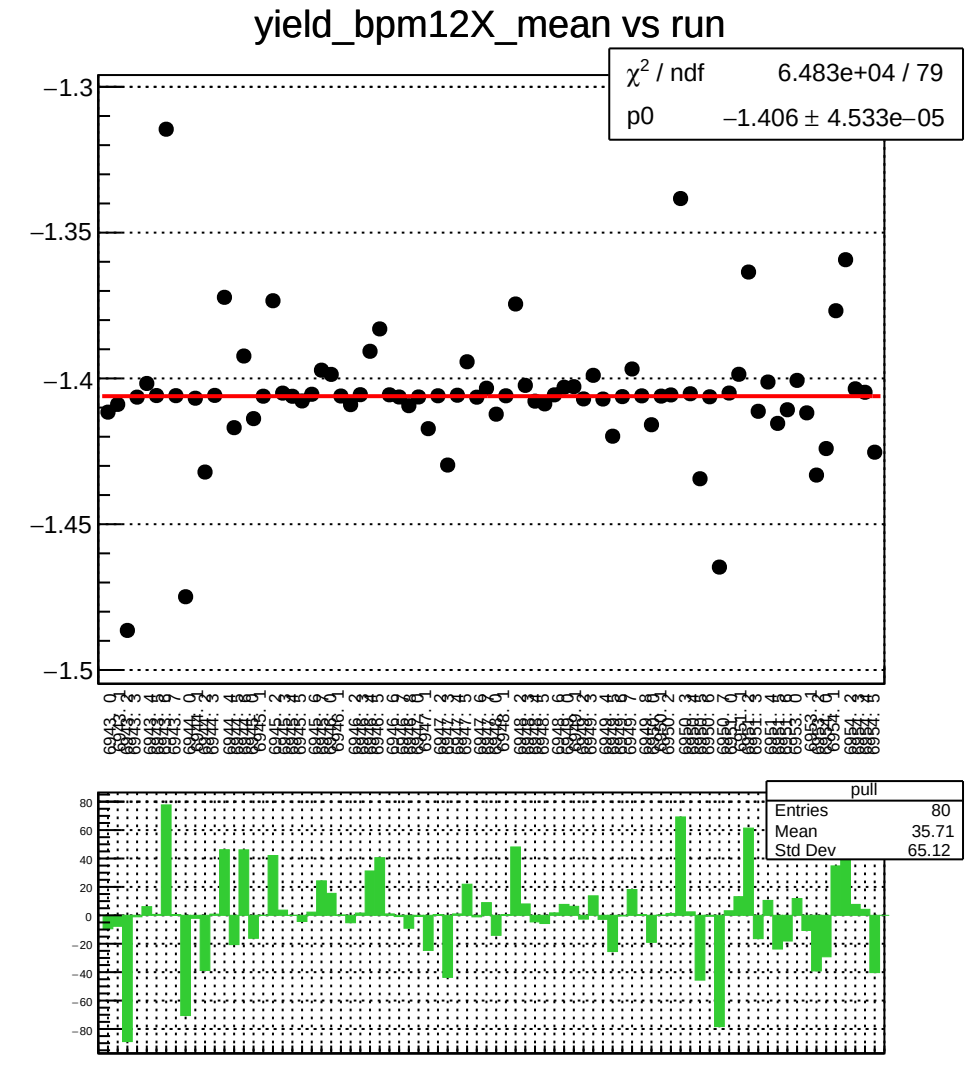

pull1D
Entries 80
Mean 0.7998
Std Dev 4.153
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

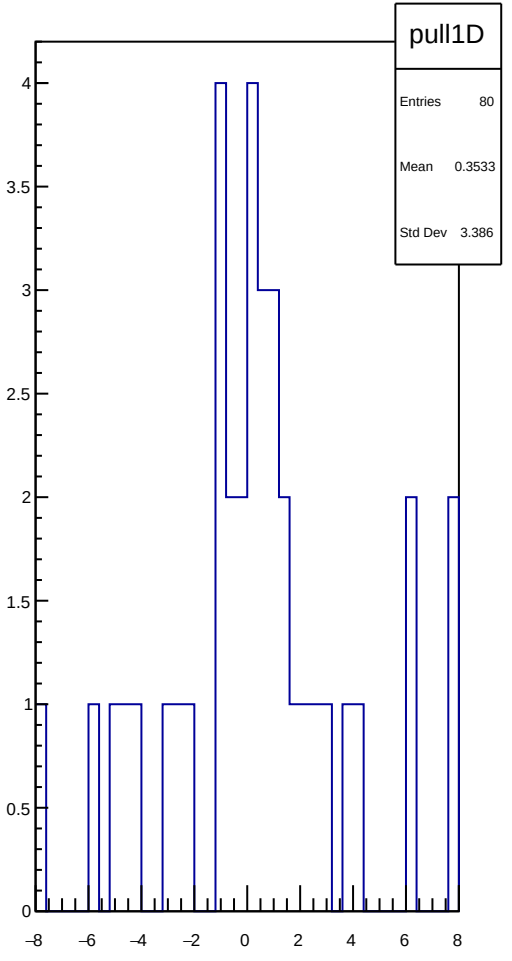

yield_bpm11X_rms vs run
χ² / ndf 1.235e+05 / 79
p0 0.01493 ± 1.23e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

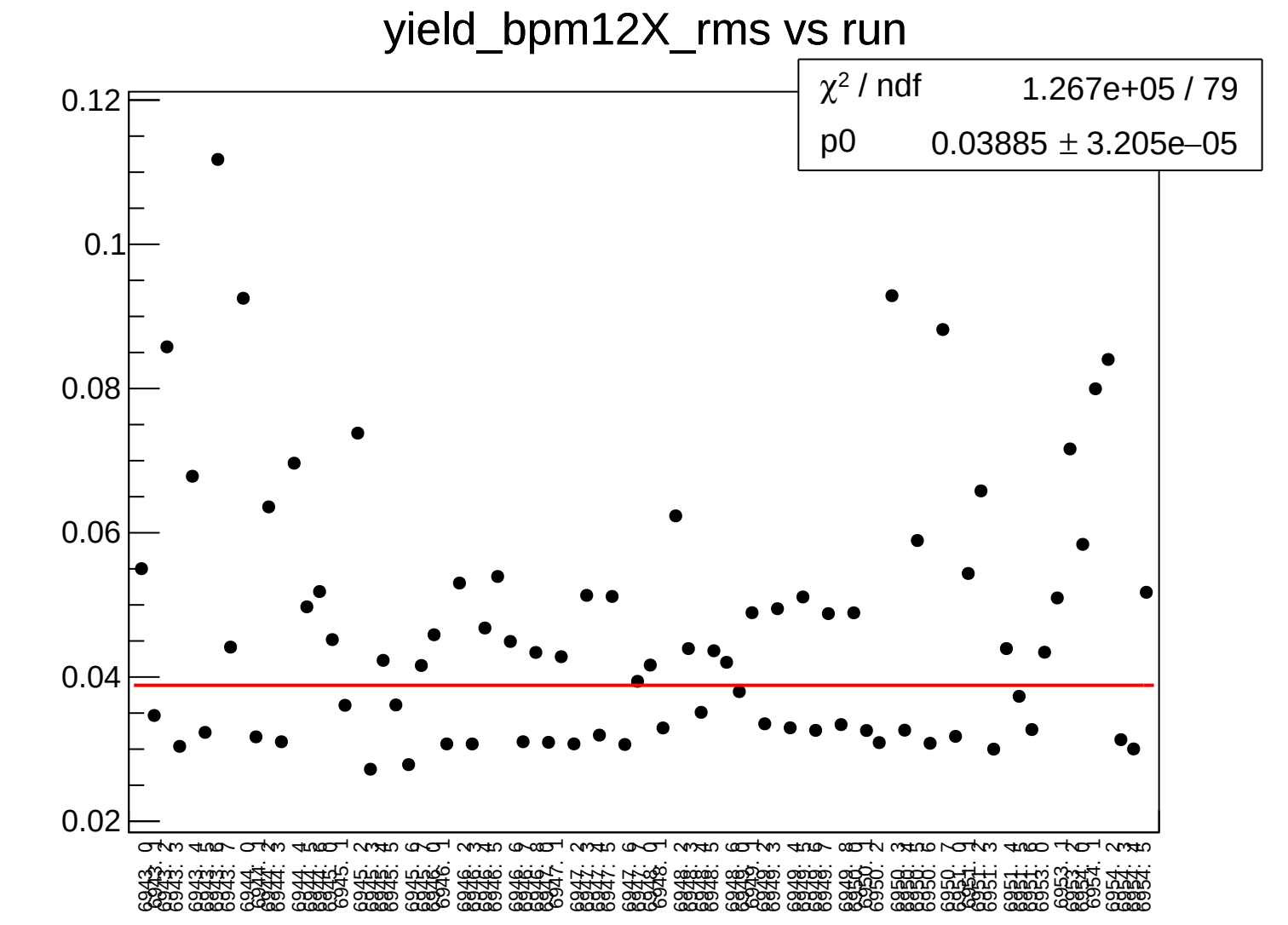

yield_bpm11Y_mean vs run
χ² / ndf 1.483e+05 / 79
p0 0.8561 ± 1.573e−05
0.87
0.86
0.85
0.84
0.83
pull
Entries 80
Mean 474
Std Dev 416.5
50
0
−50
−100
−150

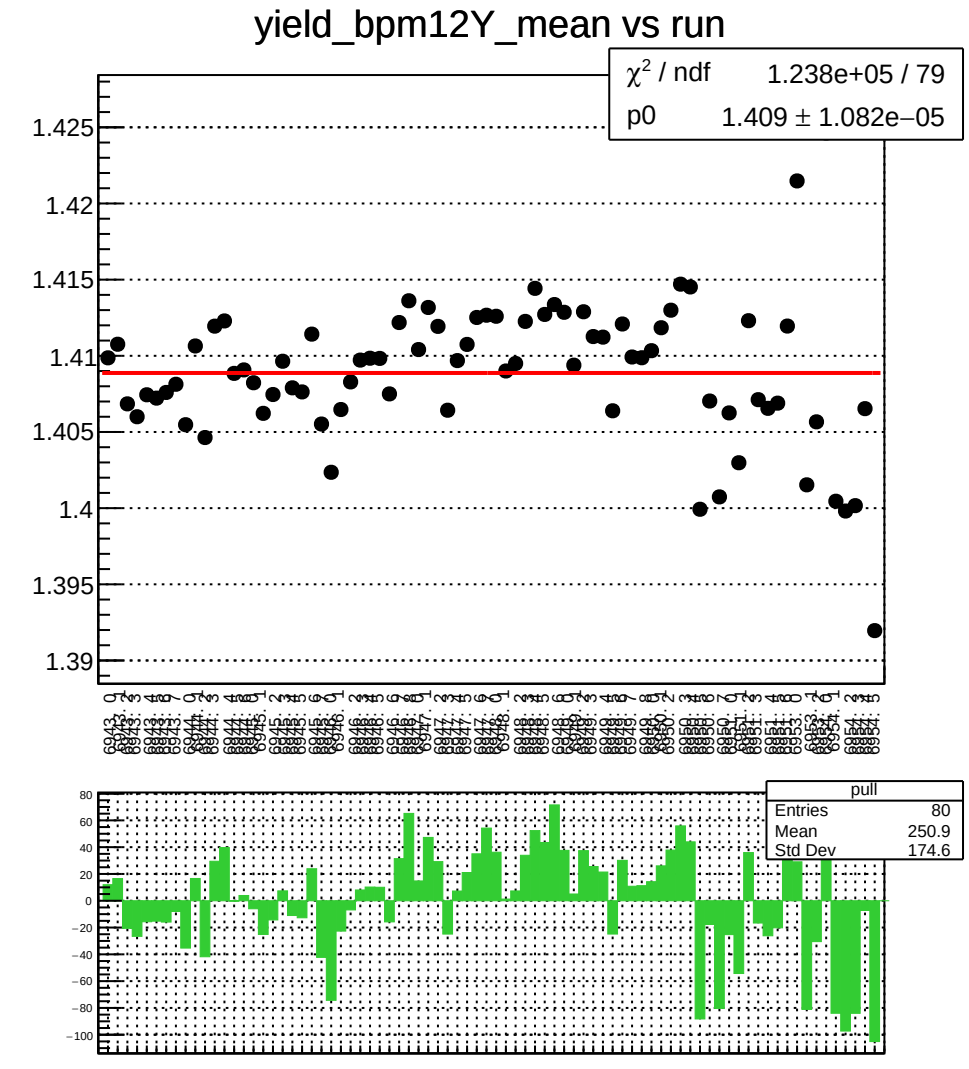

pull1D
Entries 80
Mean 1.561
Std Dev 4.669
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

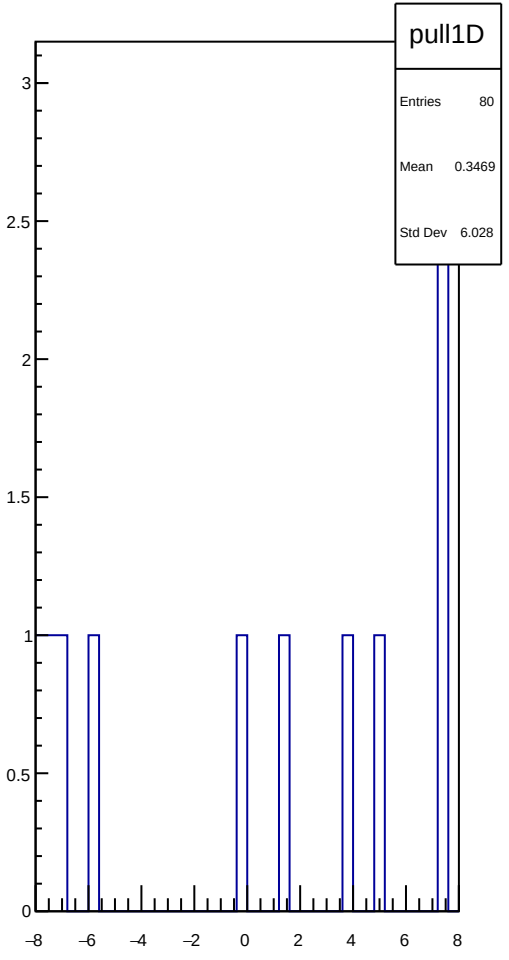

yield_bpm11Y_rms vs run
χ² / ndf 5.1e+04 / 79
p0 0.01382 ± 1.112e−05
0.06
0.05
0.04
0.03
0.02
0.01

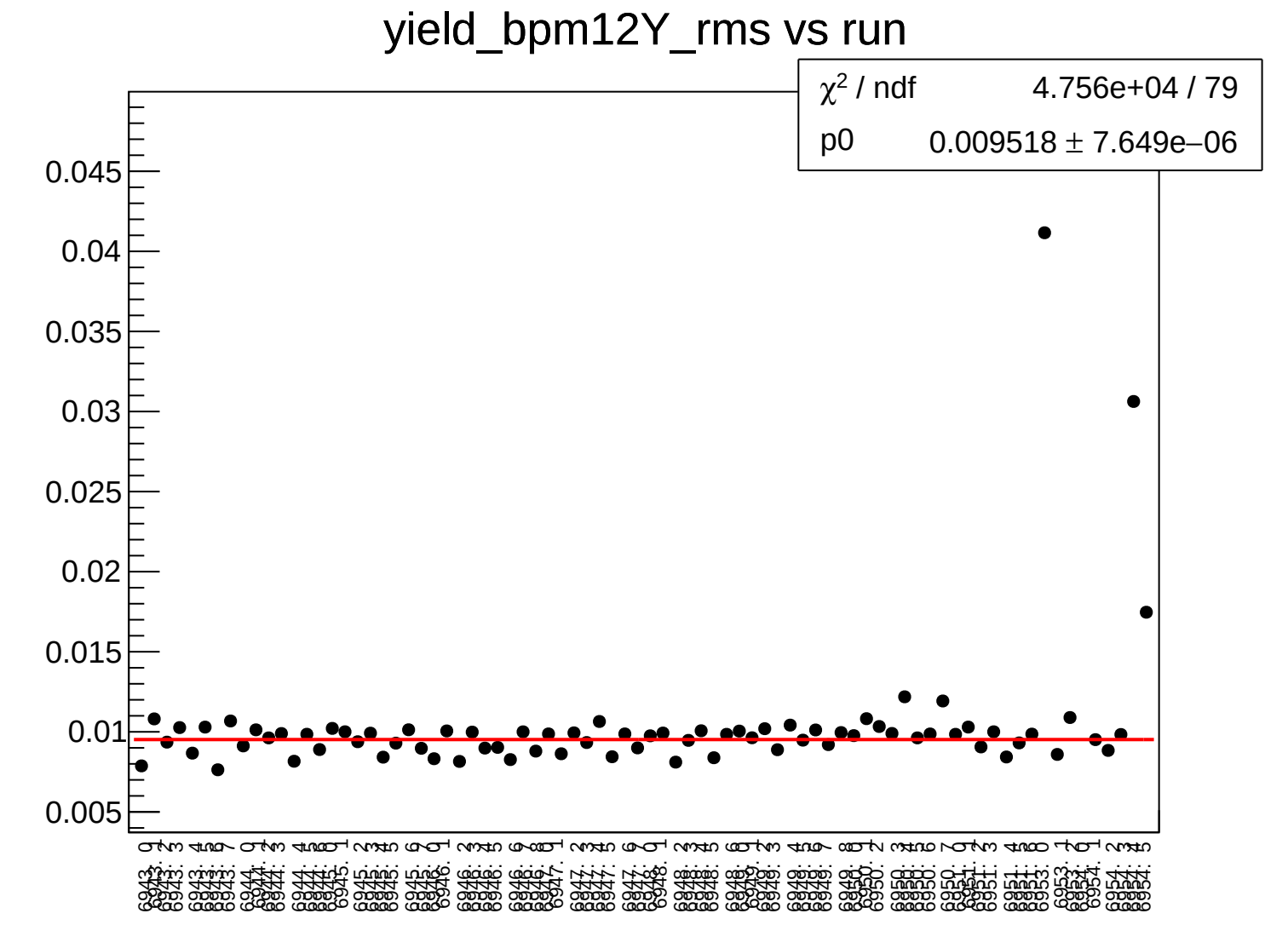

yield_bpm12X_mean vs run
χ² / ndf 6.483e+04 / 79
p0 −1.406 ± 4.533e−05
−1.3
−1.35
−1.4
−1.45
−1.5
pull
Entries 80
Mean 35.71
Std Dev 65.12
80
60
40
20
0
−20
−40
−60
−80

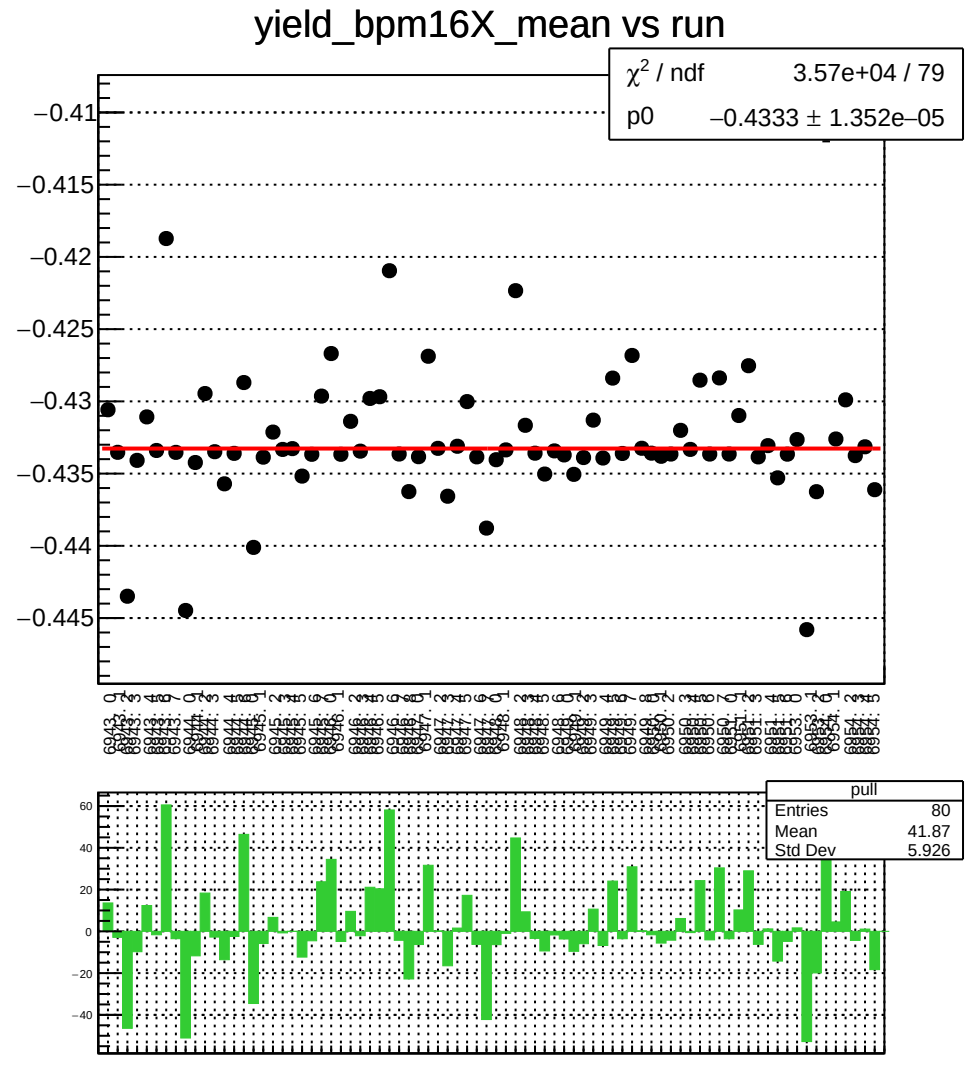

pull1D
Entries 80
Mean 0.3533
Std Dev 3.386
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

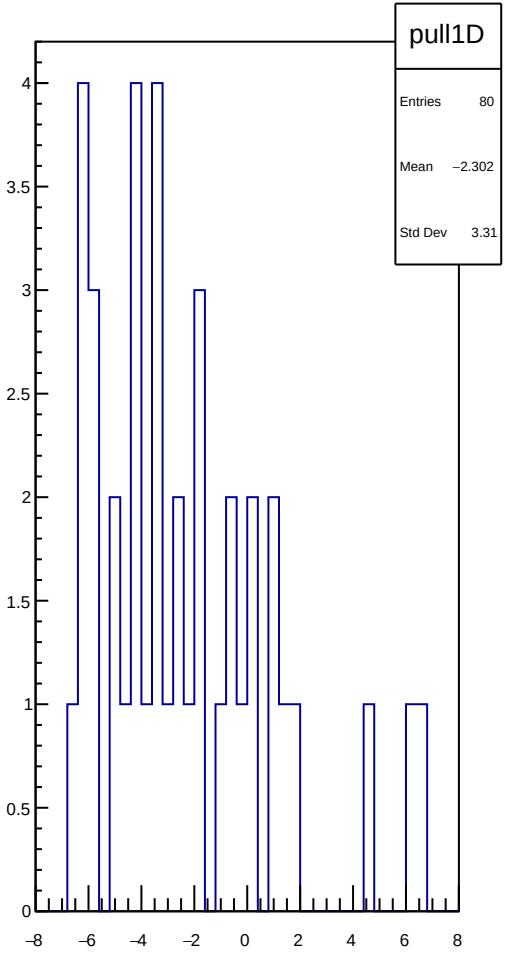

yield_bpm12X_rms vs run
χ² / ndf 1.267e+05 / 79
p0 0.03885 ± 3.205e–05
0.12
0.1
0.08
0.06
0.04
0.02

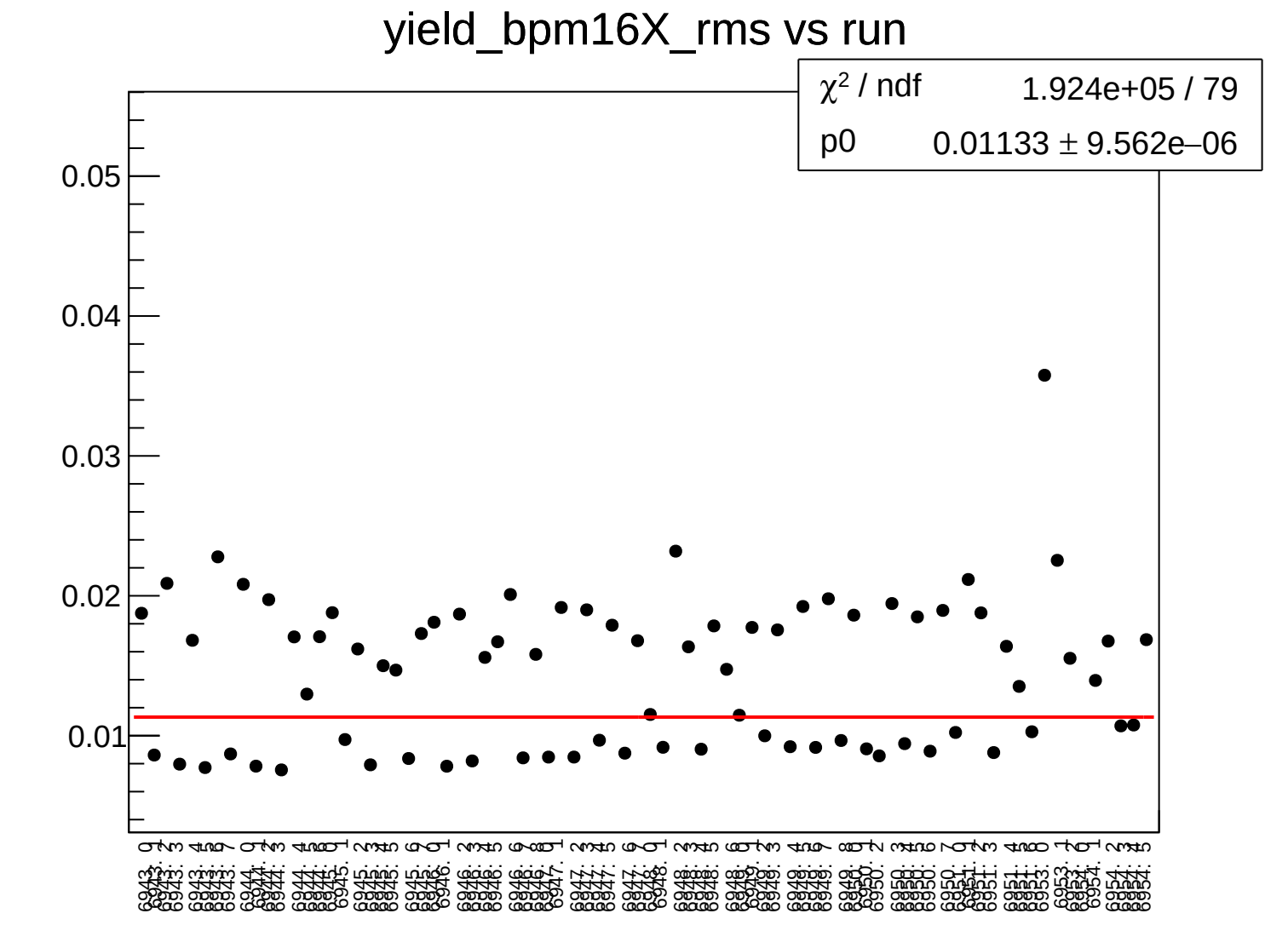

yield_bpm12Y_mean vs run
χ² / ndf 1.238e+05 / 79
p0 1.409 ± 1.082e−05
1.425
1.42
1.415
1.41
1.405
1.4
1.395
1.39
pull
Entries 80
Mean 250.9
Std Dev 174.6
80
60
40
20
0
−20
−40
−60
−80
−100

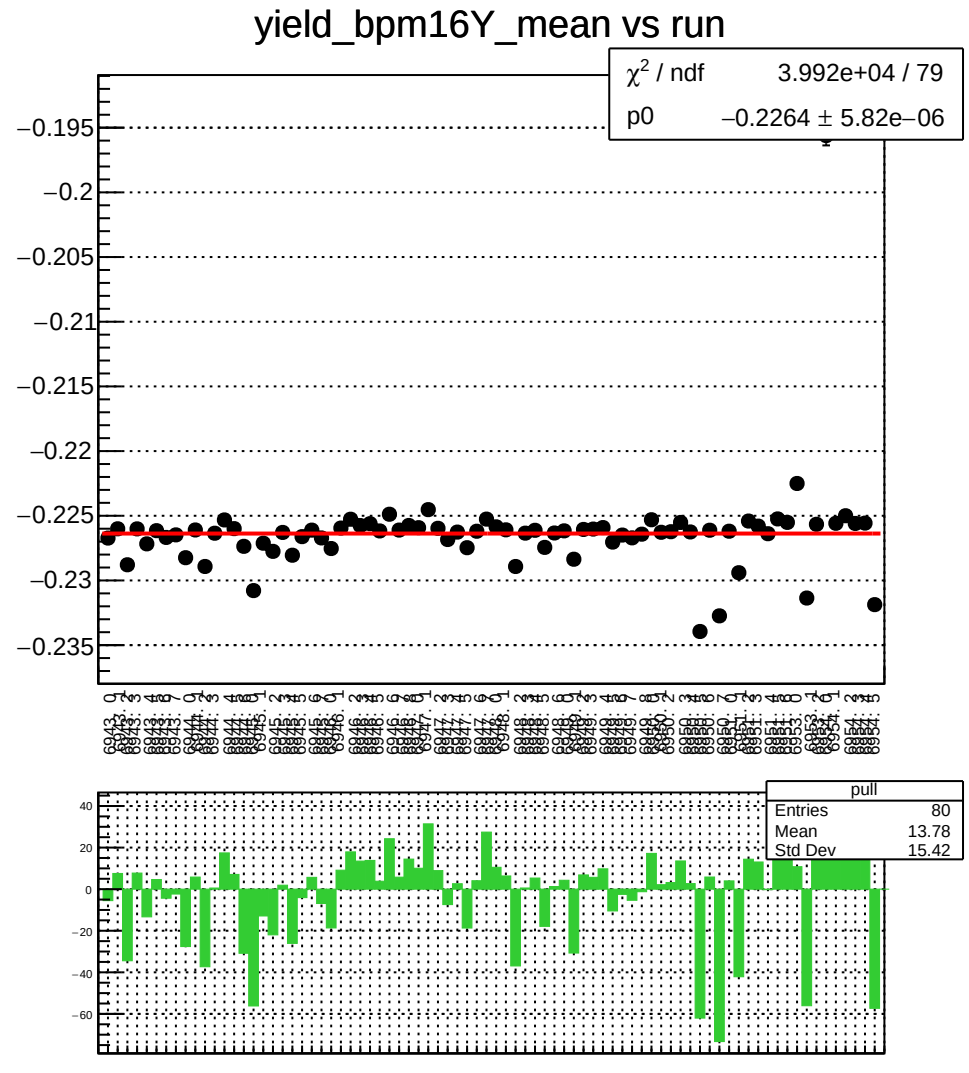

pull1D
Entries 80
Mean 0.3469
Std Dev 6.028
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

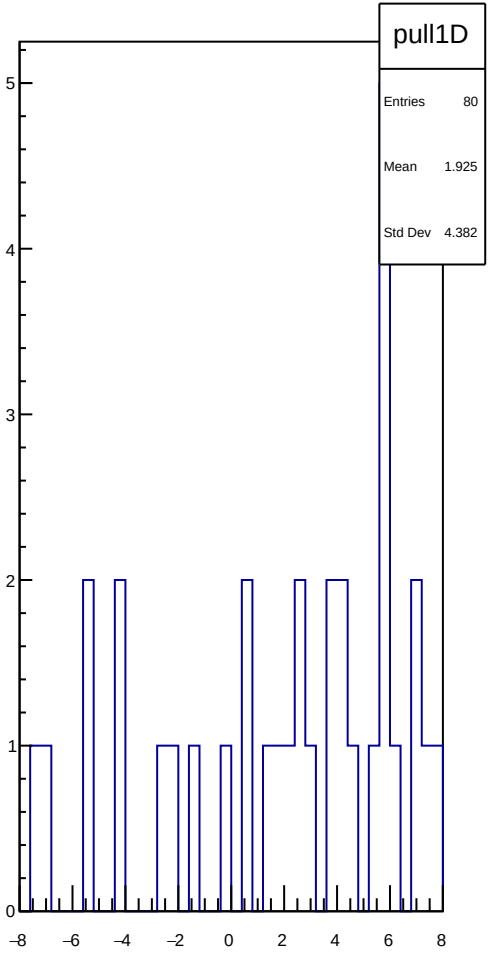

yield_bpm12Y_rms vs run
χ² / ndf 4.756e+04 / 79
p0 0.009518 ± 7.649e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

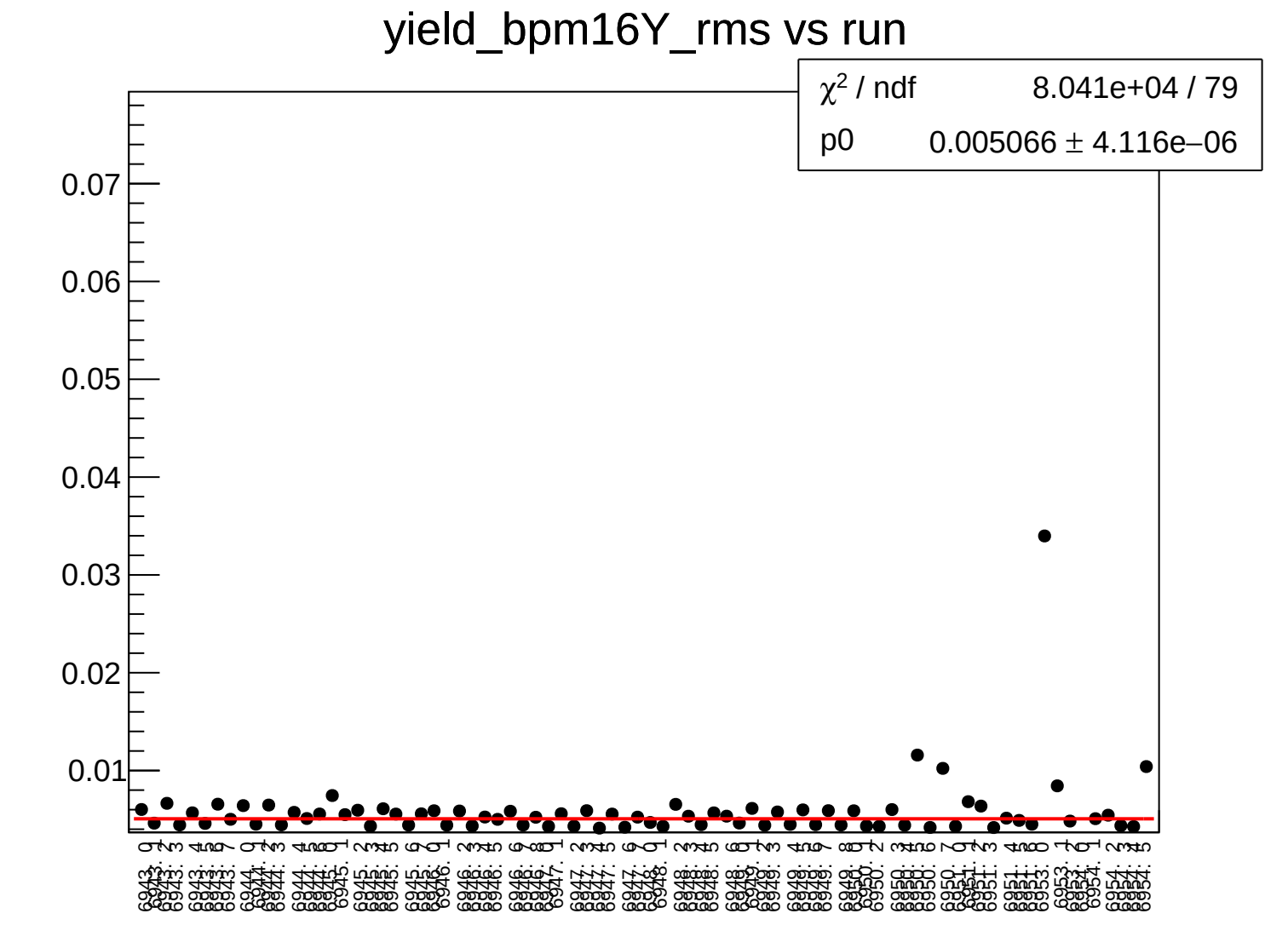

yield_bpm16X_mean vs run
χ² / ndf 3.57e+04 / 79
p0 −0.4333 ± 1.352e−05
−0.41
−0.415
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
pull
Entries 80
Mean 41.87
Std Dev 5.926
60
40
20
0
−20
−40

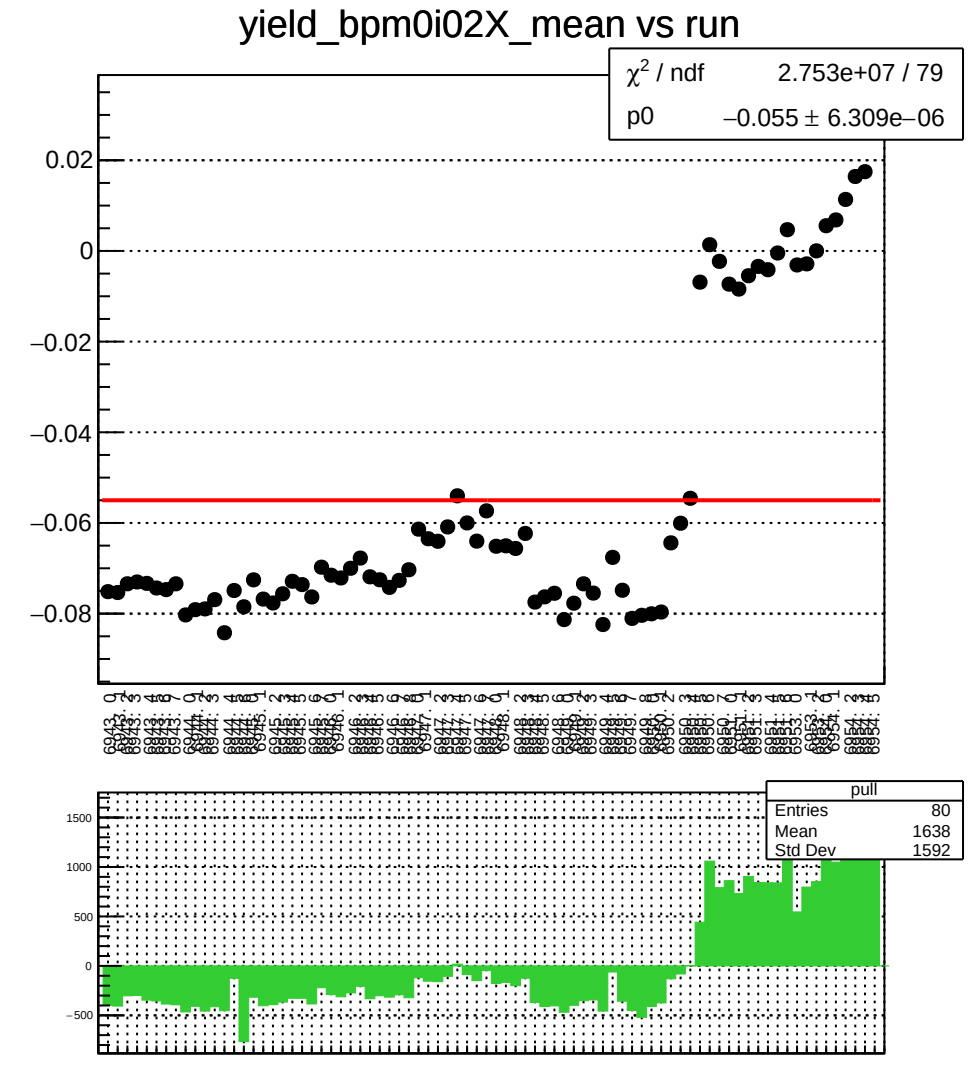

pull1D
Entries 80
Mean −2.302
Std Dev 3.31
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

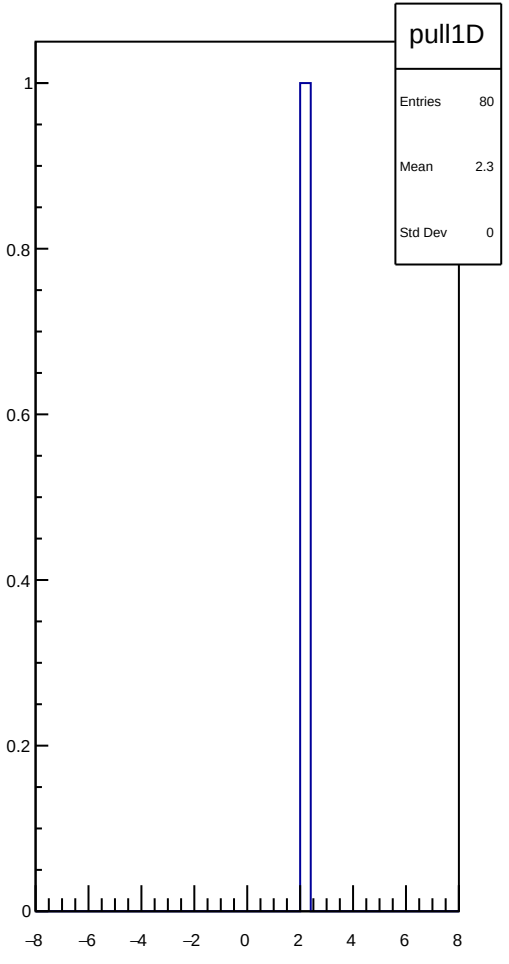

yield_bpm16X_rms vs run
χ² / ndf 1.924e+05 / 79
p0 0.01133 ± 9.562e–06
0.05
0.04
0.03
0.02
0.01

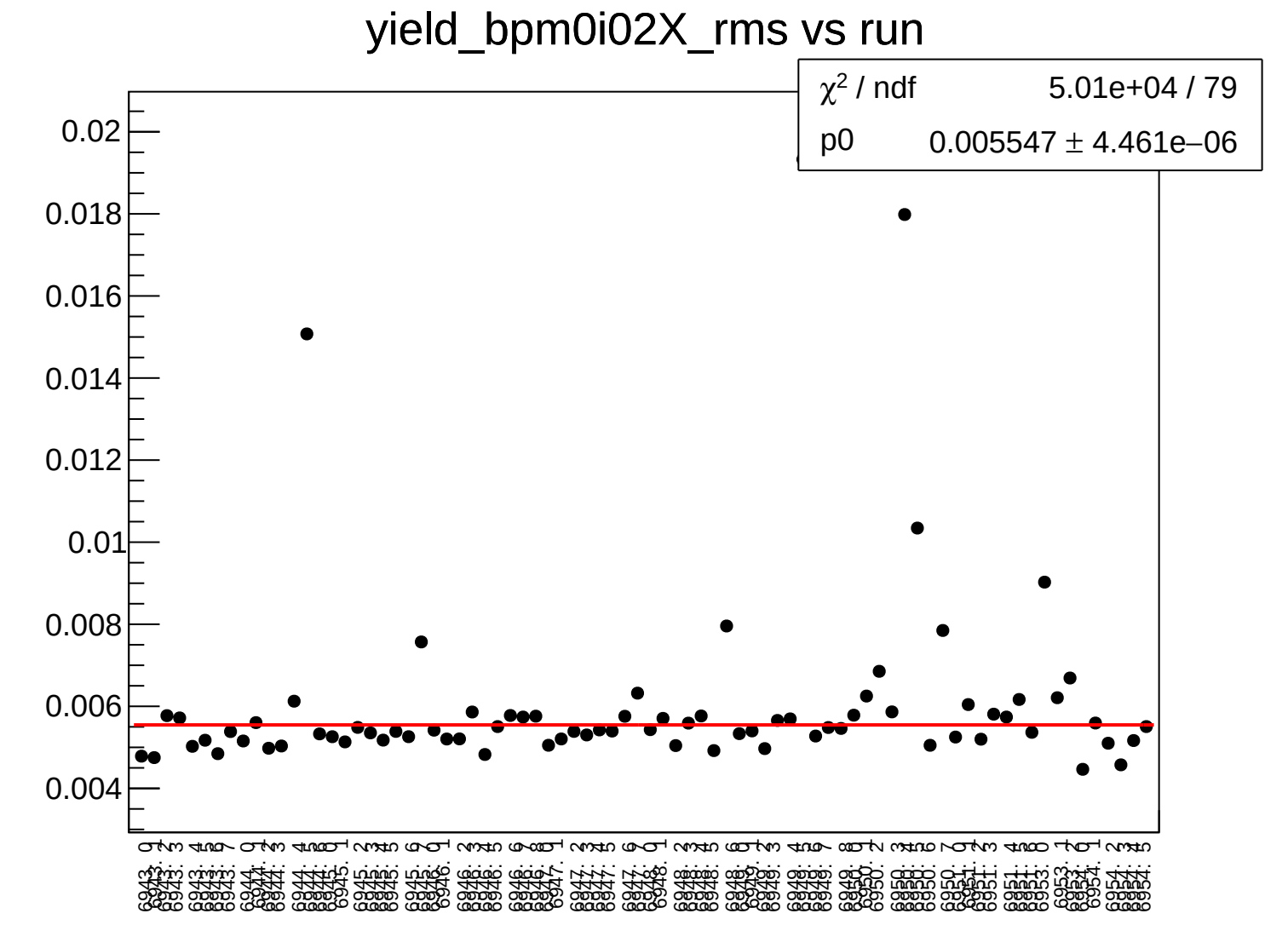

yield_bpm16Y_mean vs run
χ² / ndf 3.992e+04 / 79
p0 −0.2264 ± 5.82e−06
−0.195
−0.2
−0.205
−0.21
−0.215
−0.22
−0.225
−0.23
−0.235
pull
Entries 80
Mean 13.78
Std Dev 15.42
40
20
0
−20
−40
−60

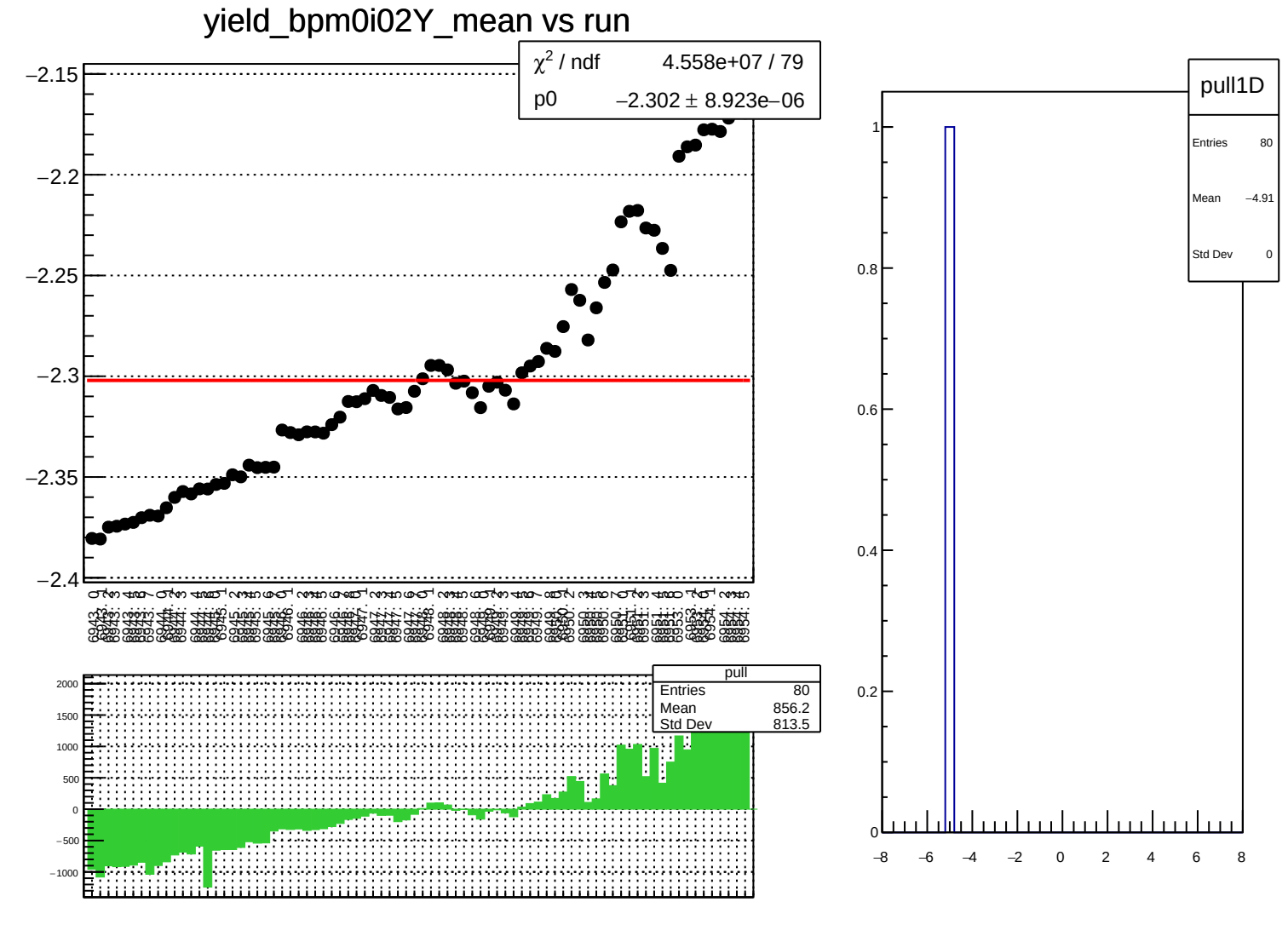

pull1D
Entries 80
Mean 1.925
Std Dev 4.382
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

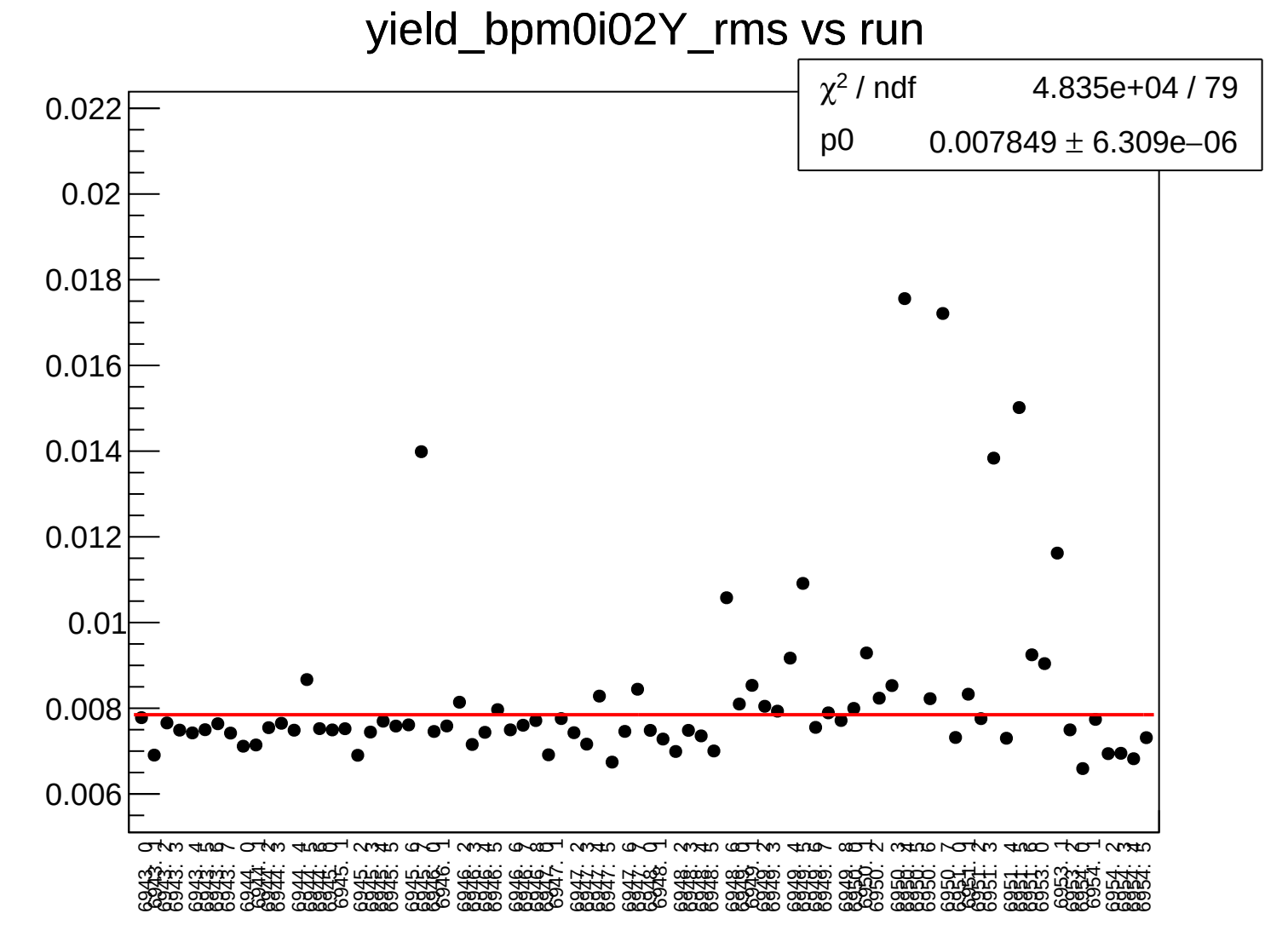

yield_bpm16Y_rms vs run
χ² / ndf 8.041e+04 / 79
p0 0.005066 ± 4.116e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

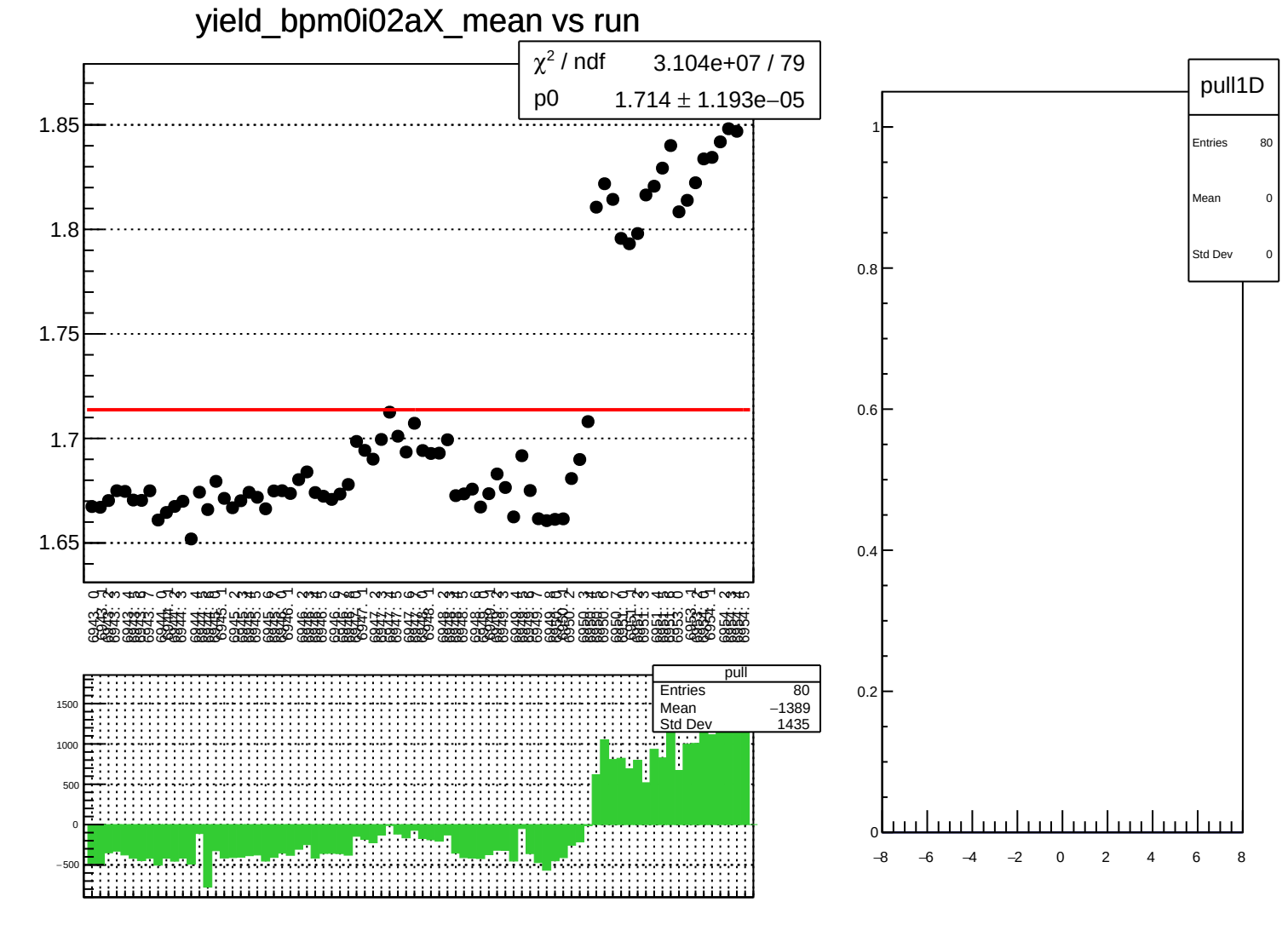

yield_bpm0i02X_mean vs run
χ² / ndf 2.753e+07 / 79
p0 −0.055 ± 6.309e−06
0.02
0
−0.02
−0.04
−0.06
−0.08
pull
Entries 80
Mean 1638
Std Dev 1592
1500
1000
500
0
−500

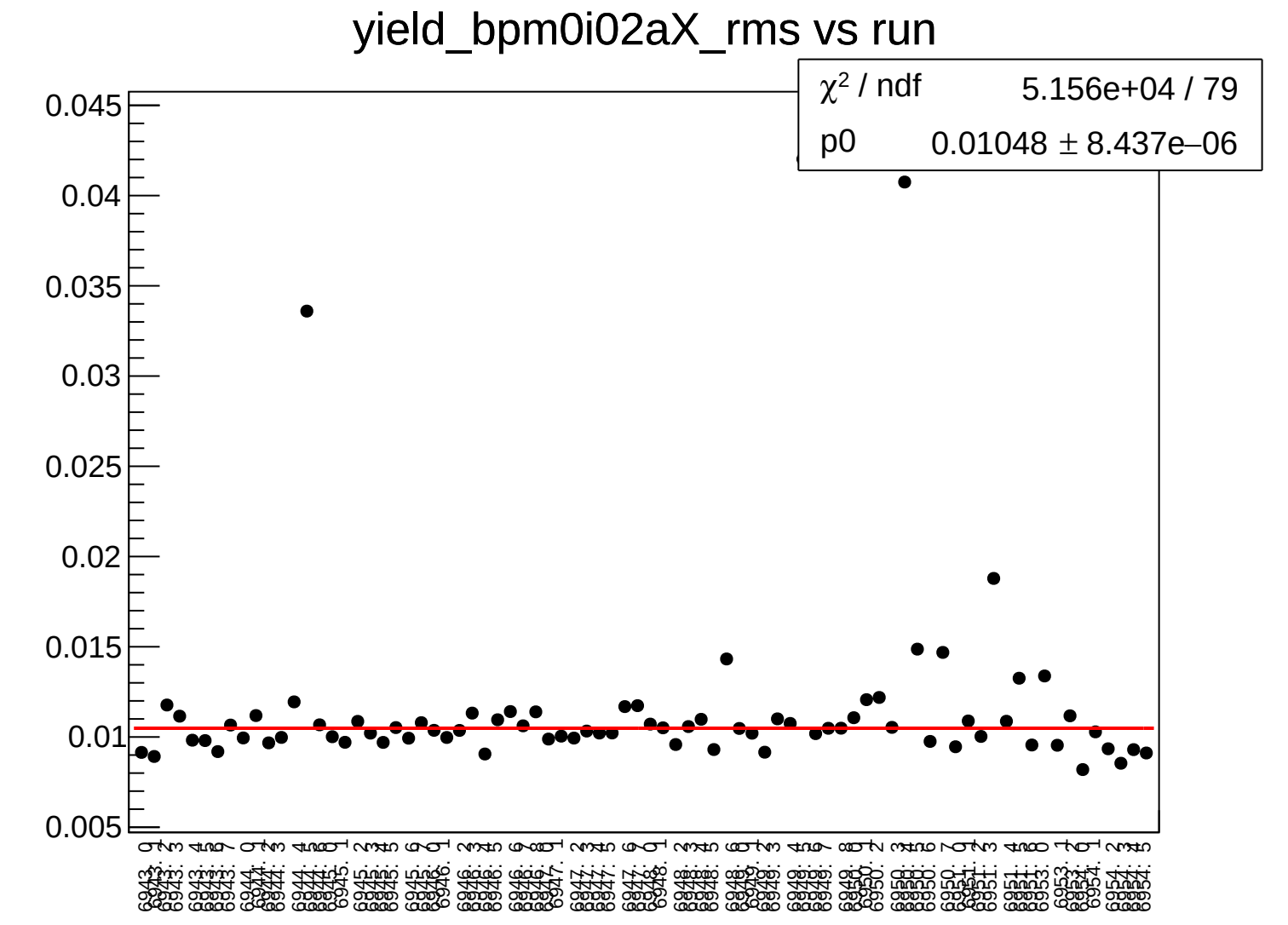

pull1D
Entries 80
Mean 2.3
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

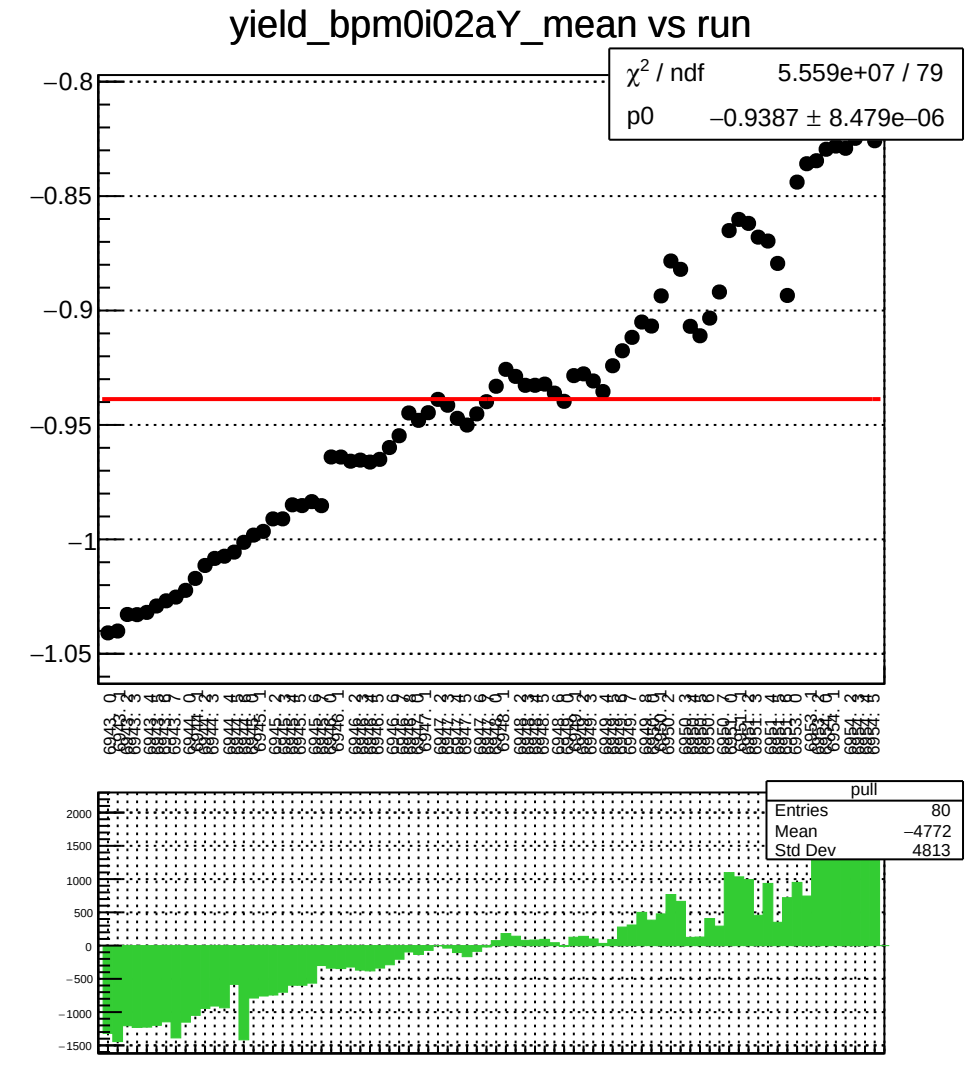

yield_bpm0i02X_rms vs run
χ^2 / ndf 5.01e+04 / 79
p0 0.005547 ± 4.461e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

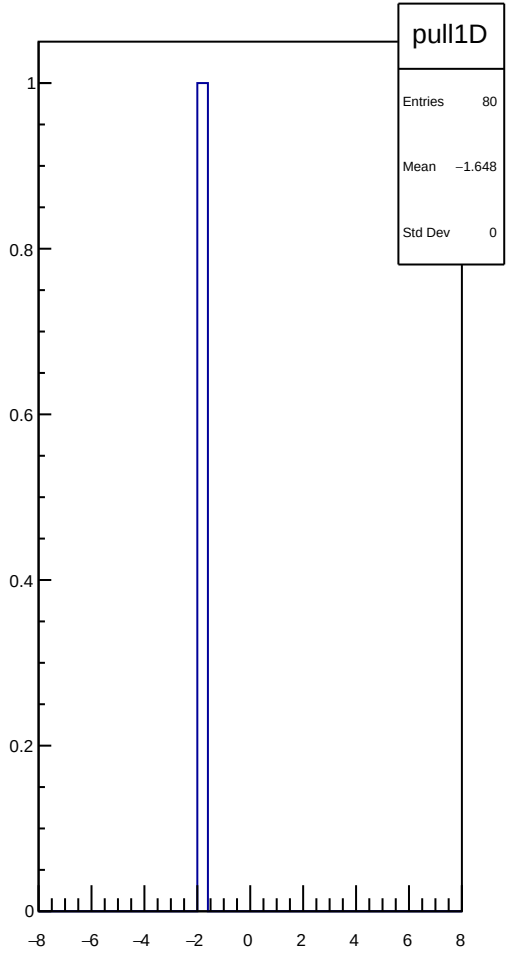

yield_bpm0i02Y_mean vs run
χ² / ndf 4.558e+07 / 79
p0 −2.302 ± 8.923e−06
−2.15
−2.2
−2.25
−2.3
−2.35
−2.4
pull
Entries 80
Mean 856.2
Std Dev 813.5
2000
1500
1000
500
0
−500
−1000
pull1D
Entries 80
Mean −4.91
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

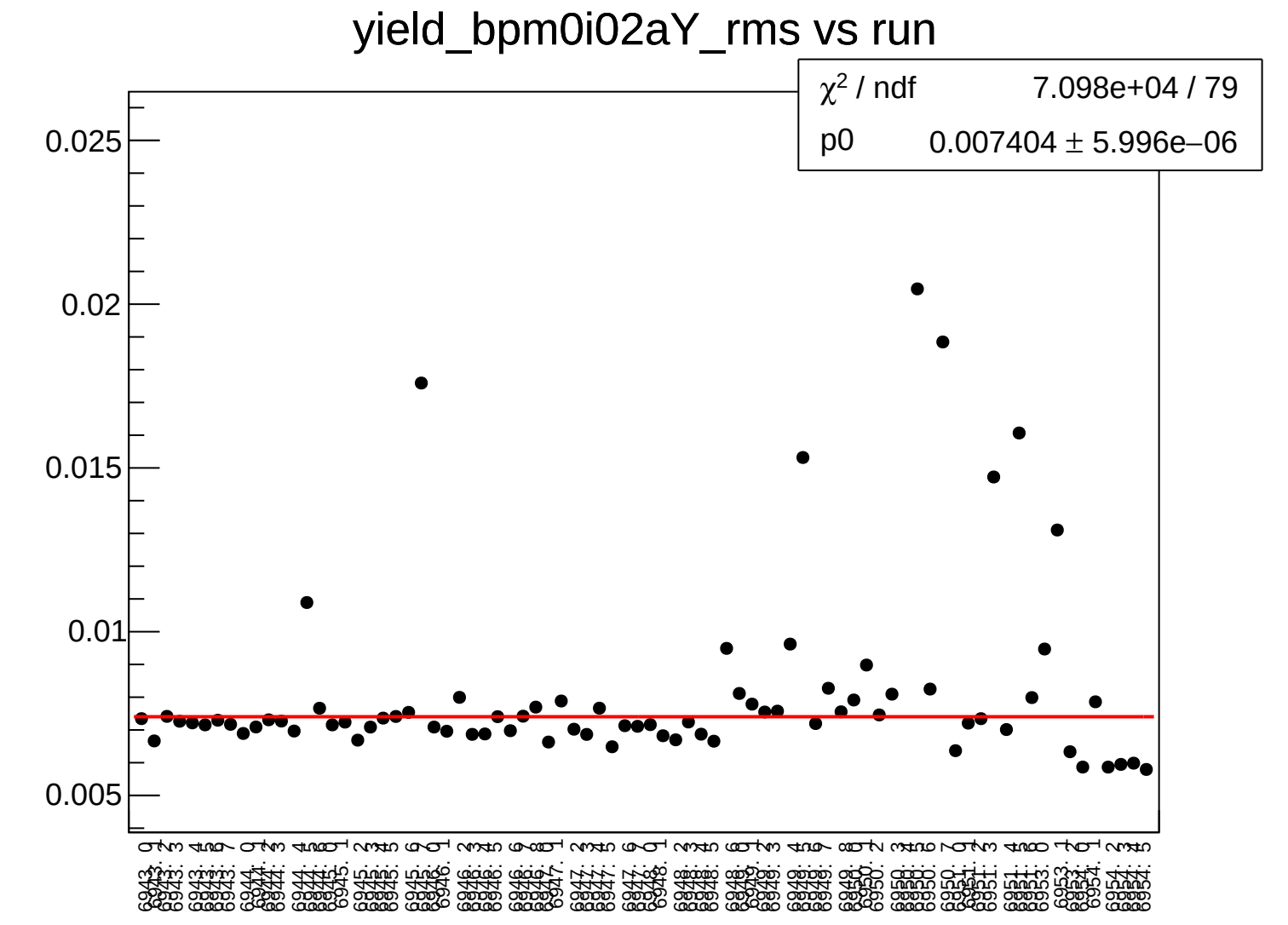

yield_bpm0i02Y_rms vs run
χ² / ndf 4.835e+04 / 79
p0 0.007849 ± 6.309e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

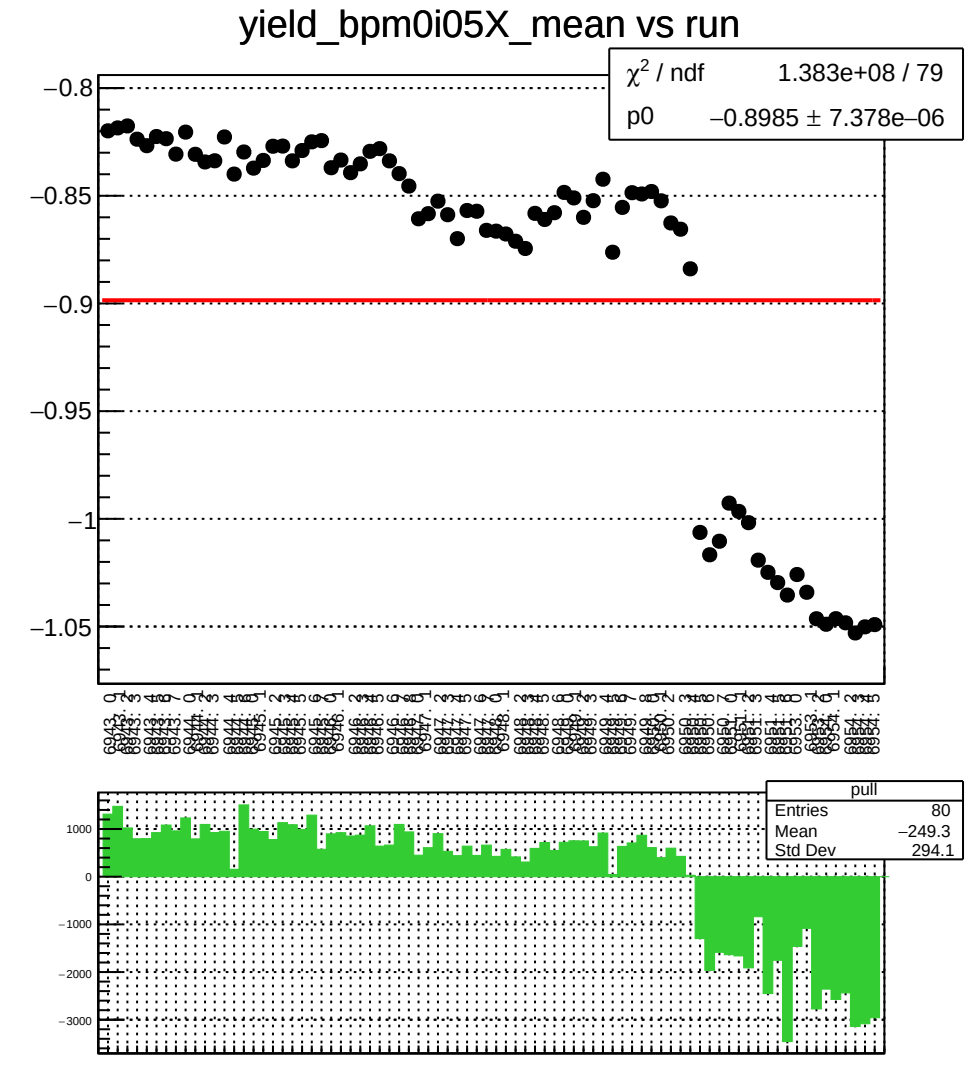

yield_bpm0i02aX_mean vs run
χ² / ndf 3.104e+07 / 79
p0 1.714 ± 1.193e−05
1.85
1.8
1.75
1.7
1.65
pull
Entries 80
Mean −1389
Std Dev 1435
1500
1000
500
0
−500
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

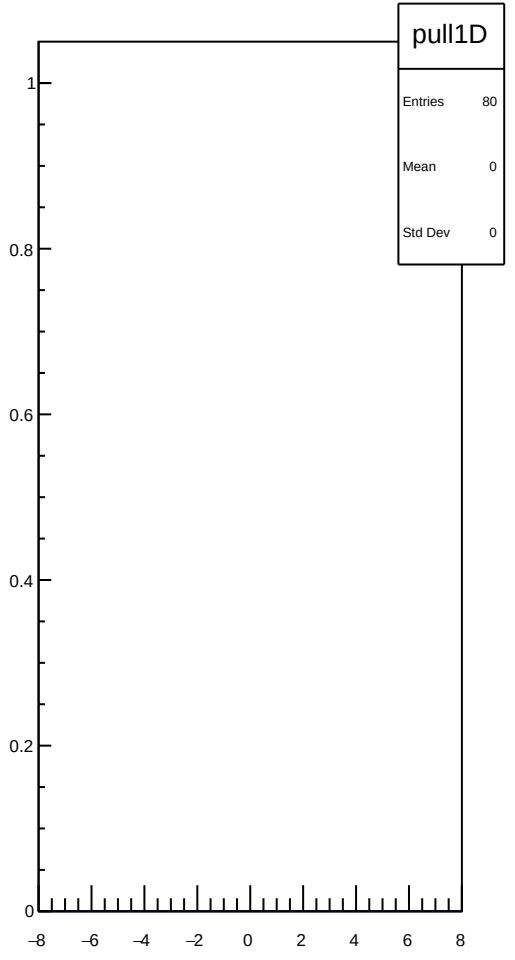

yield_bpm0i02aX_rms vs run
χ² / ndf 5.156e+04 / 79
p0 0.01048 ± 8.437e–06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

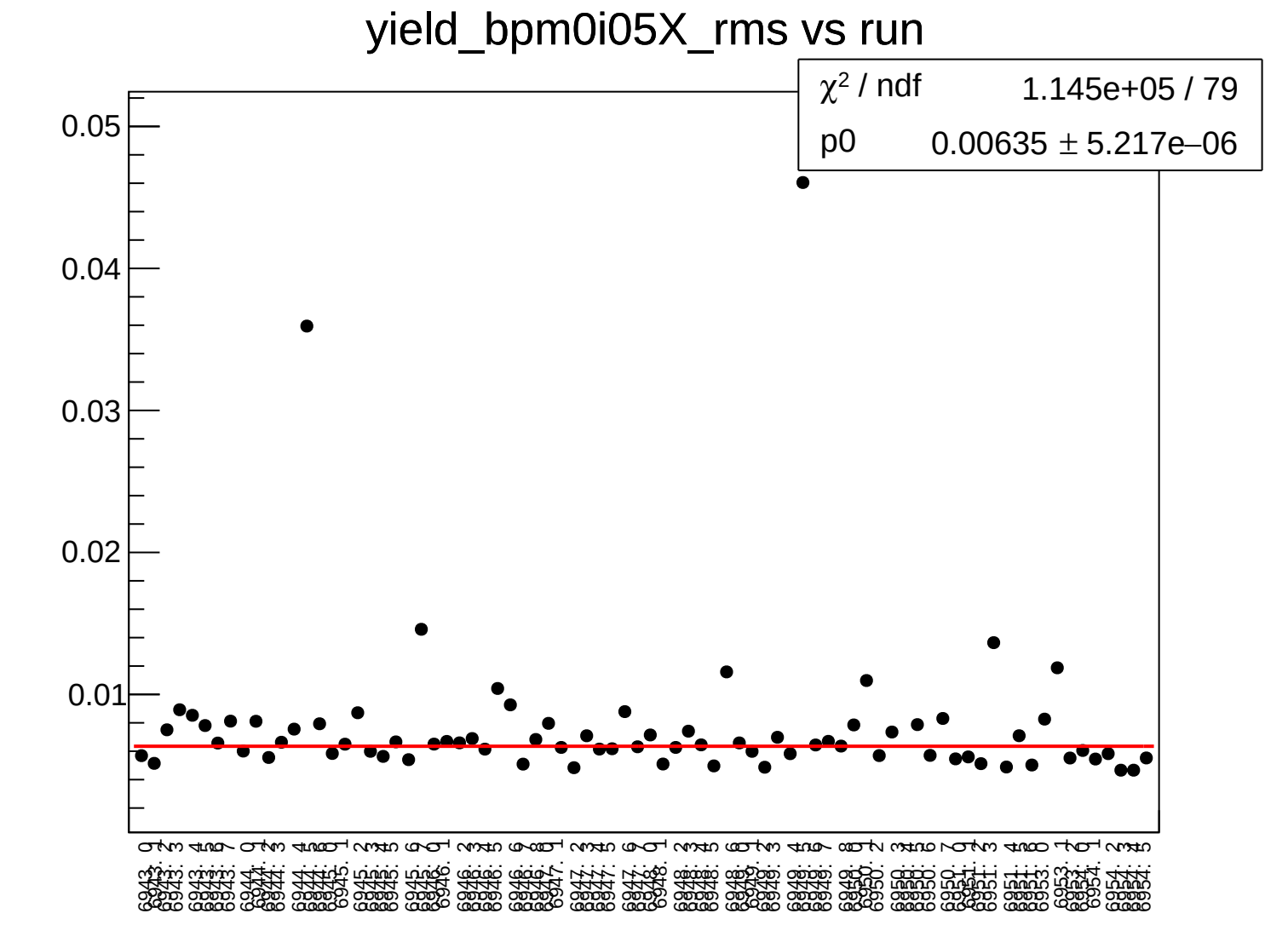

yield_bpm0i02aY_mean vs run
χ² / ndf 5.559e+07 / 79
p0 −0.9387 ± 8.479e−06
−0.8
−0.85
−0.9
−0.95
−1
−1.05
pull
Entries 80
Mean −4772
Std Dev 4813
2000
1500
1000
500
0
−500
−1000
−1500

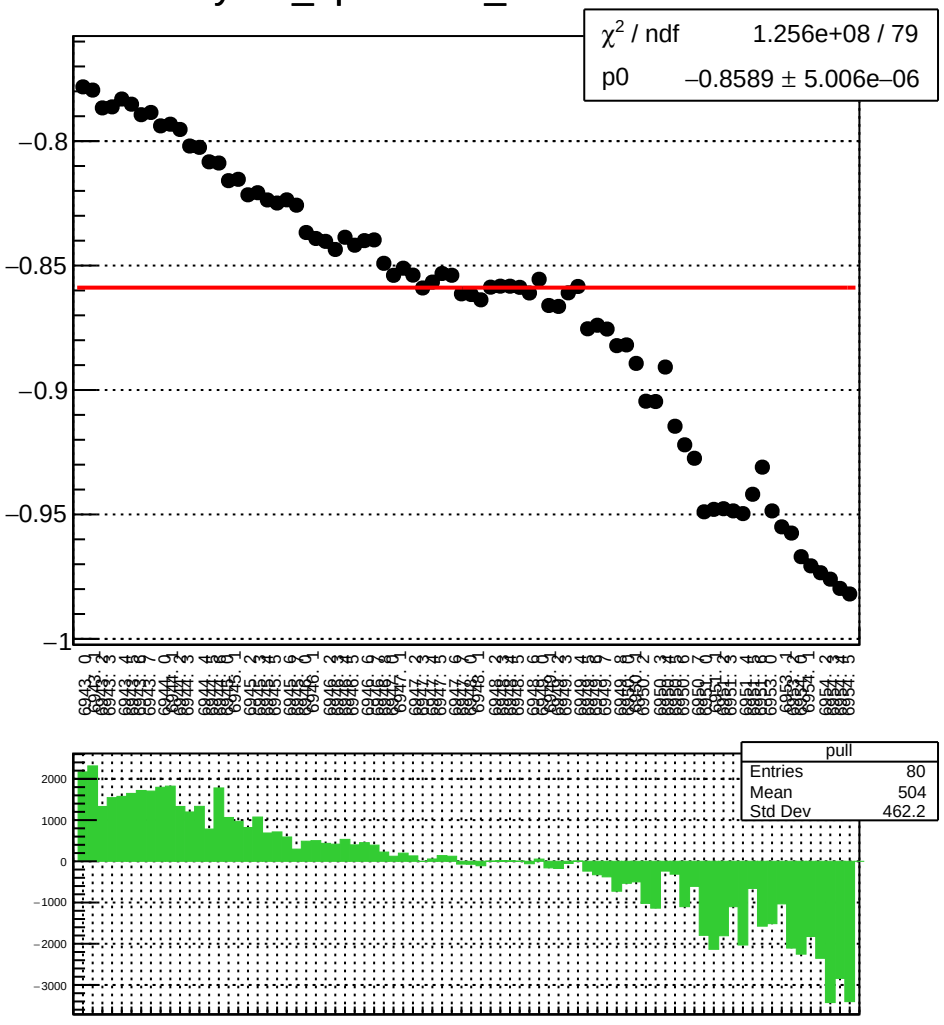

pull1D
Entries 80
Mean −1.648
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

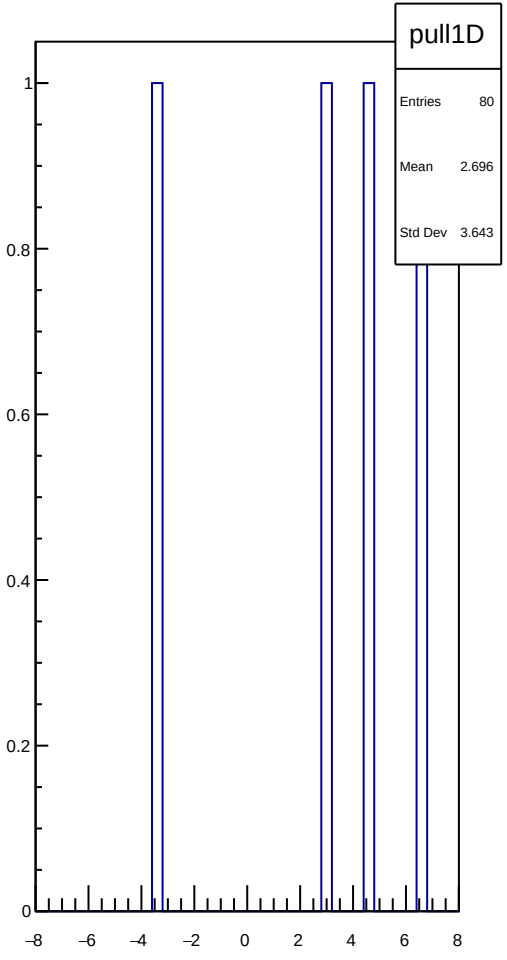

yield_bpm0i02aY_rms vs run
χ² / ndf 7.098e+04 / 79
p0 0.007404 ± 5.996e−06
0.025
0.02
0.015
0.01
0.005

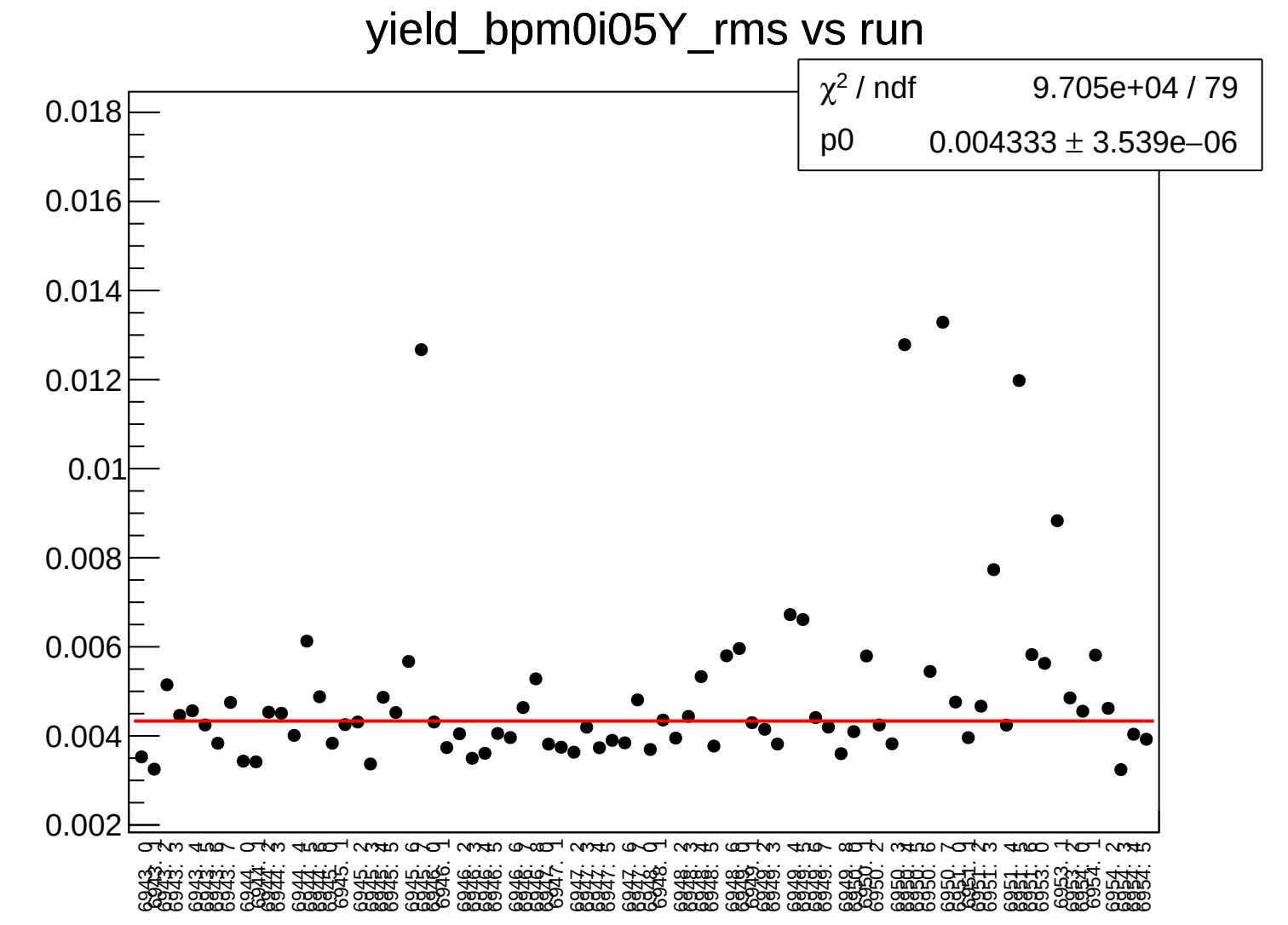

yield_bpm0i05X_mean vs run
χ² / ndf 1.383e+08 / 79
p0 −0.8985 ± 7.378e−06
−0.8
−0.85
−0.9
−0.95
−1
−1.05
pull
Entries 80
Mean −249.3
Std Dev 294.1
1000
0
−1000
−2000
−3000

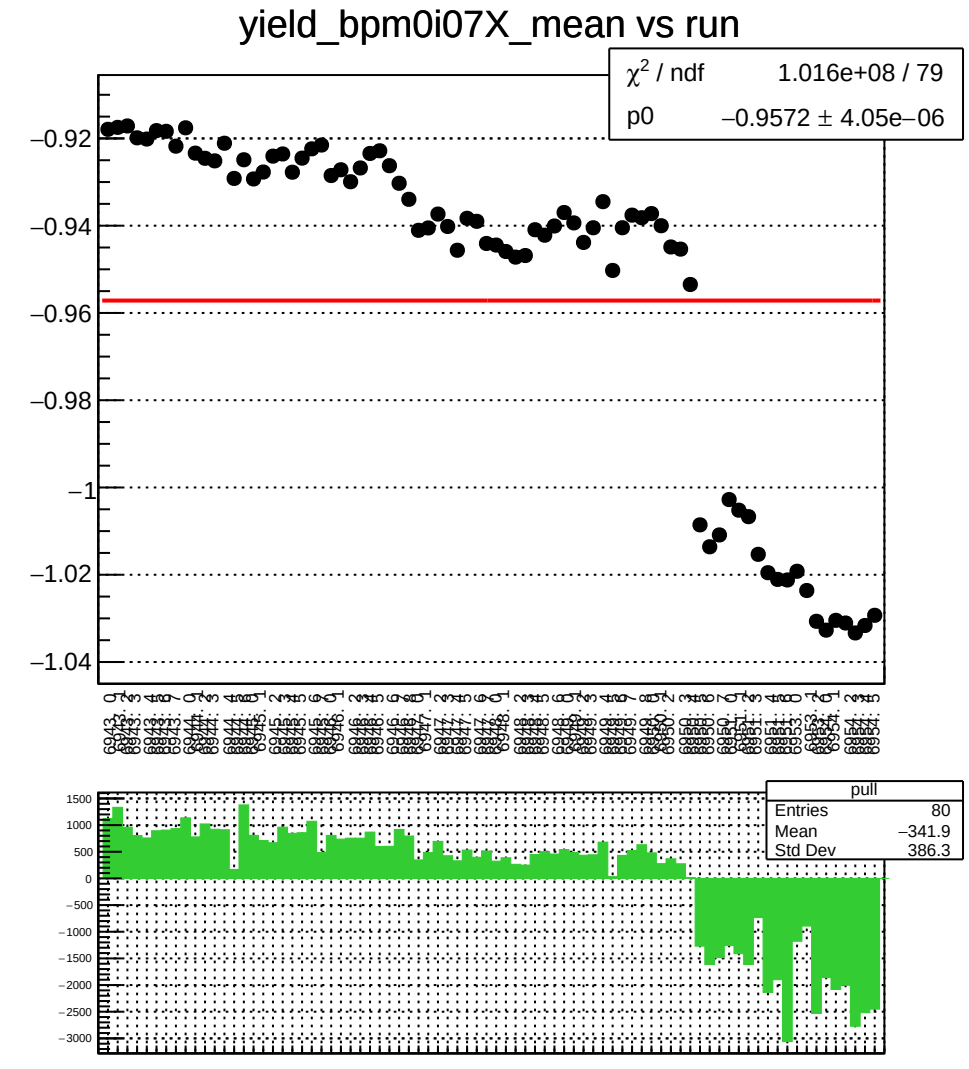

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

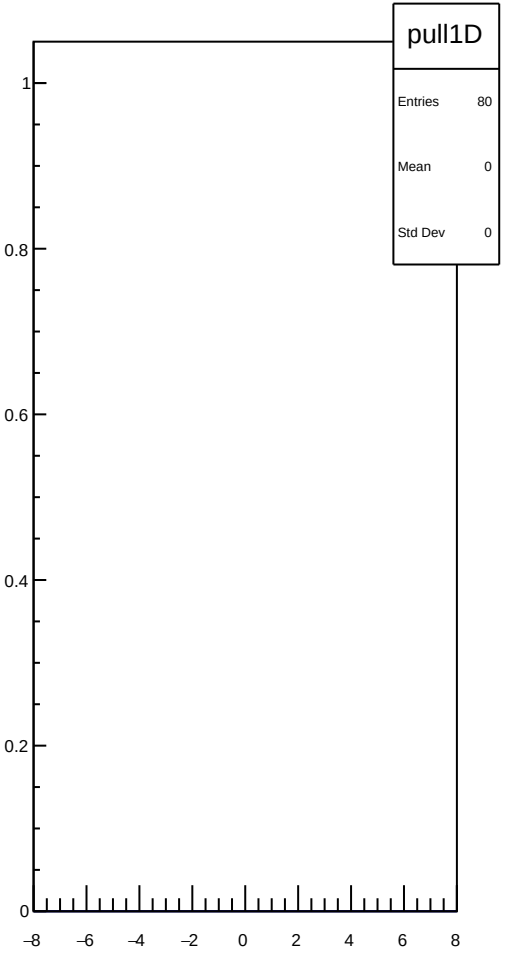

yield_bpm0i05X_rms vs run
χ² / ndf 1.145e+05 / 79
p0 0.00635 ± 5.217e–06
0.05
0.04
0.03
0.02
0.01

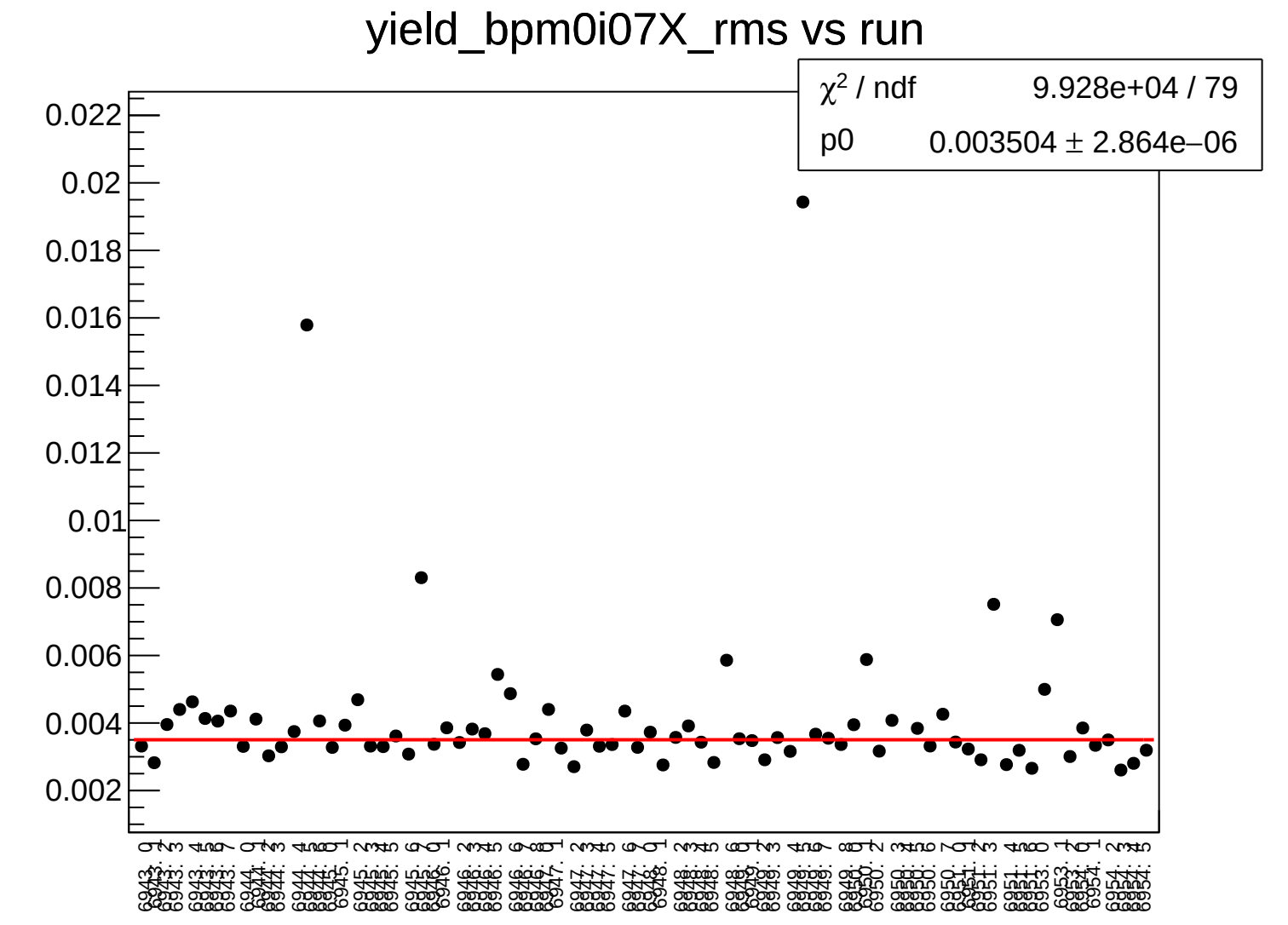

yield_bpm0i05Y_mean vs run
χ² / ndf 1.256e+08 / 79
p0 −0.8589 ± 5.006e−06
−0.8
−0.85
−0.9
−0.95
−1
pull
Entries 80
Mean 504
Std Dev 462.2
2000
1000
0
−1000
−2000
−3000

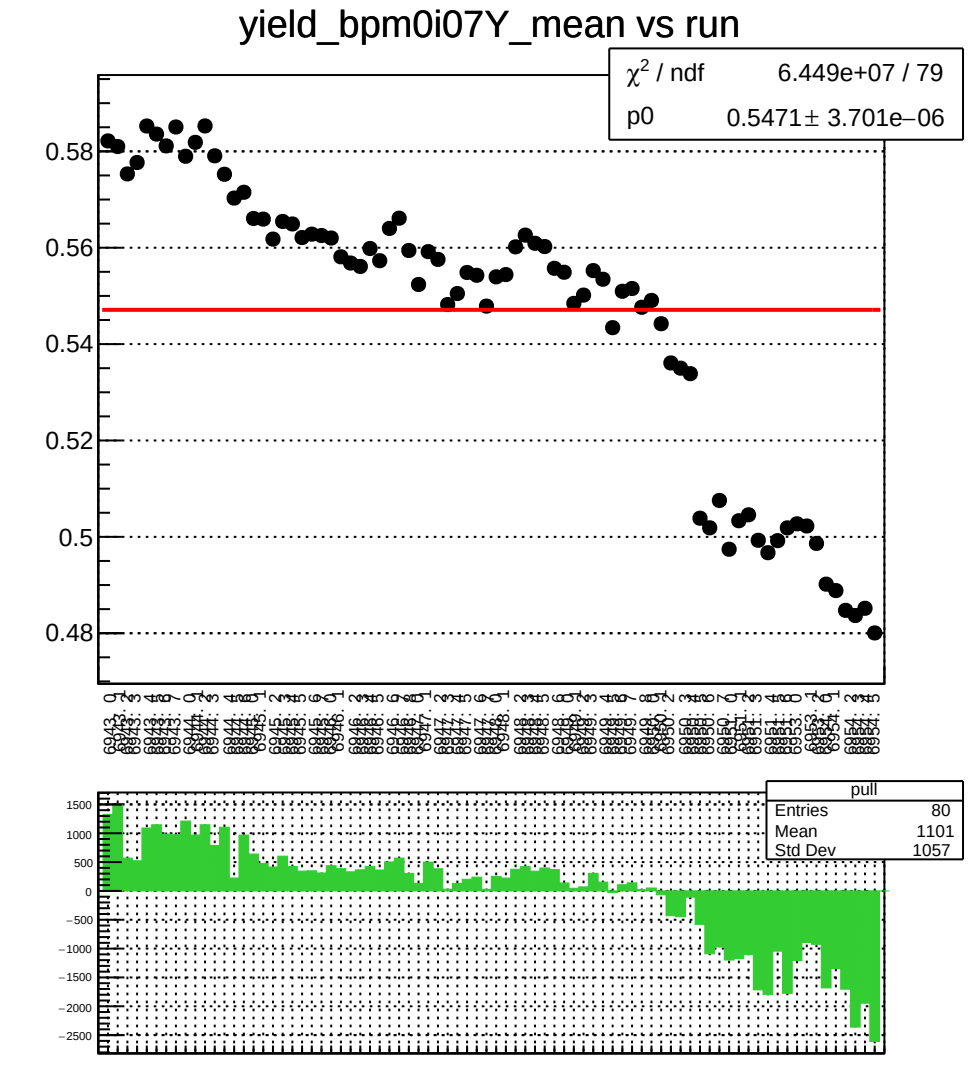

pull1D
Entries 80
Mean 2.696
Std Dev 3.643
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

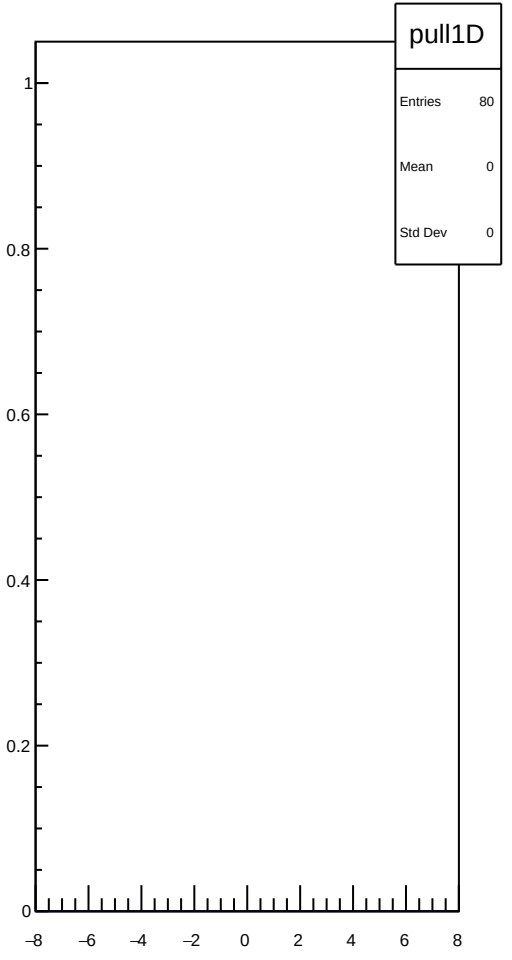

yield_bpm0i05Y_rms vs run
χ² / ndf 9.705e+04 / 79
p0 0.004333 ± 3.539e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

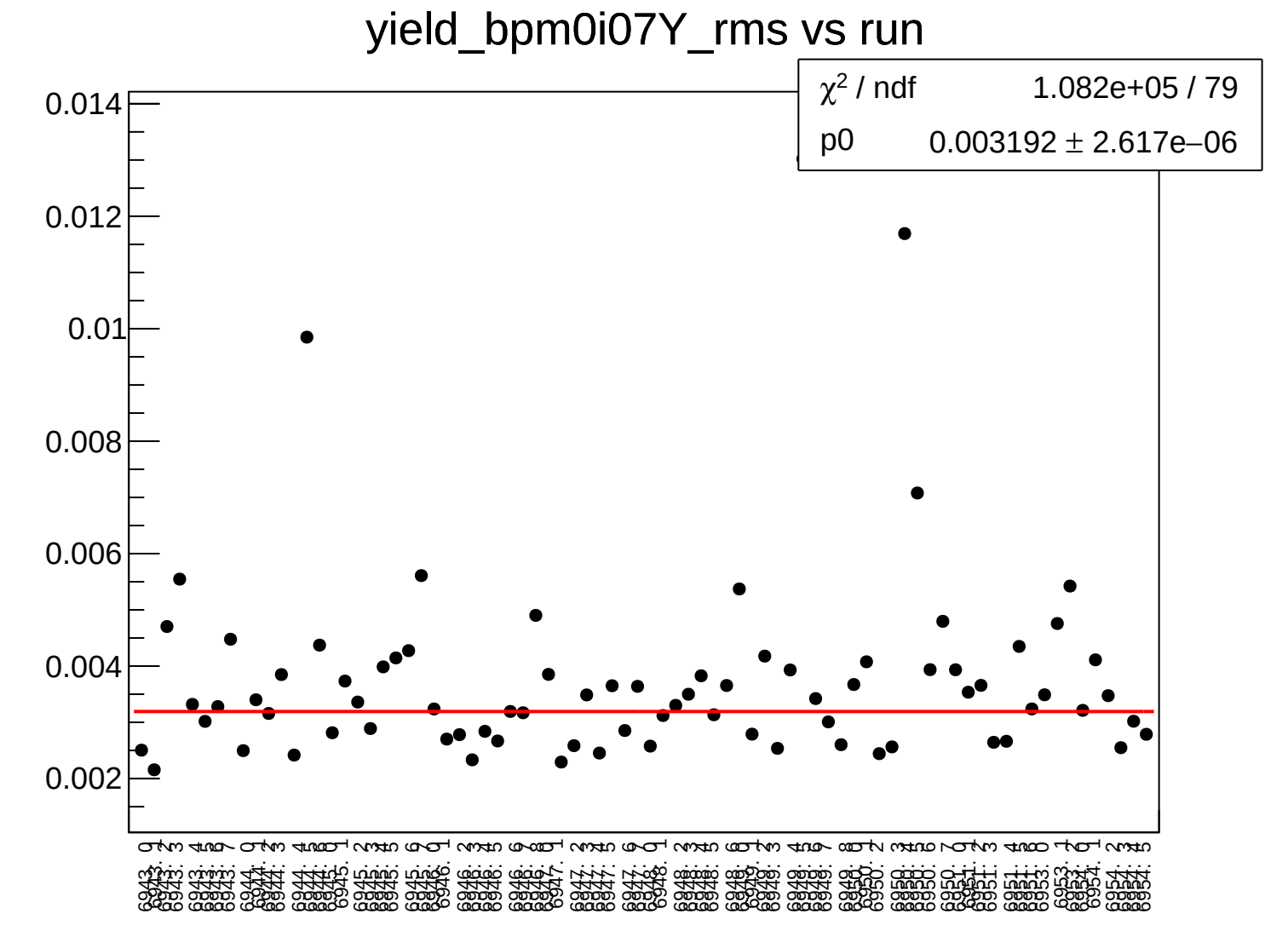

yield_bpm0i07X_mean vs run
χ² / ndf 1.016e+08 / 79
p0 −0.9572 ± 4.05e−06
−0.92
−0.94
−0.96
−0.98
−1
−1.02
−1.04
pull
Entries 80
Mean −341.9
Std Dev 386.3
1500
1000
500
0
−500
−1000
−1500
−2000
−2500
−3000

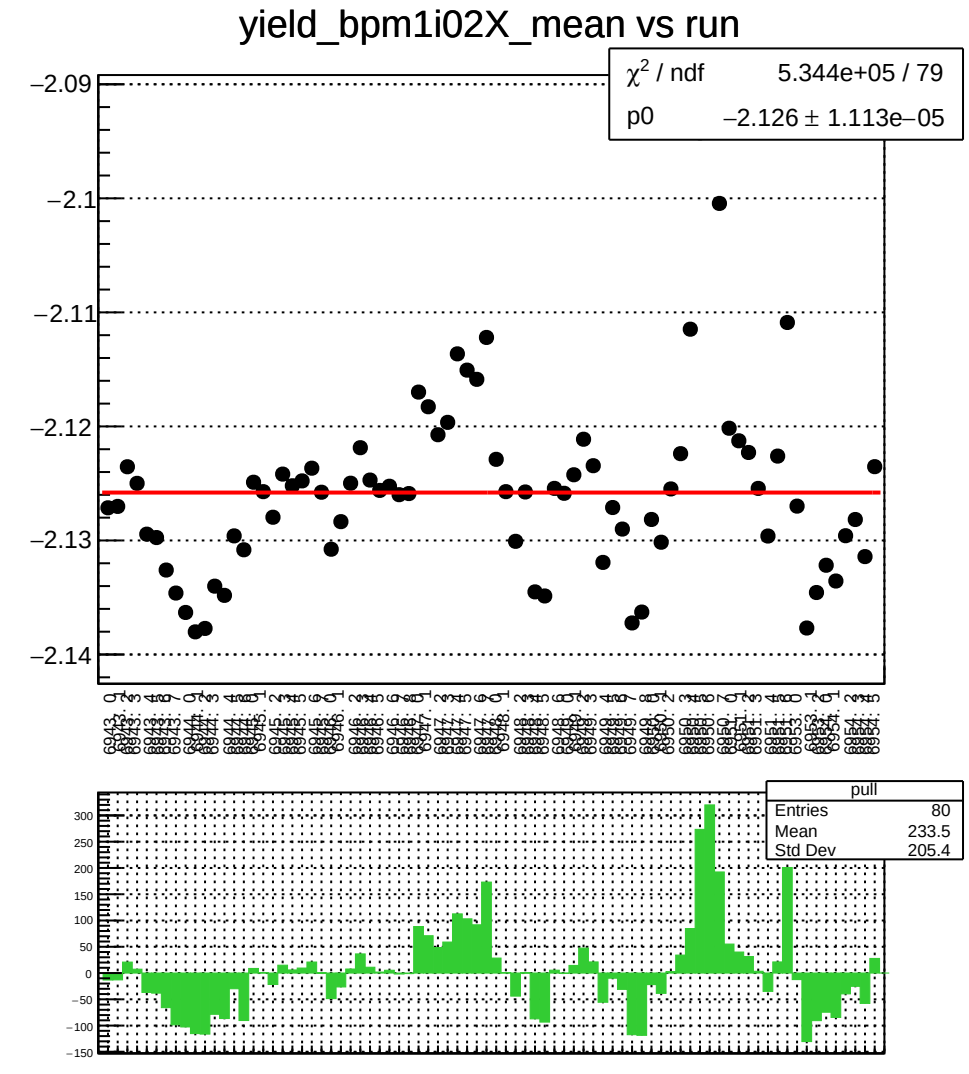

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

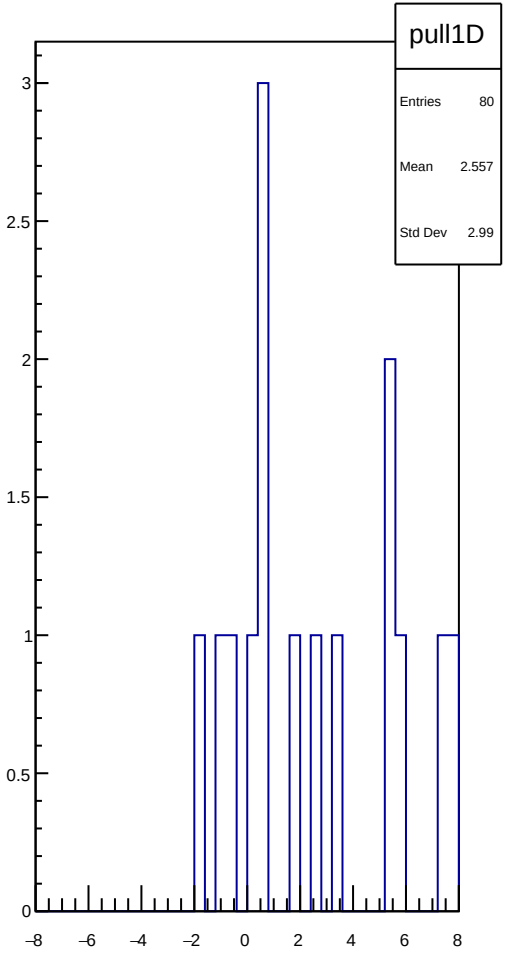

yield_bpm0i07X_rms vs run
χ^2 / ndf 9.928e+04 / 79
p0 0.003504 ± 2.864e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

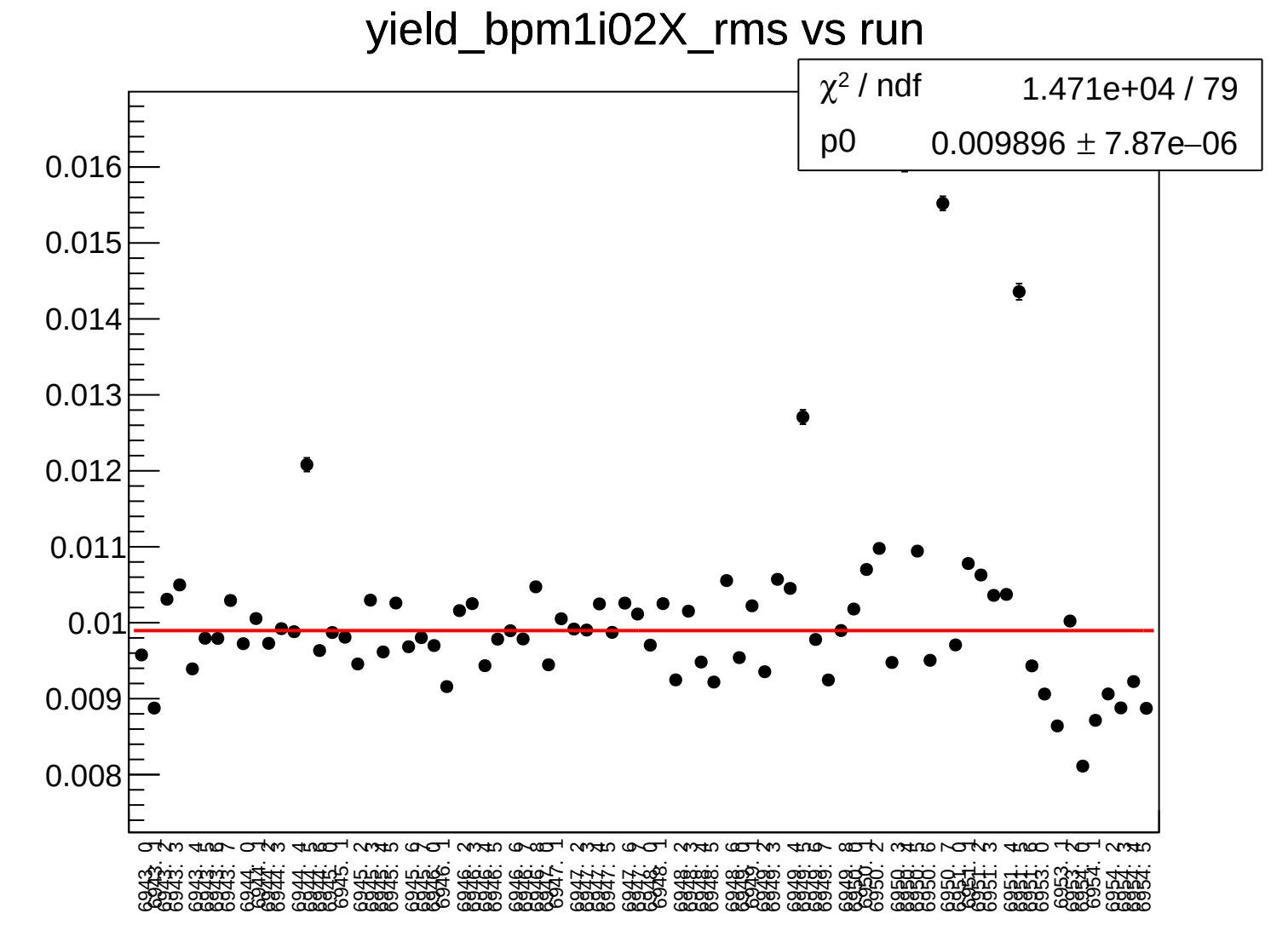

yield_bpm0i07Y_mean vs run
χ² / ndf 6.449e+07 / 79
p0 0.5471 ± 3.701e−06
0.58
0.56
0.54
0.52
0.5
0.48
pull
Entries 80
Mean 1101
Std Dev 1057
1500
1000
500
0
−500
−1000
−1500
−2000
−2500

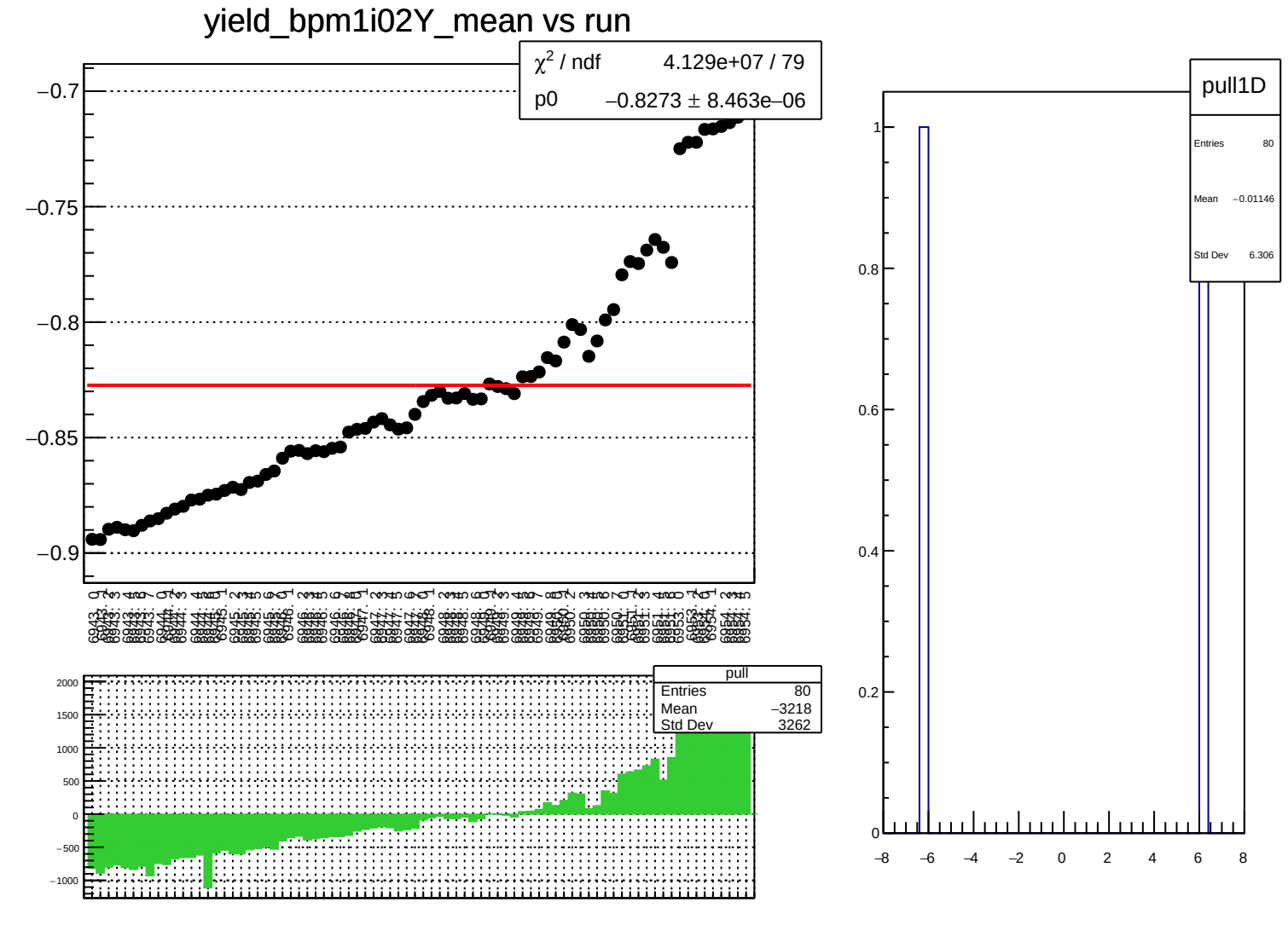

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

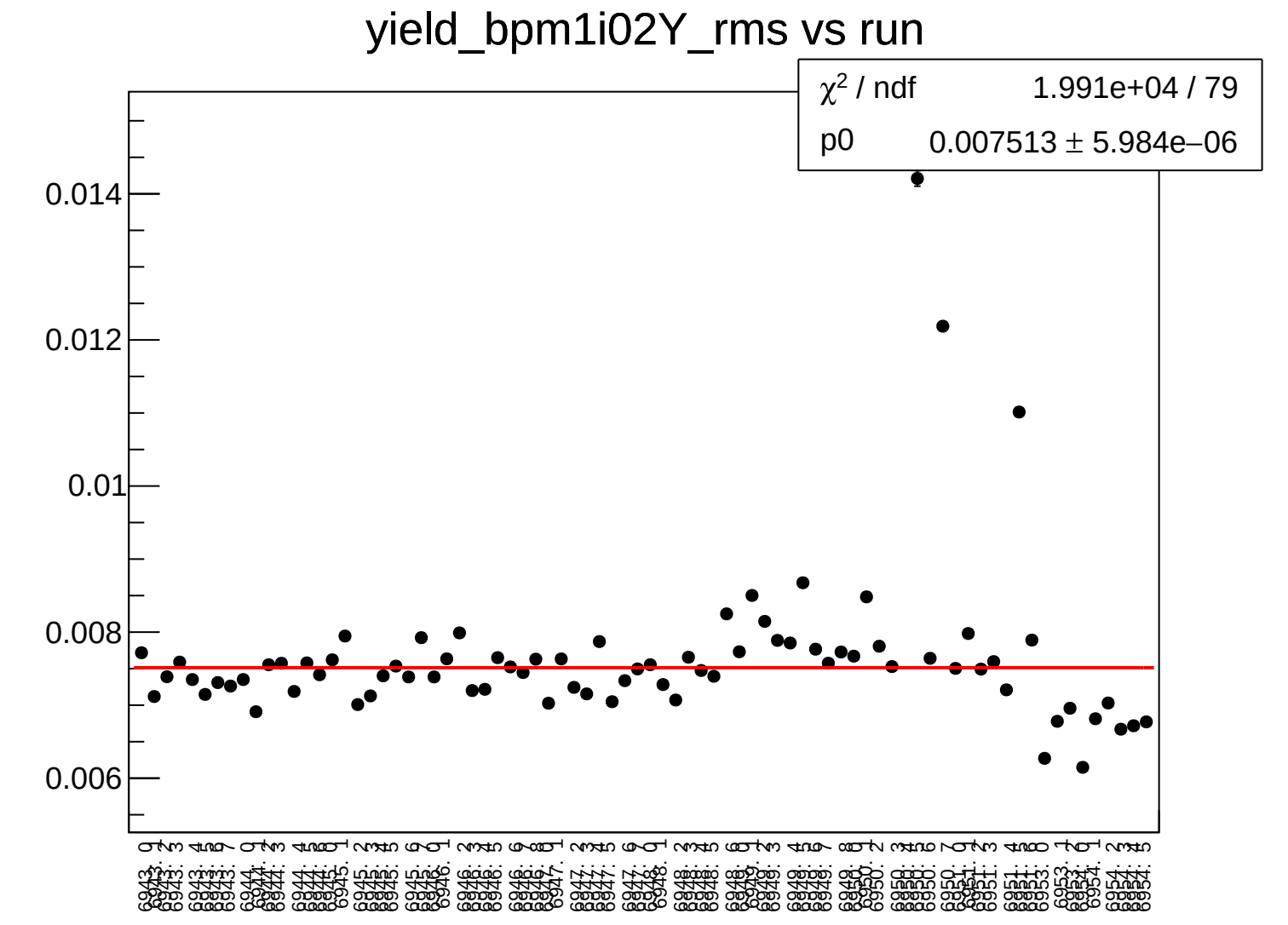

yield_bpm0i07Y_rms vs run
χ² / ndf 1.082e+05 / 79
p0 0.003192 ± 2.617e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

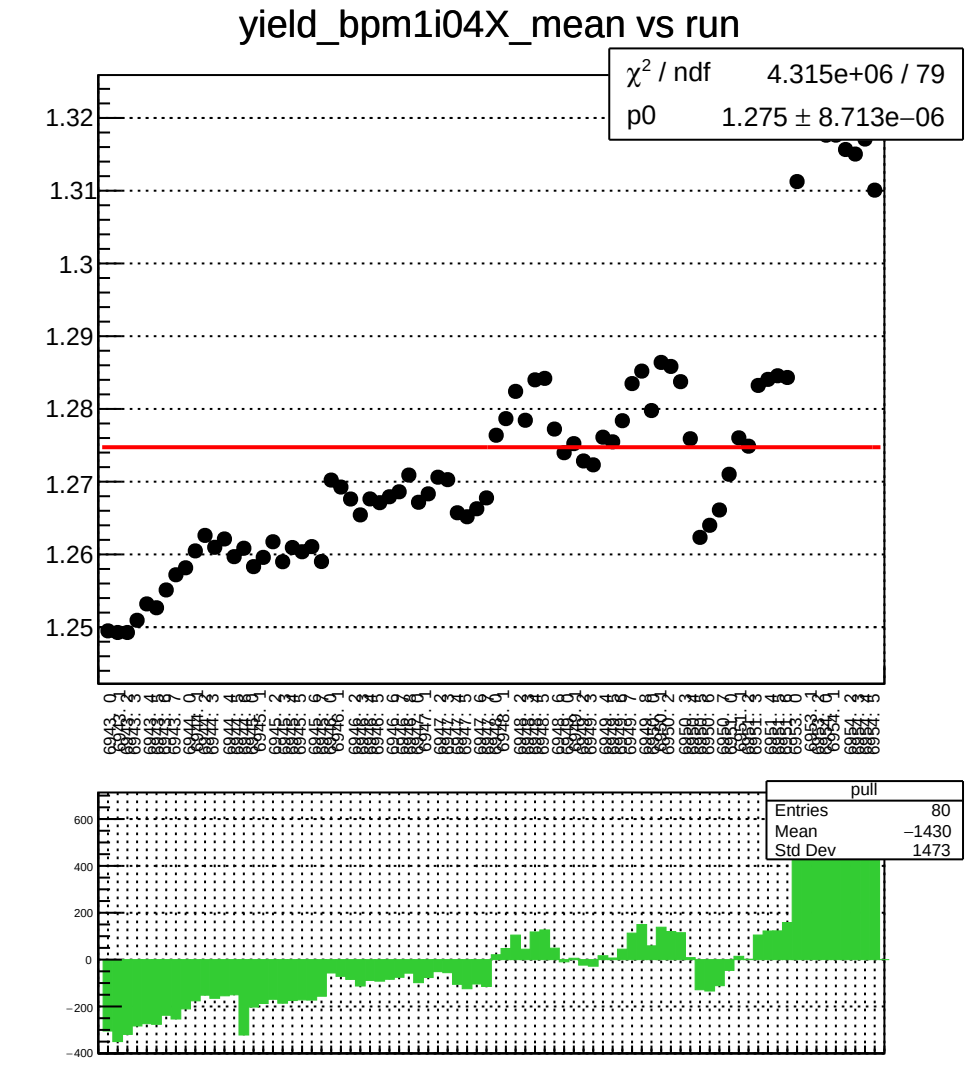

yield_bpm1i02X_mean vs run
χ² / ndf 5.344e+05 / 79
p0 −2.126 ± 1.113e−05
−2.09
−2.1
−2.11
−2.12
−2.13
−2.14
pull
Entries 80
Mean 233.5
Std Dev 205.4
300
250
200
150
100
50
0
−50
−100
−150

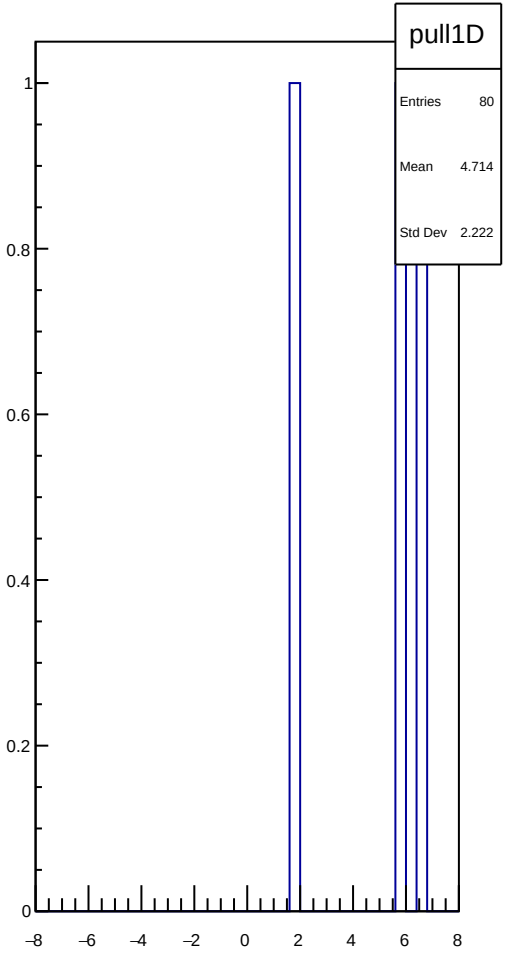

pull1D
Entries 80
Mean 2.557
Std Dev 2.99
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

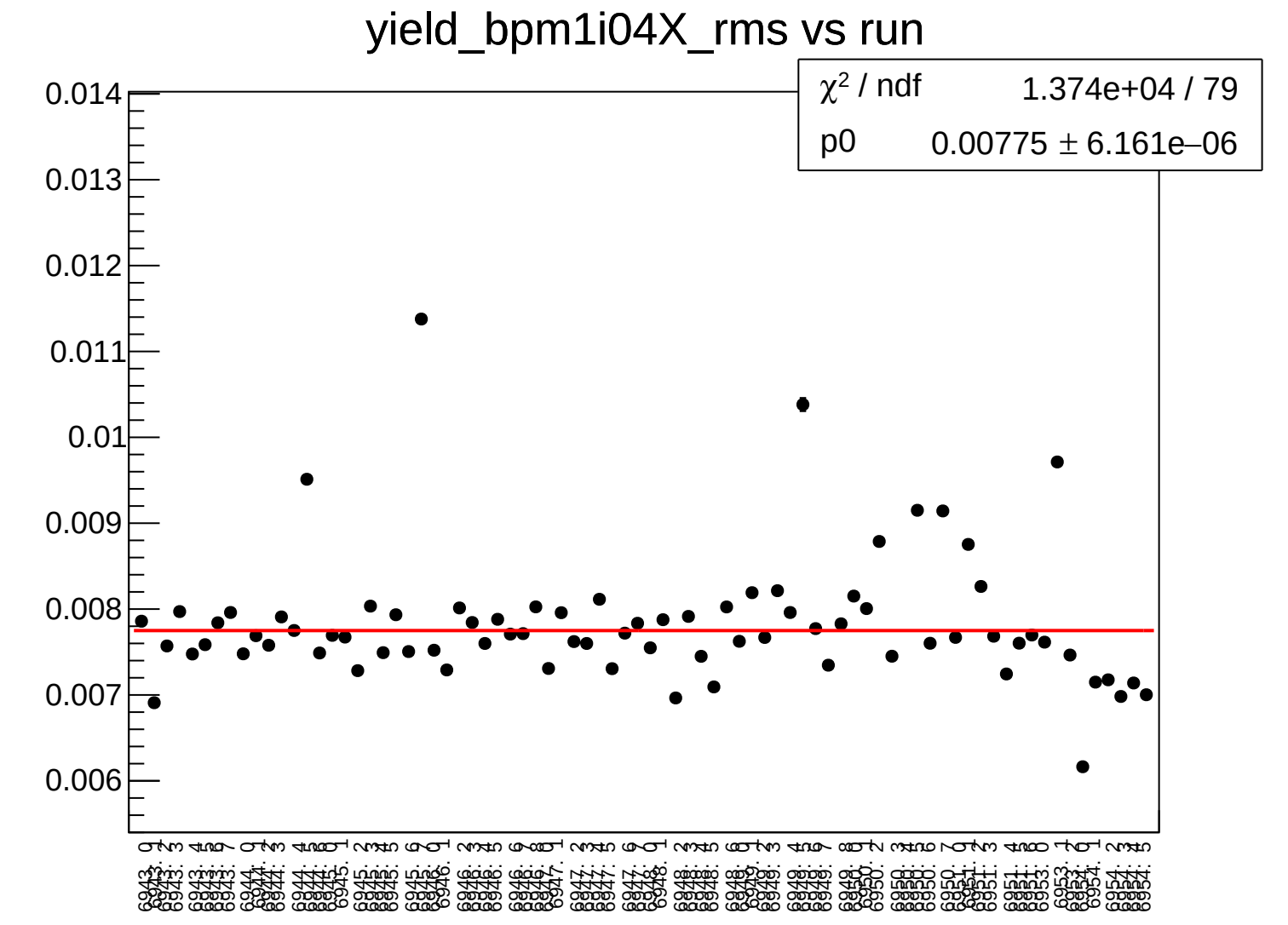

yield_bpm1i02X_rms vs run
χ² / ndf 1.471e+04 / 79
p0 0.009896 ± 7.87e–06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

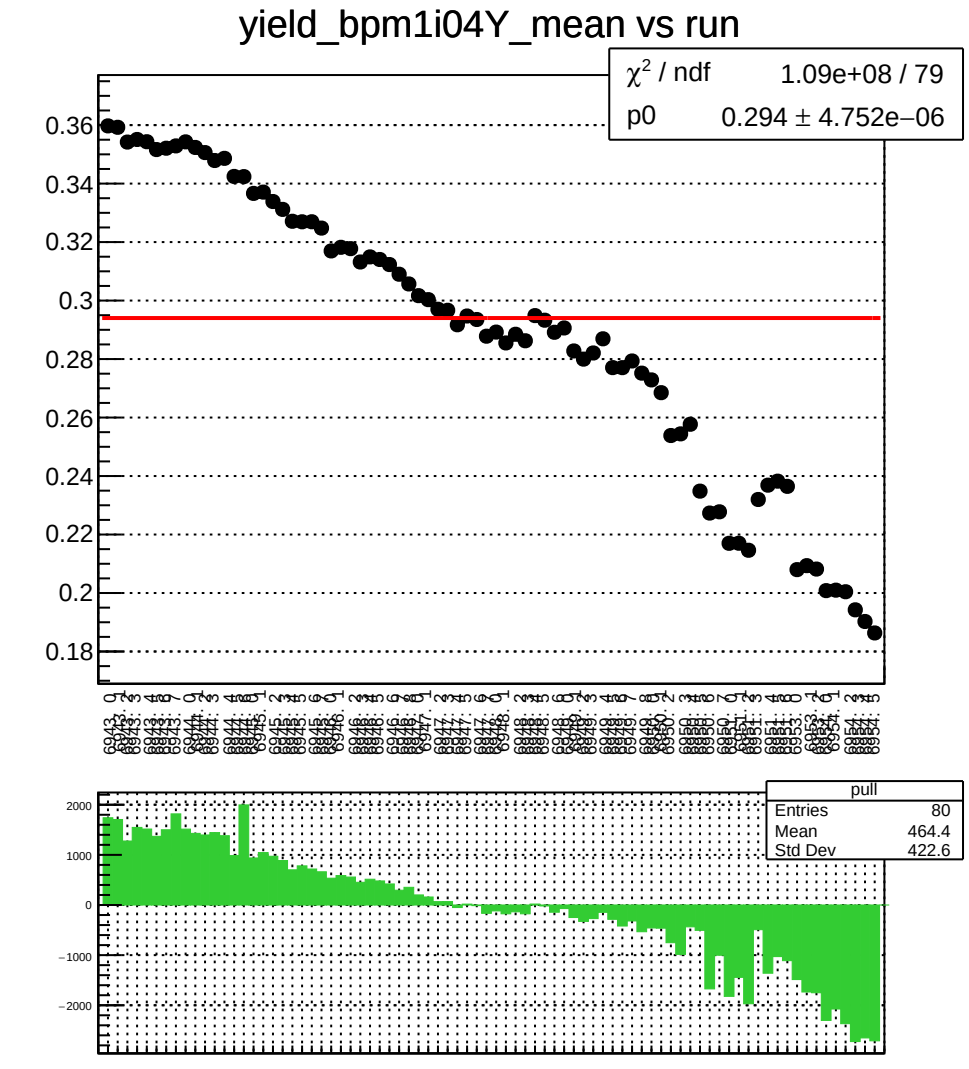

yield_bpm1i02Y_mean vs run
χ² / ndf 4.129e+07 / 79
p0 −0.8273 ± 8.463e−06
−0.7
−0.75
−0.8
−0.85
−0.9
pull
Entries 80
Mean −3218
Std Dev 3262
2000
1500
1000
500
0
−500
−1000
pull1D
Entries 80
Mean −0.01146
Std Dev 6.306
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

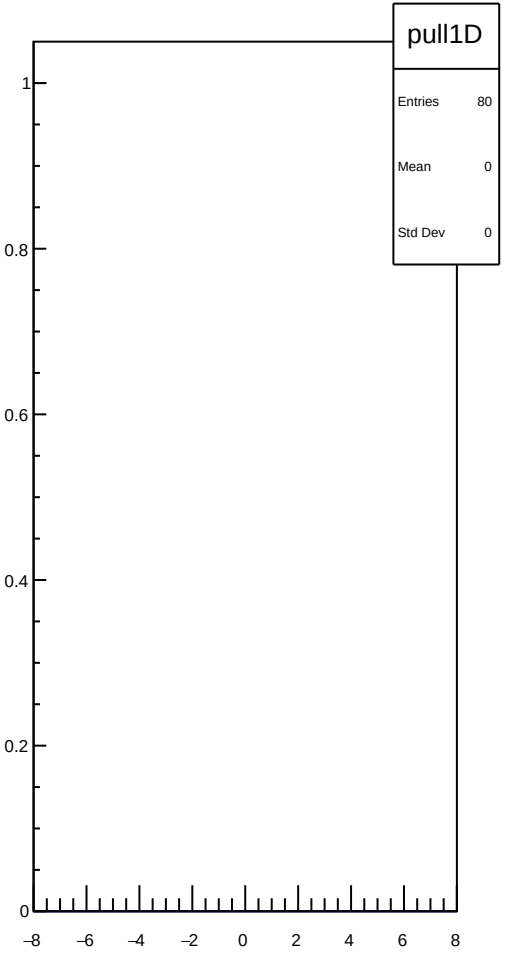

yield_bpm1i02Y_rms vs run
χ^2 / ndf 1.991e+04 / 79
p0 0.007513 ± 5.984e−06
0.014
0.012
0.01
0.008
0.006

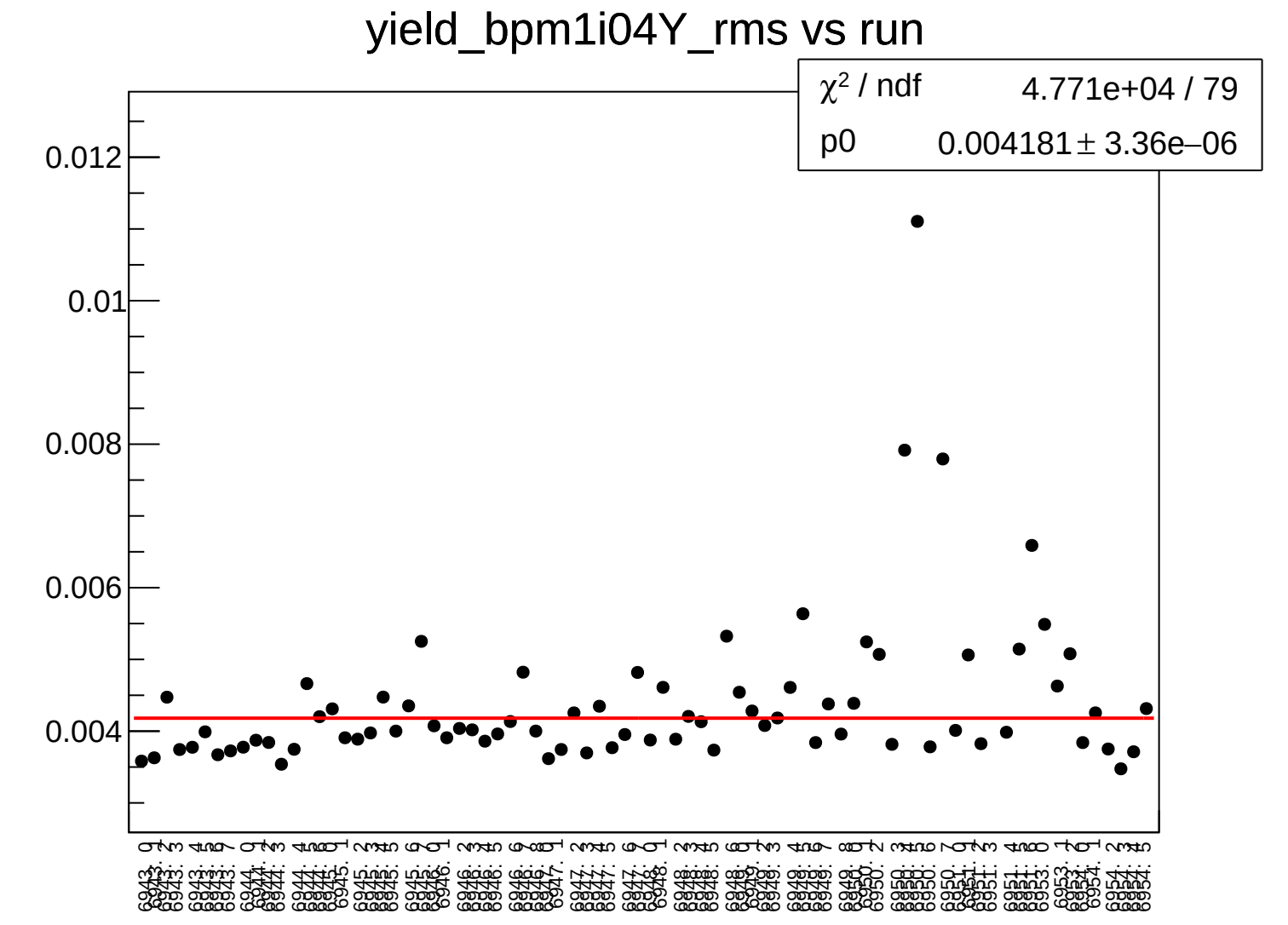

yield_bpm1i04X_mean vs run
χ² / ndf 4.315e+06 / 79
p0 1.275 ± 8.713e−06
1.32
1.31
1.3
1.29
1.28
1.27
1.26
1.25
pull
Entries 80
Mean −1430
Std Dev 1473
600
400
200
0
−200
−400

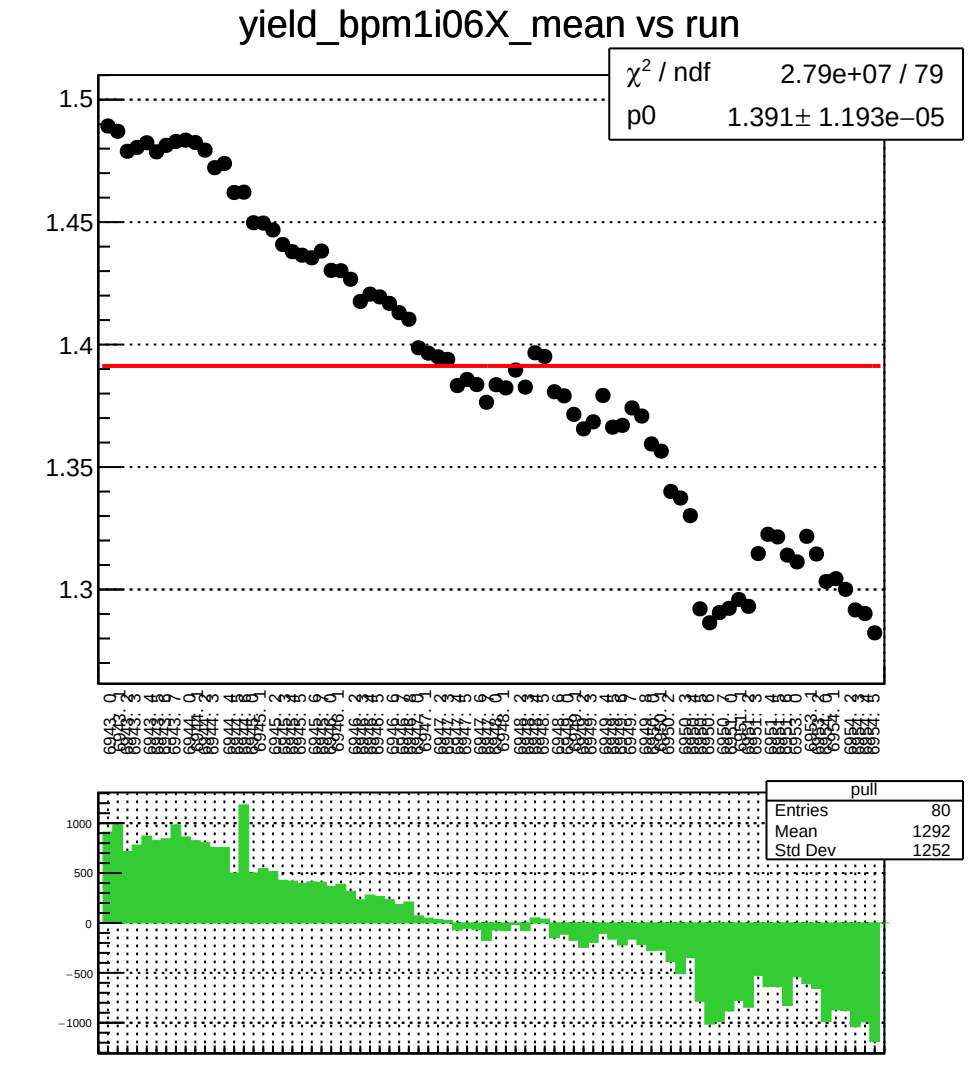

pull1D
Entries 80
Mean 4.714
Std Dev 2.222
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

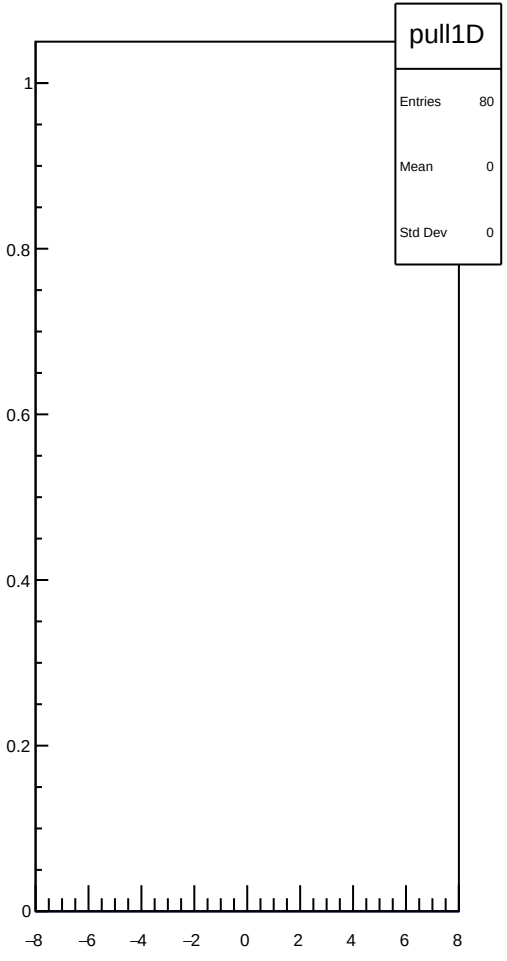

yield_bpm1i04X_rms vs run
χ² / ndf 1.374e+04 / 79
p0 0.00775 ± 6.161e–06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006


yield_bpm1i04Y_mean vs run
χ² / ndf 1.09e+08 / 79
p0 0.294 ± 4.752e−06
0.36
0.34
0.32
0.3
0.28
0.26
0.24
0.22
0.2
0.18
pull
Entries 80
Mean 464.4
Std Dev 422.6
2000
1000
0
−1000
−2000

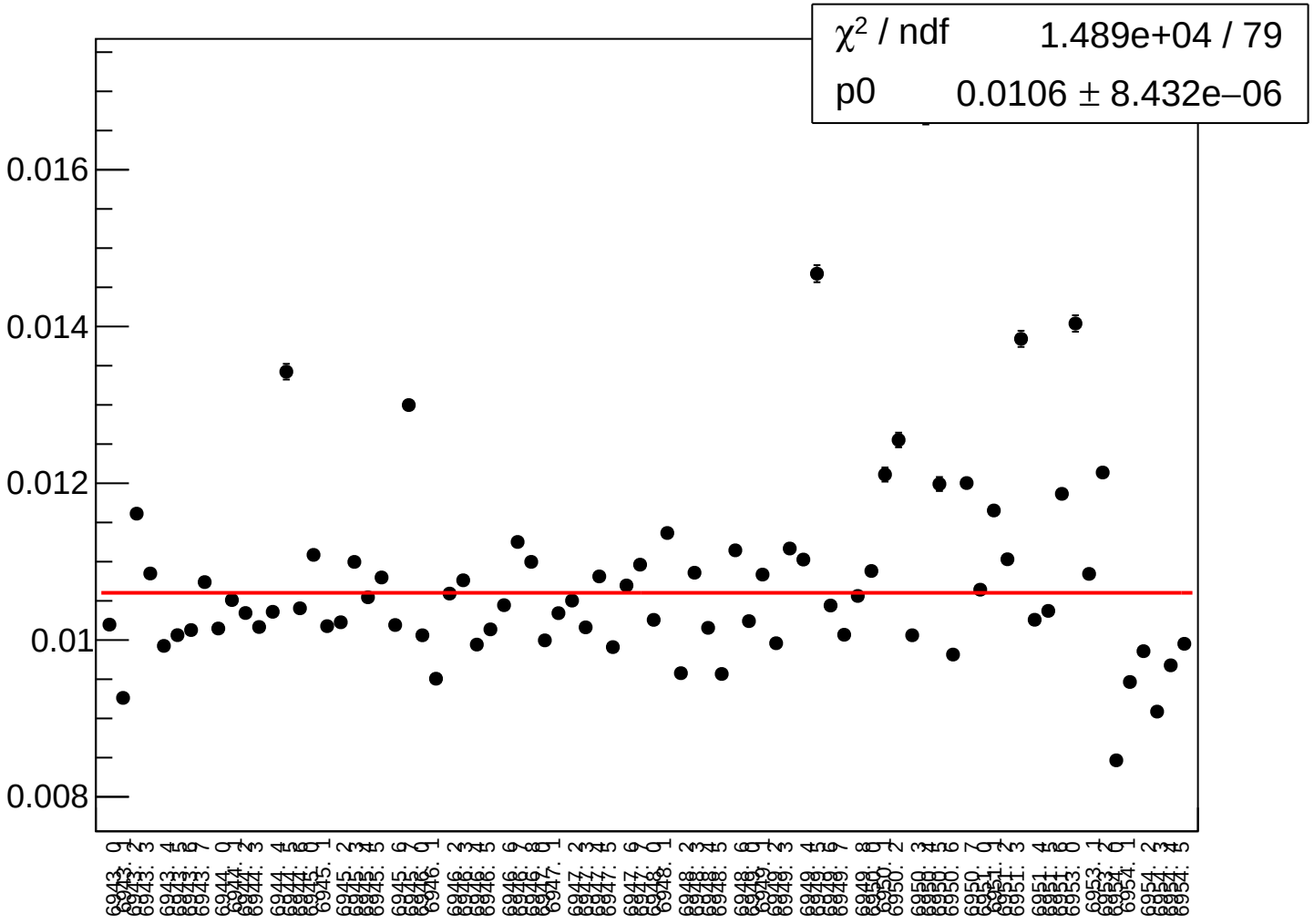

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

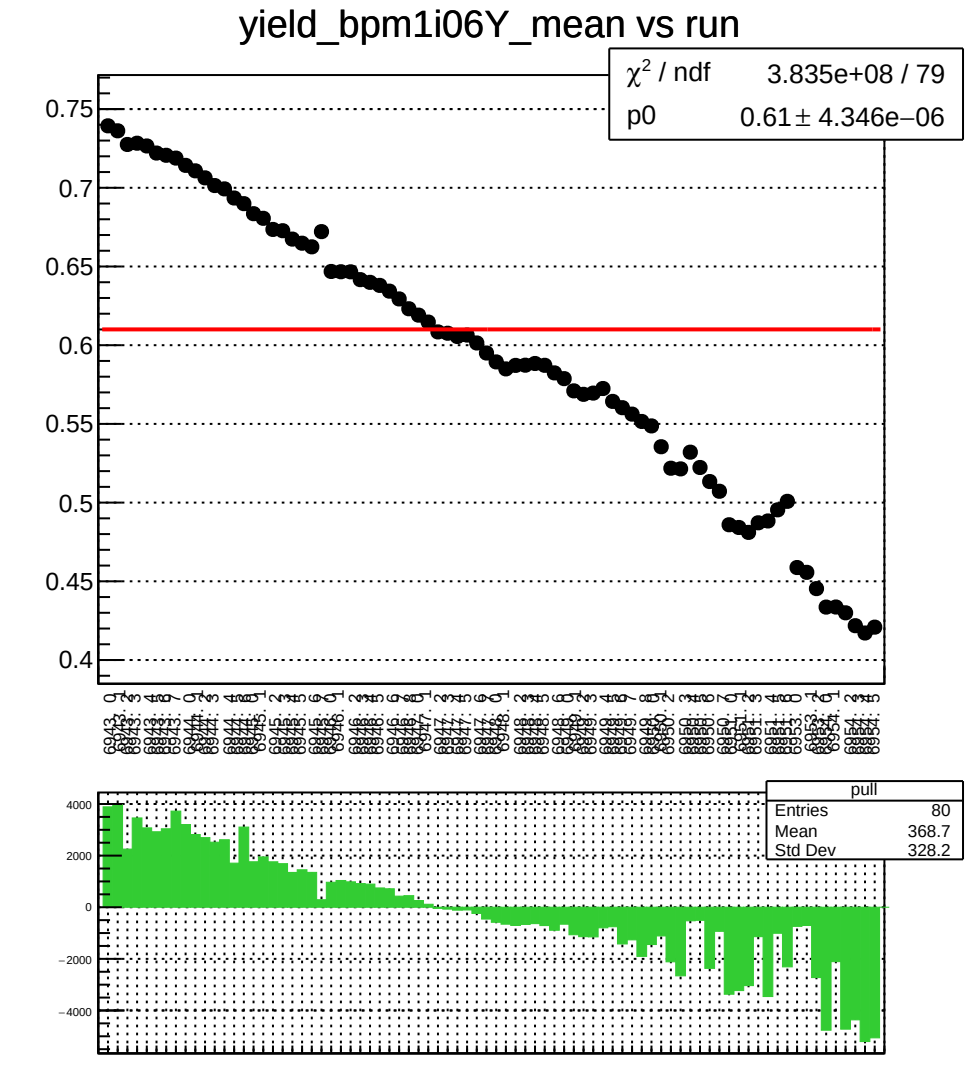

yield_bpm1i04Y_rms vs run
χ² / ndf 4.771e+04 / 79
p0 0.004181 ± 3.36e–06
0.012
0.01
0.008
0.006
0.004

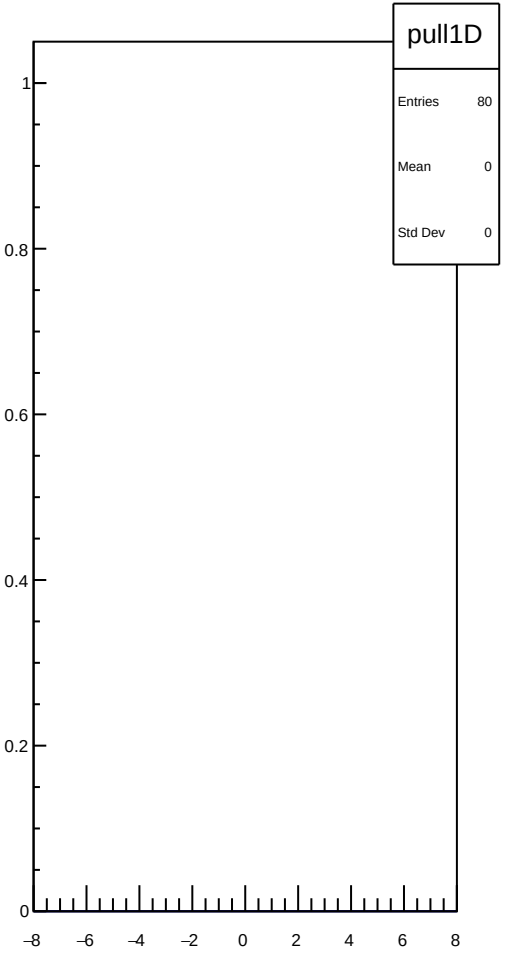

yield_bpm1i06X_mean vs run
χ² / ndf 2.79e+07 / 79
p0 1.391± 1.193e−05
1.5
1.45
1.4
1.35
1.3
pull
Entries 80
Mean 1292
Std Dev 1252
1000
500
0
−500
−1000

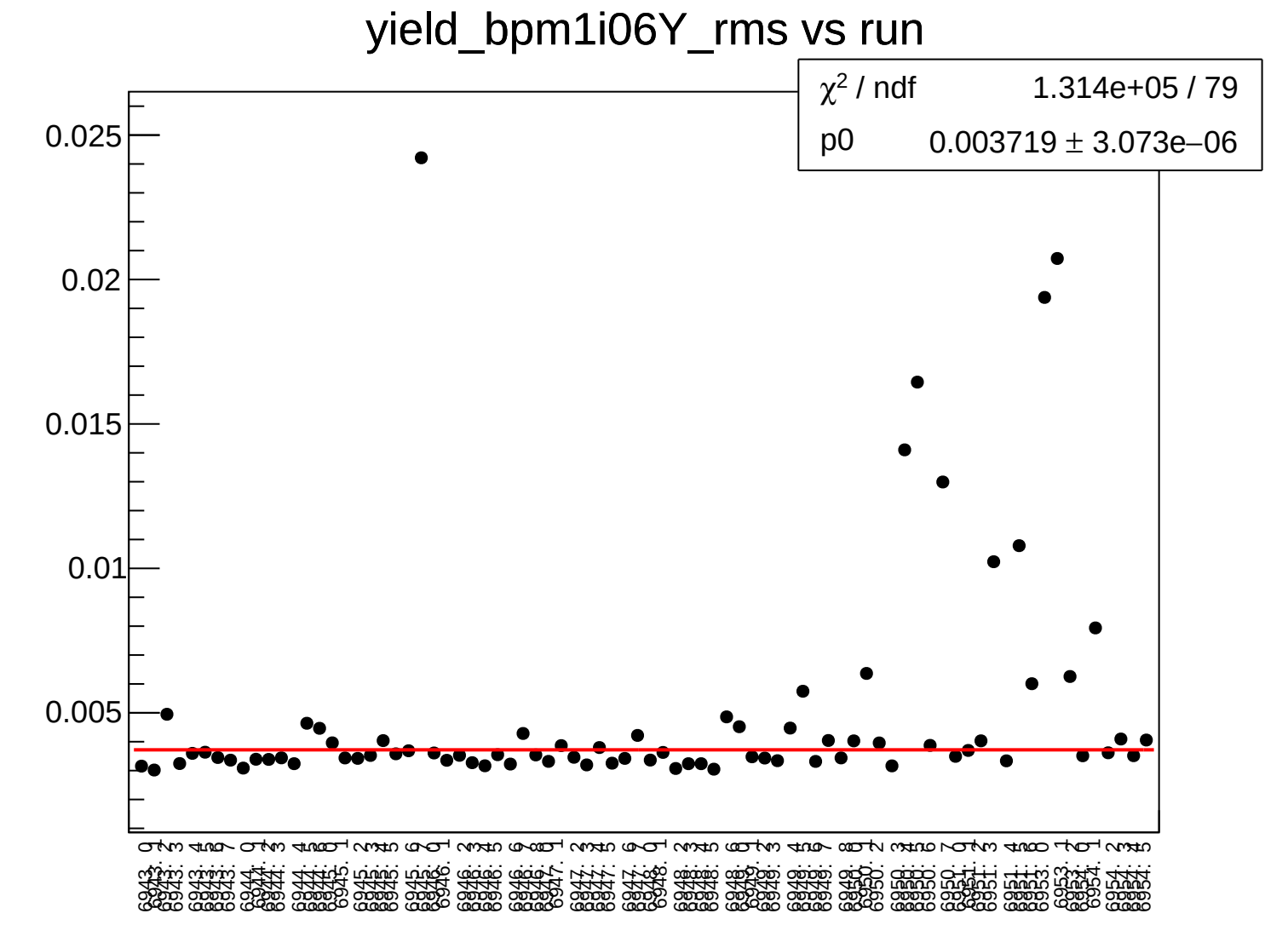

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

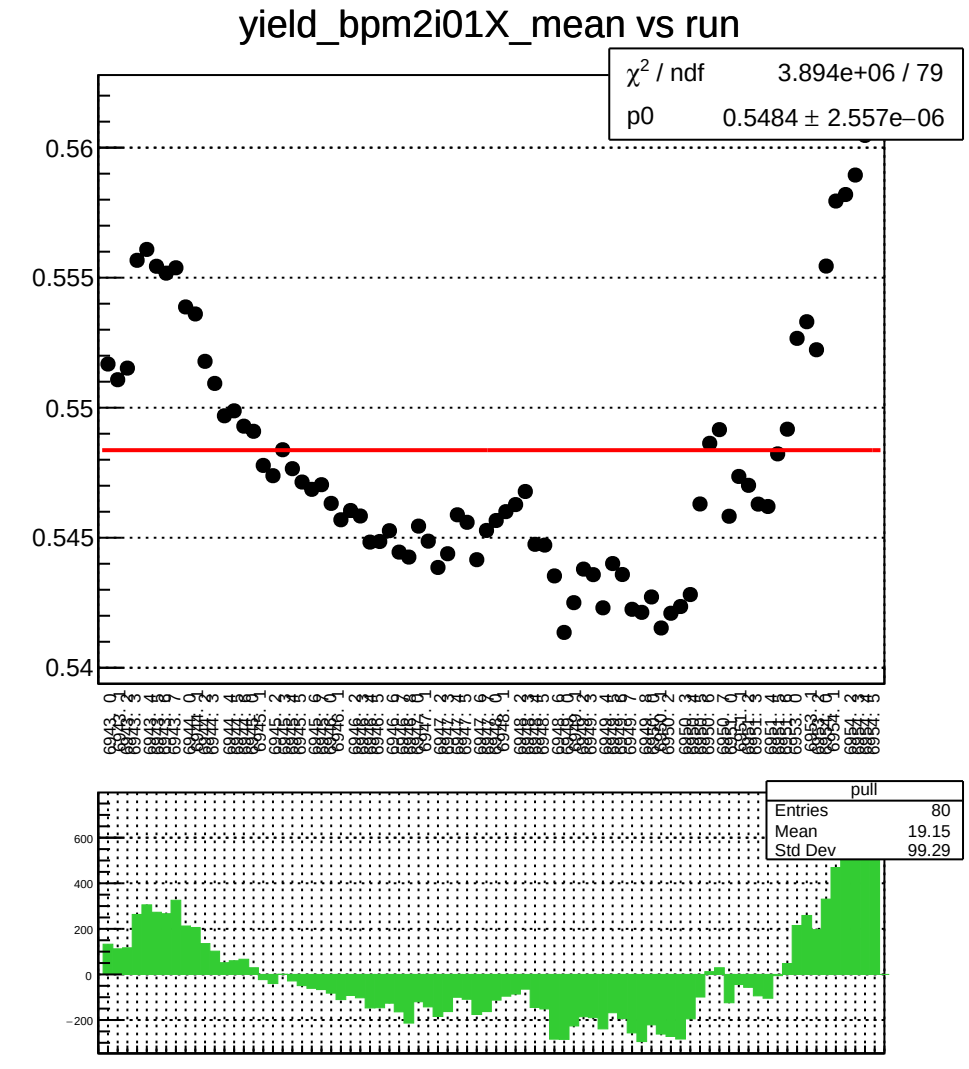
yield_bpm1i06X_rms vs run

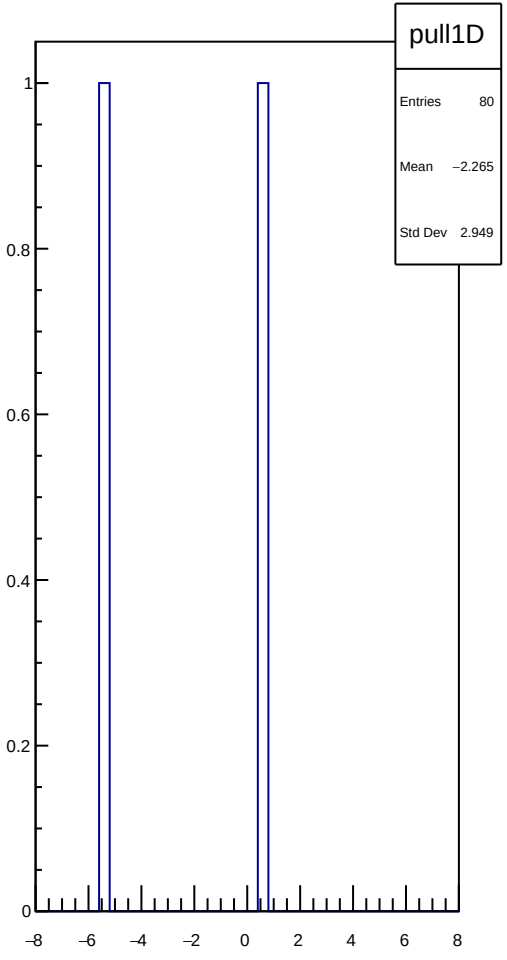


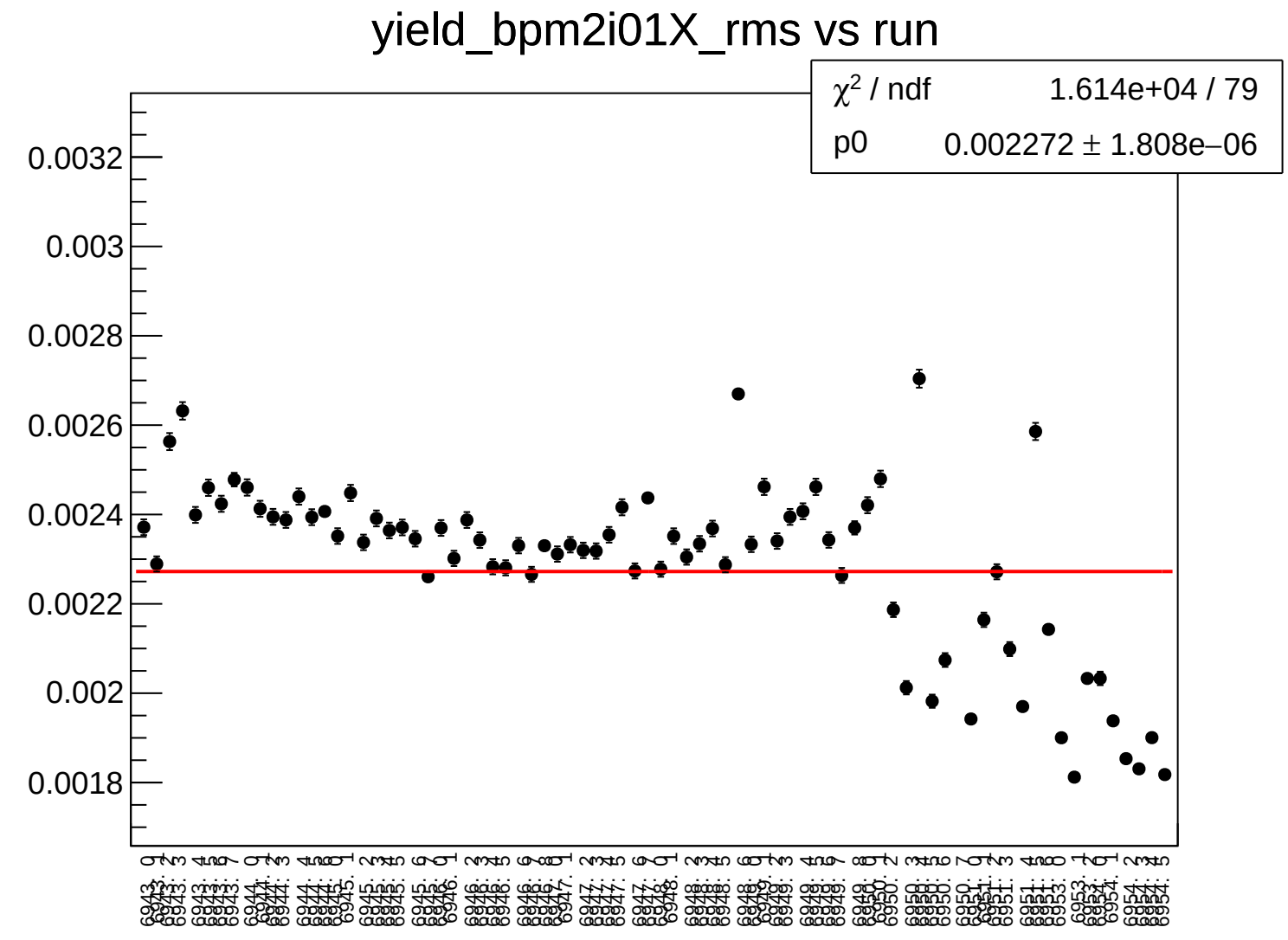

yield_bpm1i06Y_mean vs run
χ² / ndf 3.835e+08 / 79
p0 0.61 ± 4.346e−06
pull
Entries 80
Mean 368.7
Std Dev 328.2

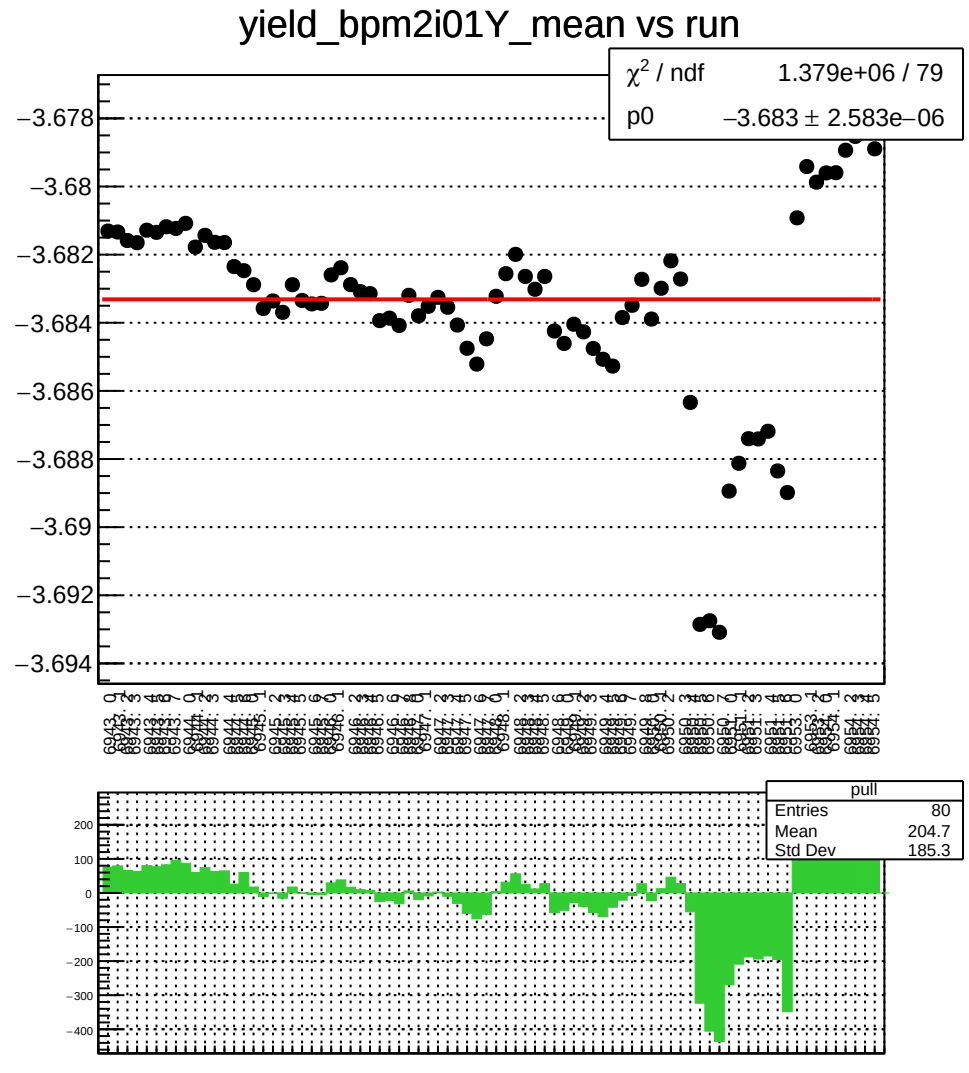

pull1D
Entries 80
Mean 0
Std Dev 0

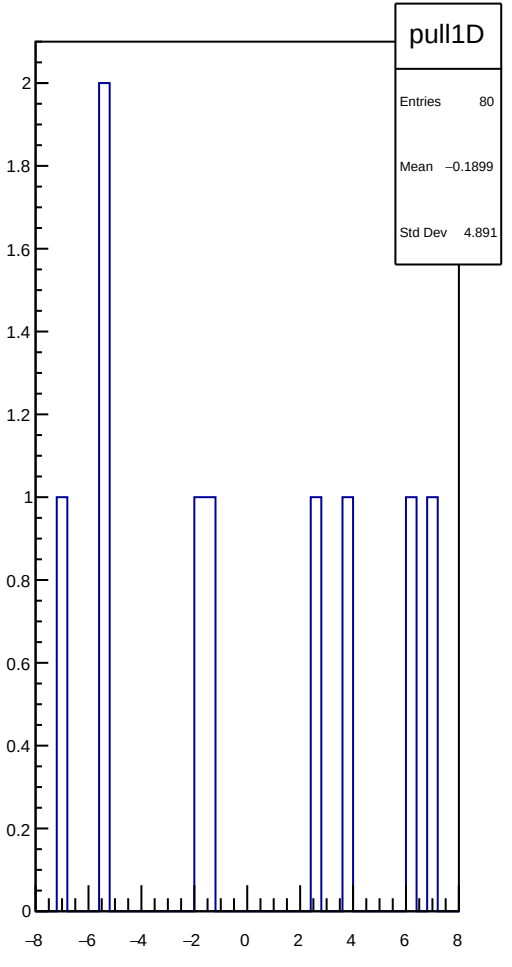

yield_bpm1i06Y_rms vs run
χ² / ndf 1.314e+05 / 79
p0 0.003719 ± 3.073e−06
0.025
0.02
0.015
0.01
0.005

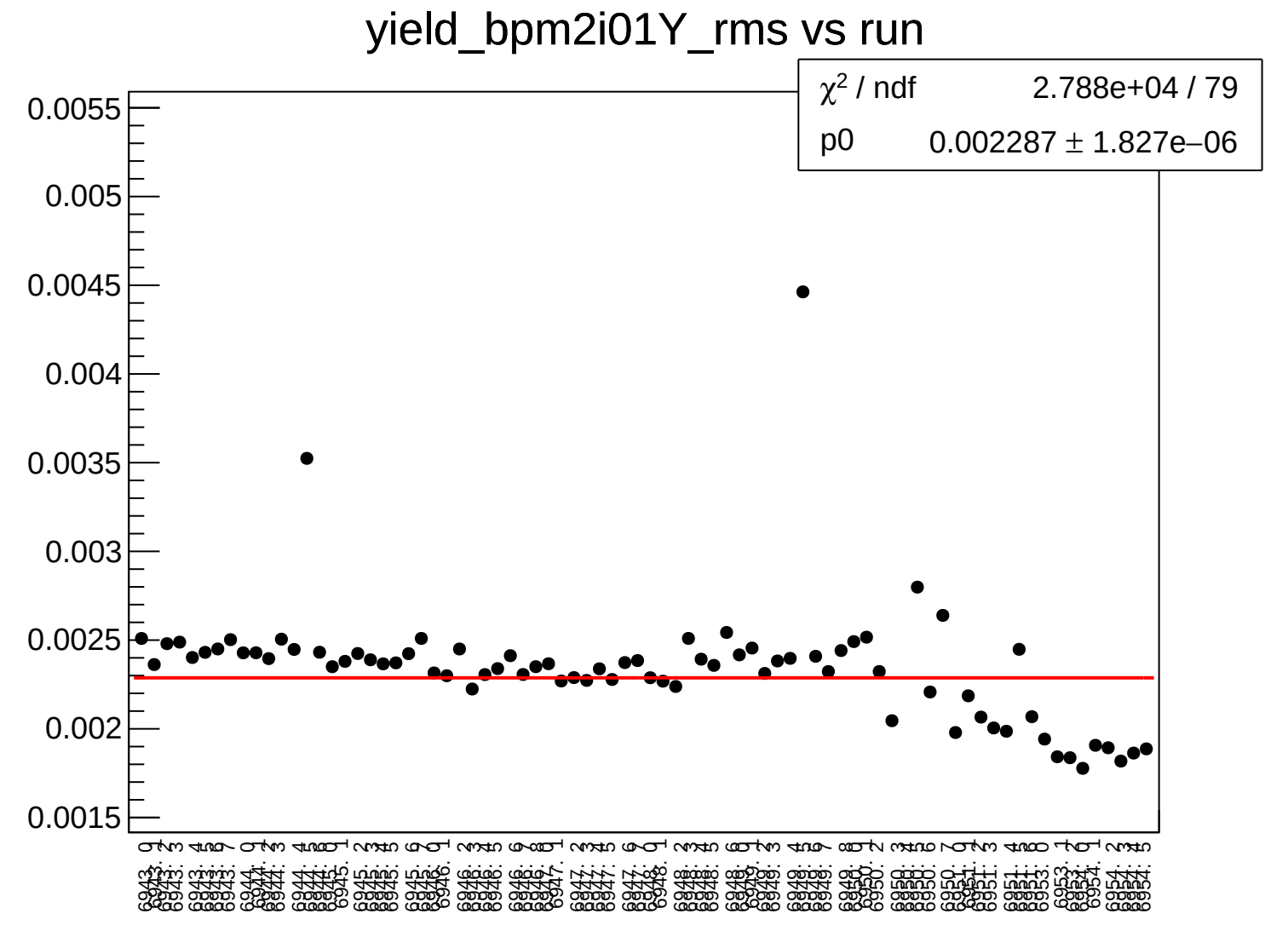

yield_bpm2i01X_mean vs run
χ² / ndf 3.894e+06 / 79
p0 0.5484 ± 2.557e−06
0.56
0.555
0.55
0.545
0.54
pull
Entries 80
Mean 19.15
Std Dev 99.29
600
400
200
0
−200

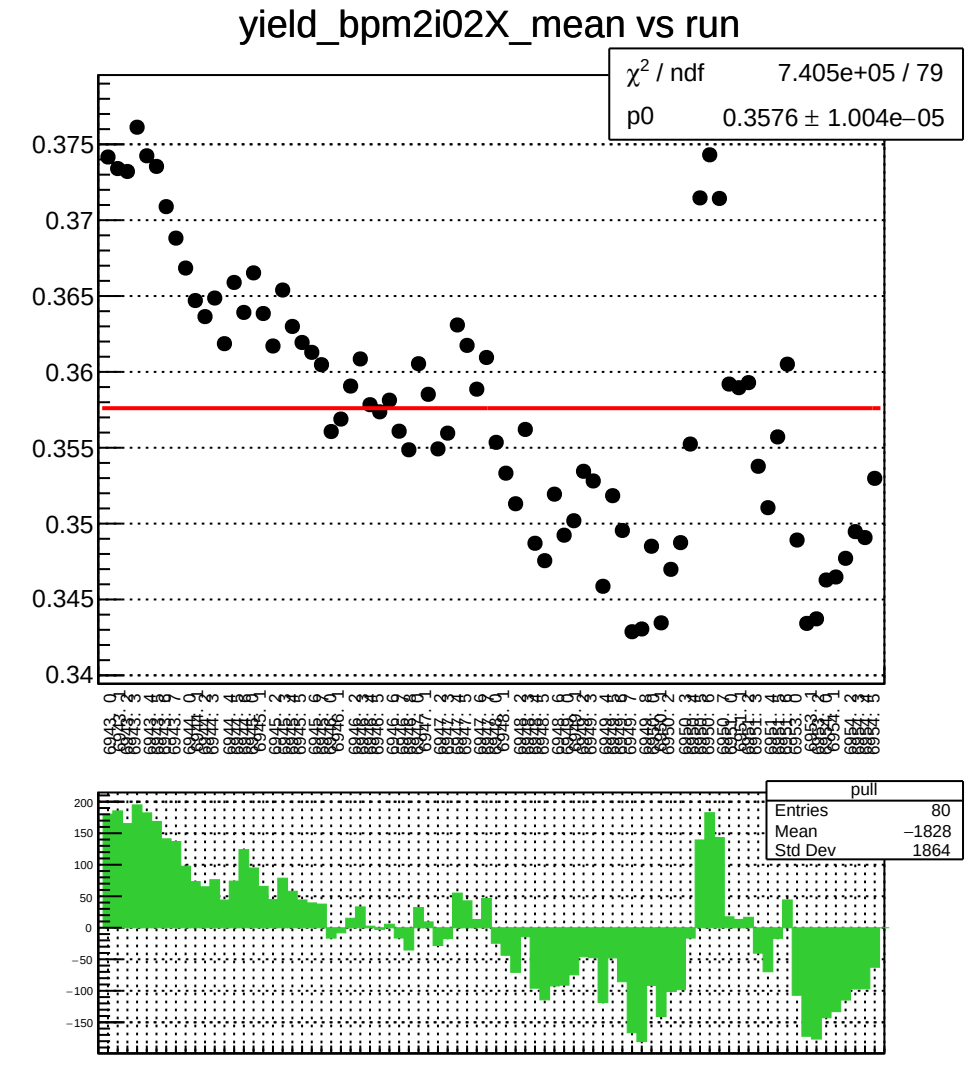

pull1D
Entries 80
Mean −2.265
Std Dev 2.949
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

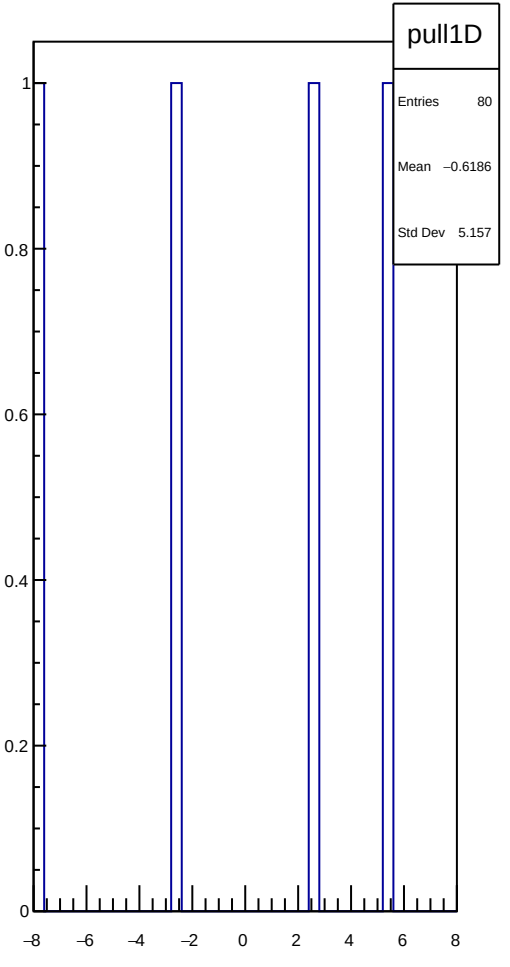

yield_bpm2i01X_rms vs run
χ² / ndf 1.614e+04 / 79
p0 0.002272 ± 1.808e−06
0.0032
0.003
0.0028
0.0026
0.0024
0.0022
0.002
0.0018

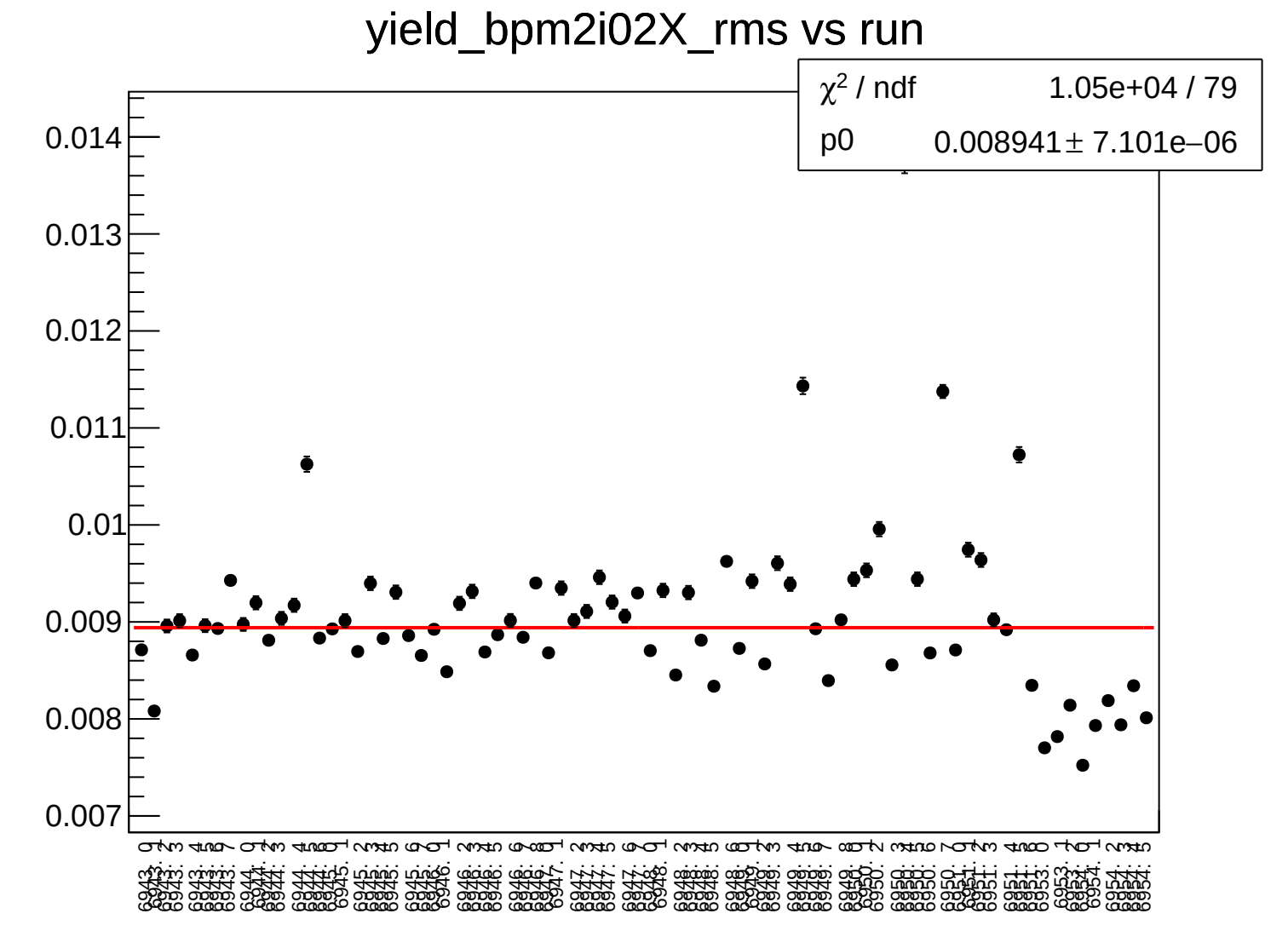

yield_bpm2i01Y_mean vs run
χ² / ndf 1.379e+06 / 79
p0 −3.683 ± 2.583e−06
−3.678
−3.68
−3.682
−3.684
−3.686
−3.688
−3.69
−3.692
−3.694
pull
Entries 80
Mean 204.7
Std Dev 185.3
200
100
0
−100
−200
−300
−400

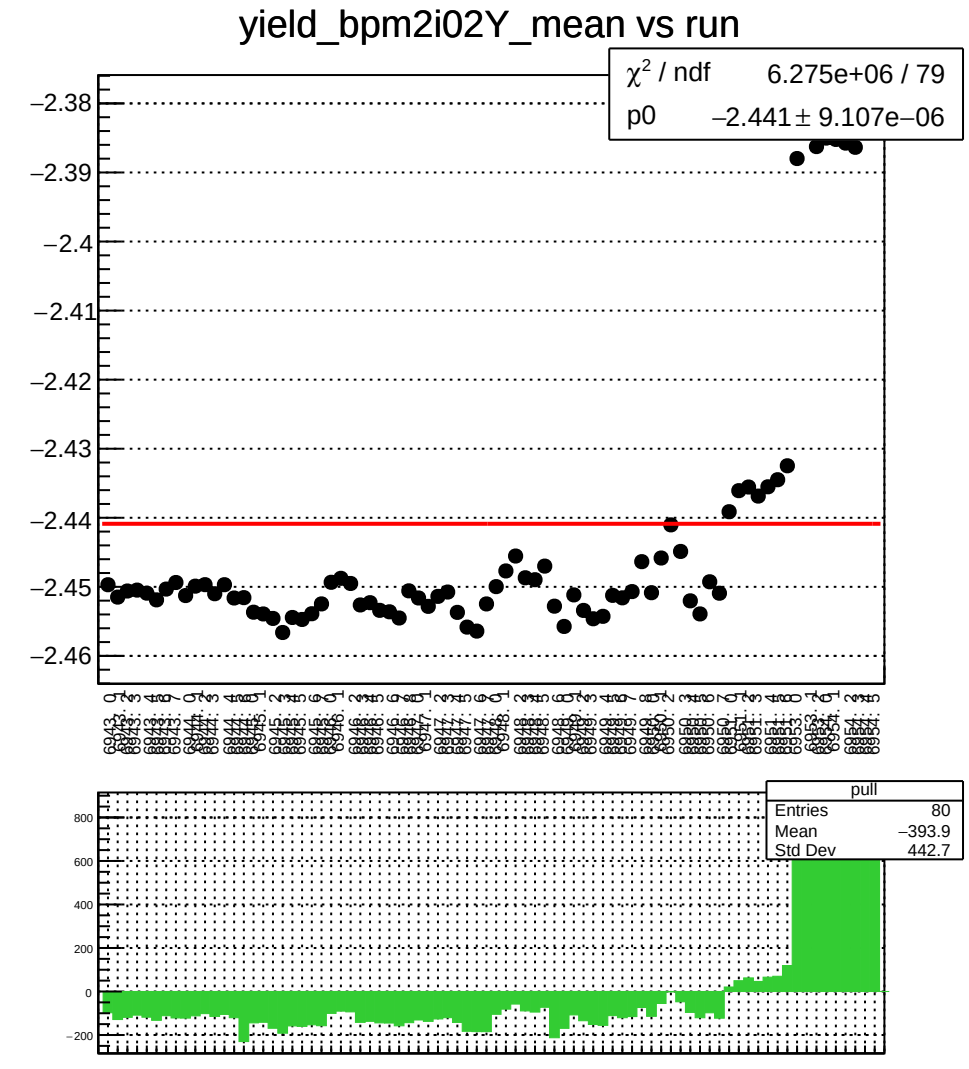

pull1D
Entries 80
Mean −0.1899
Std Dev 4.891
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

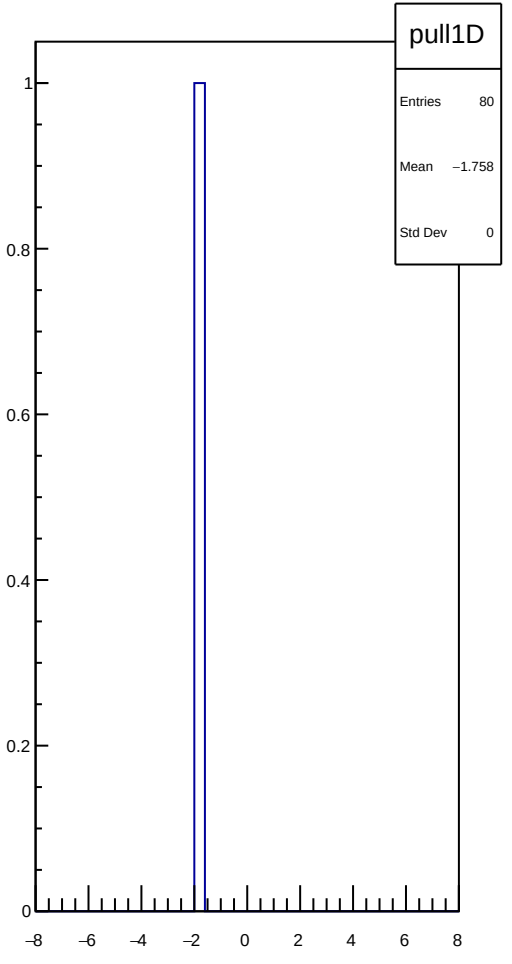

yield_bpm2i01Y_rms vs run
χ² / ndf 2.788e+04 / 79
p0 0.002287 ± 1.827e−06
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015

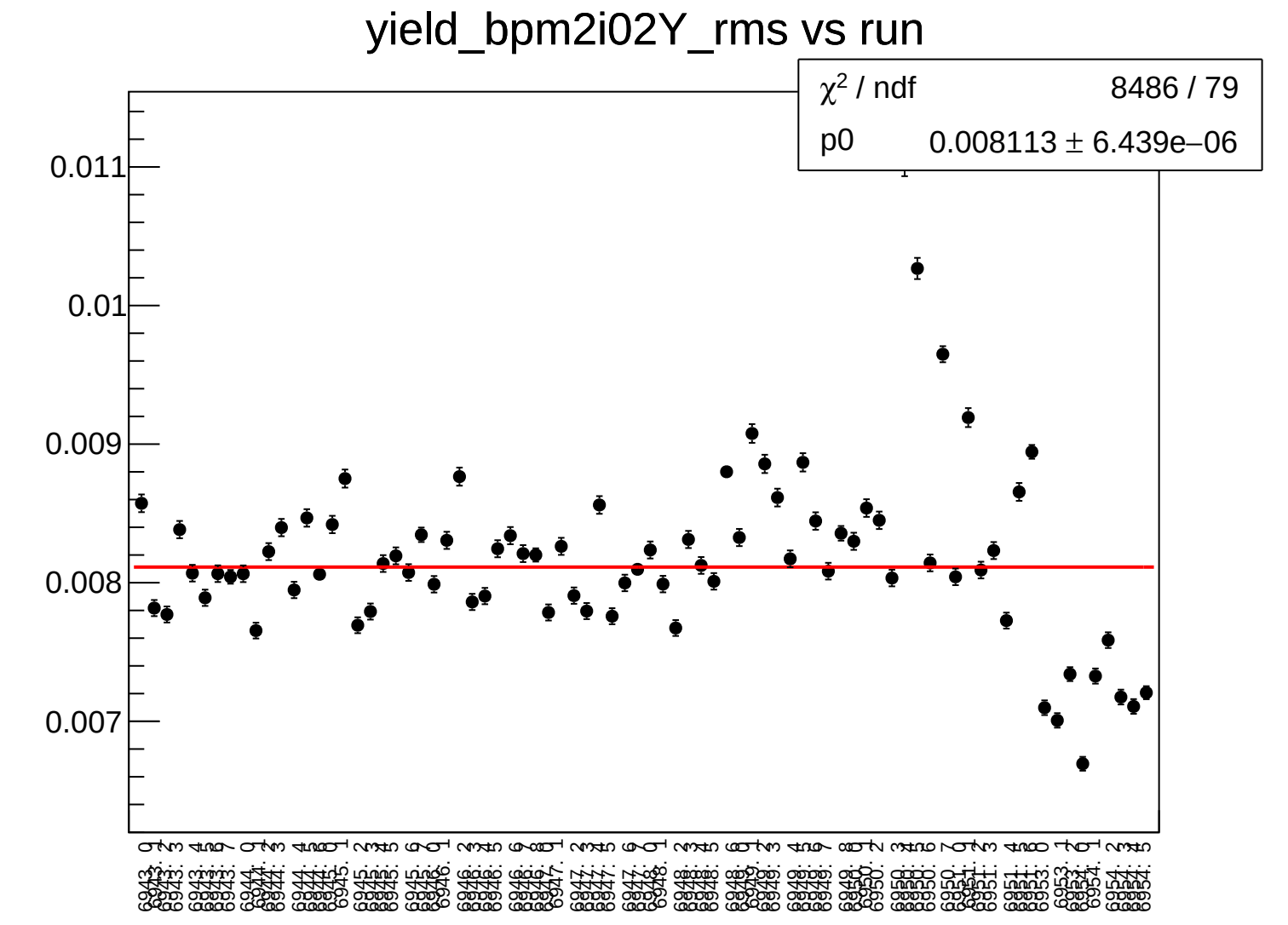

yield_bpm2i02X_mean vs run
χ² / ndf 7.405e+05 / 79
p0 0.3576 ± 1.004e−05
0.375
0.37
0.365
0.36
0.355
0.35
0.345
0.34
pull
Entries 80
Mean −1828
Std Dev 1864
200
150
100
50
0
−50
−100
−150

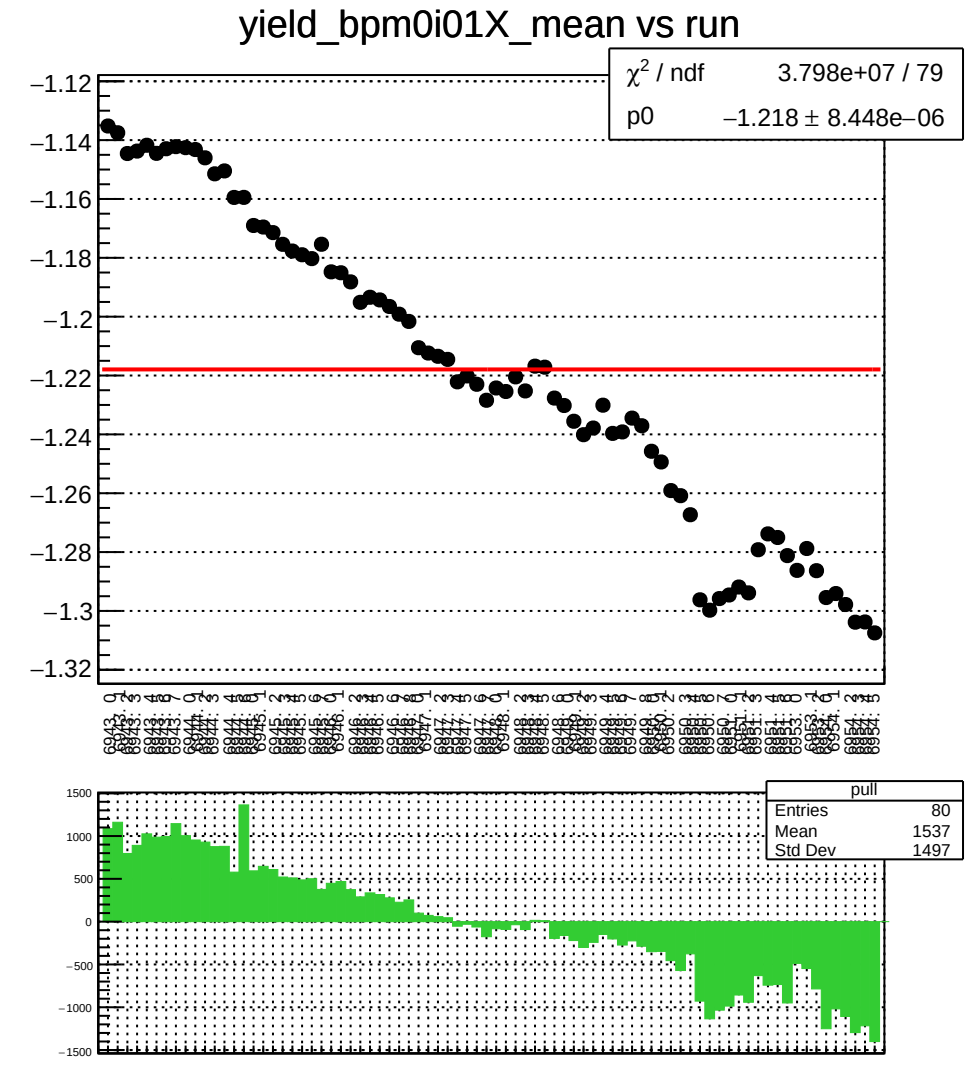

pull1D
Entries 80
Mean −0.6186
Std Dev 5.157
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

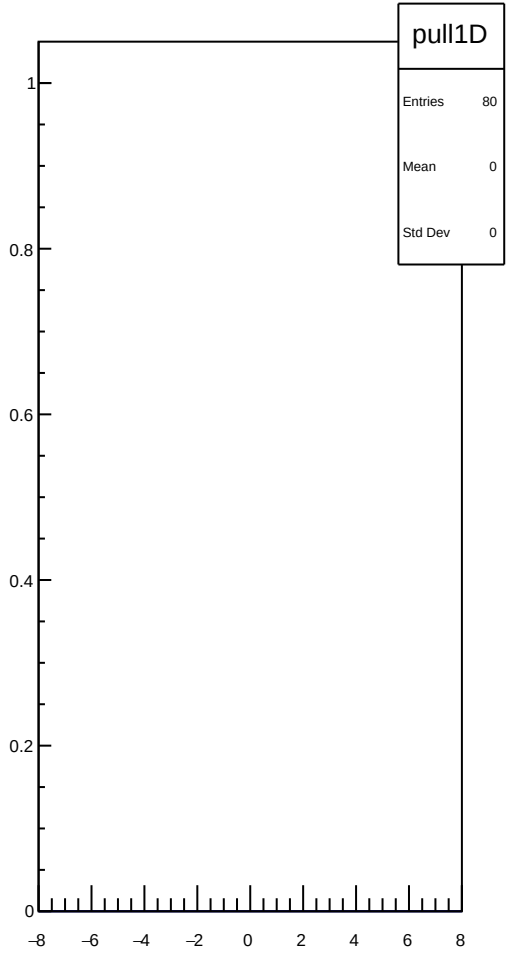

yield_bpm2i02X_rms vs run
χ² / ndf 1.05e+04 / 79
p0 0.008941 ± 7.101e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

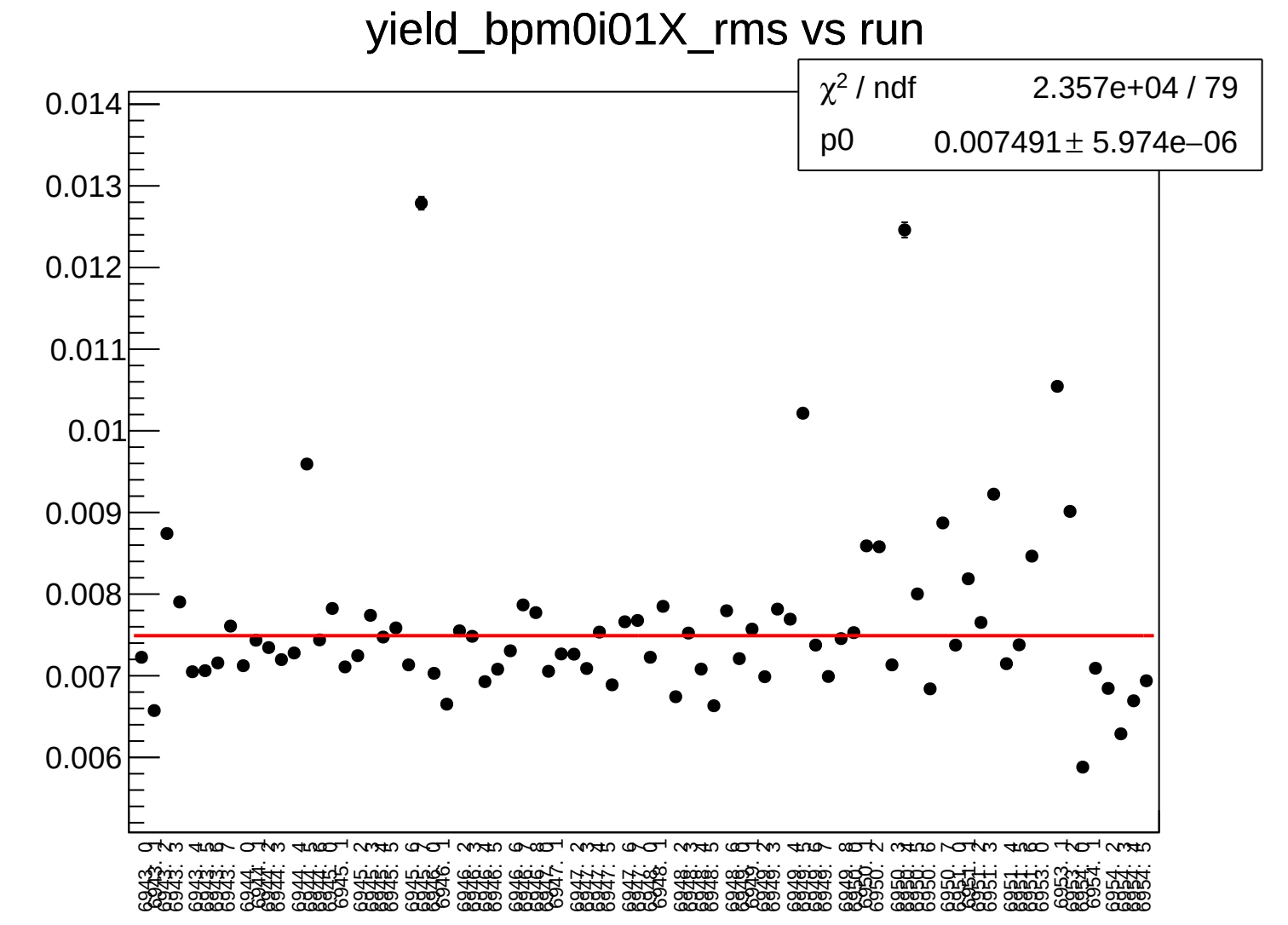

yield_bpm2i02Y_mean vs run
χ² / ndf 6.275e+06 / 79
p0 −2.441 ± 9.107e−06
−2.38
−2.39
−2.4
−2.41
−2.42
−2.43
−2.44
−2.45
−2.46
pull
Entries 80
Mean −393.9
Std Dev 442.7
800
600
400
200
0
−200

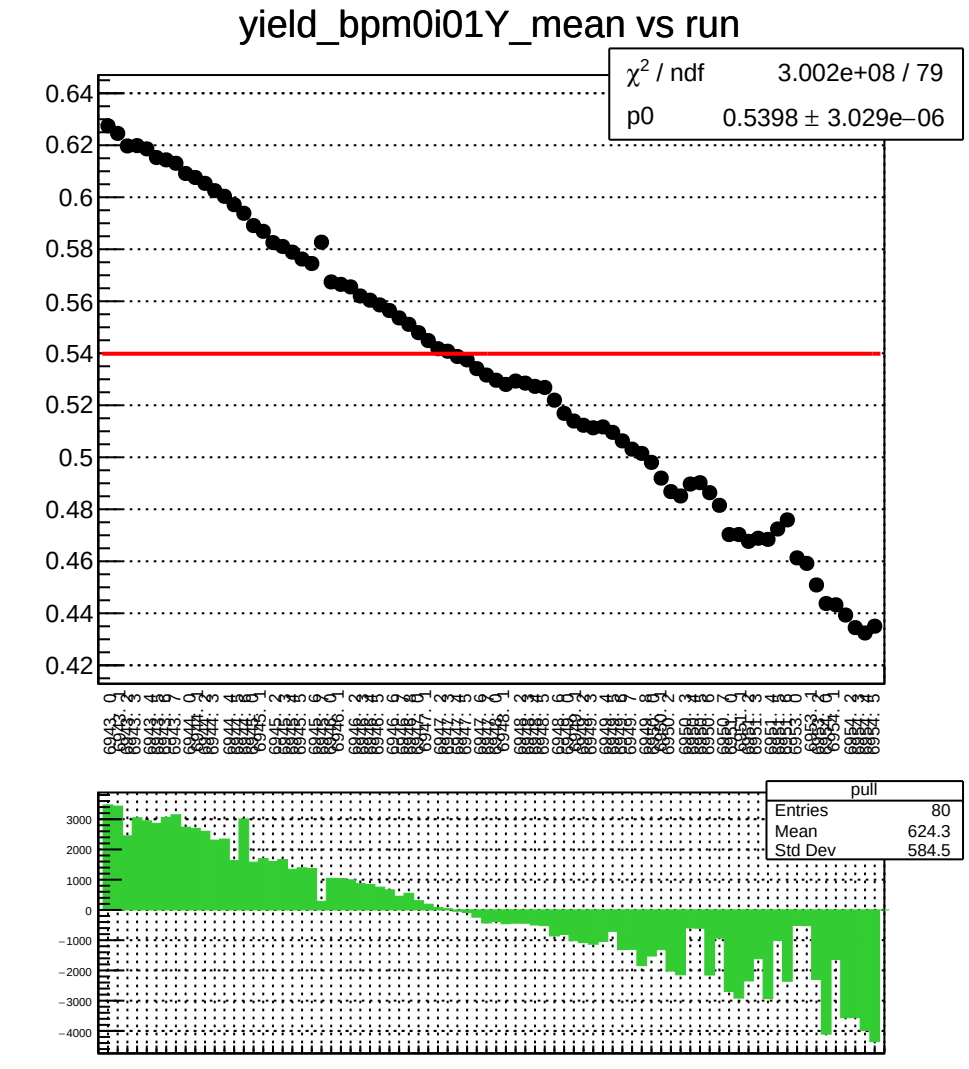

pull1D
Entries 80
Mean −1.758
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

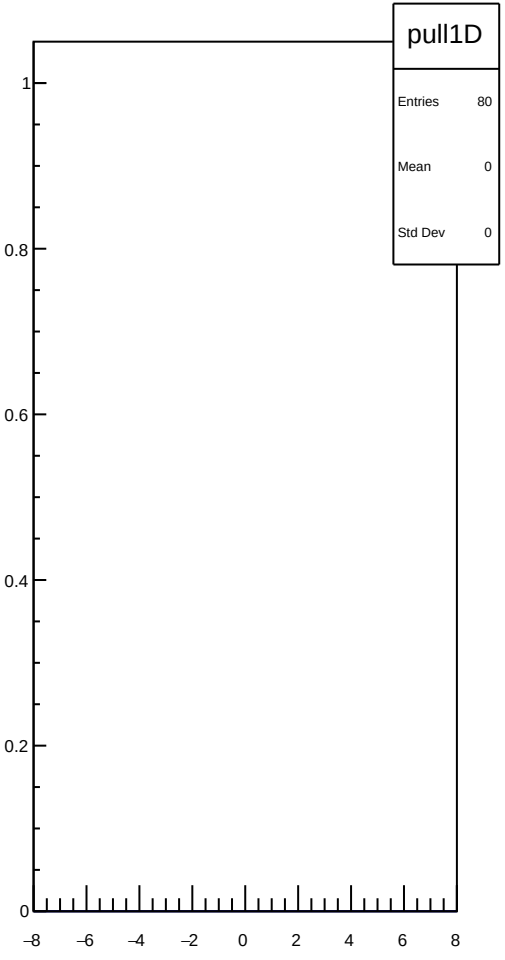

yield_bpm2i02Y_rms vs run
χ² / ndf 8486 / 79
p0 0.008113 ± 6.439e−06
0.011
0.01
0.009
0.008
0.007

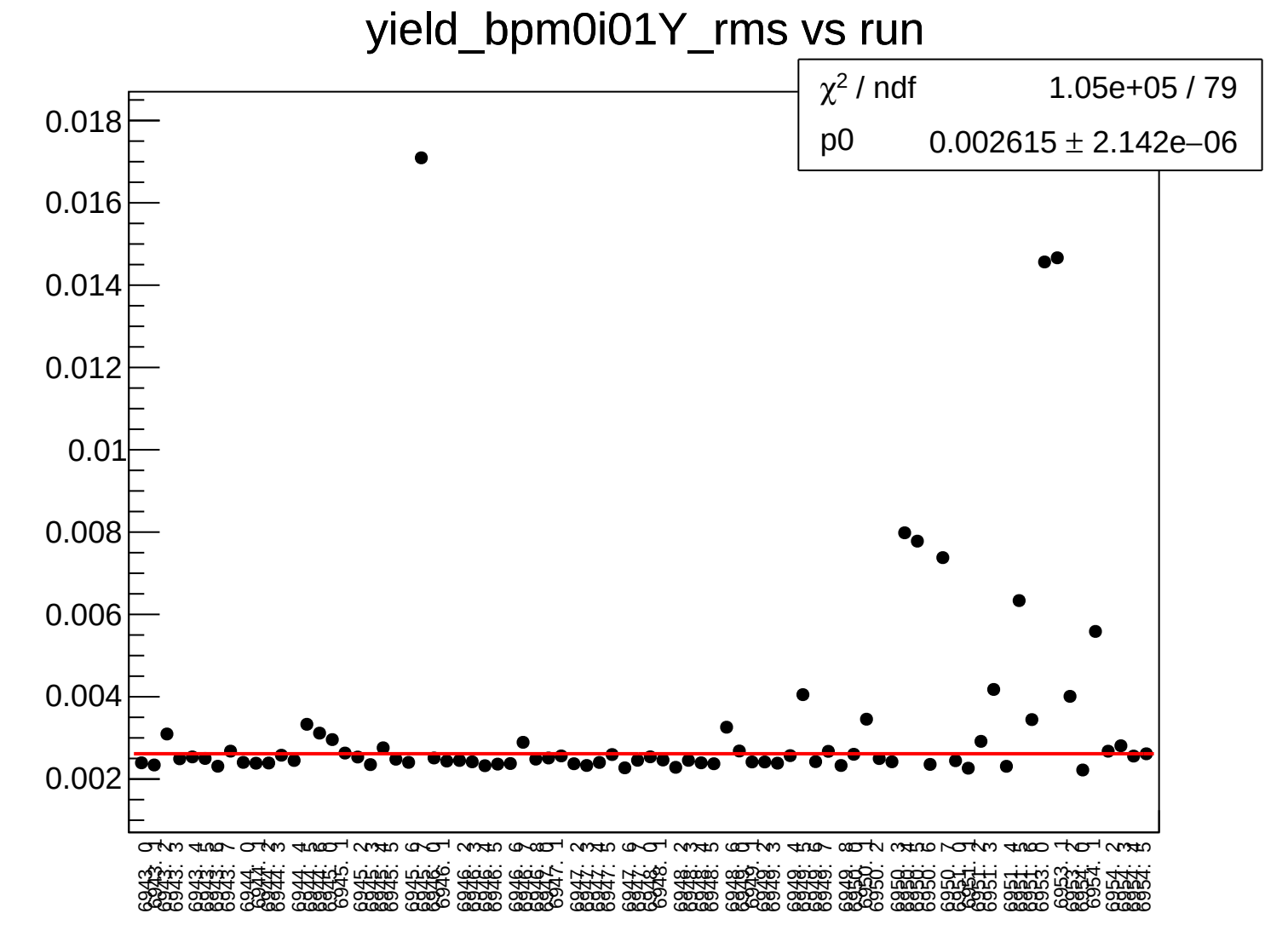

yield_bpm0i01X_mean vs run
χ² / ndf 3.798e+07 / 79
p0 −1.218 ± 8.448e−06
pull
Entries 80
Mean 1537
Std Dev 1497

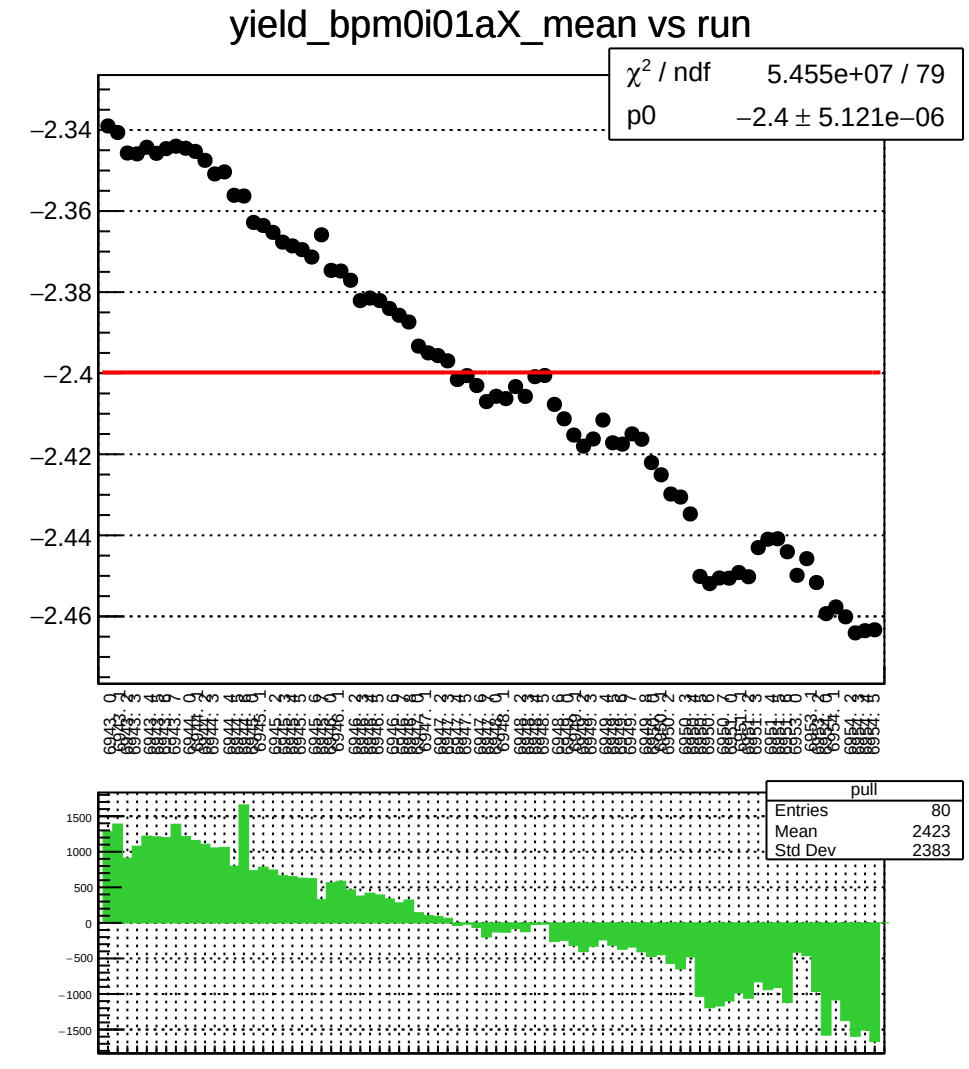

pull1D
Entries 80
Mean 0
Std Dev 0

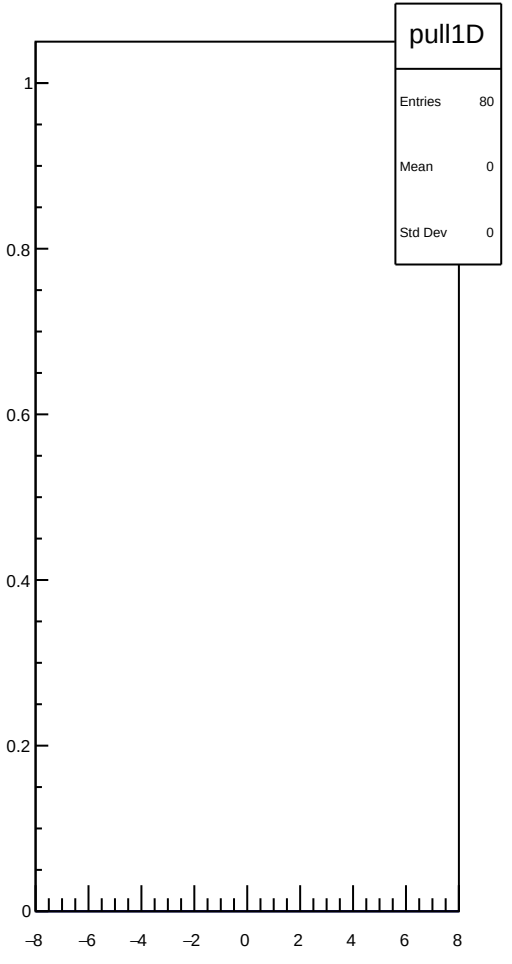

yield_bpm0i01X_rms vs run
χ² / ndf 2.357e+04 / 79
p0 0.007491 ± 5.974e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

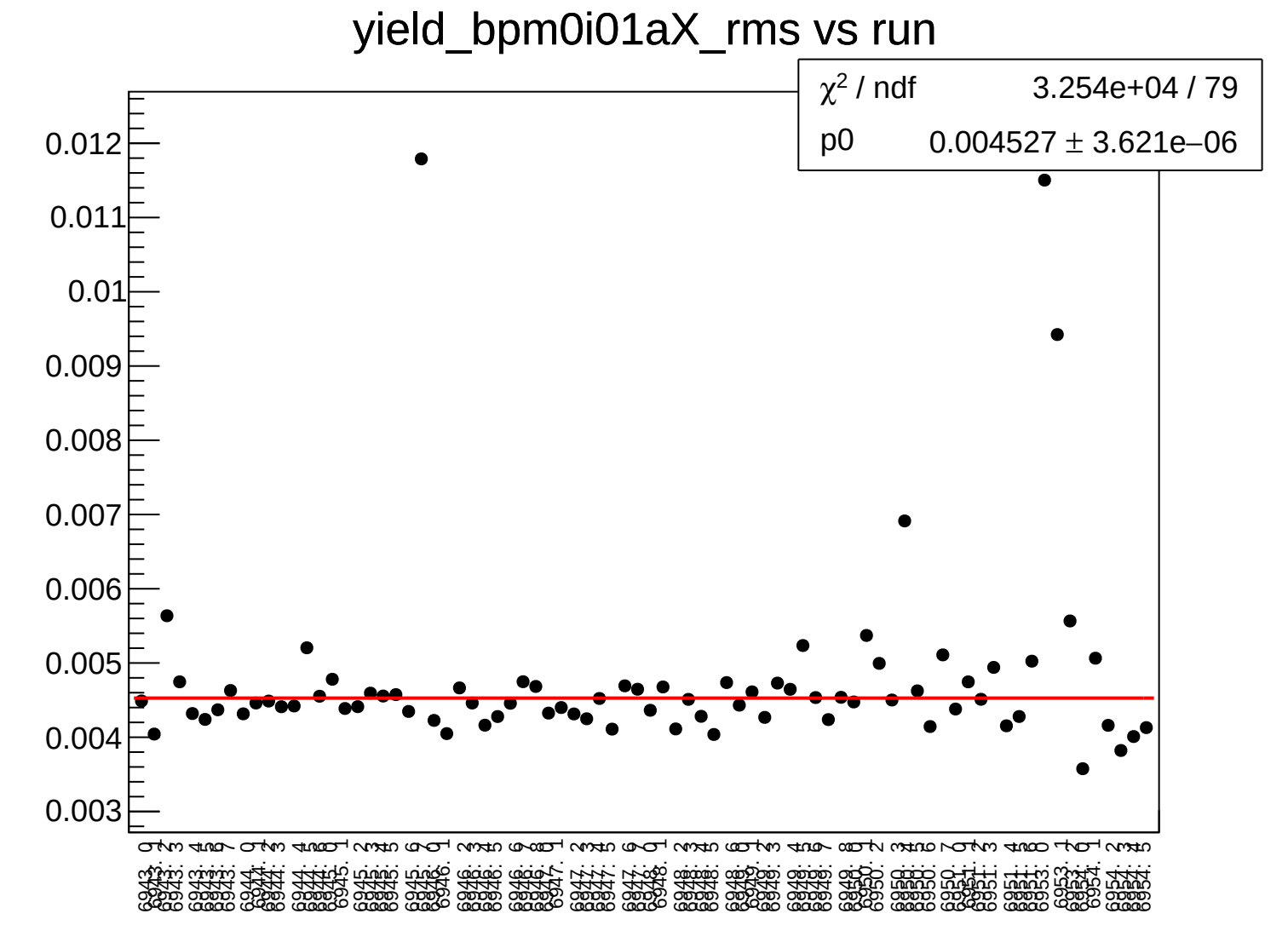

yield_bpm0i01Y_mean vs run
χ² / ndf 3.002e+08 / 79
p0 0.5398 ± 3.029e−06
pull
Entries 80
Mean 624.3
Std Dev 584.5

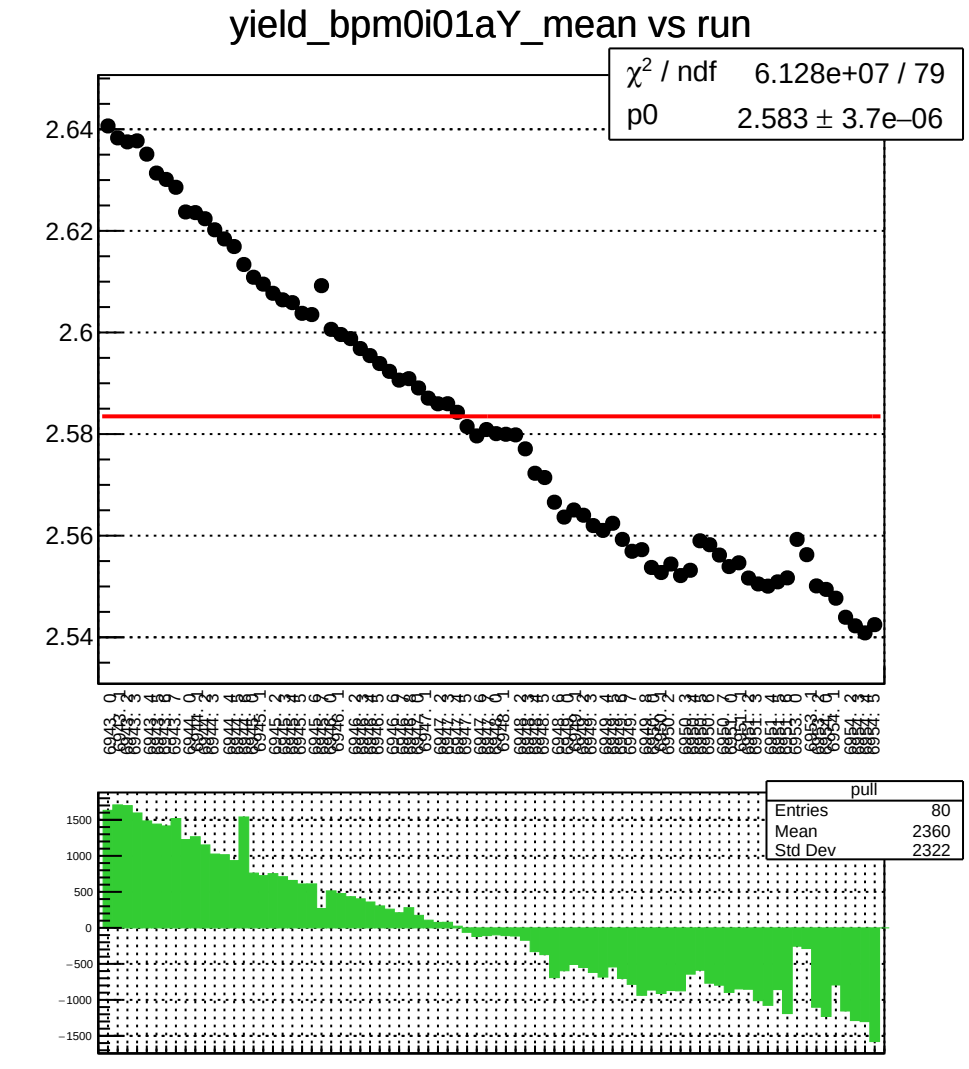

pull1D
Entries 80
Mean 0
Std Dev 0

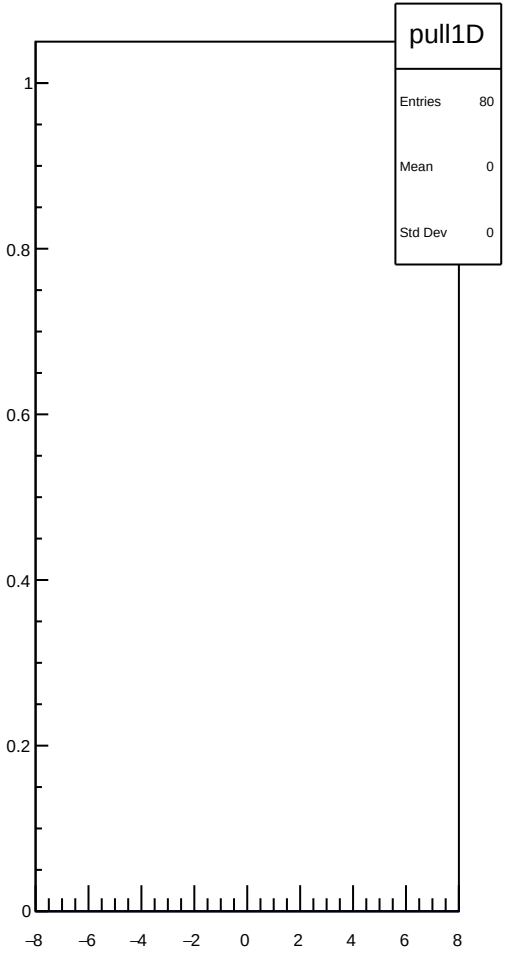

yield_bpm0i01Y_rms vs run
χ² / ndf 1.05e+05 / 79
p0 0.002615 ± 2.142e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

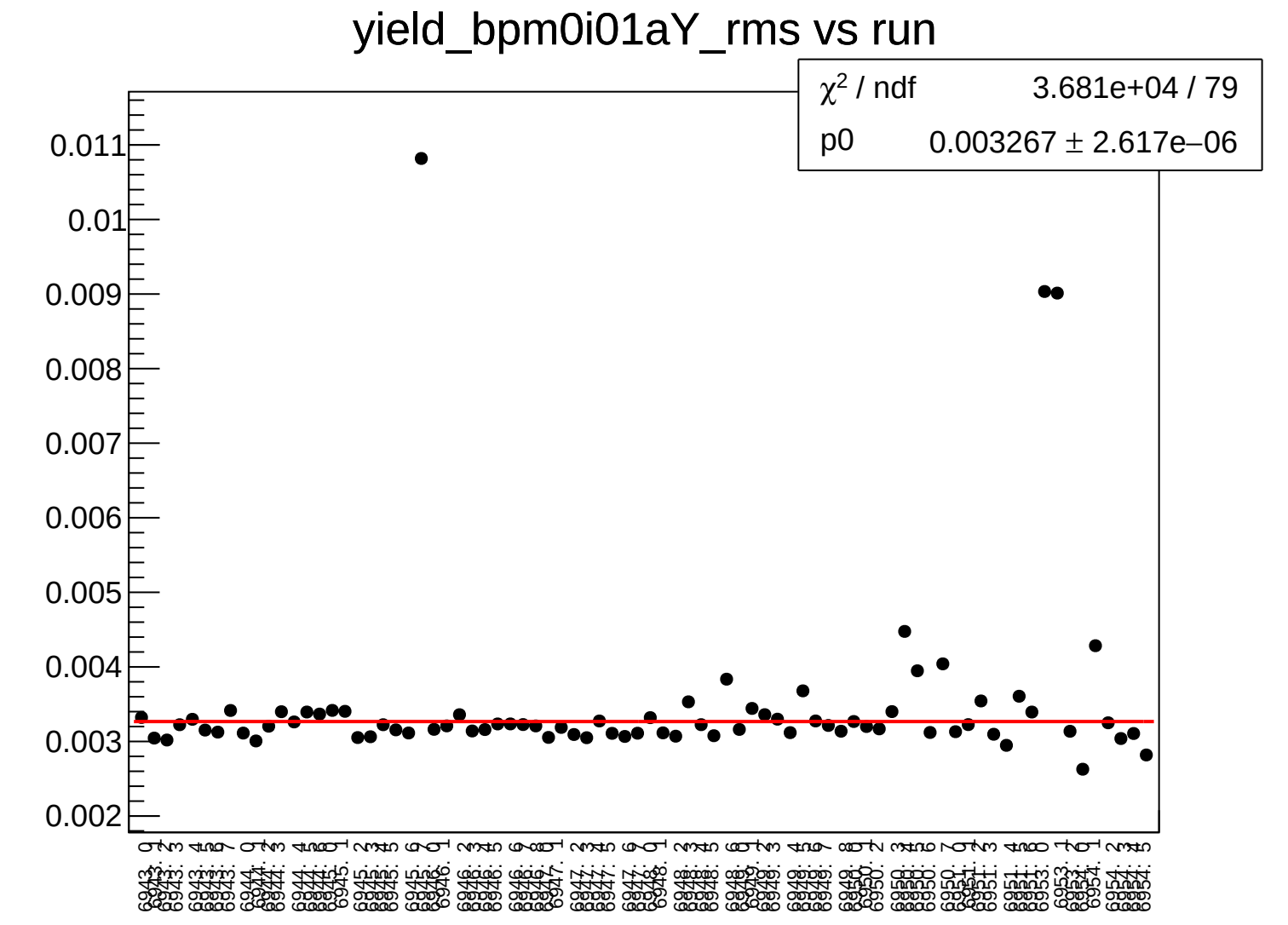

yield_bpm0i01aX_mean vs run
χ² / ndf 5.455e+07 / 79
p0 −2.4 ± 5.121e−06
−2.34
−2.36
−2.38
−2.4
−2.42
−2.44
−2.46
pull
Entries 80
Mean 2423
Std Dev 2383
1500
1000
500
0
−500
−1000
−1500

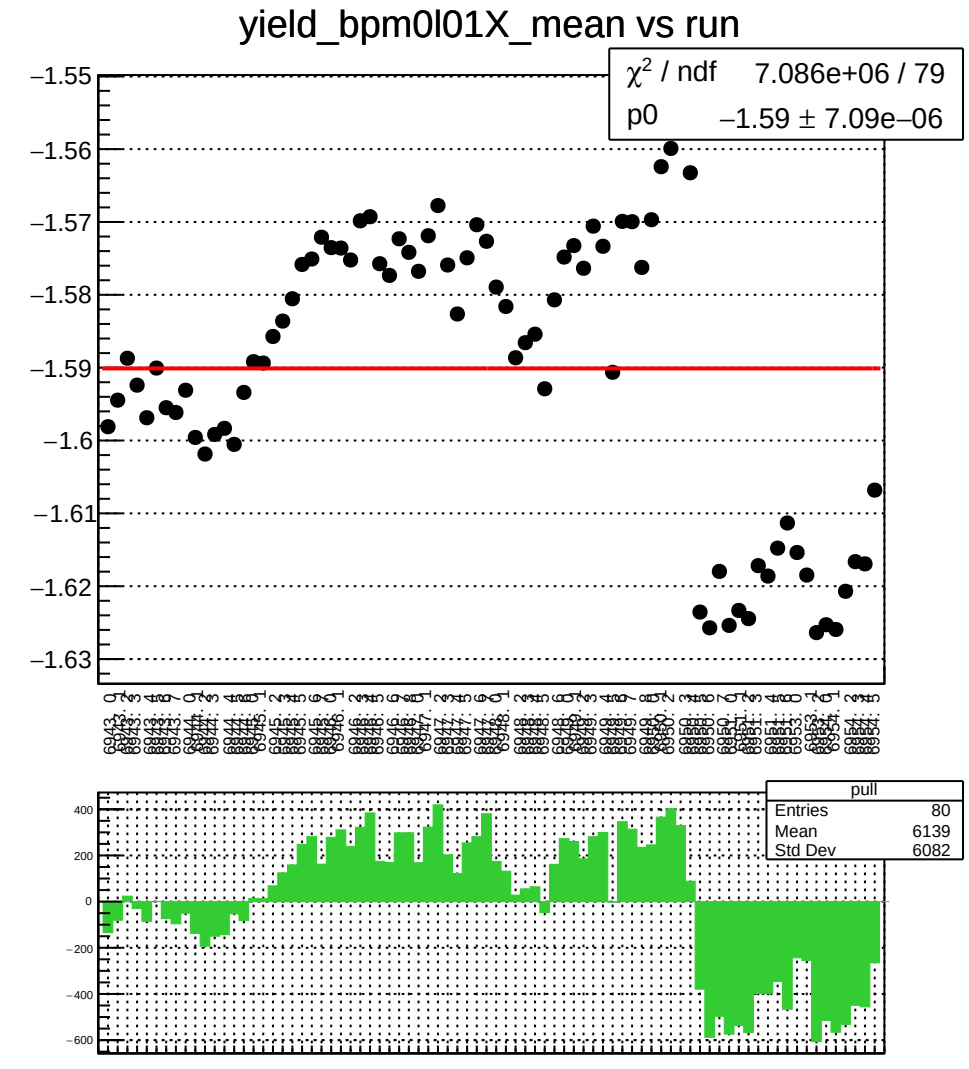

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

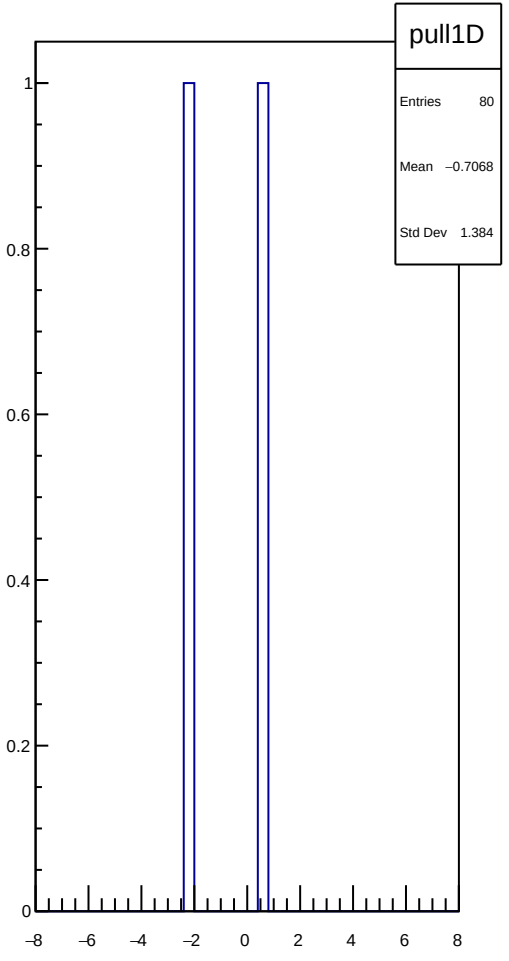

yield_bpm0i01aX_rms vs run
χ² / ndf 3.254e+04 / 79
p0 0.004527 ± 3.621e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

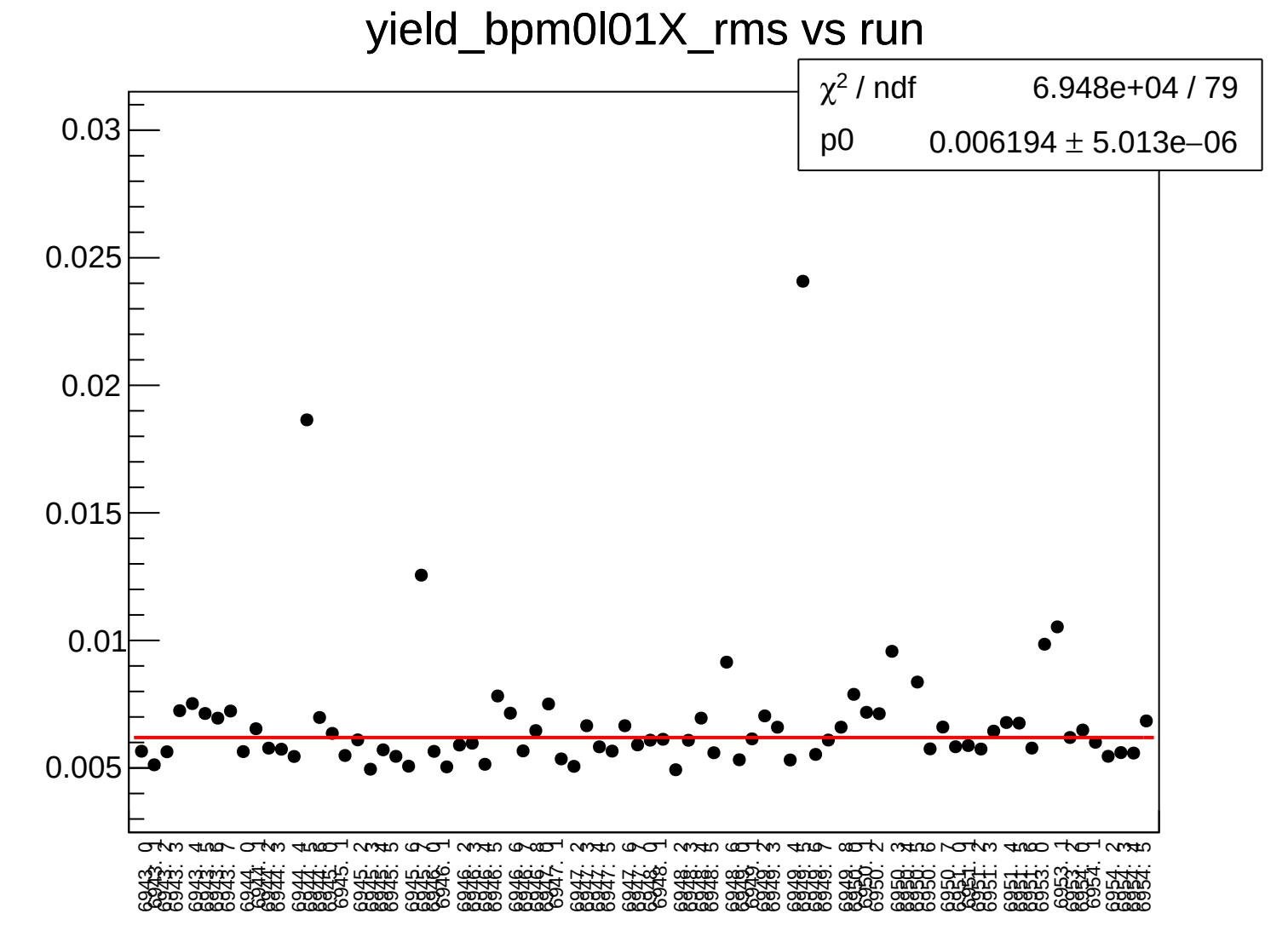

yield_bpm0i01aY_mean vs run
χ² / ndf 6.128e+07 / 79
p0 2.583 ± 3.7e–06
2.64
2.62
2.6
2.58
2.56
2.54
pull
Entries 80
Mean 2360
Std Dev 2322
1500
1000
500
0
−500
−1000
−1500

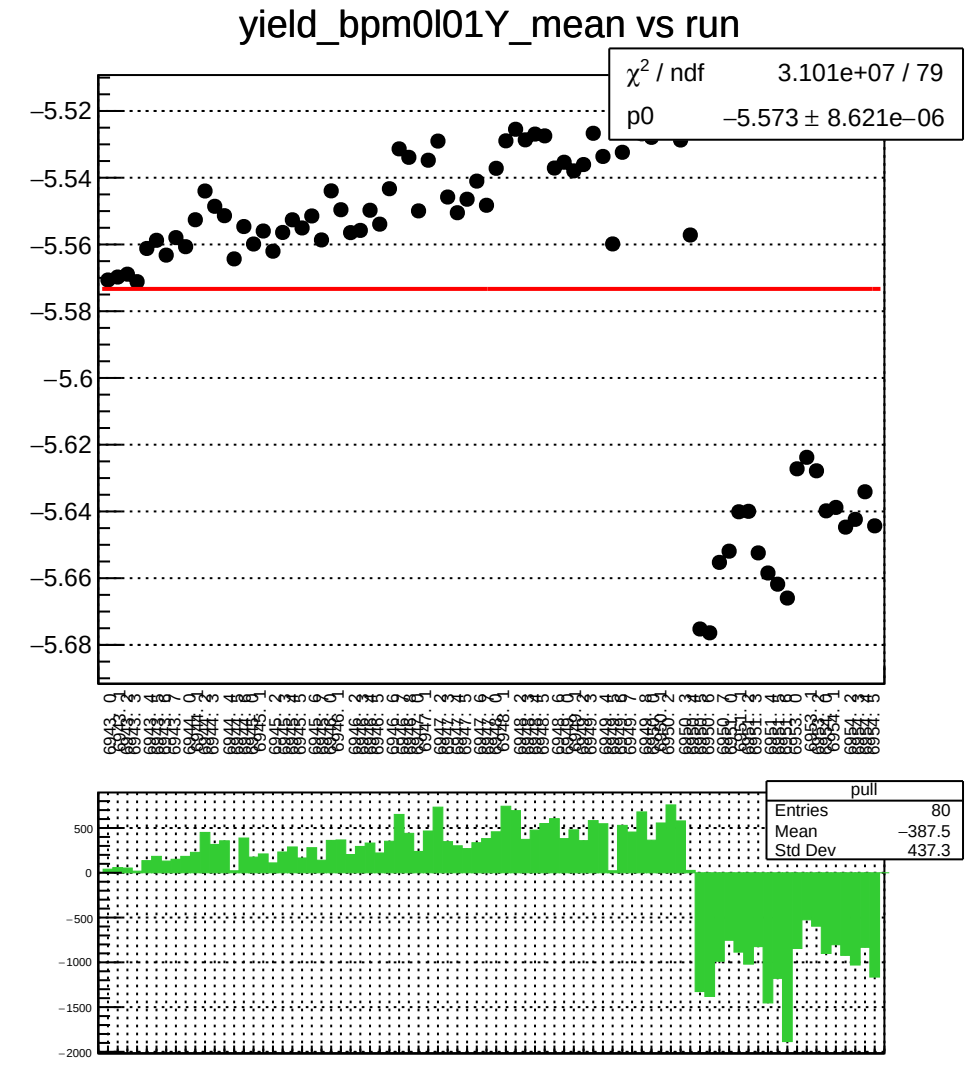

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

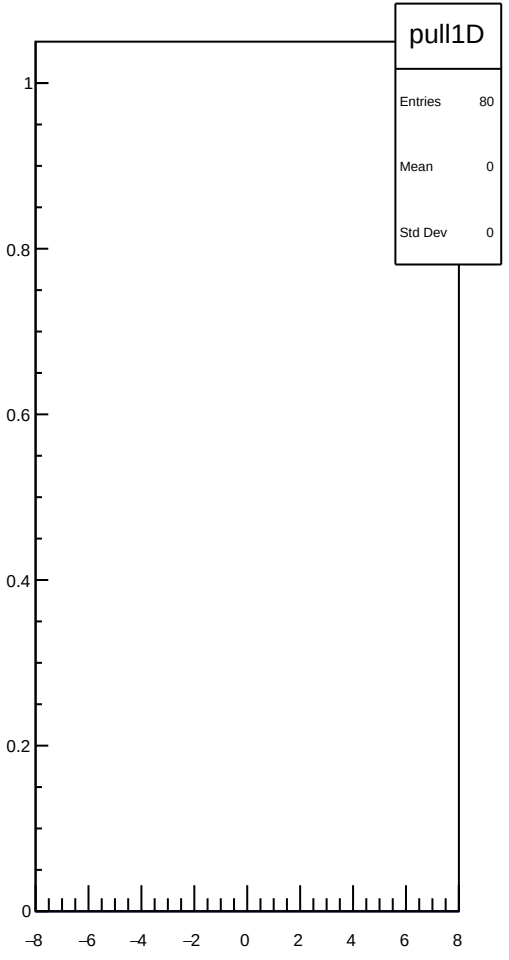

yield_bpm0i01aY_rms vs run
χ² / ndf 3.681e+04 / 79
p0 0.003267 ± 2.617e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

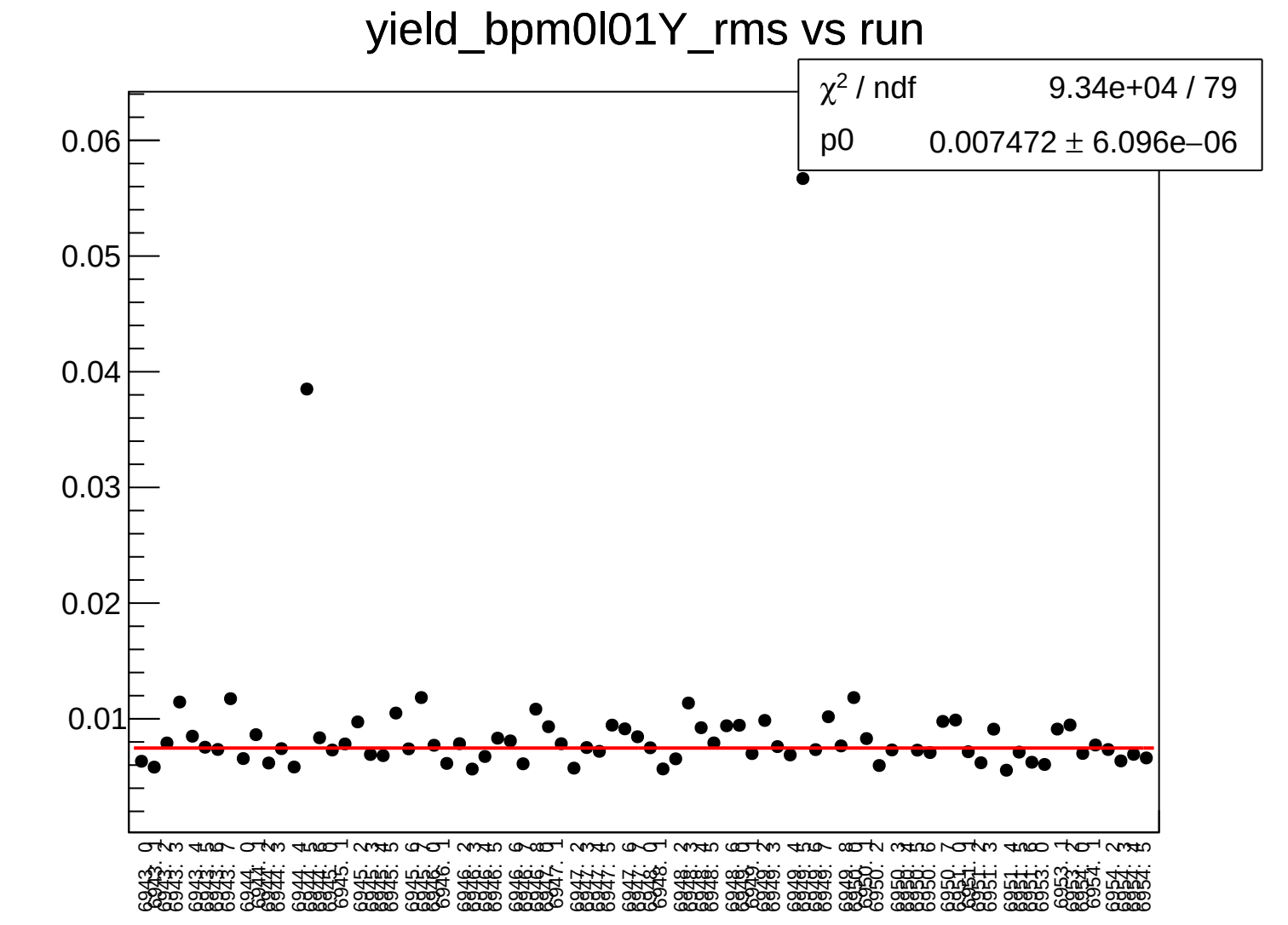

yield_bpm0l01X_mean vs run
χ² / ndf 7.086e+06 / 79
p0 −1.59 ± 7.09e−06
−1.55
−1.56
−1.57
−1.58
−1.59
−1.6
−1.61
−1.62
−1.63
pull
Entries 80
Mean 6139
Std Dev 6082
400
200
0
−200
−400
−600

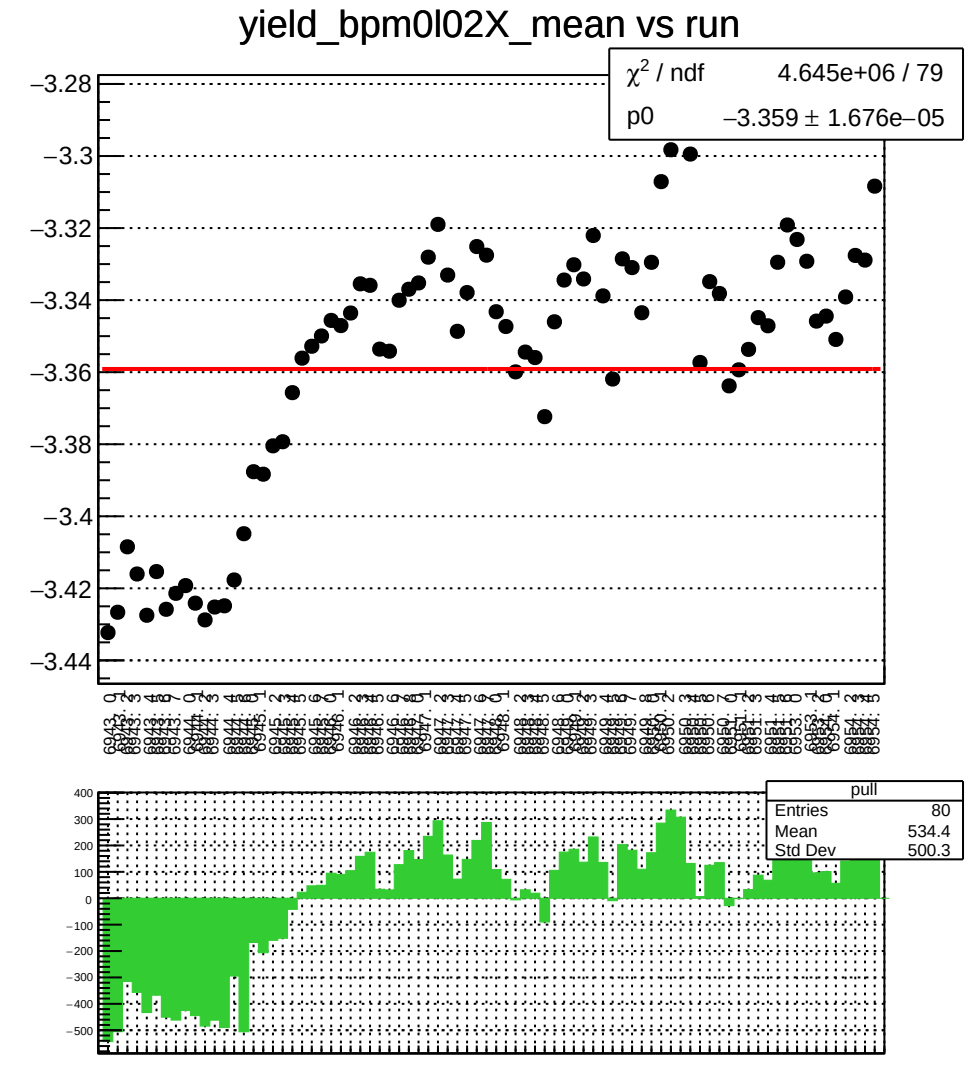

pull1D
Entries 80
Mean −0.7068
Std Dev 1.384
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

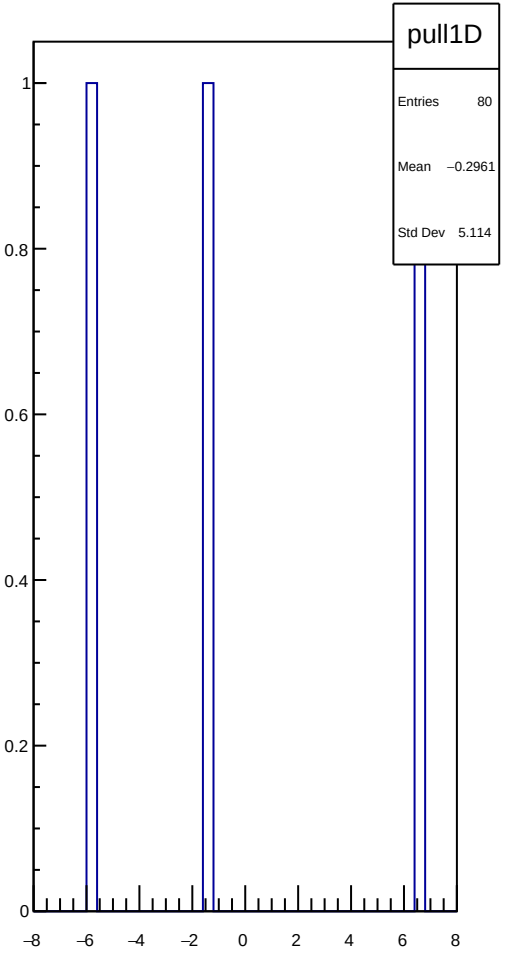

yield_bpm0l01X_rms vs run
χ² / ndf 6.948e+04 / 79
p0 0.006194 ± 5.013e−06
0.03
0.025
0.02
0.015
0.01
0.005

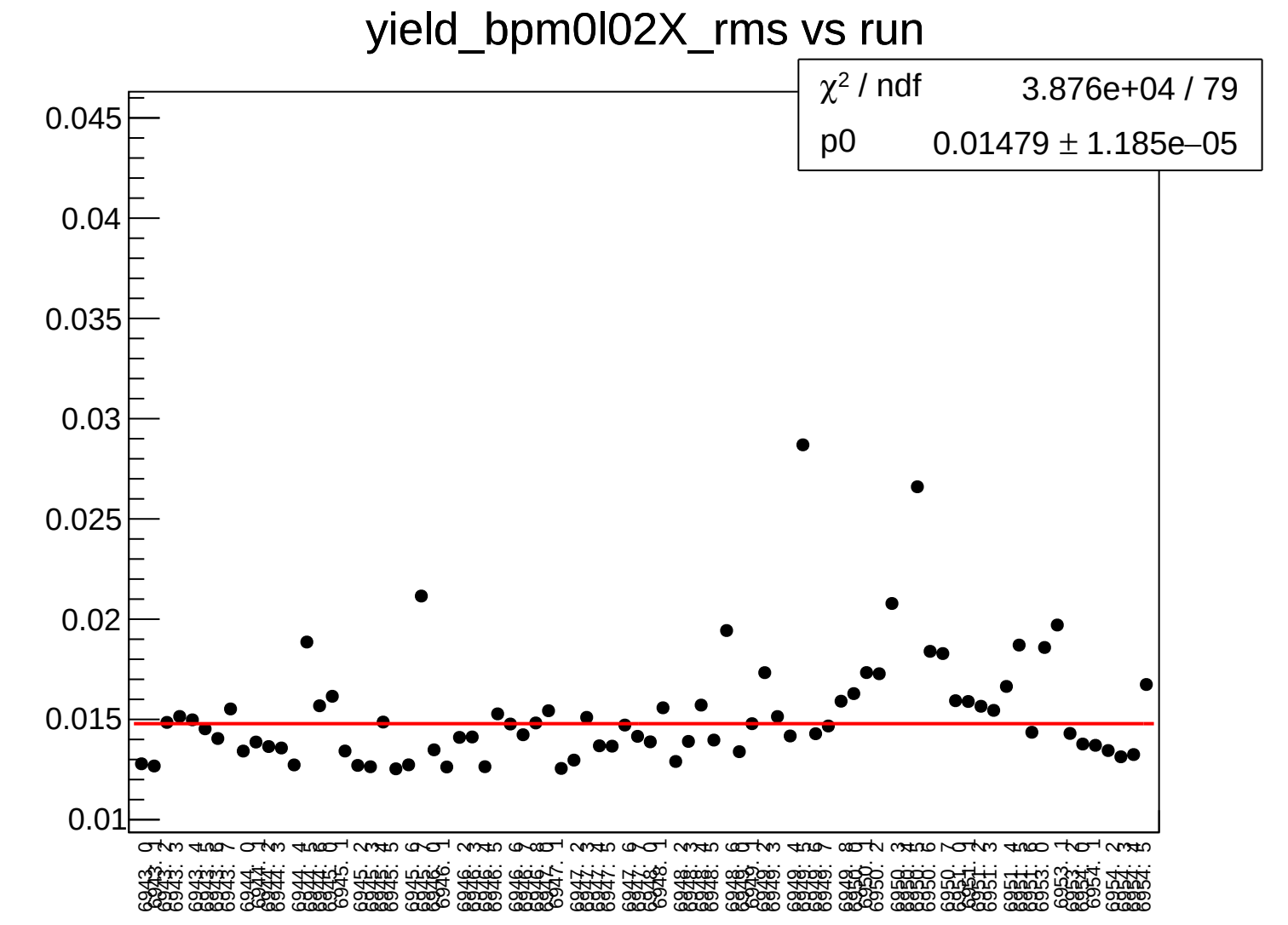

yield_bpm0l01Y_mean vs run
χ² / ndf 3.101e+07 / 79
p0 −5.573 ± 8.621e−06
−5.52
−5.54
−5.56
−5.58
−5.6
−5.62
−5.64
−5.66
−5.68
pull
Entries 80
Mean −387.5
Std Dev 437.3
500
0
−500
−1000
−1500
−2000

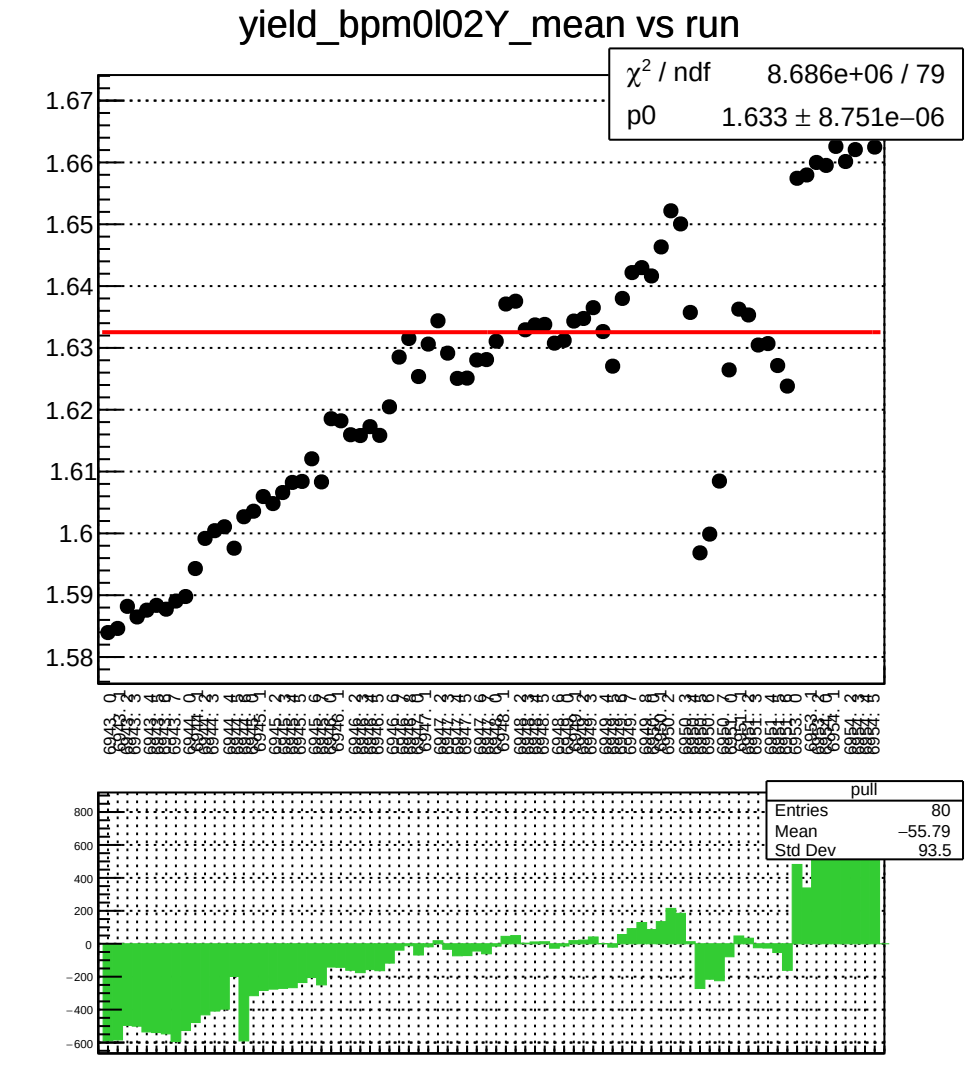

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

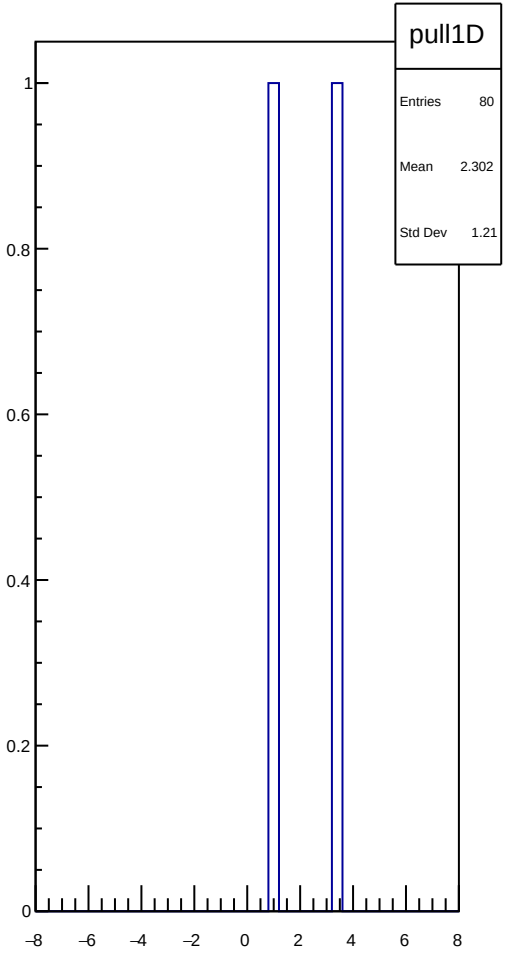

yield_bpm0l01Y_rms vs run
χ² / ndf 9.34e+04 / 79
p0 0.007472 ± 6.096e−06
0.06
0.05
0.04
0.03
0.02
0.01

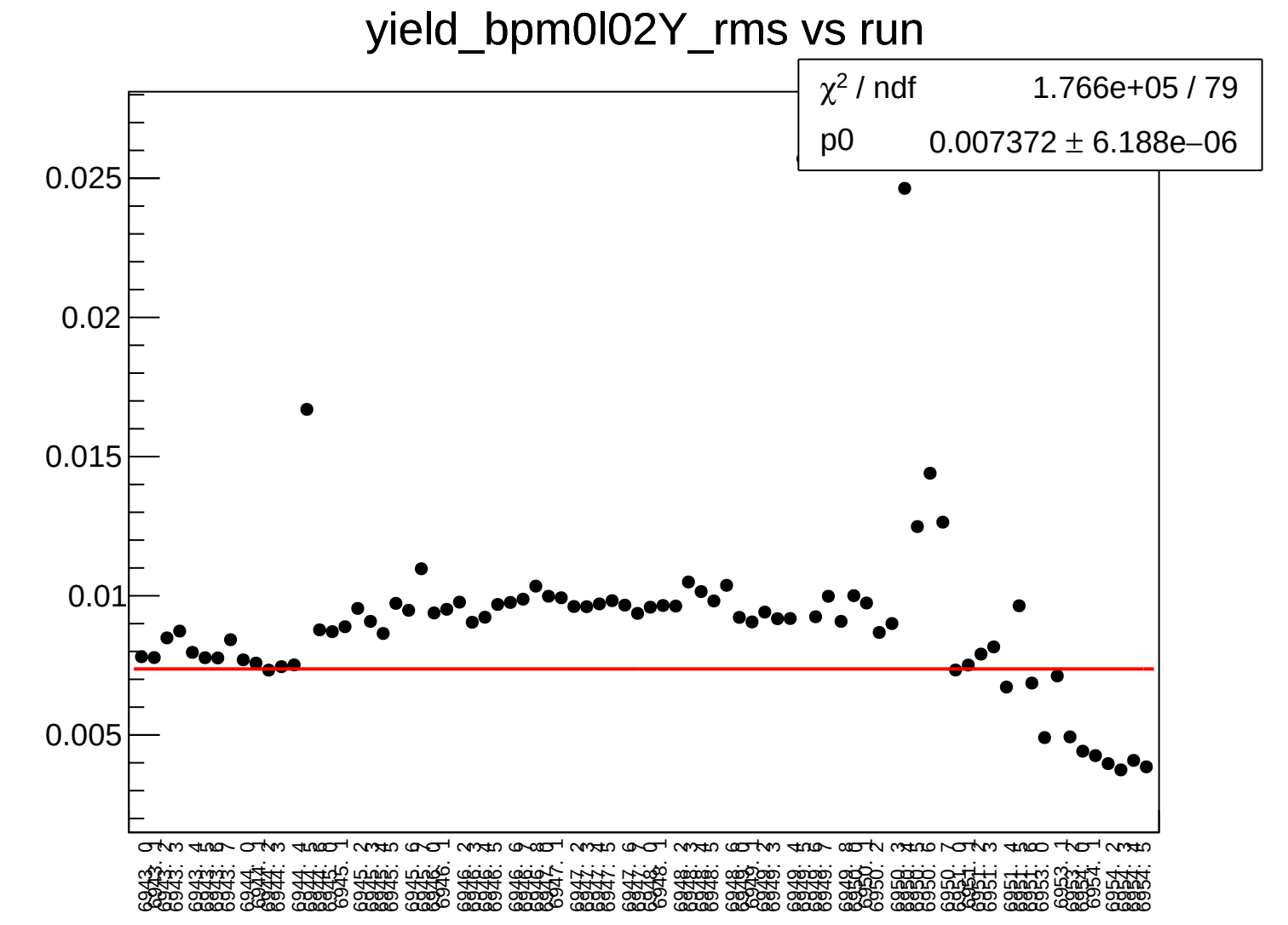

yield_bpm0l02X_mean vs run
χ² / ndf 4.645e+06 / 79
p0 −3.359 ± 1.676e−05
−3.28
−3.3
−3.32
−3.34
−3.36
−3.38
−3.4
−3.42
−3.44
pull
Entries 80
Mean 534.4
Std Dev 500.3
400
300
200
100
0
−100
−200
−300
−400
−500

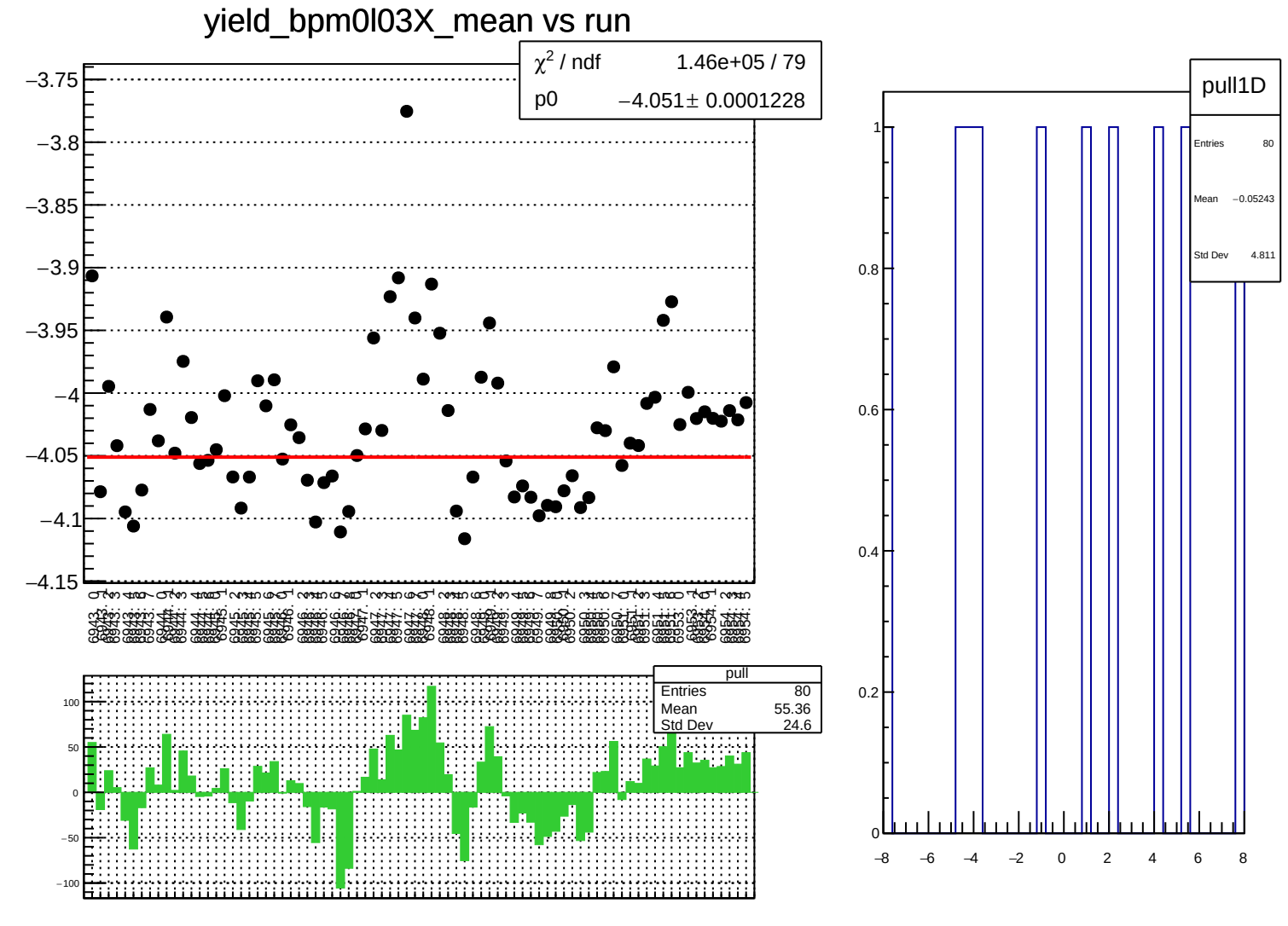

pull1D
Entries 80
Mean −0.2961
Std Dev 5.114
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

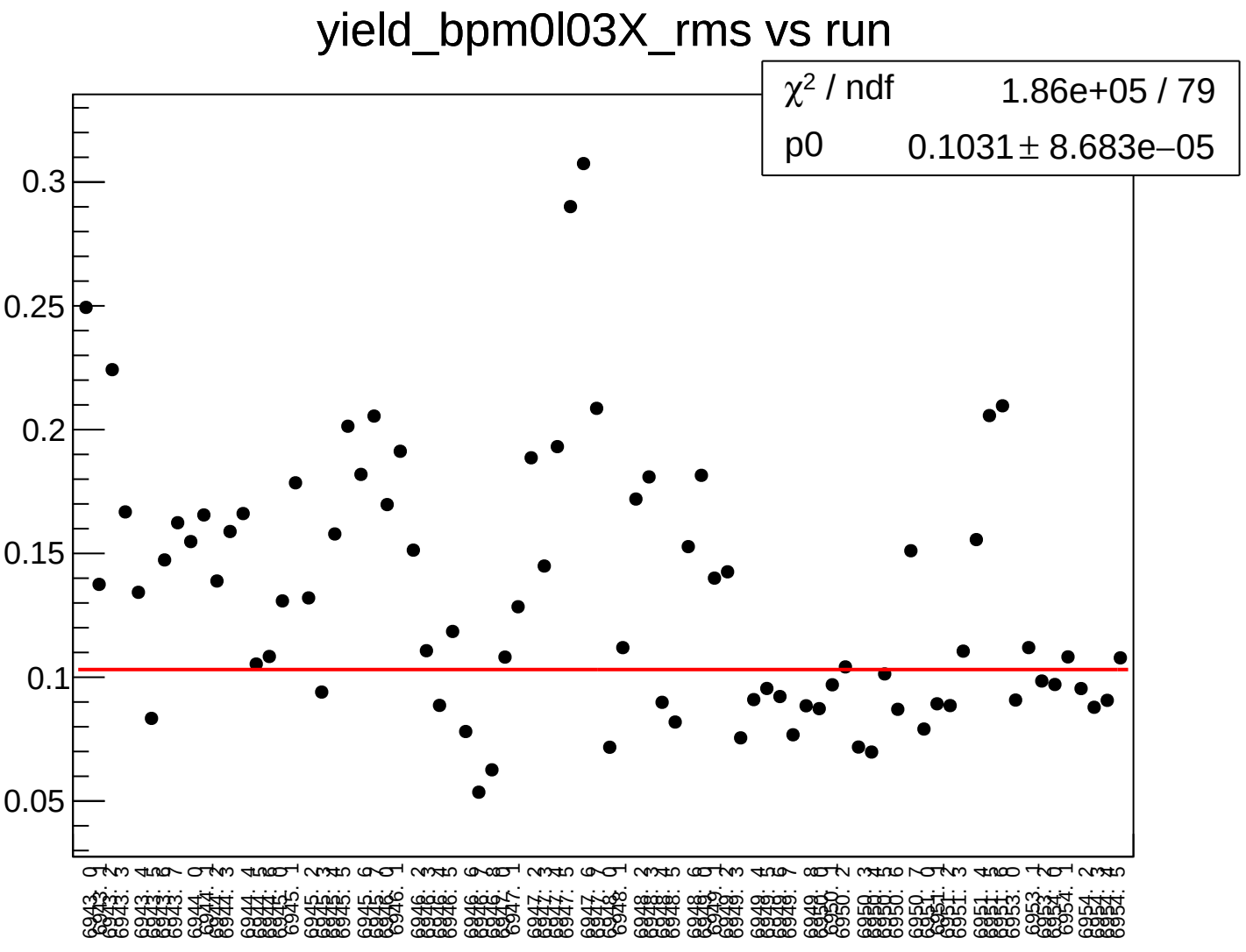

yield_bpm0l02X_rms vs run
χ² / ndf 3.876e+04 / 79
p0 0.01479 ± 1.185e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

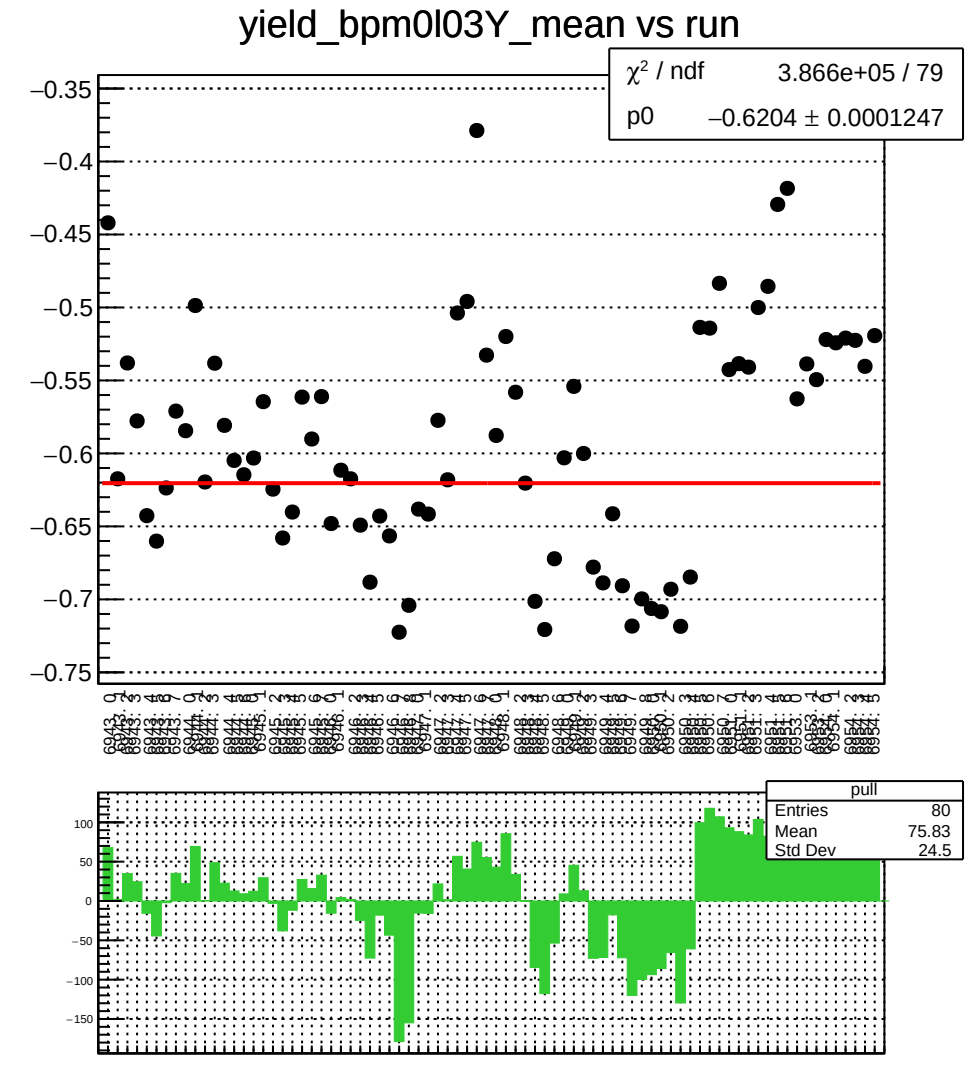

yield_bpm0l02Y_mean vs run
χ² / ndf 8.686e+06 / 79
p0 1.633 ± 8.751e−06
pull
Entries 80
Mean −55.79
Std Dev 93.5

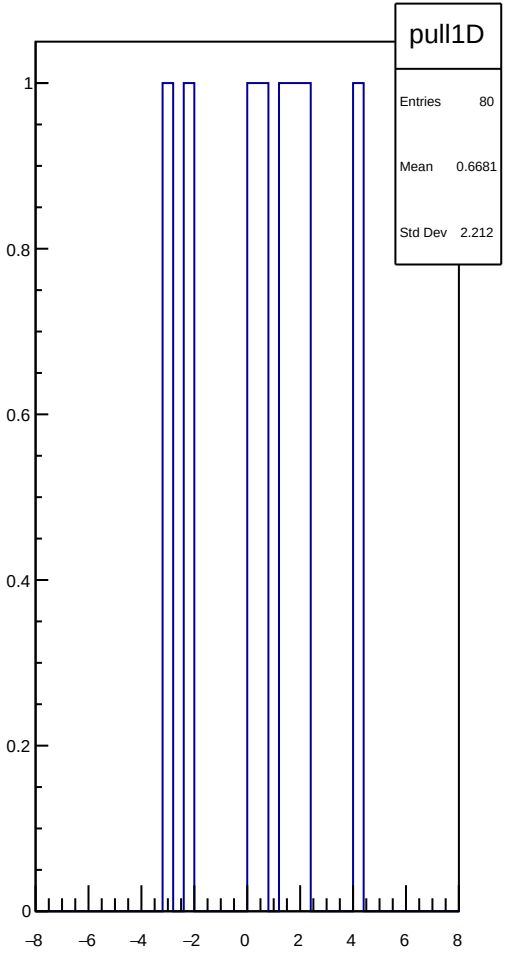

pull1D
Entries 80
Mean 2.302
Std Dev 1.21

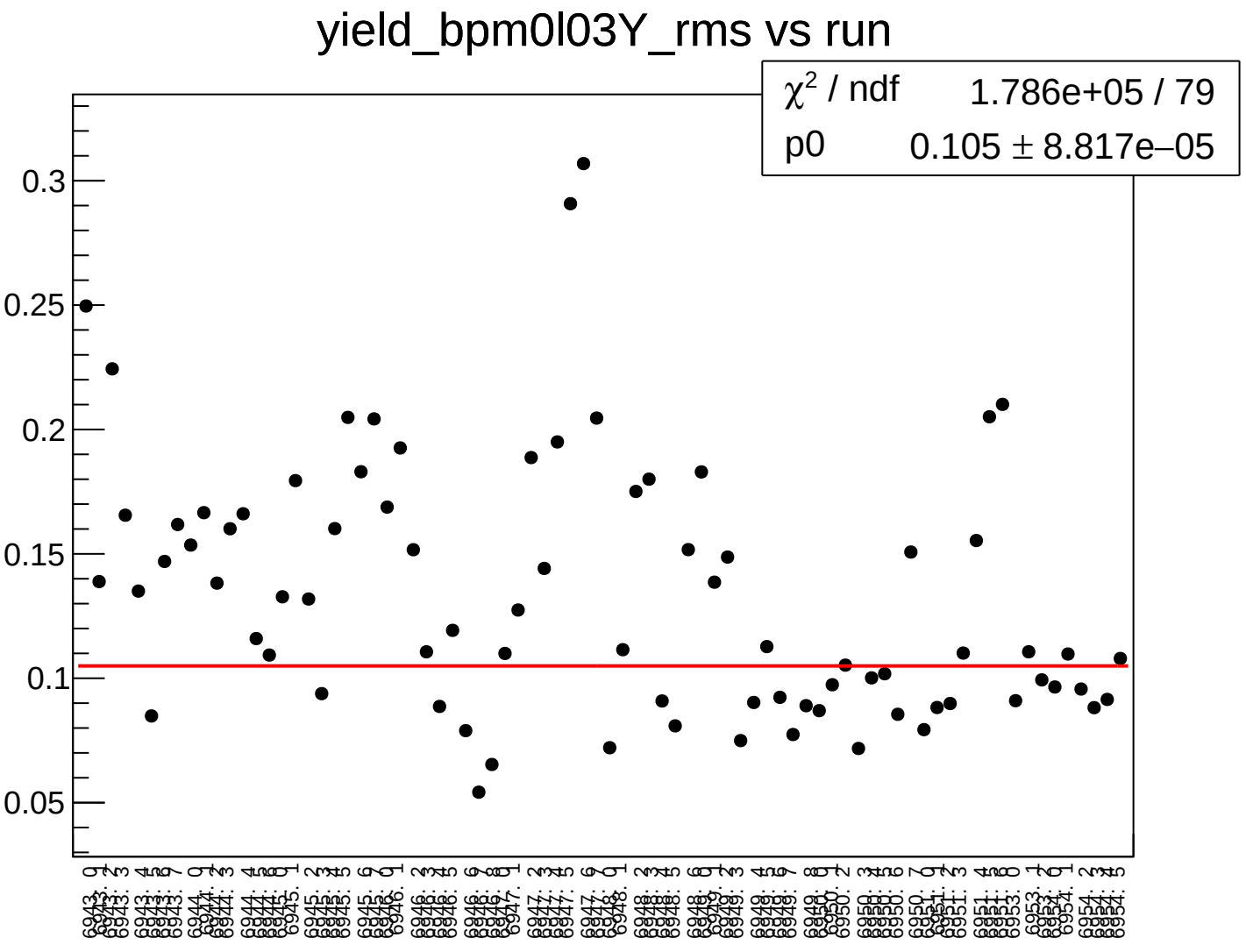

yield_bpm0l02Y_rms vs run
χ² / ndf 1.766e+05 / 79
p0 0.007372 ± 6.188e−06
0.025
0.02
0.015
0.01
0.005

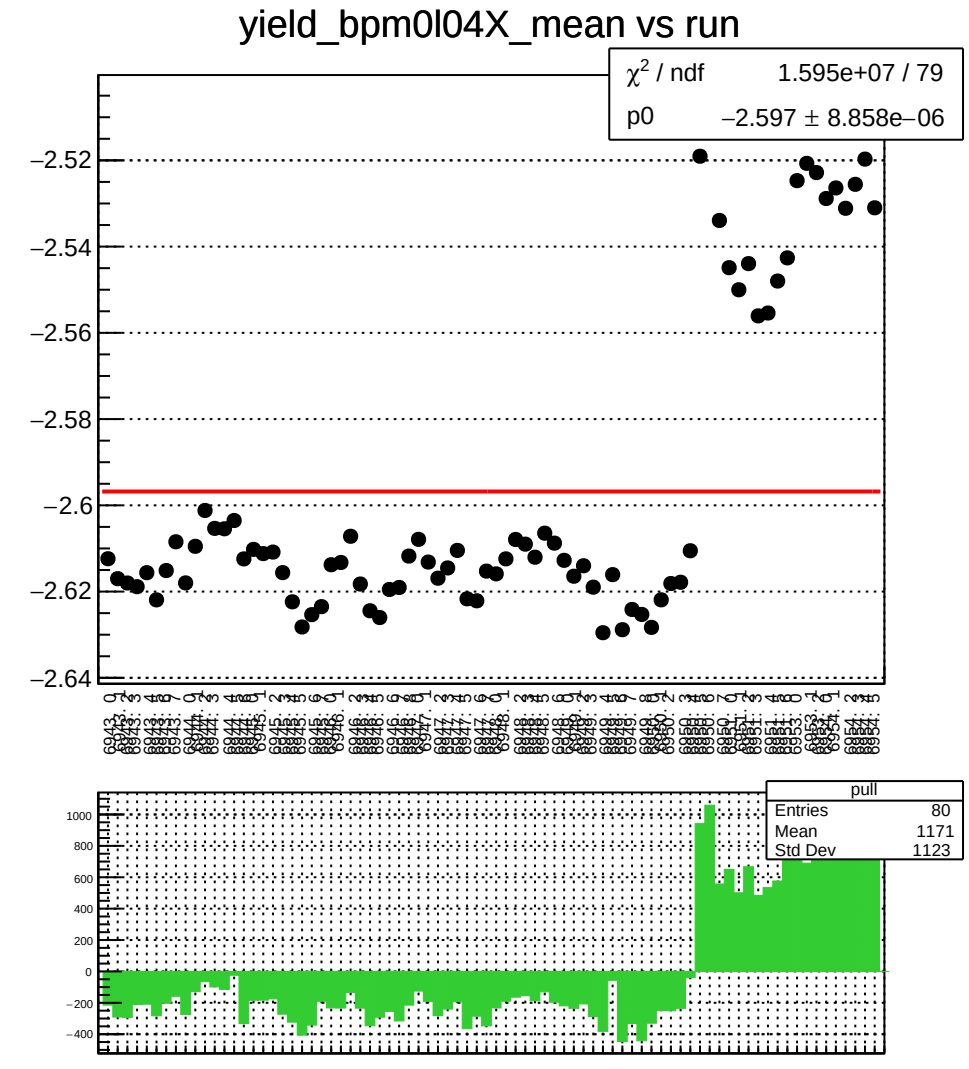

yield_bpm0l03X_mean vs run
χ² / ndf 1.46e+05 / 79
p0 −4.051± 0.0001228
−3.75
−3.8
−3.85
−3.9
−3.95
−4
−4.05
−4.1
−4.15
pull
Entries 80
Mean 55.36
Std Dev 24.6
100
50
0
−50
−100
pull1D
Entries 80
Mean −0.05243
Std Dev 4.811
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

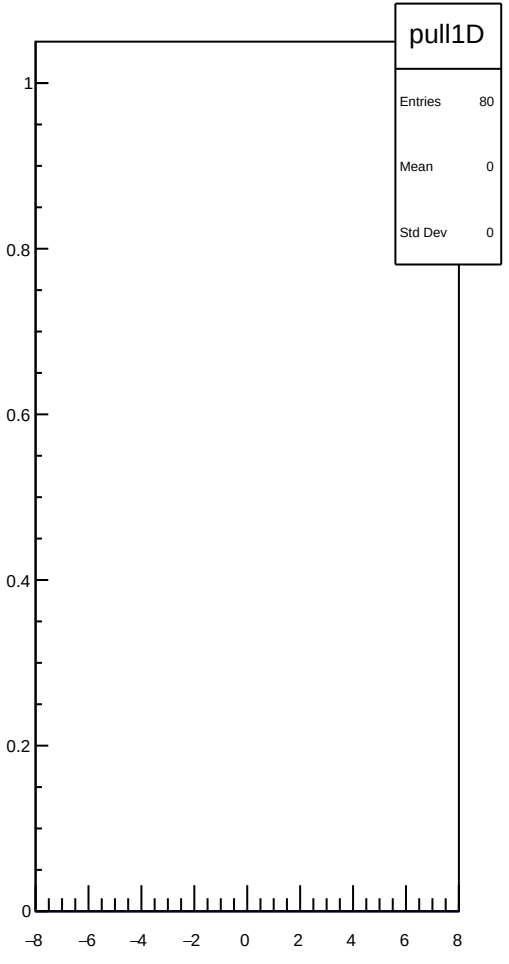

yield_bpm0l03X_rms vs run
χ² / ndf 1.86e+05 / 79
p0 0.1031 ± 8.683e−05
0.3
0.25
0.2
0.15
0.1
0.05

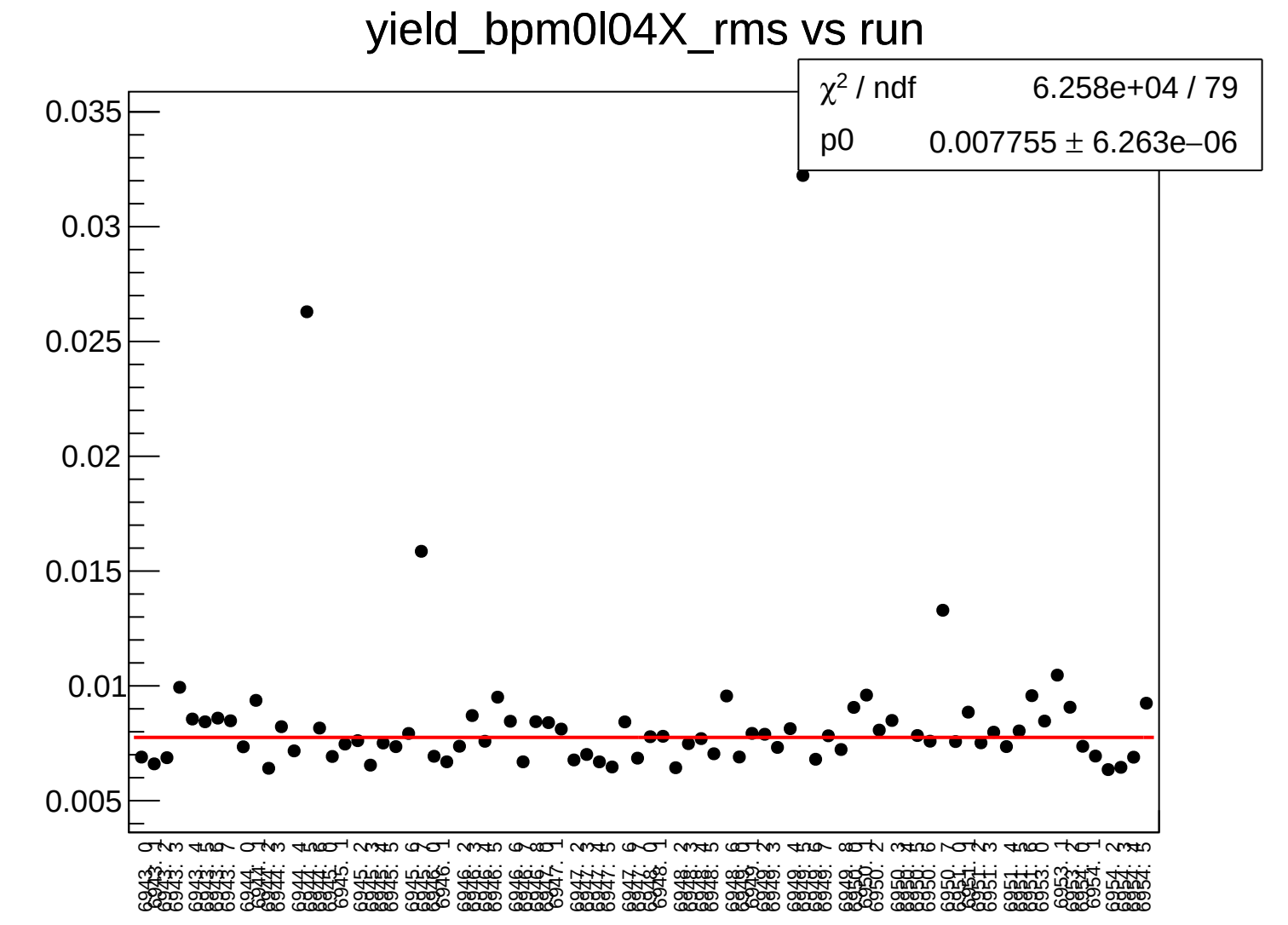

yield_bpm0l03Y_mean vs run
χ² / ndf 3.866e+05 / 79
p0 −0.6204 ± 0.0001247
−0.35
−0.4
−0.45
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 80
Mean 75.83
Std Dev 24.5
100
50
0
−50
−100
−150

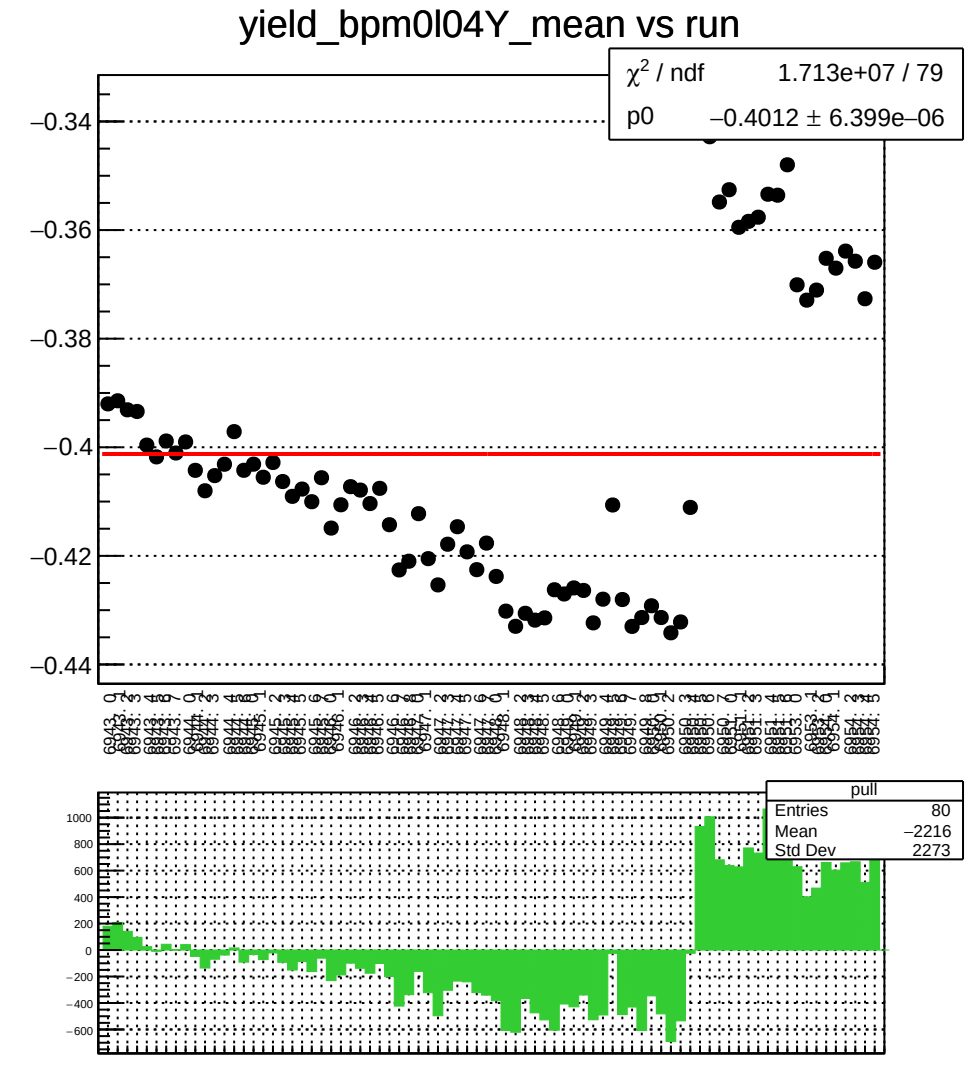

pull1D
Entries 80
Mean 0.6681
Std Dev 2.212
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

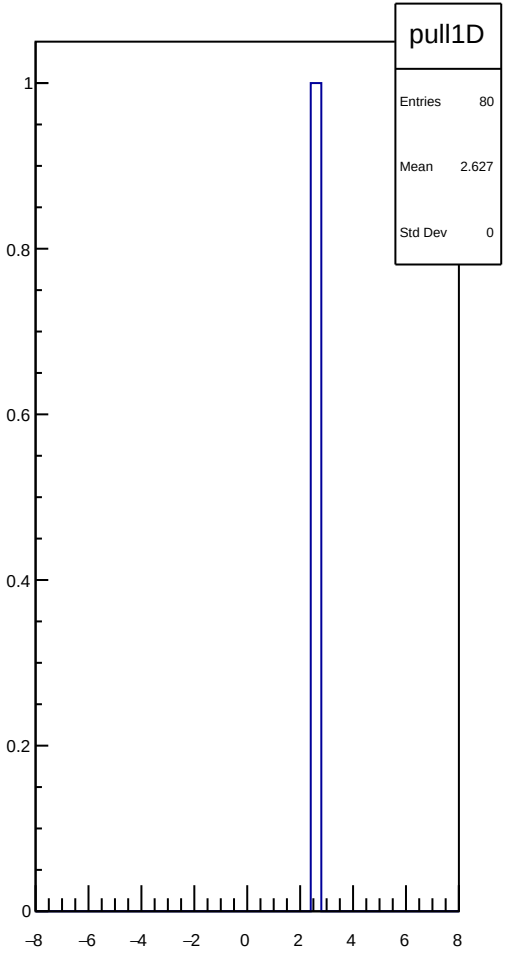

yield_bpm0l03Y_rms vs run
χ^2 / ndf 1.786e+05 / 79
p0 0.105 ± 8.817e–05
0.3
0.25
0.2
0.15
0.1
0.05

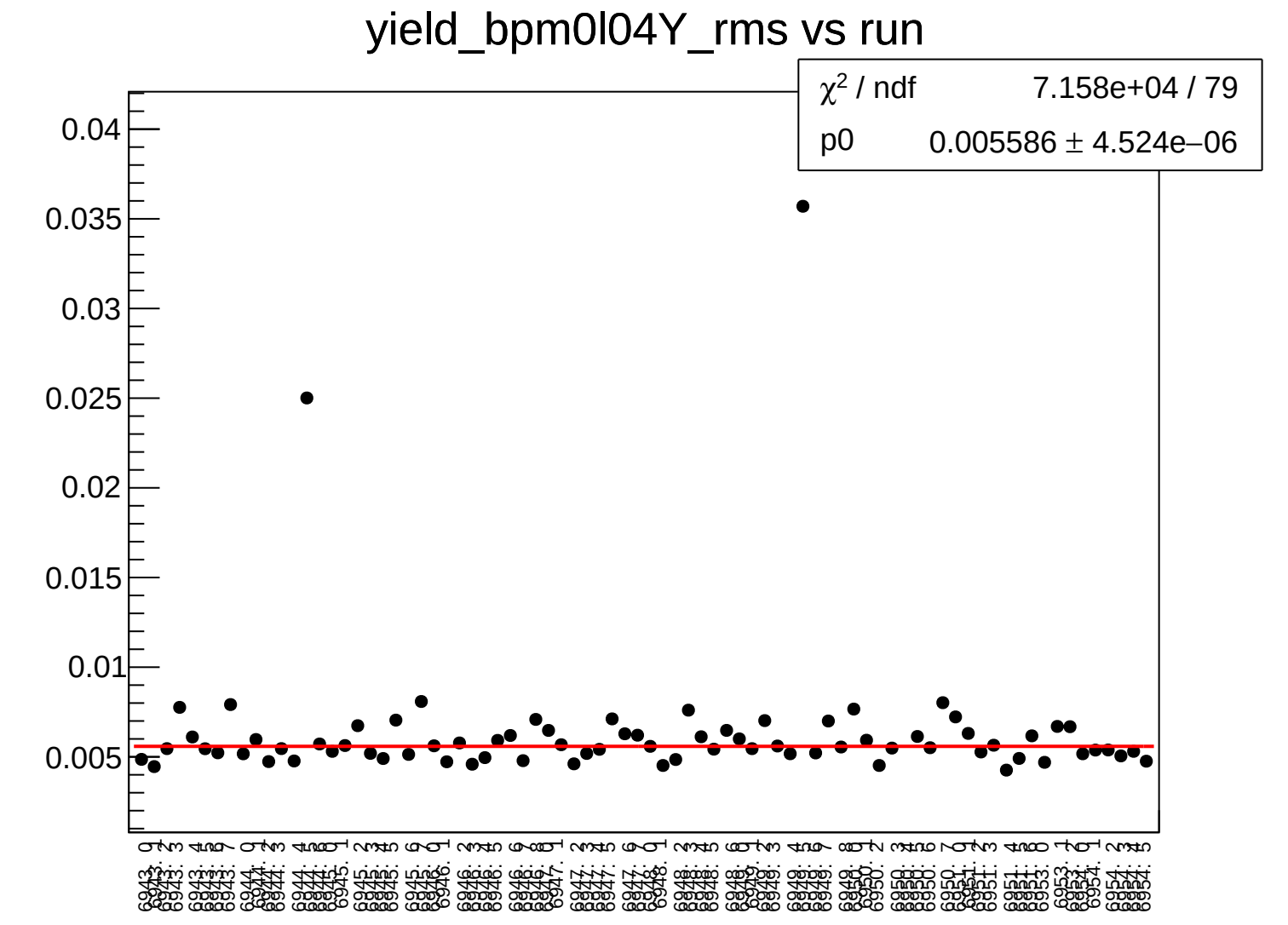

yield_bpm0l04X_mean vs run
χ² / ndf 1.595e+07 / 79
p0 −2.597 ± 8.858e−06
−2.52
−2.54
−2.56
−2.58
−2.6
−2.62
−2.64
pull
Entries 80
Mean 1171
Std Dev 1123
1000
800
600
400
200
0
−200
−400

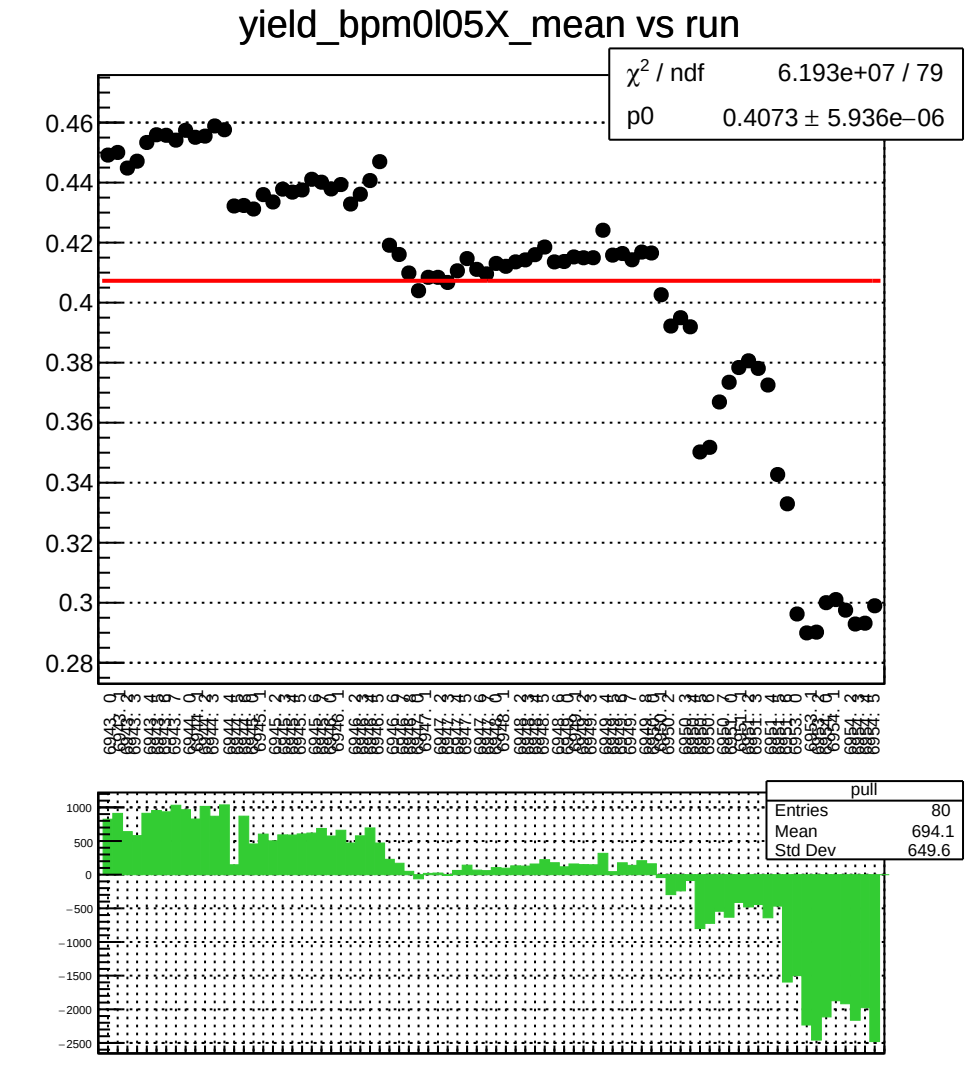

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

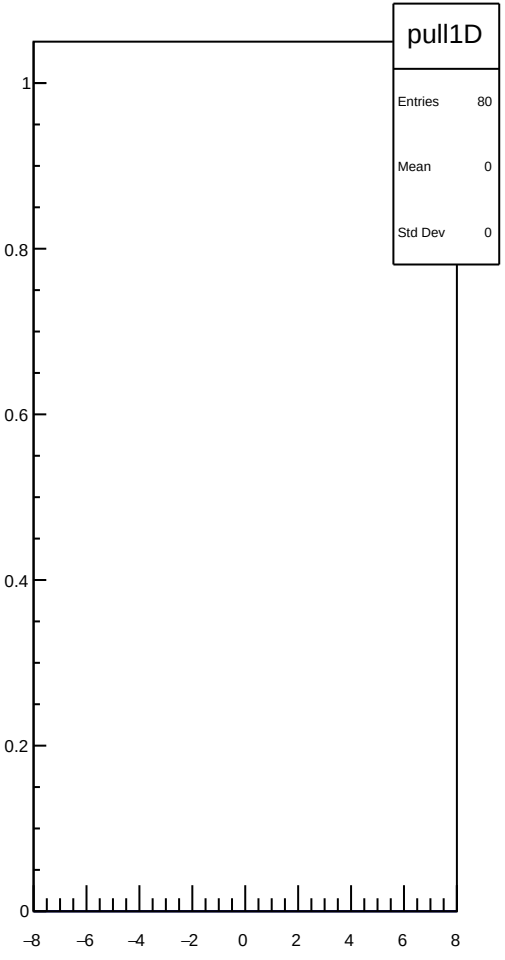

yield_bpm0l04X_rms vs run
χ² / ndf 6.258e+04 / 79
p0 0.007755 ± 6.263e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

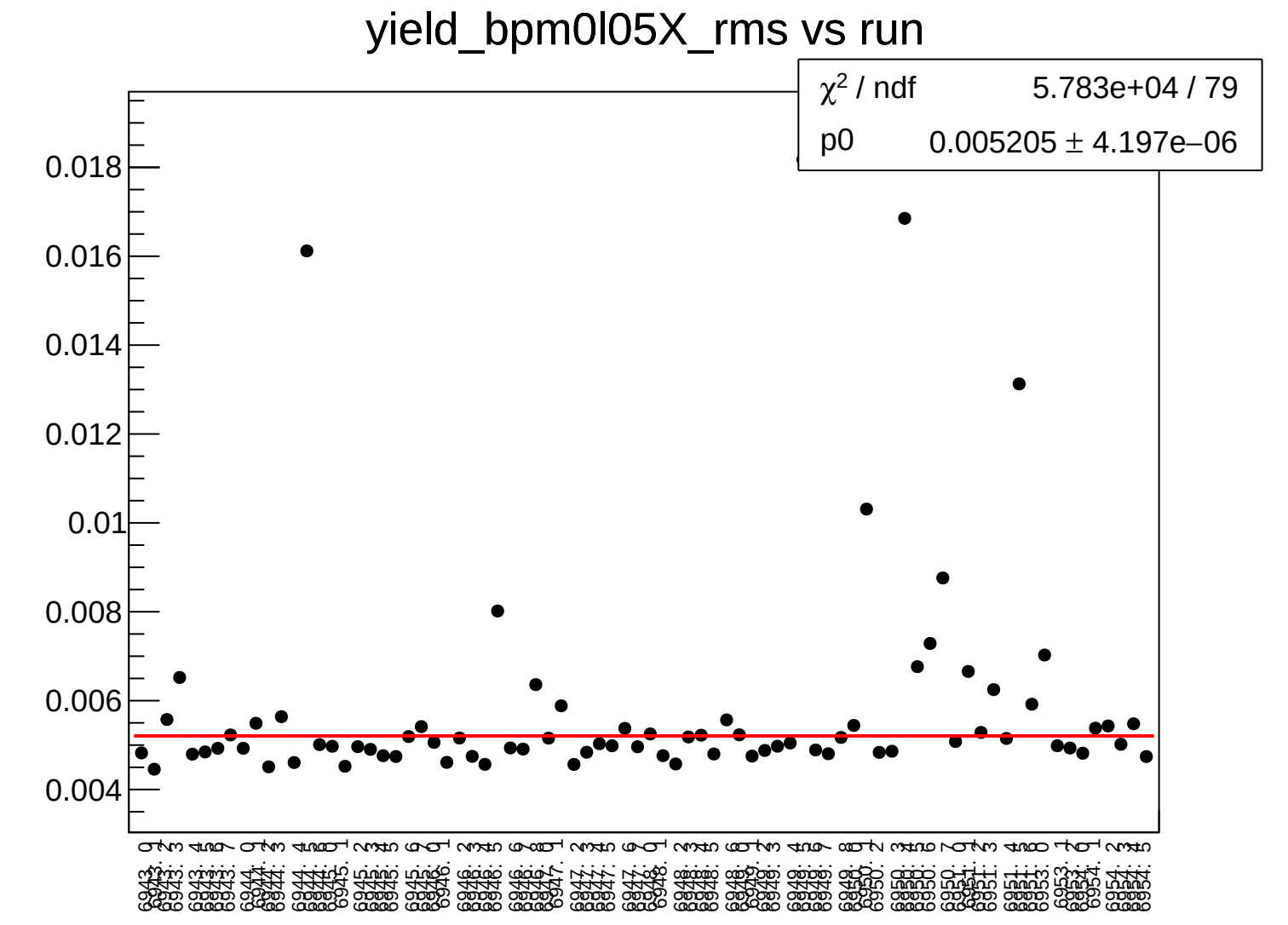

yield_bpm0l04Y_mean vs run
χ² / ndf 1.713e+07 / 79
p0 −0.4012 ± 6.399e−06
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
pull
Entries 80
Mean −2216
Std Dev 2273
1000
800
600
400
200
0
−200
−400
−600

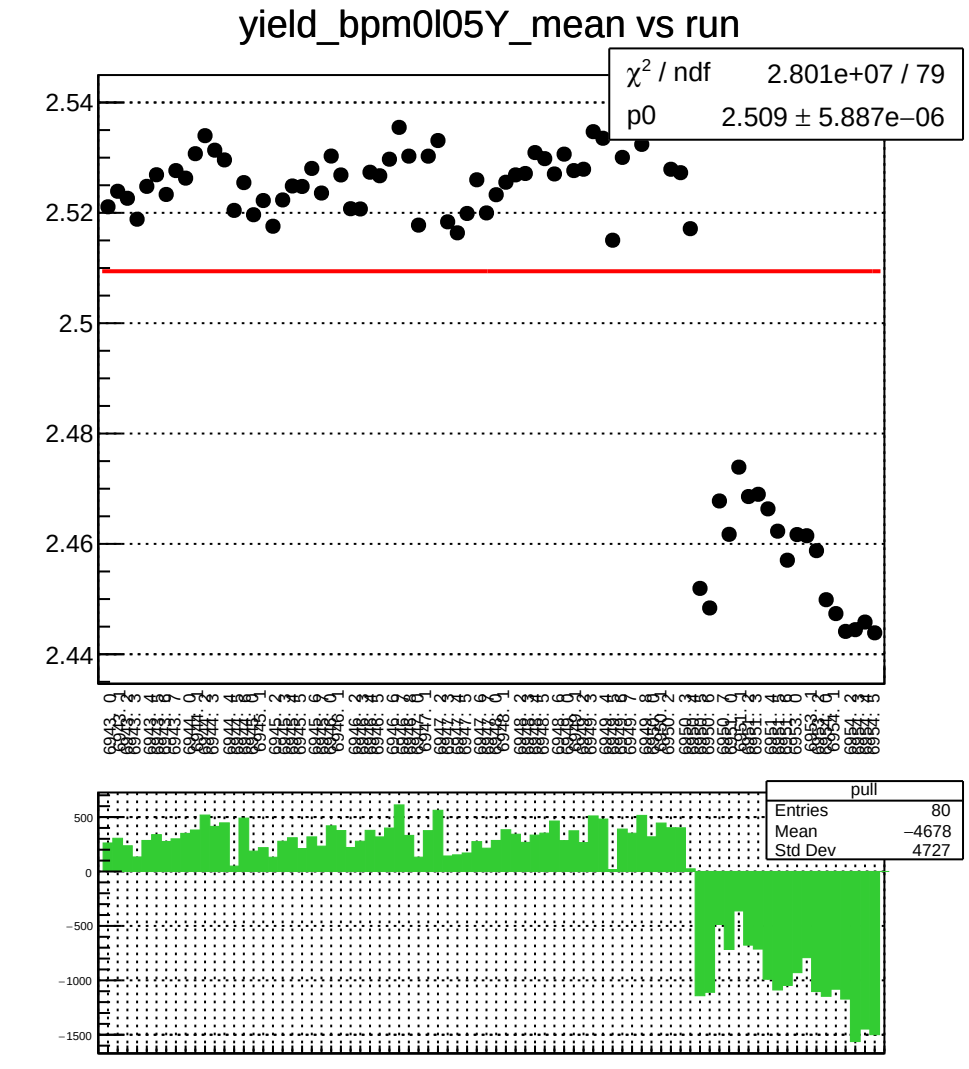

pull1D
Entries 80
Mean 2.627
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

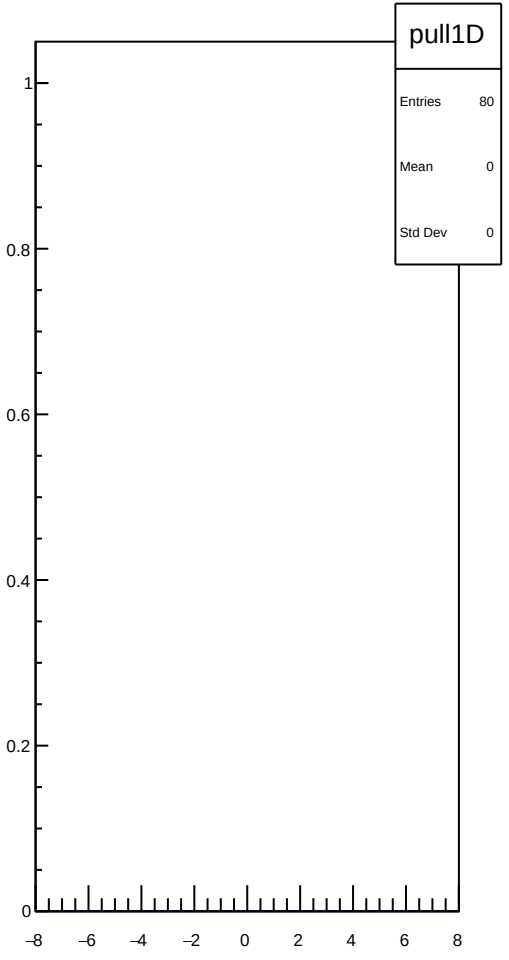

yield_bpm0l04Y_rms vs run
χ^2 / ndf 7.158e+04 / 79
p0 0.005586 ± 4.524e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005


yield_bpm0l05X_mean vs run
χ² / ndf 6.193e+07 / 79
p0 0.4073 ± 5.936e−06
pull
Entries 80
Mean 694.1
Std Dev 649.6

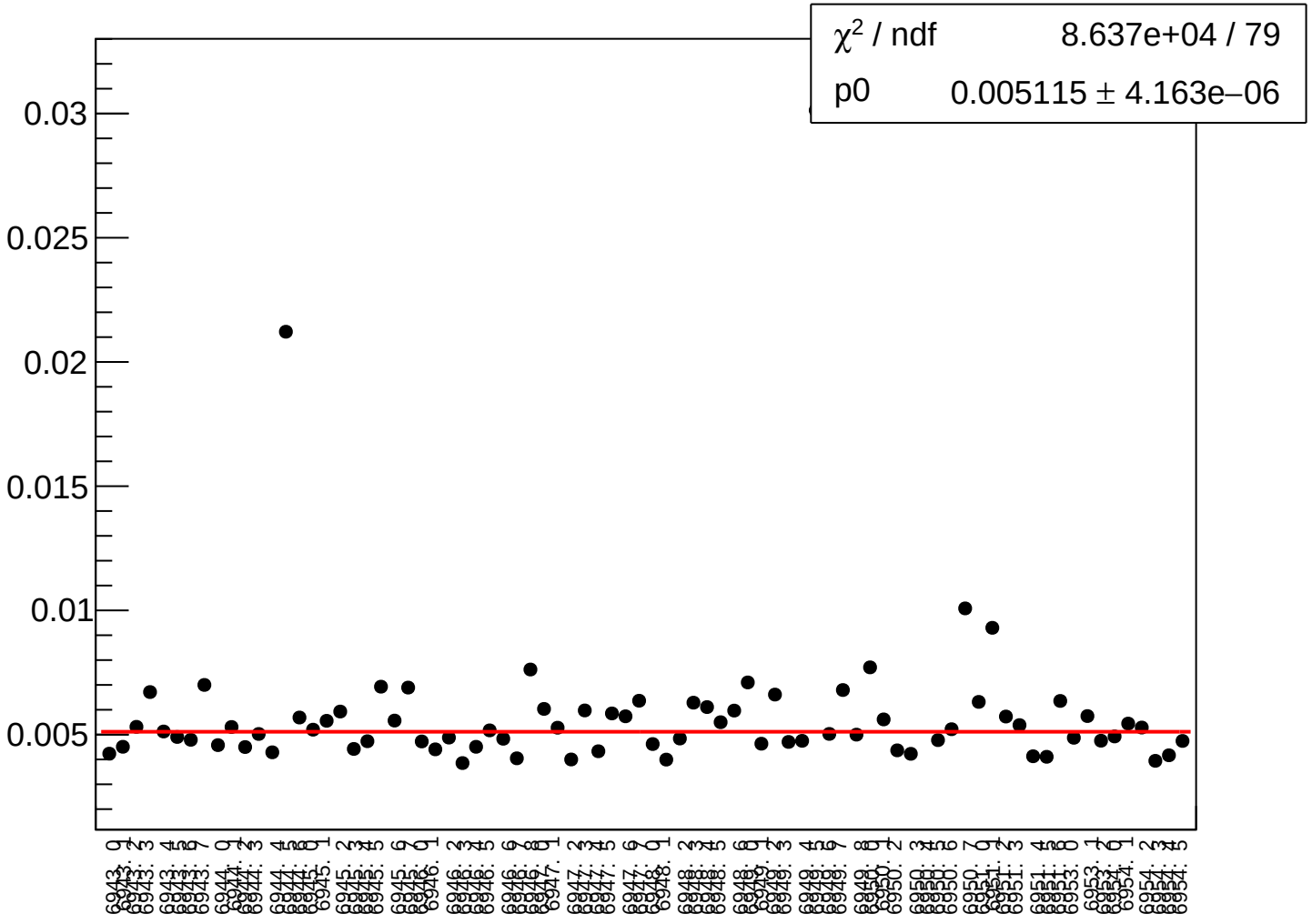

pull1D
Entries 80
Mean 0
Std Dev 0

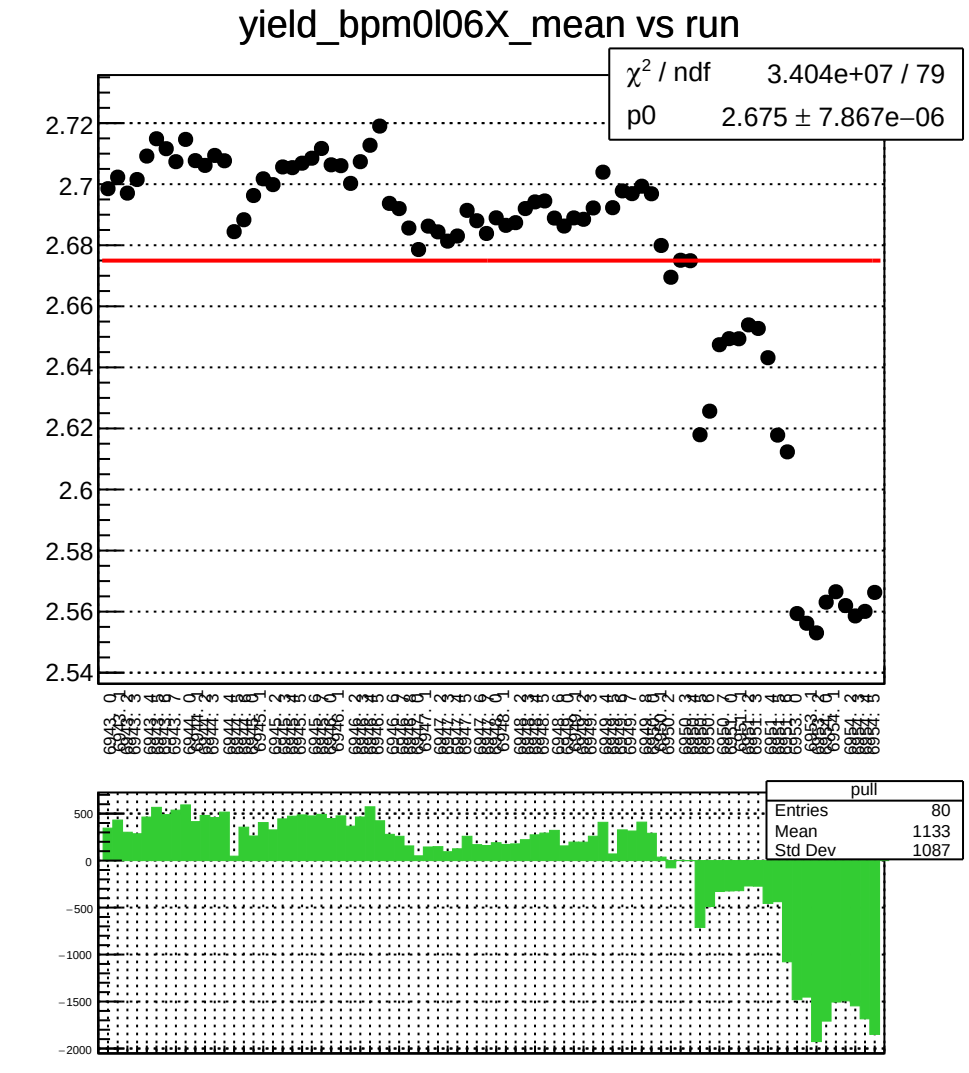

yield_bpm0l05X_rms vs run
χ^2 / ndf 5.783e+04 / 79
p0 0.005205 ± 4.197e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

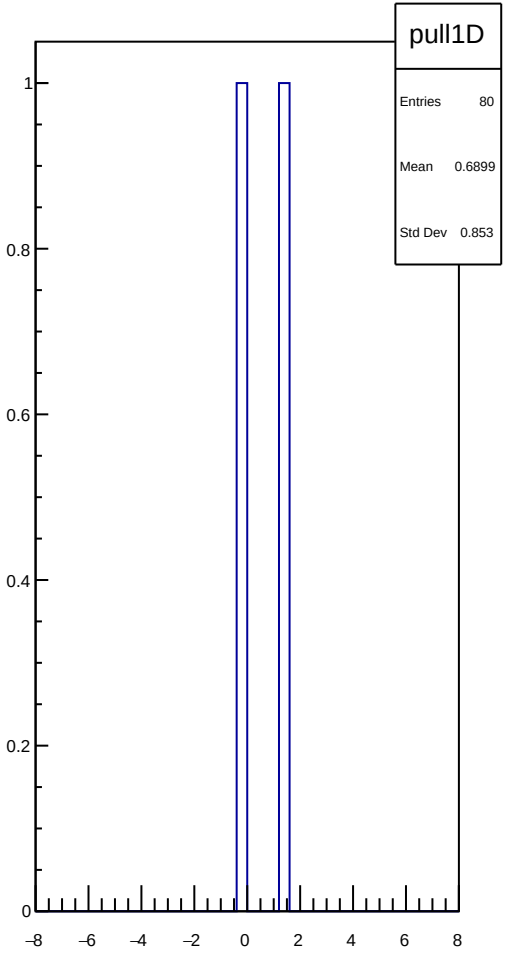

yield_bpm0l05Y_mean vs run
χ² / ndf 2.801e+07 / 79
p0 2.509 ± 5.887e−06
2.54
2.52
2.5
2.48
2.46
2.44
pull
Entries 80
Mean −4678
Std Dev 4727
500
0
−500
−1000
−1500

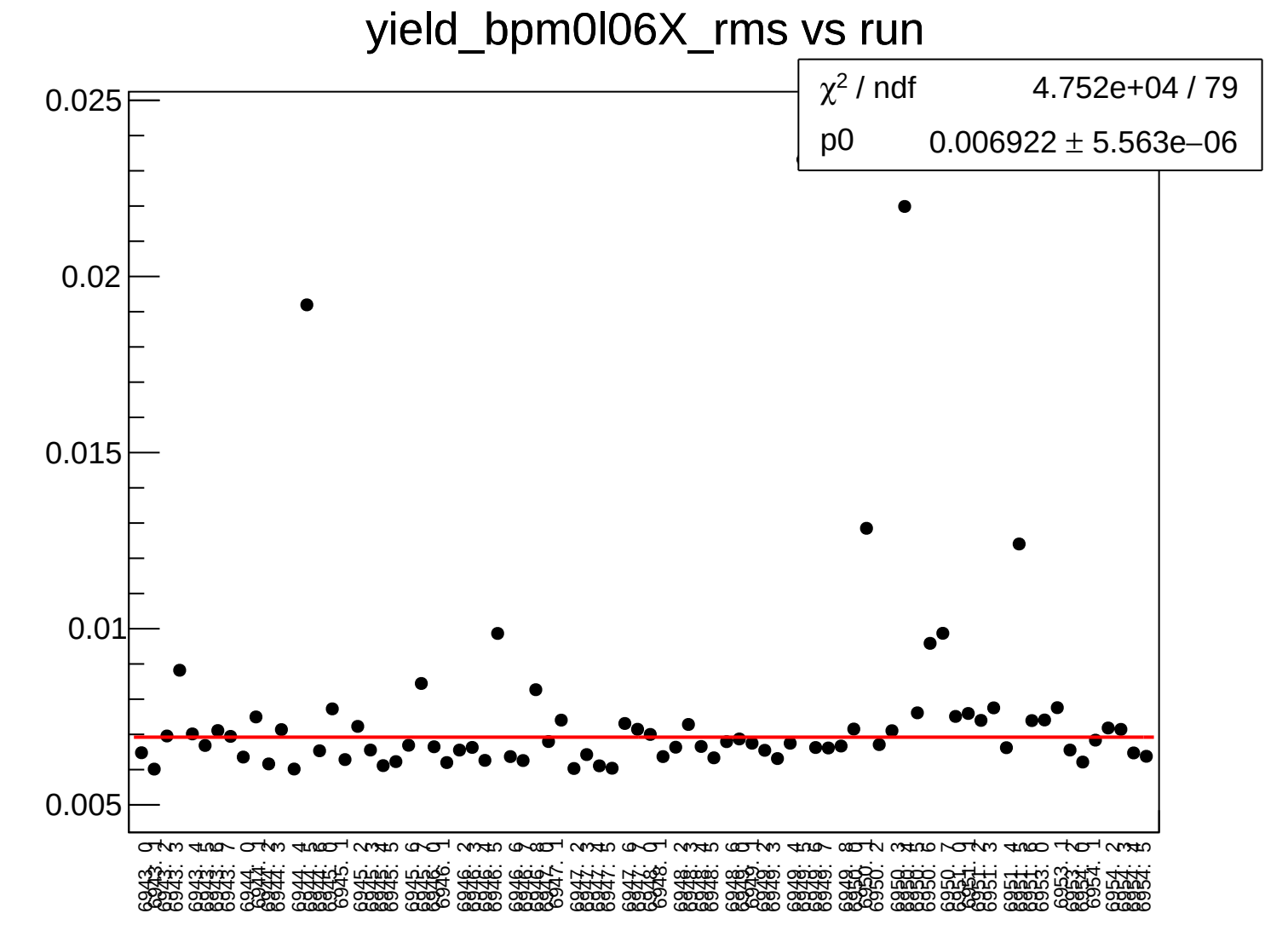

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

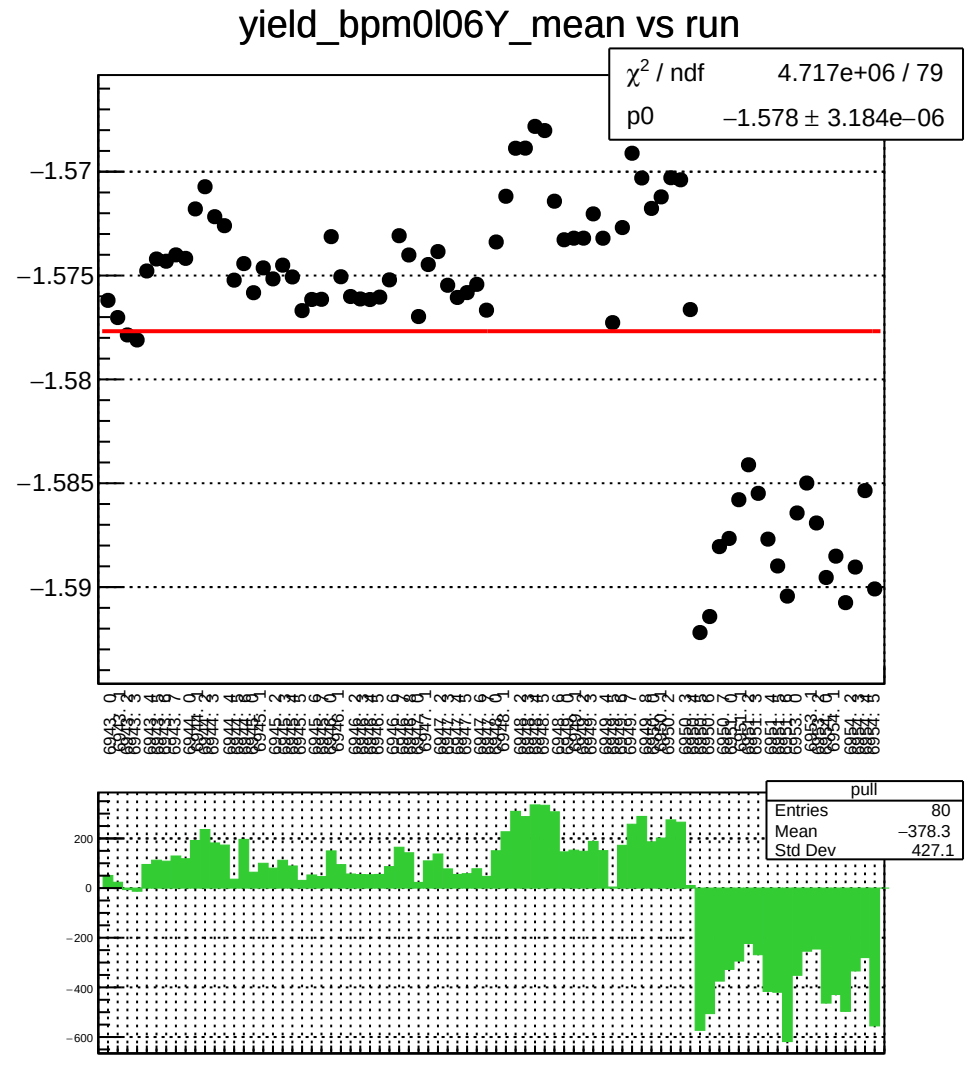
yield_bpm0l05Y_rms vs run

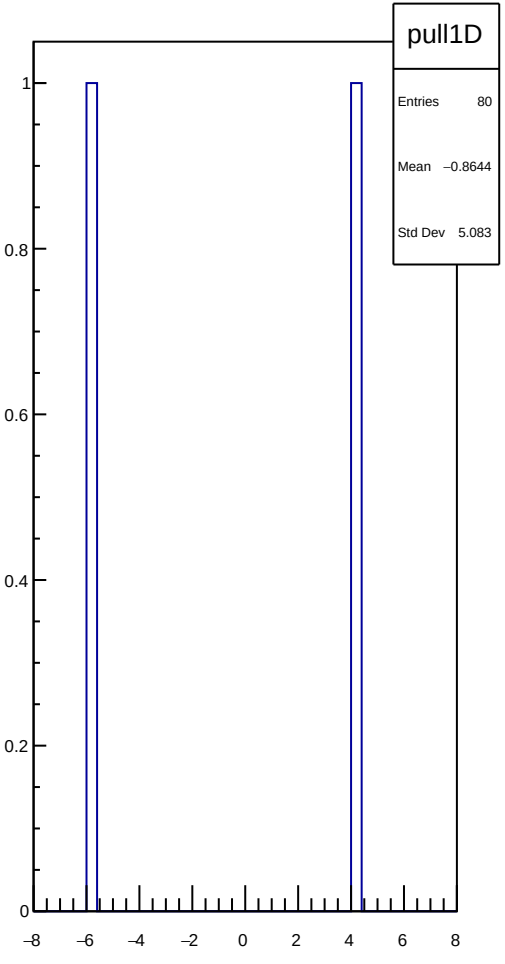


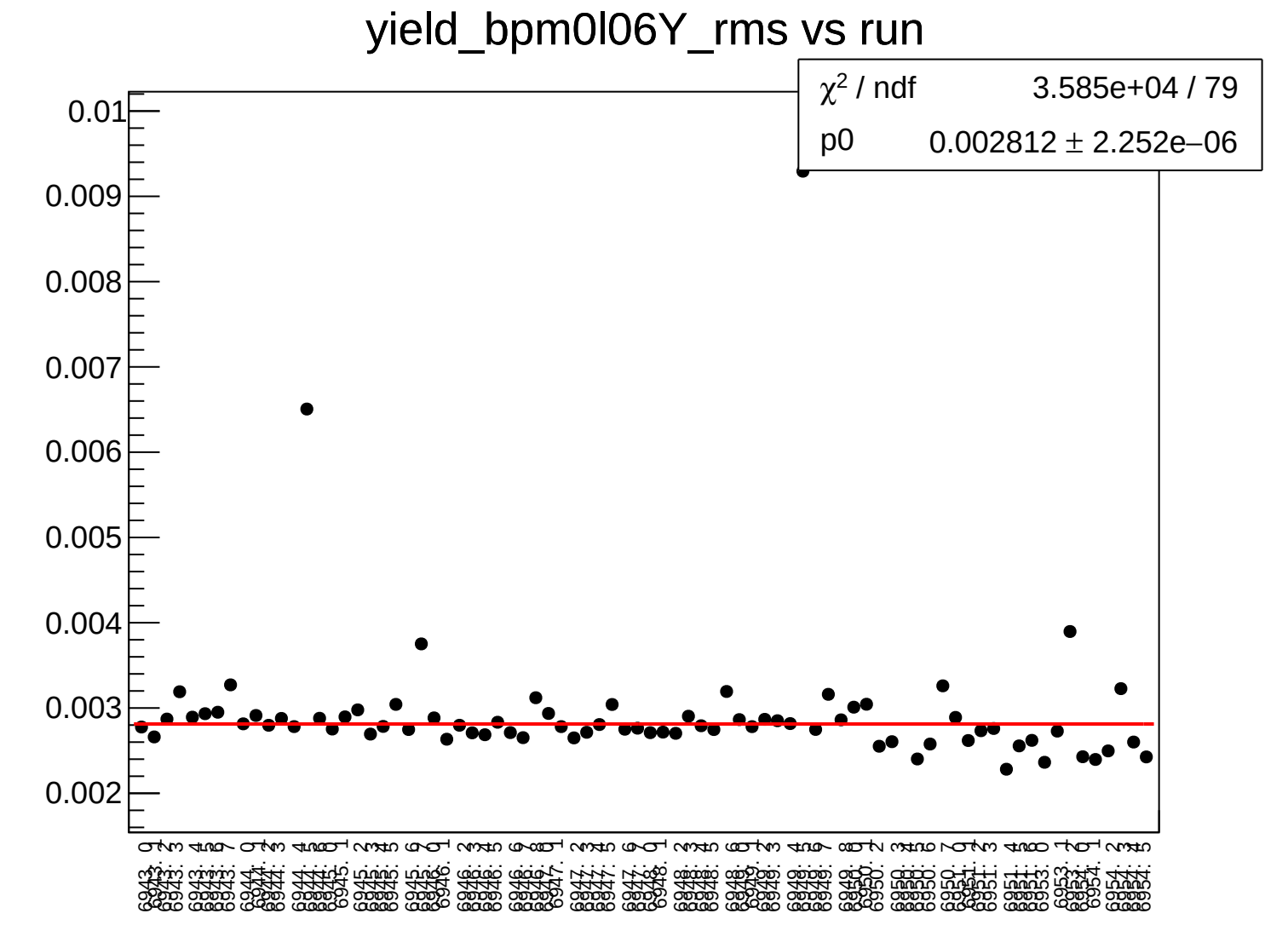

yield_bpm0l06X_mean vs run
χ² / ndf 3.404e+07 / 79
p0 2.675 ± 7.867e−06
2.72
2.7
2.68
2.66
2.64
2.62
2.6
2.58
2.56
2.54
pull
Entries 80
Mean 1133
Std Dev 1087
500
0
−500
−1000
−1500
−2000

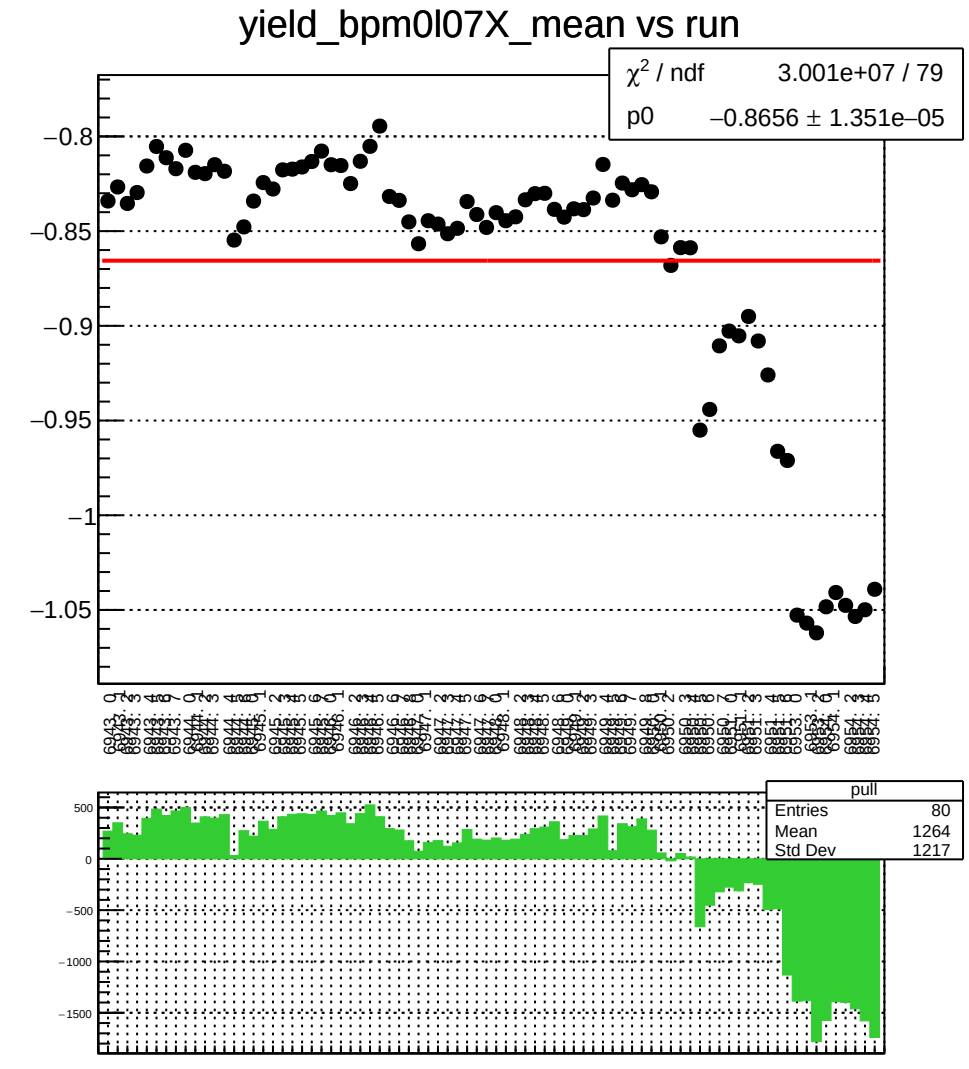

pull1D
Entries 80
Mean 0.6899
Std Dev 0.853
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

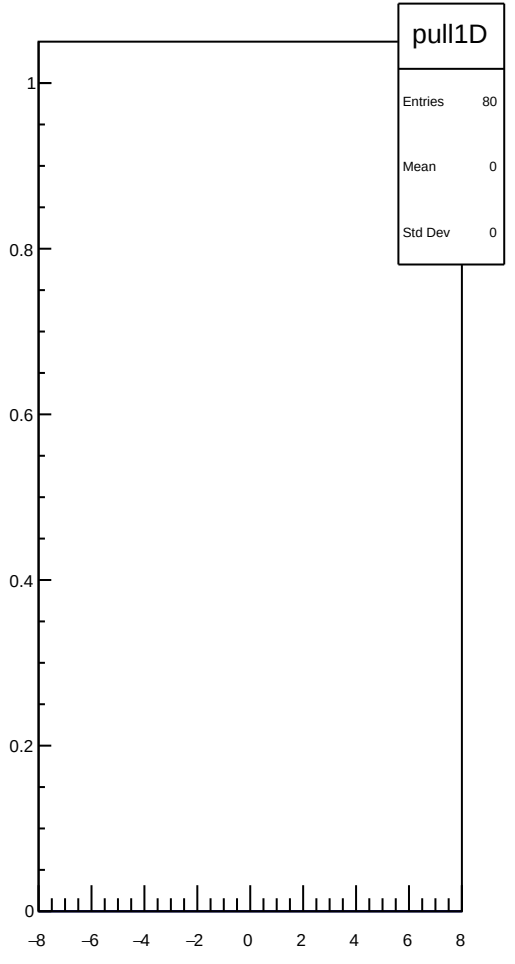

yield_bpm0l06X_rms vs run
χ² / ndf 4.752e+04 / 79
p0 0.006922 ± 5.563e−06
0.025
0.02
0.015
0.01
0.005

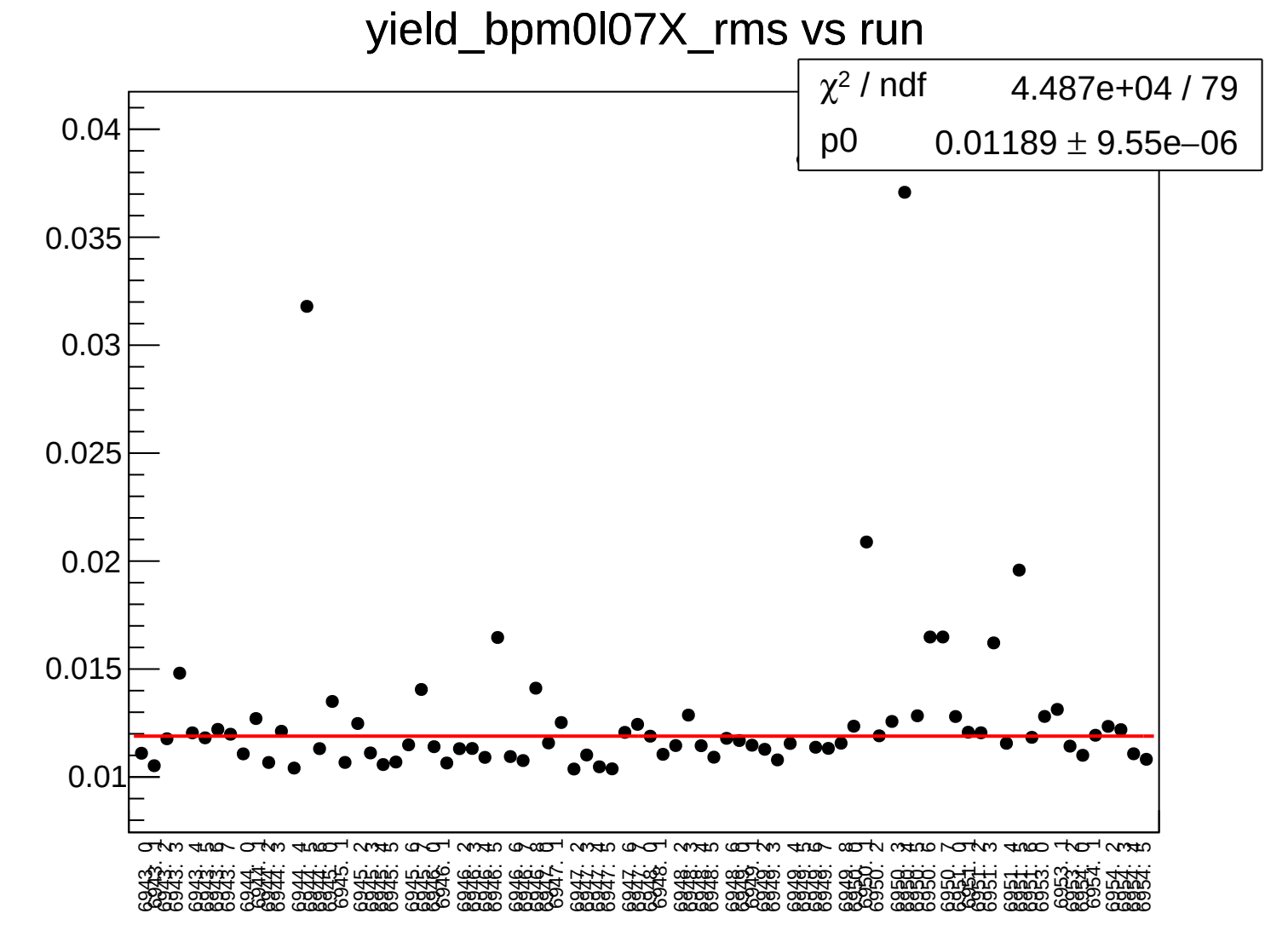

yield_bpm0l06Y_mean vs run
χ² / ndf 4.717e+06 / 79
p0 −1.578 ± 3.184e−06
−1.57
−1.575
−1.58
−1.585
−1.59
pull
Entries 80
Mean −378.3
Std Dev 427.1
200
0
−200
−400
−600

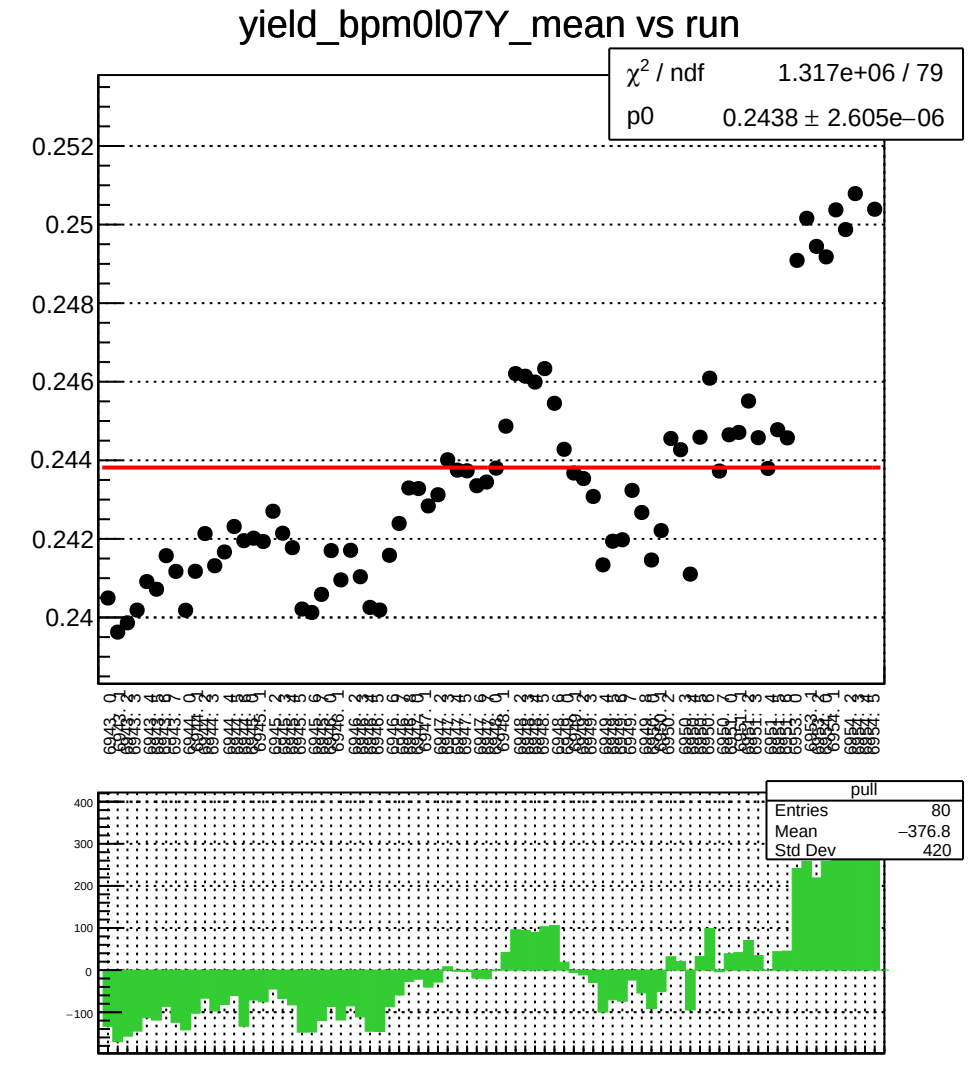

pull1D
Entries 80
Mean −0.8644
Std Dev 5.083
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

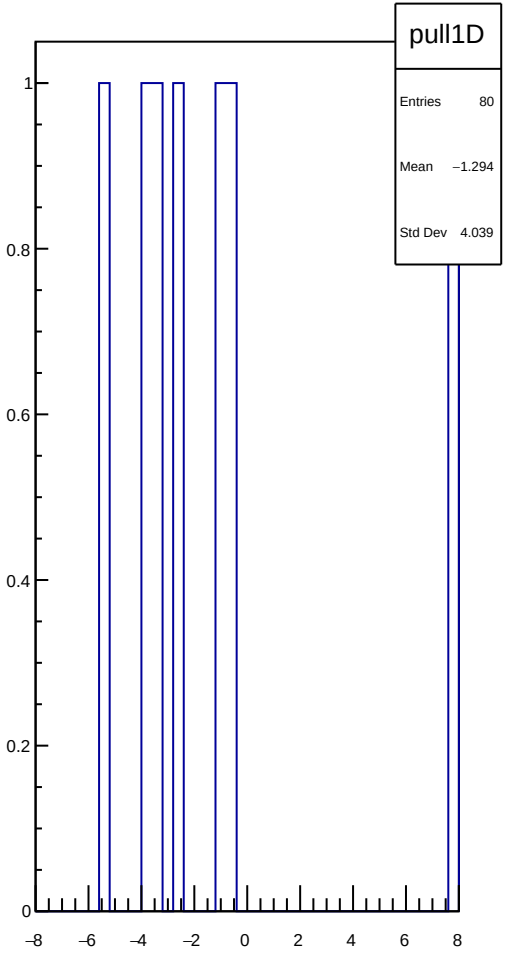

yield_bpm0l06Y_rms vs run
χ² / ndf 3.585e+04 / 79
p0 0.002812 ± 2.252e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

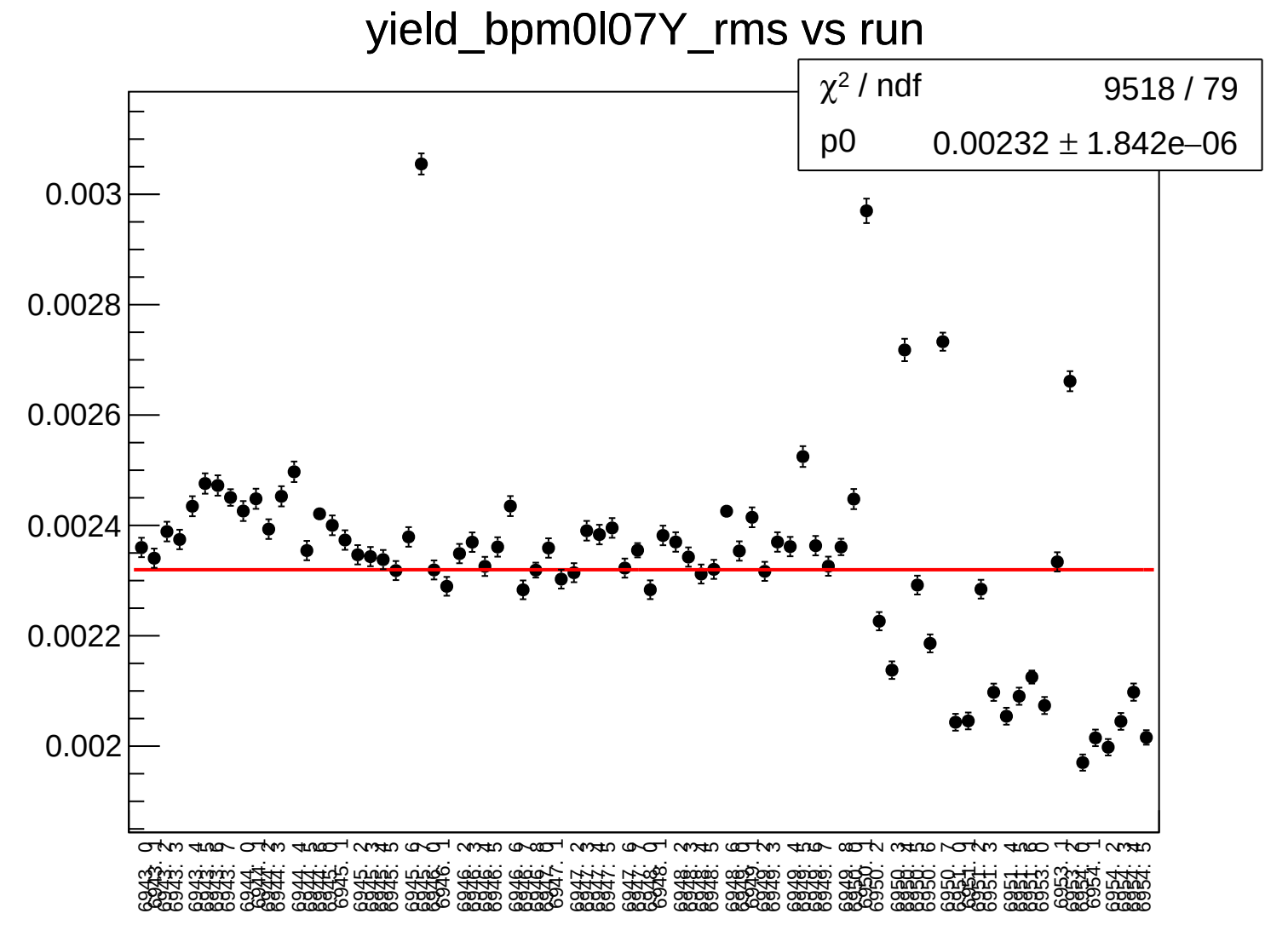

yield_bpm0l07X_mean vs run
χ² / ndf 3.001e+07 / 79
p0 −0.8656 ± 1.351e−05
−0.8
−0.85
−0.9
−0.95
−1
−1.05
pull
Entries 80
Mean 1264
Std Dev 1217
500
0
−500
−1000
−1500

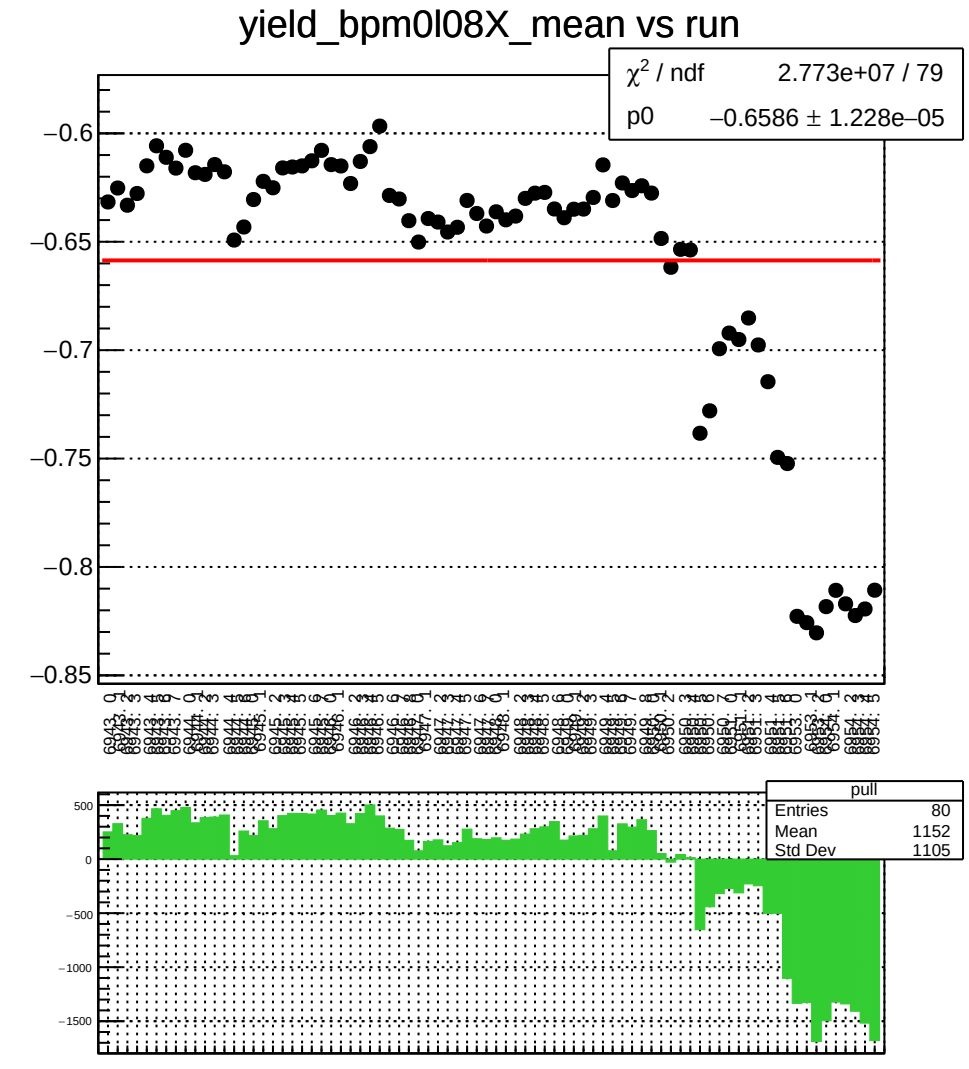

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

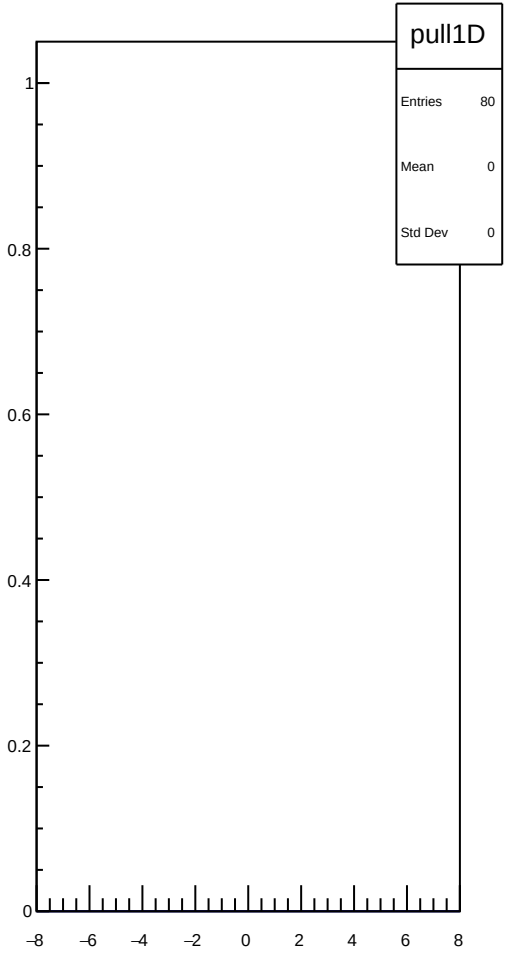

yield_bpm0l07X_rms vs run
χ² / ndf 4.487e+04 / 79
p0 0.01189 ± 9.55e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01

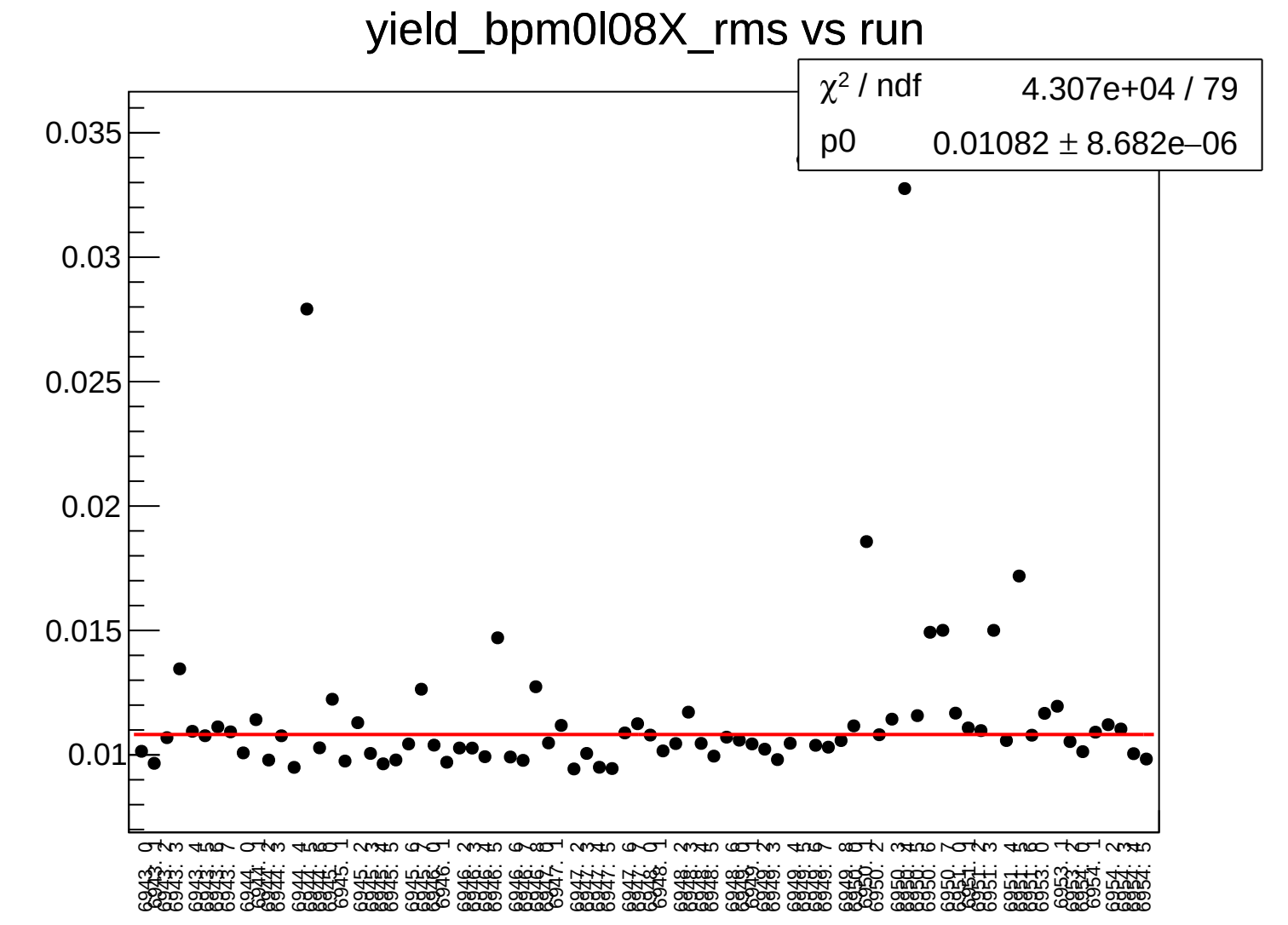

yield_bpm0l07Y_mean vs run
χ² / ndf 1.317e+06 / 79
p0 0.2438 ± 2.605e−06
0.252
0.25
0.248
0.246
0.244
0.242
0.24
pull
Entries 80
Mean −376.8
Std Dev 420
400
300
200
100
0
−100

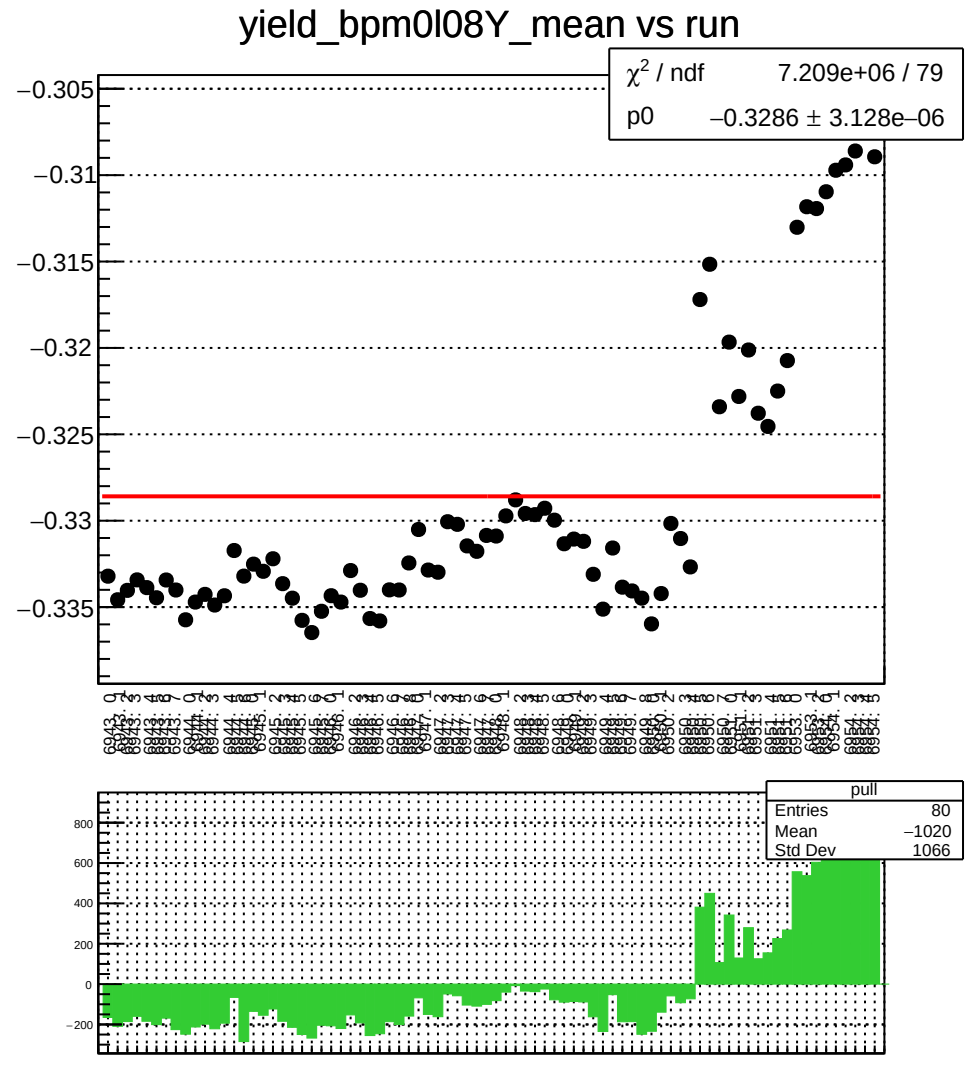

pull1D
Entries 80
Mean −1.294
Std Dev 4.039
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

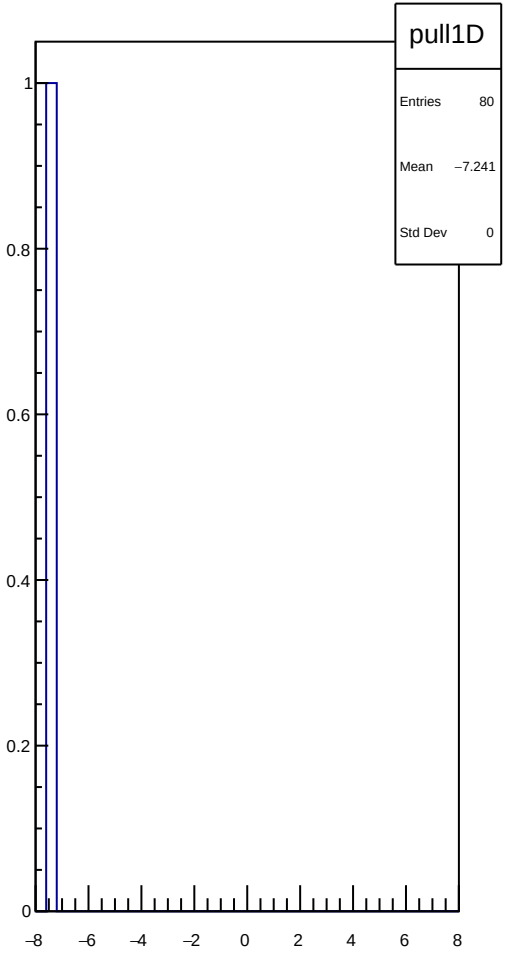

yield_bpm0l07Y_rms vs run
χ² / ndf 9518 / 79
p0 0.00232 ± 1.842e–06
0.003
0.0028
0.0026
0.0024
0.0022
0.002

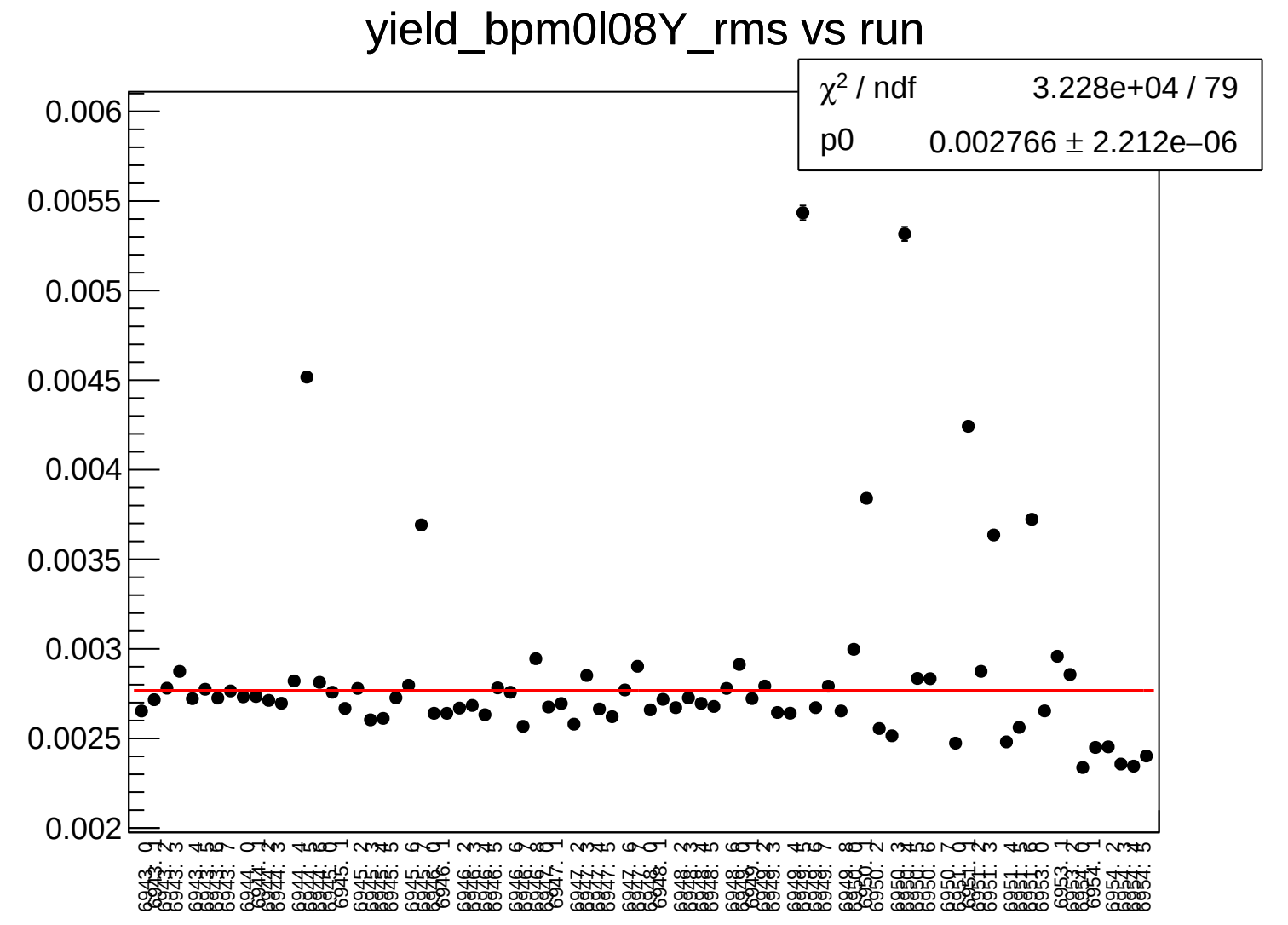

yield_bpm0l08X_mean vs run
χ² / ndf 2.773e+07 / 79
p0 −0.6586 ± 1.228e−05
−0.6
−0.65
−0.7
−0.75
−0.8
−0.85
pull
Entries 80
Mean 1152
Std Dev 1105
500
0
−500
−1000
−1500

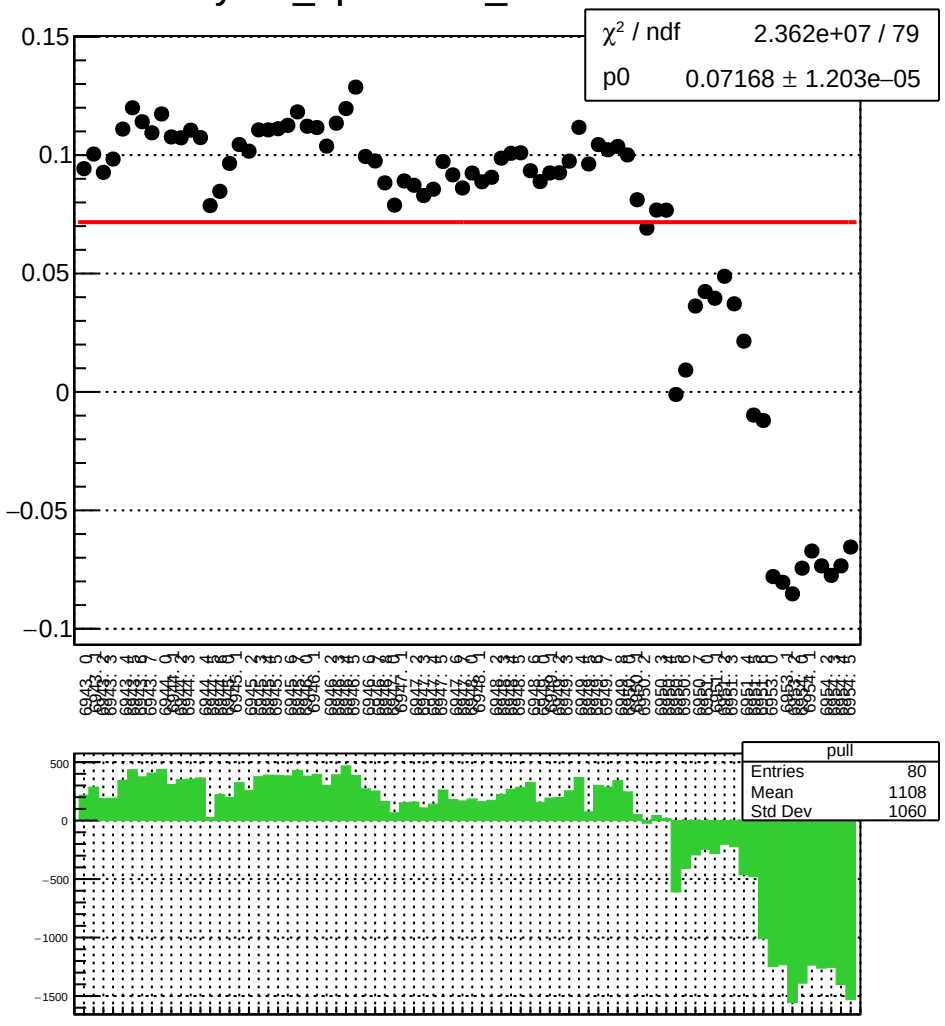

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

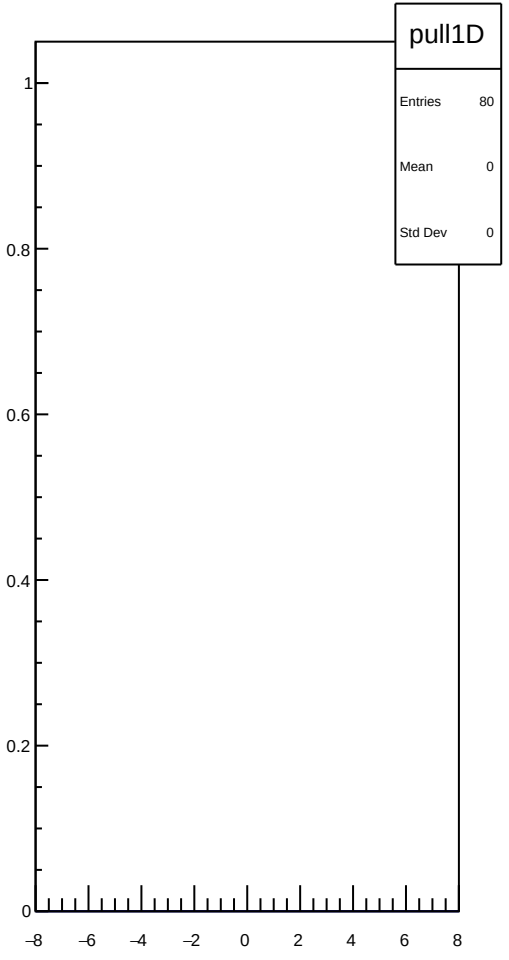

yield_bpm0l08X_rms vs run
χ² / ndf 4.307e+04 / 79
p0 0.01082 ± 8.682e–06
0.035
0.03
0.025
0.02
0.015
0.01

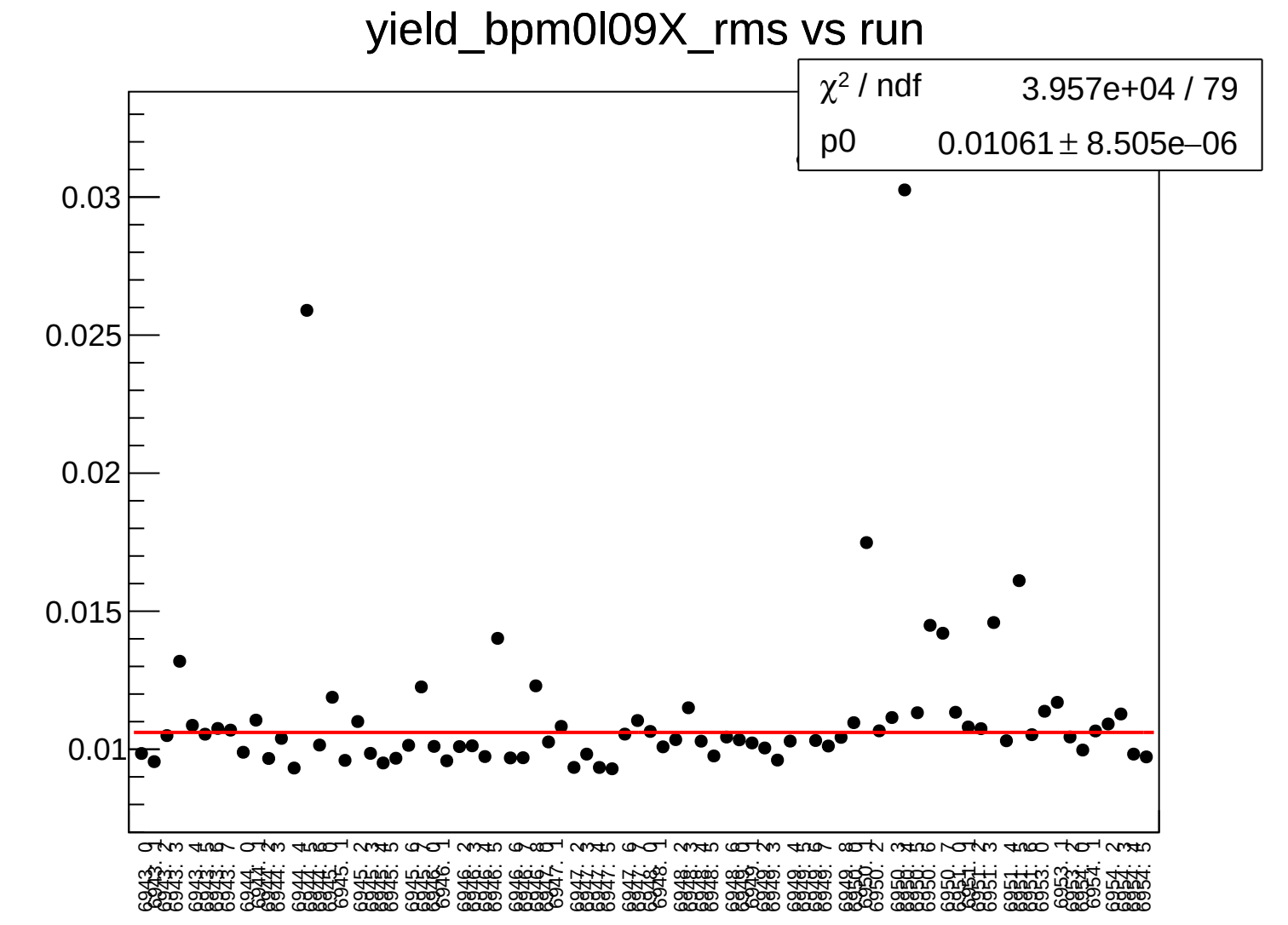

yield_bpm0l08Y_mean vs run
χ² / ndf 7.209e+06 / 79
p0 −0.3286 ± 3.128e−06
−0.305
−0.31
−0.315
−0.32
−0.325
−0.33
−0.335
pull
Entries 80
Mean −1020
Std Dev 1066
800
600
400
200
0
−200

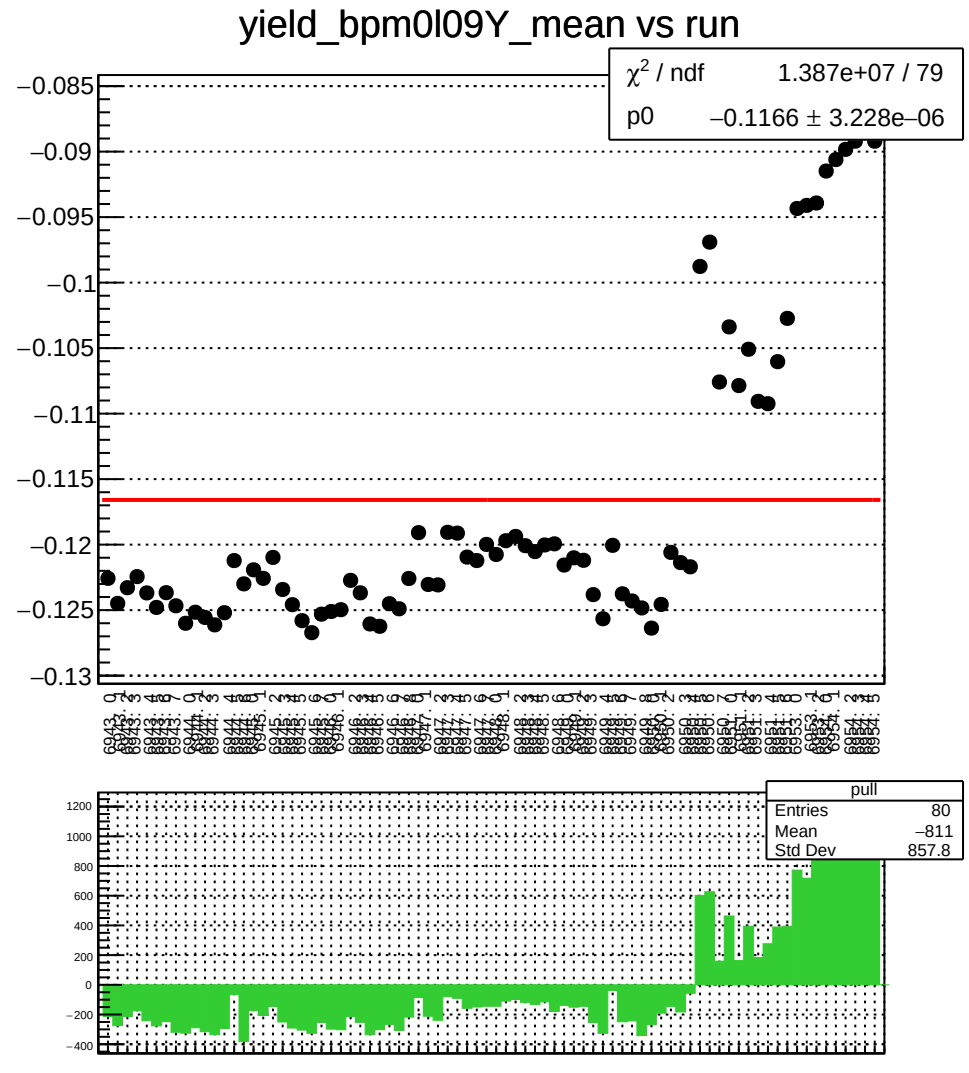

pull1D
Entries 80
Mean −7.241
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

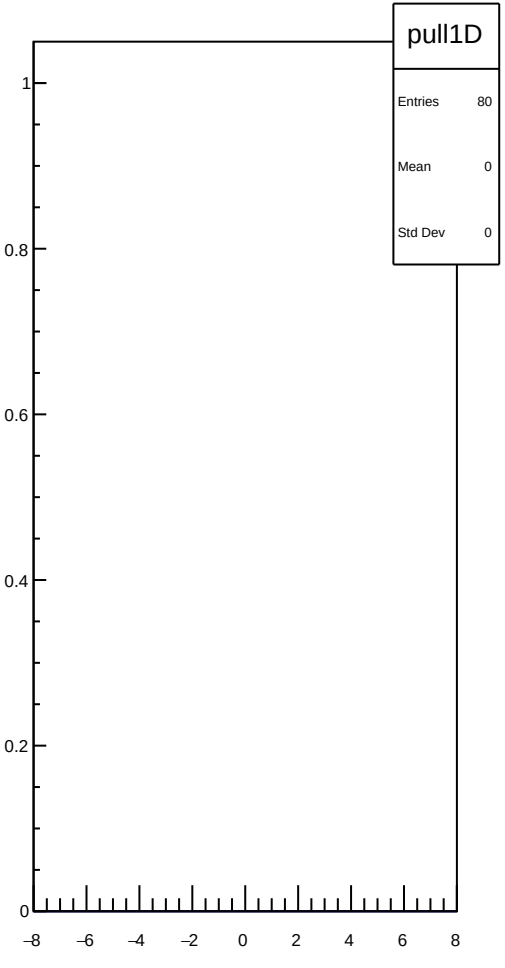

yield_bpm0l08Y_rms vs run
χ² / ndf 3.228e+04 / 79
p0 0.002766 ± 2.212e−06
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

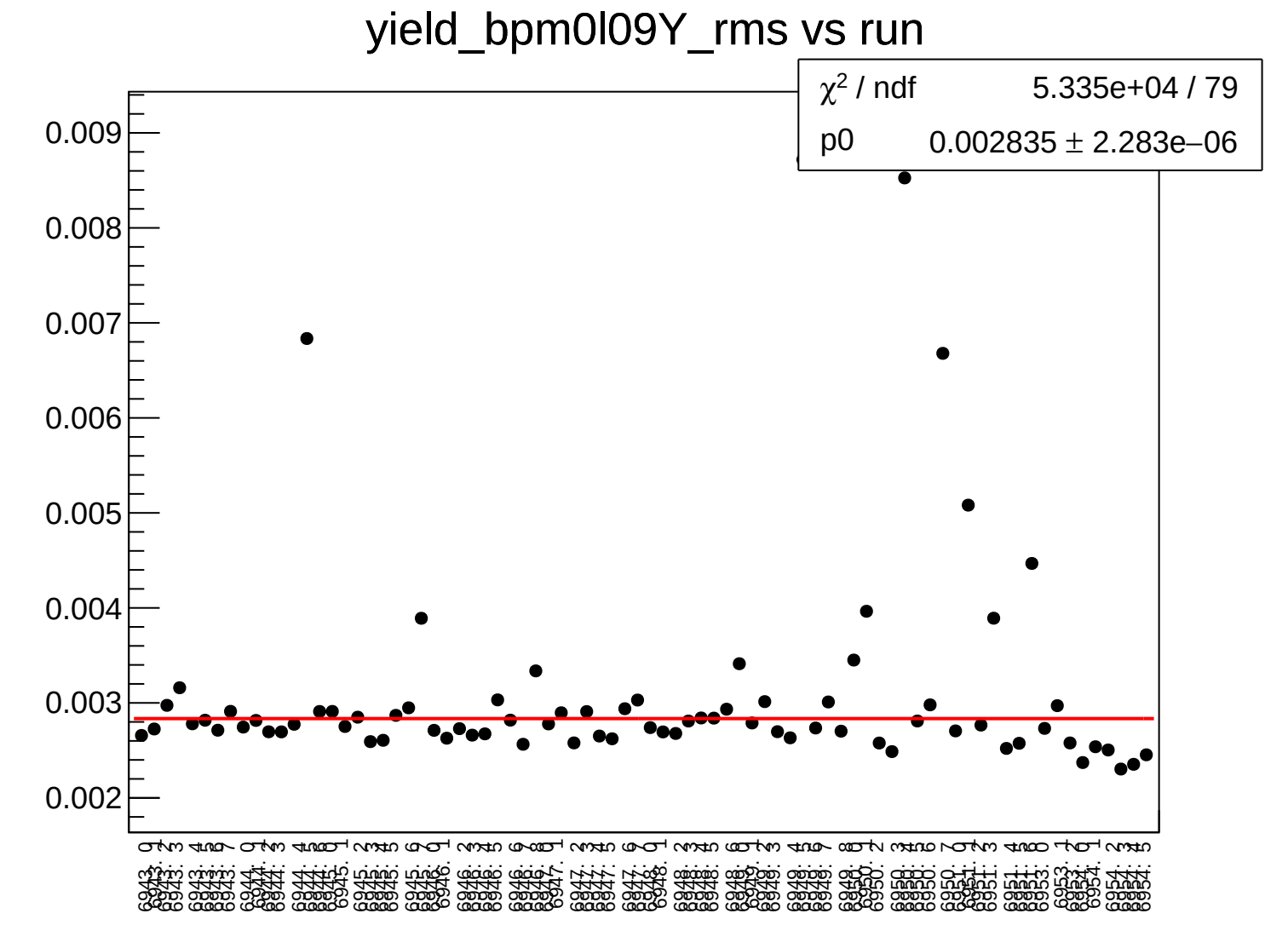

yield_bpm0l09X_mean vs run
χ² / ndf 2.362e+07 / 79
p0 0.07168 ± 1.203e−05
0.15
0.1
0.05
0
−0.05
−0.1
pull
Entries 80
Mean 1108
Std Dev 1060
500
0
−500
−1000
−1500

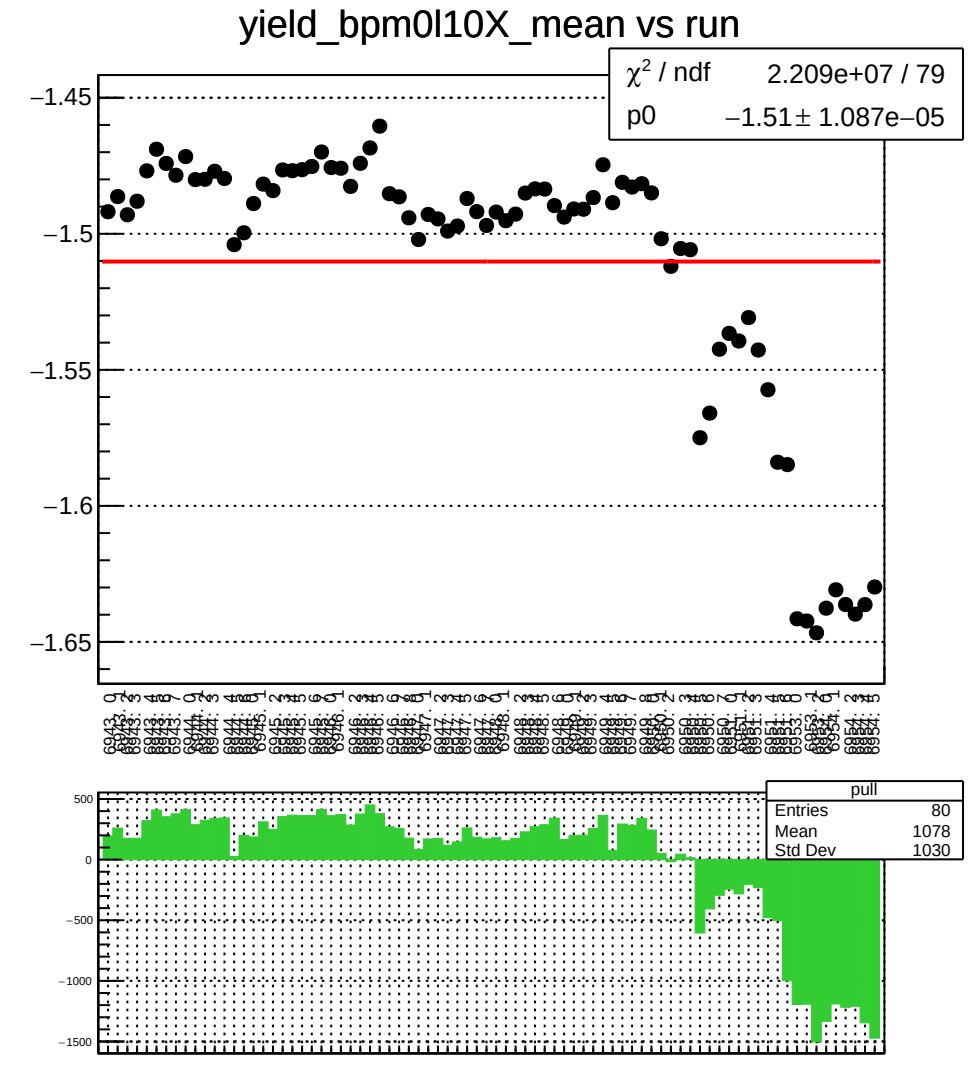

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

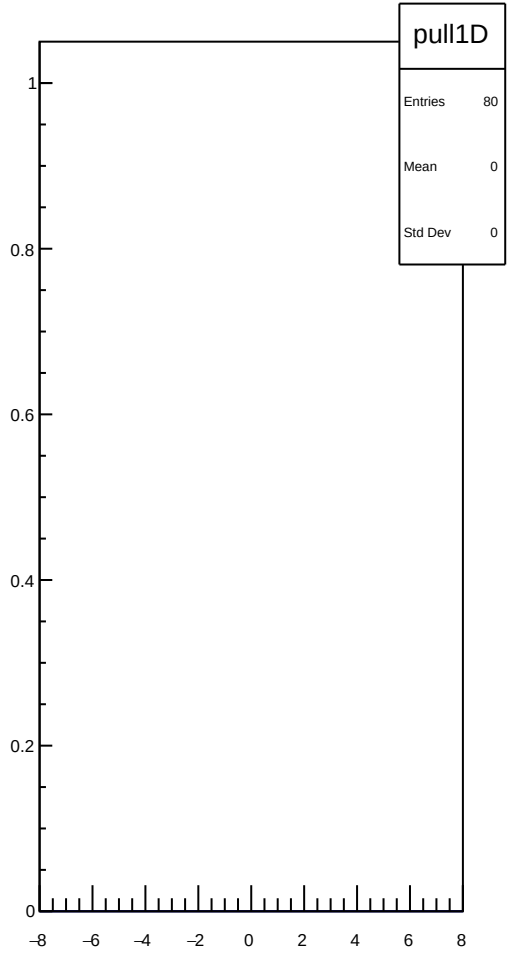

yield_bpm0l09X_rms vs run
χ² / ndf 3.957e+04 / 79
p0 0.01061 ± 8.505e–06
0.03
0.025
0.02
0.015
0.01

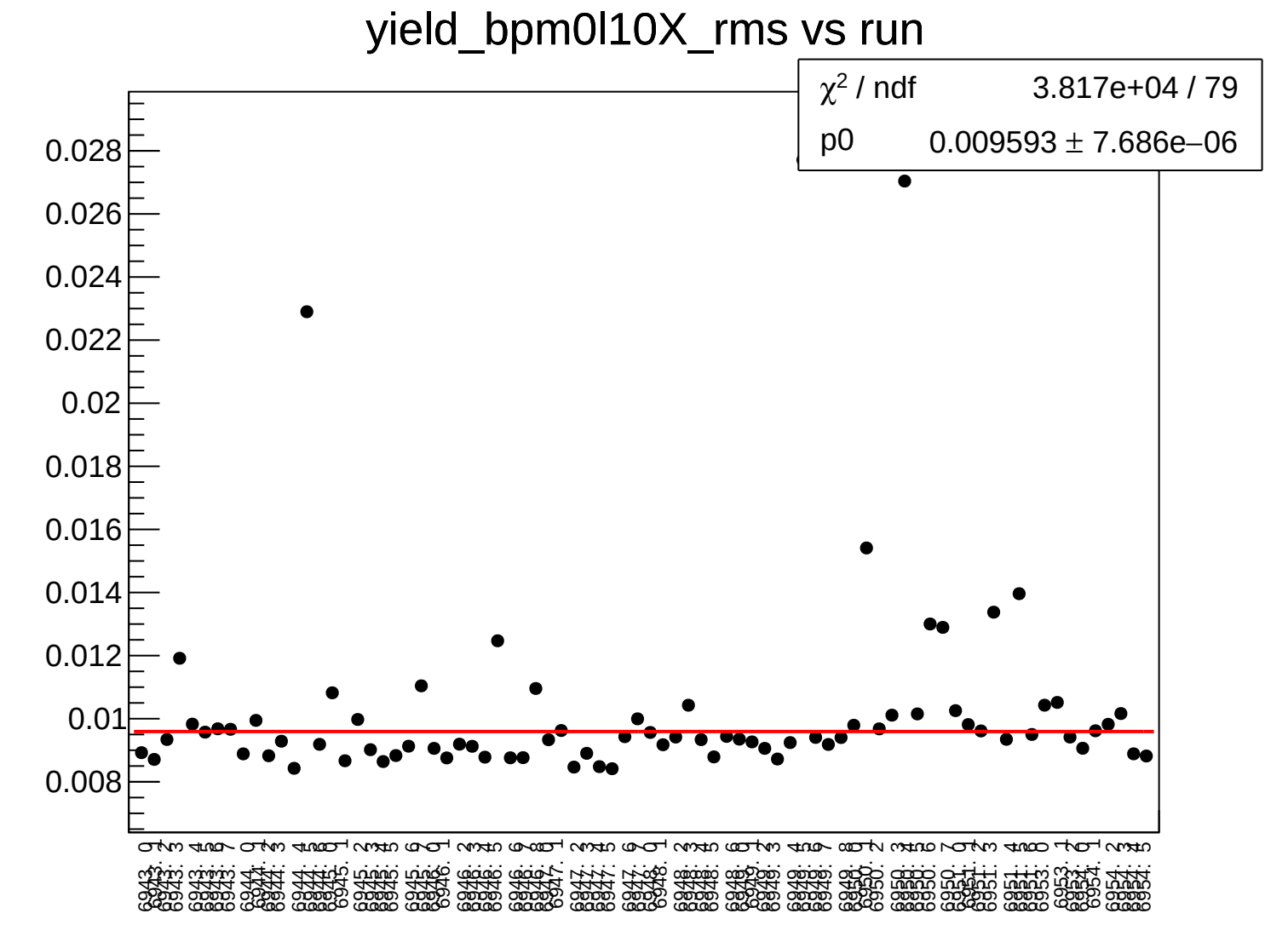

yield_bpm0l09Y_mean vs run
χ² / ndf 1.387e+07 / 79
p0 −0.1166 ± 3.228e−06
pull
Entries 80
Mean −811
Std Dev 857.8

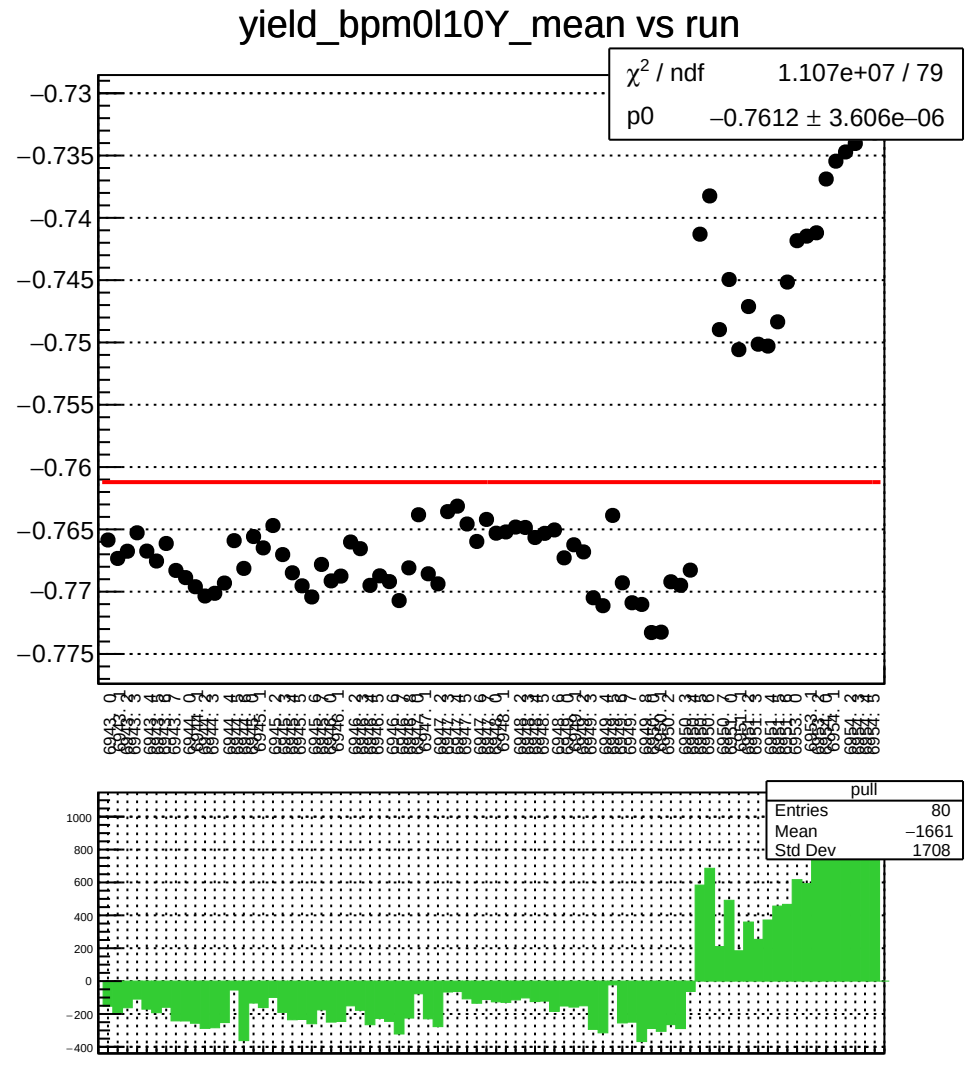

pull1D
Entries 80
Mean 0
Std Dev 0

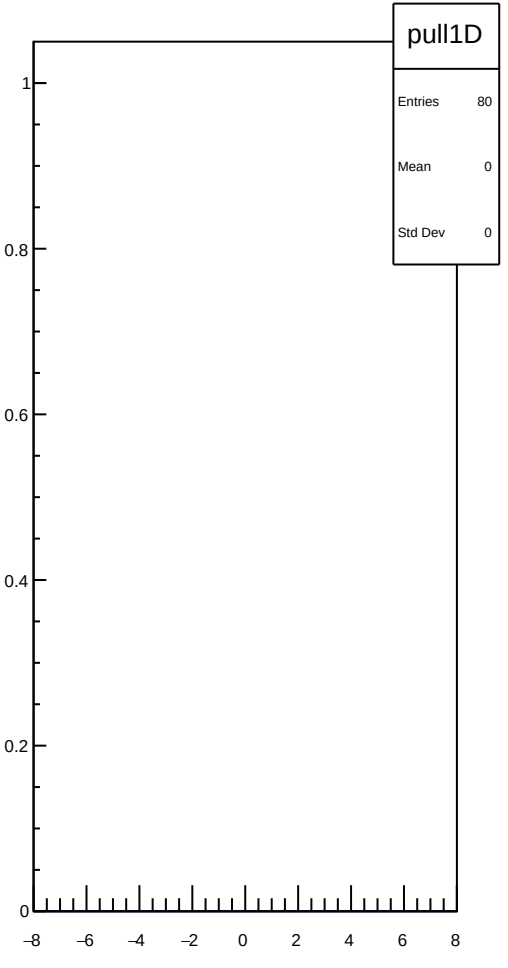

yield_bpm0l09Y_rms vs run
χ² / ndf 5.335e+04 / 79
p0 0.002835 ± 2.283e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002


yield_bpm0l10X_mean vs run
χ² / ndf 2.209e+07 / 79
p0 −1.51 ± 1.087e−05
−1.45
−1.5
−1.55
−1.6
−1.65
pull
Entries 80
Mean 1078
Std Dev 1030
500
0
−500
−1000
−1500

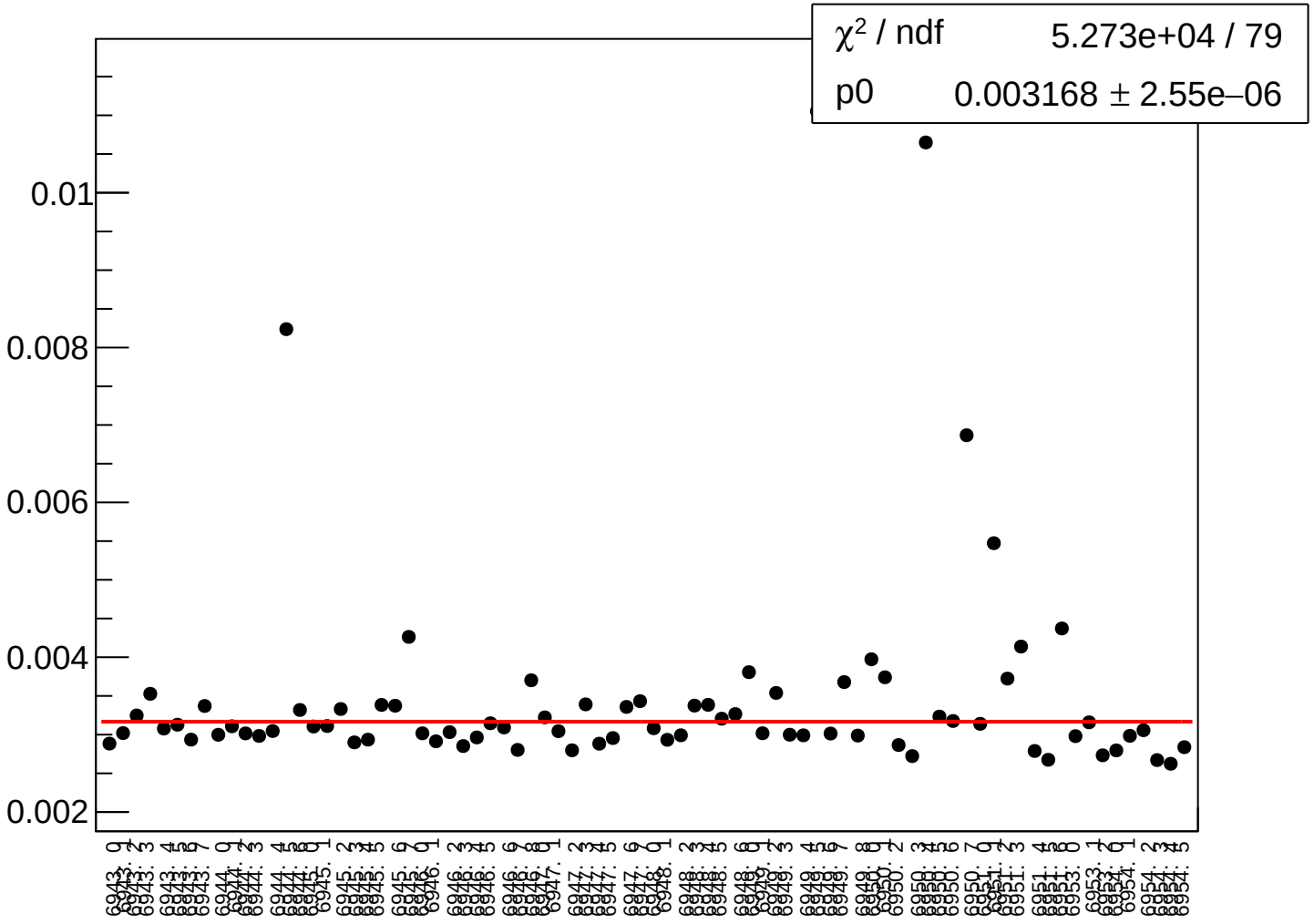

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

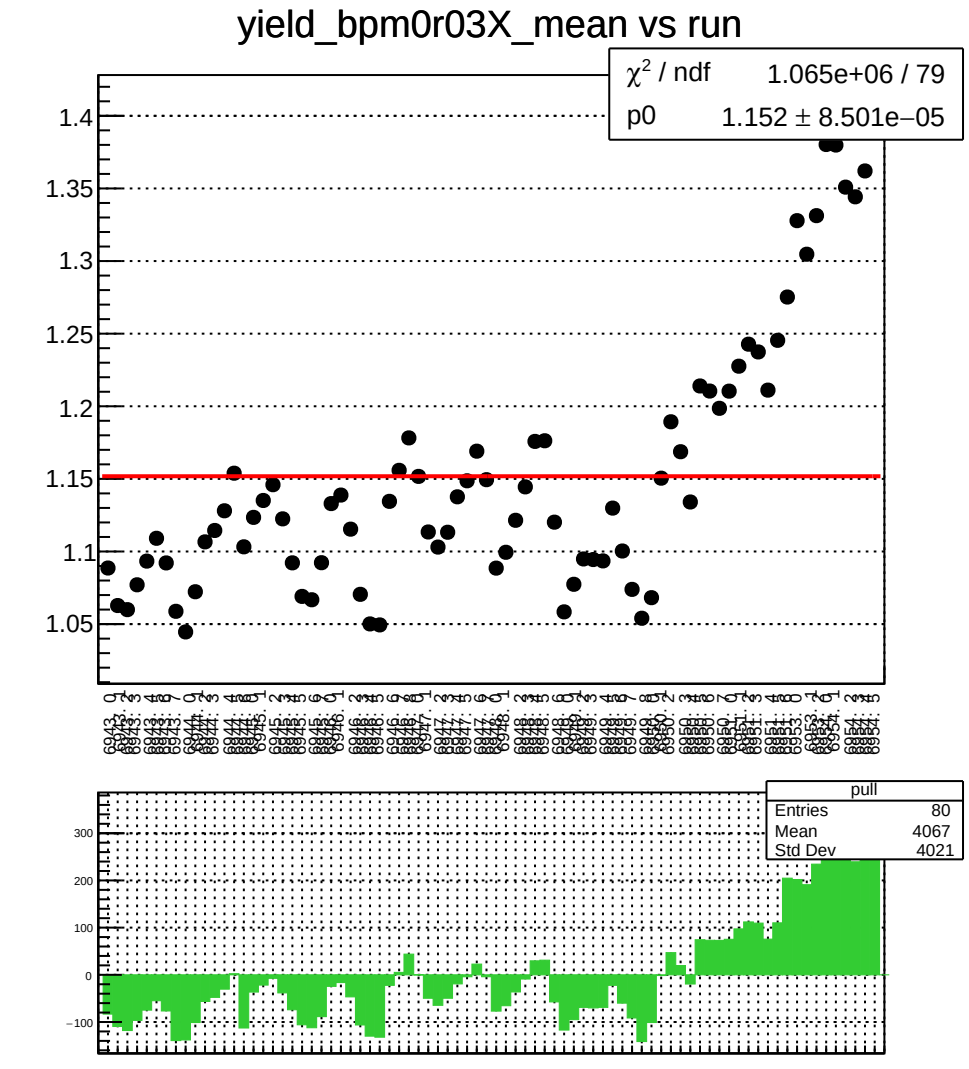

yield_bpm0l10X_rms vs run
χ² / ndf 3.817e+04 / 79
p0 0.009593 ± 7.686e−06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

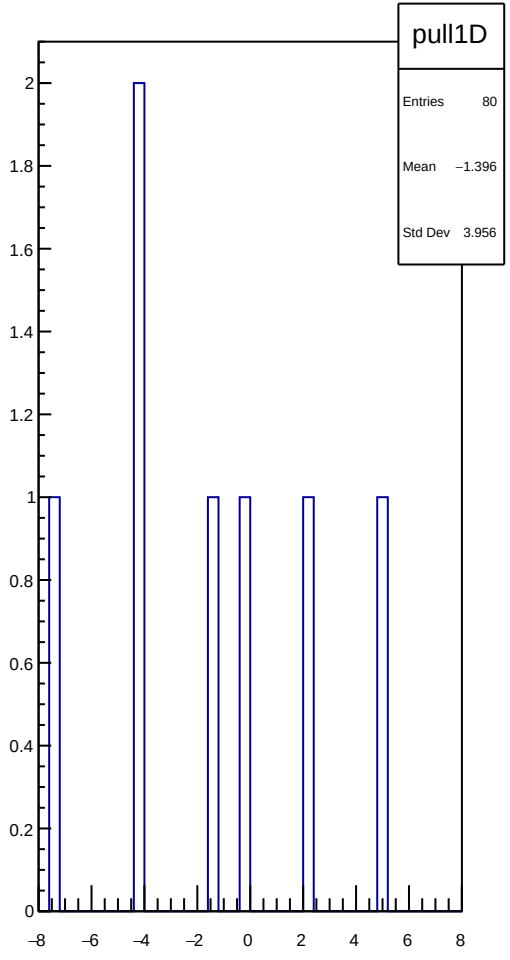

yield_bpm0l10Y_mean vs run
χ² / ndf 1.107e+07 / 79
p0 −0.7612 ± 3.606e−06
−0.73
−0.735
−0.74
−0.745
−0.75
−0.755
−0.76
−0.765
−0.77
−0.775
pull
Entries 80
Mean −1661
Std Dev 1708
1000
800
600
400
200
0
−200
−400

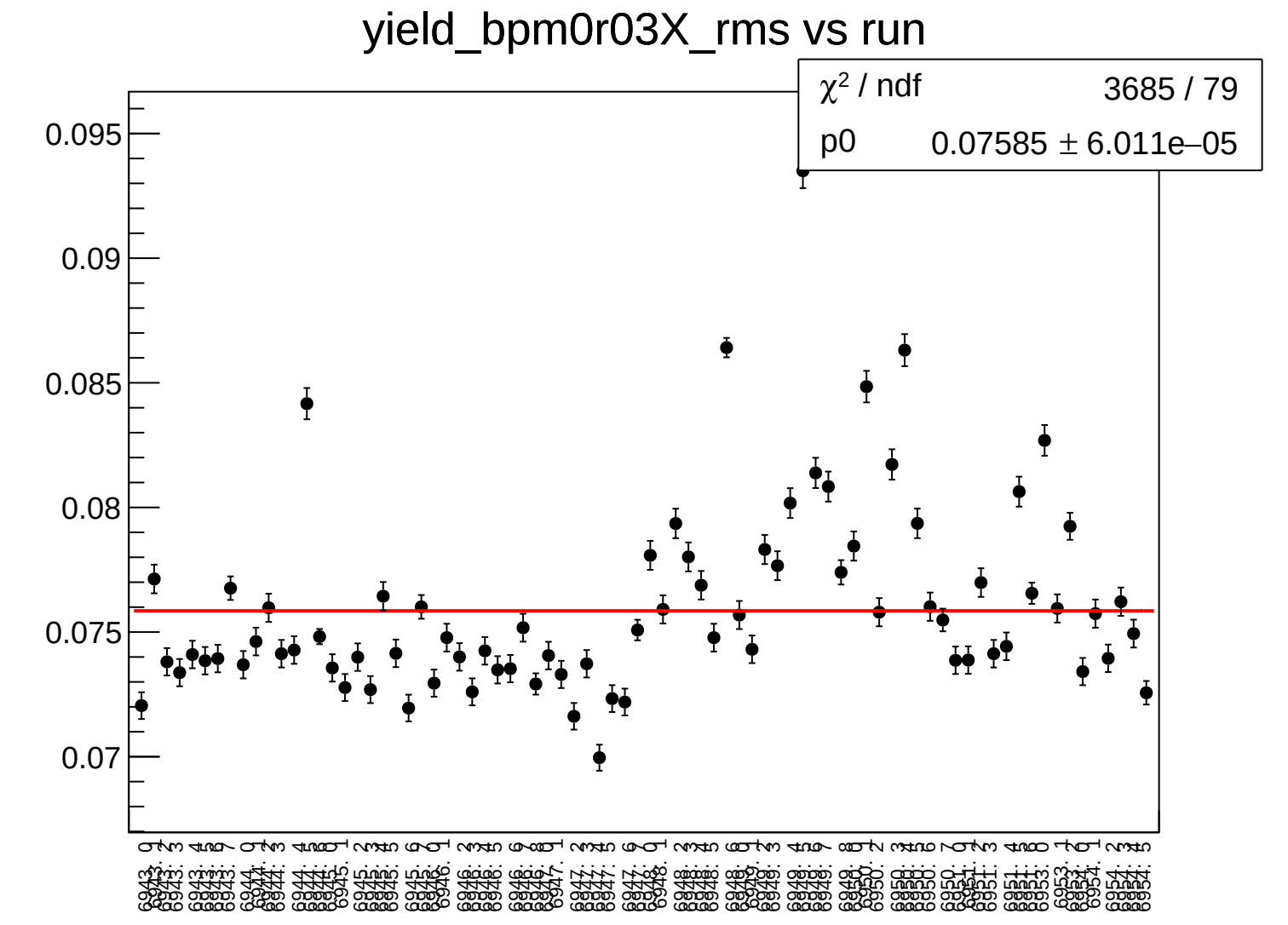

pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

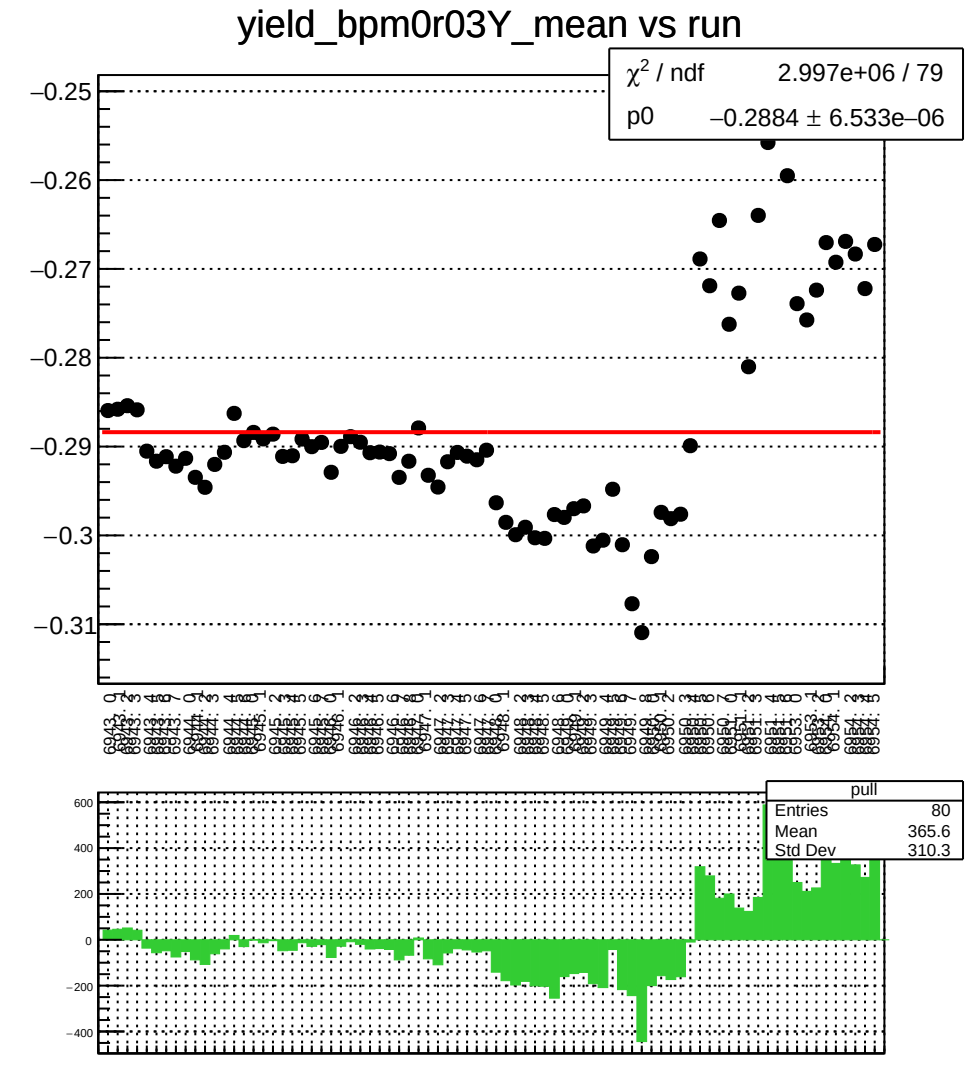
yield_bpm0l10Y_rms vs run

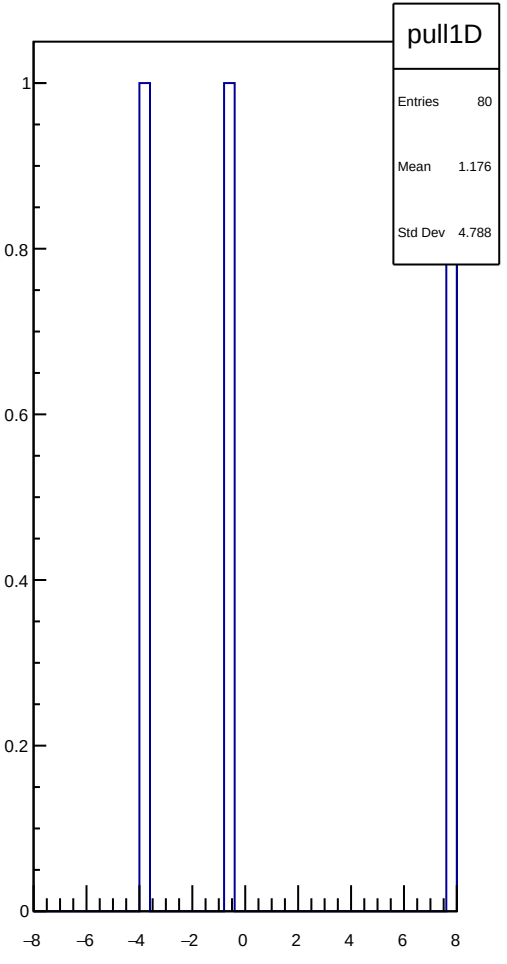


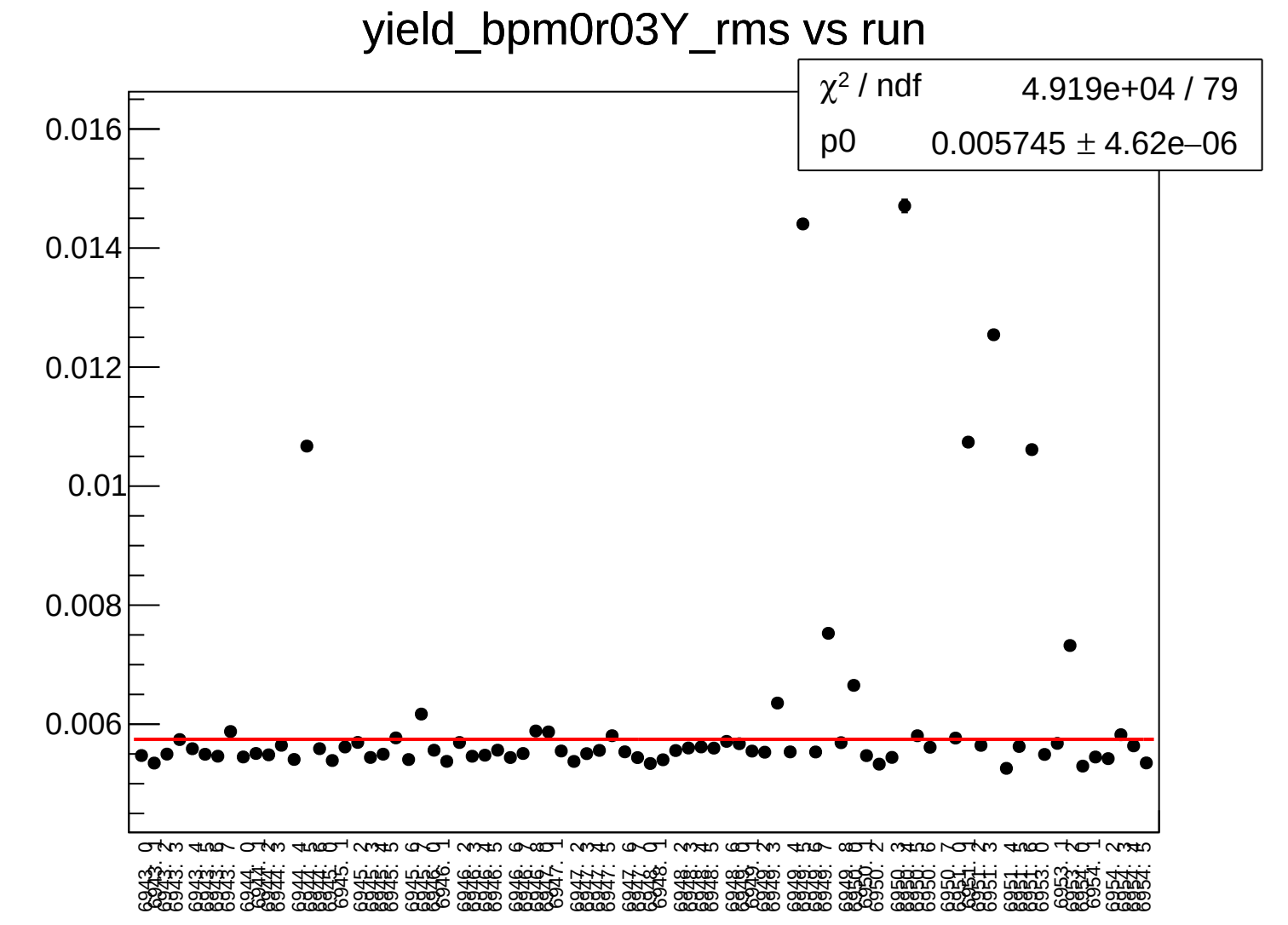

yield_bpm0r03X_mean vs run
χ² / ndf 1.065e+06 / 79
p0 1.152 ± 8.501e−05
pull
Entries 80
Mean 4067
Std Dev 4021

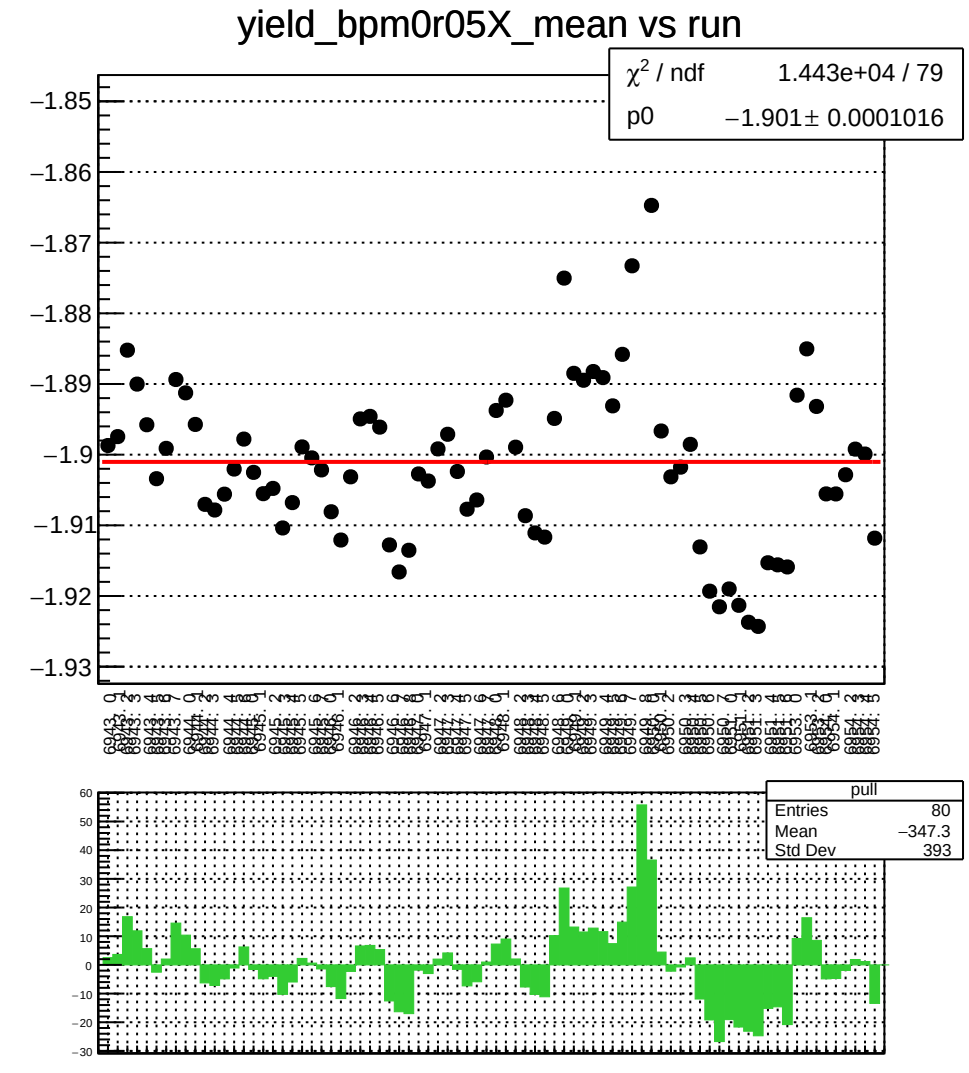

pull1D
Entries 80
Mean −1.396
Std Dev 3.956

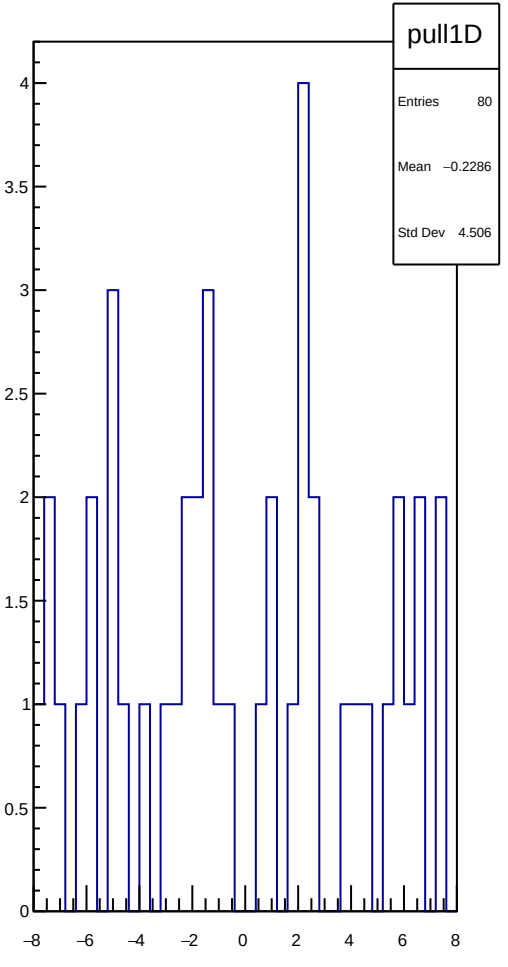

yield_bpm0r03X_rms vs run
χ² / ndf 3685 / 79
p0 0.07585 ± 6.011e–05
0.095
0.09
0.085
0.08
0.075
0.07

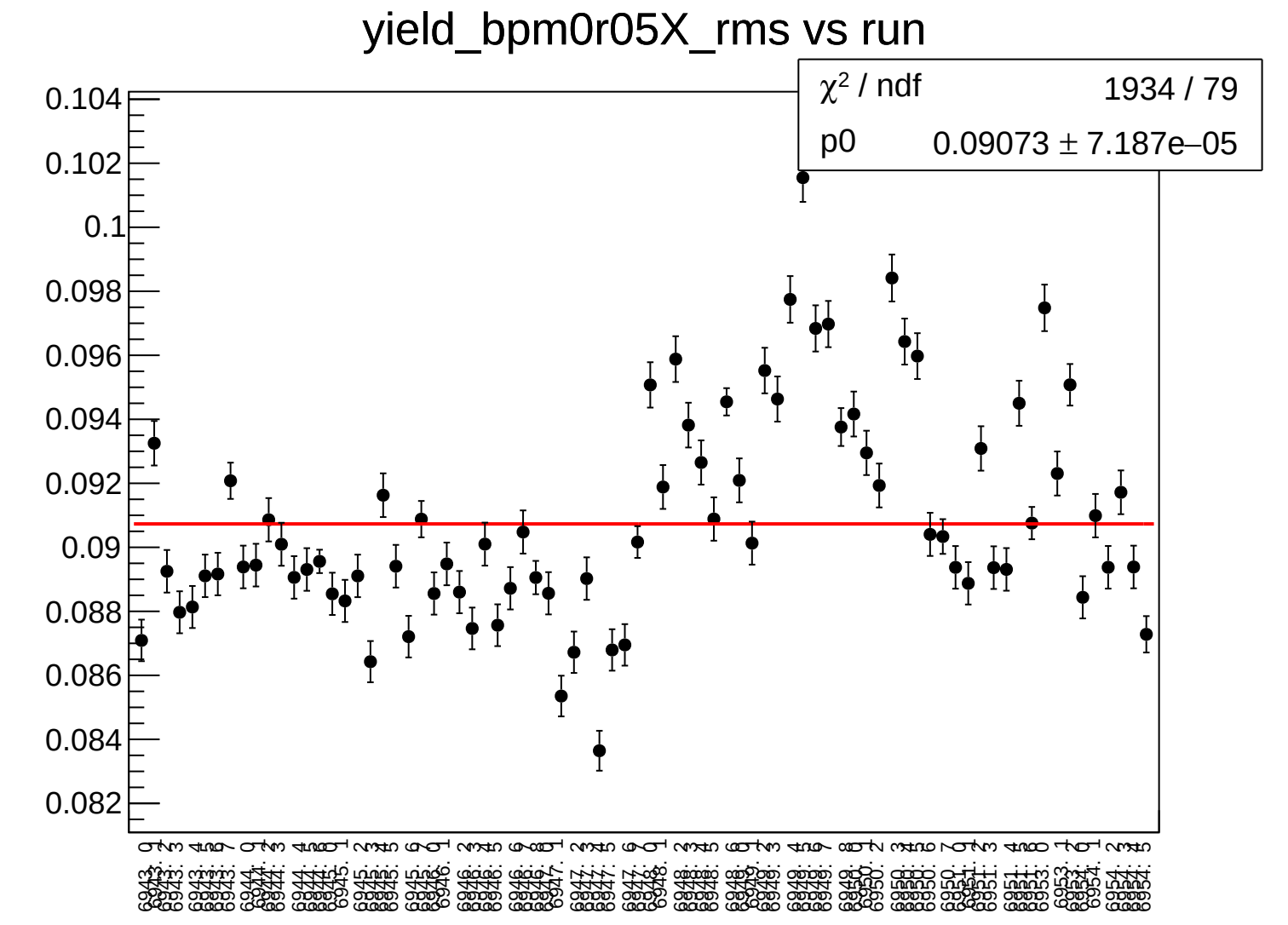

yield_bpm0r03Y_mean vs run
χ² / ndf 2.997e+06 / 79
p0 −0.2884 ± 6.533e−06
−0.25
−0.26
−0.27
−0.28
−0.29
−0.3
−0.31
pull
Entries 80
Mean 365.6
Std Dev 310.3
600
400
200
0
−200
−400

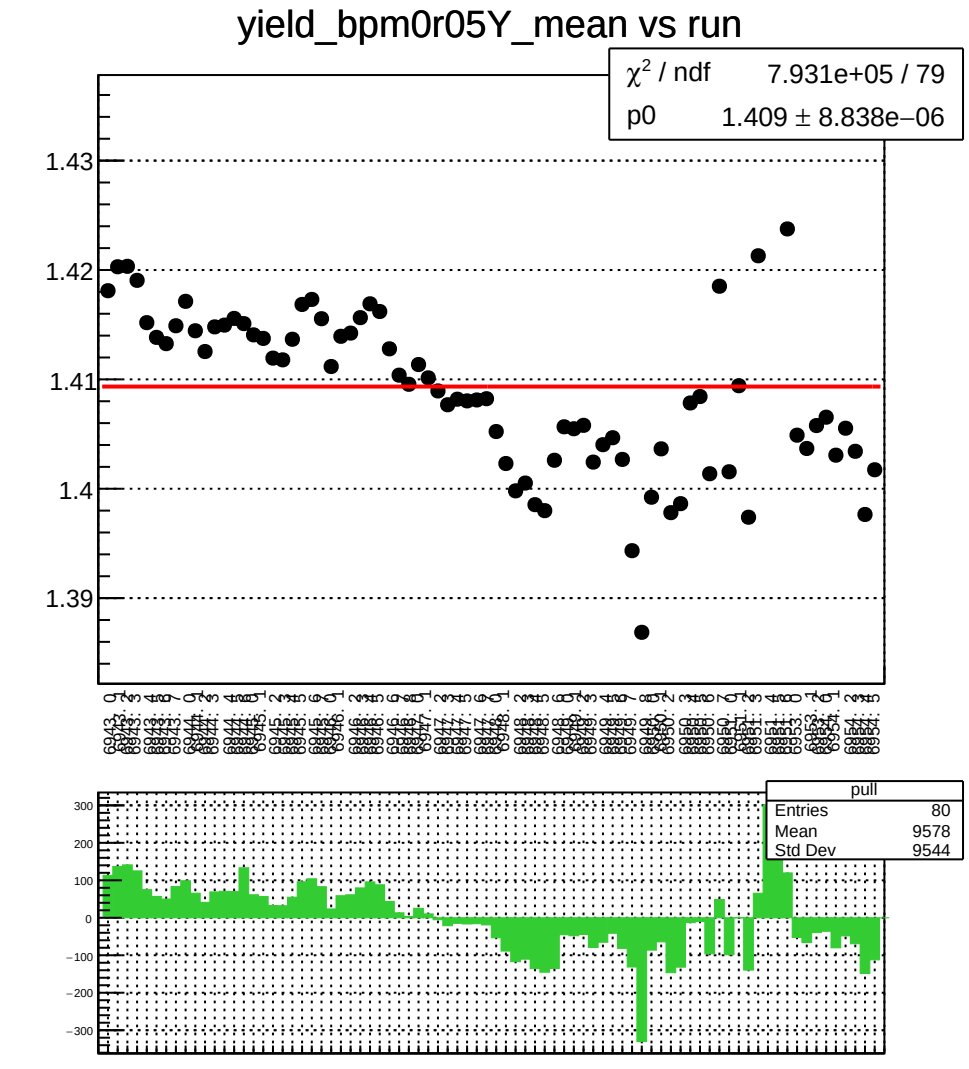

pull1D
Entries 80
Mean 1.176
Std Dev 4.788
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

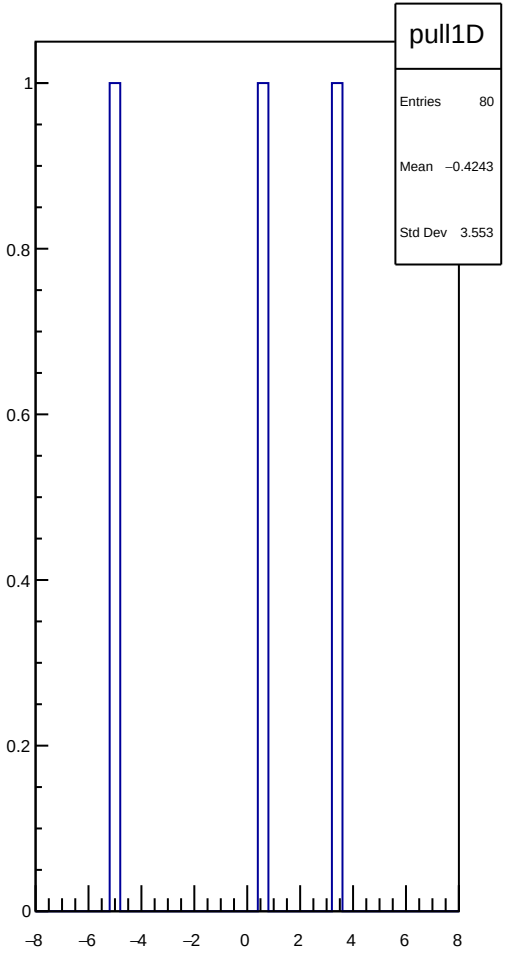

yield_bpm0r03Y_rms vs run
χ² / ndf 4.919e+04 / 79
p0 0.005745 ± 4.62e–06
0.016
0.014
0.012
0.01
0.008
0.006

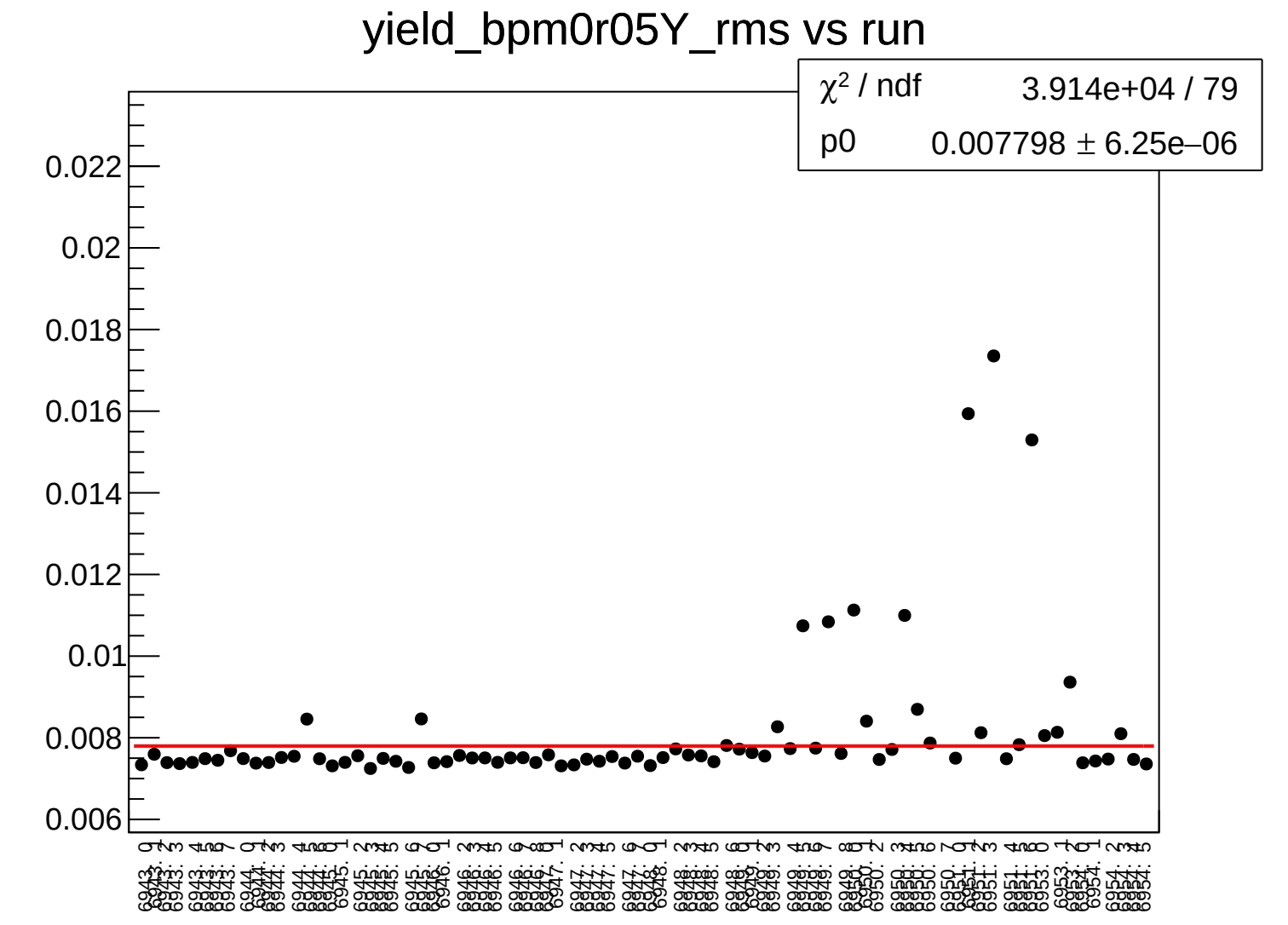

yield_bpm0r05X_mean vs run
χ² / ndf 1.443e+04 / 79
p0 −1.901 ± 0.0001016
−1.85
−1.86
−1.87
−1.88
−1.89
−1.9
−1.91
−1.92
−1.93
pull
Entries 80
Mean −347.3
Std Dev 393
60
50
40
30
20
10
0
−10
−20
−30

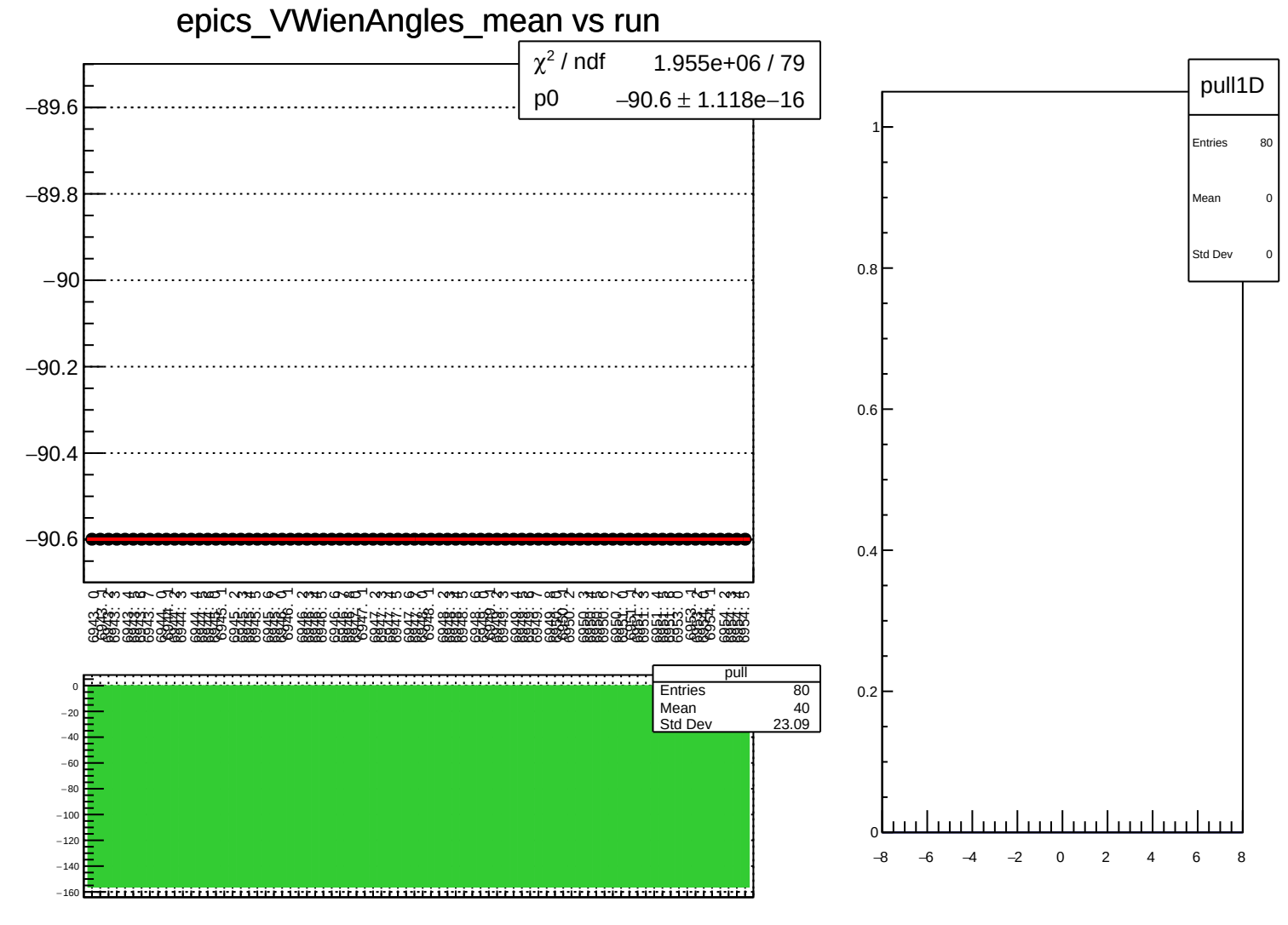

pull1D
Entries 80
Mean −0.2286
Std Dev 4.506
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

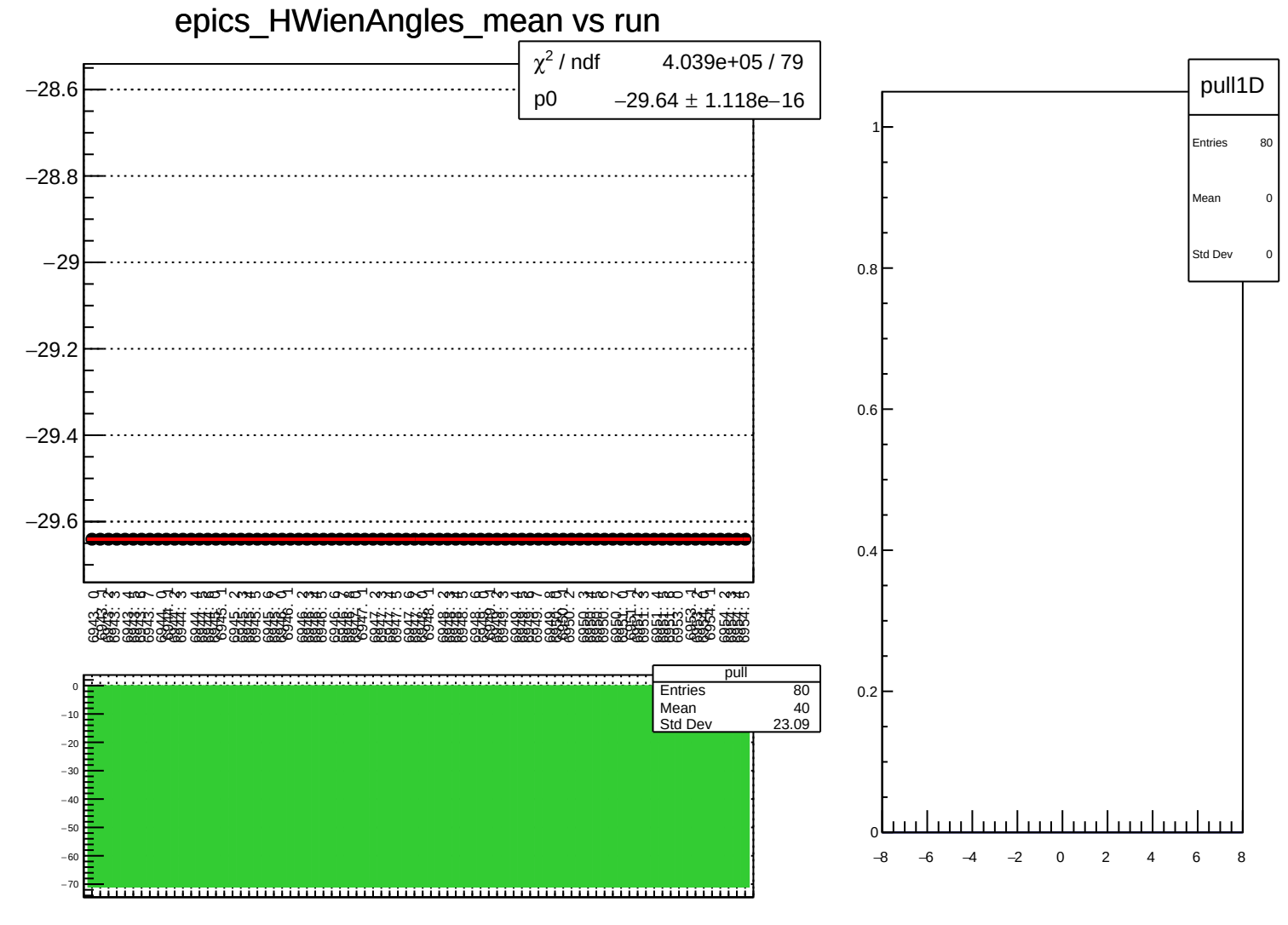

yield_bpm0r05X_rms vs run
χ² / ndf 1934 / 79
p0 0.09073 ± 7.187e–05
0.104
0.102
0.1
0.098
0.096
0.094
0.092
0.09
0.088
0.086
0.084
0.082

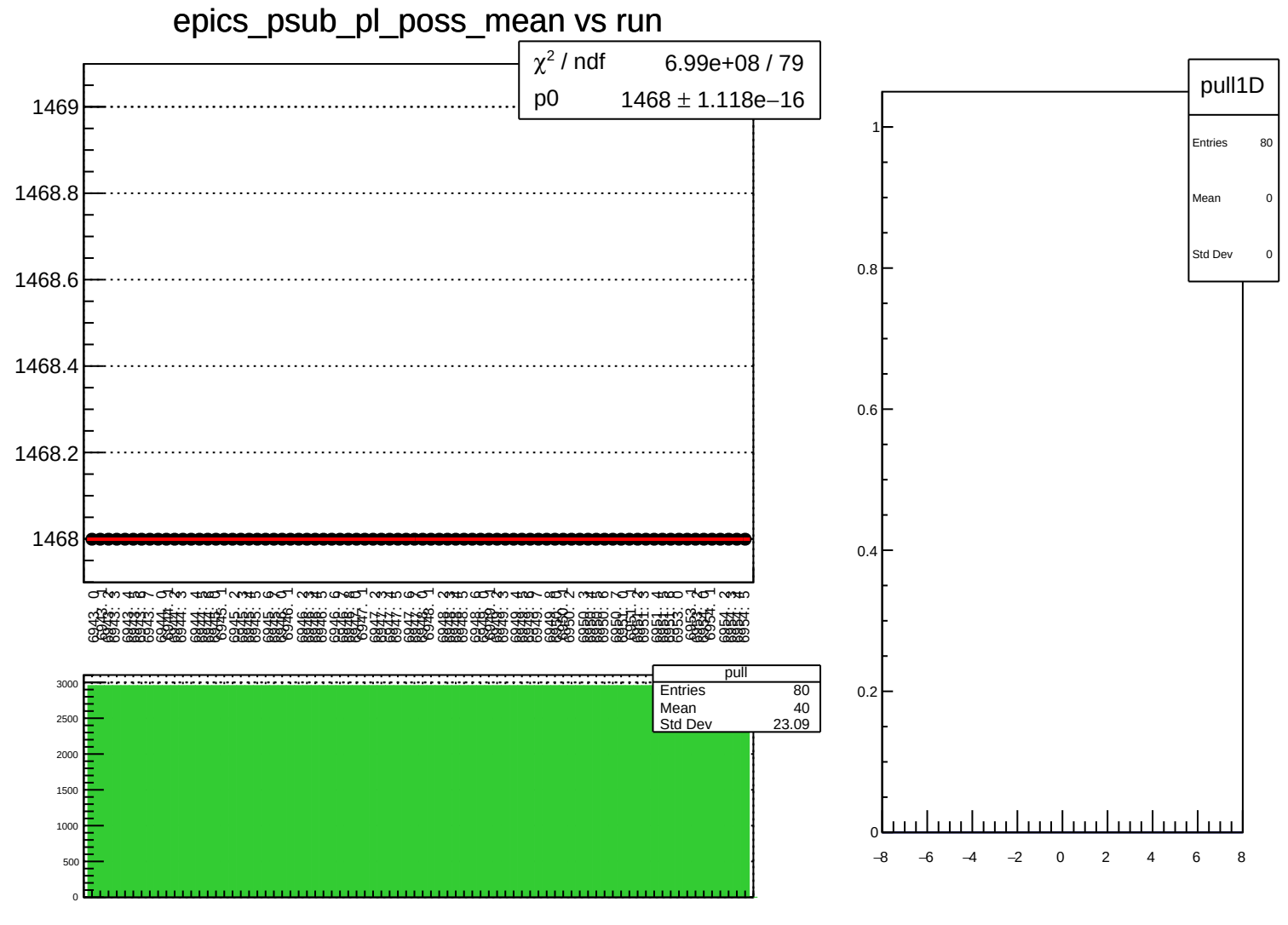

yield_bpm0r05Y_mean vs run
χ² / ndf 7.931e+05 / 79
p0 1.409 ± 8.838e−06
1.43
1.42
1.41
1.4
1.39
pull
Entries 80
Mean 9578
Std Dev 9544
300
200
100
0
−100
−200
−300

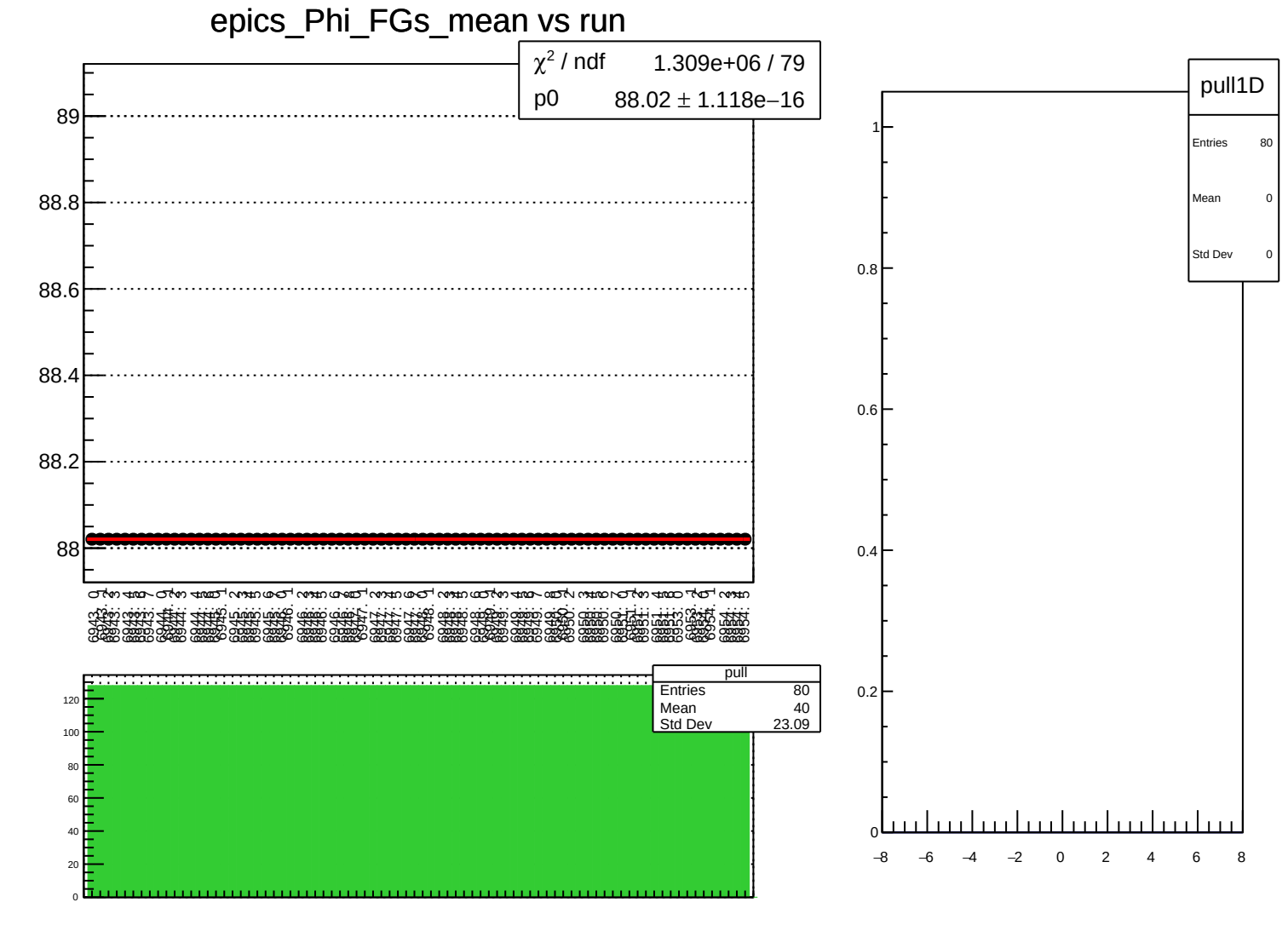

pull1D
Entries 80
Mean −0.4243
Std Dev 3.553
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

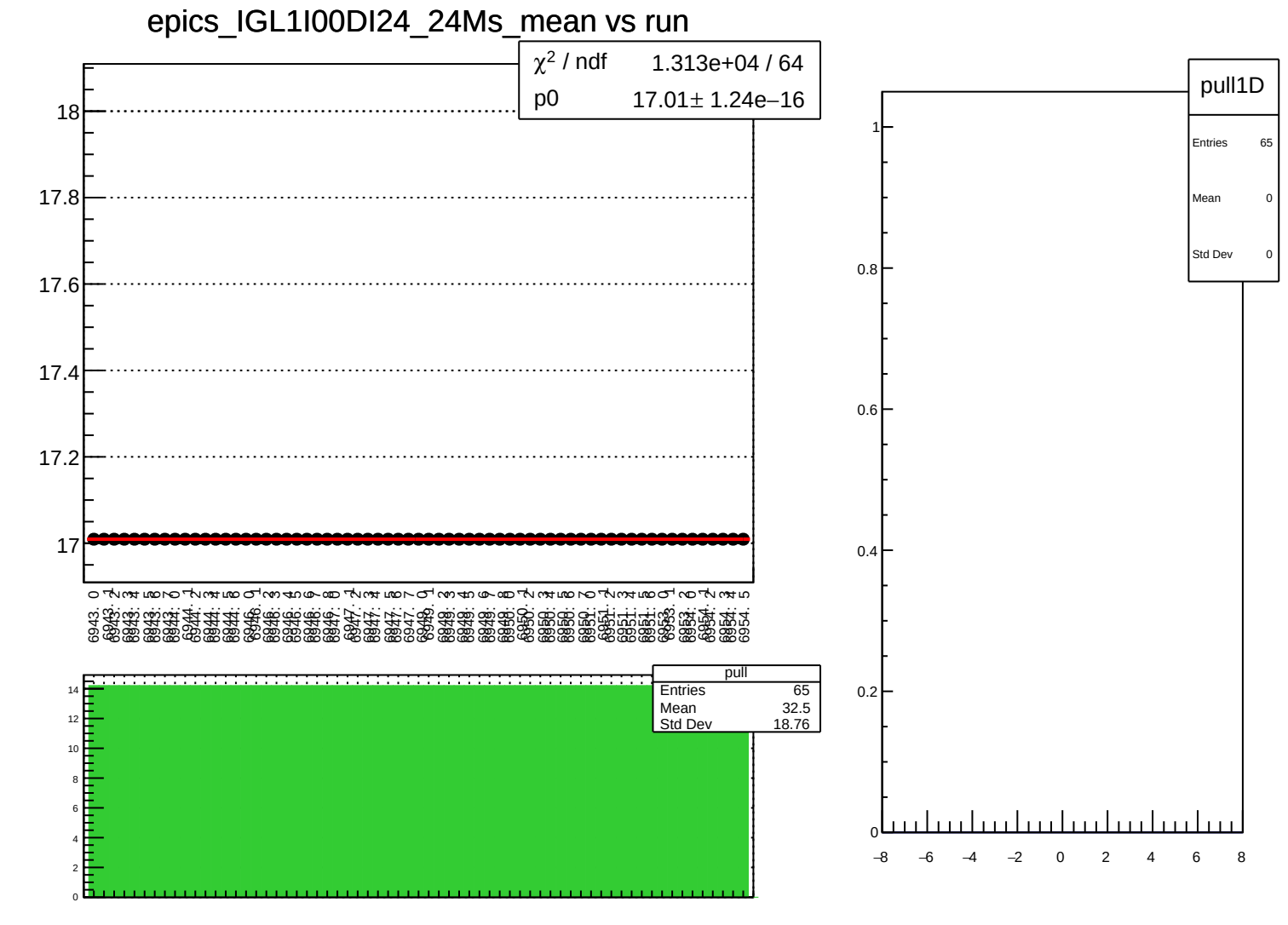

yield_bpm0r05Y_rms vs run
χ² / ndf 3.914e+04 / 79
p0 0.007798 ± 6.25e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

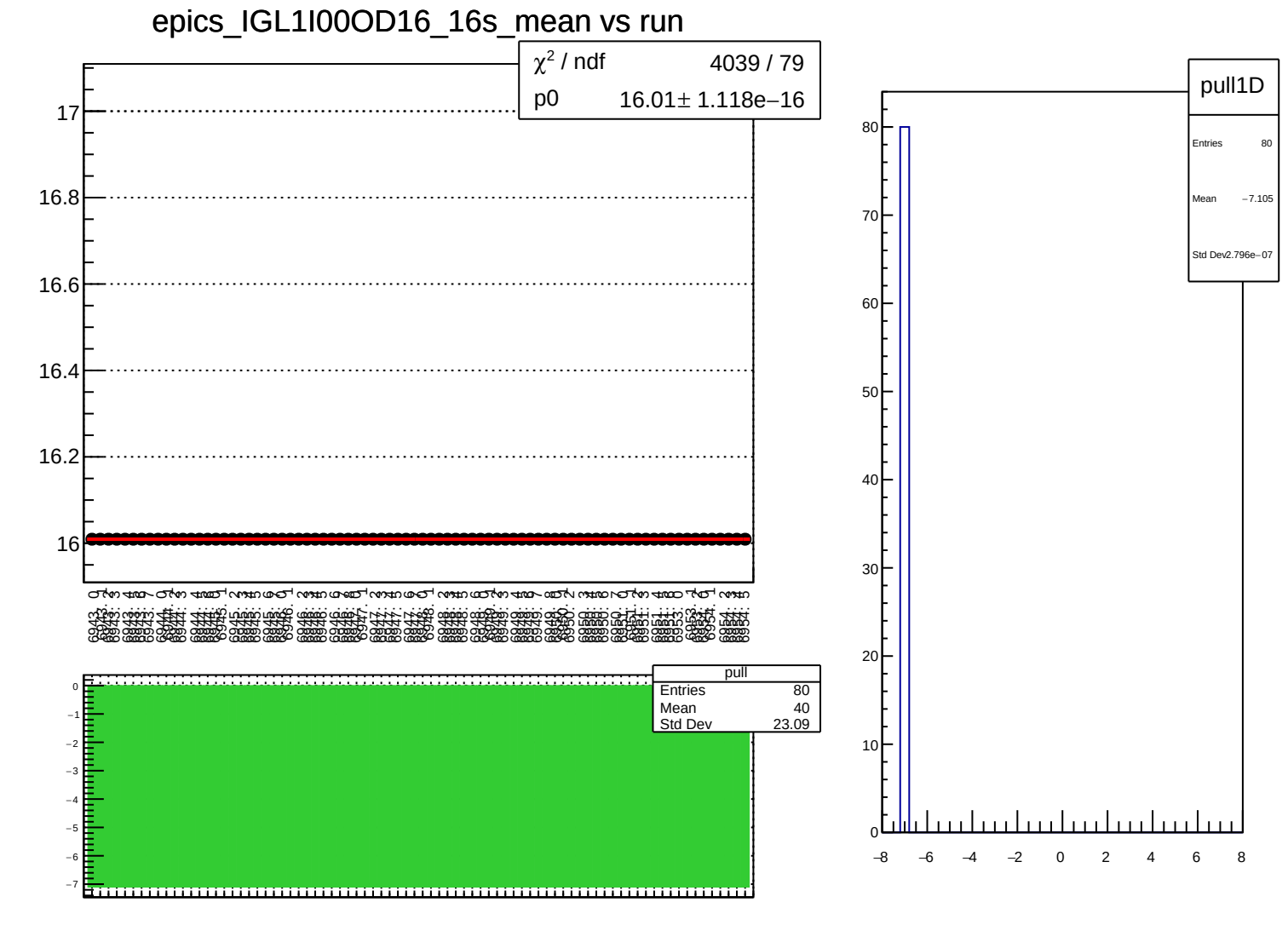

epics_VWienAngles_mean vs run
χ² / ndf 1.955e+06 / 79
p0 −90.6 ± 1.118e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 80
Mean 40
Std Dev 23.09
0
−20
−40
−60
−80
−100
−120
−140
−160
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

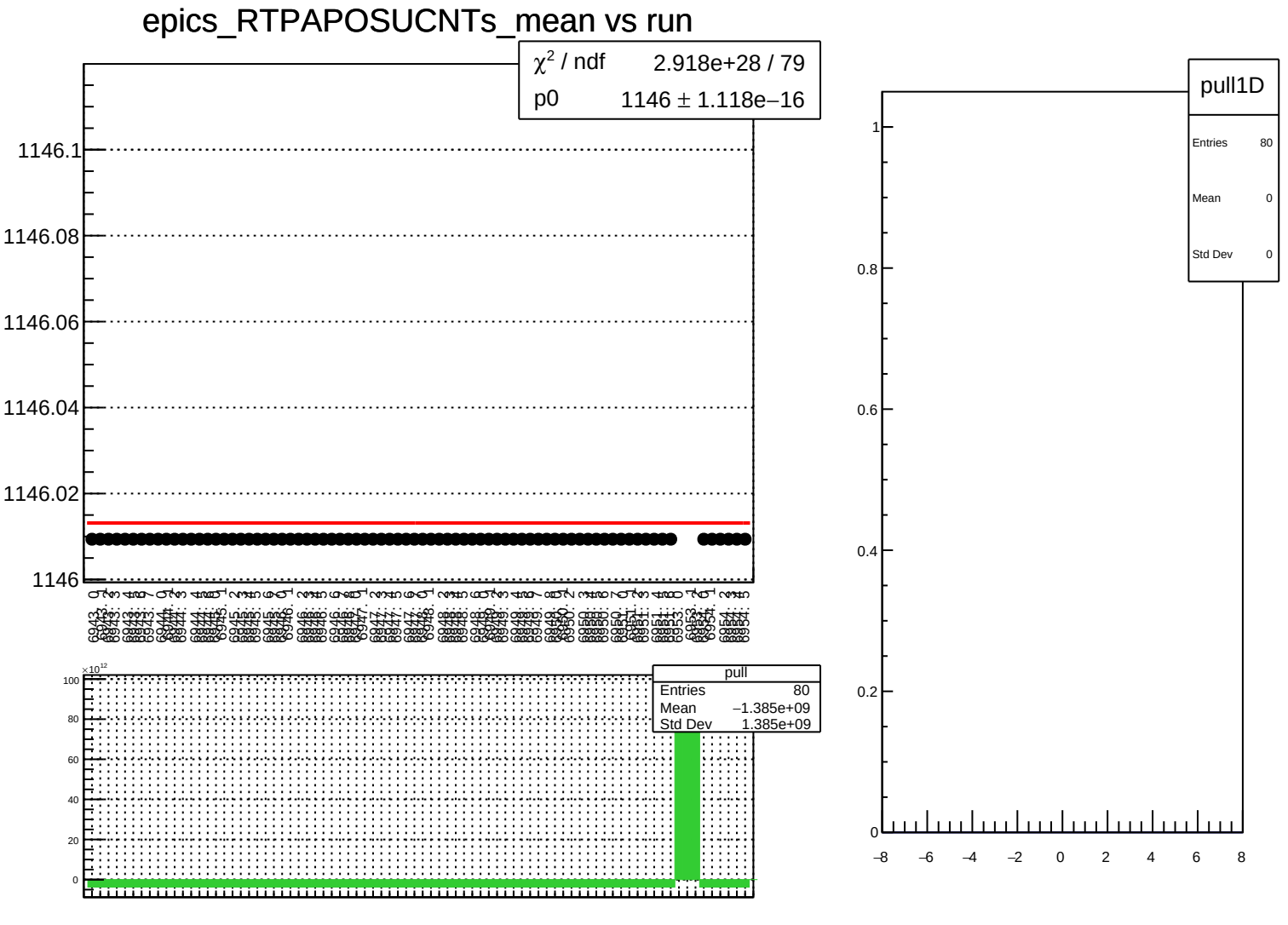

epics_HWienAngles_mean vs run
χ² / ndf 4.039e+05 / 79
p0 −29.64 ± 1.118e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 80
Mean 40
Std Dev 23.09
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

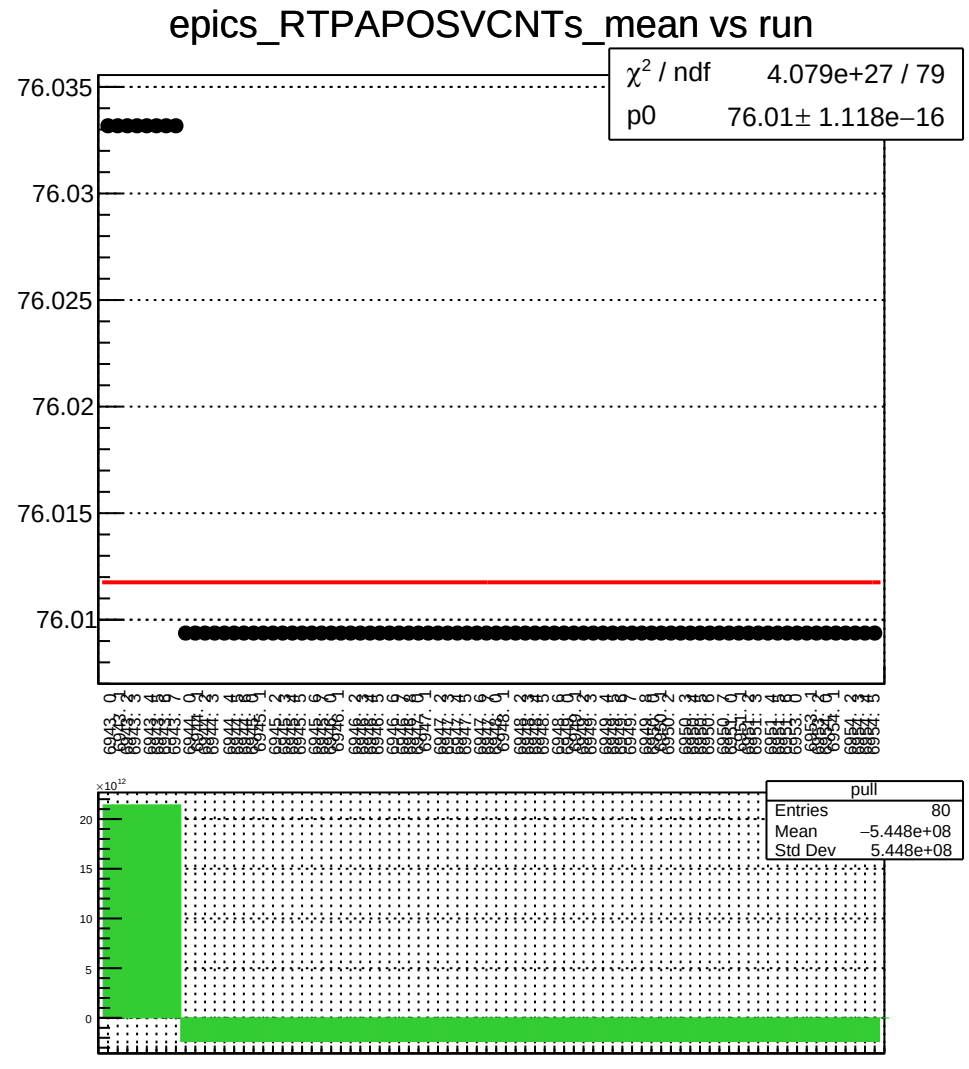

epics_psub_pl_poss_mean vs run
χ² / ndf 6.99e+08 / 79
p0 1468 ± 1.118e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 80
Mean 40
Std Dev 23.09
3000
2500
2000
1500
1000
500
0
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

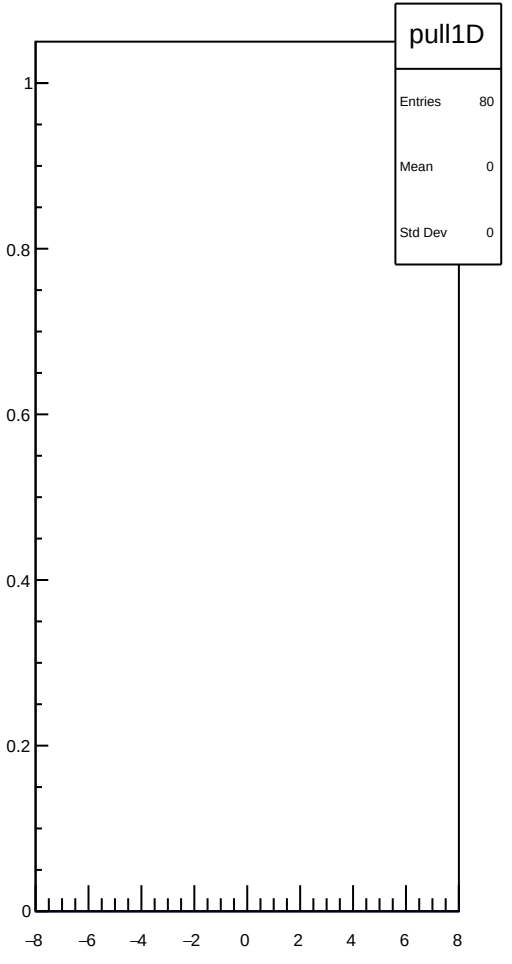

epics_Phi_FGs_mean vs run
χ² / ndf 1.309e+06 / 79
p0 88.02 ± 1.118e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 80
Mean 40
Std Dev 23.09
120
100
80
60
40
20
0
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 1.313e+04 / 64
p0 17.01± 1.24e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 65
Mean 32.5
Std Dev 18.76
14
12
10
8
6
4
2
0
pull1D
Entries 65
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 4039 / 79
p0 16.01± 1.118e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 80
Mean 40
Std Dev 23.09
0
−1
−2
−3
−4
−5
−6
−7
pull1D
Entries 80
Mean −7.105
Std Dev2.796e−07
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 2.918e+28 / 79
p0 1146 ± 1.118e−16
1146.1
1146.08
1146.06
1146.04
1146.02
1146
pull
Entries 80
Mean −1.385e+09
Std Dev 1.385e+09
×10¹²
100
80
60
40
20
0
pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 4.079e+27 / 79
p0 76.01± 1.118e−16
76.035
76.03
76.025
76.02
76.015
76.01
pull
Entries 80
Mean −5.448e+08
Std Dev 5.448e+08
×10¹²
20
15
10
5
0


pull1D
Entries 80
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8