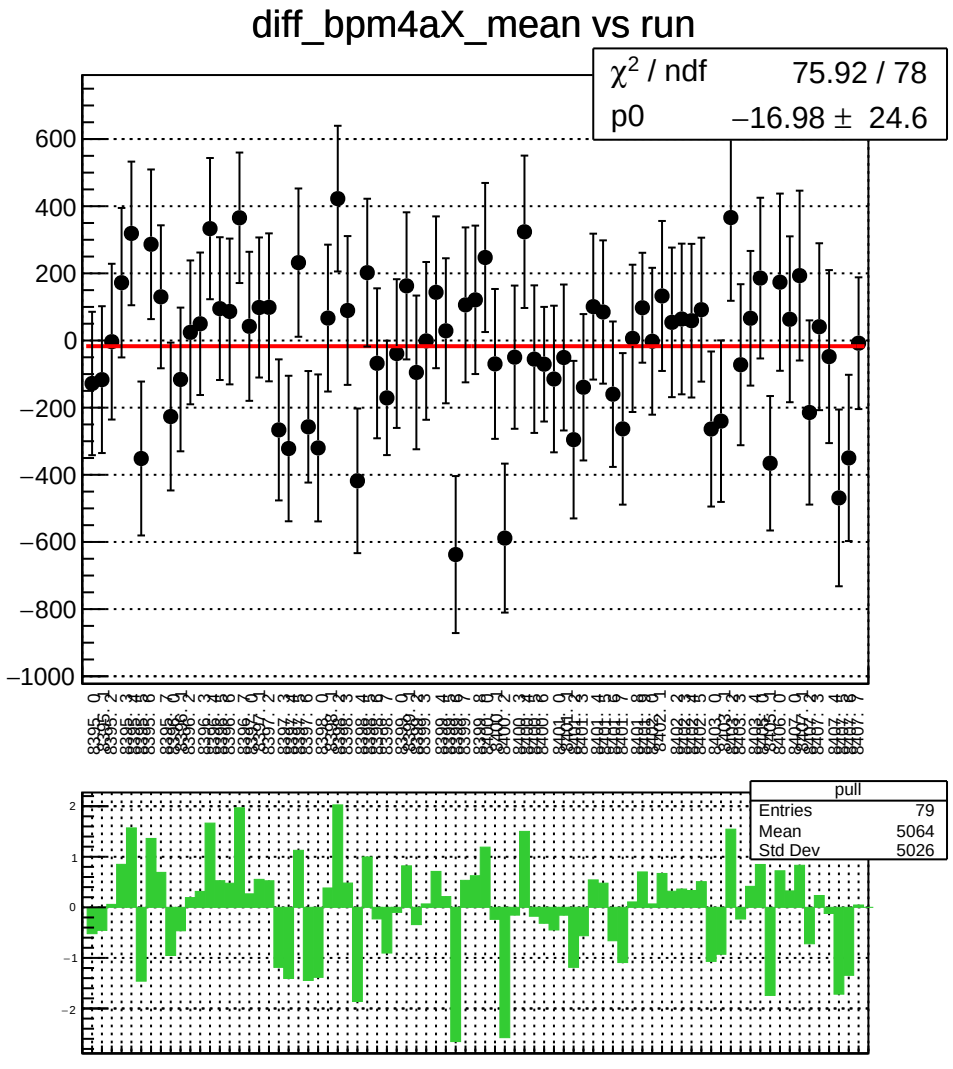
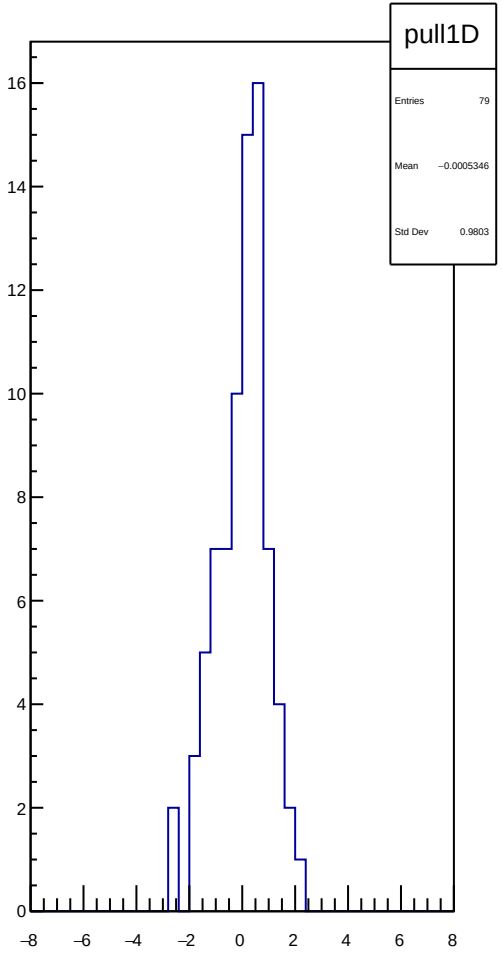
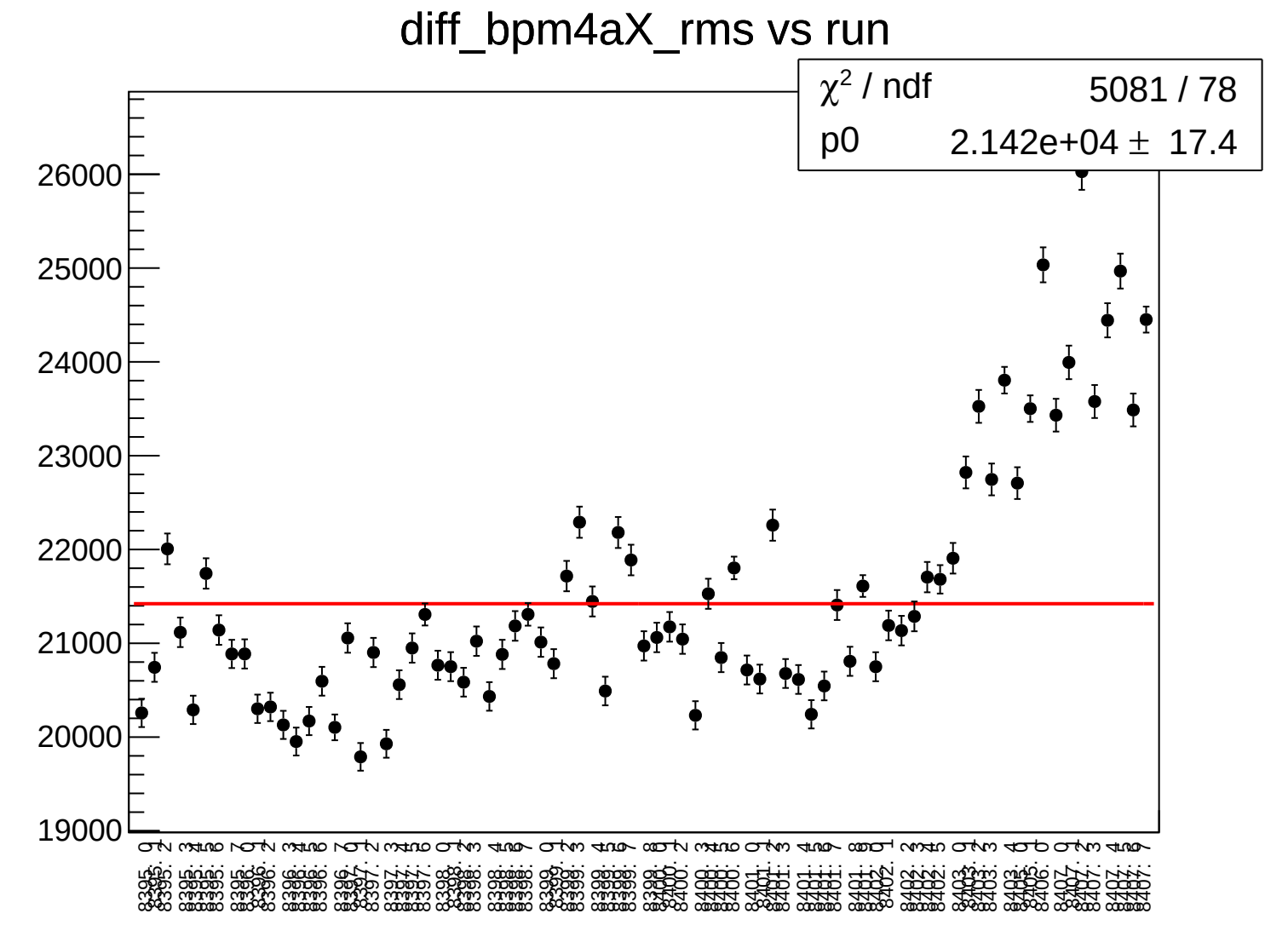
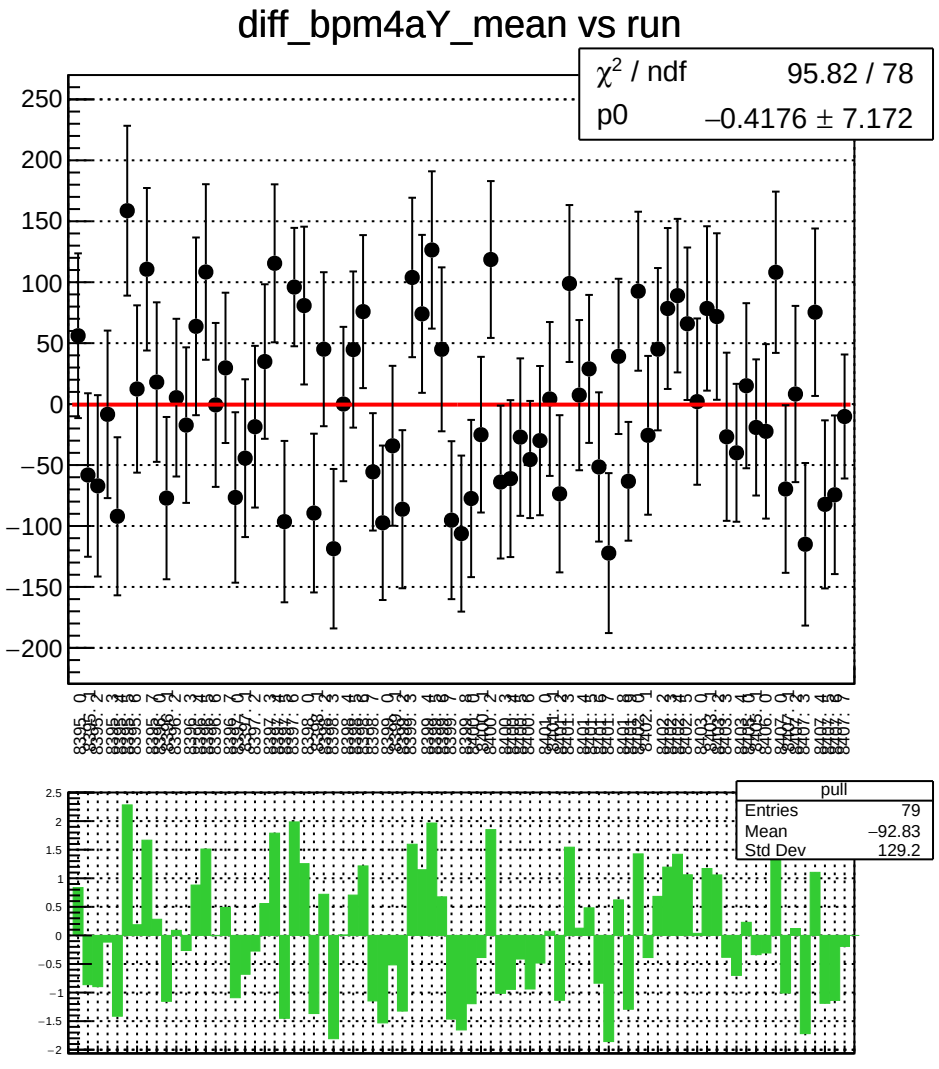
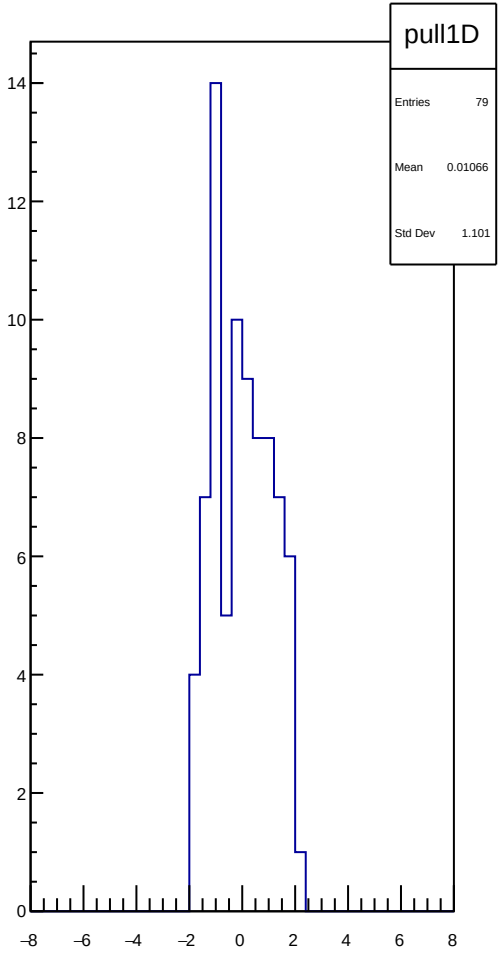
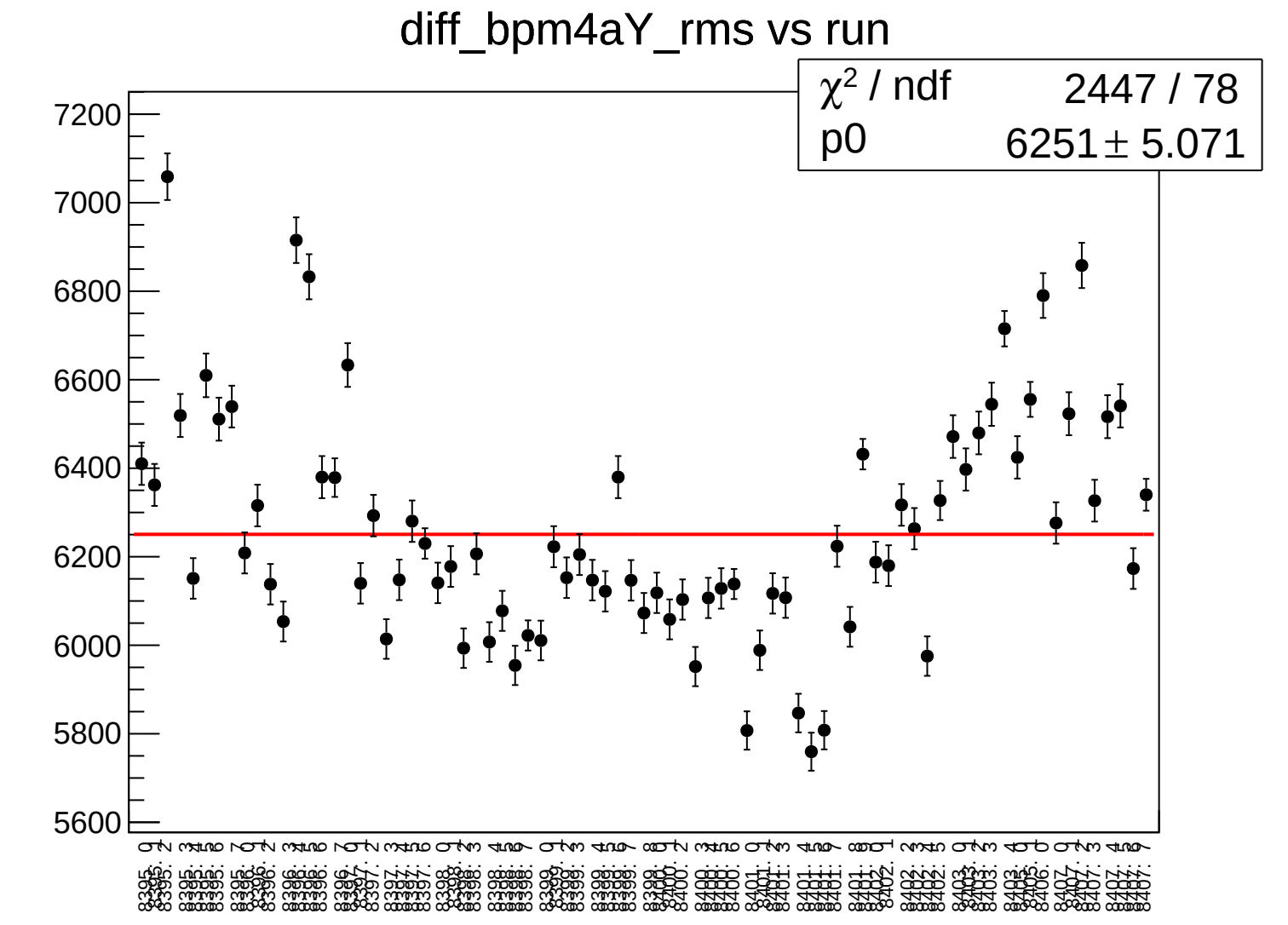

diff_bpm4aX_mean vs run
χ^2 / ndf 75.92 / 78
p0 −16.98 ± 24.6
pull
Entries 79
Mean 5064
Std Dev 5026

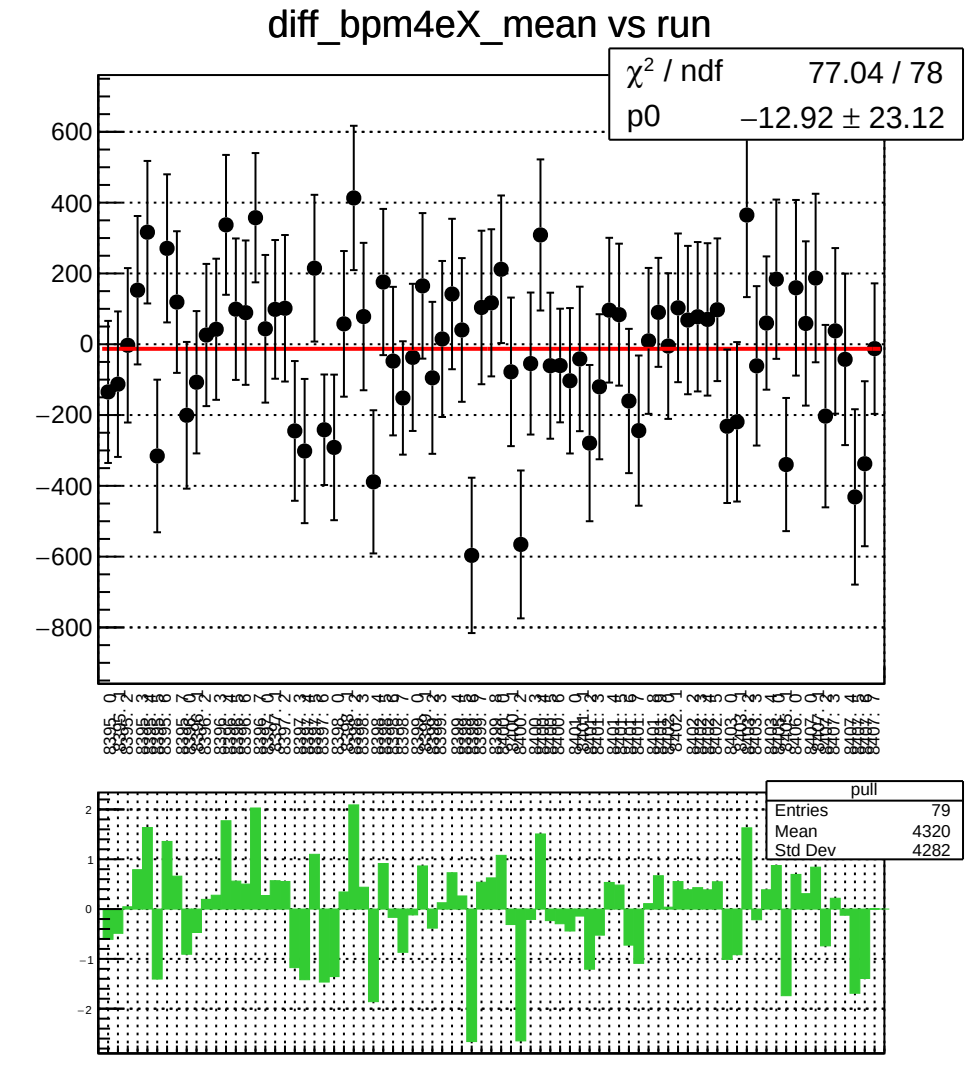

pull1D
Entries 79
Mean −0.0005346
Std Dev 0.9803

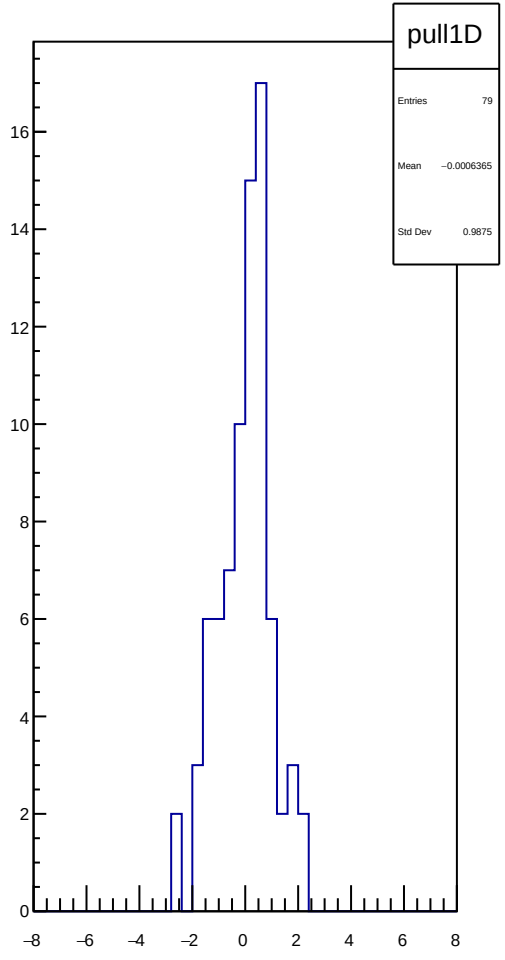

diff_bpm4aX_rms vs run
χ^2 / ndf 5081 / 78
p0 2.142e+04 ± 17.4
26000
25000
24000
23000
22000
21000
20000
19000

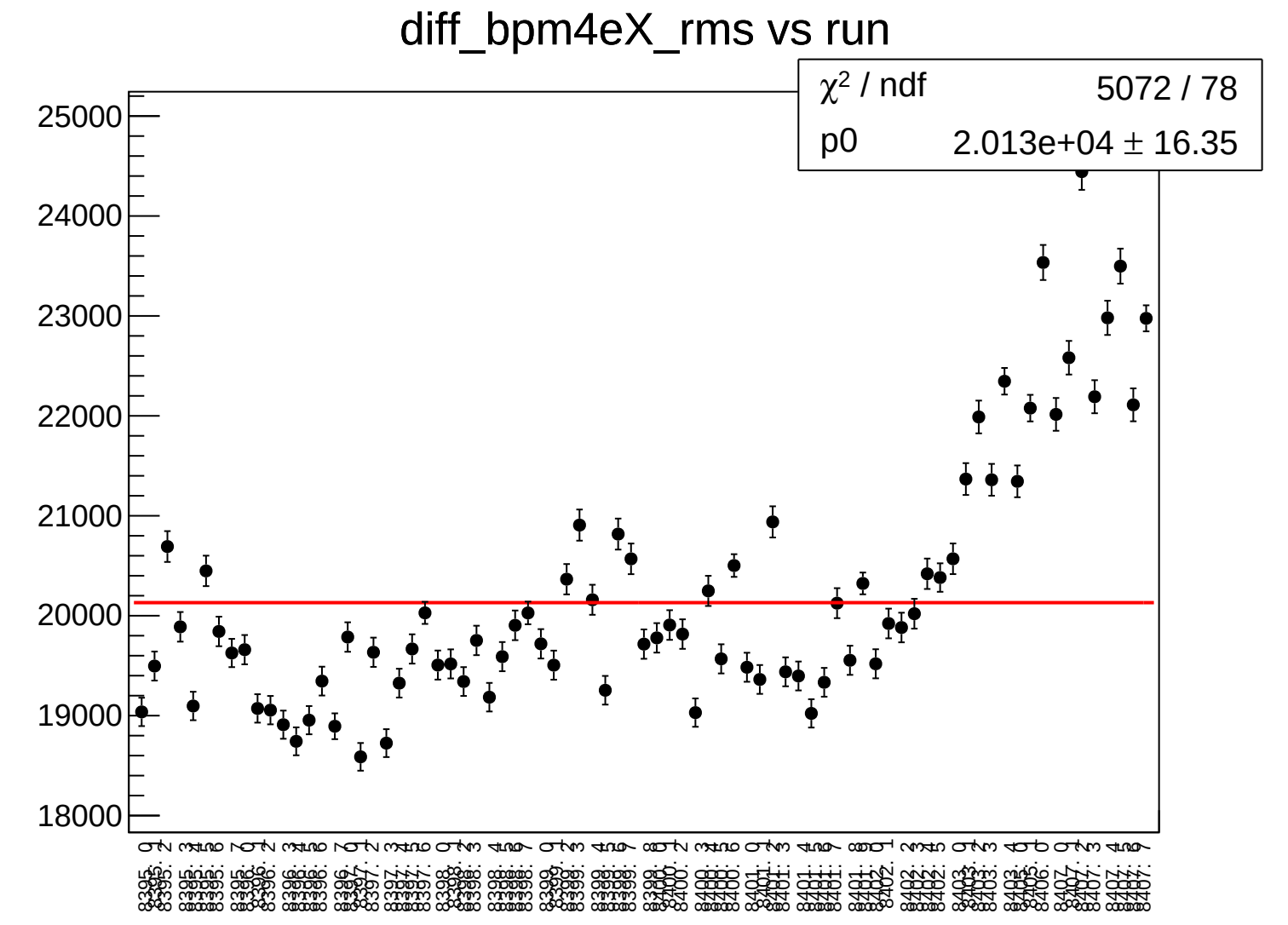

diff_bpm4aY_mean vs run
χ² / ndf 95.82 / 78
p0 −0.4176 ± 7.172
pull
Entries 79
Mean −92.83
Std Dev 129.2

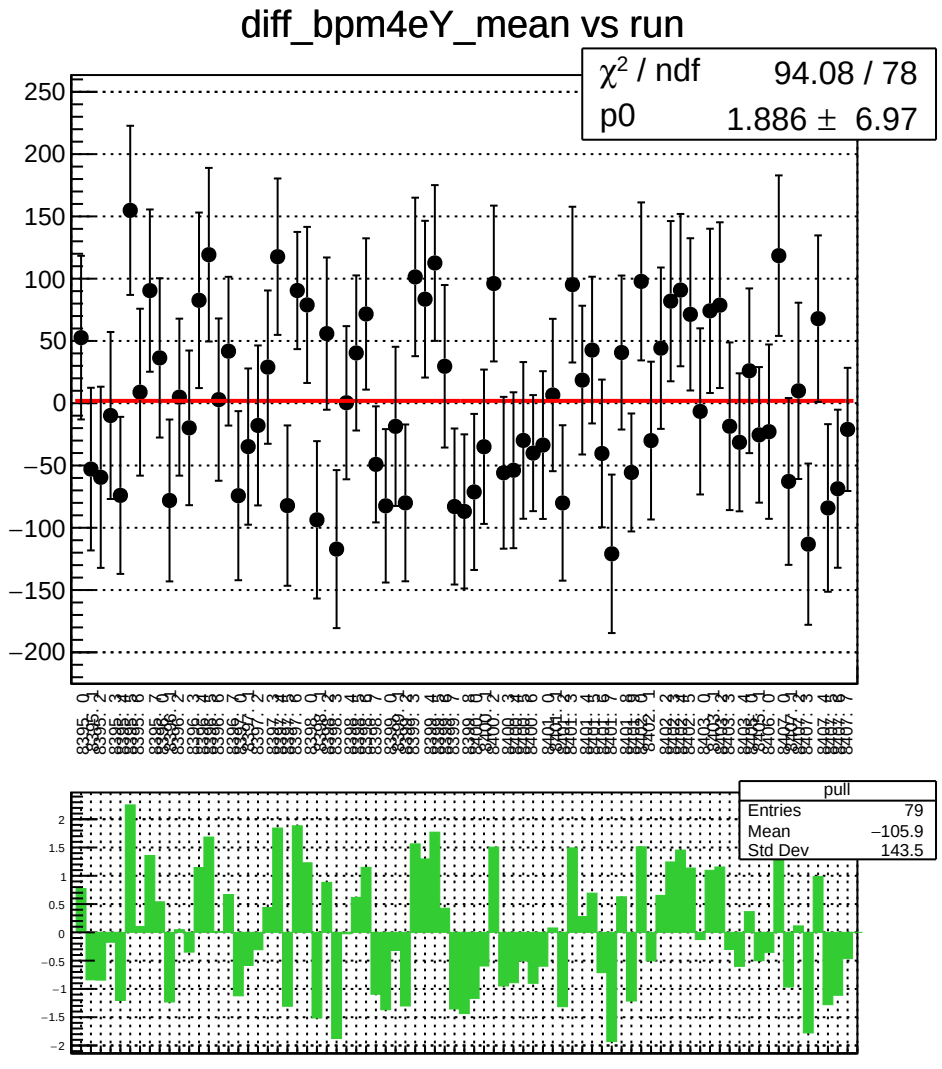

pull1D
Entries 79
Mean 0.01066
Std Dev 1.101

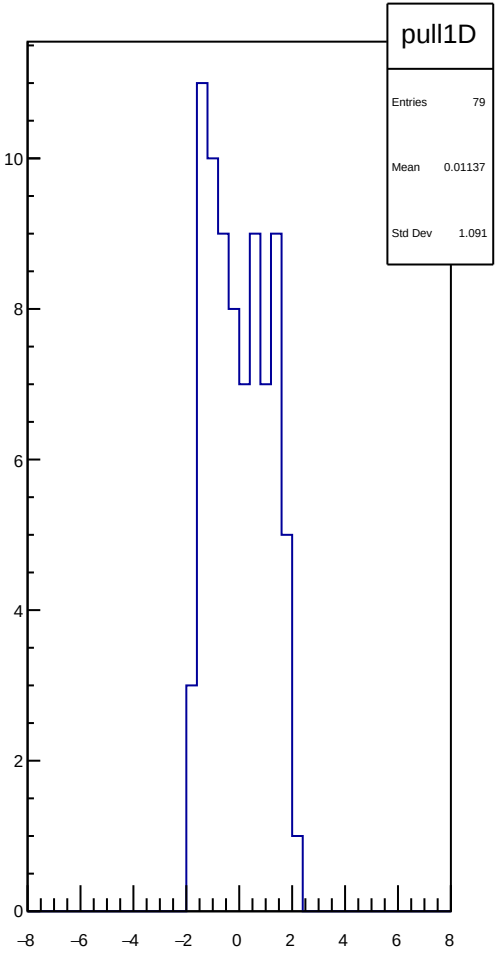

diff_bpm4aY_rms vs run
χ² / ndf 2447 / 78
p0 6251 ± 5.071
7200
7000
6800
6600
6400
6200
6000
5800
5600

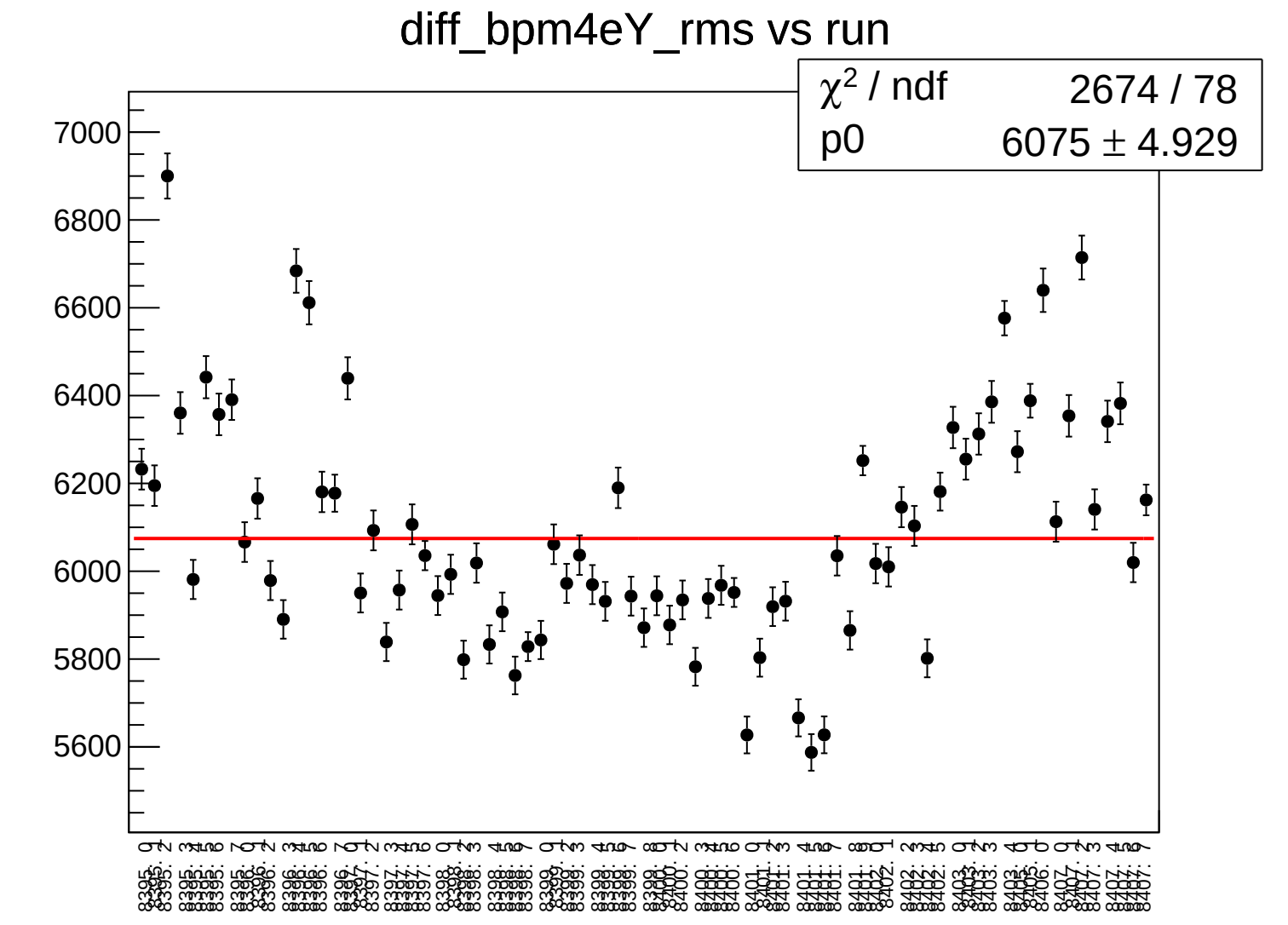

diff_bpm4eX_mean vs run
χ² / ndf 77.04 / 78
p0 −12.92 ± 23.12
600
400
200
0
−200
−400
−600
−800
pull
Entries 79
Mean 4320
Std Dev 4282
2
1
0
−1
−2

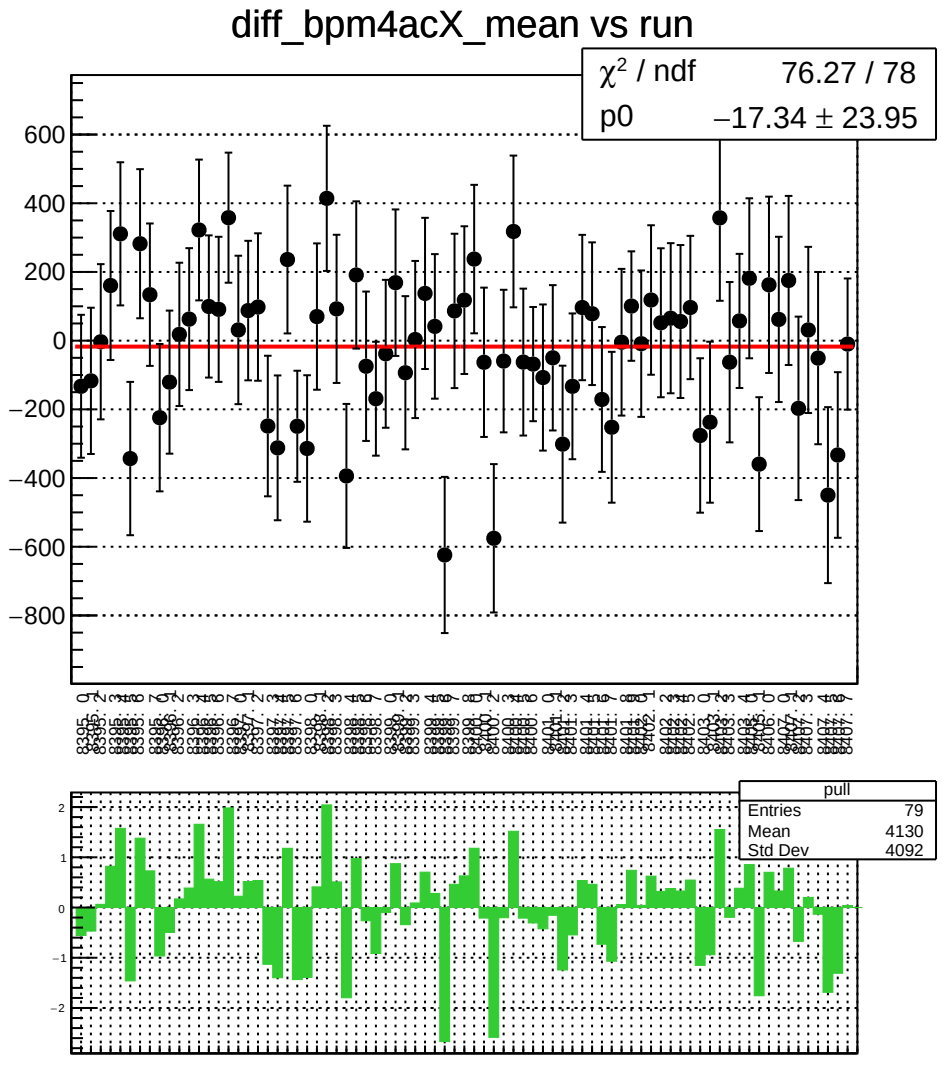

pull1D
Entries 79
Mean −0.0006365
Std Dev 0.9875
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

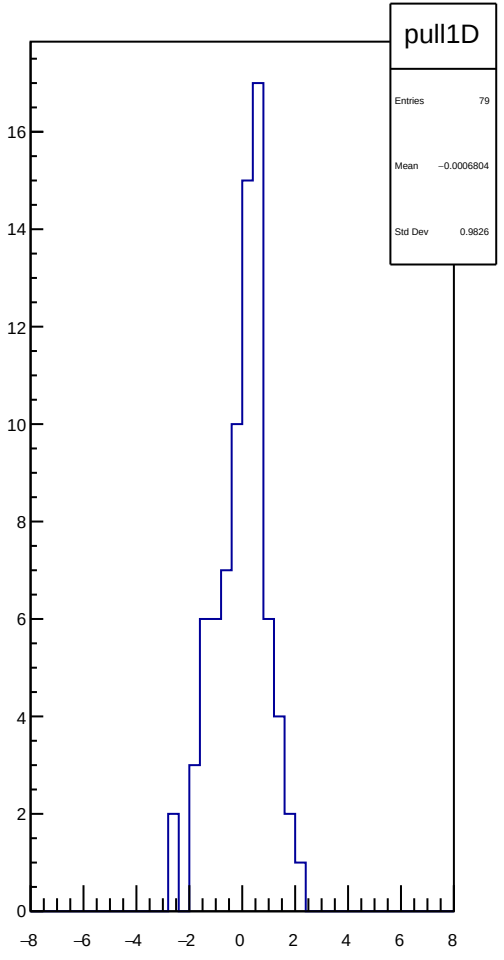

diff_bpm4eX_rms vs run
χ² / ndf 5072 / 78
p0 2.013e+04 ± 16.35
25000
24000
23000
22000
21000
20000
19000
18000

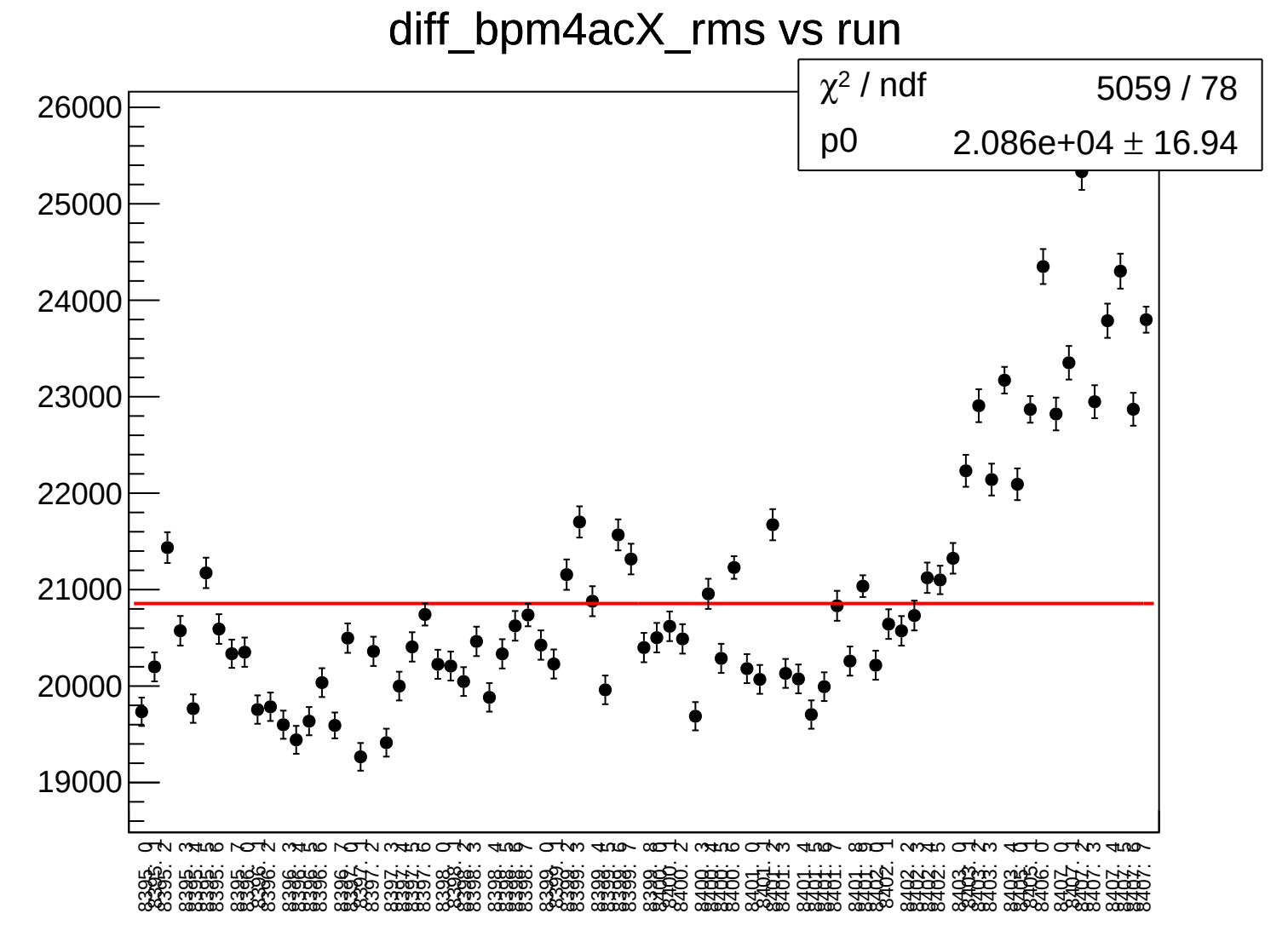

diff_bpm4eY_mean vs run
χ² / ndf 94.08 / 78
p0 1.886 ± 6.97
pull
Entries 79
Mean −105.9
Std Dev 143.5

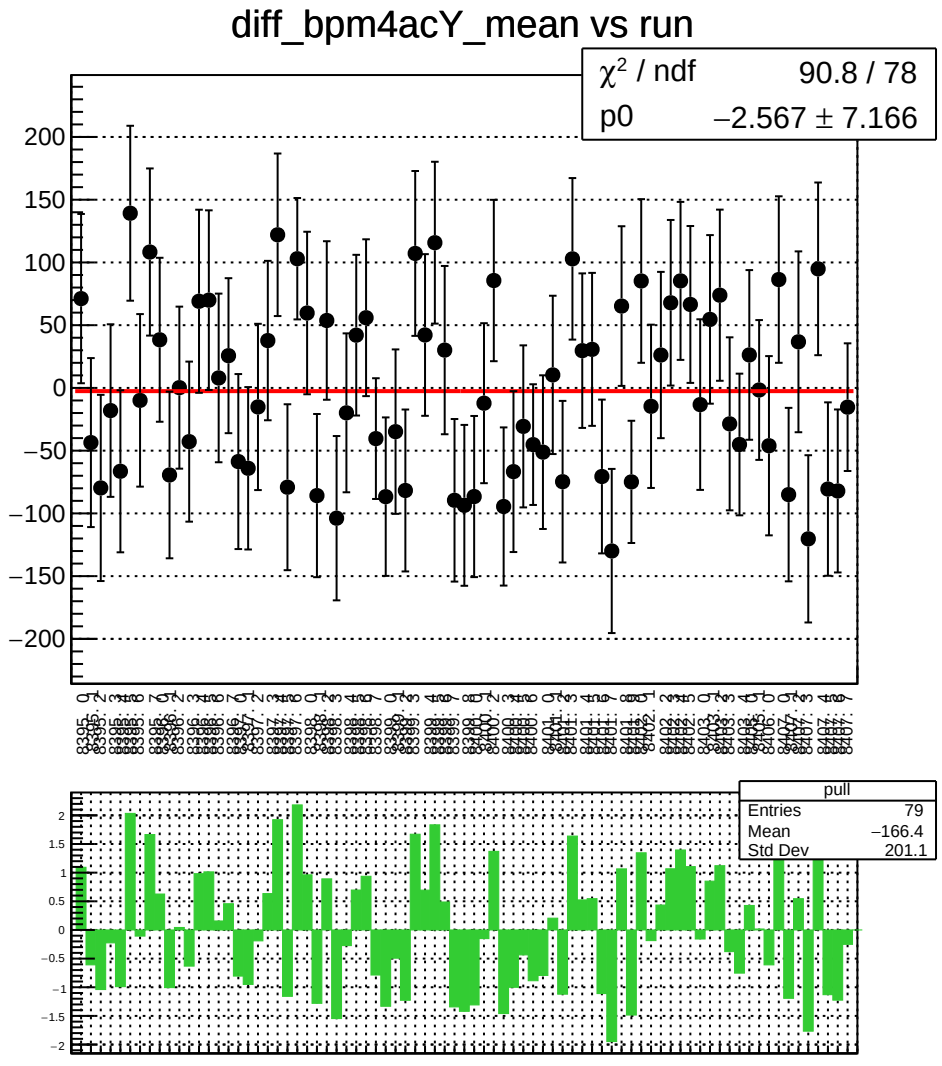

pull1D
Entries 79
Mean 0.01137
Std Dev 1.091

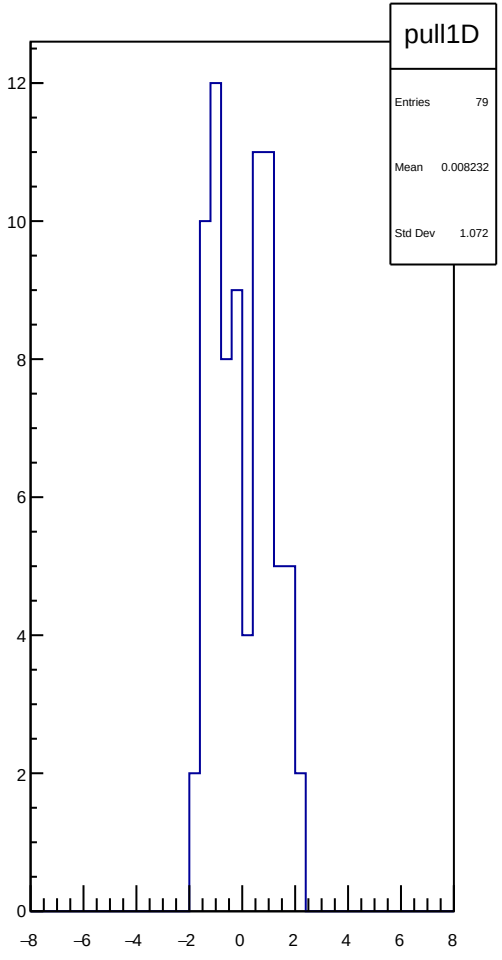

diff_bpm4eY_rms vs run
χ² / ndf 2674 / 78
p0 6075 ± 4.929
7000
6800
6600
6400
6200
6000
5800
5600

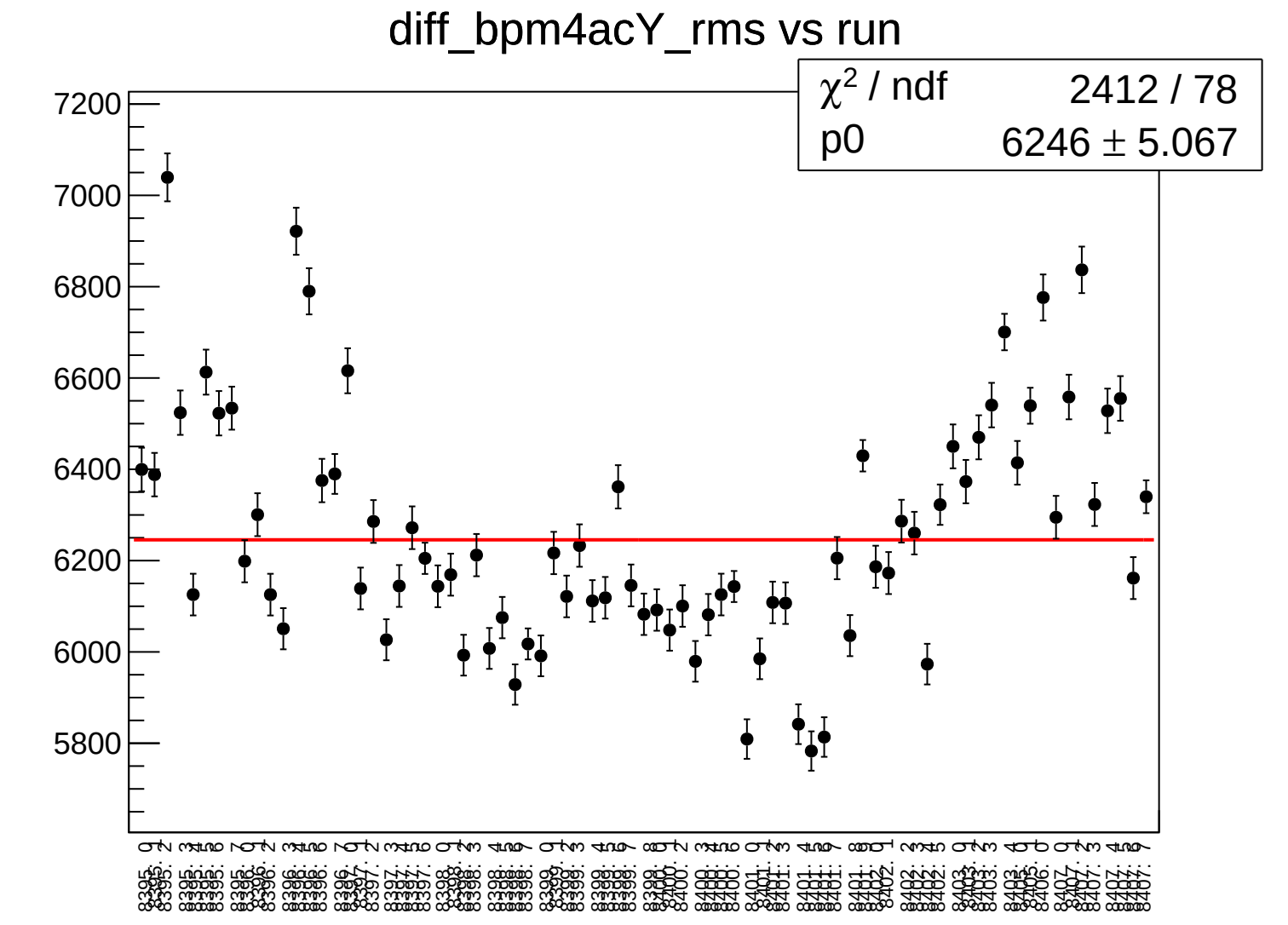

diff_bpm4acX_mean vs run
χ² / ndf 76.27 / 78
p0 −17.34 ± 23.95
pull
Entries 79
Mean 4130
Std Dev 4092

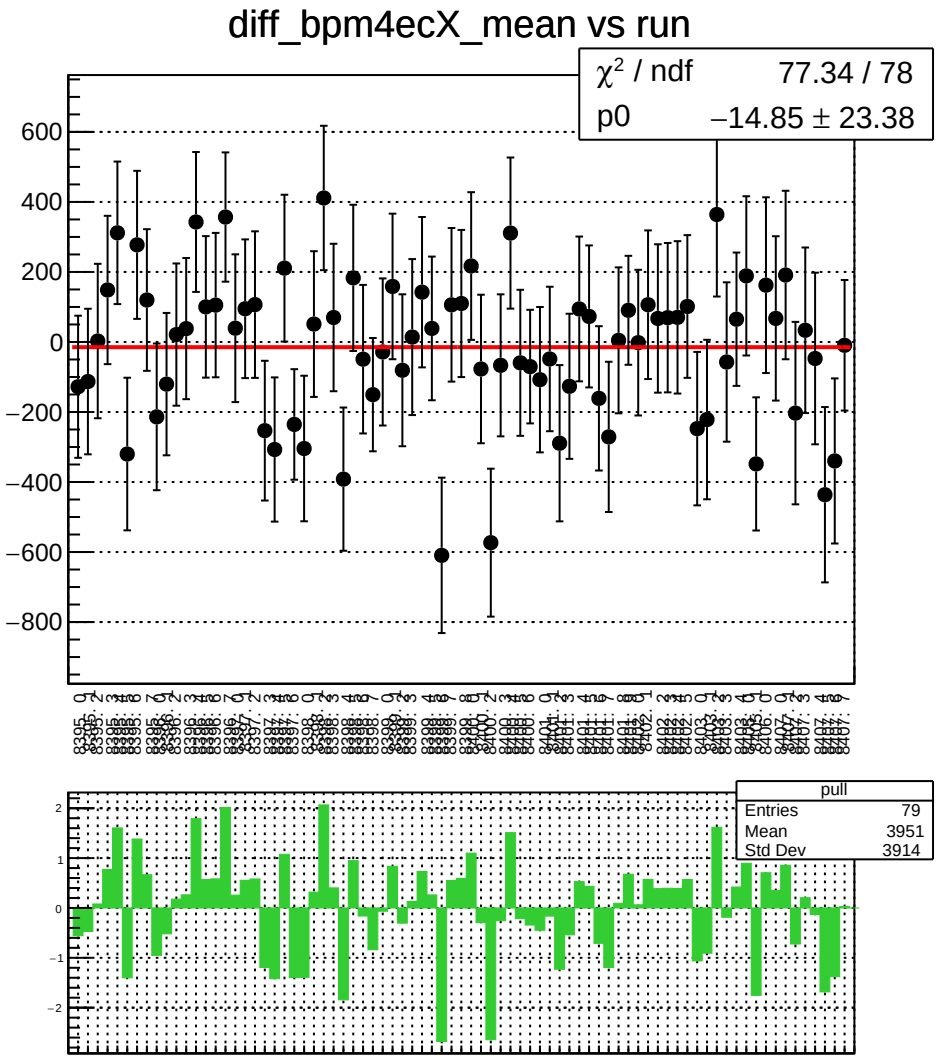

pull1D
Entries 79
Mean −0.0006804
Std Dev 0.9826

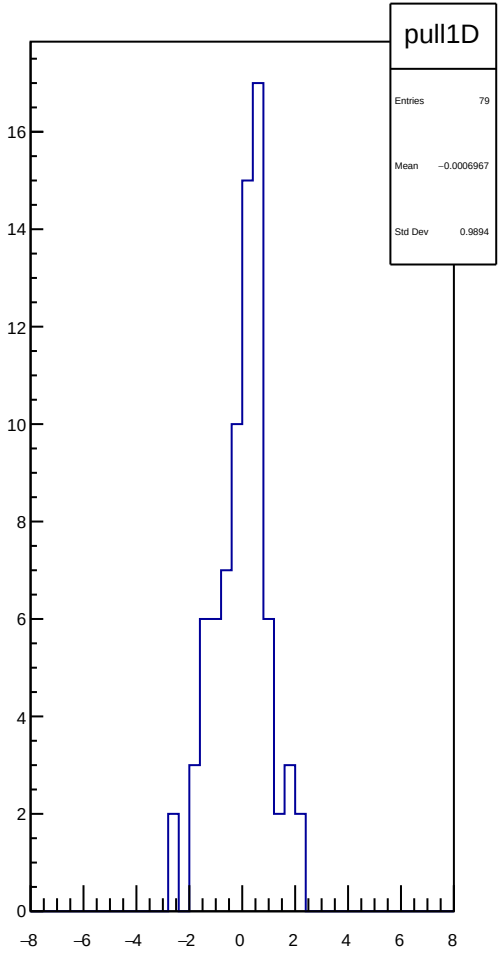

diff_bpm4acX_rms vs run
χ² / ndf 5059 / 78
p0 2.086e+04 ± 16.94
26000
25000
24000
23000
22000
21000
20000
19000

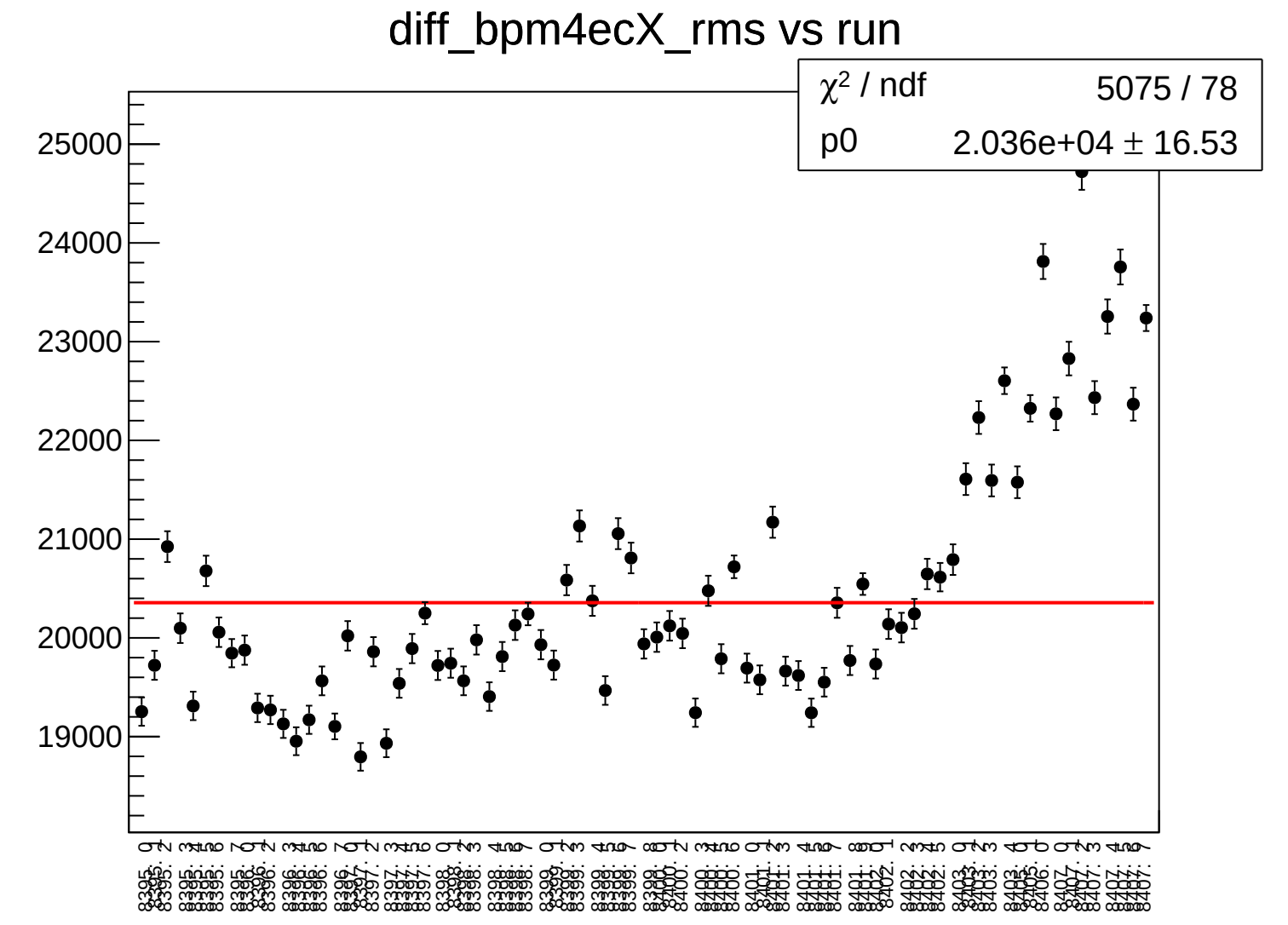

diff_bpm4acY_mean vs run
χ² / ndf 90.8 / 78
p0 −2.567 ± 7.166
pull
Entries 79
Mean −166.4
Std Dev 201.1

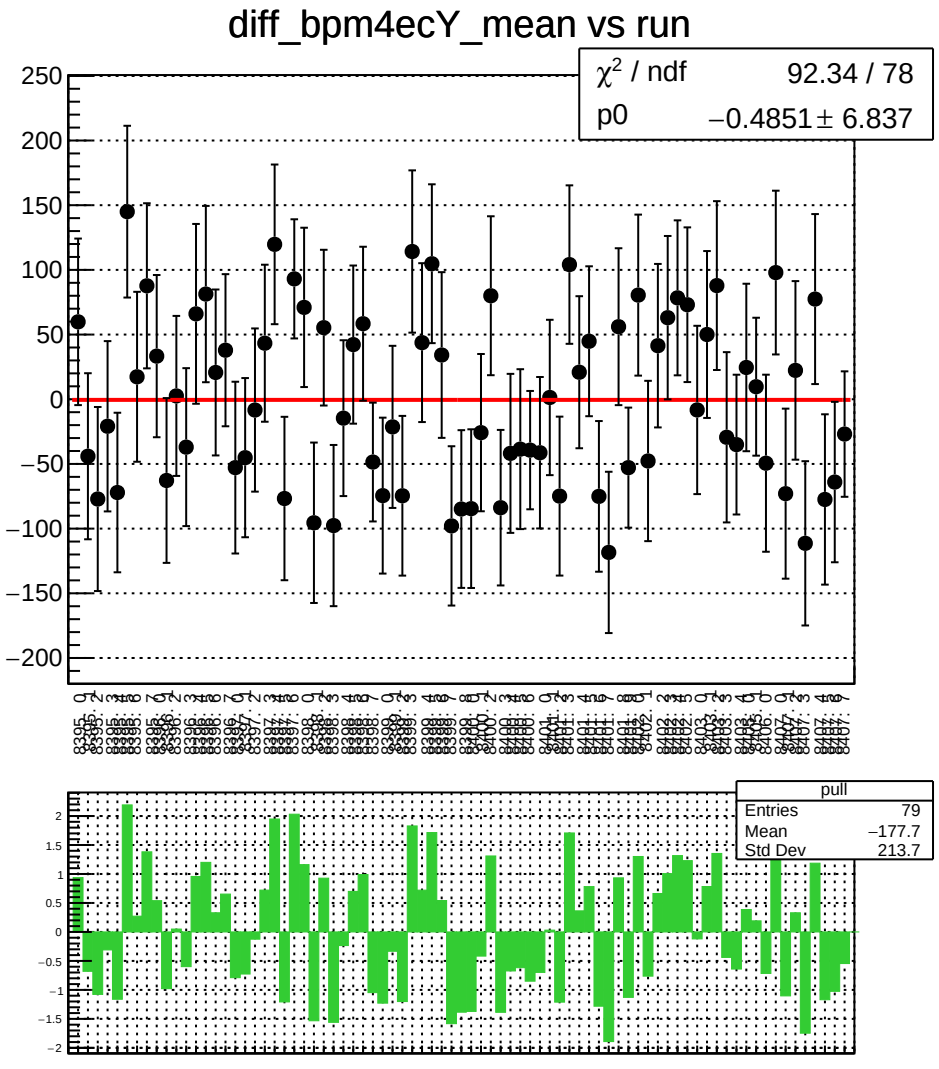

pull1D
Entries 79
Mean 0.008232
Std Dev 1.072

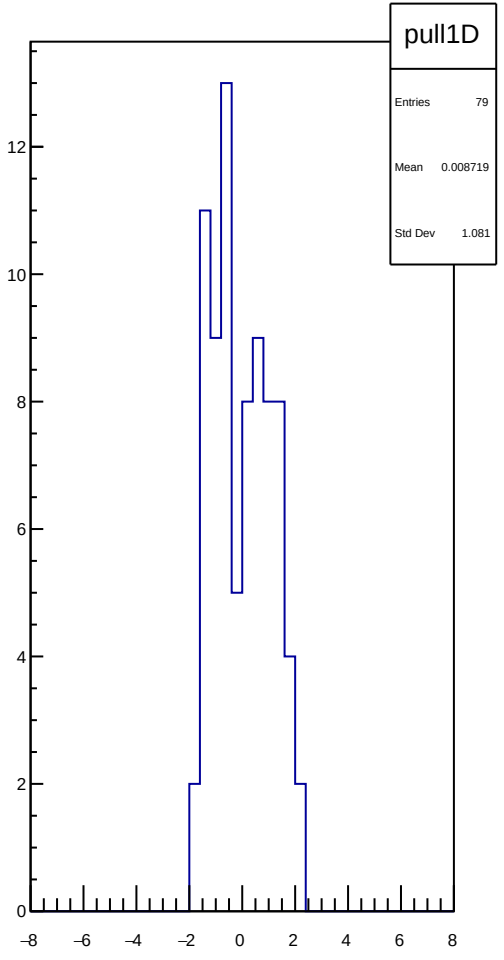

diff_bpm4acY_rms vs run
χ^2 / ndf 2412 / 78
p0 6246 ± 5.067
7200
7000
6800
6600
6400
6200
6000
5800

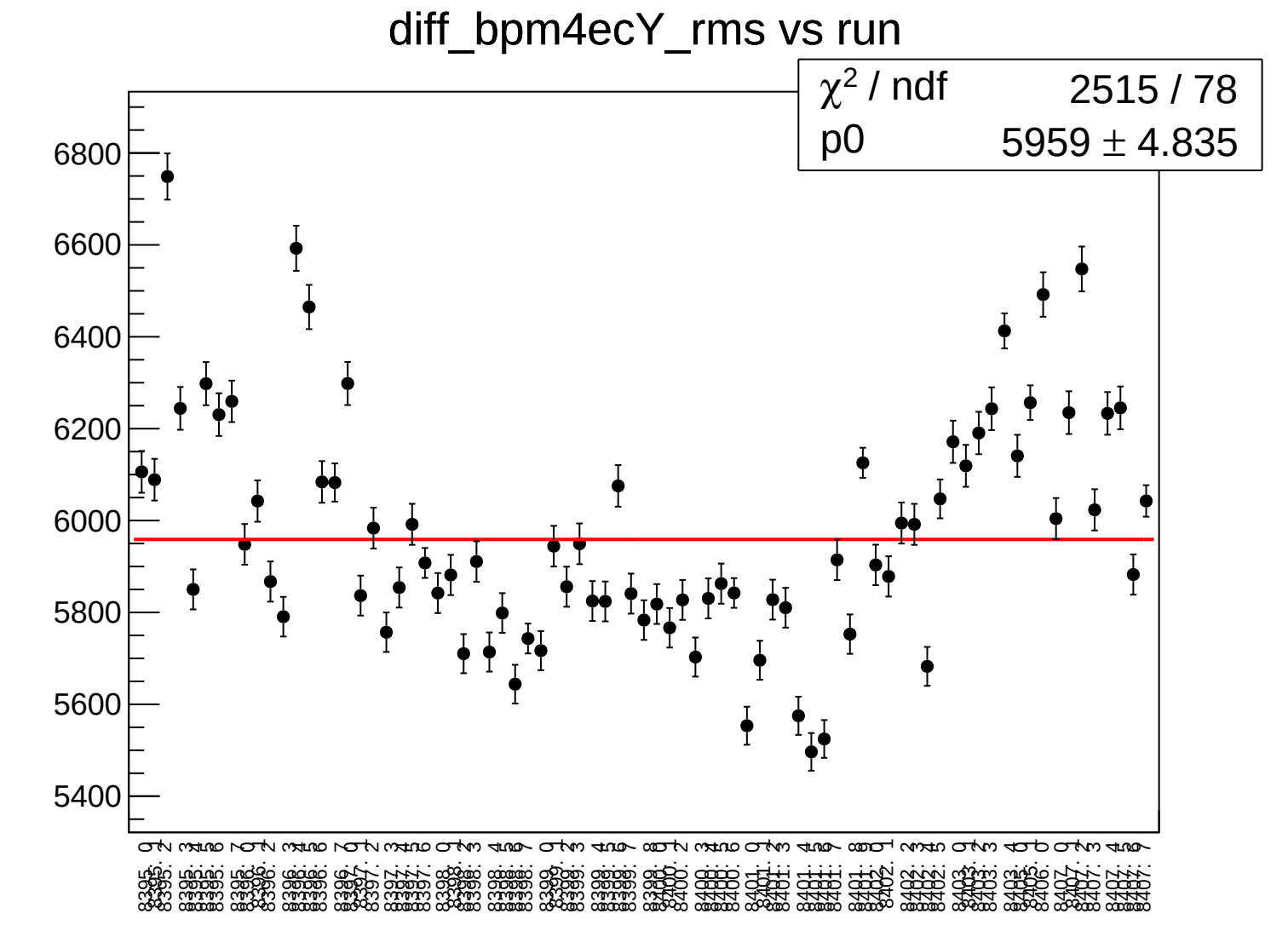

diff_bpm4ecX_mean vs run
χ² / ndf 77.34 / 78
p0 −14.85 ± 23.38
pull
Entries 79
Mean 3951
Std Dev 3914

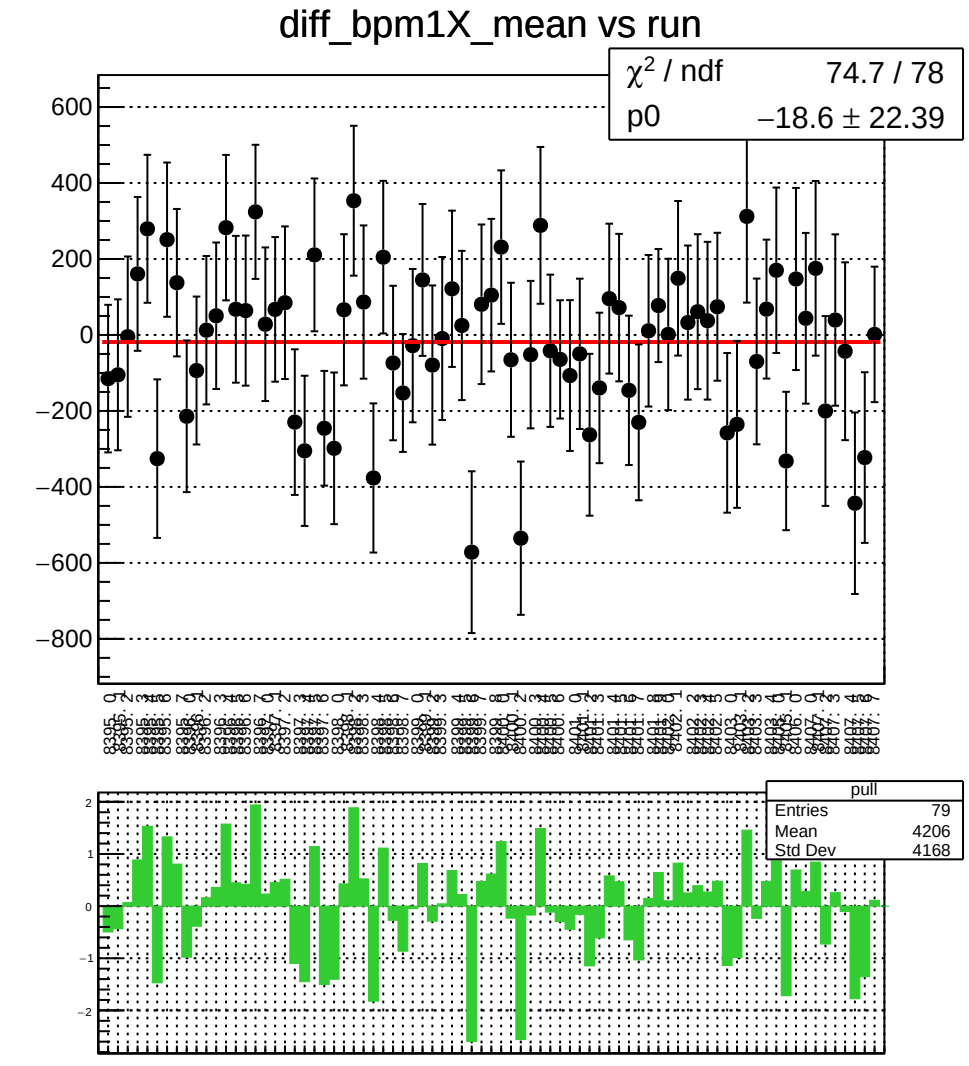

pull1D
Entries 79
Mean −0.0006967
Std Dev 0.9894

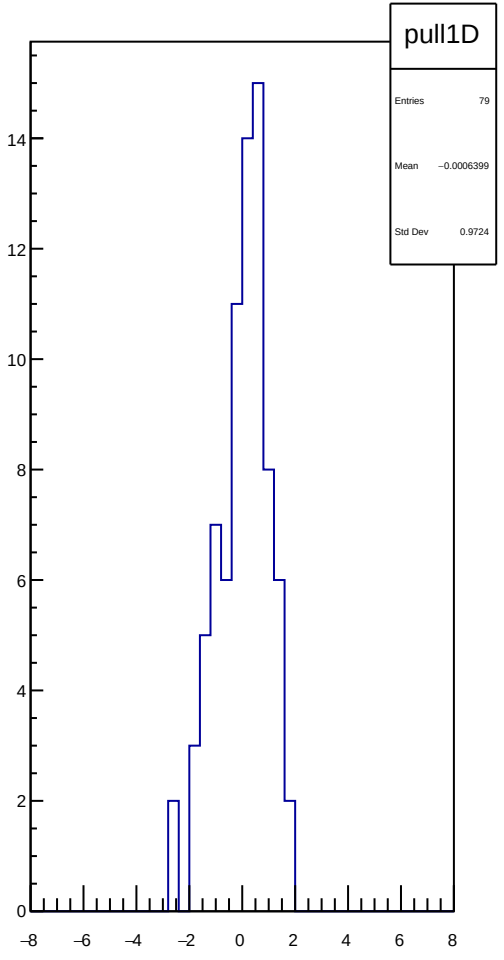

diff_bpm4ecX_rms vs run
χ² / ndf 5075 / 78
p0 2.036e+04 ± 16.53
25000
24000
23000
22000
21000
20000
19000

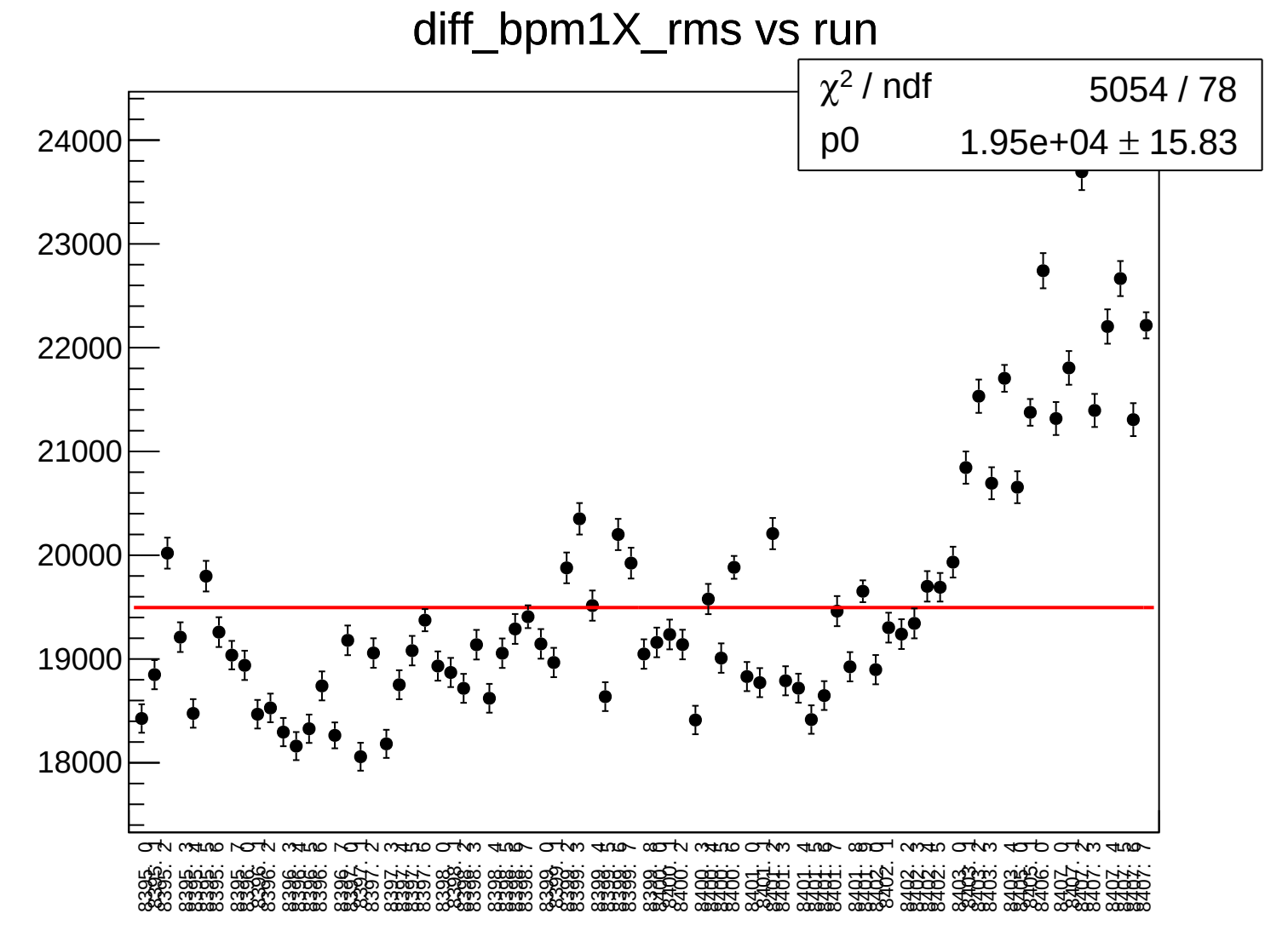

diff_bpm4ecY_mean vs run
χ² / ndf 92.34 / 78
p0 −0.4851 ± 6.837
pull
Entries 79
Mean −177.7
Std Dev 213.7

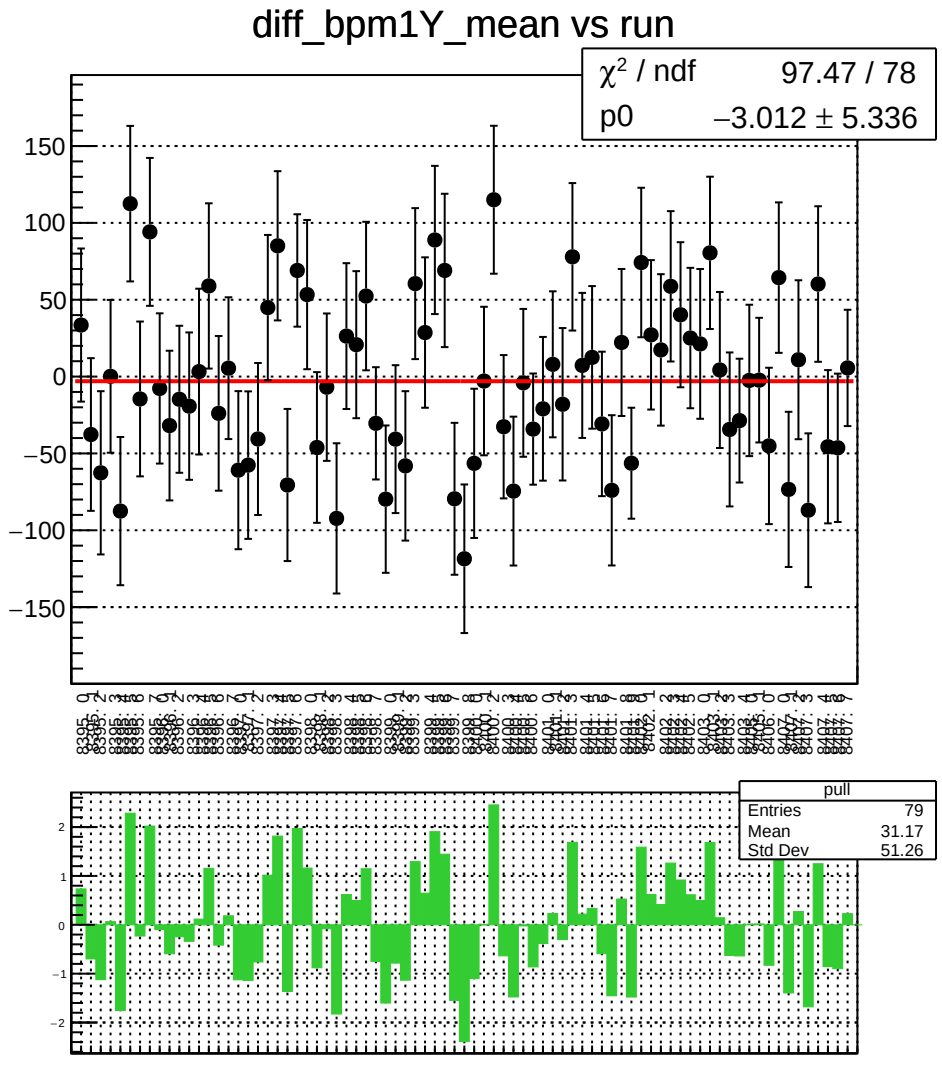

pull1D
Entries 79
Mean 0.008719
Std Dev 1.081

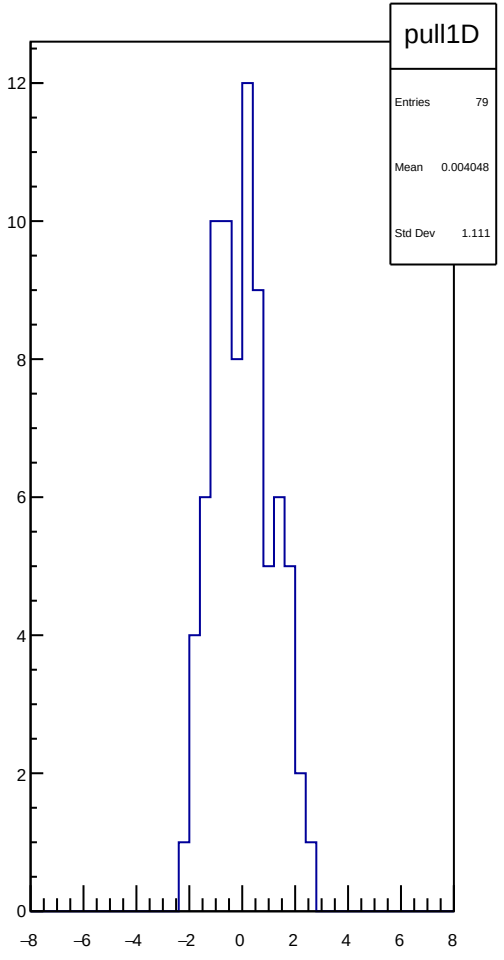

diff_bpm4ecY_rms vs run
χ² / ndf 2515 / 78
p0 5959 ± 4.835
6800
6600
6400
6200
6000
5800
5600
5400

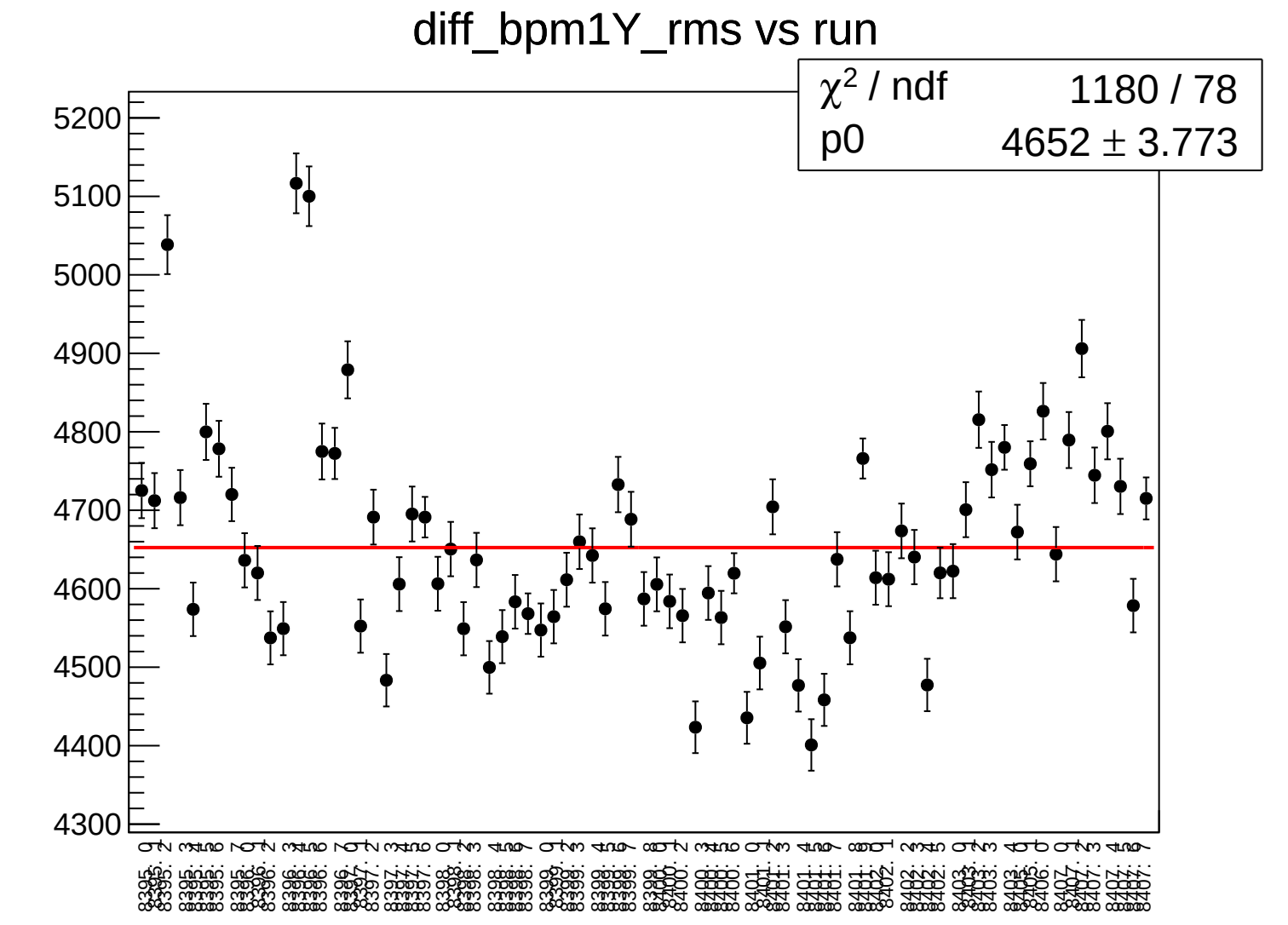

diff_bpm1X_mean vs run
χ² / ndf 74.7 / 78
p0 −18.6 ± 22.39
pull
Entries 79
Mean 4206
Std Dev 4168

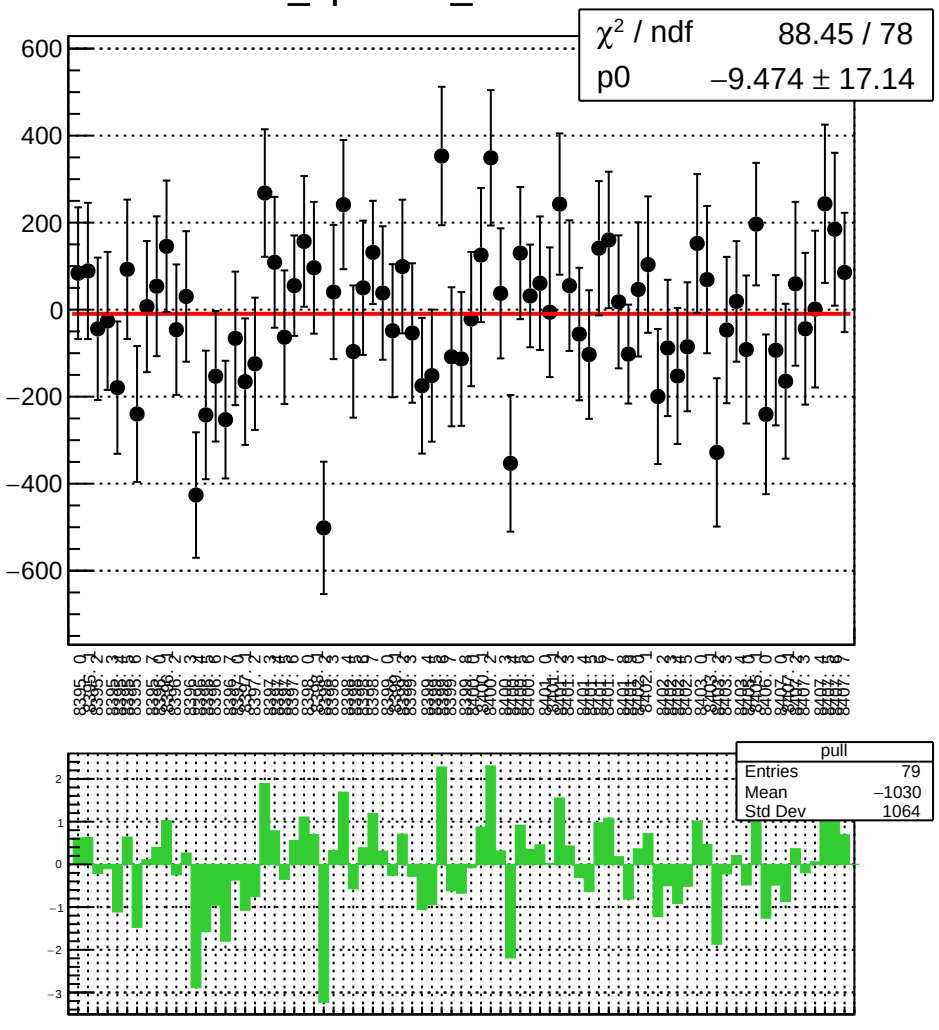

pull1D
Entries 79
Mean −0.0006399
Std Dev 0.9724

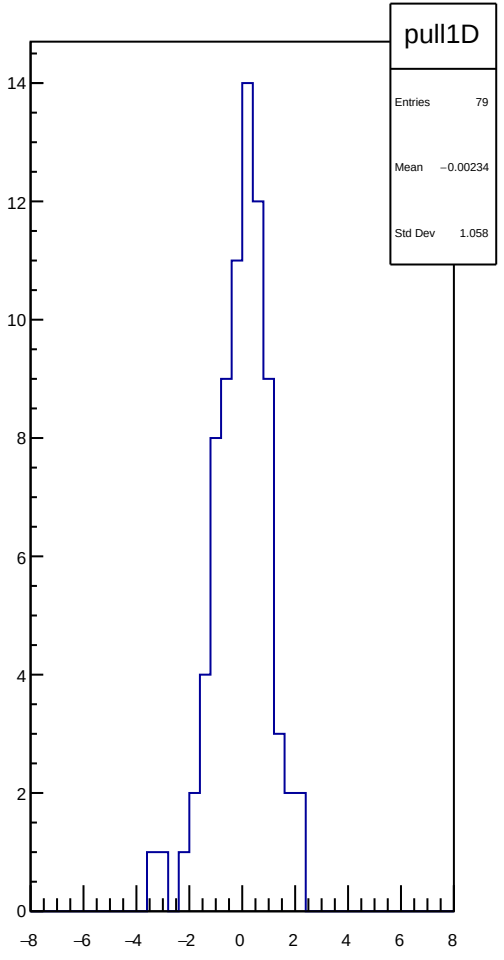

diff_bpm1X_rms vs run
χ² / ndf 5054 / 78
p0 1.95e+04 ± 15.83
24000
23000
22000
21000
20000
19000
18000

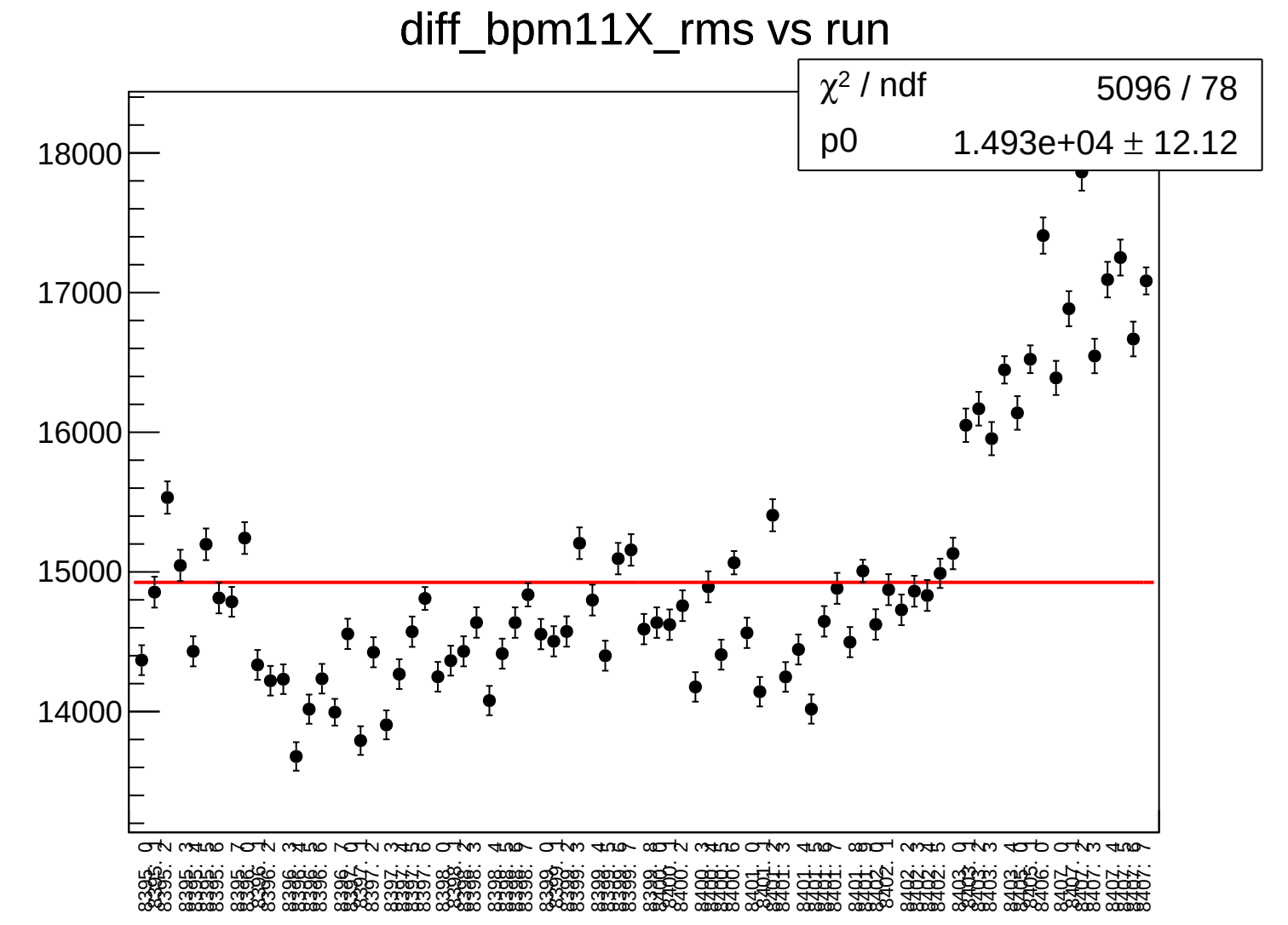

diff_bpm1Y_mean vs run
χ² / ndf 97.47 / 78
p0 −3.012 ± 5.336
150
100
50
0
−50
−100
−150
pull
Entries 79
Mean 31.17
Std Dev 51.26
2
1
0
−1
−2

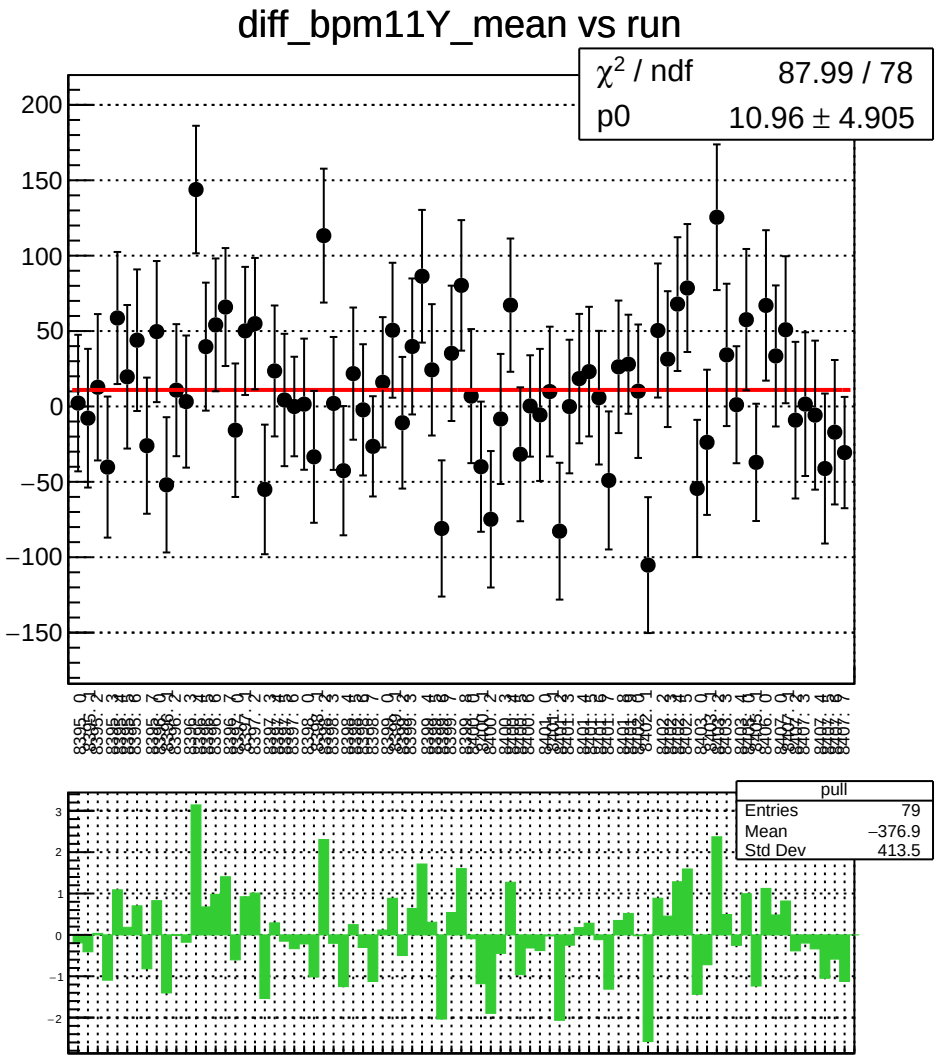

pull1D
Entries 79
Mean 0.004048
Std Dev 1.111
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

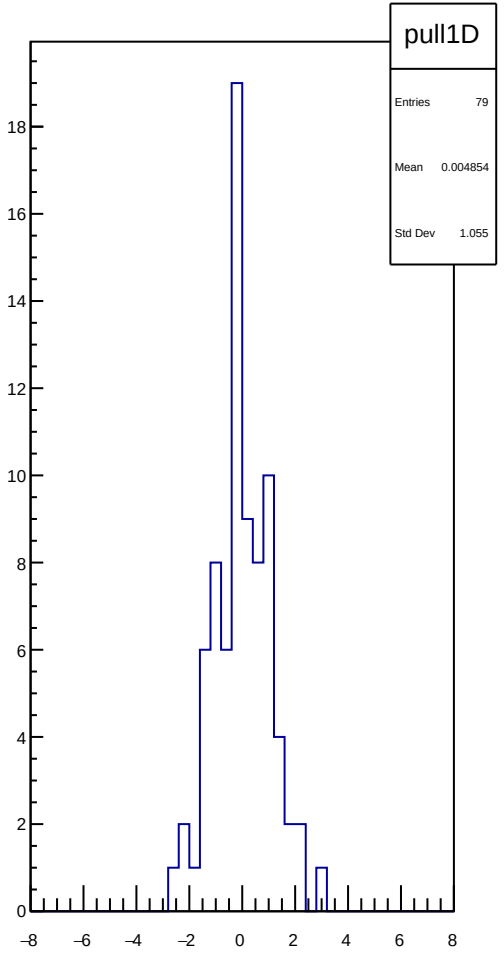

diff_bpm1Y_rms vs run
χ^2 / ndf 1180 / 78
p0 4652 ± 3.773
5200
5100
5000
4900
4800
4700
4600
4500
4400
4300

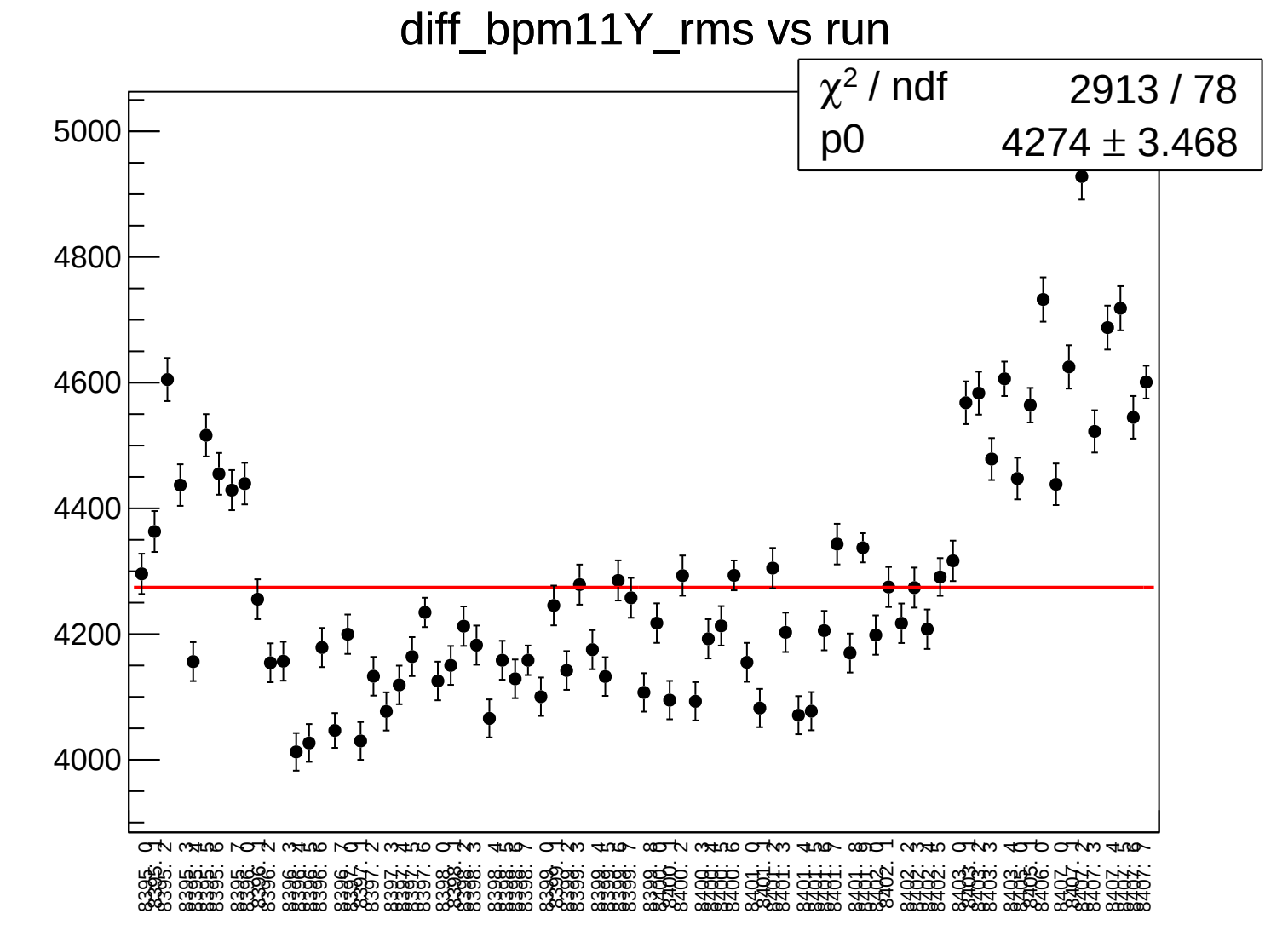

diff_bpm11X_mean vs run
χ² / ndf 88.45 / 78
p0 −9.474 ± 17.14
pull
Entries 79
Mean −1030
Std Dev 1064

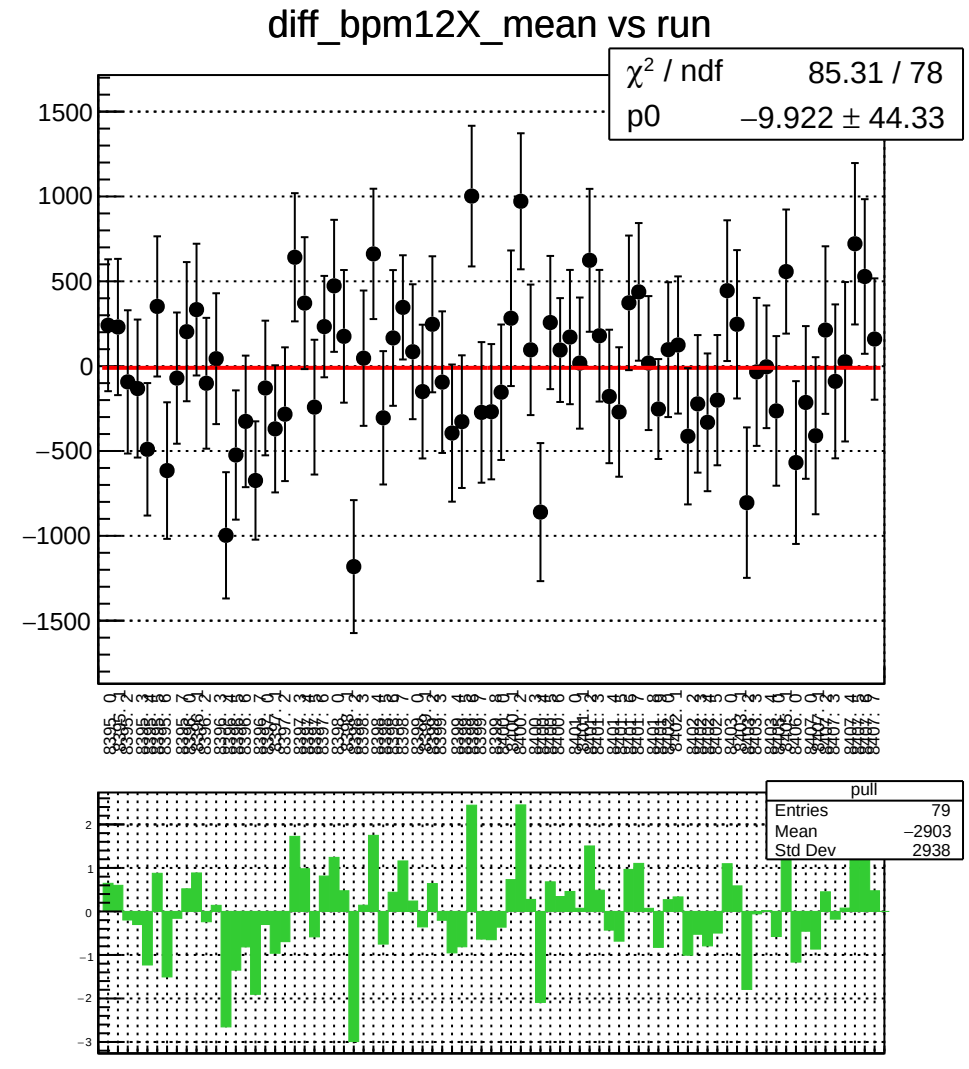

pull1D
Entries 79
Mean −0.00234
Std Dev 1.058

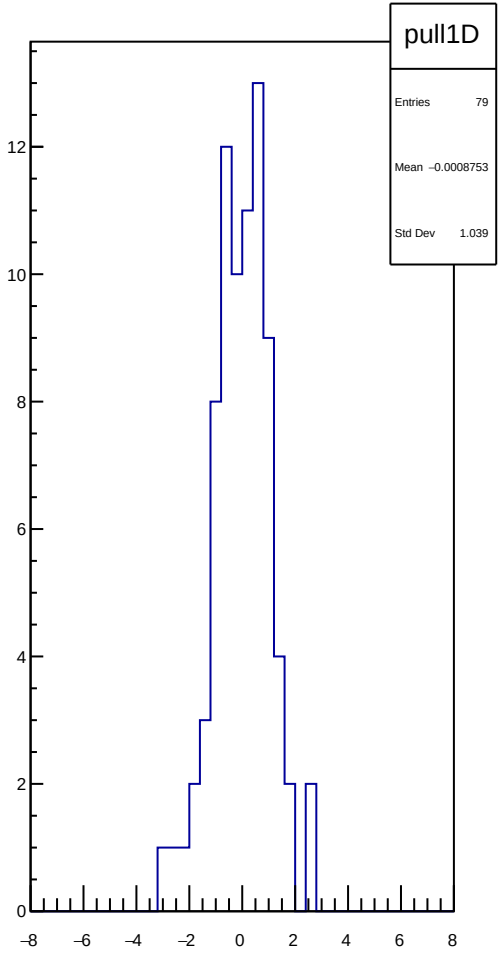

diff_bpm11X_rms vs run
χ² / ndf 5096 / 78
p0 1.493e+04 ± 12.12
18000
17000
16000
15000
14000

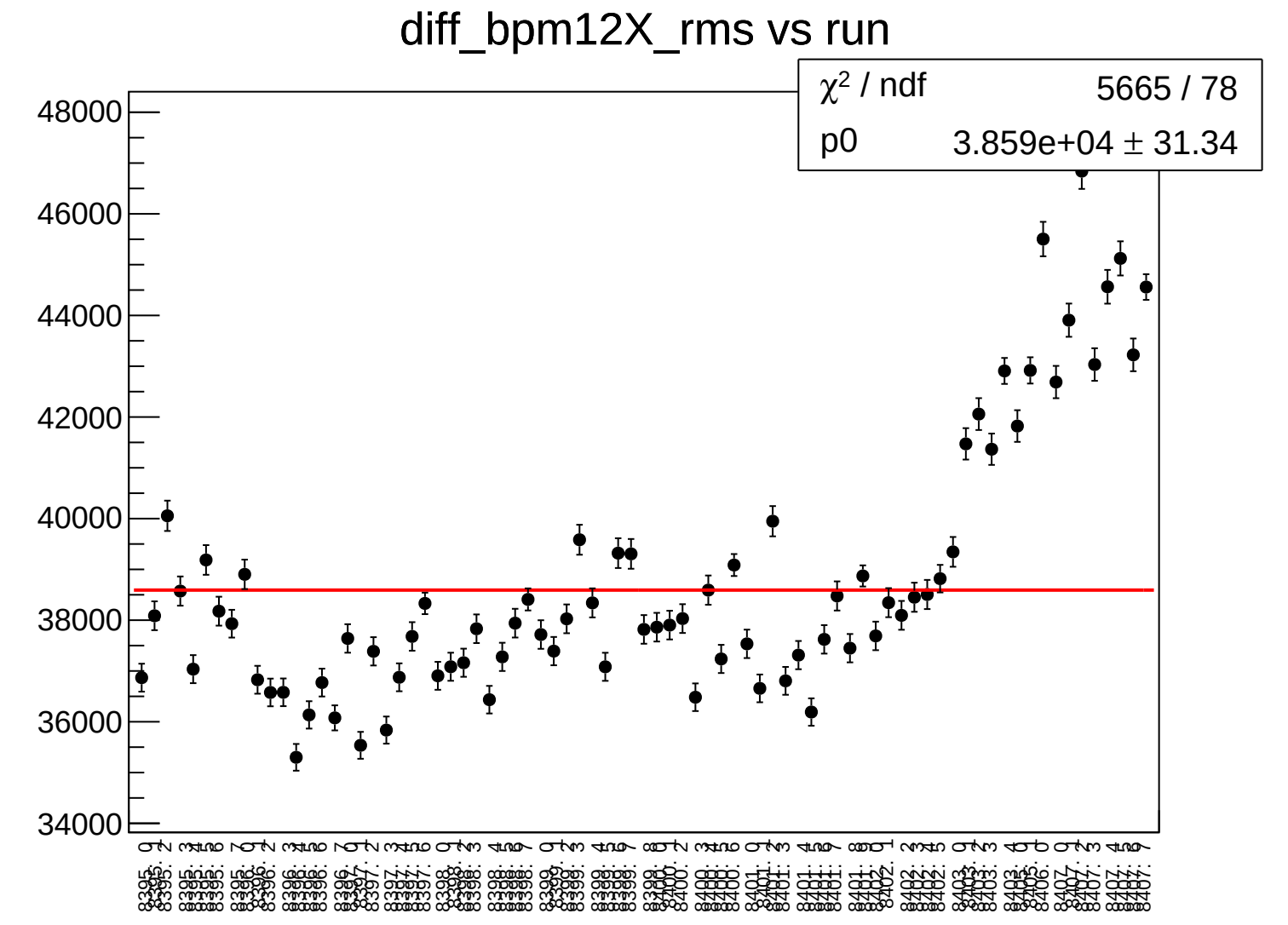

diff_bpm11Y_mean vs run
χ^2 / ndf 87.99 / 78
p0 10.96 ± 4.905
pull
Entries 79
Mean −376.9
Std Dev 413.5

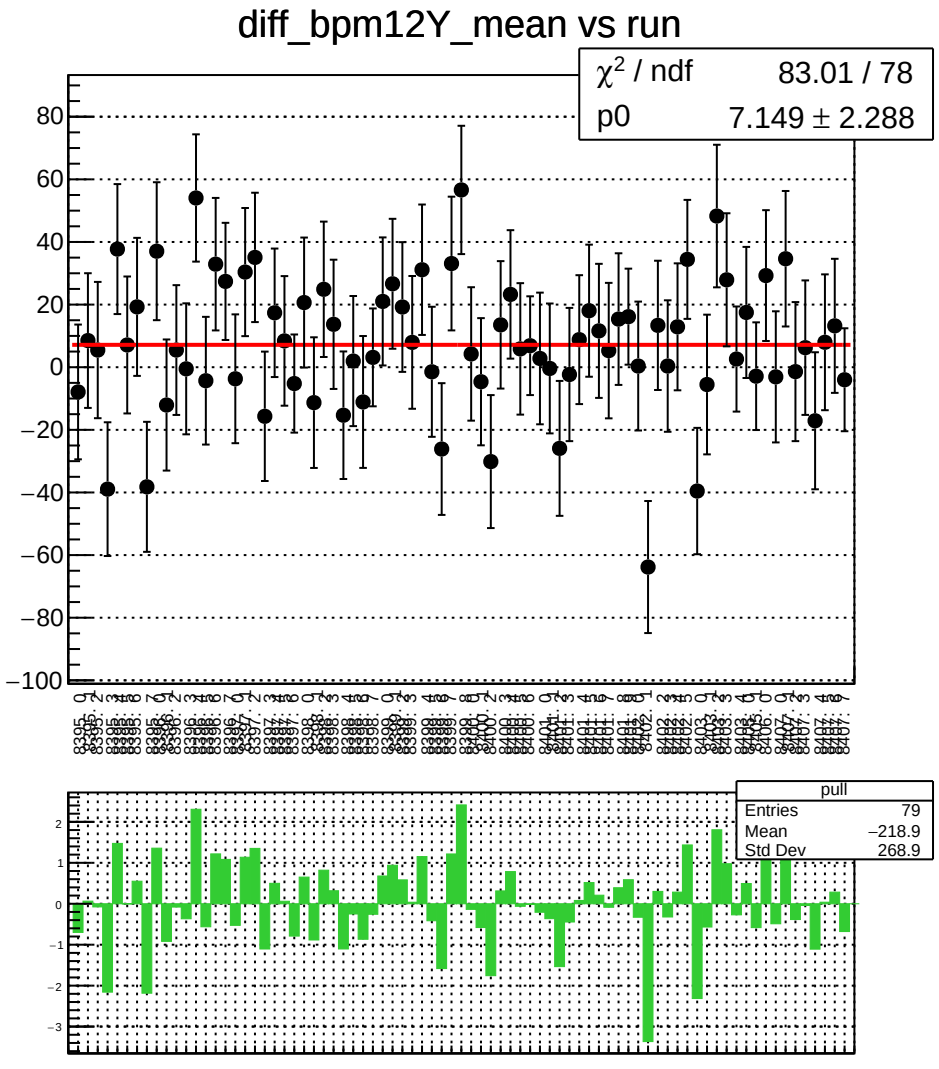

pull1D
Entries 79
Mean 0.004854
Std Dev 1.055

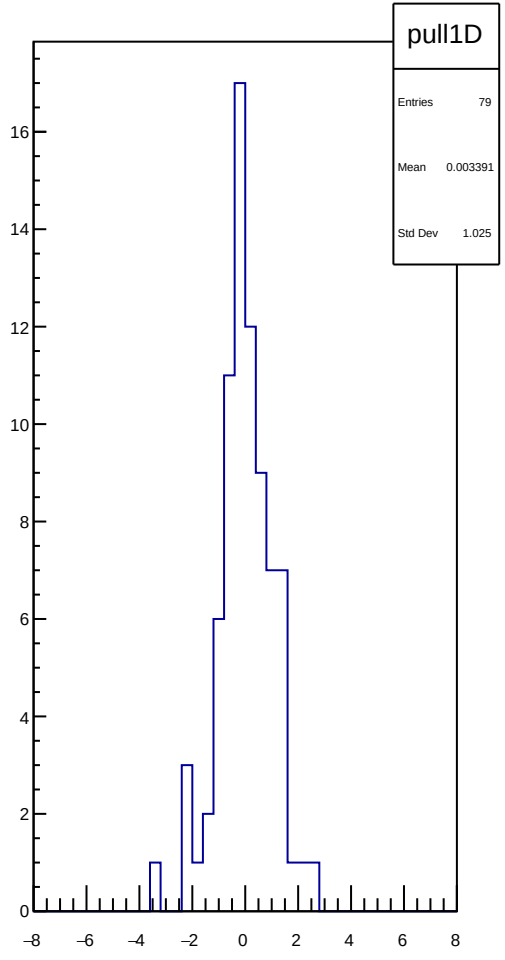

diff_bpm11Y_rms vs run
χ² / ndf 2913 / 78
p0 4274 ± 3.468
5000
4800
4600
4400
4200
4000

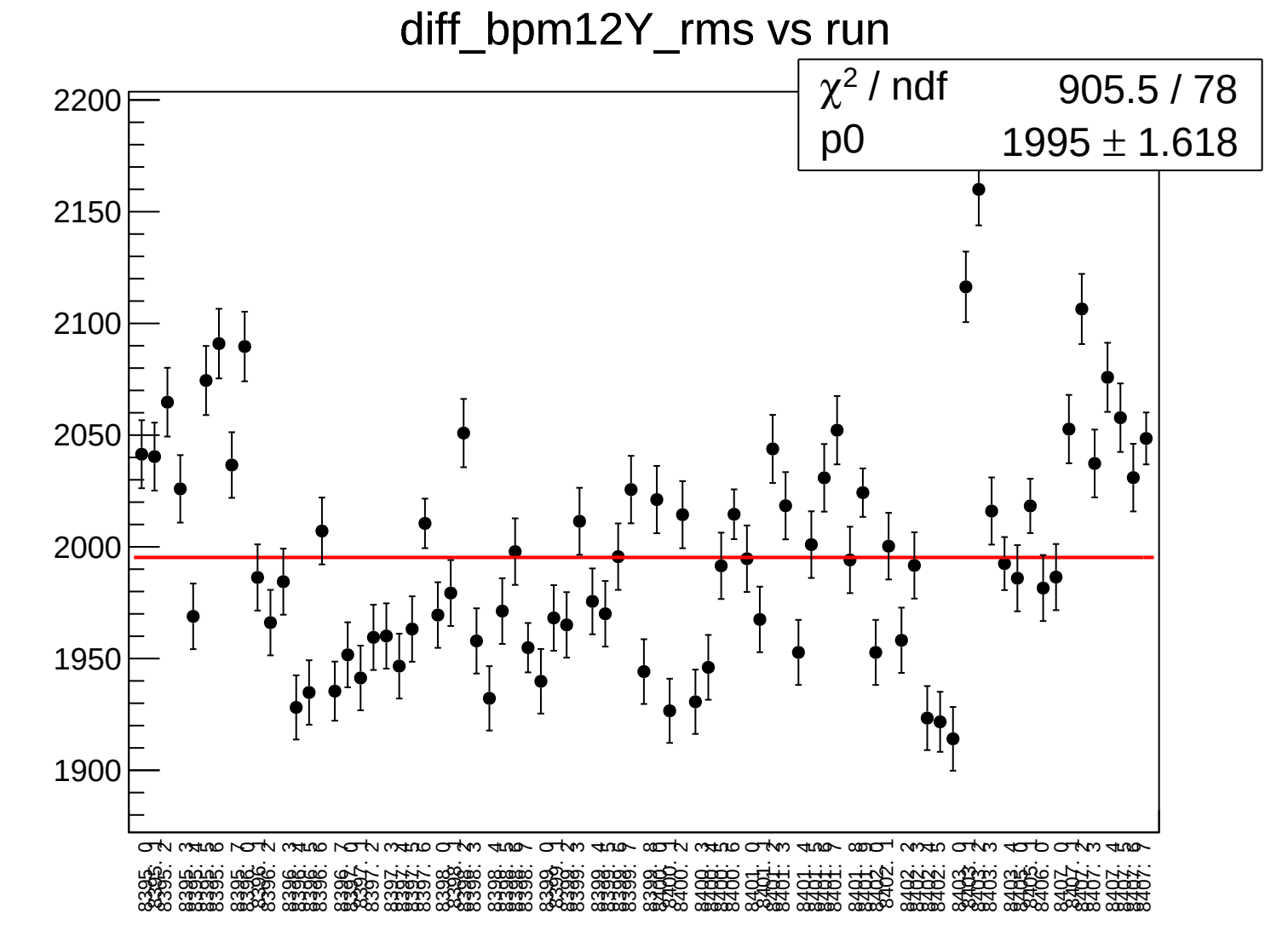

diff_bpm12X_mean vs run
χ² / ndf 85.31 / 78
p0 −9.922 ± 44.33
1500
1000
500
0
−500
−1000
−1500
pull
Entries 79
Mean −2903
Std Dev 2938
2
1
0
−1
−2
−3

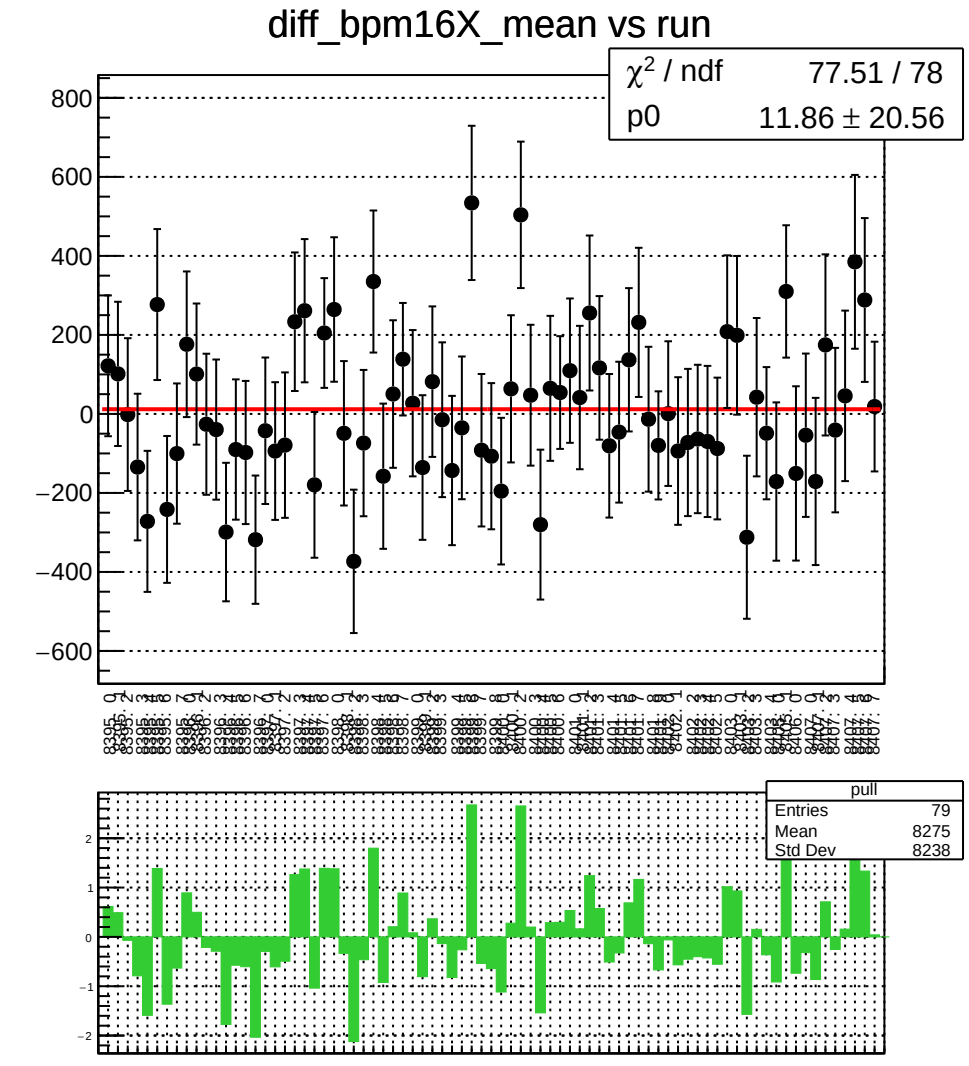

pull1D
Entries 79
Mean −0.0008753
Std Dev 1.039
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

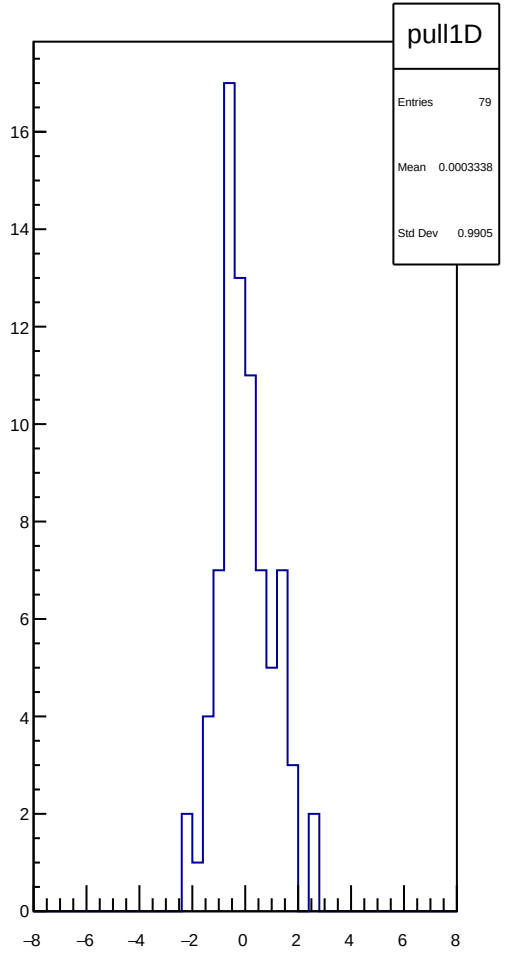

diff_bpm12X_rms vs run
χ² / ndf 5665 / 78
p0 3.859e+04 ± 31.34
48000
46000
44000
42000
40000
38000
36000
34000

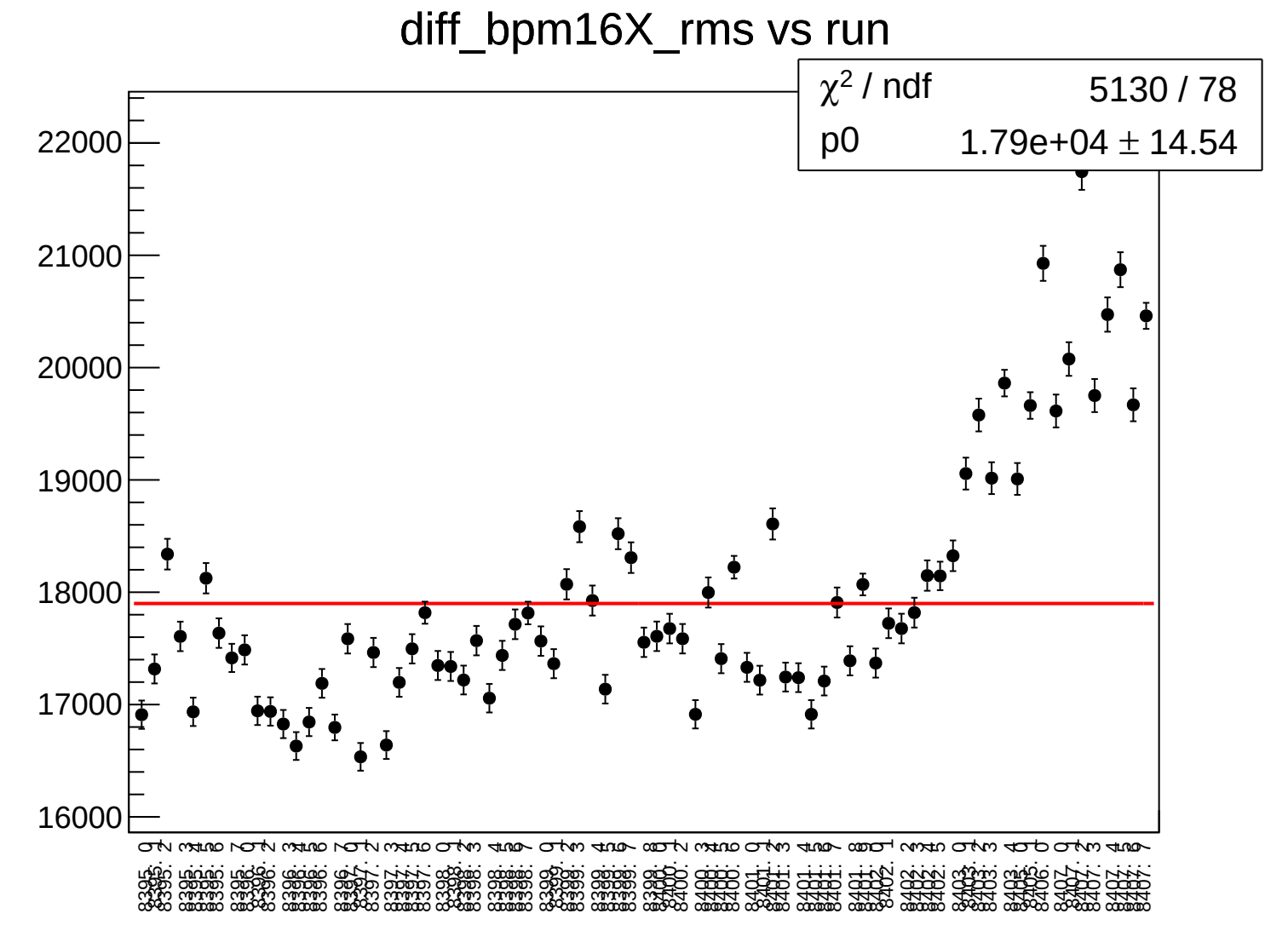

diff_bpm12Y_mean vs run
χ² / ndf 83.01 / 78
p0 7.149 ± 2.288
pull
Entries 79
Mean −218.9
Std Dev 268.9

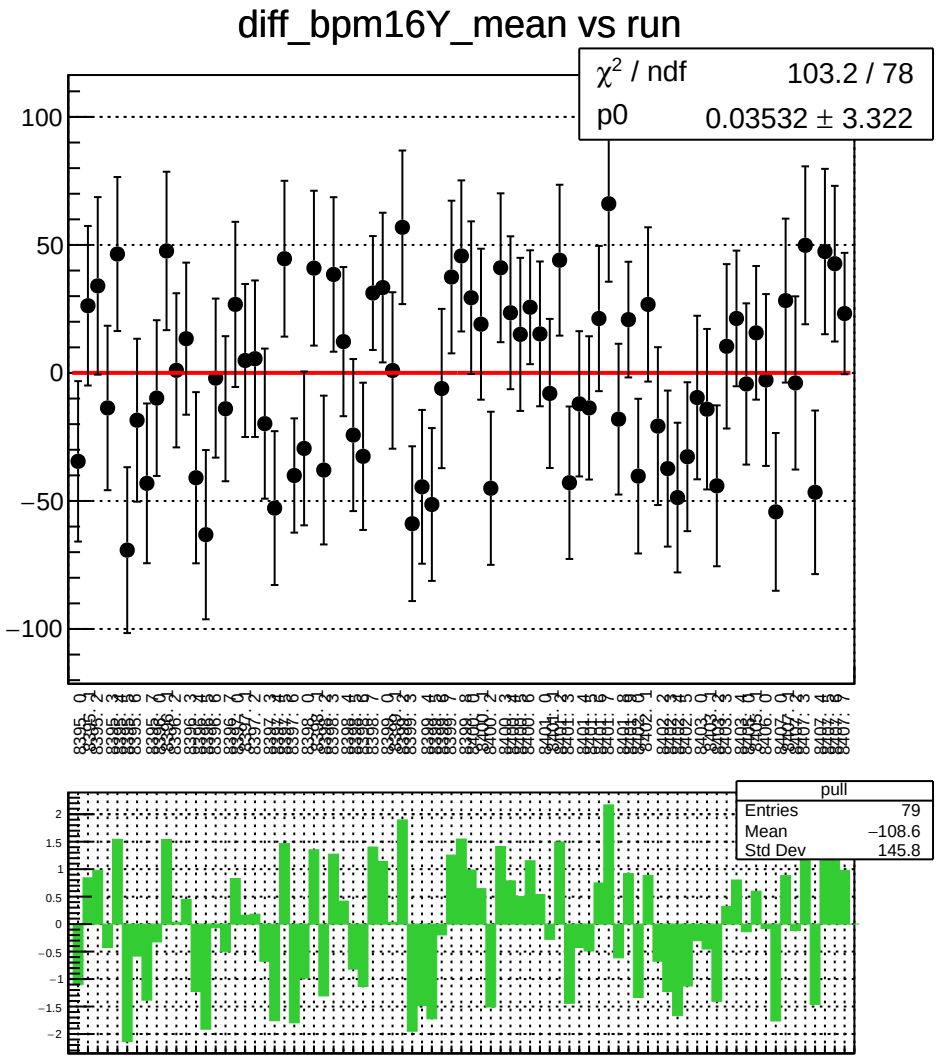

pull1D
Entries 79
Mean 0.003391
Std Dev 1.025

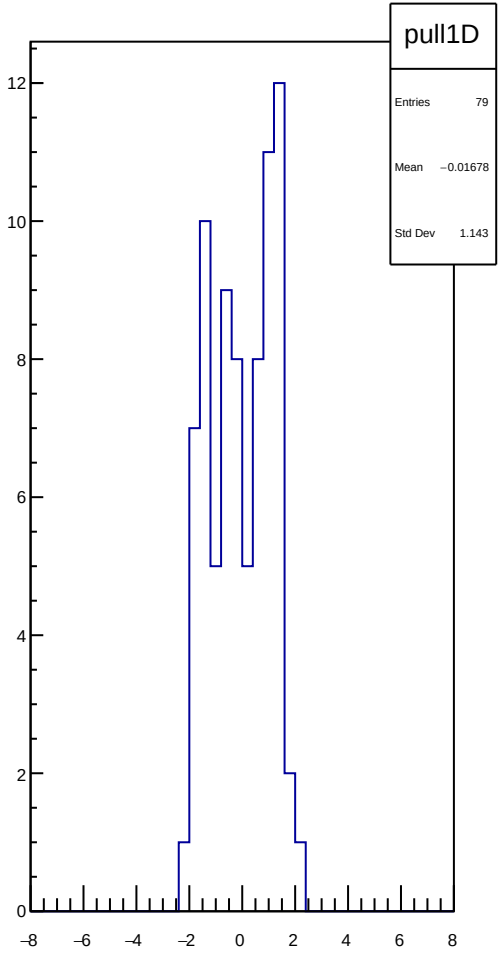

diff_bpm12Y_rms vs run
χ² / ndf 905.5 / 78
p0 1995 ± 1.618
2200
2150
2100
2050
2000
1950
1900

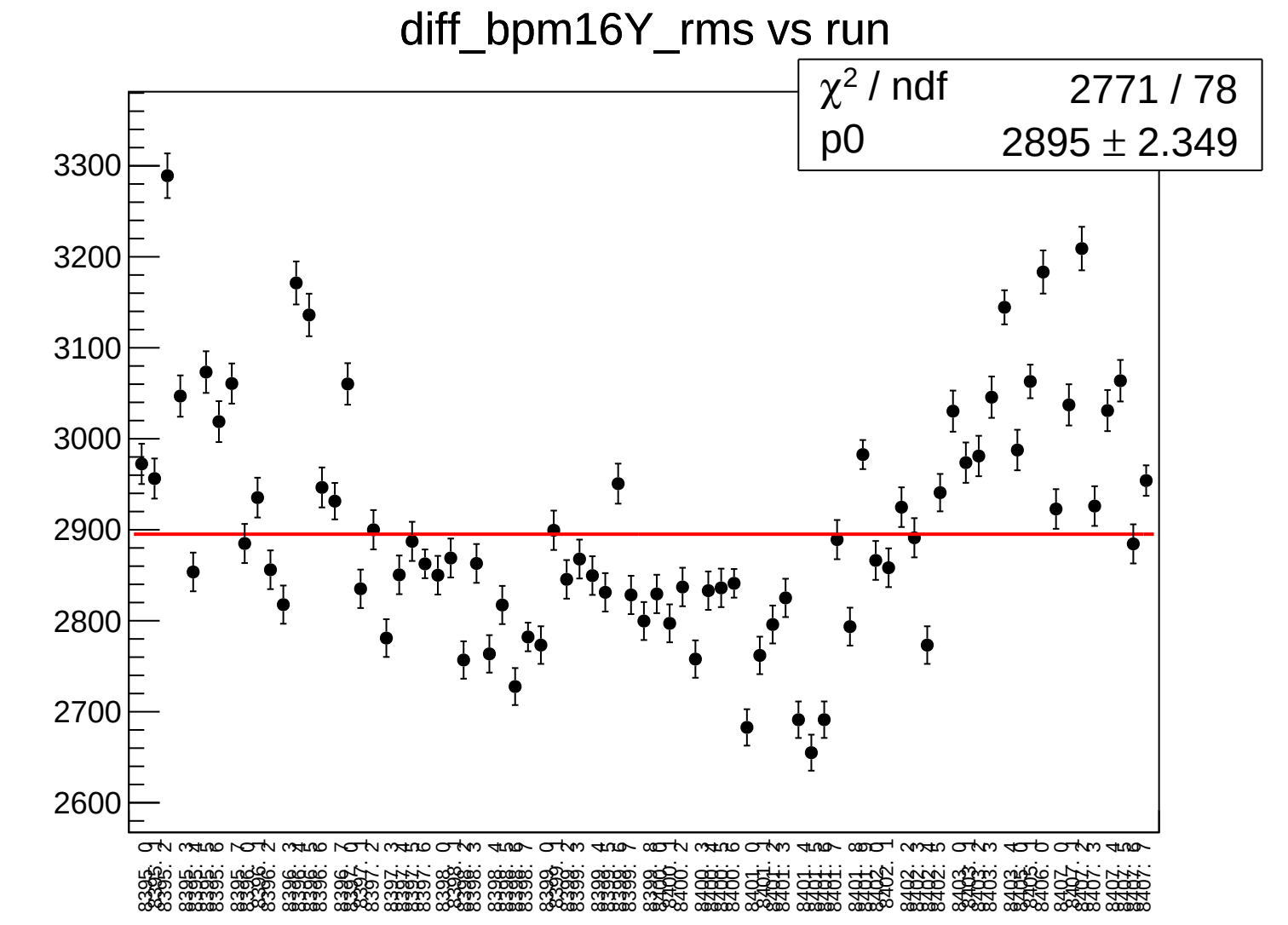

diff_bpm16X_mean vs run
χ² / ndf 77.51 / 78
p0 11.86 ± 20.56
pull
Entries 79
Mean 8275
Std Dev 8238

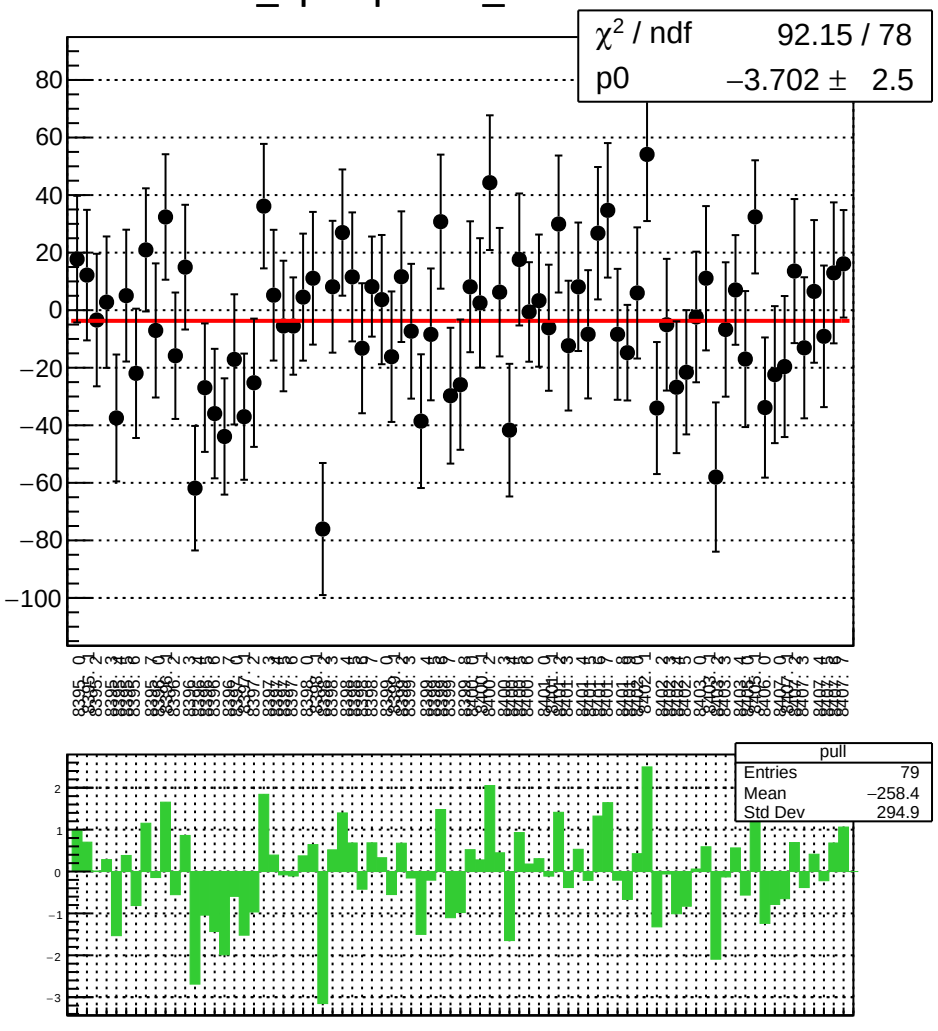

pull1D
Entries 79
Mean 0.0003338
Std Dev 0.9905

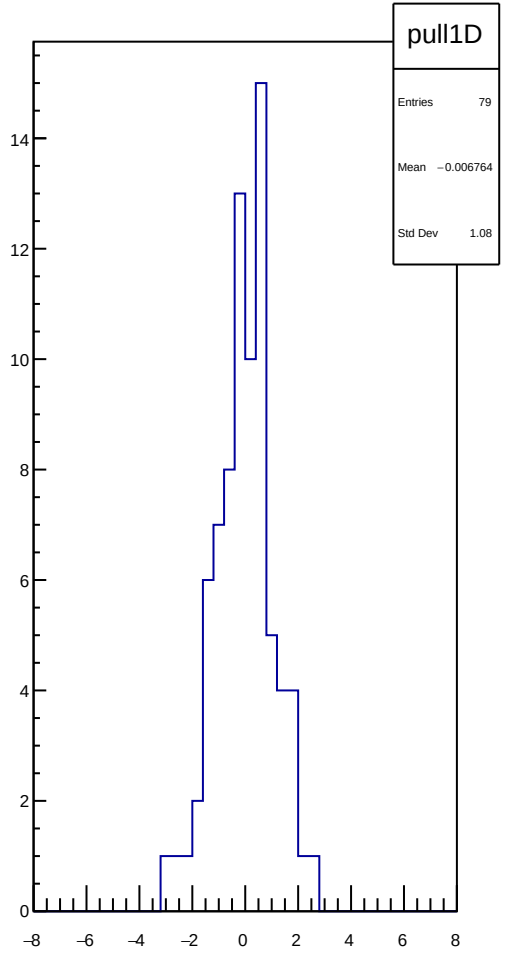

diff_bpm16X_rms vs run
χ^2 / ndf 5130 / 78
p0 1.79e+04 ± 14.54
22000
21000
20000
19000
18000
17000
16000

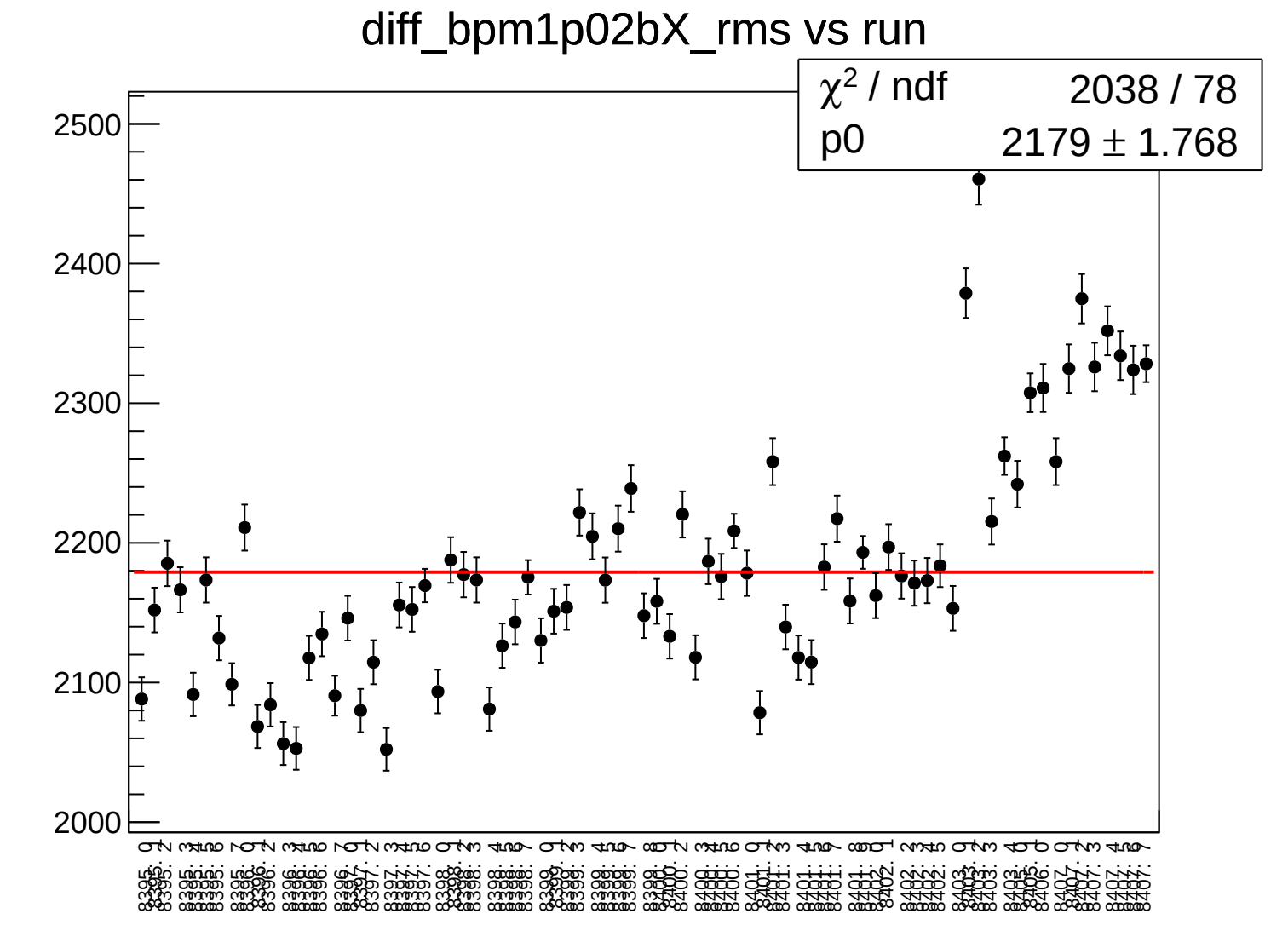

diff_bpm16Y_mean vs run
χ² / ndf 103.2 / 78
p0 0.03532 ± 3.322
100
50
0
−50
−100
pull
Entries 79
Mean −108.6
Std Dev 145.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

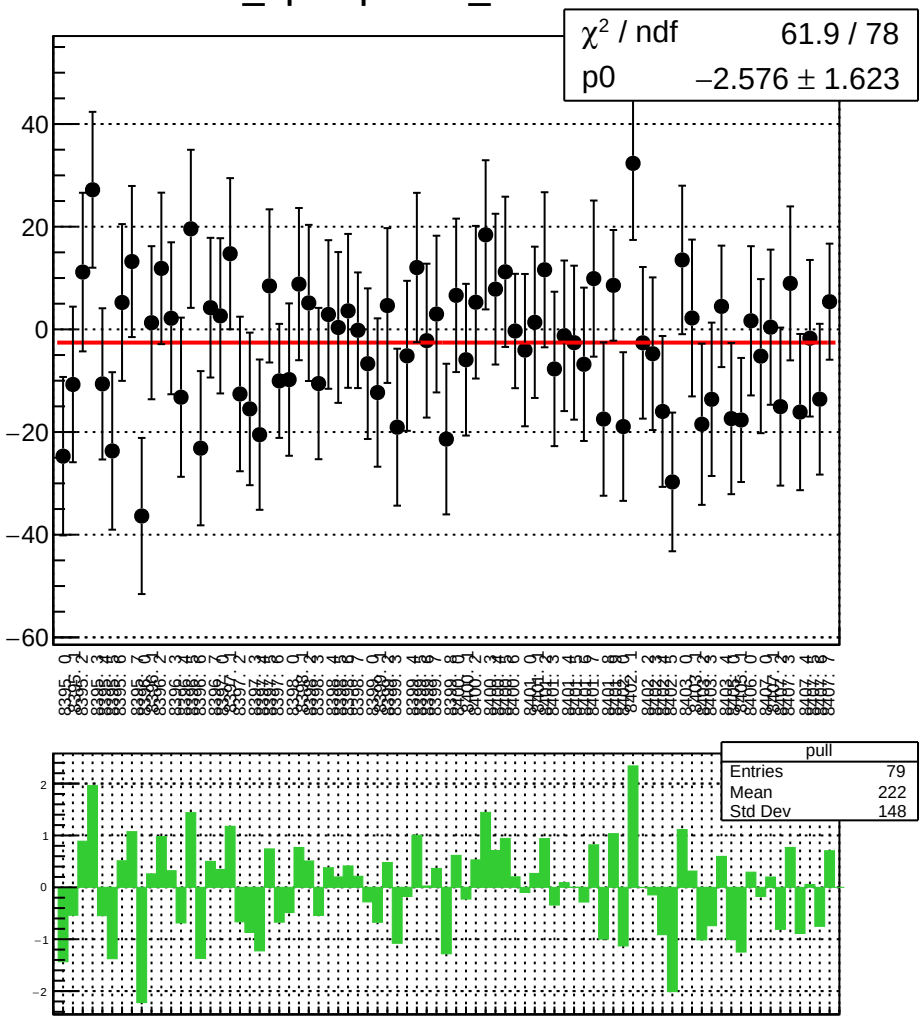

pull1D
Entries 79
Mean −0.01678
Std Dev 1.143
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

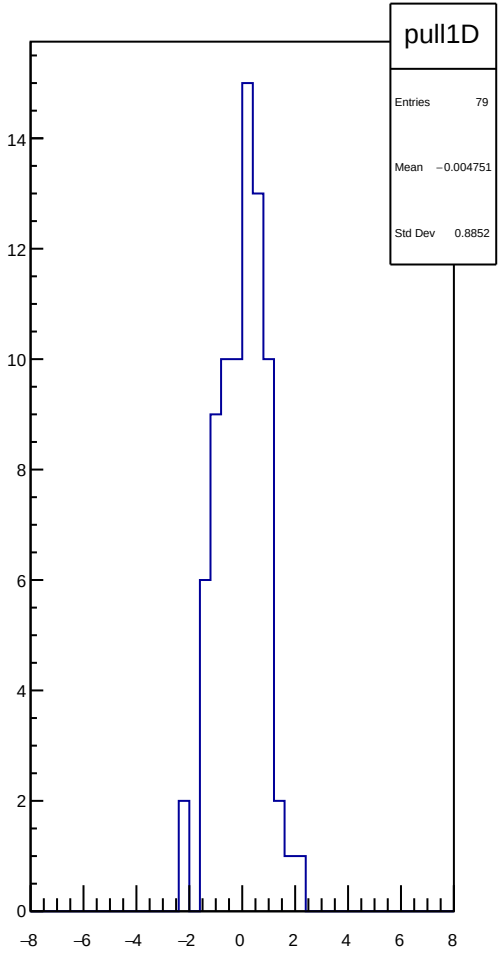

diff_bpm16Y_rms vs run
χ² / ndf 2771 / 78
p0 2895 ± 2.349
3300
3200
3100
3000
2900
2800
2700
2600

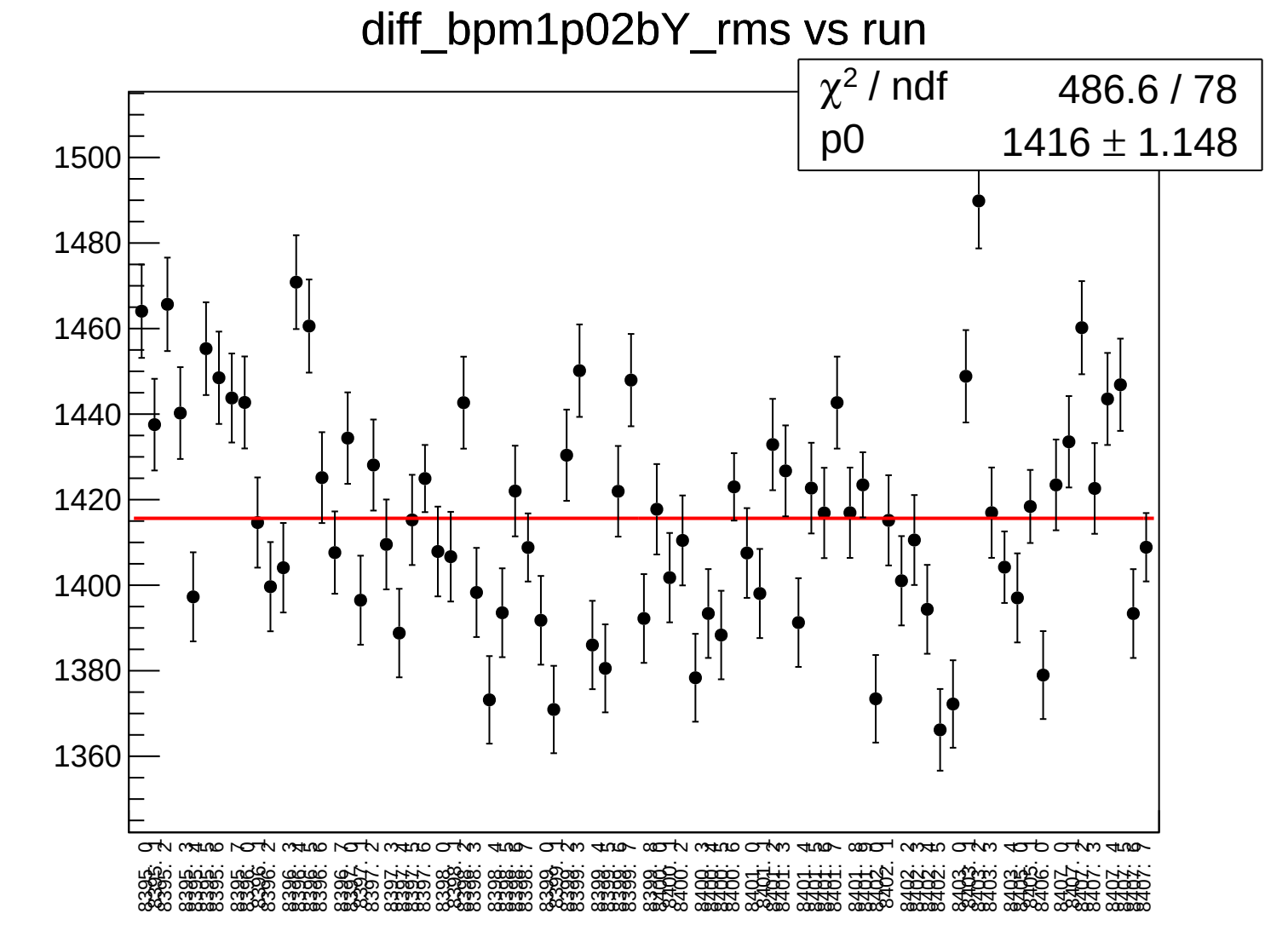

diff_bpm1p02bX_mean vs run
χ² / ndf 92.15 / 78
p0 −3.702 ± 2.5
pull
Entries 79
Mean −258.4
Std Dev 294.9

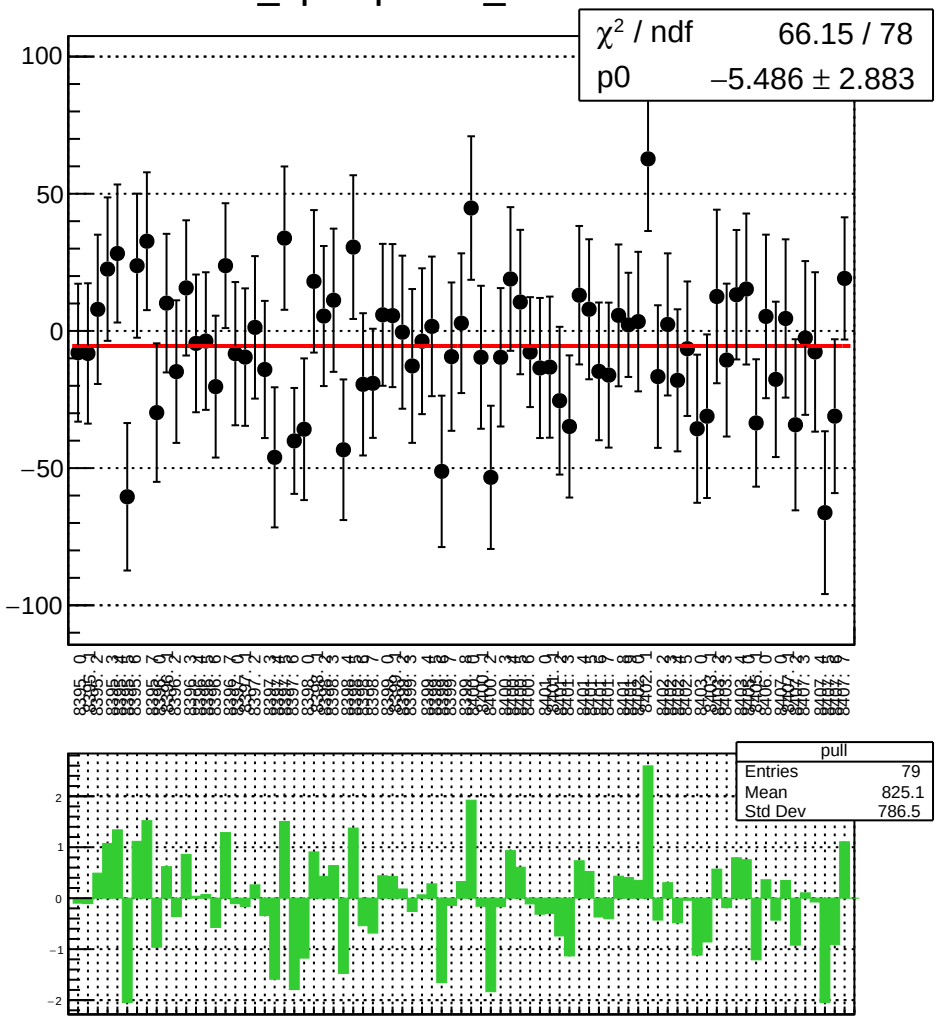

pull1D
Entries 79
Mean −0.006764
Std Dev 1.08

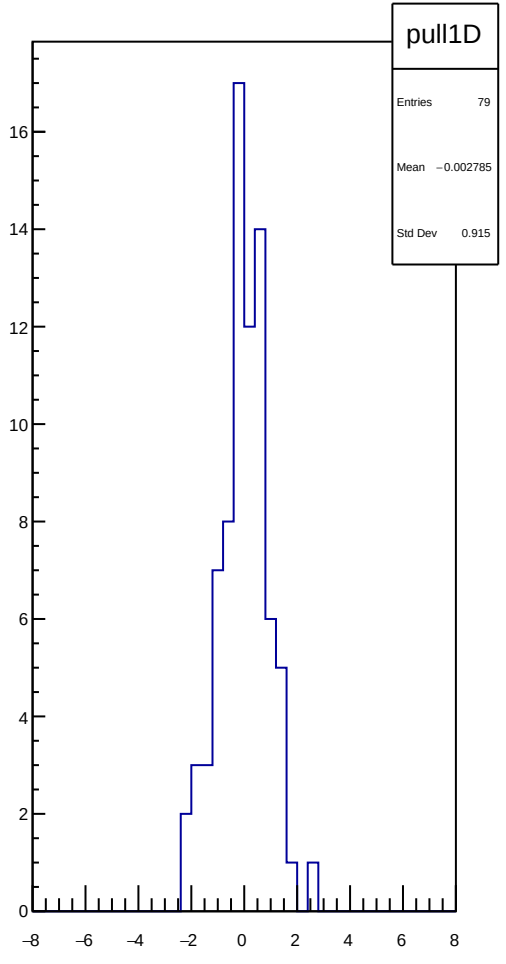

diff_bpm1p02bX_rms vs run
χ² / ndf 2038 / 78
p0 2179 ± 1.768
2500
2400
2300
2200
2100
2000

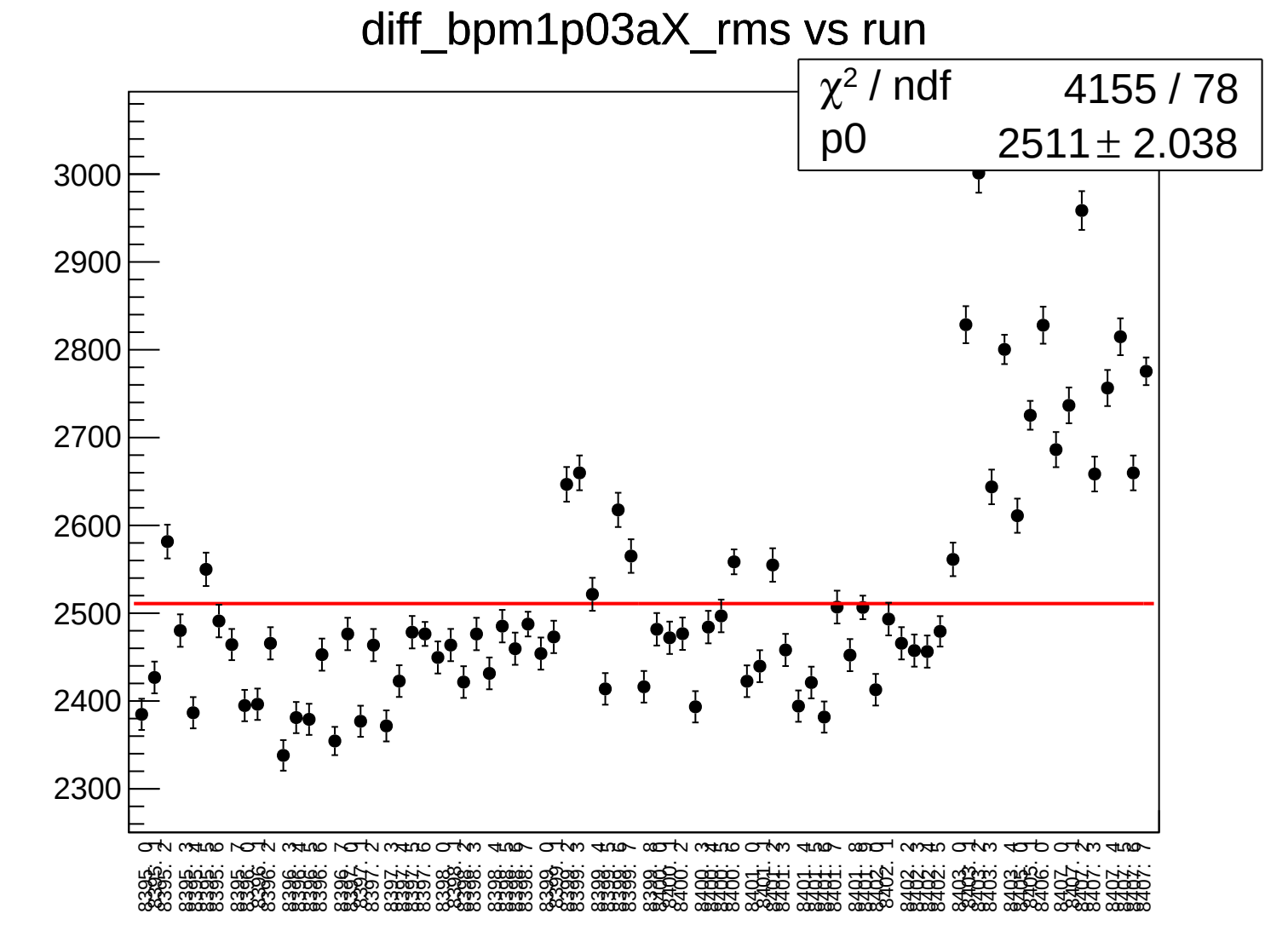

diff_bpm1p02bY_mean vs run
χ² / ndf 61.9 / 78
p0 −2.576 ± 1.623
pull
Entries 79
Mean 222
Std Dev 148

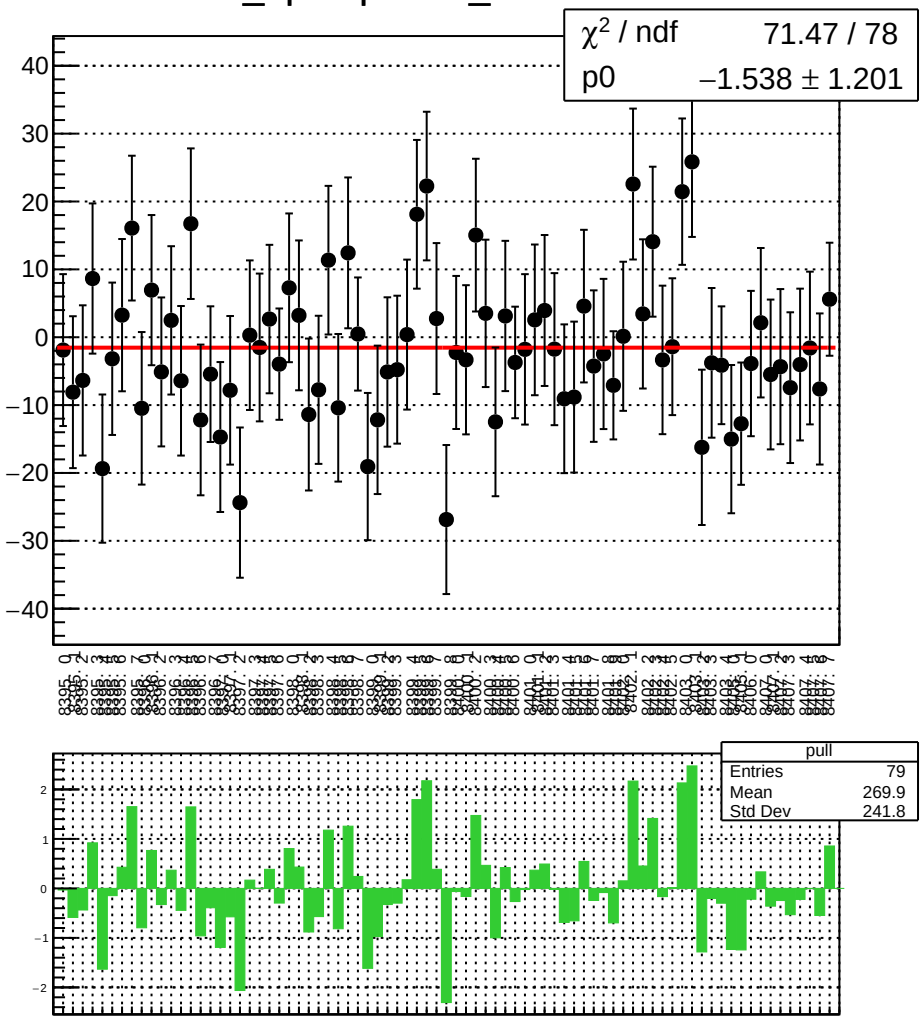

pull1D
Entries 79
Mean −0.004751
Std Dev 0.8852

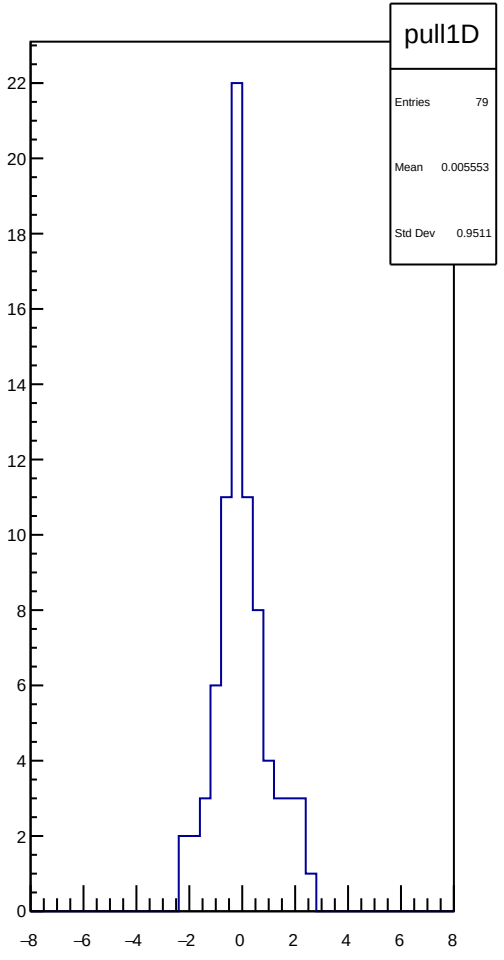

diff_bpm1p02bY_rms vs run
χ² / ndf 486.6 / 78
p0 1416 ± 1.148
1500
1480
1460
1440
1420
1400
1380
1360

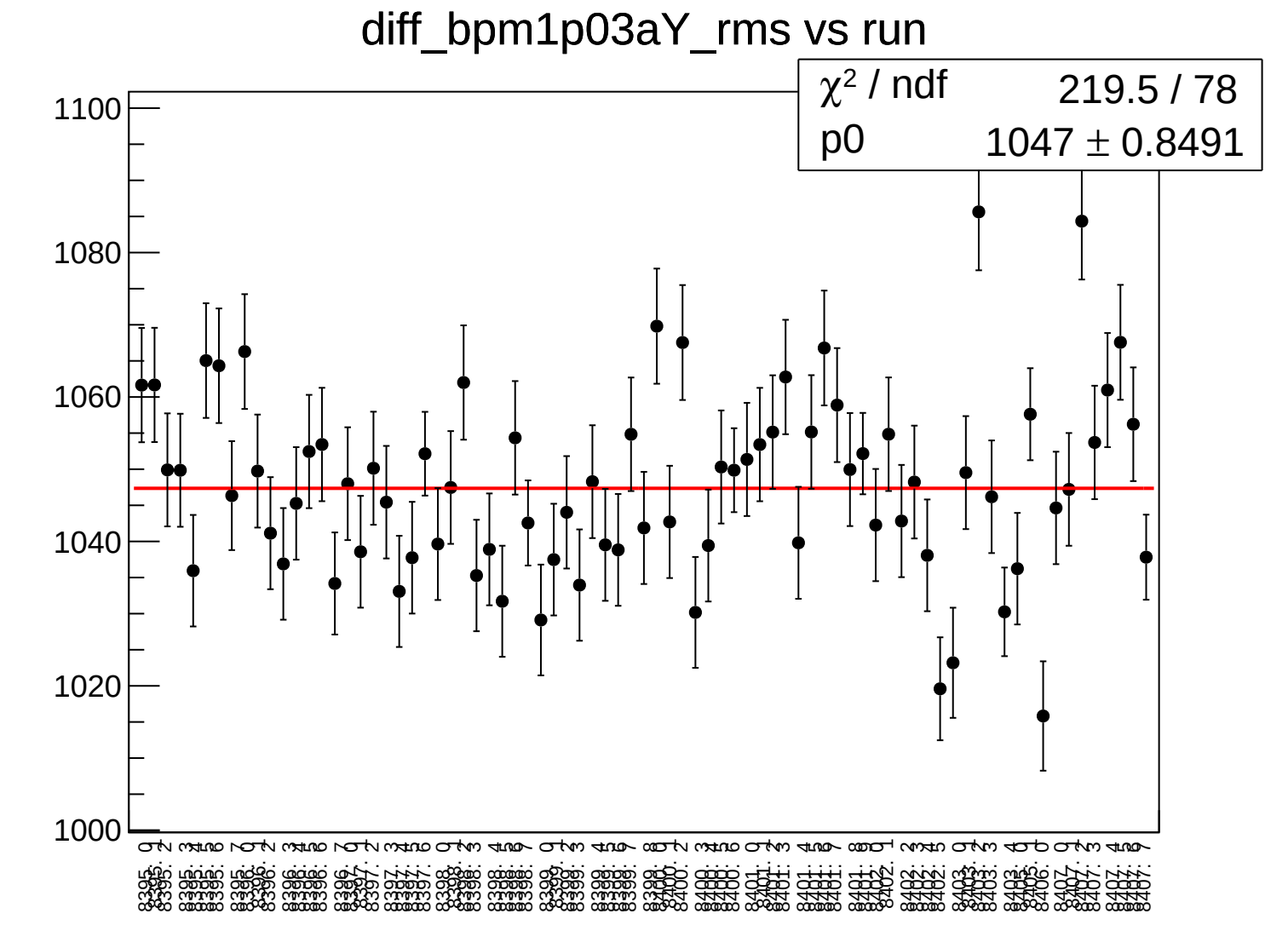

diff_bpm1p03aX_mean vs run
χ² / ndf 66.15 / 78
p0 −5.486 ± 2.883
100
50
0
−50
−100
pull
Entries 79
Mean 825.1
Std Dev 786.5
2
1
0
−1
−2

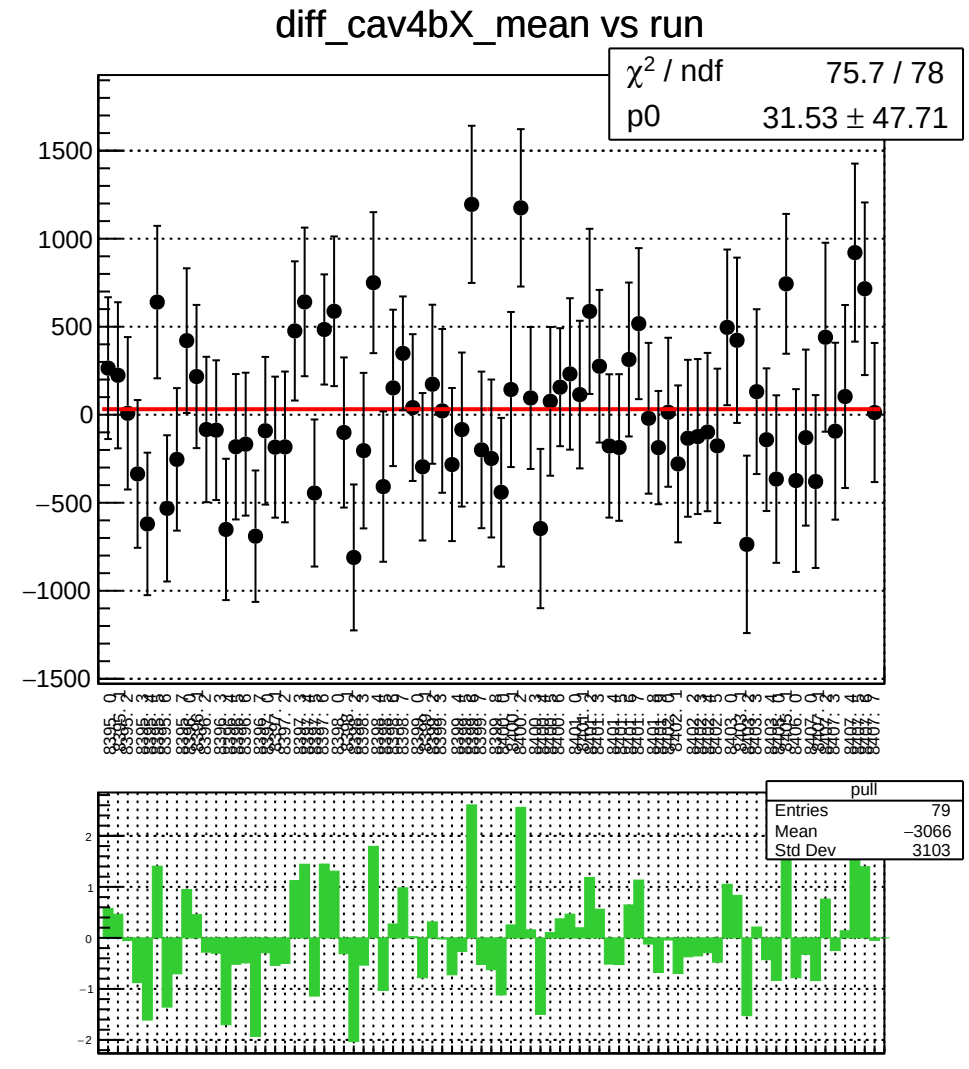

pull1D
Entries 79
Mean −0.002785
Std Dev 0.915
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

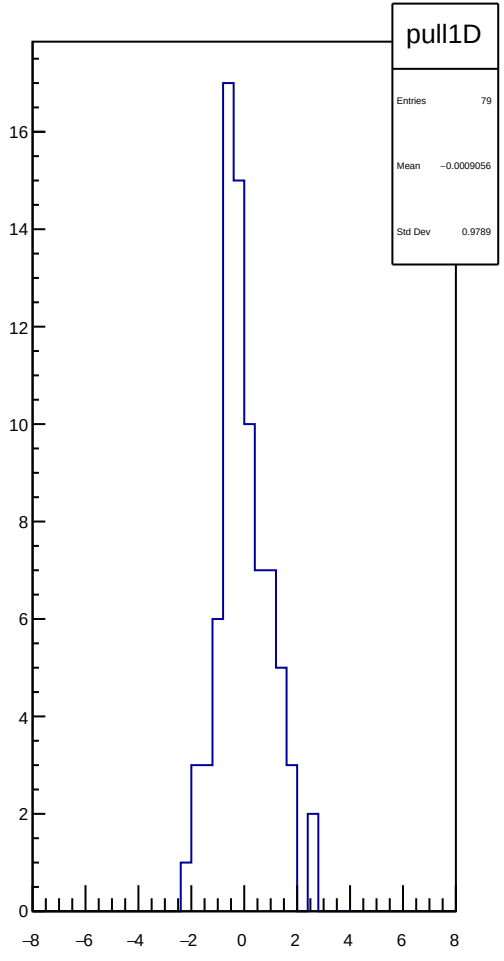

diff_bpm1p03aX_rms vs run
χ² / ndf 4155 / 78
p0 2511 ± 2.038
3000
2900
2800
2700
2600
2500
2400
2300

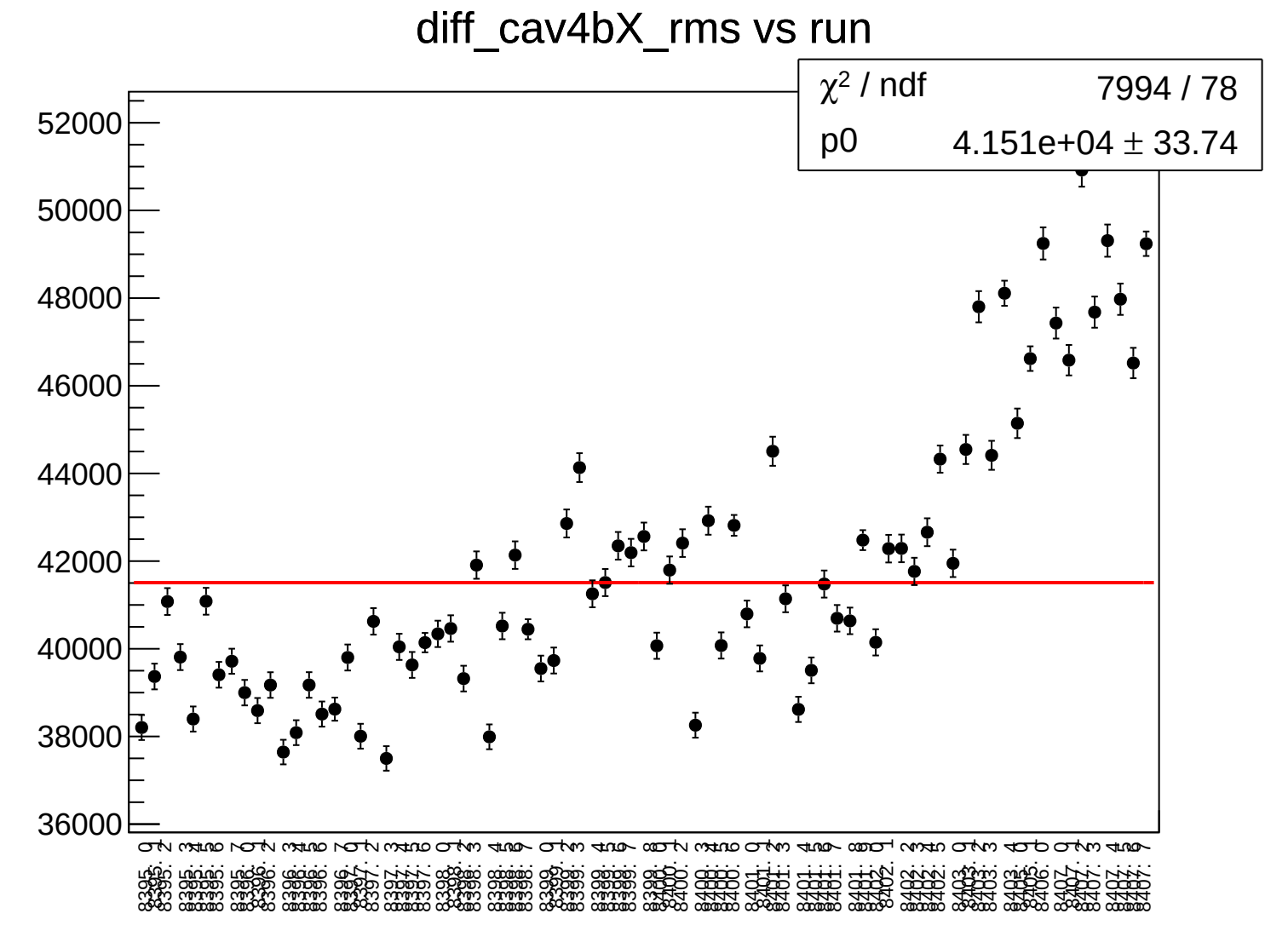

diff_bpm1p03aY_mean vs run
χ² / ndf 71.47 / 78
p0 −1.538 ± 1.201
pull
Entries 79
Mean 269.9
Std Dev 241.8

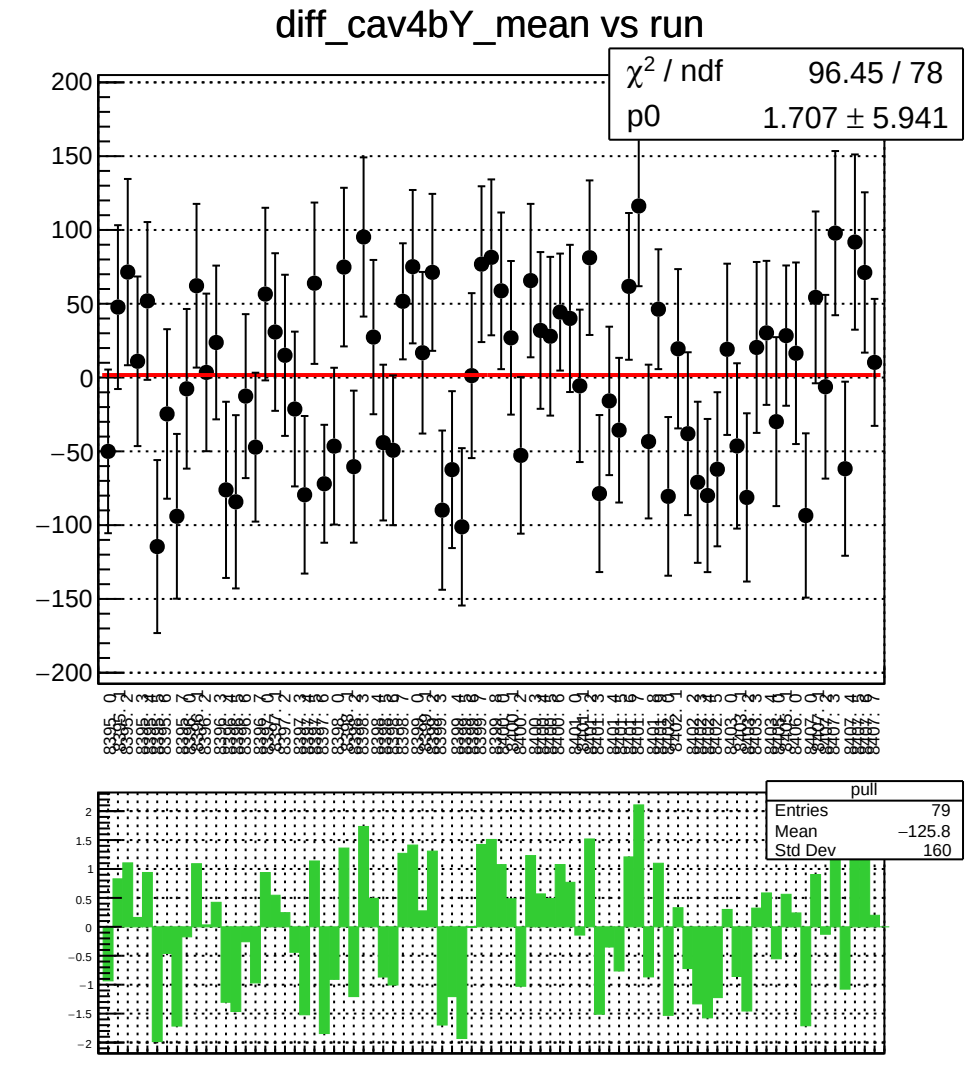

pull1D
Entries 79
Mean 0.005553
Std Dev 0.9511

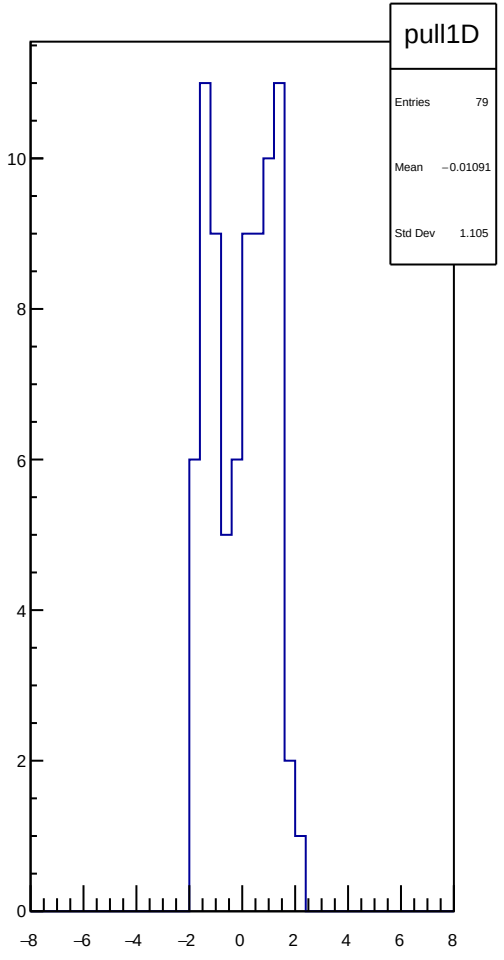

diff_bpm1p03aY_rms vs run
χ² / ndf 219.5 / 78
p0 1047 ± 0.8491
1100
1080
1060
1040
1020
1000

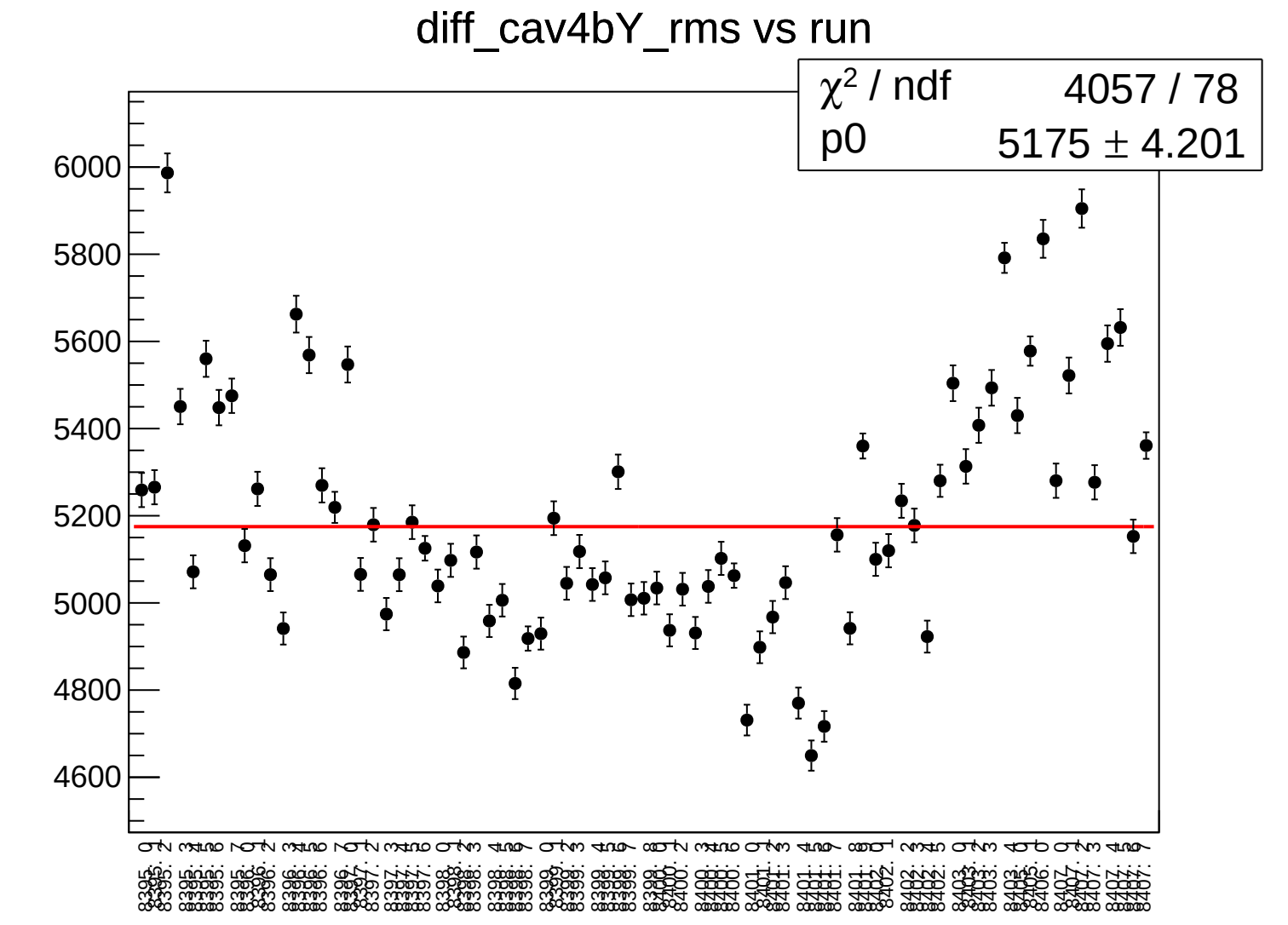

diff_cav4bX_mean vs run
χ^2 / ndf 75.7 / 78
p0 31.53 ± 47.71
1500
1000
500
0
−500
−1000
−1500
pull
Entries 79
Mean −3066
Std Dev 3103
2
1
0
−1
−2

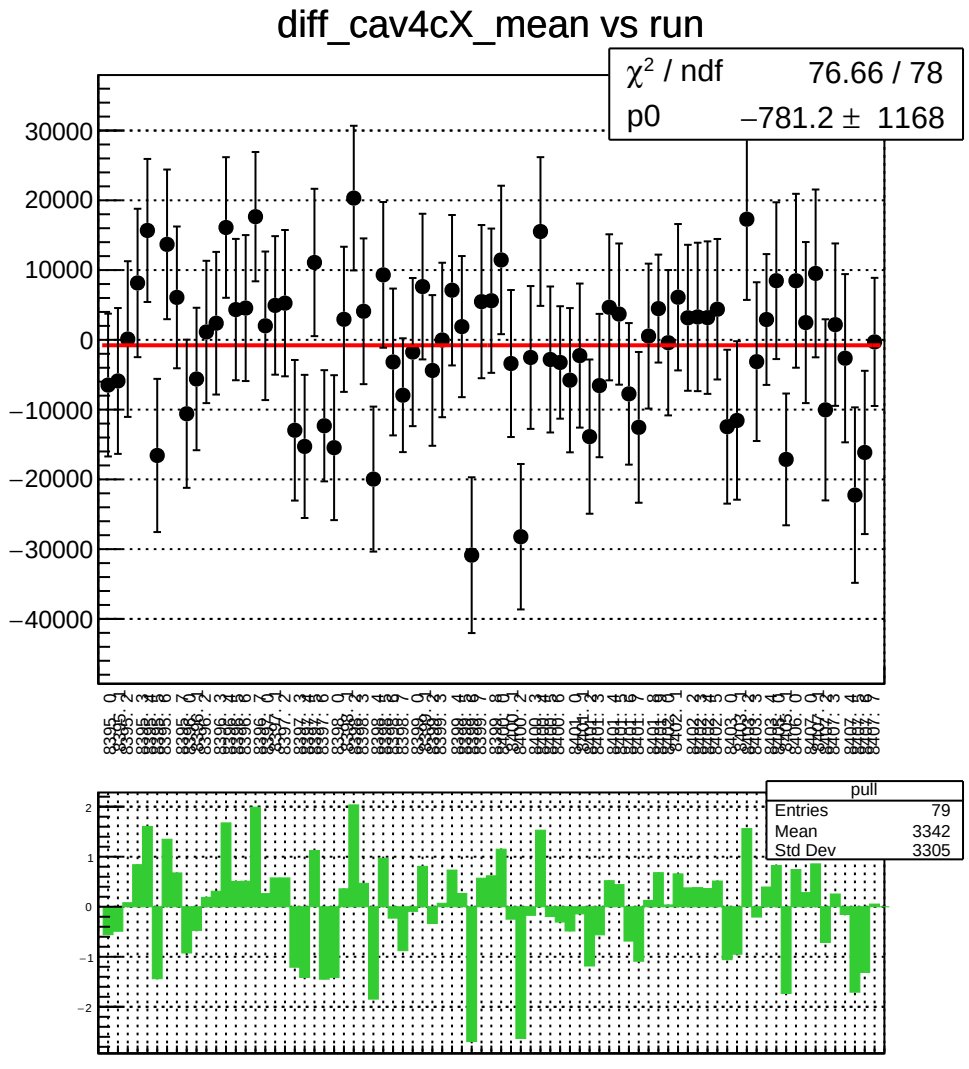

pull1D
Entries 79
Mean −0.0009056
Std Dev 0.9789
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

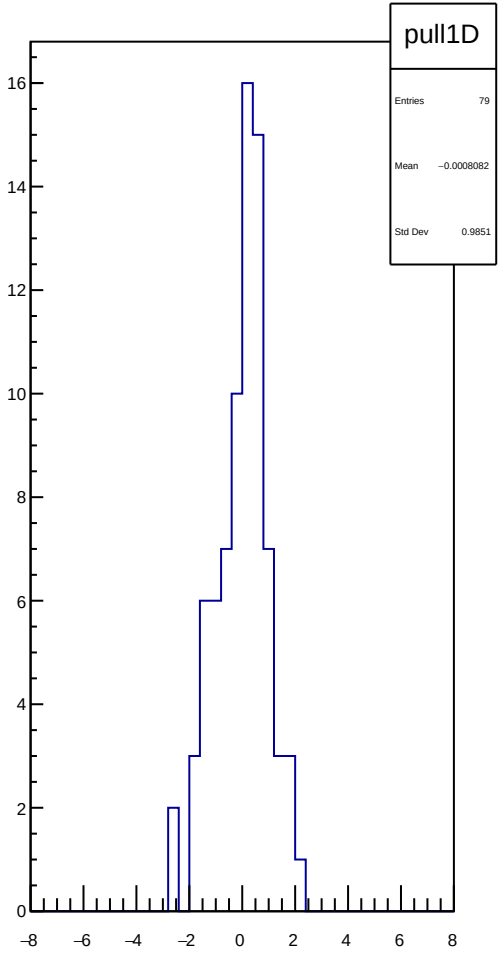

diff_cav4bX_rms vs run
χ² / ndf 7994 / 78
p0 4.151e+04 ± 33.74
52000
50000
48000
46000
44000
42000
40000
38000
36000

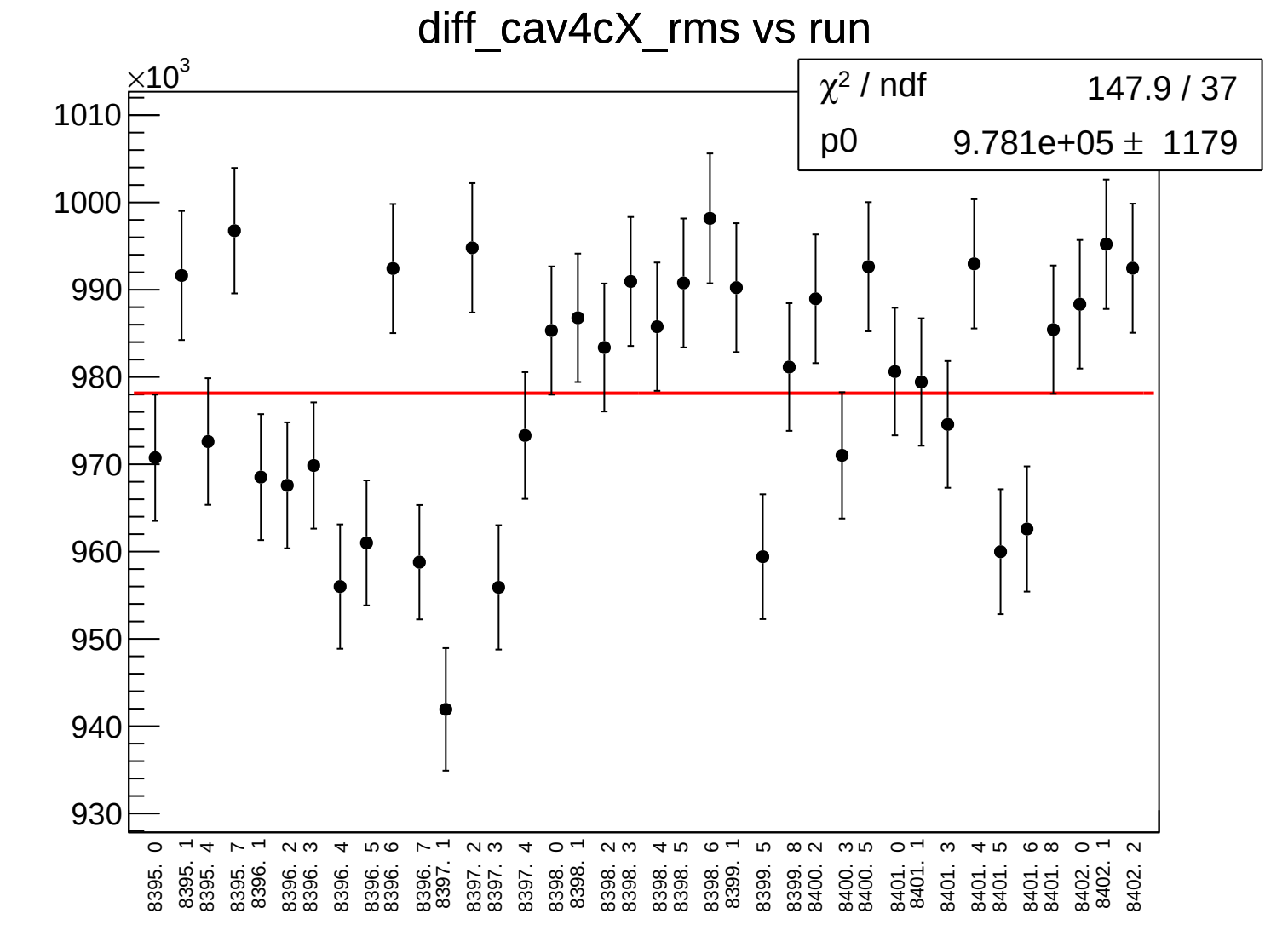

diff_cav4bY_mean vs run
χ^2 / ndf 96.45 / 78
p0 1.707 ± 5.941
pull
Entries 79
Mean −125.8
Std Dev 160

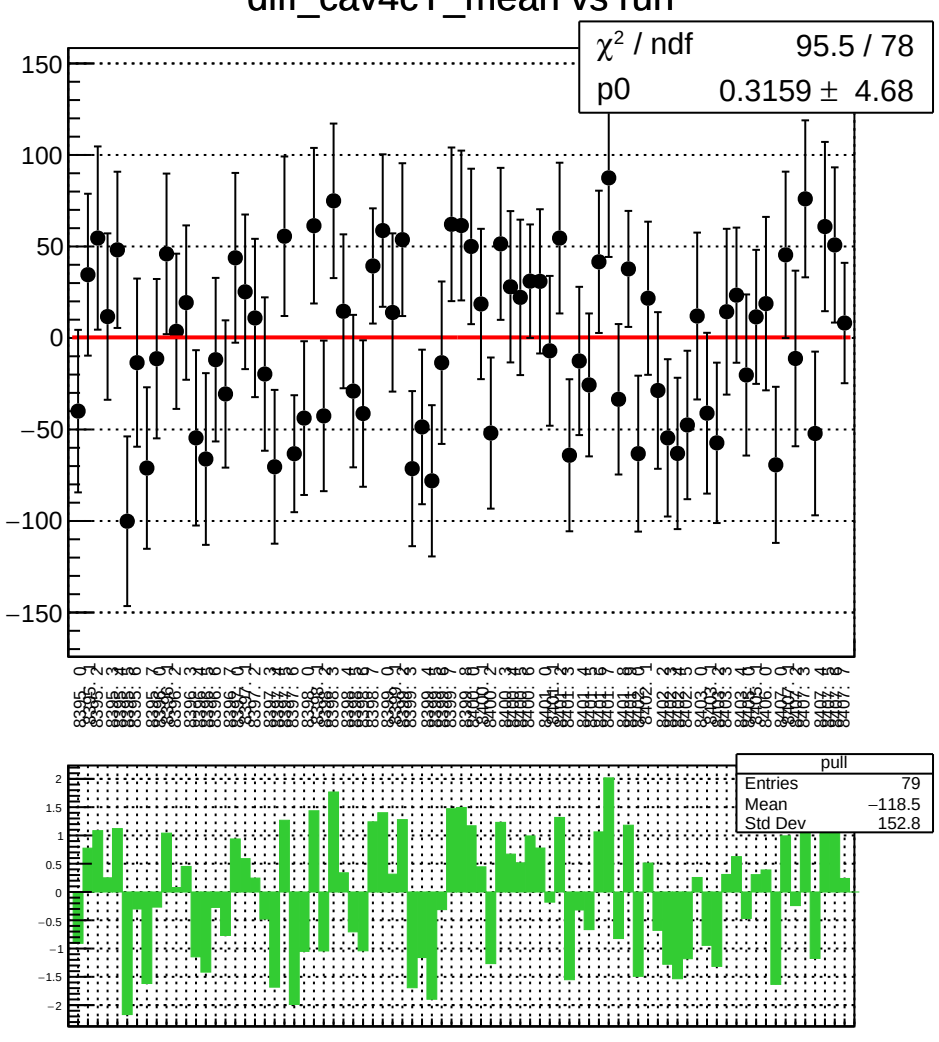

pull1D
Entries 79
Mean −0.01091
Std Dev 1.105

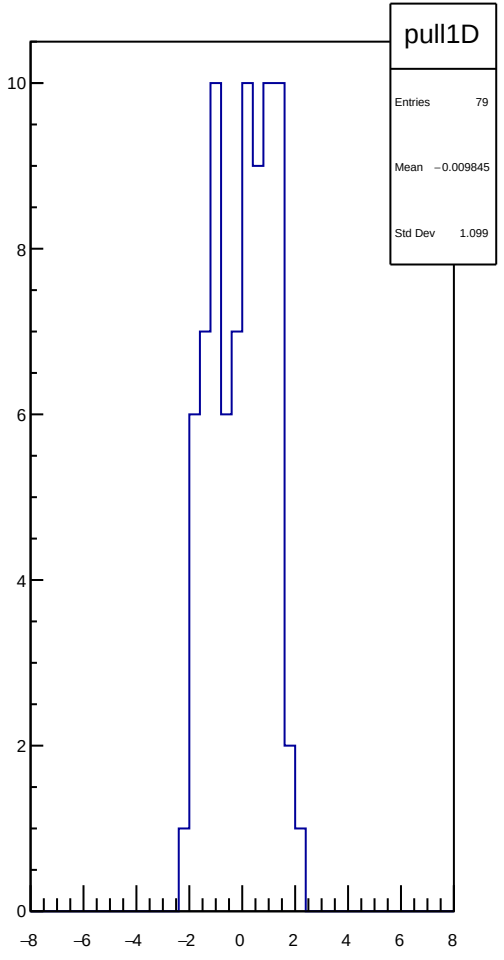

diff_cav4bY_rms vs run
χ² / ndf 4057 / 78
p0 5175 ± 4.201
6000
5800
5600
5400
5200
5000
4800
4600

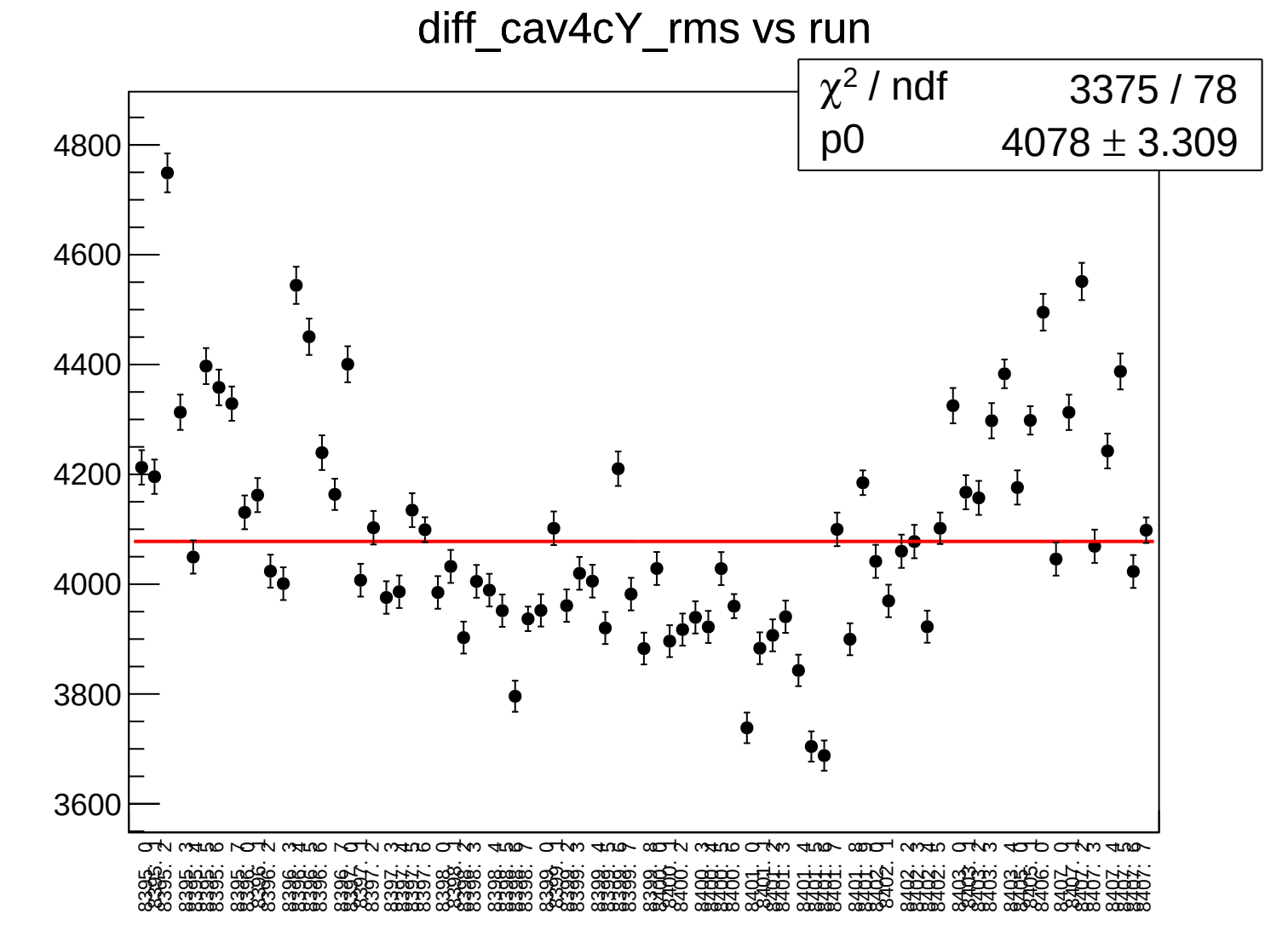

diff_cav4cX_mean vs run
χ² / ndf 76.66 / 78
p0 −781.2 ± 1168
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 79
Mean 3342
Std Dev 3305
2
1
0
−1
−2

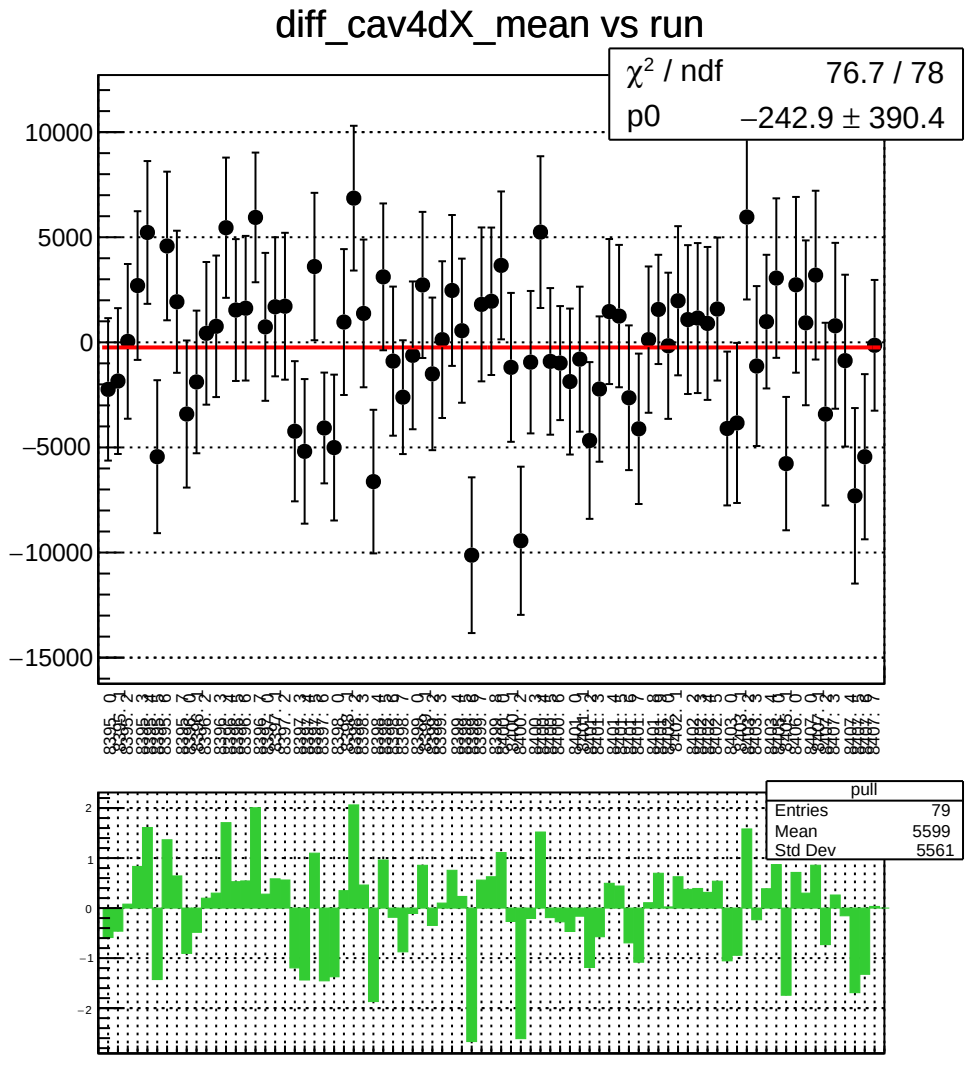

pull1D
Entries 79
Mean −0.0008082
Std Dev 0.9851
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

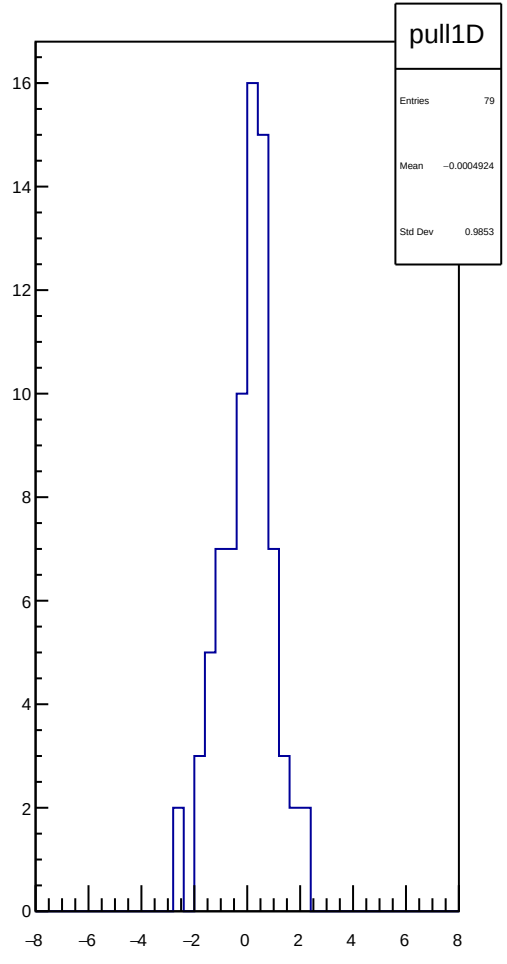

diff_cav4cX_rms vs run
×10^3
χ² / ndf 147.9 / 37
p0 9.781e+05 ± 1179
1010
1000
990
980
970
960
950
940
930
8395. 0
8395. 1
8395. 4
8395. 7
8396. 1
8396. 2
8396. 3
8396. 4
8396. 5
8396. 6
8396. 7
8397. 1
8397. 2
8397. 3
8397. 4
8398. 0
8398. 1
8398. 2
8398. 3
8398. 4
8398. 5
8398. 6
8399. 1
8399. 5
8399. 8
8400. 2
8400. 3
8400. 5
8401. 0
8401. 1
8401. 3
8401. 4
8401. 5
8401. 6
8401. 8
8402. 0
8402. 1
8402. 2

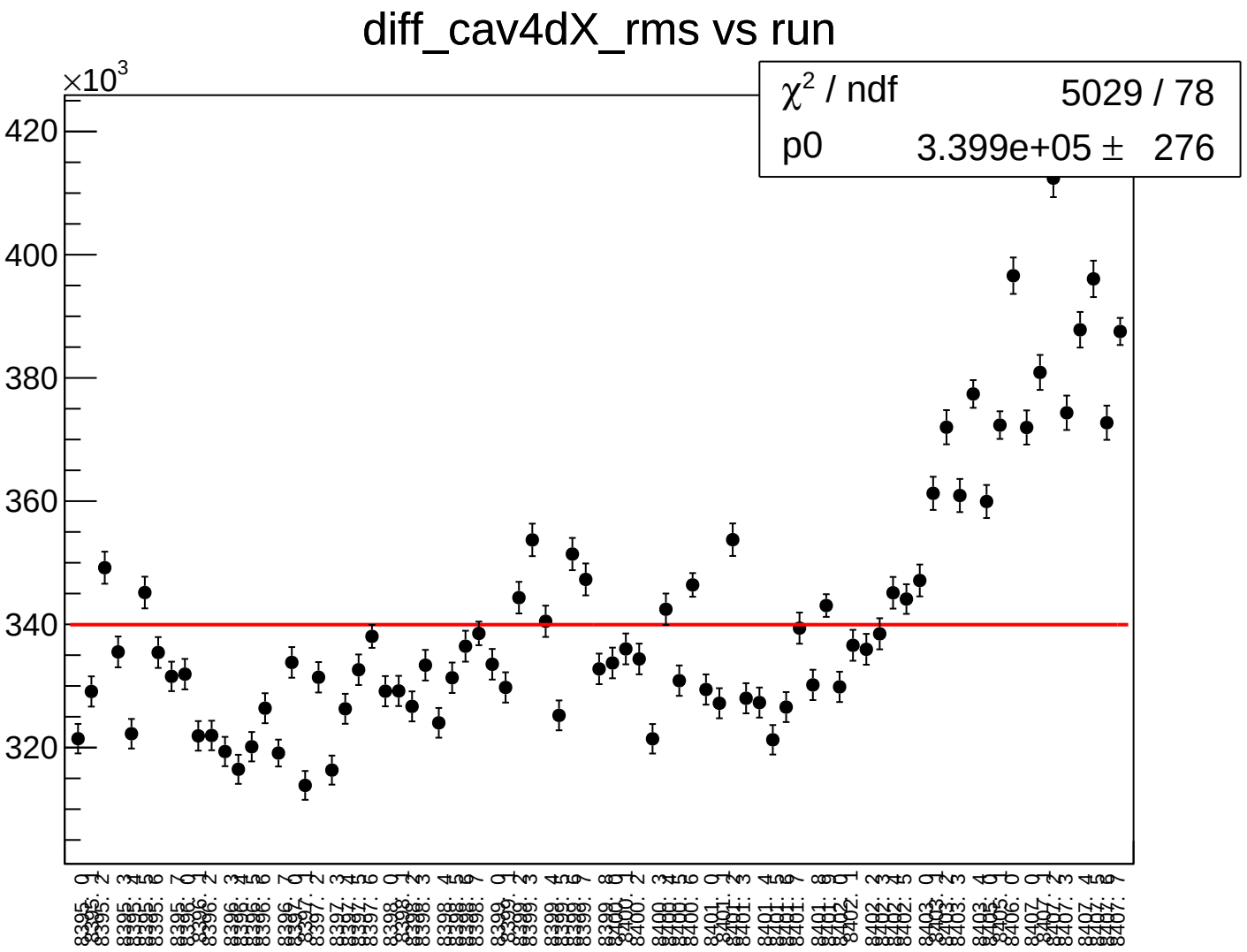

diff_cav4cY_mean vs run
χ² / ndf 95.5 / 78
p0 0.3159 ± 4.68
150
100
50
0
−50
−100
−150
pull
Entries 79
Mean −118.5
Std Dev 152.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

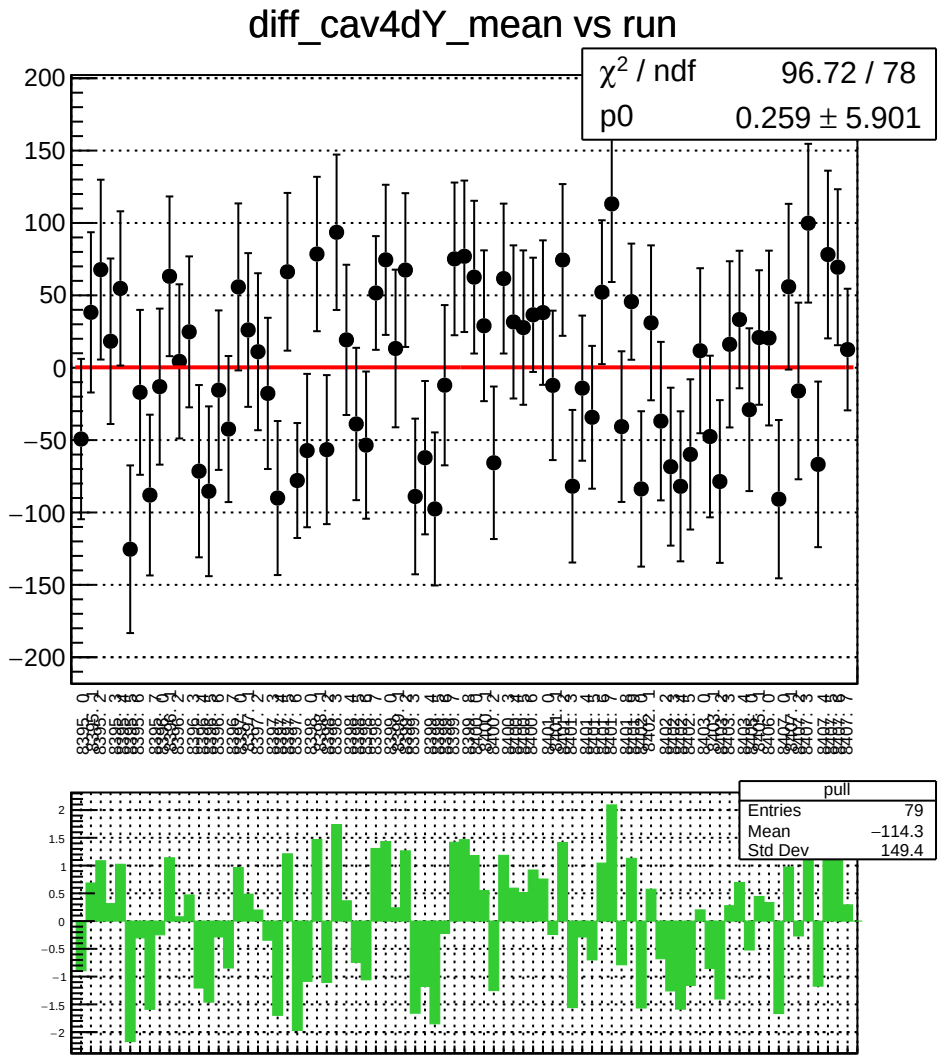

pull1D
Entries 79
Mean −0.009845
Std Dev 1.099
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

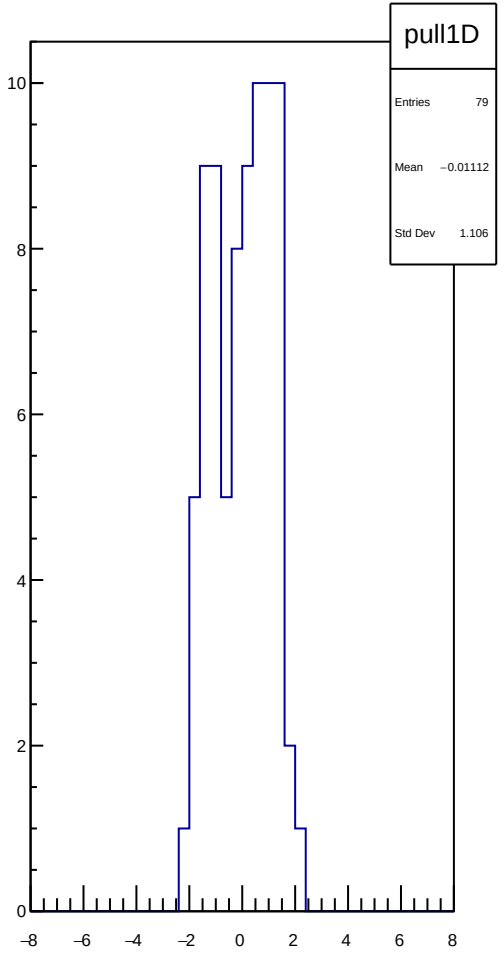

diff_cav4cY_rms vs run
χ² / ndf 3375 / 78
p0 4078 ± 3.309
4800
4600
4400
4200
4000
3800
3600

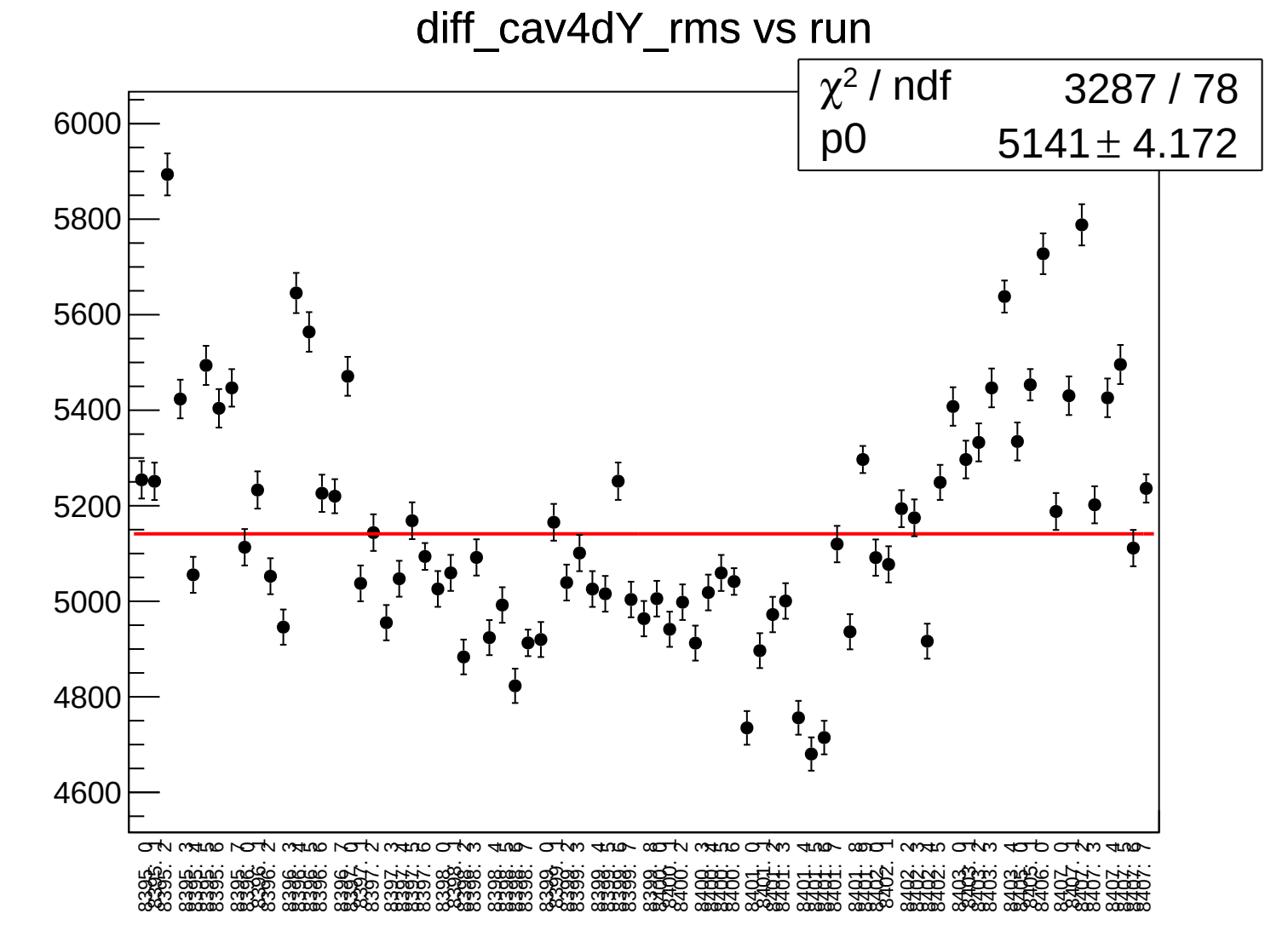

diff_cav4dX_mean vs run
χ² / ndf 76.7 / 78
p0 −242.9 ± 390.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 79
Mean 5599
Std Dev 5561
2
1
0
−1
−2

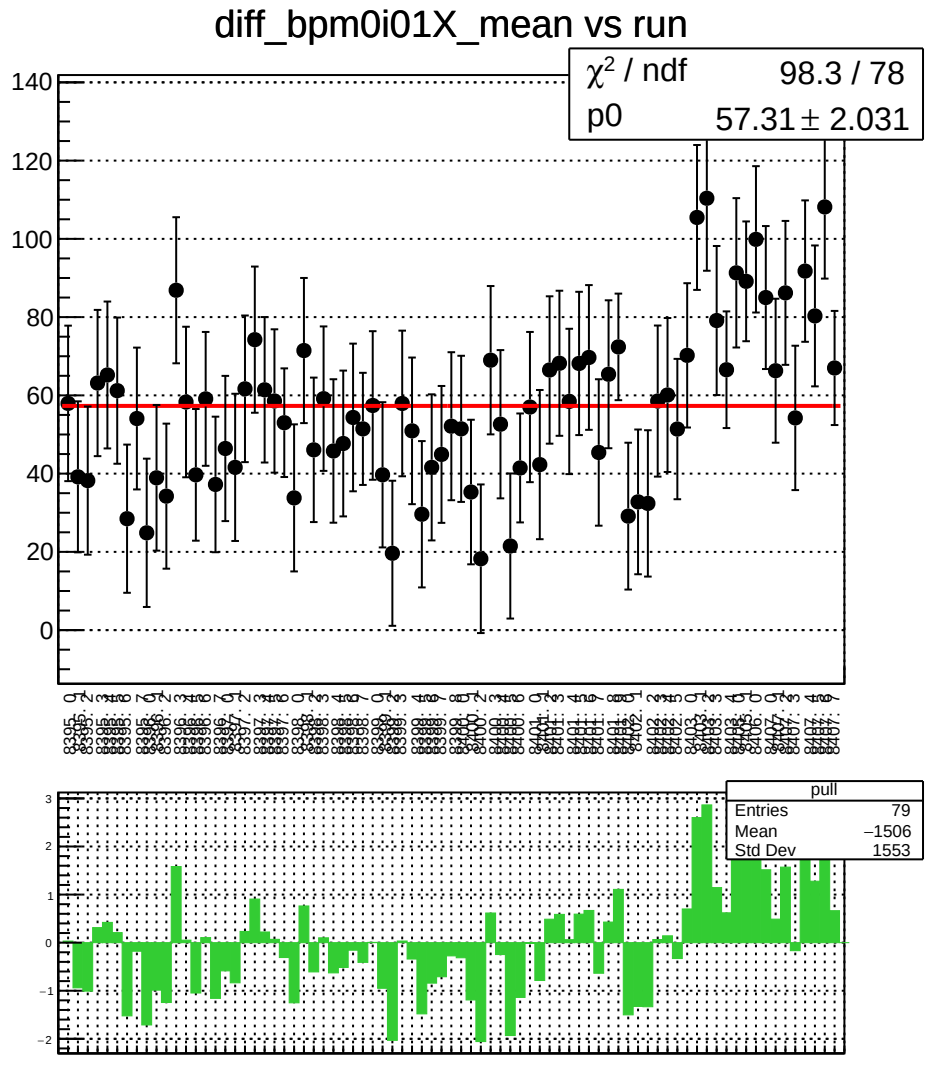

pull1D
Entries 79
Mean −0.0004924
Std Dev 0.9853
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

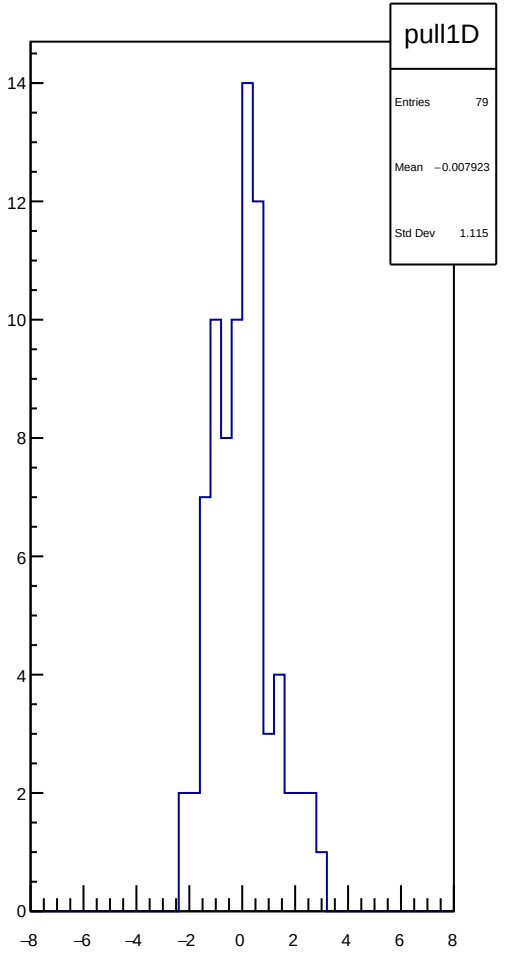

diff_cav4dX_rms vs run
×10^3
420
400
380
360
340
320
χ² / ndf 5029 / 78
p0 3.399e+05 ± 276

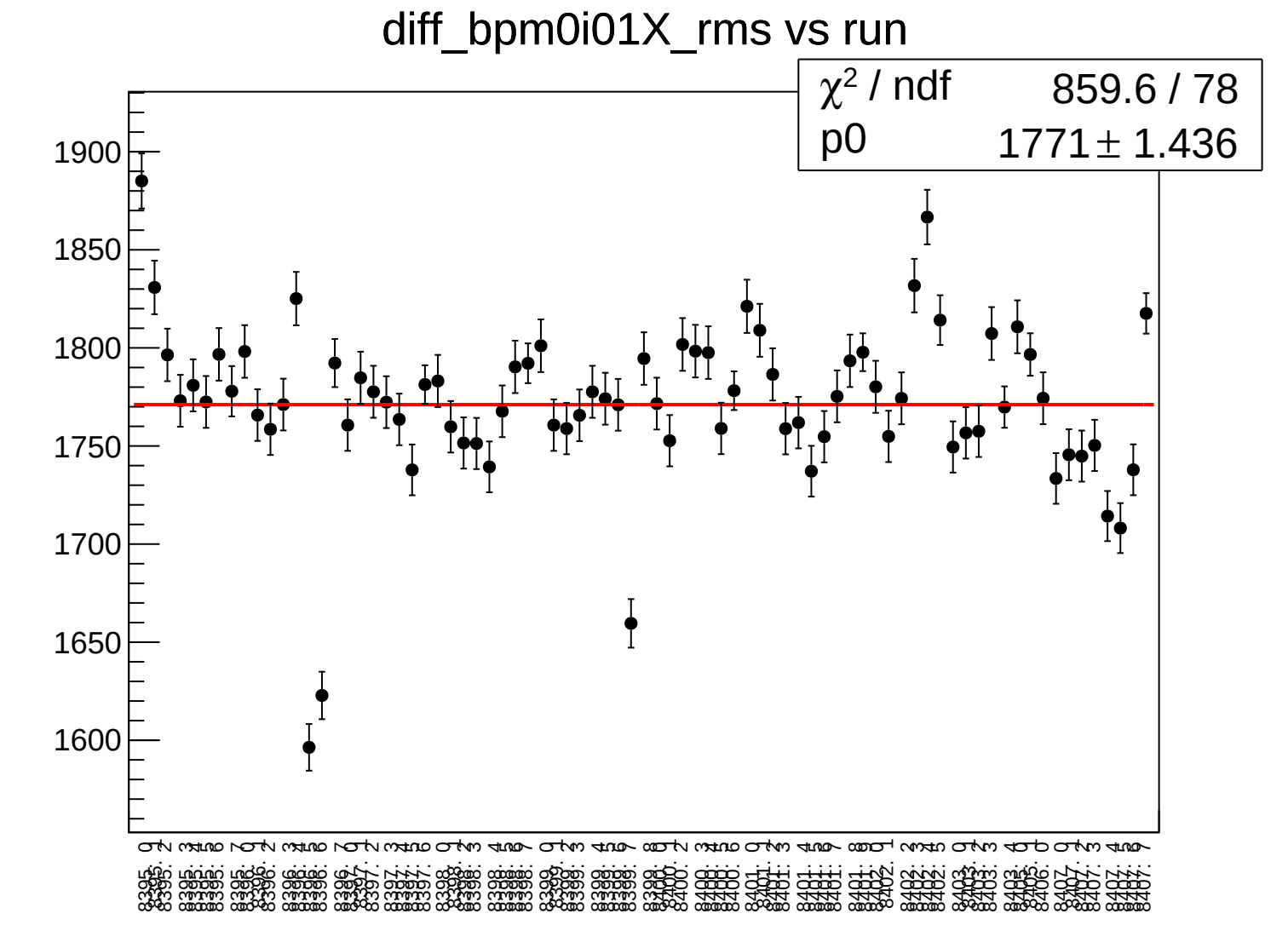

diff_cav4dY_mean vs run
χ^2 / ndf 96.72 / 78
p0 0.259 ± 5.901
pull
Entries 79
Mean −114.3
Std Dev 149.4

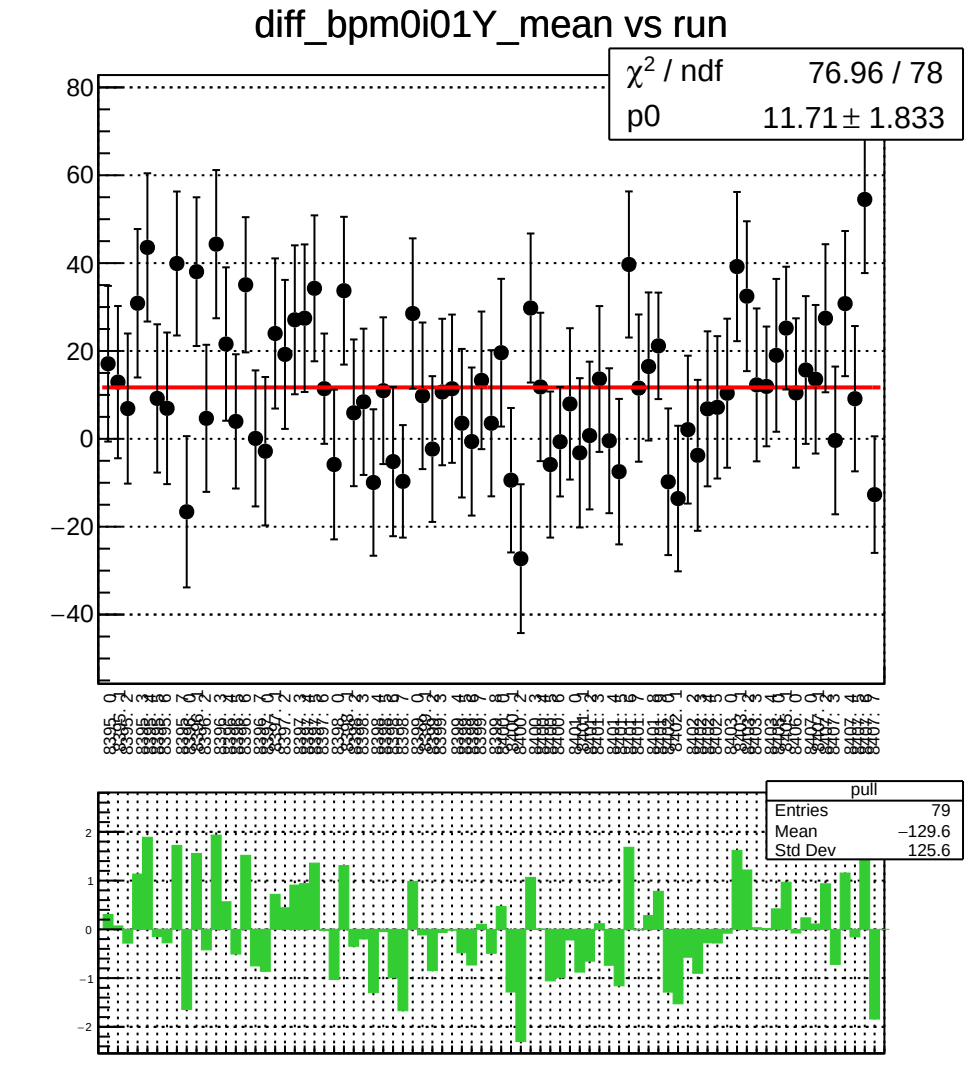

pull1D
Entries 79
Mean −0.01112
Std Dev 1.106

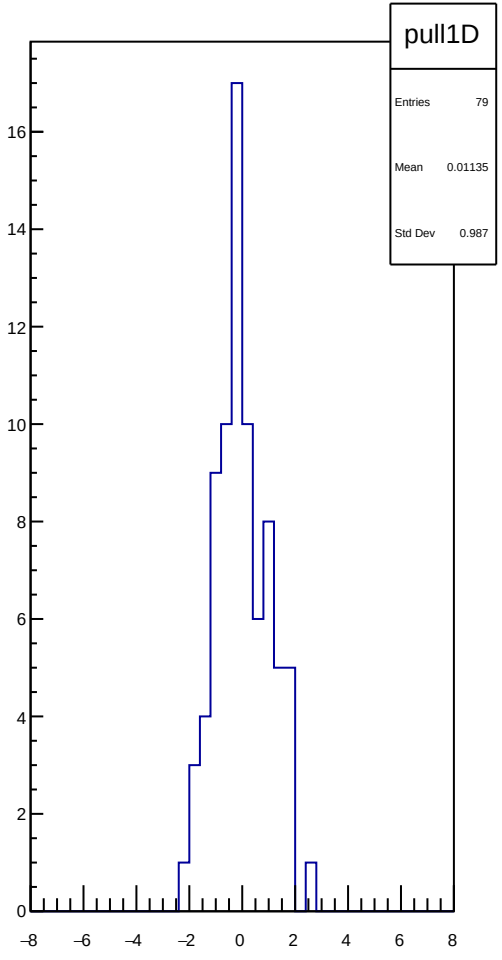

diff_cav4dY_rms vs run
χ² / ndf 3287 / 78
p0 5141 ± 4.172
6000
5800
5600
5400
5200
5000
4800
4600

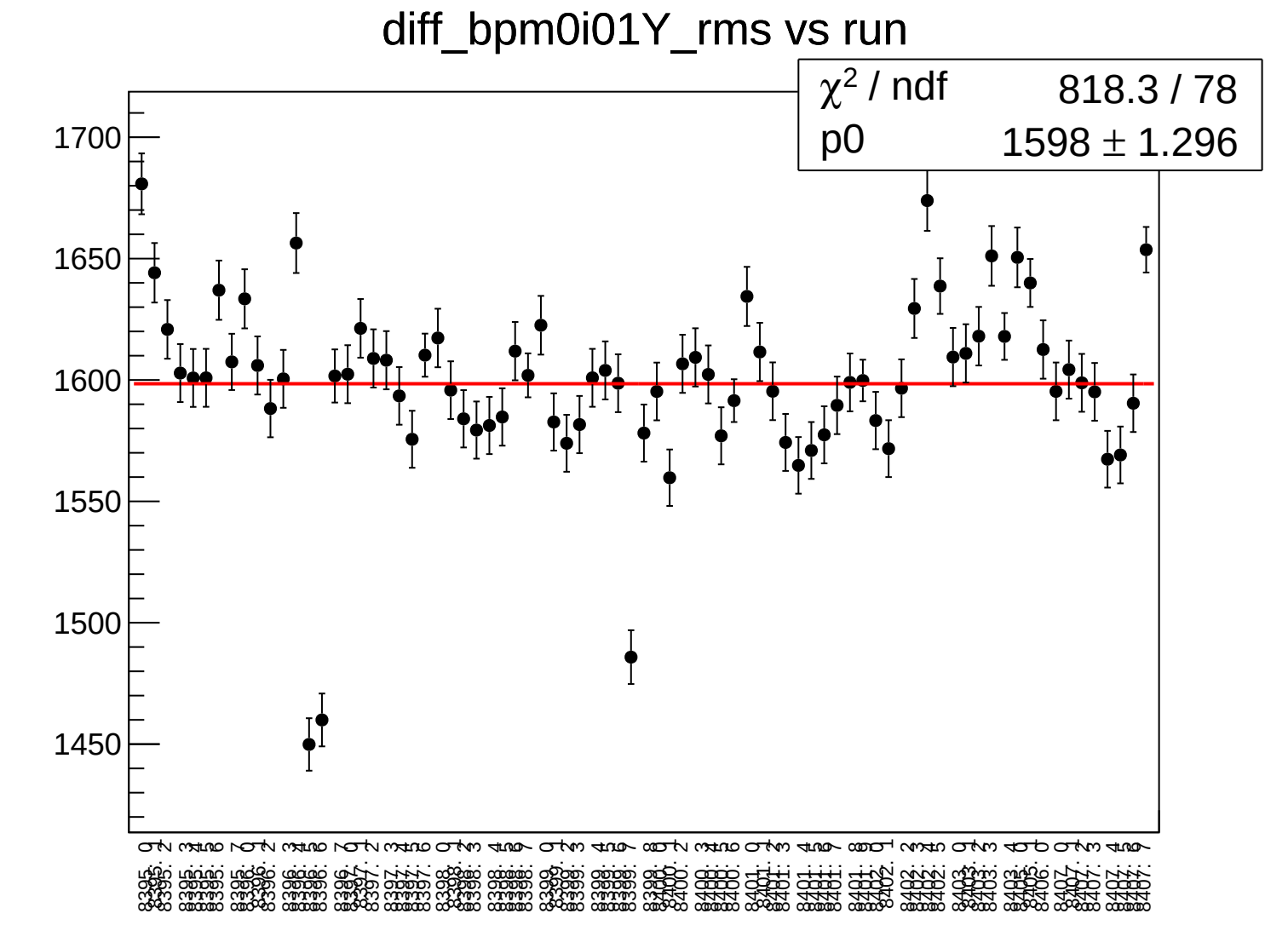

diff_bpm0i01X_mean vs run
χ^2 / ndf 98.3 / 78
p0 57.31 ± 2.031
pull
Entries 79
Mean −1506
Std Dev 1553

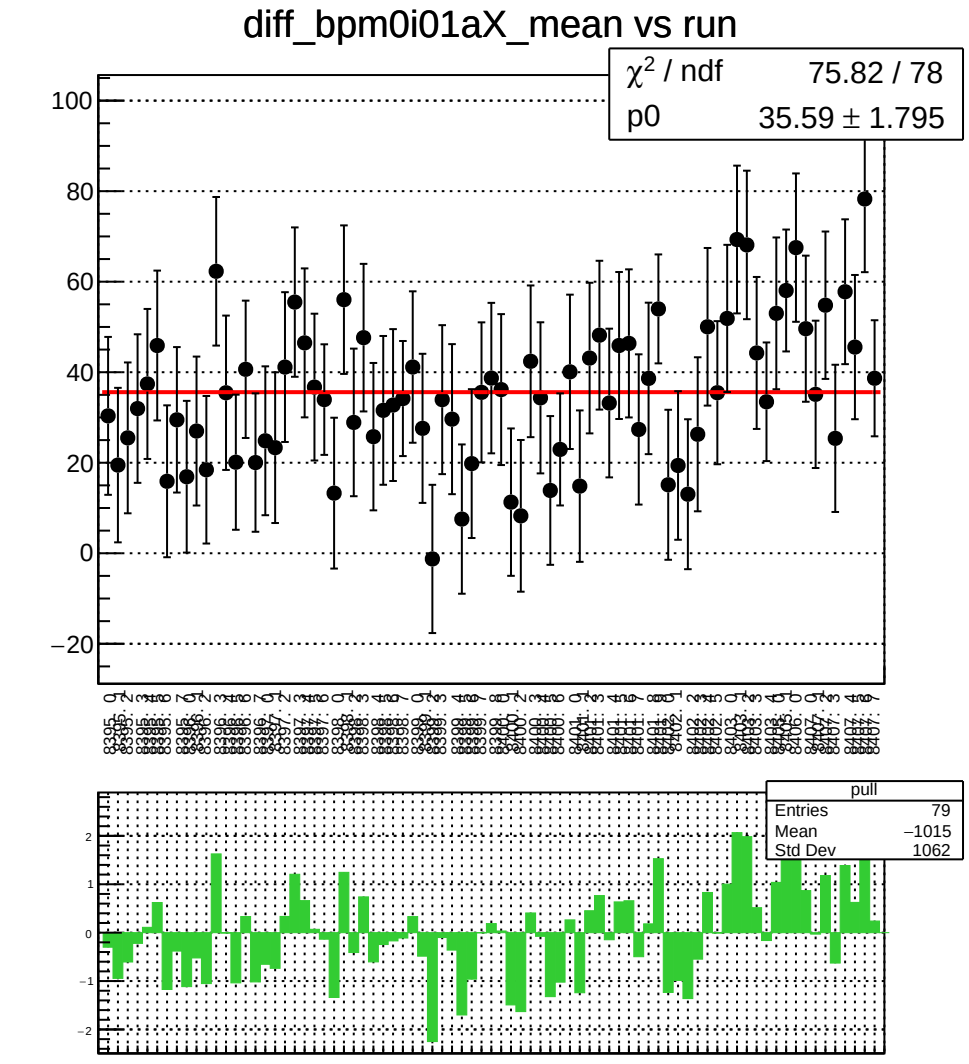

pull1D
Entries 79
Mean −0.007923
Std Dev 1.115

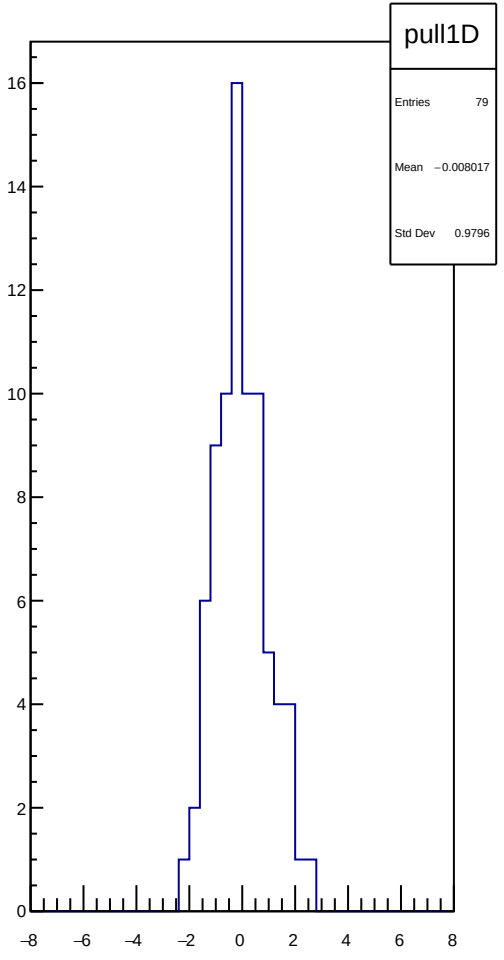

diff_bpm0i01X_rms vs run
χ² / ndf 859.6 / 78
p0 1771 ± 1.436
1900
1850
1800
1750
1700
1650
1600

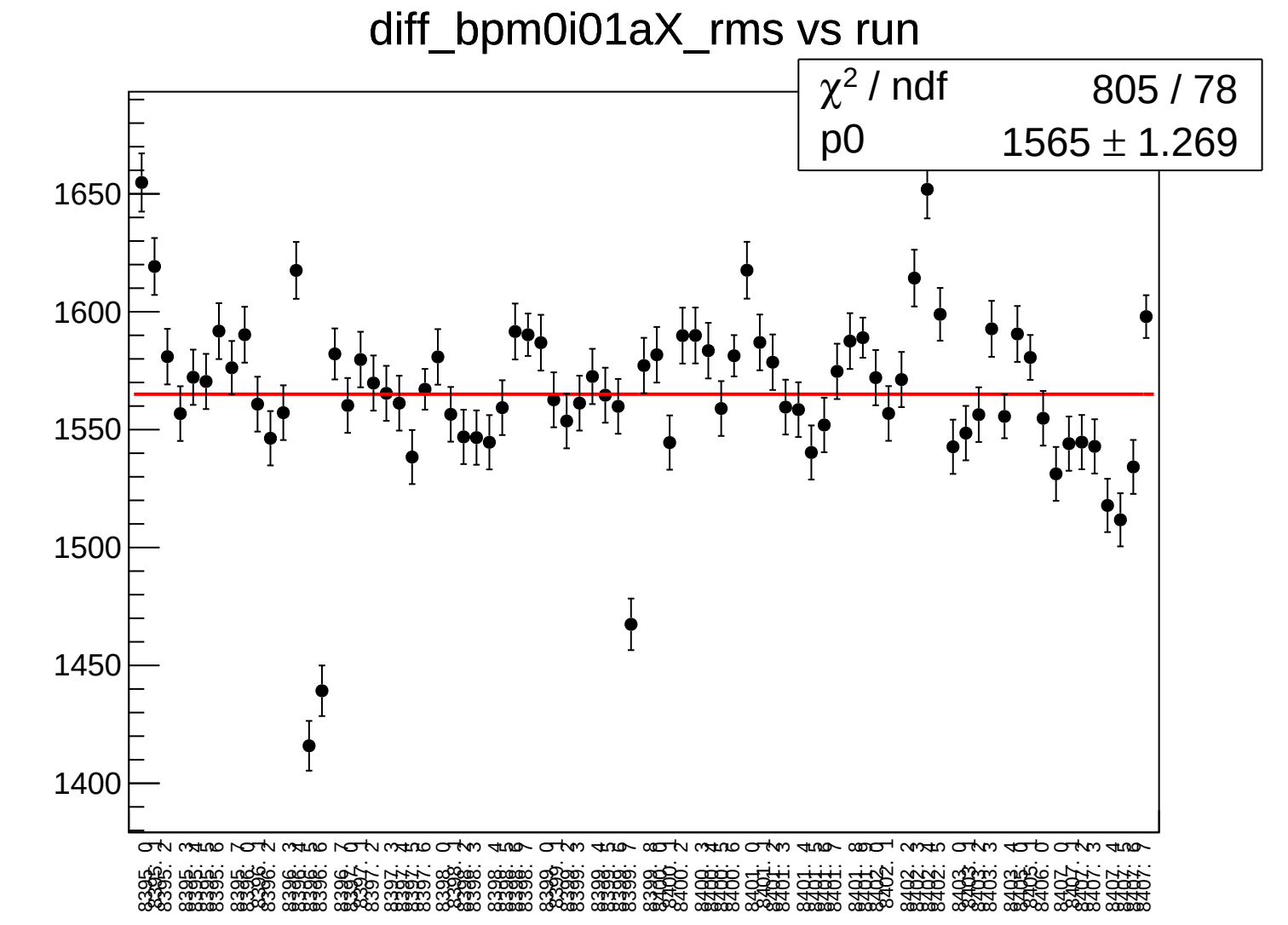

diff_bpm0i01Y_mean vs run
χ^2 / ndf 76.96 / 78
p0 11.71 ± 1.833
pull
Entries 79
Mean −129.6
Std Dev 125.6

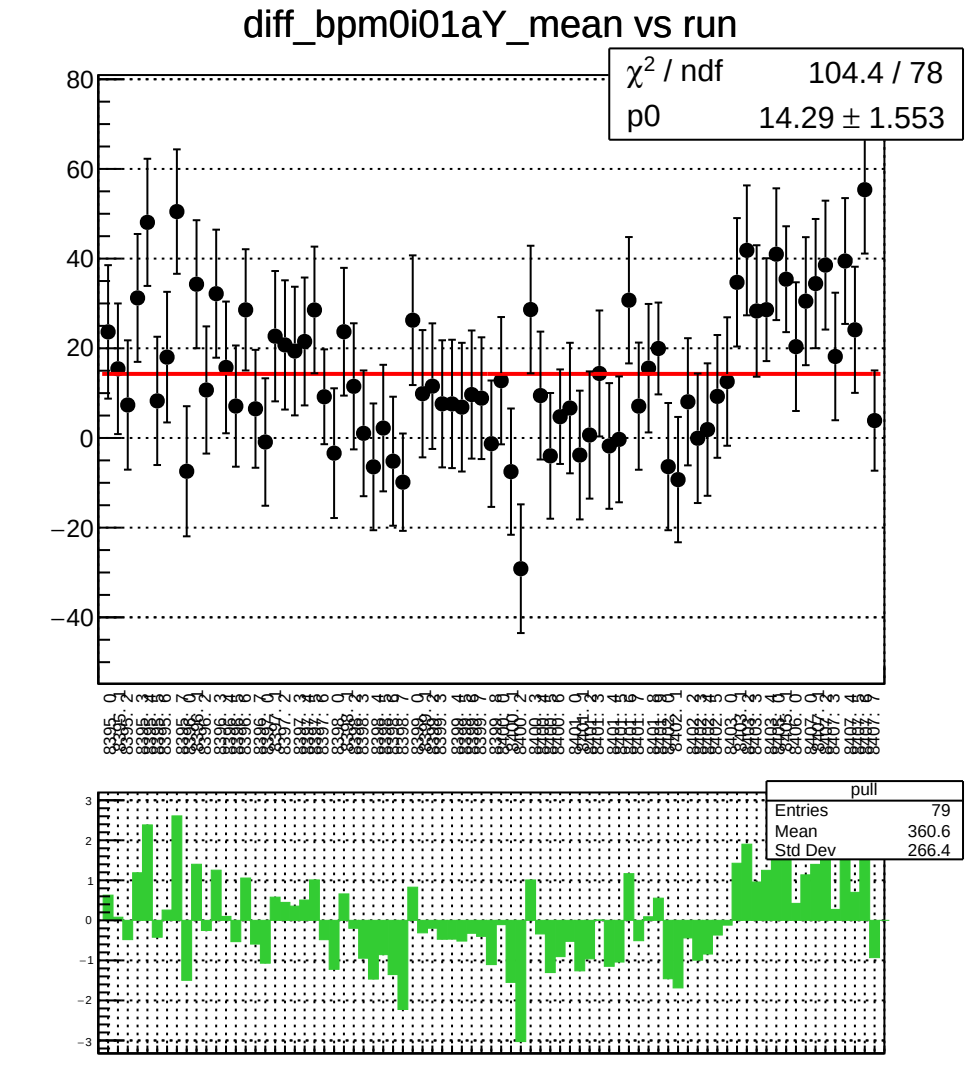

pull1D
Entries 79
Mean 0.01135
Std Dev 0.987

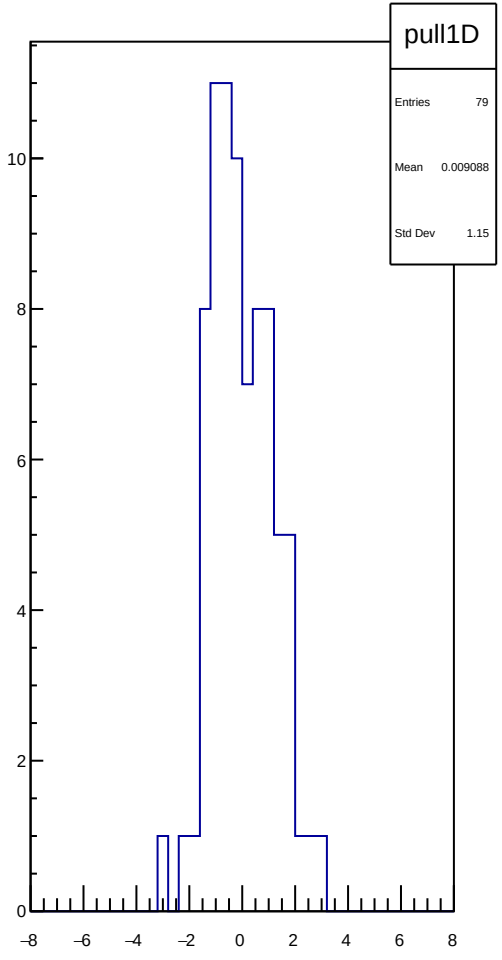

diff_bpm0i01Y_rms vs run
χ² / ndf 818.3 / 78
p0 1598 ± 1.296
1700
1650
1600
1550
1500
1450

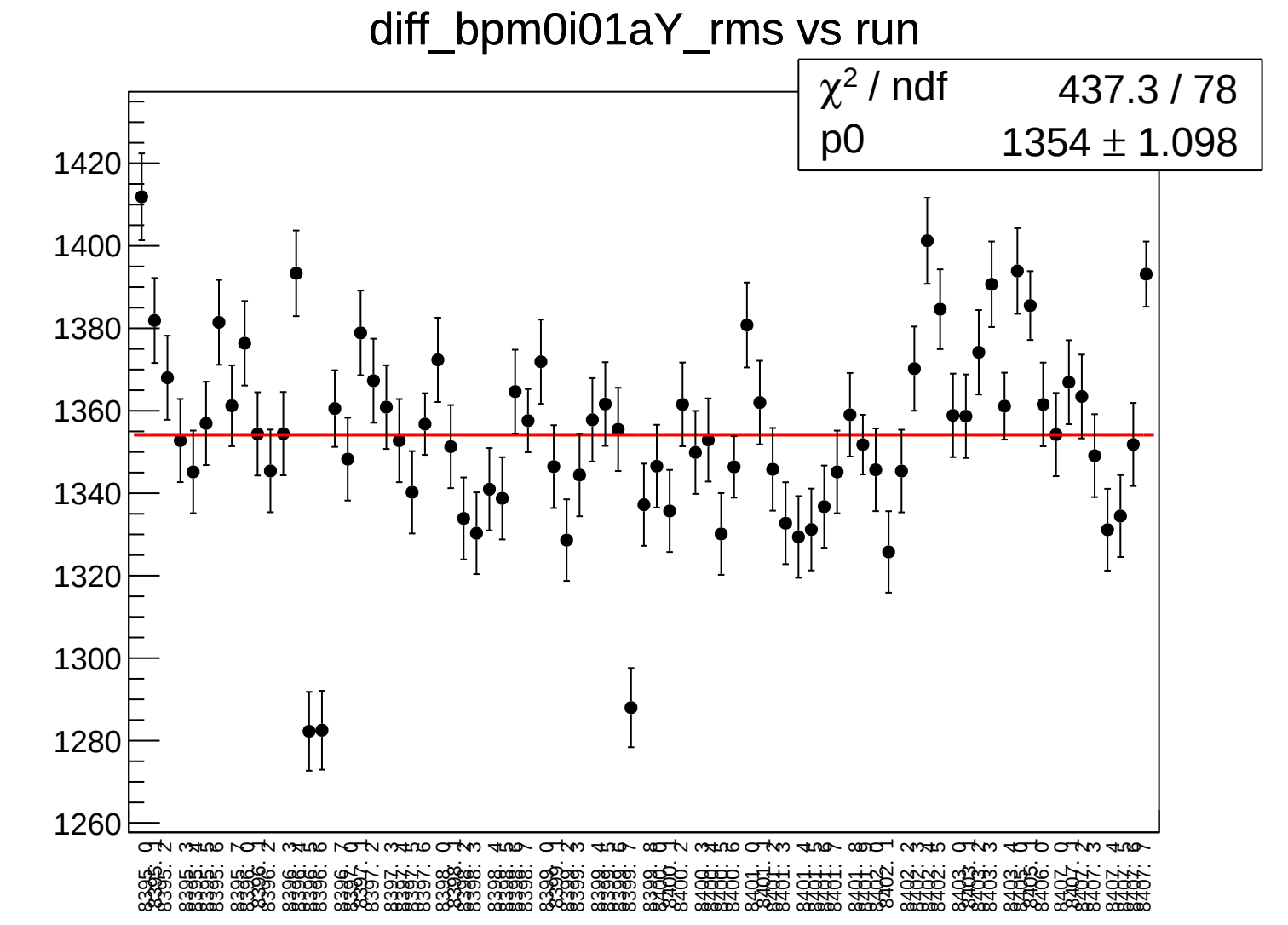

diff_bpm0i01aX_mean vs run
χ² / ndf 75.82 / 78
p0 35.59 ± 1.795
pull
Entries 79
Mean −1015
Std Dev 1062

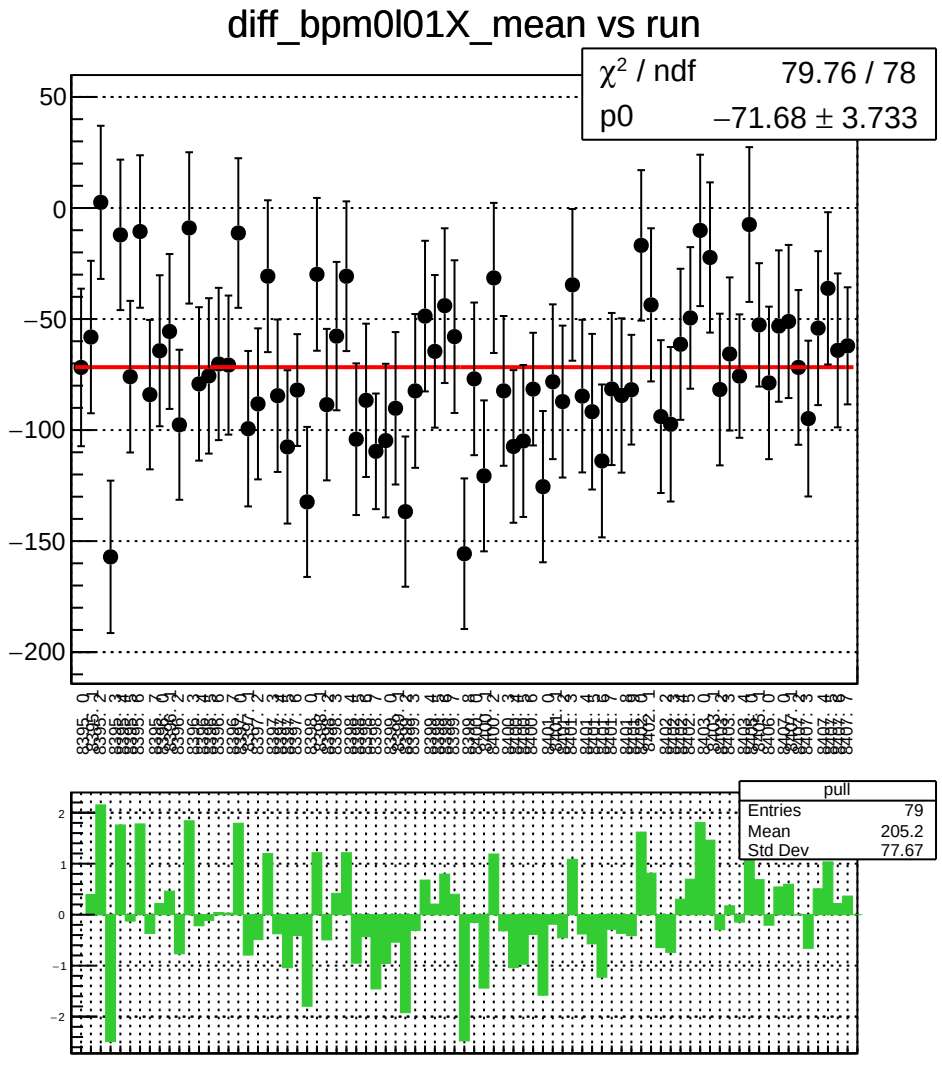

pull1D
Entries 79
Mean −0.008017
Std Dev 0.9796

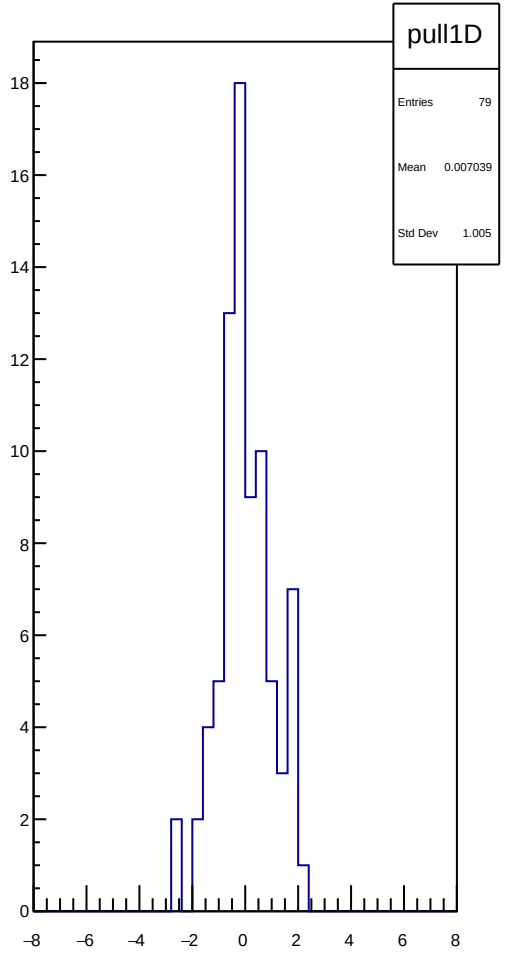

diff_bpm0i01aX_rms vs run
χ² / ndf 805 / 78
p0 1565 ± 1.269
1650
1600
1550
1500
1450
1400

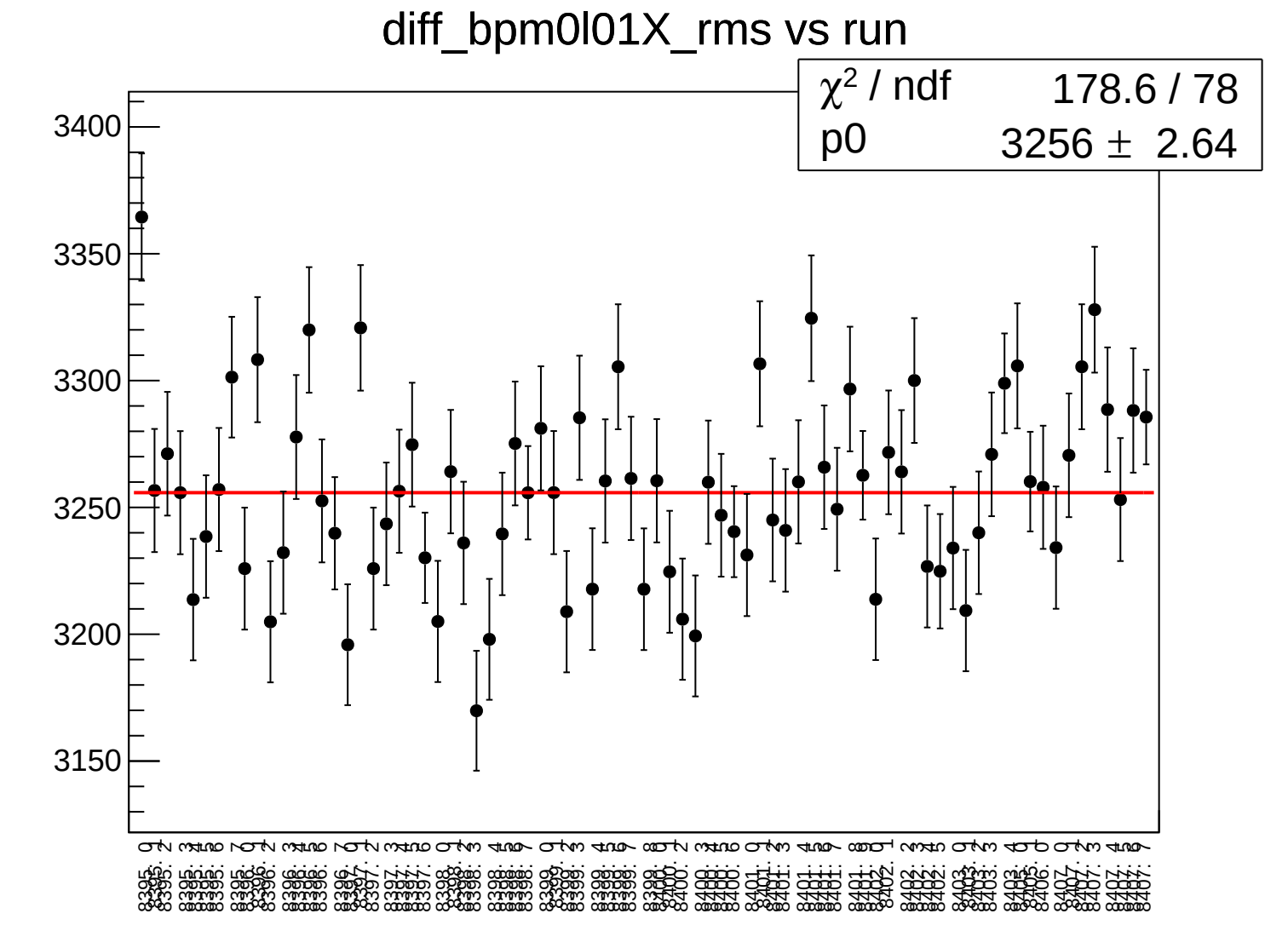

diff_bpm0i01aY_mean vs run
χ^2 / ndf 104.4 / 78
p0 14.29 ± 1.553
pull
Entries 79
Mean 360.6
Std Dev 266.4

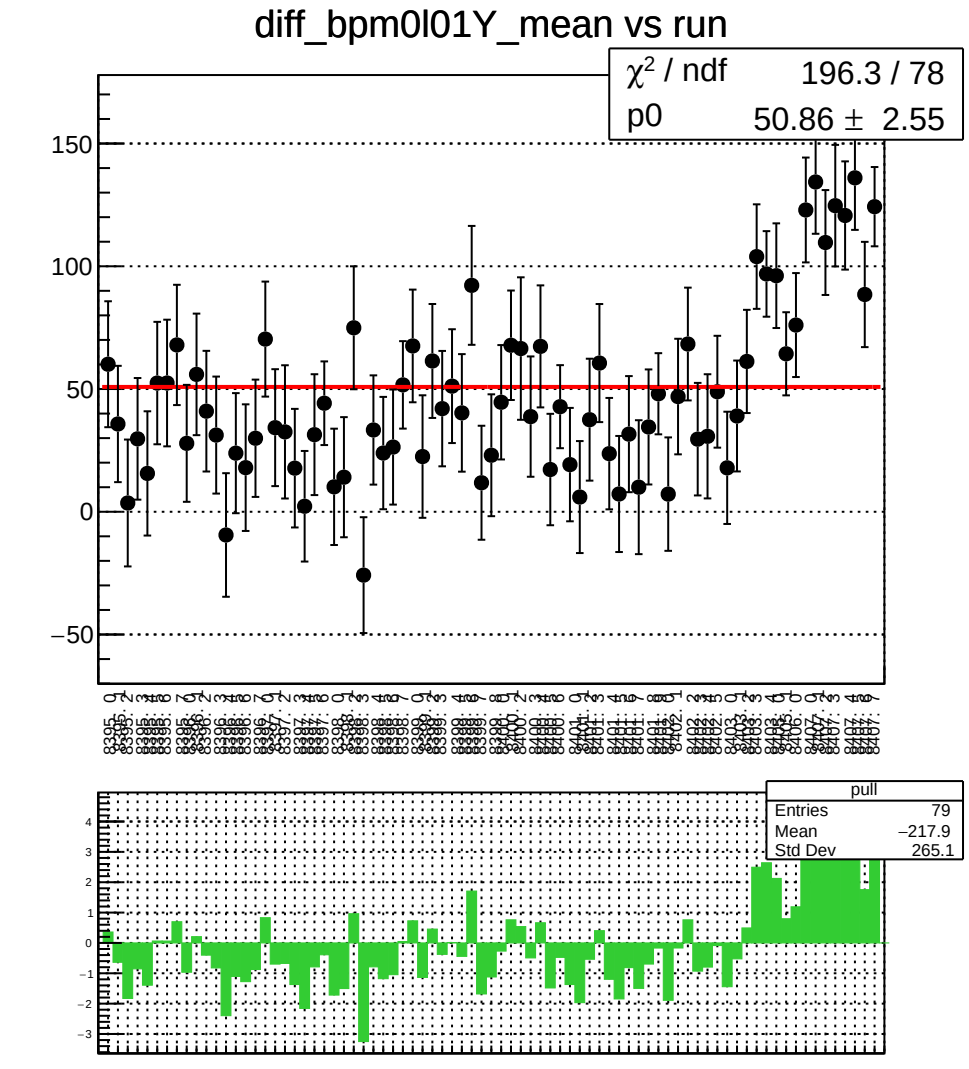

pull1D
Entries 79
Mean 0.009088
Std Dev 1.15

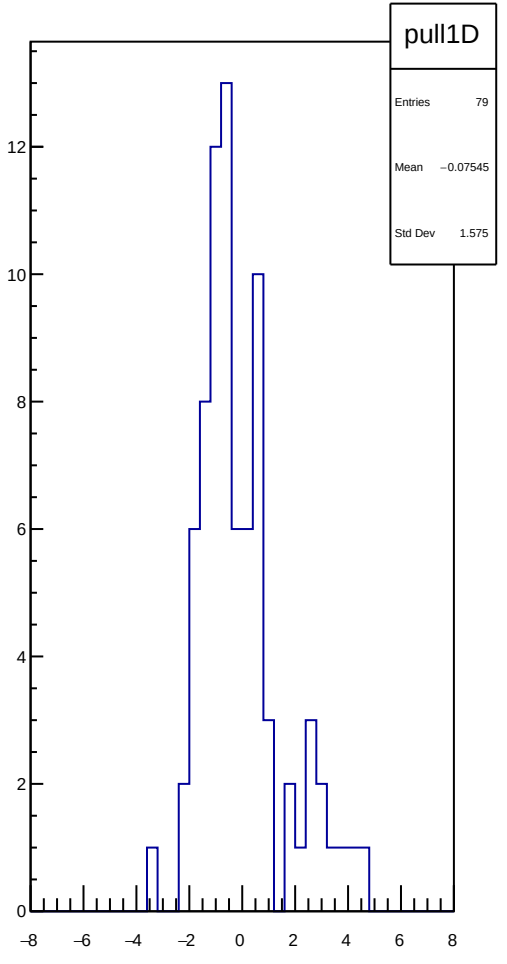

diff_bpm0i01aY_rms vs run
χ² / ndf 437.3 / 78
p0 1354 ± 1.098
1420
1400
1380
1360
1340
1320
1300
1280
1260

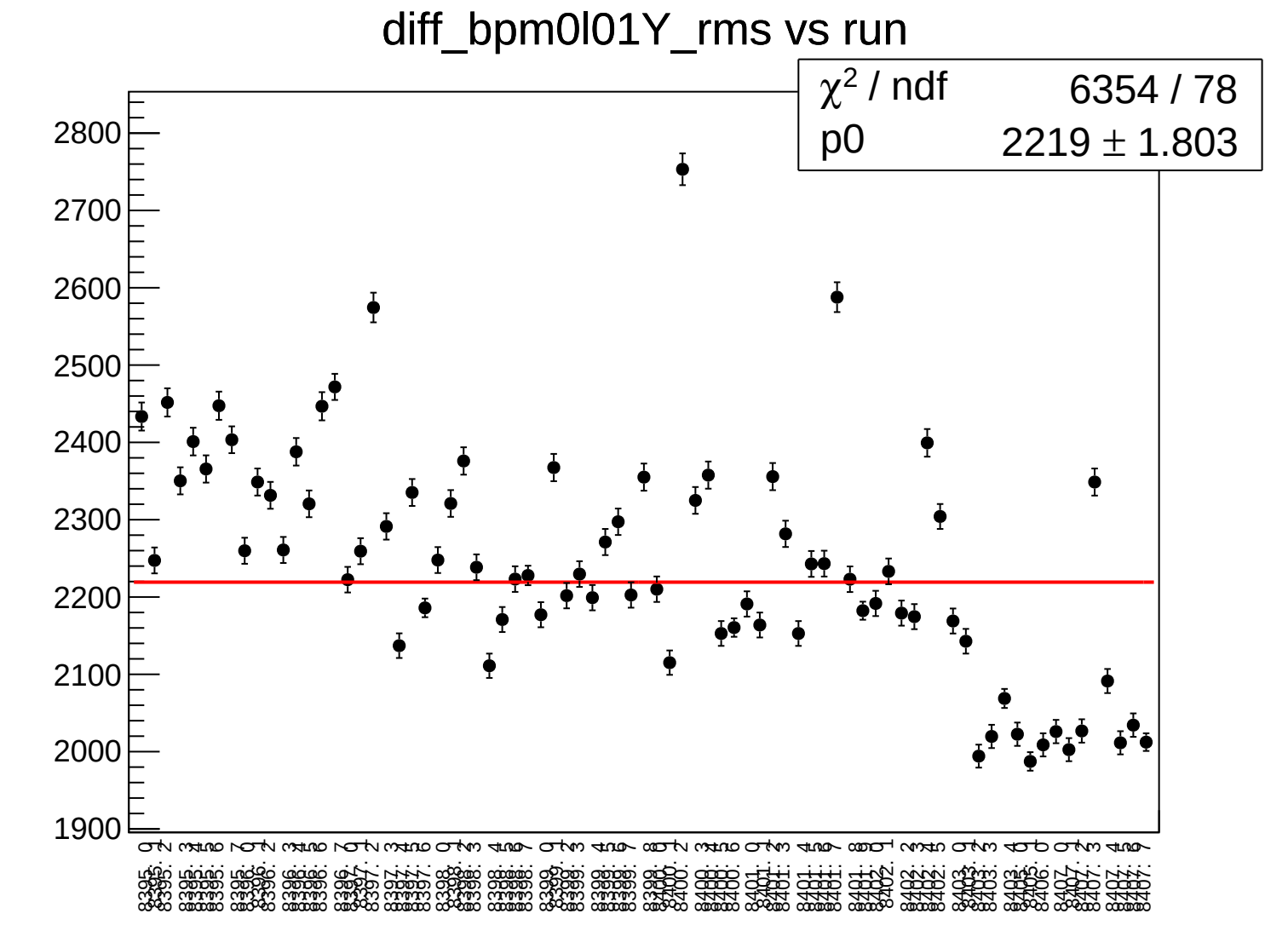

diff_bpm0l01X_mean vs run
χ² / ndf 79.76 / 78
p0 −71.68 ± 3.733
50
0
−50
−100
−150
−200
pull
Entries 79
Mean 205.2
Std Dev 77.67
2
1
0
−1
−2

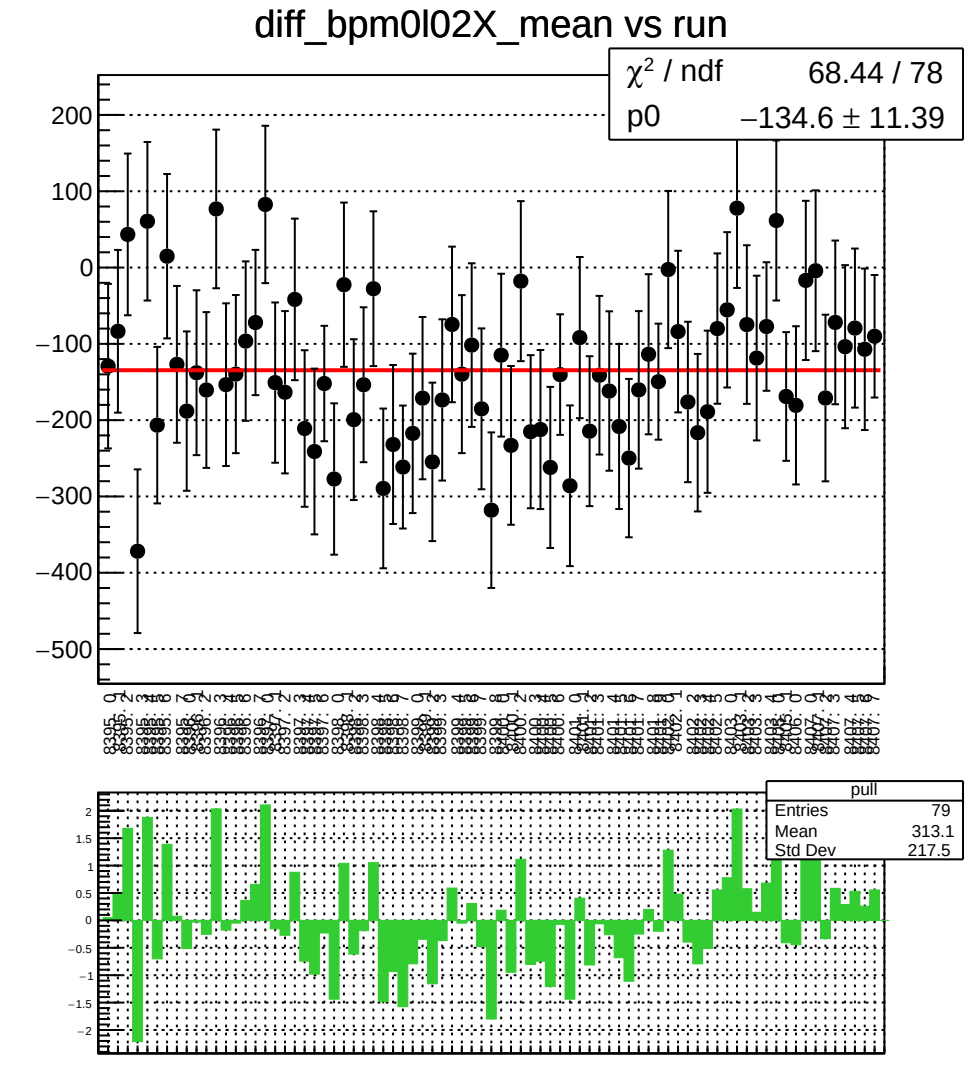

pull1D
Entries 79
Mean 0.007039
Std Dev 1.005
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

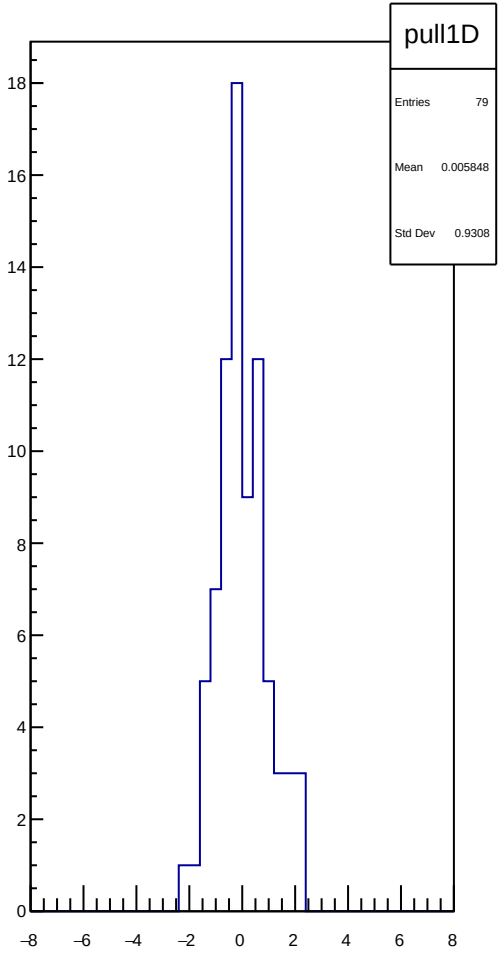

diff_bpm0l01X_rms vs run
χ² / ndf 178.6 / 78
p0 3256 ± 2.64
3400
3350
3300
3250
3200
3150

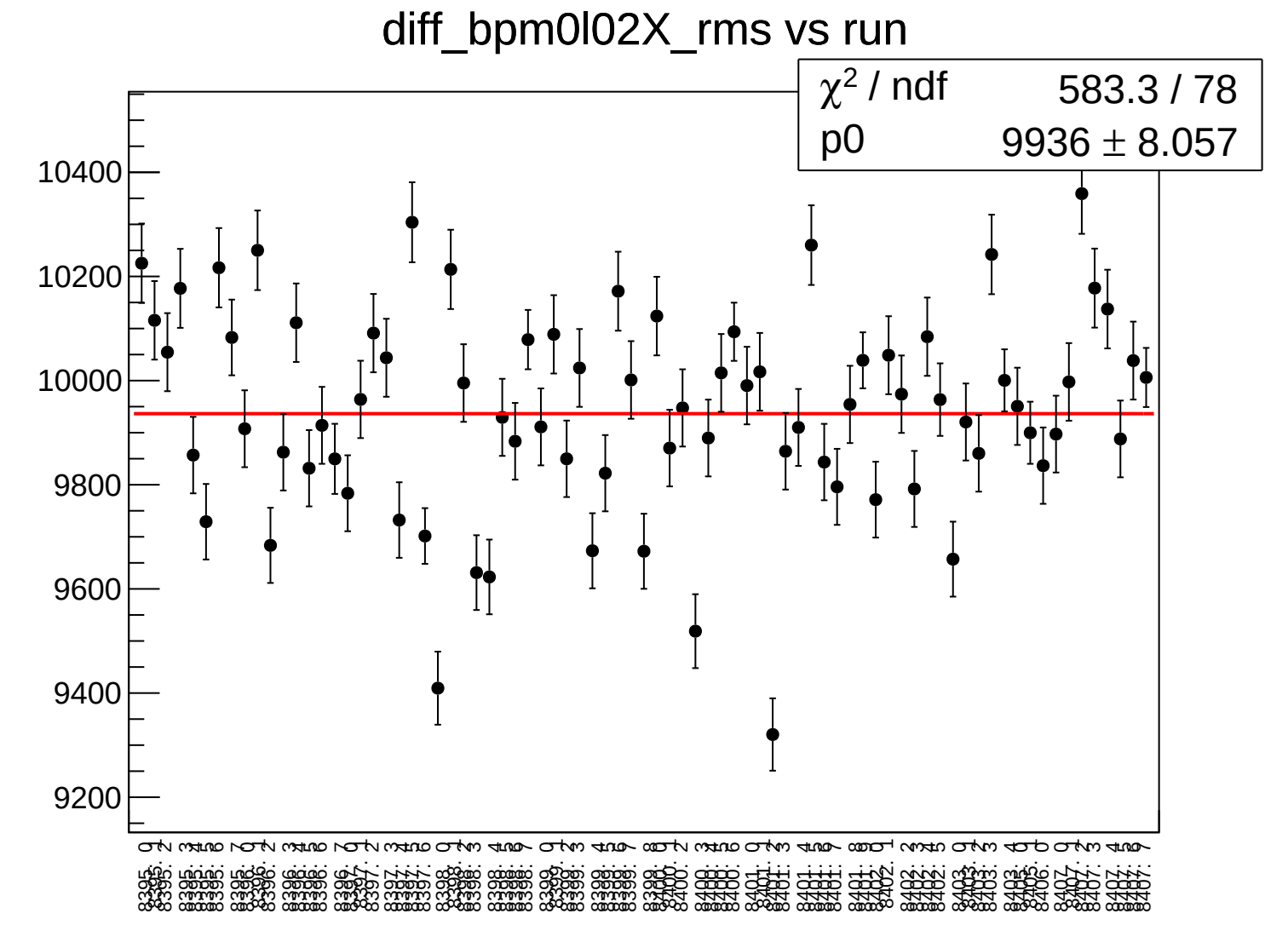

diff_bpm0l01Y_mean vs run
χ² / ndf 196.3 / 78
p0 50.86 ± 2.55
150
100
50
0
−50
pull
Entries 79
Mean −217.9
Std Dev 265.1
4
3
2
1
0
−1
−2
−3

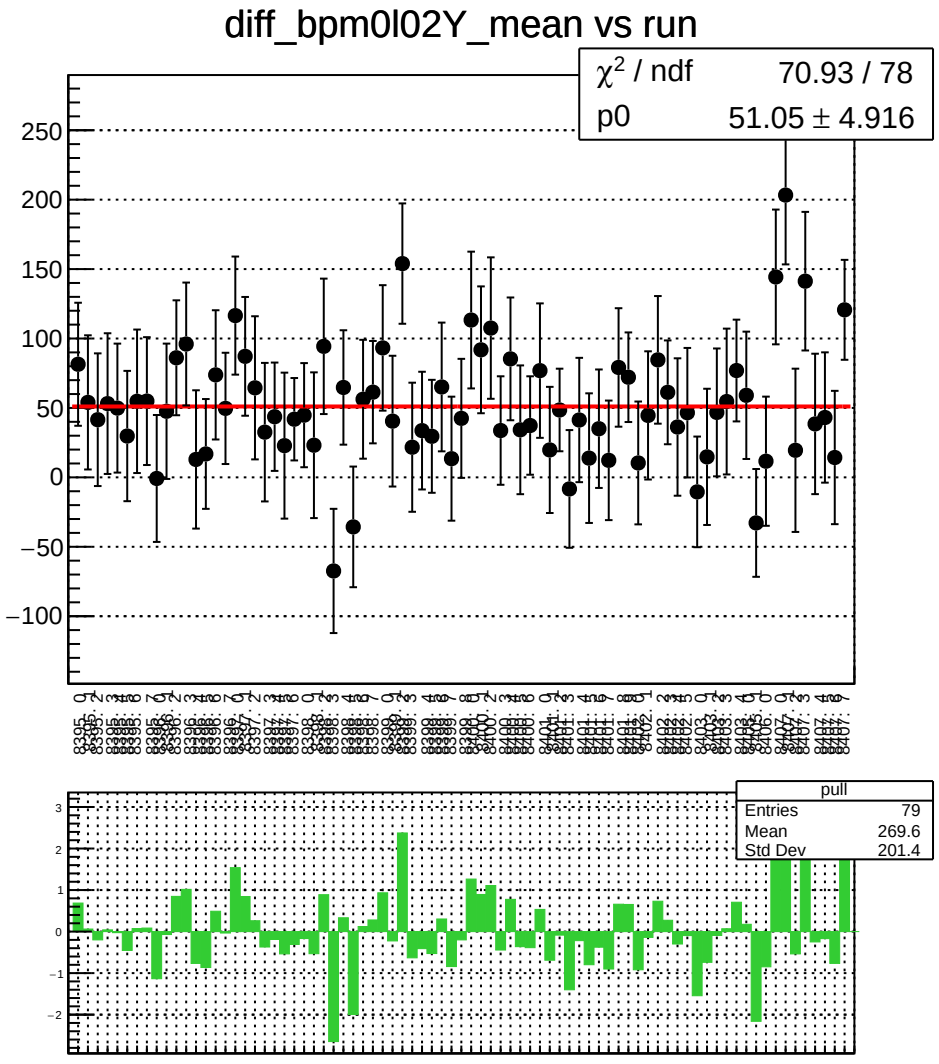

pull1D
Entries 79
Mean −0.07545
Std Dev 1.575
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

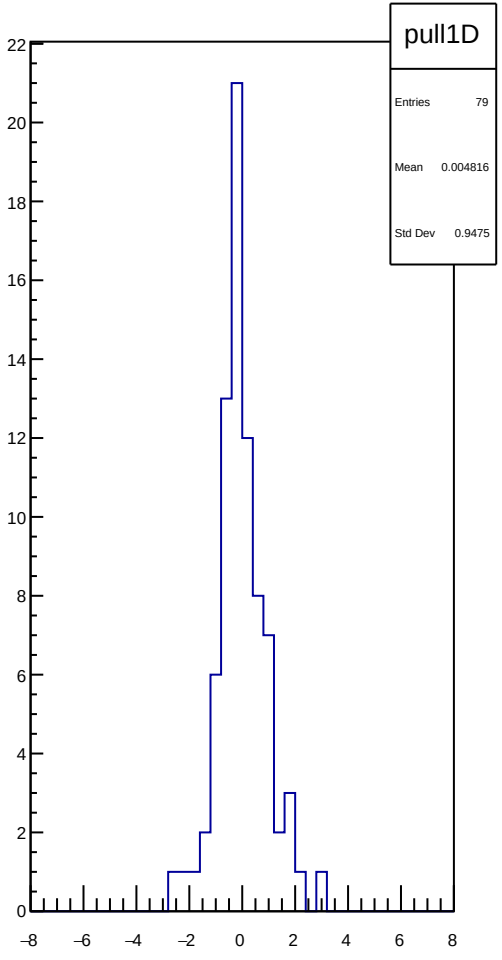

diff_bpm0l01Y_rms vs run
χ² / ndf 6354 / 78
p0 2219 ± 1.803
2800
2700
2600
2500
2400
2300
2200
2100
2000
1900

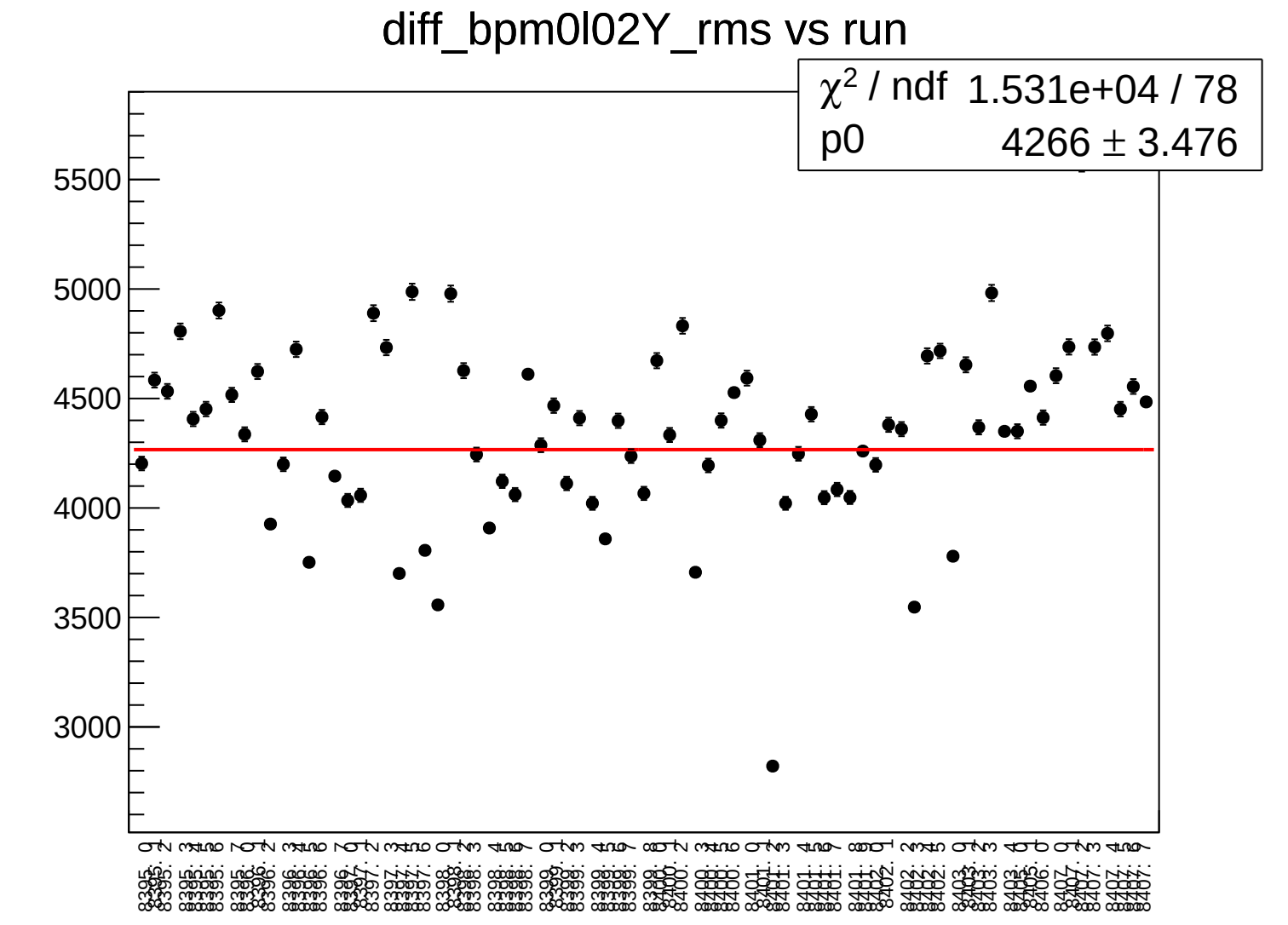

diff_bpm0l02X_mean vs run
χ² / ndf 68.44 / 78
p0 −134.6 ± 11.39
pull
Entries 79
Mean 313.1
Std Dev 217.5

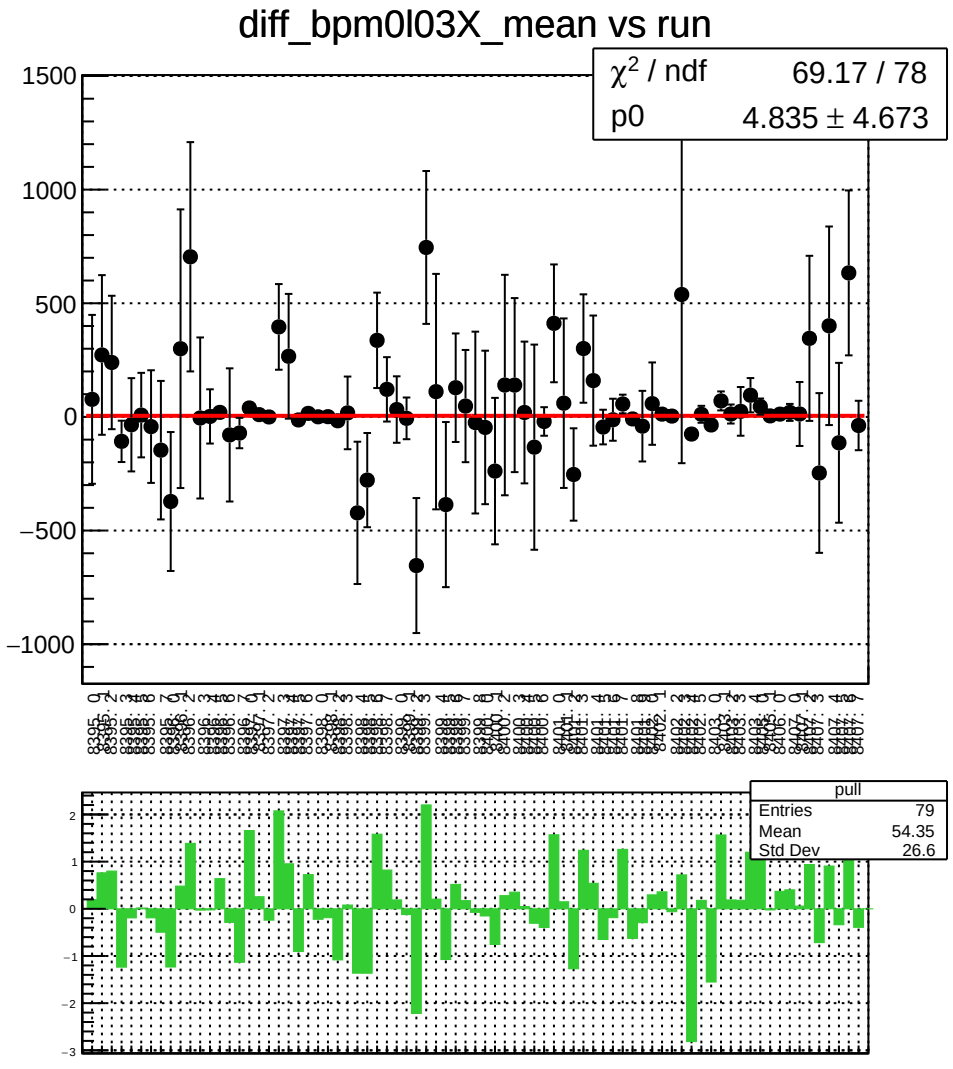

pull1D
Entries 79
Mean 0.005848
Std Dev 0.9308

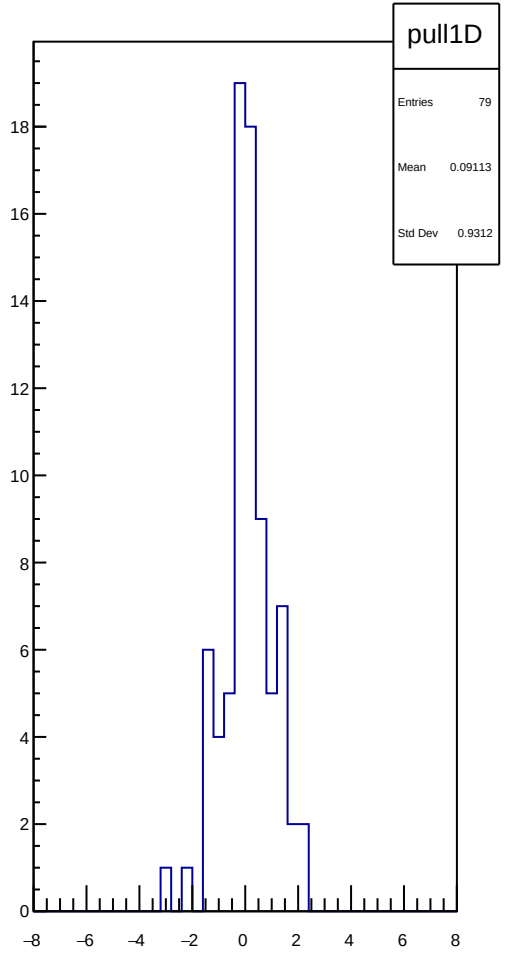

diff_bpm0l02X_rms vs run
χ² / ndf 583.3 / 78
p0 9936 ± 8.057
10400
10200
10000
9800
9600
9400
9200

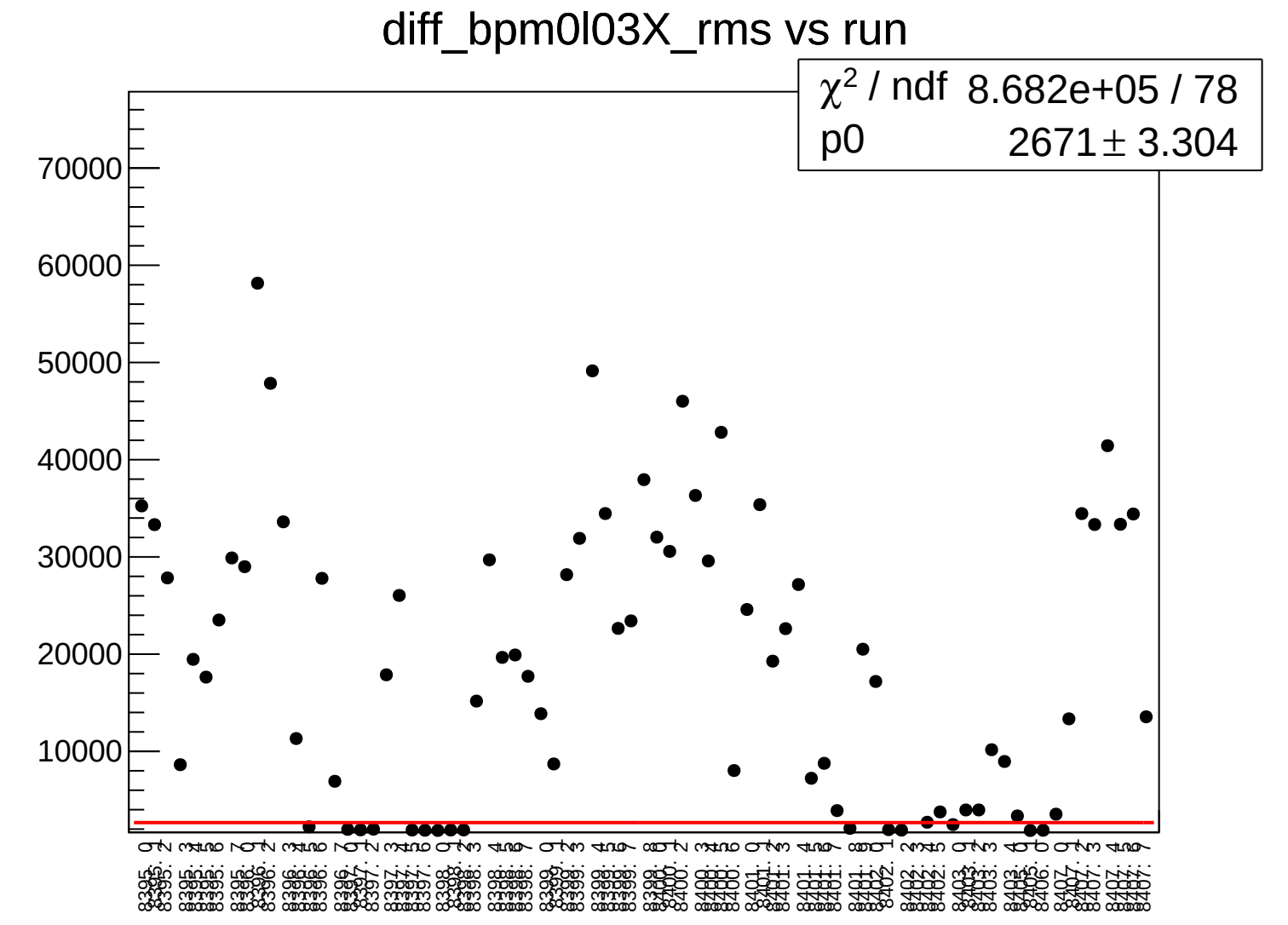

diff_bpm0l02Y_mean vs run
χ^2 / ndf 70.93 / 78
p0 51.05 ± 4.916
pull
Entries 79
Mean 269.6
Std Dev 201.4

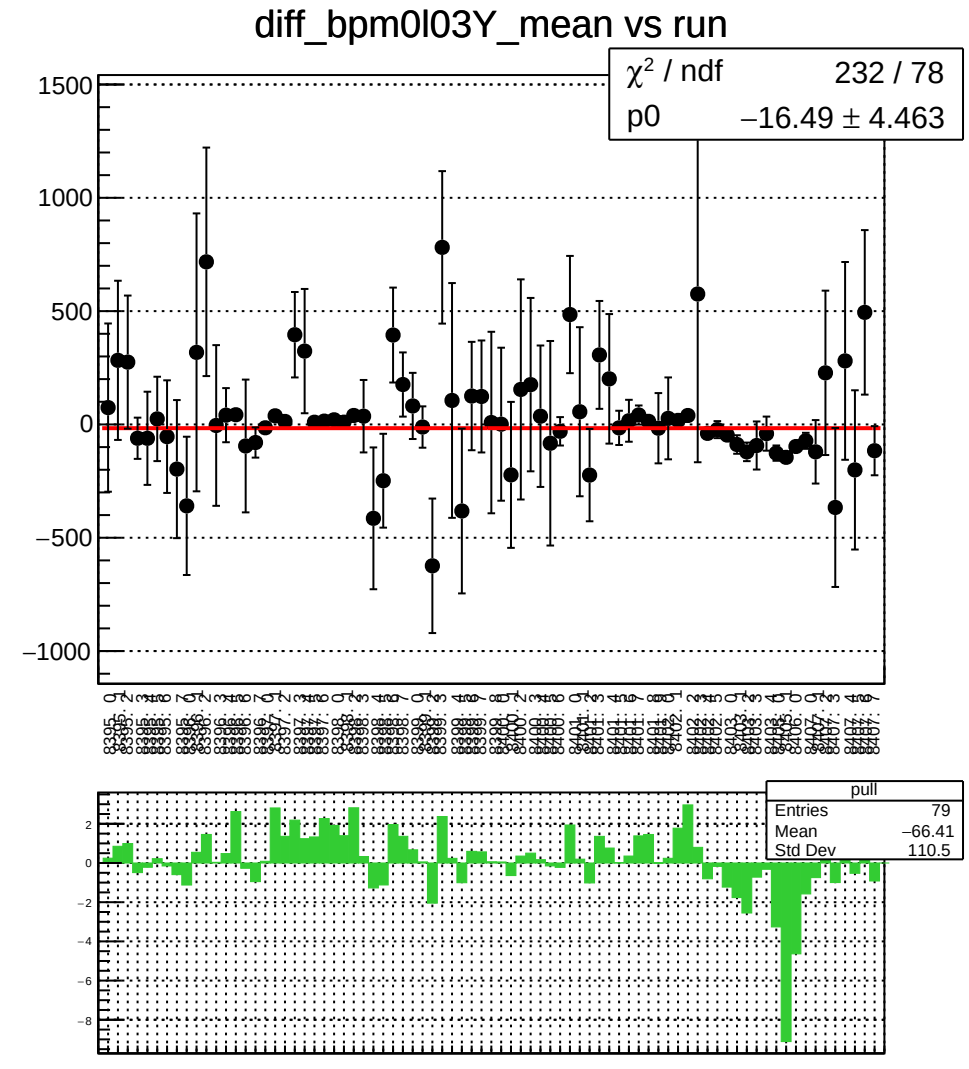

pull1D
Entries 79
Mean 0.004816
Std Dev 0.9475

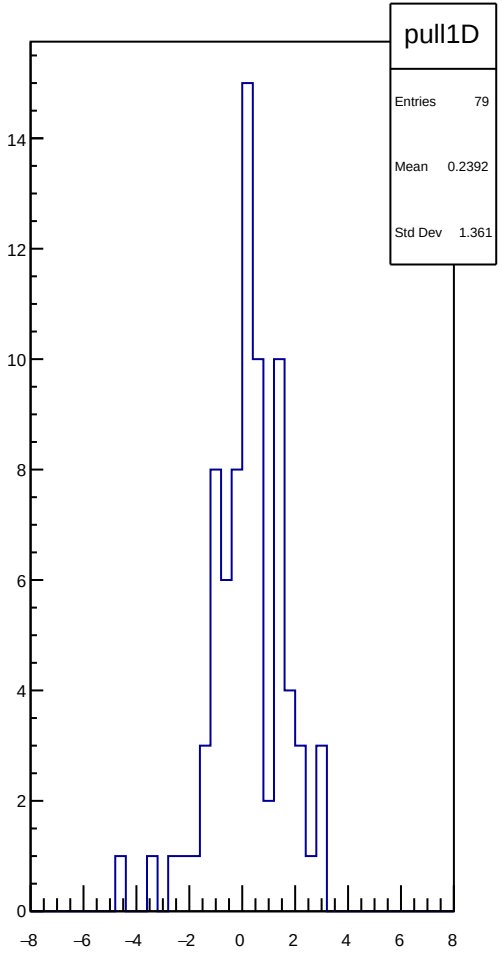

diff_bpm0l02Y_rms vs run
χ² / ndf 1.531e+04 / 78
p0 4266 ± 3.476
5500
5000
4500
4000
3500
3000

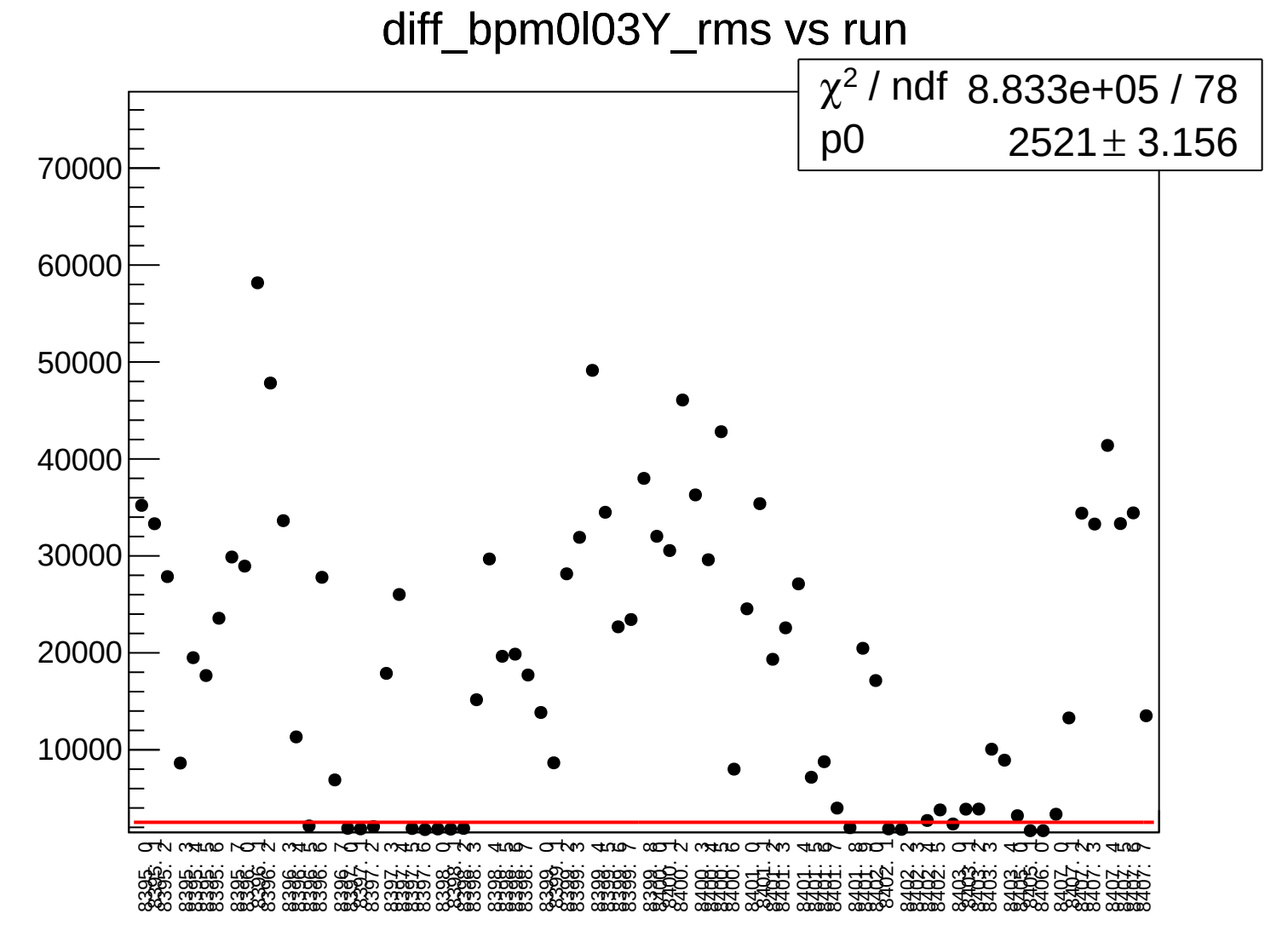

diff_bpm0l03X_mean vs run
χ^2 / ndf 69.17 / 78
p0 4.835 ± 4.673
pull
Entries 79
Mean 54.35
Std Dev 26.6

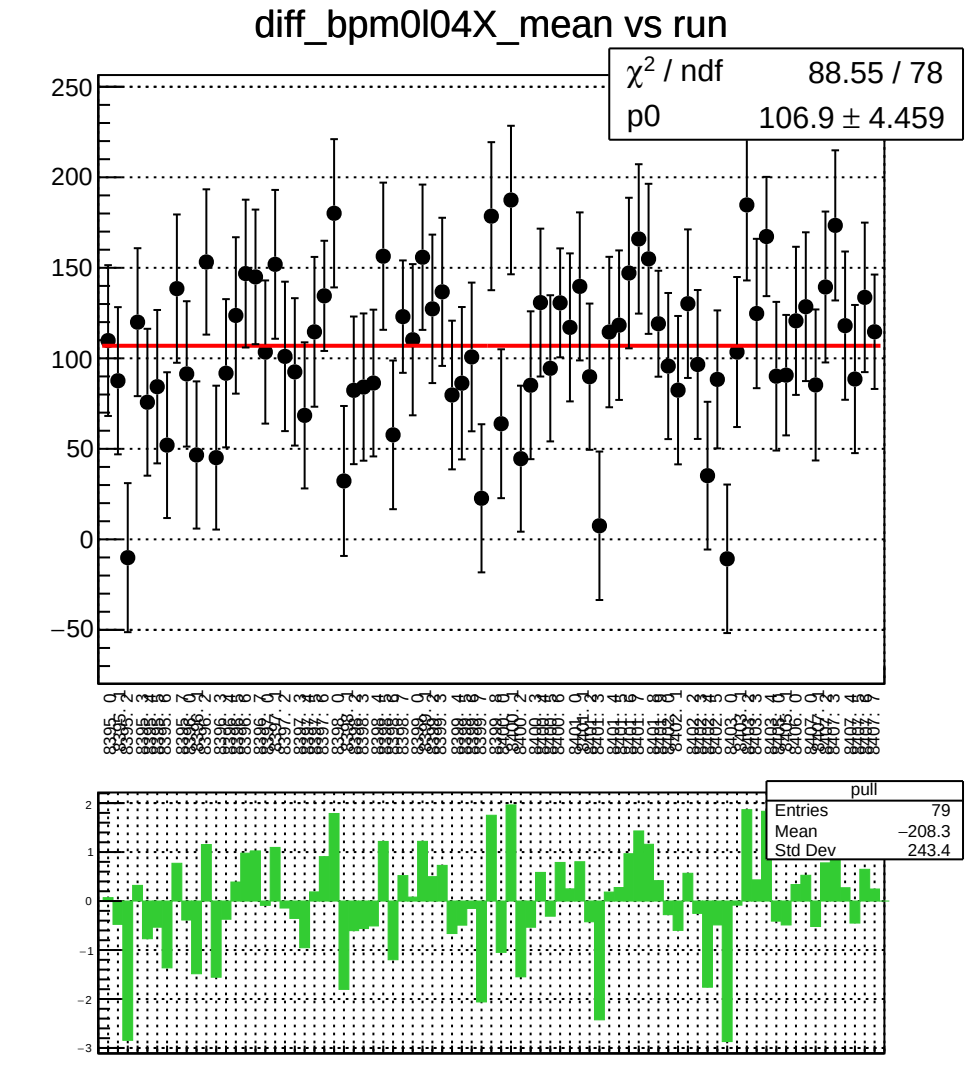

pull1D
Entries 79
Mean 0.09113
Std Dev 0.9312

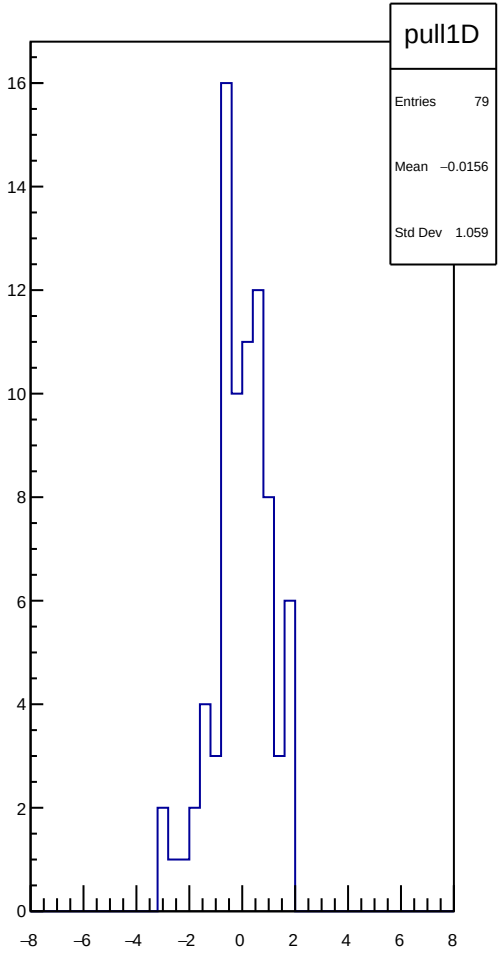

diff_bpm0l03X_rms vs run
χ^2 / ndf 8.682e+05 / 78
p0 2671 ± 3.304
70000
60000
50000
40000
30000
20000
10000

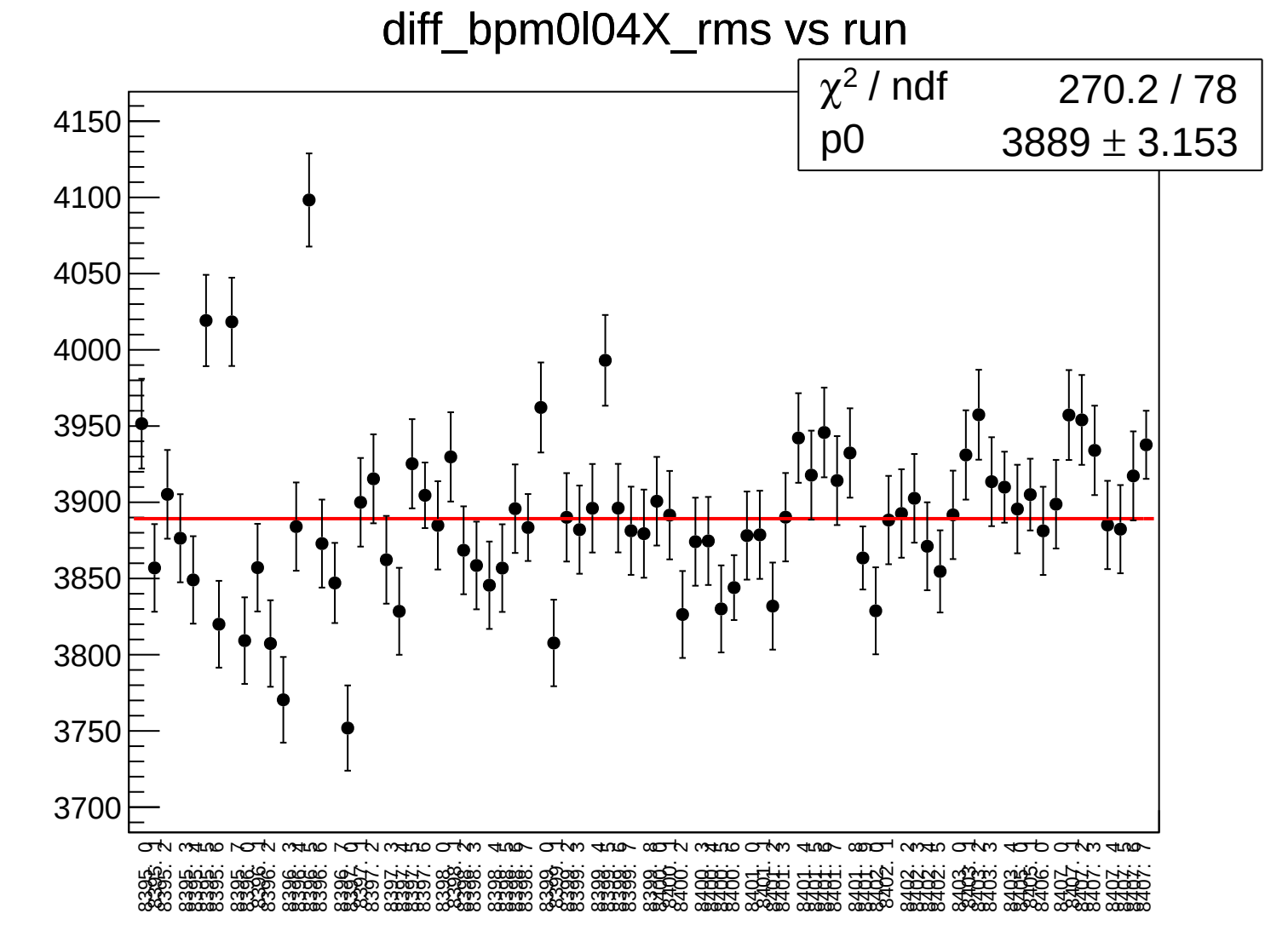

diff_bpm0l03Y_mean vs run
χ² / ndf 232 / 78
p0 −16.49 ± 4.463
pull
Entries 79
Mean −66.41
Std Dev 110.5

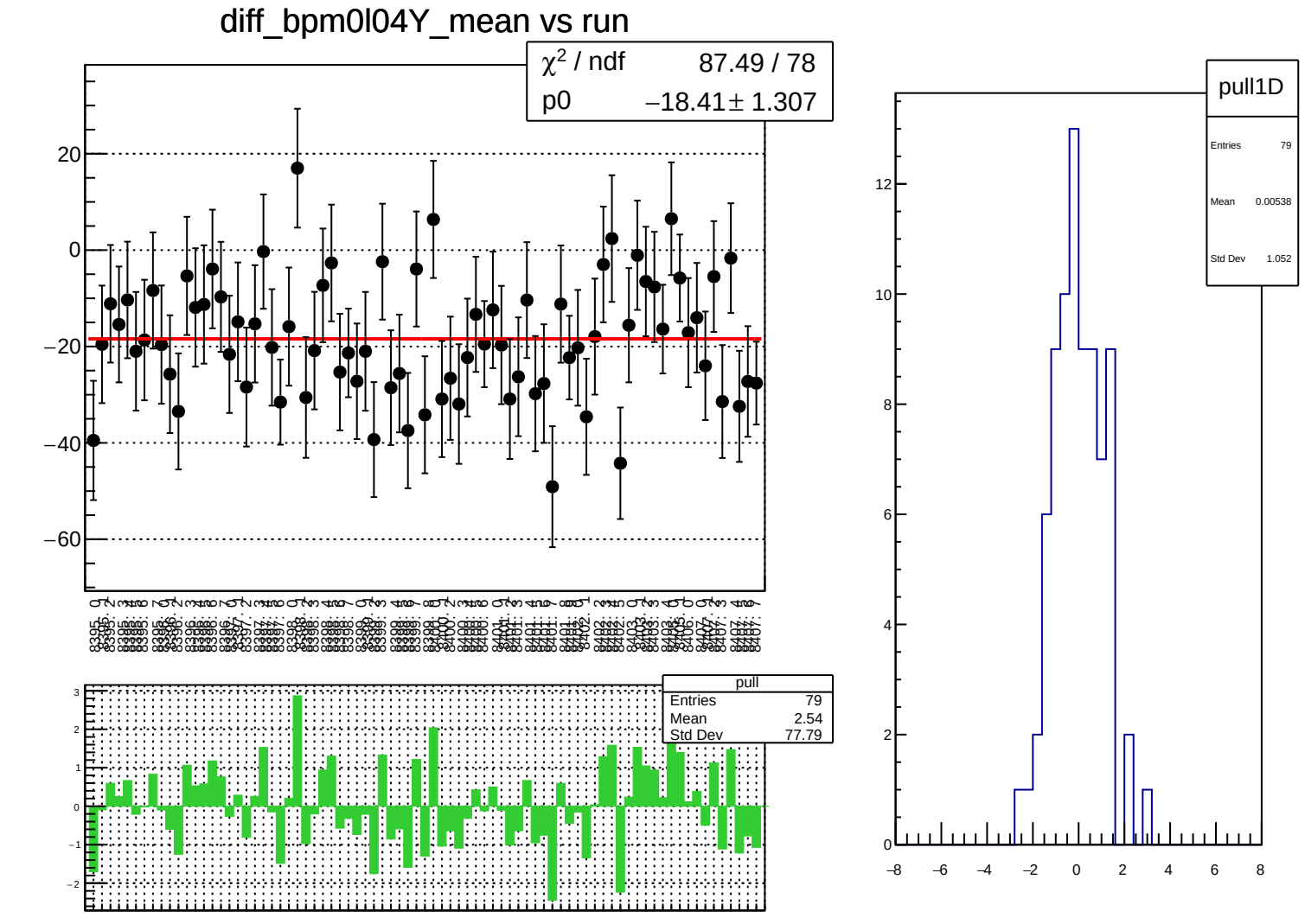

pull1D
Entries 79
Mean 0.2392
Std Dev 1.361

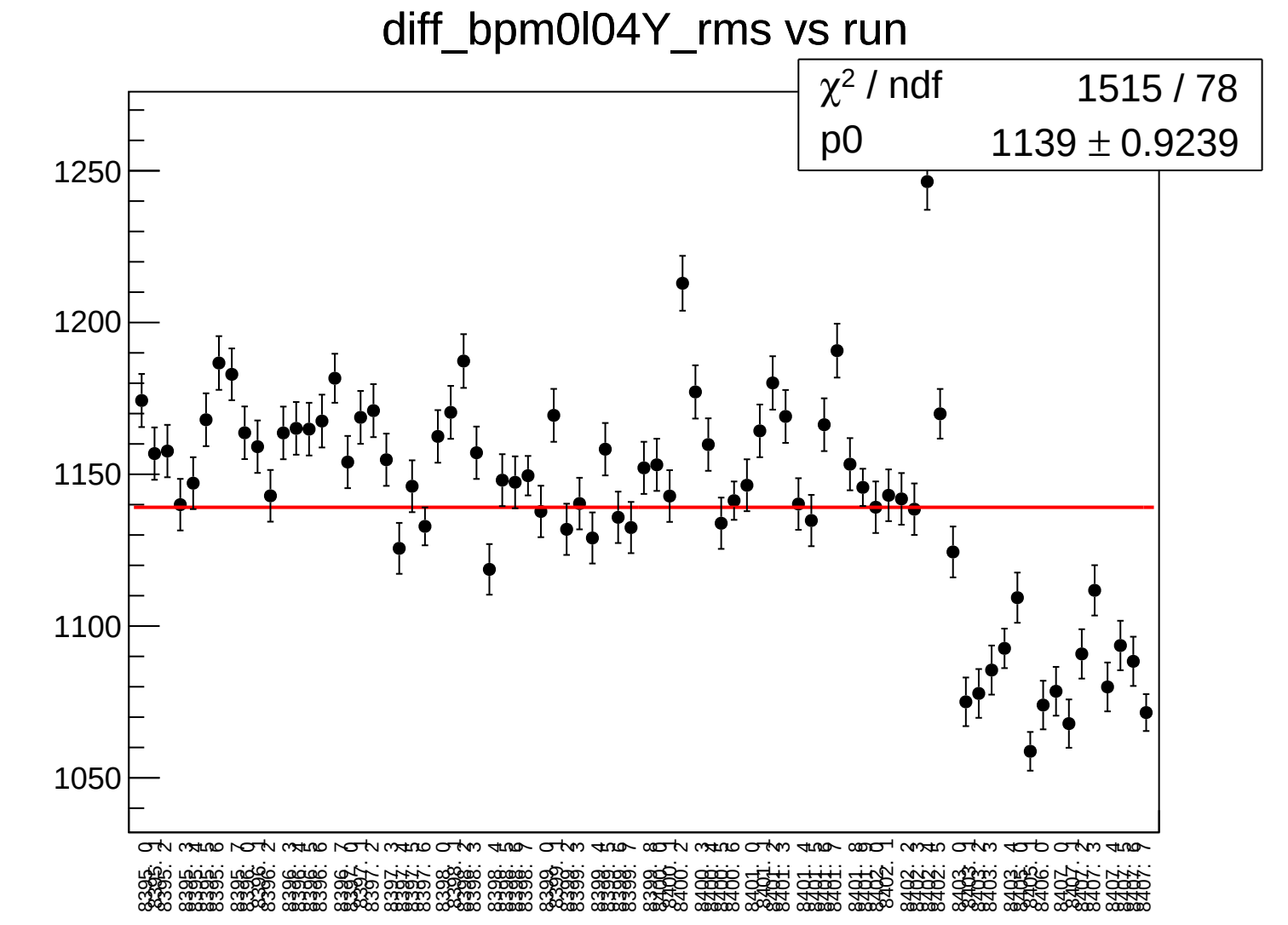

diff_bpm0l03Y_rms vs run
χ^2 / ndf 8.833e+05 / 78
p0 2521 ± 3.156
70000
60000
50000
40000
30000
20000
10000

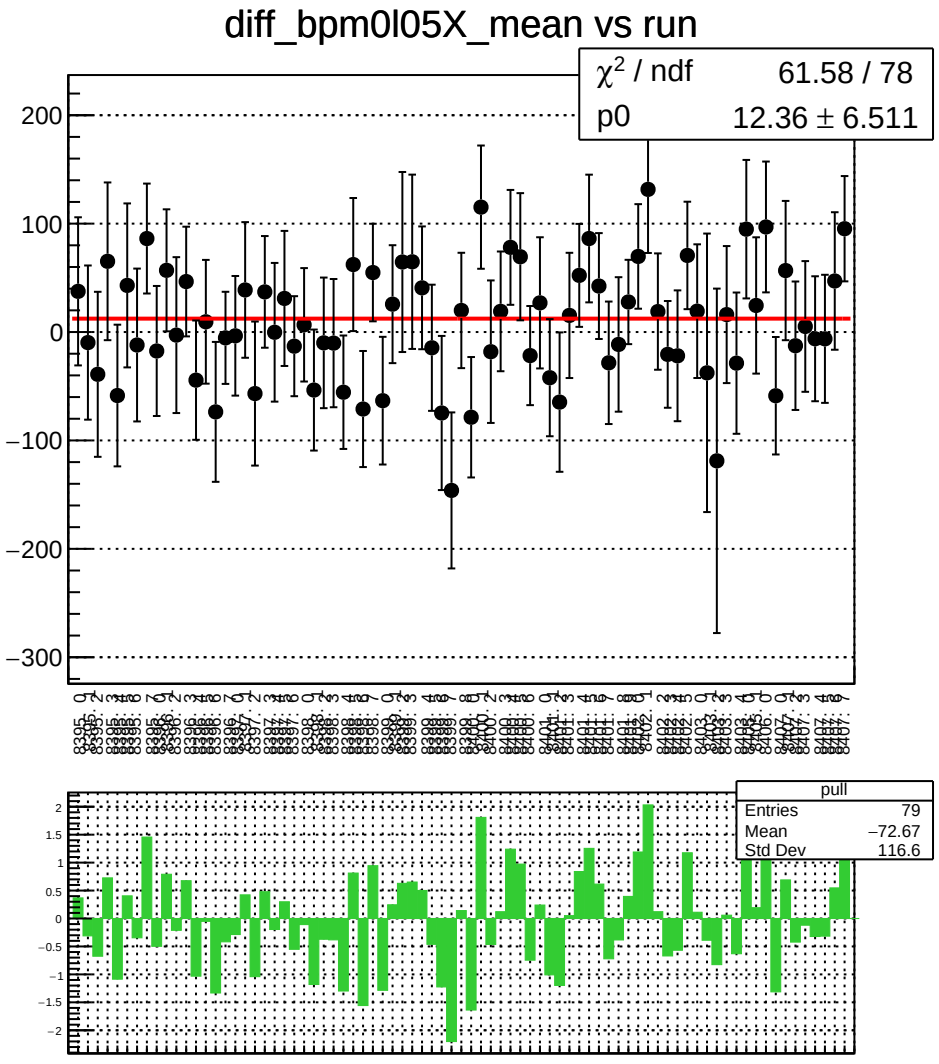

diff_bpm0l04X_mean vs run
χ^2 / ndf 88.55 / 78
p0 106.9 ± 4.459
pull
Entries 79
Mean −208.3
Std Dev 243.4

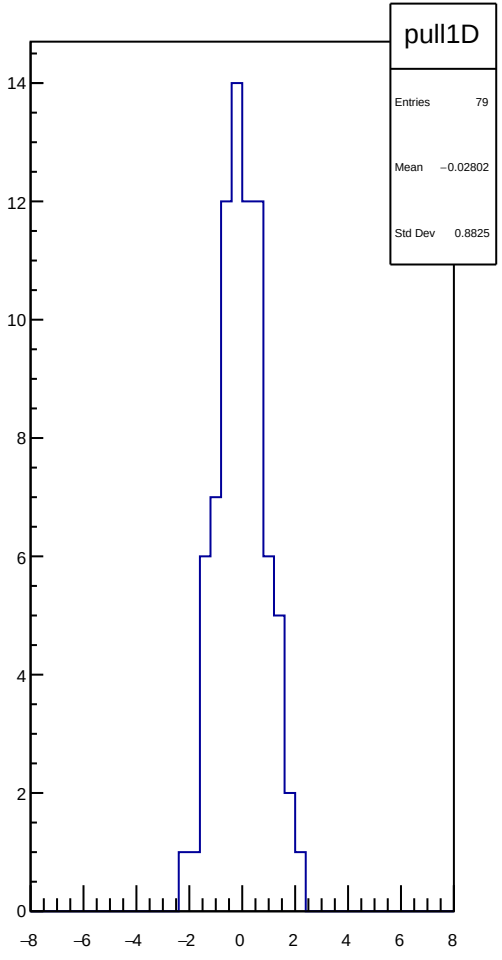

pull1D
Entries 79
Mean −0.0156
Std Dev 1.059

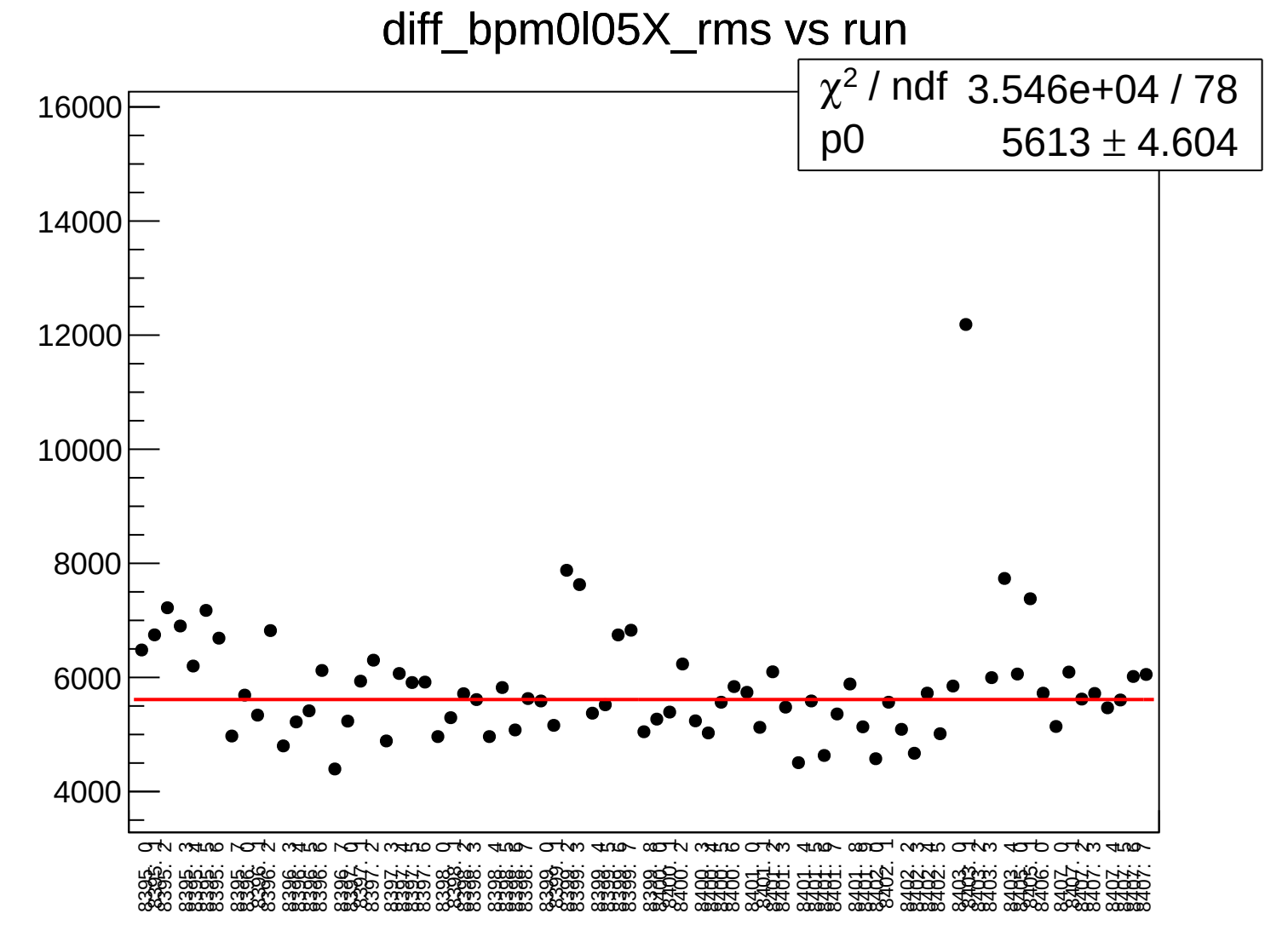

diff_bpm0l04X_rms vs run
χ² / ndf 270.2 / 78
p0 3889 ± 3.153
4150
4100
4050
4000
3950
3900
3850
3800
3750
3700

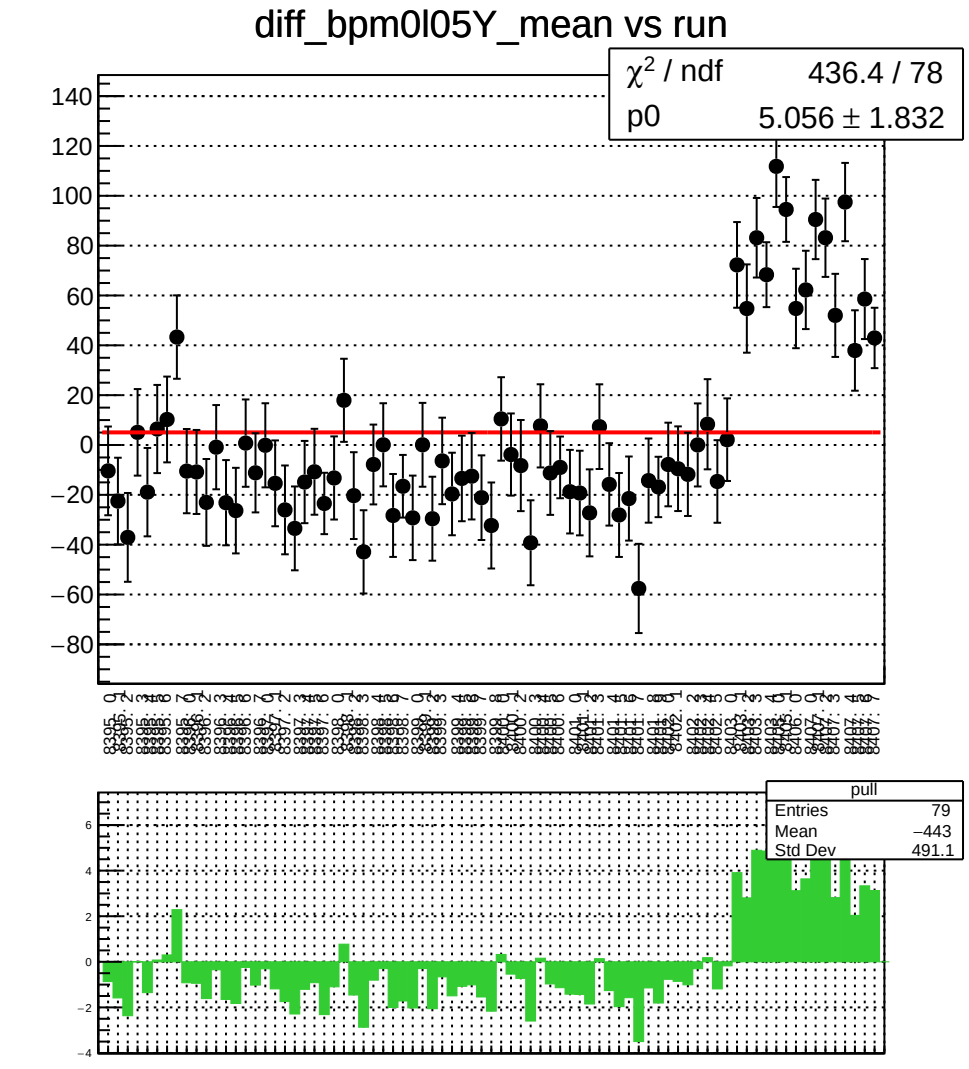

diff_bpm0l04Y_mean vs run
χ² / ndf 87.49 / 78
p0 −18.41 ± 1.307
20
0
−20
−40
−60
pull
Entries 79
Mean 2.54
Std Dev 77.79
3
2
1
0
−1
−2
pull1D
Entries 79
Mean 0.00538
Std Dev 1.052
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

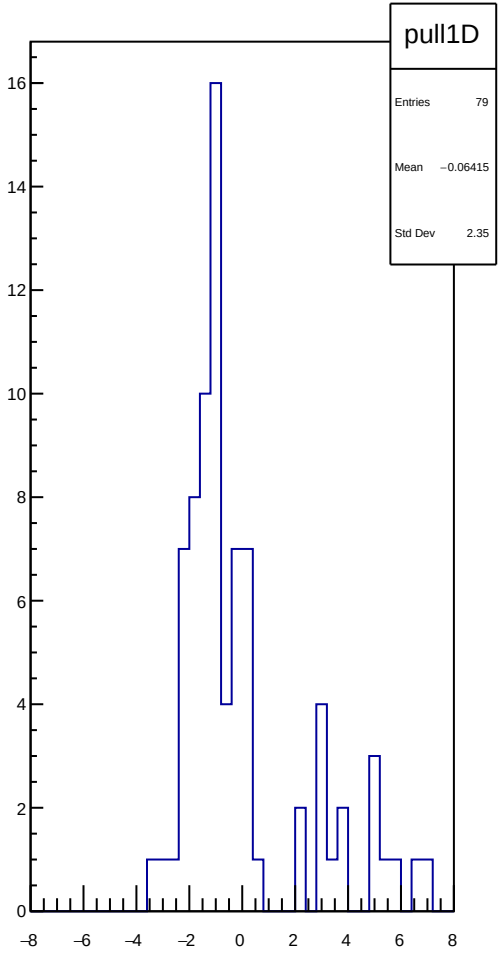

diff_bpm0l04Y_rms vs run
χ² / ndf 1515 / 78
p0 1139 ± 0.9239
1250
1200
1150
1100
1050

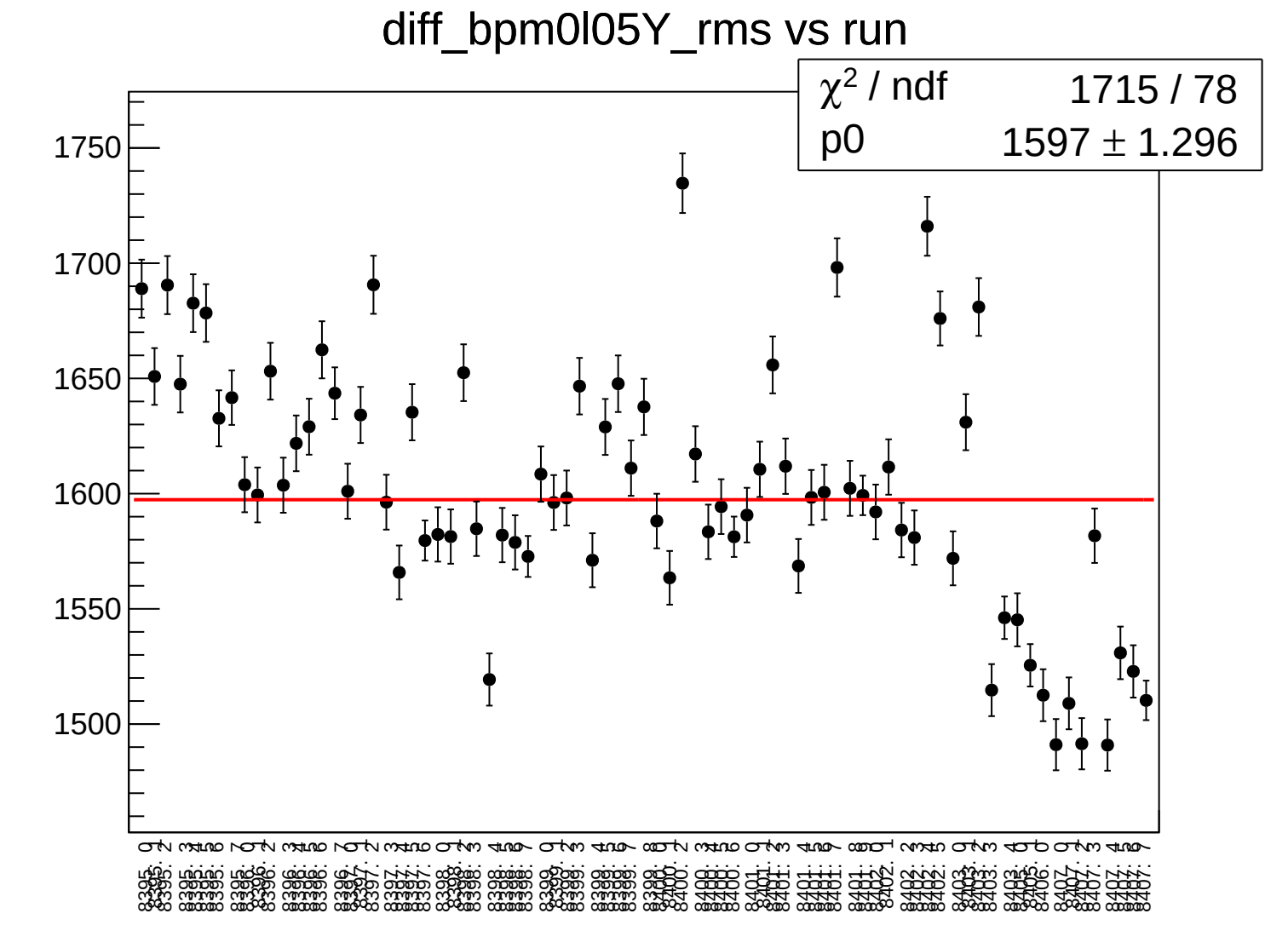

diff_bpm0l05X_mean vs run
χ^2 / ndf 61.58 / 78
p0 12.36 ± 6.511
pull
Entries 79
Mean −72.67
Std Dev 116.6

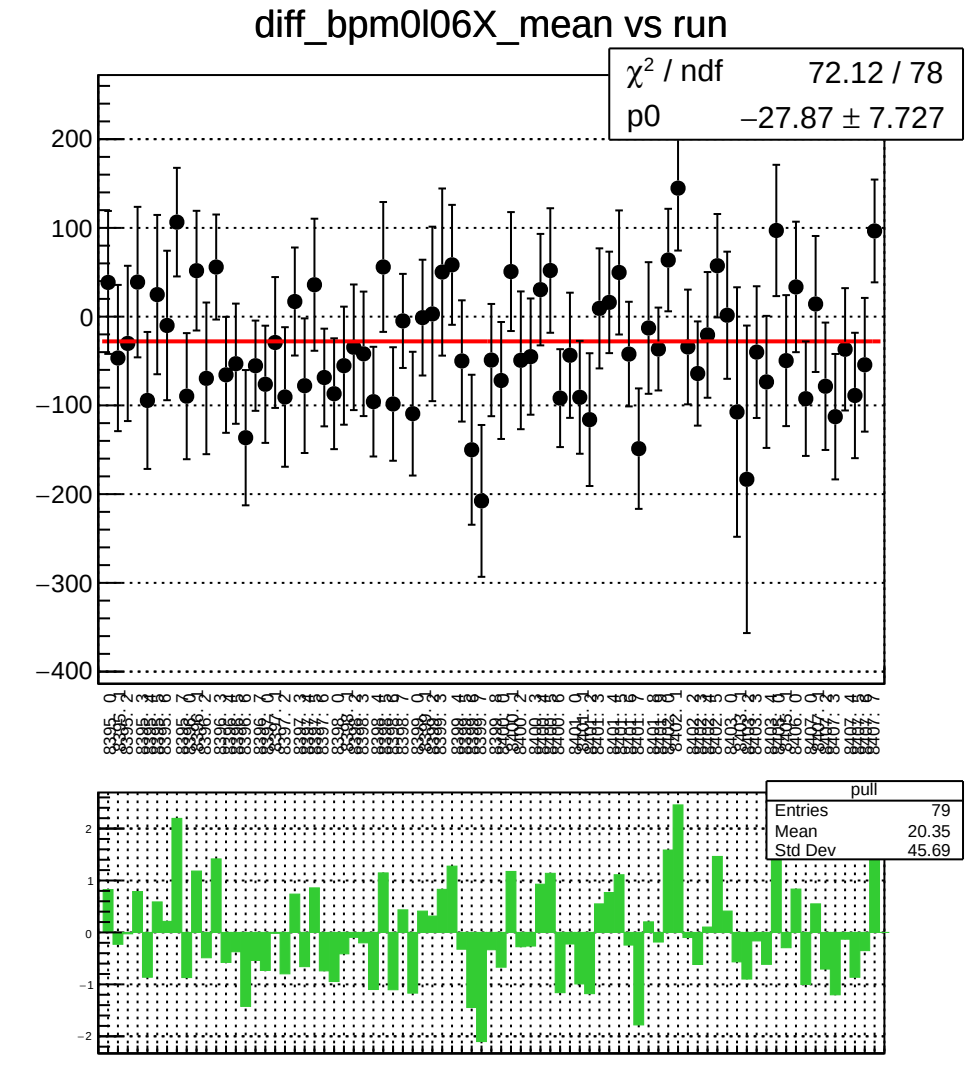

pull1D
Entries 79
Mean −0.02802
Std Dev 0.8825

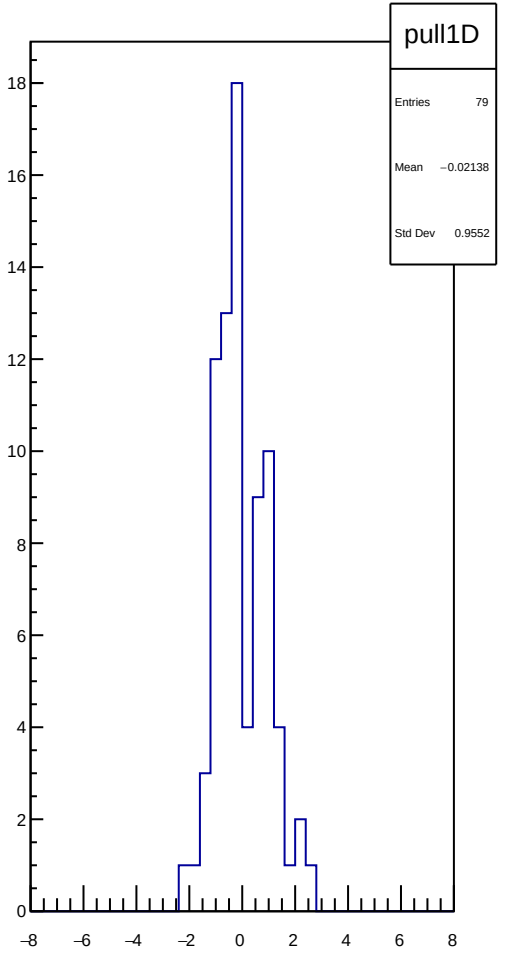

diff_bpm0l05X_rms vs run
χ² / ndf 3.546e+04 / 78
p0 5613 ± 4.604
16000
14000
12000
10000
8000
6000
4000

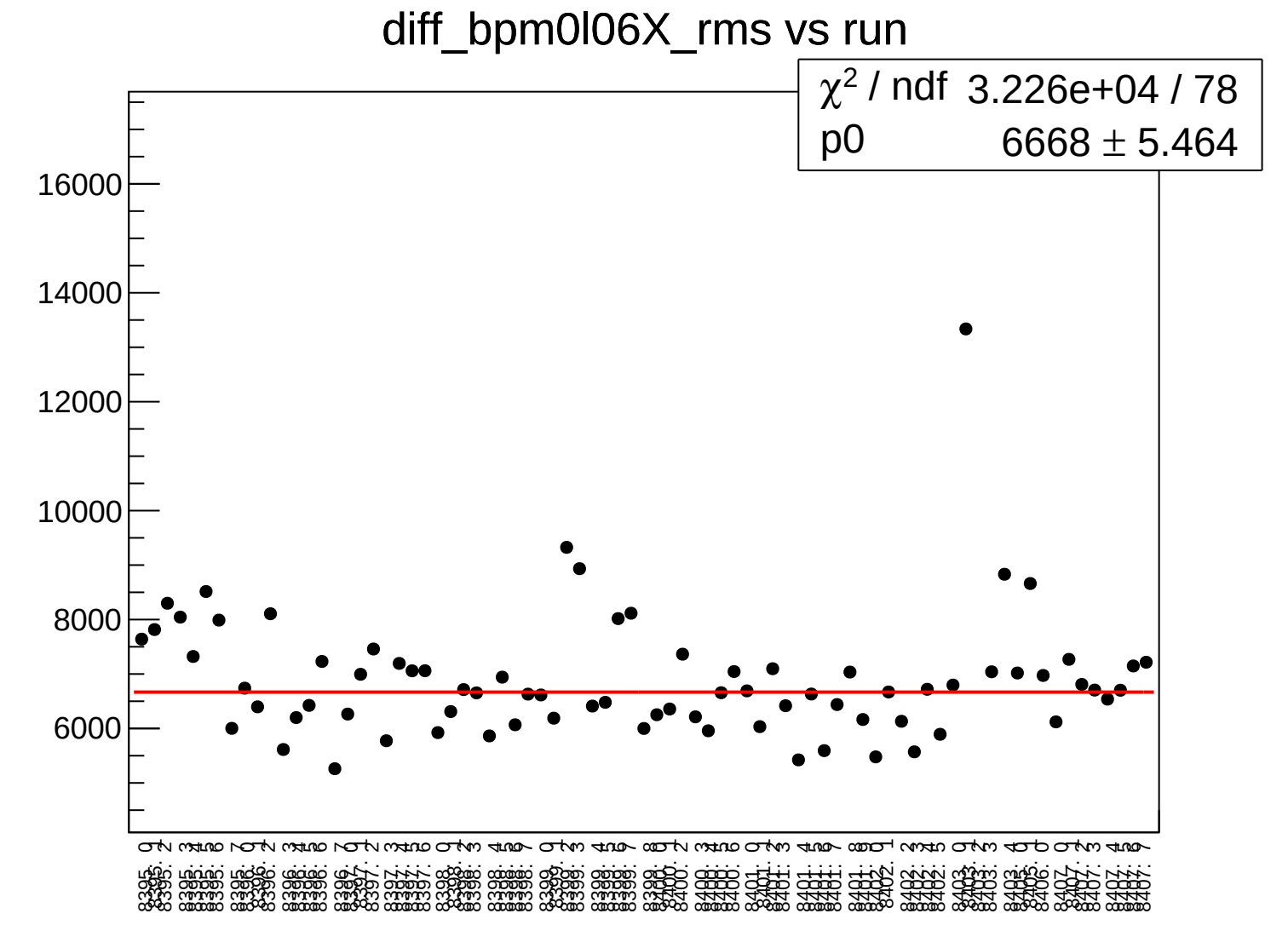

diff_bpm0l05Y_mean vs run
χ² / ndf 436.4 / 78
p0 5.056 ± 1.832
pull
Entries 79
Mean −443
Std Dev 491.1

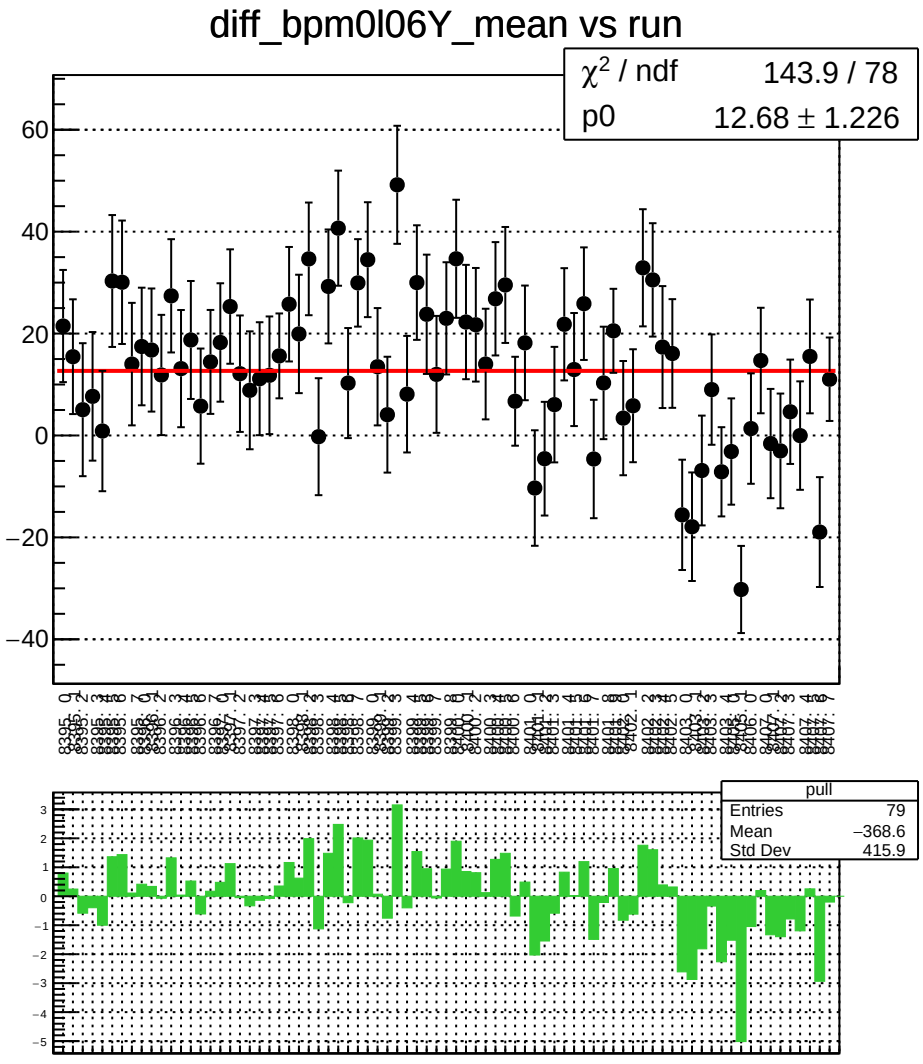

pull1D
Entries 79
Mean −0.06415
Std Dev 2.35

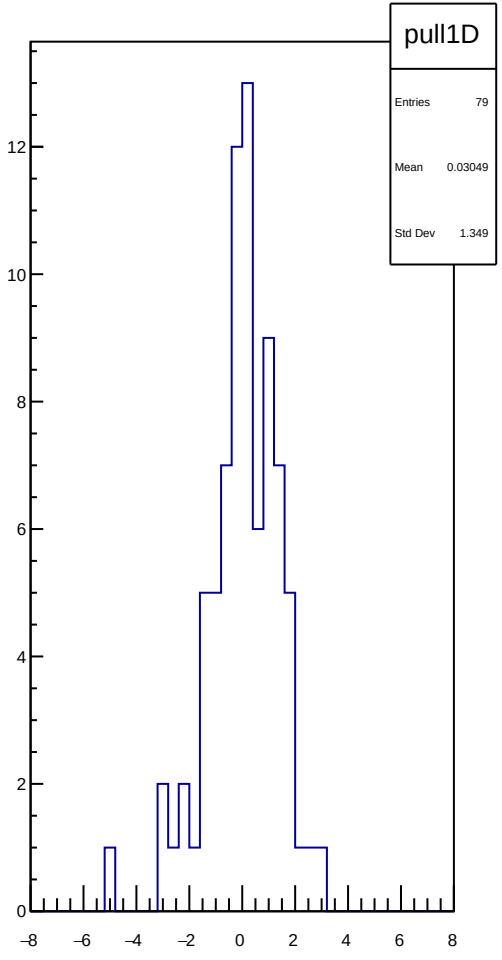

diff_bpm0l05Y_rms vs run
χ² / ndf 1715 / 78
p0 1597 ± 1.296
1750
1700
1650
1600
1550
1500

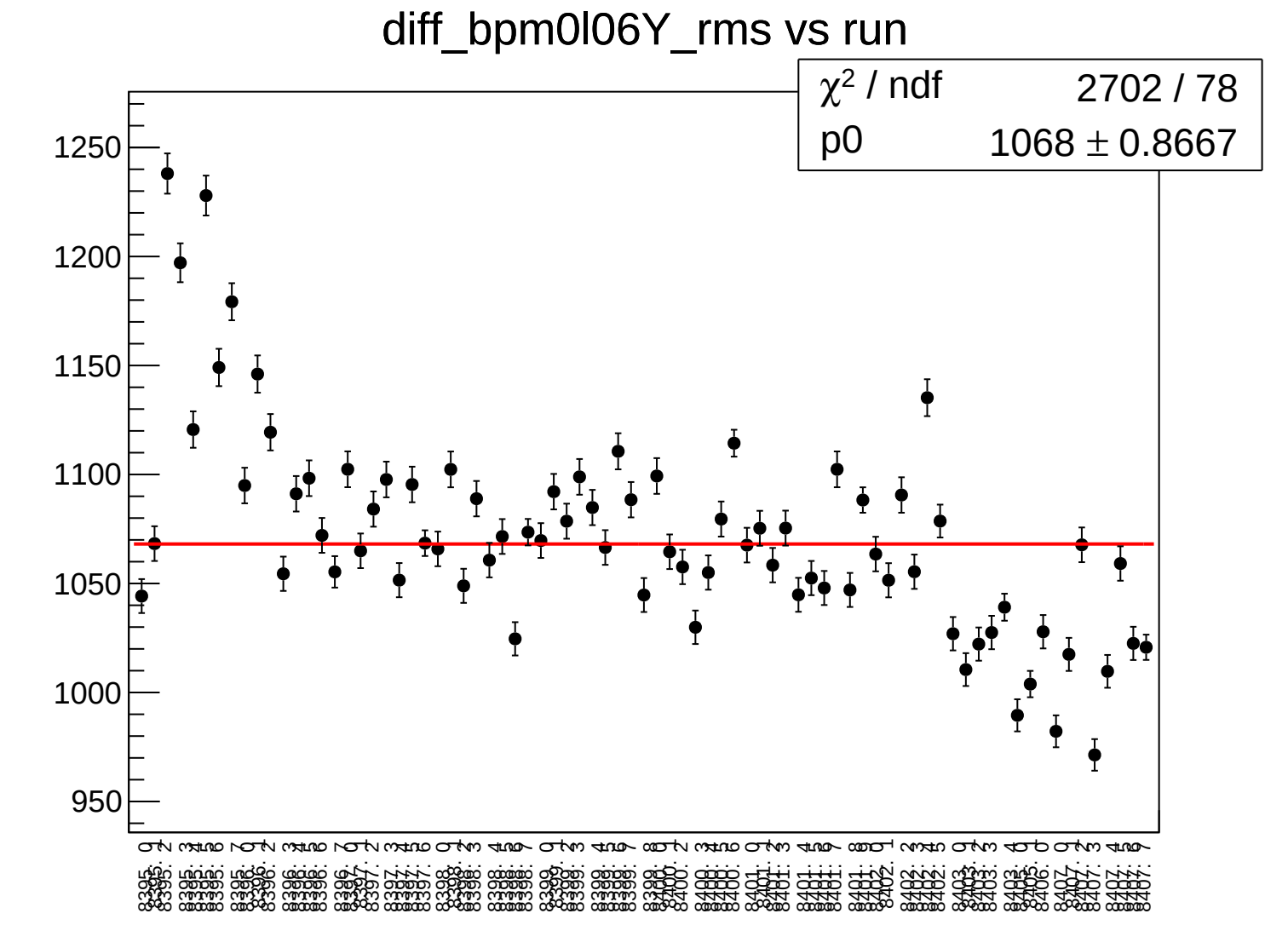

diff_bpm0l06X_mean vs run
χ^2 / ndf 72.12 / 78
p0 −27.87 ± 7.727
200
100
0
−100
−200
−300
−400
pull
Entries 79
Mean 20.35
Std Dev 45.69
2
1
0
−1
−2

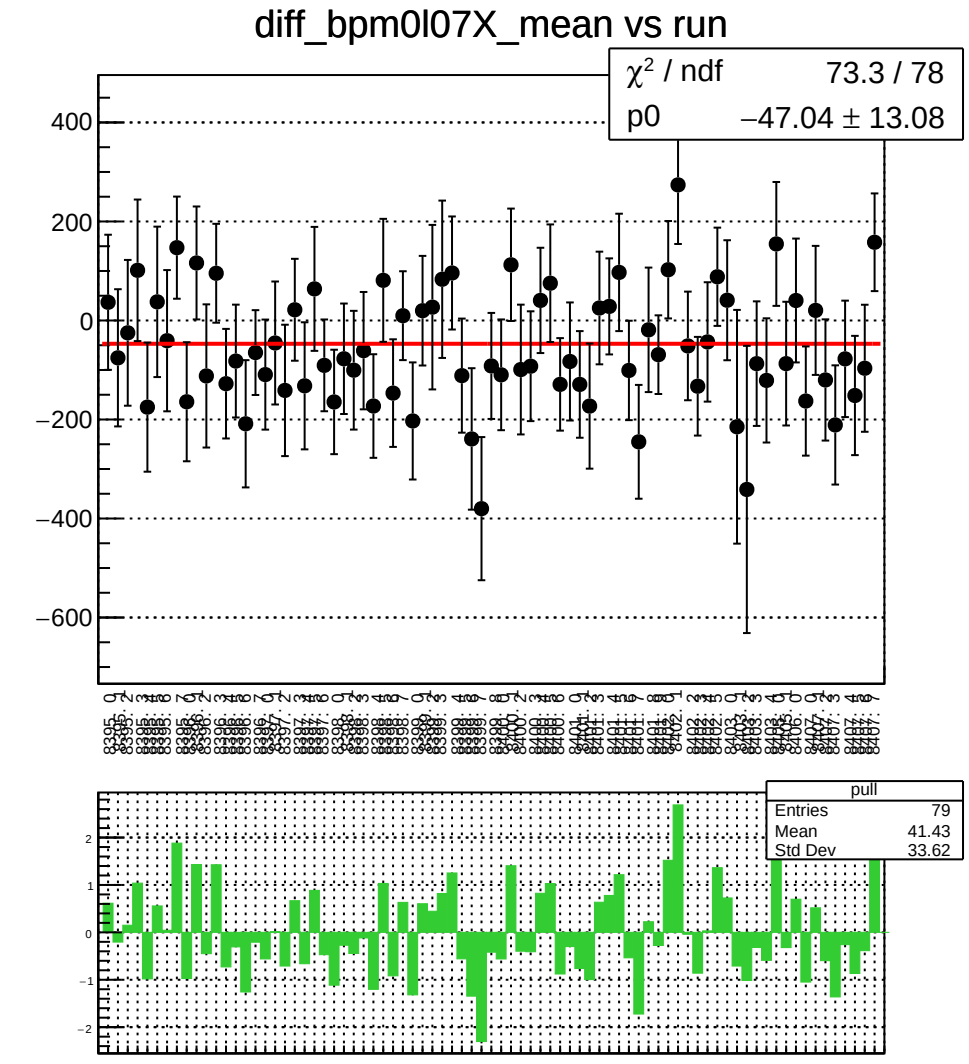

pull1D
Entries 79
Mean −0.02138
Std Dev 0.9552
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

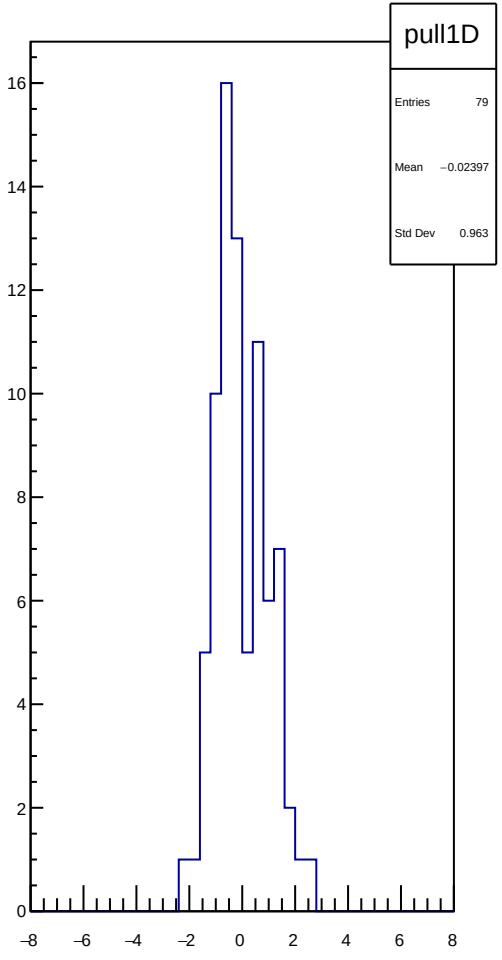

diff_bpm0l06X_rms vs run
χ² / ndf 3.226e+04 / 78
p0 6668 ± 5.464
16000
14000
12000
10000
8000
6000

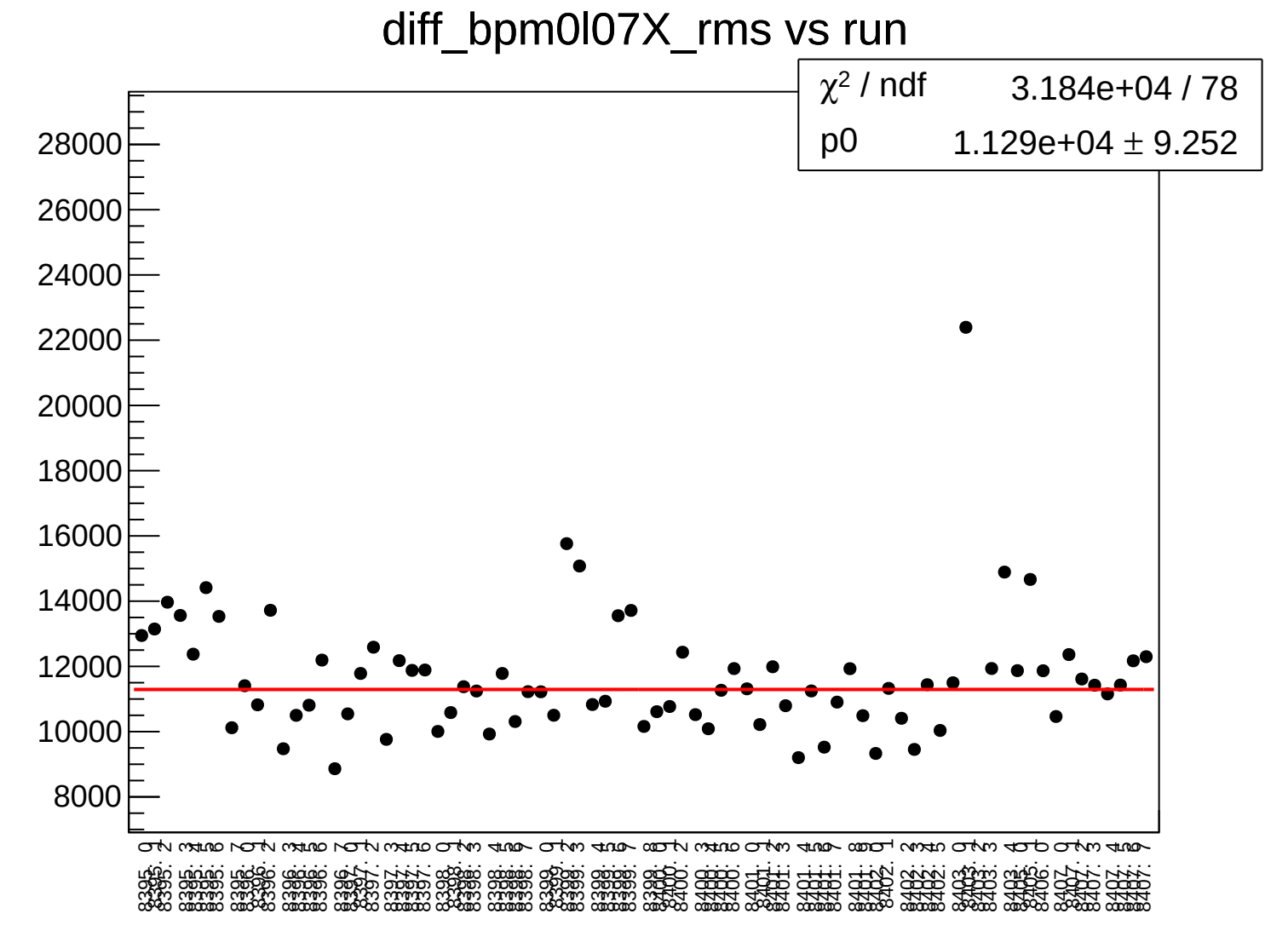

diff_bpm0l06Y_mean vs run
χ^2 / ndf 143.9 / 78
p0 12.68 ± 1.226
pull
Entries 79
Mean −368.6
Std Dev 415.9

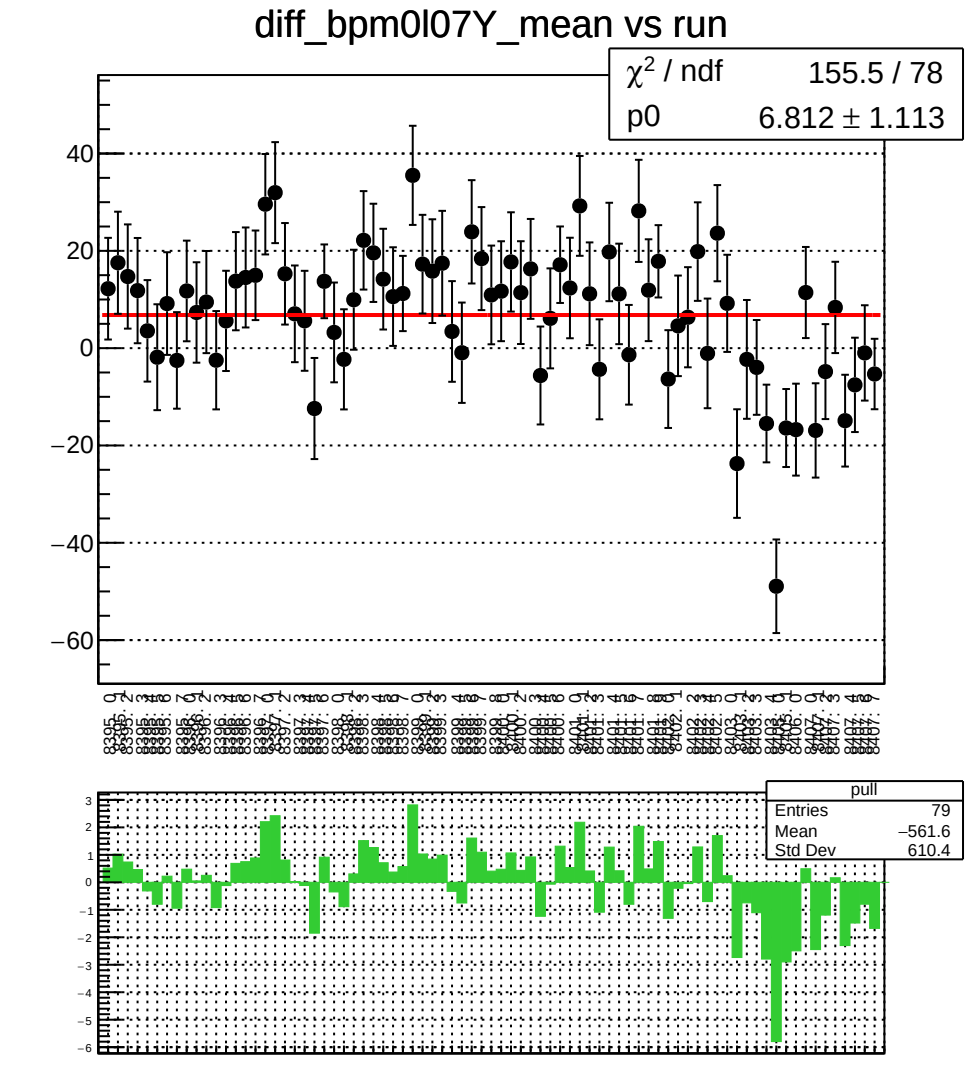

pull1D
Entries 79
Mean 0.03049
Std Dev 1.349

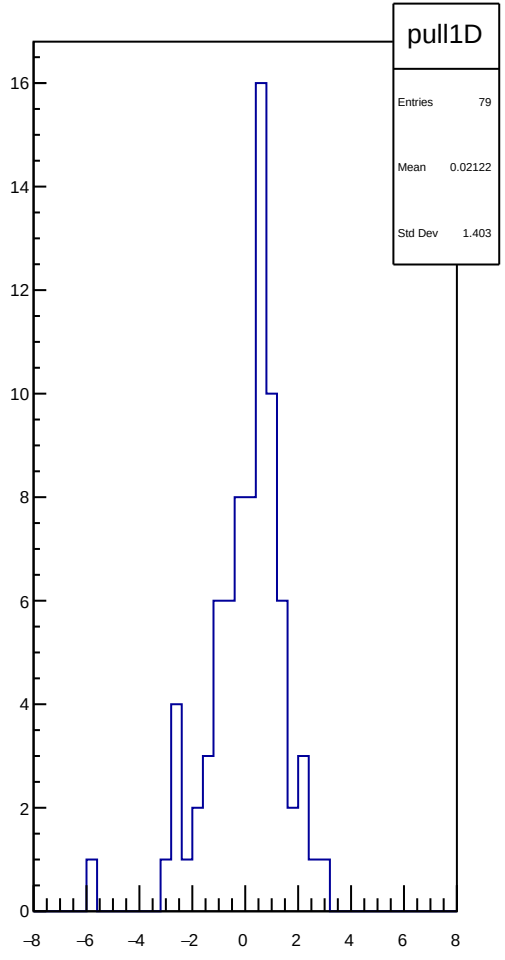

diff_bpm0l06Y_rms vs run
χ² / ndf 2702 / 78
p0 1068 ± 0.8667
1250
1200
1150
1100
1050
1000
950

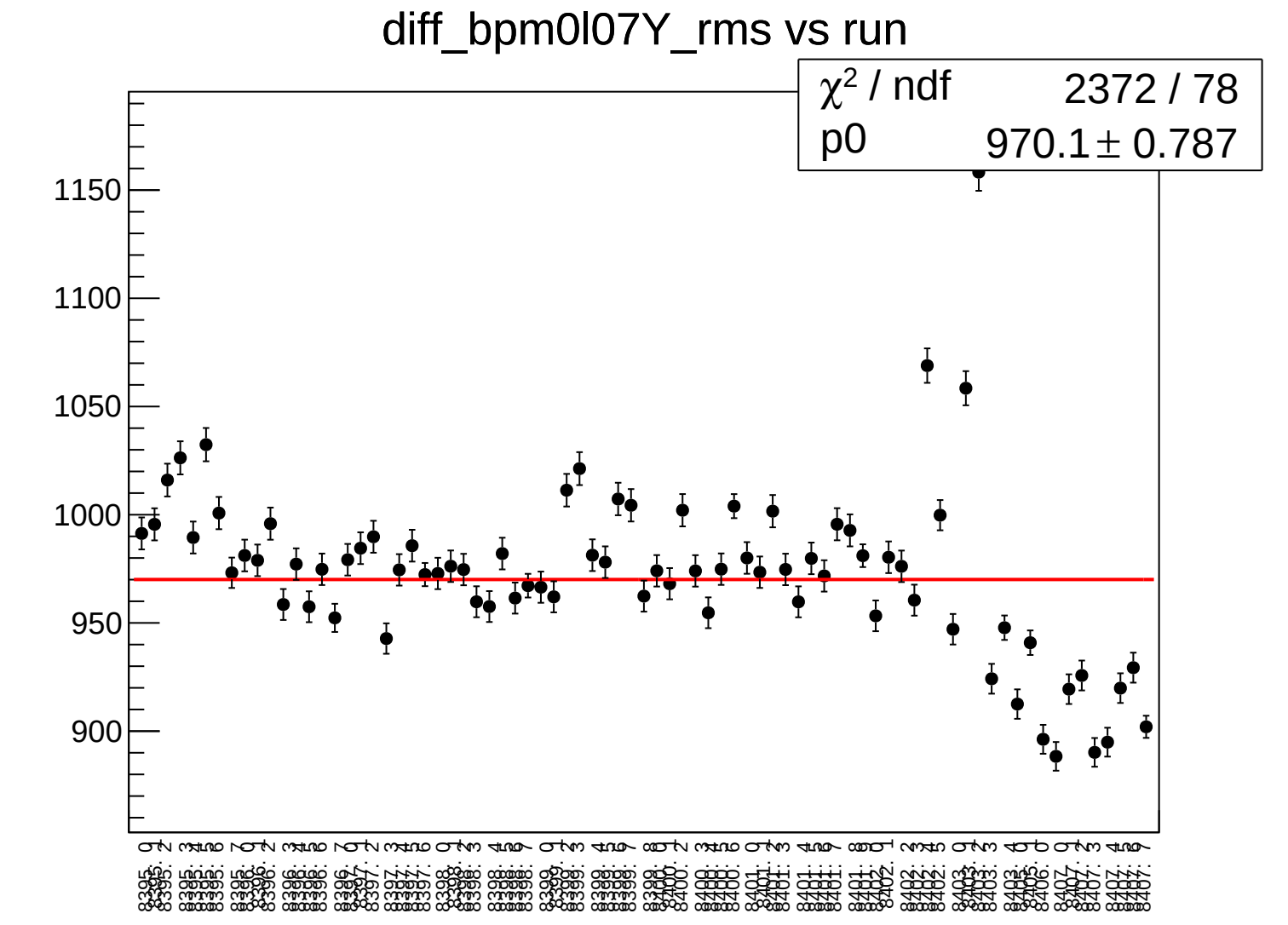

diff_bpm0l07X_mean vs run
χ² / ndf 73.3 / 78
p0 −47.04 ± 13.08
pull
Entries 79
Mean 41.43
Std Dev 33.62

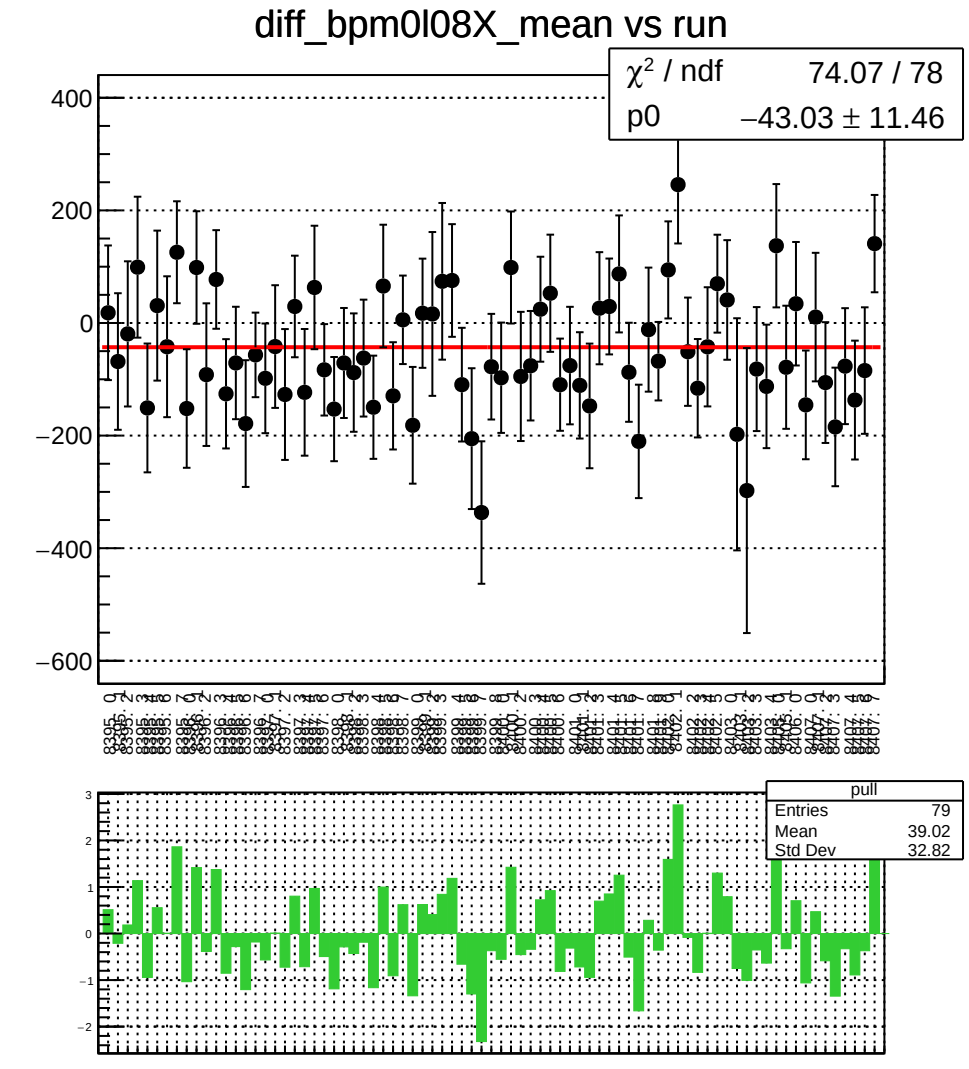

pull1D
Entries 79
Mean −0.02397
Std Dev 0.963

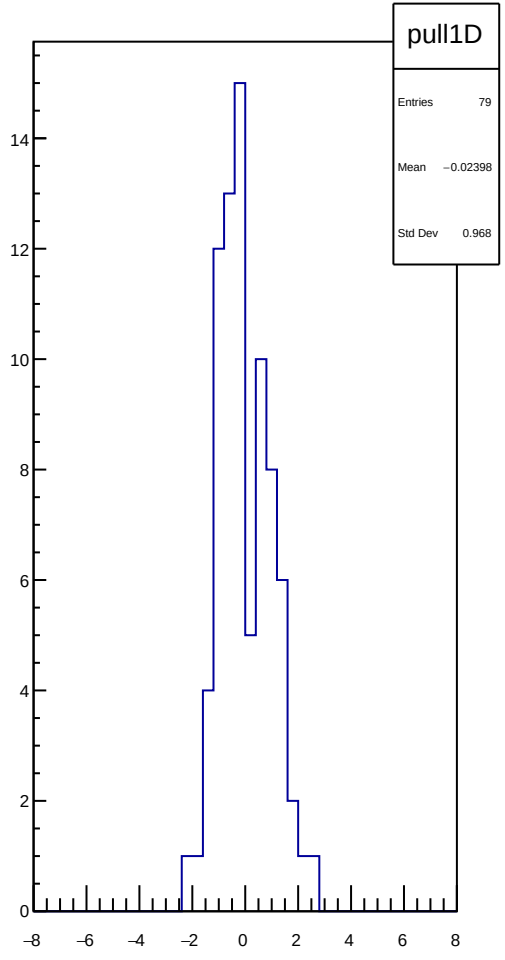

diff_bpm0l07X_rms vs run
χ² / ndf 3.184e+04 / 78
p0 1.129e+04 ± 9.252
28000
26000
24000
22000
20000
18000
16000
14000
12000
10000
8000

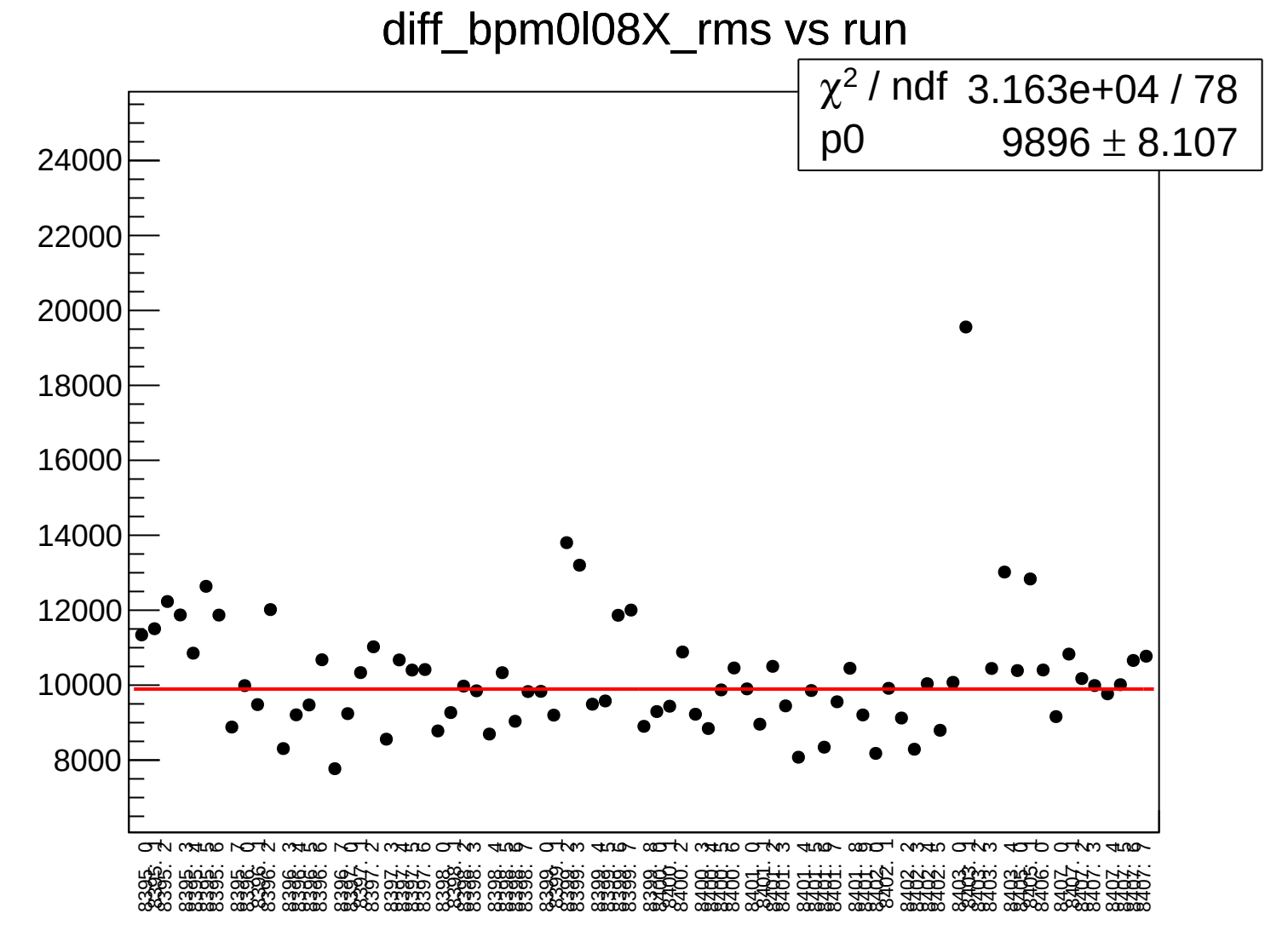

diff_bpm0l07Y_mean vs run
χ^2 / ndf 155.5 / 78
p0 6.812 ± 1.113
pull
Entries 79
Mean −561.6
Std Dev 610.4

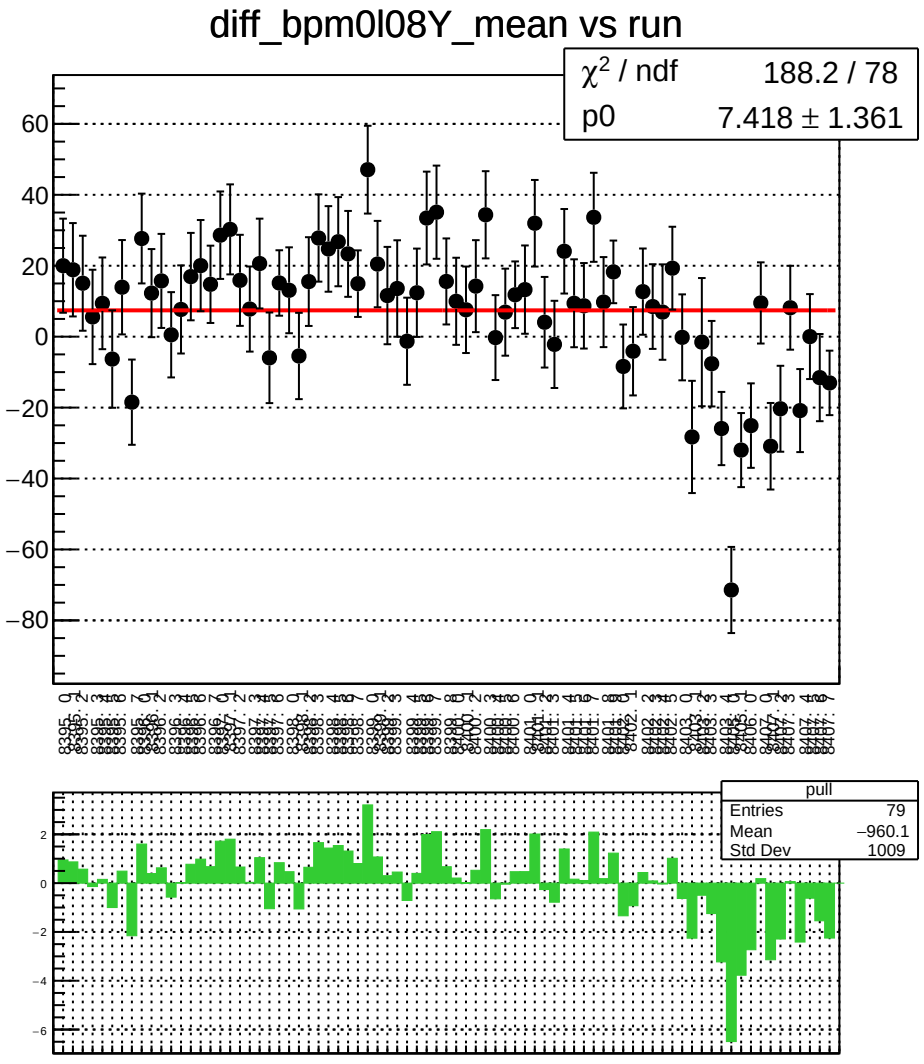

pull1D
Entries 79
Mean 0.02122
Std Dev 1.403

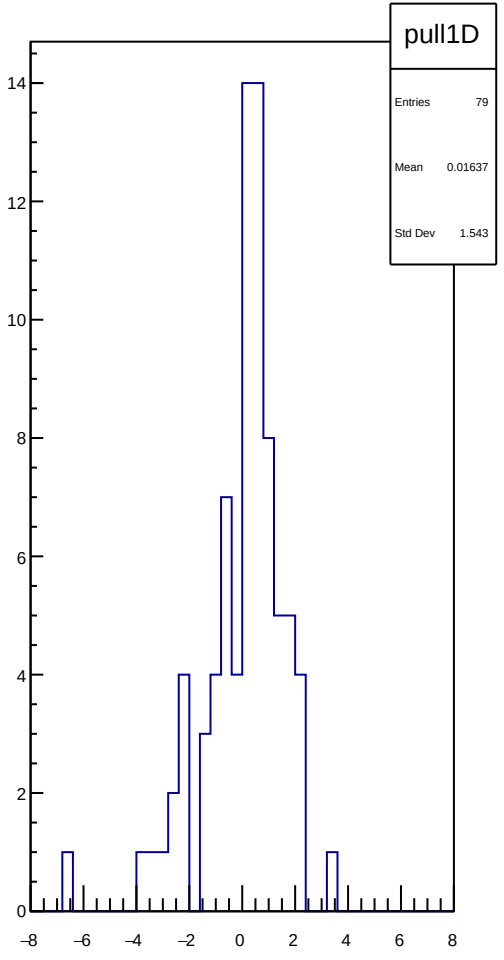

diff_bpm0l07Y_rms vs run
χ² / ndf 2372 / 78
p0 970.1 ± 0.787
1150
1100
1050
1000
950
900

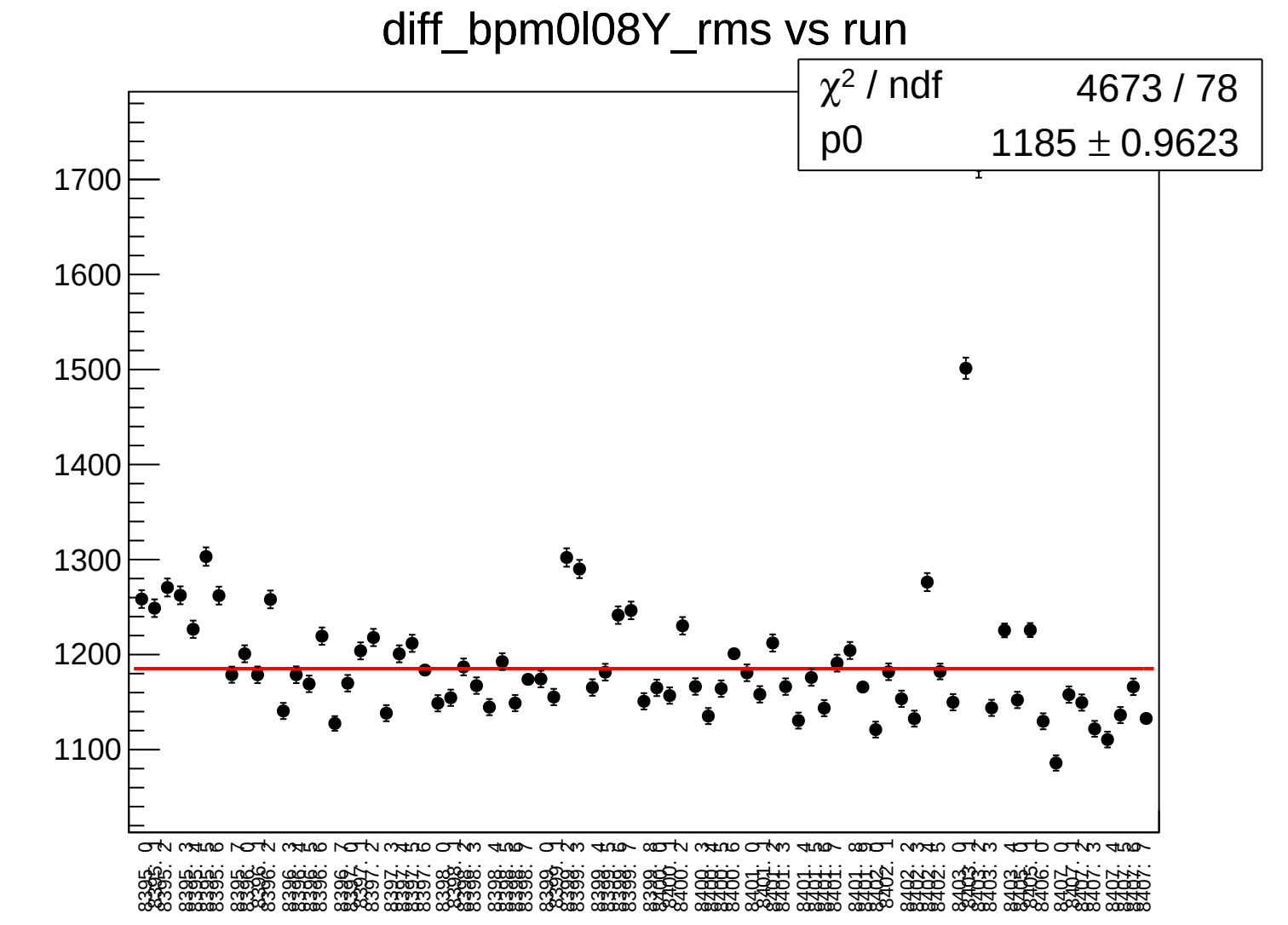

diff_bpm0l08X_mean vs run
χ² / ndf 74.07 / 78
p0 −43.03 ± 11.46
pull
Entries 79
Mean 39.02
Std Dev 32.82

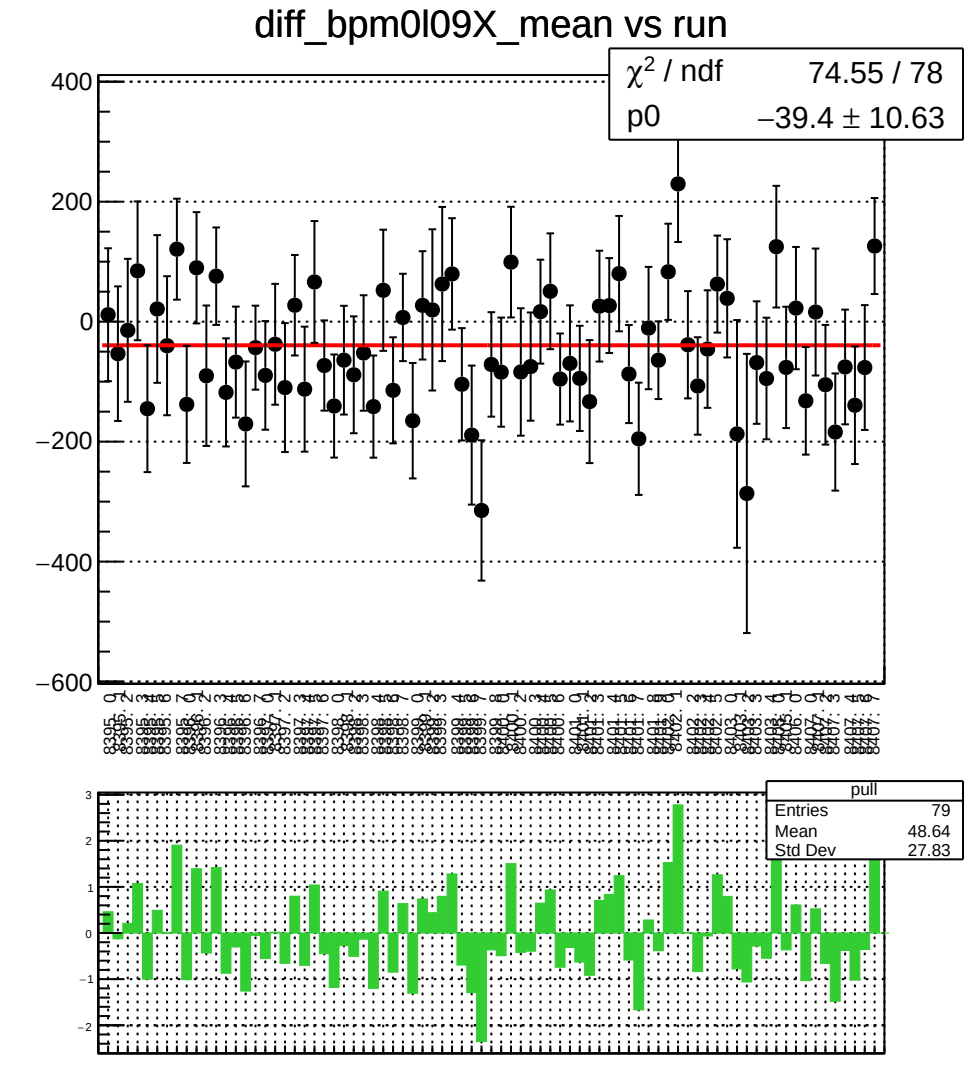

pull1D
Entries 79
Mean −0.02398
Std Dev 0.968

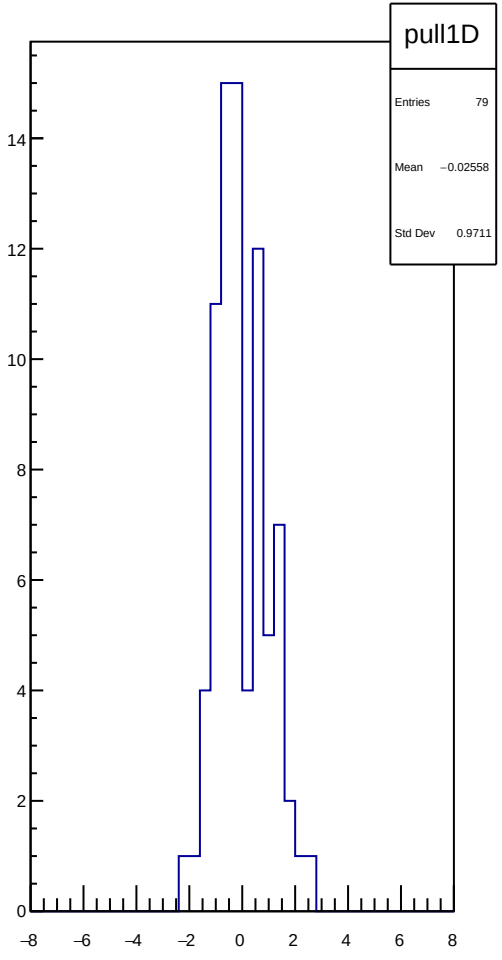

diff_bpm0l08X_rms vs run
χ² / ndf 3.163e+04 / 78
p0 9896 ± 8.107
24000
22000
20000
18000
16000
14000
12000
10000
8000

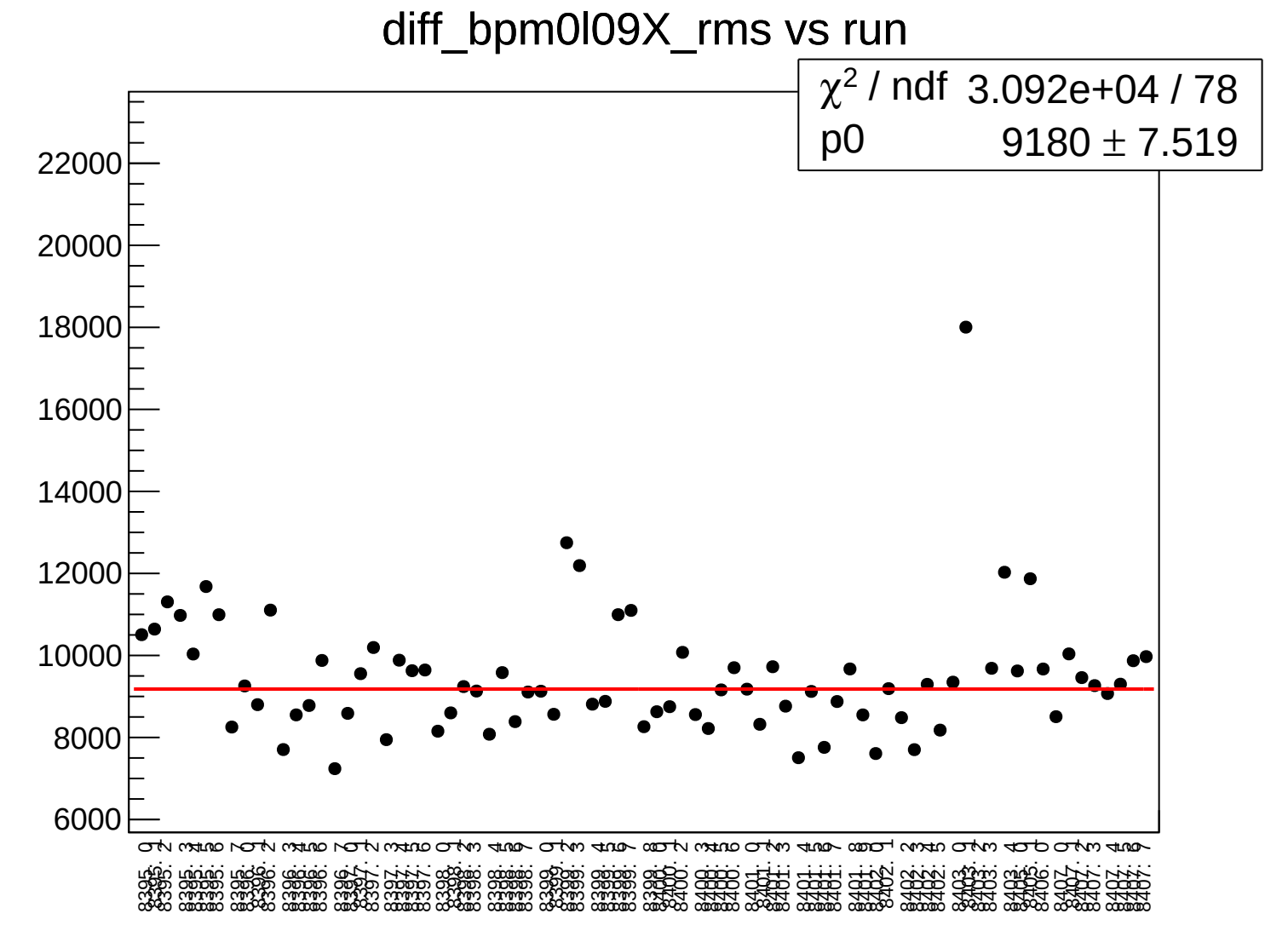

diff_bpm0l08Y_mean vs run
χ^2 / ndf 188.2 / 78
p0 7.418 ± 1.361
pull
Entries 79
Mean −960.1
Std Dev 1009

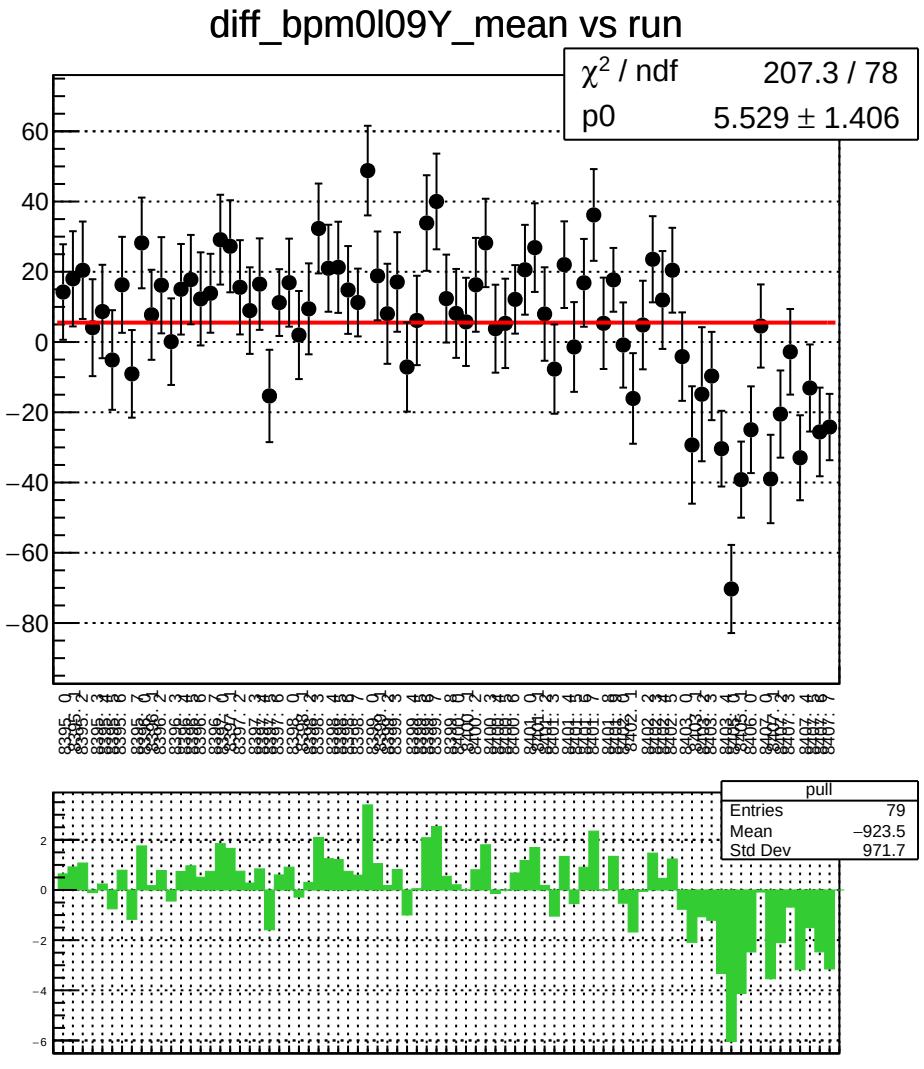

pull1D
Entries 79
Mean 0.01637
Std Dev 1.543

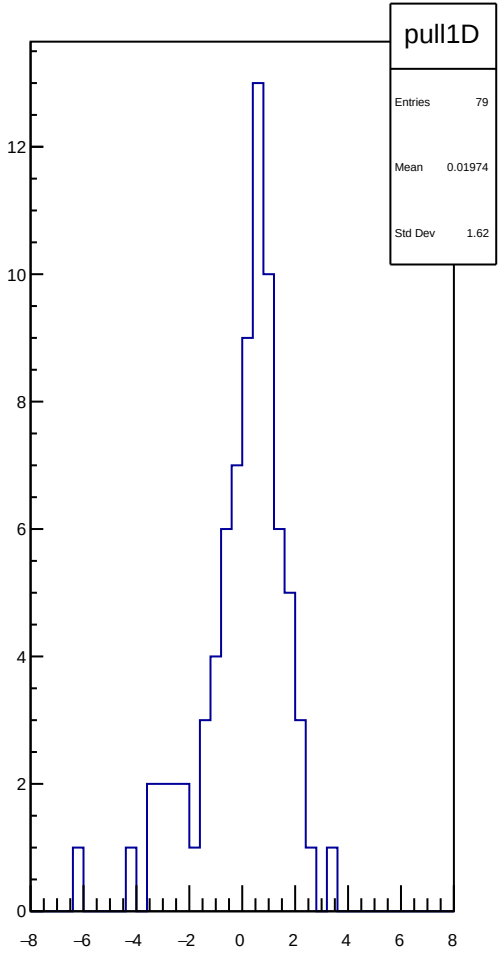

diff_bpm0l08Y_rms vs run
χ² / ndf 4673 / 78
p0 1185 ± 0.9623
1700
1600
1500
1400
1300
1200
1100

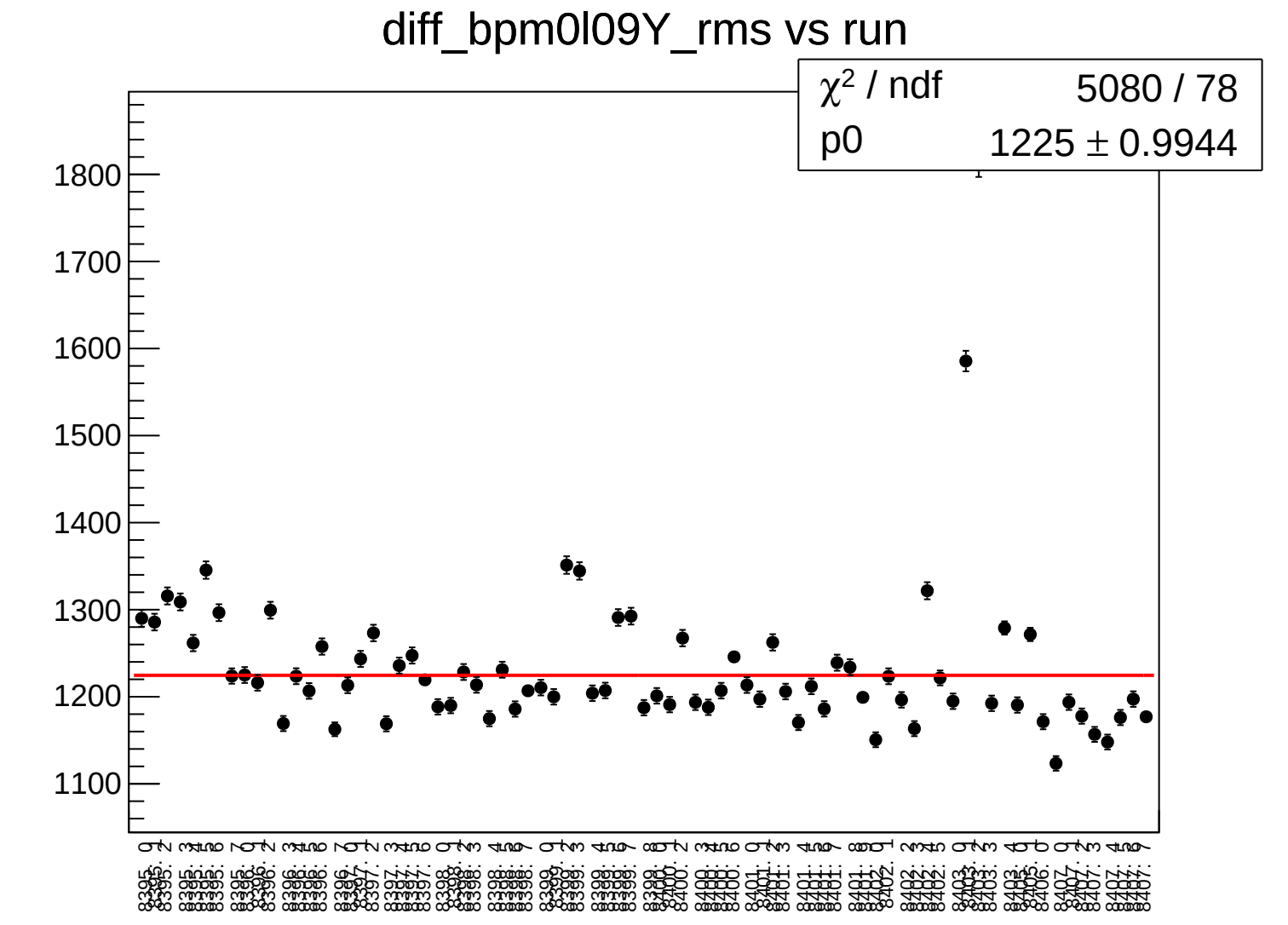

diff_bpm0l09X_mean vs run
χ² / ndf 74.55 / 78
p0 −39.4 ± 10.63
pull
Entries 79
Mean 48.64
Std Dev 27.83

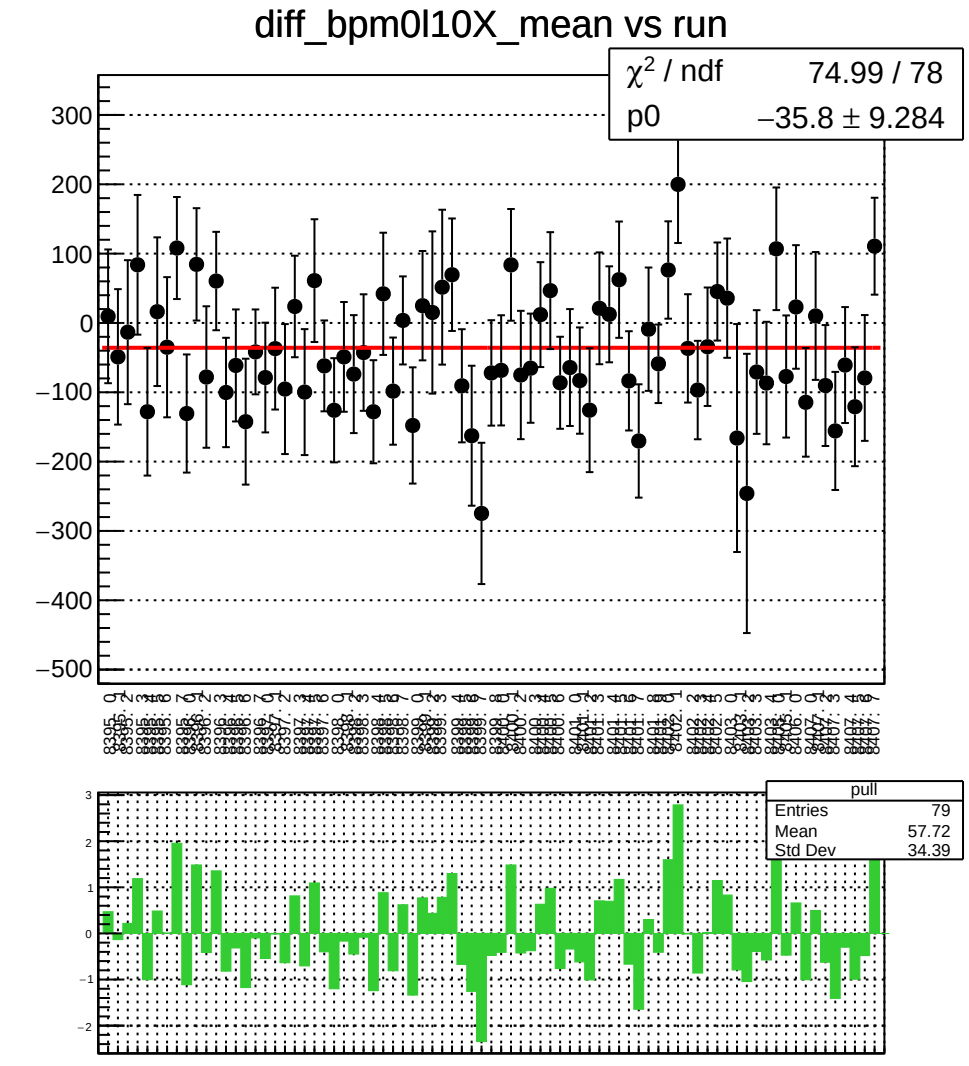

pull1D
Entries 79
Mean −0.02558
Std Dev 0.9711

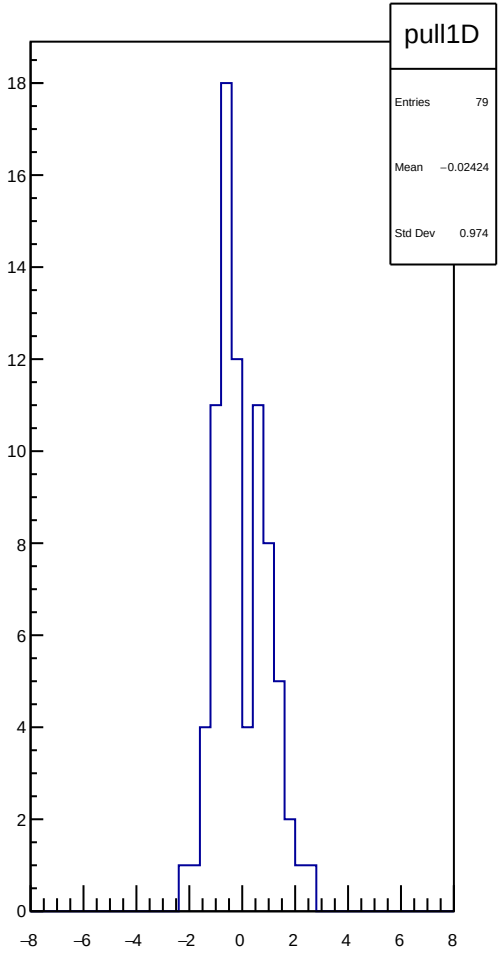

diff_bpm0l09X_rms vs run
χ² / ndf 3.092e+04 / 78
p0 9180 ± 7.519
22000
20000
18000
16000
14000
12000
10000
8000
6000

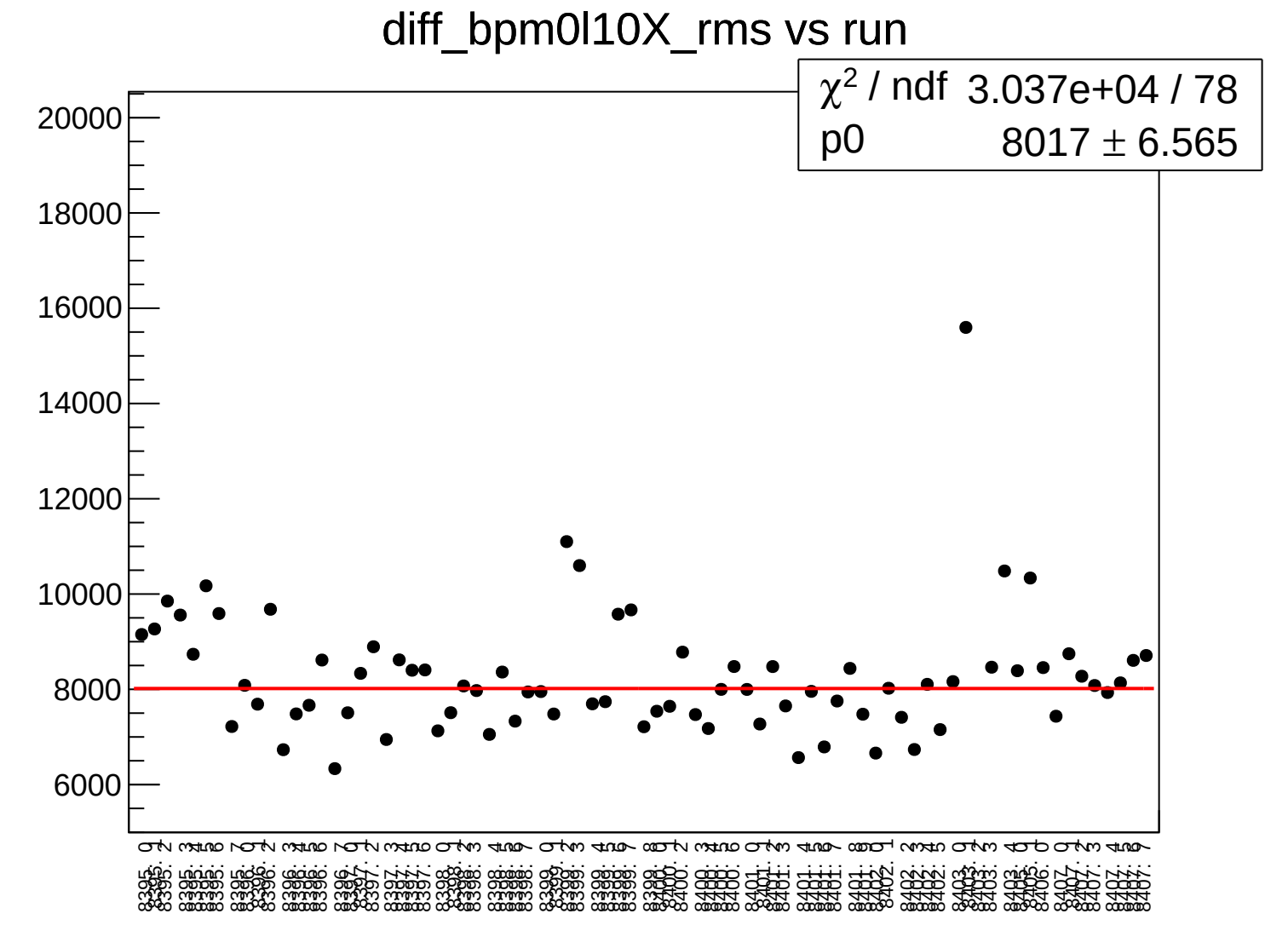

diff_bpm0l09Y_mean vs run
χ^2 / ndf 207.3 / 78
p0 5.529 ± 1.406
pull
Entries 79
Mean −923.5
Std Dev 971.7

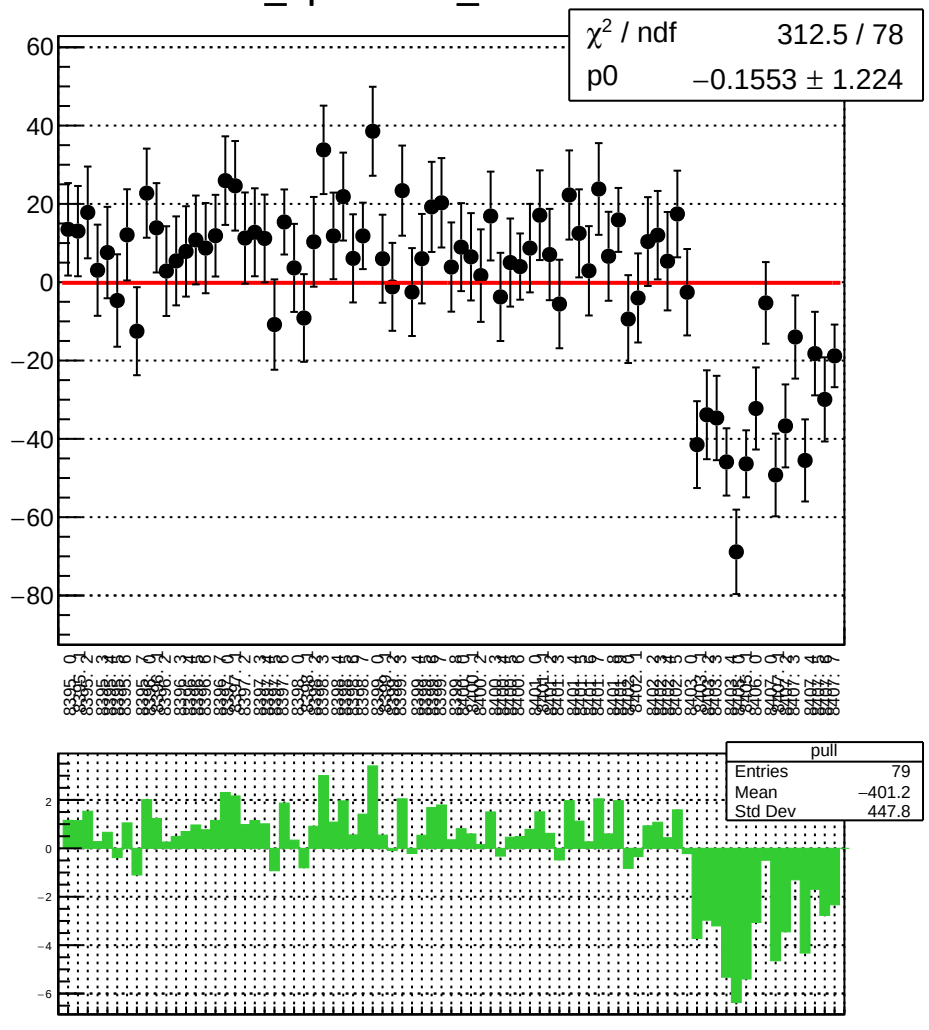

pull1D
Entries 79
Mean 0.01974
Std Dev 1.62

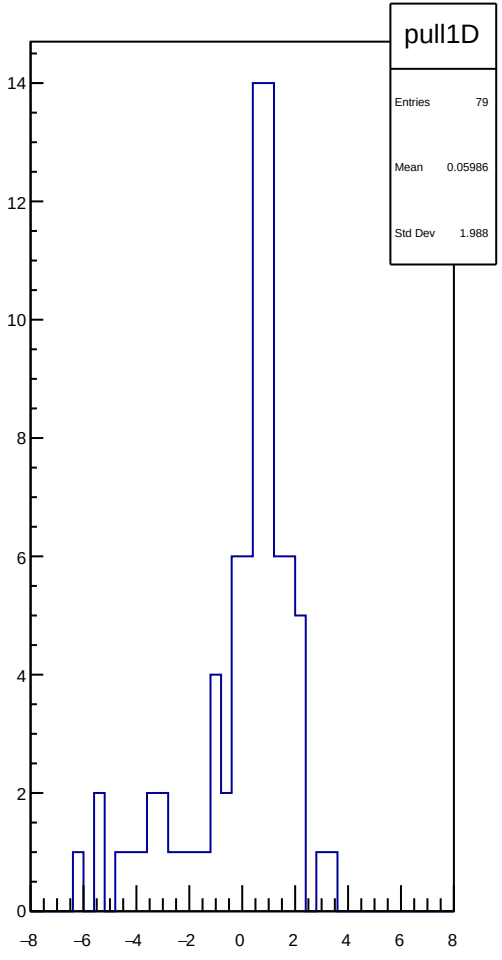

diff_bpm0l09Y_rms vs run
χ² / ndf 5080 / 78
p0 1225 ± 0.9944
1800
1700
1600
1500
1400
1300
1200
1100

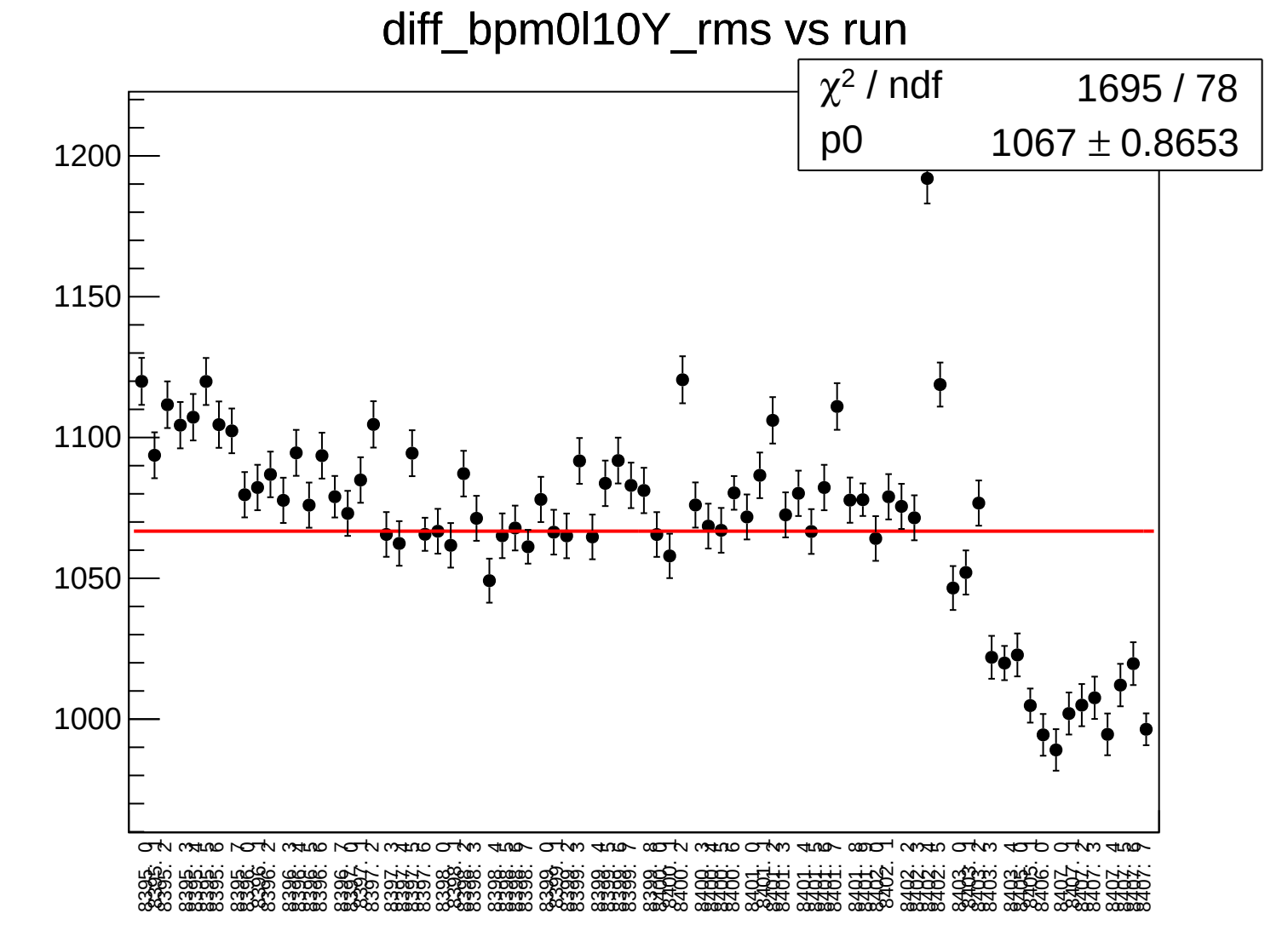

diff_bpm0l10X_mean vs run
χ² / ndf 74.99 / 78
p0 −35.8 ± 9.284
pull
Entries 79
Mean 57.72
Std Dev 34.39

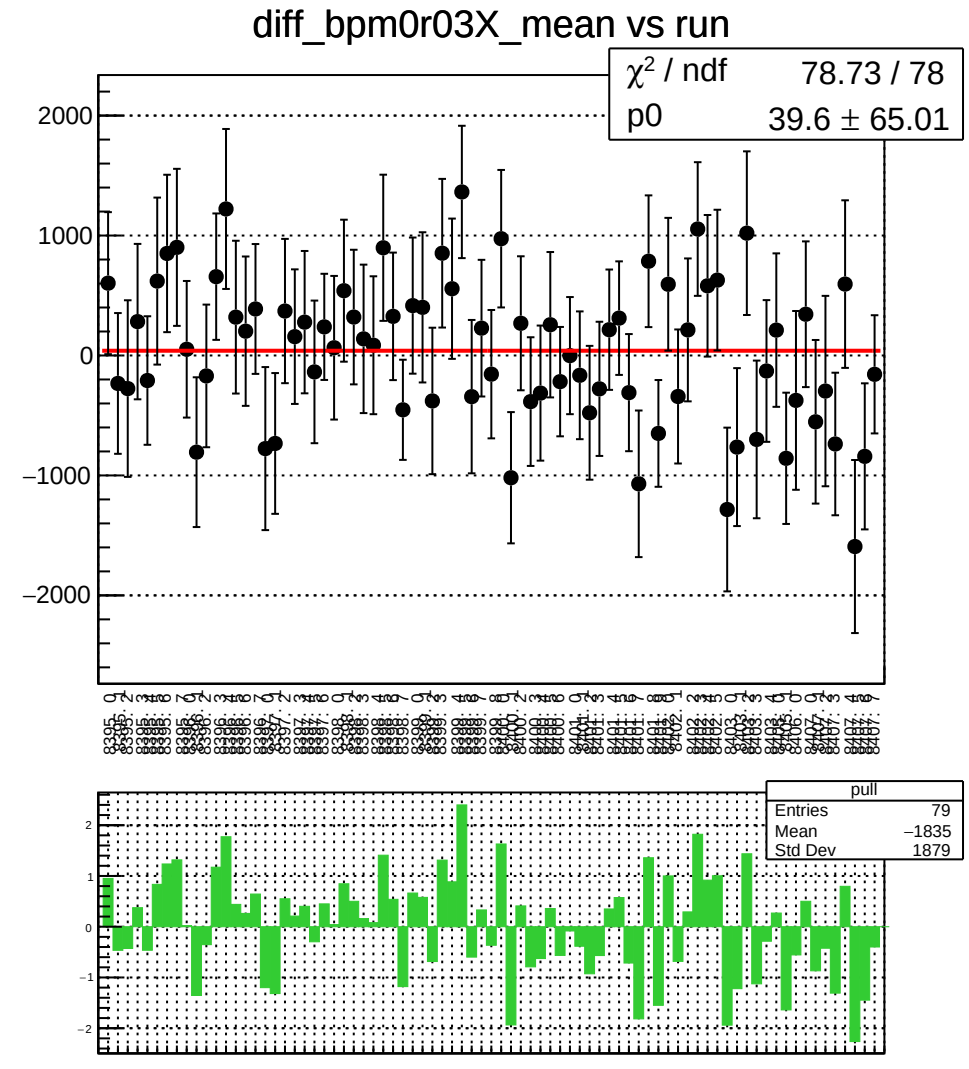

pull1D
Entries 79
Mean −0.02424
Std Dev 0.974

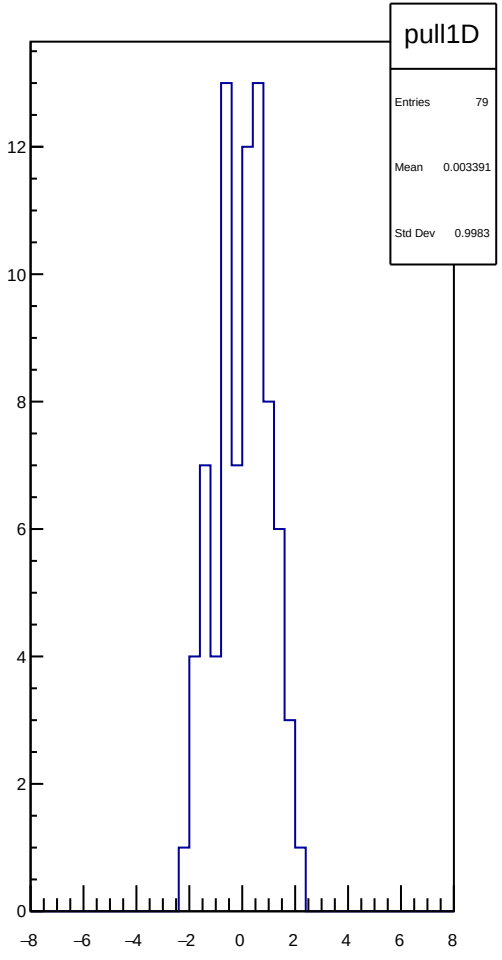

diff_bpm0l10X_rms vs run
χ² / ndf 3.037e+04 / 78
p0 8017 ± 6.565
20000
18000
16000
14000
12000
10000
8000
6000

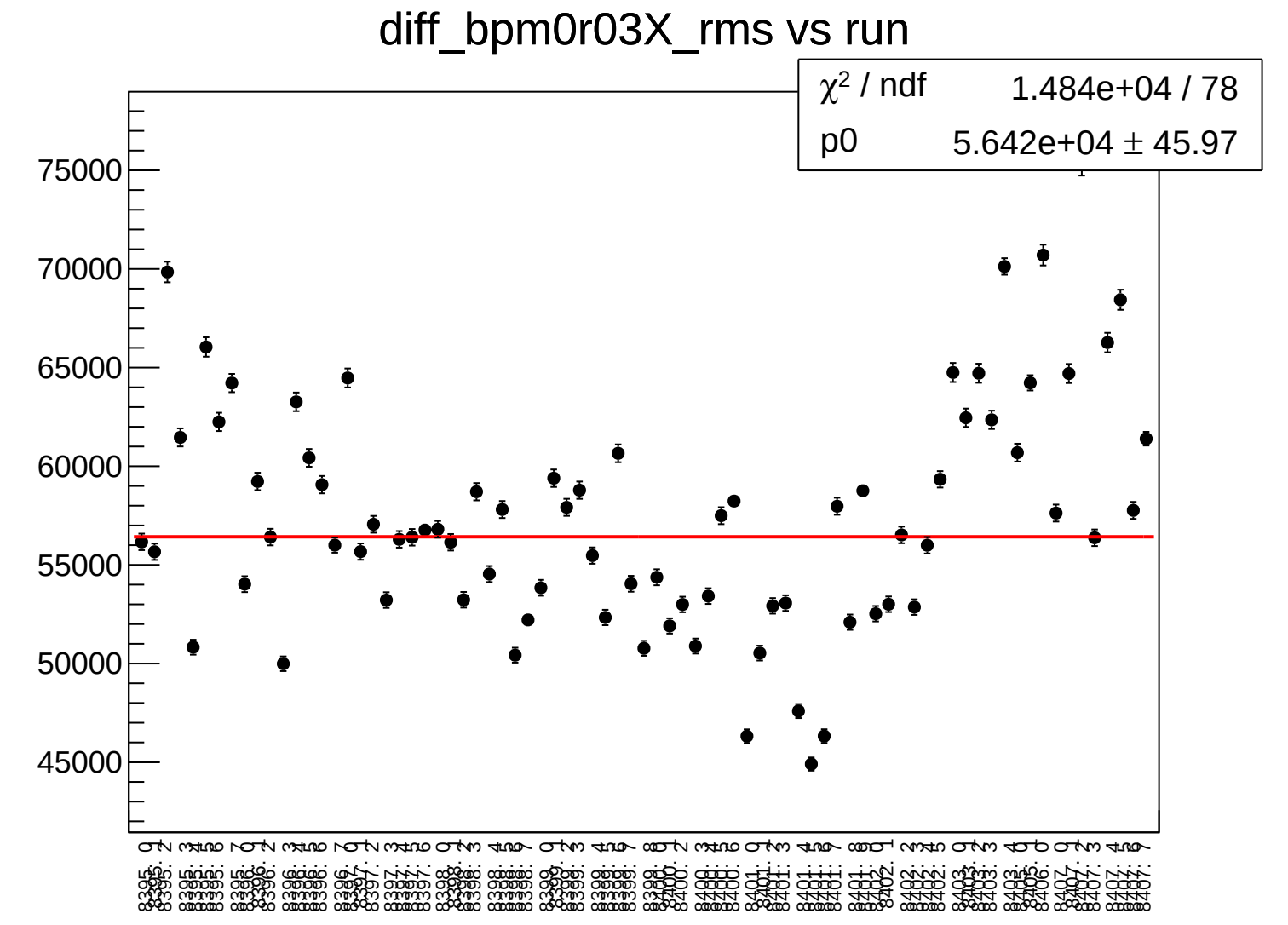

diff_bpm0l10Y_mean vs run
χ² / ndf 312.5 / 78
p0 −0.1553 ± 1.224
pull
Entries 79
Mean −401.2
Std Dev 447.8

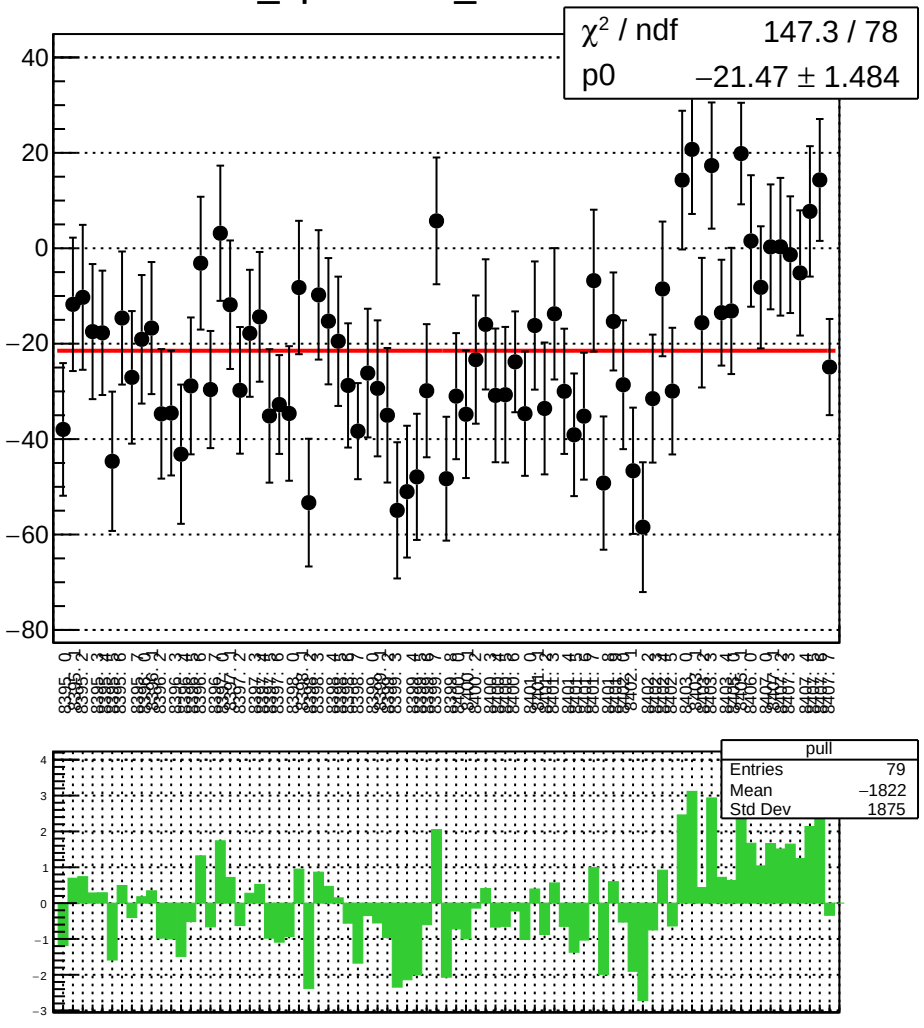

pull1D
Entries 79
Mean 0.05986
Std Dev 1.988

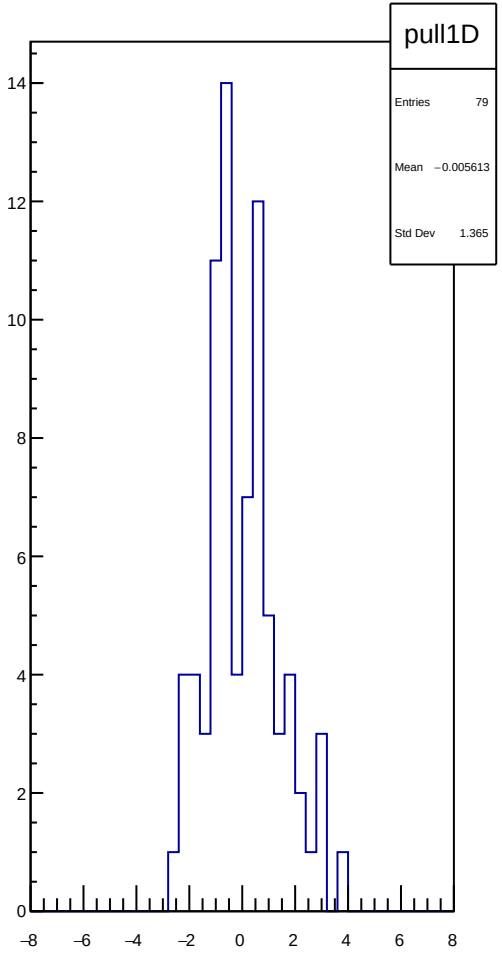

diff_bpm0l10Y_rms vs run
χ² / ndf 1695 / 78
p0 1067 ± 0.8653
1200
1150
1100
1050
1000

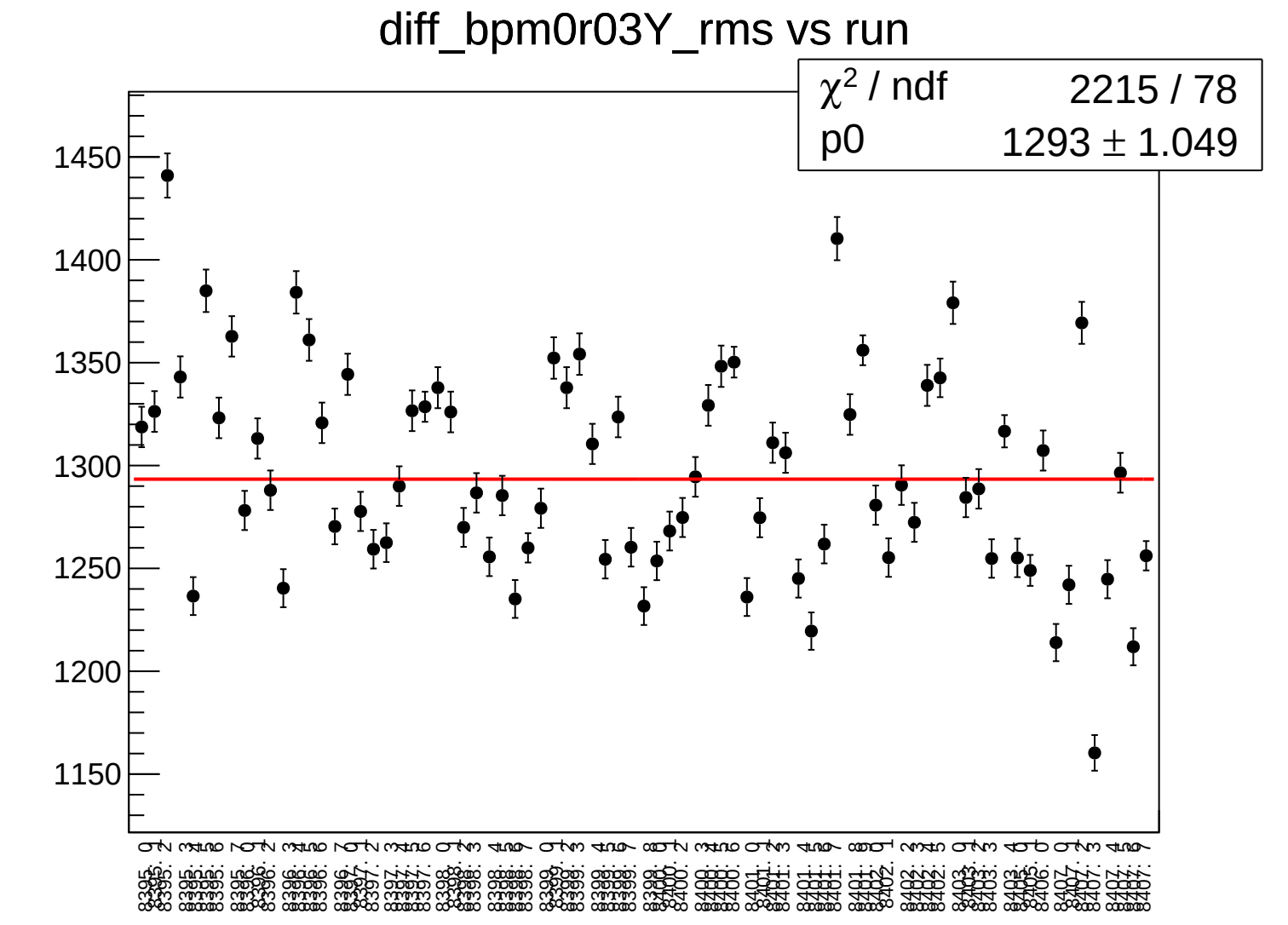

diff_bpm0r03X_mean vs run
χ² / ndf 78.73 / 78
p0 39.6 ± 65.01
2000
1000
0
−1000
−2000
pull
Entries 79
Mean −1835
Std Dev 1879
2
1
0
−1
−2

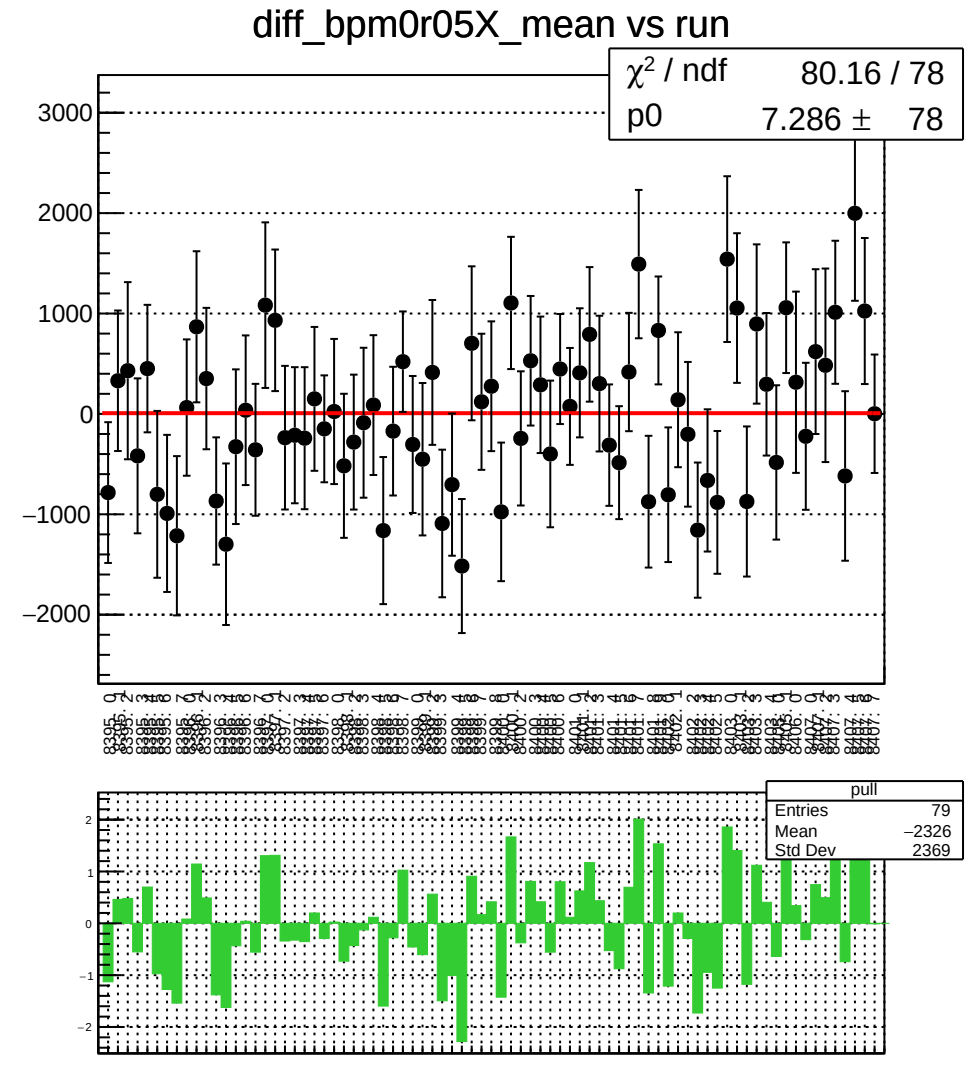

pull1D
Entries 79
Mean 0.003391
Std Dev 0.9983
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

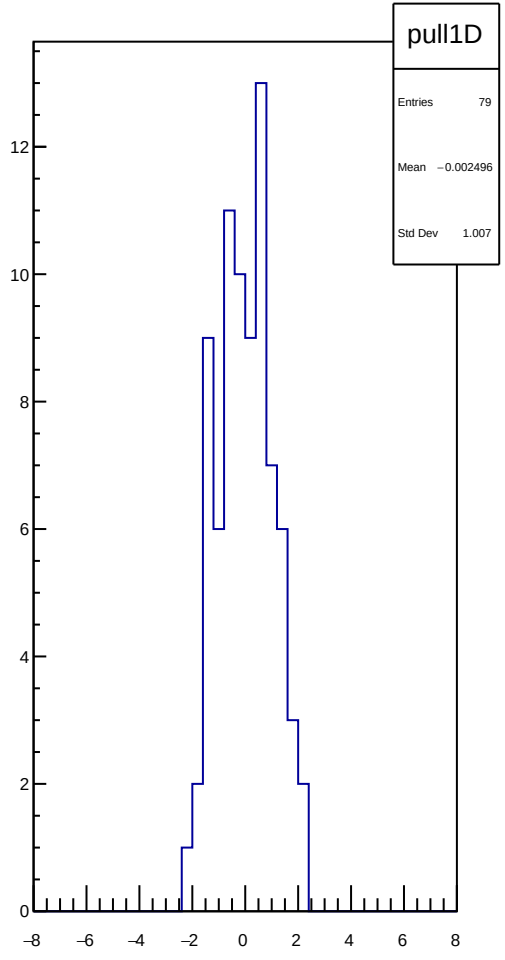

diff_bpm0r03X_rms vs run
χ² / ndf 1.484e+04 / 78
p0 5.642e+04 ± 45.97
75000
70000
65000
60000
55000
50000
45000

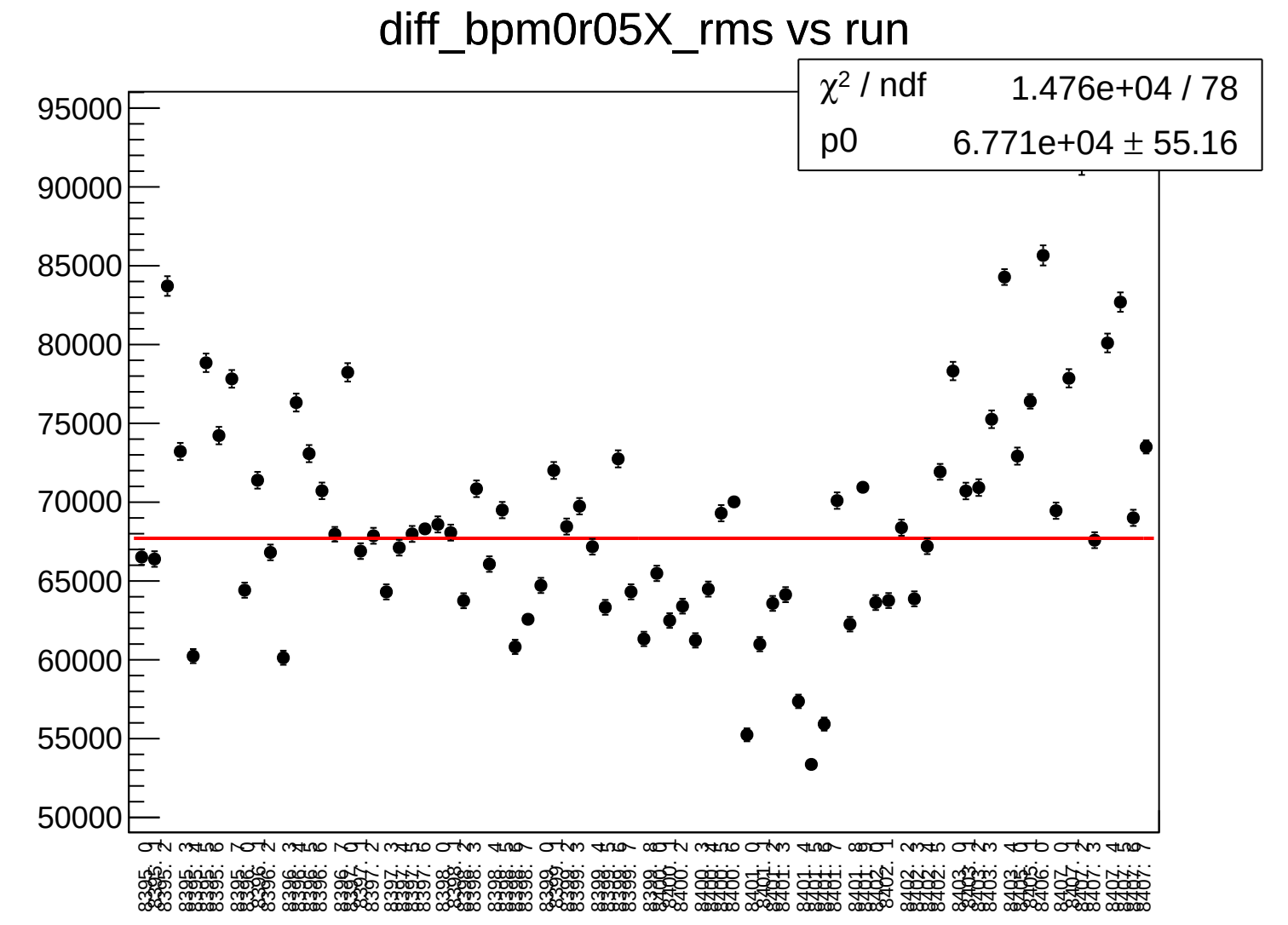

diff_bpm0r03Y_mean vs run
χ² / ndf 147.3 / 78
p0 −21.47 ± 1.484
pull
Entries 79
Mean −1822
Std Dev 1875

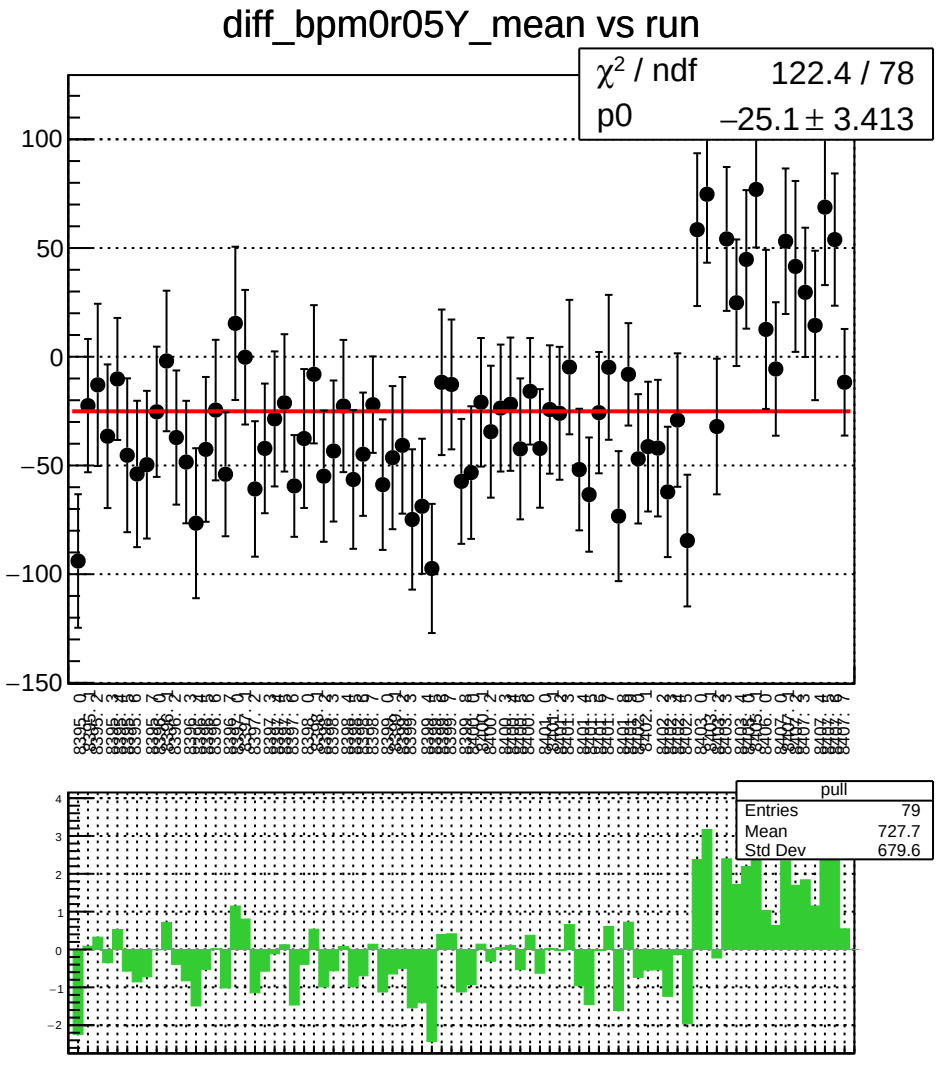

pull1D
Entries 79
Mean −0.005613
Std Dev 1.365

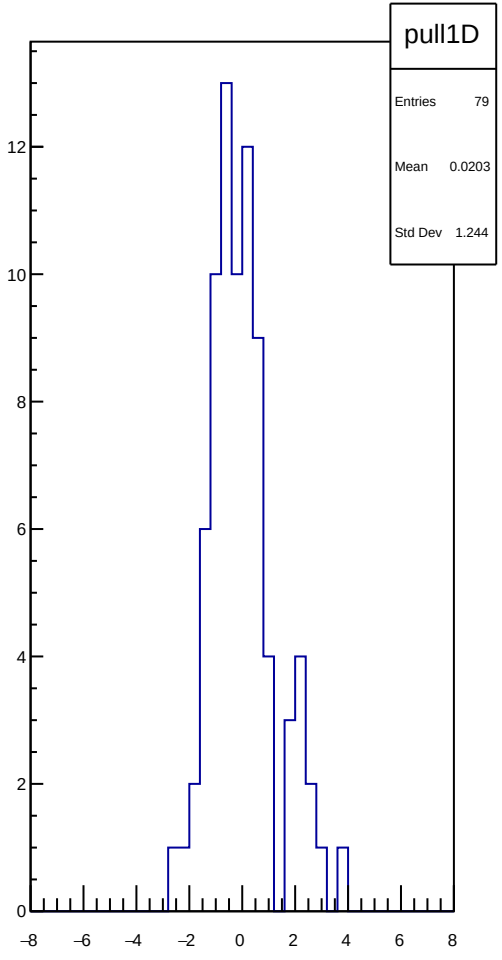

diff_bpm0r03Y_rms vs run
χ² / ndf 2215 / 78
p0 1293 ± 1.049
1450
1400
1350
1300
1250
1200
1150

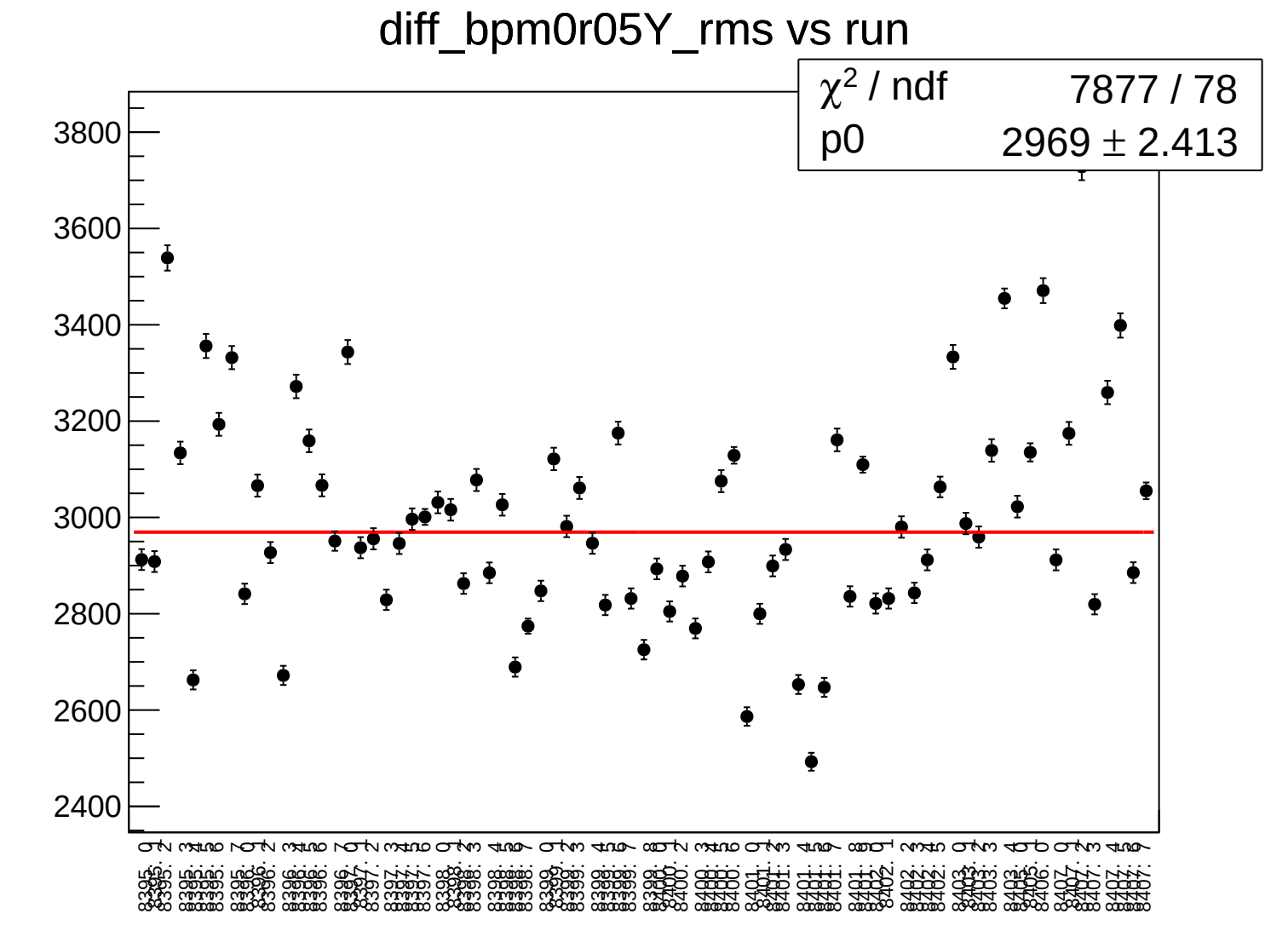

diff_bpm0r05X_mean vs run
χ² / ndf 80.16 / 78
p0 7.286 ± 78
3000
2000
1000
0
−1000
−2000
pull
Entries 79
Mean −2326
Std Dev 2369
2
1
0
−1
−2

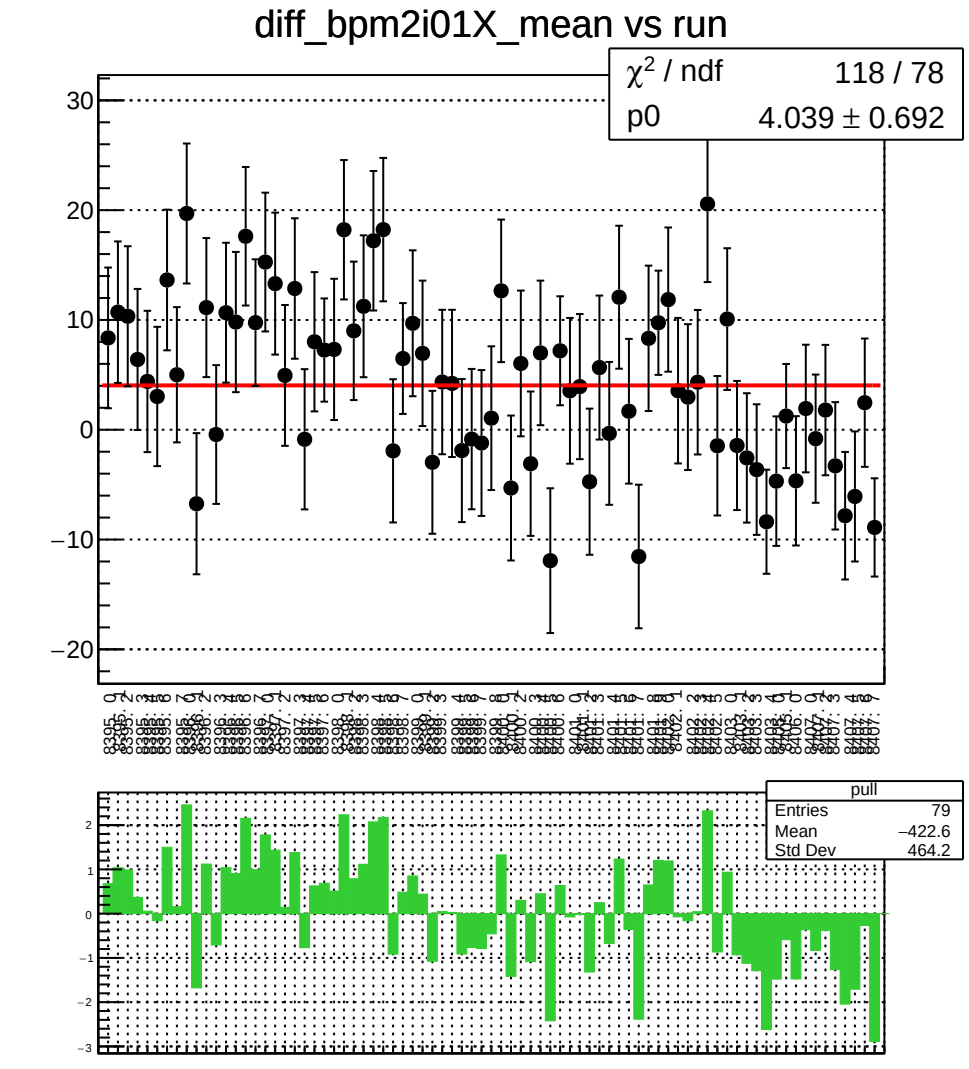

pull1D
Entries 79
Mean −0.002496
Std Dev 1.007
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

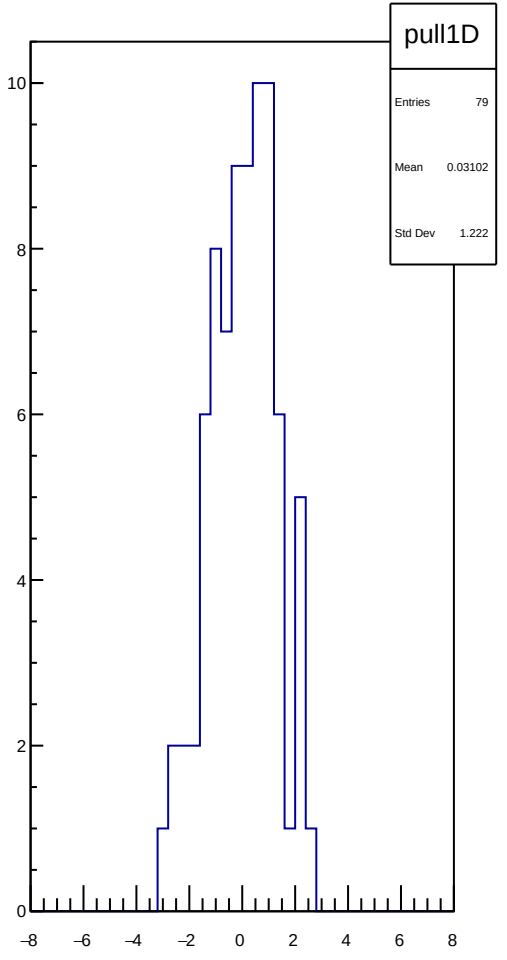

diff_bpm0r05X_rms vs run
χ² / ndf 1.476e+04 / 78
p0 6.771e+04 ± 55.16
95000
90000
85000
80000
75000
70000
65000
60000
55000
50000

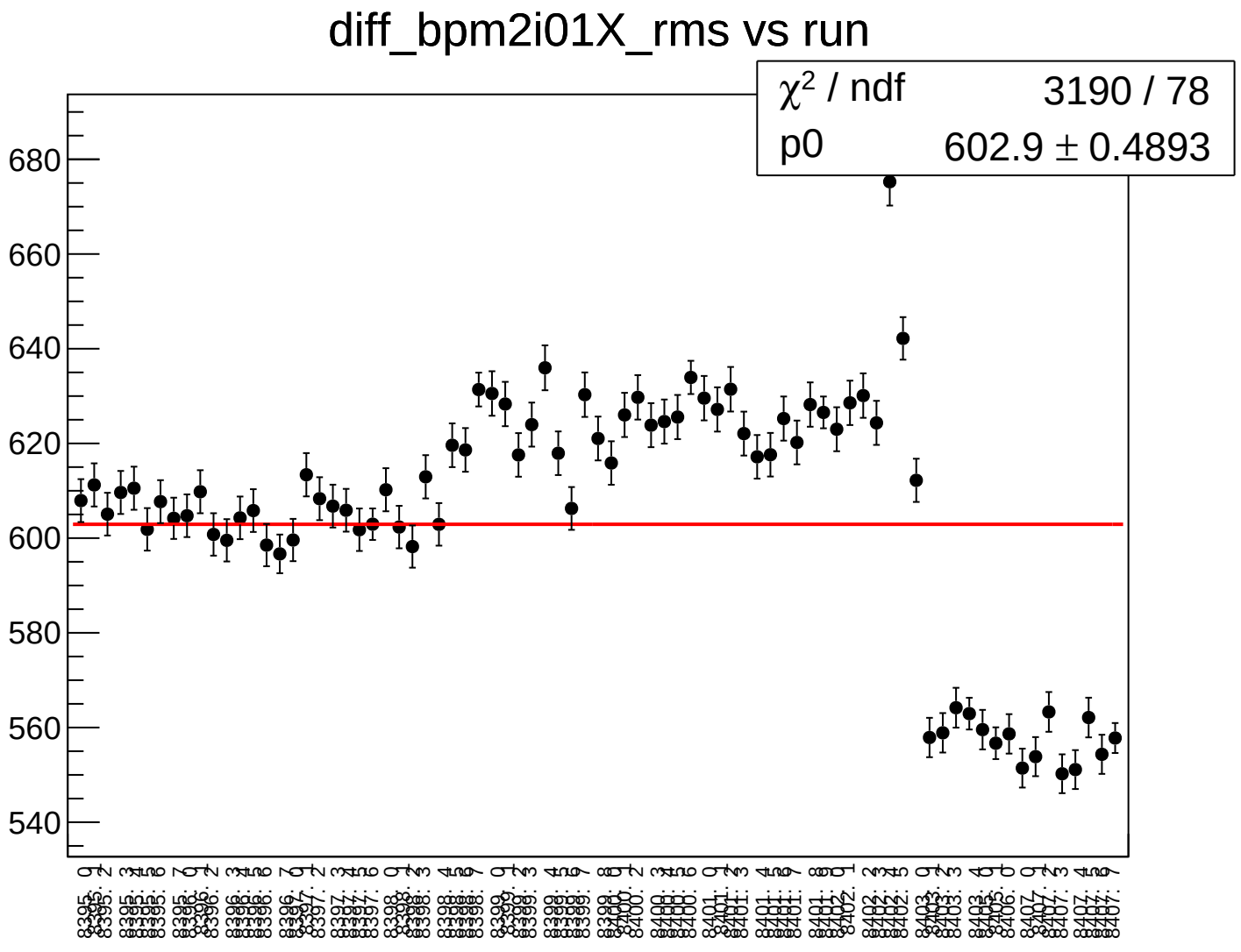

diff_bpm0r05Y_mean vs run
χ² / ndf 122.4 / 78
p0 −25.1 ± 3.413
pull
Entries 79
Mean 727.7
Std Dev 679.6

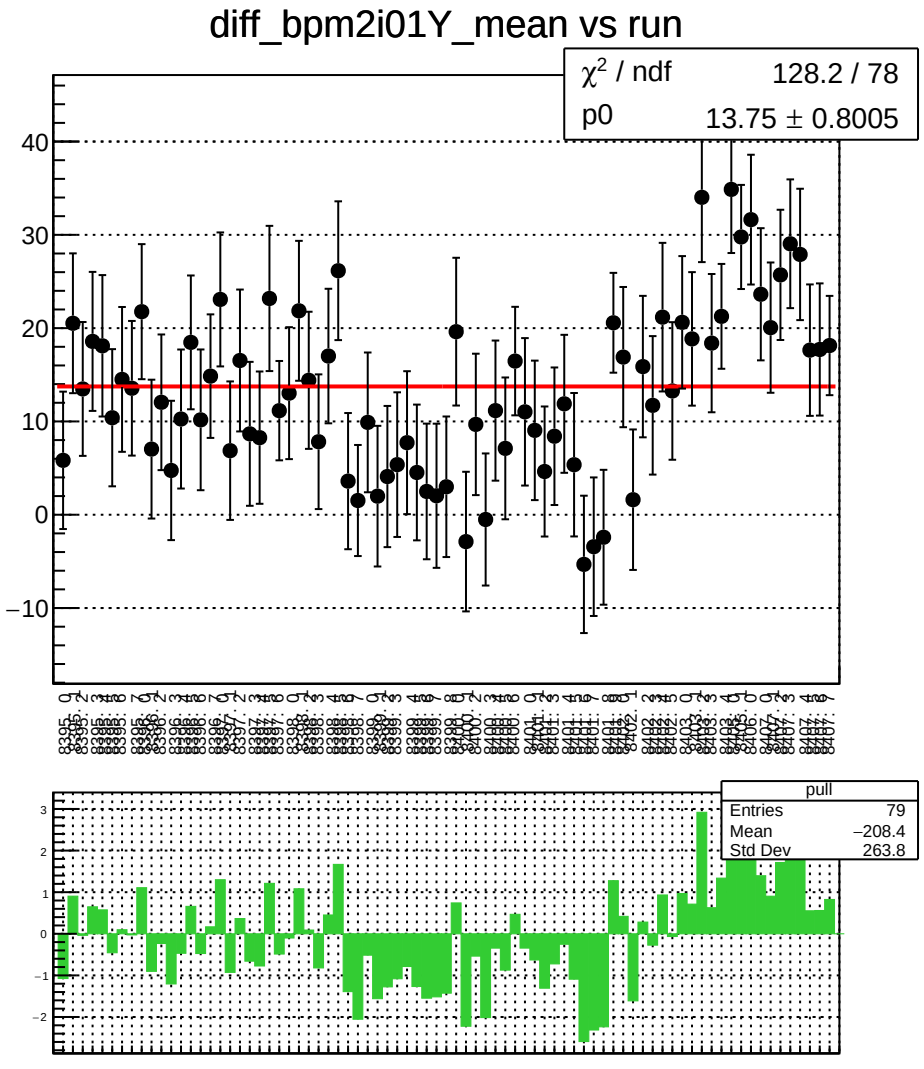

pull1D
Entries 79
Mean 0.0203
Std Dev 1.244

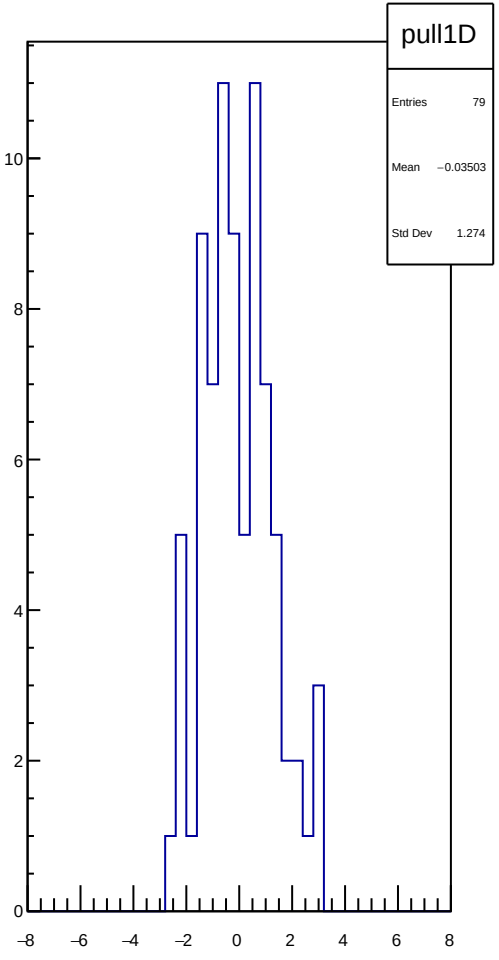

diff_bpm0r05Y_rms vs run
χ^2 / ndf 7877 / 78
p0 2969 ± 2.413
3800
3600
3400
3200
3000
2800
2600
2400

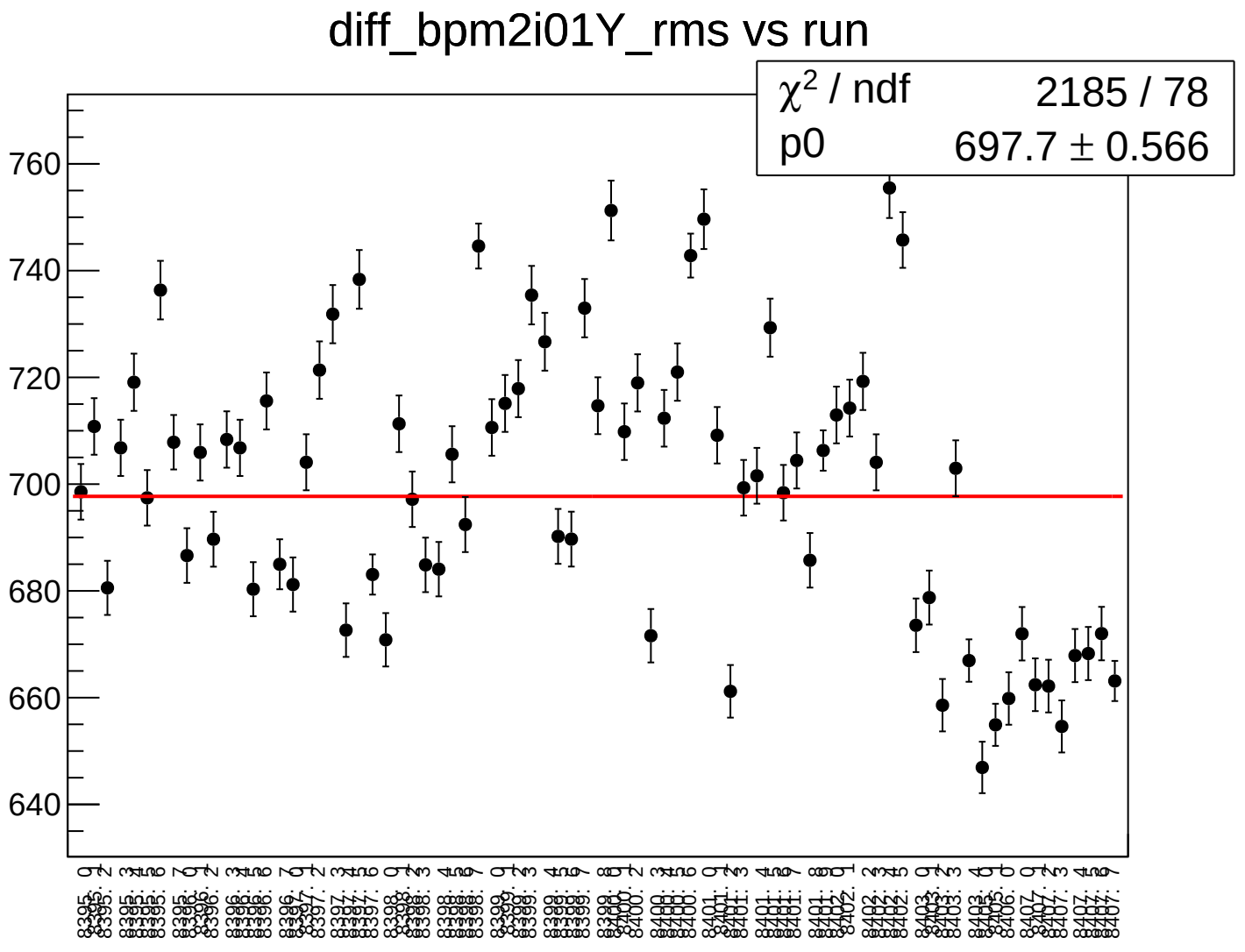

diff_bpm2i01X_mean vs run
χ² / ndf 118 / 78
p0 4.039 ± 0.692
pull
Entries 79
Mean −422.6
Std Dev 464.2

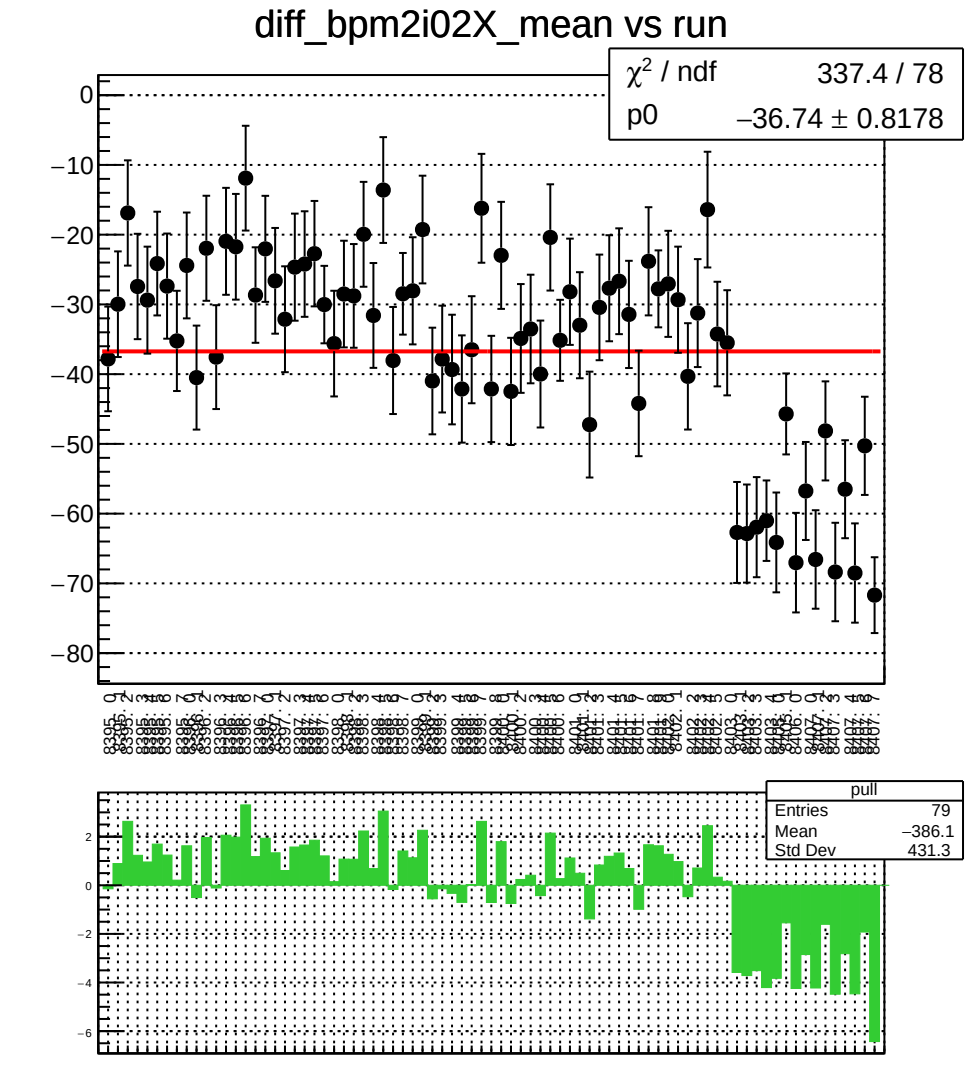

pull1D
Entries 79
Mean 0.03102
Std Dev 1.222

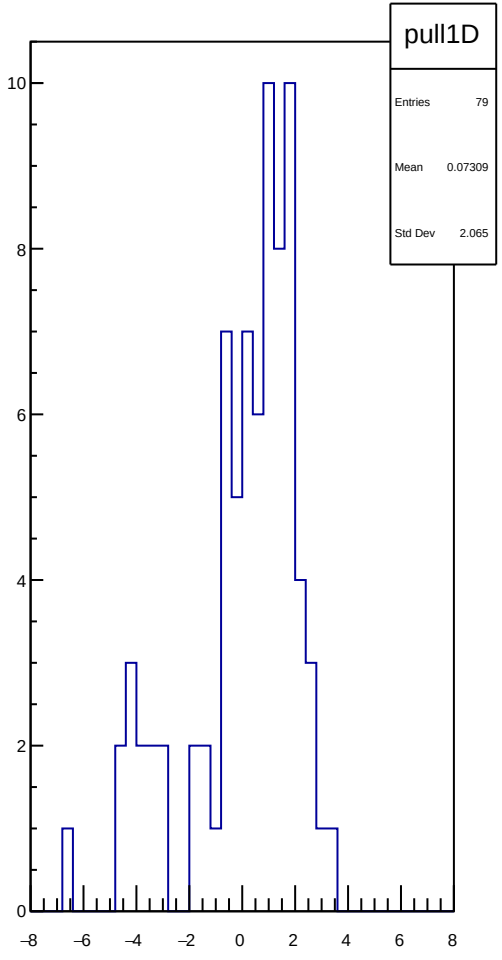

diff_bpm2i01X_rms vs run
χ² / ndf 3190 / 78
p0 602.9 ± 0.4893
680
660
640
620
600
580
560
540

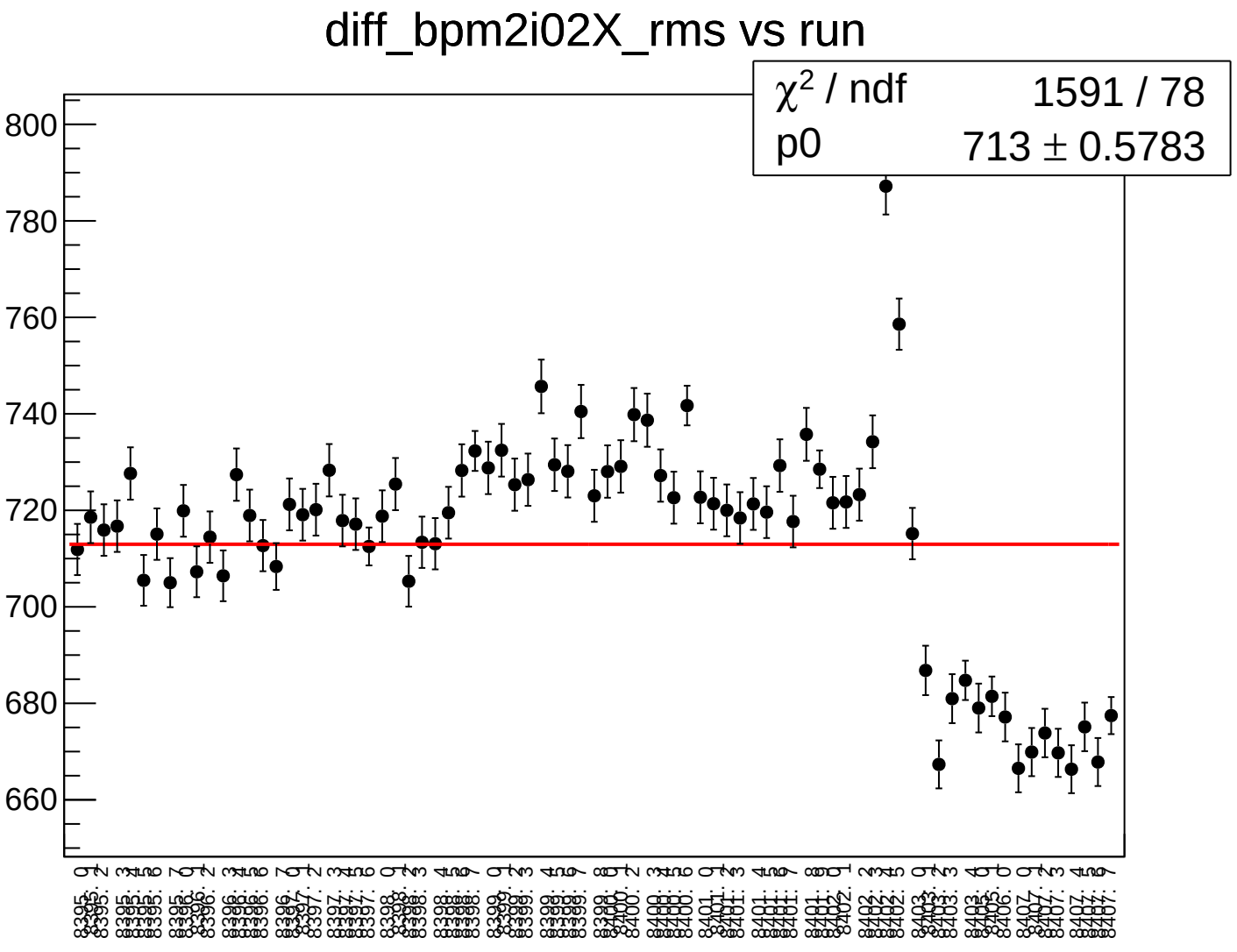

diff_bpm2i01Y_mean vs run
χ^2 / ndf 128.2 / 78
p0 13.75 ± 0.8005
pull
Entries 79
Mean −208.4
Std Dev 263.8

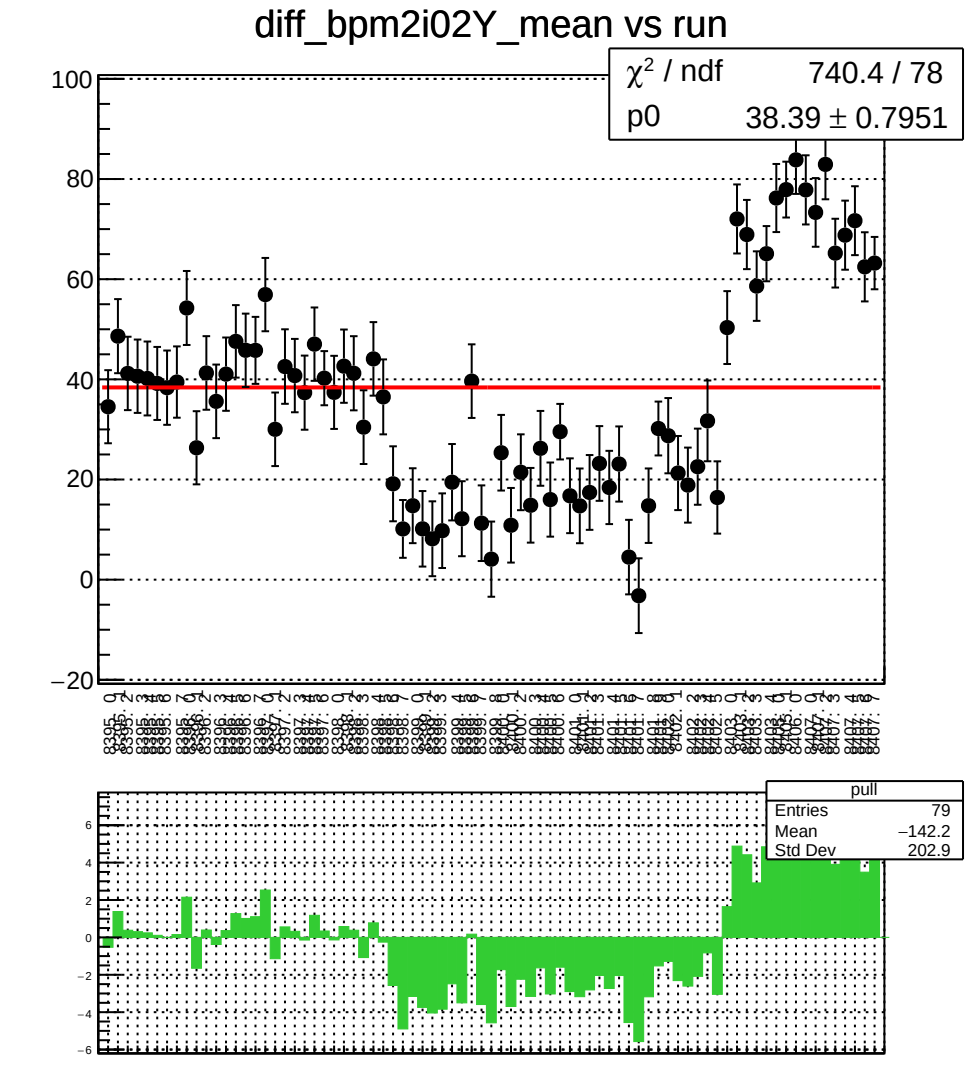

pull1D
Entries 79
Mean −0.03503
Std Dev 1.274

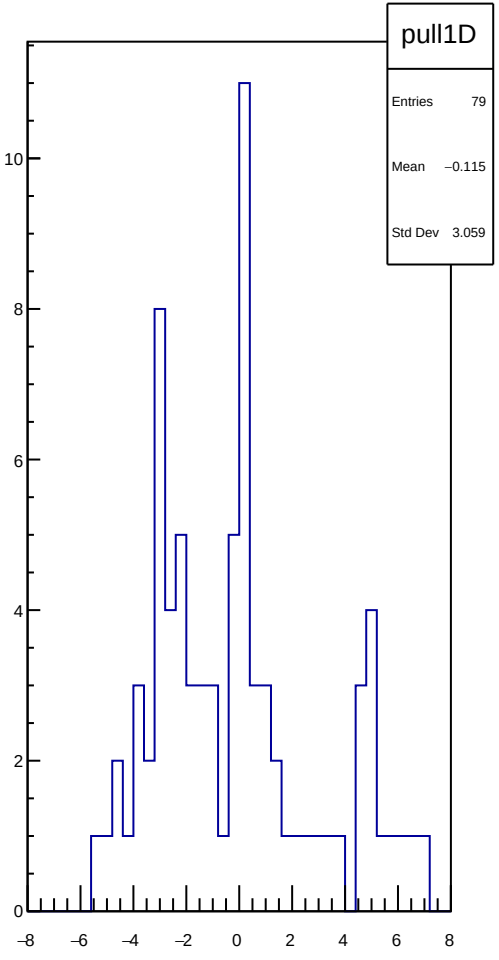

diff_bpm2i01Y_rms vs run
χ² / ndf 2185 / 78
p0 697.7 ± 0.566
760
740
720
700
680
660
640

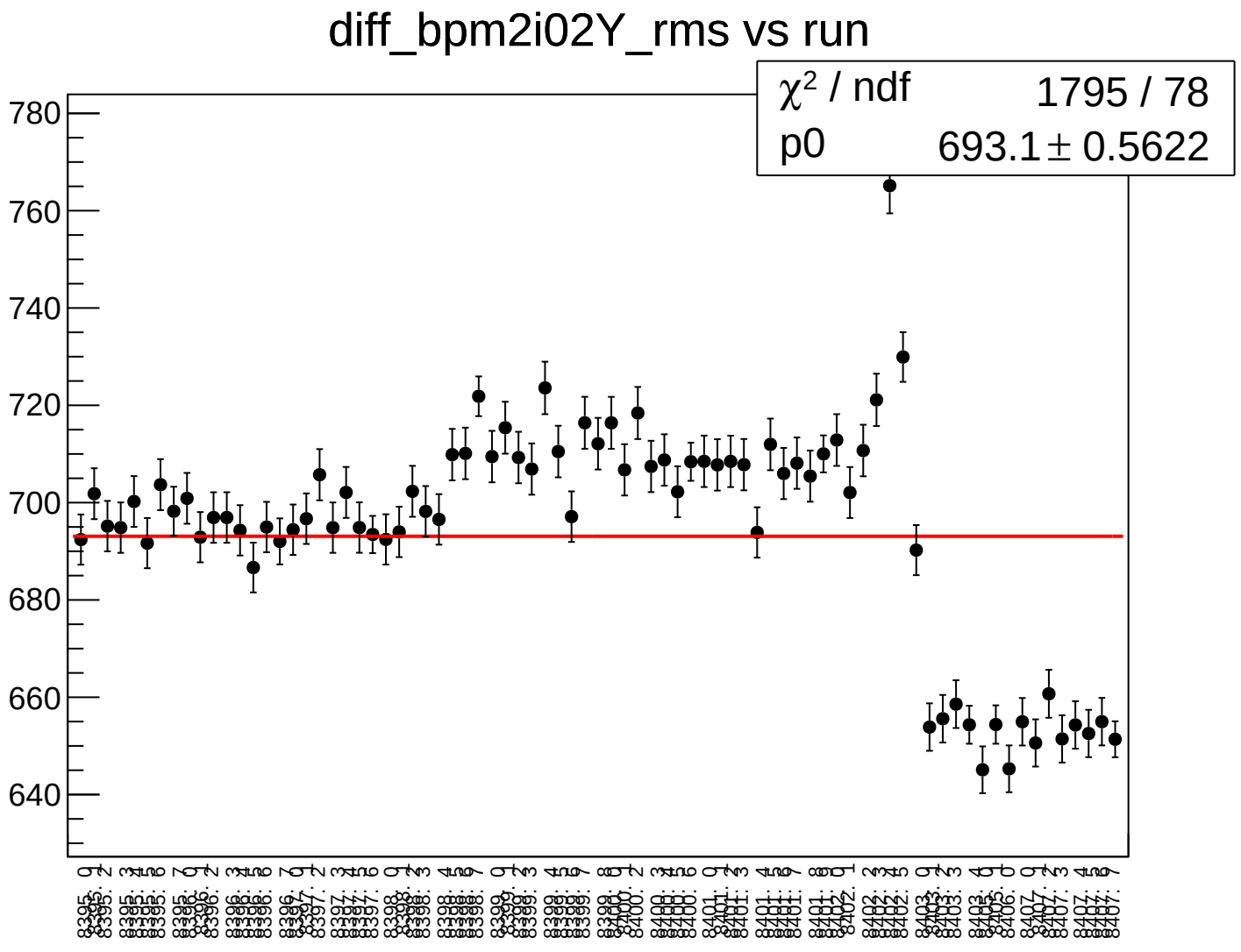

diff_bpm2i02X_mean vs run
χ² / ndf 337.4 / 78
p0 −36.74 ± 0.8178
pull
Entries 79
Mean −386.1
Std Dev 431.3

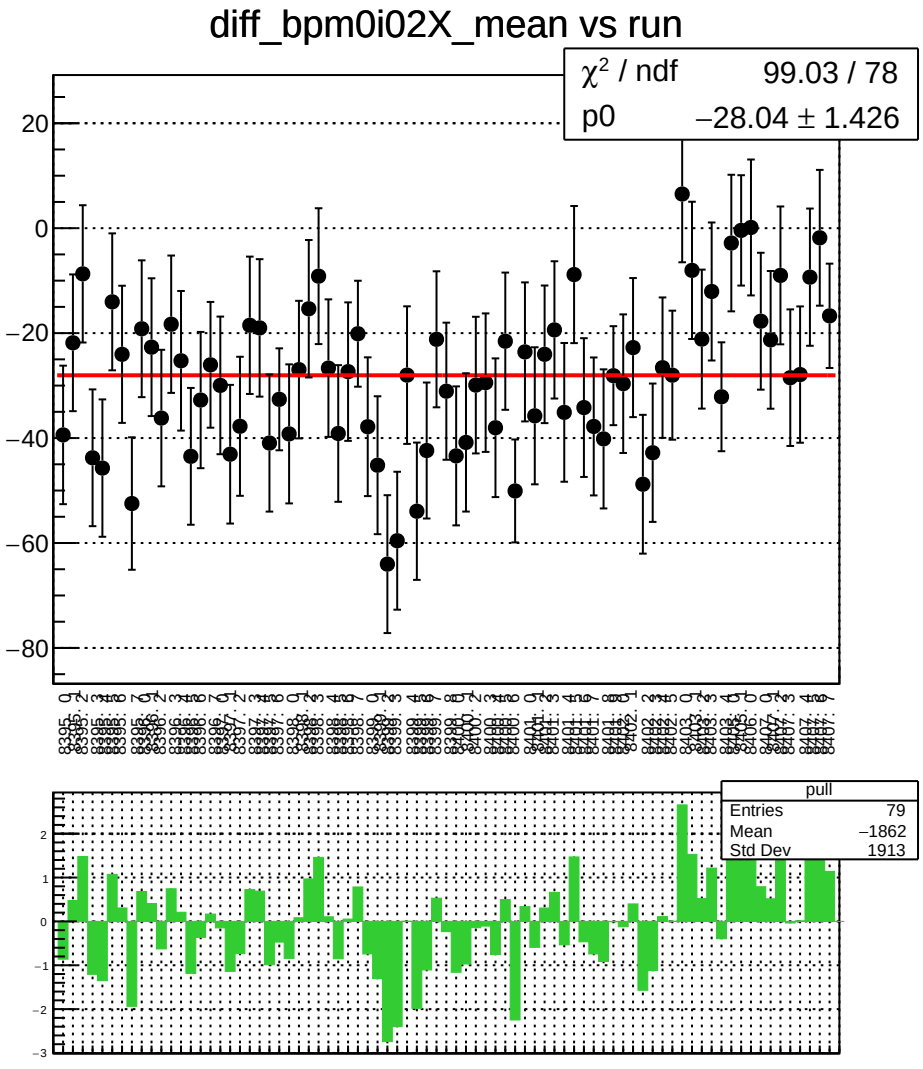

pull1D
Entries 79
Mean 0.07309
Std Dev 2.065

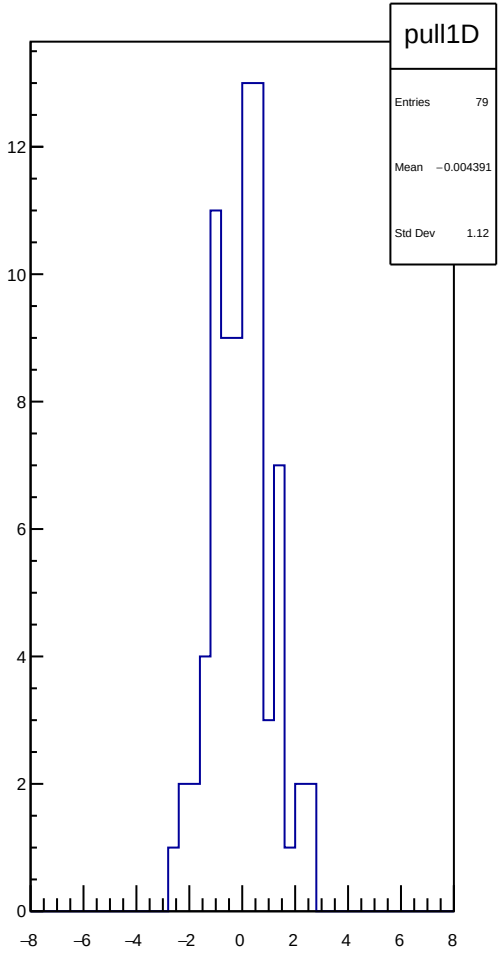

diff_bpm2i02X_rms vs run
χ² / ndf 1591 / 78
p0 713 ± 0.5783
800
780
760
740
720
700
680
660

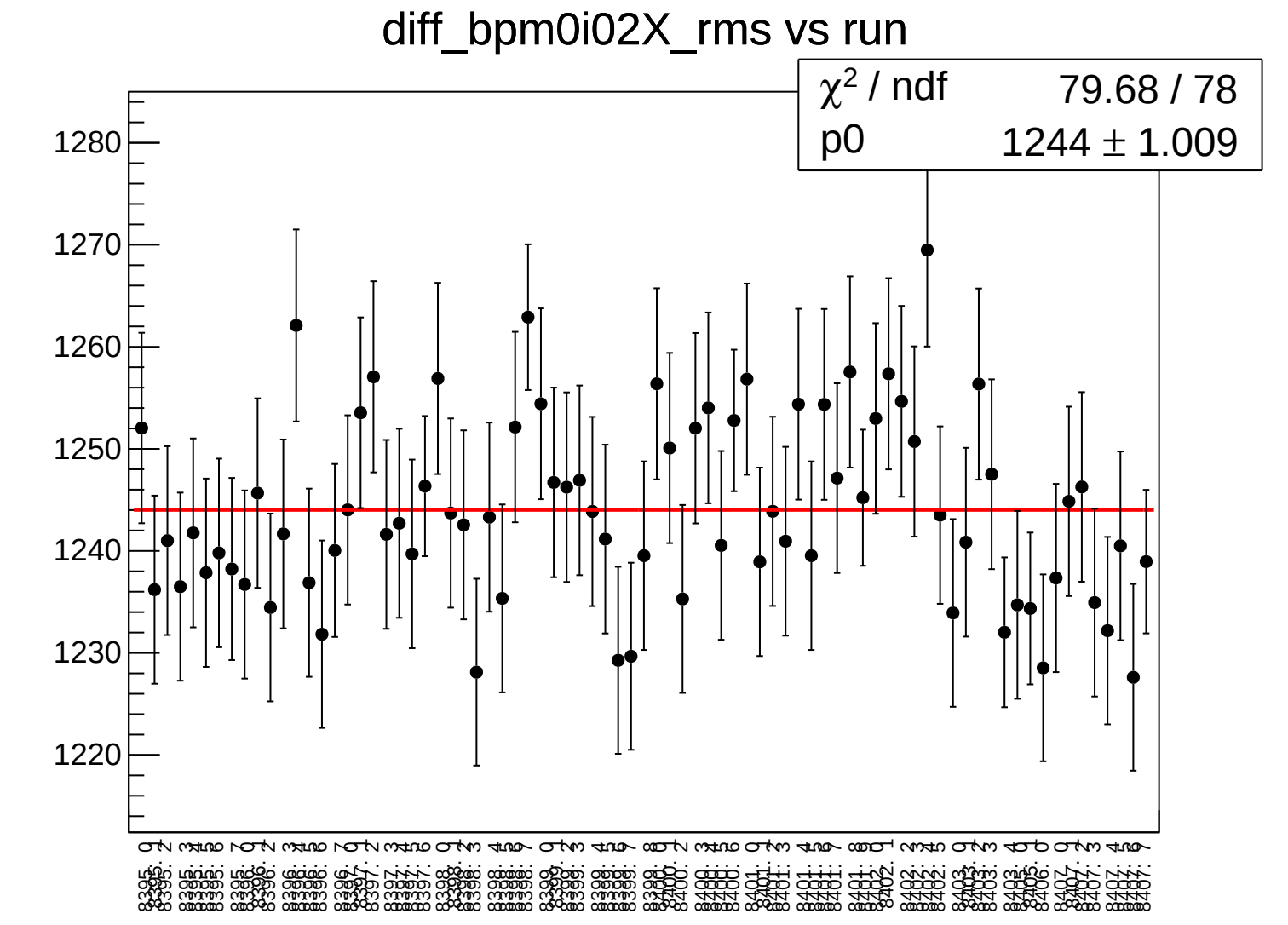

diff_bpm2i02Y_mean vs run
χ² / ndf 740.4 / 78
p0 38.39 ± 0.7951
pull
Entries 79
Mean −142.2
Std Dev 202.9

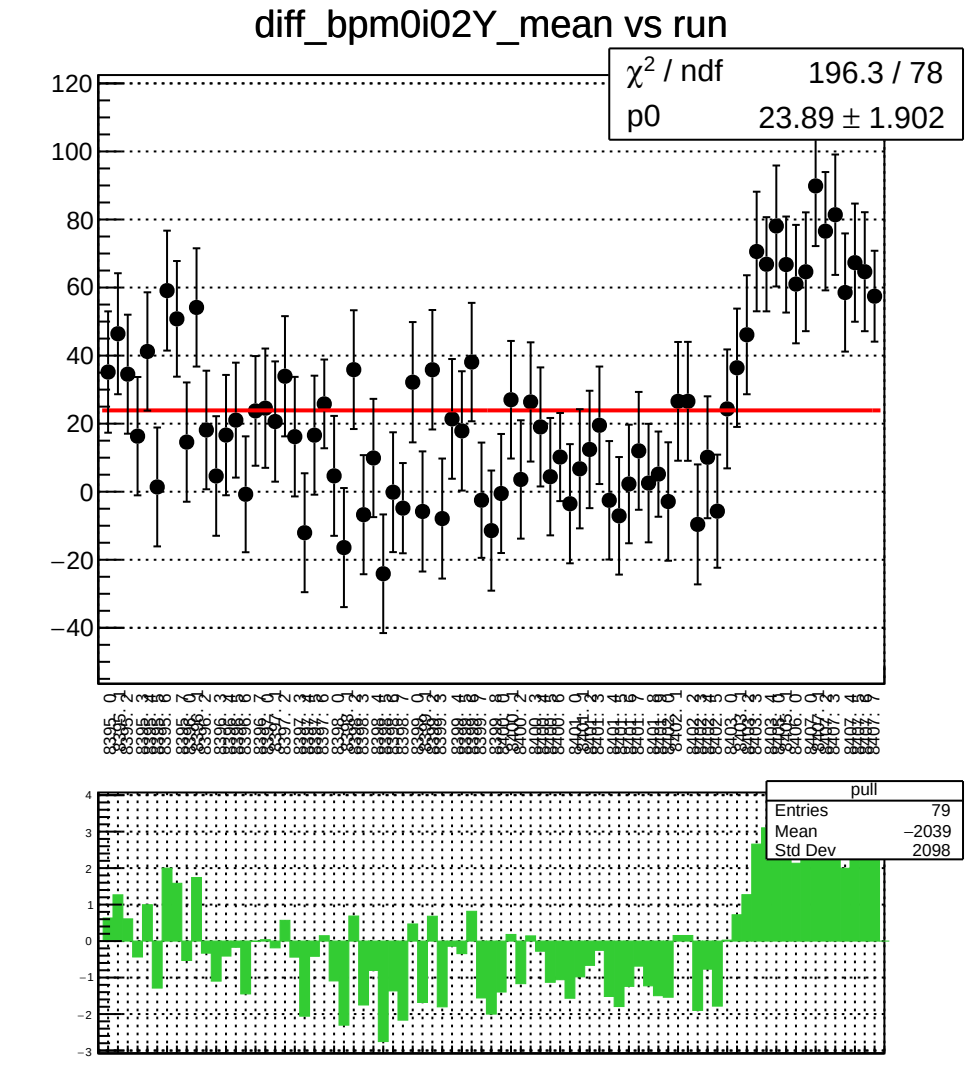

pull1D
Entries 79
Mean −0.115
Std Dev 3.059

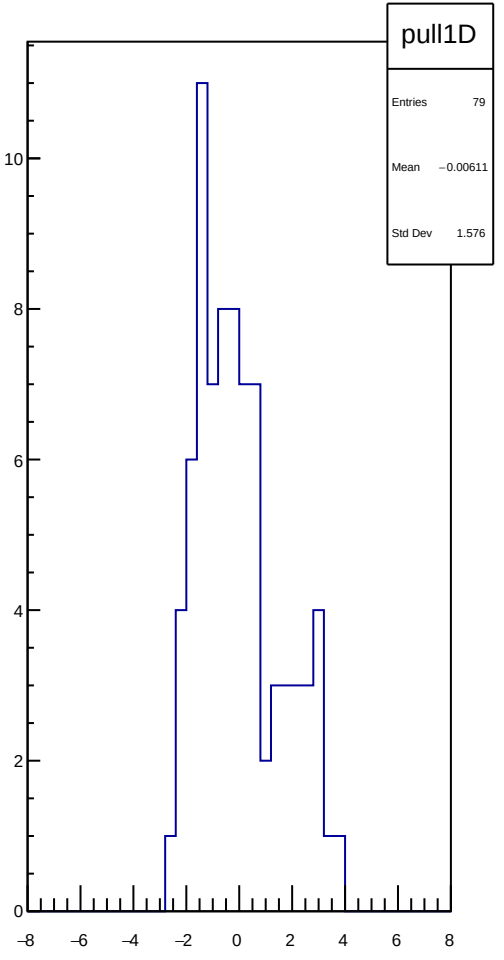

diff_bpm2i02Y_rms vs run
χ² / ndf 1795 / 78
p0 693.1 ± 0.5622
780
760
740
720
700
680
660
640

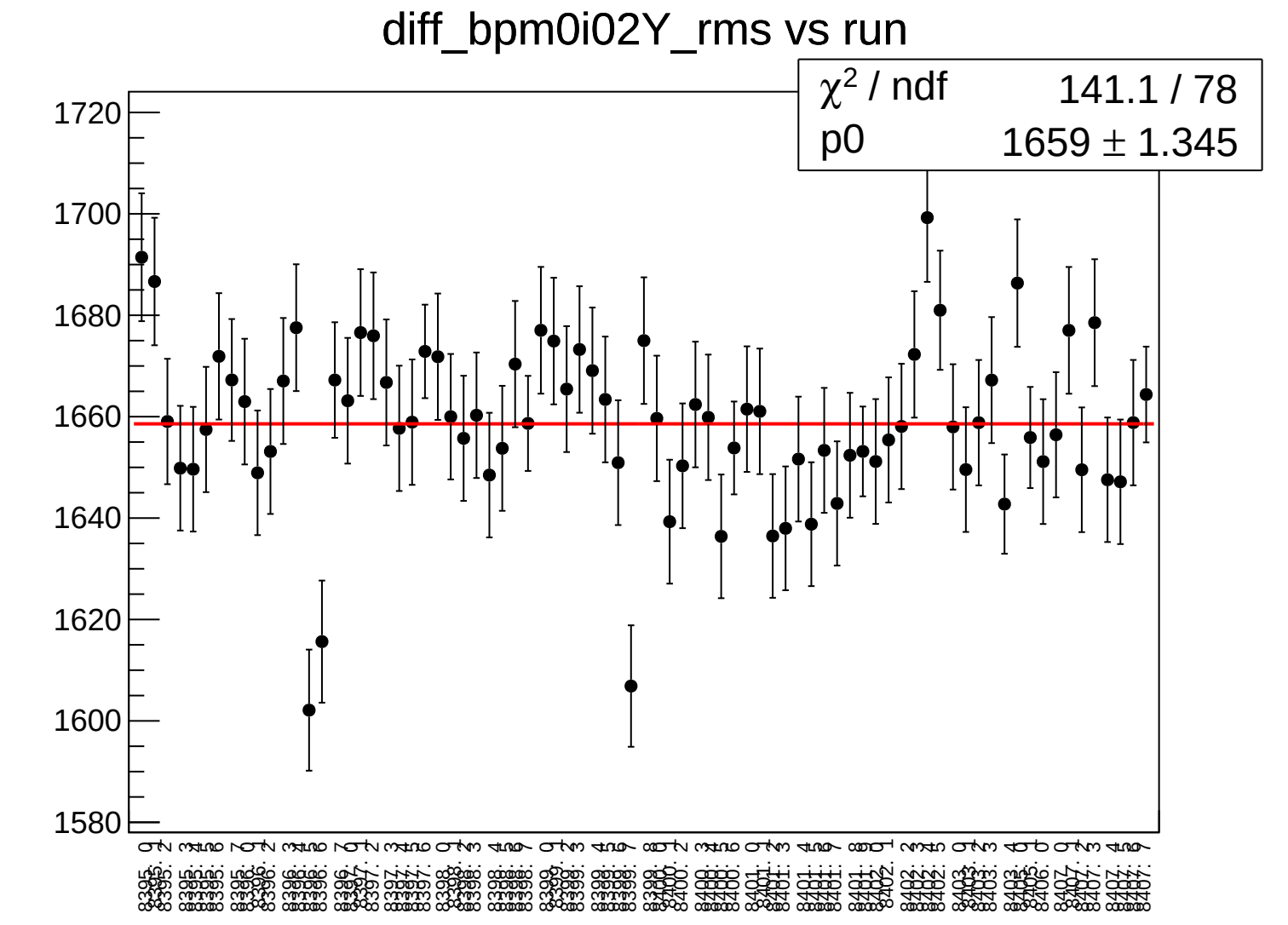

diff_bpm0i02X_mean vs run
χ² / ndf 99.03 / 78
p0 −28.04 ± 1.426
pull
Entries 79
Mean −1862
Std Dev 1913

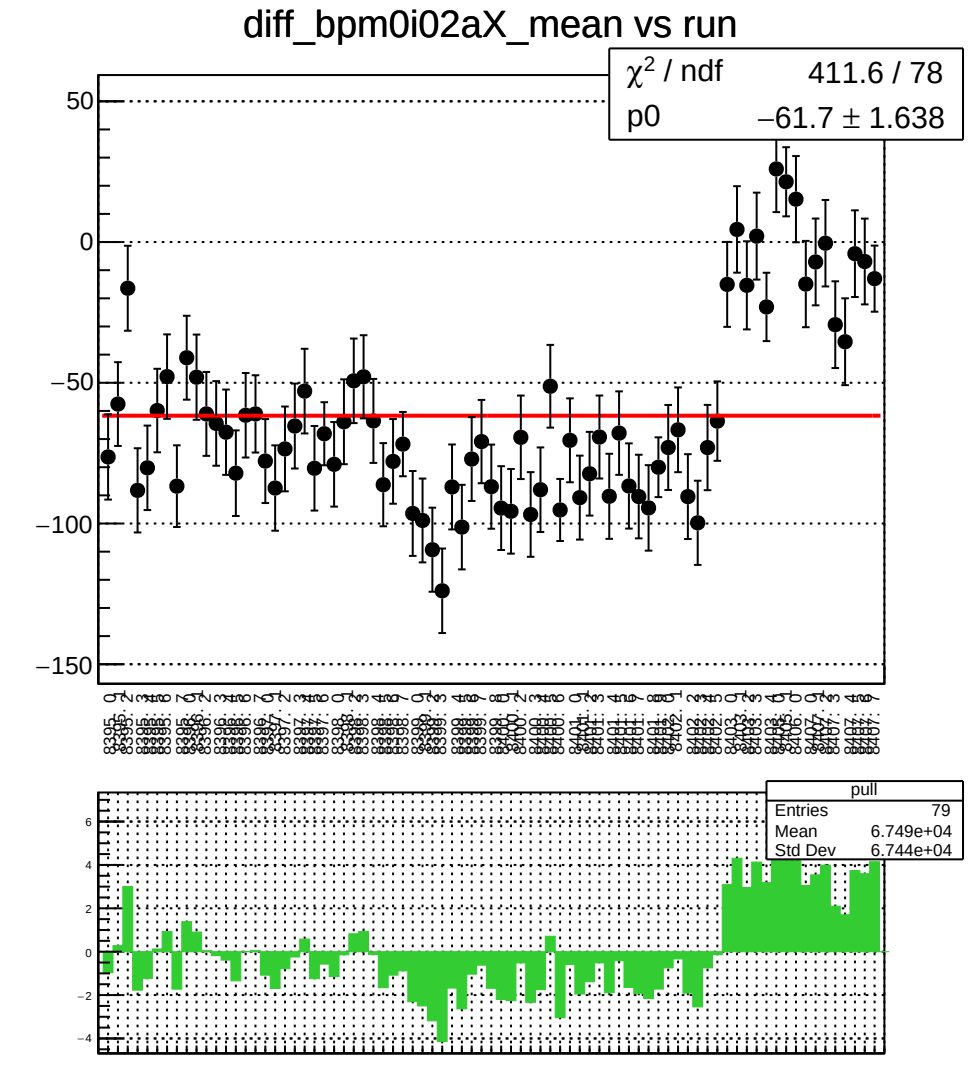

pull1D
Entries 79
Mean −0.004391
Std Dev 1.12

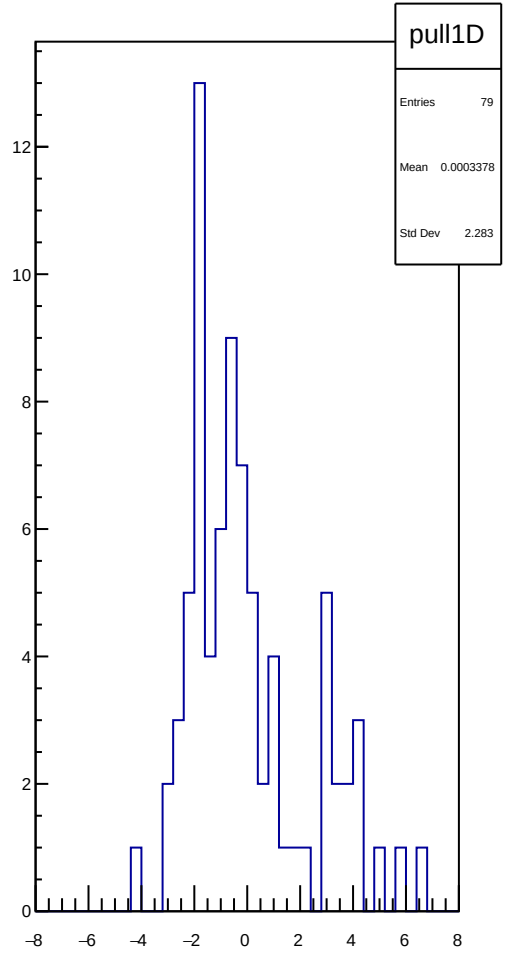

diff_bpm0i02X_rms vs run
χ² / ndf 79.68 / 78
p0 1244 ± 1.009
1280
1270
1260
1250
1240
1230
1220

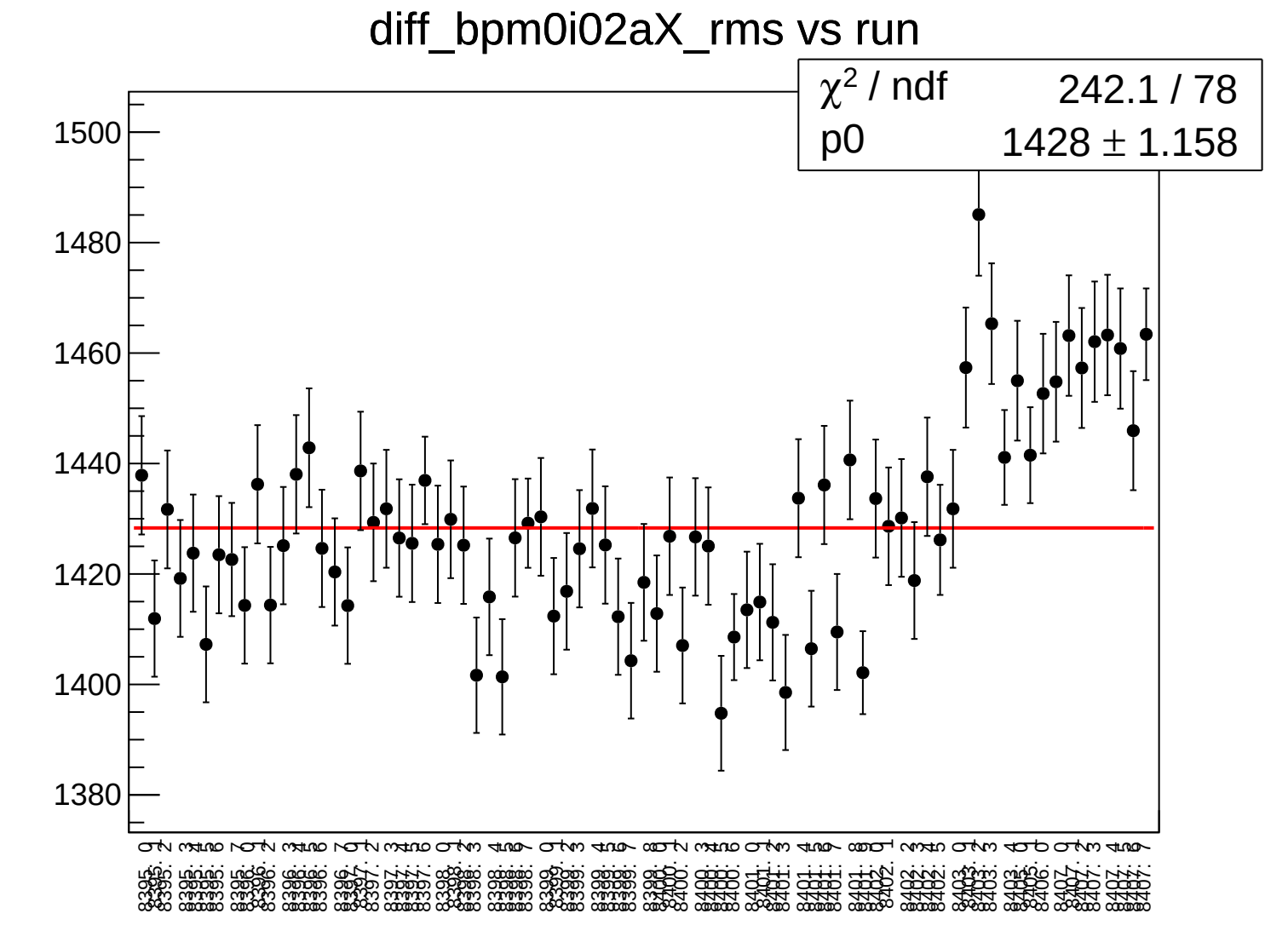

diff_bpm0i02Y_mean vs run
χ² / ndf 196.3 / 78
p0 23.89 ± 1.902
pull
Entries 79
Mean −2039
Std Dev 2098

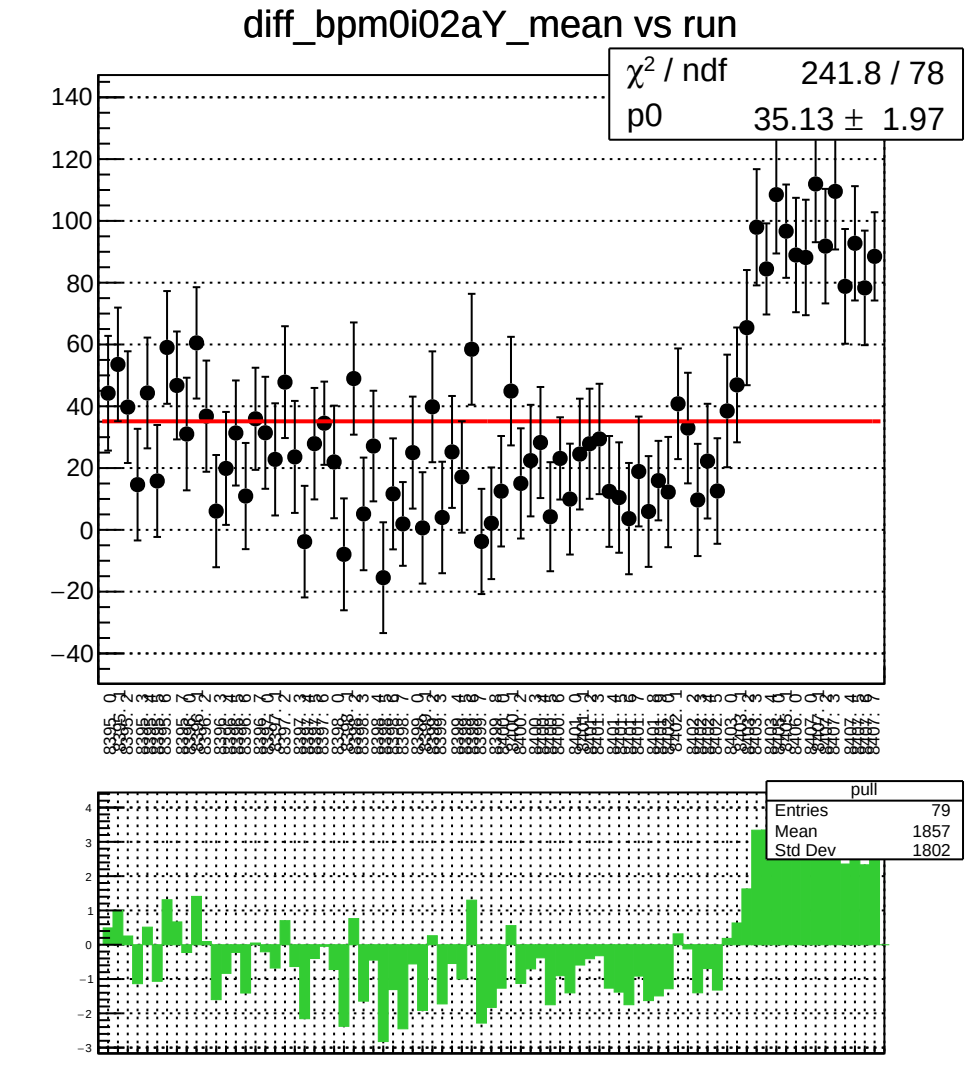

pull1D
Entries 79
Mean −0.00611
Std Dev 1.576

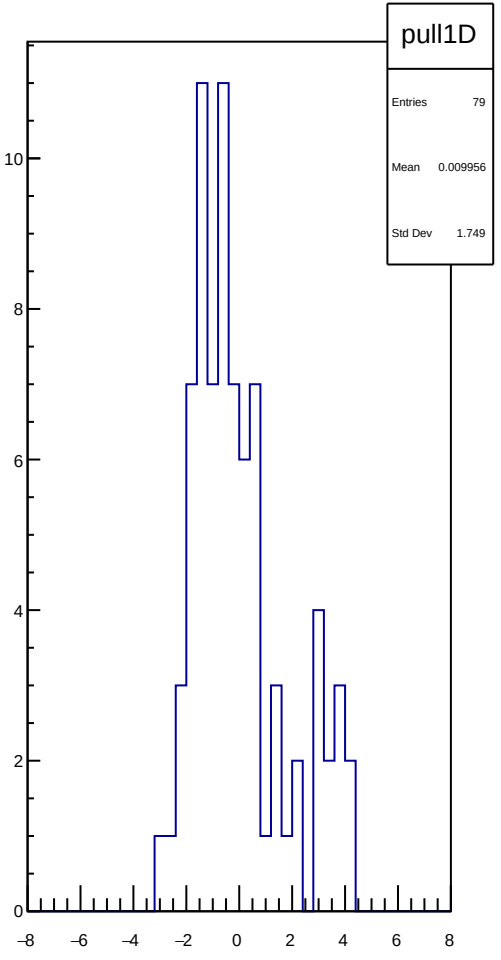

diff_bpm0i02Y_rms vs run
χ² / ndf 141.1 / 78
p0 1659 ± 1.345
1720
1700
1680
1660
1640
1620
1600
1580

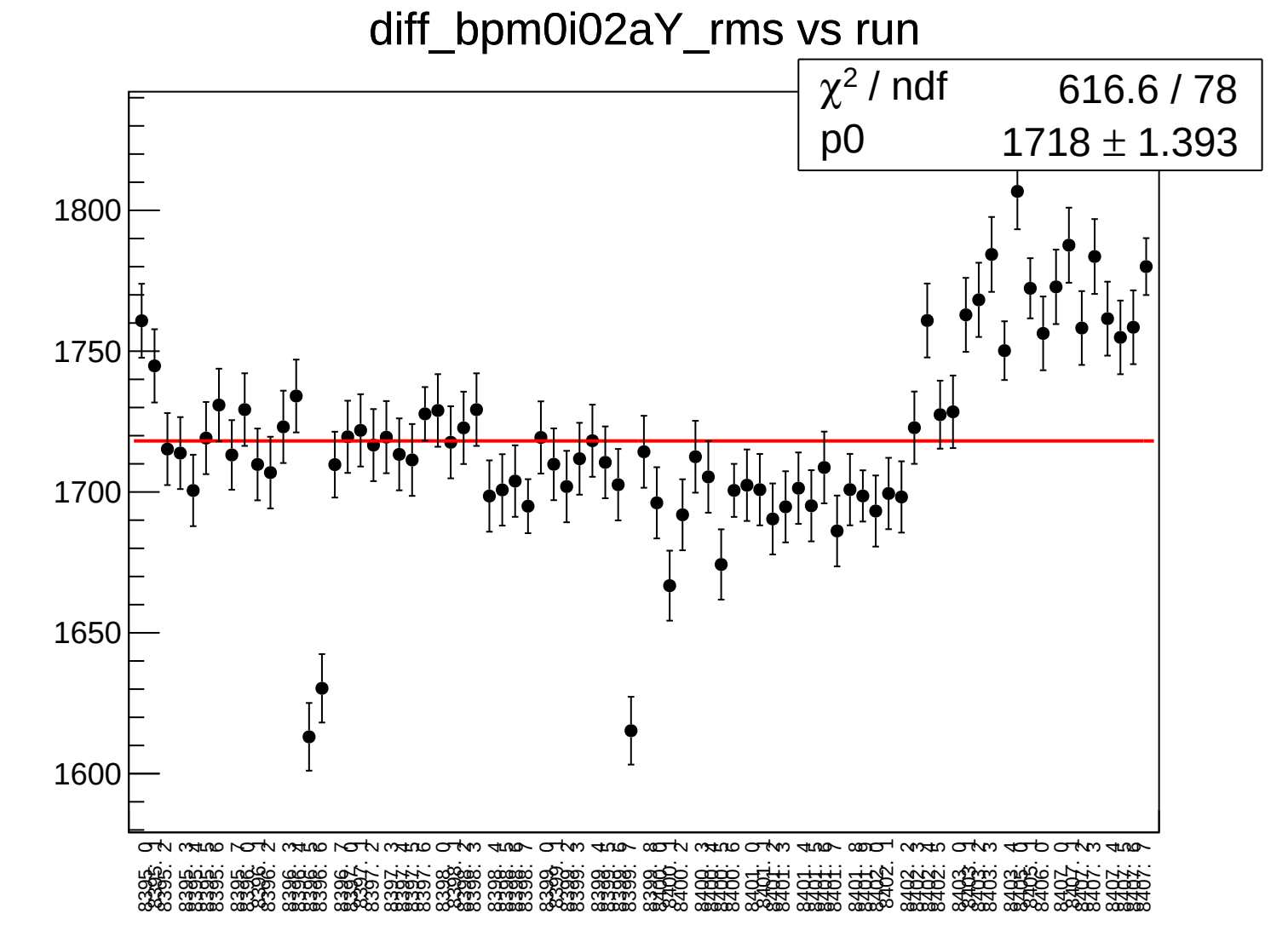

diff_bpm0i02aX_mean vs run
χ² / ndf 411.6 / 78
p0 −61.7 ± 1.638
50
0
−50
−100
−150
pull
Entries 79
Mean 6.749e+04
Std Dev 6.744e+04
6
4
2
0
−2
−4

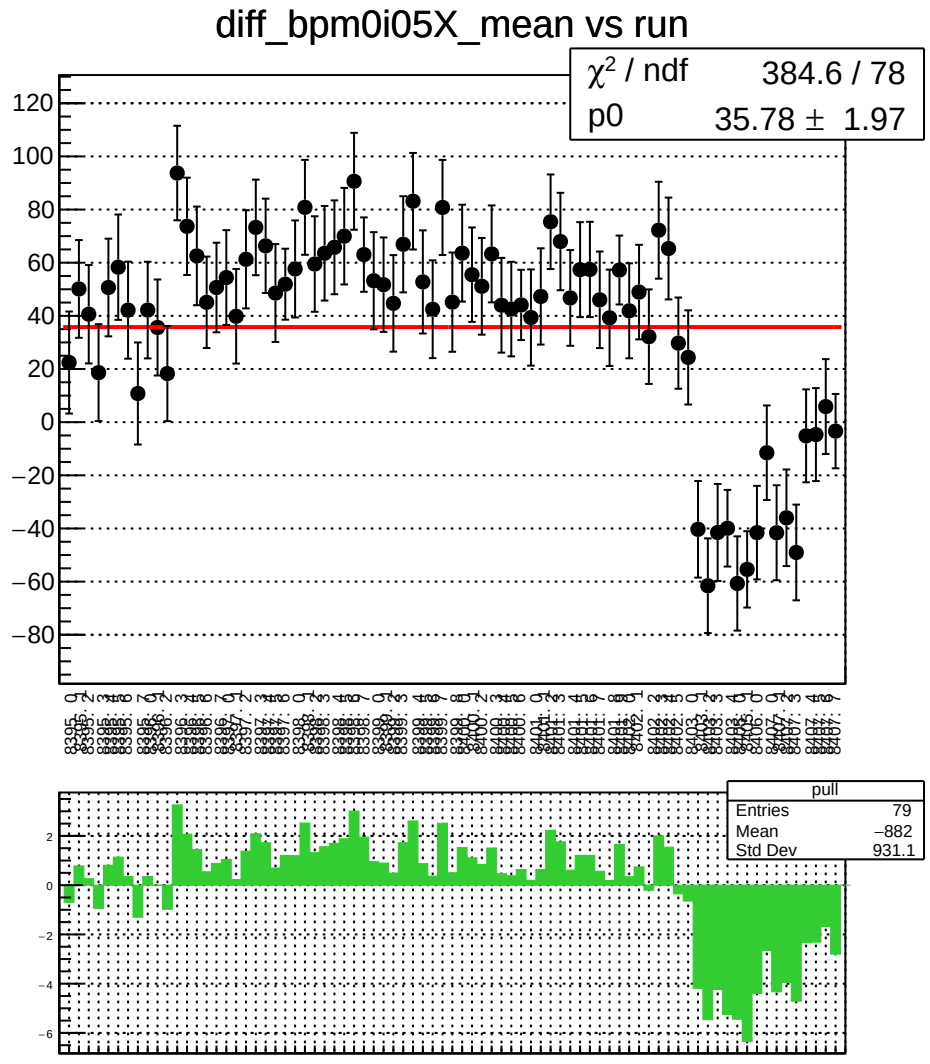

pull1D
Entries 79
Mean 0.0003378
Std Dev 2.283
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

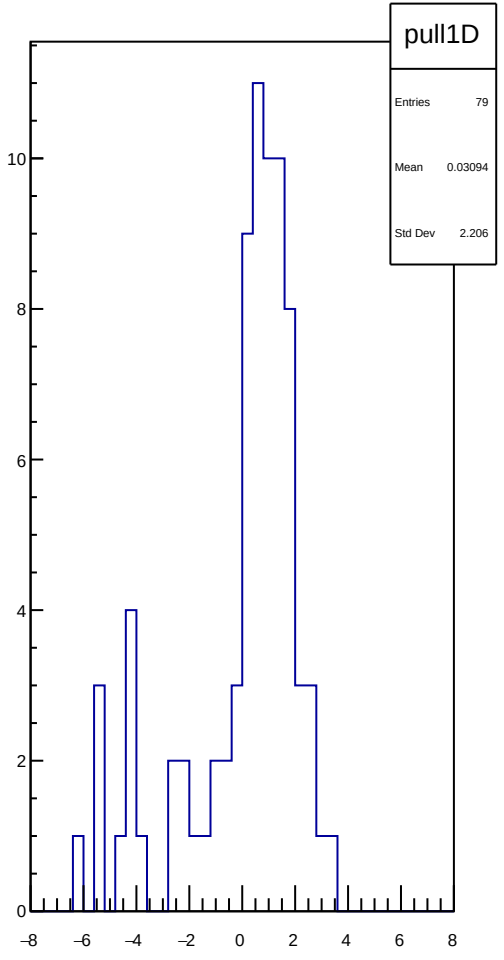

diff_bpm0i02aX_rms vs run
χ² / ndf 242.1 / 78
p0 1428 ± 1.158
1500
1480
1460
1440
1420
1400
1380

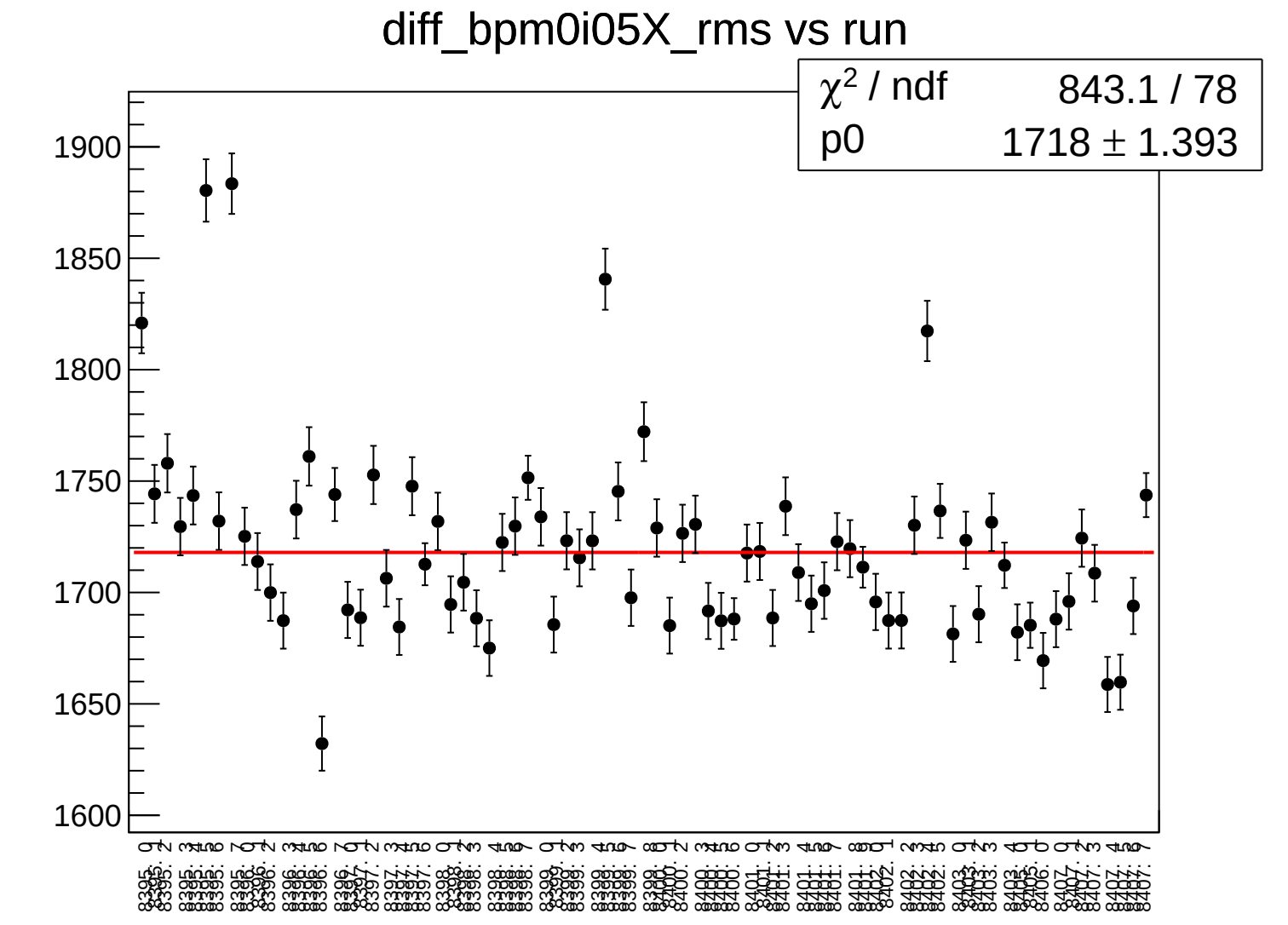

diff_bpm0i02aY_mean vs run
χ² / ndf 241.8 / 78
p0 35.13 ± 1.97
pull
Entries 79
Mean 1857
Std Dev 1802

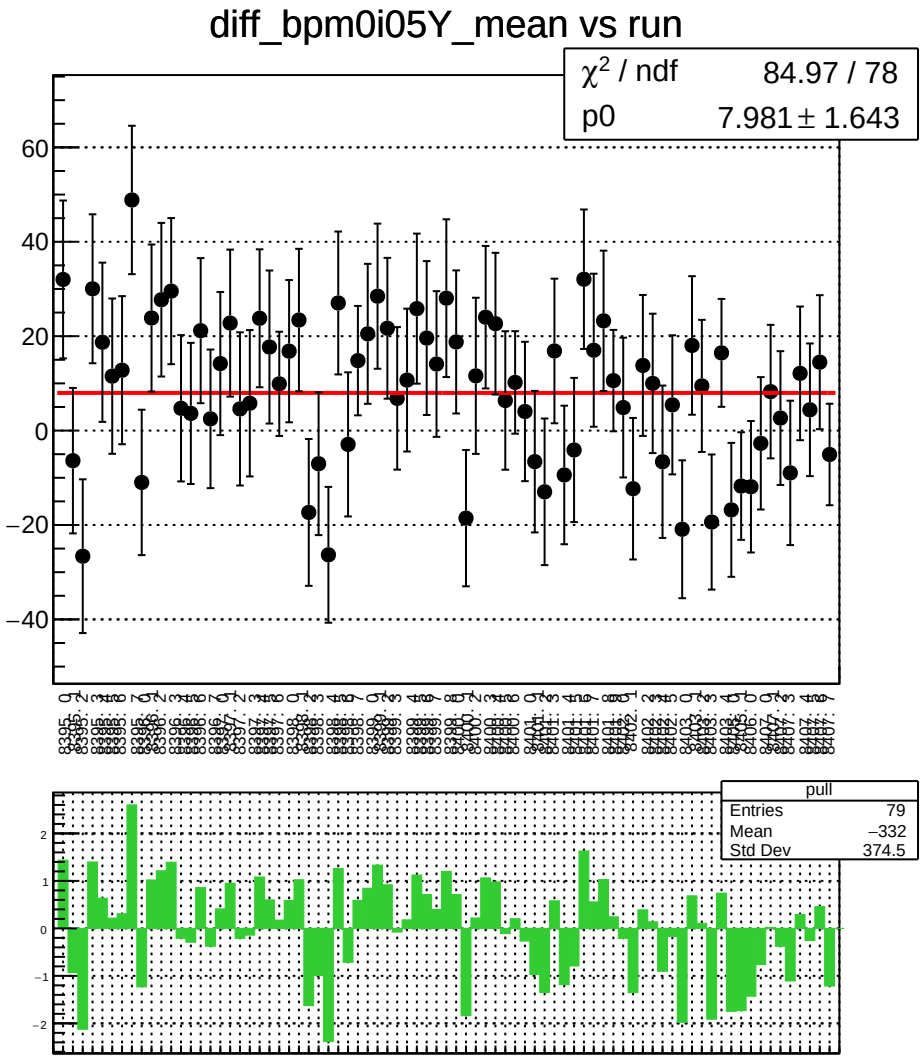

pull1D
Entries 79
Mean 0.009956
Std Dev 1.749

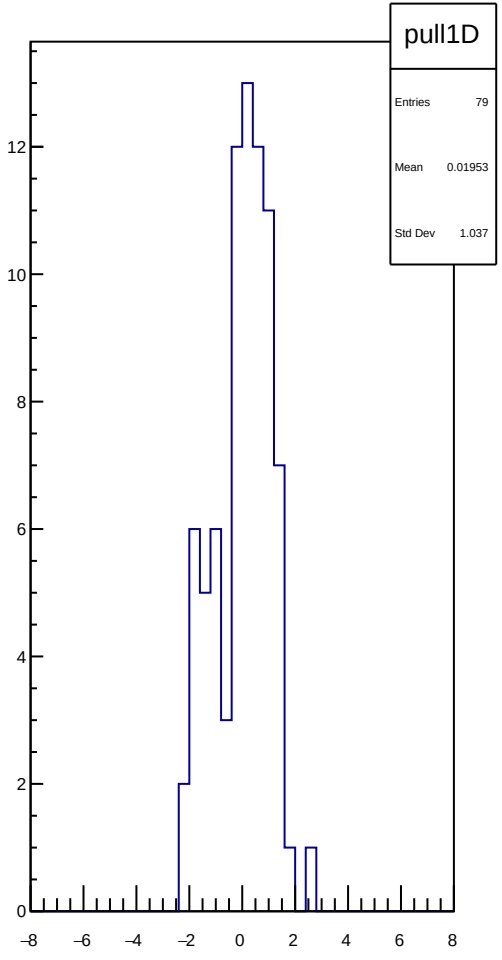

diff_bpm0i02aY_rms vs run
χ² / ndf 616.6 / 78
p0 1718 ± 1.393
1800
1750
1700
1650
1600

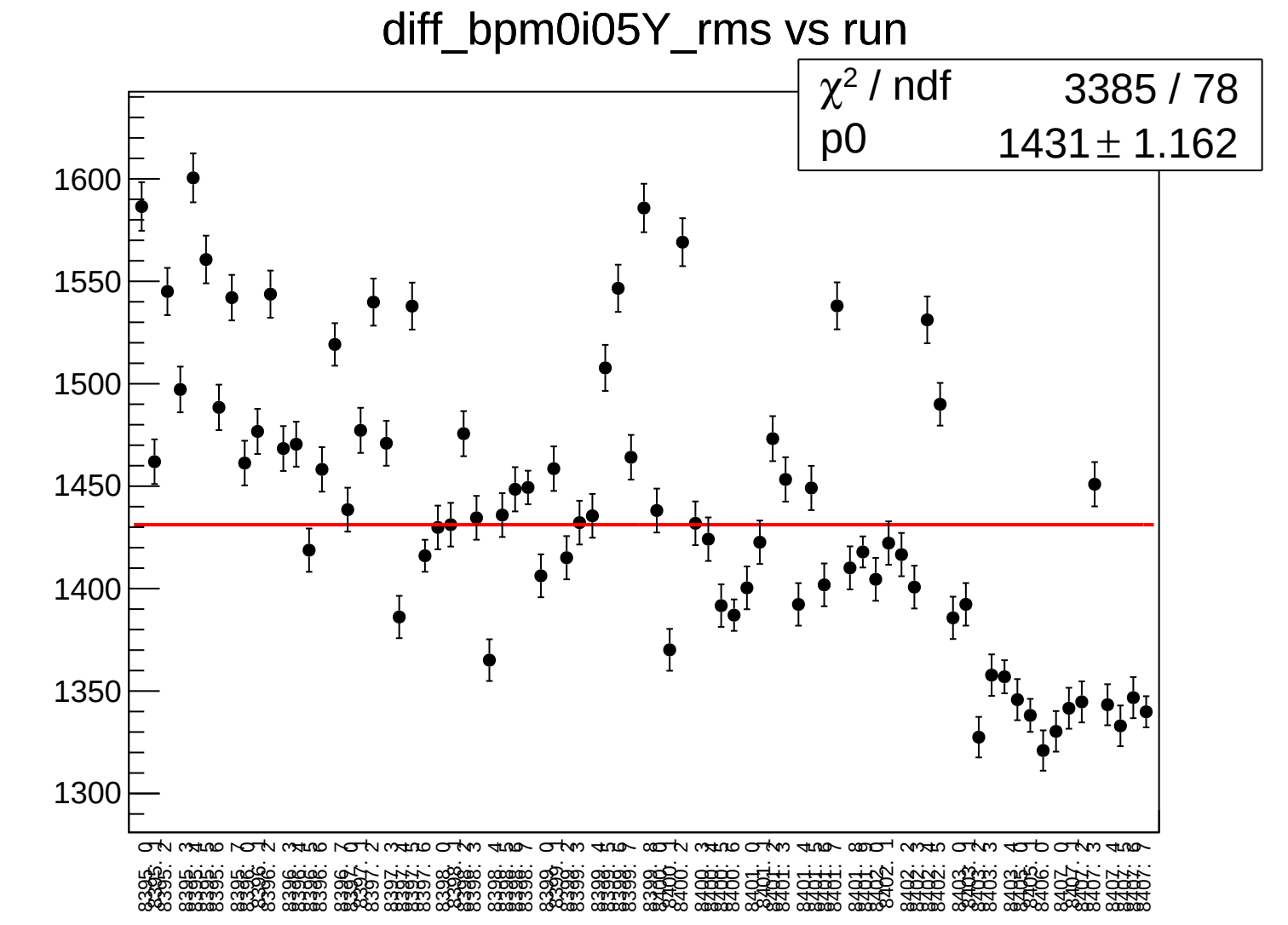

diff_bpm0i05X_mean vs run
χ² / ndf 384.6 / 78
p0 35.78 ± 1.97
pull
Entries 79
Mean −882
Std Dev 931.1

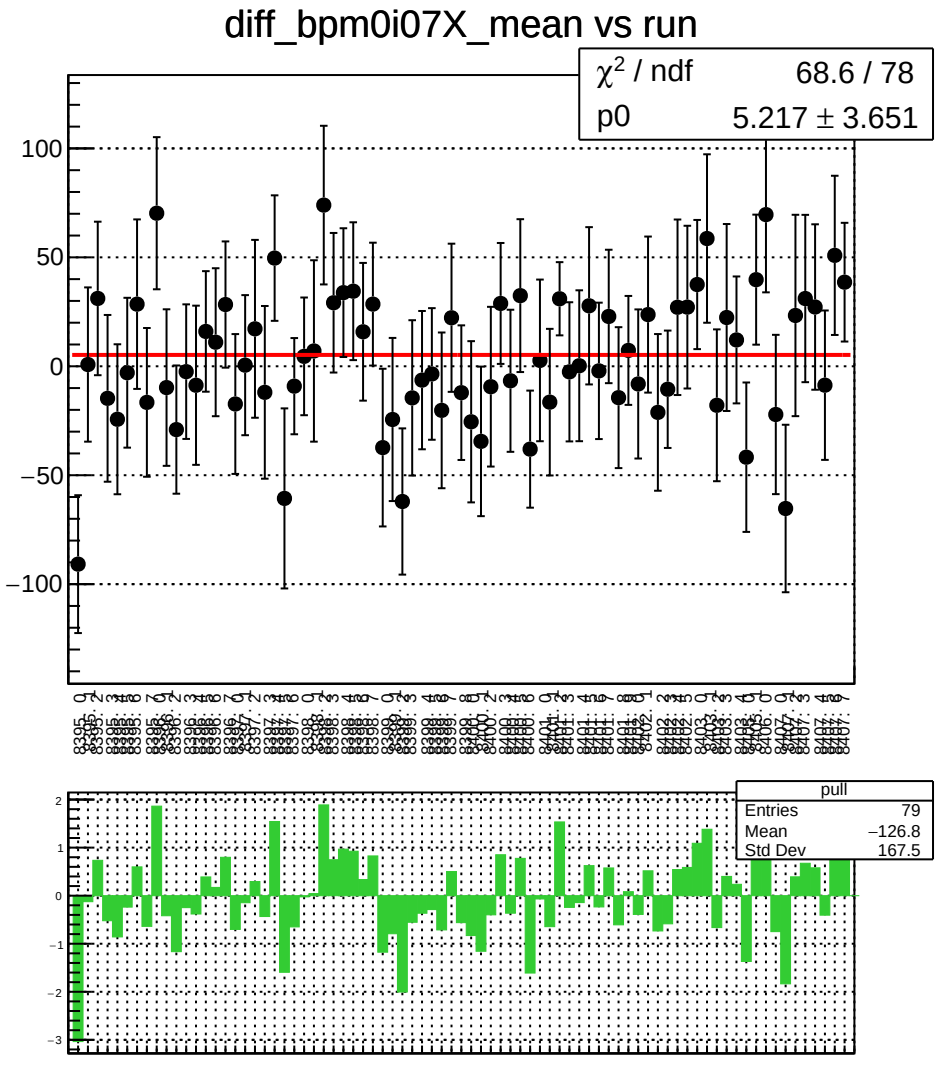

pull1D
Entries 79
Mean 0.03094
Std Dev 2.206

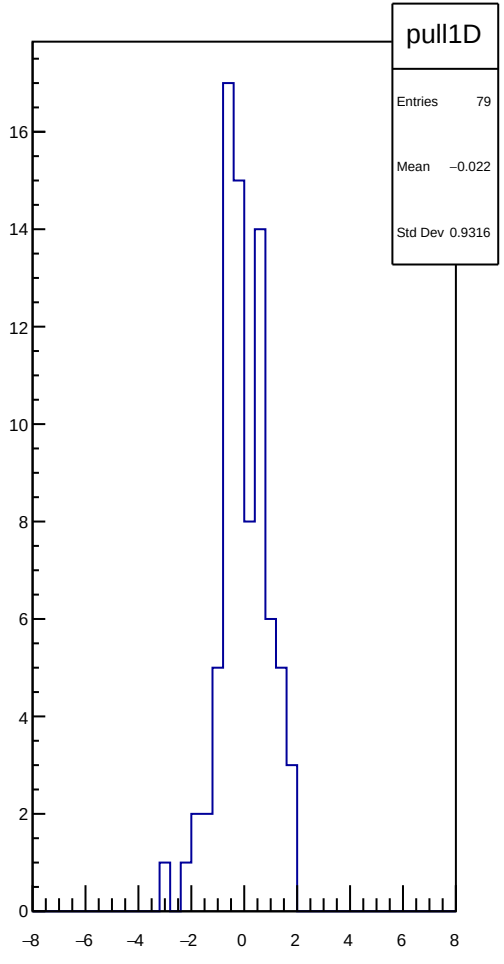

diff_bpm0i05X_rms vs run
χ² / ndf 843.1 / 78
p0 1718 ± 1.393
1900
1850
1800
1750
1700
1650
1600

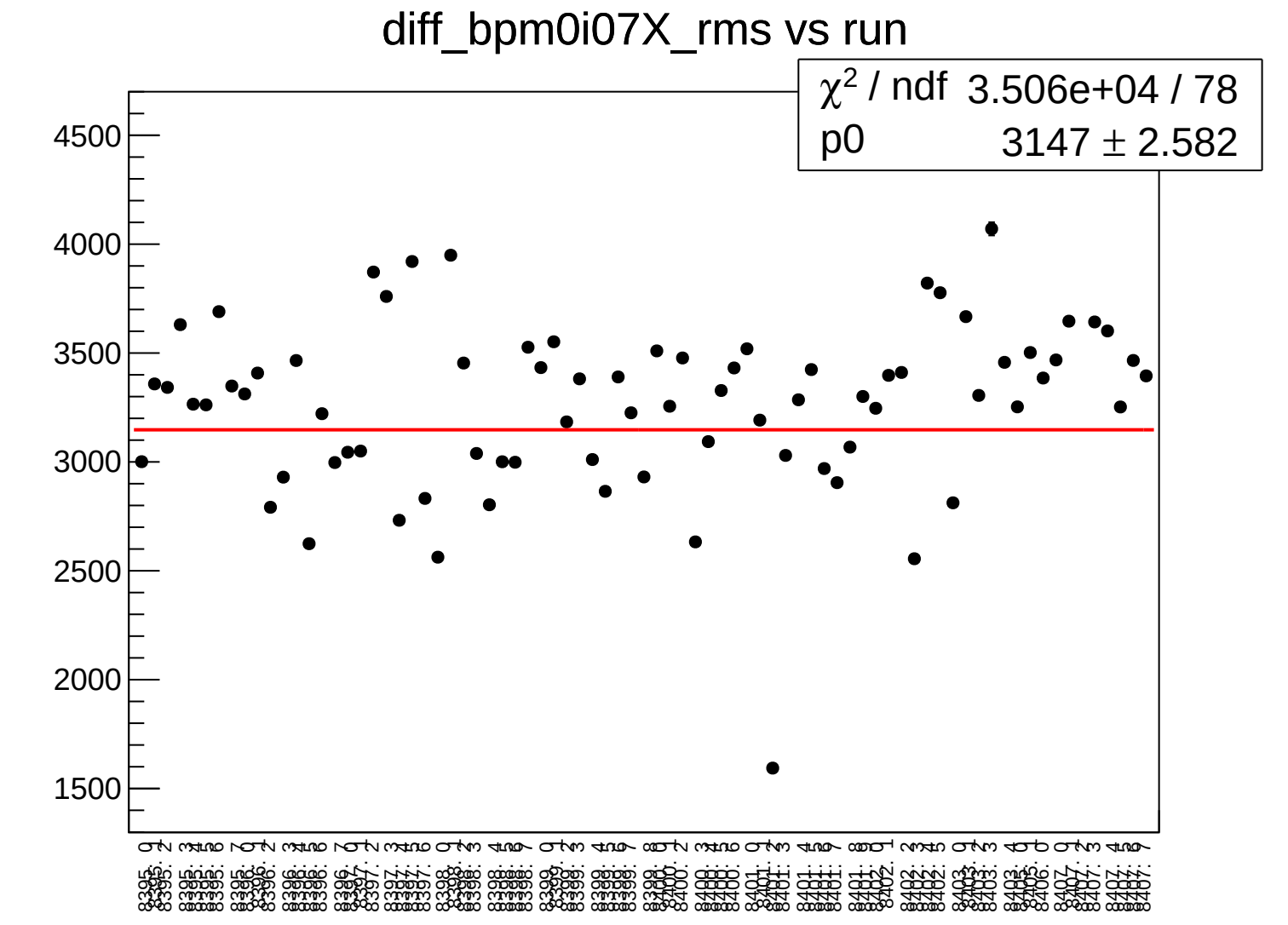

diff_bpm0i05Y_mean vs run
χ² / ndf 84.97 / 78
p0 7.981 ± 1.643
pull
Entries 79
Mean −332
Std Dev 374.5

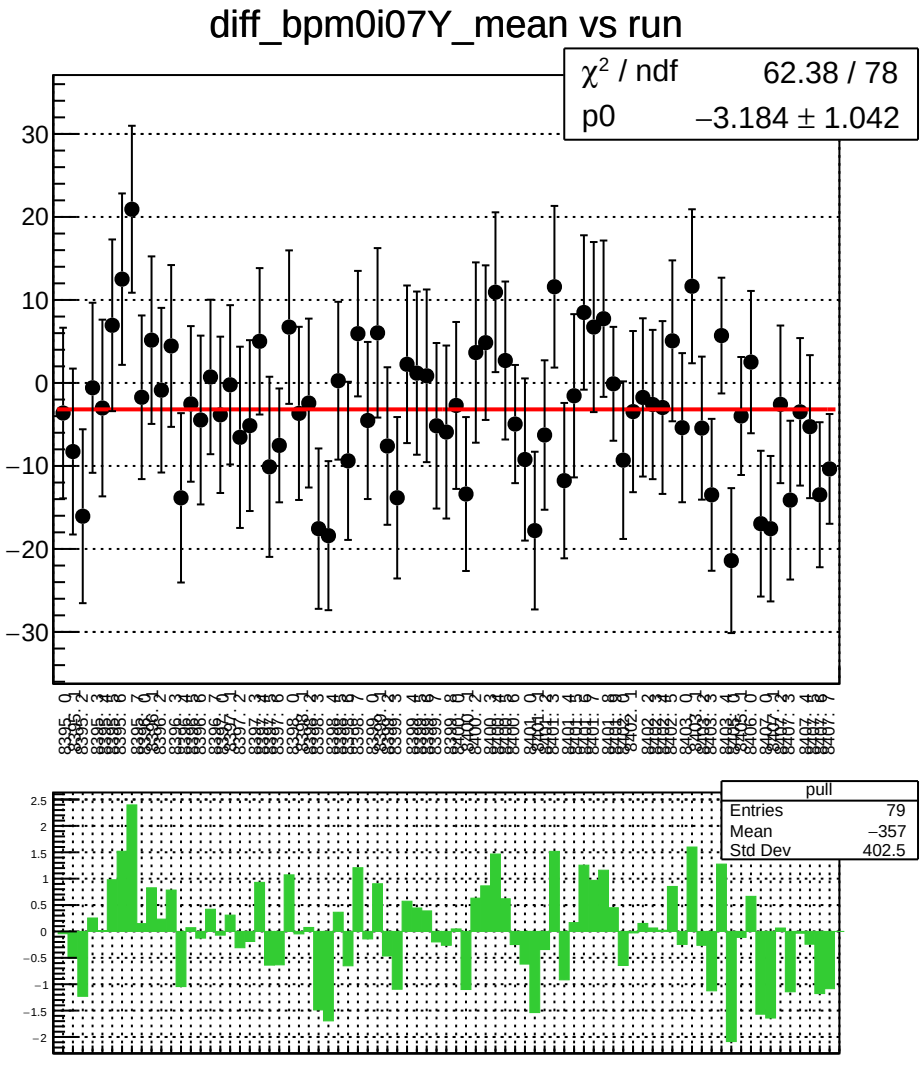

pull1D
Entries 79
Mean 0.01953
Std Dev 1.037

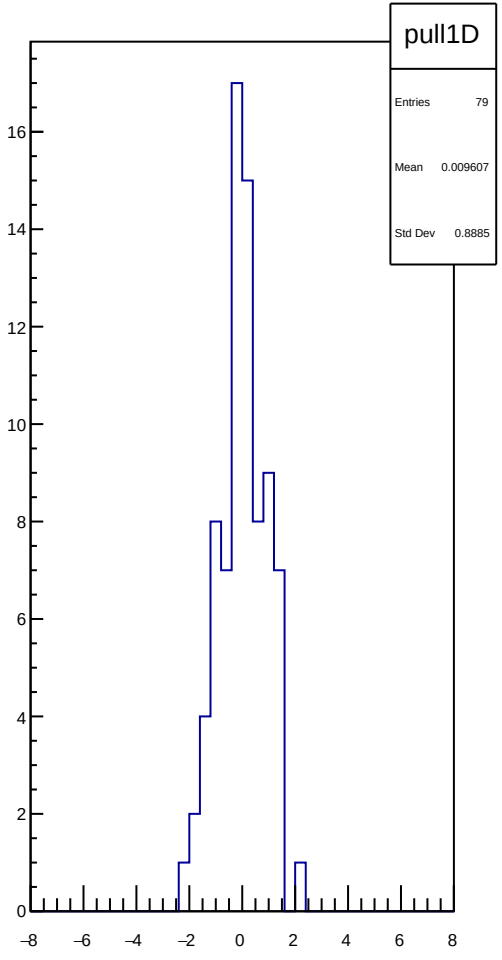

diff_bpm0i05Y_rms vs run
χ² / ndf 3385 / 78
p0 1431 ± 1.162
1600
1550
1500
1450
1400
1350
1300

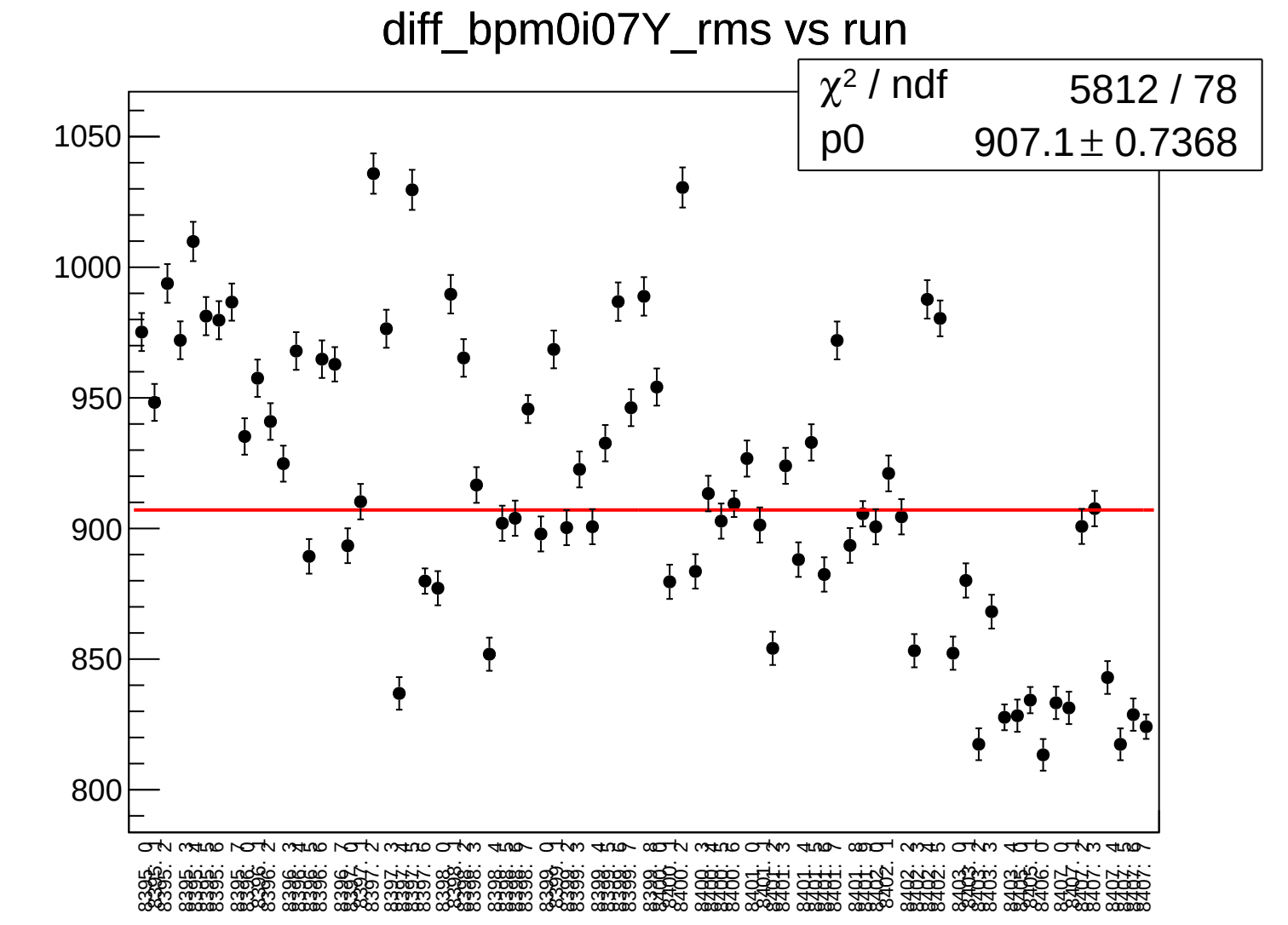

diff_bpm0i07X_mean vs run
χ² / ndf 68.6 / 78
p0 5.217 ± 3.651
100
50
0
−50
−100
pull
Entries 79
Mean −126.8
Std Dev 167.5
2
1
0
−1
−2
−3

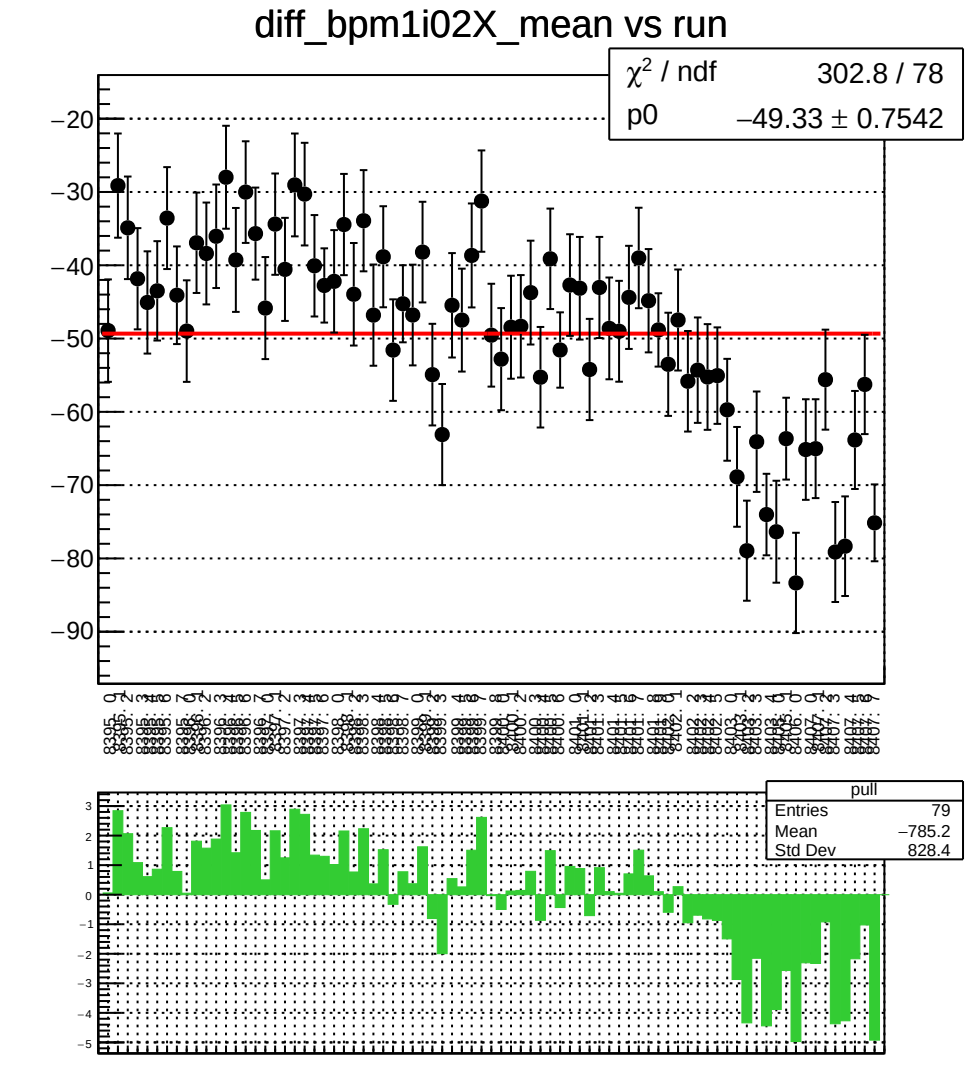

pull1D
Entries 79
Mean −0.022
Std Dev 0.9316
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

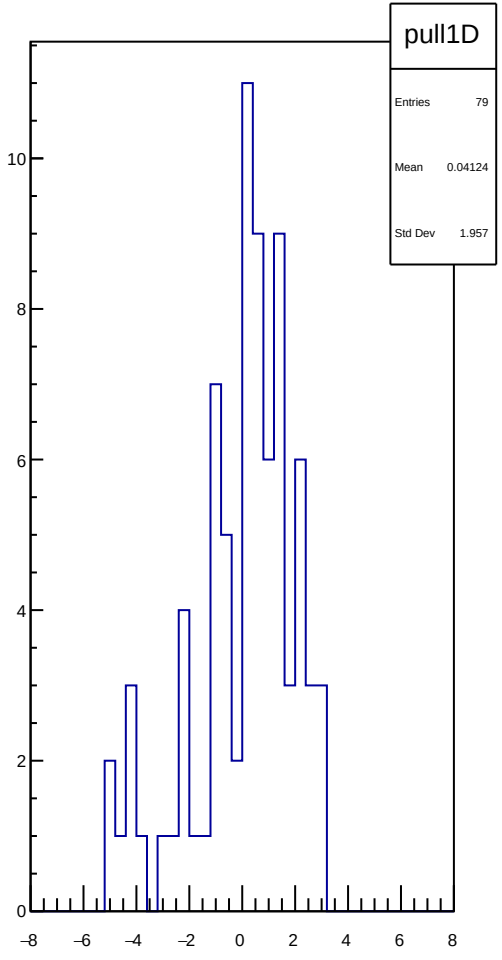

diff_bpm0i07X_rms vs run
χ² / ndf 3.506e+04 / 78
p0 3147 ± 2.582
4500
4000
3500
3000
2500
2000
1500

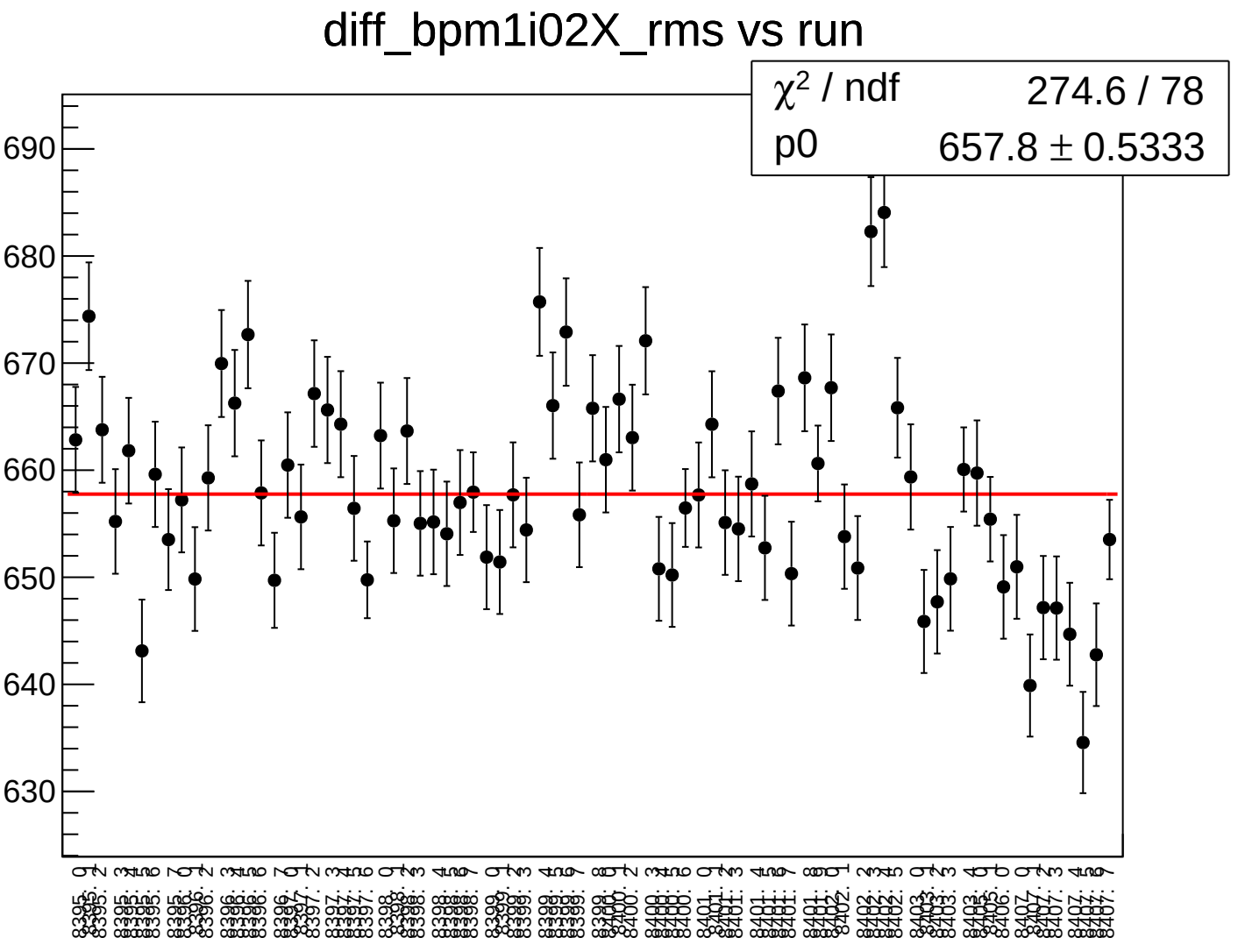

diff_bpm0i07Y_mean vs run
χ² / ndf 62.38 / 78
p0 −3.184 ± 1.042
pull
Entries 79
Mean −357
Std Dev 402.5

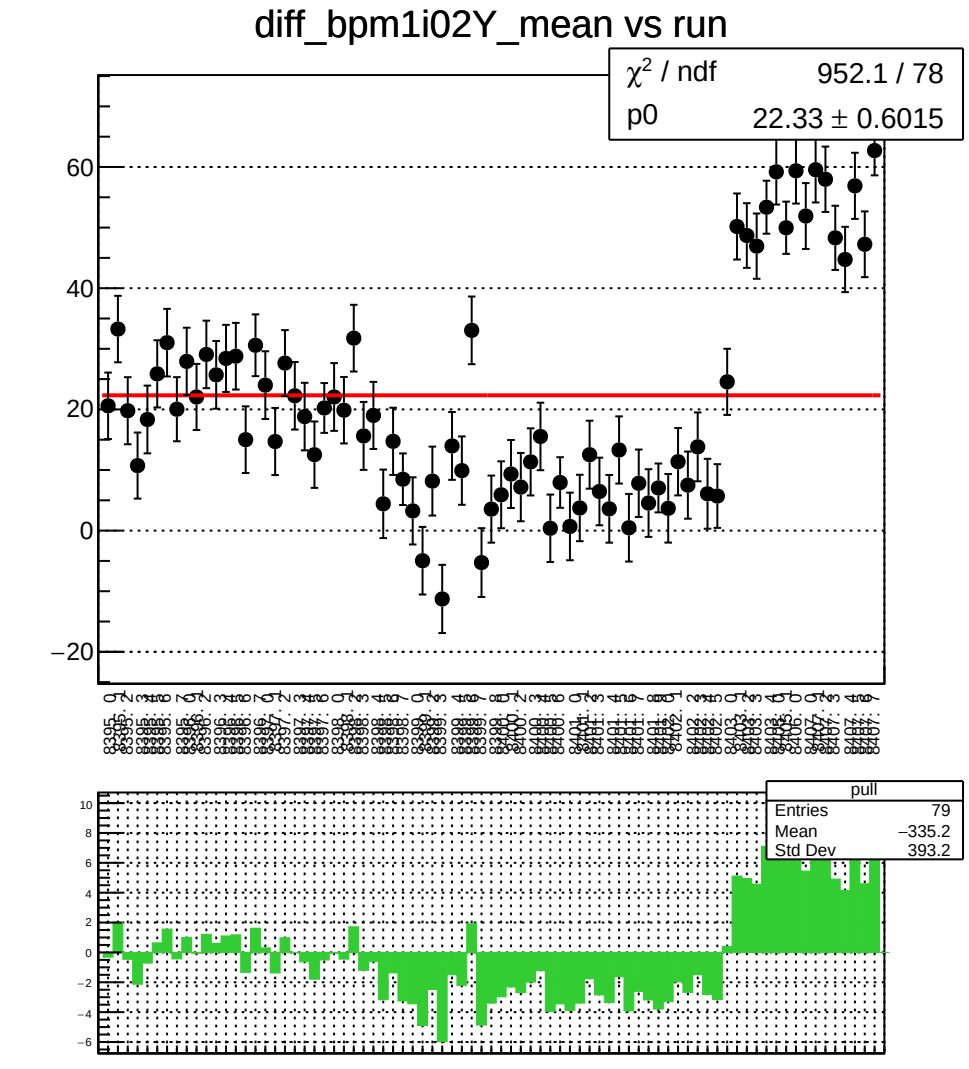

pull1D
Entries 79
Mean 0.009607
Std Dev 0.8885

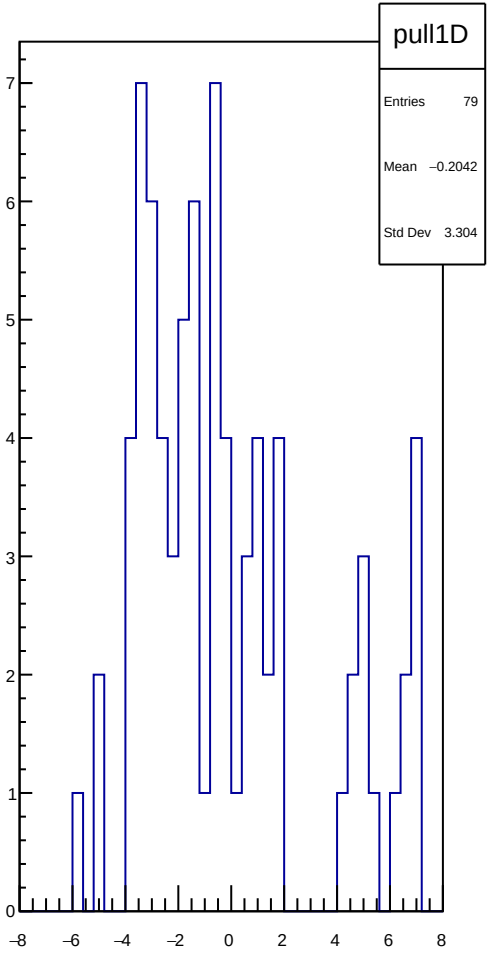

diff_bpm0i07Y_rms vs run
χ² / ndf 5812 / 78
p0 907.1 ± 0.7368
1050
1000
950
900
850
800

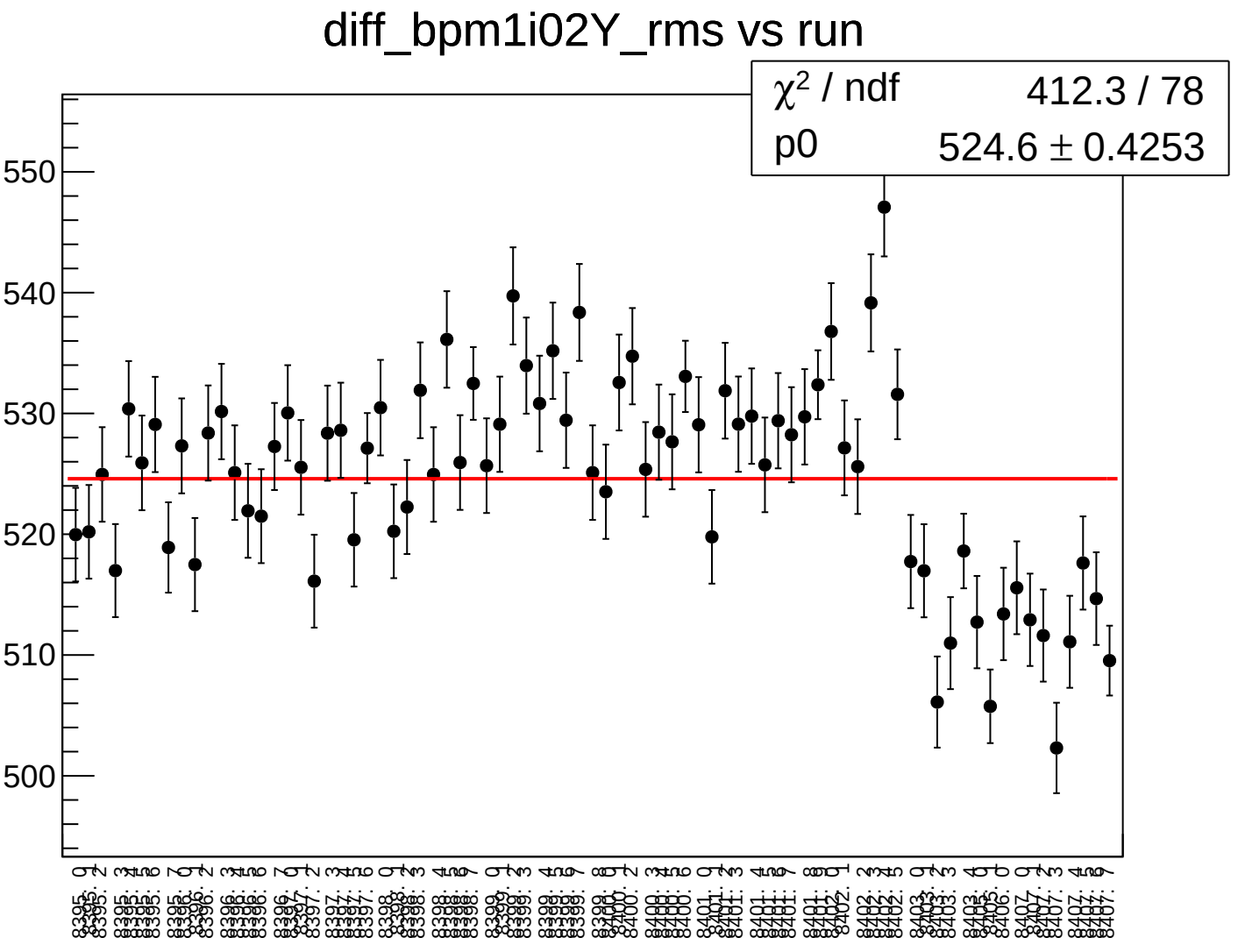

diff_bpm1i02X_mean vs run
χ² / ndf 302.8 / 78
p0 −49.33 ± 0.7542
pull
Entries 79
Mean −785.2
Std Dev 828.4

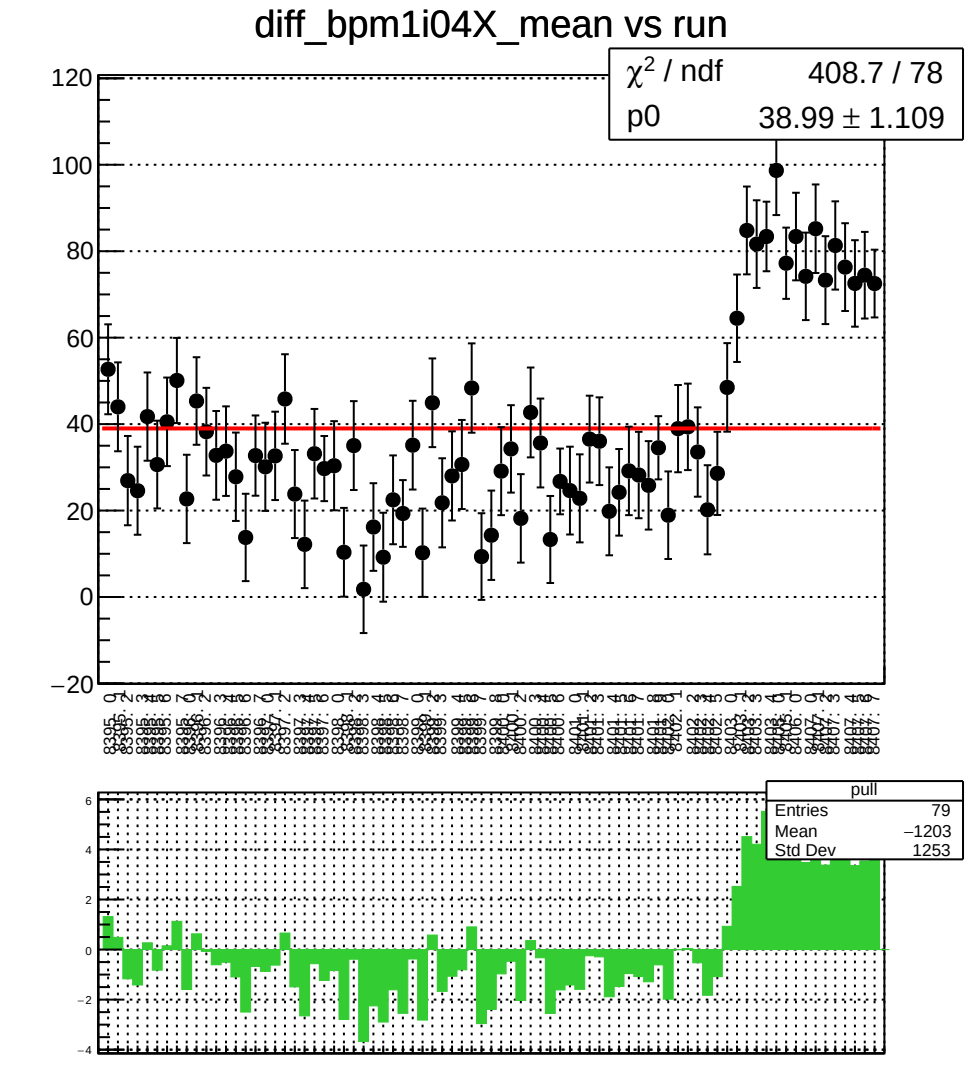

pull1D
Entries 79
Mean 0.04124
Std Dev 1.957

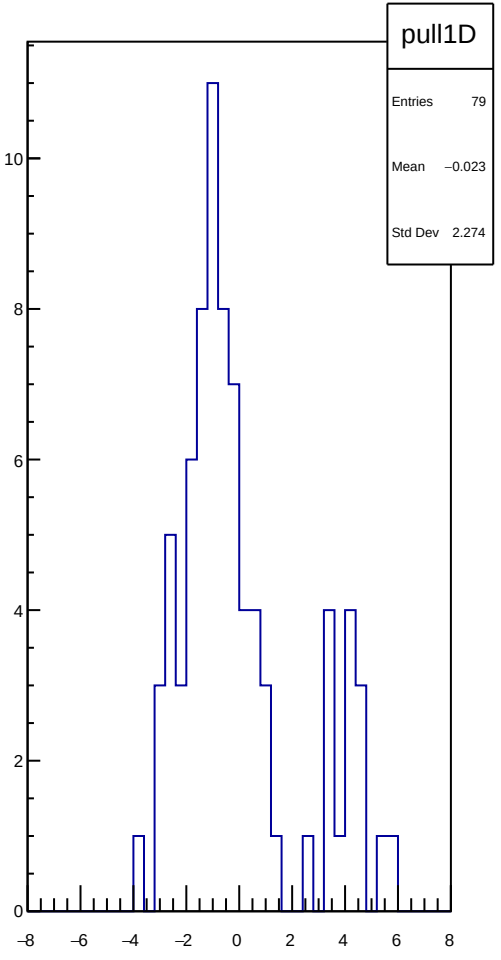

diff_bpm1i02X_rms vs run
χ² / ndf 274.6 / 78
p0 657.8 ± 0.5333
690
680
670
660
650
640
630

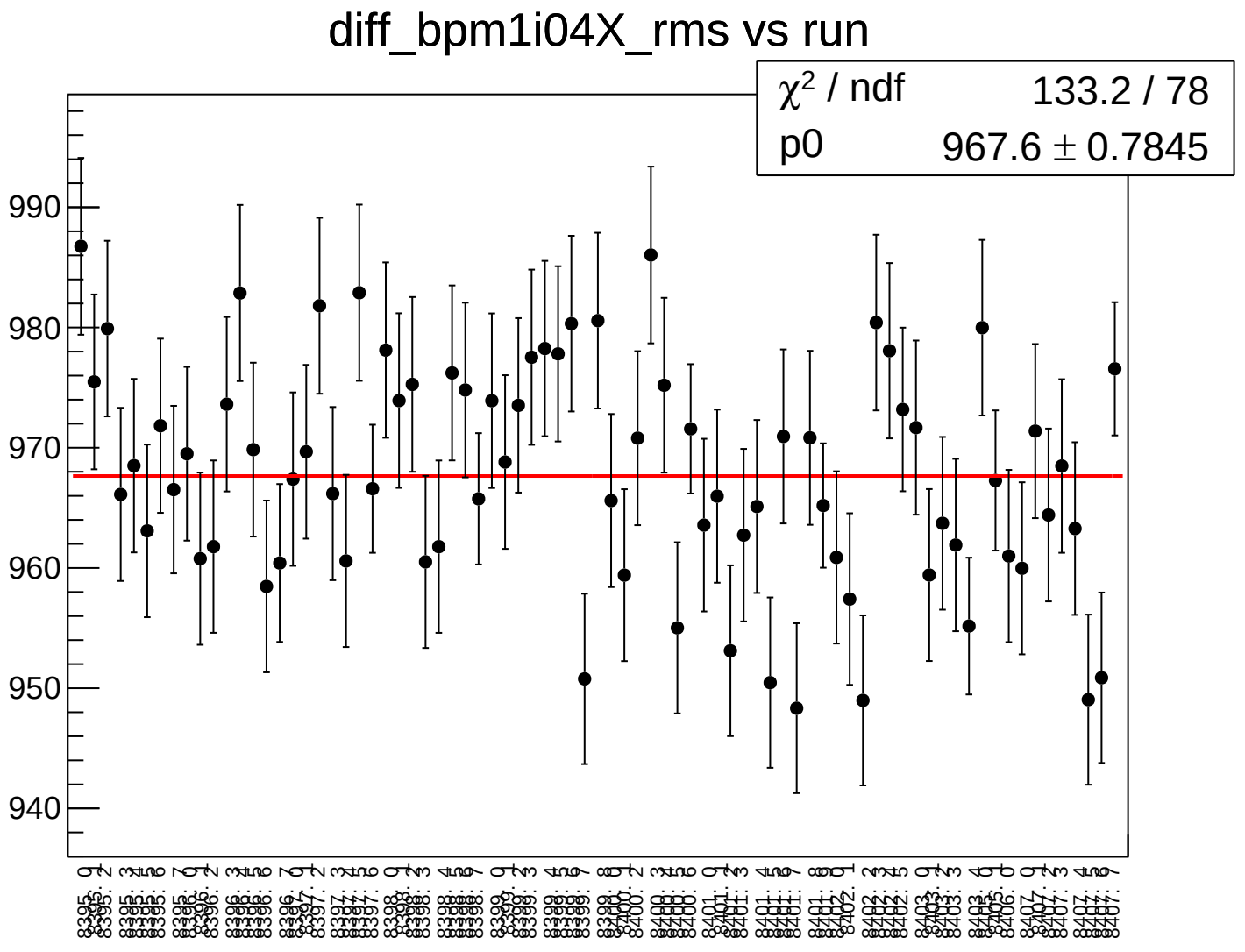

diff_bpm1i02Y_mean vs run
χ² / ndf 952.1 / 78
p0 22.33 ± 0.6015
60
40
20
0
−20
pull
Entries 79
Mean −335.2
Std Dev 393.2
10
8
6
4
2
0
−2
−4
−6

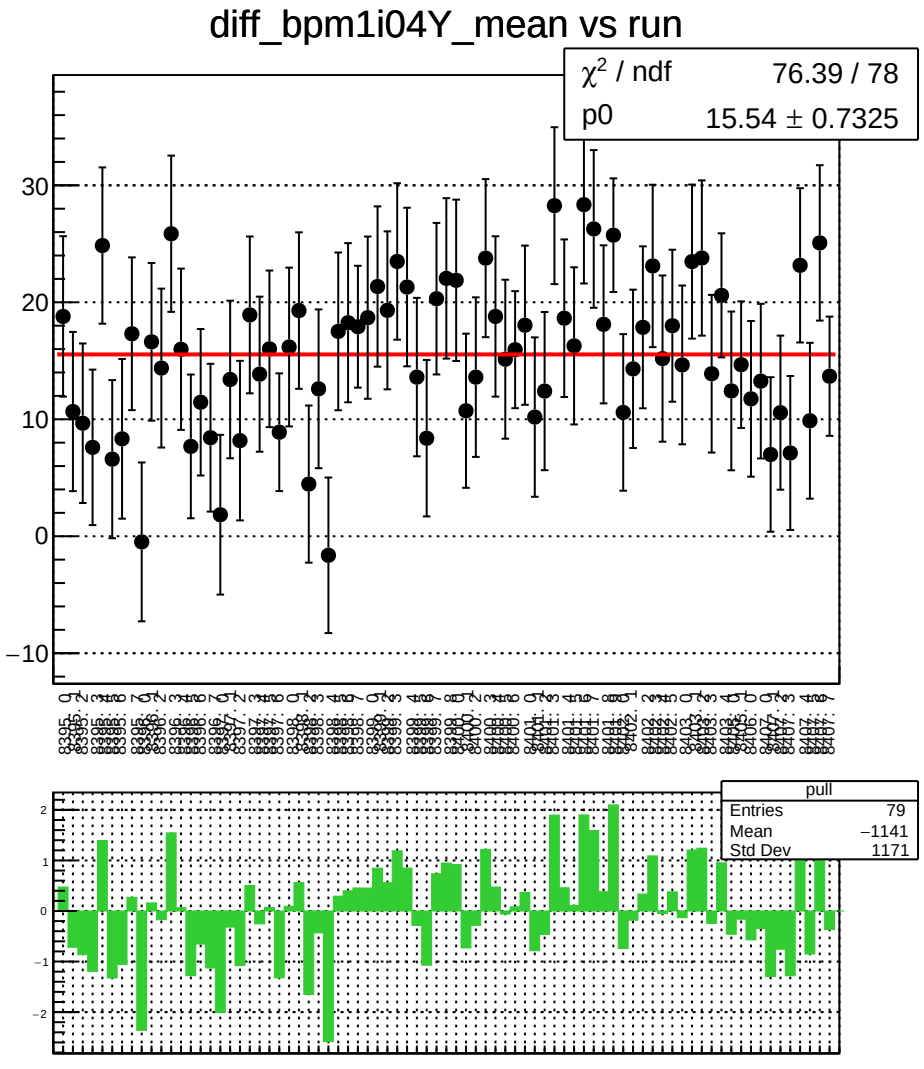

pull1D
Entries 79
Mean −0.2042
Std Dev 3.304
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

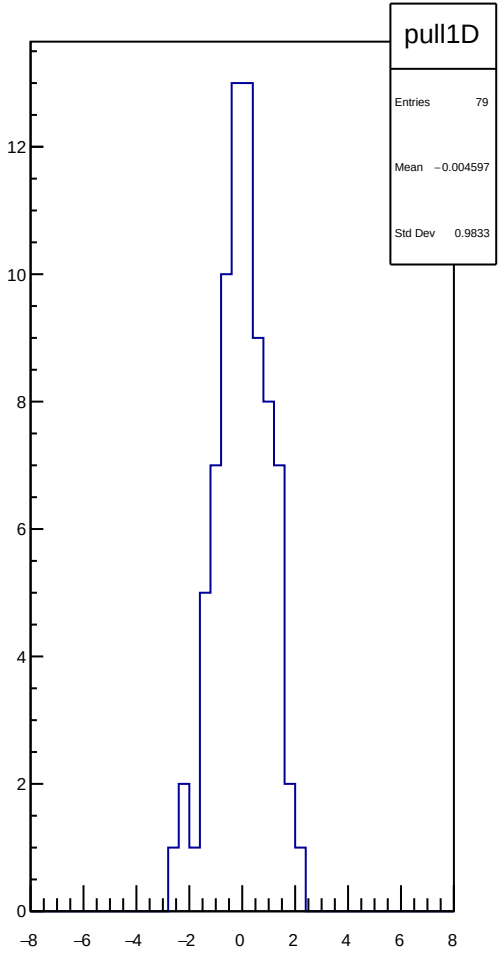

diff_bpm1i02Y_rms vs run
χ² / ndf 412.3 / 78
p0 524.6 ± 0.4253
550
540
530
520
510
500

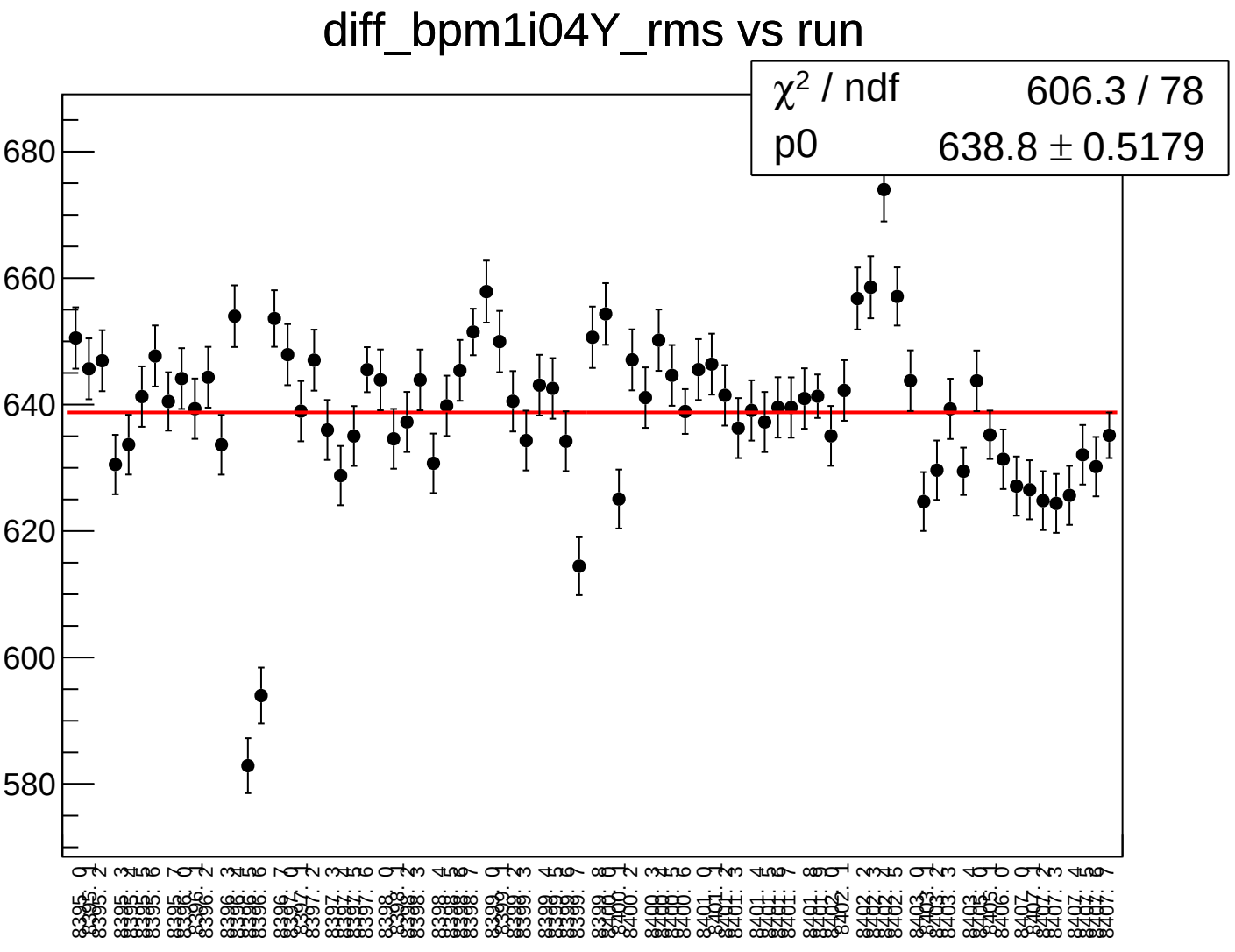

diff_bpm1i04X_mean vs run
χ^2 / ndf 408.7 / 78
p0 38.99 ± 1.109
pull
Entries 79
Mean −1203
Std Dev 1253

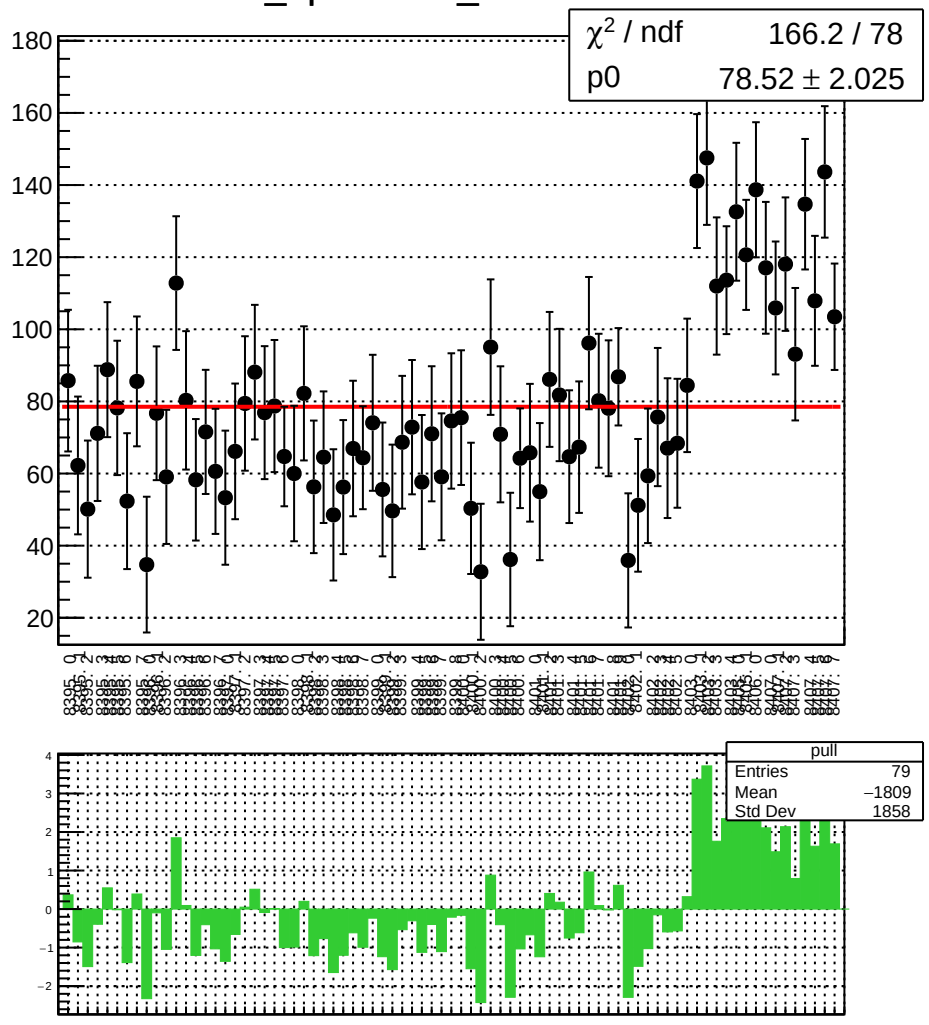

pull1D
Entries 79
Mean −0.023
Std Dev 2.274

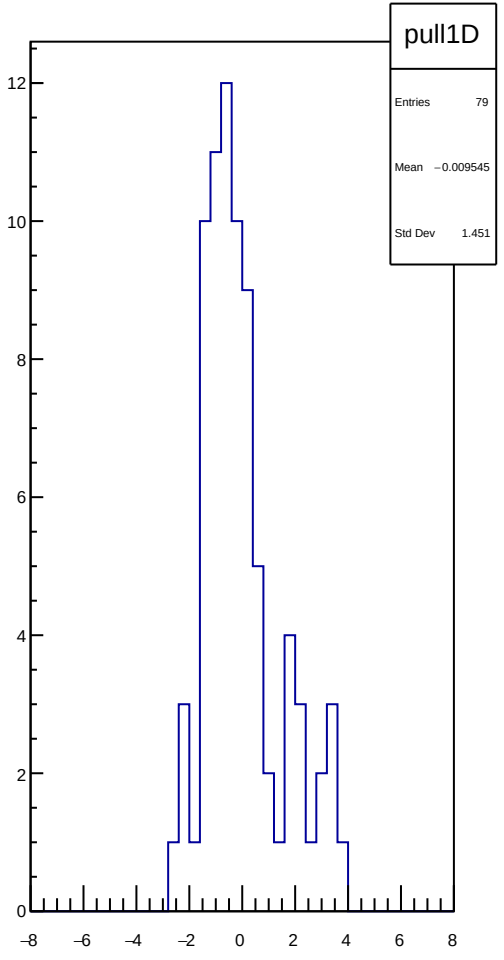

diff_bpm1i04X_rms vs run
χ² / ndf 133.2 / 78
p0 967.6 ± 0.7845
990
980
970
960
950
940

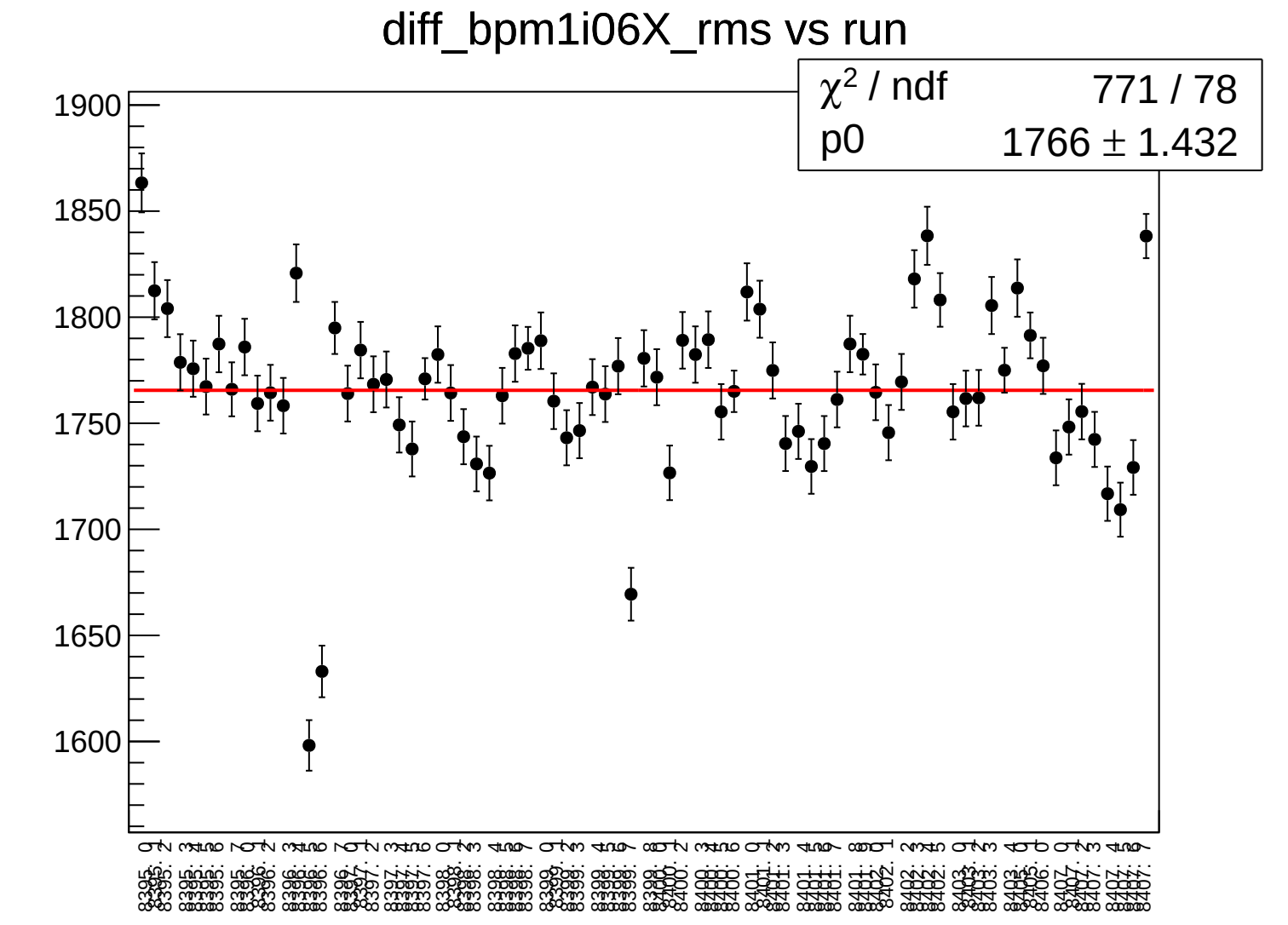

diff_bpm1i04Y_mean vs run
χ^2 / ndf 76.39 / 78
p0 15.54 ± 0.7325
pull
Entries 79
Mean −1141
Std Dev 1171

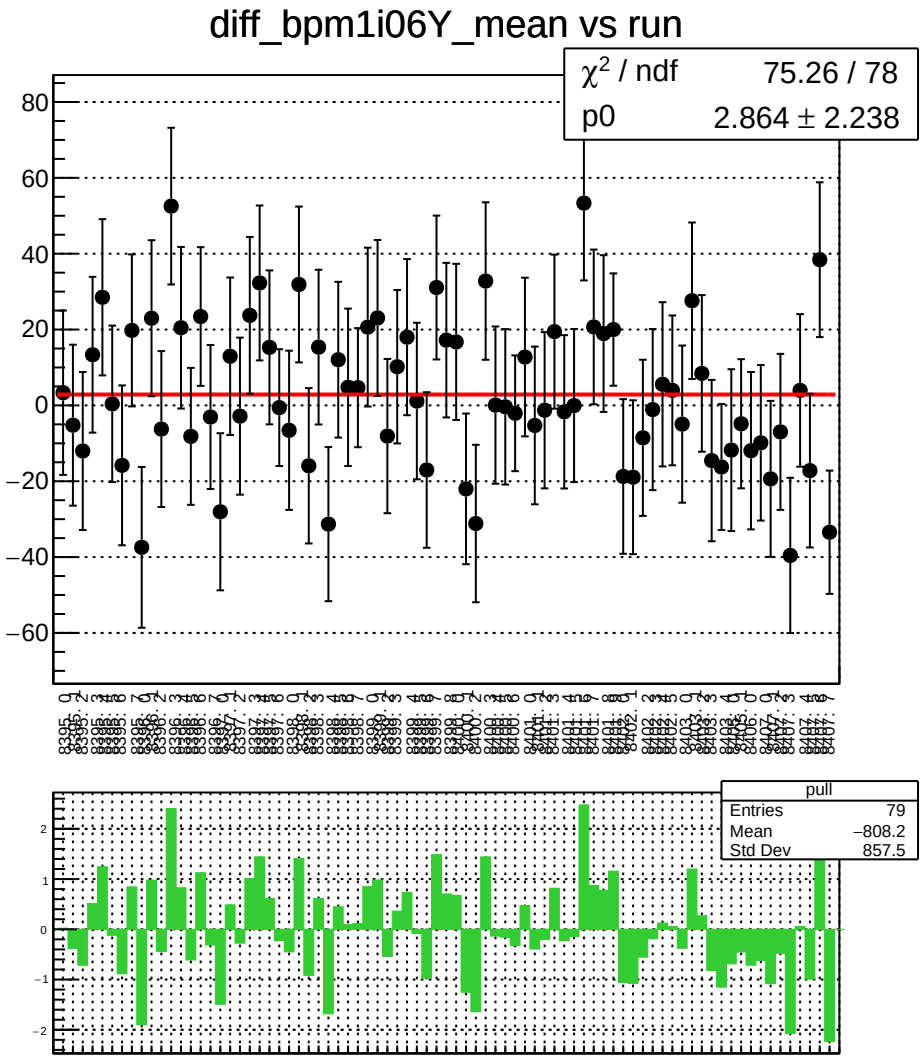

pull1D
Entries 79
Mean −0.004597
Std Dev 0.9833

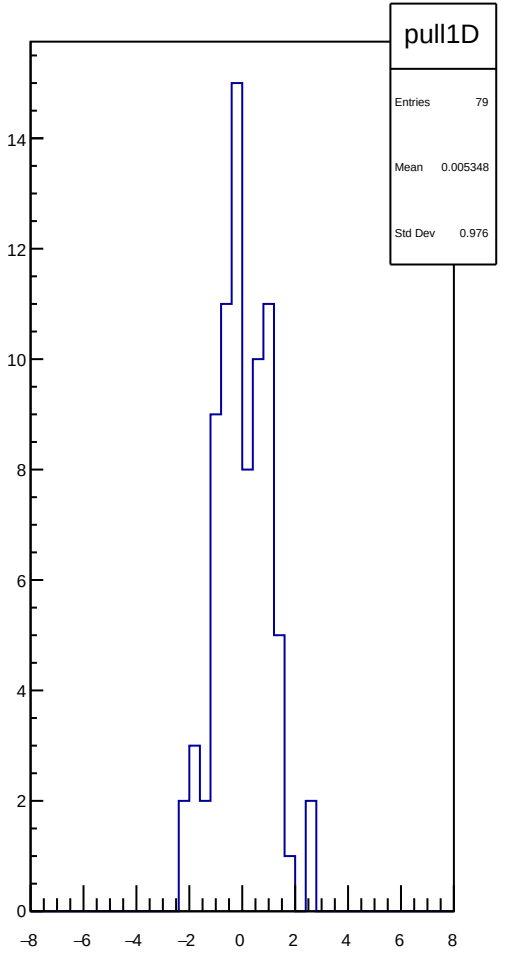

diff_bpm1i04Y_rms vs run
χ² / ndf 606.3 / 78
p0 638.8 ± 0.5179
680
660
640
620
600
580

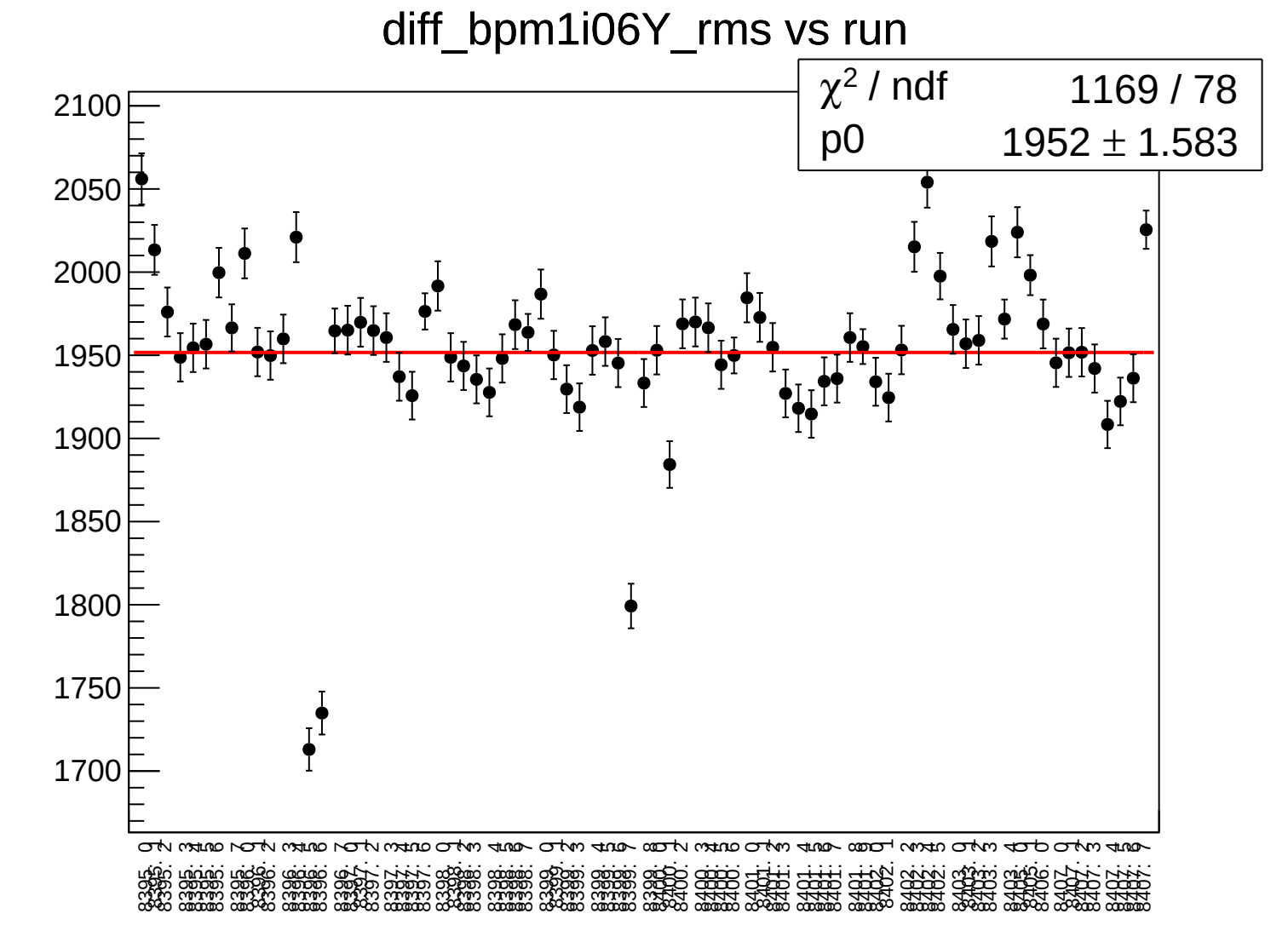

diff_bpm1i06X_mean vs run
χ² / ndf 166.2 / 78
p0 78.52 ± 2.025
pull
Entries 79
Mean −1809
Std Dev 1858

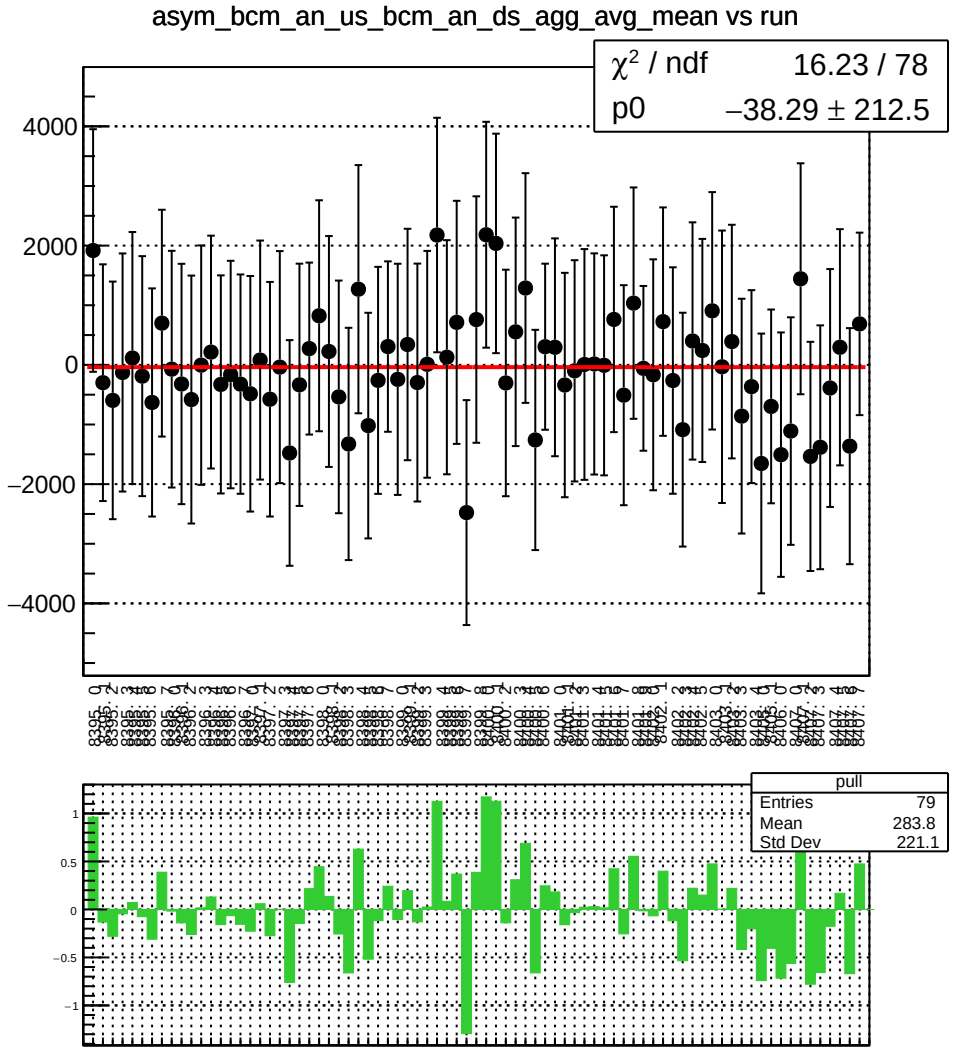

pull1D
Entries 79
Mean −0.009545
Std Dev 1.451

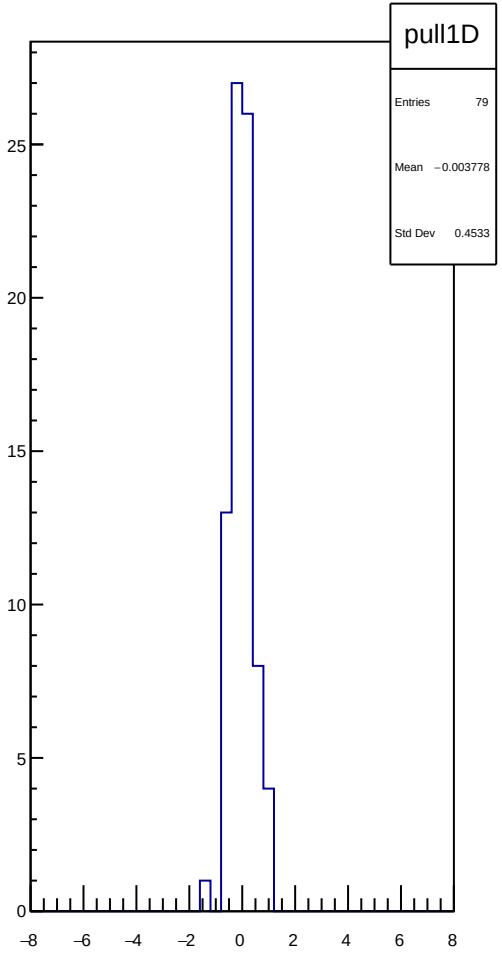

diff_bpm1i06X_rms vs run
χ² / ndf 771 / 78
p0 1766 ± 1.432
1900
1850
1800
1750
1700
1650
1600

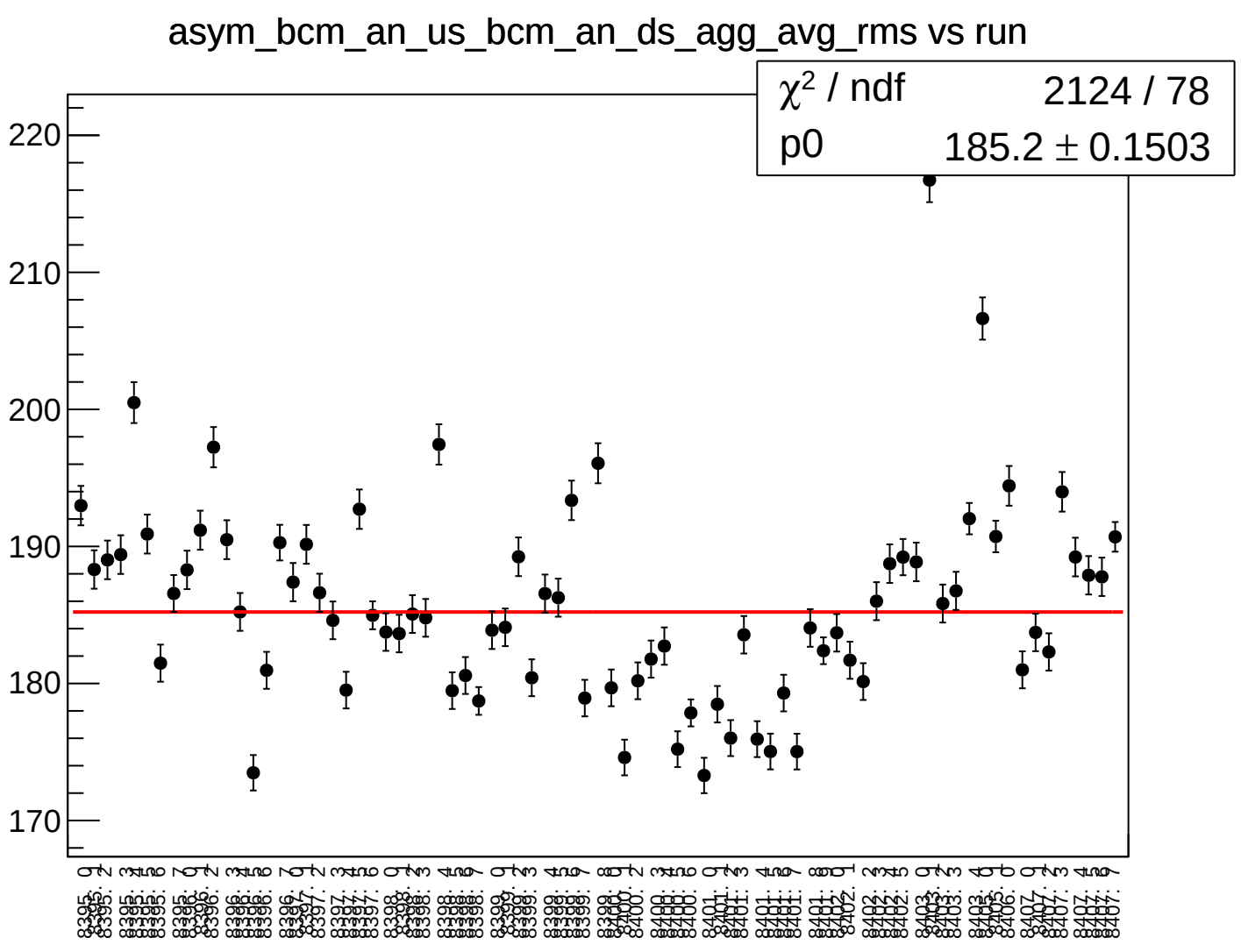

diff_bpm1i06Y_mean vs run
χ^2 / ndf 75.26 / 78
p0 2.864 ± 2.238
pull
Entries 79
Mean −808.2
Std Dev 857.5

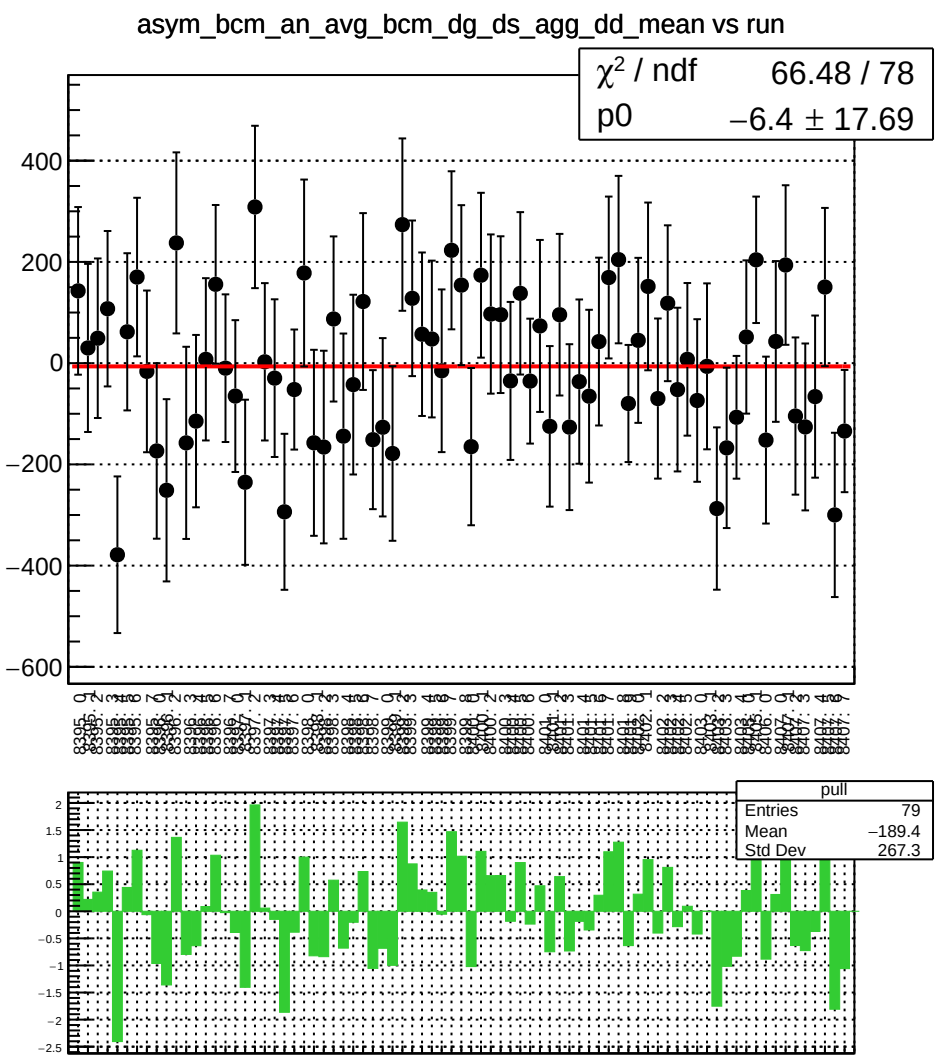

pull1D
Entries 79
Mean 0.005348
Std Dev 0.976

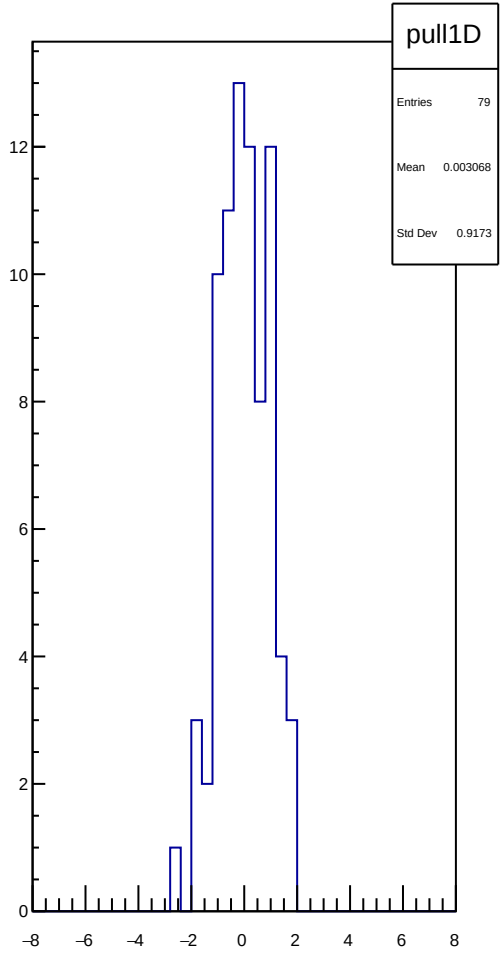

diff_bpm1i06Y_rms vs run
χ² / ndf 1169 / 78
p0 1952 ± 1.583
2100
2050
2000
1950
1900
1850
1800
1750
1700

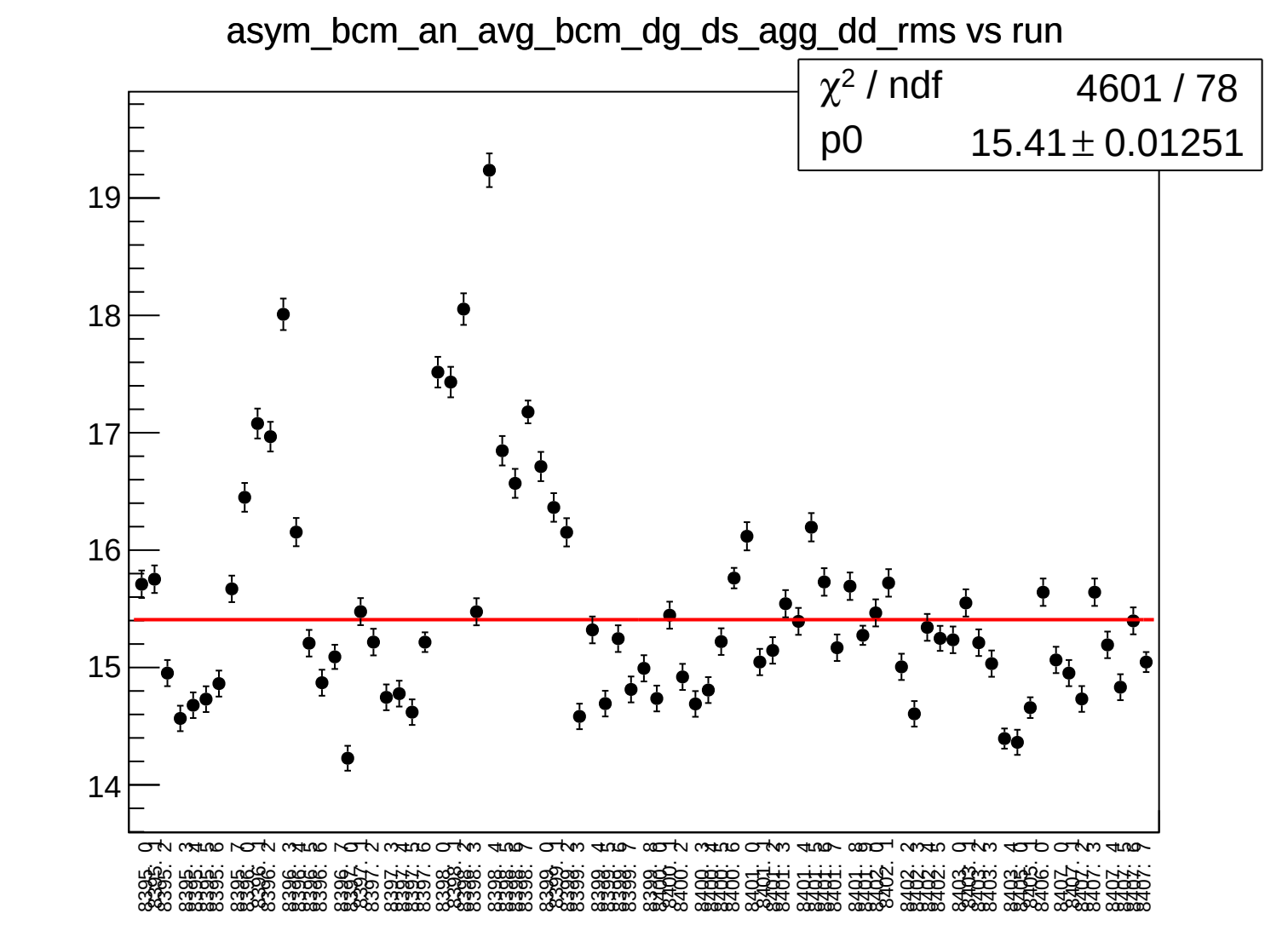

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.23 / 78
p0 −38.29 ± 212.5
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 283.8
Std Dev 221.1
1
0.5
0
−0.5
−1

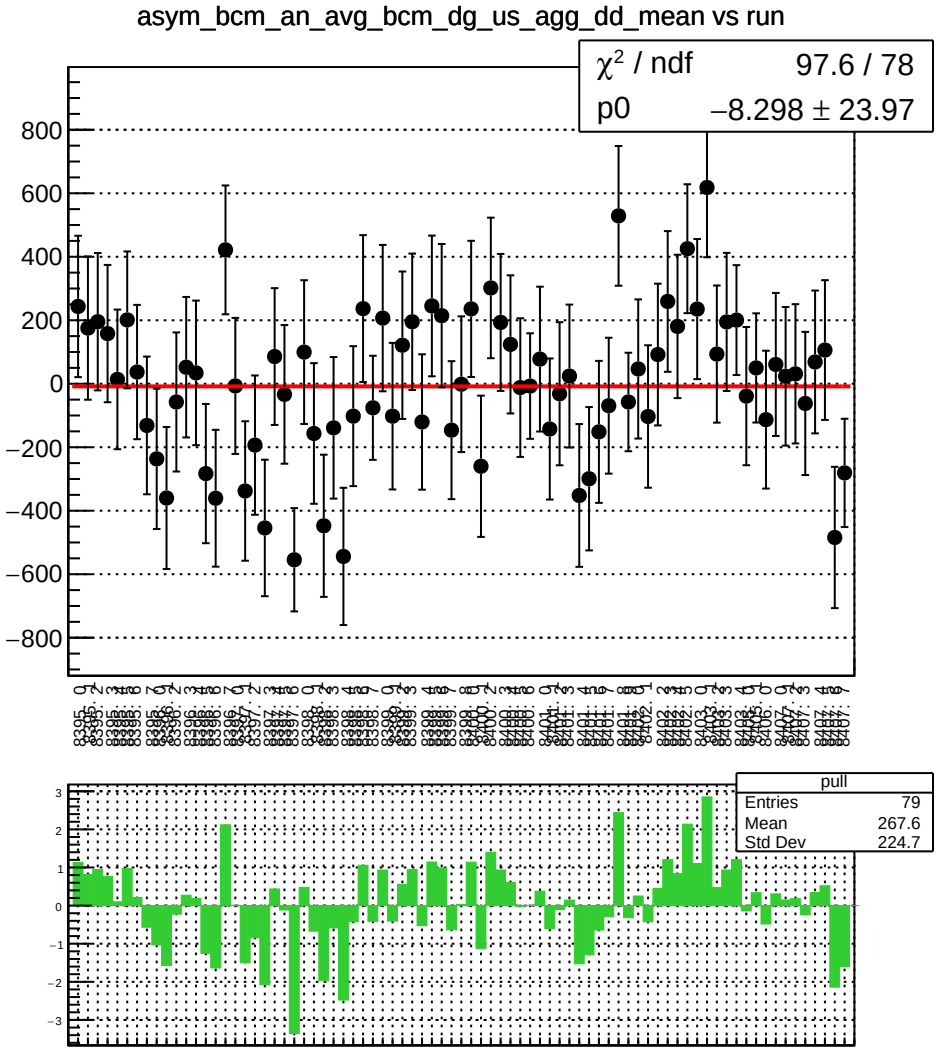

pull1D
Entries 79
Mean −0.003778
Std Dev 0.4533
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

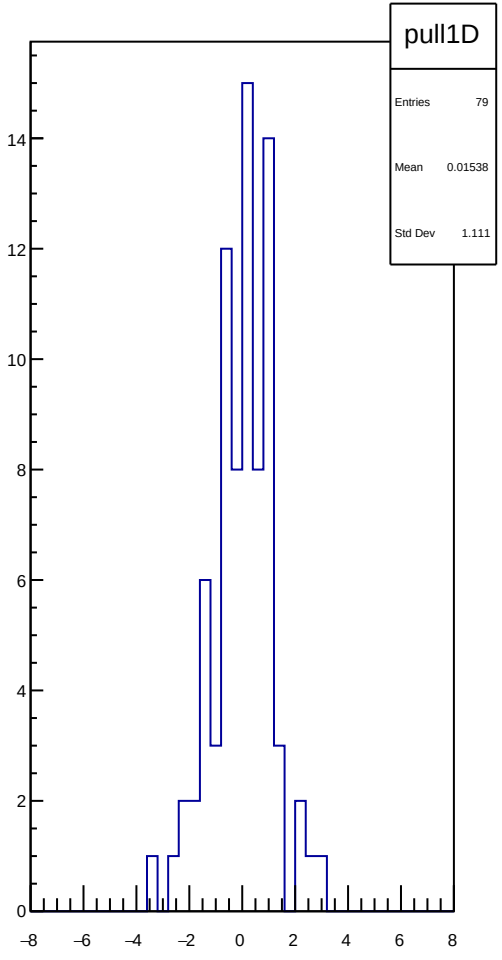

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2124 / 78
p0 185.2 ± 0.1503
220
210
200
190
180
170

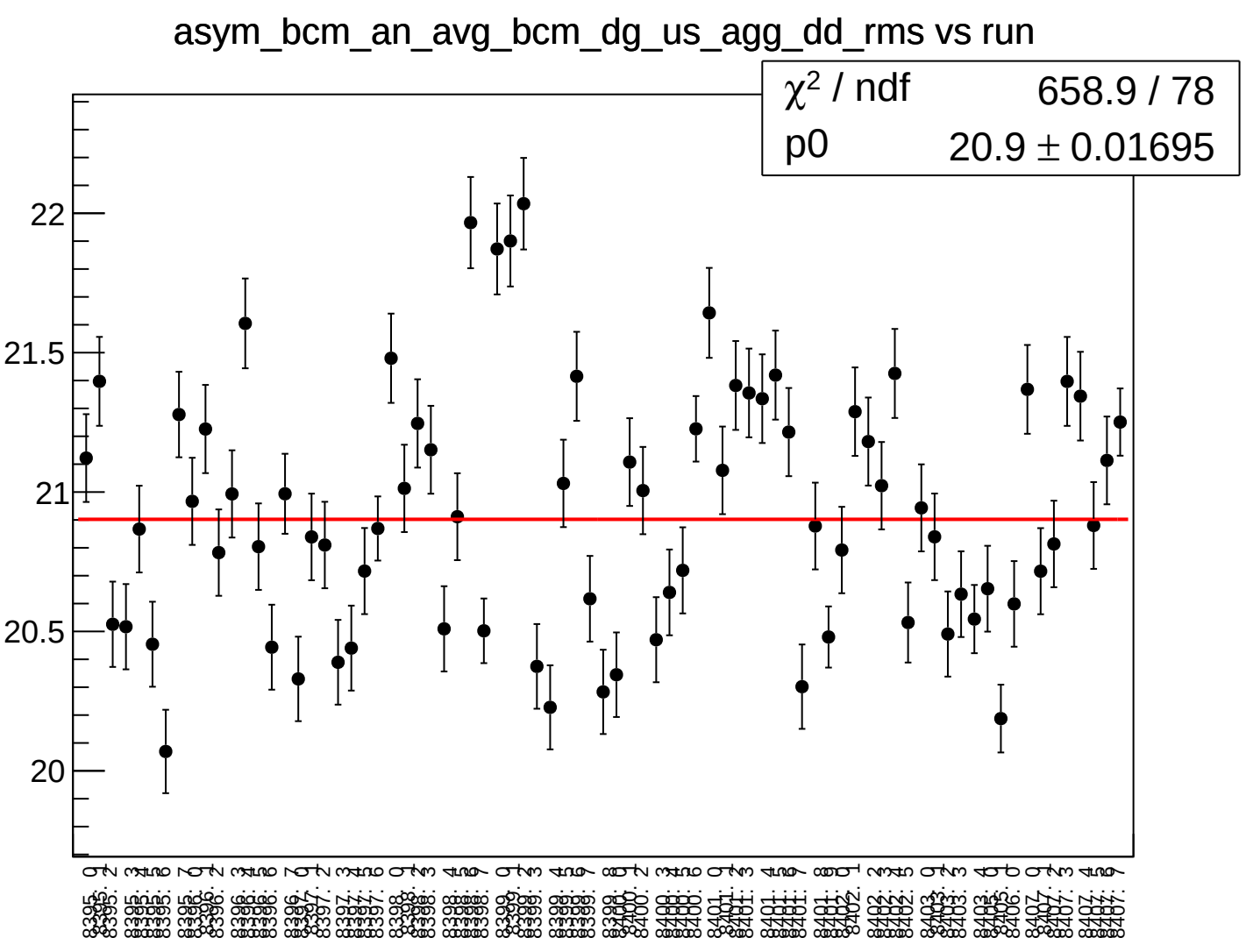

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 66.48 / 78
p0 −6.4 ± 17.69
400
200
0
−200
−400
−600
pull
Entries 79
Mean −189.4
Std Dev 267.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

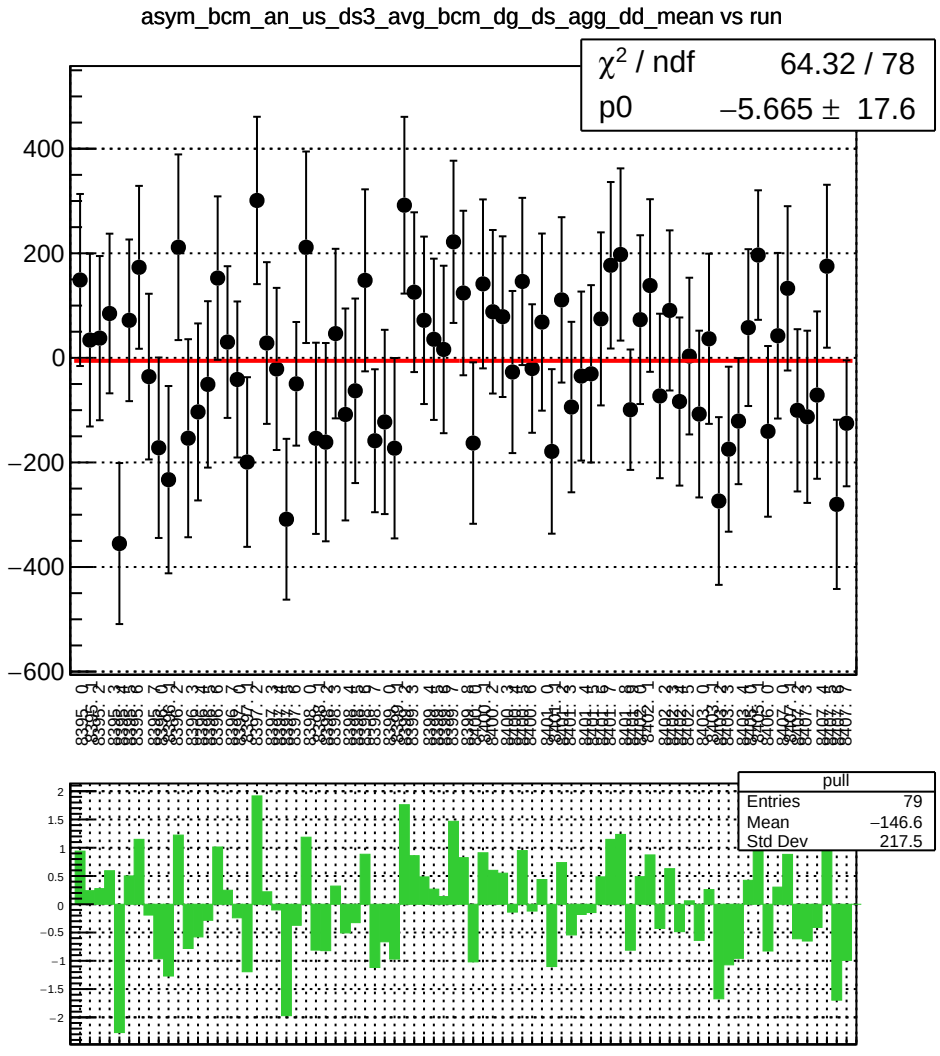

pull1D
Entries 79
Mean 0.003068
Std Dev 0.9173
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

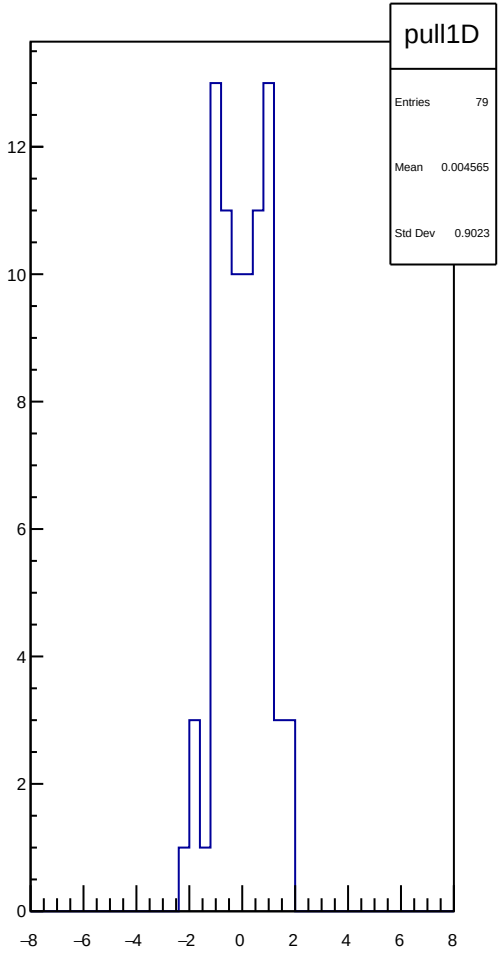

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4601 / 78
p0 15.41 ± 0.01251
19
18
17
16
15
14

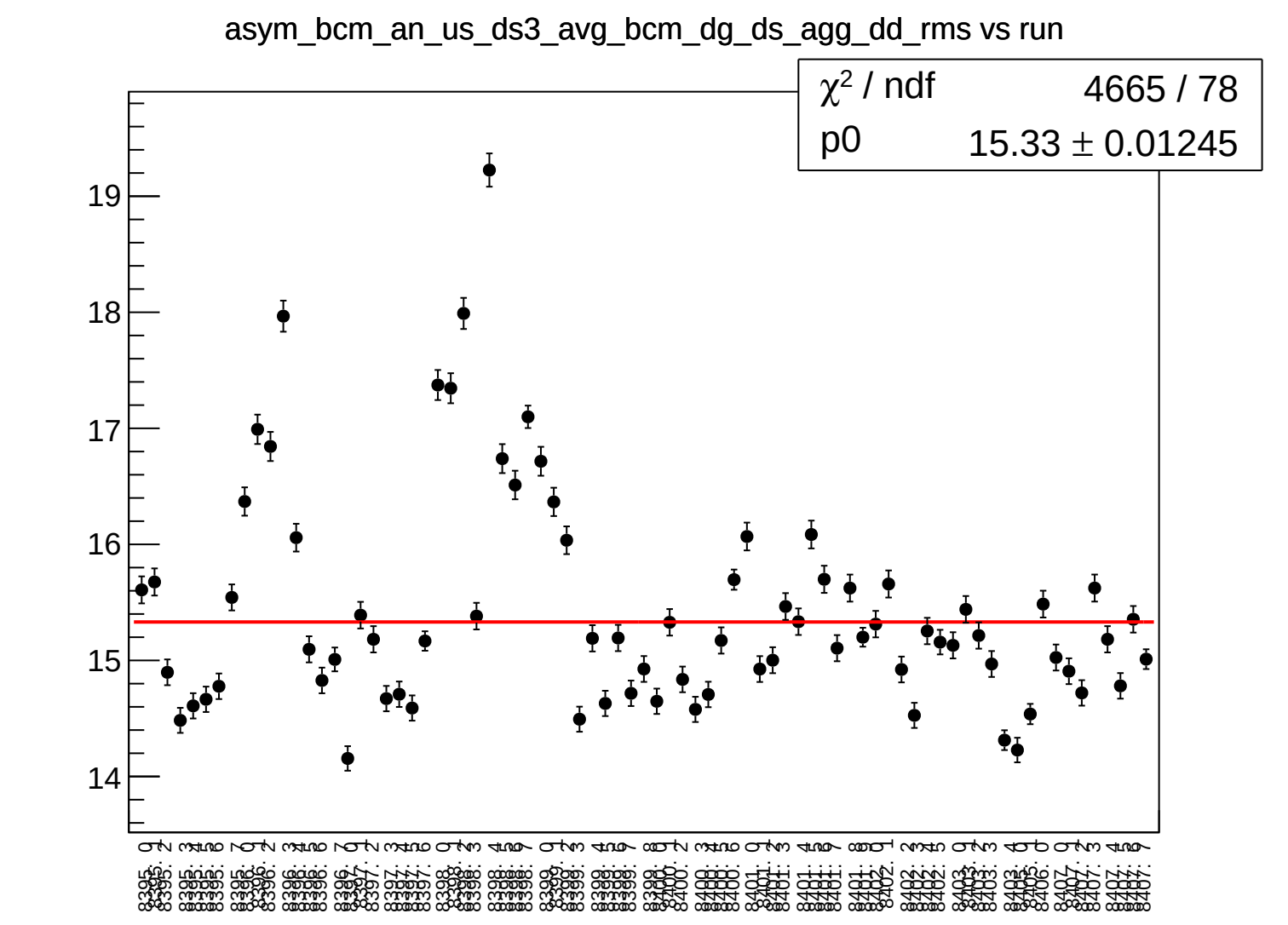

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 97.6 / 78
p0 −8.298 ± 23.97
pull
Entries 79
Mean 267.6
Std Dev 224.7

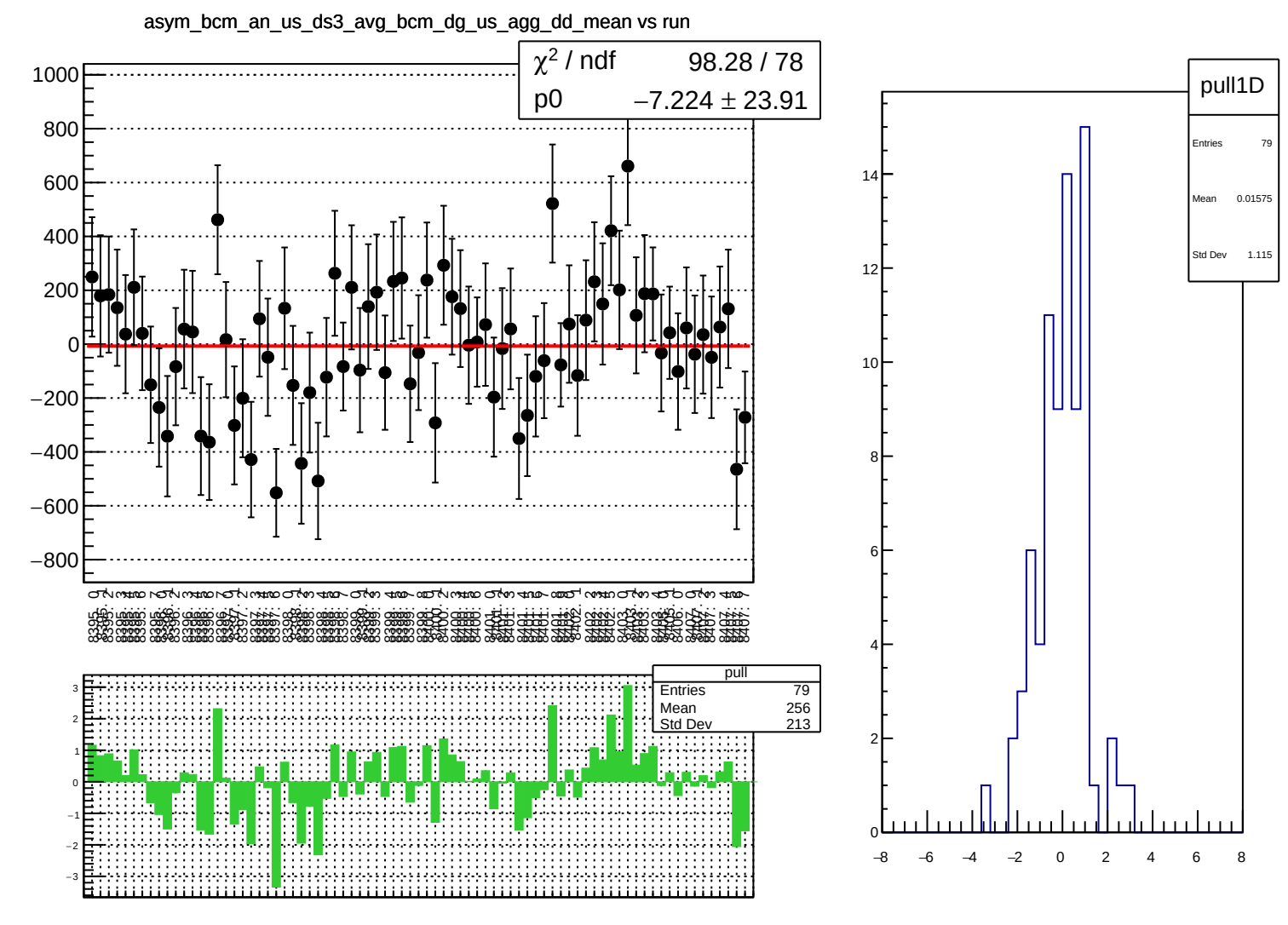

pull1D
Entries 79
Mean 0.01538
Std Dev 1.111

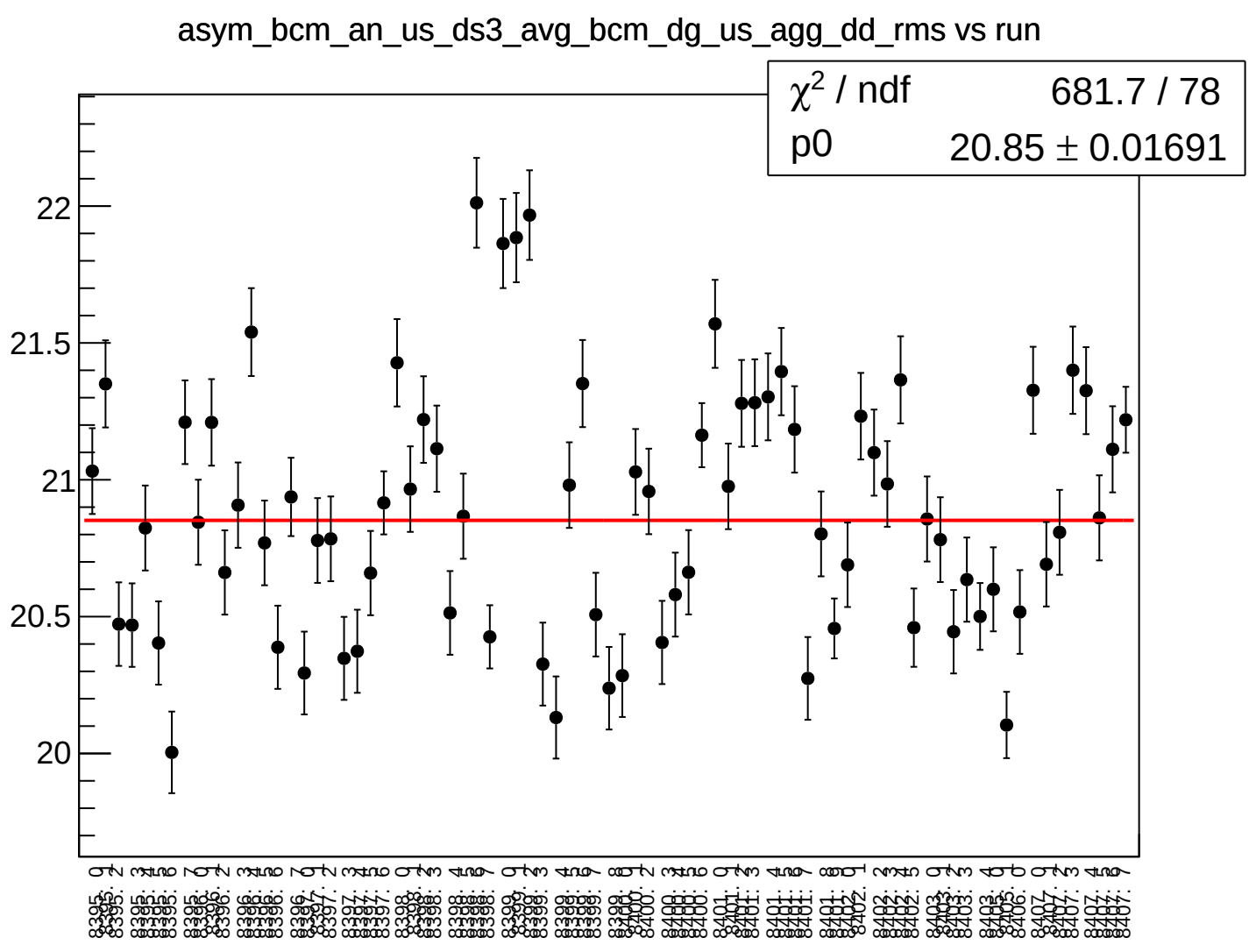

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 658.9 / 78
p0 20.9 ± 0.01695
22
21.5
21
20.5
20

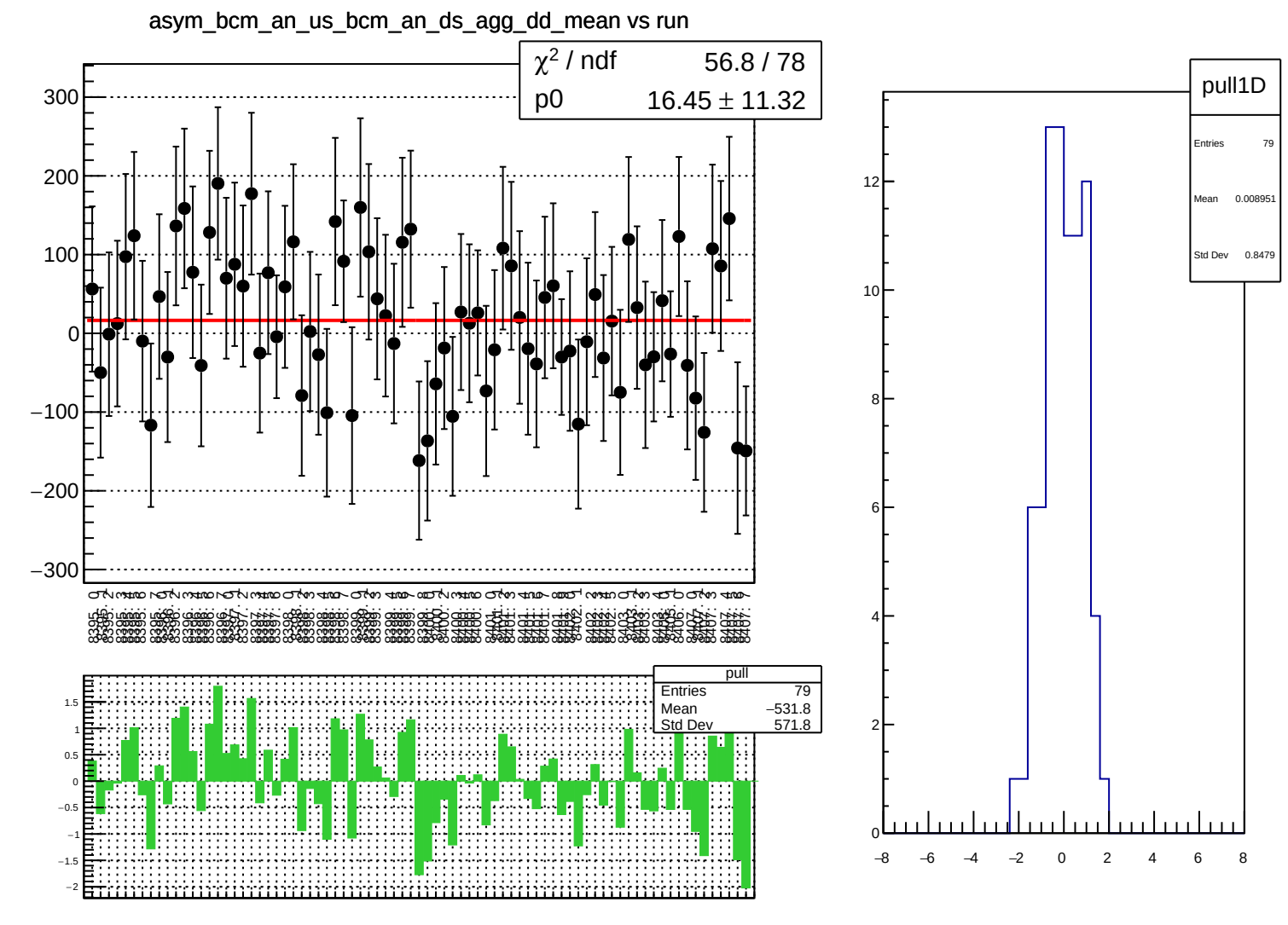

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 64.32 / 78
p0 −5.665 ± 17.6
pull
Entries 79
Mean −146.6
Std Dev 217.5

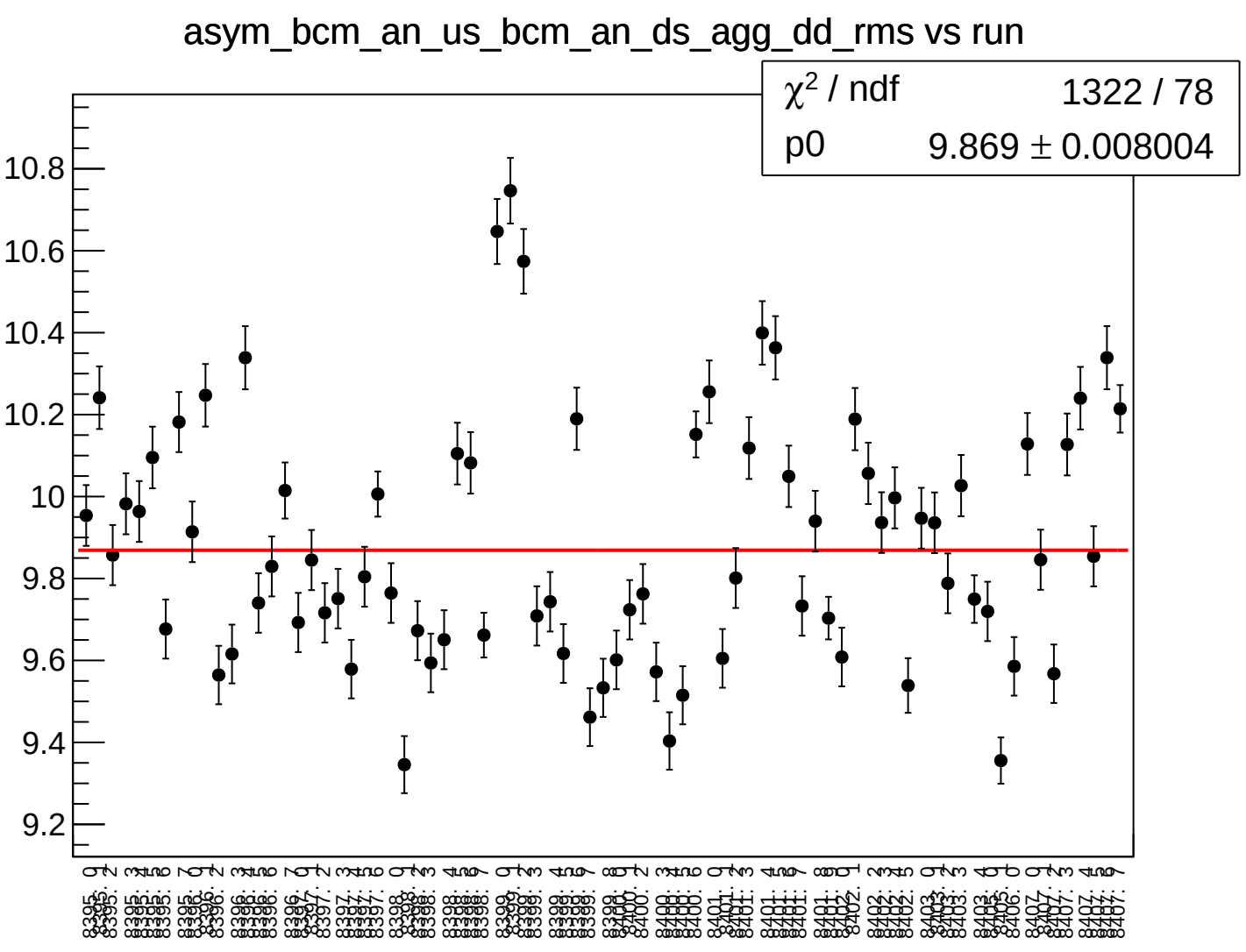

pull1D
Entries 79
Mean 0.004565
Std Dev 0.9023

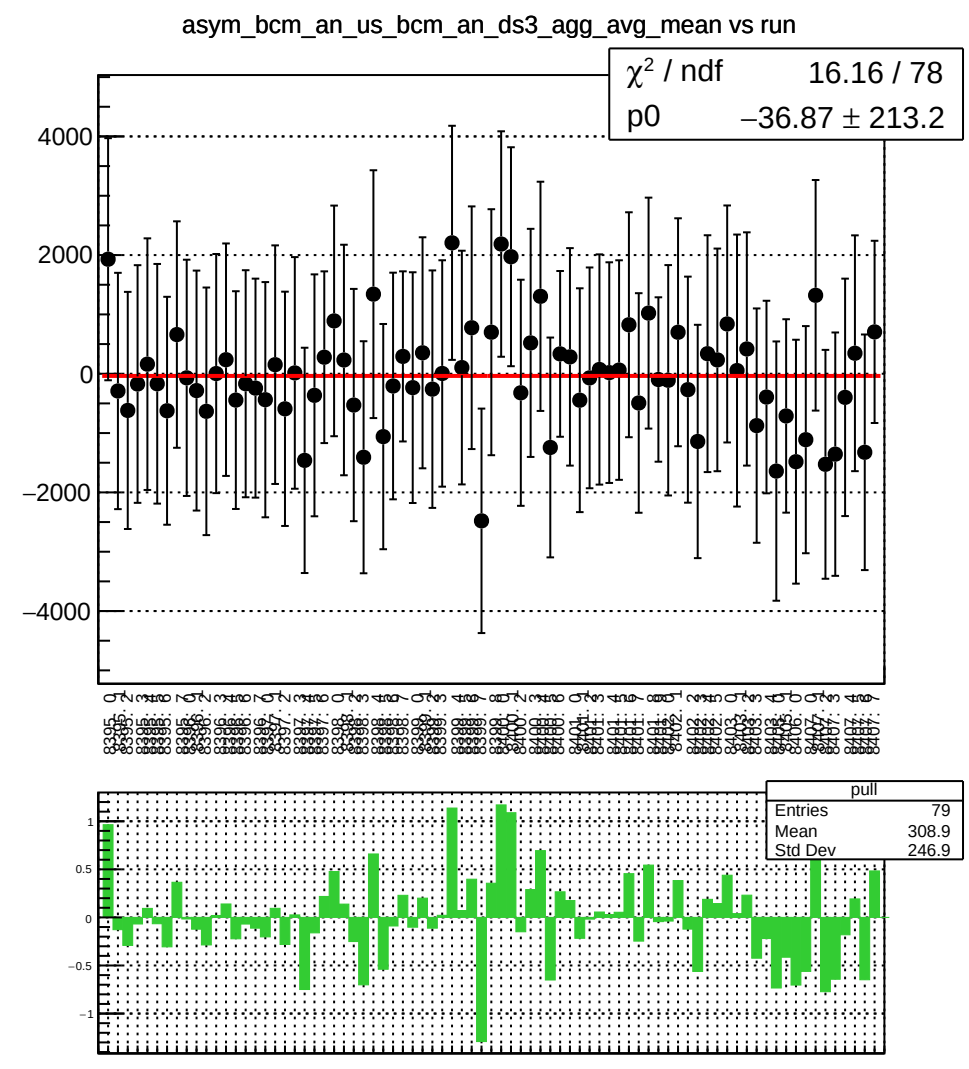

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4665 / 78
p0 15.33 ± 0.01245
19
18
17
16
15
14

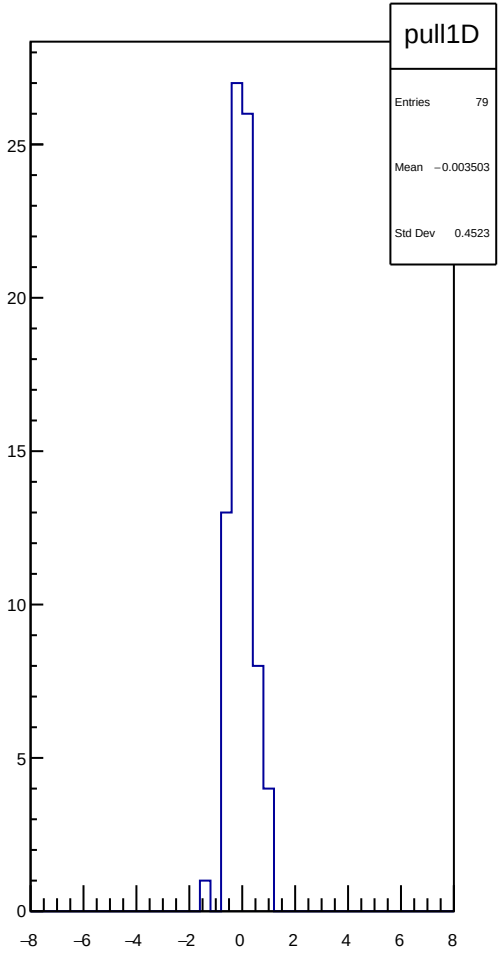

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 98.28 / 78
p0 −7.224 ± 23.91
pull
Entries 79
Mean 256
Std Dev 213
pull1D
Entries 79
Mean 0.01575
Std Dev 1.115

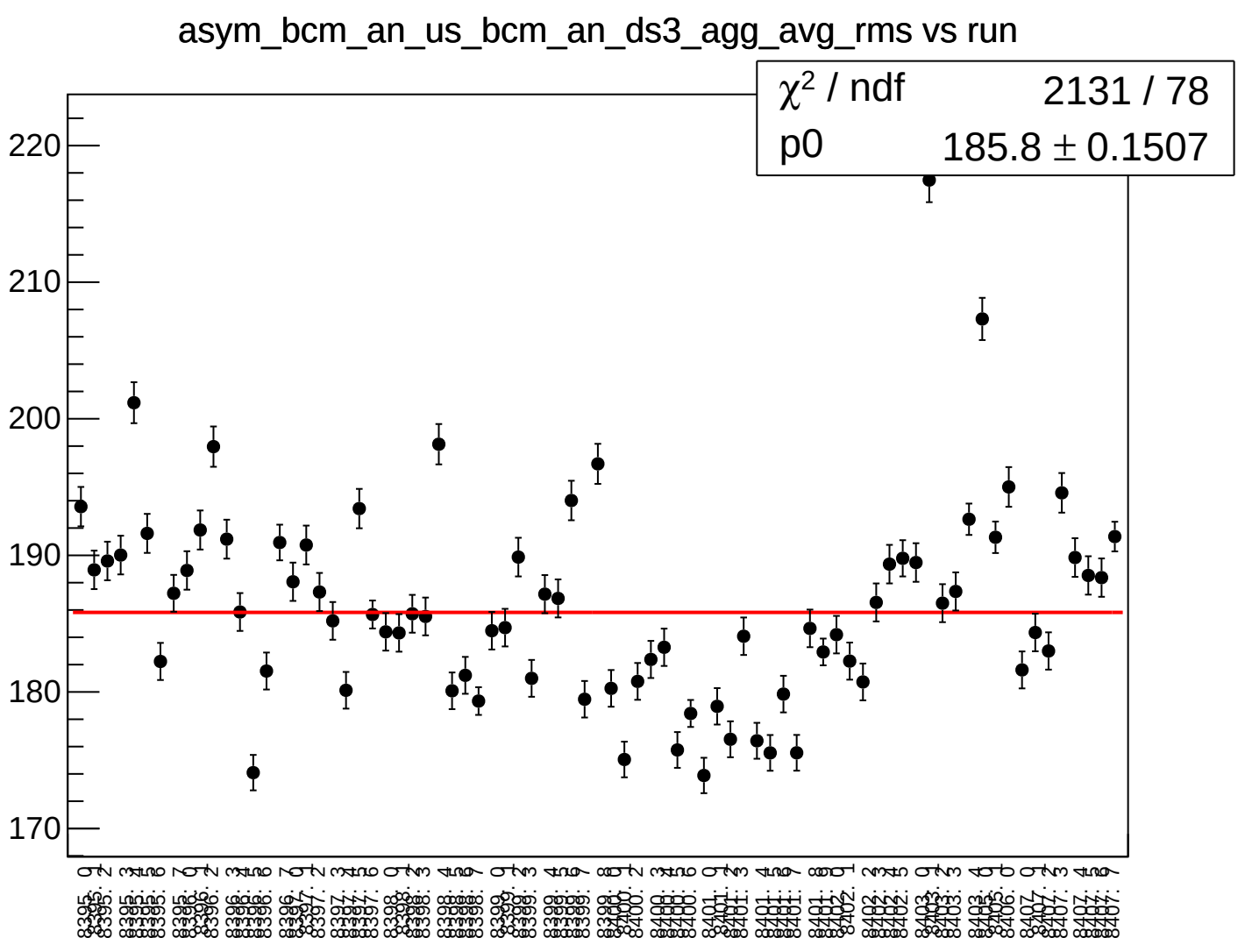

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 681.7 / 78
p0 20.85 ± 0.01691
22
21.5
21
20.5
20

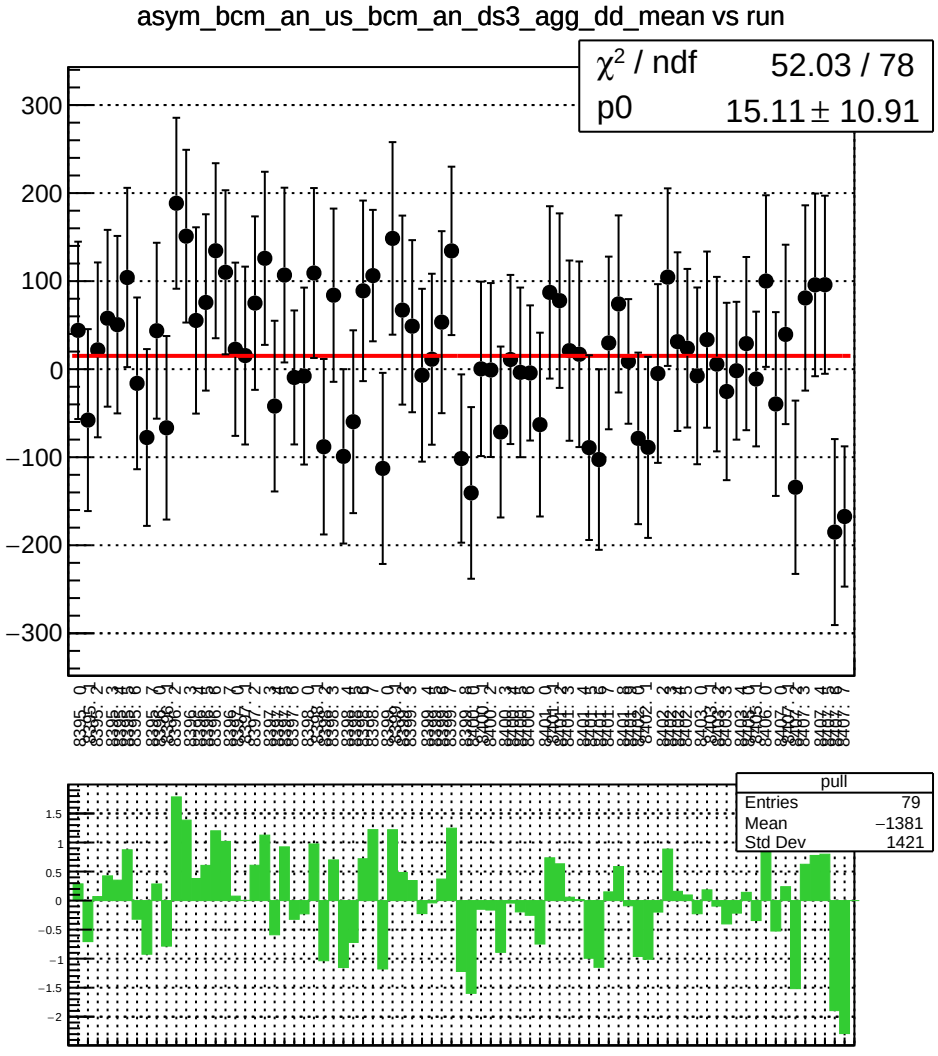

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 56.8 / 78
p0 16.45 ± 11.32
pull
Entries 79
Mean −531.8
Std Dev 571.8
pull1D
Entries 79
Mean 0.008951
Std Dev 0.8479

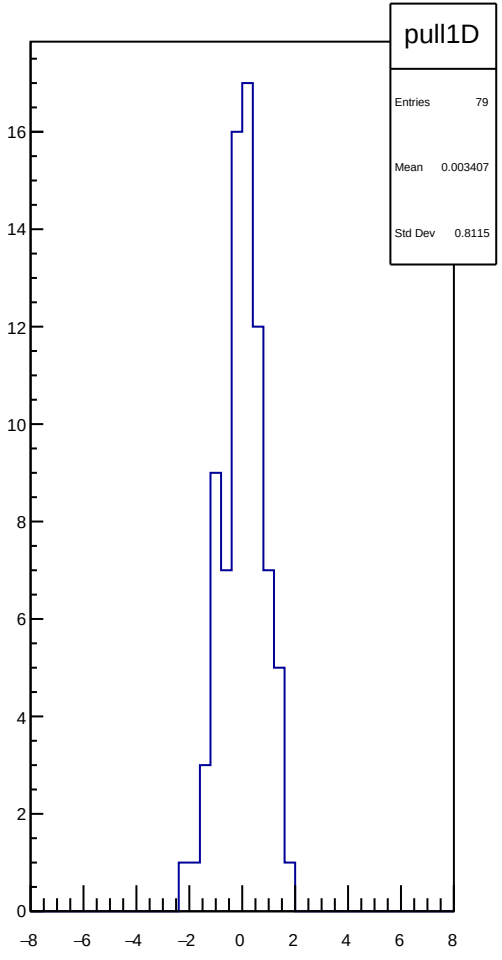

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1322 / 78
p0 9.869 ± 0.008004
10.8
10.6
10.4
10.2
10
9.8
9.6
9.4
9.2

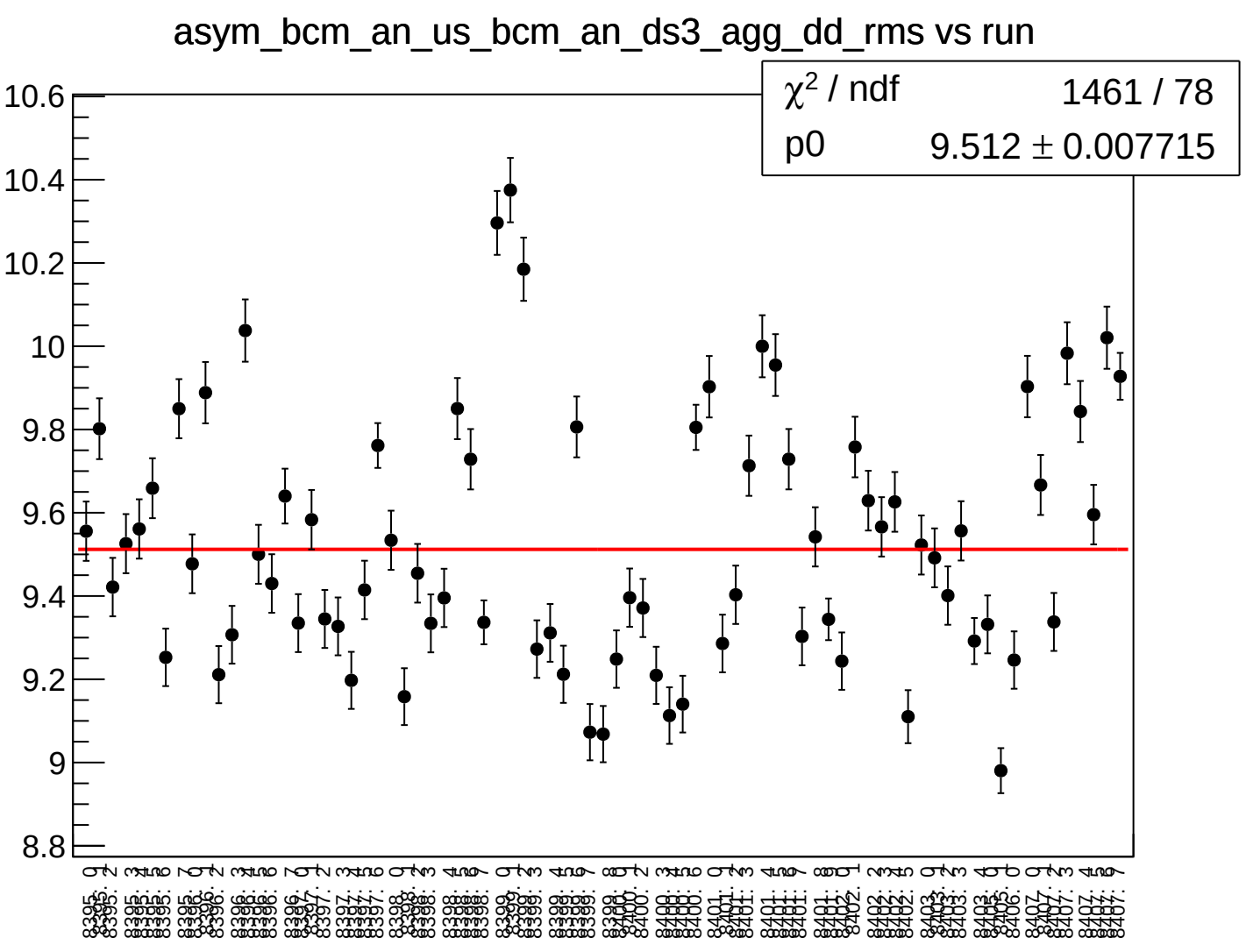

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 16.16 / 78
p0 −36.87 ± 213.2
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 308.9
Std Dev 246.9
1
0.5
0
−0.5
−1

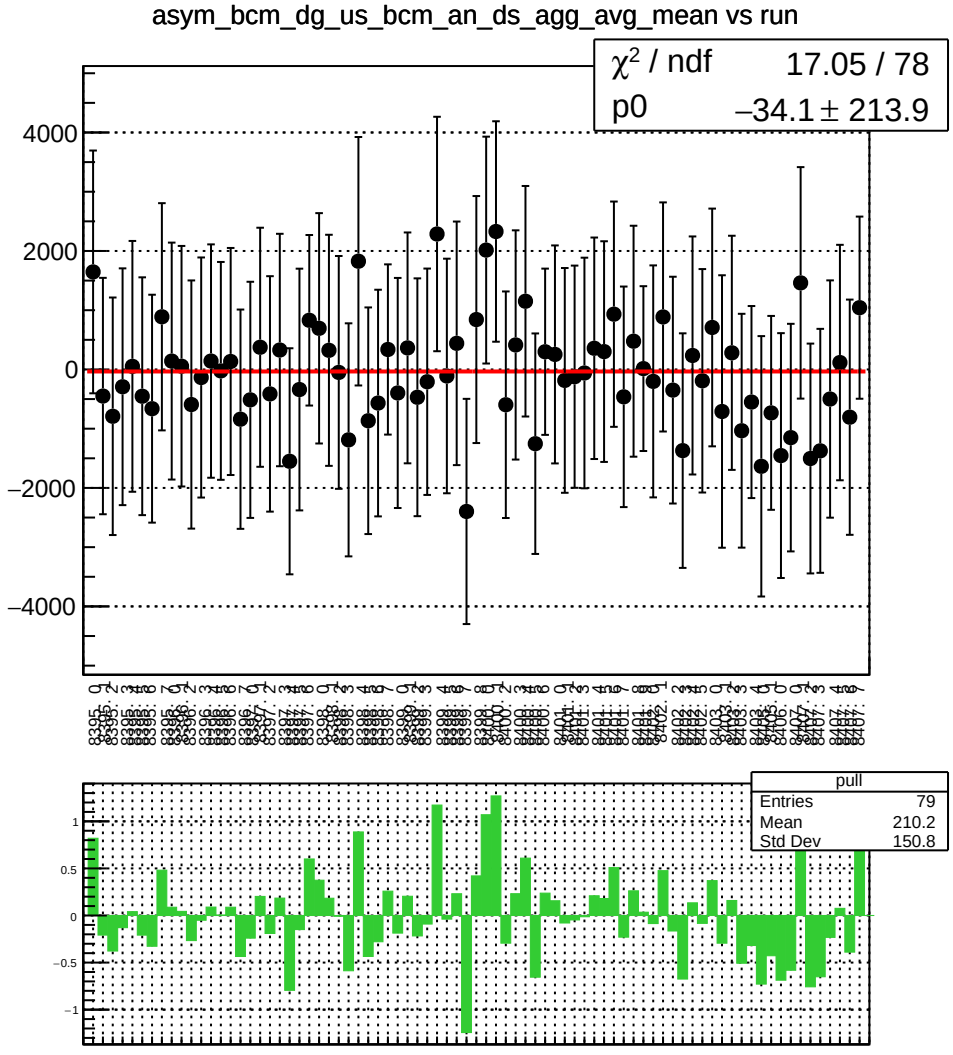

pull1D
Entries 79
Mean −0.003503
Std Dev 0.4523
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

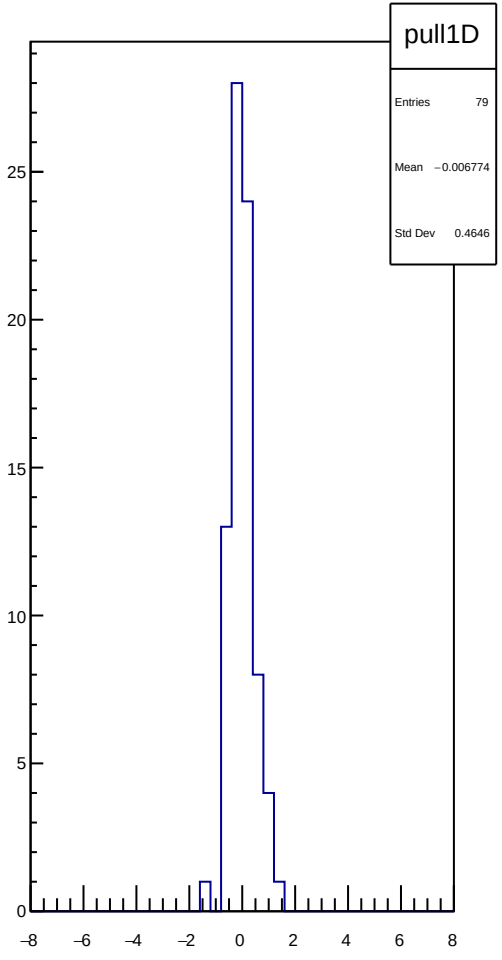

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 2131 / 78
p0 185.8 ± 0.1507
220
210
200
190
180
170

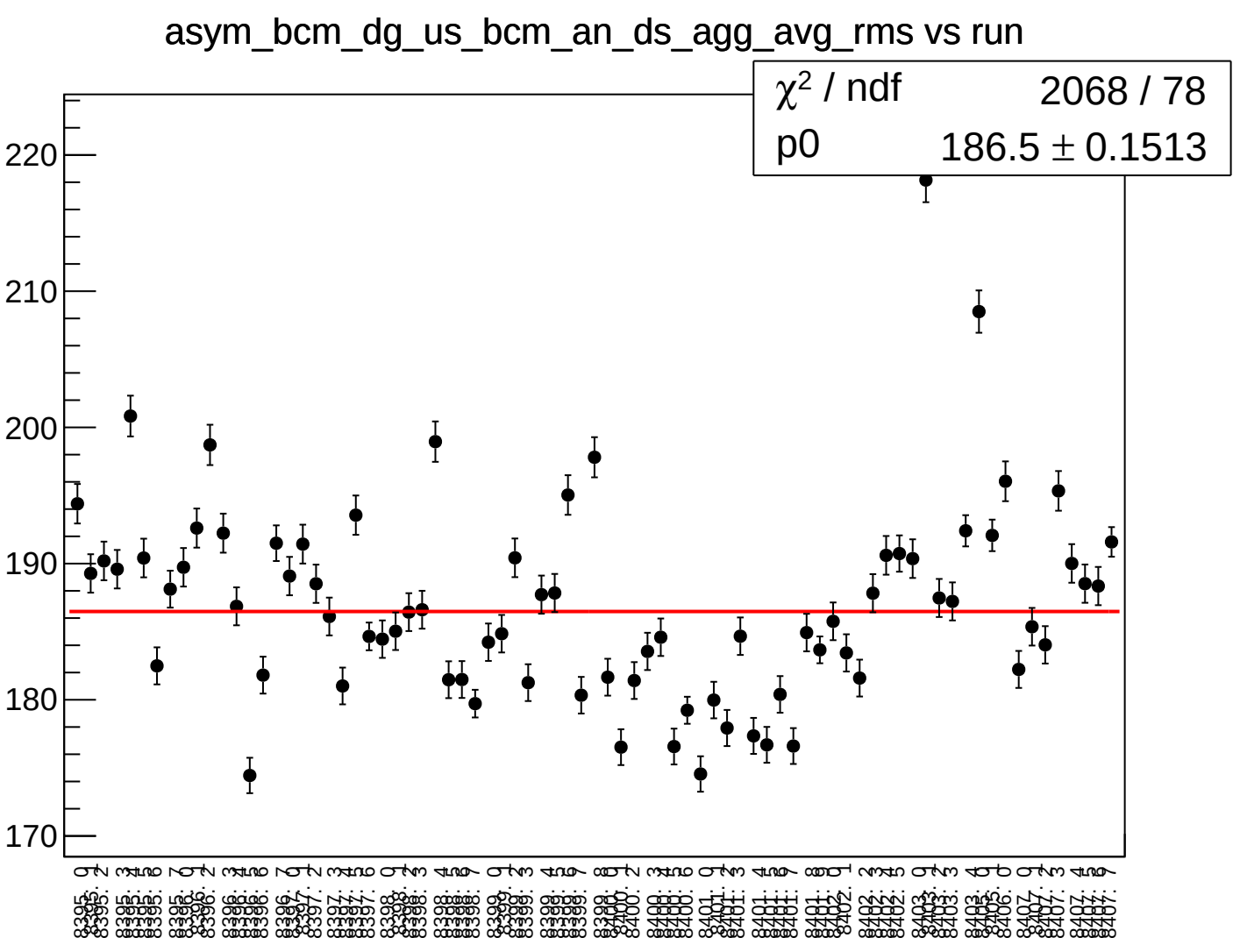

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 52.03 / 78
p0 15.11 ± 10.91
pull
Entries 79
Mean −1381
Std Dev 1421

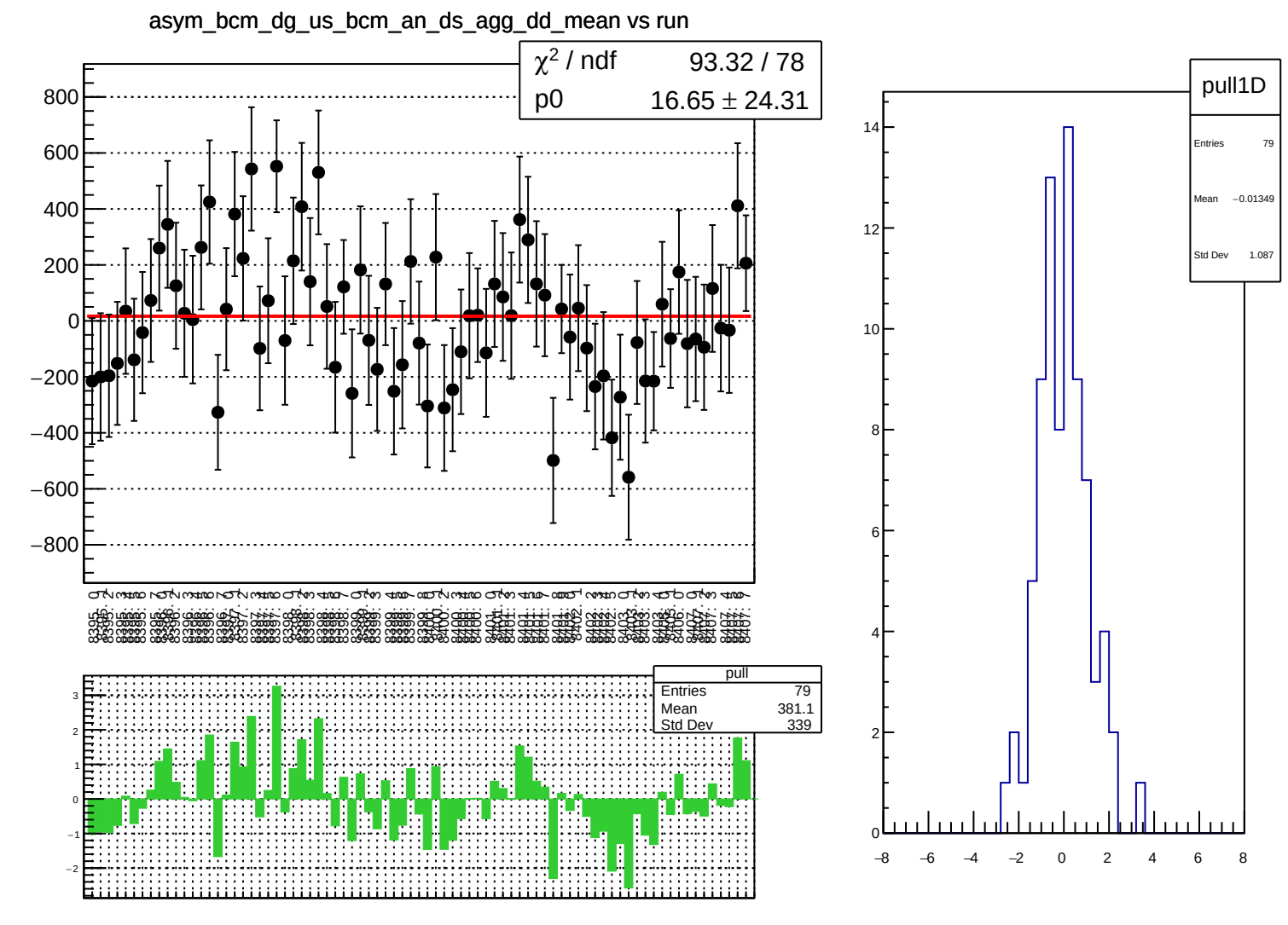

pull1D
Entries 79
Mean 0.003407
Std Dev 0.8115

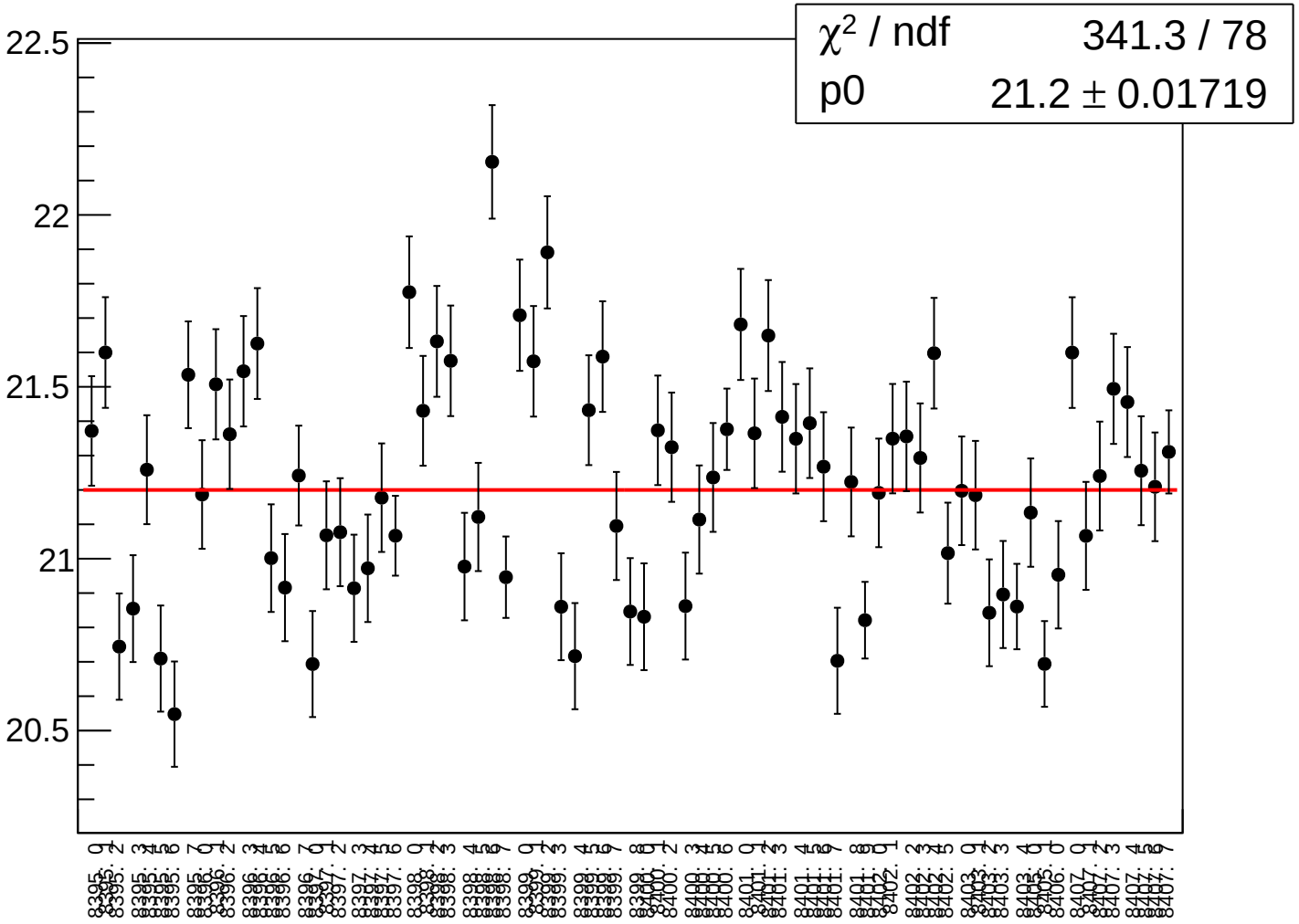

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1461 / 78
p0 9.512 ± 0.007715
10.6
10.4
10.2
10
9.8
9.6
9.4
9.2
9
8.8

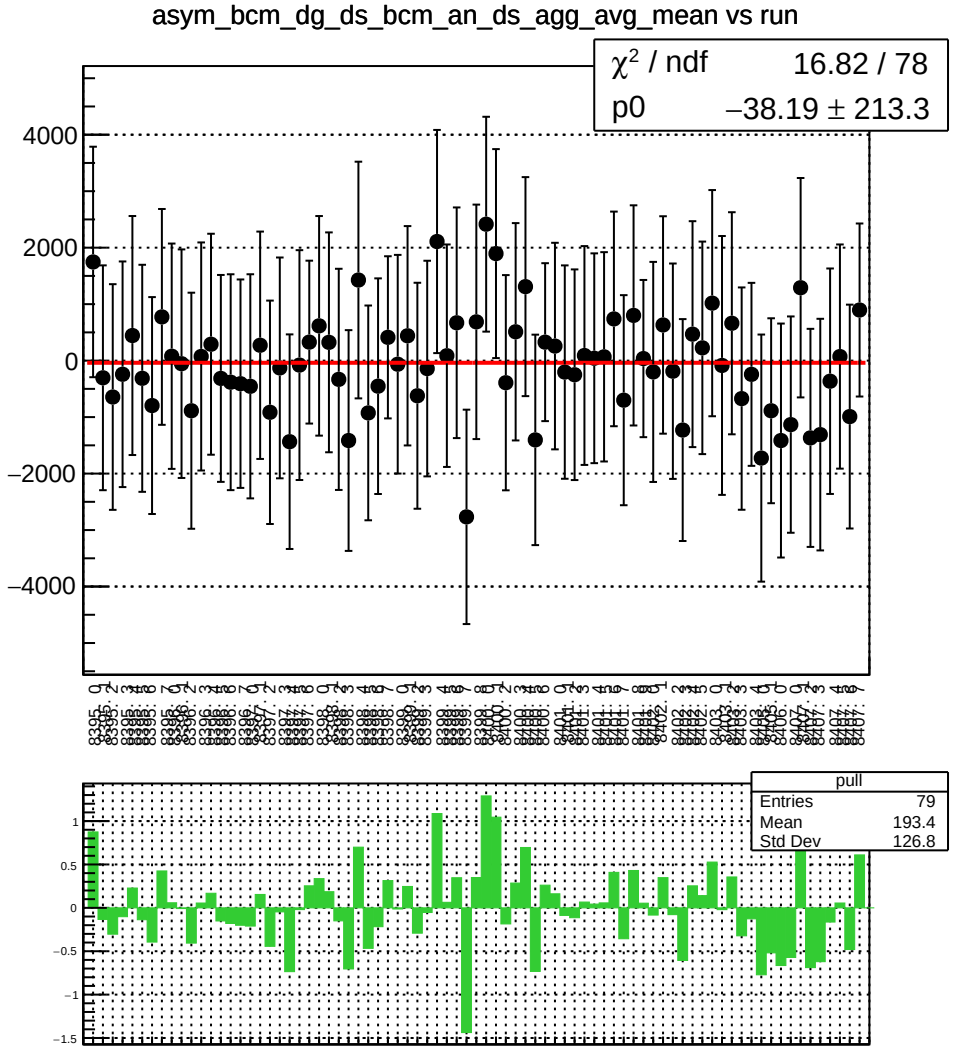

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.05 / 78
p0 −34.1 ± 213.9
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 210.2
Std Dev 150.8
1
0.5
0
−0.5
−1

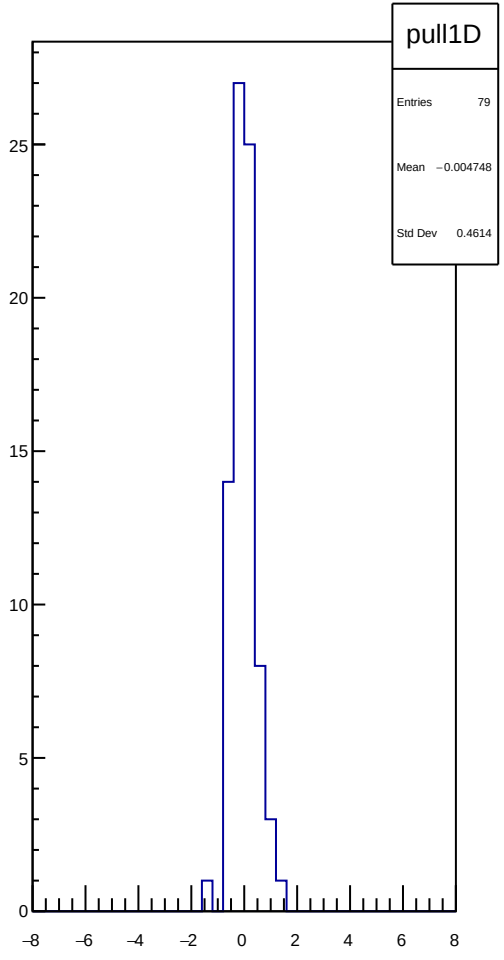

pull1D
Entries 79
Mean −0.006774
Std Dev 0.4646
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

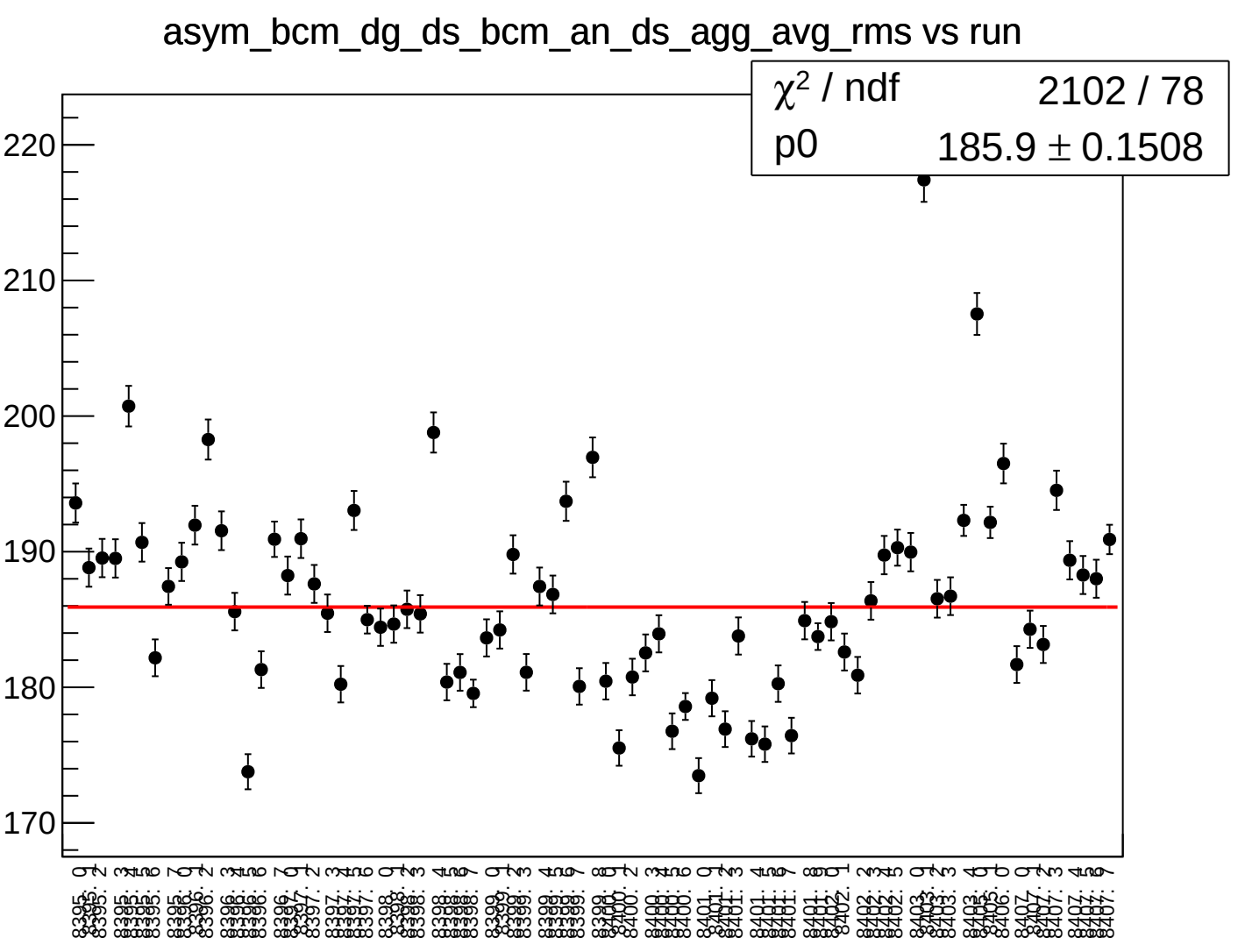

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2068 / 78
p0 186.5 ± 0.1513
220
210
200
190
180
170

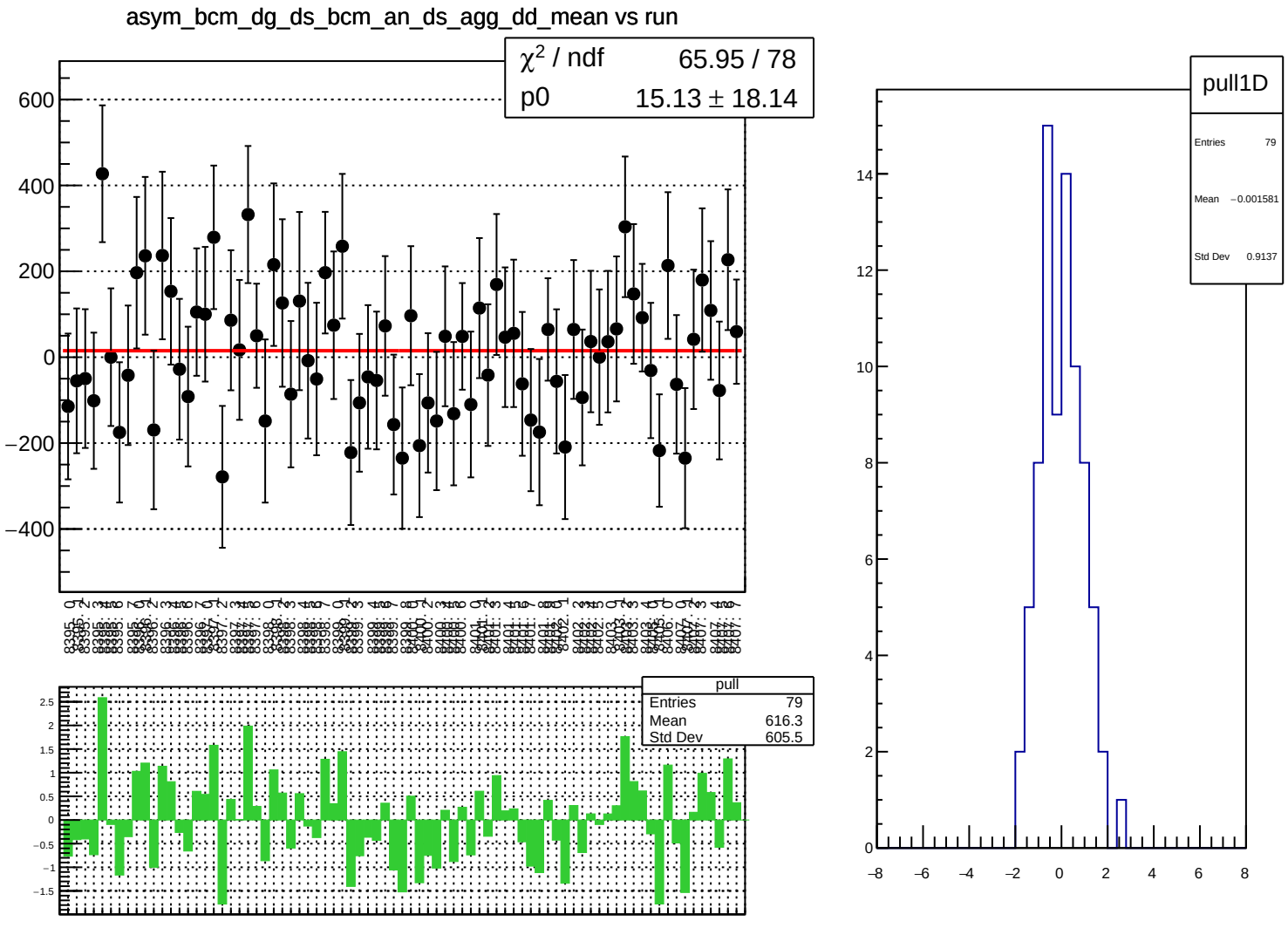

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 93.32 / 78
p0 16.65 ± 24.31
pull
Entries 79
Mean 381.1
Std Dev 339
pull1D
Entries 79
Mean −0.01349
Std Dev 1.087

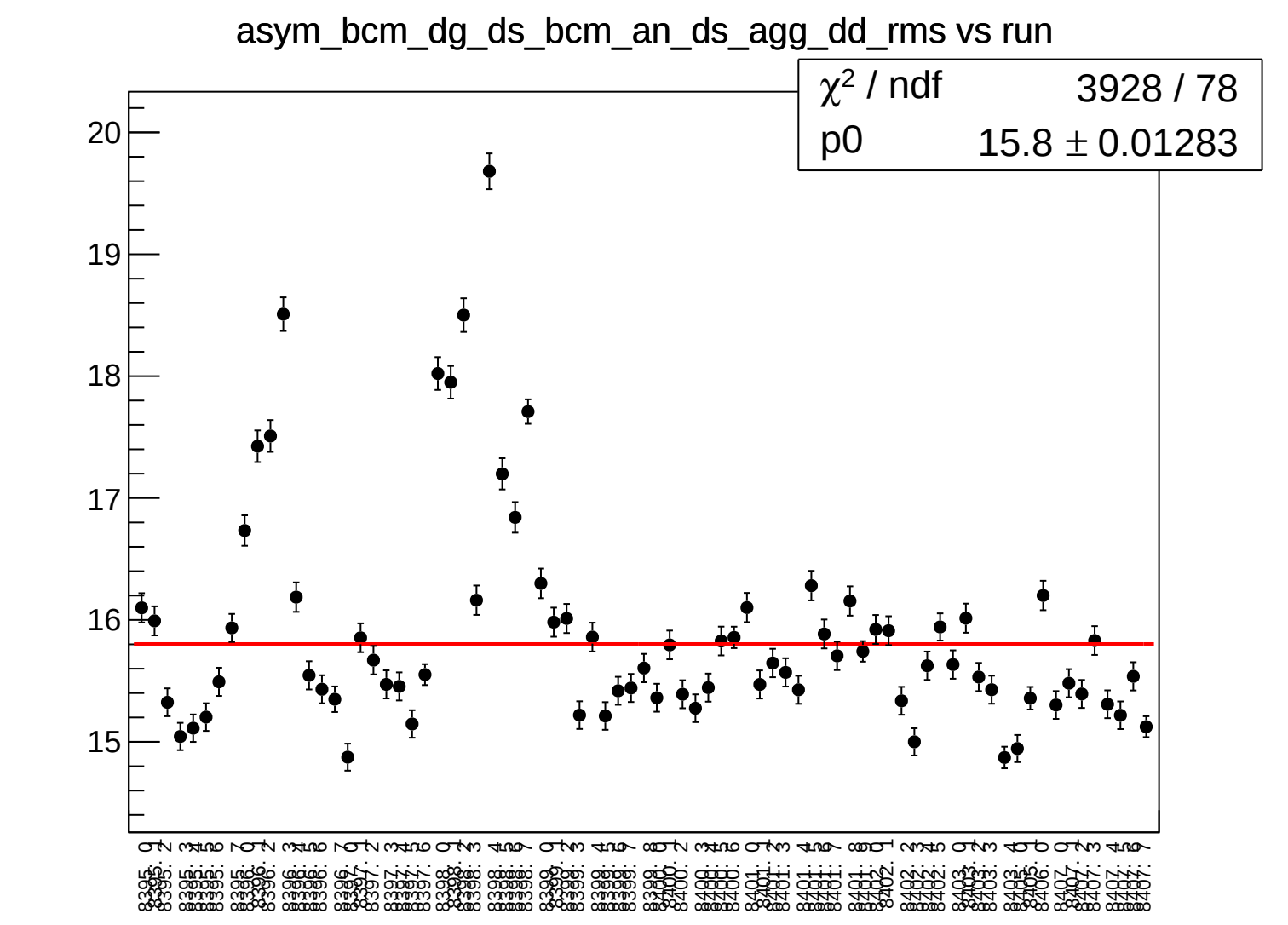

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 341.3 / 78
p0 21.2 ± 0.01719
22.5
22
21.5
21
20.5

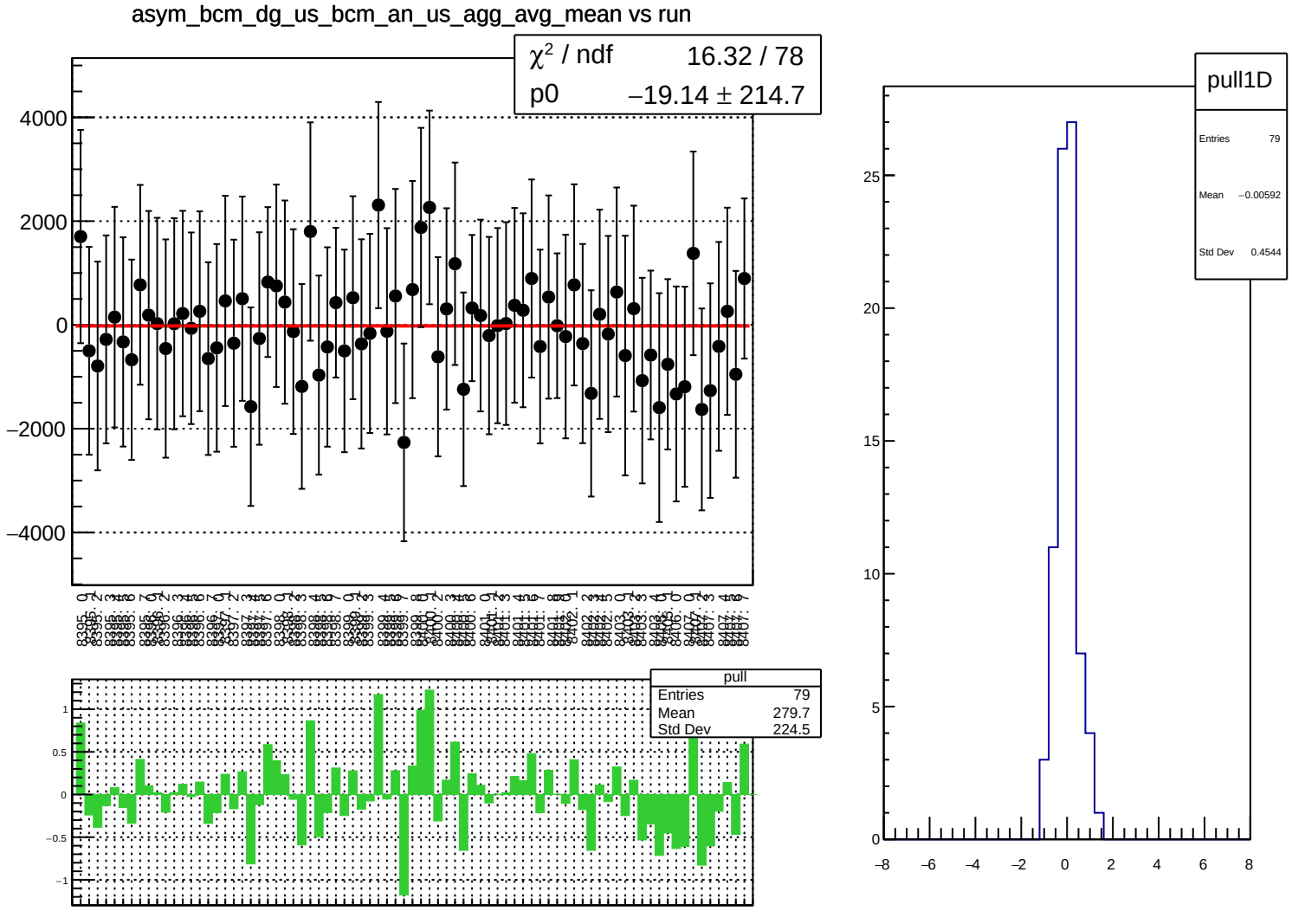

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.82 / 78
p0 −38.19 ± 213.3
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 193.4
Std Dev 126.8
1
0.5
0
−0.5
−1
−1.5

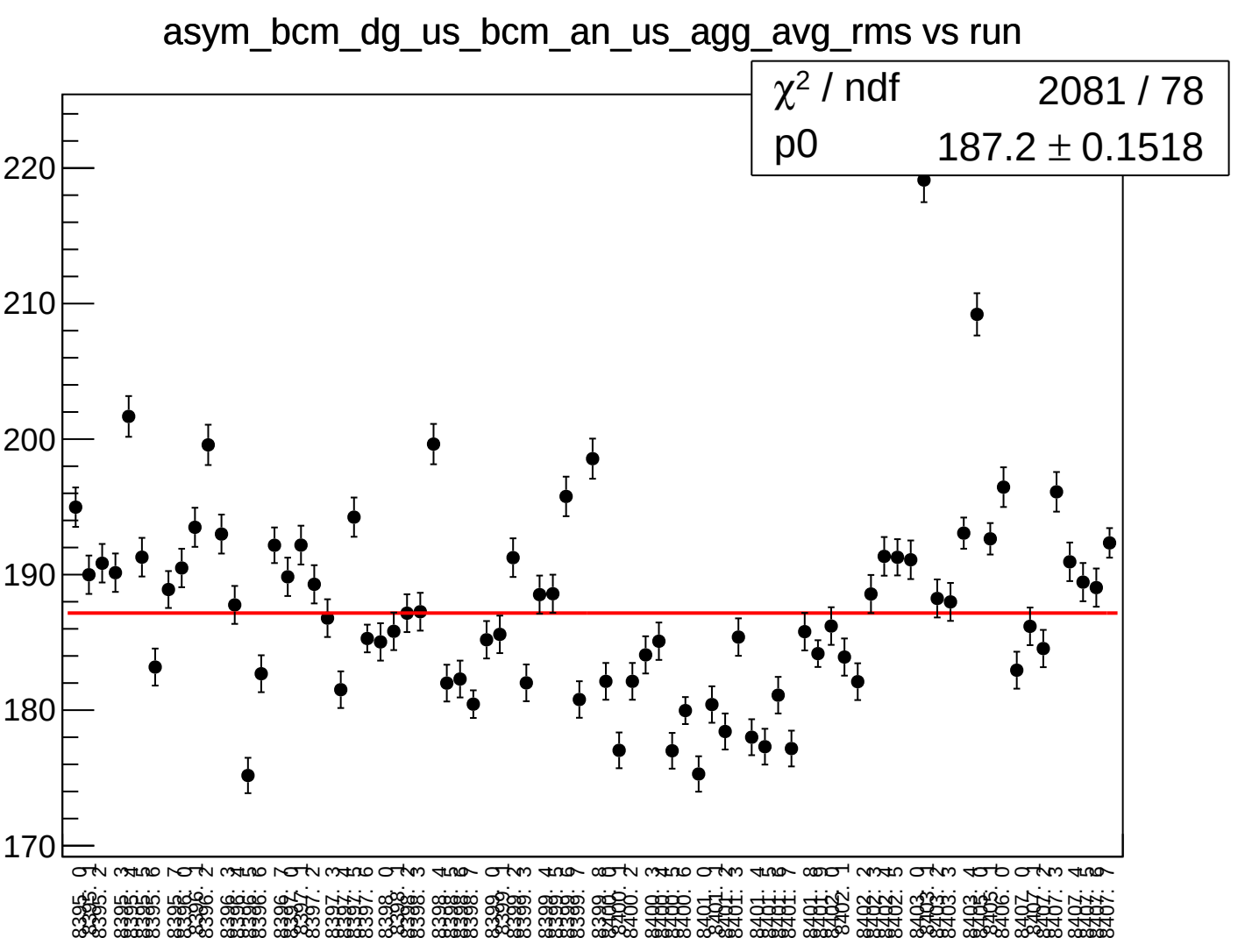

pull1D
Entries 79
Mean −0.004748
Std Dev 0.4614
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

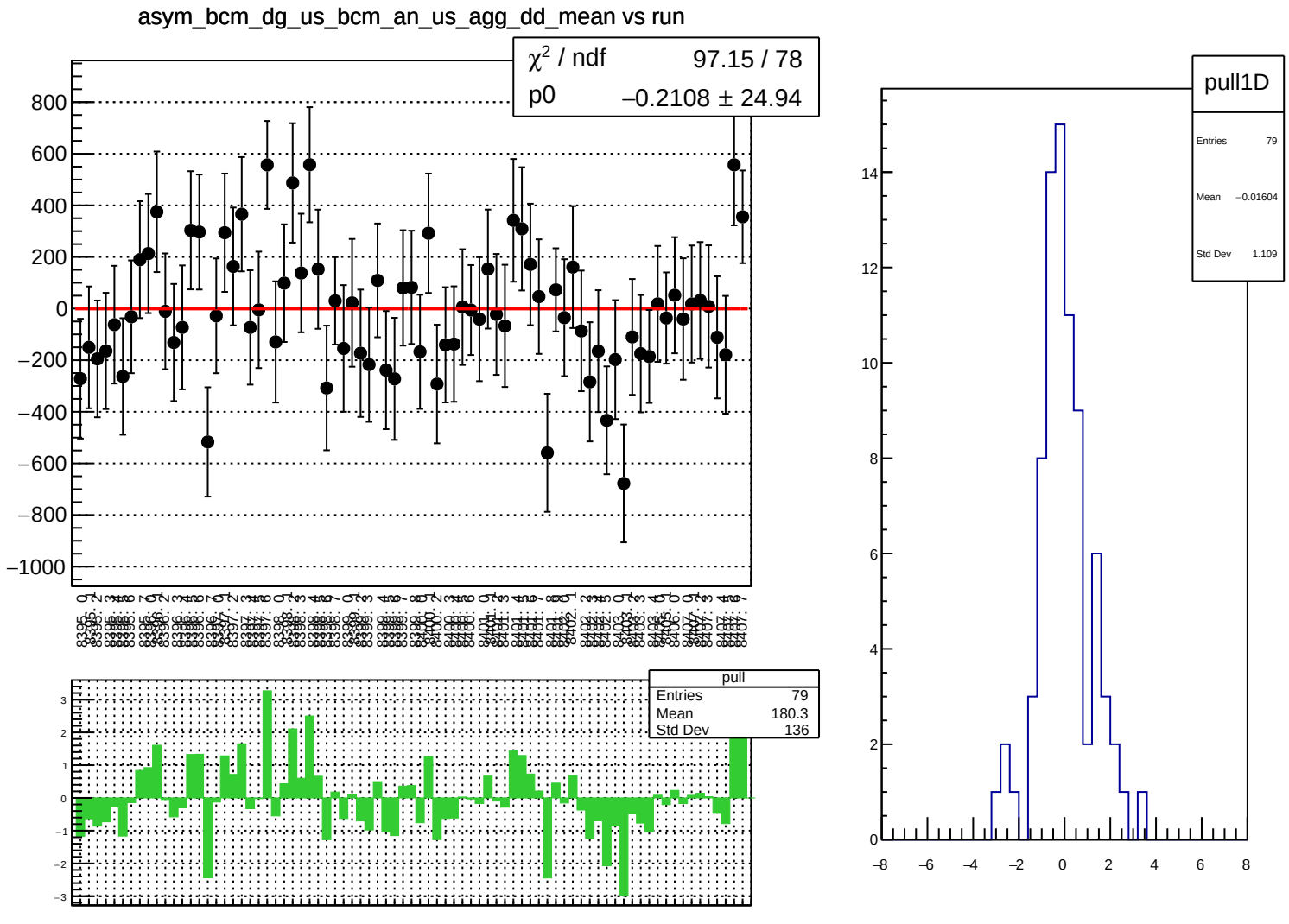

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2102 / 78
p0 185.9 ± 0.1508
220
210
200
190
180
170

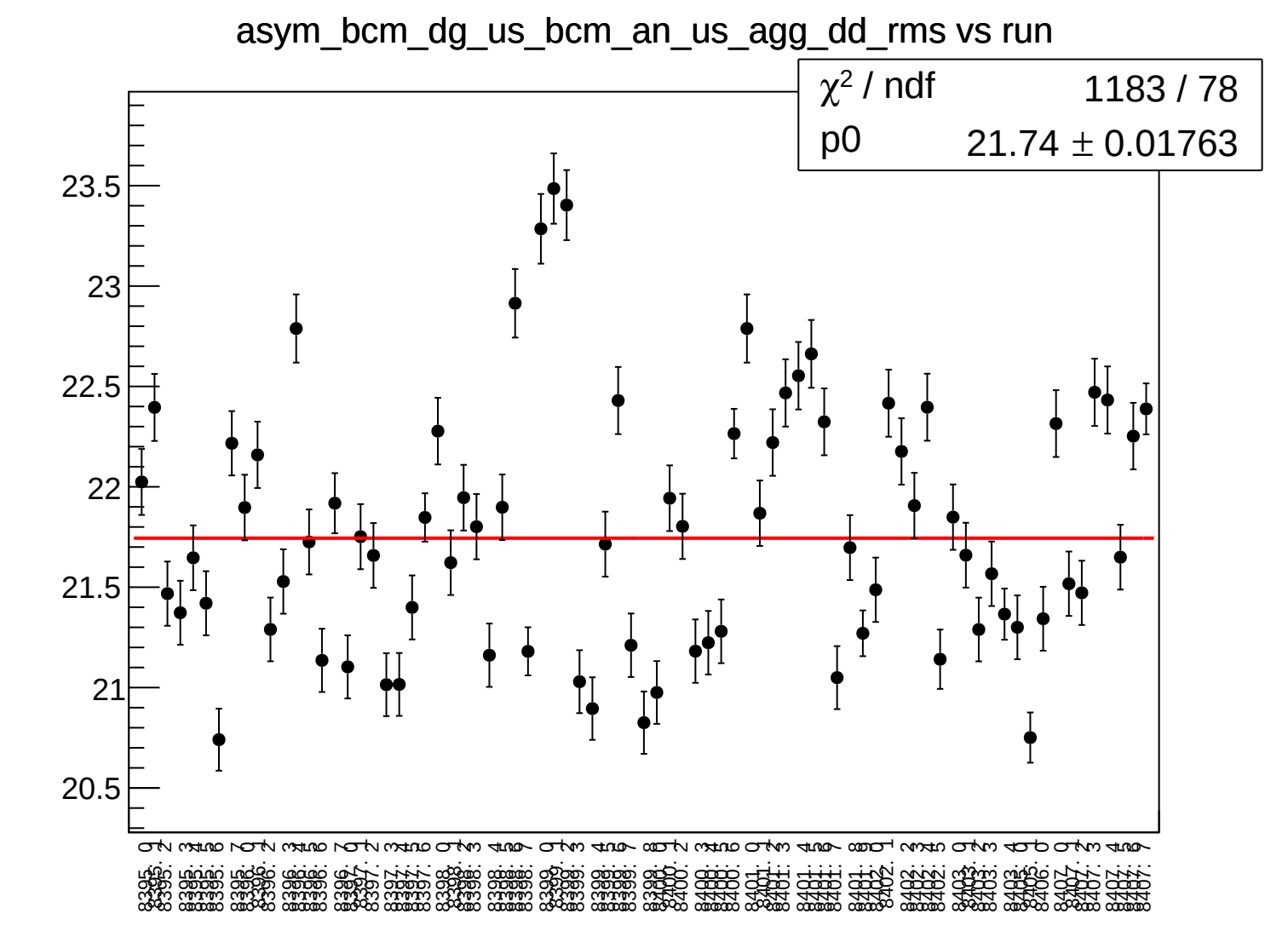

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 65.95 / 78
p0 15.13 ± 18.14
pull
Entries 79
Mean 616.3
Std Dev 605.5
pull1D
Entries 79
Mean −0.001581
Std Dev 0.9137

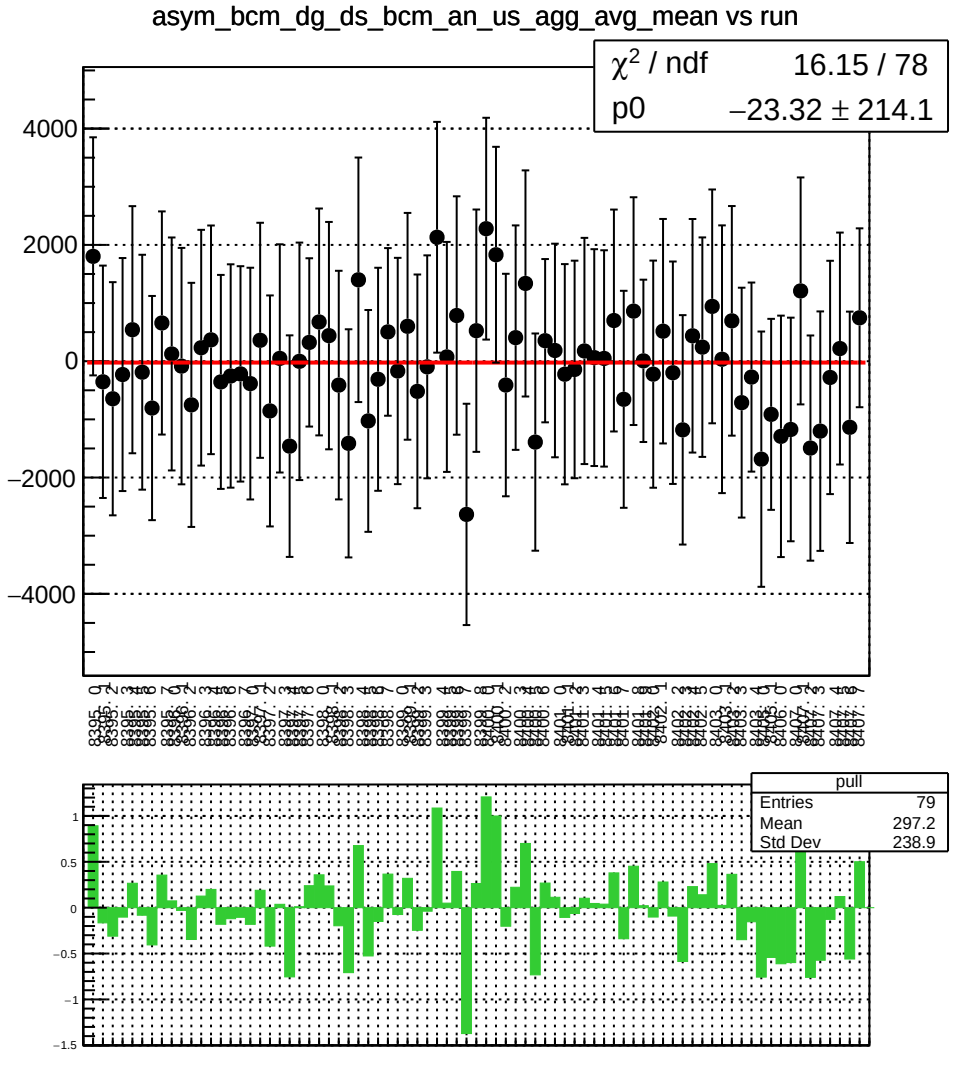

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3928 / 78
p0 15.8 ± 0.01283
20
19
18
17
16
15

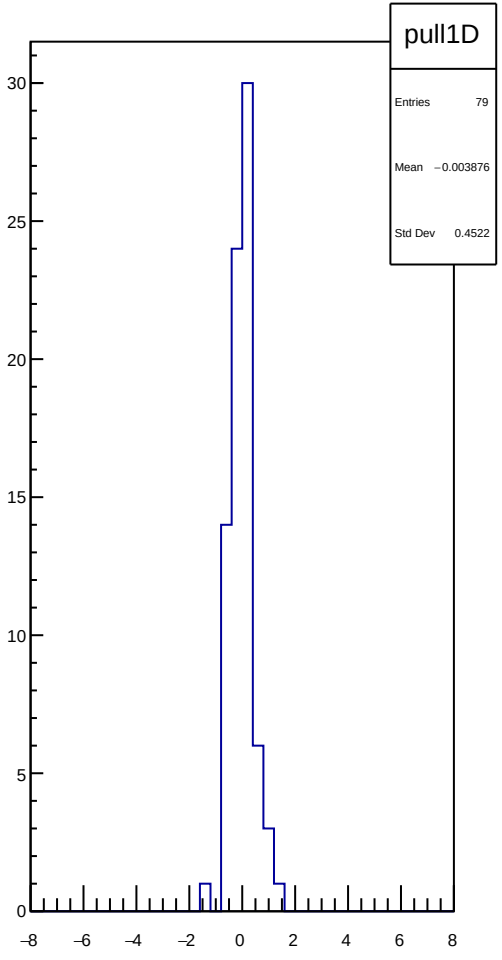

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.32 / 78
p0 −19.14 ± 214.7
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 279.7
Std Dev 224.5
1
0.5
0
−0.5
−1
pull1D
Entries 79
Mean −0.00592
Std Dev 0.4544
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

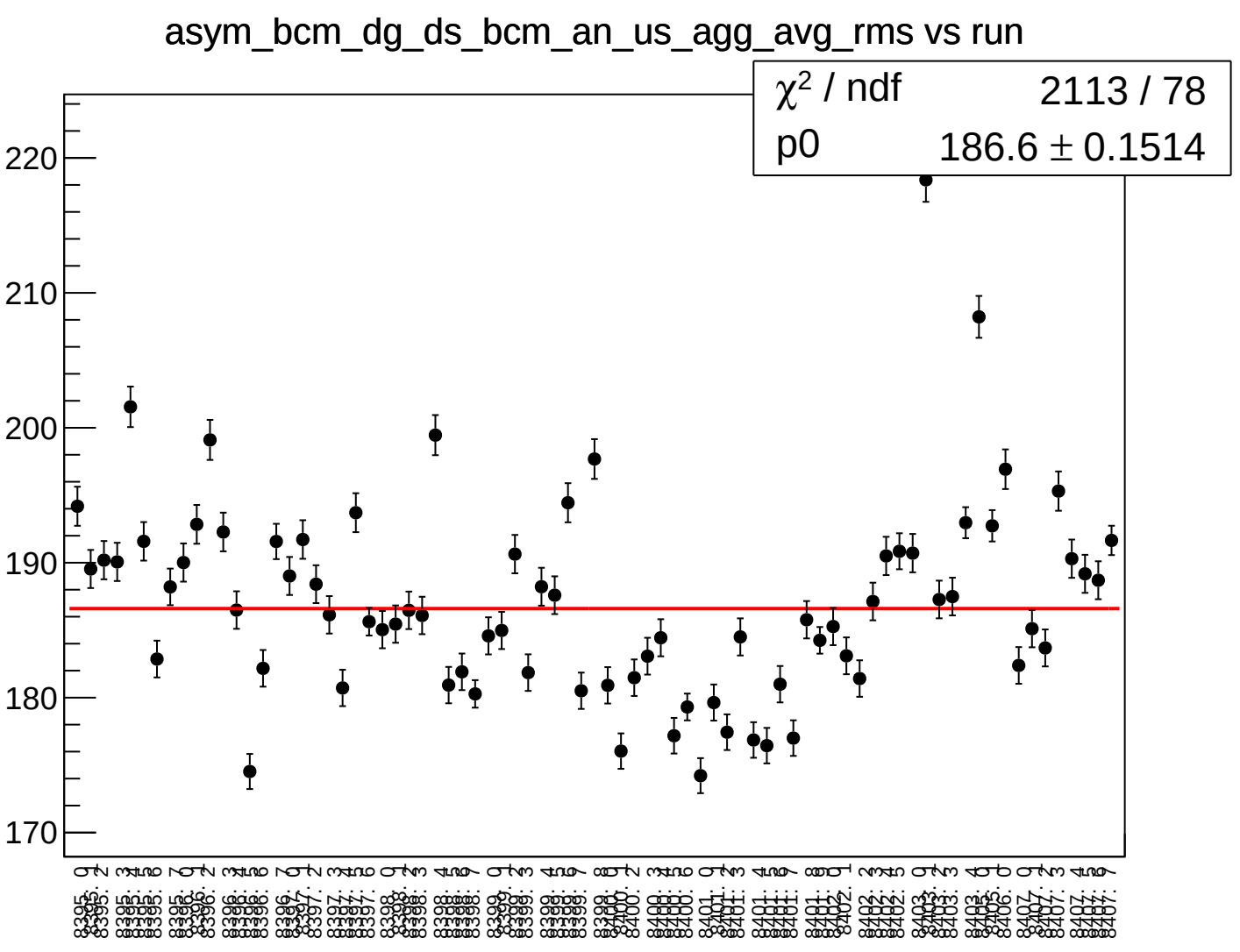

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2081 / 78
p0 187.2 ± 0.1518
220
210
200
190
180
170

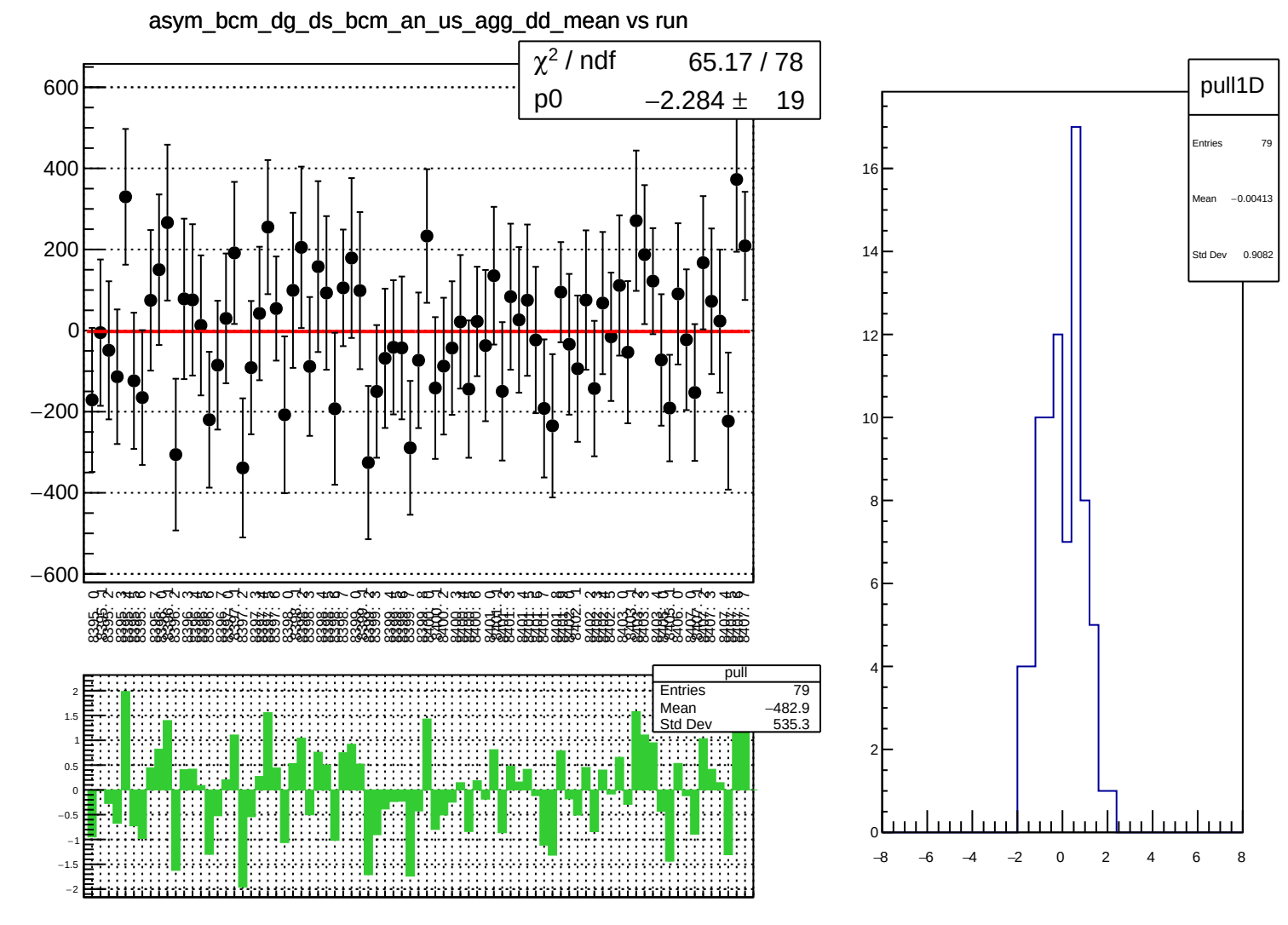

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 97.15 / 78
p0 −0.2108 ± 24.94
pull
Entries 79
Mean 180.3
Std Dev 136
pull1D
Entries 79
Mean −0.01604
Std Dev 1.109

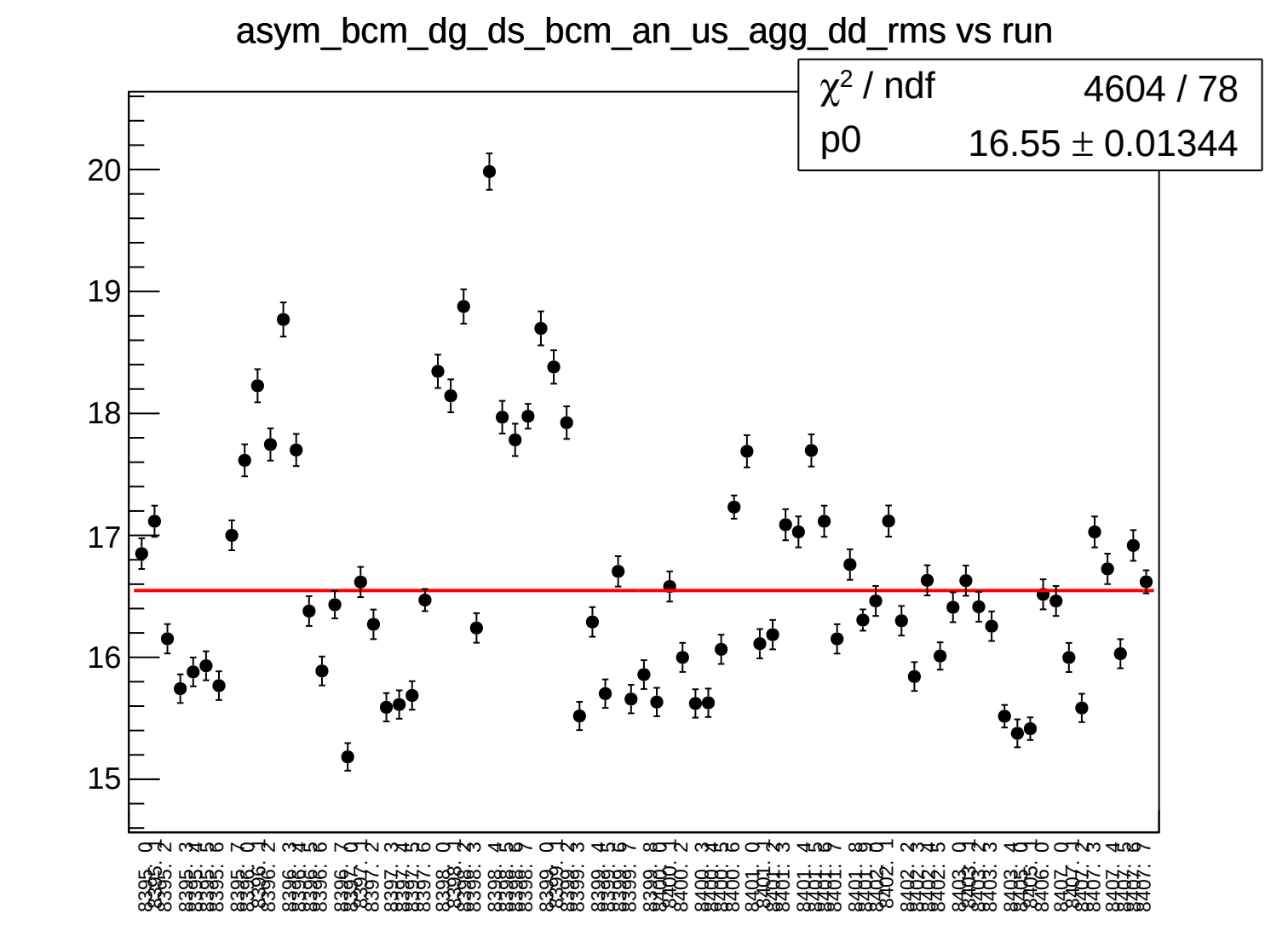

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1183 / 78
p0 21.74 ± 0.01763
23.5
23
22.5
22
21.5
21
20.5

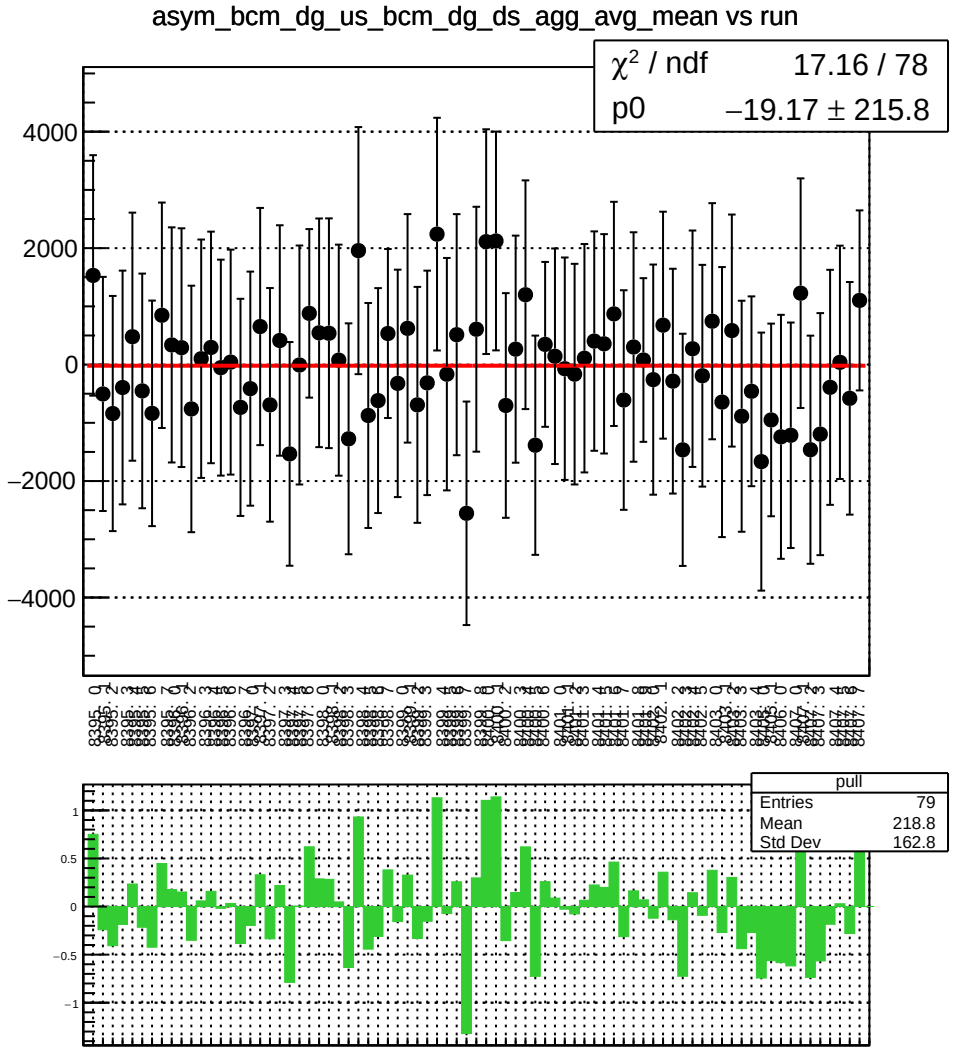

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.15 / 78
p0 −23.32 ± 214.1
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 297.2
Std Dev 238.9
1
0.5
0
−0.5
−1
−1.5

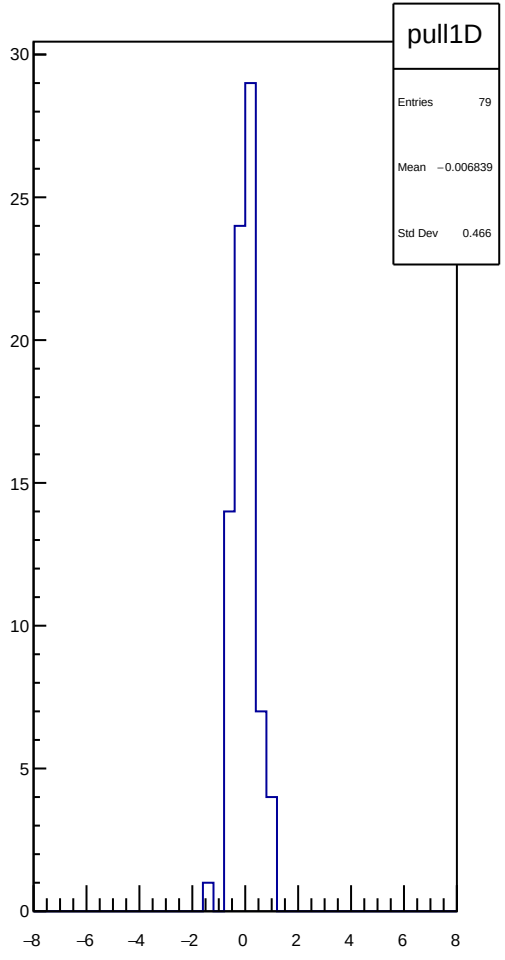

pull1D
Entries 79
Mean −0.003876
Std Dev 0.4522
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

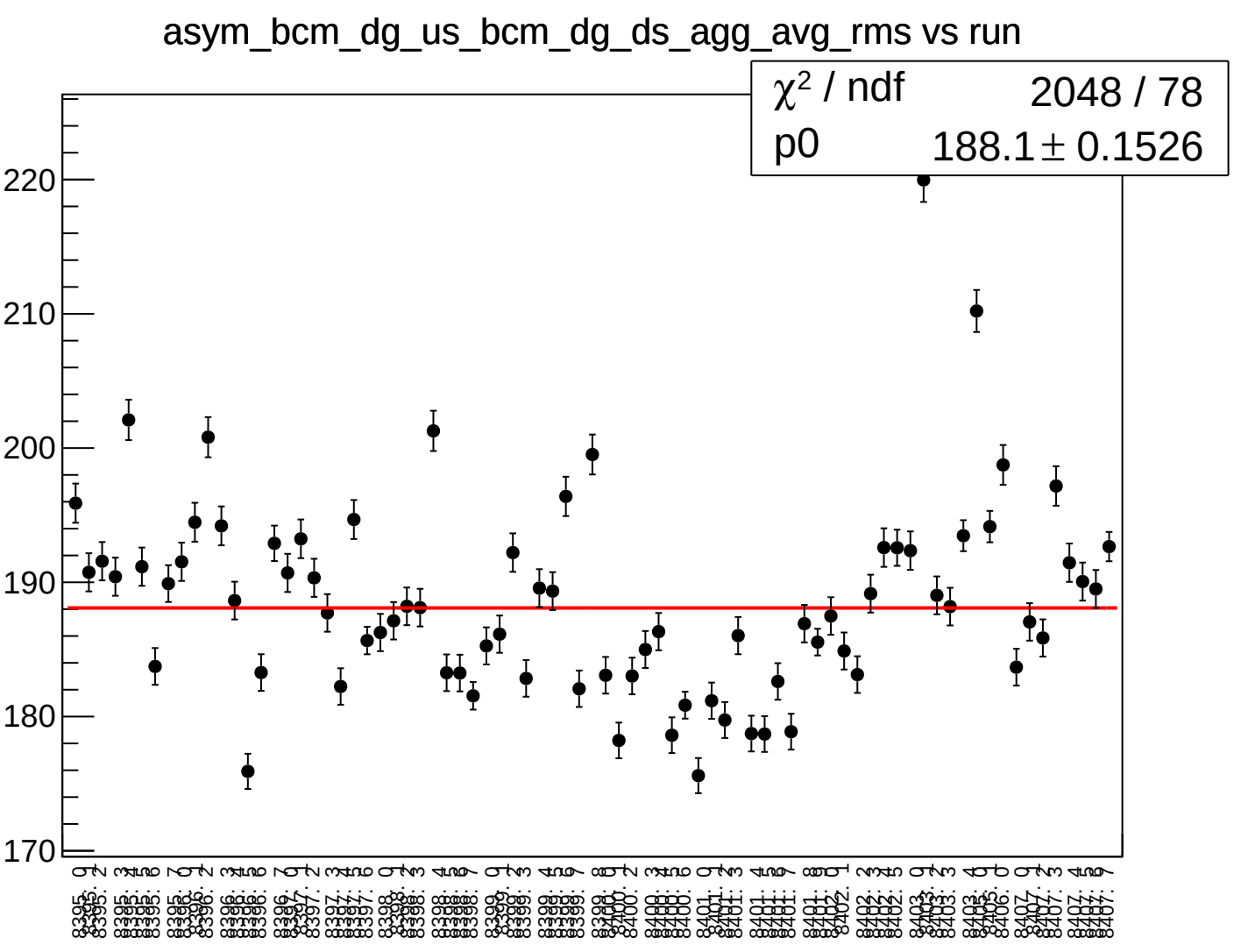

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2113 / 78
p0 186.6 ± 0.1514
220
210
200
190
180
170

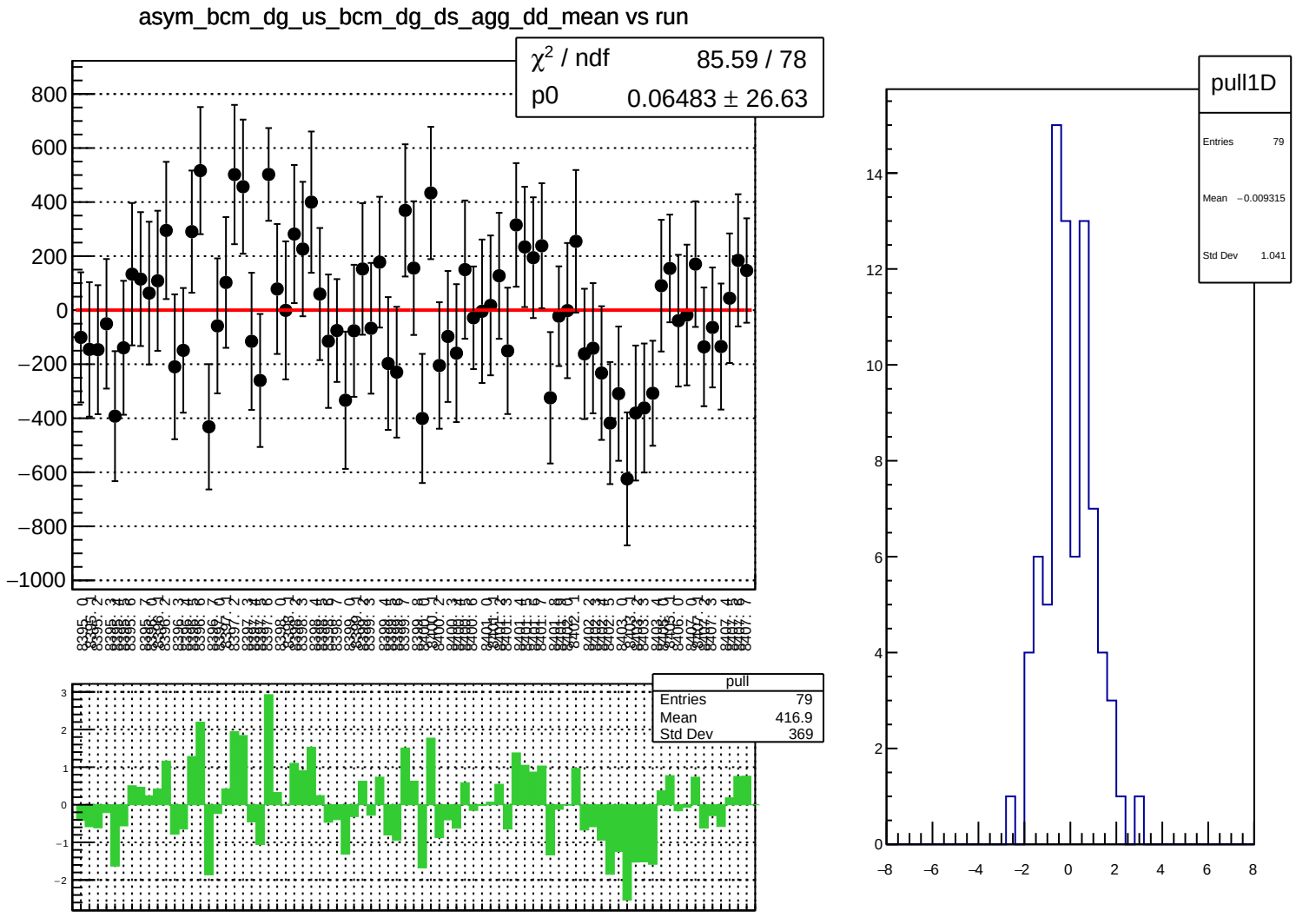

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 65.17 / 78
p0 −2.284 ± 19
pull
Entries 79
Mean −482.9
Std Dev 535.3
pull1D
Entries 79
Mean −0.00413
Std Dev 0.9082

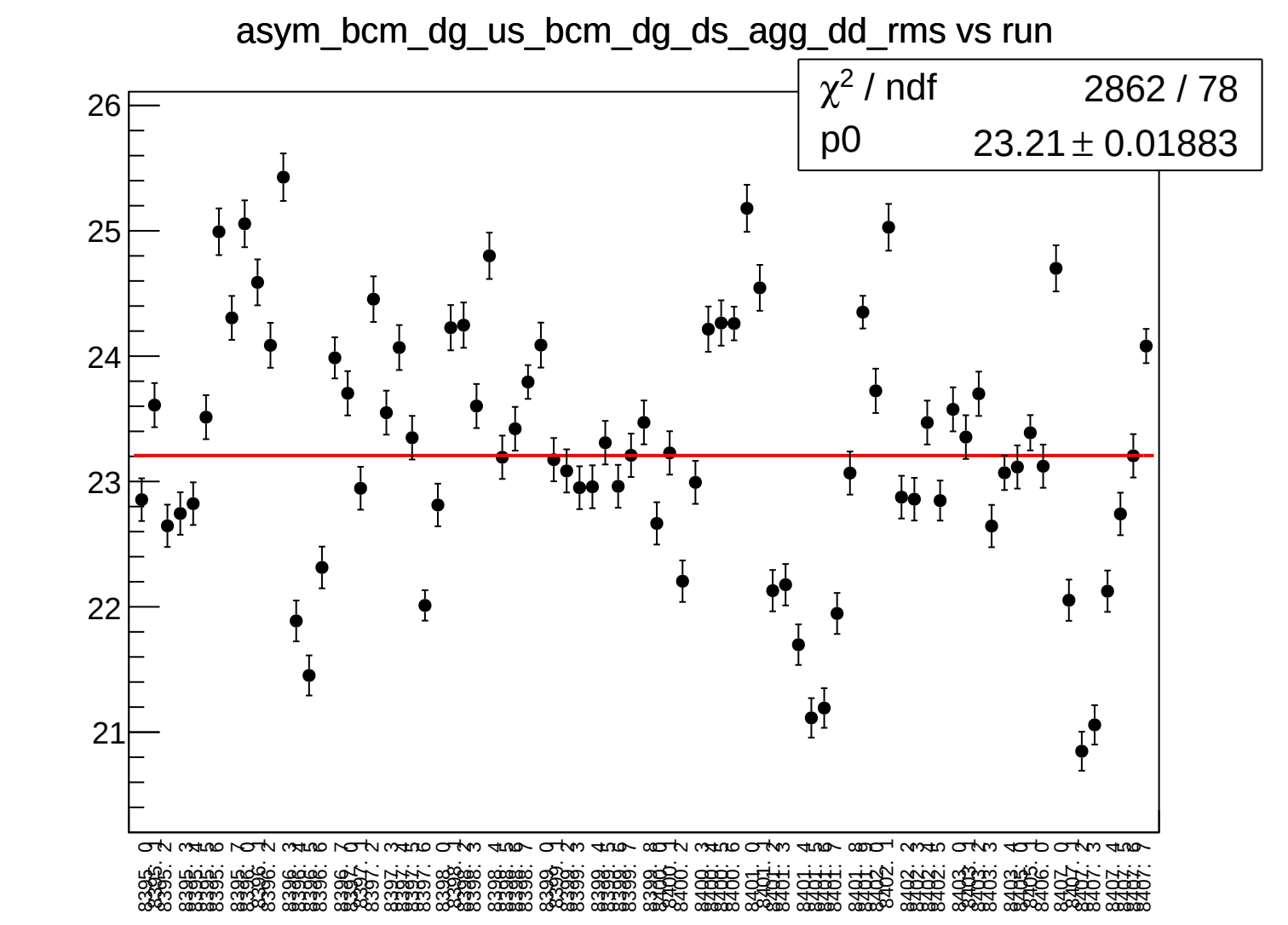

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4604 / 78
p0 16.55 ± 0.01344
20
19
18
17
16
15

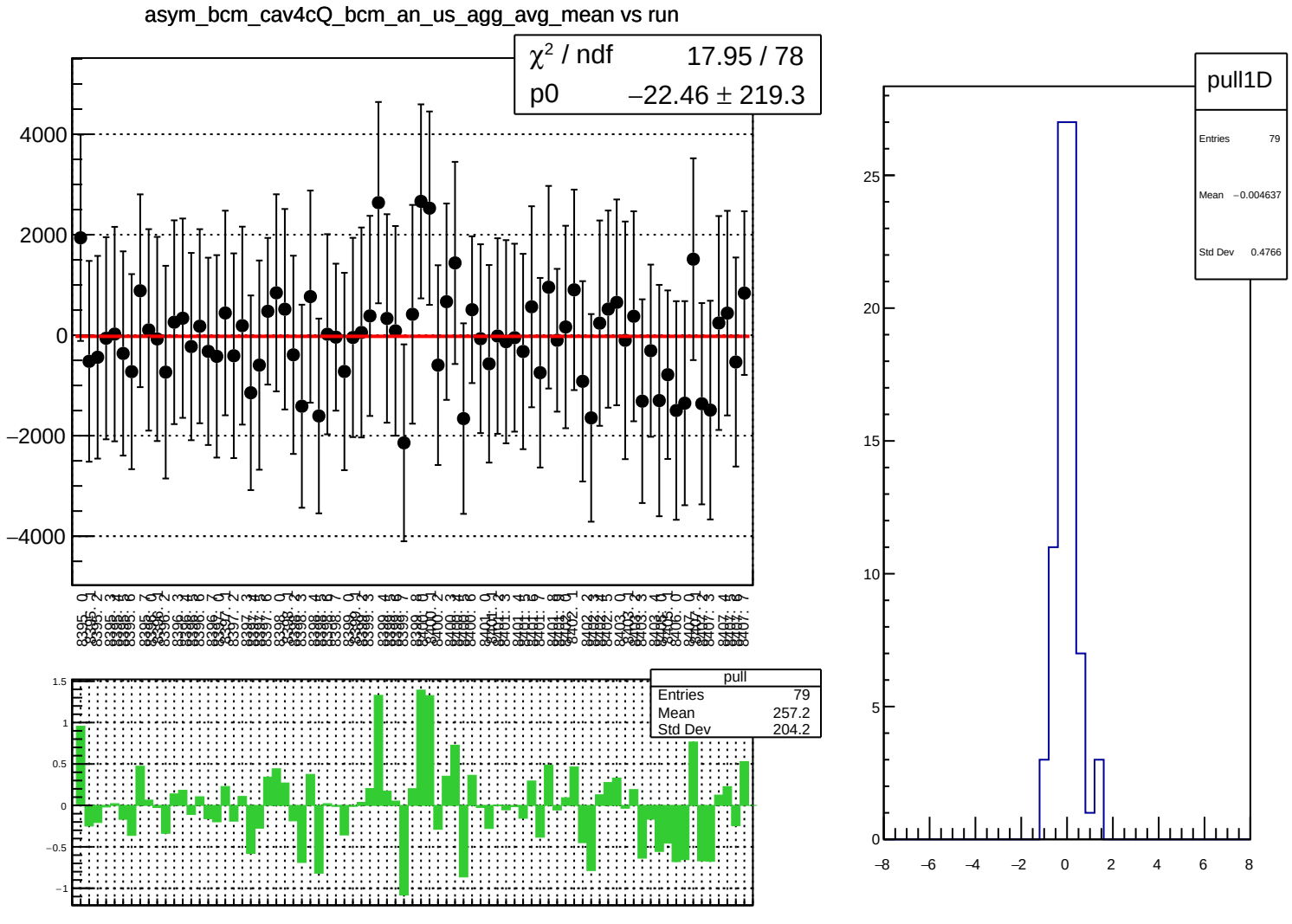

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 17.16 / 78
p0 −19.17 ± 215.8
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 218.8
Std Dev 162.8
1
0.5
0
−0.5
−1

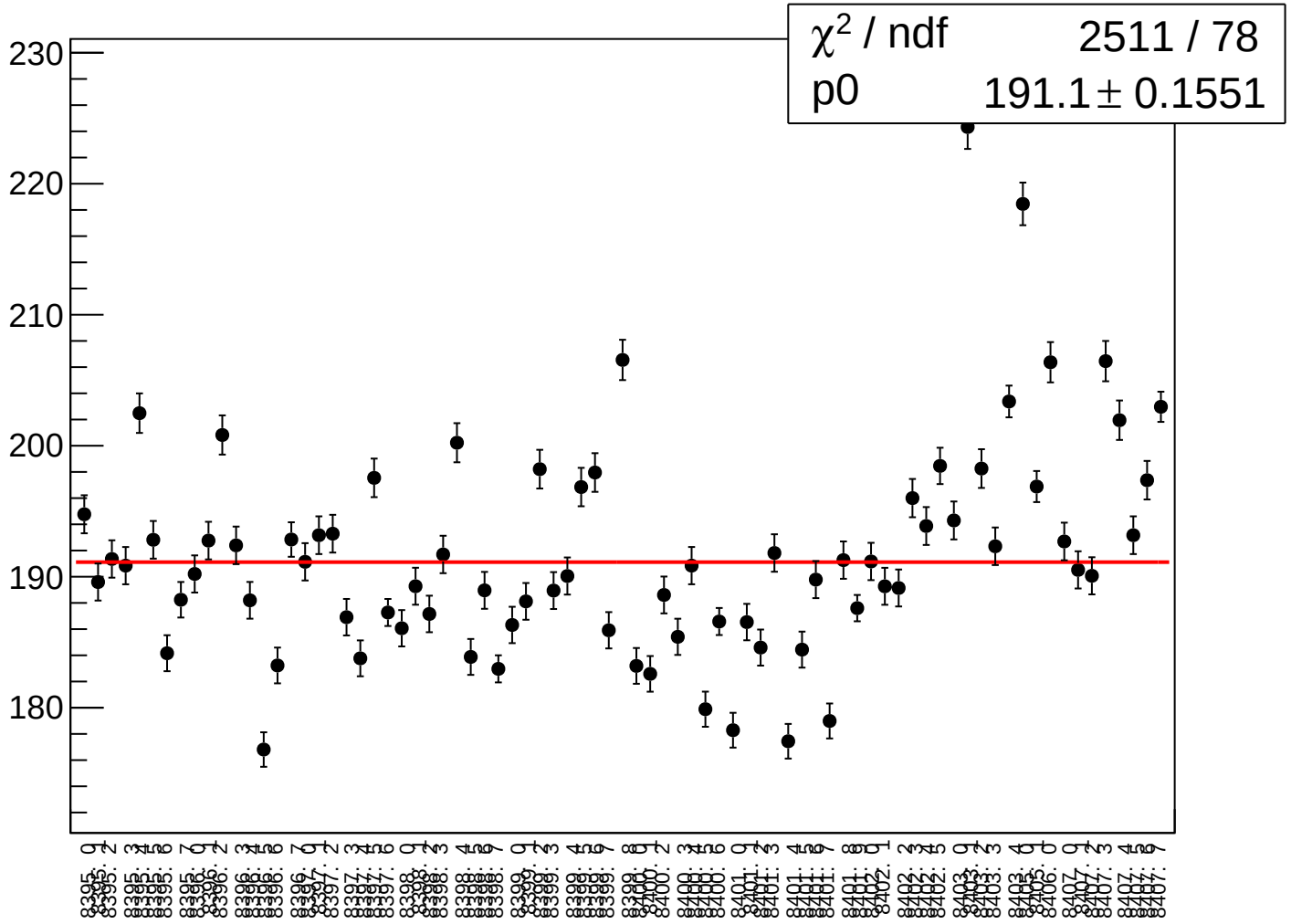

pull1D
Entries 79
Mean −0.006839
Std Dev 0.466
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

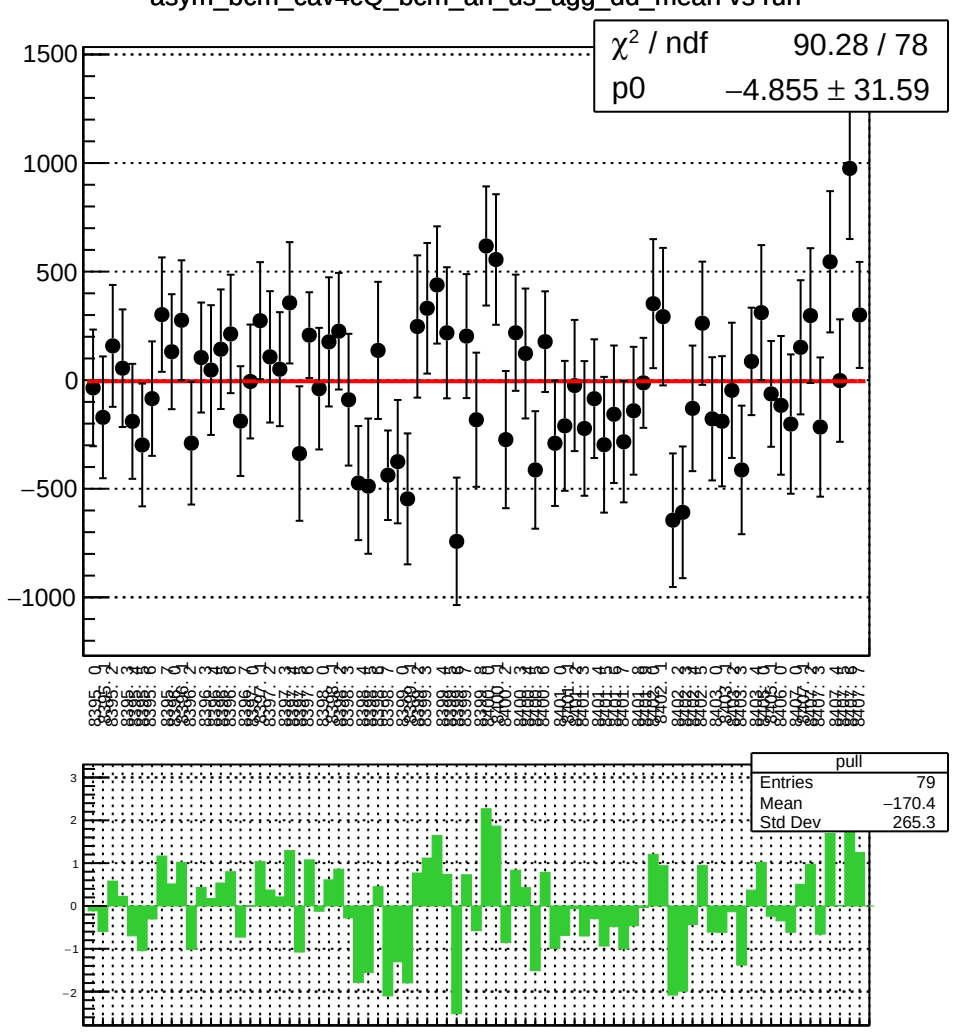

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2048 / 78
p0 188.1 ± 0.1526
220
210
200
190
180
170

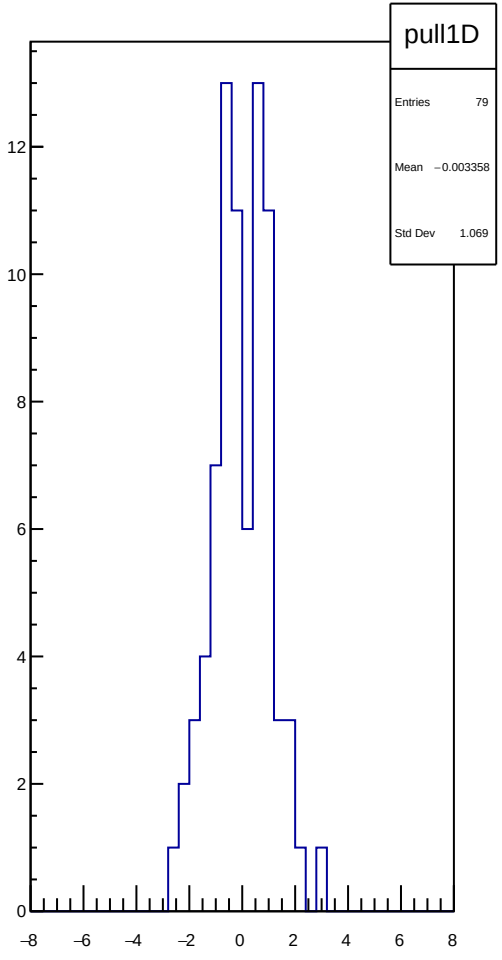

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 85.59 / 78
p0 0.06483 ± 26.63
pull
Entries 79
Mean 416.9
Std Dev 369
pull1D
Entries 79
Mean −0.009315
Std Dev 1.041

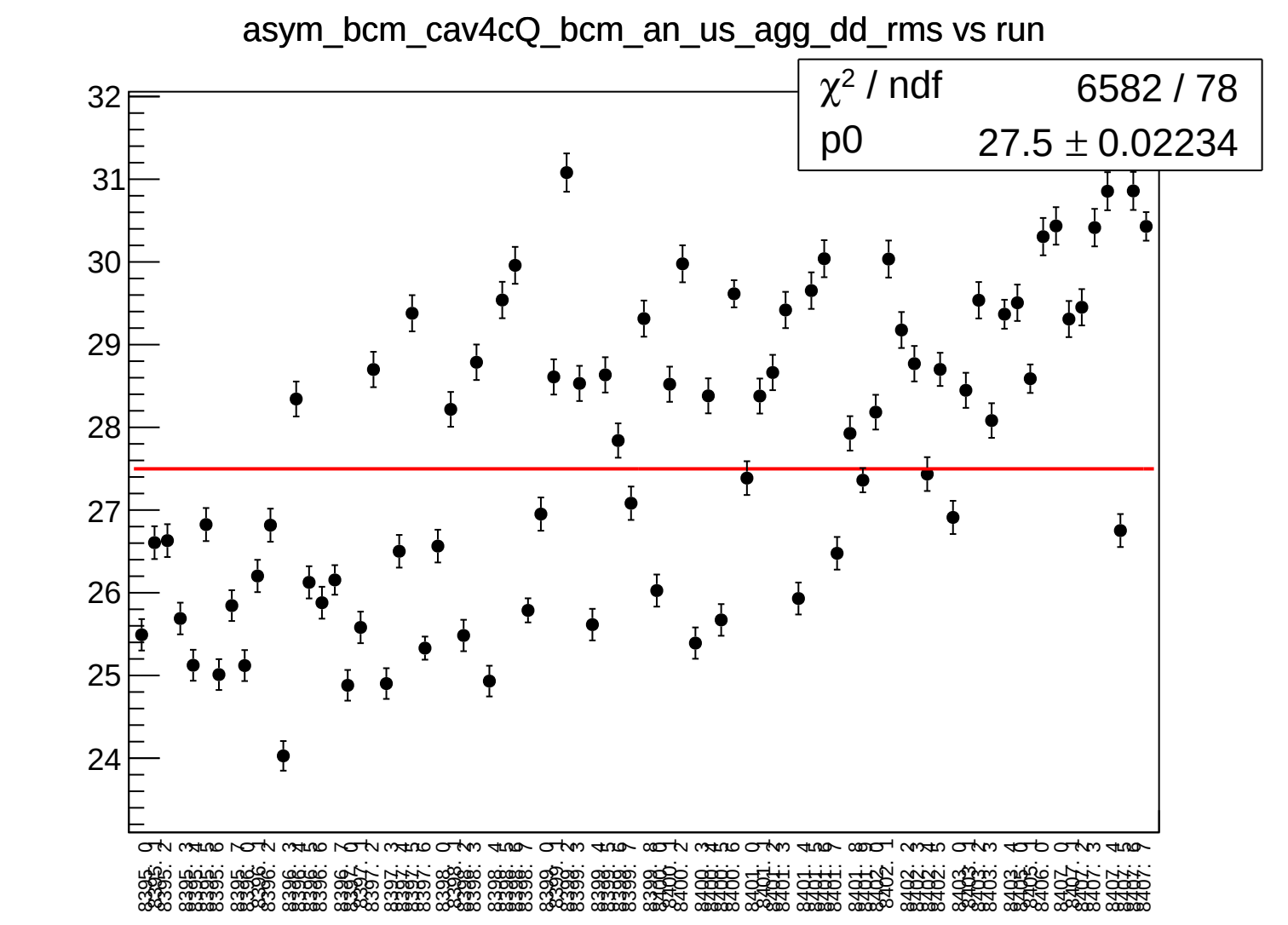

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2862 / 78
p0 23.21 ± 0.01883
26
25
24
23
22
21

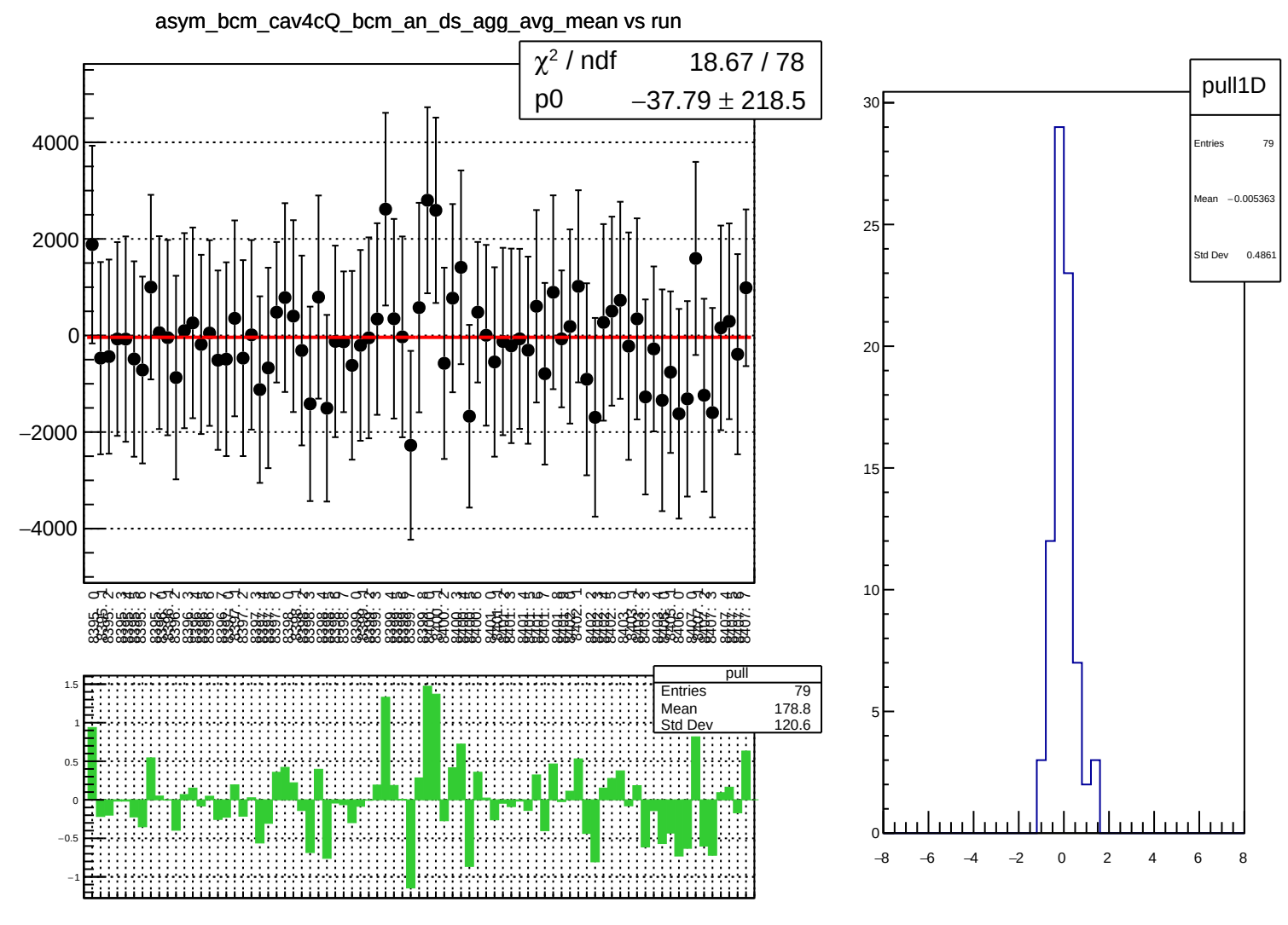

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.95 / 78
p0 −22.46 ± 219.3
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 257.2
Std Dev 204.2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 79
Mean −0.004637
Std Dev 0.4766
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

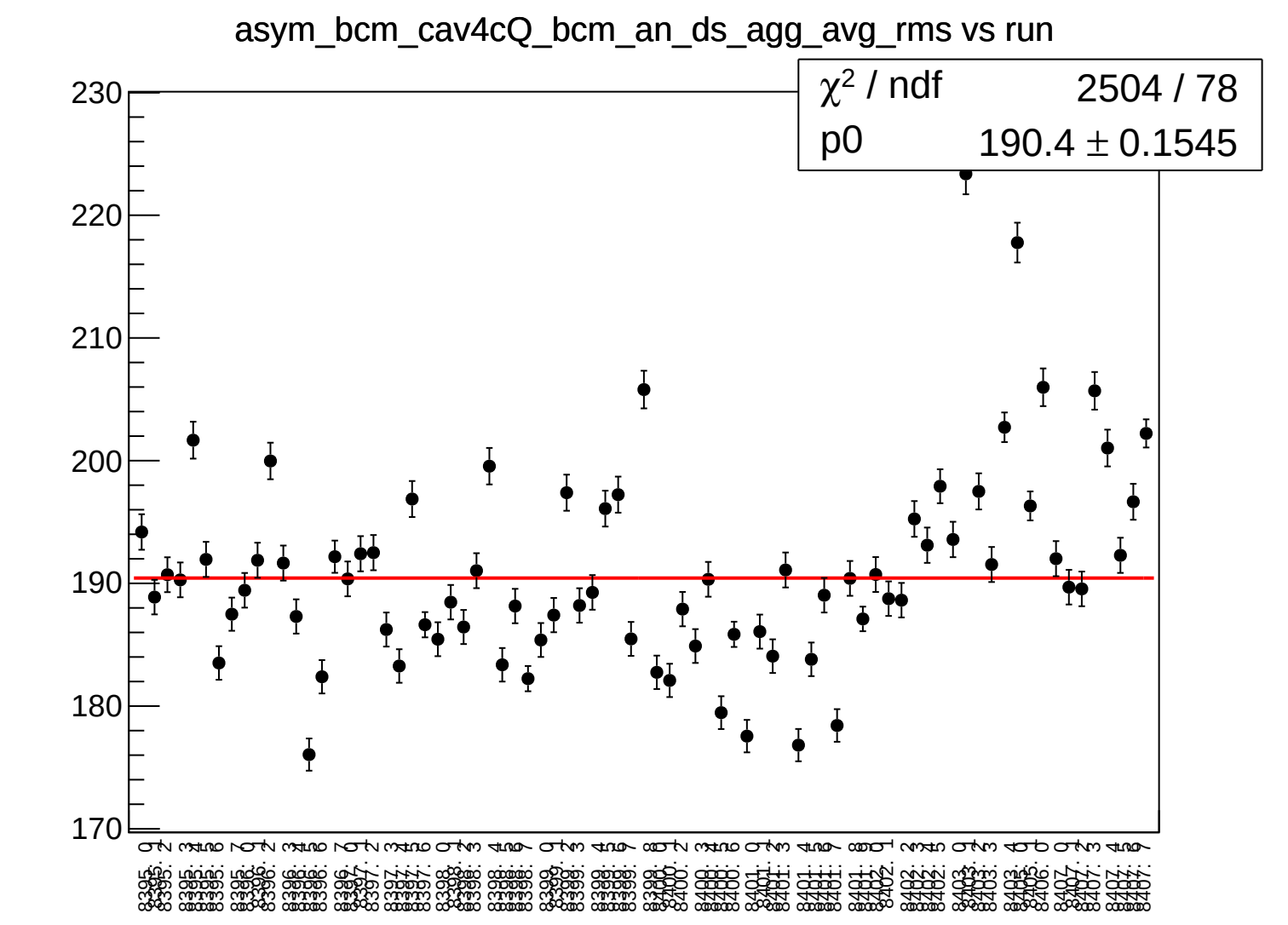

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ^2 / ndf 2511 / 78
p0 191.1 ± 0.1551
230
220
210
200
190
180

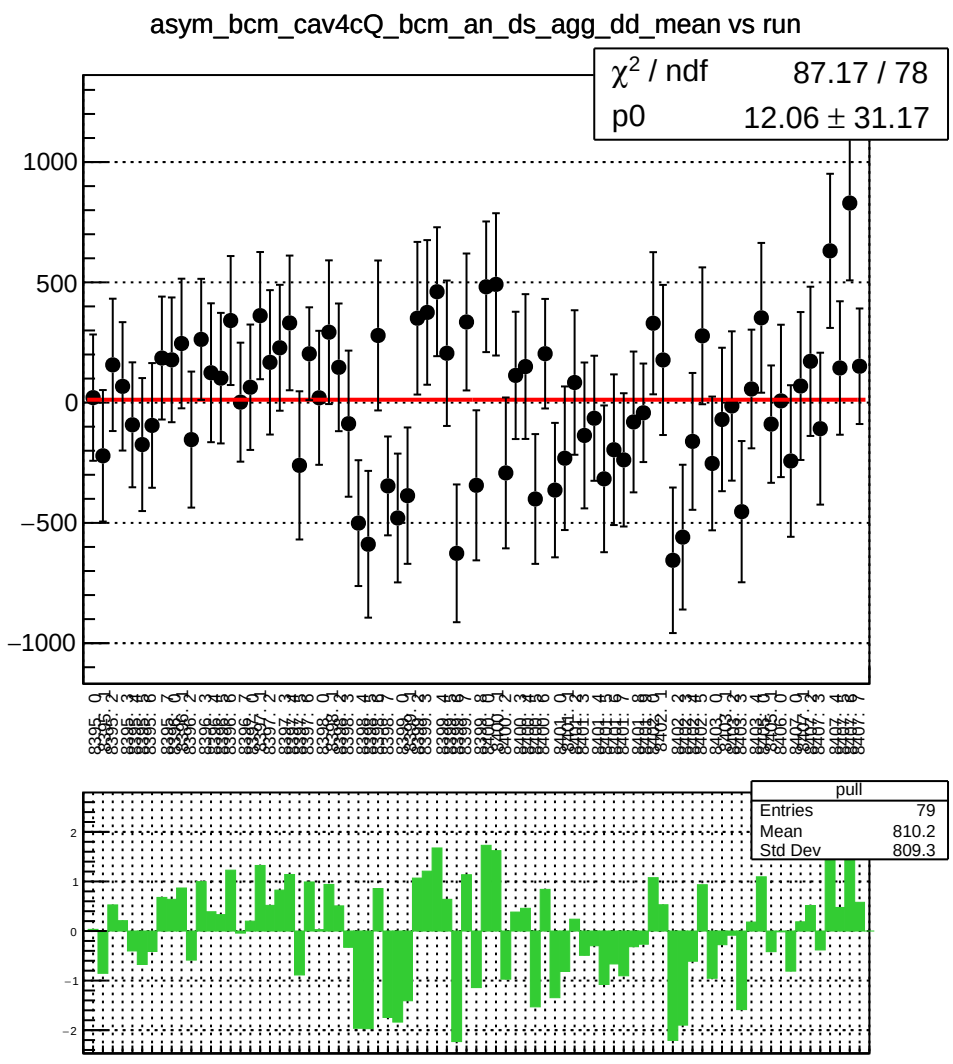

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 90.28 / 78
p0 −4.855 ± 31.59
1500
1000
500
0
−500
−1000
pull
Entries 79
Mean −170.4
Std Dev 265.3
3
2
1
0
−1
−2

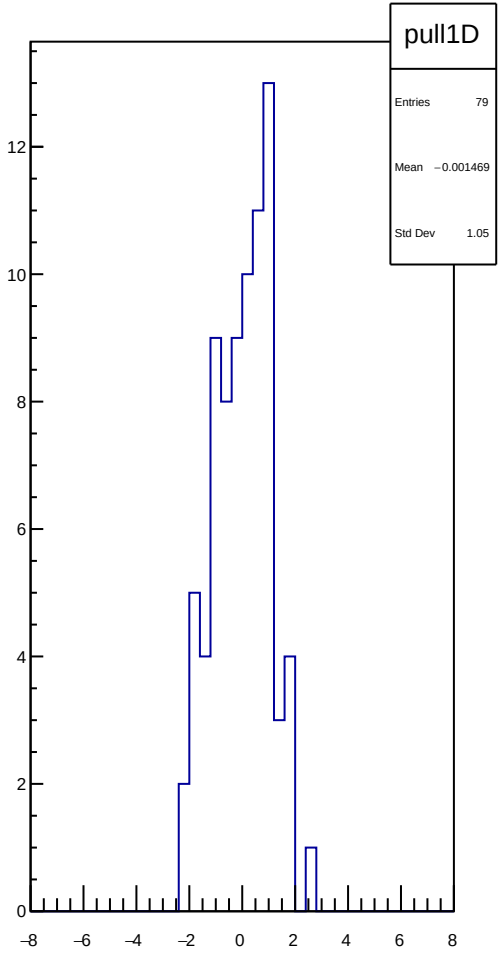

pull1D
Entries 79
Mean −0.003358
Std Dev 1.069
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

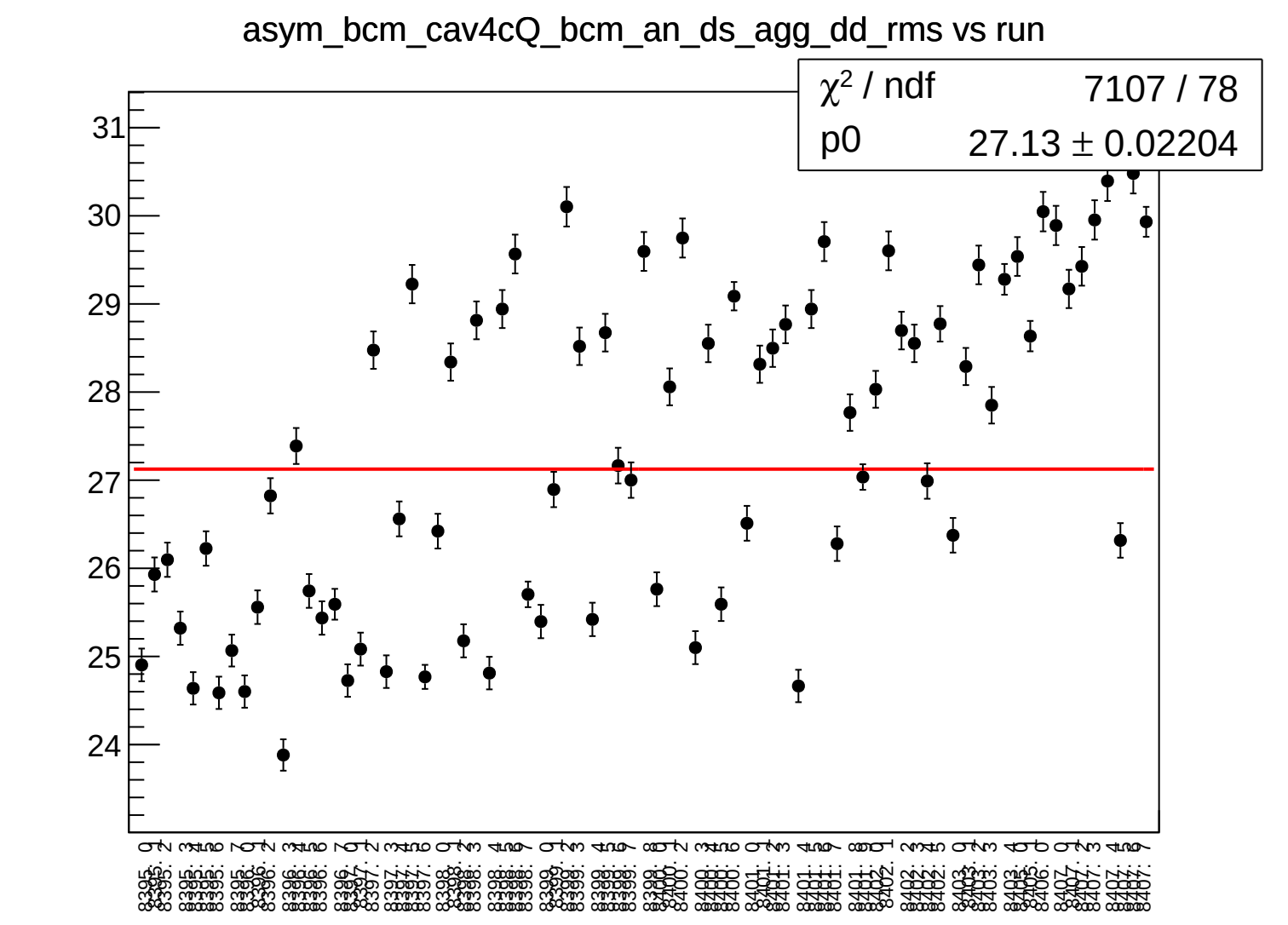

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 6582 / 78
p0 27.5 ± 0.02234
32
31
30
29
28
27
26
25
24

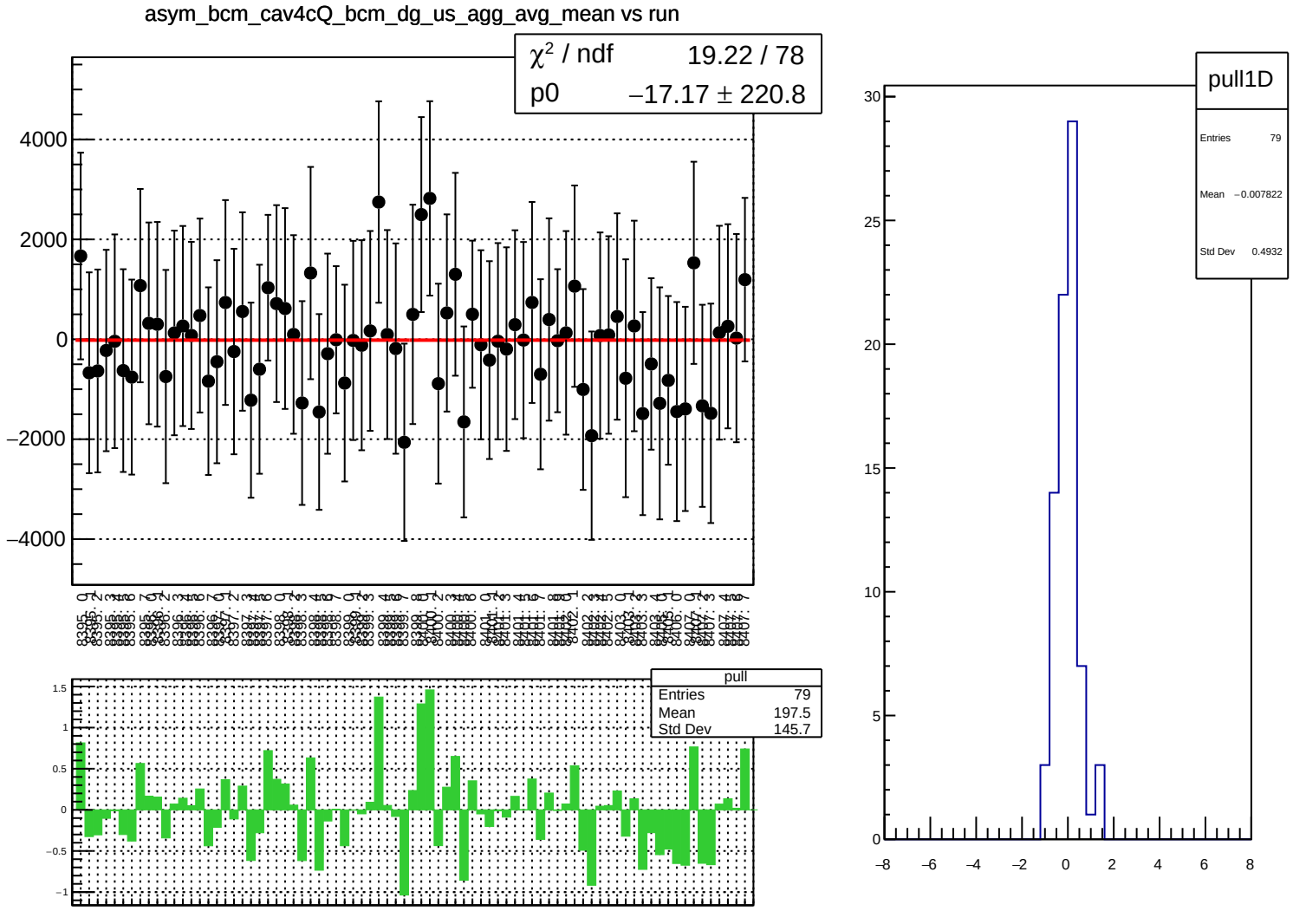

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.67 / 78
p0 −37.79 ± 218.5
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 178.8
Std Dev 120.6
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 79
Mean −0.005363
Std Dev 0.4861
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

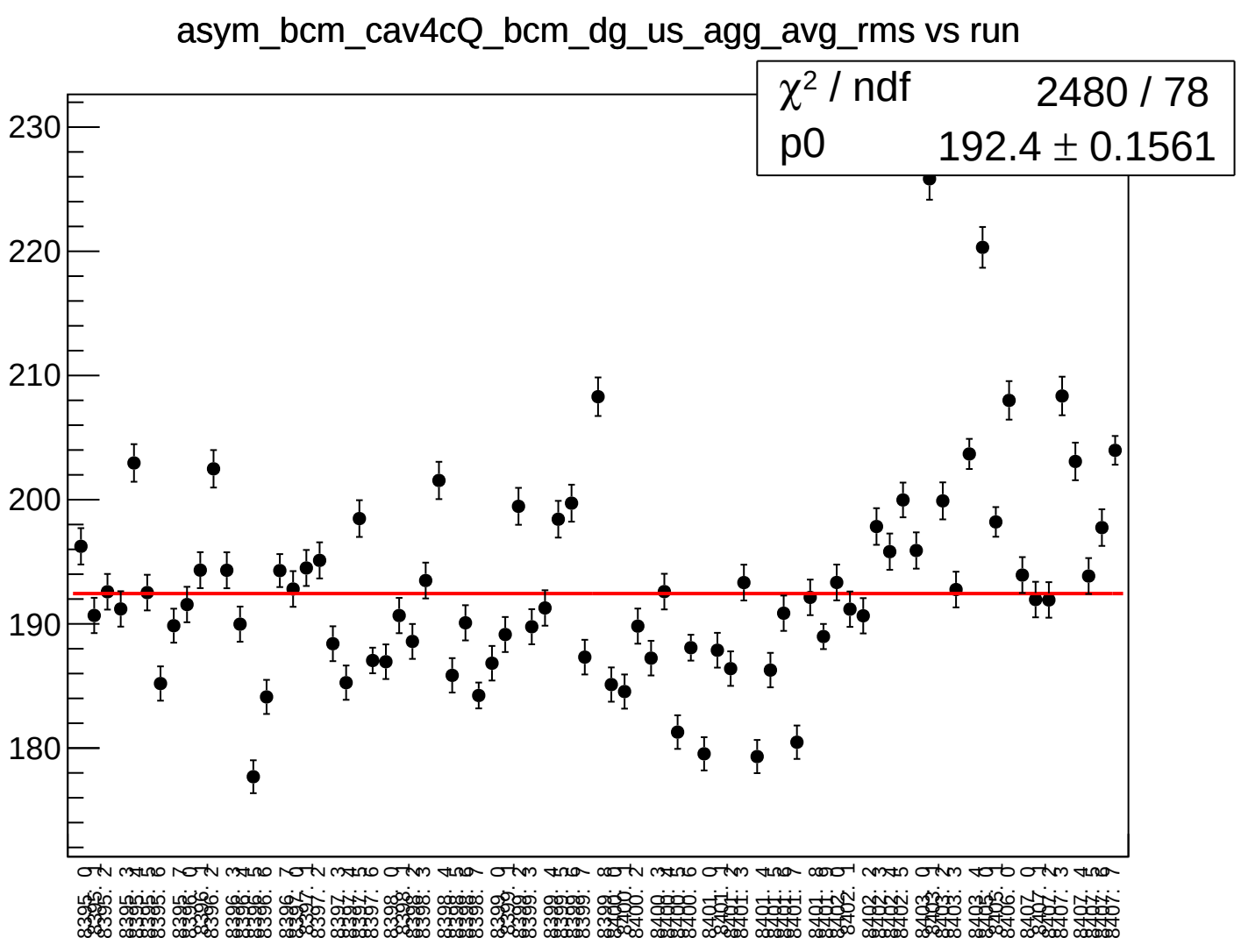

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2504 / 78
p0 190.4 ± 0.1545
230
220
210
200
190
180
170

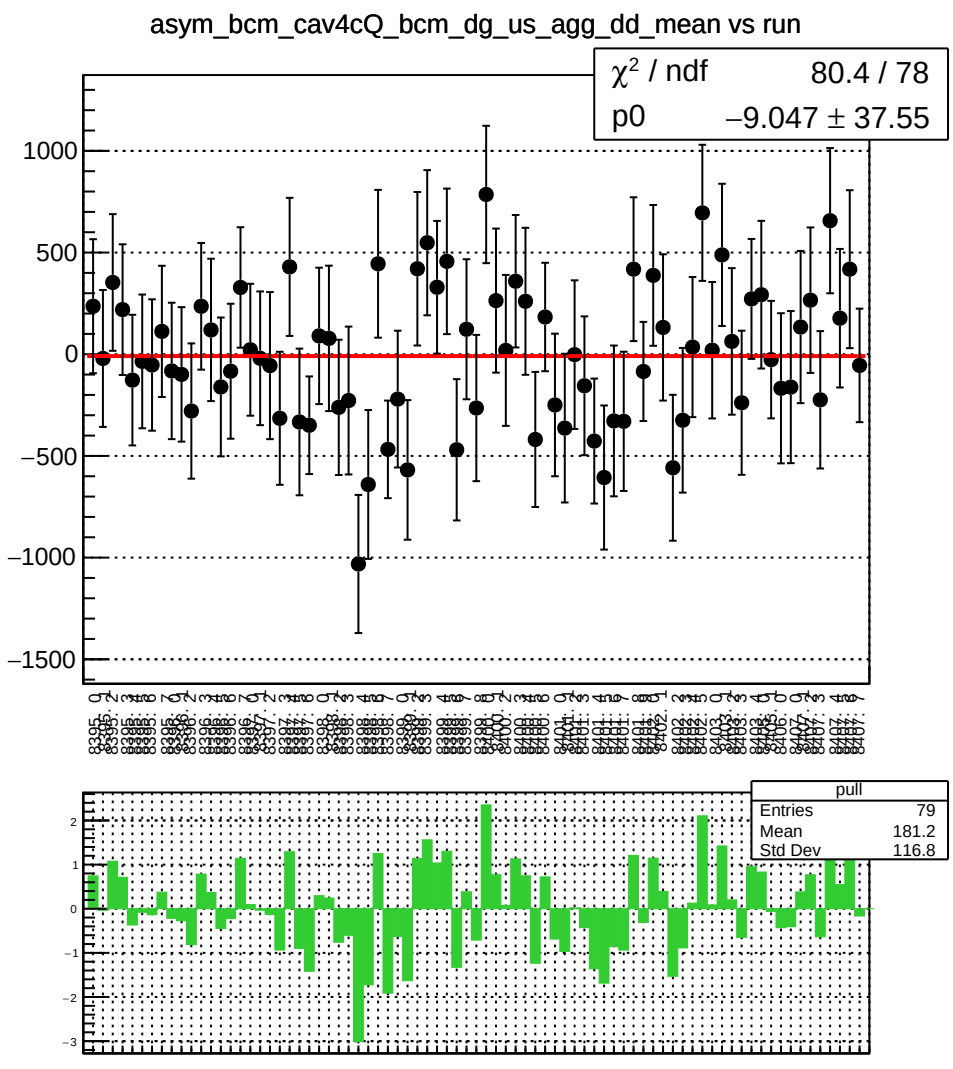

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 87.17 / 78
p0 12.06 ± 31.17
1000
500
0
−500
−1000
pull
Entries 79
Mean 810.2
Std Dev 809.3
2
1
0
−1
−2

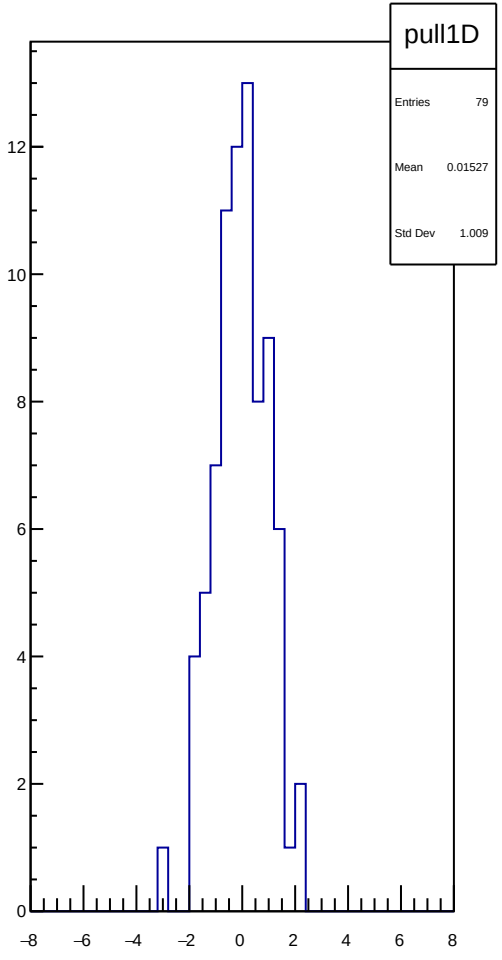

pull1D
Entries 79
Mean −0.001469
Std Dev 1.05
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

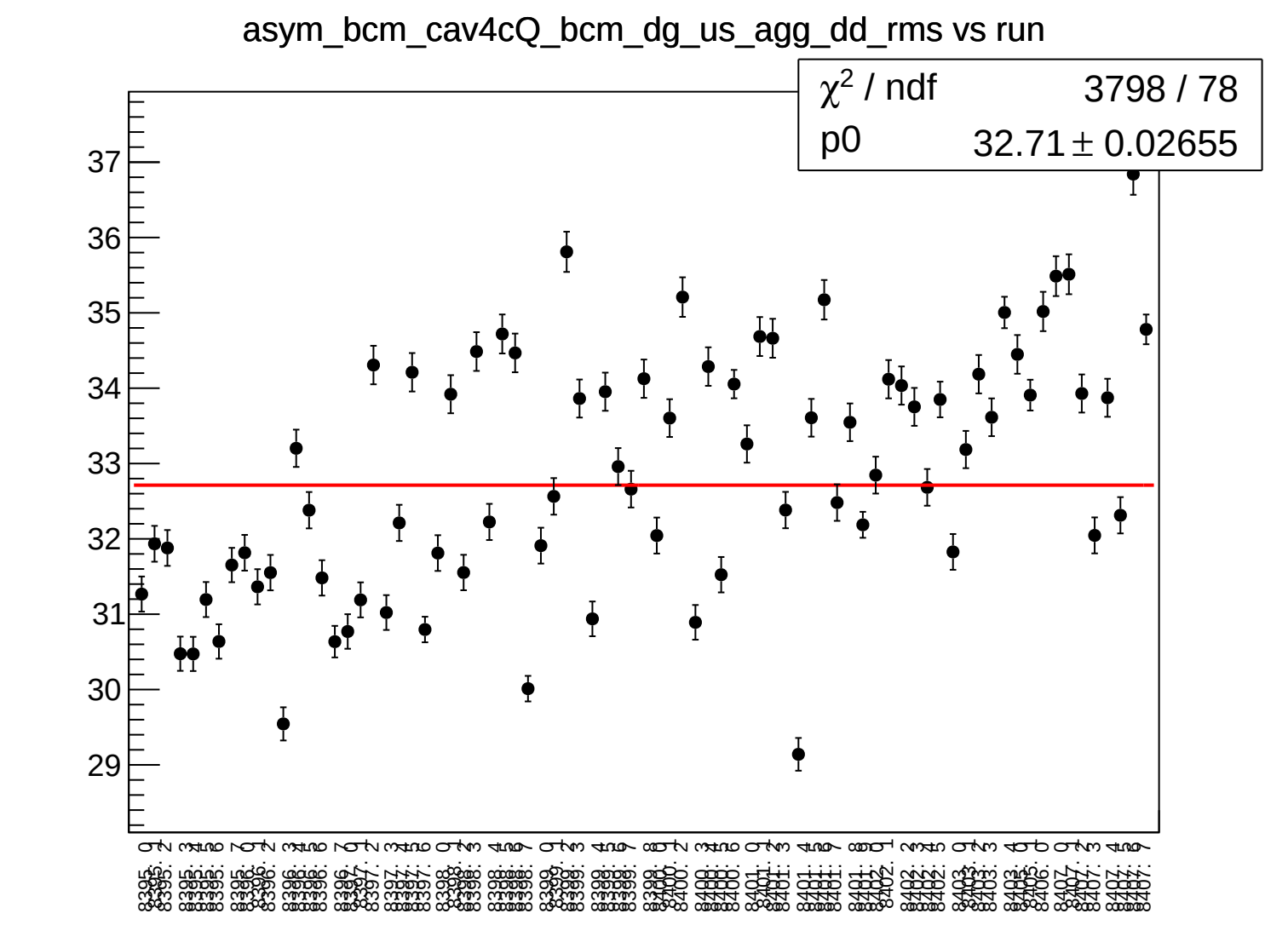

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 7107 / 78
p0 27.13 ± 0.02204
31
30
29
28
27
26
25
24

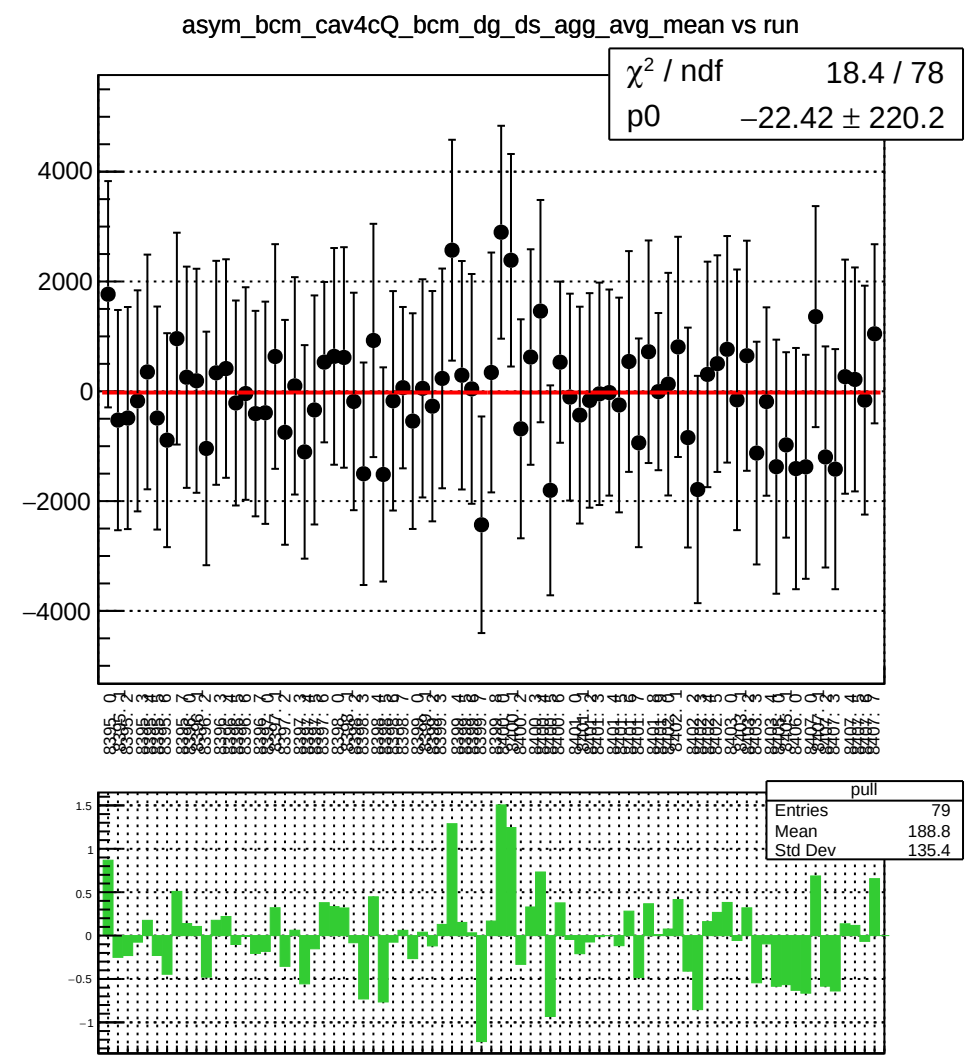

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 19.22 / 78
p0 −17.17 ± 220.8
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 197.5
Std Dev 145.7
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 79
Mean −0.007822
Std Dev 0.4932
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

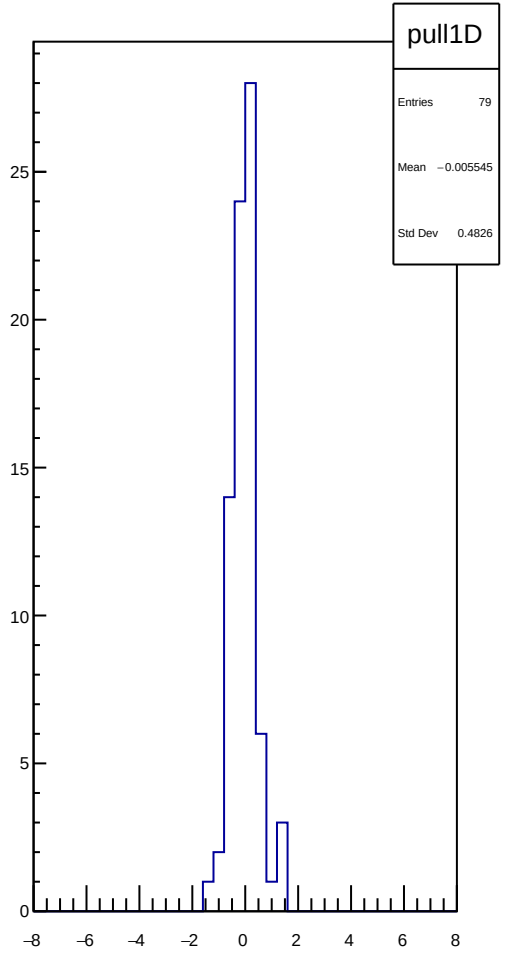

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2480 / 78
p0 192.4 ± 0.1561
230
220
210
200
190
180

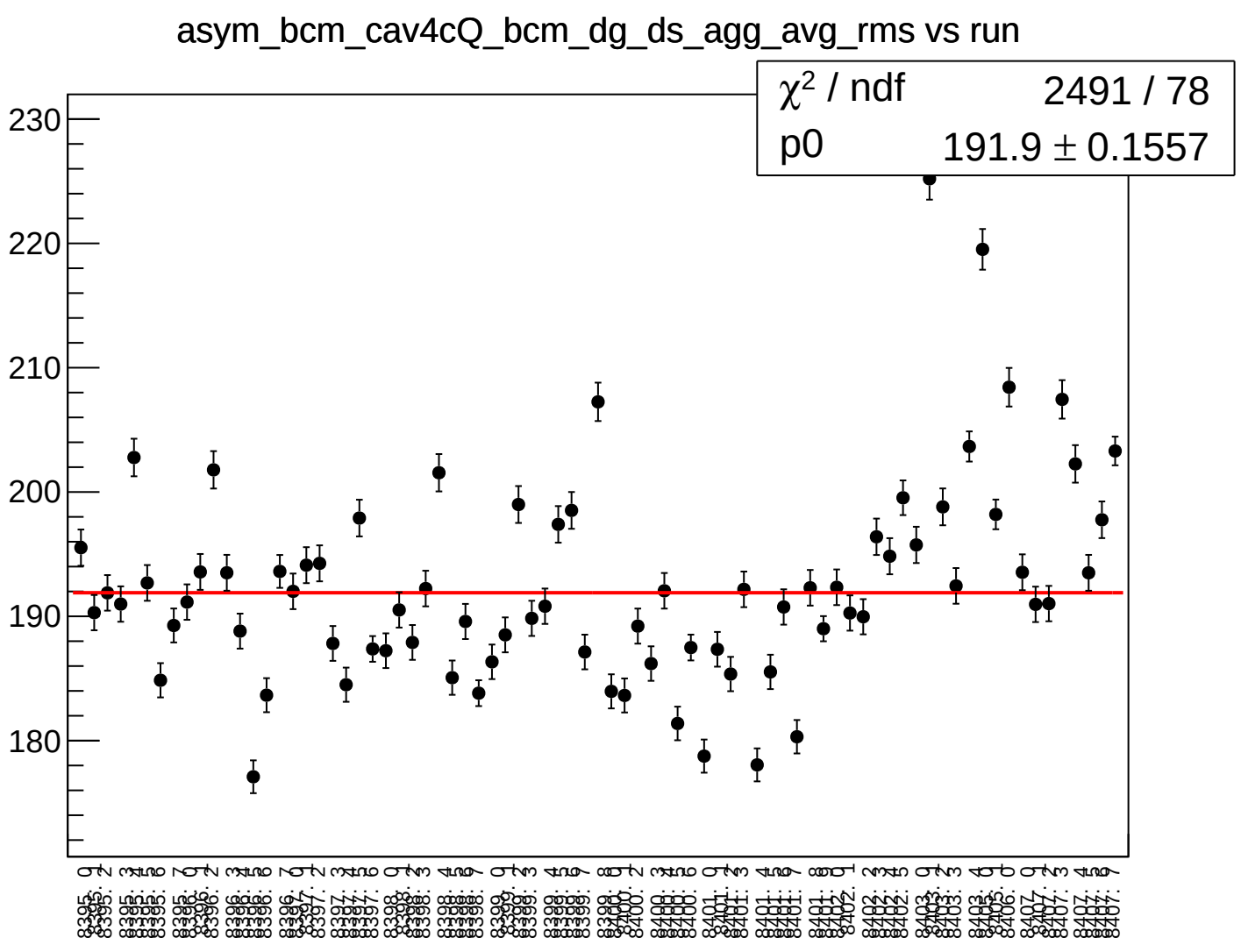

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 80.4 / 78
p0 −9.047 ± 37.55
1000
500
0
−500
−1000
−1500
pull
Entries 79
Mean 181.2
Std Dev 116.8
2
1
0
−1
−2
−3

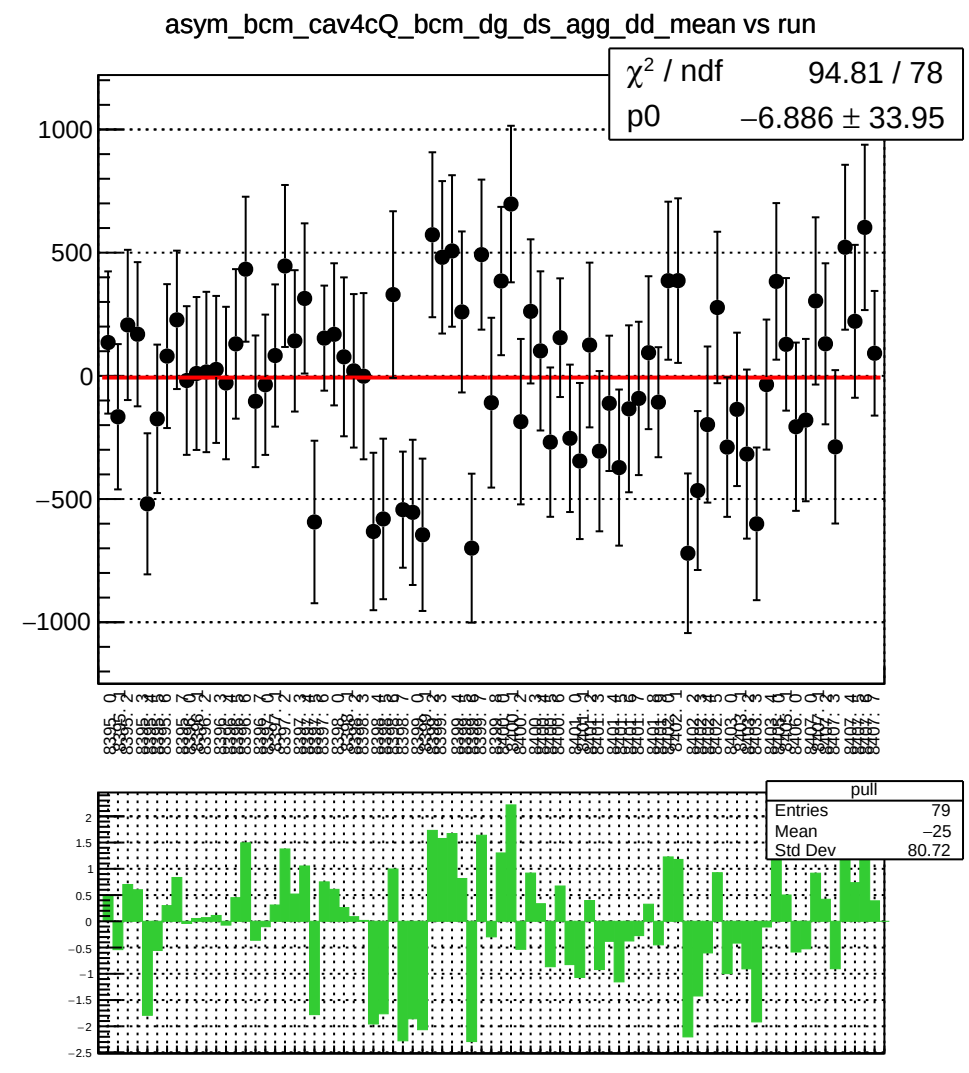

pull1D
Entries 79
Mean 0.01527
Std Dev 1.009
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

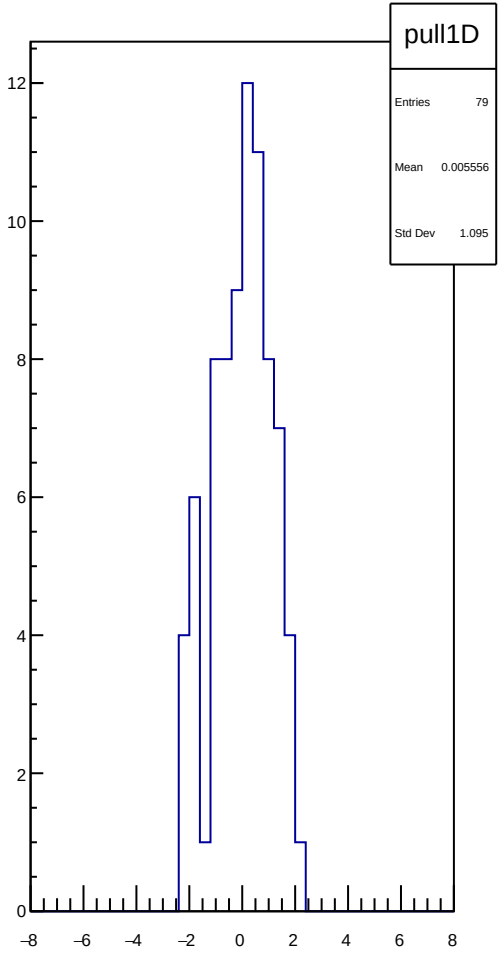

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ^2 / ndf 3798 / 78
p0 32.71 ± 0.02655
37
36
35
34
33
32
31
30
29

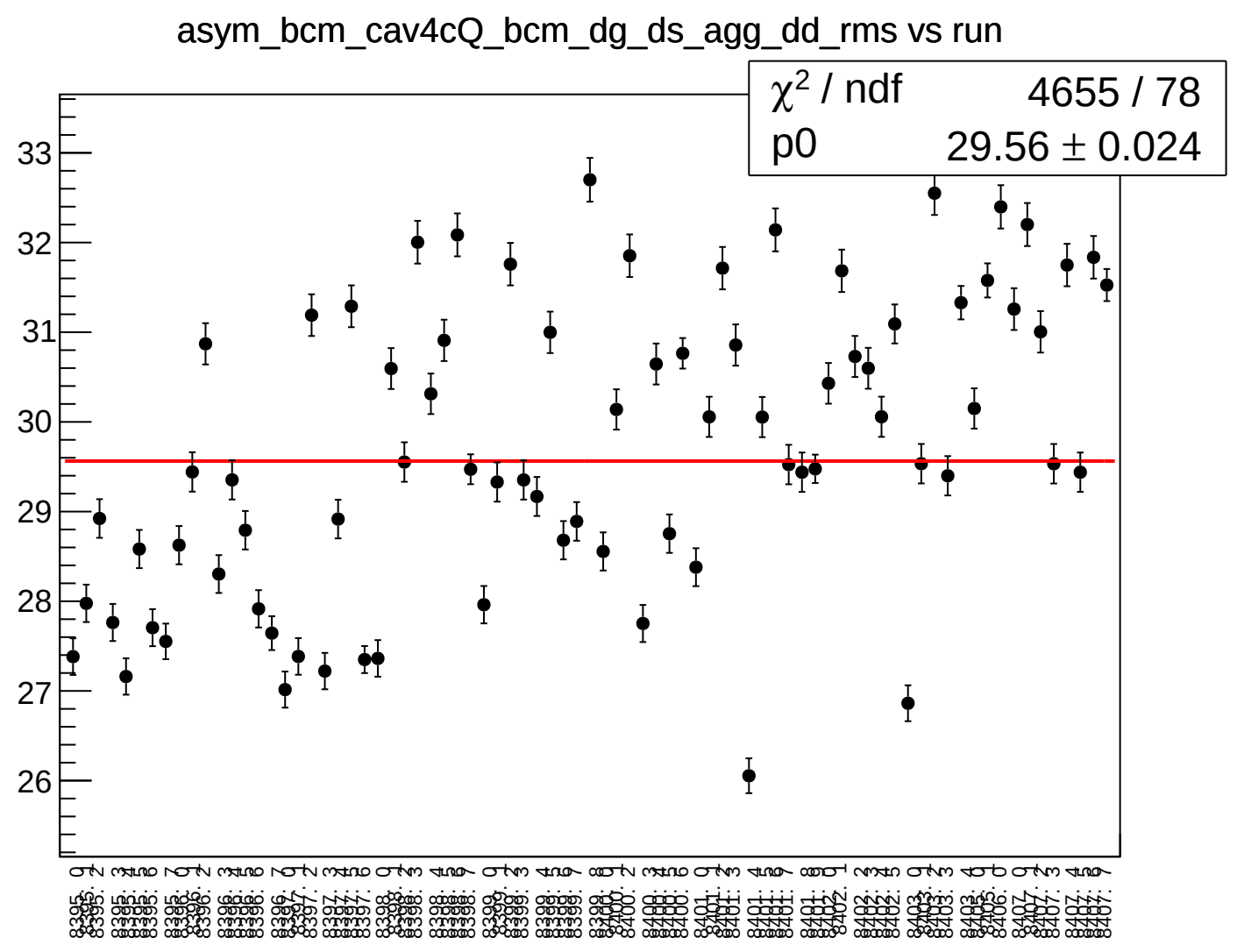

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.4 / 78
p0 −22.42 ± 220.2
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 188.8
Std Dev 135.4
1.5
1
0.5
0
−0.5
−1

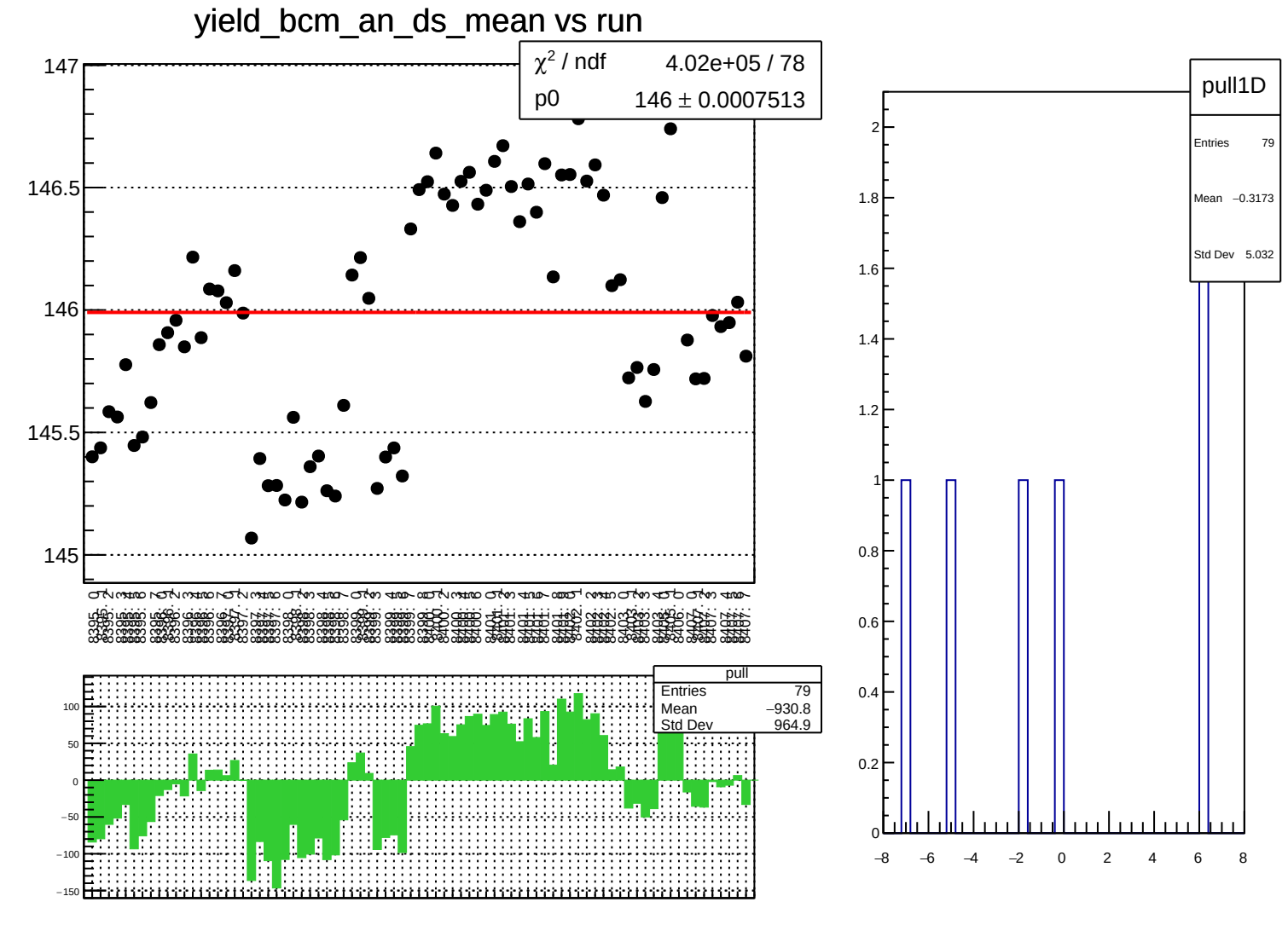

pull1D
Entries 79
Mean −0.005545
Std Dev 0.4826
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

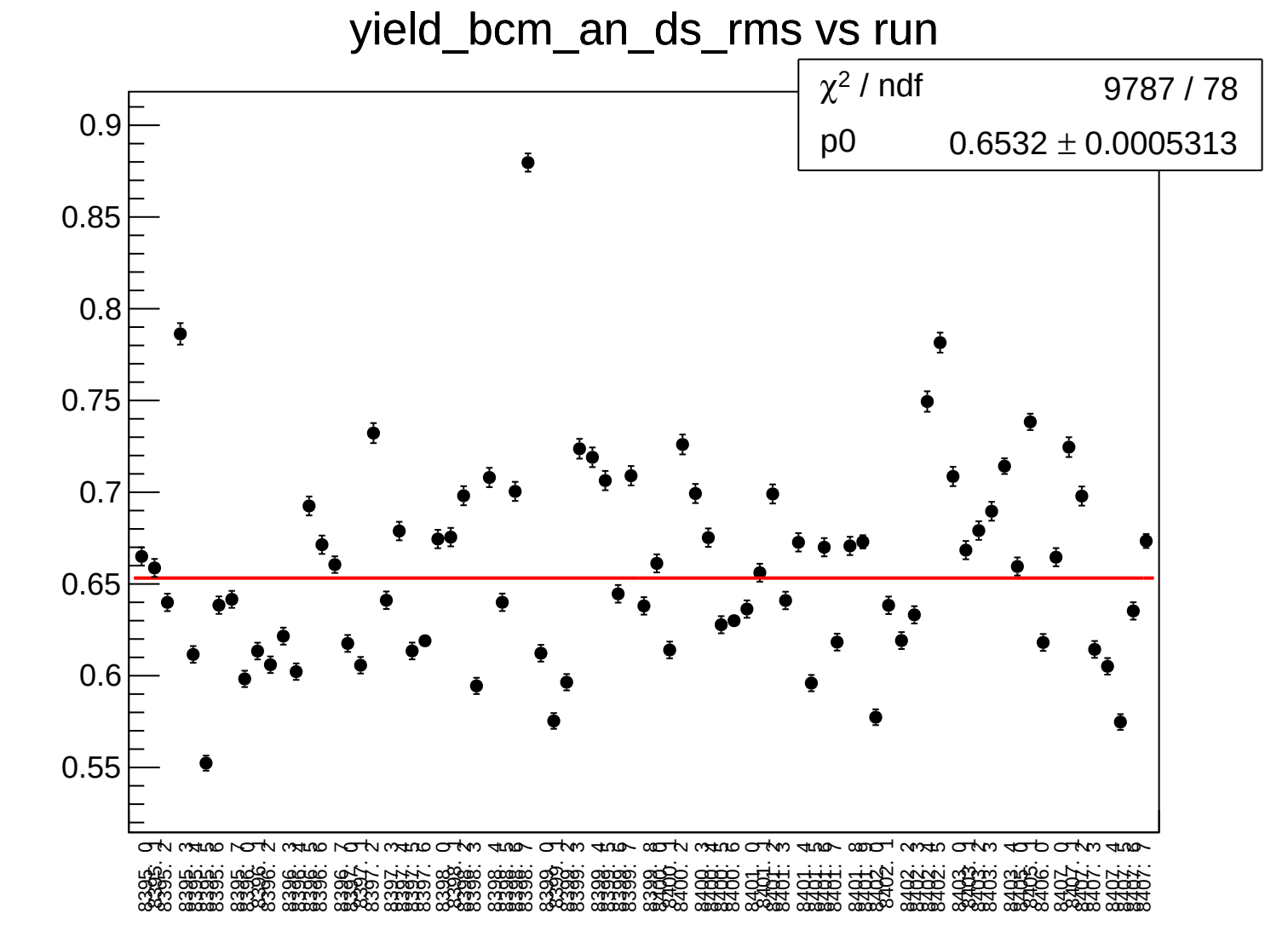

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2491 / 78
p0 191.9 ± 0.1557
230
220
210
200
190
180

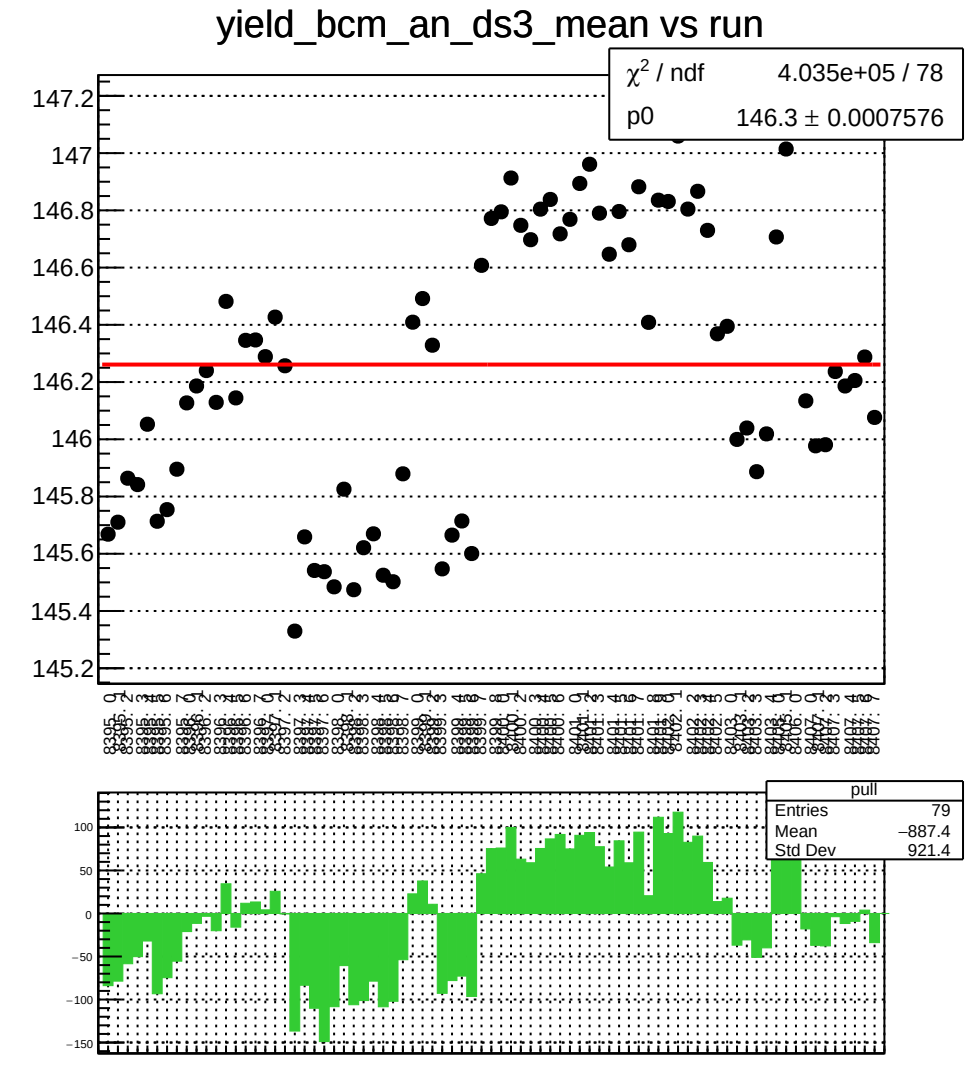

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 94.81 / 78
p0 −6.886 ± 33.95
1000
500
0
−500
−1000
pull
Entries 79
Mean −25
Std Dev 80.72
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

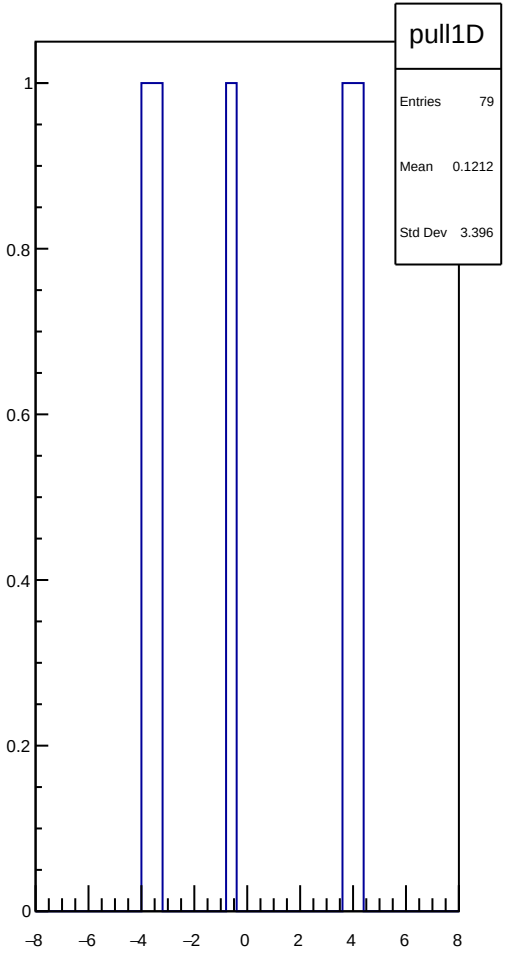

pull1D
Entries 79
Mean 0.005556
Std Dev 1.095
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

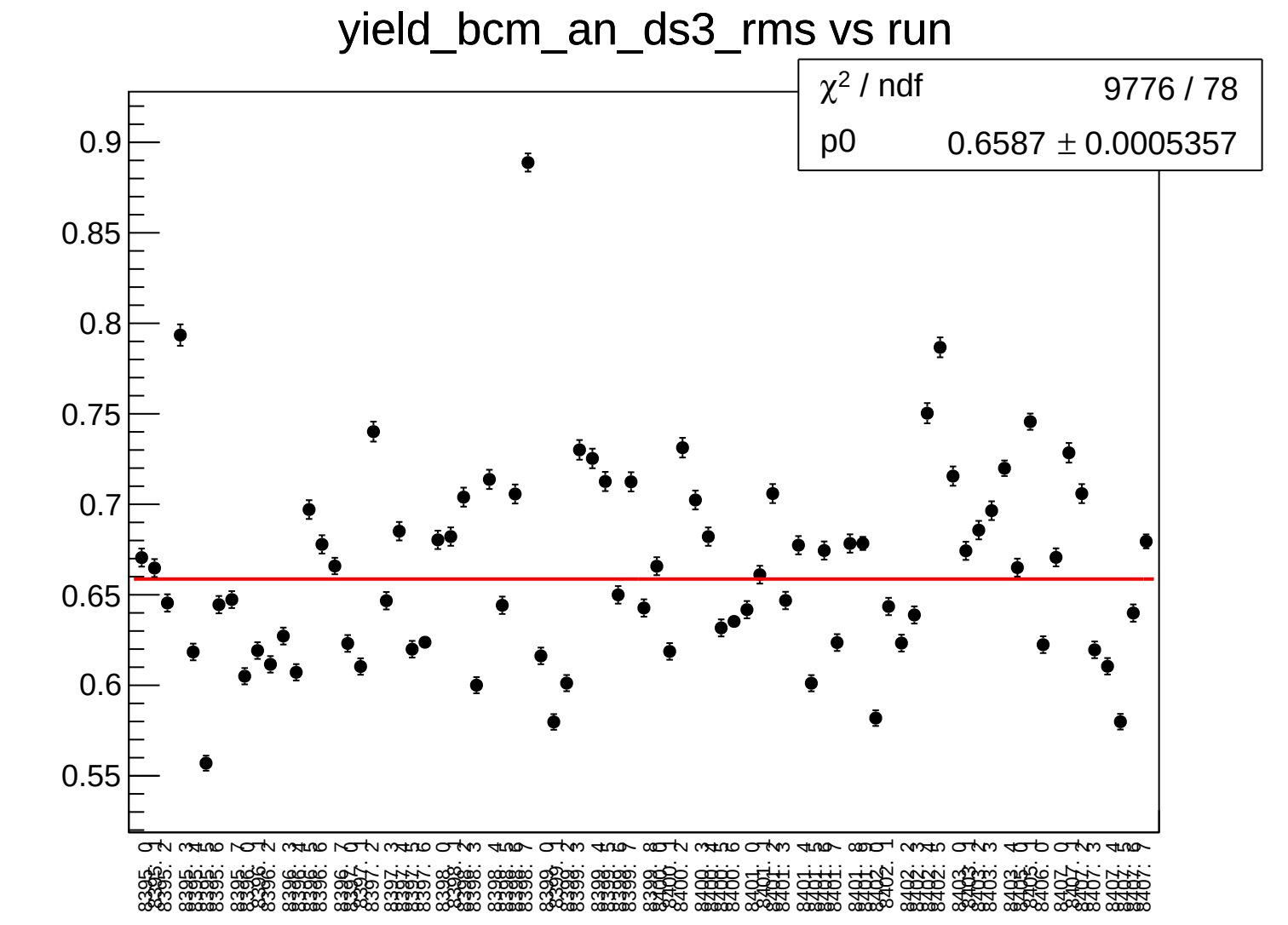

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4655 / 78
p0 29.56 ± 0.024
33
32
31
30
29
28
27
26

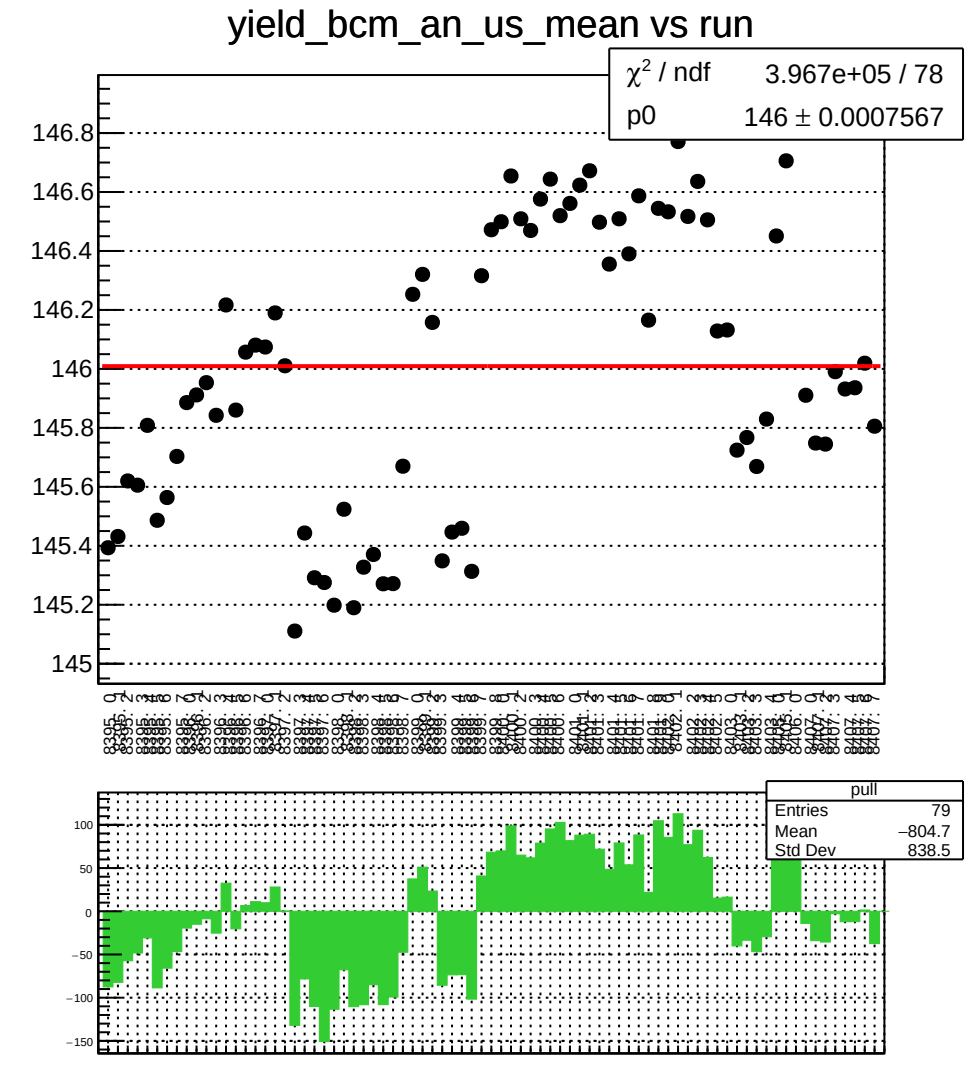

yield_bcm_an_ds_mean vs run
χ² / ndf 4.02e+05 / 78
p0 146 ± 0.0007513
147
146.5
146
145.5
145
pull
Entries 79
Mean −930.8
Std Dev 964.9
100
50
0
−50
−100
−150
pull1D
Entries 79
Mean −0.3173
Std Dev 5.032
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

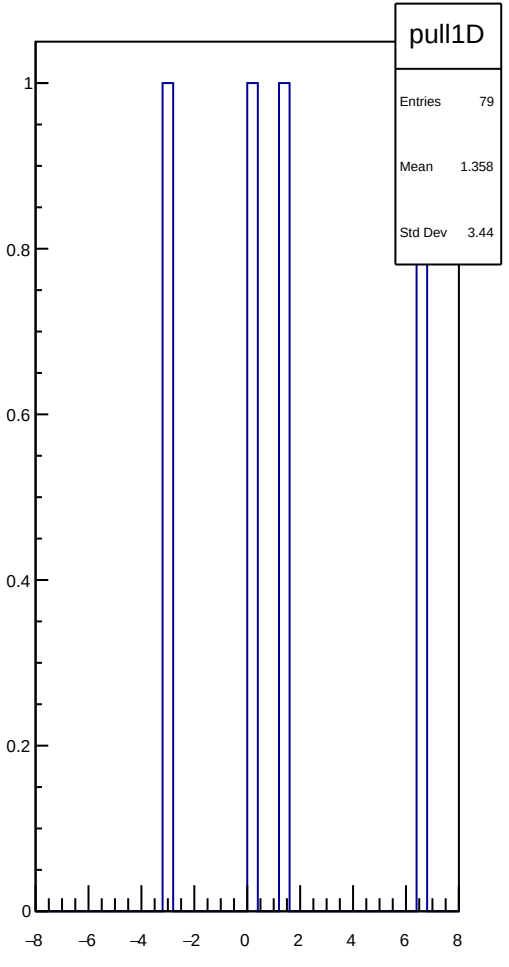

yield_bcm_an_ds_rms vs run
χ² / ndf 9787 / 78
p0 0.6532 ± 0.0005313
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

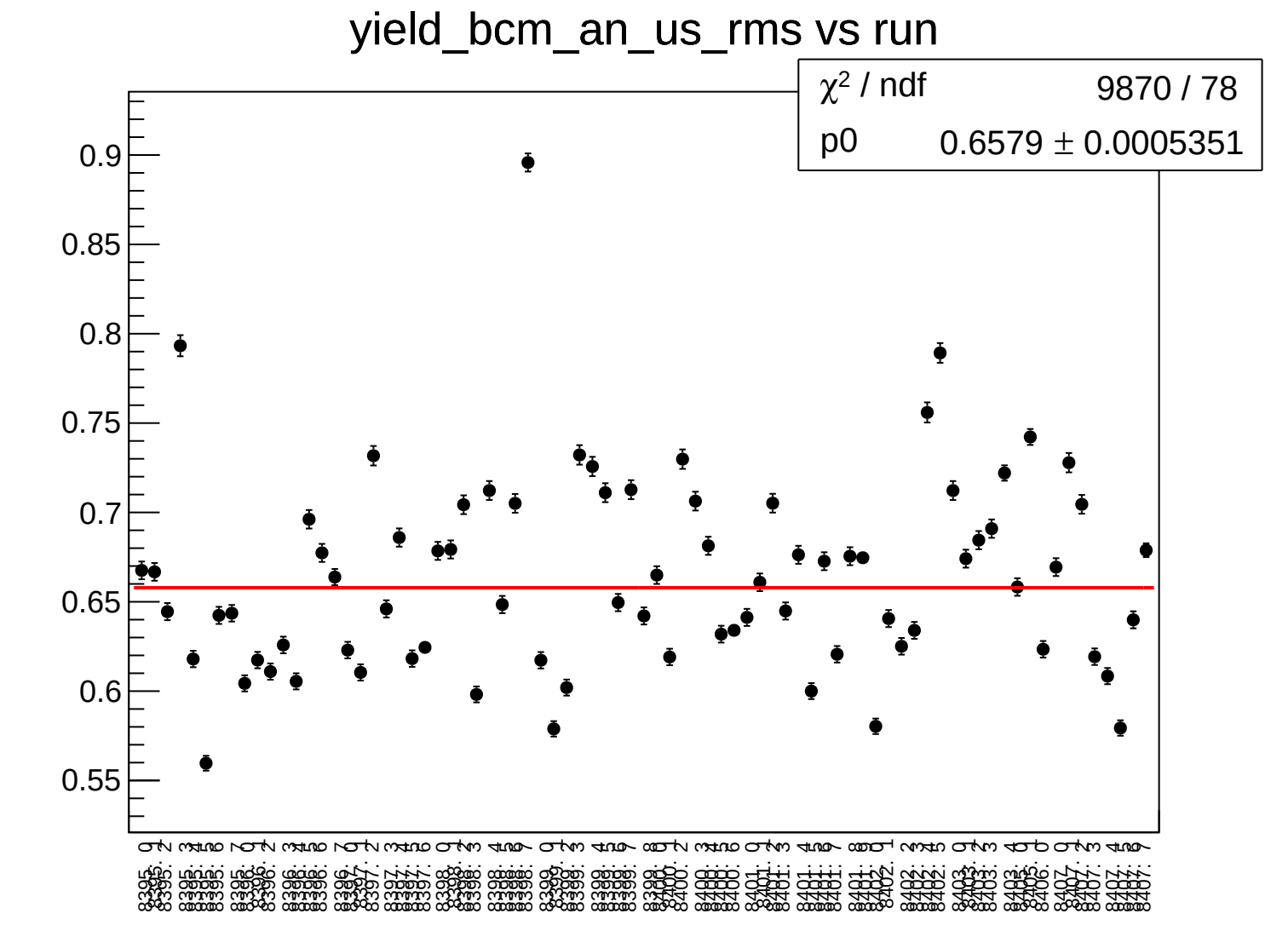

yield_bcm_an_ds3_mean vs run
χ² / ndf 4.035e+05 / 78
p0 146.3 ± 0.0007576
147.2
147
146.8
146.6
146.4
146.2
146
145.8
145.6
145.4
145.2
pull
Entries 79
Mean −887.4
Std Dev 921.4
100
50
0
−50
−100
−150

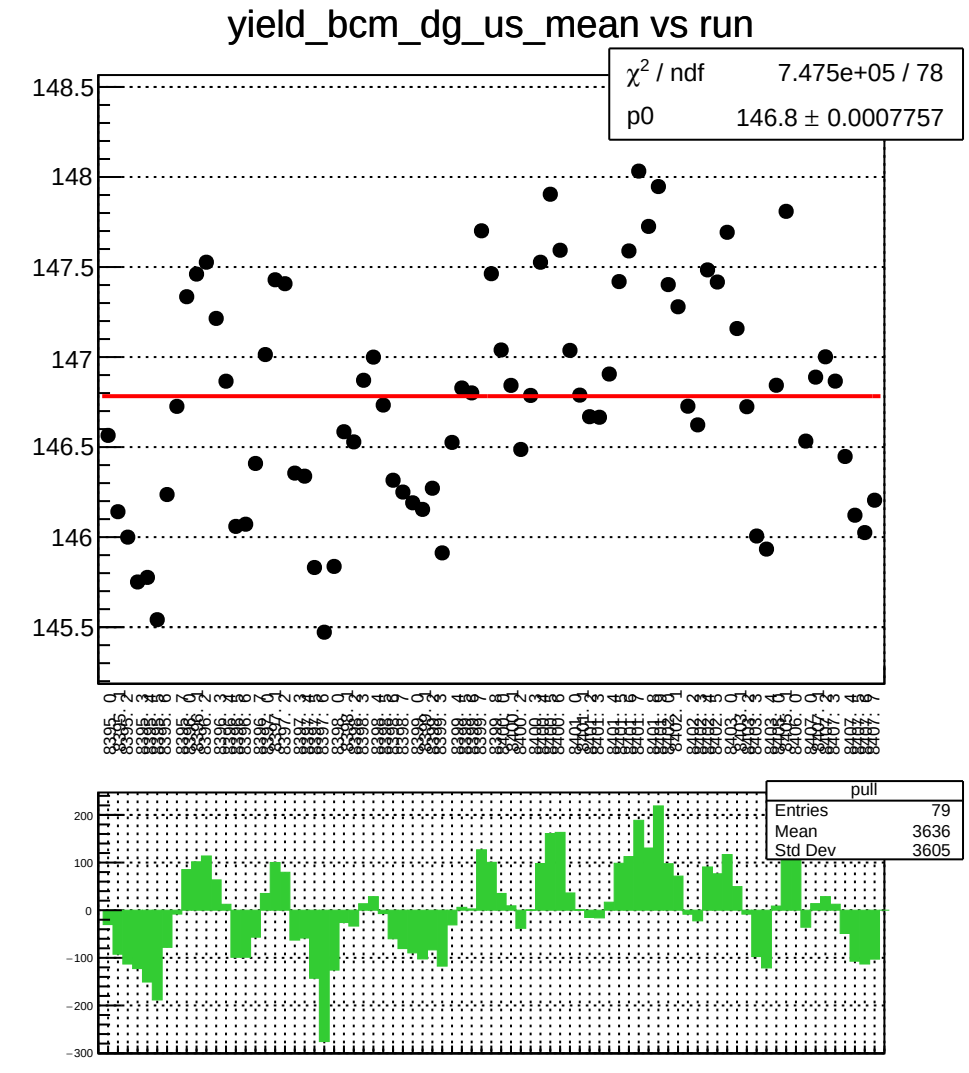

pull1D
Entries 79
Mean 0.1212
Std Dev 3.396
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

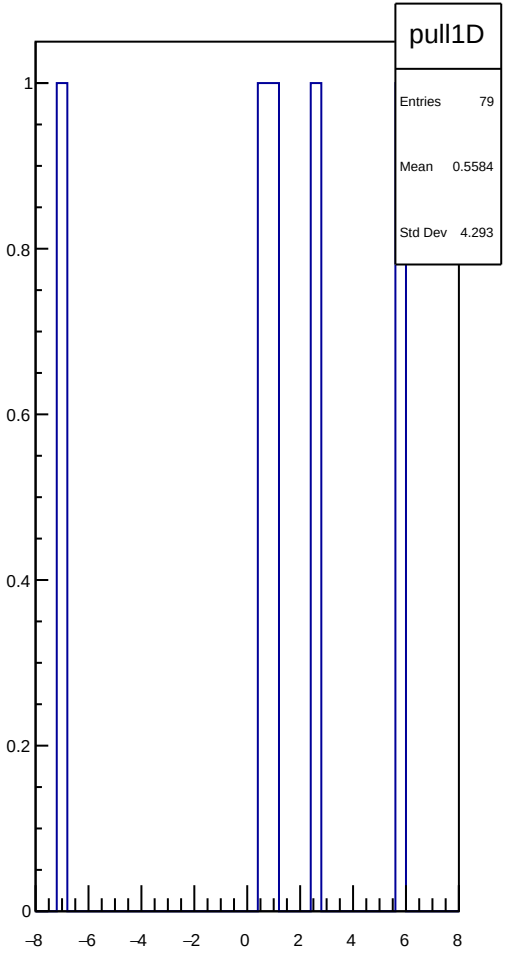

yield_bcm_an_ds3_rms vs run
χ² / ndf 9776 / 78
p0 0.6587 ± 0.0005357
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

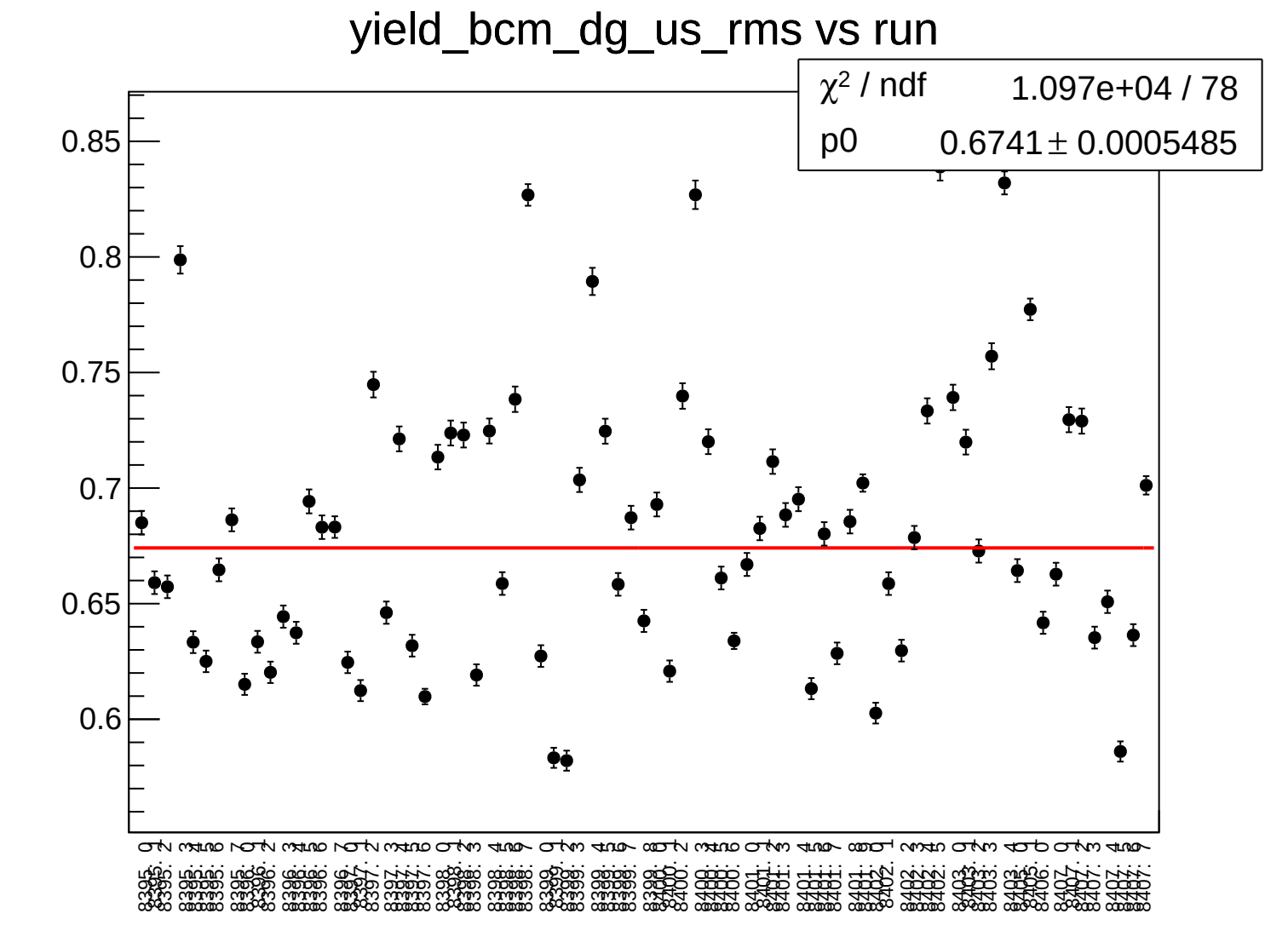

yield_bcm_an_us_mean vs run
χ² / ndf 3.967e+05 / 78
p0 146 ± 0.0007567
146.8
146.6
146.4
146.2
146
145.8
145.6
145.4
145.2
145
pull
Entries 79
Mean −804.7
Std Dev 838.5
100
50
0
−50
−100
−150

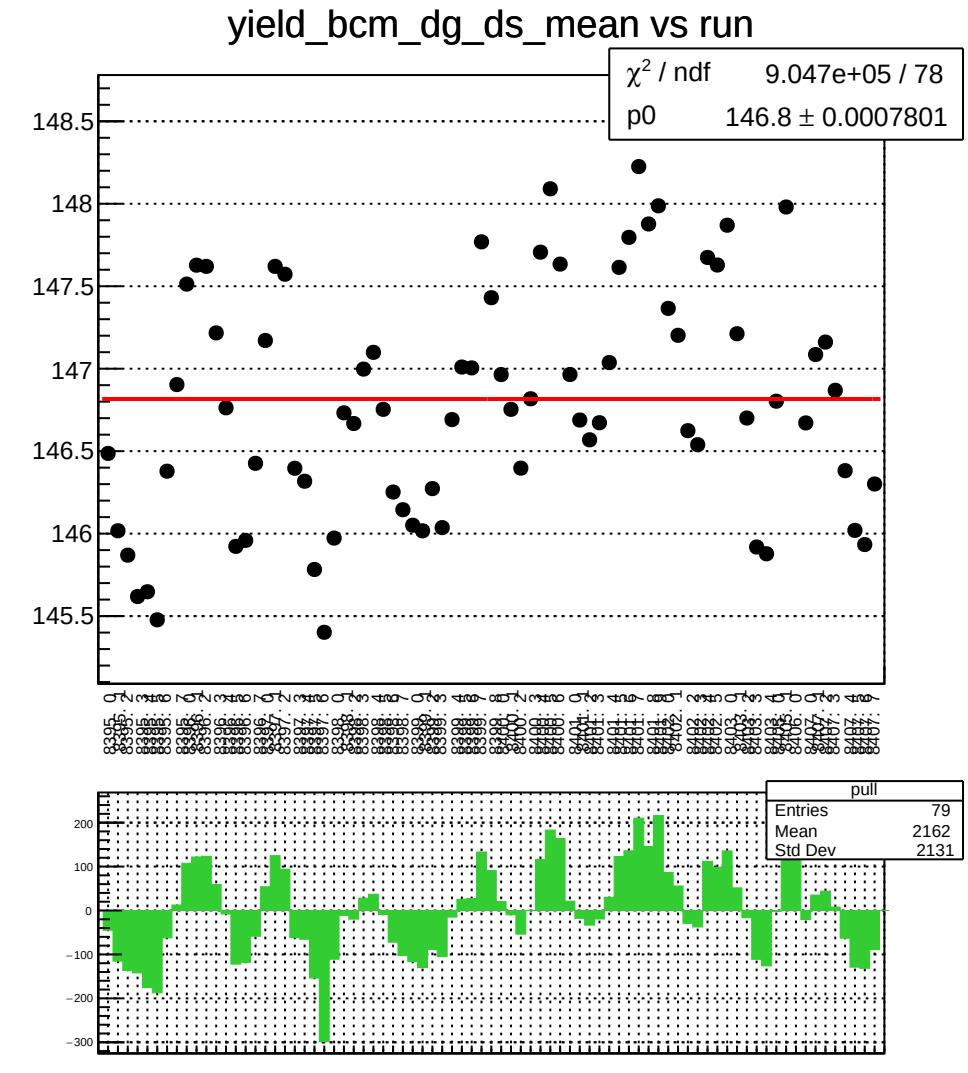

pull1D
Entries 79
Mean 1.358
Std Dev 3.44
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

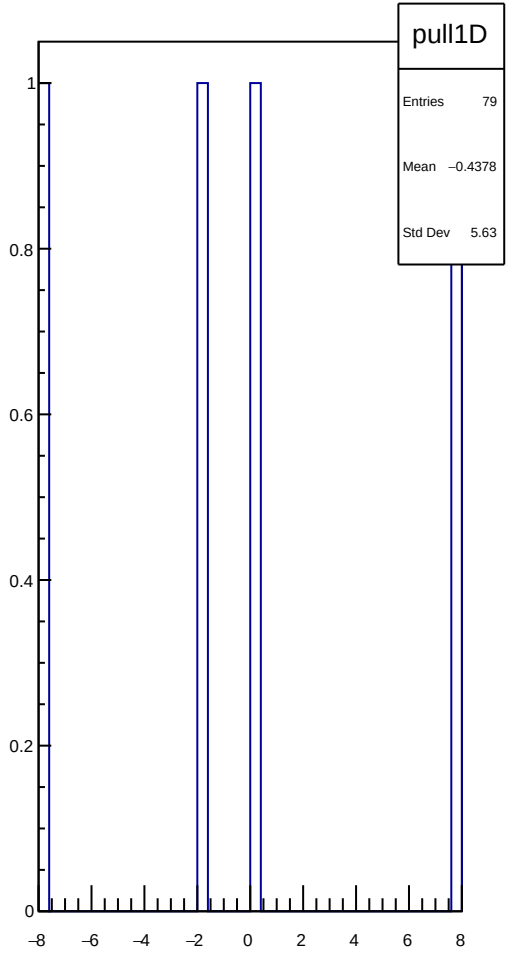

yield_bcm_an_us_rms vs run
χ² / ndf 9870 / 78
p0 0.6579 ± 0.0005351
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

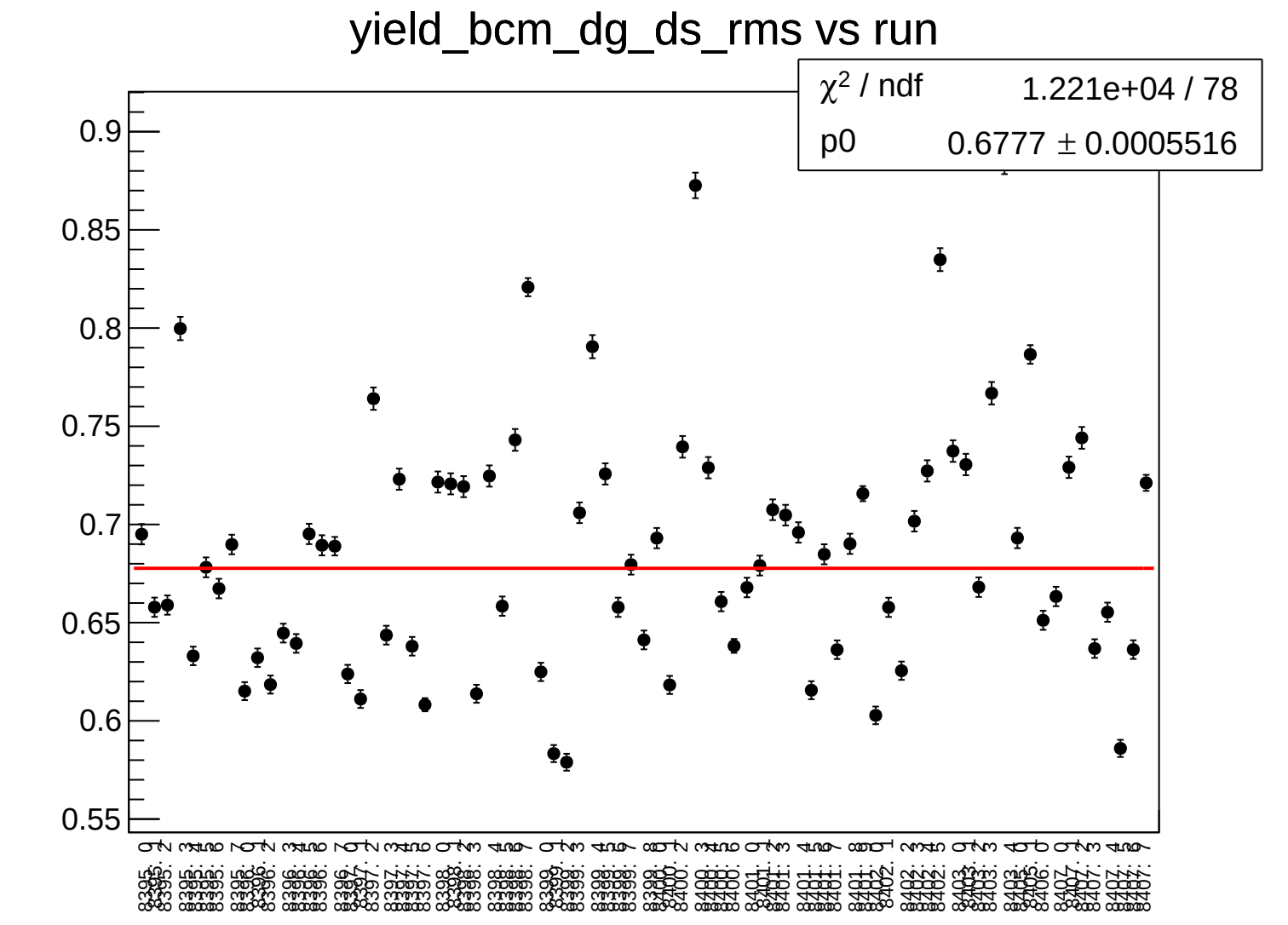

yield_bcm_dg_us_mean vs run
χ² / ndf 7.475e+05 / 78
p0 146.8 ± 0.0007757
148.5
148
147.5
147
146.5
146
145.5
pull
Entries 79
Mean 3636
Std Dev 3605
200
100
0
−100
−200
−300

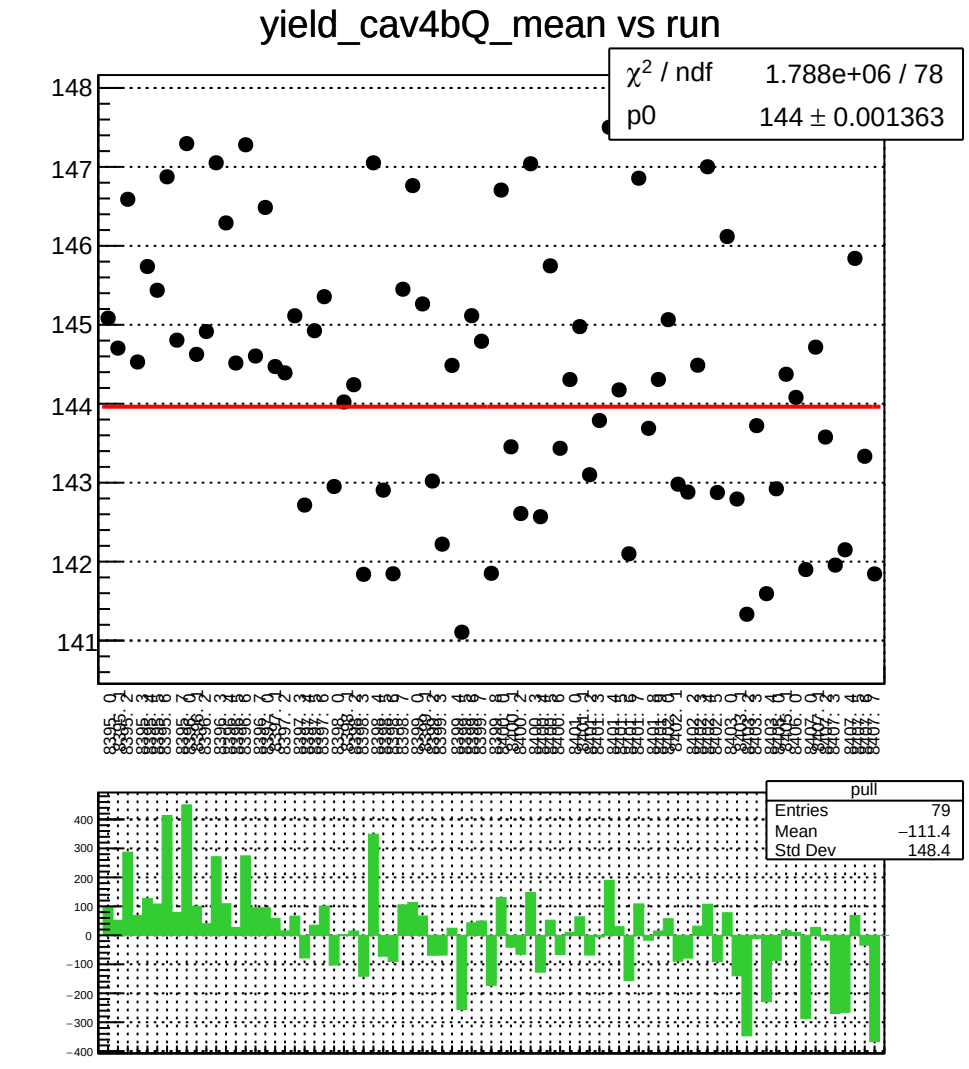

pull1D
Entries 79
Mean 0.5584
Std Dev 4.293
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

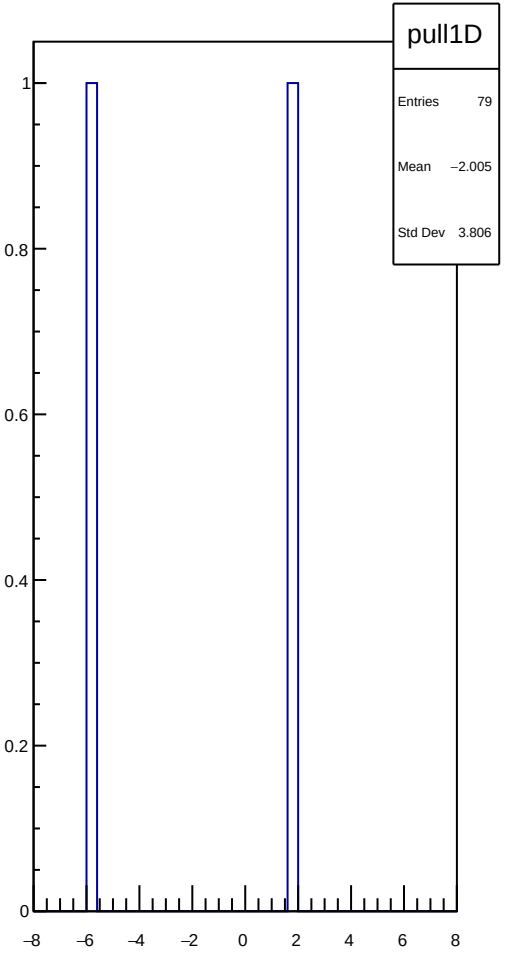

yield_bcm_dg_us_rms vs run
χ² / ndf 1.097e+04 / 78
p0 0.6741 ± 0.0005485
0.85
0.8
0.75
0.7
0.65
0.6

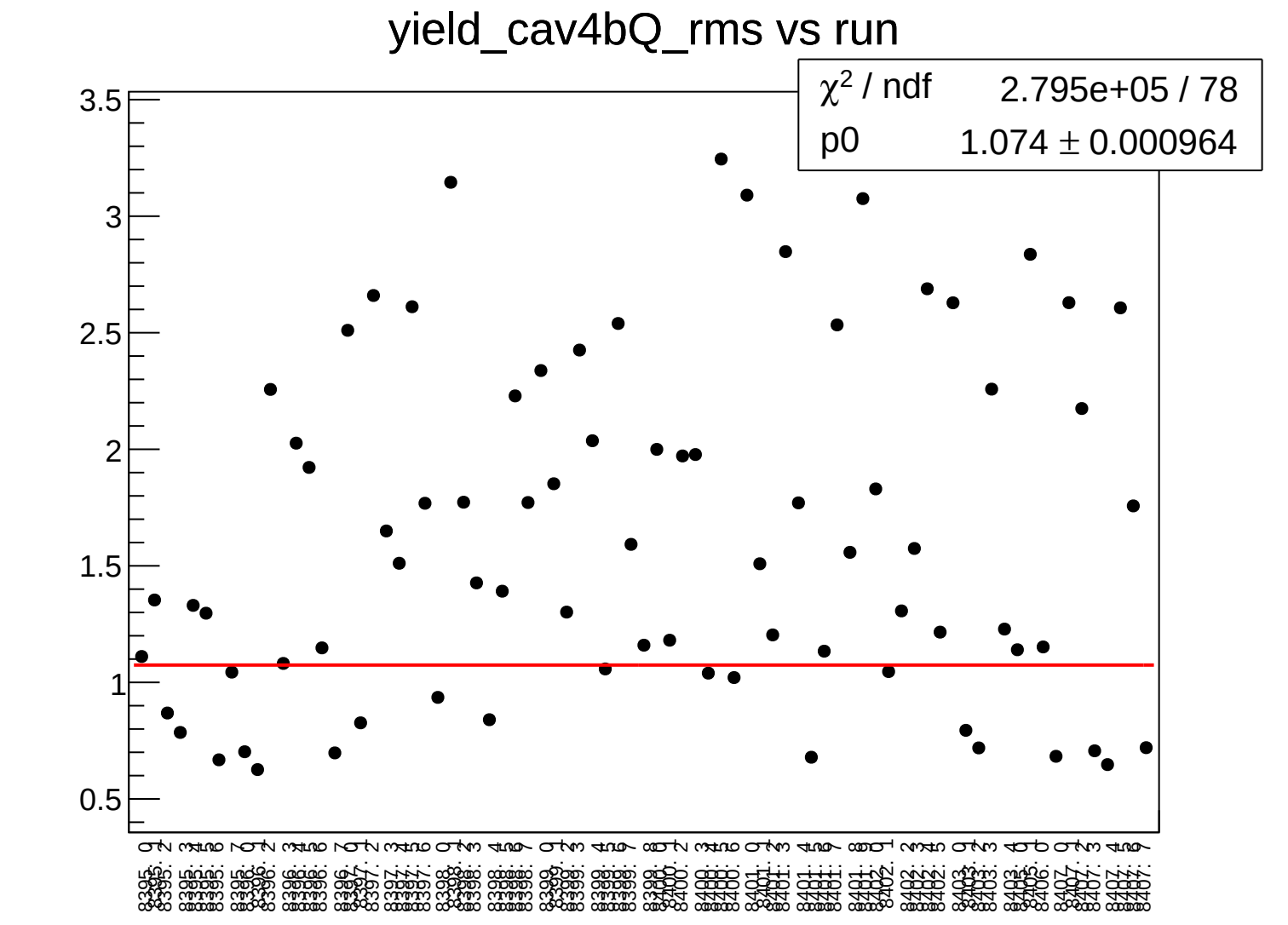

yield_bcm_dg_ds_mean vs run
χ² / ndf 9.047e+05 / 78
p0 146.8 ± 0.0007801
148.5
148
147.5
147
146.5
146
145.5
pull
Entries 79
Mean 2162
Std Dev 2131
200
100
0
−100
−200
−300

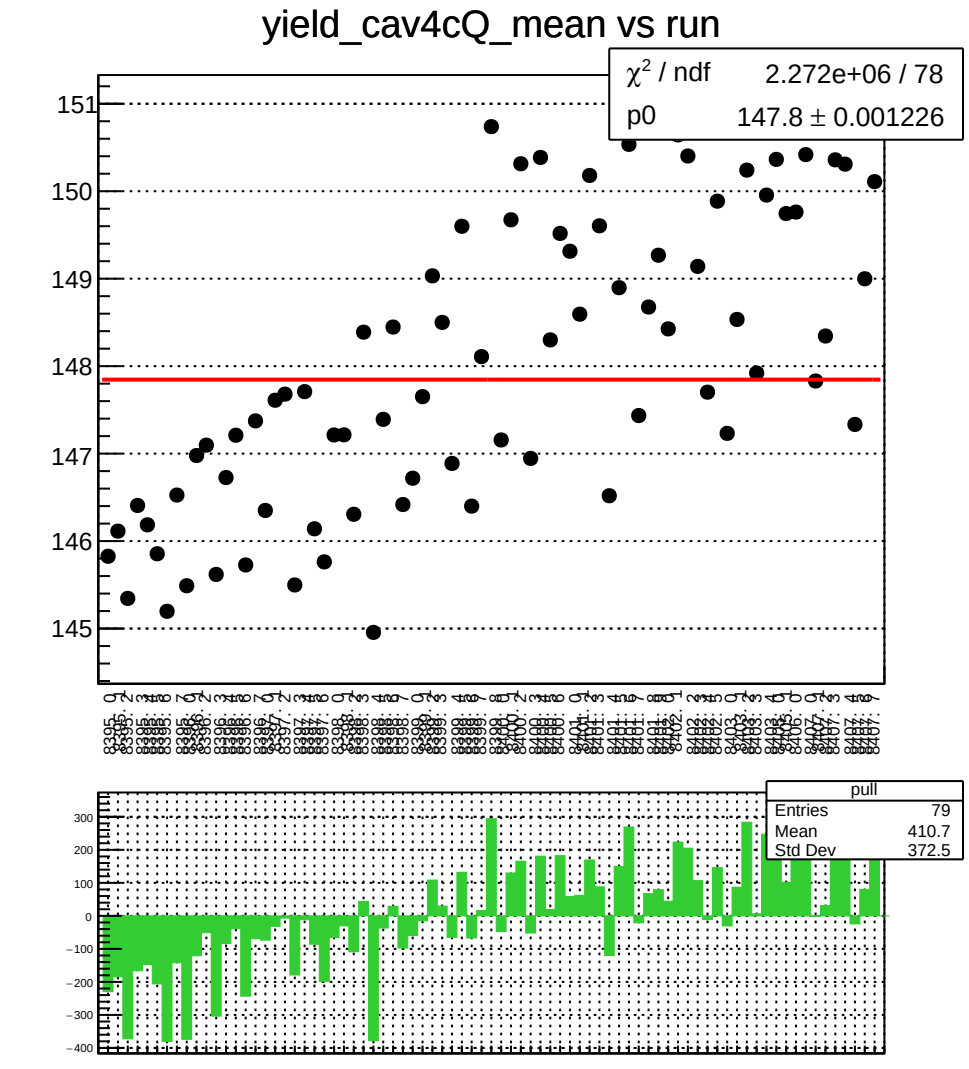

pull1D
Entries 79
Mean −0.4378
Std Dev 5.63
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

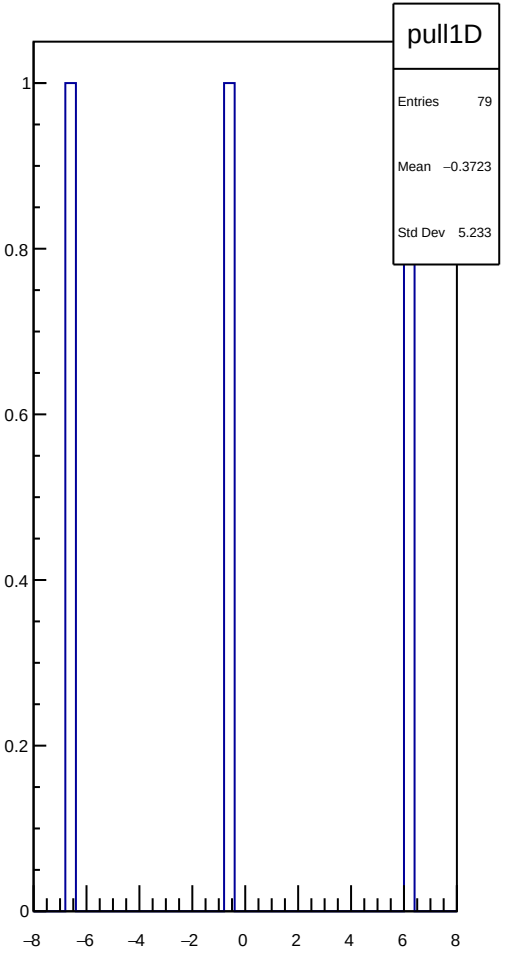

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.221e+04 / 78
p0 0.6777 ± 0.0005516
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

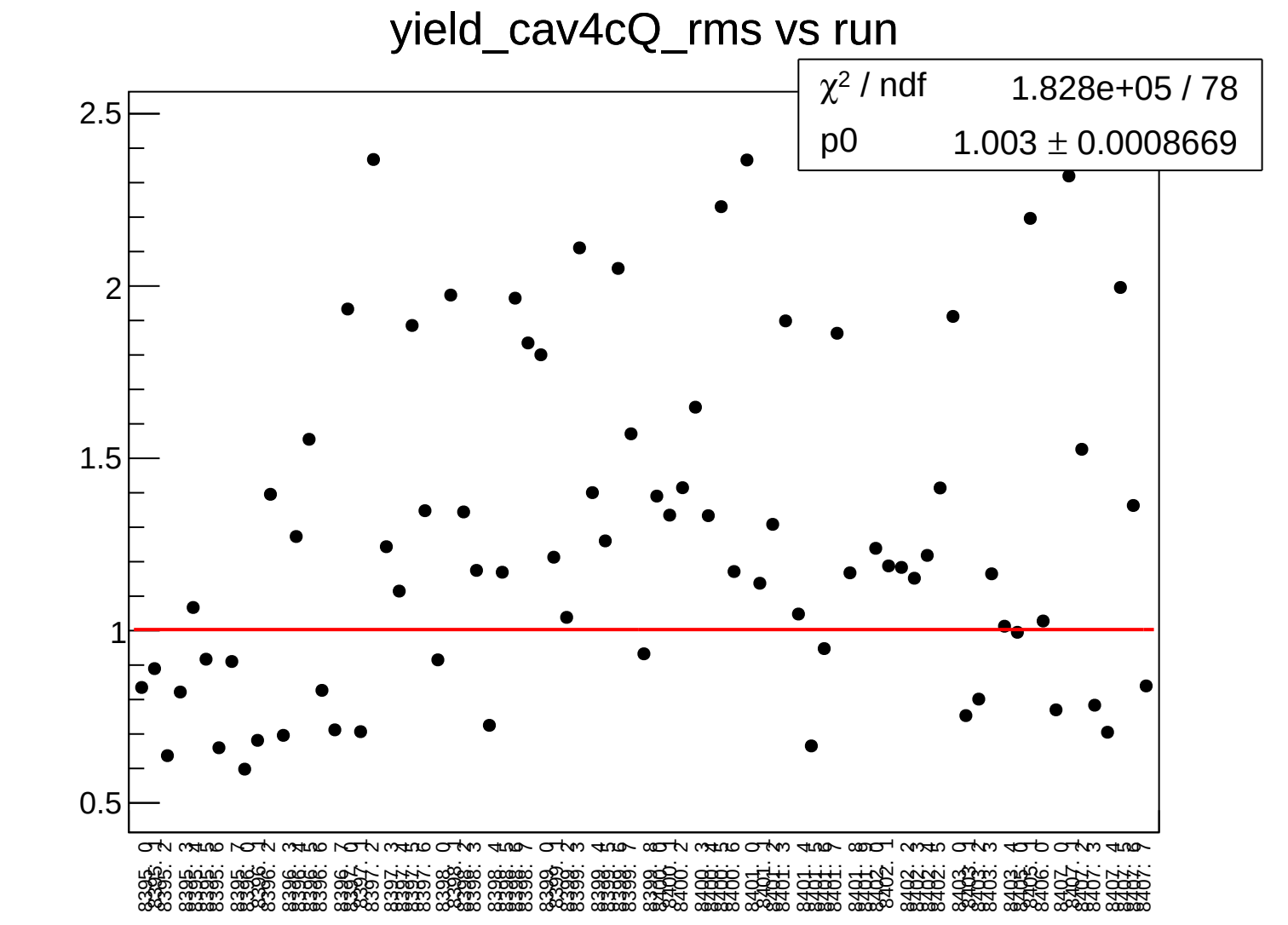

yield_cav4bQ_mean vs run
χ² / ndf 1.788e+06 / 78
p0 144 ± 0.001363
148
147
146
145
144
143
142
141
pull
Entries 79
Mean −111.4
Std Dev 148.4
400
300
200
100
0
−100
−200
−300
−400

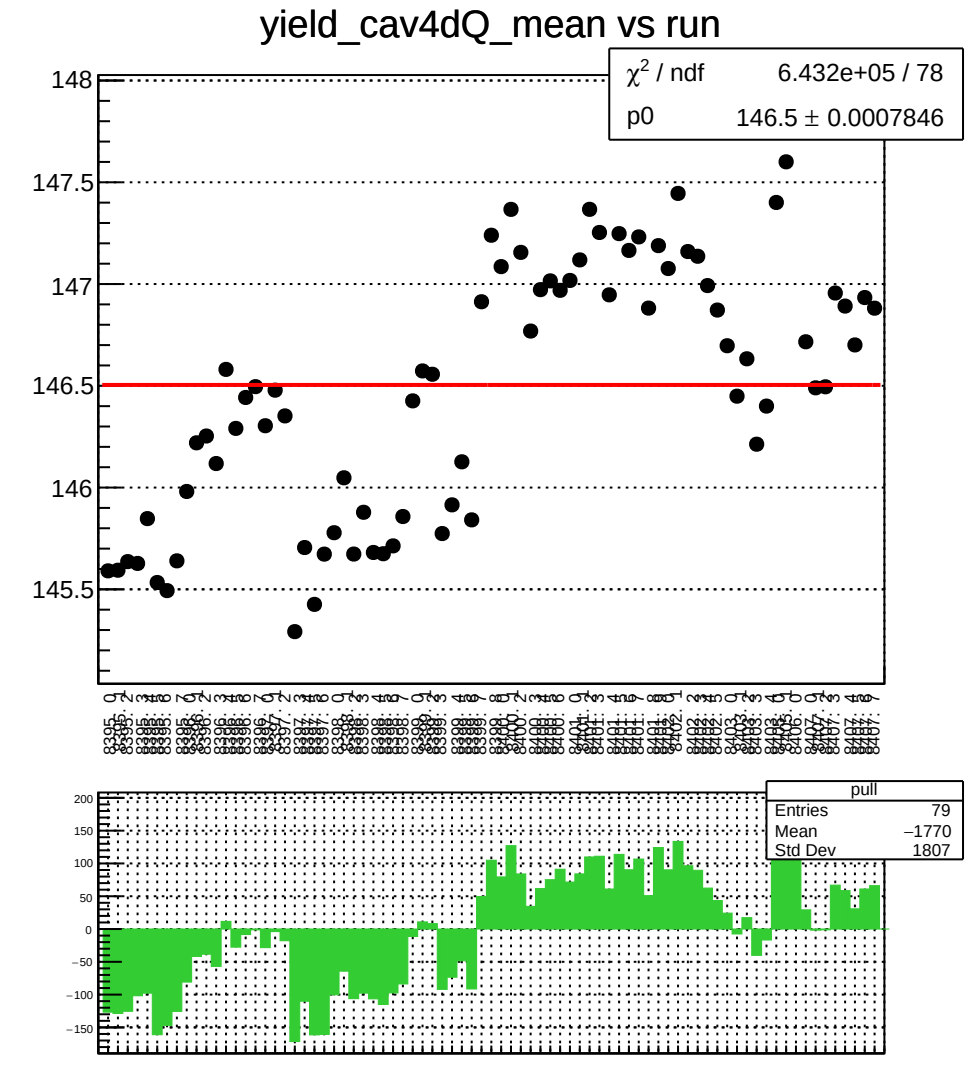

pull1D
Entries 79
Mean −2.005
Std Dev 3.806
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

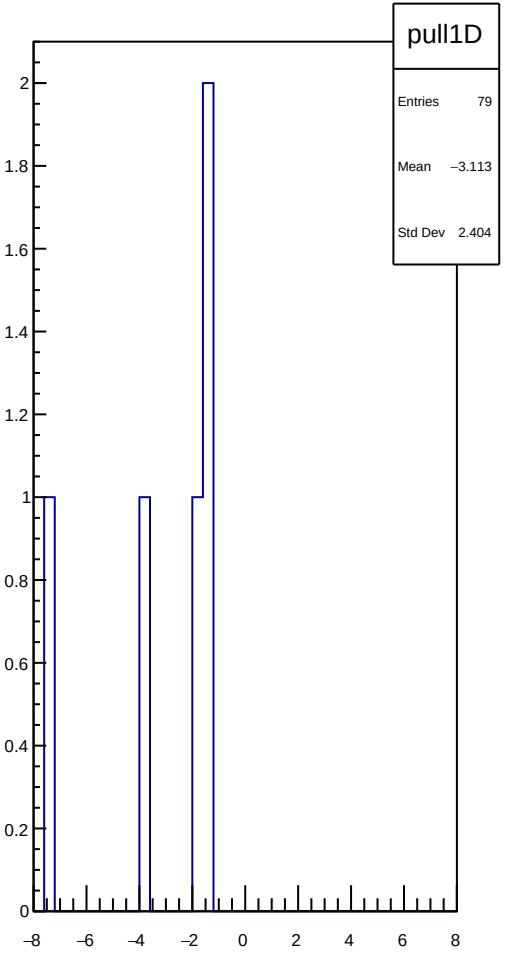

yield_cav4bQ_rms vs run
χ² / ndf 2.795e+05 / 78
p0 1.074 ± 0.000964
3.5
3
2.5
2
1.5
1
0.5

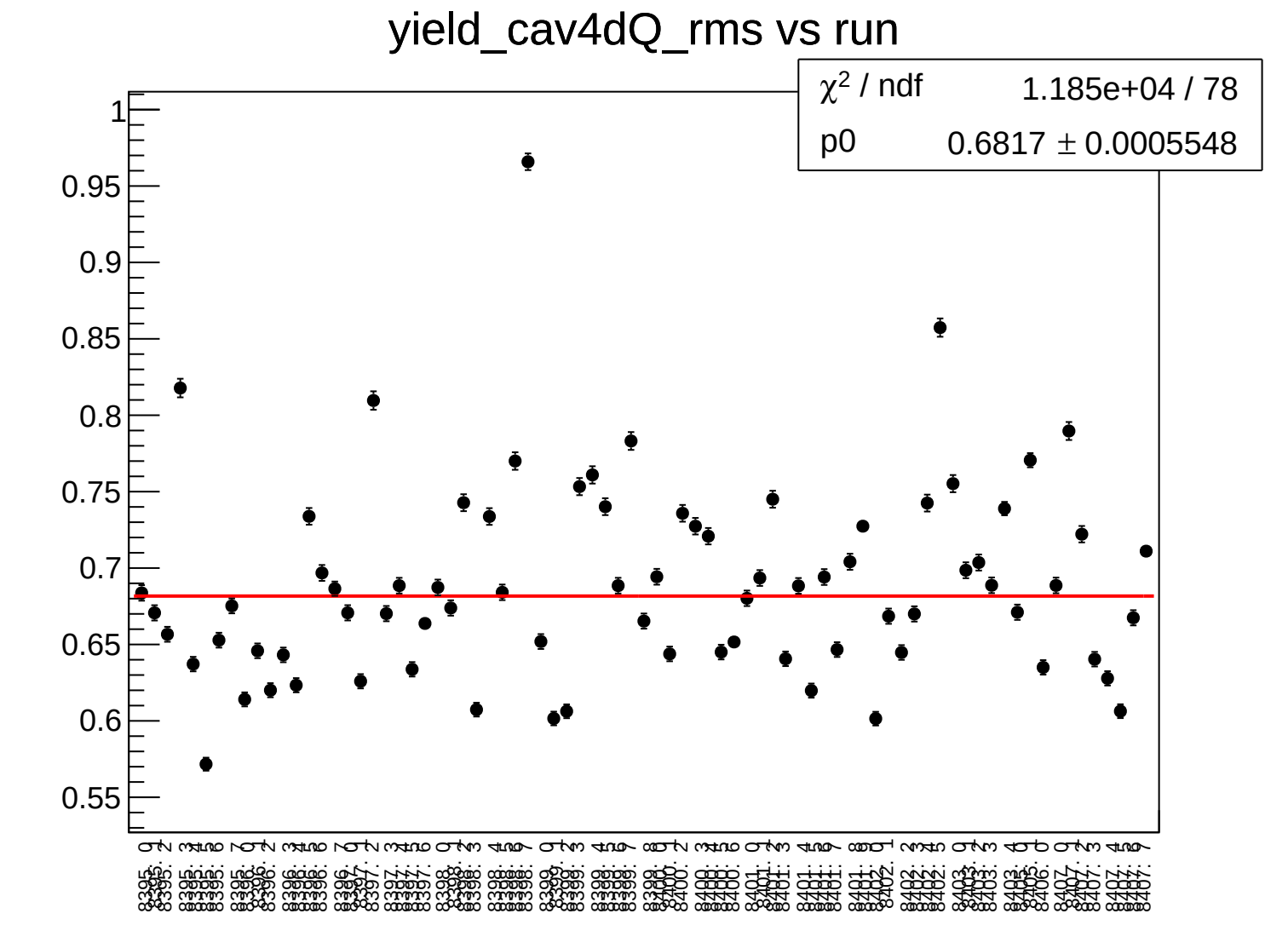

yield_cav4cQ_mean vs run
χ² / ndf 2.272e+06 / 78
p0 147.8 ± 0.001226
151
150
149
148
147
146
145
pull
Entries 79
Mean 410.7
Std Dev 372.5
300
200
100
0
−100
−200
−300
−400

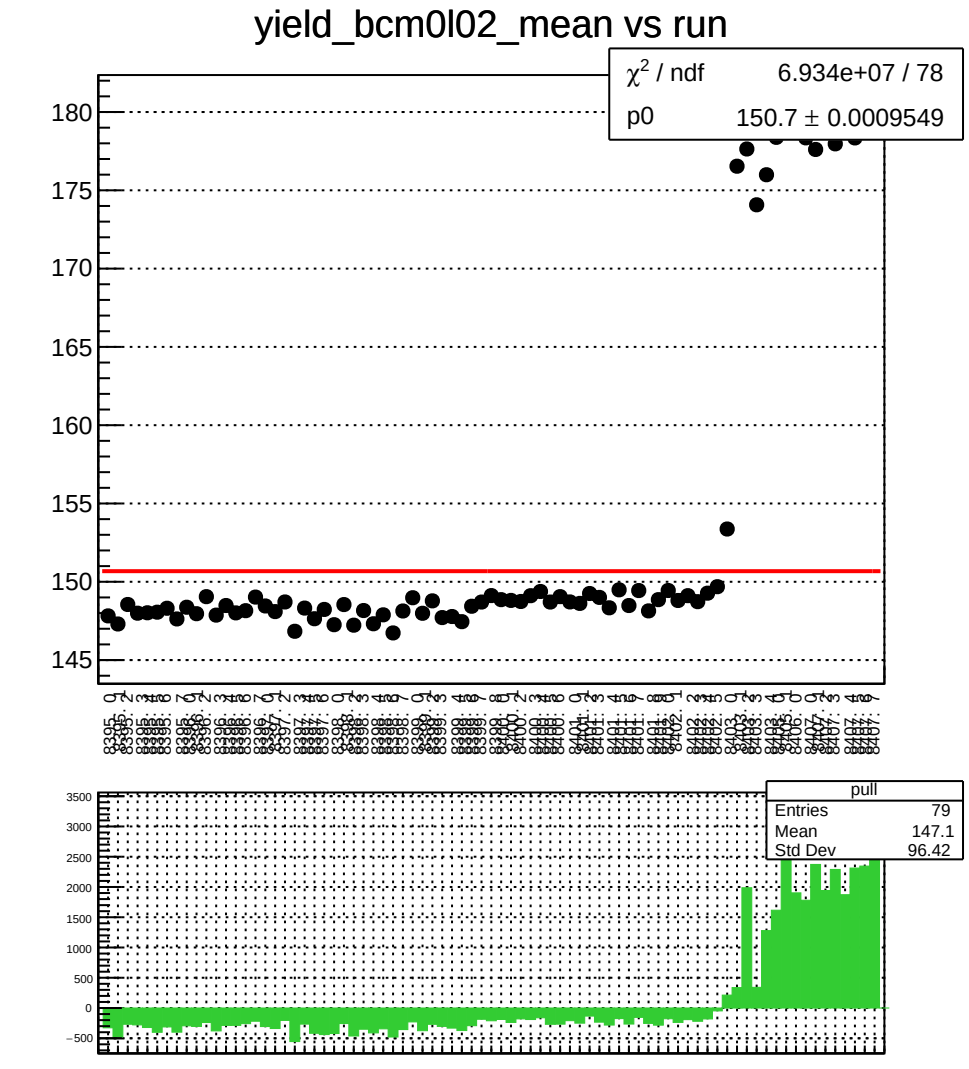

pull1D
Entries 79
Mean −0.3723
Std Dev 5.233
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

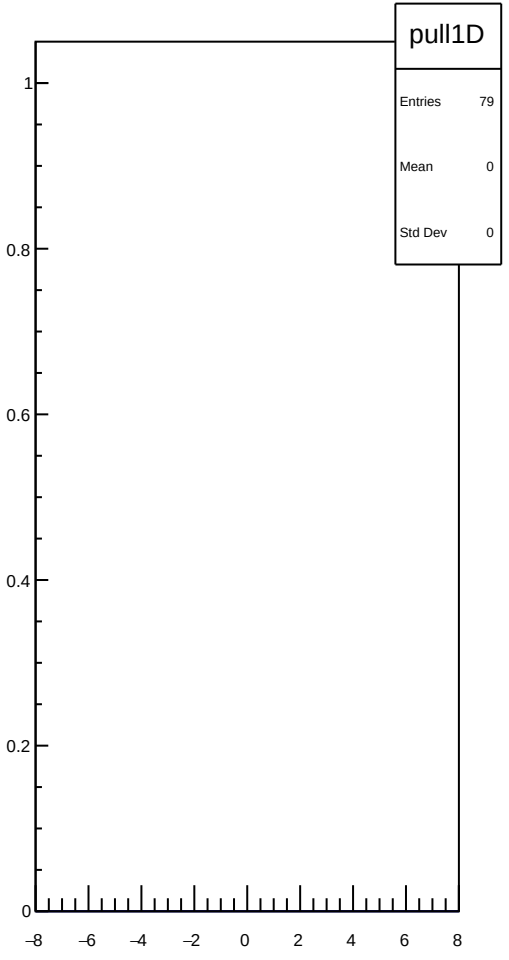

yield_cav4cQ_rms vs run
χ² / ndf 1.828e+05 / 78
p0 1.003 ± 0.0008669
2.5
2
1.5
1
0.5

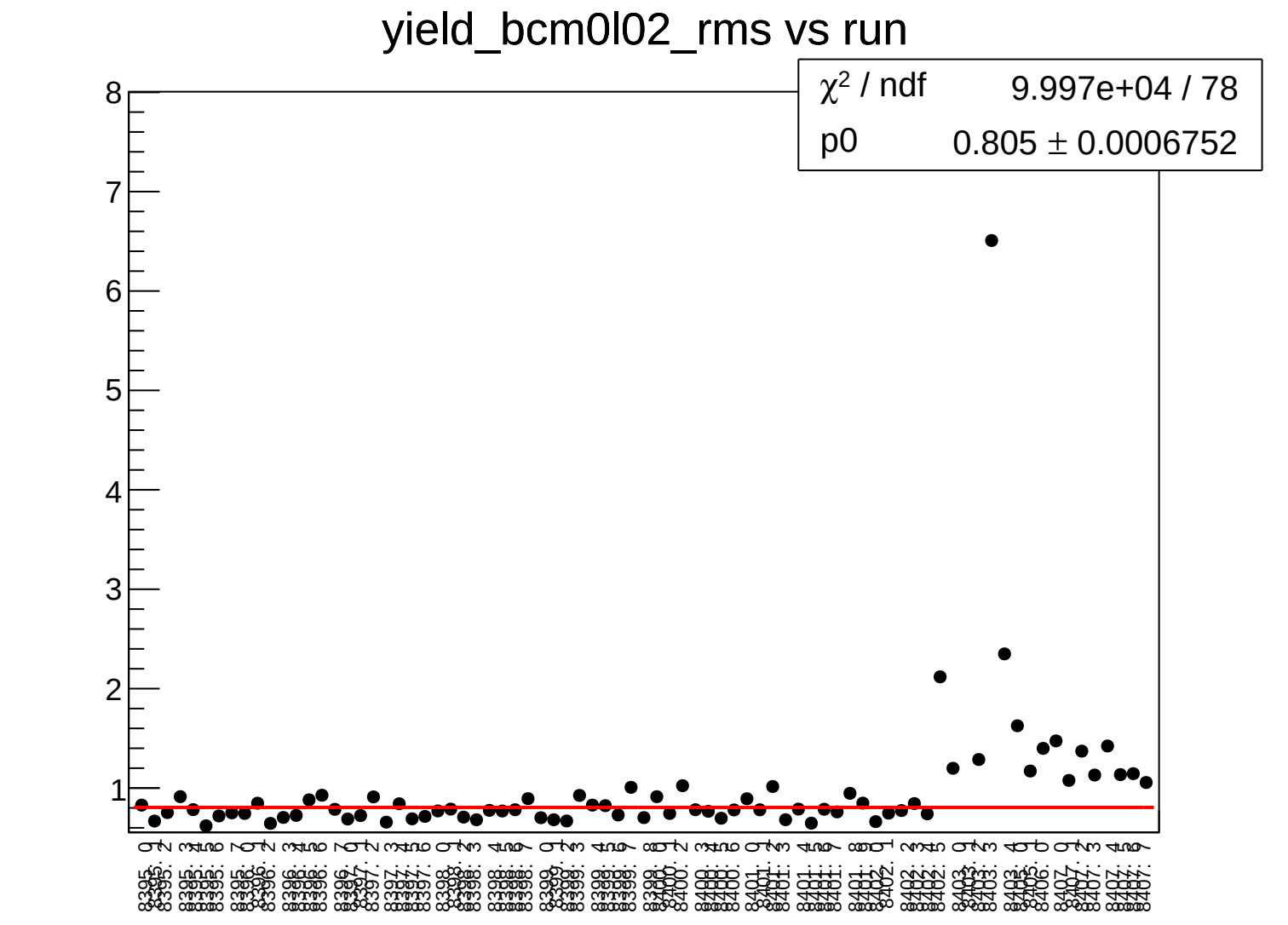

yield_cav4dQ_mean vs run
χ² / ndf 6.432e+05 / 78
p0 146.5 ± 0.0007846
148
147.5
147
146.5
146
145.5
pull
Entries 79
Mean −1770
Std Dev 1807
200
150
100
50
0
−50
−100
−150

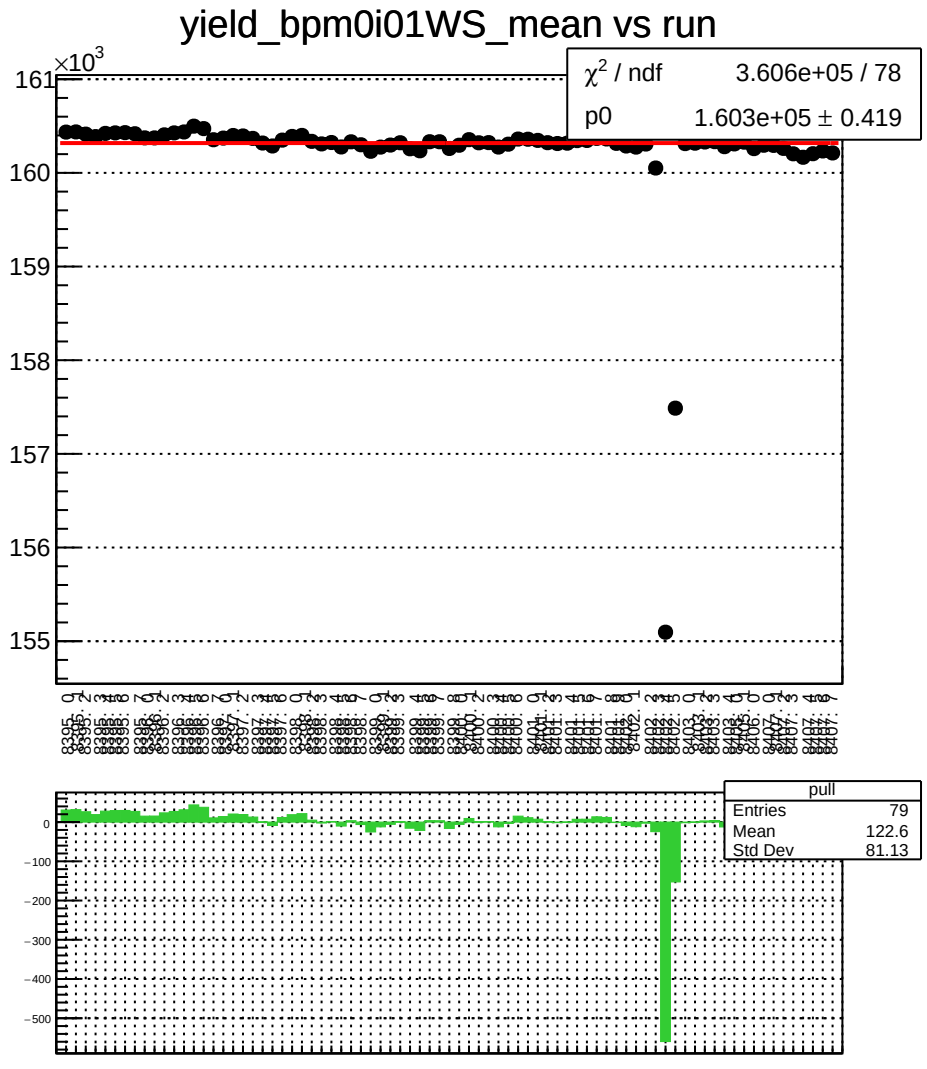

pull1D
Entries 79
Mean −3.113
Std Dev 2.404
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

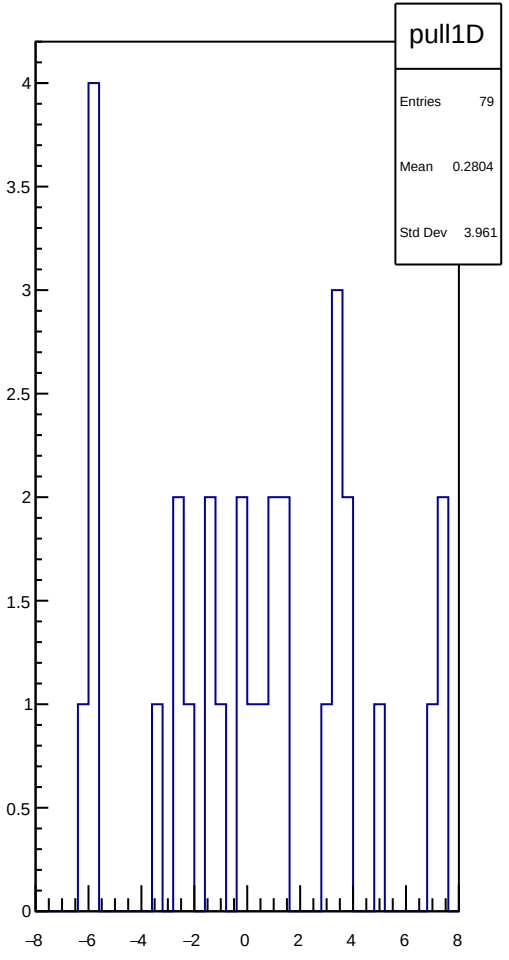

yield_cav4dQ_rms vs run
χ² / ndf 1.185e+04 / 78
p0 0.6817 ± 0.0005548
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55

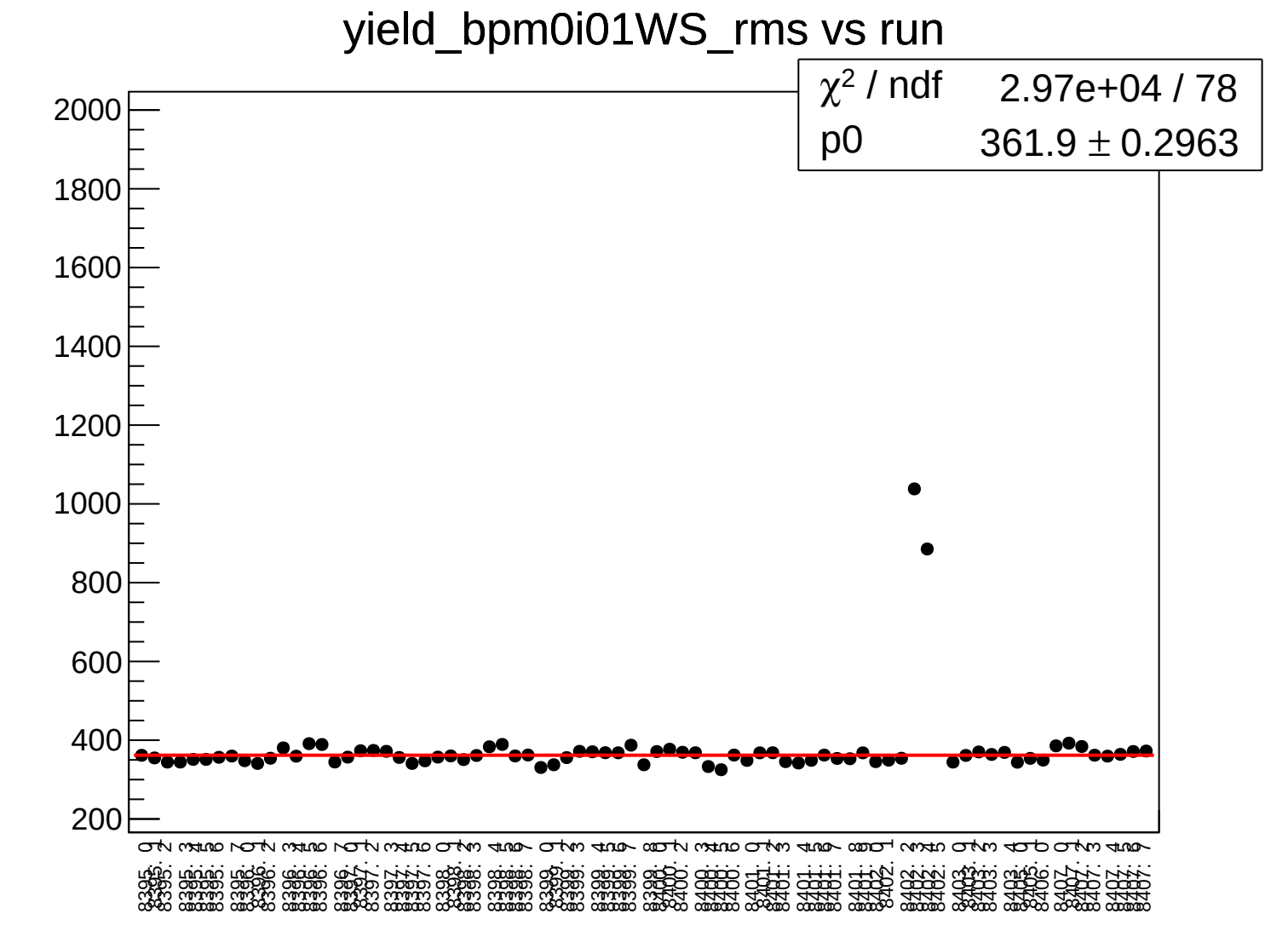

yield_bcm0l02_mean vs run
χ² / ndf 6.934e+07 / 78
p0 150.7 ± 0.0009549
pull
Entries 79
Mean 147.1
Std Dev 96.42

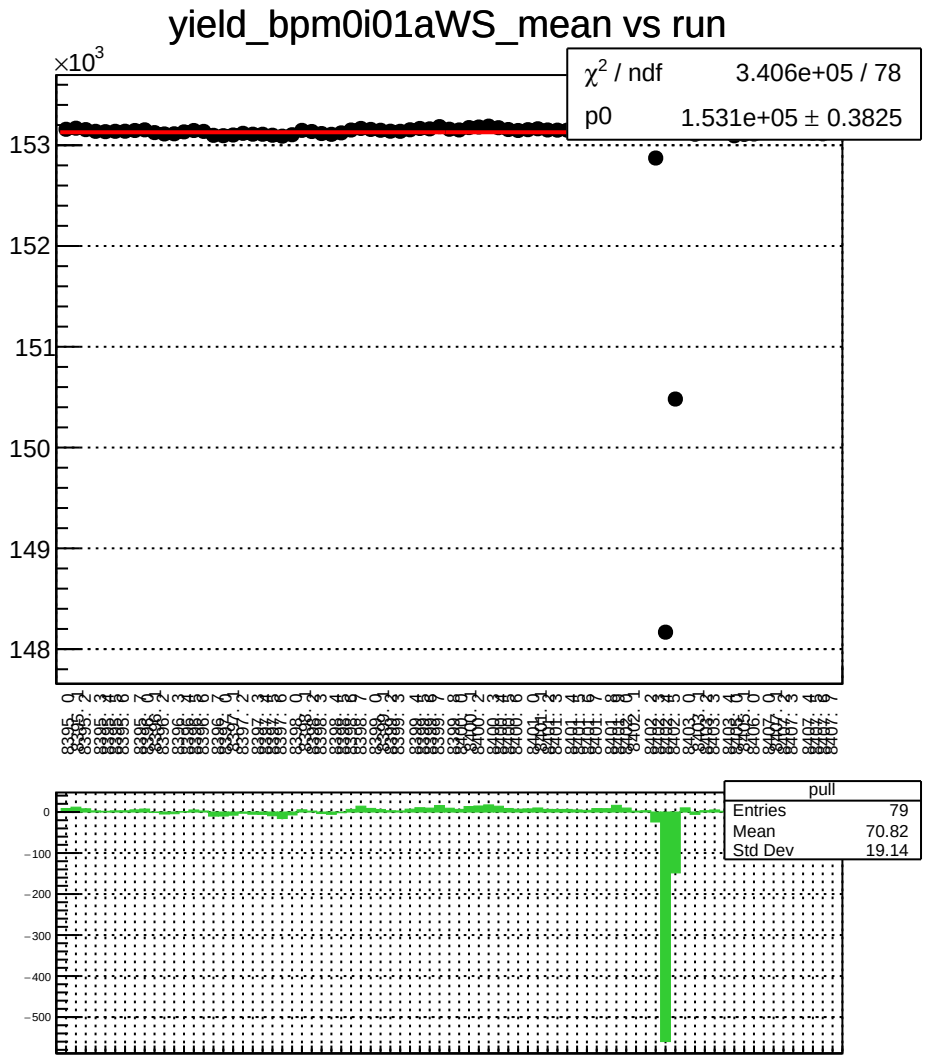

pull1D
Entries 79
Mean 0
Std Dev 0

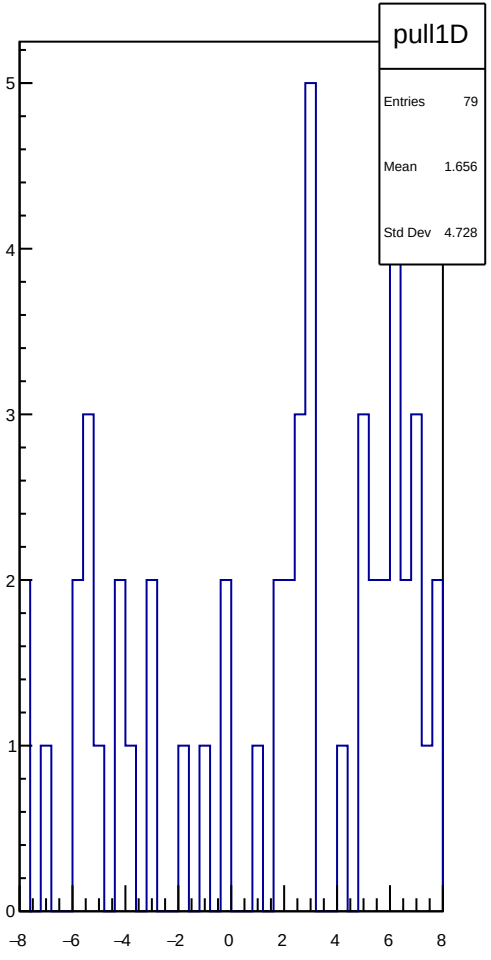

yield_bcm0l02_rms vs run
χ² / ndf 9.997e+04 / 78
p0 0.805 ± 0.0006752
8
7
6
5
4
3
2
1

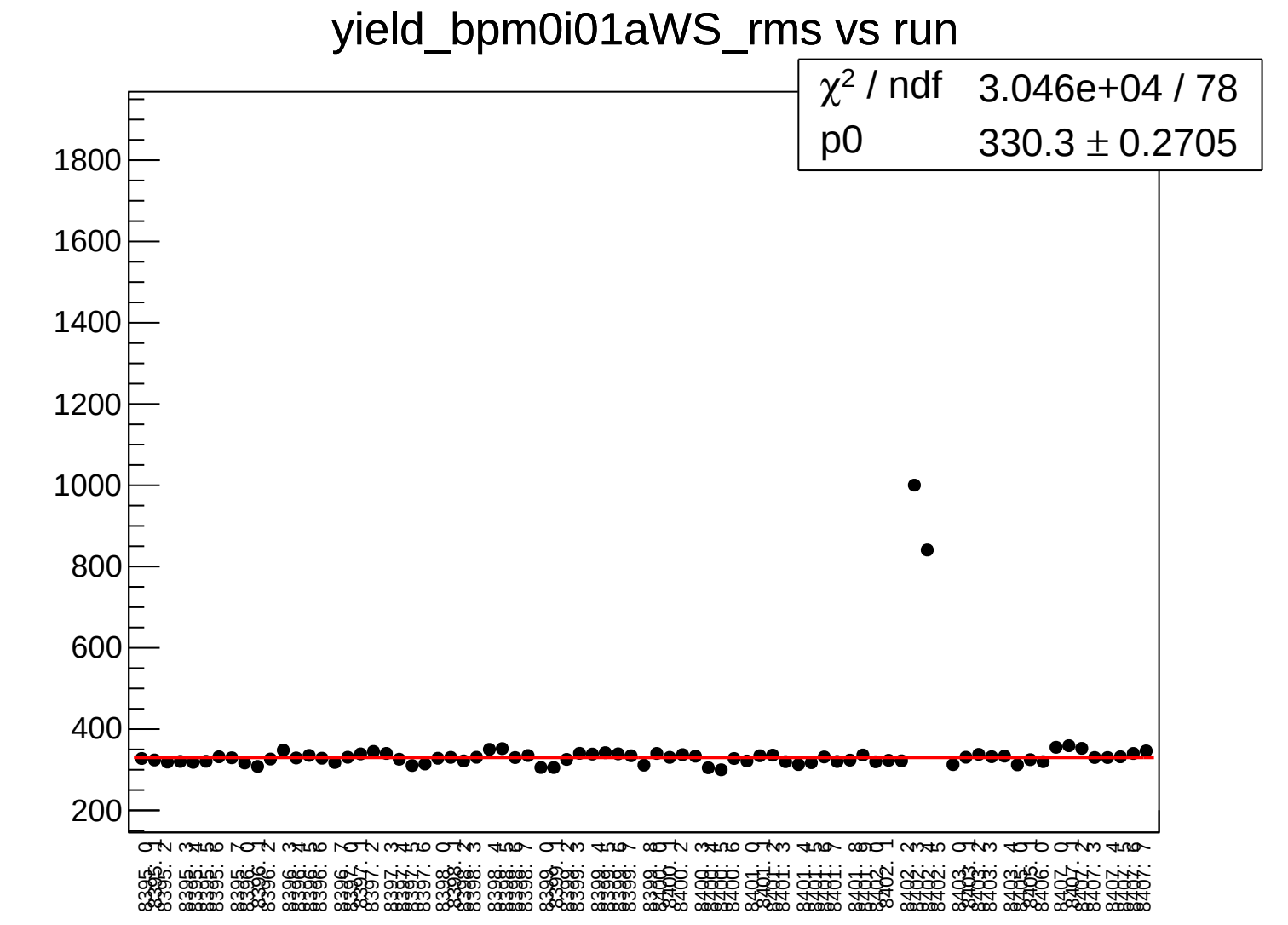

yield_bpm0i01WS_mean vs run
χ² / ndf 3.606e+05 / 78
p0 1.603e+05 ± 0.419
×10³
161
160
159
158
157
156
155
pull
Entries 79
Mean 122.6
Std Dev 81.13
0
−100
−200
−300
−400
−500

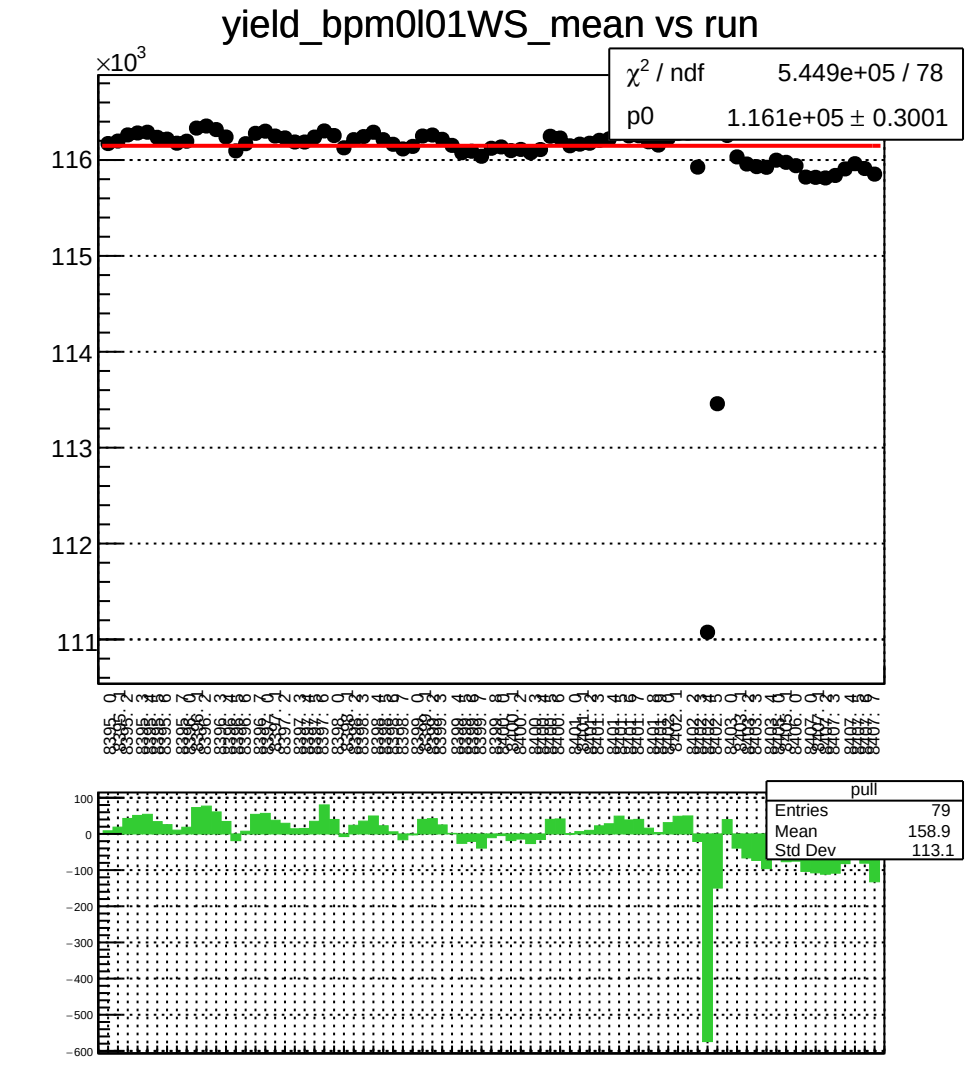

pull1D
Entries 79
Mean 0.2804
Std Dev 3.961
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

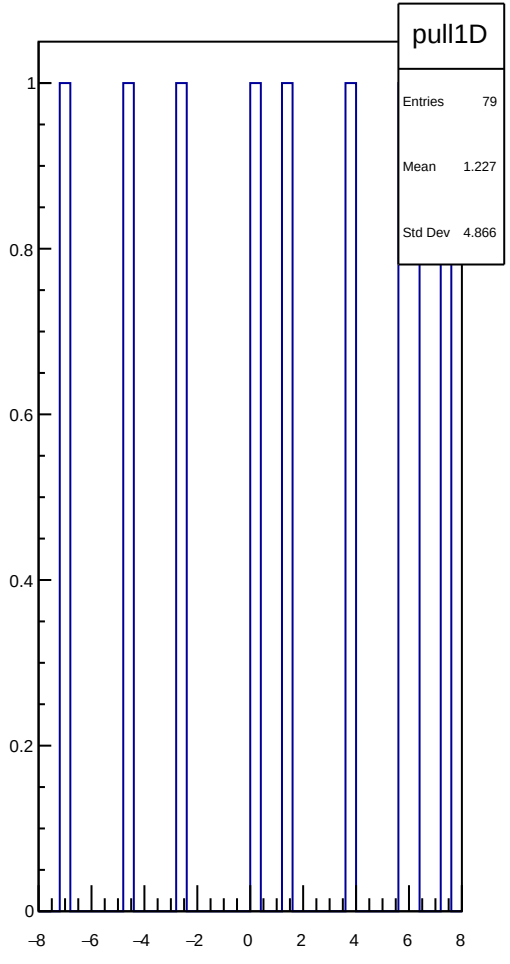

yield_bpm0i01WS_rms vs run
χ² / ndf 2.97e+04 / 78
p0 361.9 ± 0.2963
2000
1800
1600
1400
1200
1000
800
600
400
200

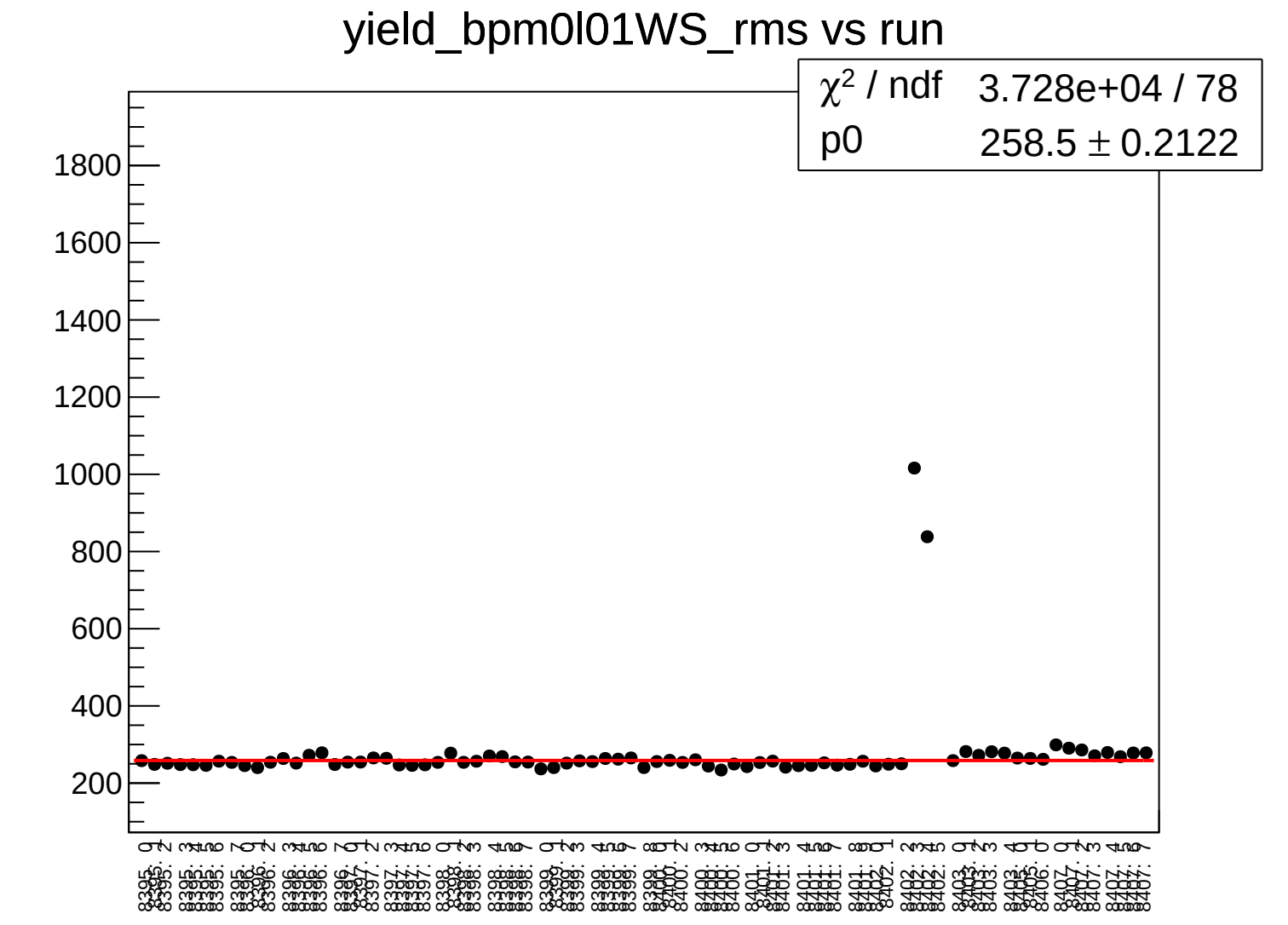

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 3.406e+05 / 78
p0 1.531e+05 ± 0.3825
153
152
151
150
149
148
pull
Entries 79
Mean 70.82
Std Dev 19.14
0
−100
−200
−300
−400
−500

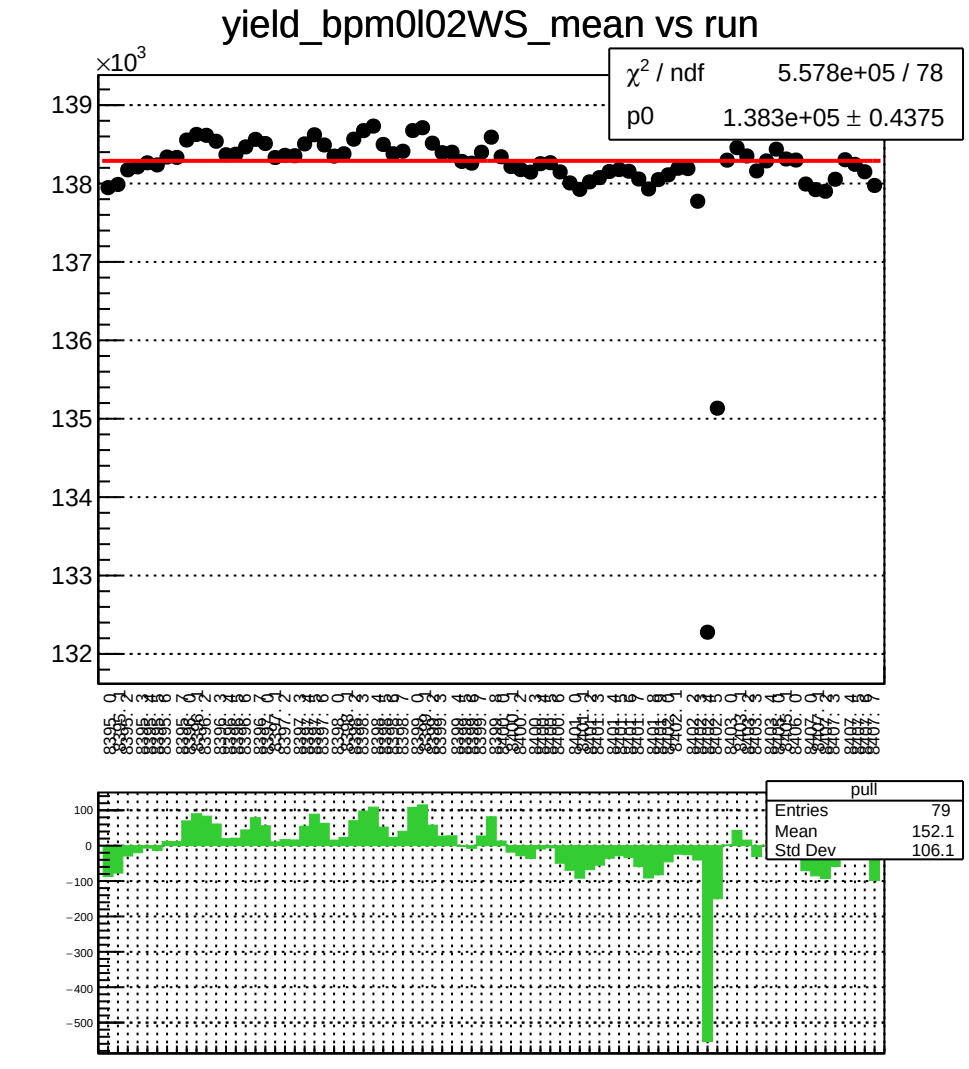

pull1D
Entries 79
Mean 1.656
Std Dev 4.728
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

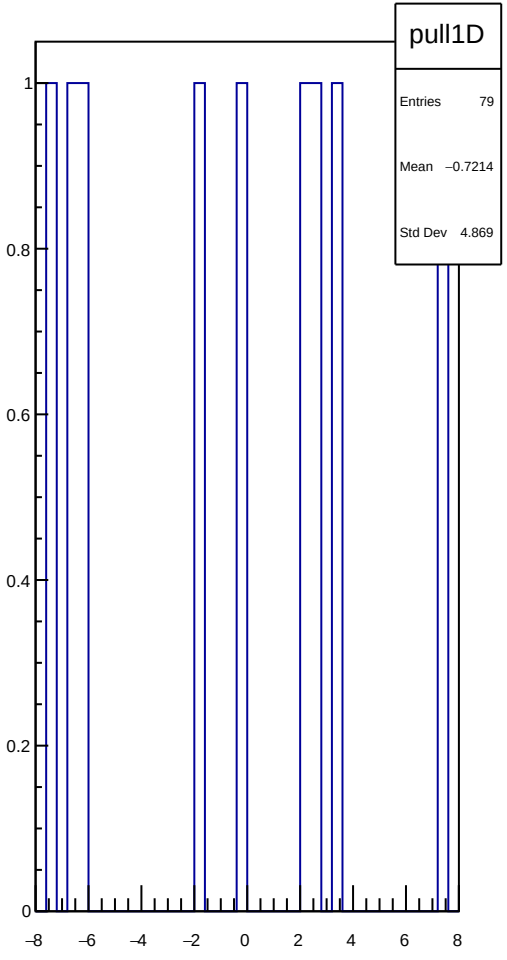

yield_bpm0i01aWS_rms vs run
χ² / ndf 3.046e+04 / 78
p0 330.3 ± 0.2705
1800
1600
1400
1200
1000
800
600
400
200

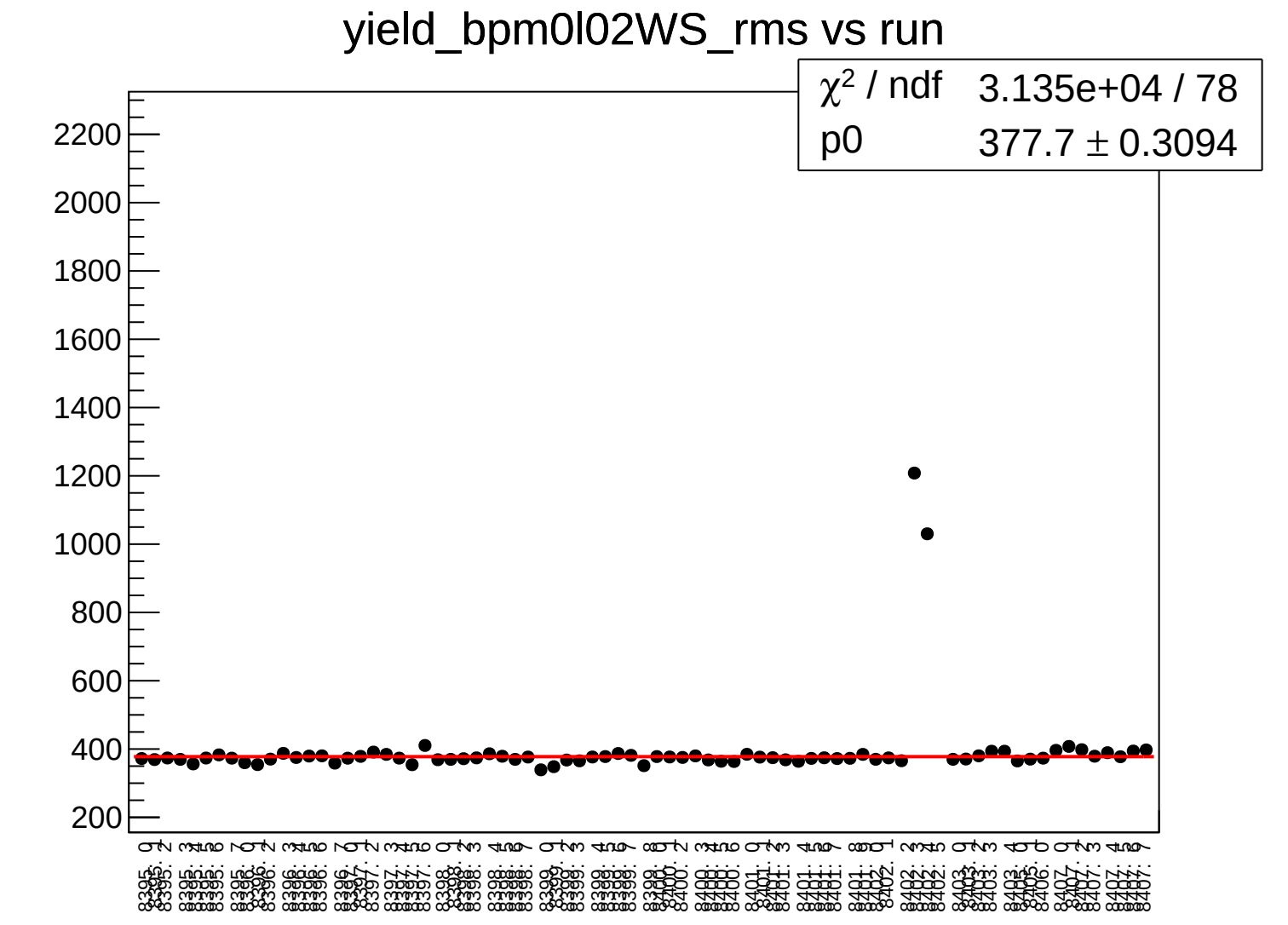

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 5.449e+05 / 78
p0 1.161e+05 ± 0.3001
116
115
114
113
112
111
pull
Entries 79
Mean 158.9
Std Dev 113.1
100
0
−100
−200
−300
−400
−500
−600

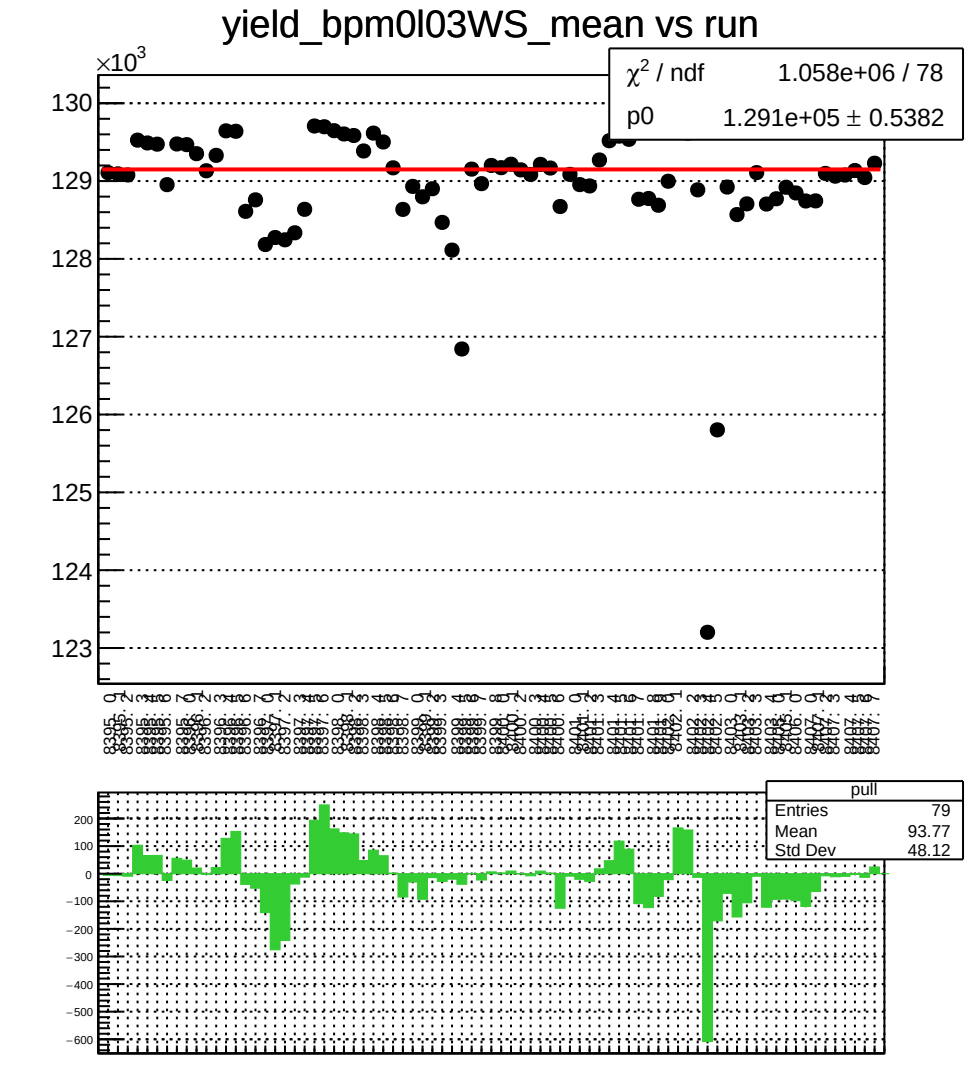

pull1D
Entries 79
Mean 1.227
Std Dev 4.866
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

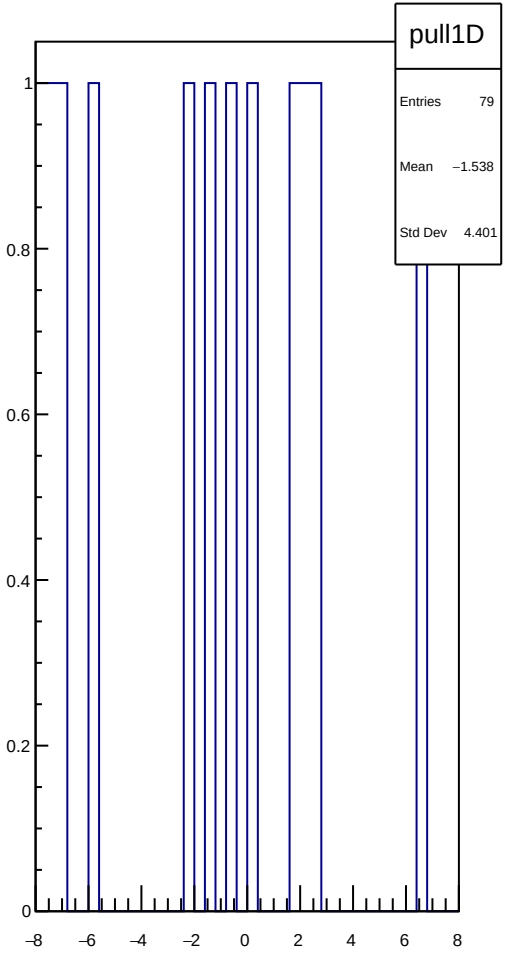

yield_bpm0l01WS_rms vs run
χ² / ndf 3.728e+04 / 78
p0 258.5 ± 0.2122
1800
1600
1400
1200
1000
800
600
400
200

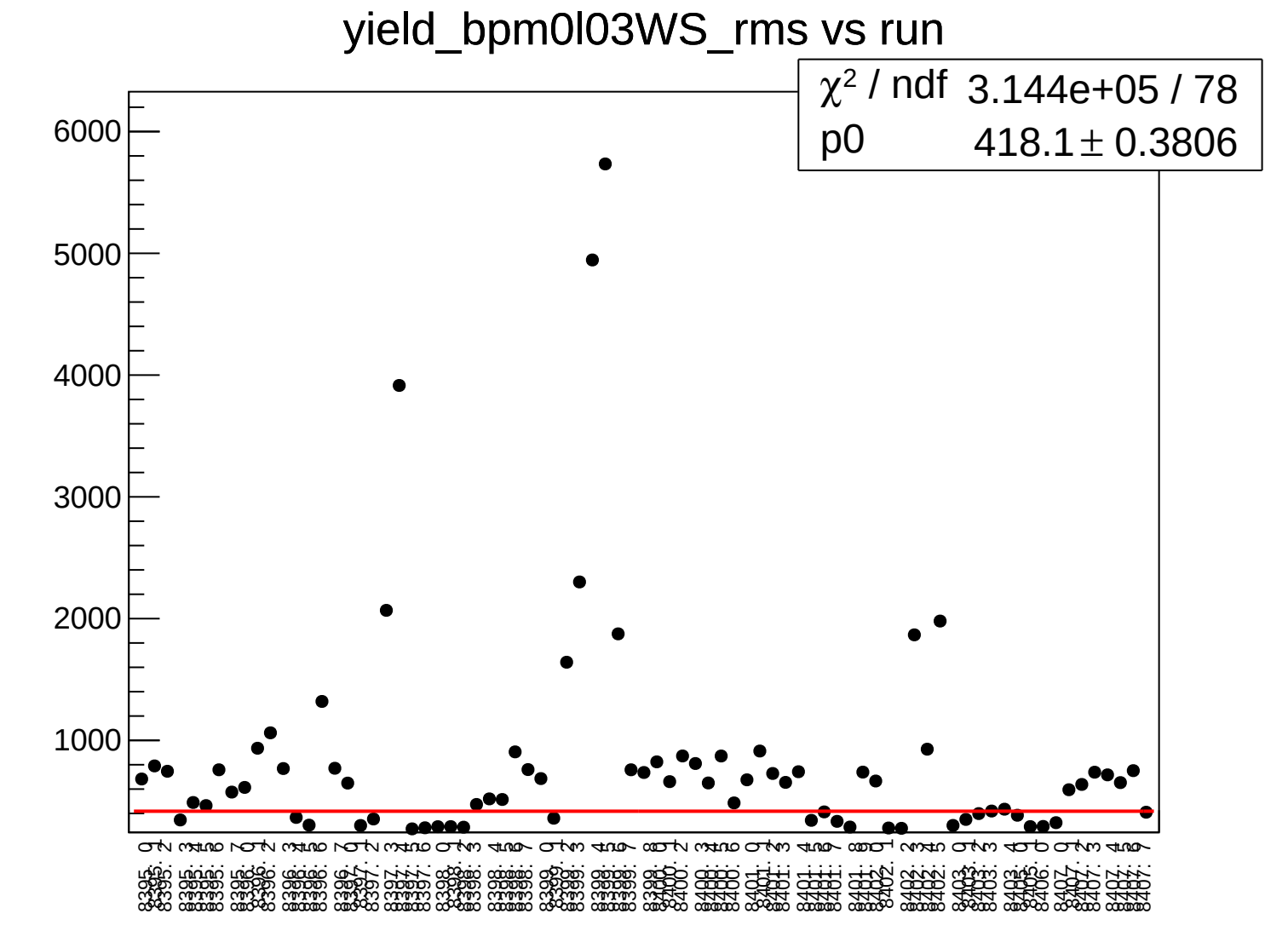

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 5.578e+05 / 78
p0 1.383e+05 ± 0.4375
139
138
137
136
135
134
133
132
pull
Entries 79
Mean 152.1
Std Dev 106.1
100
0
−100
−200
−300
−400
−500

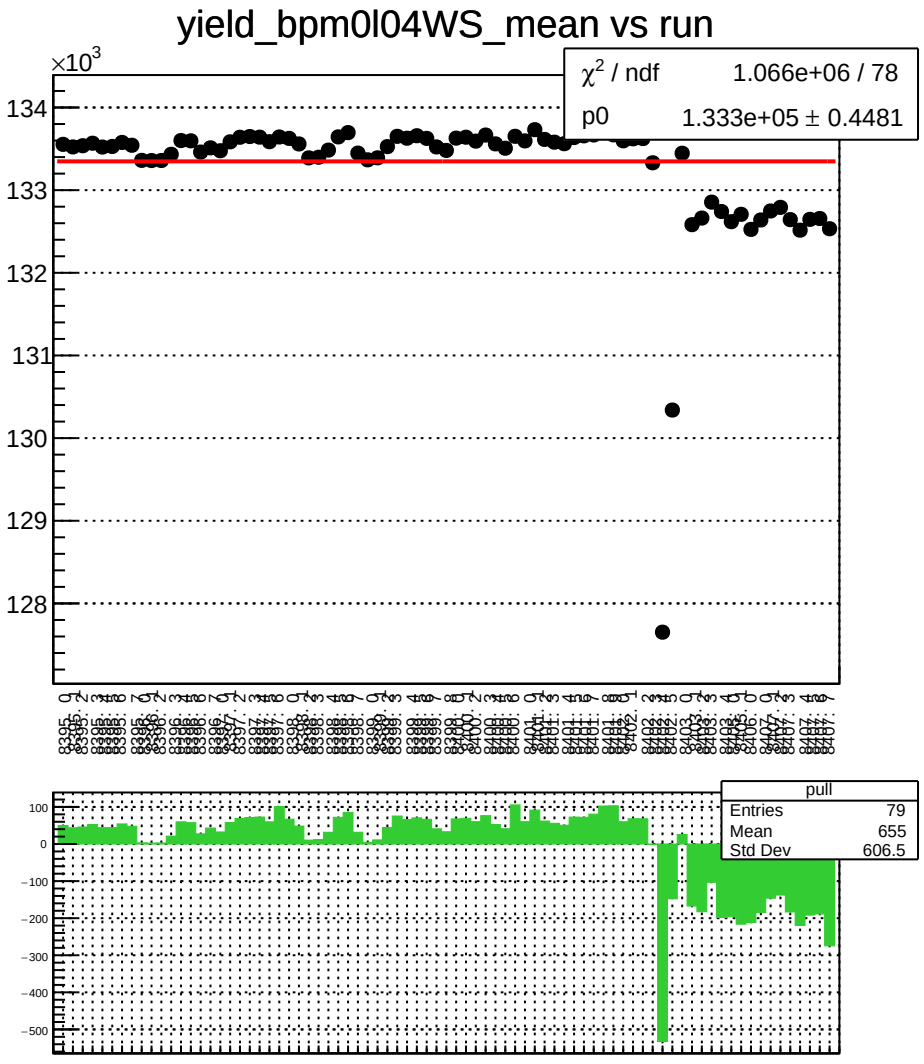

pull1D
Entries 79
Mean −0.7214
Std Dev 4.869
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

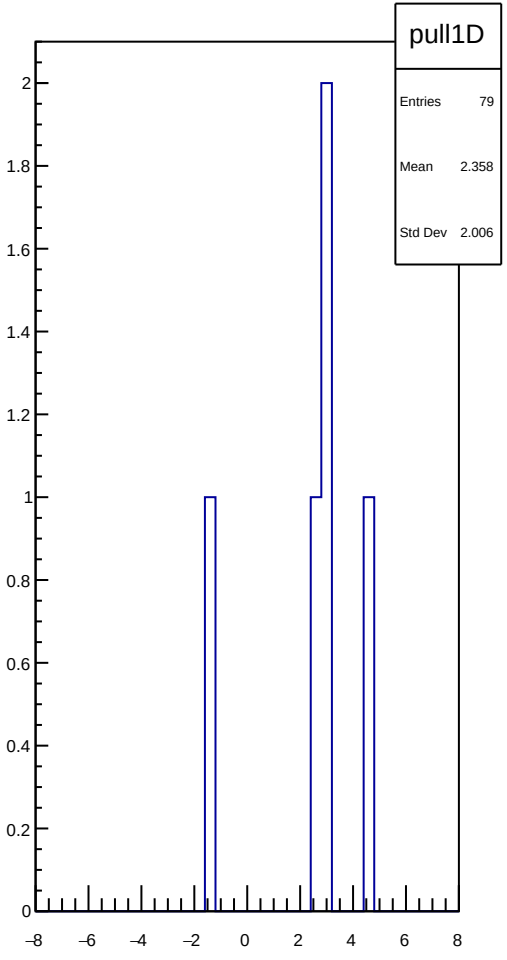

yield_bpm0l02WS_rms vs run
χ² / ndf 3.135e+04 / 78
p0 377.7 ± 0.3094
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

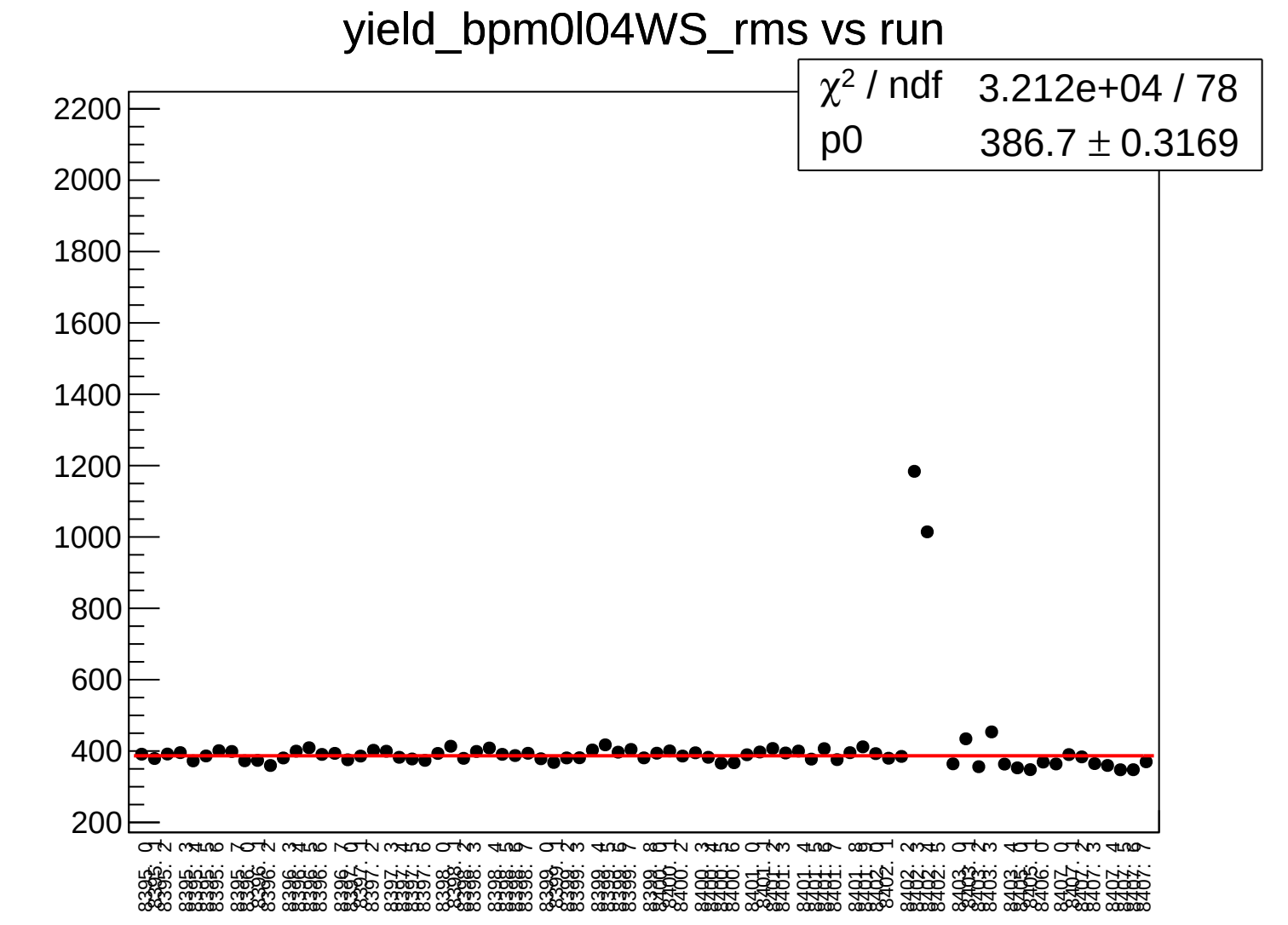

yield_bpm0l03WS_mean vs run
×10^3
130
129
128
127
126
125
124
123
χ² / ndf 1.058e+06 / 78
p0 1.291e+05 ± 0.5382
pull
Entries 79
Mean 93.77
Std Dev 48.12
200
100
0
−100
−200
−300
−400
−500
−600

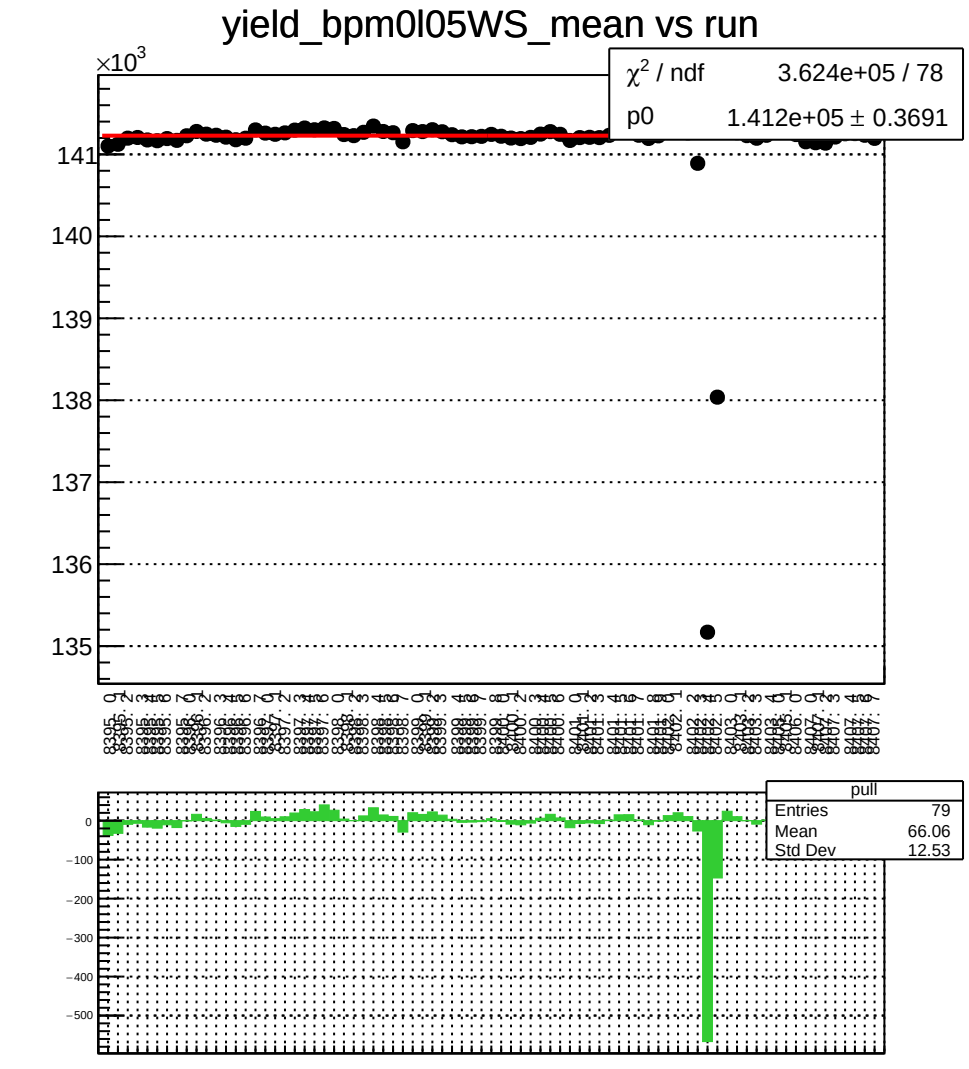

pull1D
Entries 79
Mean −1.538
Std Dev 4.401
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

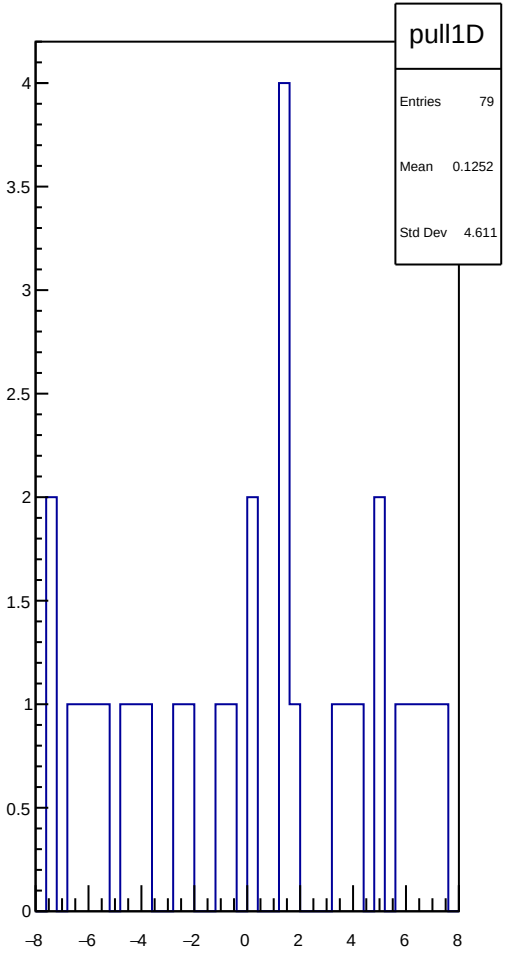

yield_bpm0l03WS_rms vs run
χ² / ndf 3.144e+05 / 78
p0 418.1 ± 0.3806
6000
5000
4000
3000
2000
1000

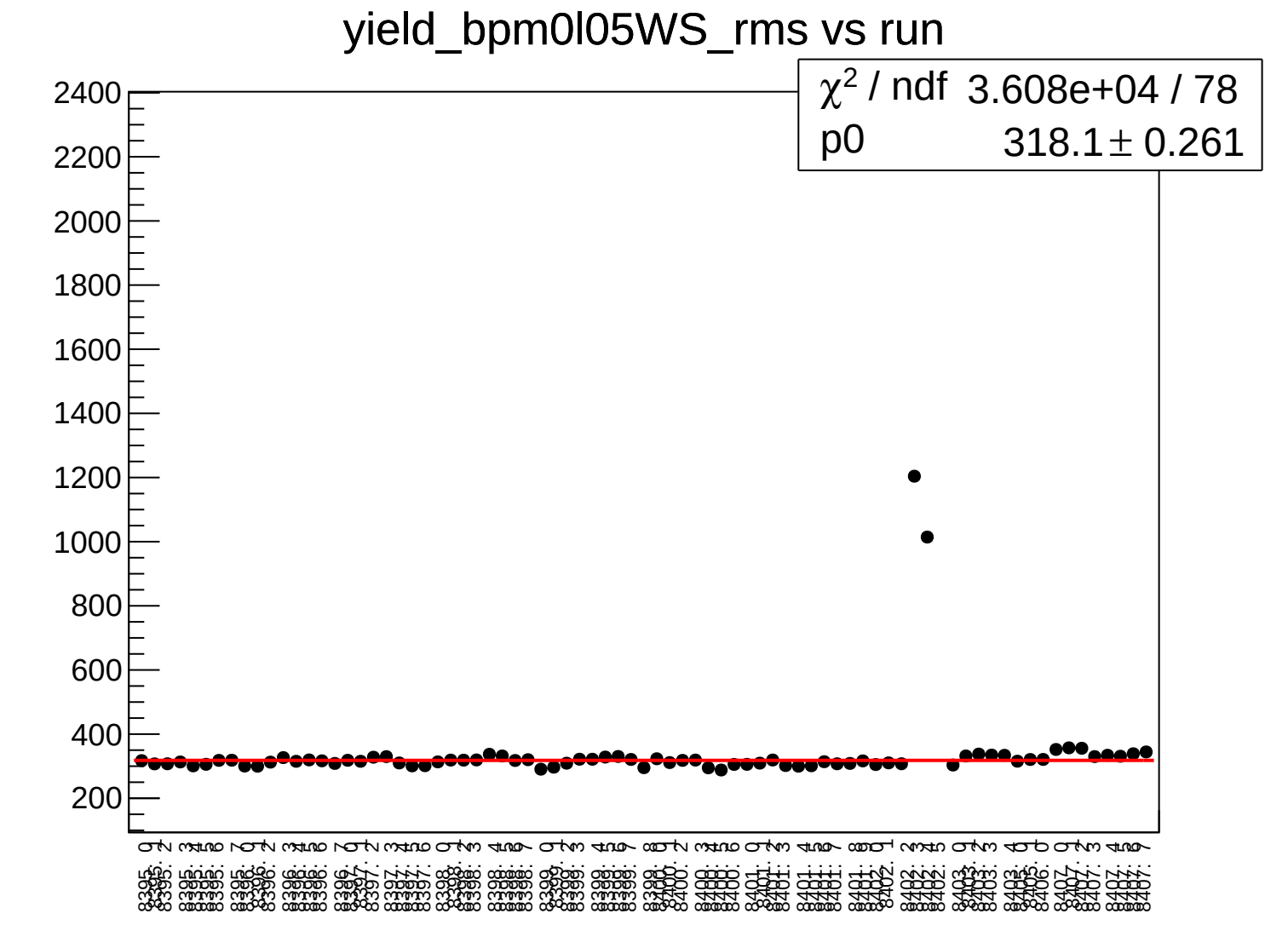

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 1.066e+06 / 78
p0 1.333e+05 ± 0.4481
134
133
132
131
130
129
128
pull
Entries 79
Mean 655
Std Dev 606.5
100
0
−100
−200
−300
−400
−500

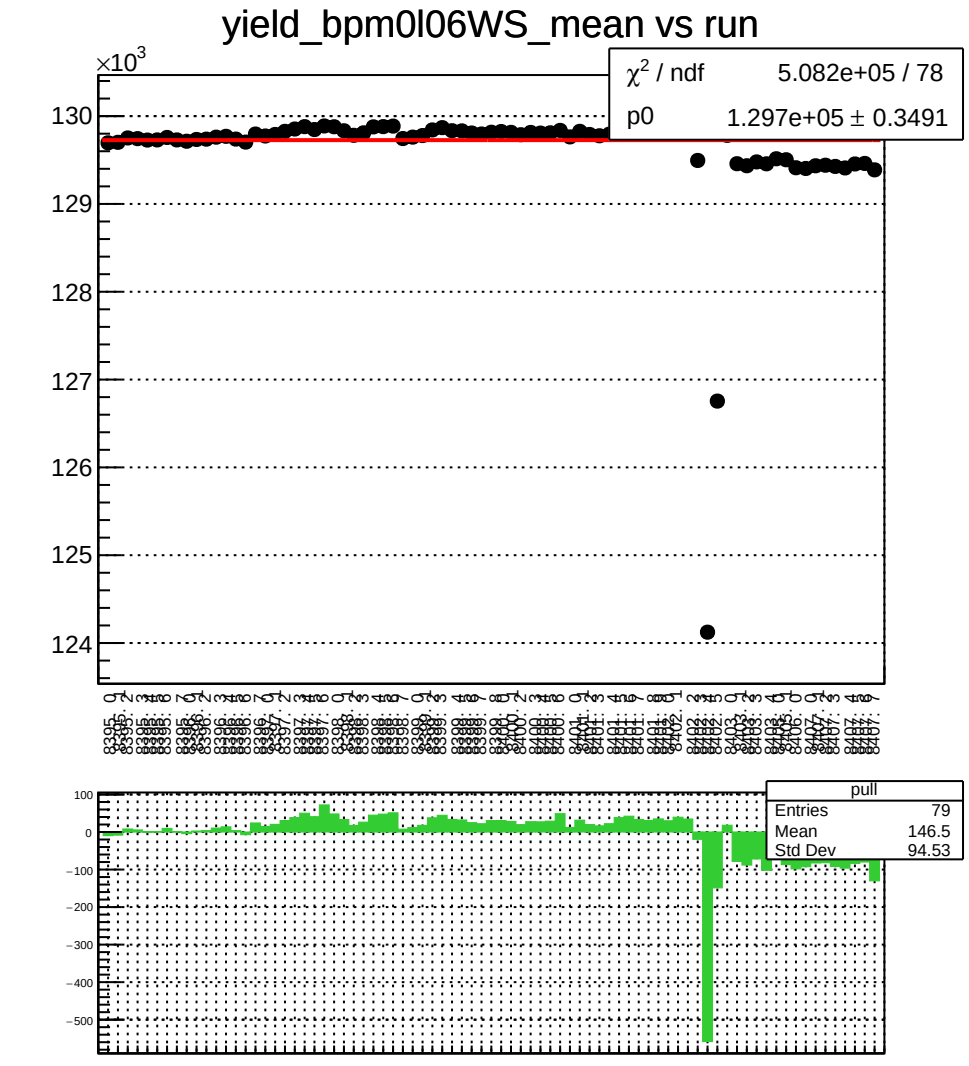

pull1D
Entries 79
Mean 2.358
Std Dev 2.006
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

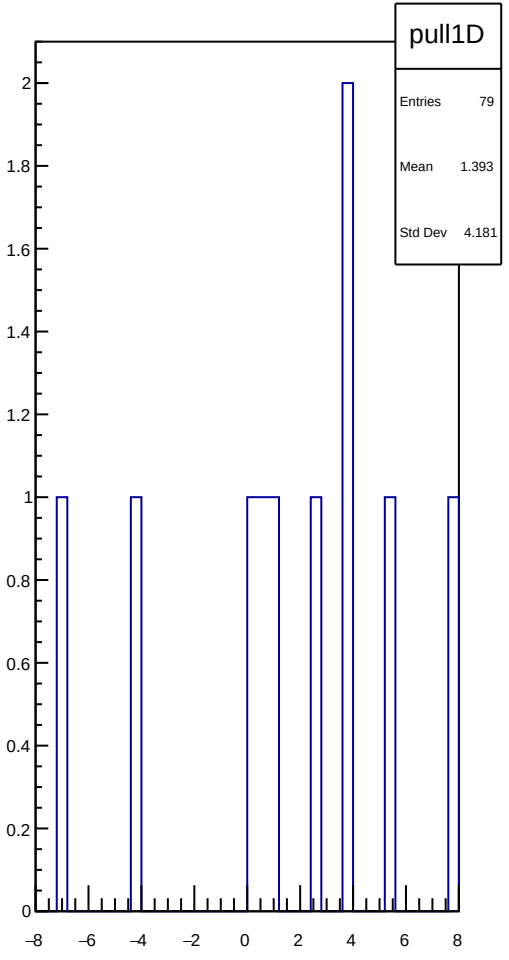

yield_bpm0l04WS_rms vs run
χ² / ndf 3.212e+04 / 78
p0 386.7 ± 0.3169
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

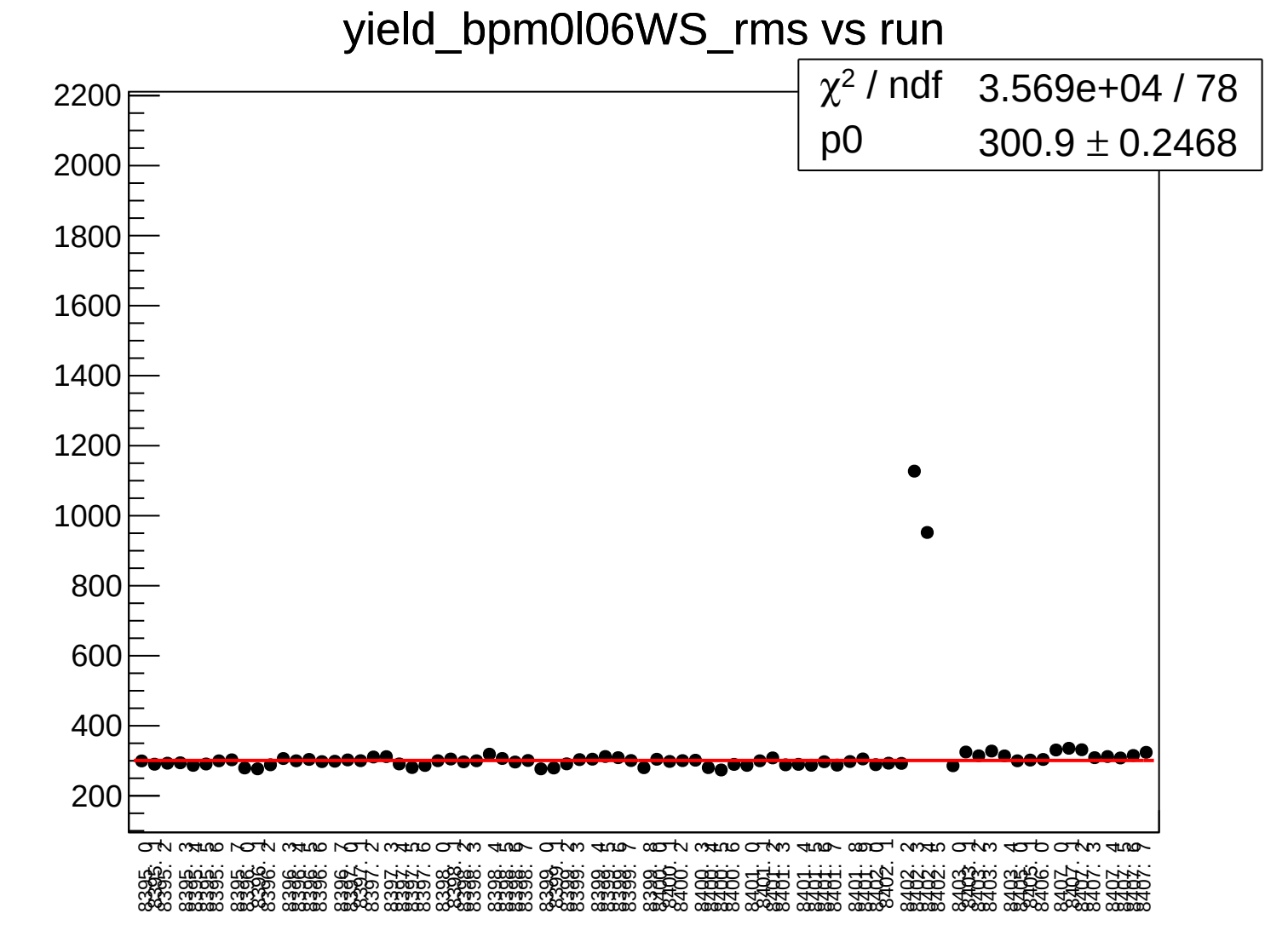

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 3.624e+05 / 78
p0 1.412e+05 ± 0.3691
141
140
139
138
137
136
135
pull
Entries 79
Mean 66.06
Std Dev 12.53
0
−100
−200
−300
−400
−500

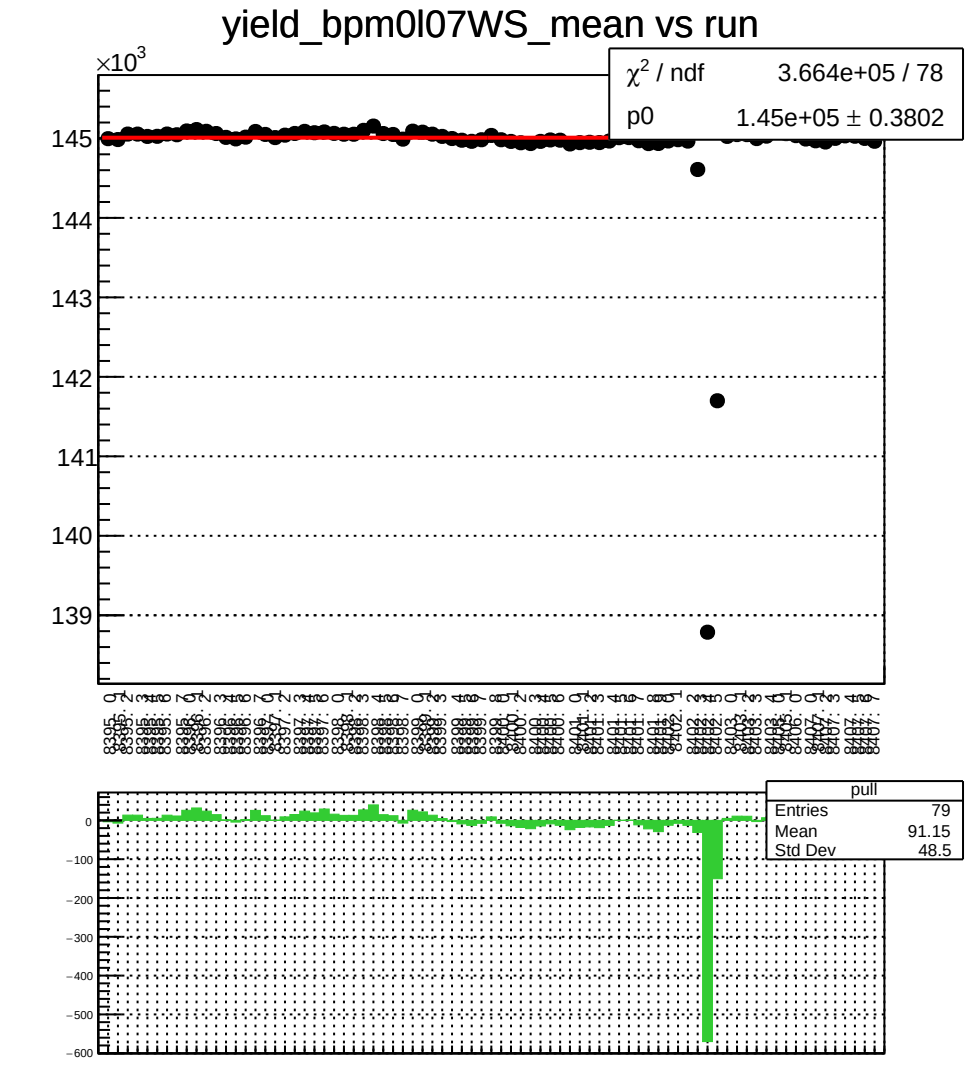

pull1D
Entries 79
Mean 0.1252
Std Dev 4.611
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

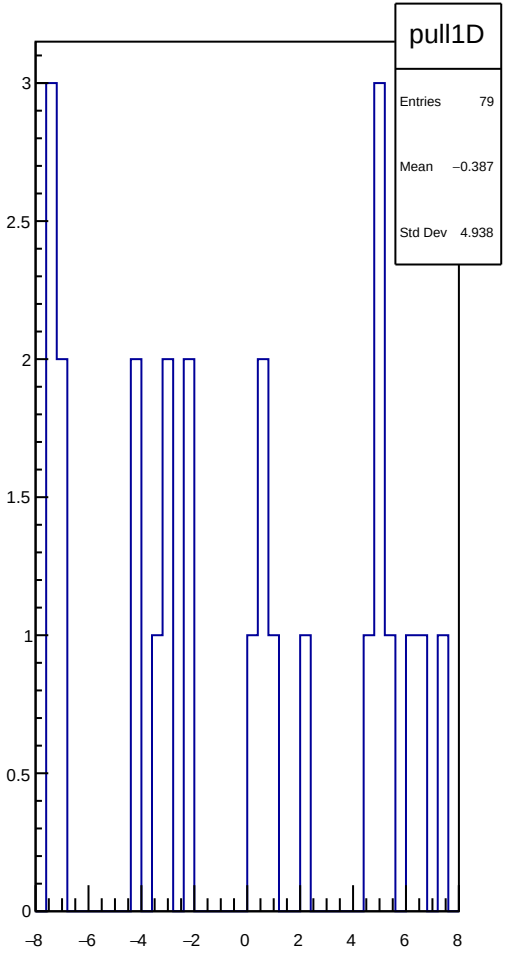

yield_bpm0l05WS_rms vs run
χ² / ndf 3.608e+04 / 78
p0 318.1 ± 0.261
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

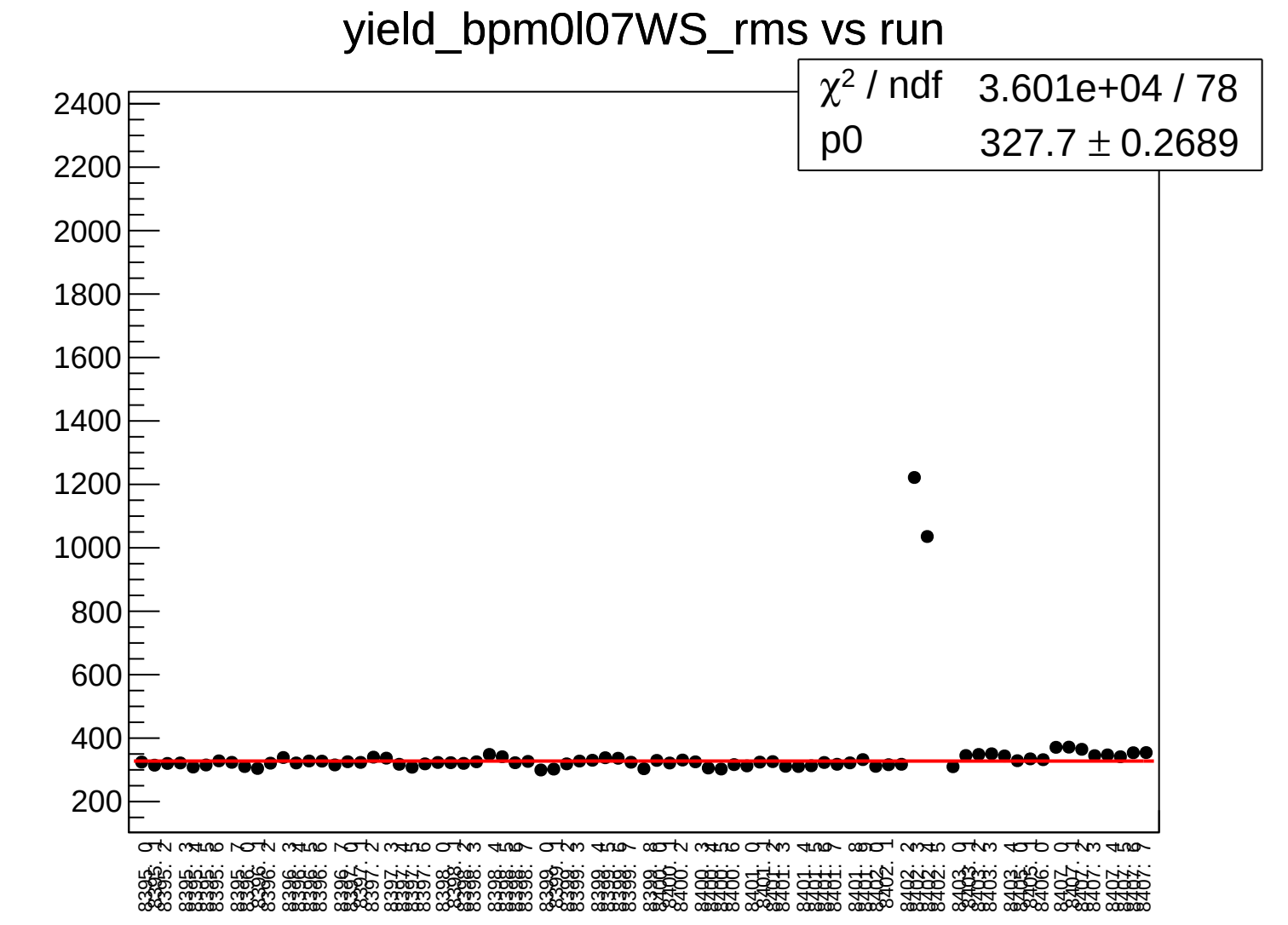

yield_bpm0l06WS_mean vs run
×10^3
130
129
128
127
126
125
124
χ² / ndf 5.082e+05 / 78
p0 1.297e+05 ± 0.3491
pull
Entries 79
Mean 146.5
Std Dev 94.53
100
0
−100
−200
−300
−400
−500

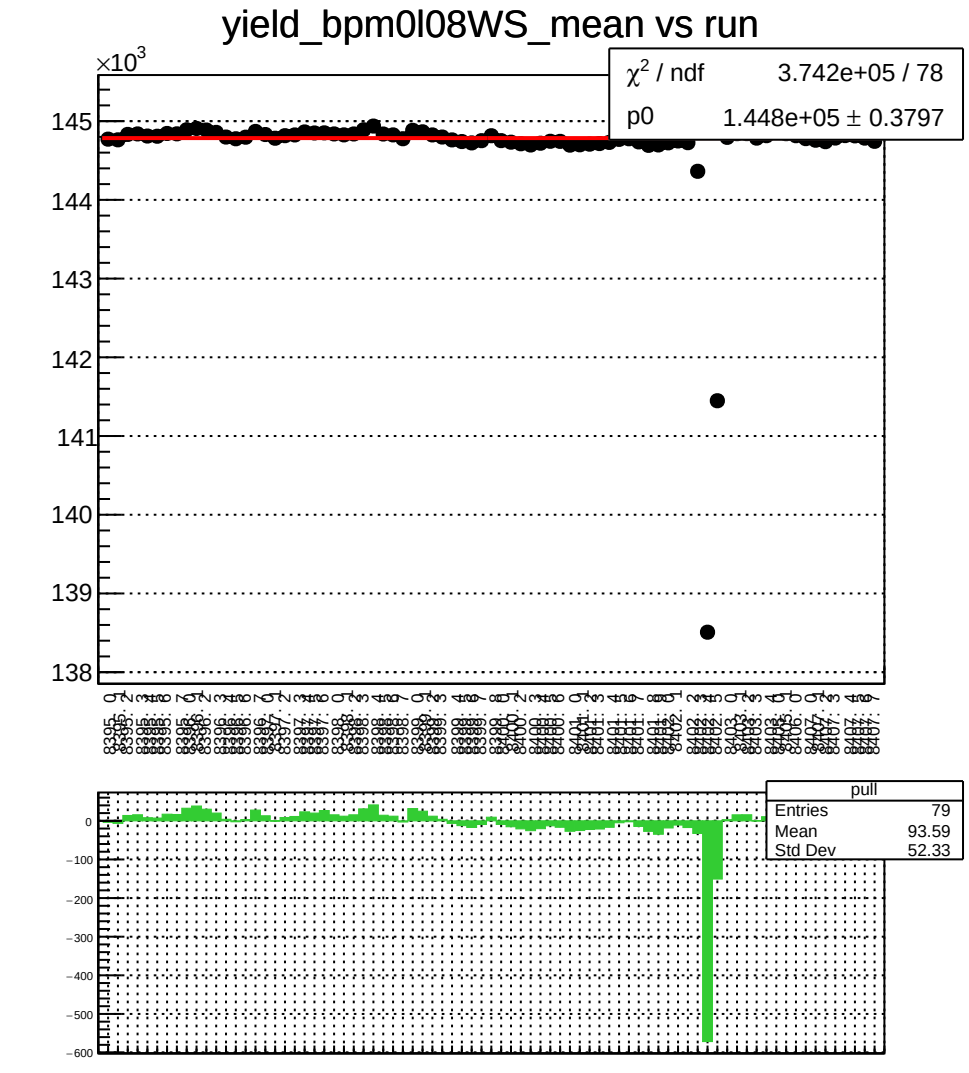

pull1D
Entries 79
Mean 1.393
Std Dev 4.181
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

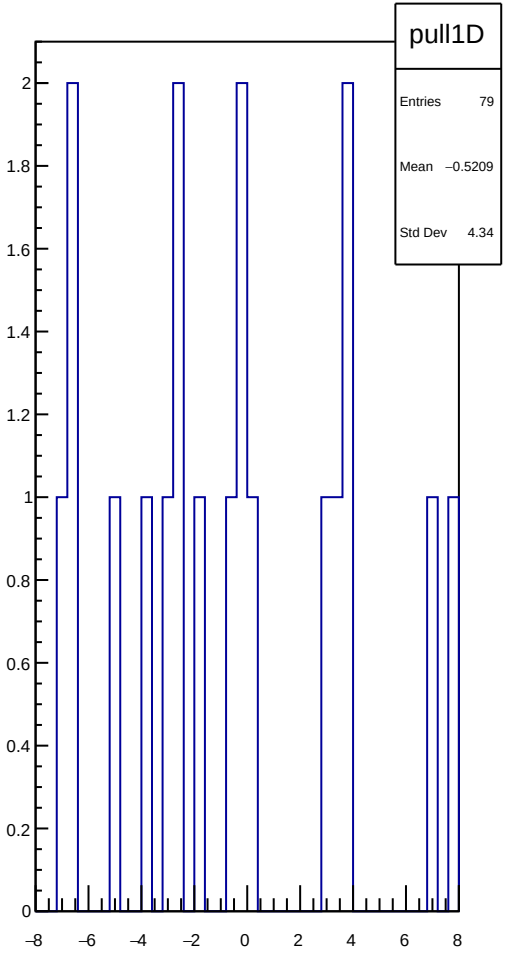

yield_bpm0l06WS_rms vs run
χ² / ndf 3.569e+04 / 78
p0 300.9 ± 0.2468
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

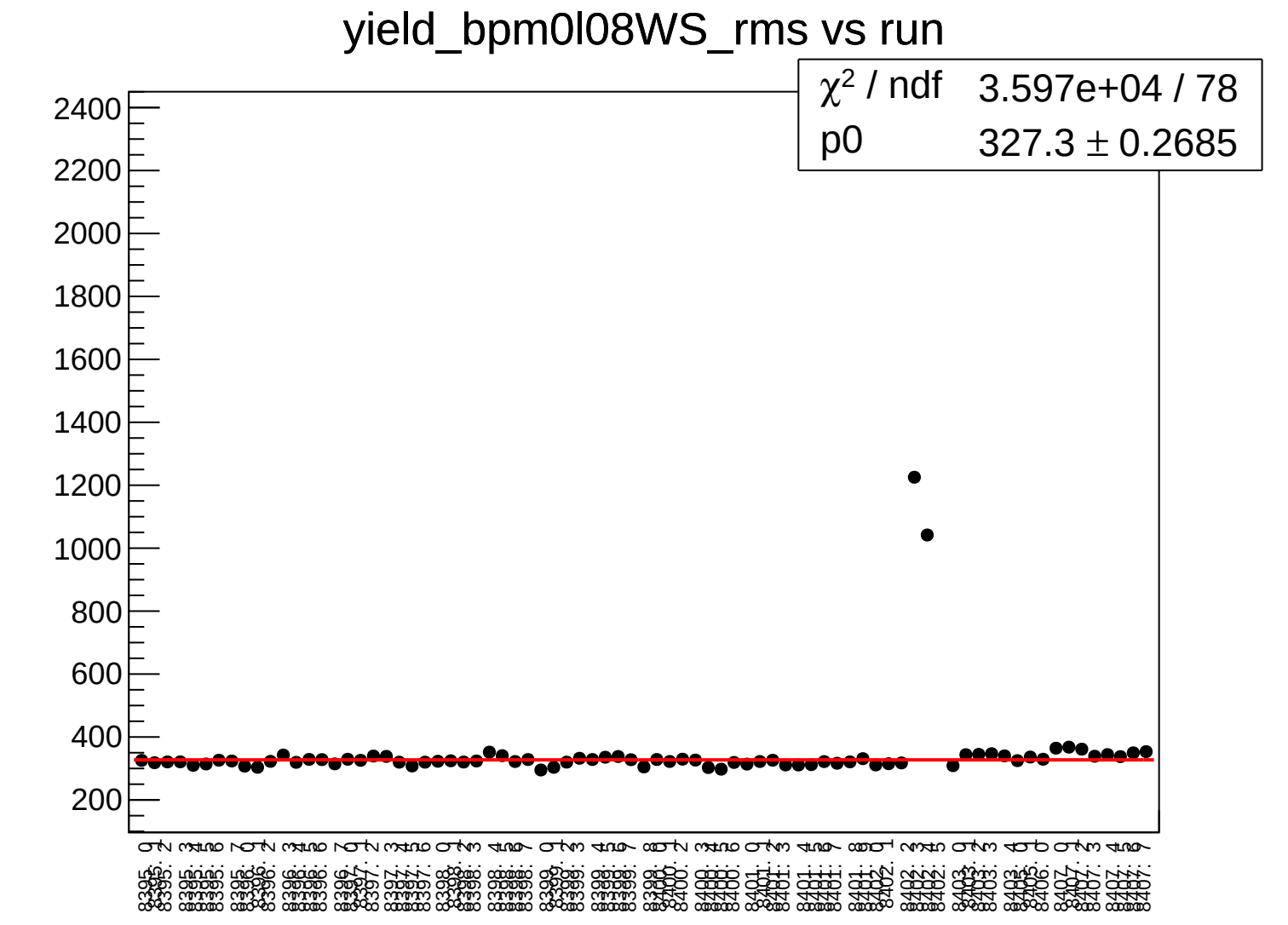

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 3.664e+05 / 78
p0 1.45e+05 ± 0.3802
145
144
143
142
141
140
139
pull
Entries 79
Mean 91.15
Std Dev 48.5
0
−100
−200
−300
−400
−500
−600

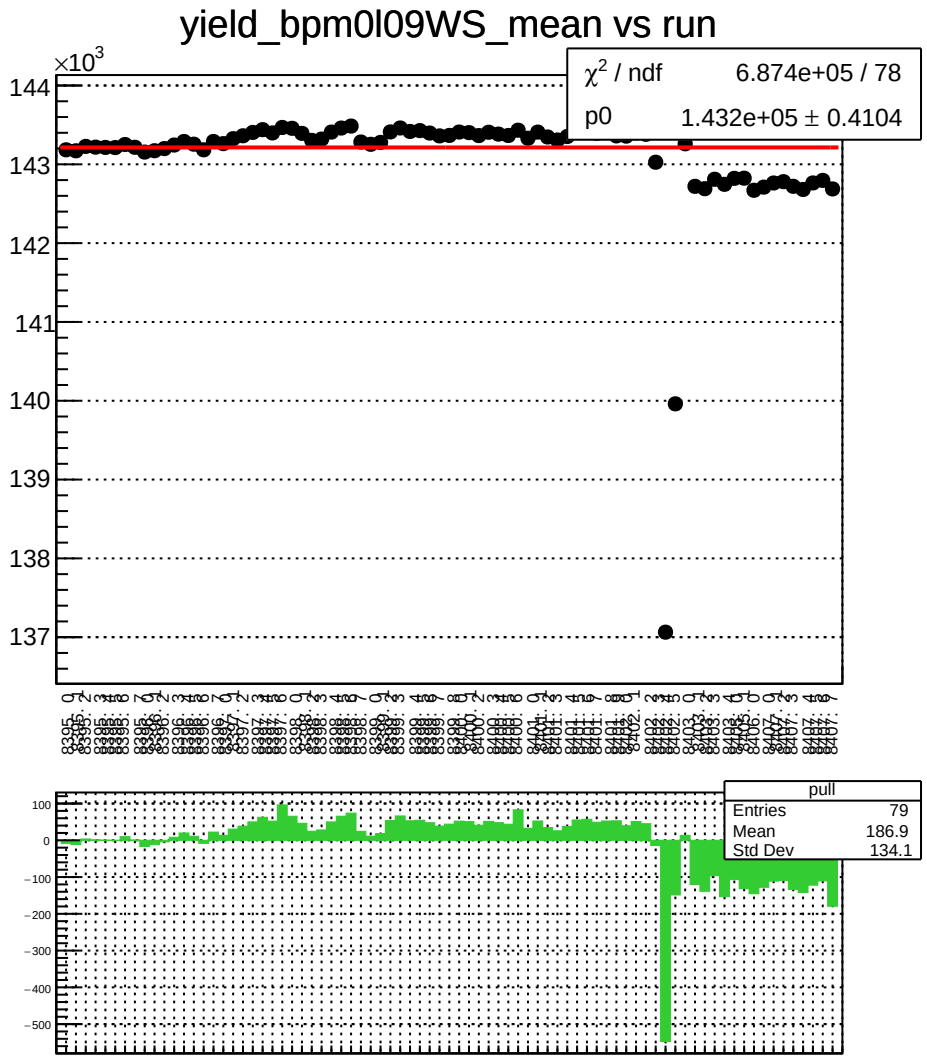

pull1D
Entries 79
Mean −0.387
Std Dev 4.938
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

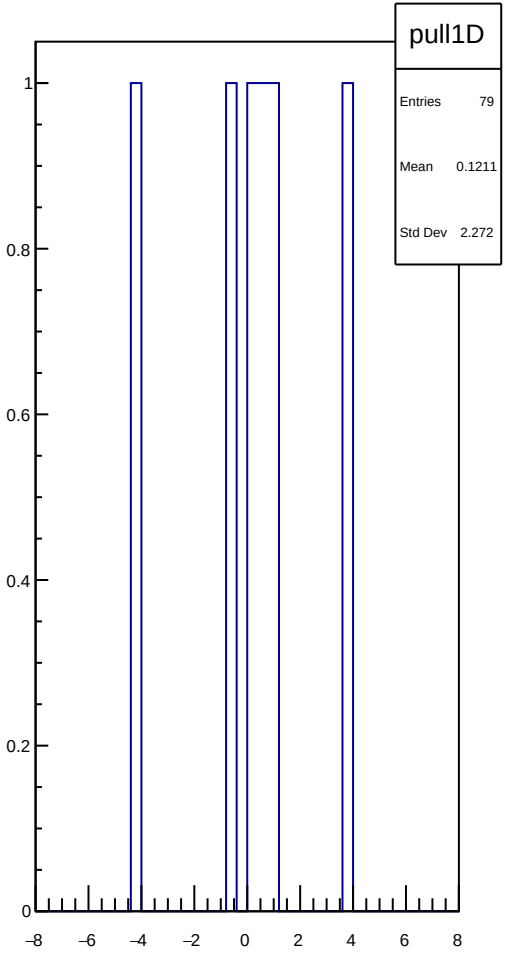

yield_bpm0l07WS_rms vs run
χ² / ndf 3.601e+04 / 78
p0 327.7 ± 0.2689
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

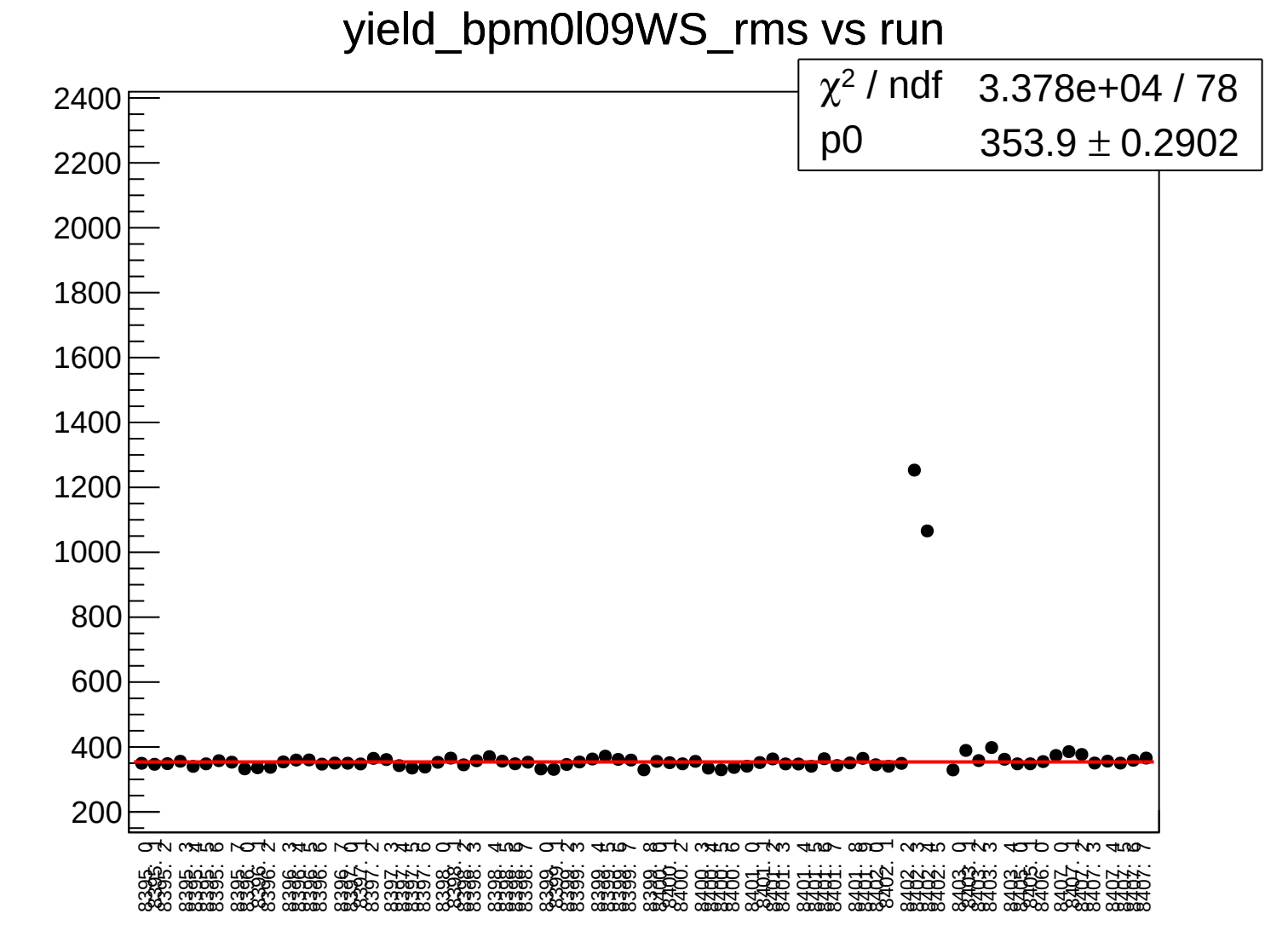

yield_bpm0l08WS_mean vs run
×10^3
χ^2 / ndf 3.742e+05 / 78
p0 1.448e+05 ± 0.3797
145
144
143
142
141
140
139
138
pull
Entries 79
Mean 93.59
Std Dev 52.33
0
−100
−200
−300
−400
−500
−600

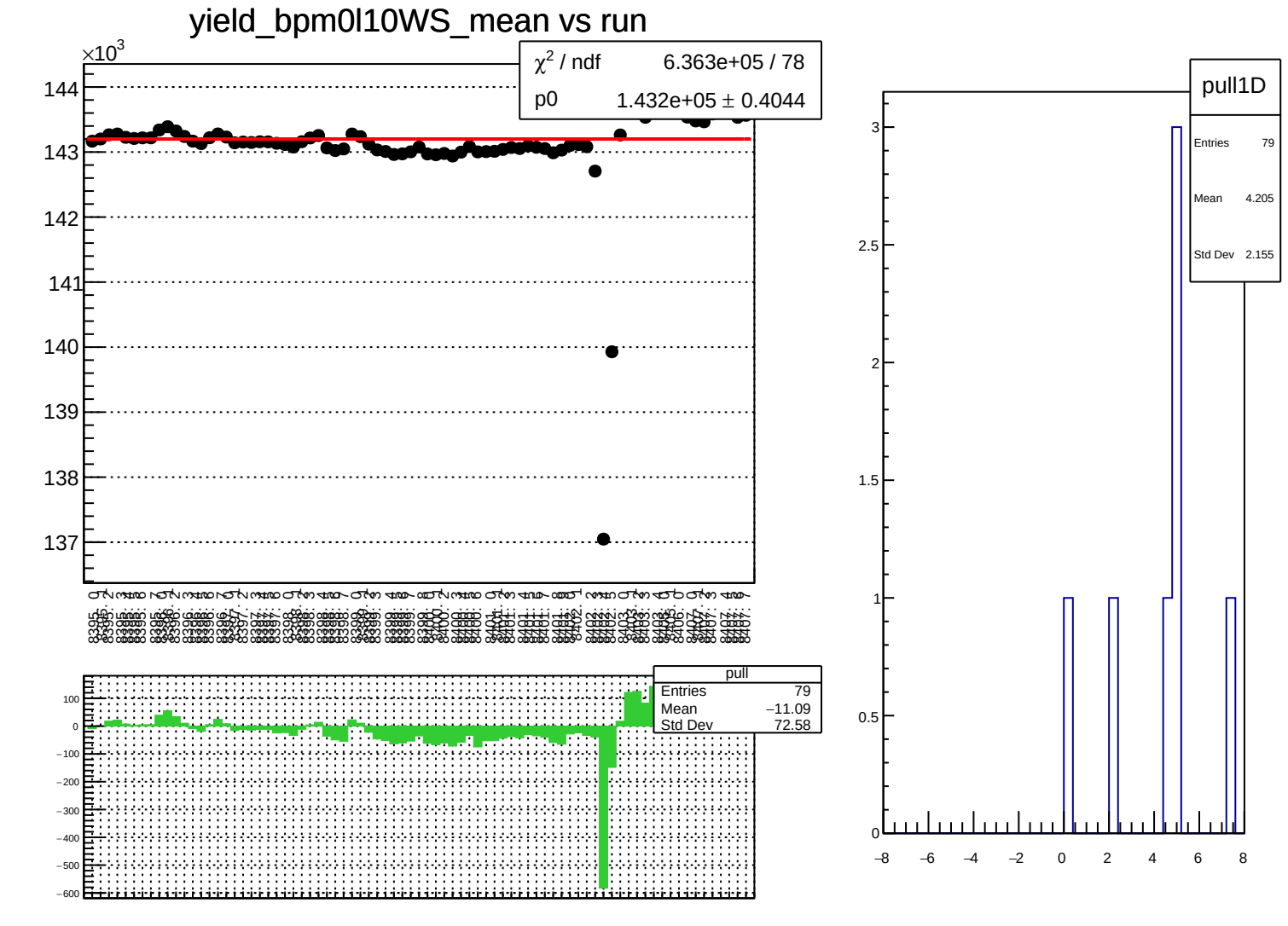

pull1D
Entries 79
Mean −0.5209
Std Dev 4.34
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

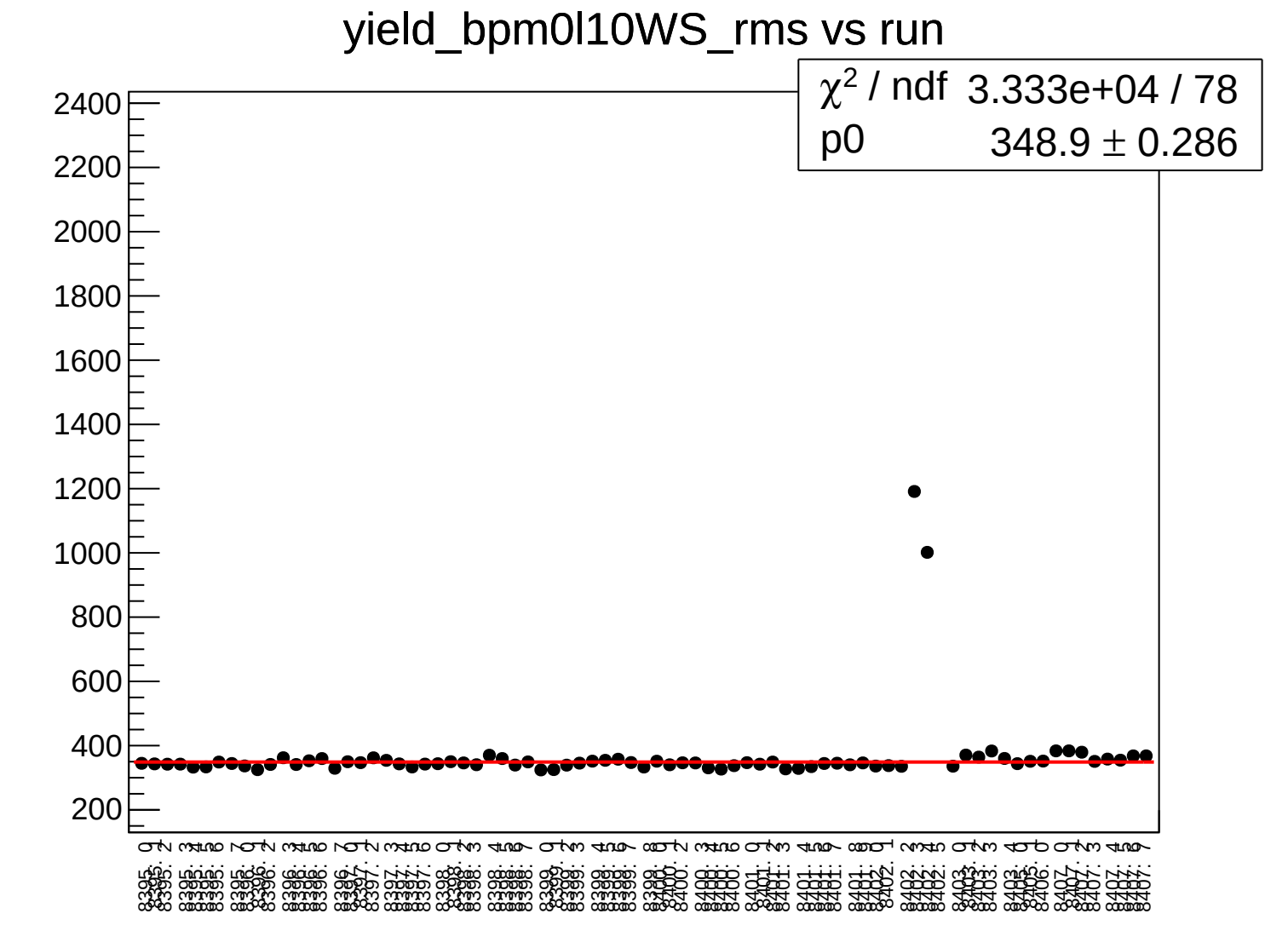

yield_bpm0l08WS_rms vs run
χ² / ndf 3.597e+04 / 78
p0 327.3 ± 0.2685
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

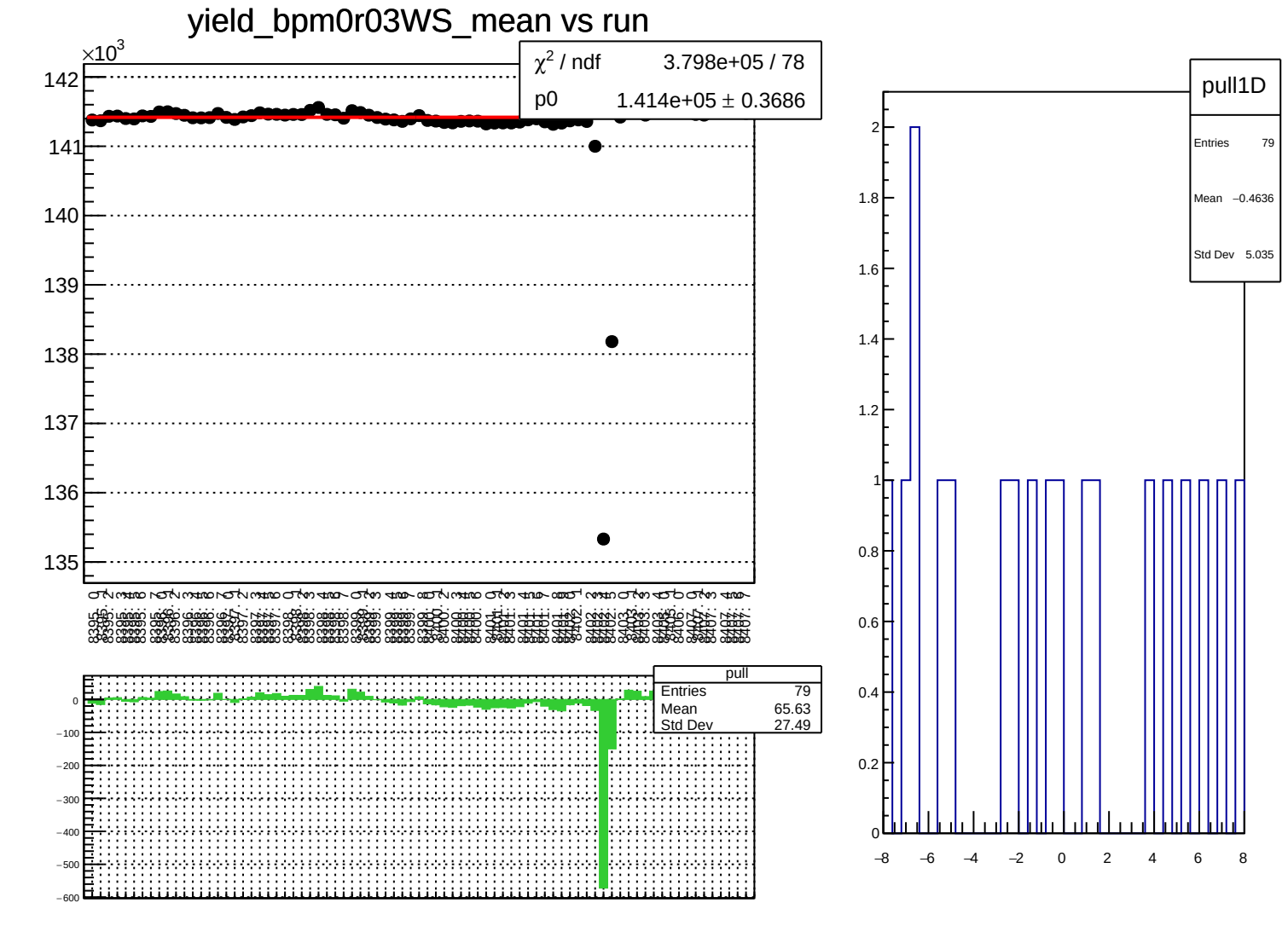

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 6.874e+05 / 78
p0 1.432e+05 ± 0.4104
144
143
142
141
140
139
138
137
pull
Entries 79
Mean 186.9
Std Dev 134.1
100
0
−100
−200
−300
−400
−500

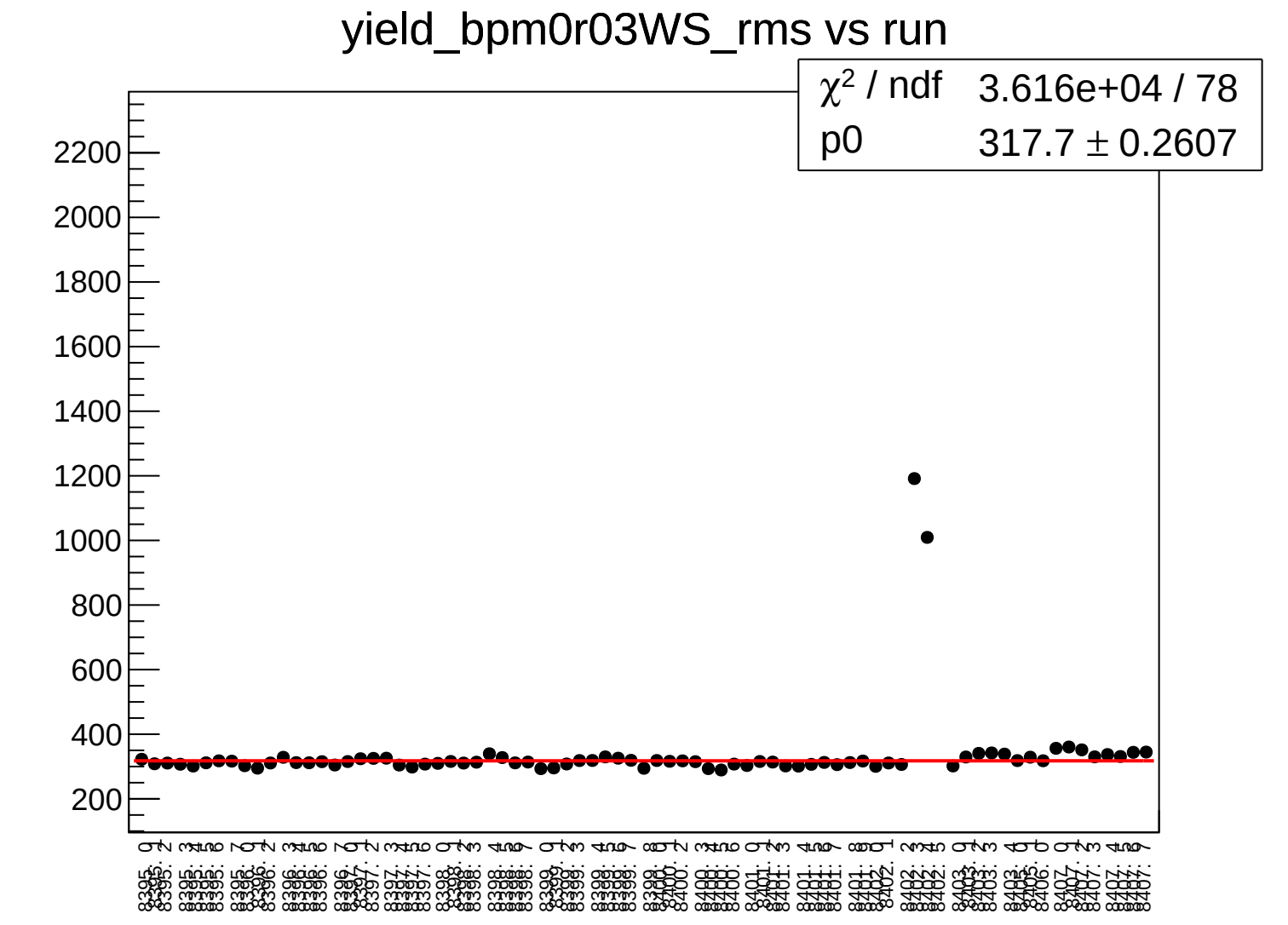

pull1D
Entries 79
Mean 0.1211
Std Dev 2.272
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

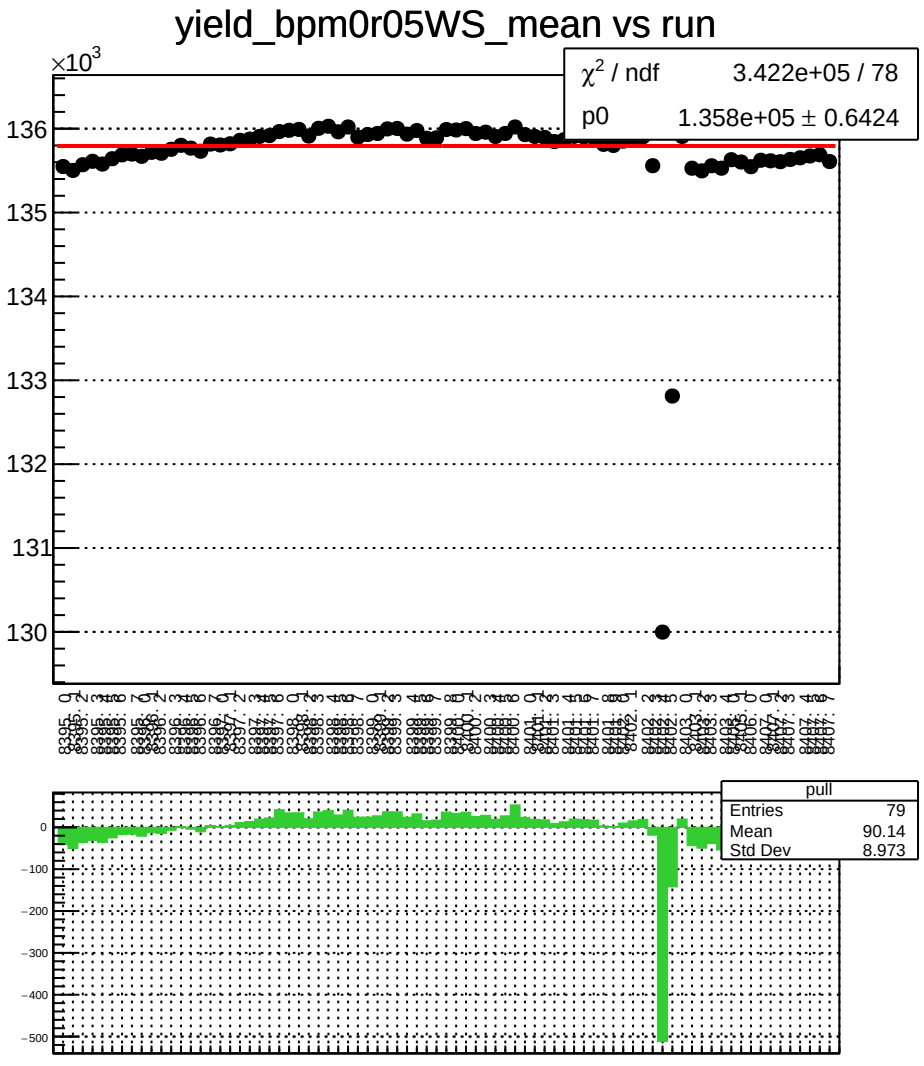

yield_bpm0l09WS_rms vs run
χ² / ndf 3.378e+04 / 78
p0 353.9 ± 0.2902
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

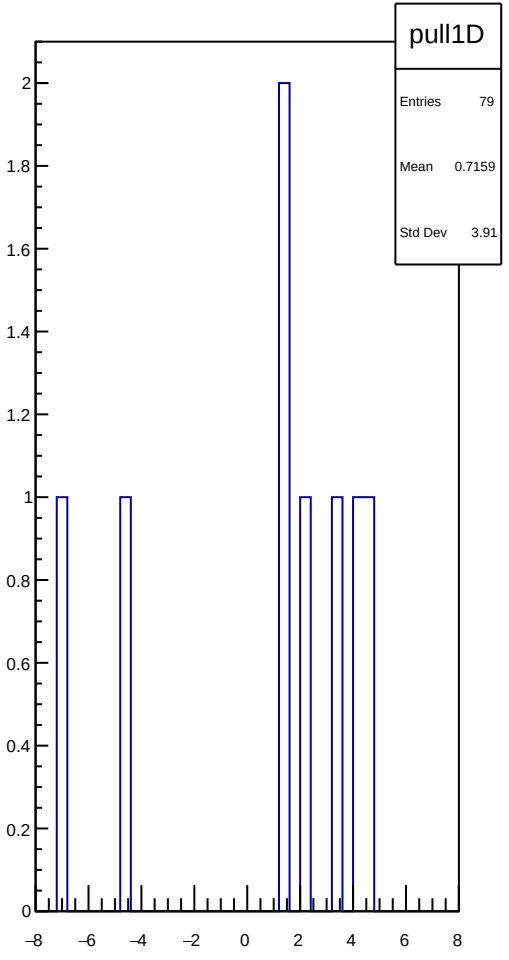

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 6.363e+05 / 78
p0 1.432e+05 ± 0.4044
144
143
142
141
140
139
138
137
pull
Entries 79
Mean −11.09
Std Dev 72.58
100
0
−100
−200
−300
−400
−500
−600
pull1D
Entries 79
Mean 4.205
Std Dev 2.155
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

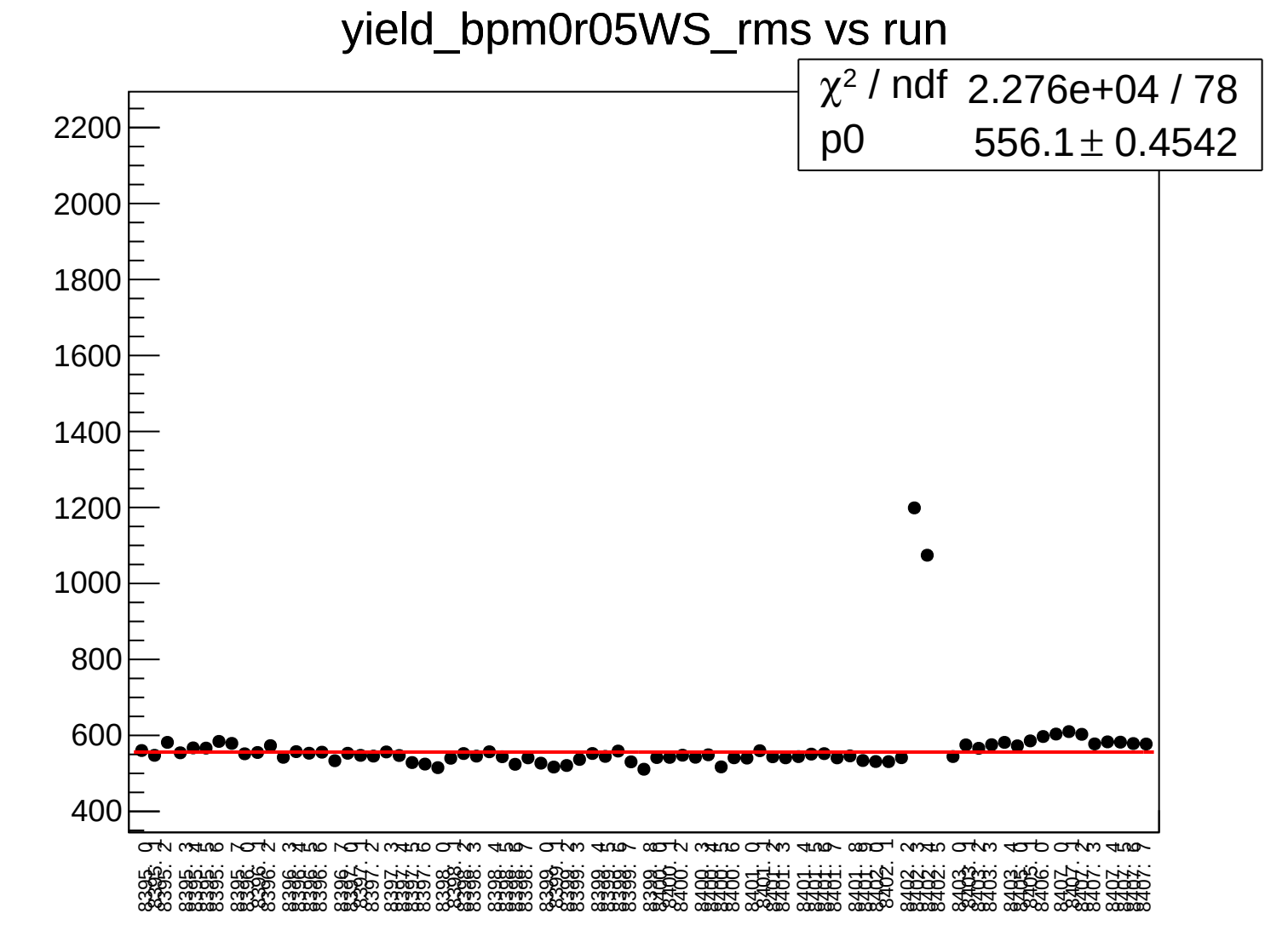

yield_bpm0l10WS_rms vs run
χ² / ndf 3.333e+04 / 78
p0 348.9 ± 0.286
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

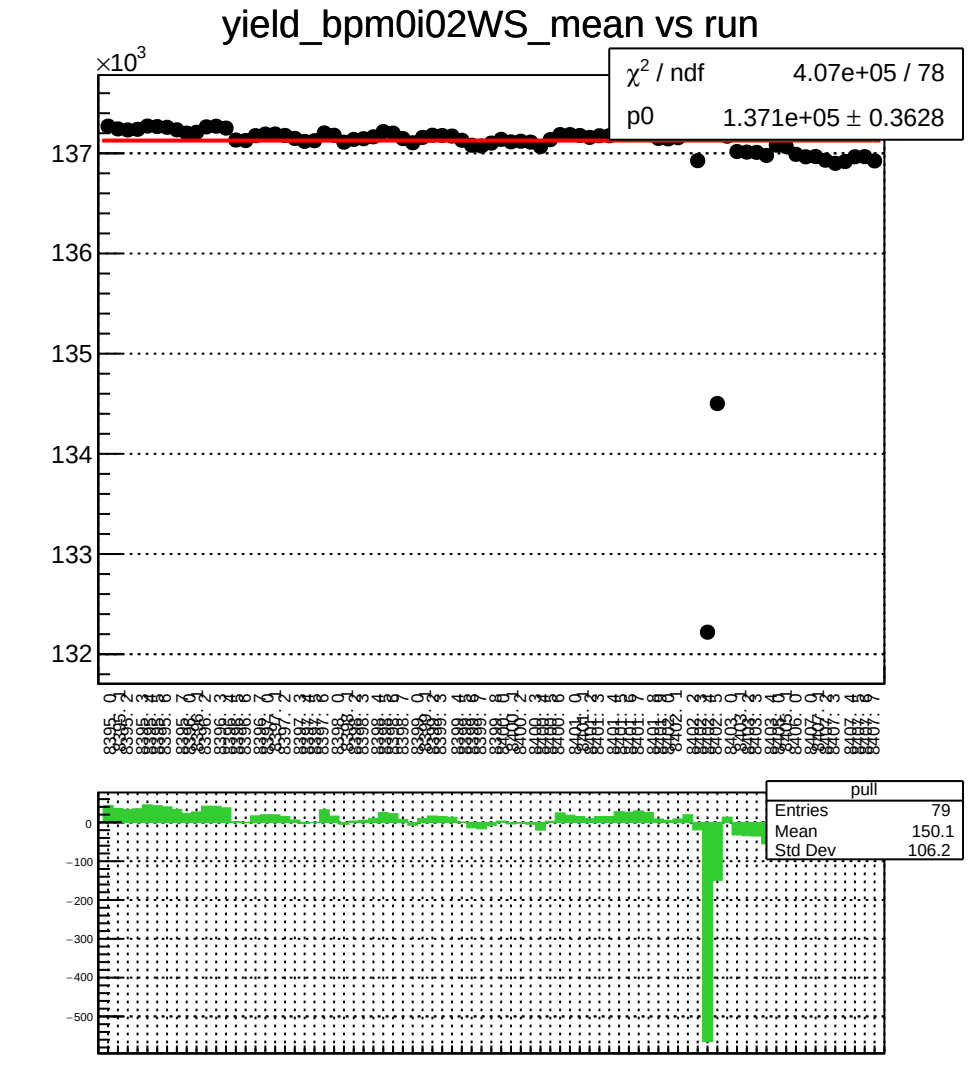

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 3.798e+05 / 78
p0 1.414e+05 ± 0.3686
142
141
140
139
138
137
136
135
pull
Entries 79
Mean 65.63
Std Dev 27.49
0
−100
−200
−300
−400
−500
−600
pull1D
Entries 79
Mean −0.4636
Std Dev 5.035
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

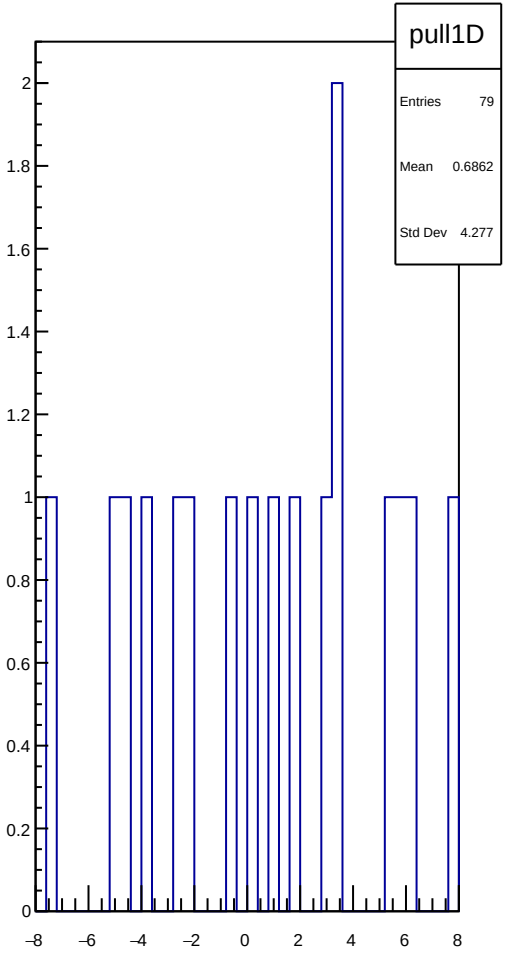

yield_bpm0r03WS_rms vs run
χ² / ndf 3.616e+04 / 78
p0 317.7 ± 0.2607
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

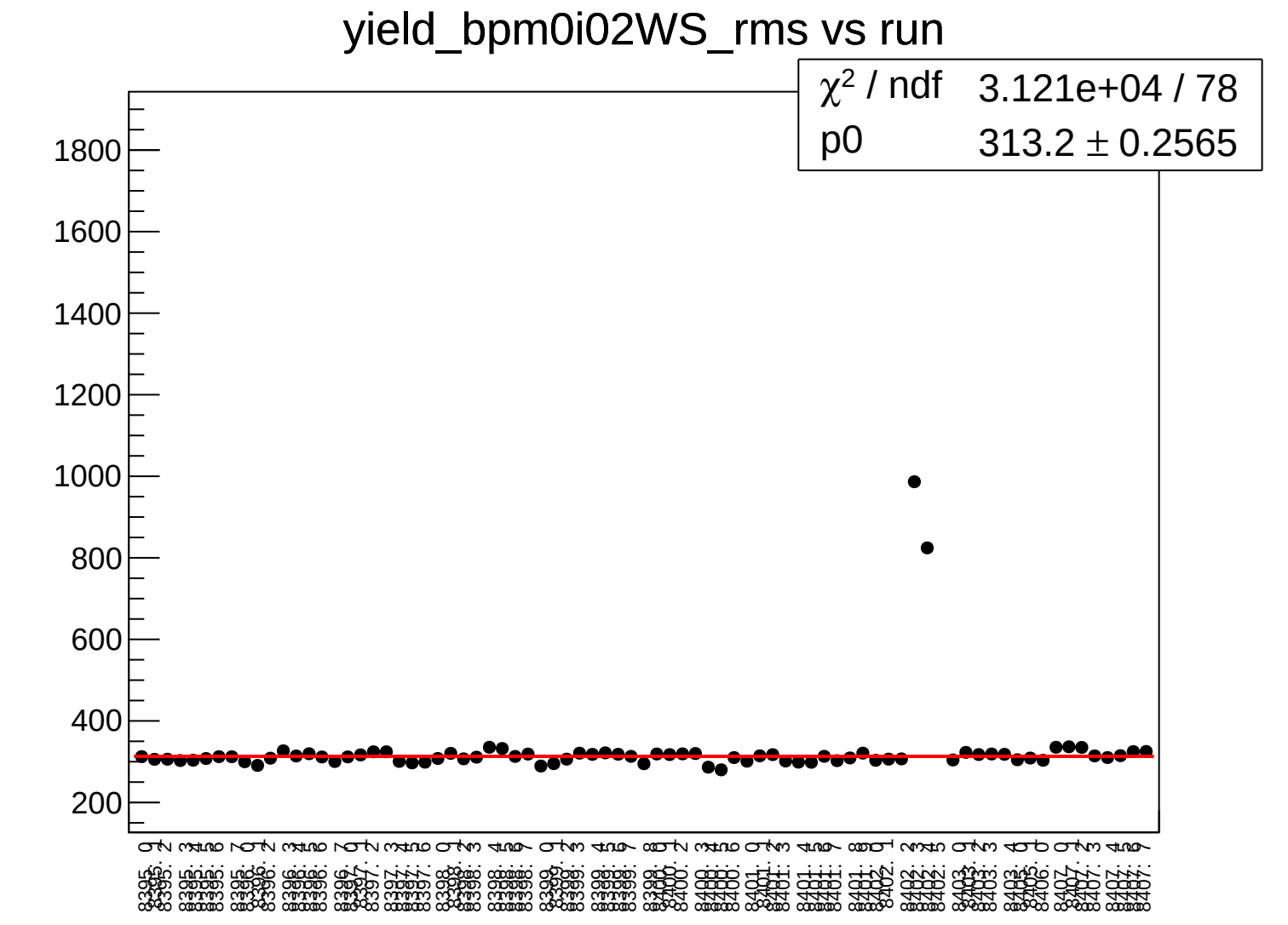

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 3.422e+05 / 78
p0 1.358e+05 ± 0.6424
136
135
134
133
132
131
130
pull
Entries 79
Mean 90.14
Std Dev 8.973
0
−100
−200
−300
−400
−500

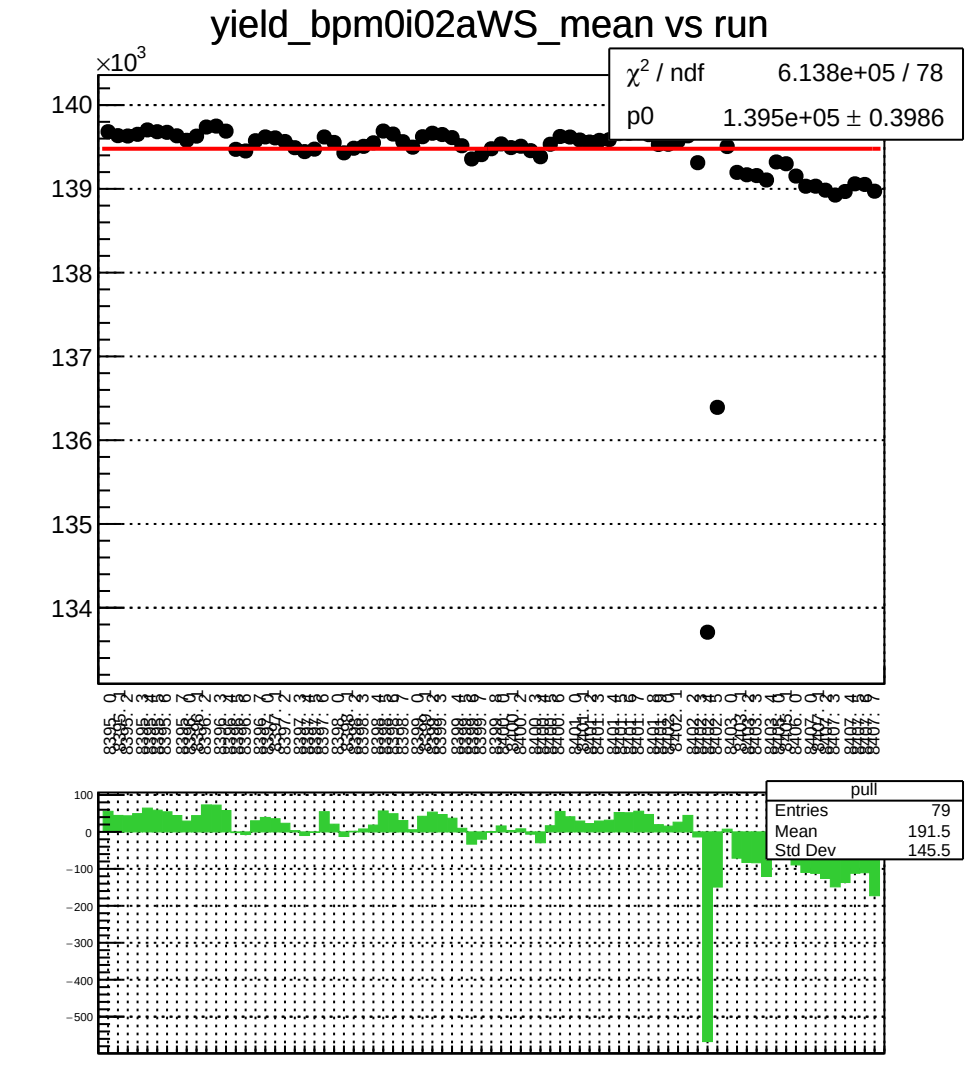

pull1D
Entries 79
Mean 0.7159
Std Dev 3.91
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

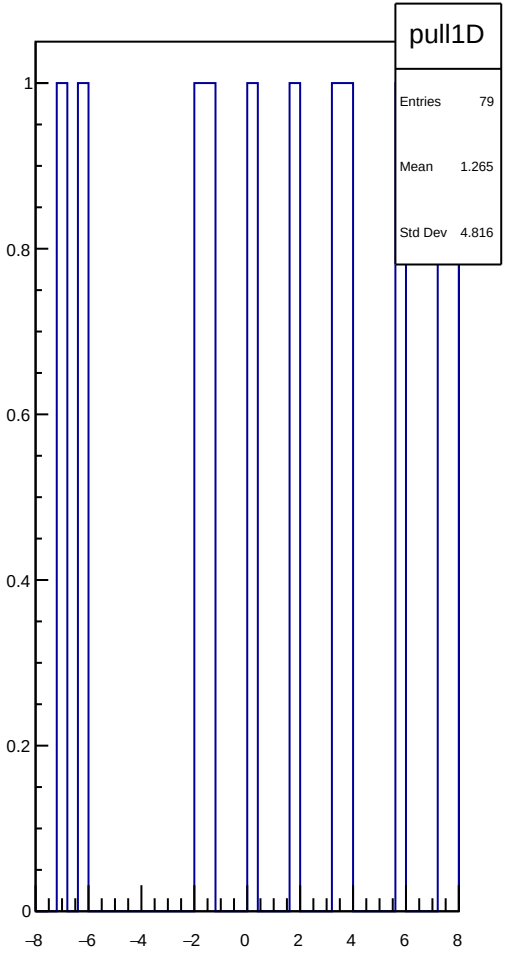

yield_bpm0r05WS_rms vs run
χ² / ndf 2.276e+04 / 78
p0 556.1 ± 0.4542
2200
2000
1800
1600
1400
1200
1000
800
600
400

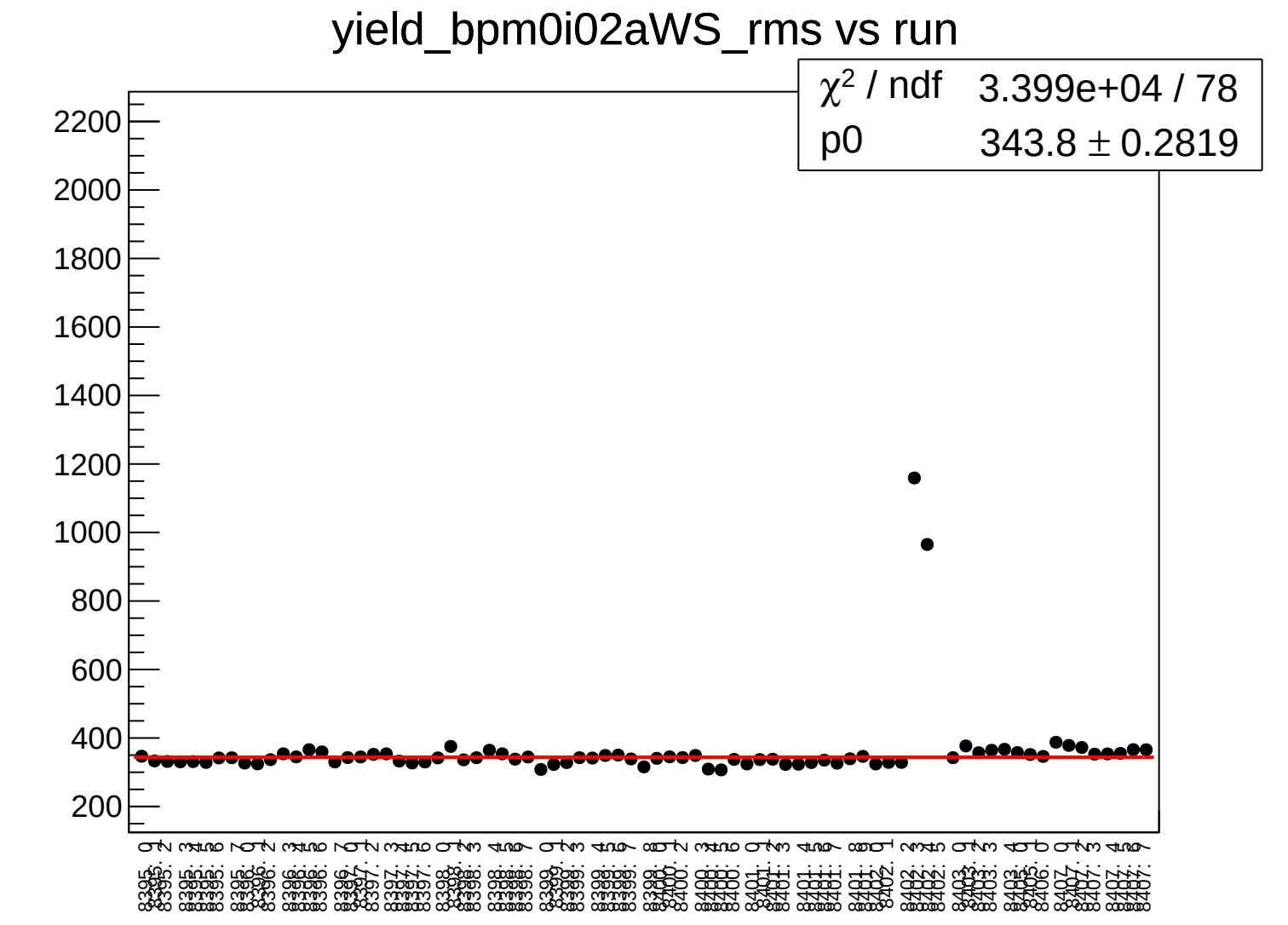

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 4.07e+05 / 78
p0 1.371e+05 ± 0.3628
137
136
135
134
133
132
pull
Entries 79
Mean 150.1
Std Dev 106.2
0
−100
−200
−300
−400
−500

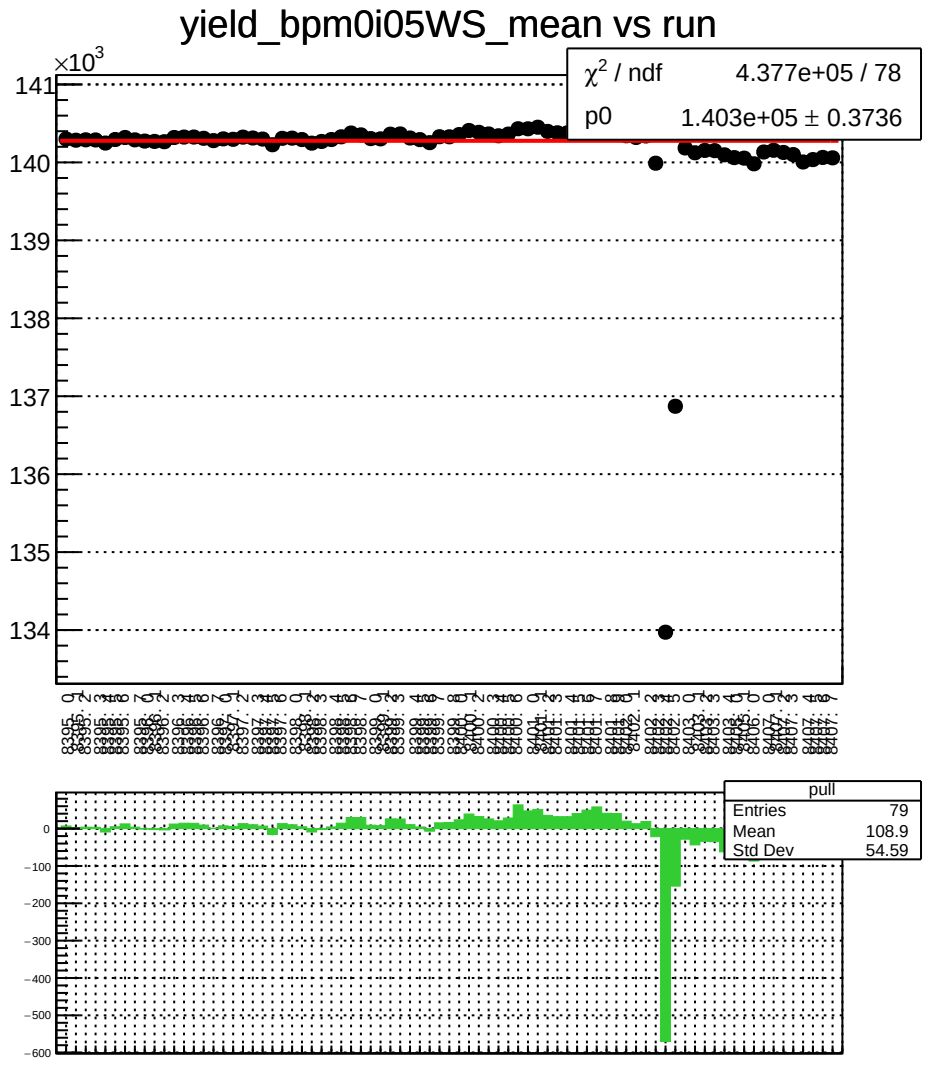

pull1D
Entries 79
Mean 0.6862
Std Dev 4.277
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

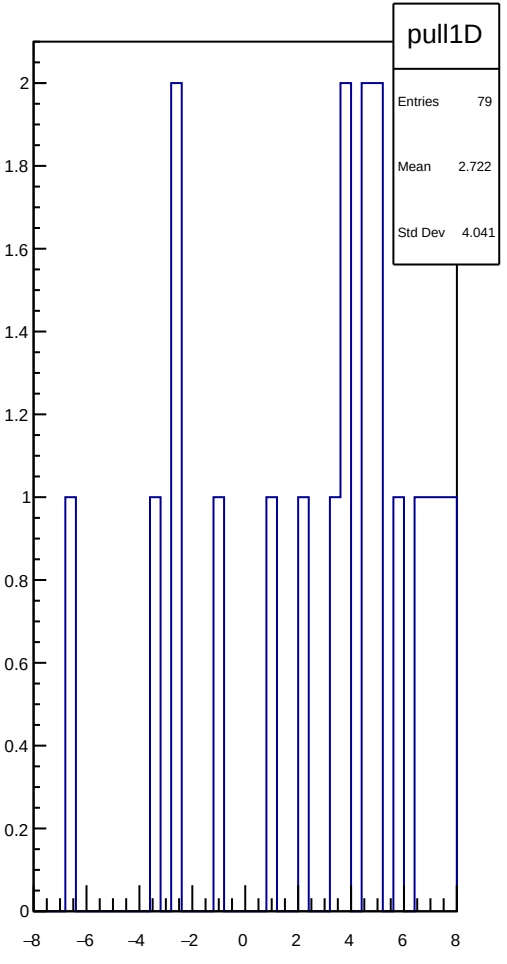

yield_bpm0i02WS_rms vs run
χ² / ndf 3.121e+04 / 78
p0 313.2 ± 0.2565
1800
1600
1400
1200
1000
800
600
400
200

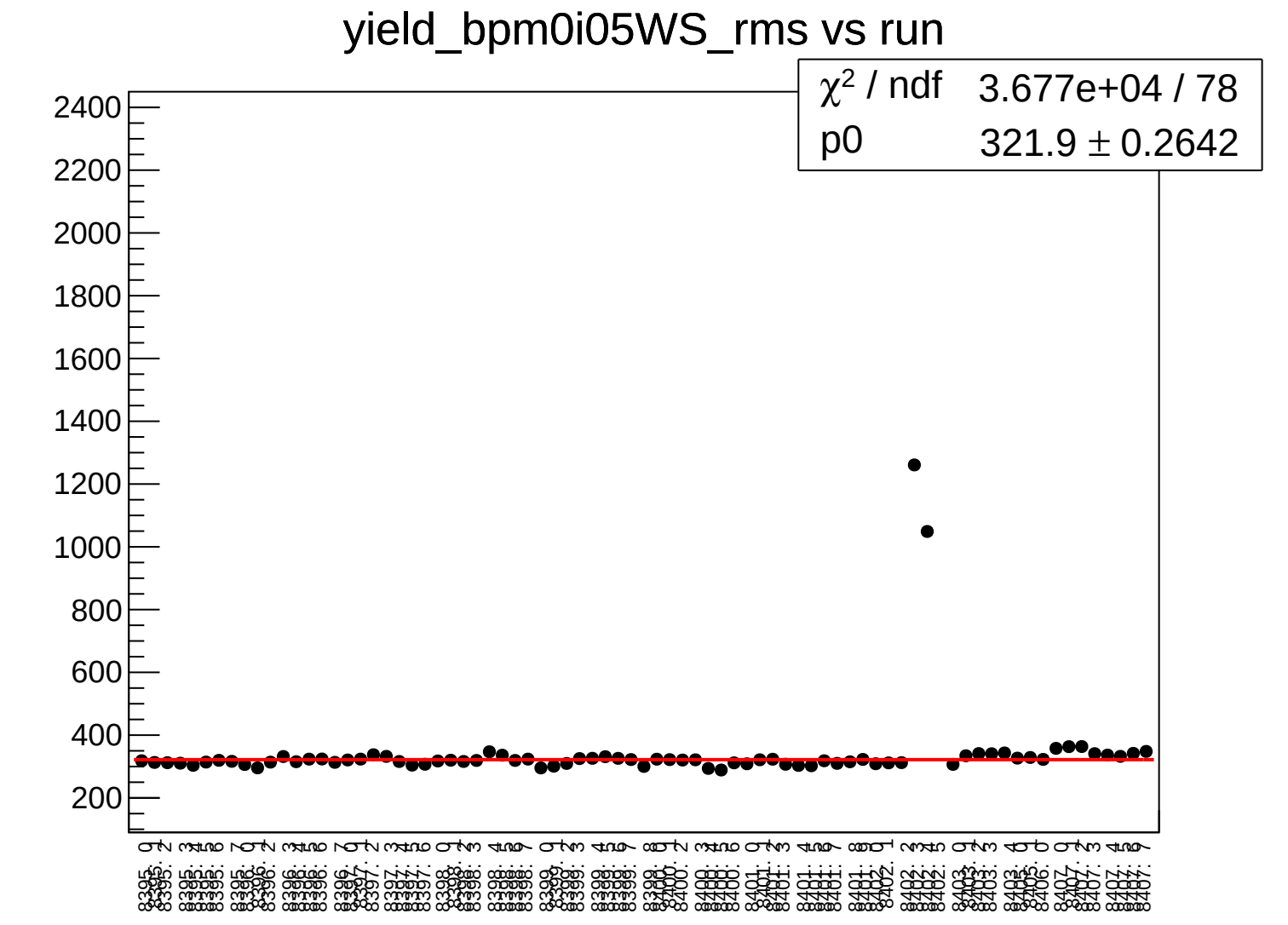

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 6.138e+05 / 78
p0 1.395e+05 ± 0.3986
140
139
138
137
136
135
134
pull
Entries 79
Mean 191.5
Std Dev 145.5
100
0
−100
−200
−300
−400
−500

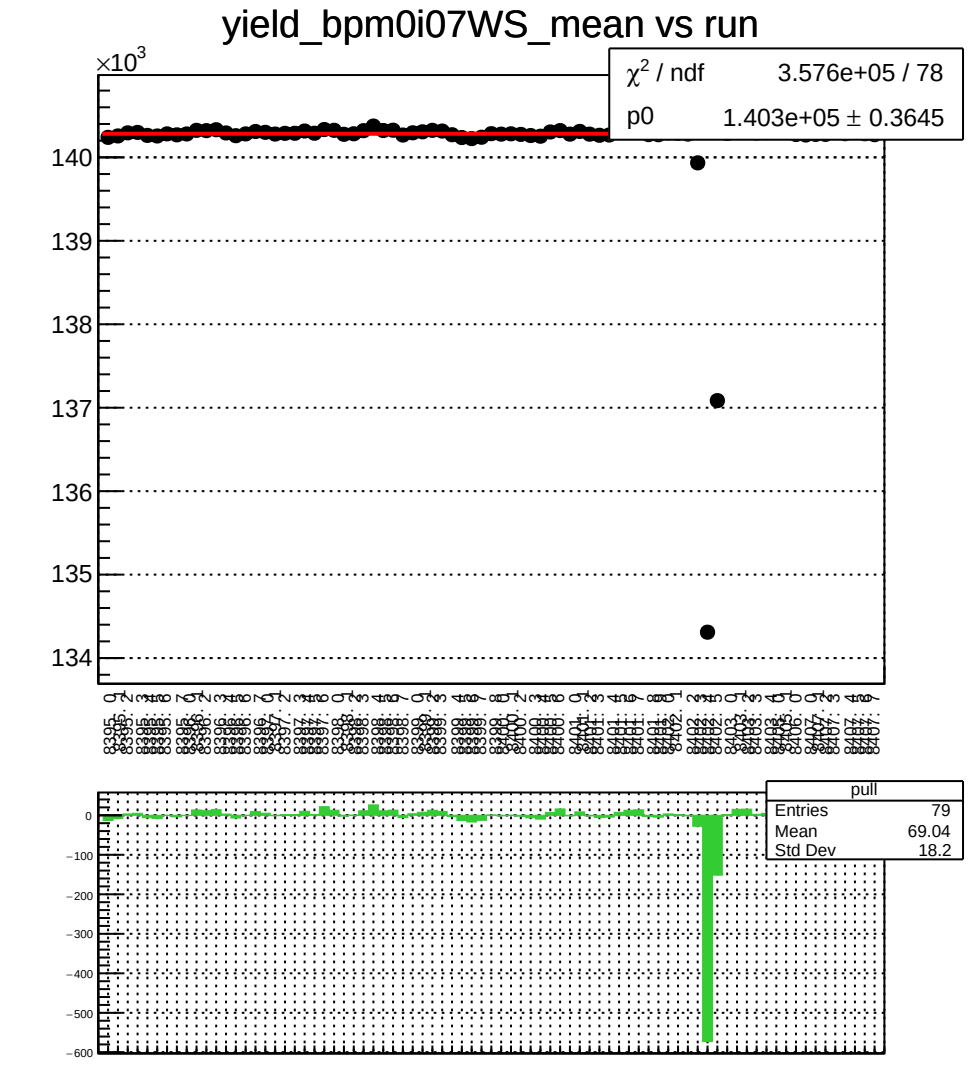

pull1D
Entries 79
Mean 1.265
Std Dev 4.816
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

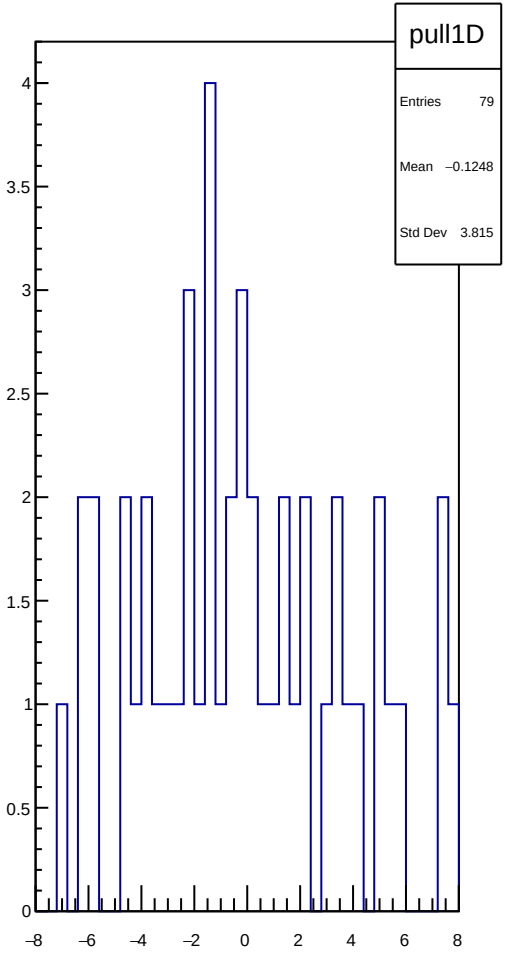

yield_bpm0i02aWS_rms vs run
χ² / ndf 3.399e+04 / 78
p0 343.8 ± 0.2819
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

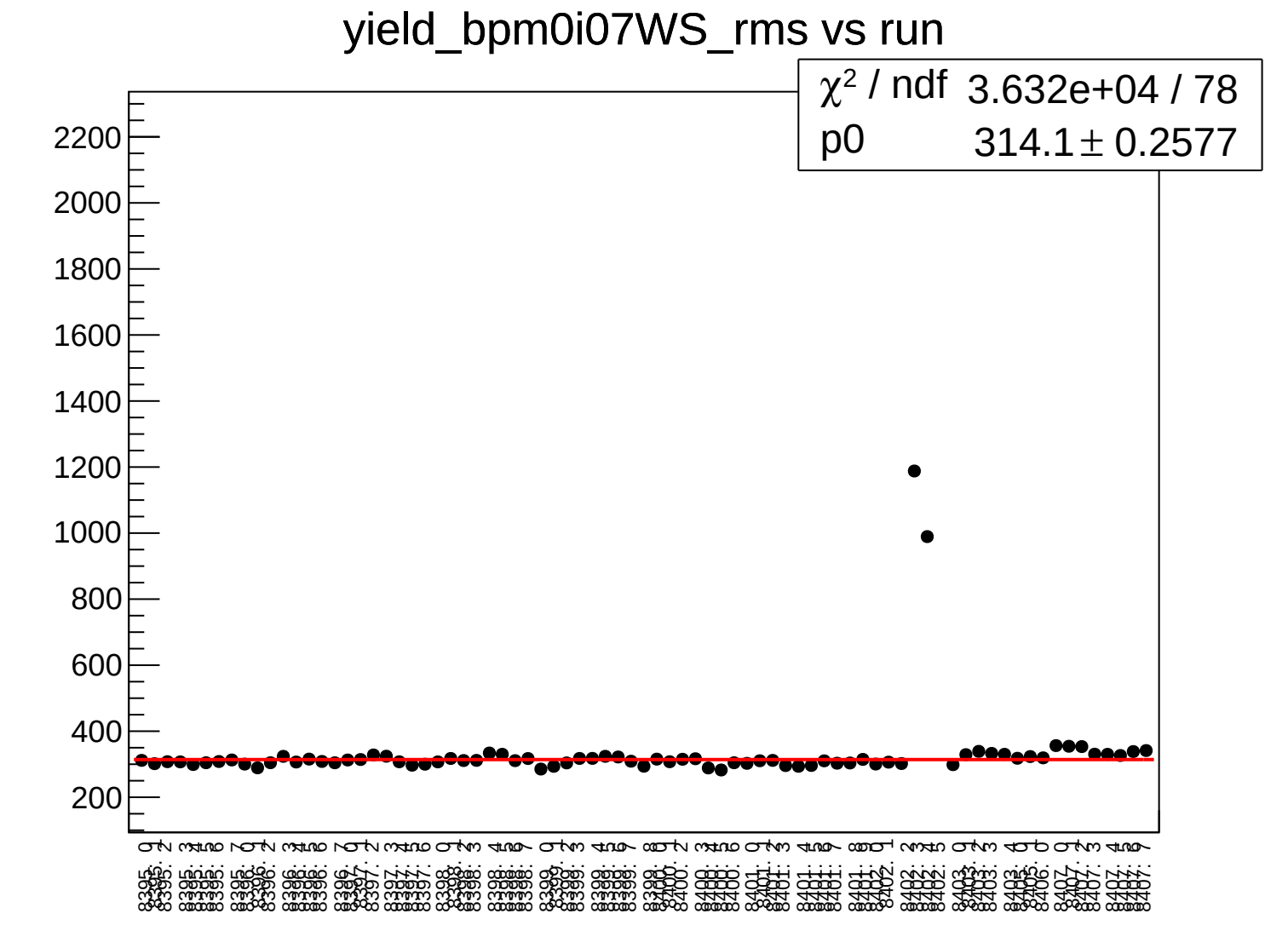

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 4.377e+05 / 78
p0 1.403e+05 ± 0.3736
141
140
139
138
137
136
135
134
pull
Entries 79
Mean 108.9
Std Dev 54.59
0
−100
−200
−300
−400
−500
−600

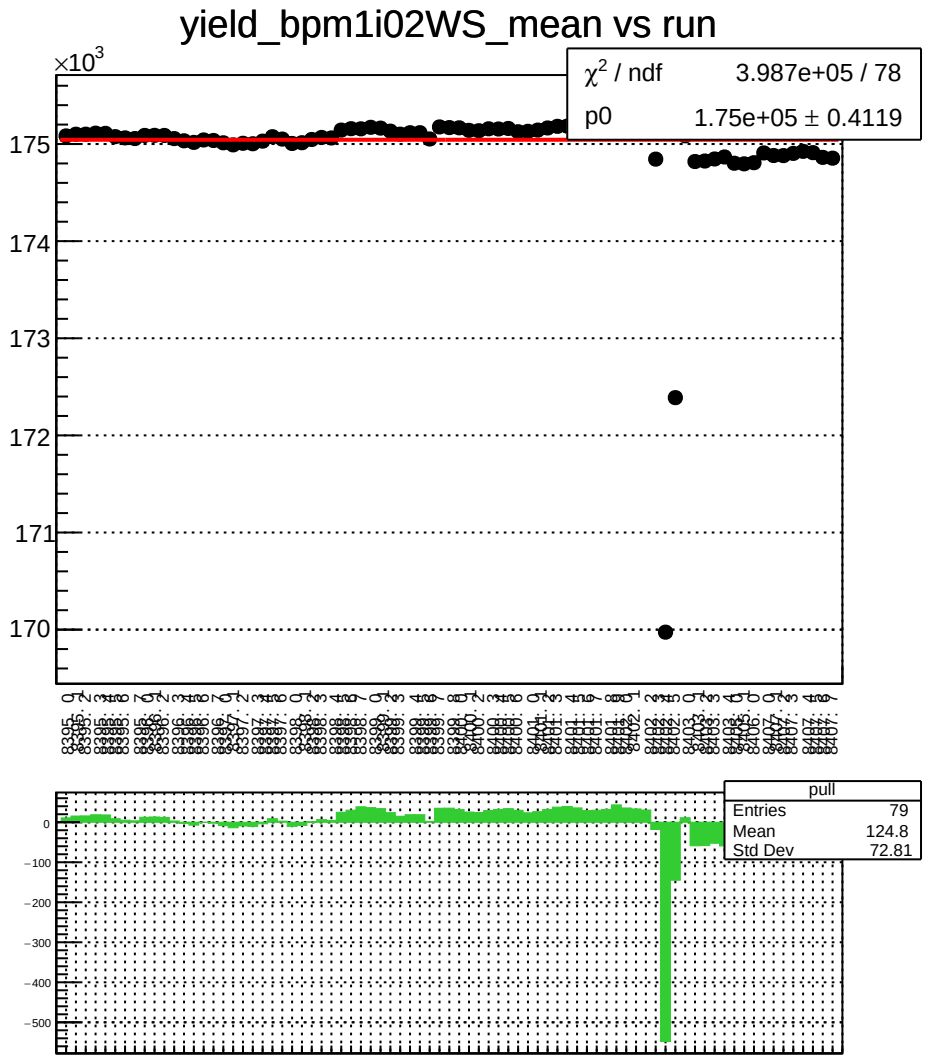

pull1D
Entries 79
Mean 2.722
Std Dev 4.041
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

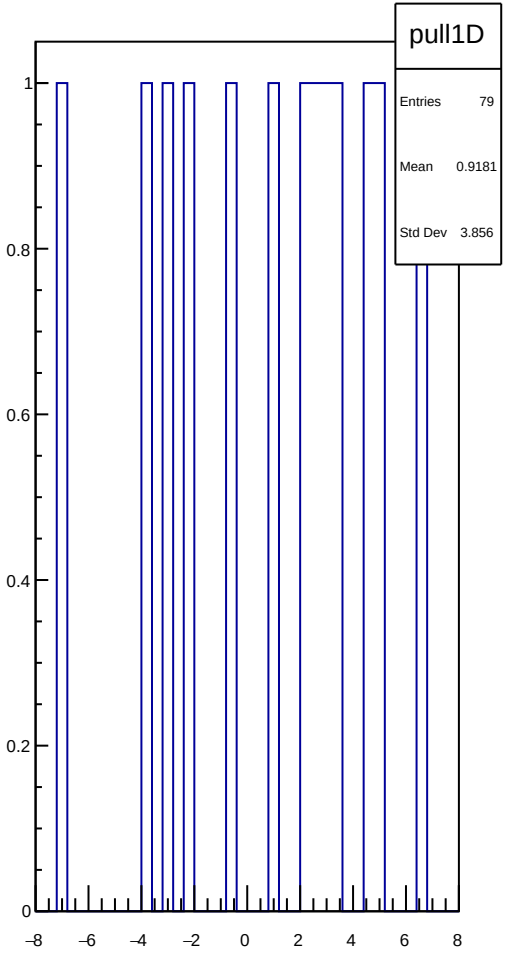

yield_bpm0i05WS_rms vs run
χ² / ndf 3.677e+04 / 78
p0 321.9 ± 0.2642
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

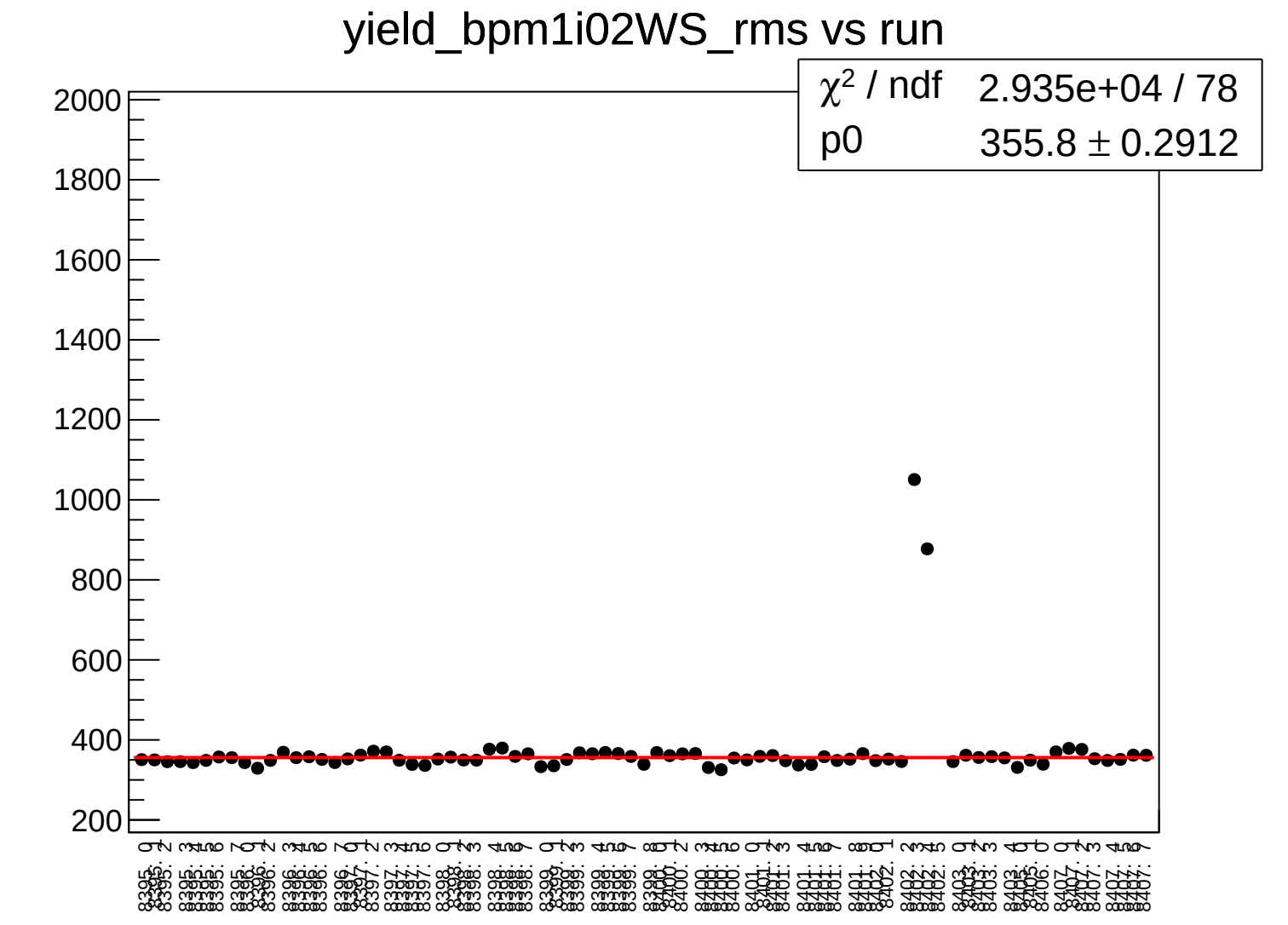

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 3.576e+05 / 78
p0 1.403e+05 ± 0.3645
140
139
138
137
136
135
134
pull
Entries 79
Mean 69.04
Std Dev 18.2
0
−100
−200
−300
−400
−500
−600

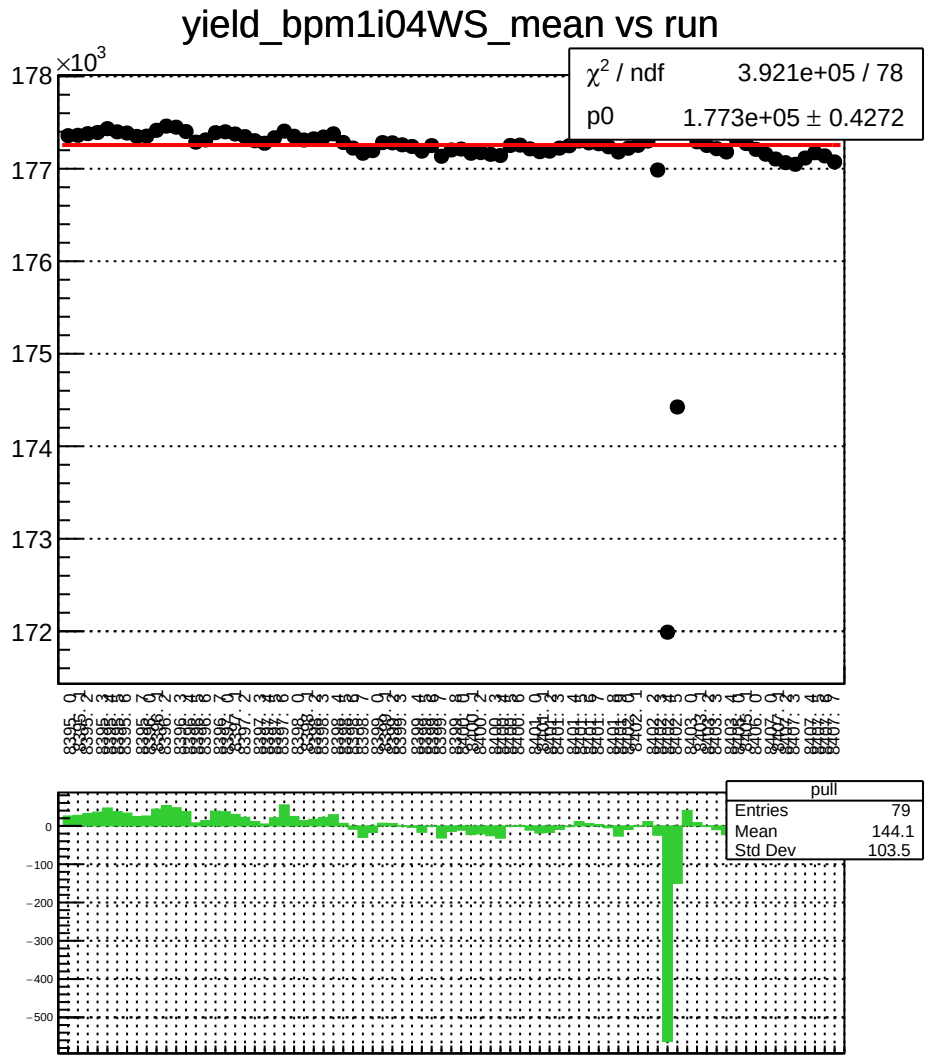

pull1D
Entries 79
Mean −0.1248
Std Dev 3.815
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

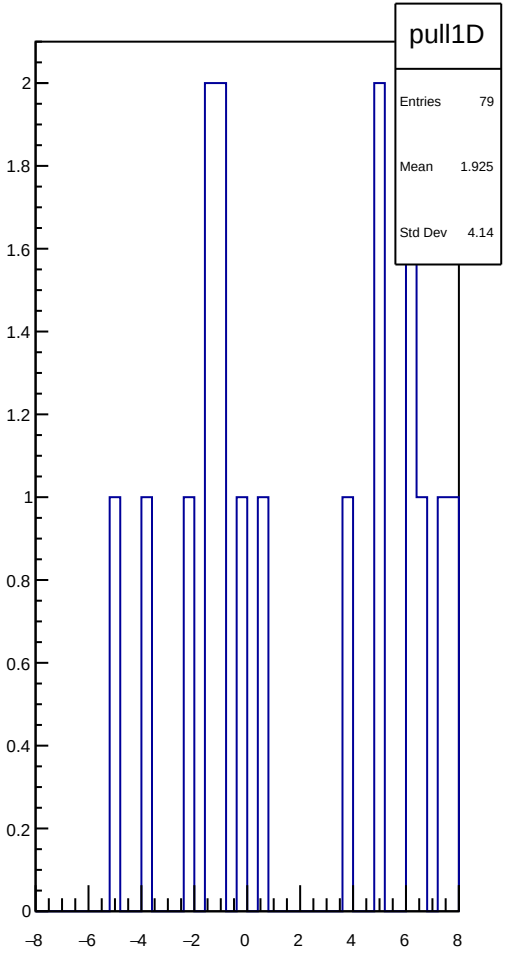

yield_bpm0i07WS_rms vs run
χ² / ndf 3.632e+04 / 78
p0 314.1 ± 0.2577
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

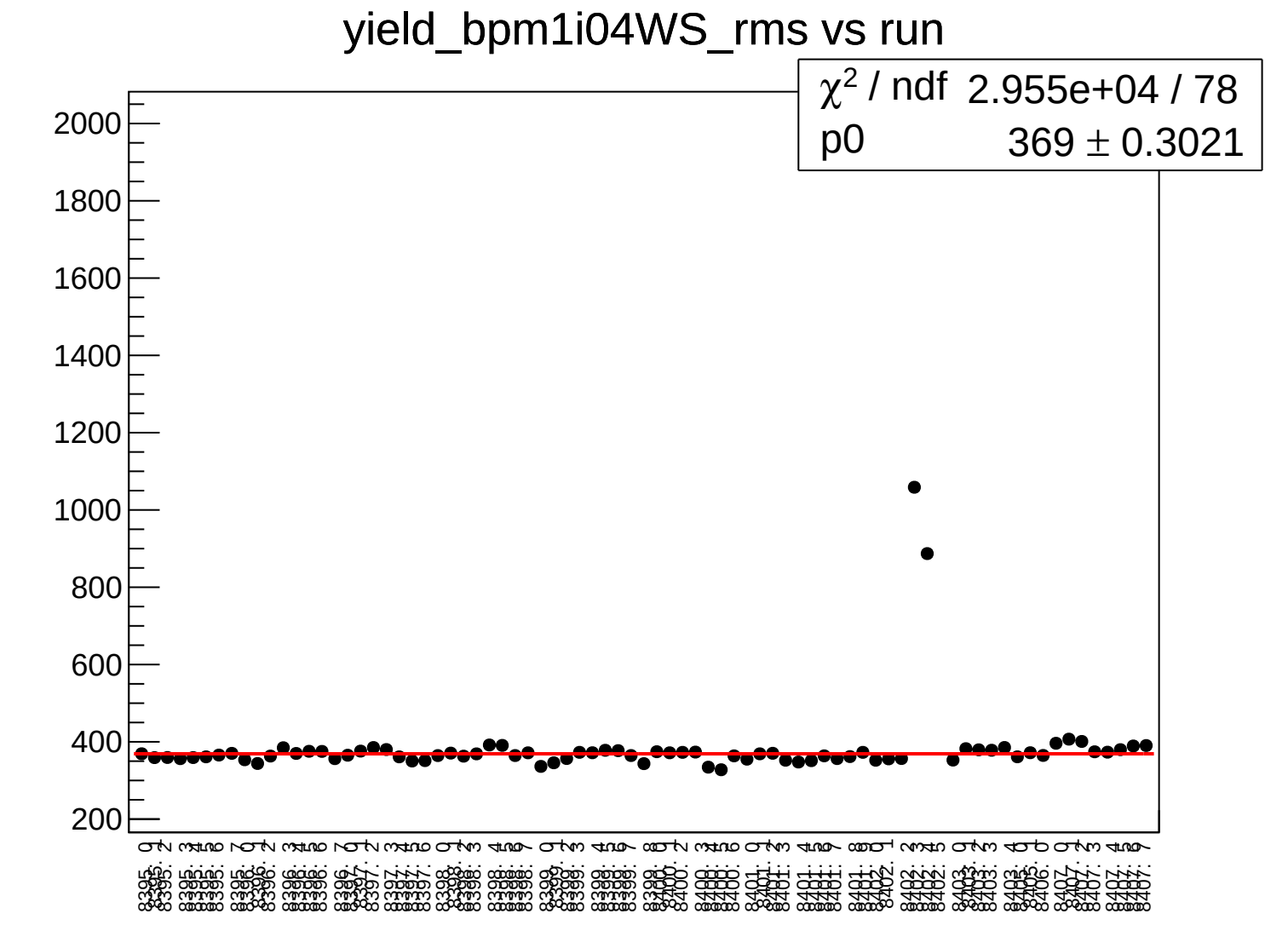

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 3.987e+05 / 78
p0 1.75e+05 ± 0.4119
175
174
173
172
171
170
pull
Entries 79
Mean 124.8
Std Dev 72.81
0
−100
−200
−300
−400
−500

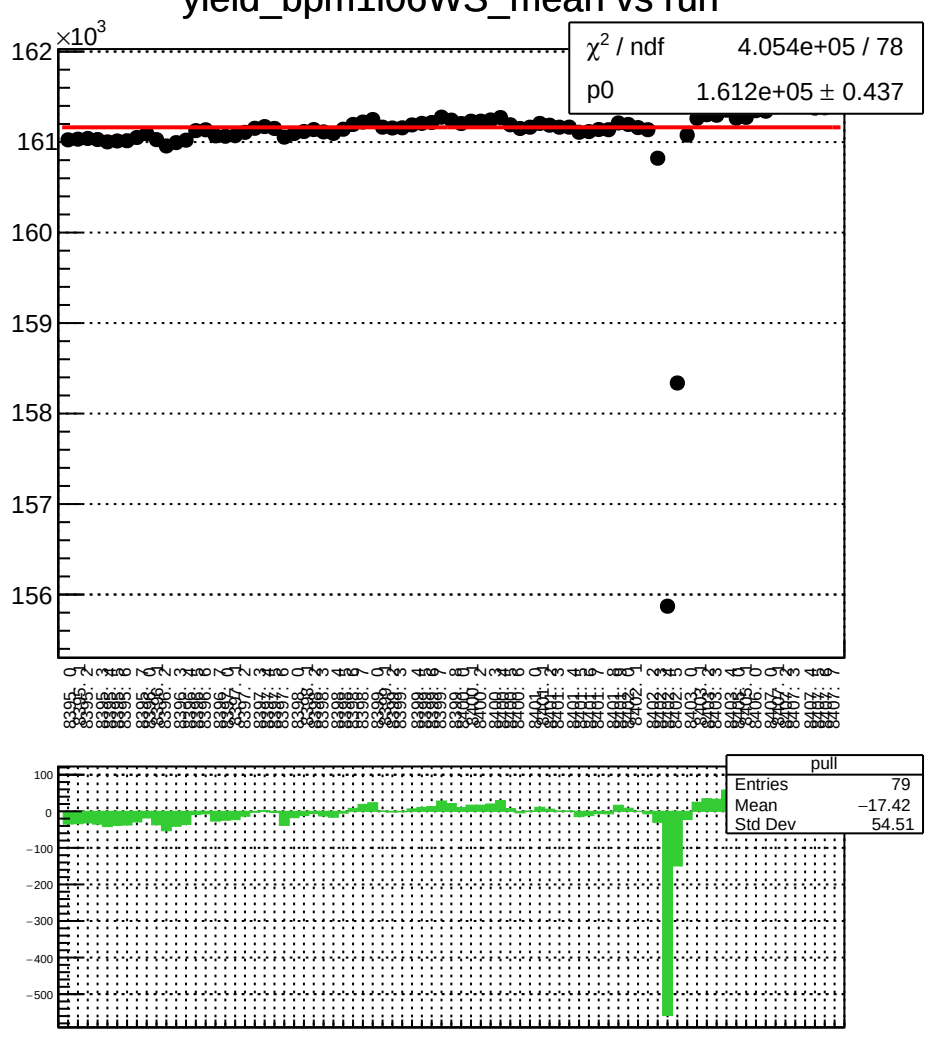

pull1D
Entries 79
Mean 0.9181
Std Dev 3.856
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

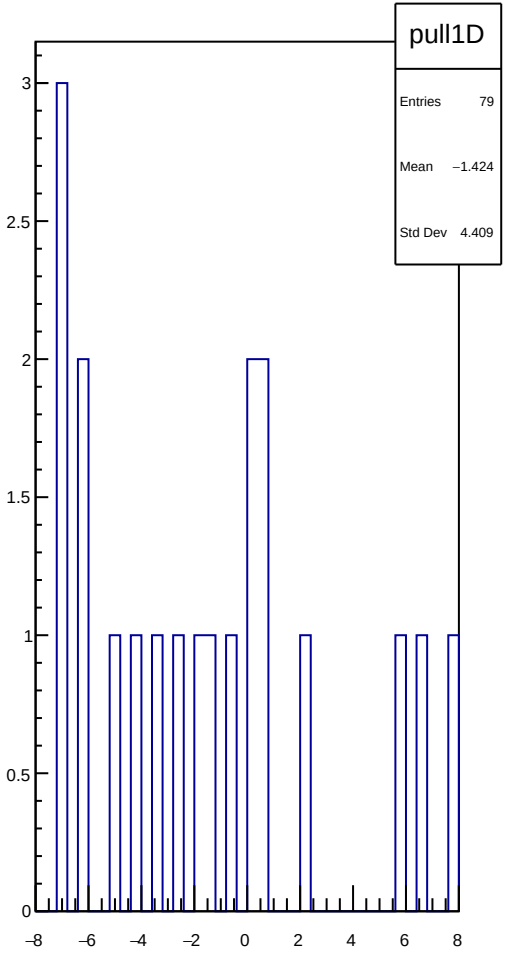

yield_bpm1i02WS_rms vs run
χ² / ndf 2.935e+04 / 78
p0 355.8 ± 0.2912
2000
1800
1600
1400
1200
1000
800
600
400
200

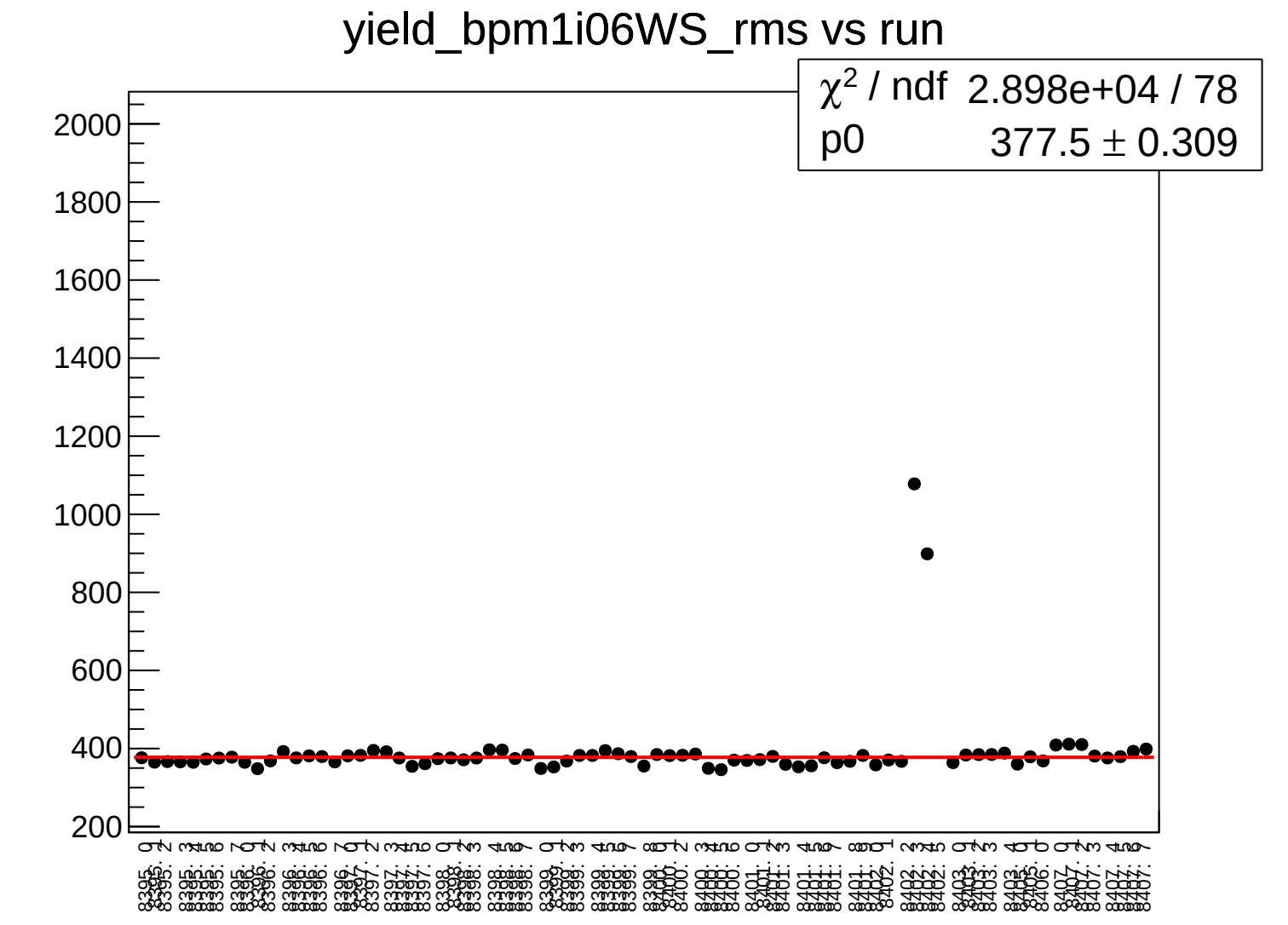

yield_bpm1i04WS_mean vs run
χ² / ndf 3.921e+05 / 78
p0 1.773e+05 ± 0.4272
×10³
178
177
176
175
174
173
172
pull
Entries 79
Mean 144.1
Std Dev 103.5
0
−100
−200
−300
−400
−500

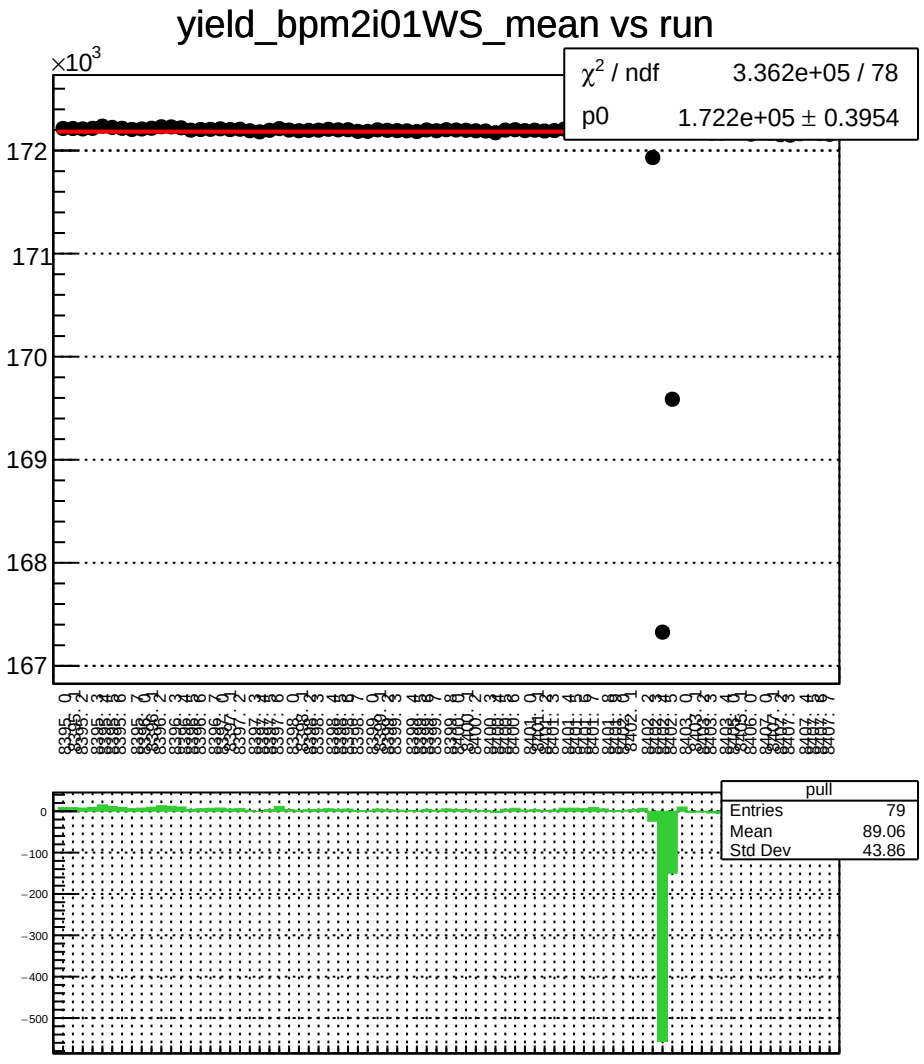

pull1D
Entries 79
Mean 1.925
Std Dev 4.14
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

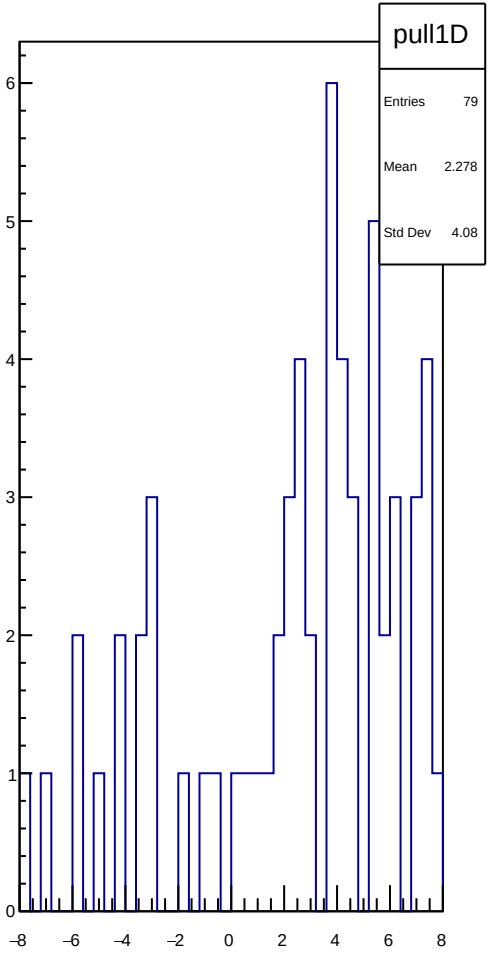

yield_bpm1i04WS_rms vs run
χ² / ndf 2.955e+04 / 78
p0 369 ± 0.3021
2000
1800
1600
1400
1200
1000
800
600
400
200

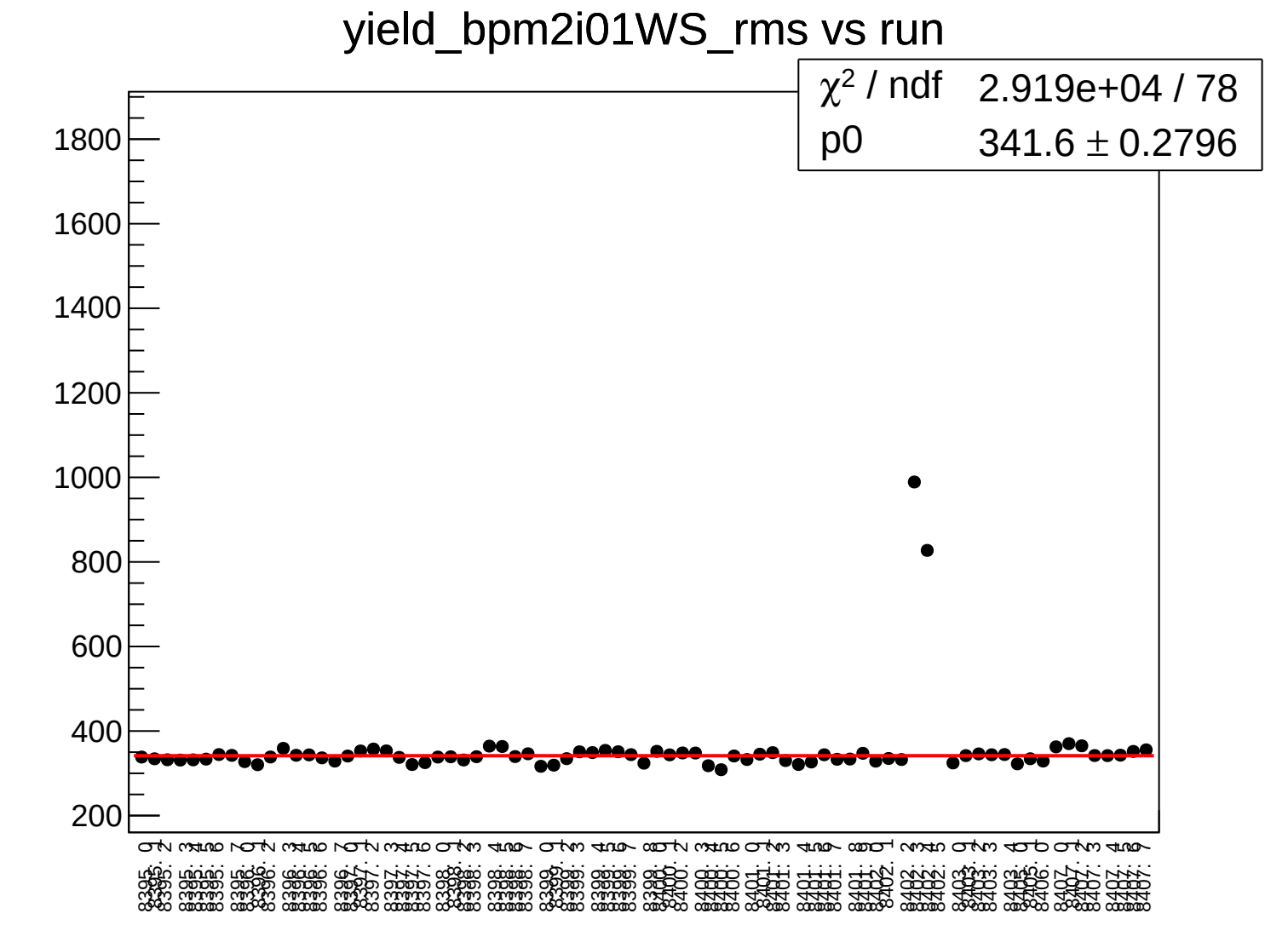

yield_bpm1i06WS_mean vs run
χ² / ndf 4.054e+05 / 78
p0 1.612e+05 ± 0.437
×10³
pull
Entries 79
Mean −17.42
Std Dev 54.51

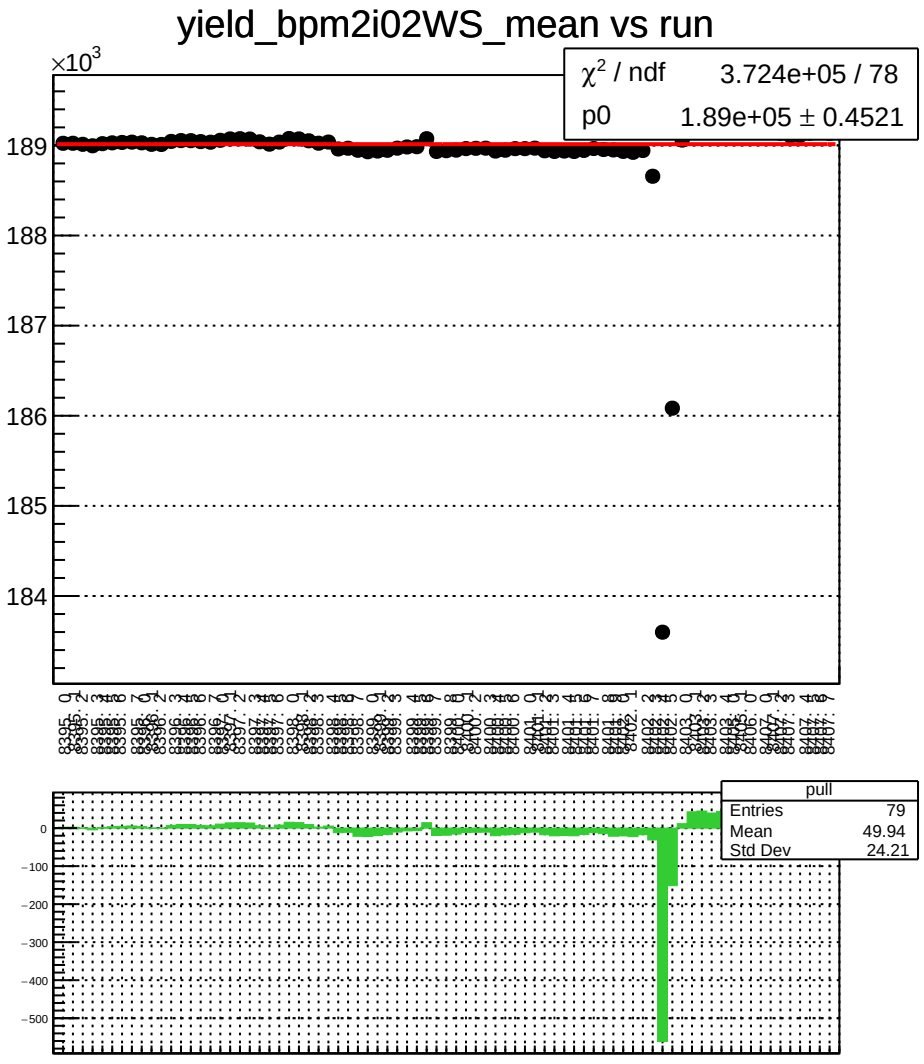

pull1D
Entries 79
Mean −1.424
Std Dev 4.409

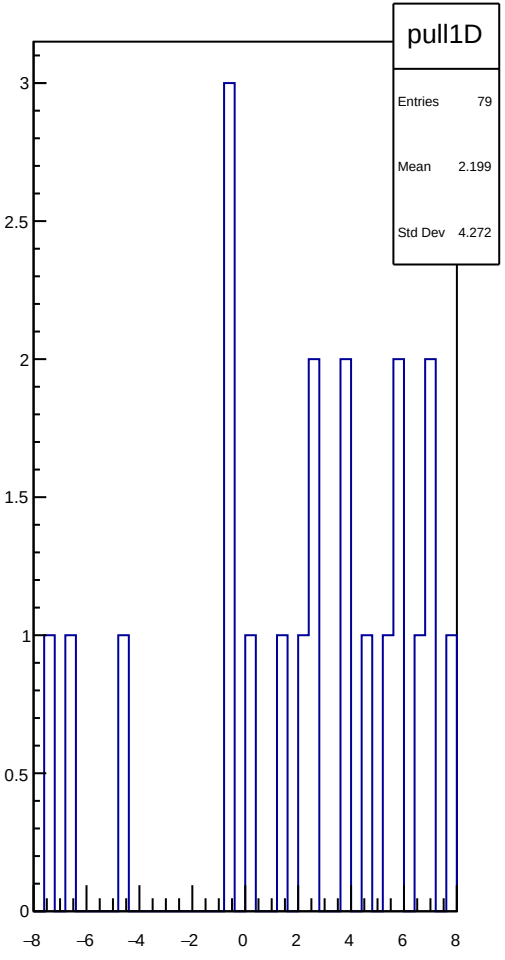

yield_bpm1i06WS_rms vs run
χ² / ndf 2.898e+04 / 78
p0 377.5 ± 0.309
2000
1800
1600
1400
1200
1000
800
600
400
200

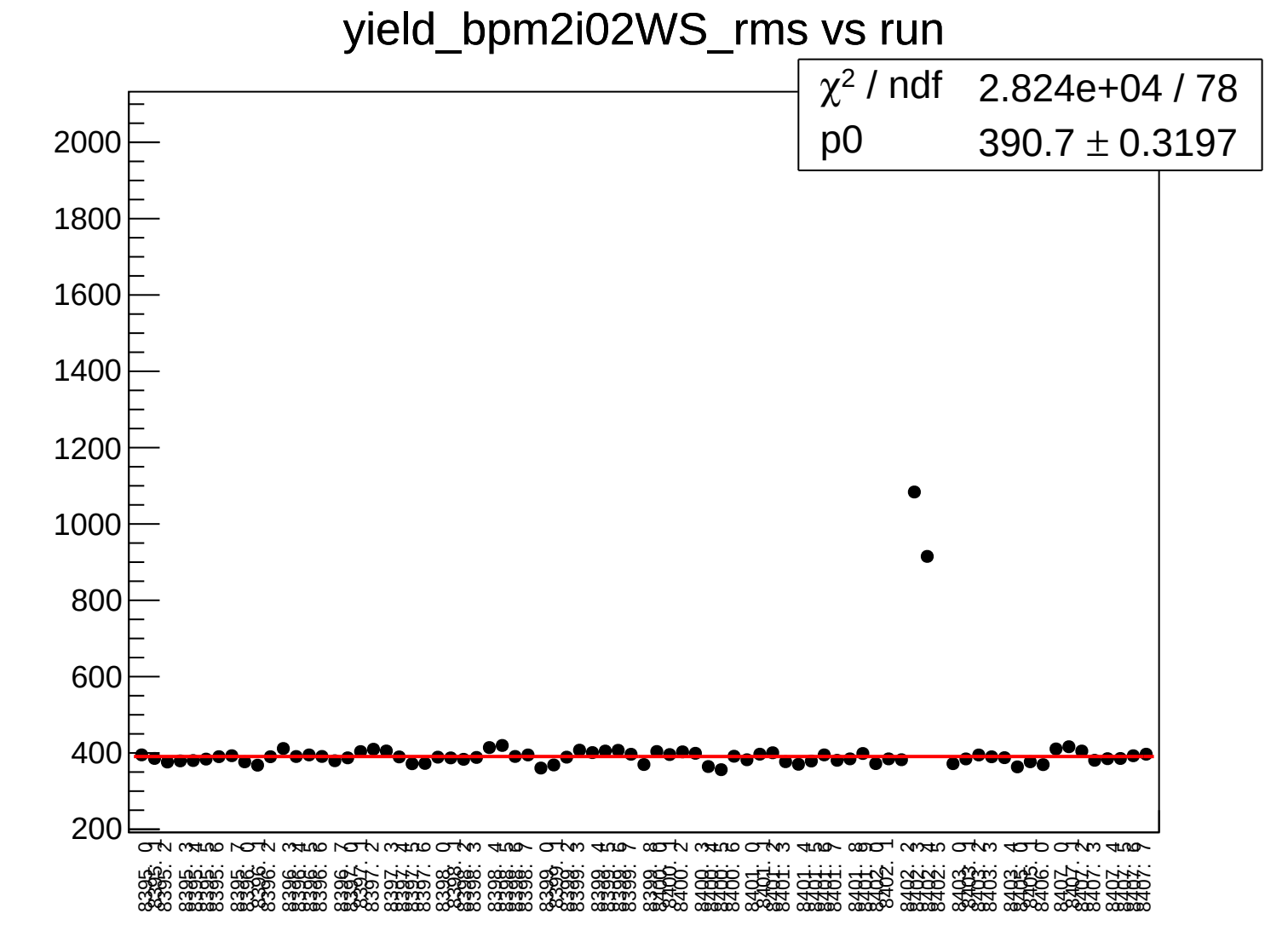

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 3.362e+05 / 78
p0 1.722e+05 ± 0.3954
172
171
170
169
168
167
pull
Entries 79
Mean 89.06
Std Dev 43.86
0
−100
−200
−300
−400
−500

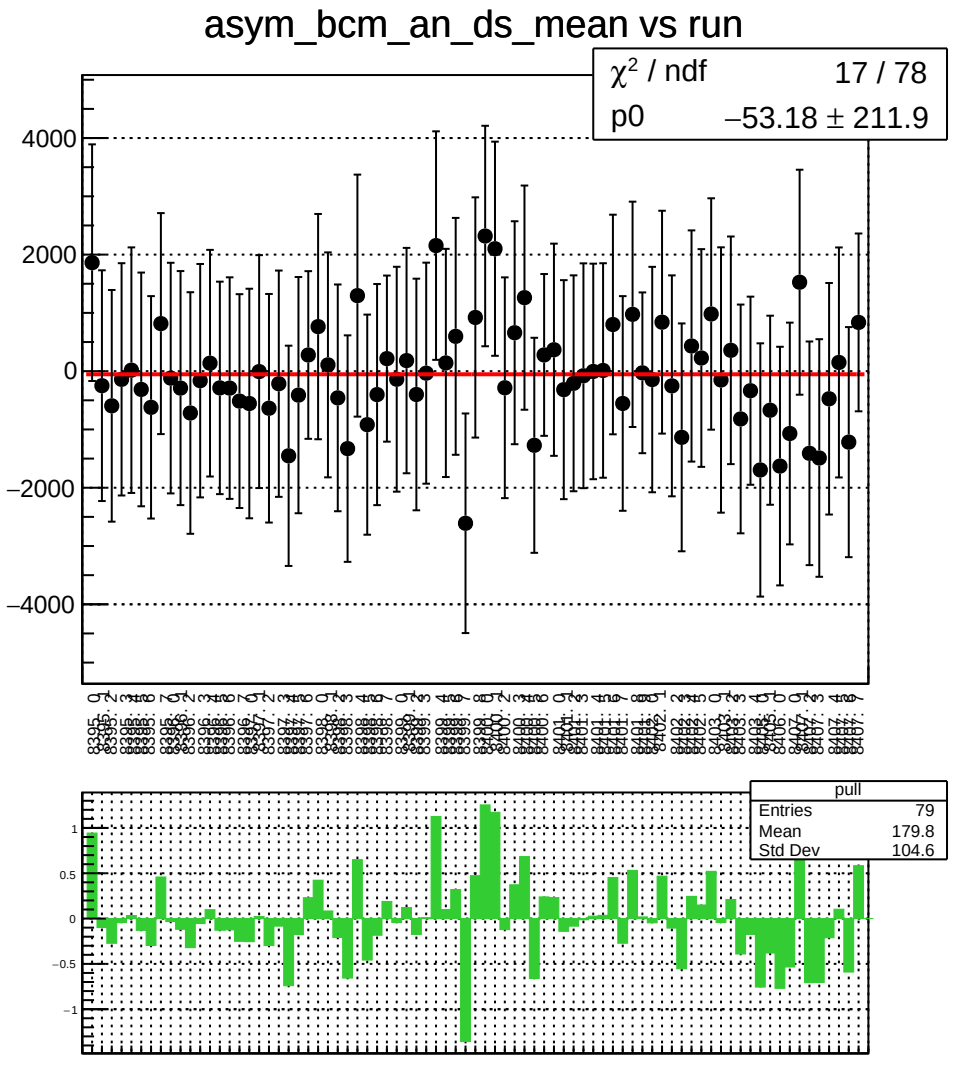

pull1D
Entries 79
Mean 2.278
Std Dev 4.08
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

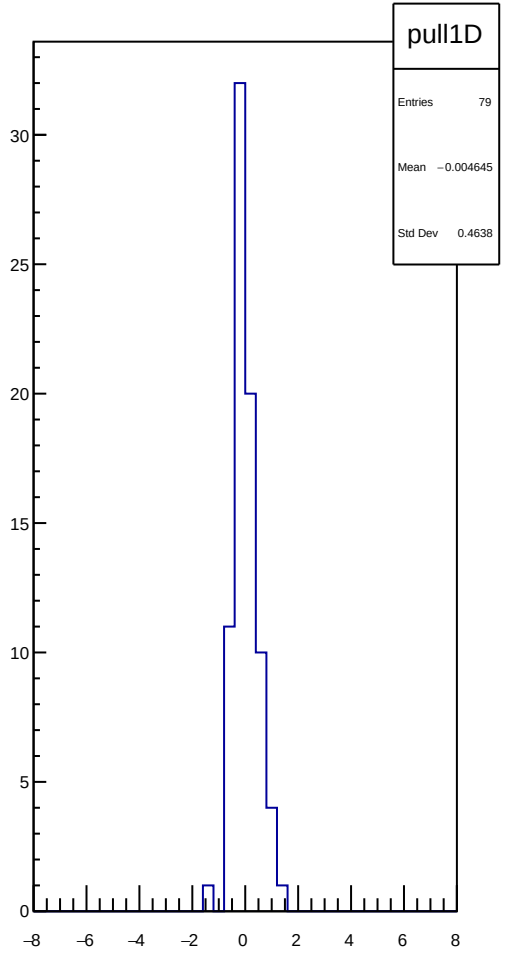

yield_bpm2i01WS_rms vs run
χ² / ndf 2.919e+04 / 78
p0 341.6 ± 0.2796
1800
1600
1400
1200
1000
800
600
400
200

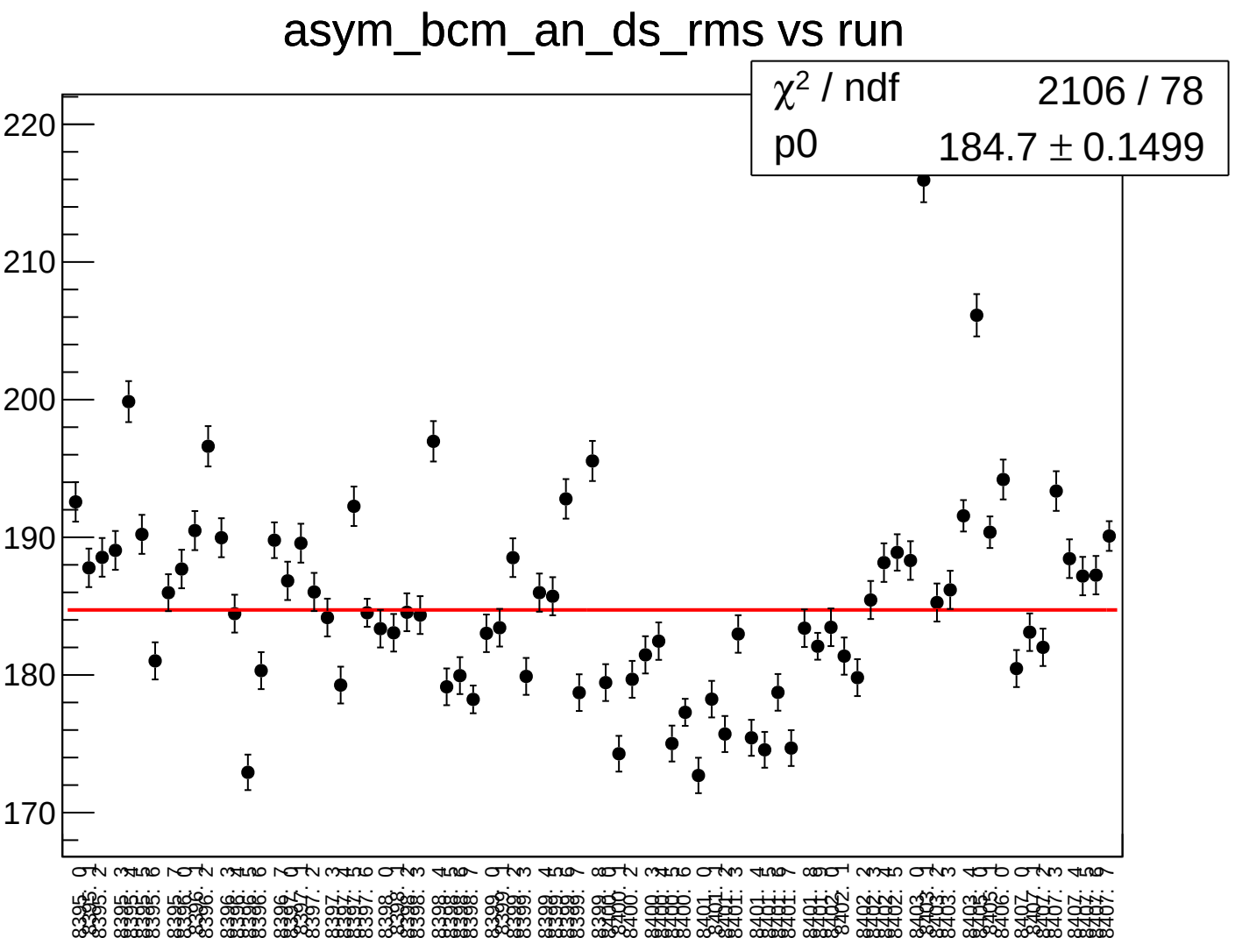

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 3.724e+05 / 78
p0 1.89e+05 ± 0.4521
189
188
187
186
185
184
pull
Entries 79
Mean 49.94
Std Dev 24.21
0
−100
−200
−300
−400
−500

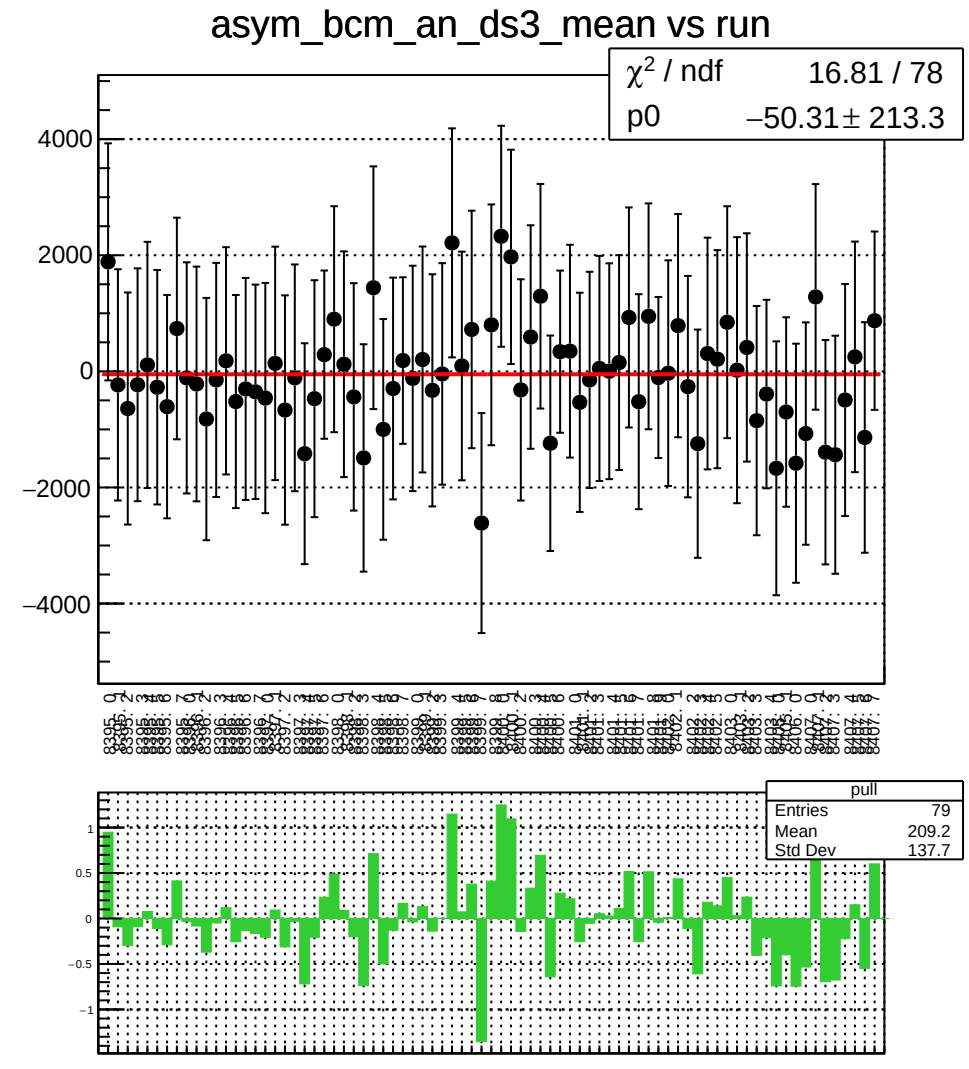

pull1D
Entries 79
Mean 2.199
Std Dev 4.272
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

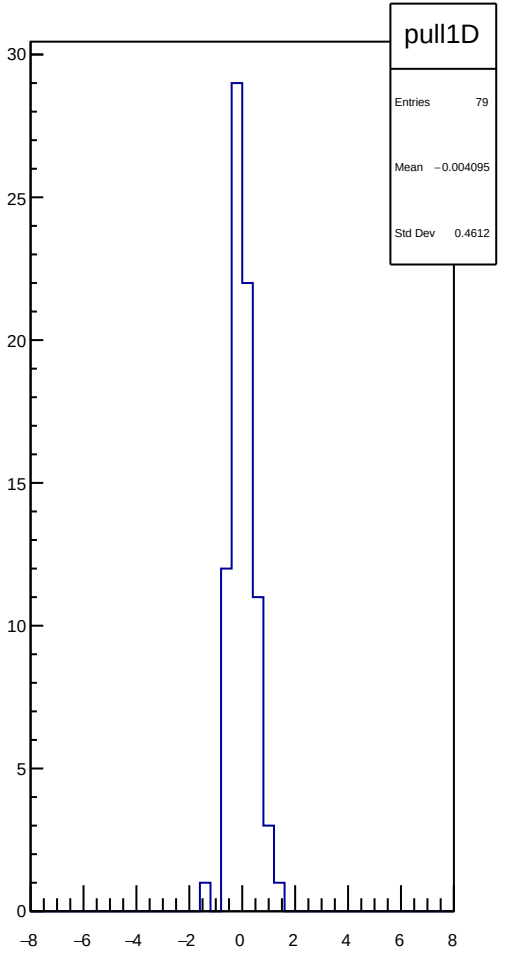

yield_bpm2i02WS_rms vs run
χ² / ndf 2.824e+04 / 78
p0 390.7 ± 0.3197
2000
1800
1600
1400
1200
1000
800
600
400
200

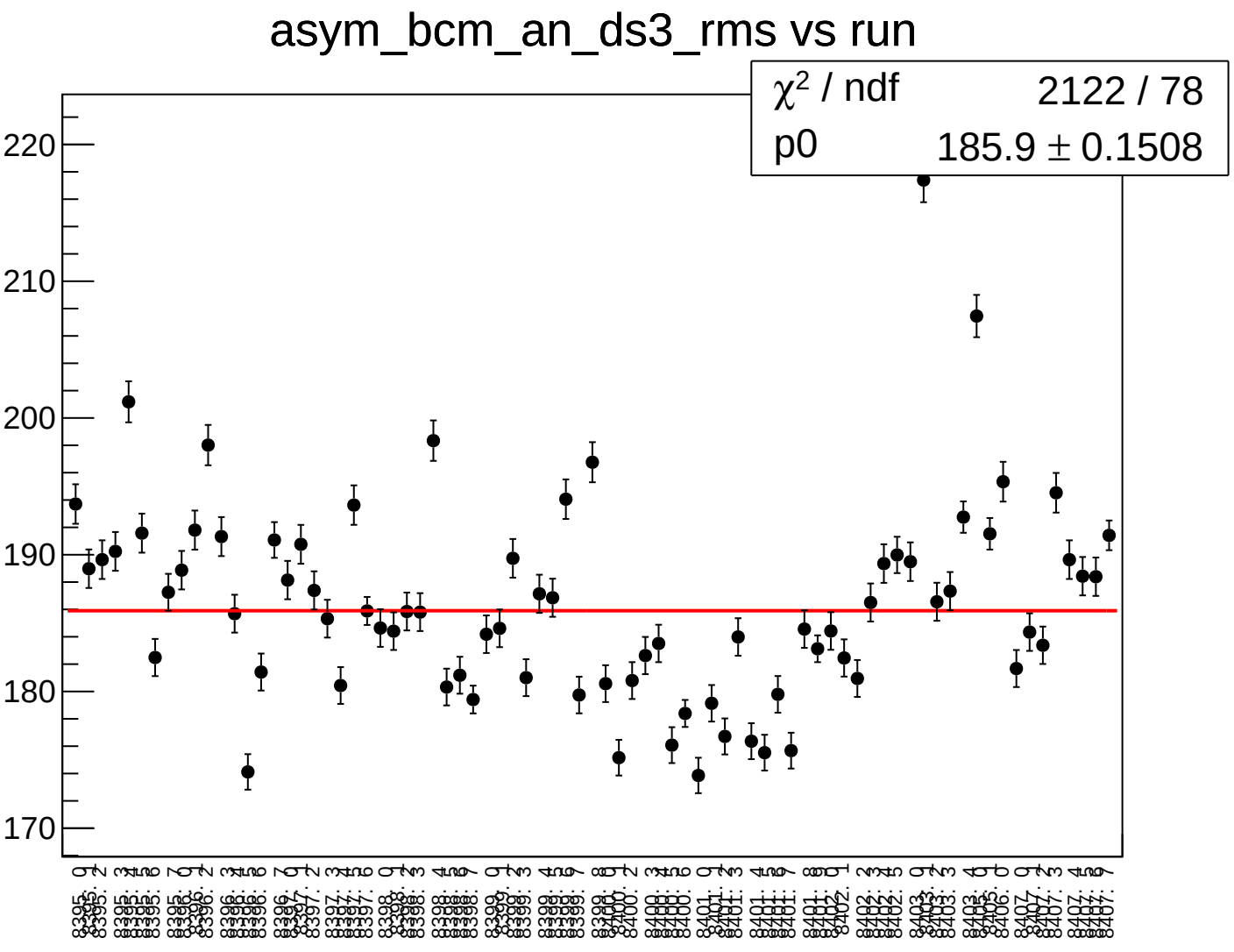

asym_bcm_an_ds_mean vs run
χ² / ndf 17 / 78
p0 −53.18 ± 211.9
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 179.8
Std Dev 104.6
1
0.5
0
−0.5
−1

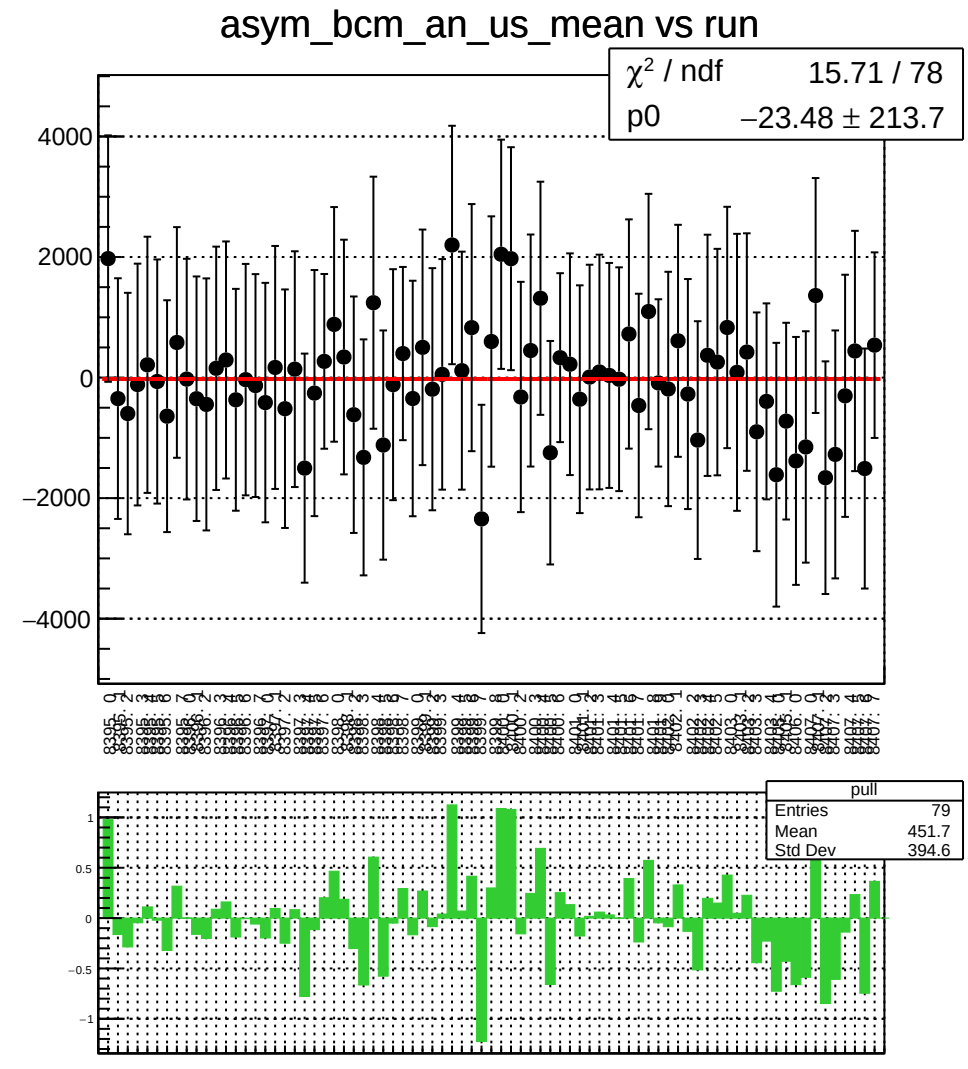

pull1D
Entries 79
Mean −0.004645
Std Dev 0.4638
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

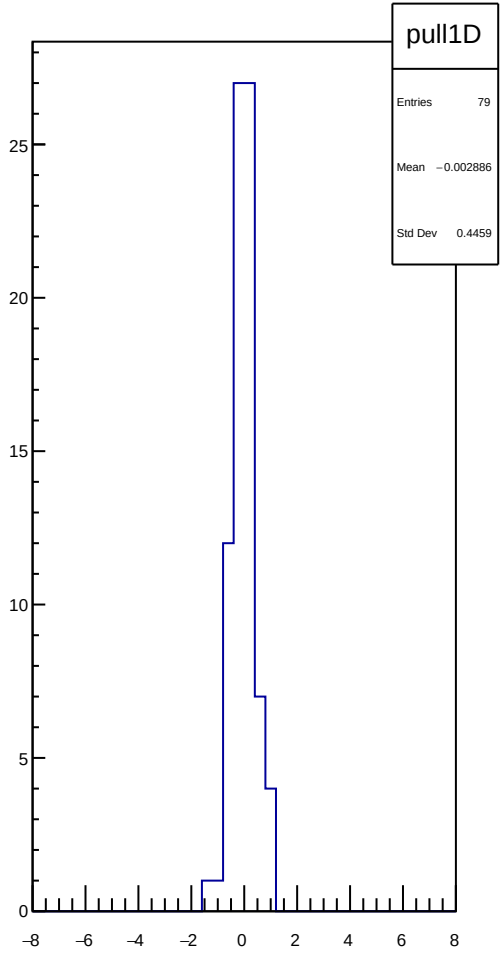

asym_bcm_an_ds_rms vs run
χ² / ndf 2106 / 78
p0 184.7 ± 0.1499
220
210
200
190
180
170

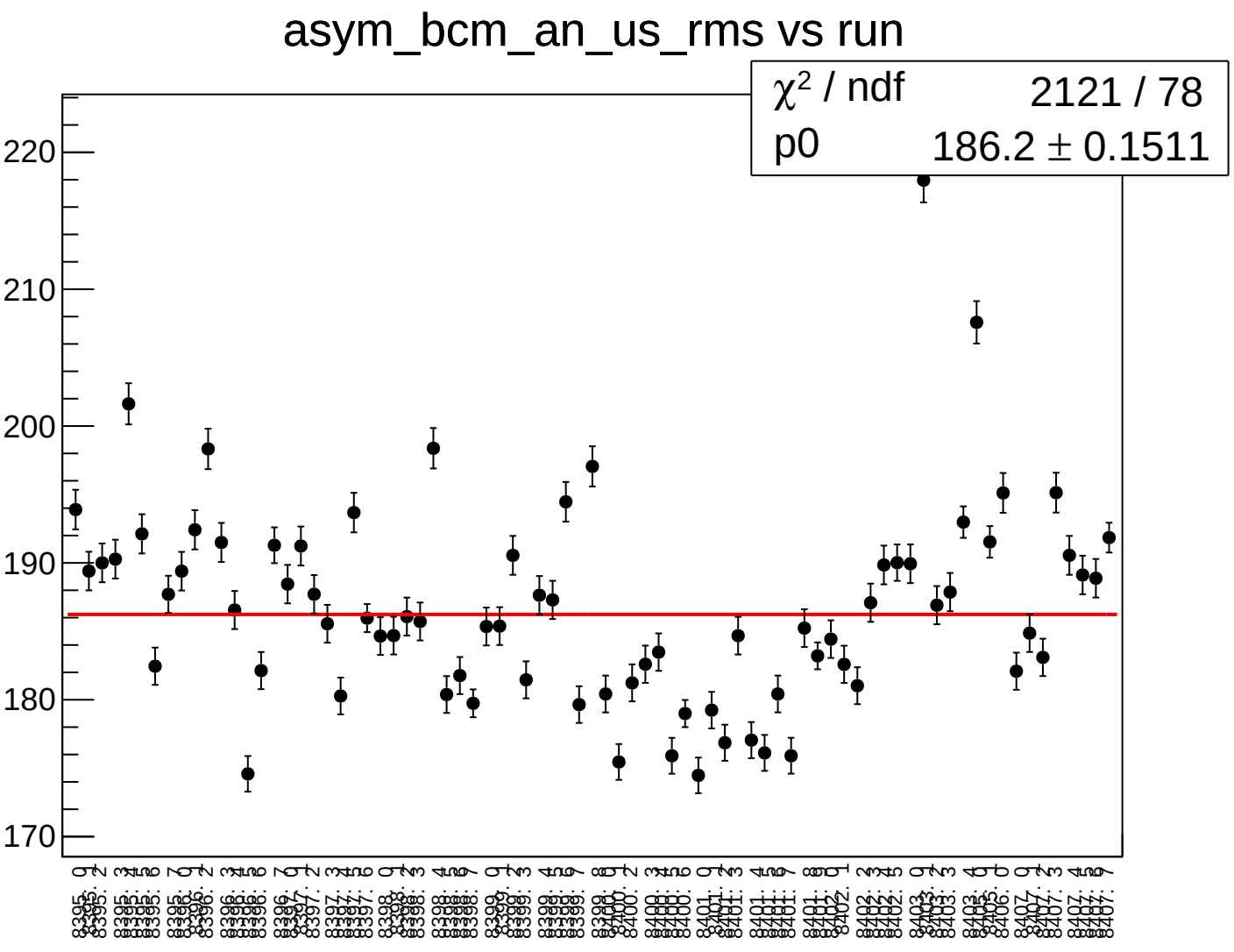

asym_bcm_an_ds3_mean vs run
χ² / ndf 16.81 / 78
p0 −50.31 ± 213.3
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 209.2
Std Dev 137.7
1
0.5
0
−0.5
−1

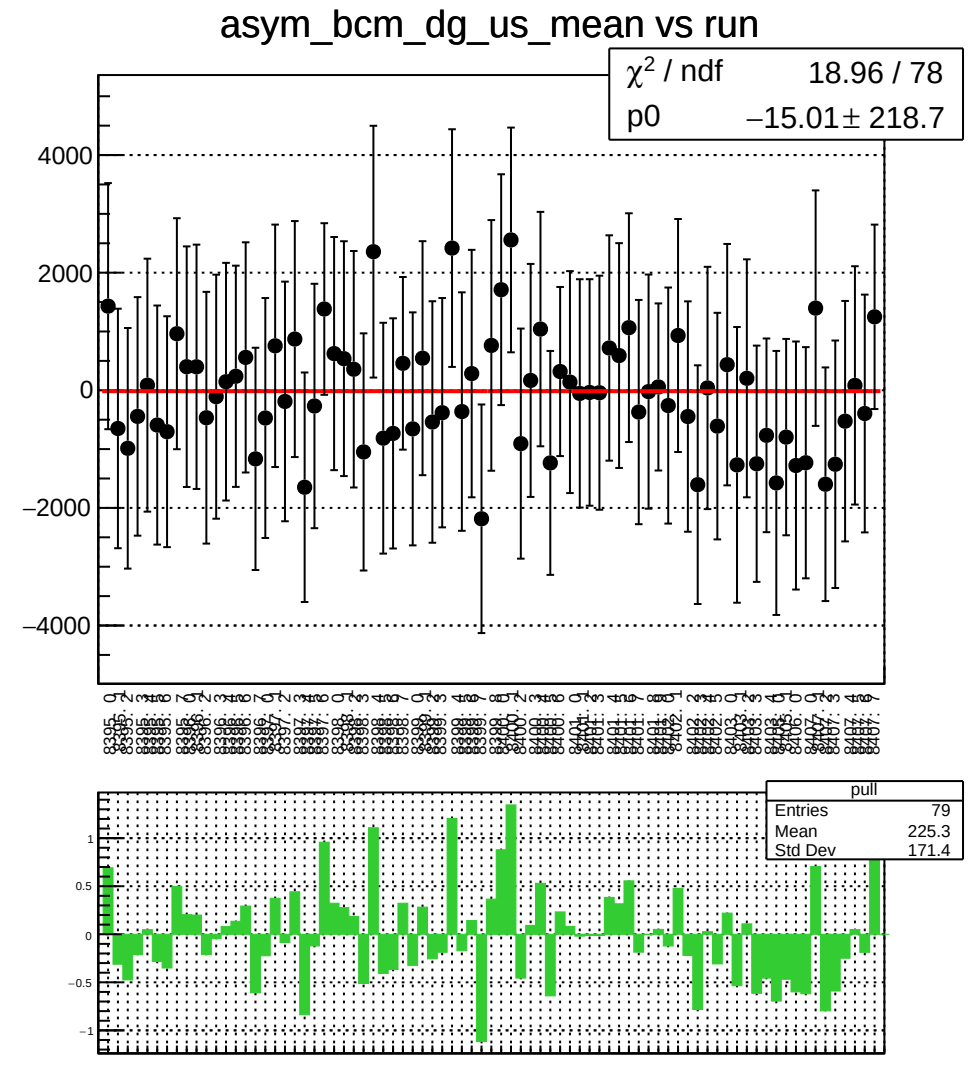

pull1D
Entries 79
Mean −0.004095
Std Dev 0.4612
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

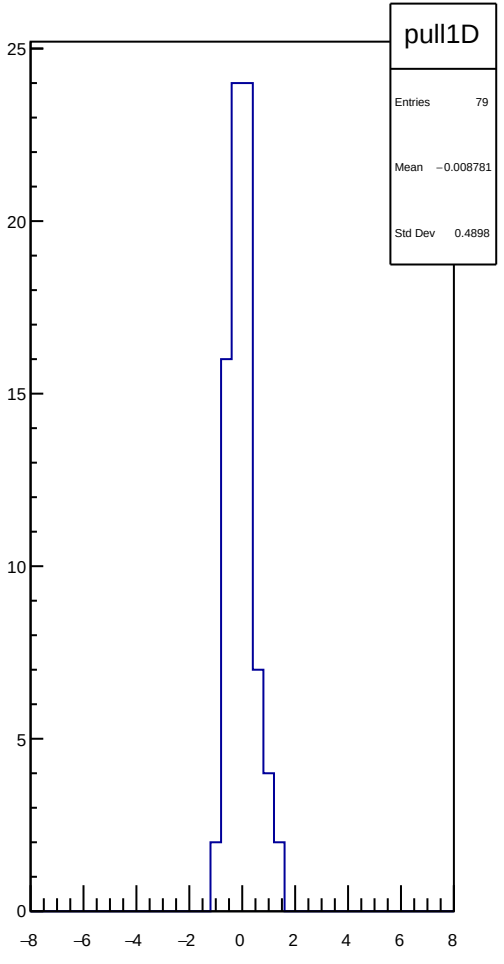

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 2122 / 78
p0 185.9 ± 0.1508
220
210
200
190
180
170

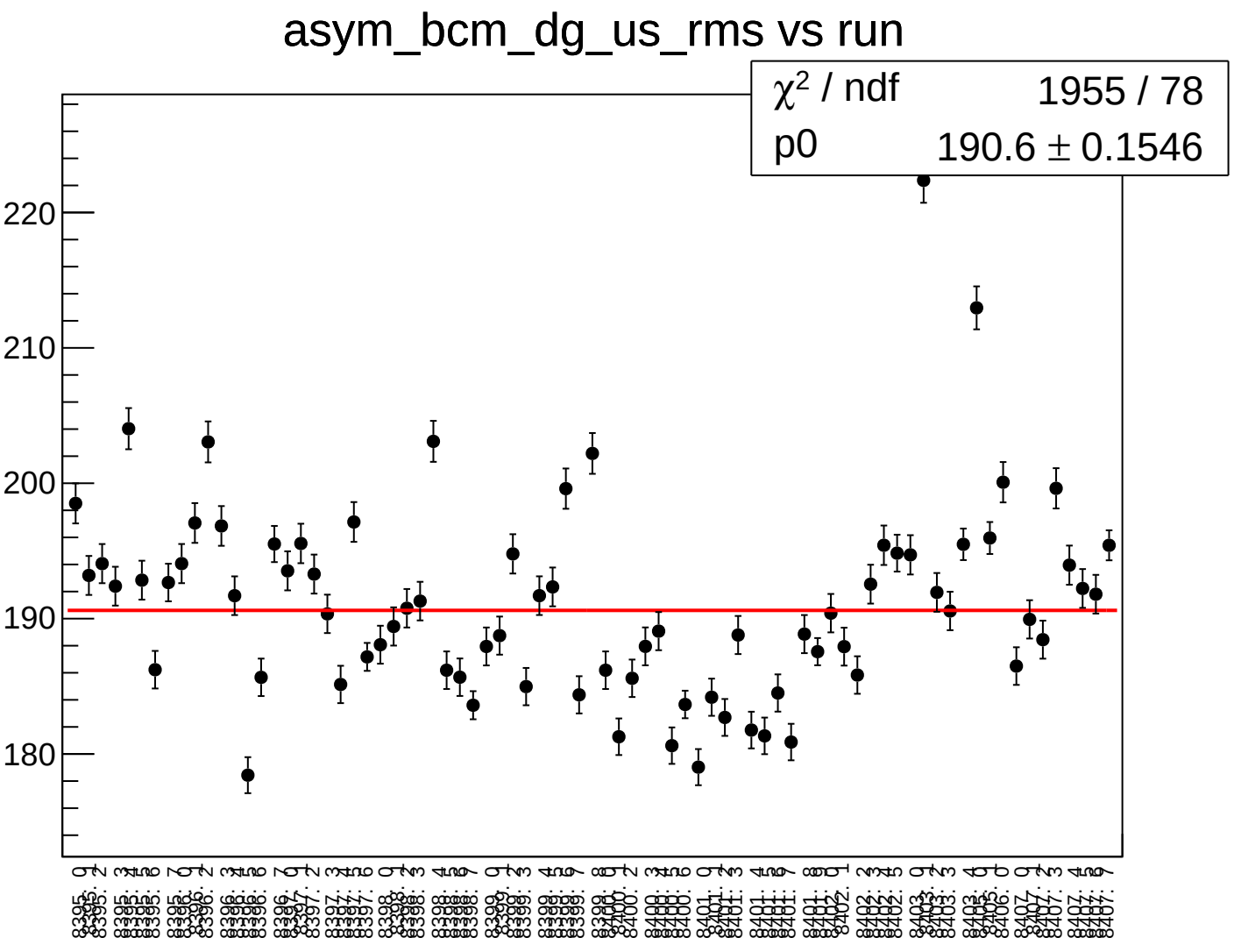

asym_bcm_an_us_mean vs run
χ² / ndf 15.71 / 78
p0 −23.48 ± 213.7
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 451.7
Std Dev 394.6
1
0.5
0
−0.5
−1

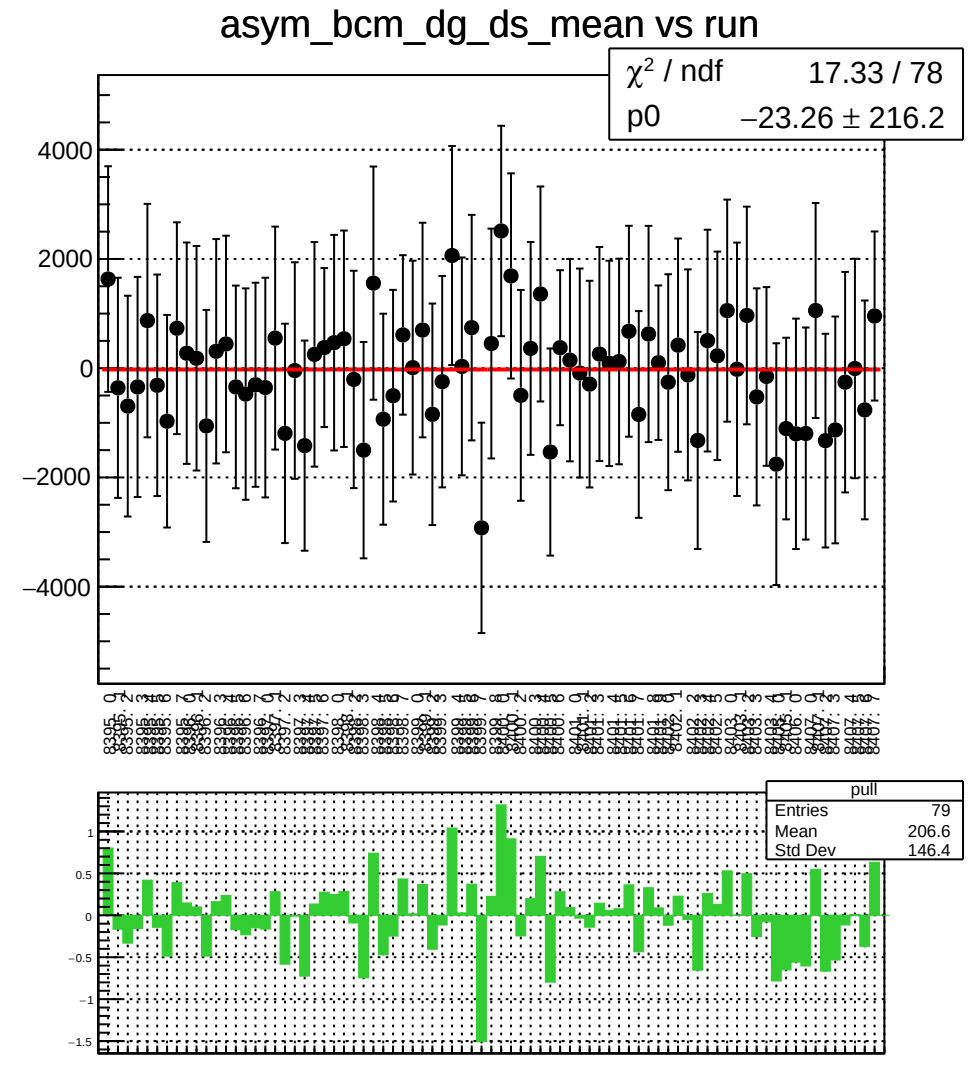

pull1D
Entries 79
Mean −0.002886
Std Dev 0.4459
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

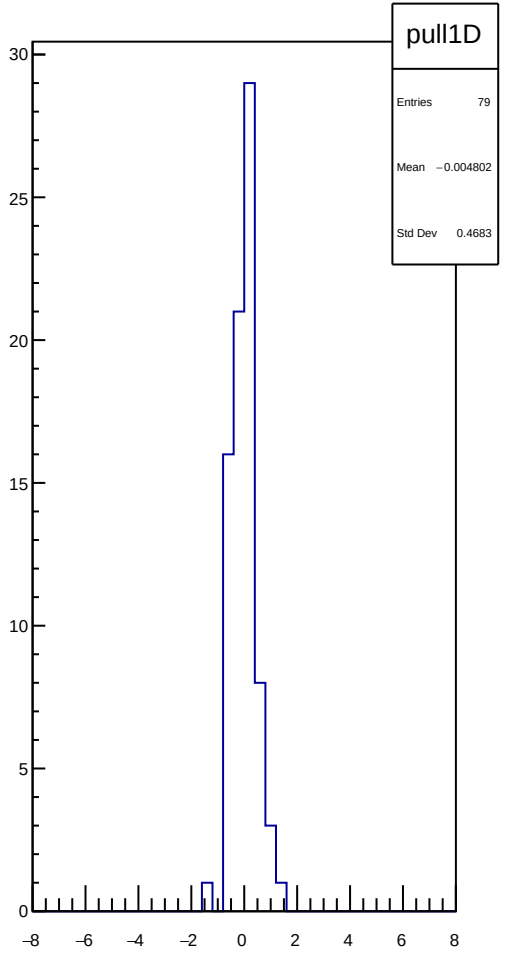

asym_bcm_an_us_rms vs run
χ² / ndf 2121 / 78
p0 186.2 ± 0.1511
220
210
200
190
180
170

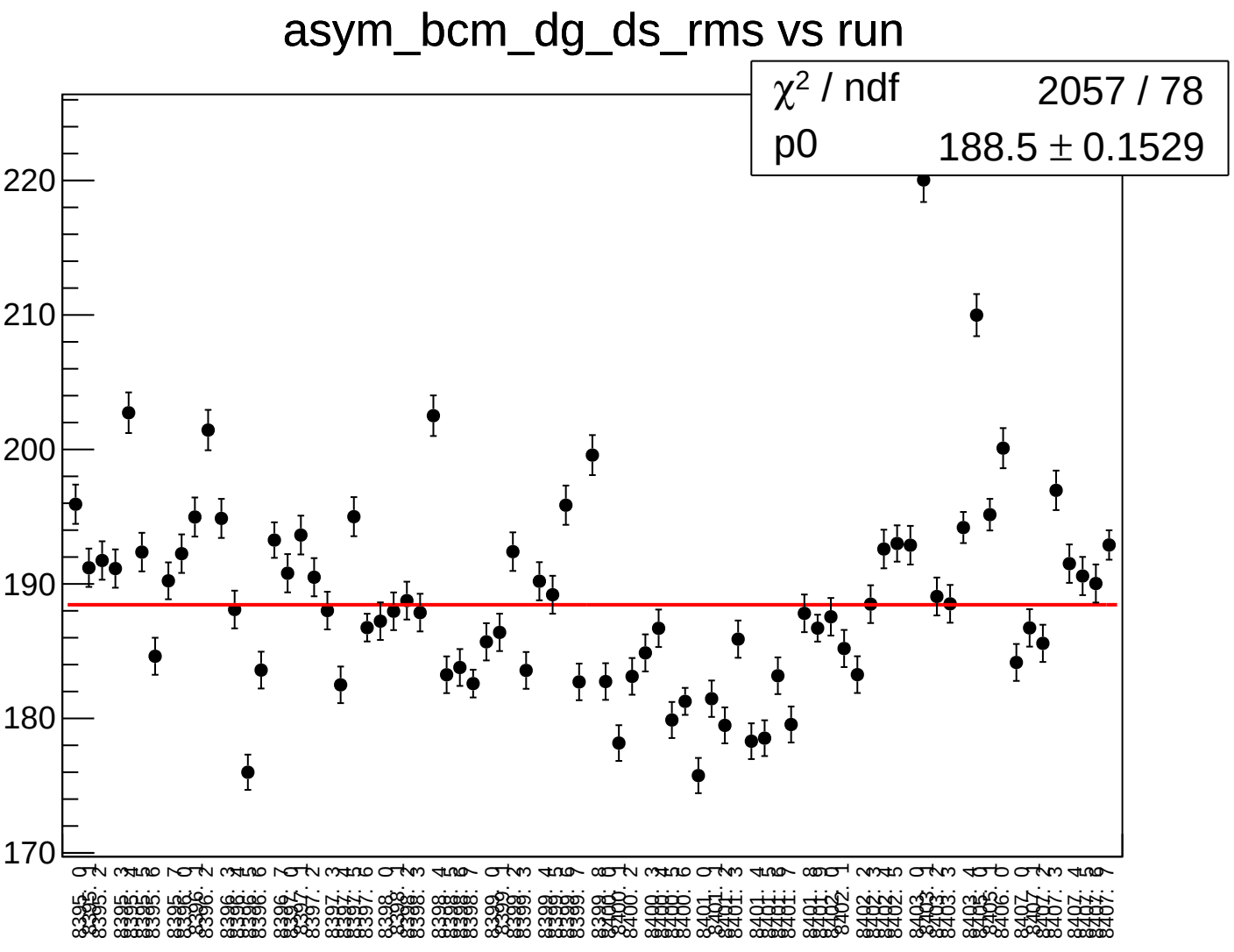

asym_bcm_dg_us_mean vs run
χ² / ndf 18.96 / 78
p0 −15.01 ± 218.7
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 225.3
Std Dev 171.4
1
0.5
0
−0.5
−1

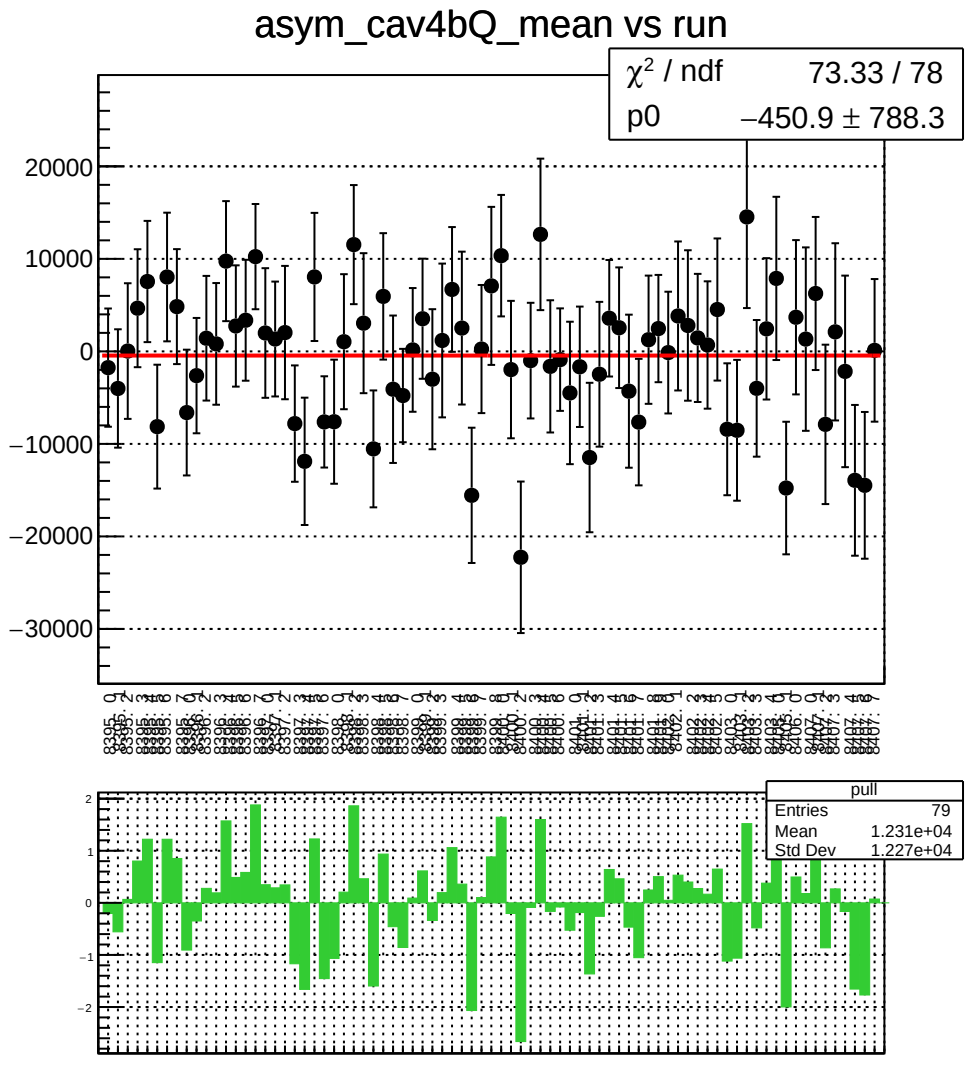

pull1D
Entries 79
Mean −0.008781
Std Dev 0.4898
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

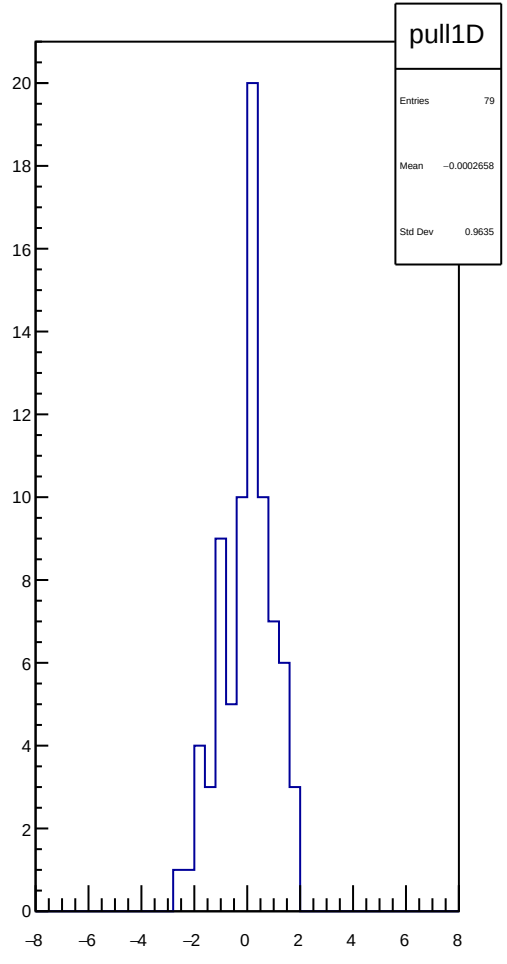

asym_bcm_dg_us_rms vs run
χ² / ndf 1955 / 78
p0 190.6 ± 0.1546
220
210
200
190
180

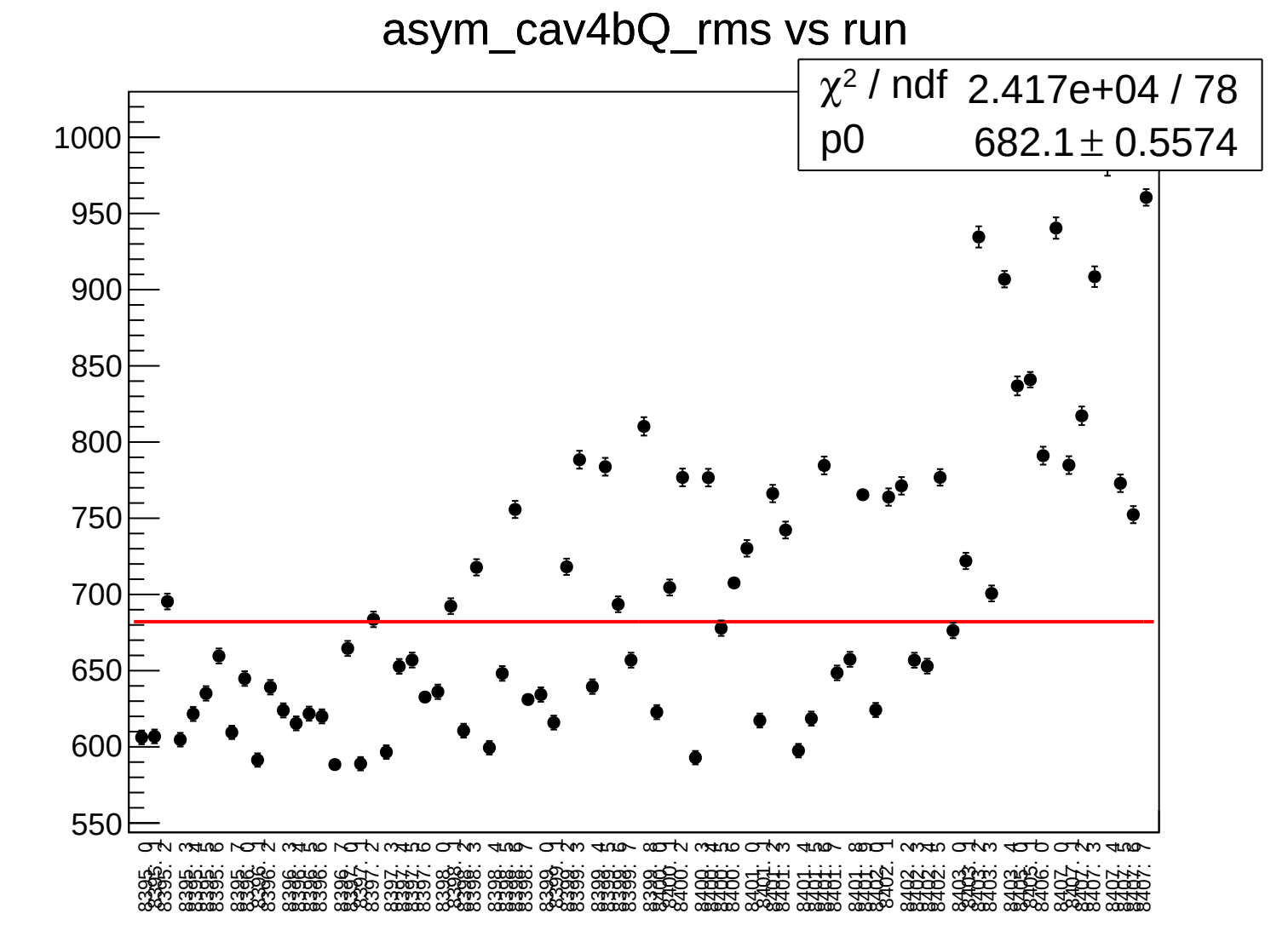

asym_bcm_dg_ds_mean vs run
χ² / ndf 17.33 / 78
p0 −23.26 ± 216.2
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 206.6
Std Dev 146.4
1
0.5
0
−0.5
−1
−1.5

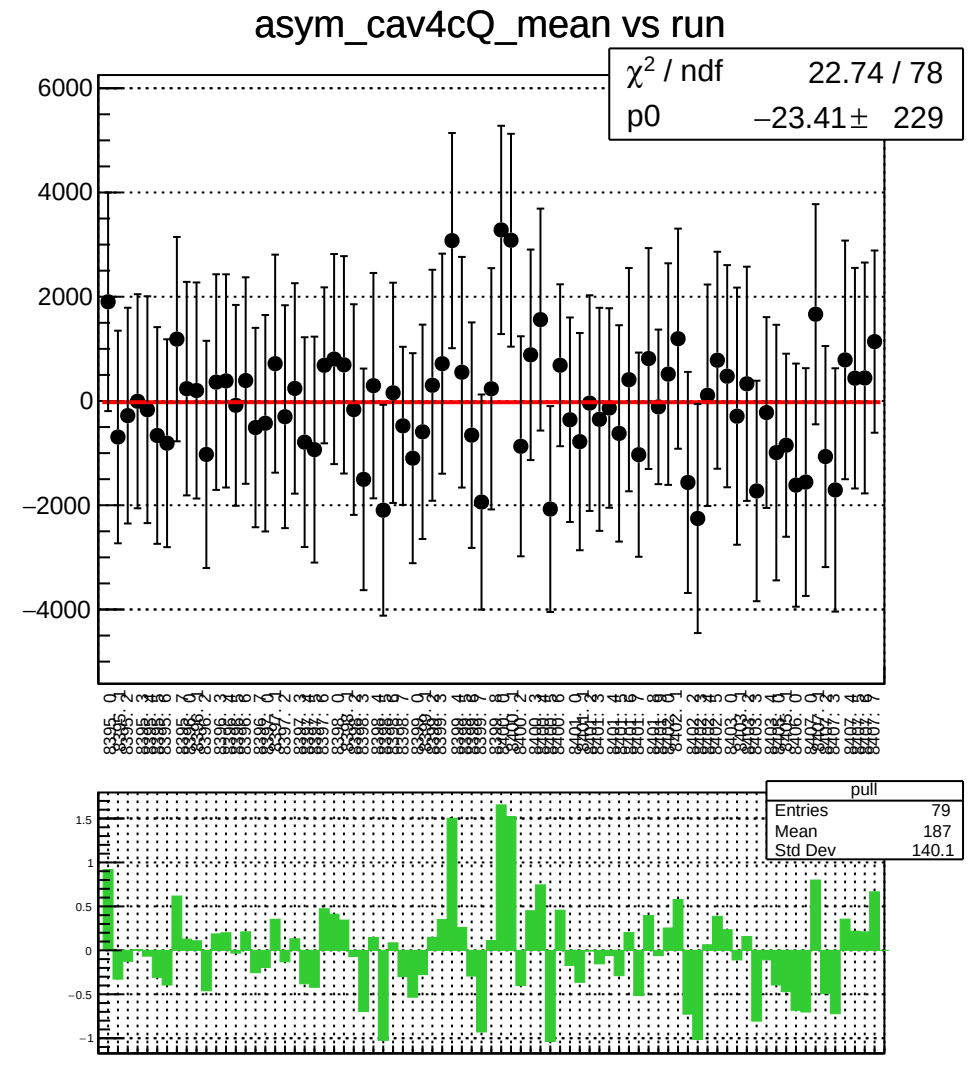

pull1D
Entries 79
Mean −0.004802
Std Dev 0.4683
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

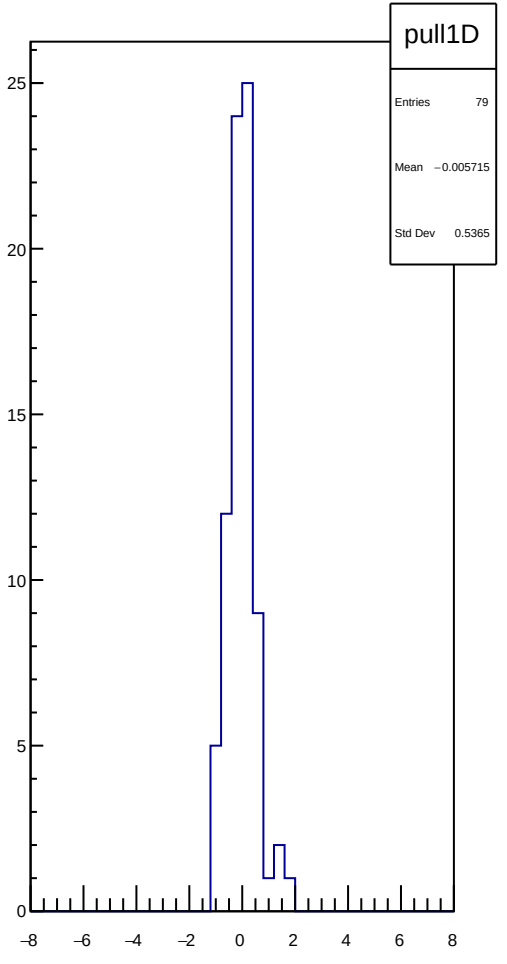

asym_bcm_dg_ds_rms vs run
χ² / ndf 2057 / 78
p0 188.5 ± 0.1529
220
210
200
190
180
170

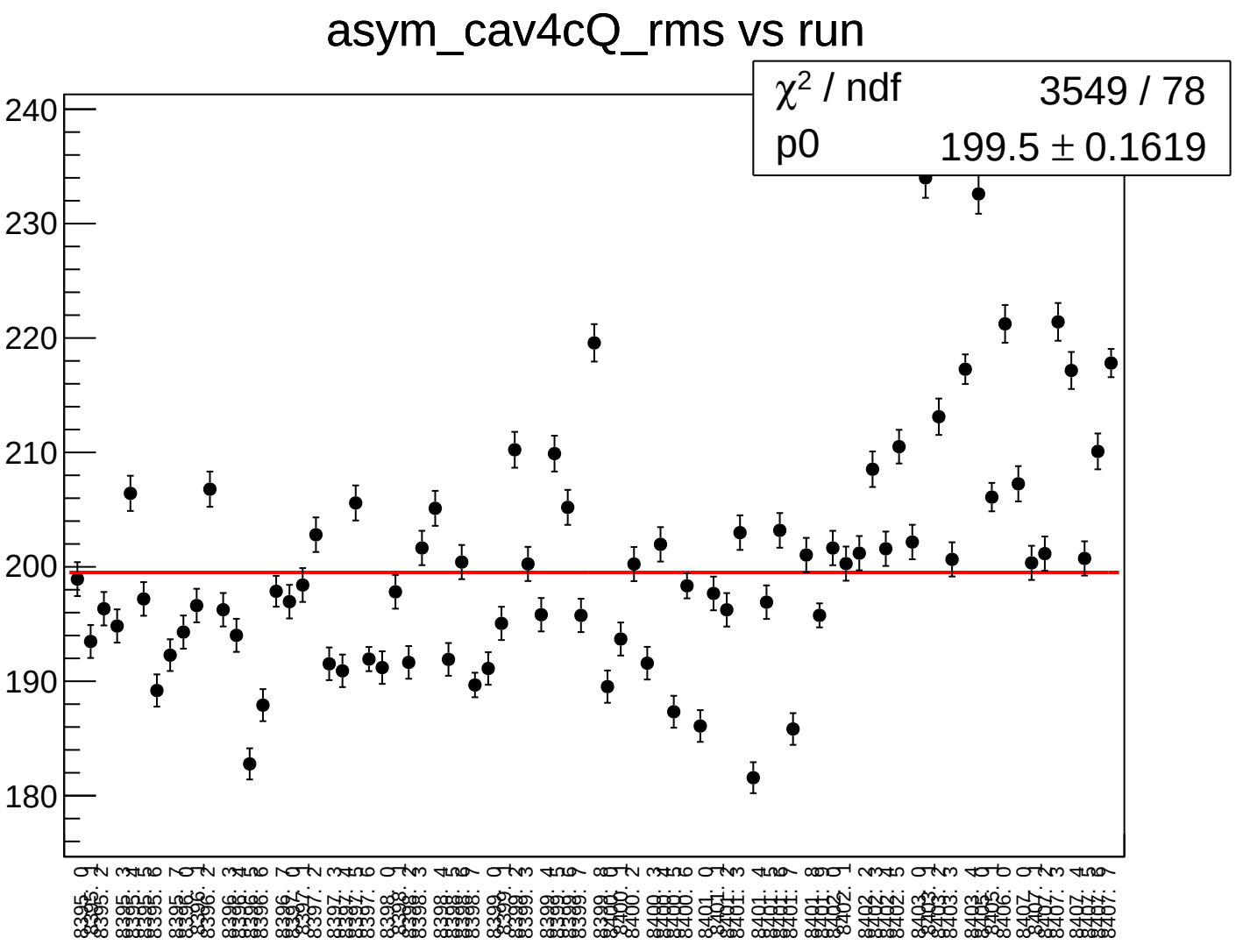

asym_cav4bQ_mean vs run
χ² / ndf 73.33 / 78
p0 −450.9 ± 788.3
20000
10000
0
−10000
−20000
−30000
pull
Entries 79
Mean 1.231e+04
Std Dev 1.227e+04
2
1
0
−1
−2

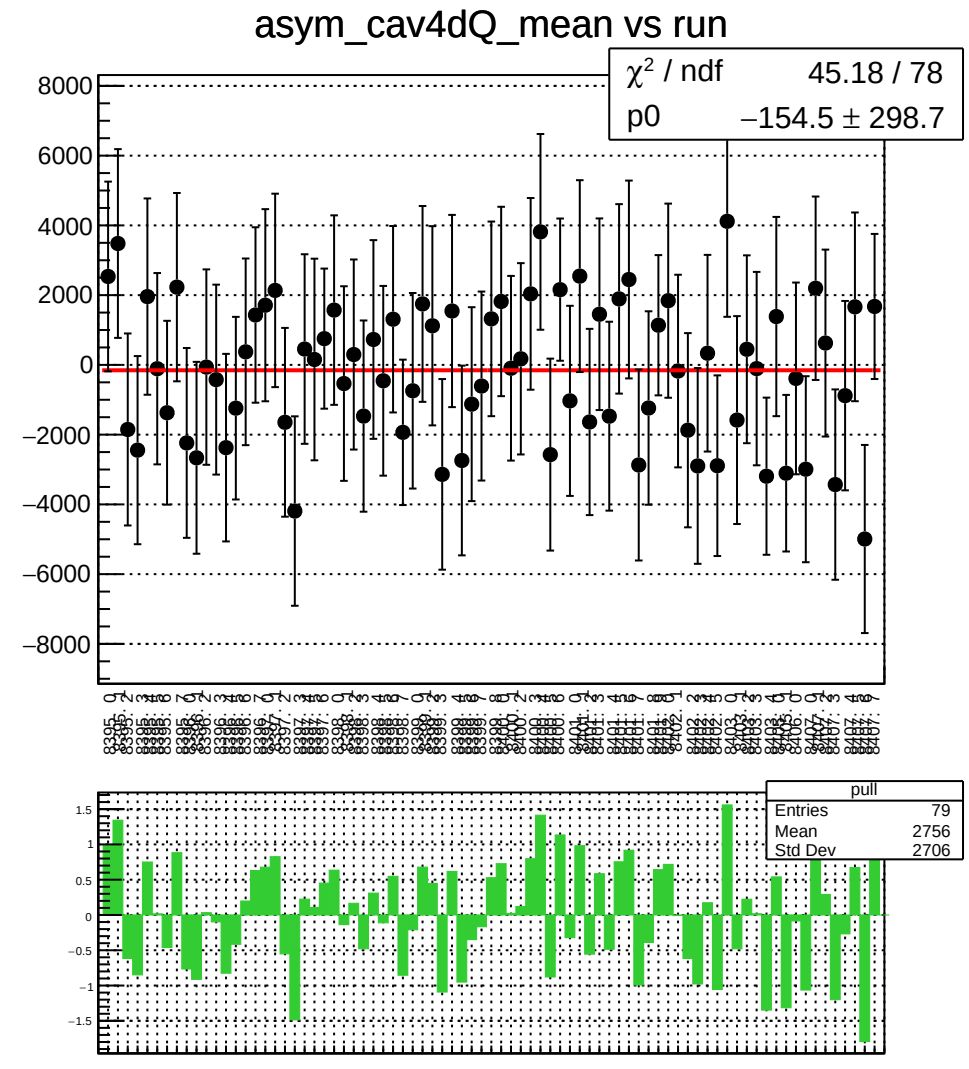

pull1D
Entries 79
Mean −0.0002658
Std Dev 0.9635
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

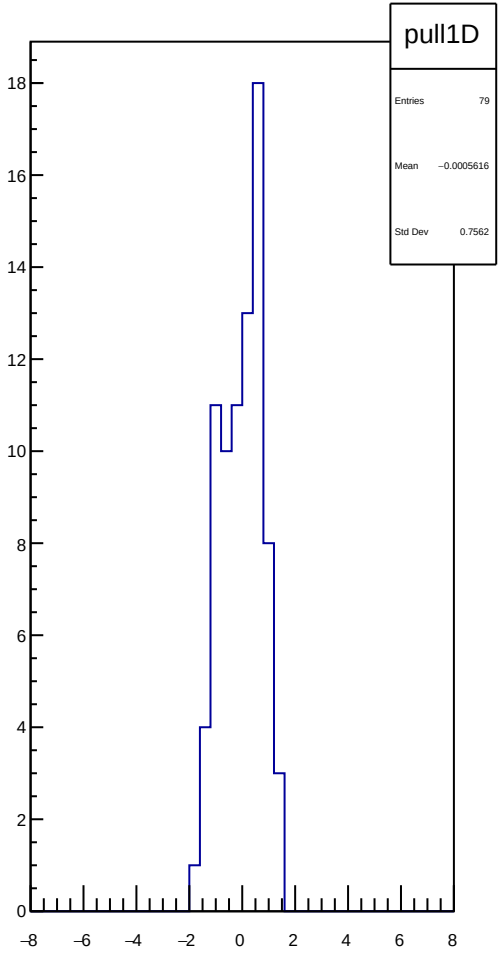

asym_cav4bQ_rms vs run
χ² / ndf 2.417e+04 / 78
p0 682.1 ± 0.5574
1000
950
900
850
800
750
700
650
600
550

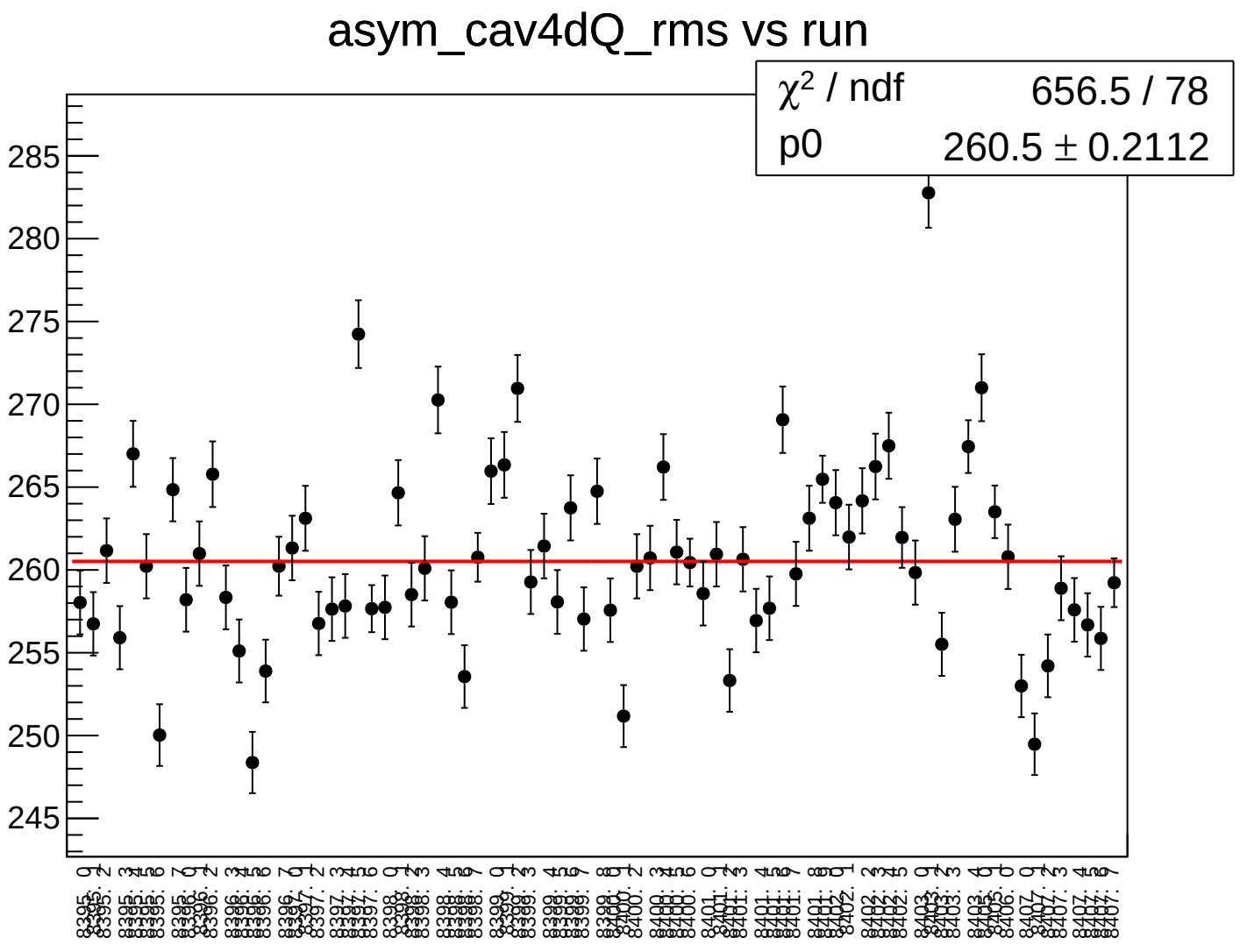

asym_cav4cQ_mean vs run
χ² / ndf 22.74 / 78
p0 −23.41± 229
6000
4000
2000
0
−2000
−4000
pull
Entries 79
Mean 187
Std Dev 140.1
1.5
1
0.5
0
−0.5
−1

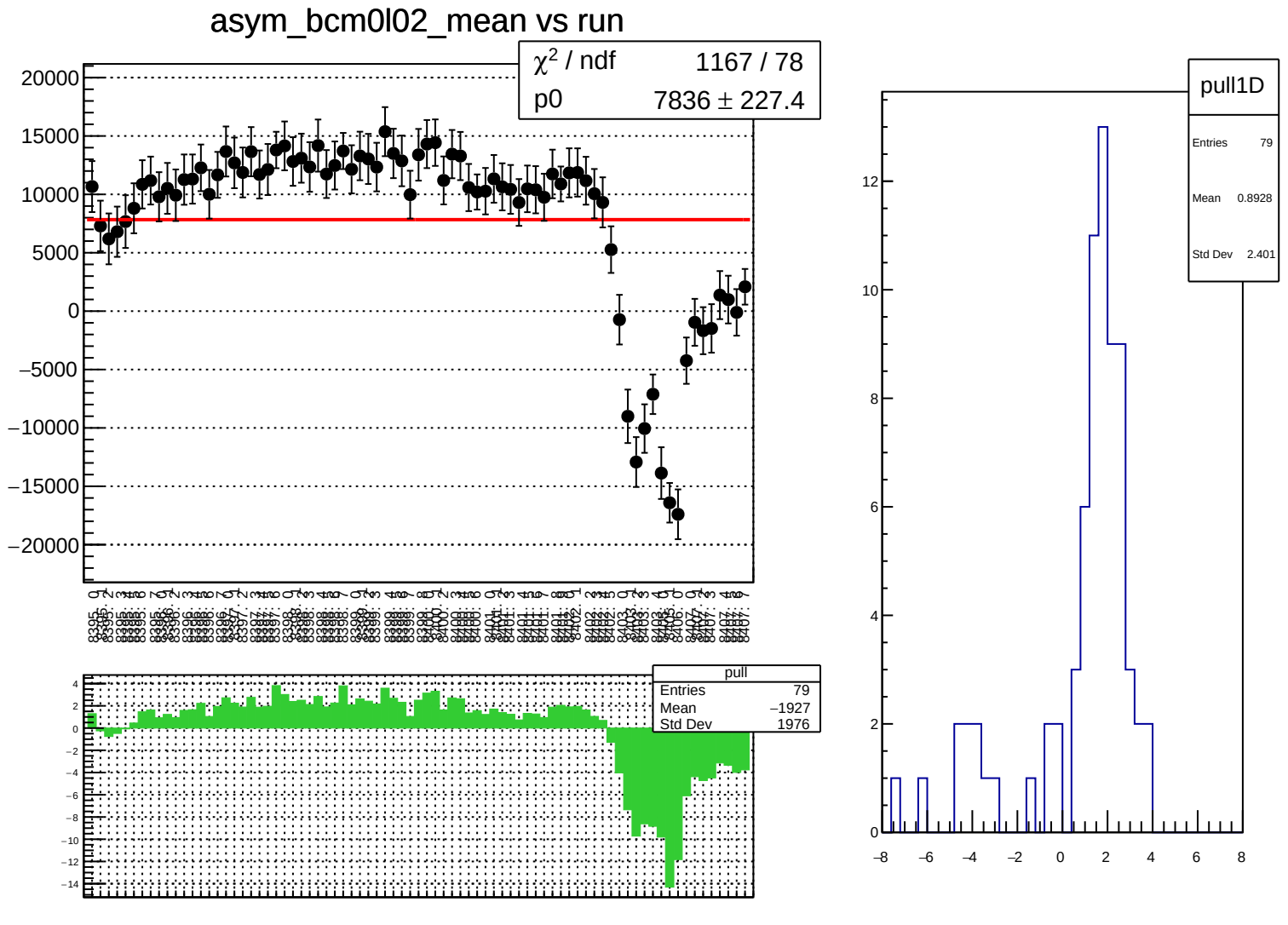

pull1D
Entries 79
Mean −0.005715
Std Dev 0.5365
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

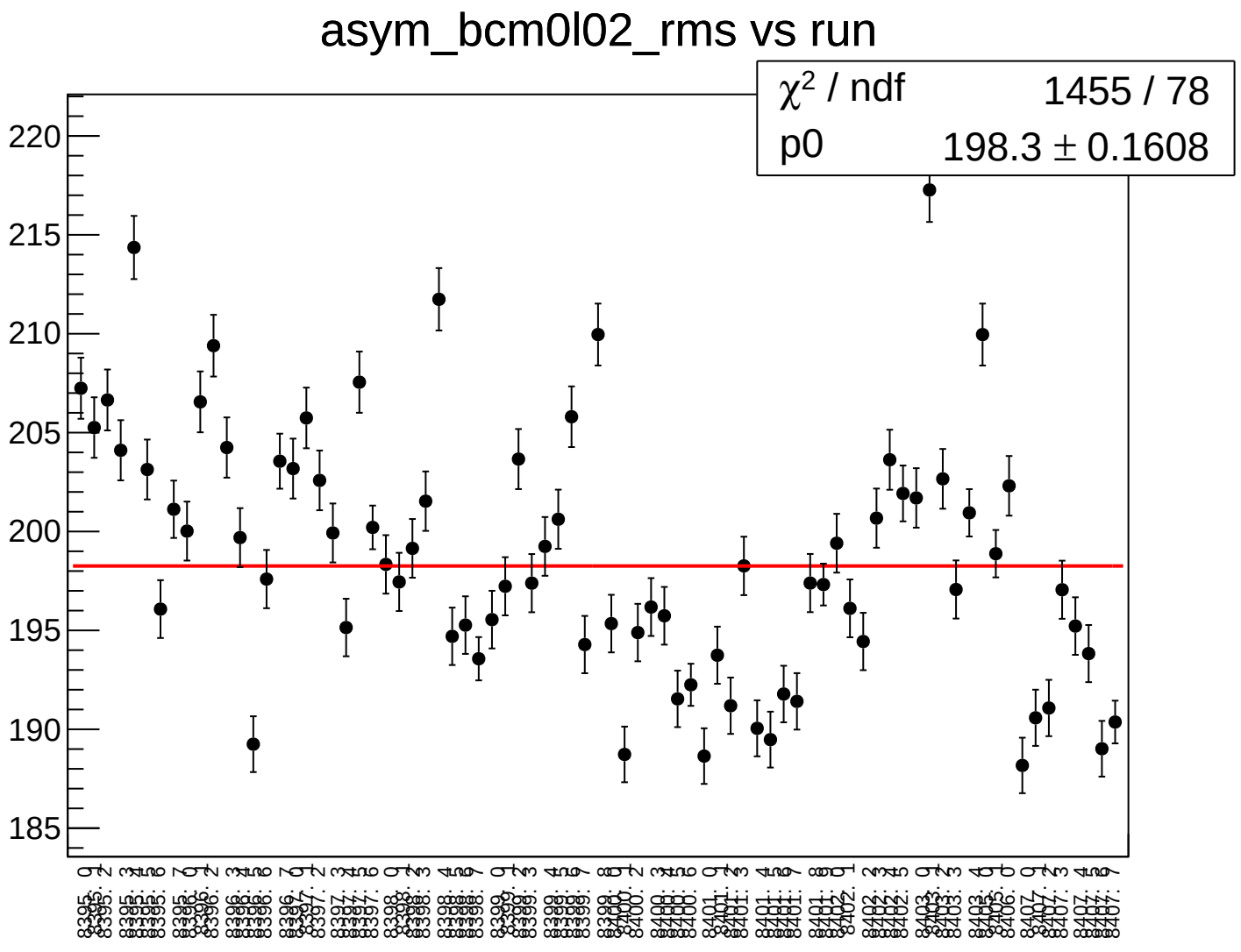

asym_cav4cQ_rms vs run
χ² / ndf 3549 / 78
p0 199.5 ± 0.1619
240
230
220
210
200
190
180

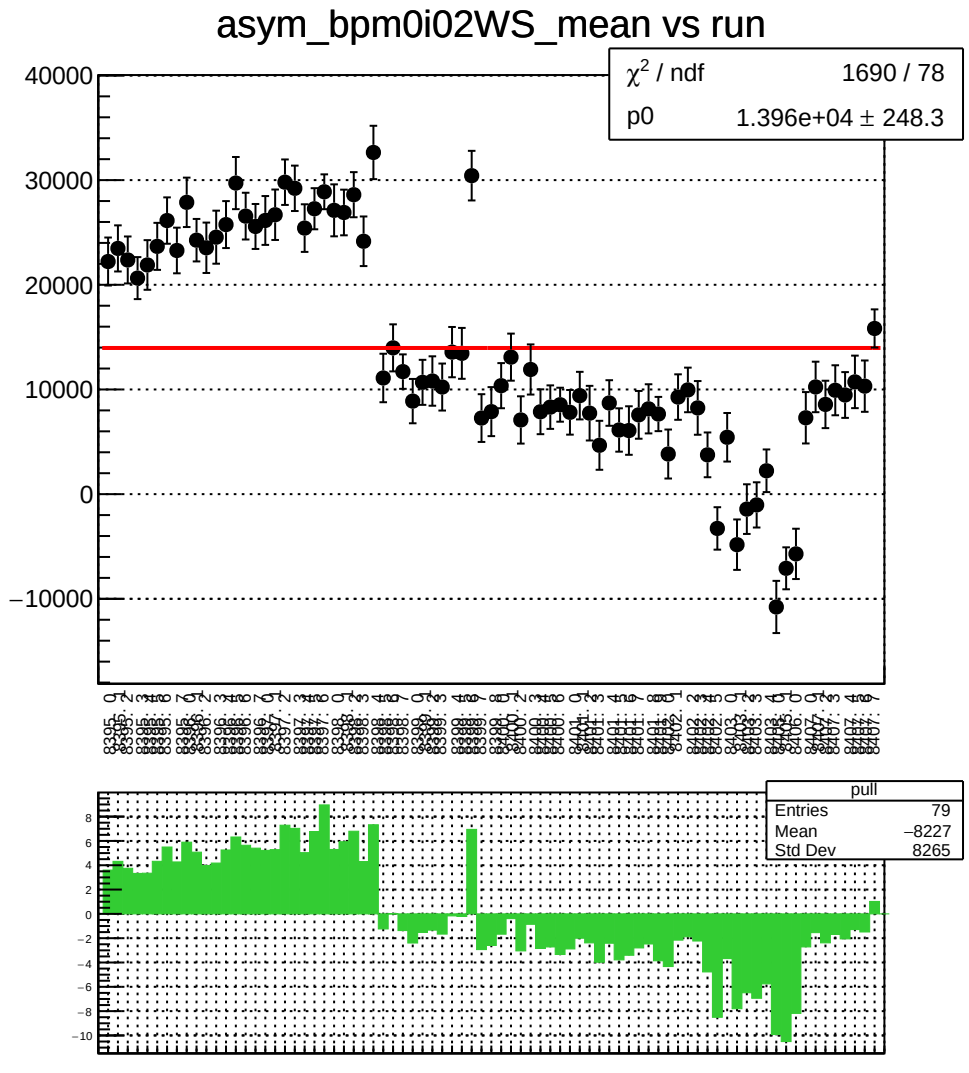

asym_cav4dQ_mean vs run
χ² / ndf 45.18 / 78
p0 −154.5 ± 298.7
pull
Entries 79
Mean 2756
Std Dev 2706

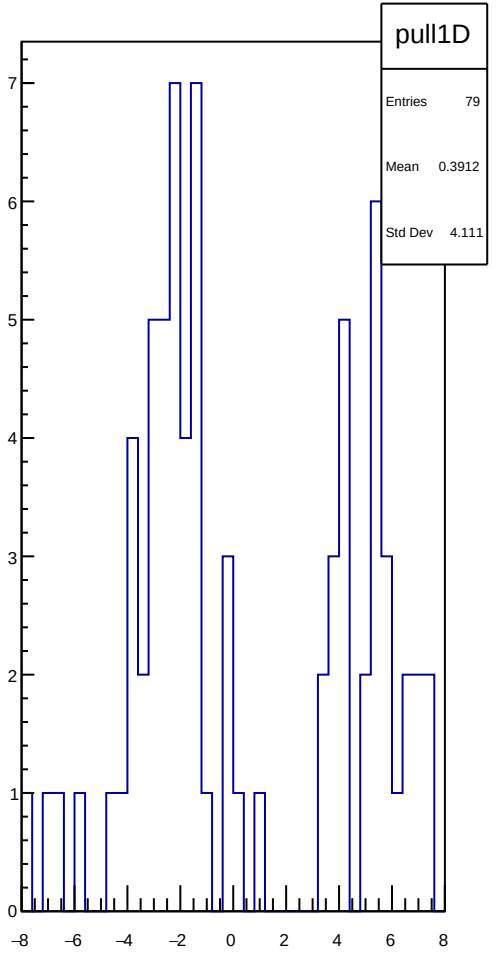

pull1D
Entries 79
Mean −0.0005616
Std Dev 0.7562

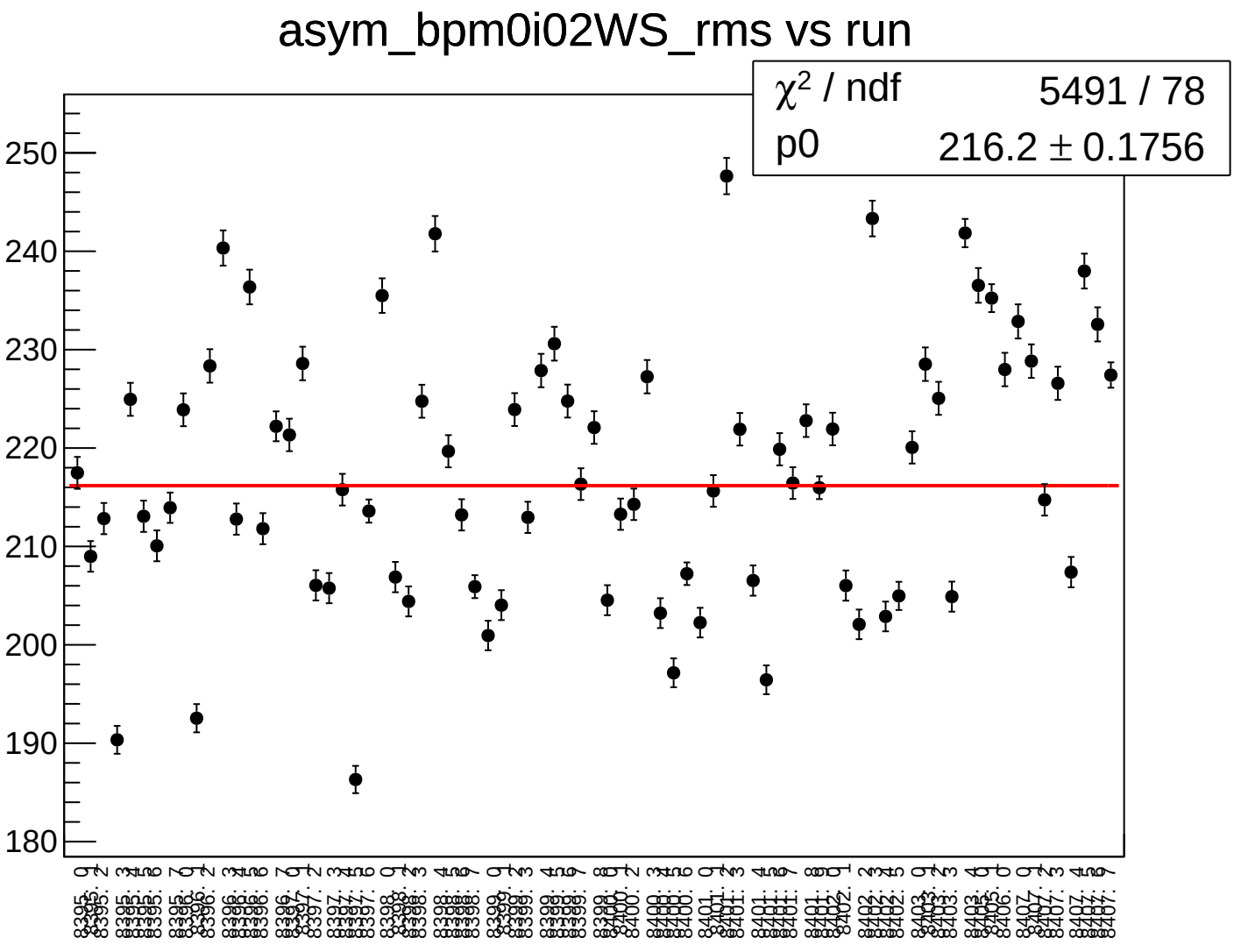

asym_cav4dQ_rms vs run
χ² / ndf 656.5 / 78
p0 260.5 ± 0.2112
285
280
275
270
265
260
255
250
245

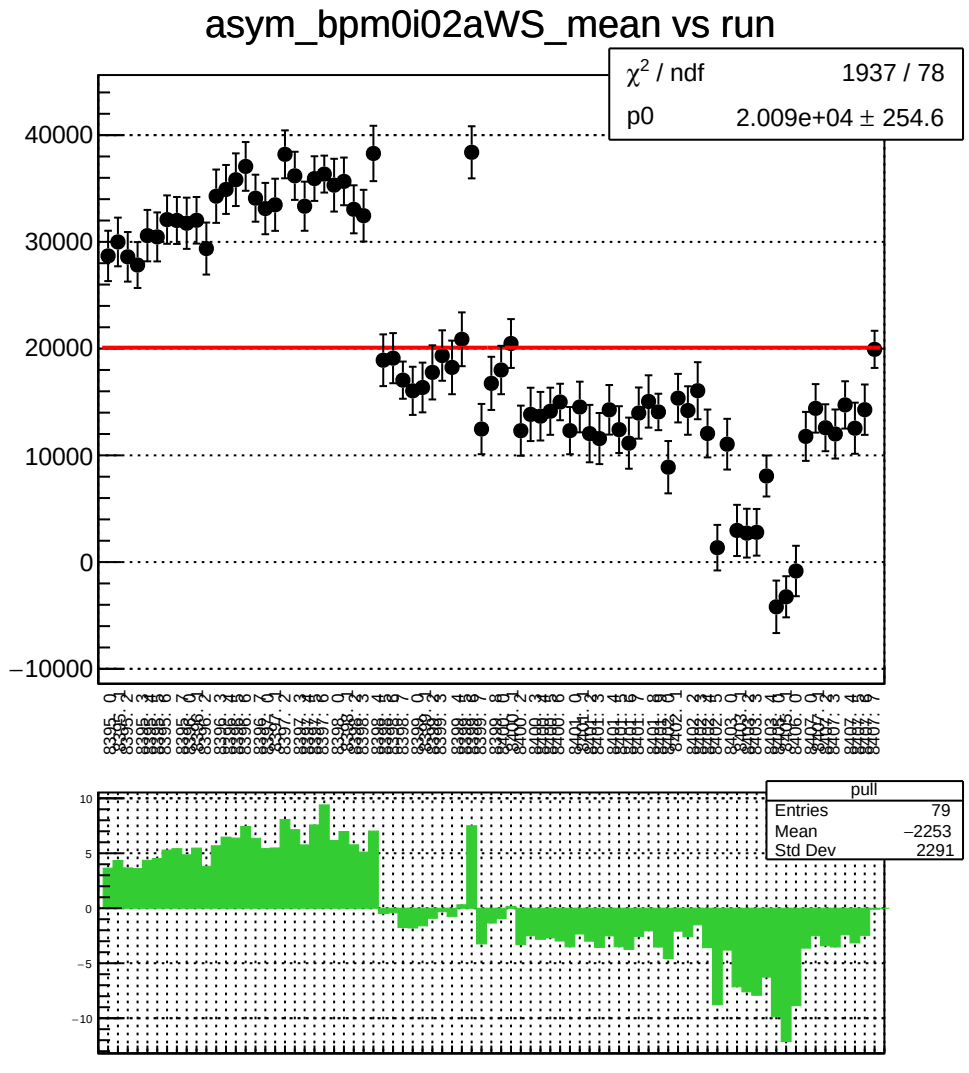

asym_bcm0l02_mean vs run
χ² / ndf 1167 / 78
p0 7836 ± 227.4
pull
Entries 79
Mean −1927
Std Dev 1976
pull1D
Entries 79
Mean 0.8928
Std Dev 2.401

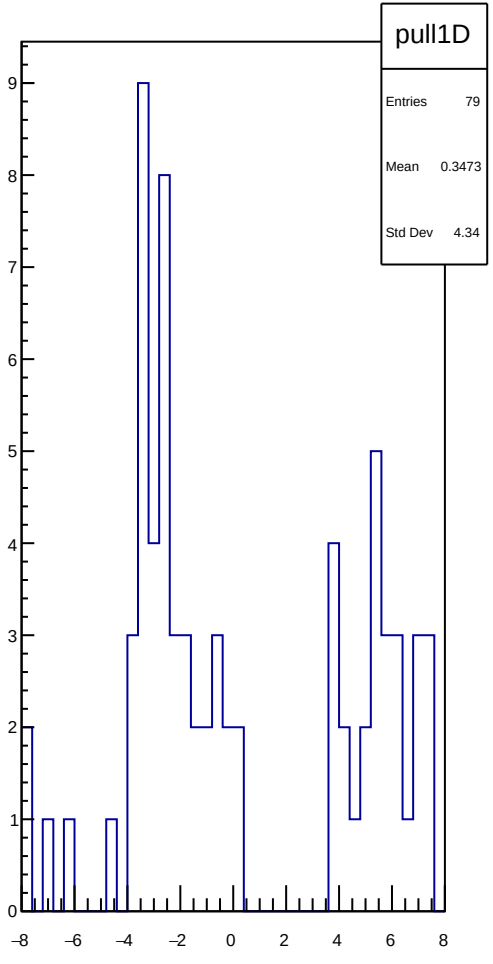

asym_bcm0l02_rms vs run
χ² / ndf 1455 / 78
p0 198.3 ± 0.1608
220
215
210
205
200
195
190
185

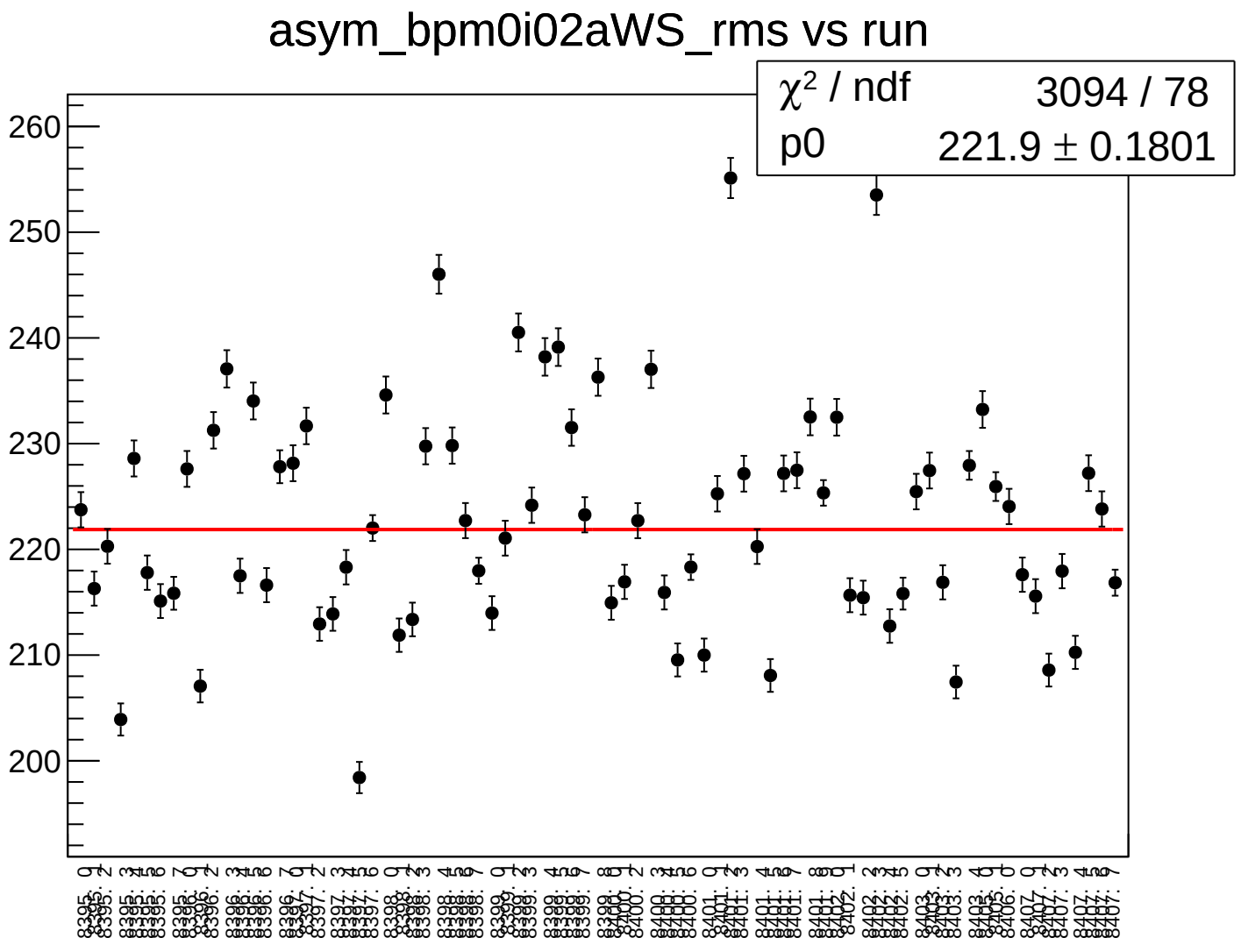

asym_bpm0i02WS_mean vs run
χ² / ndf 1690 / 78
p0 1.396e+04 ± 248.3
40000
30000
20000
10000
0
−10000
pull
Entries 79
Mean −8227
Std Dev 8265
8
6
4
2
0
−2
−4
−6
−8
−10

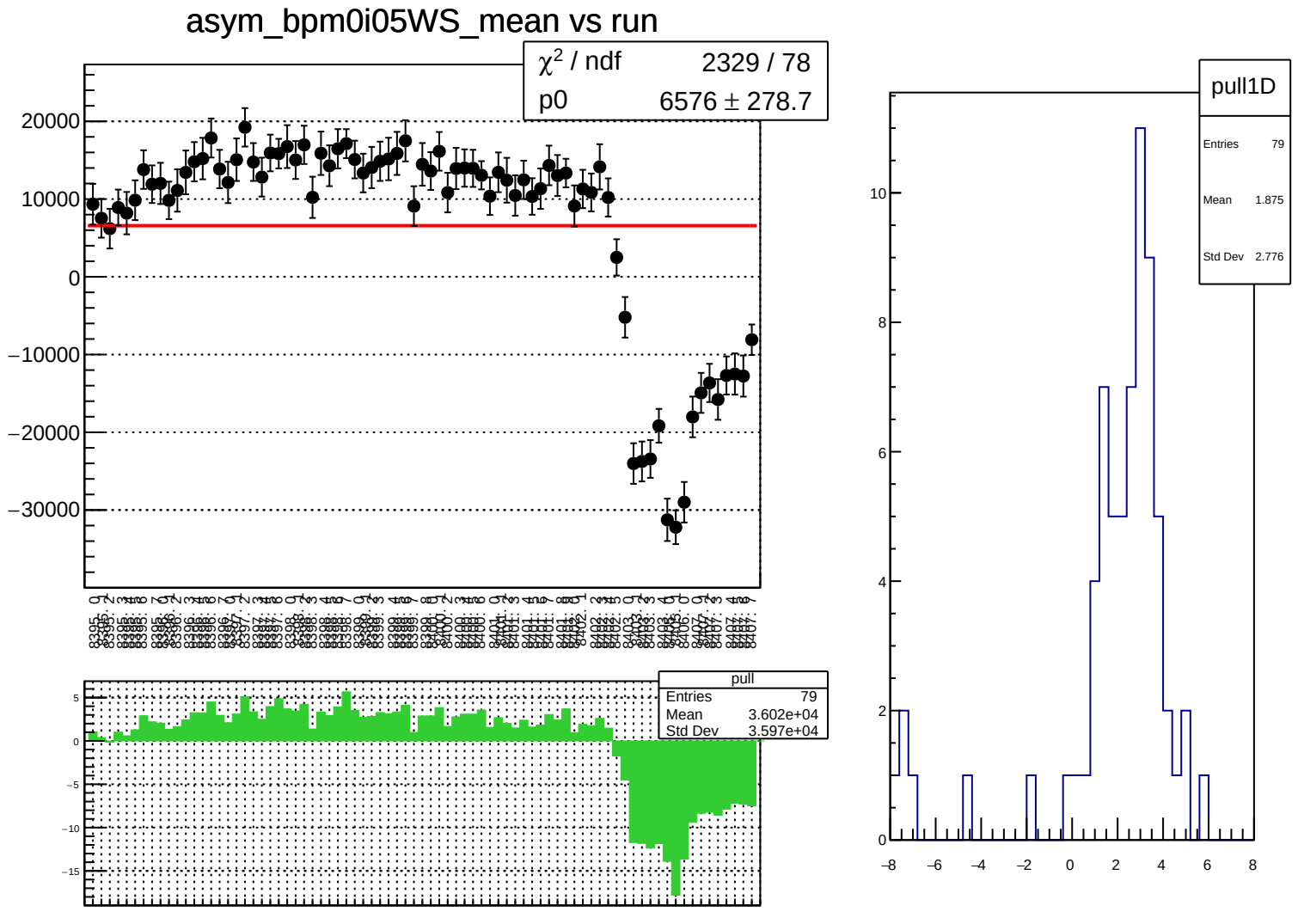

pull1D
Entries 79
Mean 0.3912
Std Dev 4.111
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

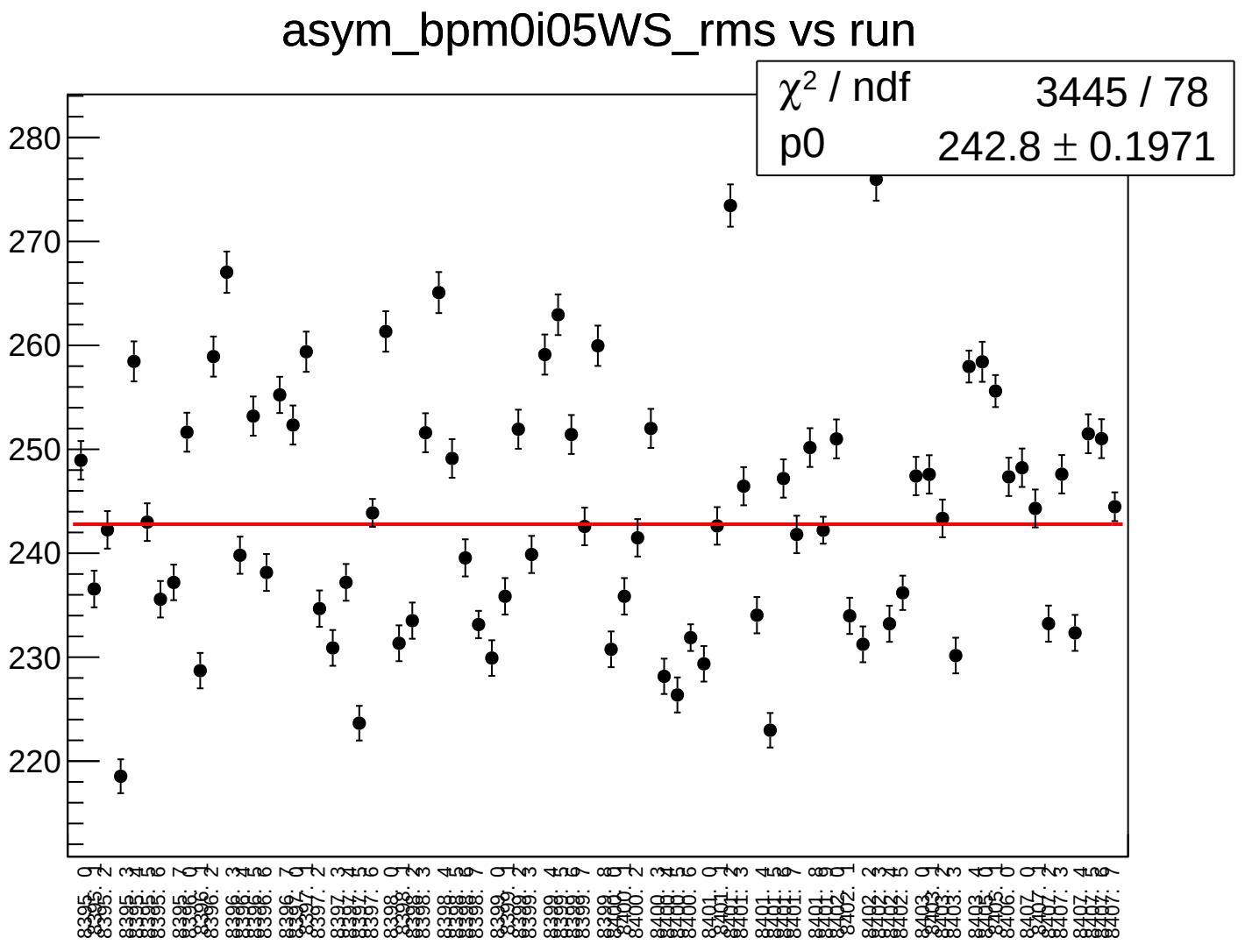

asym_bpm0i02WS_rms vs run
χ² / ndf 5491 / 78
p0 216.2 ± 0.1756
250
240
230
220
210
200
190
180

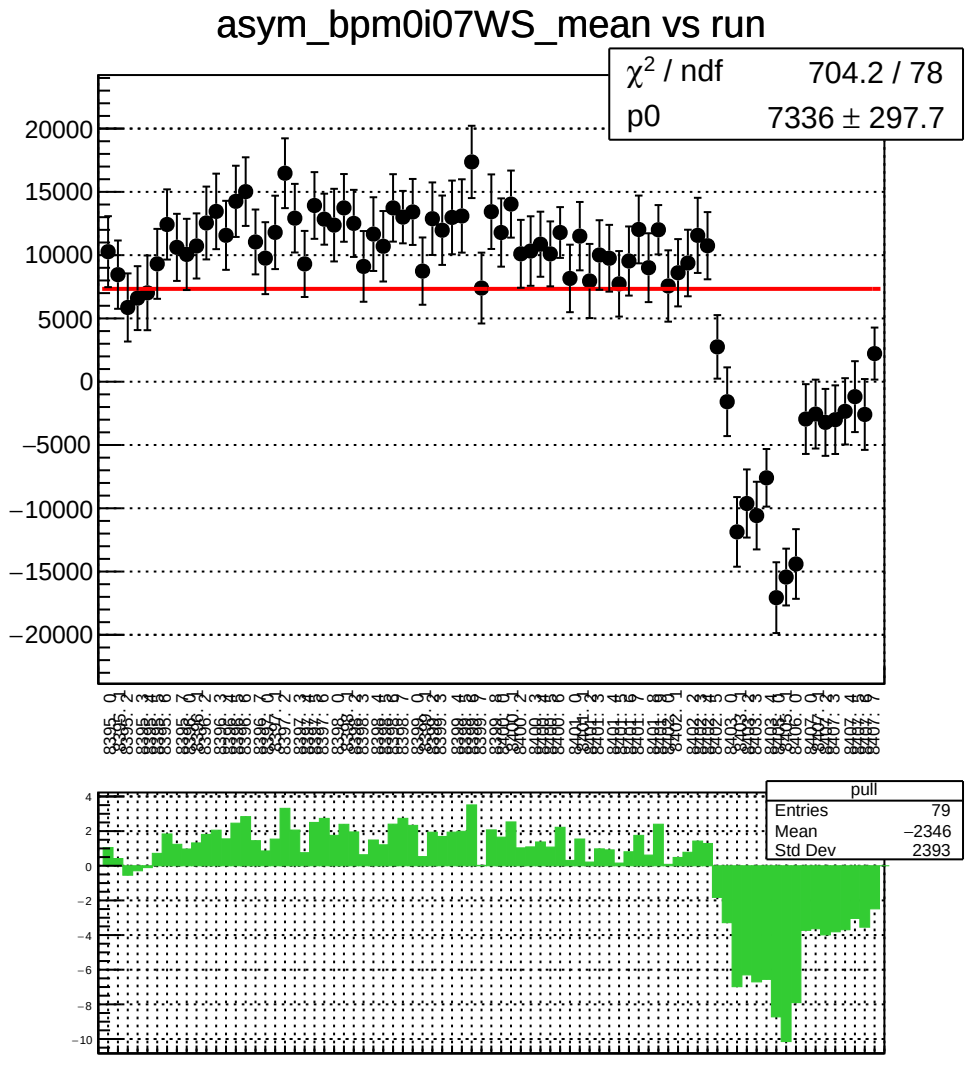

asym_bpm0i02aWS_mean vs run
χ² / ndf 1937 / 78
p0 2.009e+04 ± 254.6
40000
30000
20000
10000
0
−10000
pull
Entries 79
Mean −2253
Std Dev 2291
10
5
0
−5
−10

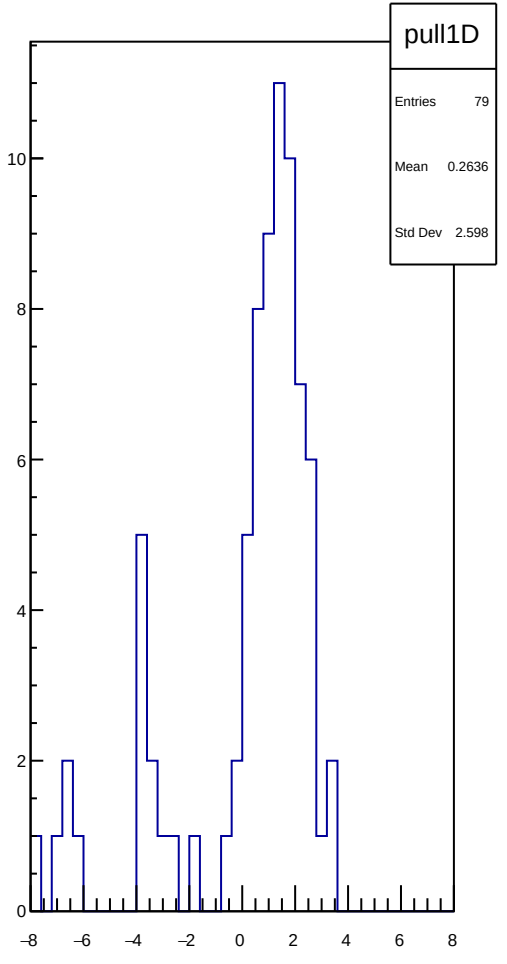

pull1D
Entries 79
Mean 0.3473
Std Dev 4.34
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

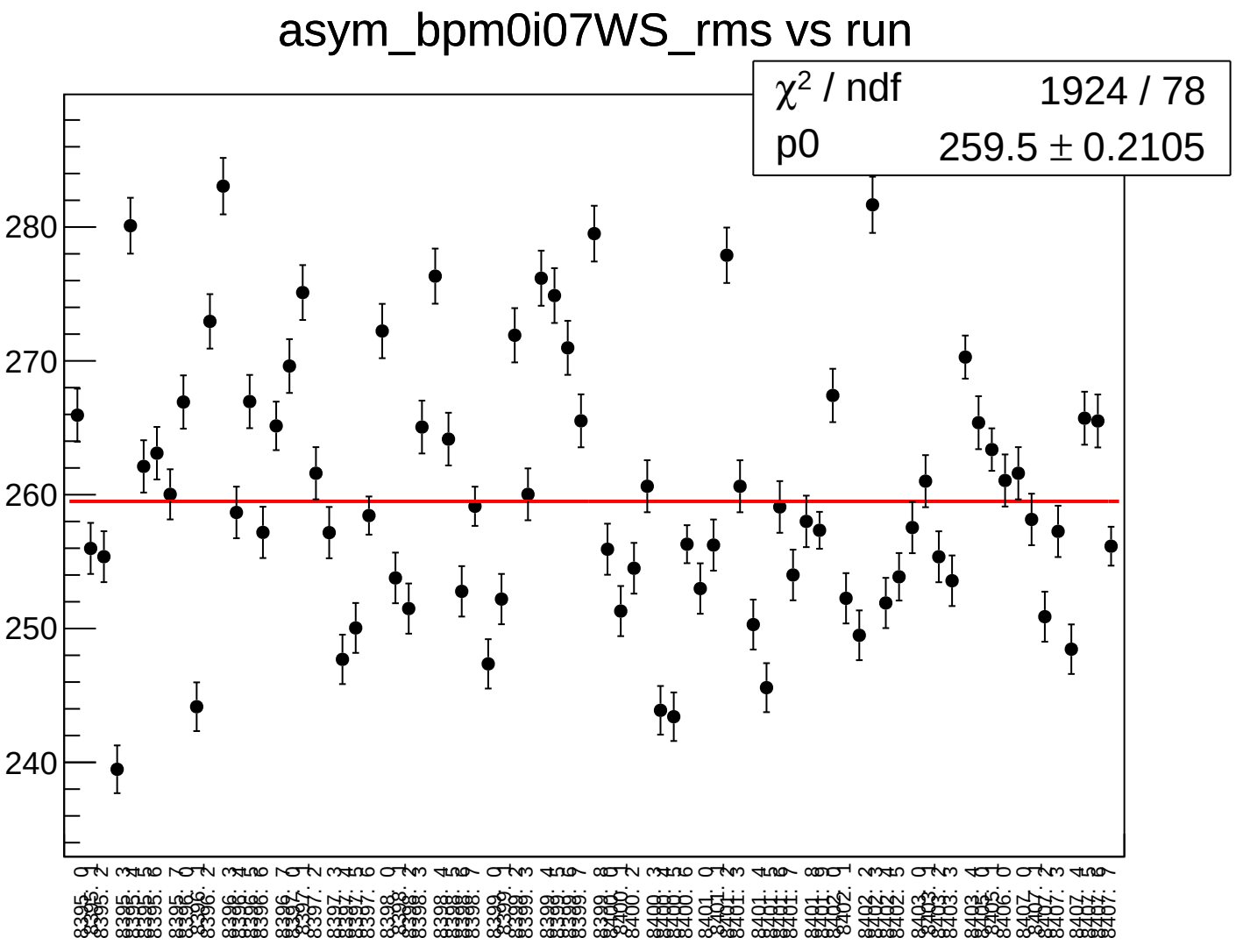

asym_bpm0i02aWS_rms vs run
χ² / ndf 3094 / 78
p0 221.9 ± 0.1801
260
250
240
230
220
210
200

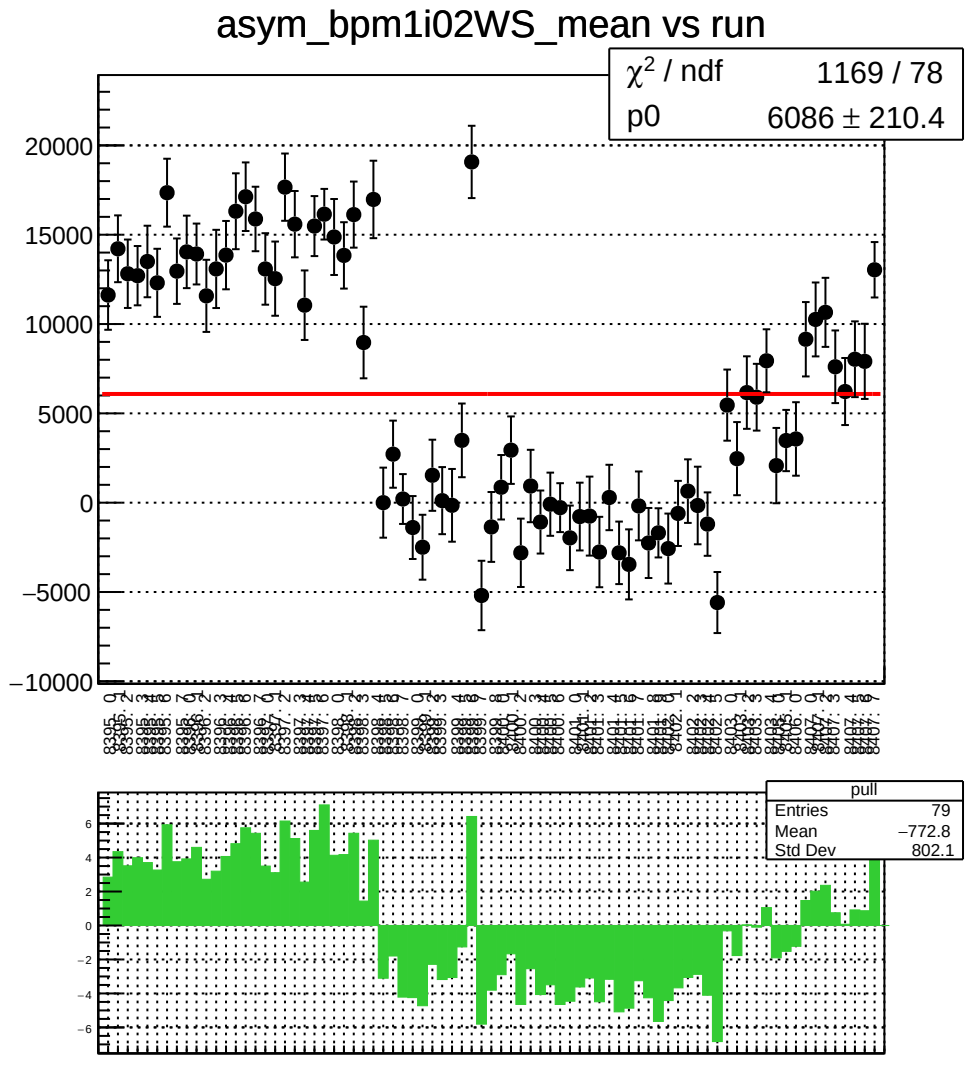

asym_bpm0i05WS_mean vs run
χ² / ndf 2329 / 78
p0 6576 ± 278.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 79
Mean 3.602e+04
Std Dev 3.597e+04
5
0
−5
−10
−15
pull1D
Entries 79
Mean 1.875
Std Dev 2.776
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

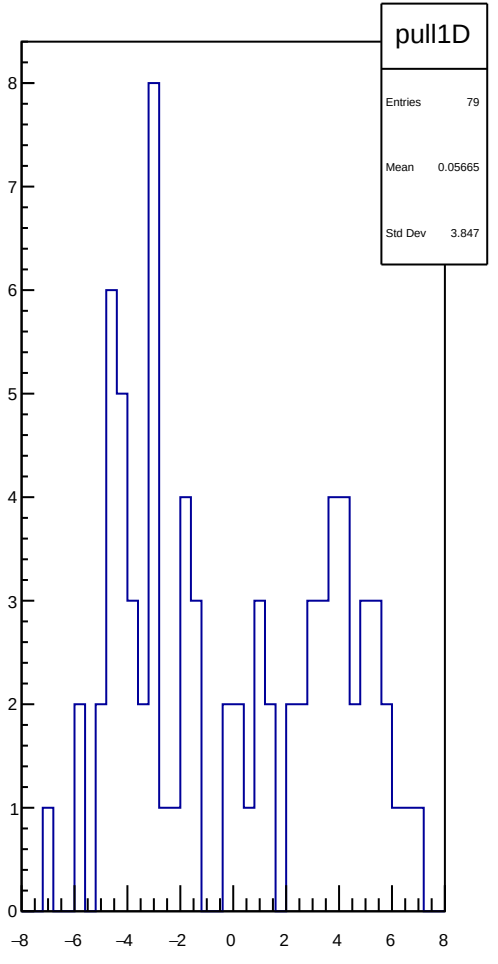

asym_bpm0i05WS_rms vs run
χ² / ndf 3445 / 78
p0 242.8 ± 0.1971
280
270
260
250
240
230
220

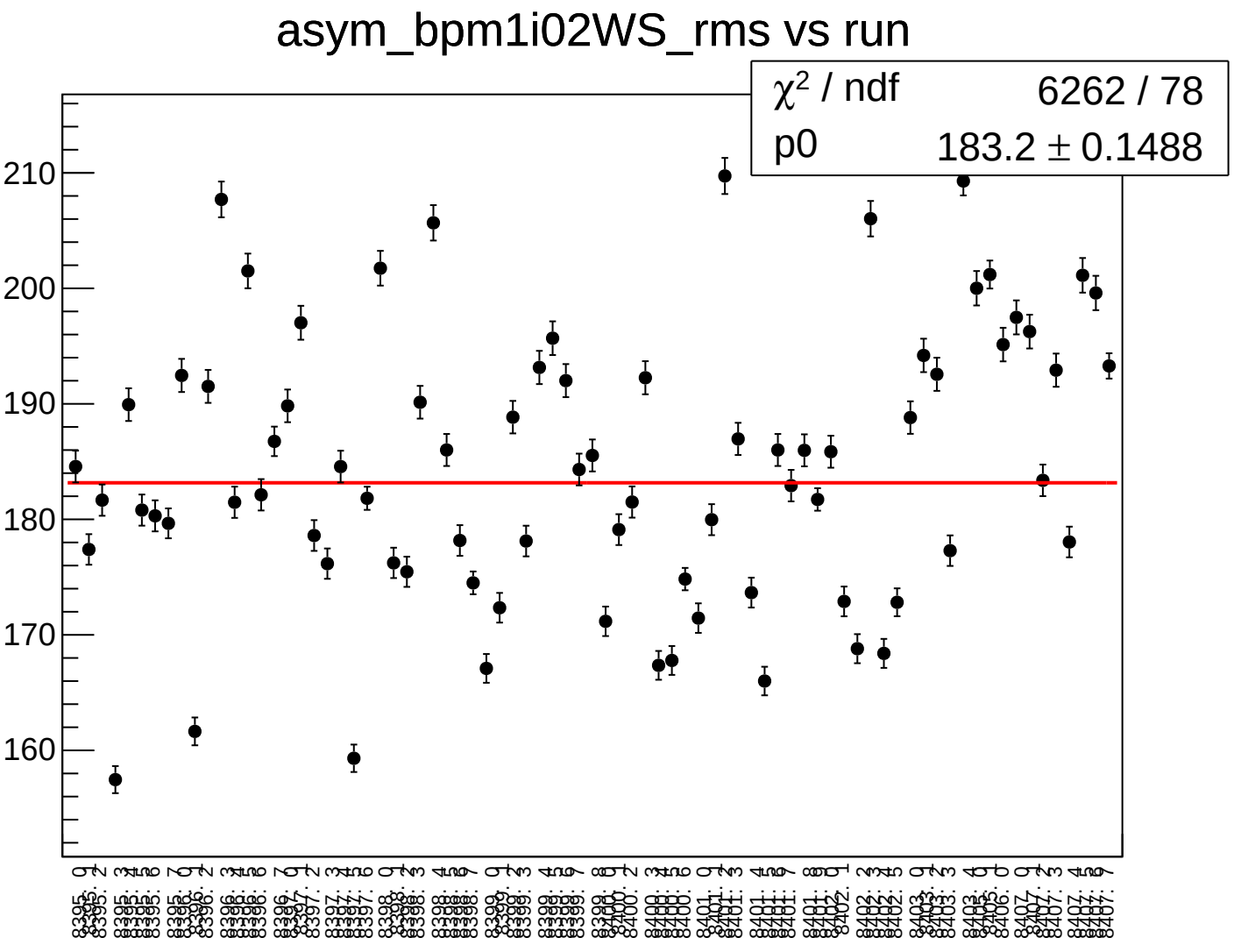

asym_bpm0i07WS_mean vs run
χ² / ndf 704.2 / 78
p0 7336 ± 297.7
pull
Entries 79
Mean −2346
Std Dev 2393

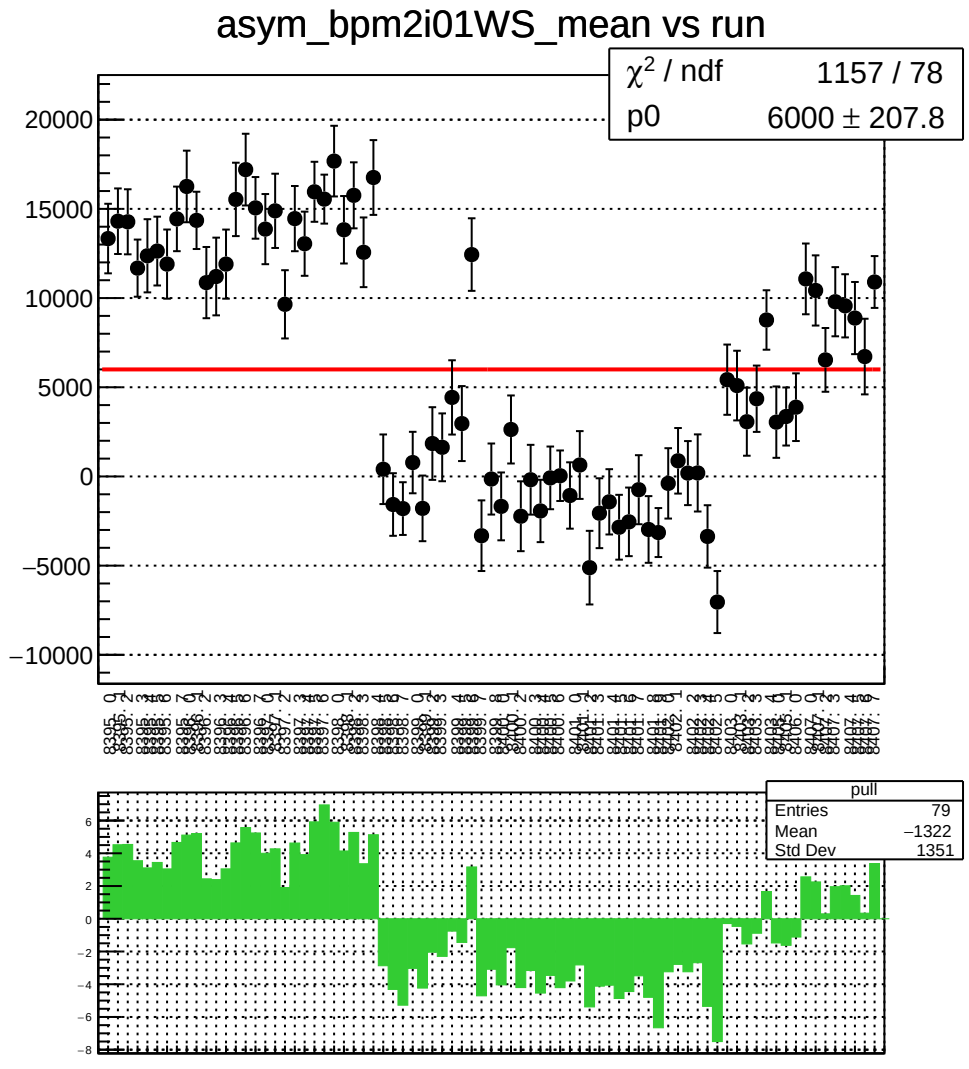

pull1D
Entries 79
Mean 0.2636
Std Dev 2.598

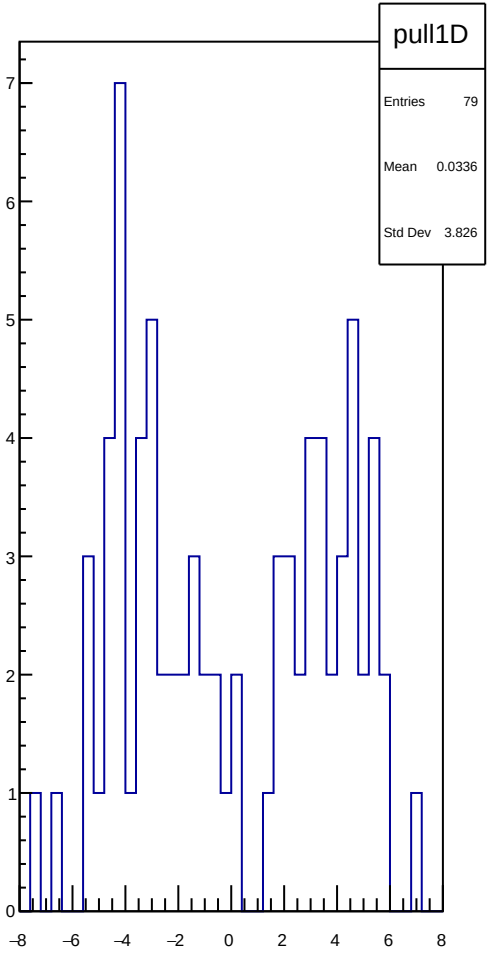

asym_bpm0i07WS_rms vs run
χ² / ndf 1924 / 78
p0 259.5 ± 0.2105
280
270
260
250
240

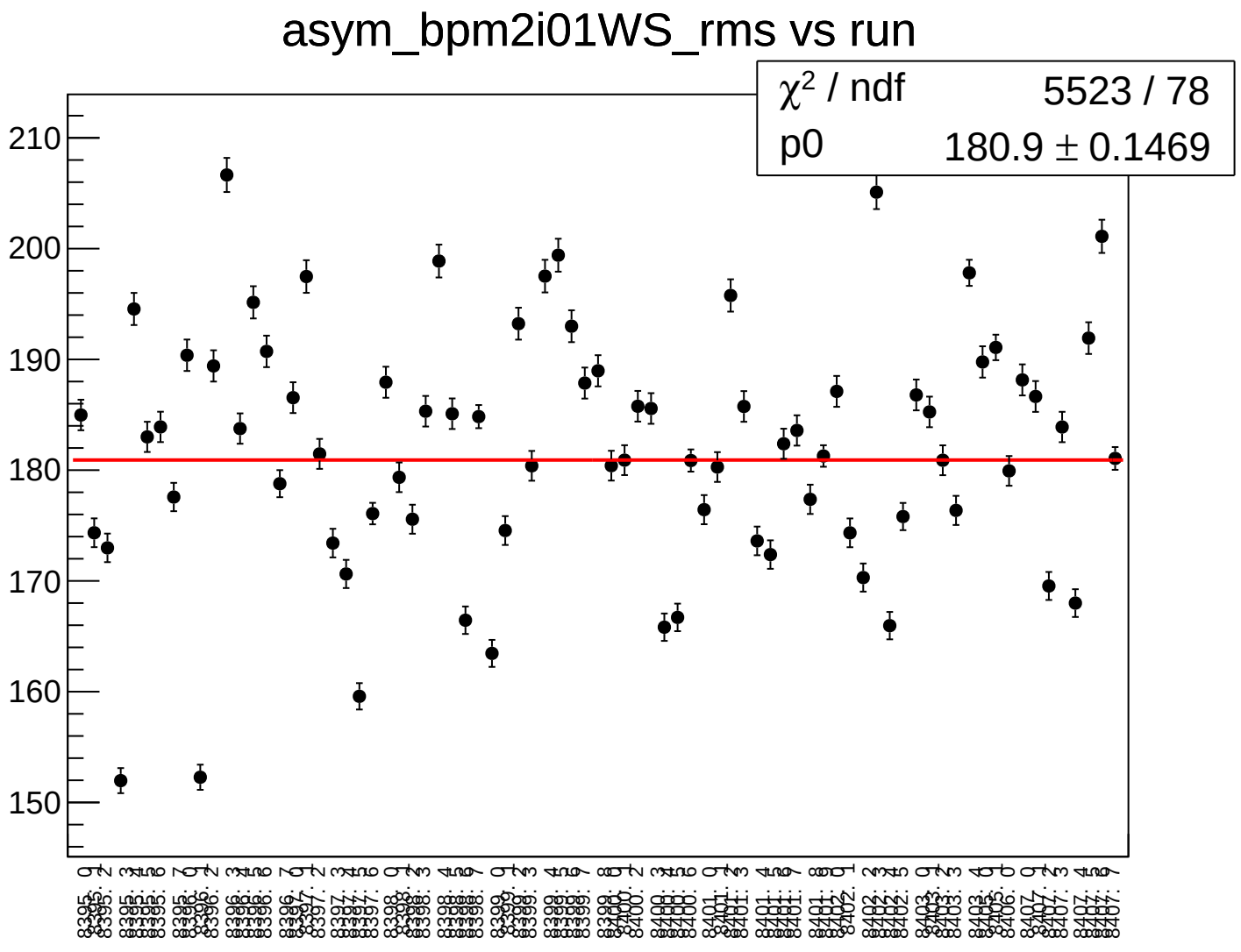

asym_bpm1i02WS_mean vs run
χ² / ndf 1169 / 78
p0 6086 ± 210.4
pull
Entries 79
Mean −772.8
Std Dev 802.1

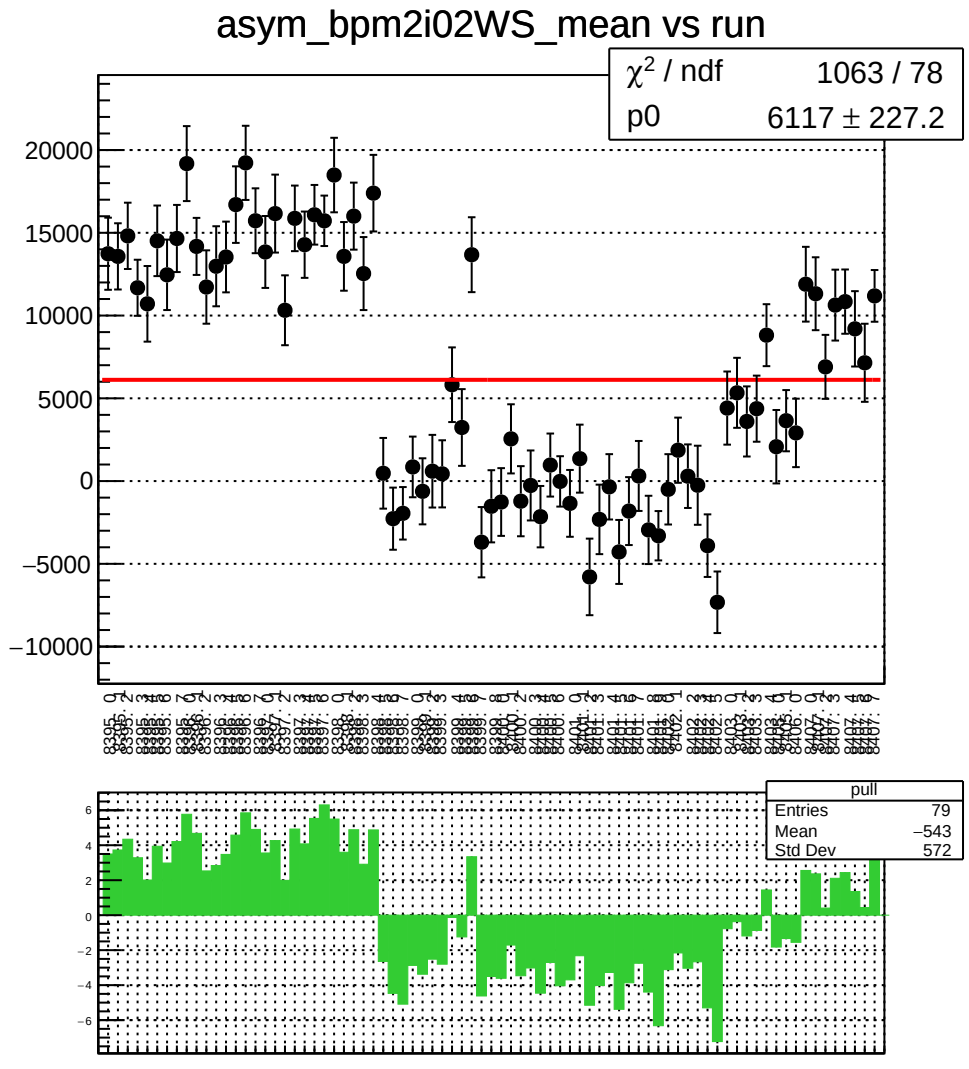

pull1D
Entries 79
Mean 0.05665
Std Dev 3.847

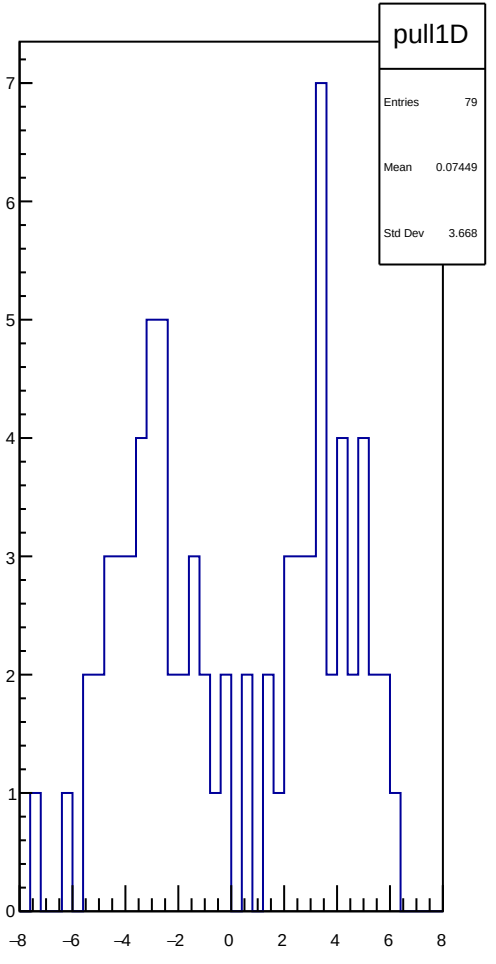

asym_bpm1i02WS_rms vs run
χ² / ndf 6262 / 78
p0 183.2 ± 0.1488
210
200
190
180
170
160

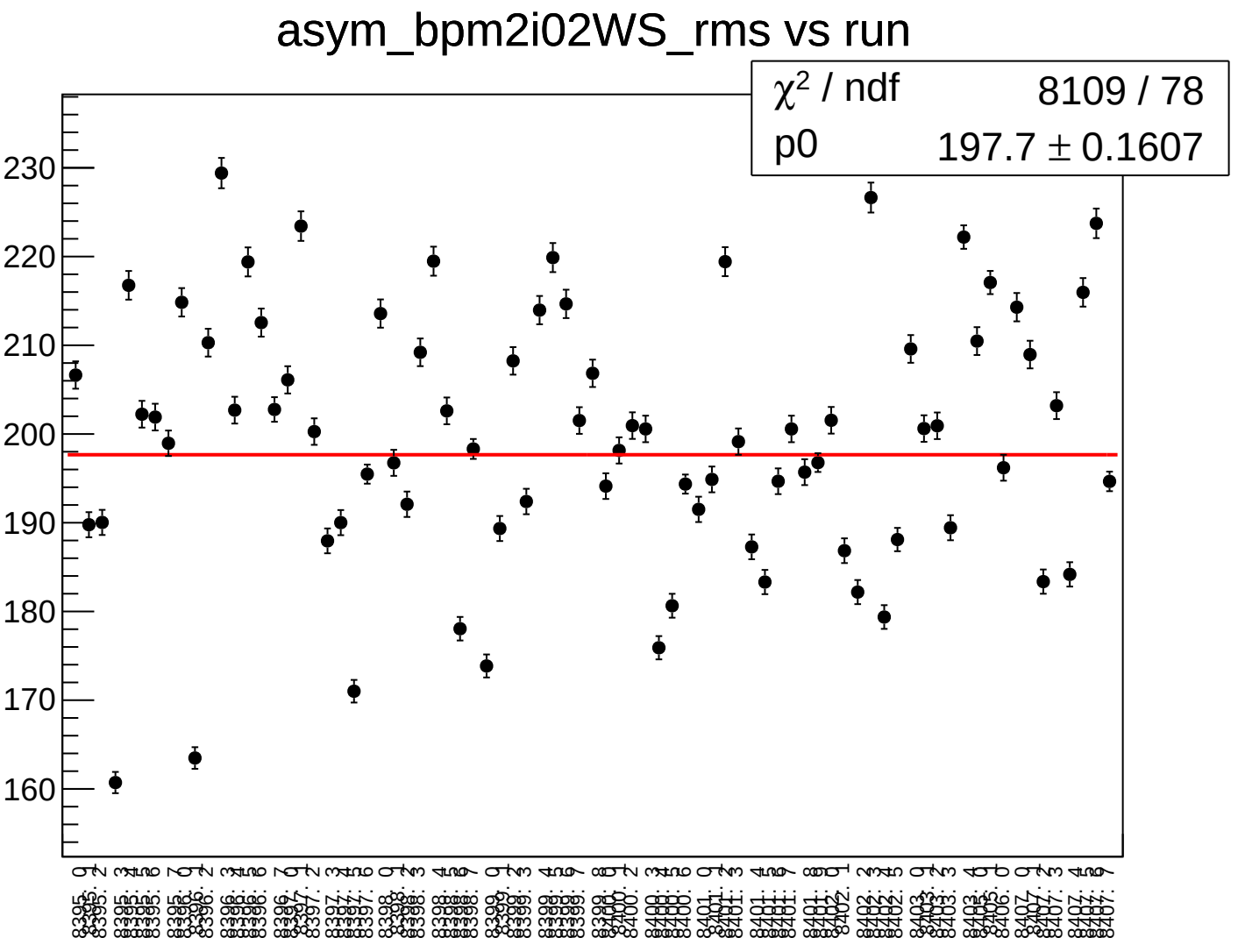

asym_bpm2i01WS_mean vs run
χ² / ndf 1157 / 78
p0 6000 ± 207.8
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 79
Mean −1322
Std Dev 1351
6
4
2
0
−2
−4
−6
−8

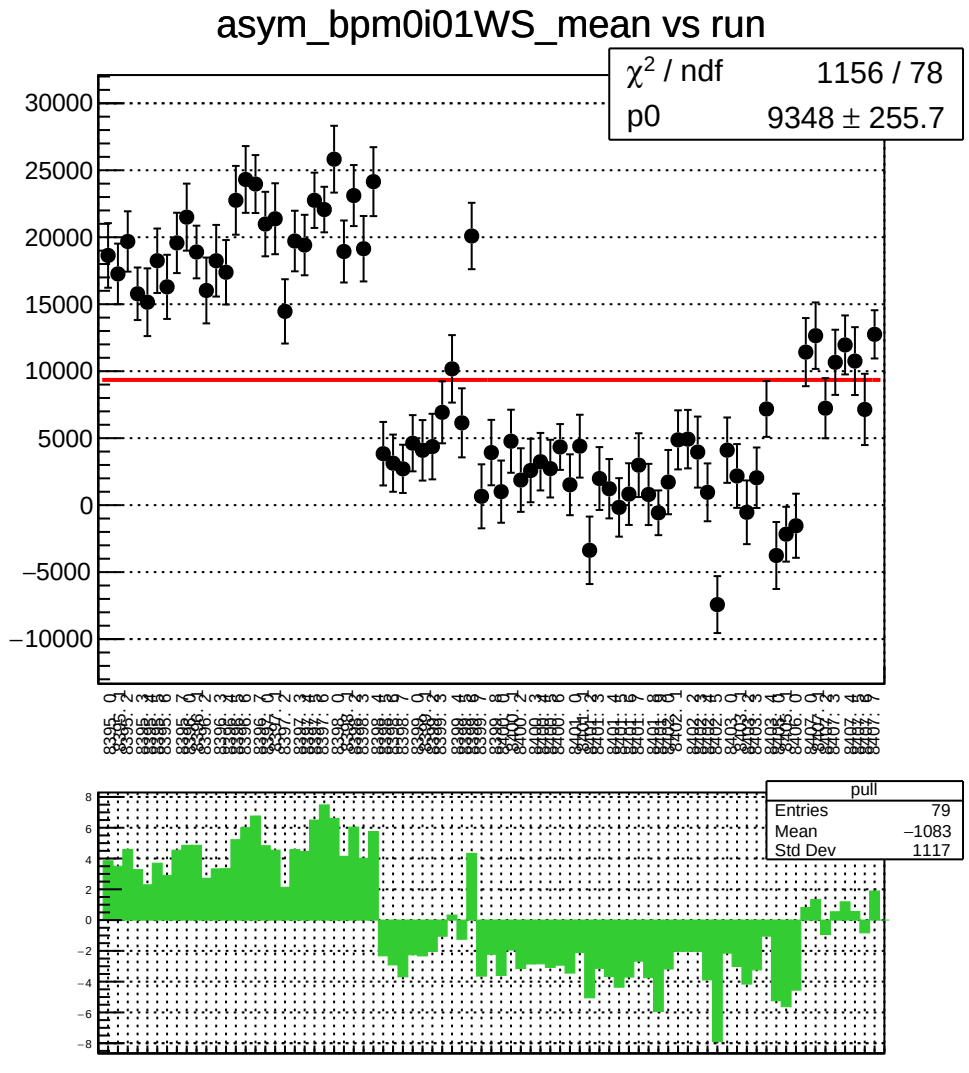

pull1D
Entries 79
Mean 0.0336
Std Dev 3.826
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

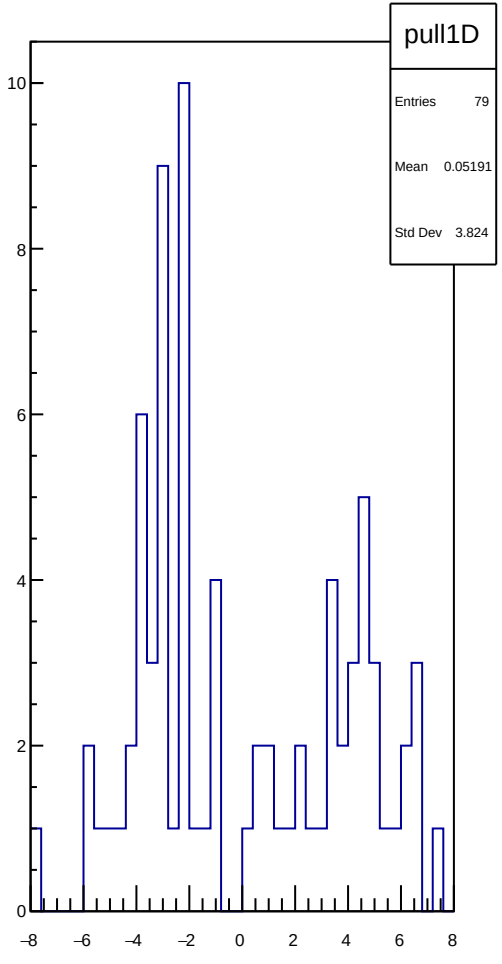

asym_bpm2i01WS_rms vs run
χ² / ndf 5523 / 78
p0 180.9 ± 0.1469
210
200
190
180
170
160
150

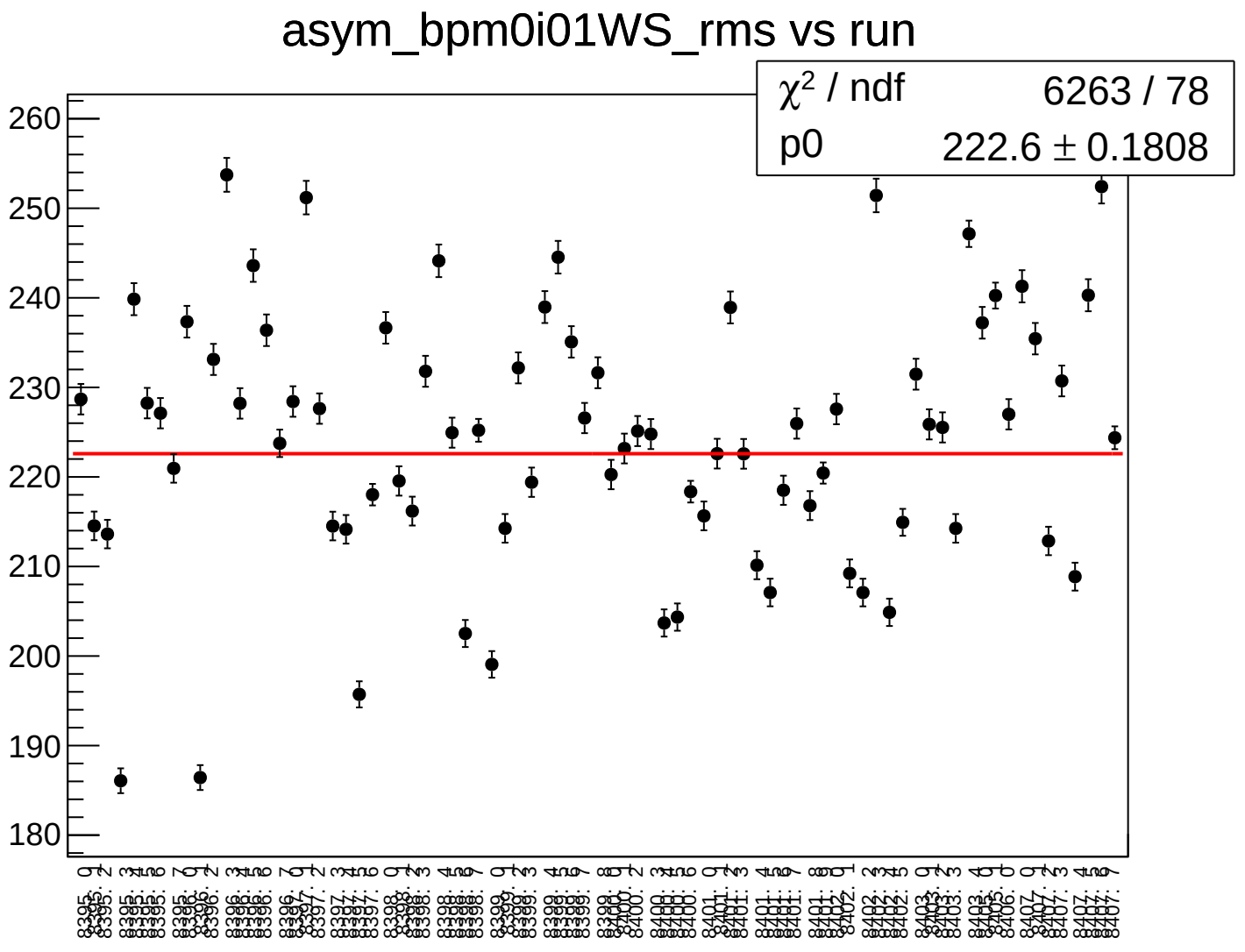

asym_bpm2i02WS_mean vs run
χ² / ndf 1063 / 78
p0 6117 ± 227.2
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 79
Mean −543
Std Dev 572
6
4
2
0
−2
−4
−6

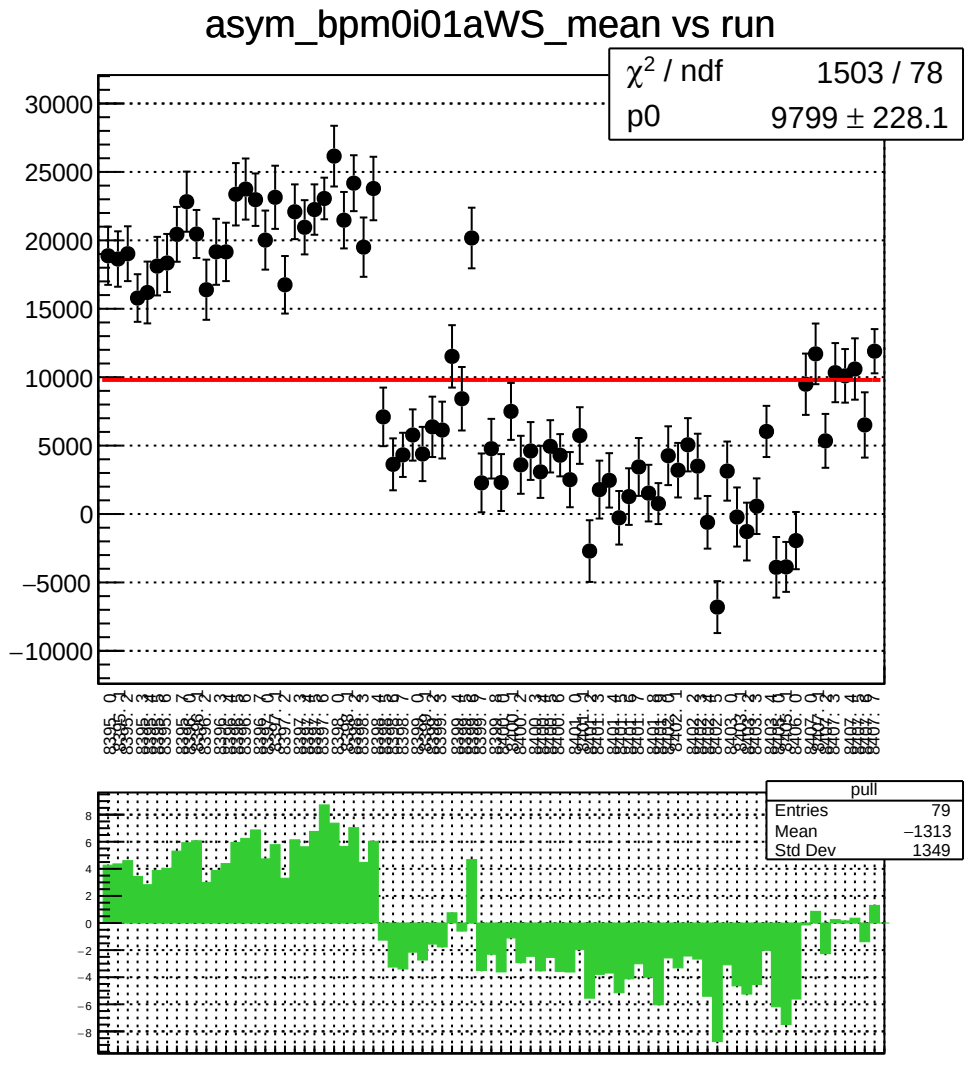

pull1D
Entries 79
Mean 0.07449
Std Dev 3.668
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

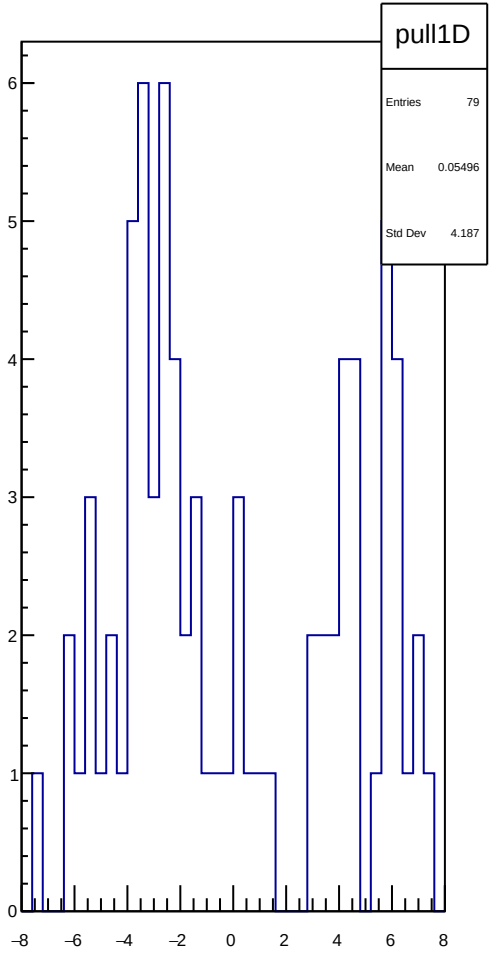

asym_bpm2i02WS_rms vs run
χ² / ndf 8109 / 78
p0 197.7 ± 0.1607
230
220
210
200
190
180
170
160

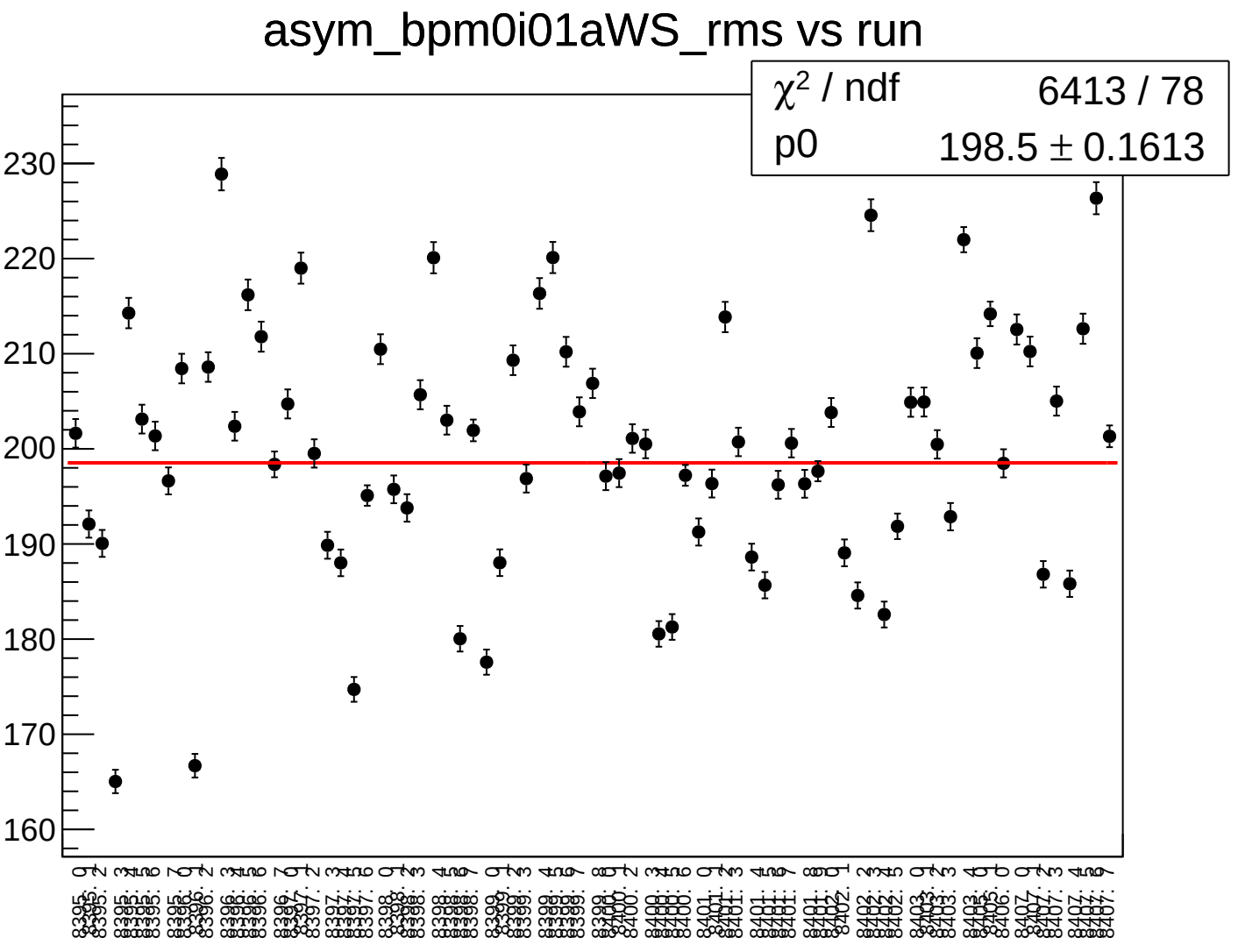

asym_bpm0i01WS_mean vs run
χ² / ndf 1156 / 78
p0 9348 ± 255.7
30000
25000
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 79
Mean −1083
Std Dev 1117
8
6
4
2
0
−2
−4
−6
−8

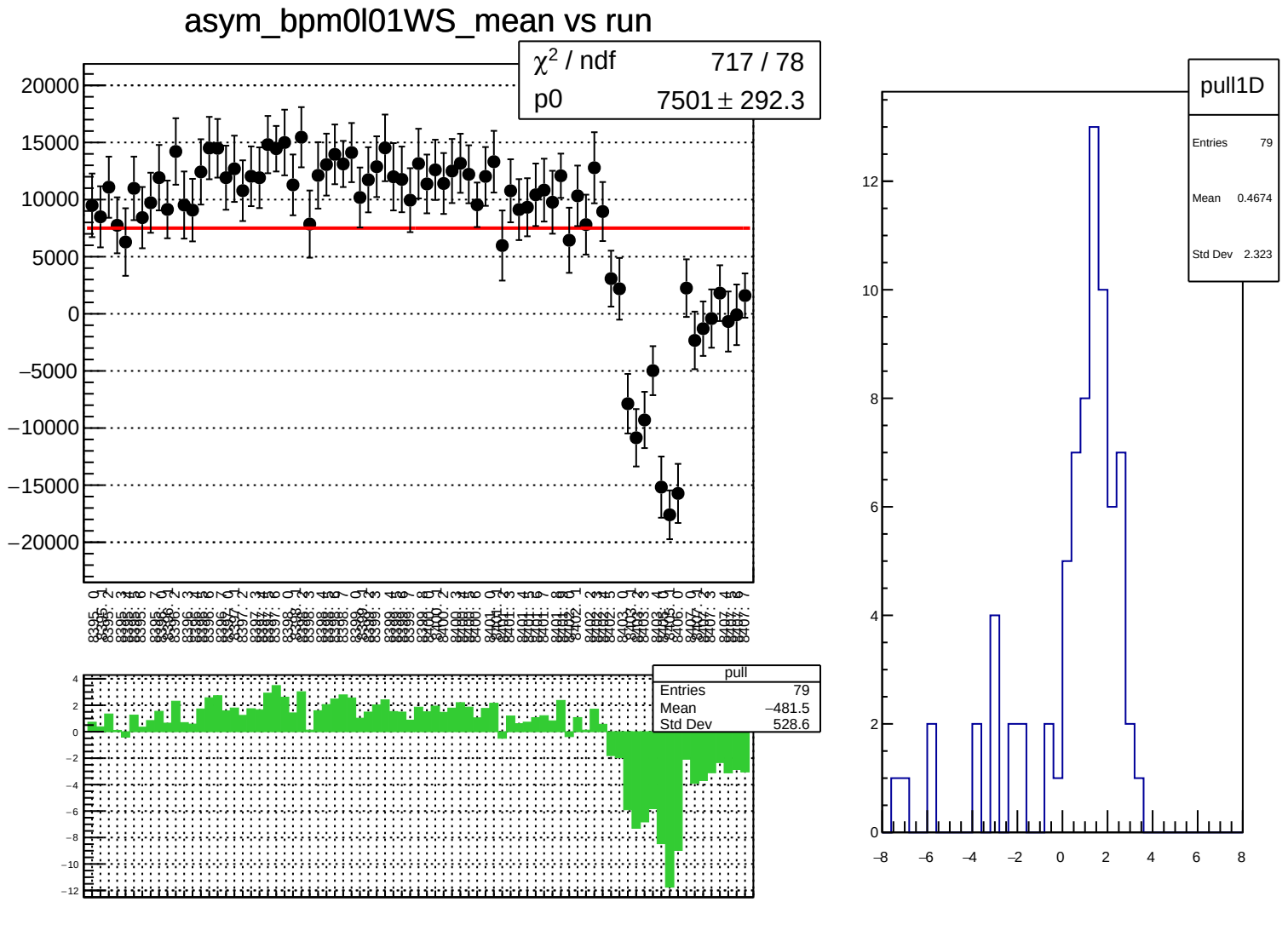

pull1D
Entries 79
Mean 0.05191
Std Dev 3.824
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

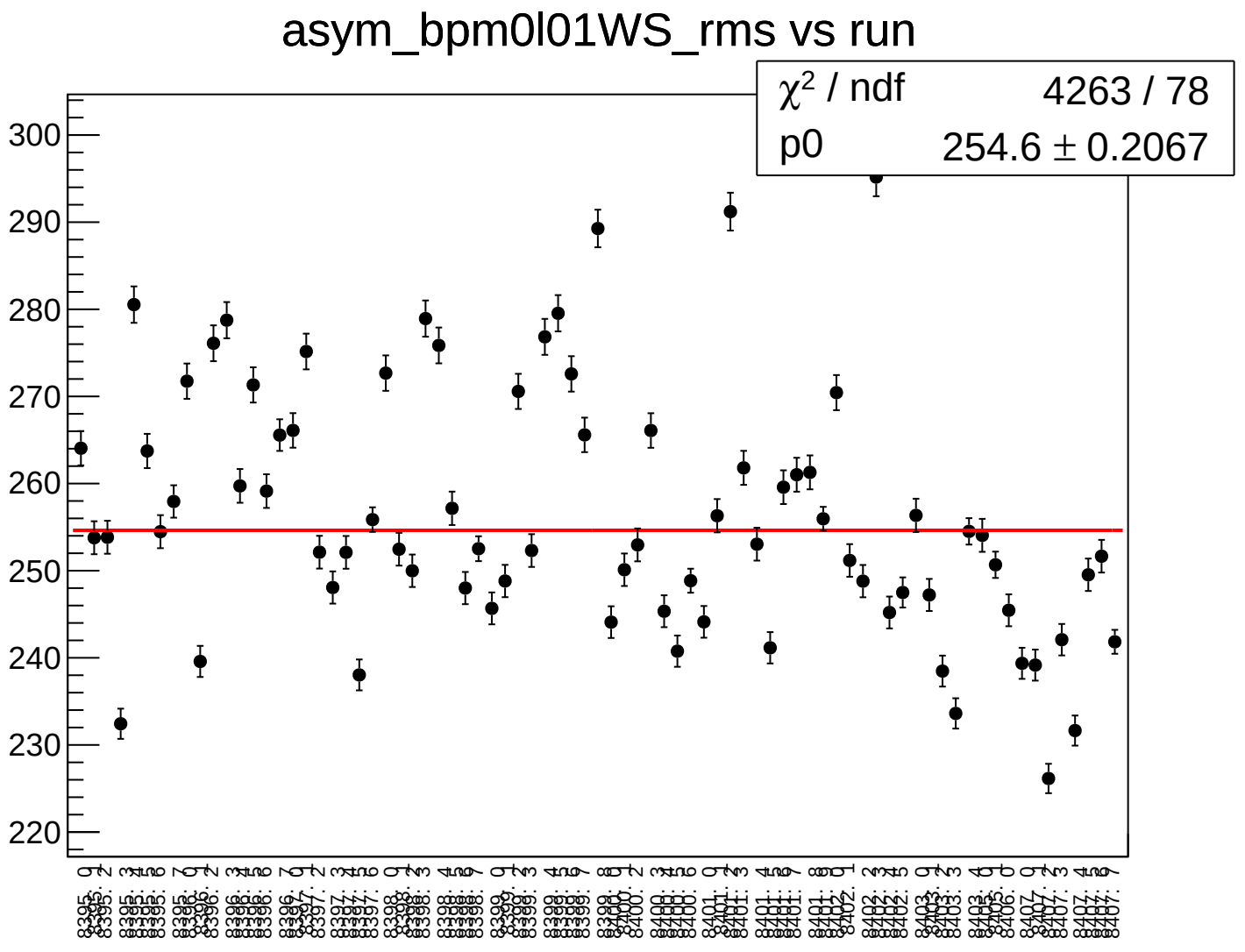

asym_bpm0i01WS_rms vs run
χ² / ndf 6263 / 78
p0 222.6 ± 0.1808
260
250
240
230
220
210
200
190
180

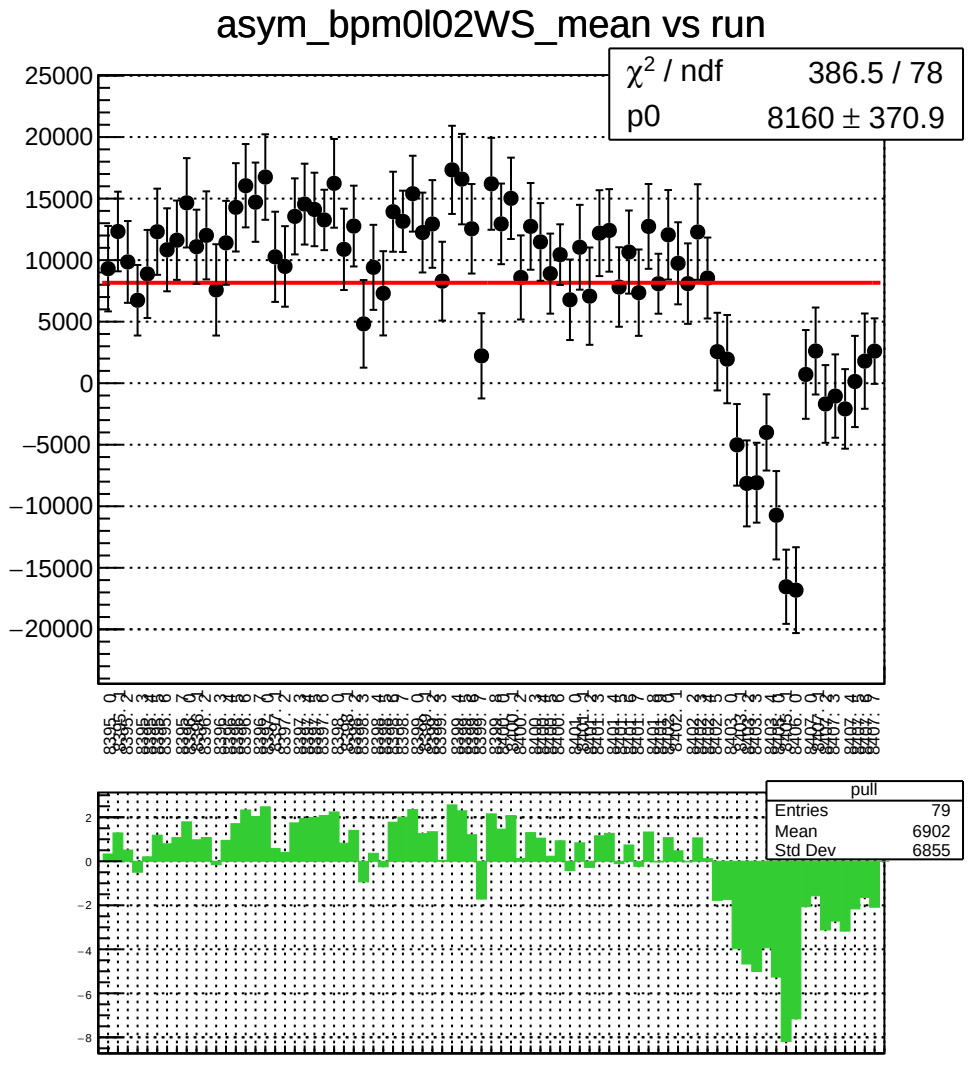

asym_bpm0i01aWS_mean vs run
χ² / ndf 1503 / 78
p0 9799 ± 228.1
pull
Entries 79
Mean −1313
Std Dev 1349

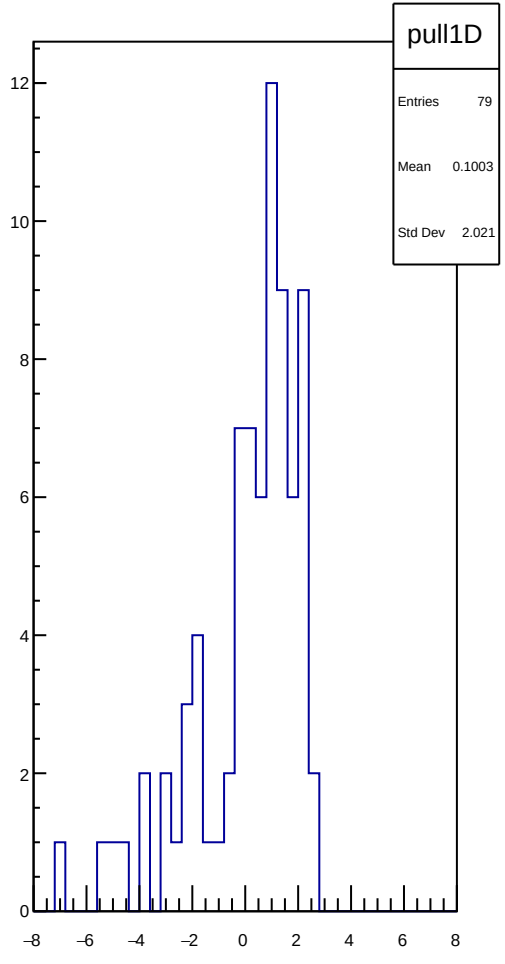

pull1D
Entries 79
Mean 0.05496
Std Dev 4.187

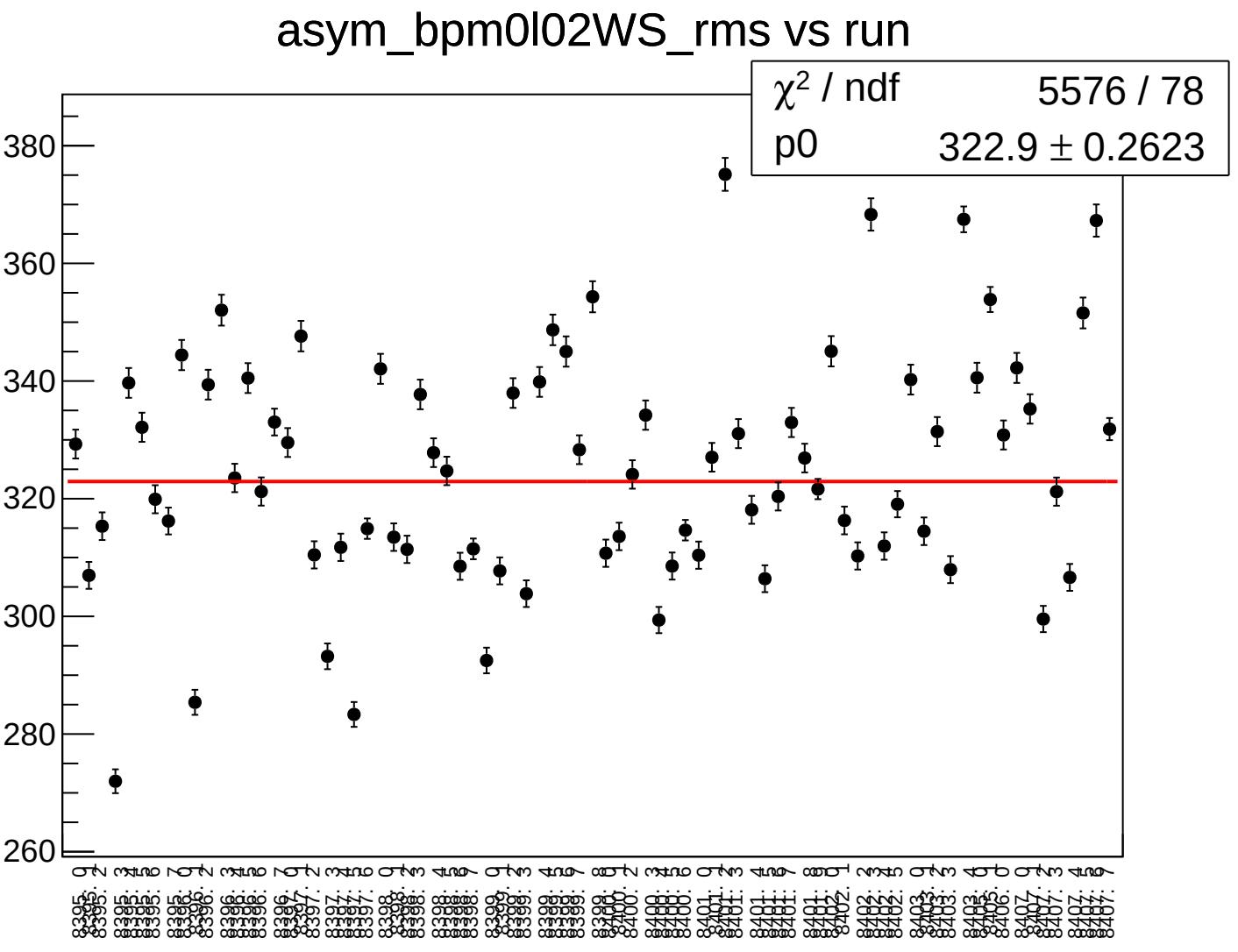

asym_bpm0i01aWS_rms vs run
χ² / ndf 6413 / 78
p0 198.5 ± 0.1613
230
220
210
200
190
180
170
160

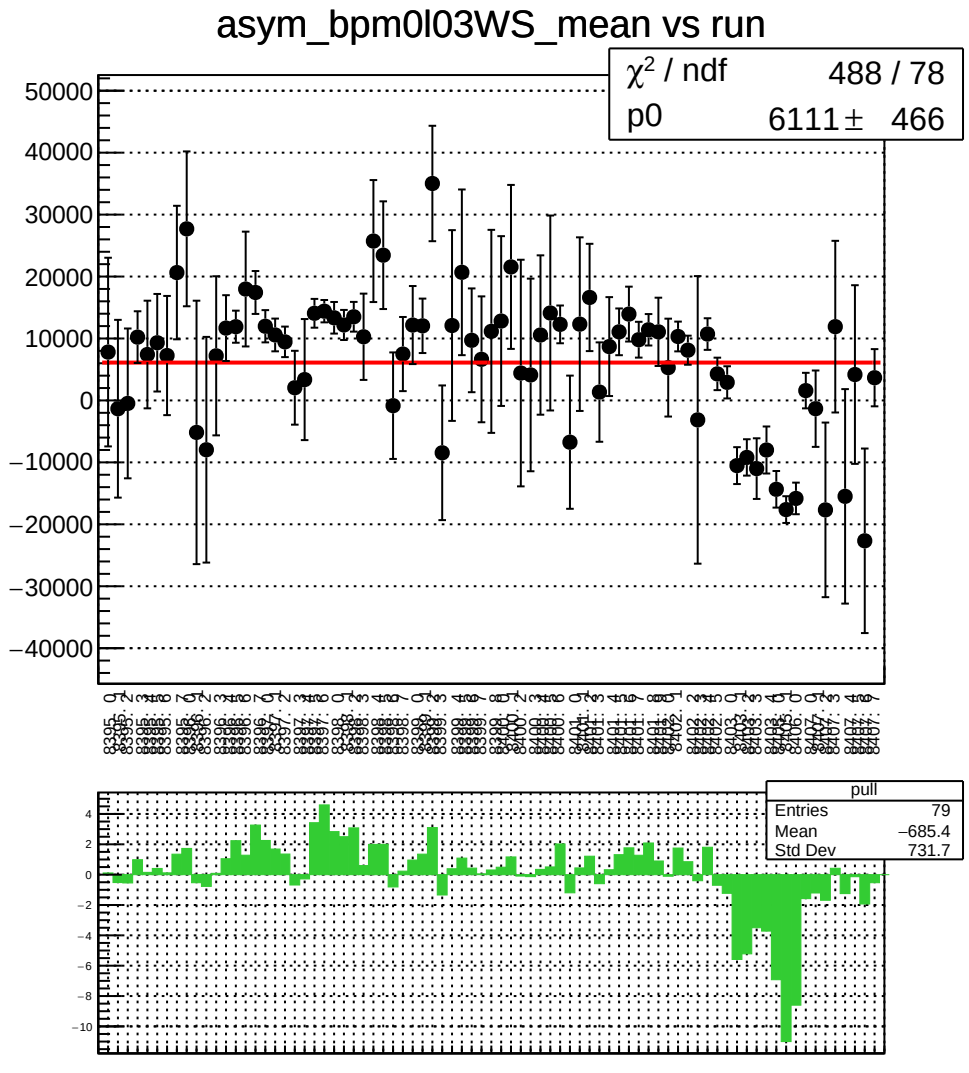

asym_bpm0l01WS_mean vs run
χ² / ndf 717 / 78
p0 7501 ± 292.3
pull
Entries 79
Mean −481.5
Std Dev 528.6
pull1D
Entries 79
Mean 0.4674
Std Dev 2.323

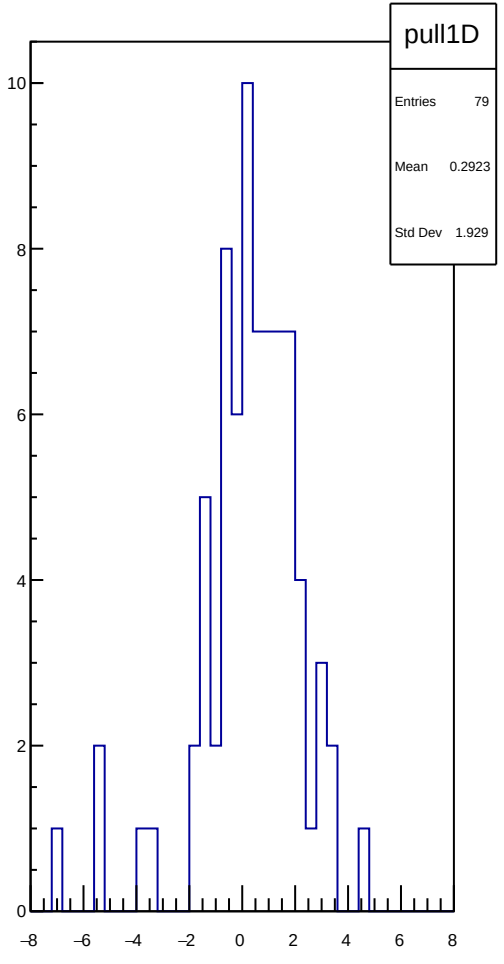

asym_bpm0l01WS_rms vs run
χ² / ndf 4263 / 78
p0 254.6 ± 0.2067
300
290
280
270
260
250
240
230
220

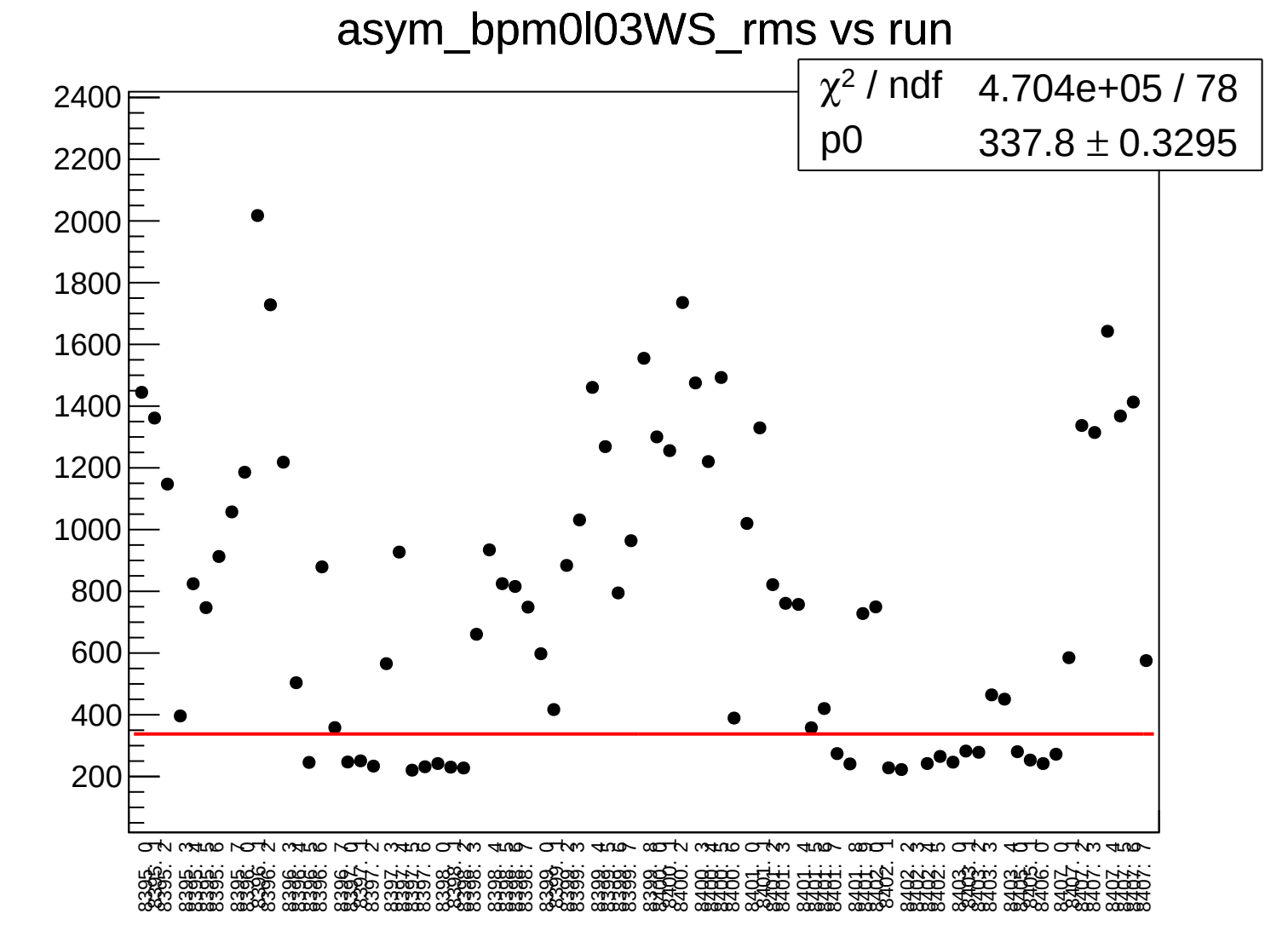

asym_bpm0l02WS_mean vs run
χ² / ndf 386.5 / 78
p0 8160 ± 370.9
pull
Entries 79
Mean 6902
Std Dev 6855

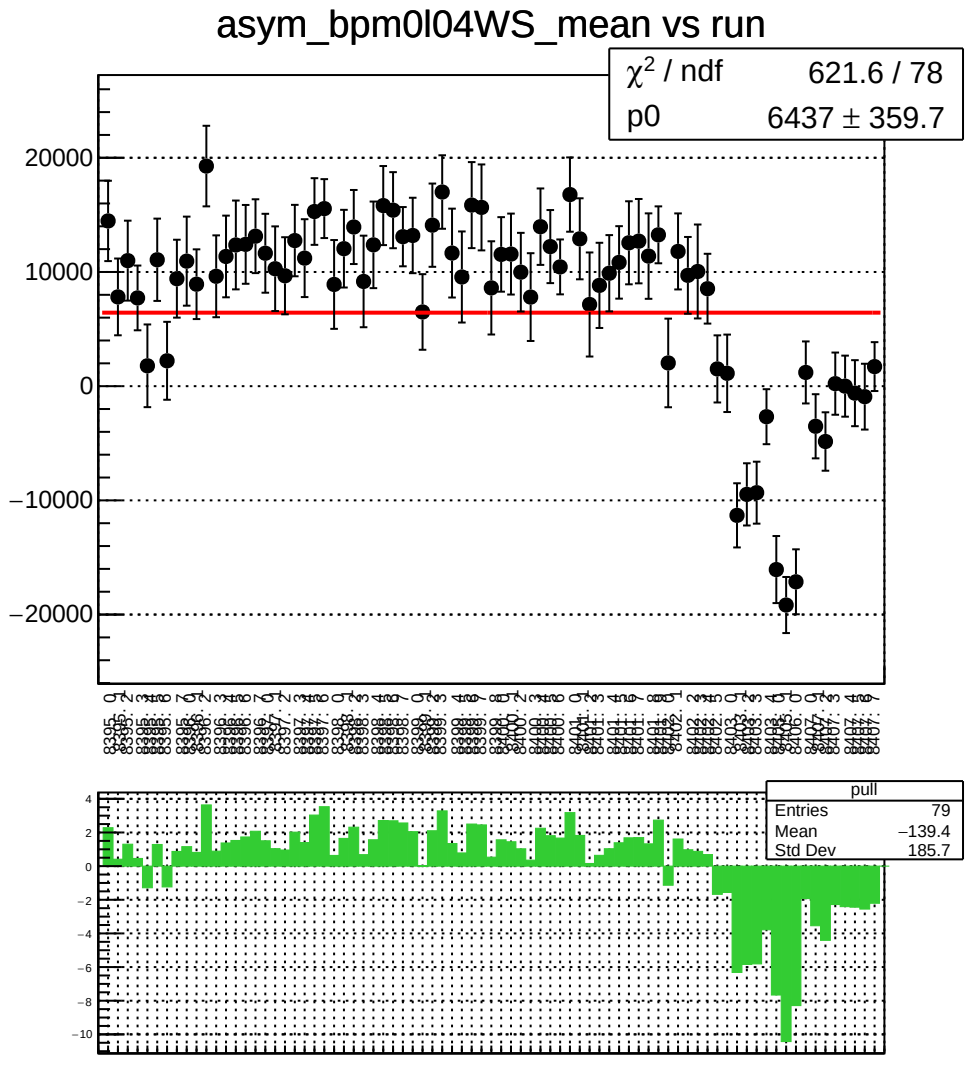

pull1D
Entries 79
Mean 0.1003
Std Dev 2.021

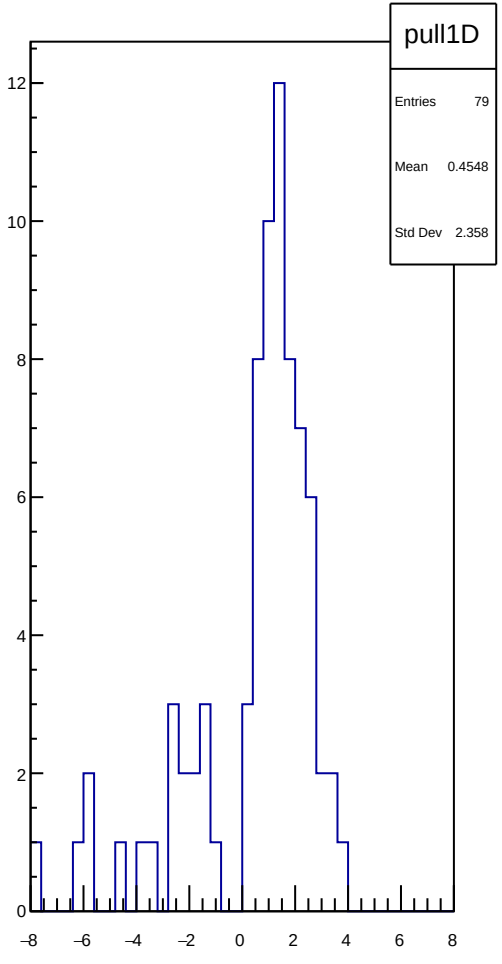

asym_bpm0l02WS_rms vs run
χ² / ndf 5576 / 78
p0 322.9 ± 0.2623
380
360
340
320
300
280
260

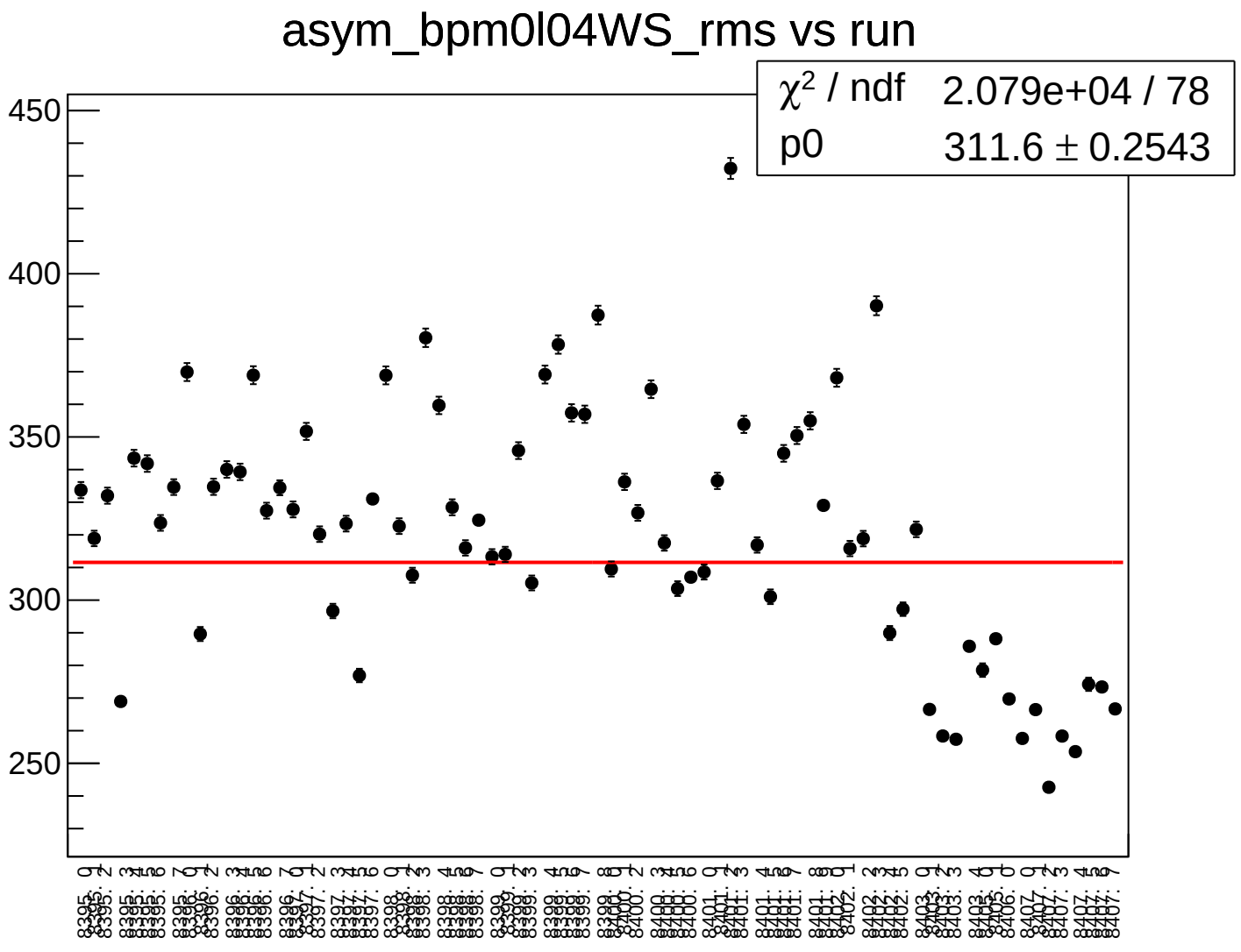

asym_bpm0l03WS_mean vs run
χ² / ndf 488 / 78
p0 6111 ± 466
pull
Entries 79
Mean −685.4
Std Dev 731.7

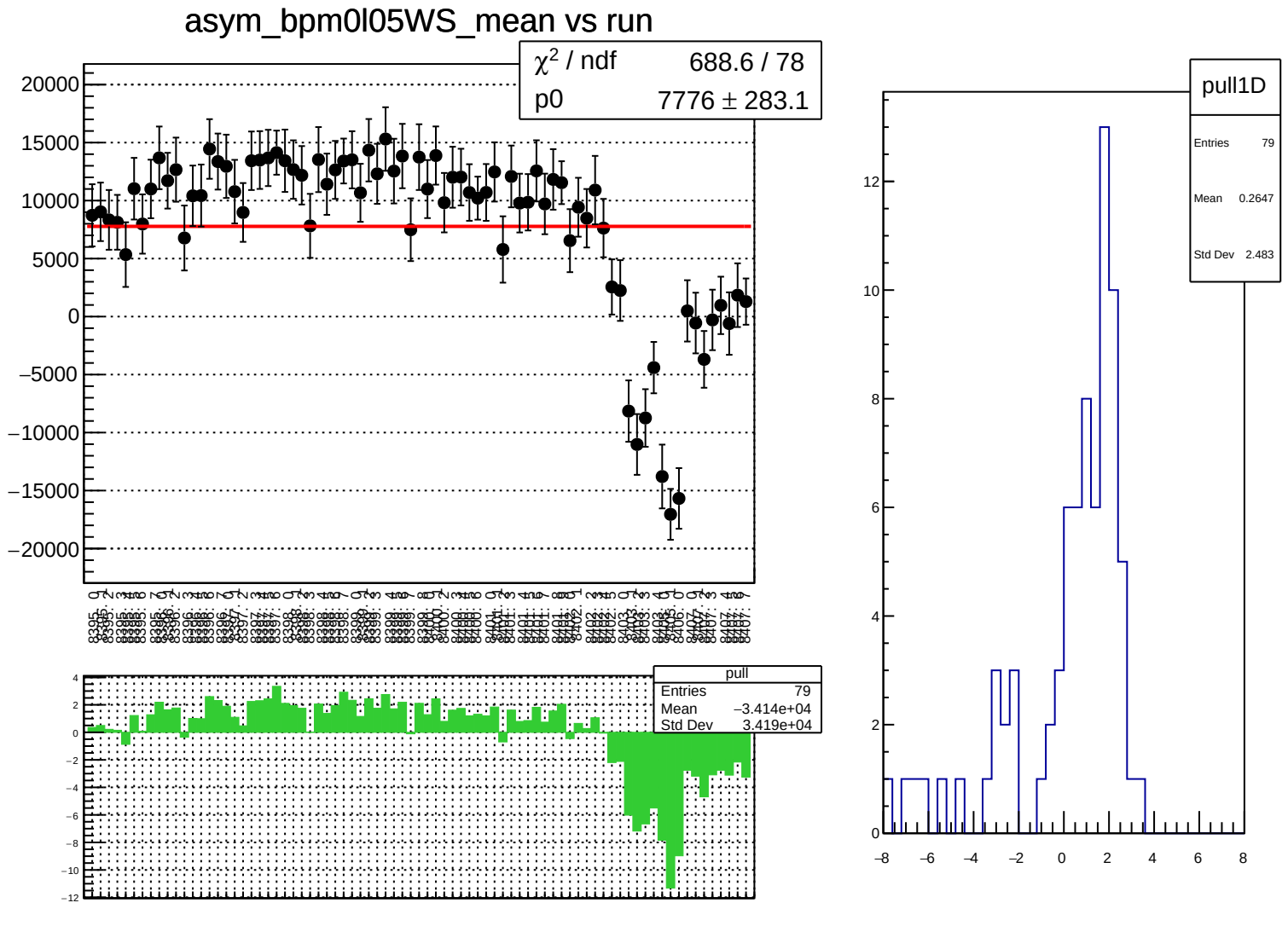

pull1D
Entries 79
Mean 0.2923
Std Dev 1.929

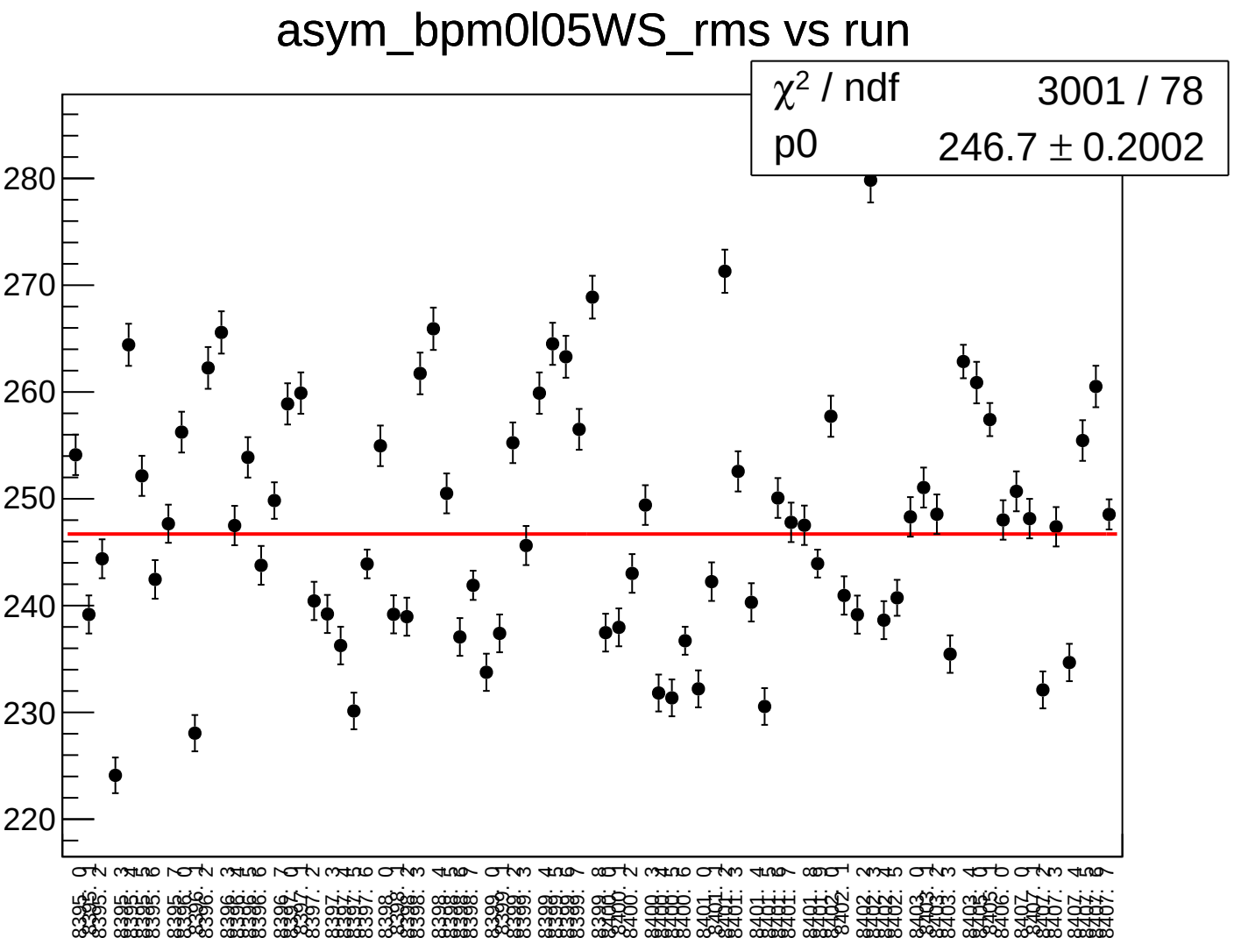

asym_bpm0l03WS_rms vs run
χ^2 / ndf 4.704e+05 / 78
p0 337.8 ± 0.3295
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

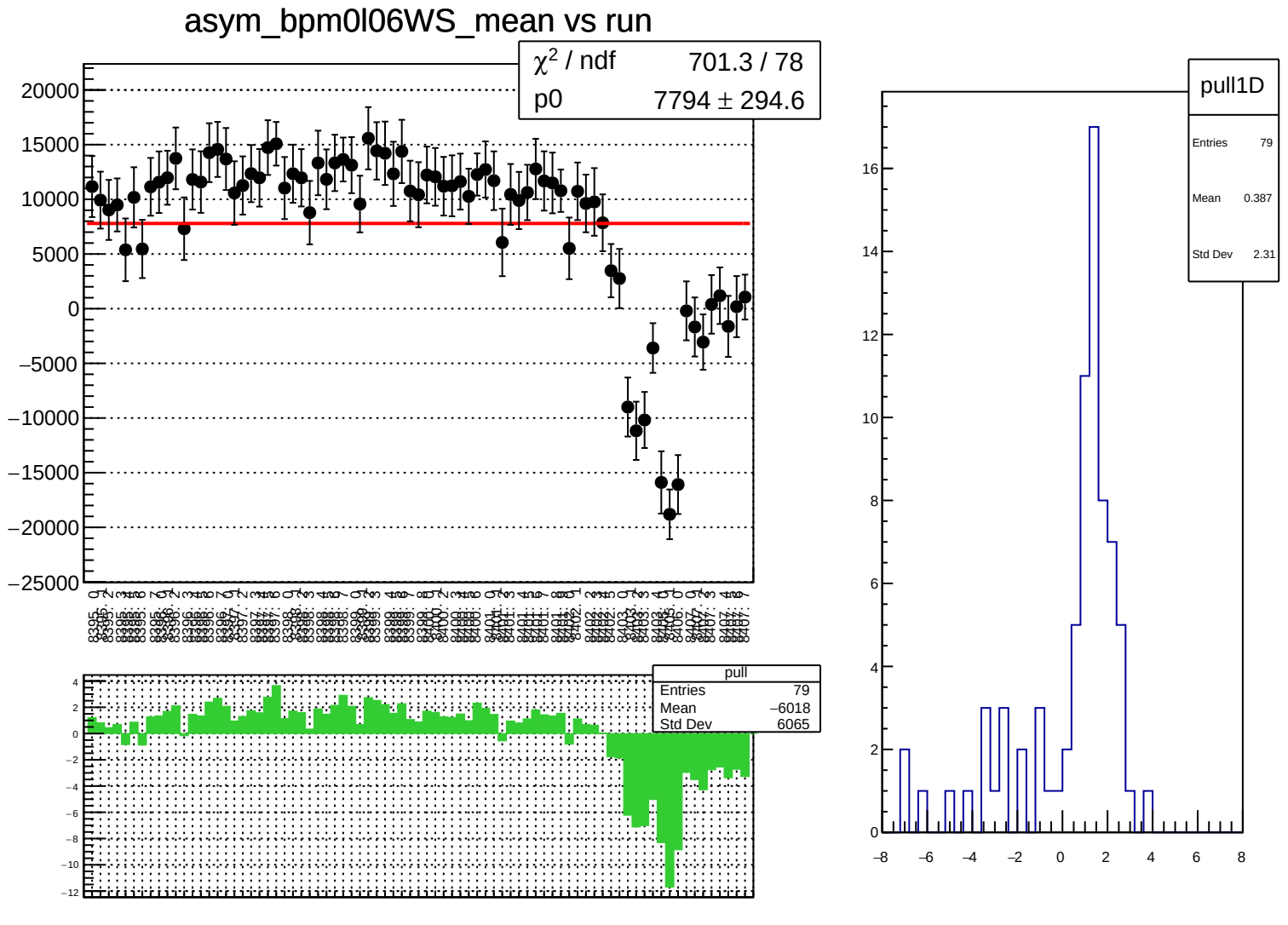

asym_bpm0l04WS_mean vs run
χ² / ndf 621.6 / 78
p0 6437 ± 359.7
20000
10000
0
−10000
−20000
pull
Entries 79
Mean −139.4
Std Dev 185.7
4
2
0
−2
−4
−6
−8
−10

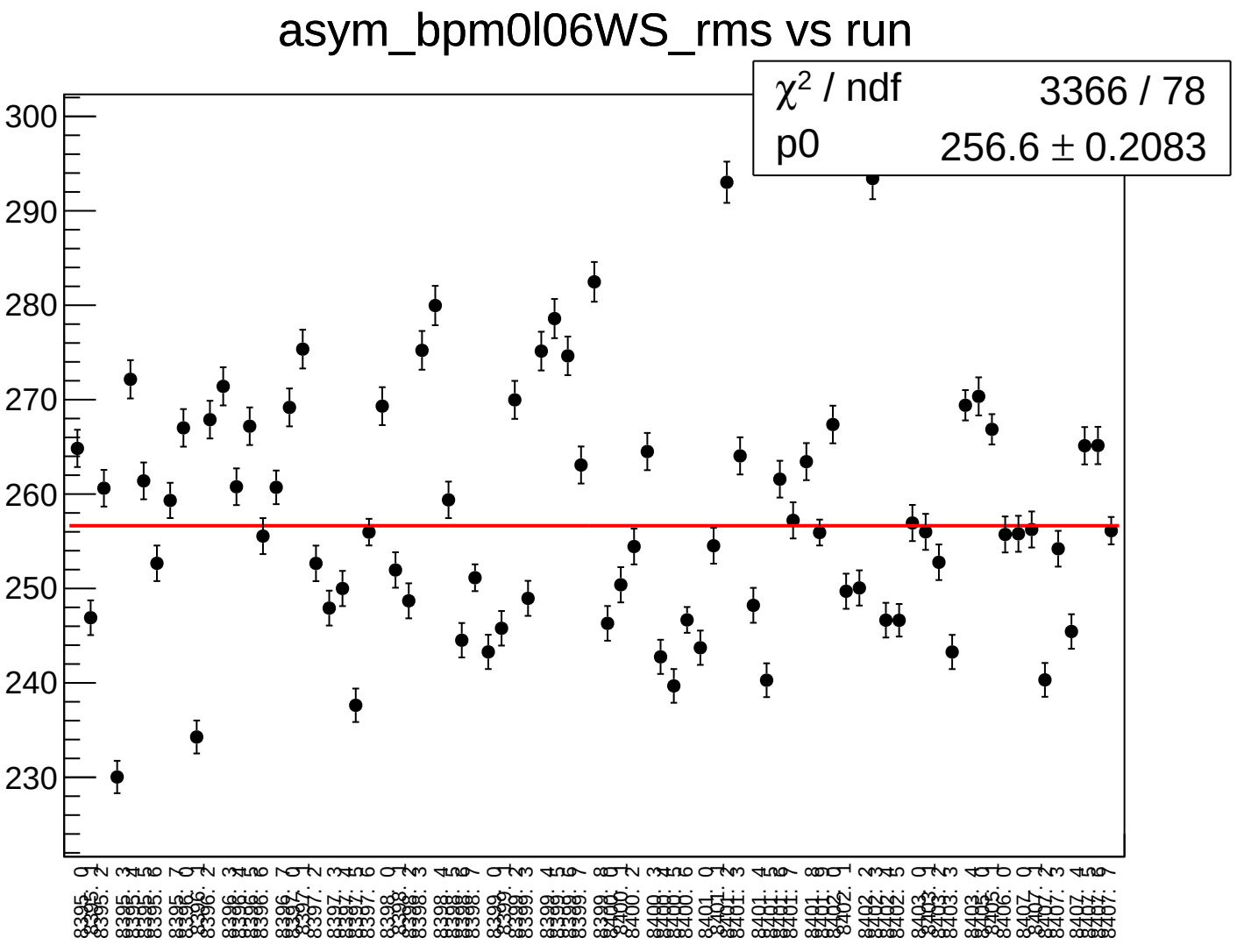

pull1D
Entries 79
Mean 0.4548
Std Dev 2.358
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

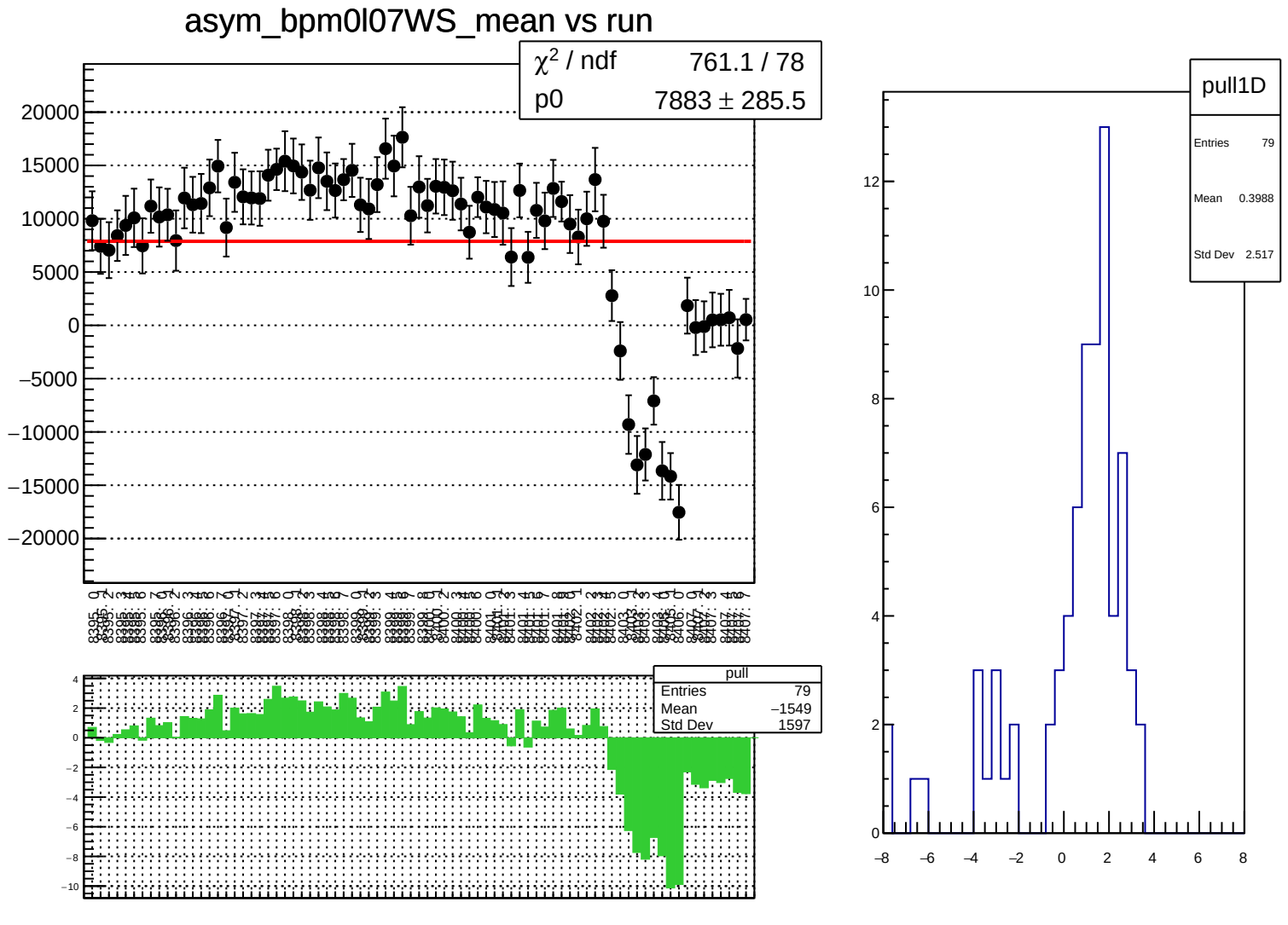

asym_bpm0l04WS_rms vs run
χ² / ndf 2.079e+04 / 78
p0 311.6 ± 0.2543
450
400
350
300
250

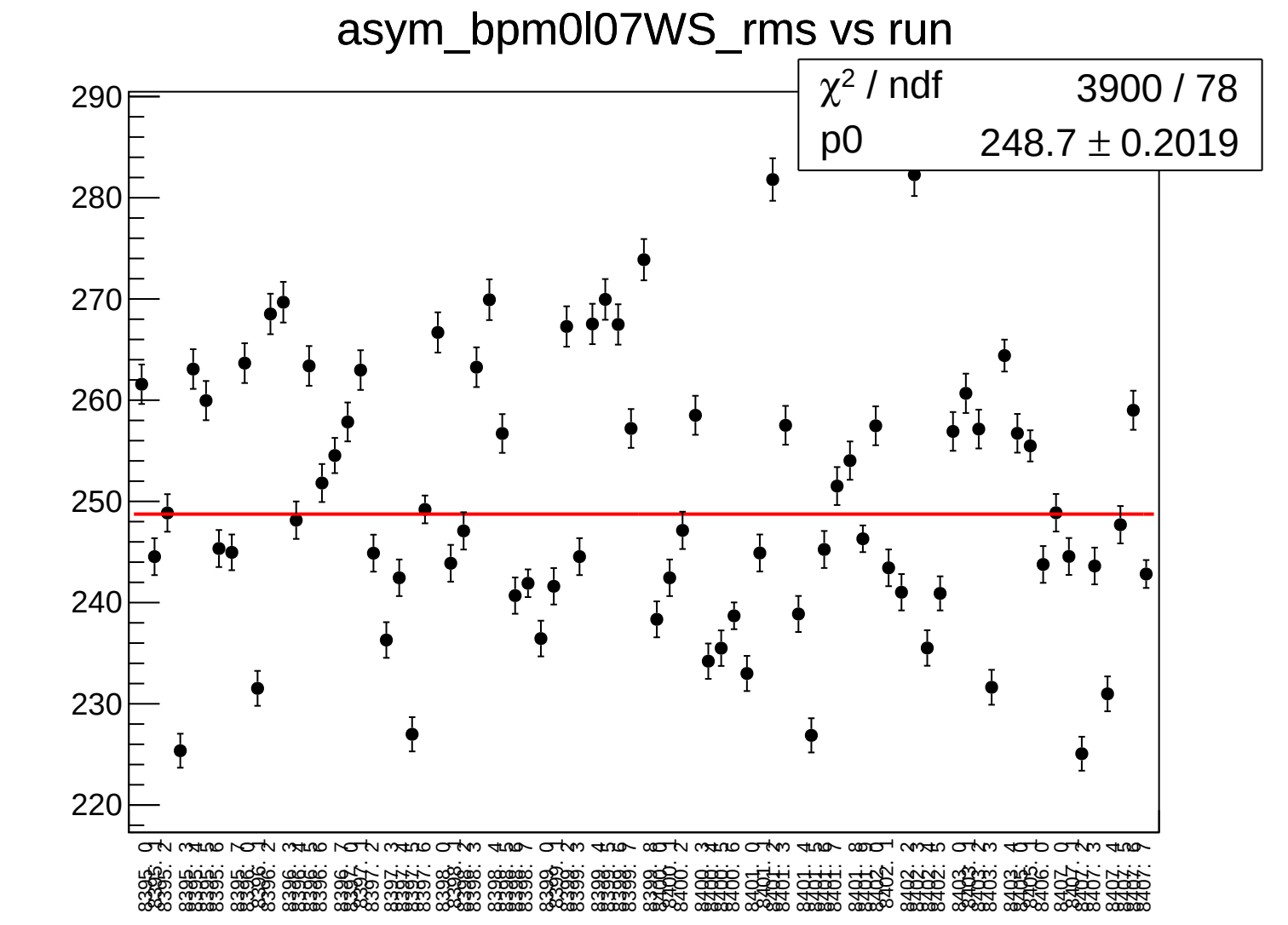

asym_bpm0l05WS_mean vs run
χ² / ndf 688.6 / 78
p0 7776 ± 283.1
pull
Entries 79
Mean −3.414e+04
Std Dev 3.419e+04
pull1D
Entries 79
Mean 0.2647
Std Dev 2.483

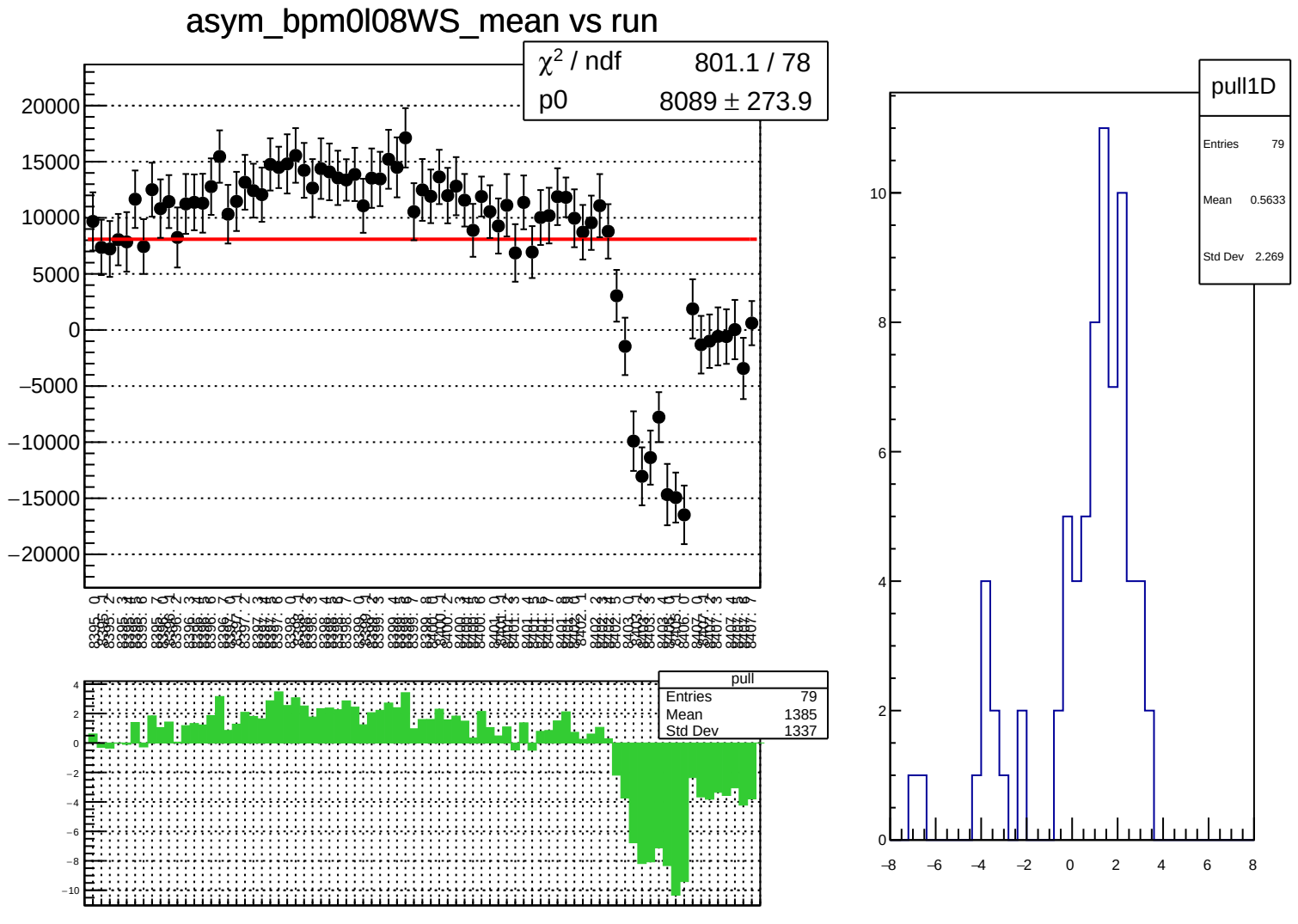

asym_bpm0l05WS_rms vs run
χ^2 / ndf 3001 / 78
p0 246.7 ± 0.2002
280
270
260
250
240
230
220

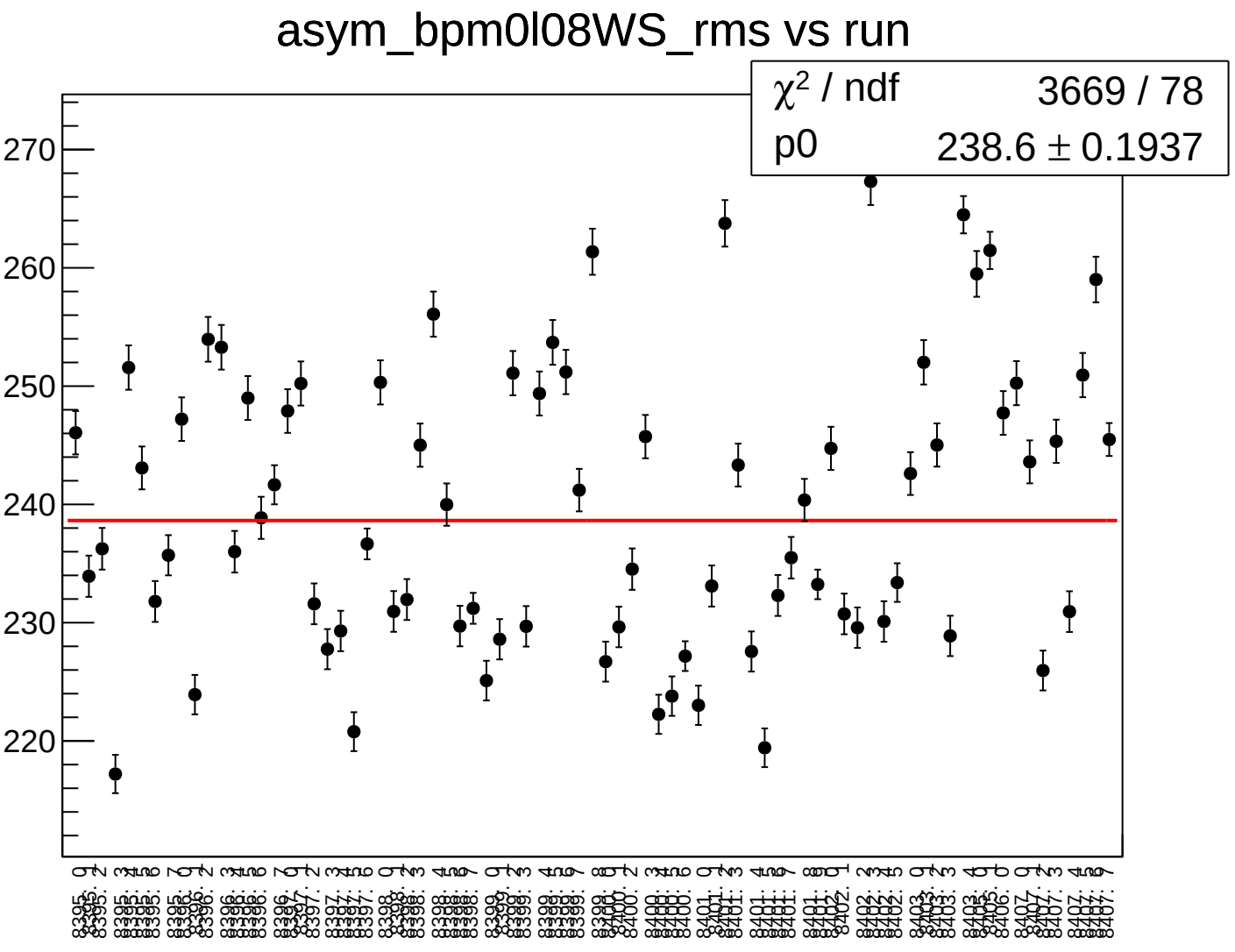

asym_bpm0l06WS_mean vs run
χ² / ndf 701.3 / 78
p0 7794 ± 294.6
pull
Entries 79
Mean −6018
Std Dev 6065
pull1D
Entries 79
Mean 0.387
Std Dev 2.31

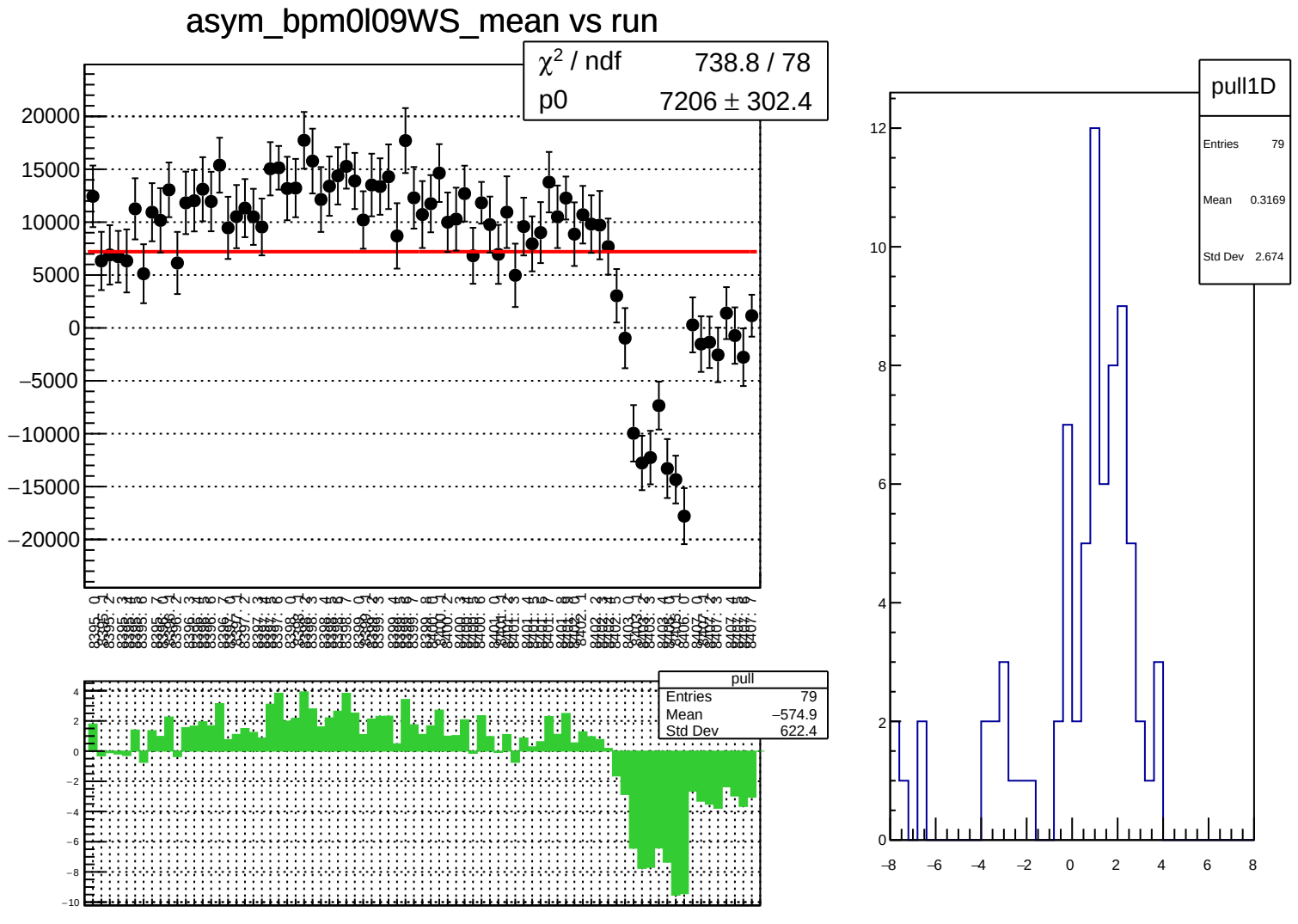

asym_bpm0l06WS_rms vs run
χ² / ndf 3366 / 78
p0 256.6 ± 0.2083
300
290
280
270
260
250
240
230

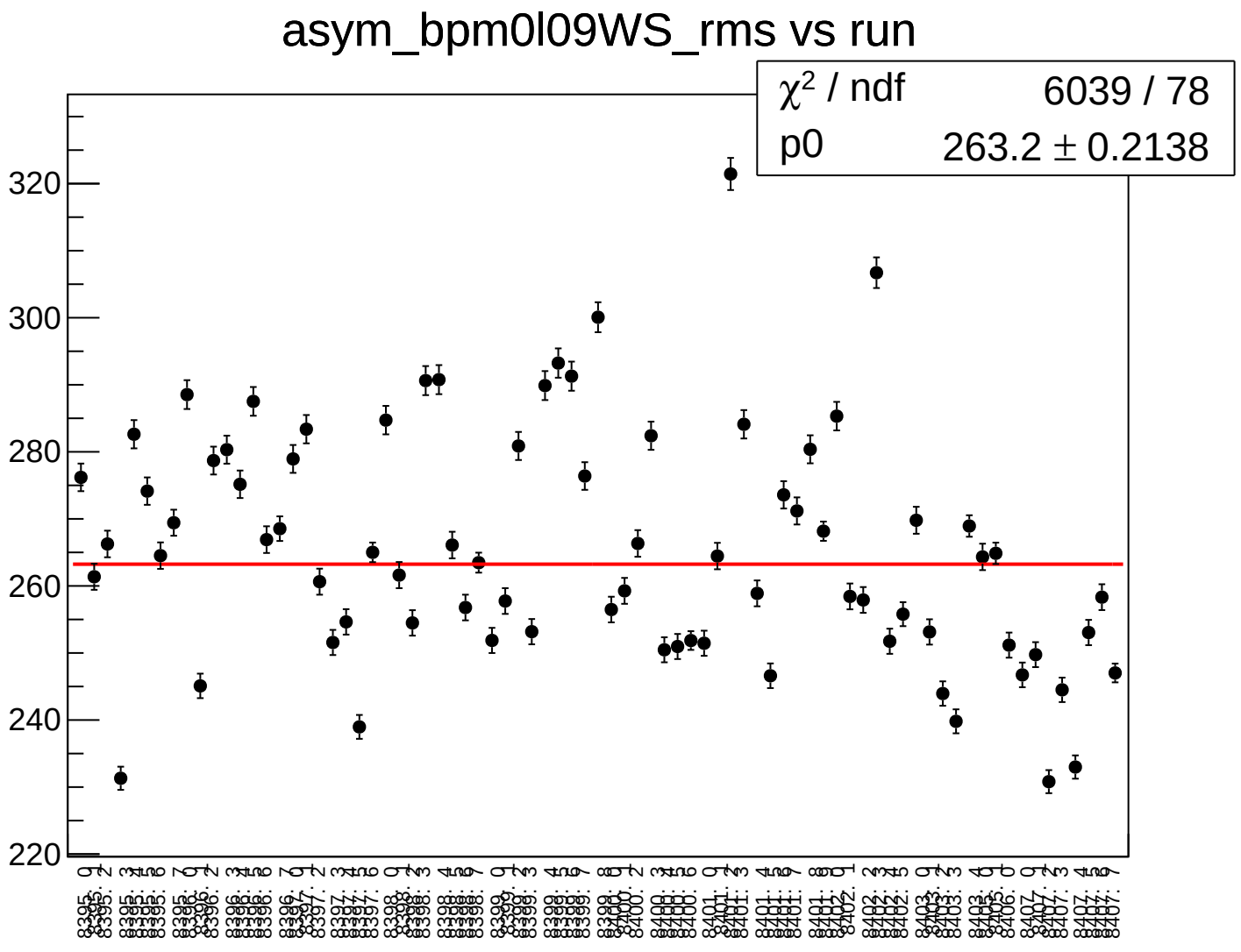

asym_bpm0l07WS_mean vs run
χ² / ndf 761.1 / 78
p0 7883 ± 285.5
pull
Entries 79
Mean −1549
Std Dev 1597
pull1D
Entries 79
Mean 0.3988
Std Dev 2.517

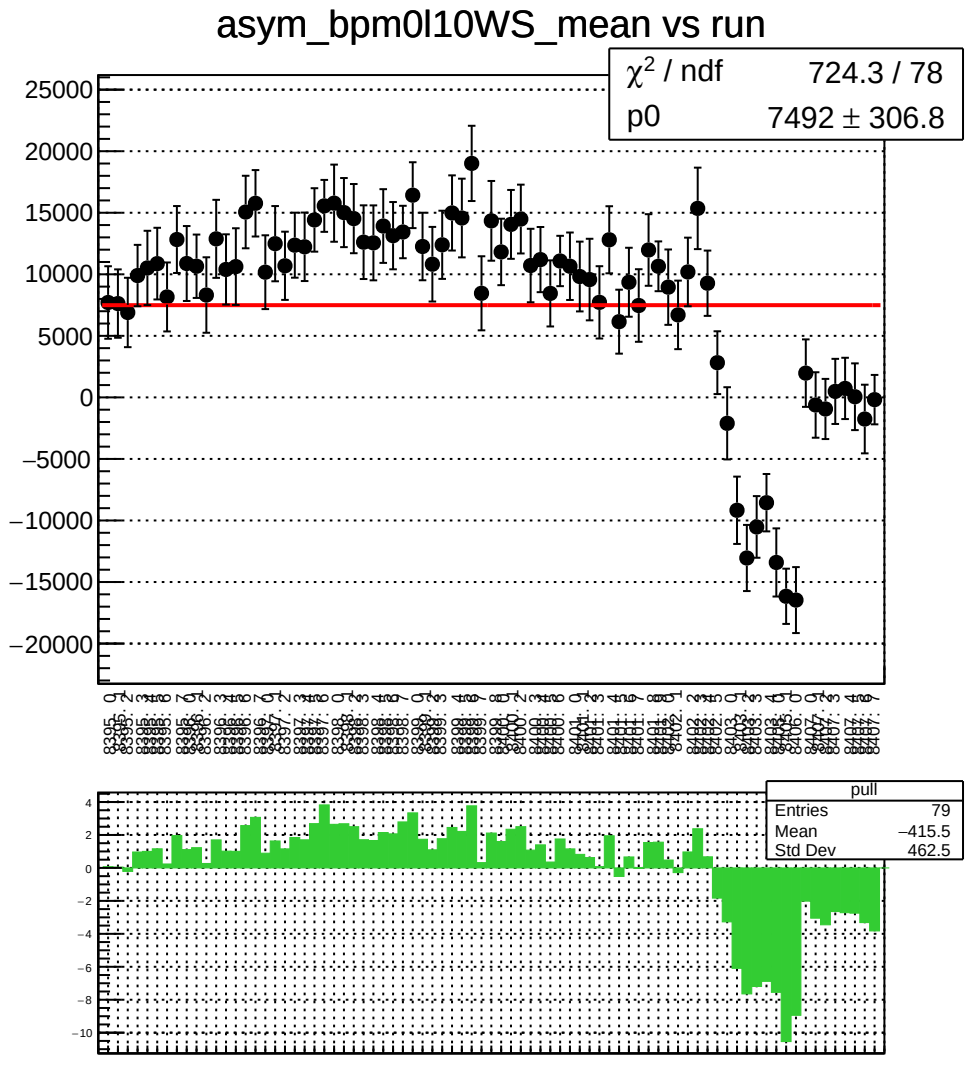

asym_bpm0l07WS_rms vs run
χ^2 / ndf 3900 / 78
p0 248.7 ± 0.2019
290
280
270
260
250
240
230
220

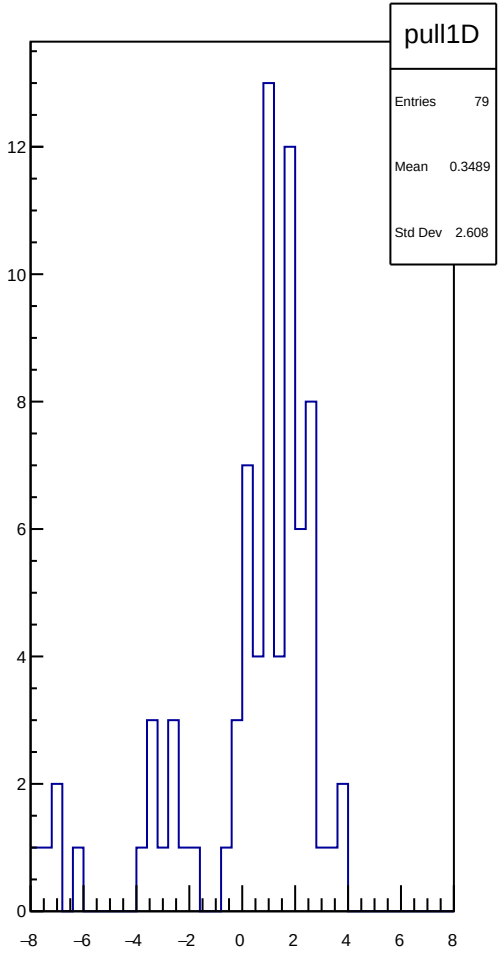

asym_bpm0l08WS_mean vs run
χ² / ndf 801.1 / 78
p0 8089 ± 273.9
pull
Entries 79
Mean 1385
Std Dev 1337
pull1D
Entries 79
Mean 0.5633
Std Dev 2.269

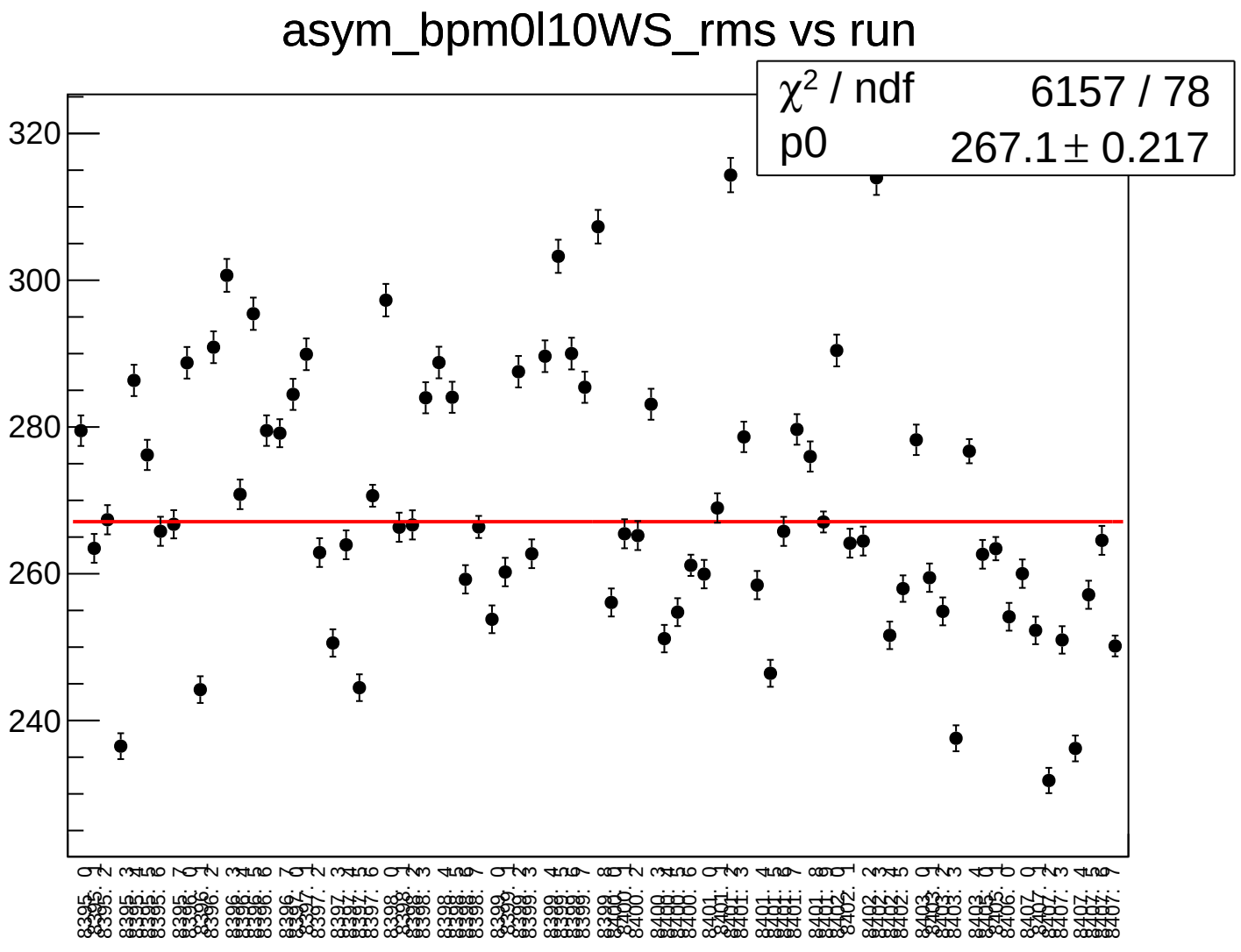

asym_bpm0l08WS_rms vs run
χ² / ndf 3669 / 78
p0 238.6 ± 0.1937
270
260
250
240
230
220

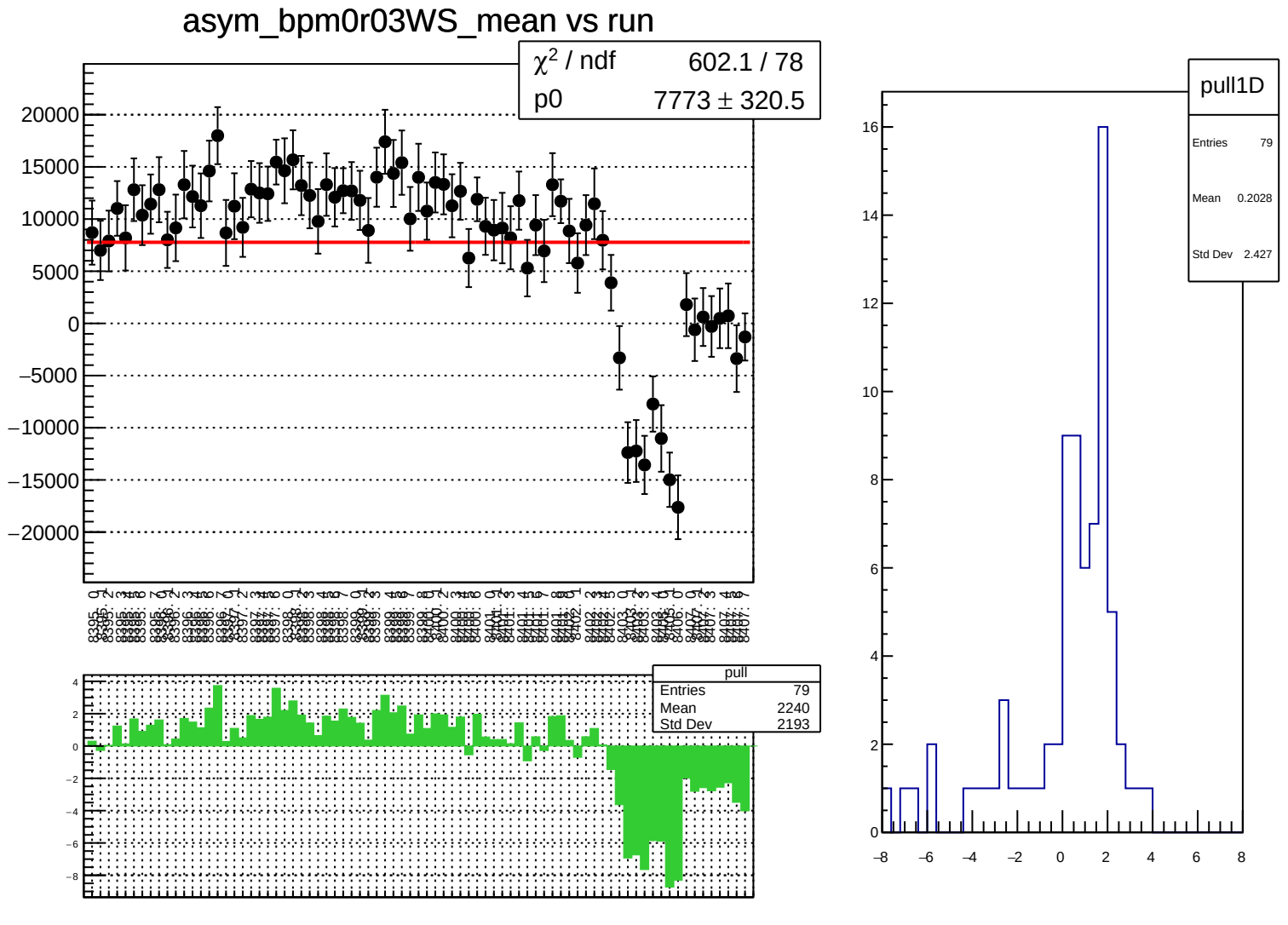

asym_bpm0l09WS_mean vs run
χ² / ndf 738.8 / 78
p0 7206 ± 302.4
pull
Entries 79
Mean −574.9
Std Dev 622.4
pull1D
Entries 79
Mean 0.3169
Std Dev 2.674

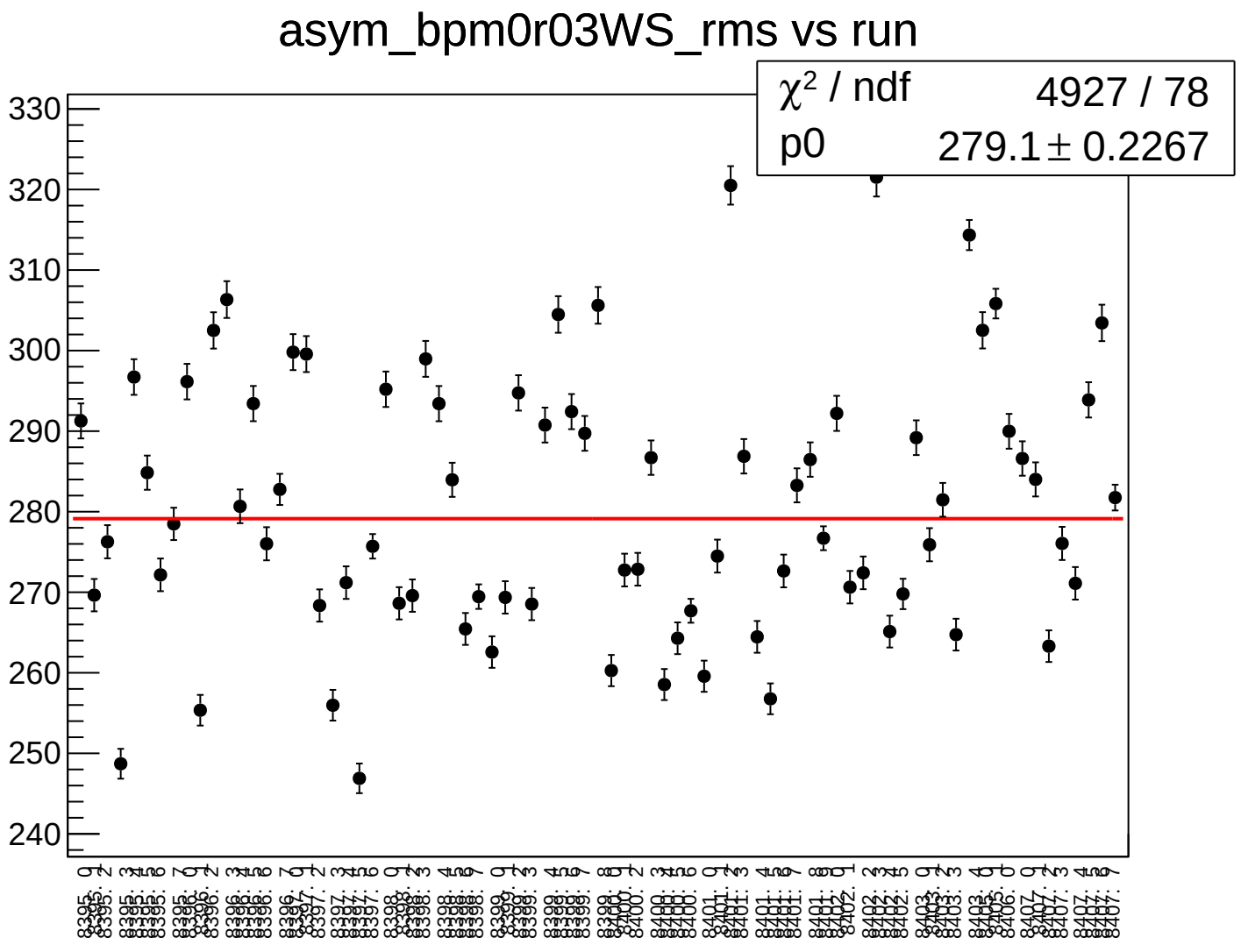

asym_bpm0l09WS_rms vs run
χ² / ndf 6039 / 78
p0 263.2 ± 0.2138
320
300
280
260
240
220

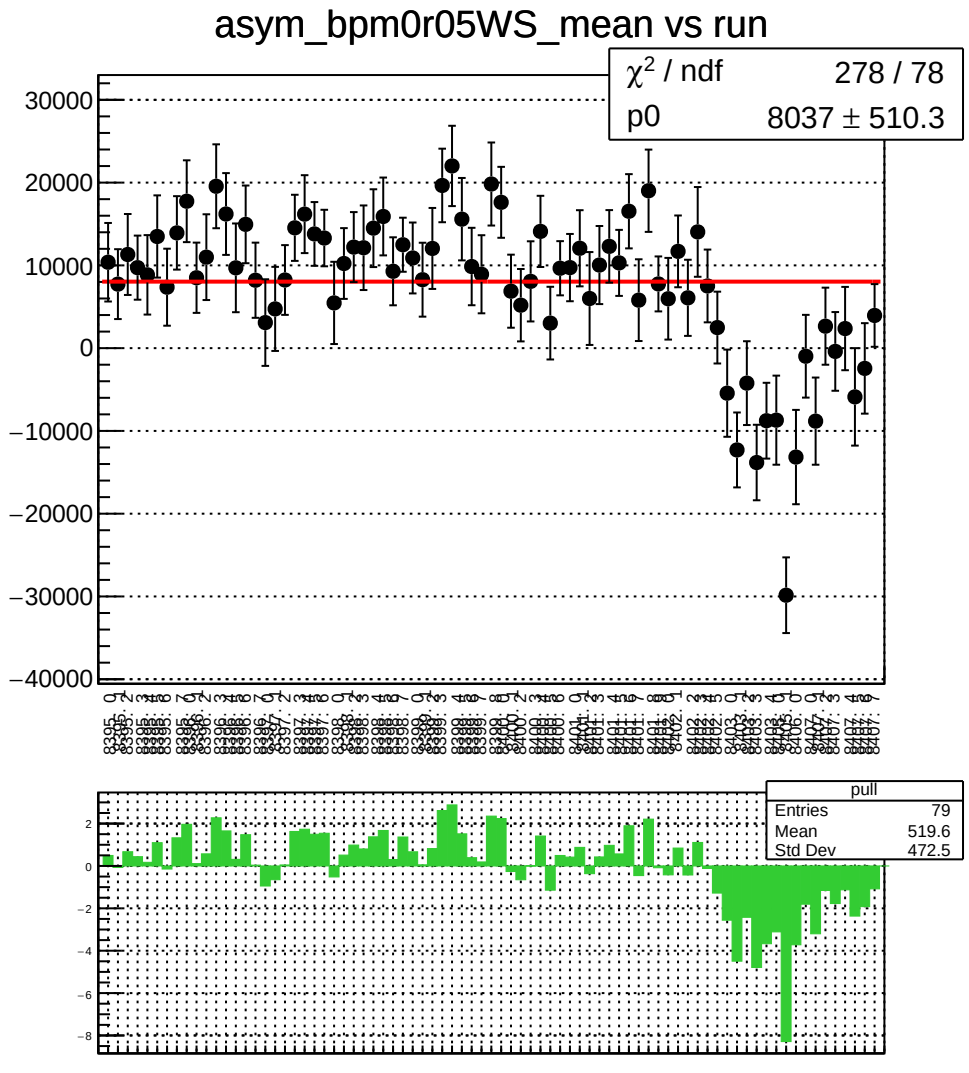

asym_bpm0l10WS_mean vs run
χ² / ndf 724.3 / 78
p0 7492 ± 306.8
pull
Entries 79
Mean −415.5
Std Dev 462.5

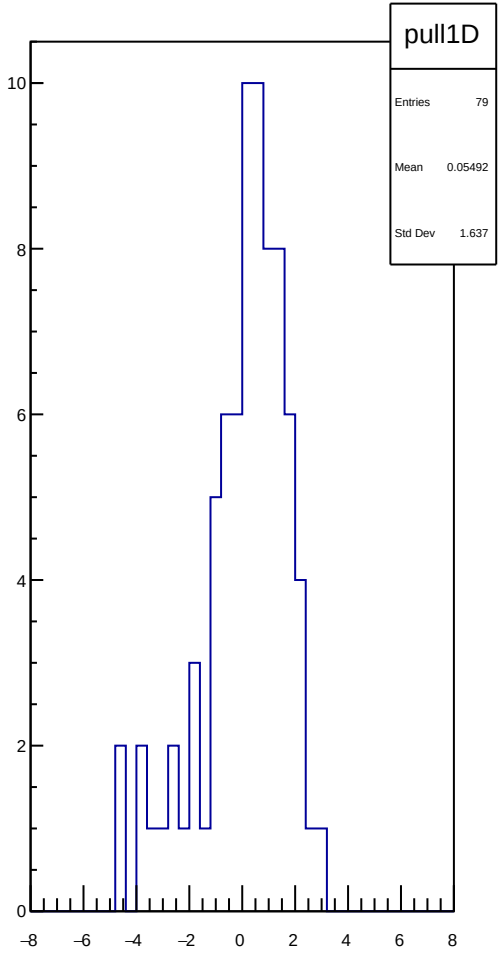

pull1D
Entries 79
Mean 0.3489
Std Dev 2.608

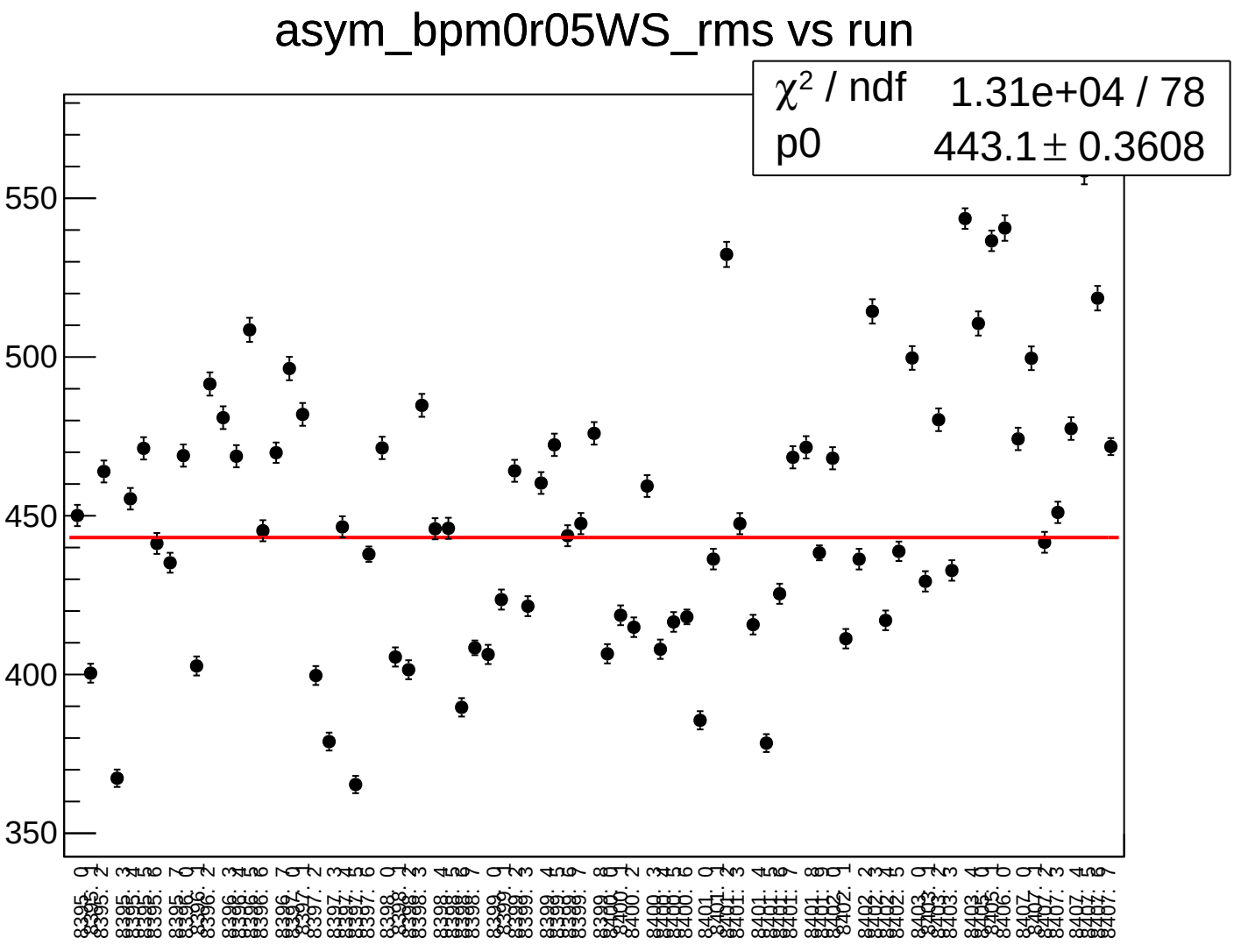

asym_bpm0l10WS_rms vs run
χ² / ndf 6157 / 78
p0 267.1 ± 0.217
320
300
280
260
240

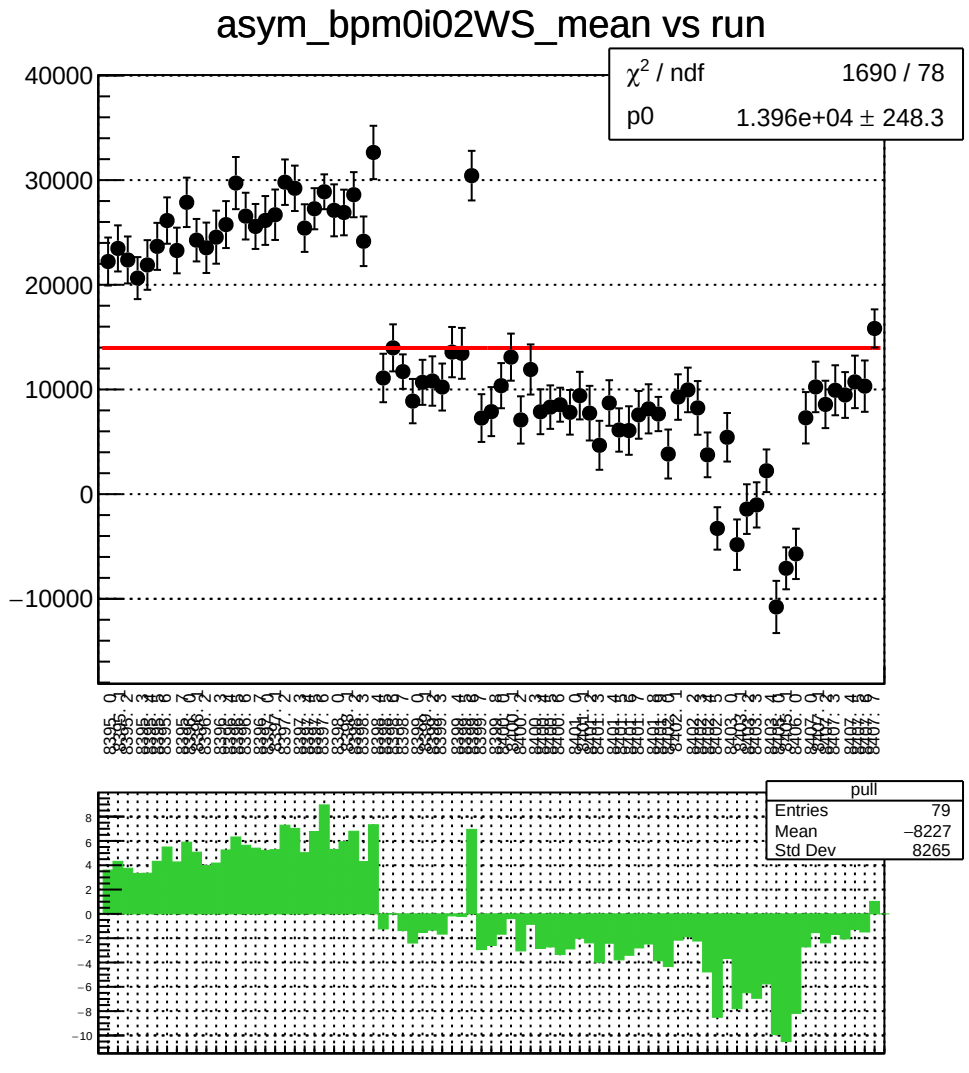

asym_bpm0r03WS_mean vs run
χ² / ndf 602.1 / 78
p0 7773 ± 320.5
pull
Entries 79
Mean 2240
Std Dev 2193
pull1D
Entries 79
Mean 0.2028
Std Dev 2.427

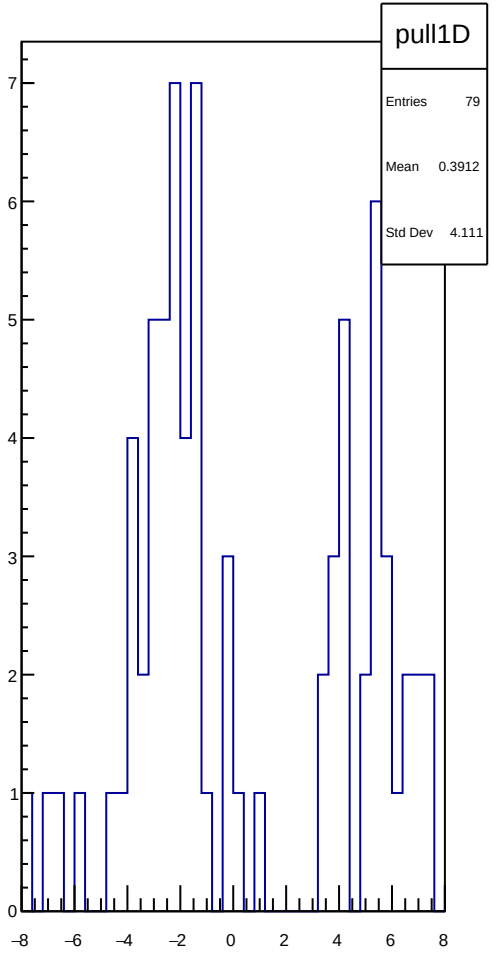

asym_bpm0r03WS_rms vs run
χ² / ndf 4927 / 78
p0 279.1 ± 0.2267
330
320
310
300
290
280
270
260
250
240

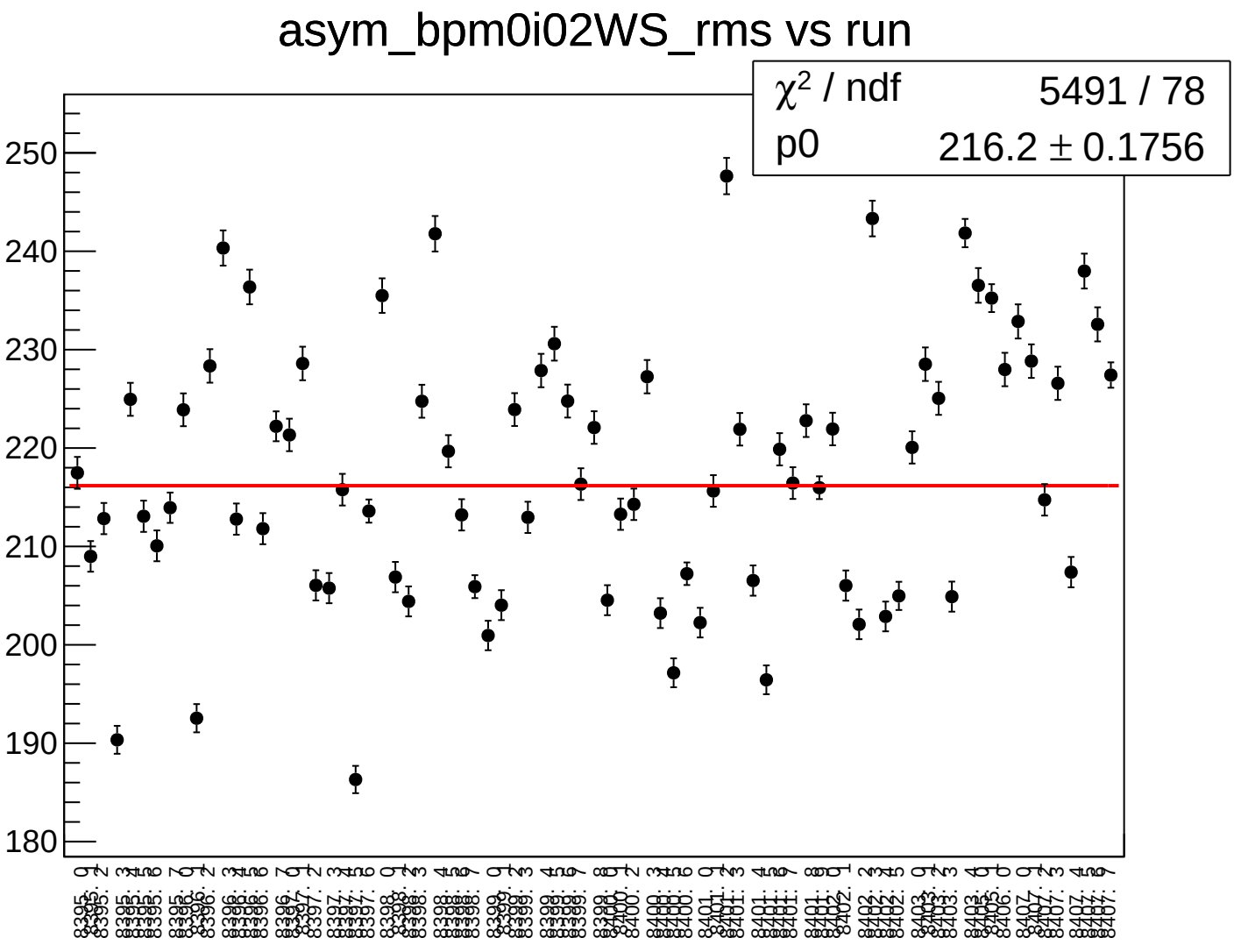

asym_bpm0r05WS_mean vs run
χ² / ndf 278 / 78
p0 8037 ± 510.3
pull
Entries 79
Mean 519.6
Std Dev 472.5

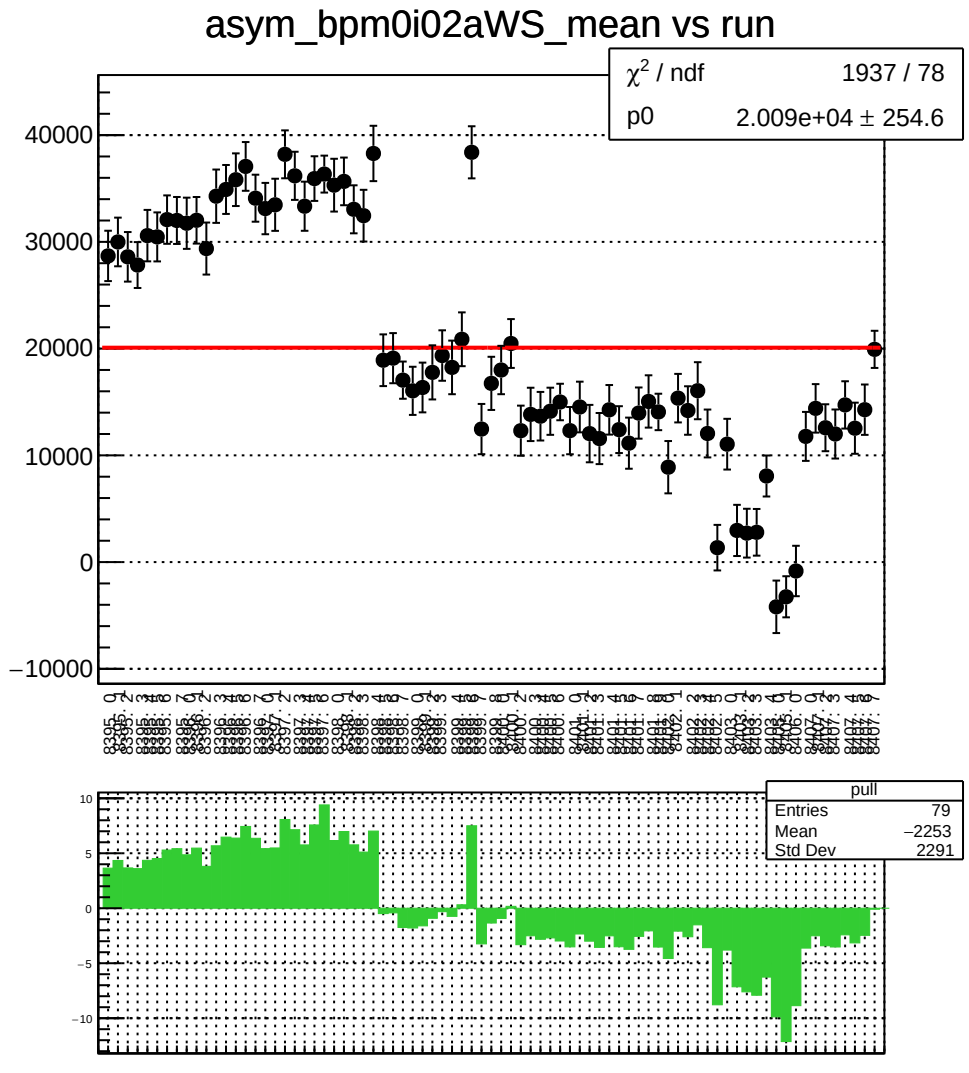

pull1D
Entries 79
Mean 0.05492
Std Dev 1.637

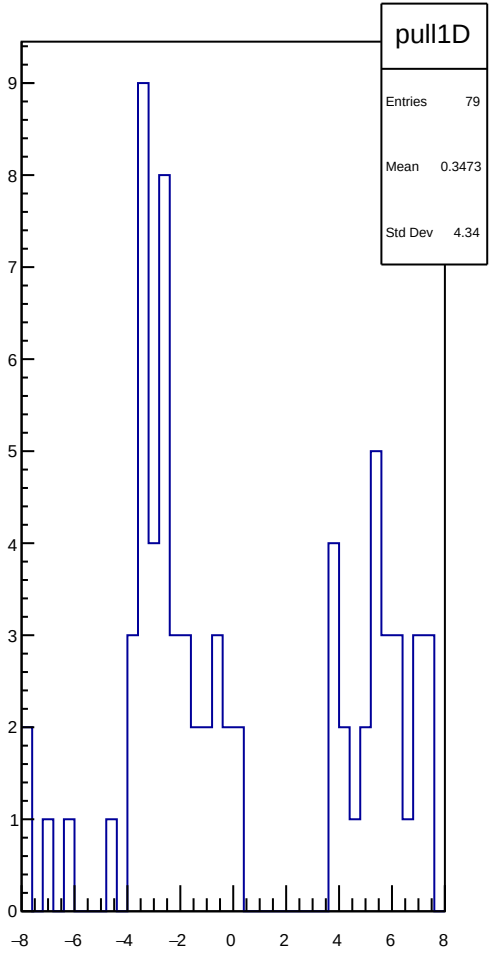

asym_bpm0r05WS_rms vs run
χ² / ndf 1.31e+04 / 78
p0 443.1 ± 0.3608
550
500
450
400
350

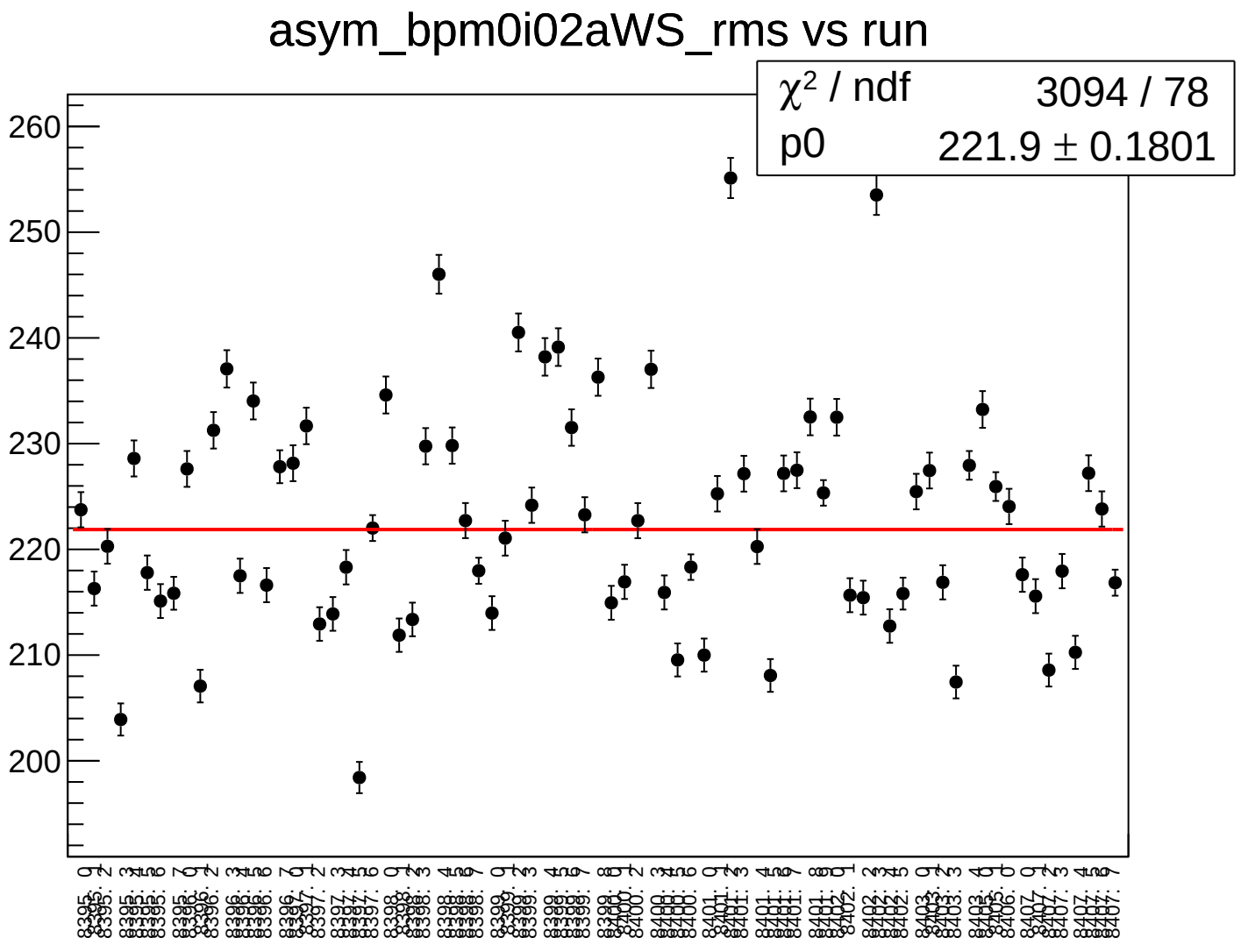

asym_bpm0i02WS_mean vs run
χ² / ndf 1690 / 78
p0 1.396e+04 ± 248.3
40000
30000
20000
10000
0
−10000
pull
Entries 79
Mean −8227
Std Dev 8265
8
6
4
2
0
−2
−4
−6
−8
−10

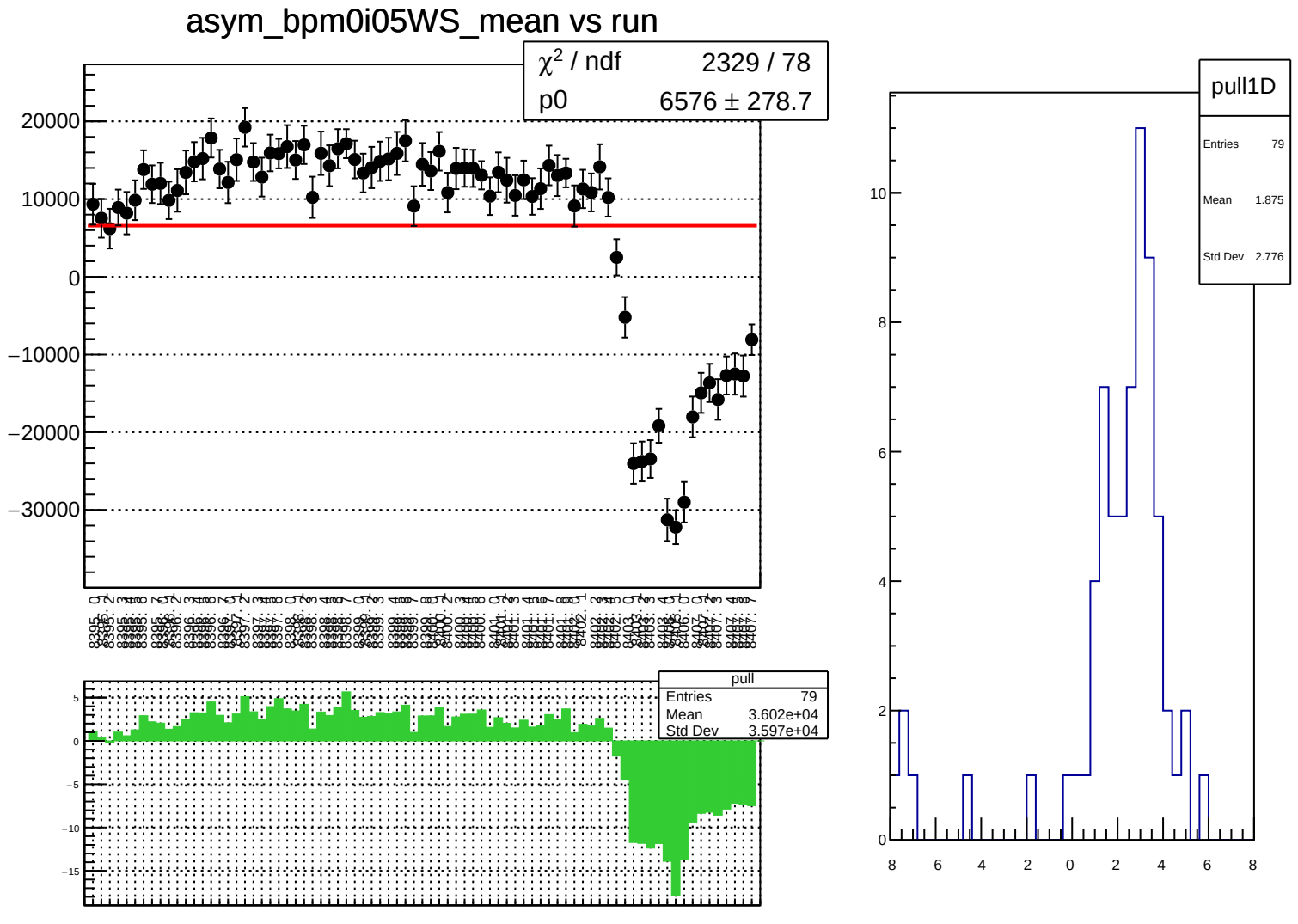

pull1D
Entries 79
Mean 0.3912
Std Dev 4.111
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

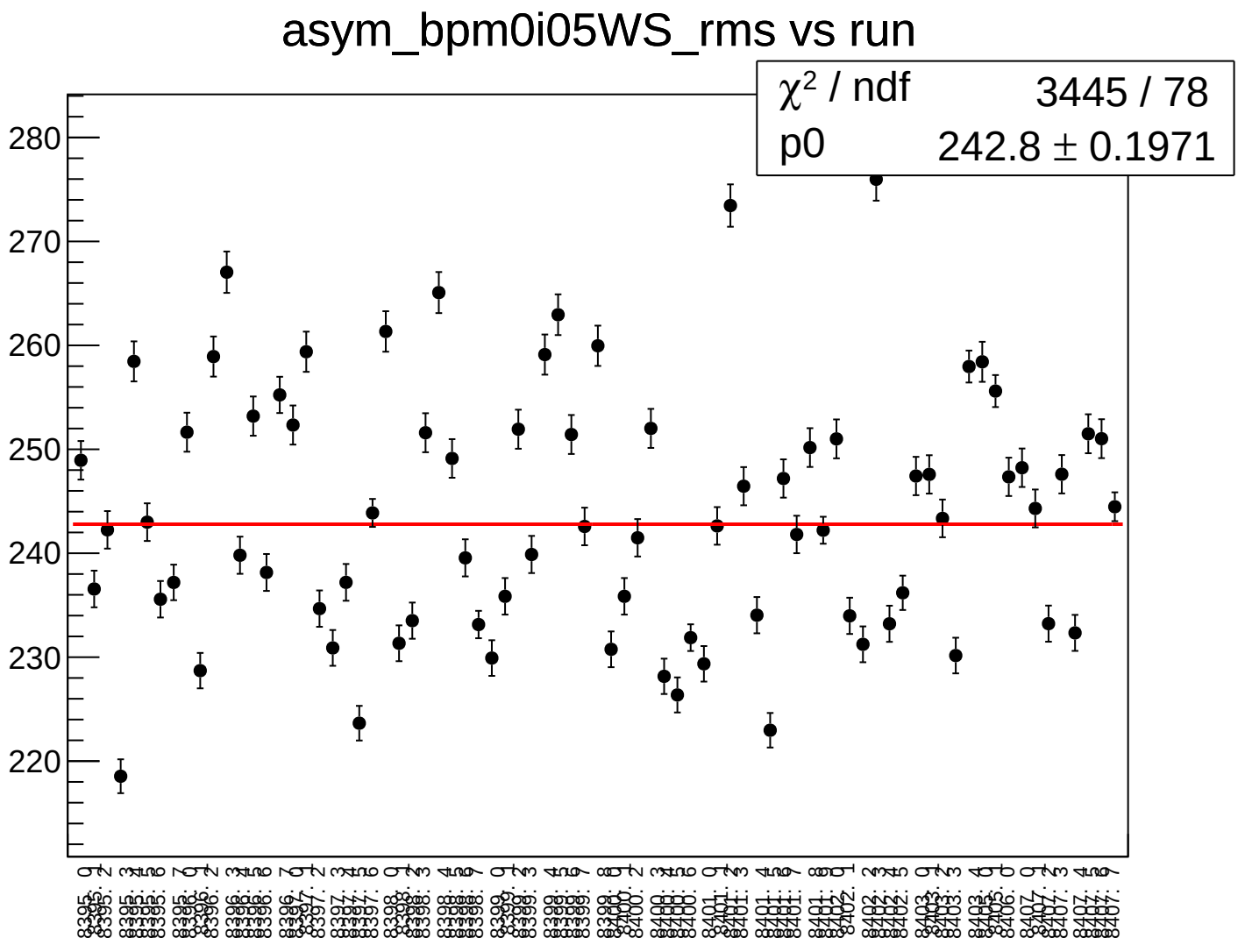

asym_bpm0i02WS_rms vs run
χ² / ndf 5491 / 78
p0 216.2 ± 0.1756
250
240
230
220
210
200
190
180

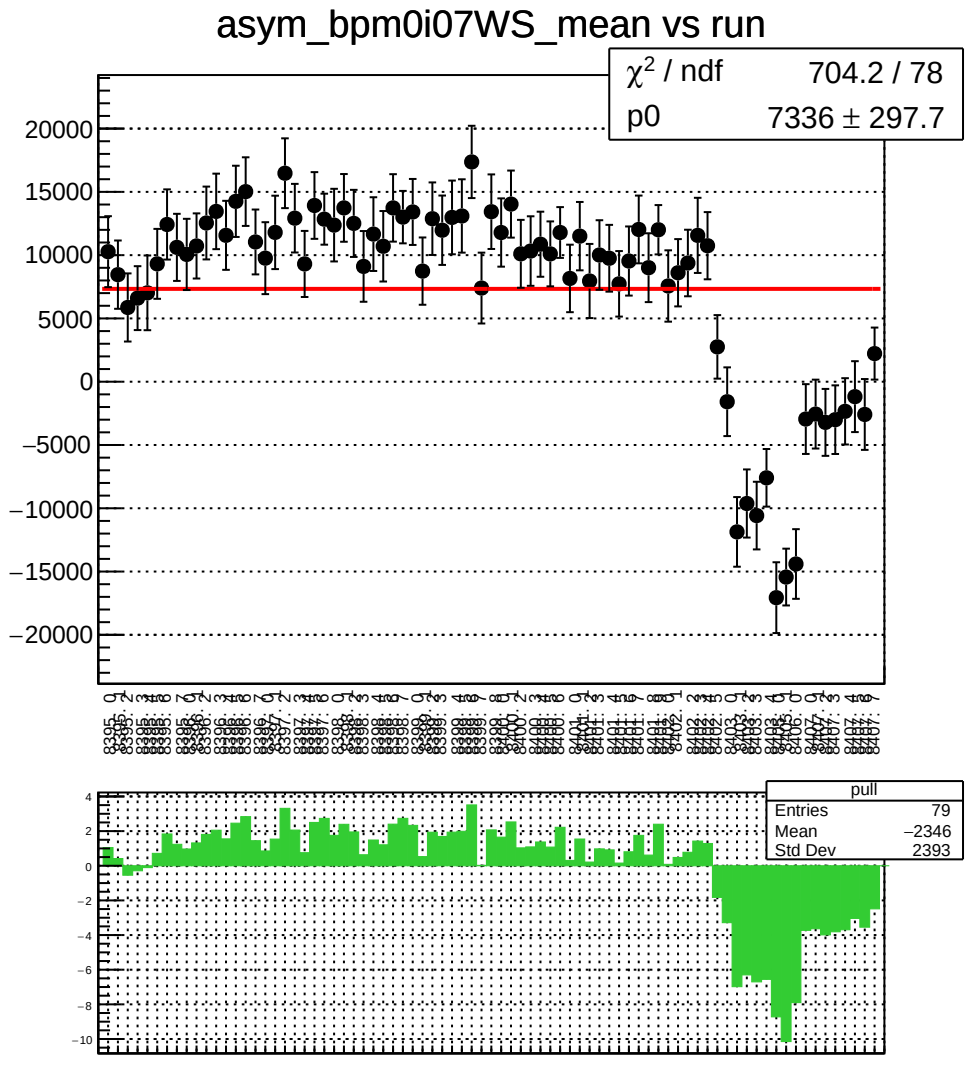

asym_bpm0i02aWS_mean vs run
χ² / ndf 1937 / 78
p0 2.009e+04 ± 254.6
40000
30000
20000
10000
0
−10000
pull
Entries 79
Mean −2253
Std Dev 2291
10
5
0
−5
−10

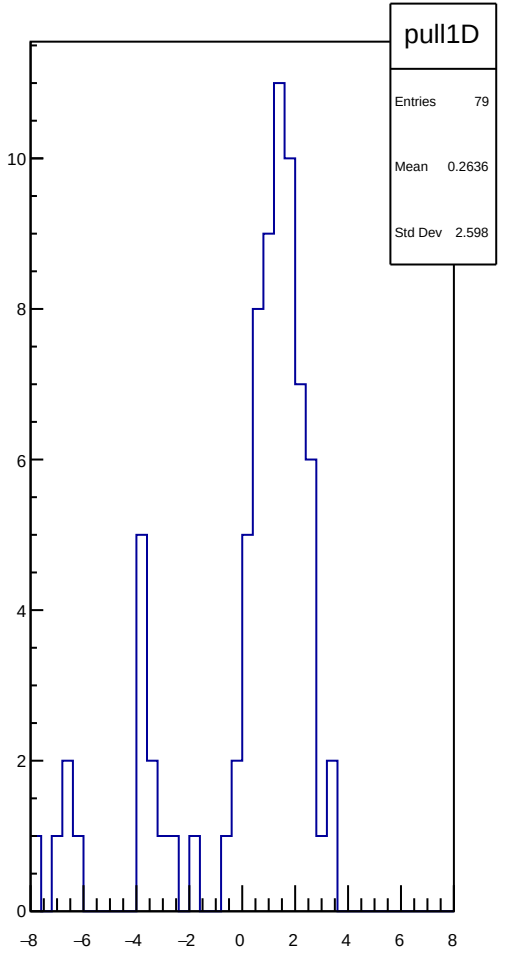

pull1D
Entries 79
Mean 0.3473
Std Dev 4.34
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

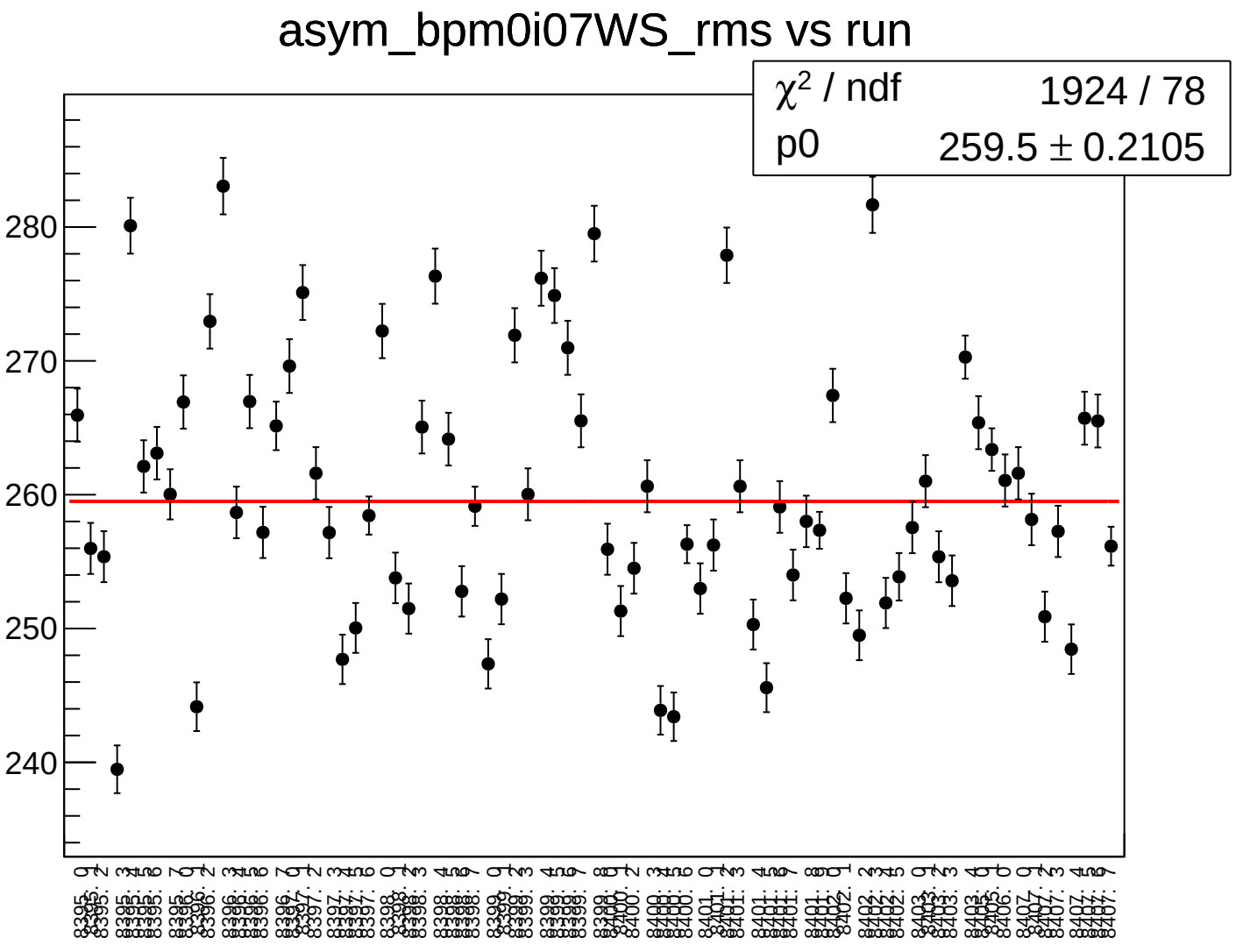

asym_bpm0i02aWS_rms vs run
χ² / ndf 3094 / 78
p0 221.9 ± 0.1801
260
250
240
230
220
210
200

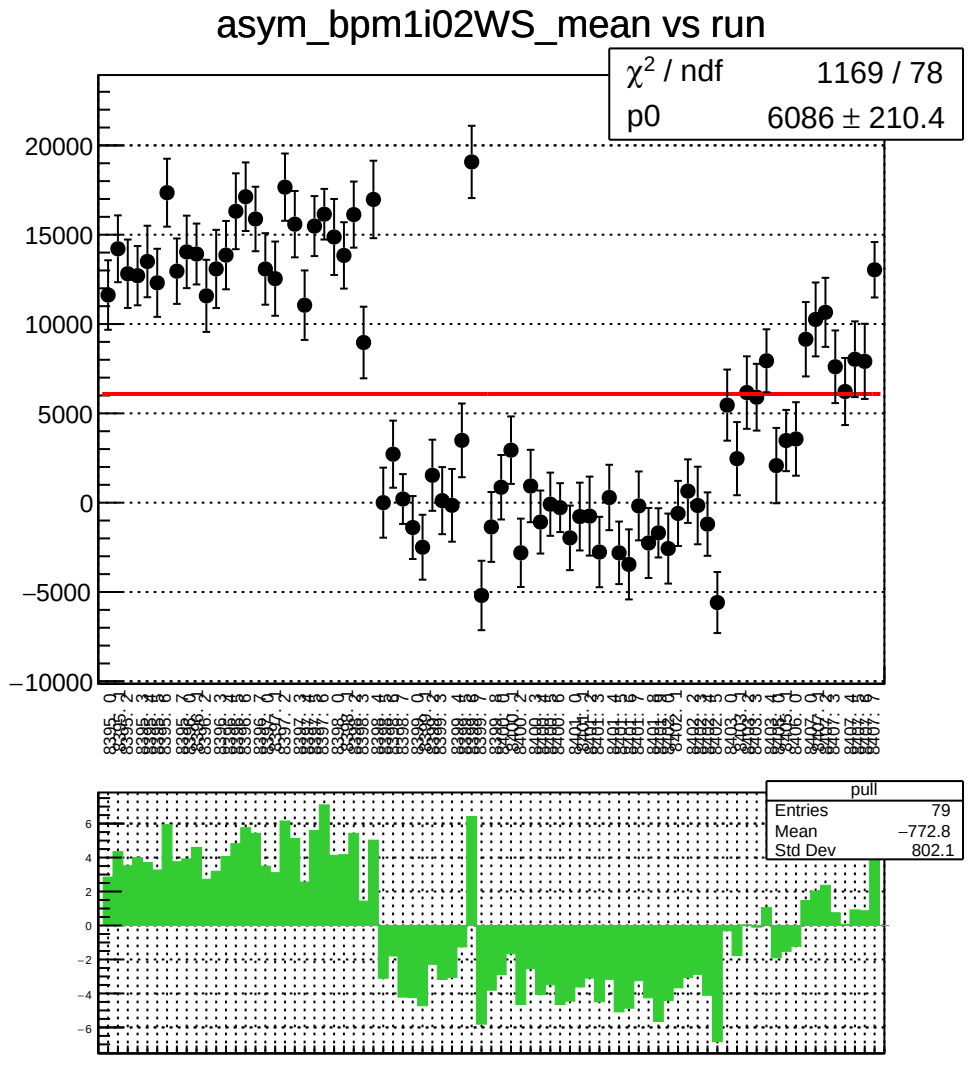

asym_bpm0i05WS_mean vs run
χ² / ndf 2329 / 78
p0 6576 ± 278.7
20000
10000
0
−10000
−20000
−30000
pull
Entries 79
Mean 3.602e+04
Std Dev 3.597e+04
5
0
−5
−10
−15
pull1D
Entries 79
Mean 1.875
Std Dev 2.776
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

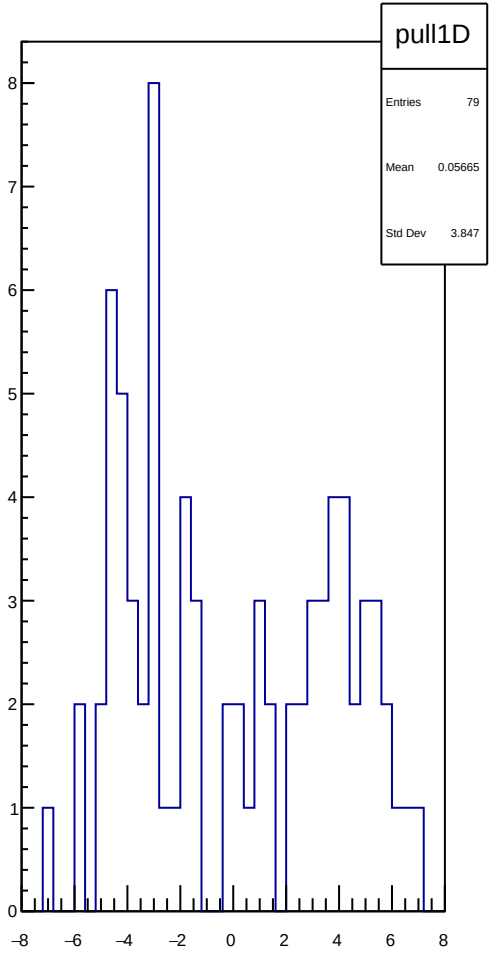

asym_bpm0i05WS_rms vs run
χ² / ndf 3445 / 78
p0 242.8 ± 0.1971
280
270
260
250
240
230
220

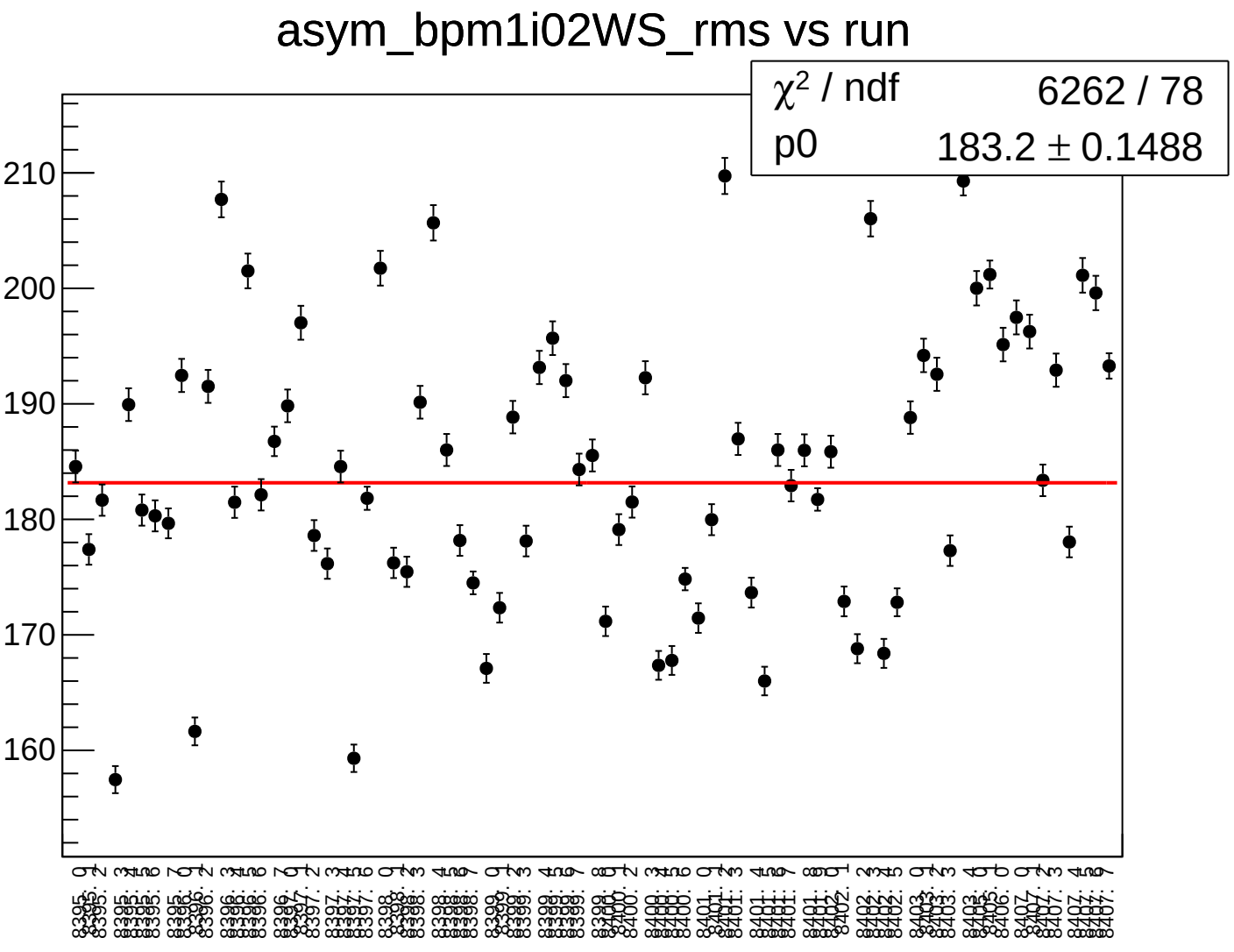

asym_bpm0i07WS_mean vs run
χ² / ndf 704.2 / 78
p0 7336 ± 297.7
pull
Entries 79
Mean −2346
Std Dev 2393

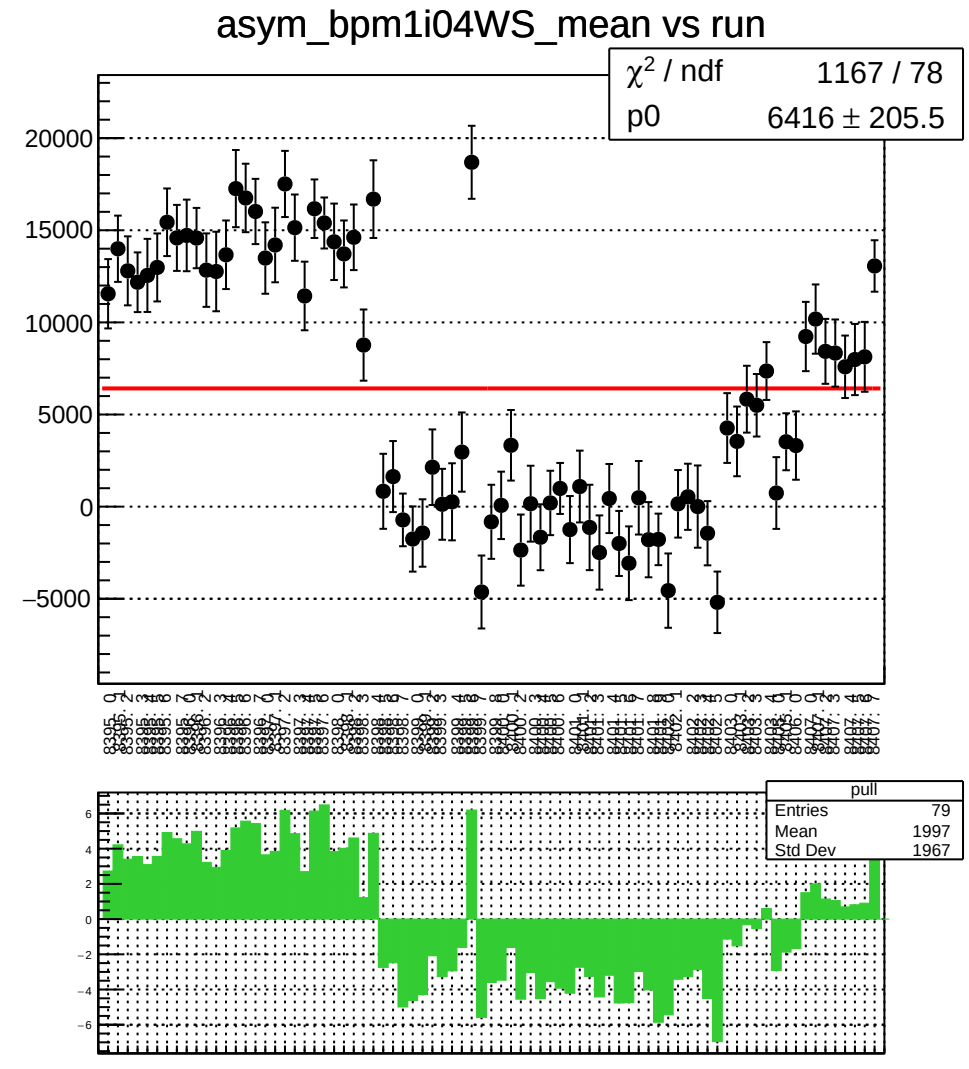

pull1D
Entries 79
Mean 0.2636
Std Dev 2.598

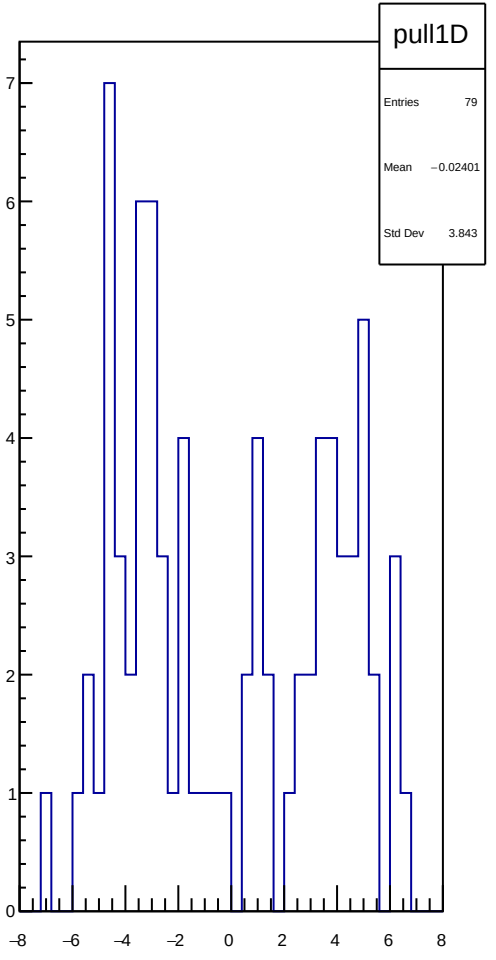

asym_bpm0i07WS_rms vs run
χ² / ndf 1924 / 78
p0 259.5 ± 0.2105
280
270
260
250
240

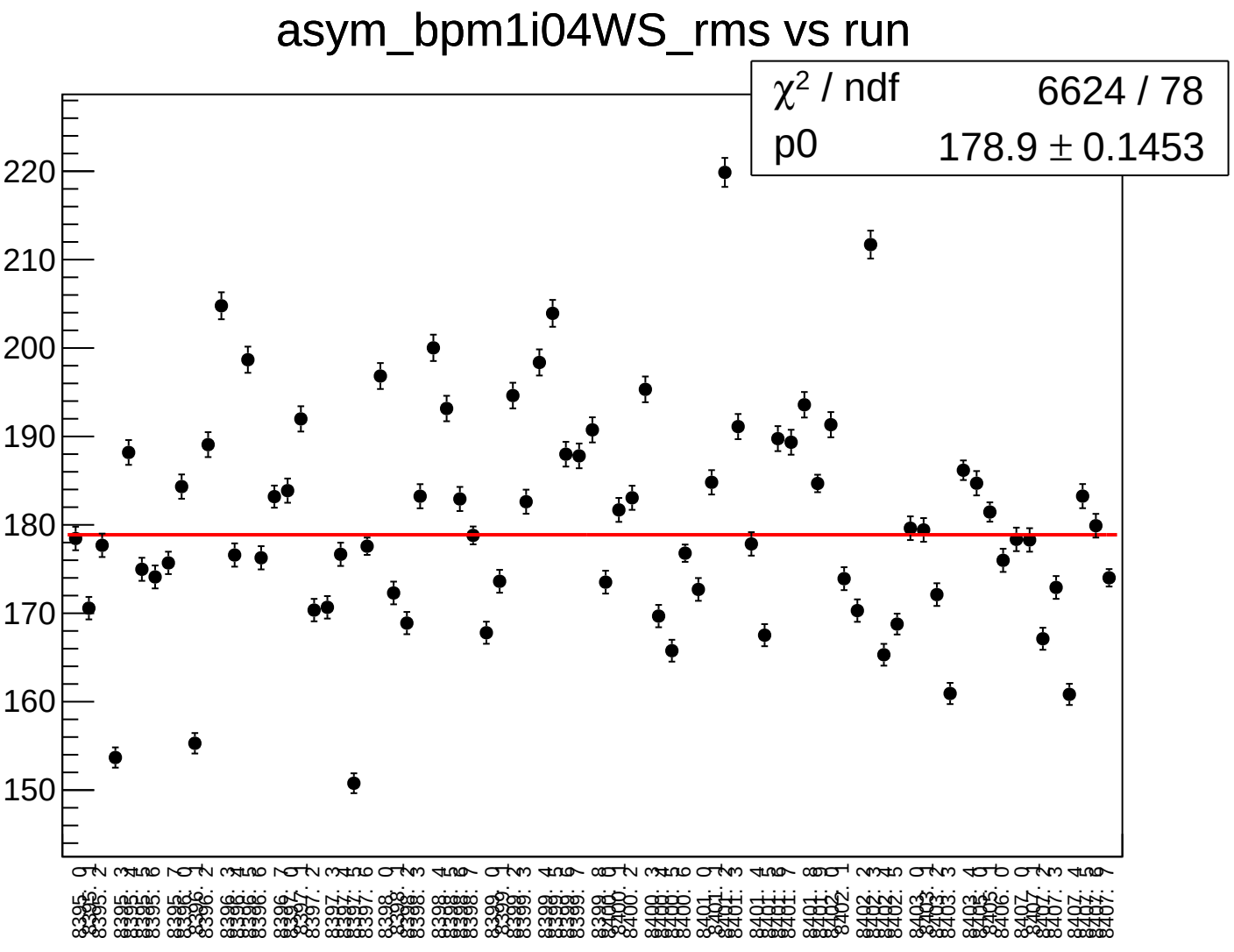

asym_bpm1i02WS_mean vs run
χ² / ndf 1169 / 78
p0 6086 ± 210.4
pull
Entries 79
Mean −772.8
Std Dev 802.1

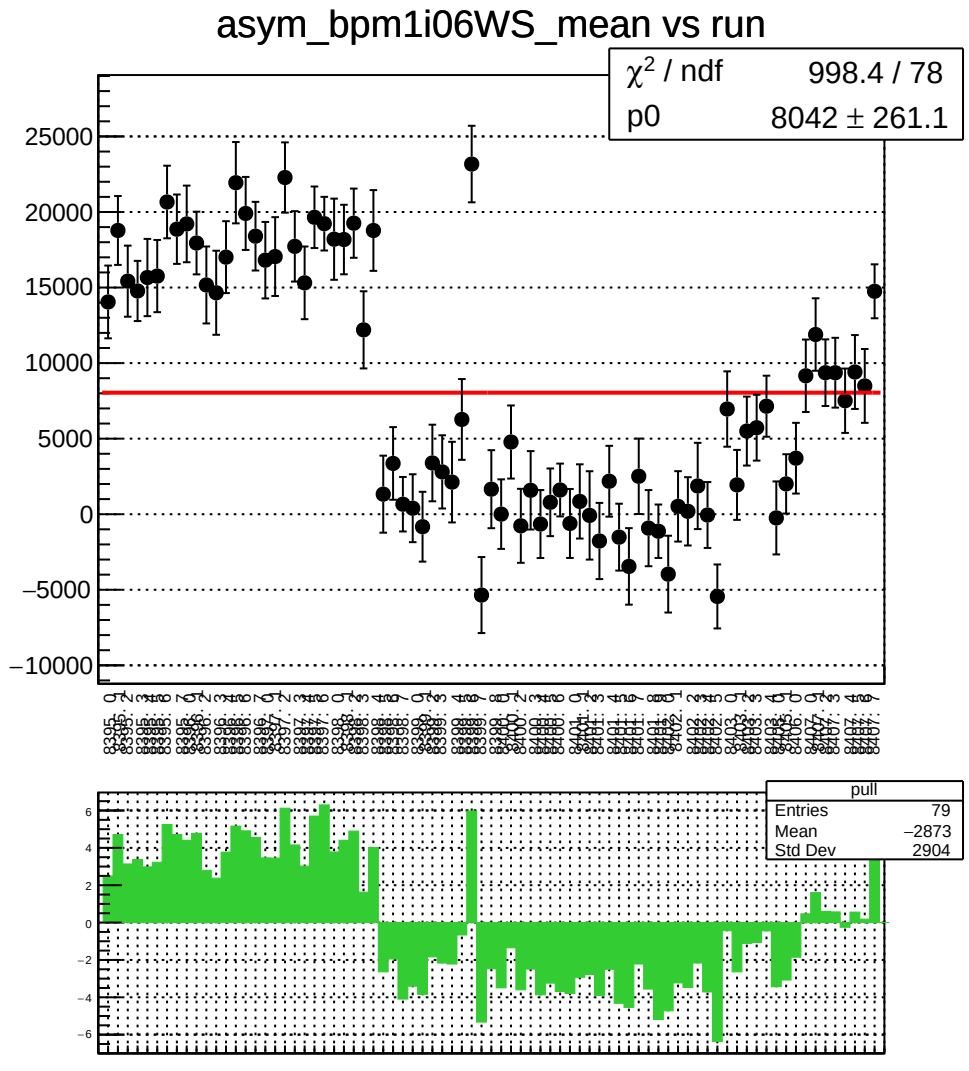

pull1D
Entries 79
Mean 0.05665
Std Dev 3.847

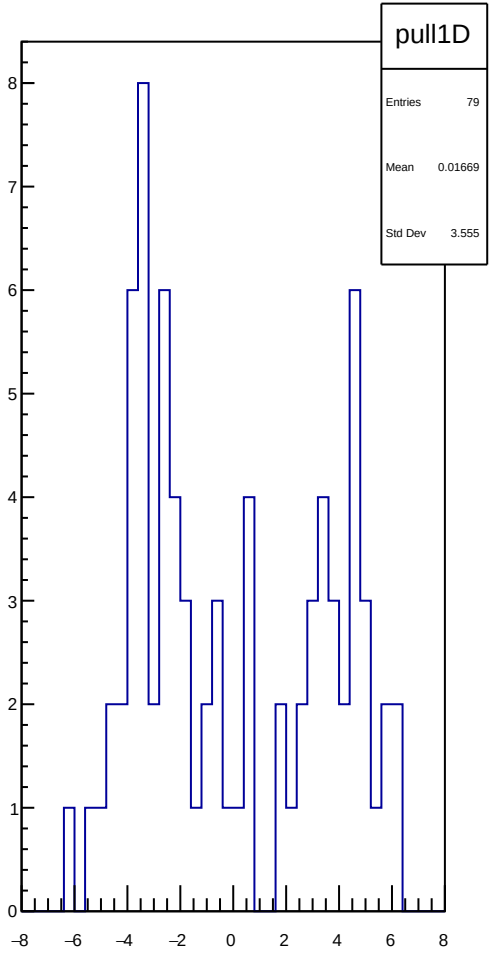

asym_bpm1i02WS_rms vs run
χ² / ndf 6262 / 78
p0 183.2 ± 0.1488
210
200
190
180
170
160

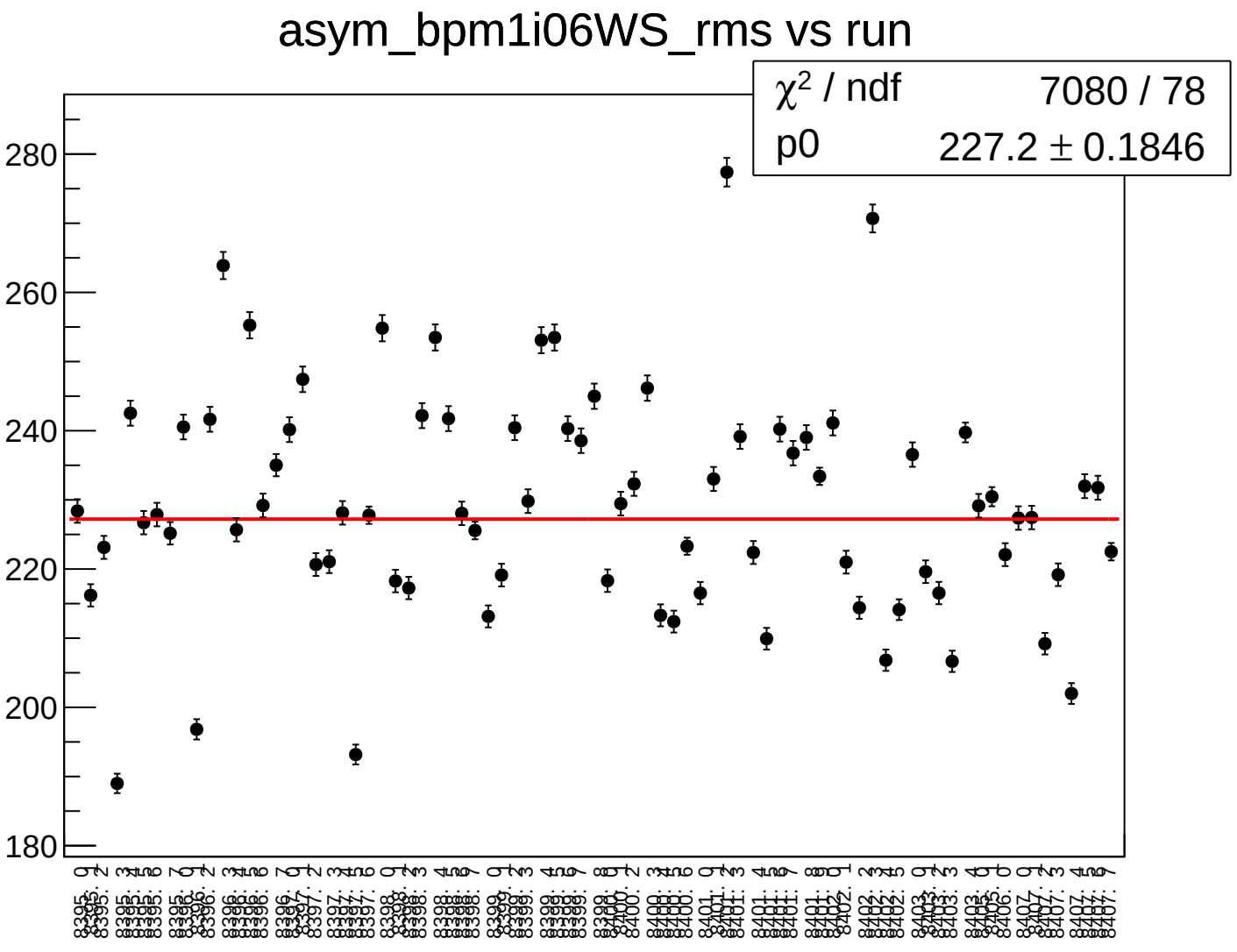

asym_bpm1i04WS_mean vs run
χ² / ndf 1167 / 78
p0 6416 ± 205.5
20000
15000
10000
5000
0
−5000
pull
Entries 79
Mean 1997
Std Dev 1967
6
4
2
0
−2
−4
−6

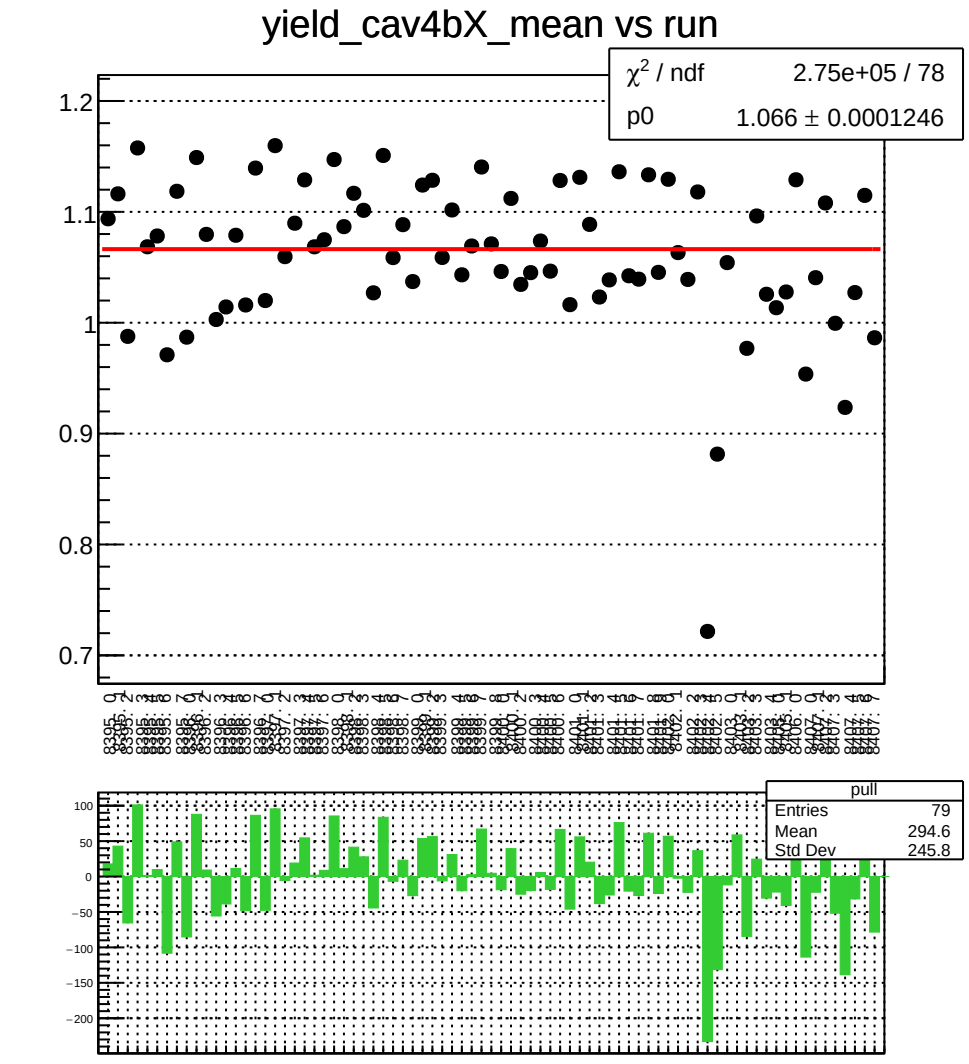

pull1D
Entries 79
Mean −0.02401
Std Dev 3.843
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

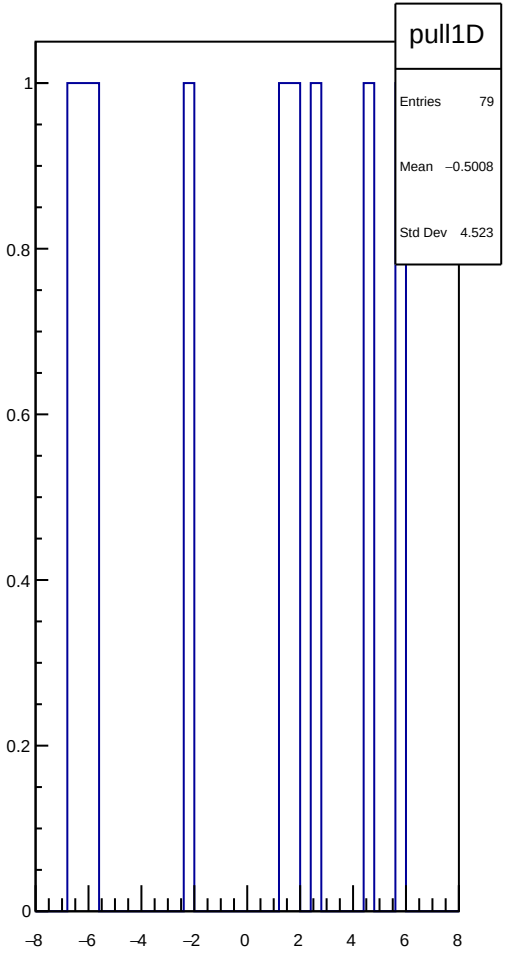

asym_bpm1i04WS_rms vs run
χ² / ndf 6624 / 78
p0 178.9 ± 0.1453
220
210
200
190
180
170
160
150

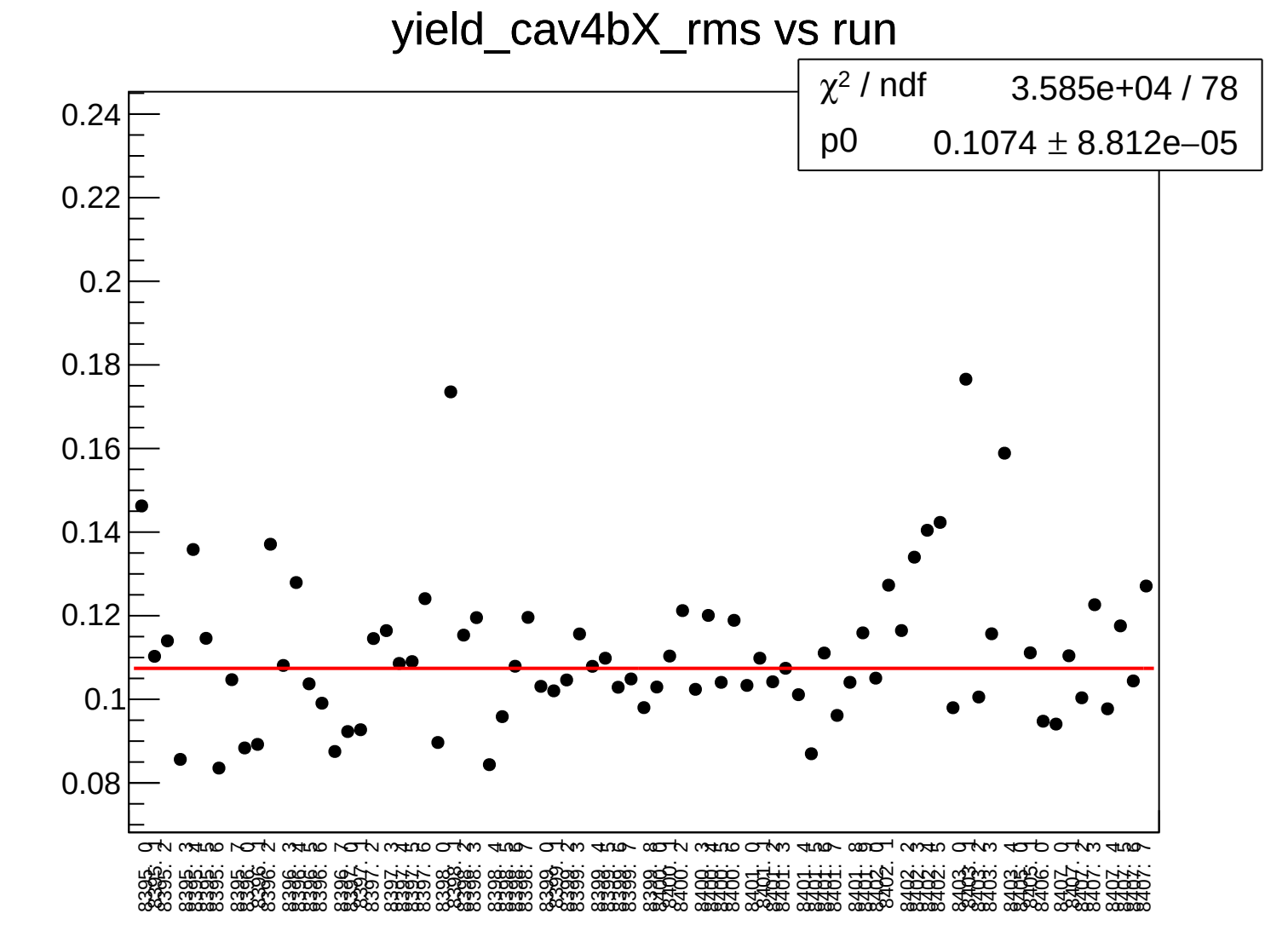

asym_bpm1i06WS_mean vs run
χ² / ndf 998.4 / 78
p0 8042 ± 261.1
pull
Entries 79
Mean −2873
Std Dev 2904

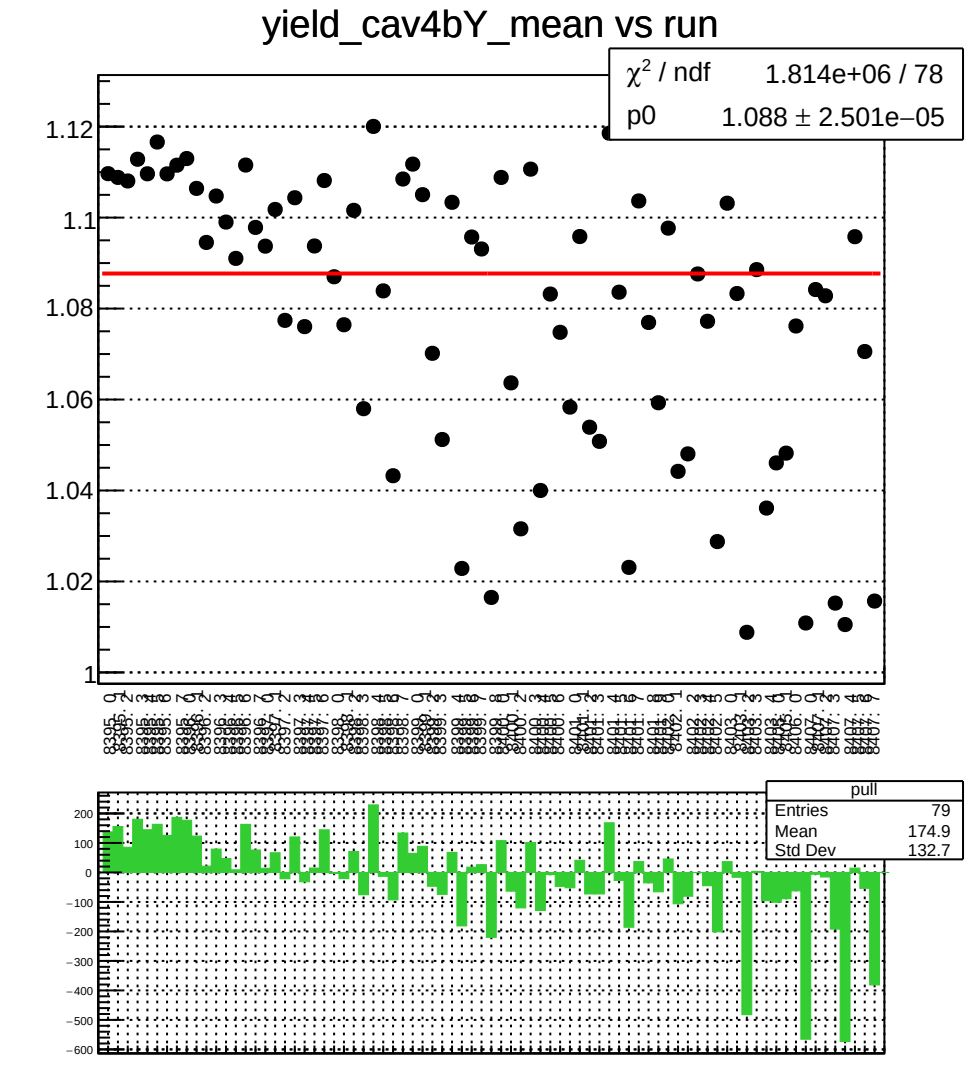

pull1D
Entries 79
Mean 0.01669
Std Dev 3.555

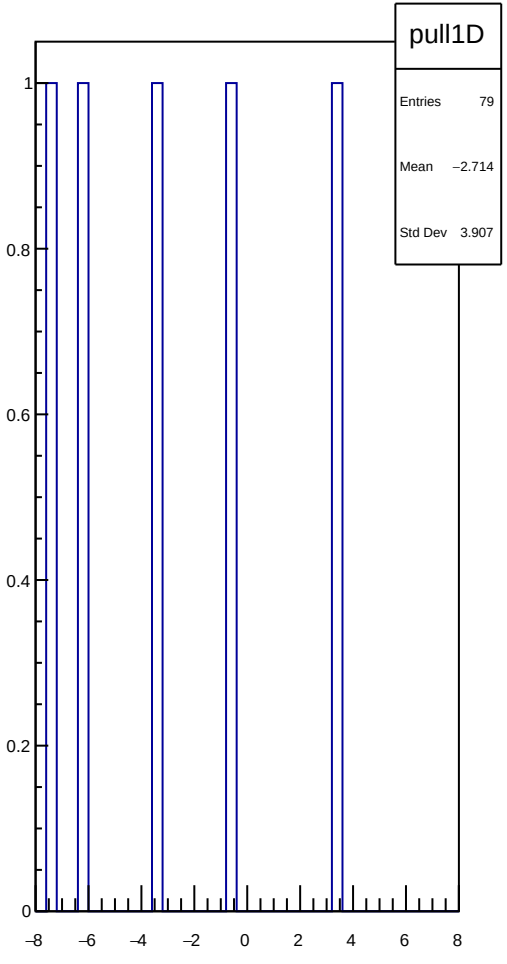

asym_bpm1i06WS_rms vs run
χ² / ndf 7080 / 78
p0 227.2 ± 0.1846
280
260
240
220
200
180

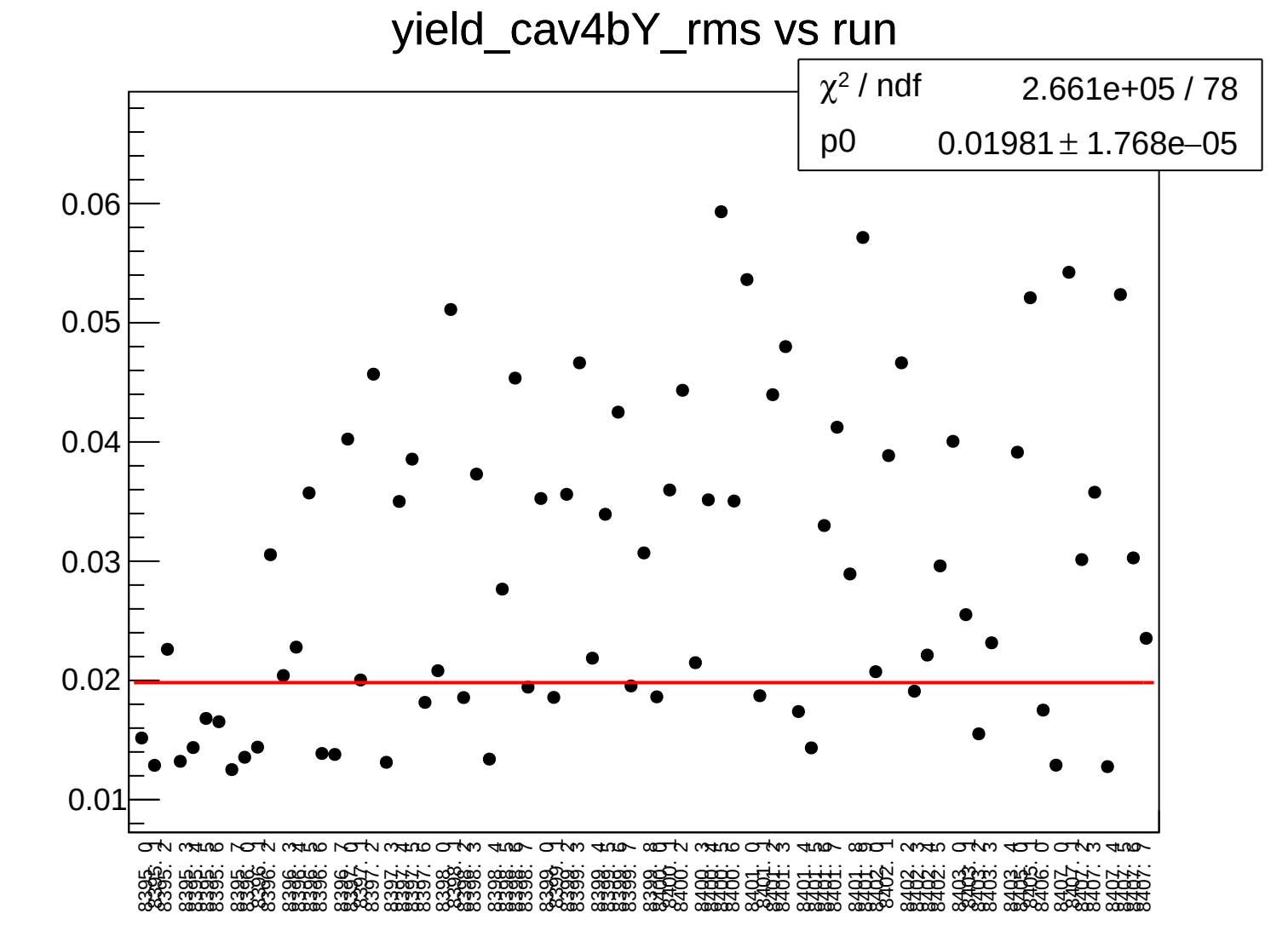

yield_cav4bX_mean vs run
χ² / ndf 2.75e+05 / 78
p0 1.066 ± 0.0001246
1.2
1.1
1
0.9
0.8
0.7
pull
Entries 79
Mean 294.6
Std Dev 245.8
100
50
0
−50
−100
−150
−200

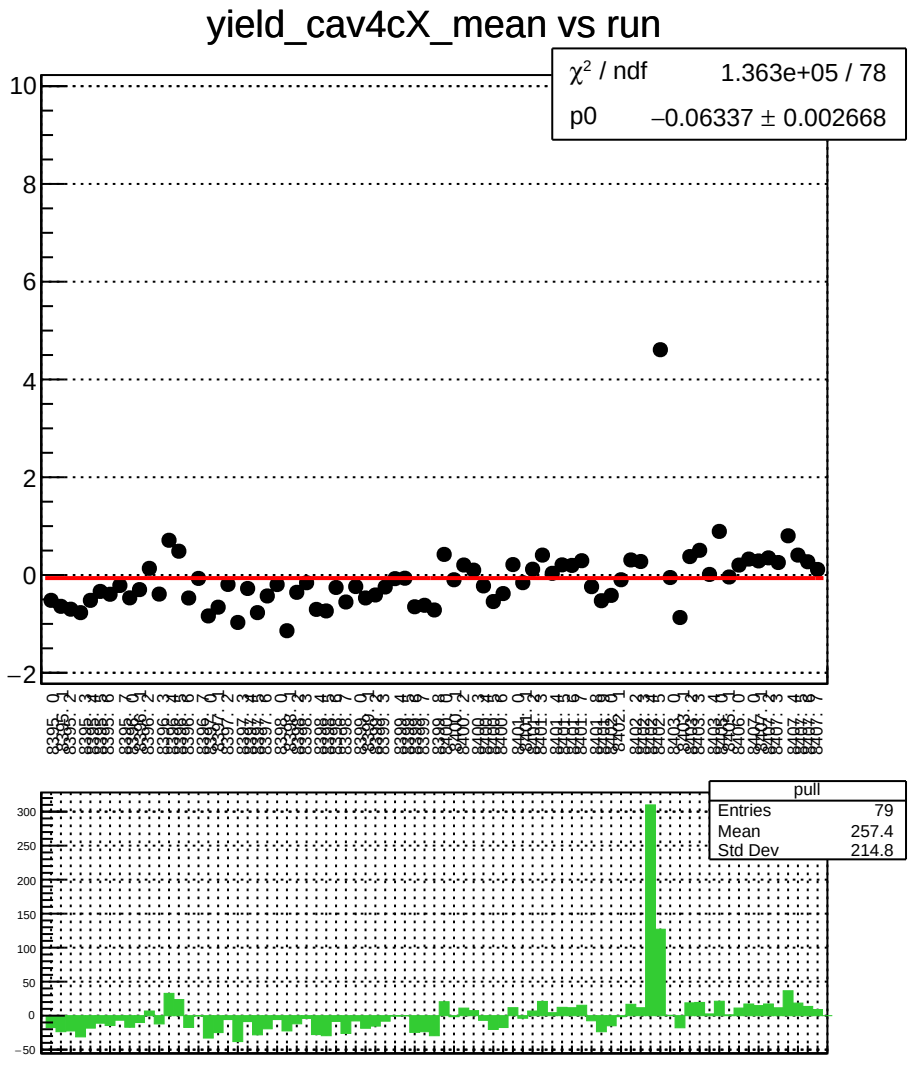

pull1D
Entries 79
Mean −0.5008
Std Dev 4.523
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

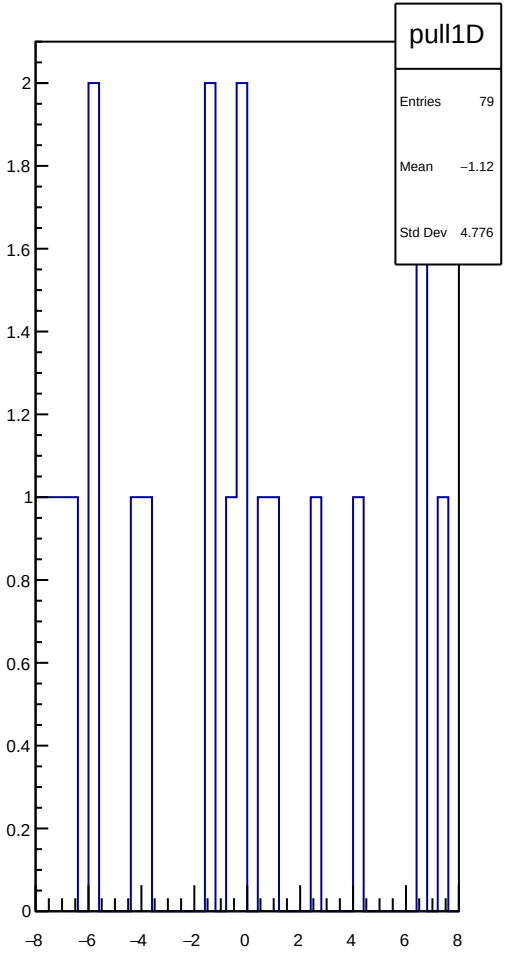

yield_cav4bX_rms vs run
χ² / ndf 3.585e+04 / 78
p0 0.1074 ± 8.812e−05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08

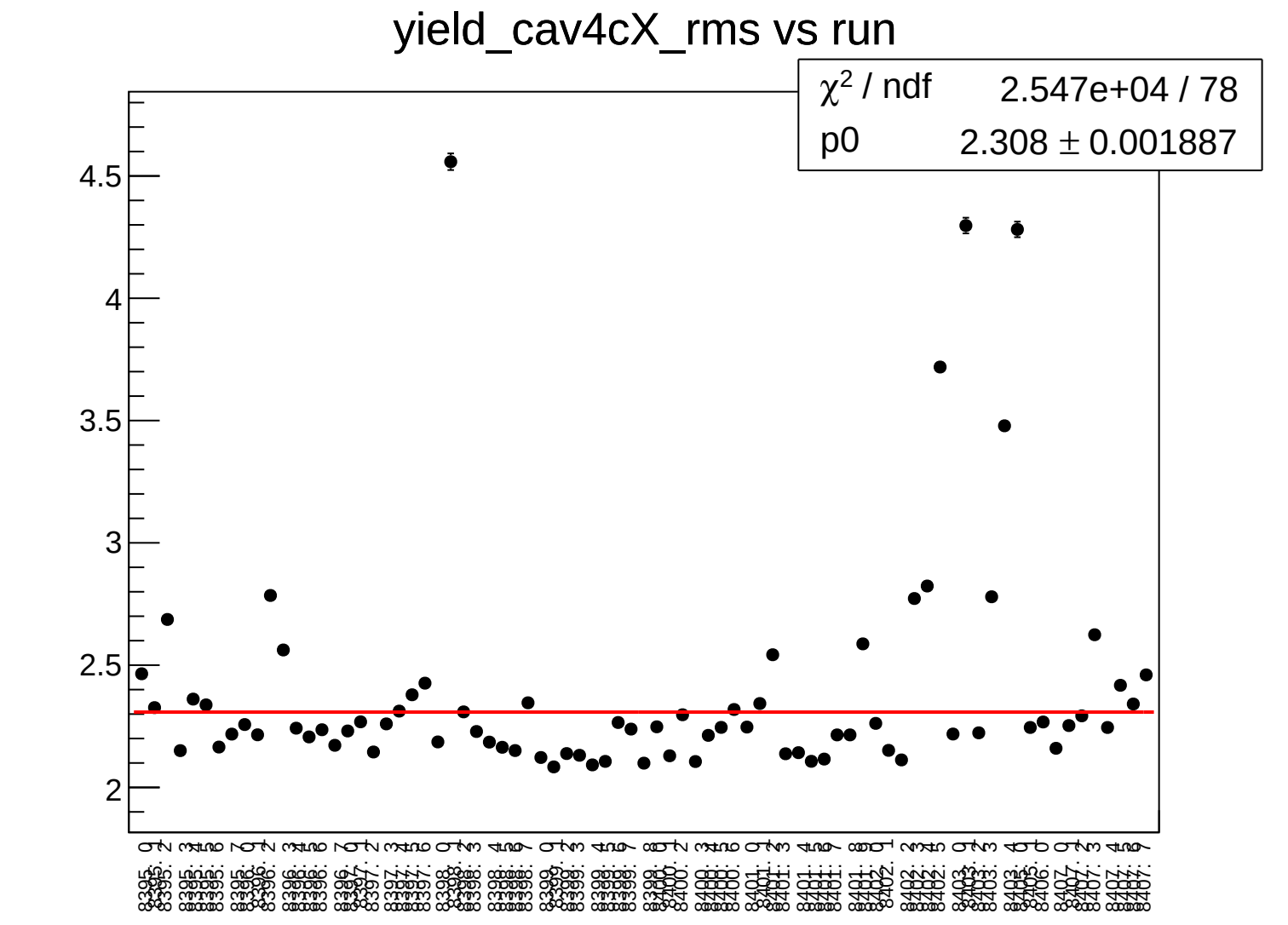

yield_cav4bY_mean vs run
χ² / ndf 1.814e+06 / 78
p0 1.088 ± 2.501e−05
1.12
1.1
1.08
1.06
1.04
1.02
1
pull
Entries 79
Mean 174.9
Std Dev 132.7
200
100
0
−100
−200
−300
−400
−500
−600

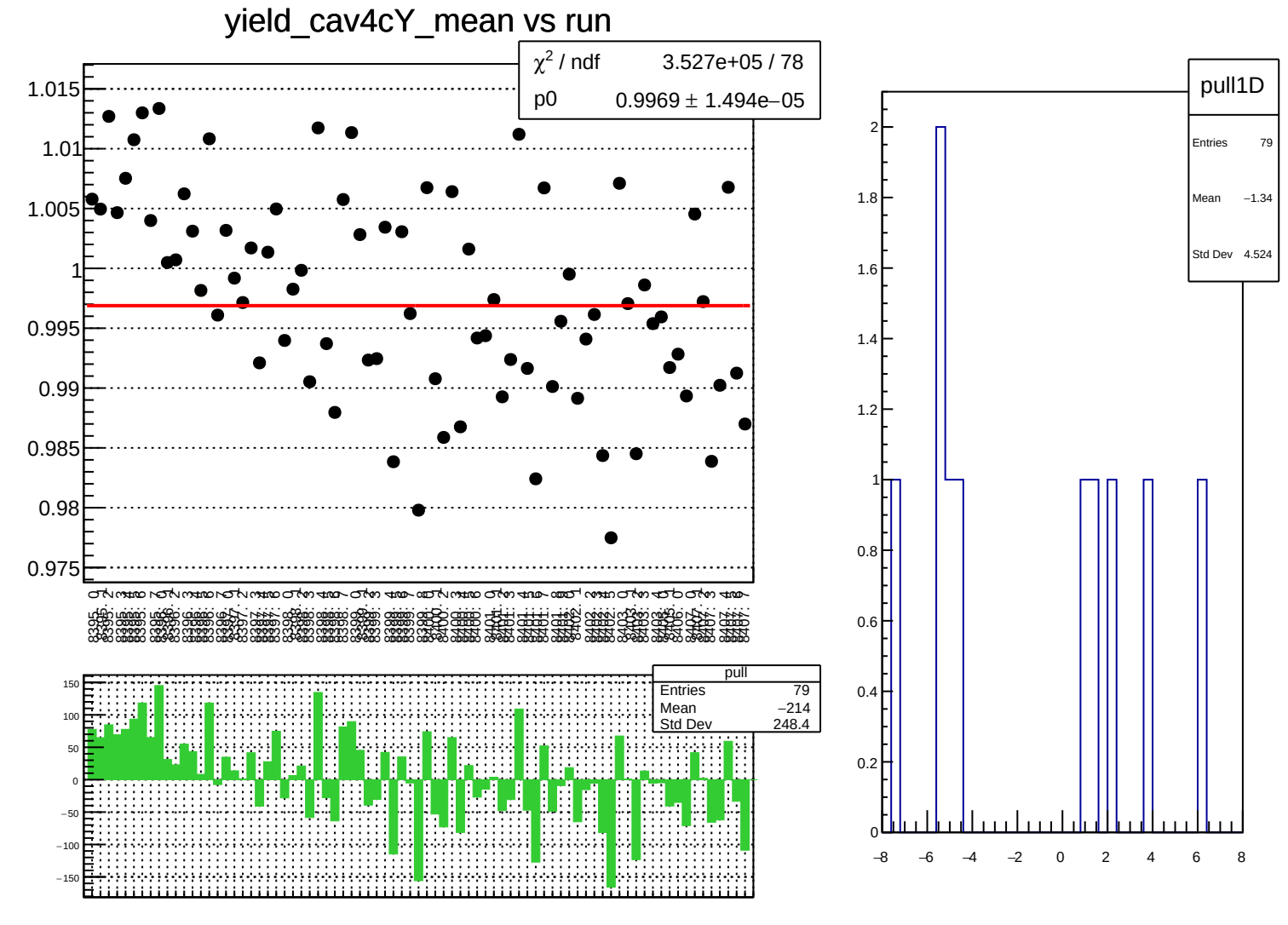

pull1D
Entries 79
Mean −2.714
Std Dev 3.907
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

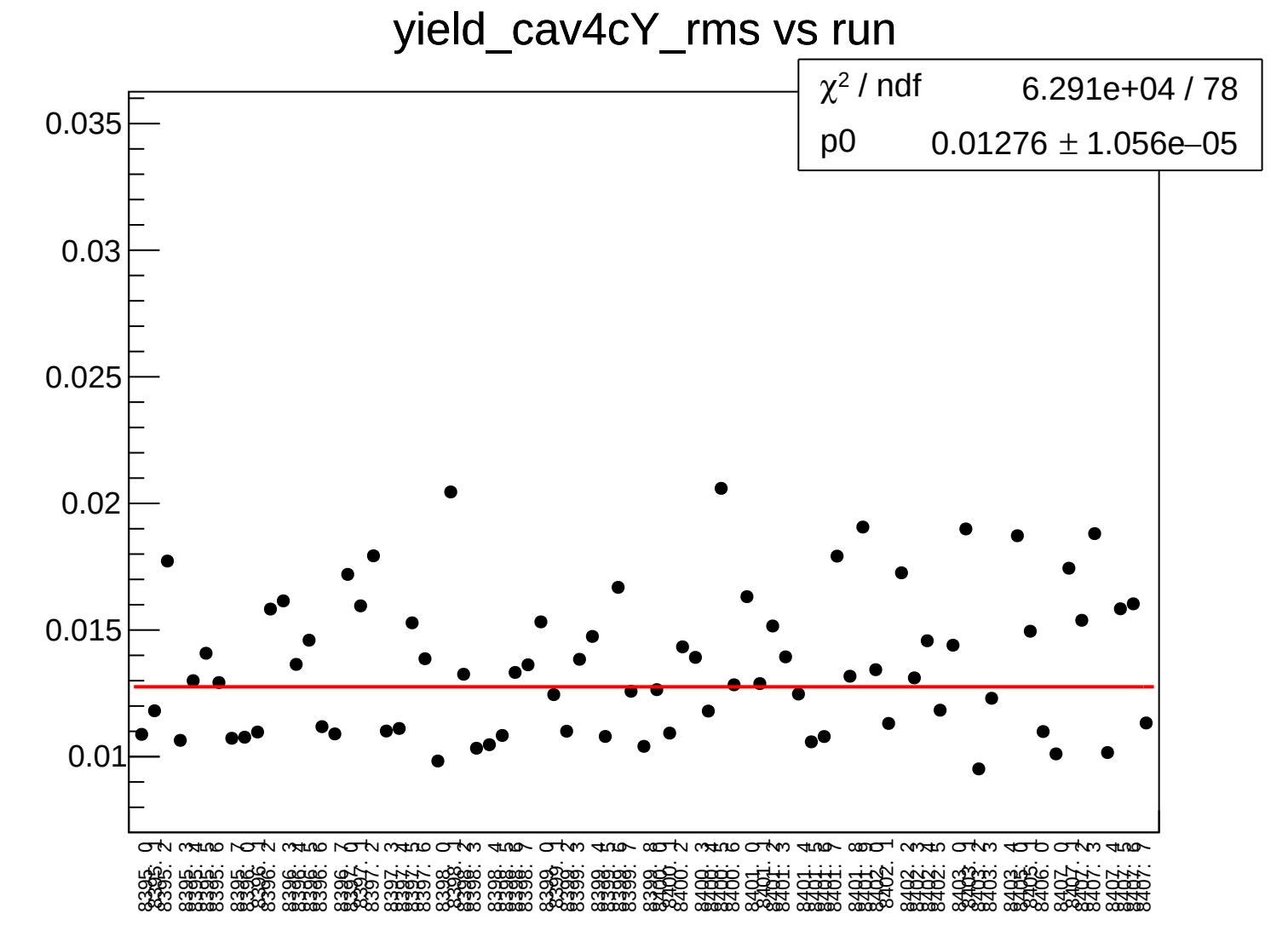

yield_cav4bY_rms vs run
χ² / ndf 2.661e+05 / 78
p0 0.01981 ± 1.768e–05
0.06
0.05
0.04
0.03
0.02
0.01

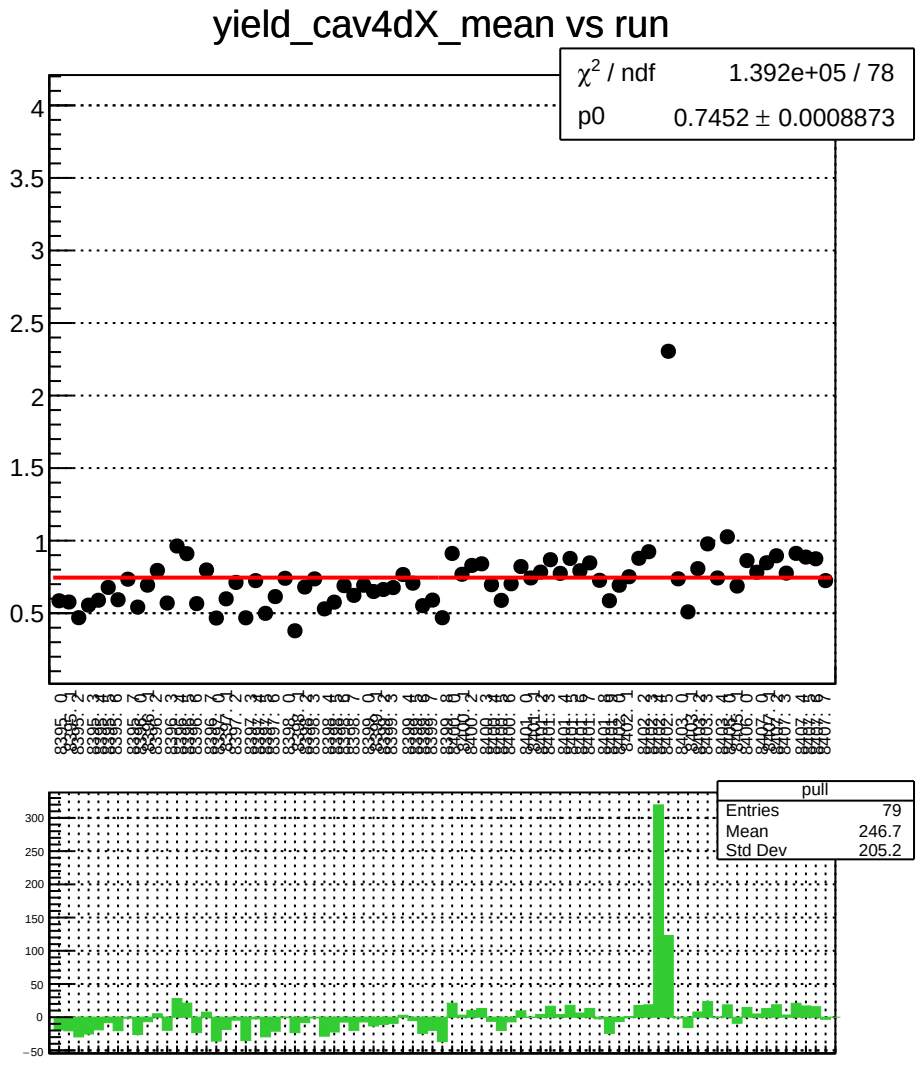

yield_cav4cX_mean vs run
χ² / ndf 1.363e+05 / 78
p0 −0.06337 ± 0.002668
pull
Entries 79
Mean 257.4
Std Dev 214.8

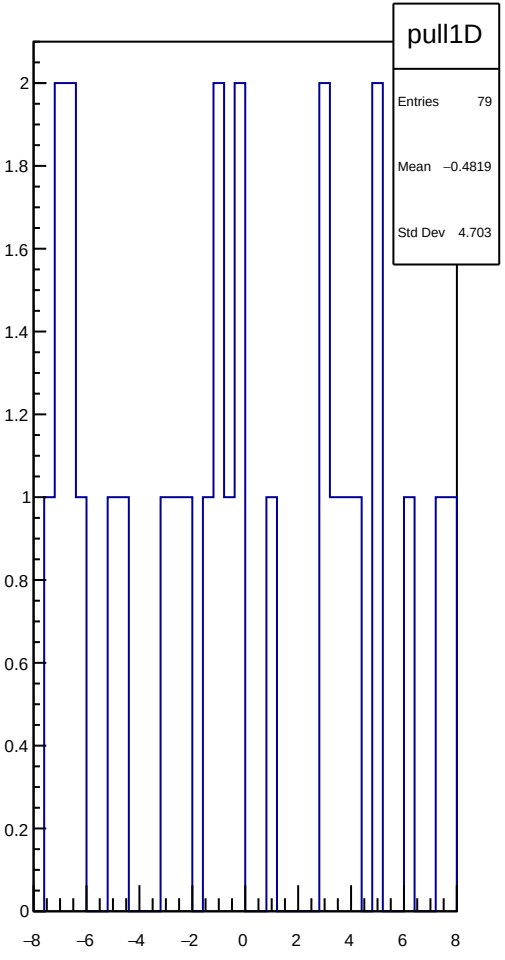

pull1D
Entries 79
Mean −1.12
Std Dev 4.776

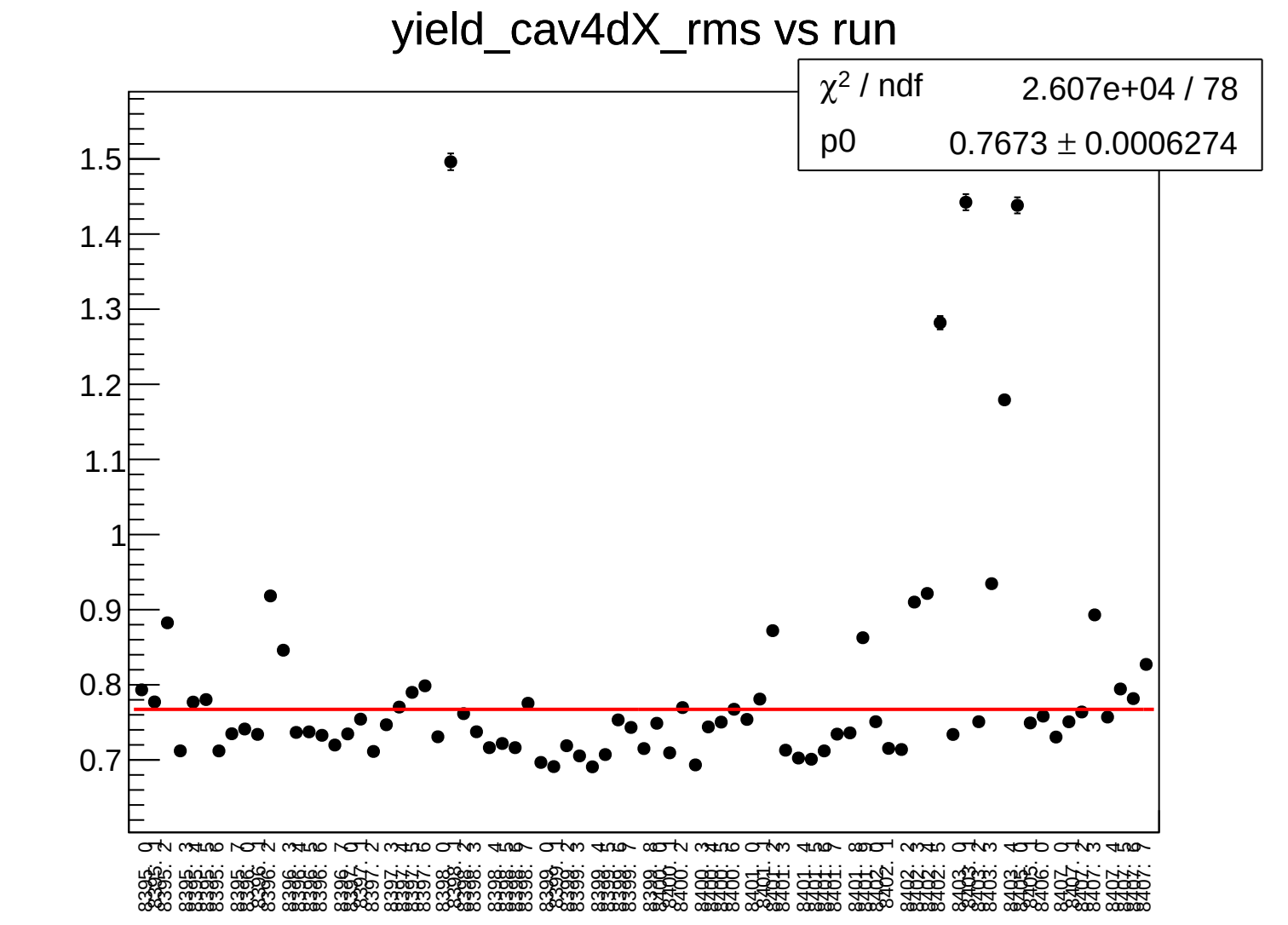

yield_cav4cX_rms vs run
χ² / ndf 2.547e+04 / 78
p0 2.308 ± 0.001887
4.5
4
3.5
3
2.5
2

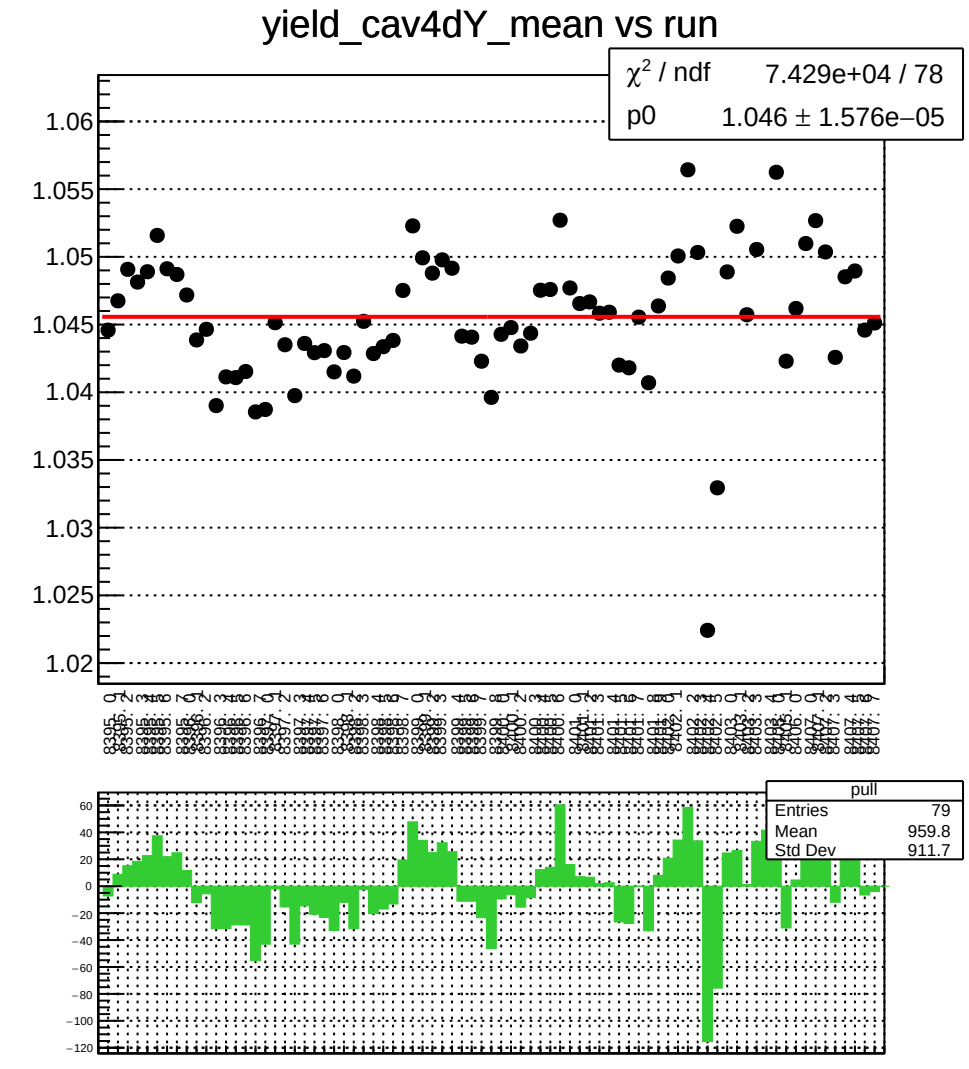

yield_cav4cY_mean vs run
χ² / ndf 3.527e+05 / 78
p0 0.9969 ± 1.494e−05
pull
Entries 79
Mean −214
Std Dev 248.4
pull1D
Entries 79
Mean −1.34
Std Dev 4.524

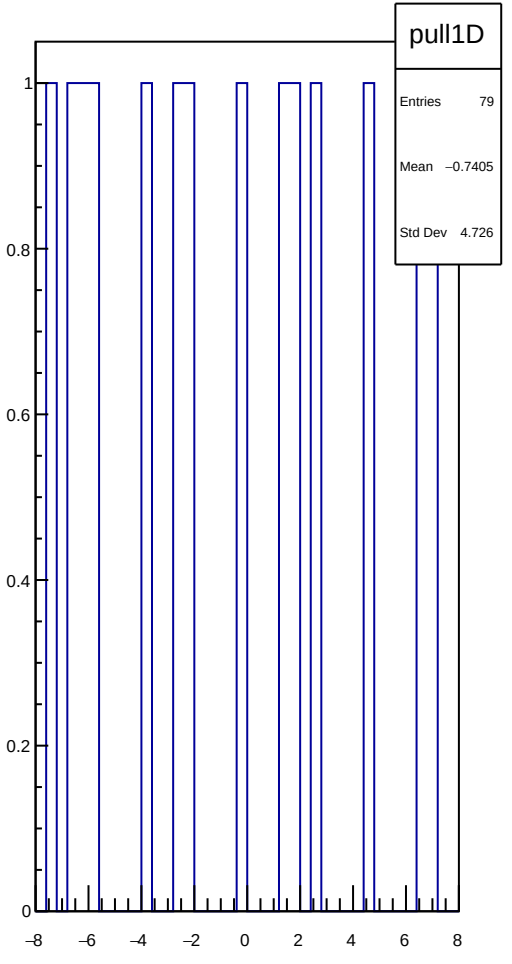

yield_cav4cY_rms vs run
χ² / ndf 6.291e+04 / 78
p0 0.01276 ± 1.056e−05
0.035
0.03
0.025
0.02
0.015
0.01

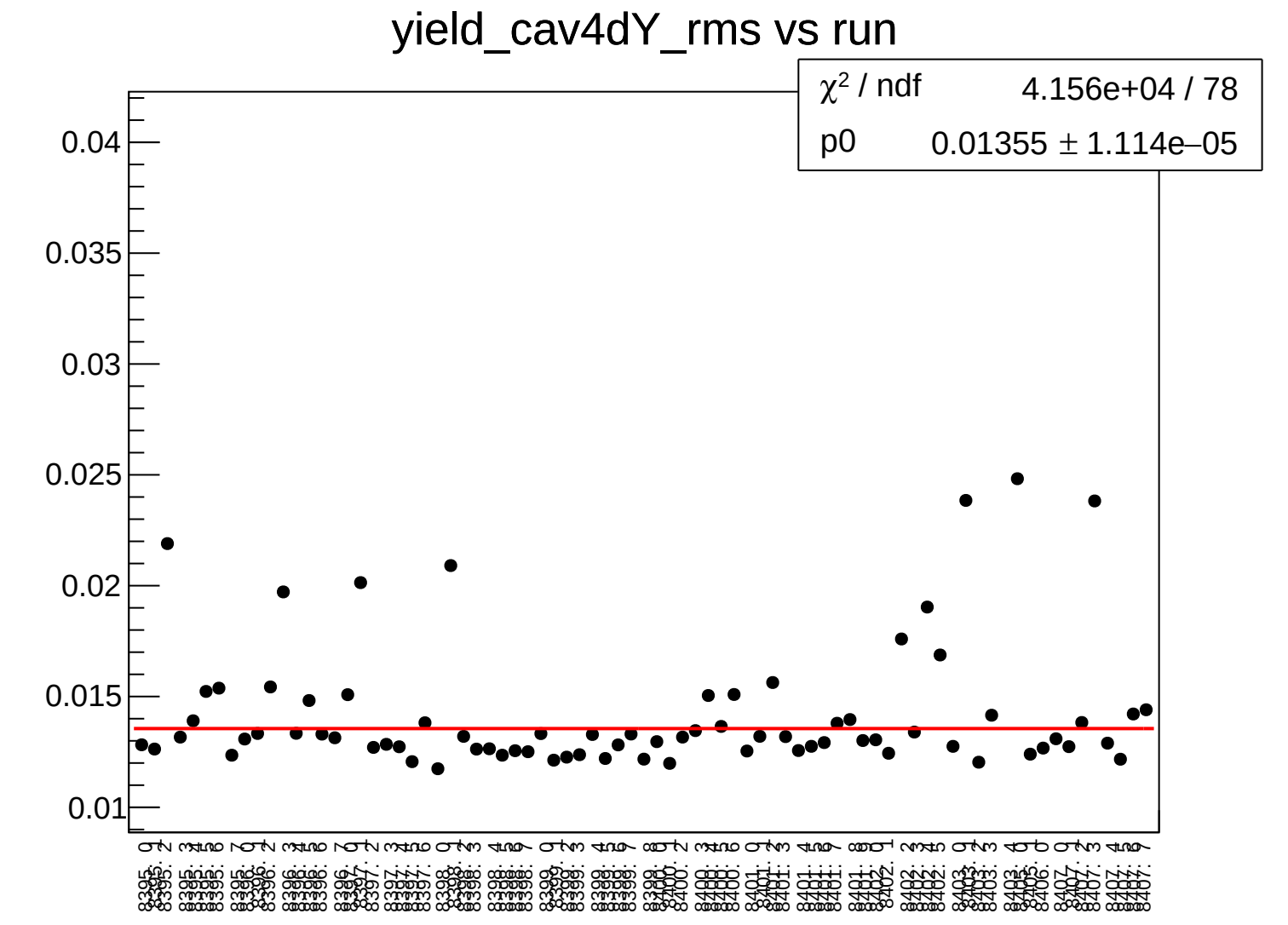

yield_cav4dX_mean vs run
χ² / ndf 1.392e+05 / 78
p0 0.7452 ± 0.0008873
pull
Entries 79
Mean 246.7
Std Dev 205.2

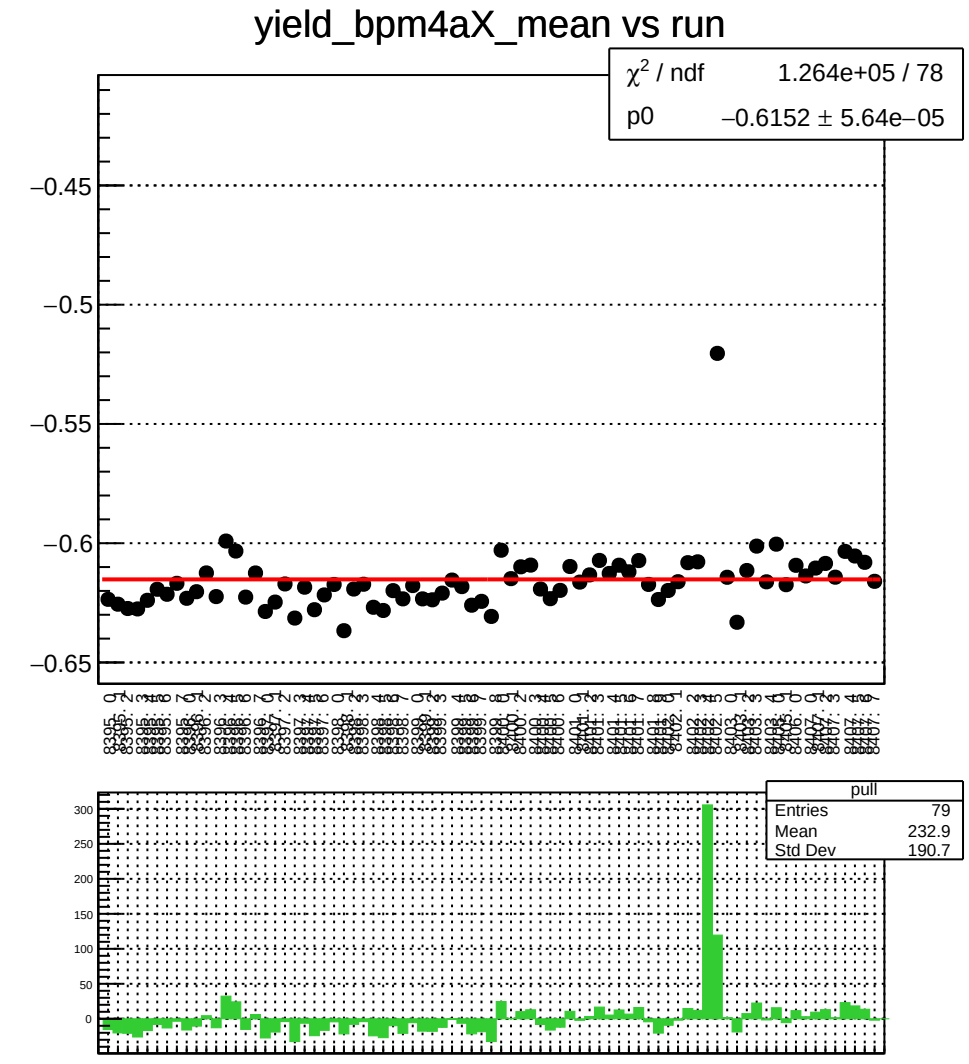

pull1D
Entries 79
Mean −0.4819
Std Dev 4.703

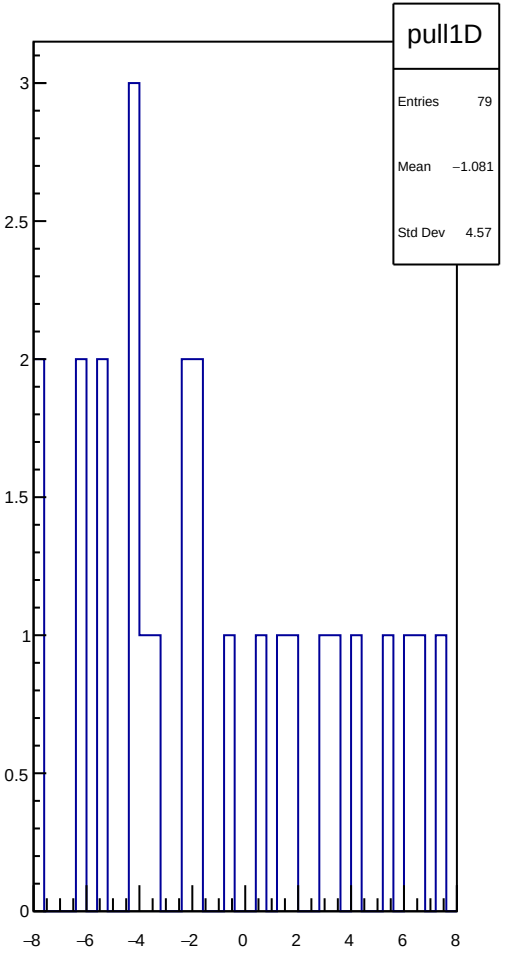

yield_cav4dX_rms vs run
χ² / ndf 2.607e+04 / 78
p0 0.7673 ± 0.0006274
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
0.7

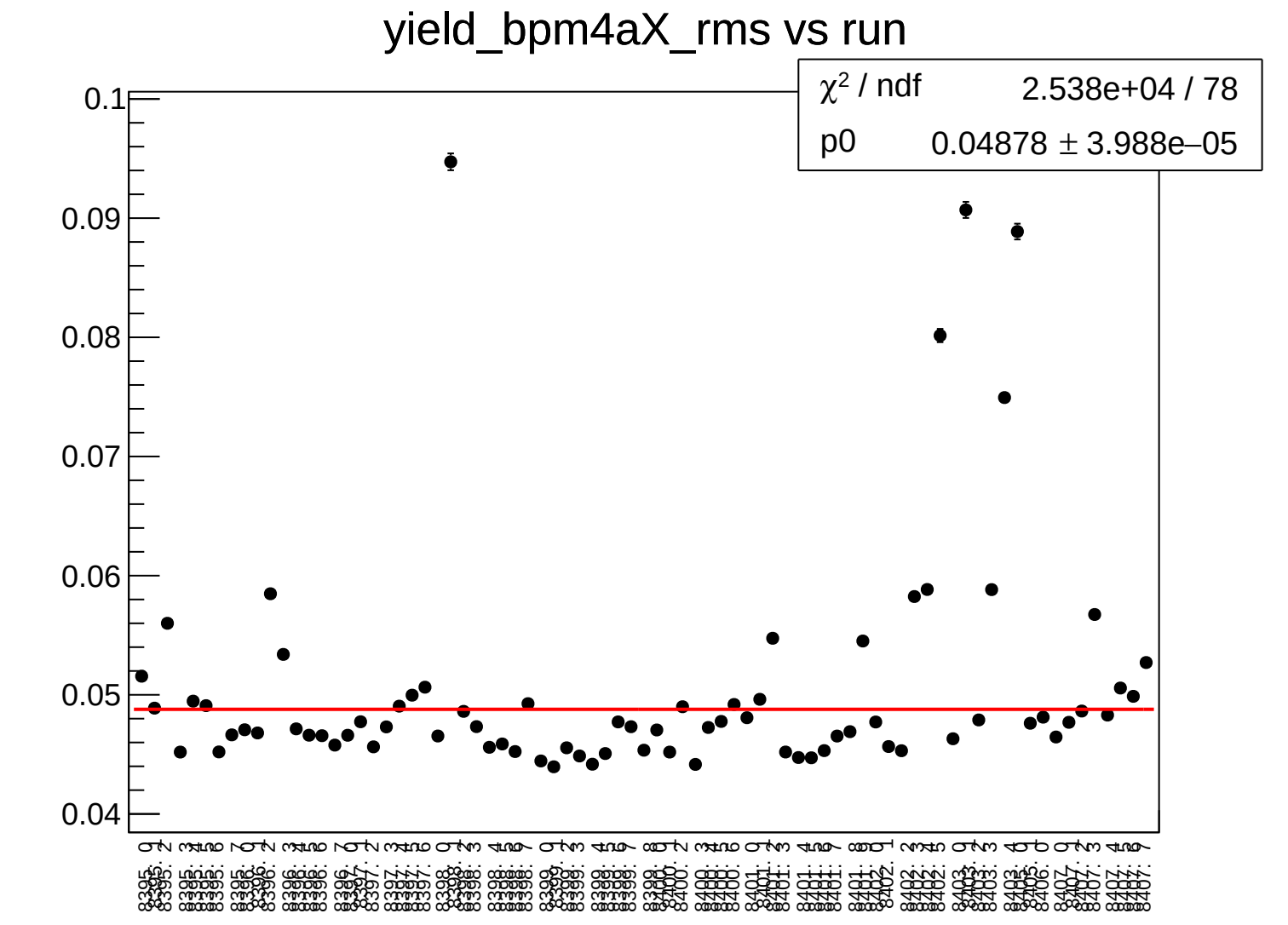

yield_cav4dY_mean vs run
χ² / ndf 7.429e+04 / 78
p0 1.046 ± 1.576e−05
1.06
1.055
1.05
1.045
1.04
1.035
1.03
1.025
1.02
pull
Entries 79
Mean 959.8
Std Dev 911.7
60
40
20
0
−20
−40
−60
−80
−100
−120

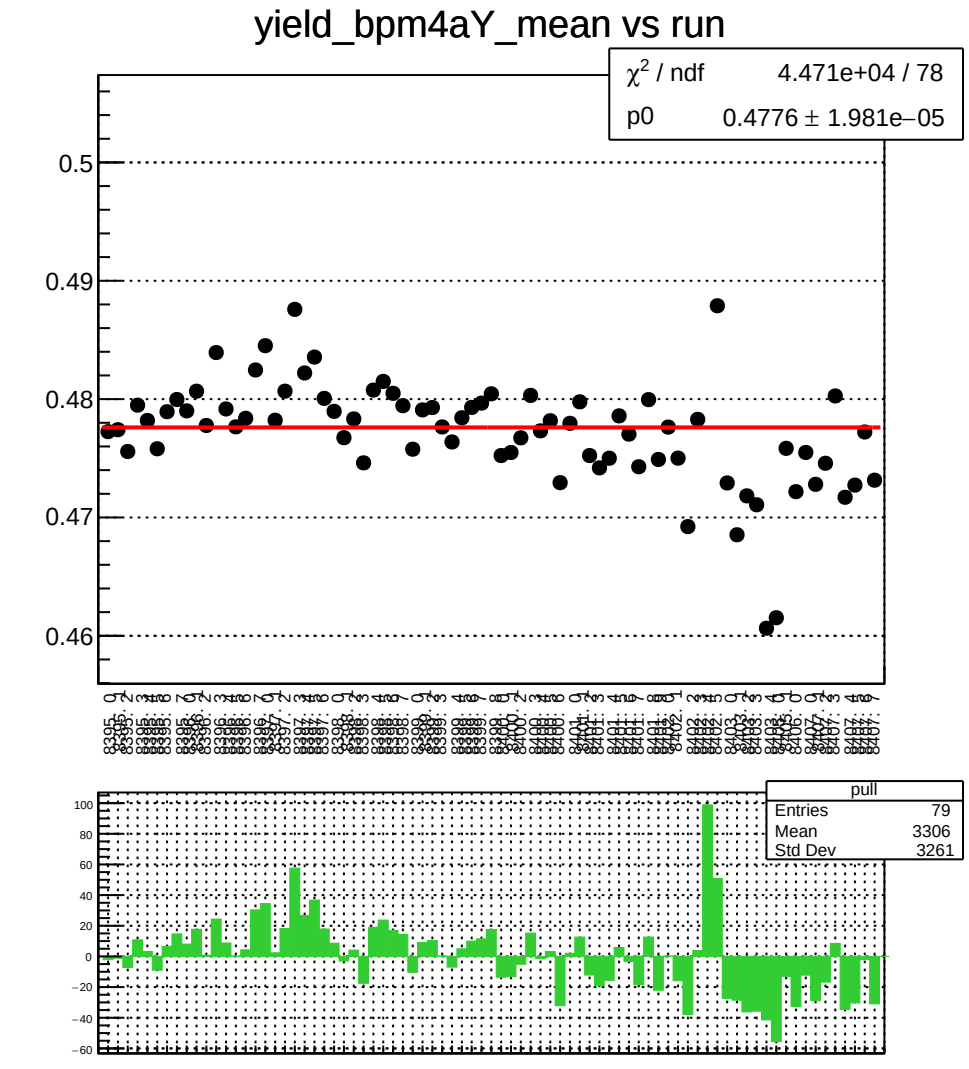

pull1D
Entries 79
Mean −0.7405
Std Dev 4.726
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

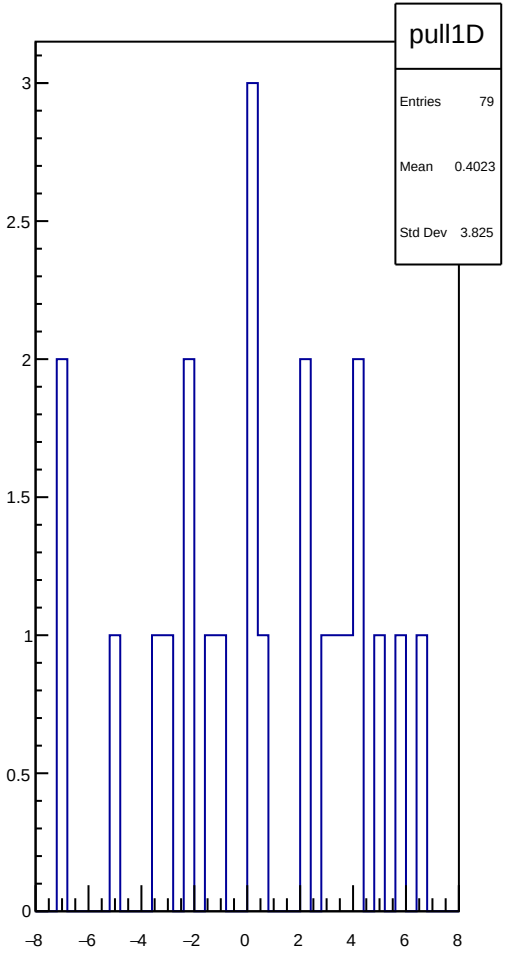

yield_cav4dY_rms vs run
χ² / ndf 4.156e+04 / 78
p0 0.01355 ± 1.114e–05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

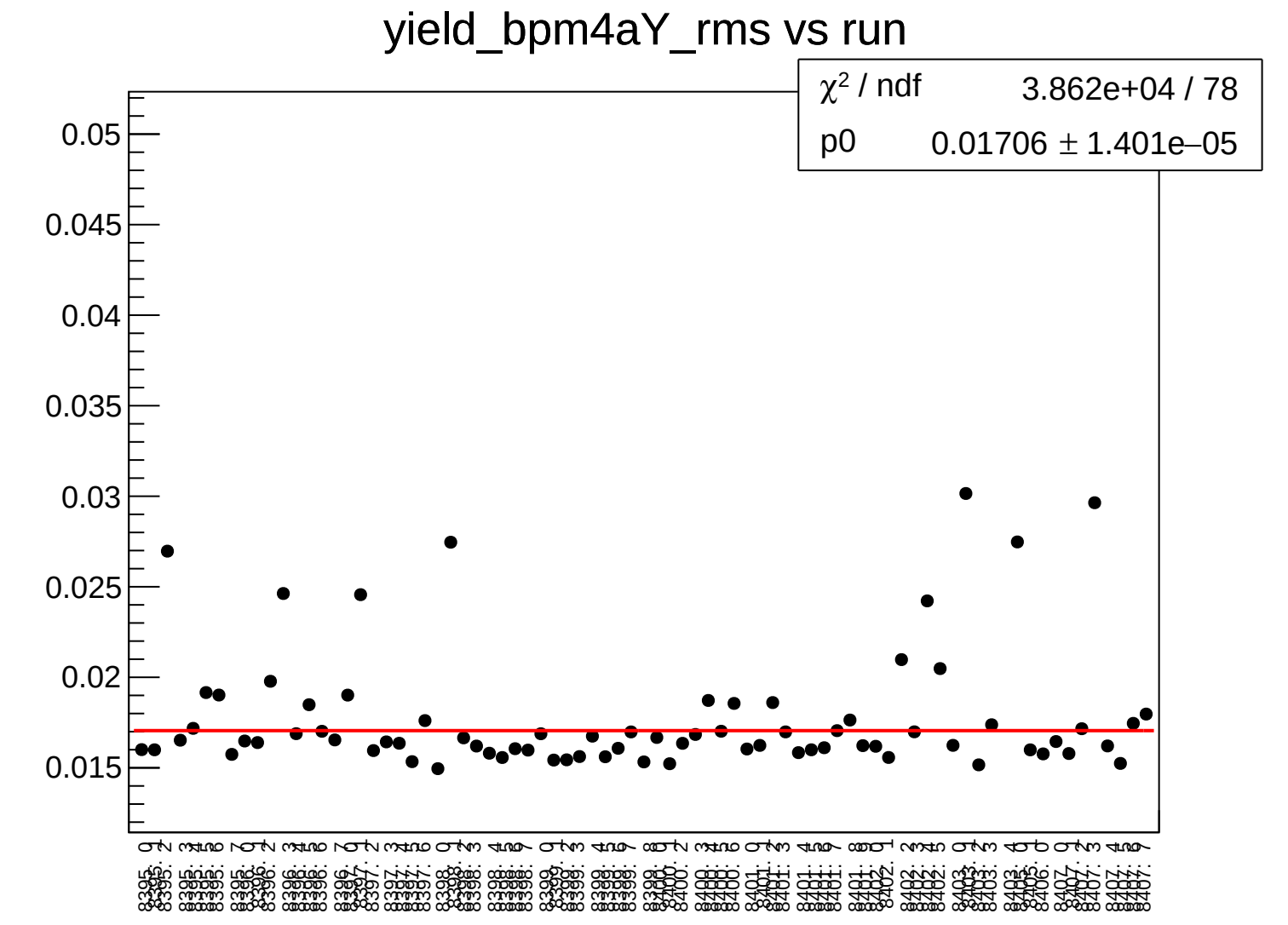

yield_bpm4aX_mean vs run
χ² / ndf 1.264e+05 / 78
p0 −0.6152 ± 5.64e−05
−0.45
−0.5
−0.55
−0.6
−0.65
pull
Entries 79
Mean 232.9
Std Dev 190.7
300
250
200
150
100
50
0

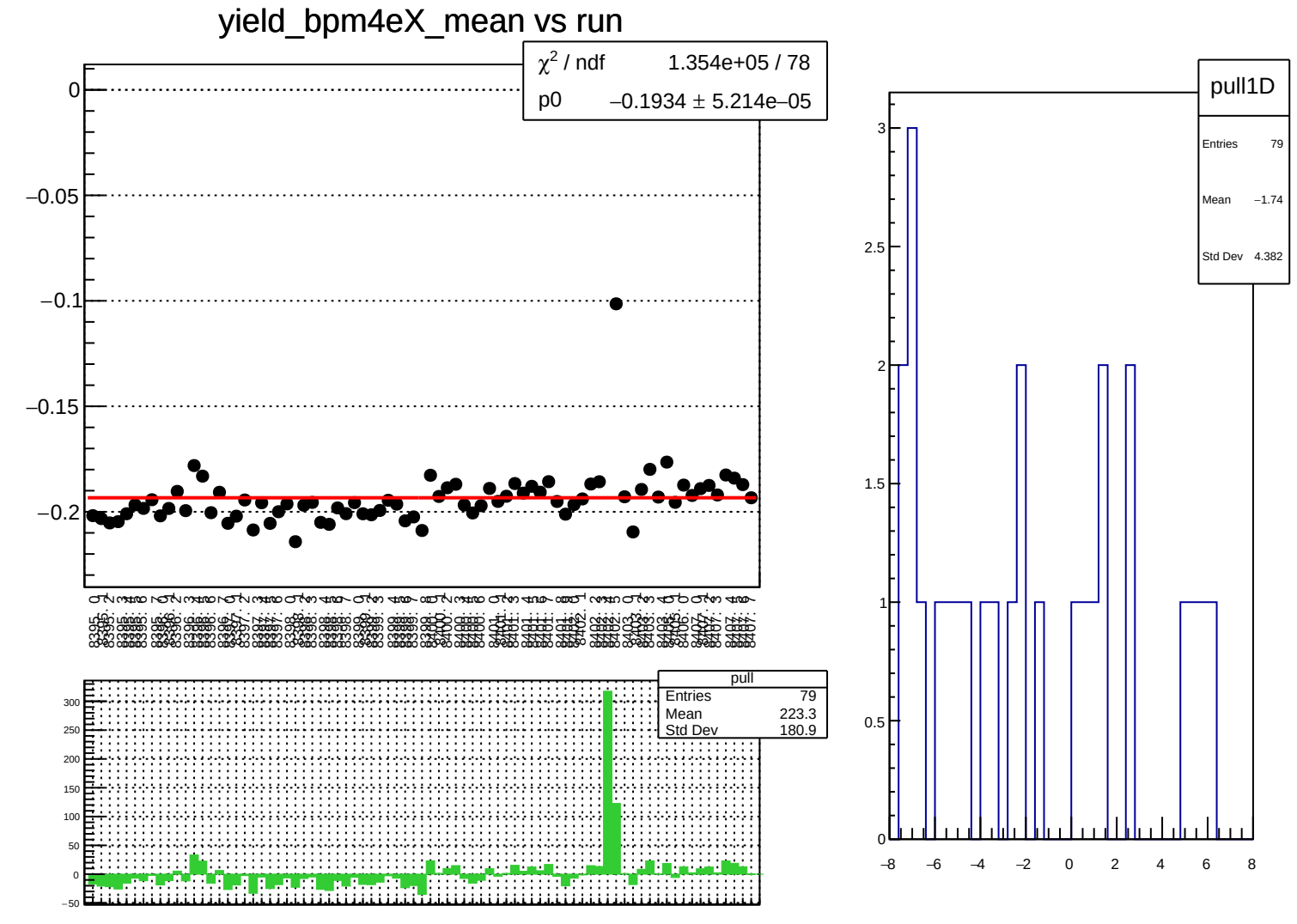

pull1D
Entries 79
Mean −1.081
Std Dev 4.57
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

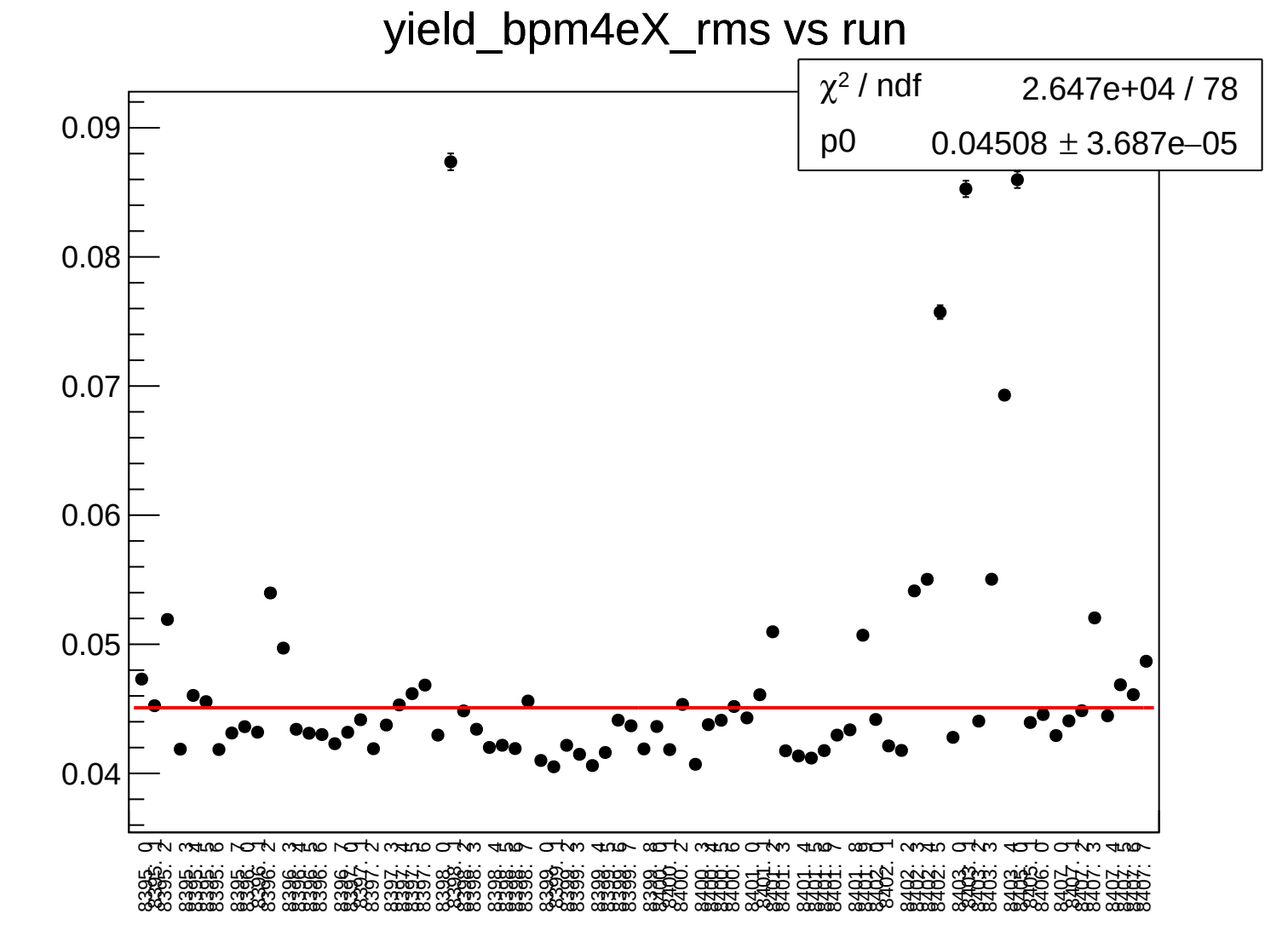

yield_bpm4aX_rms vs run
χ² / ndf 2.538e+04 / 78
p0 0.04878 ± 3.988e–05
0.1
0.09
0.08
0.07
0.06
0.05
0.04

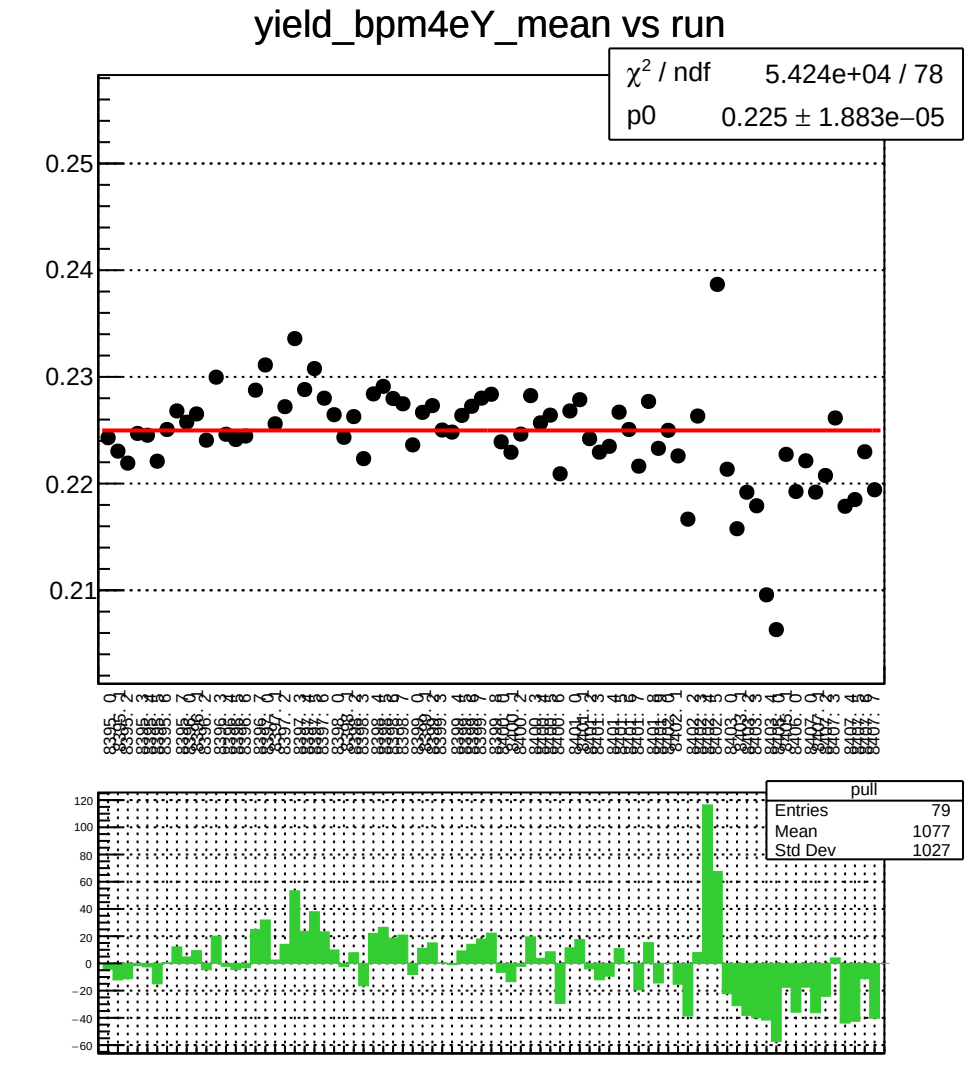

yield_bpm4aY_mean vs run
χ² / ndf 4.471e+04 / 78
p0 0.4776 ± 1.981e−05
0.5
0.49
0.48
0.47
0.46
pull
Entries 79
Mean 3306
Std Dev 3261
100
80
60
40
20
0
−20
−40
−60

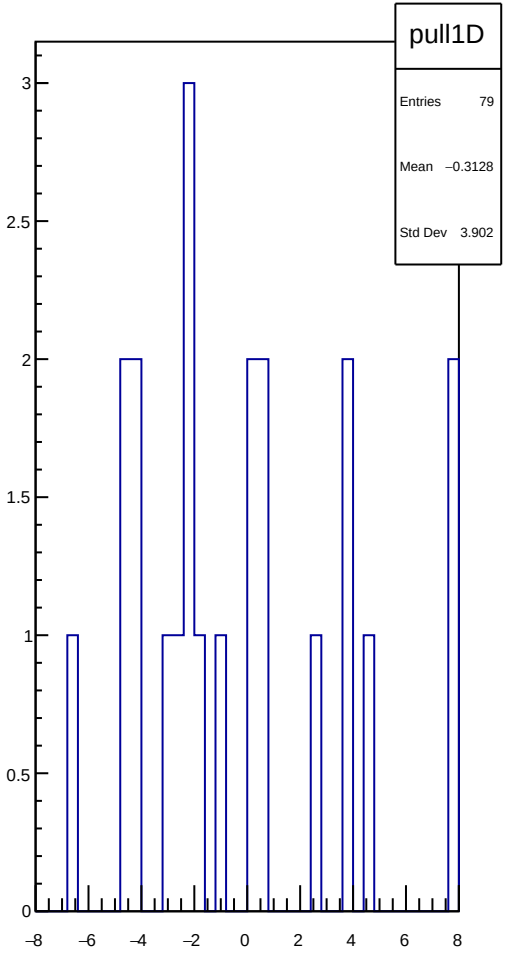

pull1D
Entries 79
Mean 0.4023
Std Dev 3.825
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

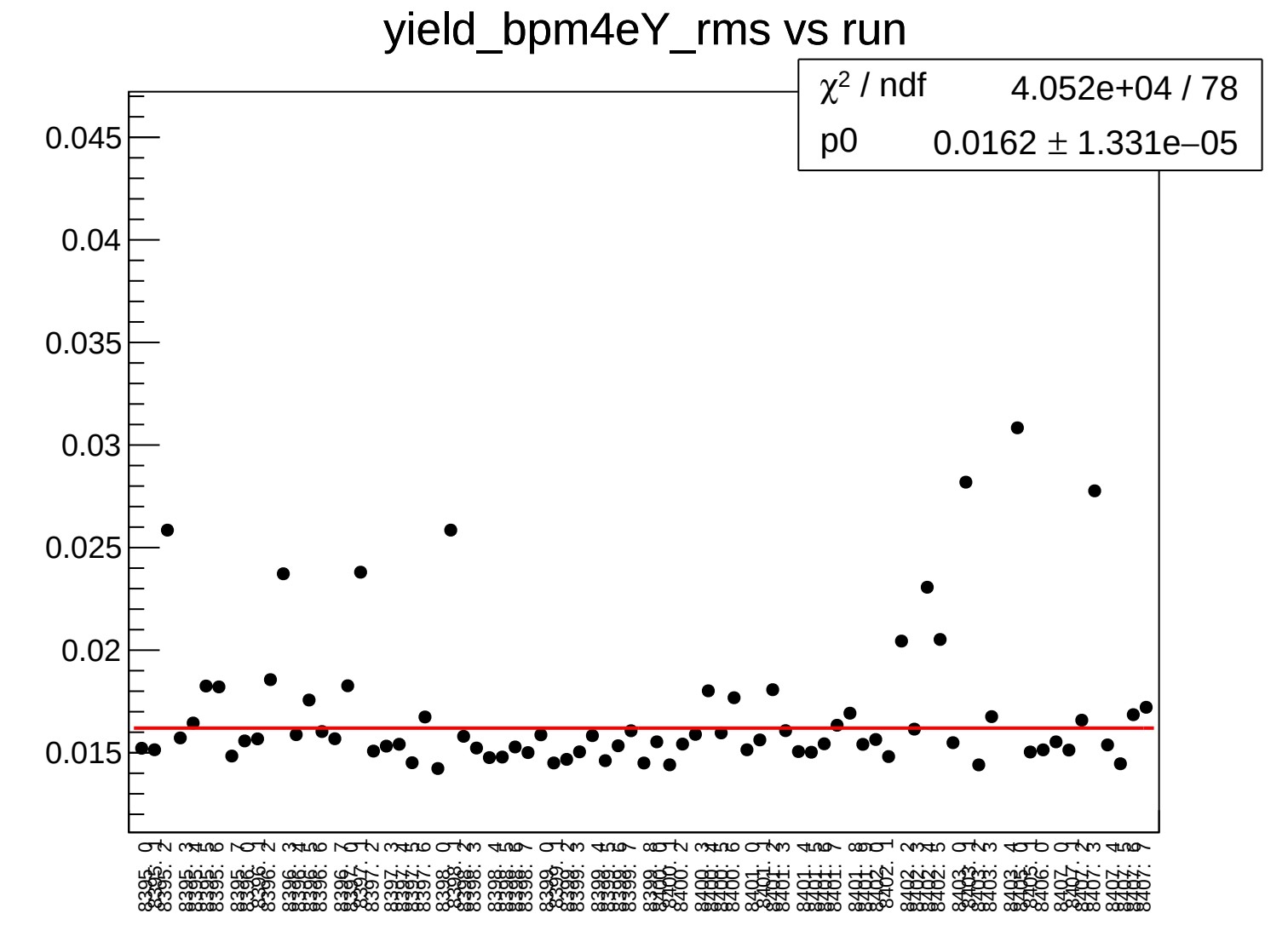

yield_bpm4aY_rms vs run
χ² / ndf 3.862e+04 / 78
p0 0.01706 ± 1.401e–05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

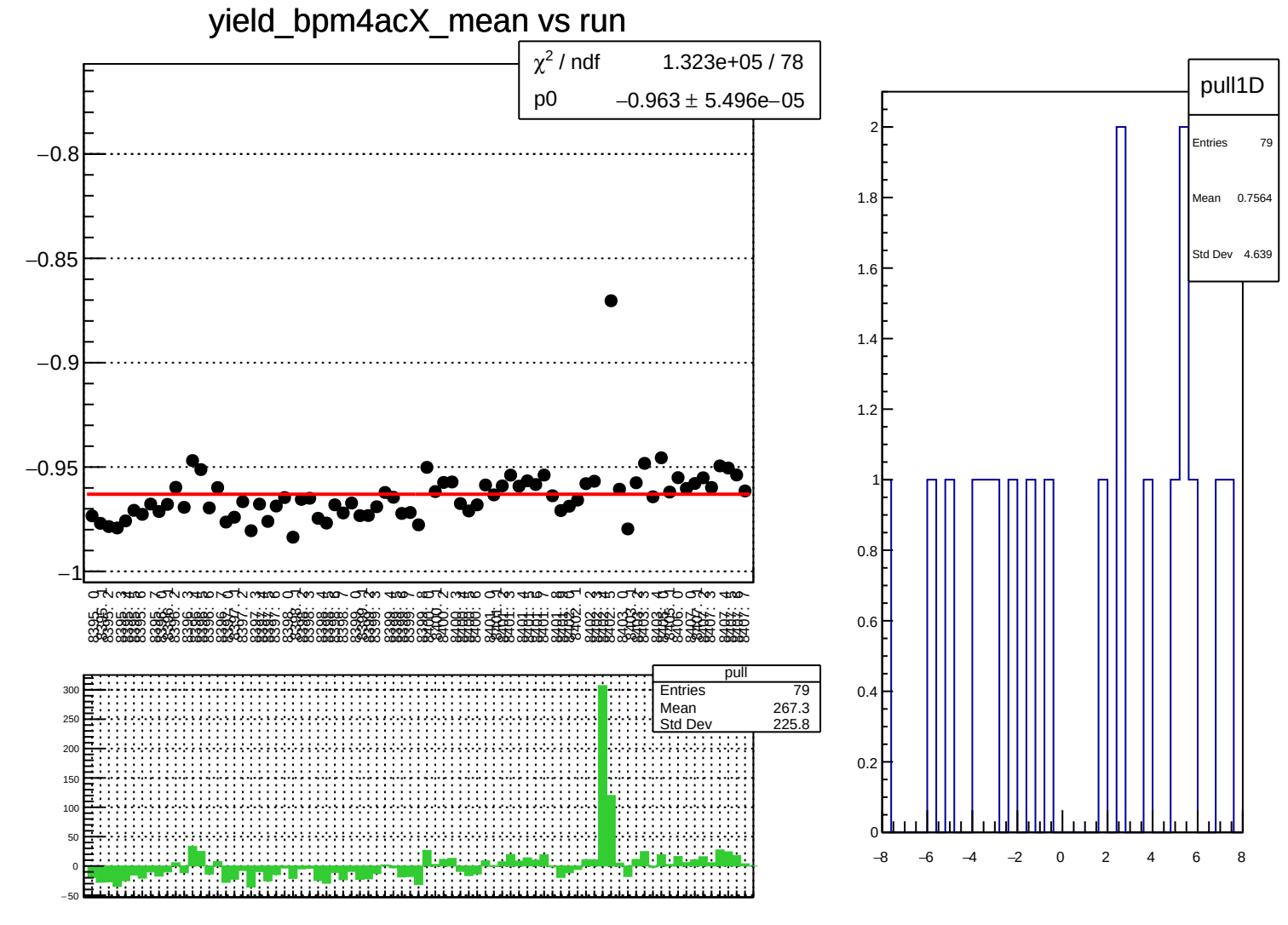

yield_bpm4eX_mean vs run
χ² / ndf 1.354e+05 / 78
p0 −0.1934 ± 5.214e−05
0
−0.05
−0.1
−0.15
−0.2
pull
Entries 79
Mean 223.3
Std Dev 180.9
300
250
200
150
100
50
0
−50
pull1D
Entries 79
Mean −1.74
Std Dev 4.382
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

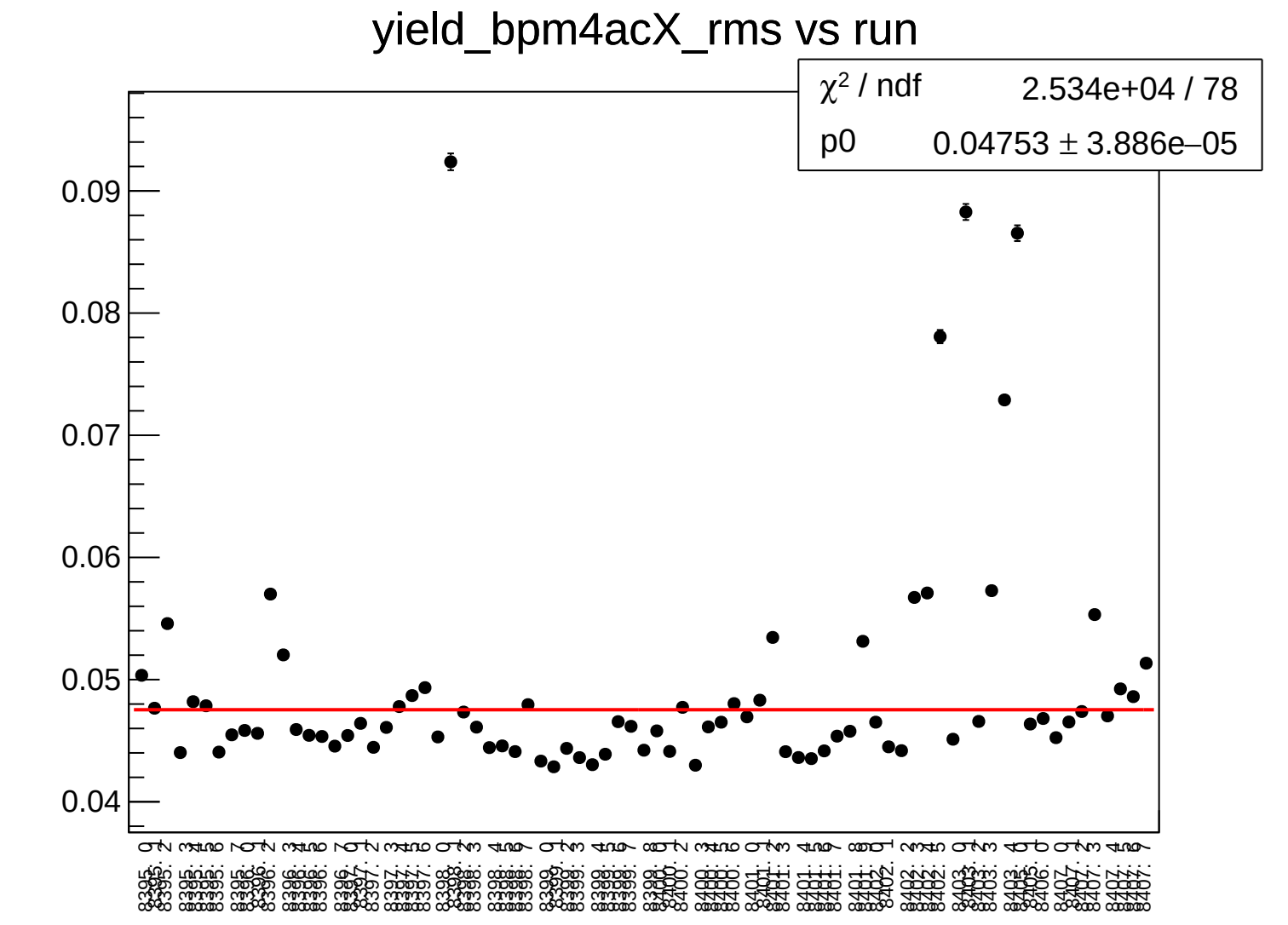

yield_bpm4eX_rms vs run
χ² / ndf 2.647e+04 / 78
p0 0.04508 ± 3.687e–05
0.09
0.08
0.07
0.06
0.05
0.04

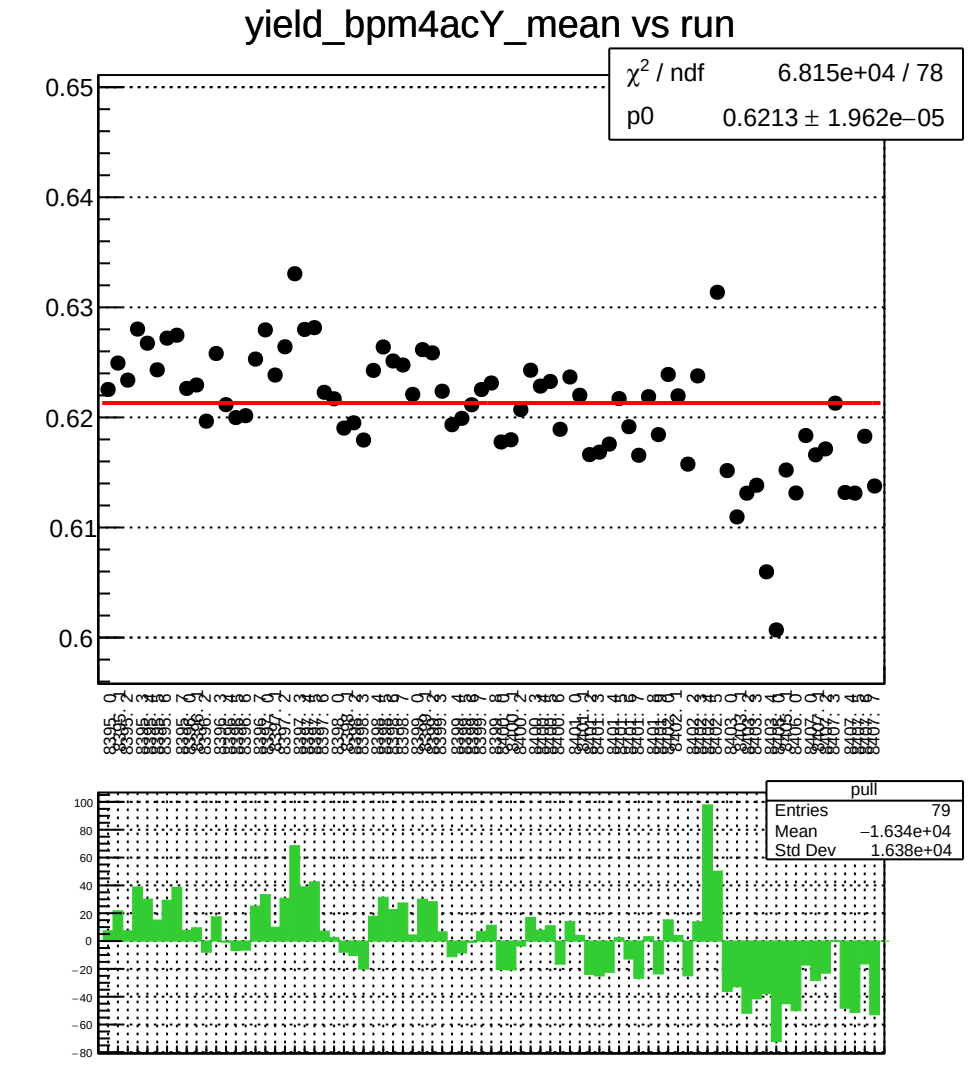

yield_bpm4eY_mean vs run
χ² / ndf 5.424e+04 / 78
p0 0.225 ± 1.883e−05
0.25
0.24
0.23
0.22
0.21
pull
Entries 79
Mean 1077
Std Dev 1027
120
100
80
60
40
20
0
−20
−40
−60

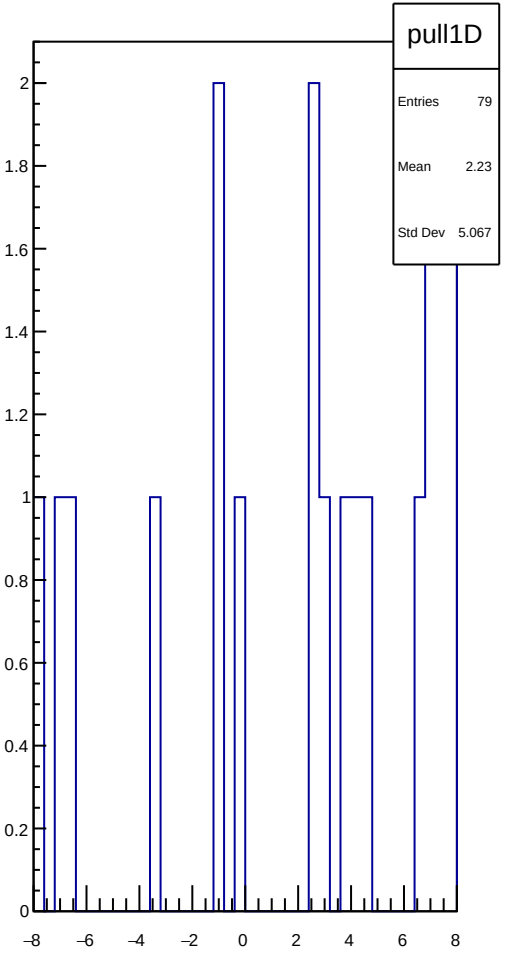

pull1D
Entries 79
Mean −0.3128
Std Dev 3.902
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

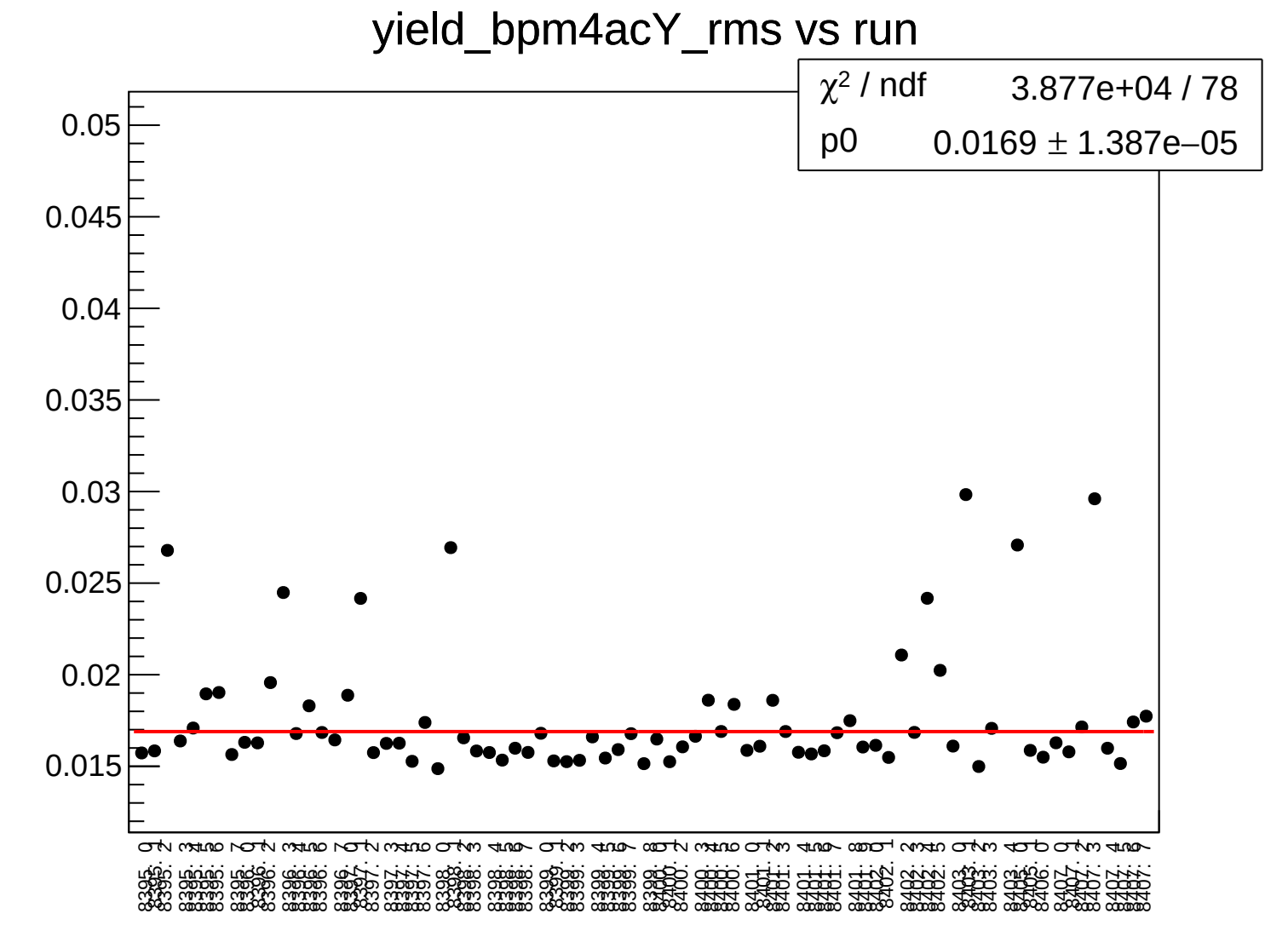

yield_bpm4eY_rms vs run
χ² / ndf 4.052e+04 / 78
p0 0.0162 ± 1.331e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

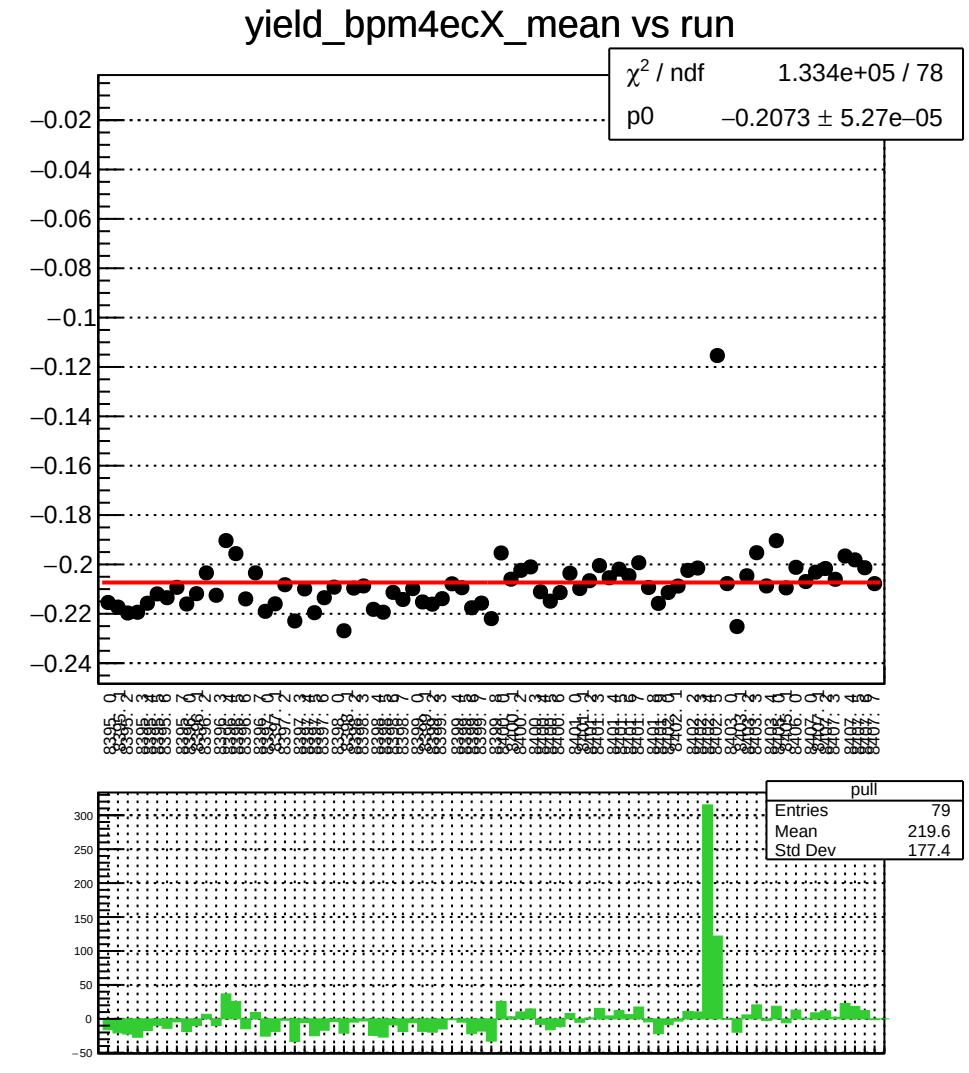

yield_bpm4acX_mean vs run
χ² / ndf 1.323e+05 / 78
p0 −0.963 ± 5.496e−05
pull
Entries 79
Mean 267.3
Std Dev 225.8
pull1D
Entries 79
Mean 0.7564
Std Dev 4.639

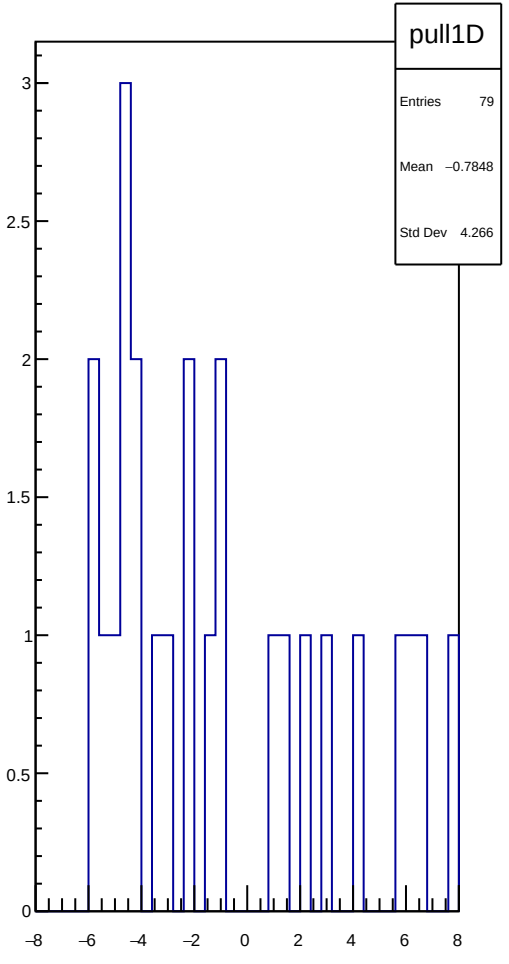

yield_bpm4acX_rms vs run
χ² / ndf 2.534e+04 / 78
p0 0.04753 ± 3.886e–05
0.09
0.08
0.07
0.06
0.05
0.04

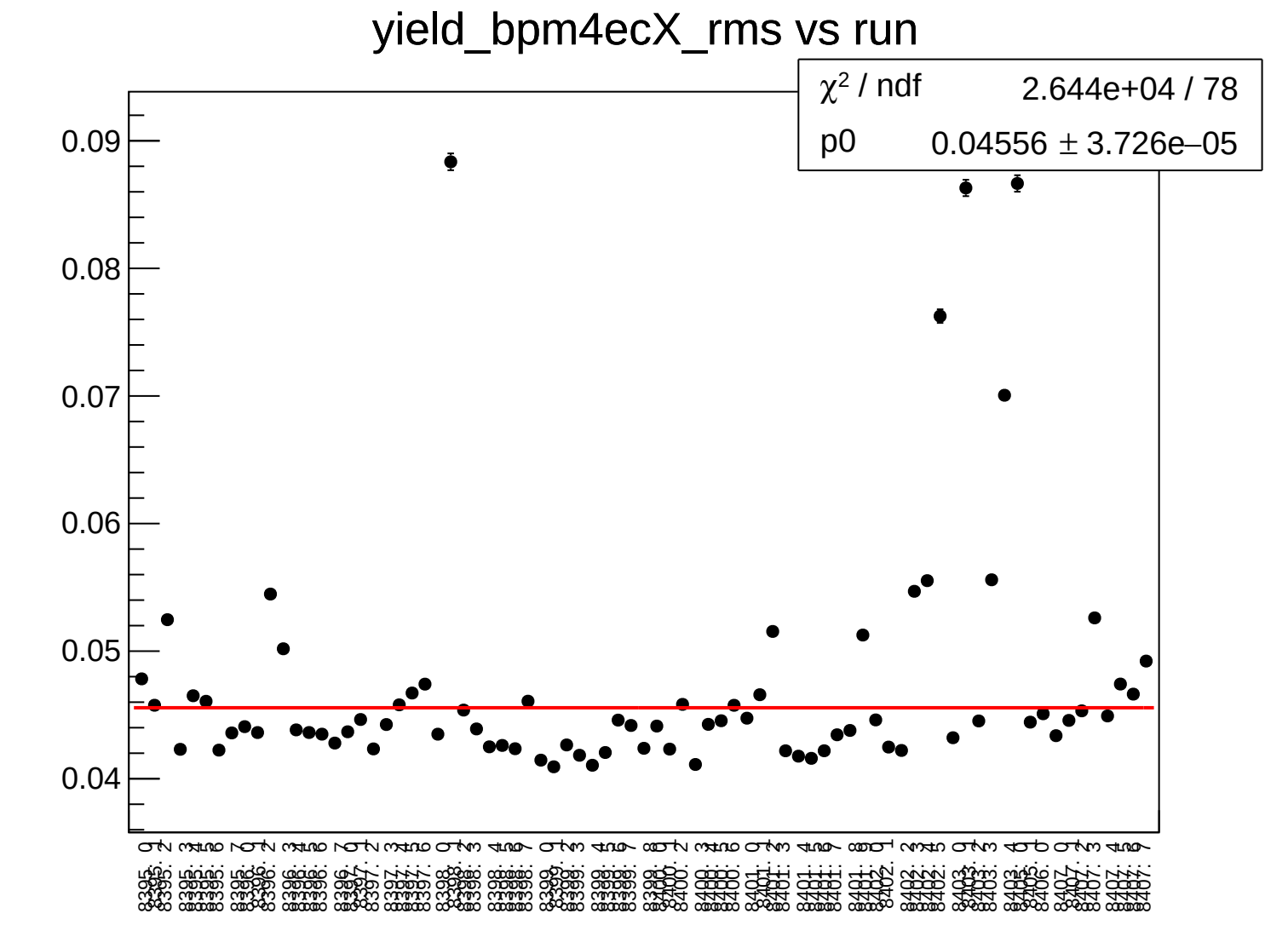

yield_bpm4acY_mean vs run
χ² / ndf 6.815e+04 / 78
p0 0.6213 ± 1.962e−05
0.65
0.64
0.63
0.62
0.61
0.6
pull
Entries 79
Mean −1.634e+04
Std Dev 1.638e+04
100
80
60
40
20
0
−20
−40
−60
−80

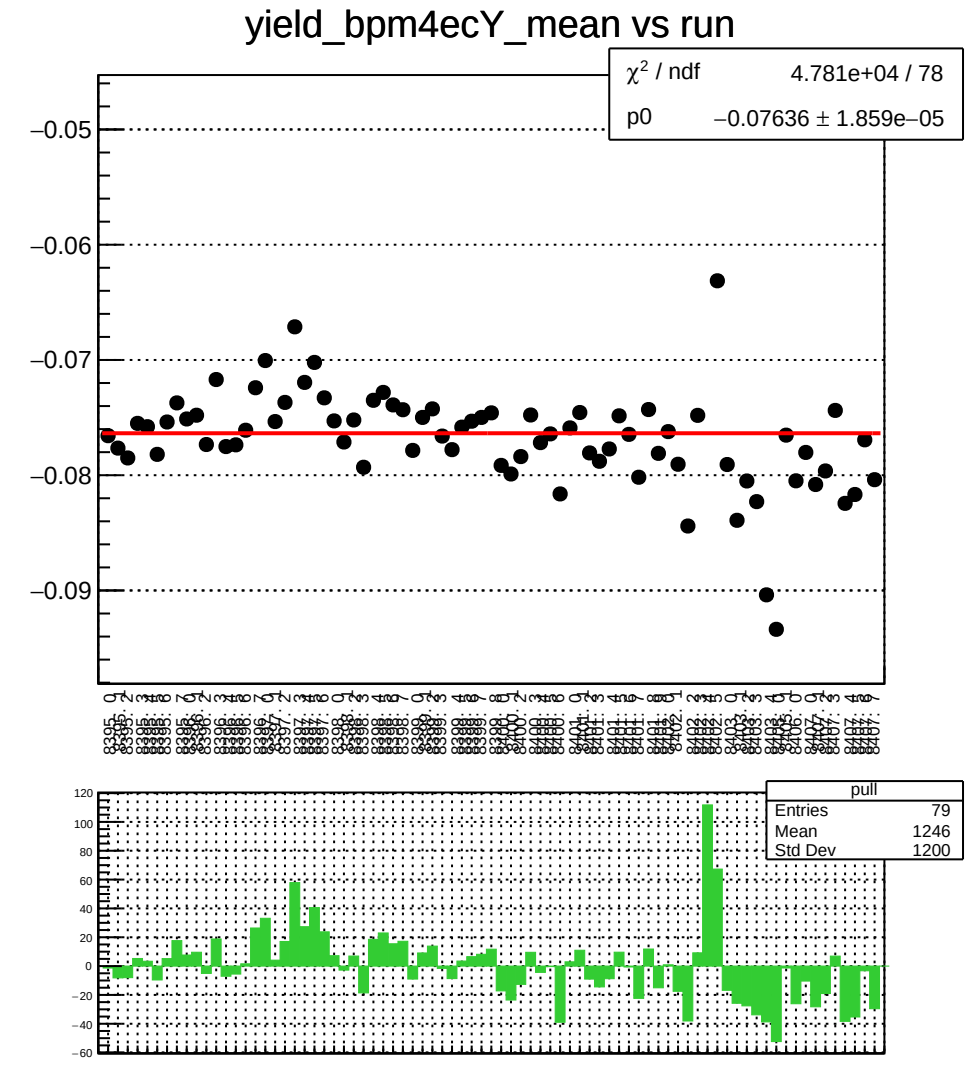

pull1D
Entries 79
Mean 2.23
Std Dev 5.067
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

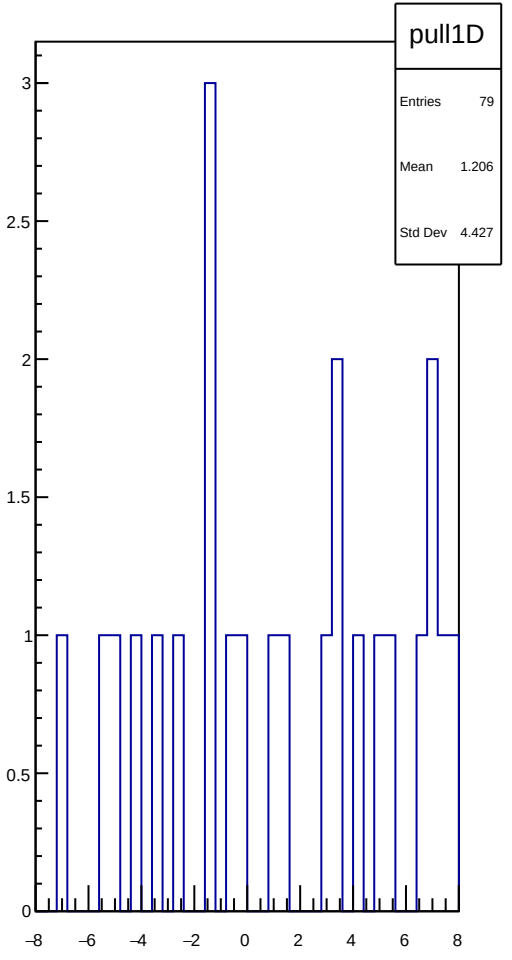

yield_bpm4acY_rms vs run
χ² / ndf 3.877e+04 / 78
p0 0.0169 ± 1.387e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

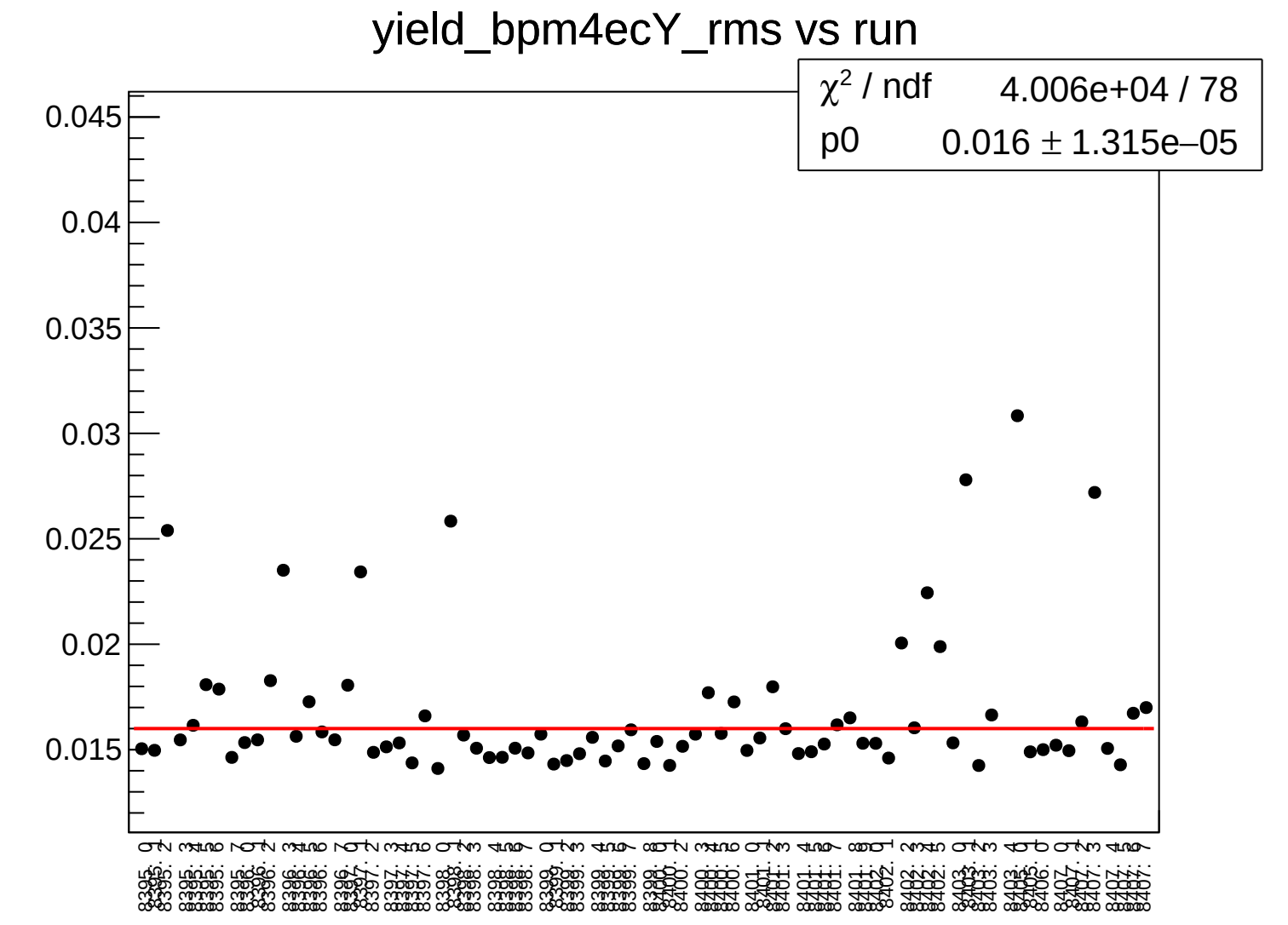

yield_bpm4ecX_mean vs run
χ² / ndf 1.334e+05 / 78
p0 −0.2073 ± 5.27e−05
pull
Entries 79
Mean 219.6
Std Dev 177.4

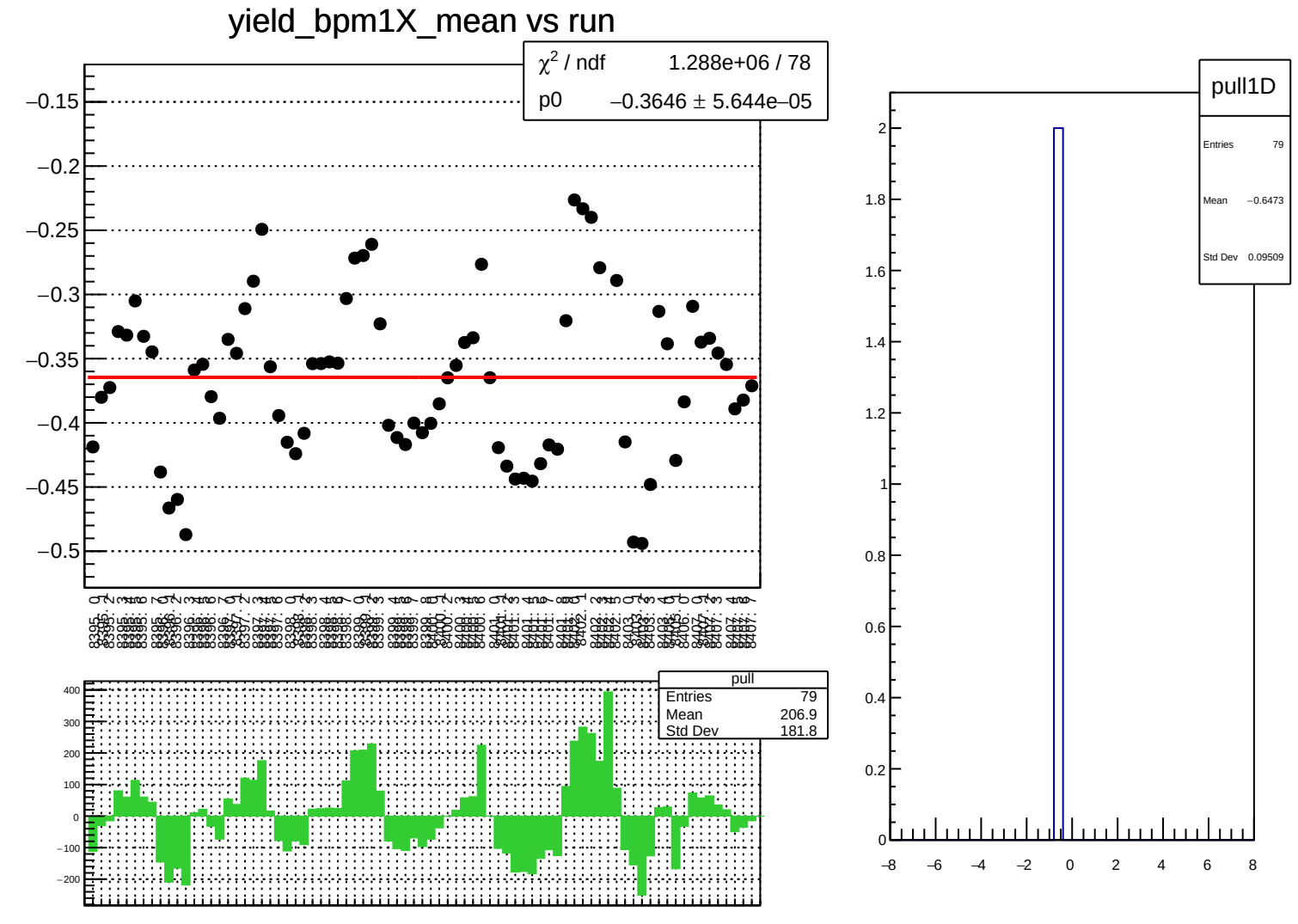

pull1D
Entries 79
Mean −0.7848
Std Dev 4.266

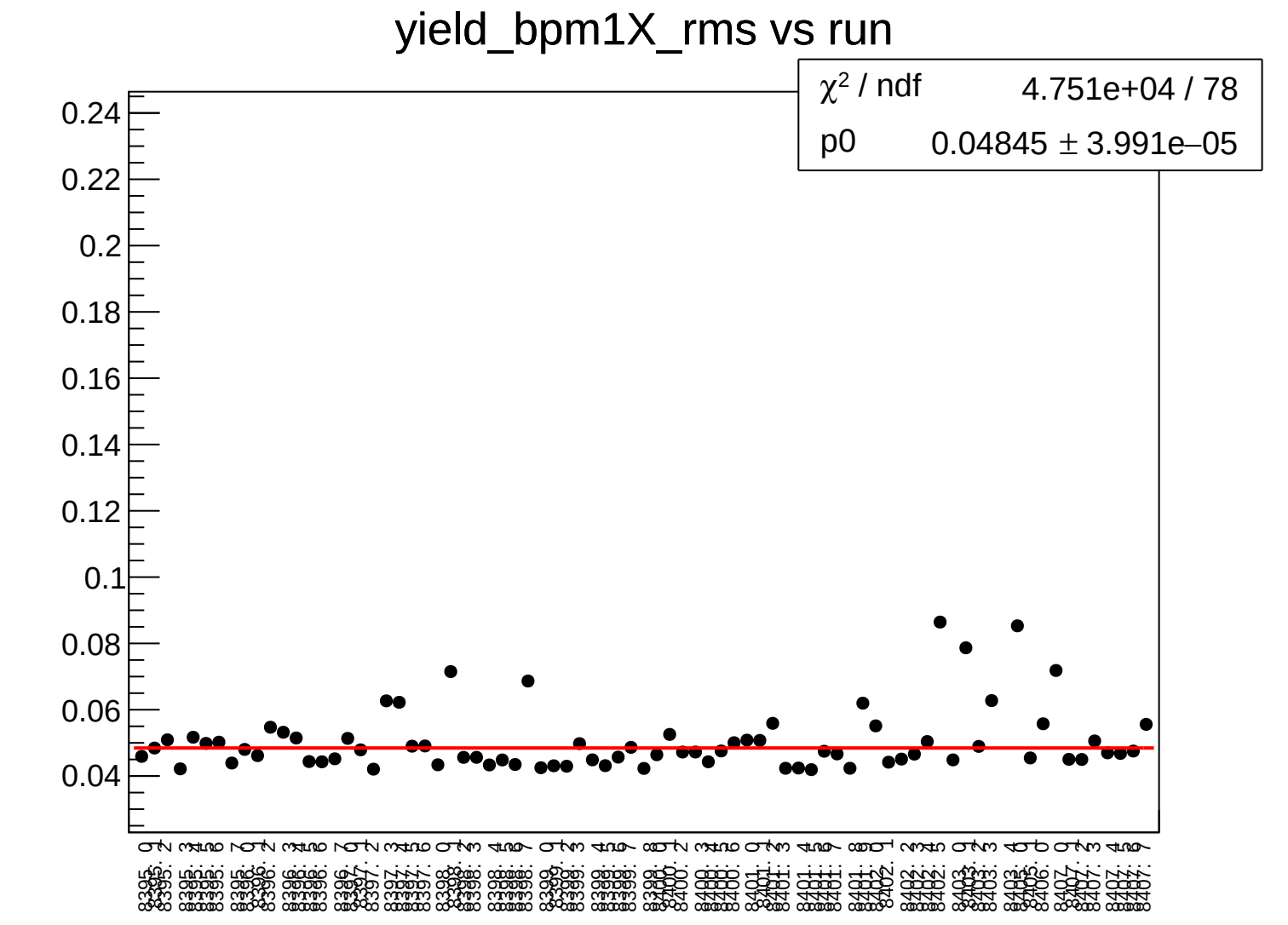

yield_bpm4ecX_rms vs run
χ² / ndf 2.644e+04 / 78
p0 0.04556 ± 3.726e−05
0.09
0.08
0.07
0.06
0.05
0.04

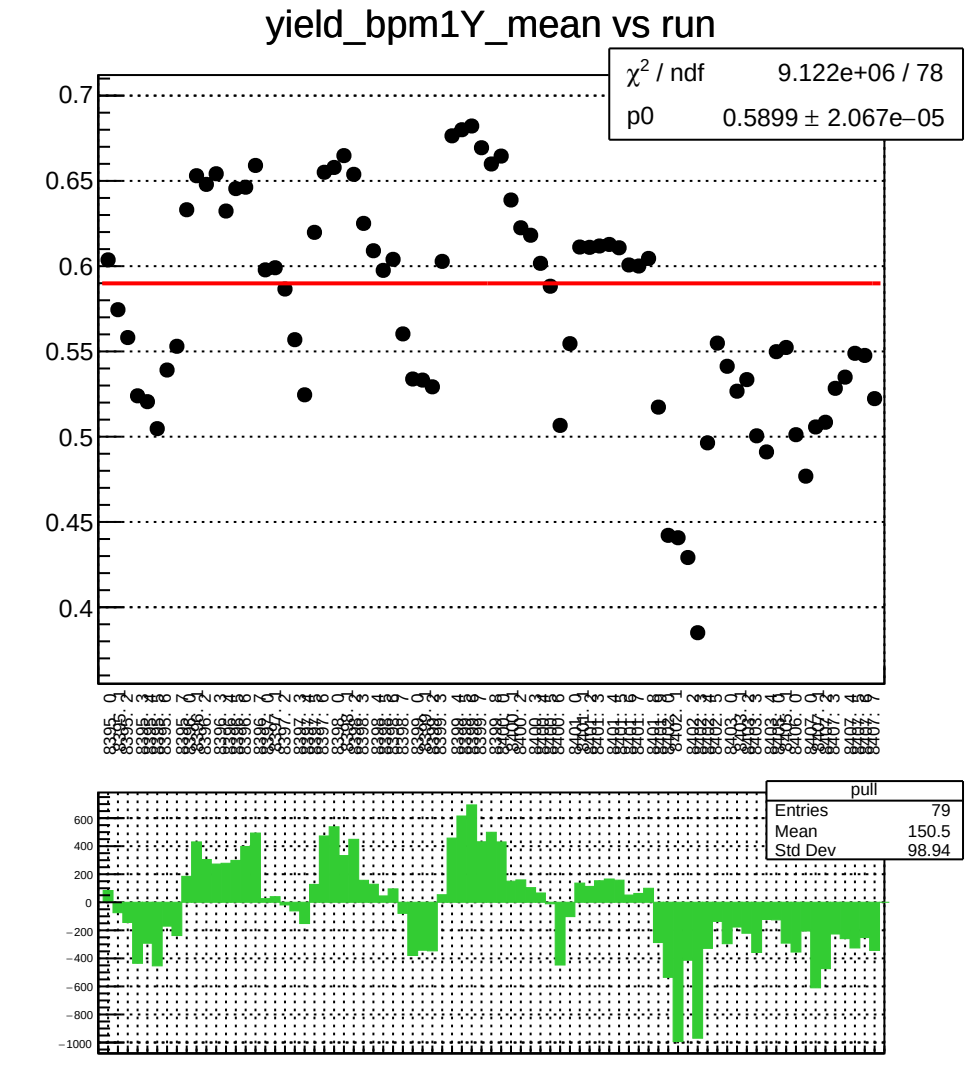

yield_bpm4ecY_mean vs run
χ² / ndf 4.781e+04 / 78
p0 −0.07636 ± 1.859e−05
−0.05
−0.06
−0.07
−0.08
−0.09
pull
Entries 79
Mean 1246
Std Dev 1200
120
100
80
60
40
20
0
−20
−40
−60

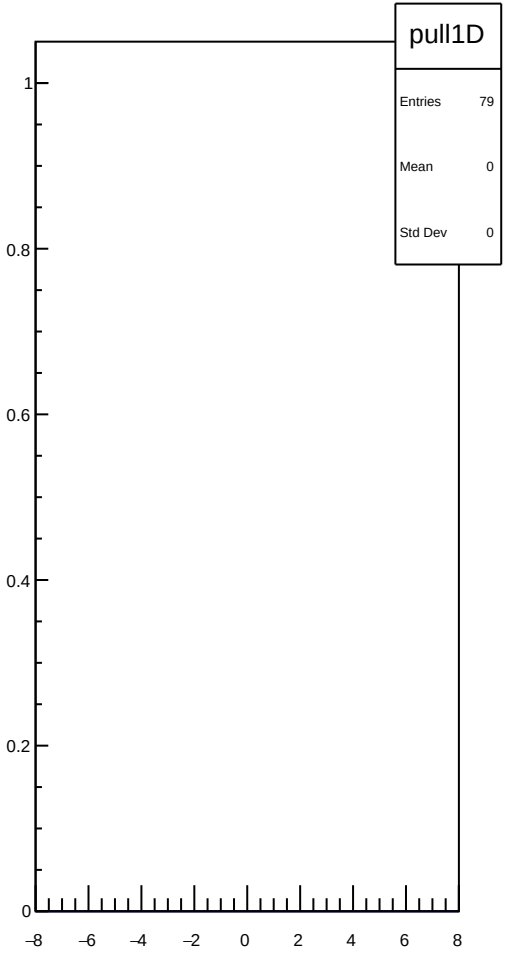

pull1D
Entries 79
Mean 1.206
Std Dev 4.427
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

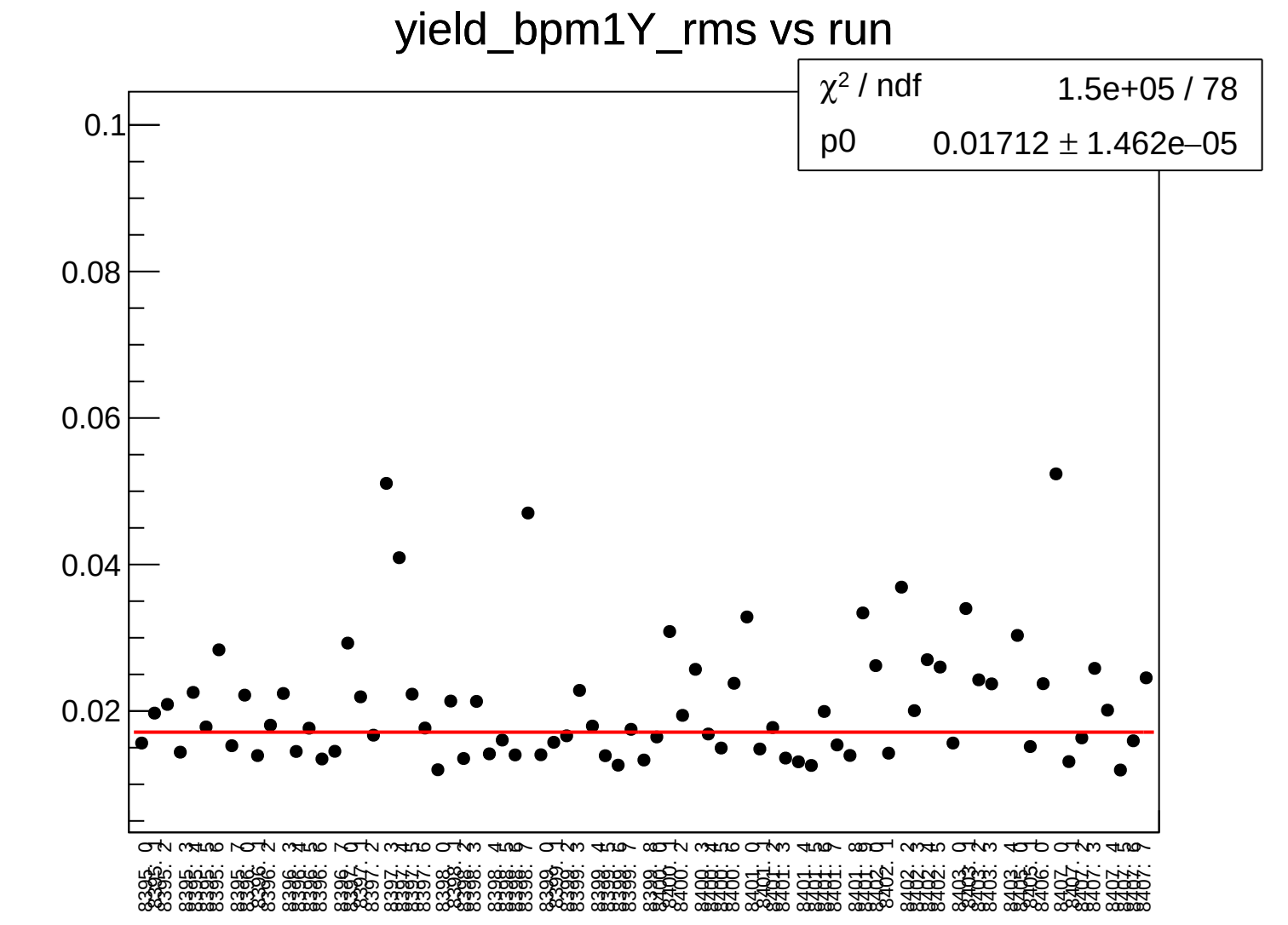

yield_bpm4ecY_rms vs run
χ² / ndf 4.006e+04 / 78
p0 0.016 ± 1.315e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

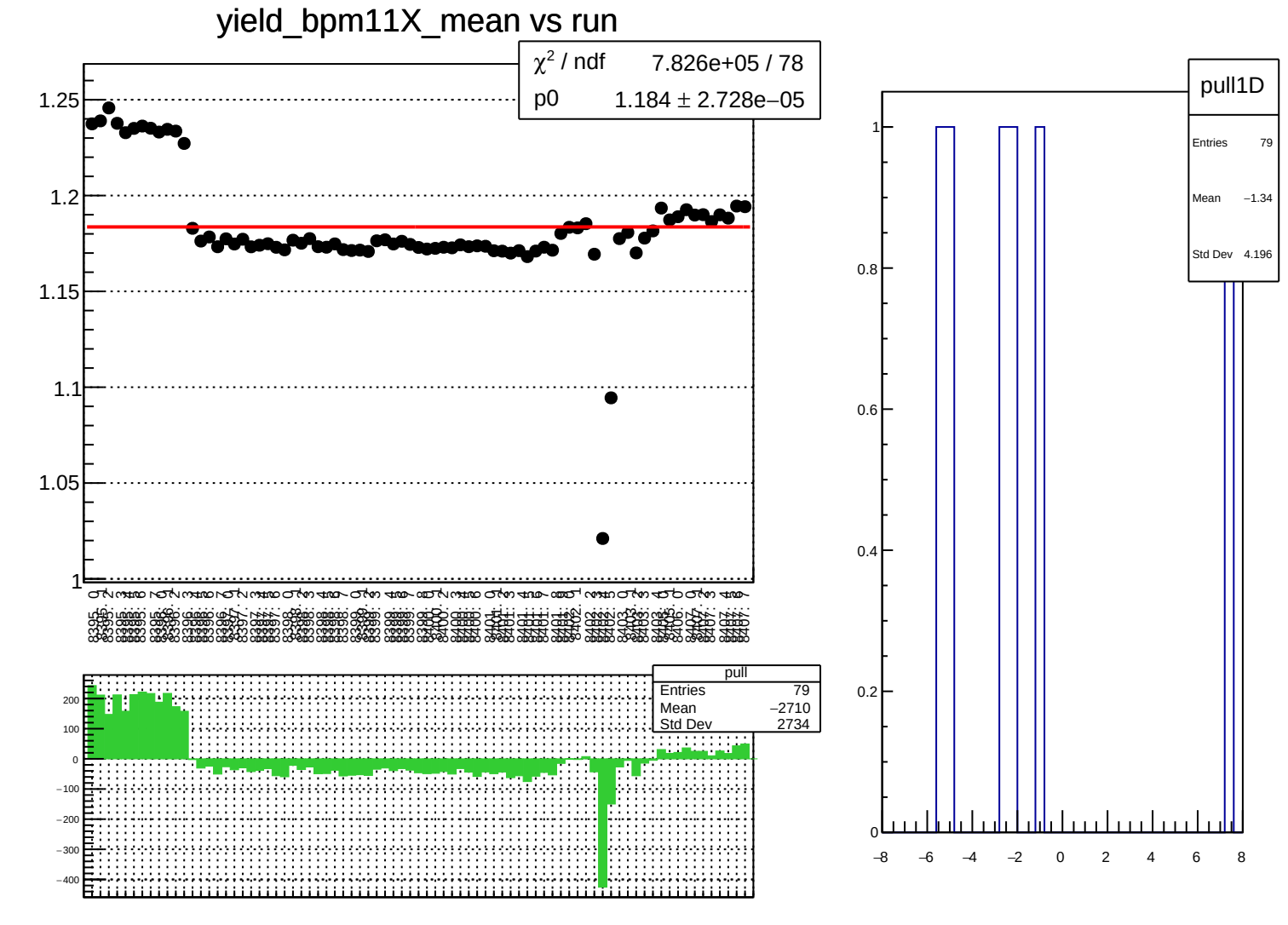

yield_bpm1X_mean vs run
χ² / ndf 1.288e+06 / 78
p0 −0.3646 ± 5.644e−05
−0.15
−0.2
−0.25
−0.3
−0.35
−0.4
−0.45
−0.5
pull
Entries 79
Mean 206.9
Std Dev 181.8
400
300
200
100
0
−100
−200
pull1D
Entries 79
Mean −0.6473
Std Dev 0.09509
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

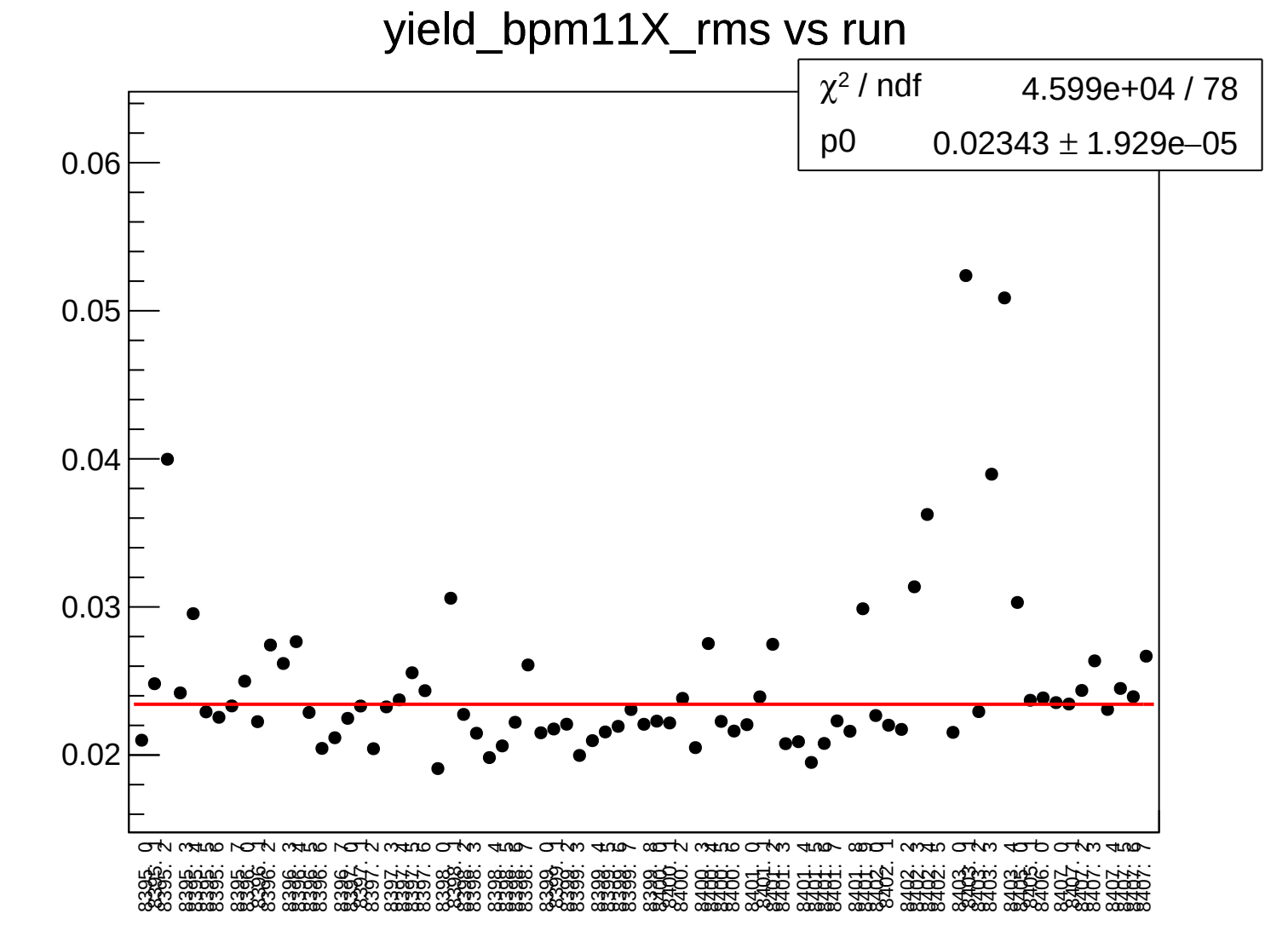

yield_bpm1X_rms vs run
χ² / ndf 4.751e+04 / 78
p0 0.04845 ± 3.991e–05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

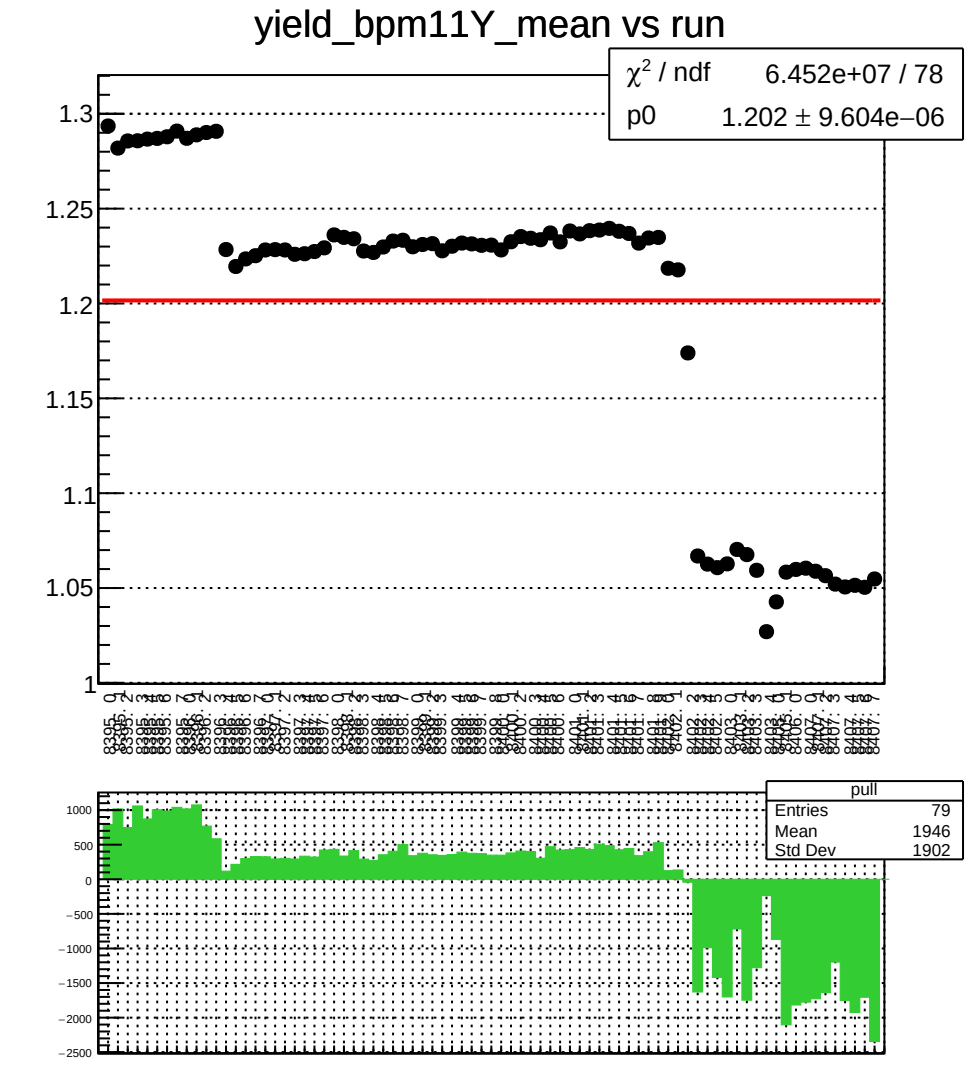

yield_bpm1Y_mean vs run
χ² / ndf 9.122e+06 / 78
p0 0.5899 ± 2.067e−05
0.7
0.65
0.6
0.55
0.5
0.45
0.4
pull
Entries 79
Mean 150.5
Std Dev 98.94
600
400
200
0
−200
−400
−600
−800
−1000

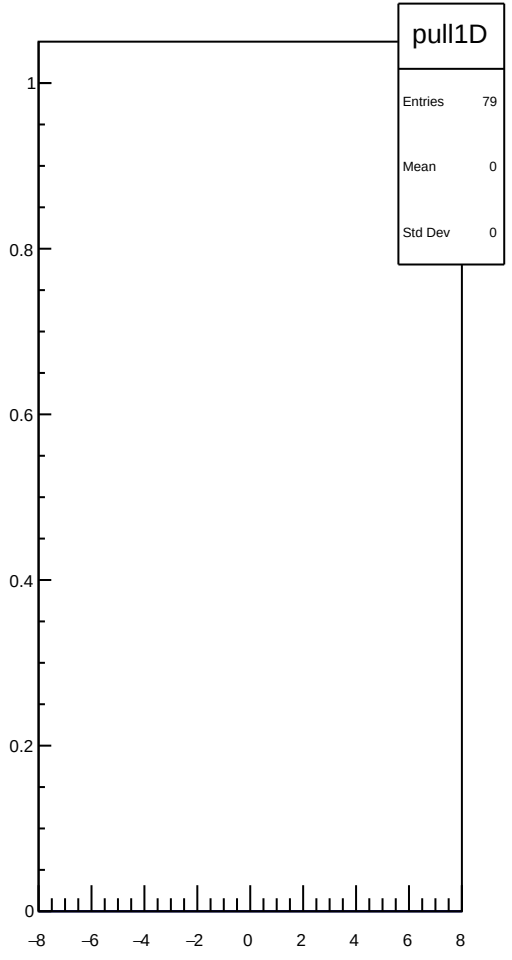

pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

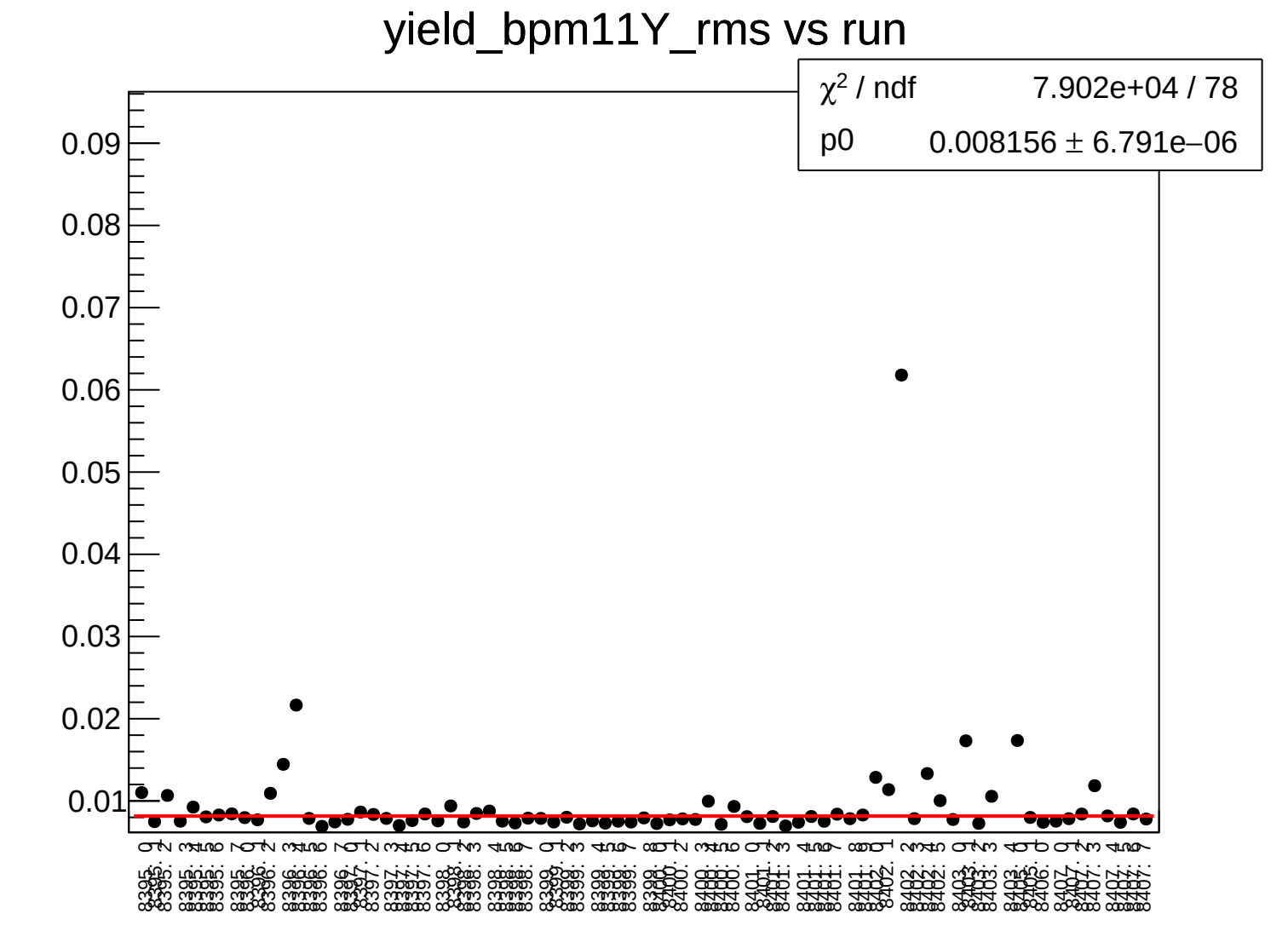

yield_bpm1Y_rms vs run
χ² / ndf 1.5e+05 / 78
p0 0.01712 ± 1.462e−05
0.1
0.08
0.06
0.04
0.02

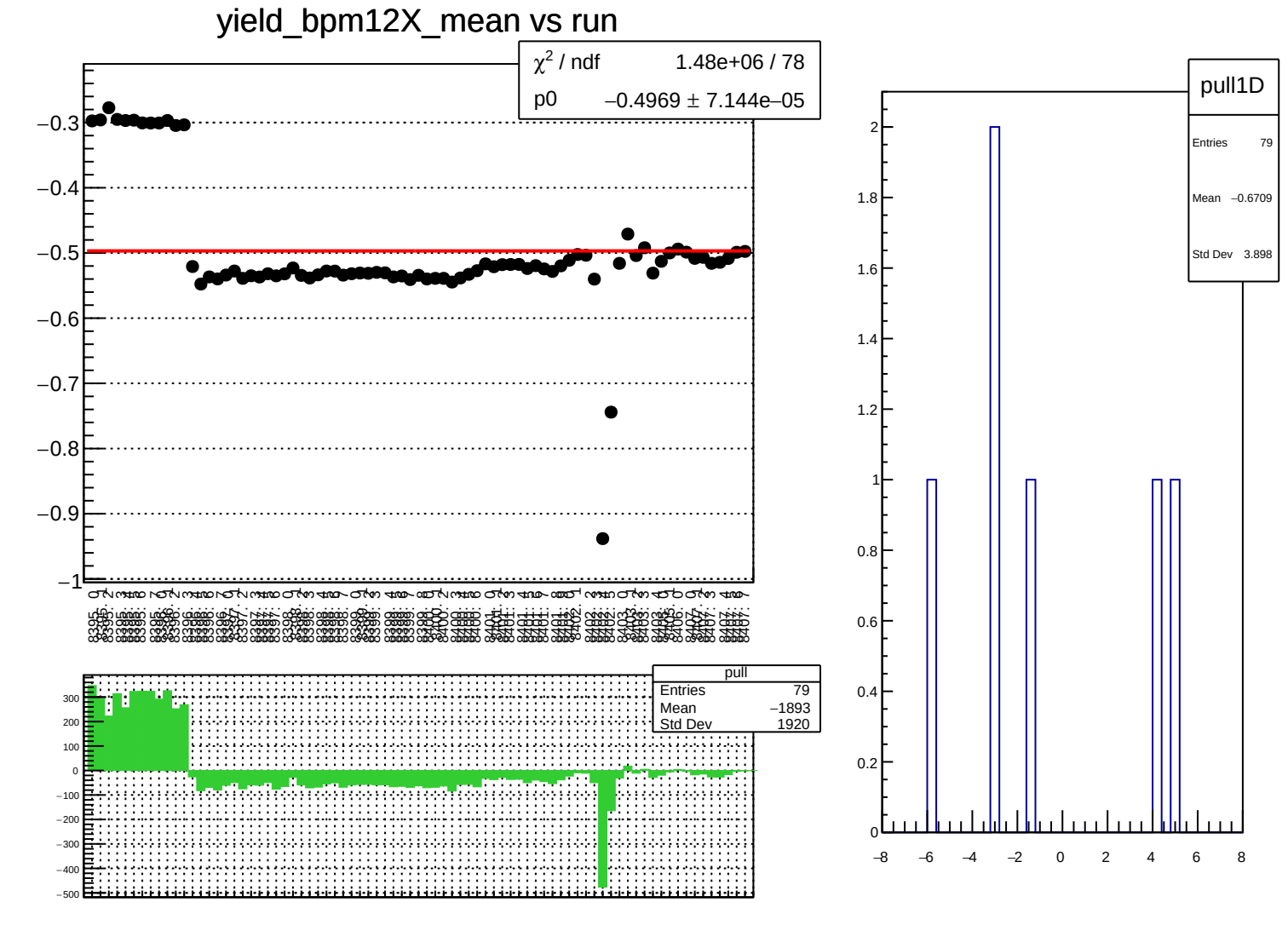

yield_bpm11X_mean vs run
χ² / ndf 7.826e+05 / 78
p0 1.184 ± 2.728e−05
1.25
1.2
1.15
1.1
1.05
1
pull
Entries 79
Mean −2710
Std Dev 2734
200
100
0
−100
−200
−300
−400
pull1D
Entries 79
Mean −1.34
Std Dev 4.196
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

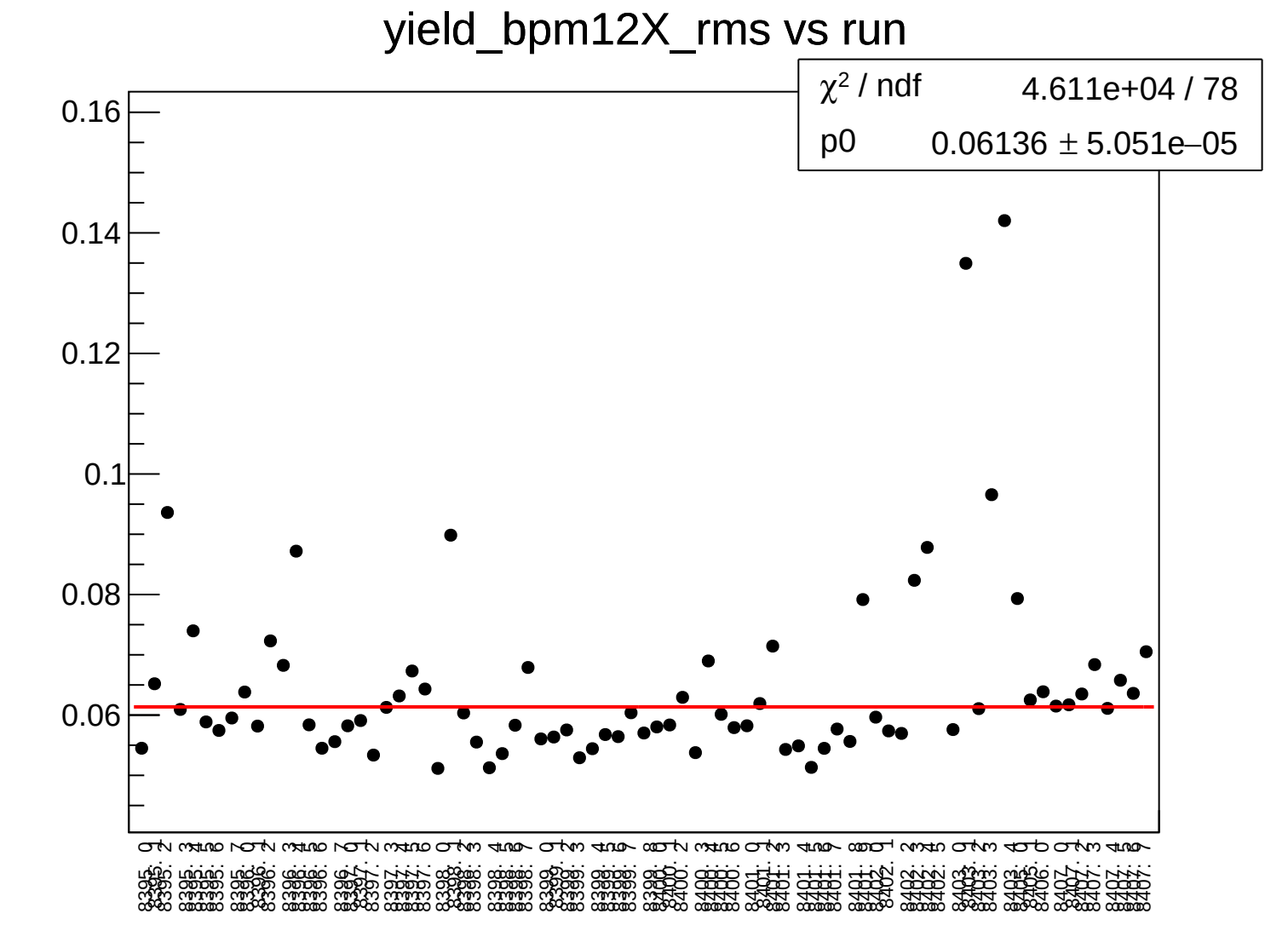

yield_bpm11X_rms vs run
χ² / ndf 4.599e+04 / 78
p0 0.02343 ± 1.929e−05
0.06
0.05
0.04
0.03
0.02

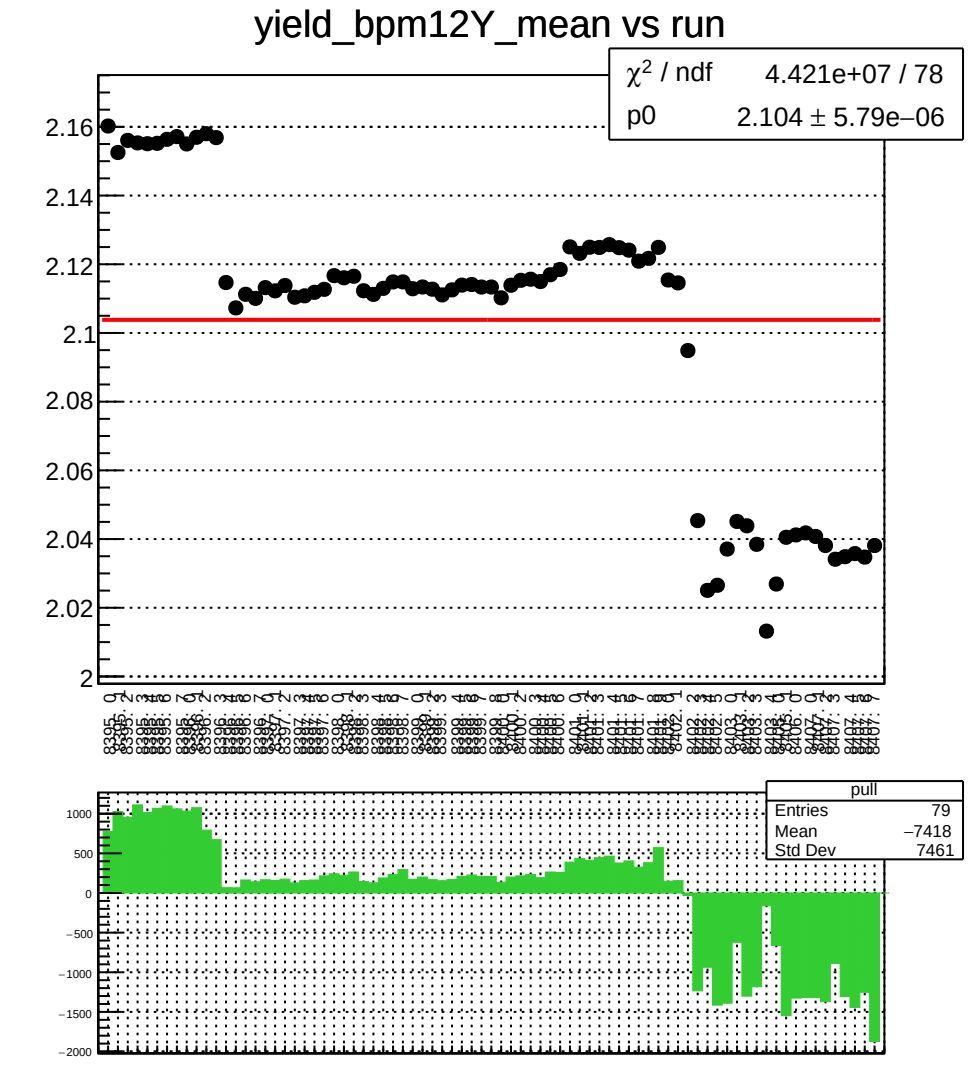

yield_bpm11Y_mean vs run
χ² / ndf 6.452e+07 / 78
p0 1.202 ± 9.604e−06
1.3
1.25
1.2
1.15
1.1
1.05
1
pull
Entries 79
Mean 1946
Std Dev 1902
1000
500
0
−500
−1000
−1500
−2000
−2500

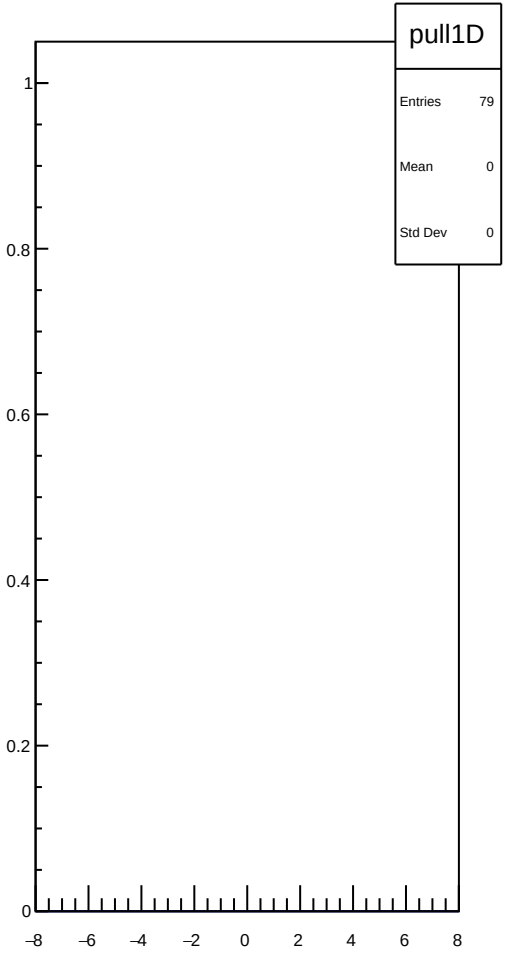

pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

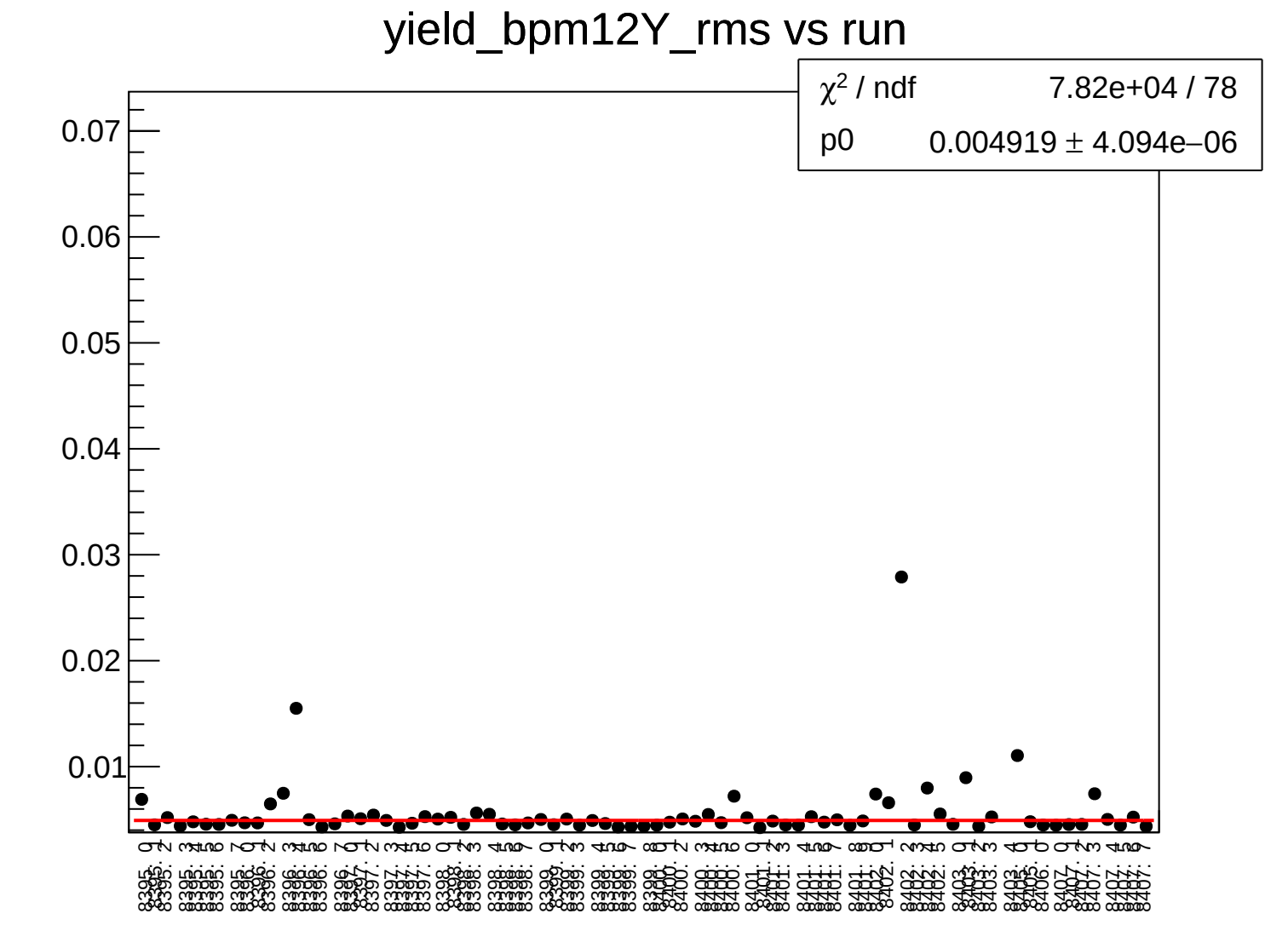

yield_bpm11Y_rms vs run
χ² / ndf 7.902e+04 / 78
p0 0.008156 ± 6.791e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

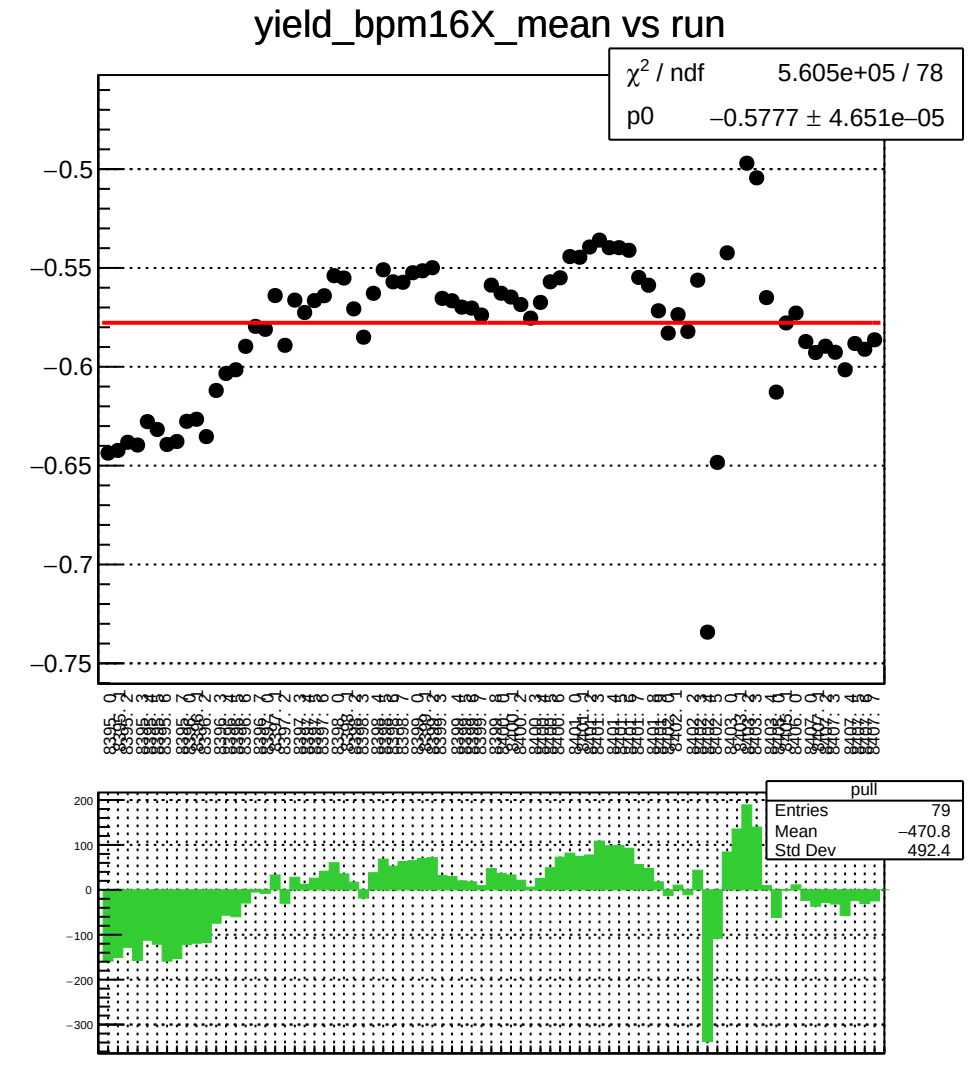

yield_bpm12X_mean vs run
χ² / ndf 1.48e+06 / 78
p0 −0.4969 ± 7.144e−05
pull
Entries 79
Mean −1893
Std Dev 1920
pull1D
Entries 79
Mean −0.6709
Std Dev 3.898

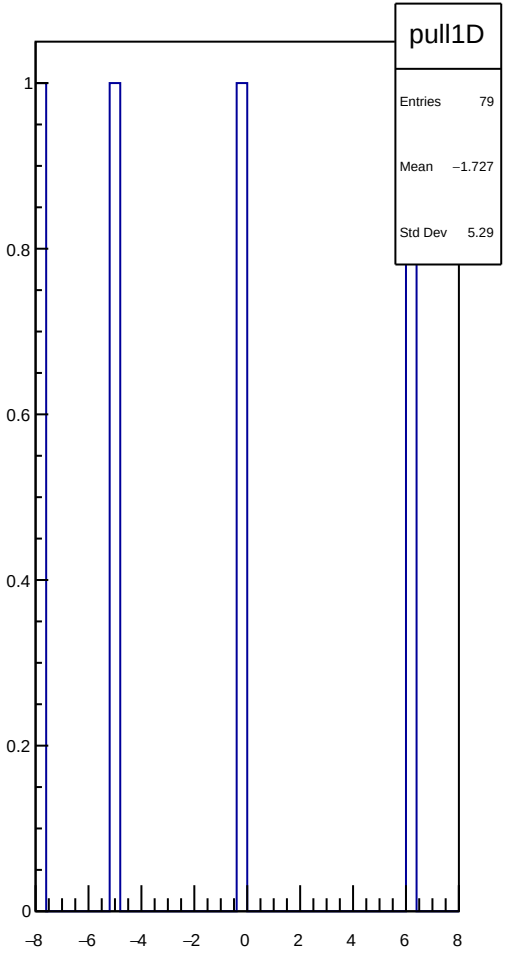

yield_bpm12X_rms vs run
χ² / ndf 4.611e+04 / 78
p0 0.06136 ± 5.051e–05
0.16
0.14
0.12
0.1
0.08
0.06

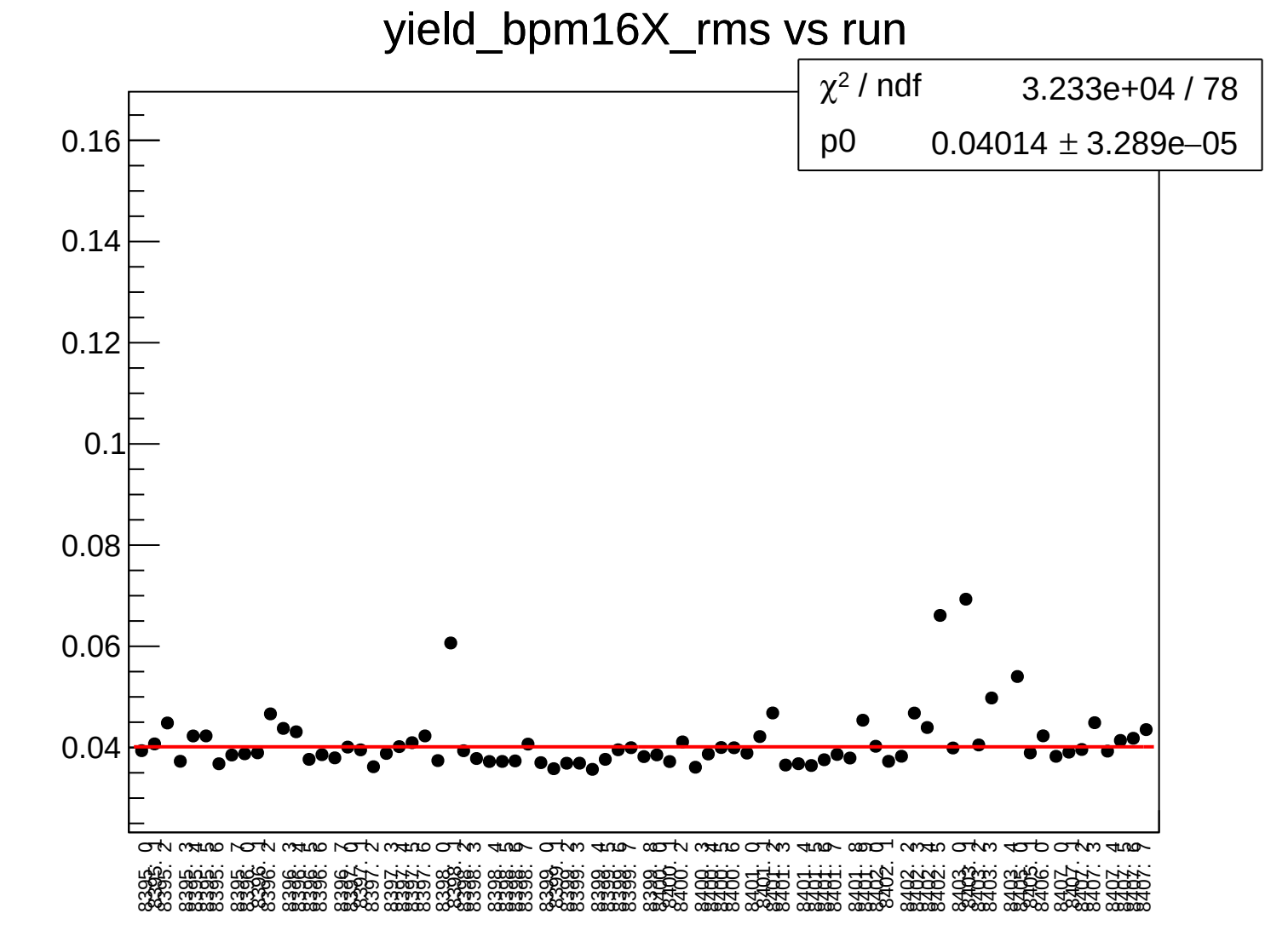

yield_bpm12Y_mean vs run
χ² / ndf 4.421e+07 / 78
p0 2.104 ± 5.79e−06
pull
Entries 79
Mean −7418
Std Dev 7461

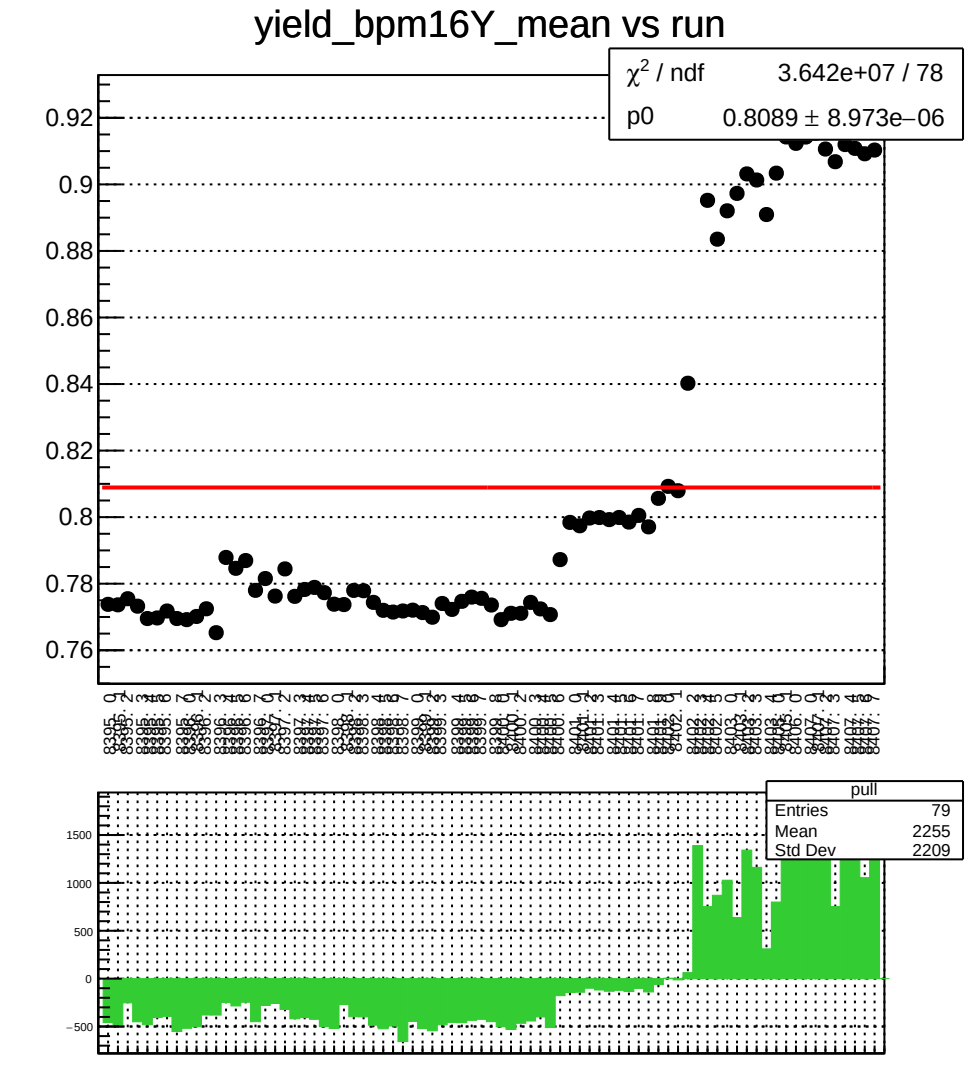

pull1D
Entries 79
Mean 0
Std Dev 0

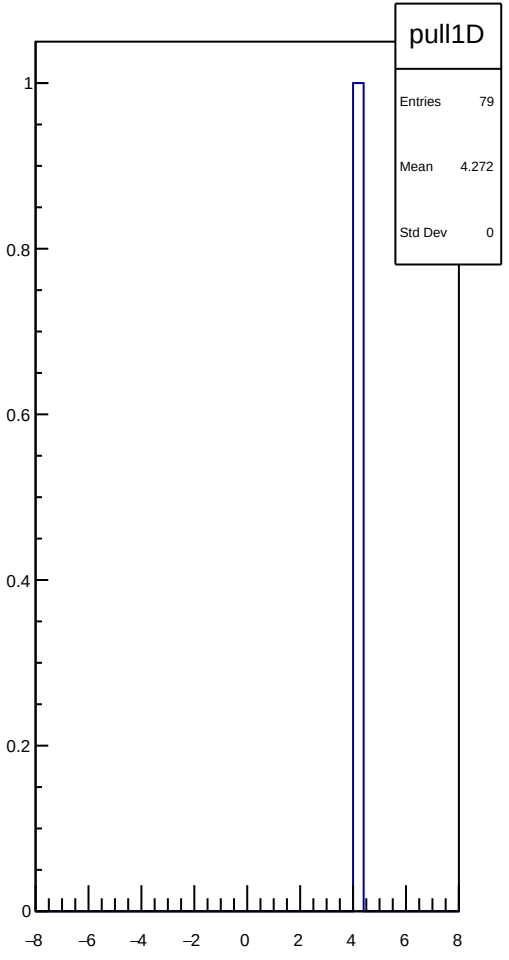

yield_bpm12Y_rms vs run
χ² / ndf 7.82e+04 / 78
p0 0.004919 ± 4.094e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

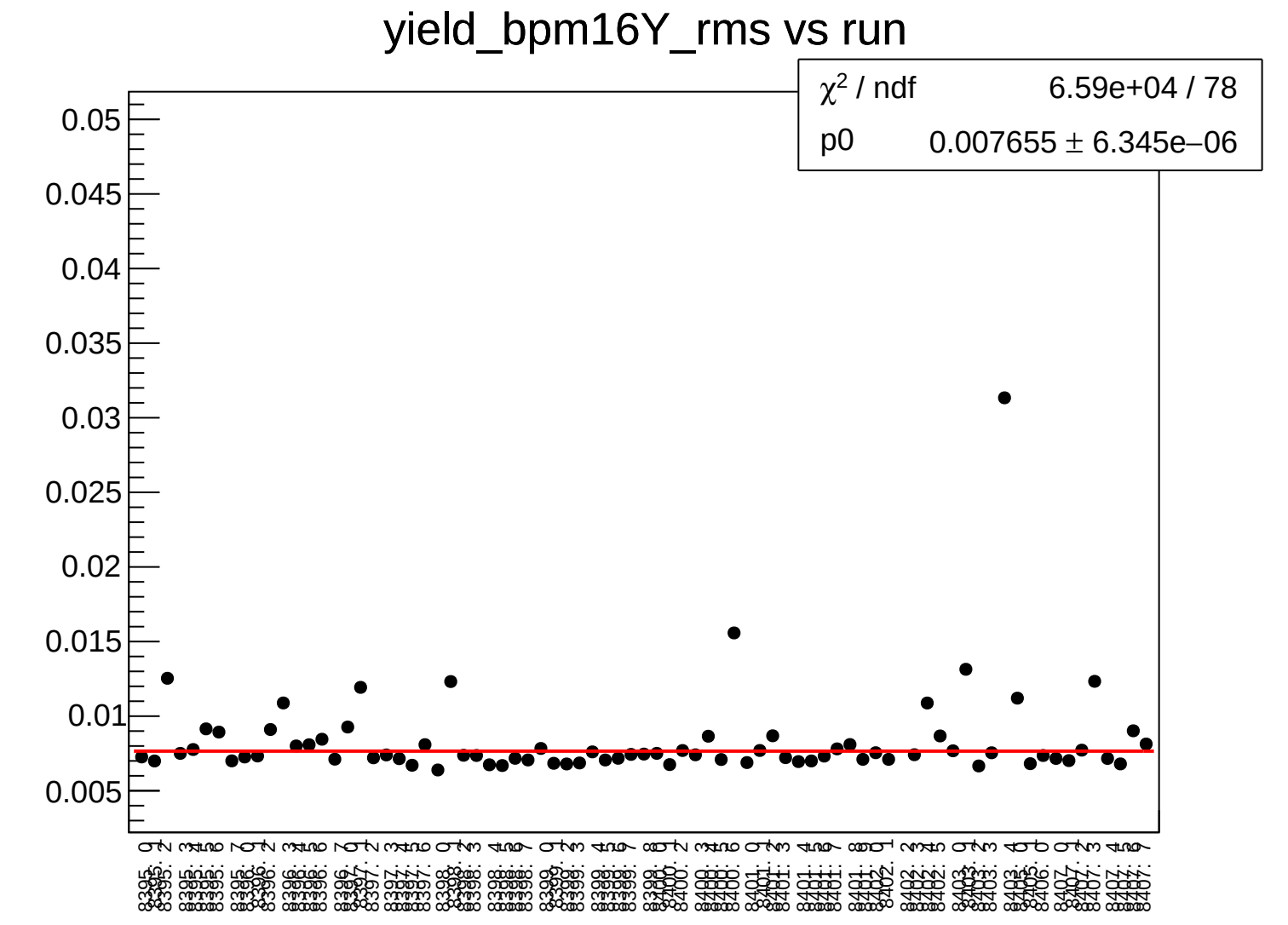

yield_bpm16X_mean vs run
χ² / ndf 5.605e+05 / 78
p0 −0.5777 ± 4.651e−05
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 79
Mean −470.8
Std Dev 492.4
200
100
0
−100
−200
−300

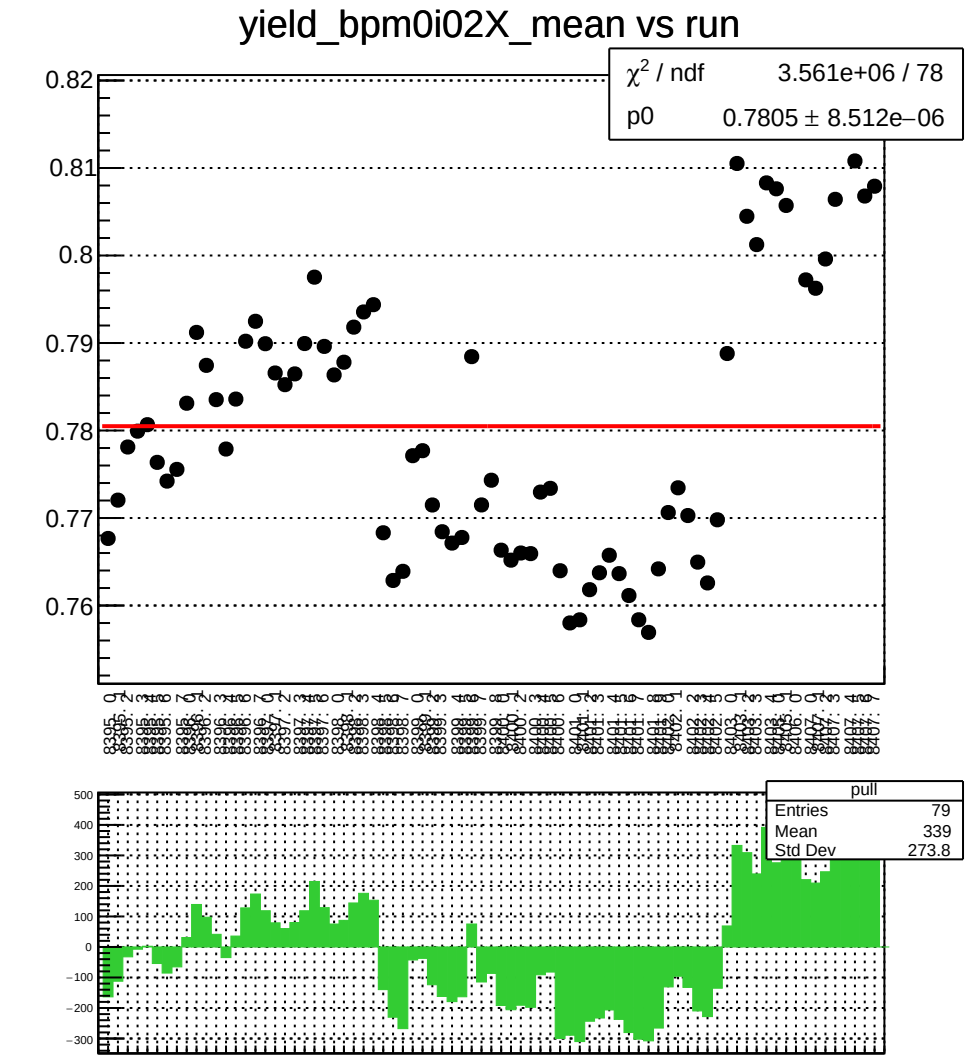

pull1D
Entries 79
Mean −1.727
Std Dev 5.29
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

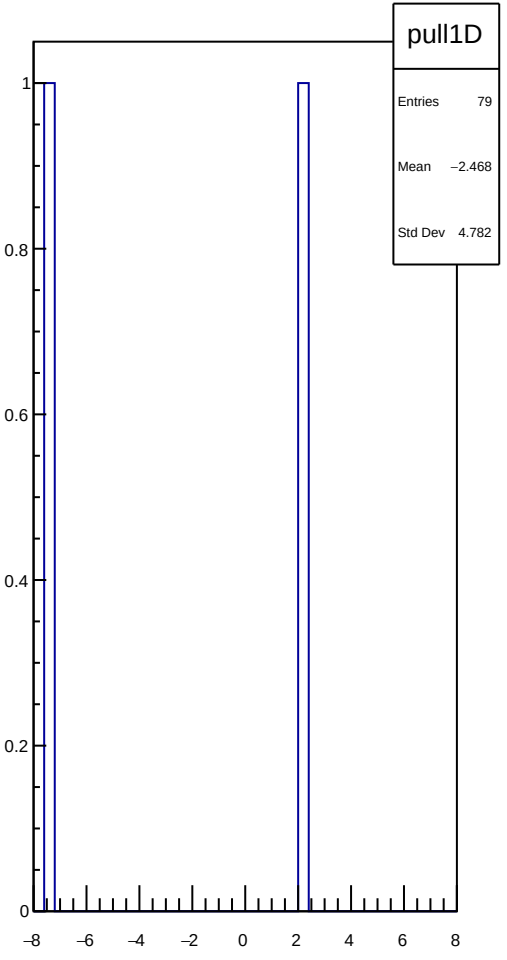

yield_bpm16X_rms vs run
χ² / ndf 3.233e+04 / 78
p0 0.04014 ± 3.289e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

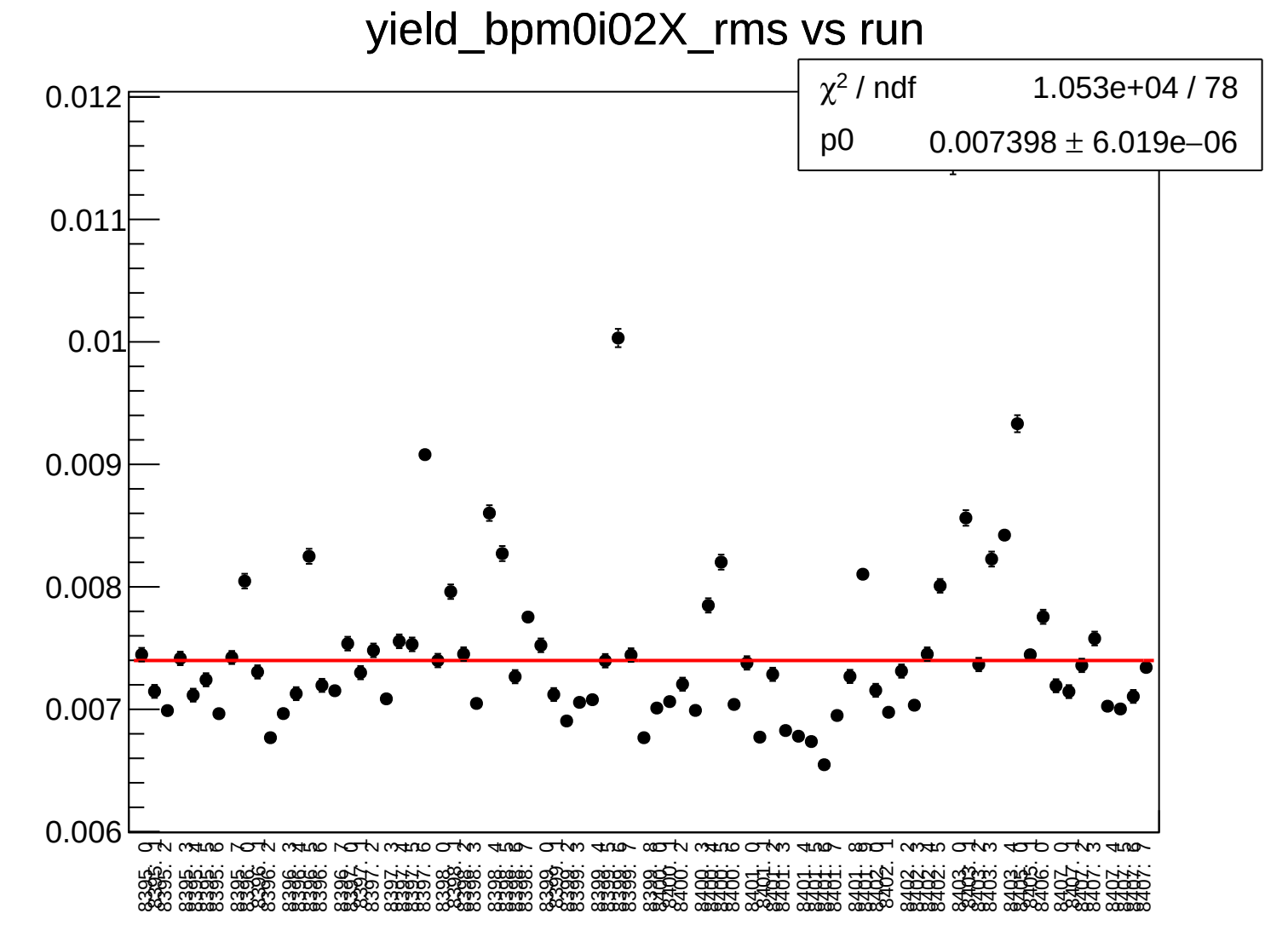

yield_bpm16Y_mean vs run
χ² / ndf 3.642e+07 / 78
p0 0.8089 ± 8.973e−06
0.92
0.9
0.88
0.86
0.84
0.82
0.8
0.78
0.76
pull
Entries 79
Mean 2255
Std Dev 2209
1500
1000
500
0
−500

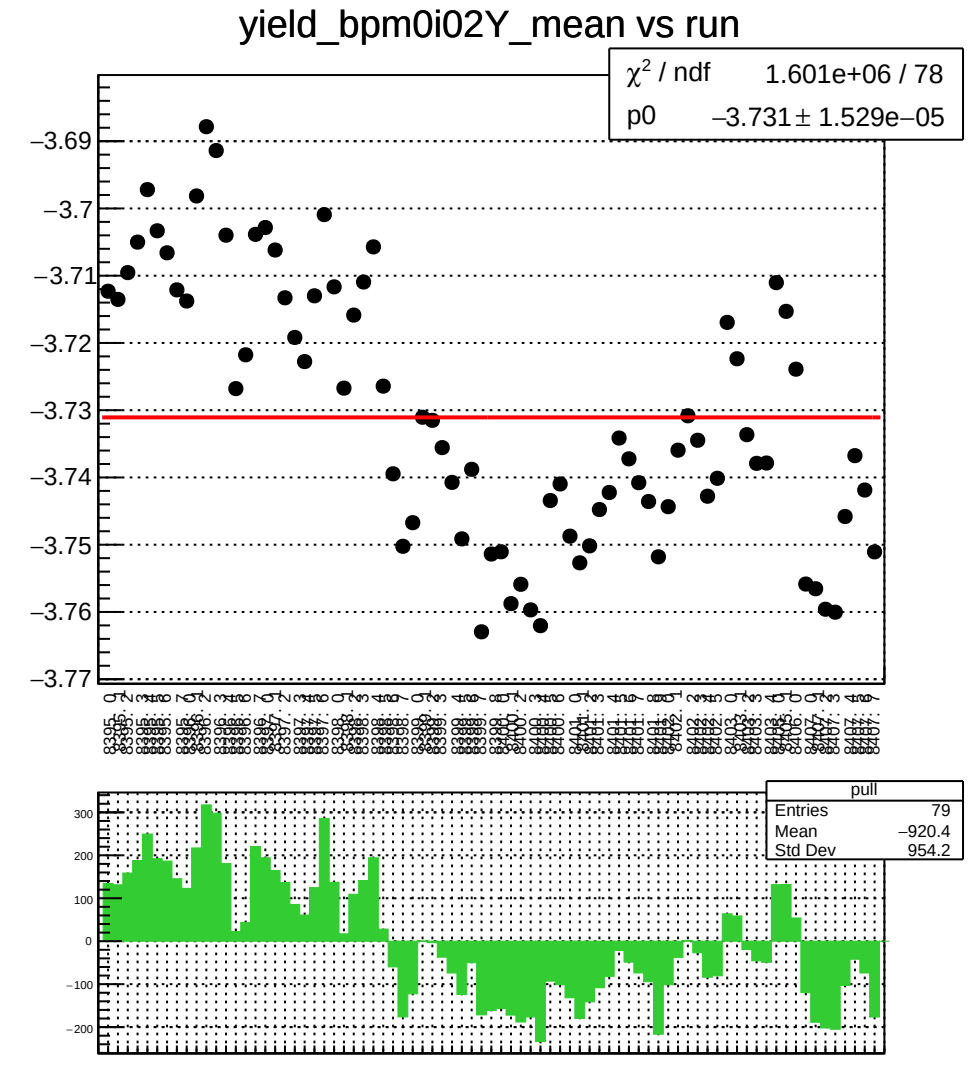

pull1D
Entries 79
Mean 4.272
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

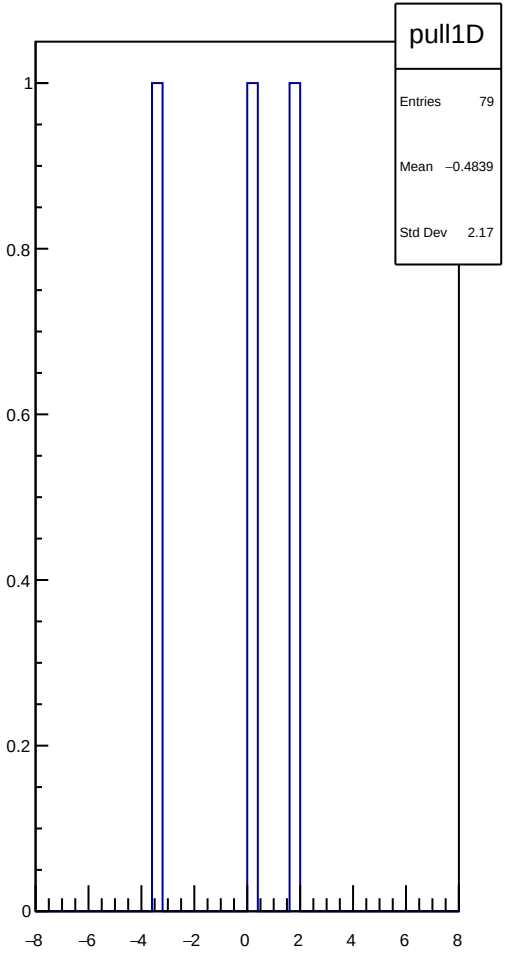

yield_bpm16Y_rms vs run
χ² / ndf 6.59e+04 / 78
p0 0.007655 ± 6.345e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

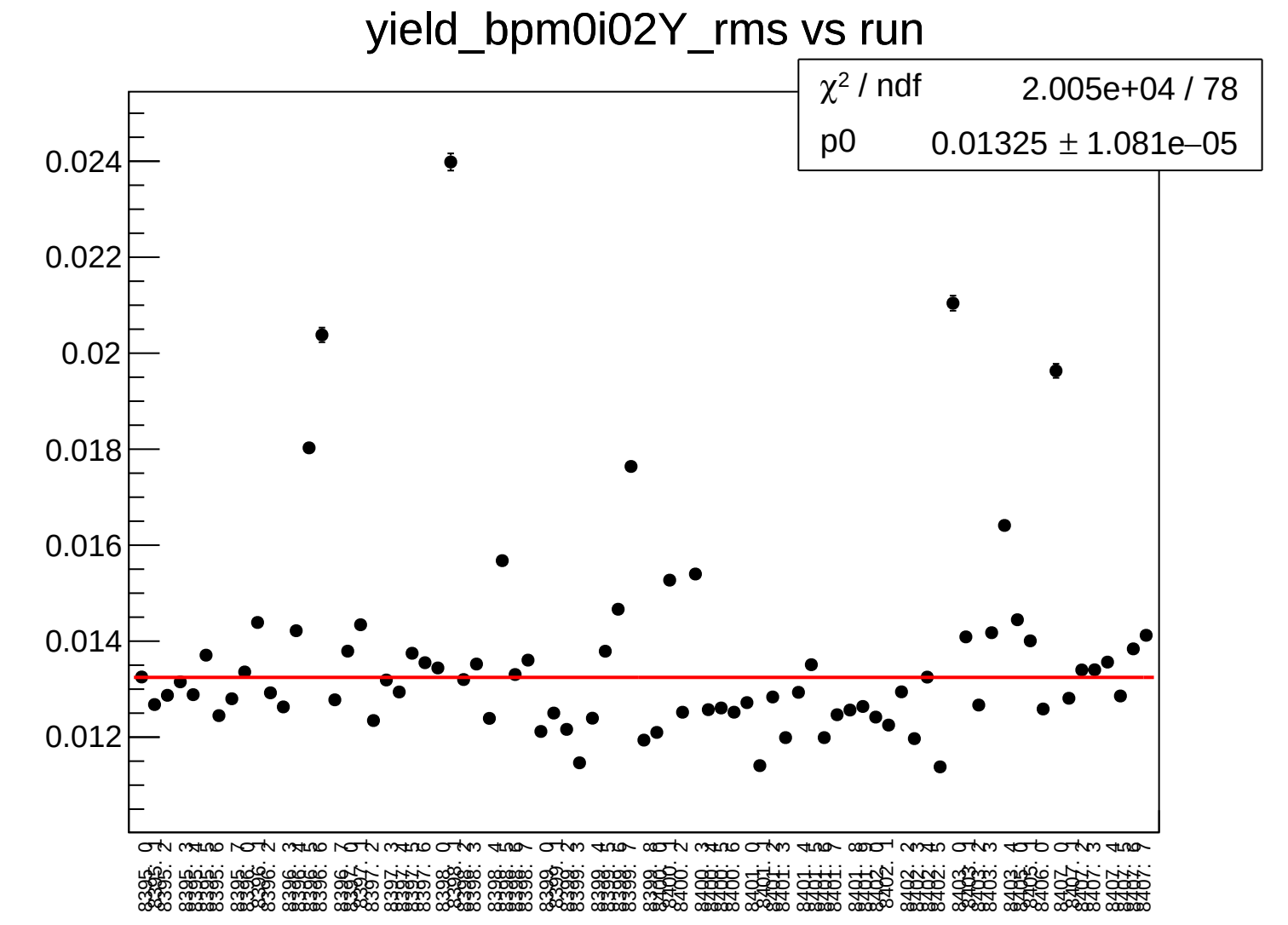

yield_bpm0i02X_mean vs run
χ² / ndf 3.561e+06 / 78
p0 0.7805 ± 8.512e−06
0.82
0.81
0.8
0.79
0.78
0.77
0.76
pull
Entries 79
Mean 339
Std Dev 273.8
500
400
300
200
100
0
−100
−200
−300

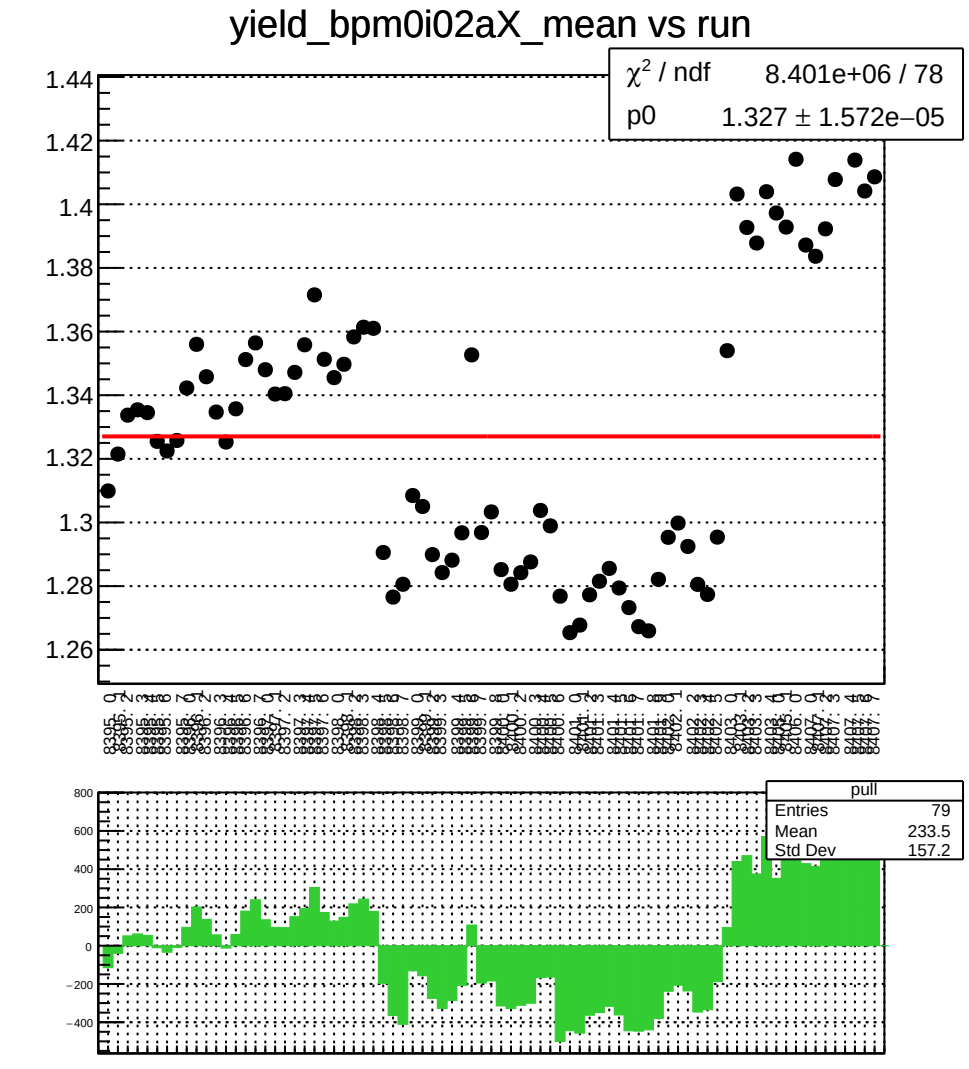

pull1D
Entries 79
Mean −2.468
Std Dev 4.782
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

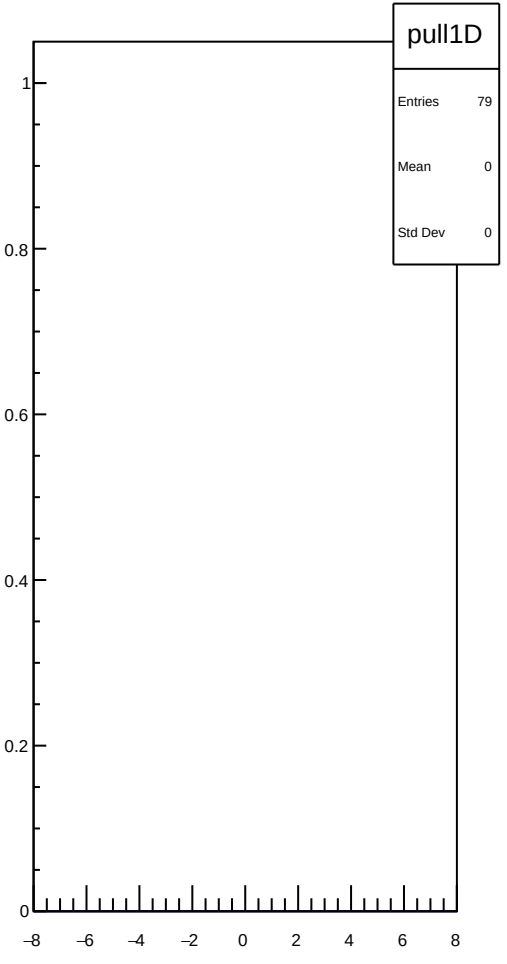

yield_bpm0i02X_rms vs run
χ² / ndf 1.053e+04 / 78
p0 0.007398 ± 6.019e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006

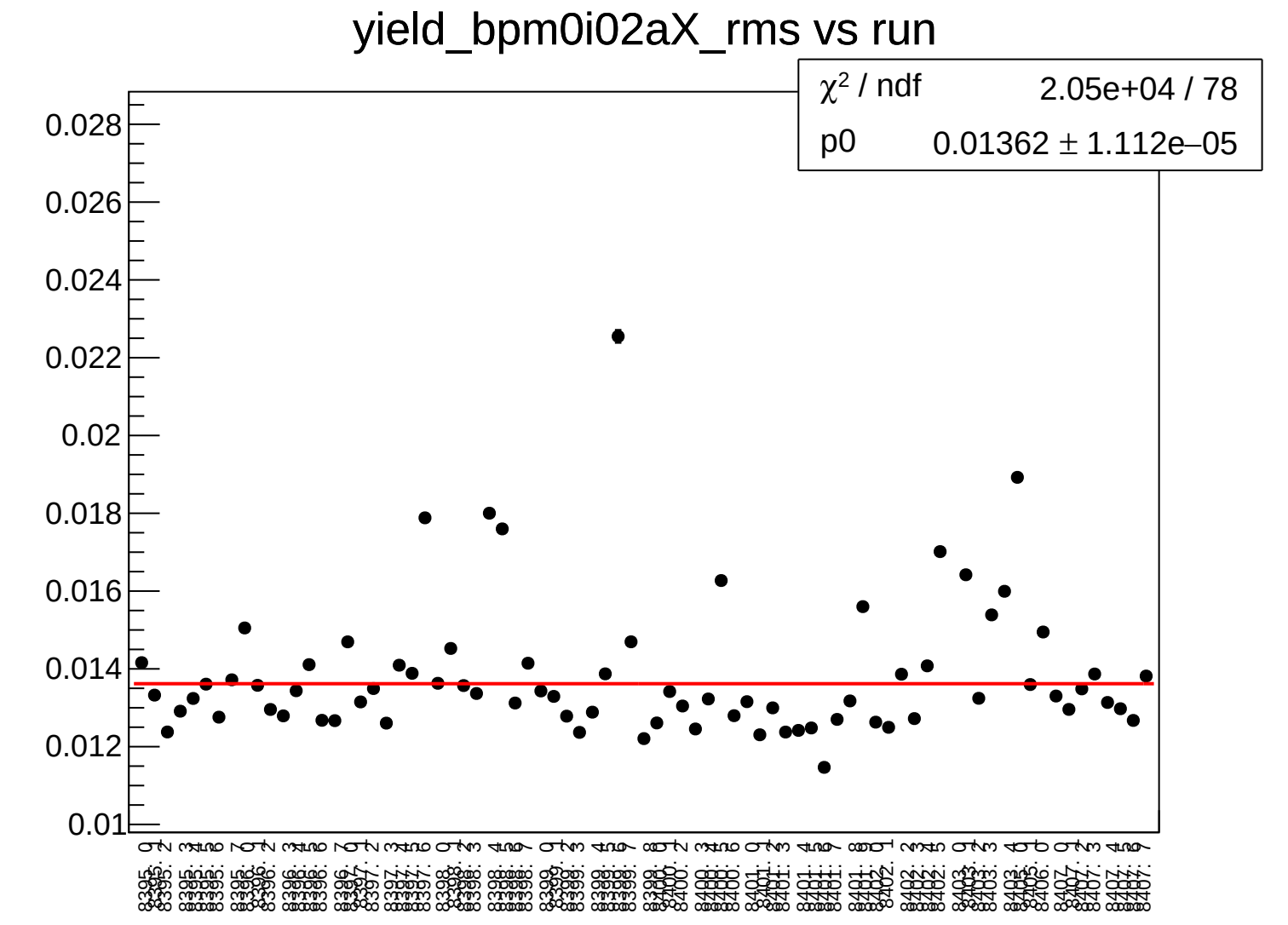

yield_bpm0i02Y_mean vs run
χ² / ndf 1.601e+06 / 78
p0 −3.731 ± 1.529e−05
−3.69
−3.7
−3.71
−3.72
−3.73
−3.74
−3.75
−3.76
−3.77
pull
Entries 79
Mean −920.4
Std Dev 954.2
300
200
100
0
−100
−200

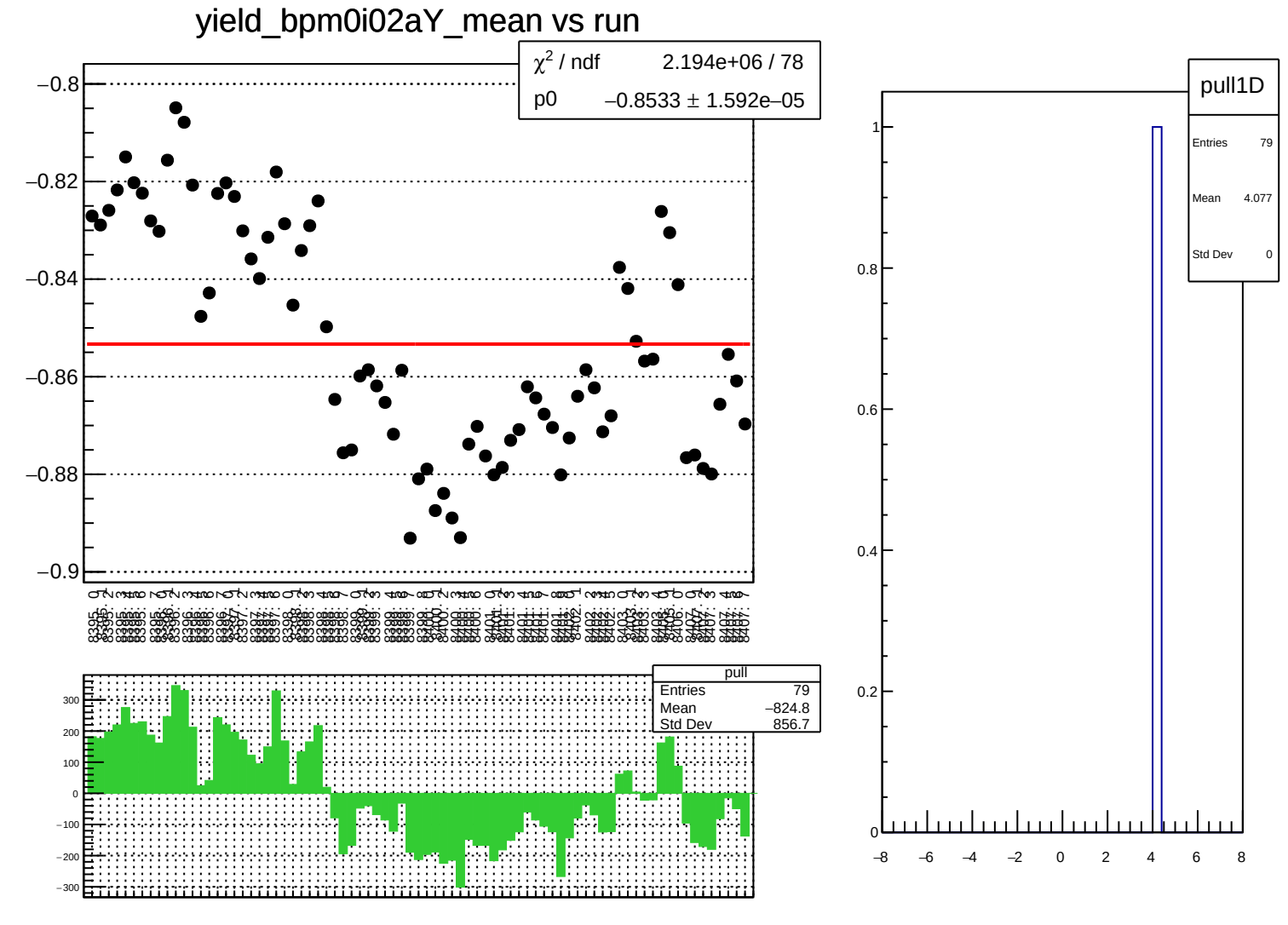

pull1D
Entries 79
Mean −0.4839
Std Dev 2.17
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

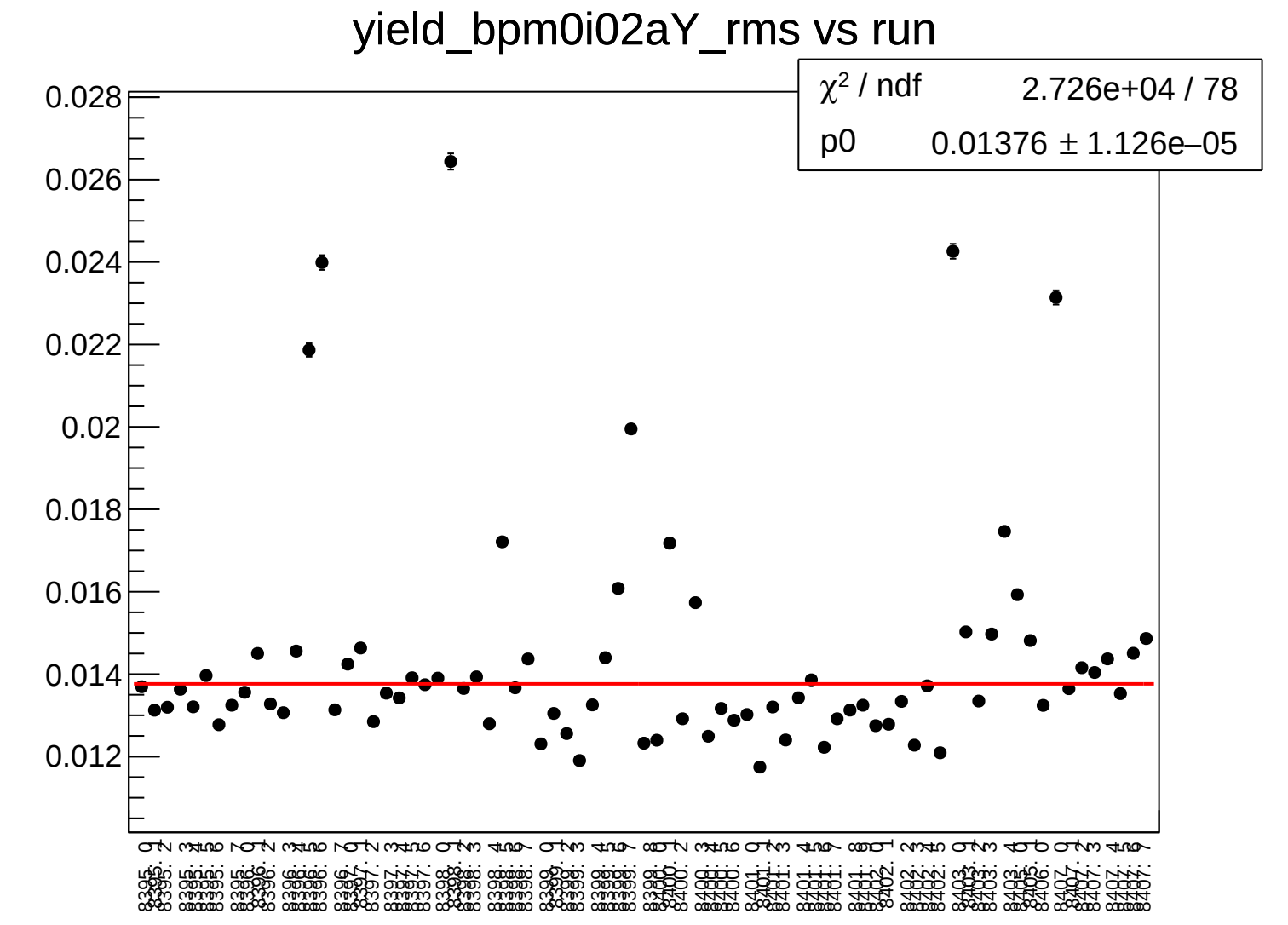

yield_bpm0i02Y_rms vs run
χ² / ndf 2.005e+04 / 78
p0 0.01325 ± 1.081e–05
0.024
0.022
0.02
0.018
0.016
0.014
0.012

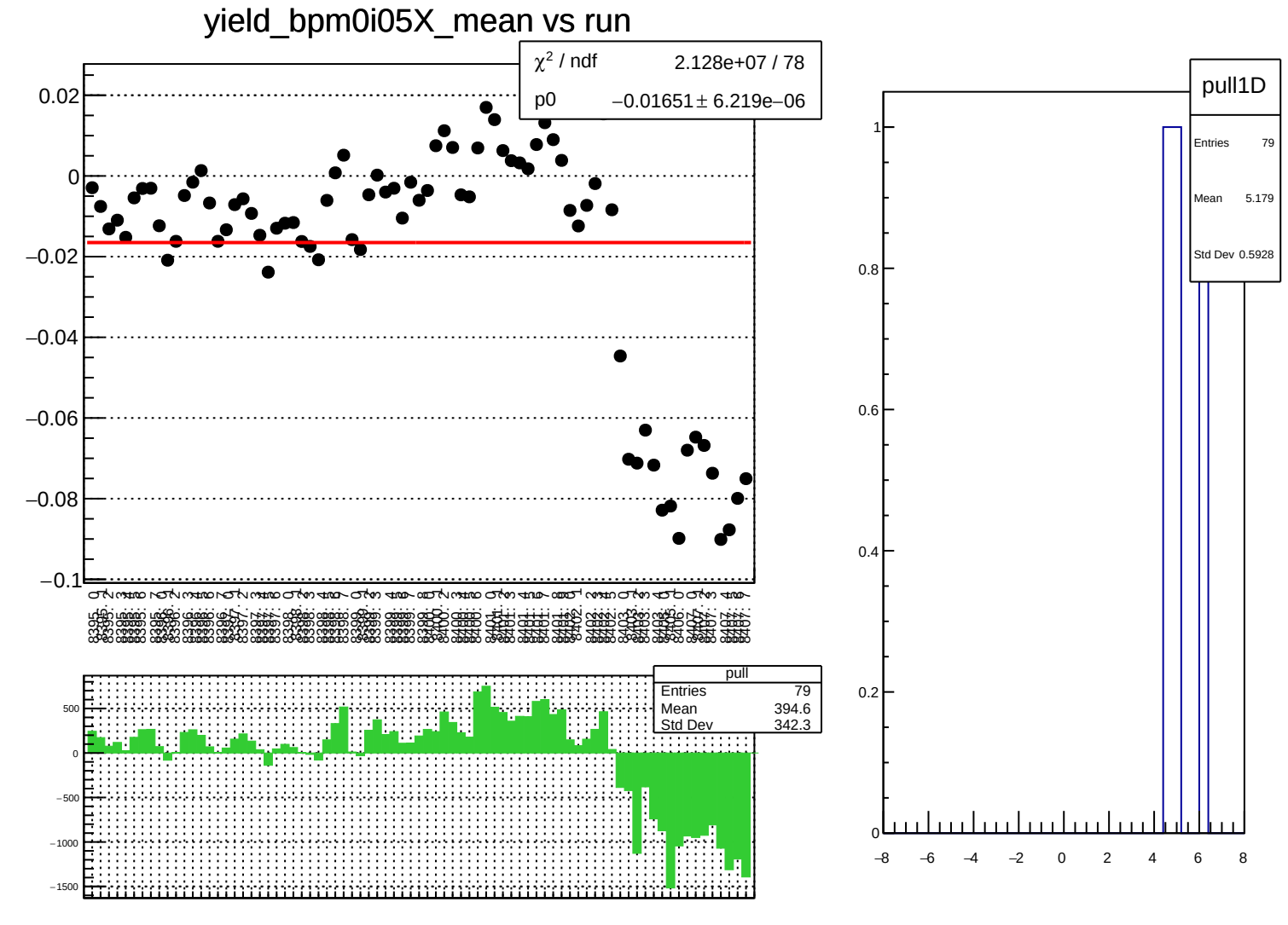

yield_bpm0i02aX_mean vs run
χ² / ndf 8.401e+06 / 78
p0 1.327 ± 1.572e−05
pull
Entries 79
Mean 233.5
Std Dev 157.2

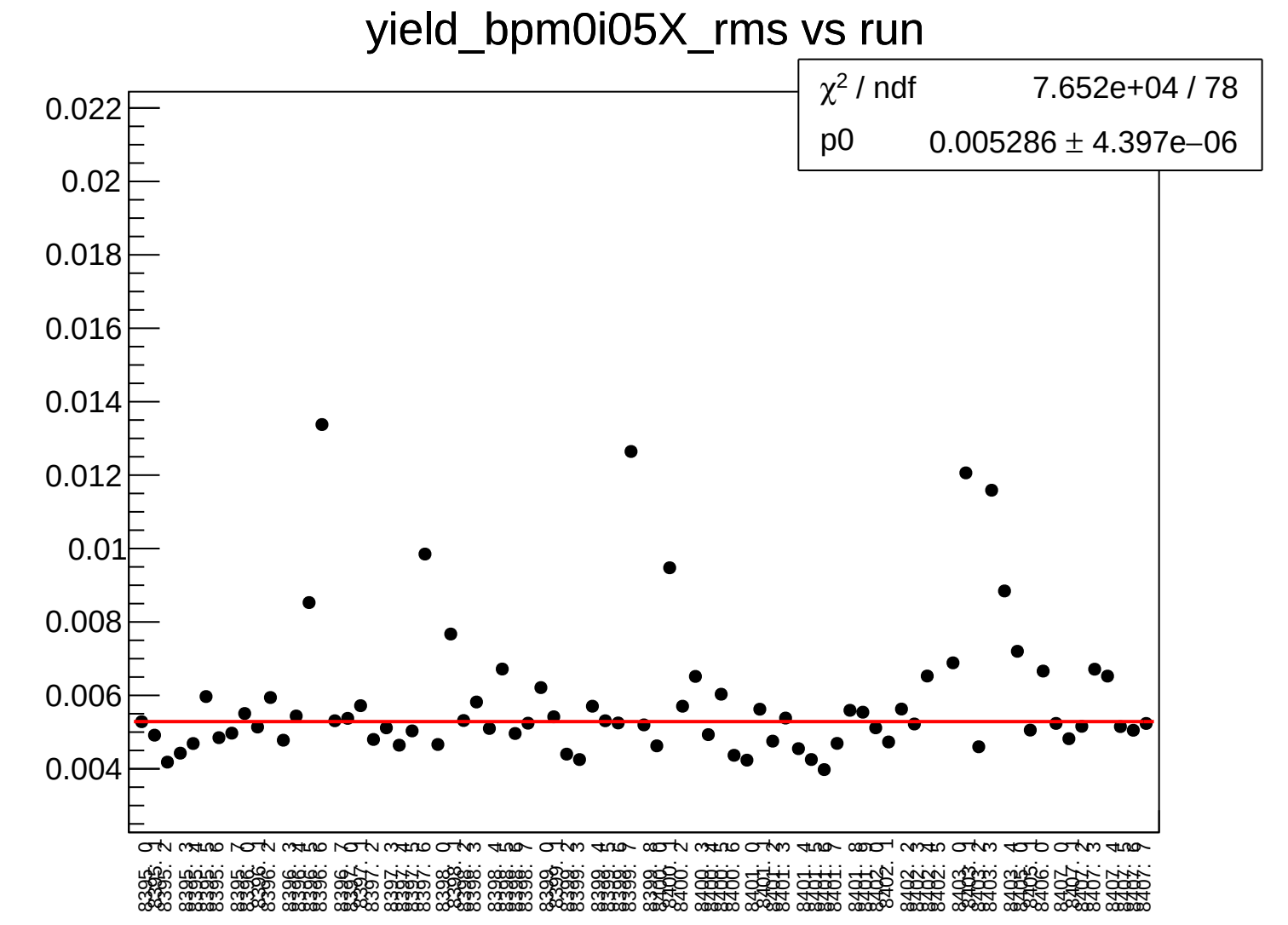

pull1D
Entries 79
Mean 0
Std Dev 0

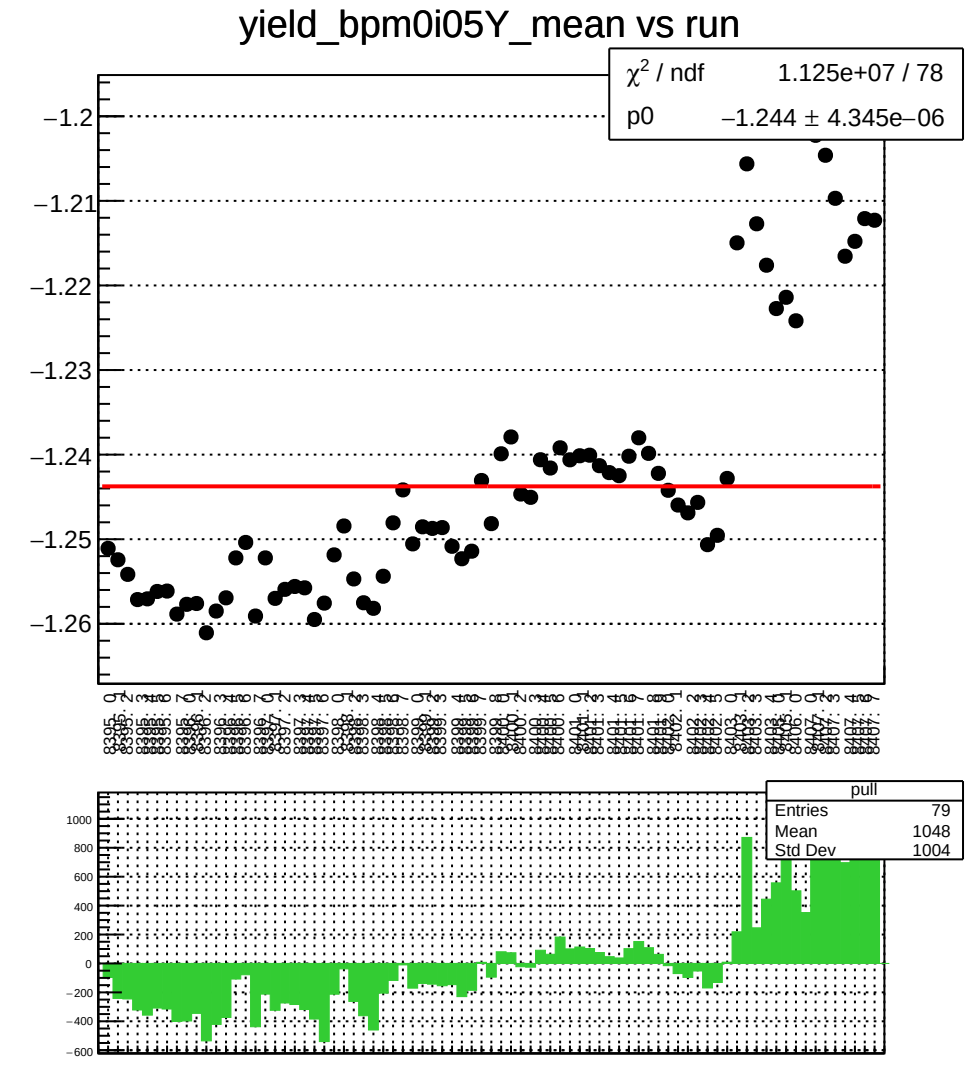

yield_bpm0i02aX_rms vs run
χ² / ndf 2.05e+04 / 78
p0 0.01362 ± 1.112e−05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

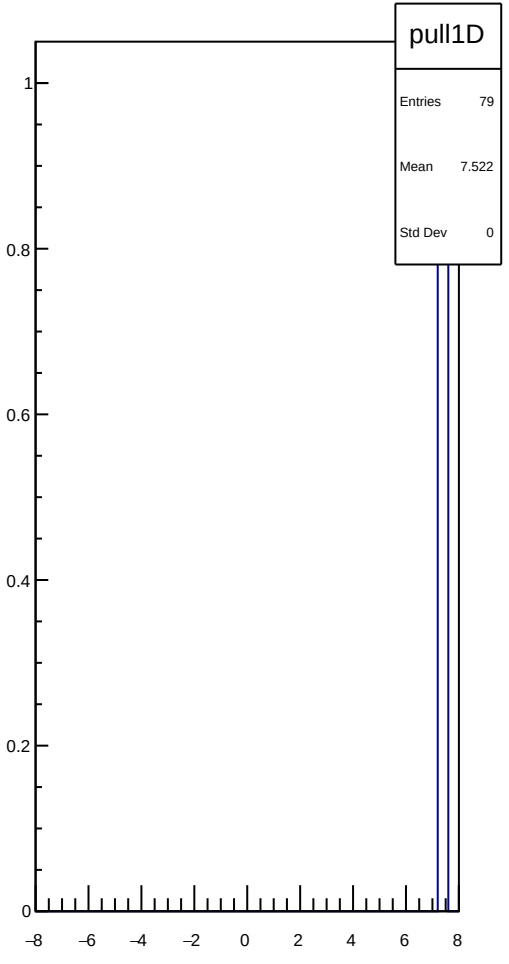

yield_bpm0i02aY_mean vs run
χ² / ndf 2.194e+06 / 78
p0 −0.8533 ± 1.592e−05
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
pull
Entries 79
Mean −824.8
Std Dev 856.7
300
200
100
0
−100
−200
−300
pull1D
Entries 79
Mean 4.077
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

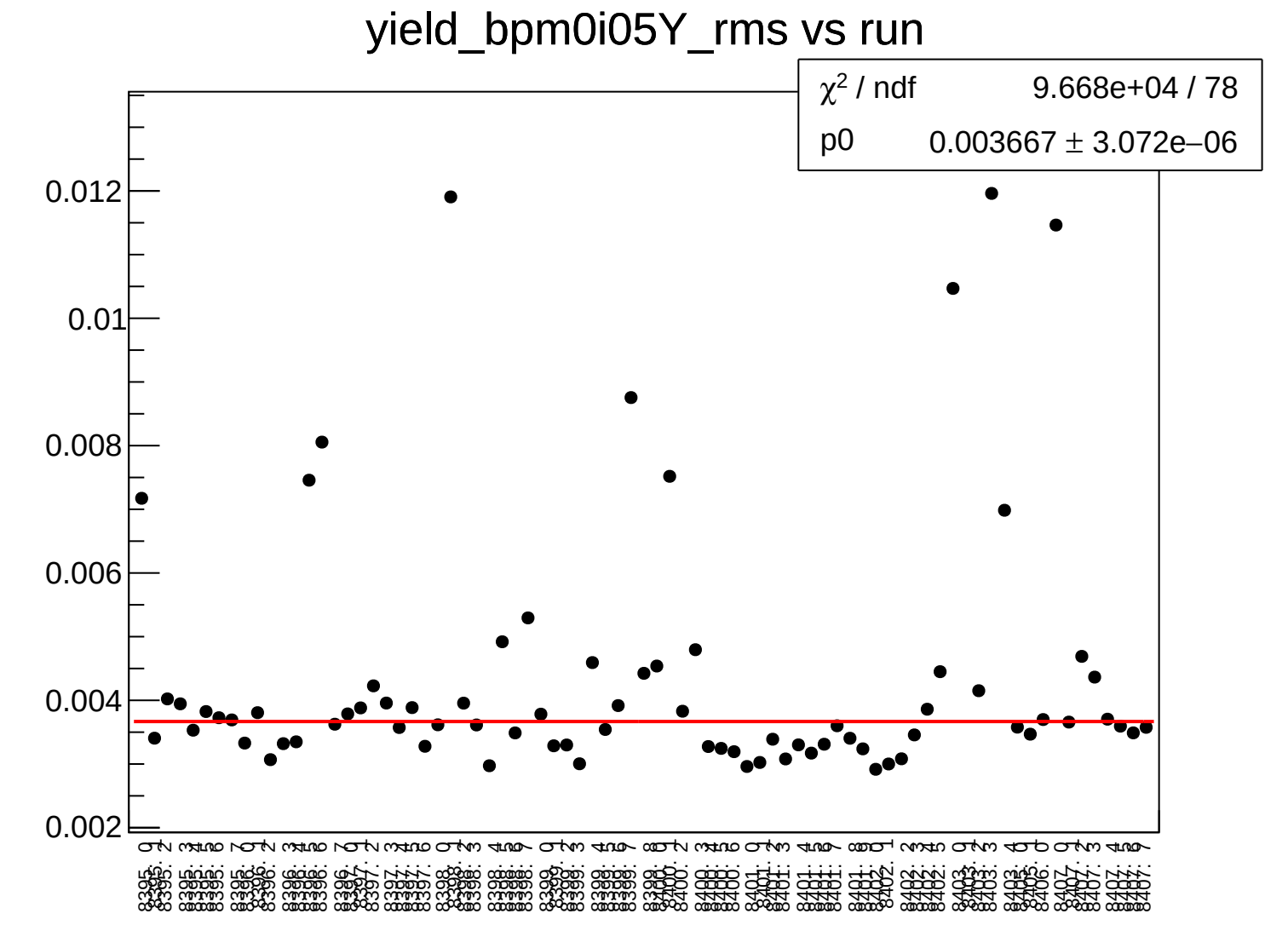

yield_bpm0i02aY_rms vs run
χ² / ndf 2.726e+04 / 78
p0 0.01376 ± 1.126e−05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

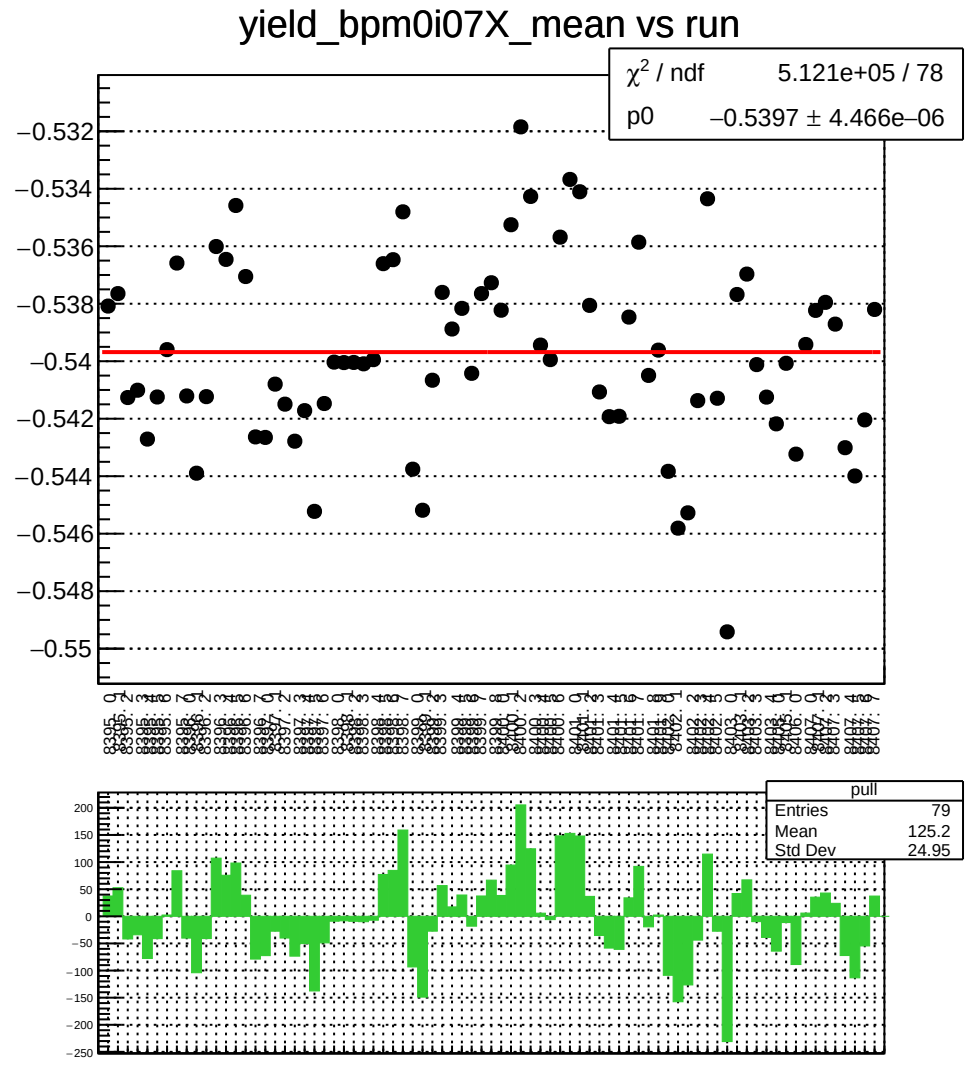

yield_bpm0i05X_mean vs run
χ² / ndf 2.128e+07 / 78
p0 −0.01651 ± 6.219e−06
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
pull
Entries 79
Mean 394.6
Std Dev 342.3
500
0
−500
−1000
−1500
pull1D
Entries 79
Mean 5.179
Std Dev 0.5928
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

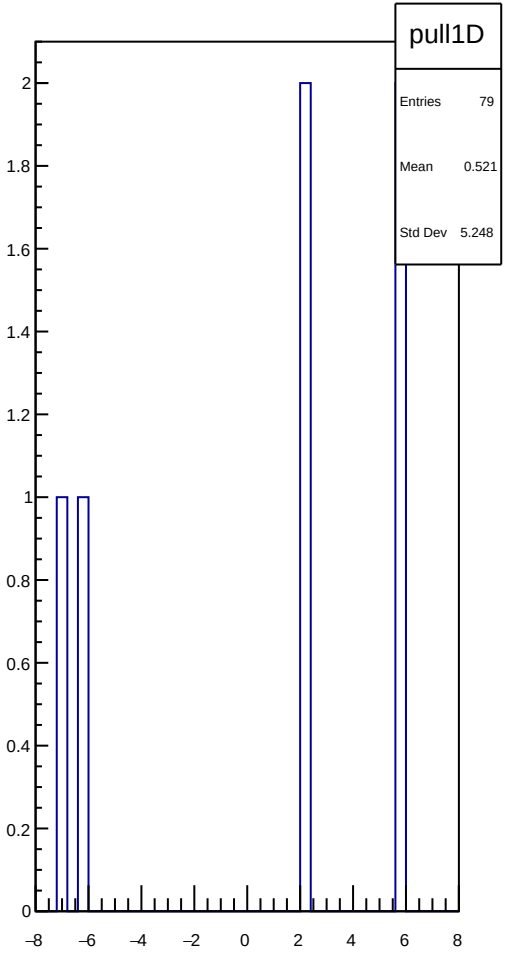

yield_bpm0i05X_rms vs run
χ^2 / ndf 7.652e+04 / 78
p0 0.005286 ± 4.397e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

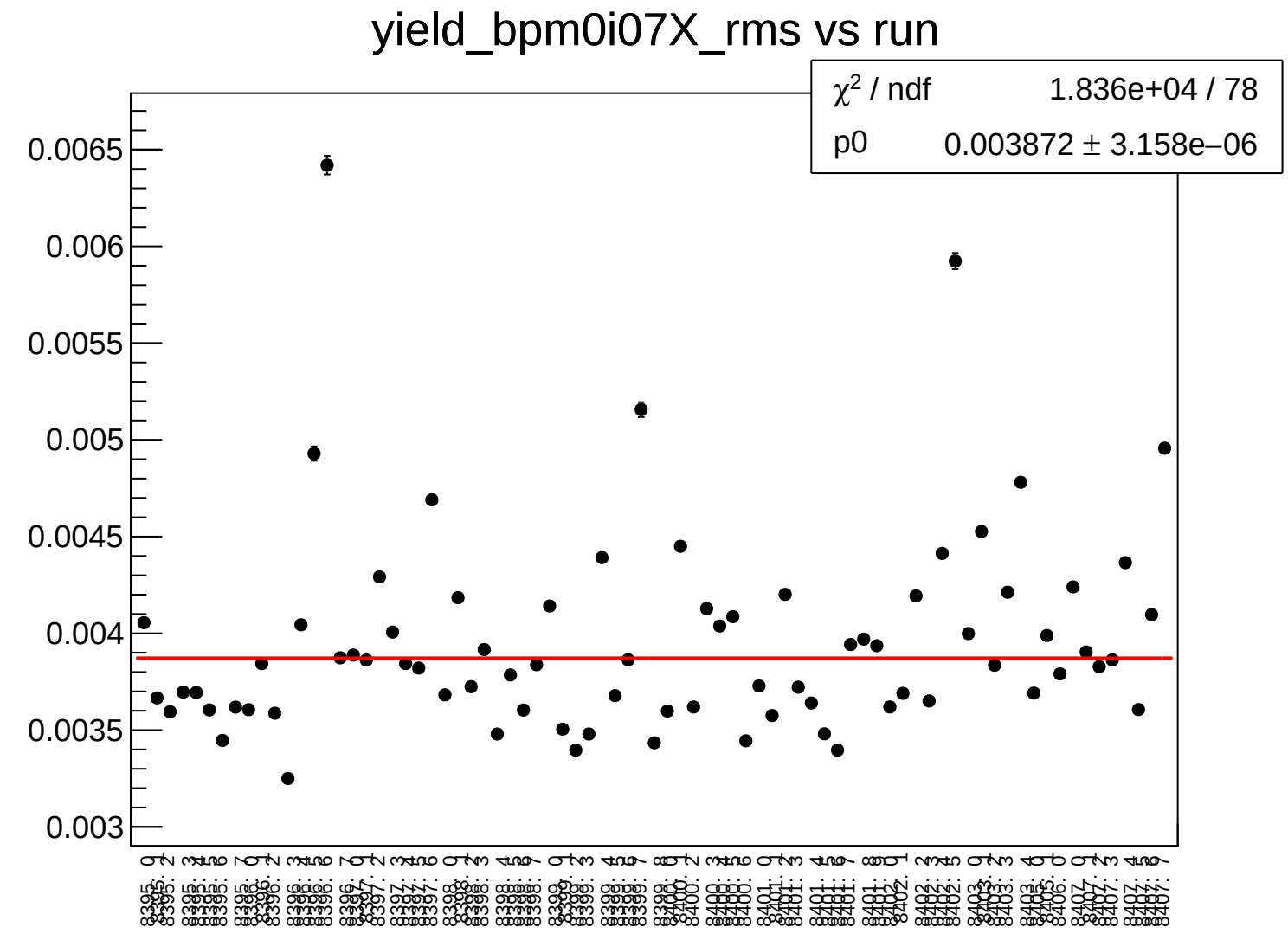

yield_bpm0i05Y_mean vs run
χ² / ndf 1.125e+07 / 78
p0 −1.244 ± 4.345e−06
−1.2
−1.21
−1.22
−1.23
−1.24
−1.25
−1.26
pull
Entries 79
Mean 1048
Std Dev 1004
1000
800
600
400
200
0
−200
−400
−600

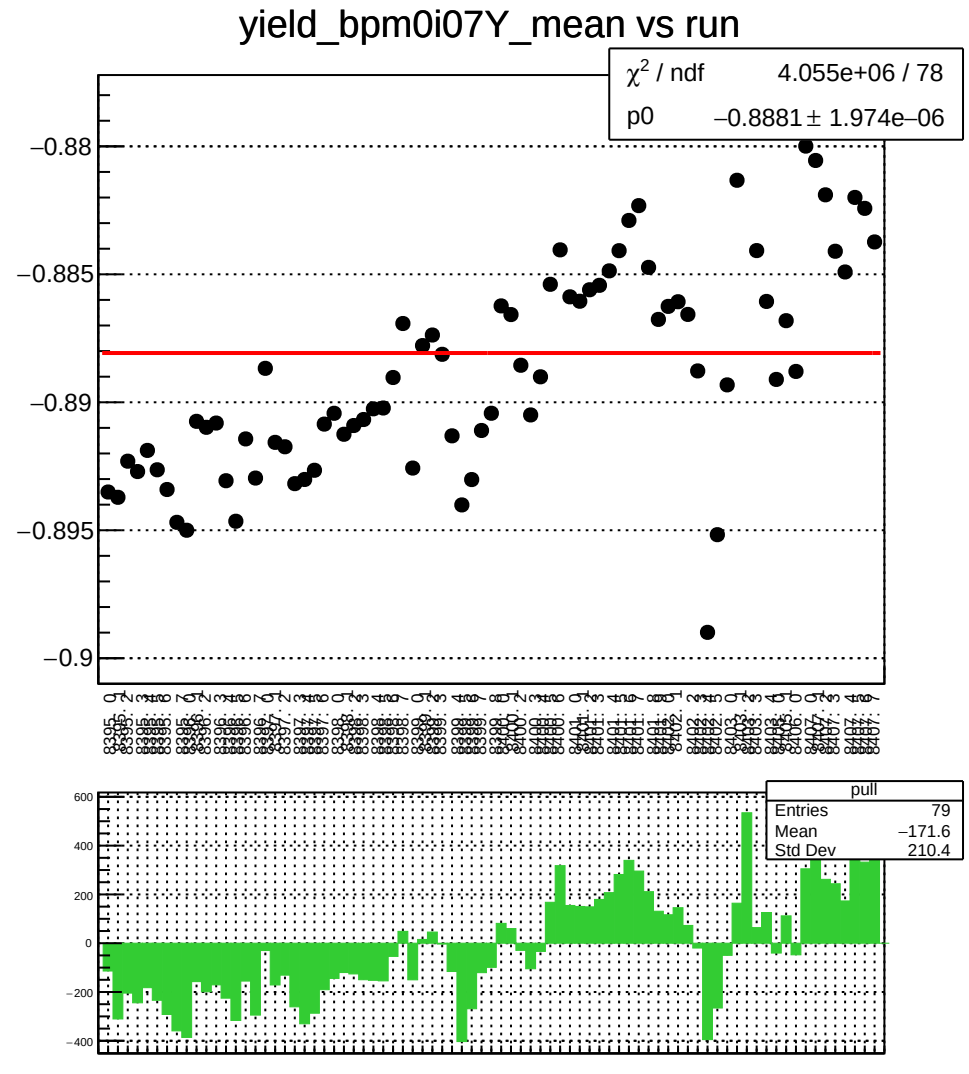

pull1D
Entries 79
Mean 7.522
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

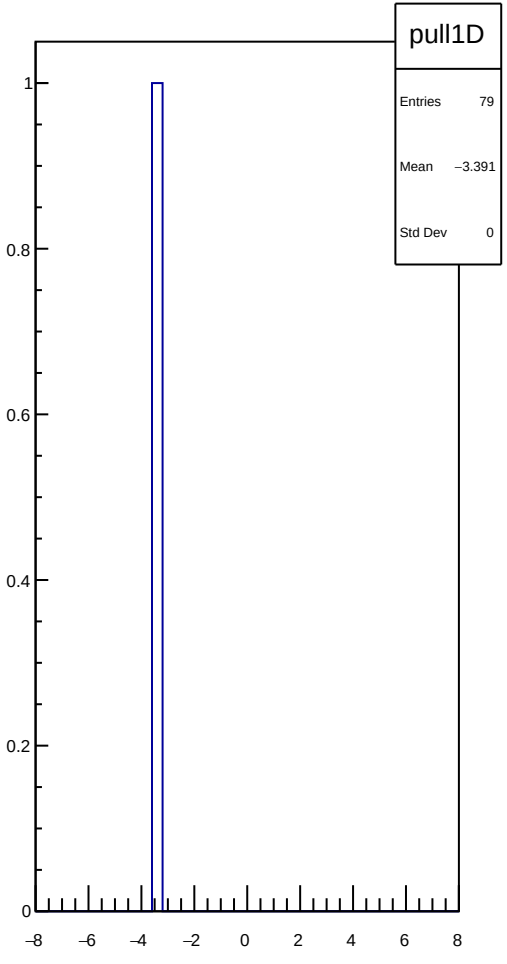

yield_bpm0i05Y_rms vs run
χ² / ndf 9.668e+04 / 78
p0 0.003667 ± 3.072e−06
0.012
0.01
0.008
0.006
0.004
0.002

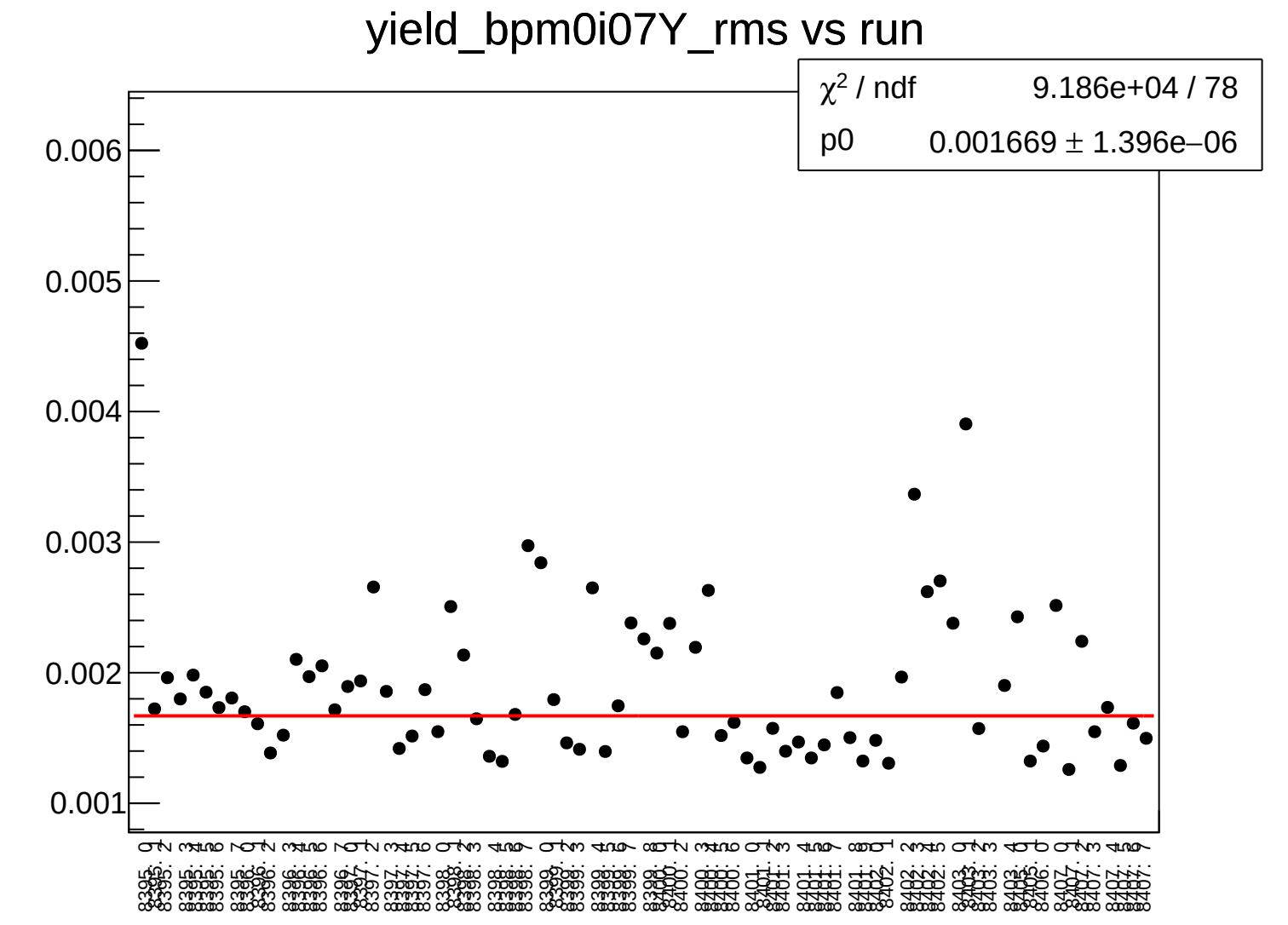

yield_bpm0i07X_mean vs run
χ² / ndf 5.121e+05 / 78
p0 −0.5397 ± 4.466e−06
−0.532
−0.534
−0.536
−0.538
−0.54
−0.542
−0.544
−0.546
−0.548
−0.55
pull
Entries 79
Mean 125.2
Std Dev 24.95
200
150
100
50
0
−50
−100
−150
−200
−250

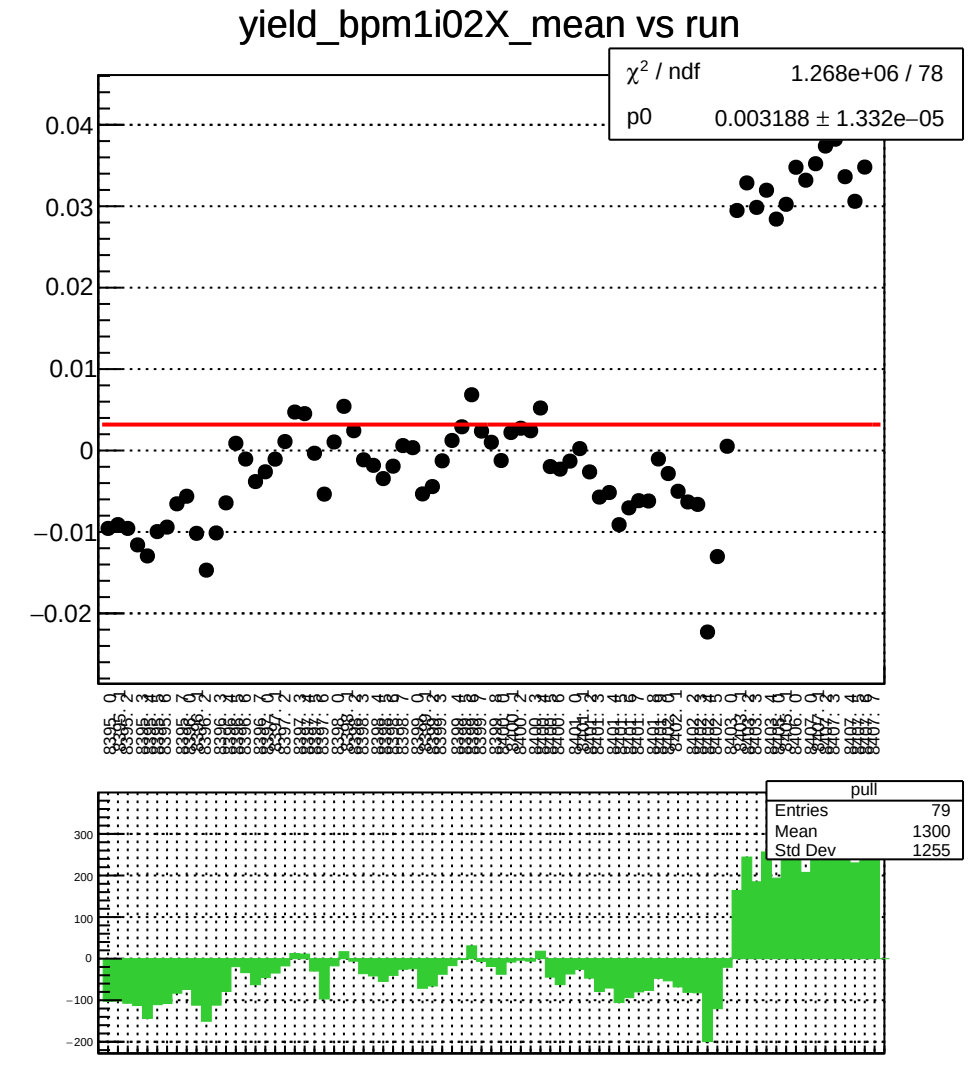

pull1D
Entries 79
Mean 0.521
Std Dev 5.248
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

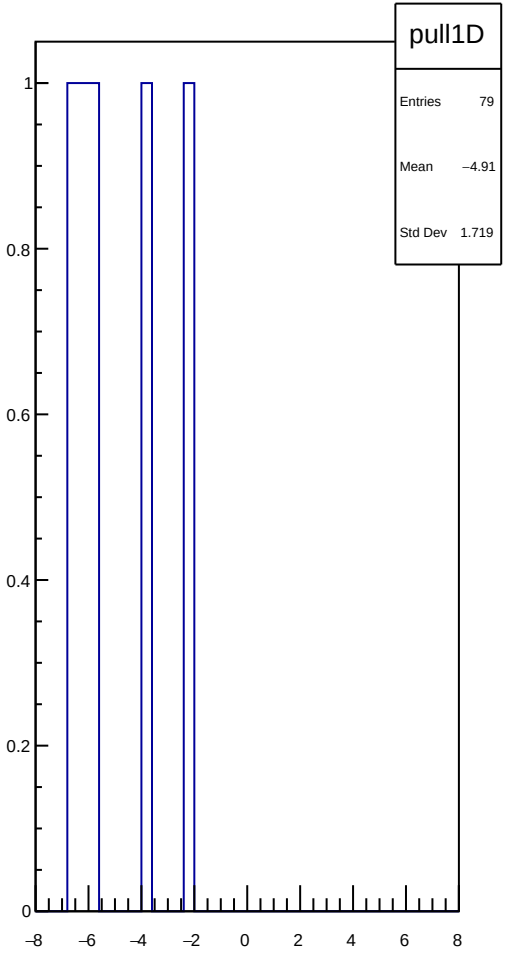

yield_bpm0i07X_rms vs run
χ^2 / ndf 1.836e+04 / 78
p0 0.003872 ± 3.158e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

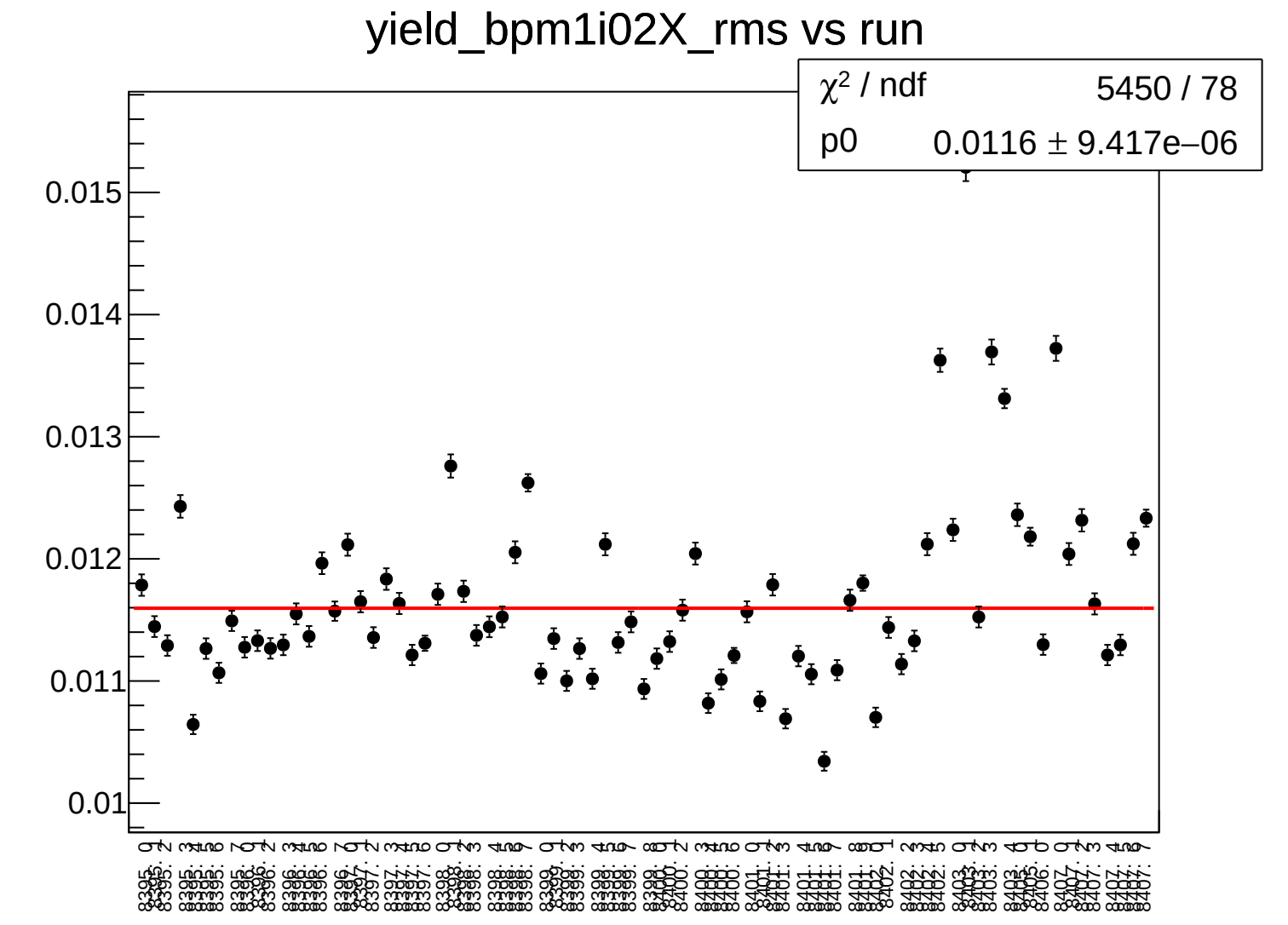

yield_bpm0i07Y_mean vs run
χ² / ndf 4.055e+06 / 78
p0 −0.8881 ± 1.974e−06
−0.88
−0.885
−0.89
−0.895
−0.9
pull
Entries 79
Mean −171.6
Std Dev 210.4
600
400
200
0
−200
−400

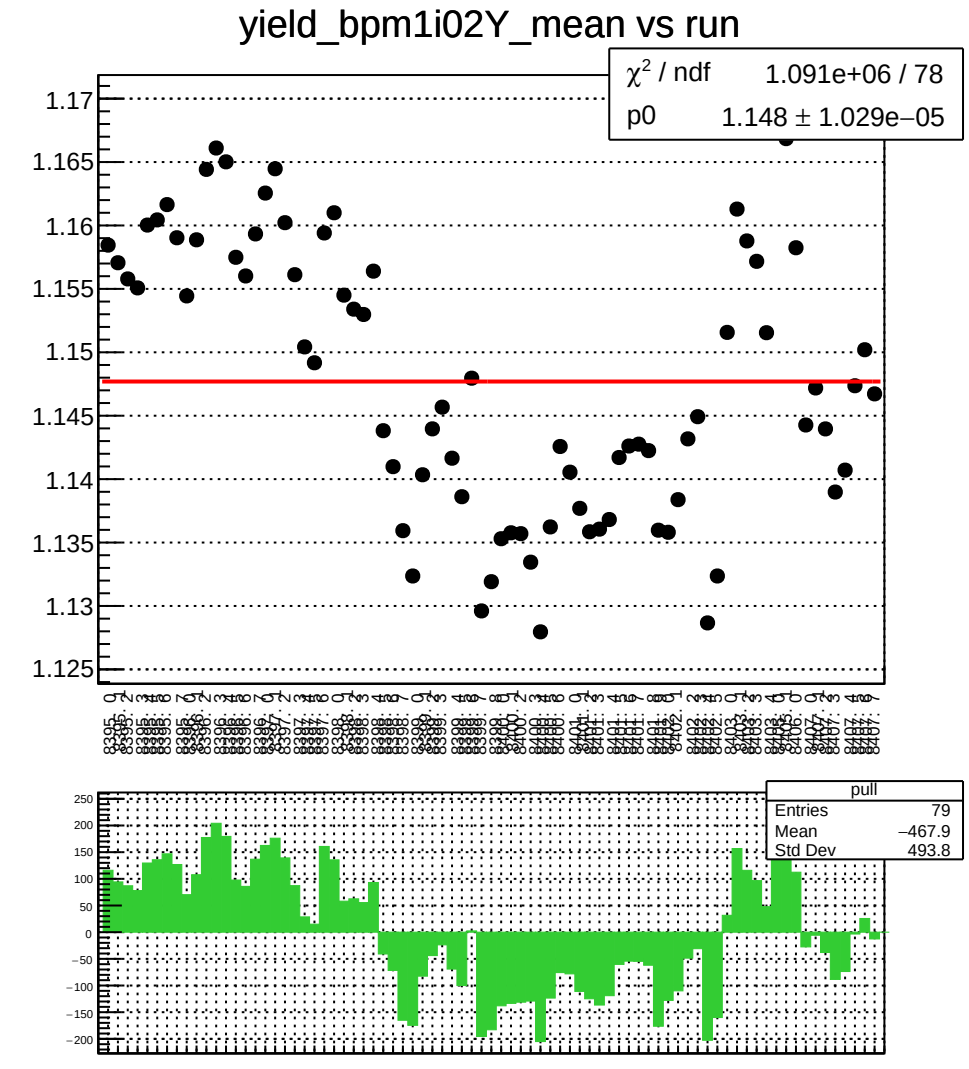

pull1D
Entries 79
Mean −3.391
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

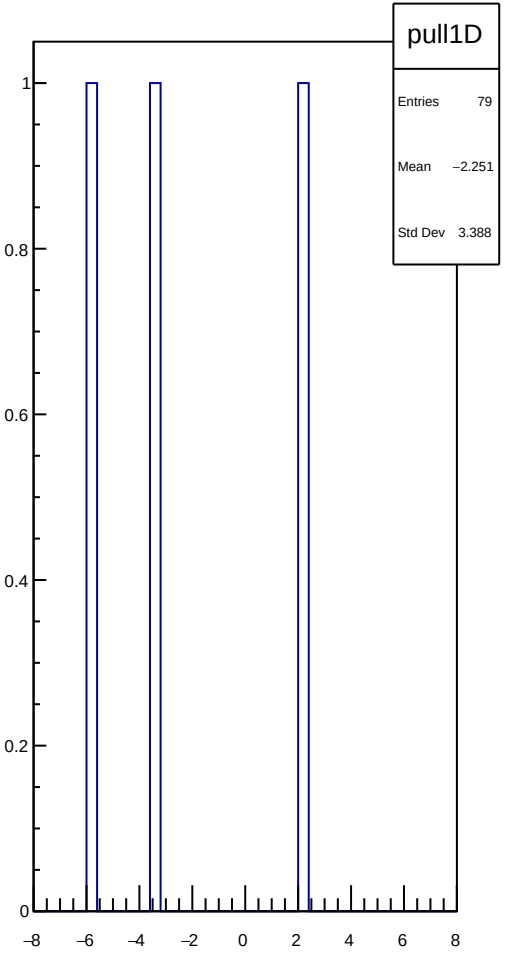

yield_bpm0i07Y_rms vs run
χ² / ndf 9.186e+04 / 78
p0 0.001669 ± 1.396e−06
0.006
0.005
0.004
0.003
0.002
0.001

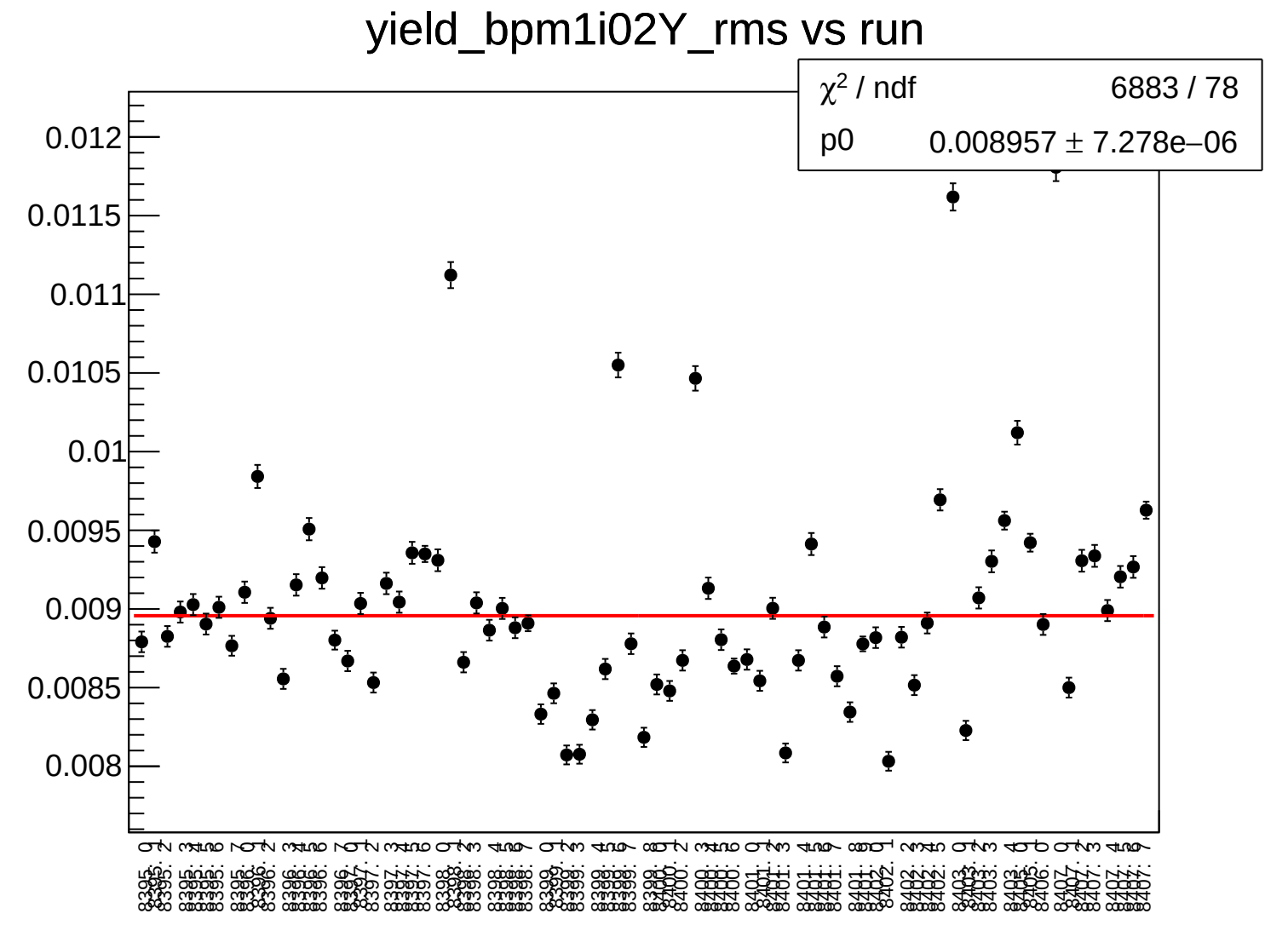

yield_bpm1i02X_mean vs run
χ² / ndf 1.268e+06 / 78
p0 0.003188 ± 1.332e−05
0.04
0.03
0.02
0.01
0
−0.01
−0.02
pull
Entries 79
Mean 1300
Std Dev 1255
300
200
100
0
−100
−200

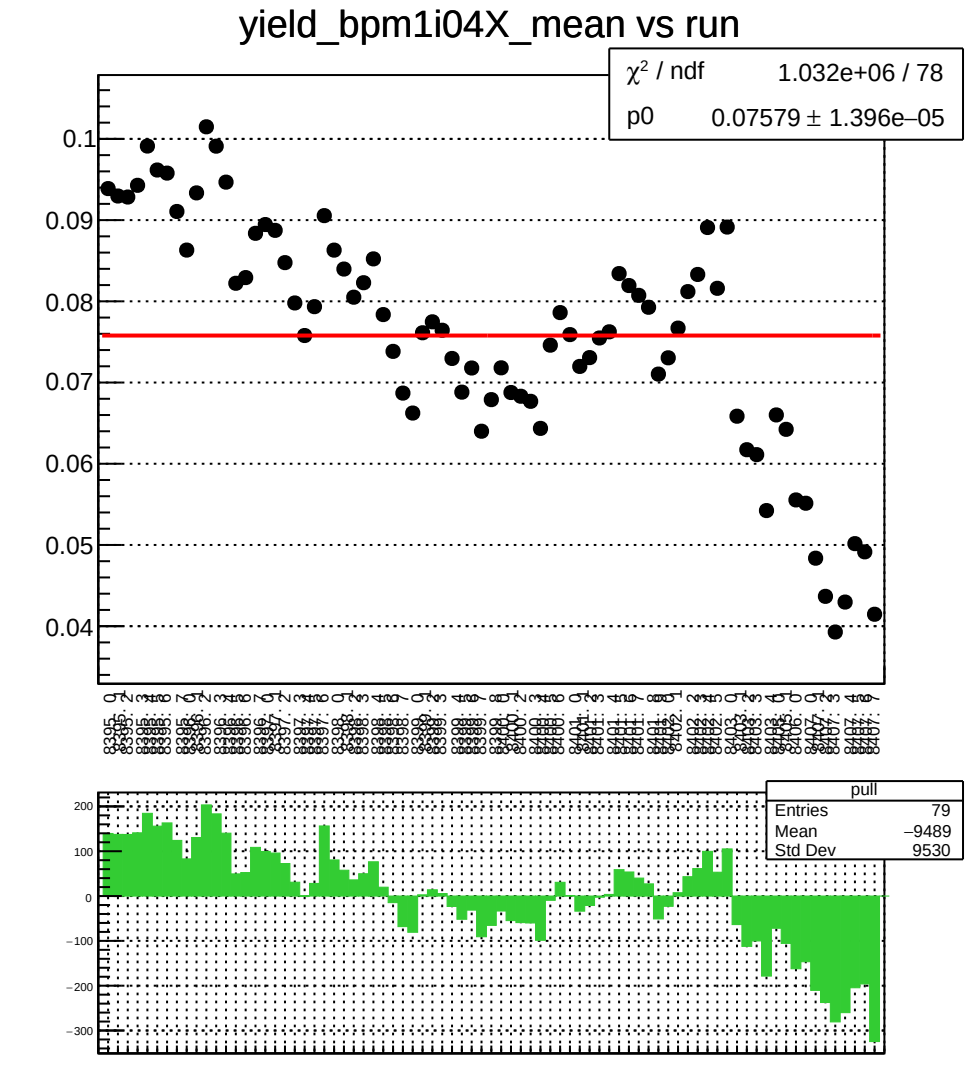

pull1D
Entries 79
Mean −4.91
Std Dev 1.719
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

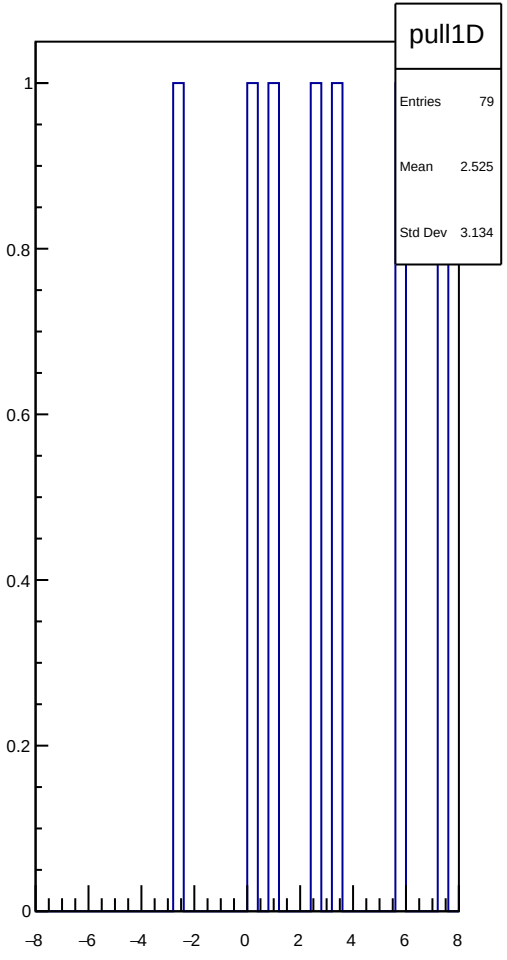

yield_bpm1i02X_rms vs run
χ² / ndf 5450 / 78
p0 0.0116 ± 9.417e−06
0.015
0.014
0.013
0.012
0.011
0.01

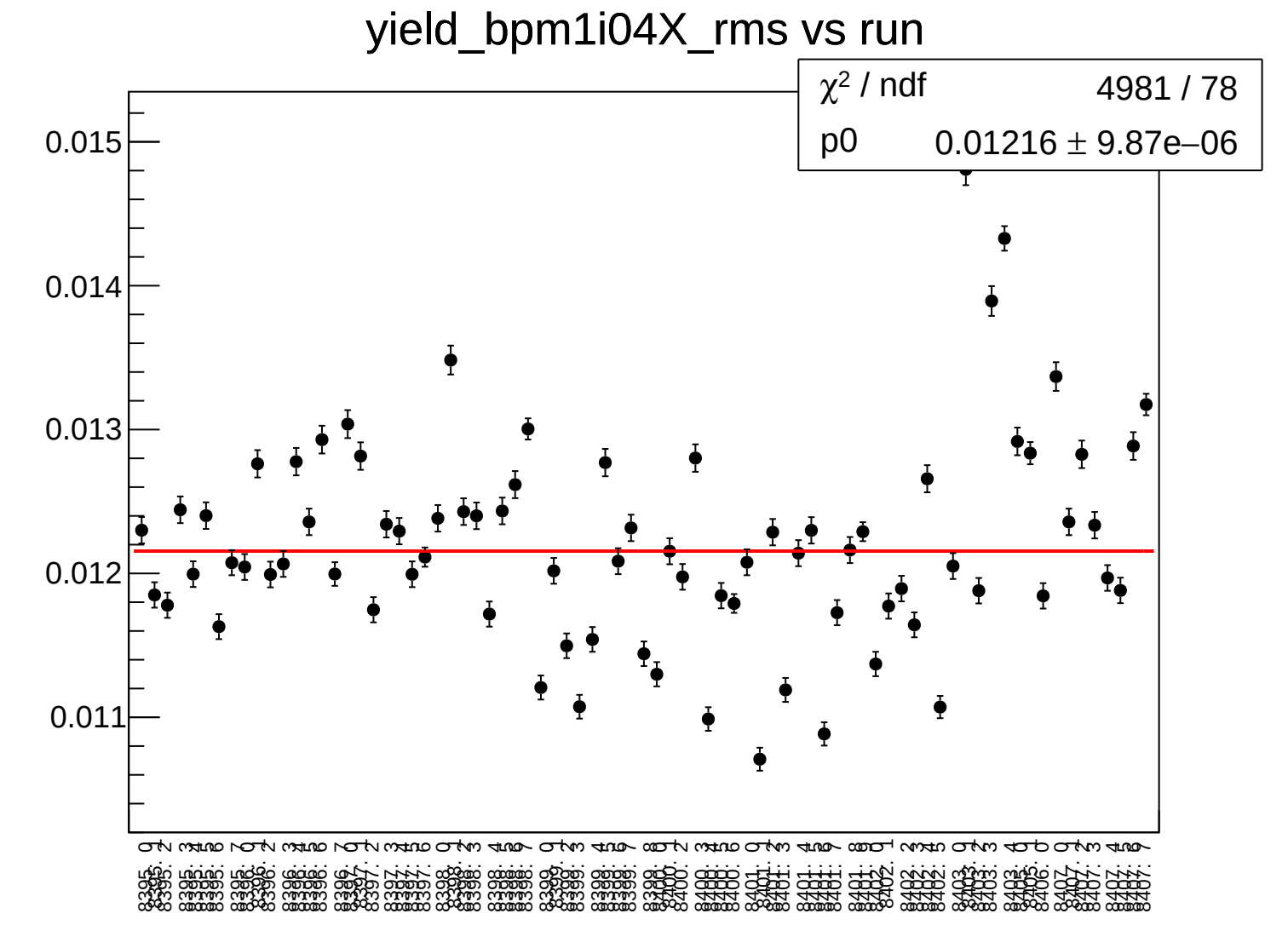

yield_bpm1i02Y_mean vs run
χ² / ndf 1.091e+06 / 78
p0 1.148 ± 1.029e−05
pull
Entries 79
Mean −467.9
Std Dev 493.8

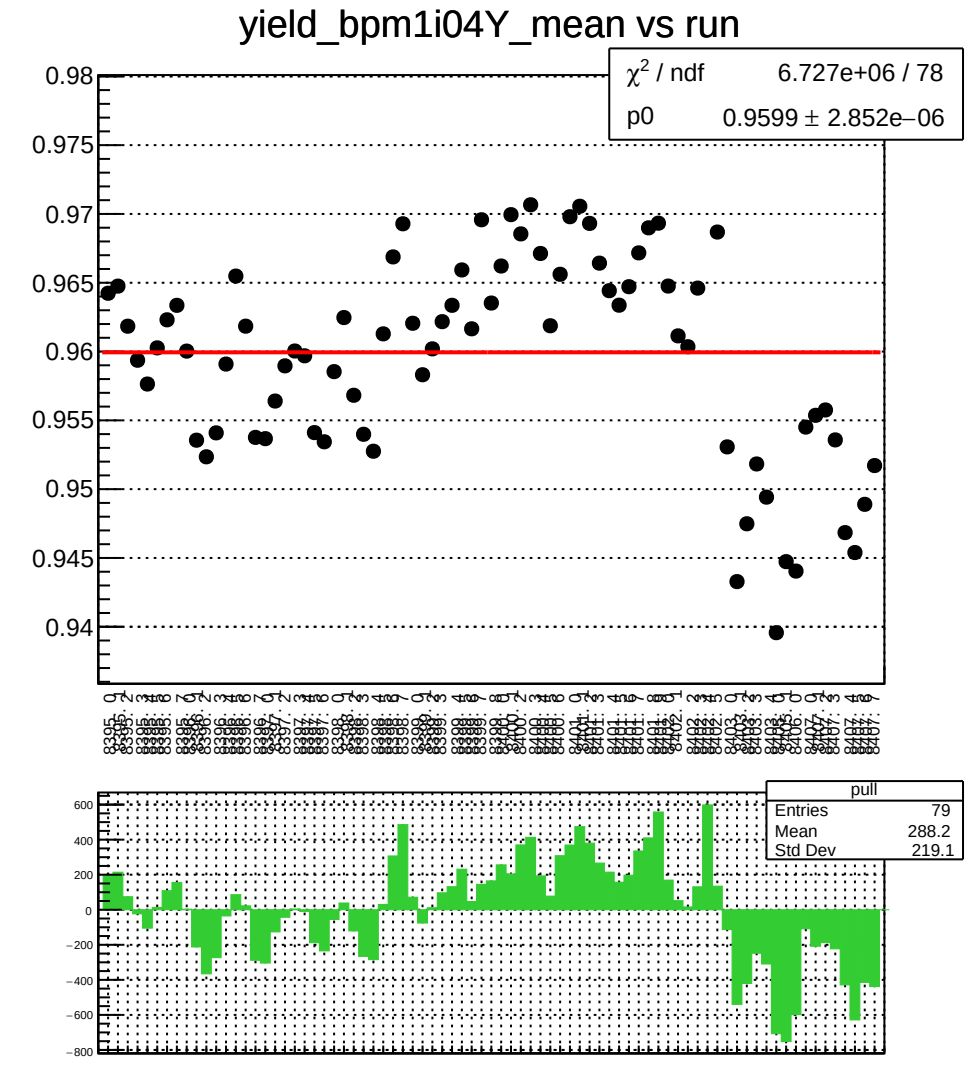

pull1D
Entries 79
Mean −2.251
Std Dev 3.388

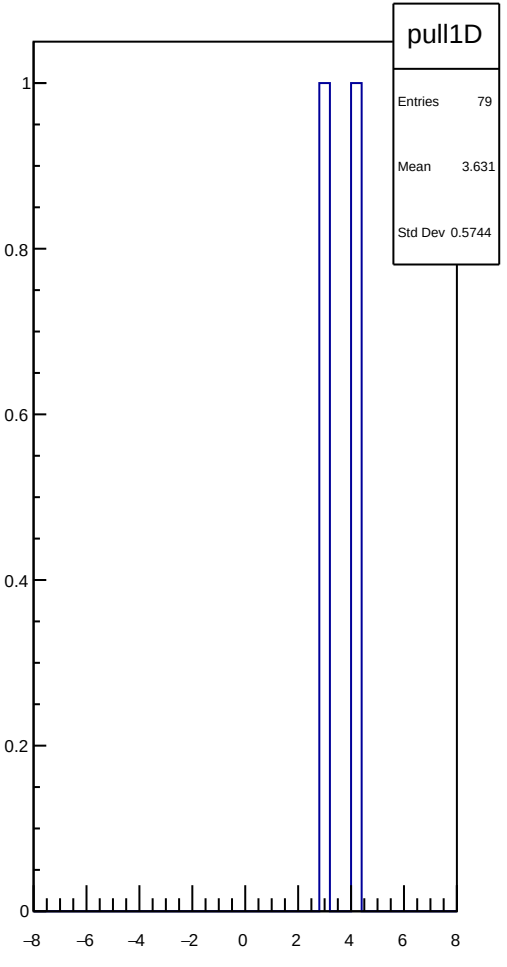

yield_bpm1i02Y_rms vs run
χ² / ndf 6883 / 78
p0 0.008957 ± 7.278e−06
0.012
0.0115
0.011
0.0105
0.01
0.0095
0.009
0.0085
0.008

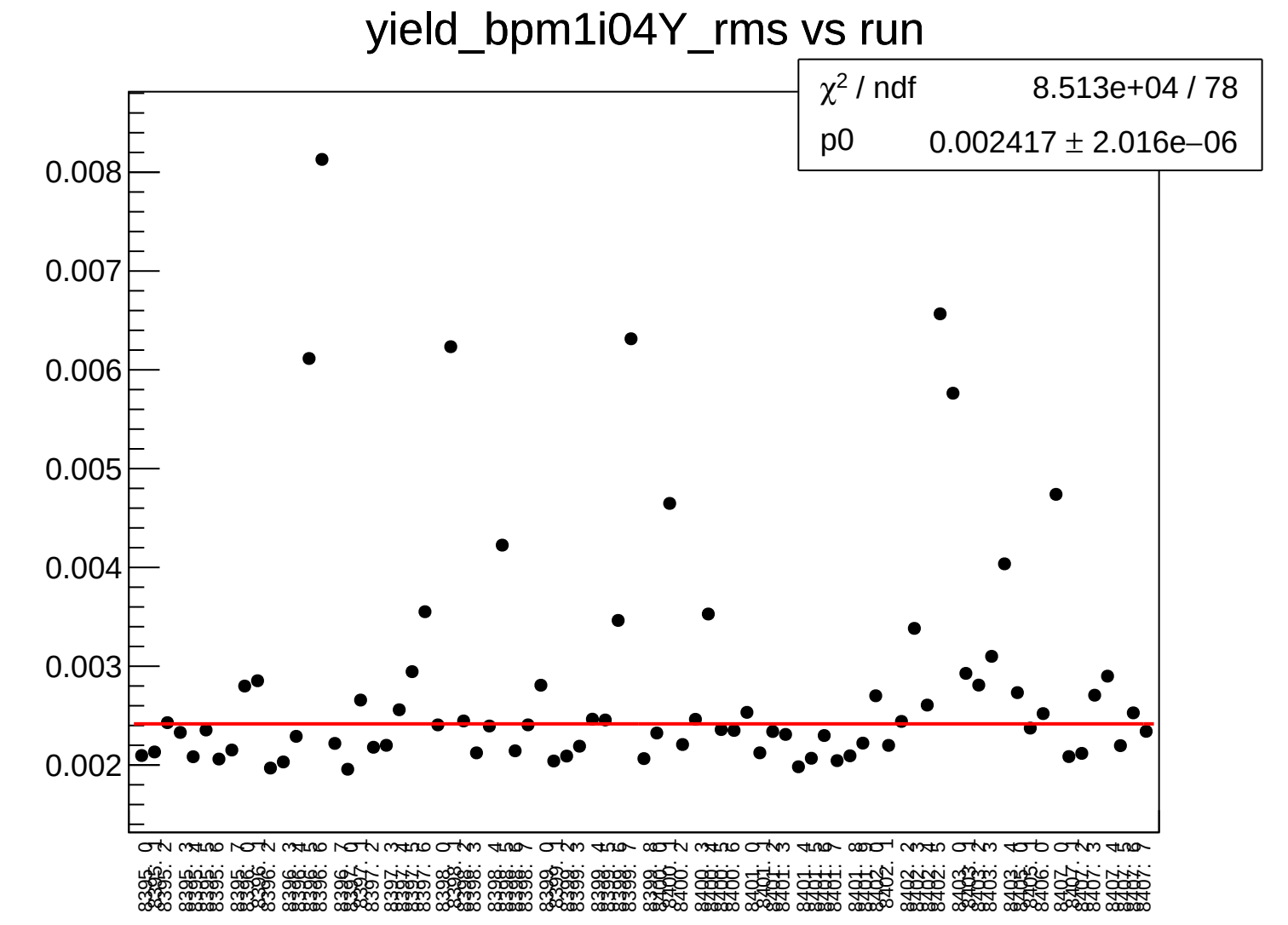

yield_bpm1i04X_mean vs run
χ² / ndf 1.032e+06 / 78
p0 0.07579 ± 1.396e−05
0.1
0.09
0.08
0.07
0.06
0.05
0.04
pull
Entries 79
Mean −9489
Std Dev 9530
200
100
0
−100
−200
−300

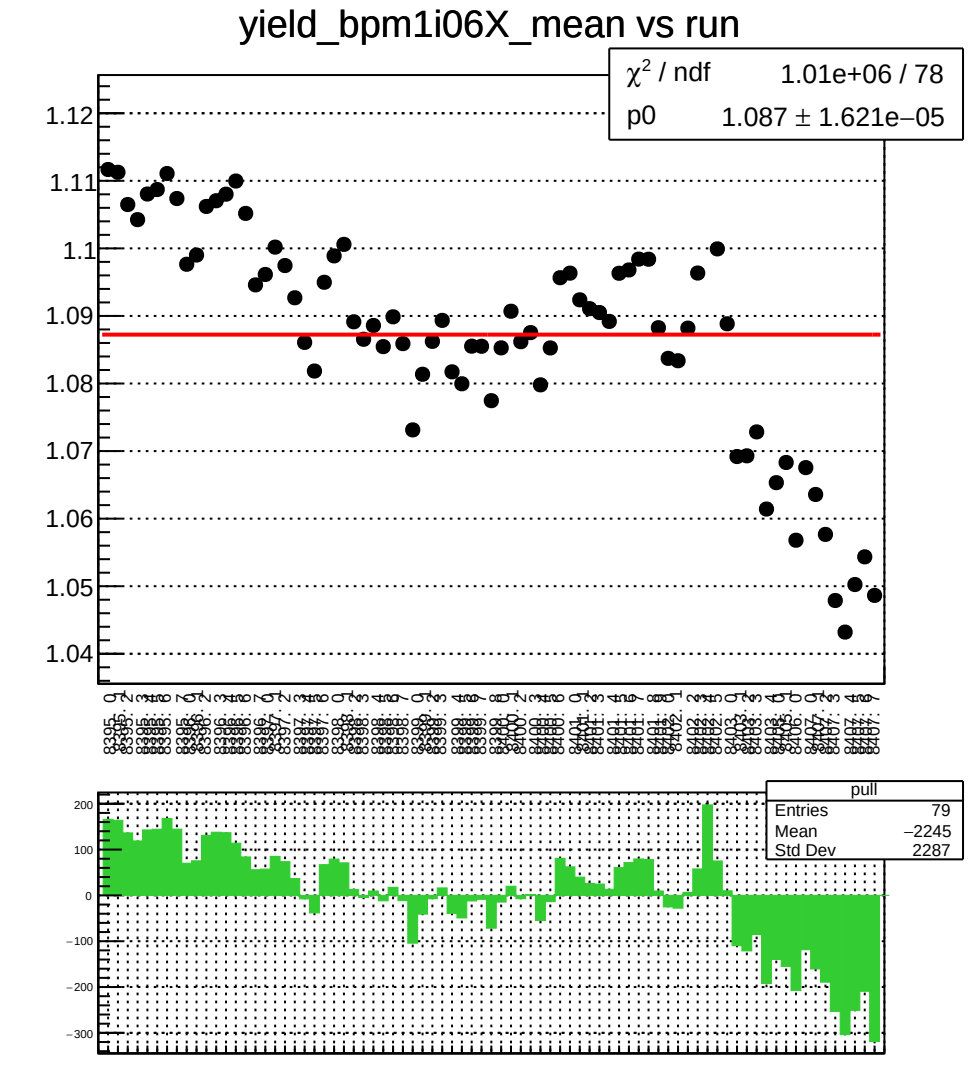

pull1D
Entries 79
Mean 2.525
Std Dev 3.134
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

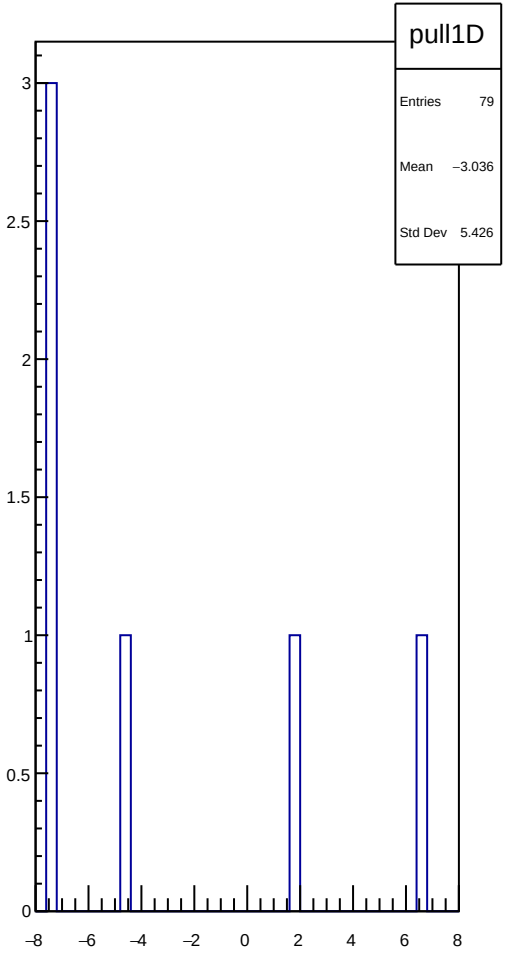

yield_bpm1i04X_rms vs run
χ² / ndf 4981 / 78
p0 0.01216 ± 9.87e−06
0.015
0.014
0.013
0.012
0.011

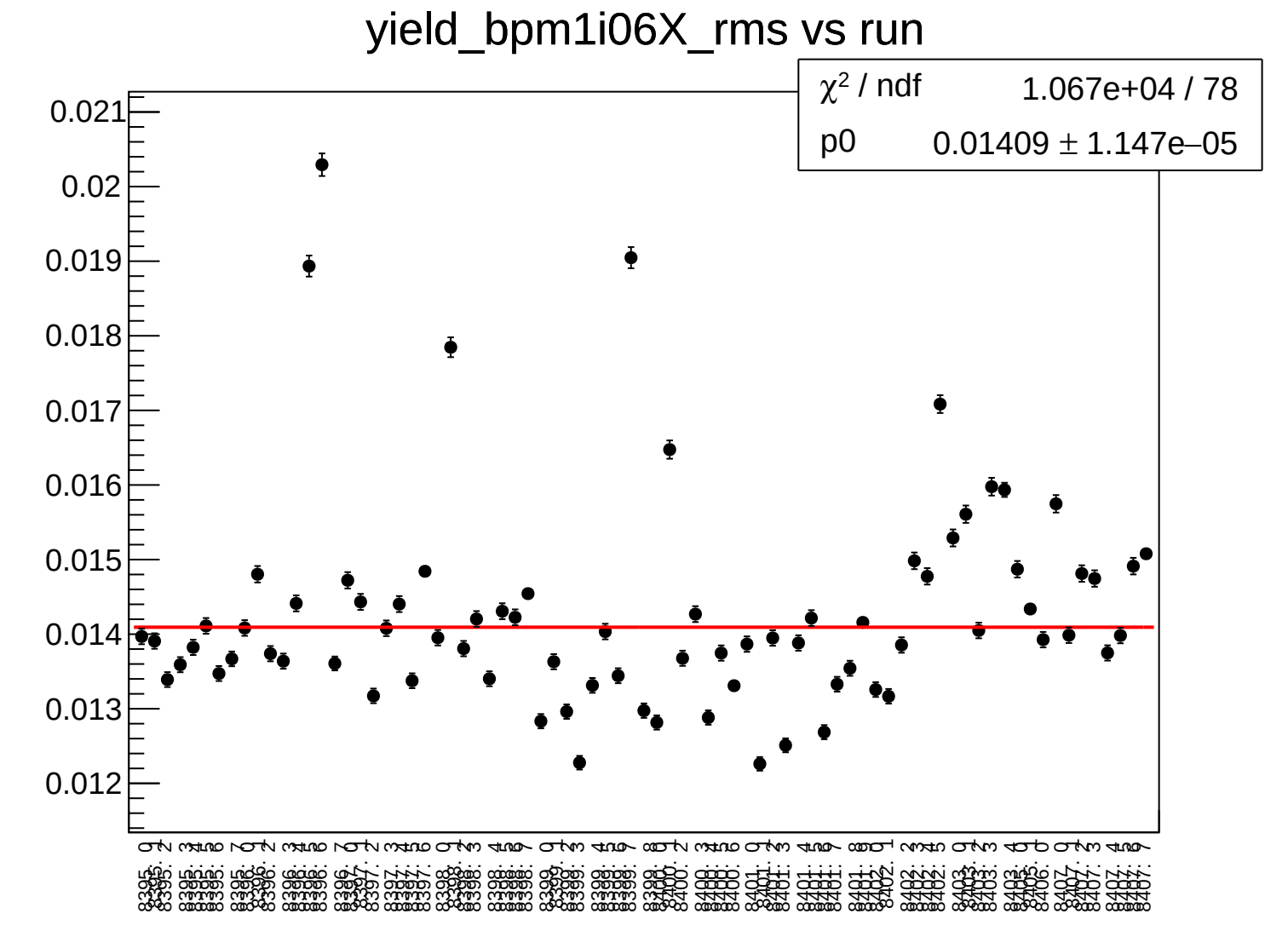

yield_bpm1i04Y_mean vs run
χ² / ndf 6.727e+06 / 78
p0 0.9599 ± 2.852e−06
0.98
0.975
0.97
0.965
0.96
0.955
0.95
0.945
0.94
pull
Entries 79
Mean 288.2
Std Dev 219.1
600
400
200
0
−200
−400
−600
−800

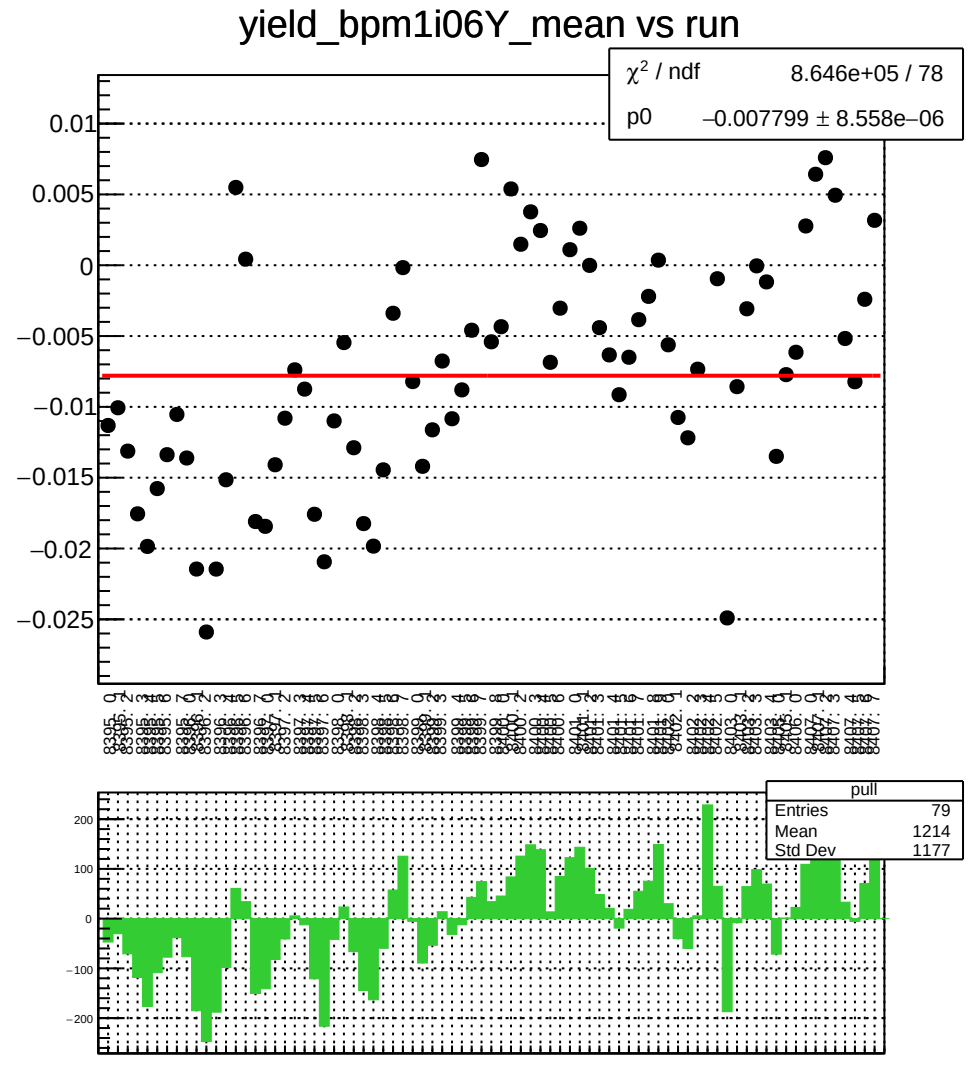

pull1D
Entries 79
Mean 3.631
Std Dev 0.5744
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

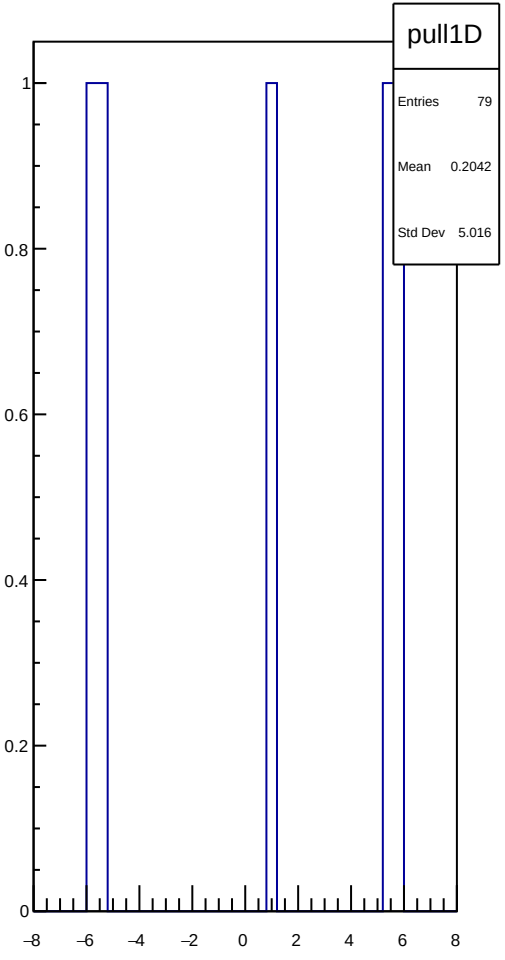

yield_bpm1i04Y_rms vs run
χ^2 / ndf 8.513e+04 / 78
p0 0.002417 ± 2.016e−06
0.008
0.007
0.006
0.005
0.004
0.003
0.002

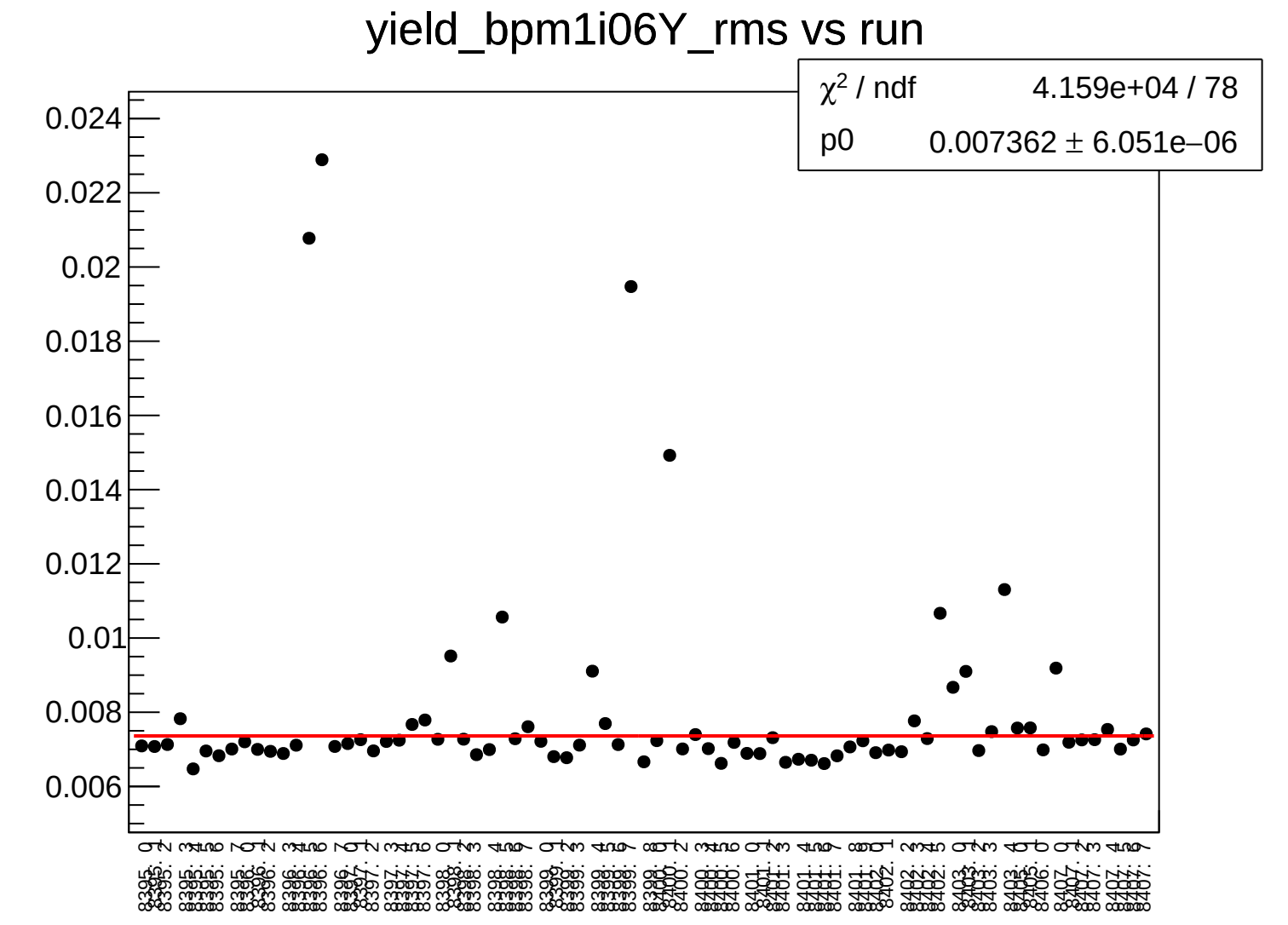

yield_bpm1i06X_mean vs run
χ² / ndf 1.01e+06 / 78
p0 1.087 ± 1.621e−05
1.12
1.11
1.1
1.09
1.08
1.07
1.06
1.05
1.04
pull
Entries 79
Mean −2245
Std Dev 2287
200
100
0
−100
−200
−300

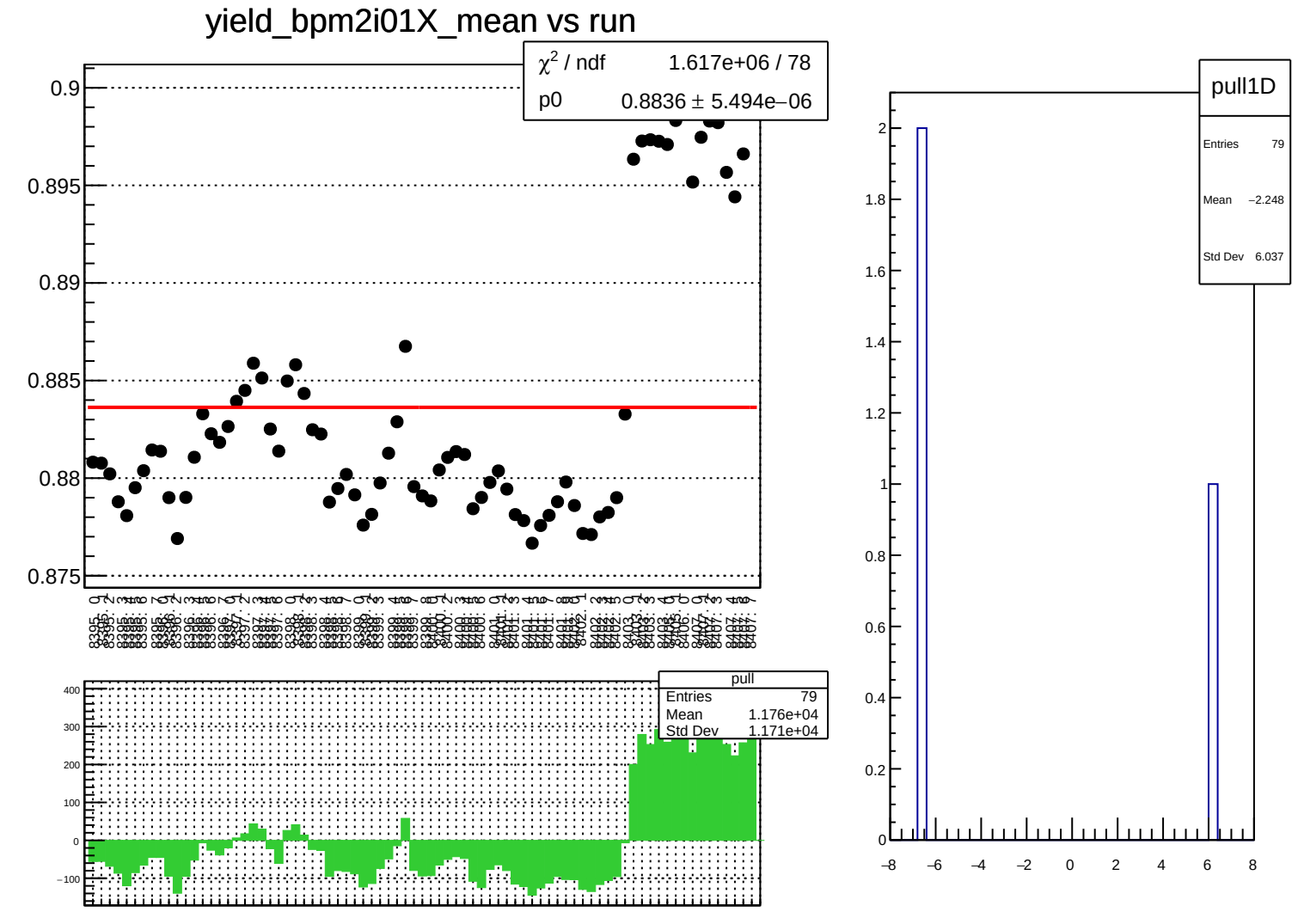

pull1D
Entries 79
Mean −3.036
Std Dev 5.426
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

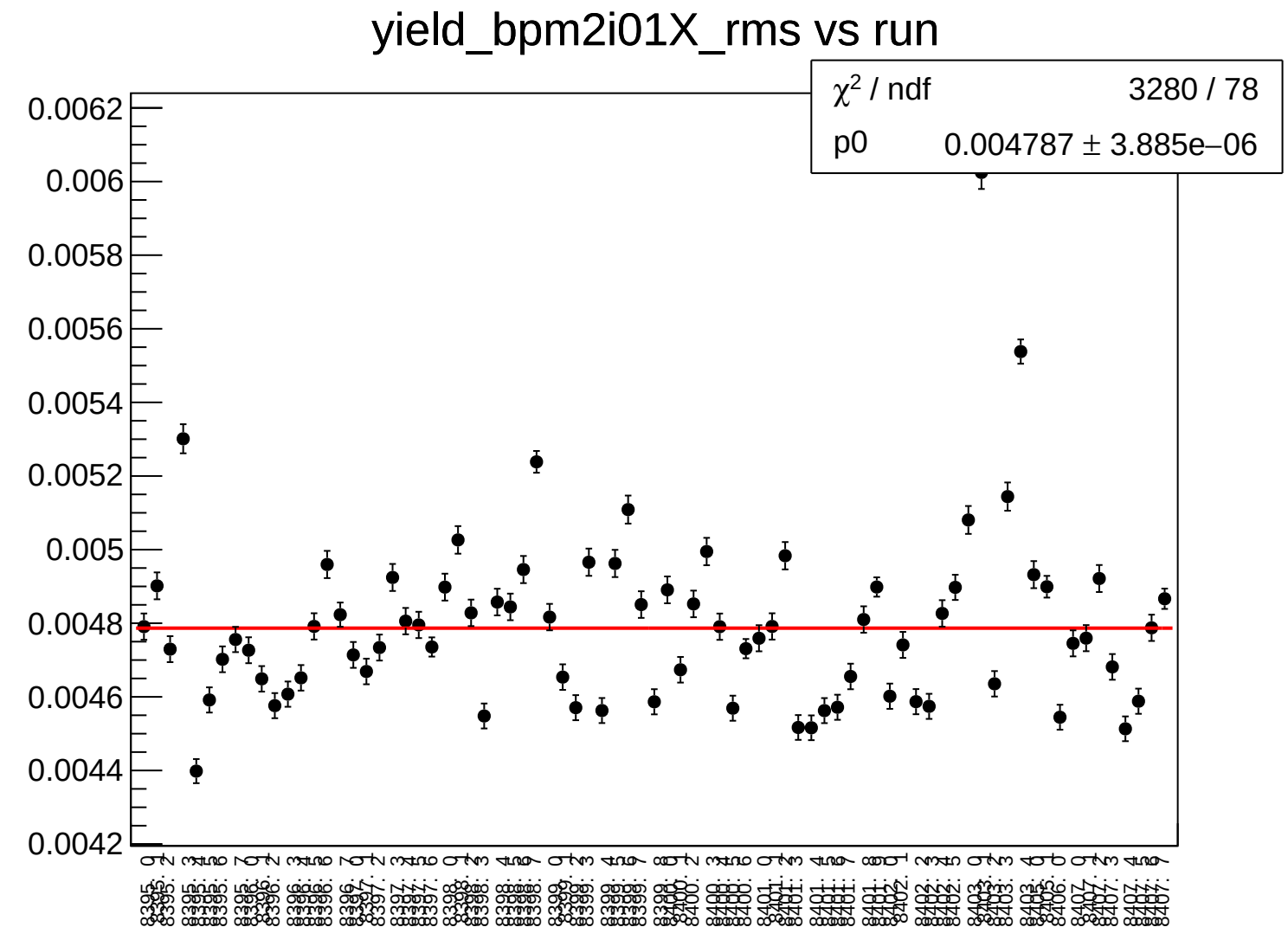

yield_bpm1i06X_rms vs run
χ² / ndf 1.067e+04 / 78
p0 0.01409 ± 1.147e–05
0.021
0.02
0.019
0.018
0.017
0.016
0.015
0.014
0.013
0.012

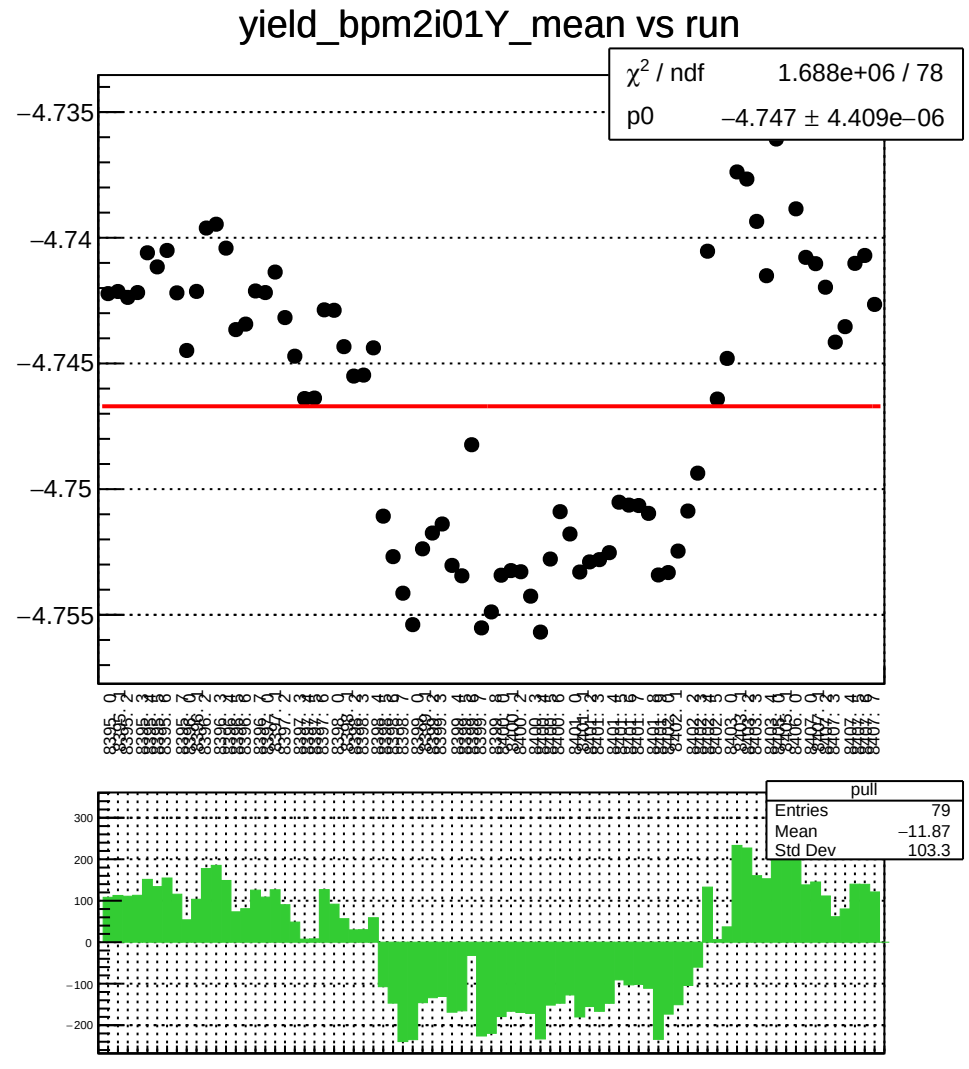

yield_bpm1i06Y_mean vs run
χ² / ndf 8.646e+05 / 78
p0 −0.007799 ± 8.558e−06
0.01
0.005
0
−0.005
−0.01
−0.015
−0.02
−0.025
pull
Entries 79
Mean 1214
Std Dev 1177
200
100
0
−100
−200

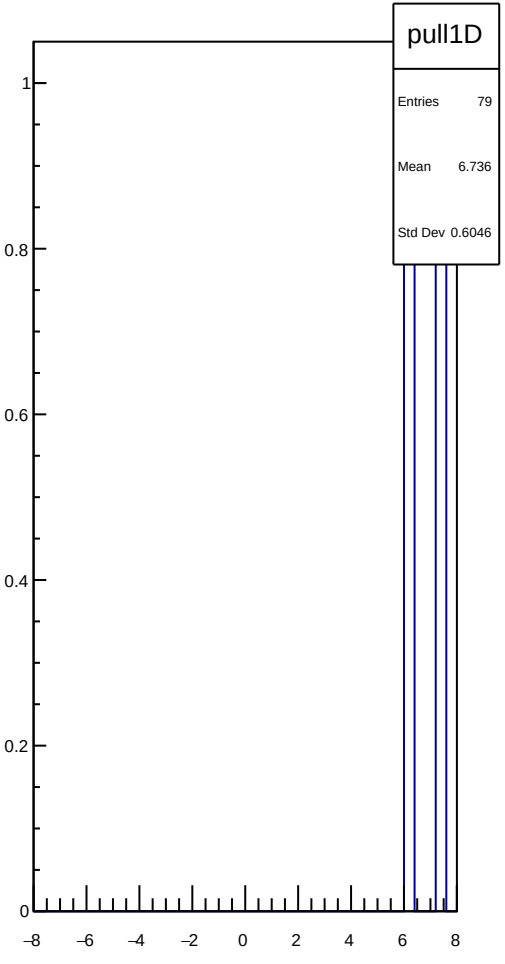

pull1D
Entries 79
Mean 0.2042
Std Dev 5.016
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

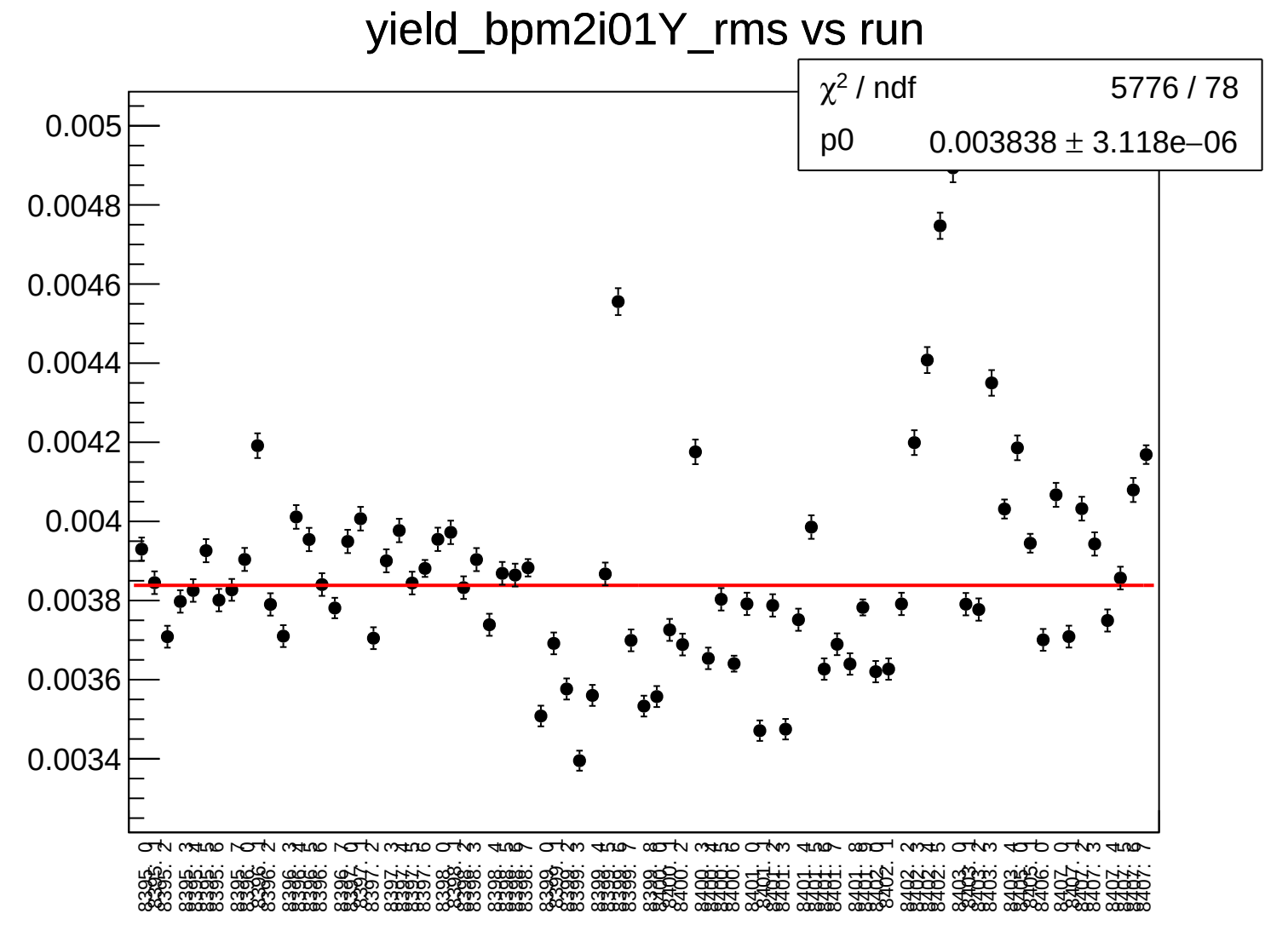

yield_bpm1i06Y_rms vs run
χ² / ndf 4.159e+04 / 78
p0 0.007362 ± 6.051e−06
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

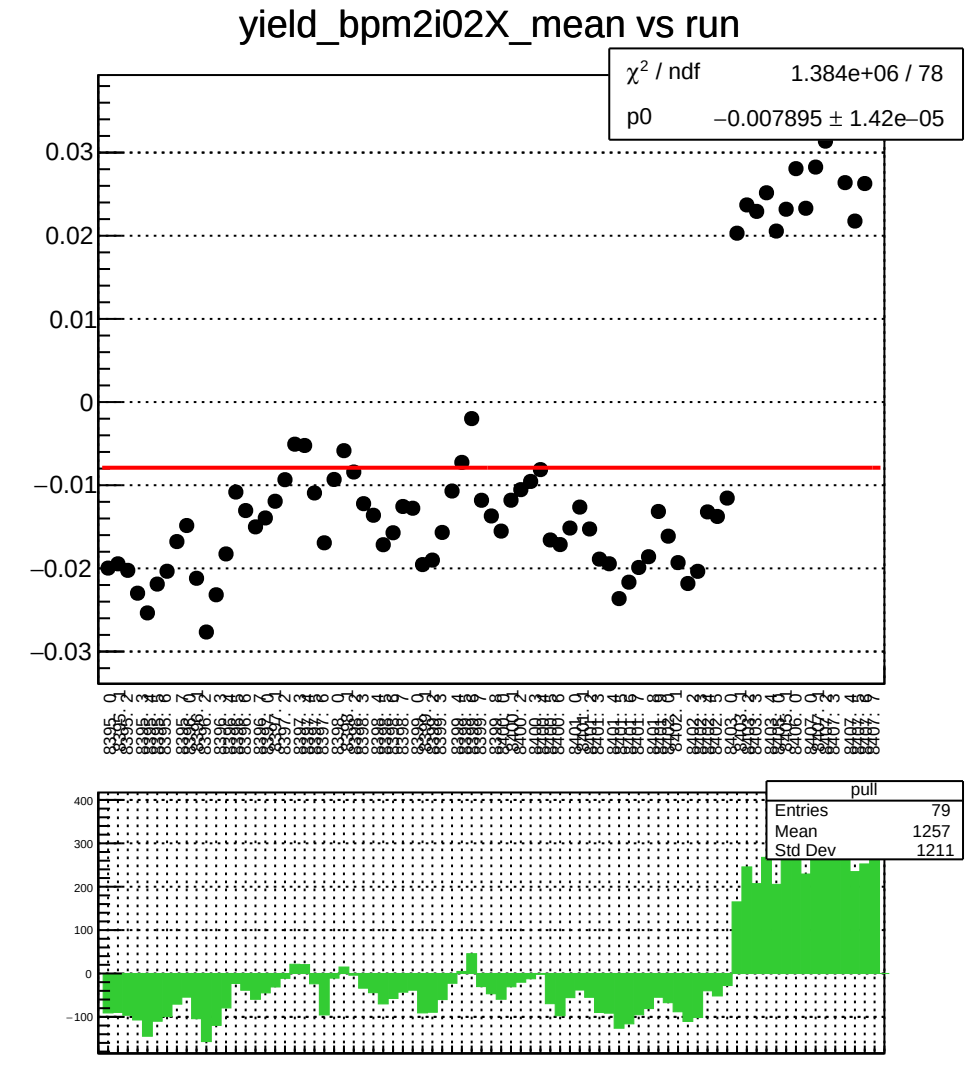

yield_bpm2i01X_mean vs run
χ² / ndf 1.617e+06 / 78
p0 0.8836 ± 5.494e−06
0.9
0.895
0.89
0.885
0.88
0.875
pull
Entries 79
Mean 1.176e+04
Std Dev 1.171e+04
400
300
200
100
0
−100
pull1D
Entries 79
Mean −2.248
Std Dev 6.037
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

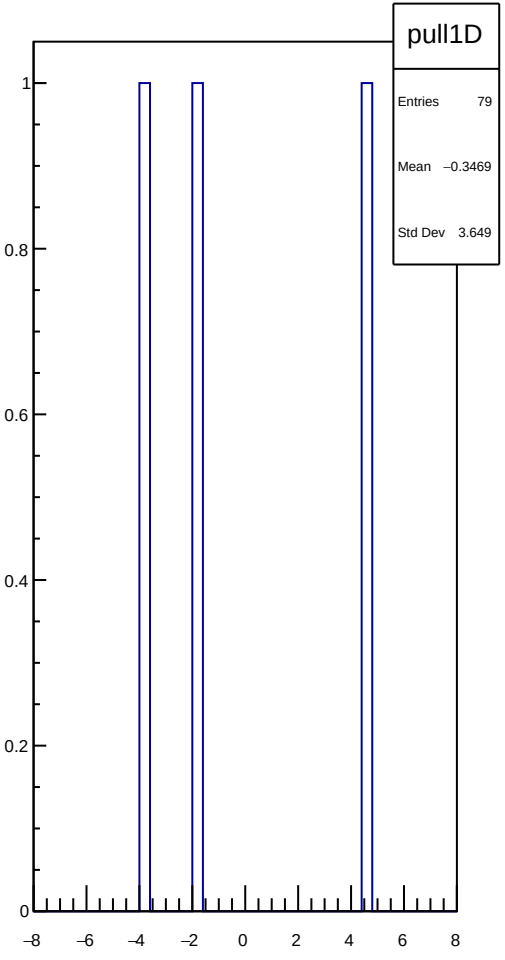

yield_bpm2i01X_rms vs run
χ² / ndf 3280 / 78
p0 0.004787 ± 3.885e−06
0.0062
0.006
0.0058
0.0056
0.0054
0.0052
0.005
0.0048
0.0046
0.0044
0.0042

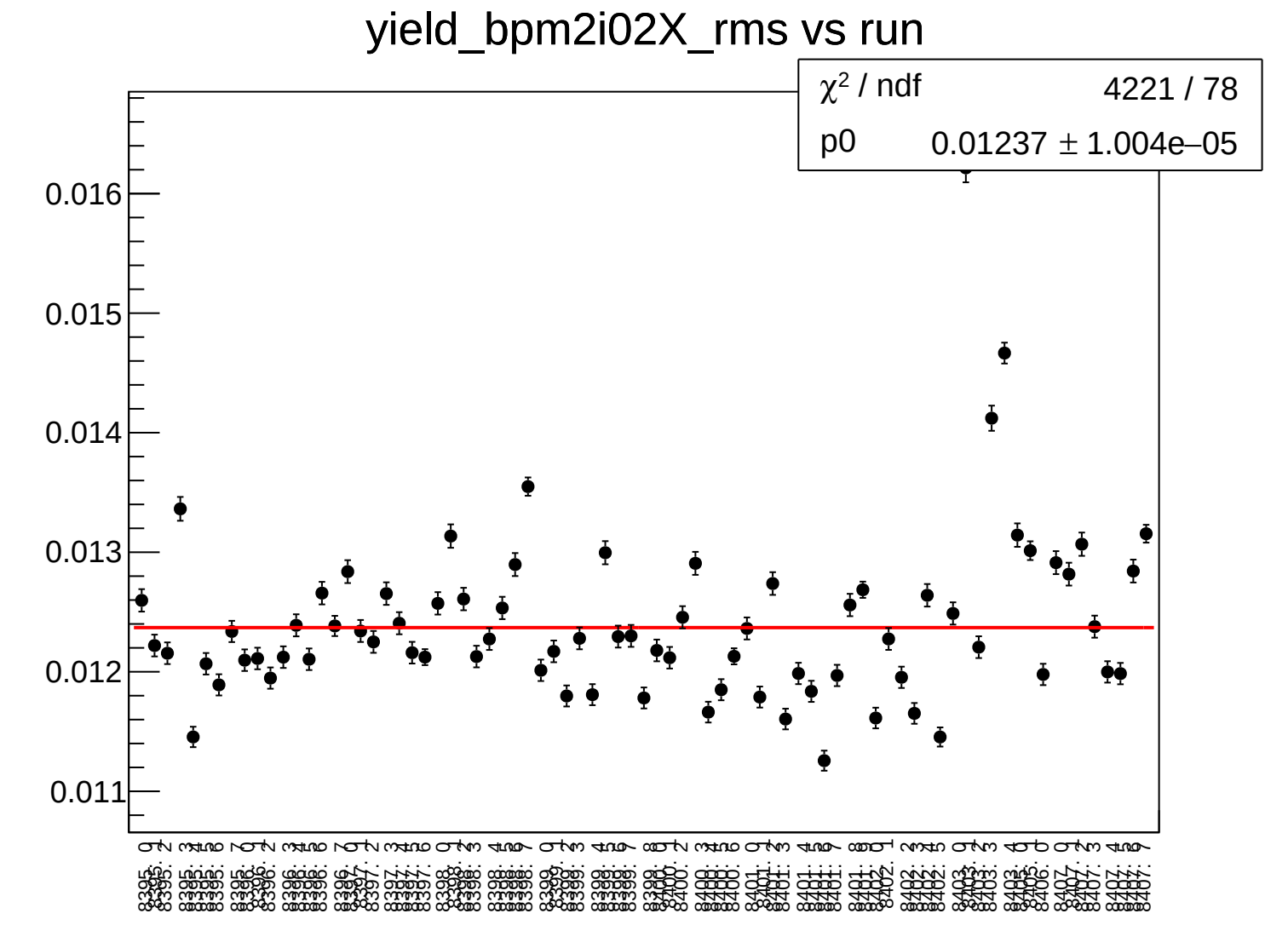

yield_bpm2i01Y_mean vs run
χ² / ndf 1.688e+06 / 78
p0 −4.747 ± 4.409e−06
−4.735
−4.74
−4.745
−4.75
−4.755
pull
Entries 79
Mean −11.87
Std Dev 103.3
300
200
100
0
−100
−200

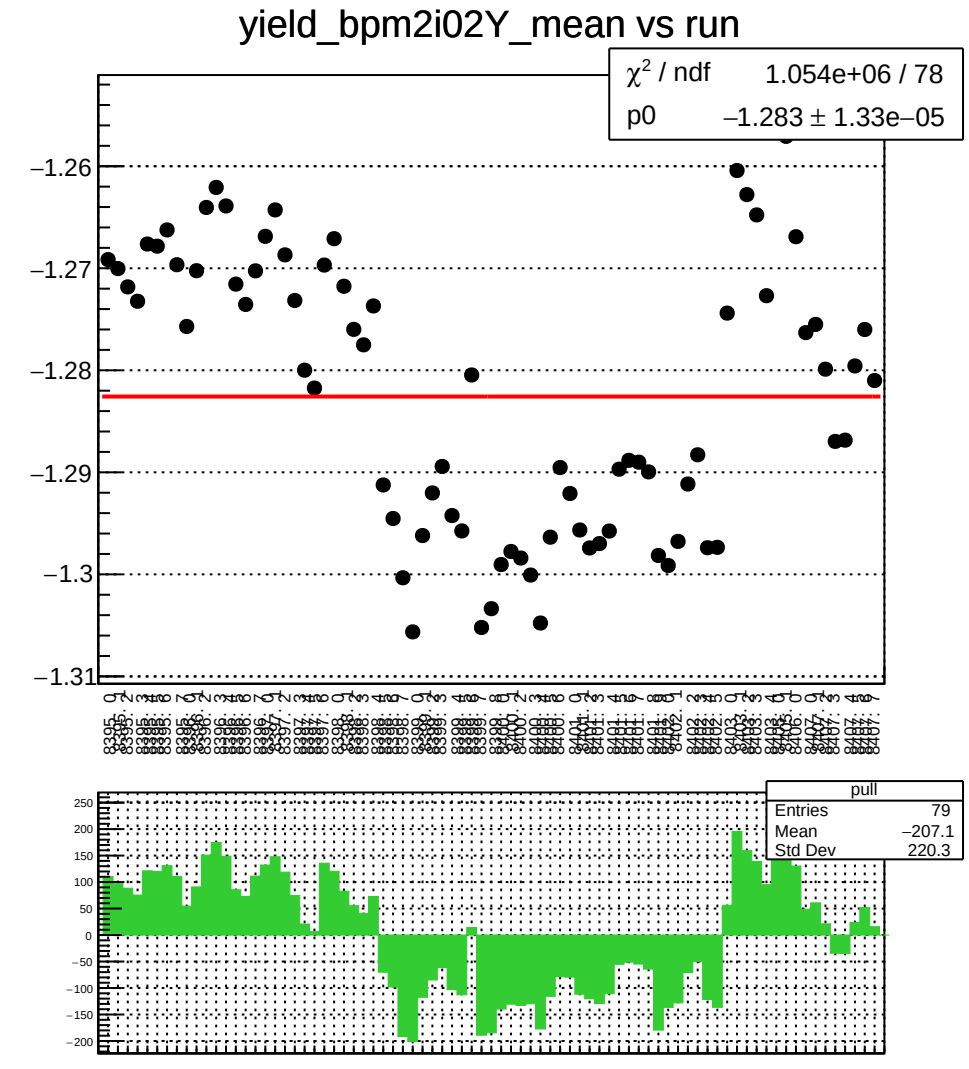

pull1D
Entries 79
Mean 6.736
Std Dev 0.6046
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

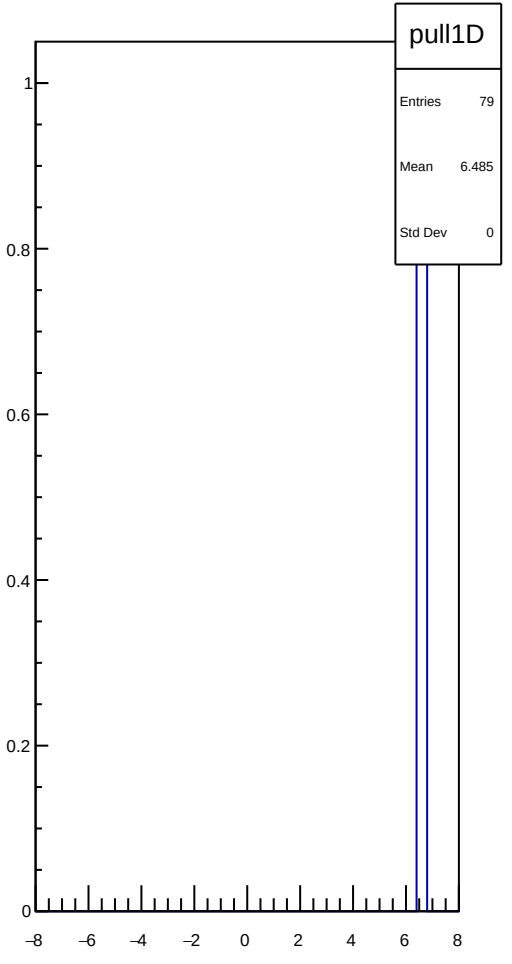

yield_bpm2i01Y_rms vs run
χ² / ndf 5776 / 78
p0 0.003838 ± 3.118e−06
0.005
0.0048
0.0046
0.0044
0.0042
0.004
0.0038
0.0036
0.0034

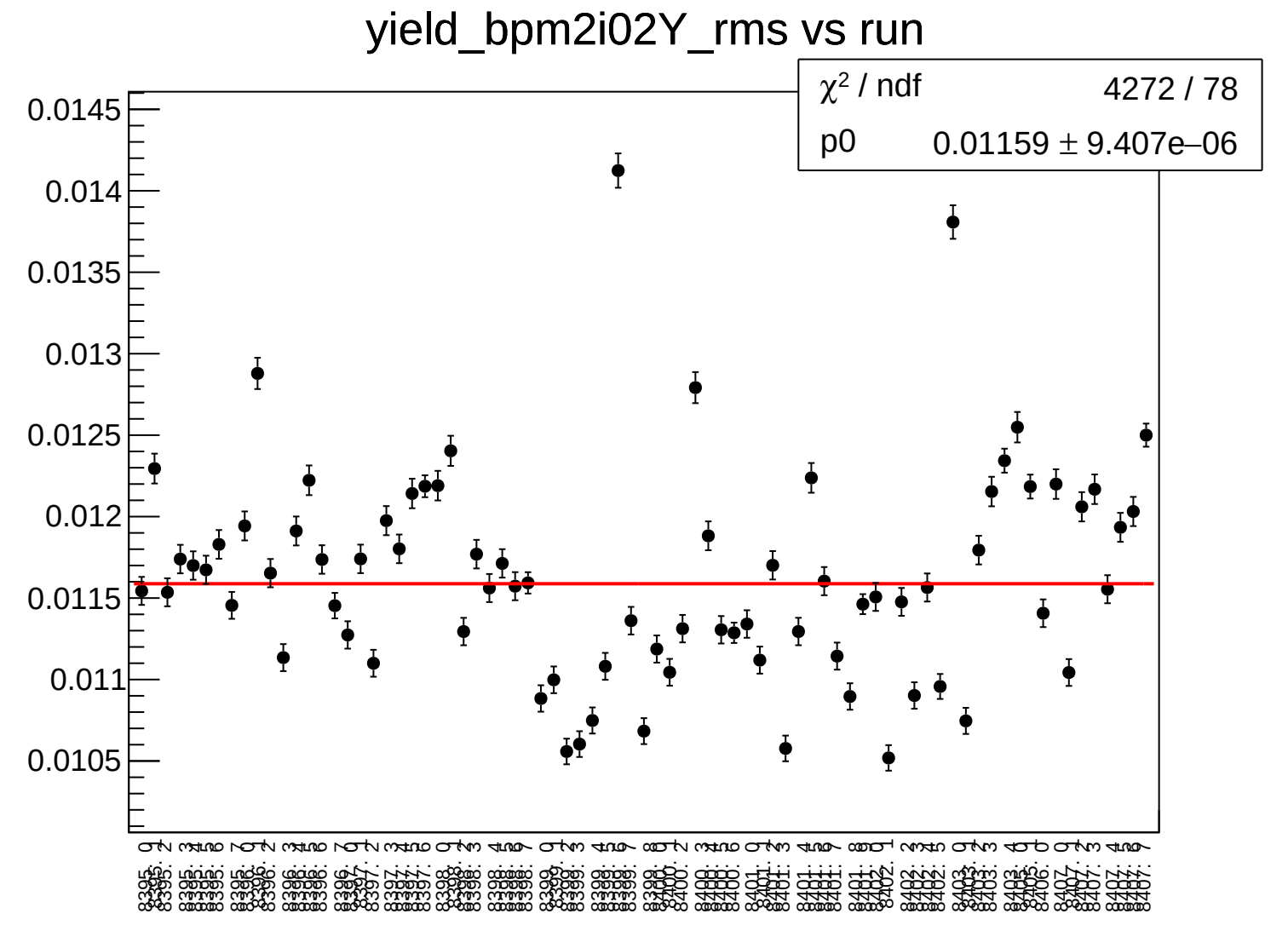

yield_bpm2i02X_mean vs run
χ² / ndf 1.384e+06 / 78
p0 −0.007895 ± 1.42e−05
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
pull
Entries 79
Mean 1257
Std Dev 1211
400
300
200
100
0
−100

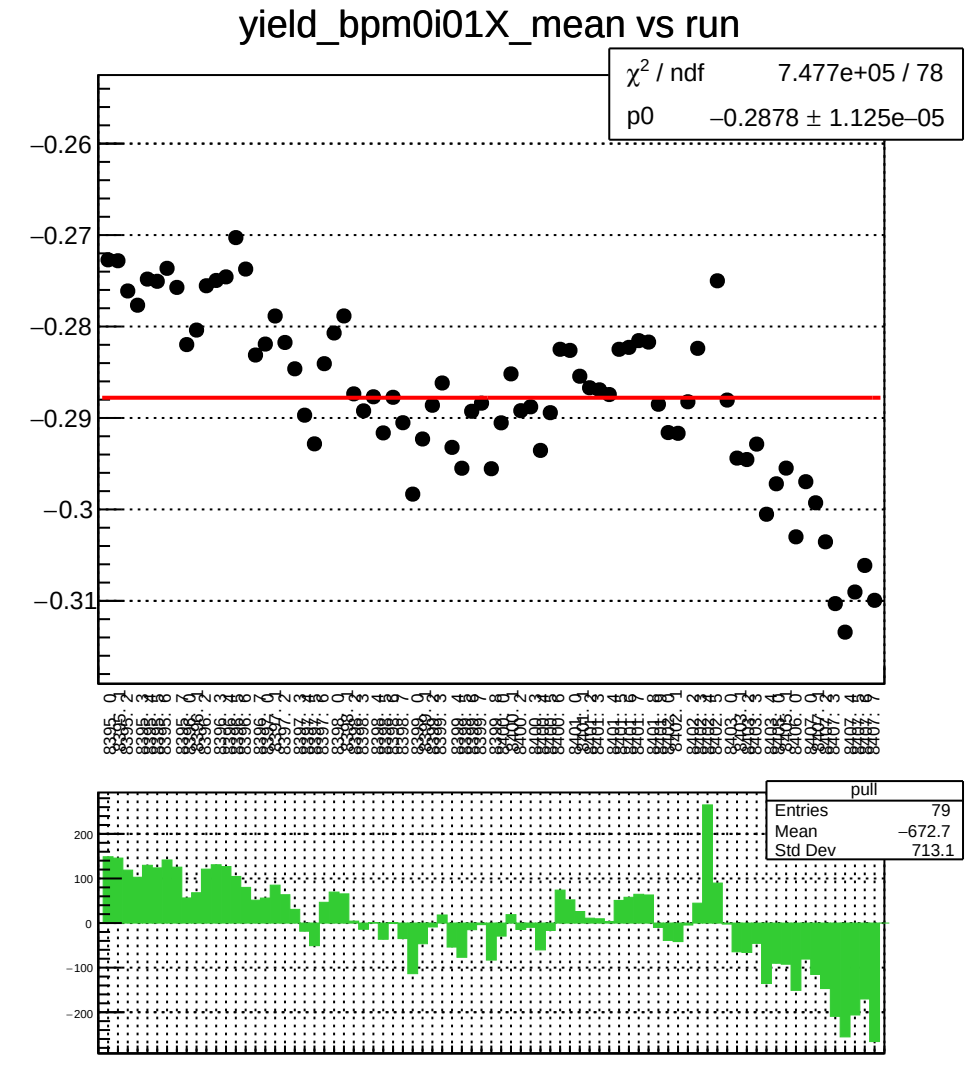

pull1D
Entries 79
Mean −0.3469
Std Dev 3.649
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

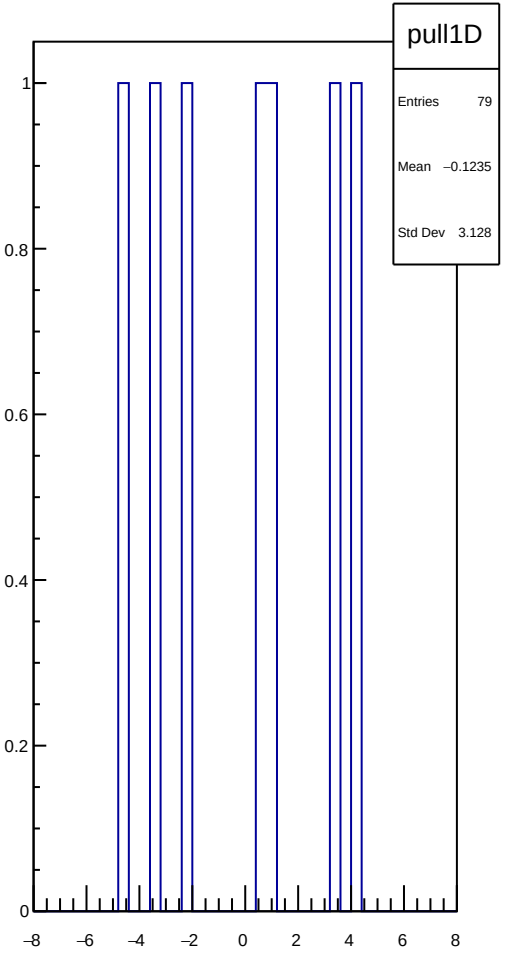

yield_bpm2i02X_rms vs run
χ² / ndf 4221 / 78
p0 0.01237 ± 1.004e−05
0.016
0.015
0.014
0.013
0.012
0.011

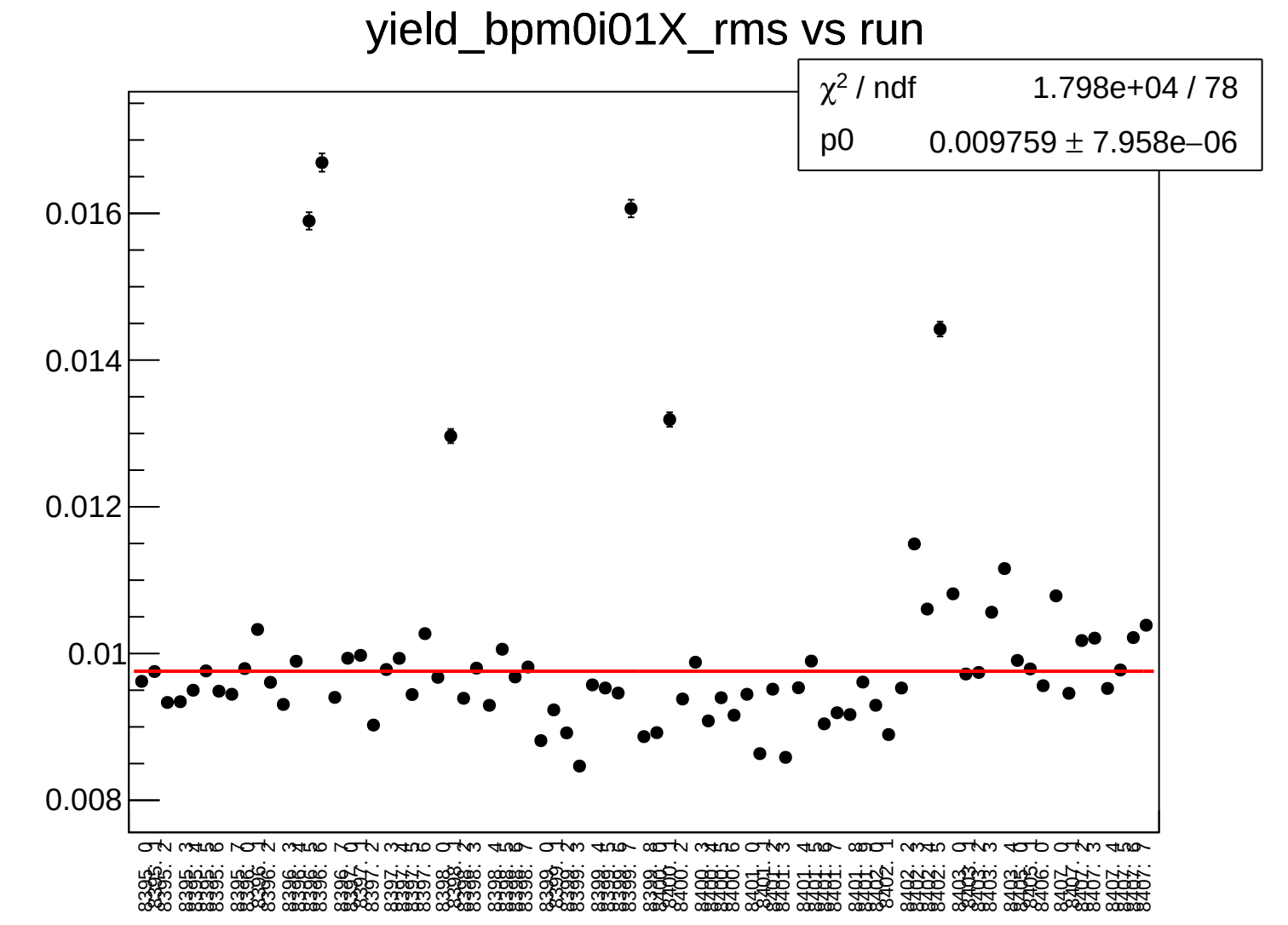

yield_bpm2i02Y_mean vs run
χ² / ndf 1.054e+06 / 78
p0 −1.283 ± 1.33e−05
−1.26
−1.27
−1.28
−1.29
−1.3
−1.31
pull
Entries 79
Mean −207.1
Std Dev 220.3
250
200
150
100
50
0
−50
−100
−150
−200

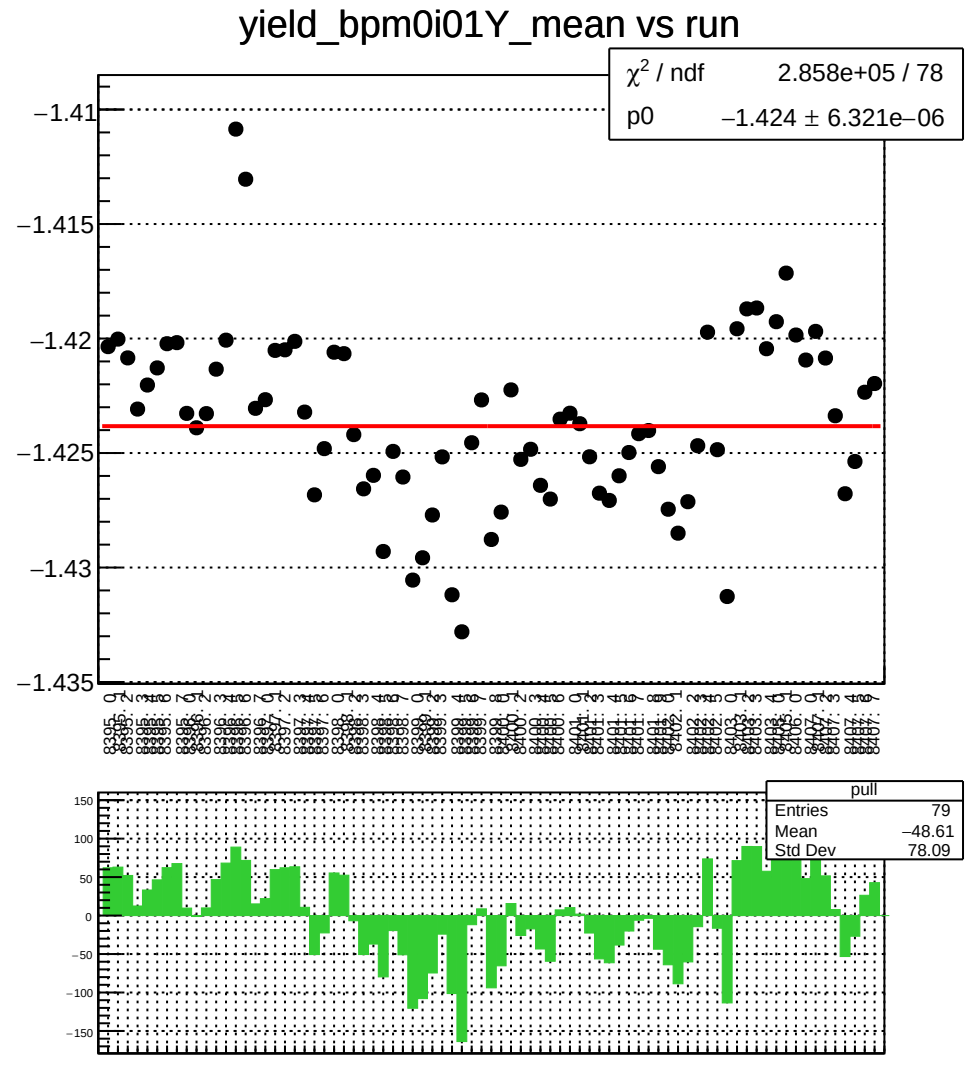

pull1D
Entries 79
Mean 6.485
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

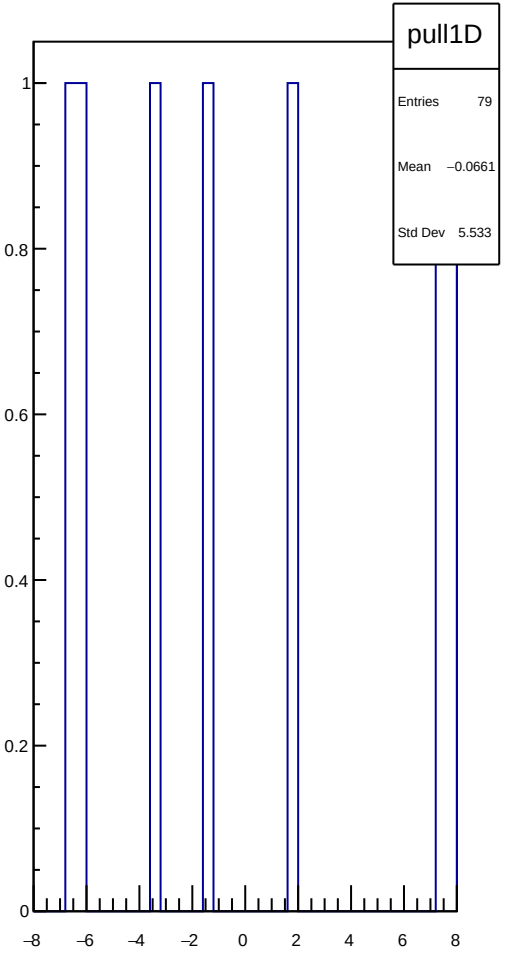

yield_bpm2i02Y_rms vs run
χ² / ndf 4272 / 78
p0 0.01159 ± 9.407e–06
0.0145
0.014
0.0135
0.013
0.0125
0.012
0.0115
0.011
0.0105

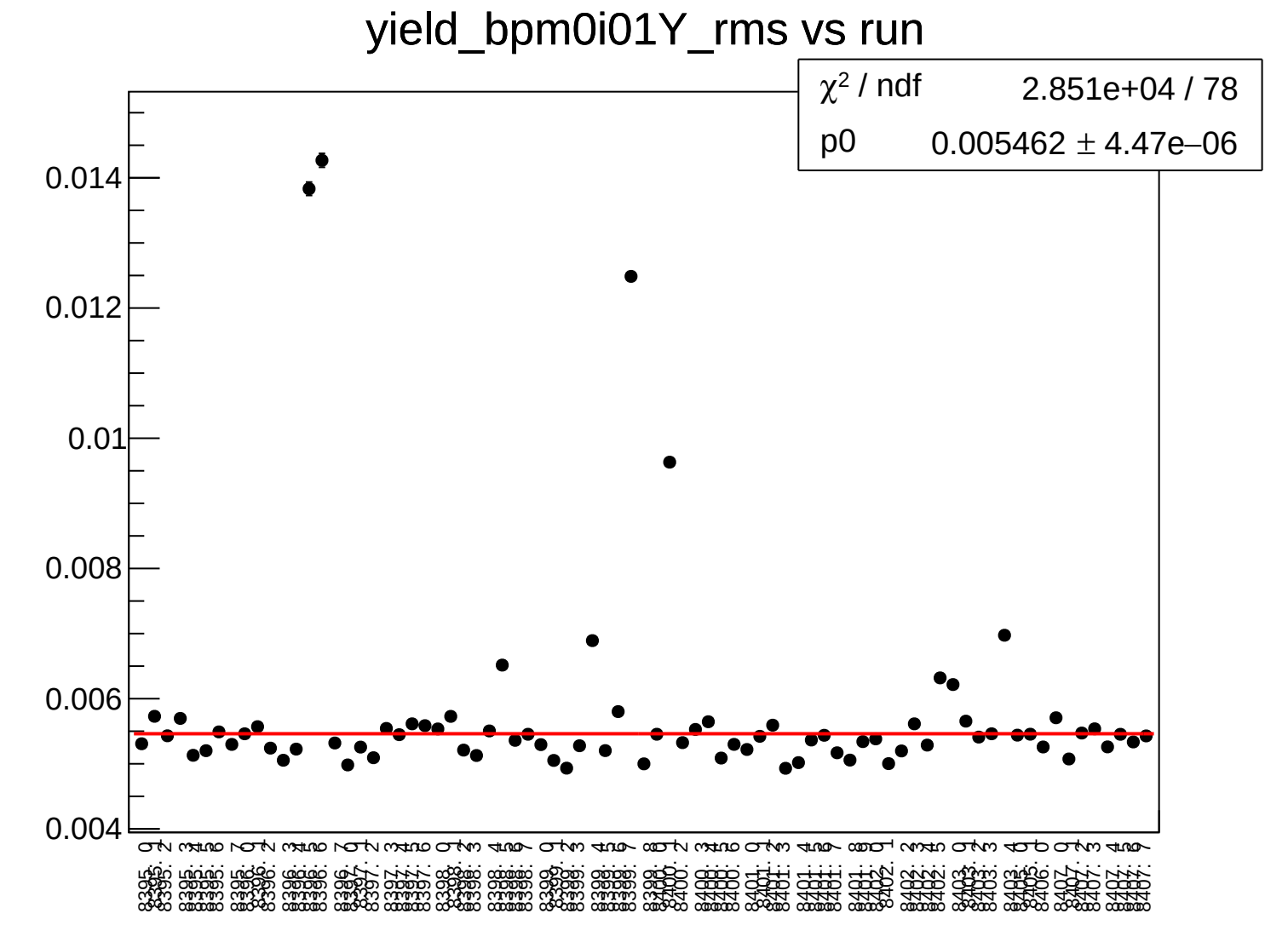

yield_bpm0i01X_mean vs run
χ² / ndf 7.477e+05 / 78
p0 −0.2878 ± 1.125e−05
−0.26
−0.27
−0.28
−0.29
−0.3
−0.31
pull
Entries 79
Mean −672.7
Std Dev 713.1
200
100
0
−100
−200

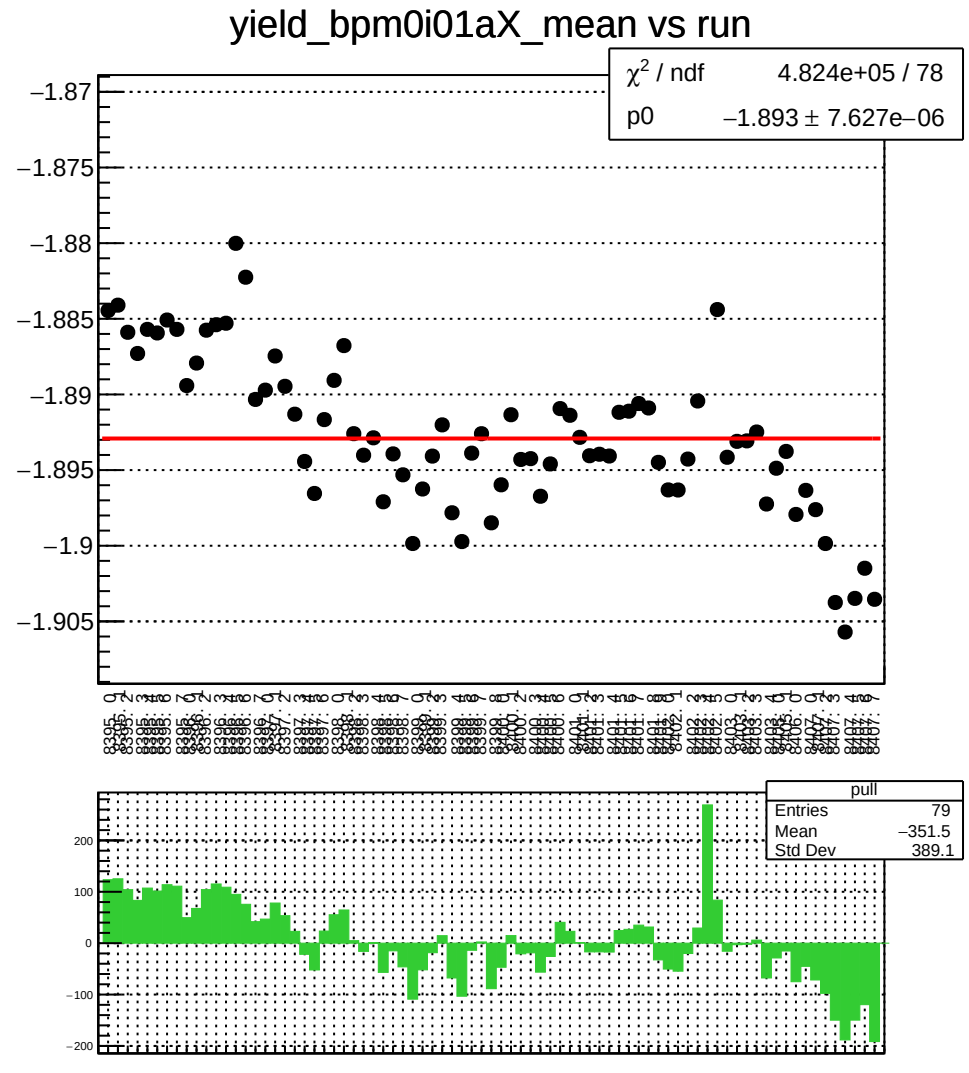

pull1D
Entries 79
Mean −0.1235
Std Dev 3.128
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

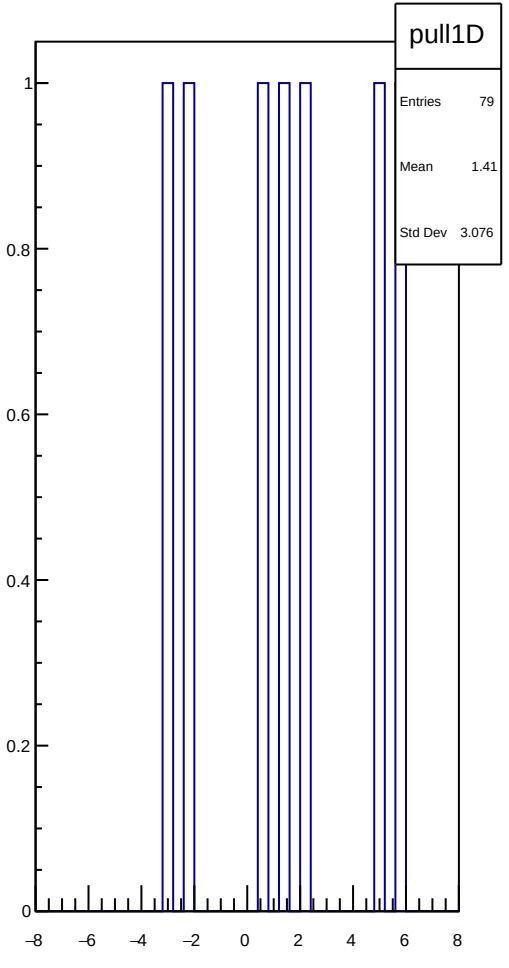

yield_bpm0i01X_rms vs run
χ^2 / ndf 1.798e+04 / 78
p0 0.009759 ± 7.958e−06
0.016
0.014
0.012
0.01
0.008

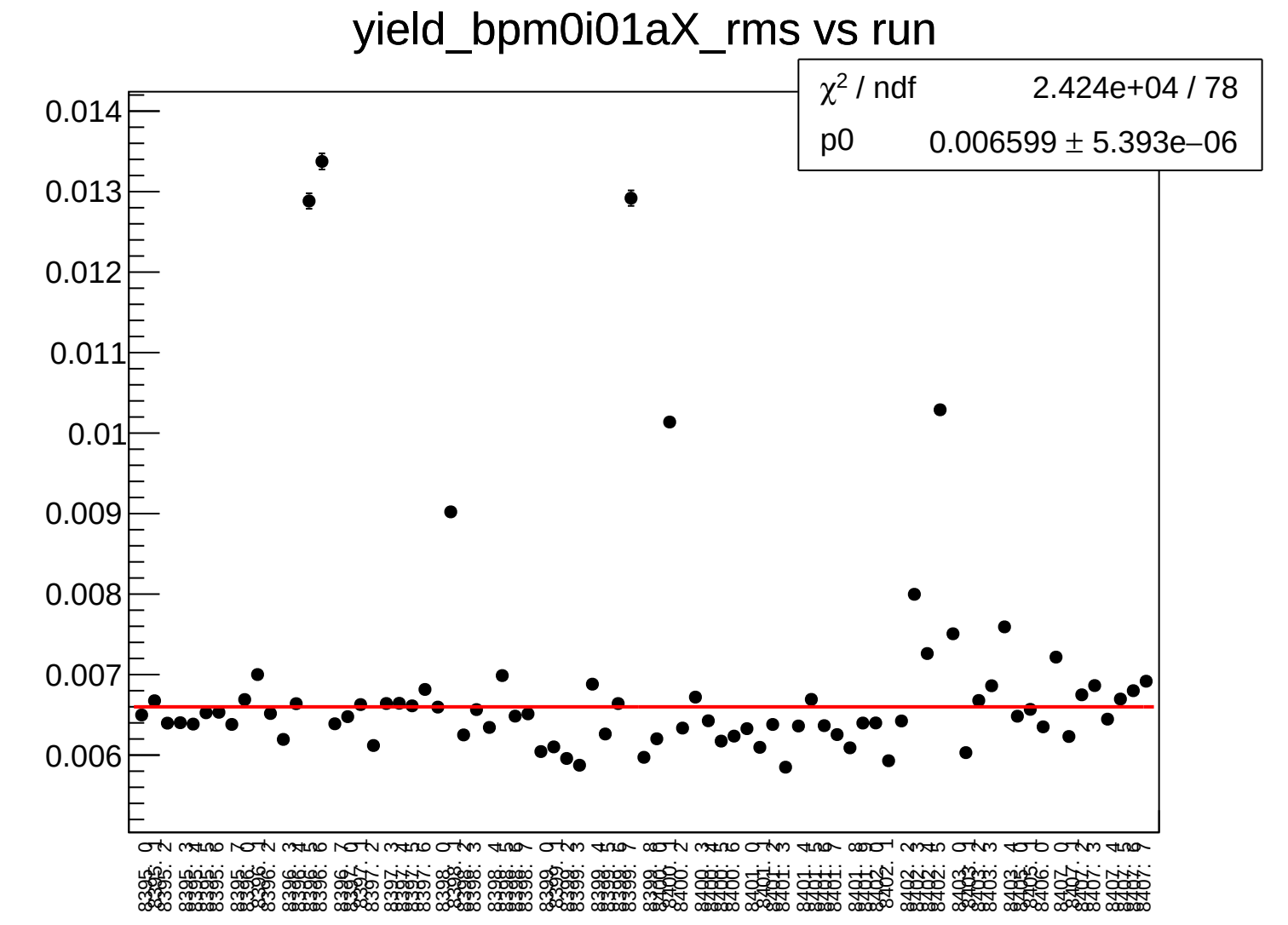

yield_bpm0i01Y_mean vs run
χ² / ndf 2.858e+05 / 78
p0 −1.424 ± 6.321e−06
−1.41
−1.415
−1.42
−1.425
−1.43
−1.435
pull
Entries 79
Mean −48.61
Std Dev 78.09
150
100
50
0
−50
−100
−150

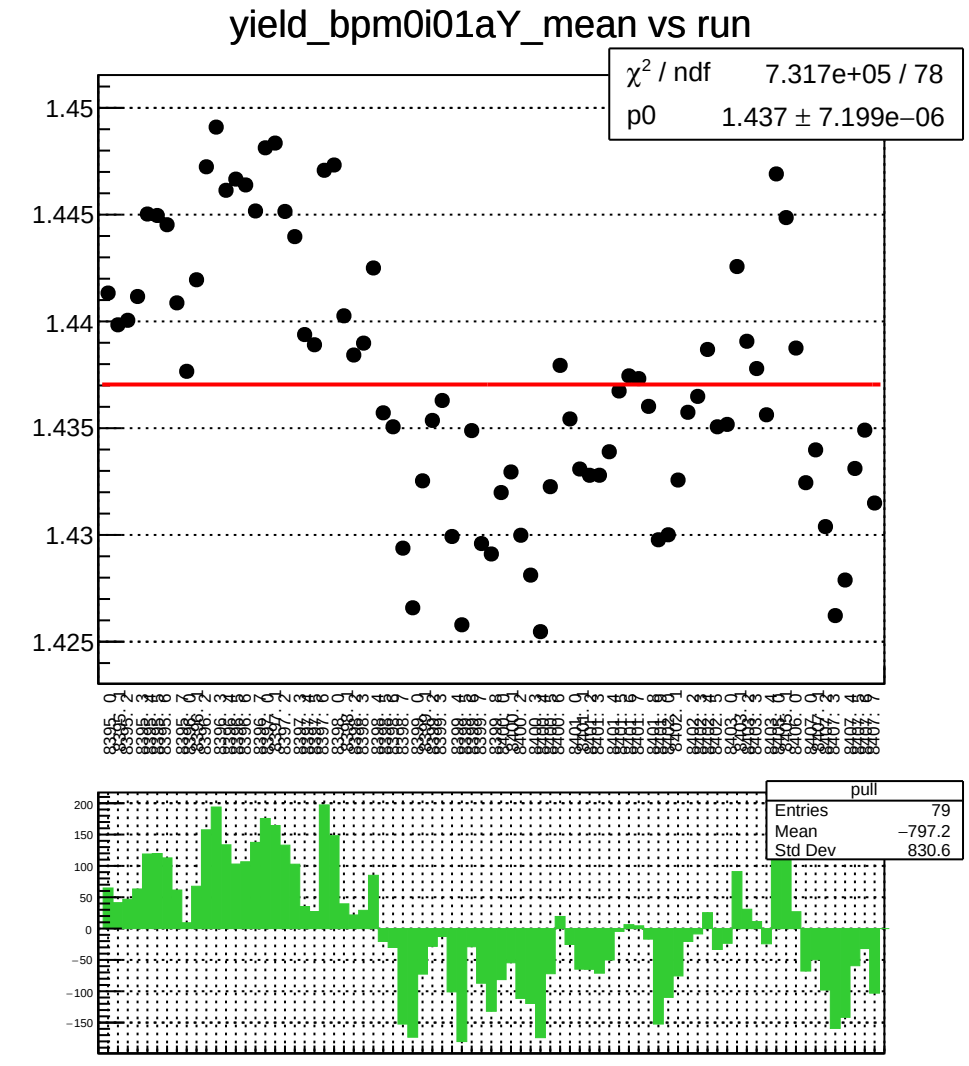

pull1D
Entries 79
Mean −0.0661
Std Dev 5.533
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

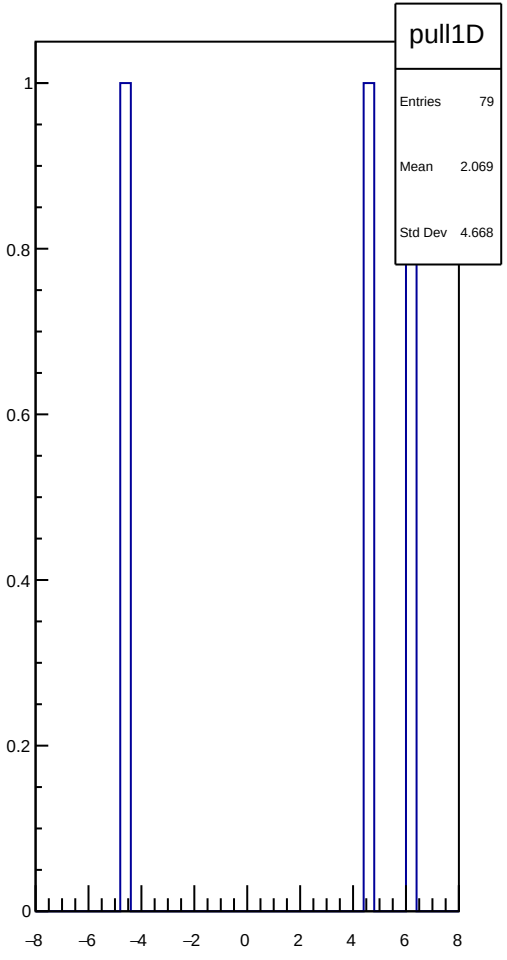

yield_bpm0i01Y_rms vs run
χ² / ndf 2.851e+04 / 78
p0 0.005462 ± 4.47e–06
0.014
0.012
0.01
0.008
0.006
0.004

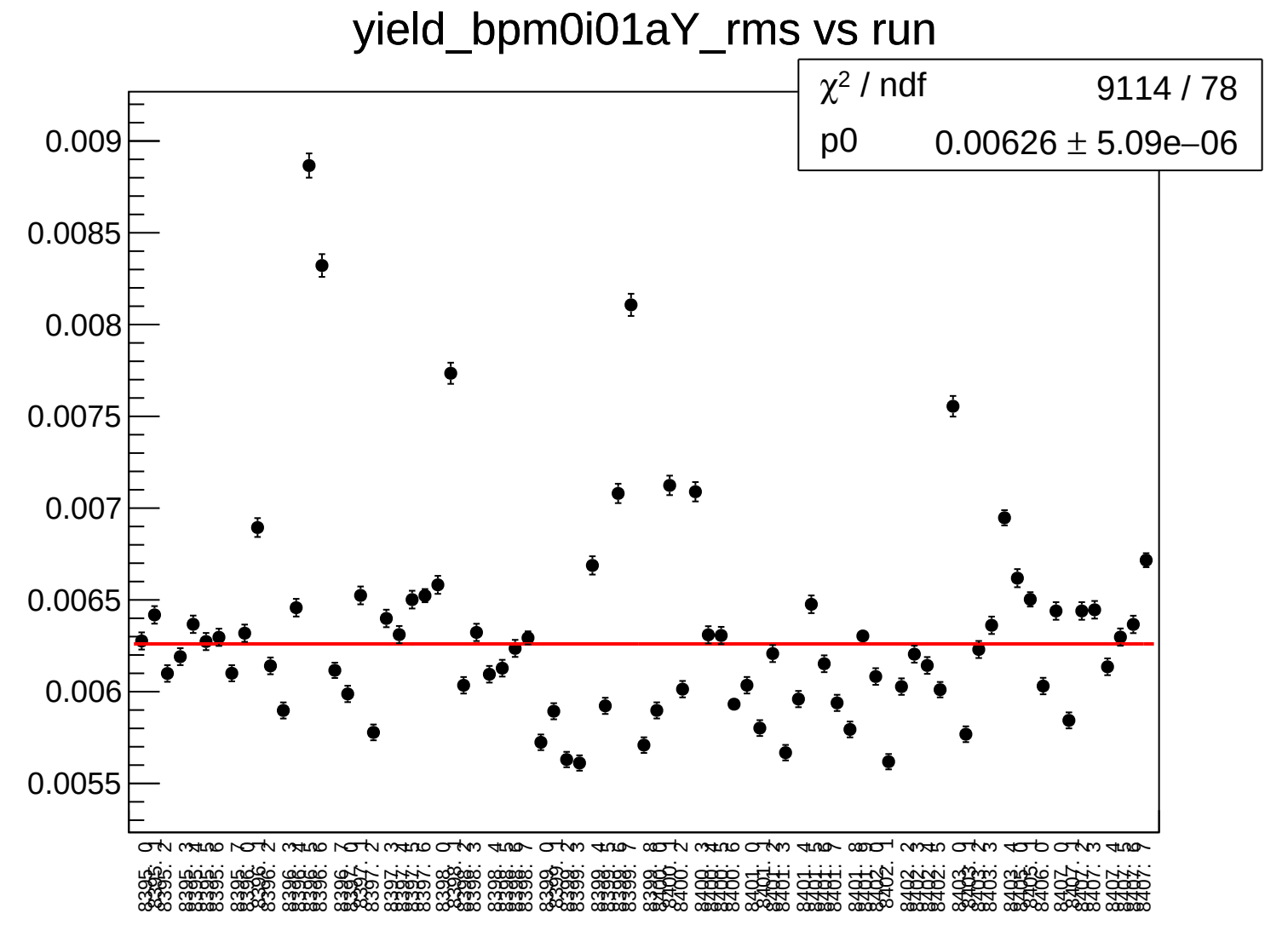

yield_bpm0i01aX_mean vs run
χ² / ndf 4.824e+05 / 78
p0 −1.893 ± 7.627e−06
−1.87
−1.875
−1.88
−1.885
−1.89
−1.895
−1.9
−1.905
pull
Entries 79
Mean −351.5
Std Dev 389.1
200
100
0
−100
−200

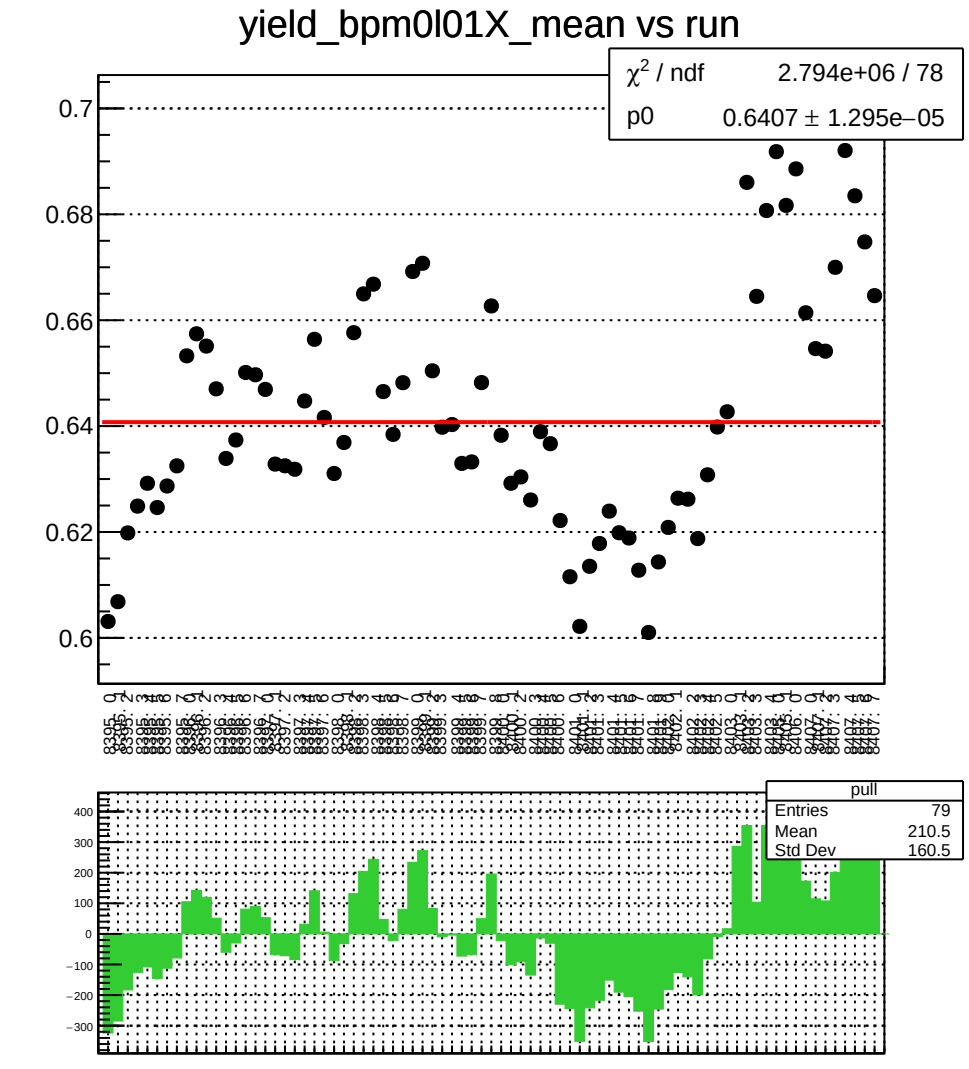

pull1D
Entries 79
Mean 1.41
Std Dev 3.076
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

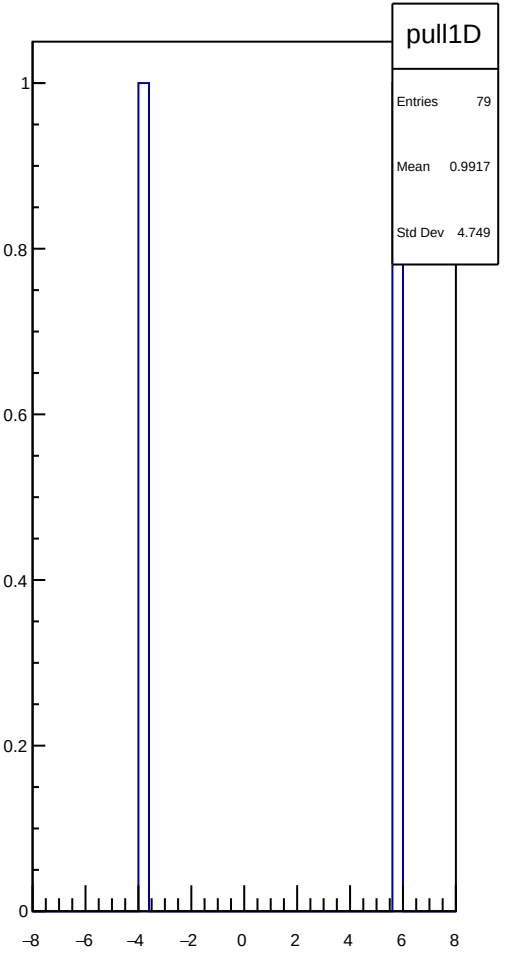

yield_bpm0i01aX_rms vs run
χ² / ndf 2.424e+04 / 78
p0 0.006599 ± 5.393e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

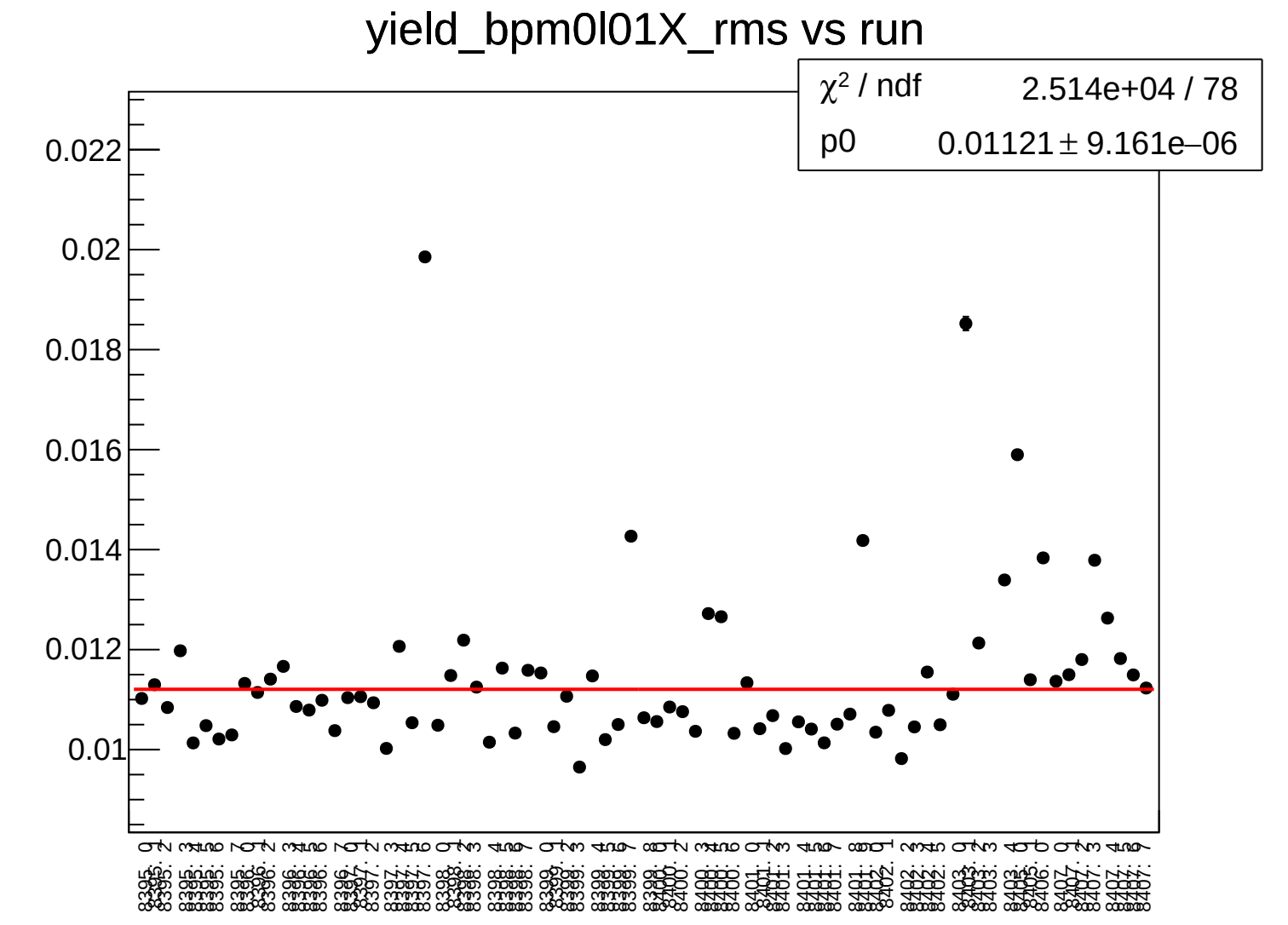

yield_bpm0i01aY_mean vs run
χ² / ndf 7.317e+05 / 78
p0 1.437 ± 7.199e−06
1.45
1.445
1.44
1.435
1.43
1.425
pull
Entries 79
Mean −797.2
Std Dev 830.6
200
150
100
50
0
−50
−100
−150

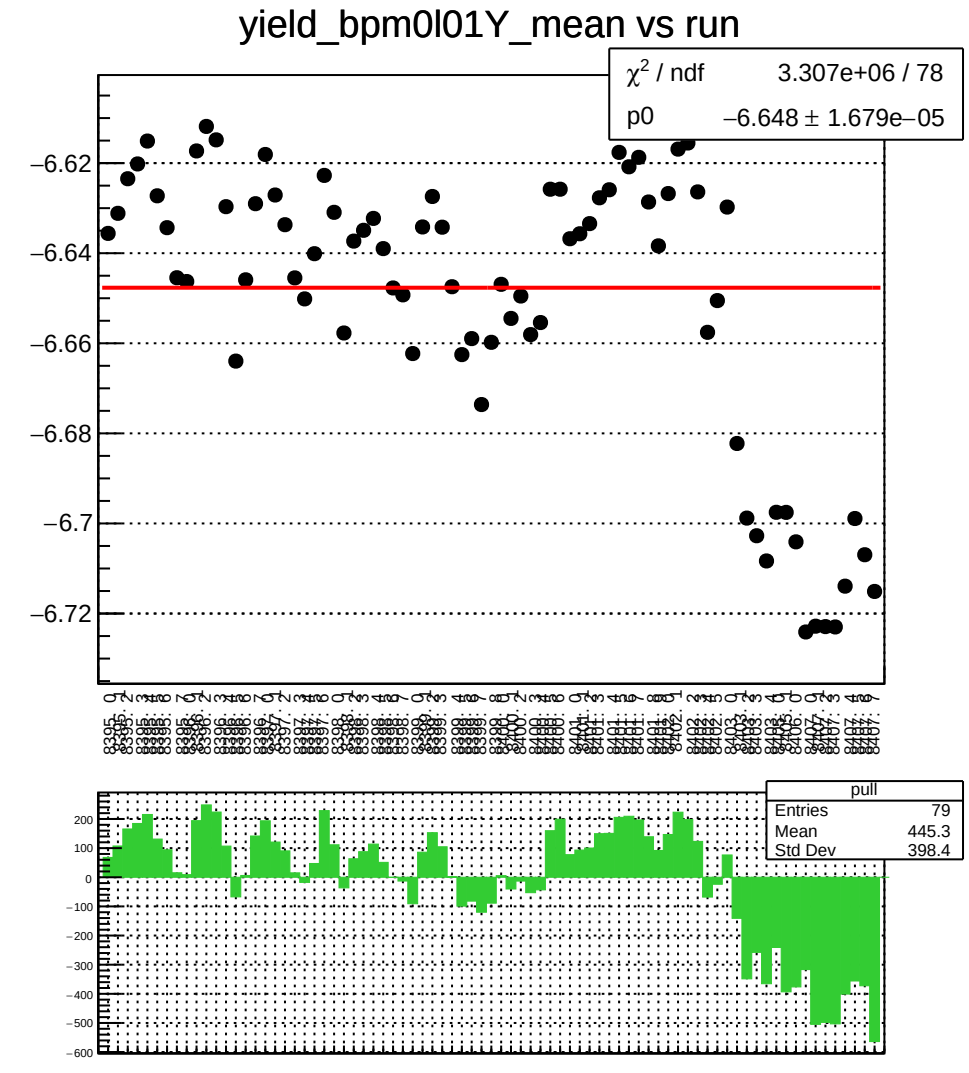

pull1D
Entries 79
Mean 2.069
Std Dev 4.668
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

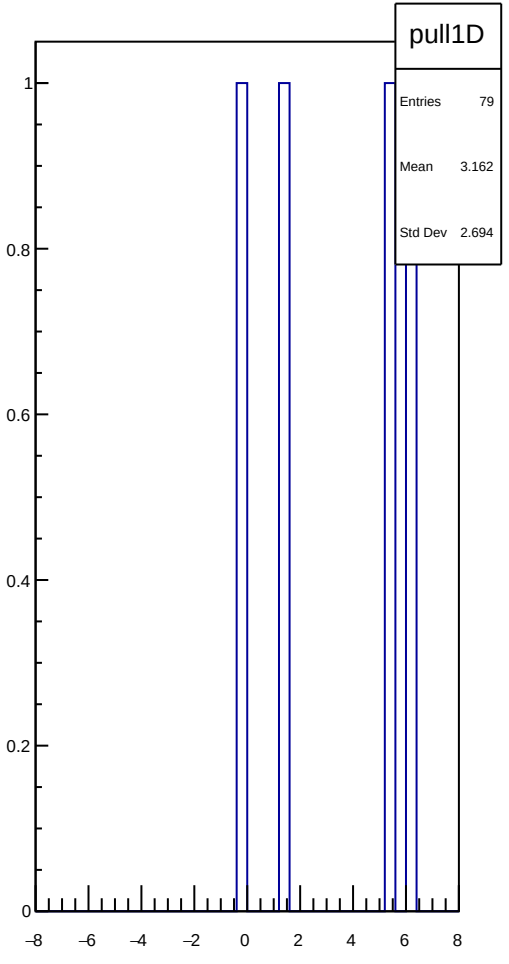

yield_bpm0i01aY_rms vs run
χ² / ndf 9114 / 78
p0 0.00626 ± 5.09e–06
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006
0.0055

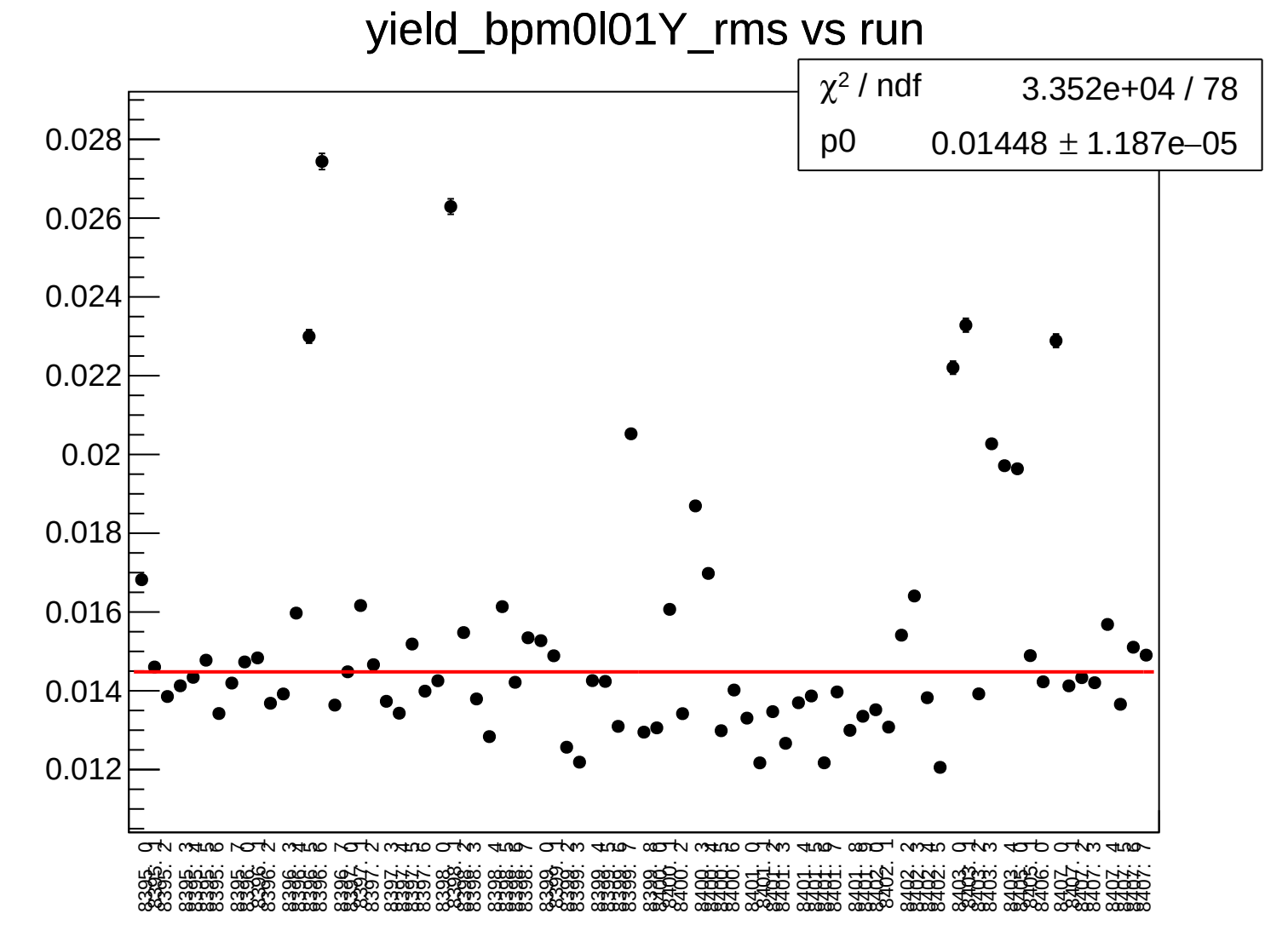

yield_bpm0l01X_mean vs run
χ² / ndf 2.794e+06 / 78
p0 0.6407 ± 1.295e−05
0.7
0.68
0.66
0.64
0.62
0.6
pull
Entries 79
Mean 210.5
Std Dev 160.5
400
300
200
100
0
−100
−200
−300

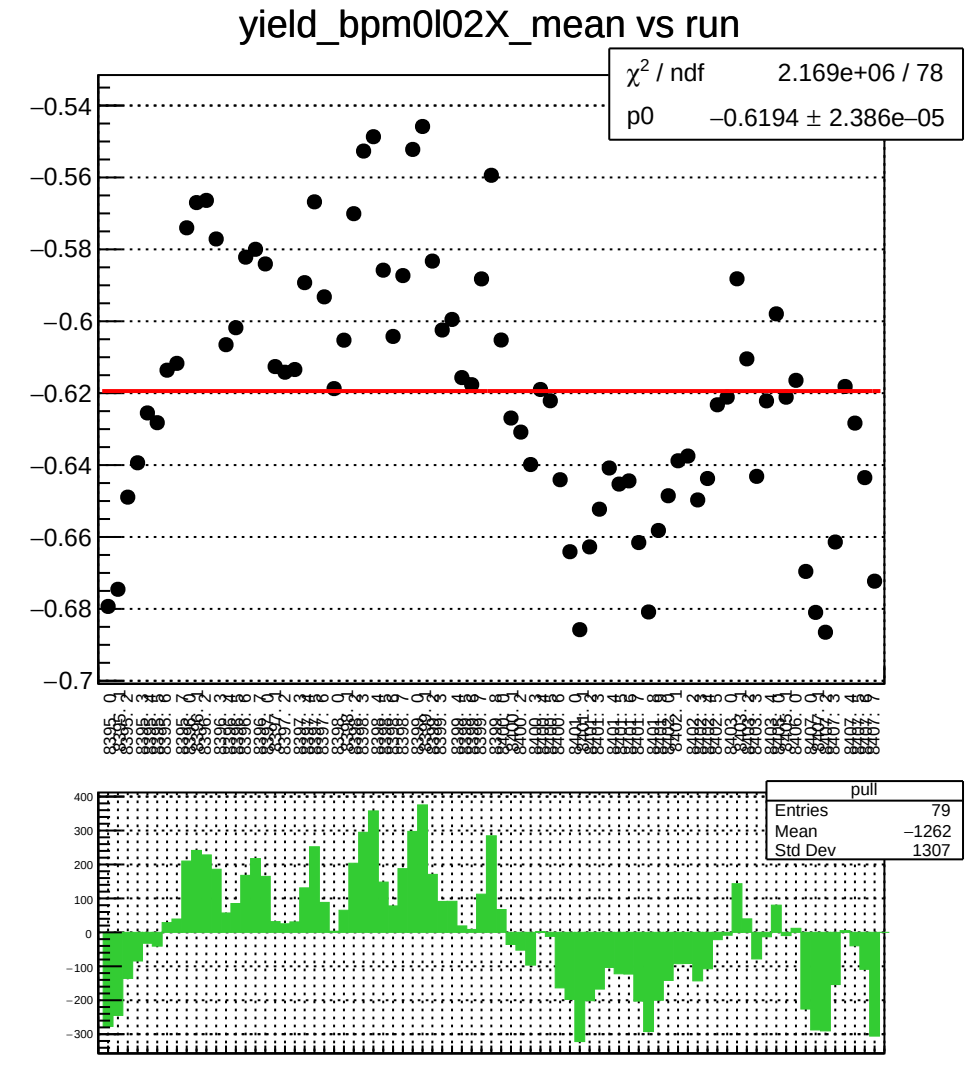

pull1D
Entries 79
Mean 0.9917
Std Dev 4.749
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

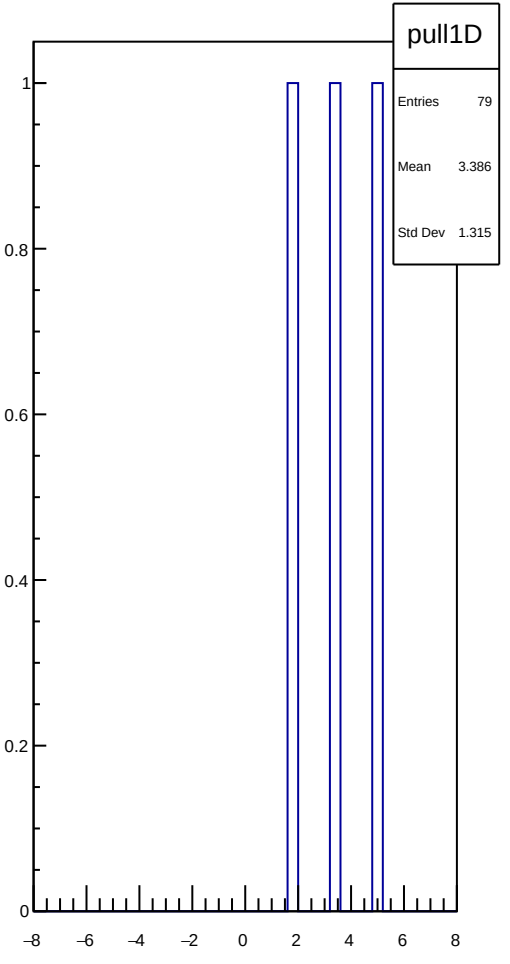

yield_bpm0l01X_rms vs run
χ² / ndf 2.514e+04 / 78
p0 0.01121 ± 9.161e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01

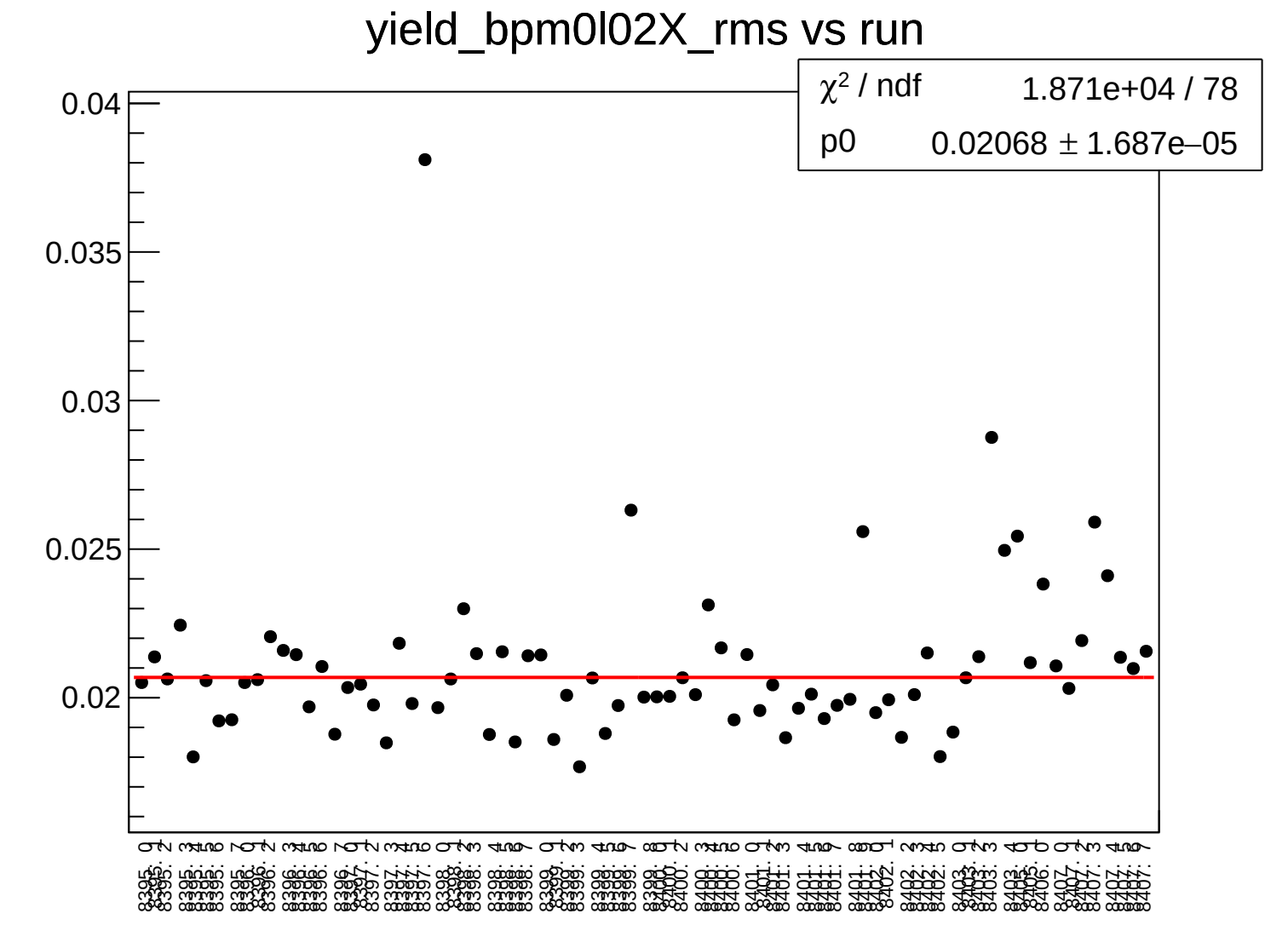

yield_bpm0l01Y_mean vs run
χ² / ndf 3.307e+06 / 78
p0 −6.648 ± 1.679e−05
−6.62
−6.64
−6.66
−6.68
−6.7
−6.72
pull
Entries 79
Mean 445.3
Std Dev 398.4
200
100
0
−100
−200
−300
−400
−500
−600

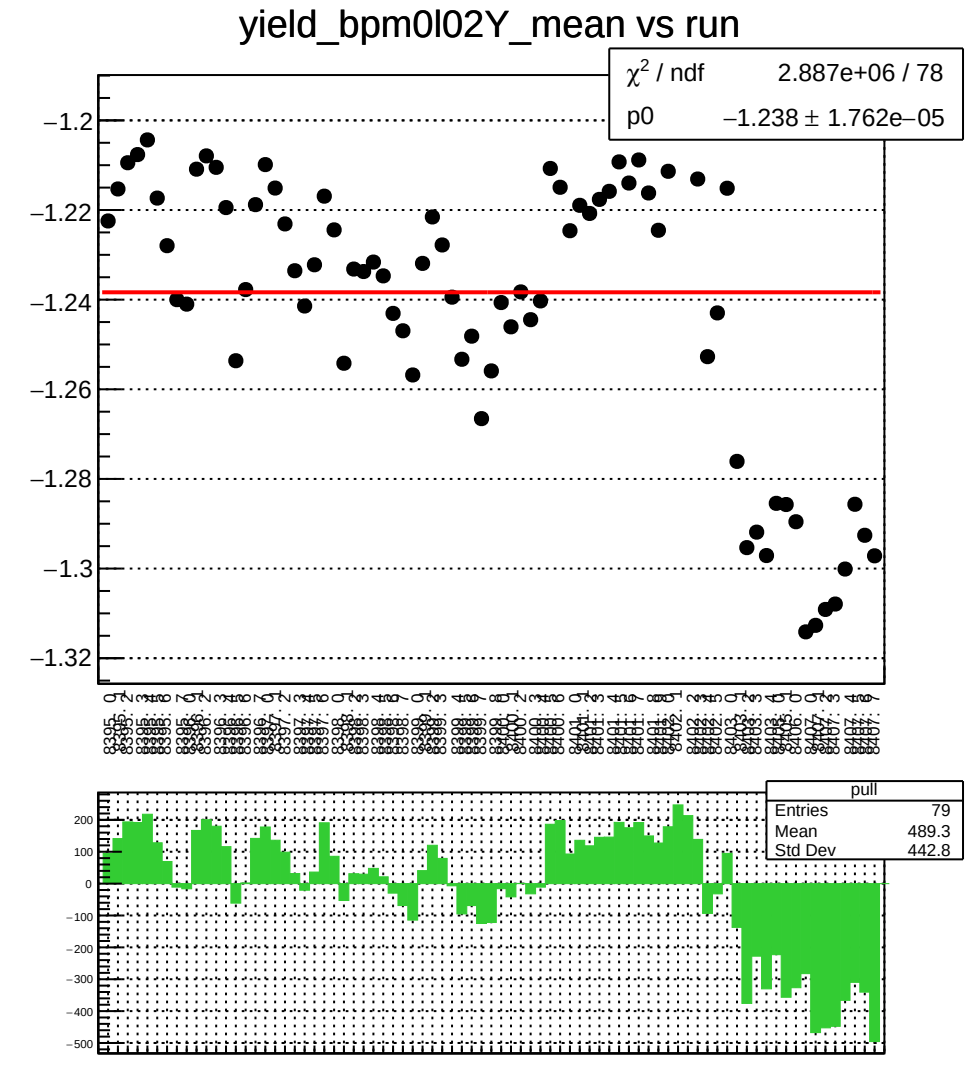

pull1D
Entries 79
Mean 3.162
Std Dev 2.694
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

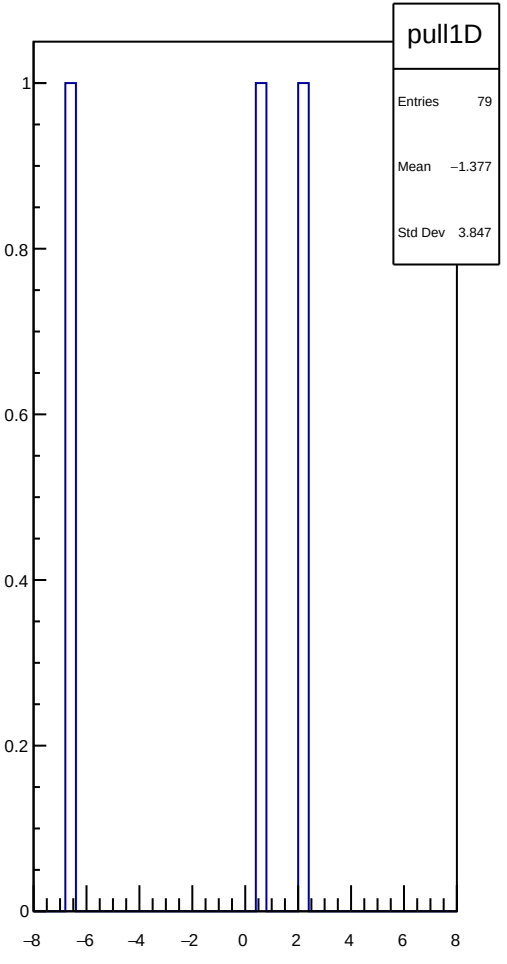

yield_bpm0l01Y_rms vs run
χ² / ndf 3.352e+04 / 78
p0 0.01448 ± 1.187e–05
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

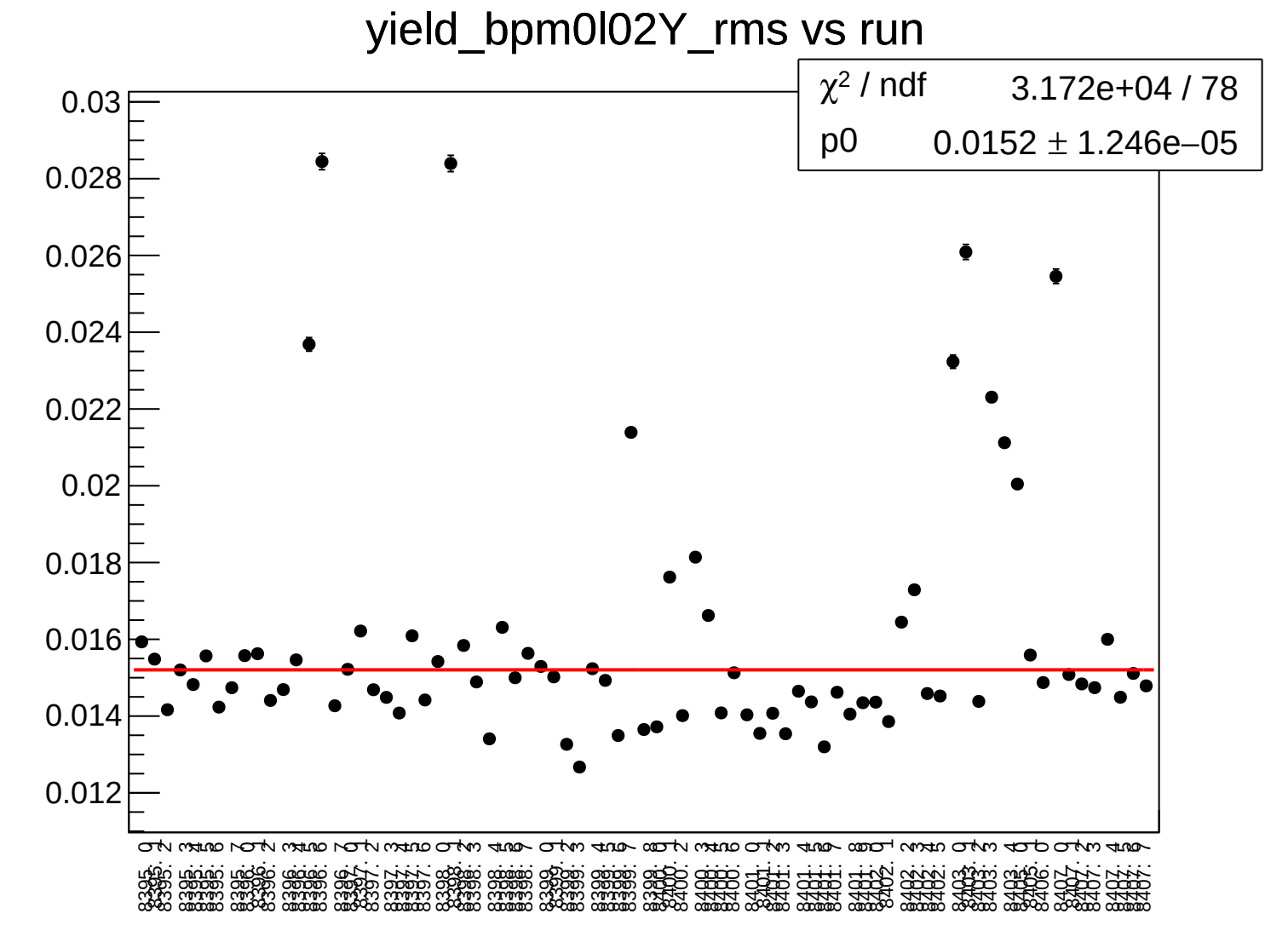

yield_bpm0l02X_mean vs run
χ² / ndf 2.169e+06 / 78
p0 −0.6194 ± 2.386e−05
−0.54
−0.56
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
pull
Entries 79
Mean −1262
Std Dev 1307
400
300
200
100
0
−100
−200
−300

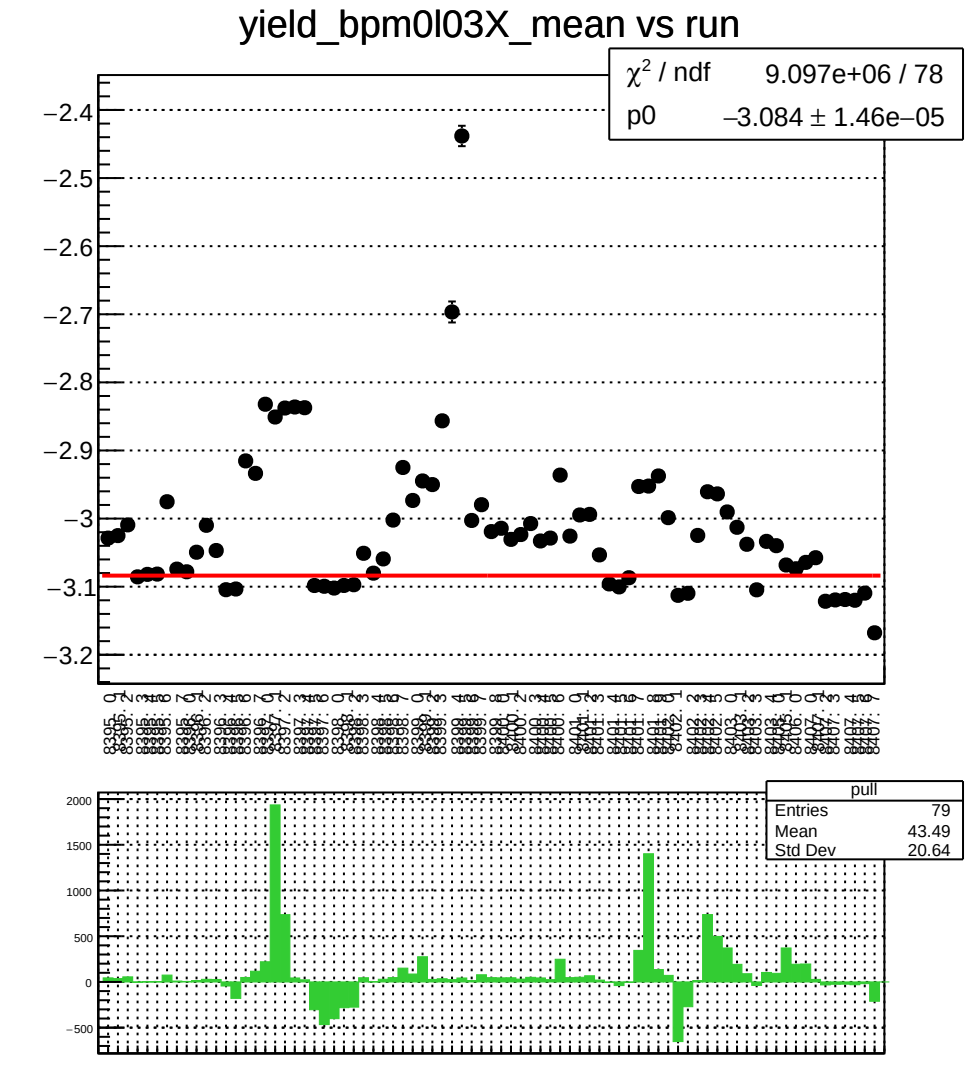

pull1D
Entries 79
Mean 3.386
Std Dev 1.315
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

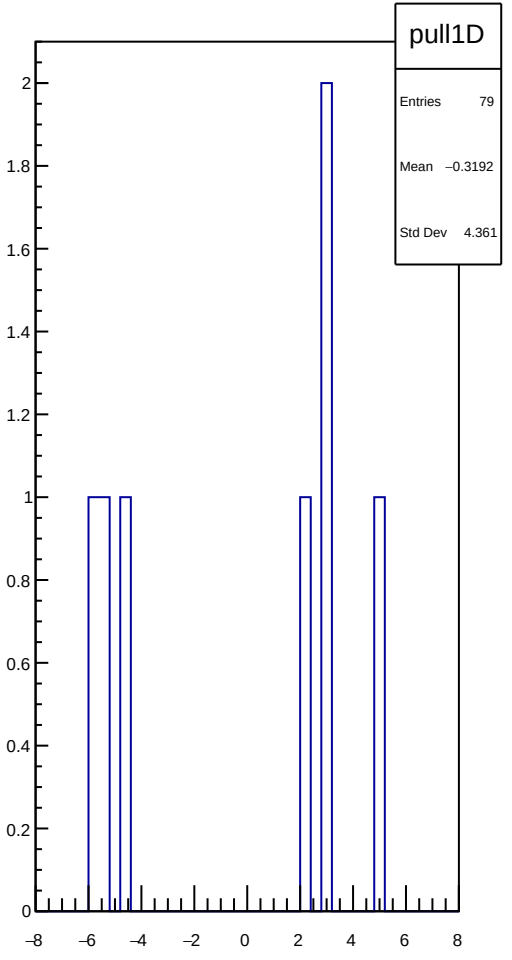

yield_bpm0l02X_rms vs run
χ² / ndf 1.871e+04 / 78
p0 0.02068 ± 1.687e–05
0.04
0.035
0.03
0.025
0.02

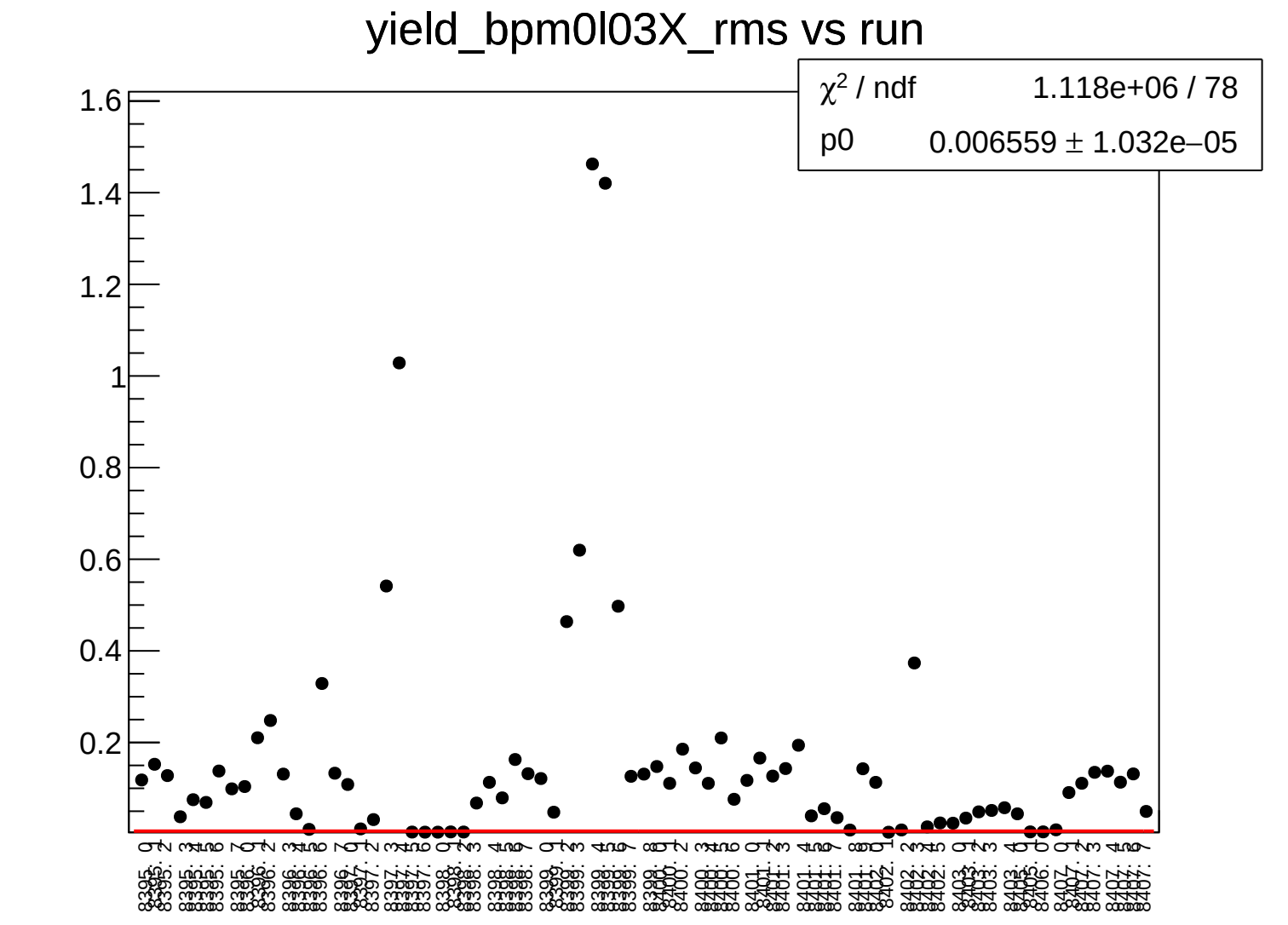

yield_bpm0l02Y_mean vs run
χ² / ndf 2.887e+06 / 78
p0 −1.238 ± 1.762e−05
−1.2
−1.22
−1.24
−1.26
−1.28
−1.3
−1.32
pull
Entries 79
Mean 489.3
Std Dev 442.8
200
100
0
−100
−200
−300
−400
−500

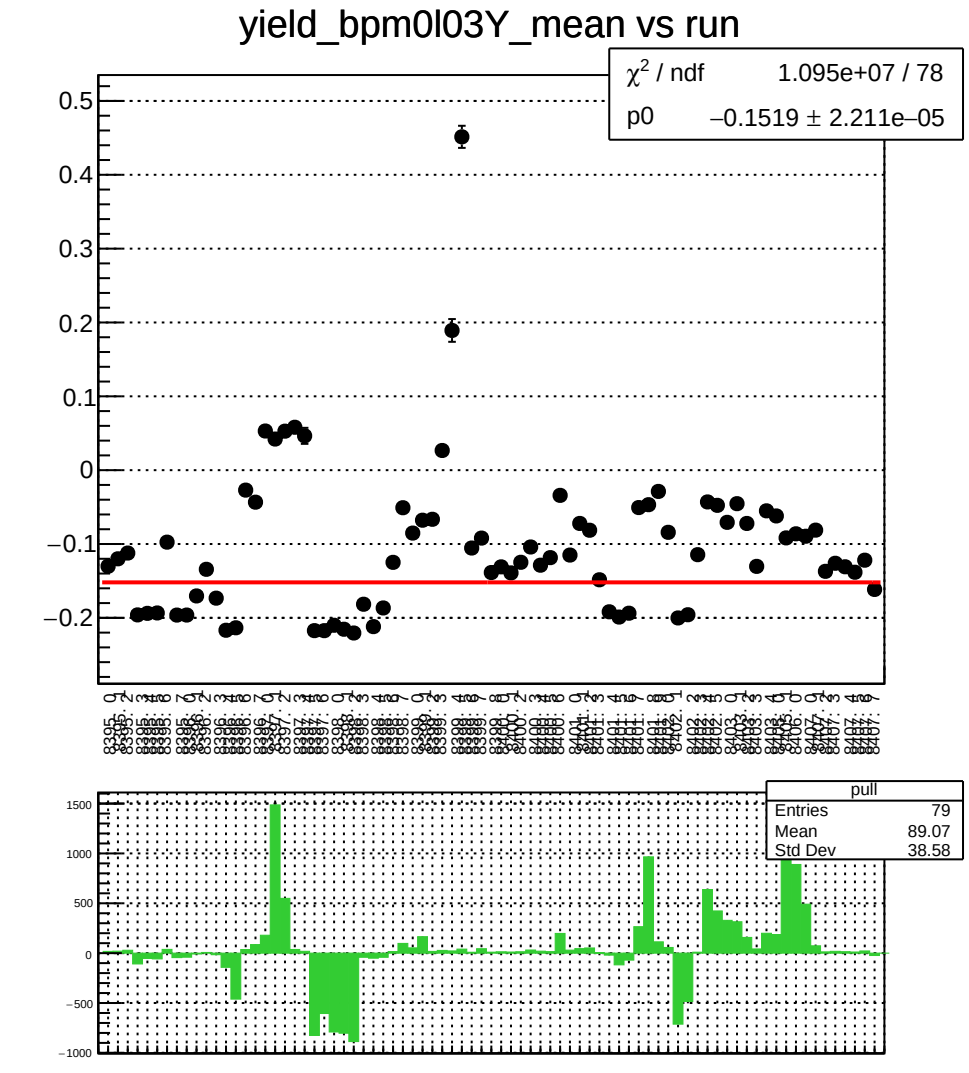

pull1D
Entries 79
Mean −1.377
Std Dev 3.847
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

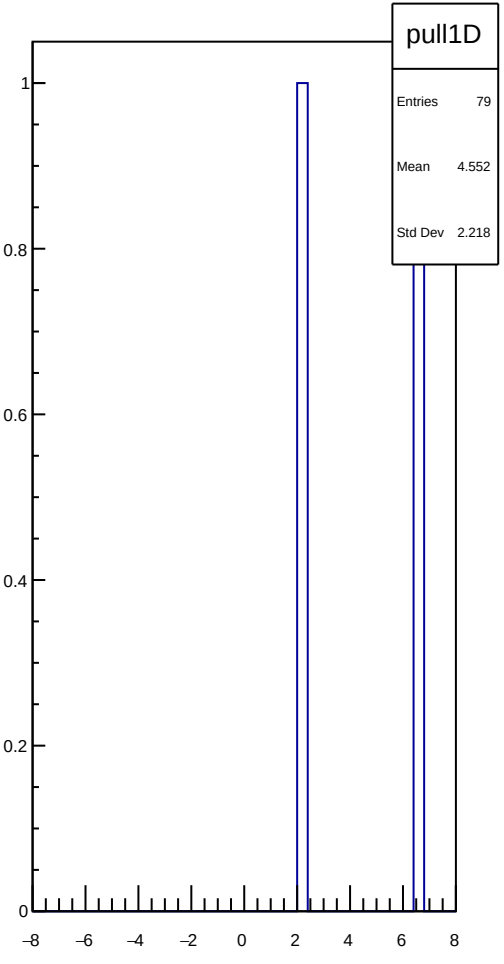

yield_bpm0l02Y_rms vs run
χ² / ndf 3.172e+04 / 78
p0 0.0152 ± 1.246e−05
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

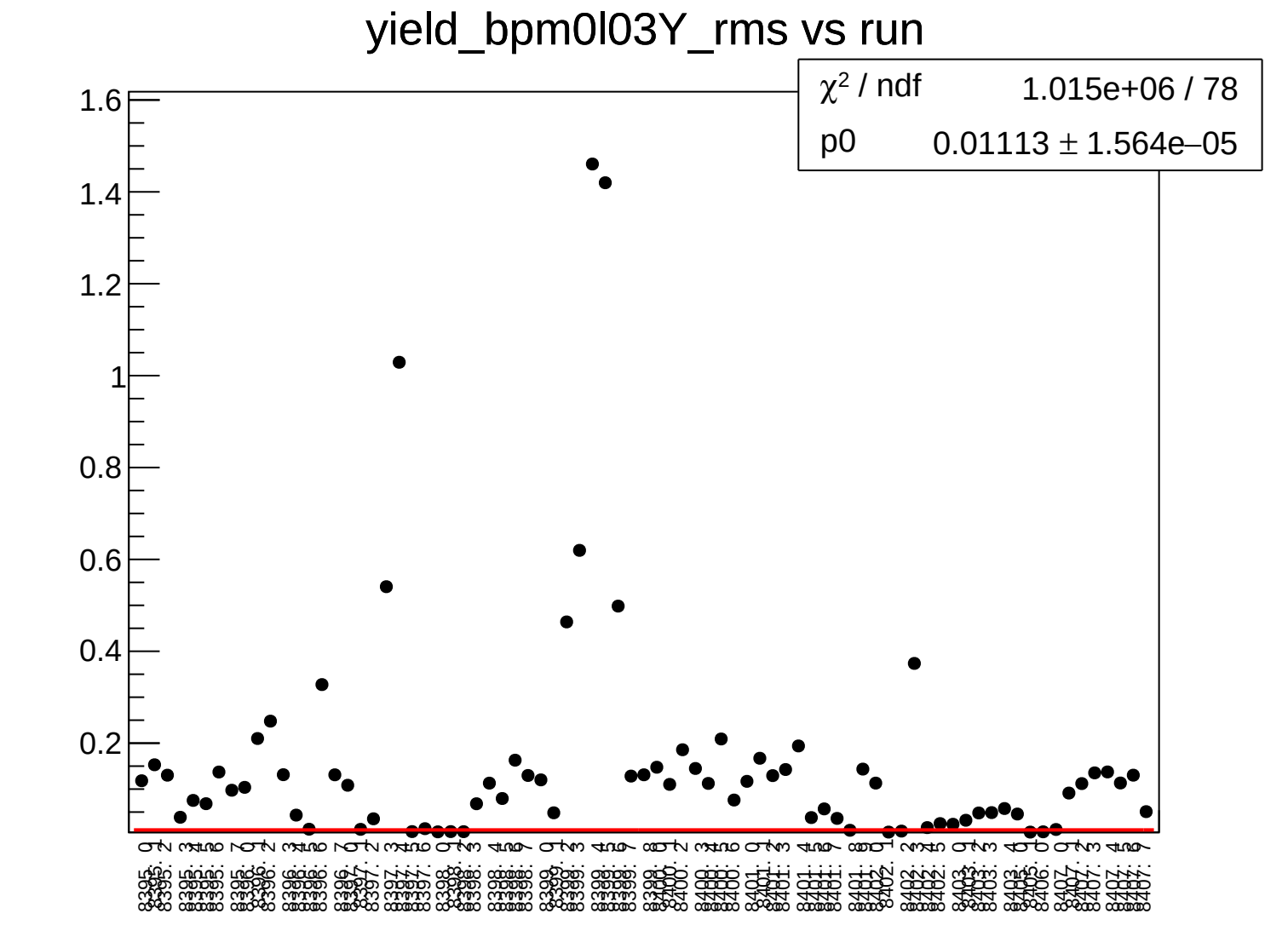

yield_bpm0l03X_mean vs run
χ² / ndf 9.097e+06 / 78
p0 −3.084 ± 1.46e−05
−2.4
−2.5
−2.6
−2.7
−2.8
−2.9
−3
−3.1
−3.2
pull
Entries 79
Mean 43.49
Std Dev 20.64
2000
1500
1000
500
0
−500

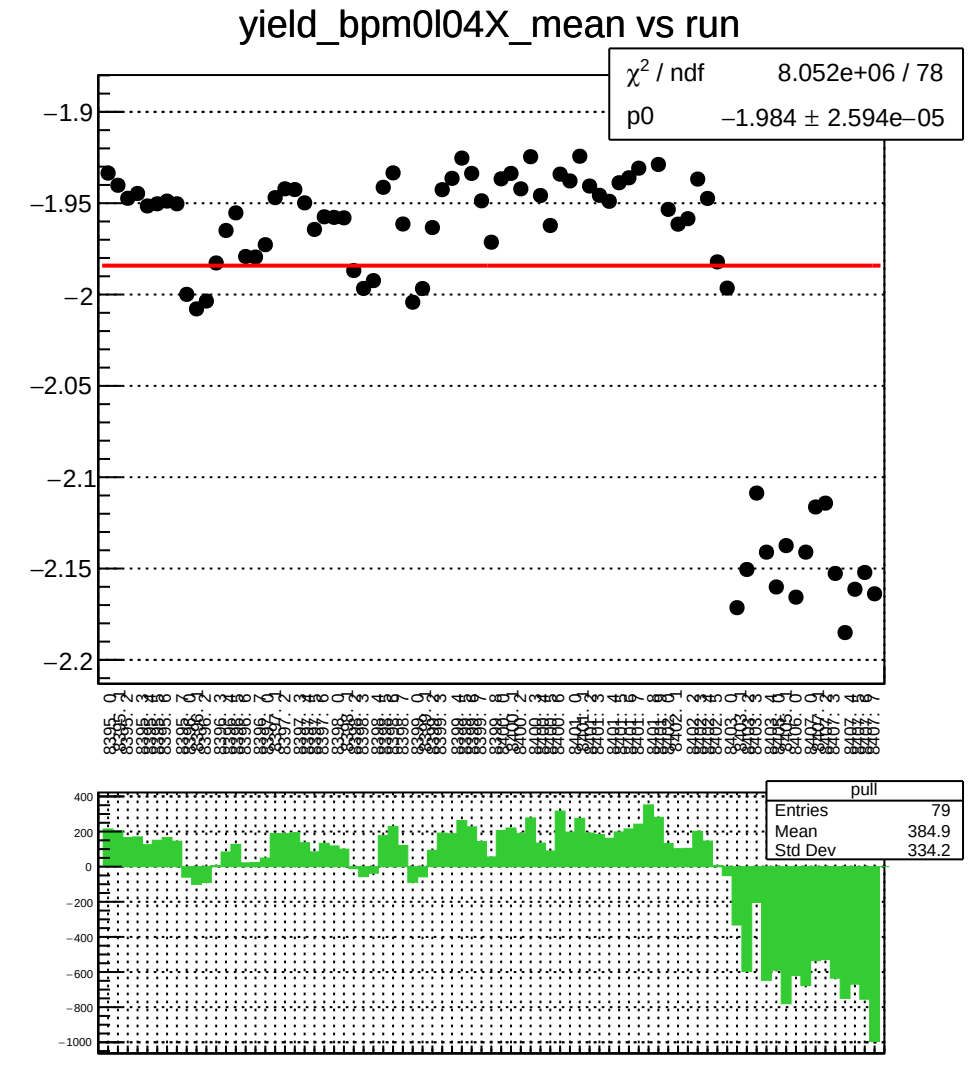

pull1D
Entries 79
Mean −0.3192
Std Dev 4.361
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

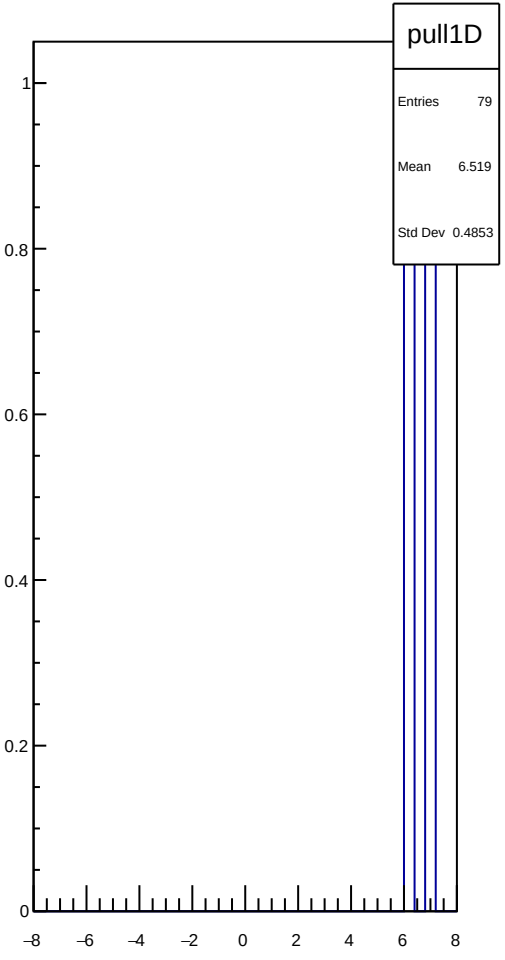

yield_bpm0l03X_rms vs run
χ² / ndf 1.118e+06 / 78
p0 0.006559 ± 1.032e−05
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

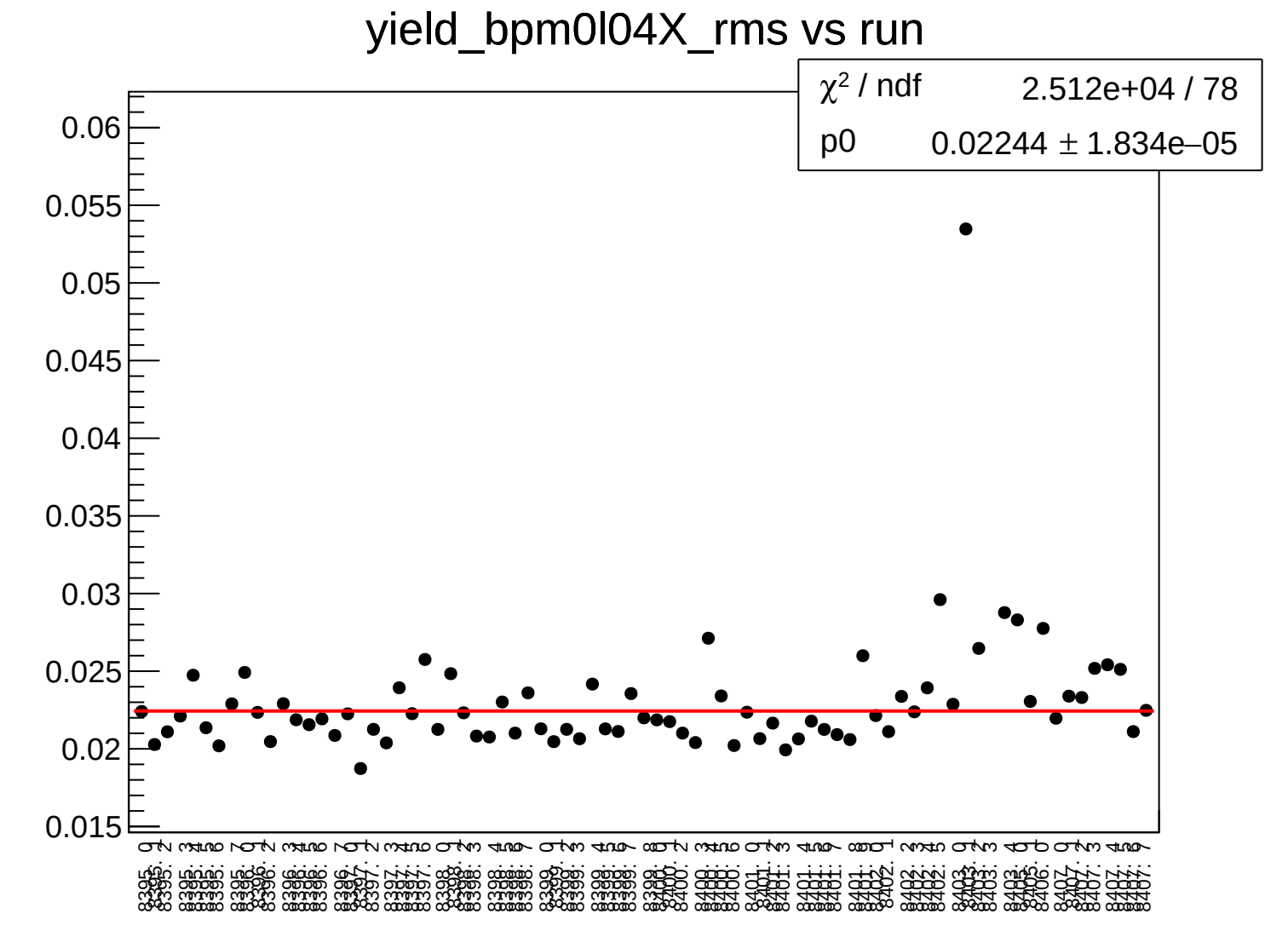

yield_bpm0l03Y_mean vs run
χ² / ndf 1.095e+07 / 78
p0 −0.1519 ± 2.211e−05
pull
Entries 79
Mean 89.07
Std Dev 38.58

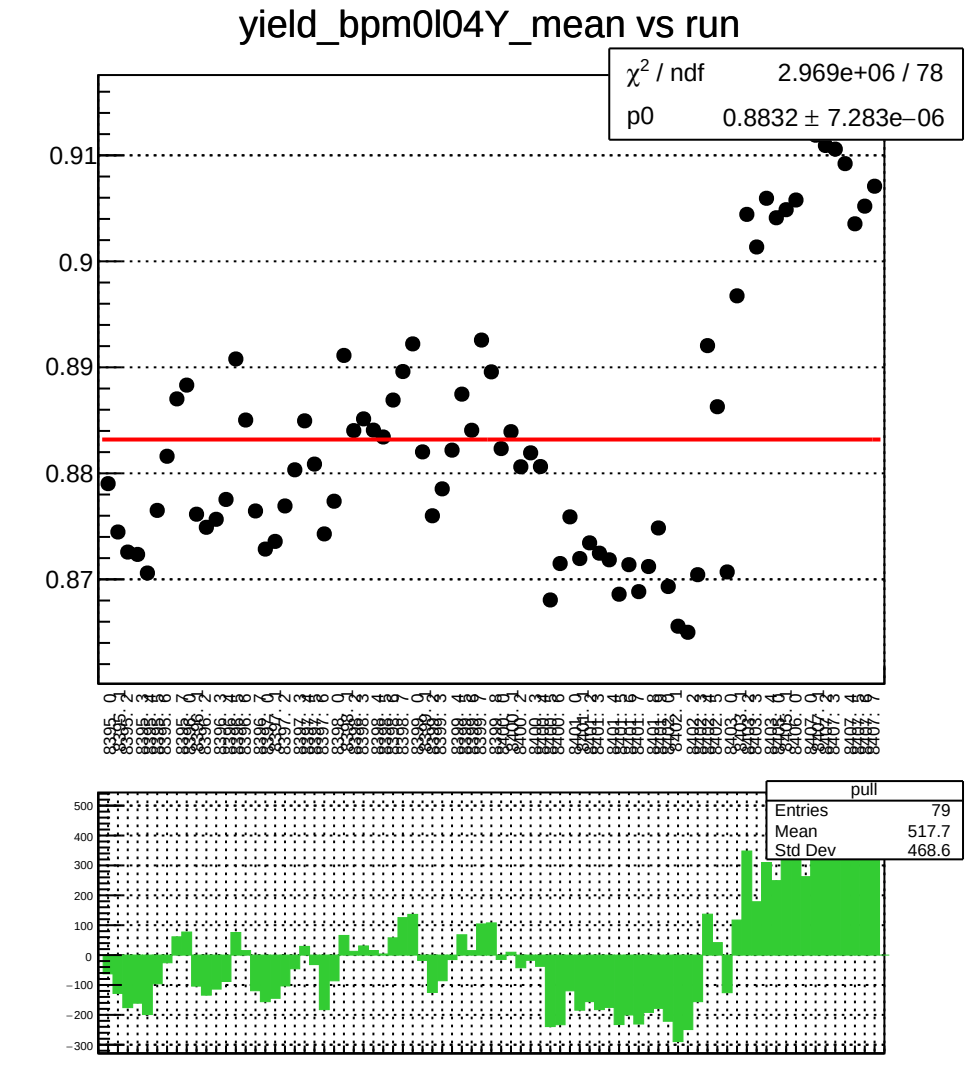

pull1D
Entries 79
Mean 4.552
Std Dev 2.218

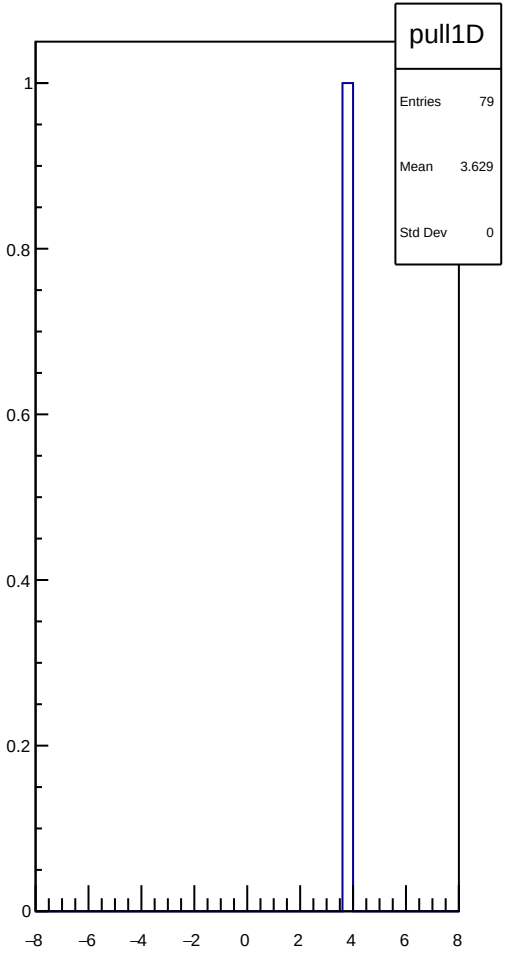

yield_bpm0l03Y_rms vs run
χ² / ndf 1.015e+06 / 78
p0 0.01113 ± 1.564e−05
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

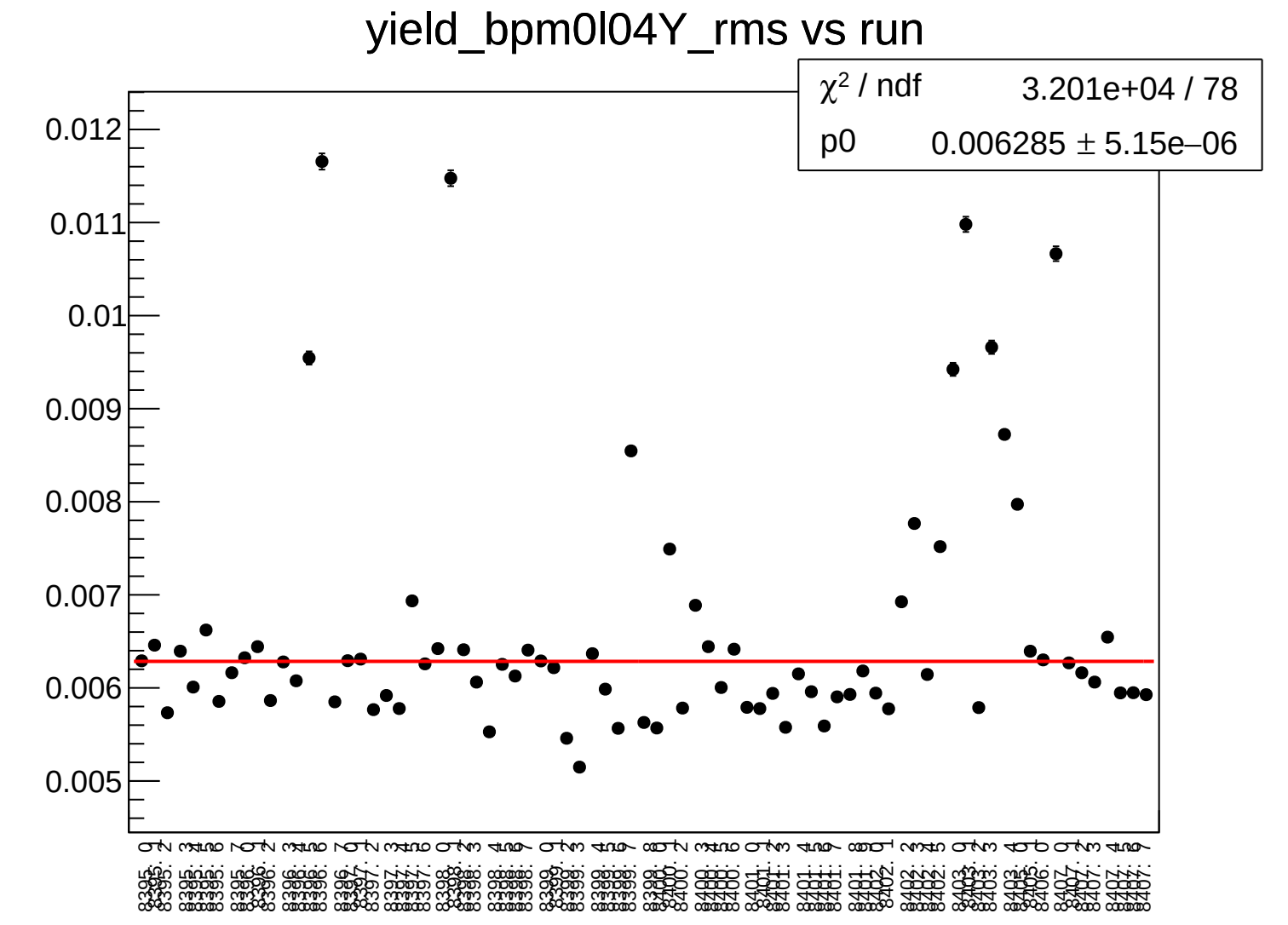

yield_bpm0l04X_mean vs run
χ² / ndf 8.052e+06 / 78
p0 −1.984 ± 2.594e−05
−1.9
−1.95
−2
−2.05
−2.1
−2.15
−2.2
pull
Entries 79
Mean 384.9
Std Dev 334.2
400
200
0
−200
−400
−600
−800
−1000

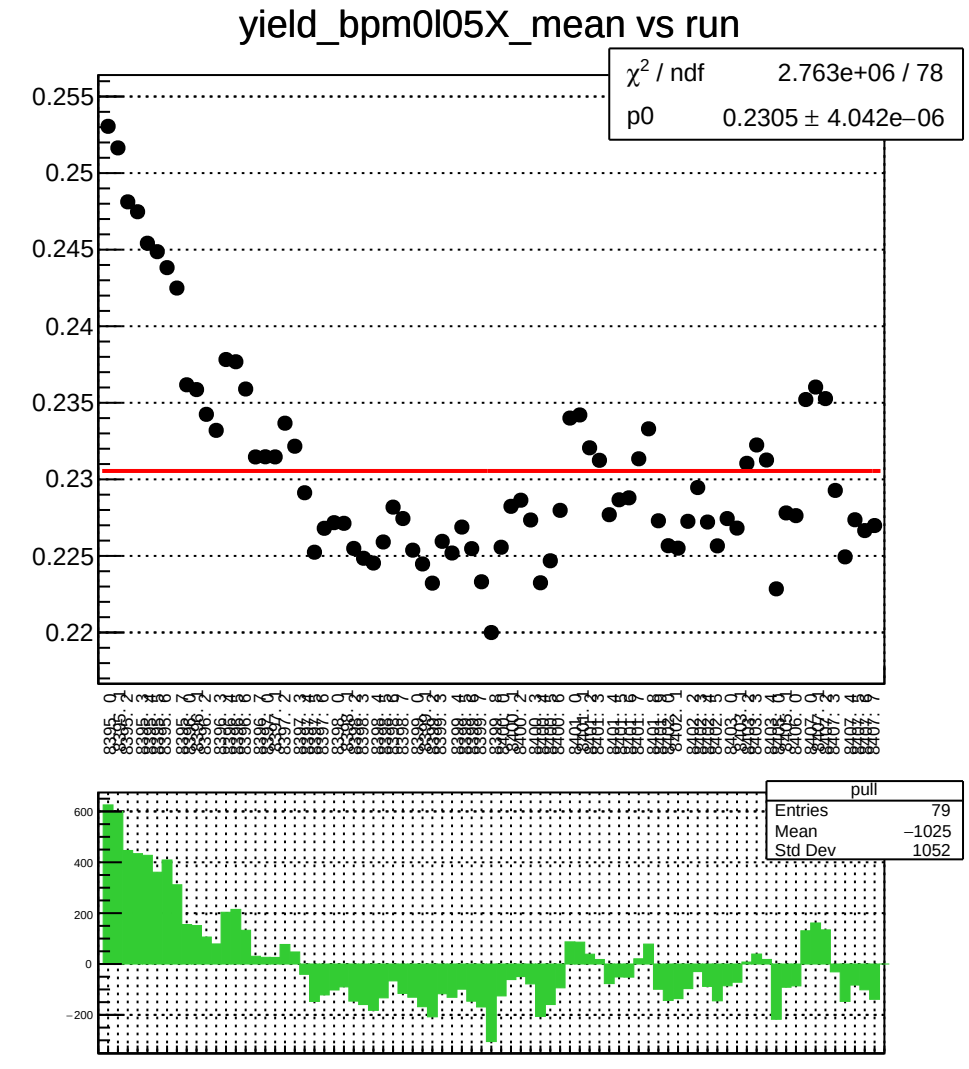

pull1D
Entries 79
Mean 6.519
Std Dev 0.4853
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

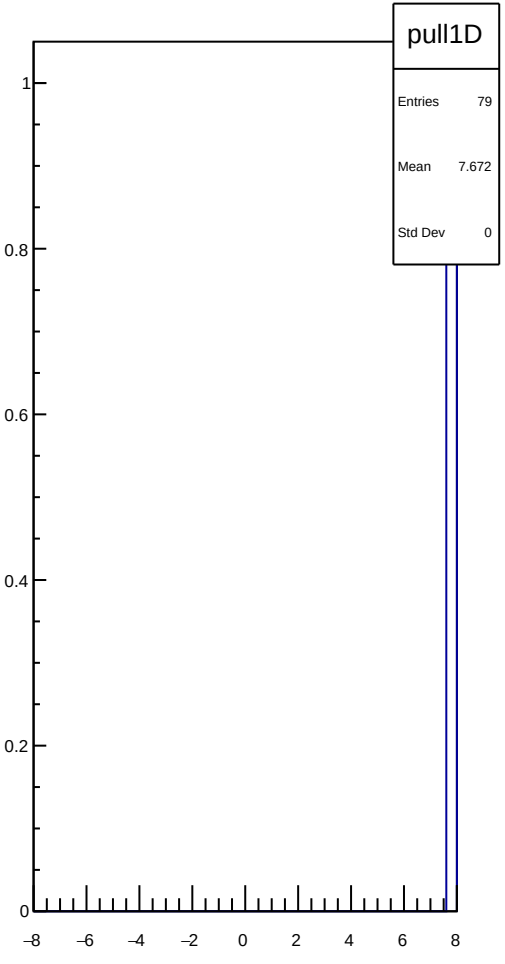

yield_bpm0l04X_rms vs run
χ² / ndf 2.512e+04 / 78
p0 0.02244 ± 1.834e–05
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

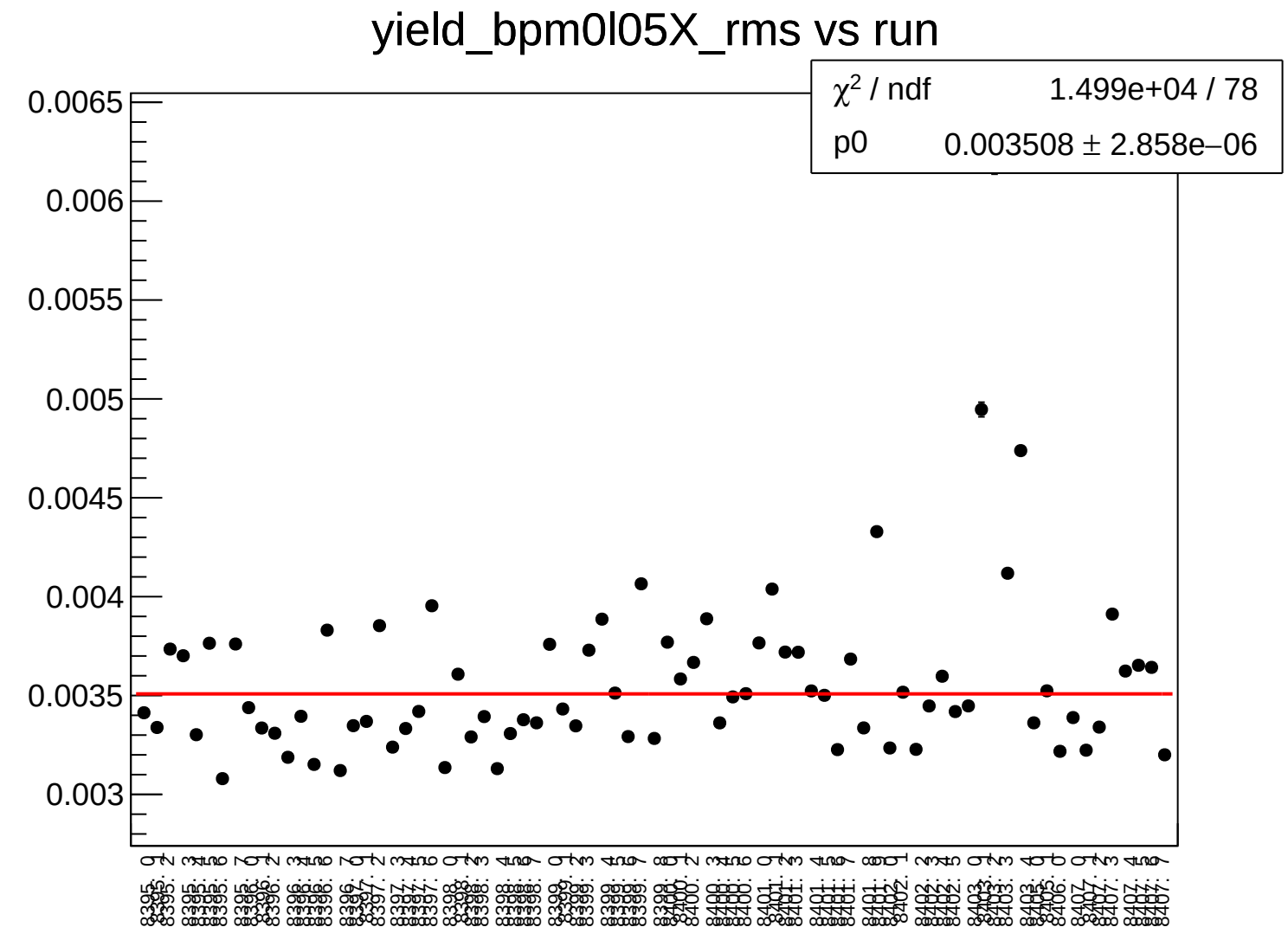

yield_bpm0l04Y_mean vs run
χ² / ndf 2.969e+06 / 78
p0 0.8832 ± 7.283e−06
0.91
0.9
0.89
0.88
0.87
pull
Entries 79
Mean 517.7
Std Dev 468.6
500
400
300
200
100
0
−100
−200
−300

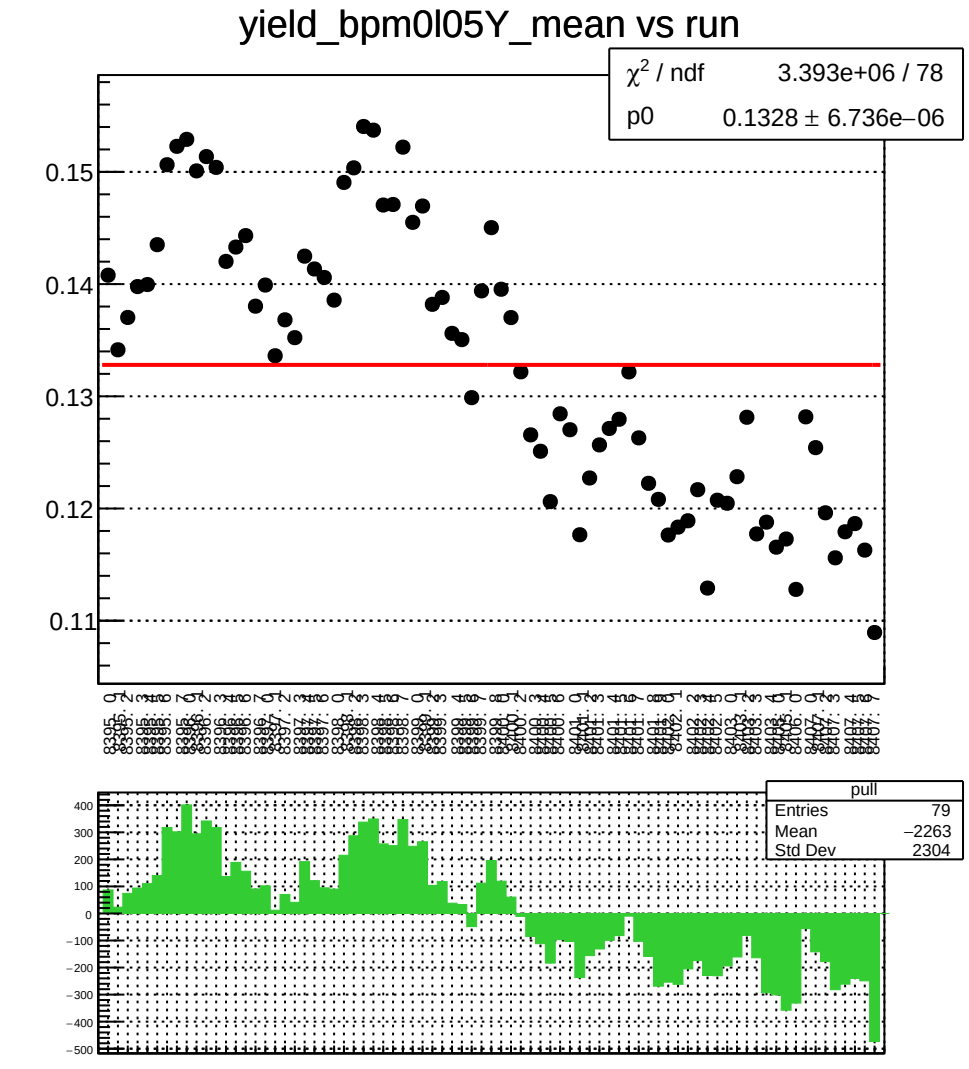

pull1D
Entries 79
Mean 3.629
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

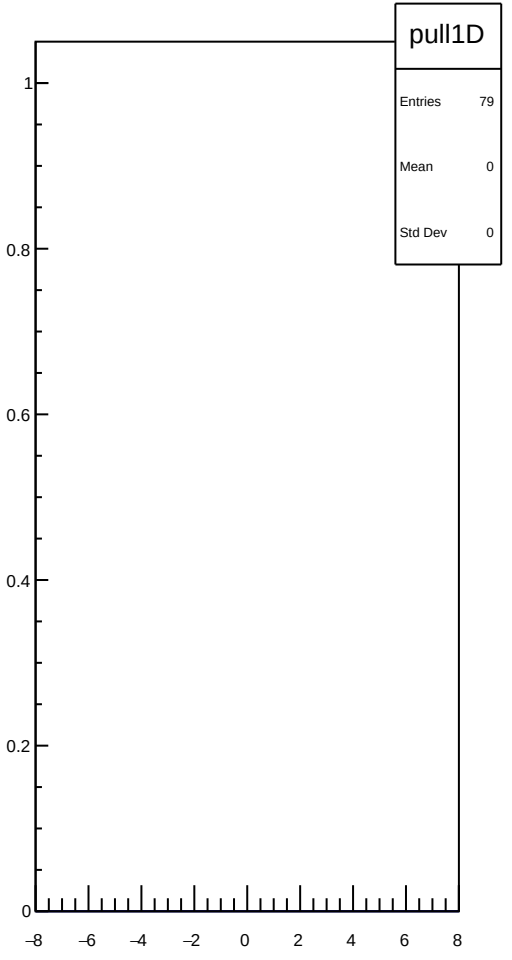

yield_bpm0l04Y_rms vs run
χ² / ndf 3.201e+04 / 78
p0 0.006285 ± 5.15e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005

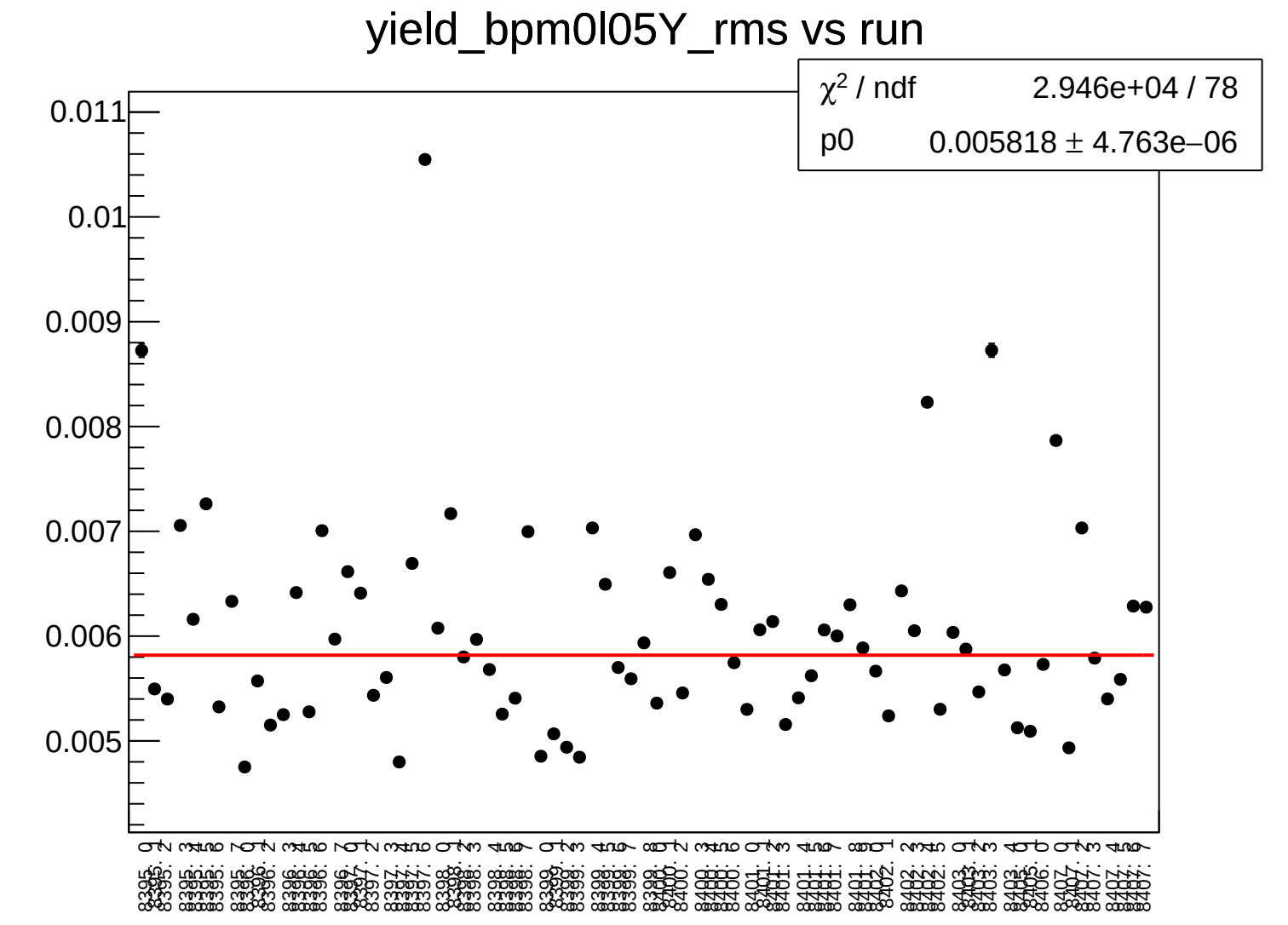

yield_bpm0l05X_mean vs run
χ² / ndf 2.763e+06 / 78
p0 0.2305 ± 4.042e−06
0.255
0.25
0.245
0.24
0.235
0.23
0.225
0.22
pull
Entries 79
Mean −1025
Std Dev 1052
600
400
200
0
−200

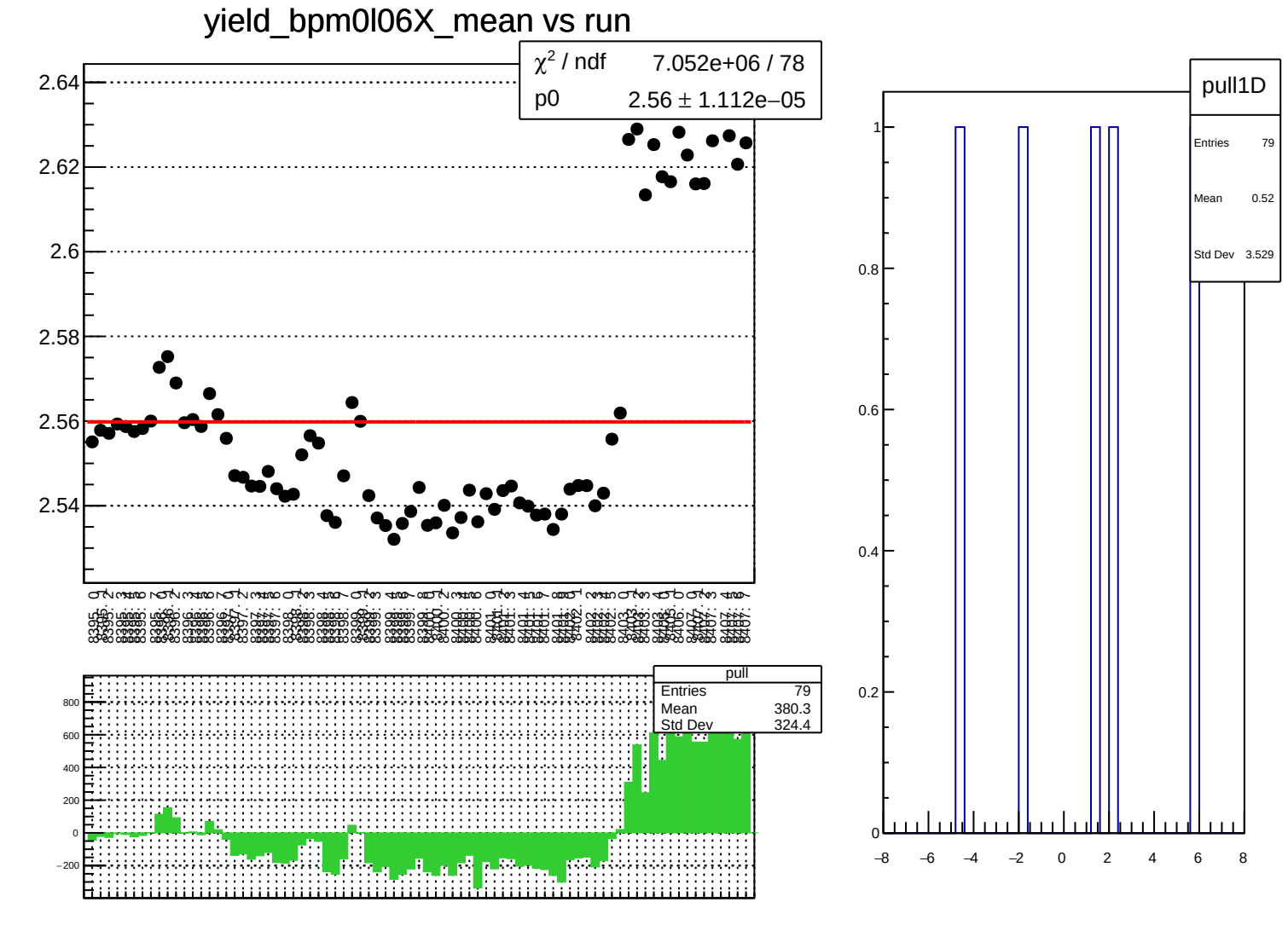

pull1D
Entries 79
Mean 7.672
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

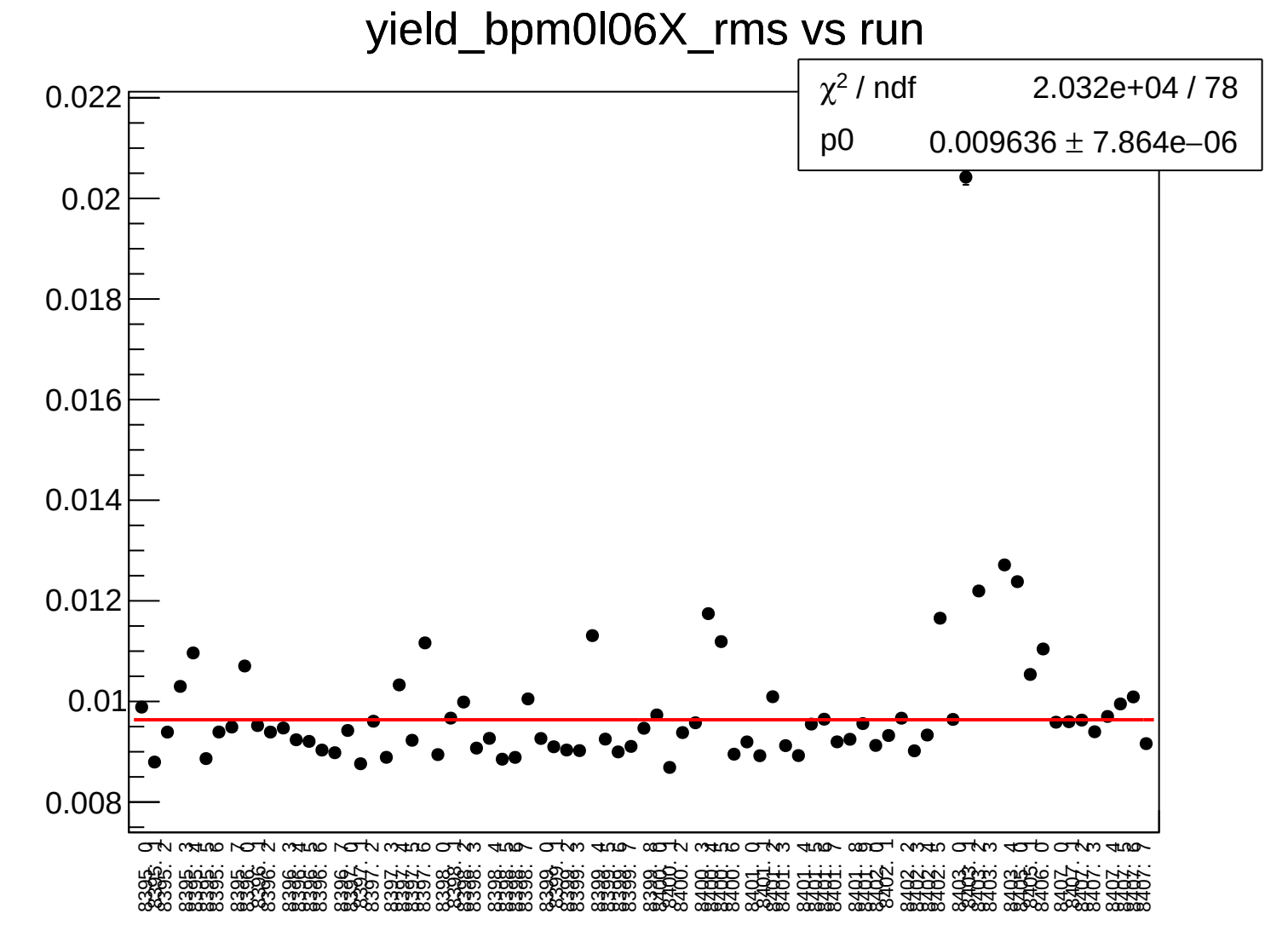

yield_bpm0l05X_rms vs run
χ² / ndf 1.499e+04 / 78
p0 0.003508 ± 2.858e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

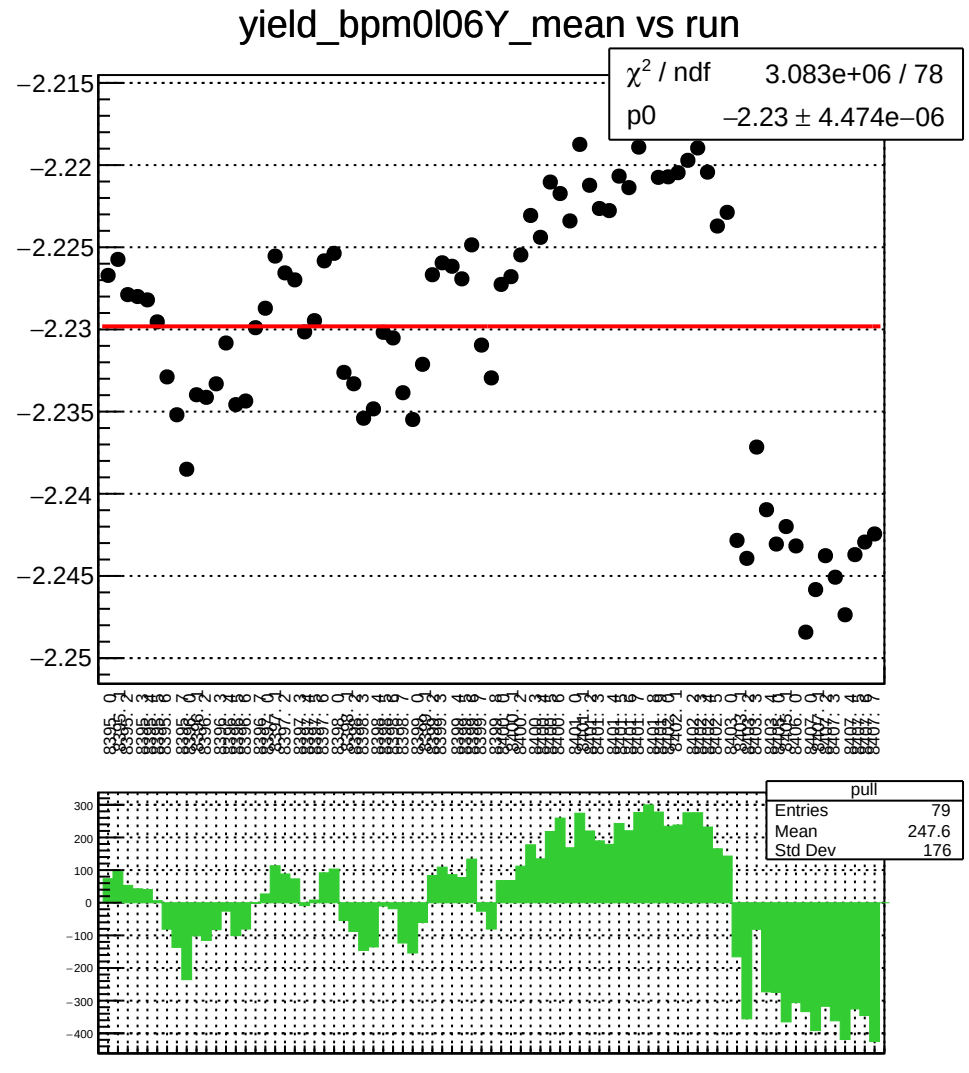

yield_bpm0l05Y_mean vs run
χ² / ndf 3.393e+06 / 78
p0 0.1328 ± 6.736e−06
0.15
0.14
0.13
0.12
0.11
pull
Entries 79
Mean −2263
Std Dev 2304
400
300
200
100
0
−100
−200
−300
−400
−500

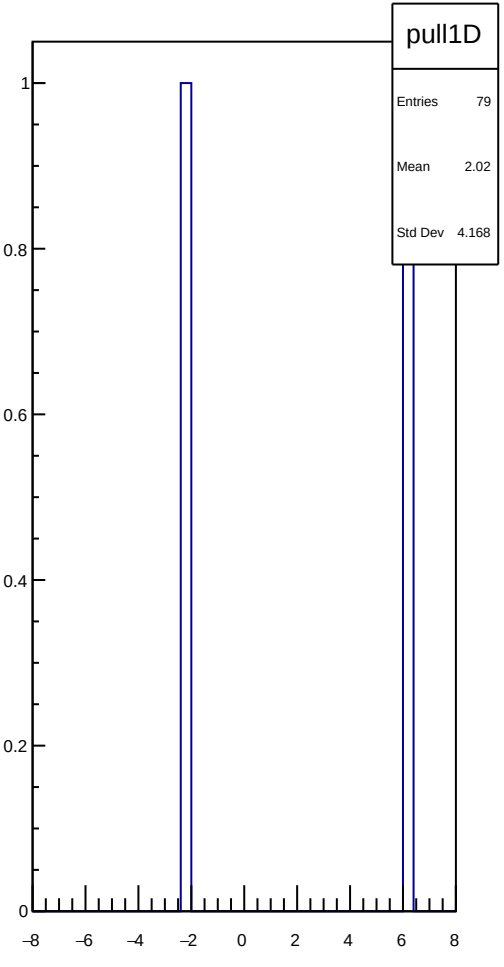

pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

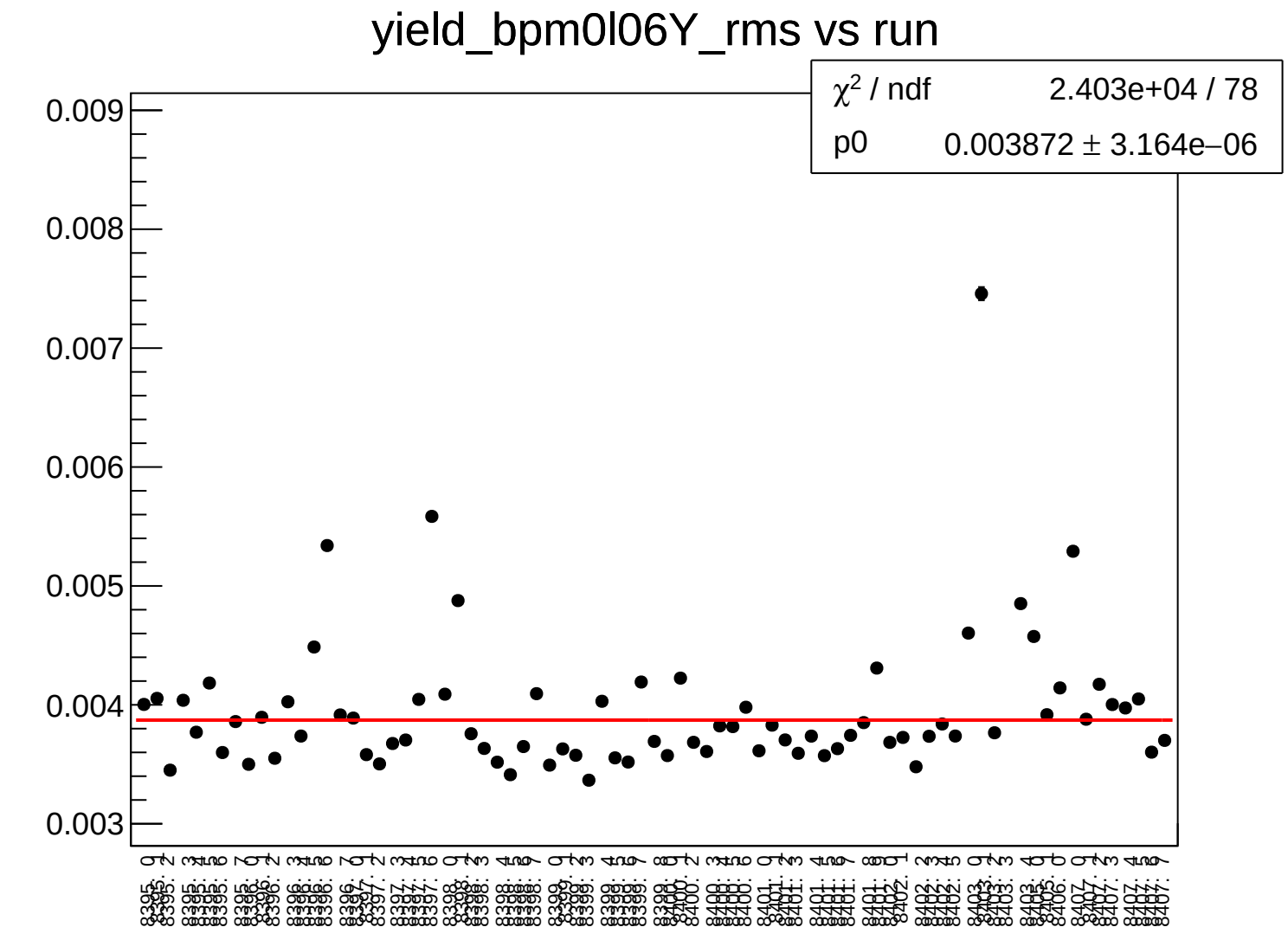

yield_bpm0l05Y_rms vs run
χ² / ndf 2.946e+04 / 78
p0 0.005818 ± 4.763e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005

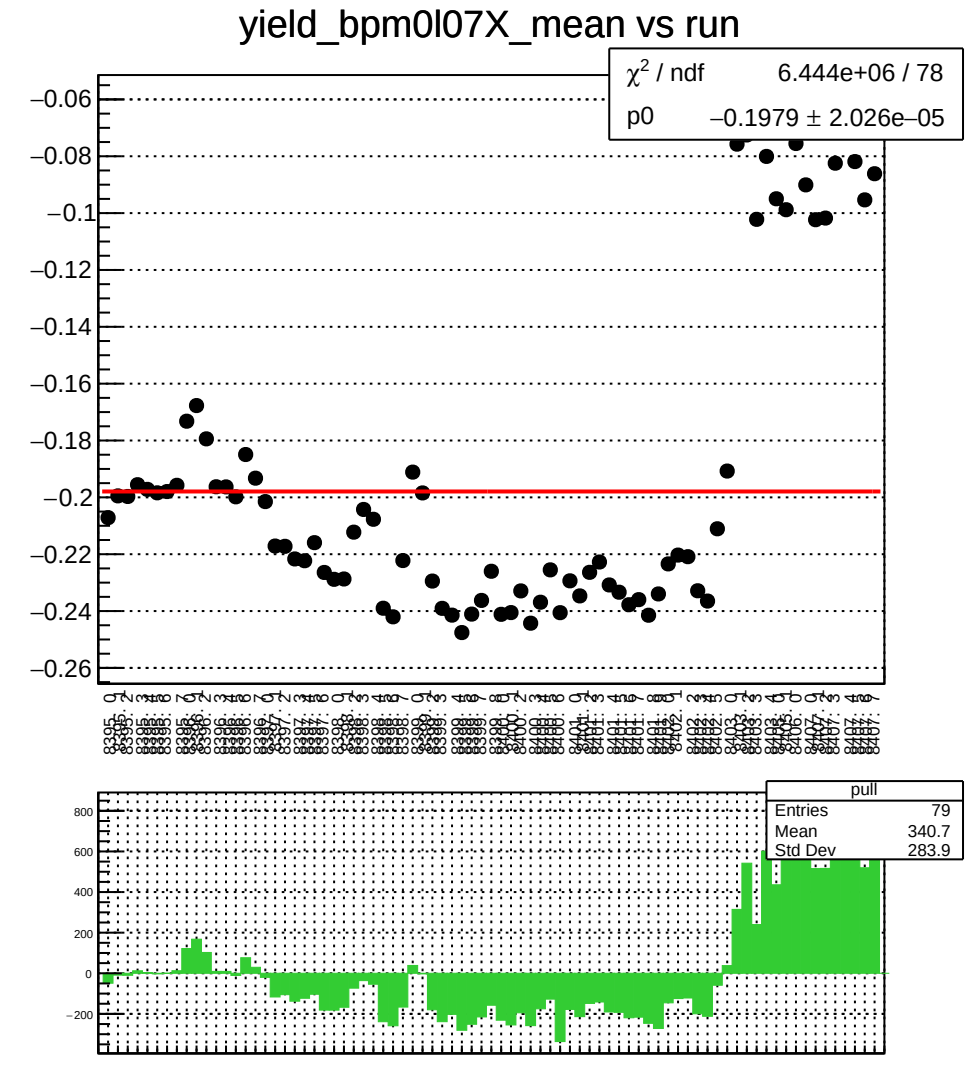

yield_bpm0l06X_mean vs run
χ² / ndf 7.052e+06 / 78
p0 2.56 ± 1.112e−05
2.64
2.62
2.6
2.58
2.56
2.54
pull
Entries 79
Mean 380.3
Std Dev 324.4
800
600
400
200
0
−200
pull1D
Entries 79
Mean 0.52
Std Dev 3.529
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

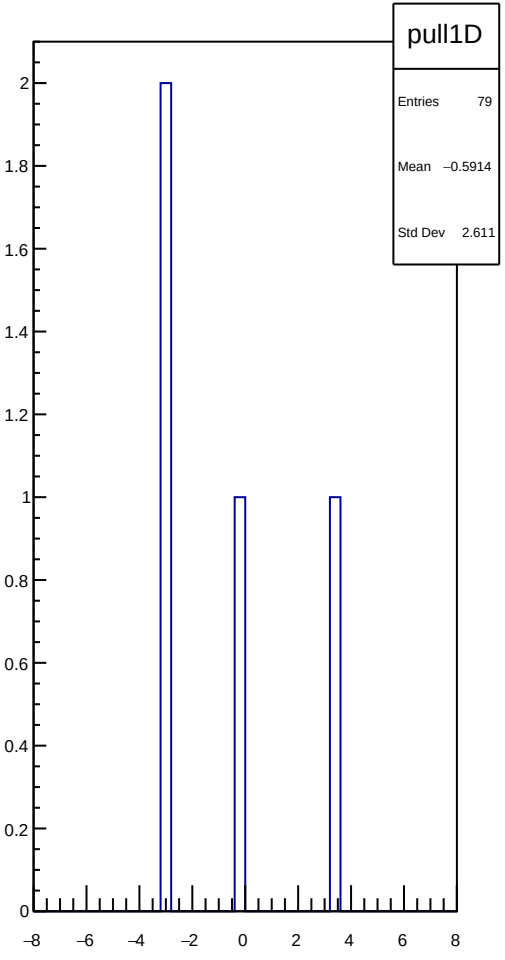

yield_bpm0l06X_rms vs run
χ² / ndf 2.032e+04 / 78
p0 0.009636 ± 7.864e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

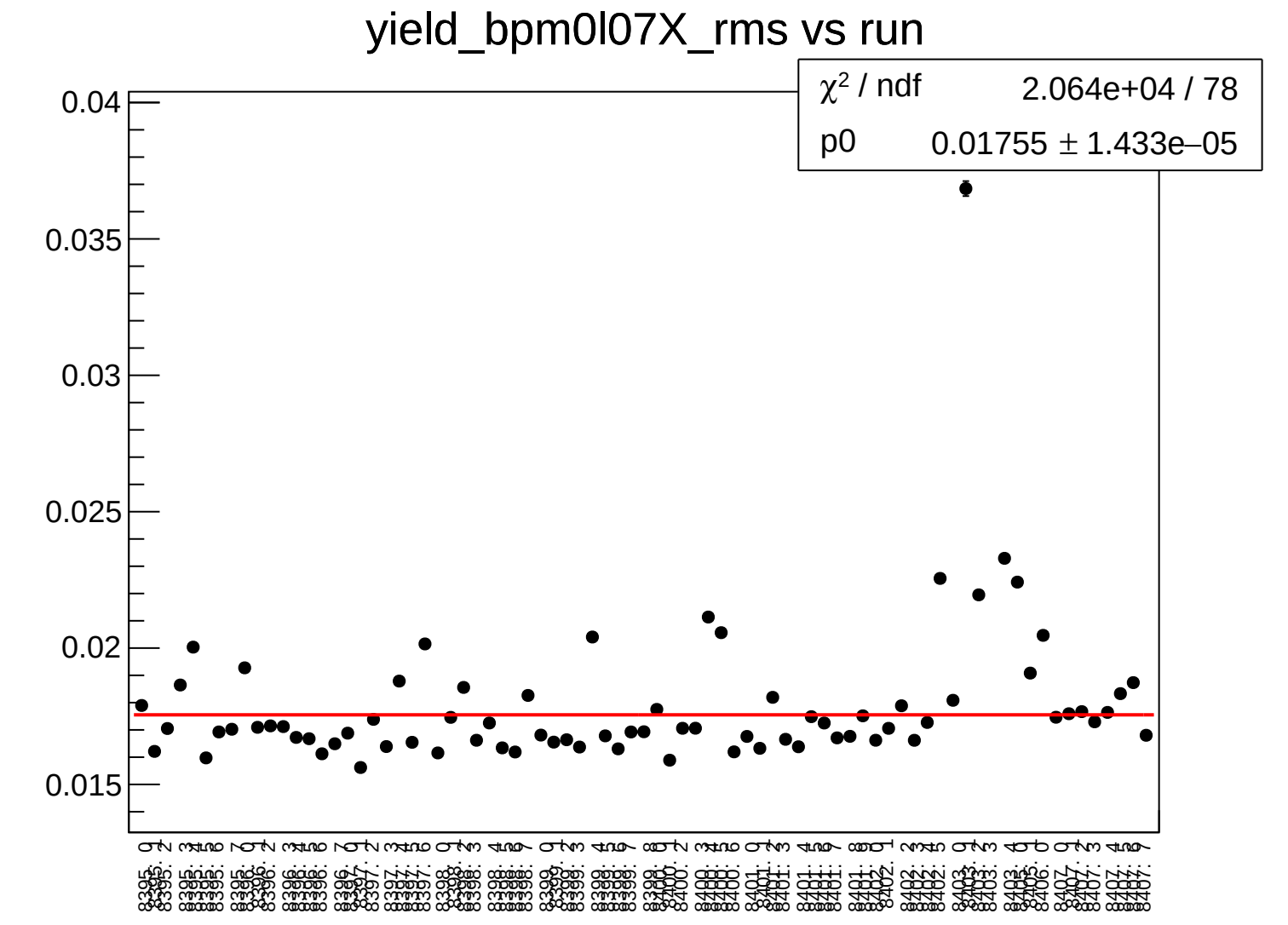

yield_bpm0l06Y_mean vs run
χ² / ndf 3.083e+06 / 78
p0 −2.23 ± 4.474e−06
−2.215
−2.22
−2.225
−2.23
−2.235
−2.24
−2.245
−2.25
pull
Entries 79
Mean 247.6
Std Dev 176
300
200
100
0
−100
−200
−300
−400

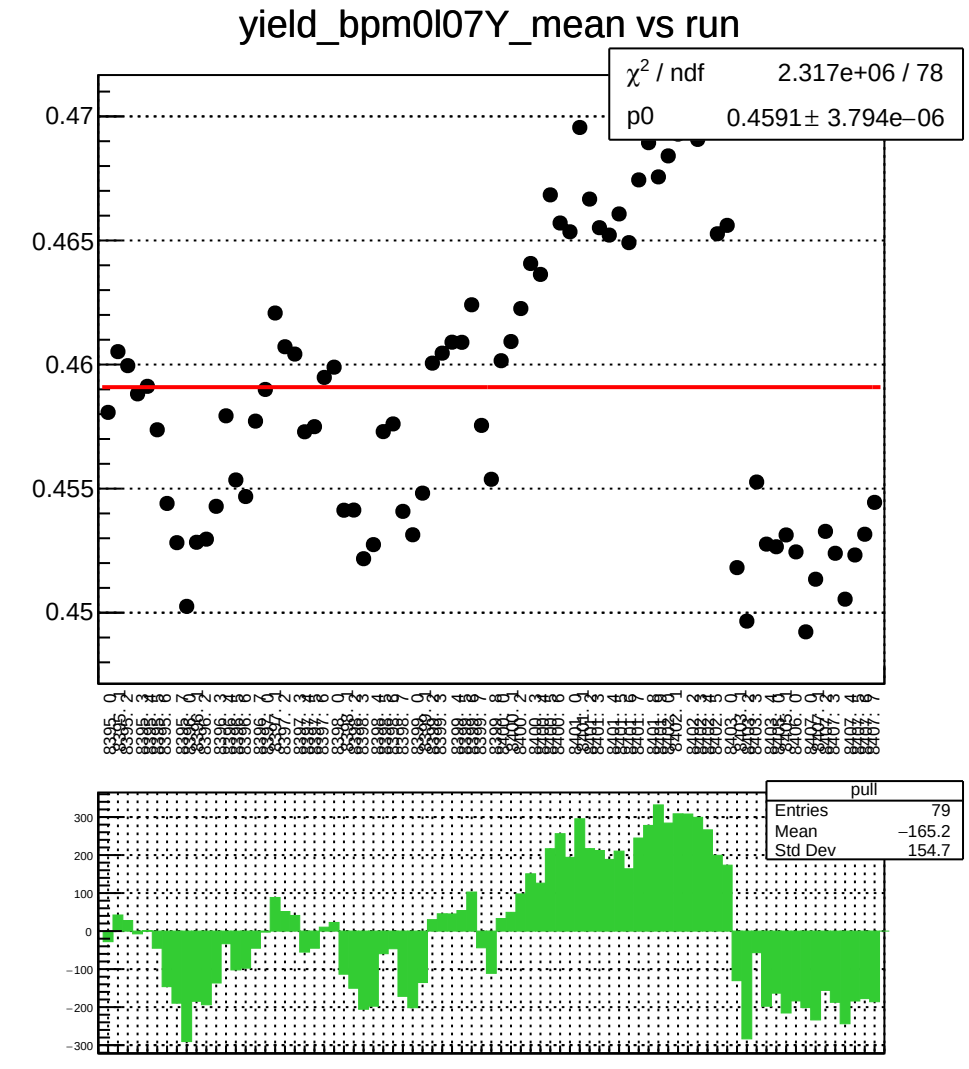

pull1D
Entries 79
Mean 2.02
Std Dev 4.168
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

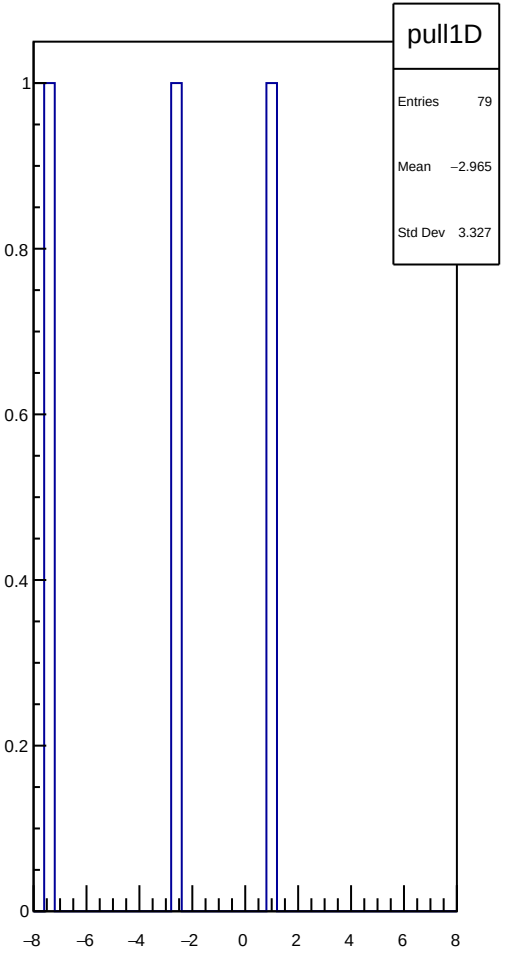

yield_bpm0l06Y_rms vs run
χ² / ndf 2.403e+04 / 78
p0 0.003872 ± 3.164e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003

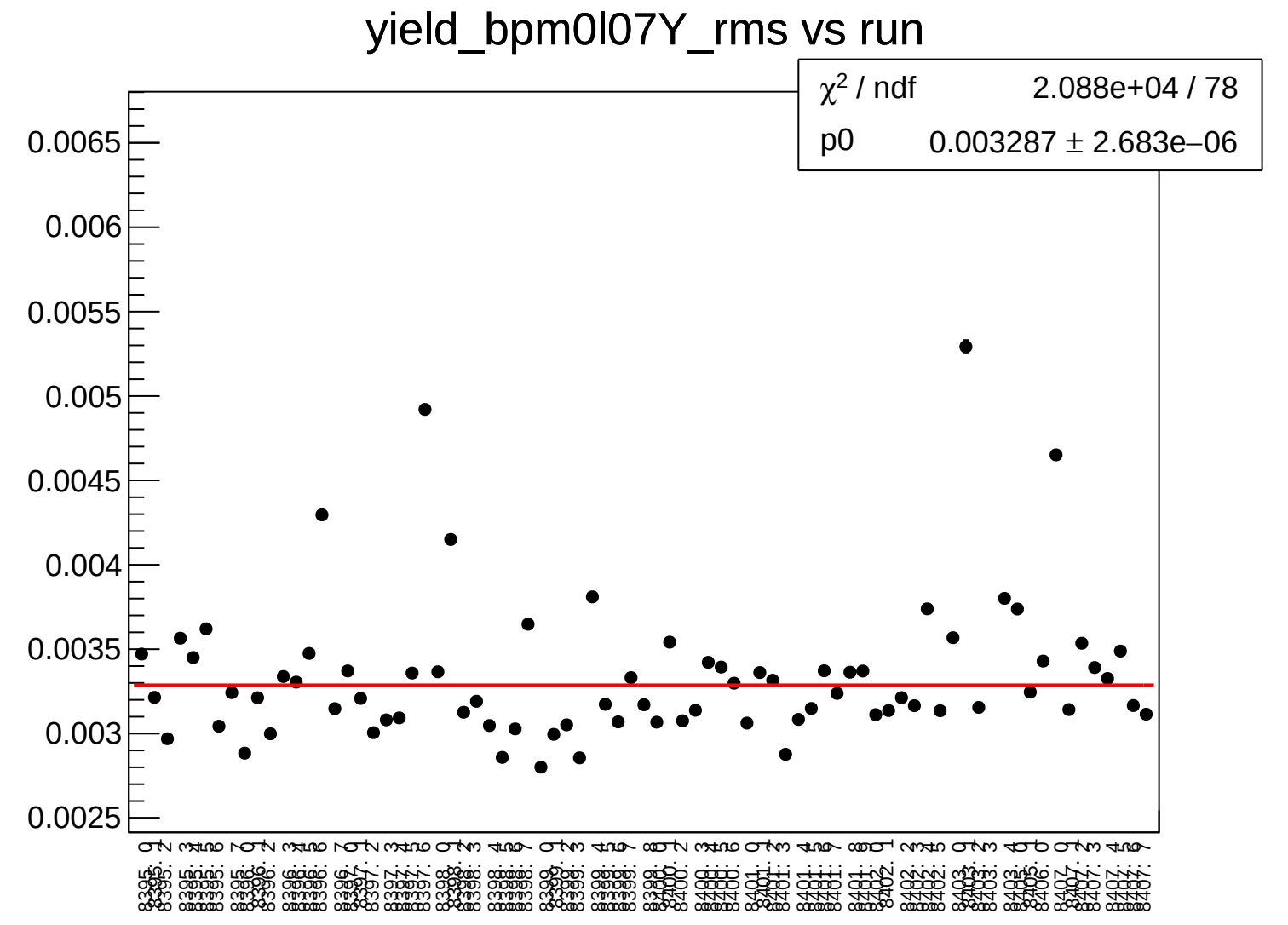

yield_bpm0l07X_mean vs run
χ² / ndf 6.444e+06 / 78
p0 −0.1979 ± 2.026e−05
pull
Entries 79
Mean 340.7
Std Dev 283.9

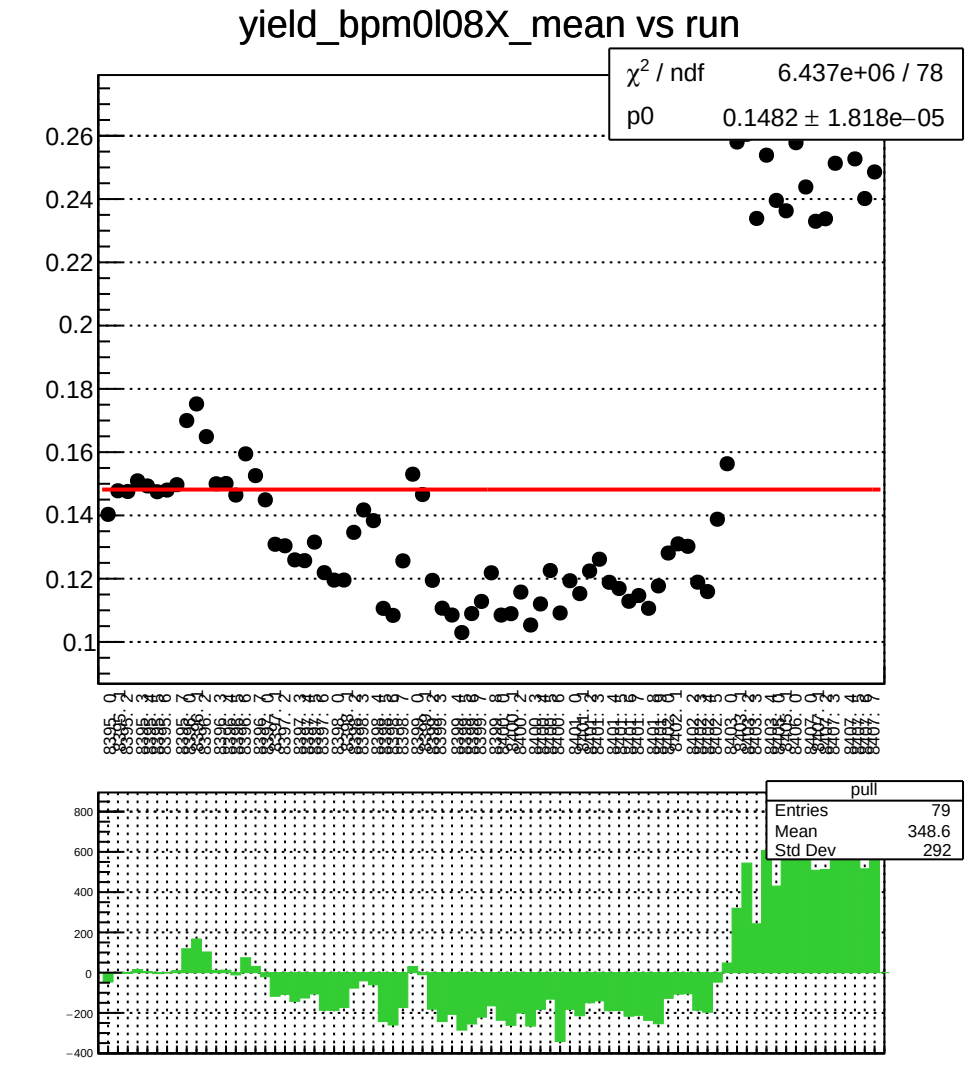

pull1D
Entries 79
Mean −0.5914
Std Dev 2.611

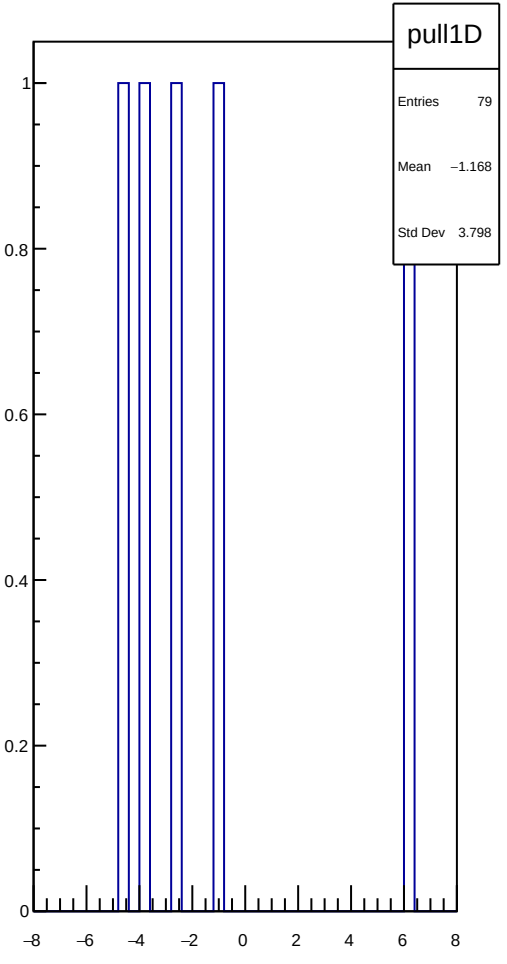

yield_bpm0l07X_rms vs run
χ² / ndf 2.064e+04 / 78
p0 0.01755 ± 1.433e–05
0.04
0.035
0.03
0.025
0.02
0.015

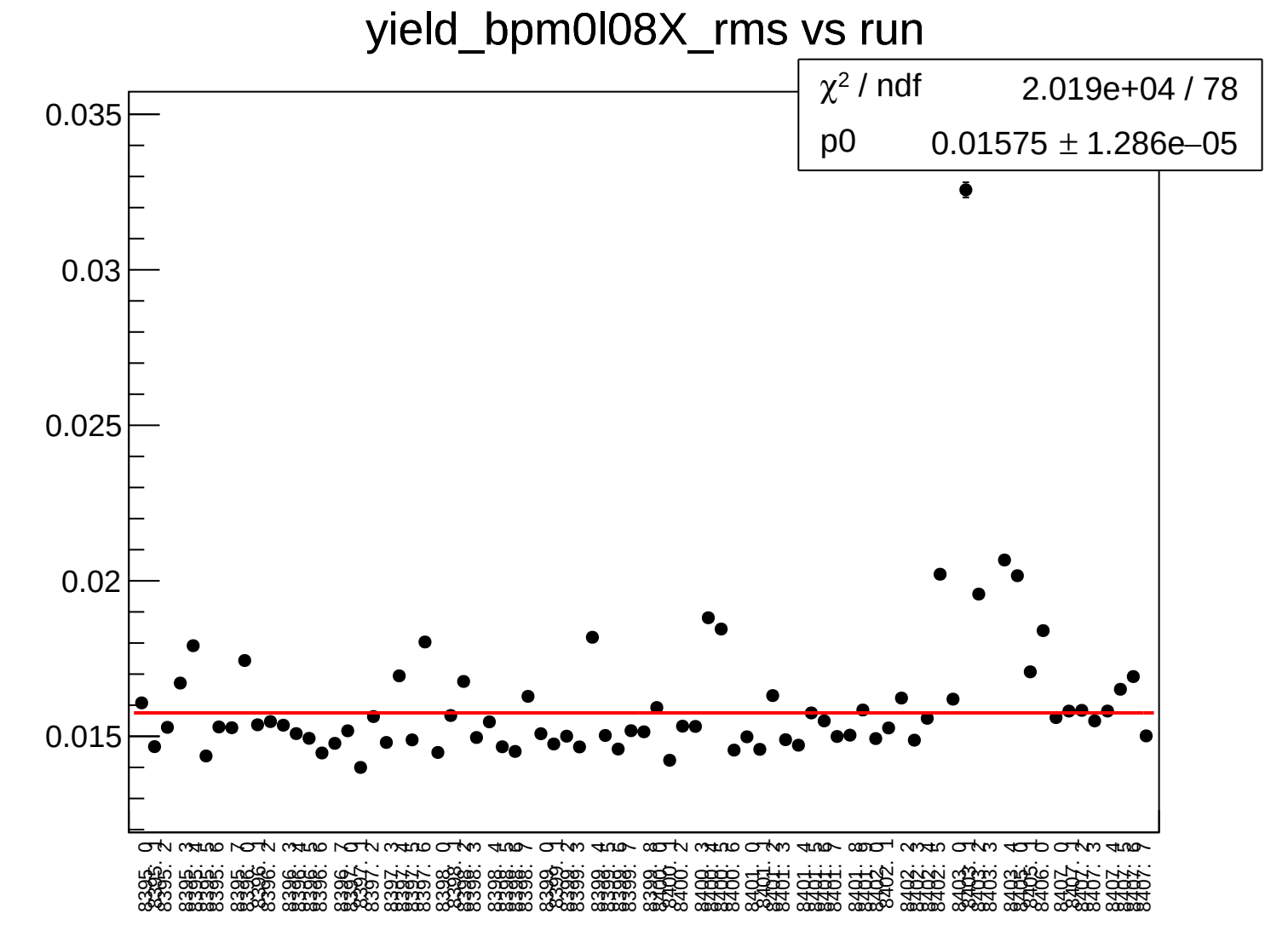

yield_bpm0l07Y_mean vs run
χ² / ndf 2.317e+06 / 78
p0 0.4591 ± 3.794e−06
0.47
0.465
0.46
0.455
0.45
pull
Entries 79
Mean −165.2
Std Dev 154.7
300
200
100
0
−100
−200
−300

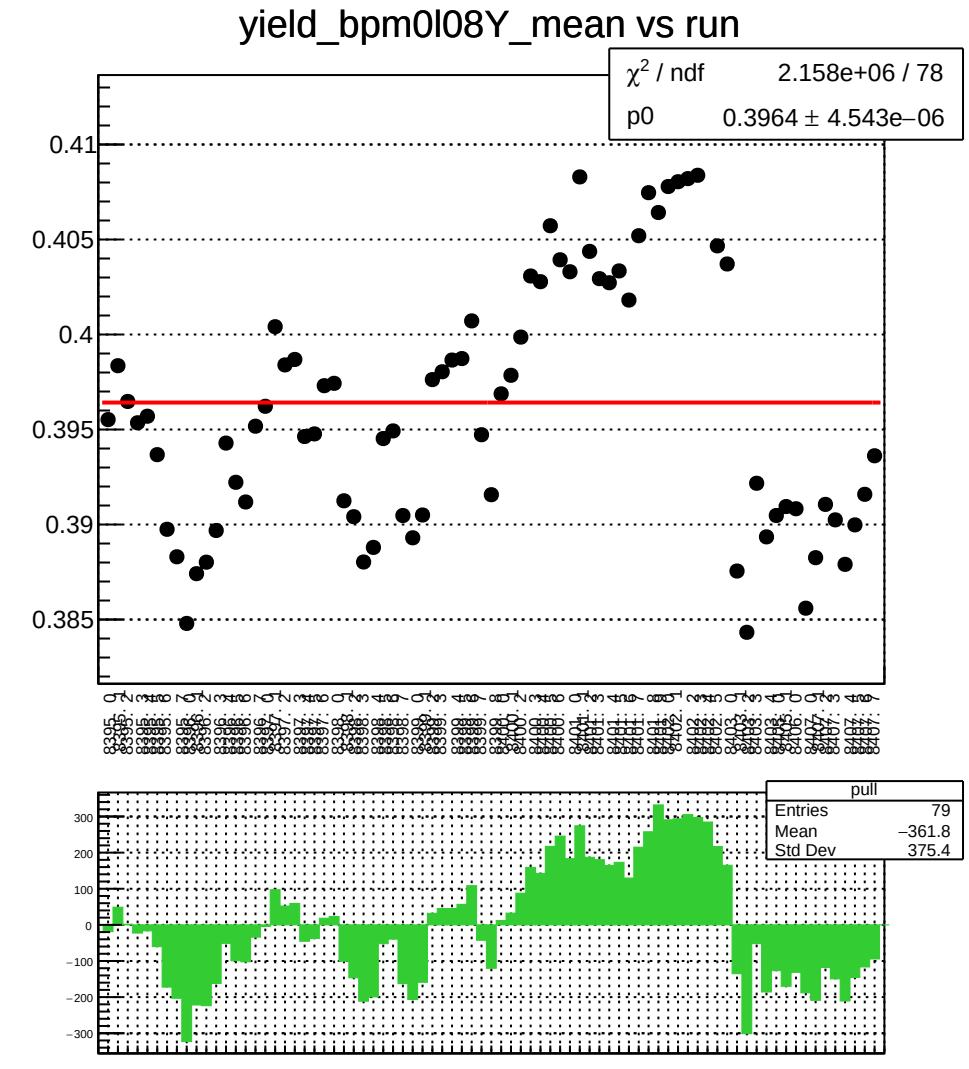

pull1D
Entries 79
Mean −2.965
Std Dev 3.327
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

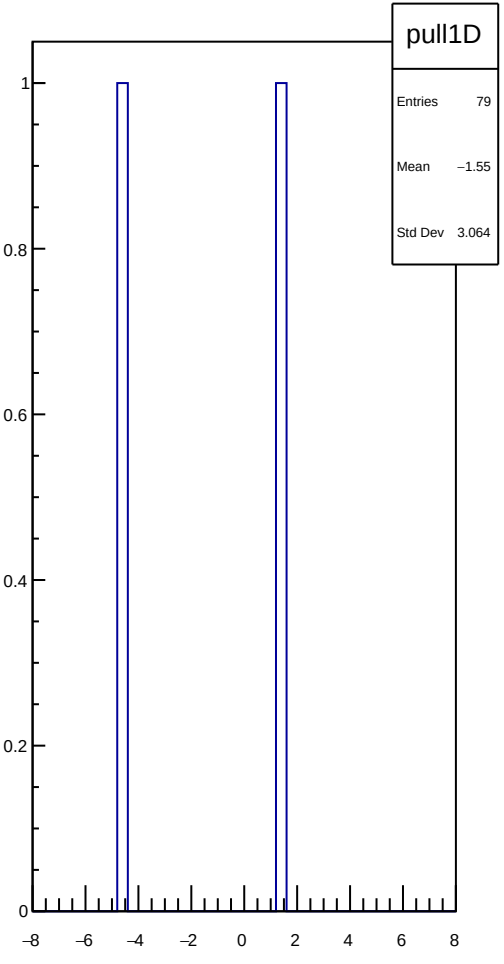

yield_bpm0l07Y_rms vs run
χ² / ndf 2.088e+04 / 78
p0 0.003287 ± 2.683e−06
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025

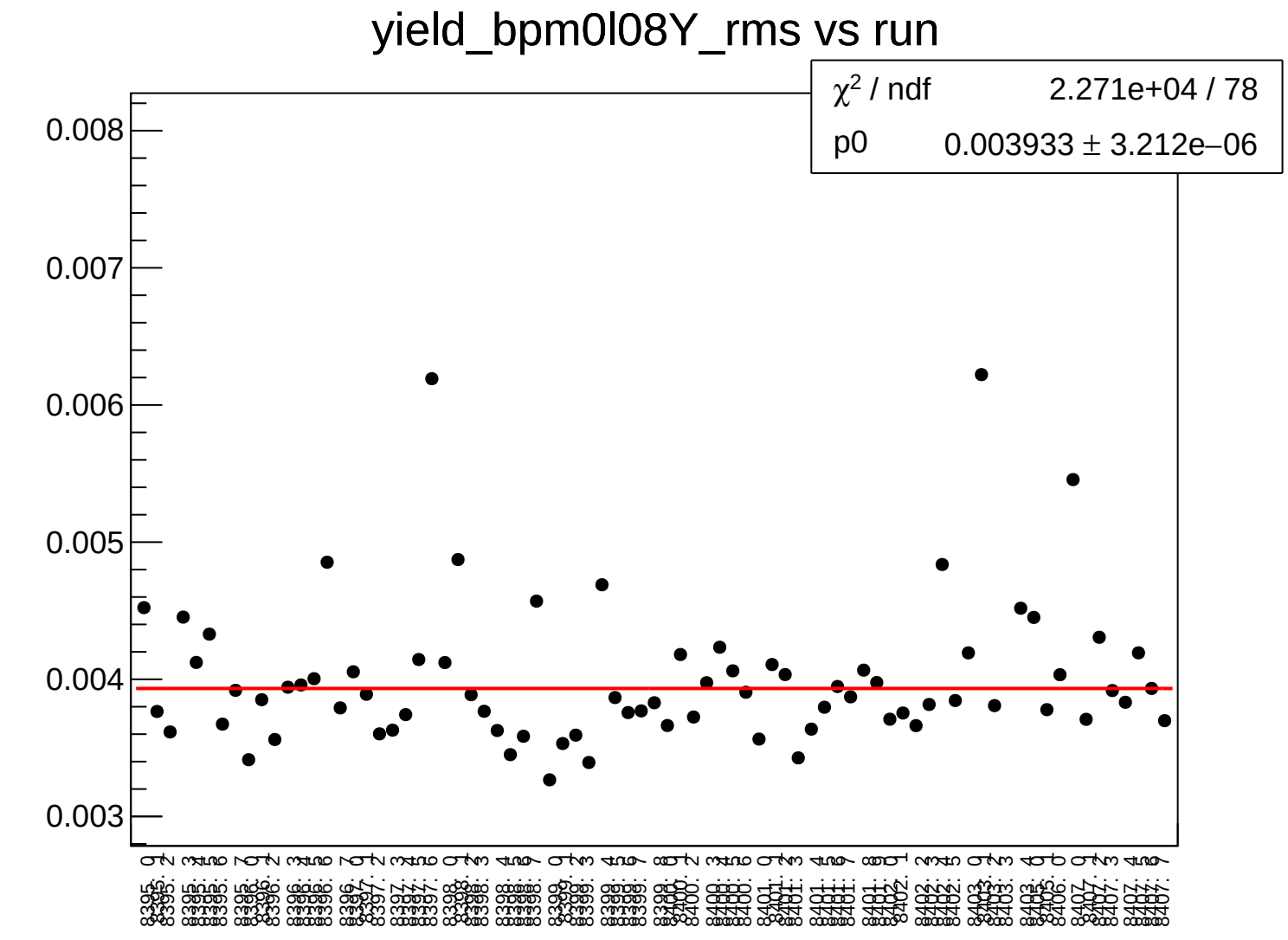

yield_bpm0l08X_mean vs run
χ² / ndf 6.437e+06 / 78
p0 0.1482 ± 1.818e−05
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
pull
Entries 79
Mean 348.6
Std Dev 292
800
600
400
200
0
−200
−400

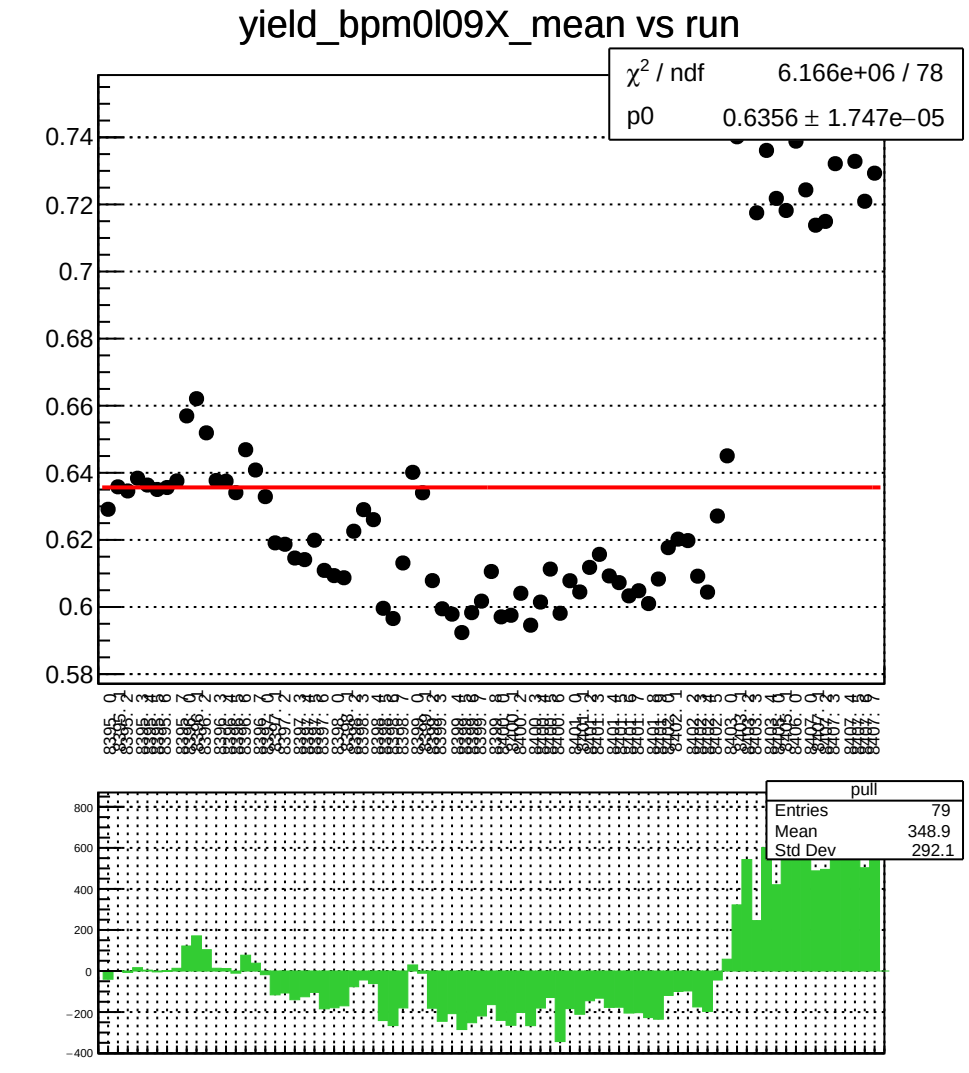

pull1D
Entries 79
Mean −1.168
Std Dev 3.798
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

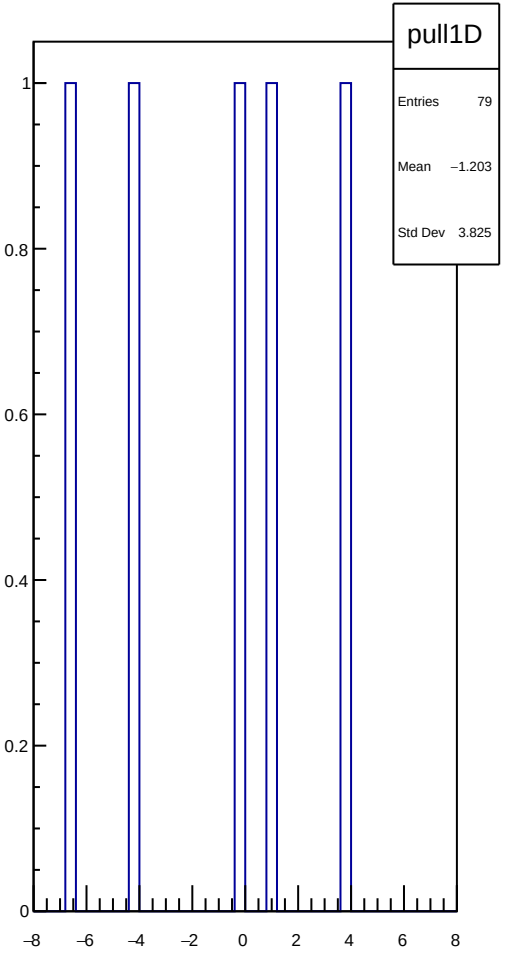

yield_bpm0l08X_rms vs run
χ² / ndf 2.019e+04 / 78
p0 0.01575 ± 1.286e−05
0.035
0.03
0.025
0.02
0.015

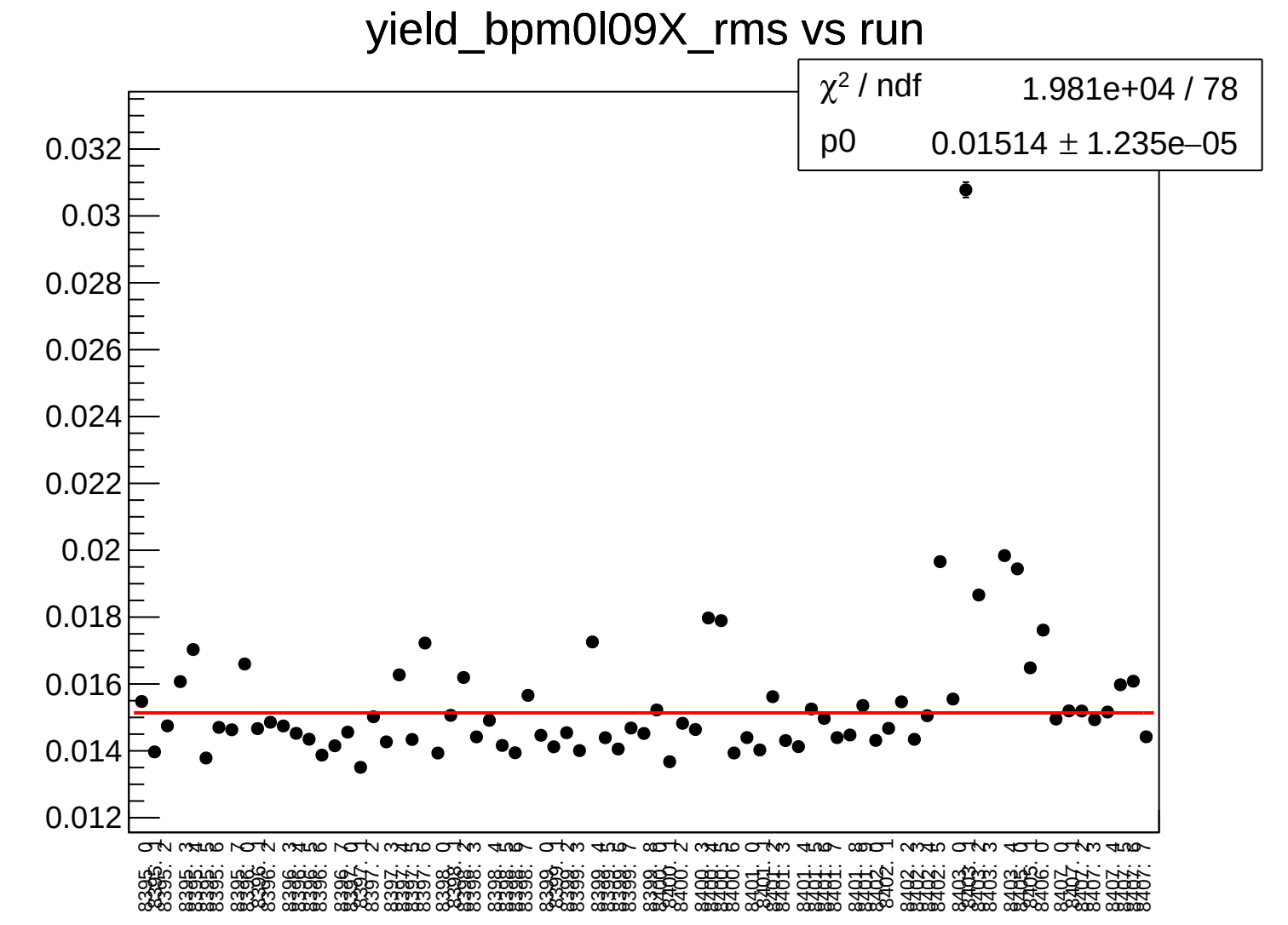

yield_bpm0l08Y_mean vs run
χ² / ndf 2.158e+06 / 78
p0 0.3964 ± 4.543e−06
0.41
0.405
0.4
0.395
0.39
0.385
pull
Entries 79
Mean −361.8
Std Dev 375.4
300
200
100
0
−100
−200
−300

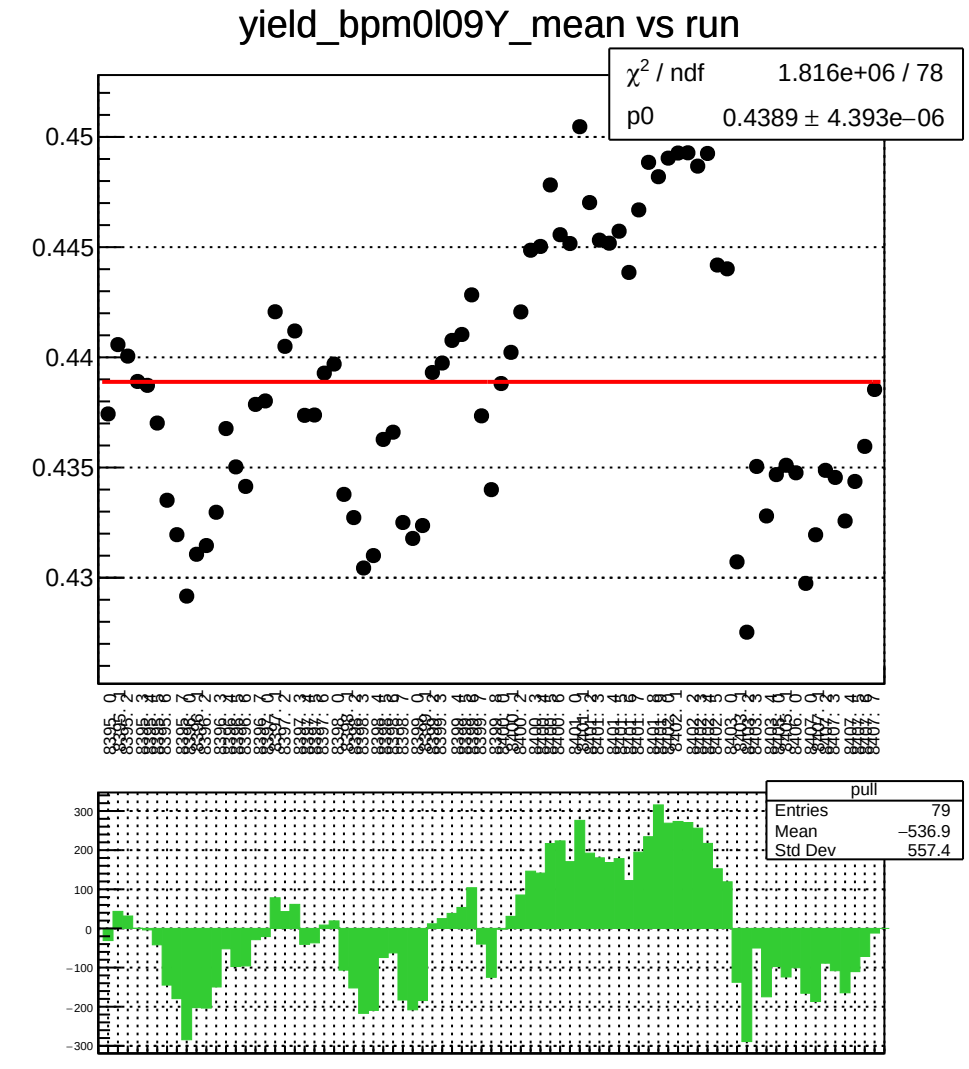

pull1D
Entries 79
Mean −1.55
Std Dev 3.064
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

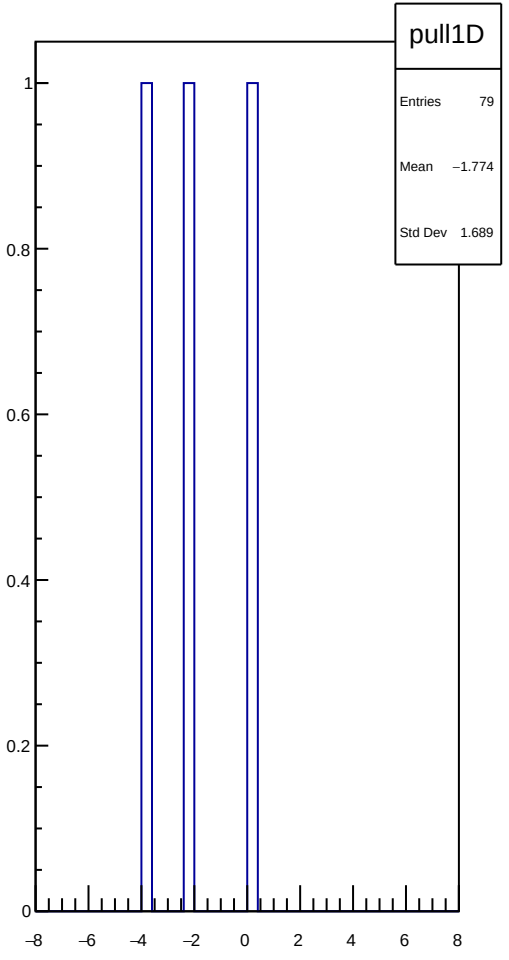

yield_bpm0l08Y_rms vs run
χ² / ndf 2.271e+04 / 78
p0 0.003933 ± 3.212e−06
0.008
0.007
0.006
0.005
0.004
0.003

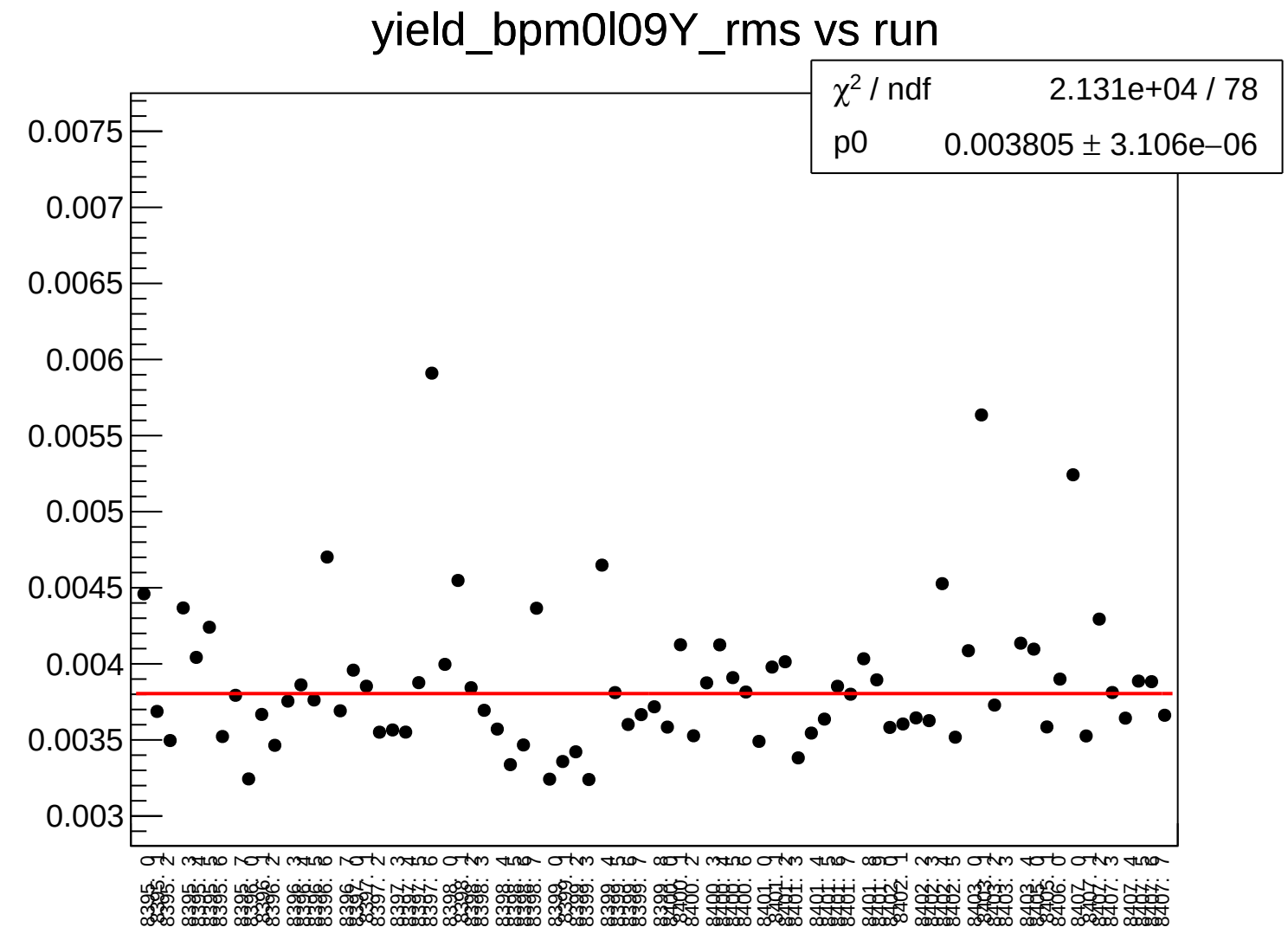

yield_bpm0l09X_mean vs run
χ² / ndf 6.166e+06 / 78
p0 0.6356 ± 1.747e−05
0.74
0.72
0.7
0.68
0.66
0.64
0.62
0.6
0.58
pull
Entries 79
Mean 348.9
Std Dev 292.1
800
600
400
200
0
−200
−400

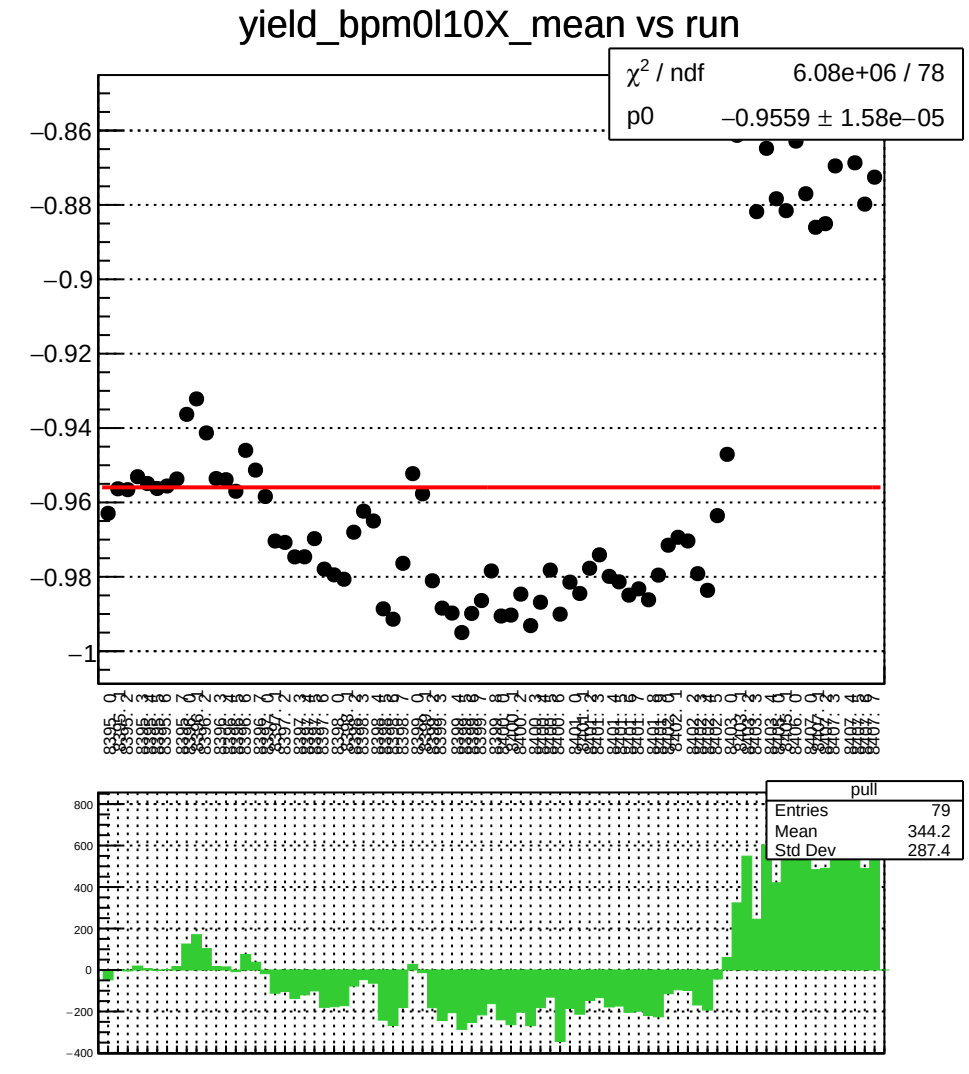

pull1D
Entries 79
Mean −1.203
Std Dev 3.825
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

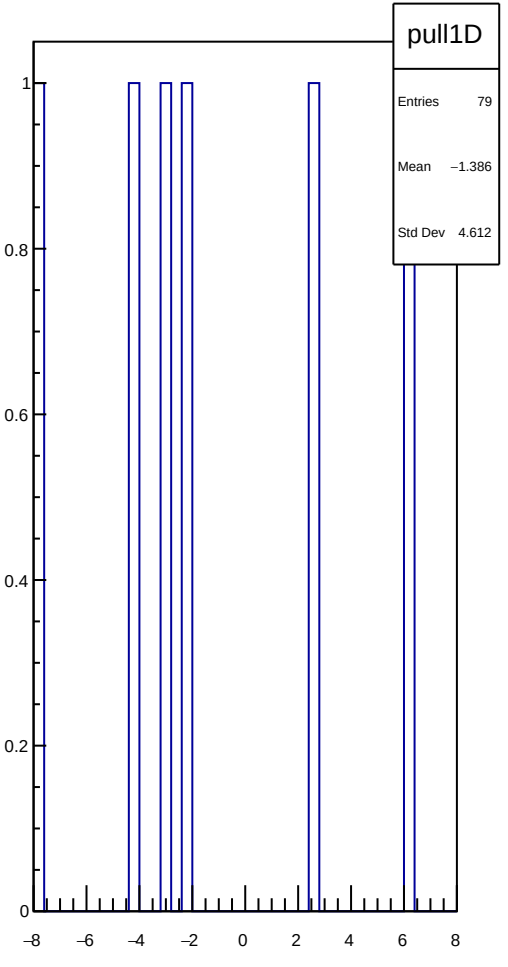

yield_bpm0l09X_rms vs run
χ² / ndf 1.981e+04 / 78
p0 0.01514 ± 1.235e−05
0.032
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

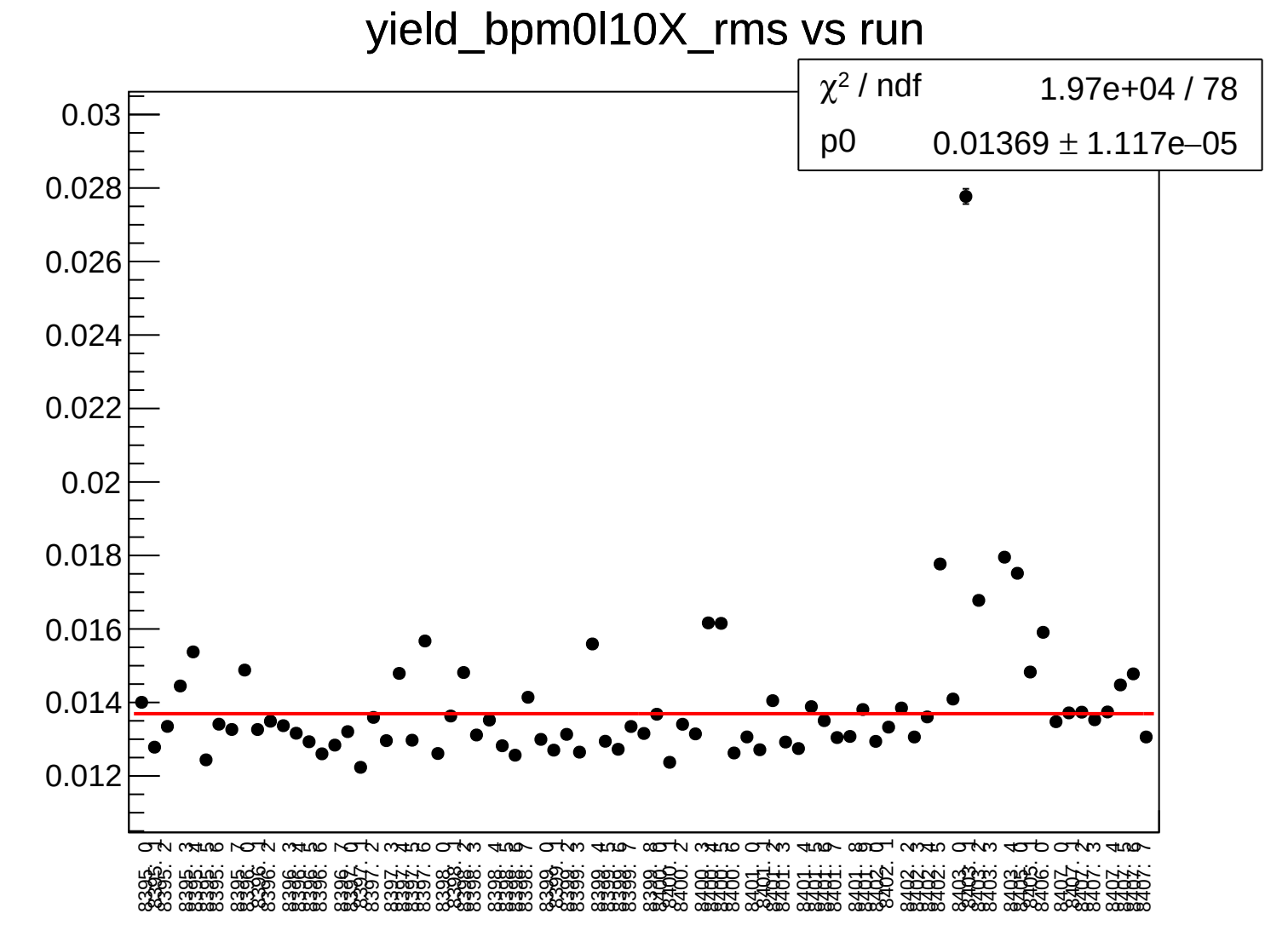

yield_bpm0l09Y_mean vs run
χ² / ndf 1.816e+06 / 78
p0 0.4389 ± 4.393e−06
0.45
0.445
0.44
0.435
0.43
pull
Entries 79
Mean −536.9
Std Dev 557.4
300
200
100
0
−100
−200
−300

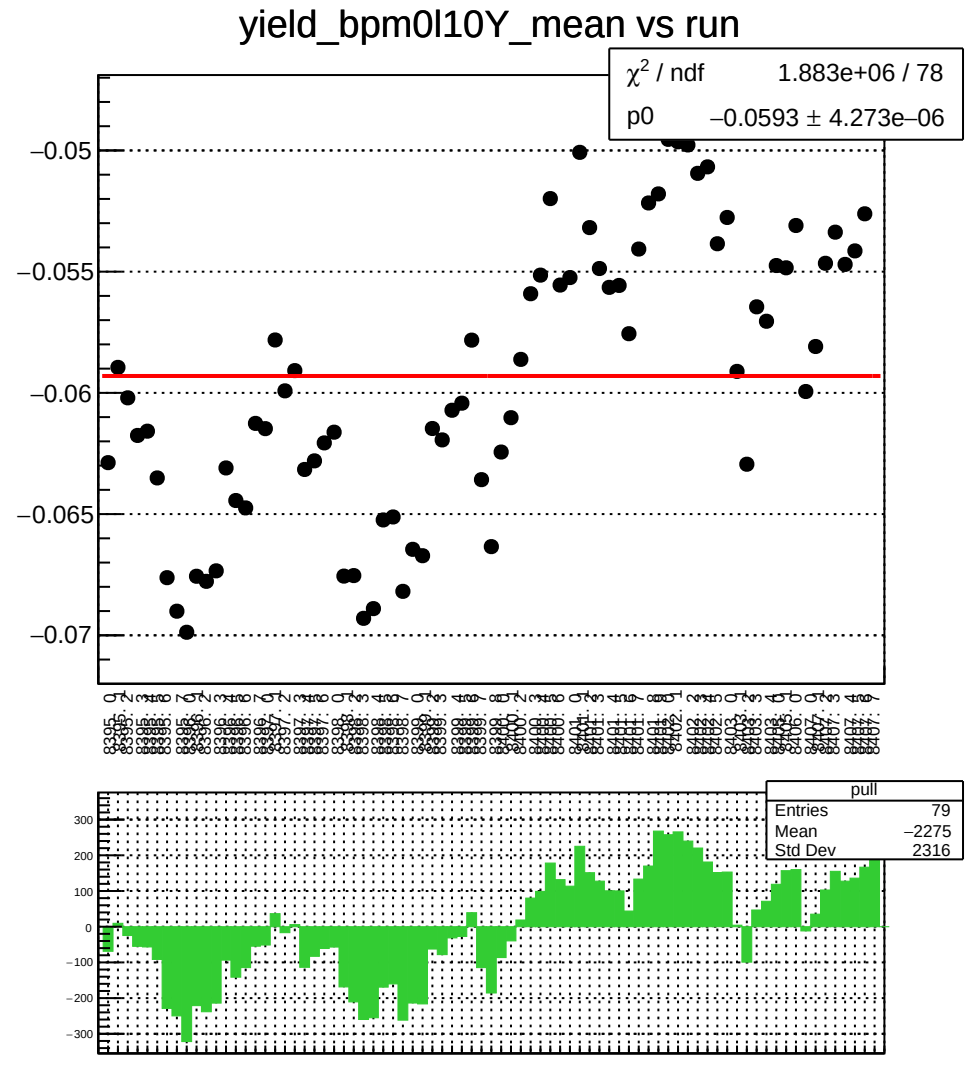

pull1D
Entries 79
Mean −1.774
Std Dev 1.689
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

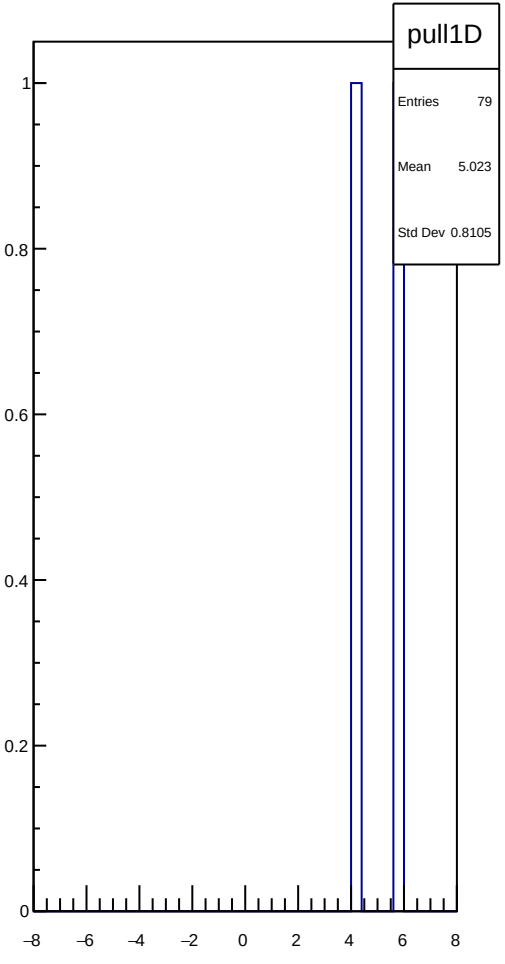

yield_bpm0l09Y_rms vs run
χ² / ndf 2.131e+04 / 78
p0 0.003805 ± 3.106e−06
0.0075
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

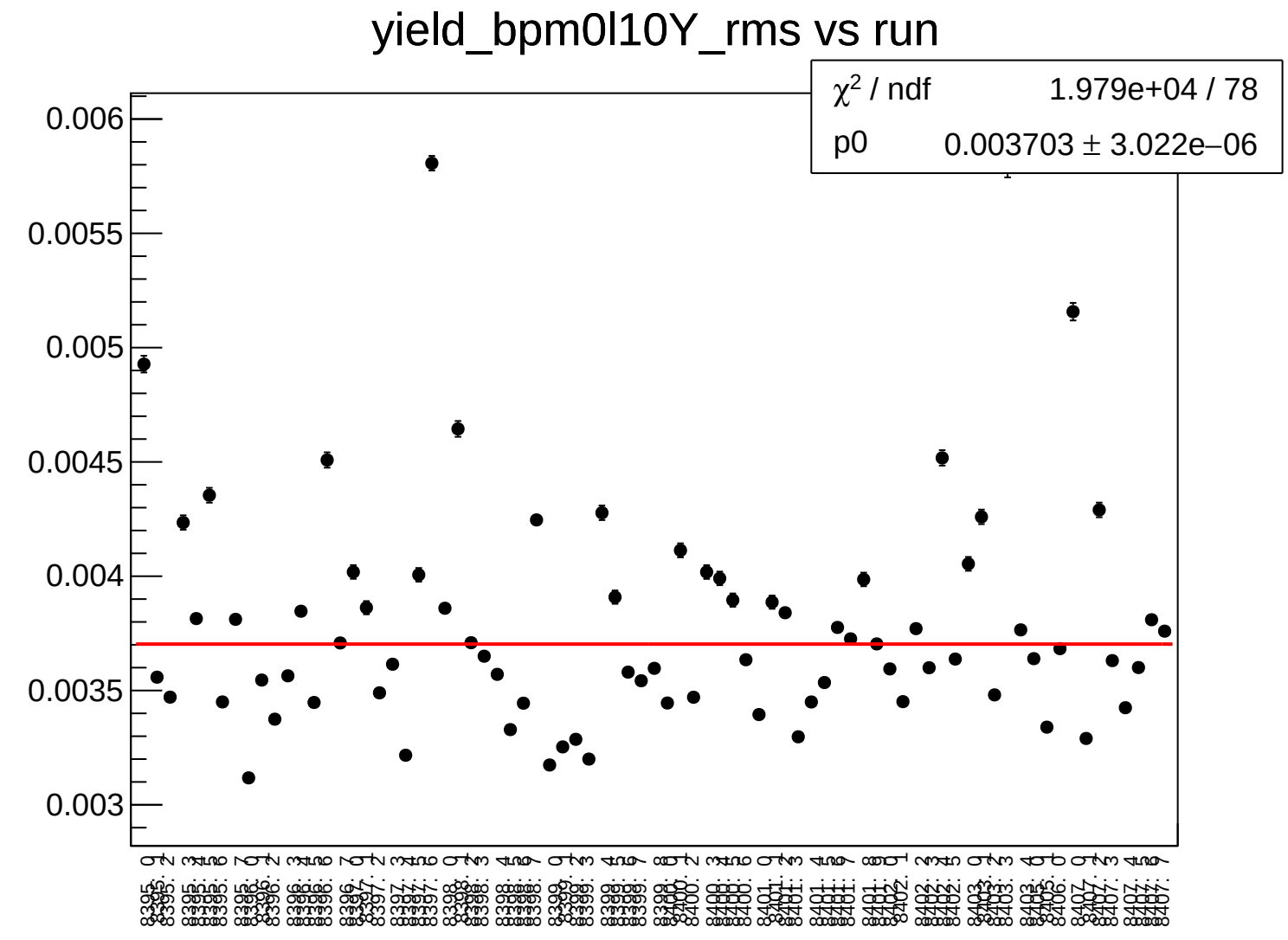

yield_bpm0l10X_mean vs run
χ² / ndf 6.08e+06 / 78
p0 −0.9559 ± 1.58e−05
−0.86
−0.88
−0.9
−0.92
−0.94
−0.96
−0.98
−1
pull
Entries 79
Mean 344.2
Std Dev 287.4
800
600
400
200
0
−200
−400

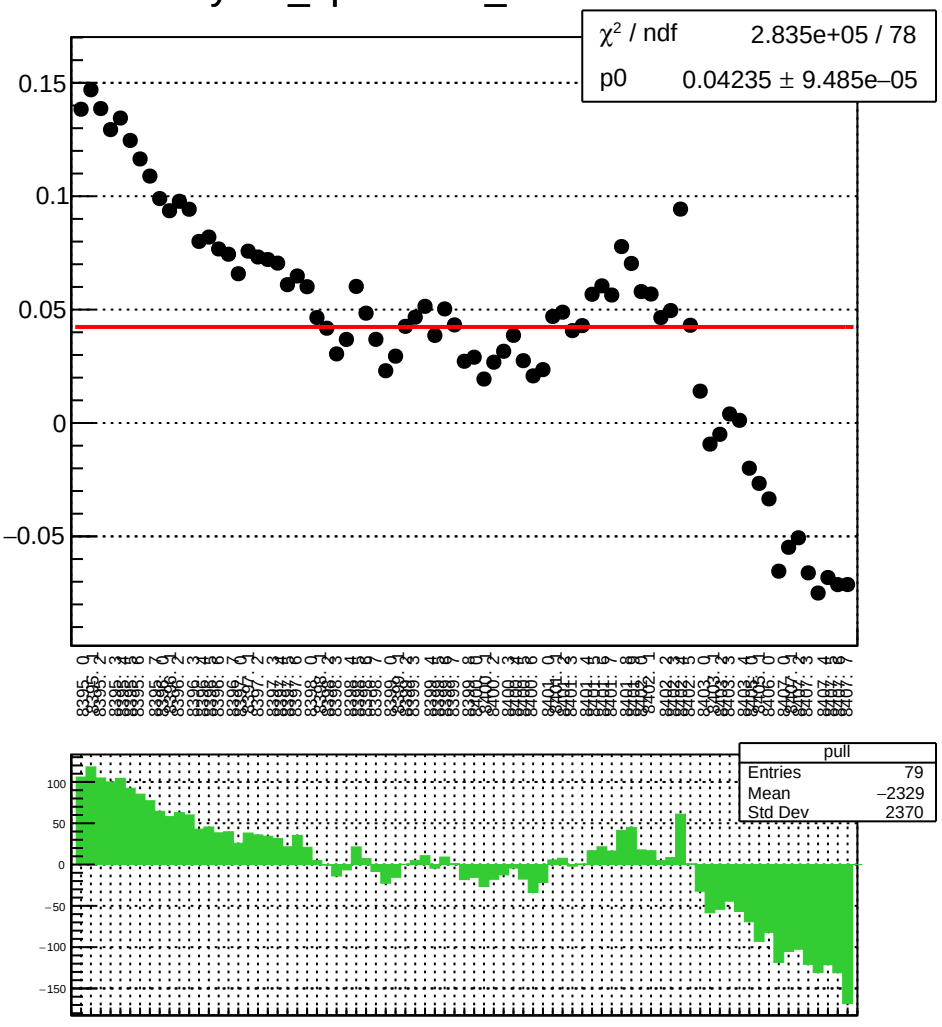

pull1D
Entries 79
Mean −1.386
Std Dev 4.612
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

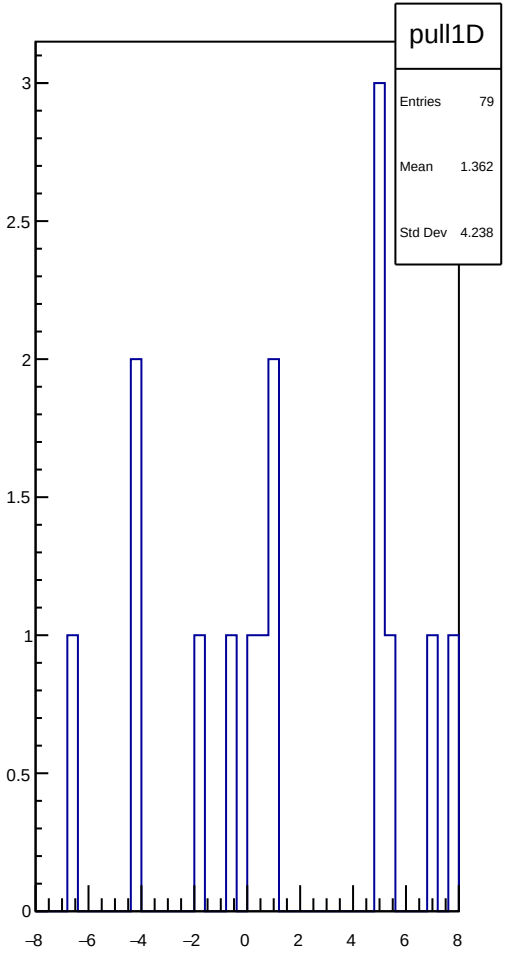

yield_bpm0l10X_rms vs run
χ² / ndf 1.97e+04 / 78
p0 0.01369 ± 1.117e–05
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012

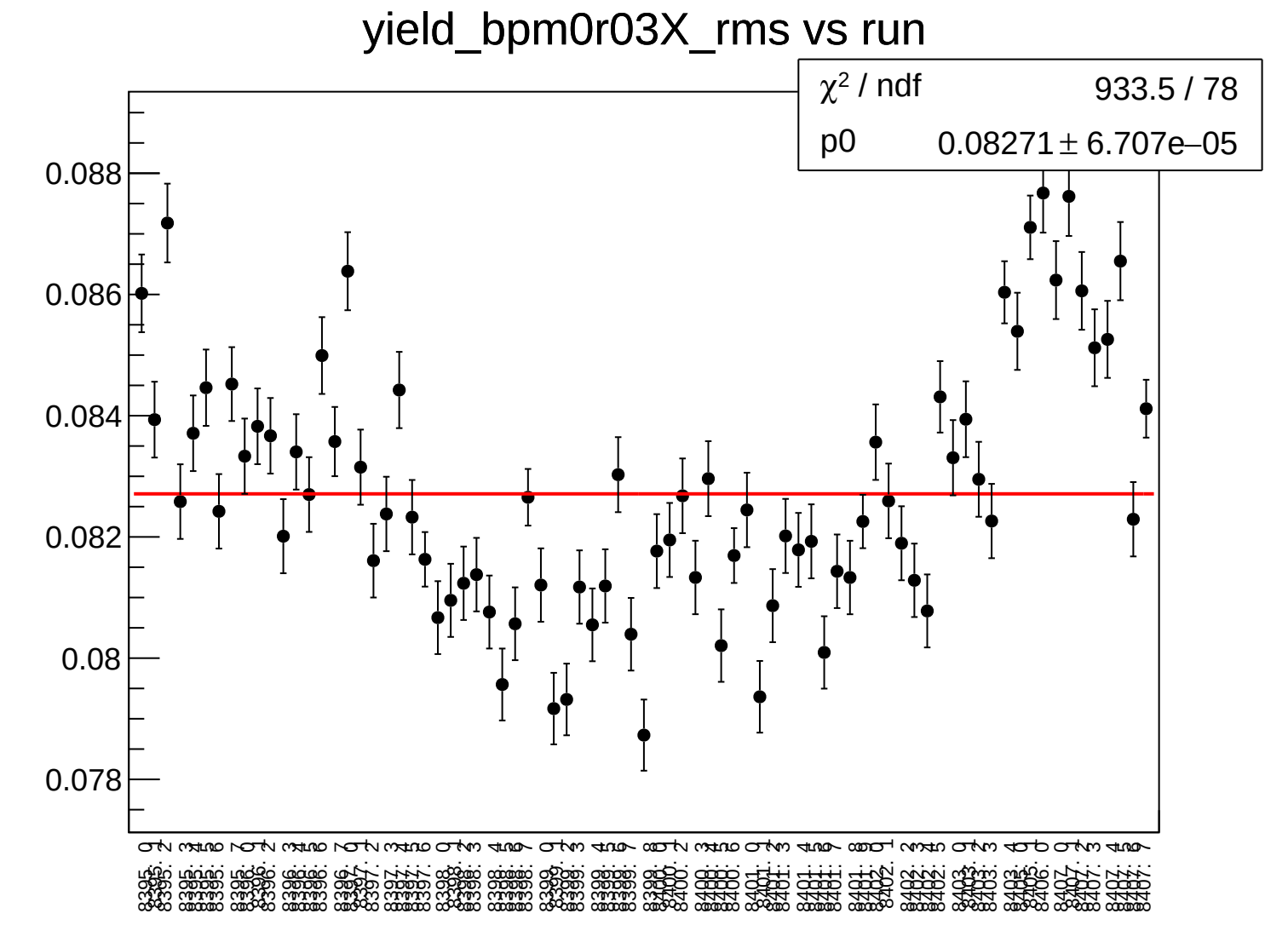

yield_bpm0l10Y_mean vs run
χ² / ndf 1.883e+06 / 78
p0 −0.0593 ± 4.273e−06
−0.05
−0.055
−0.06
−0.065
−0.07
pull
Entries 79
Mean −2275
Std Dev 2316
300
200
100
0
−100
−200
−300

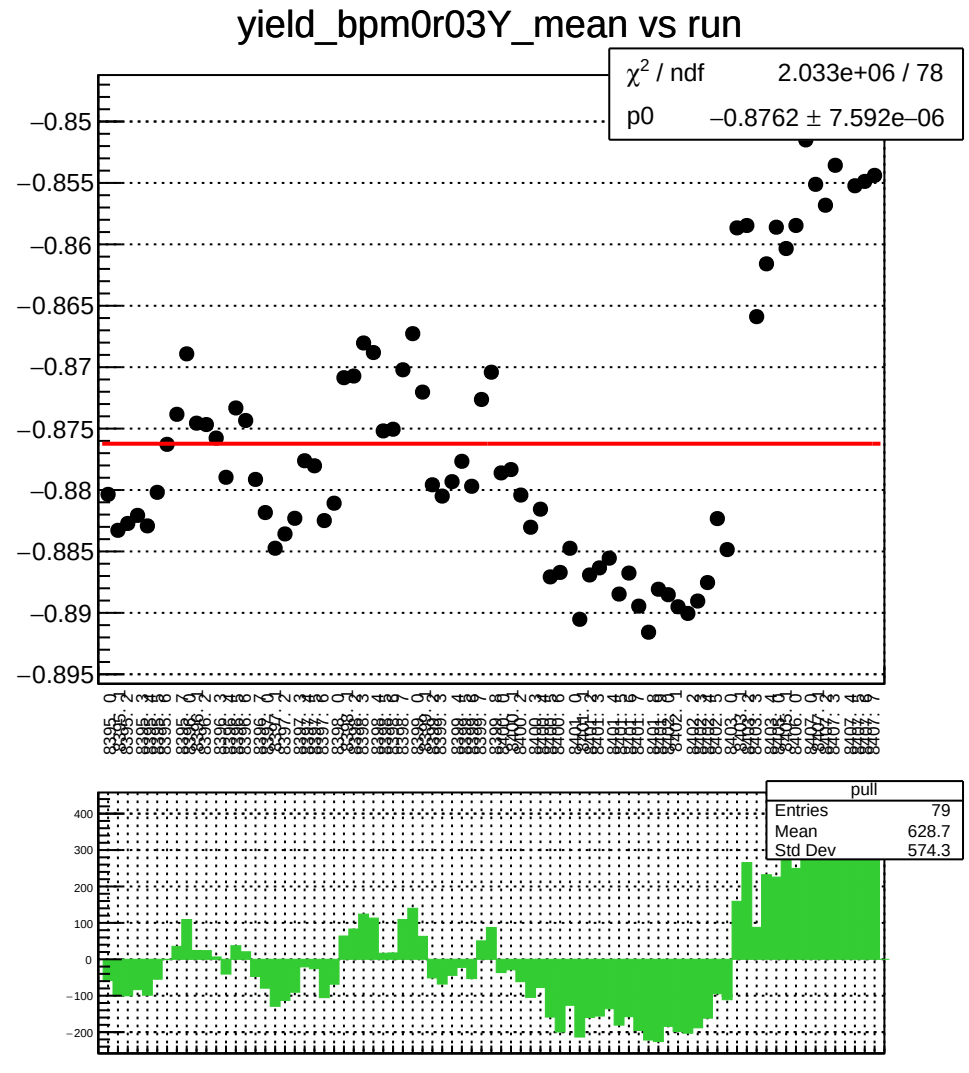

pull1D
Entries 79
Mean 5.023
Std Dev 0.8105
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

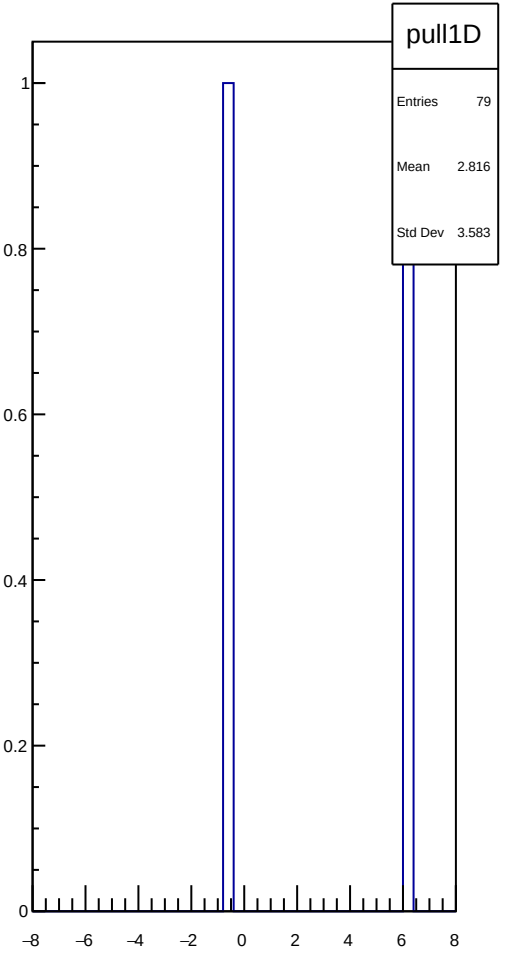

yield_bpm0l10Y_rms vs run
χ² / ndf 1.979e+04 / 78
p0 0.003703 ± 3.022e−06
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

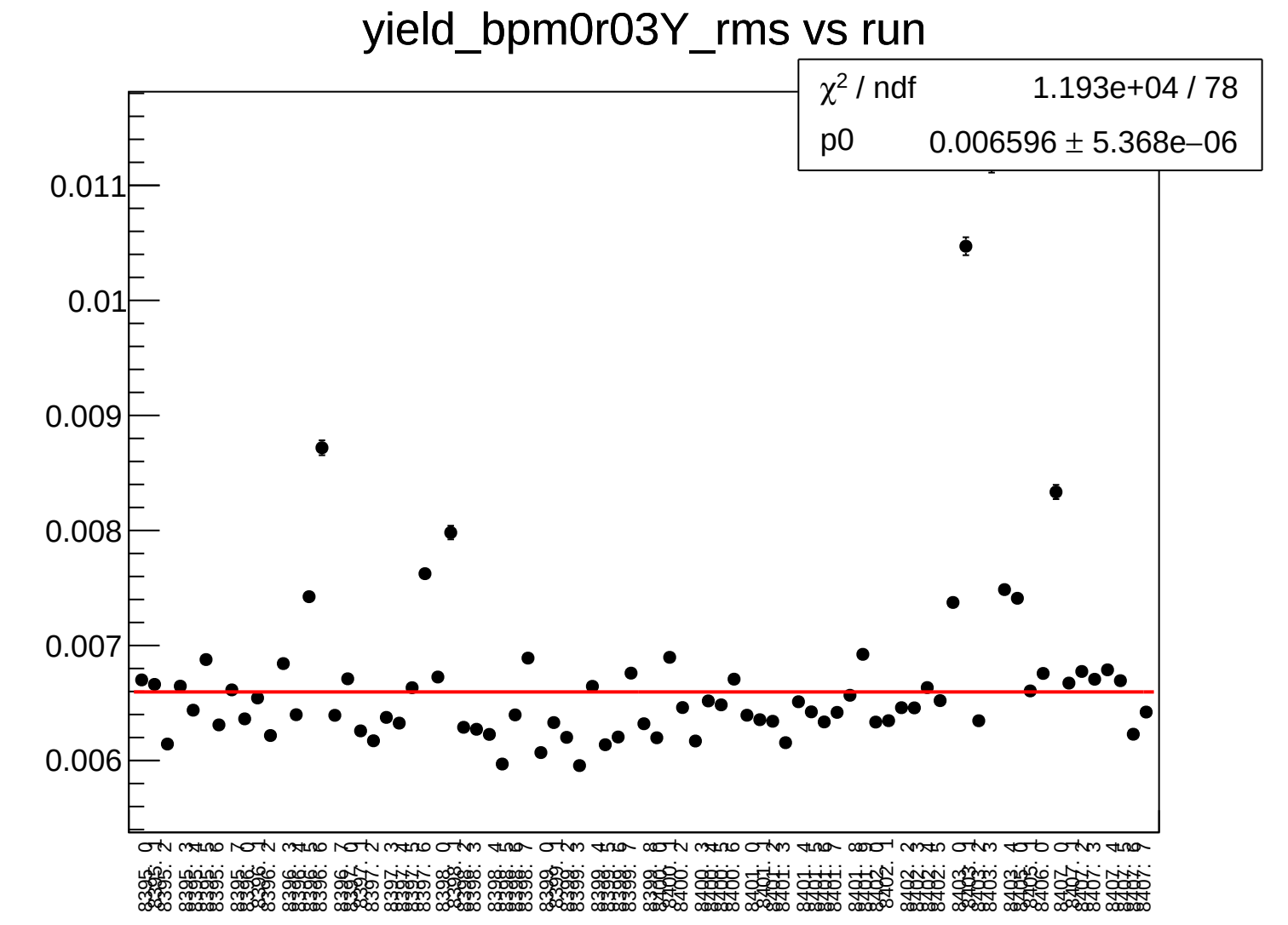

yield_bpm0r03X_mean vs run
χ² / ndf 2.835e+05 / 78
p0 0.04235 ± 9.485e−05
0.15
0.1
0.05
0
−0.05
pull
Entries 79
Mean −2329
Std Dev 2370
100
50
0
−50
−100
−150

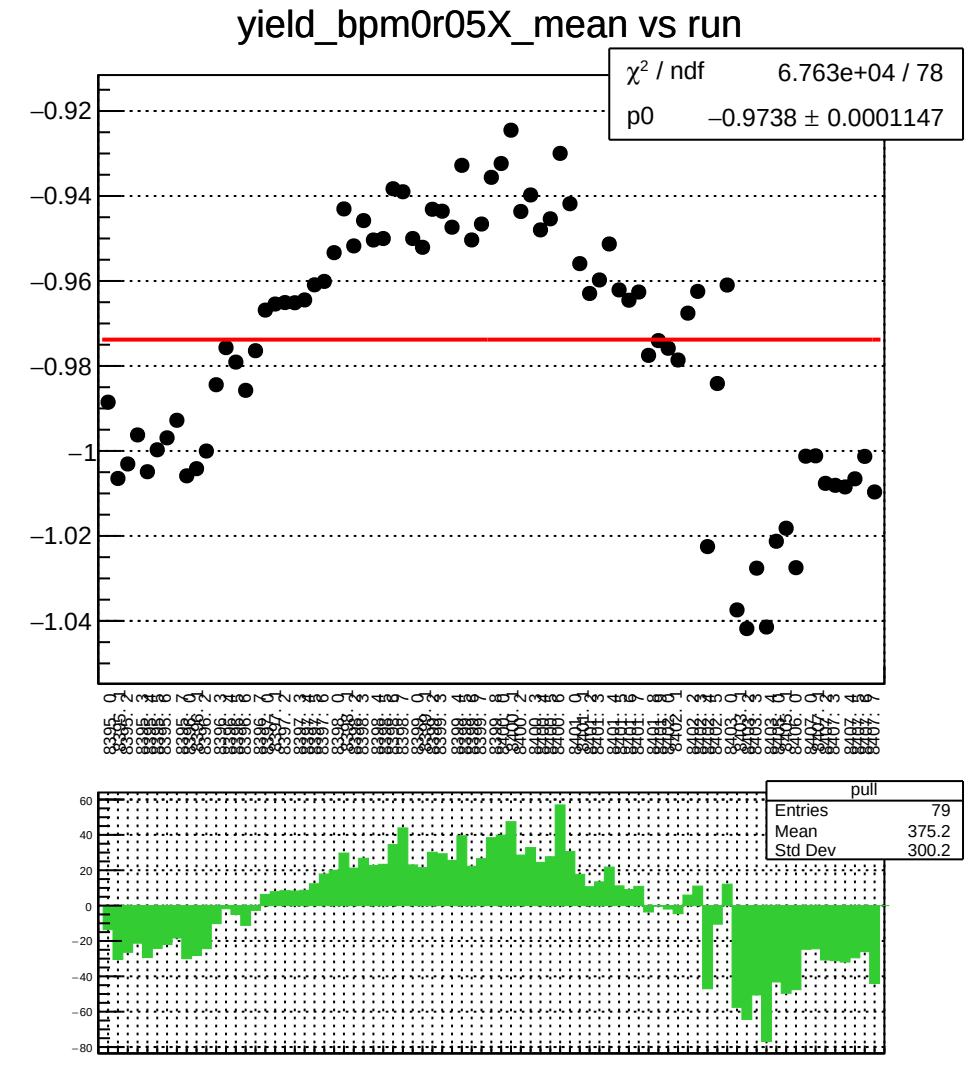

pull1D
Entries 79
Mean 1.362
Std Dev 4.238
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

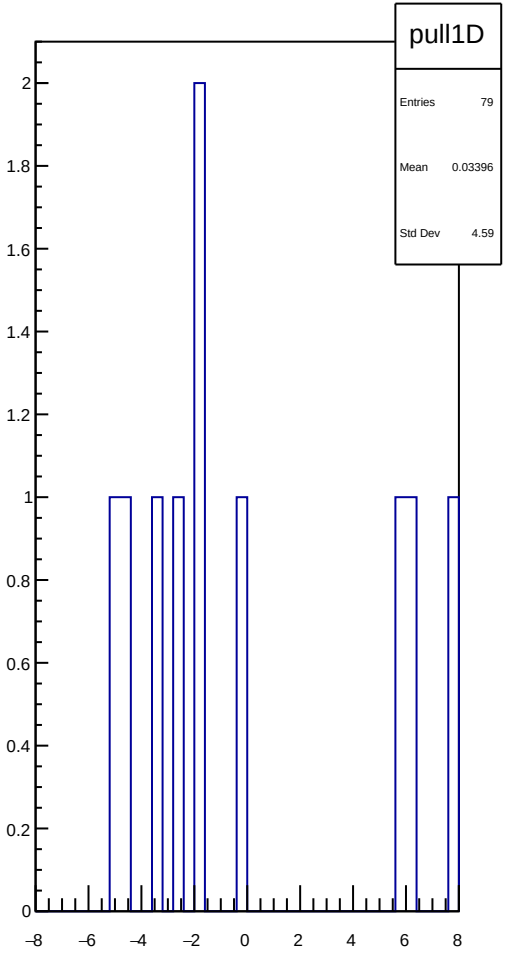

yield_bpm0r03X_rms vs run
χ² / ndf 933.5 / 78
p0 0.08271 ± 6.707e–05
0.088
0.086
0.084
0.082
0.08
0.078

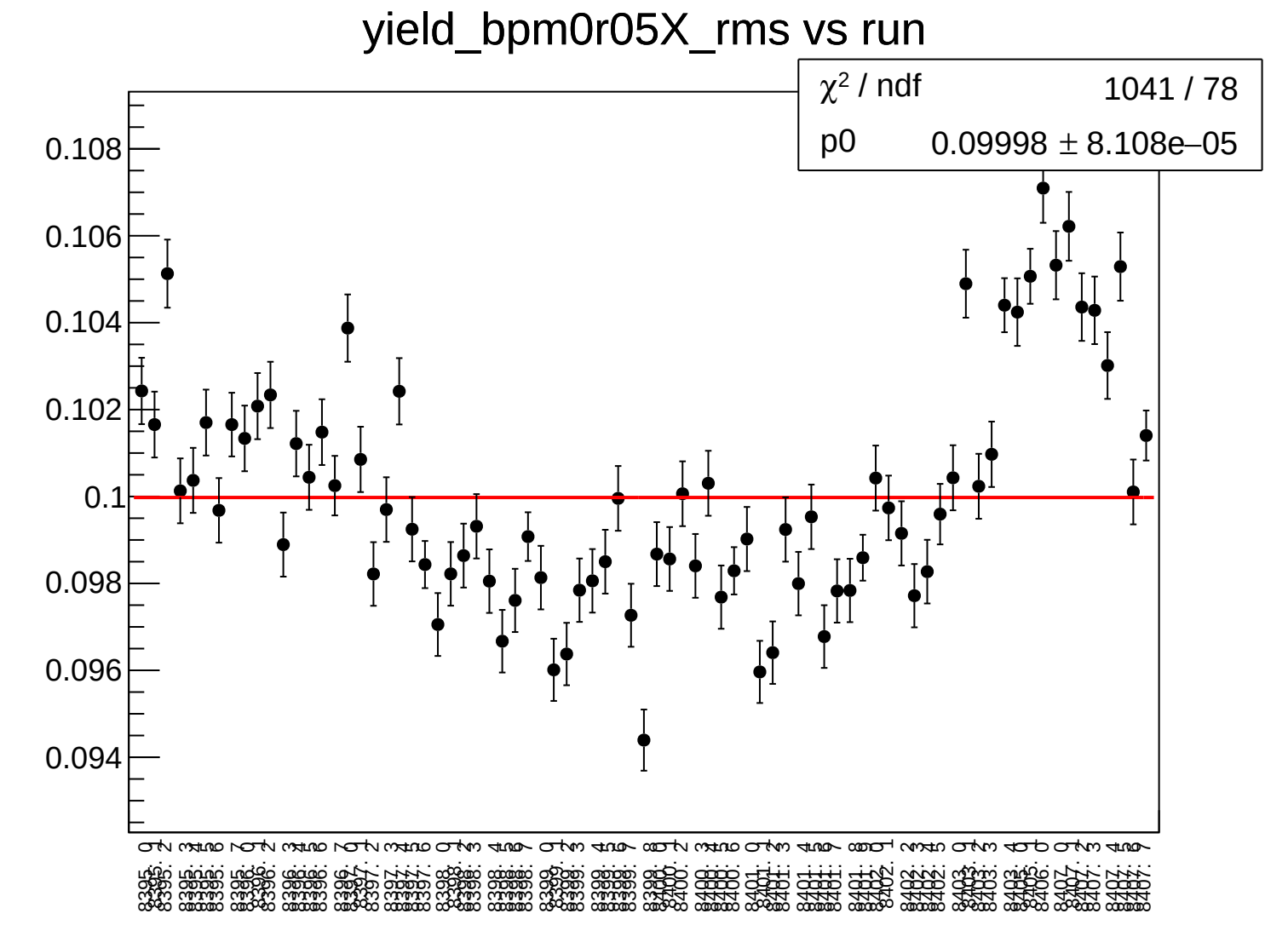

yield_bpm0r03Y_mean vs run
χ² / ndf 2.033e+06 / 78
p0 −0.8762 ± 7.592e−06
−0.85
−0.855
−0.86
−0.865
−0.87
−0.875
−0.88
−0.885
−0.89
−0.895
pull
Entries 79
Mean 628.7
Std Dev 574.3
400
300
200
100
0
−100
−200

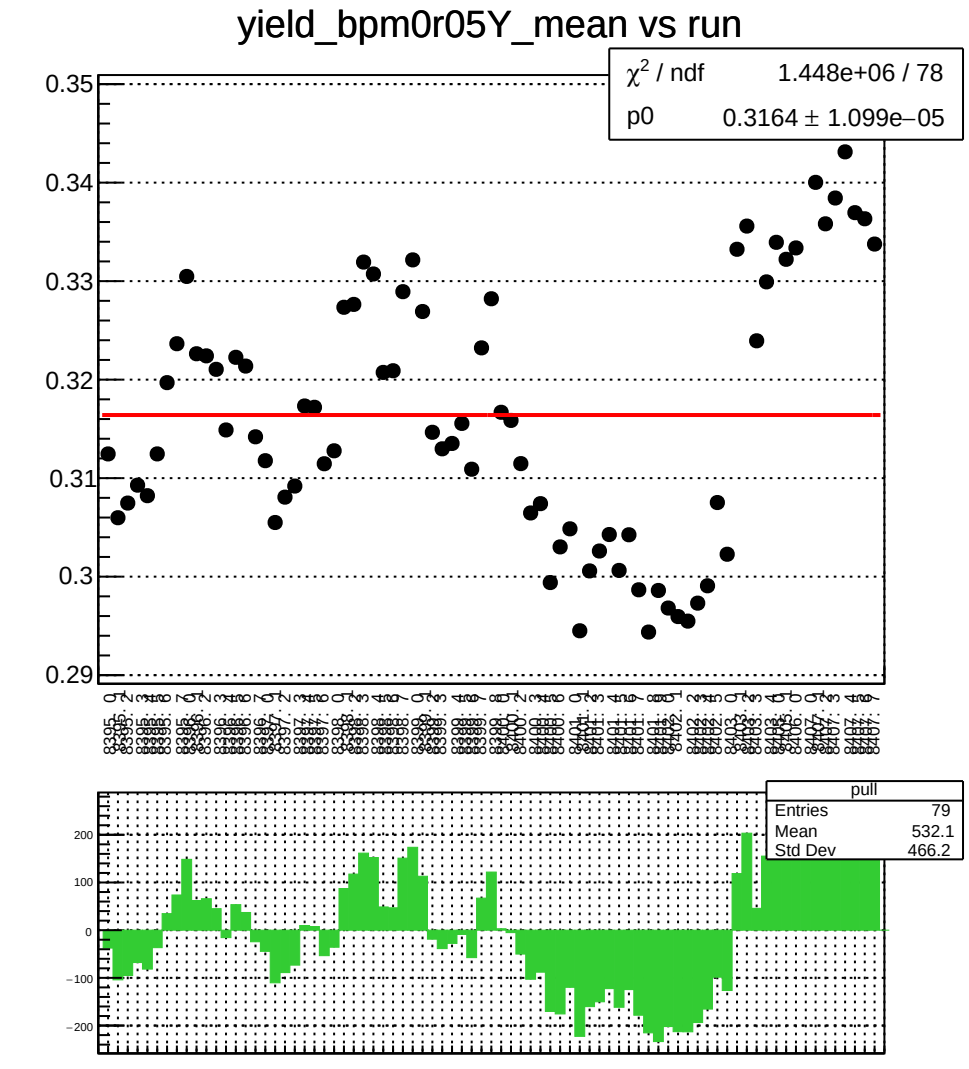

pull1D
Entries 79
Mean 2.816
Std Dev 3.583
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

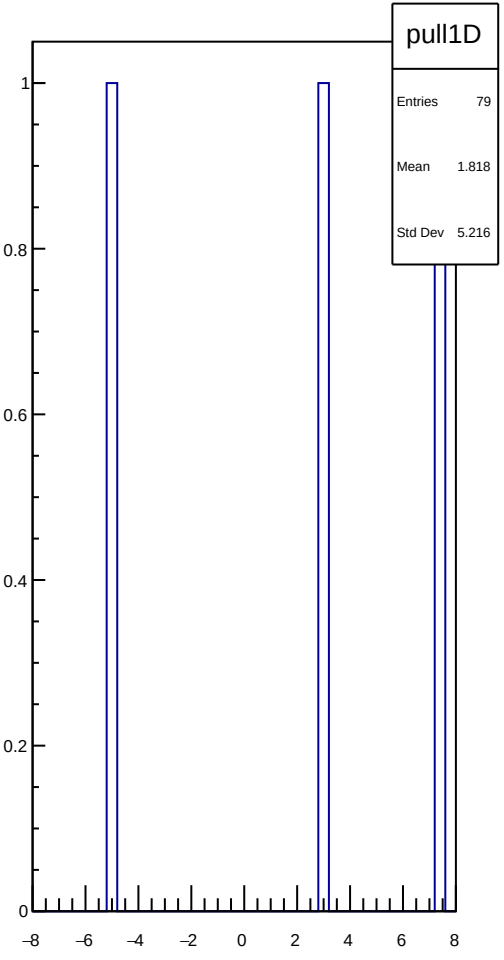

yield_bpm0r03Y_rms vs run
χ² / ndf 1.193e+04 / 78
p0 0.006596 ± 5.368e−06
0.011
0.01
0.009
0.008
0.007
0.006

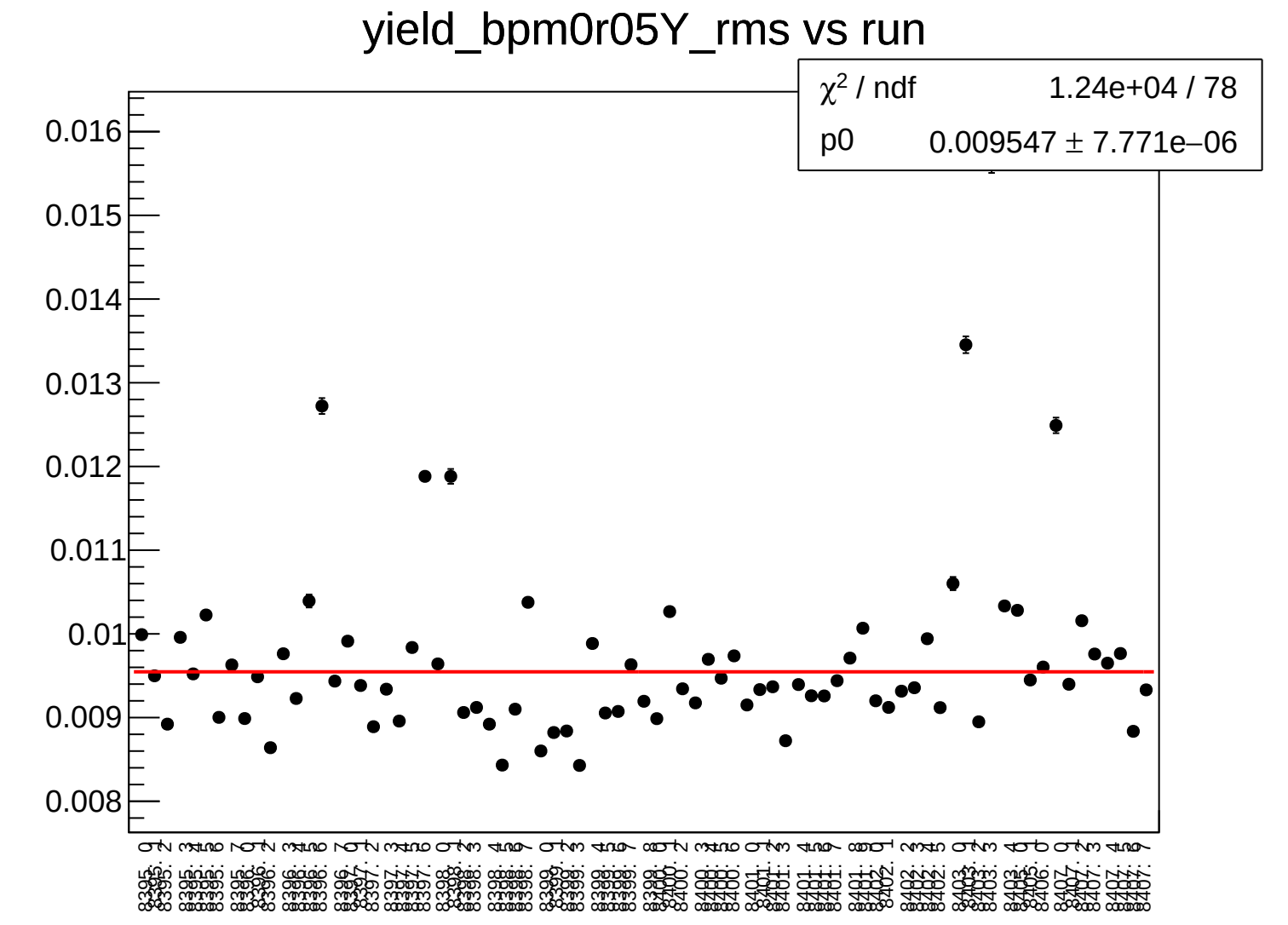

yield_bpm0r05X_mean vs run
χ² / ndf 6.763e+04 / 78
p0 −0.9738 ± 0.0001147
−0.92
−0.94
−0.96
−0.98
−1
−1.02
−1.04
pull
Entries 79
Mean 375.2
Std Dev 300.2
60
40
20
0
−20
−40
−60
−80

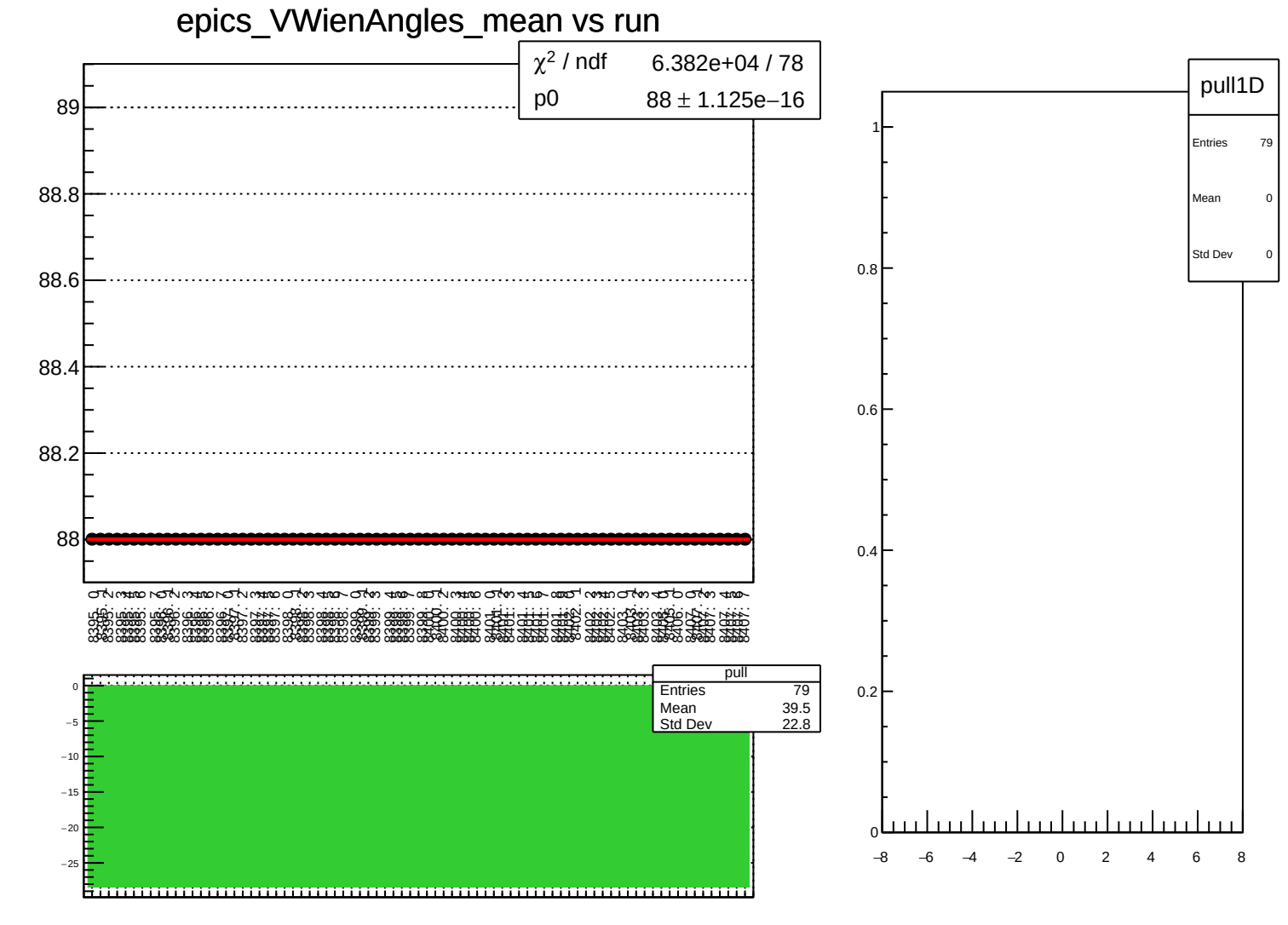

pull1D
Entries 79
Mean 0.03396
Std Dev 4.59
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

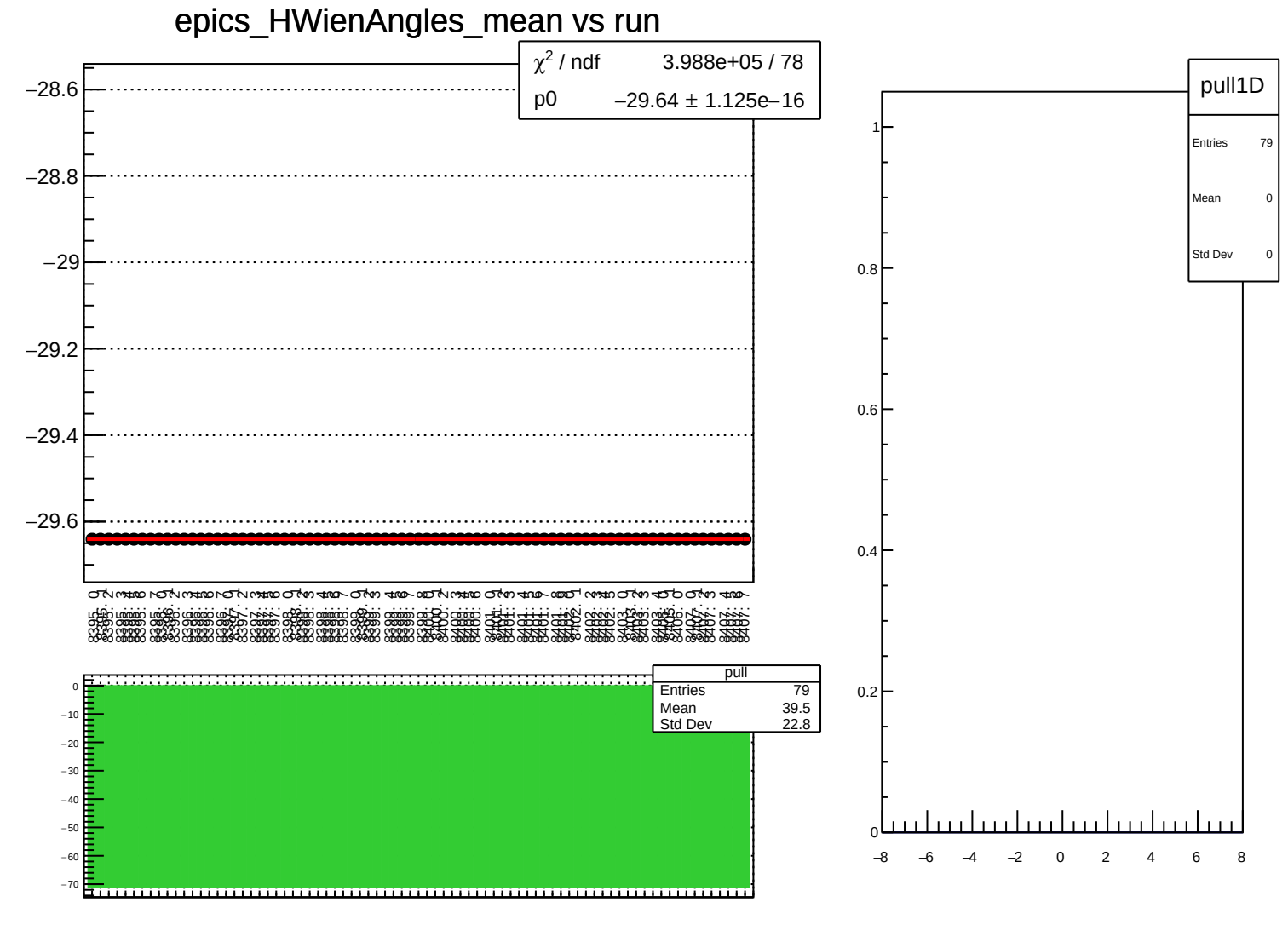

yield_bpm0r05X_rms vs run
χ² / ndf 1041 / 78
p0 0.09998 ± 8.108e–05
0.108
0.106
0.104
0.102
0.1
0.098
0.096
0.094

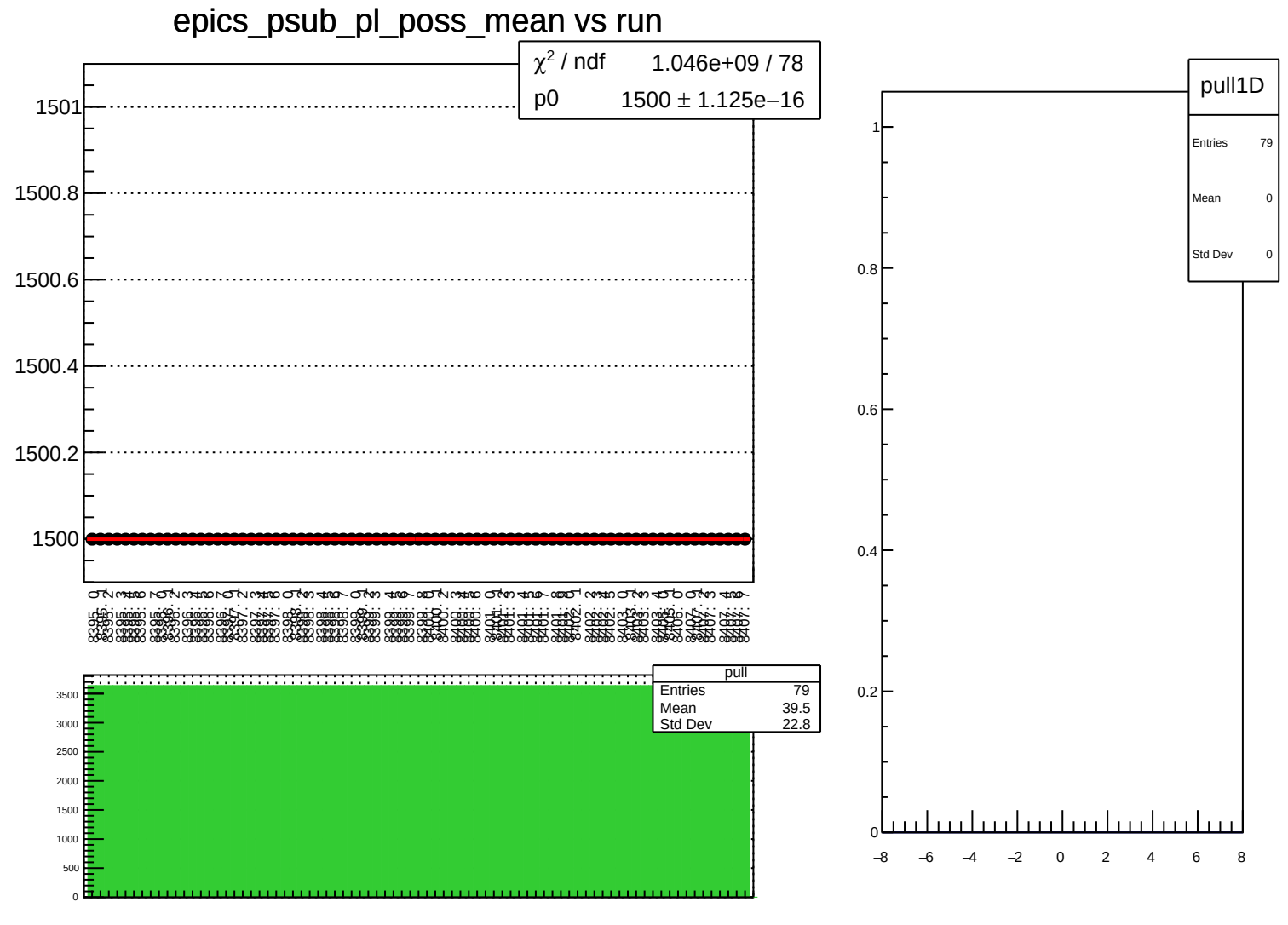

yield_bpm0r05Y_mean vs run
χ² / ndf 1.448e+06 / 78
p0 0.3164 ± 1.099e−05
0.35
0.34
0.33
0.32
0.31
0.3
0.29
pull
Entries 79
Mean 532.1
Std Dev 466.2
200
100
0
−100
−200

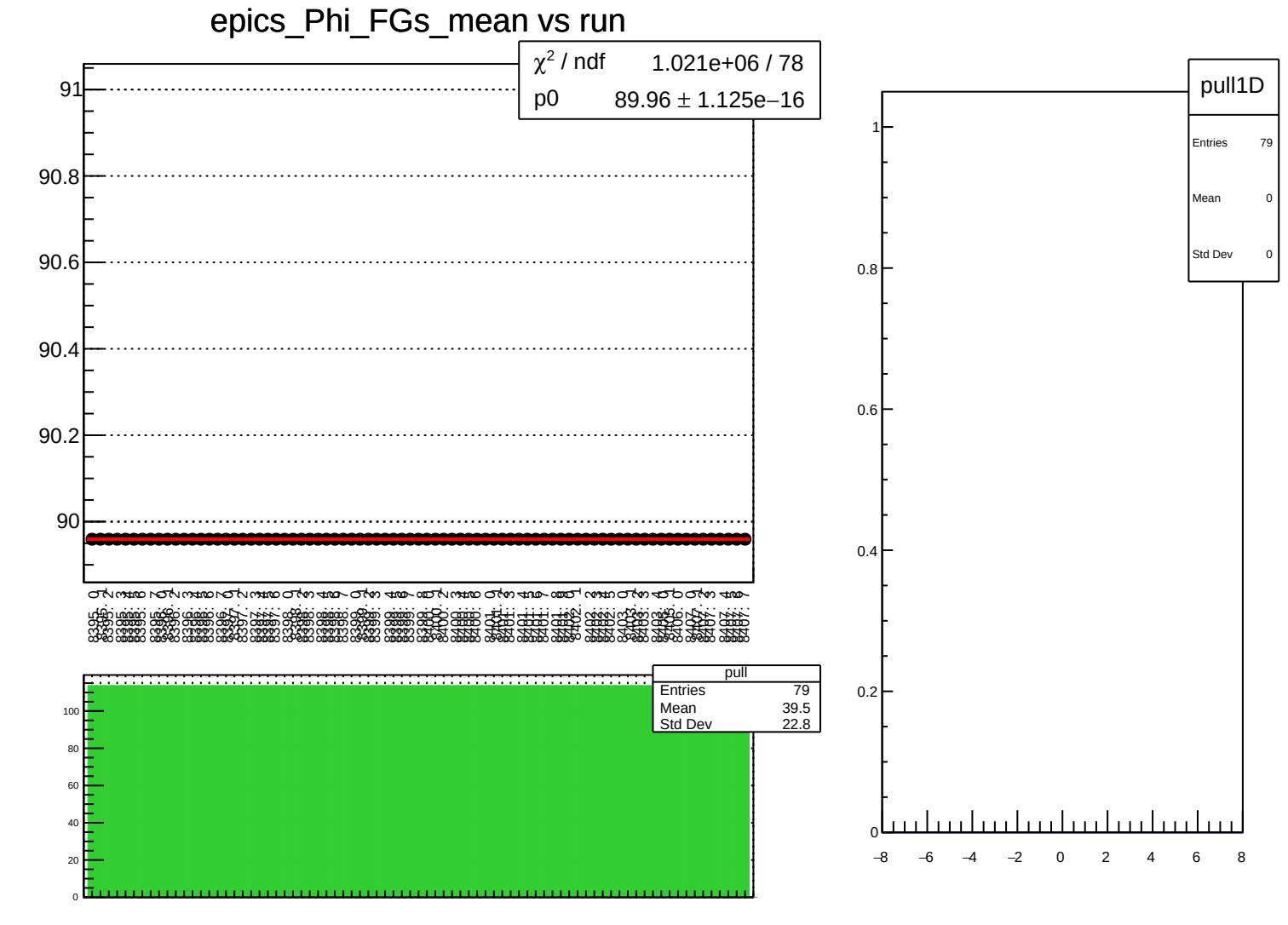

pull1D
Entries 79
Mean 1.818
Std Dev 5.216
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

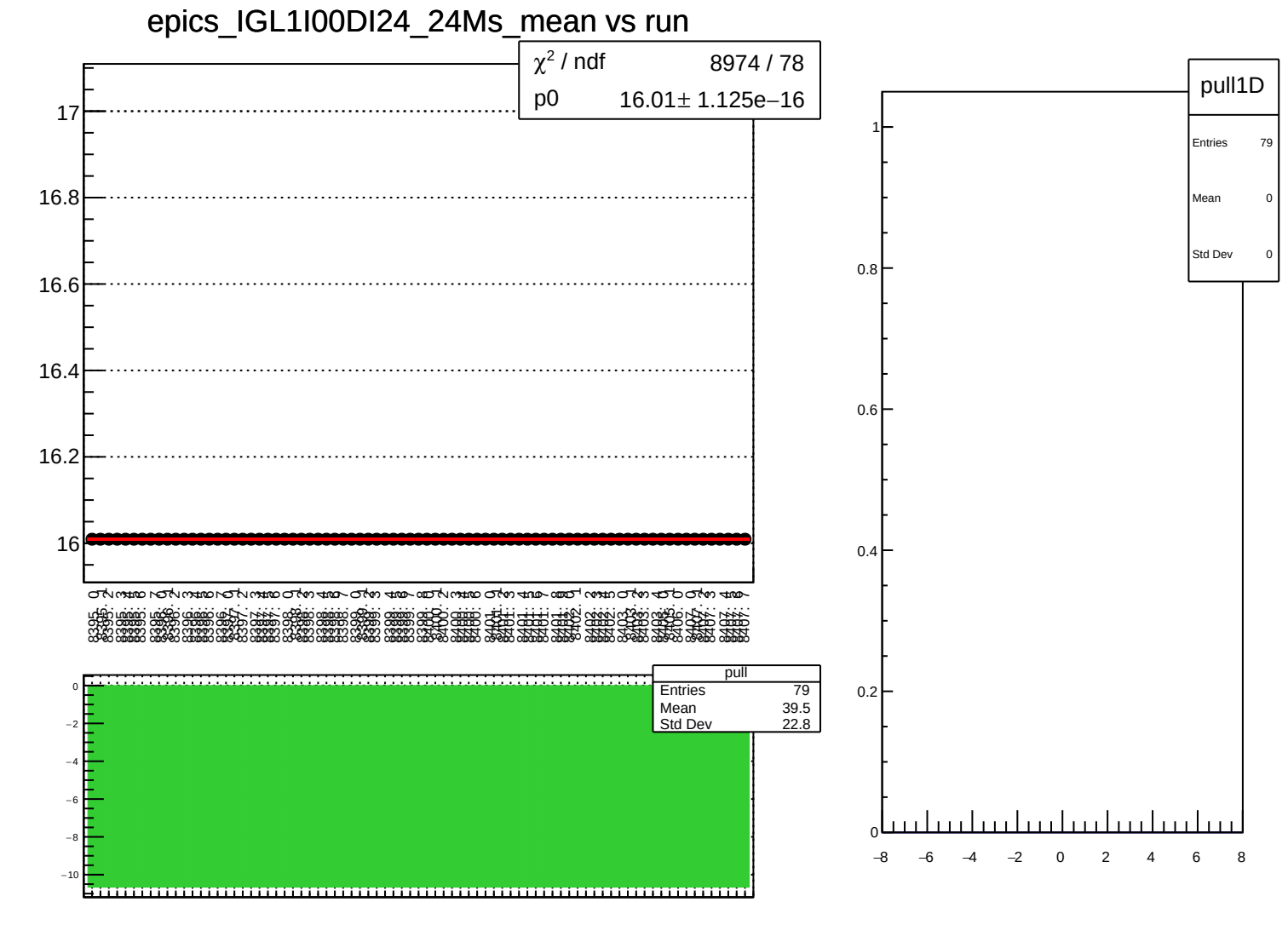

yield_bpm0r05Y_rms vs run
χ² / ndf 1.24e+04 / 78
p0 0.009547 ± 7.771e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

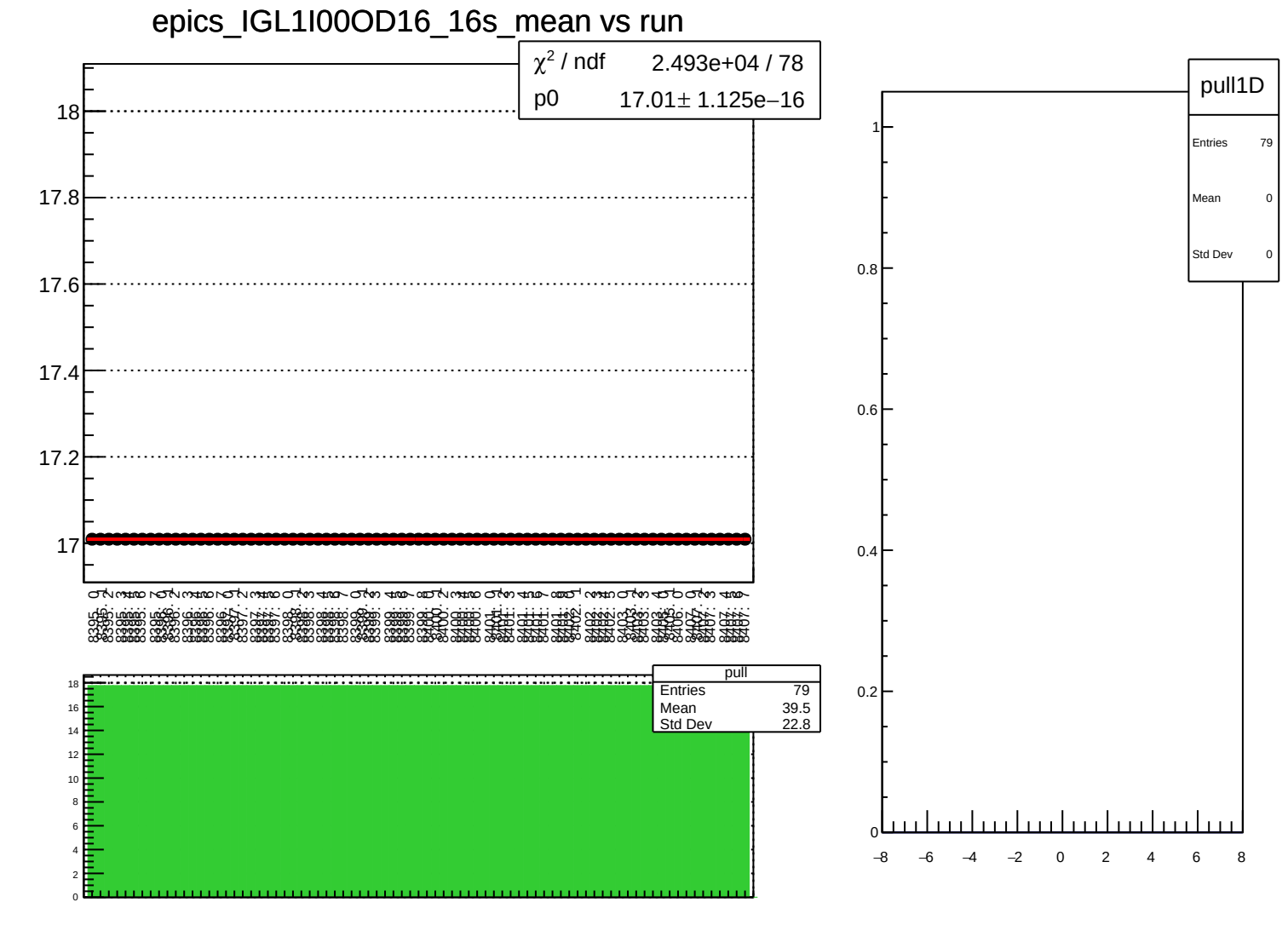

epics_VWienAngles_mean vs run
χ² / ndf 6.382e+04 / 78
p0 88 ± 1.125e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 79
Mean 39.5
Std Dev 22.8
0
−5
−10
−15
−20
−25
pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

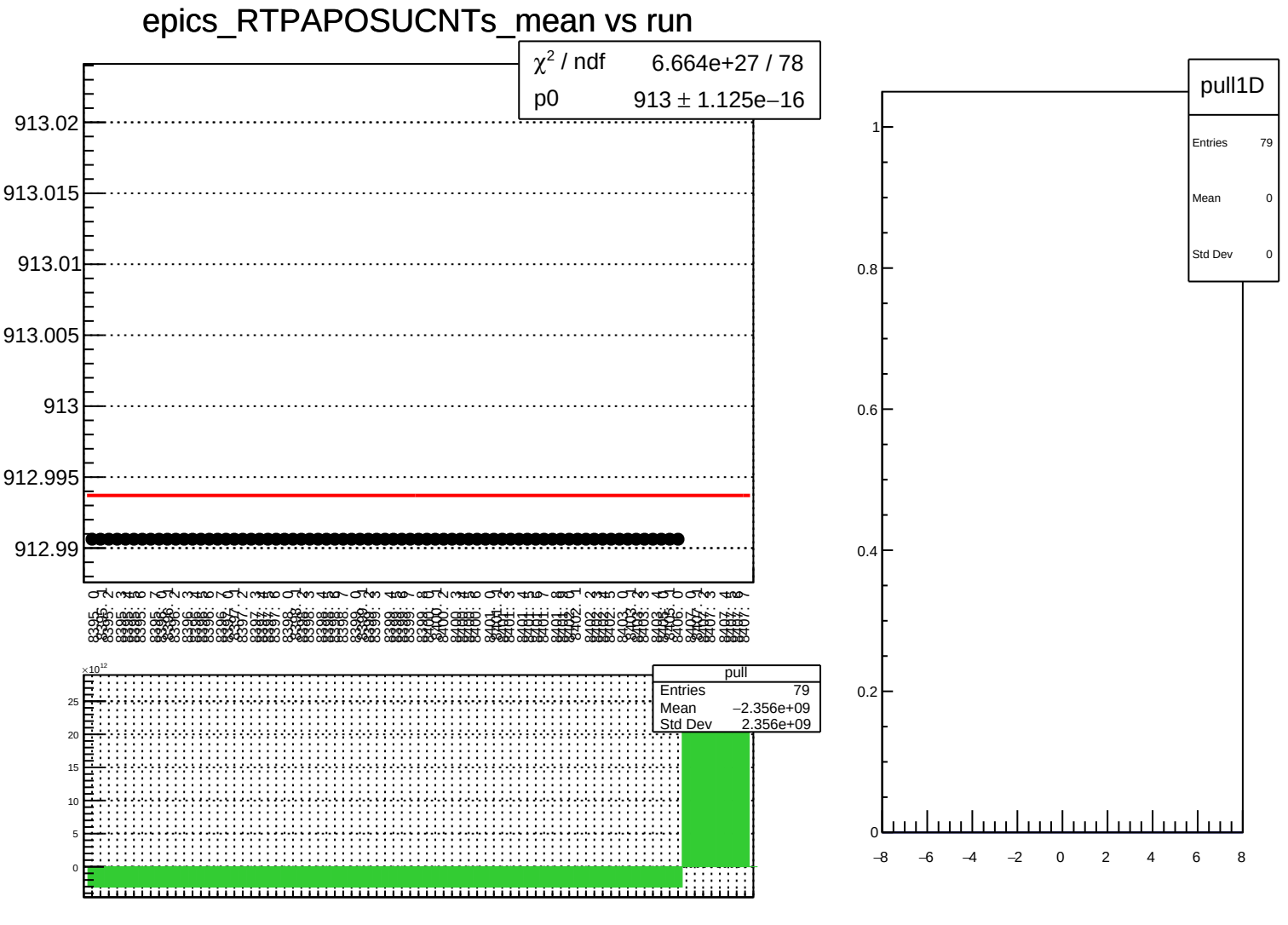

epics_HWienAngles_mean vs run
χ² / ndf 3.988e+05 / 78
p0 −29.64 ± 1.125e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 79
Mean 39.5
Std Dev 22.8
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

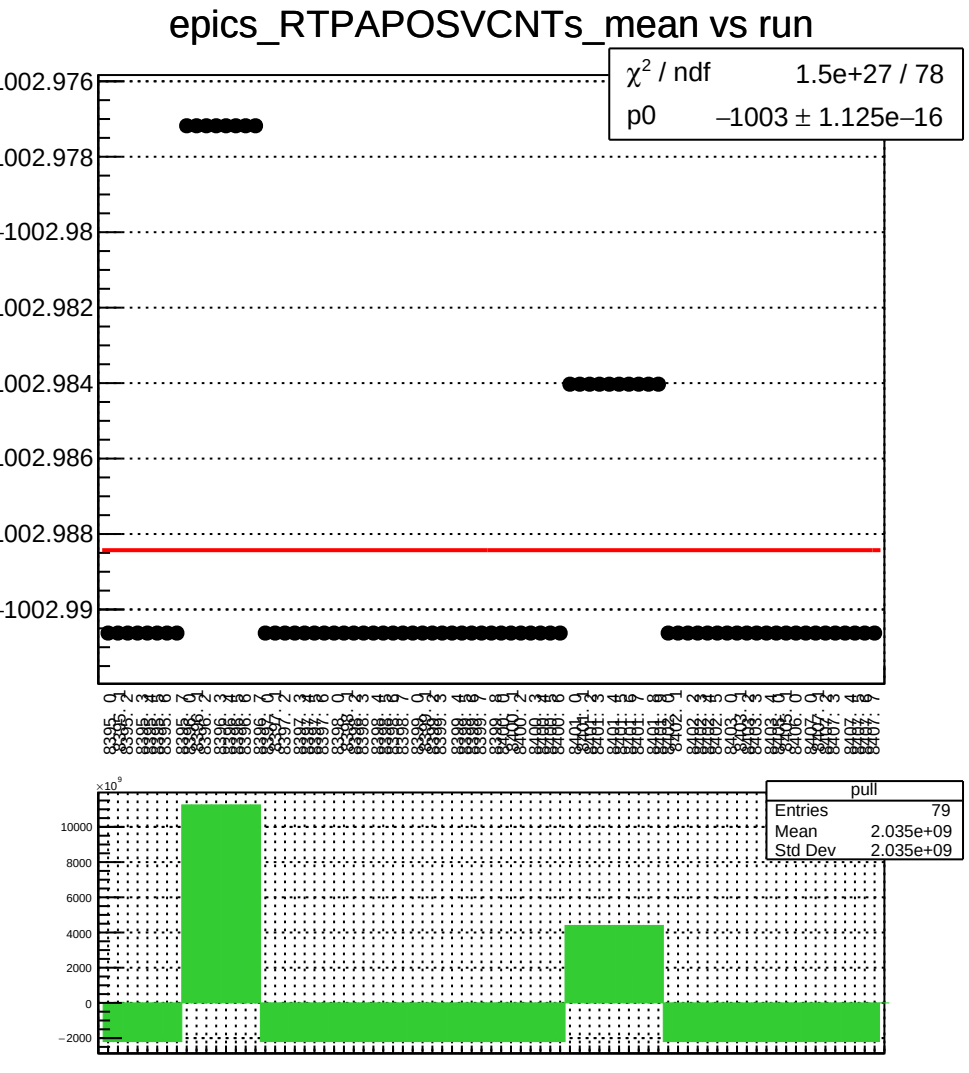

epics_psub_pl_poss_mean vs run
χ² / ndf 1.046e+09 / 78
p0 1500 ± 1.125e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 79
Mean 39.5
Std Dev 22.8
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

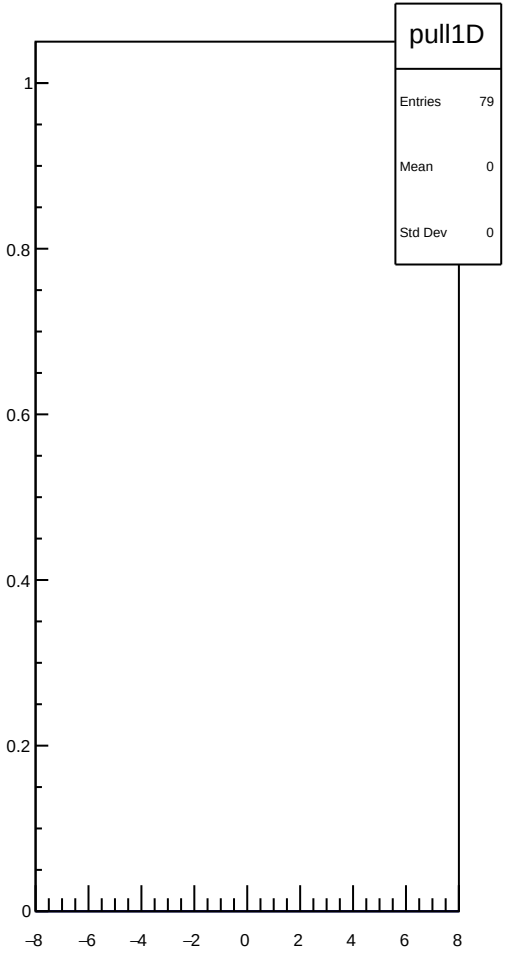

epics_Phi_FGs_mean vs run
χ² / ndf 1.021e+06 / 78
p0 89.96 ± 1.125e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 79
Mean 39.5
Std Dev 22.8
100
80
60
40
20
0
pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

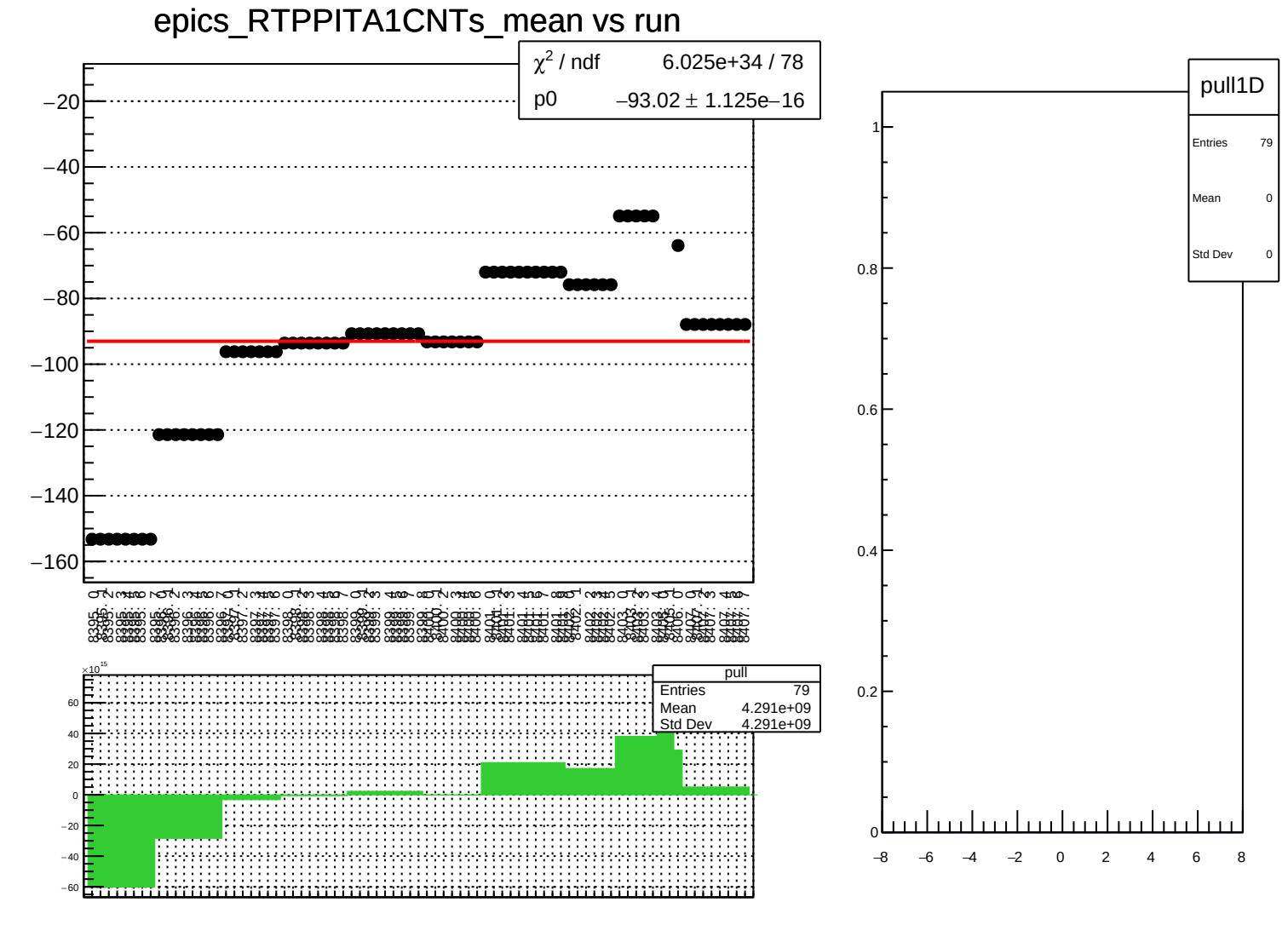

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 8974 / 78
p0 16.01± 1.125e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 79
Mean 39.5
Std Dev 22.8
0
−2
−4
−6
−8
−10
pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

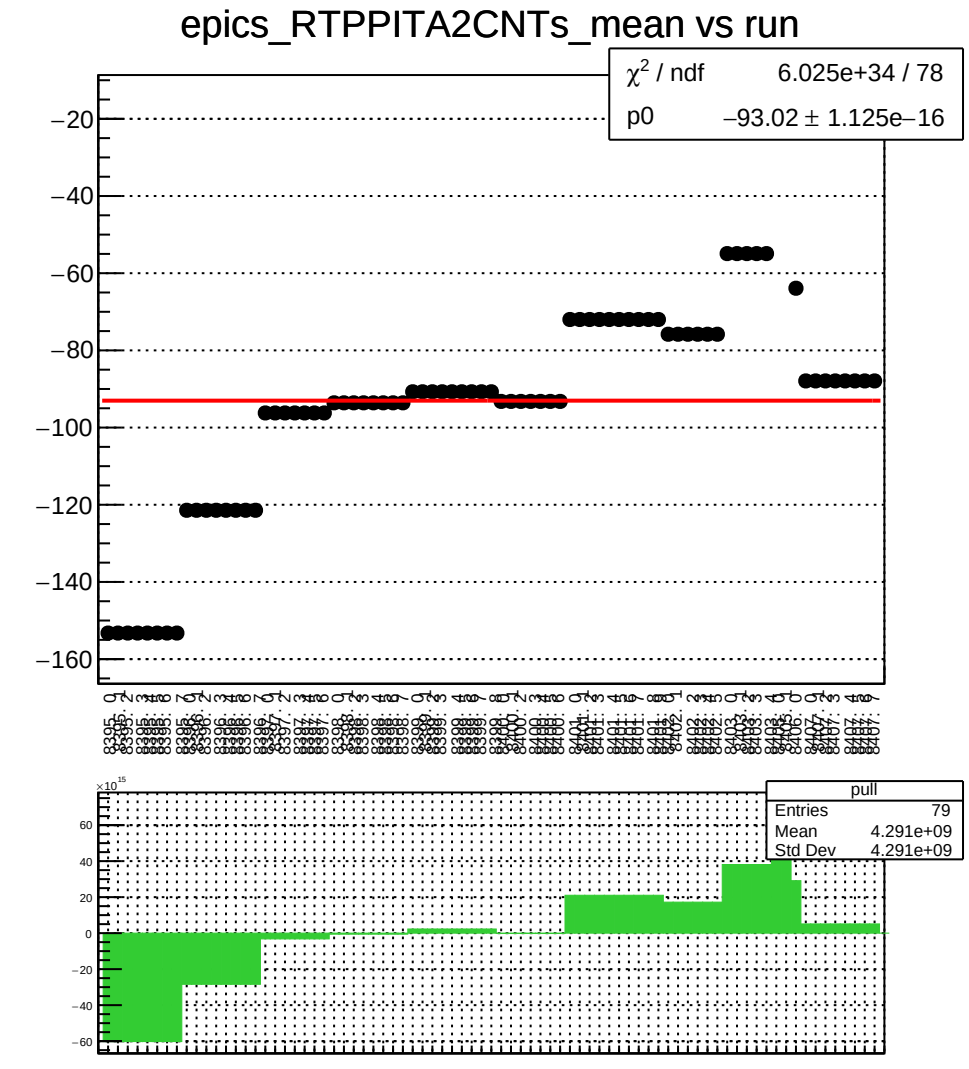

epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 2.493e+04 / 78
p0 17.01± 1.125e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 79
Mean 39.5
Std Dev 22.8
pull1D
Entries 79
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

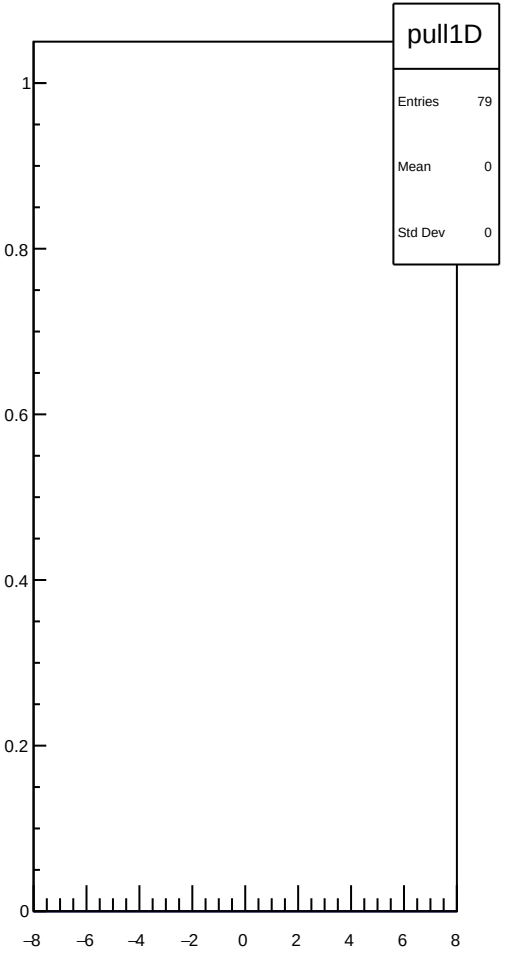

epics_RTPAPOSUCNTs_mean vs run
χ² / ndf 6.664e+27 / 78
p0 913 ± 1.125e−16
913.02
913.015
913.01
913.005
913
912.995
912.99
pull
Entries 79
Mean −2.356e+09
Std Dev 2.356e+09
pull1D
Entries 79
Mean 0
Std Dev 0


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 1.5e+27 / 78
p0 −1003 ± 1.125e−16
−1002.976
−1002.978
−1002.98
−1002.982
−1002.984
−1002.986
−1002.988
−1002.99
pull
Entries 79
Mean 2.035e+09
Std Dev 2.035e+09
×10⁹
10000
8000
6000
4000
2000
0
−2000


pull1D
Entries 79
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_RTPPITA1CNTs_mean vs run
χ² / ndf 6.025e+34 / 78
p0 −93.02 ± 1.125e−16
pull
Entries 79
Mean 4.291e+09
Std Dev 4.291e+09
pull1D
Entries 79
Mean 0
Std Dev 0


epics_RTPPITA2CNTs_mean vs run
χ² / ndf 6.025e+34 / 78
p0 −93.02 ± 1.125e−16
pull
Entries 79
Mean 4.291e+09
Std Dev 4.291e+09


pull1D
Entries 79
Mean 0
Std Dev 0