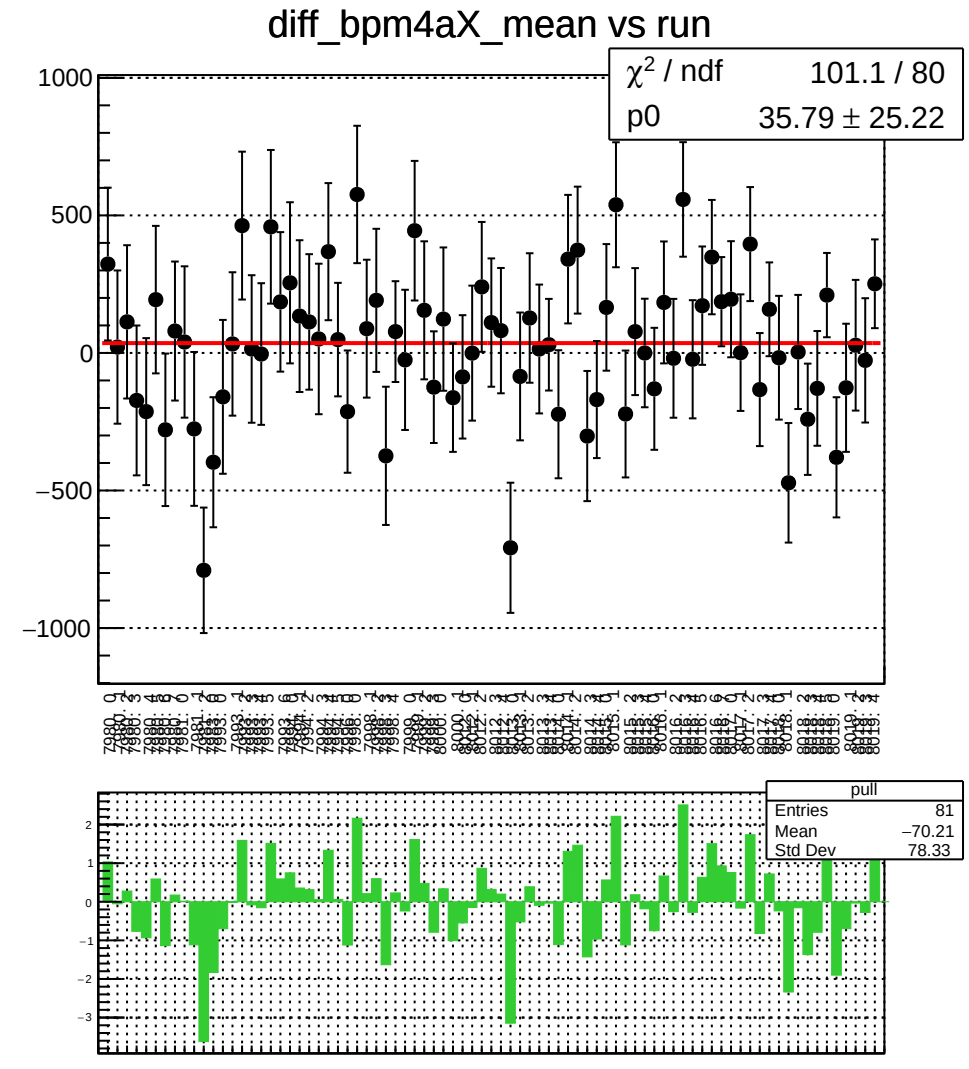
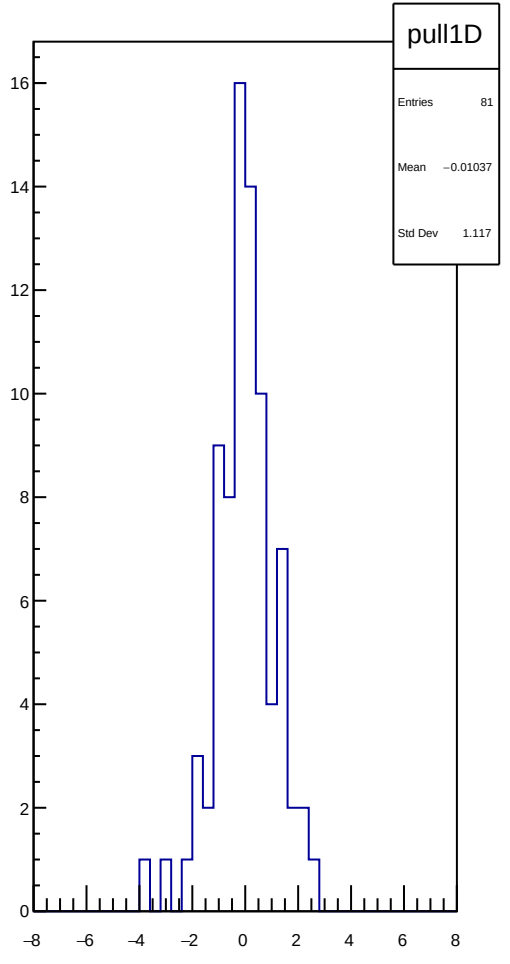
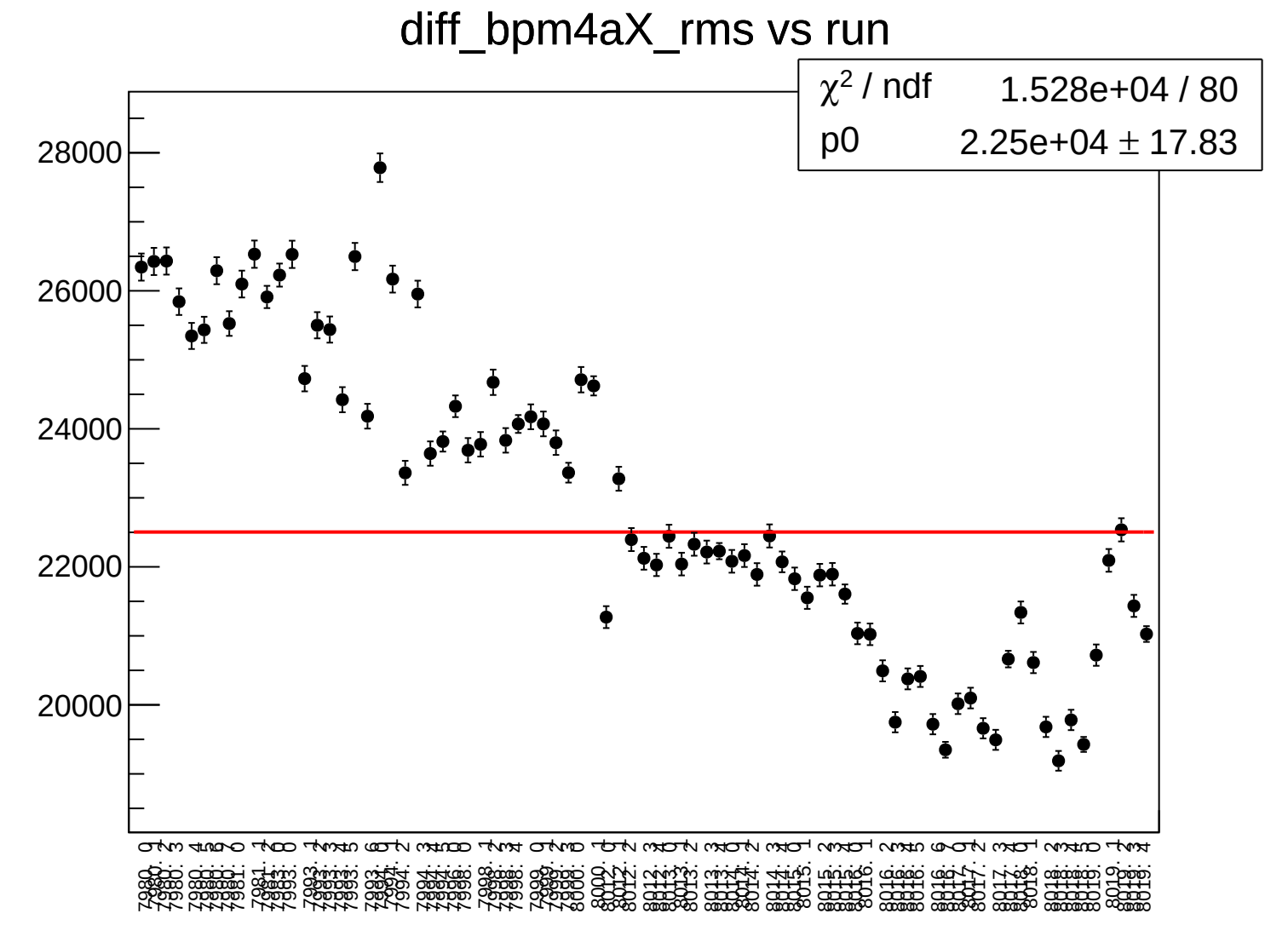
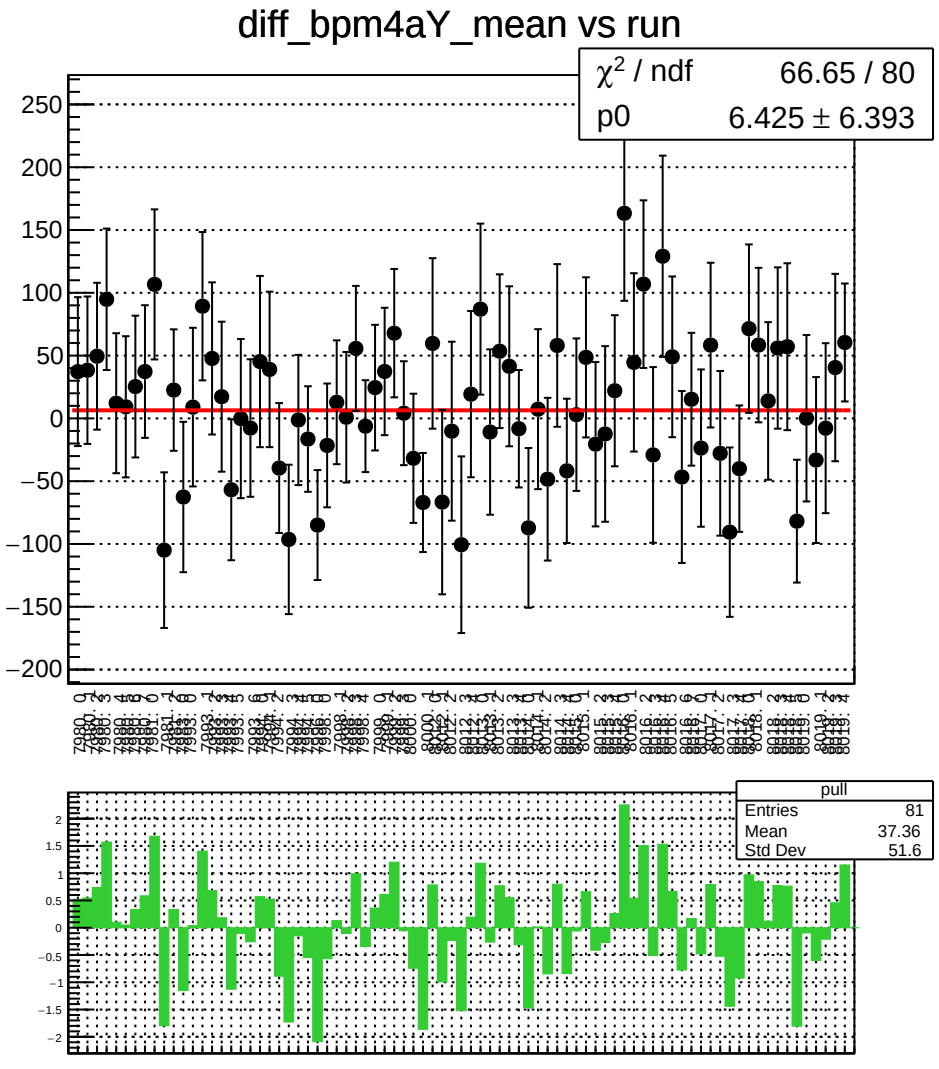
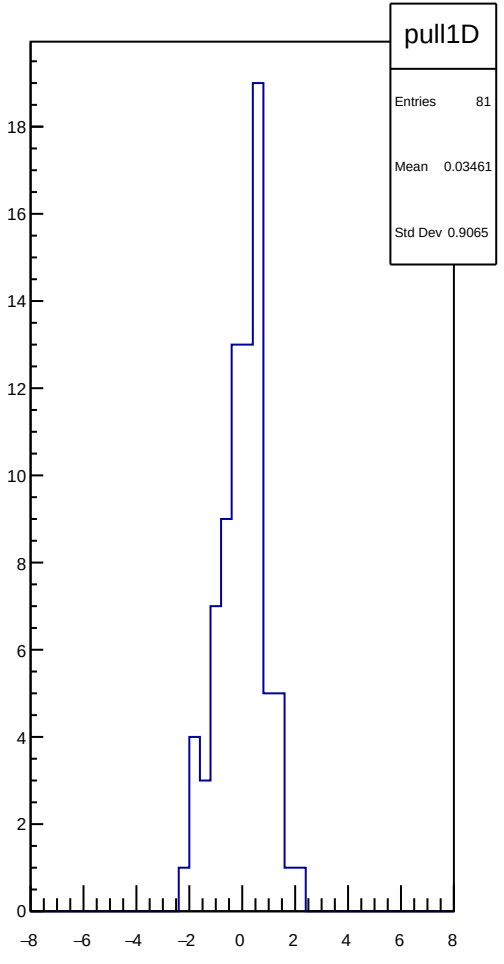
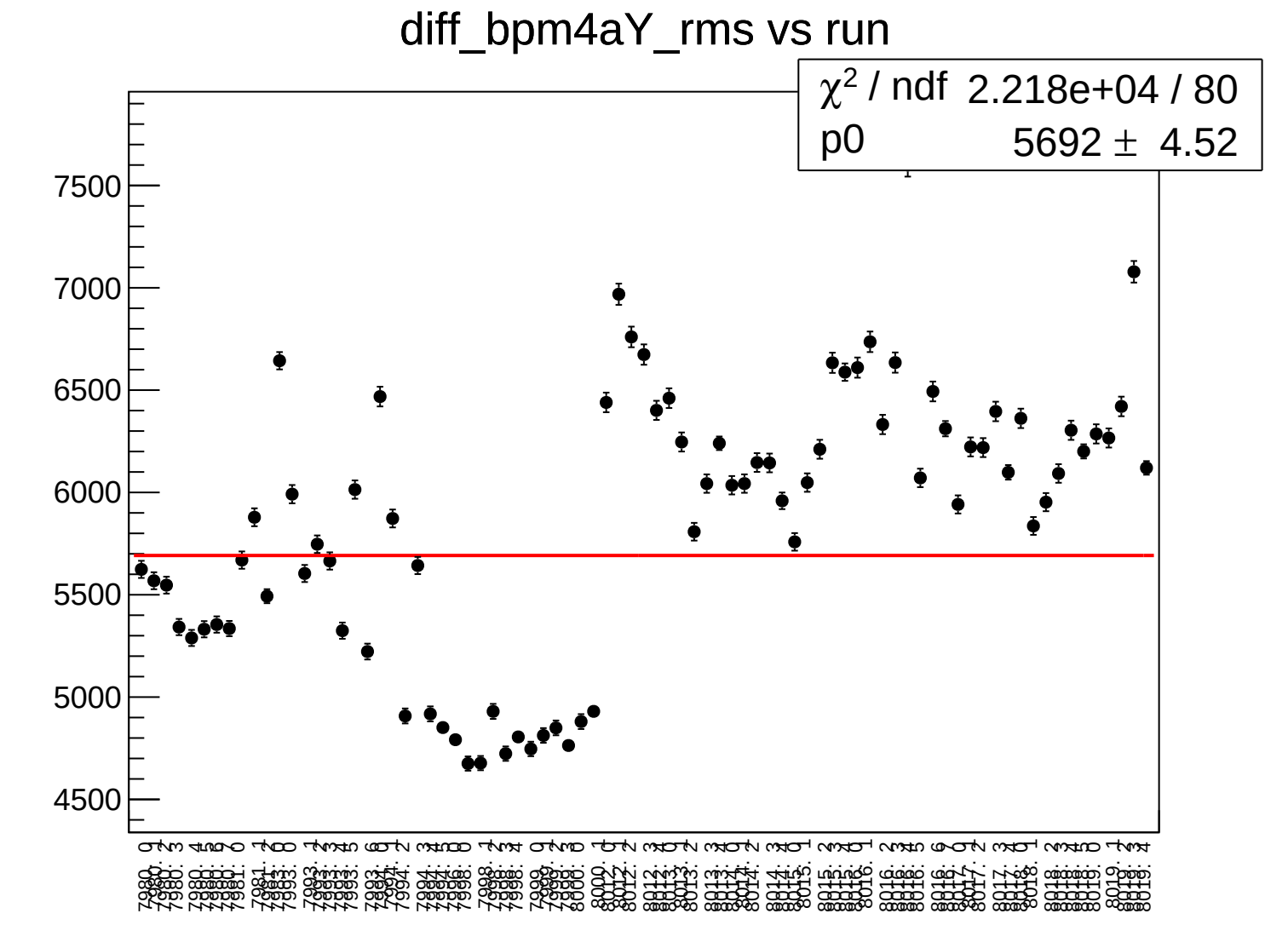

diff_bpm4aX_mean vs run
χ² / ndf 101.1 / 80
p0 35.79 ± 25.22
1000
500
0
−500
−1000
pull
Entries 81
Mean −70.21
Std Dev 78.33
2
1
0
−1
−2
−3

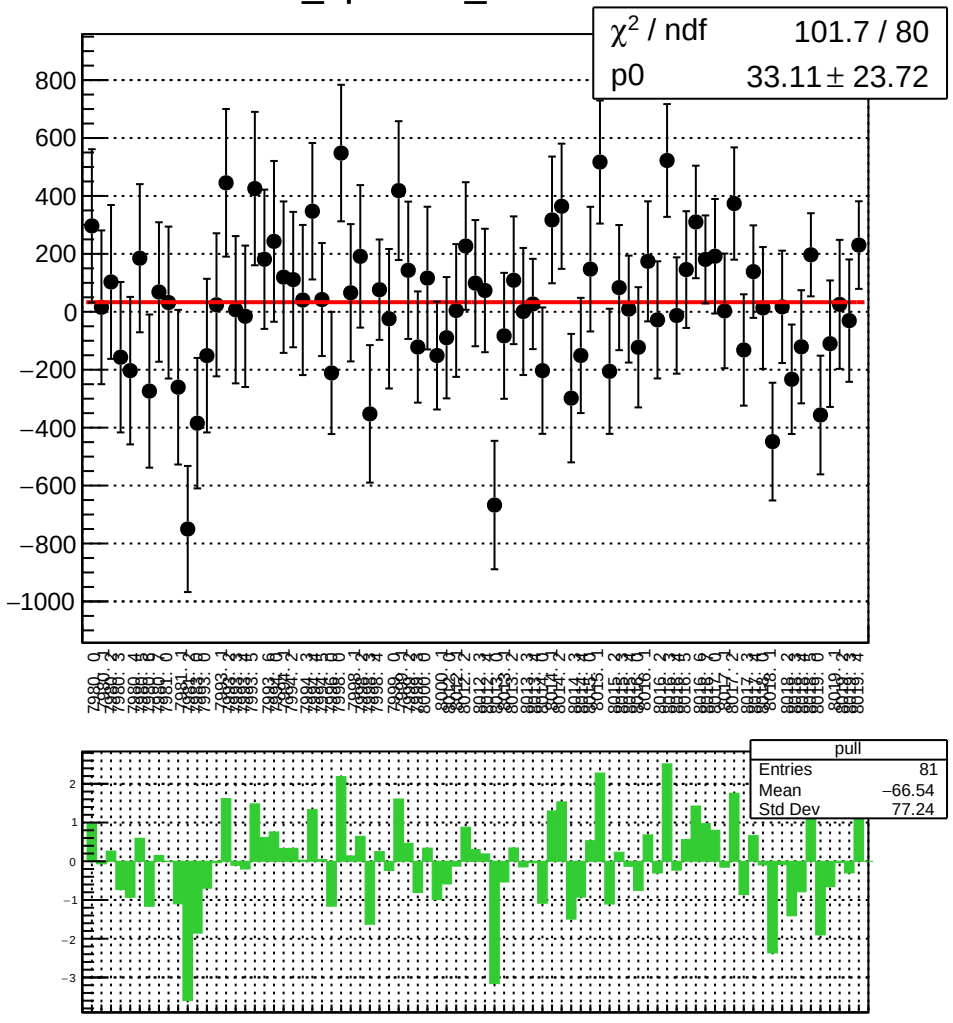

pull1D
Entries 81
Mean −0.01037
Std Dev 1.117
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

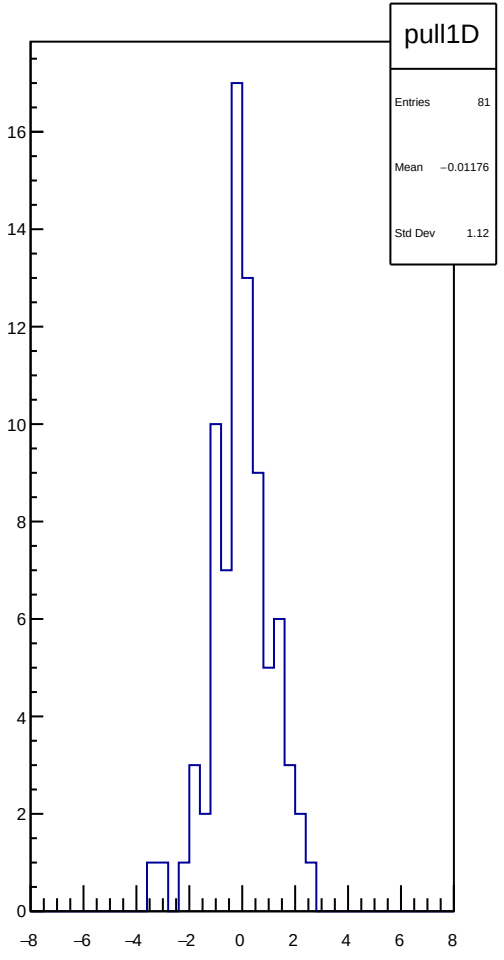

diff_bpm4aX_rms vs run
χ^2 / ndf 1.528e+04 / 80
p0 2.25e+04 ± 17.83
28000
26000
24000
22000
20000

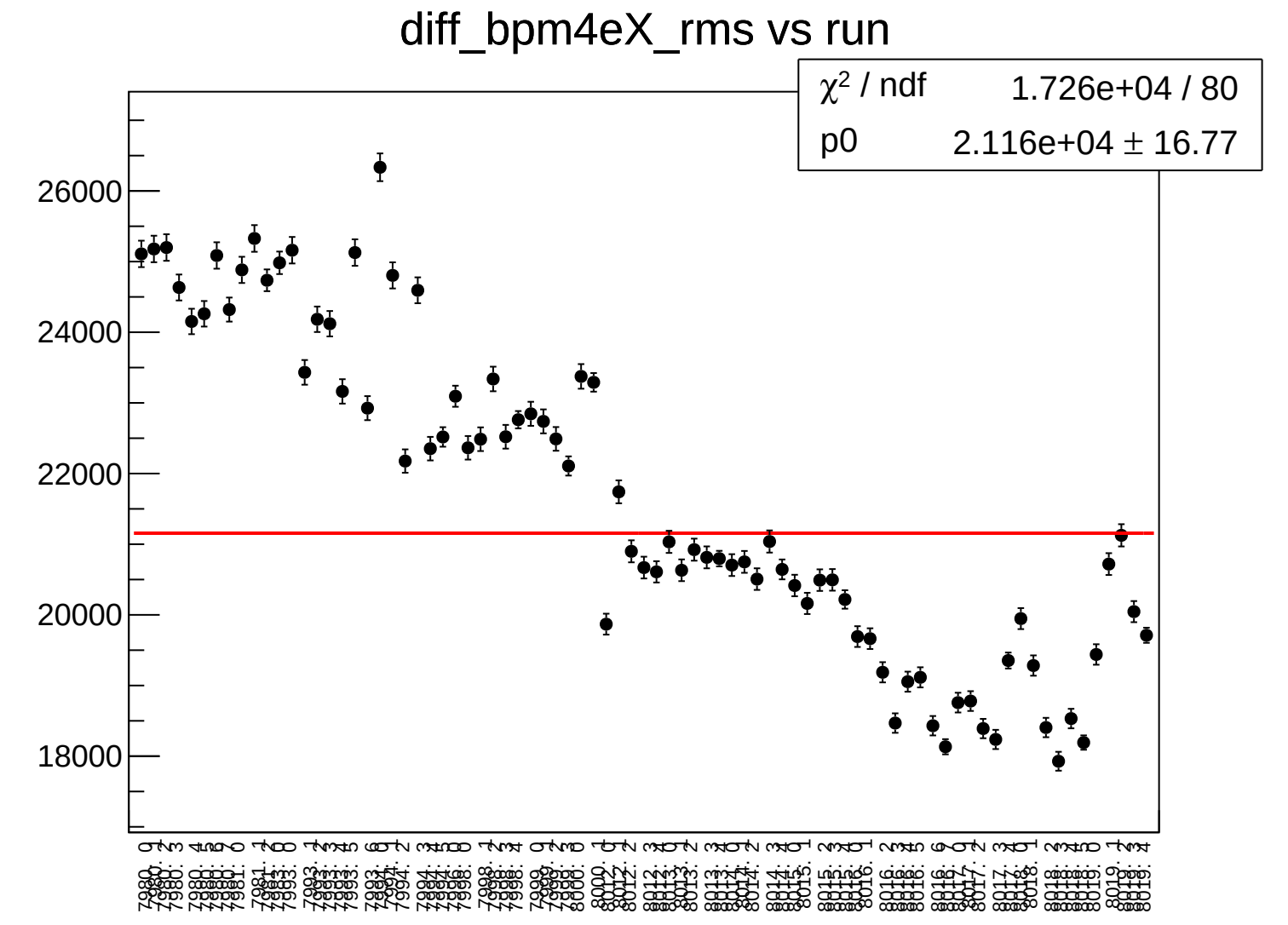

diff_bpm4aY_mean vs run
χ² / ndf 66.65 / 80
p0 6.425 ± 6.393
pull
Entries 81
Mean 37.36
Std Dev 51.6

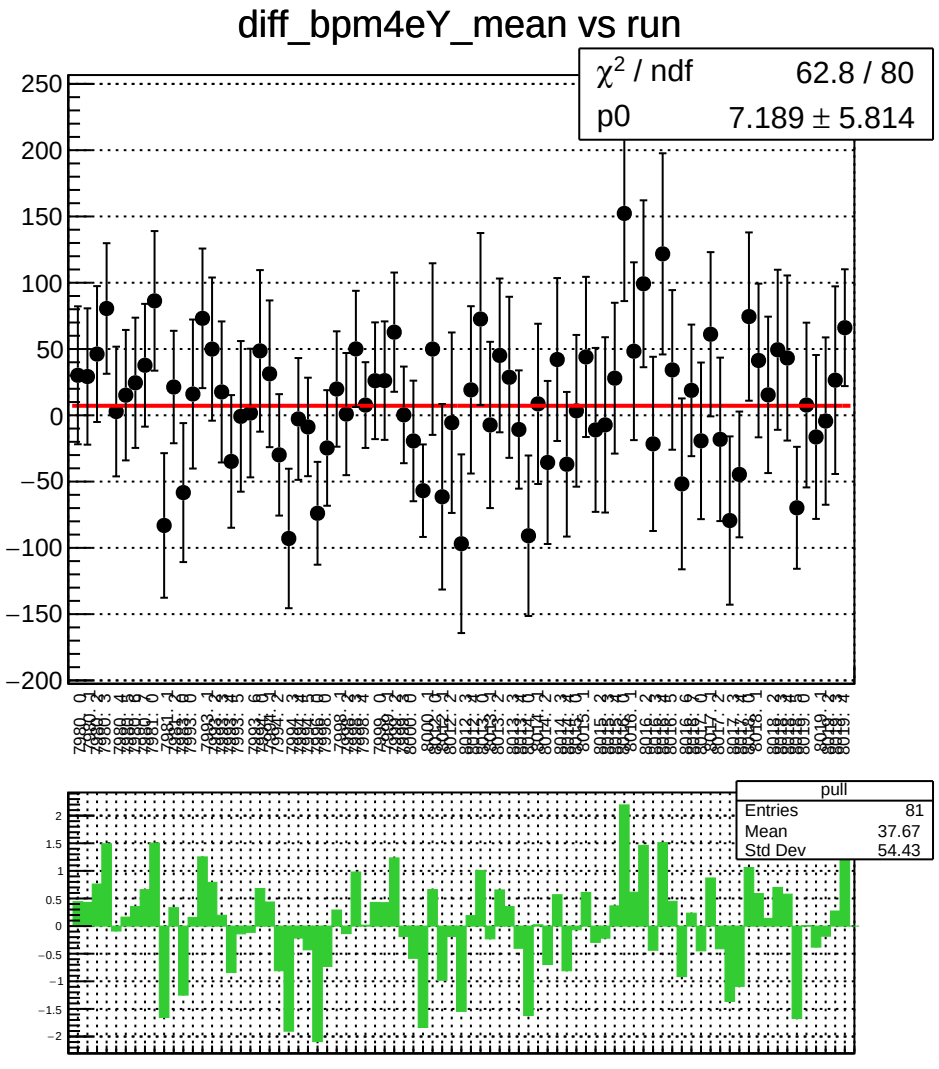

pull1D
Entries 81
Mean 0.03461
Std Dev 0.9065

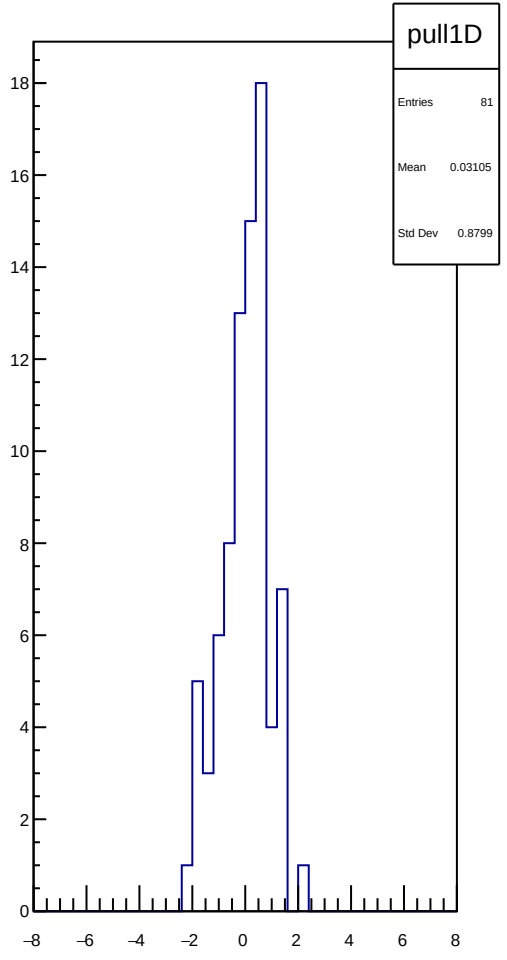

diff_bpm4aY_rms vs run
χ² / ndf 2.218e+04 / 80
p0 5692 ± 4.52
7500
7000
6500
6000
5500
5000
4500

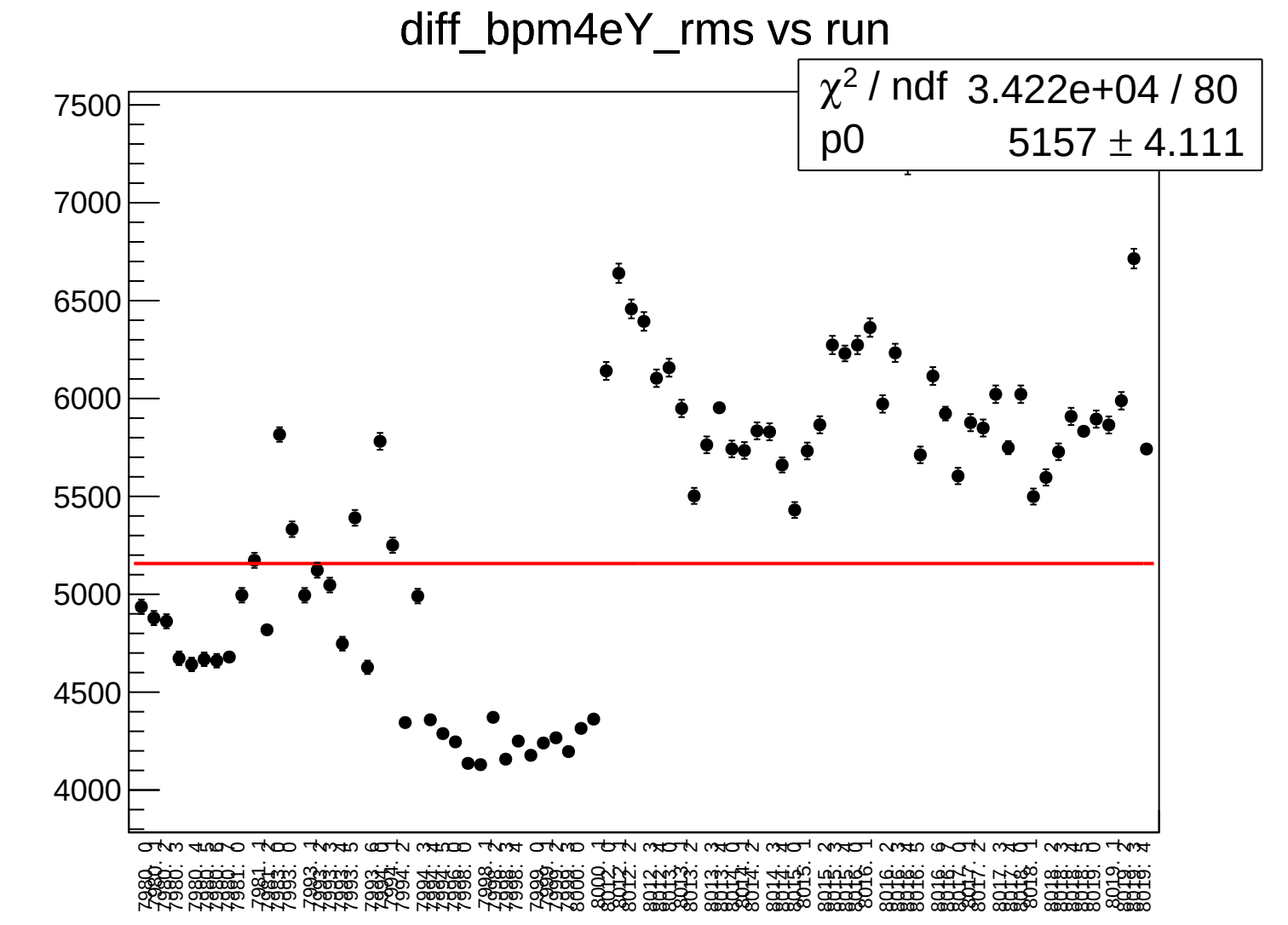

diff_bpm4eX_mean vs run
χ² / ndf 101.7 / 80
p0 33.11 ± 23.72
pull
Entries 81
Mean −66.54
Std Dev 77.24

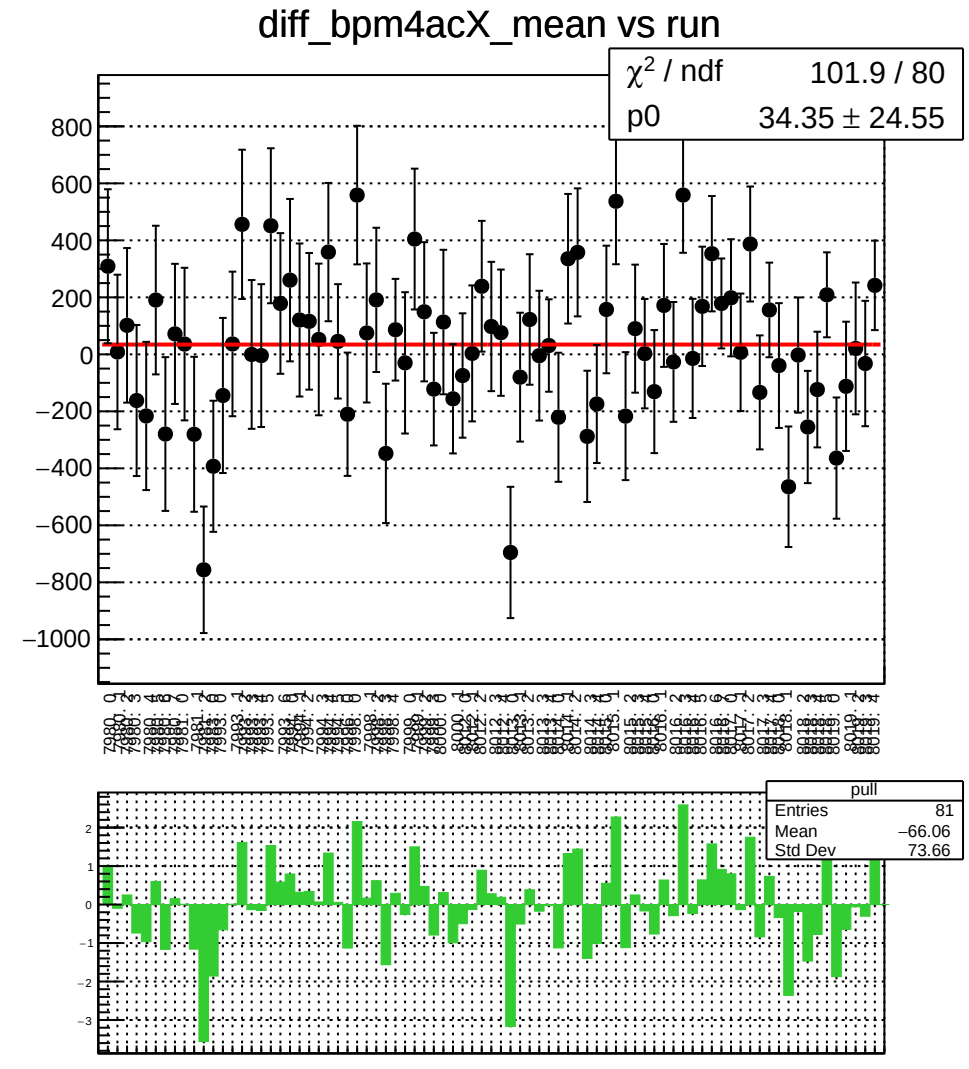

pull1D
Entries 81
Mean −0.01176
Std Dev 1.12

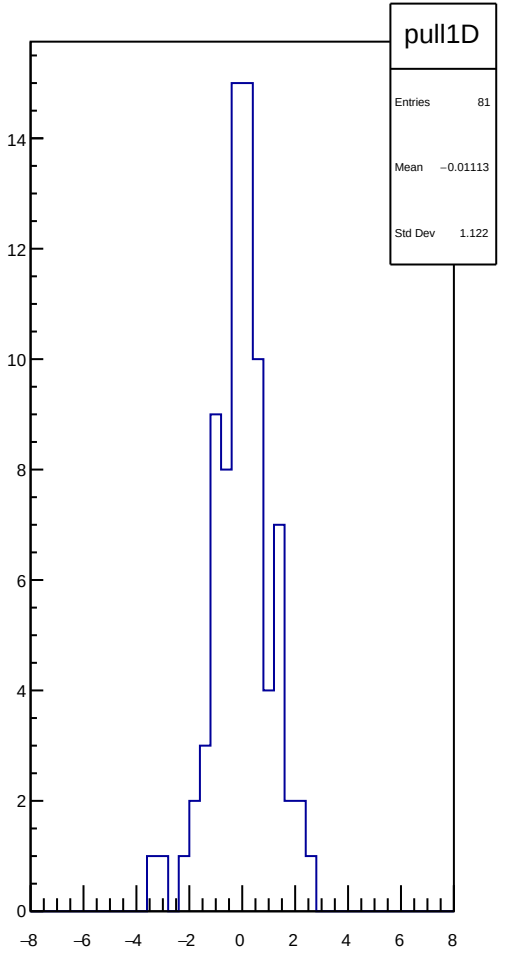

diff_bpm4eX_rms vs run
χ² / ndf 1.726e+04 / 80
p0 2.116e+04 ± 16.77
26000
24000
22000
20000
18000

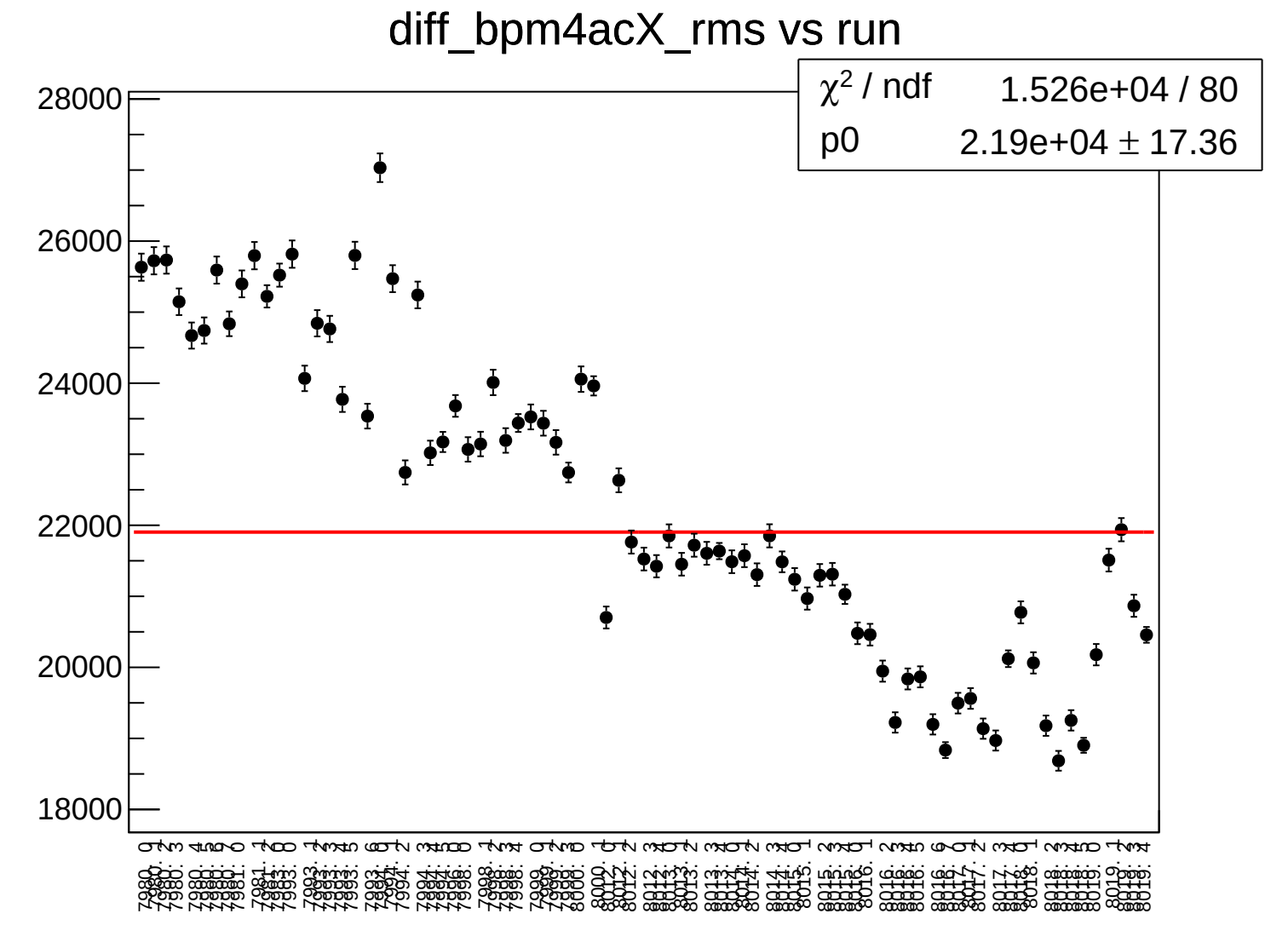

diff_bpm4eY_mean vs run
χ^2 / ndf 62.8 / 80
p0 7.189 ± 5.814
pull
Entries 81
Mean 37.67
Std Dev 54.43

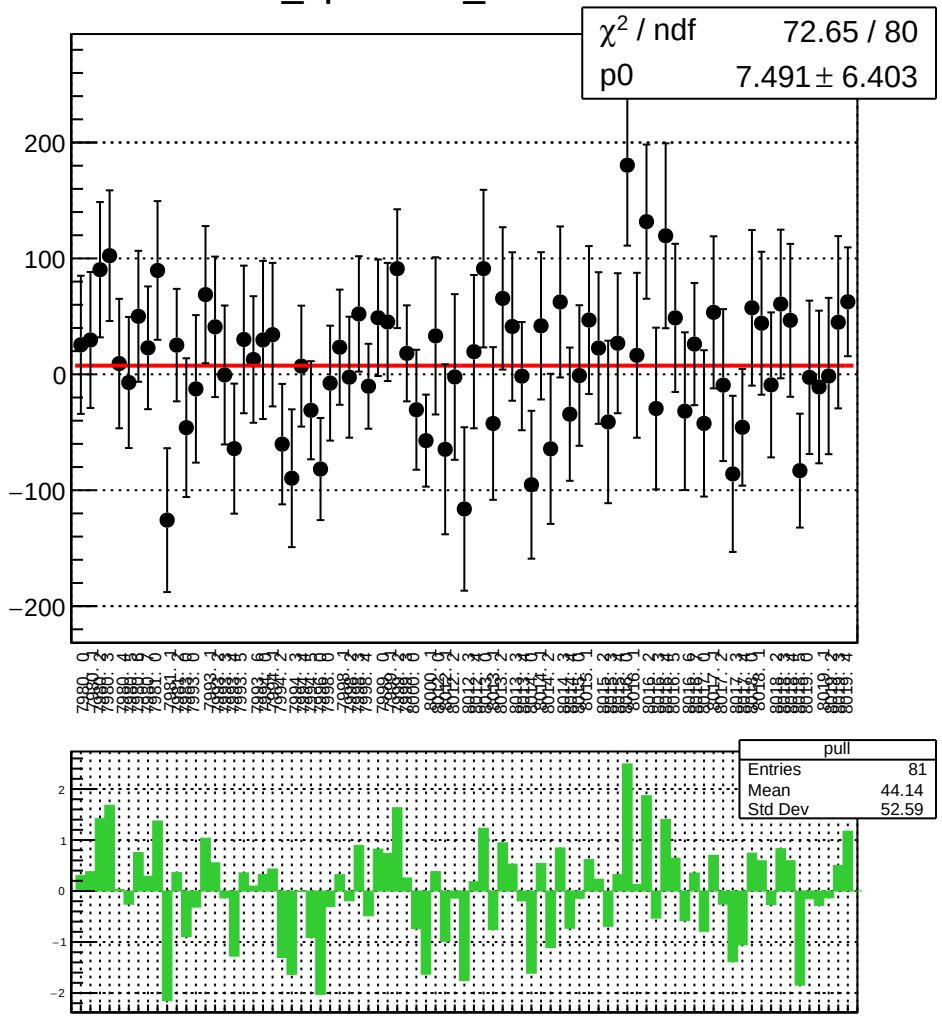

pull1D
Entries 81
Mean 0.03105
Std Dev 0.8799

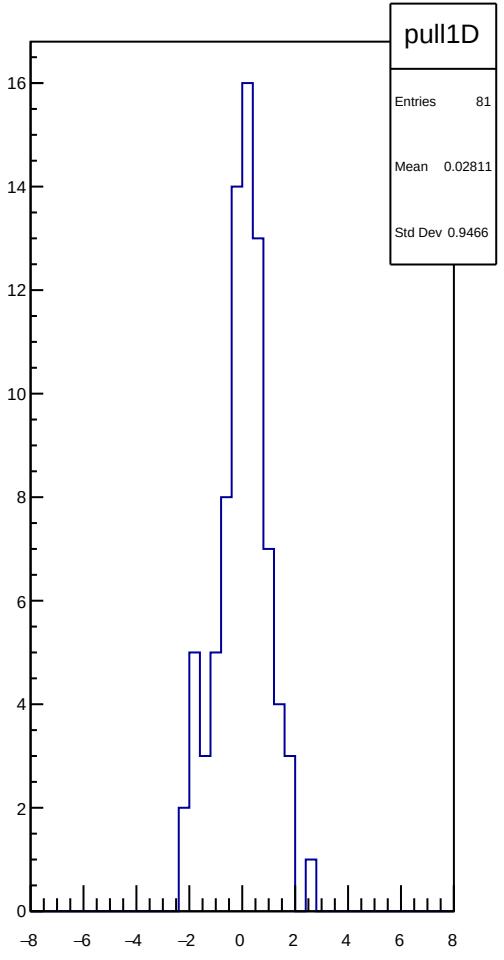

diff_bpm4eY_rms vs run
χ² / ndf 3.422e+04 / 80
p0 5157 ± 4.111
7500
7000
6500
6000
5500
5000
4500
4000

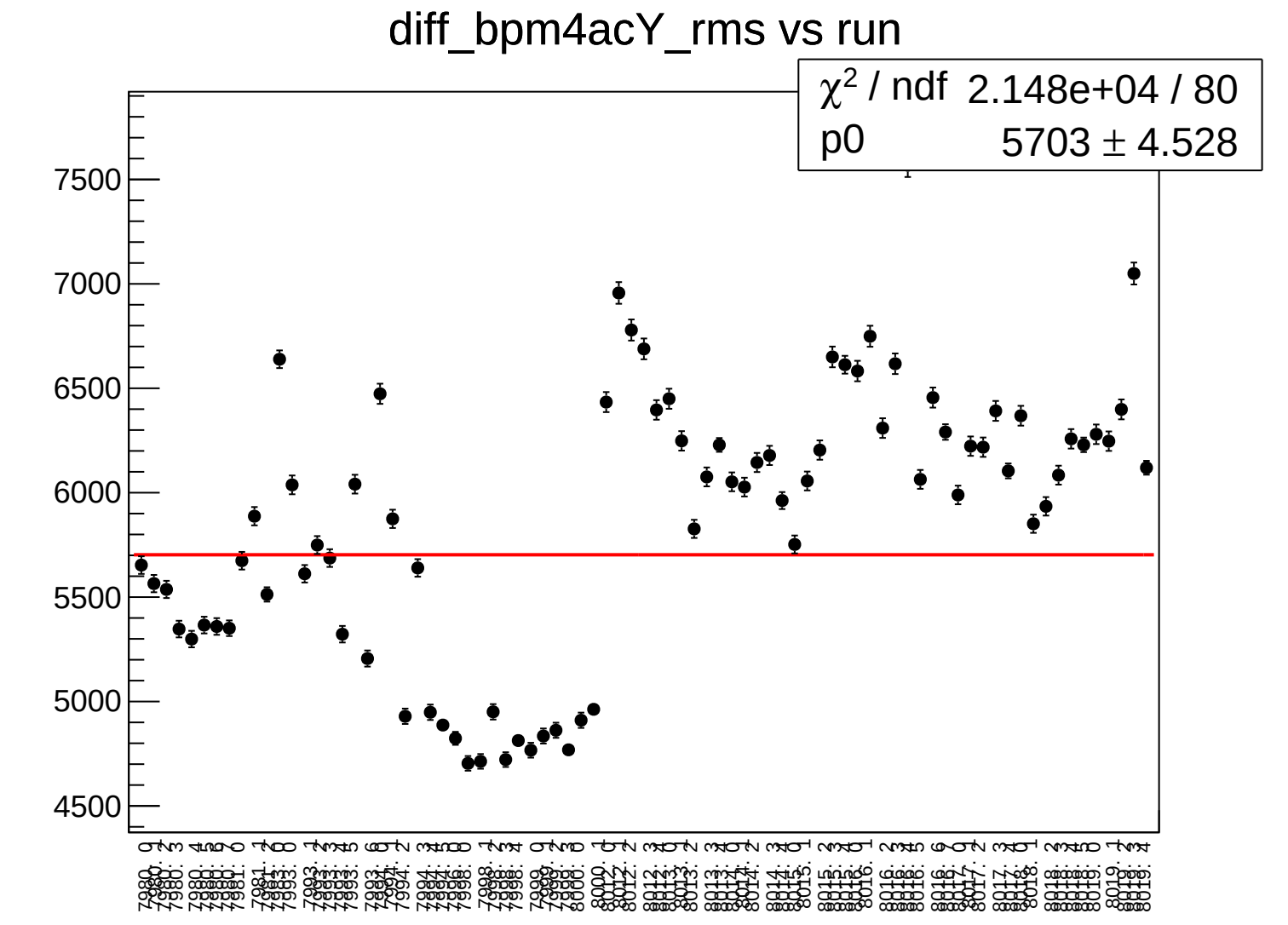

diff_bpm4acX_mean vs run
χ^2 / ndf 101.9 / 80
p0 34.35 ± 24.55
pull
Entries 81
Mean −66.06
Std Dev 73.66

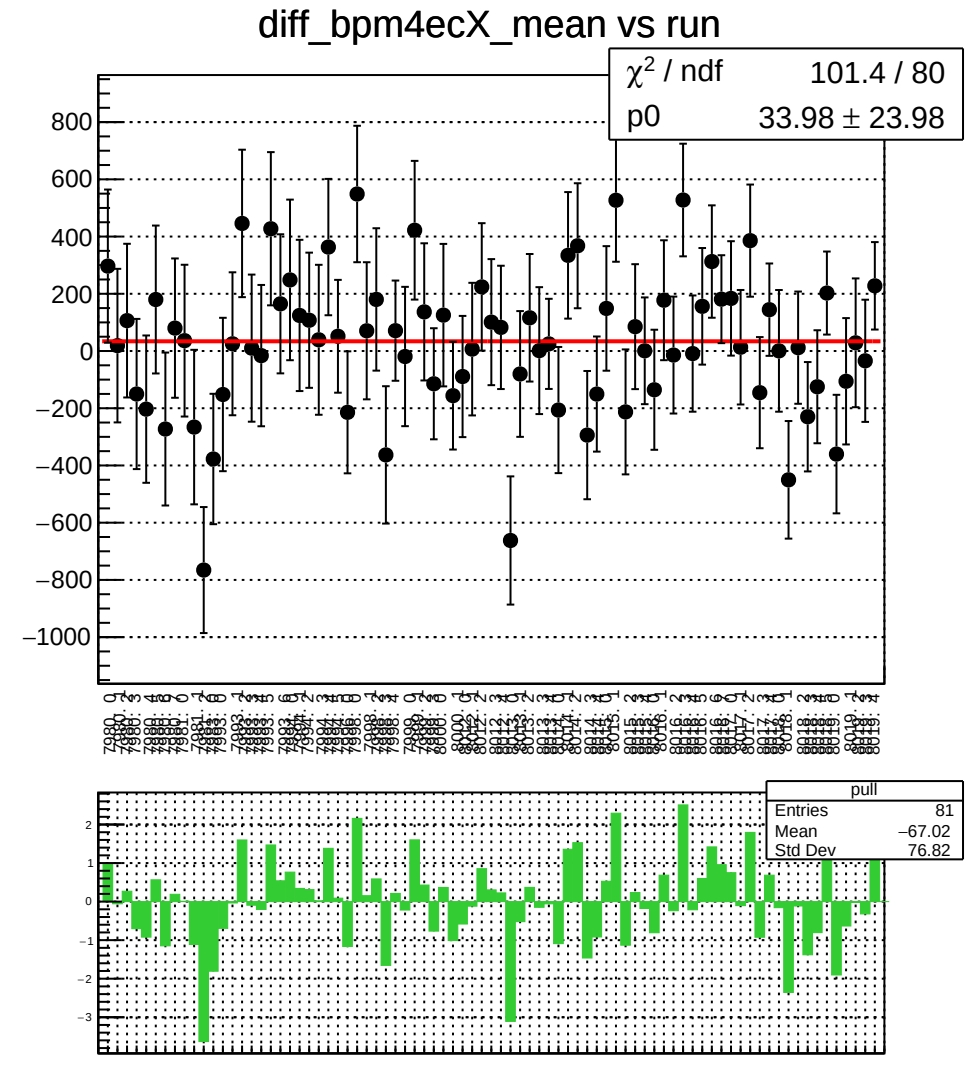

pull1D
Entries 81
Mean −0.01113
Std Dev 1.122

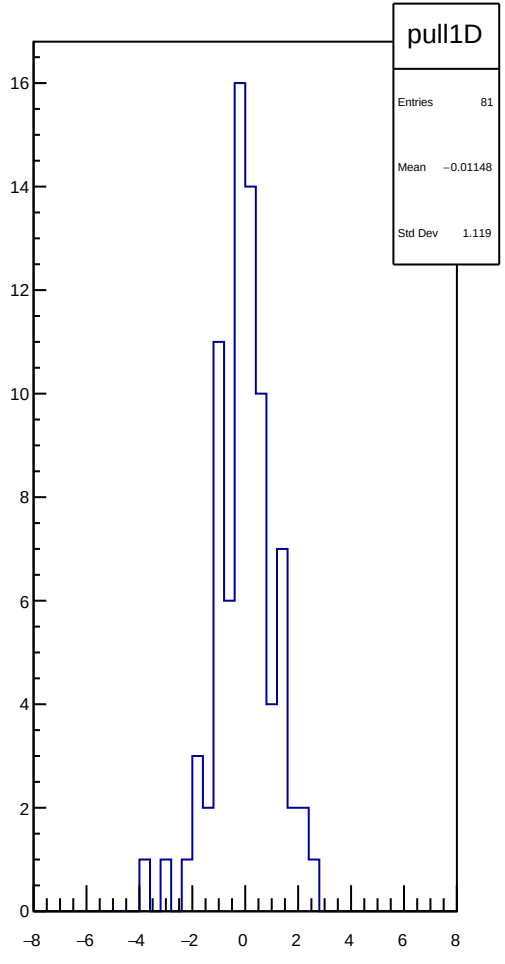

diff_bpm4acX_rms vs run
χ² / ndf 1.526e+04 / 80
p0 2.19e+04 ± 17.36
28000
26000
24000
22000
20000
18000

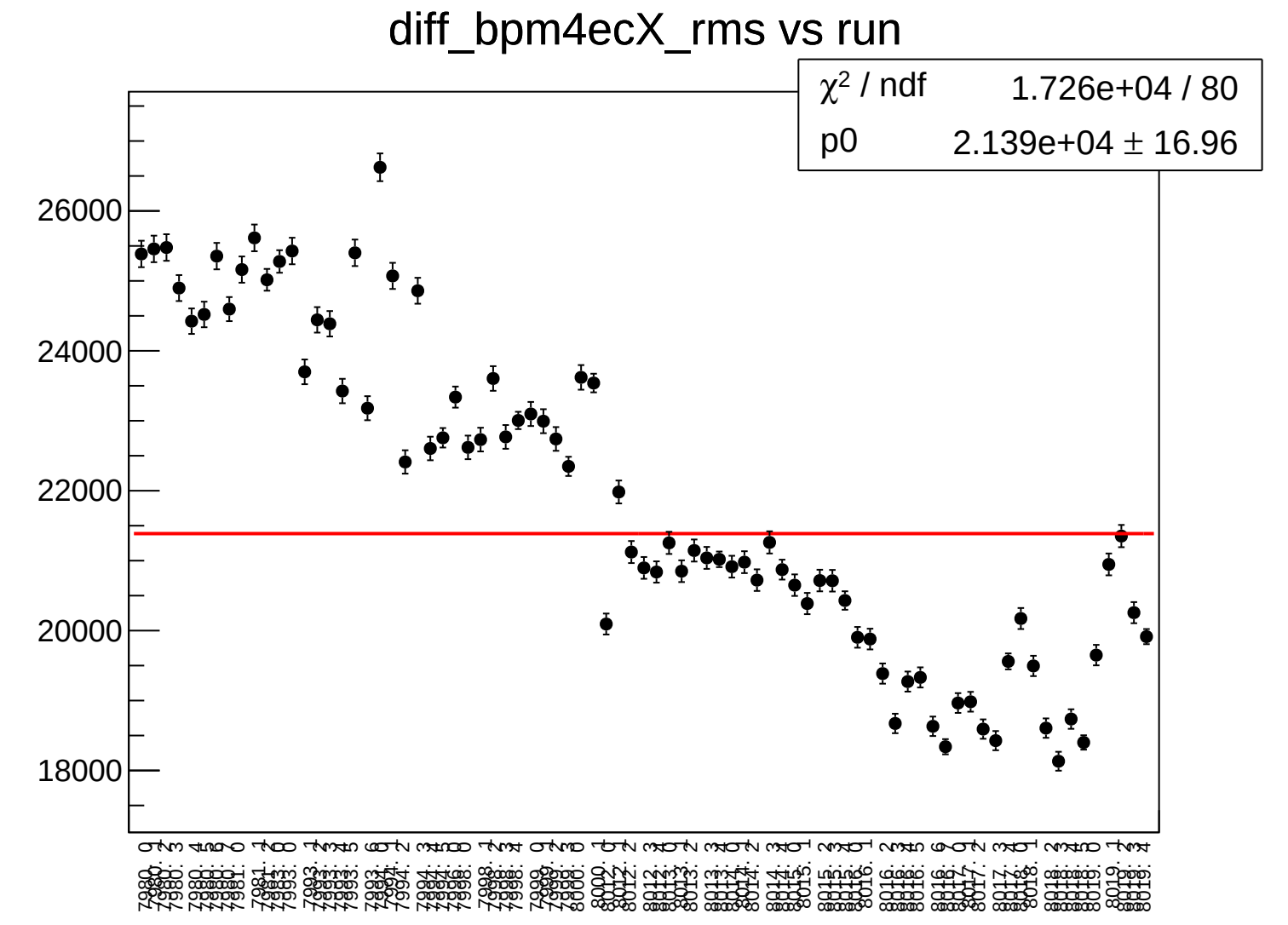

diff_bpm4acY_mean vs run
χ² / ndf 72.65 / 80
p0 7.491 ± 6.403
200
100
0
−100
−200
pull
Entries 81
Mean 44.14
Std Dev 52.59
2
1
0
−1
−2

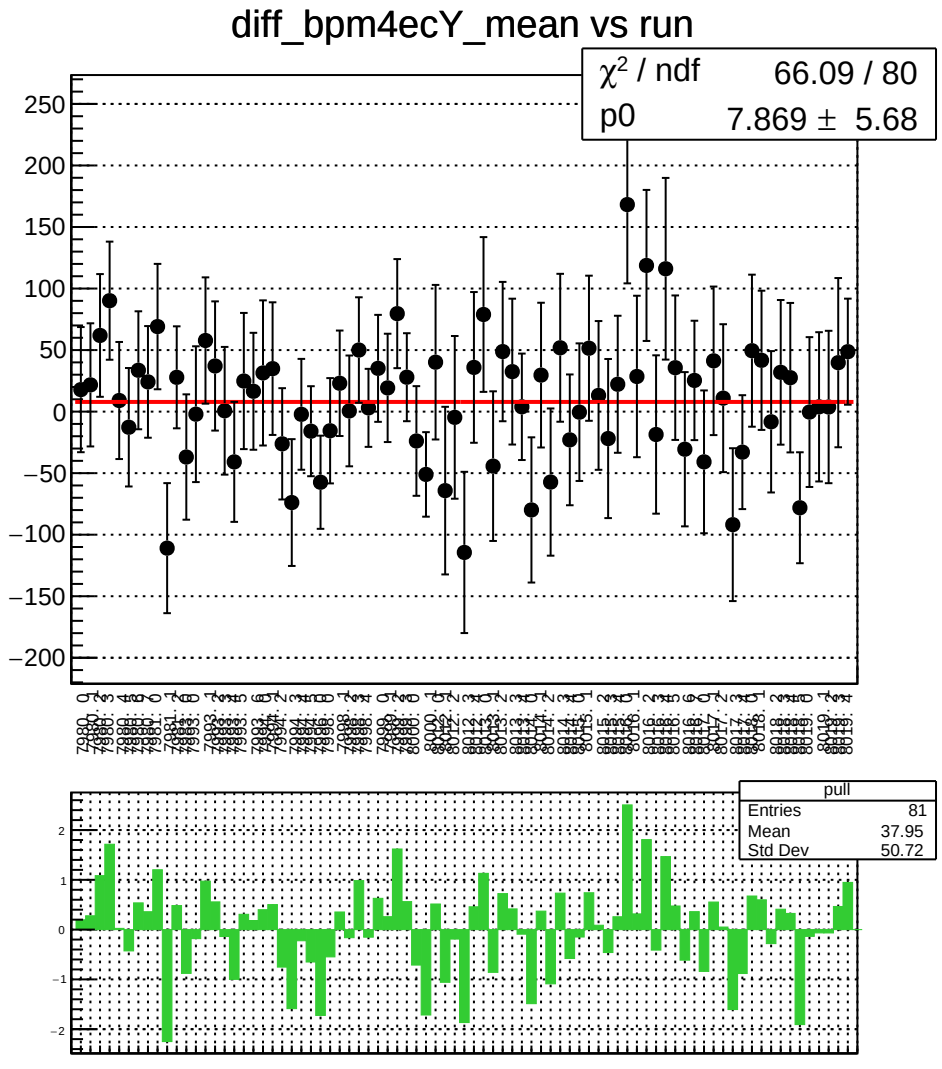

pull1D
Entries 81
Mean 0.02811
Std Dev 0.9466
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

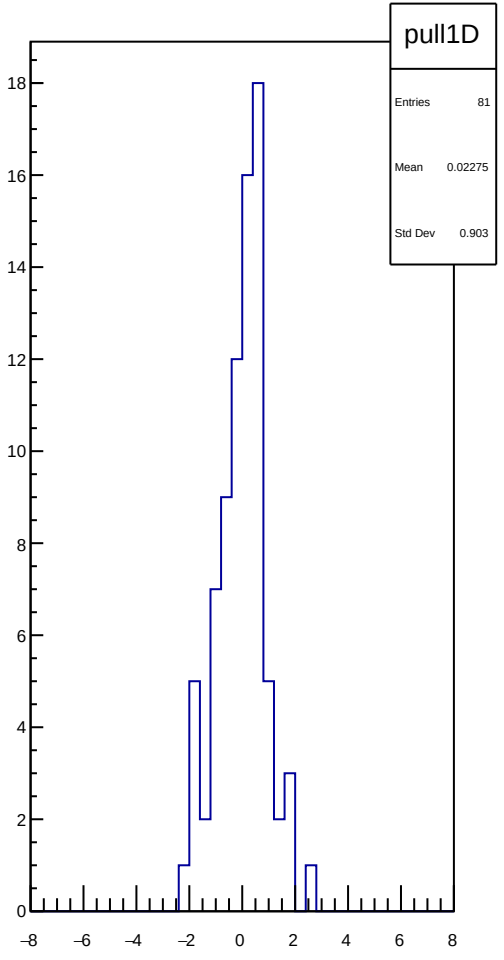

diff_bpm4acY_rms vs run
χ² / ndf 2.148e+04 / 80
p0 5703 ± 4.528
7500
7000
6500
6000
5500
5000
4500

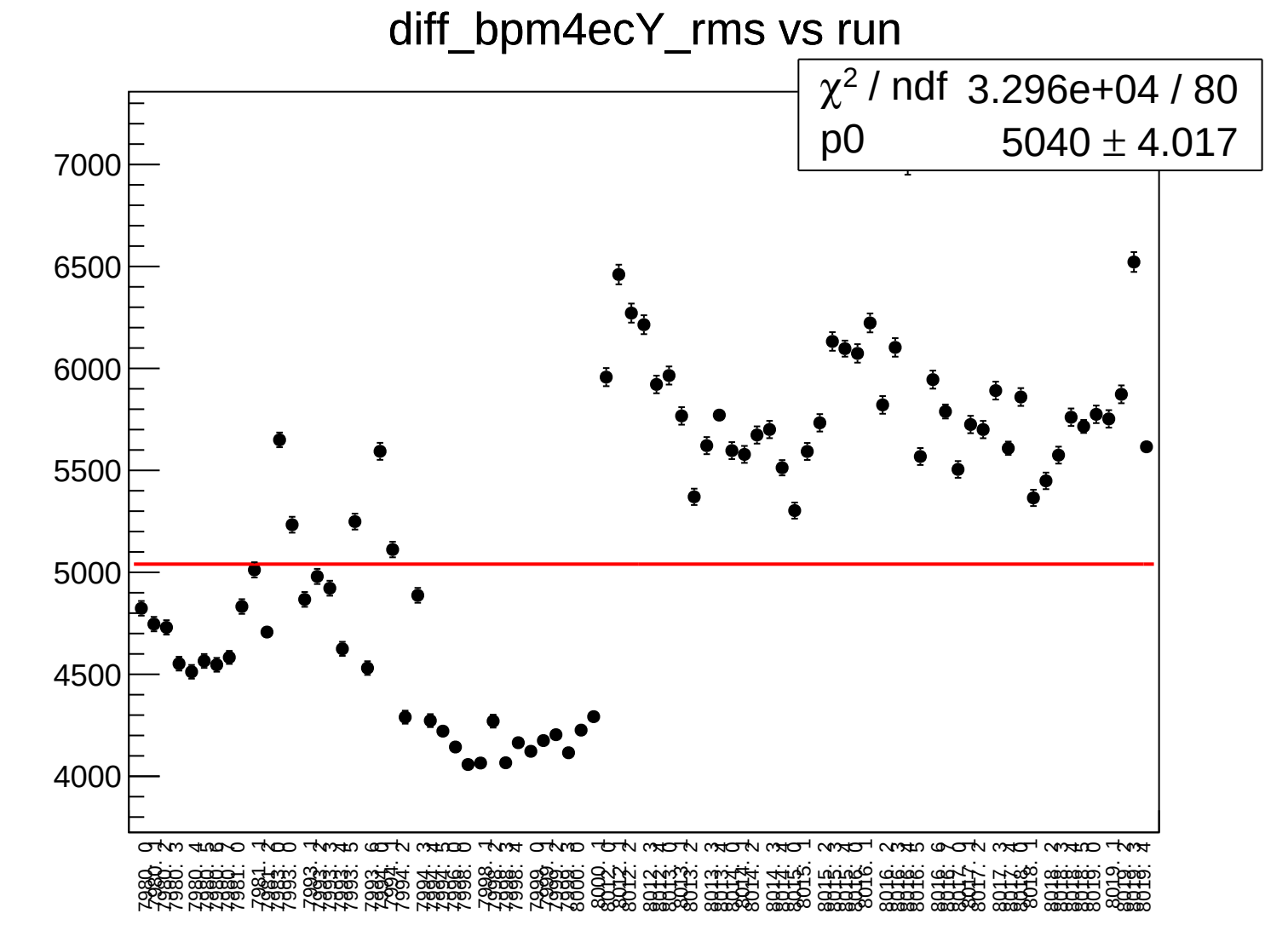

diff_bpm4ecX_mean vs run
χ² / ndf 101.4 / 80
p0 33.98 ± 23.98
pull
Entries 81
Mean −67.02
Std Dev 76.82

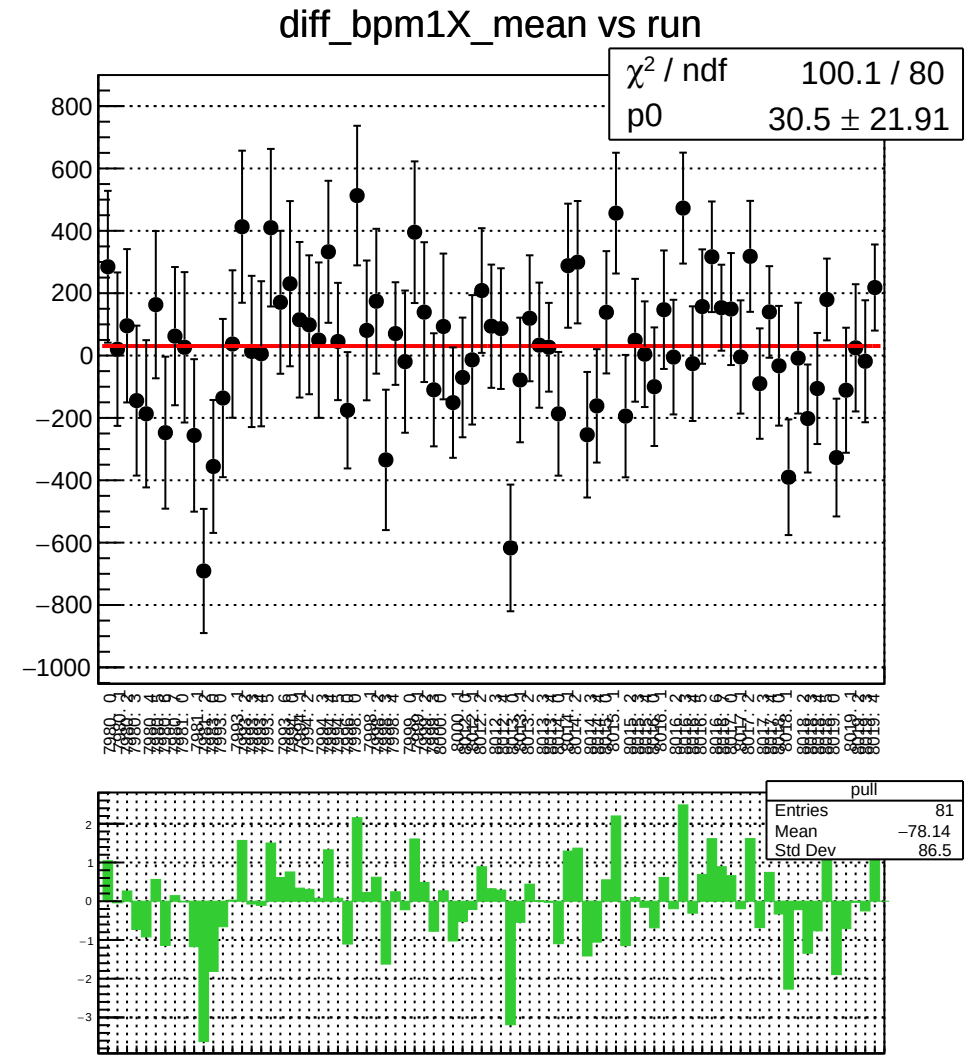

pull1D
Entries 81
Mean −0.01148
Std Dev 1.119

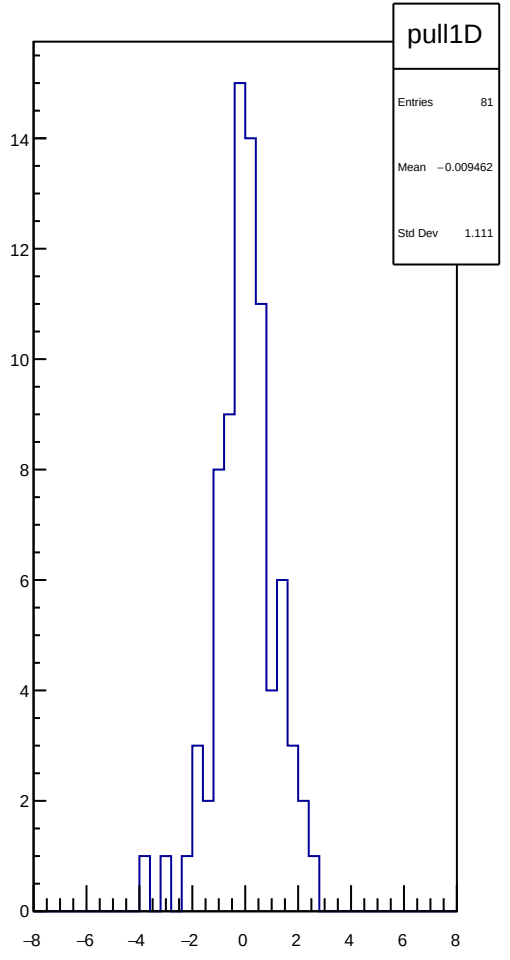

diff_bpm4ecX_rms vs run
χ² / ndf 1.726e+04 / 80
p0 2.139e+04 ± 16.96
26000
24000
22000
20000
18000

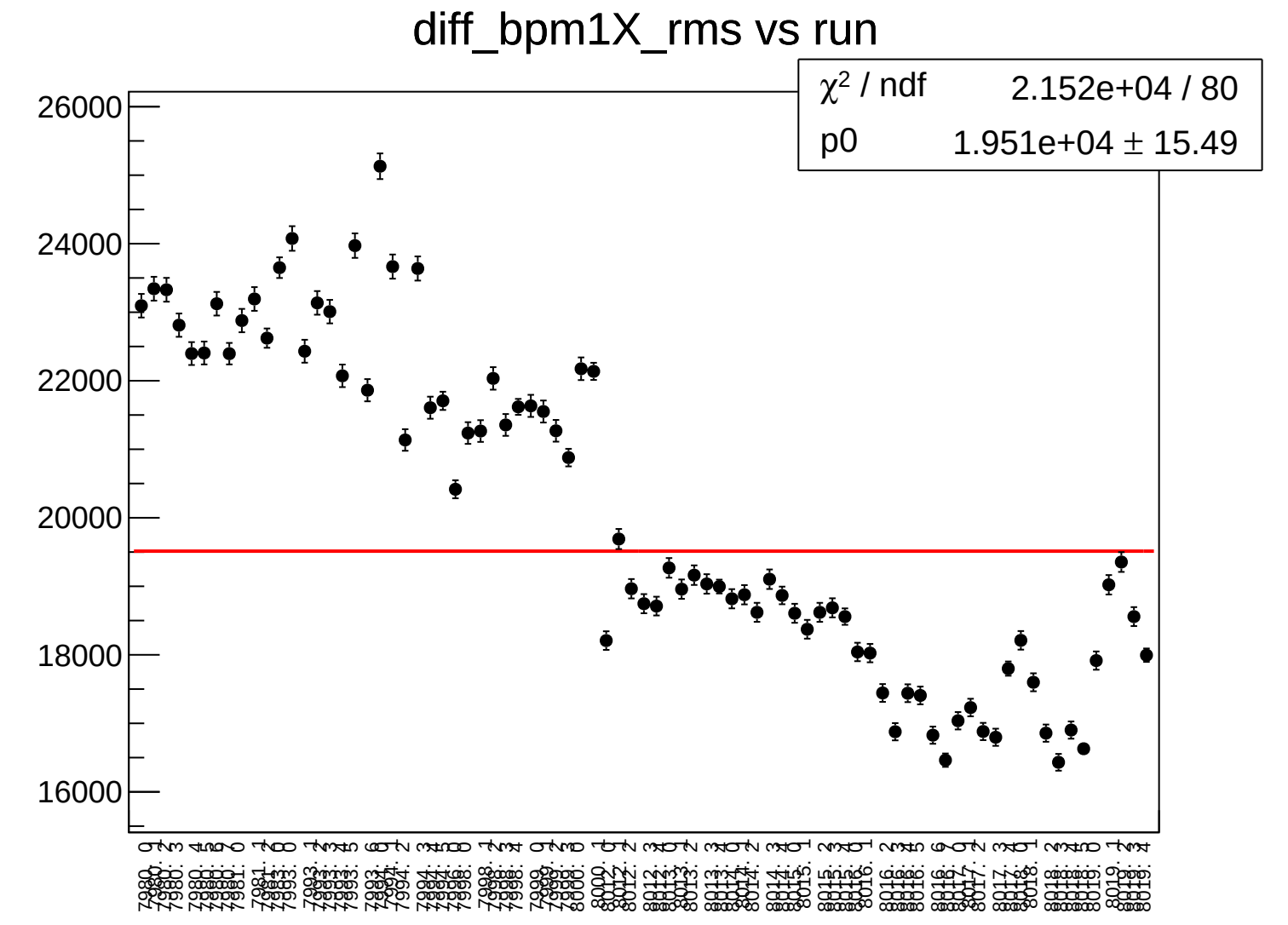

diff_bpm4ecY_mean vs run
χ² / ndf 66.09 / 80
p0 7.869 ± 5.68
pull
Entries 81
Mean 37.95
Std Dev 50.72

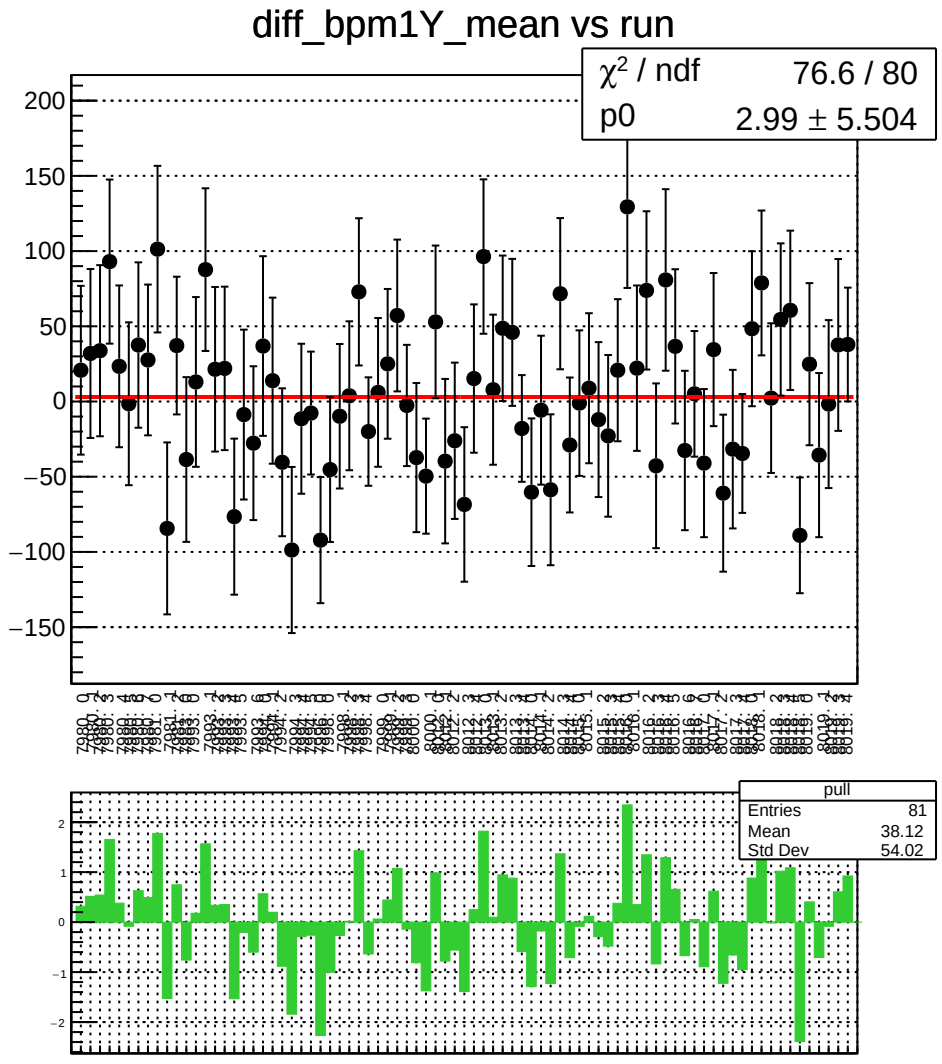

pull1D
Entries 81
Mean 0.02275
Std Dev 0.903

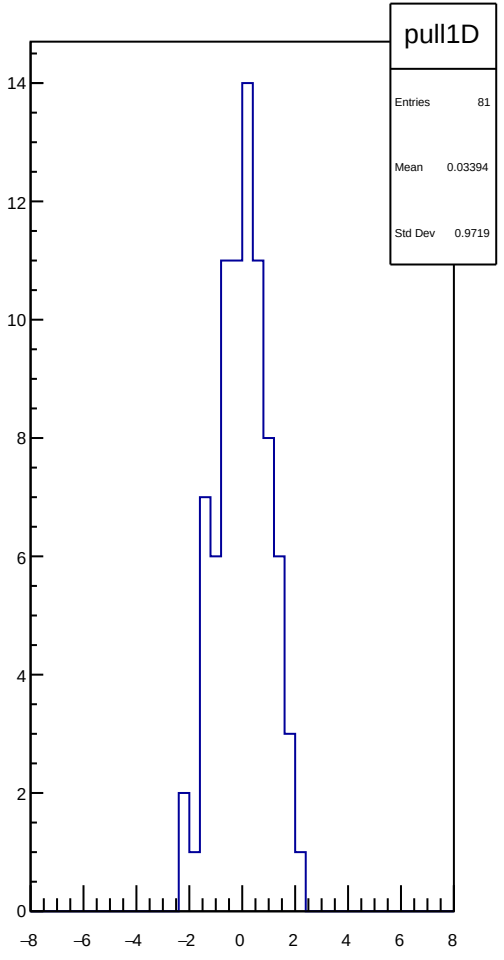

diff_bpm4ecY_rms vs run
χ² / ndf 3.296e+04 / 80
p0 5040 ± 4.017
7000
6500
6000
5500
5000
4500
4000

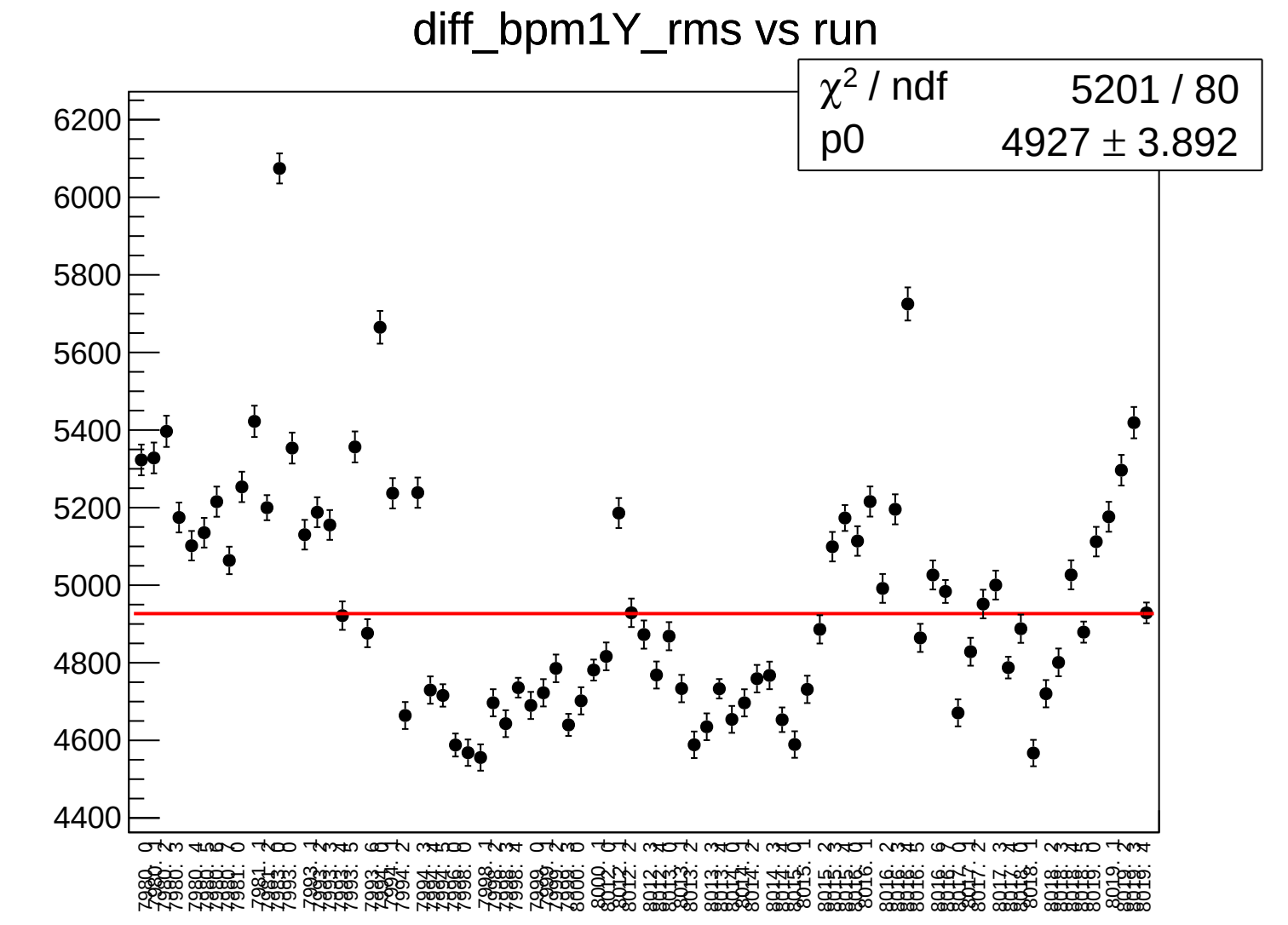

diff_bpm1X_mean vs run
χ² / ndf 100.1 / 80
p0 30.5 ± 21.91
pull
Entries 81
Mean −78.14
Std Dev 86.5

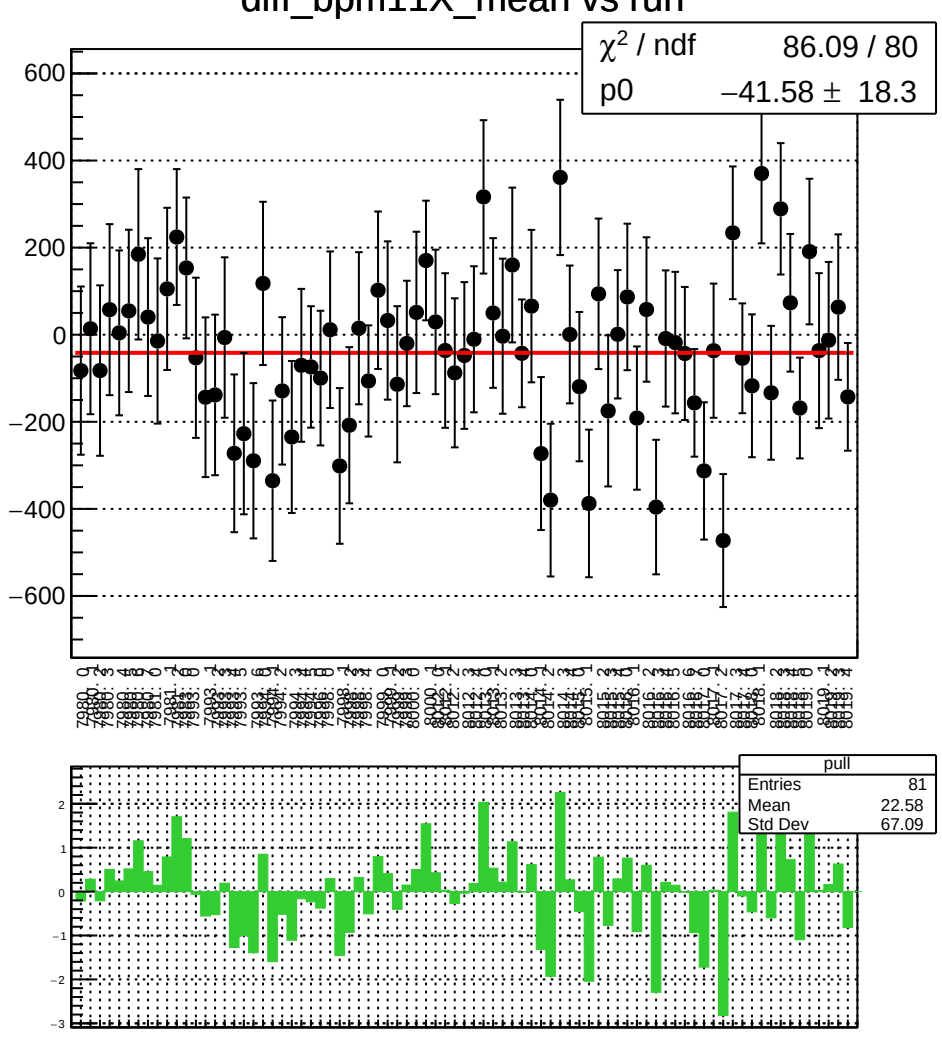

pull1D
Entries 81
Mean −0.009462
Std Dev 1.111

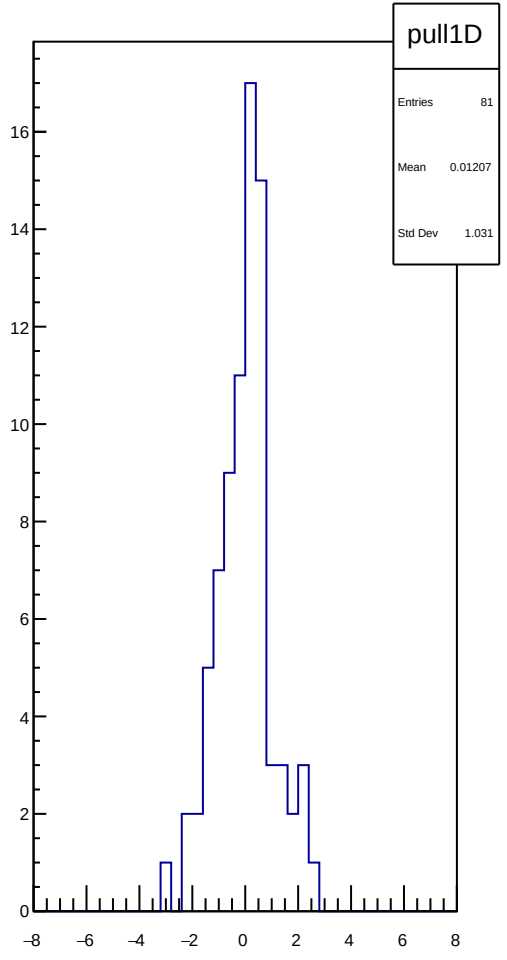

diff_bpm1X_rms vs run
χ² / ndf 2.152e+04 / 80
p0 1.951e+04 ± 15.49
26000
24000
22000
20000
18000
16000

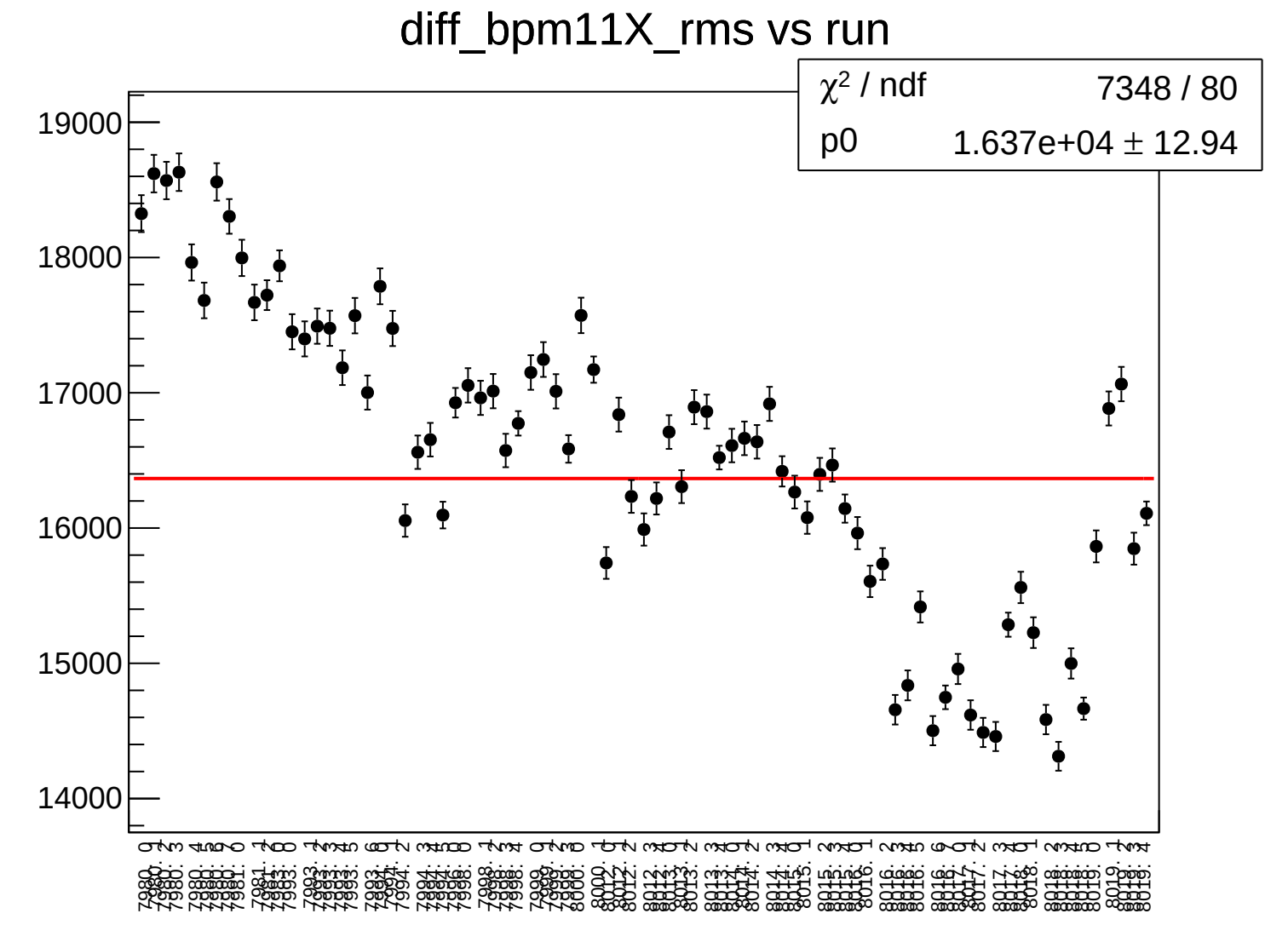

diff_bpm1Y_mean vs run
χ² / ndf 76.6 / 80
p0 2.99 ± 5.504
pull
Entries 81
Mean 38.12
Std Dev 54.02

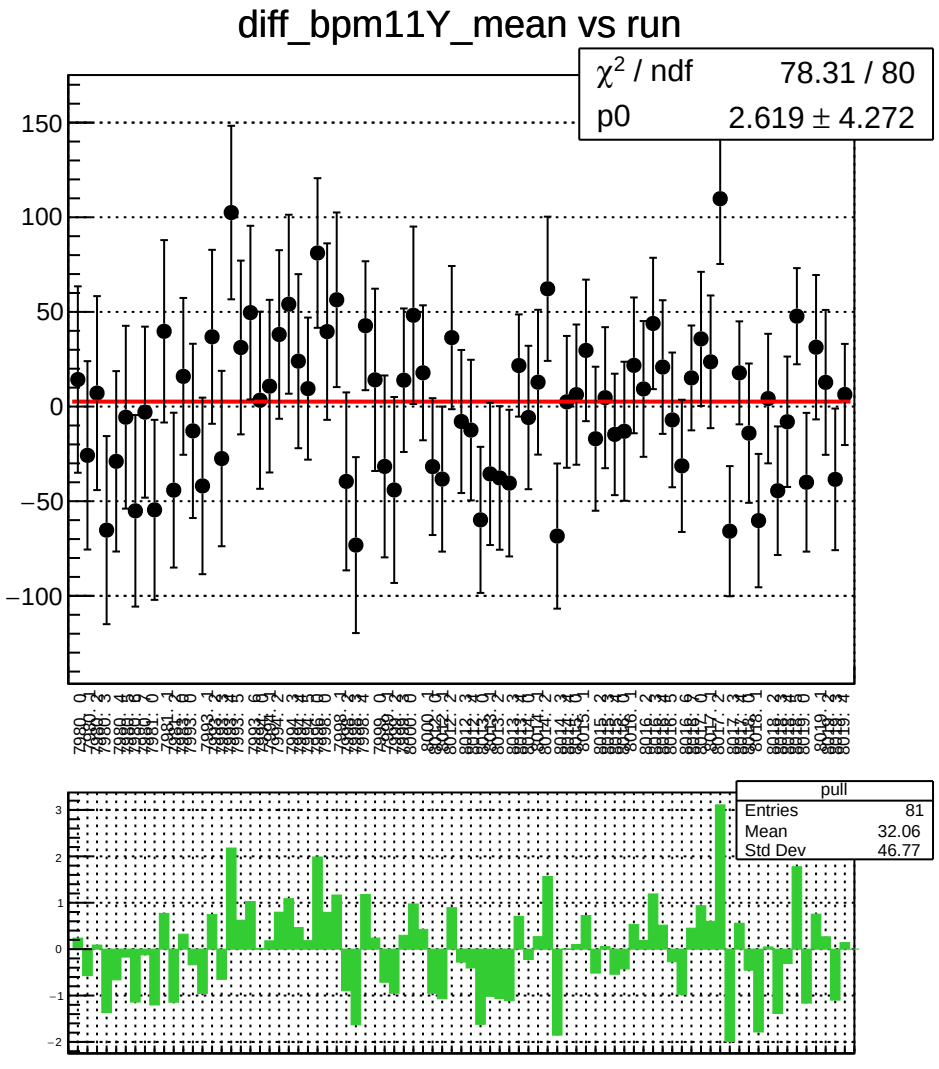

pull1D
Entries 81
Mean 0.03394
Std Dev 0.9719

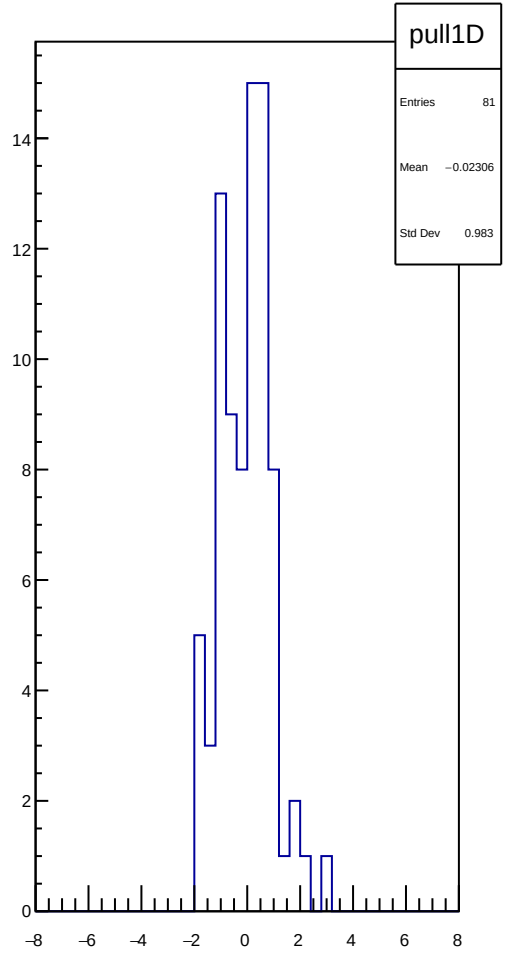

diff_bpm1Y_rms vs run
χ² / ndf 5201 / 80
p0 4927 ± 3.892
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400

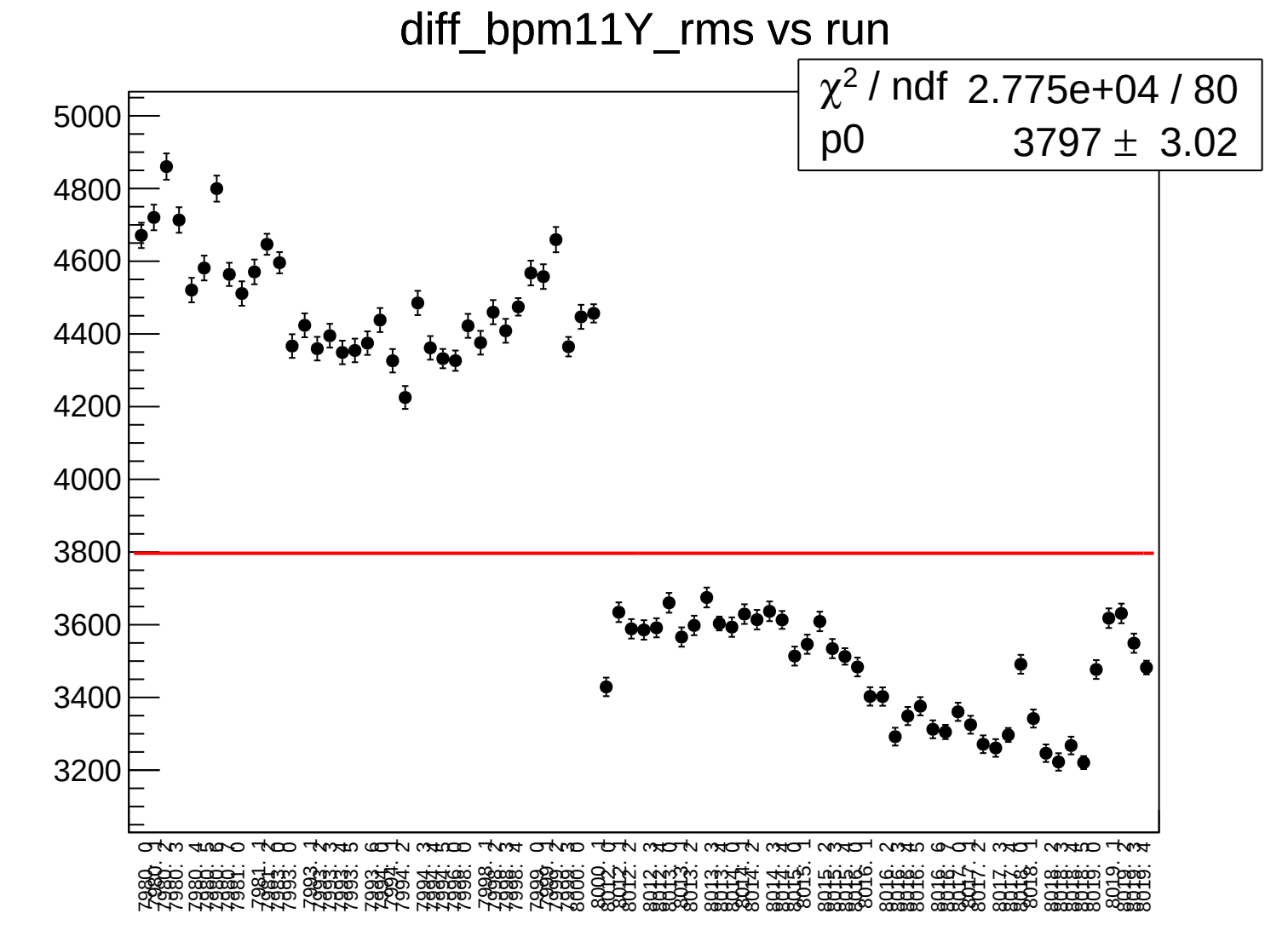

diff_bpm11X_mean vs run
χ^2 / ndf 86.09 / 80
p0 −41.58 ± 18.3
600
400
200
0
−200
−400
−600
pull
Entries 81
Mean 22.58
Std Dev 67.09
2
1
0
−1
−2
−3

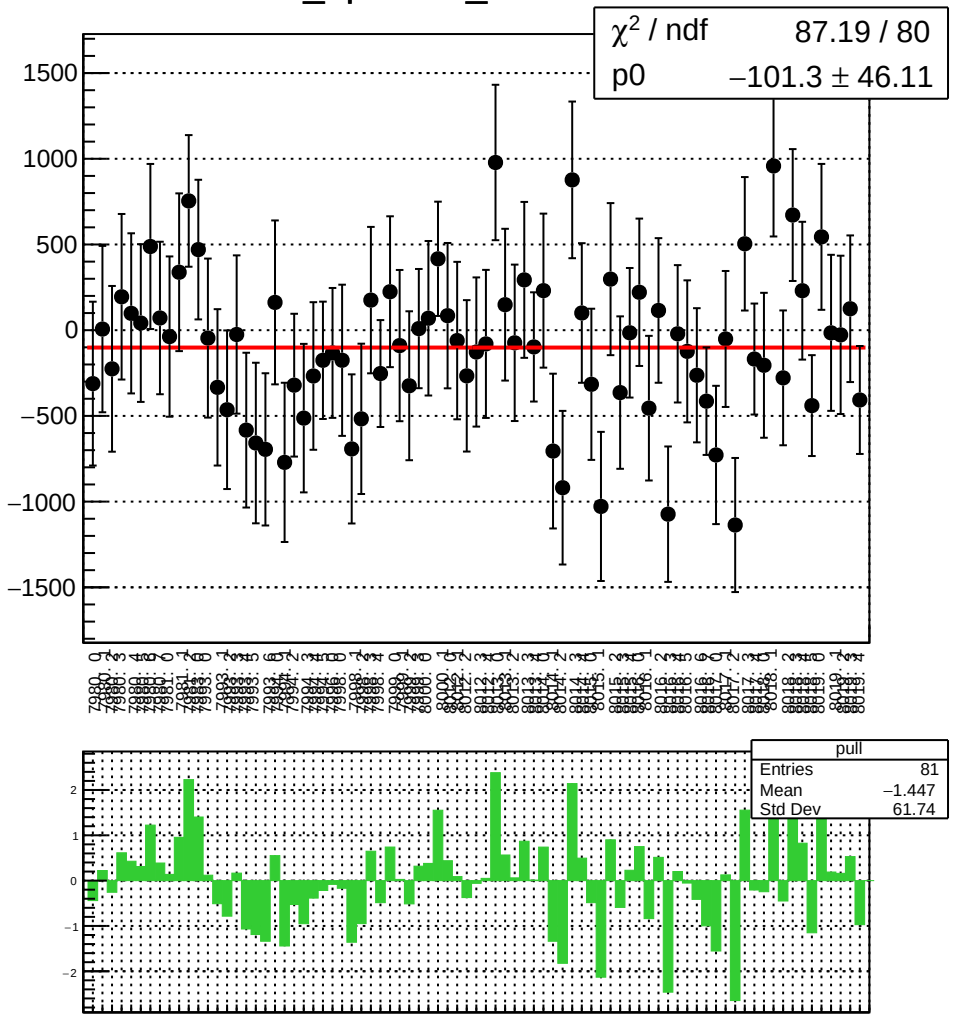

pull1D
Entries 81
Mean 0.01207
Std Dev 1.031
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

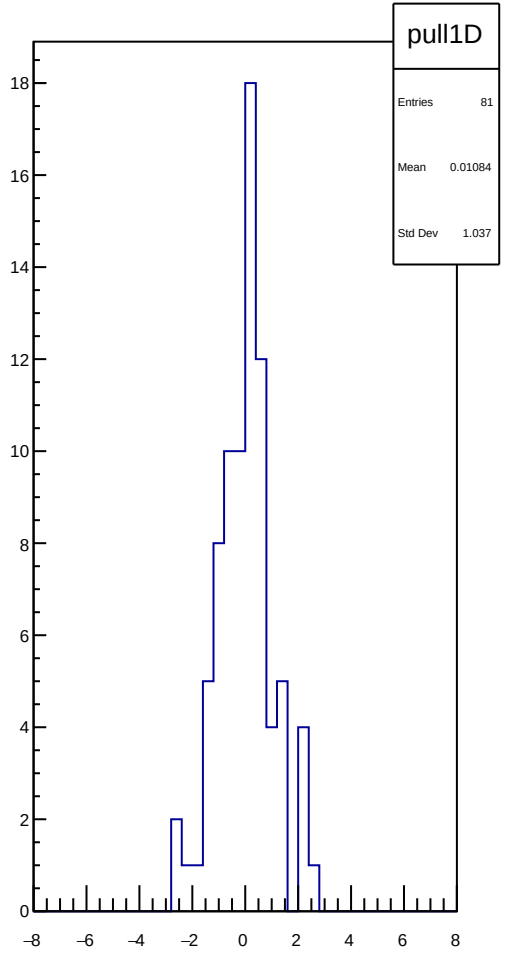

diff_bpm11X_rms vs run
χ² / ndf 7348 / 80
p0 1.637e+04 ± 12.94
19000
18000
17000
16000
15000
14000

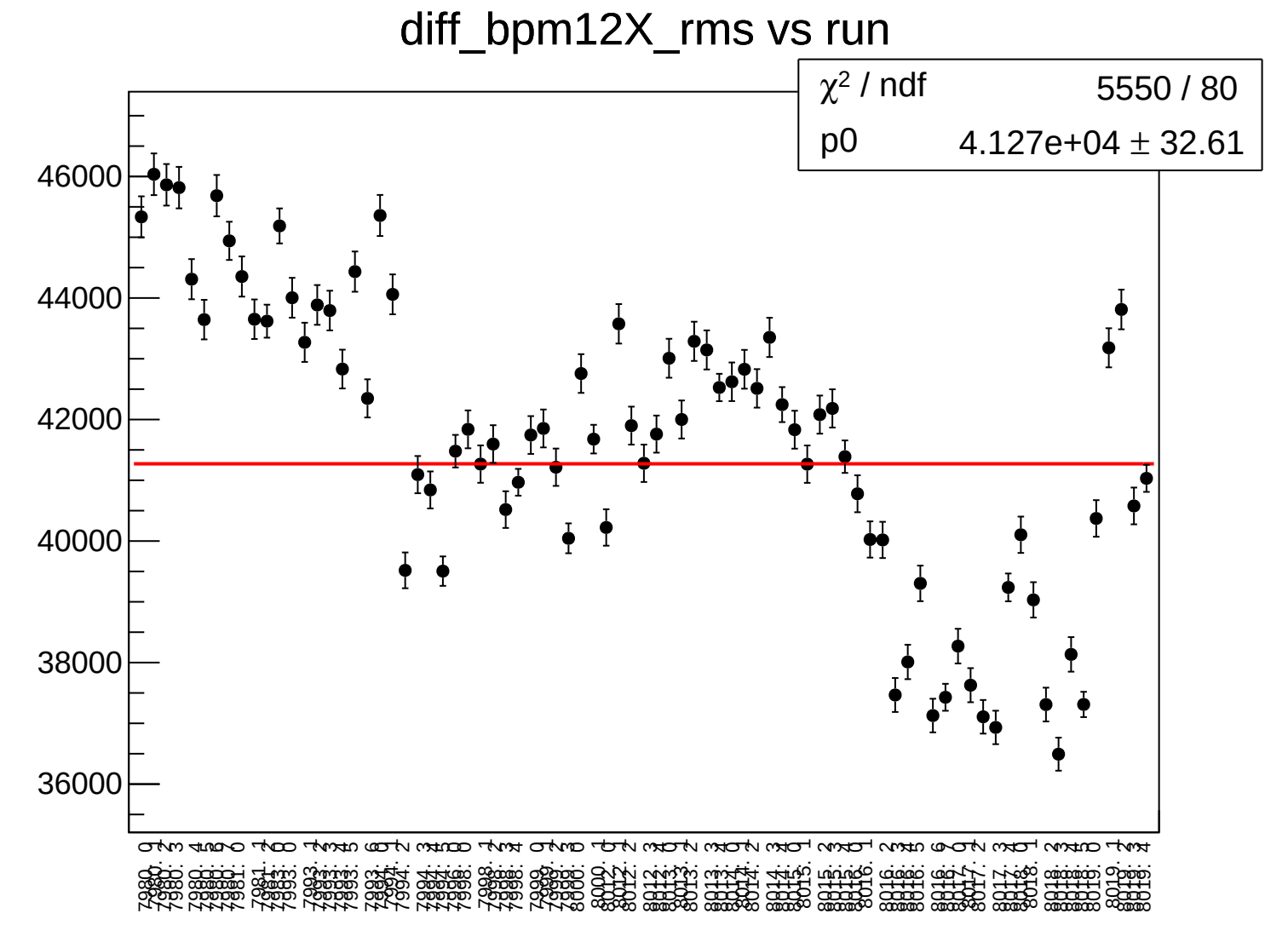

diff_bpm11Y_mean vs run
χ^2 / ndf 78.31 / 80
p0 2.619 ± 4.272
150
100
50
0
−50
−100
pull
Entries 81
Mean 32.06
Std Dev 46.77
3
2
1
0
−1
−2

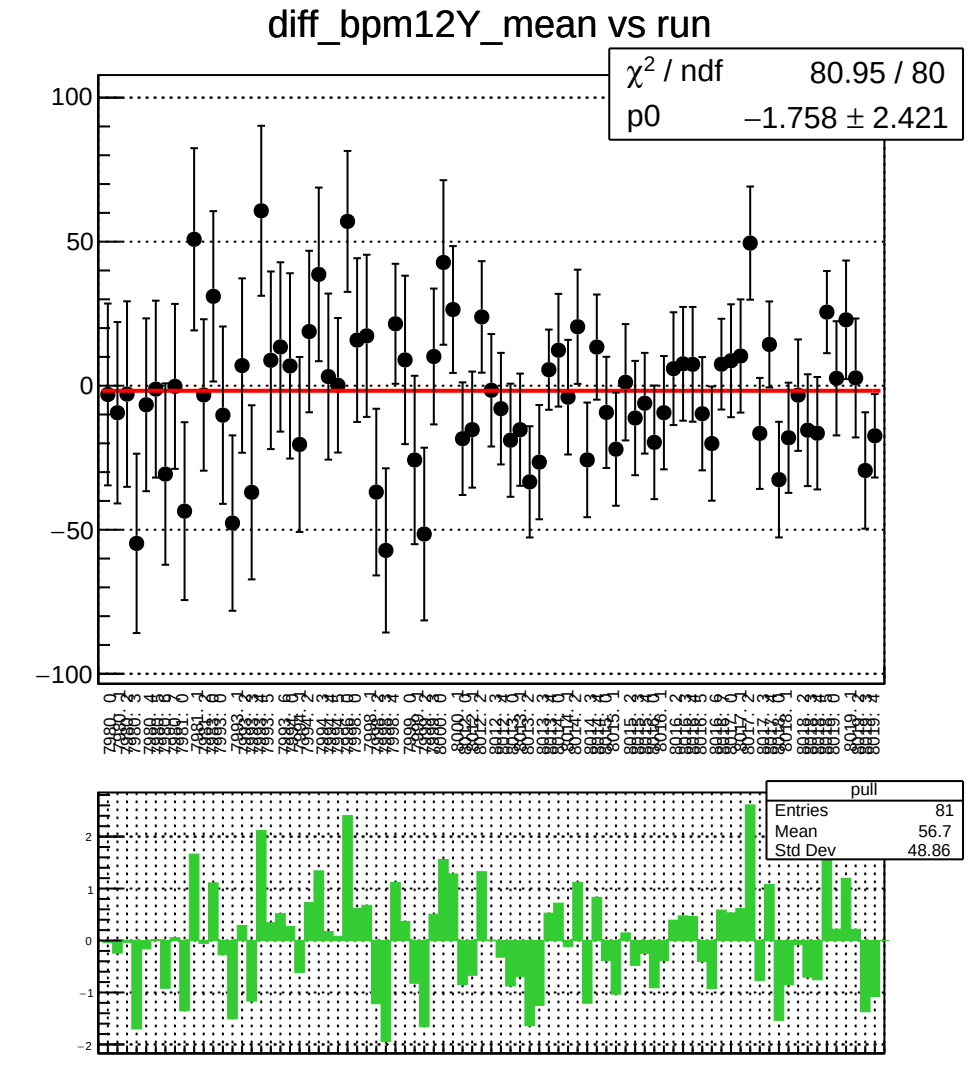

pull1D
Entries 81
Mean −0.02306
Std Dev 0.983
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

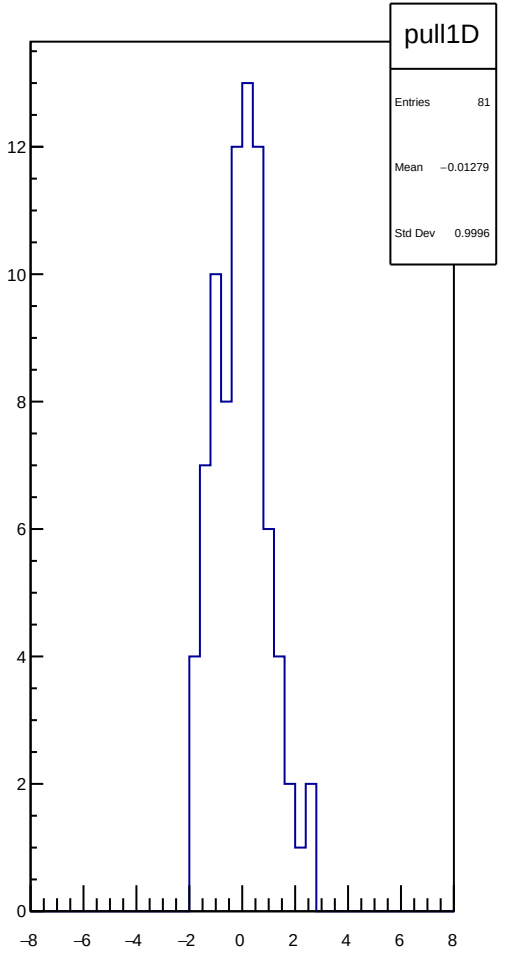

diff_bpm11Y_rms vs run
χ² / ndf 2.775e+04 / 80
p0 3797 ± 3.02
5000
4800
4600
4400
4200
4000
3800
3600
3400
3200

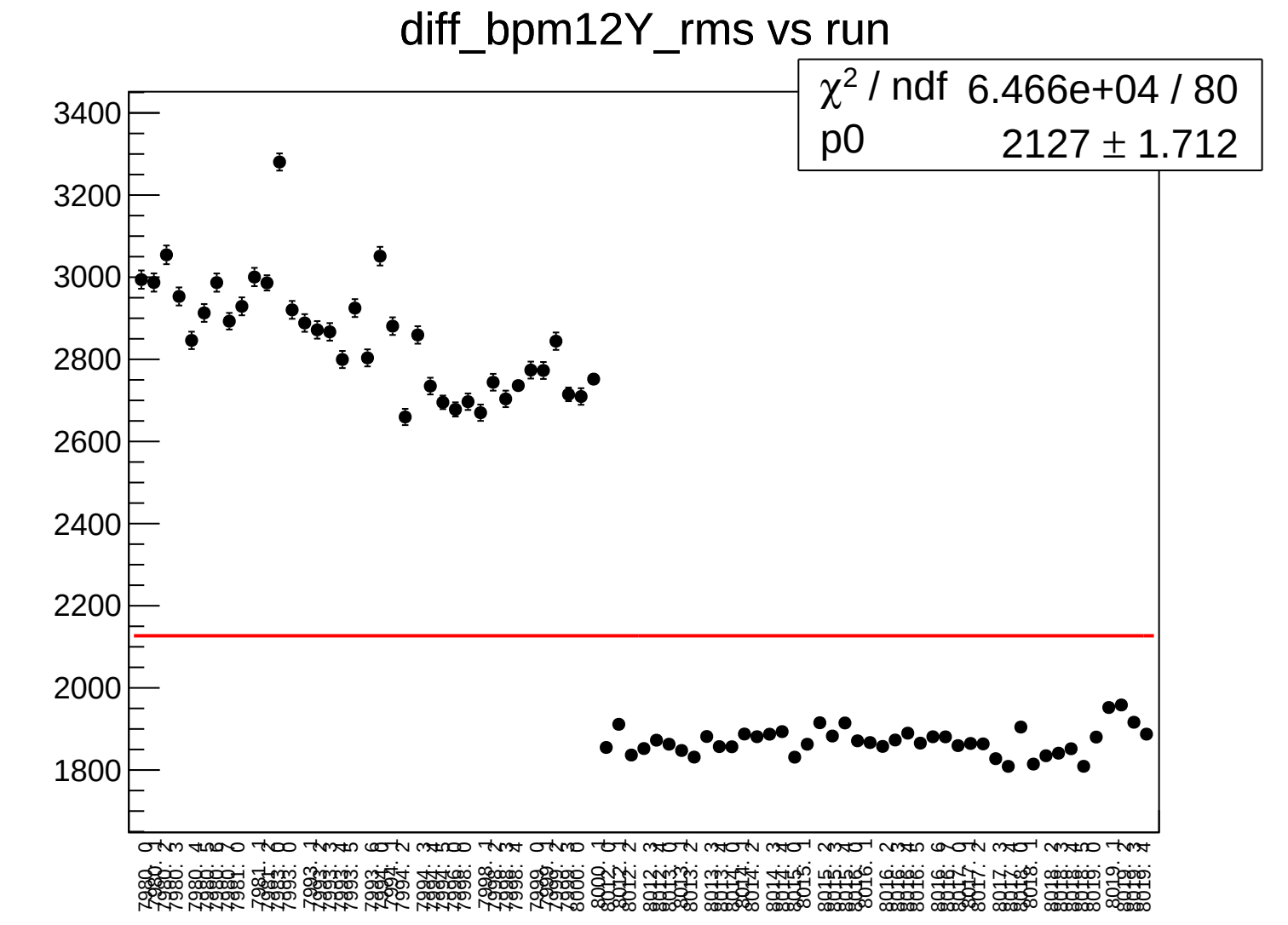

diff_bpm12X_mean vs run
χ^2 / ndf 87.19 / 80
p0 −101.3 ± 46.11
1500
1000
500
0
−500
−1000
−1500
pull
Entries 81
Mean −1.447
Std Dev 61.74
2
1
0
−1
−2

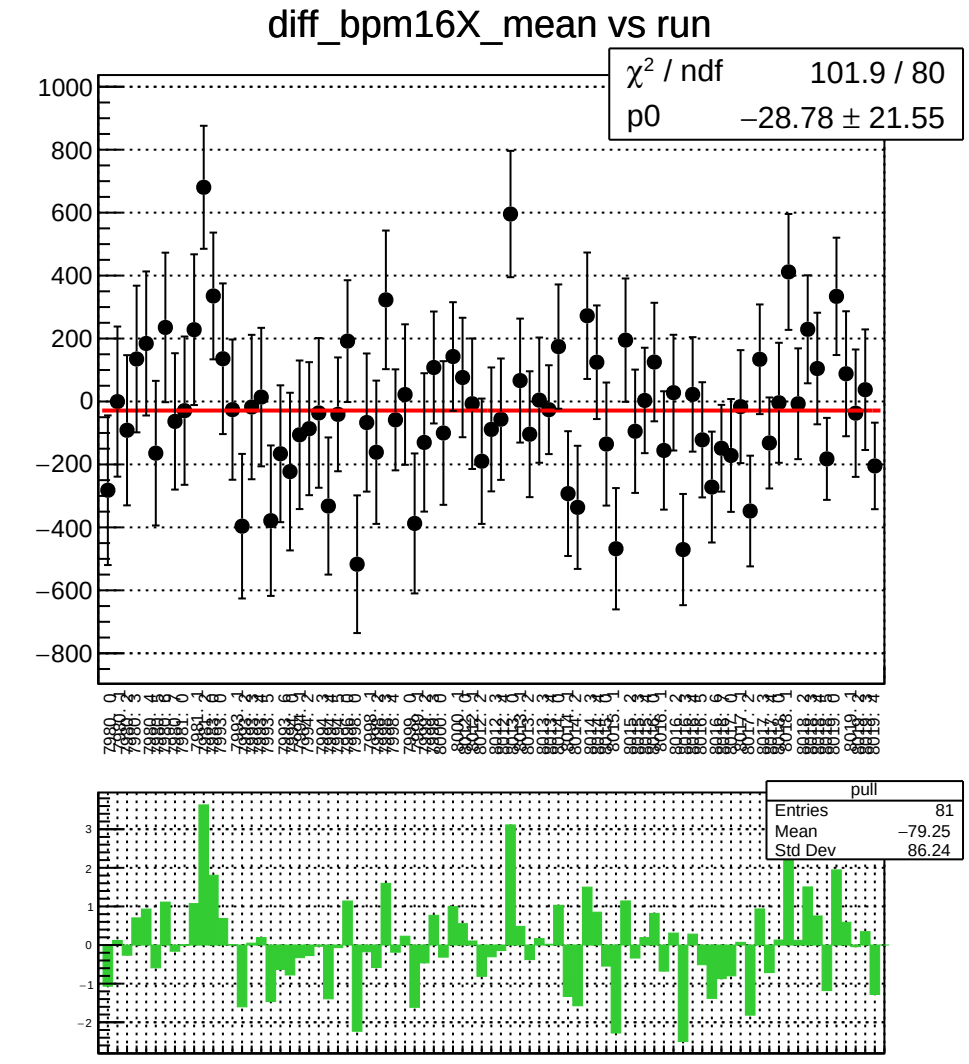

pull1D
Entries 81
Mean 0.01084
Std Dev 1.037
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

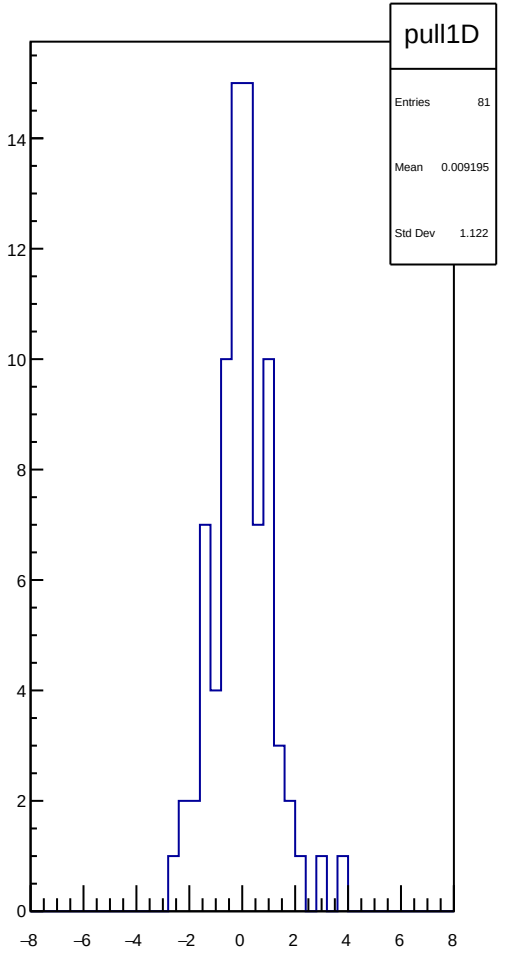

diff_bpm12X_rms vs run
χ² / ndf 5550 / 80
p0 4.127e+04 ± 32.61
46000
44000
42000
40000
38000
36000

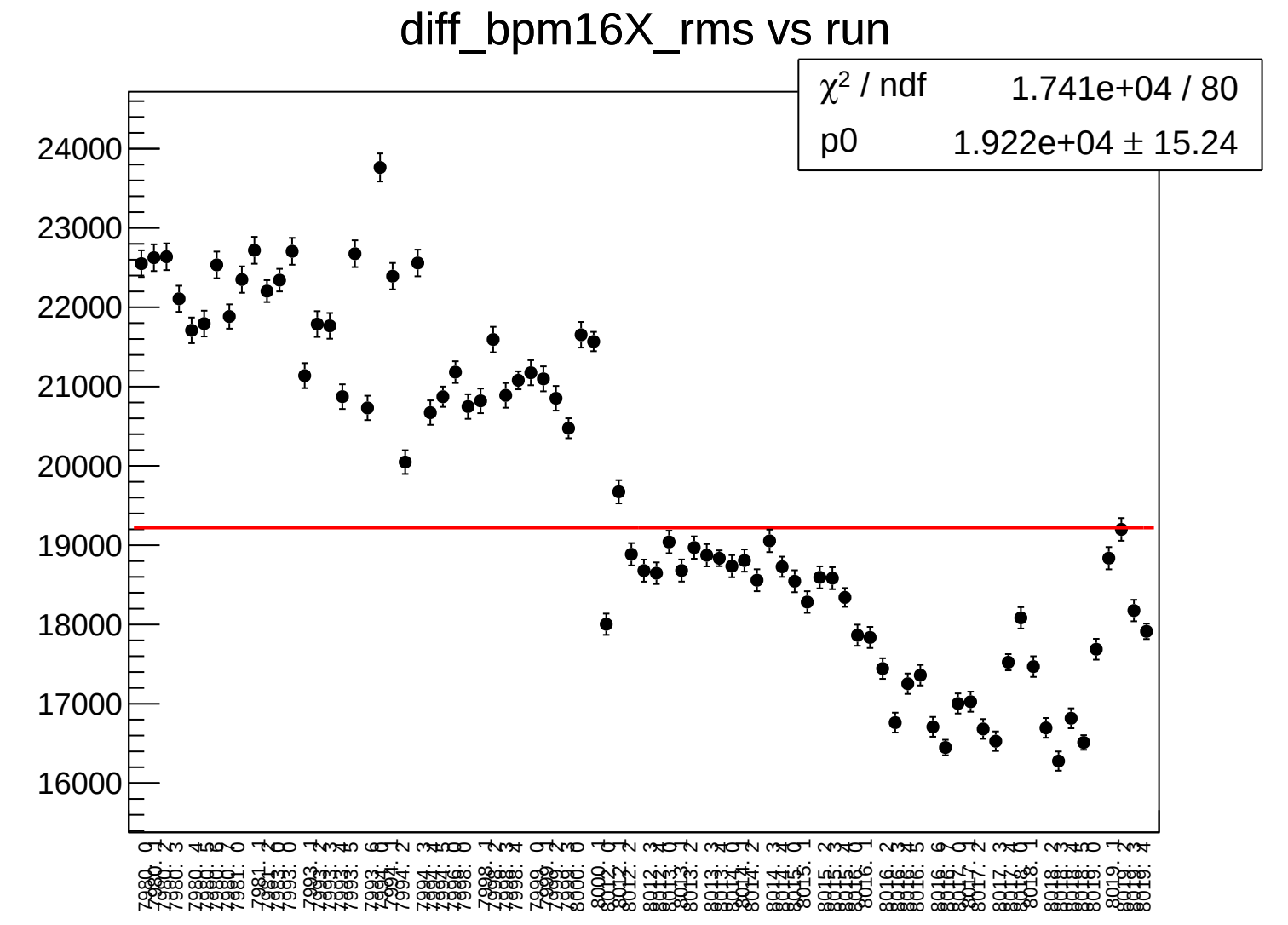

diff_bpm12Y_mean vs run
χ² / ndf 80.95 / 80
p0 −1.758 ± 2.421
pull
Entries 81
Mean 56.7
Std Dev 48.86

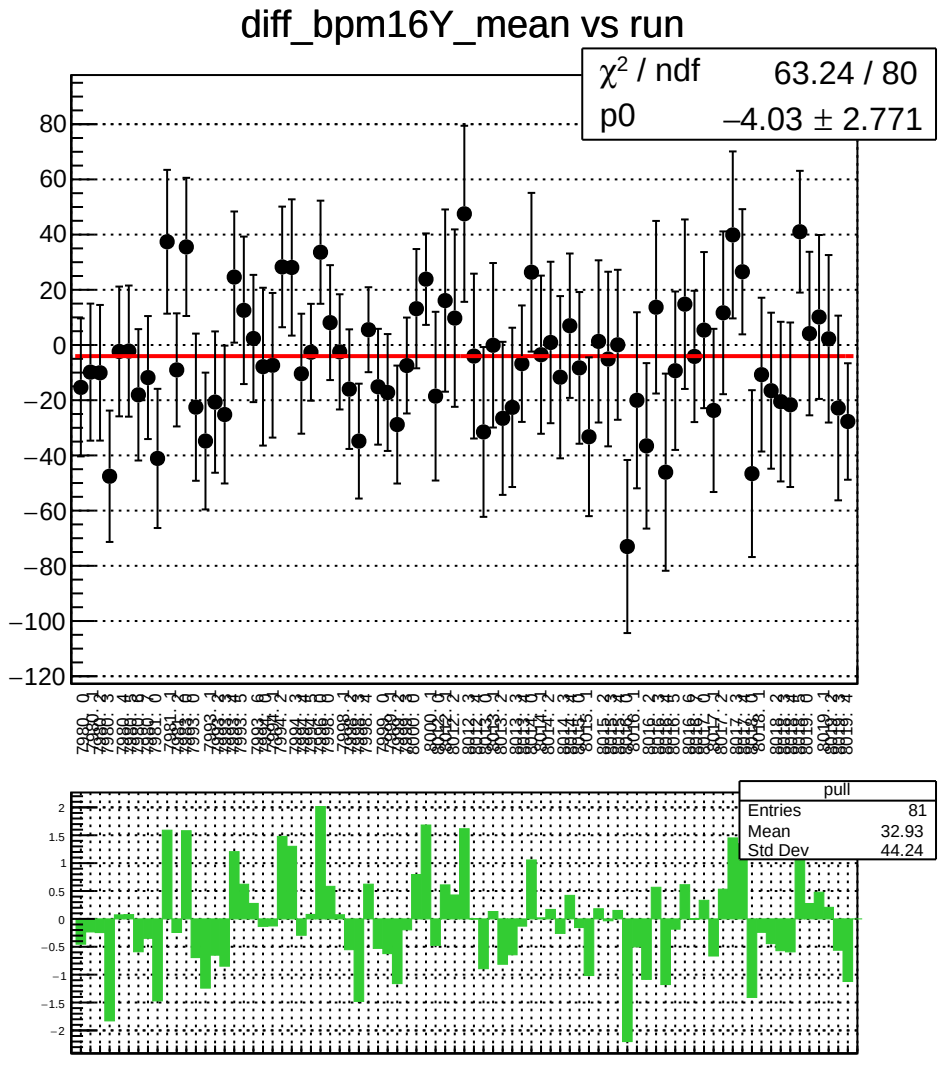

pull1D
Entries 81
Mean −0.01279
Std Dev 0.9996

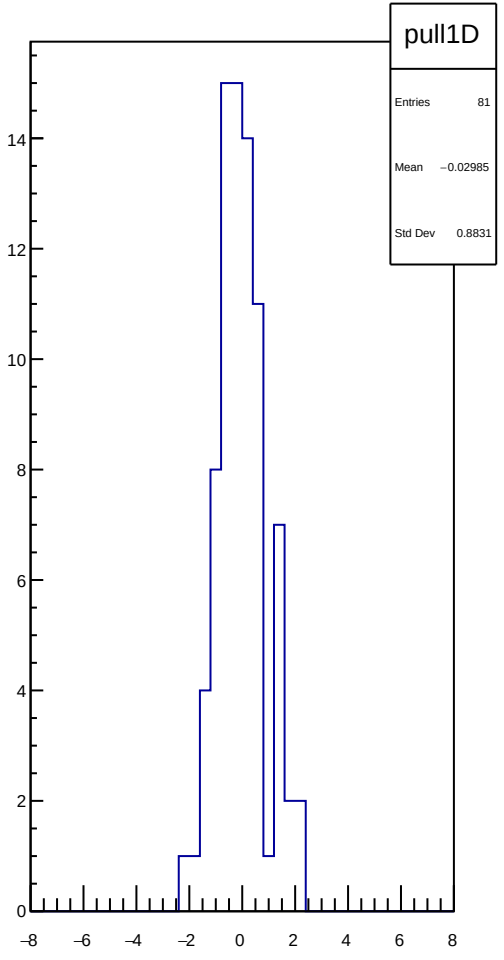

diff_bpm12Y_rms vs run
χ² / ndf 6.466e+04 / 80
p0 2127 ± 1.712
3400
3200
3000
2800
2600
2400
2200
2000
1800

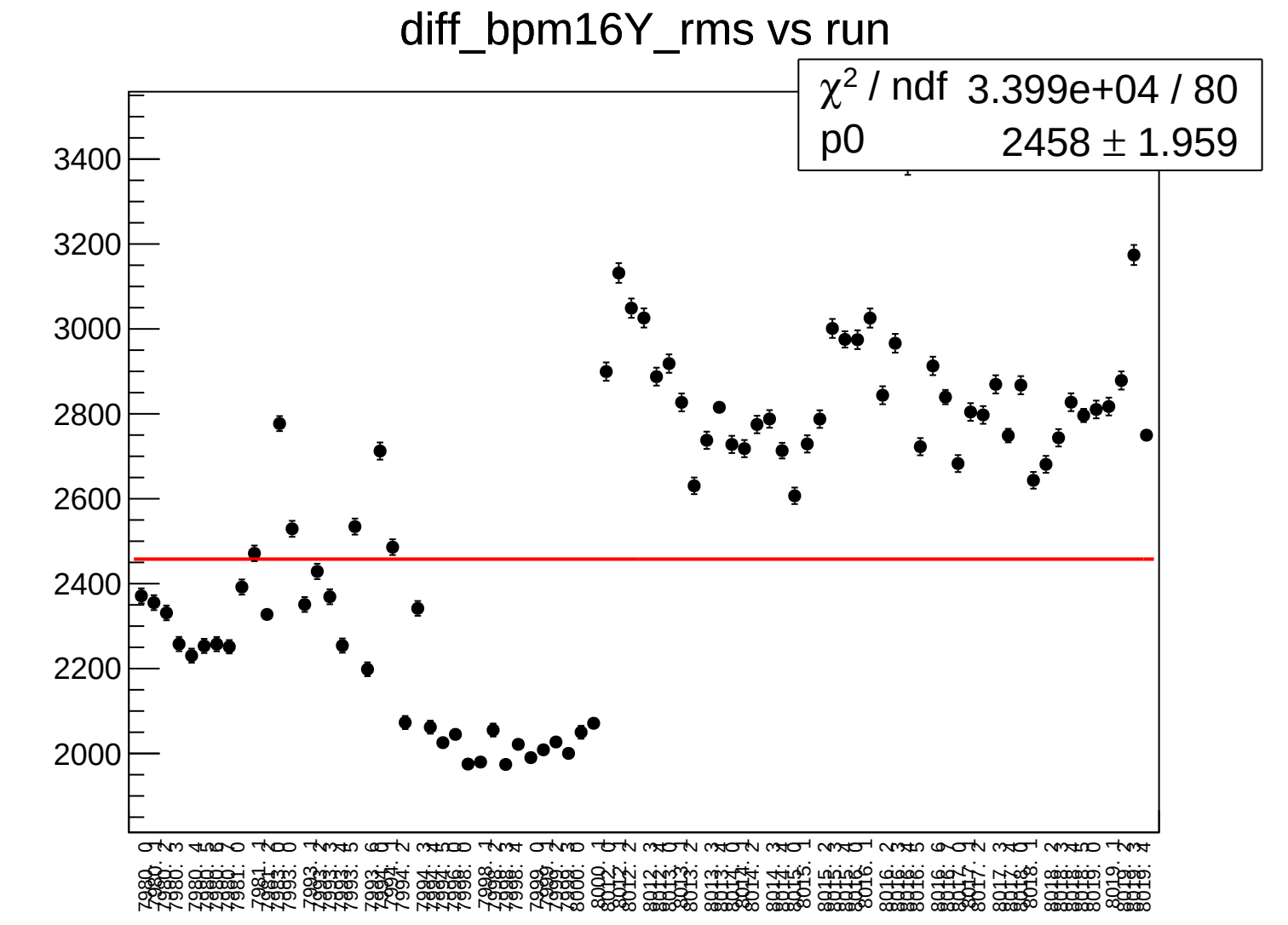

diff_bpm16X_mean vs run
χ² / ndf 101.9 / 80
p0 −28.78 ± 21.55
pull
Entries 81
Mean −79.25
Std Dev 86.24

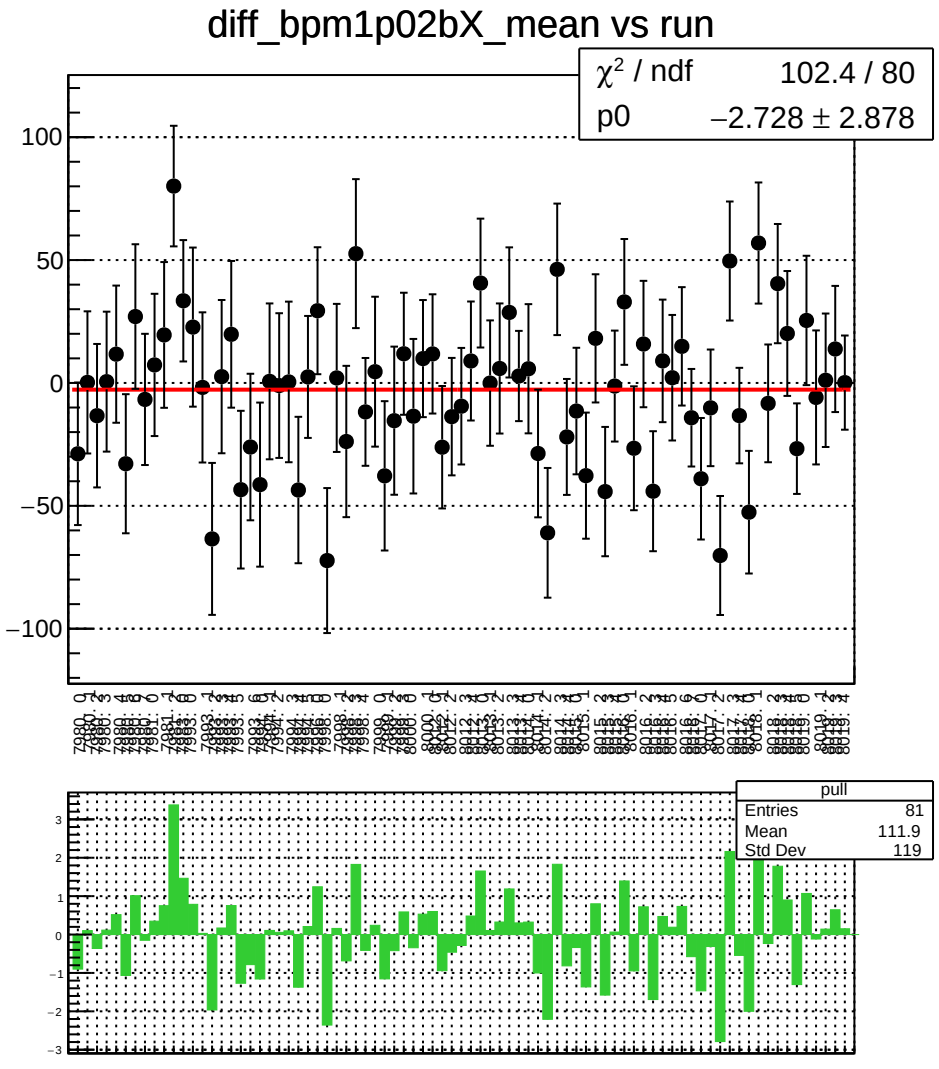

pull1D
Entries 81
Mean 0.009195
Std Dev 1.122

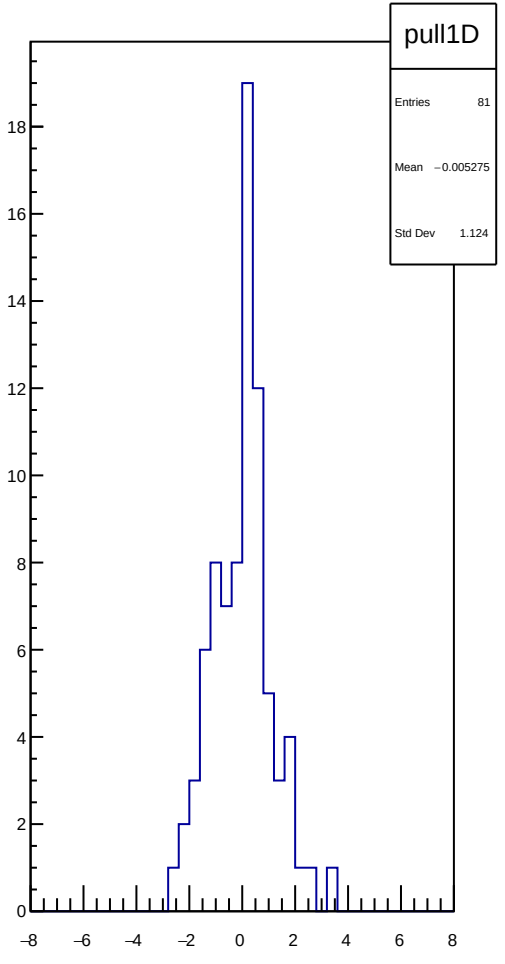

diff_bpm16X_rms vs run
χ² / ndf 1.741e+04 / 80
p0 1.922e+04 ± 15.24
24000
23000
22000
21000
20000
19000
18000
17000
16000

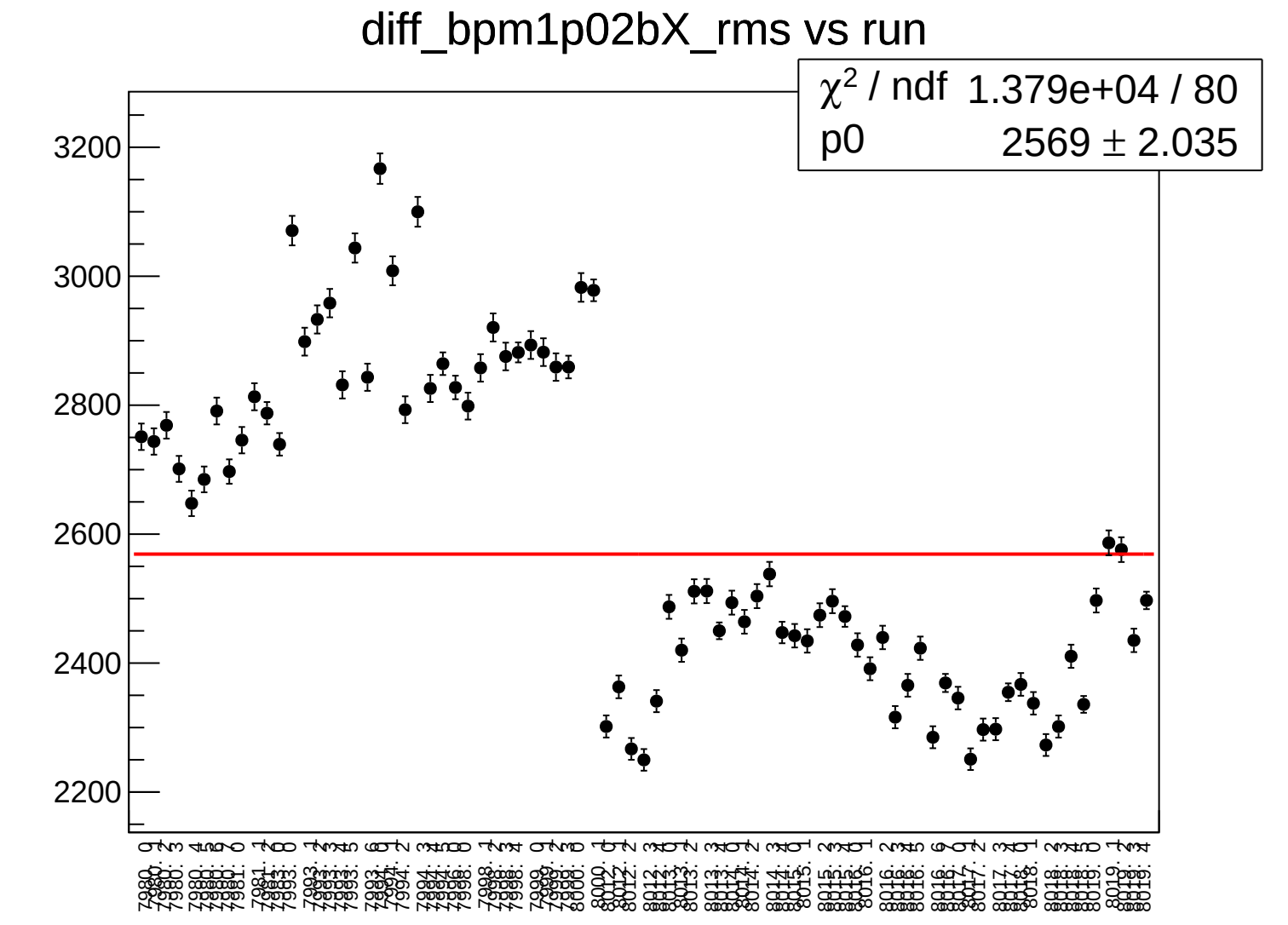

diff_bpm16Y_mean vs run
χ² / ndf 63.24 / 80
p0 −4.03 ± 2.771
pull
Entries 81
Mean 32.93
Std Dev 44.24

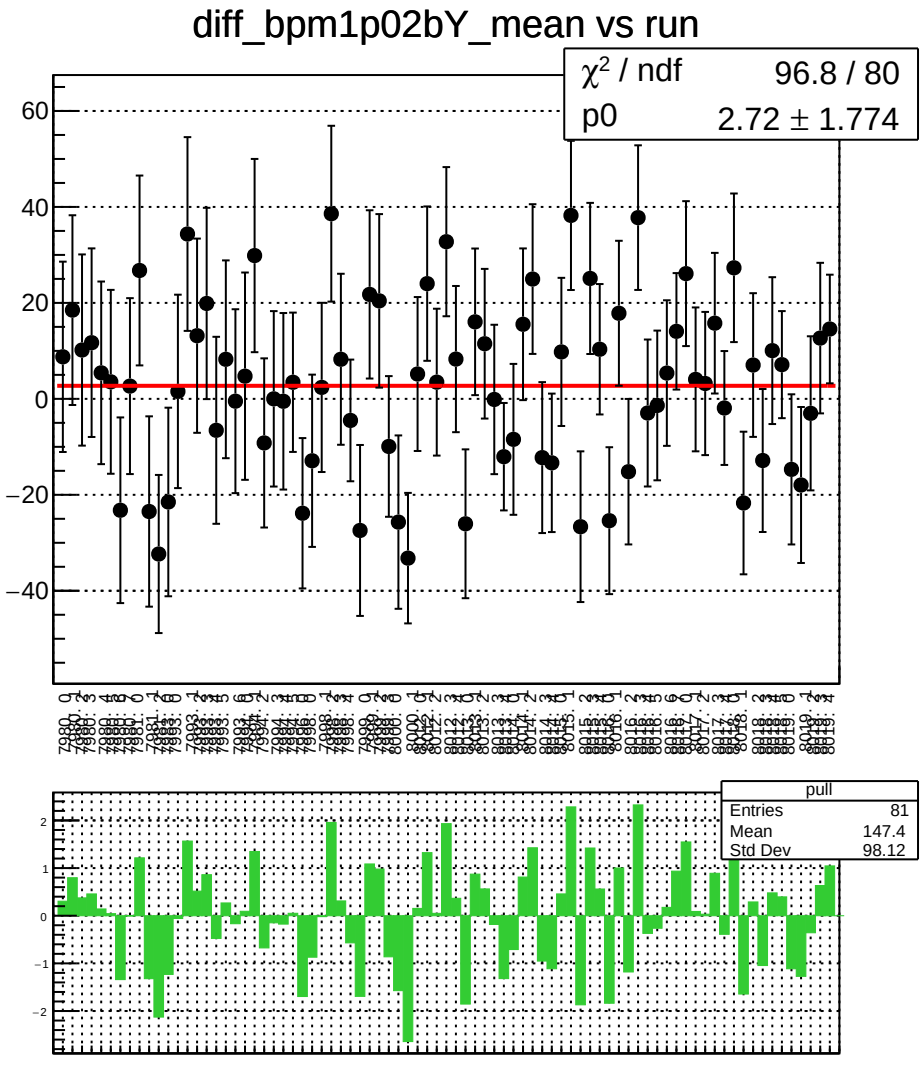

pull1D
Entries 81
Mean −0.02985
Std Dev 0.8831

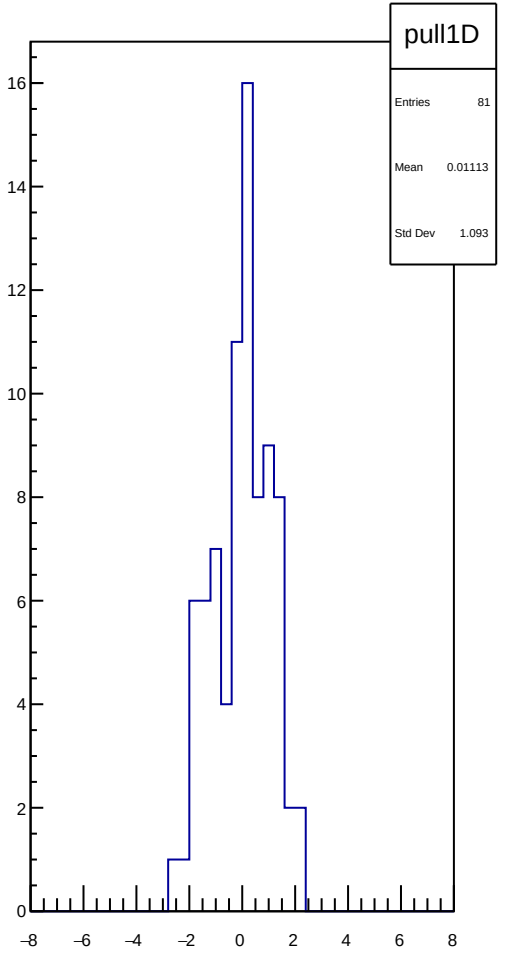

diff_bpm16Y_rms vs run
χ² / ndf 3.399e+04 / 80
p0 2458 ± 1.959
3400
3200
3000
2800
2600
2400
2200
2000

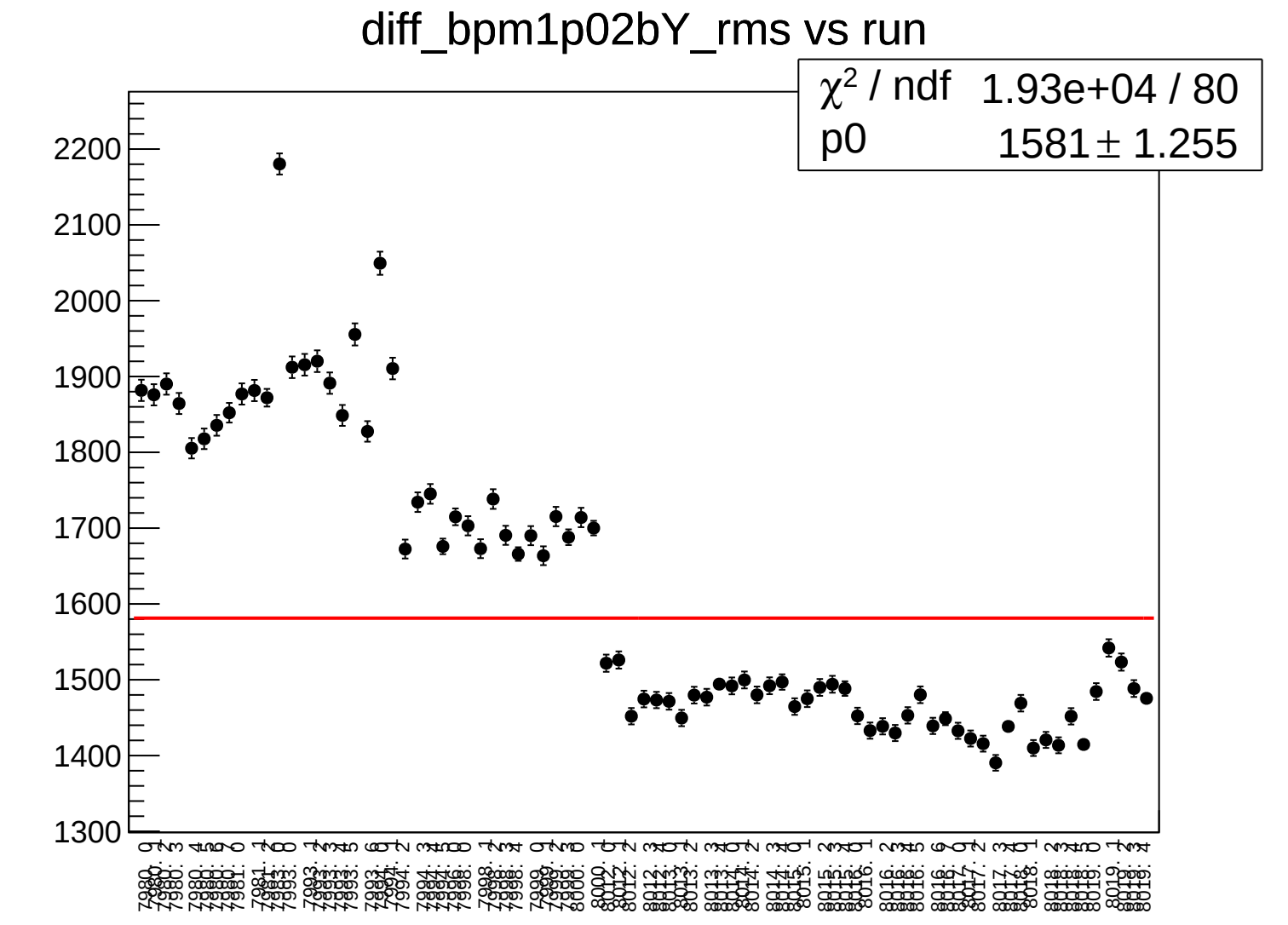

diff_bpm1p02bX_mean vs run
χ² / ndf 102.4 / 80
p0 −2.728 ± 2.878
pull
Entries 81
Mean 111.9
Std Dev 119

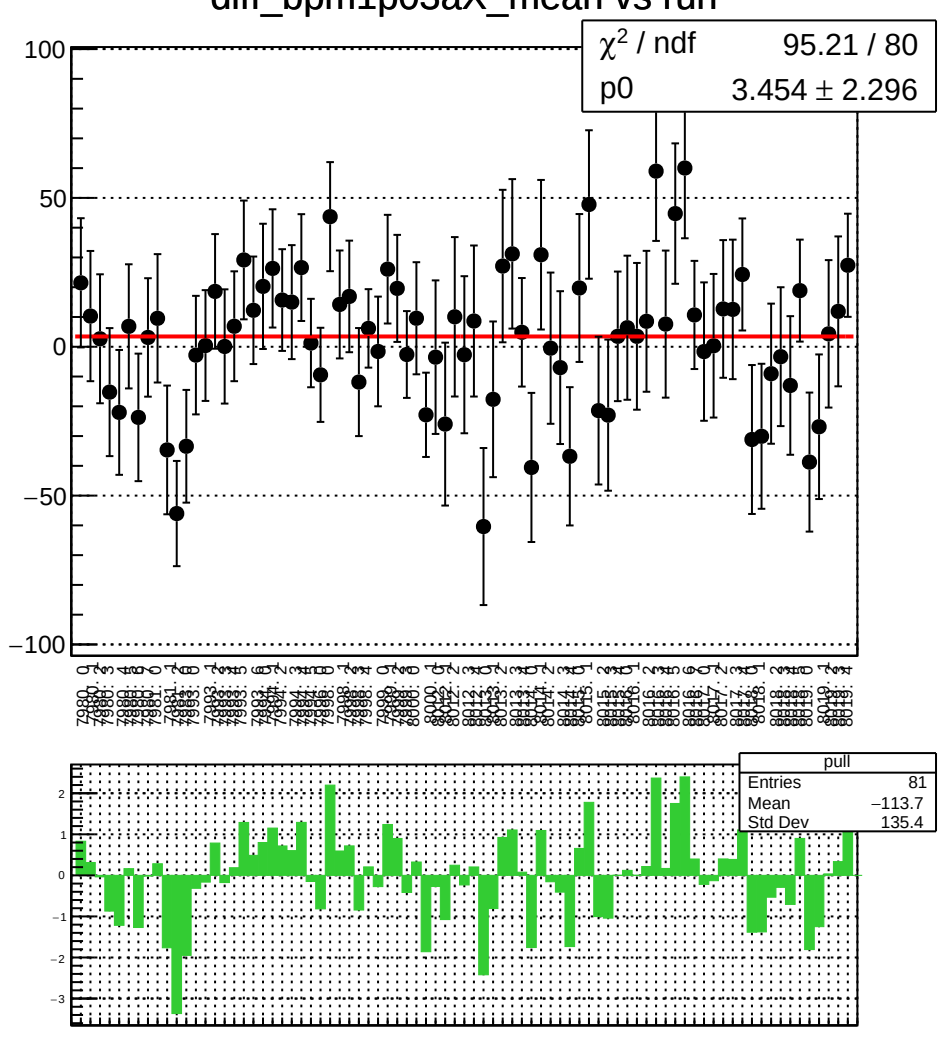

pull1D
Entries 81
Mean −0.005275
Std Dev 1.124

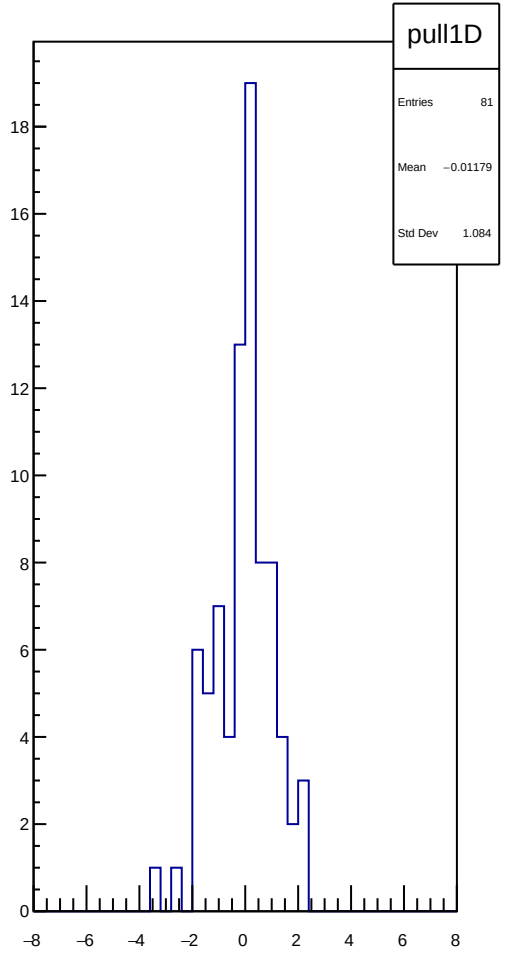

diff_bpm1p02bX_rms vs run
χ² / ndf 1.379e+04 / 80
p0 2569 ± 2.035
3200
3000
2800
2600
2400
2200

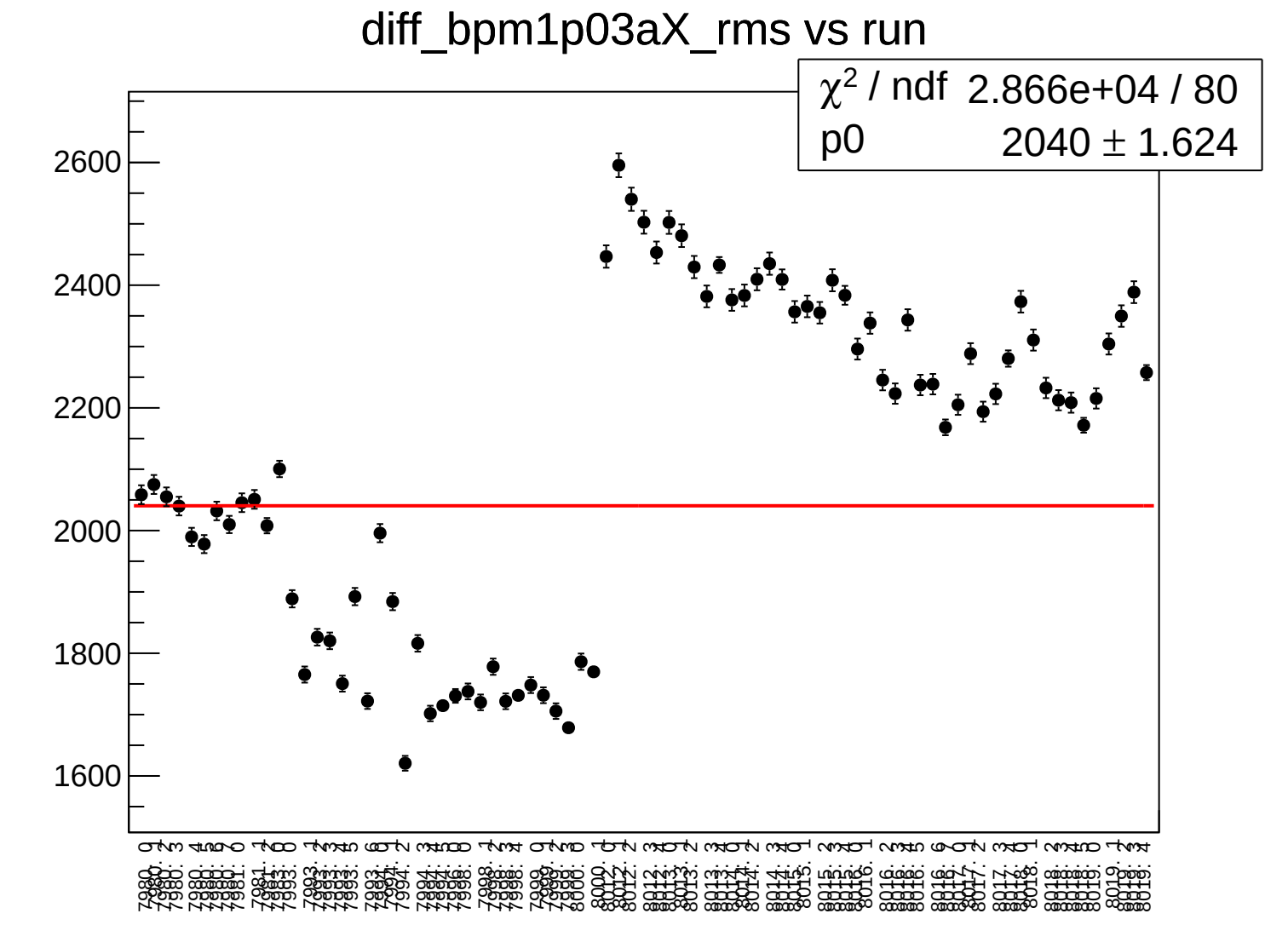

diff_bpm1p02bY_mean vs run
χ^2 / ndf 96.8 / 80
p0 2.72 ± 1.774
pull
Entries 81
Mean 147.4
Std Dev 98.12

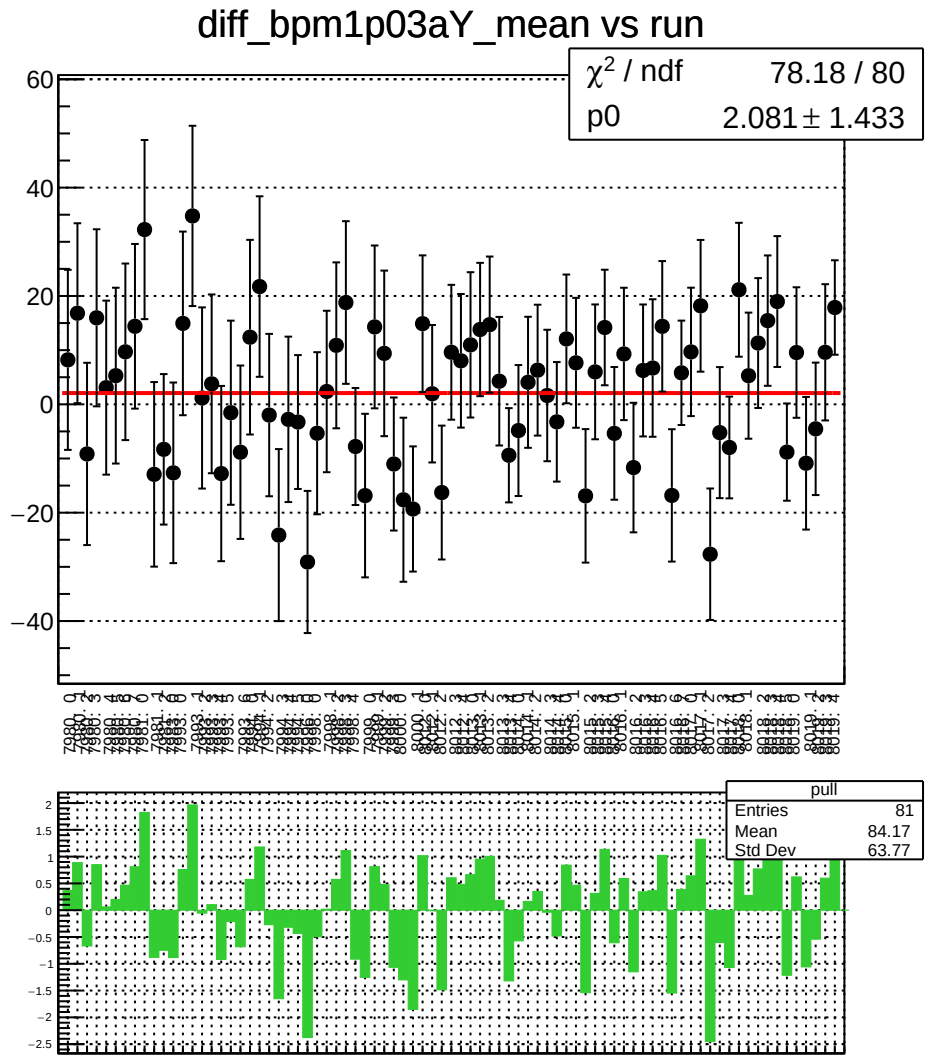

pull1D
Entries 81
Mean 0.01113
Std Dev 1.093

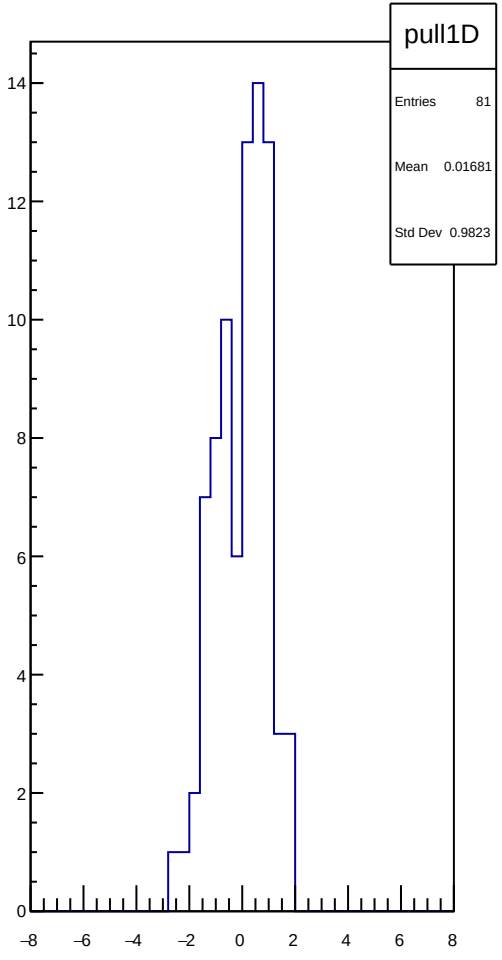

diff_bpm1p02bY_rms vs run
χ² / ndf 1.93e+04 / 80
p0 1581 ± 1.255
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300

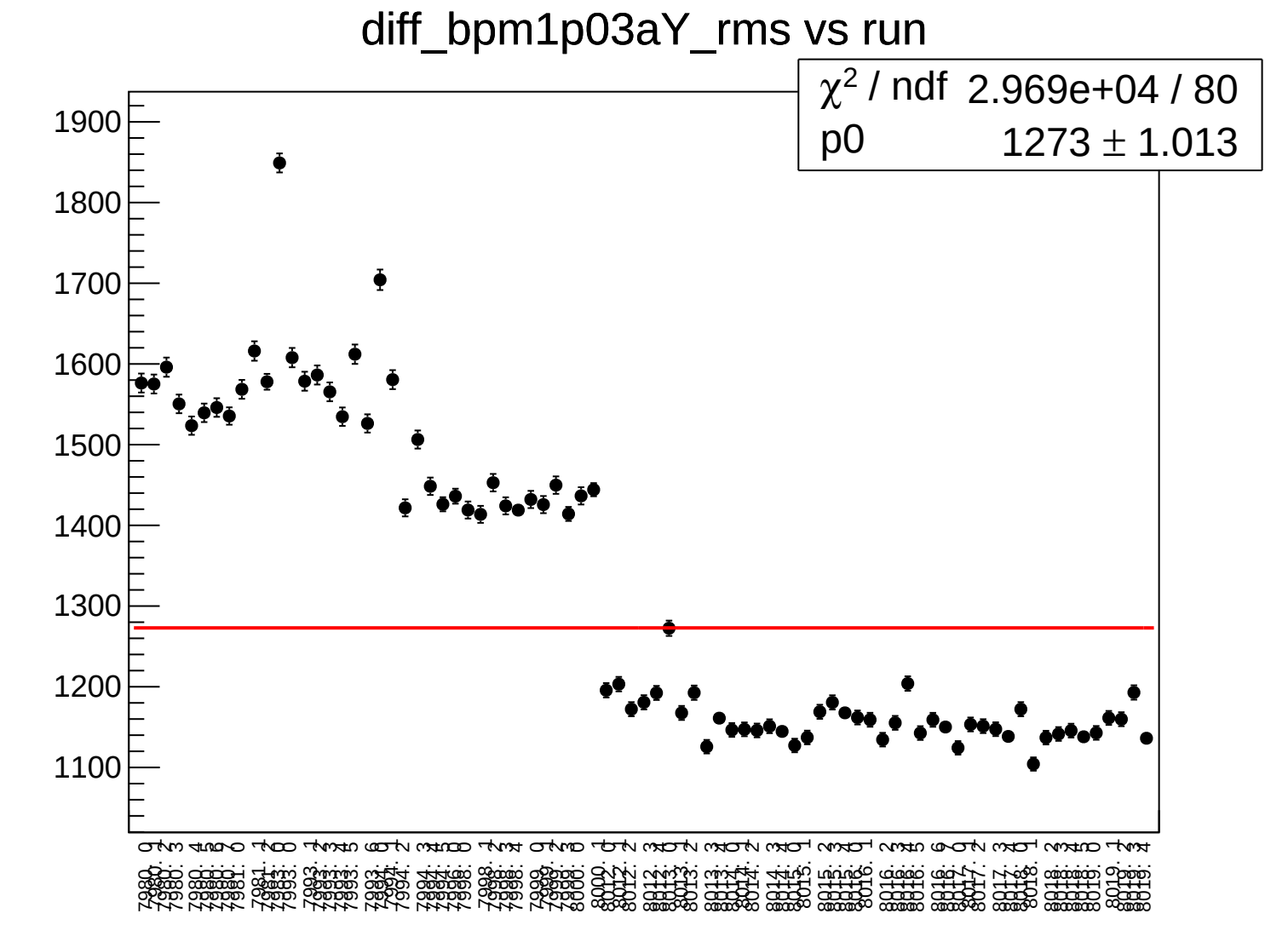

diff_bpm1p03aX_mean vs run
χ^2 / ndf 95.21 / 80
p0 3.454 ± 2.296
pull
Entries 81
Mean −113.7
Std Dev 135.4

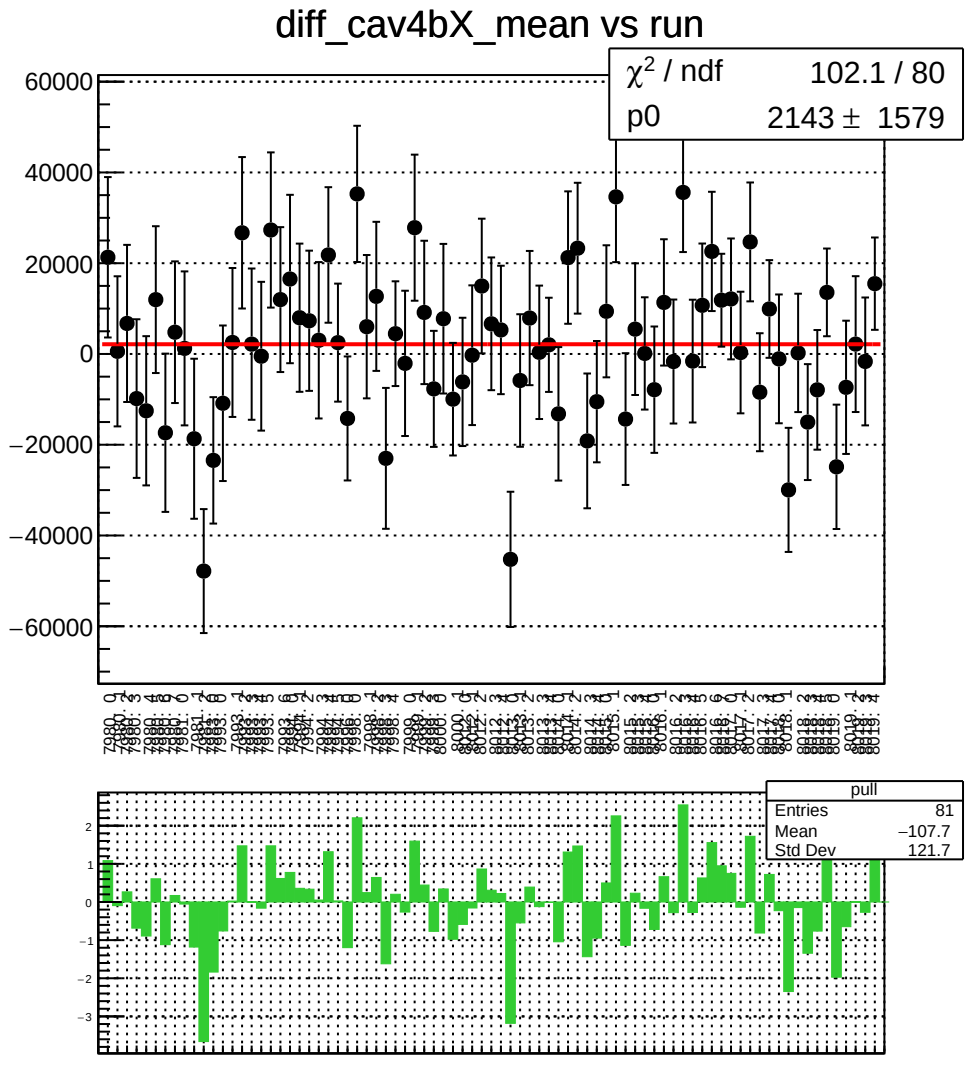

pull1D
Entries 81
Mean −0.01179
Std Dev 1.084

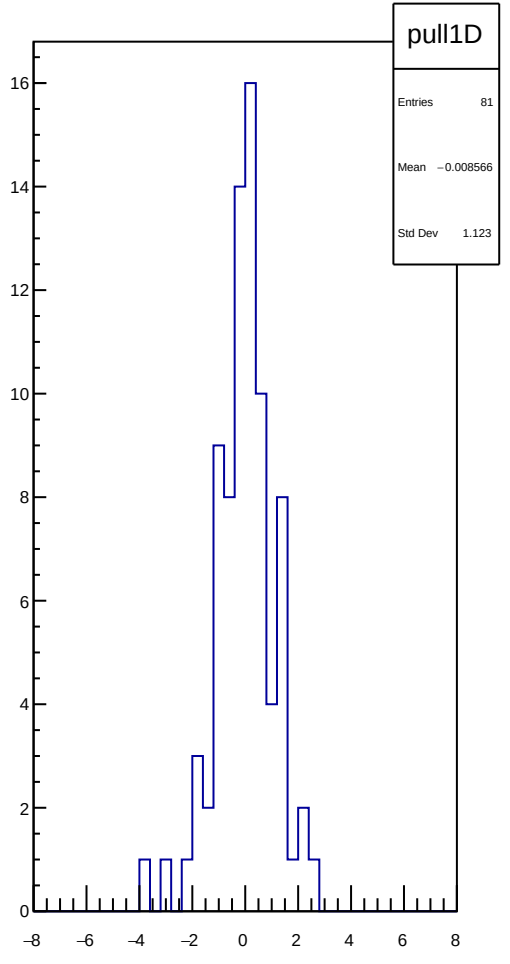

diff_bpm1p03aX_rms vs run
χ² / ndf 2.866e+04 / 80
p0 2040 ± 1.624
2600
2400
2200
2000
1800
1600

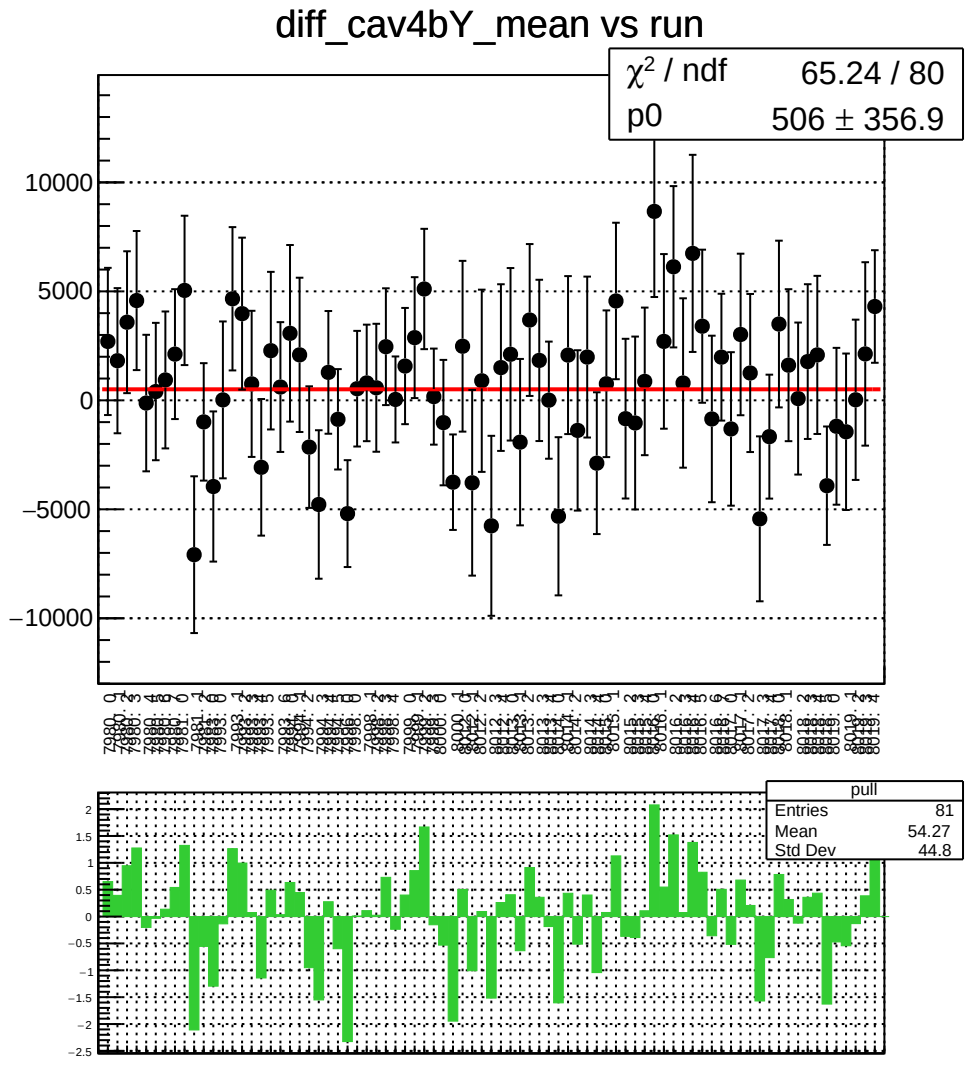

diff_bpm1p03aY_mean vs run
χ² / ndf 78.18 / 80
p0 2.081 ± 1.433
pull
Entries 81
Mean 84.17
Std Dev 63.77

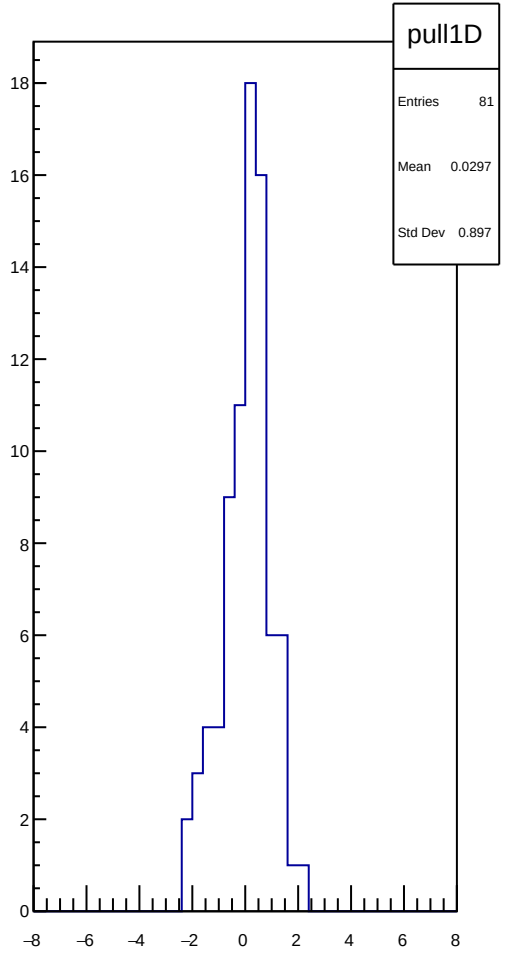

pull1D
Entries 81
Mean 0.01681
Std Dev 0.9823

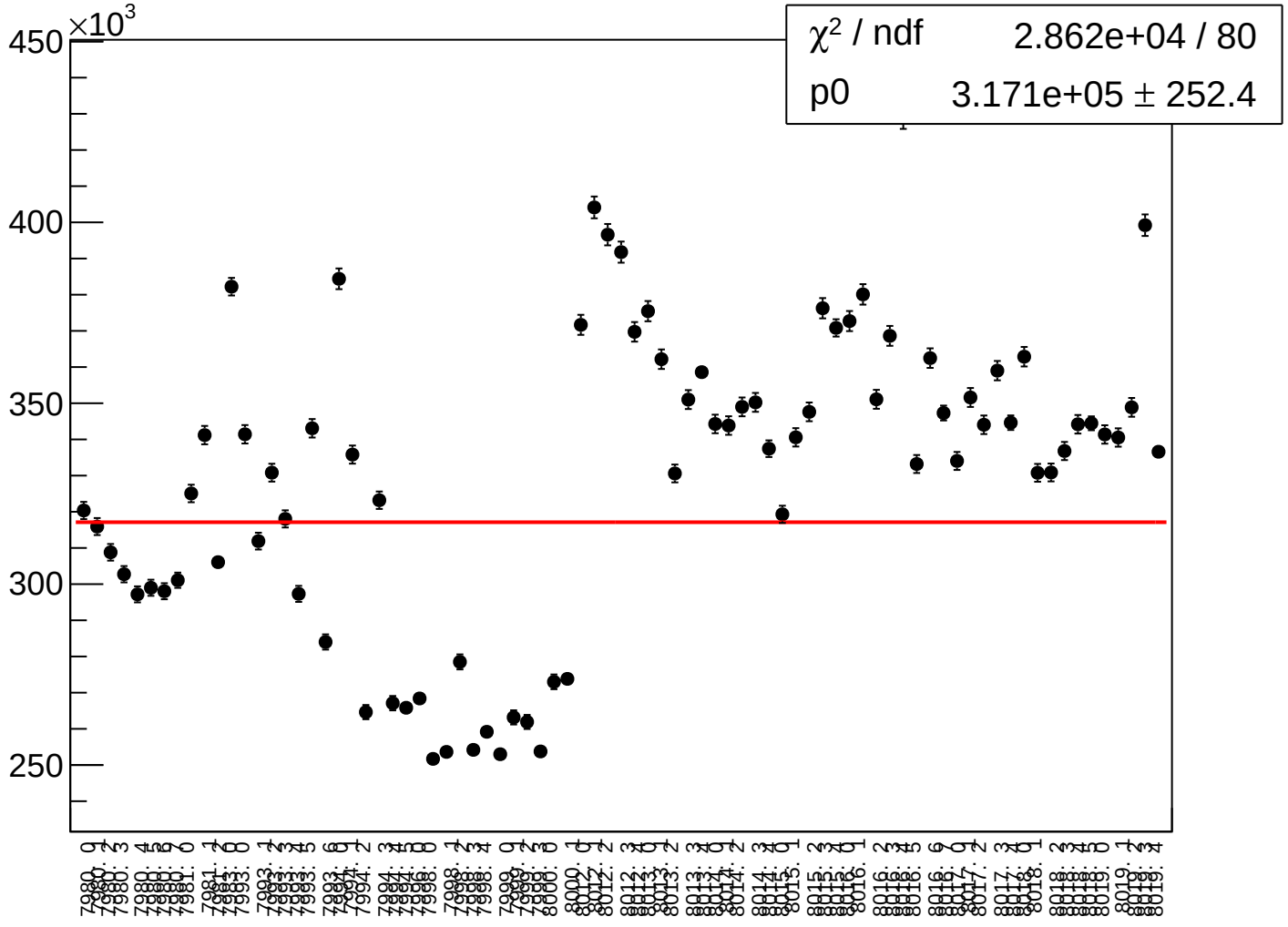

diff_bpm1p03aY_rms vs run
χ² / ndf 2.969e+04 / 80
p0 1273 ± 1.013
1900
1800
1700
1600
1500
1400
1300
1200
1100

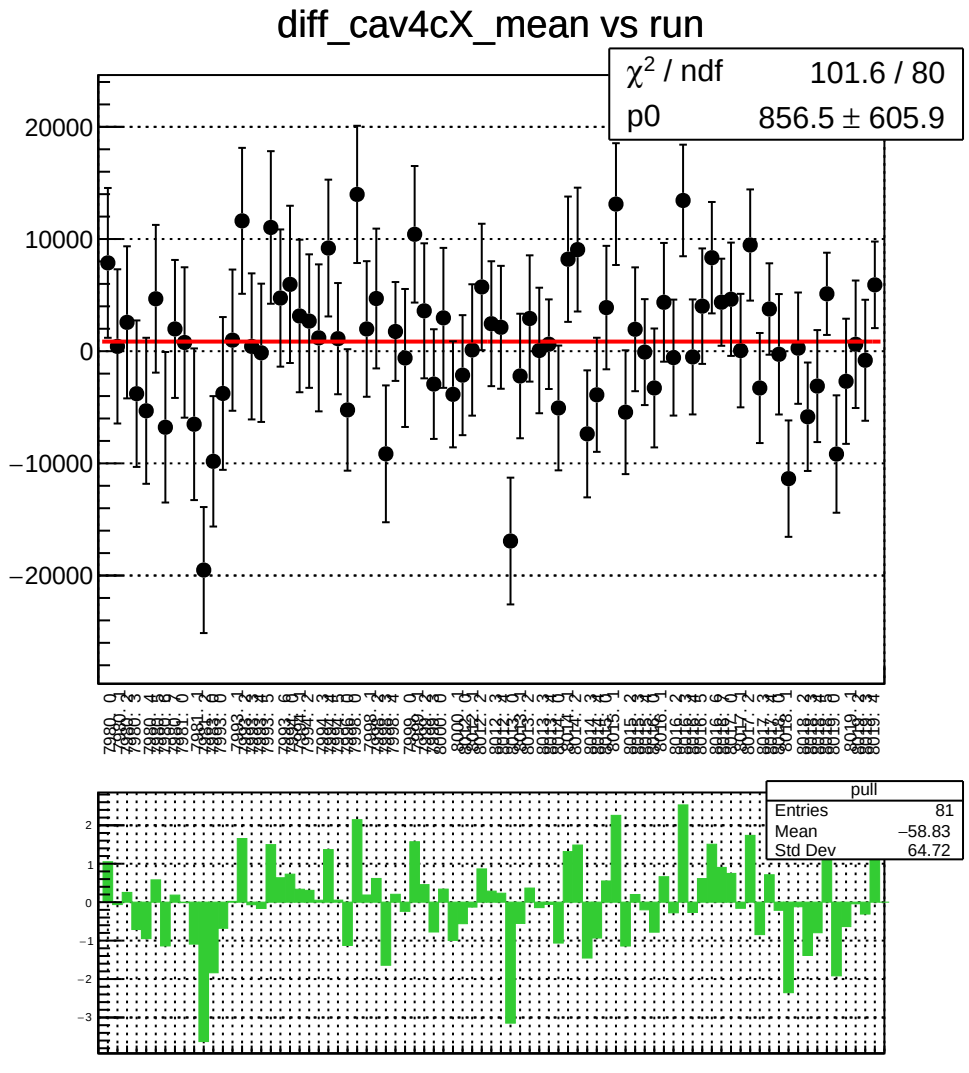

diff_cav4bX_mean vs run
χ² / ndf 102.1 / 80
p0 2143 ± 1579
pull
Entries 81
Mean −107.7
Std Dev 121.7

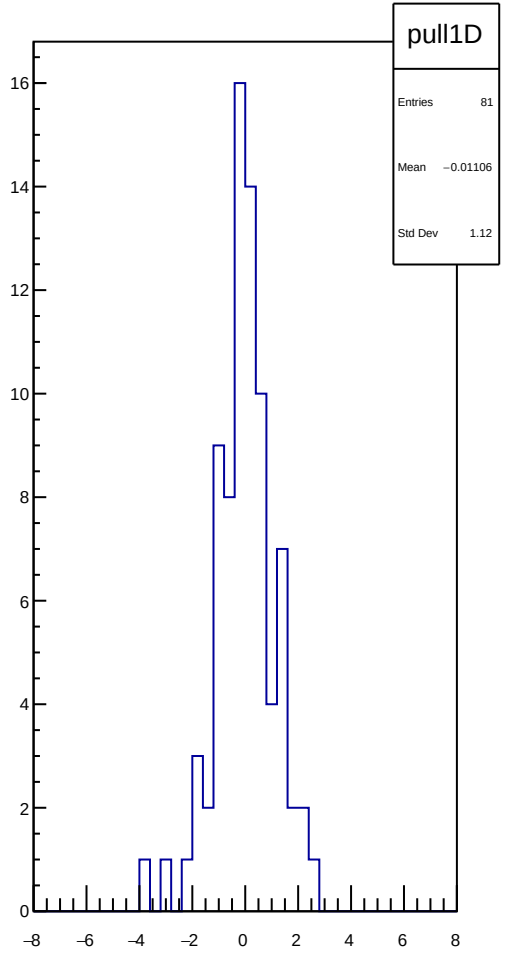

pull1D
Entries 81
Mean −0.008566
Std Dev 1.123

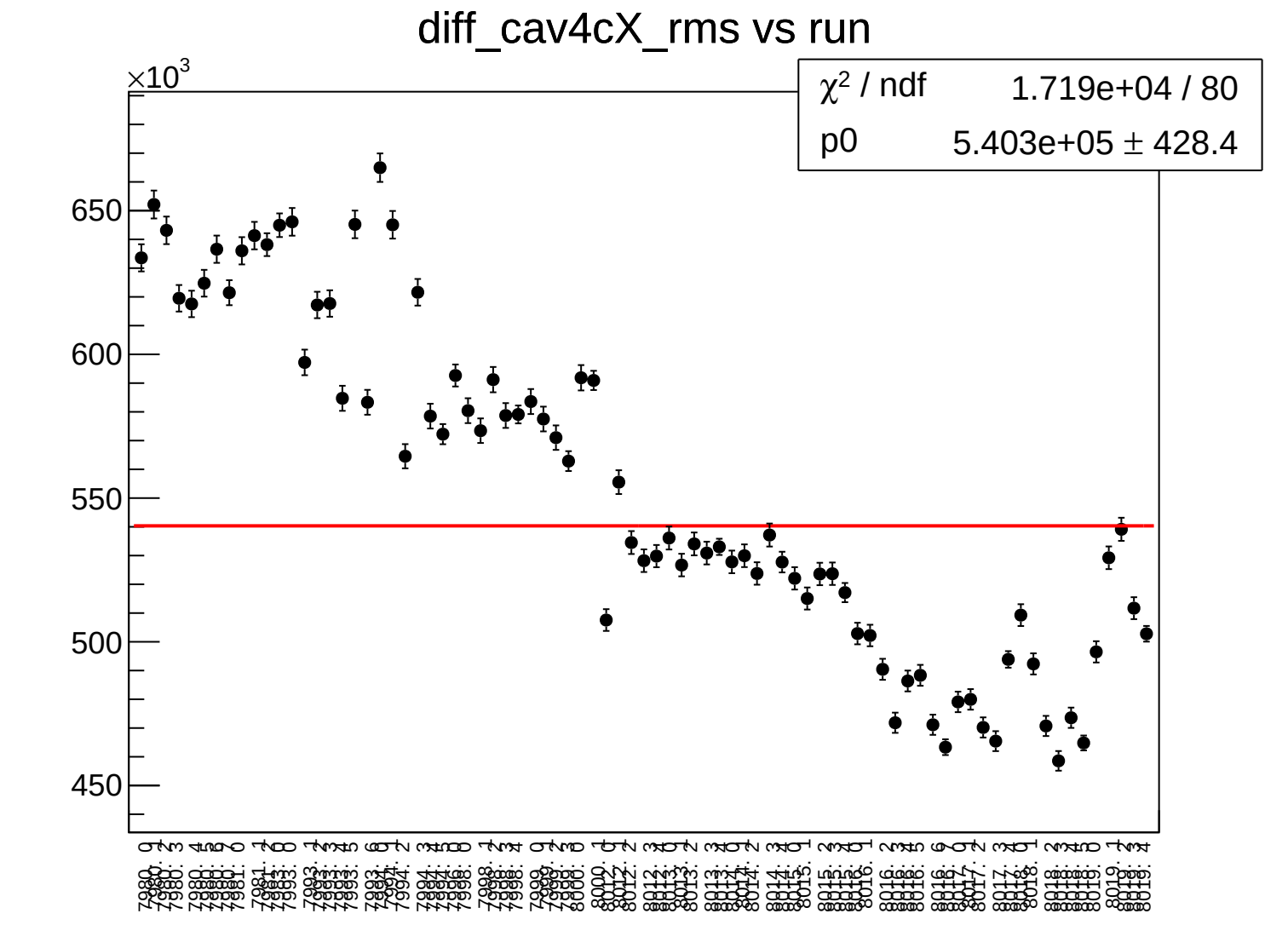

diff_cav4bY_mean vs run
χ² / ndf 65.24 / 80
p0 506 ± 356.9
10000
5000
0
−5000
−10000
pull
Entries 81
Mean 54.27
Std Dev 44.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

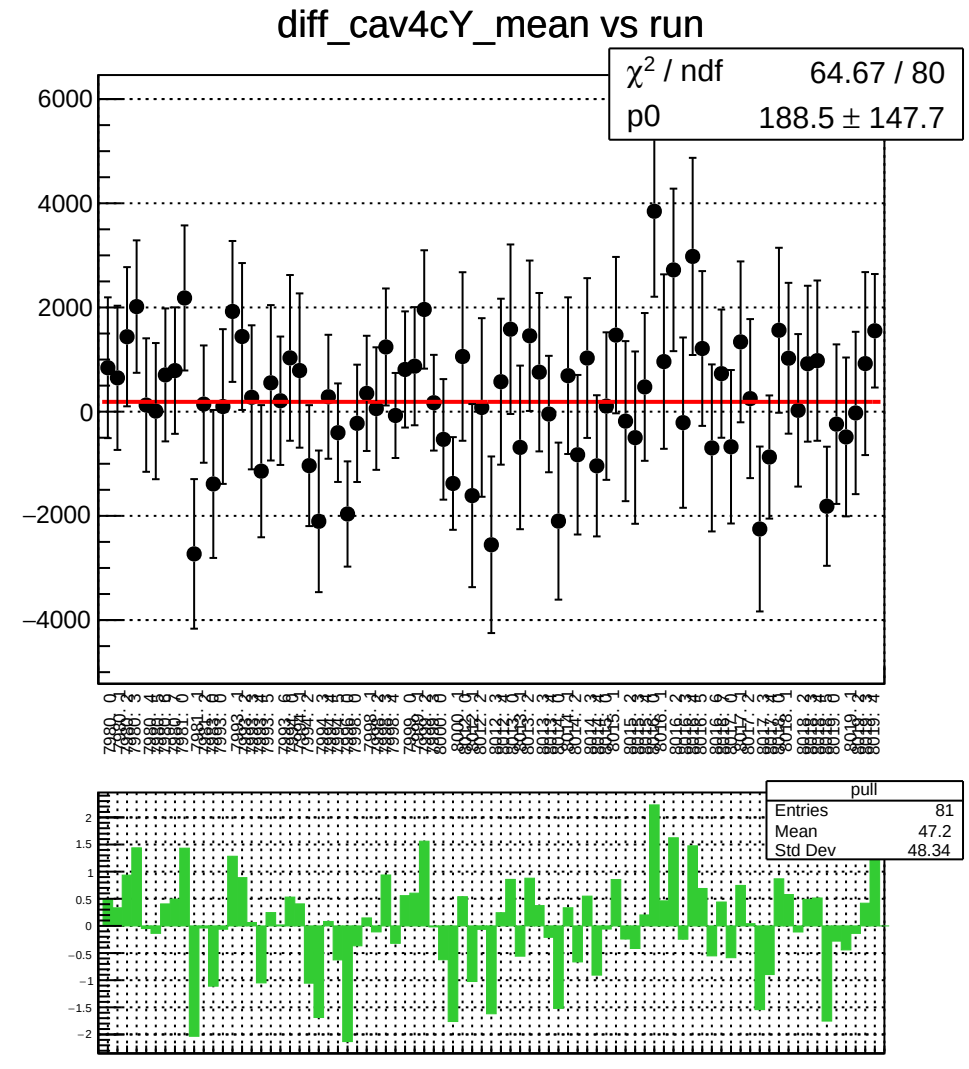

pull1D
Entries 81
Mean 0.0297
Std Dev 0.897
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

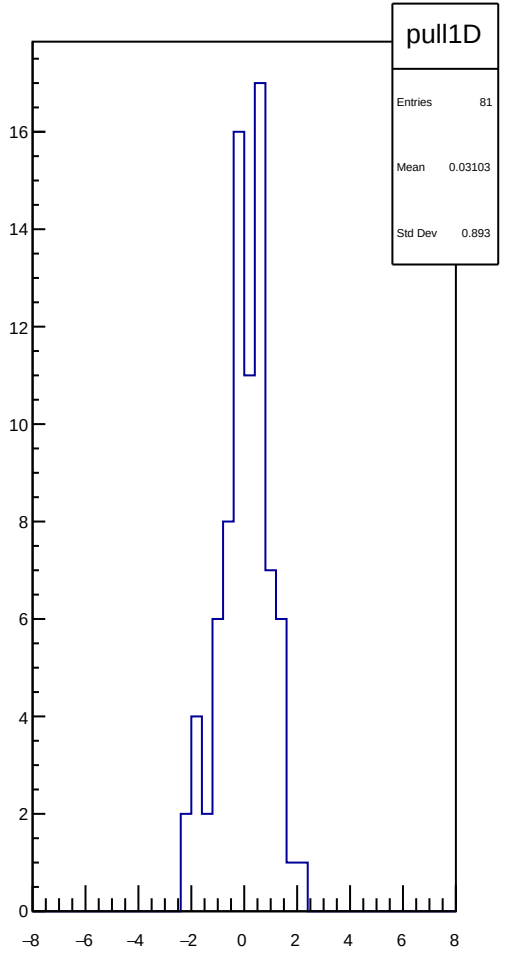

diff_cav4bY_rms vs run
×10^3
450
400
350
300
250
χ² / ndf 2.862e+04 / 80
p0 3.171e+05 ± 252.4

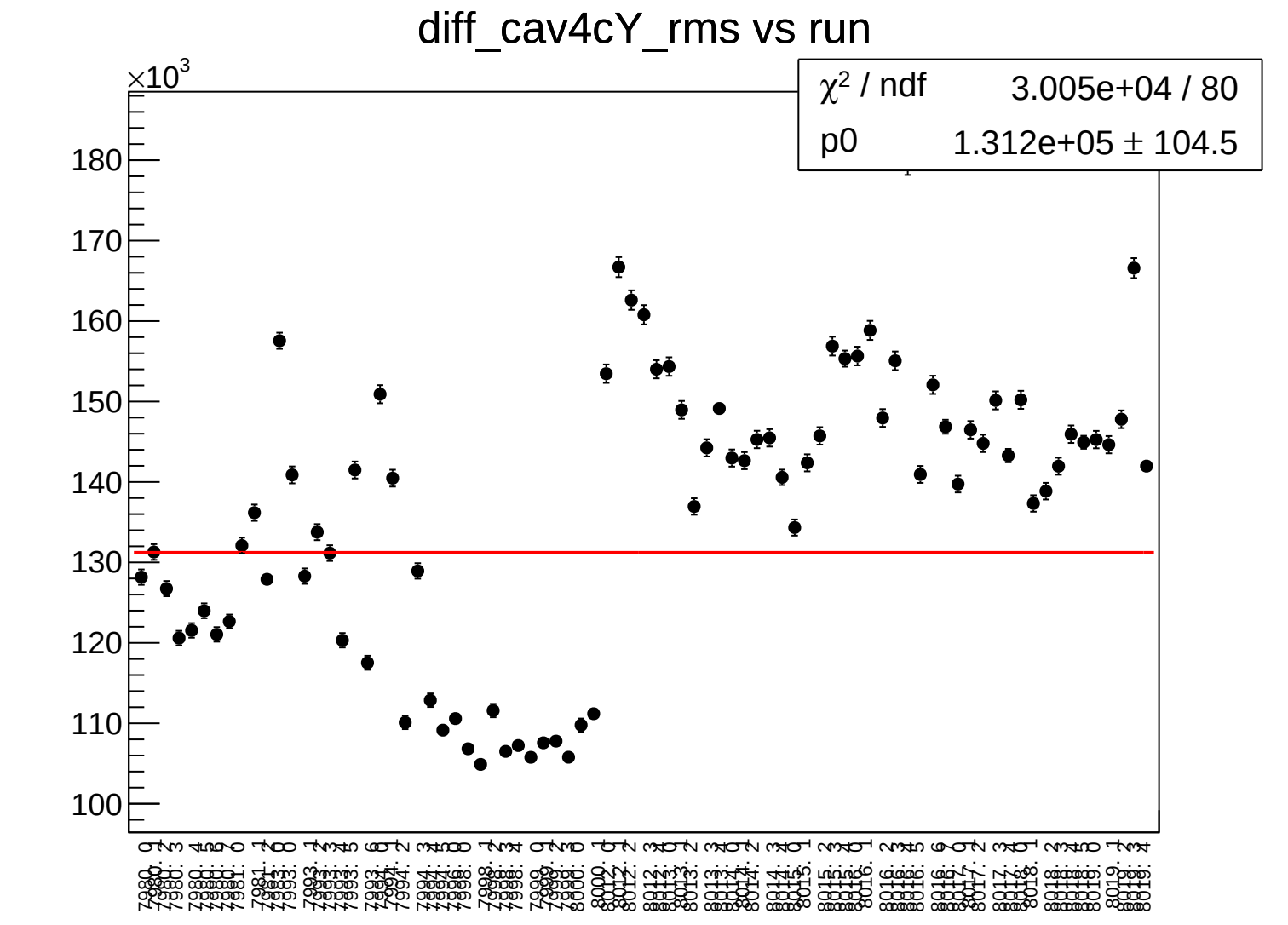

diff_cav4cX_mean vs run
χ² / ndf 101.6 / 80
p0 856.5 ± 605.9
20000
10000
0
−10000
−20000
pull
Entries 81
Mean −58.83
Std Dev 64.72
2
1
0
−1
−2
−3

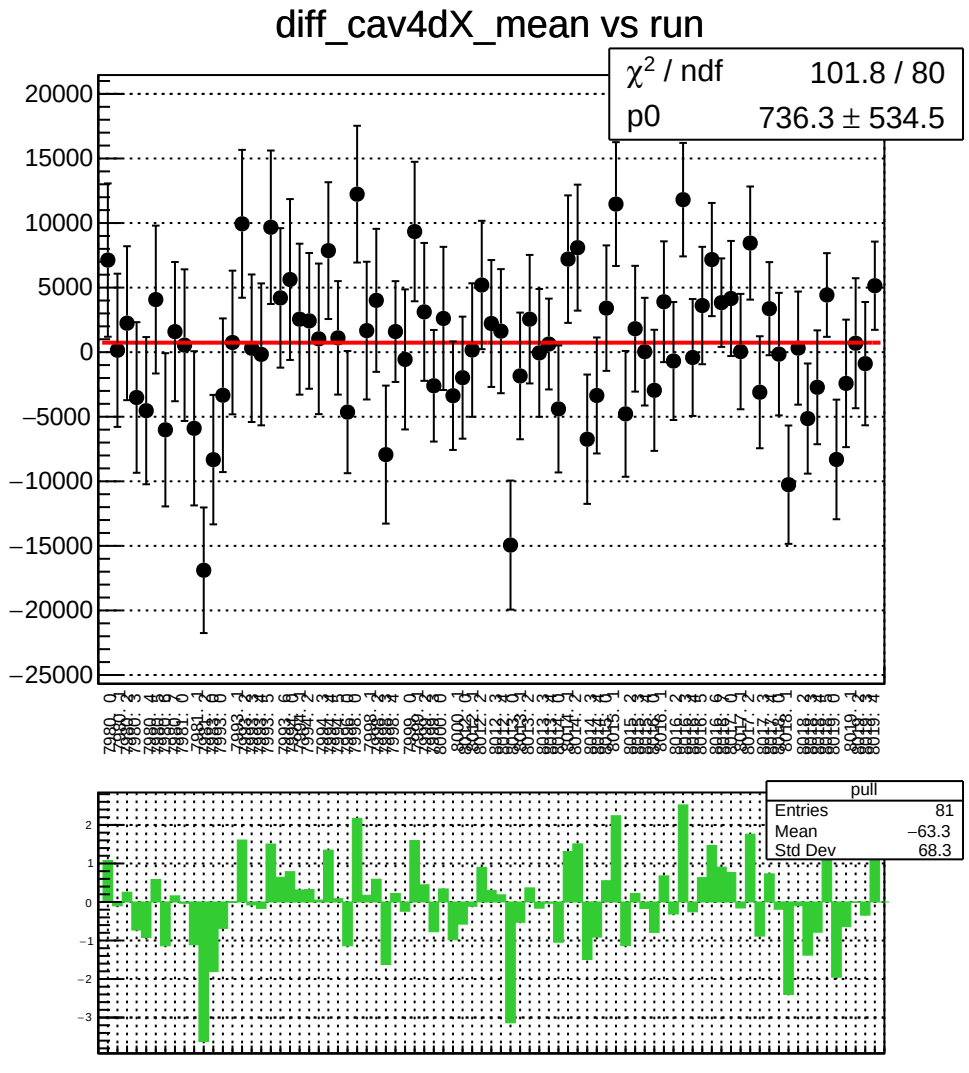

pull1D
Entries 81
Mean −0.01106
Std Dev 1.12
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

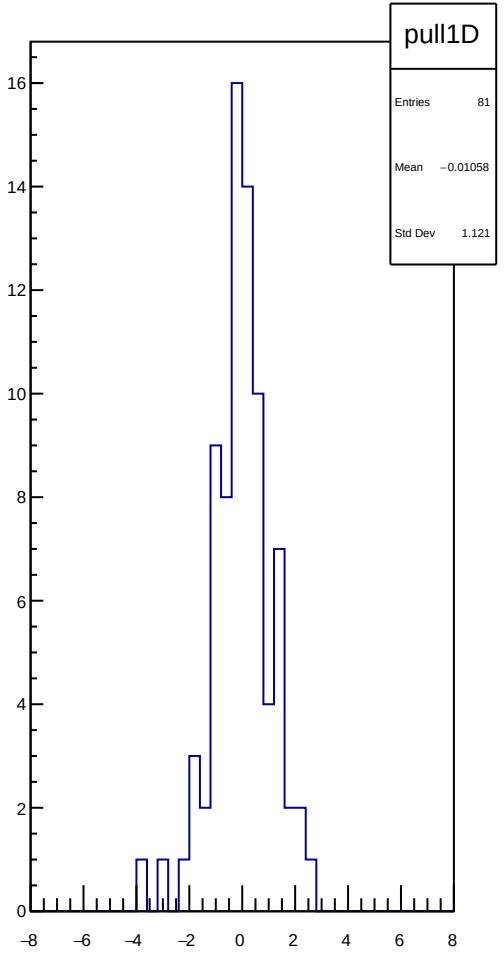

diff_cav4cX_rms vs run
×10^3
χ² / ndf 1.719e+04 / 80
p0 5.403e+05 ± 428.4
650
600
550
500
450

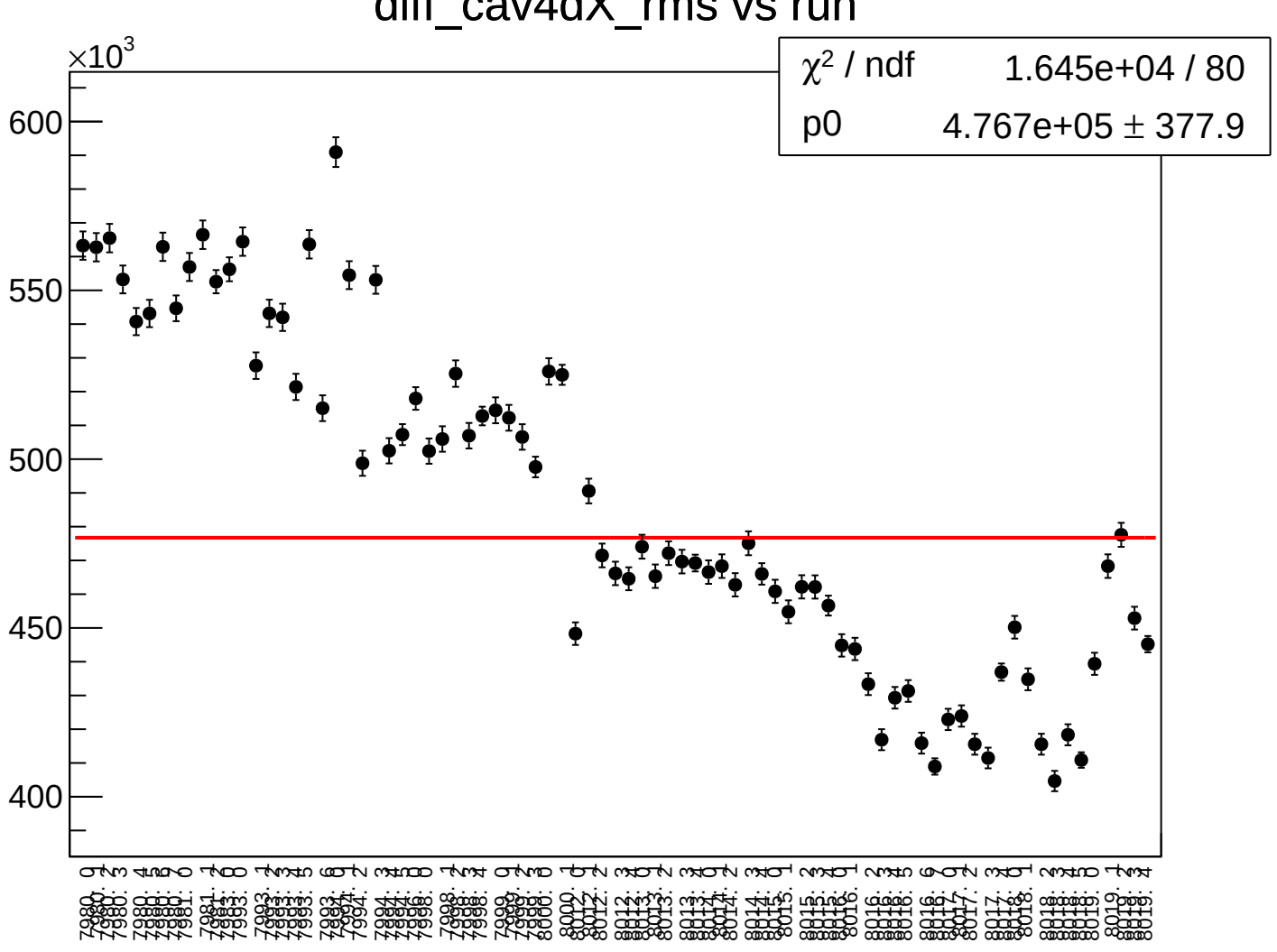

diff_cav4cY_mean vs run
χ² / ndf 64.67 / 80
p0 188.5 ± 147.7
6000
4000
2000
0
−2000
−4000
pull
Entries 81
Mean 47.2
Std Dev 48.34
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

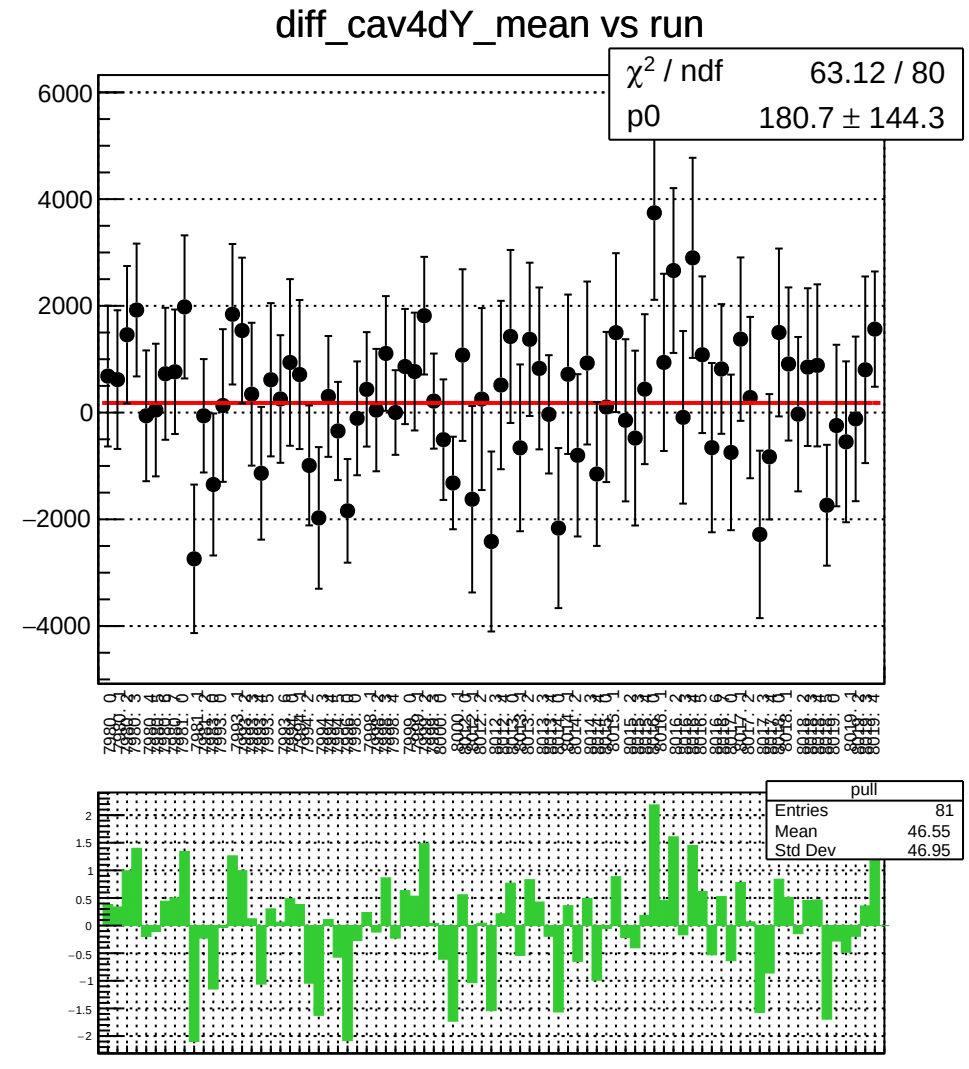

pull1D
Entries 81
Mean 0.03103
Std Dev 0.893
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

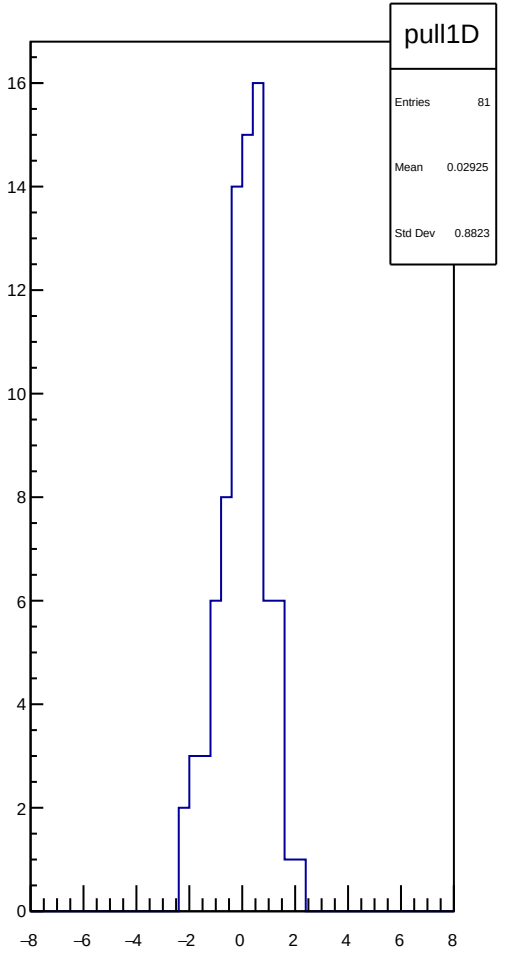

diff_cav4cY_rms vs run
×10^3
χ² / ndf 3.005e+04 / 80
p0 1.312e+05 ± 104.5
180
170
160
150
140
130
120
110
100

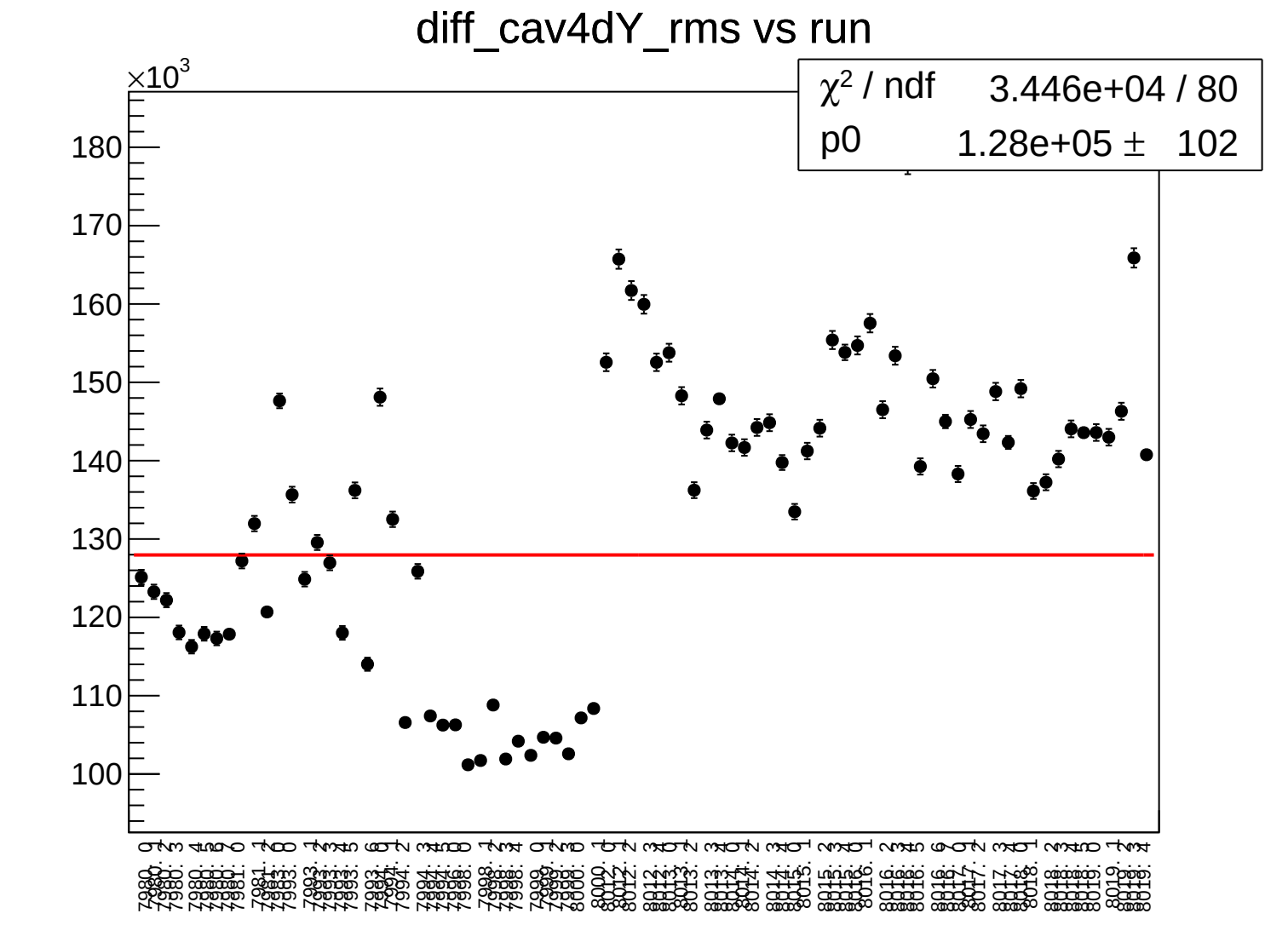

diff_cav4dX_mean vs run
χ^2 / ndf 101.8 / 80
p0 736.3 ± 534.5
pull
Entries 81
Mean −63.3
Std Dev 68.3

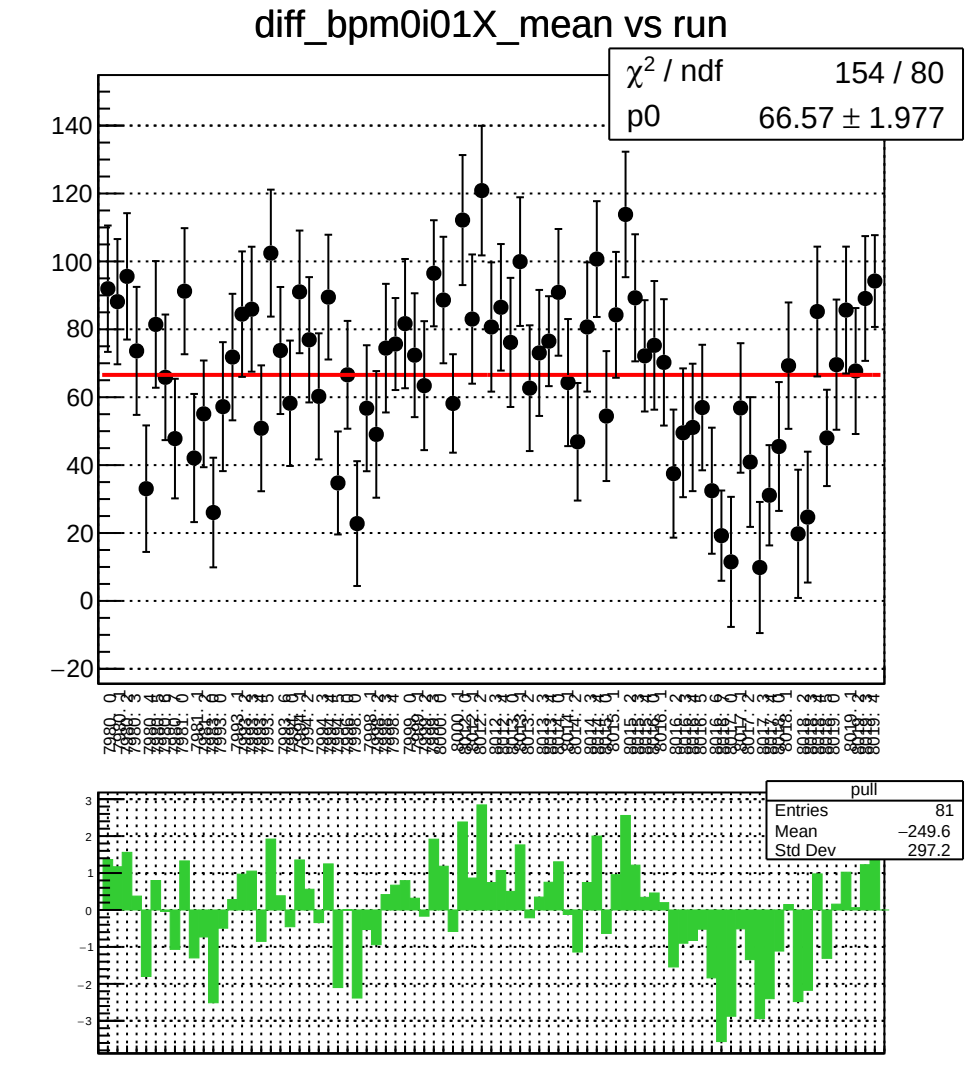

pull1D
Entries 81
Mean −0.01058
Std Dev 1.121

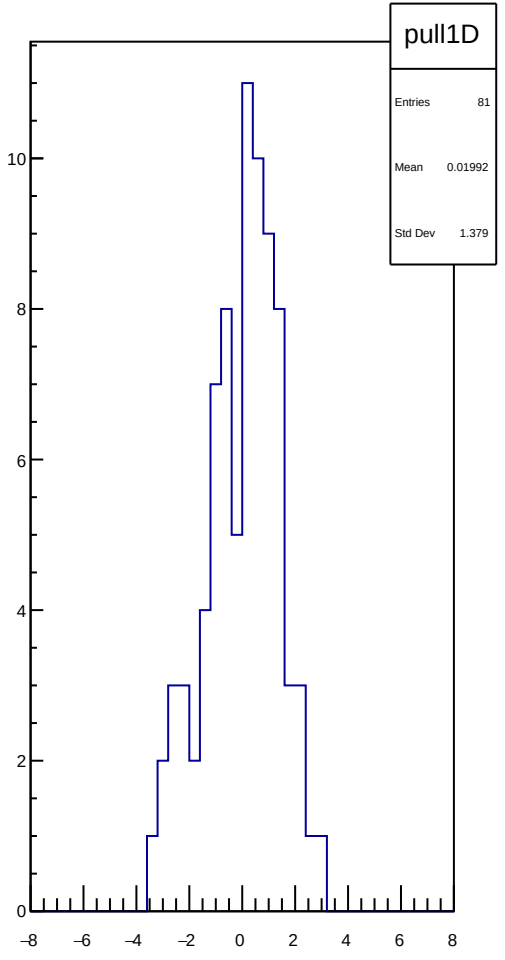

diff_cav4dX_rms vs run
×10^3
600
550
500
450
400
χ² / ndf 1.645e+04 / 80
p0 4.767e+05 ± 377.9

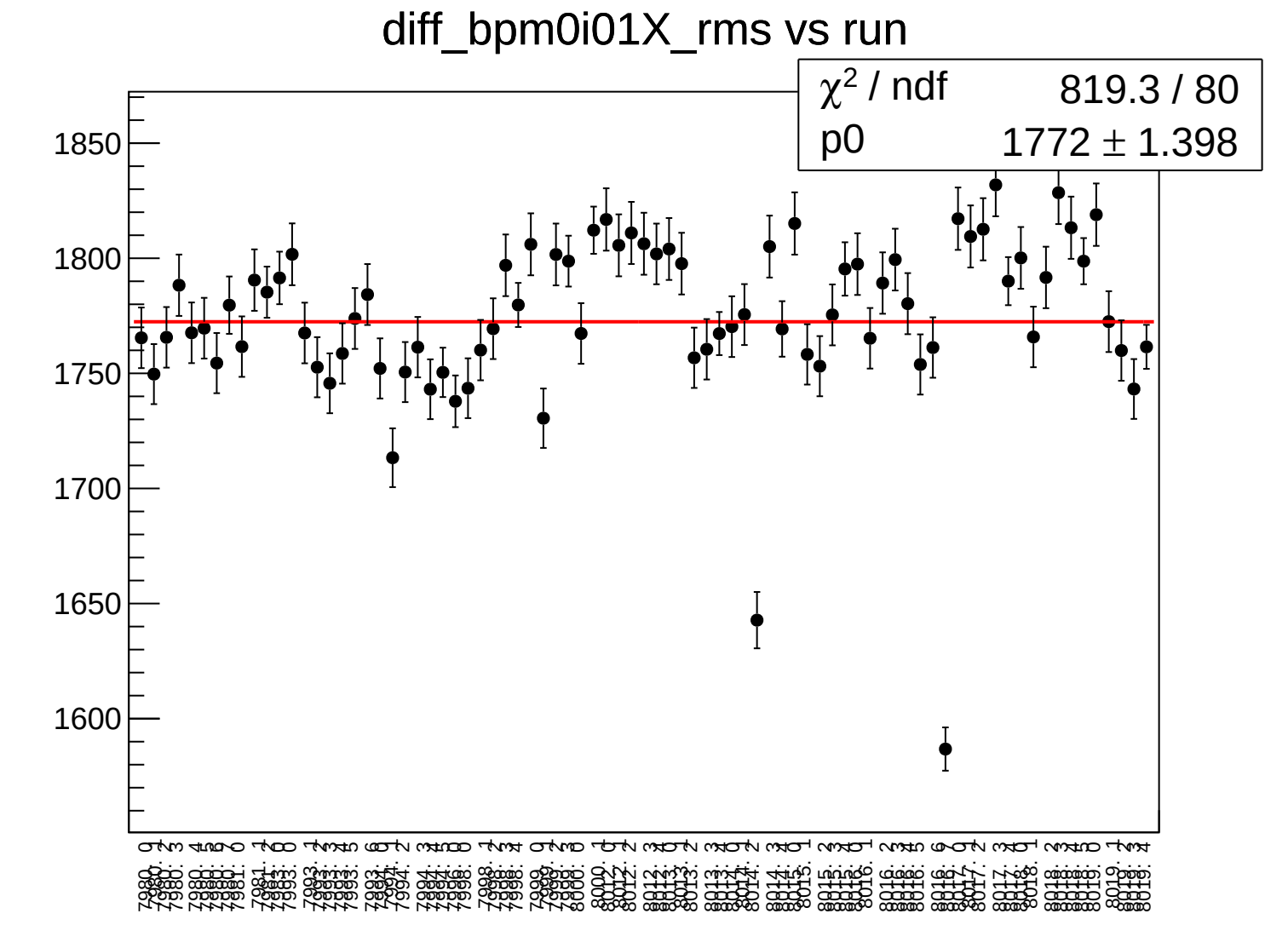

diff_cav4dY_mean vs run
χ² / ndf 63.12 / 80
p0 180.7 ± 144.3
6000
4000
2000
0
−2000
−4000
pull
Entries 81
Mean 46.55
Std Dev 46.95
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

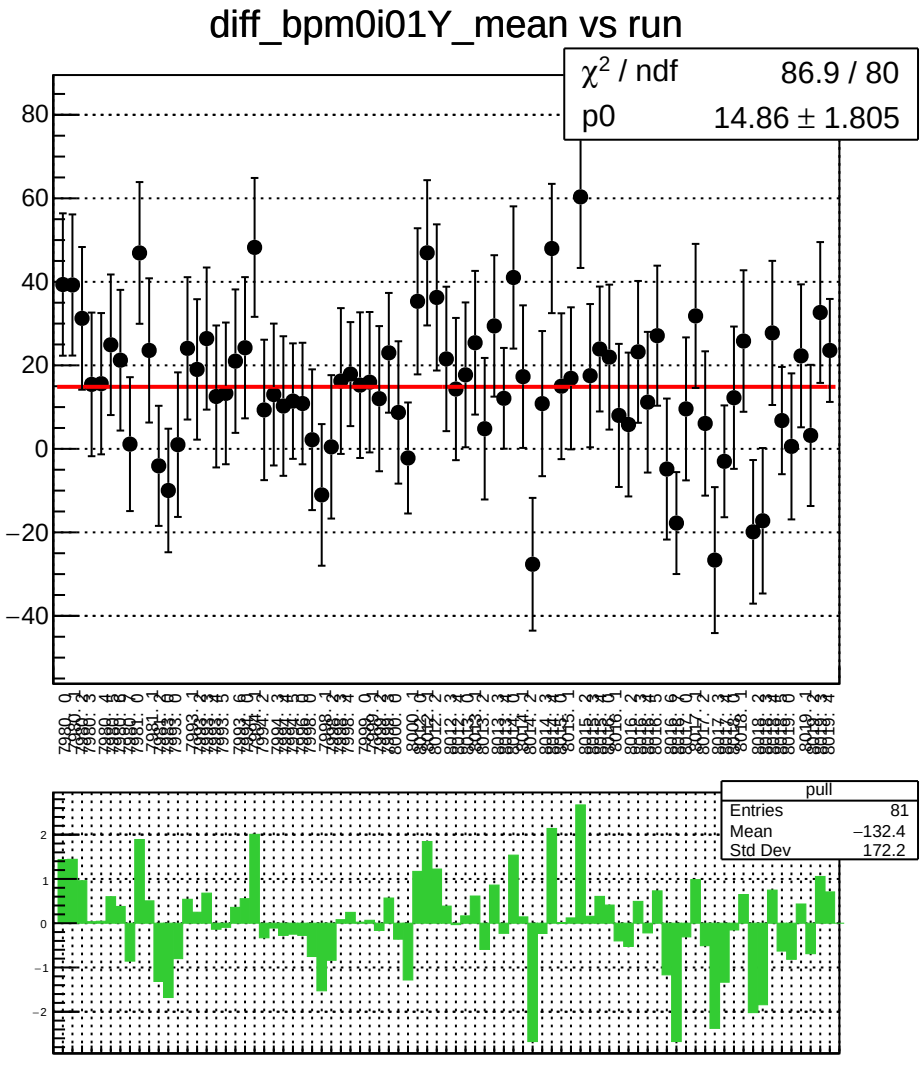

pull1D
Entries 81
Mean 0.02925
Std Dev 0.8823
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

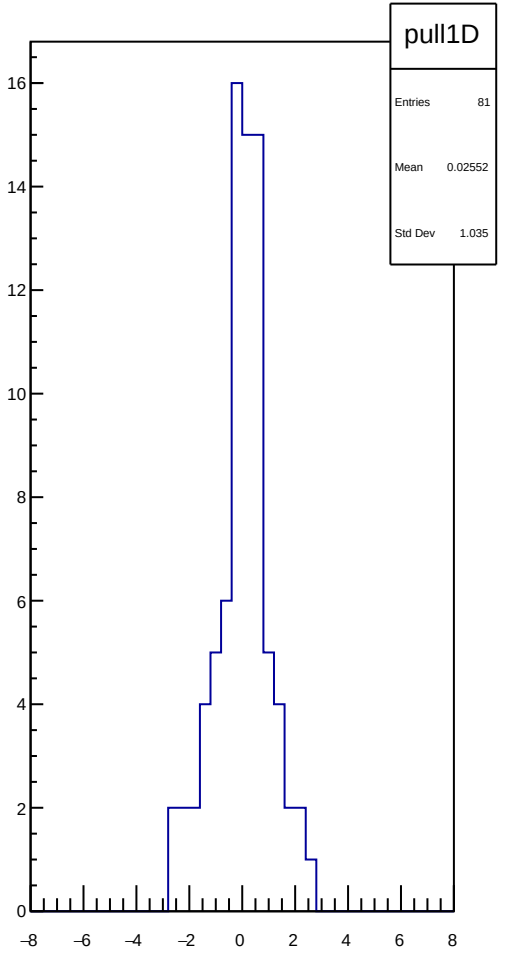

diff_cav4dY_rms vs run
×10^3
χ² / ndf 3.446e+04 / 80
p0 1.28e+05 ± 102
180
170
160
150
140
130
120
110
100

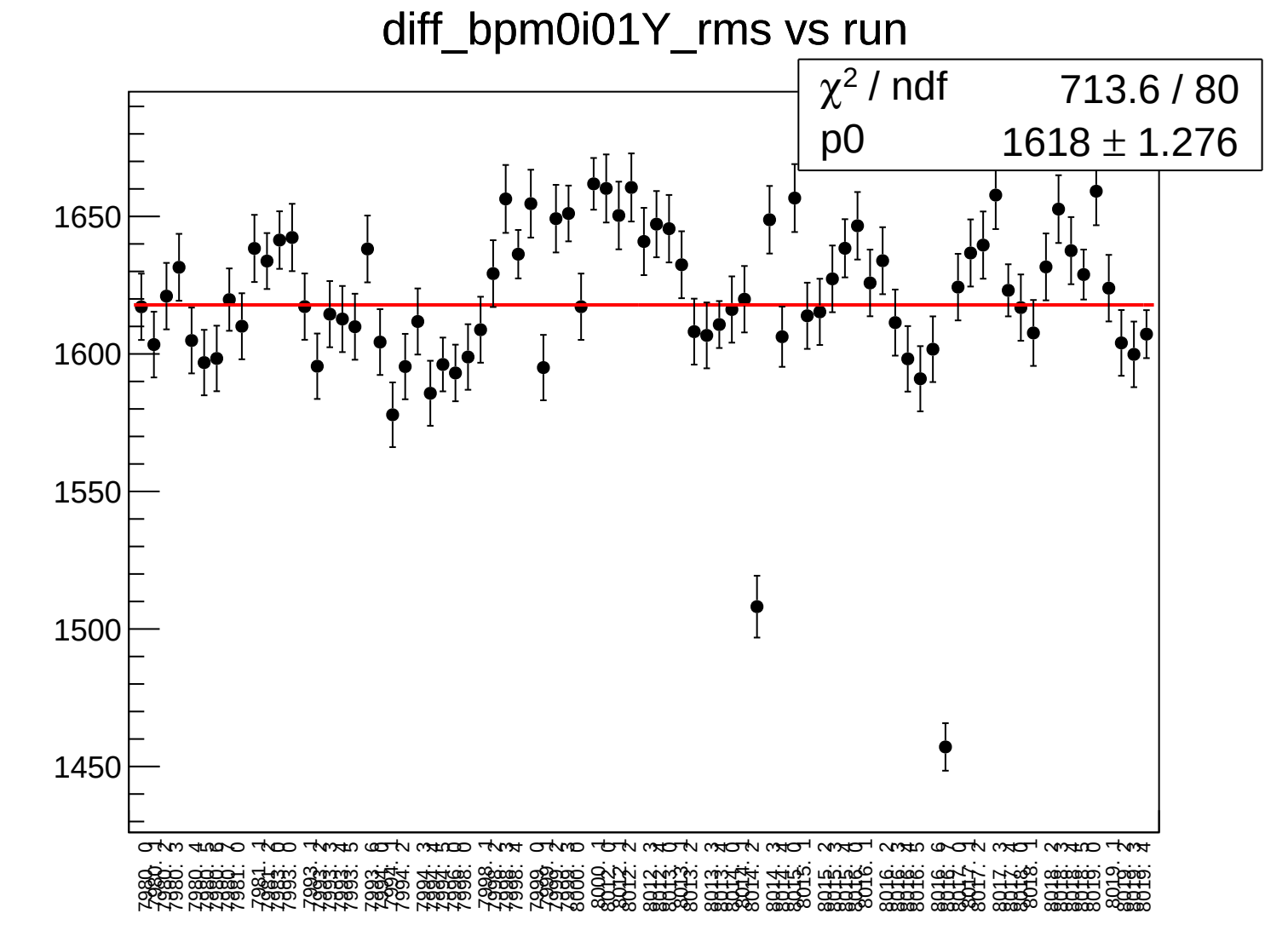

diff_bpm0i01X_mean vs run
χ^2 / ndf 154 / 80
p0 66.57 ± 1.977
pull
Entries 81
Mean −249.6
Std Dev 297.2

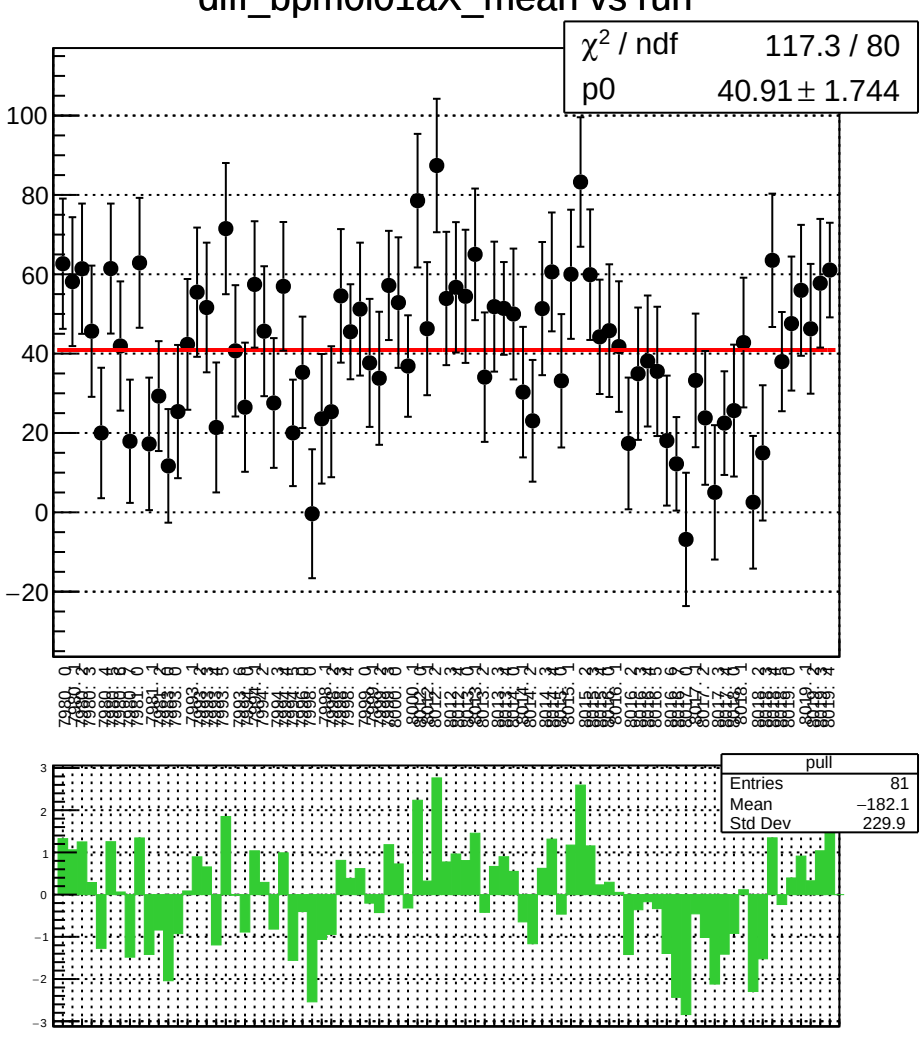

pull1D
Entries 81
Mean 0.01992
Std Dev 1.379

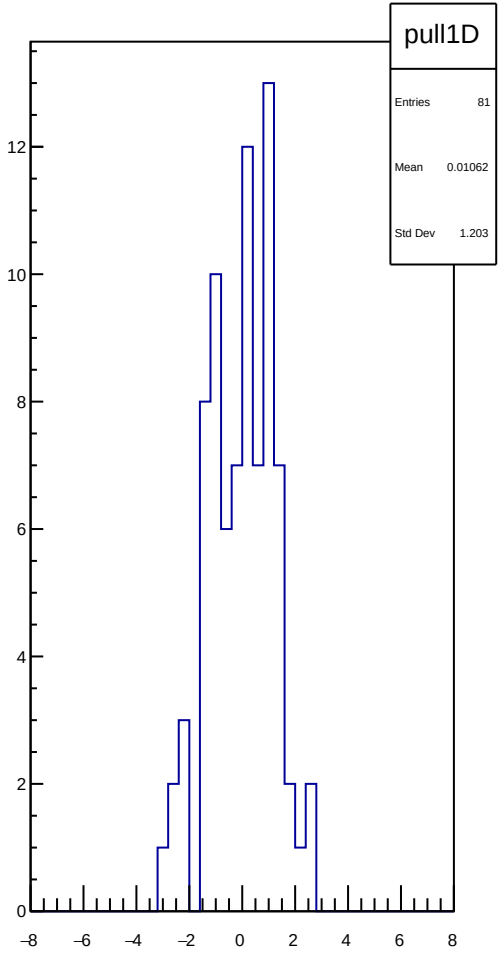

diff_bpm0i01X_rms vs run
χ^2 / ndf 819.3 / 80
p0 1772 ± 1.398
1850
1800
1750
1700
1650
1600

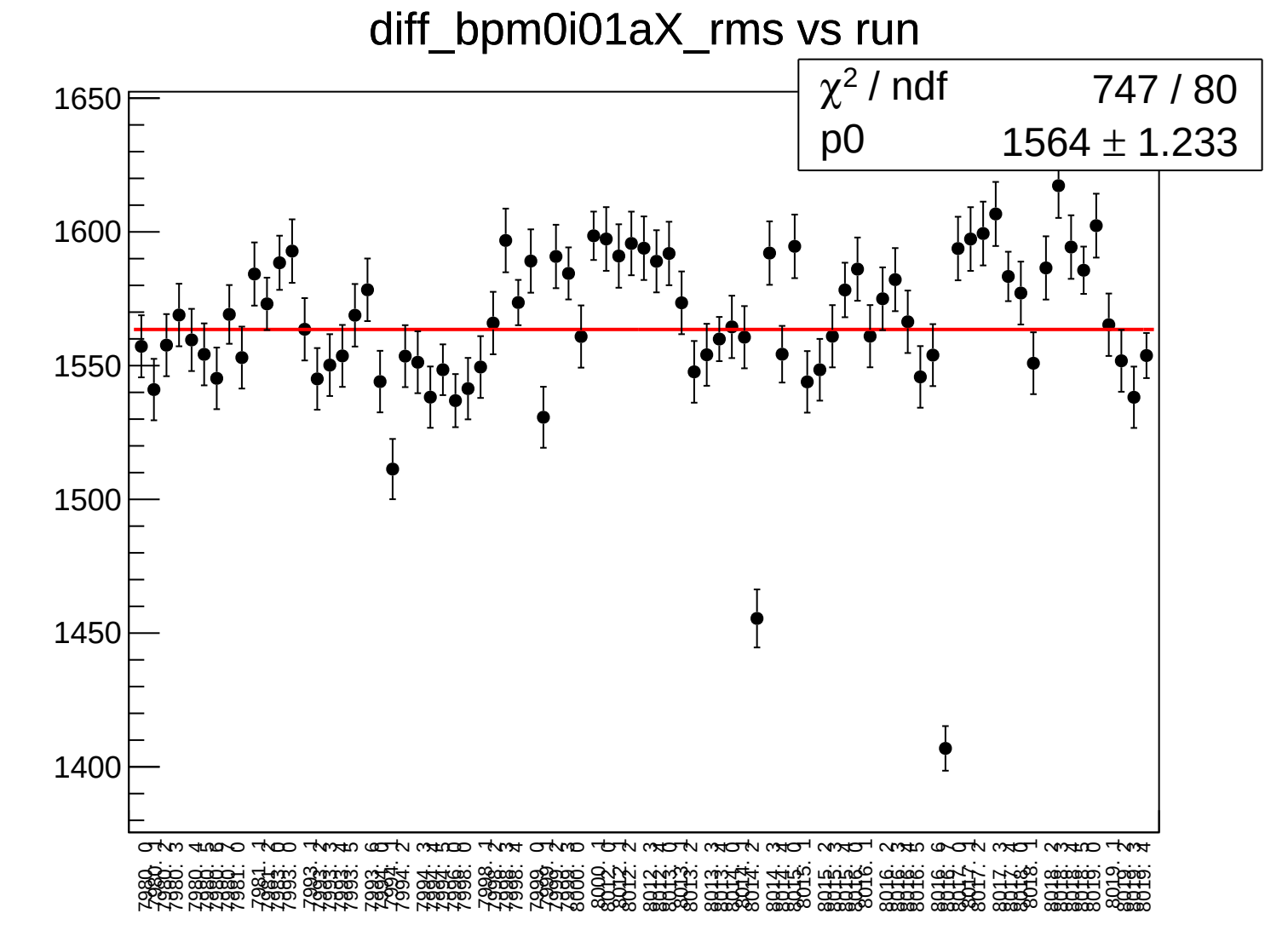

diff_bpm0i01Y_mean vs run
χ^2 / ndf 86.9 / 80
p0 14.86 ± 1.805
pull
Entries 81
Mean −132.4
Std Dev 172.2

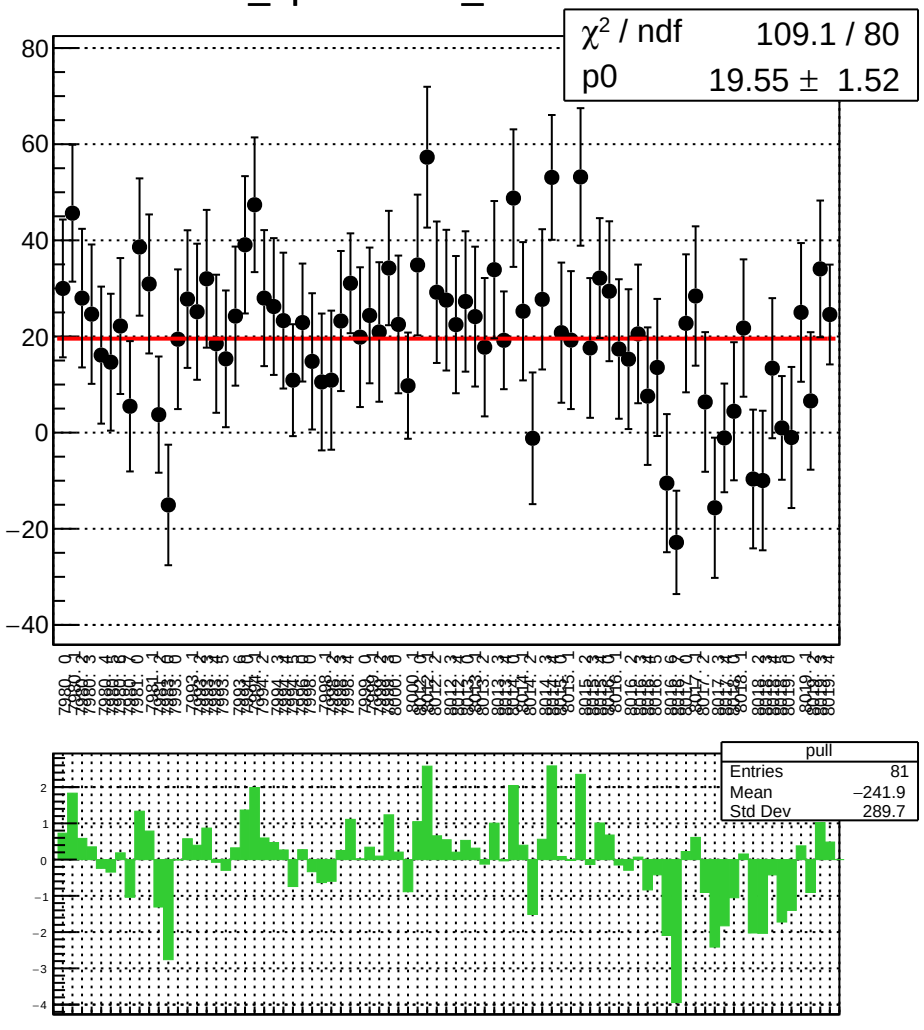

pull1D
Entries 81
Mean 0.02552
Std Dev 1.035

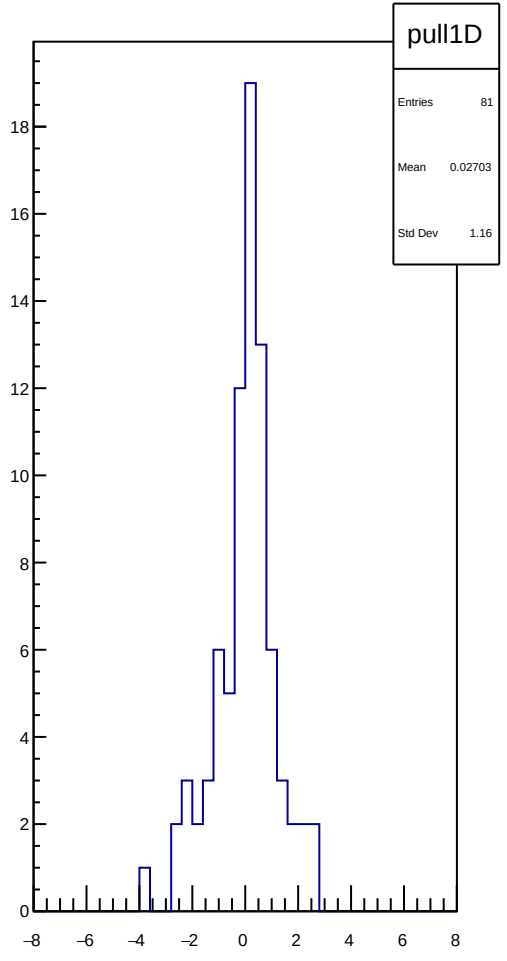

diff_bpm0i01Y_rms vs run
χ² / ndf 713.6 / 80
p0 1618 ± 1.276
1650
1600
1550
1500
1450

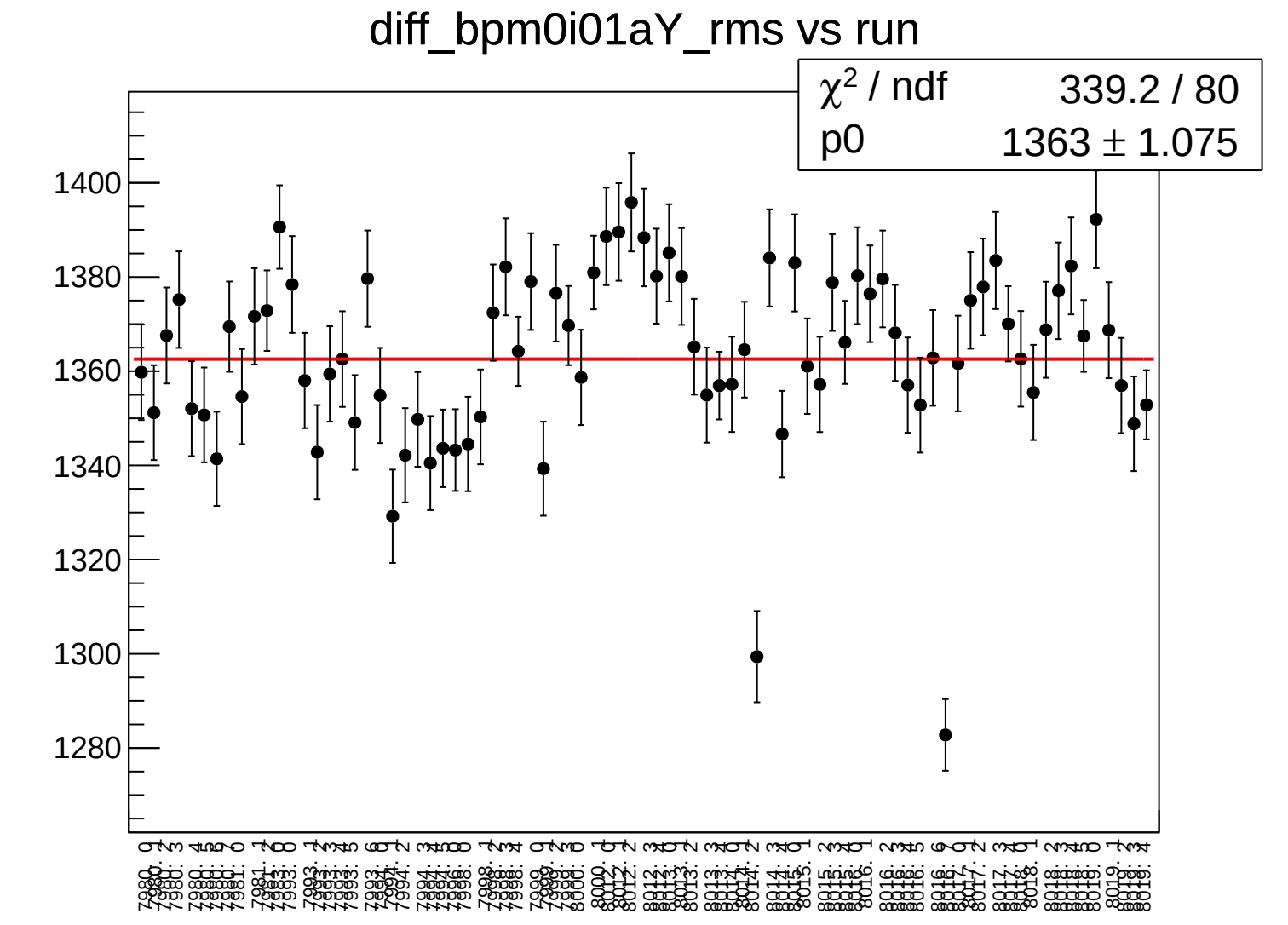

diff_bpm0i01aX_mean vs run
χ^2 / ndf 117.3 / 80
p0 40.91 ± 1.744
pull
Entries 81
Mean −182.1
Std Dev 229.9

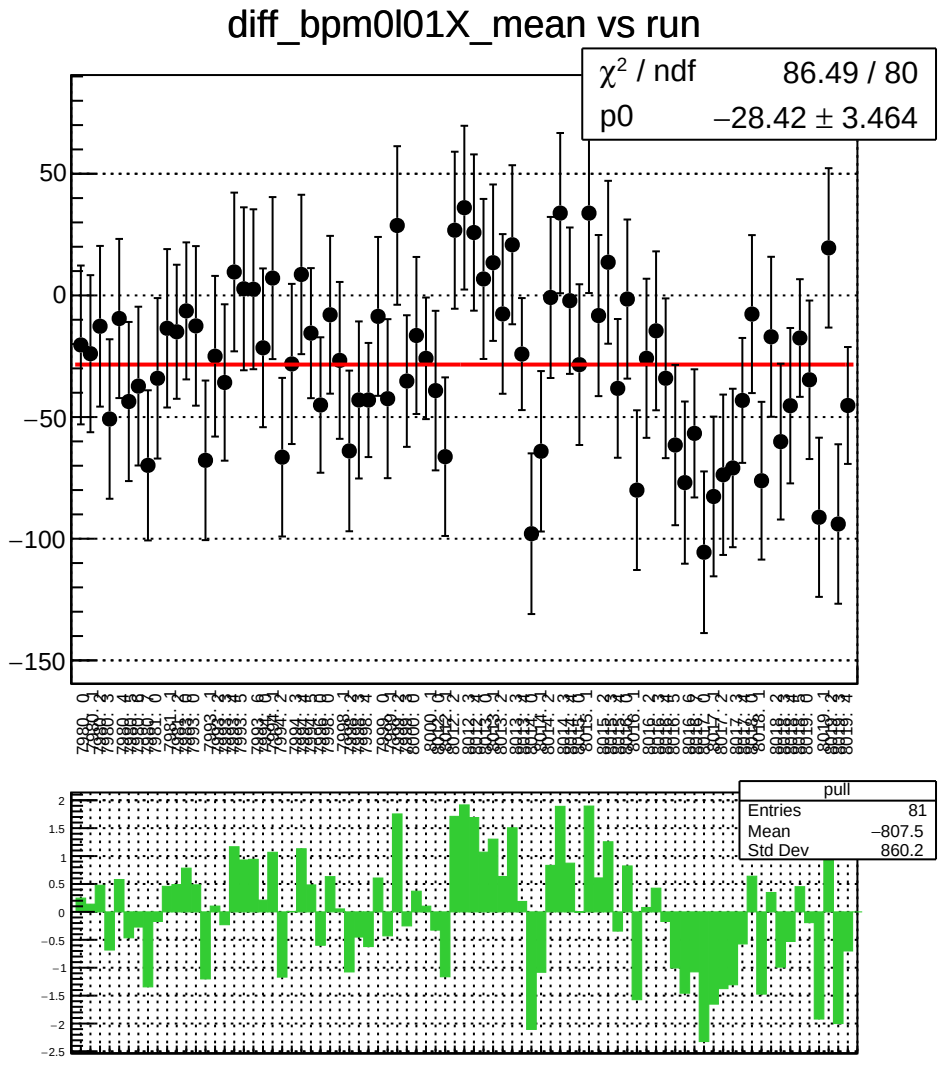

pull1D
Entries 81
Mean 0.01062
Std Dev 1.203

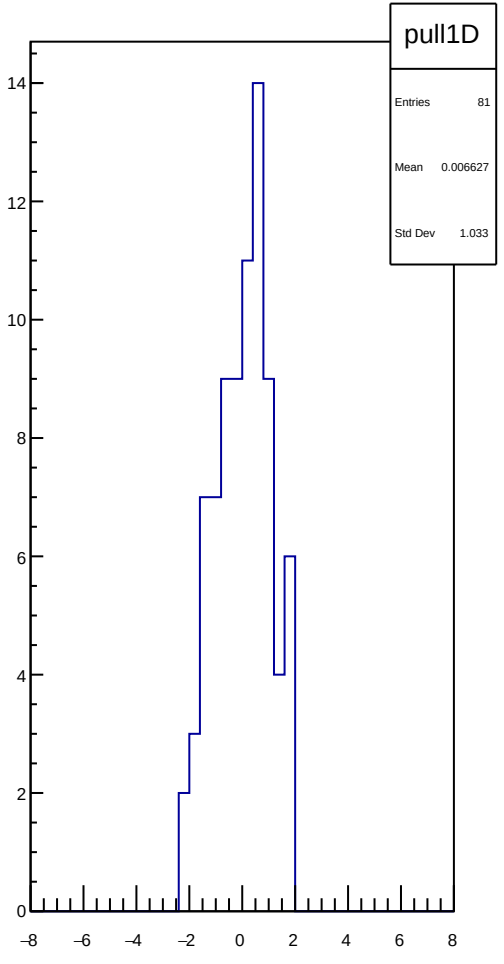

diff_bpm0i01aX_rms vs run
χ² / ndf 747 / 80
p0 1564 ± 1.233
1650
1600
1550
1500
1450
1400

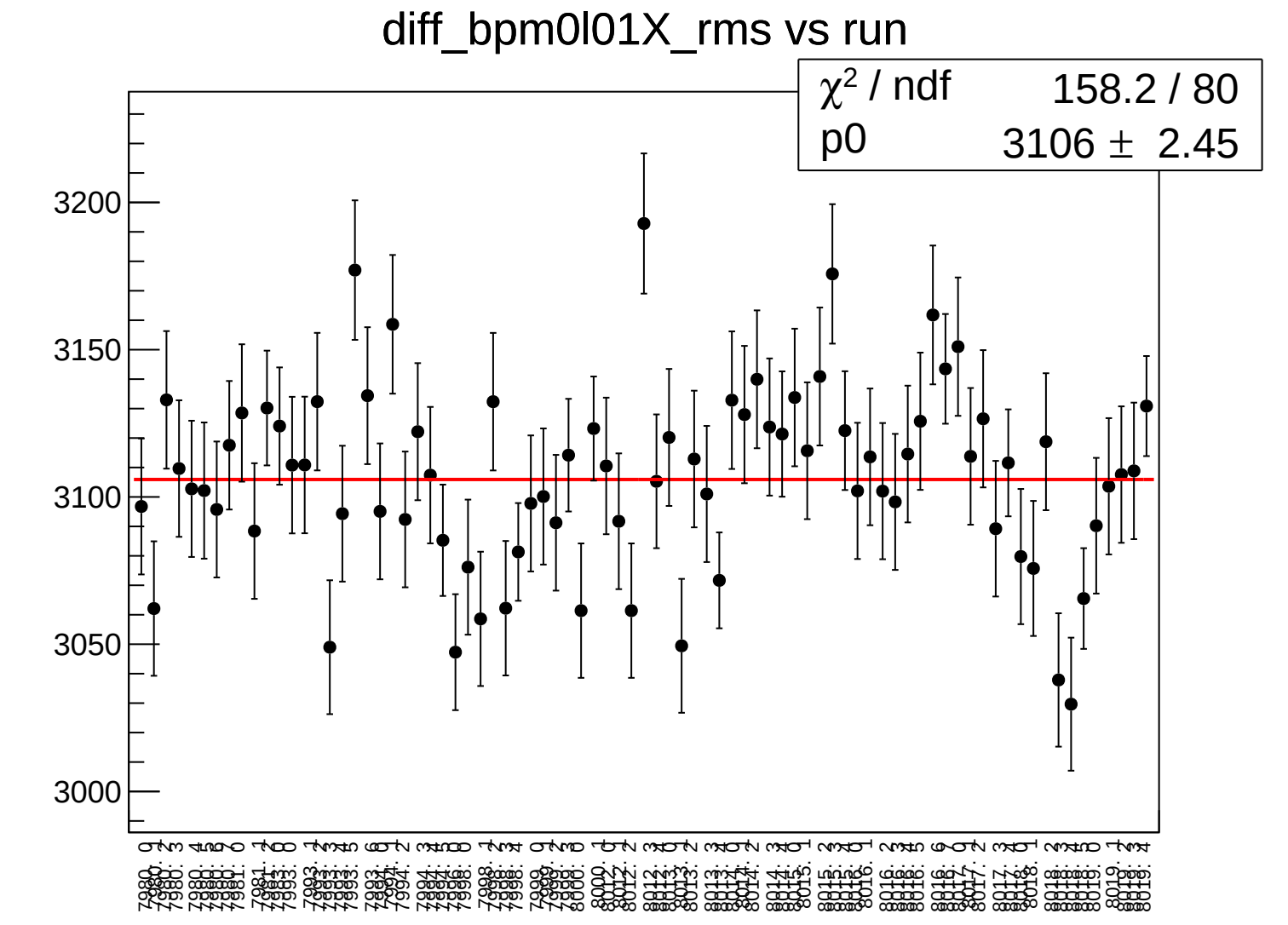

diff_bpm0i01aY_mean vs run
χ² / ndf 109.1 / 80
p0 19.55 ± 1.52
pull
Entries 81
Mean −241.9
Std Dev 289.7

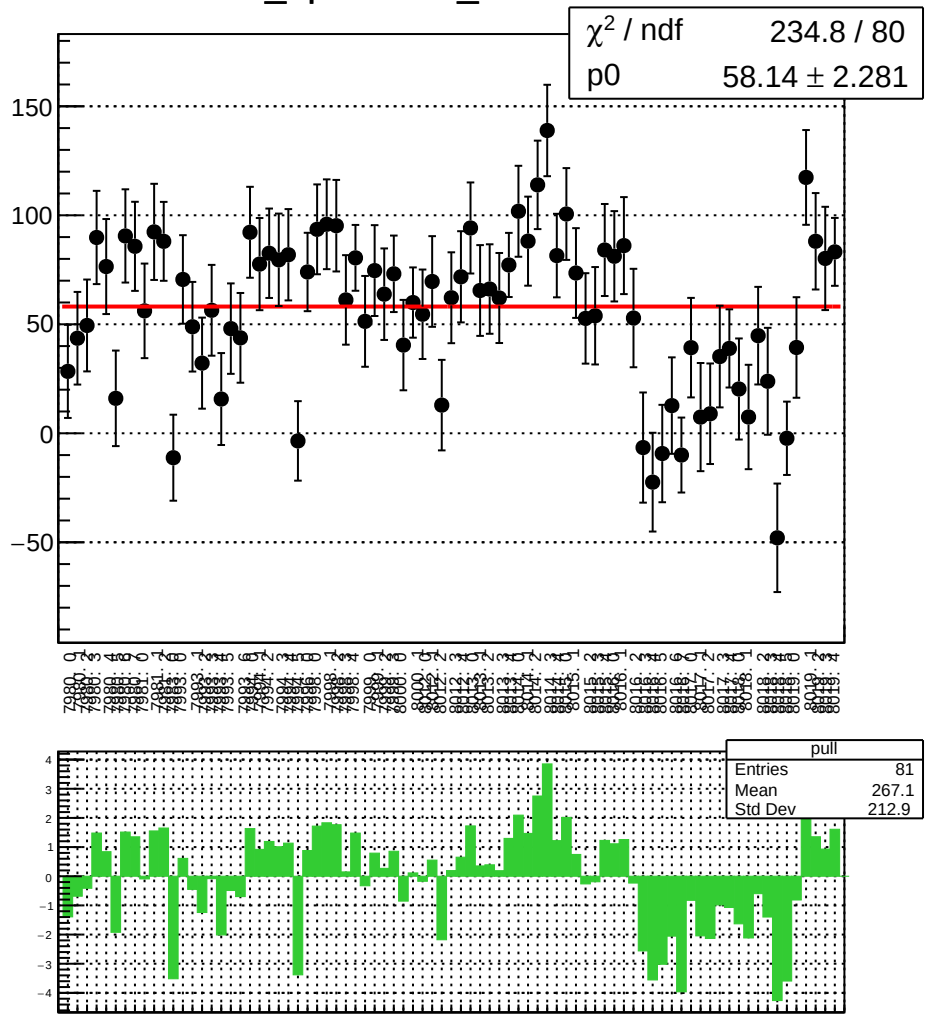

pull1D
Entries 81
Mean 0.02703
Std Dev 1.16

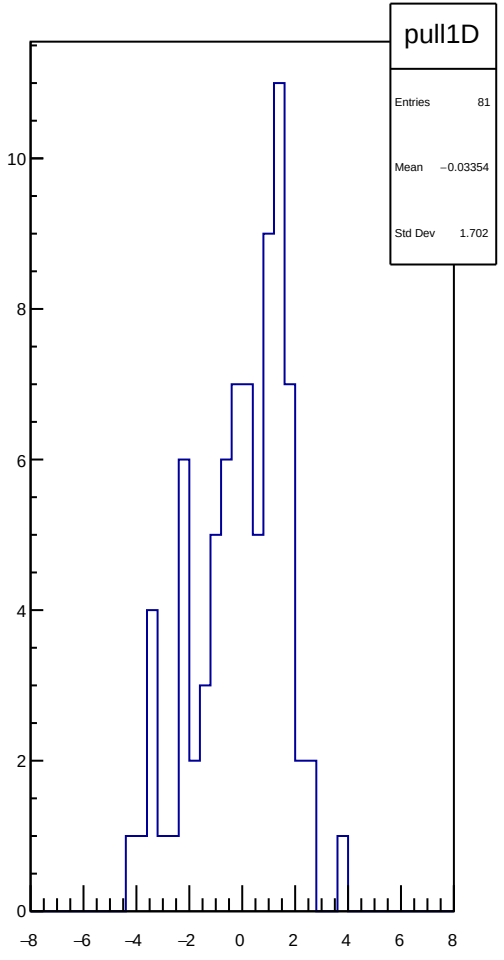

diff_bpm0i01aY_rms vs run
χ² / ndf 339.2 / 80
p0 1363 ± 1.075
1400
1380
1360
1340
1320
1300
1280

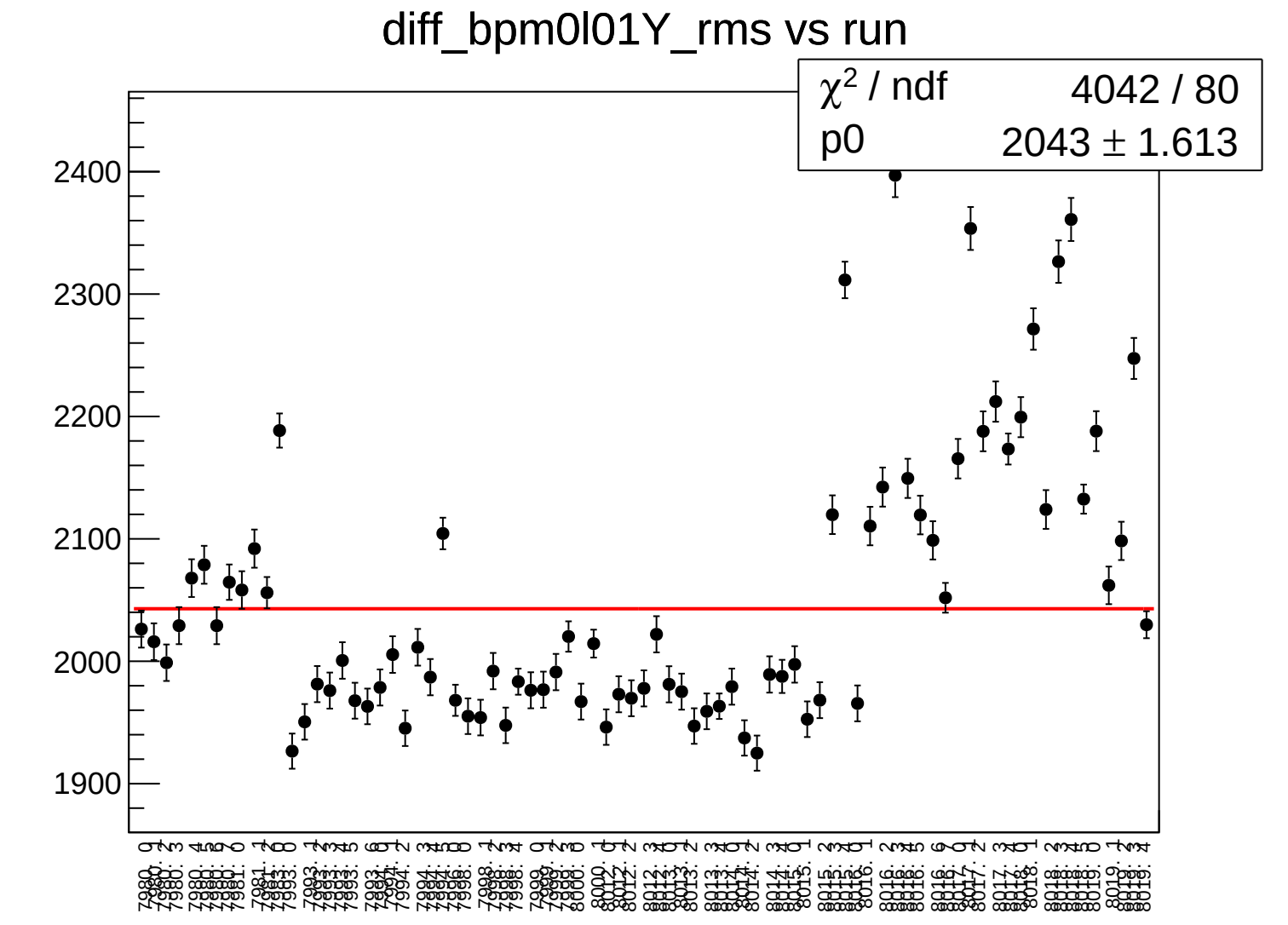

diff_bpm0l01X_mean vs run
χ² / ndf 86.49 / 80
p0 −28.42 ± 3.464
pull
Entries 81
Mean −807.5
Std Dev 860.2

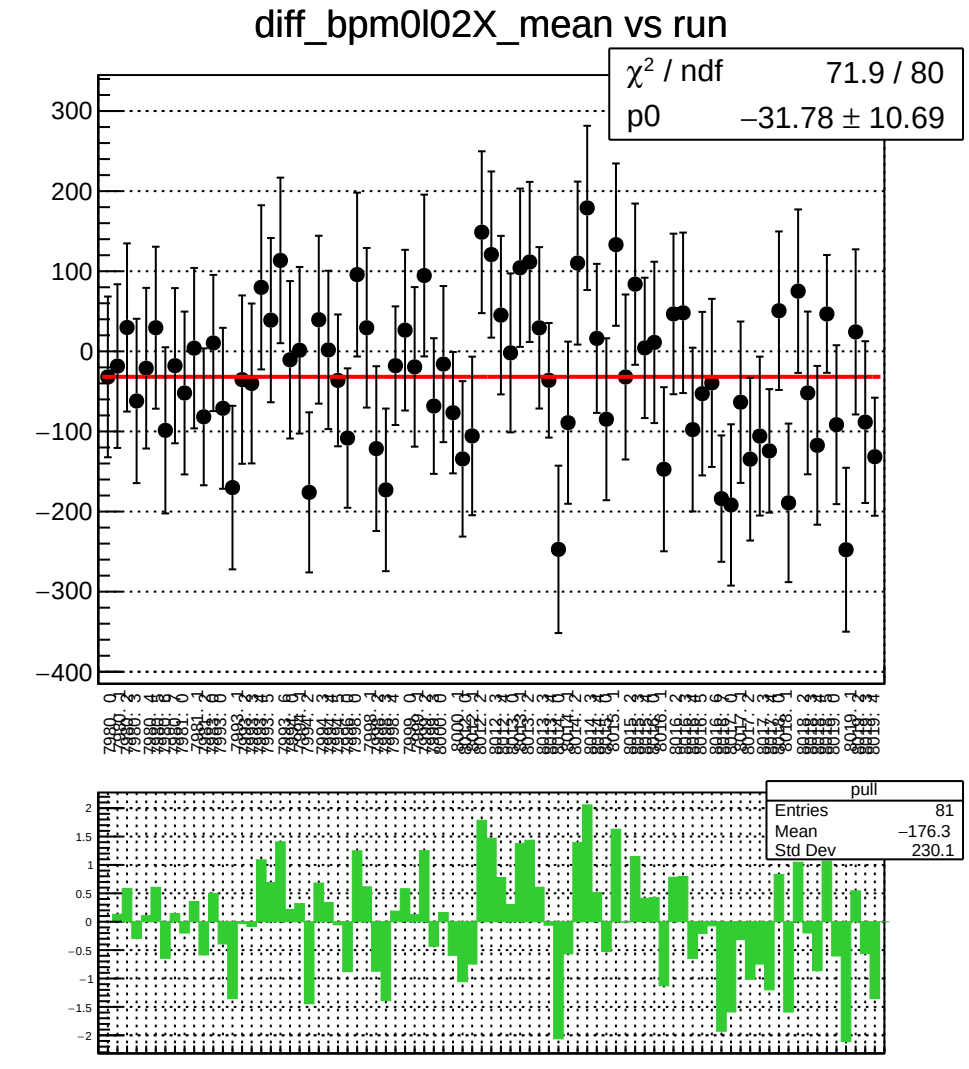

pull1D
Entries 81
Mean 0.006627
Std Dev 1.033

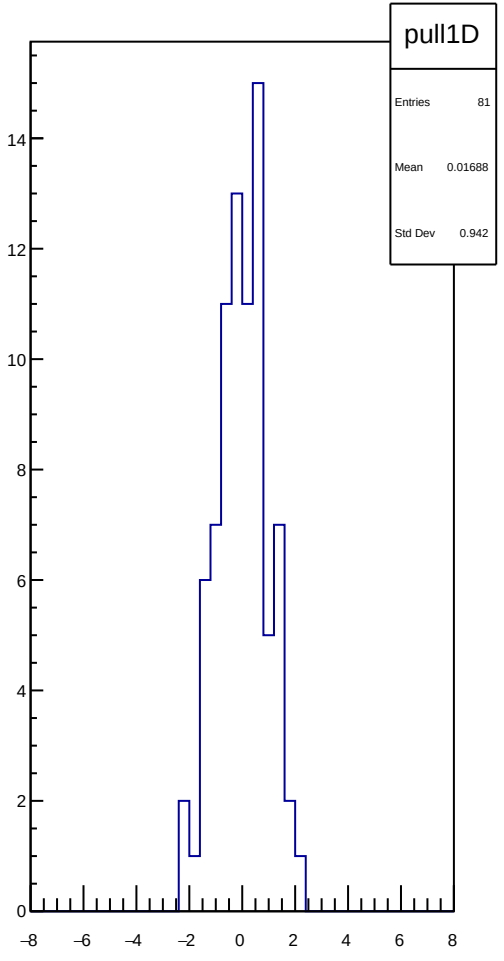

diff_bpm0l01X_rms vs run
χ² / ndf 158.2 / 80
p0 3106 ± 2.45
3200
3150
3100
3050
3000

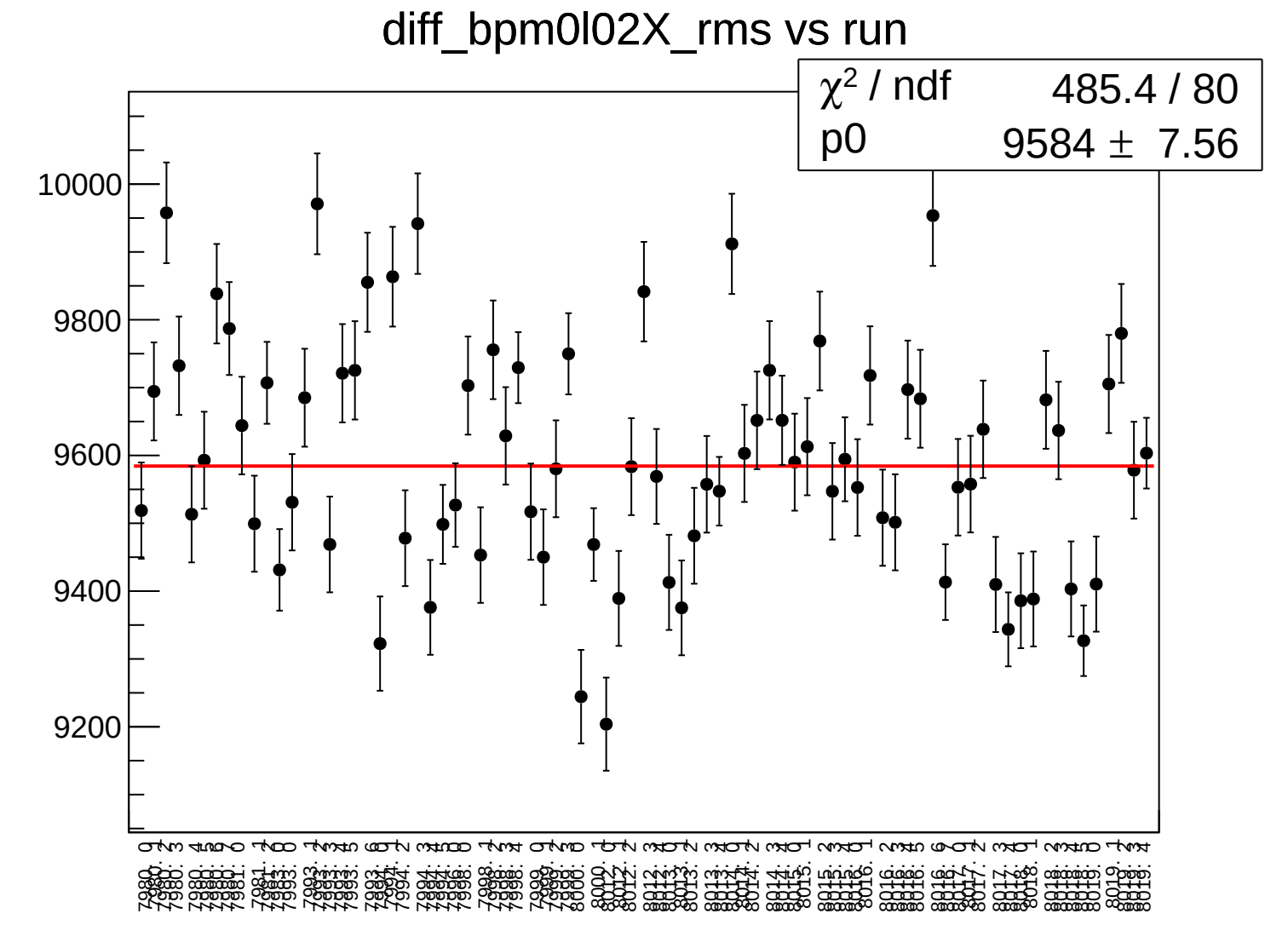

diff_bpm0l01Y_mean vs run
χ² / ndf 234.8 / 80
p0 58.14 ± 2.281
150
100
50
0
−50
pull
Entries 81
Mean 267.1
Std Dev 212.9
4
3
2
1
0
−1
−2
−3
−4

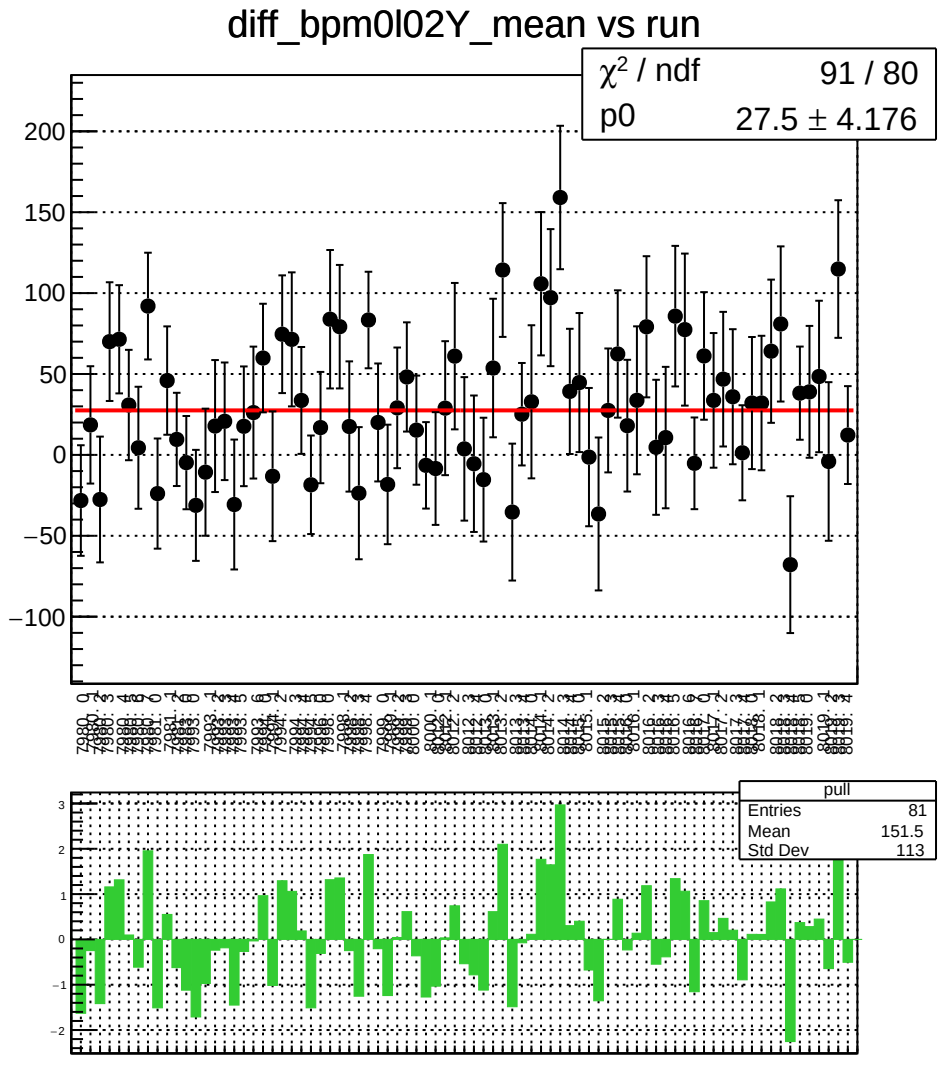

pull1D
Entries 81
Mean −0.03354
Std Dev 1.702
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

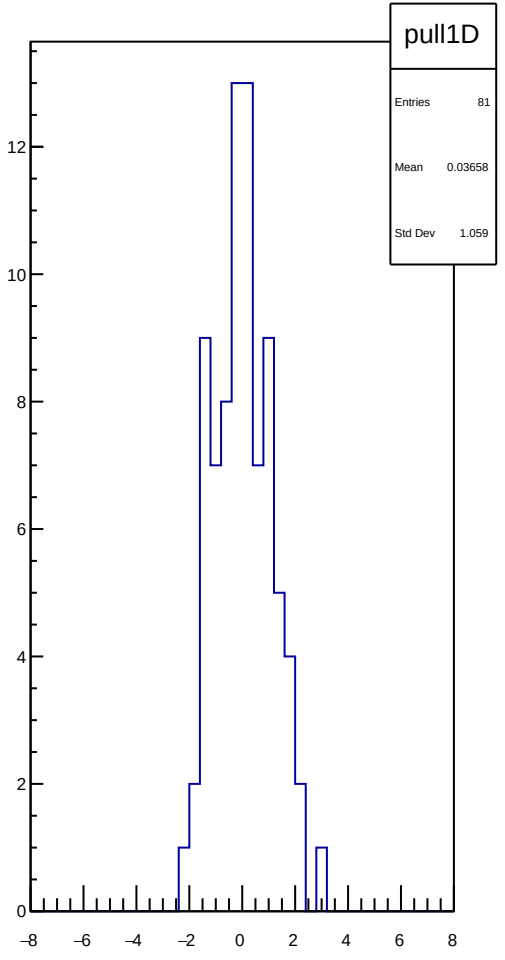

diff_bpm0l01Y_rms vs run
χ² / ndf 4042 / 80
p0 2043 ± 1.613
2400
2300
2200
2100
2000
1900

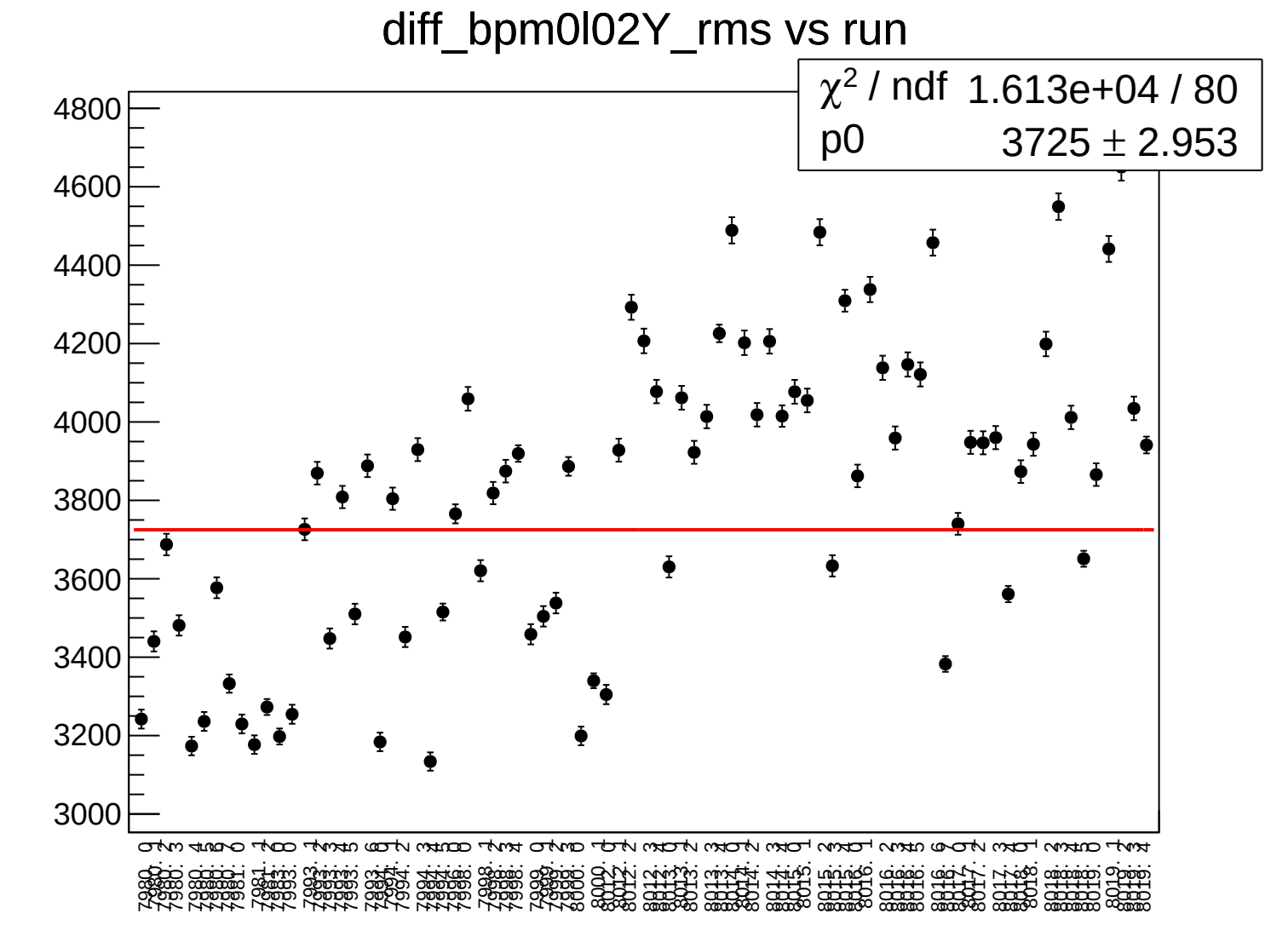

diff_bpm0l02X_mean vs run
χ² / ndf 71.9 / 80
p0 −31.78 ± 10.69
pull
Entries 81
Mean −176.3
Std Dev 230.1

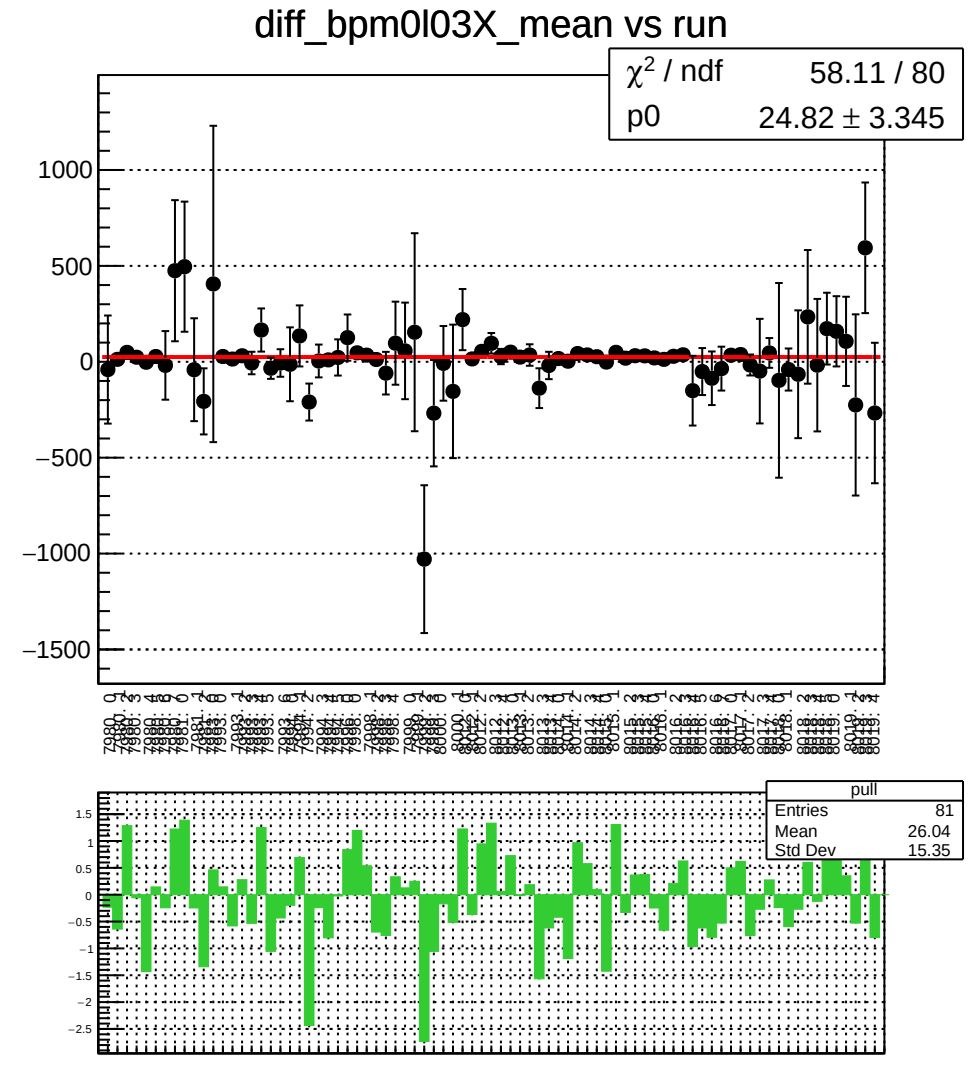

pull1D
Entries 81
Mean 0.01688
Std Dev 0.942

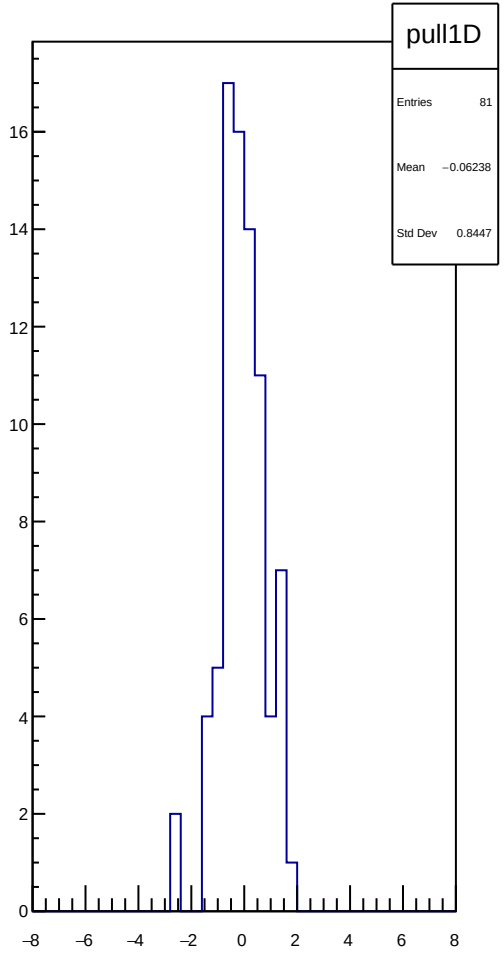

diff_bpm0l02X_rms vs run
χ² / ndf 485.4 / 80
p0 9584 ± 7.56
10000
9800
9600
9400
9200

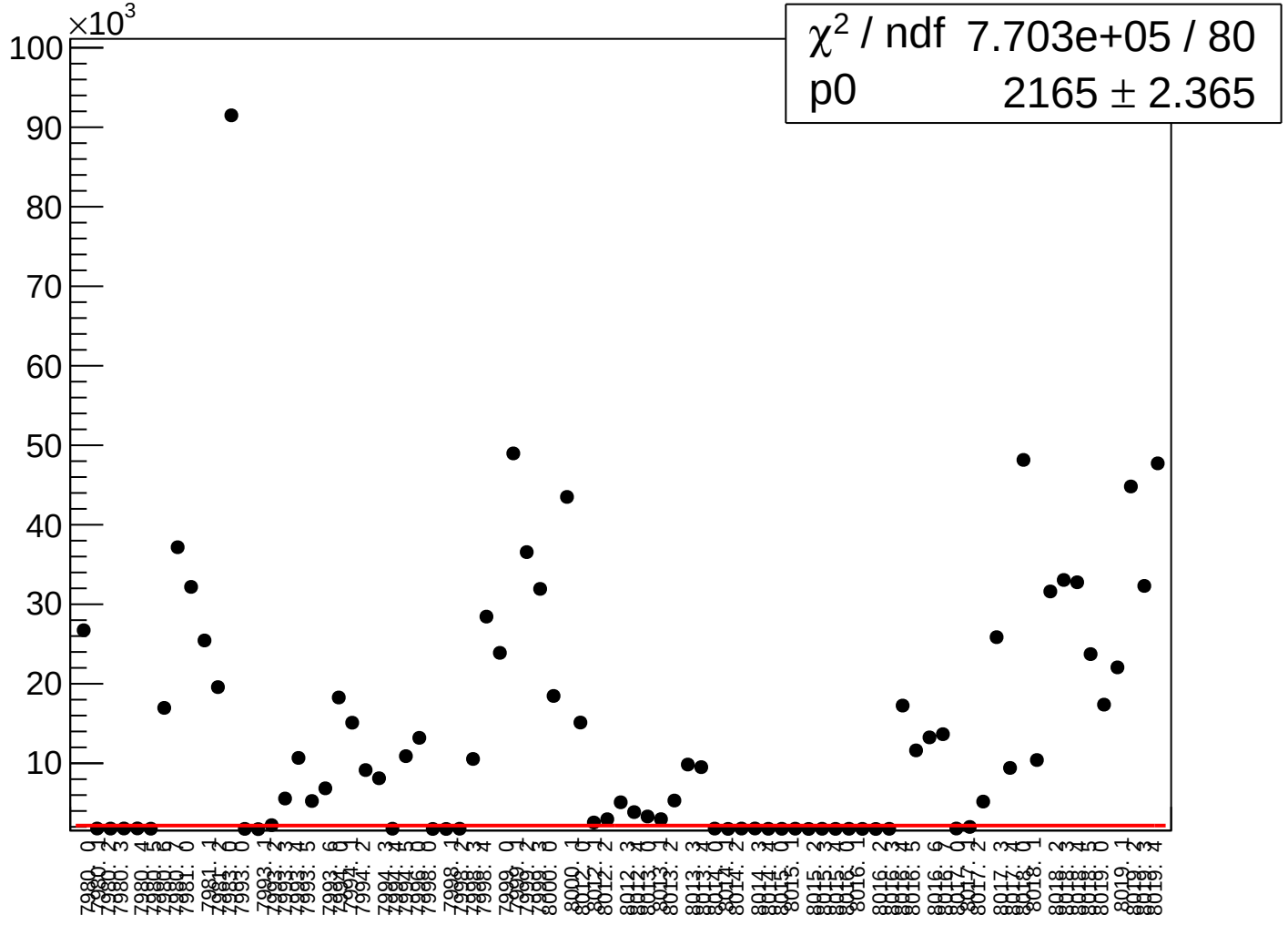

diff_bpm0l02Y_mean vs run
χ^2 / ndf 91 / 80
p0 27.5 ± 4.176
pull
Entries 81
Mean 151.5
Std Dev 113

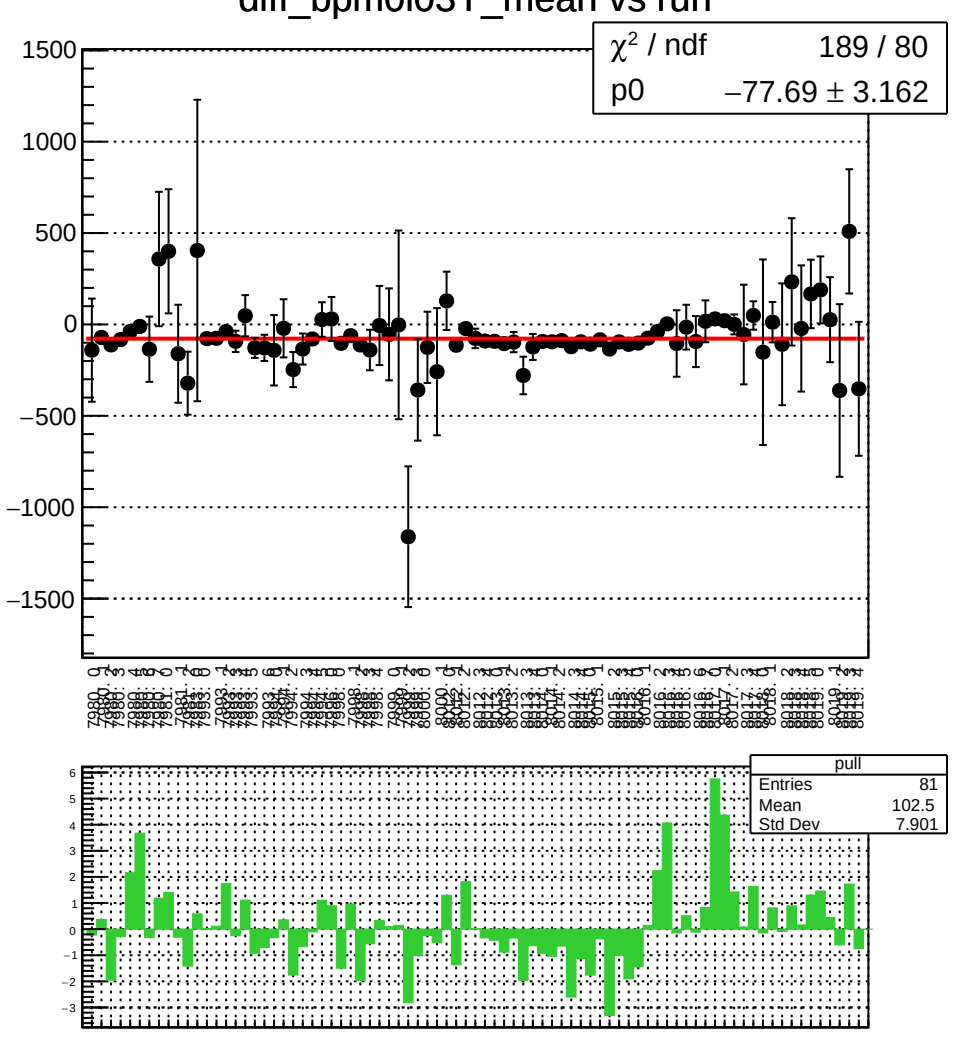

pull1D
Entries 81
Mean 0.03658
Std Dev 1.059

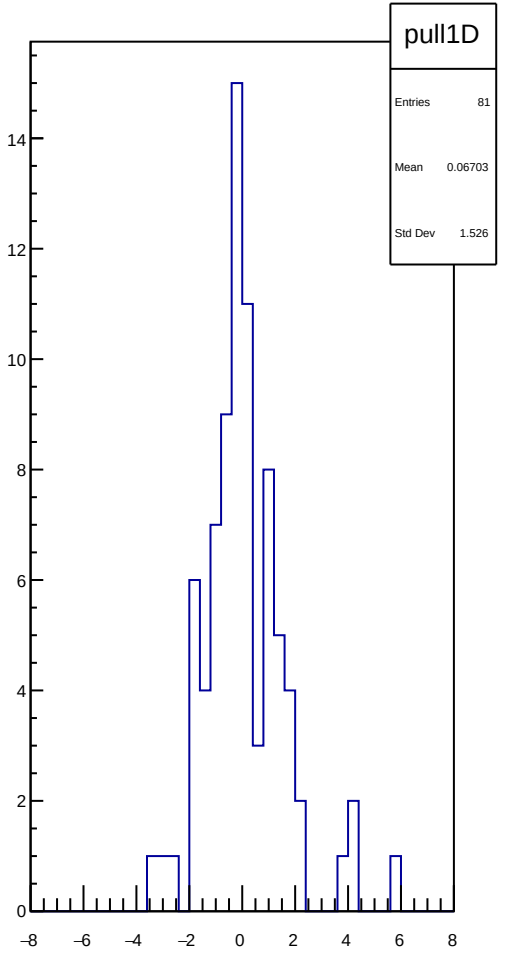

diff_bpm0l02Y_rms vs run
χ² / ndf 1.613e+04 / 80
p0 3725 ± 2.953
4800
4600
4400
4200
4000
3800
3600
3400
3200
3000

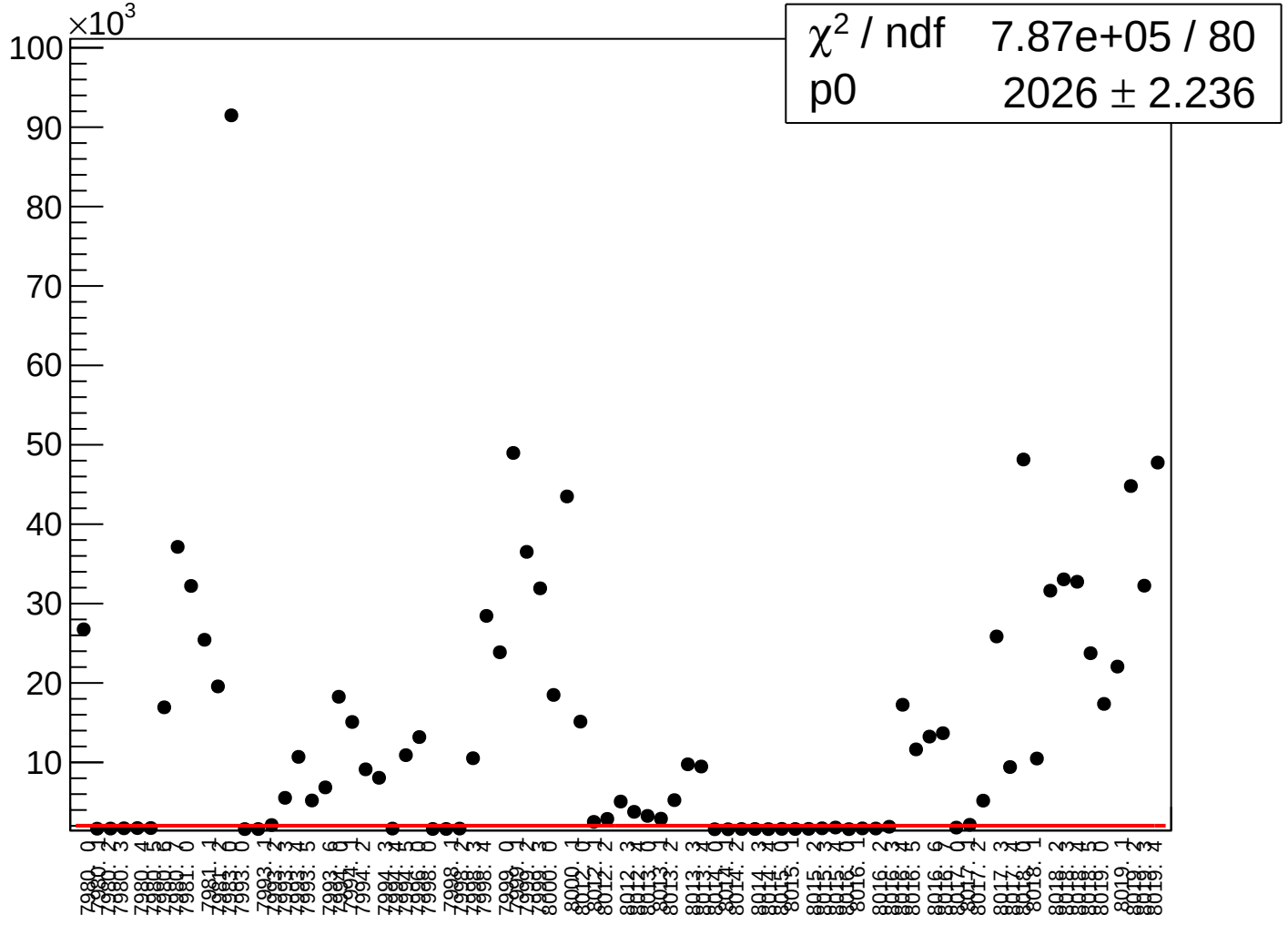

diff_bpm0l03X_mean vs run
χ² / ndf 58.11 / 80
p0 24.82 ± 3.345
1000
500
0
−500
−1000
−1500
pull
Entries 81
Mean 26.04
Std Dev 15.35
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

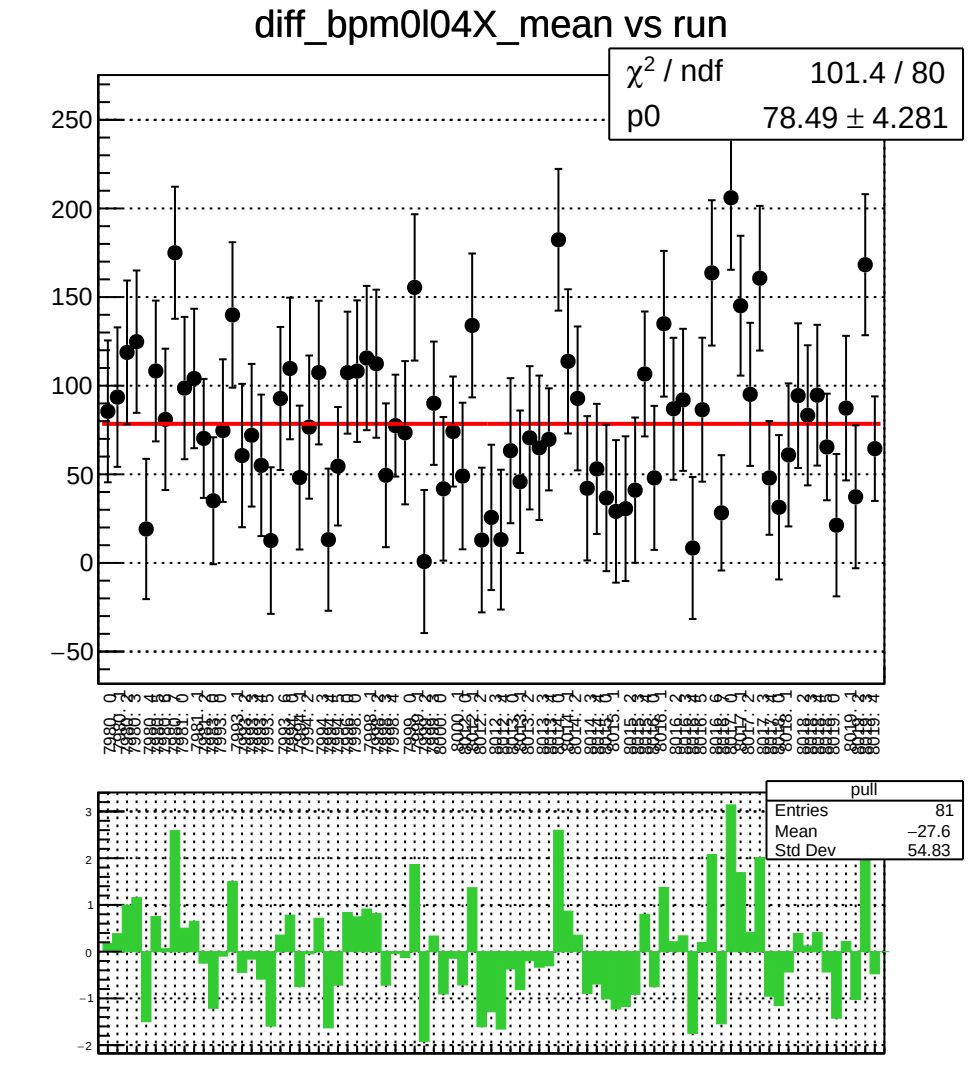

pull1D
Entries 81
Mean −0.06238
Std Dev 0.8447
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

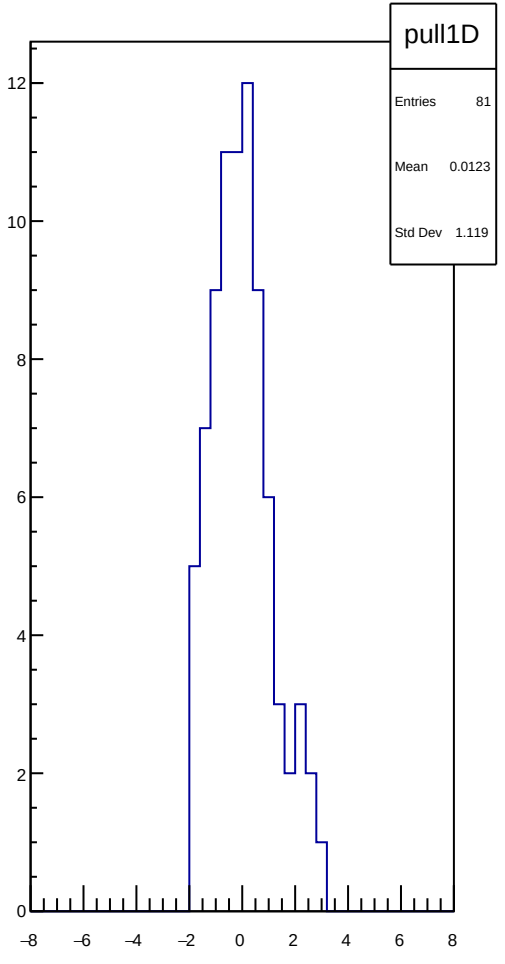

diff_bpm0l03X_rms vs run
×10^3
χ^2 / ndf 7.703e+05 / 80
p0 2165 ± 2.365
100
90
80
70
60
50
40
30
20
10

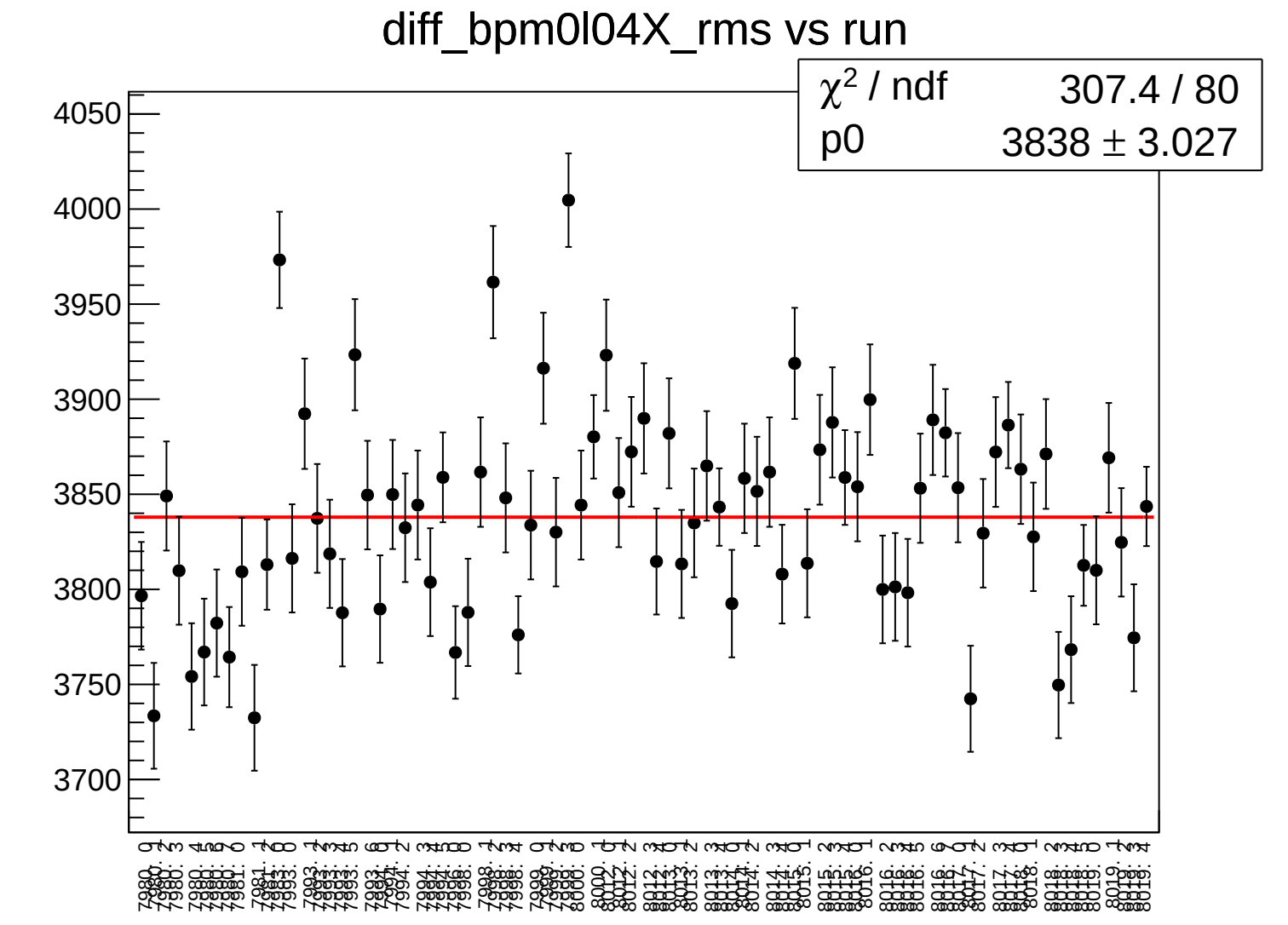

diff_bpm0l03Y_mean vs run
χ² / ndf 189 / 80
p0 −77.69 ± 3.162
pull
Entries 81
Mean 102.5
Std Dev 7.901

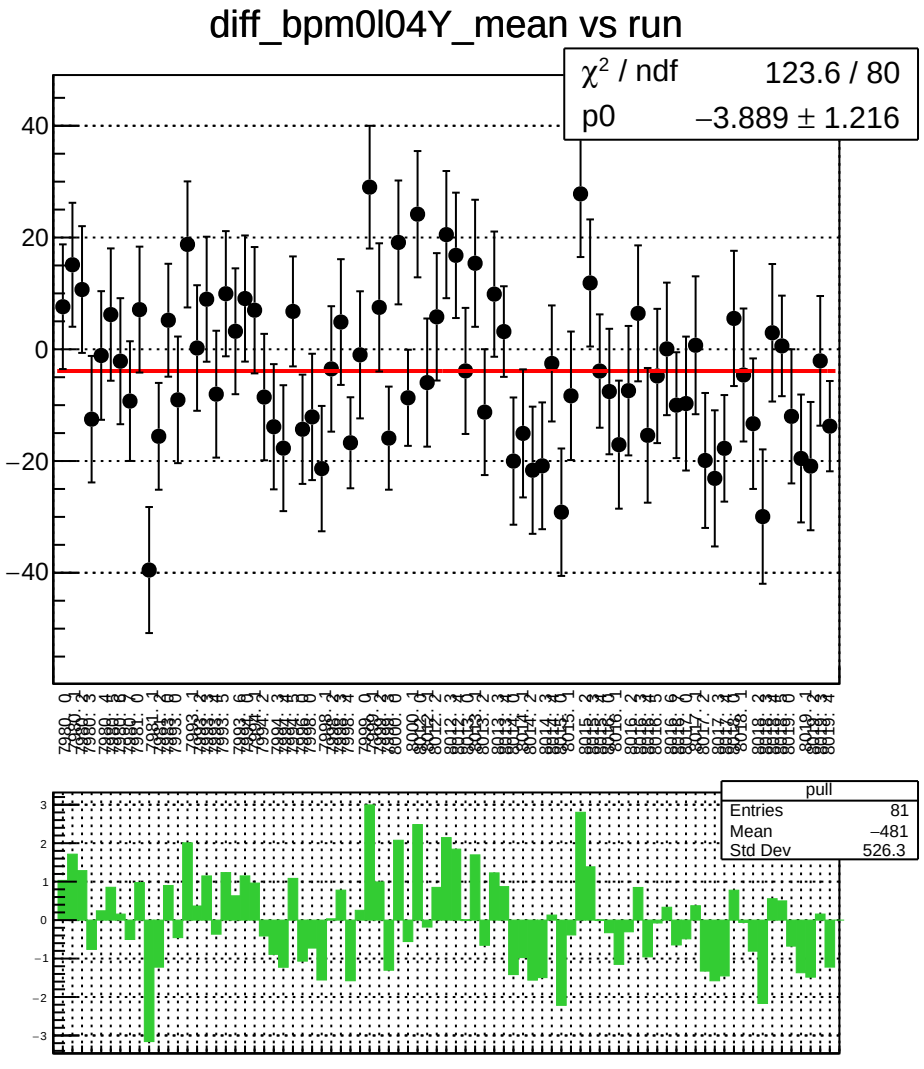

pull1D
Entries 81
Mean 0.06703
Std Dev 1.526

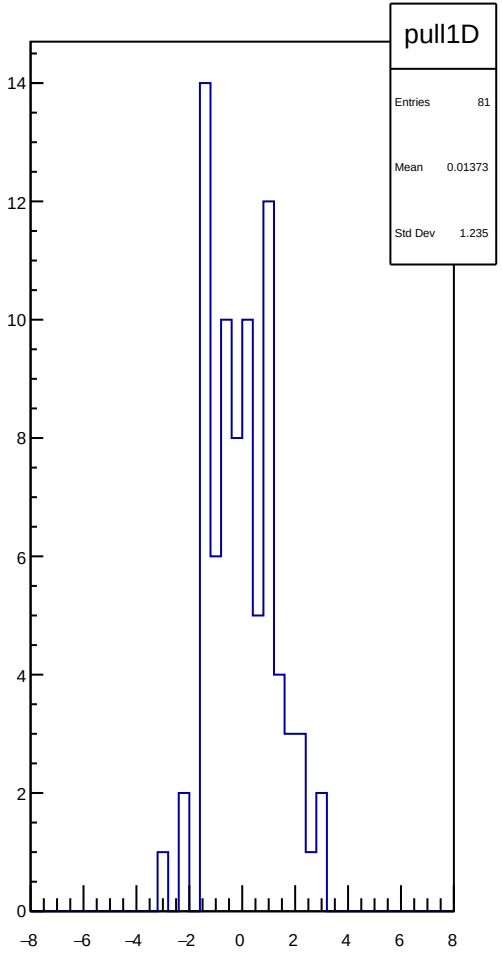

diff_bpm0l03Y_rms vs run
×10^3
χ^2 / ndf 7.87e+05 / 80
p0 2026 ± 2.236
100
90
80
70
60
50
40
30
20
10

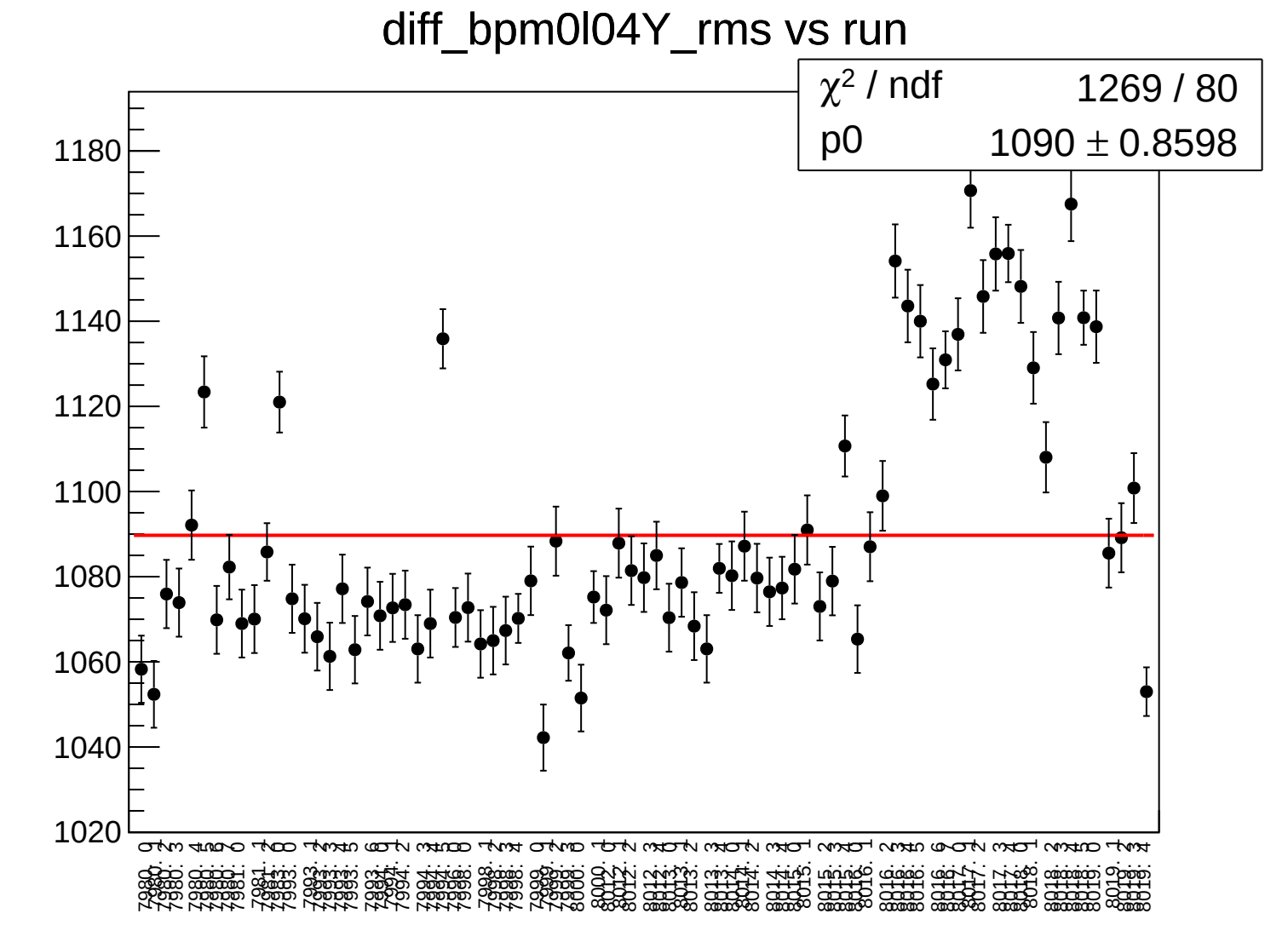

diff_bpm0l04X_mean vs run
χ² / ndf 101.4 / 80
p0 78.49 ± 4.281
pull
Entries 81
Mean −27.6
Std Dev 54.83

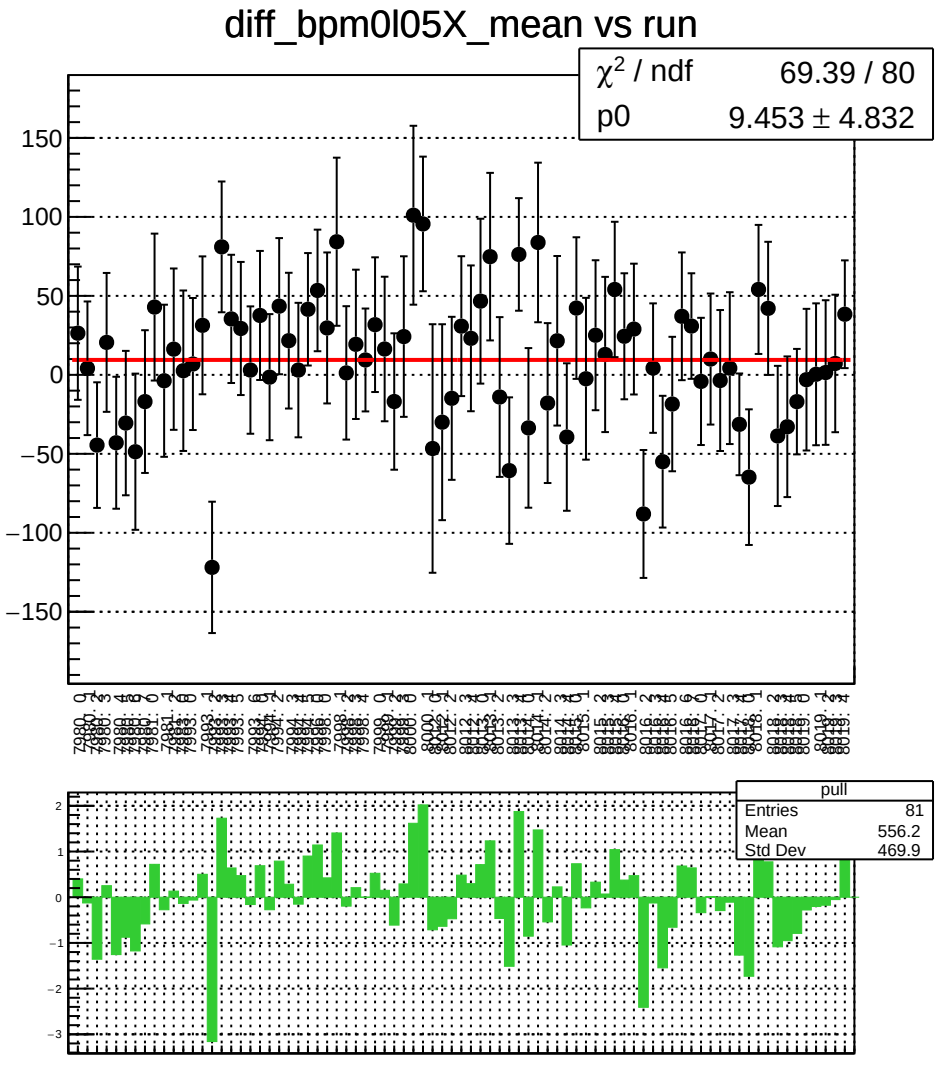

pull1D
Entries 81
Mean 0.0123
Std Dev 1.119

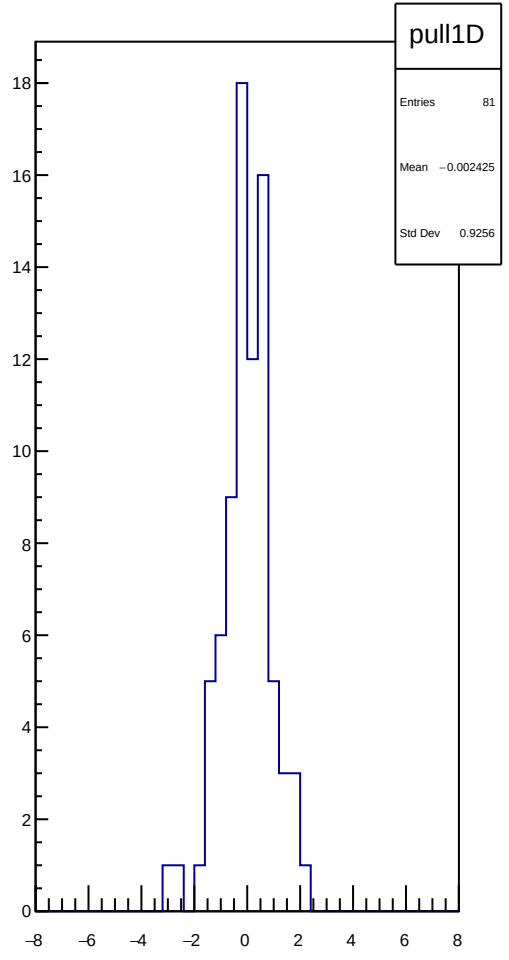

diff_bpm0l04X_rms vs run
χ² / ndf 307.4 / 80
p0 3838 ± 3.027
4050
4000
3950
3900
3850
3800
3750
3700

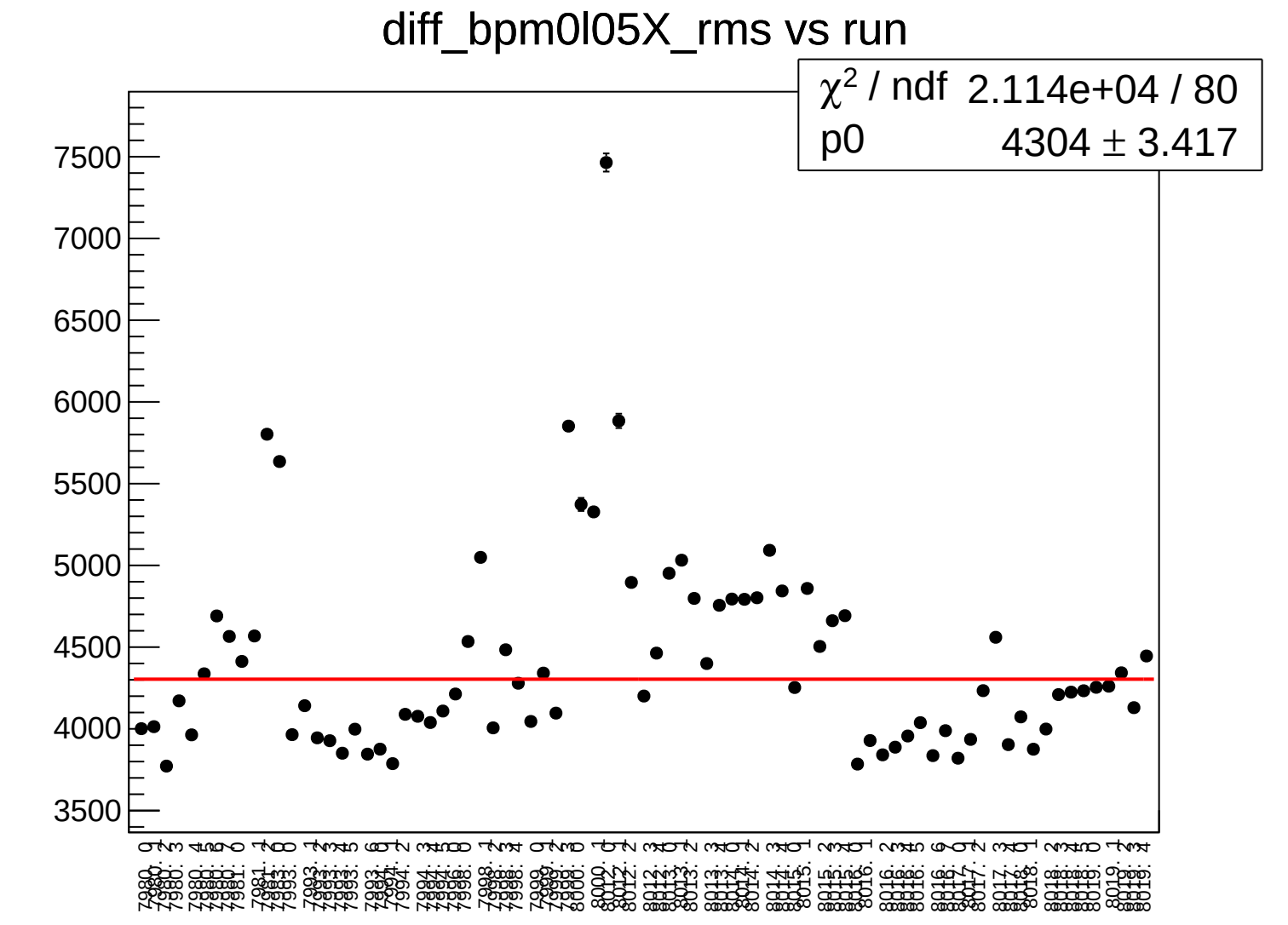

diff_bpm0l04Y_mean vs run
χ² / ndf 123.6 / 80
p0 −3.889 ± 1.216
pull
Entries 81
Mean −481
Std Dev 526.3

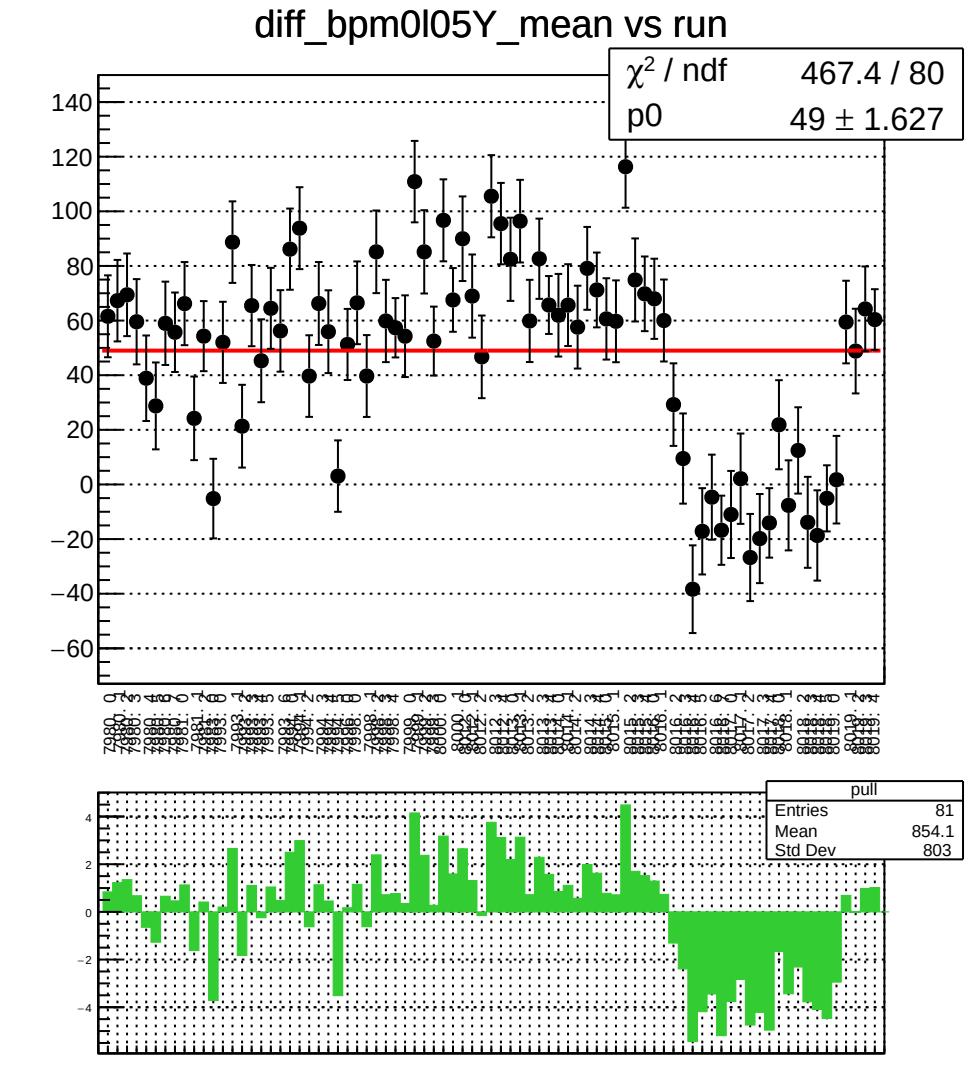

pull1D
Entries 81
Mean 0.01373
Std Dev 1.235

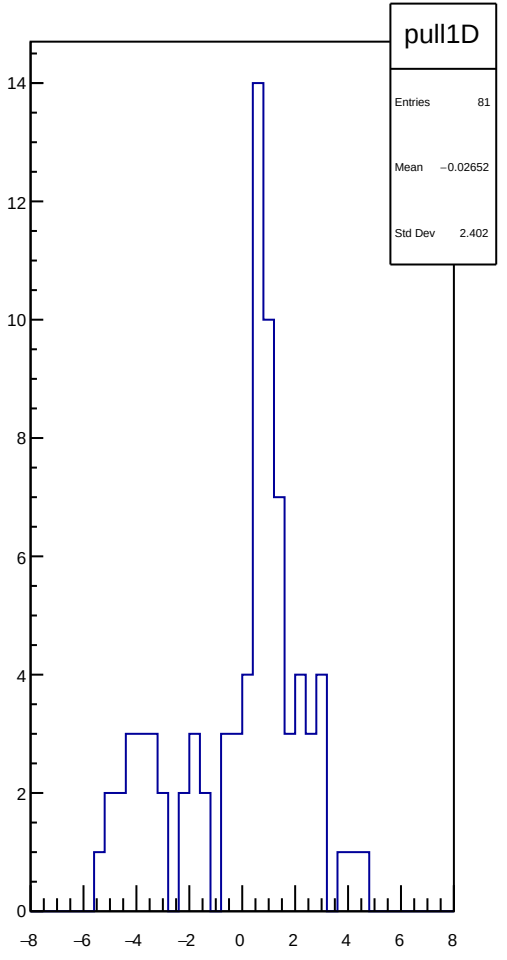

diff_bpm0l04Y_rms vs run
χ² / ndf 1269 / 80
p0 1090 ± 0.8598
1180
1160
1140
1120
1100
1080
1060
1040
1020

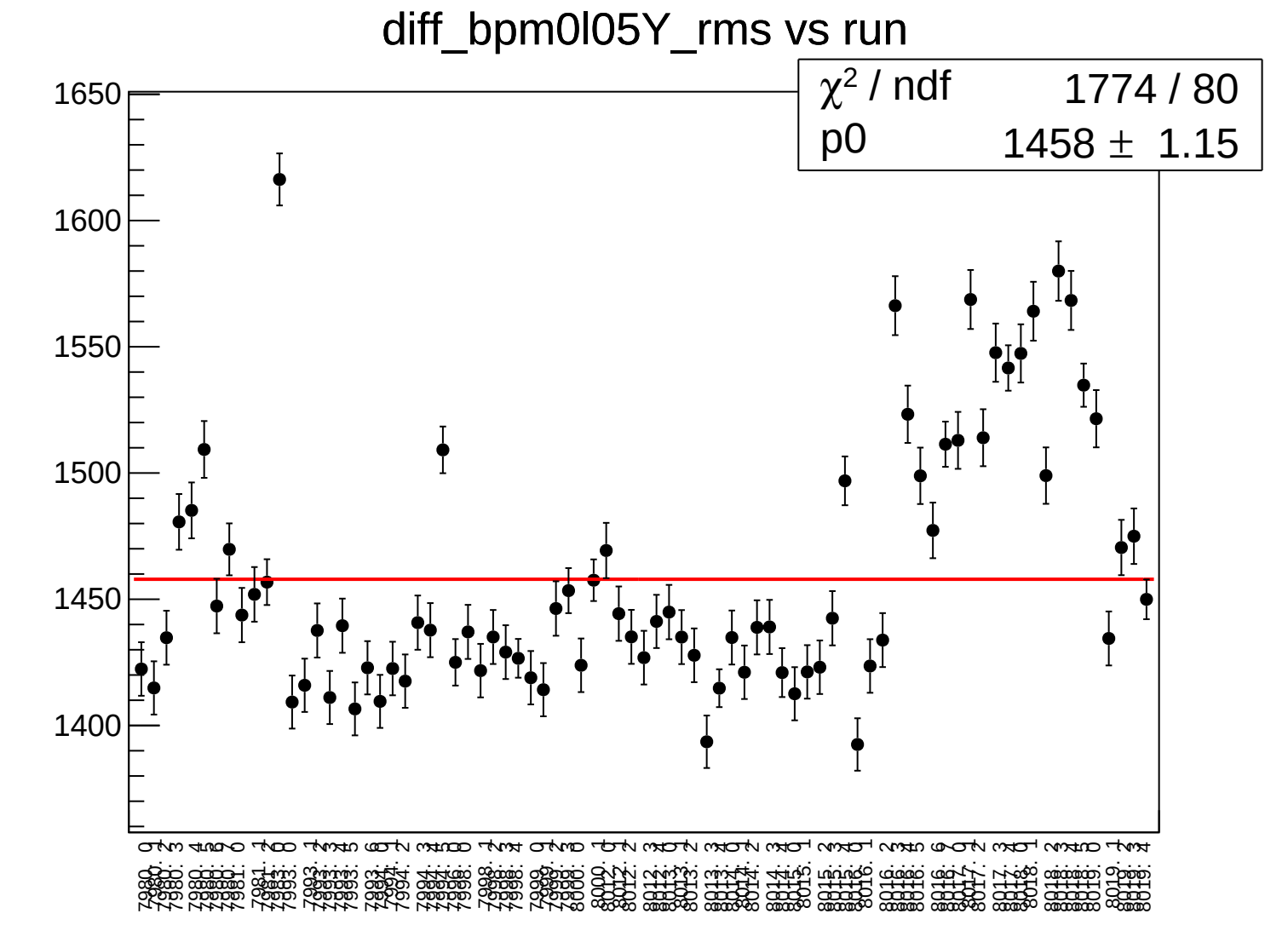

diff_bpm0l05X_mean vs run
χ^2 / ndf 69.39 / 80
p0 9.453 ± 4.832
150
100
50
0
−50
−100
−150
pull
Entries 81
Mean 556.2
Std Dev 469.9
2
1
0
−1
−2
−3

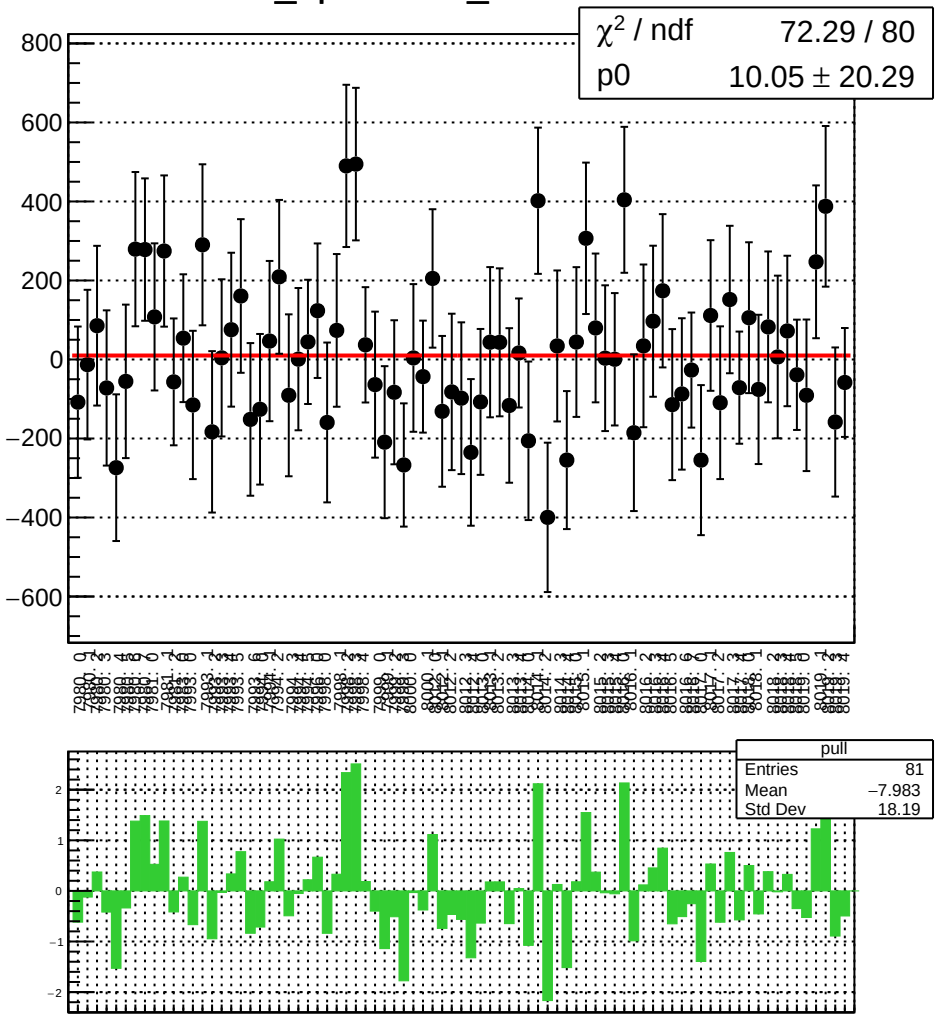

pull1D
Entries 81
Mean −0.002425
Std Dev 0.9256
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

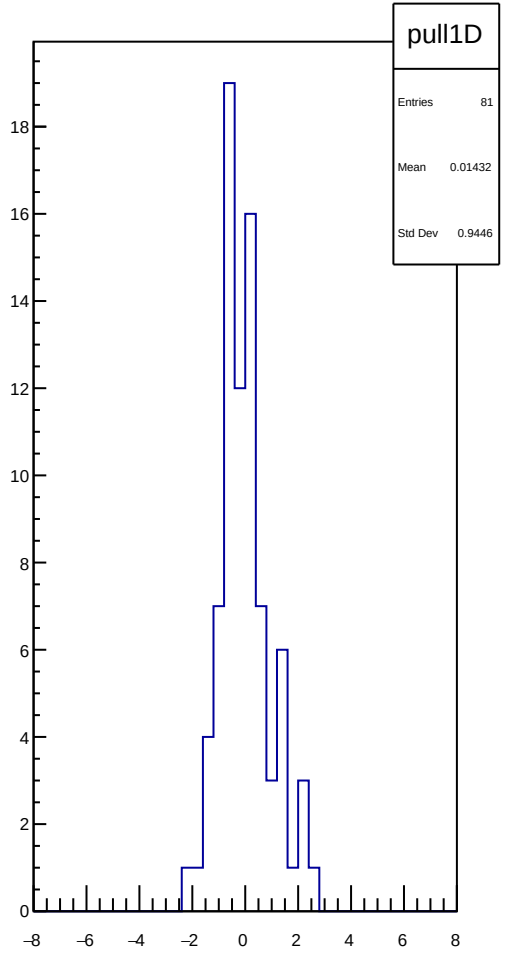

diff_bpm0l05X_rms vs run
χ² / ndf 2.114e+04 / 80
p0 4304 ± 3.417
7500
7000
6500
6000
5500
5000
4500
4000
3500

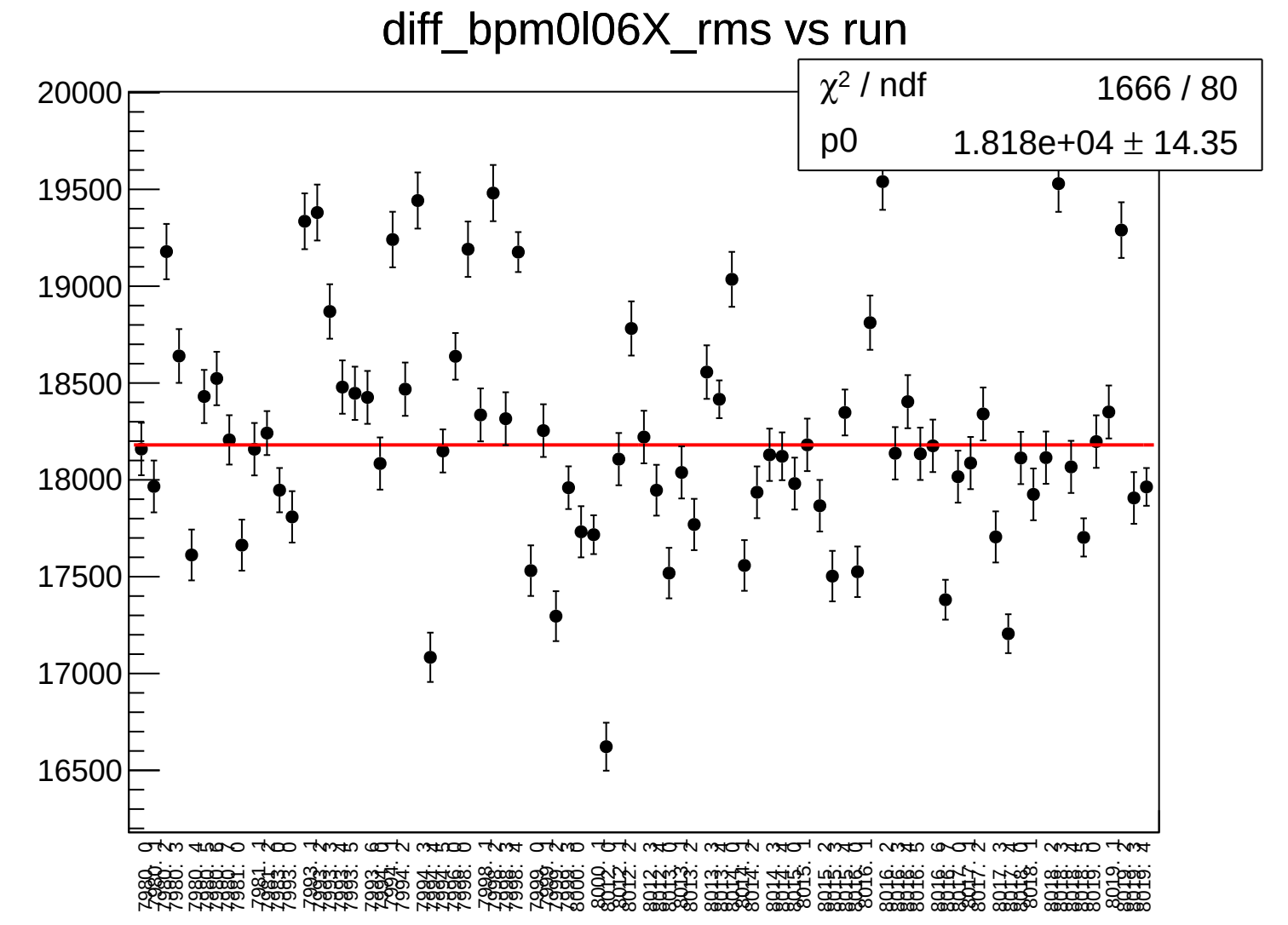

diff_bpm0l05Y_mean vs run
χ² / ndf 467.4 / 80
p0 49 ± 1.627
pull
Entries 81
Mean 854.1
Std Dev 803

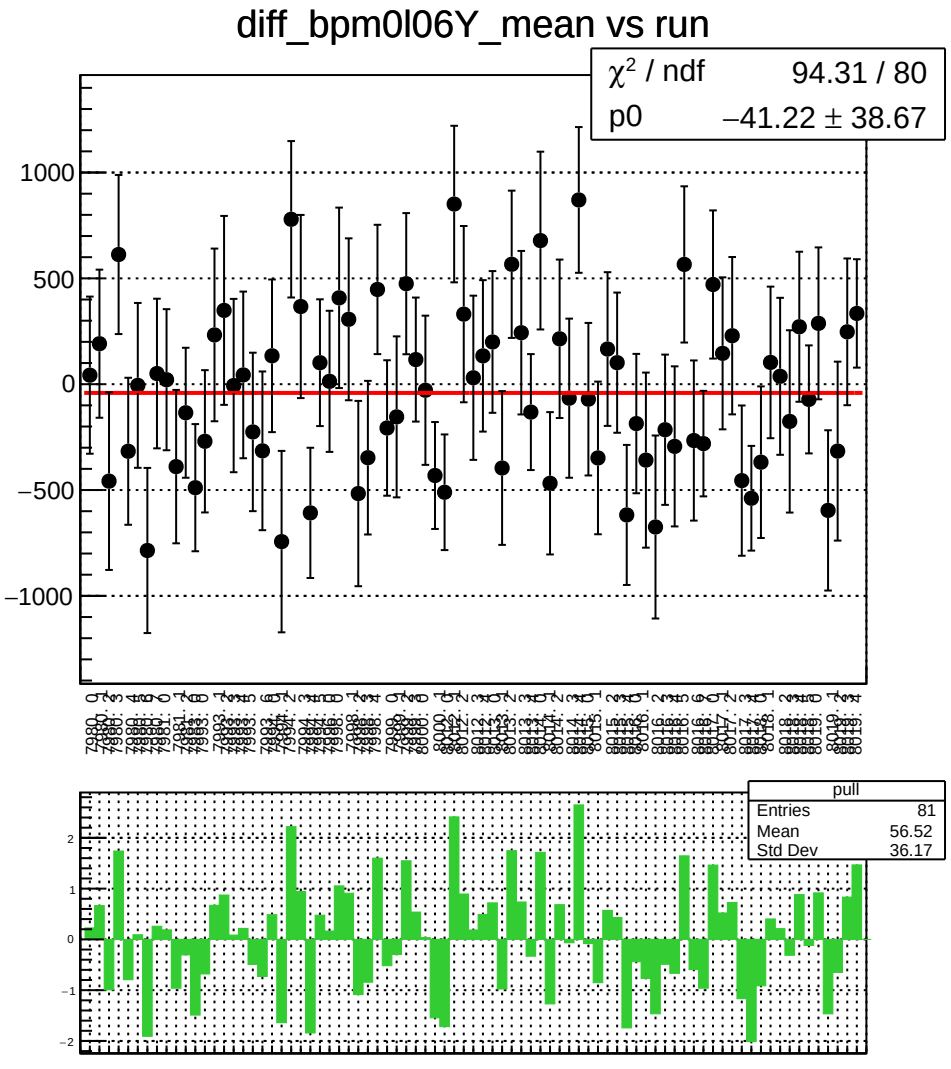

pull1D
Entries 81
Mean −0.02652
Std Dev 2.402

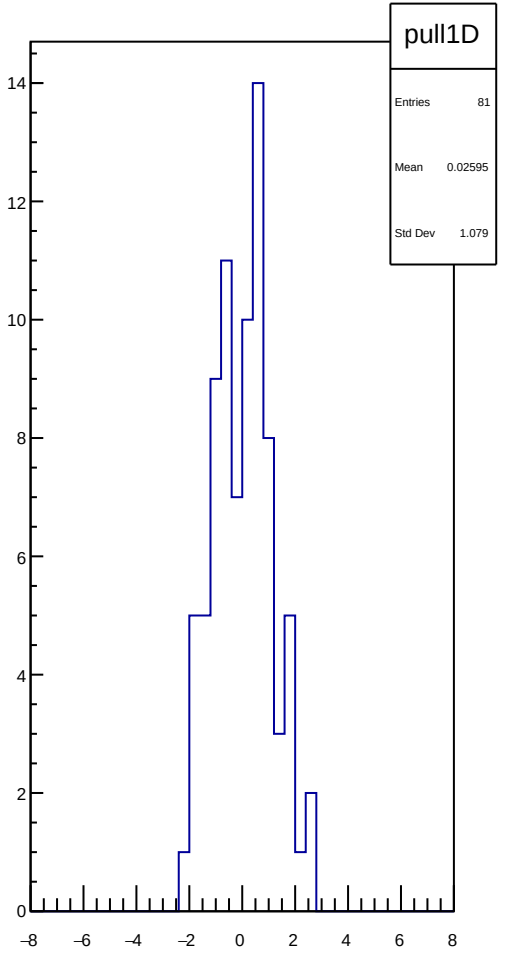

diff_bpm0l05Y_rms vs run
χ² / ndf 1774 / 80
p0 1458 ± 1.15
1650
1600
1550
1500
1450
1400

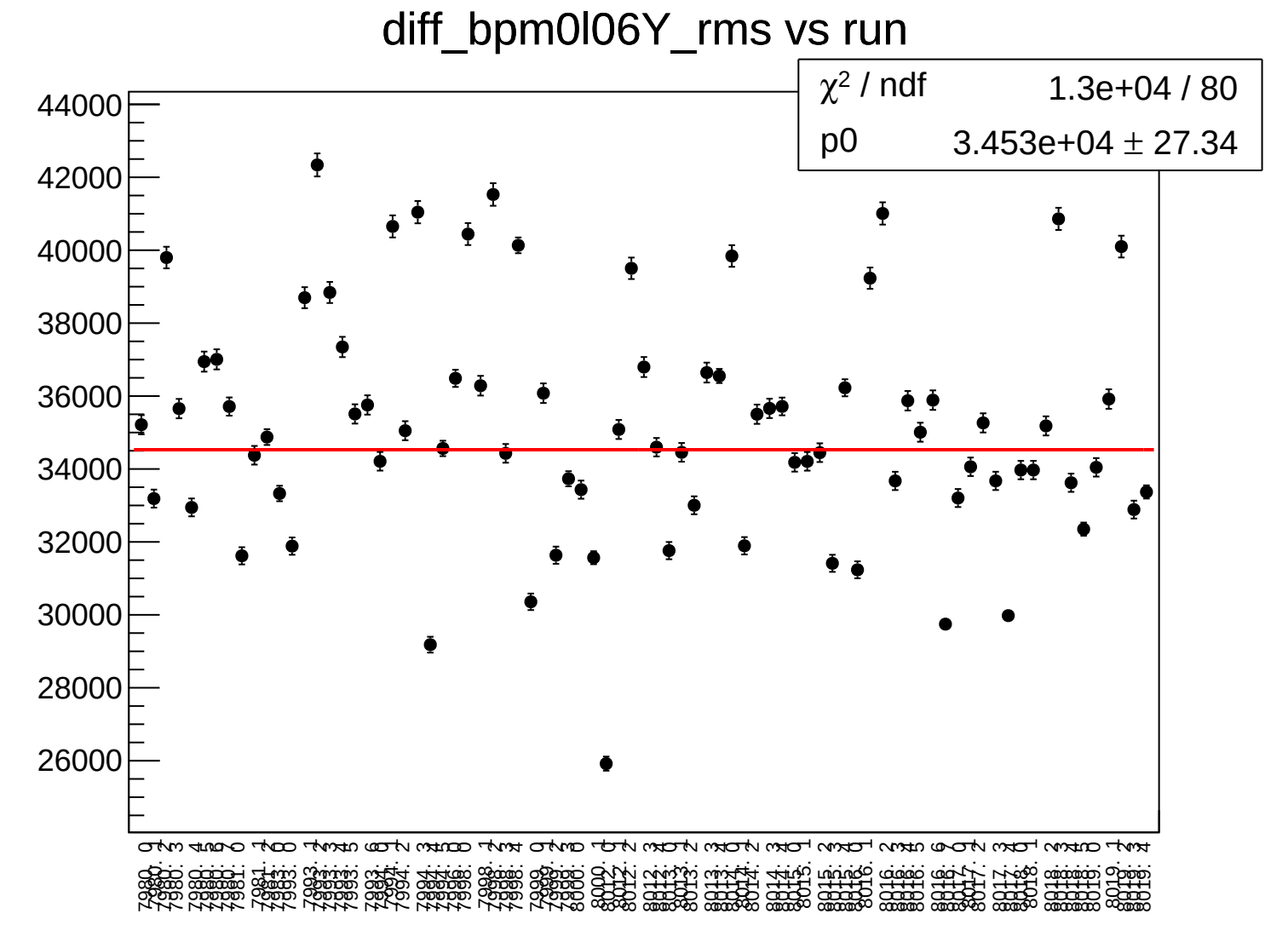

diff_bpm0l06X_mean vs run
χ² / ndf 72.29 / 80
p0 10.05 ± 20.29
pull
Entries 81
Mean −7.983
Std Dev 18.19

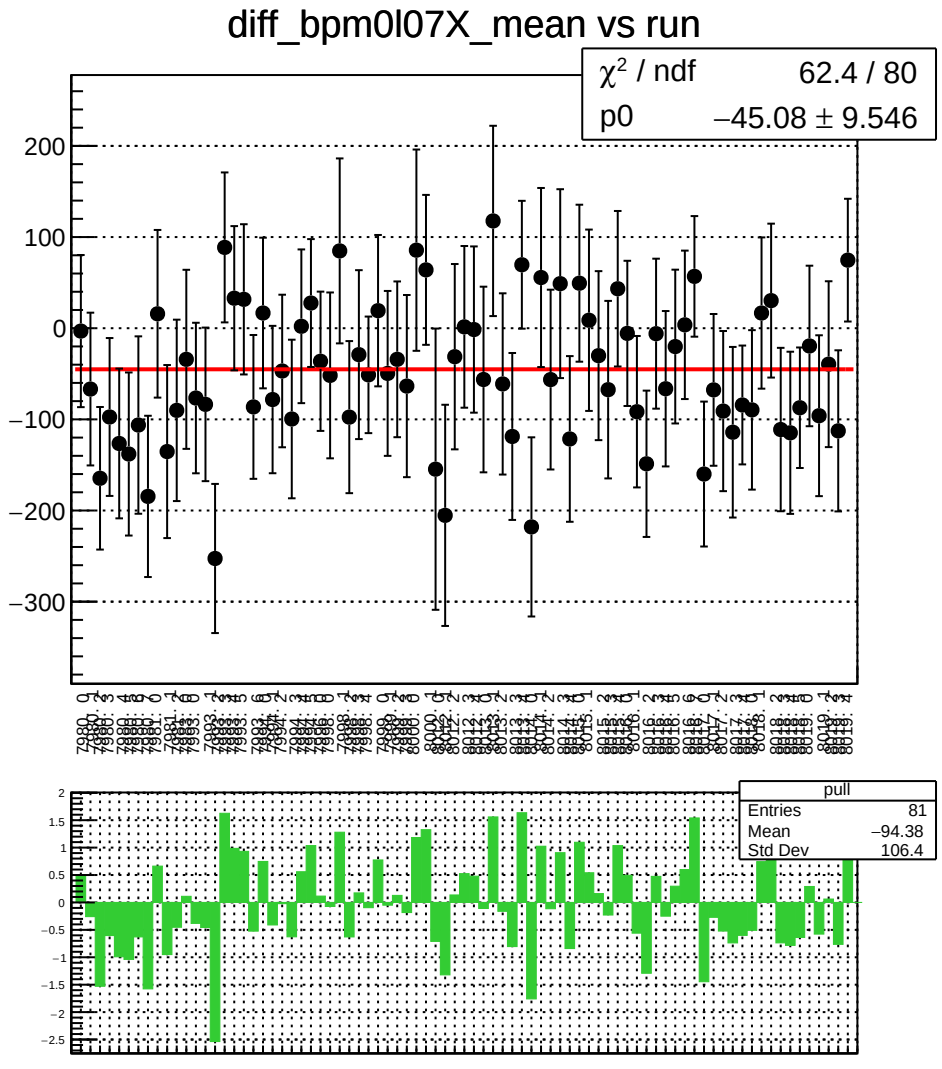

pull1D
Entries 81
Mean 0.01432
Std Dev 0.9446

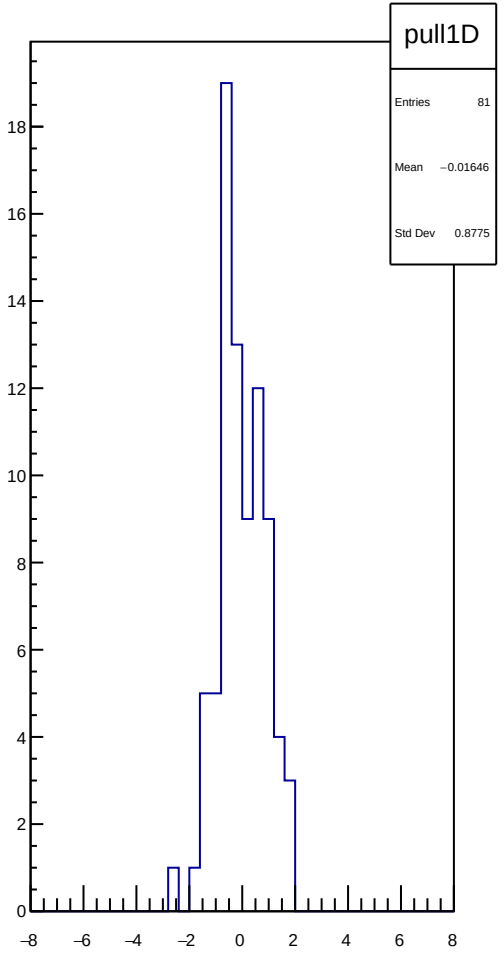

diff_bpm0l06X_rms vs run
χ² / ndf 1666 / 80
p0 1.818e+04 ± 14.35
20000
19500
19000
18500
18000
17500
17000
16500

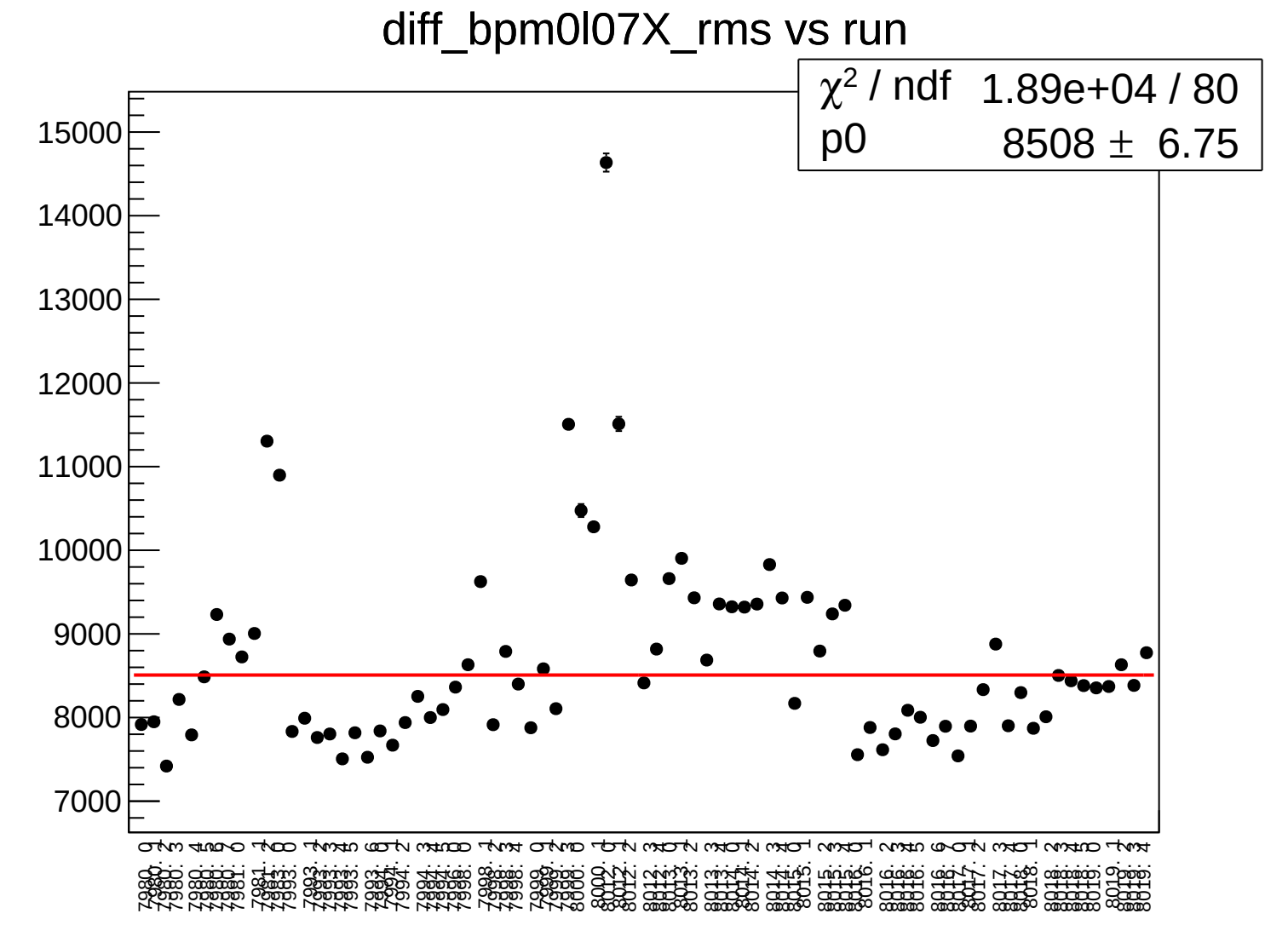

diff_bpm0l06Y_mean vs run
χ² / ndf 94.31 / 80
p0 −41.22 ± 38.67
1000
500
0
−500
−1000
pull
Entries 81
Mean 56.52
Std Dev 36.17
2
1
0
−1
−2

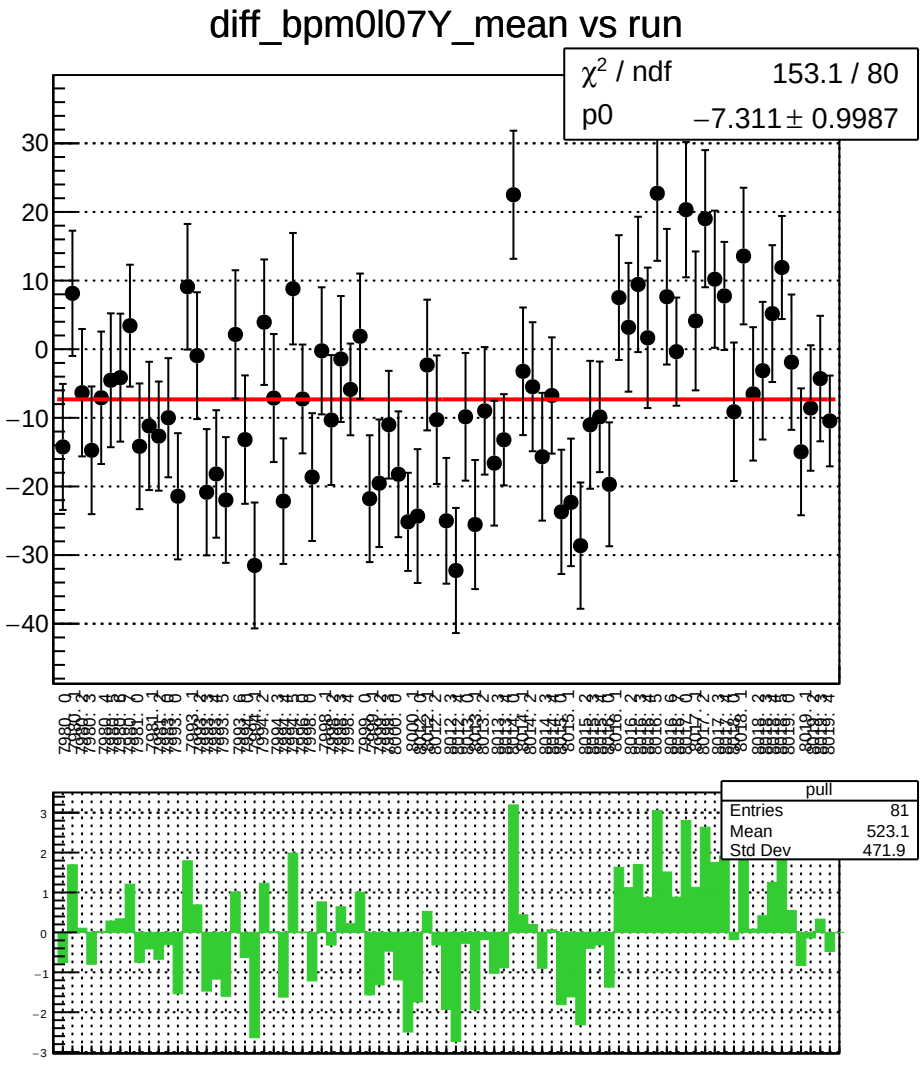

pull1D
Entries 81
Mean 0.02595
Std Dev 1.079
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

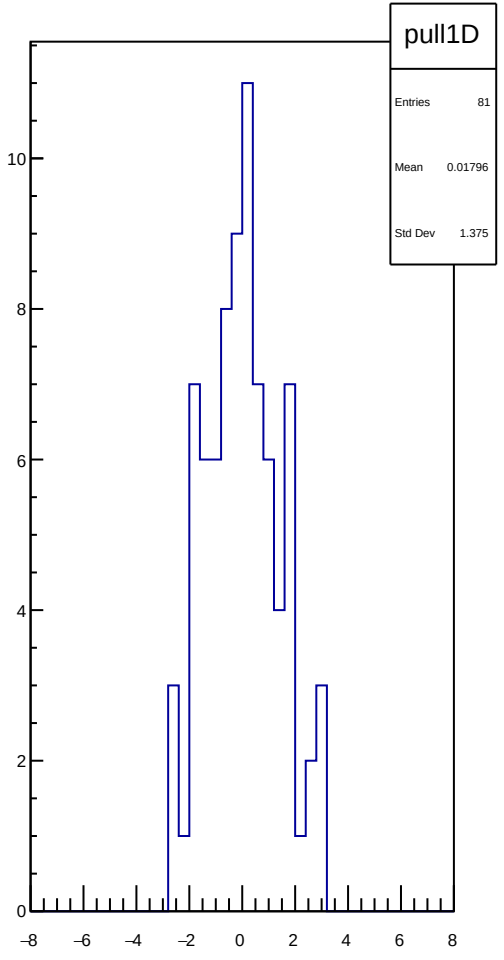

diff_bpm0l06Y_rms vs run
χ² / ndf 1.3e+04 / 80
p0 3.453e+04 ± 27.34
44000
42000
40000
38000
36000
34000
32000
30000
28000
26000

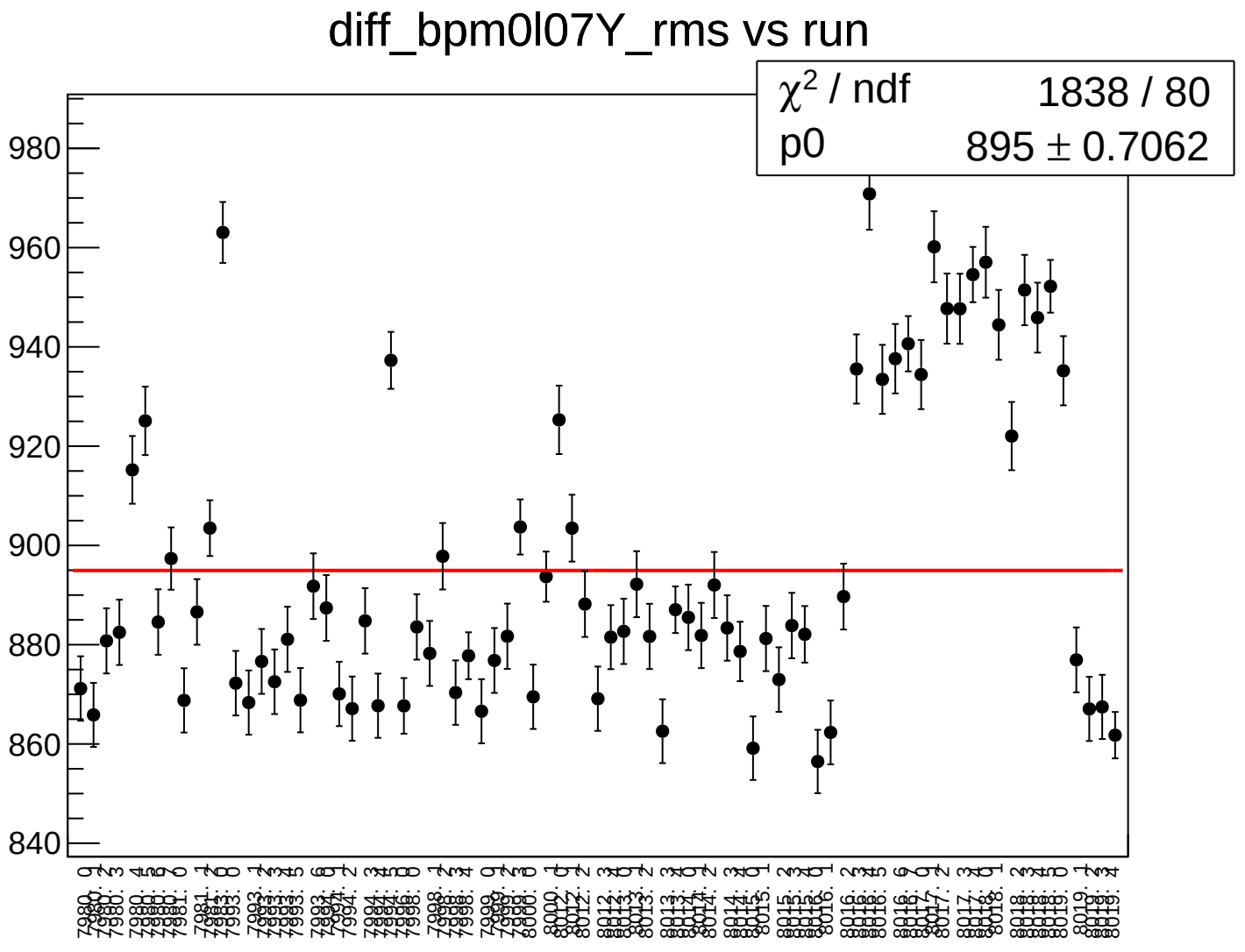

diff_bpm0l07X_mean vs run
χ² / ndf 62.4 / 80
p0 −45.08 ± 9.546
pull
Entries 81
Mean −94.38
Std Dev 106.4

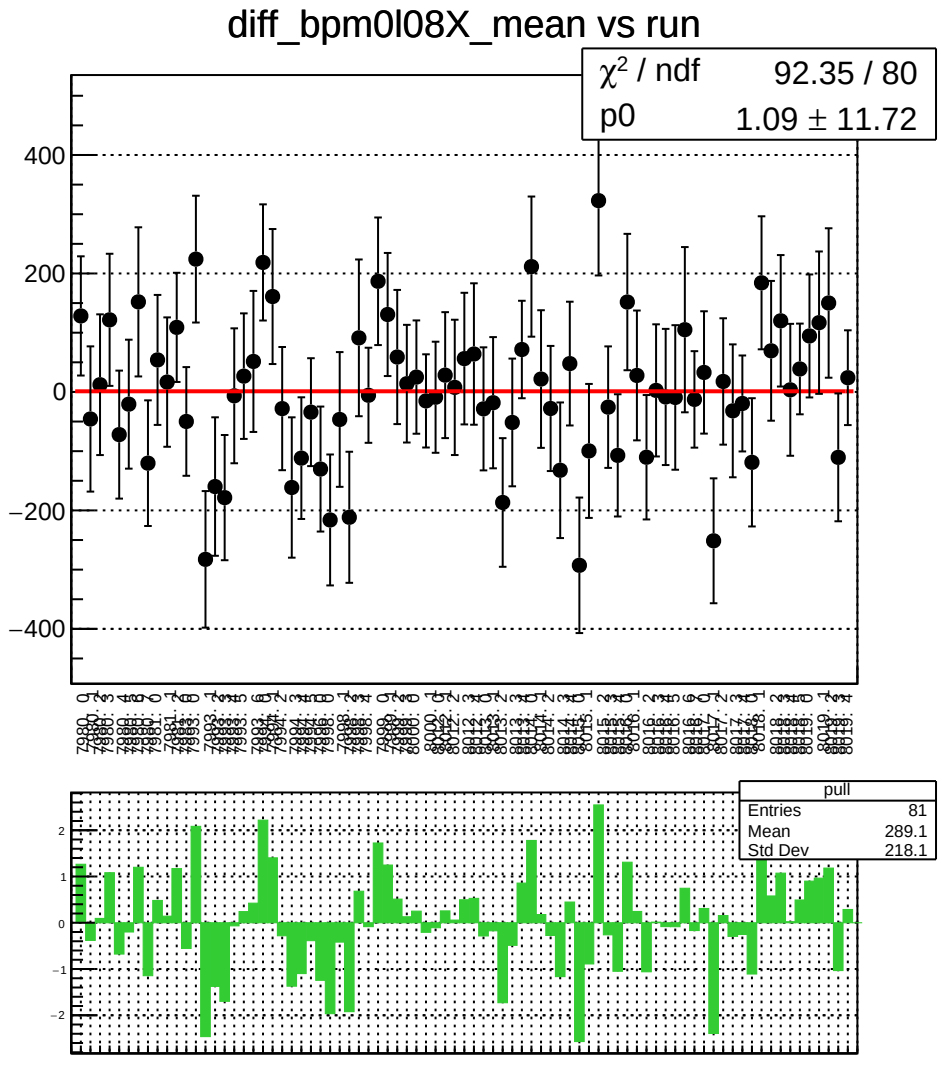

pull1D
Entries 81
Mean −0.01646
Std Dev 0.8775

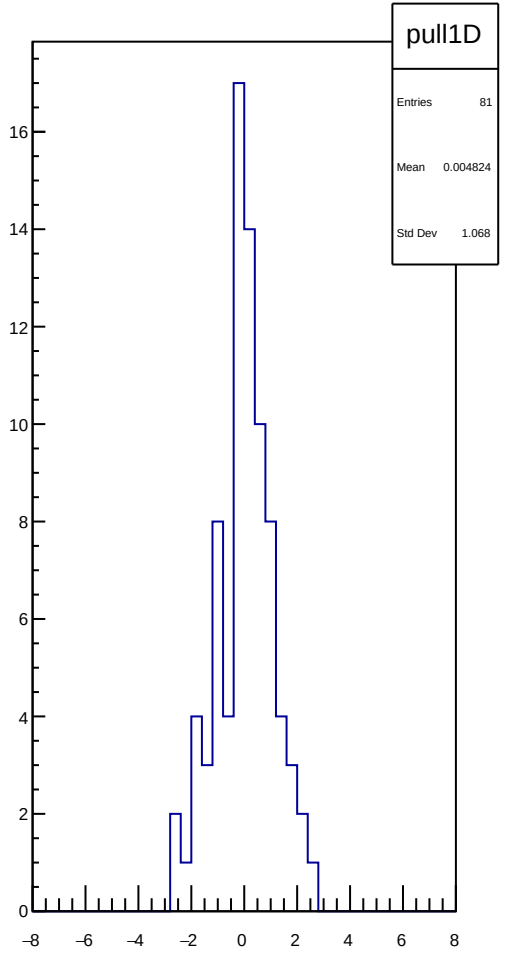

diff_bpm0l07X_rms vs run
χ² / ndf 1.89e+04 / 80
p0 8508 ± 6.75
15000
14000
13000
12000
11000
10000
9000
8000
7000

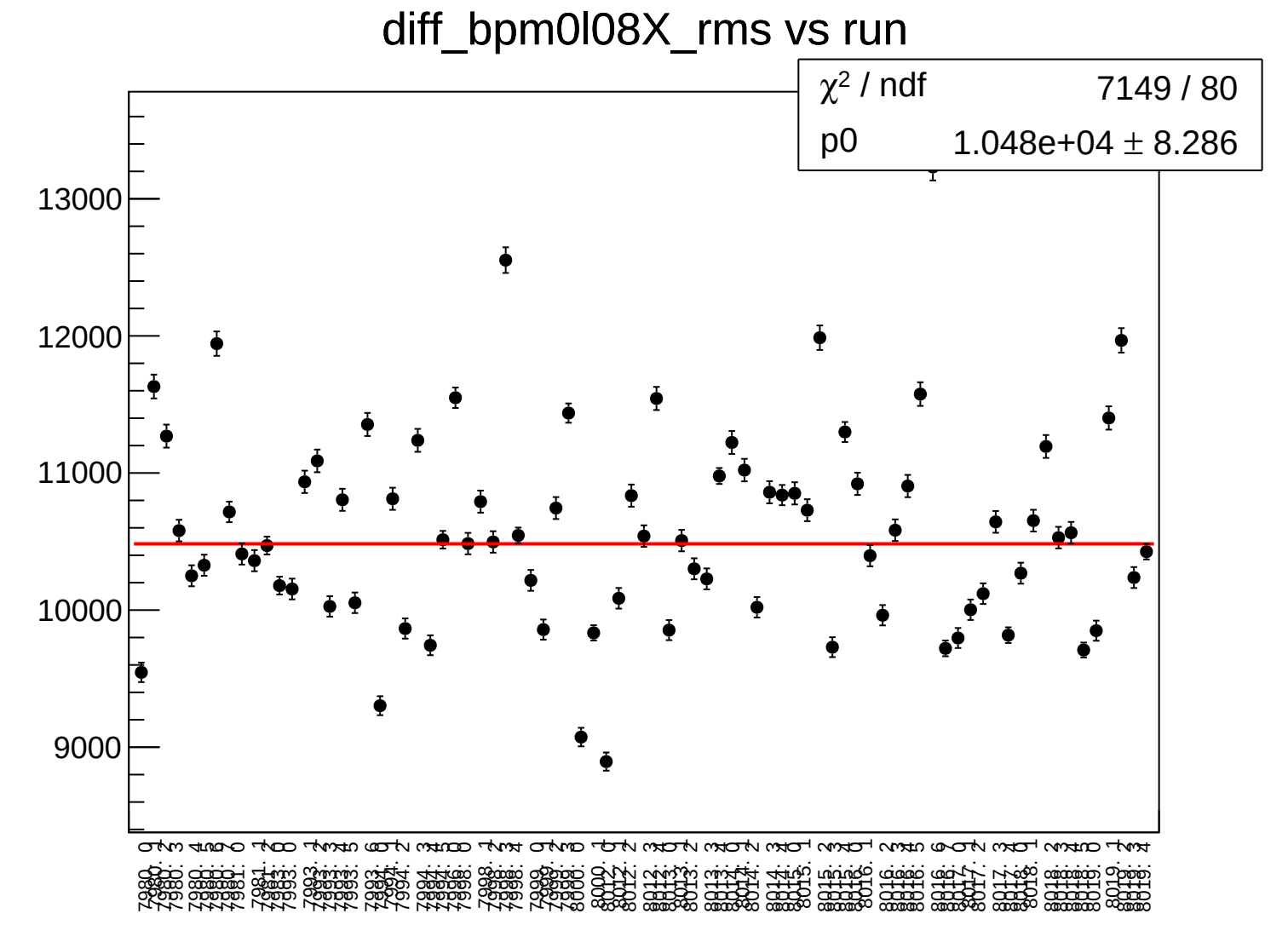

diff_bpm0l07Y_mean vs run
χ² / ndf 153.1 / 80
p0 −7.311 ± 0.9987
pull
Entries 81
Mean 523.1
Std Dev 471.9

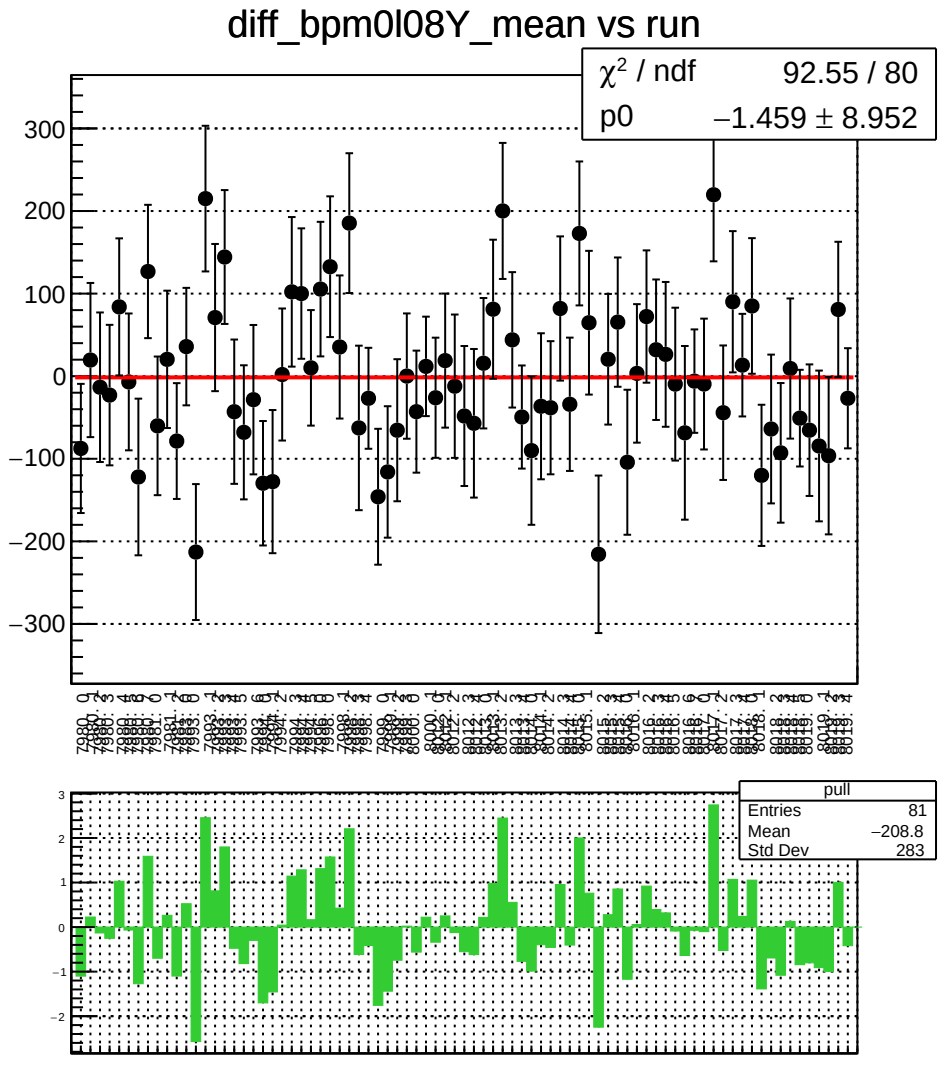

pull1D
Entries 81
Mean 0.01796
Std Dev 1.375

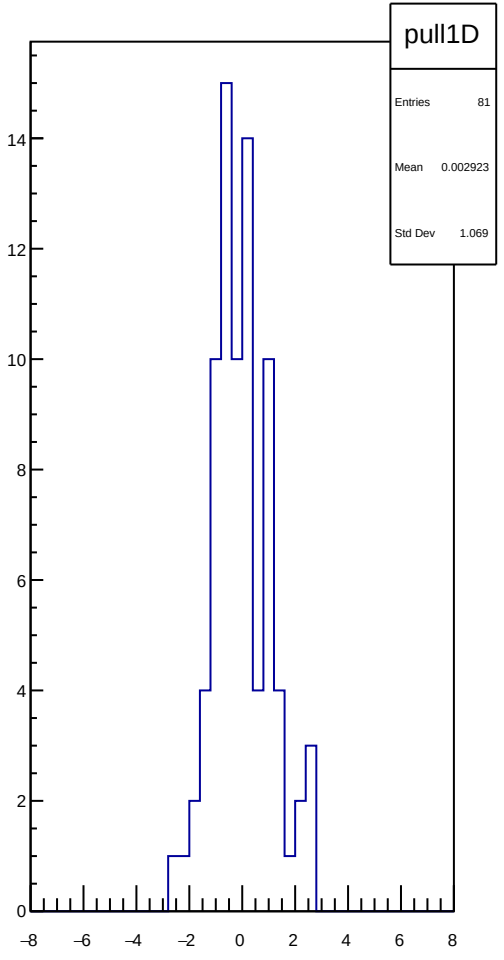

diff_bpm0l07Y_rms vs run
χ² / ndf 1838 / 80
p0 895 ± 0.7062
980
960
940
920
900
880
860
840

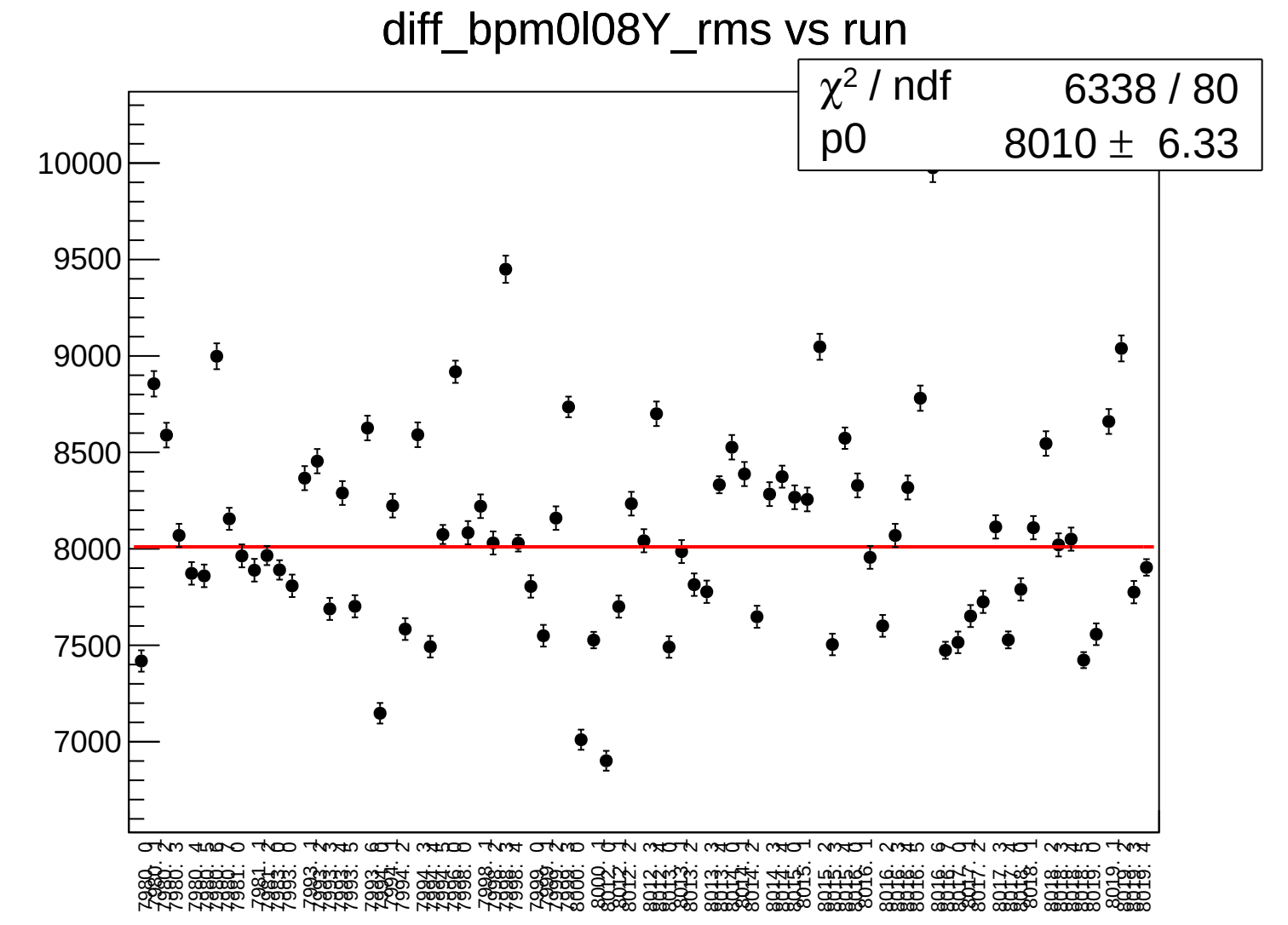

diff_bpm0l08X_mean vs run
χ² / ndf 92.35 / 80
p0 1.09 ± 11.72
400
200
0
−200
−400
pull
Entries 81
Mean 289.1
Std Dev 218.1
2
1
0
−1
−2

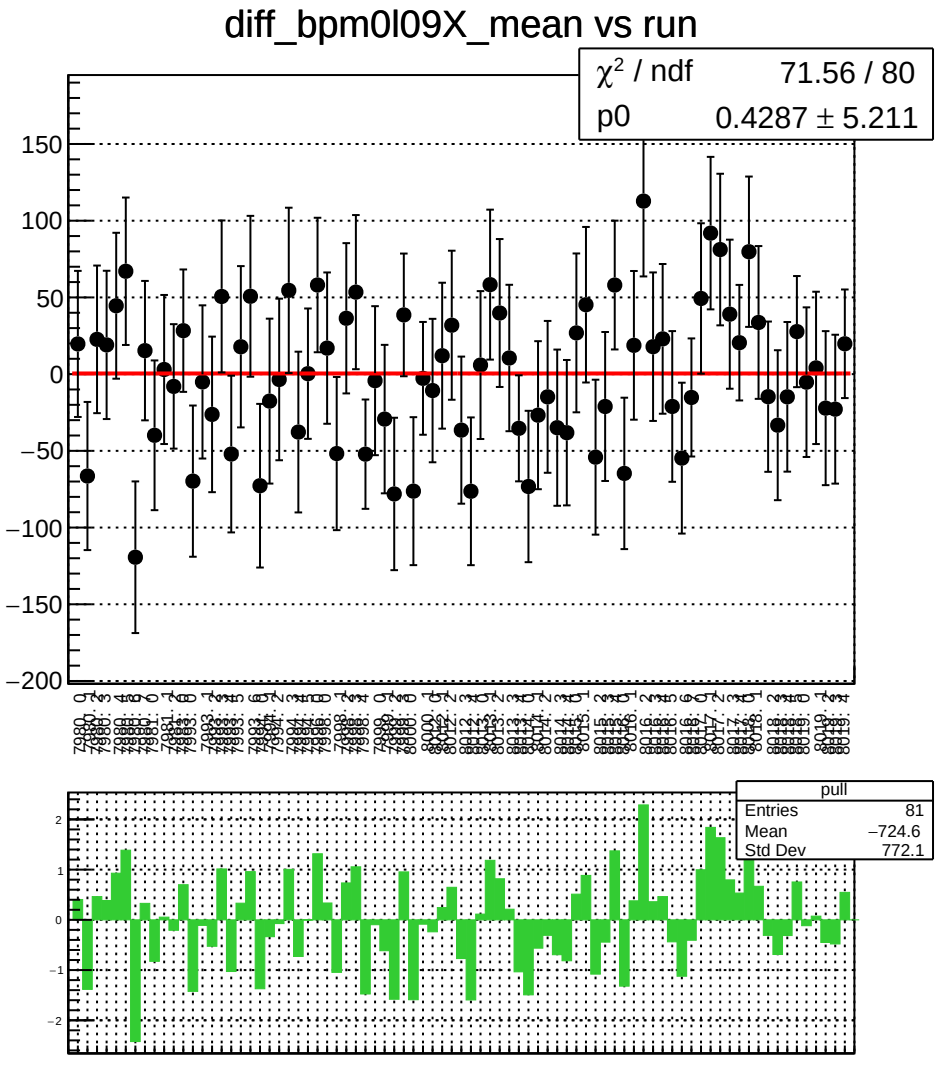

pull1D
Entries 81
Mean 0.004824
Std Dev 1.068
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

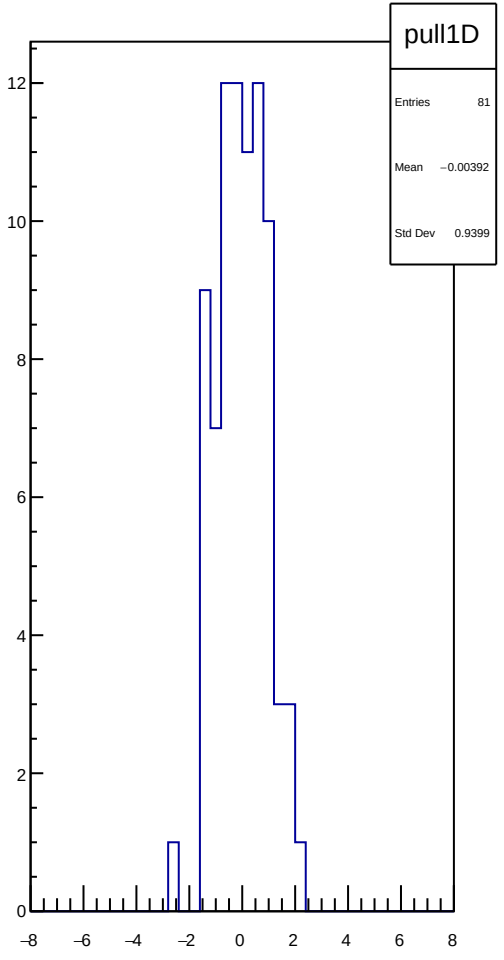

diff_bpm0l08X_rms vs run
χ² / ndf 7149 / 80
p0 1.048e+04 ± 8.286
13000
12000
11000
10000
9000

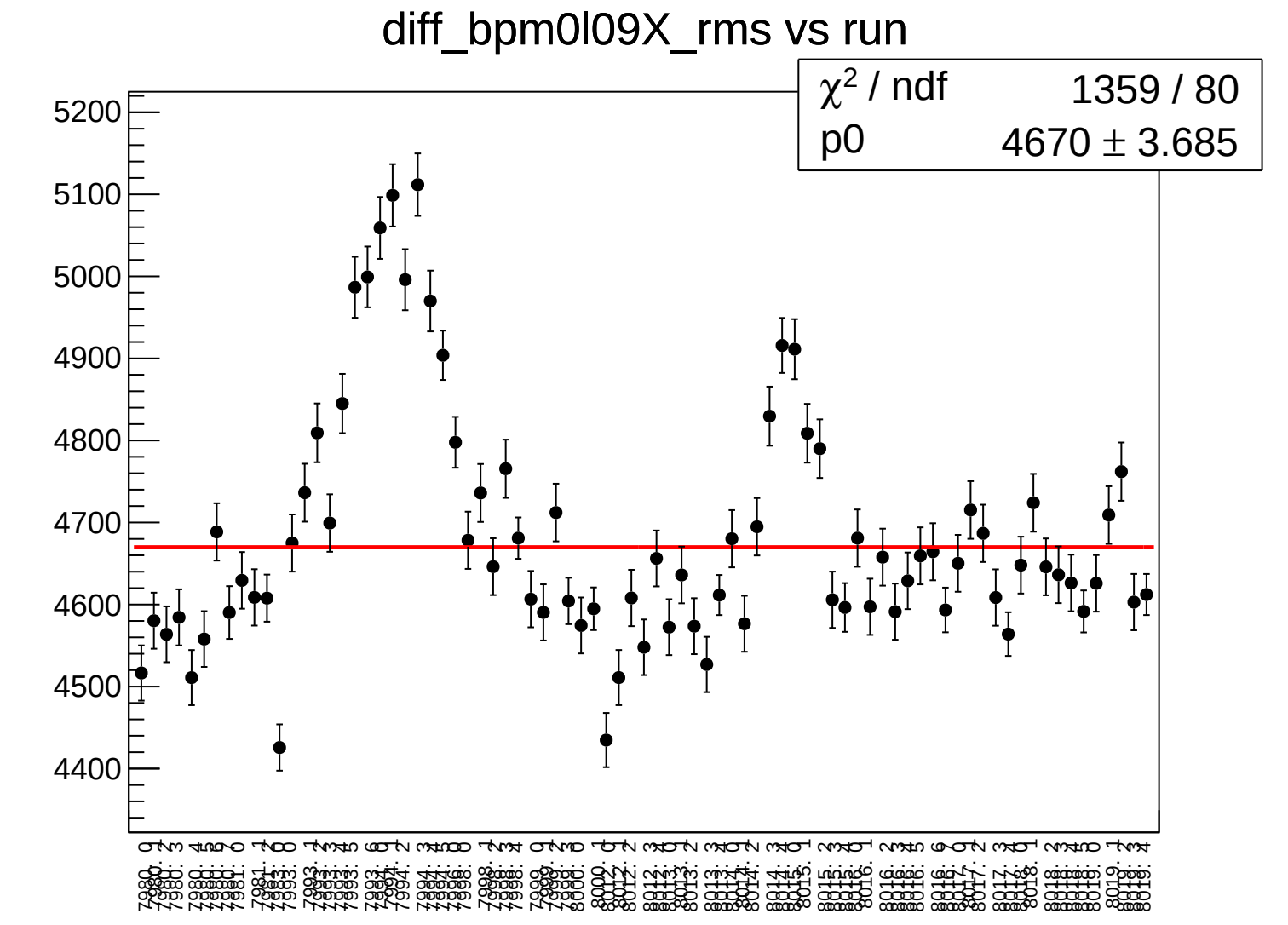

diff_bpm0l08Y_mean vs run
χ² / ndf 92.55 / 80
p0 −1.459 ± 8.952
pull
Entries 81
Mean −208.8
Std Dev 283

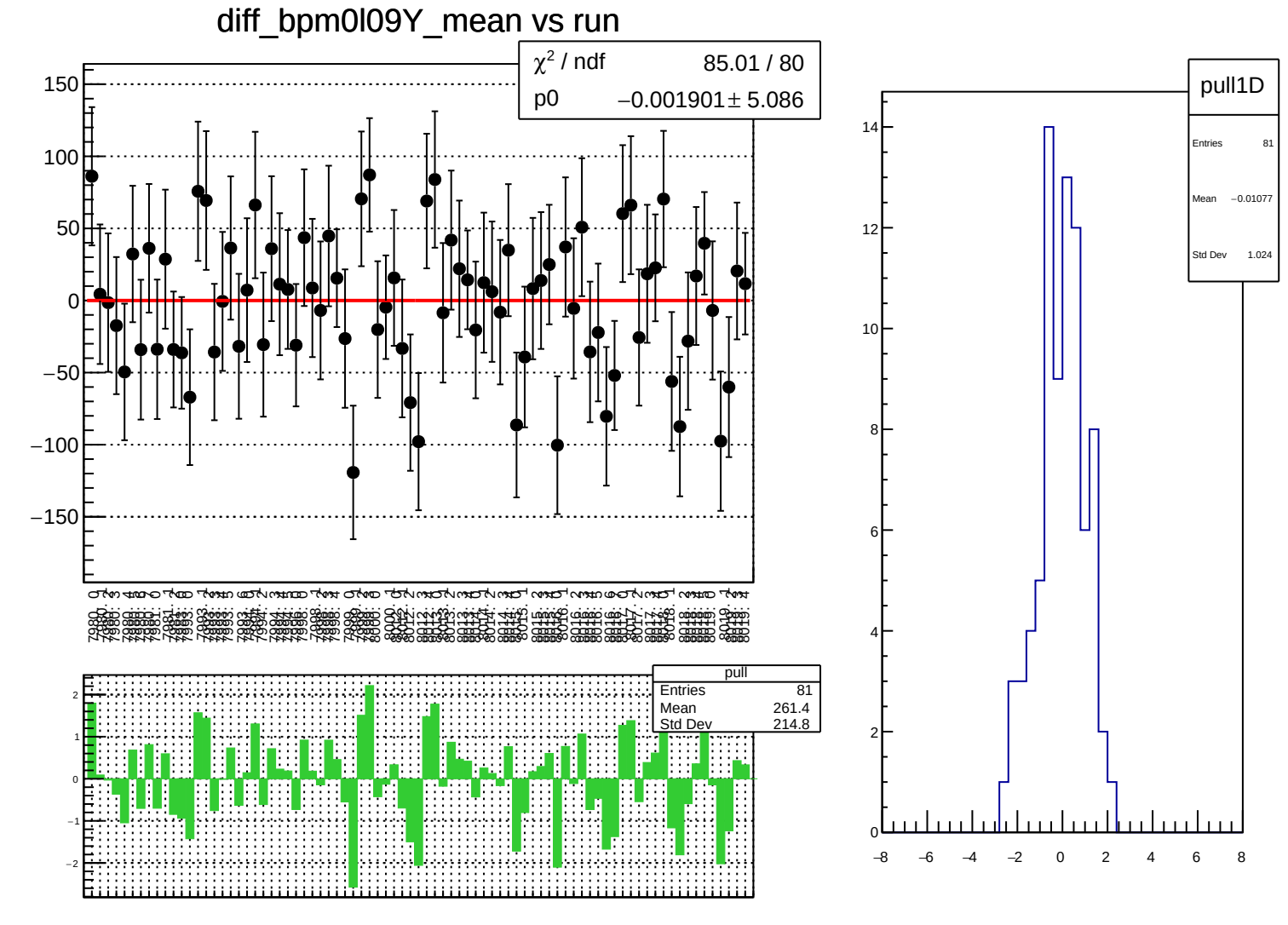

pull1D
Entries 81
Mean 0.002923
Std Dev 1.069

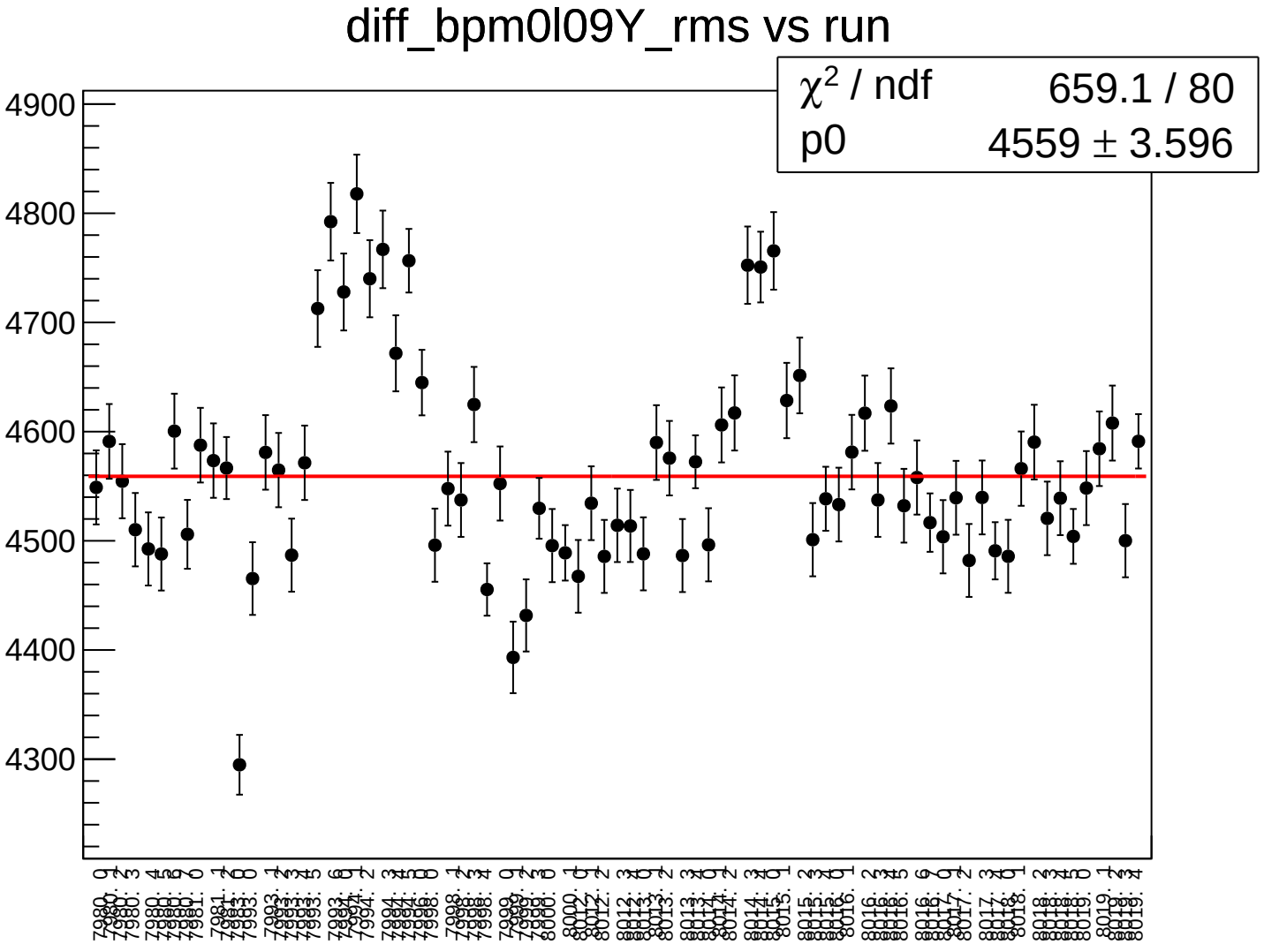

diff_bpm0l08Y_rms vs run
χ² / ndf 6338 / 80
p0 8010 ± 6.33
10000
9500
9000
8500
8000
7500
7000

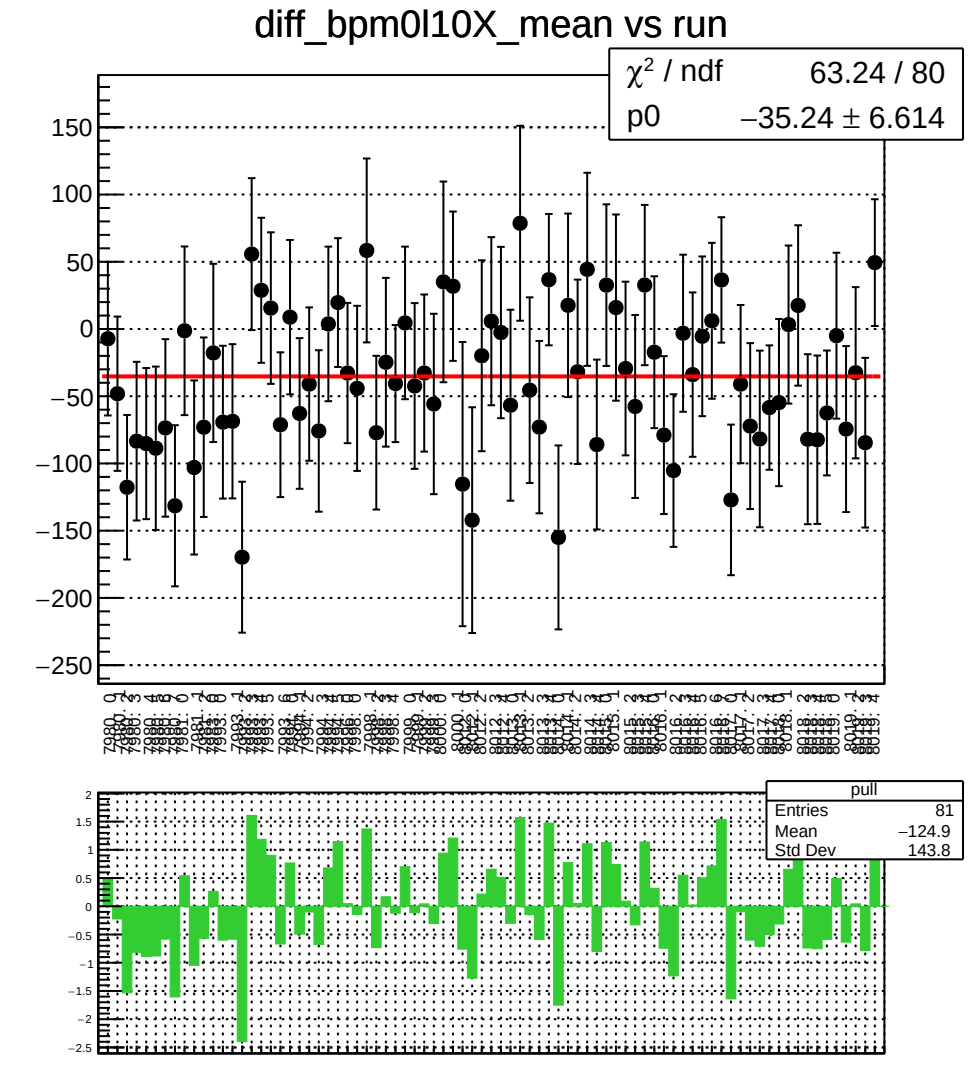

diff_bpm0l09X_mean vs run
χ² / ndf 71.56 / 80
p0 0.4287 ± 5.211
pull
Entries 81
Mean −724.6
Std Dev 772.1

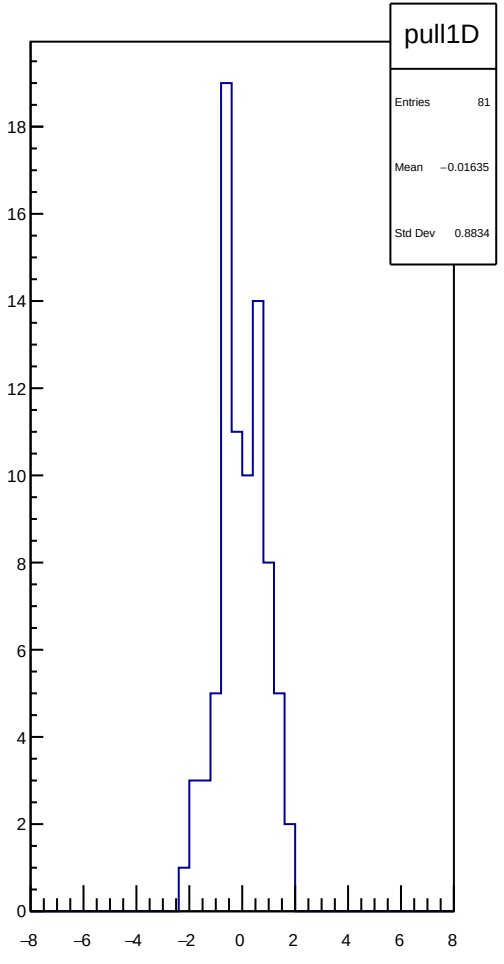

pull1D
Entries 81
Mean −0.00392
Std Dev 0.9399

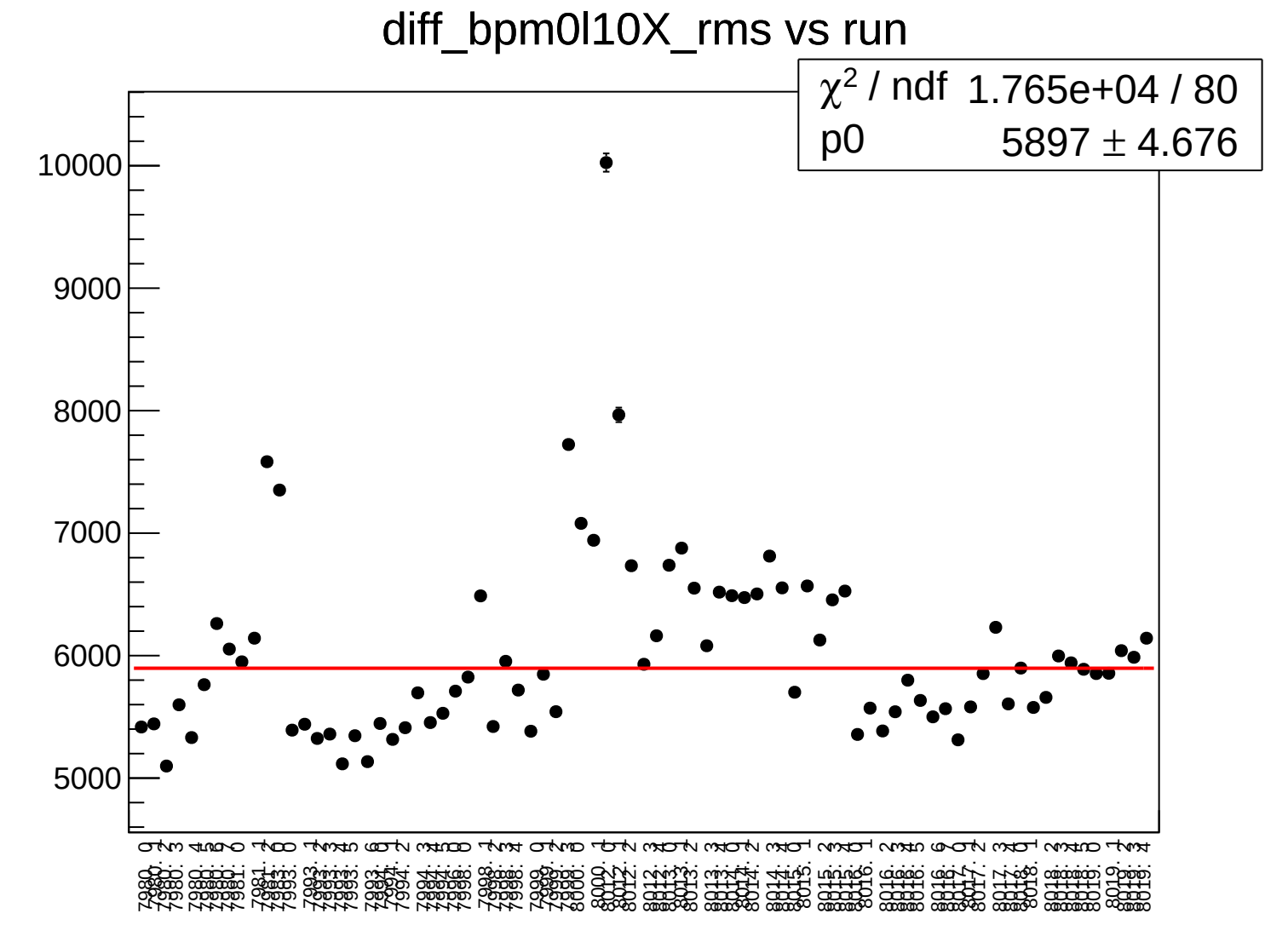

diff_bpm0l09X_rms vs run
χ² / ndf 1359 / 80
p0 4670 ± 3.685
5200
5100
5000
4900
4800
4700
4600
4500
4400

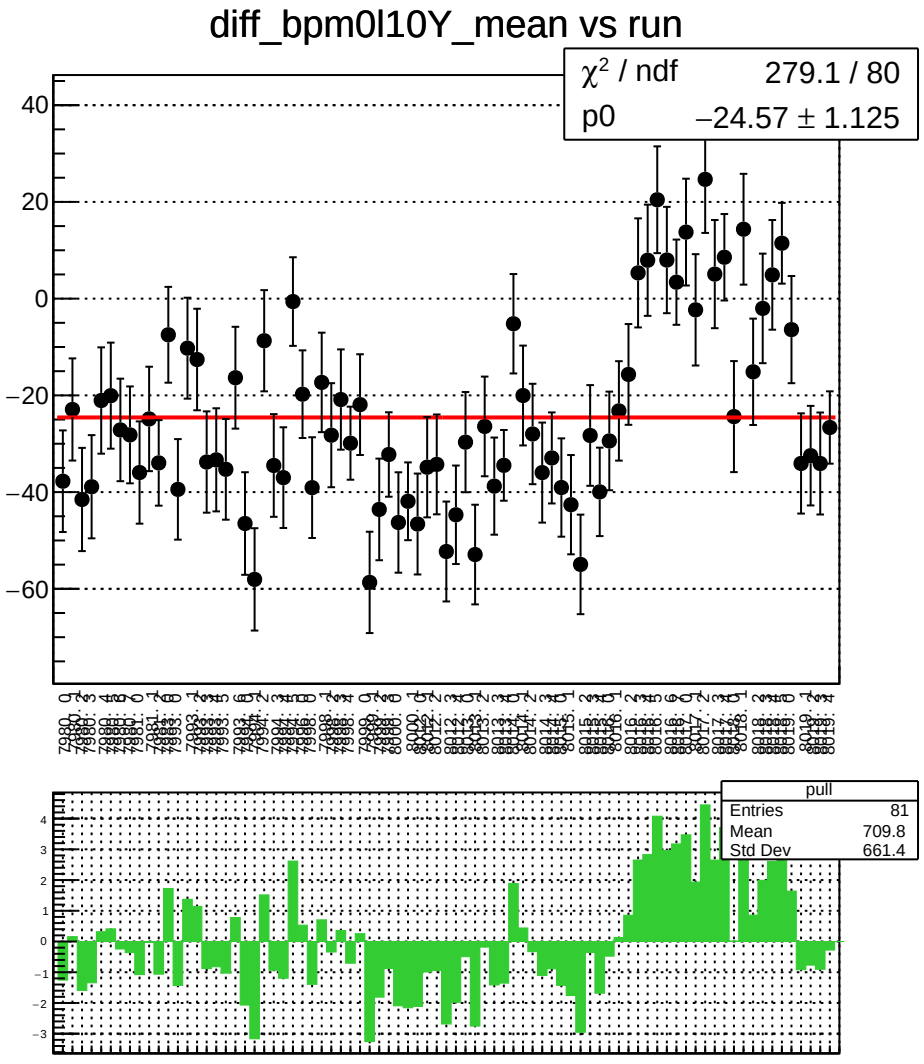

diff_bpm0l09Y_mean vs run
χ² / ndf 85.01 / 80
p0 −0.001901 ± 5.086
150
100
50
0
−50
−100
−150
pull
Entries 81
Mean 261.4
Std Dev 214.8
2
1
0
−1
−2
pull1D
Entries 81
Mean −0.01077
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

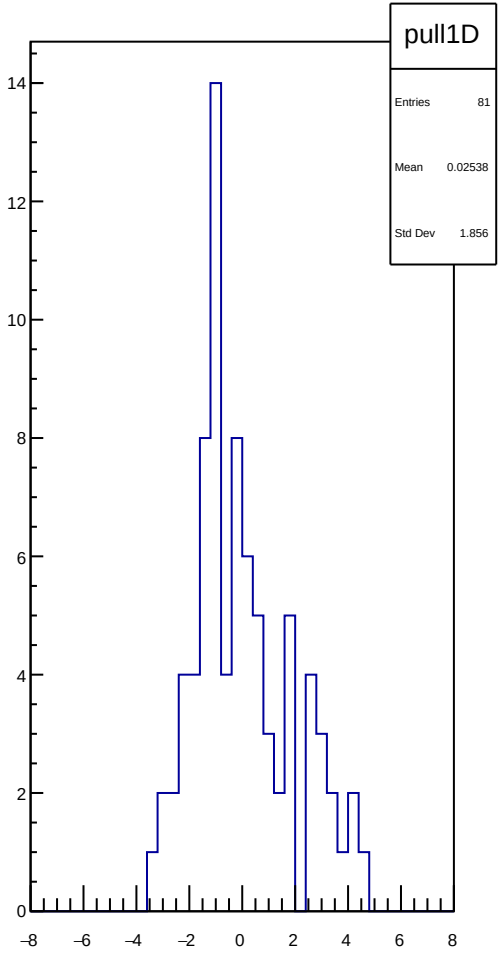

diff_bpm0l09Y_rms vs run
χ² / ndf 659.1 / 80
p0 4559 ± 3.596
4900
4800
4700
4600
4500
4400
4300

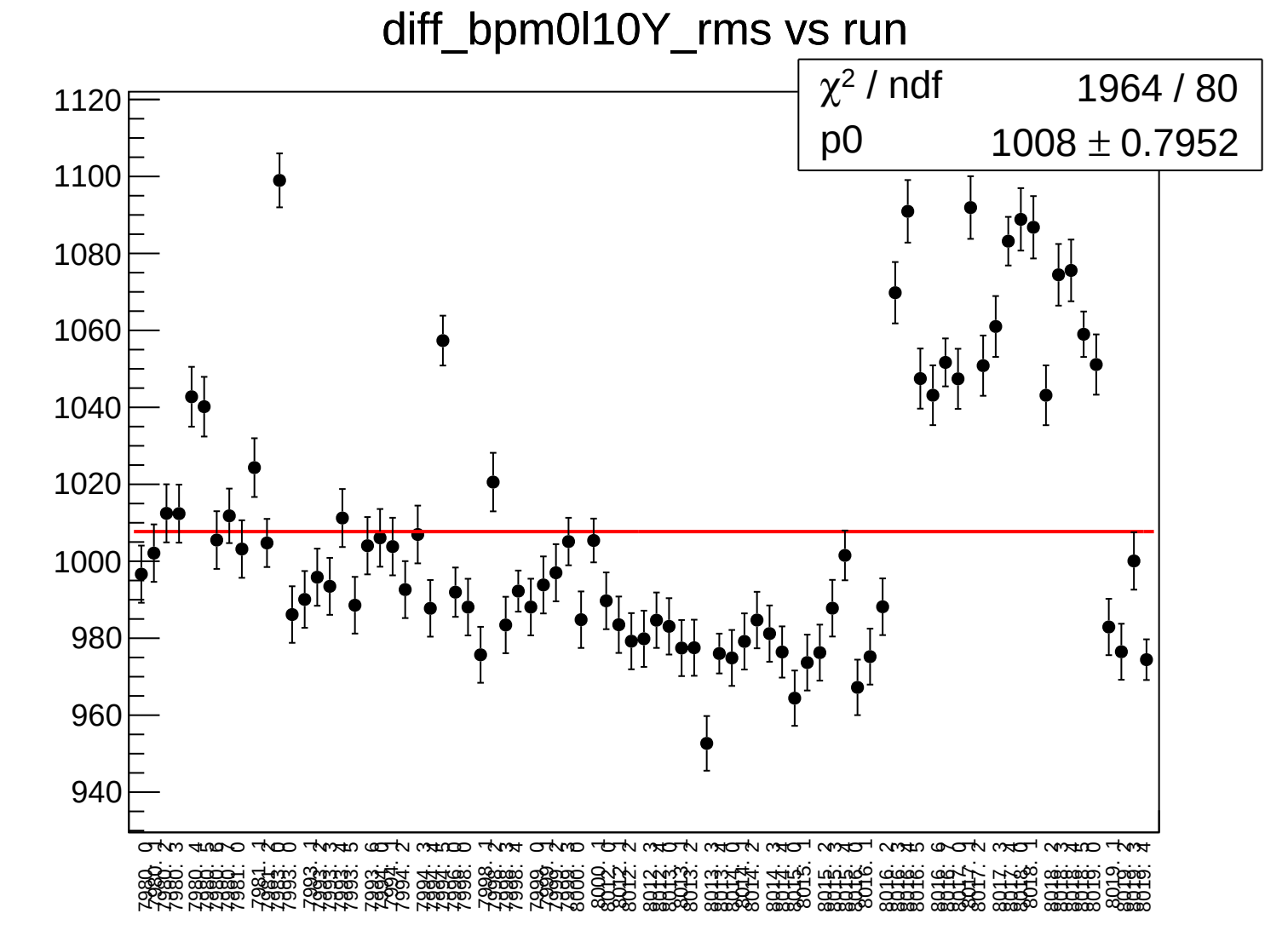

diff_bpm0l10X_mean vs run
χ² / ndf 63.24 / 80
p0 −35.24 ± 6.614
pull
Entries 81
Mean −124.9
Std Dev 143.8

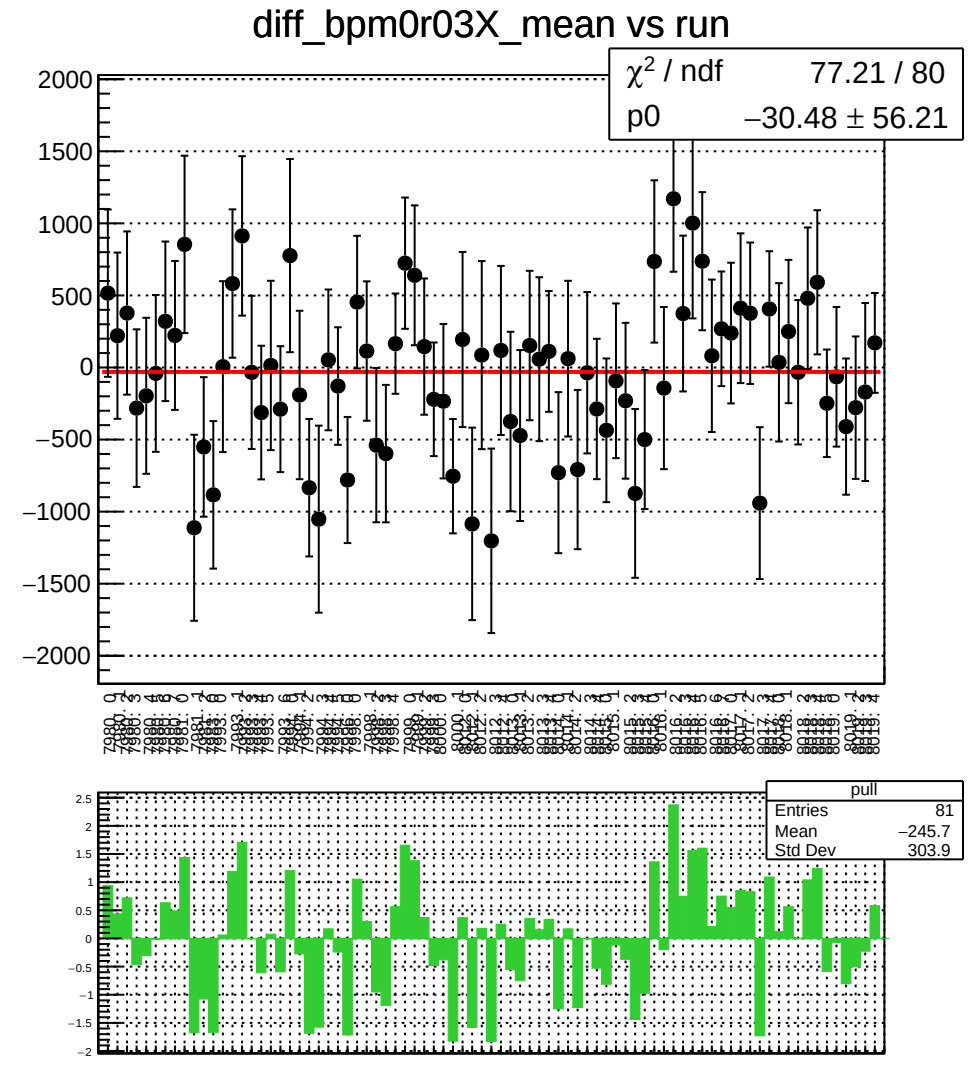

pull1D
Entries 81
Mean −0.01635
Std Dev 0.8834

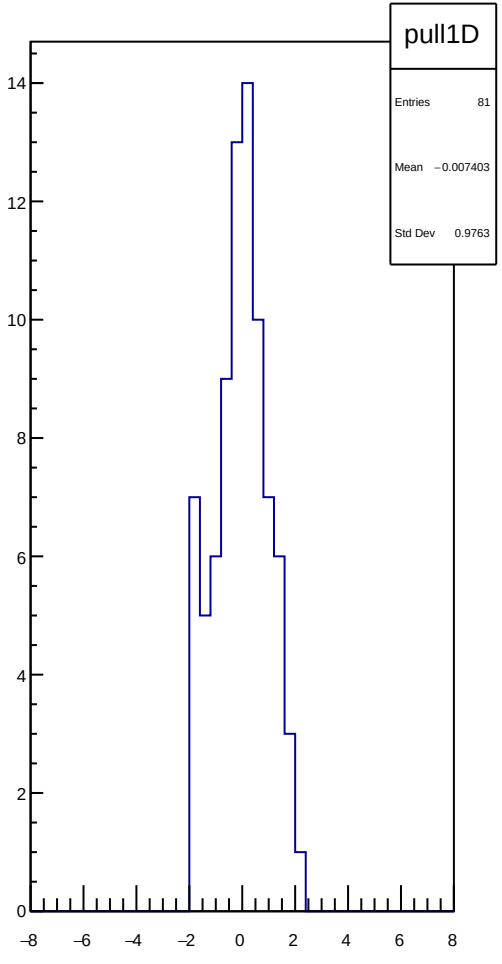

diff_bpm0l10X_rms vs run
χ² / ndf 1.765e+04 / 80
p0 5897 ± 4.676
10000
9000
8000
7000
6000
5000

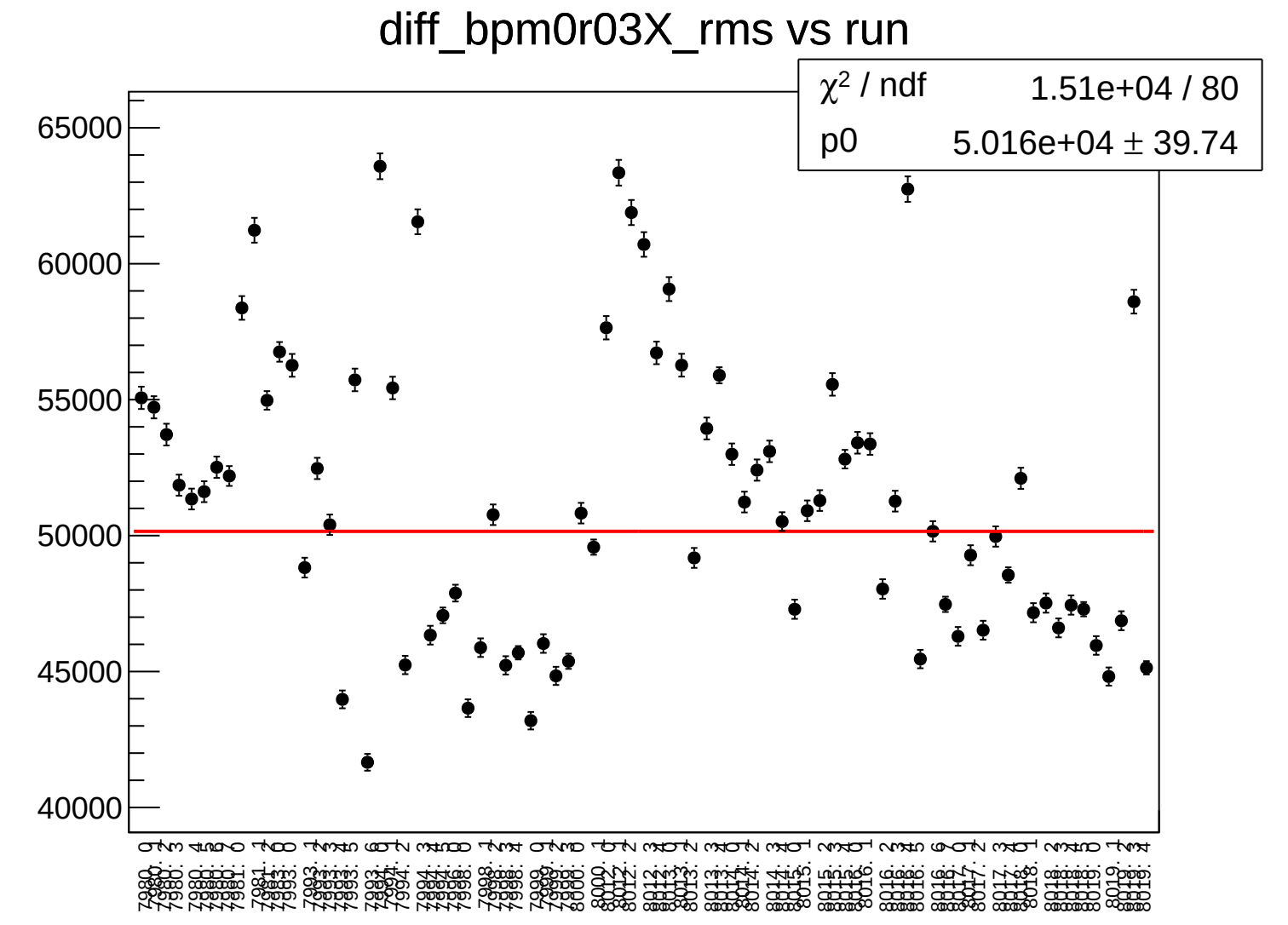

diff_bpm0l10Y_mean vs run
χ² / ndf 279.1 / 80
p0 −24.57 ± 1.125
pull
Entries 81
Mean 709.8
Std Dev 661.4

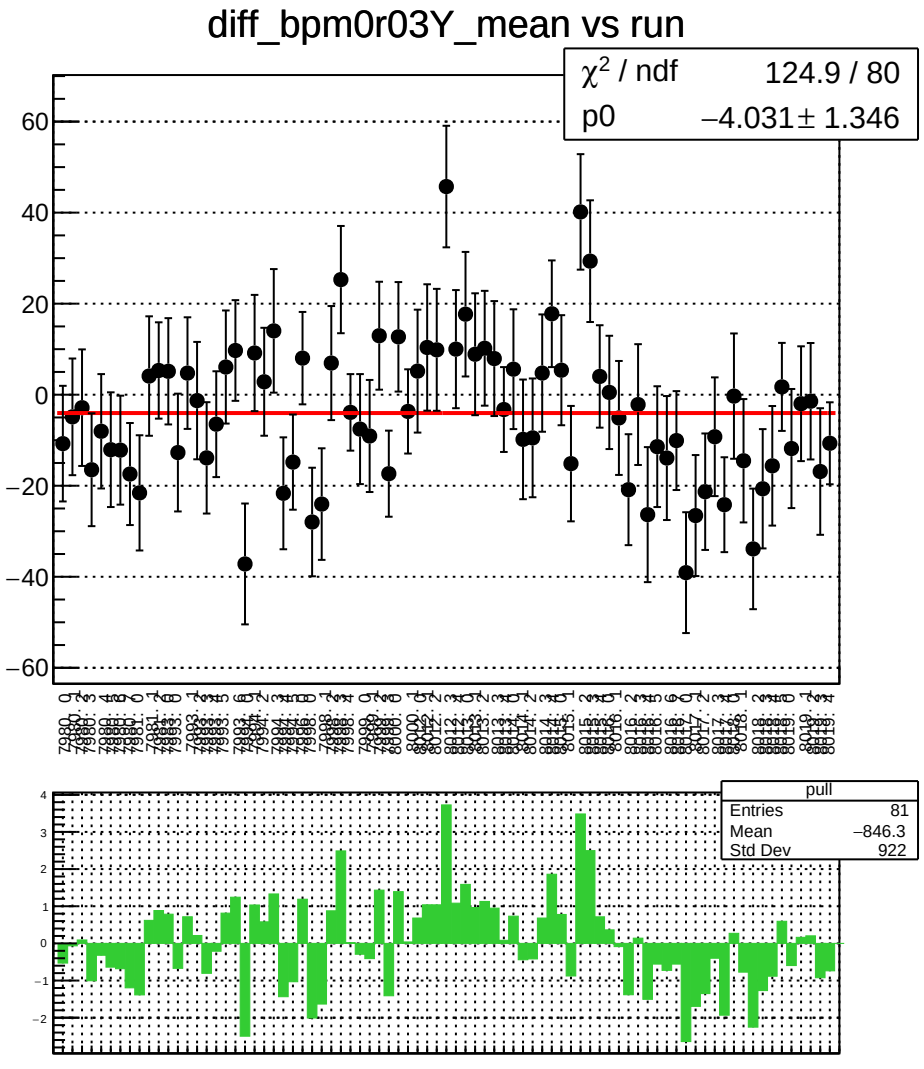

pull1D
Entries 81
Mean 0.02538
Std Dev 1.856

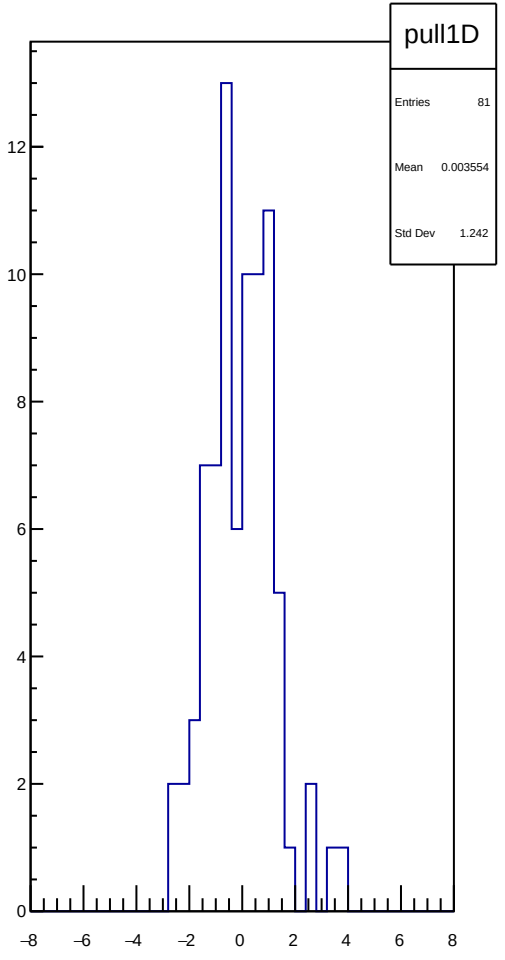

diff_bpm0l10Y_rms vs run
χ² / ndf 1964 / 80
p0 1008 ± 0.7952
1120
1100
1080
1060
1040
1020
1000
980
960
940

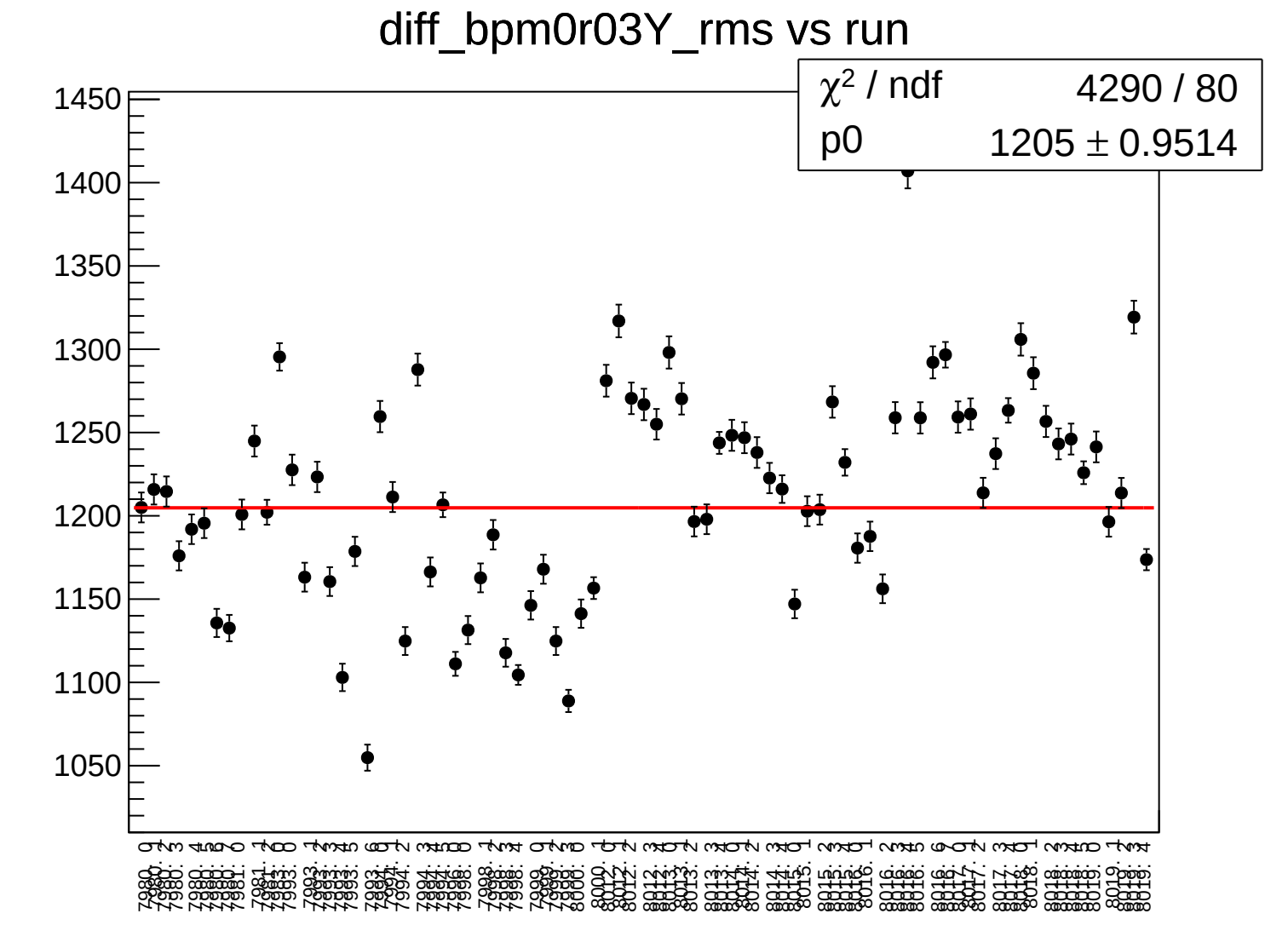

diff_bpm0r03X_mean vs run
χ² / ndf 77.21 / 80
p0 −30.48 ± 56.21
pull
Entries 81
Mean −245.7
Std Dev 303.9

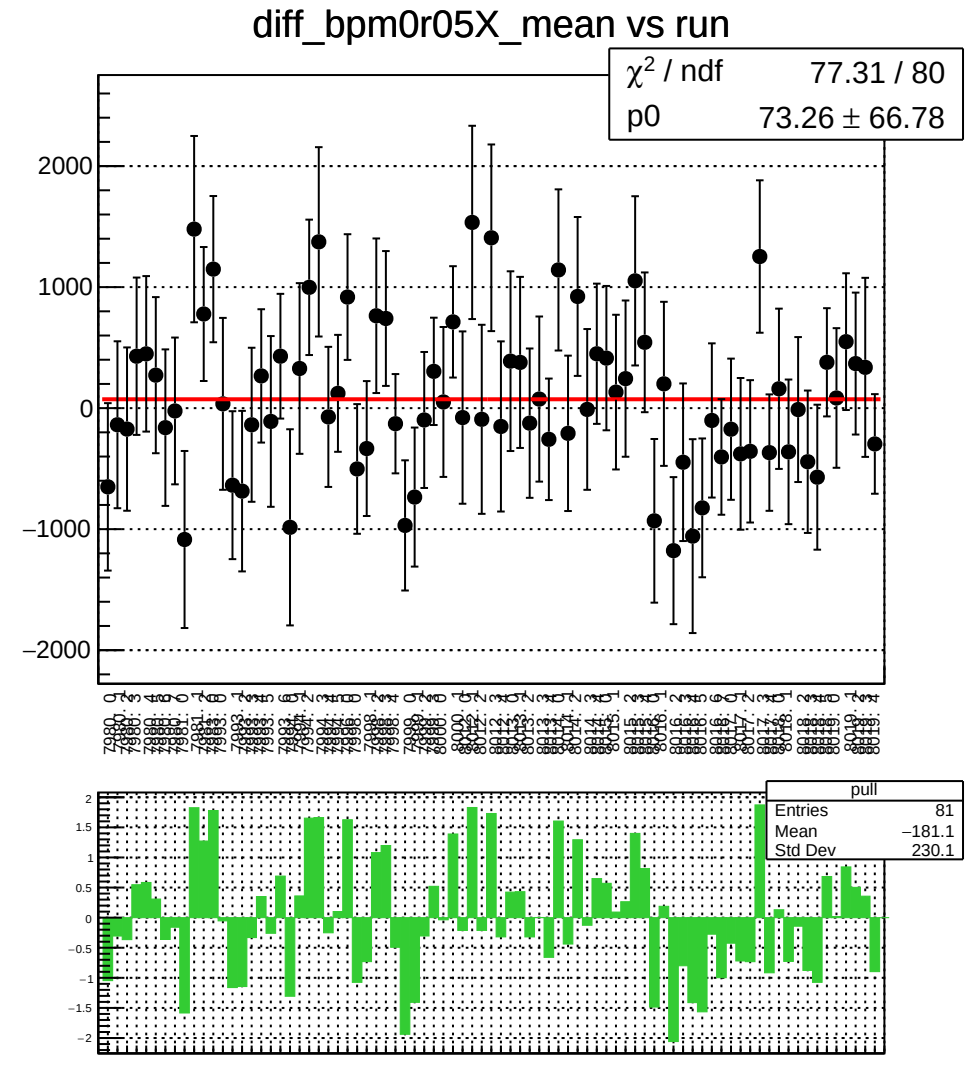

pull1D
Entries 81
Mean −0.007403
Std Dev 0.9763

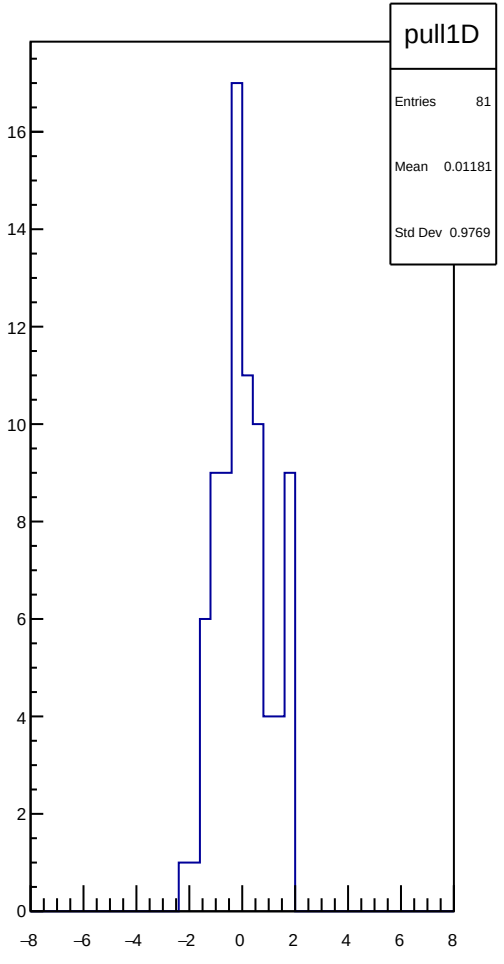

diff_bpm0r03X_rms vs run
χ² / ndf 1.51e+04 / 80
p0 5.016e+04 ± 39.74
65000
60000
55000
50000
45000
40000

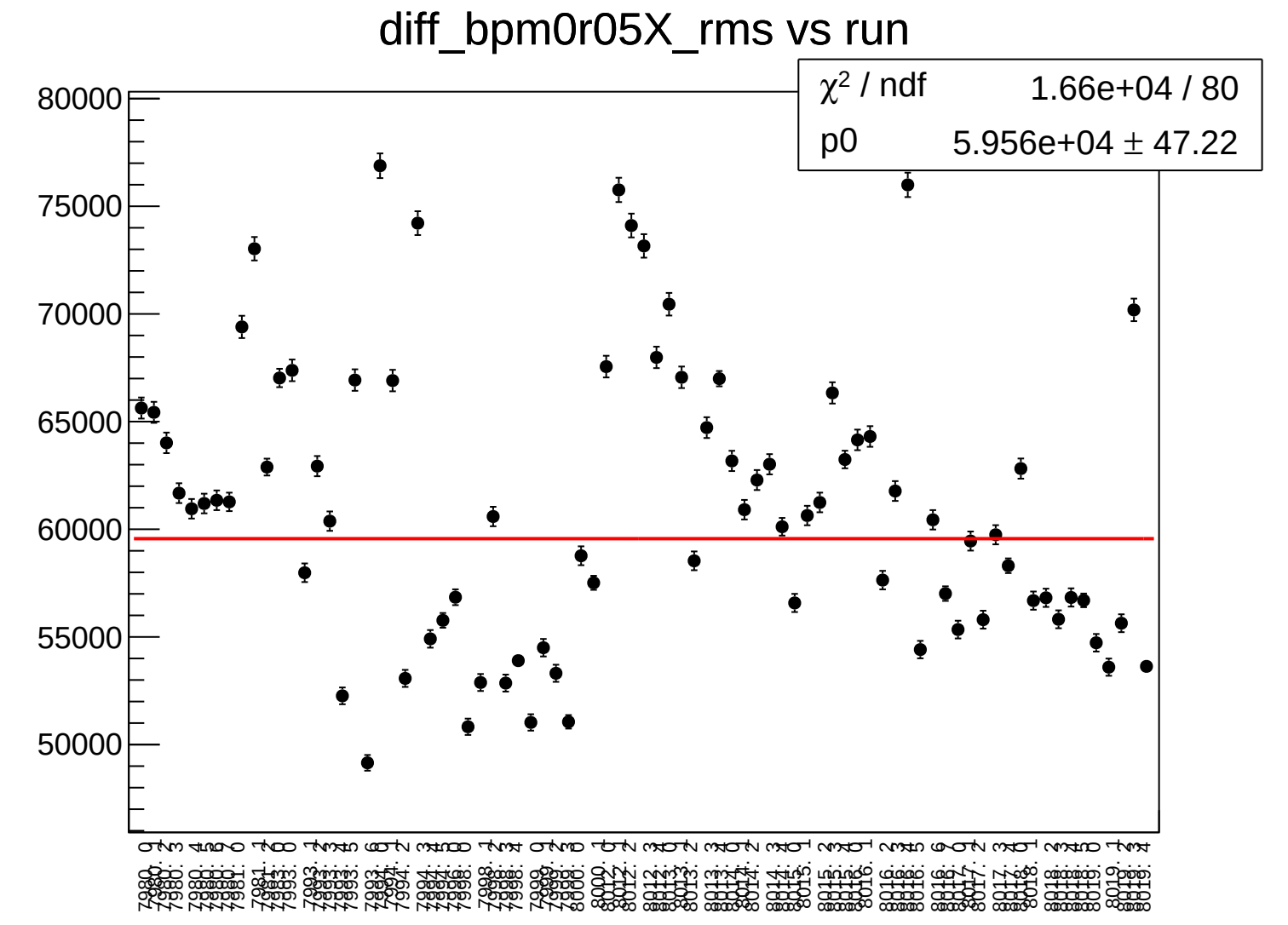

diff_bpm0r03Y_mean vs run
χ² / ndf 124.9 / 80
p0 −4.031 ± 1.346
pull
Entries 81
Mean −846.3
Std Dev 922

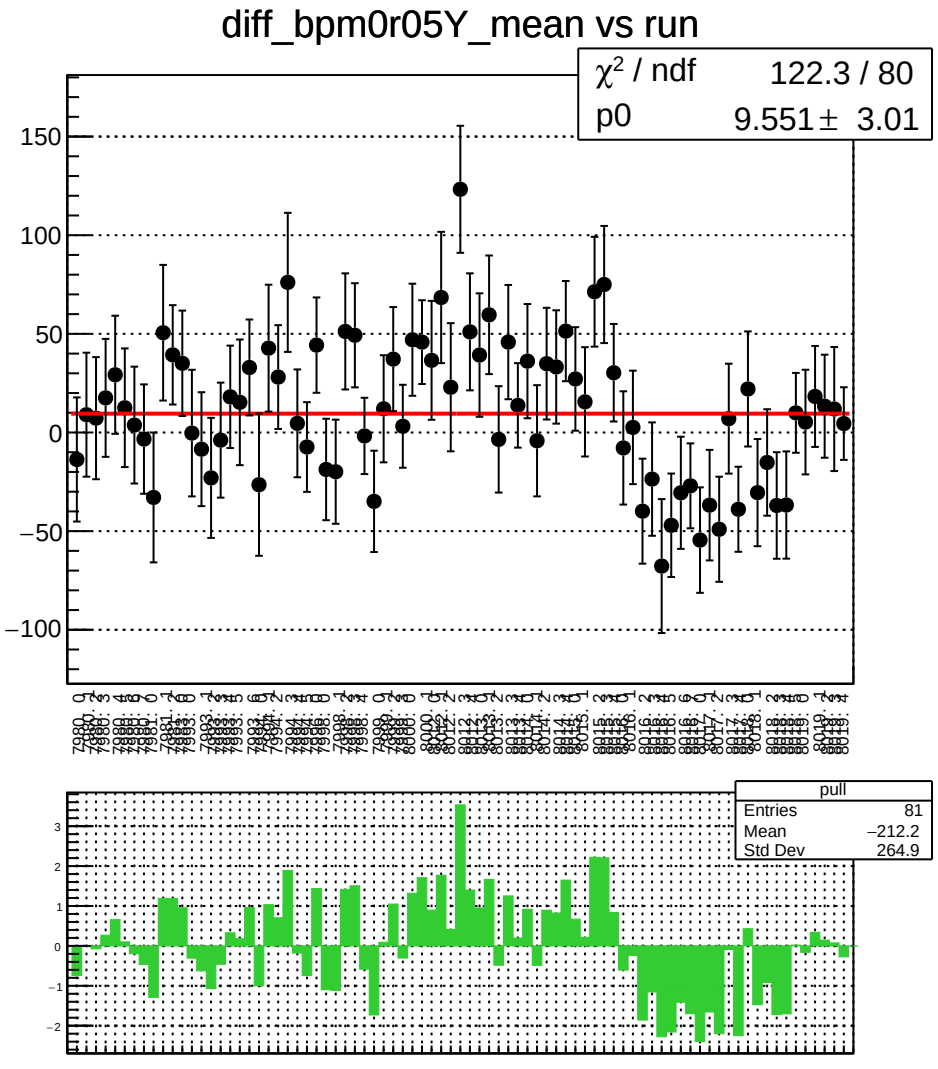

pull1D
Entries 81
Mean 0.003554
Std Dev 1.242

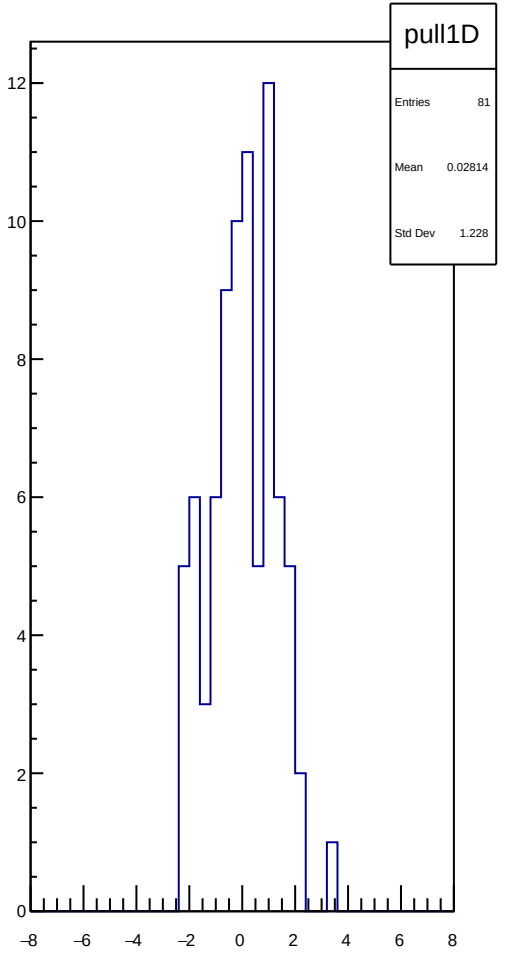

diff_bpm0r03Y_rms vs run
χ² / ndf 4290 / 80
p0 1205 ± 0.9514
1450
1400
1350
1300
1250
1200
1150
1100
1050

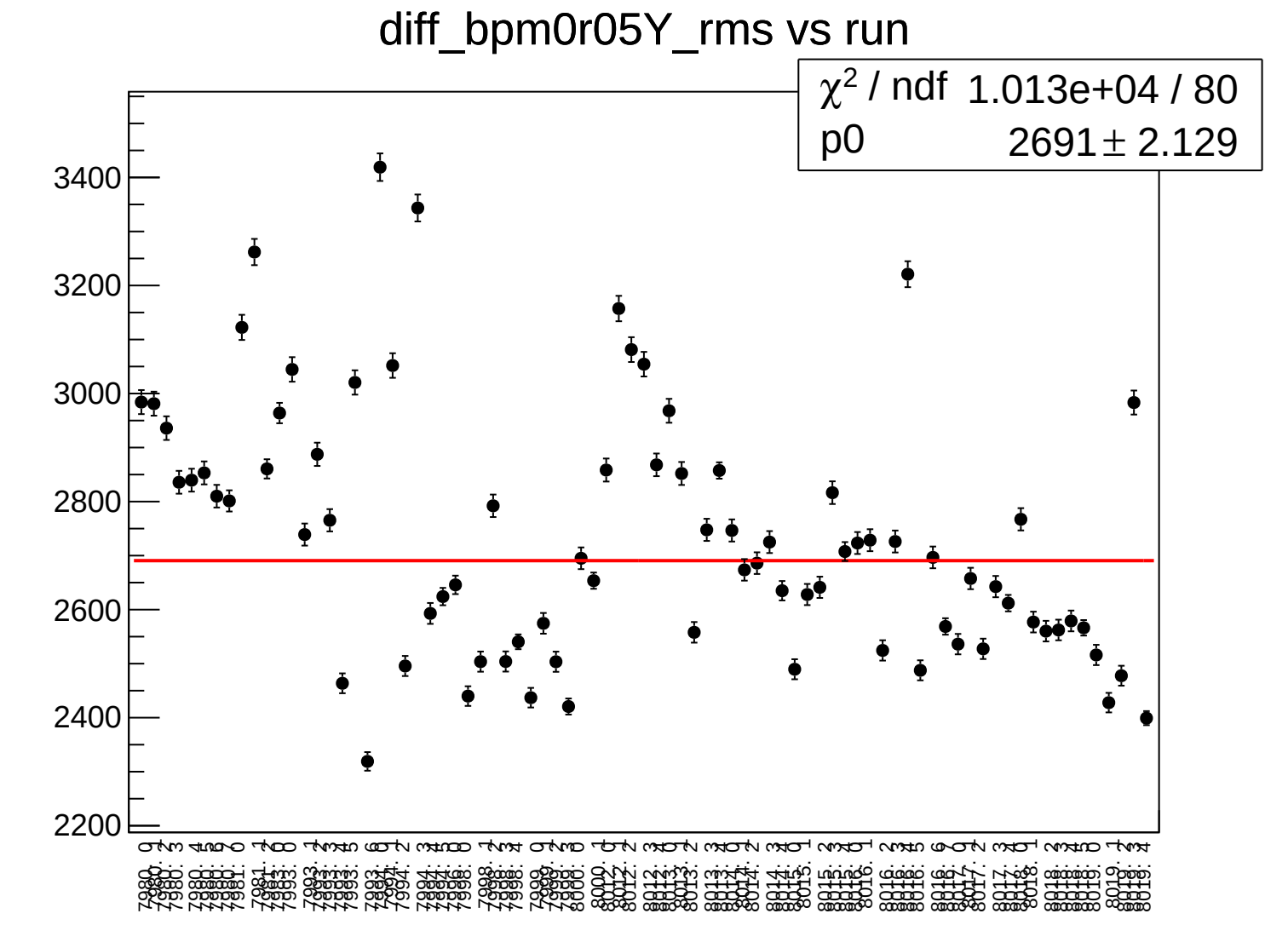

diff_bpm0r05X_mean vs run
χ² / ndf 77.31 / 80
p0 73.26 ± 66.78
2000
1000
0
−1000
−2000
pull
Entries 81
Mean −181.1
Std Dev 230.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

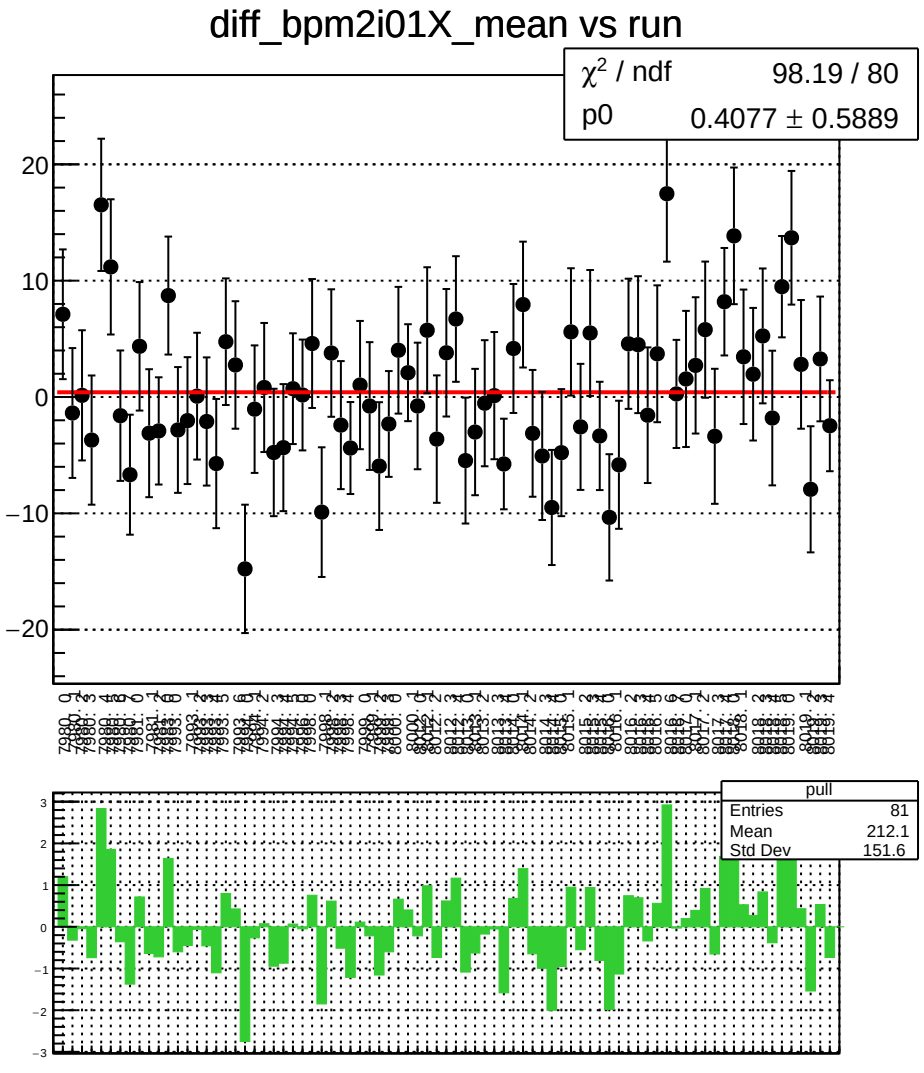

pull1D
Entries 81
Mean 0.01181
Std Dev 0.9769
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

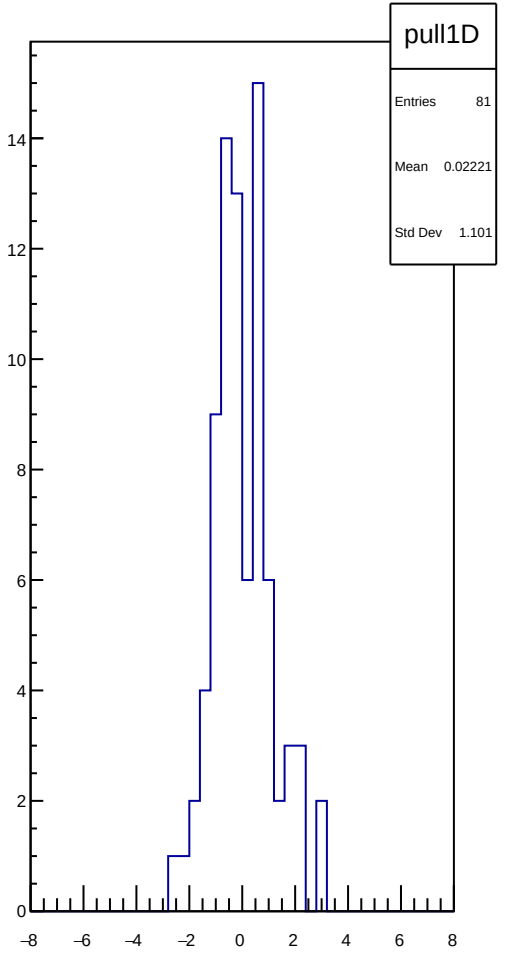

diff_bpm0r05X_rms vs run
χ² / ndf 1.66e+04 / 80
p0 5.956e+04 ± 47.22
80000
75000
70000
65000
60000
55000
50000

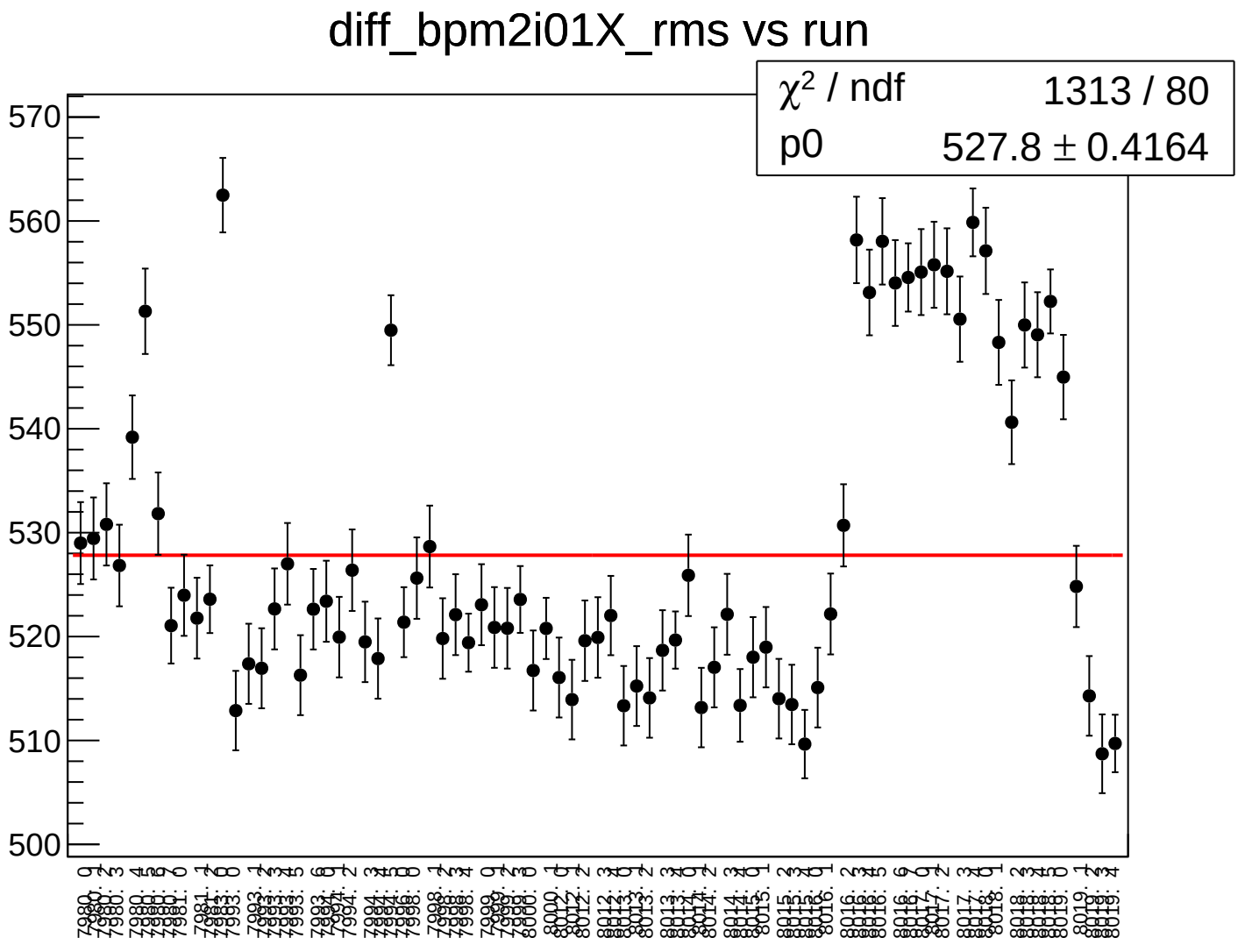

diff_bpm0r05Y_mean vs run
χ² / ndf 122.3 / 80
p0 9.551 ± 3.01
150
100
50
0
−50
−100
pull
Entries 81
Mean −212.2
Std Dev 264.9
3
2
1
0
−1
−2

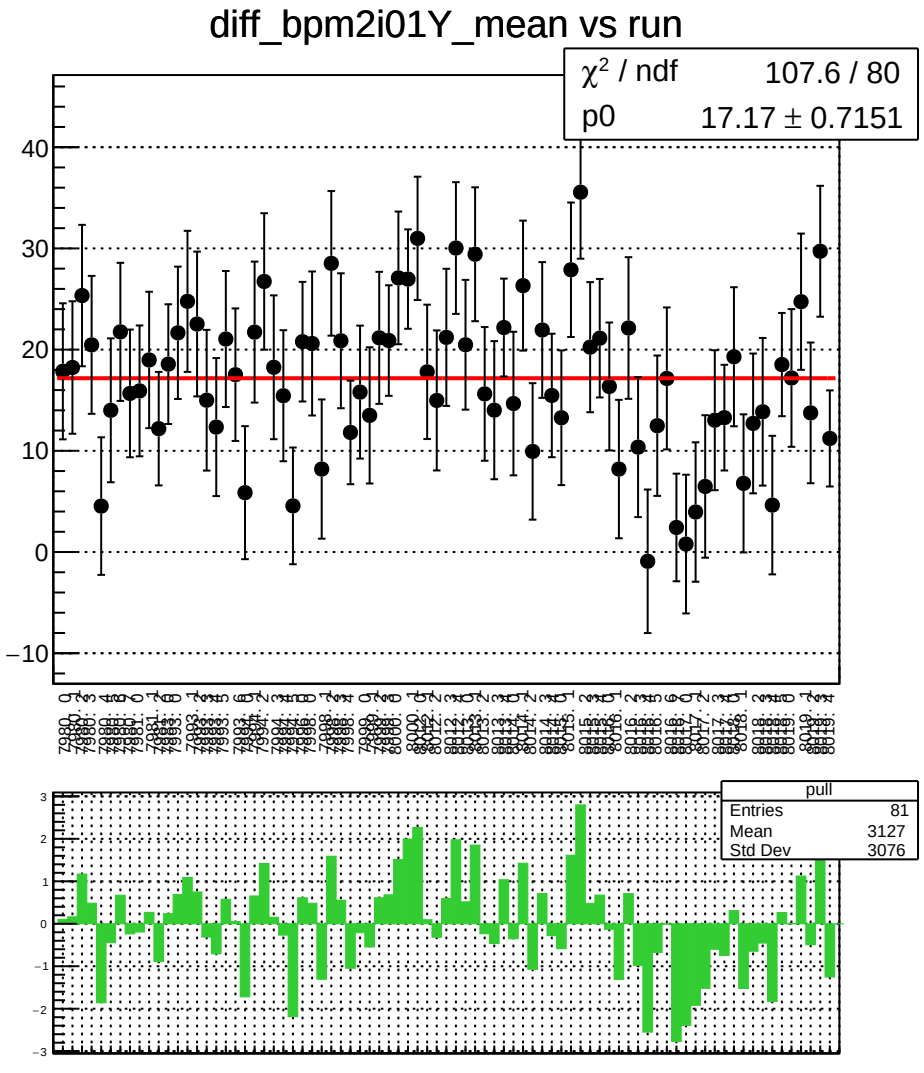

pull1D
Entries 81
Mean 0.02814
Std Dev 1.228
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

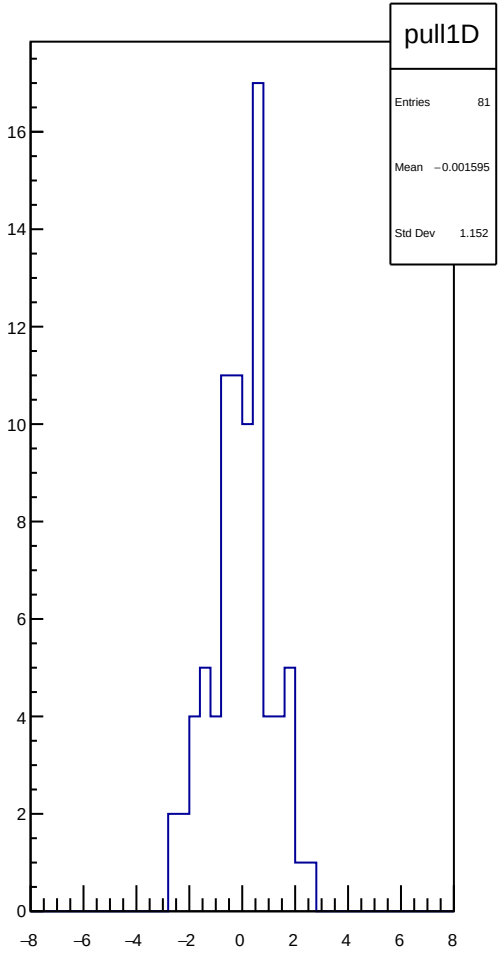

diff_bpm0r05Y_rms vs run
χ² / ndf 1.013e+04 / 80
p0 2691 ± 2.129
3400
3200
3000
2800
2600
2400
2200

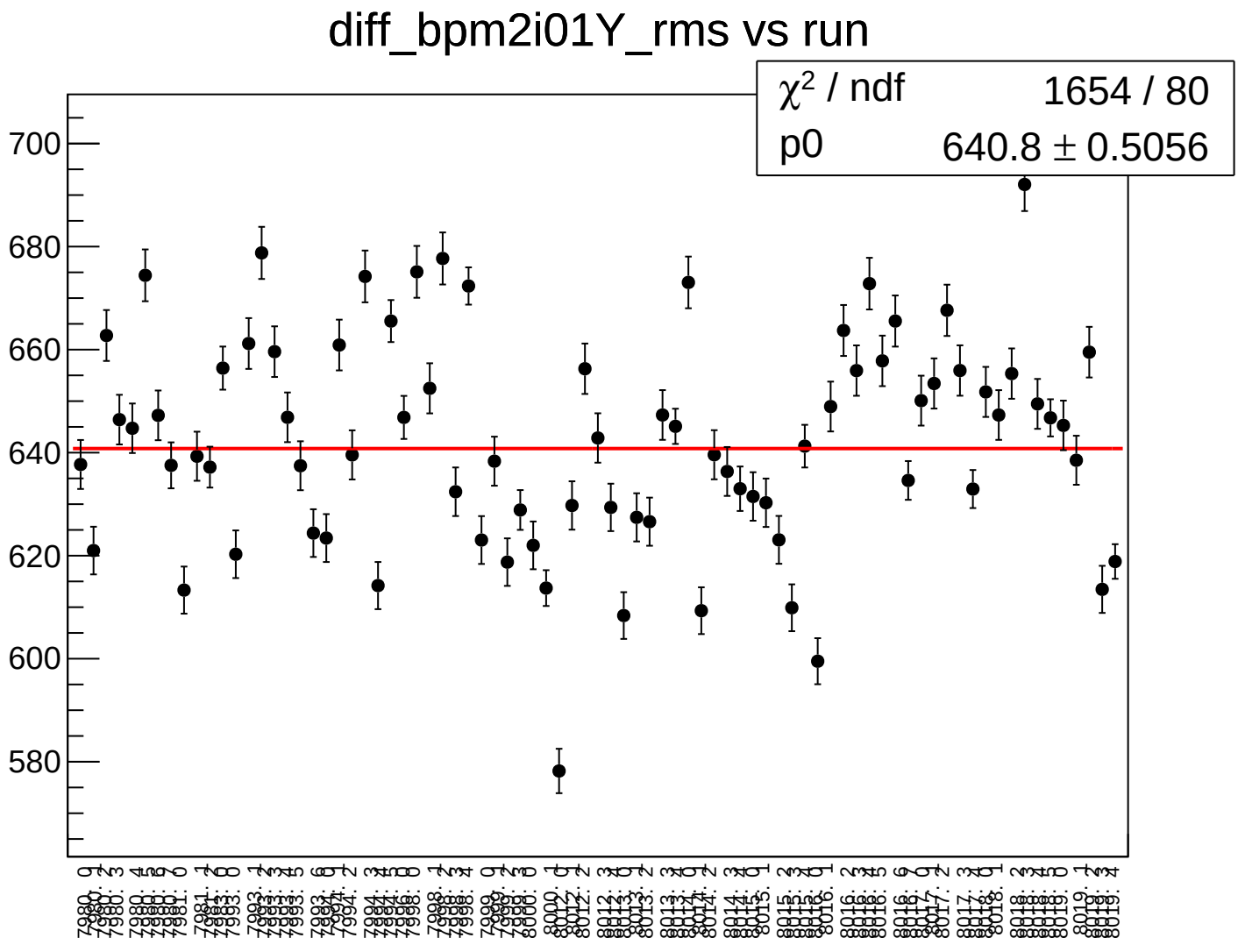

diff_bpm2i01X_mean vs run
χ² / ndf 98.19 / 80
p0 0.4077 ± 0.5889
pull
Entries 81
Mean 212.1
Std Dev 151.6

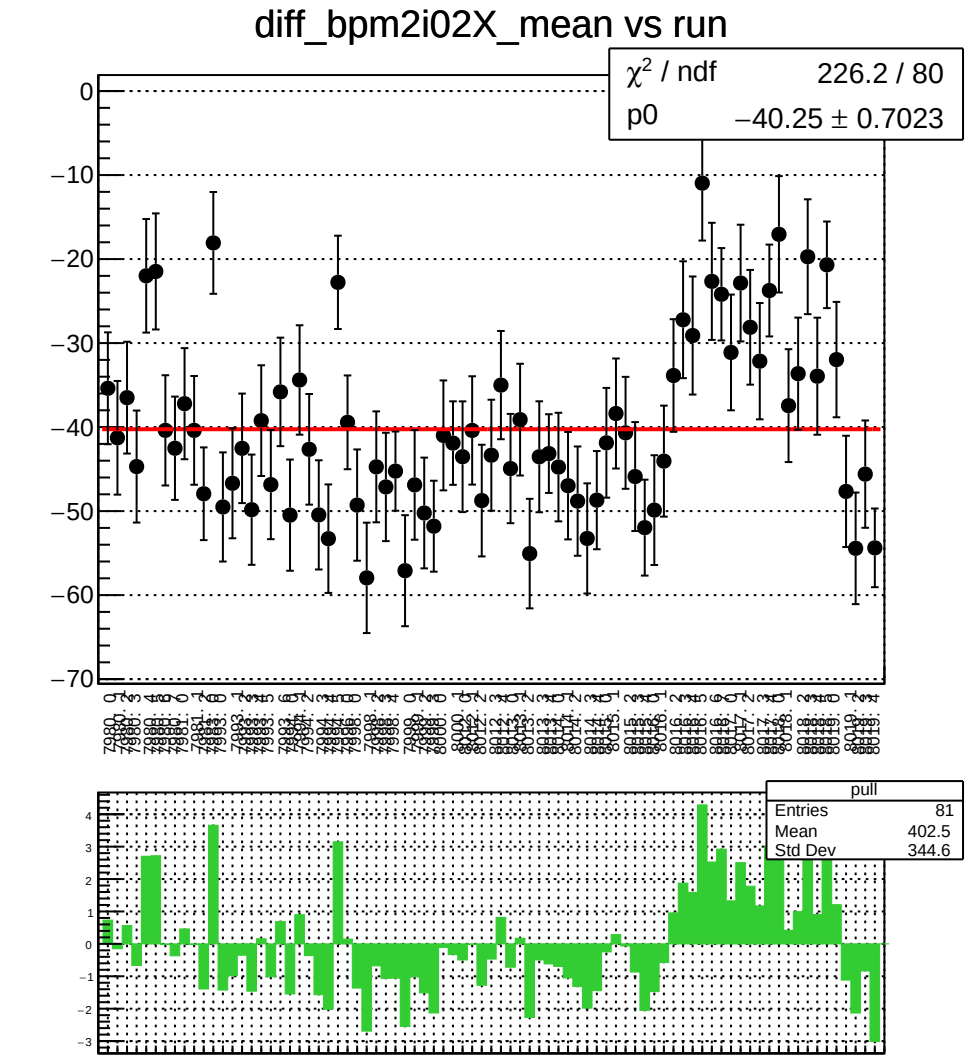

pull1D
Entries 81
Mean 0.02221
Std Dev 1.101

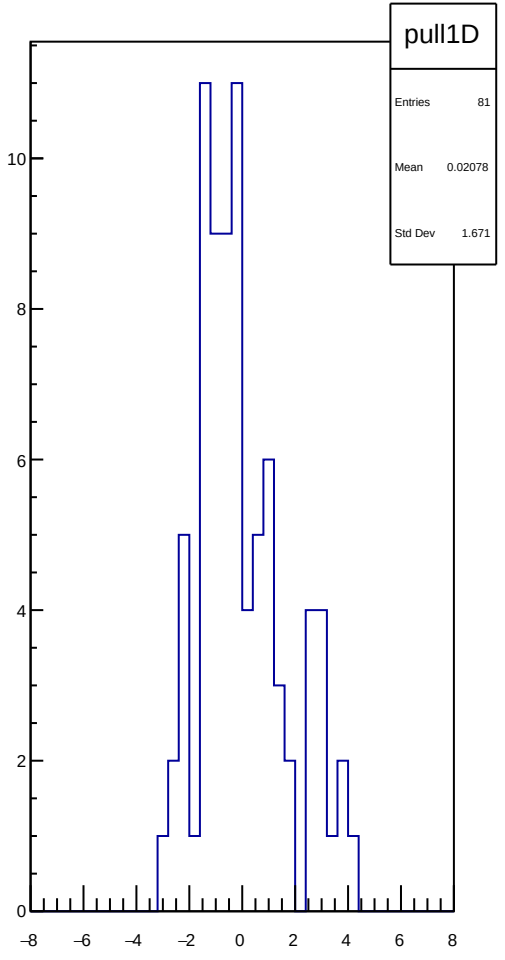

diff_bpm2i01X_rms vs run
χ² / ndf 1313 / 80
p0 527.8 ± 0.4164
570
560
550
540
530
520
510
500

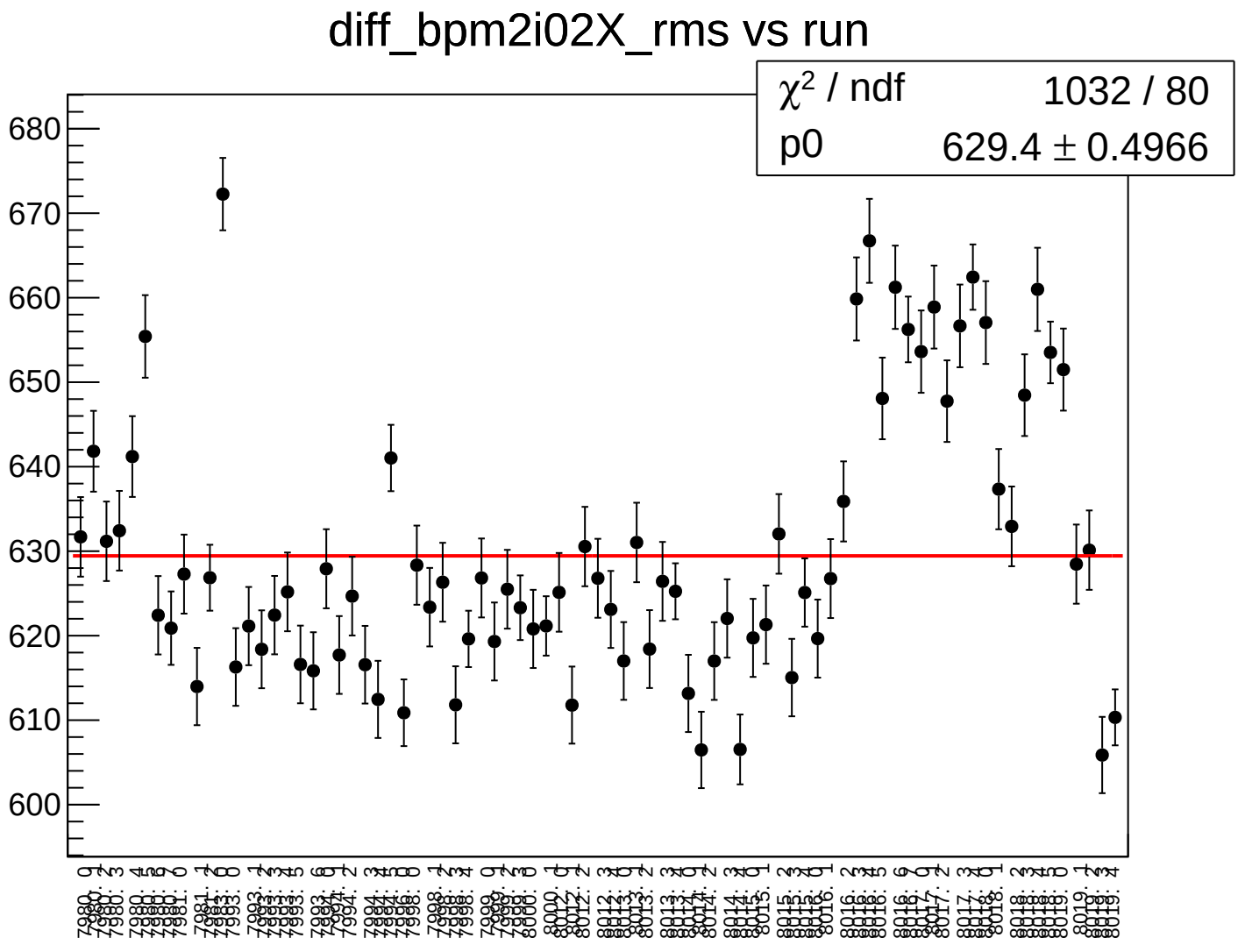

diff_bpm2i01Y_mean vs run
χ² / ndf 107.6 / 80
p0 17.17 ± 0.7151
pull
Entries 81
Mean 3127
Std Dev 3076

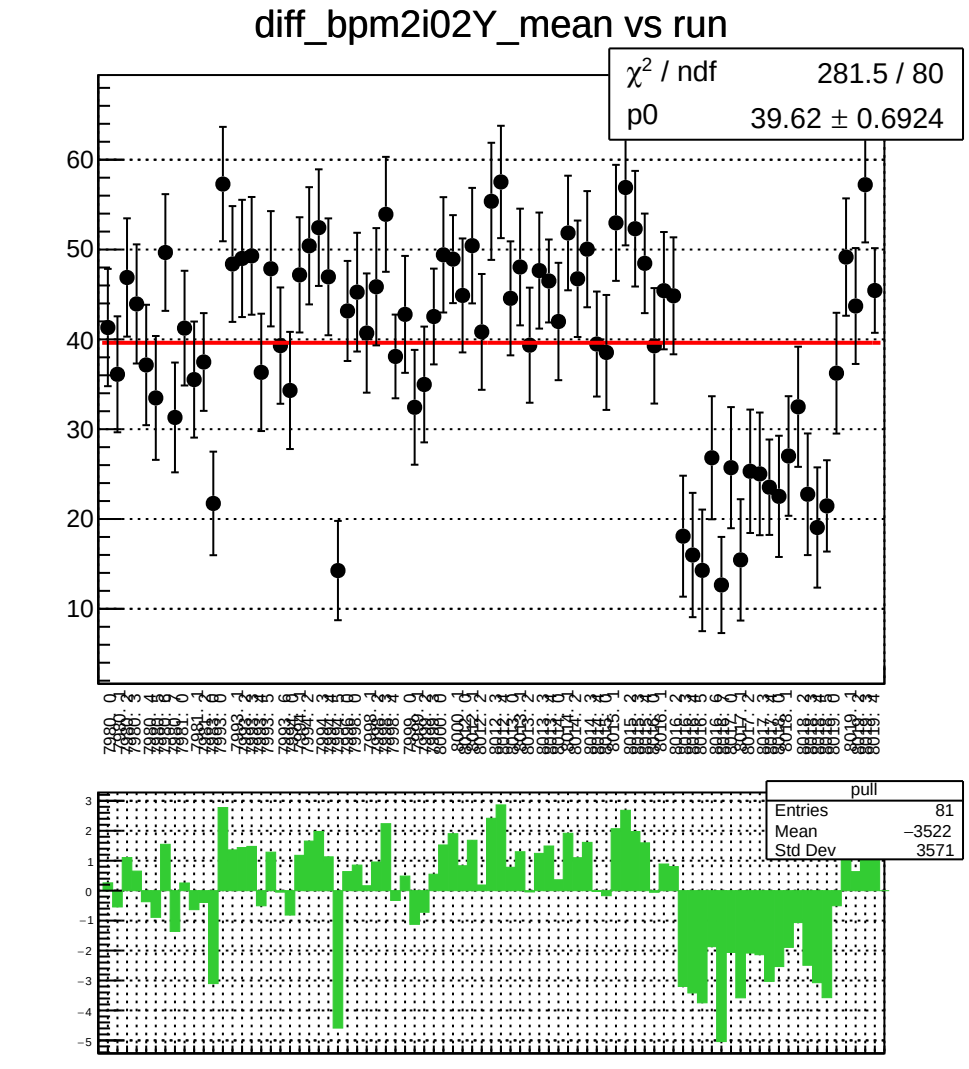

pull1D
Entries 81
Mean −0.001595
Std Dev 1.152

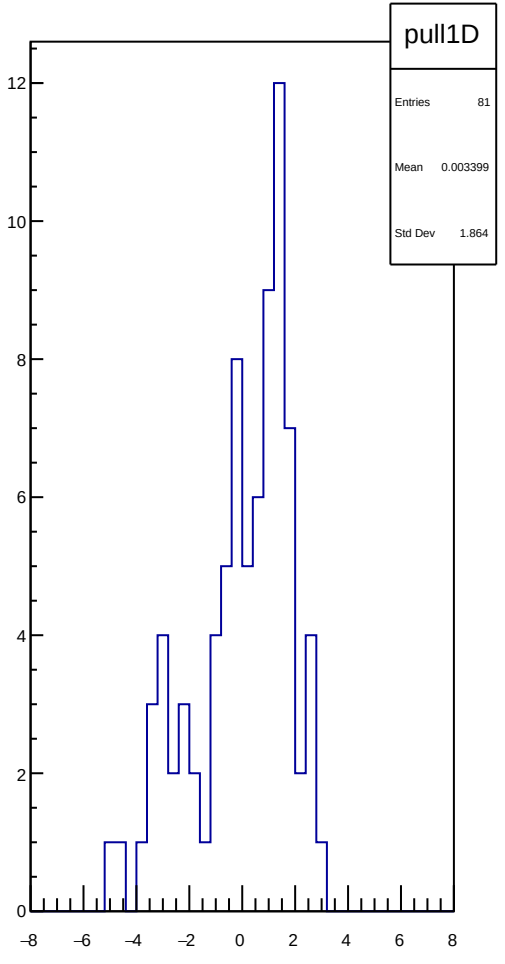

diff_bpm2i01Y_rms vs run
χ² / ndf 1654 / 80
p0 640.8 ± 0.5056
700
680
660
640
620
600
580

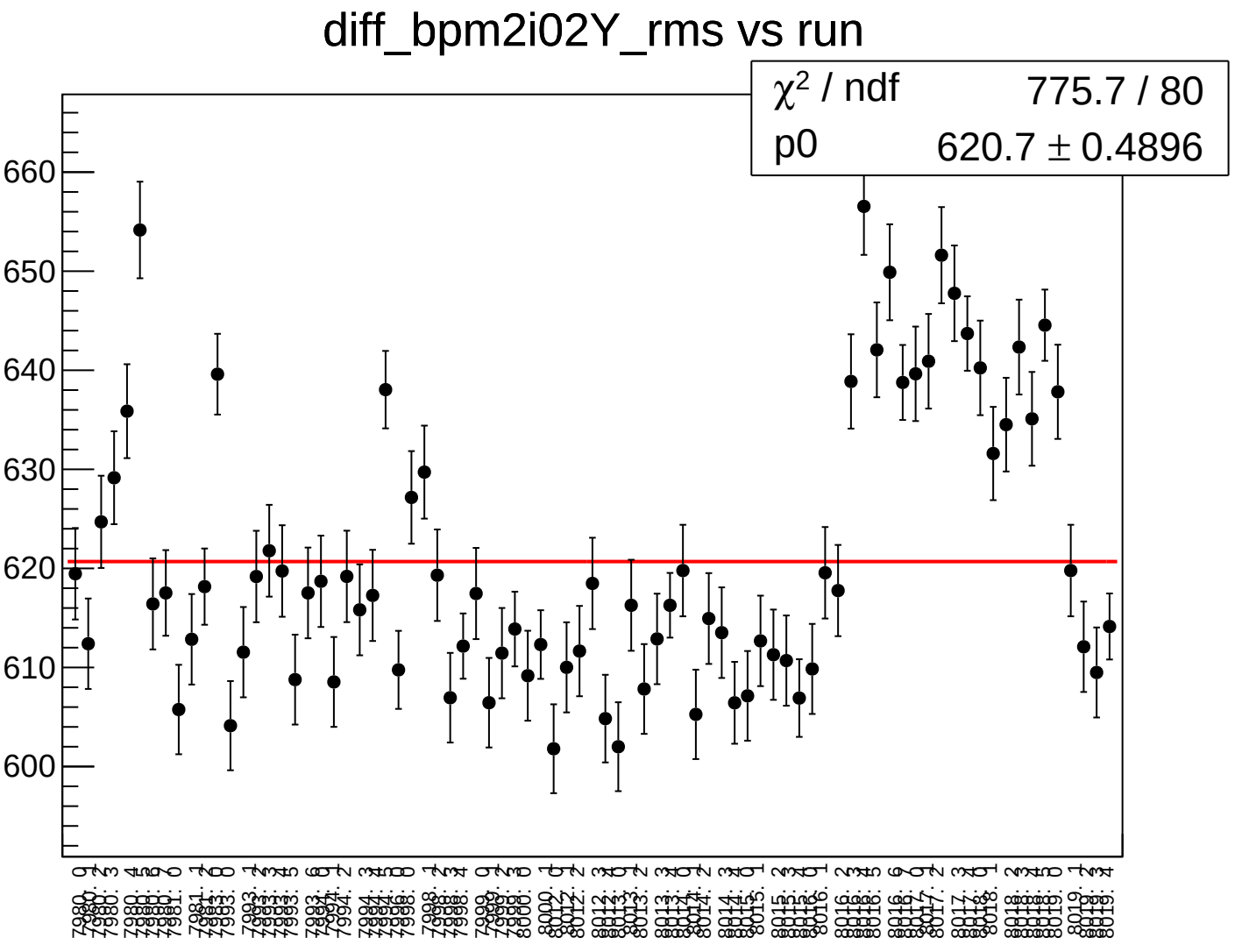

diff_bpm2i02X_mean vs run
χ² / ndf 226.2 / 80
p0 −40.25 ± 0.7023
pull
Entries 81
Mean 402.5
Std Dev 344.6

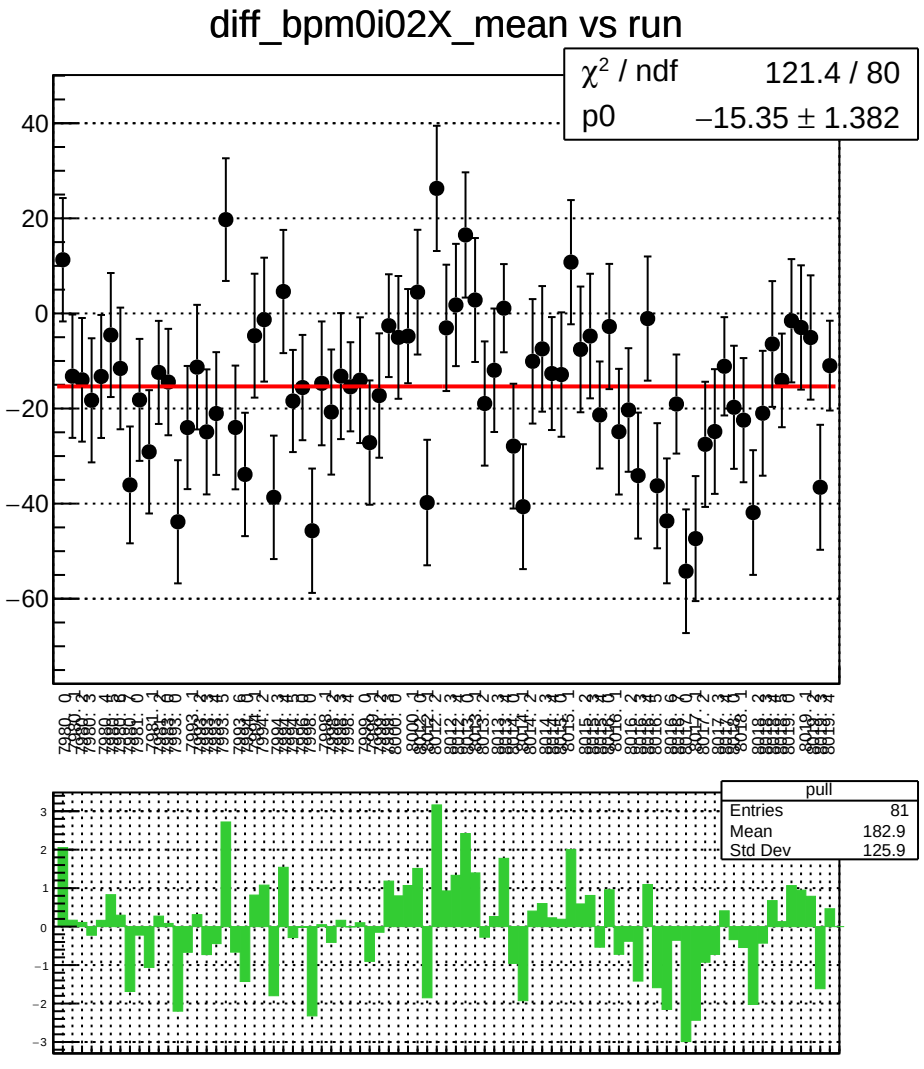

pull1D
Entries 81
Mean 0.02078
Std Dev 1.671

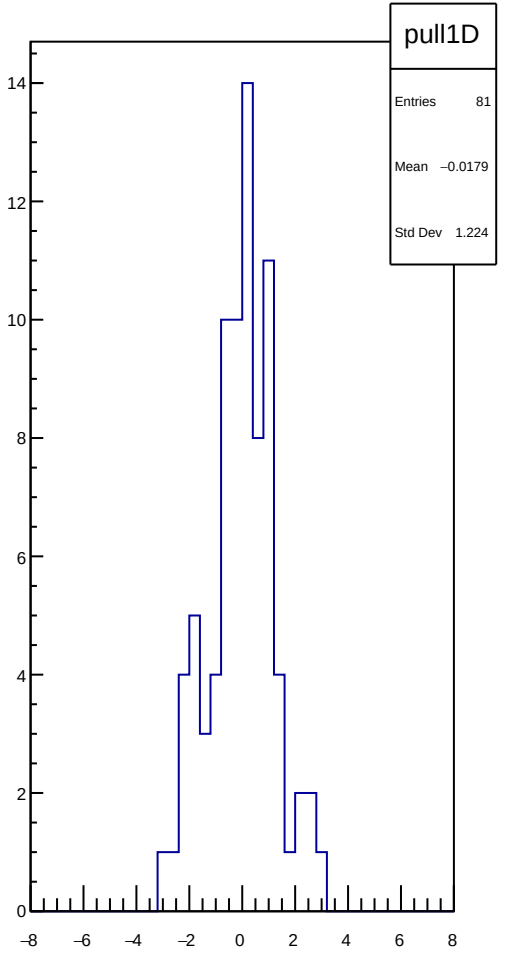

diff_bpm2i02X_rms vs run
χ² / ndf 1032 / 80
p0 629.4 ± 0.4966
680
670
660
650
640
630
620
610
600

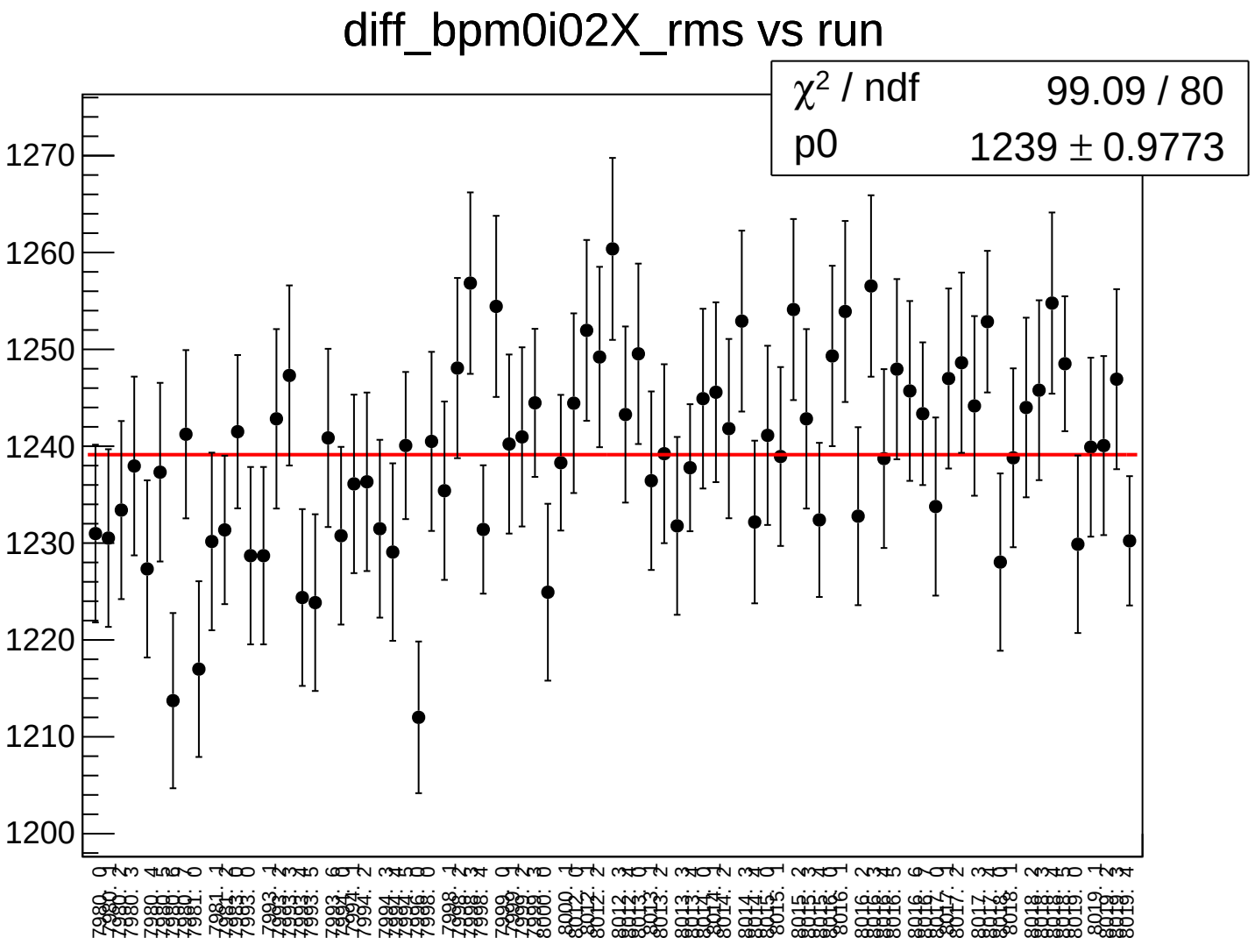

diff_bpm2i02Y_mean vs run
χ² / ndf 281.5 / 80
p0 39.62 ± 0.6924
pull
Entries 81
Mean −3522
Std Dev 3571

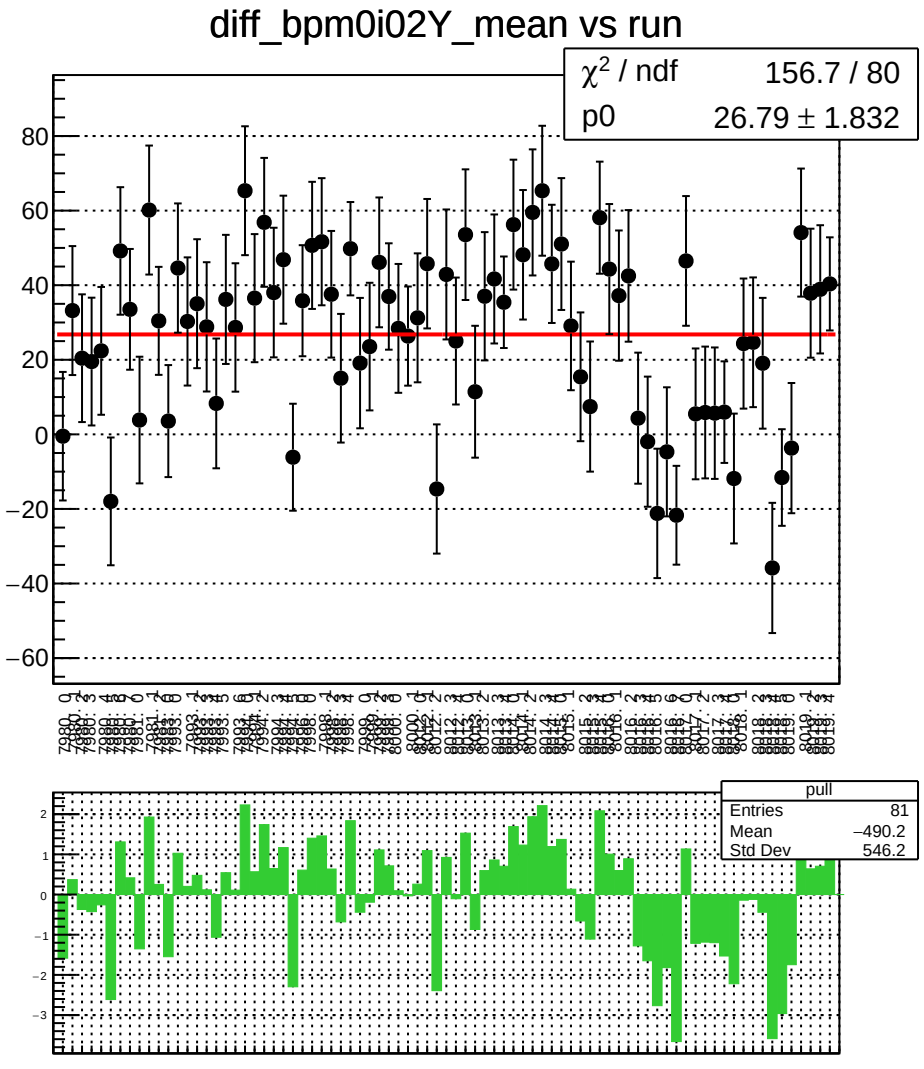

pull1D
Entries 81
Mean 0.003399
Std Dev 1.864

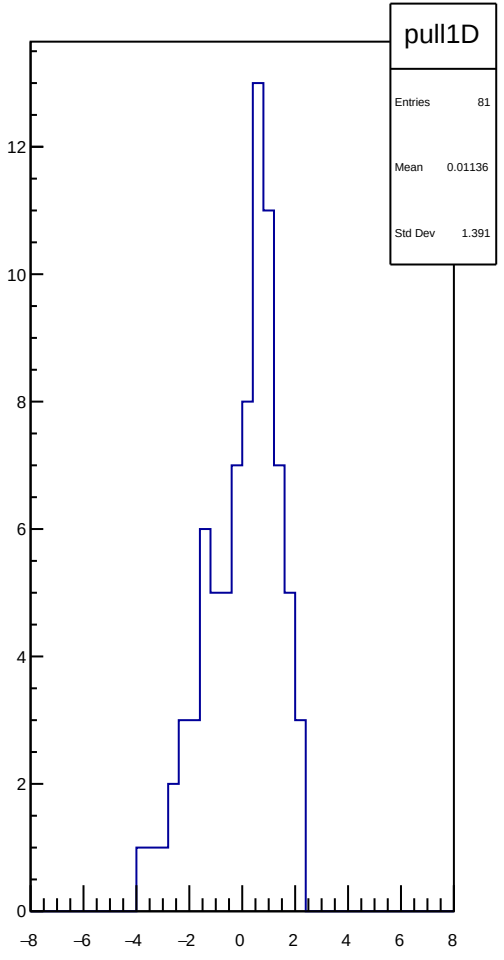

diff_bpm2i02Y_rms vs run
χ² / ndf 775.7 / 80
p0 620.7 ± 0.4896
660
650
640
630
620
610
600

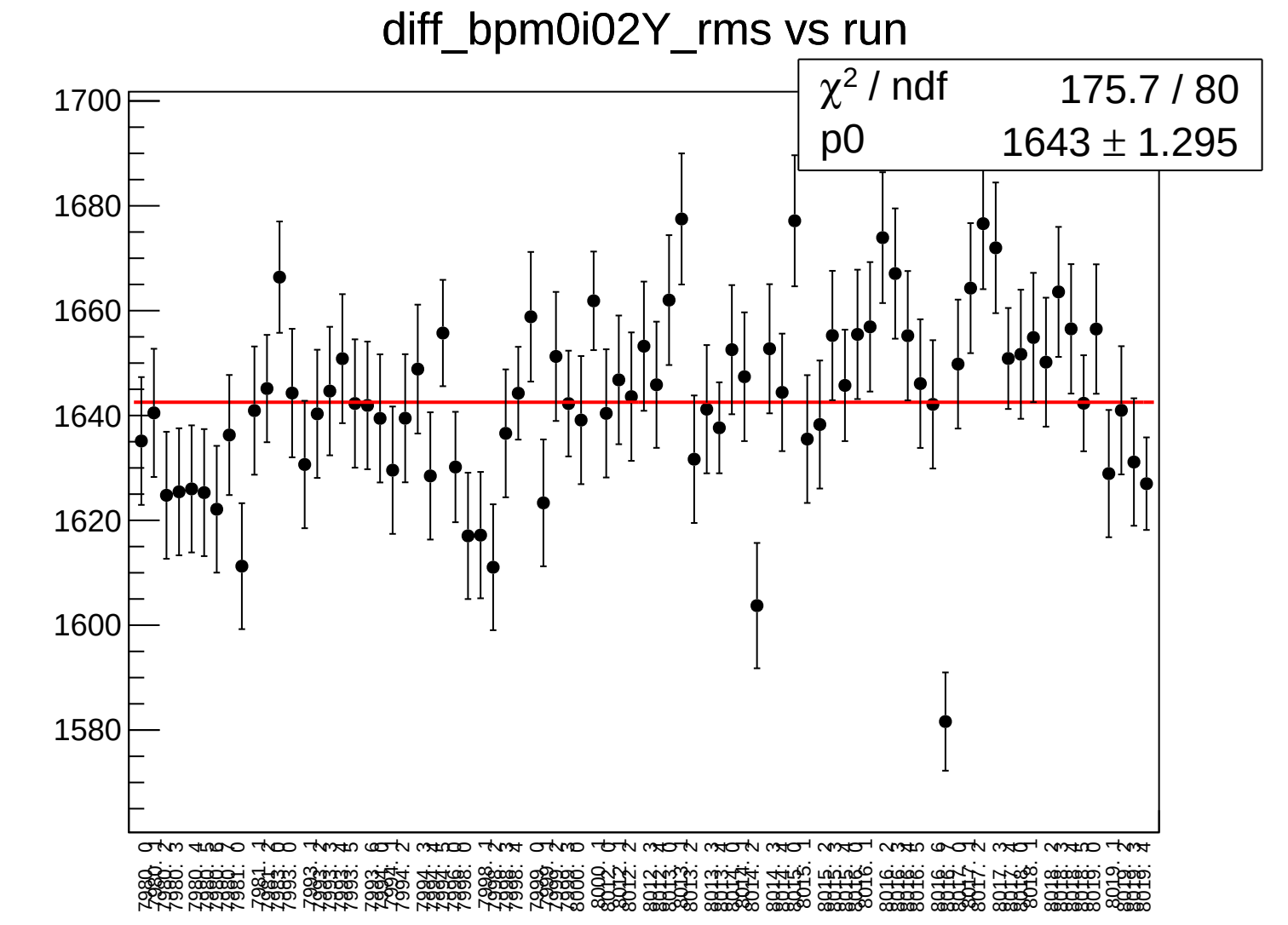

diff_bpm0i02X_mean vs run
χ² / ndf 121.4 / 80
p0 −15.35 ± 1.382
pull
Entries 81
Mean 182.9
Std Dev 125.9

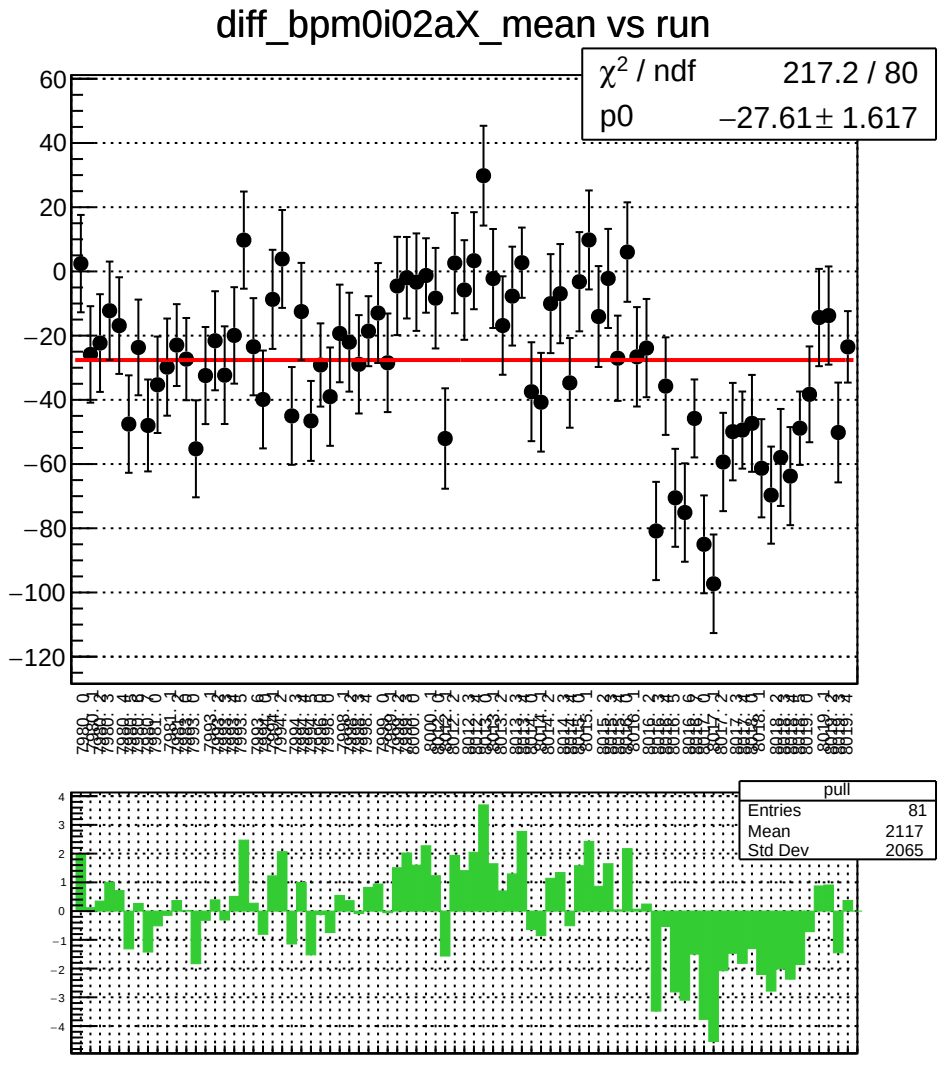

pull1D
Entries 81
Mean −0.0179
Std Dev 1.224

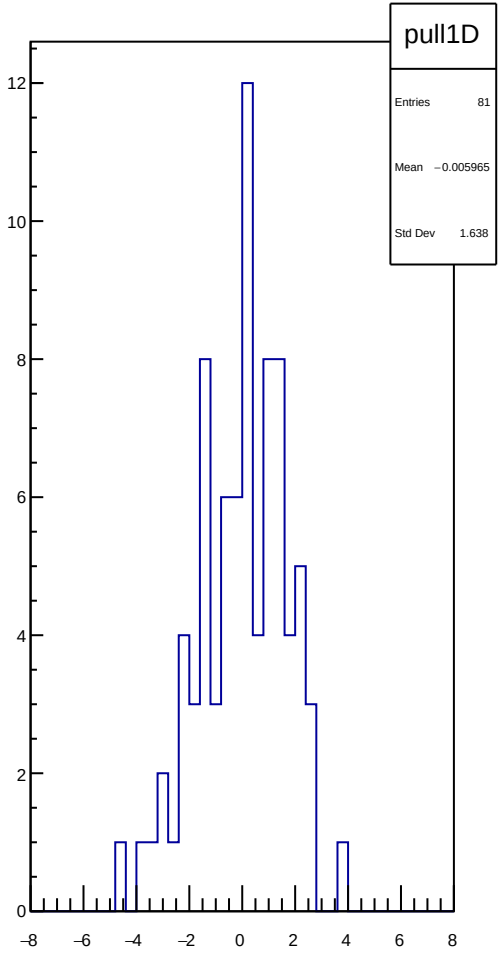

diff_bpm0i02X_rms vs run
χ² / ndf 99.09 / 80
p0 1239 ± 0.9773
1270
1260
1250
1240
1230
1220
1210
1200

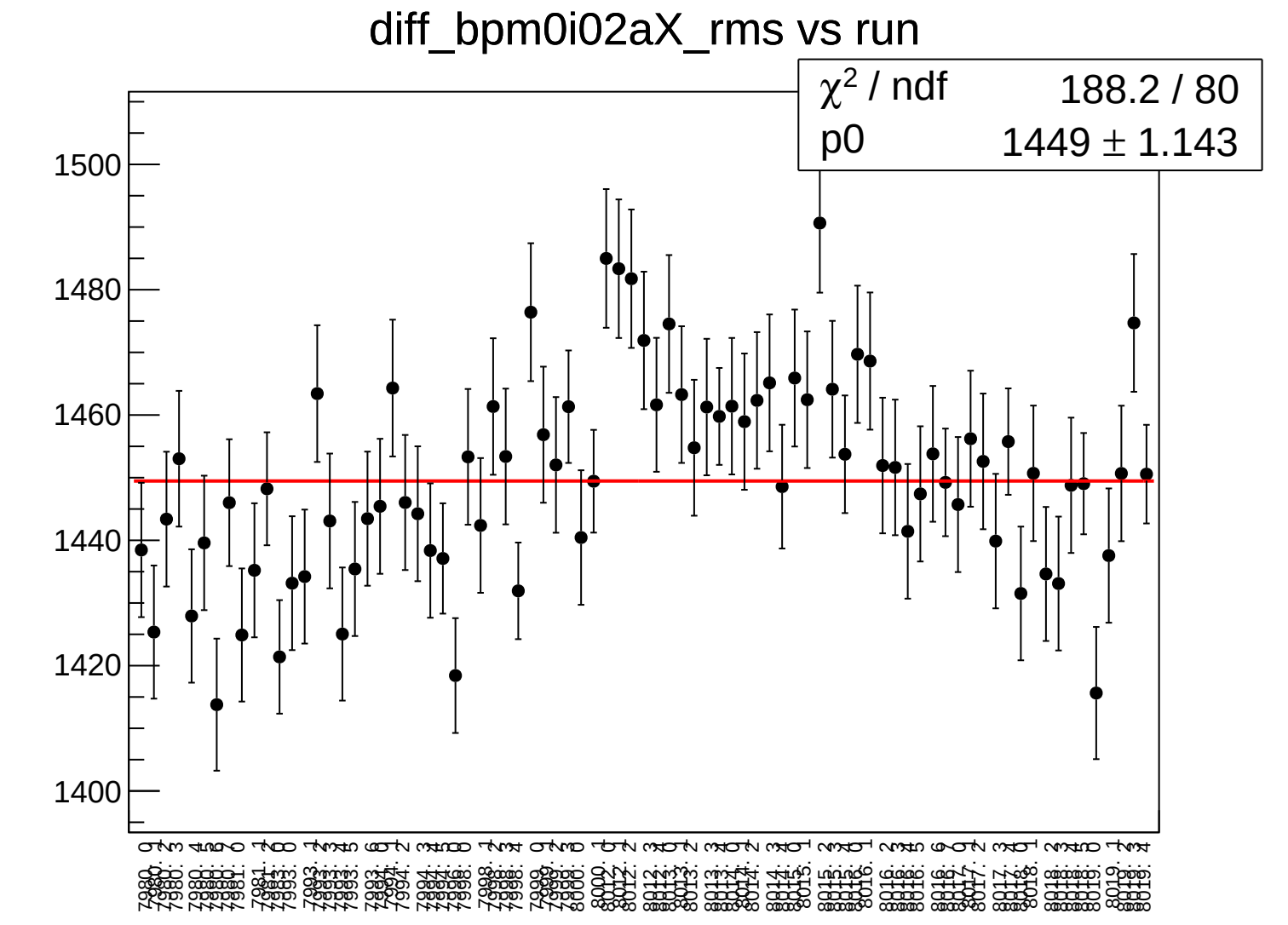

diff_bpm0i02Y_mean vs run
χ² / ndf 156.7 / 80
p0 26.79 ± 1.832
pull
Entries 81
Mean −490.2
Std Dev 546.2

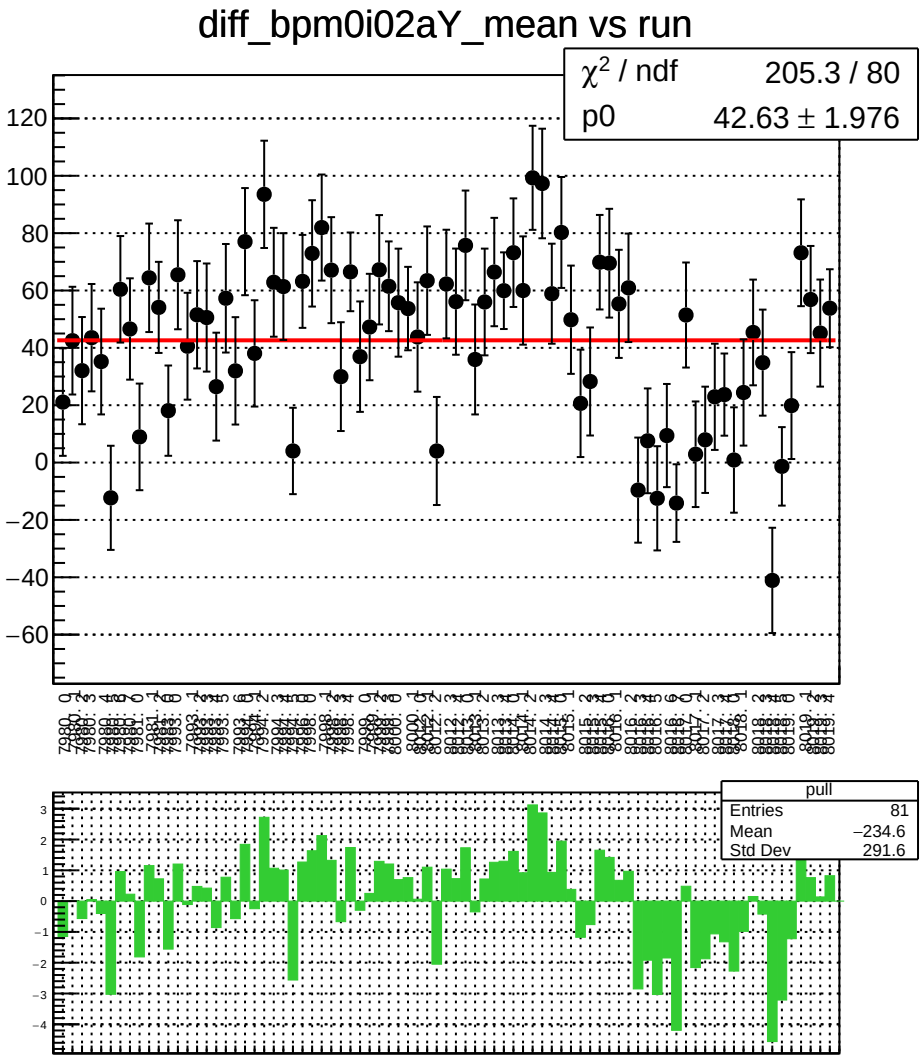

pull1D
Entries 81
Mean 0.01136
Std Dev 1.391

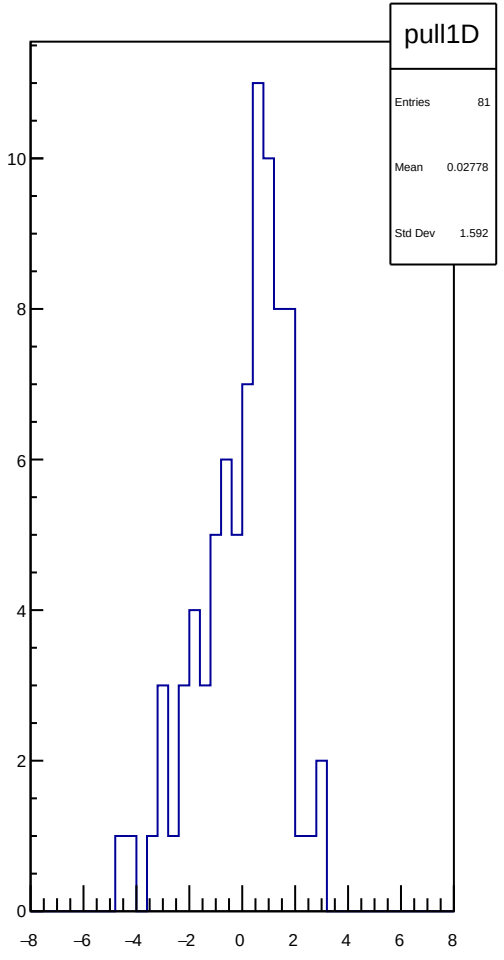

diff_bpm0i02Y_rms vs run
χ² / ndf 175.7 / 80
p0 1643 ± 1.295
1700
1680
1660
1640
1620
1600
1580

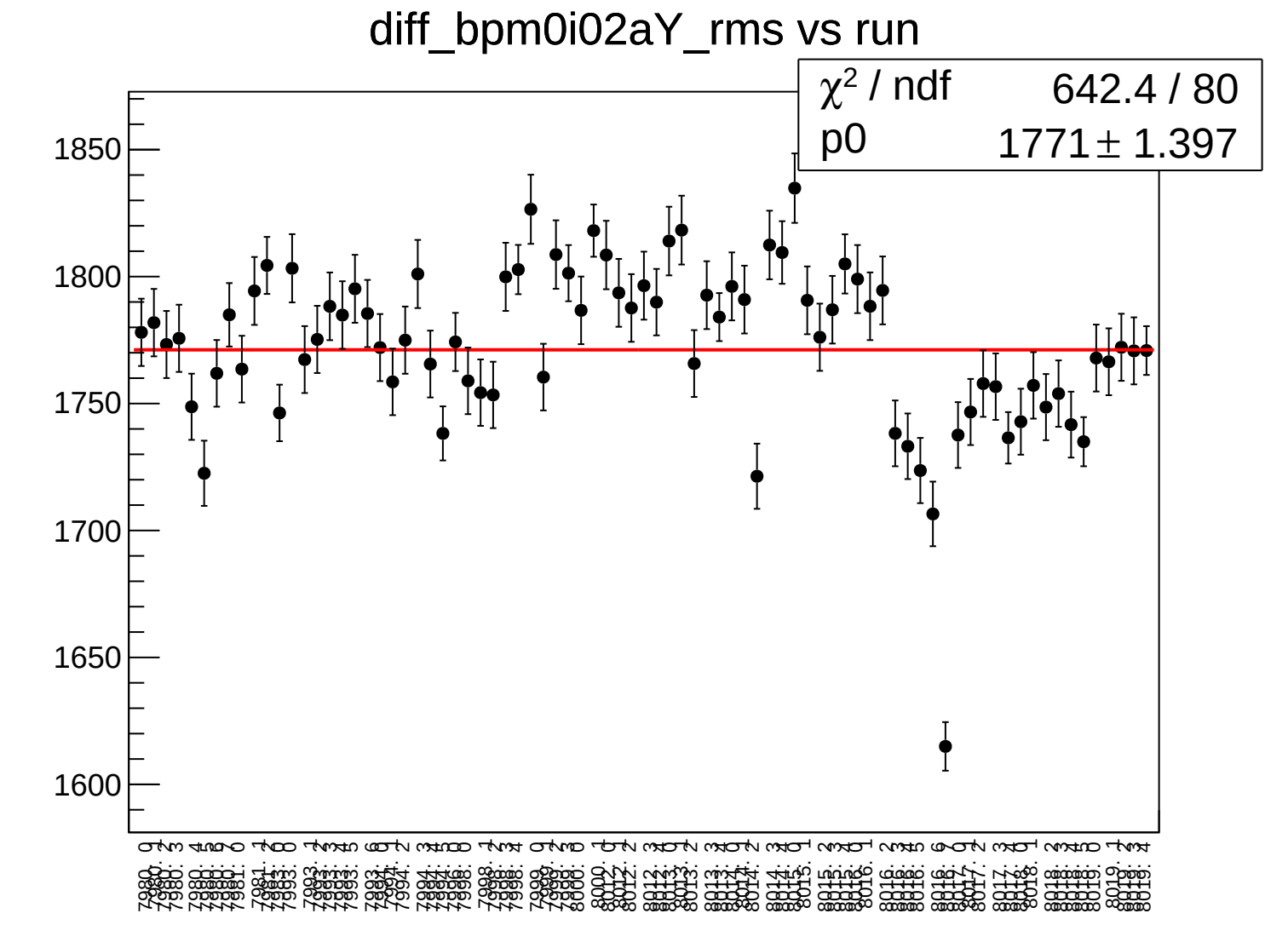

diff_bpm0i02aX_mean vs run
χ² / ndf 217.2 / 80
p0 −27.61 ± 1.617
pull
Entries 81
Mean 2117
Std Dev 2065

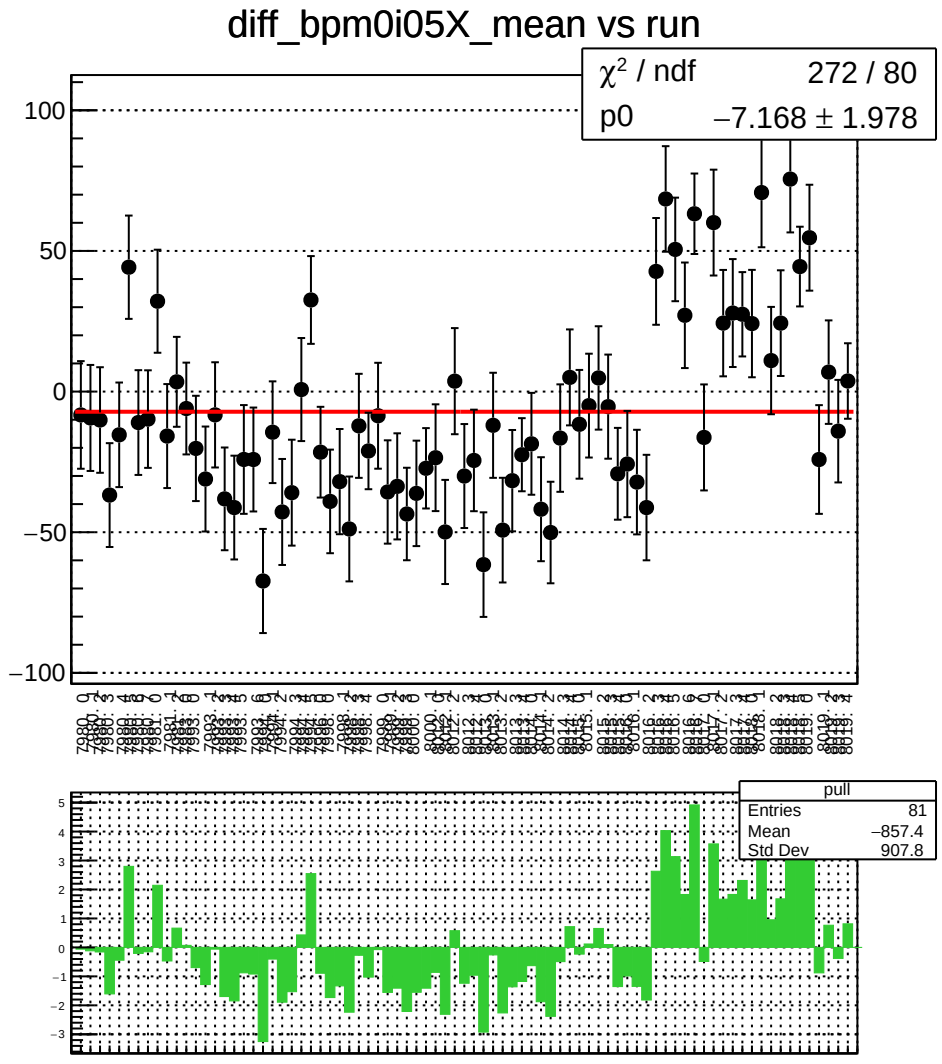

pull1D
Entries 81
Mean −0.005965
Std Dev 1.638

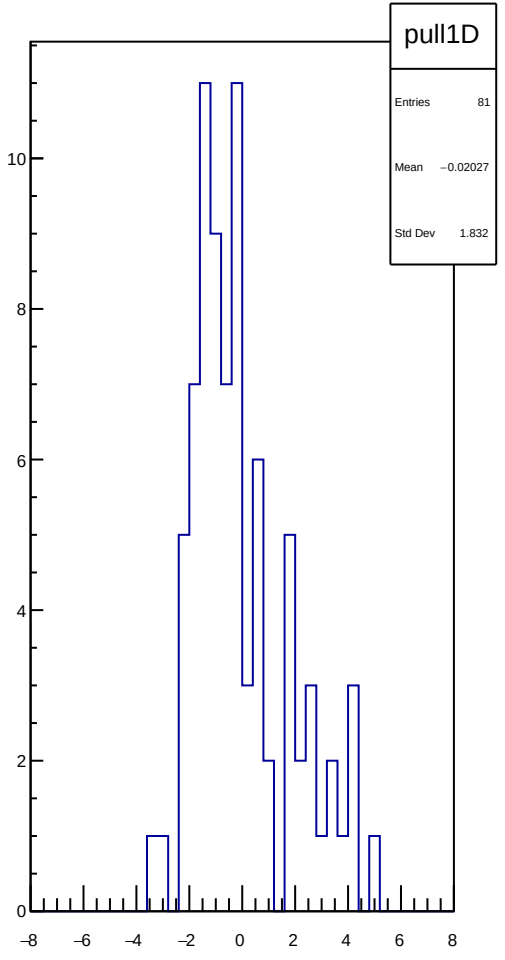

diff_bpm0i02aX_rms vs run
χ² / ndf 188.2 / 80
p0 1449 ± 1.143
1500
1480
1460
1440
1420
1400

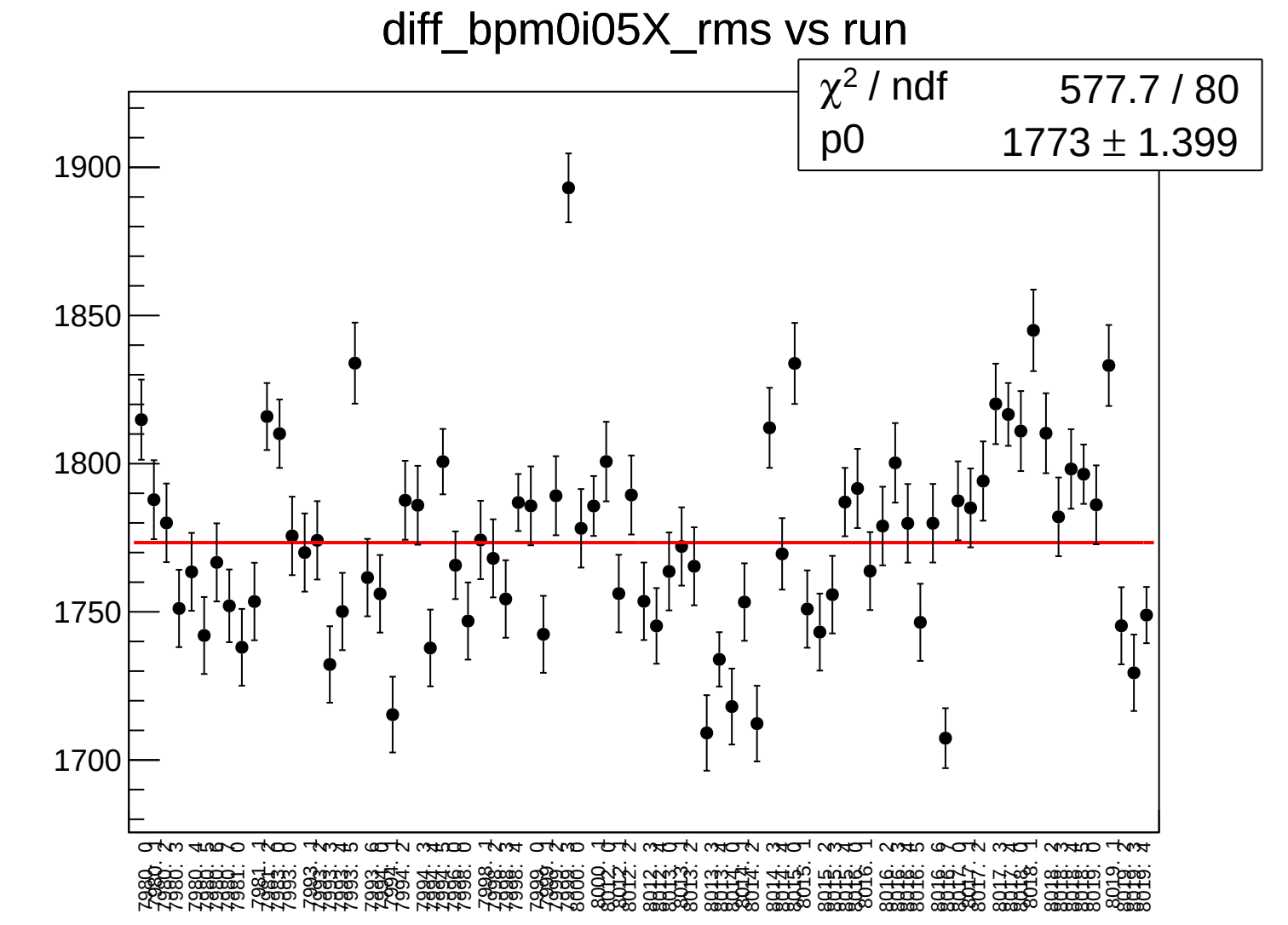

diff_bpm0i02aY_mean vs run
χ² / ndf 205.3 / 80
p0 42.63 ± 1.976
pull
Entries 81
Mean −234.6
Std Dev 291.6

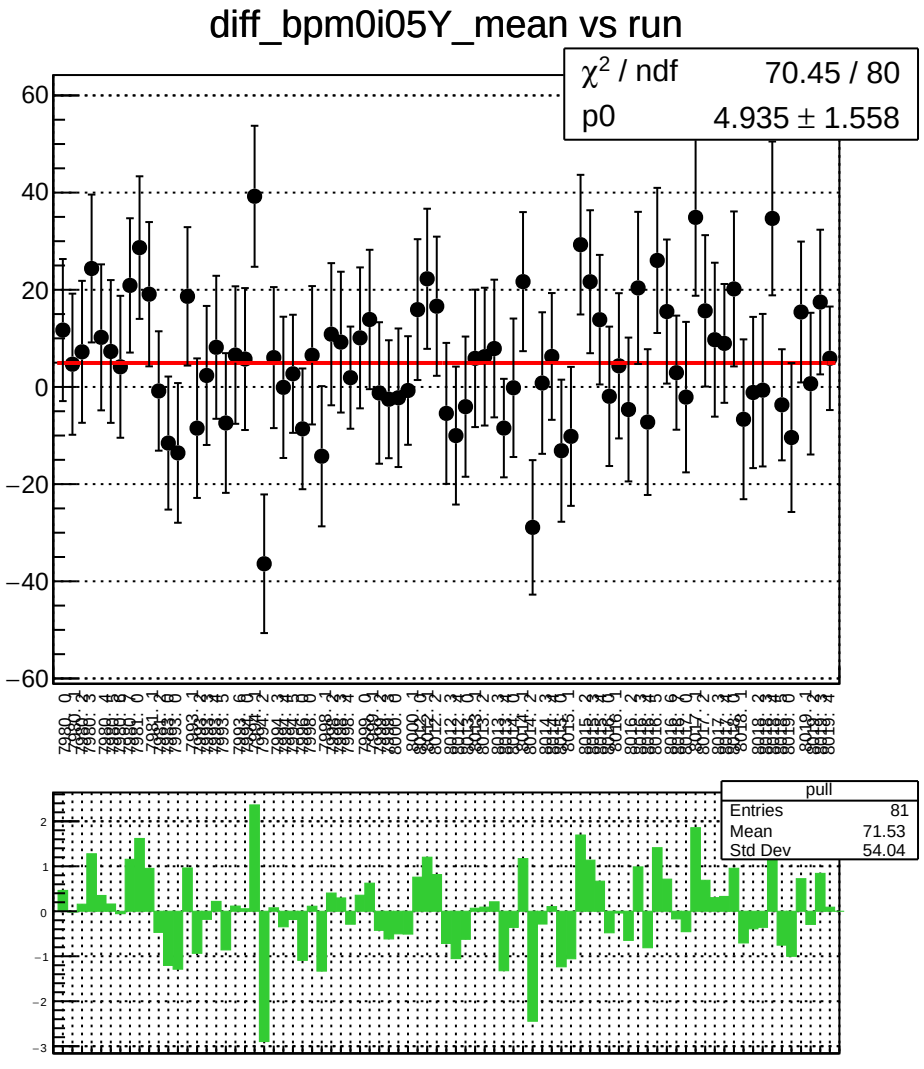

pull1D
Entries 81
Mean 0.02778
Std Dev 1.592

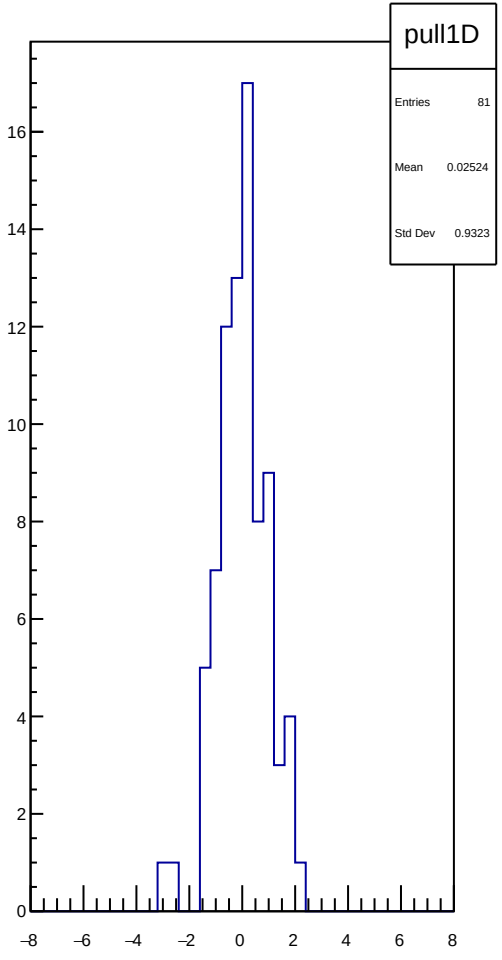

diff_bpm0i02aY_rms vs run
χ² / ndf 642.4 / 80
p0 1771 ± 1.397
1850
1800
1750
1700
1650
1600

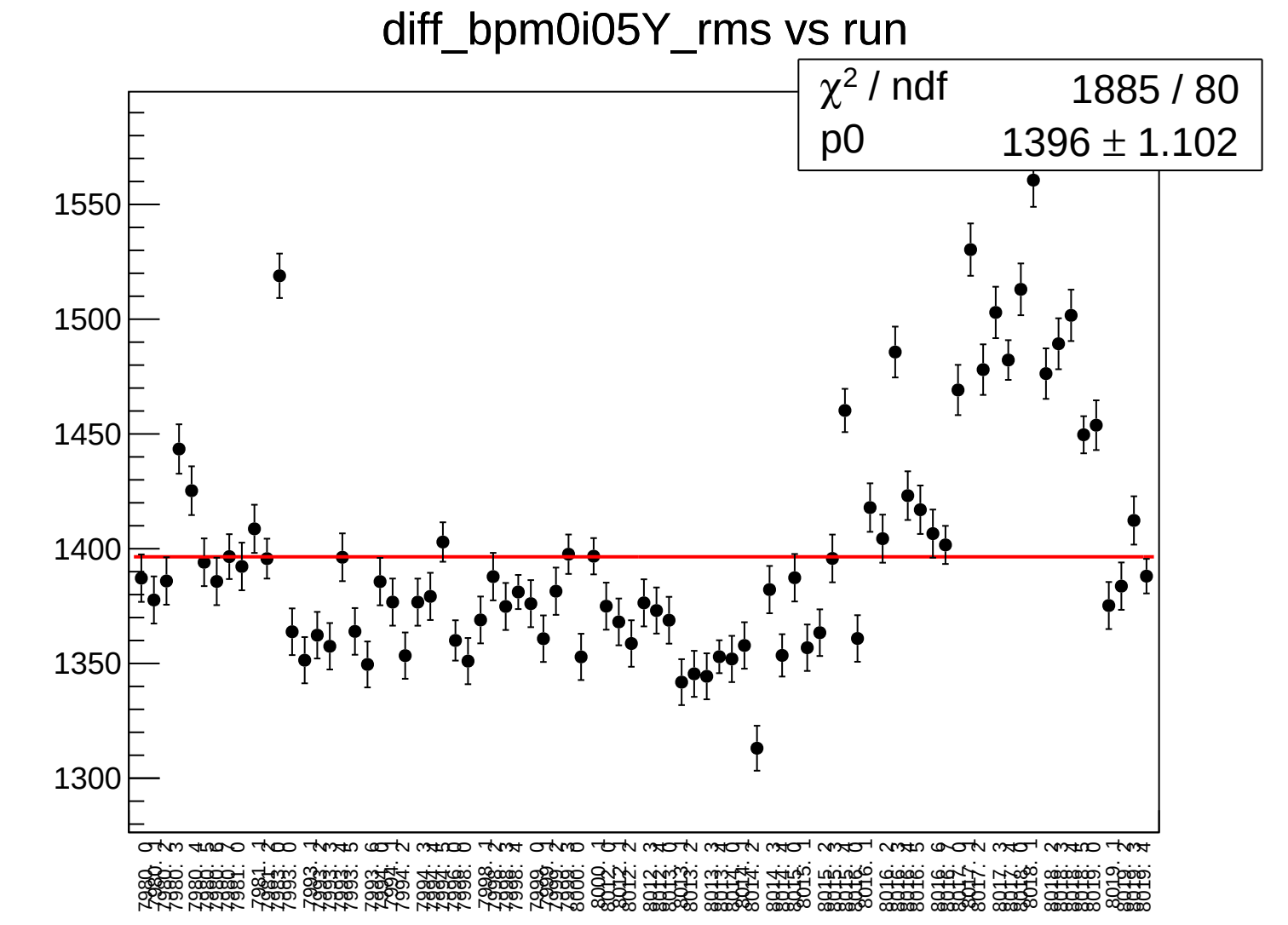

diff_bpm0i05X_mean vs run
χ² / ndf 272 / 80
p0 −7.168 ± 1.978
100
50
0
−50
−100
pull
Entries 81
Mean −857.4
Std Dev 907.8
5
4
3
2
1
0
−1
−2
−3

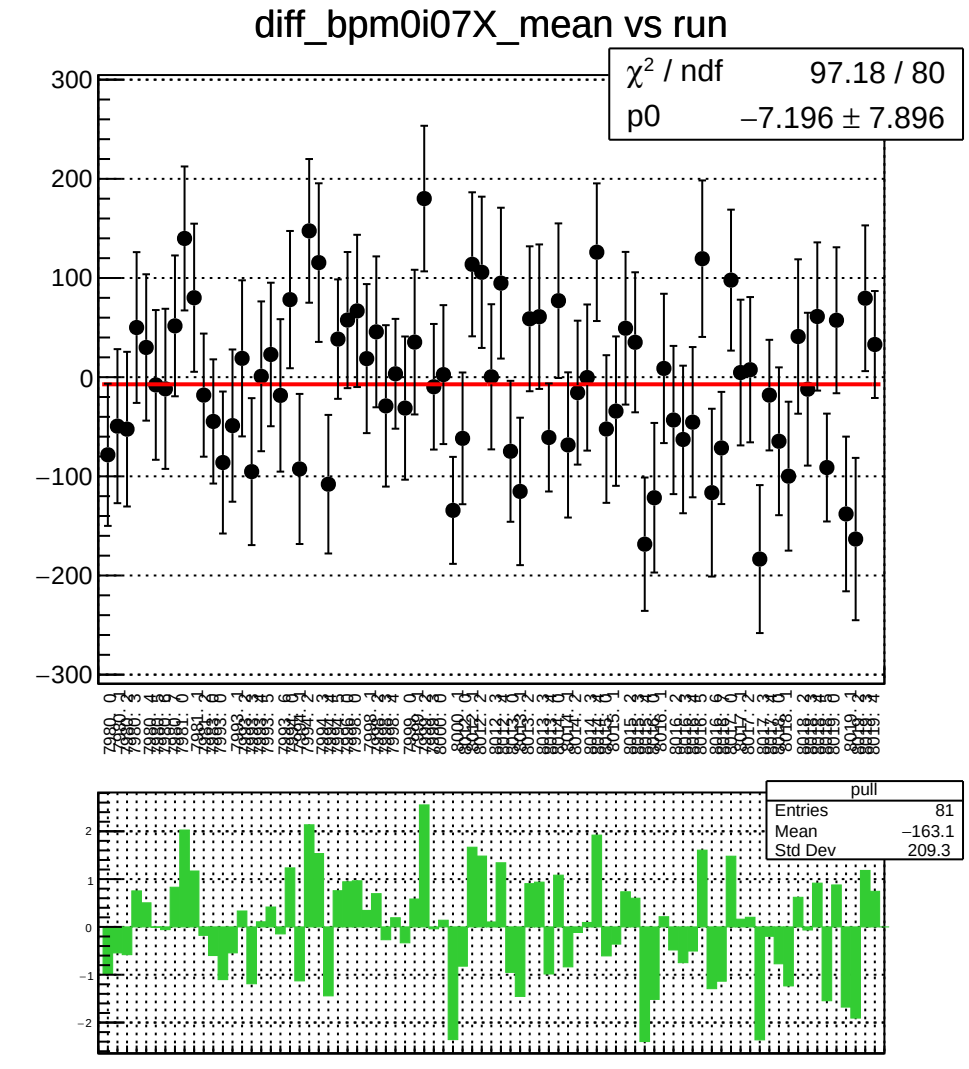

pull1D
Entries 81
Mean −0.02027
Std Dev 1.832
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

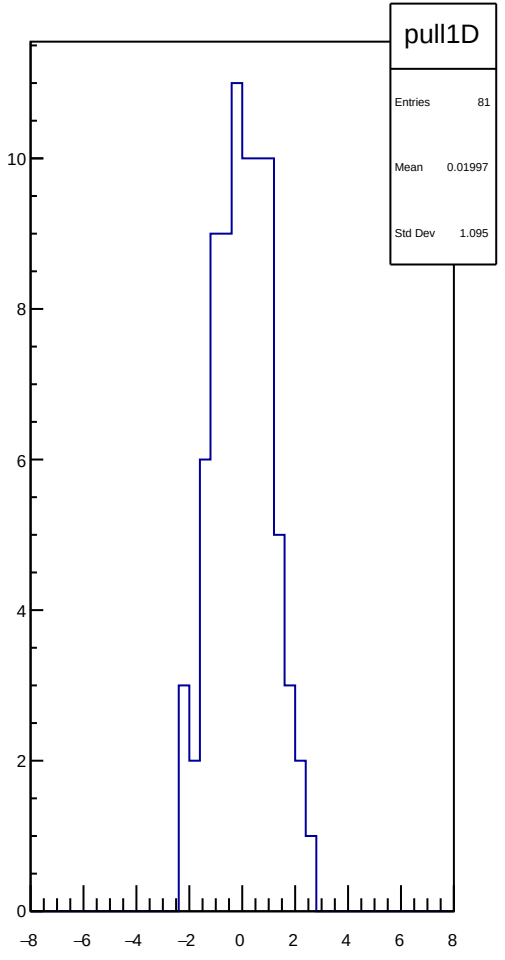

diff_bpm0i05X_rms vs run
χ² / ndf 577.7 / 80
p0 1773 ± 1.399
1900
1850
1800
1750
1700

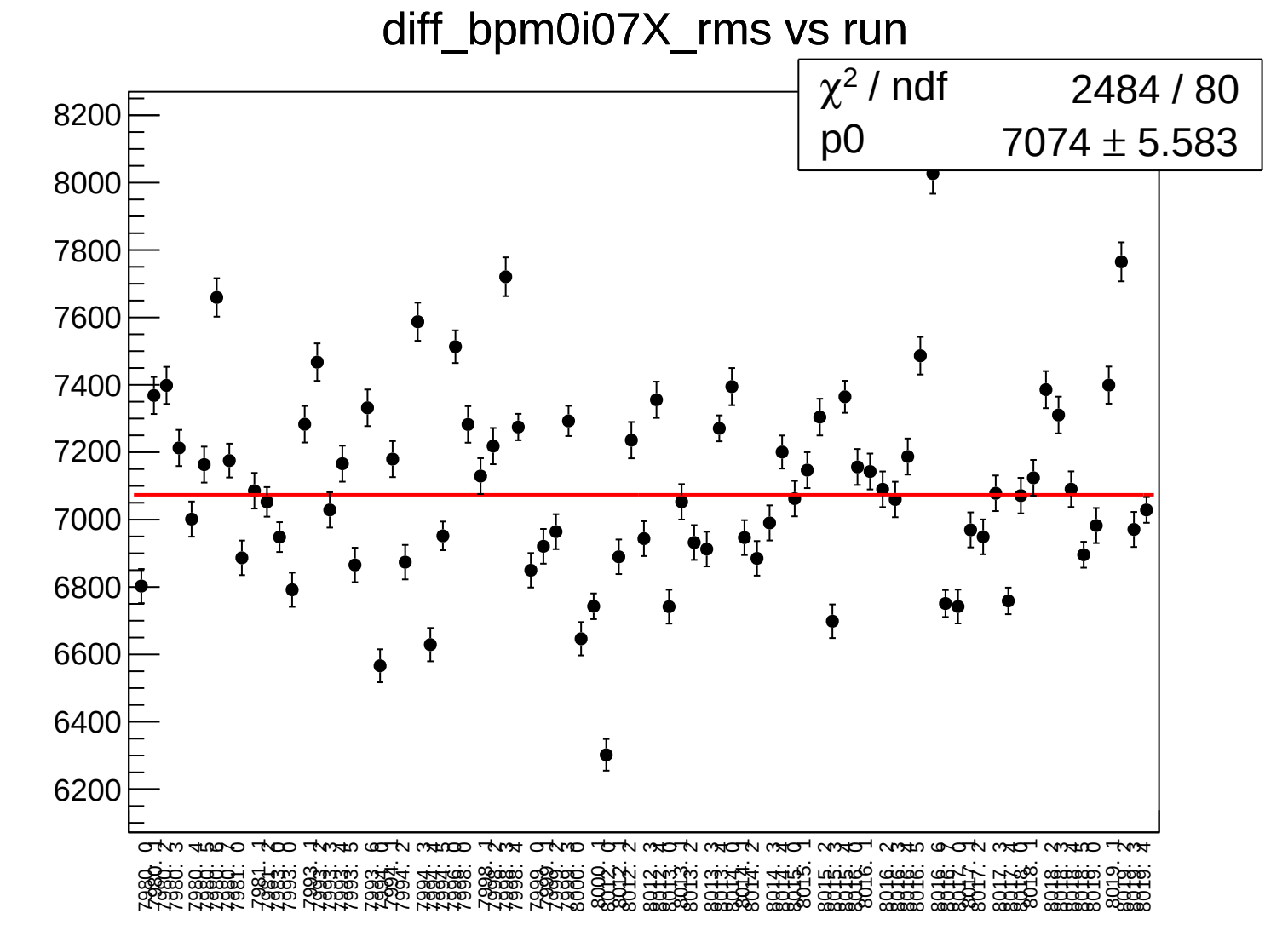

diff_bpm0i05Y_mean vs run
χ² / ndf 70.45 / 80
p0 4.935 ± 1.558
pull
Entries 81
Mean 71.53
Std Dev 54.04

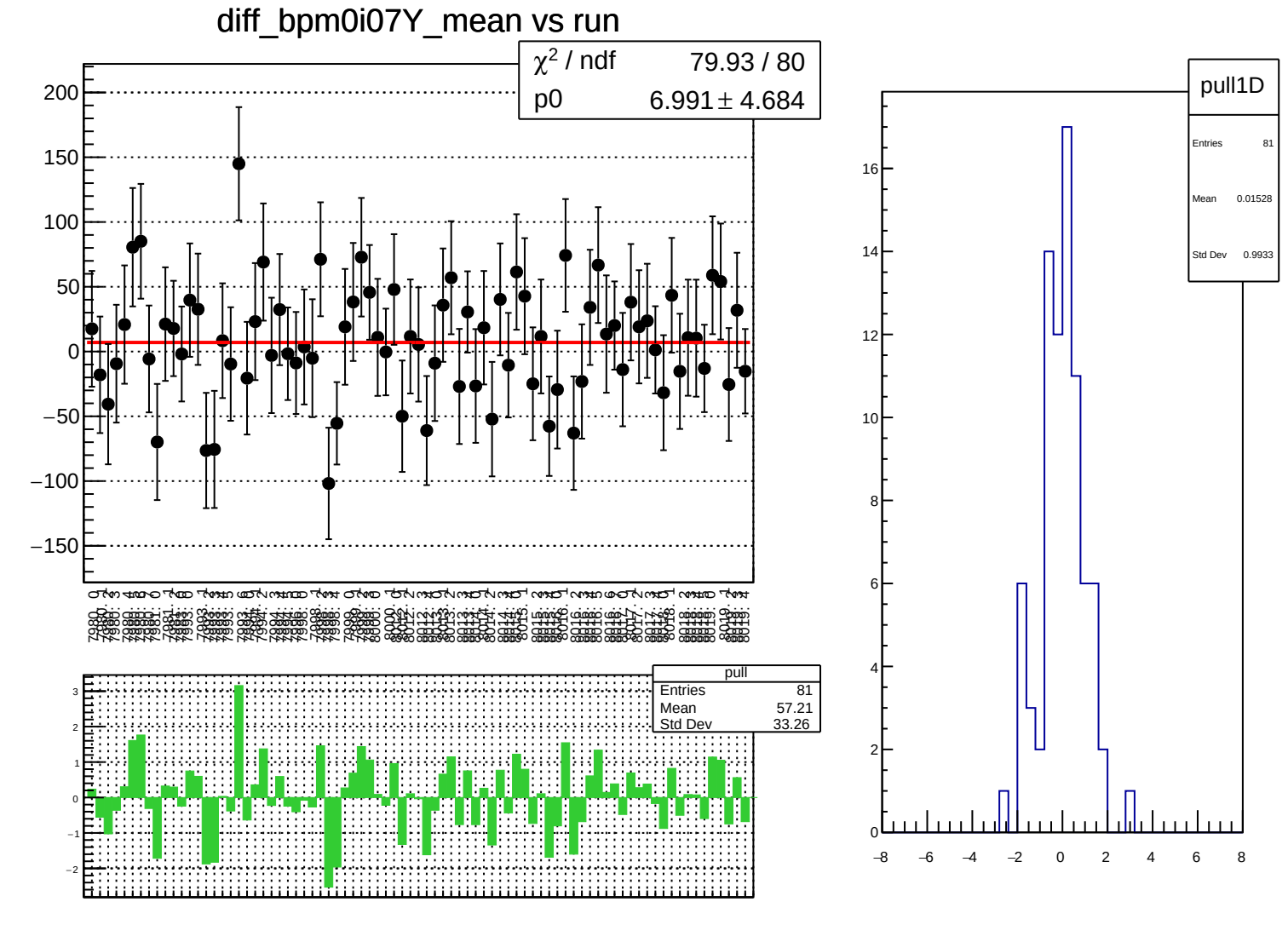

pull1D
Entries 81
Mean 0.02524
Std Dev 0.9323

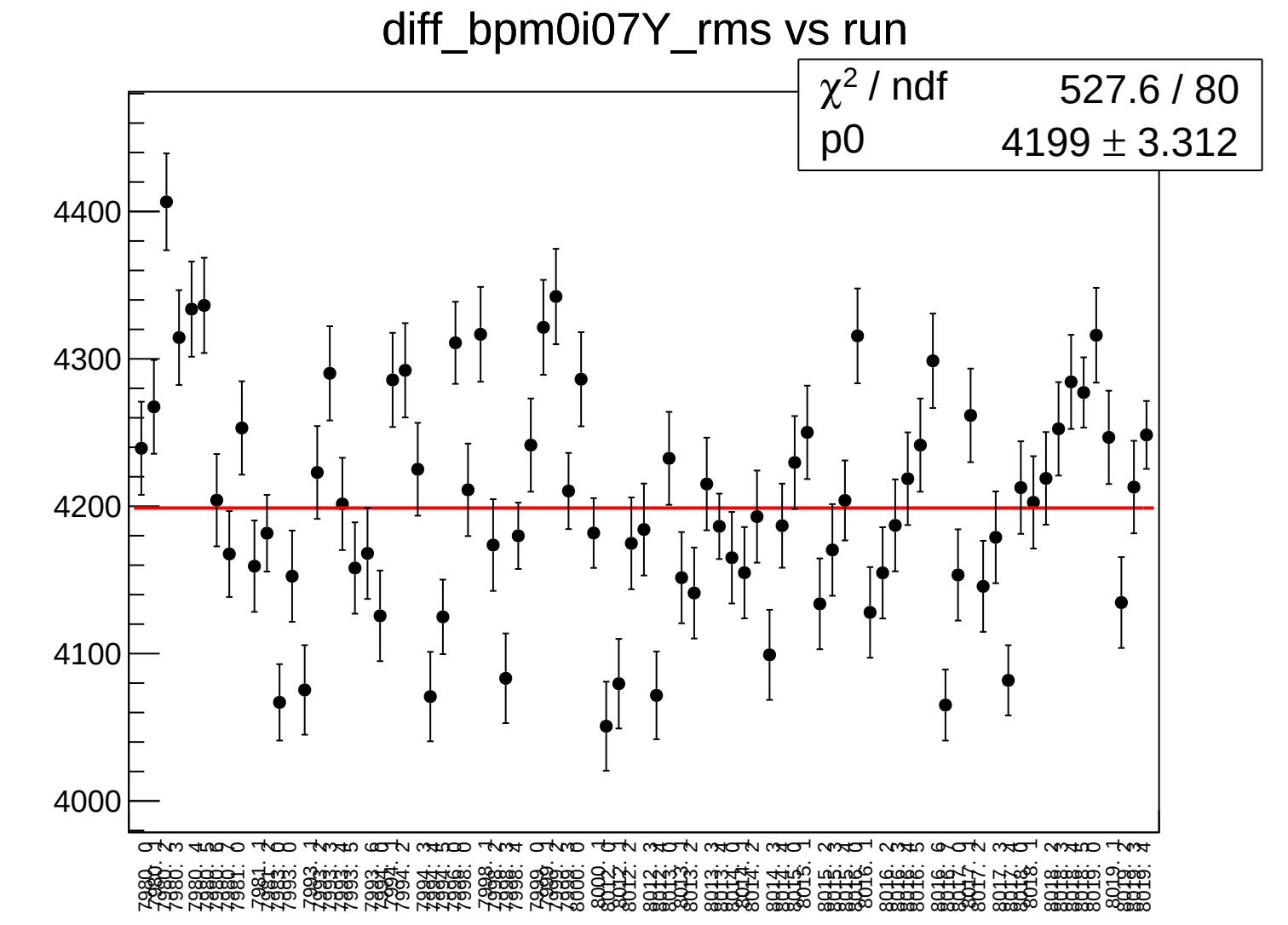

diff_bpm0i05Y_rms vs run
χ² / ndf 1885 / 80
p0 1396 ± 1.102
1550
1500
1450
1400
1350
1300

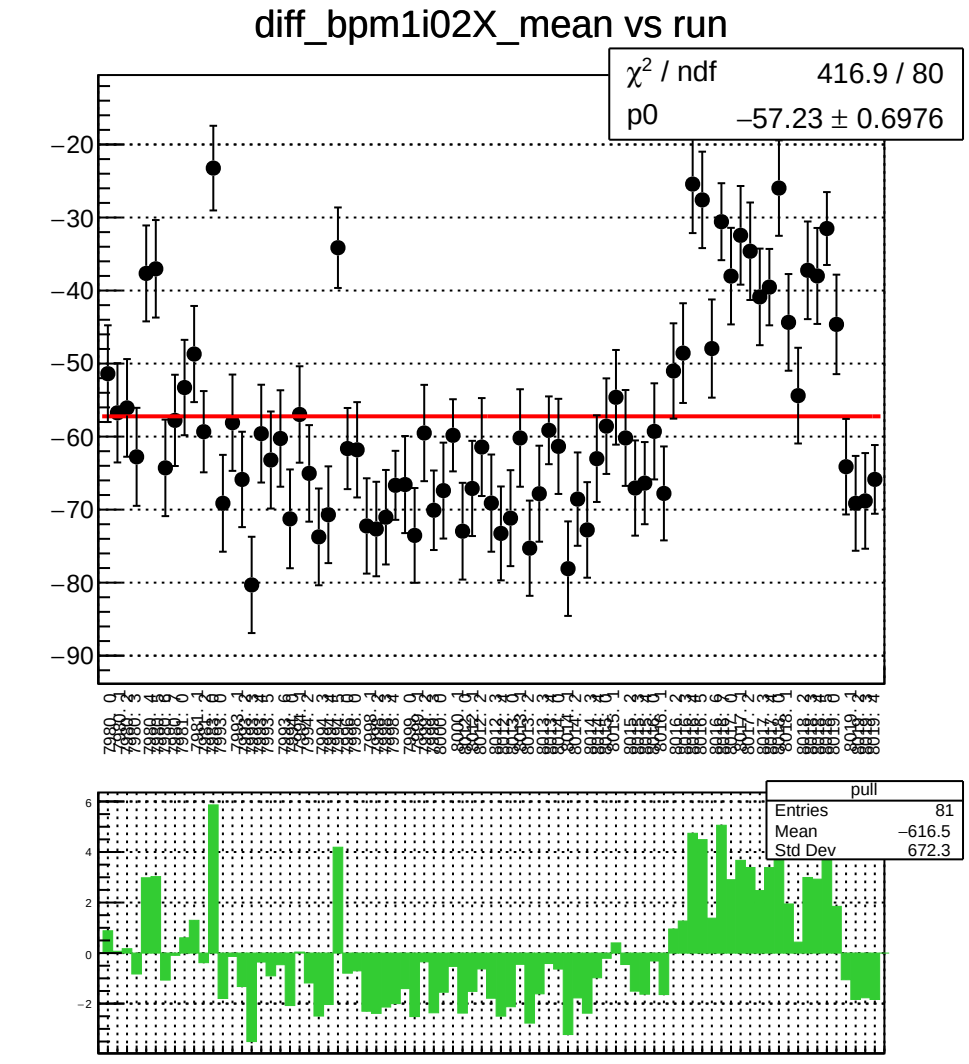

diff_bpm0i07X_mean vs run
χ² / ndf 97.18 / 80
p0 −7.196 ± 7.896
pull
Entries 81
Mean −163.1
Std Dev 209.3

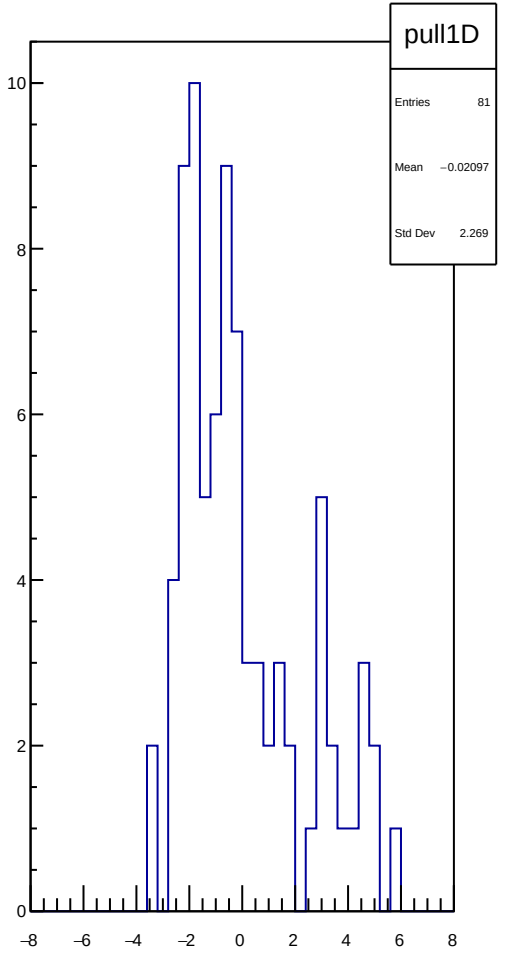

pull1D
Entries 81
Mean 0.01997
Std Dev 1.095

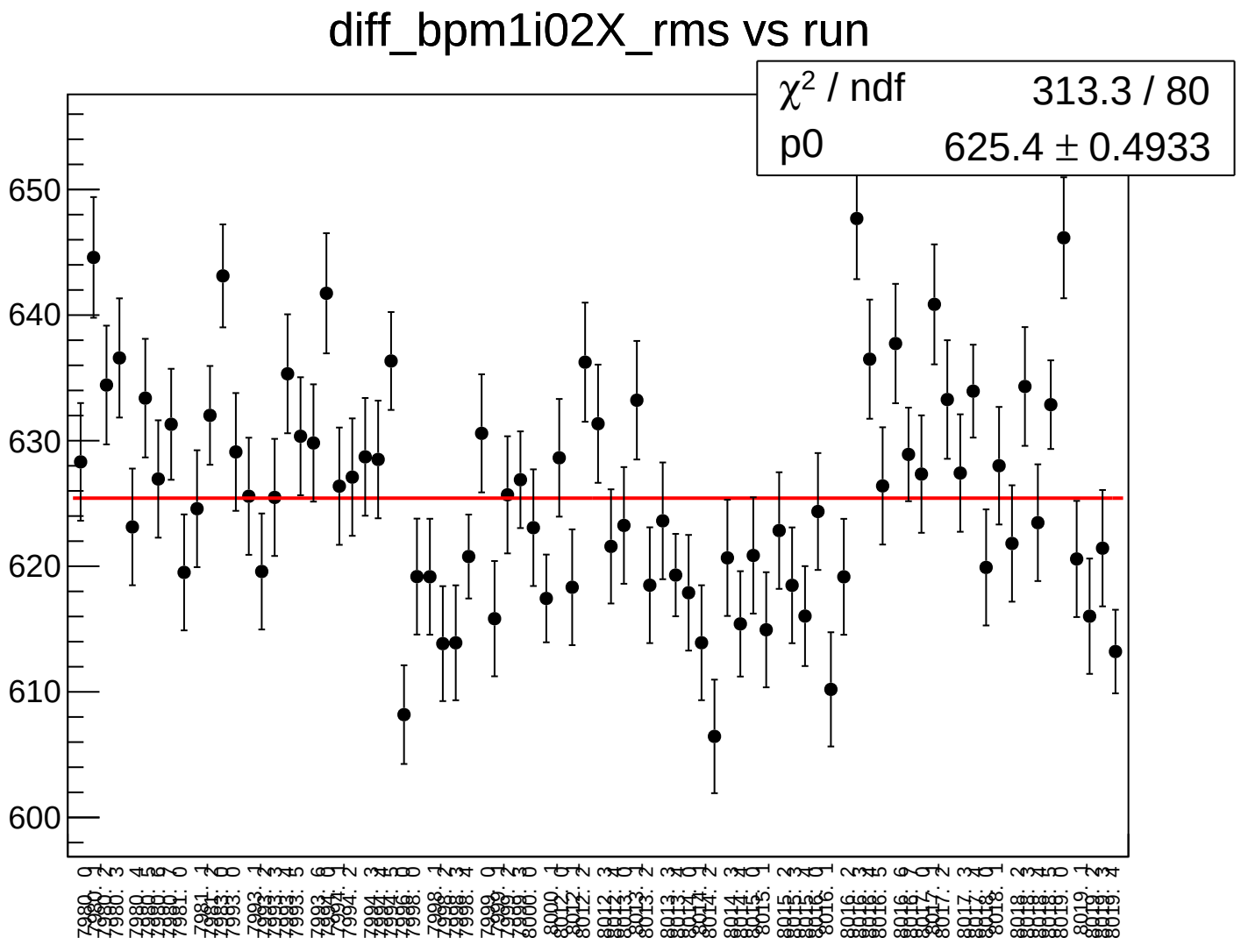

diff_bpm0i07X_rms vs run
χ² / ndf 2484 / 80
p0 7074 ± 5.583
8200
8000
7800
7600
7400
7200
7000
6800
6600
6400
6200

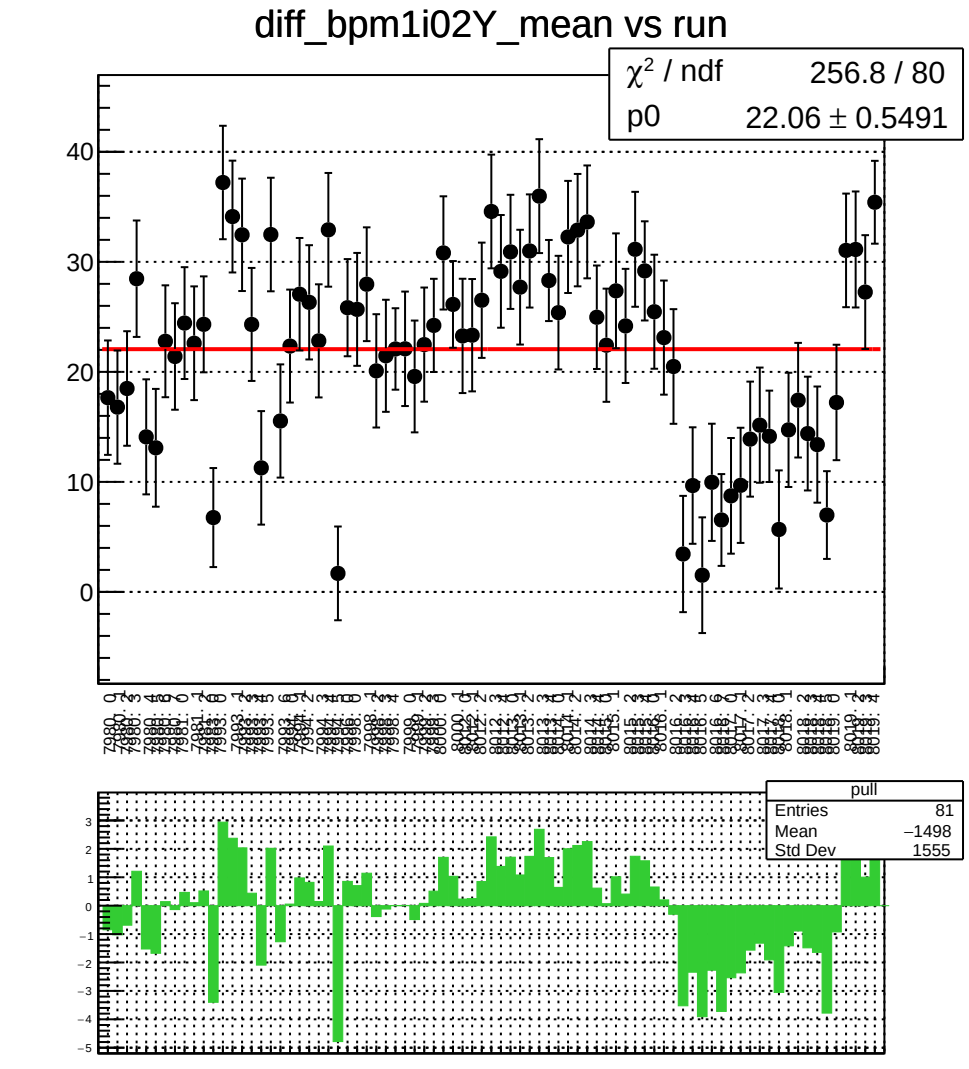

diff_bpm0i07Y_mean vs run
χ² / ndf 79.93 / 80
p0 6.991 ± 4.684
pull
Entries 81
Mean 57.21
Std Dev 33.26
pull1D
Entries 81
Mean 0.01528
Std Dev 0.9933

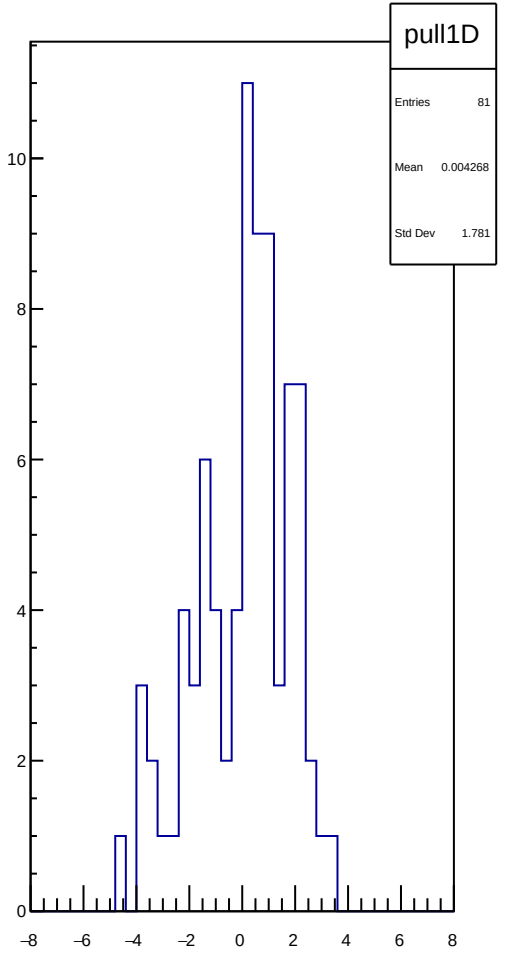

diff_bpm0i07Y_rms vs run
χ² / ndf 527.6 / 80
p0 4199 ± 3.312
4400
4300
4200
4100
4000

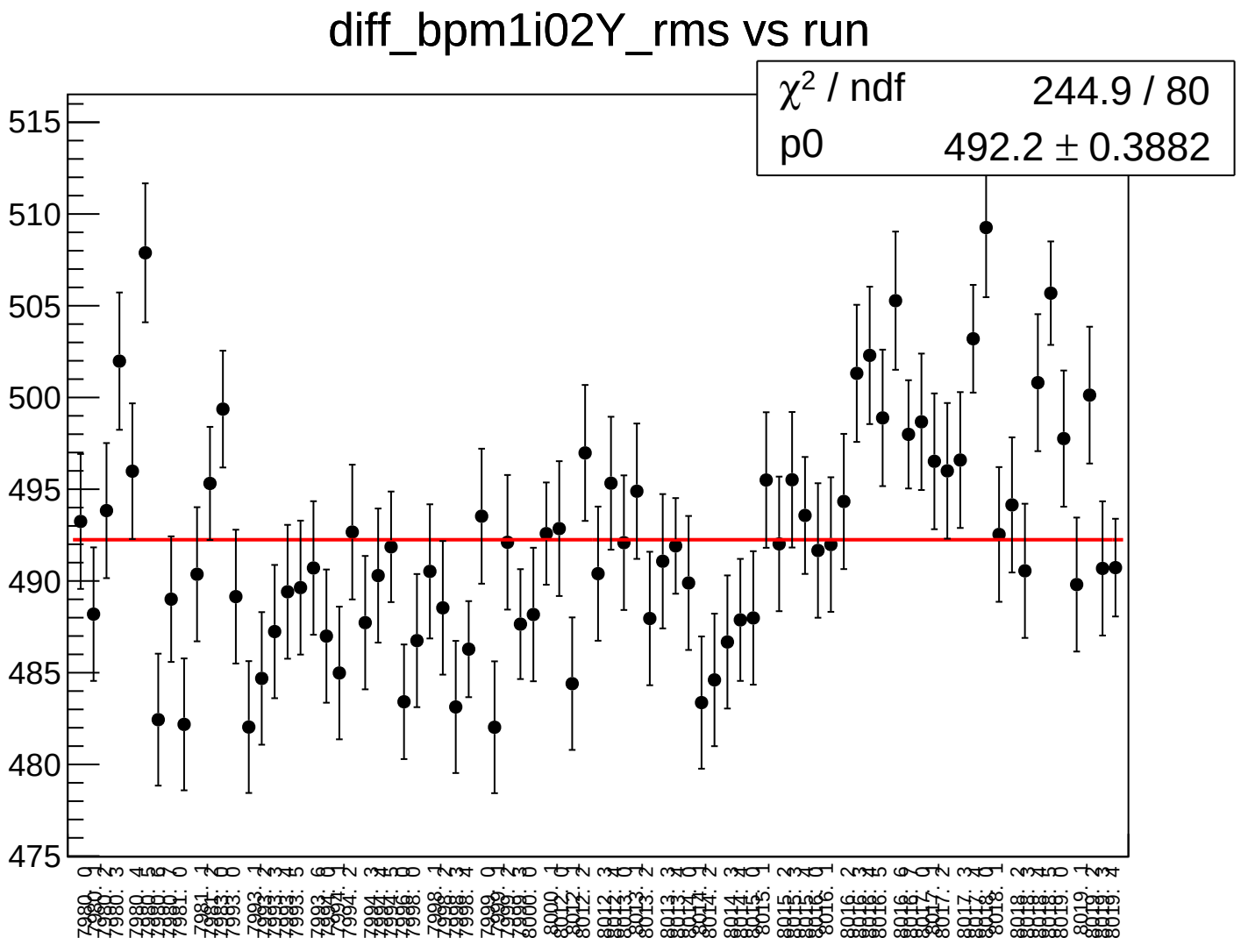

diff_bpm1i02X_mean vs run
χ² / ndf 416.9 / 80
p0 −57.23 ± 0.6976
pull
Entries 81
Mean −616.5
Std Dev 672.3

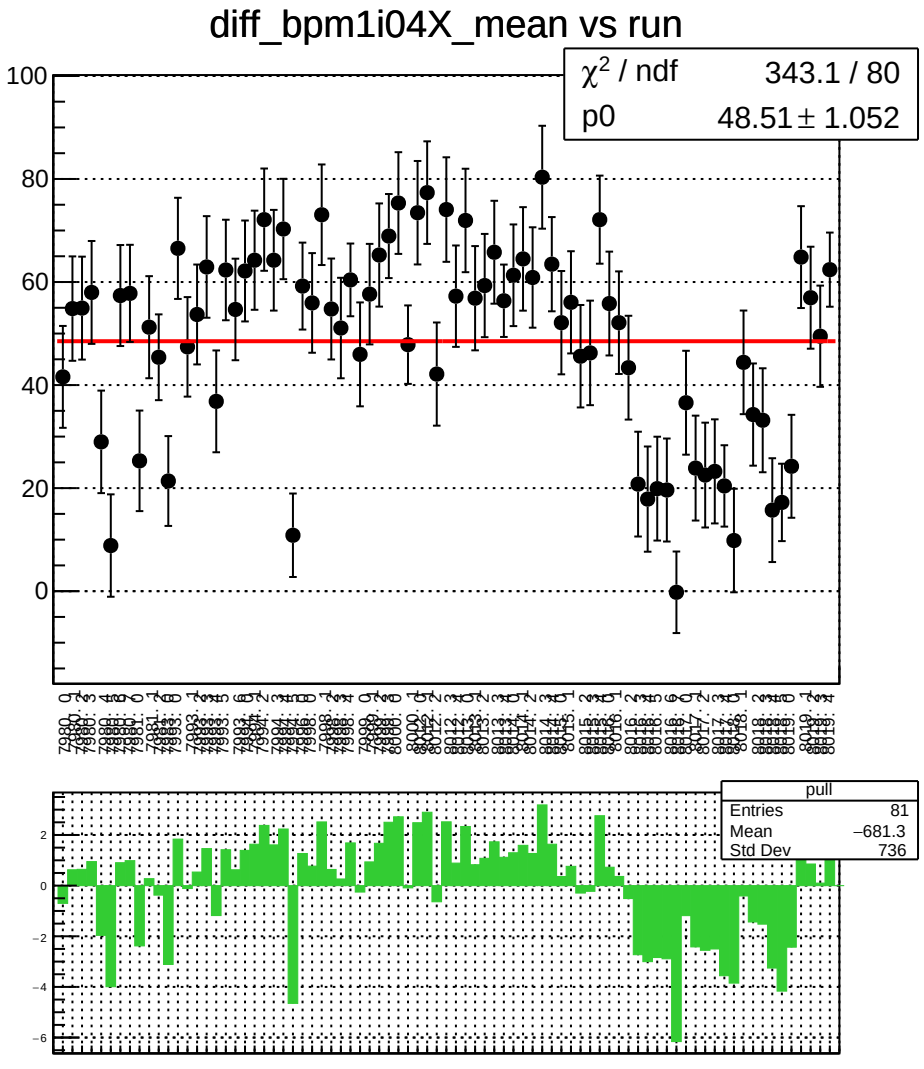

pull1D
Entries 81
Mean −0.02097
Std Dev 2.269

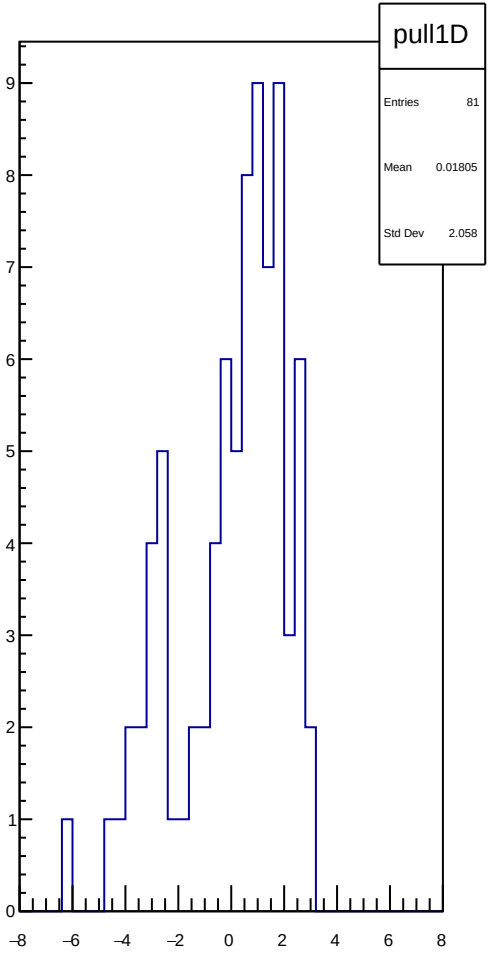

diff_bpm1i02X_rms vs run
χ² / ndf 313.3 / 80
p0 625.4 ± 0.4933
650
640
630
620
610
600

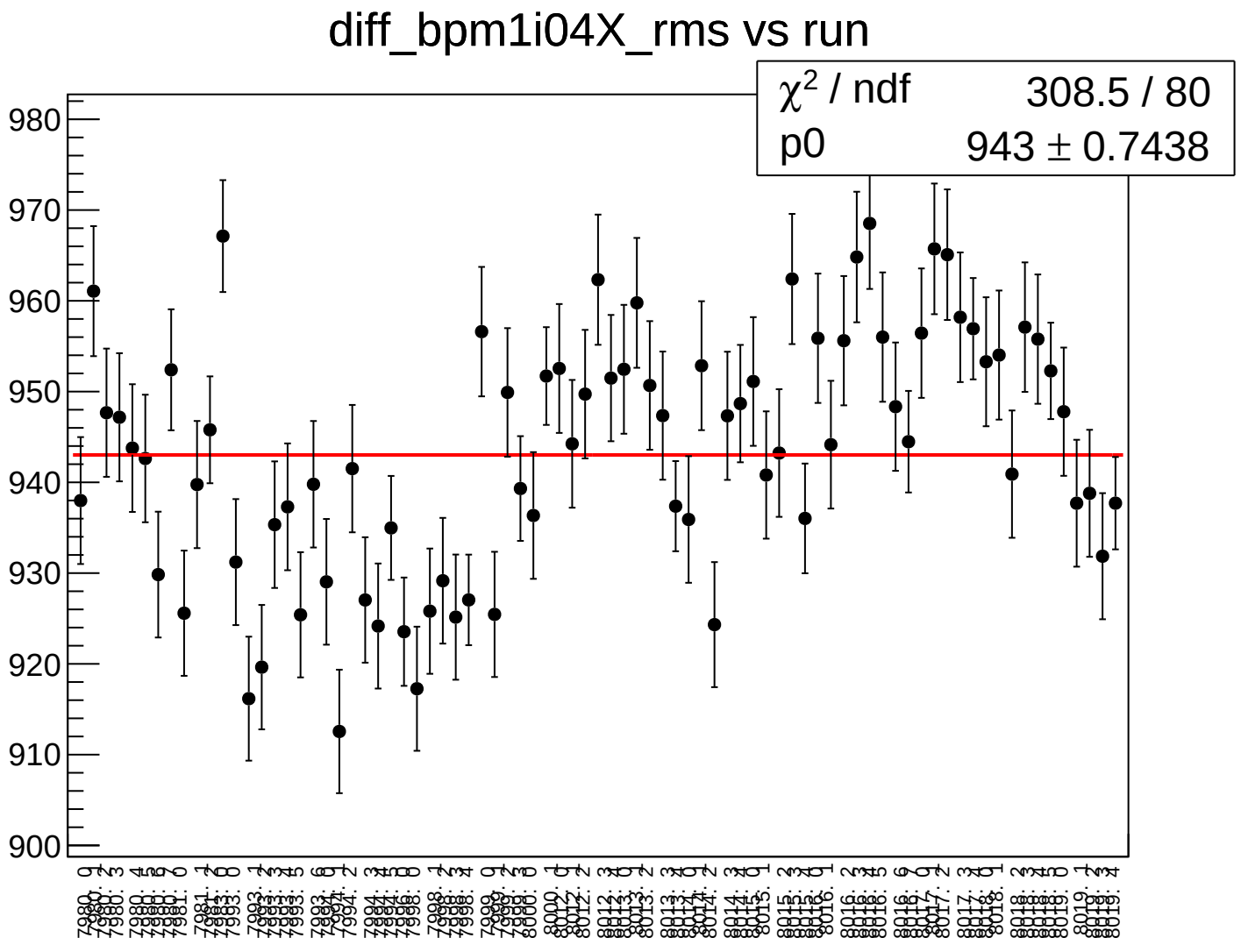

diff_bpm1i02Y_mean vs run
χ² / ndf 256.8 / 80
p0 22.06 ± 0.5491
pull
Entries 81
Mean −1498
Std Dev 1555

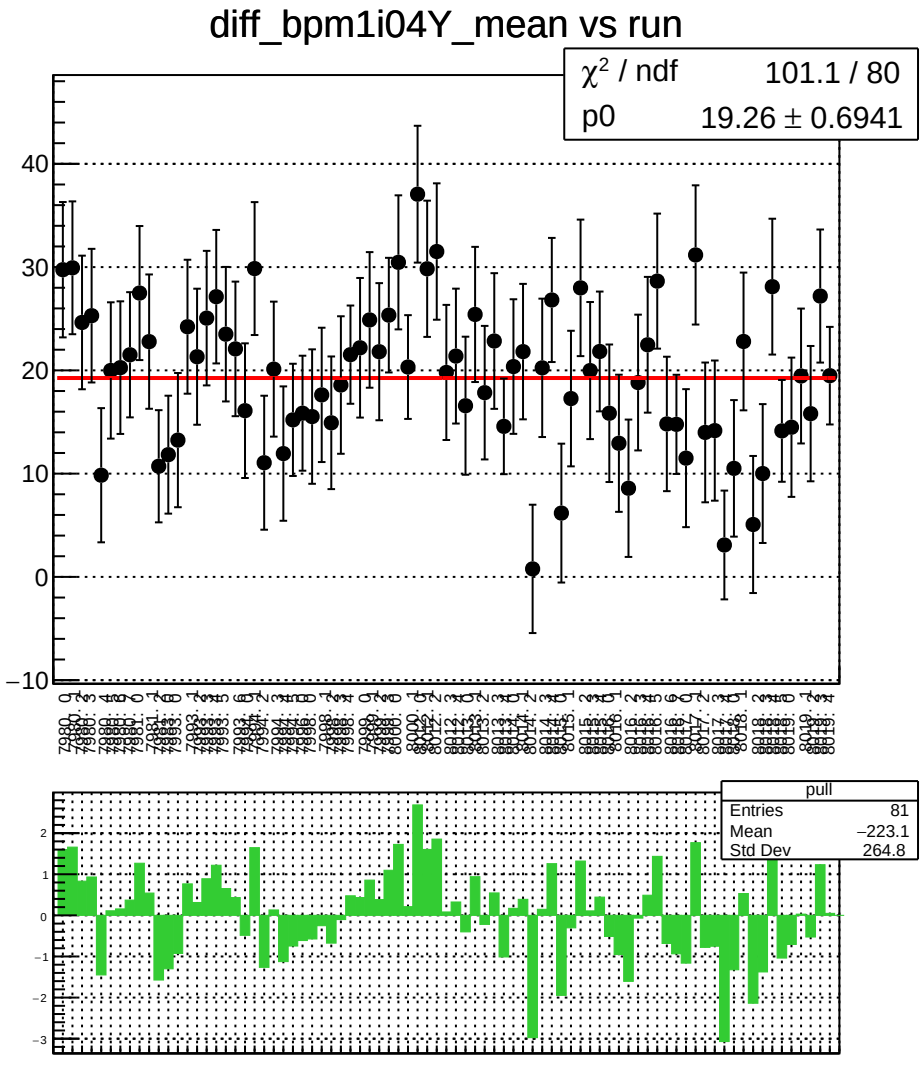

pull1D
Entries 81
Mean 0.004268
Std Dev 1.781

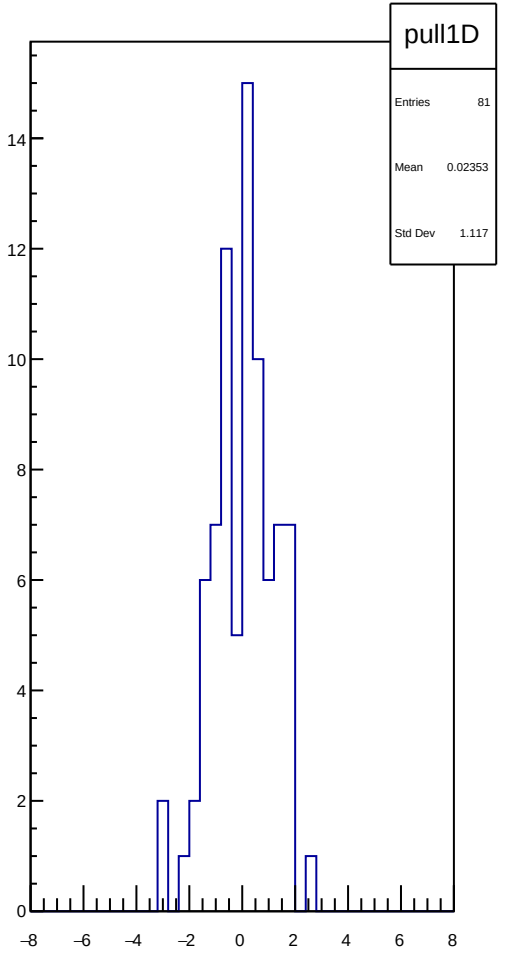

diff_bpm1i02Y_rms vs run
χ² / ndf 244.9 / 80
p0 492.2 ± 0.3882
515
510
505
500
495
490
485
480
475

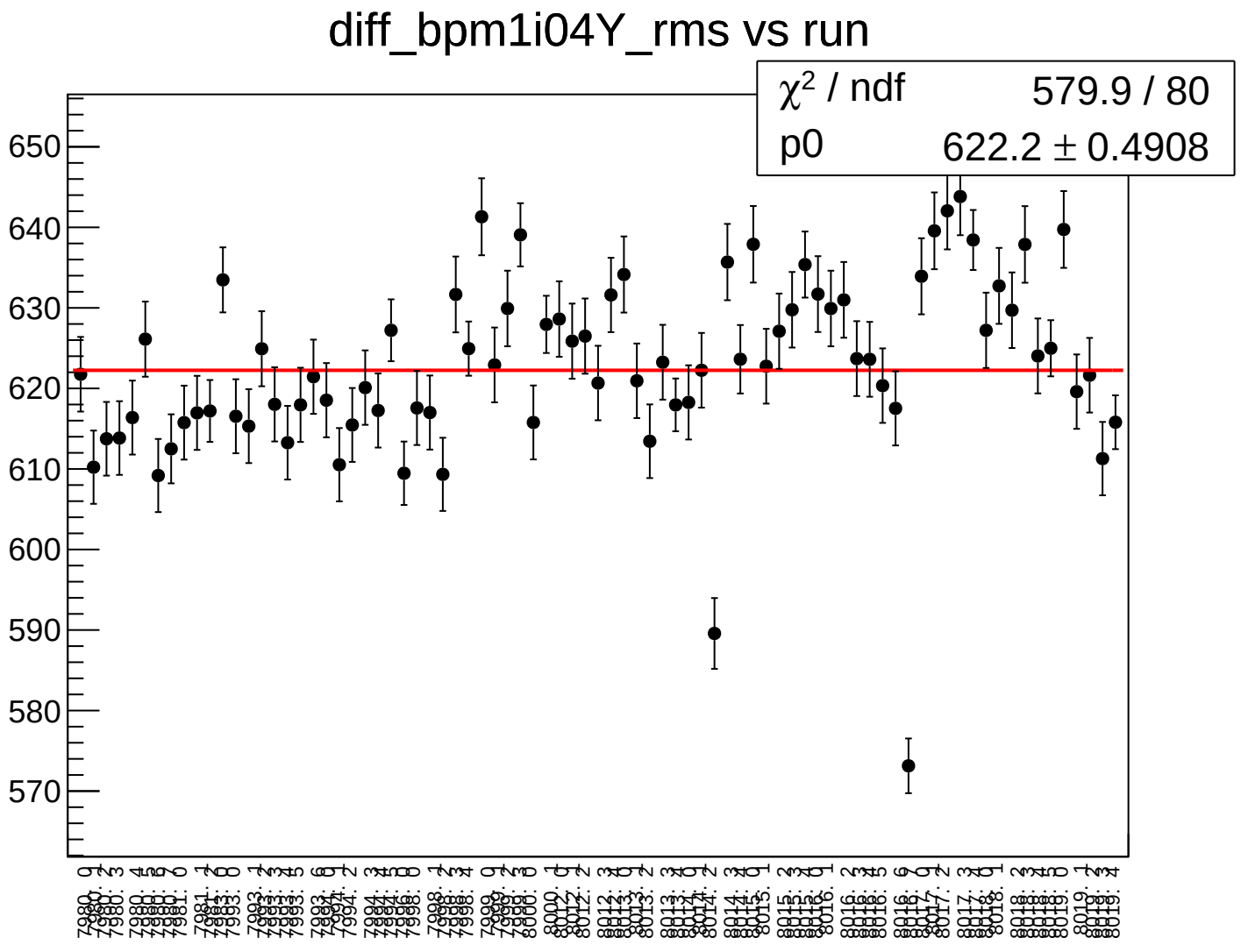

diff_bpm1i04X_mean vs run
χ^2 / ndf 343.1 / 80
p0 48.51 ± 1.052
pull
Entries 81
Mean −681.3
Std Dev 736

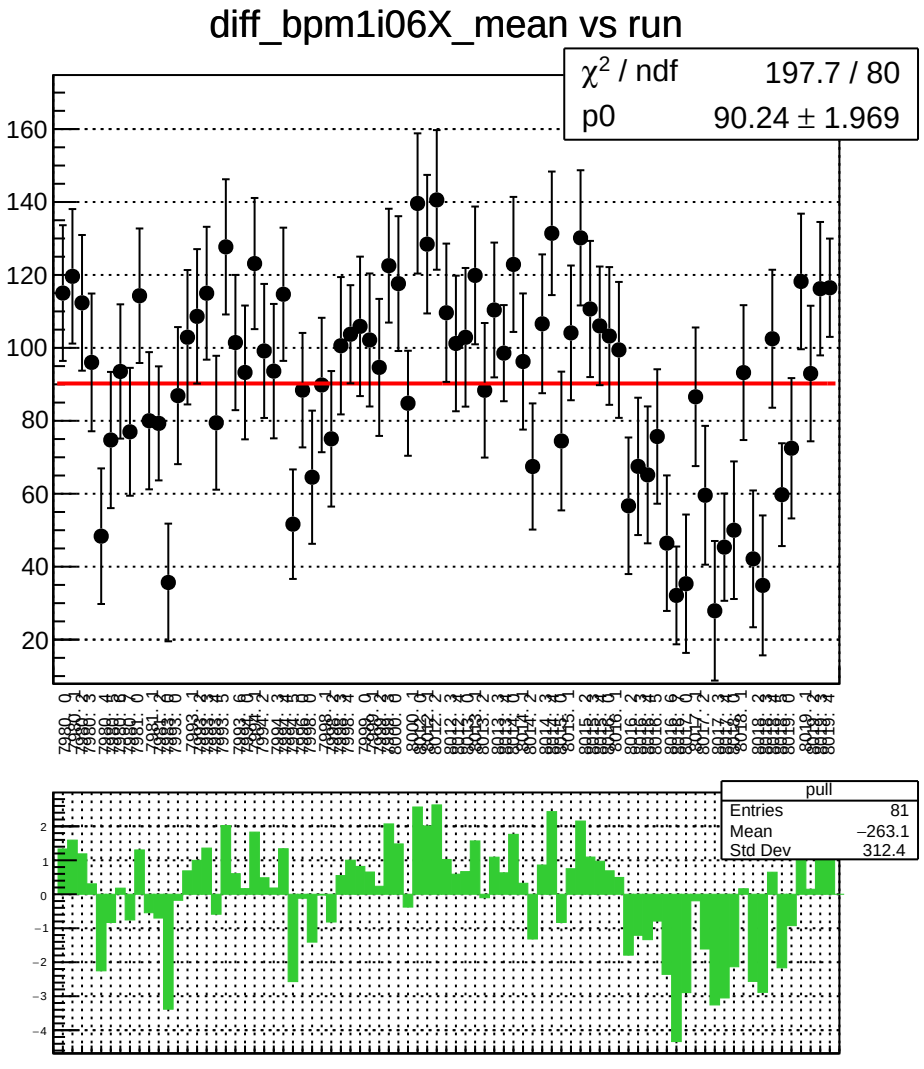

pull1D
Entries 81
Mean 0.01805
Std Dev 2.058

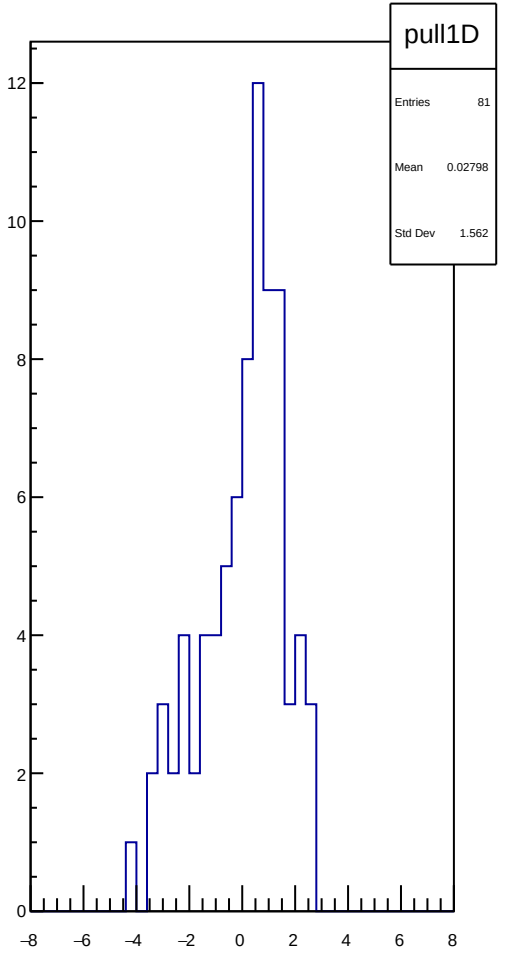

diff_bpm1i04X_rms vs run
χ² / ndf 308.5 / 80
p0 943 ± 0.7438
980
970
960
950
940
930
920
910
900

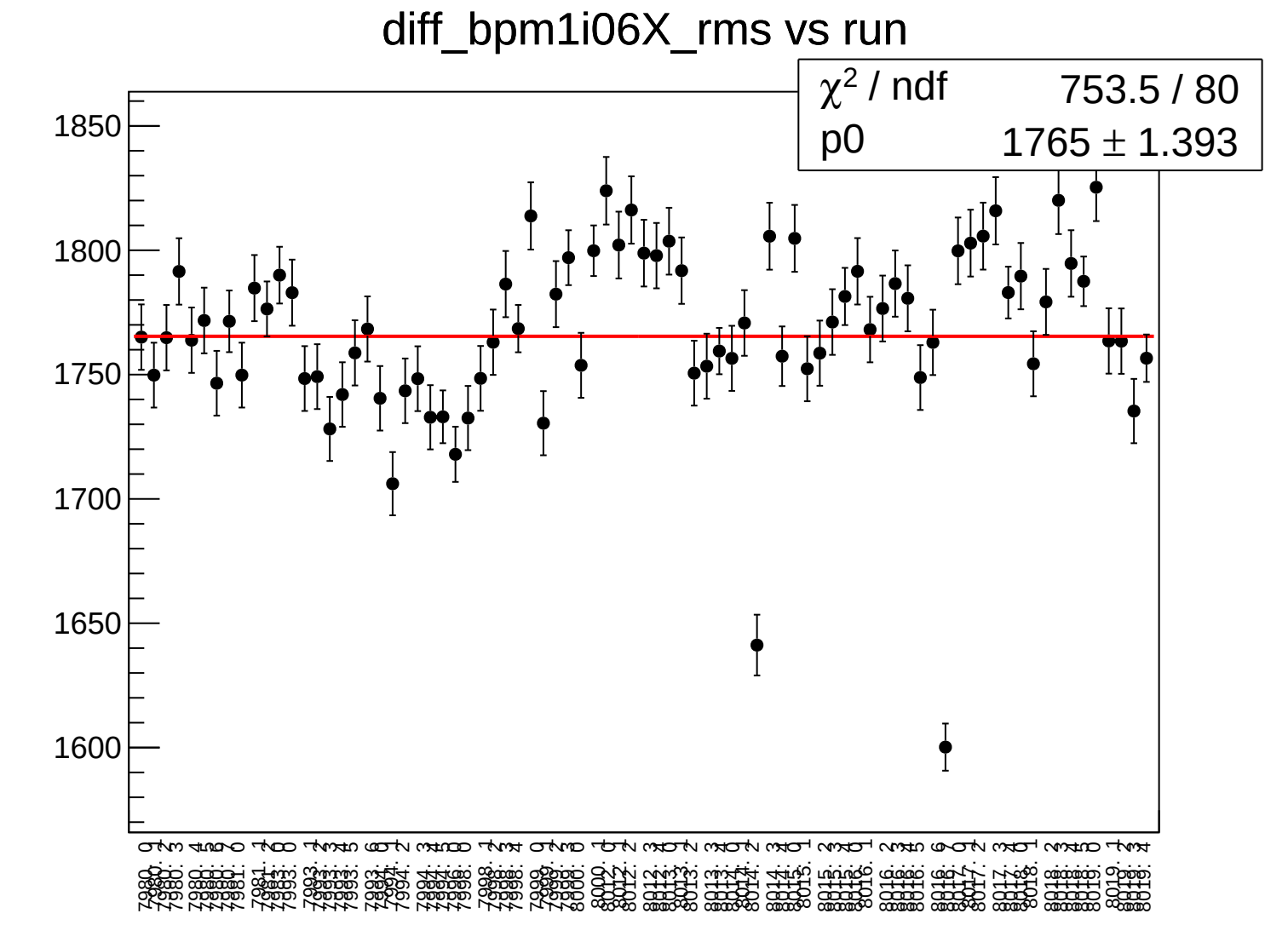

diff_bpm1i04Y_mean vs run
χ² / ndf 101.1 / 80
p0 19.26 ± 0.6941
pull
Entries 81
Mean −223.1
Std Dev 264.8

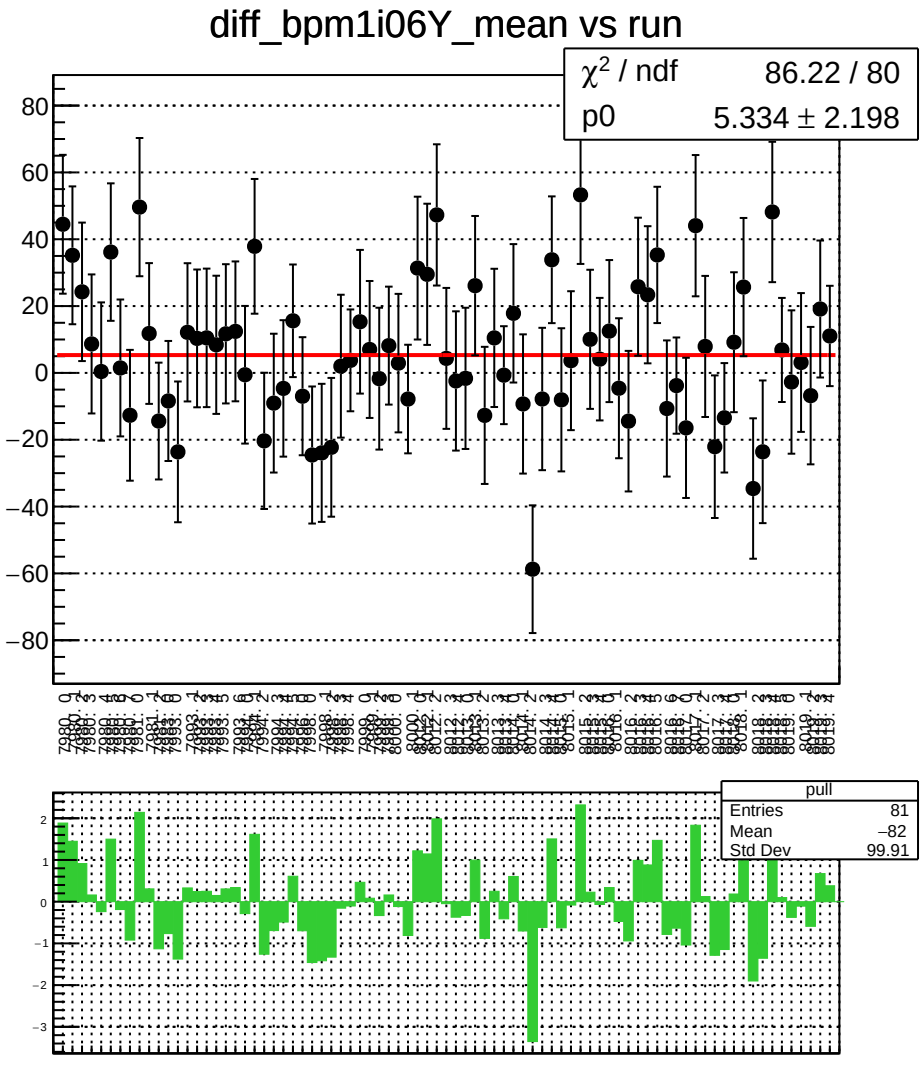

pull1D
Entries 81
Mean 0.02353
Std Dev 1.117

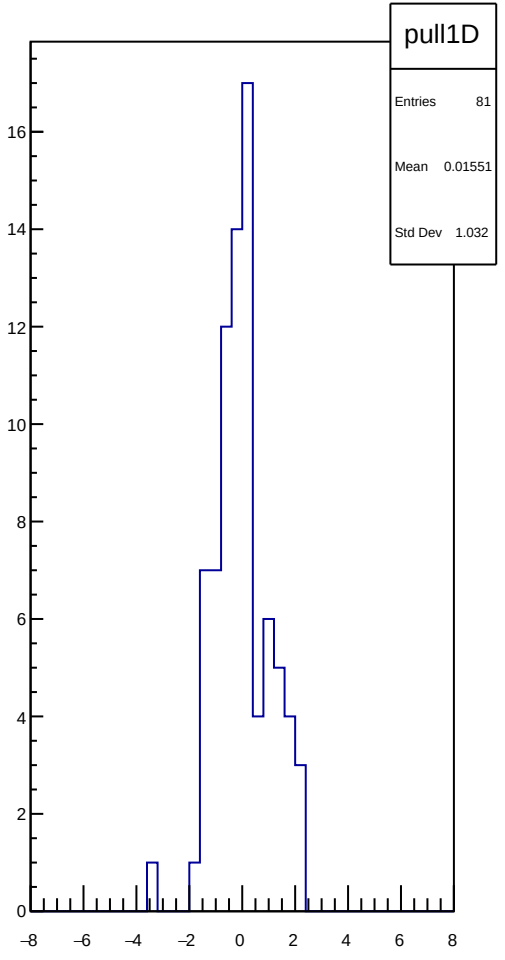

diff_bpm1i04Y_rms vs run
χ² / ndf 579.9 / 80
p0 622.2 ± 0.4908
650
640
630
620
610
600
590
580
570

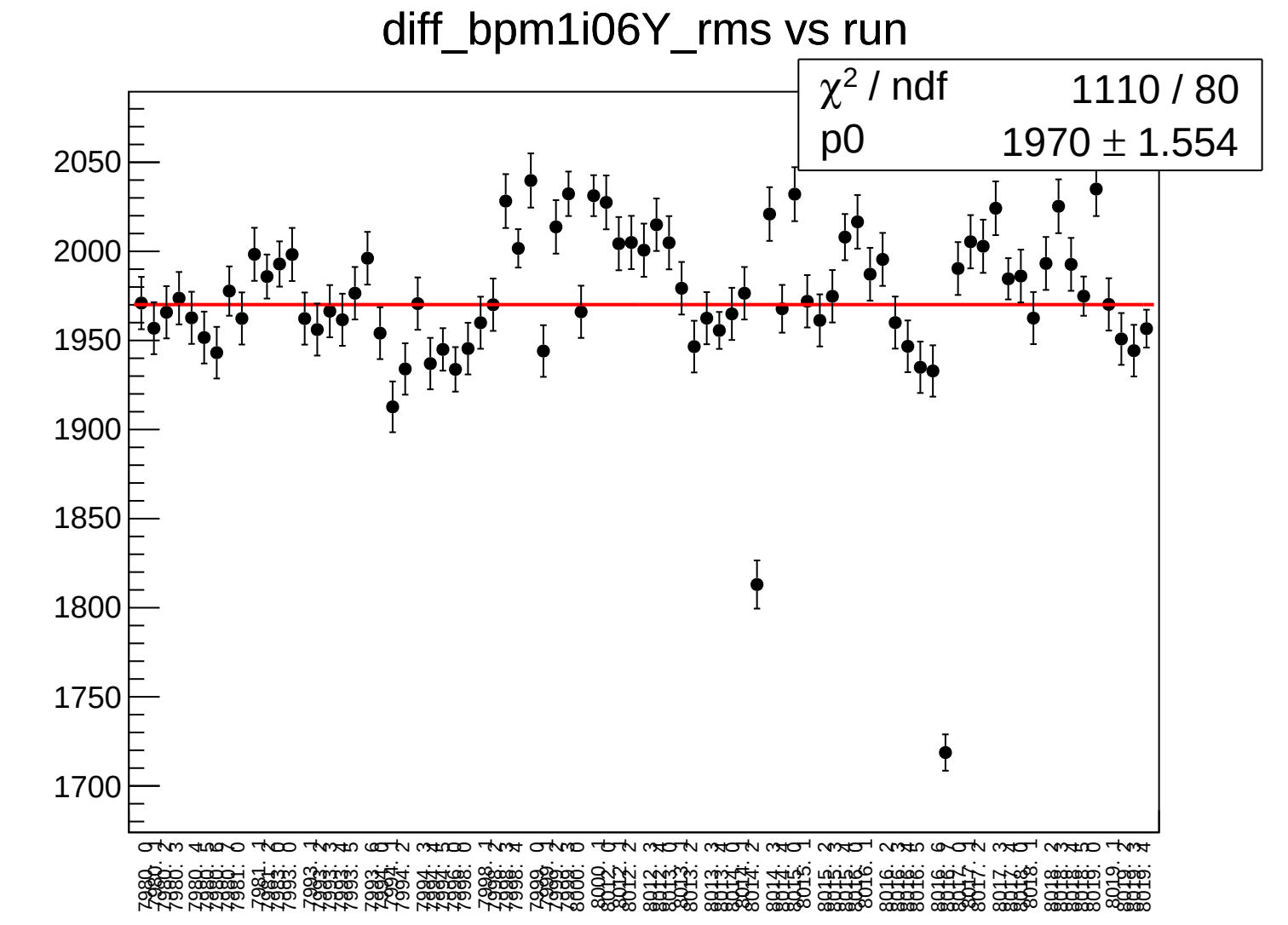

diff_bpm1i06X_mean vs run
χ^2 / ndf 197.7 / 80
p0 90.24 ± 1.969
pull
Entries 81
Mean −263.1
Std Dev 312.4

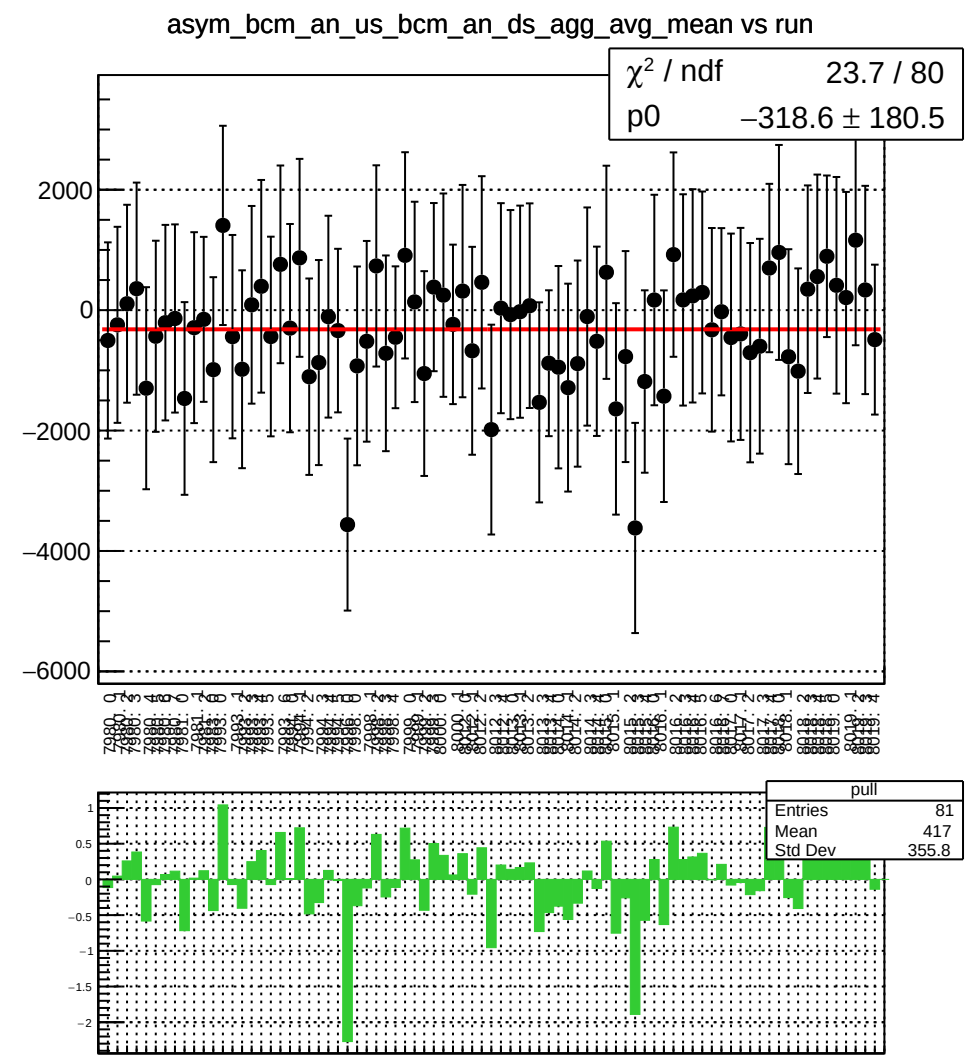

pull1D
Entries 81
Mean 0.02798
Std Dev 1.562

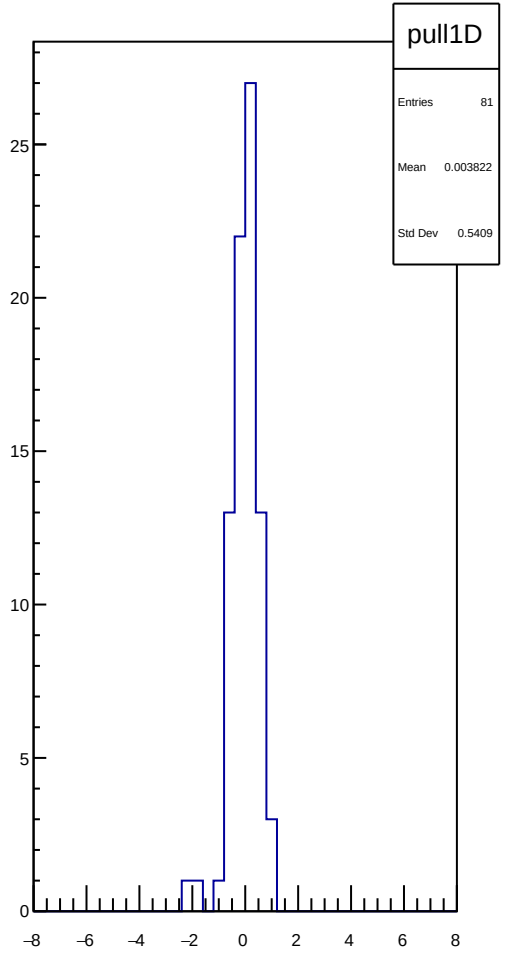

diff_bpm1i06X_rms vs run
χ² / ndf 753.5 / 80
p0 1765 ± 1.393
1850
1800
1750
1700
1650
1600

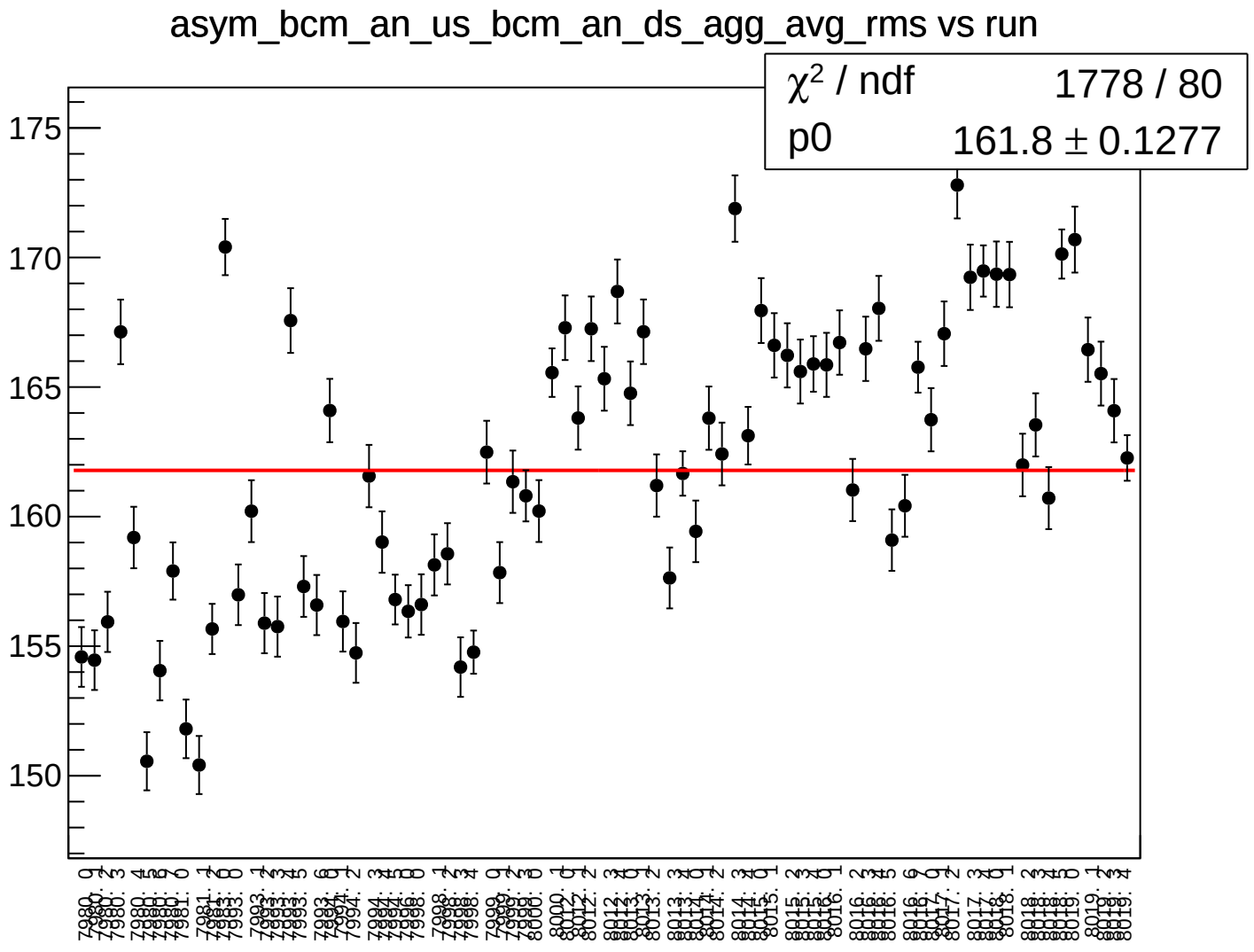

diff_bpm1i06Y_mean vs run
χ² / ndf 86.22 / 80
p0 5.334 ± 2.198
pull
Entries 81
Mean −82
Std Dev 99.91

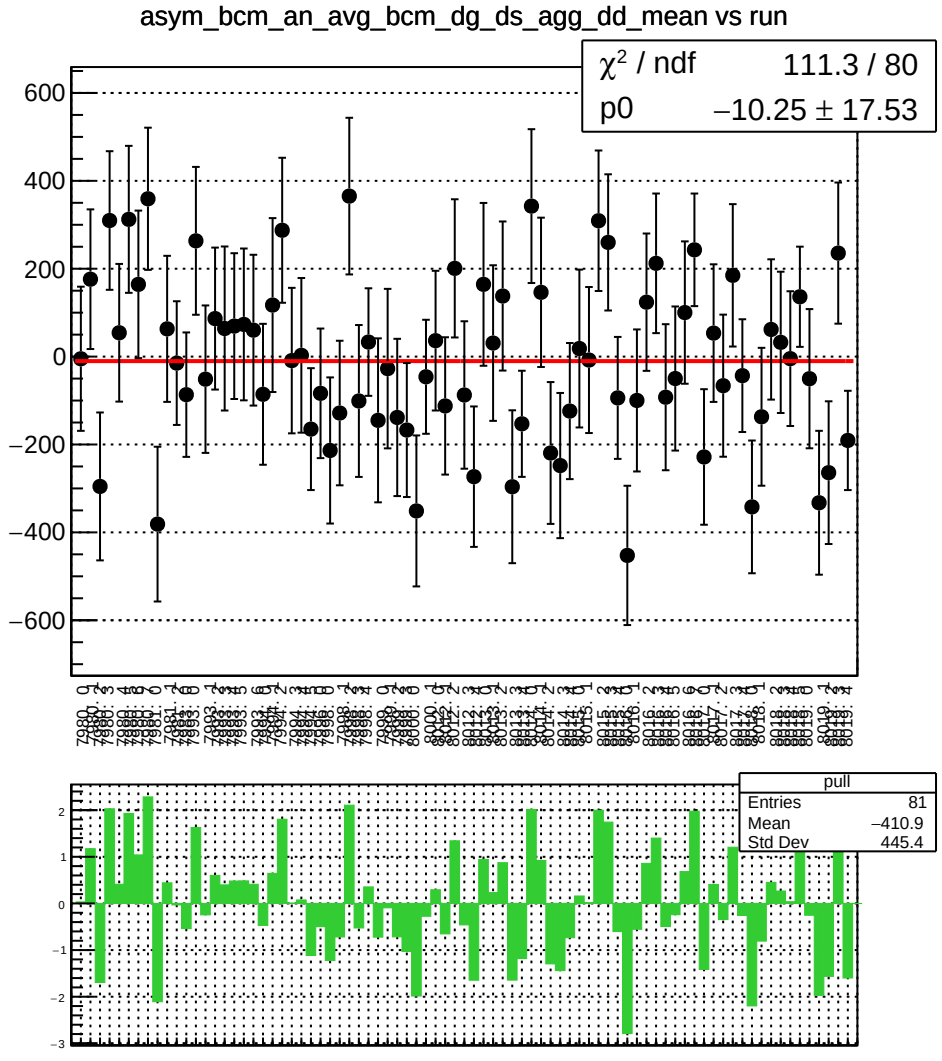

pull1D
Entries 81
Mean 0.01551
Std Dev 1.032

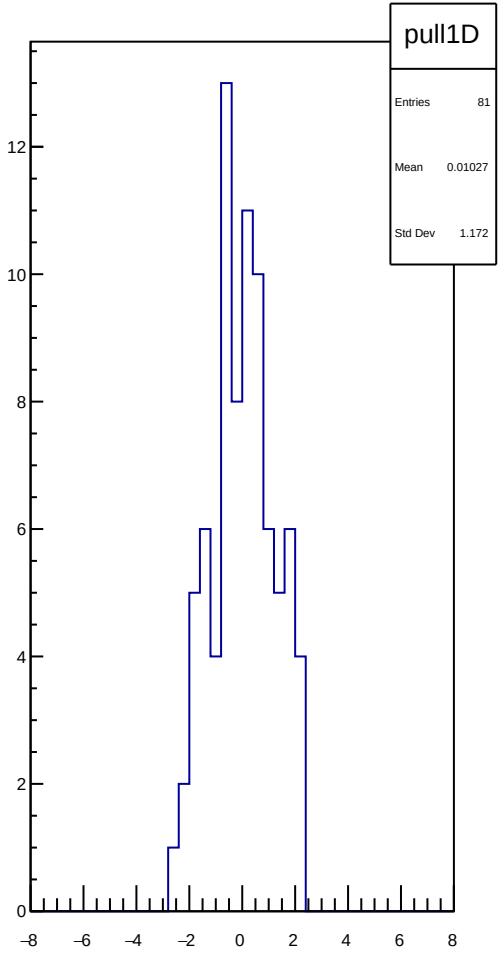

diff_bpm1i06Y_rms vs run
χ² / ndf 1110 / 80
p0 1970 ± 1.554
2050
2000
1950
1900
1850
1800
1750
1700

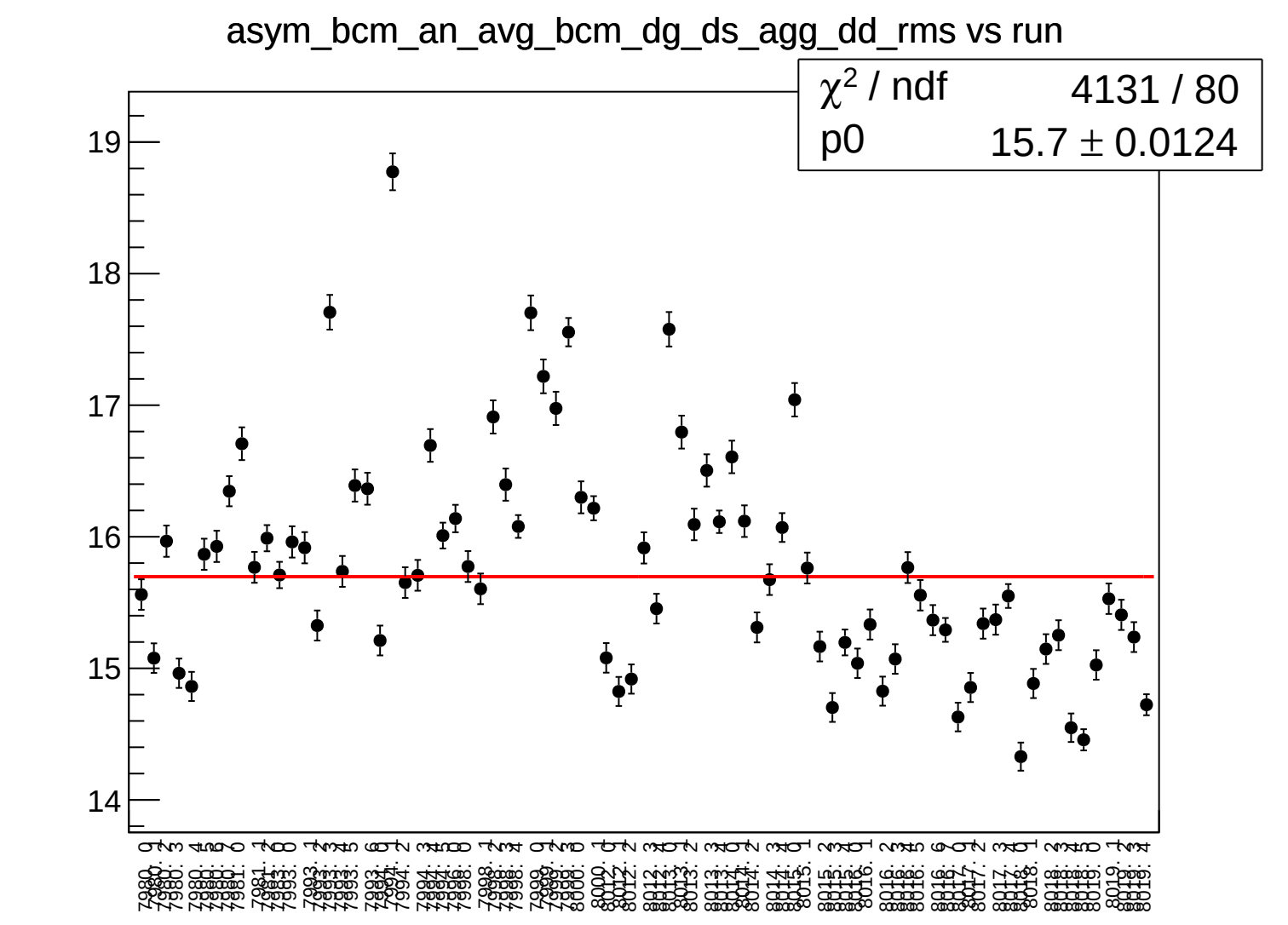

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 23.7 / 80
p0 −318.6 ± 180.5
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 417
Std Dev 355.8
1
0.5
0
−0.5
−1
−1.5
−2

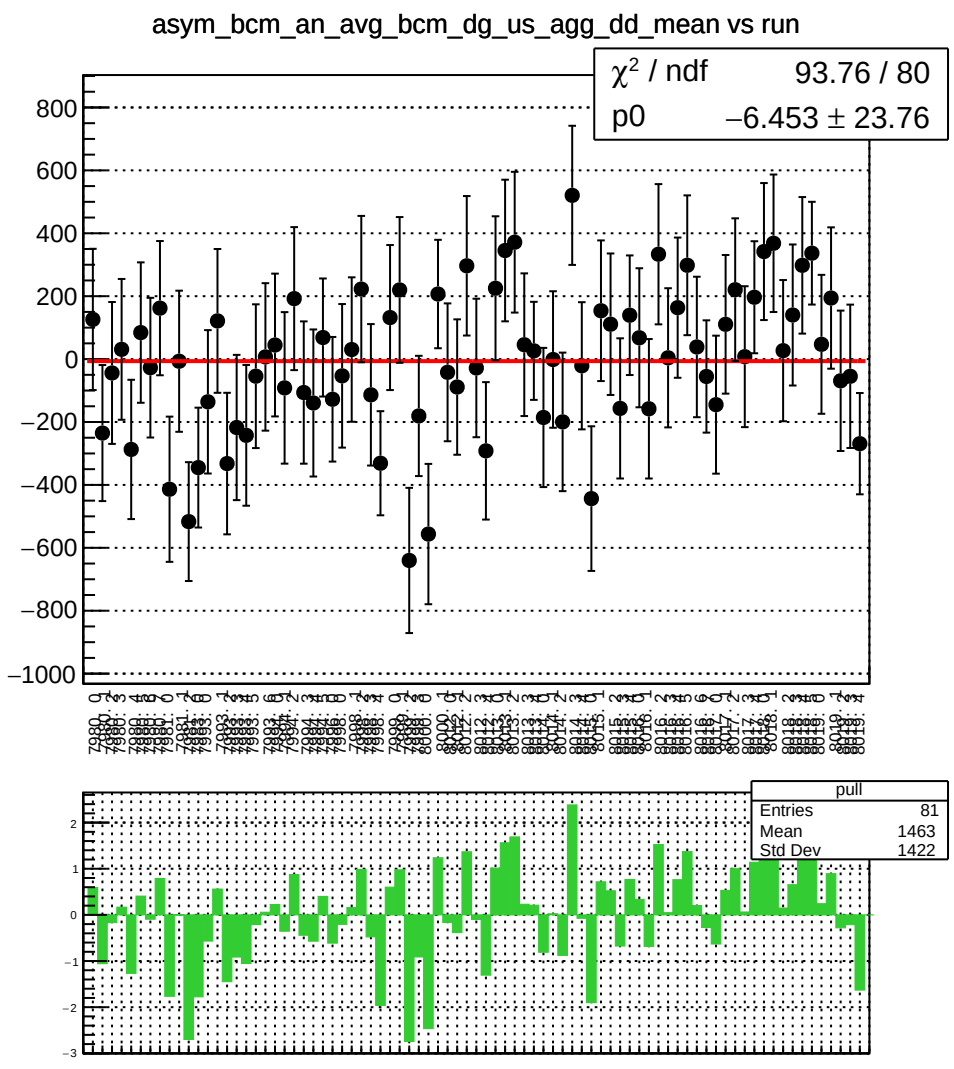

pull1D
Entries 81
Mean 0.003822
Std Dev 0.5409
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

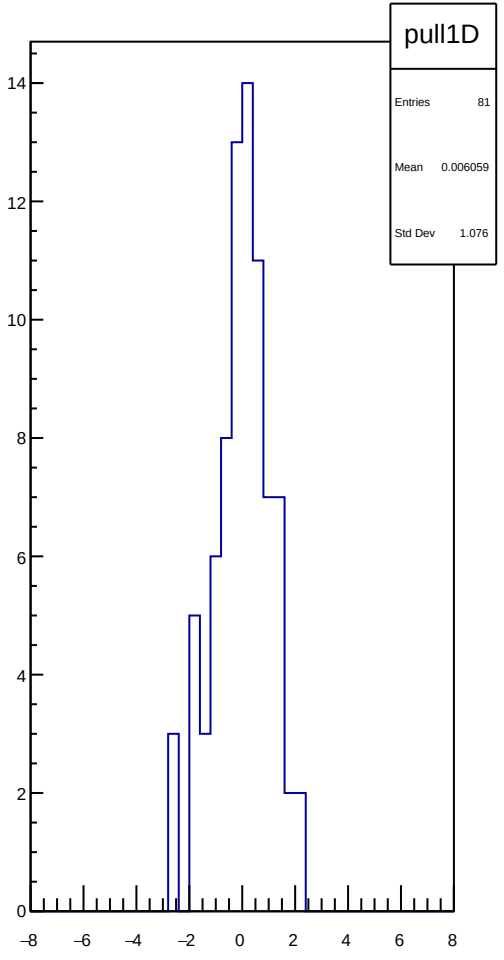

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1778 / 80
p0 161.8 ± 0.1277
175
170
165
160
155
150

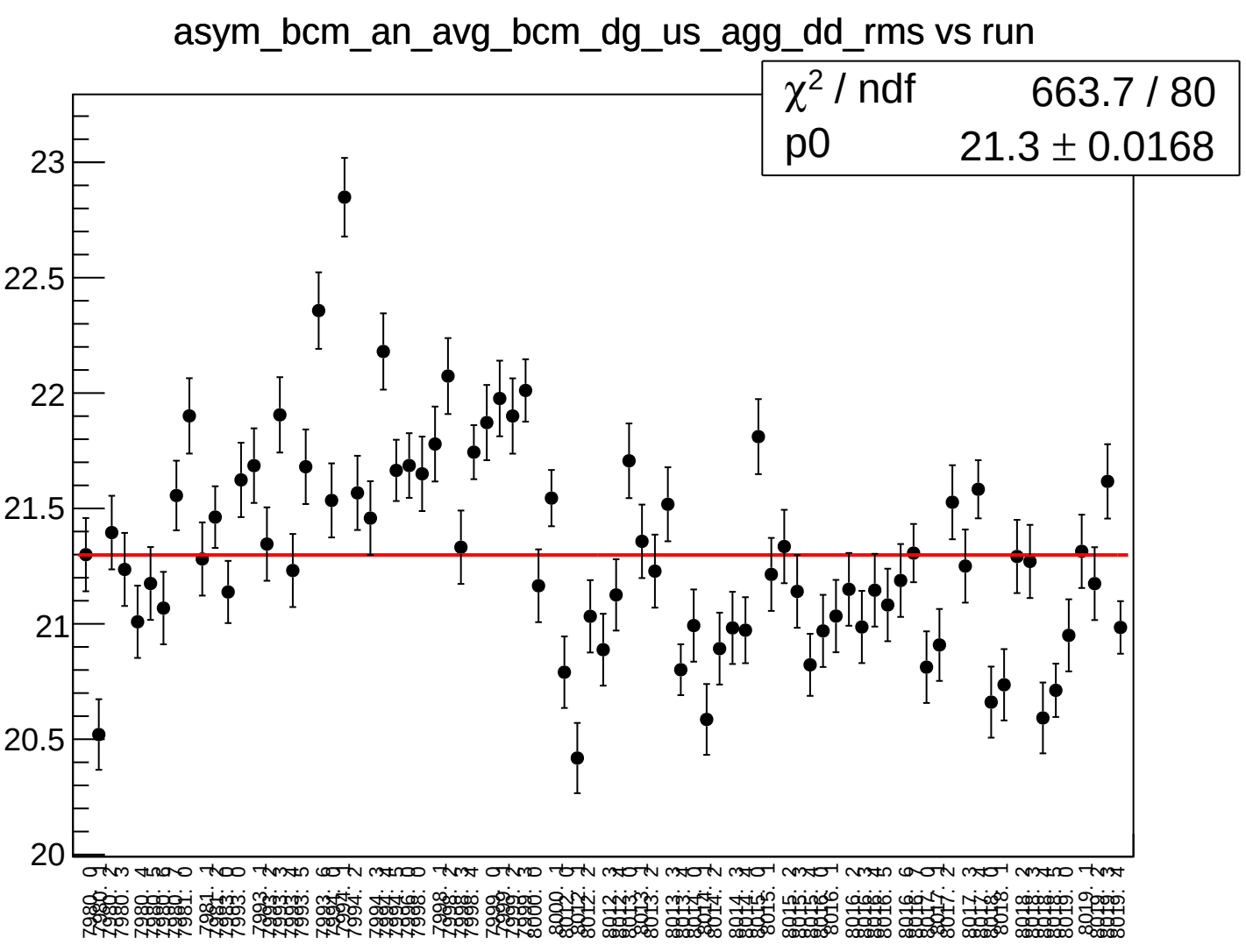

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 111.3 / 80
p0 −10.25 ± 17.53
pull
Entries 81
Mean −410.9
Std Dev 445.4

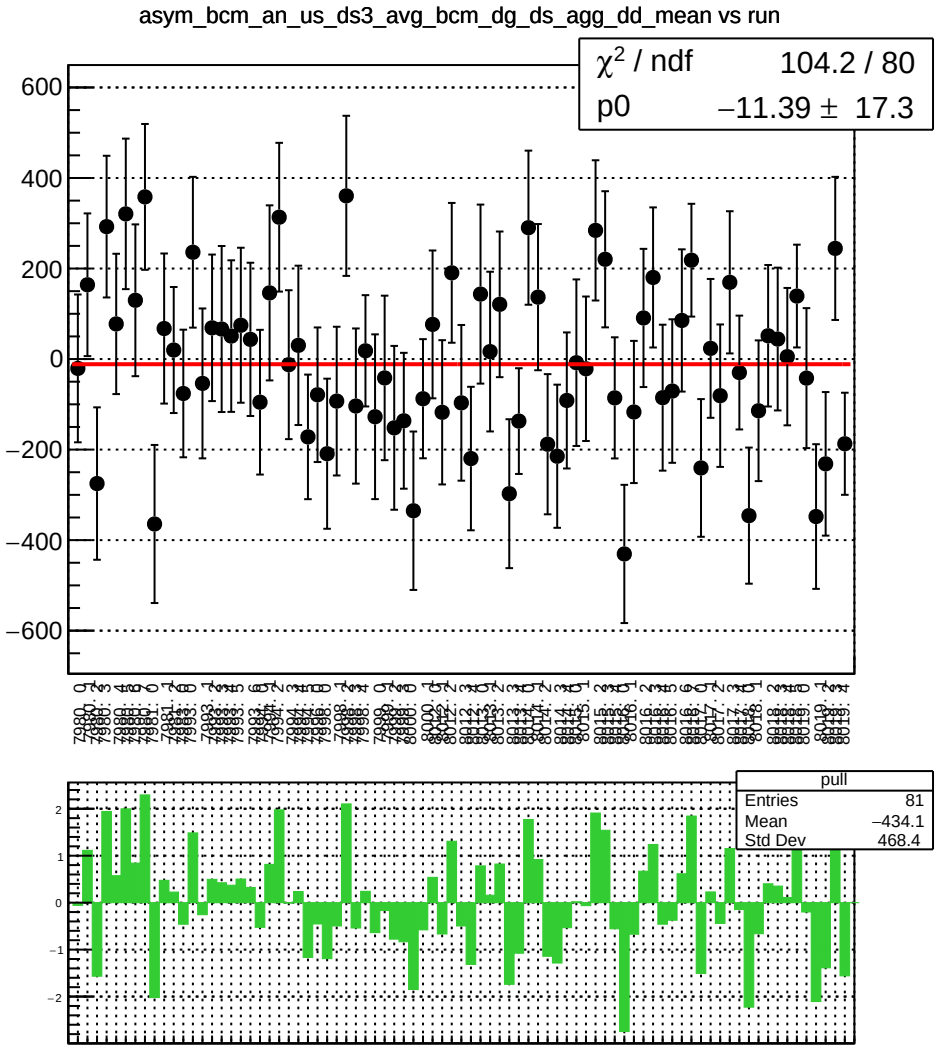

pull1D
Entries 81
Mean 0.01027
Std Dev 1.172

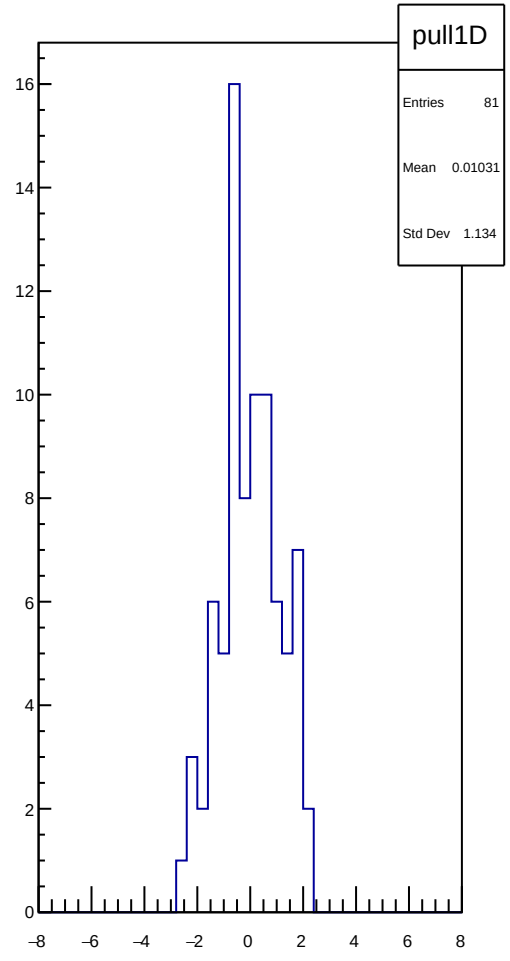

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 4131 / 80
p0 15.7 ± 0.0124
19
18
17
16
15
14

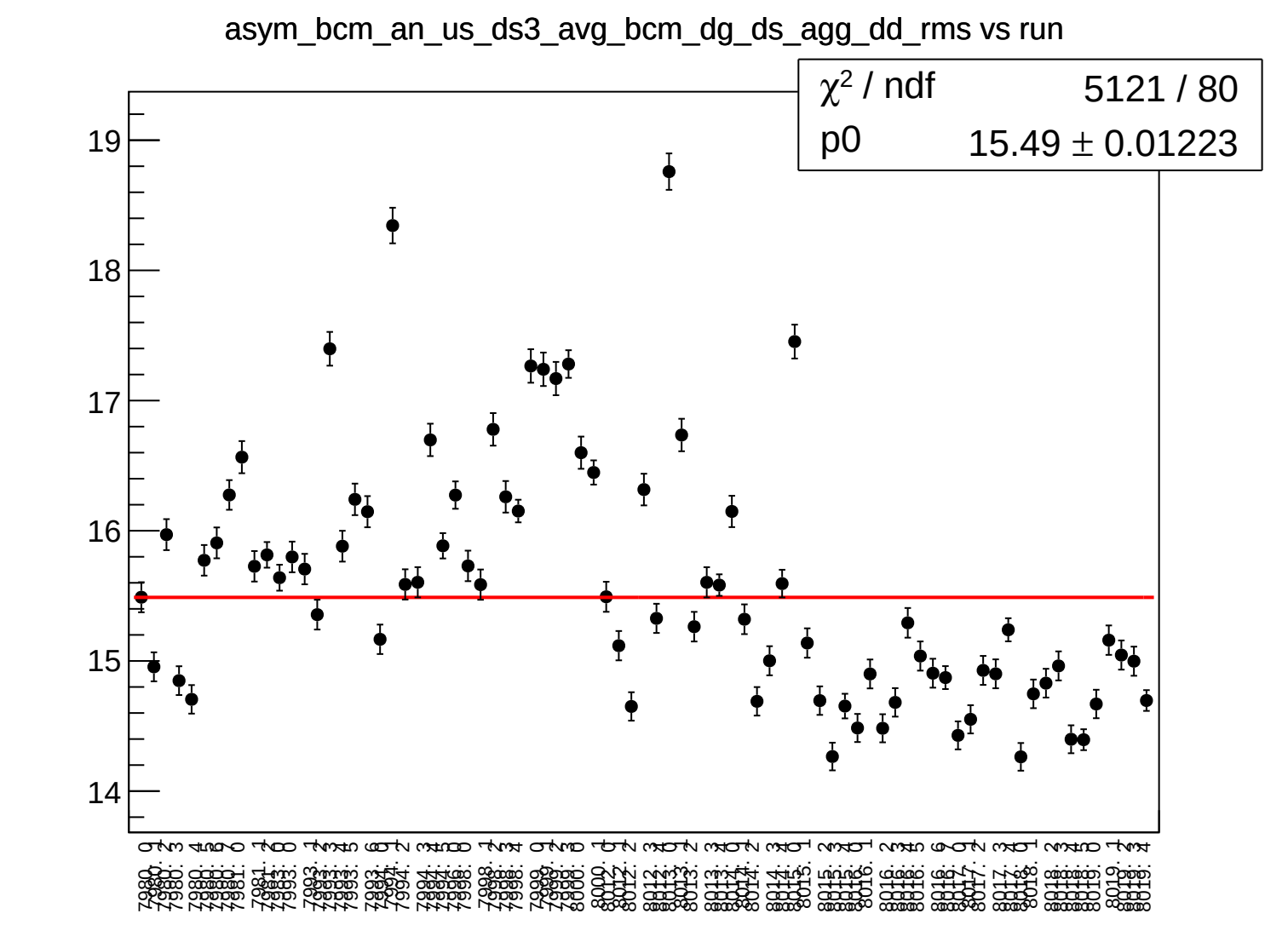

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 93.76 / 80
p0 −6.453 ± 23.76
pull
Entries 81
Mean 1463
Std Dev 1422

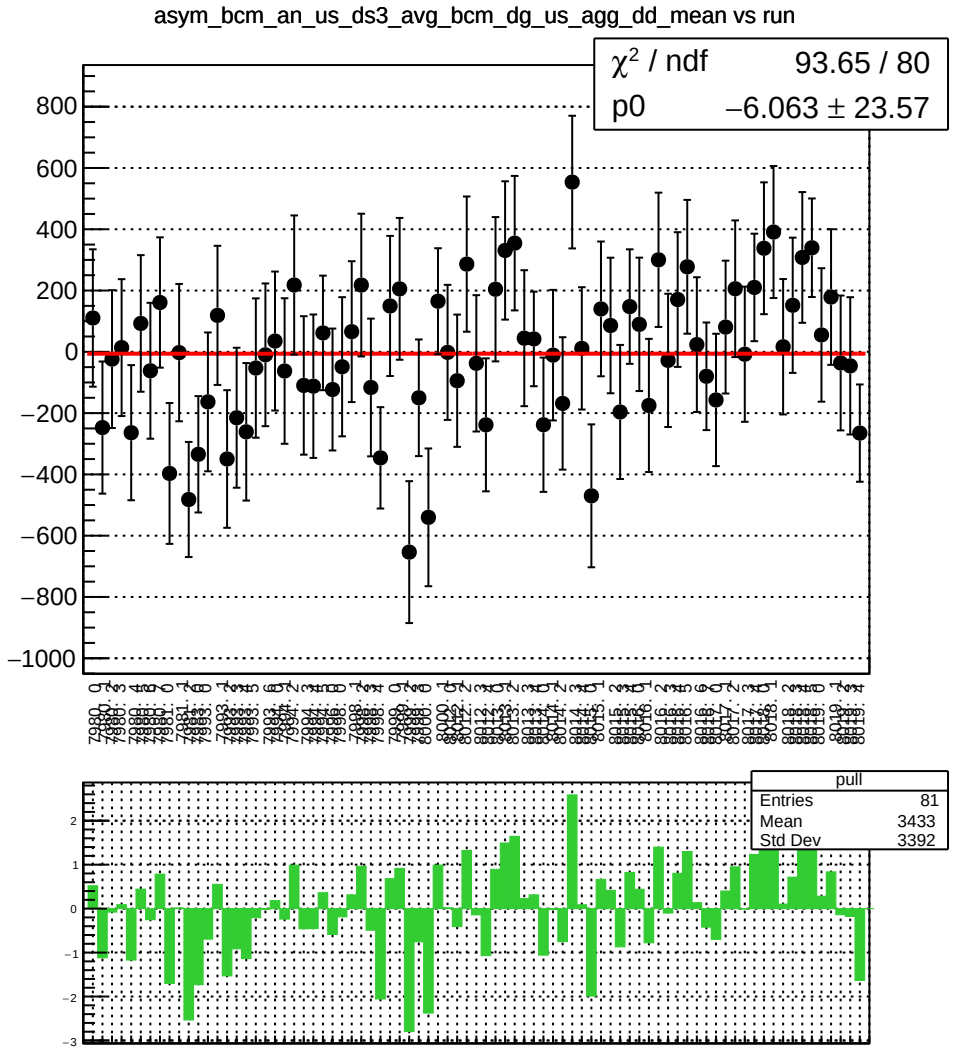

pull1D
Entries 81
Mean 0.006059
Std Dev 1.076

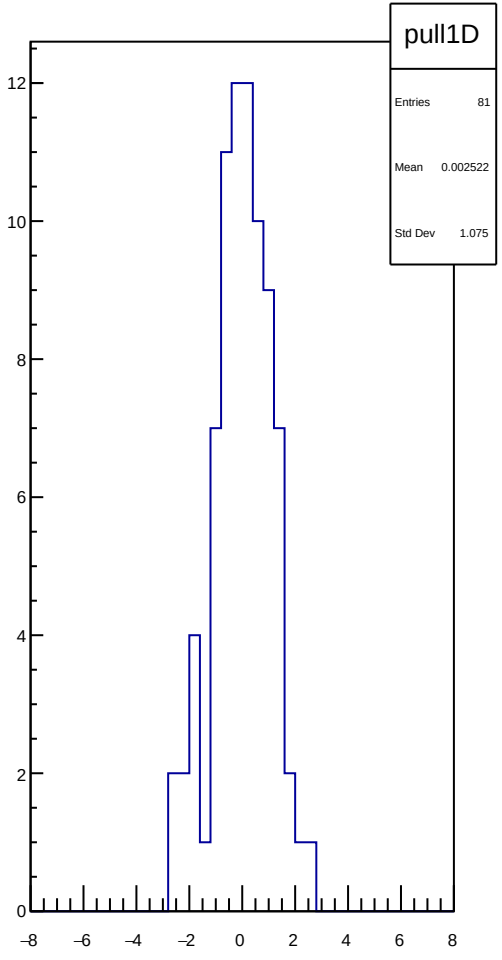

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 663.7 / 80
p0 21.3 ± 0.0168
23
22.5
22
21.5
21
20.5
20

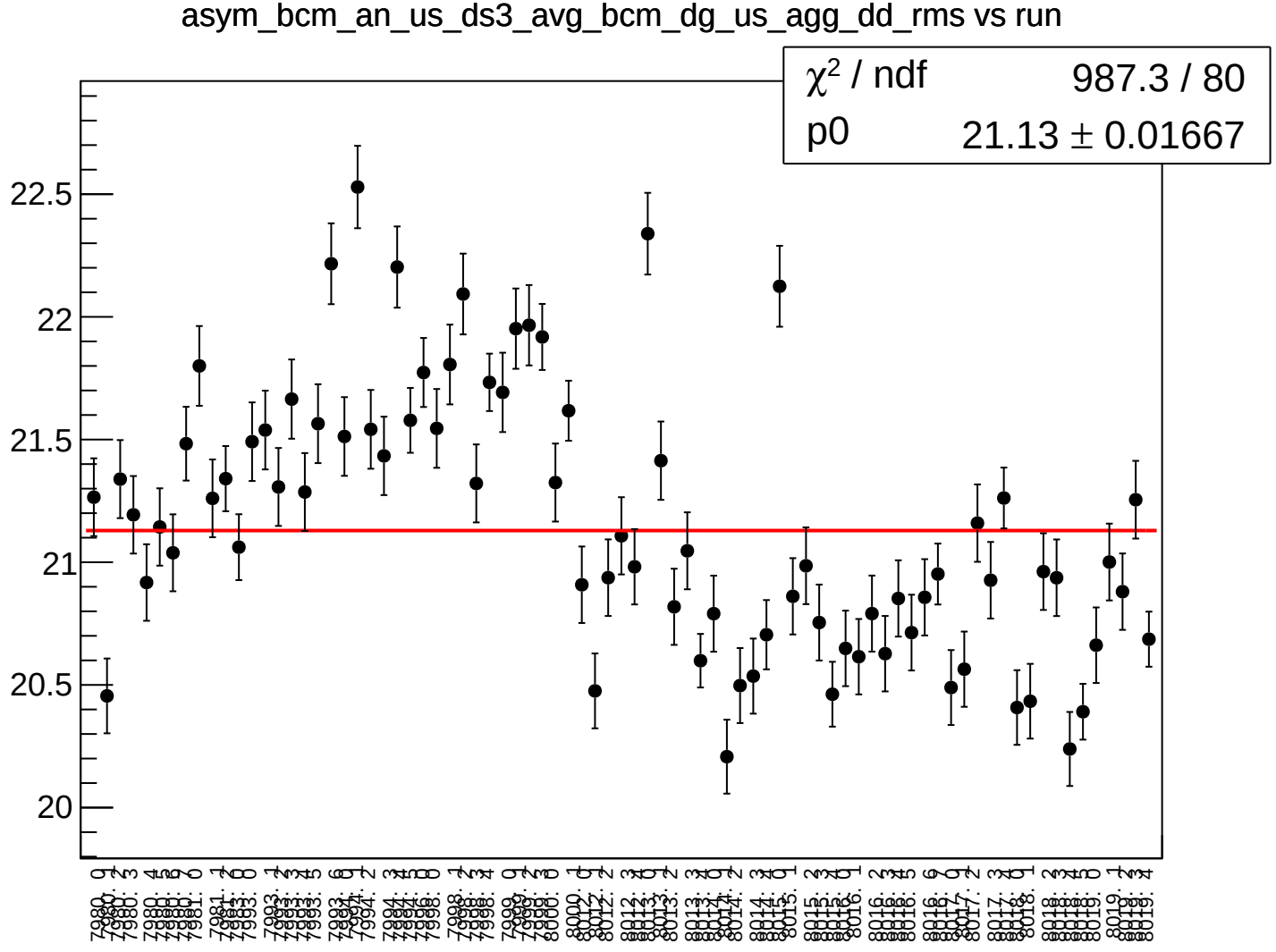

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 104.2 / 80
p0 −11.39 ± 17.3
pull
Entries 81
Mean −434.1
Std Dev 468.4

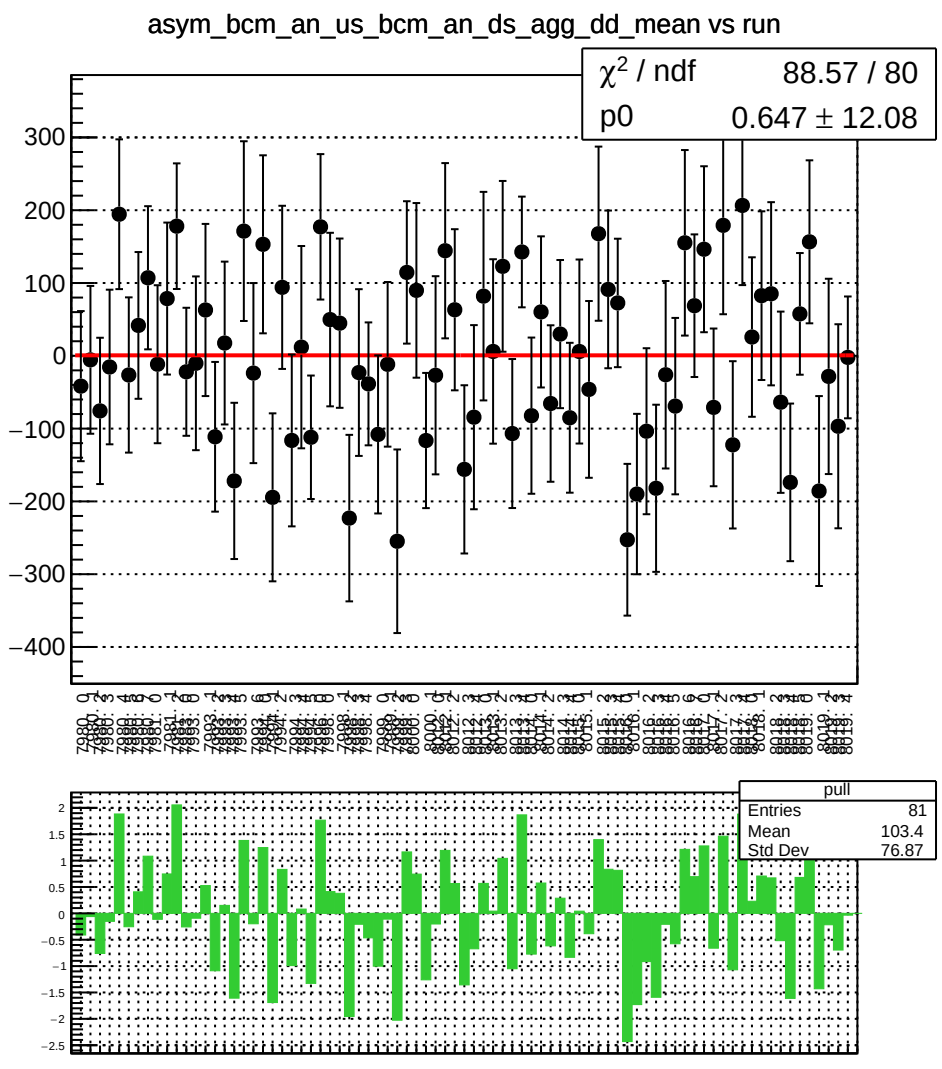

pull1D
Entries 81
Mean 0.01031
Std Dev 1.134

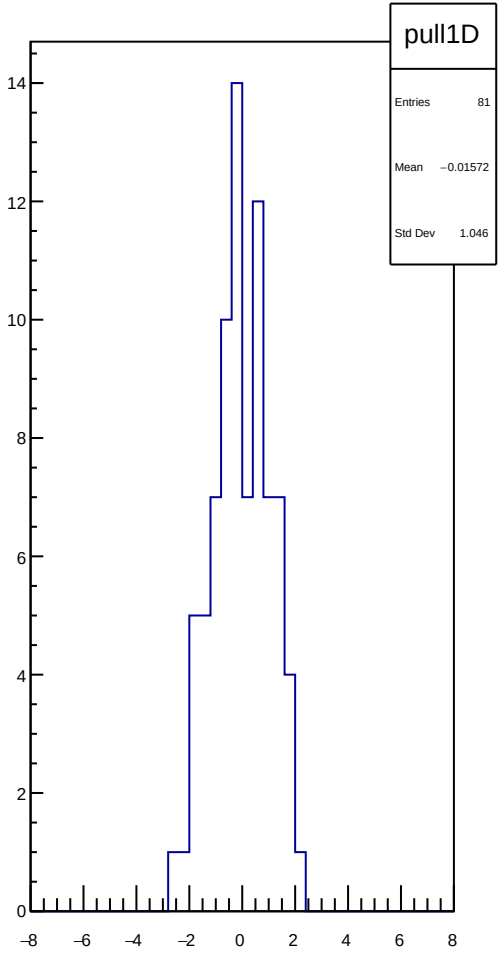

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 5121 / 80
p0 15.49 ± 0.01223
19
18
17
16
15
14

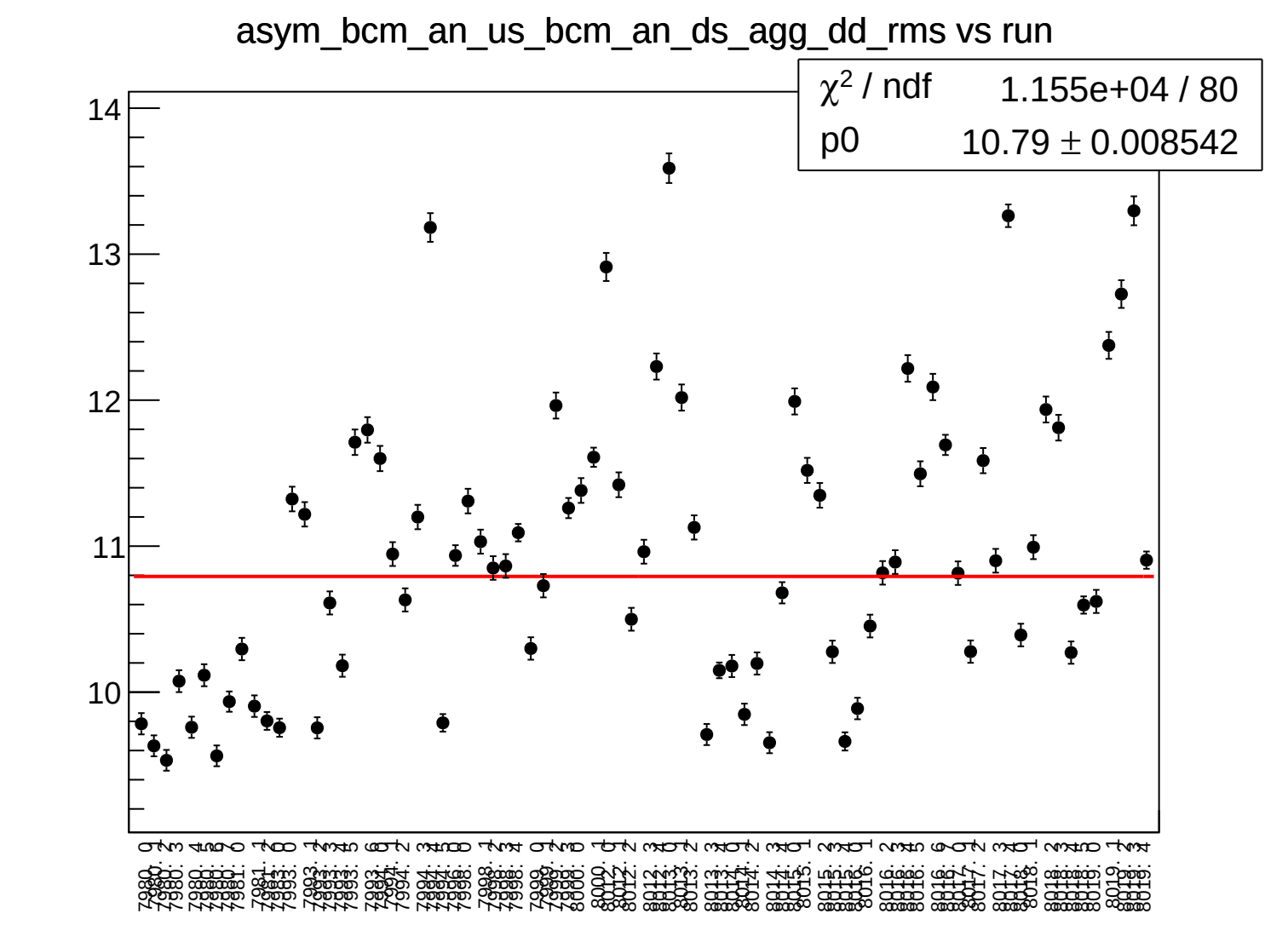

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 93.65 / 80
p0 −6.063 ± 23.57
pull
Entries 81
Mean 3433
Std Dev 3392

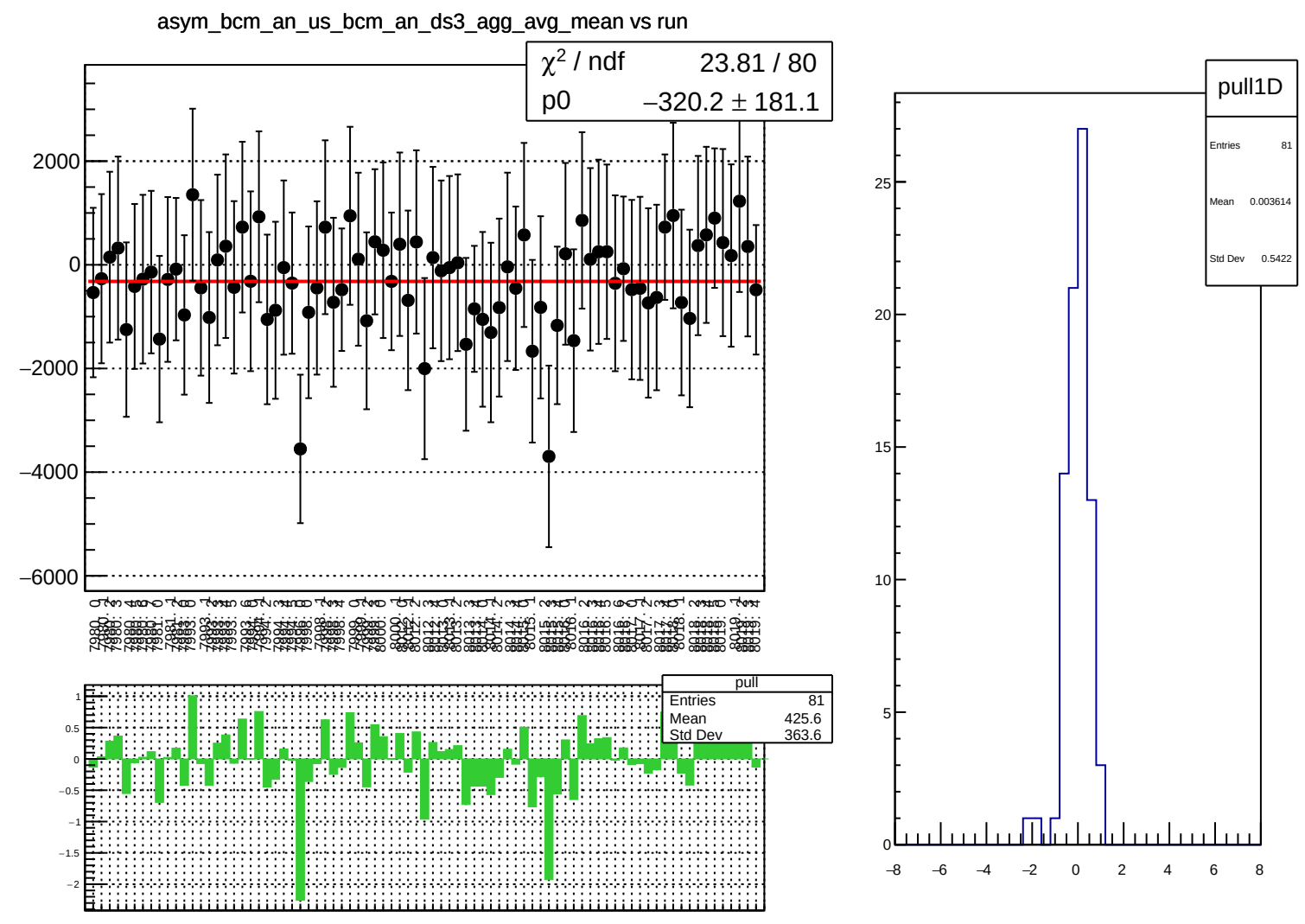

pull1D
Entries 81
Mean 0.002522
Std Dev 1.075

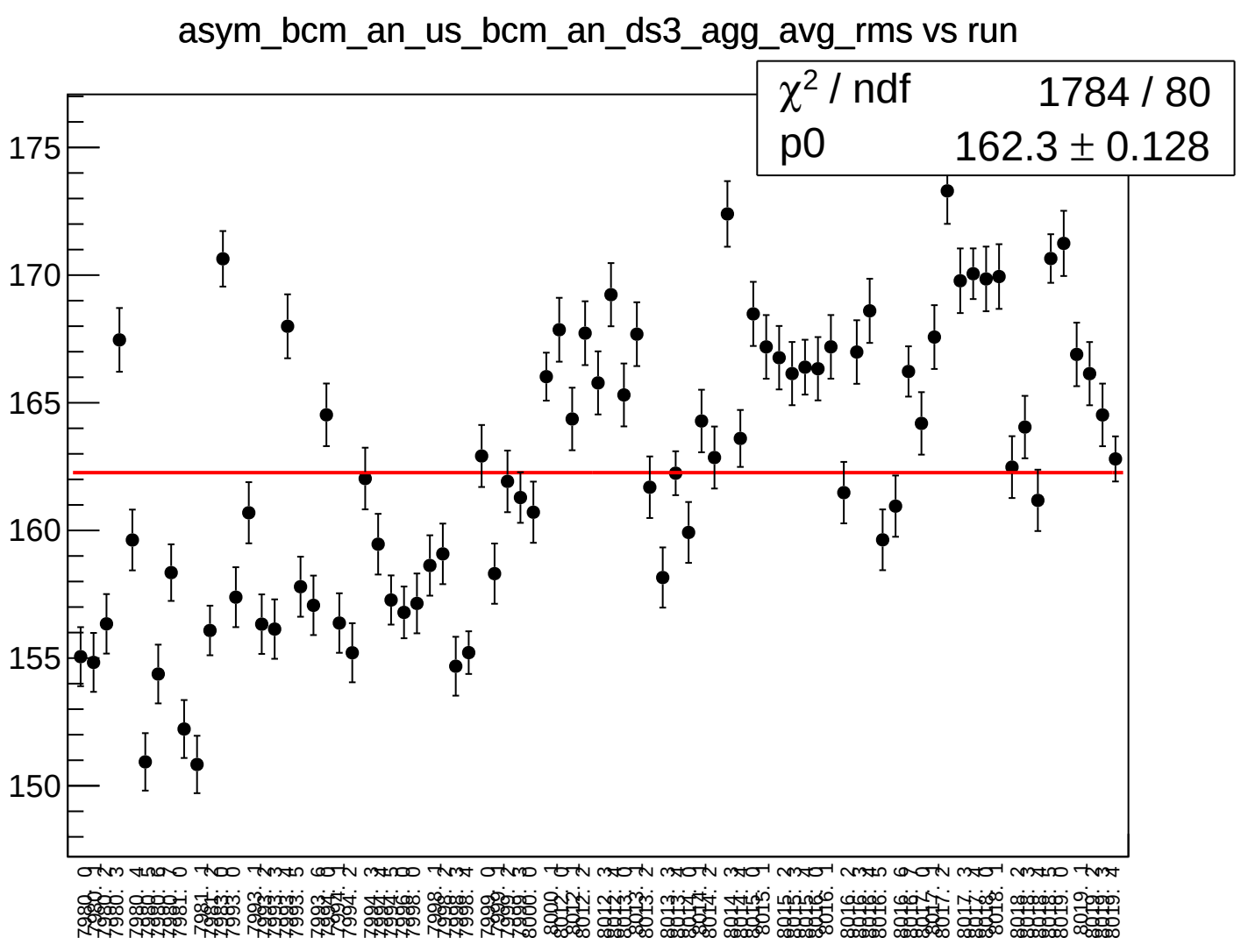

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 987.3 / 80
p0 21.13 ± 0.01667
22.5
22
21.5
21
20.5
20

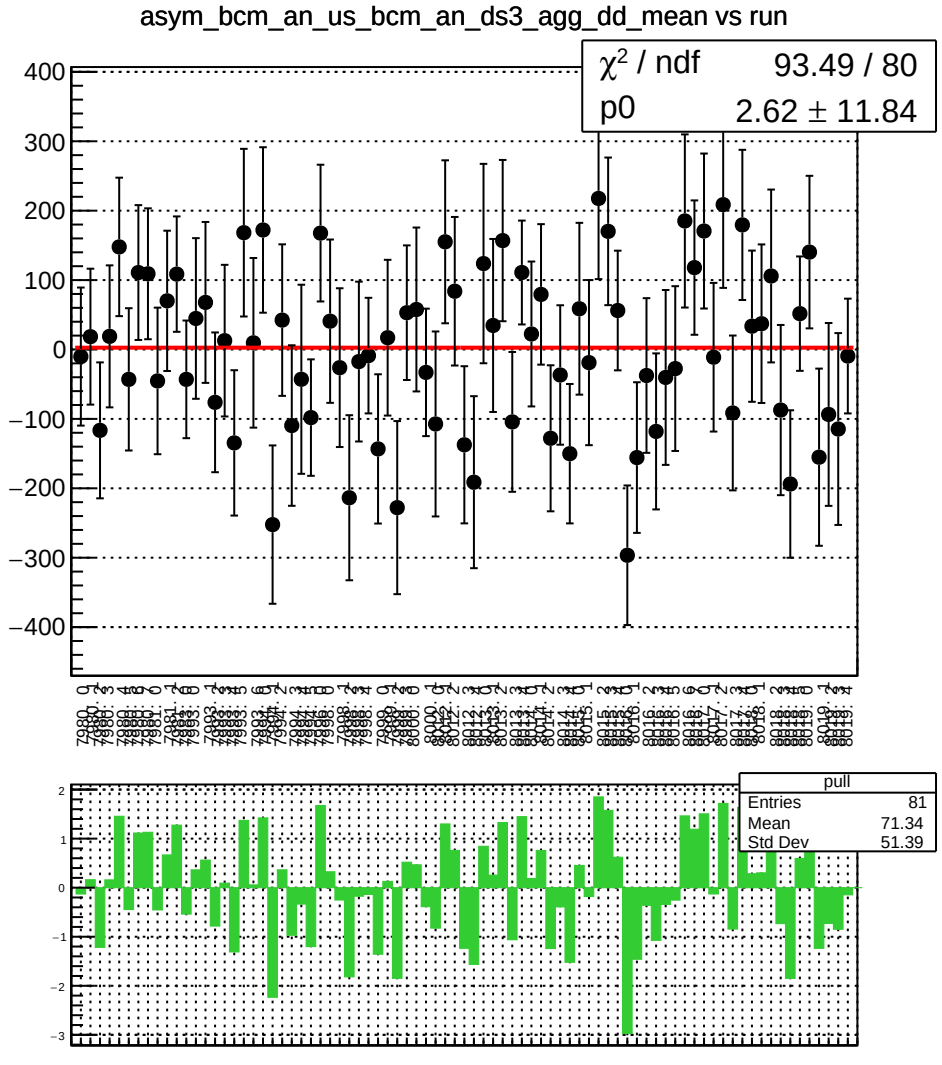

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 88.57 / 80
p0 0.647 ± 12.08
pull
Entries 81
Mean 103.4
Std Dev 76.87

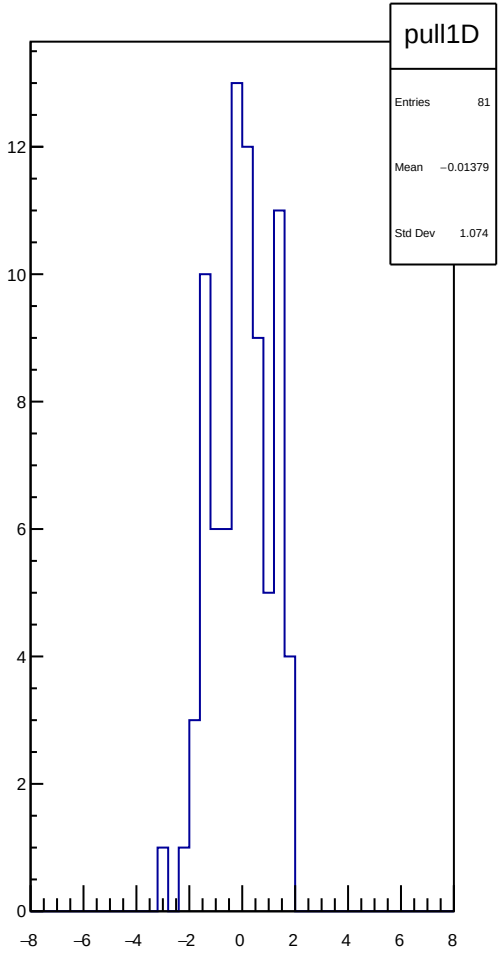

pull1D
Entries 81
Mean −0.01572
Std Dev 1.046

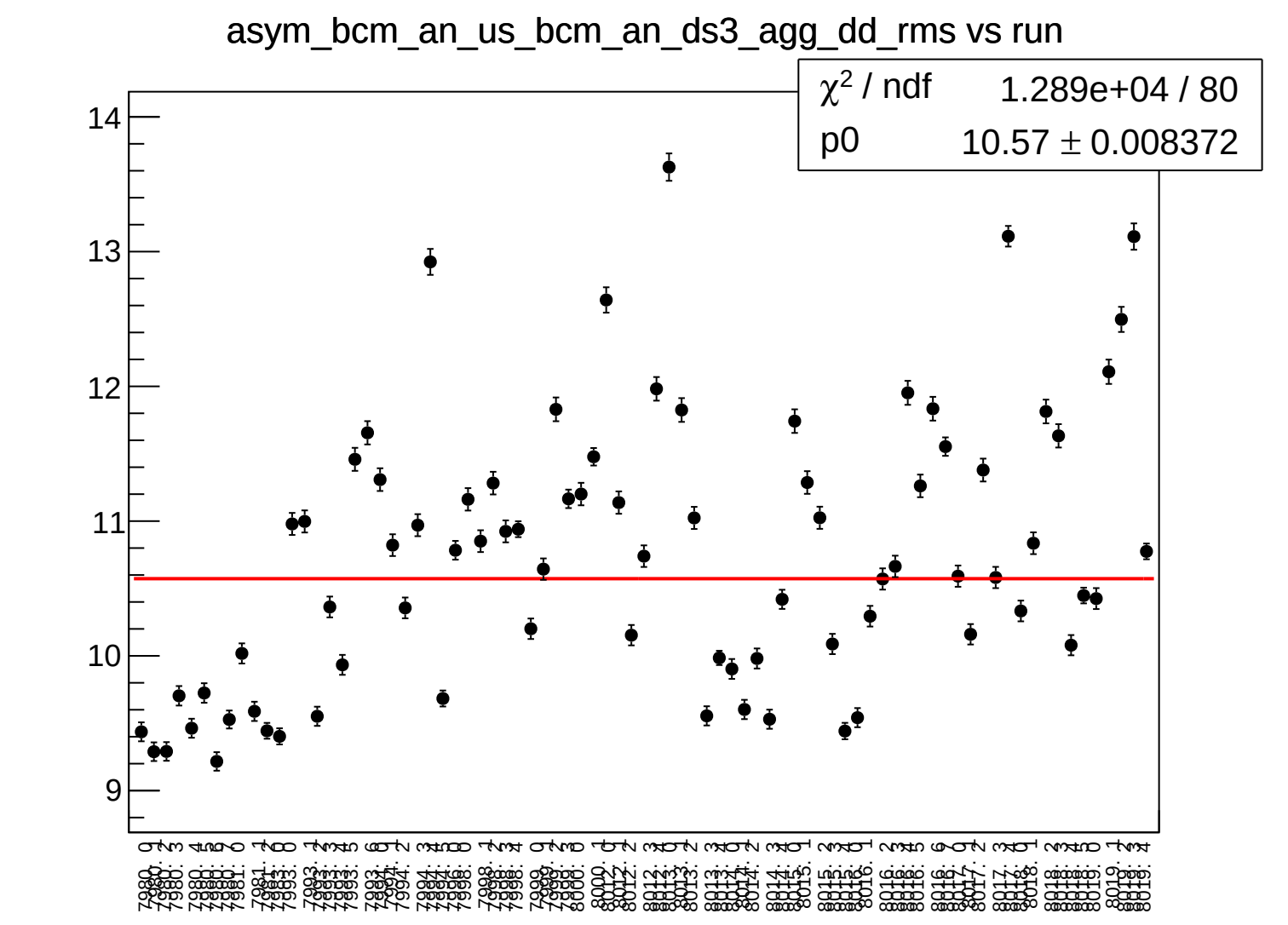

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.155e+04 / 80
p0 10.79 ± 0.008542
14
13
12
11
10

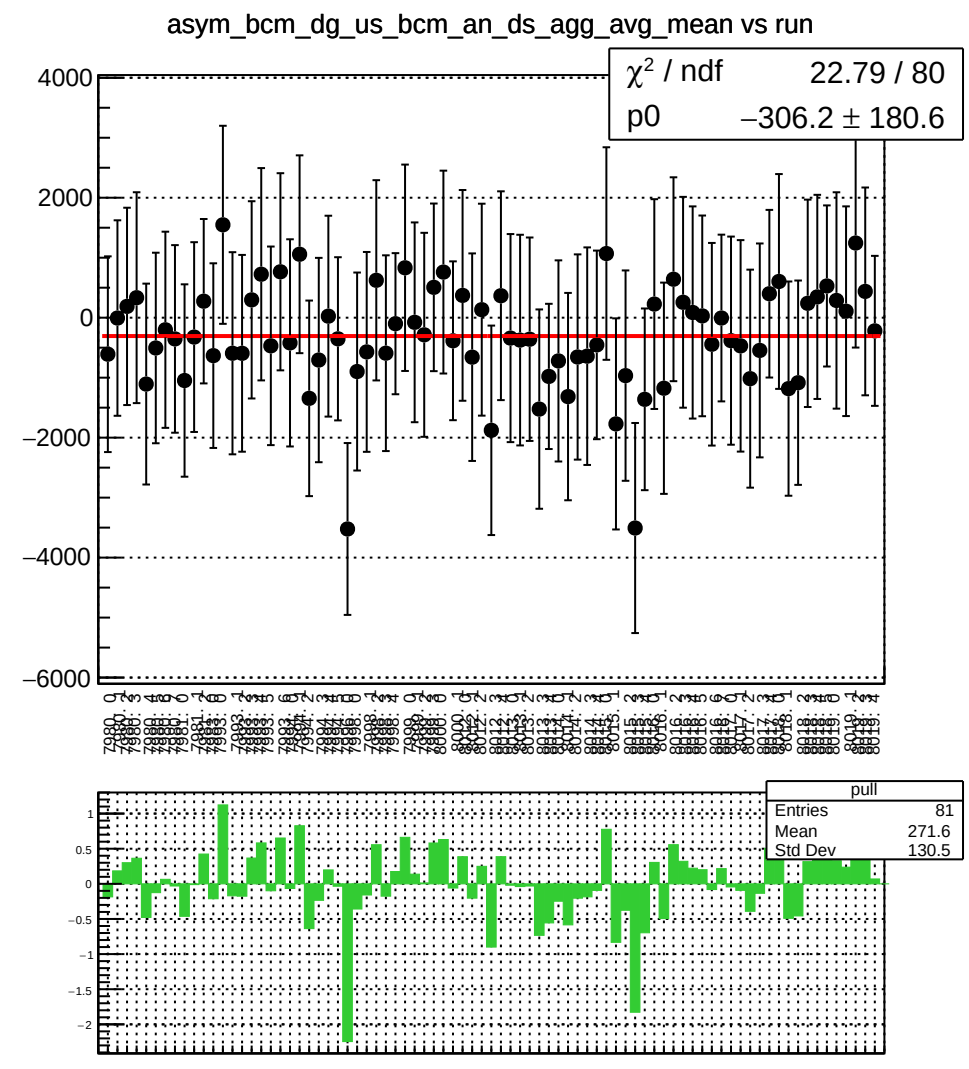

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 23.81 / 80
p0 −320.2 ± 181.1
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 425.6
Std Dev 363.6
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 81
Mean 0.003614
Std Dev 0.5422
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

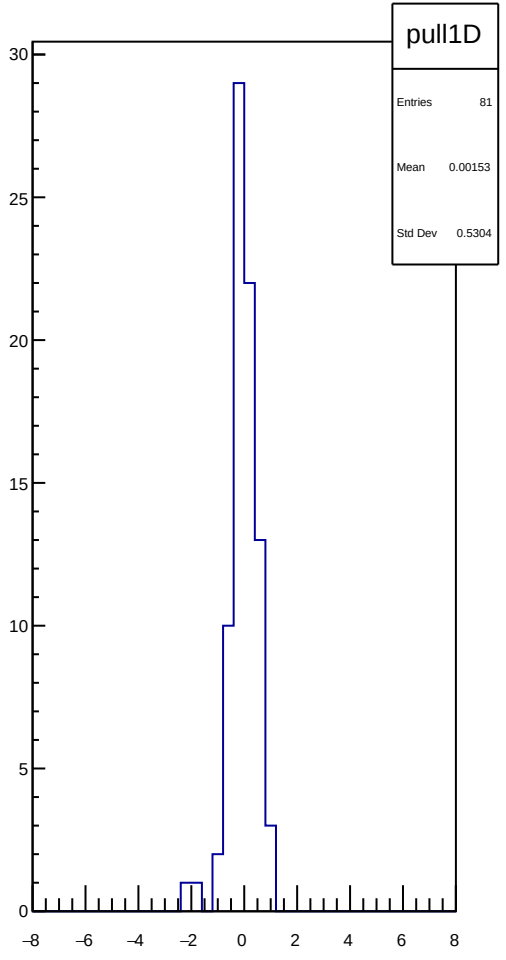

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1784 / 80
p0 162.3 ± 0.128
175
170
165
160
155
150

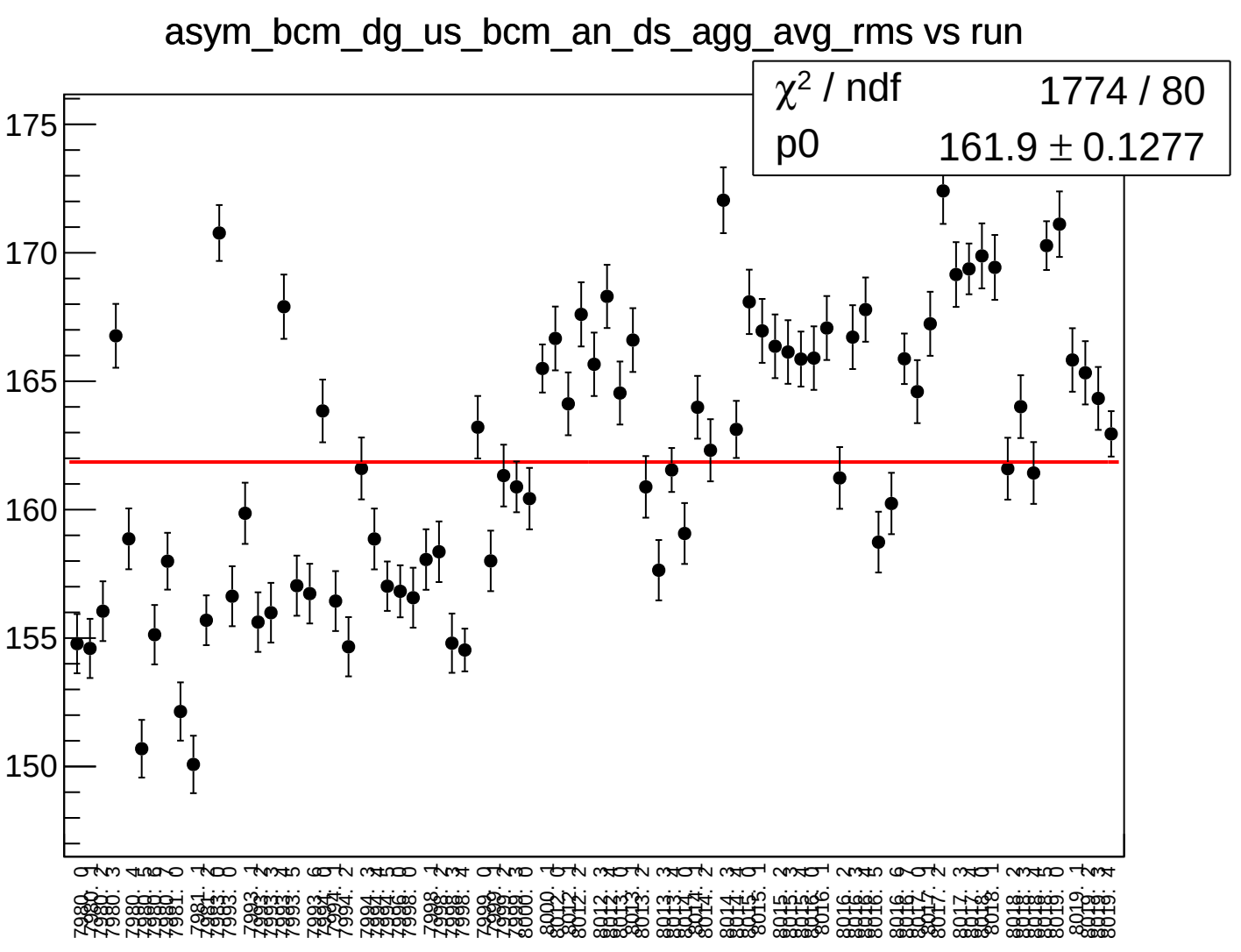

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 93.49 / 80
p0 2.62 ± 11.84
pull
Entries 81
Mean 71.34
Std Dev 51.39

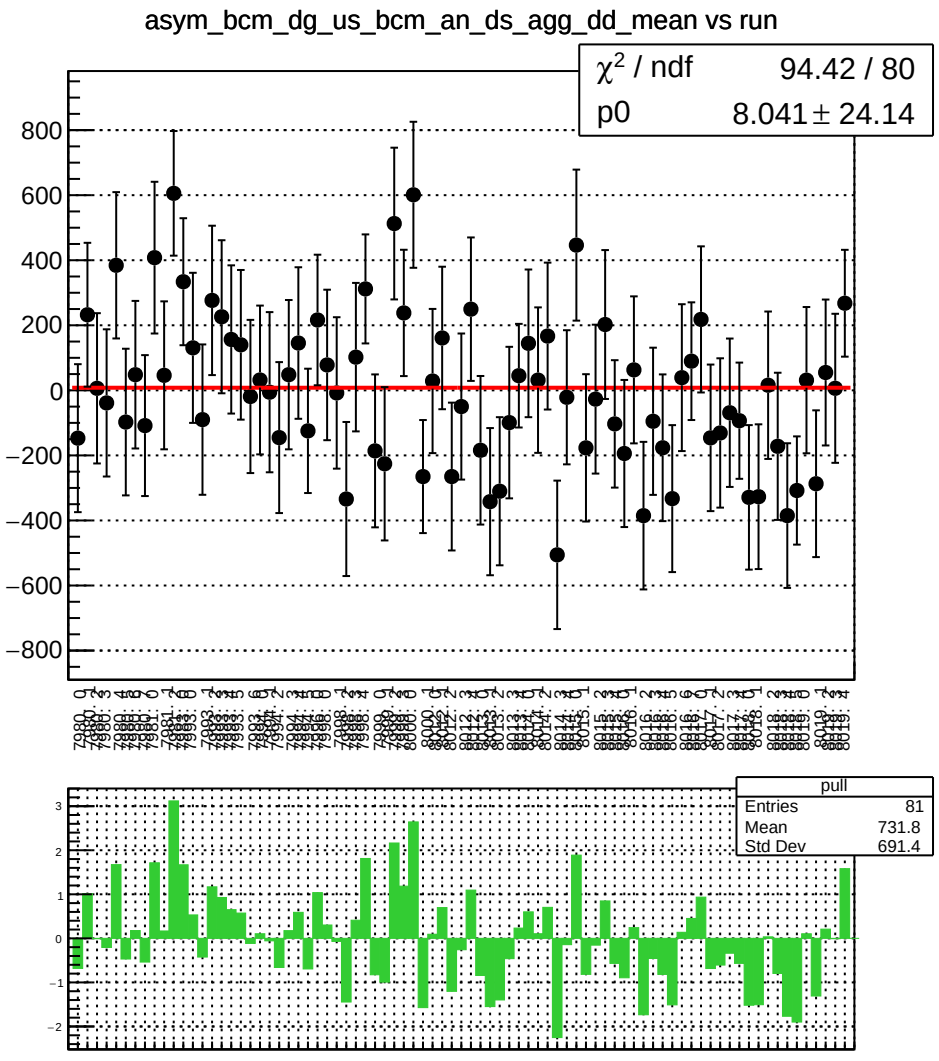

pull1D
Entries 81
Mean −0.01379
Std Dev 1.074

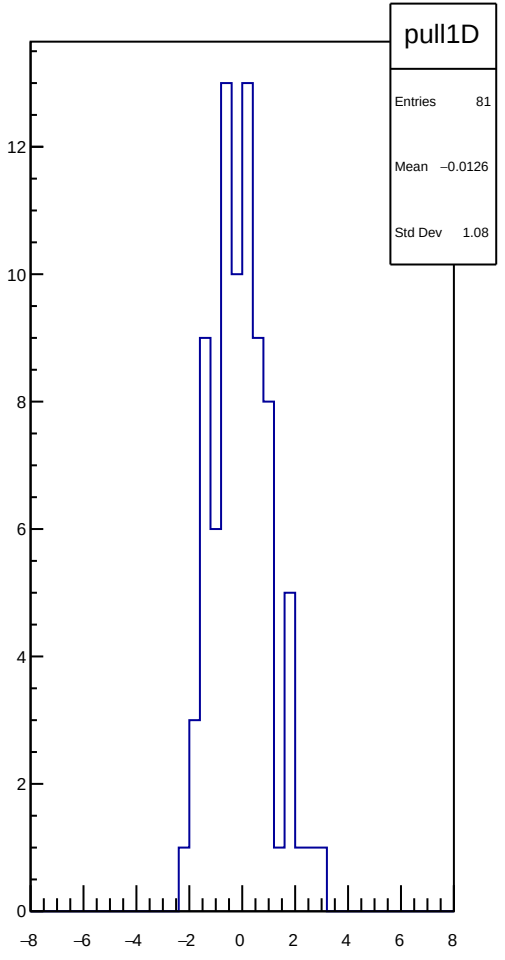

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1.289e+04 / 80
p0 10.57 ± 0.008372
14
13
12
11
10
9

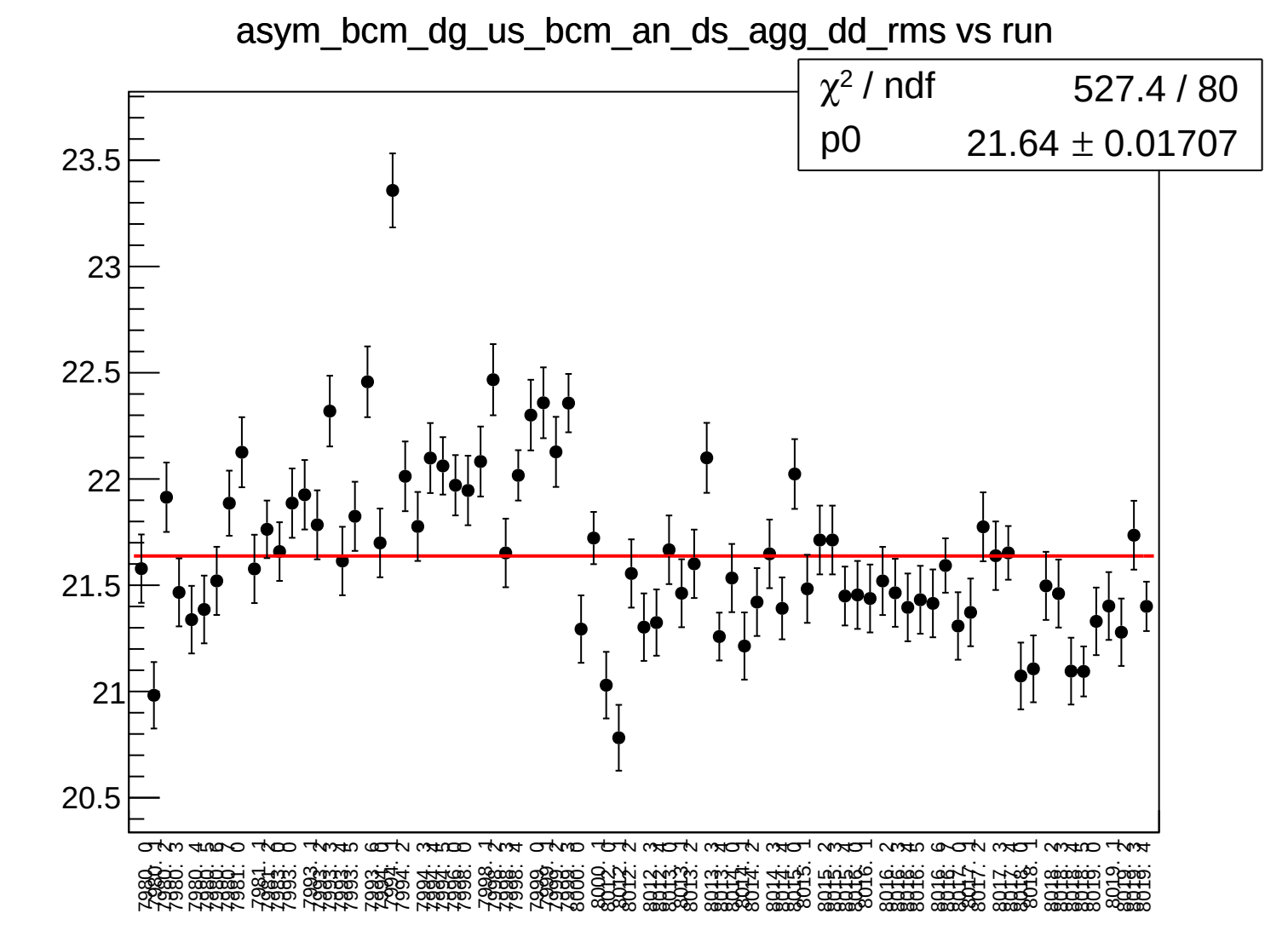

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 22.79 / 80
p0 −306.2 ± 180.6
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 271.6
Std Dev 130.5
1
0.5
0
−0.5
−1
−1.5
−2

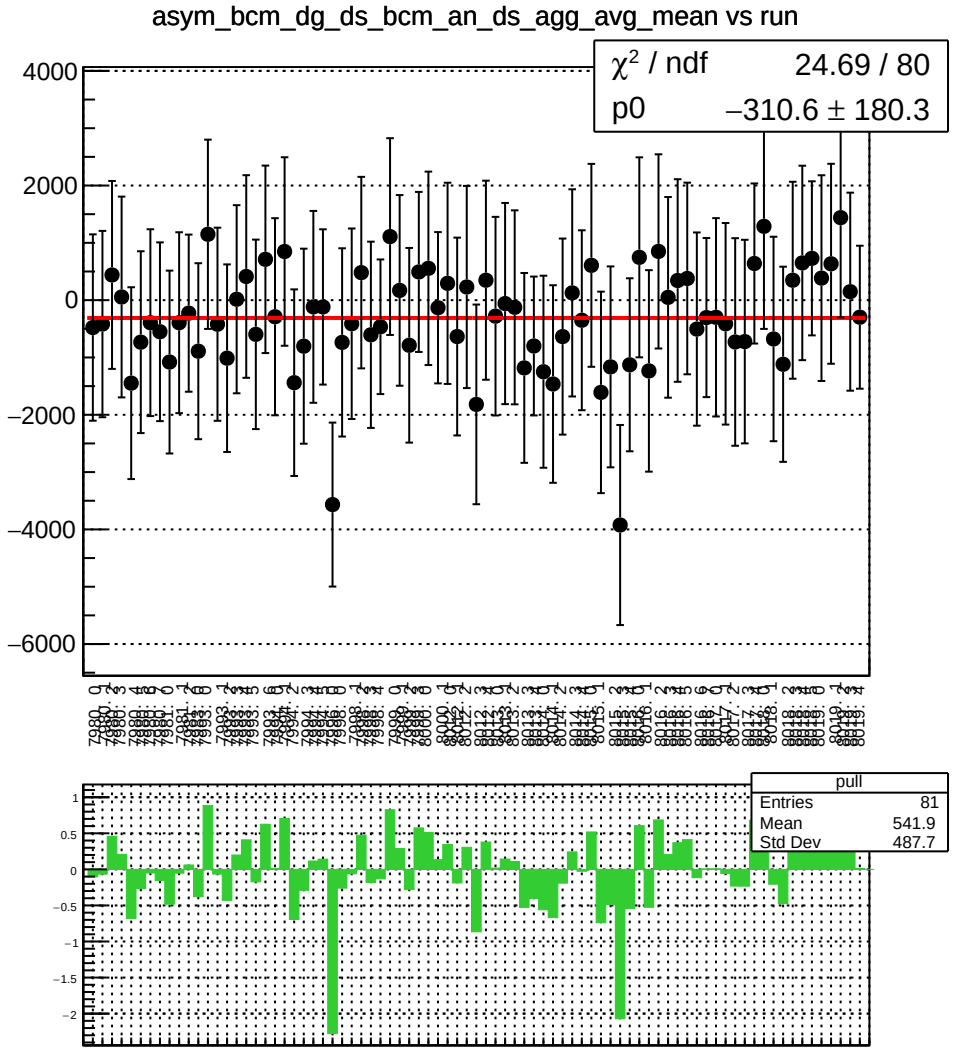

pull1D
Entries 81
Mean 0.00153
Std Dev 0.5304
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

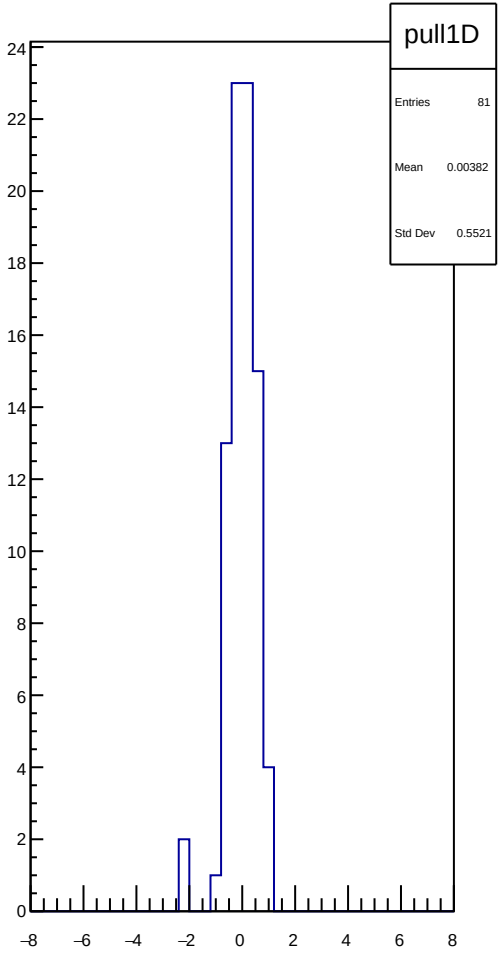

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1774 / 80
p0 161.9 ± 0.1277
175
170
165
160
155
150

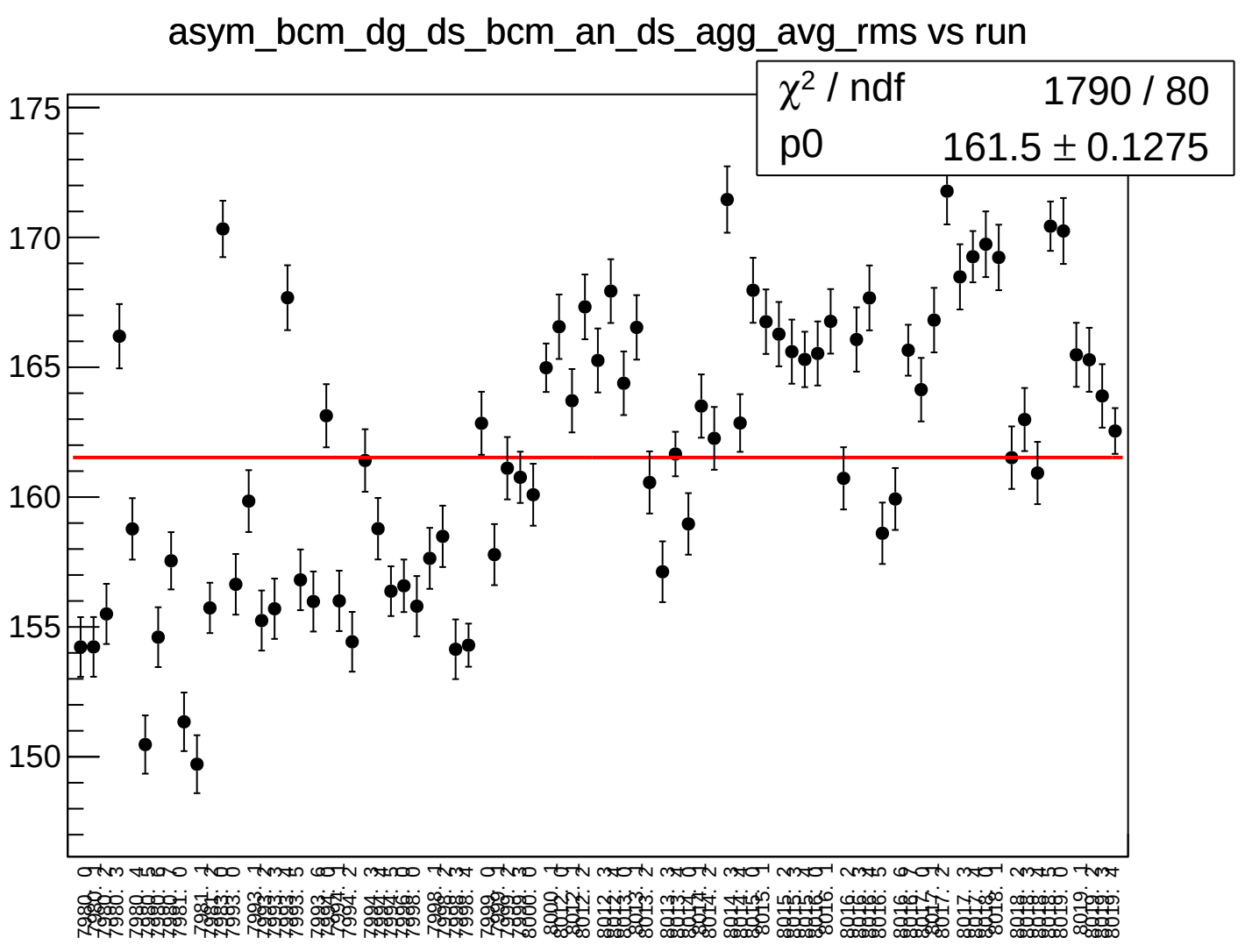

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 94.42 / 80
p0 8.041 ± 24.14
pull
Entries 81
Mean 731.8
Std Dev 691.4

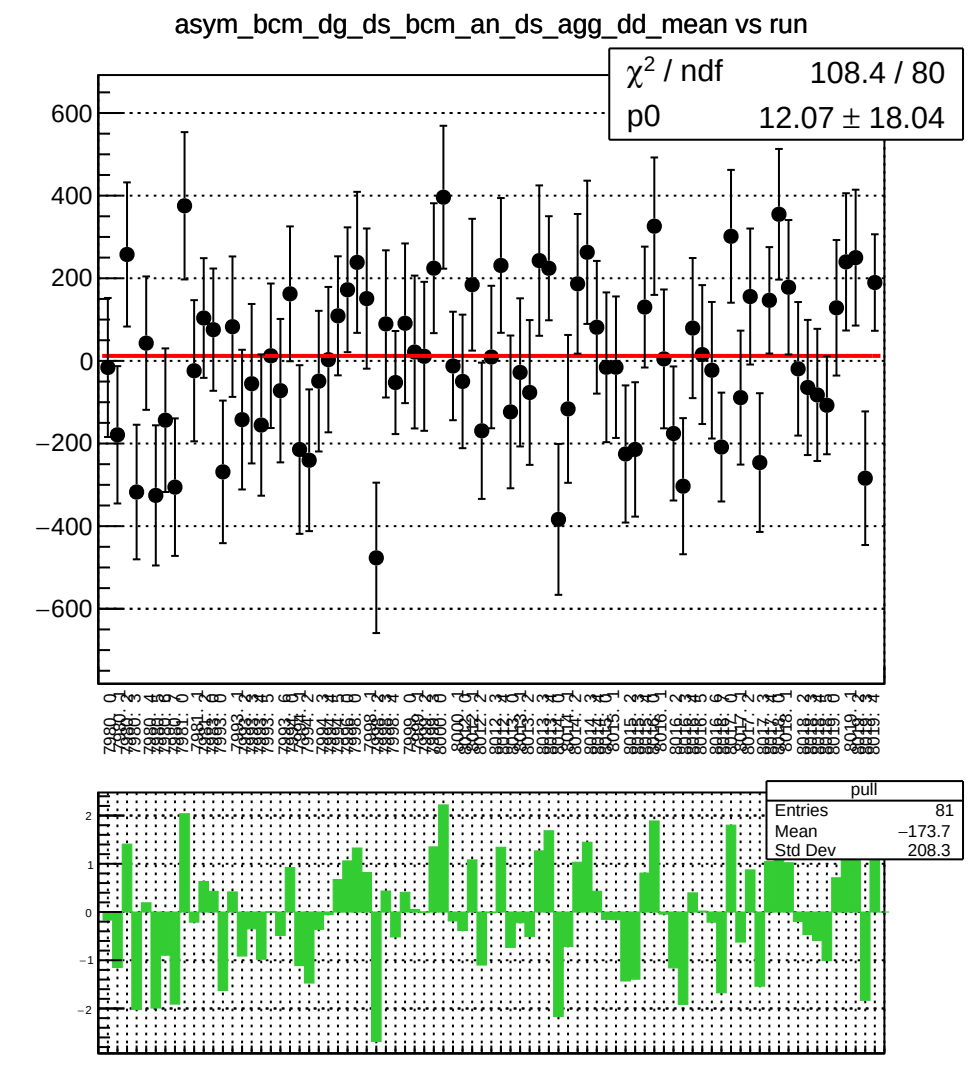

pull1D
Entries 81
Mean −0.0126
Std Dev 1.08

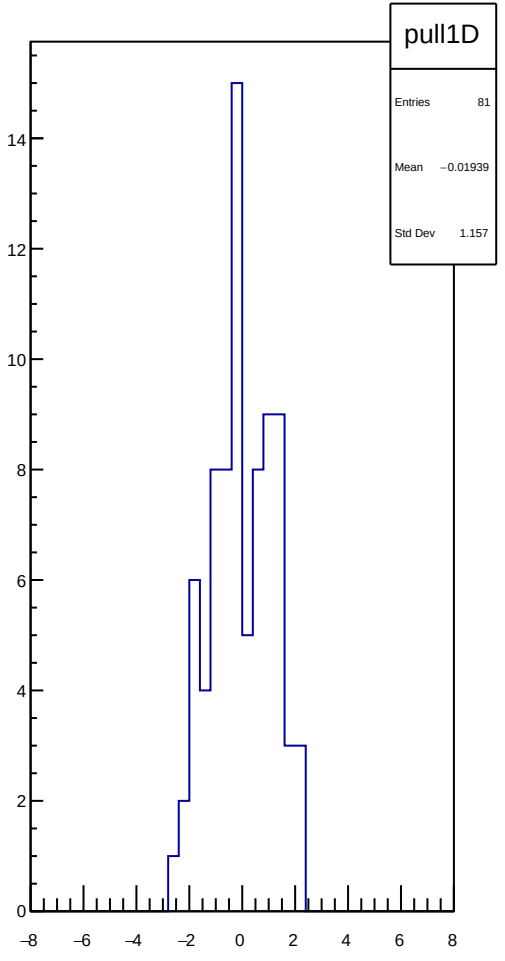

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 527.4 / 80
p0 21.64 ± 0.01707
23.5
23
22.5
22
21.5
21
20.5

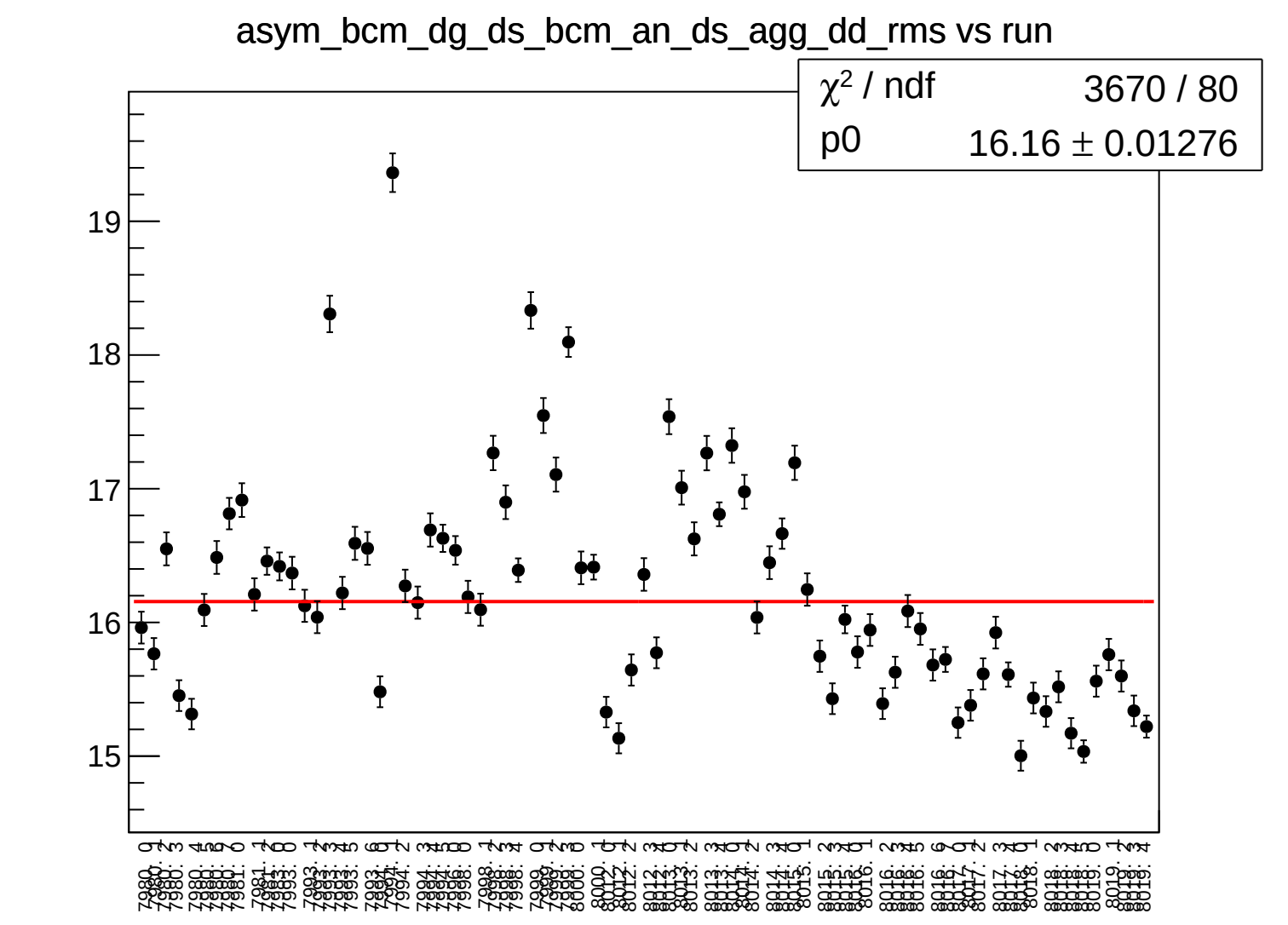

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 24.69 / 80
p0 −310.6 ± 180.3
pull
Entries 81
Mean 541.9
Std Dev 487.7

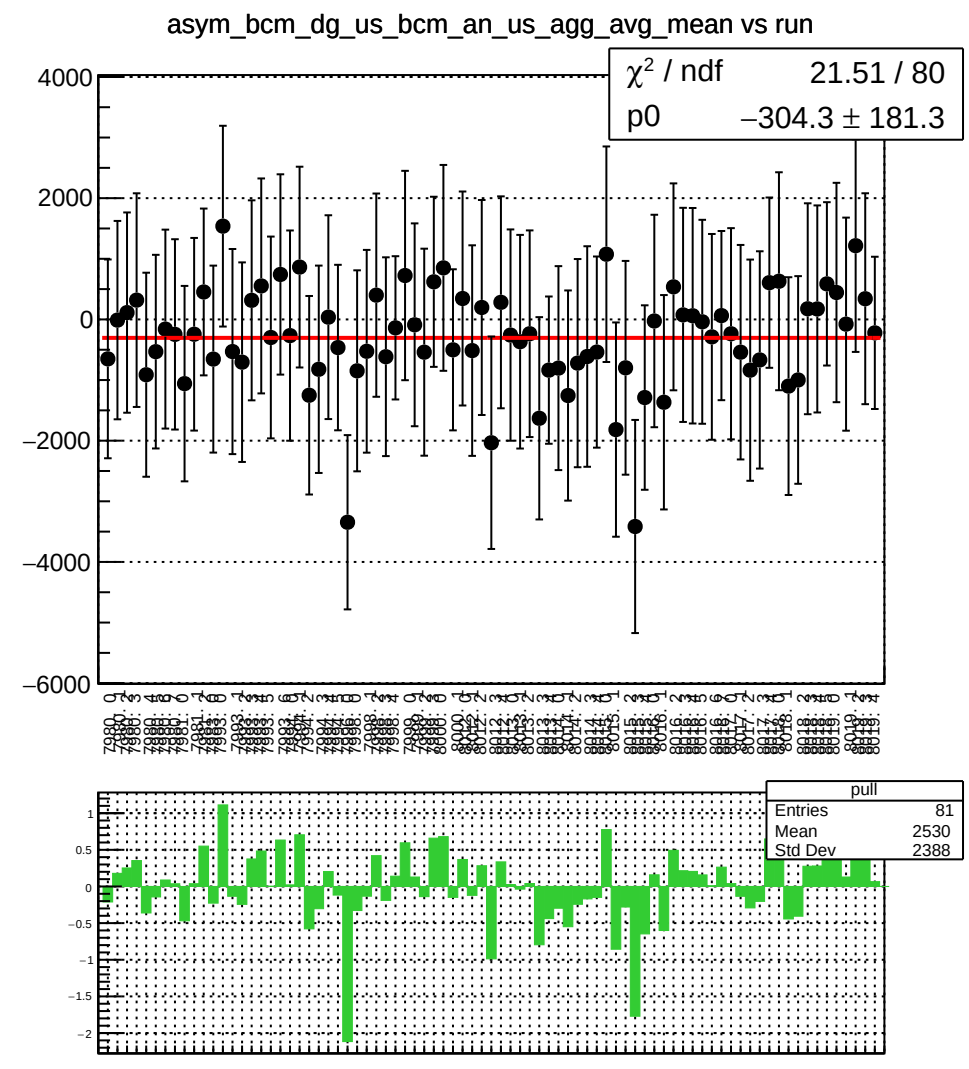

pull1D
Entries 81
Mean 0.00382
Std Dev 0.5521

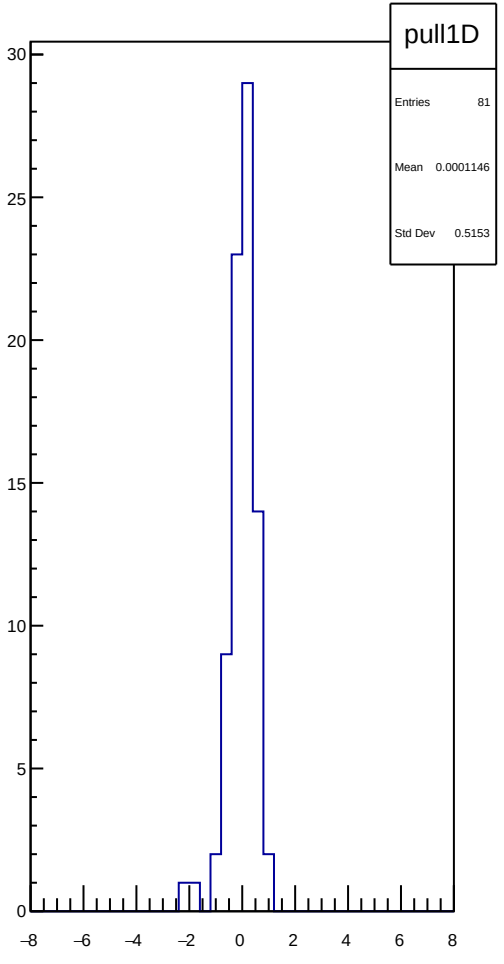

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1790 / 80
p0 161.5 ± 0.1275
175
170
165
160
155
150

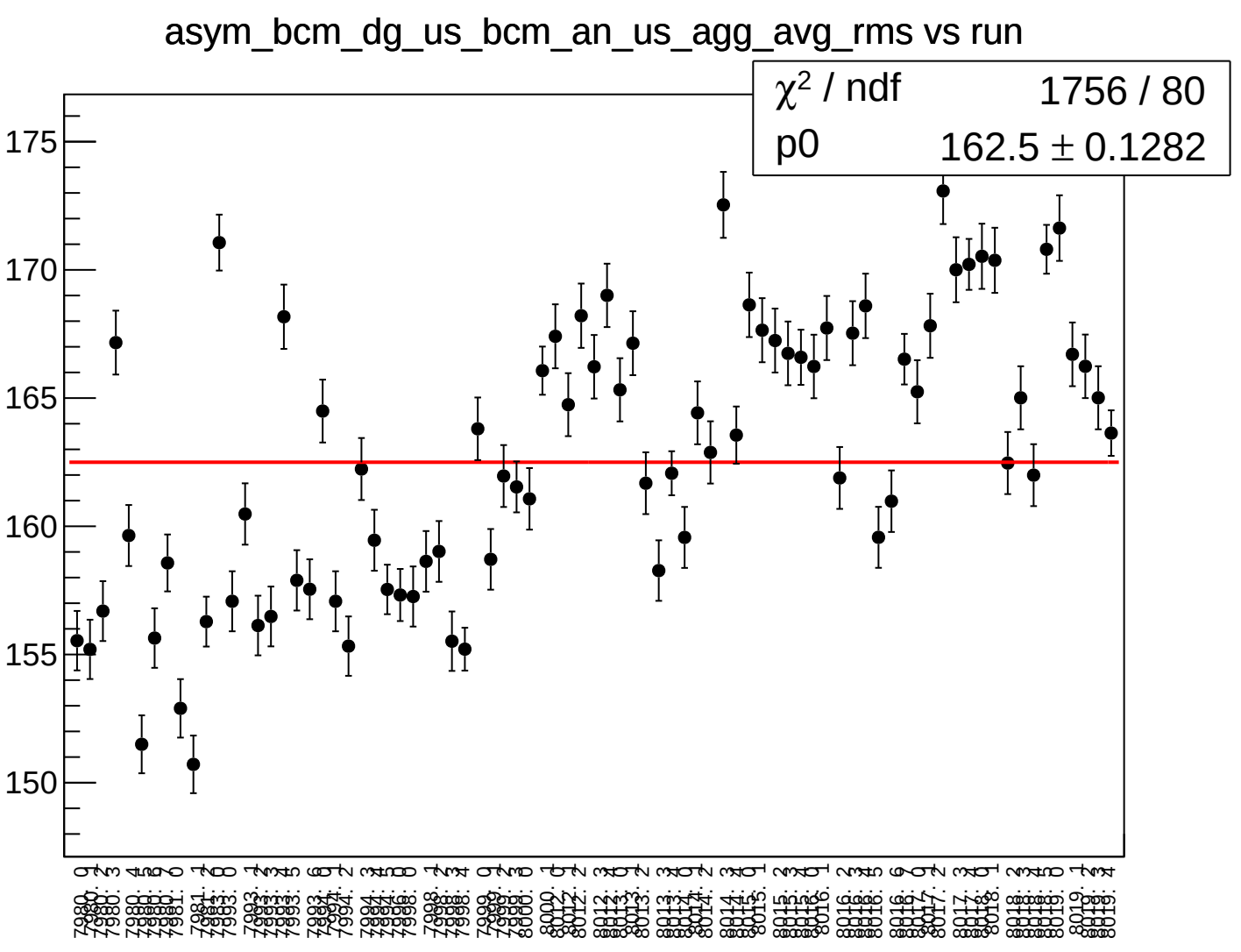

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 108.4 / 80
p0 12.07 ± 18.04
pull
Entries 81
Mean −173.7
Std Dev 208.3

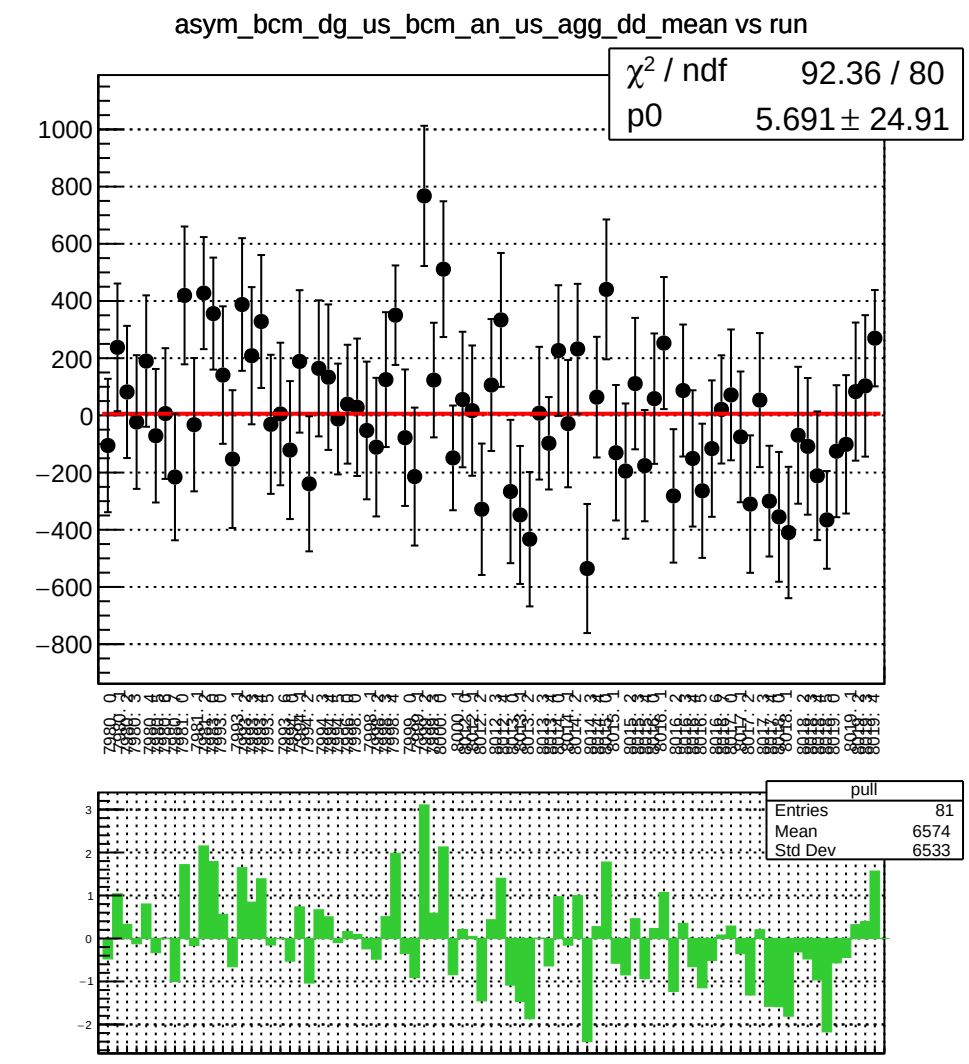

pull1D
Entries 81
Mean −0.01939
Std Dev 1.157

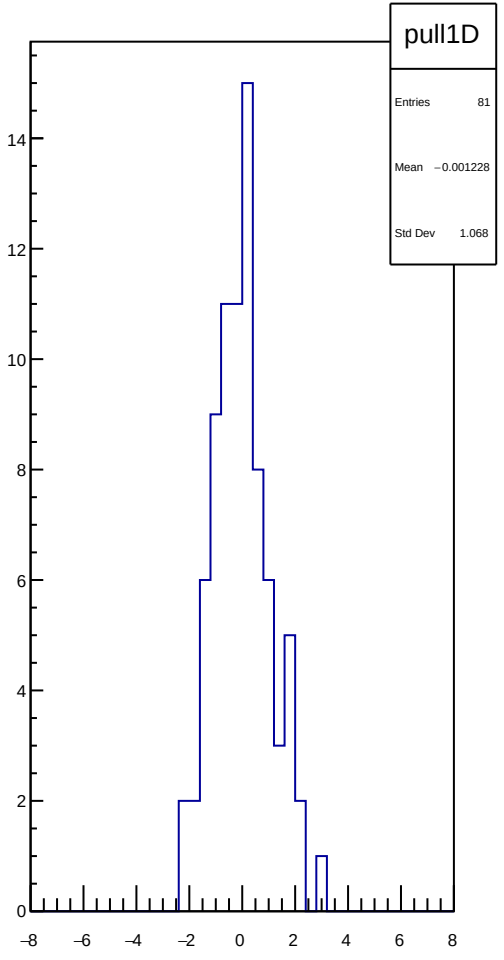

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3670 / 80
p0 16.16 ± 0.01276
19
18
17
16
15

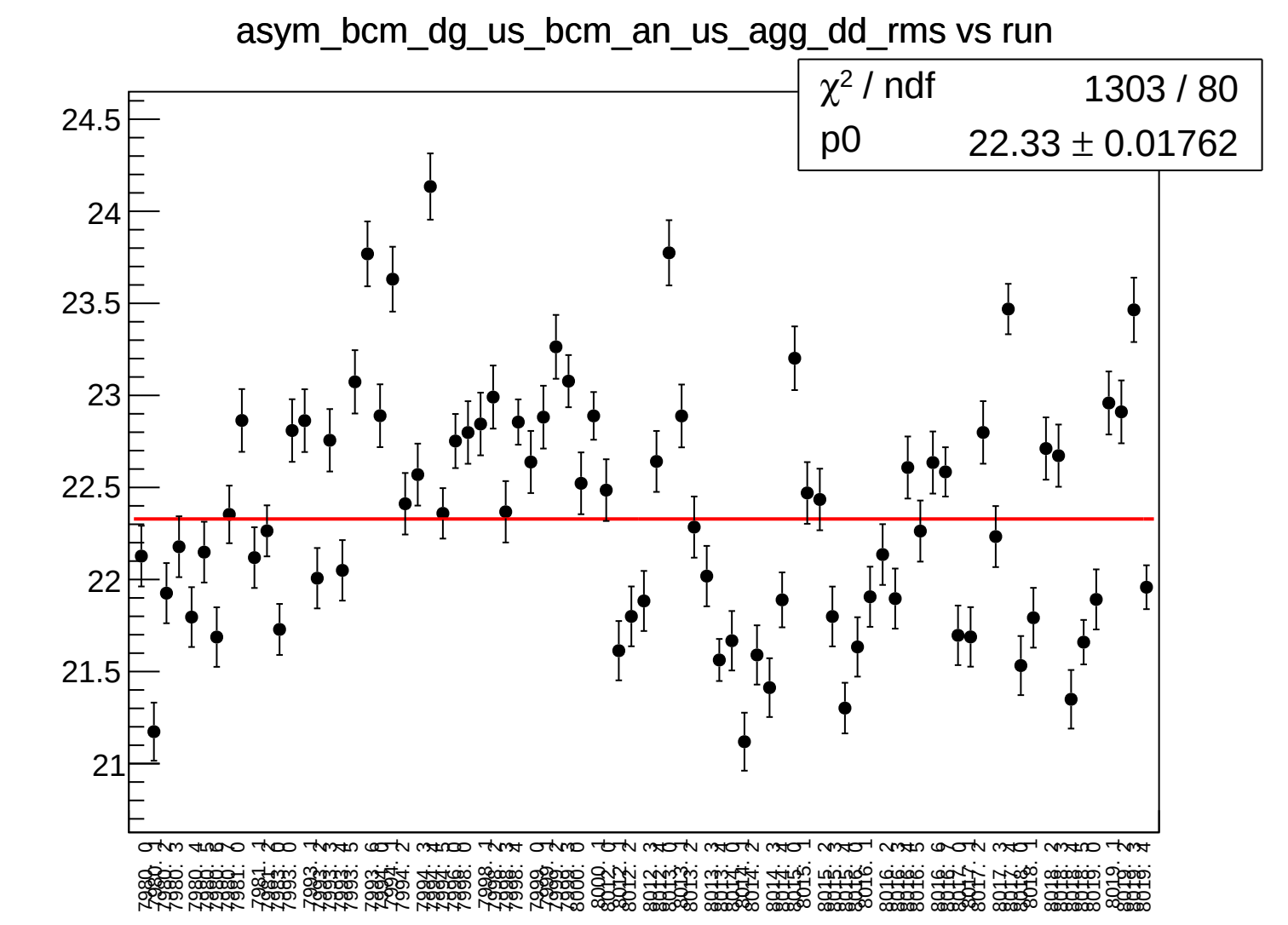

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 21.51 / 80
p0 −304.3 ± 181.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 2530
Std Dev 2388
1
0.5
0
−0.5
−1
−1.5
−2

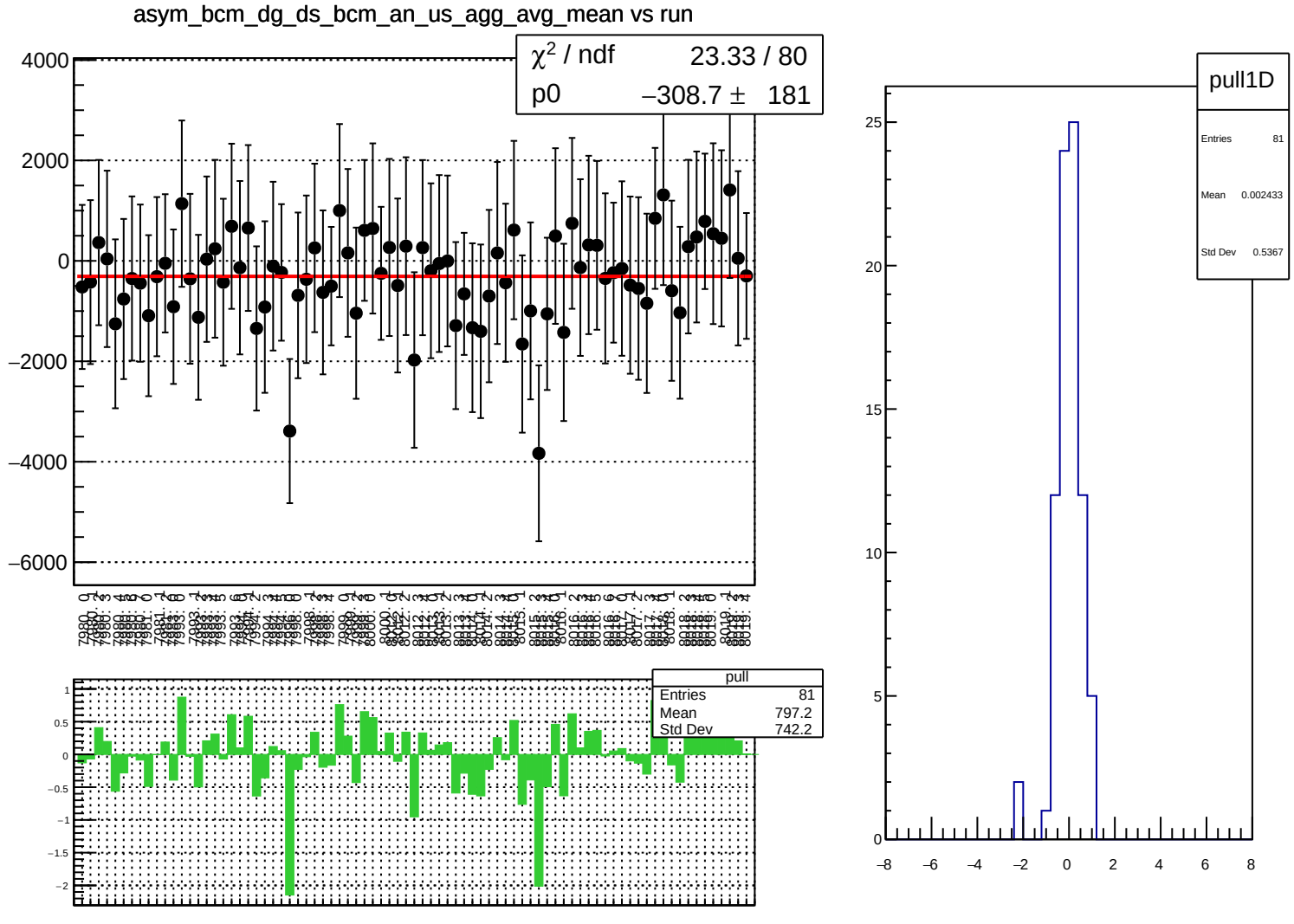

pull1D
Entries 81
Mean 0.0001146
Std Dev 0.5153
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

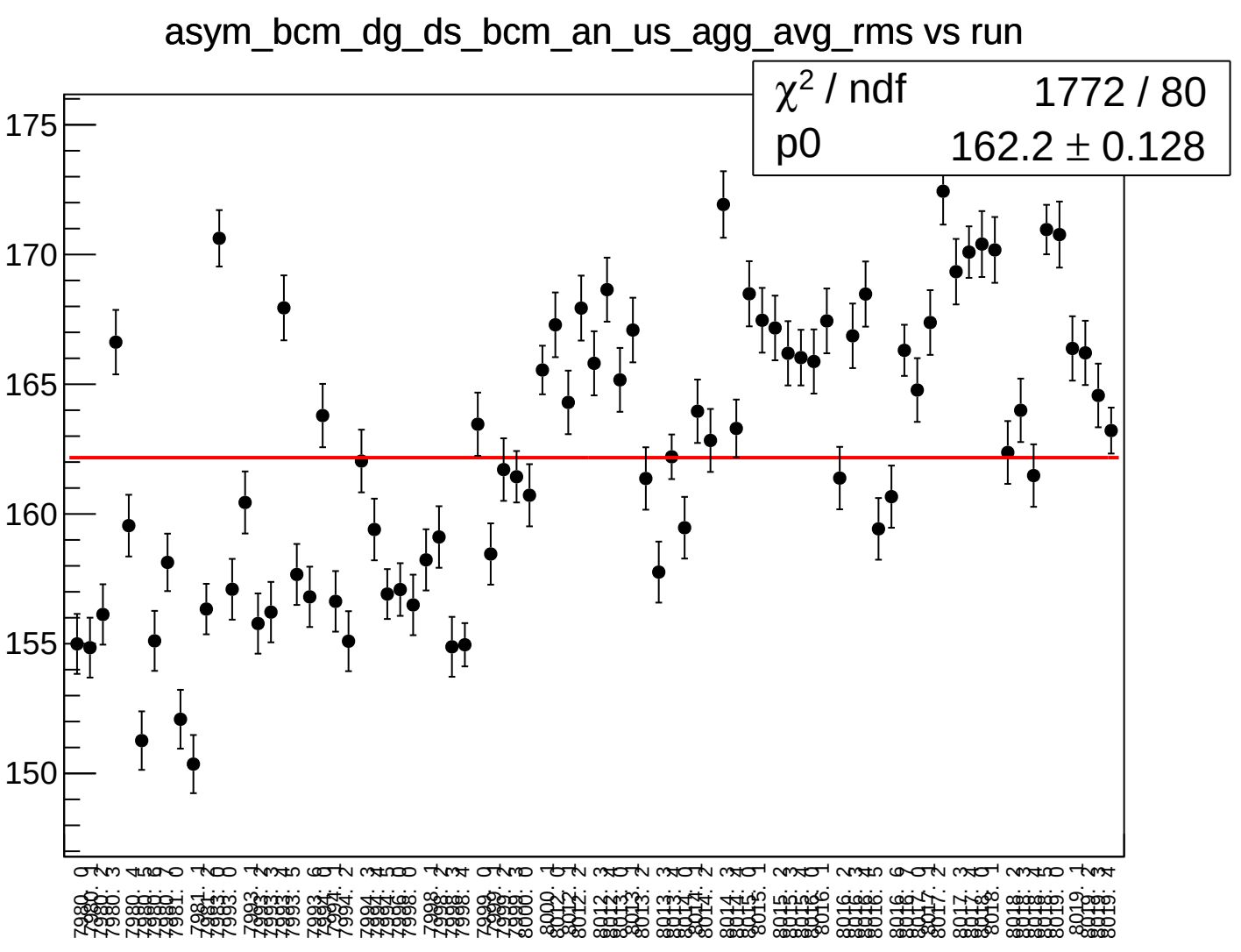

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1756 / 80
p0 162.5 ± 0.1282
175
170
165
160
155
150

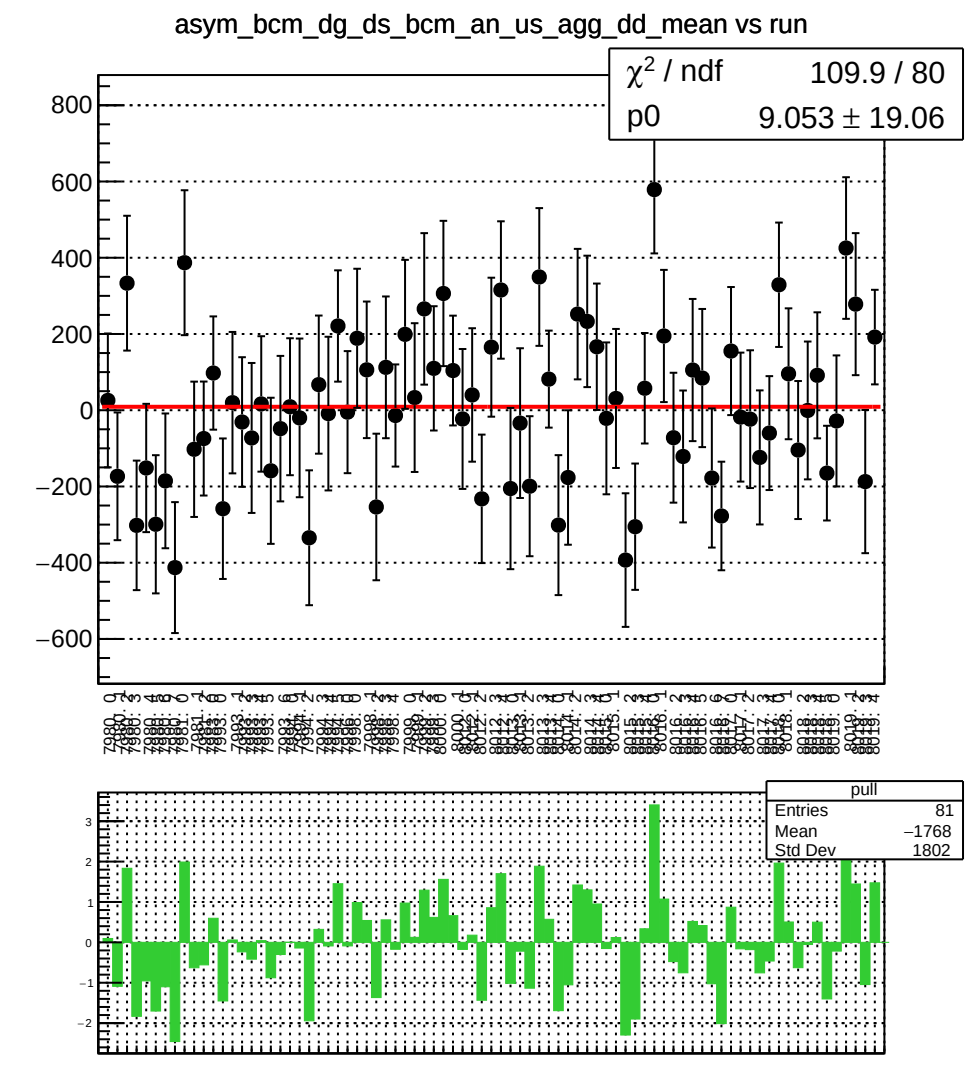

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 92.36 / 80
p0 5.691 ± 24.91
pull
Entries 81
Mean 6574
Std Dev 6533

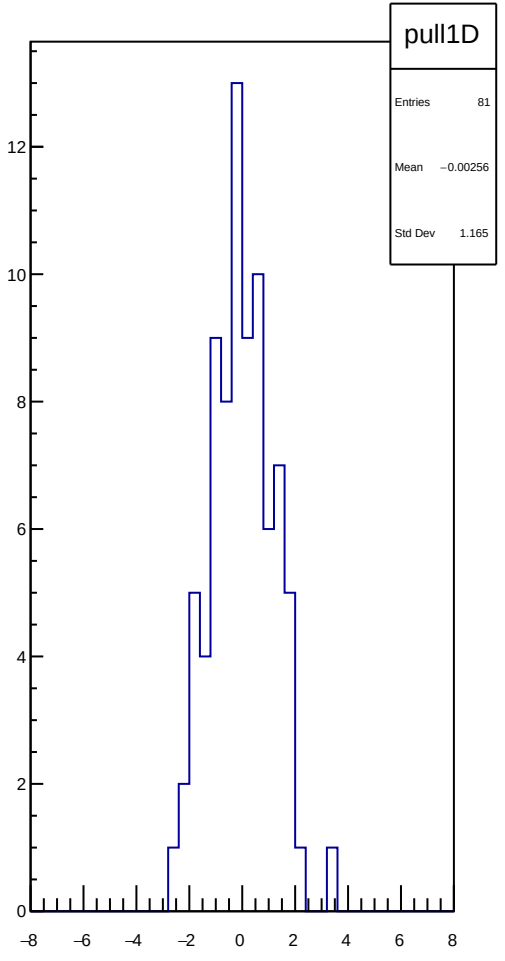

pull1D
Entries 81
Mean −0.001228
Std Dev 1.068

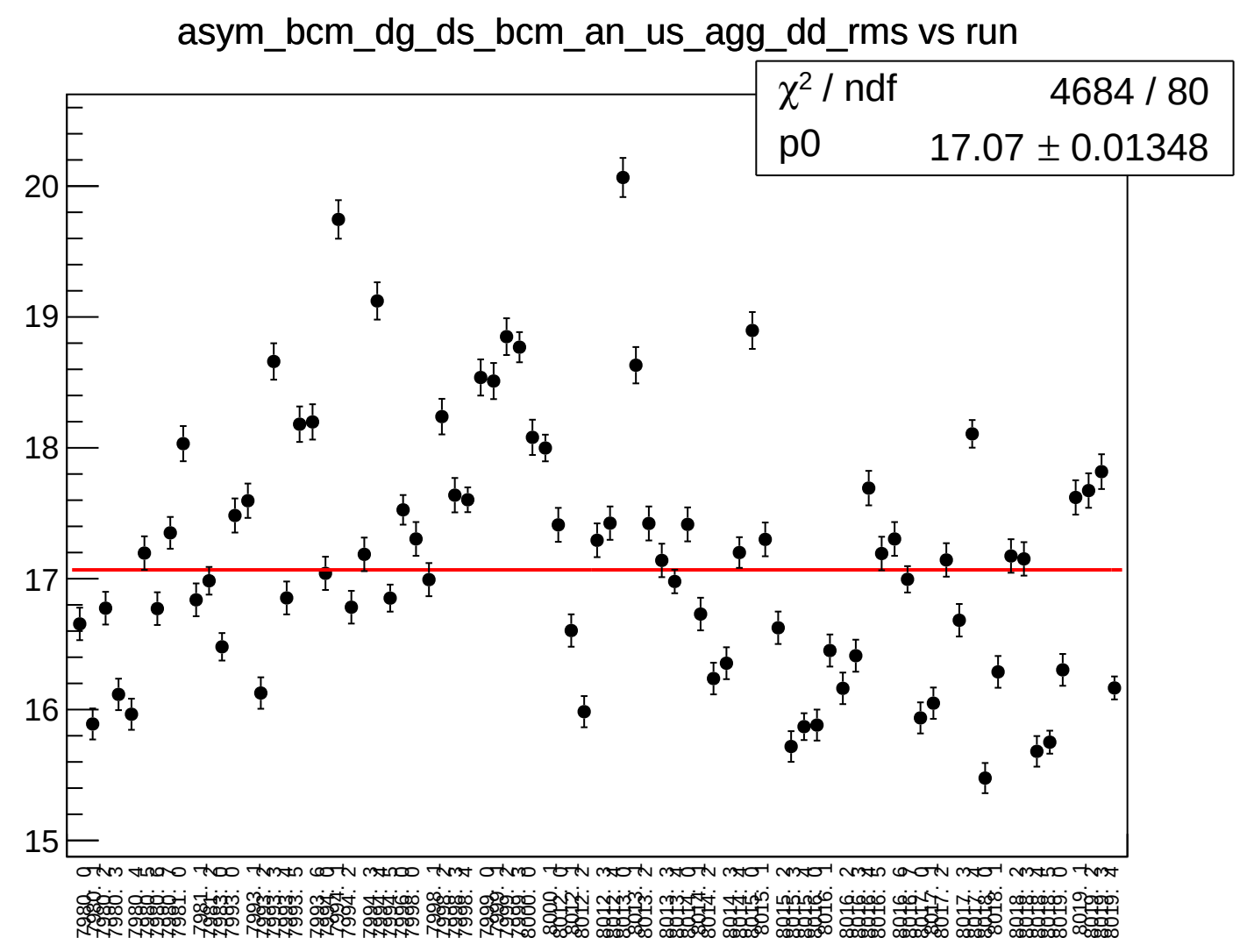

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1303 / 80
p0 22.33 ± 0.01762
24.5
24
23.5
23
22.5
22
21.5
21

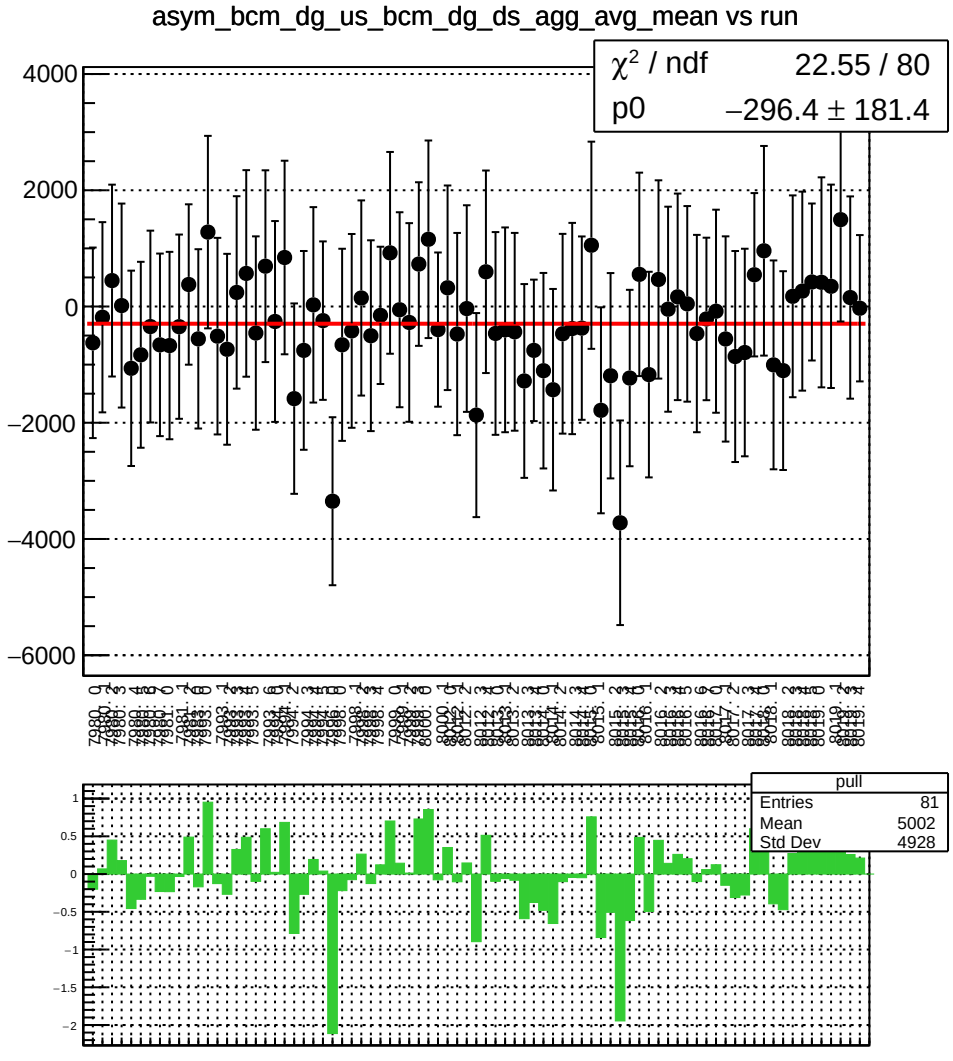

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 23.33 / 80
p0 −308.7 ± 181
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 797.2
Std Dev 742.2
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 81
Mean 0.002433
Std Dev 0.5367
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

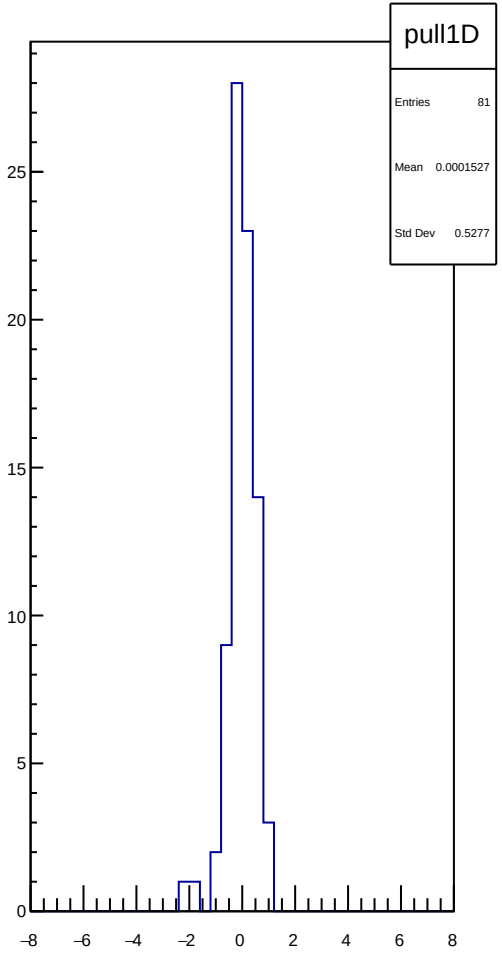

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1772 / 80
p0 162.2 ± 0.128
175
170
165
160
155
150

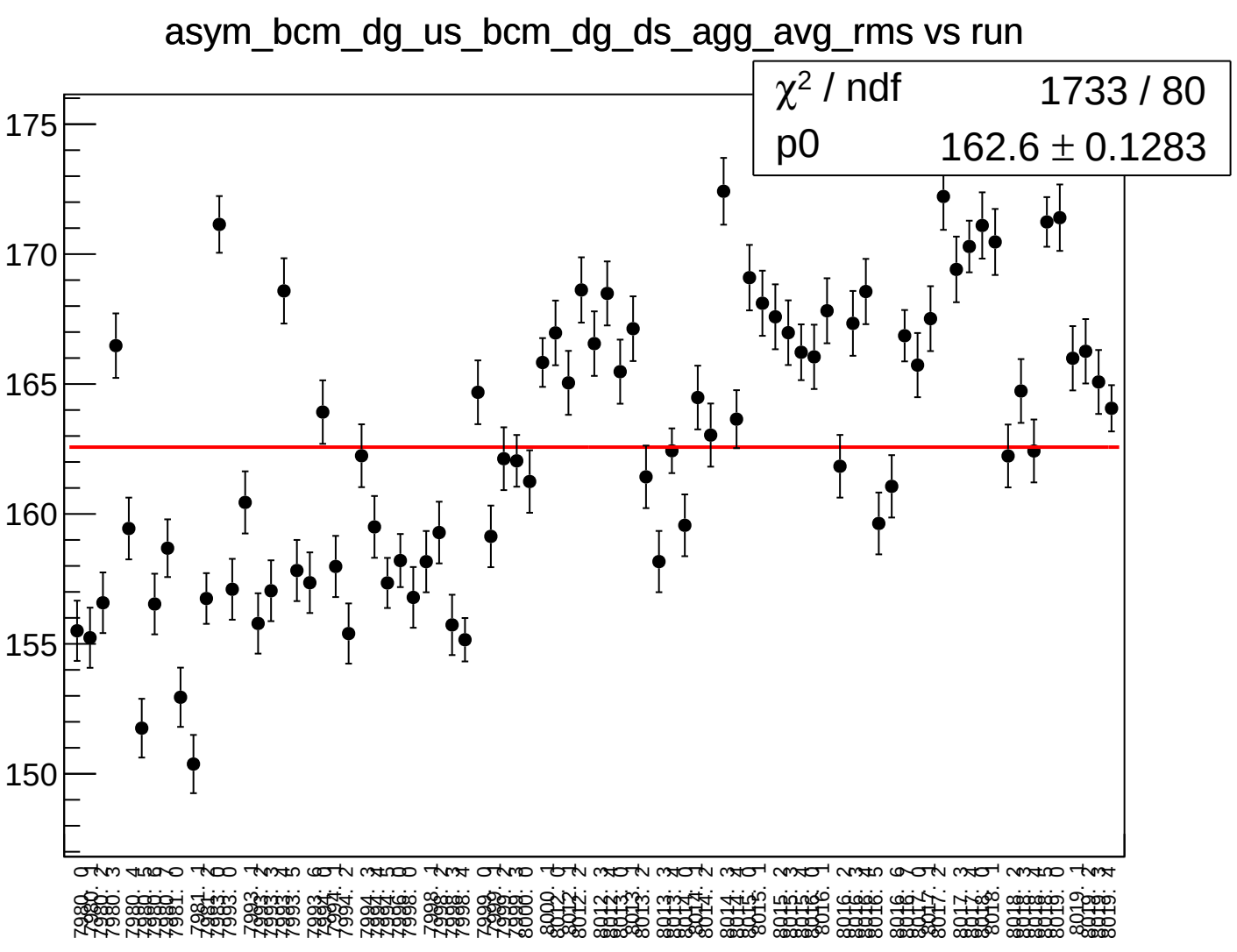

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 109.9 / 80
p0 9.053 ± 19.06
pull
Entries 81
Mean −1768
Std Dev 1802

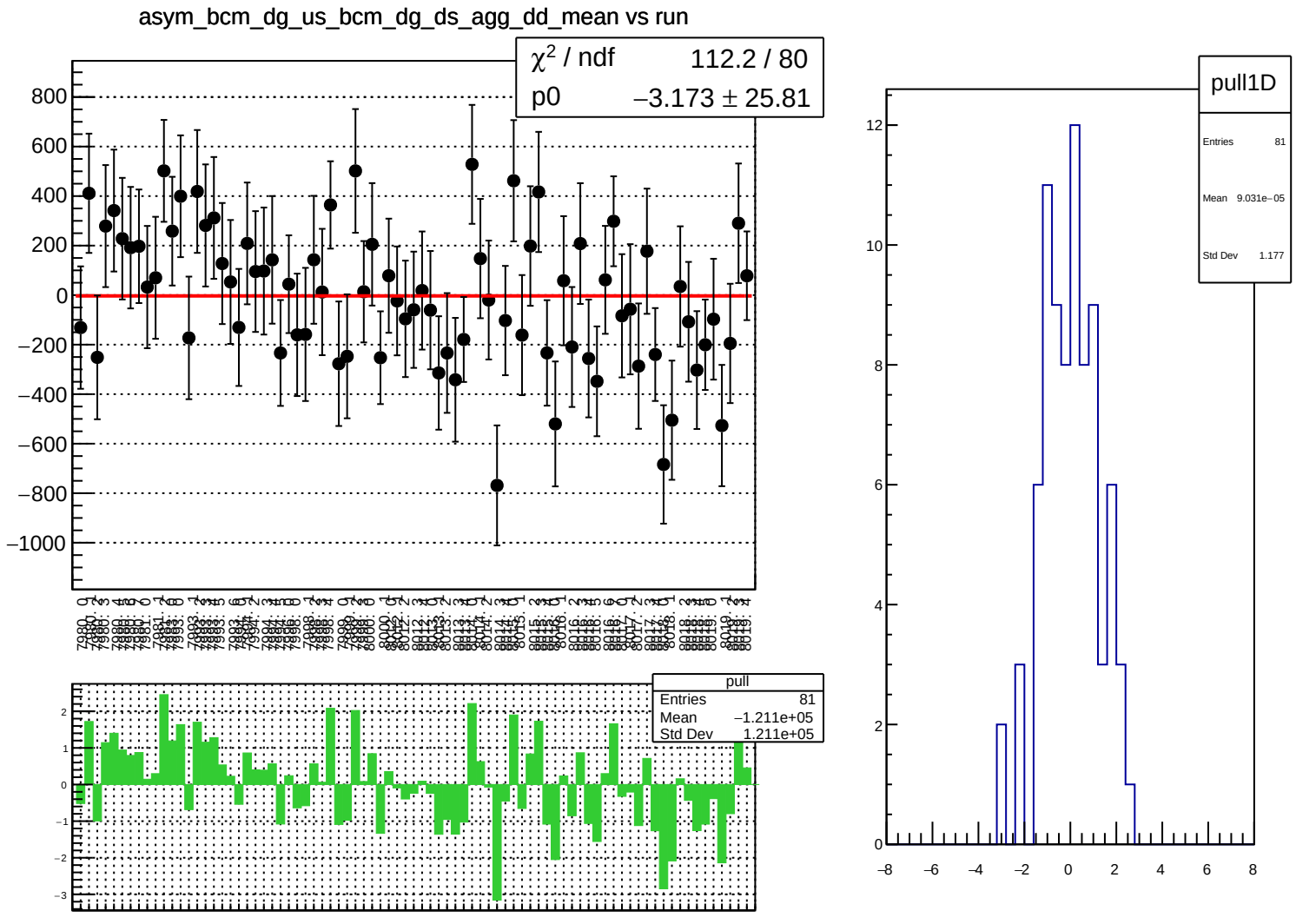

pull1D
Entries 81
Mean −0.00256
Std Dev 1.165

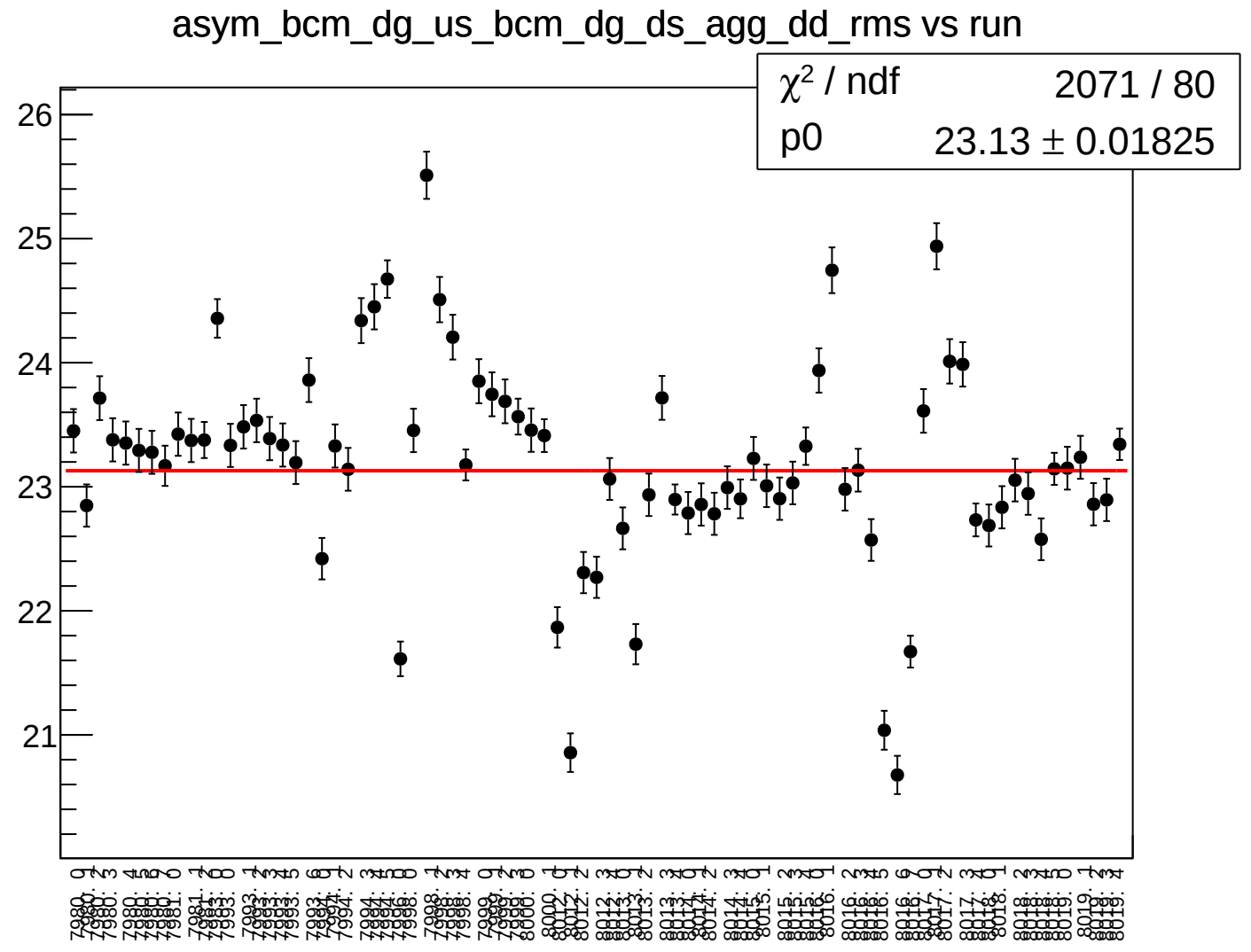

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 4684 / 80
p0 17.07 ± 0.01348
20
19
18
17
16
15

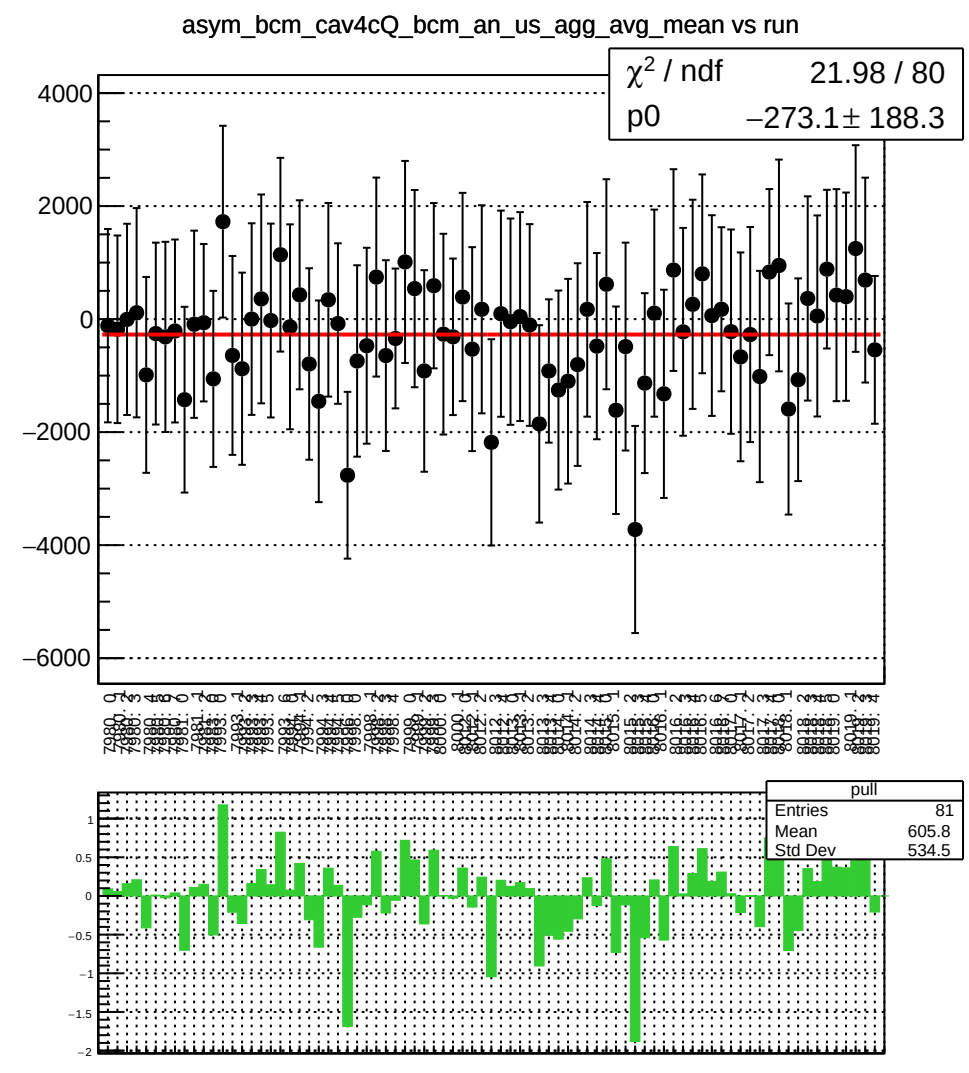

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 22.55 / 80
p0 −296.4 ± 181.4
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 5002
Std Dev 4928
1
0.5
0
−0.5
−1
−1.5
−2

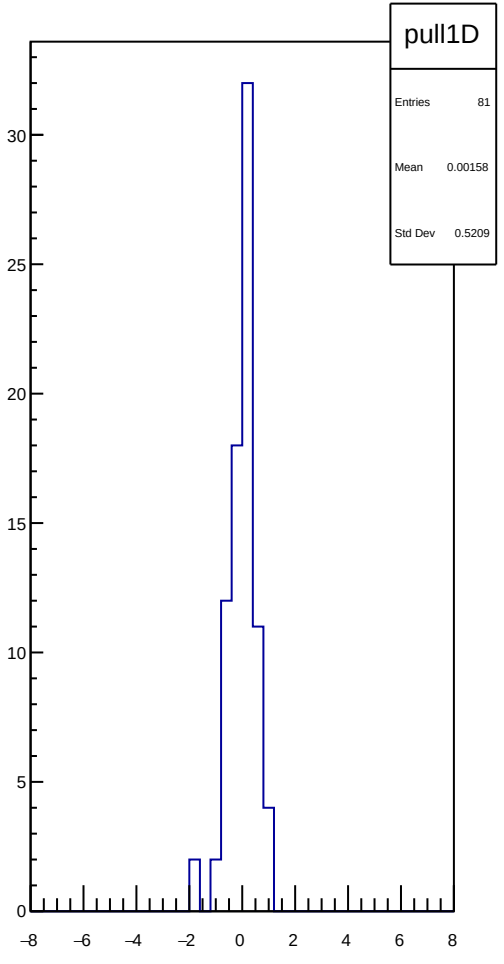

pull1D
Entries 81
Mean 0.0001527
Std Dev 0.5277
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

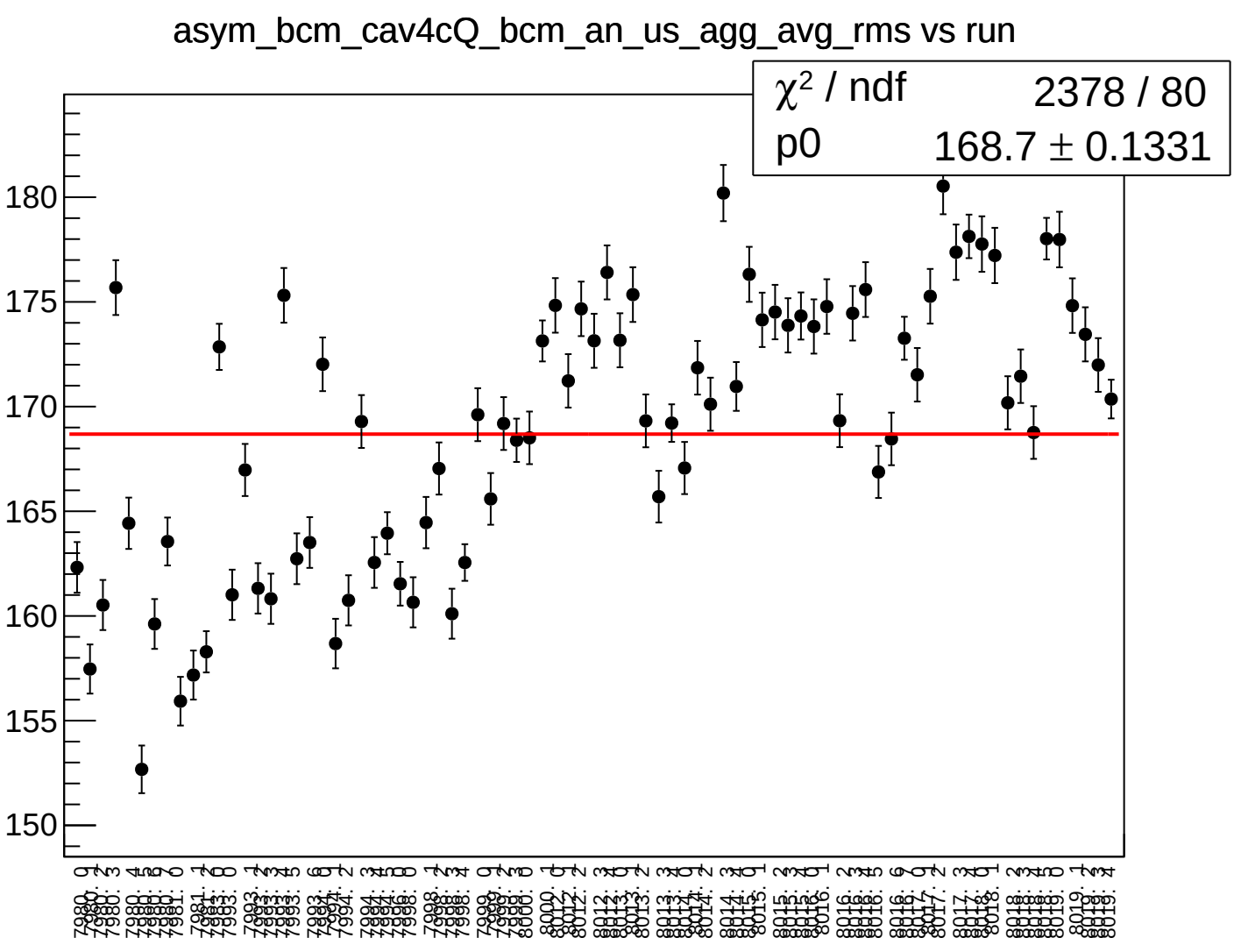

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1733 / 80
p0 162.6 ± 0.1283
175
170
165
160
155
150

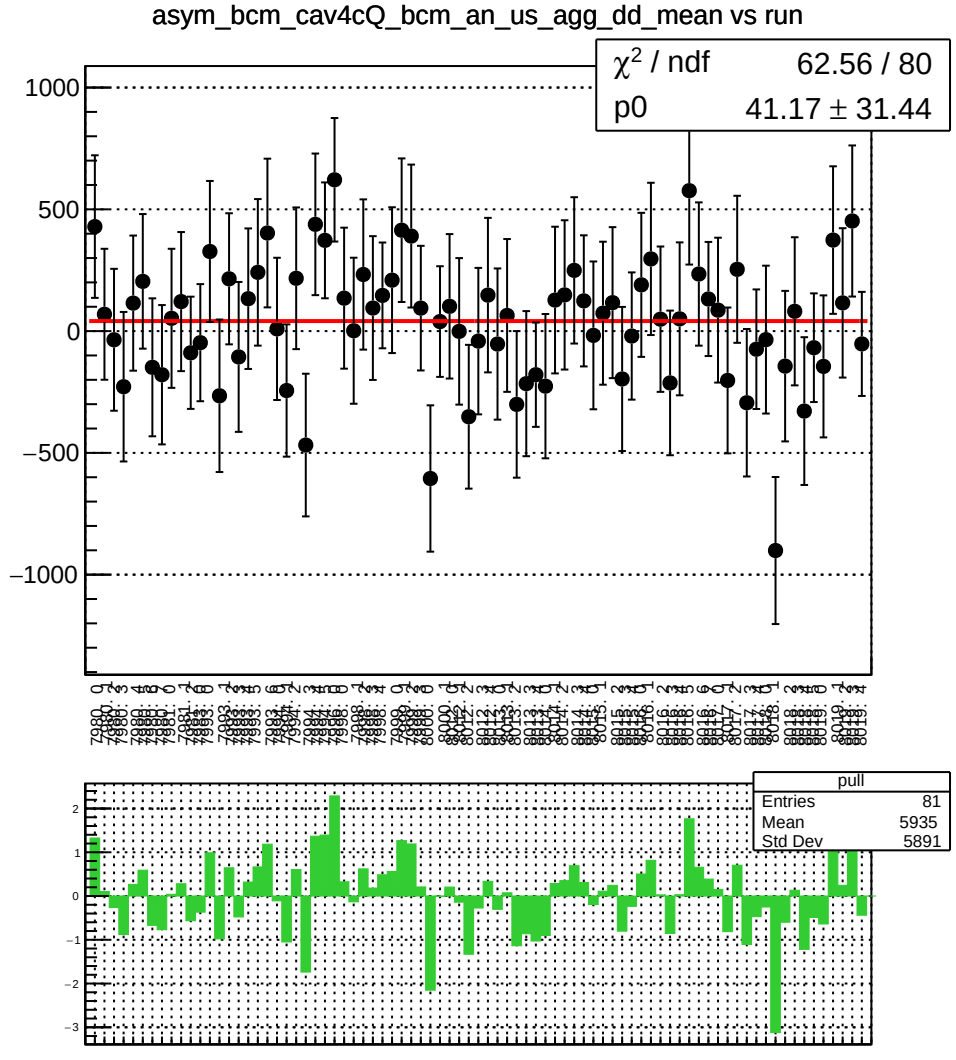

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 112.2 / 80
p0 −3.173 ± 25.81
pull
Entries 81
Mean −1.211e+05
Std Dev 1.211e+05
pull1D
Entries 81
Mean 9.031e−05
Std Dev 1.177

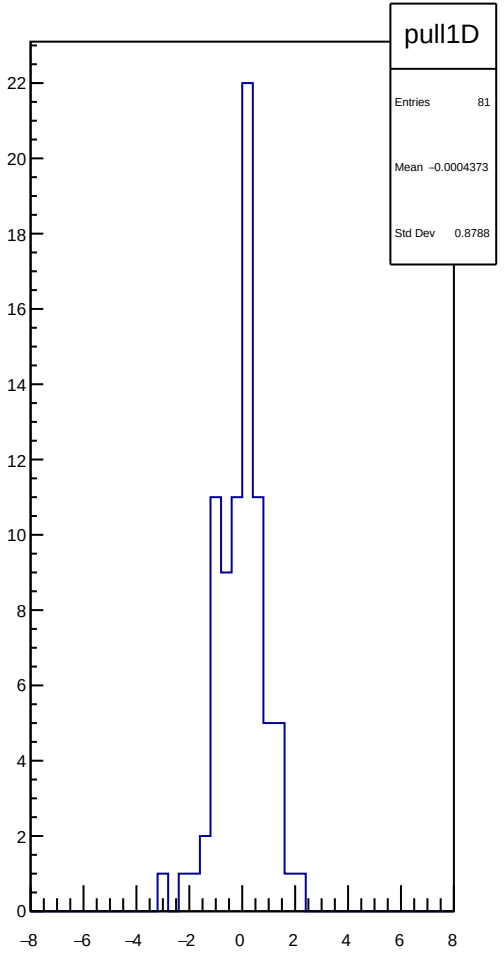

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2071 / 80
p0 23.13 ± 0.01825
26
25
24
23
22
21

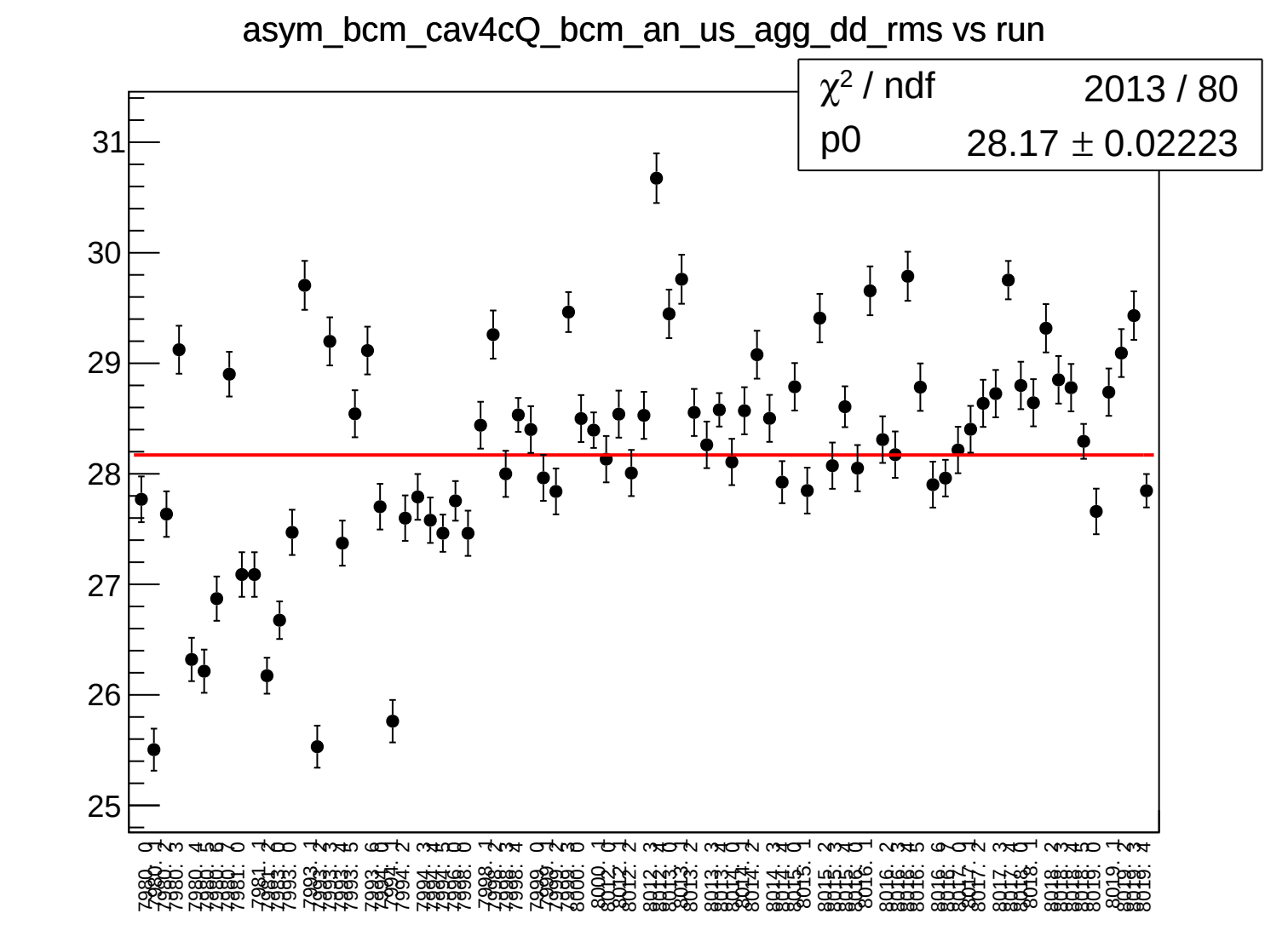

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 21.98 / 80
p0 −273.1± 188.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 605.8
Std Dev 534.5
1
0.5
0
−0.5
−1
−1.5
−2

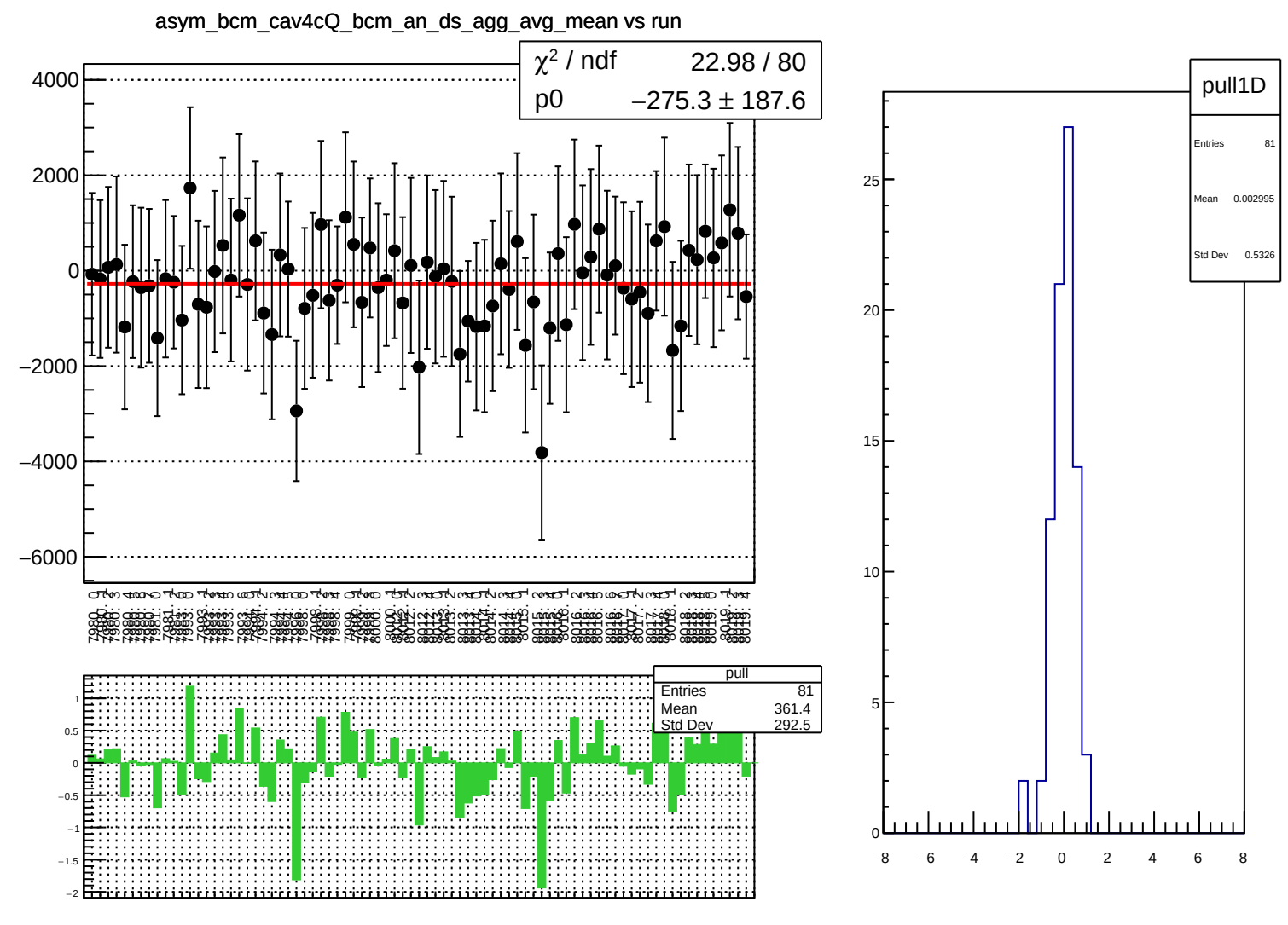

pull1D
Entries 81
Mean 0.00158
Std Dev 0.5209
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

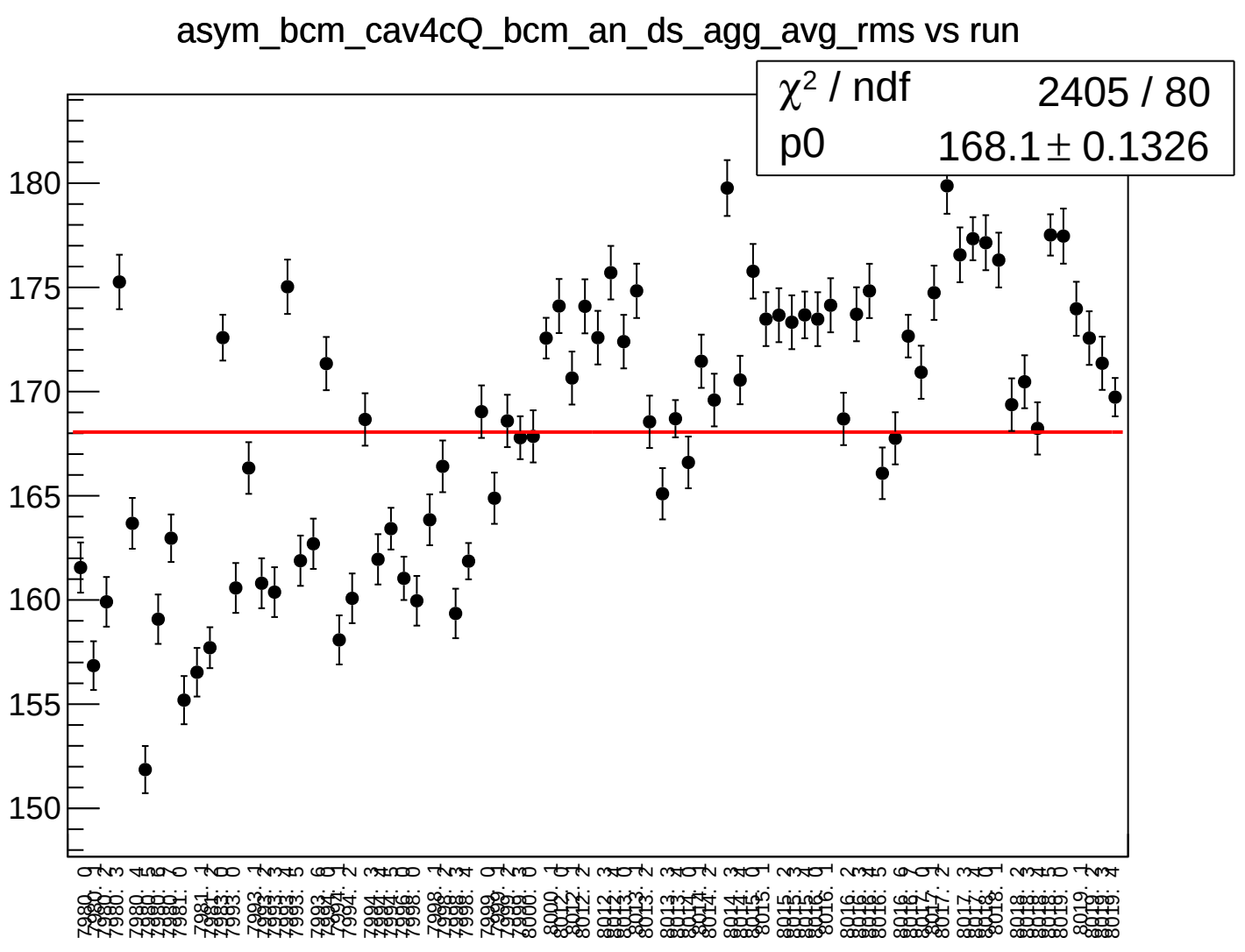

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 2378 / 80
p0 168.7 ± 0.1331
180
175
170
165
160
155
150

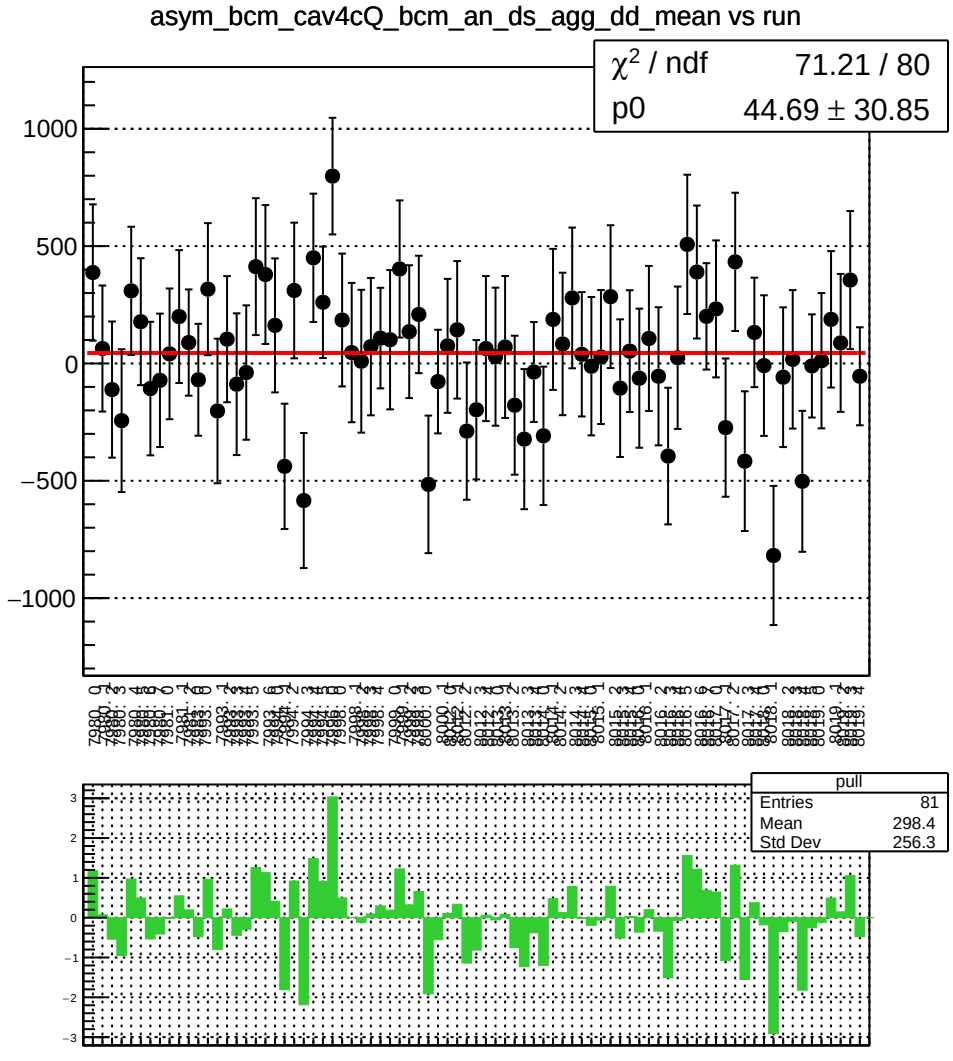

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 62.56 / 80
p0 41.17 ± 31.44
1000
500
0
−500
−1000
pull
Entries 81
Mean 5935
Std Dev 5891
2
1
0
−1
−2
−3

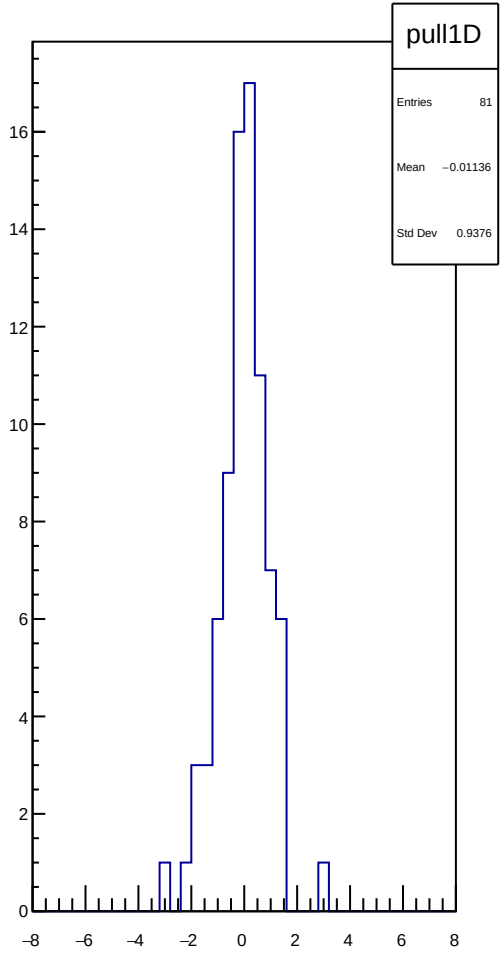

pull1D
Entries 81
Mean −0.0004373
Std Dev 0.8788
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

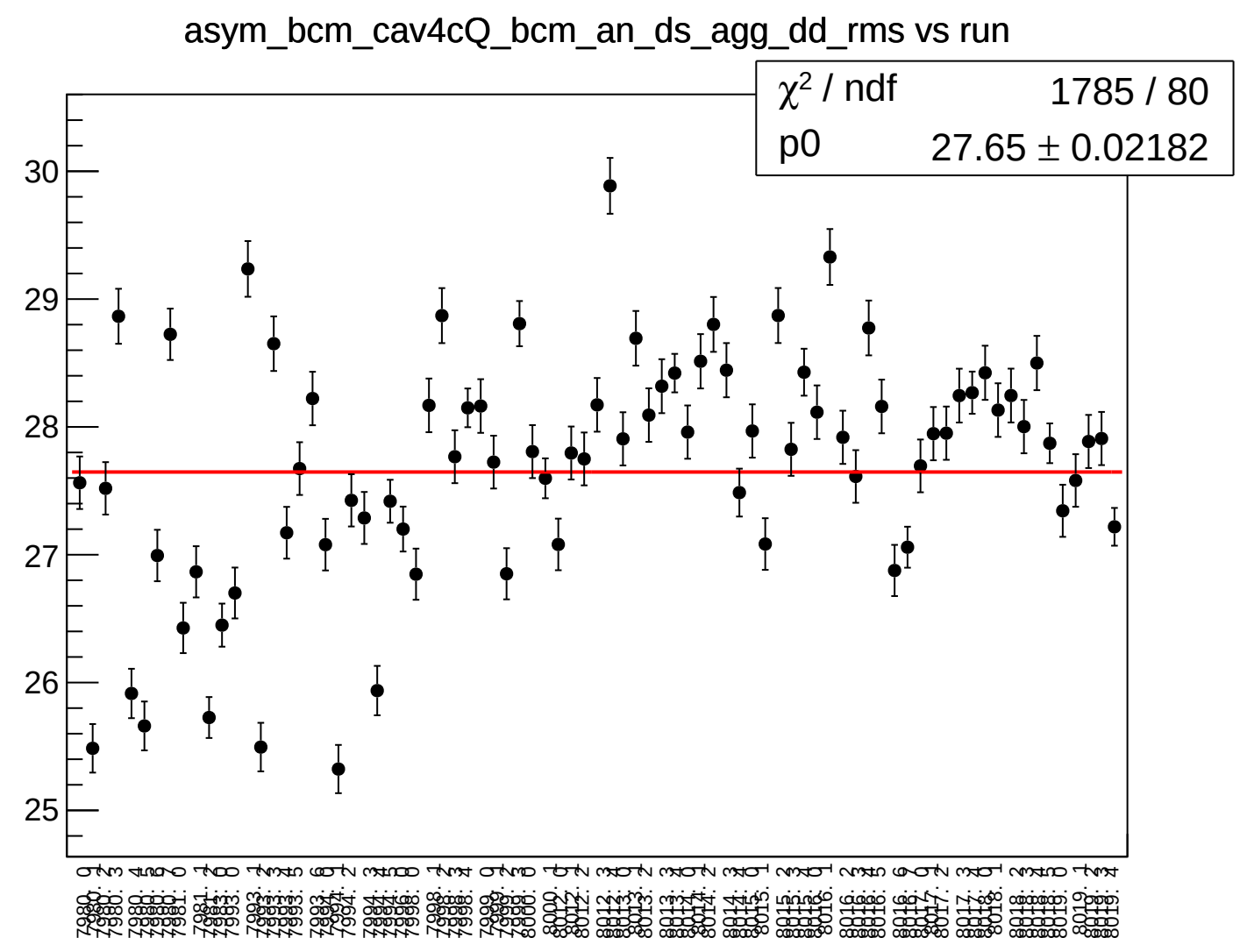

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2013 / 80
p0 28.17 ± 0.02223
31
30
29
28
27
26
25

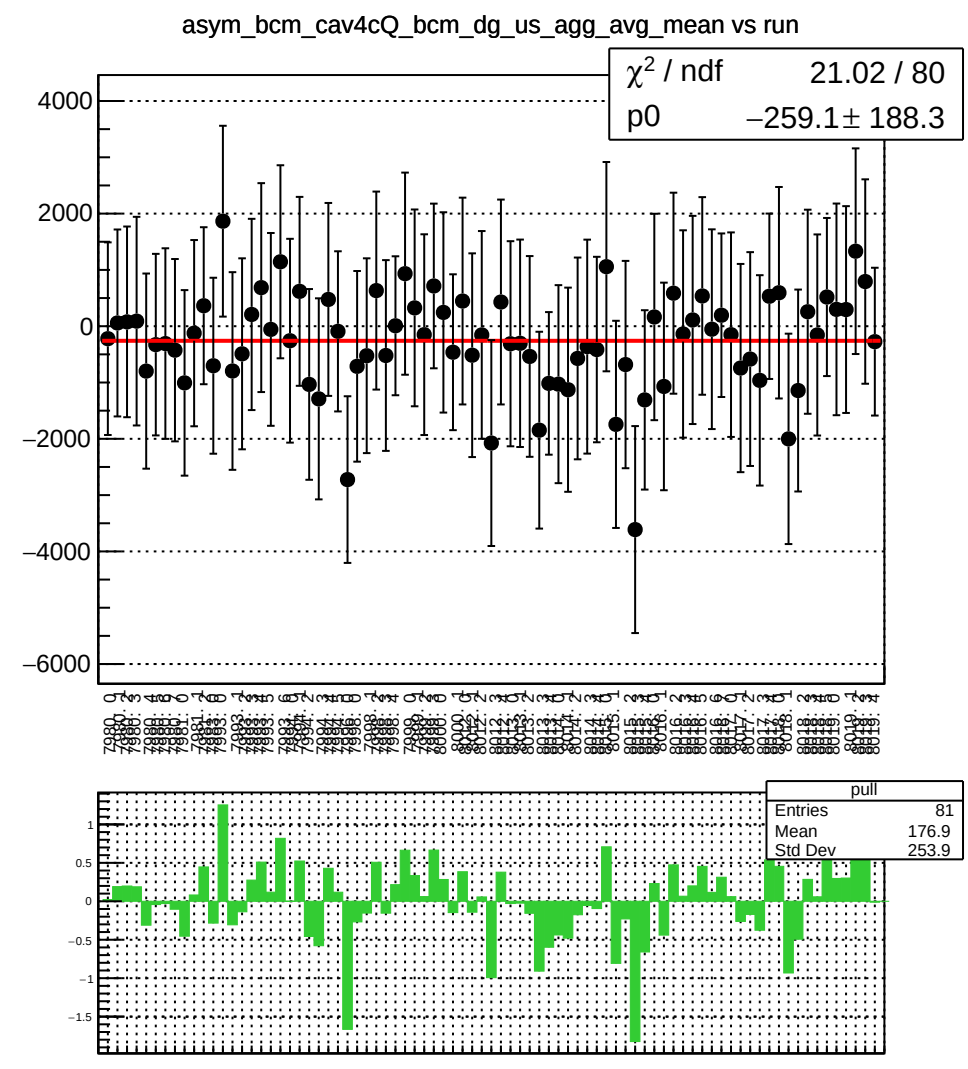

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 22.98 / 80
p0 −275.3 ± 187.6
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 361.4
Std Dev 292.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 81
Mean 0.002995
Std Dev 0.5326
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

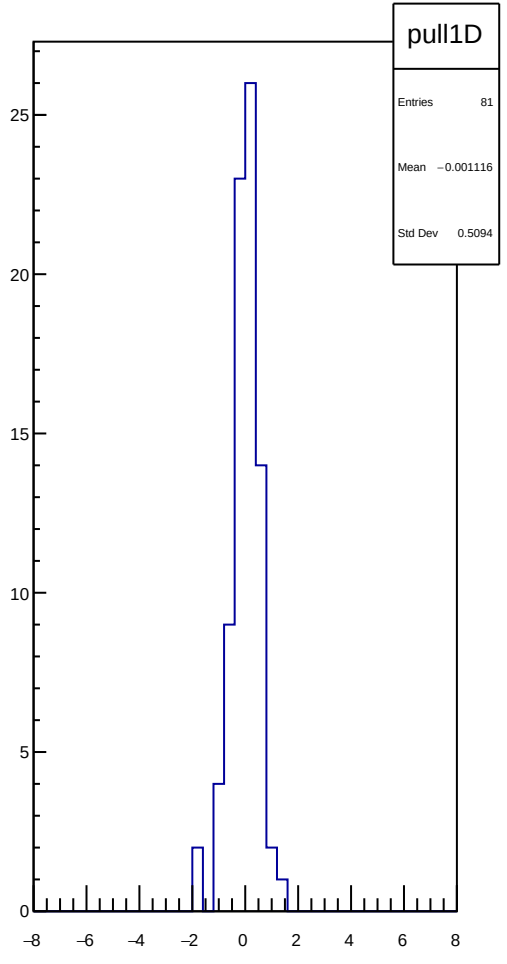

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 2405 / 80
p0 168.1 ± 0.1326
180
175
170
165
160
155
150

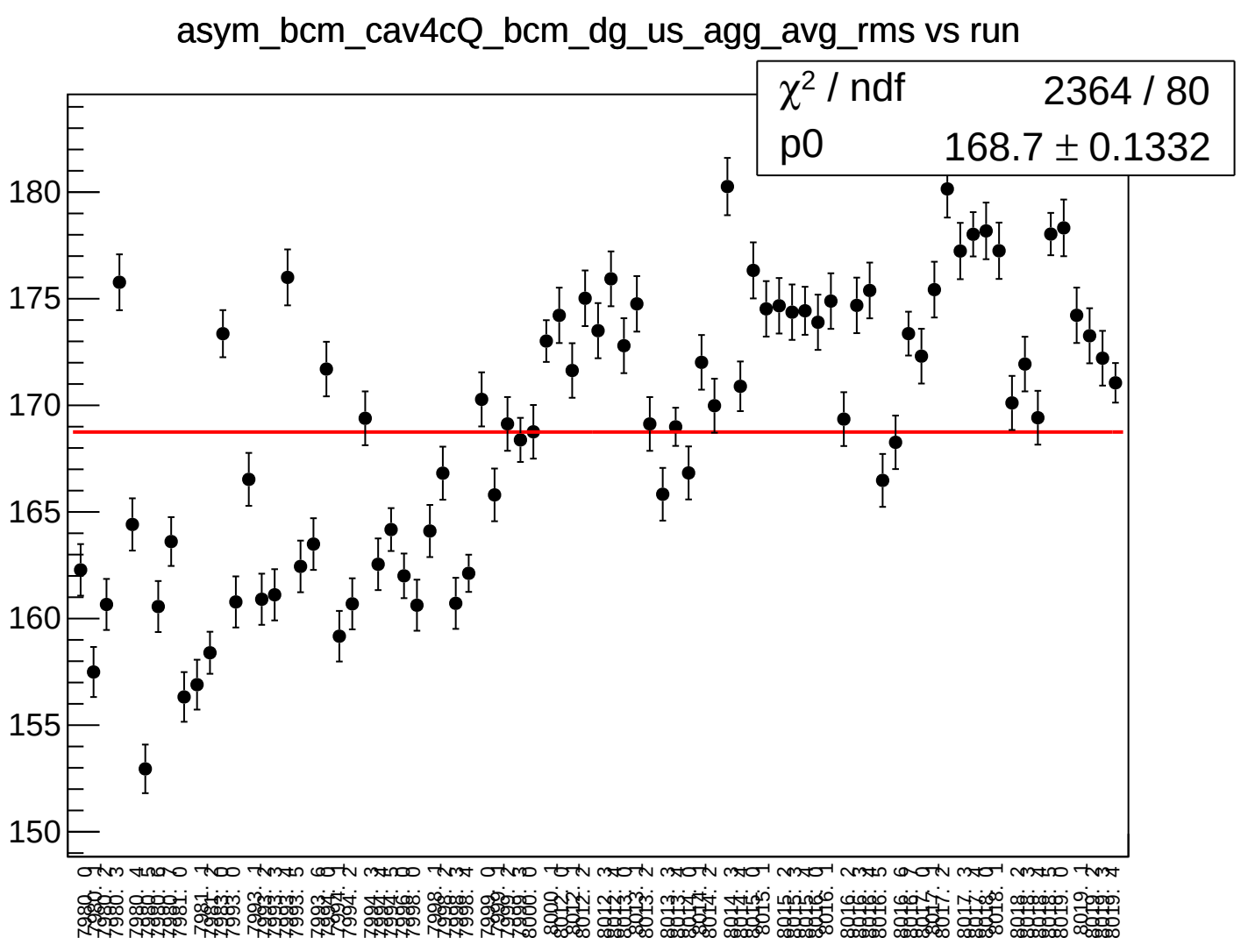

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 71.21 / 80
p0 44.69 ± 30.85
1000
500
0
−500
−1000
pull
Entries 81
Mean 298.4
Std Dev 256.3
3
2
1
0
−1
−2
−3

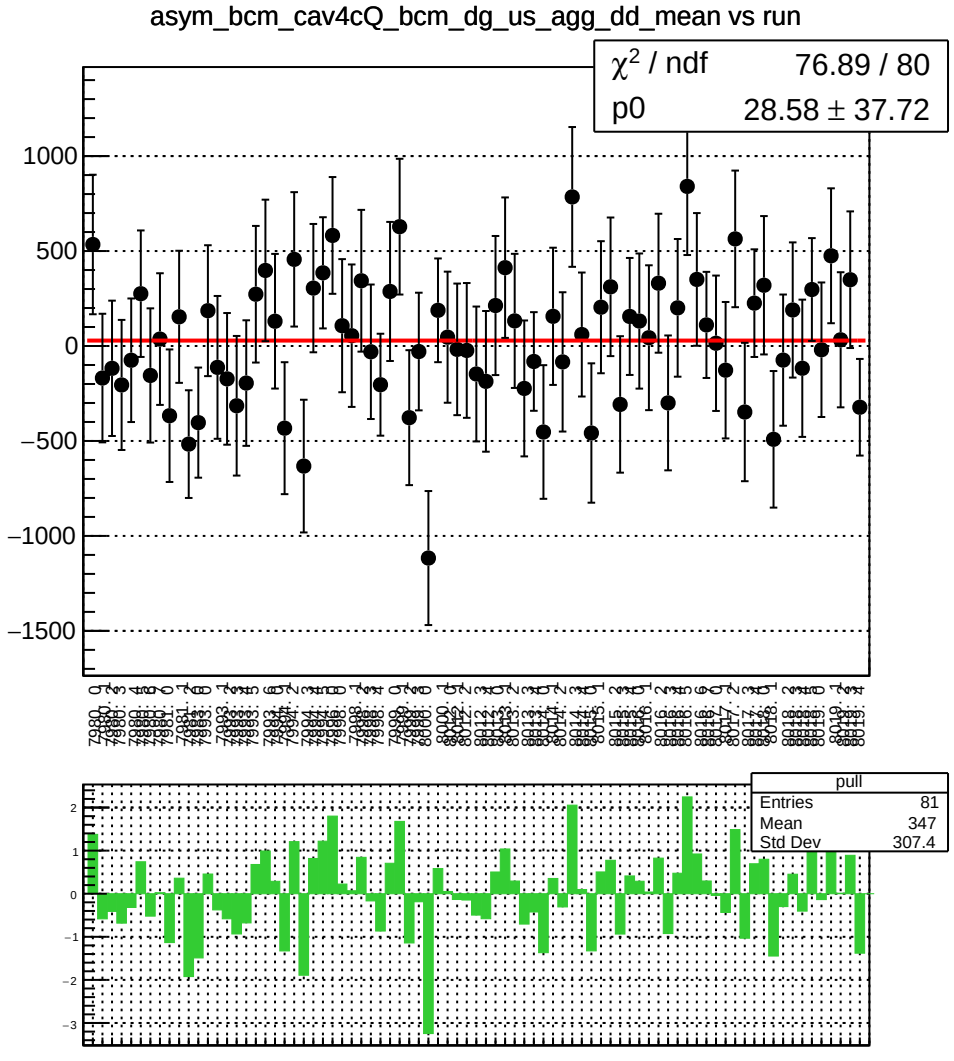

pull1D
Entries 81
Mean −0.01136
Std Dev 0.9376
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

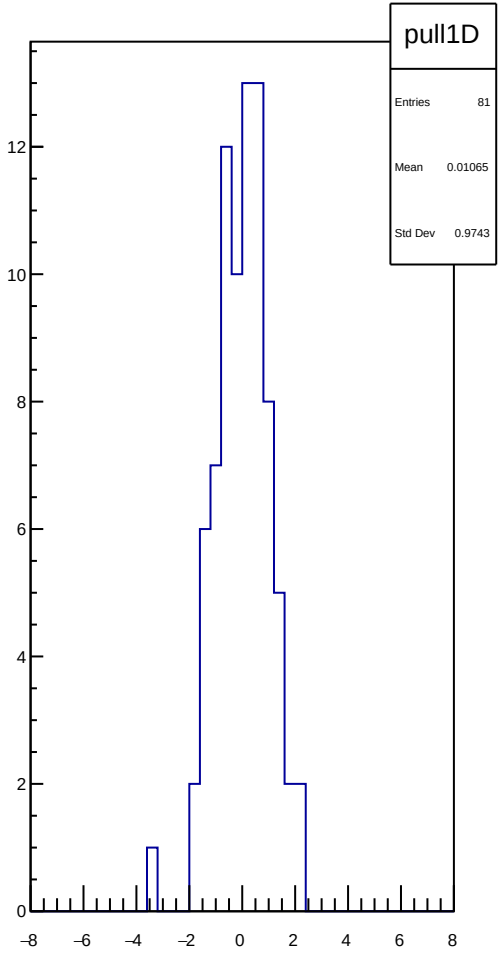

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1785 / 80
p0 27.65 ± 0.02182
30
29
28
27
26
25

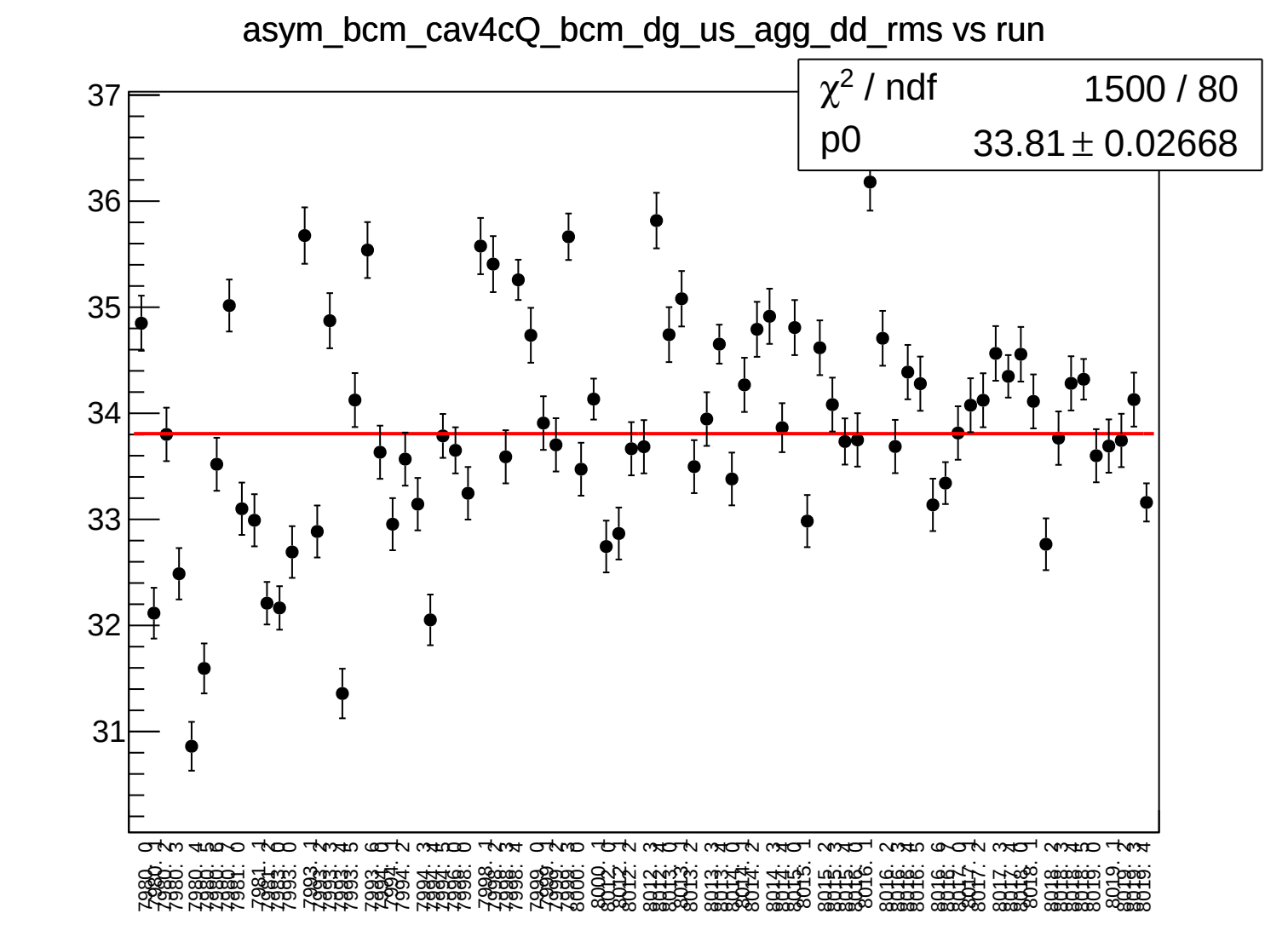

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 21.02 / 80
p0 −259.1± 188.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 176.9
Std Dev 253.9
1
0.5
0
−0.5
−1
−1.5

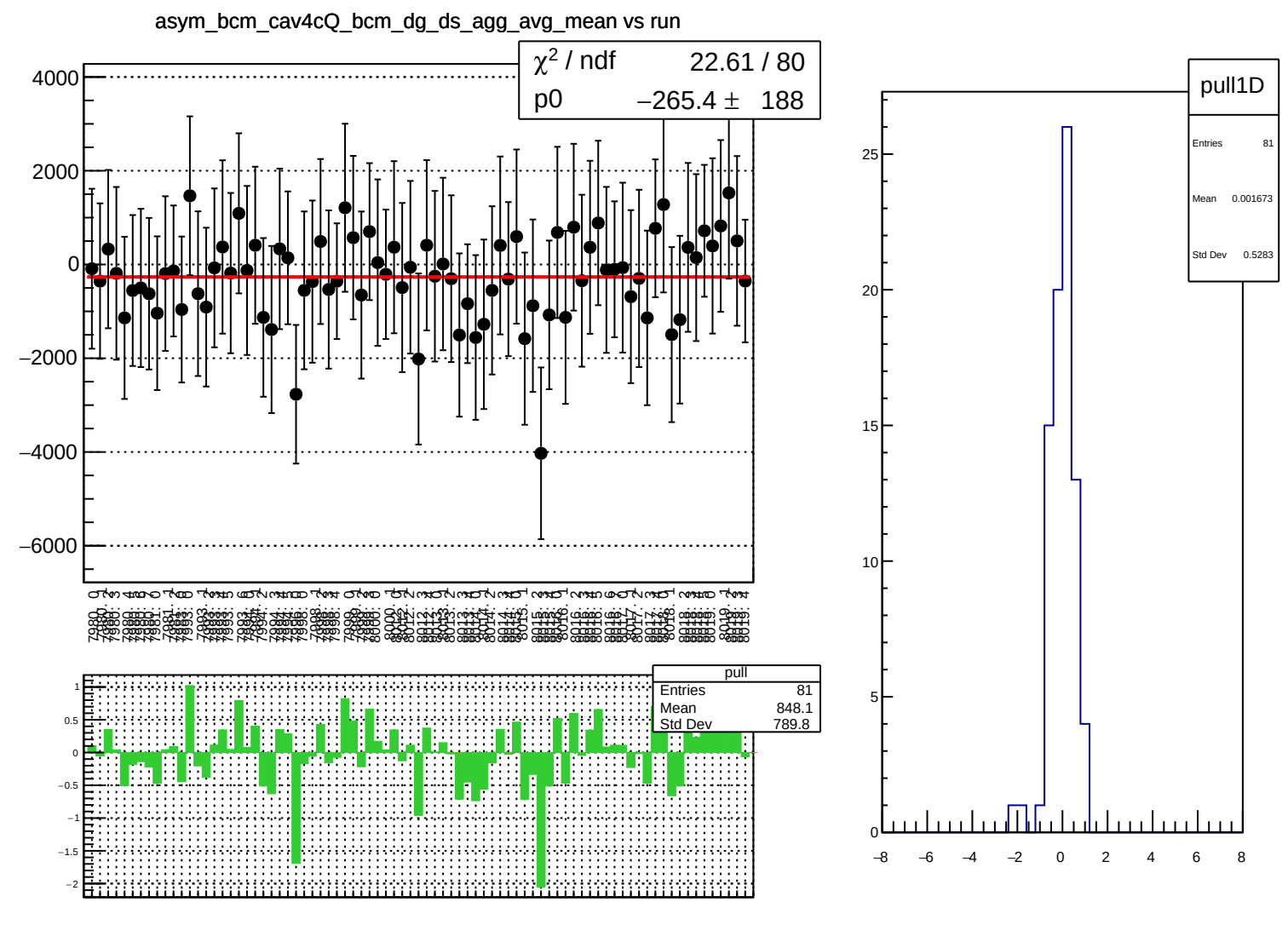

pull1D
Entries 81
Mean −0.001116
Std Dev 0.5094
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

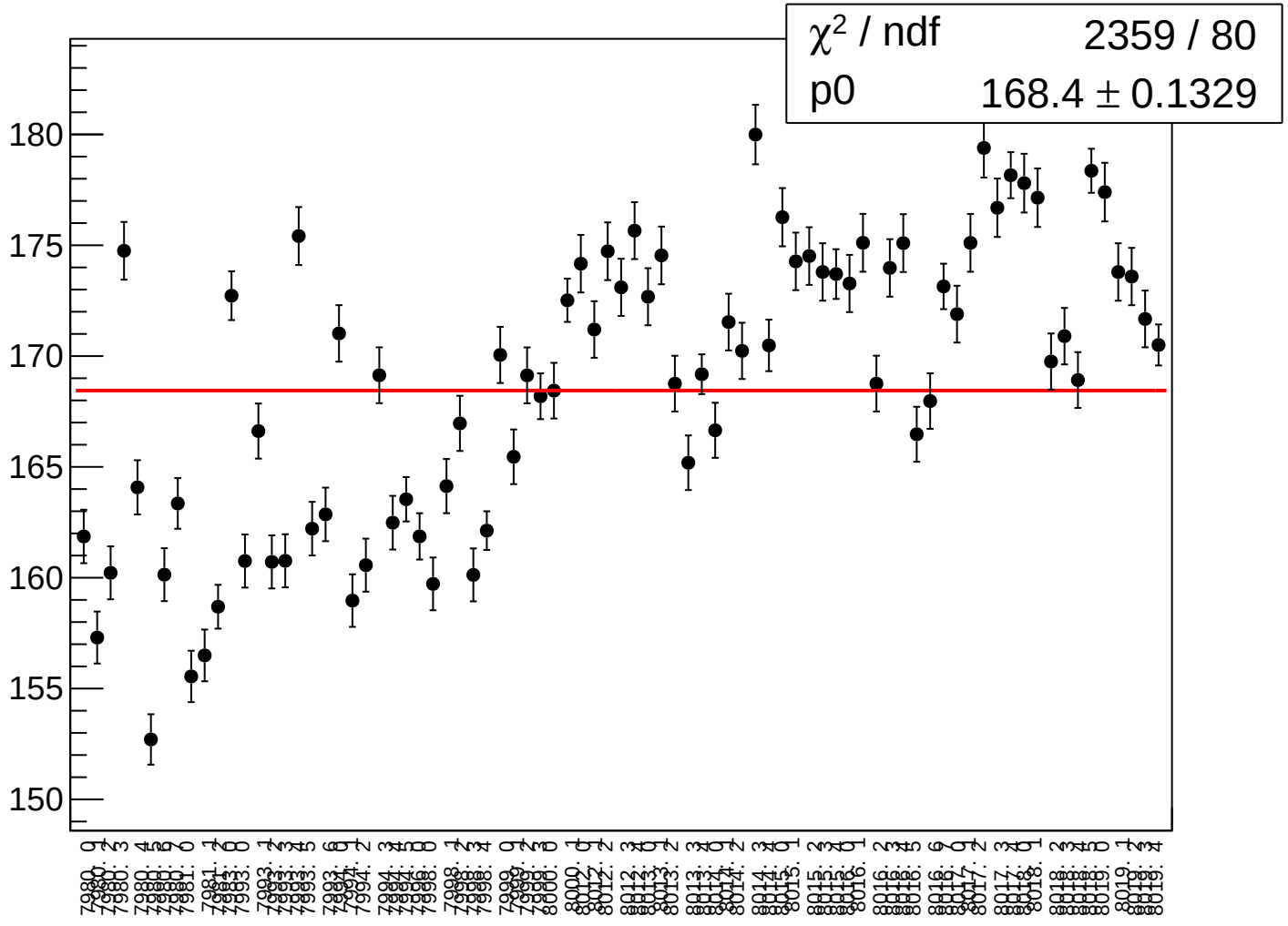

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 2364 / 80
p0 168.7 ± 0.1332
180
175
170
165
160
155
150

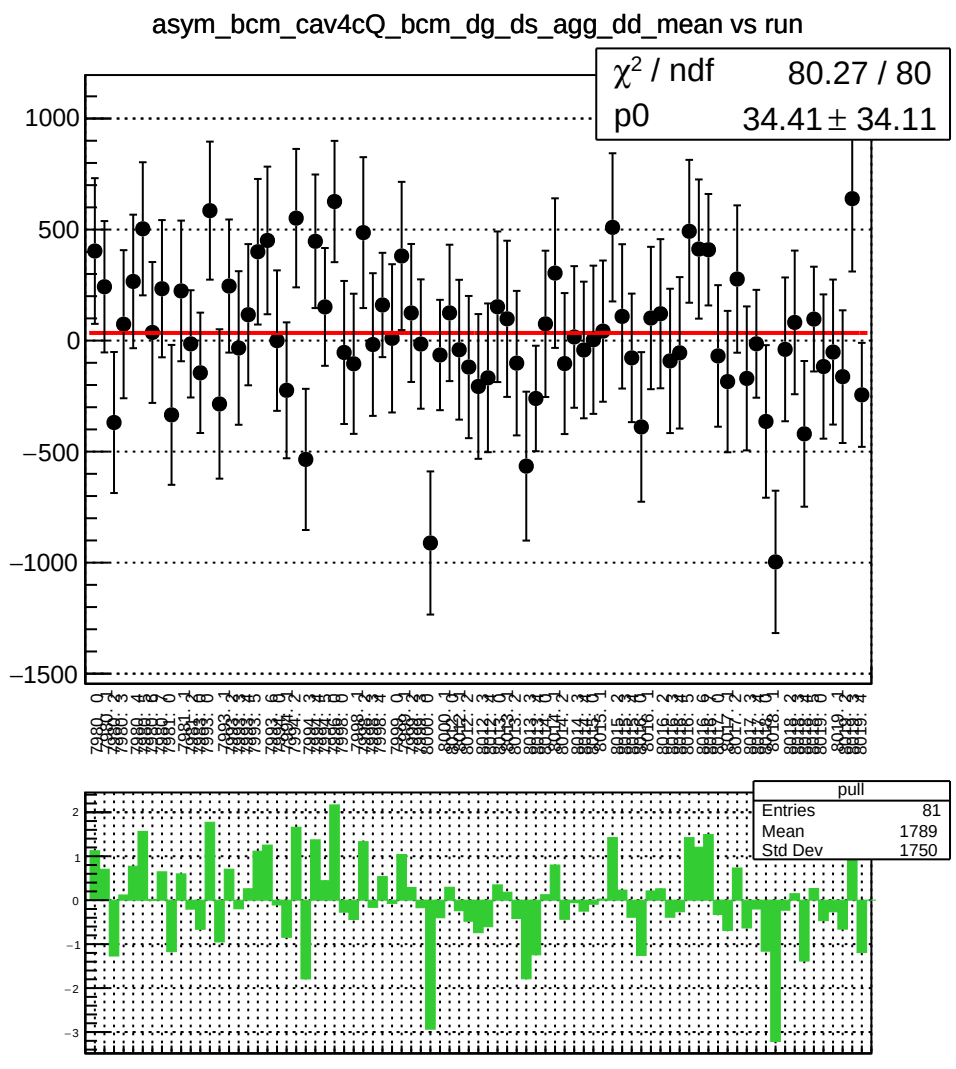

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 76.89 / 80
p0 28.58 ± 37.72
pull
Entries 81
Mean 347
Std Dev 307.4

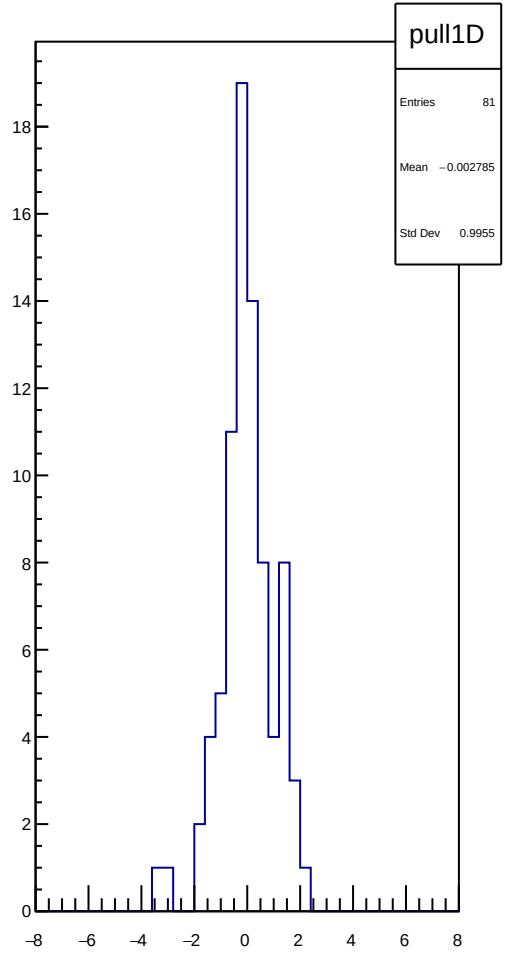

pull1D
Entries 81
Mean 0.01065
Std Dev 0.9743

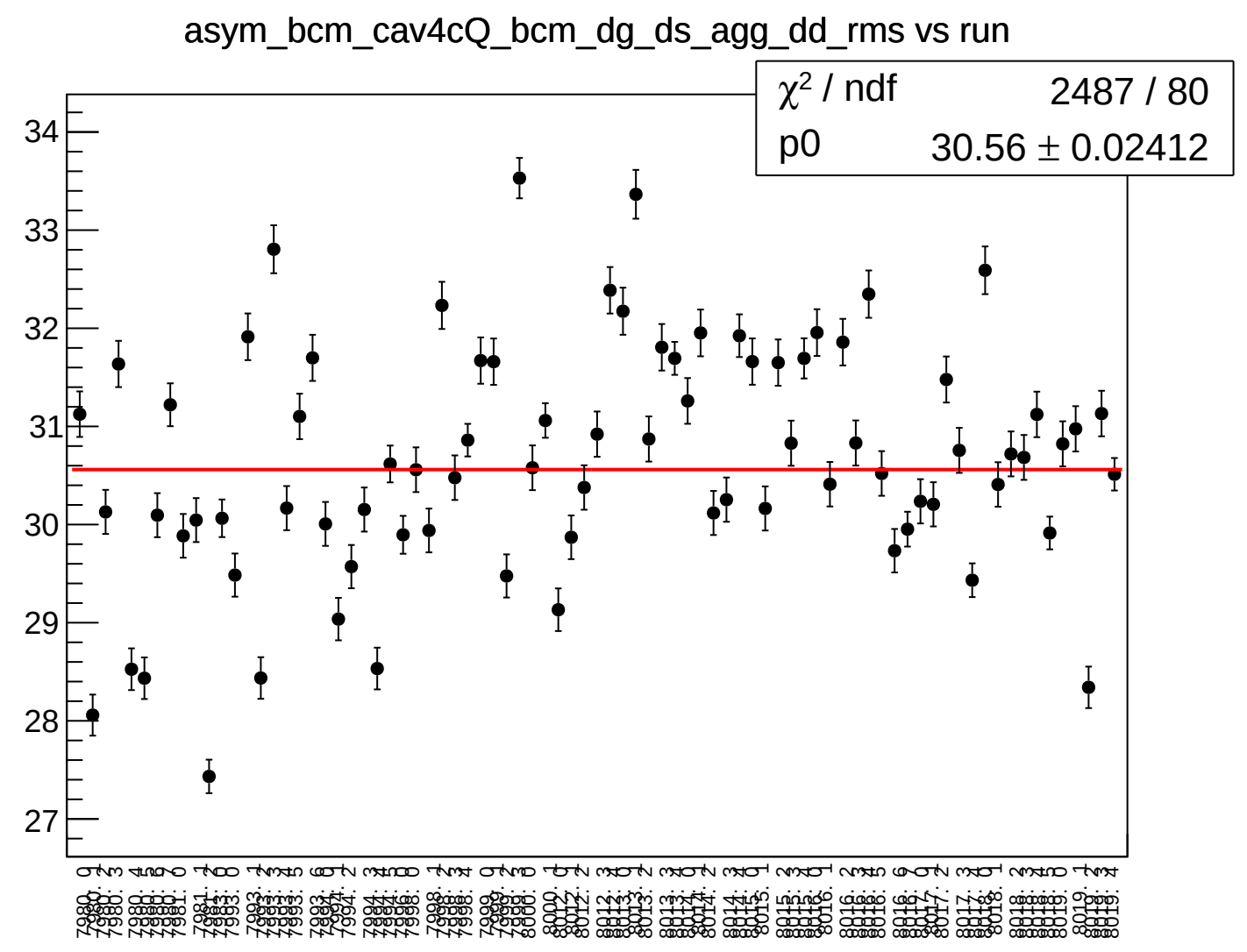

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1500 / 80
p0 33.81 ± 0.02668
37
36
35
34
33
32
31

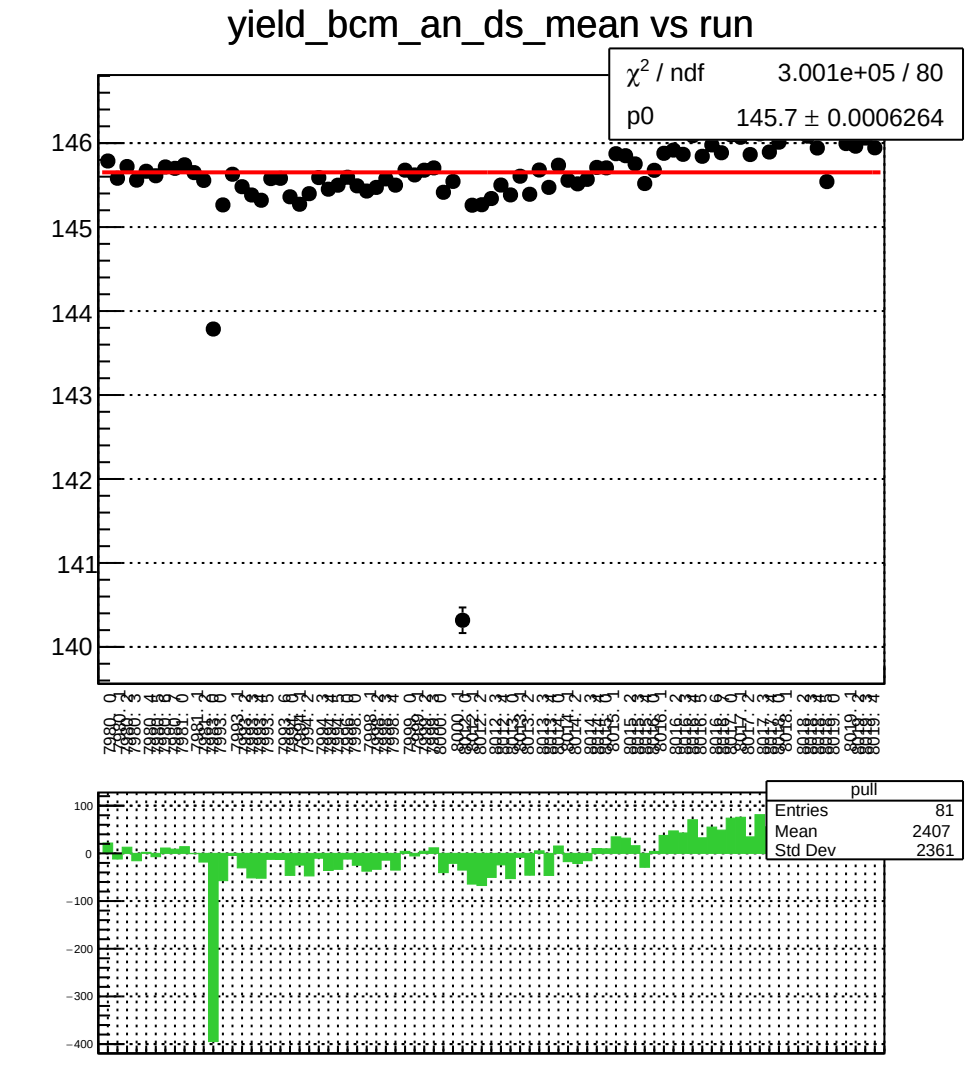

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 22.61 / 80
p0 −265.4 ± 188
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 848.1
Std Dev 789.8
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 81
Mean 0.001673
Std Dev 0.5283
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

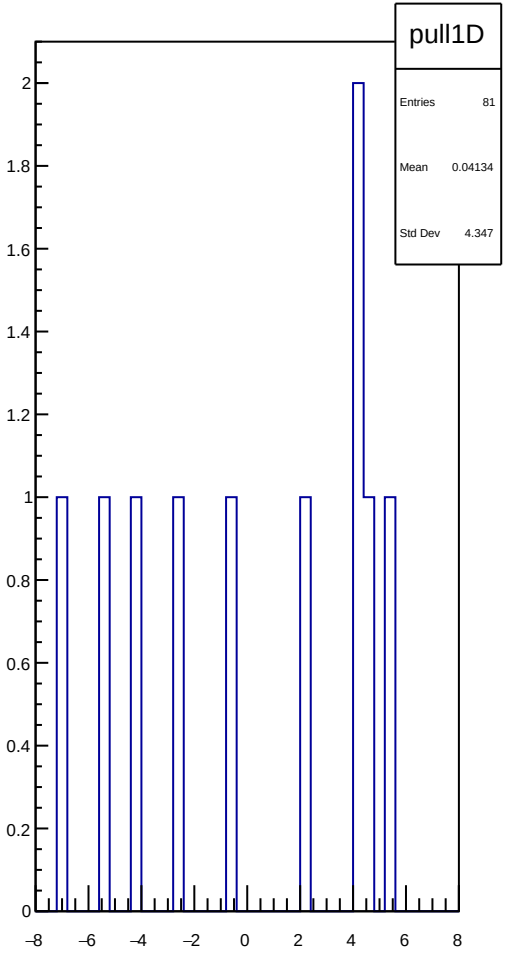

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 2359 / 80
p0 168.4 ± 0.1329
180
175
170
165
160
155
150

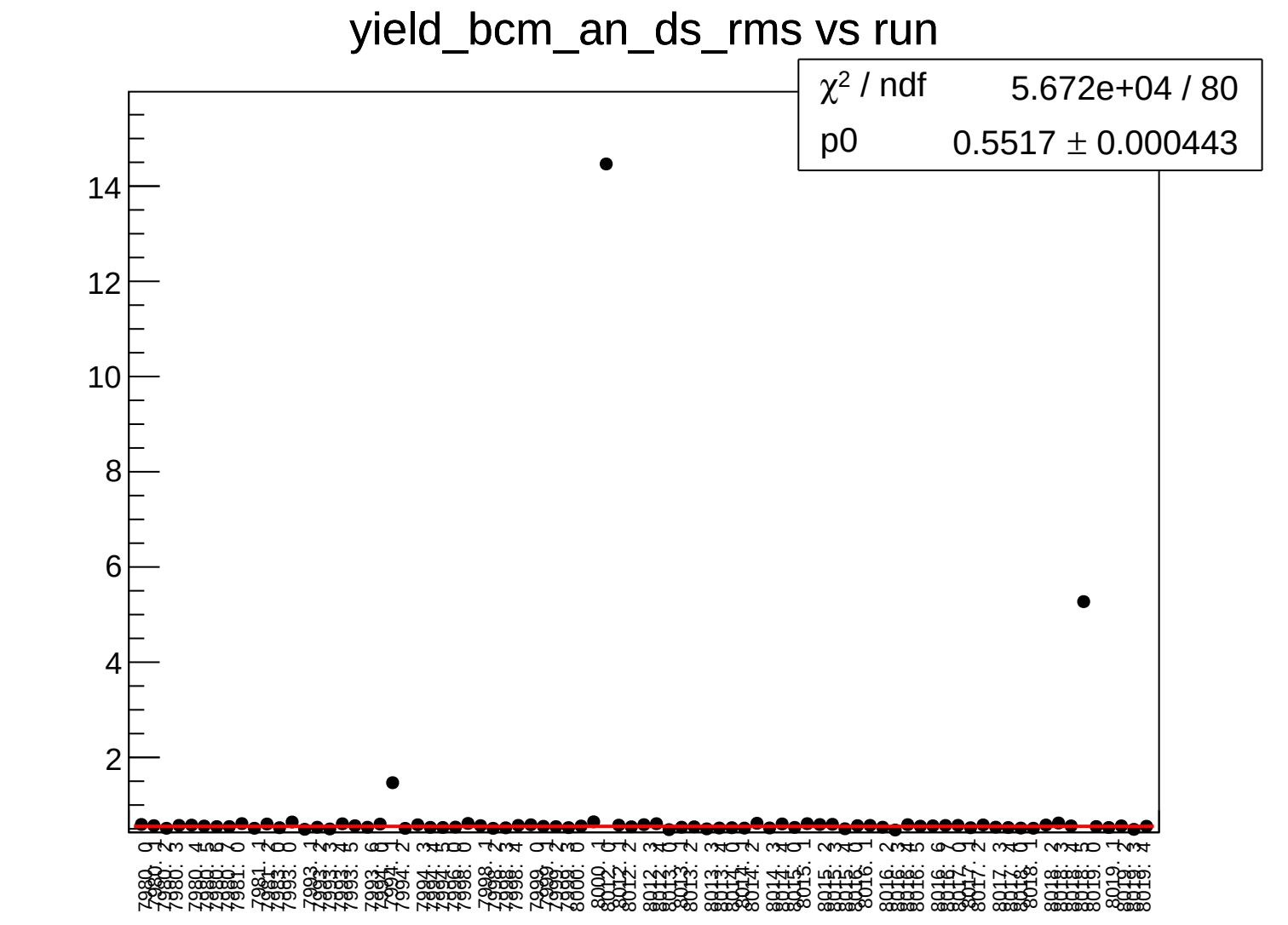

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 80.27 / 80
p0 34.41 ± 34.11
1000
500
0
−500
−1000
−1500
pull
Entries 81
Mean 1789
Std Dev 1750
2
1
0
−1
−2
−3

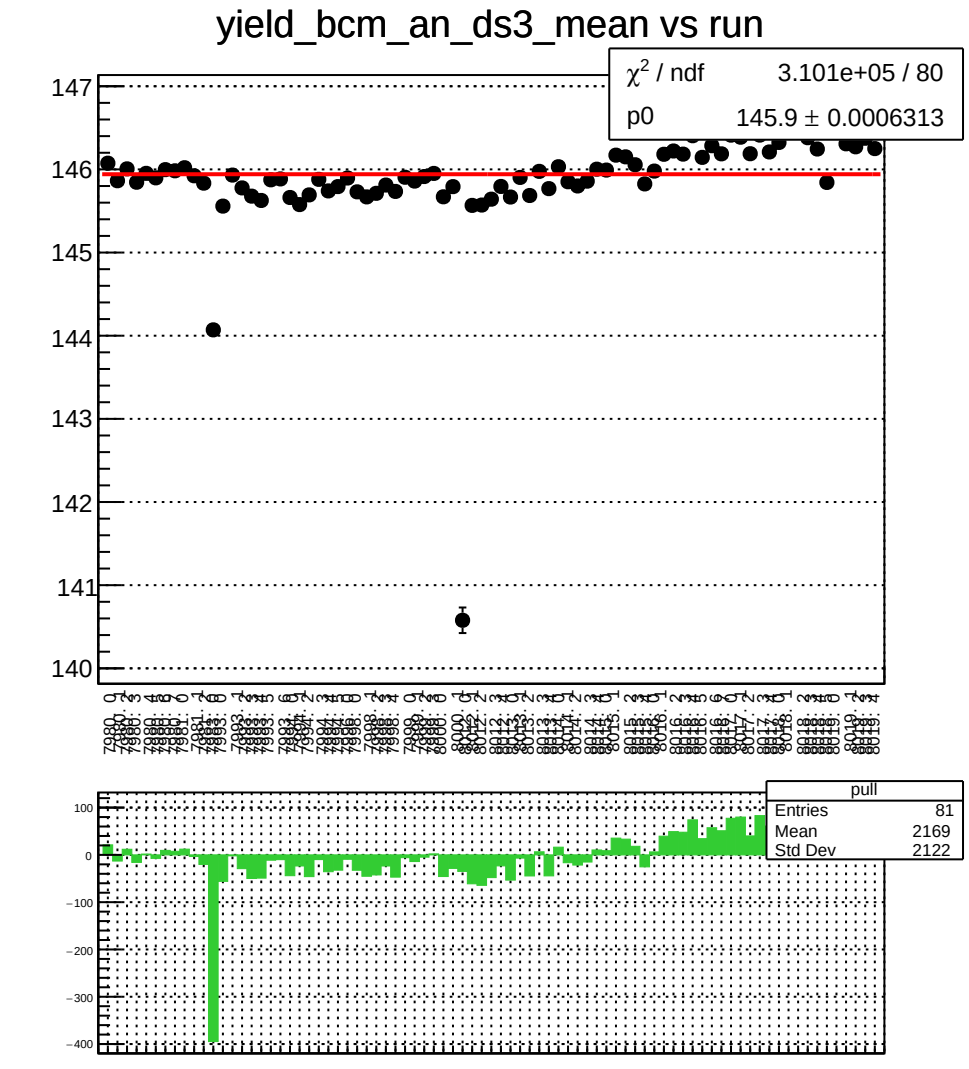

pull1D
Entries 81
Mean −0.002785
Std Dev 0.9955
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

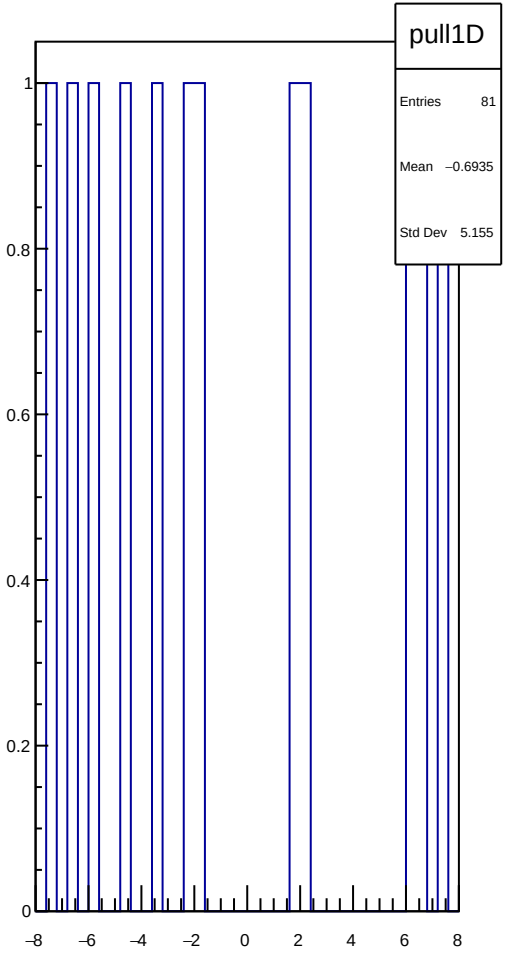

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2487 / 80
p0 30.56 ± 0.02412
34
33
32
31
30
29
28
27

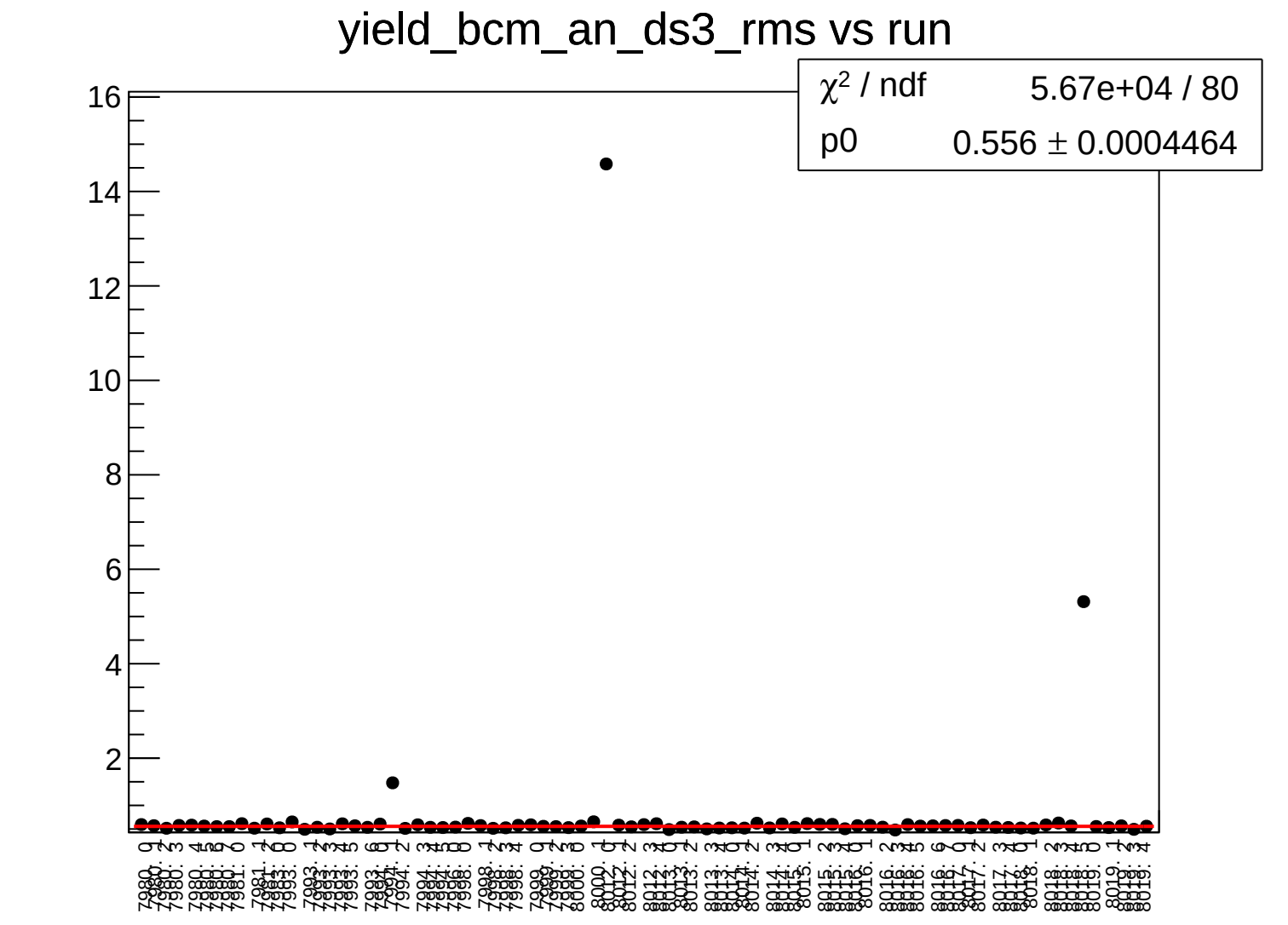

yield_bcm_an_ds_mean vs run
χ² / ndf 3.001e+05 / 80
p0 145.7 ± 0.0006264
146
145
144
143
142
141
140
pull
Entries 81
Mean 2407
Std Dev 2361
100
0
−100
−200
−300
−400

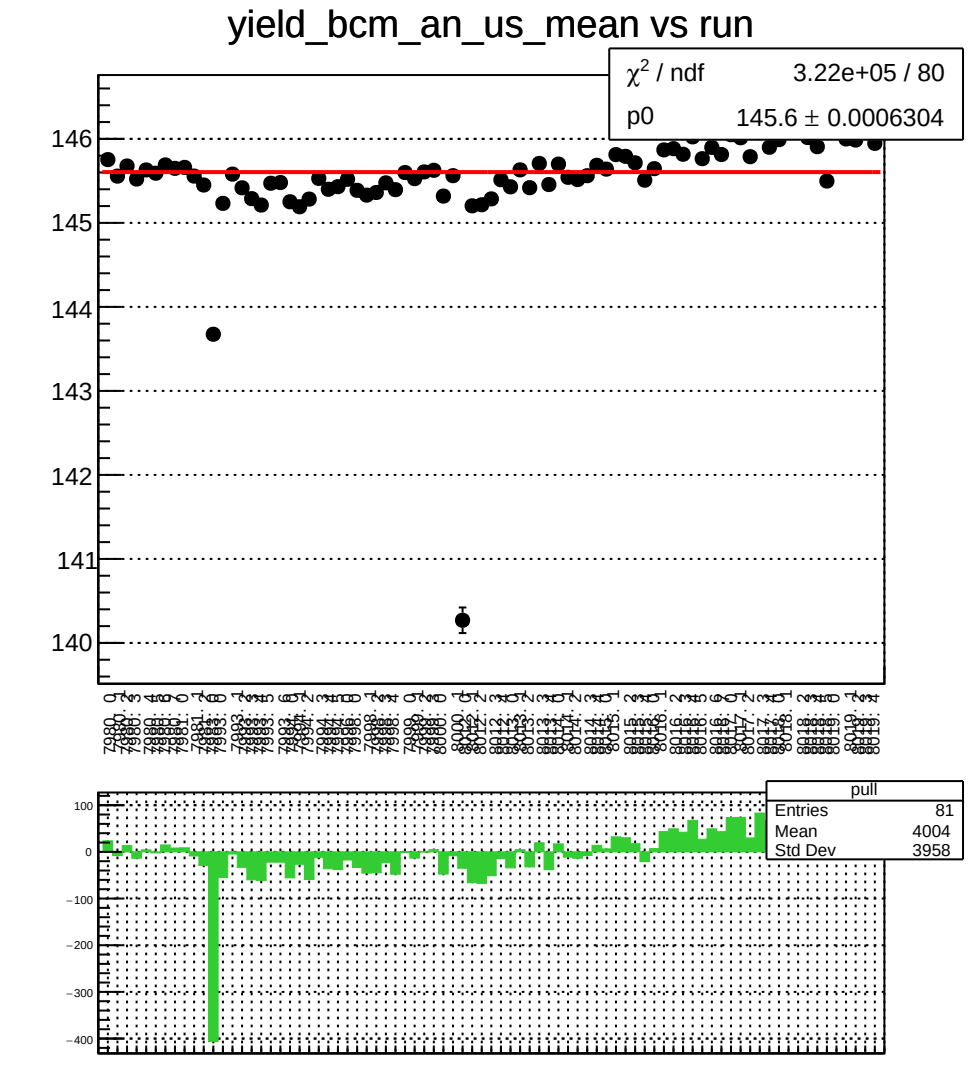

pull1D
Entries 81
Mean 0.04134
Std Dev 4.347
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

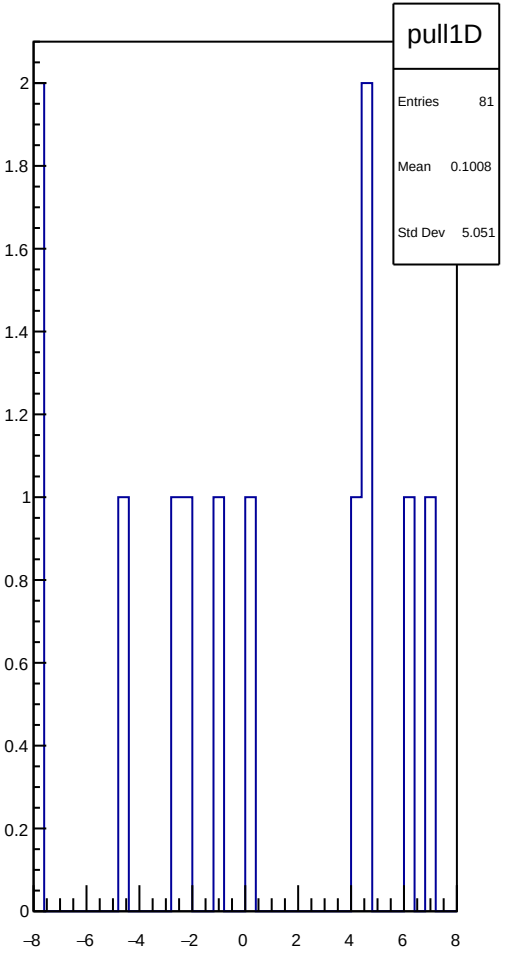

yield_bcm_an_ds_rms vs run
χ² / ndf 5.672e+04 / 80
p0 0.5517 ± 0.000443
14
12
10
8
6
4
2

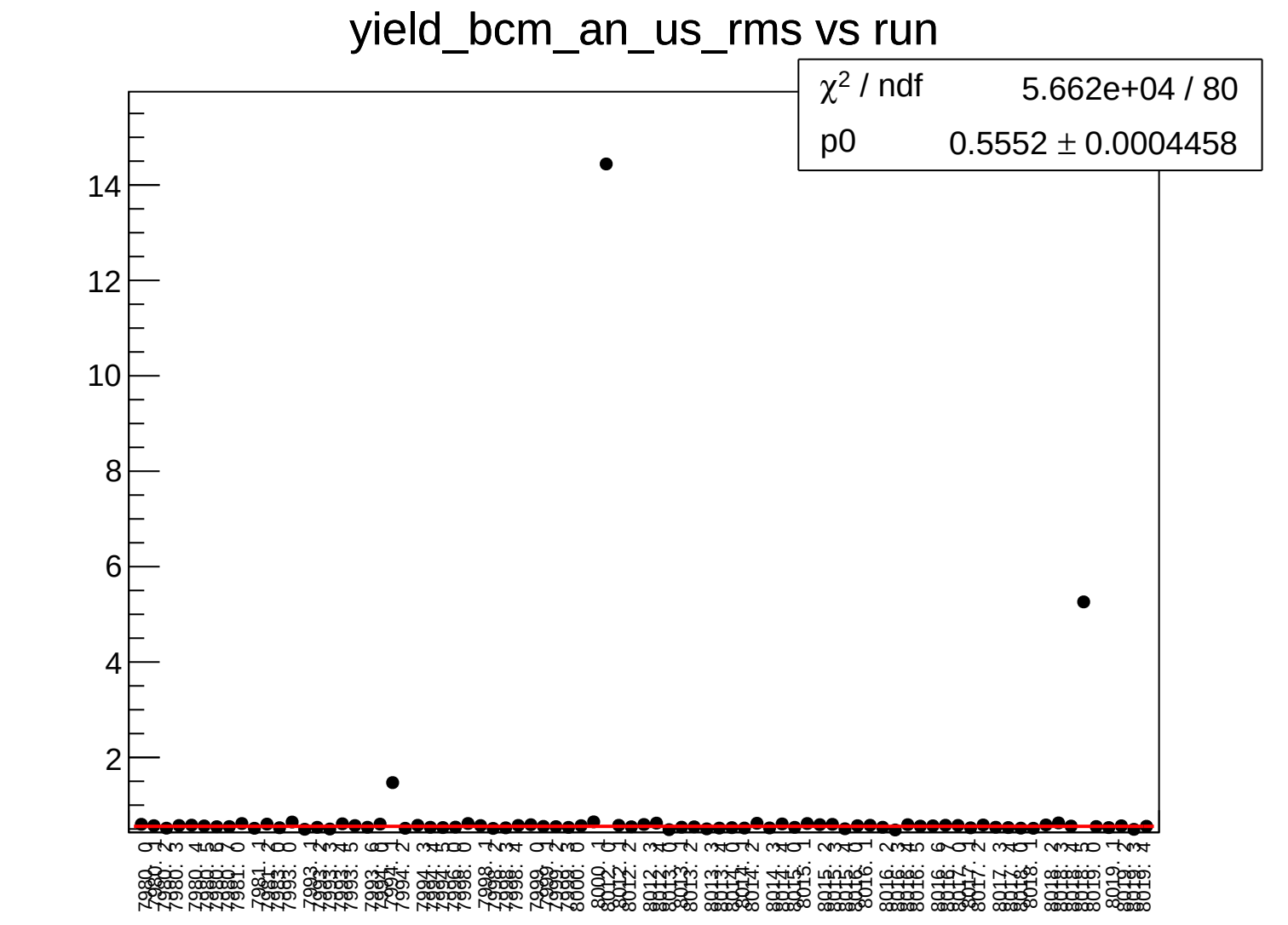

yield_bcm_an_ds3_mean vs run
χ² / ndf 3.101e+05 / 80
p0 145.9 ± 0.0006313
147
146
145
144
143
142
141
140
pull
Entries 81
Mean 2169
Std Dev 2122
100
0
−100
−200
−300
−400

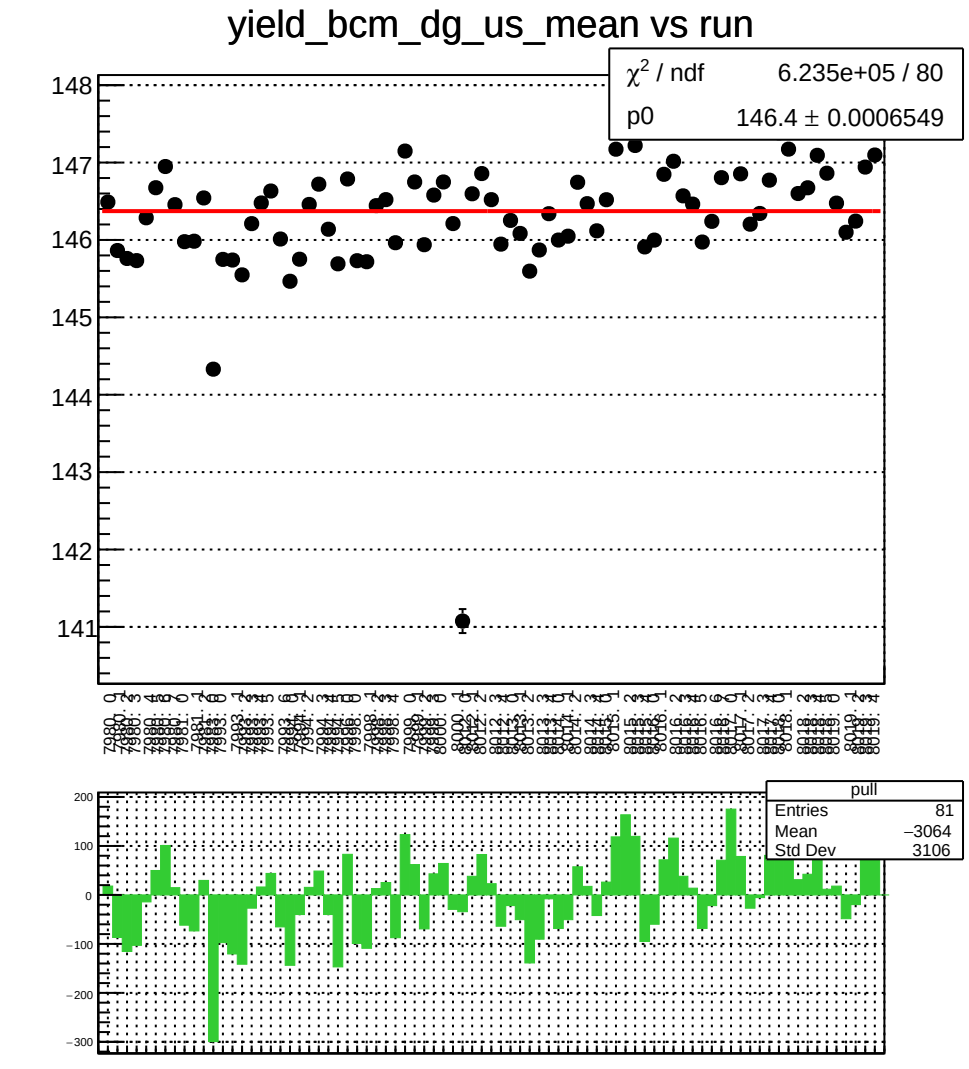

pull1D
Entries 81
Mean −0.6935
Std Dev 5.155
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

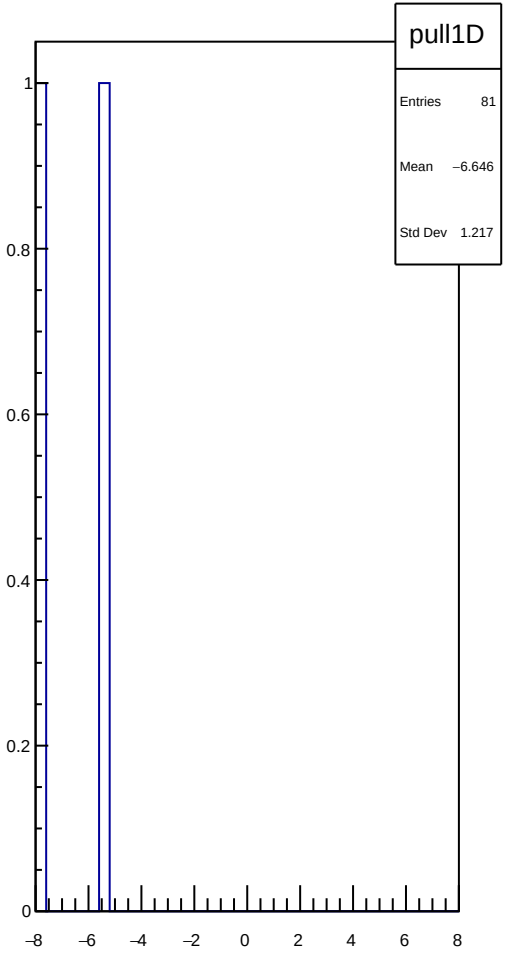

yield_bcm_an_ds3_rms vs run
χ² / ndf 5.67e+04 / 80
p0 0.556 ± 0.0004464
16
14
12
10
8
6
4
2

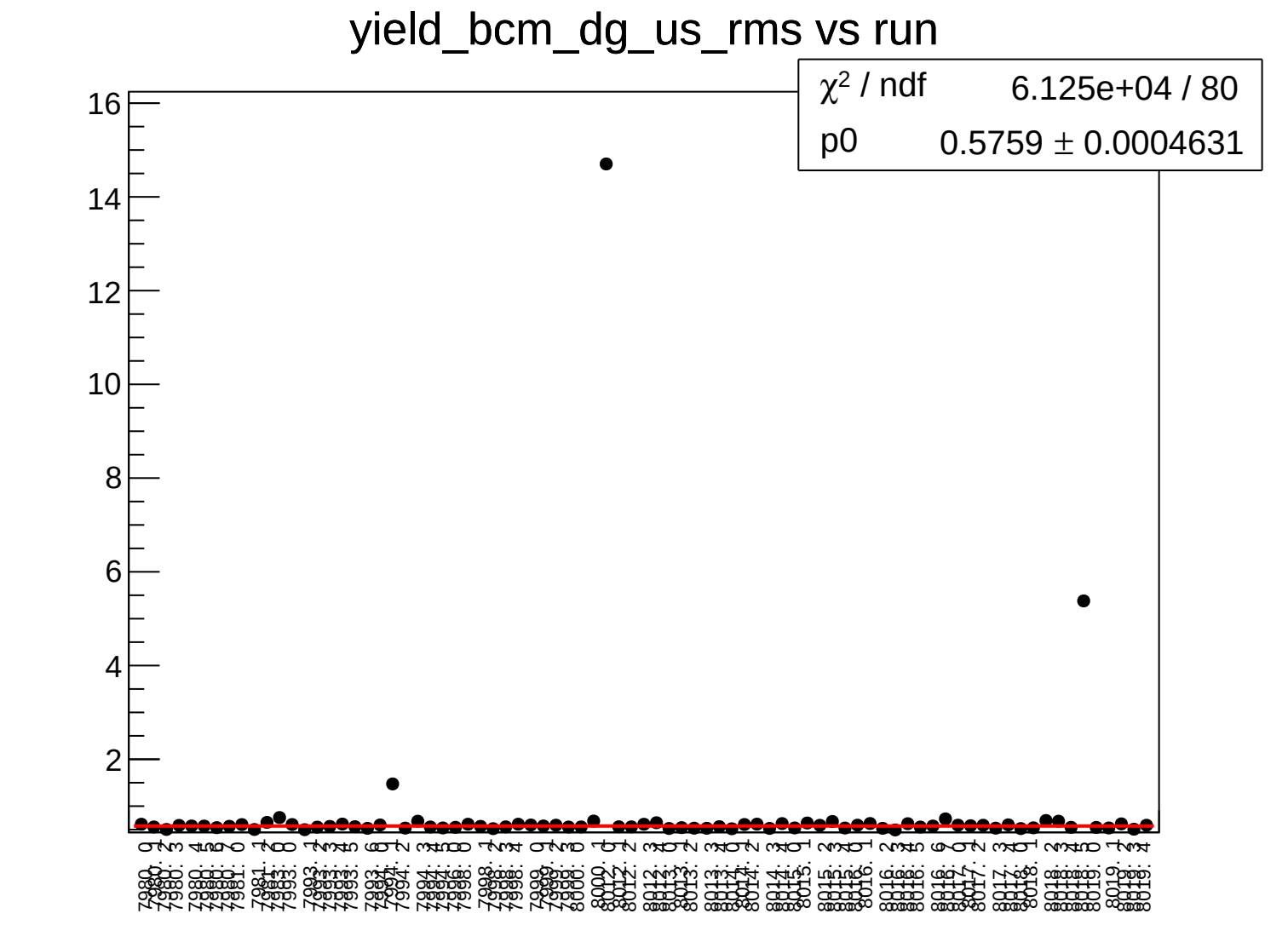

yield_bcm_an_us_mean vs run
χ² / ndf 3.22e+05 / 80
p0 145.6 ± 0.0006304
pull
Entries 81
Mean 4004
Std Dev 3958

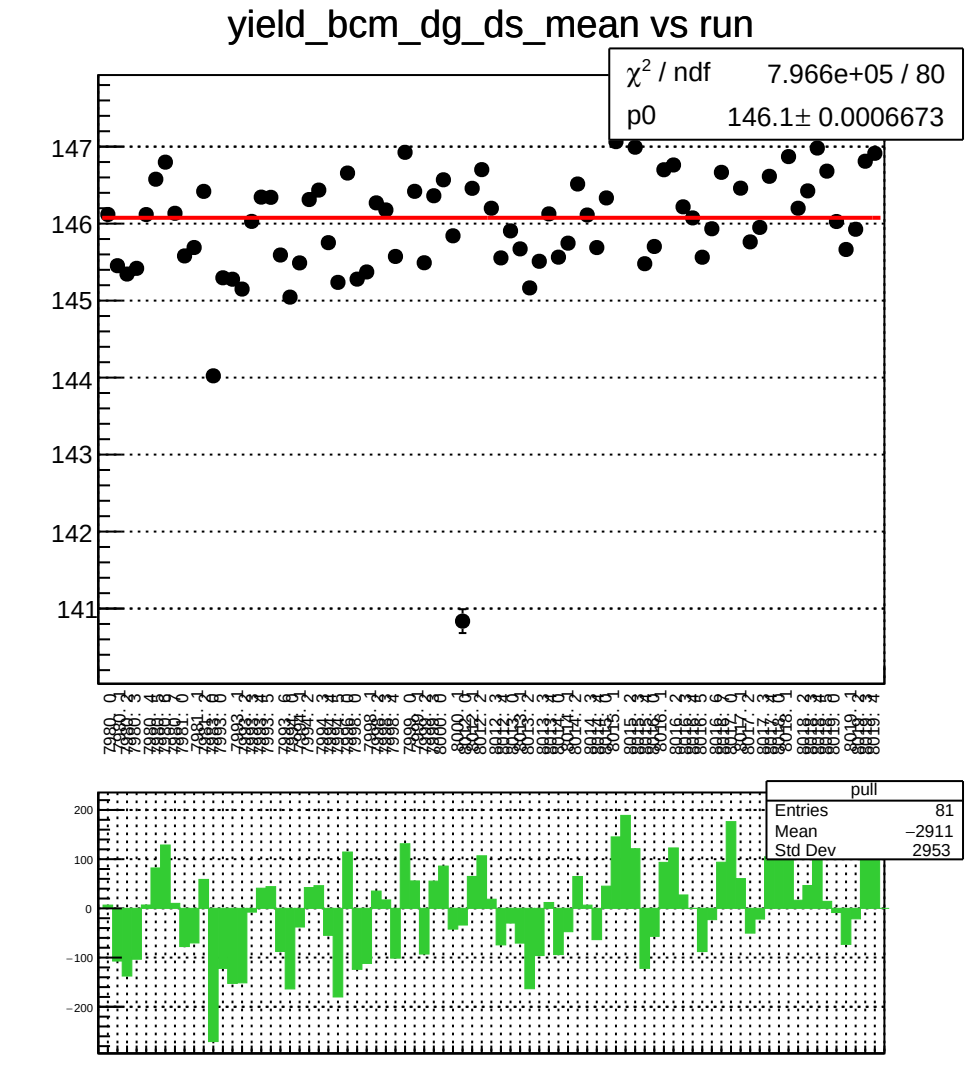

pull1D
Entries 81
Mean 0.1008
Std Dev 5.051

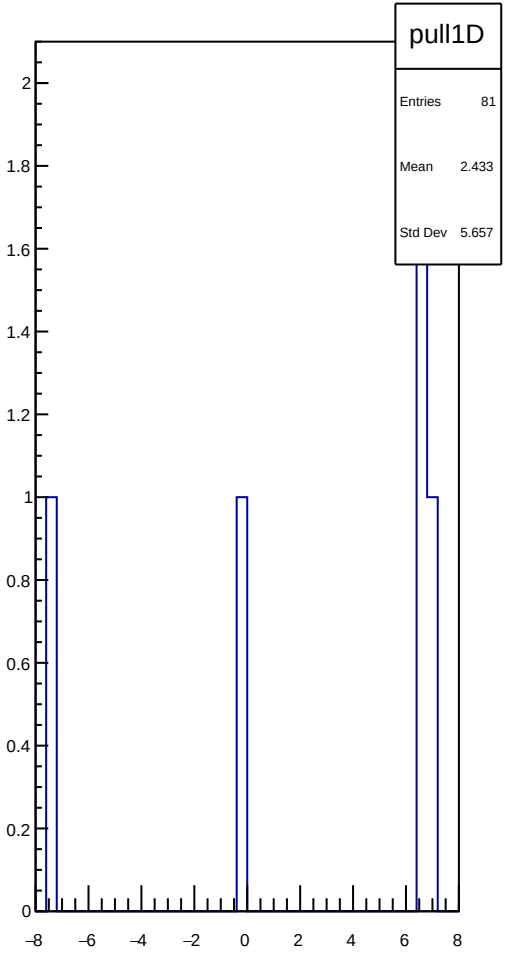

yield_bcm_an_us_rms vs run
χ² / ndf 5.662e+04 / 80
p0 0.5552 ± 0.0004458
14
12
10
8
6
4
2

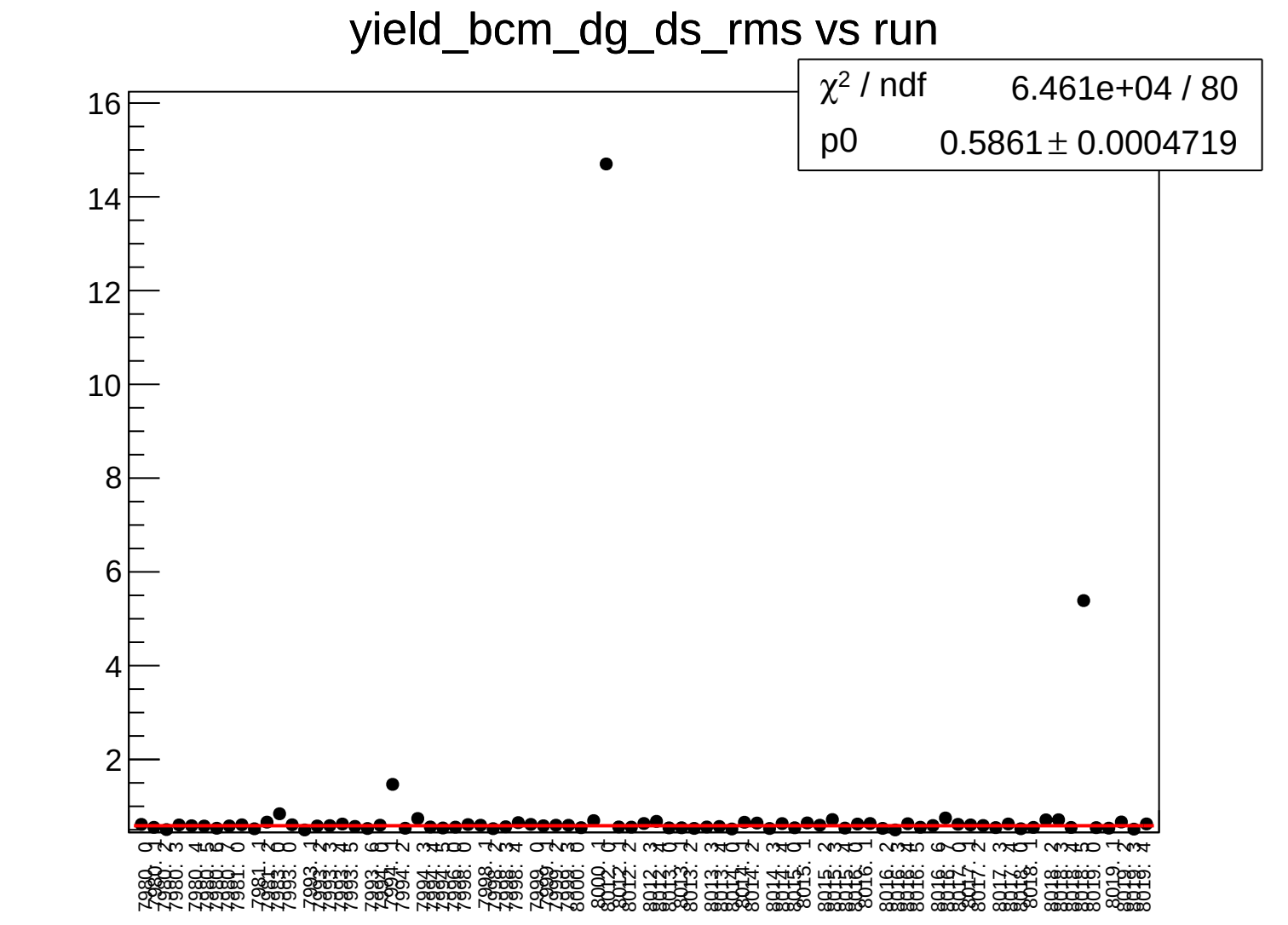

yield_bcm_dg_us_mean vs run
χ² / ndf 6.235e+05 / 80
p0 146.4 ± 0.0006549
148
147
146
145
144
143
142
141
pull
Entries 81
Mean −3064
Std Dev 3106
200
100
0
−100
−200
−300

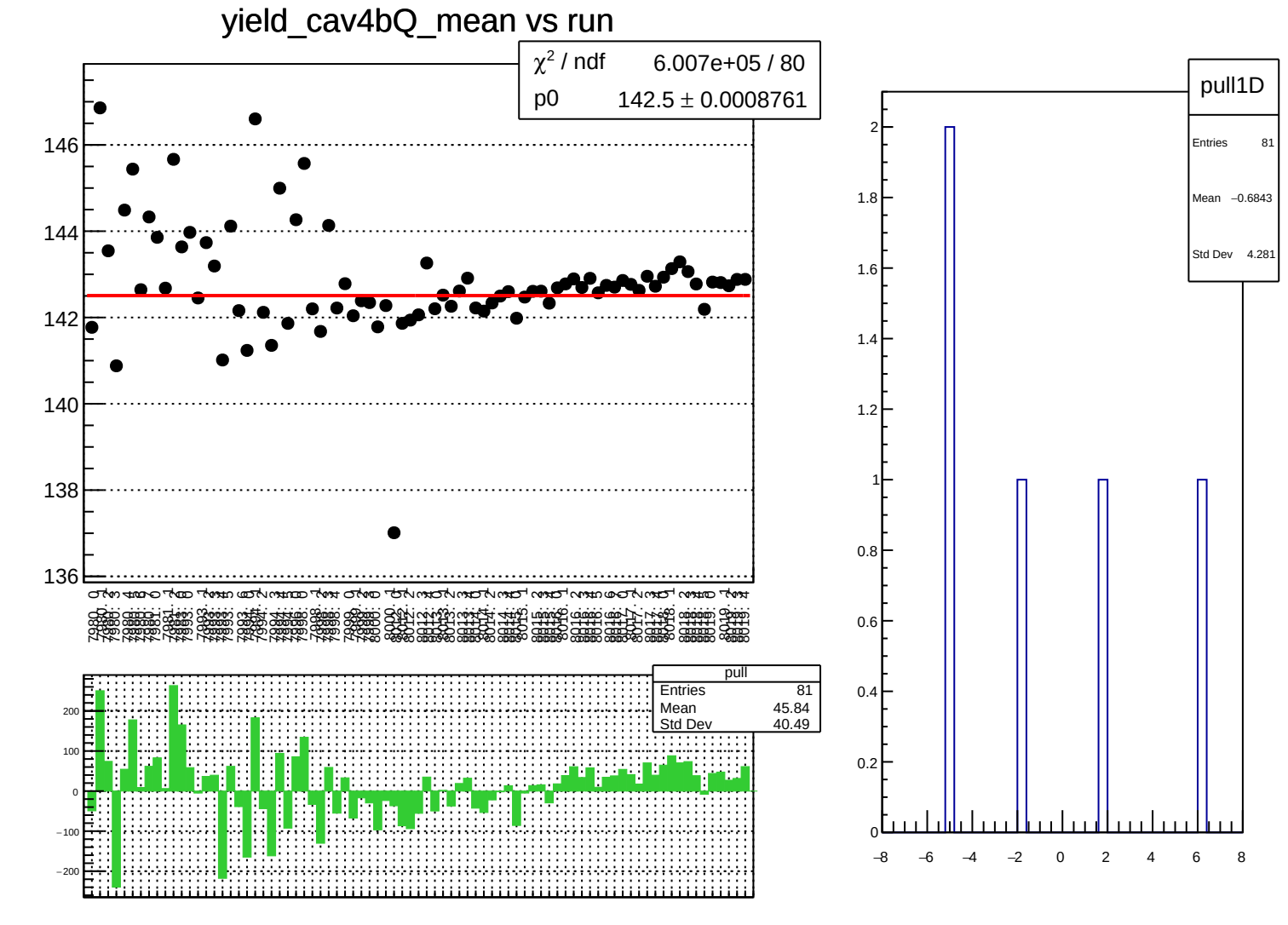

pull1D
Entries 81
Mean −6.646
Std Dev 1.217
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

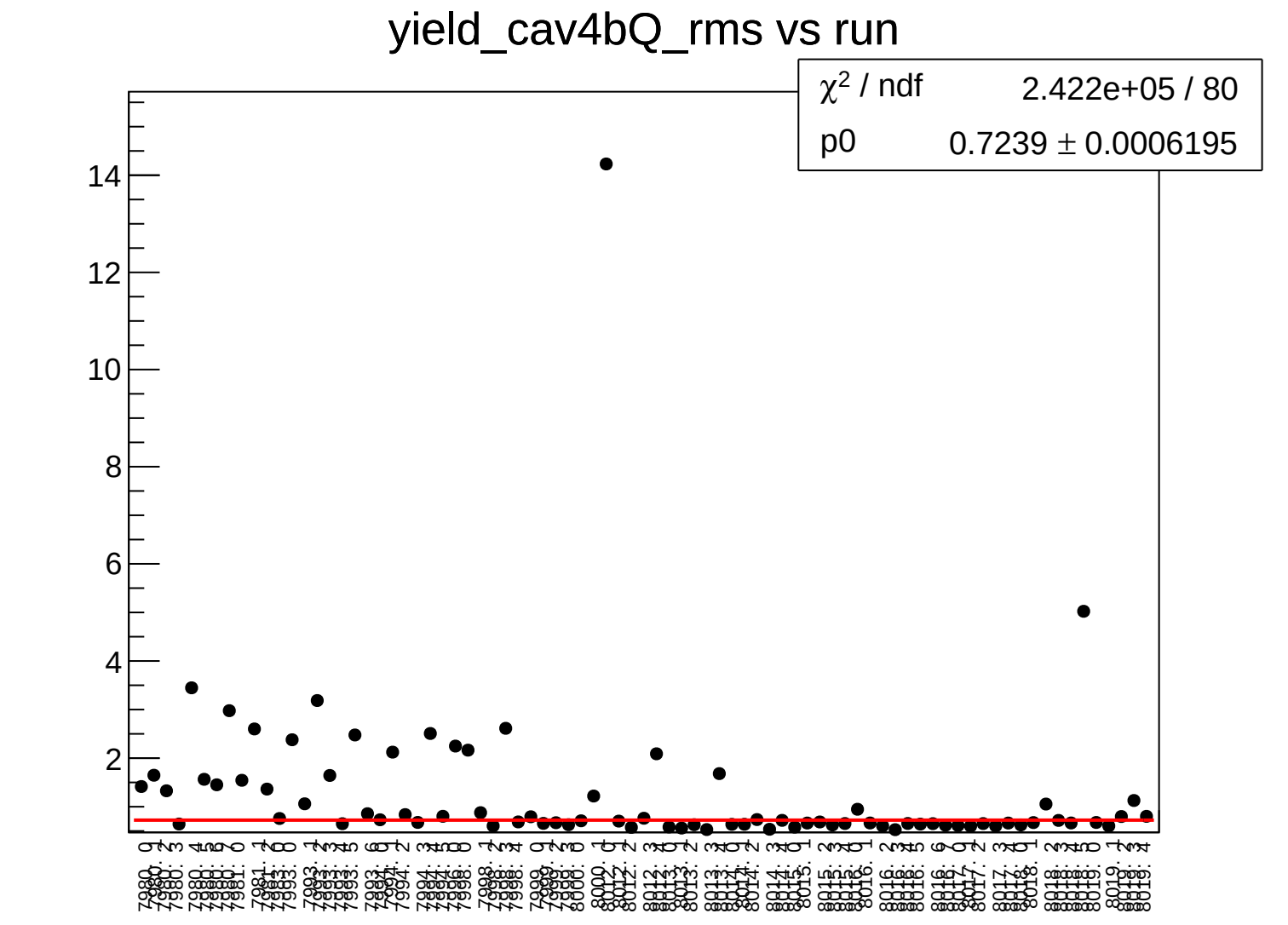

yield_bcm_dg_us_rms vs run
χ² / ndf 6.125e+04 / 80
p0 0.5759 ± 0.0004631
16
14
12
10
8
6
4
2

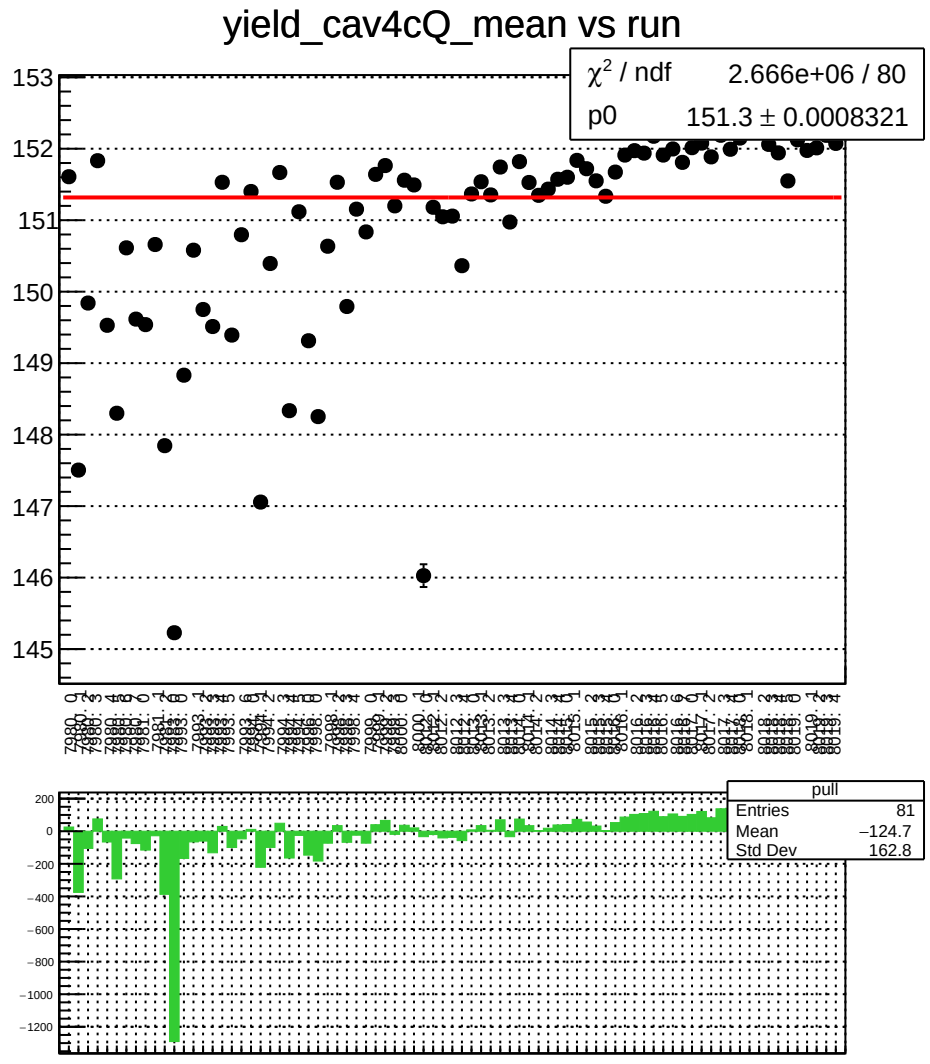

yield_bcm_dg_ds_mean vs run
χ² / ndf 7.966e+05 / 80
p0 146.1± 0.0006673
147
146
145
144
143
142
141
pull
Entries 81
Mean −2911
Std Dev 2953
200
100
0
−100
−200

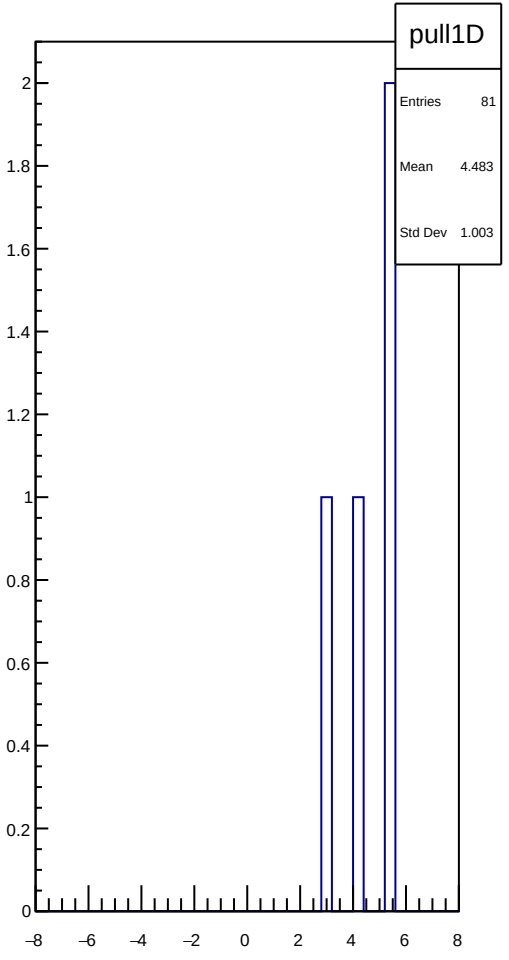

pull1D
Entries 81
Mean 2.433
Std Dev 5.657
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

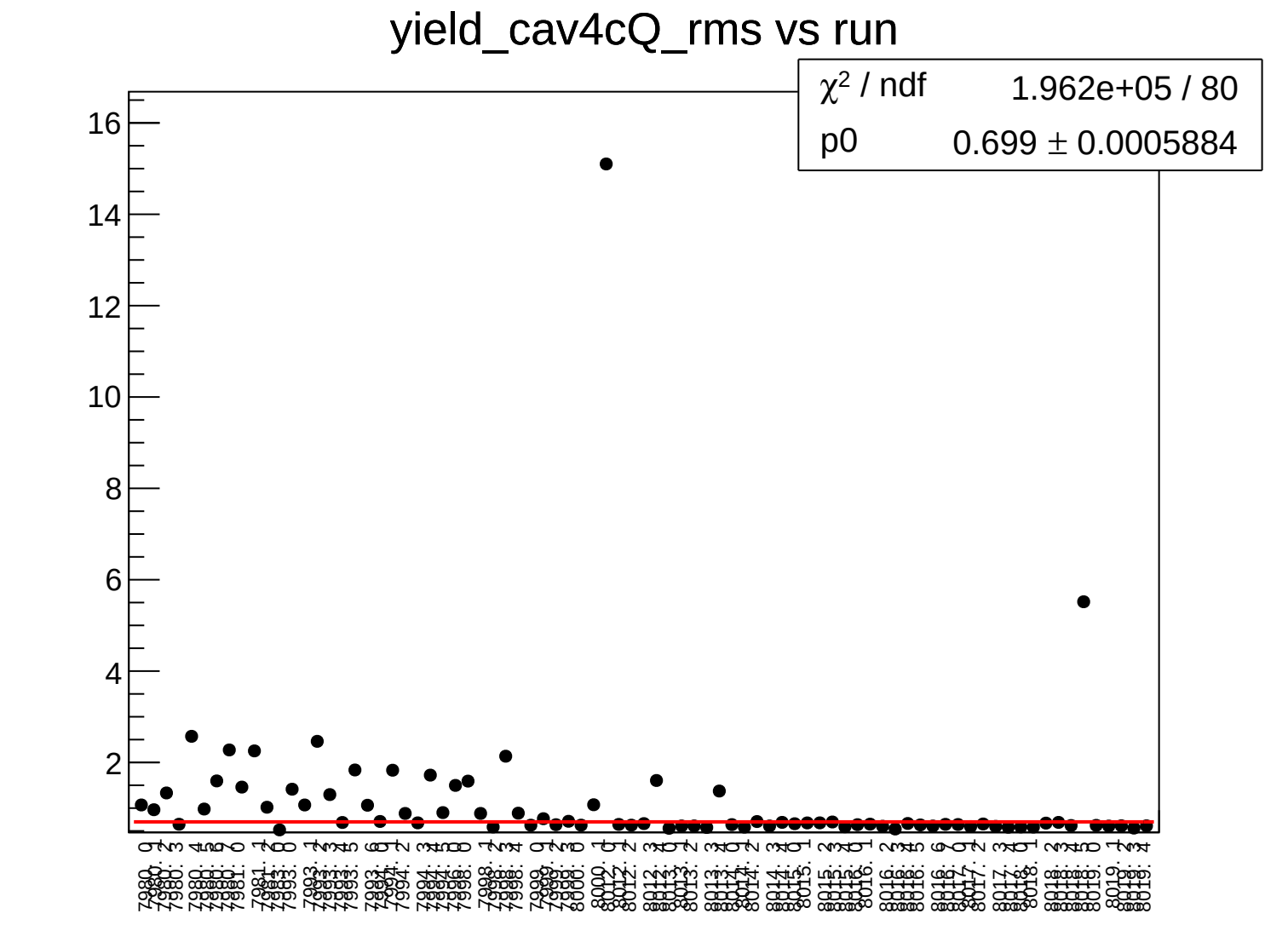

yield_bcm_dg_ds_rms vs run
χ² / ndf 6.461e+04 / 80
p0 0.5861 ± 0.0004719
16
14
12
10
8
6
4
2

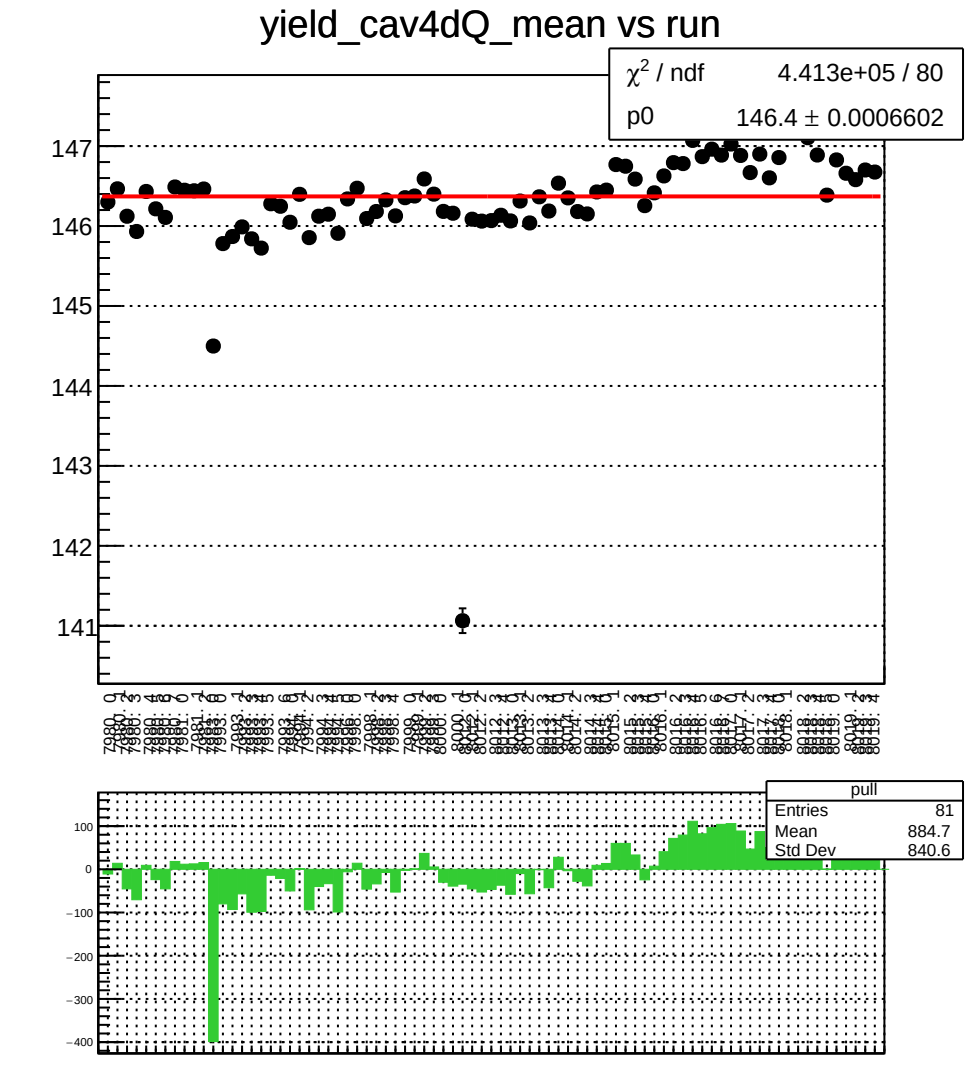

yield_cav4bQ_mean vs run
χ² / ndf 6.007e+05 / 80
p0 142.5 ± 0.0008761
146
144
142
140
138
136
pull
Entries 81
Mean 45.84
Std Dev 40.49
200
100
0
−100
−200
pull1D
Entries 81
Mean −0.6843
Std Dev 4.281
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

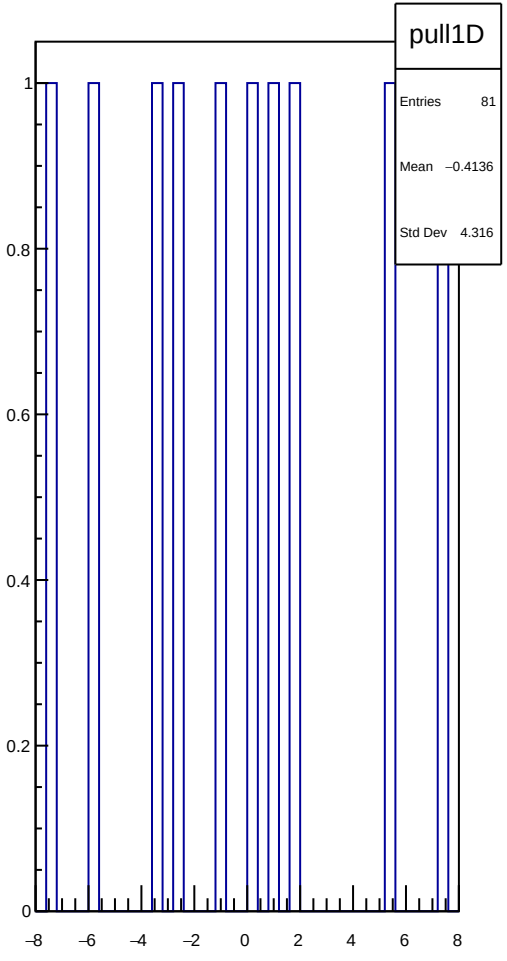

yield_cav4bQ_rms vs run
χ² / ndf 2.422e+05 / 80
p0 0.7239 ± 0.0006195
14
12
10
8
6
4
2

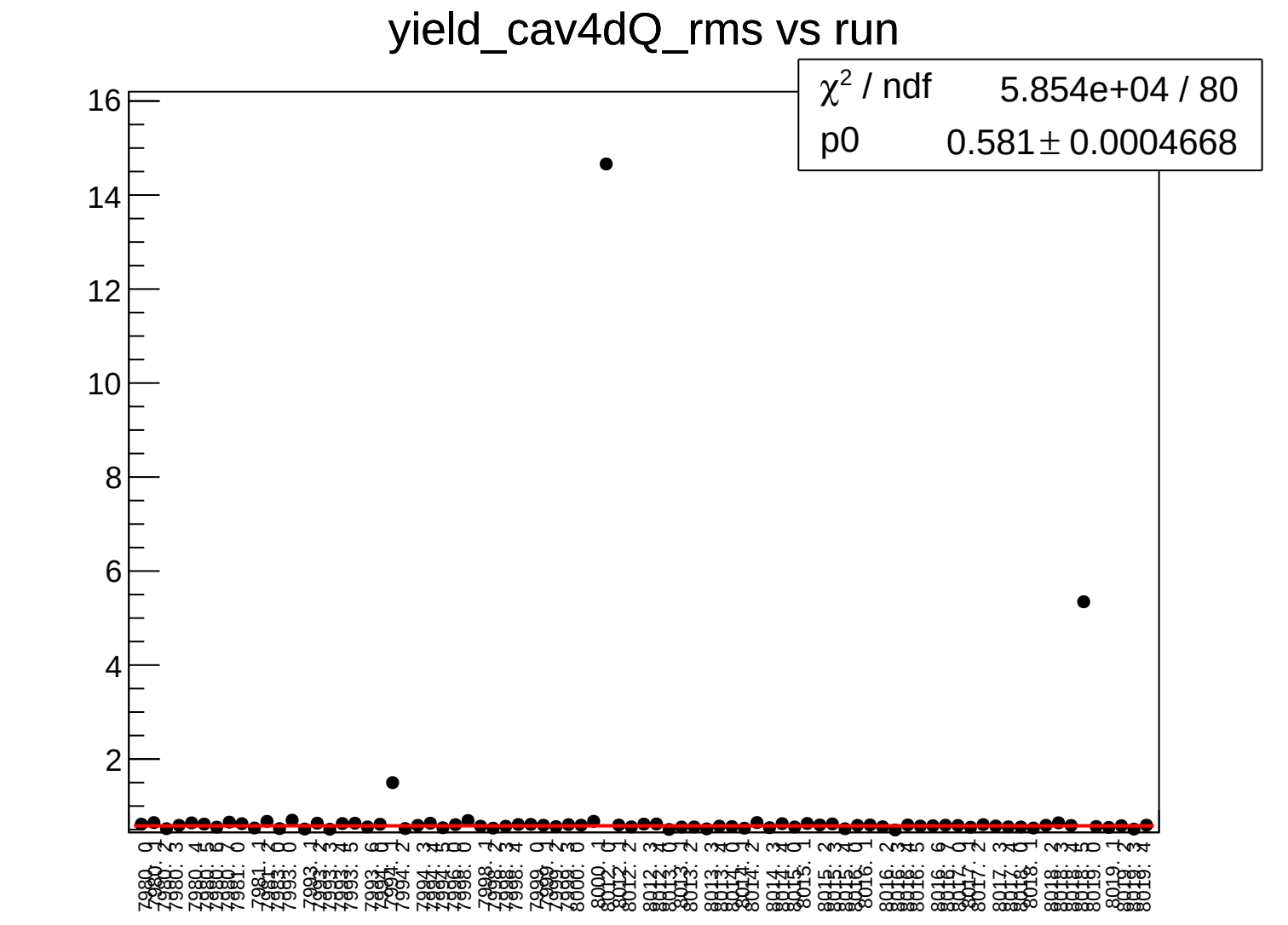

yield_cav4cQ_mean vs run
χ² / ndf 2.666e+06 / 80
p0 151.3 ± 0.0008321
153
152
151
150
149
148
147
146
145
pull
Entries 81
Mean −124.7
Std Dev 162.8
200
0
−200
−400
−600
−800
−1000
−1200

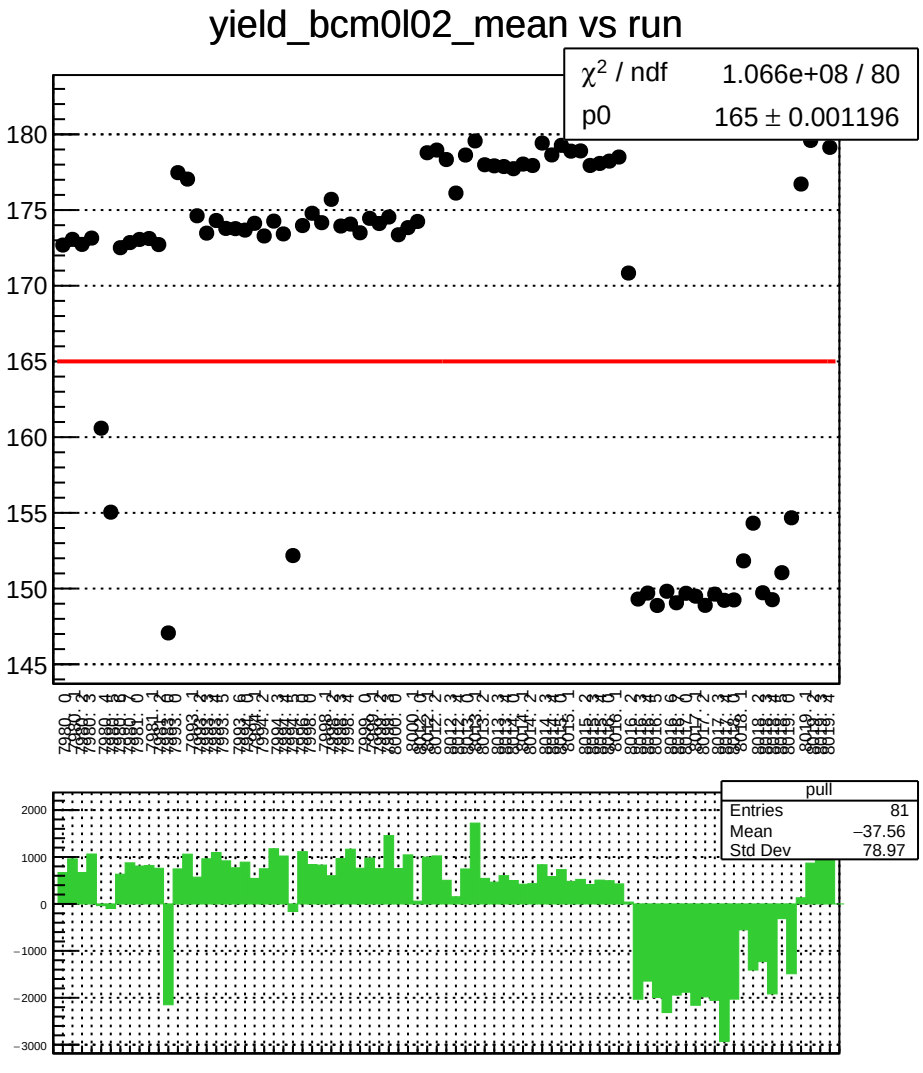

pull1D
Entries 81
Mean 4.483
Std Dev 1.003
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

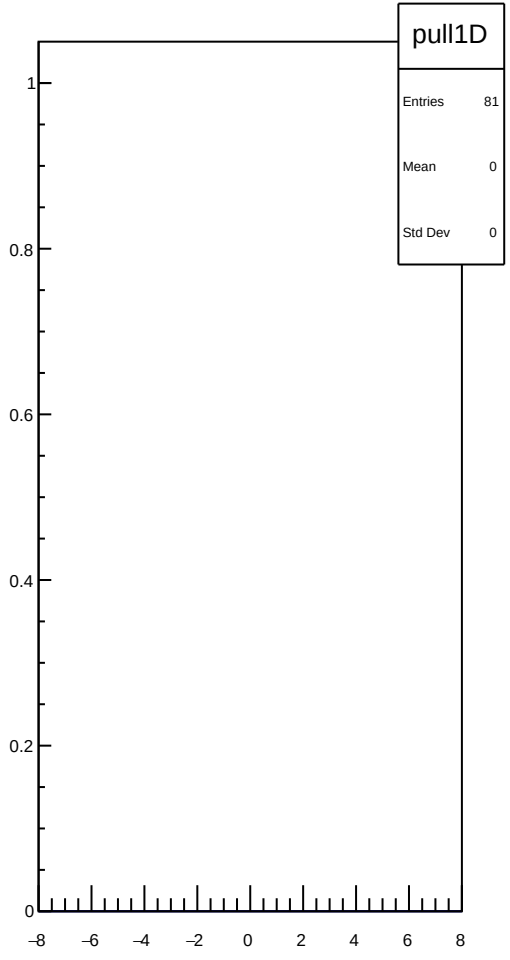

yield_cav4cQ_rms vs run
χ² / ndf 1.962e+05 / 80
p0 0.699 ± 0.0005884
16
14
12
10
8
6
4
2

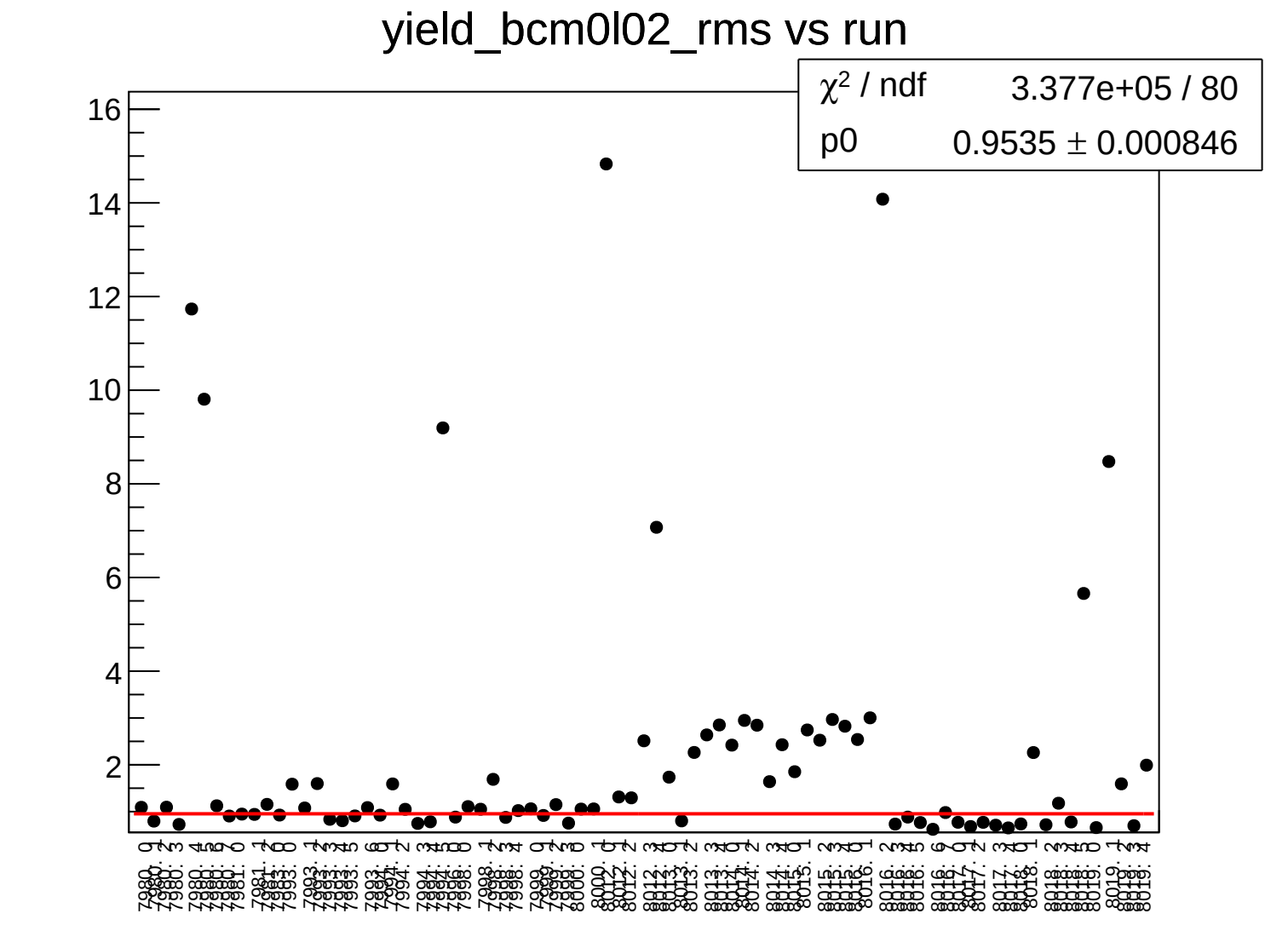

yield_cav4dQ_mean vs run
χ² / ndf 4.413e+05 / 80
p0 146.4 ± 0.0006602
147
146
145
144
143
142
141
pull
Entries 81
Mean 884.7
Std Dev 840.6
100
0
−100
−200
−300
−400

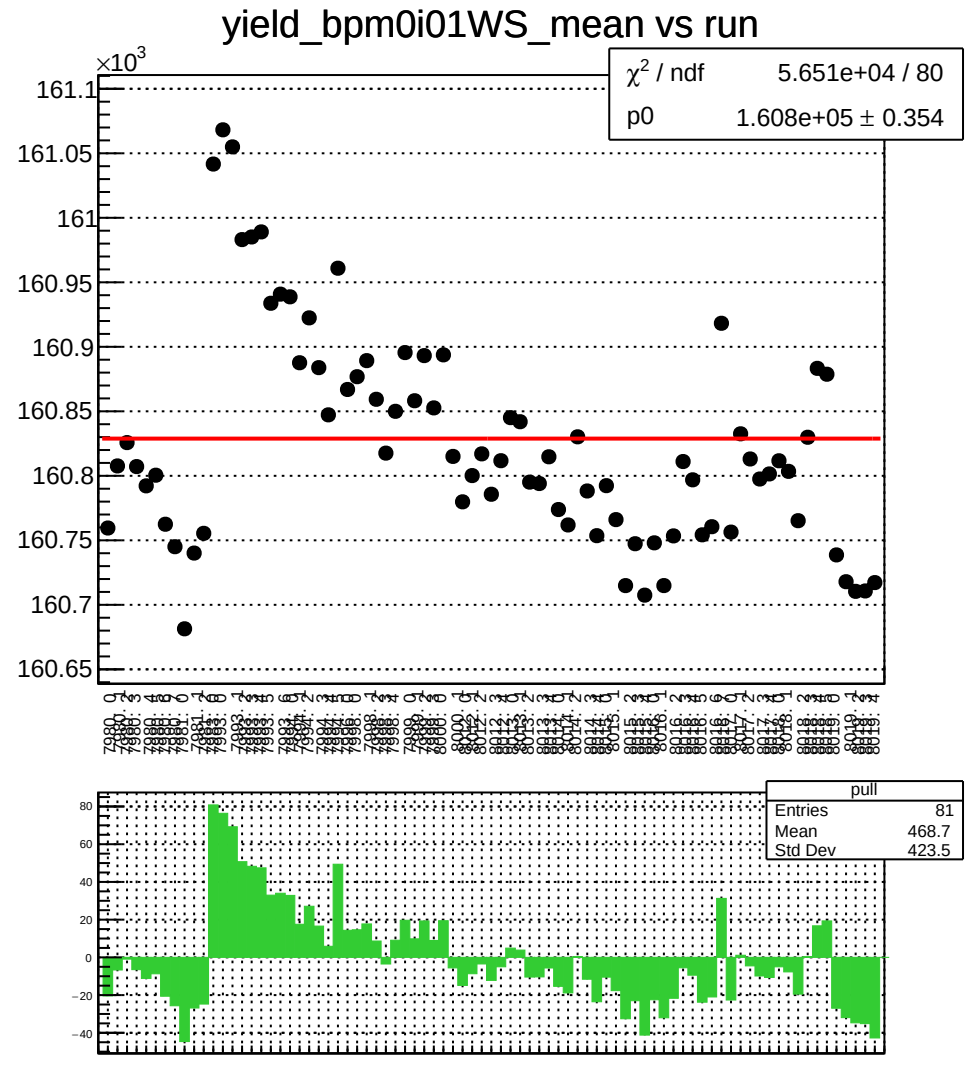

pull1D
Entries 81
Mean −0.4136
Std Dev 4.316
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

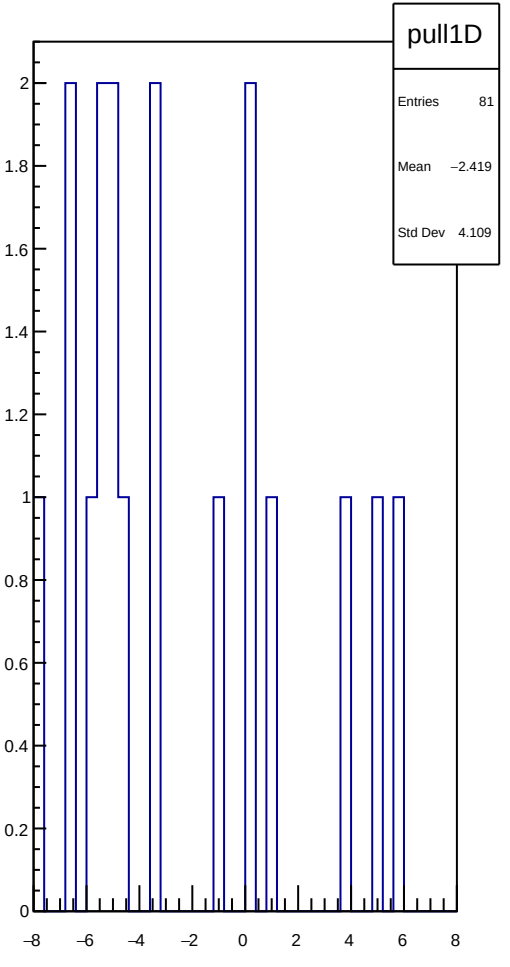

yield_cav4dQ_rms vs run
χ^2 / ndf 5.854e+04 / 80
p0 0.581 ± 0.0004668
16
14
12
10
8
6
4
2

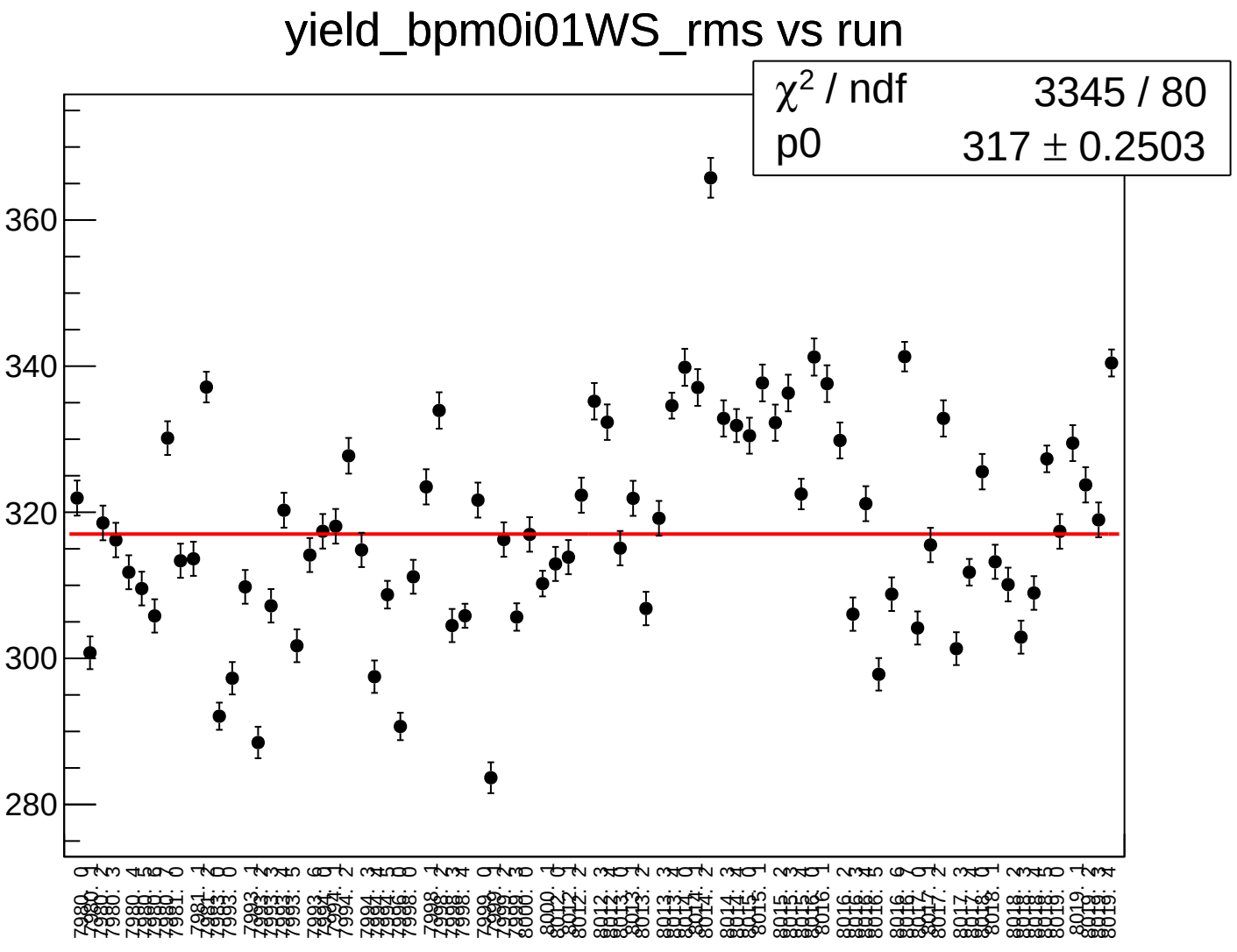

yield_bcm0l02_mean vs run
χ² / ndf 1.066e+08 / 80
p0 165 ± 0.001196
180
175
170
165
160
155
150
145
pull
Entries 81
Mean −37.56
Std Dev 78.97
2000
1000
0
−1000
−2000
−3000

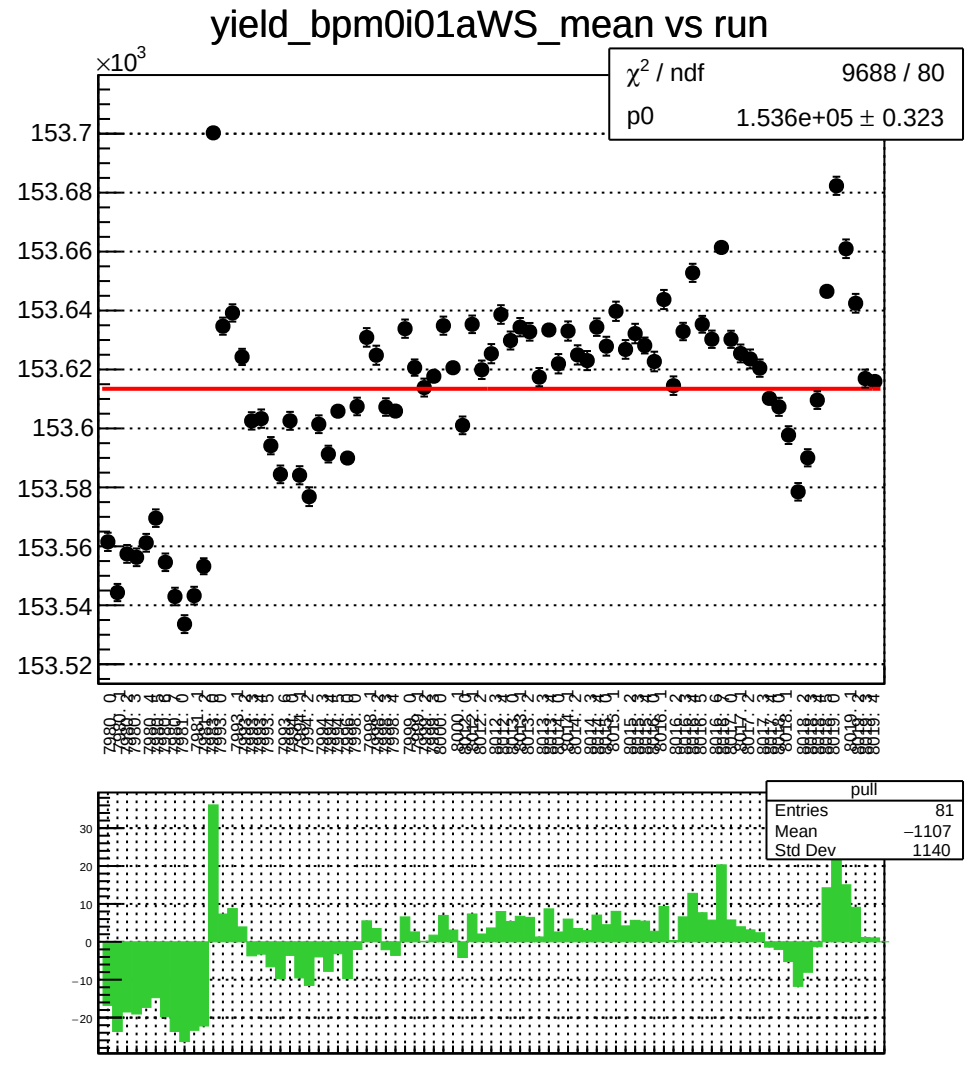

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

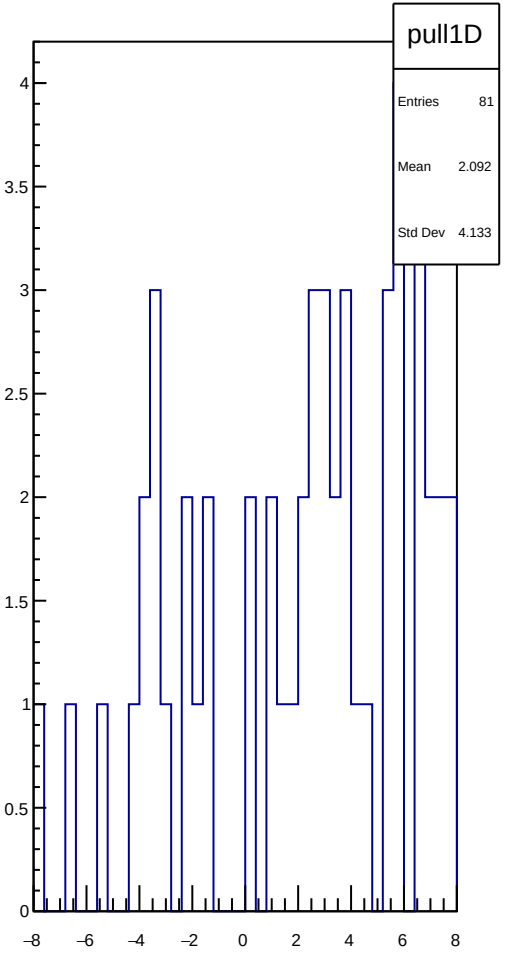

yield_bcm0l02_rms vs run
χ² / ndf 3.377e+05 / 80
p0 0.9535 ± 0.000846
16
14
12
10
8
6
4
2

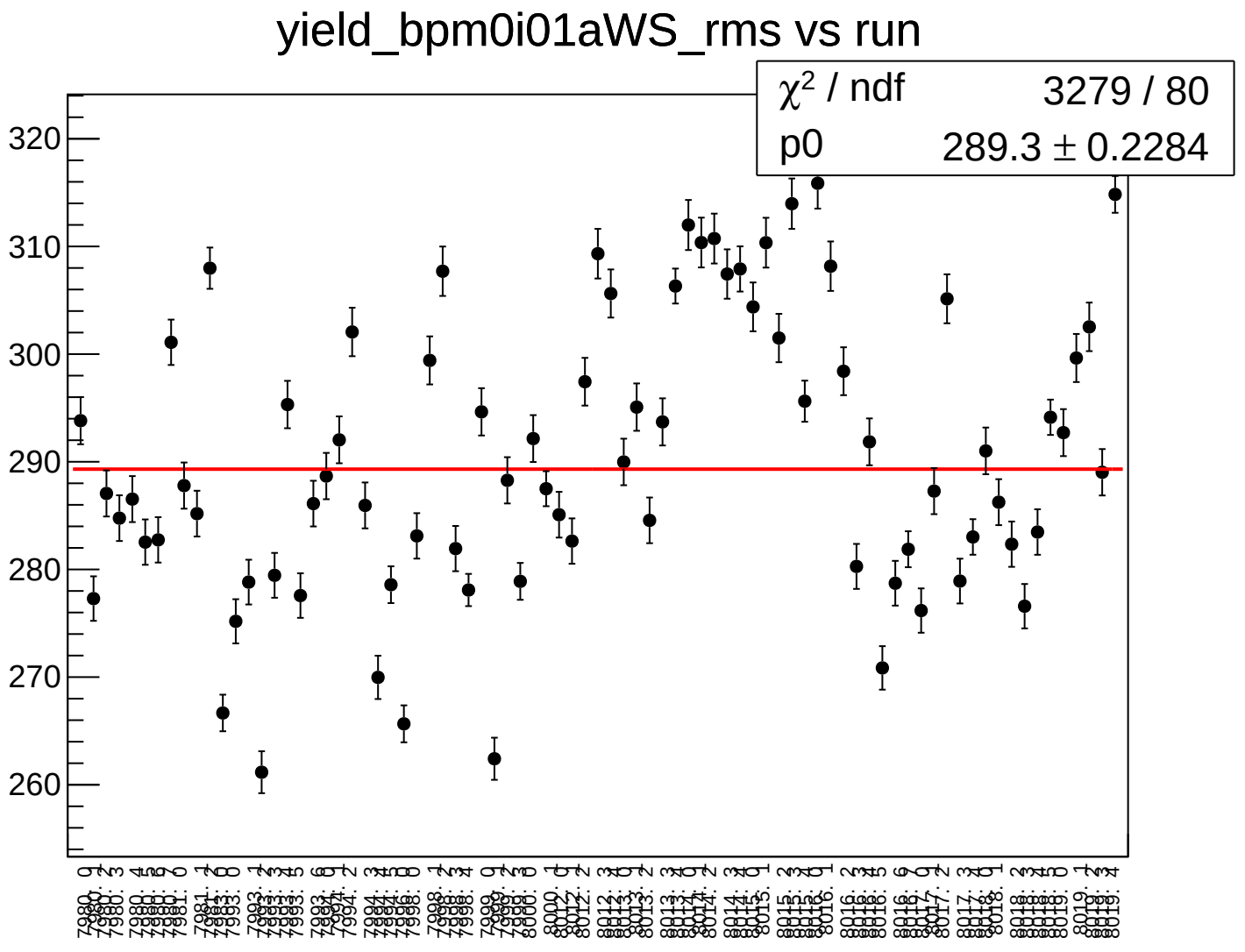

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 5.651e+04 / 80
p0 1.608e+05 ± 0.354
161.1
161.05
161
160.95
160.9
160.85
160.8
160.75
160.7
160.65
pull
Entries 81
Mean 468.7
Std Dev 423.5
80
60
40
20
0
−20
−40

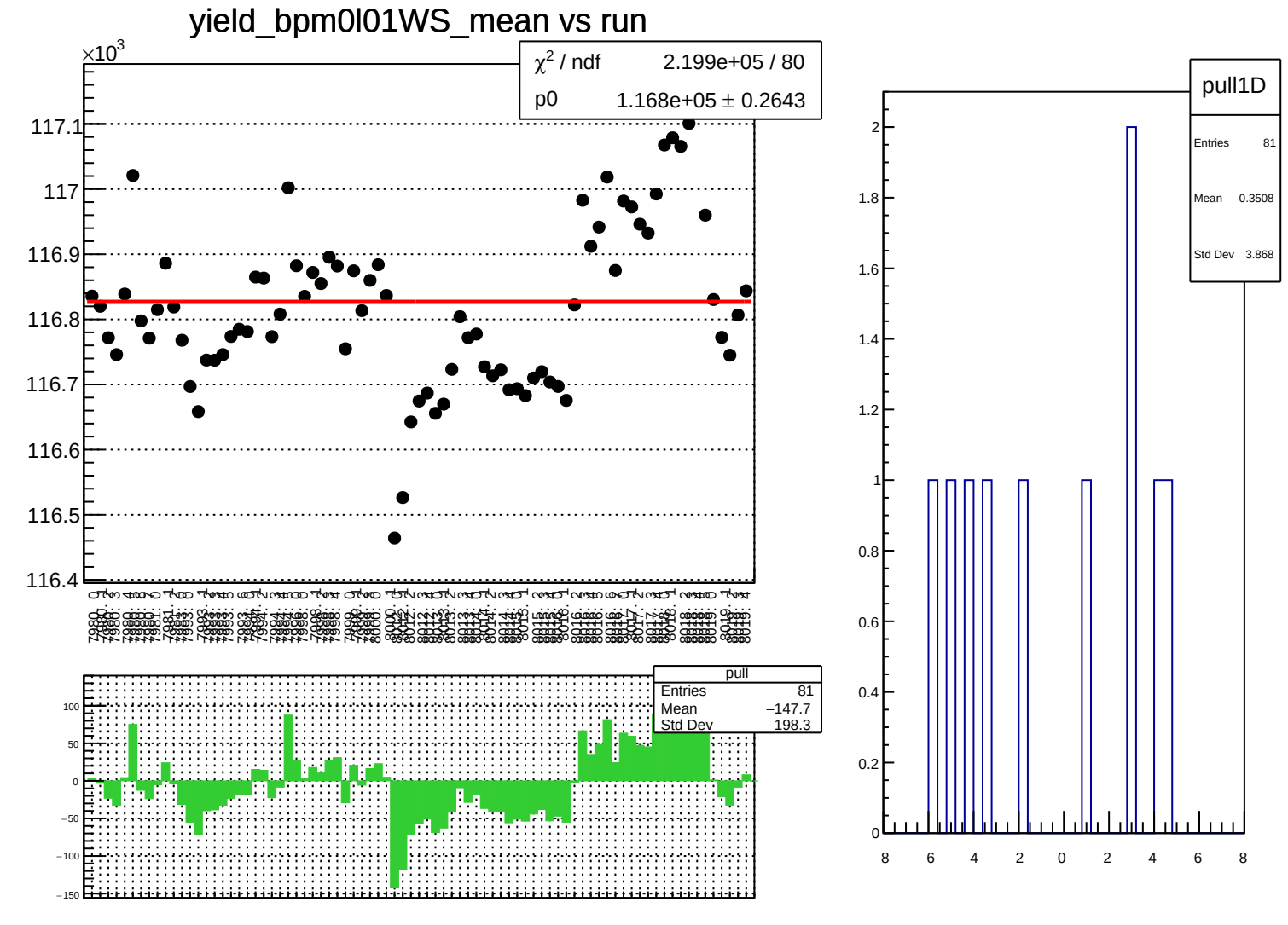

pull1D
Entries 81
Mean −2.419
Std Dev 4.109
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

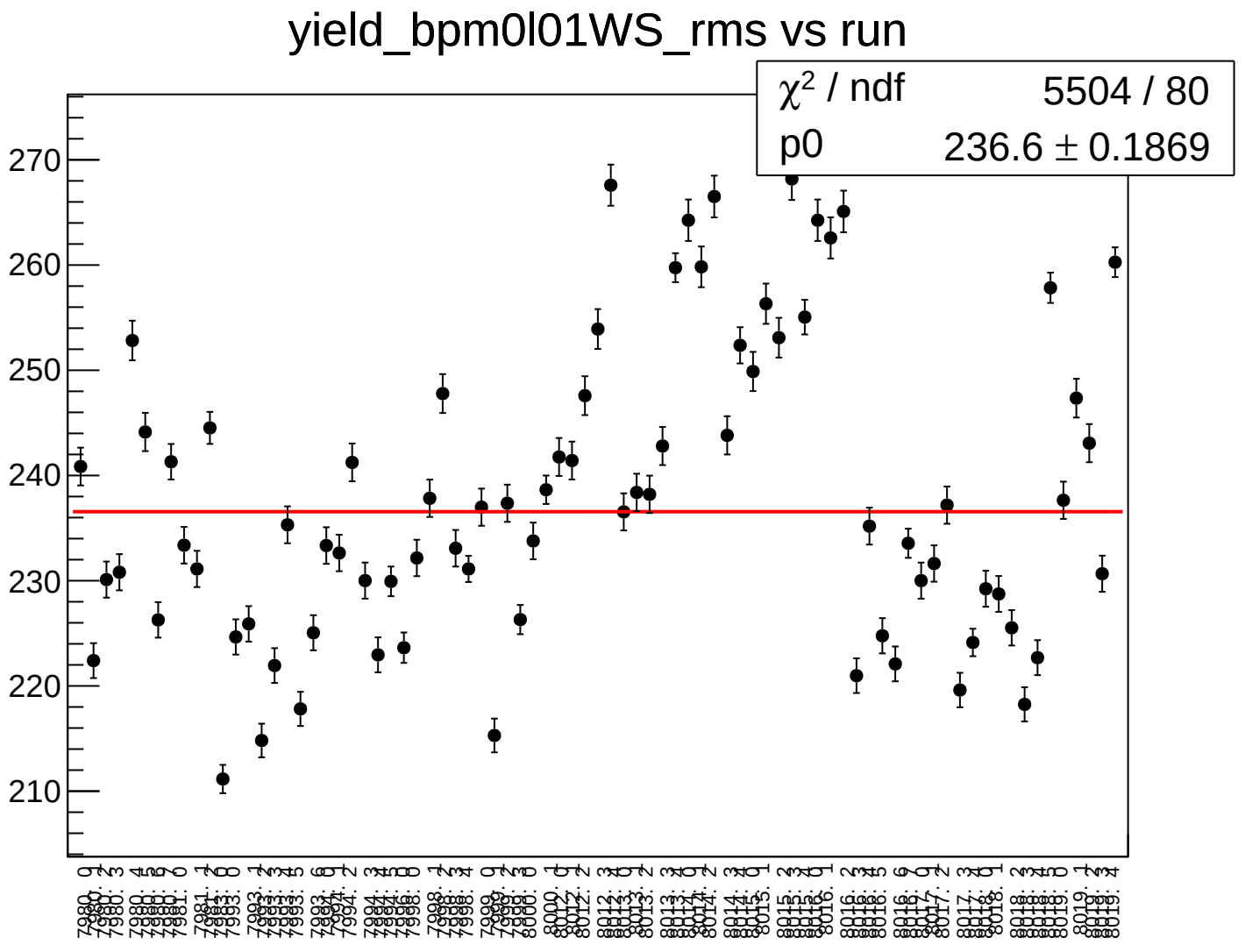

yield_bpm0i01WS_rms vs run
χ² / ndf 3345 / 80
p0 317 ± 0.2503
360
340
320
300
280

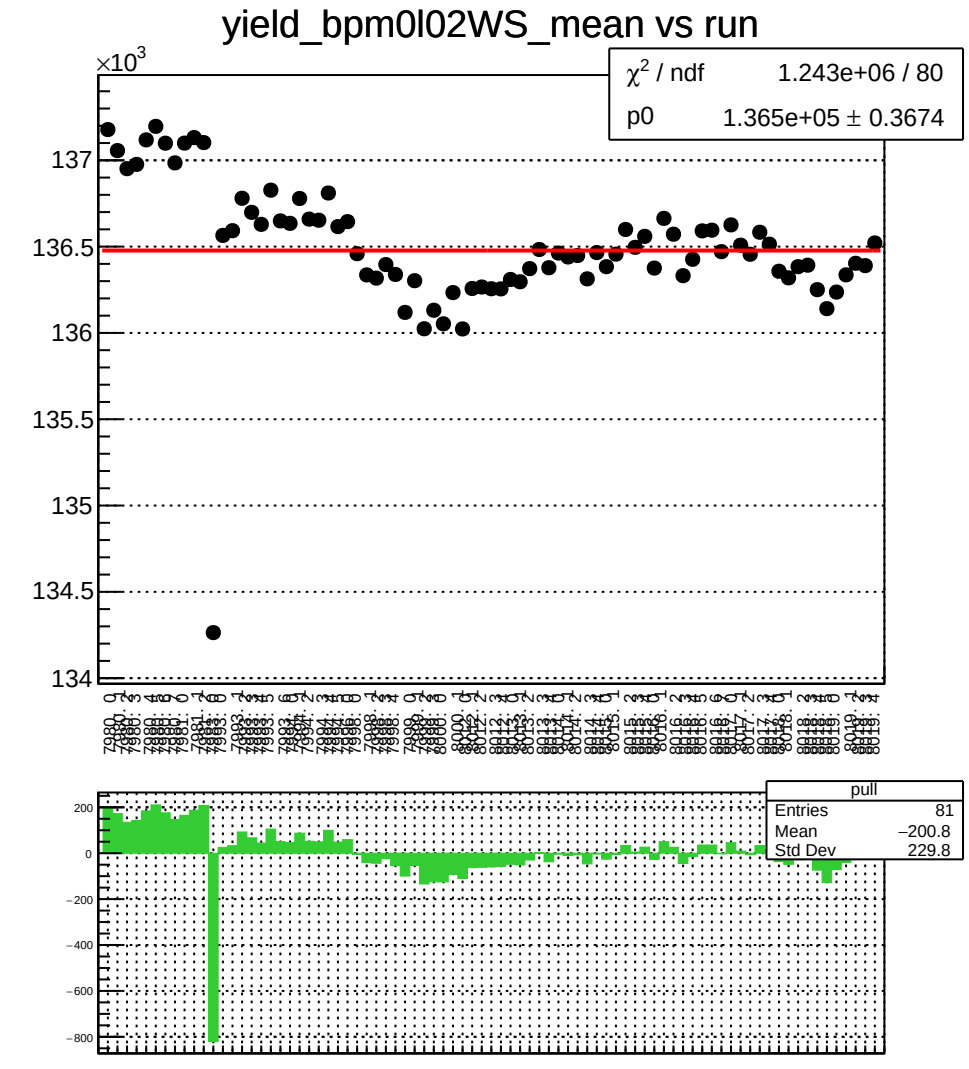

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 9688 / 80
p0 1.536e+05 ± 0.323
153.7
153.68
153.66
153.64
153.62
153.6
153.58
153.56
153.54
153.52
pull
Entries 81
Mean −1107
Std Dev 1140
30
20
10
0
−10
−20

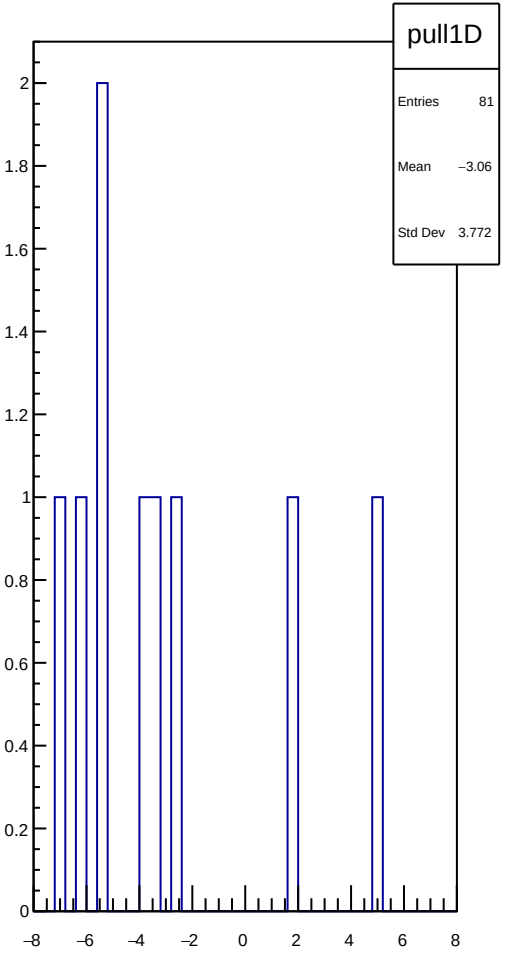

pull1D
Entries 81
Mean 2.092
Std Dev 4.133
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

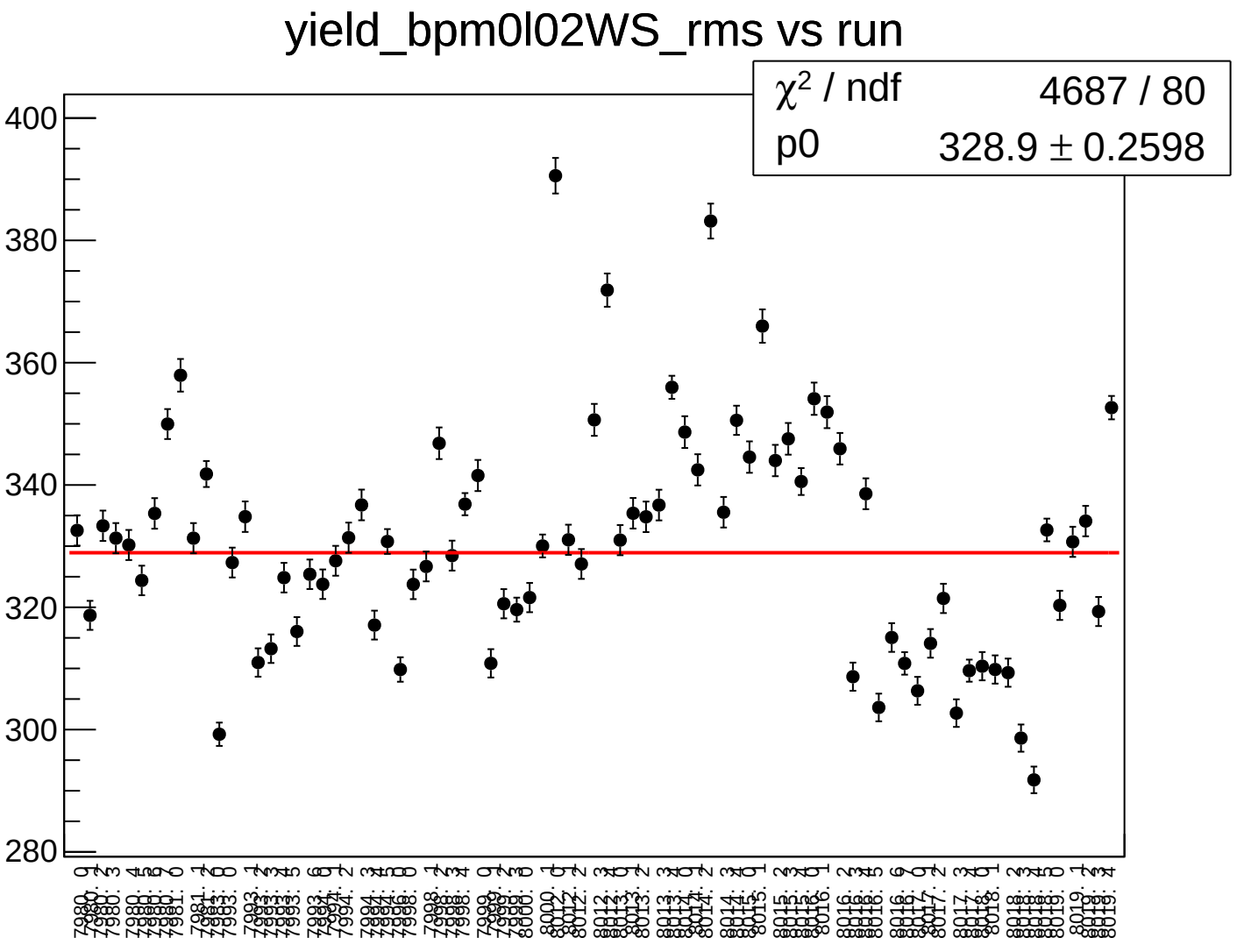

yield_bpm0i01aWS_rms vs run
χ² / ndf 3279 / 80
p0 289.3 ± 0.2284
320
310
300
290
280
270
260

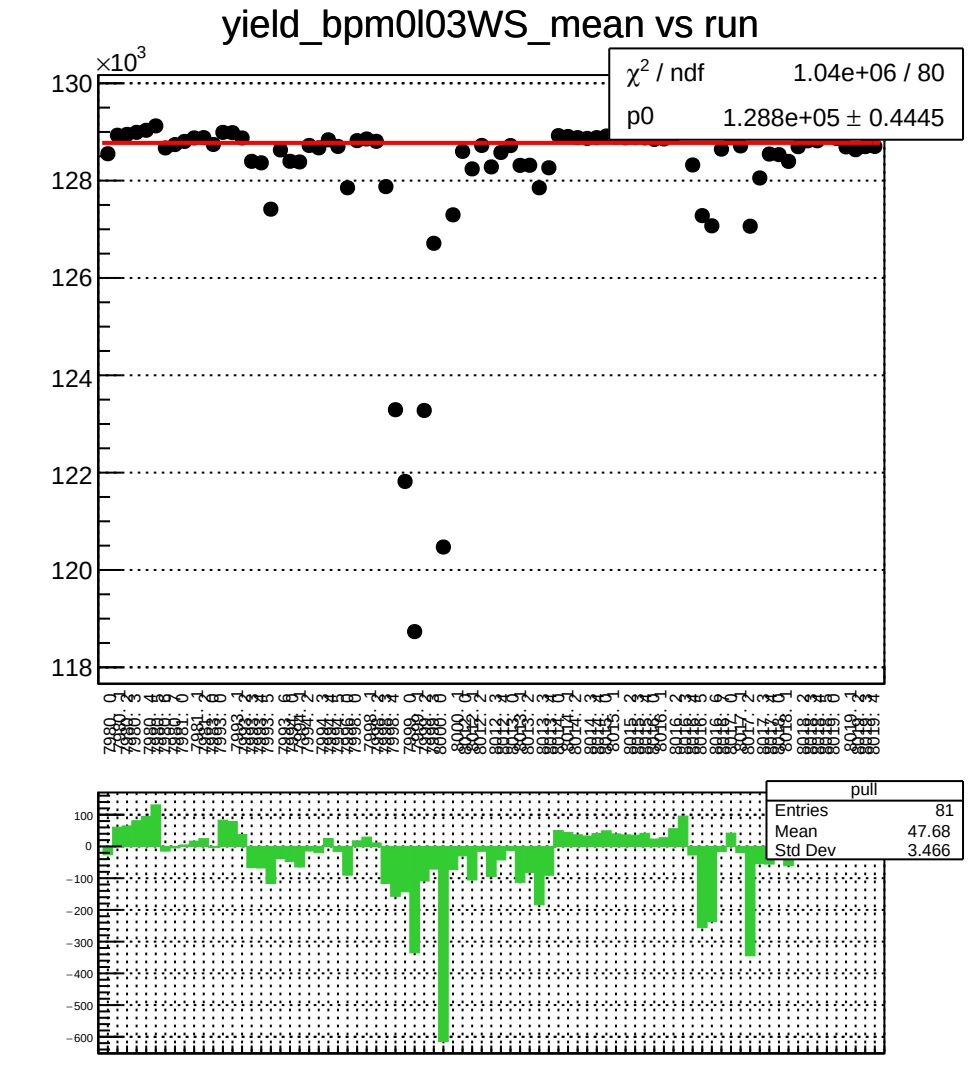

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 2.199e+05 / 80
p0 1.168e+05 ± 0.2643
117.1
117
116.9
116.8
116.7
116.6
116.5
116.4
pull
Entries 81
Mean −147.7
Std Dev 198.3
100
50
0
−50
−100
−150
pull1D
Entries 81
Mean −0.3508
Std Dev 3.868
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

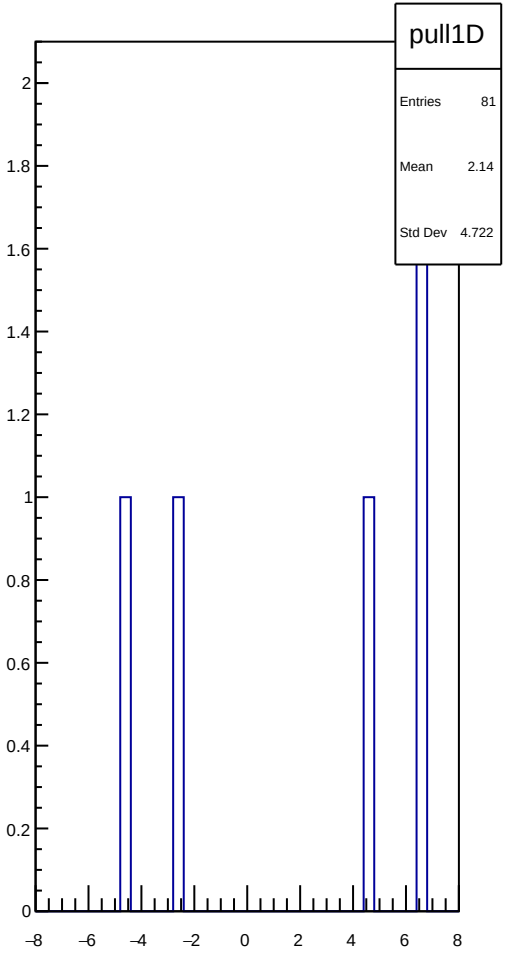

yield_bpm0l01WS_rms vs run
χ² / ndf 5504 / 80
p0 236.6 ± 0.1869
270
260
250
240
230
220
210

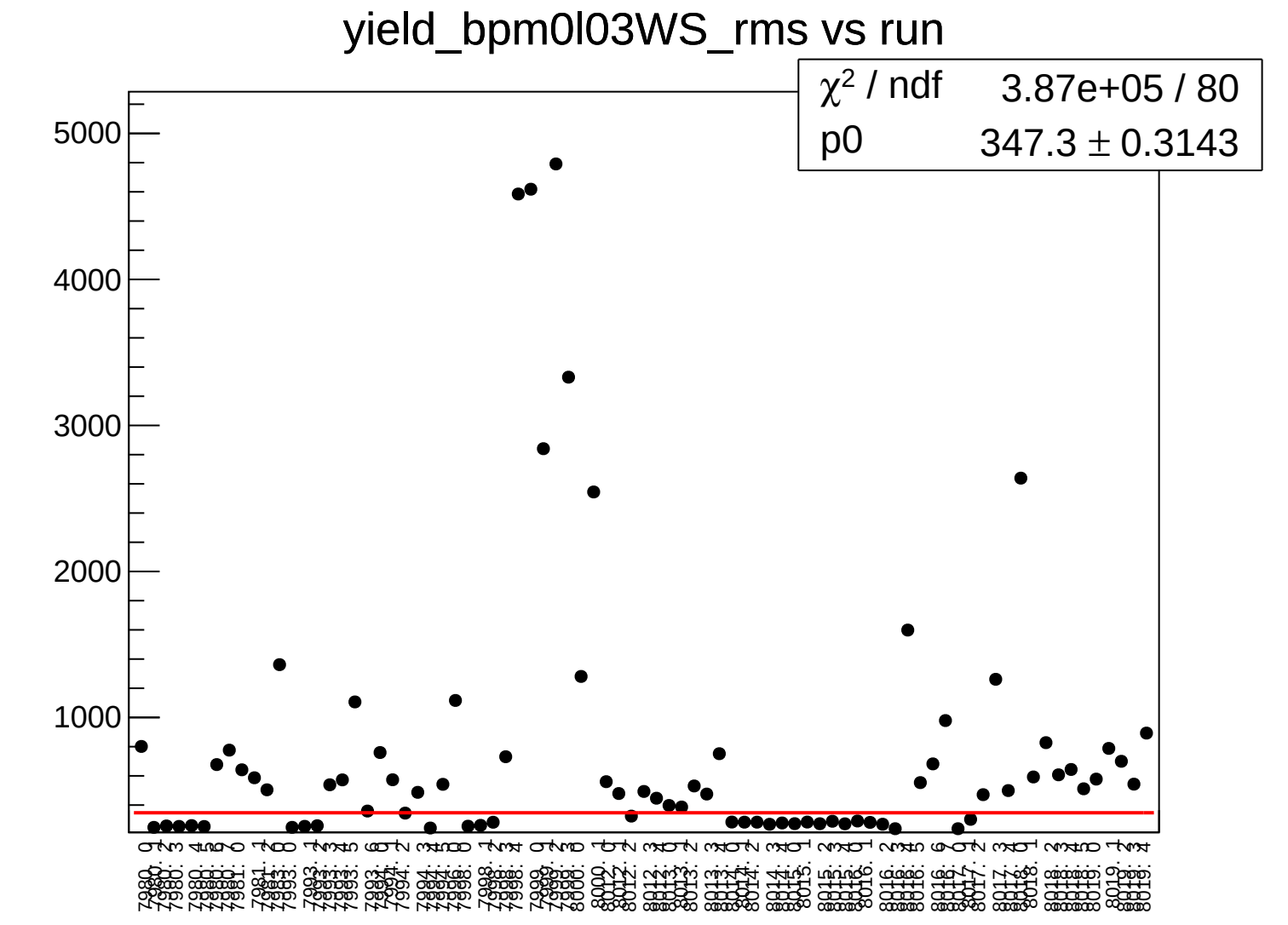

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 1.243e+06 / 80
p0 1.365e+05 ± 0.3674
137
136.5
136
135.5
135
134.5
134
pull
Entries 81
Mean −200.8
Std Dev 229.8
200
0
−200
−400
−600
−800

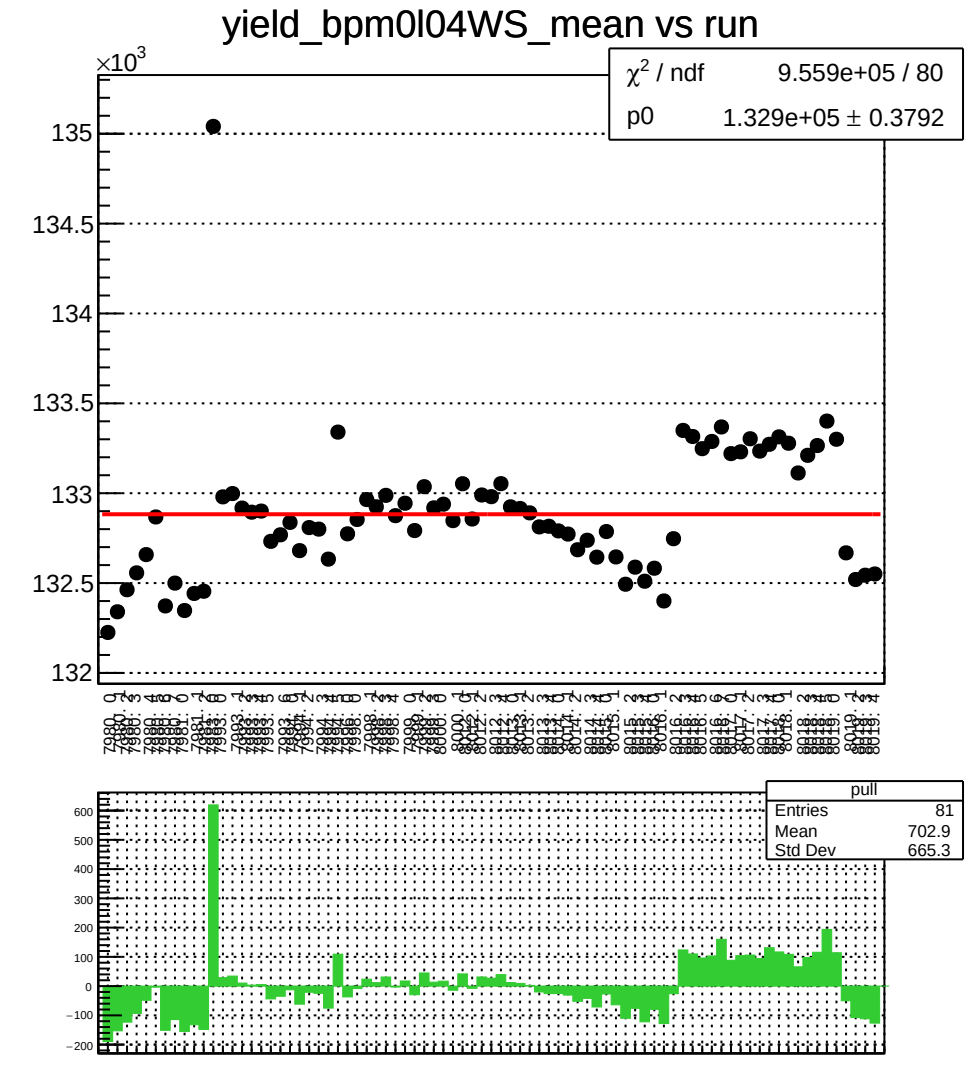

pull1D
Entries 81
Mean −3.06
Std Dev 3.772
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

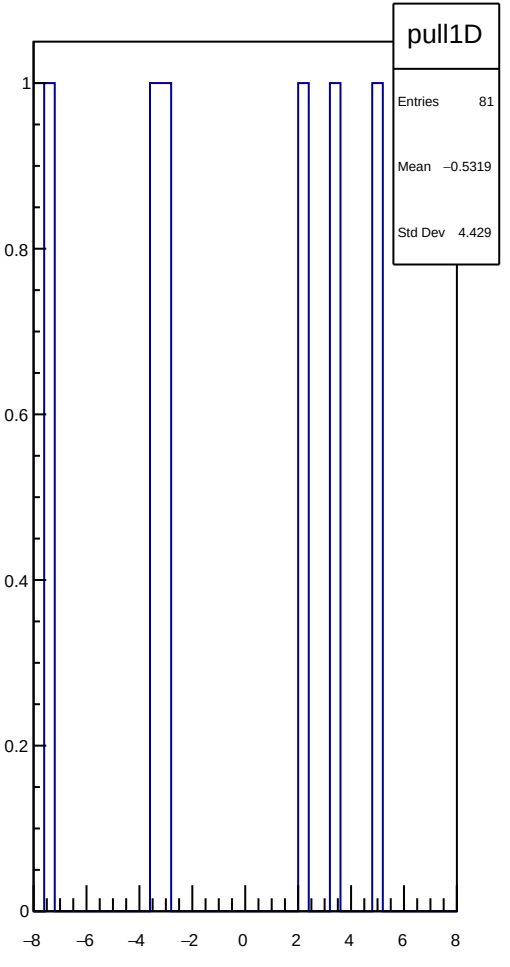

yield_bpm0l02WS_rms vs run
χ² / ndf 4687 / 80
p0 328.9 ± 0.2598
400
380
360
340
320
300
280

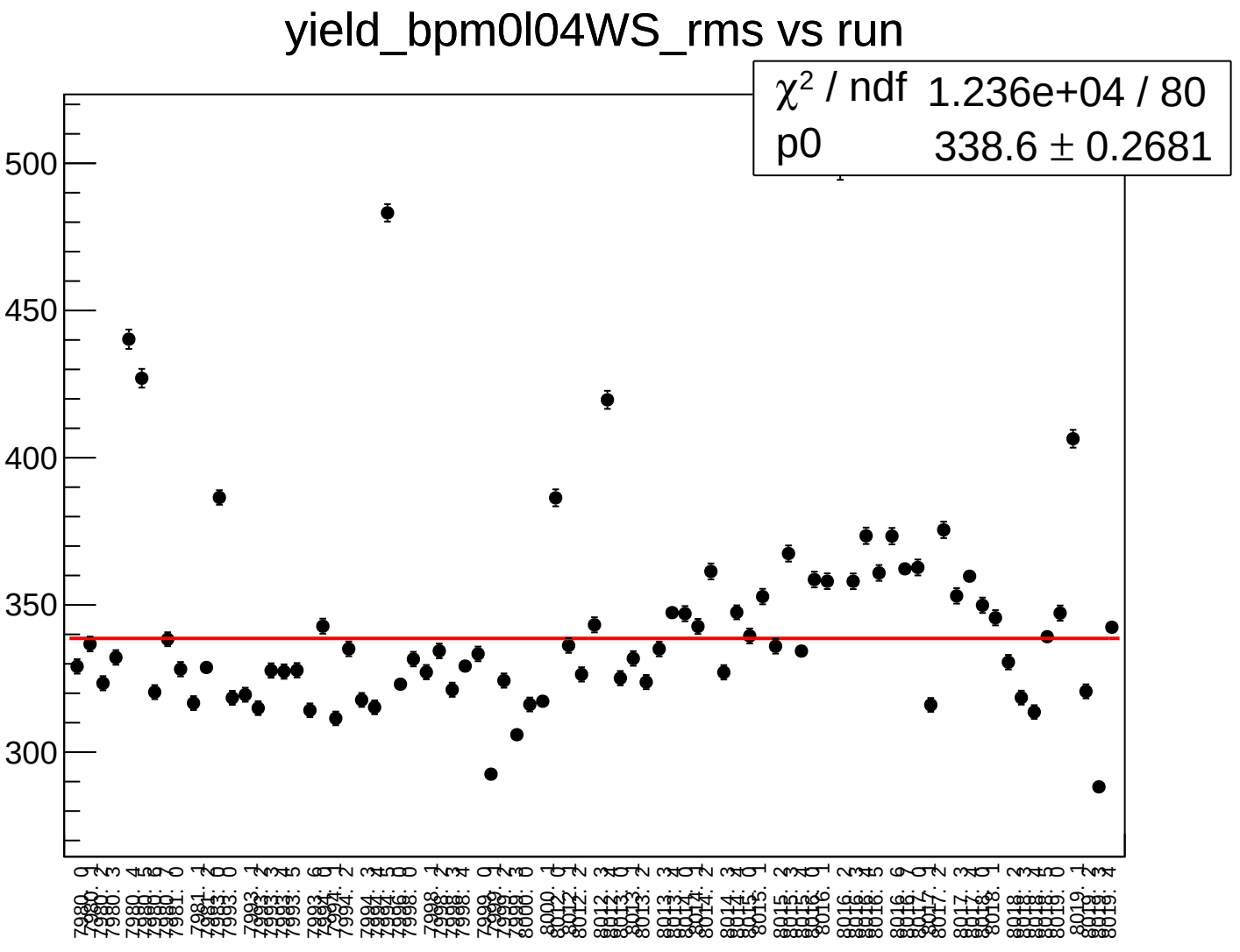

yield_bpm0l03WS_mean vs run
×10^3
130
128
126
124
122
120
118
χ² / ndf 1.04e+06 / 80
p0 1.288e+05 ± 0.4445
pull
Entries 81
Mean 47.68
Std Dev 3.466
100
0
−100
−200
−300
−400
−500
−600

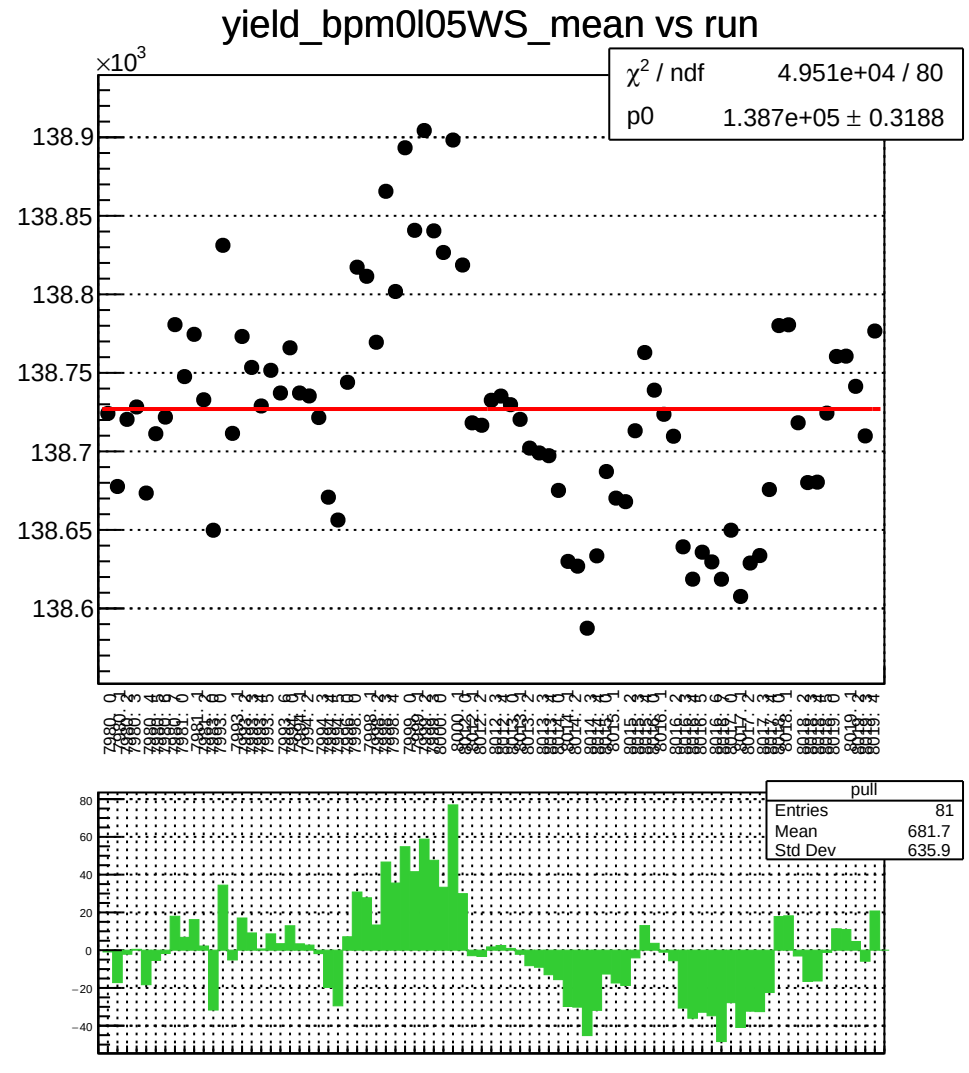

pull1D
Entries 81
Mean 2.14
Std Dev 4.722
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

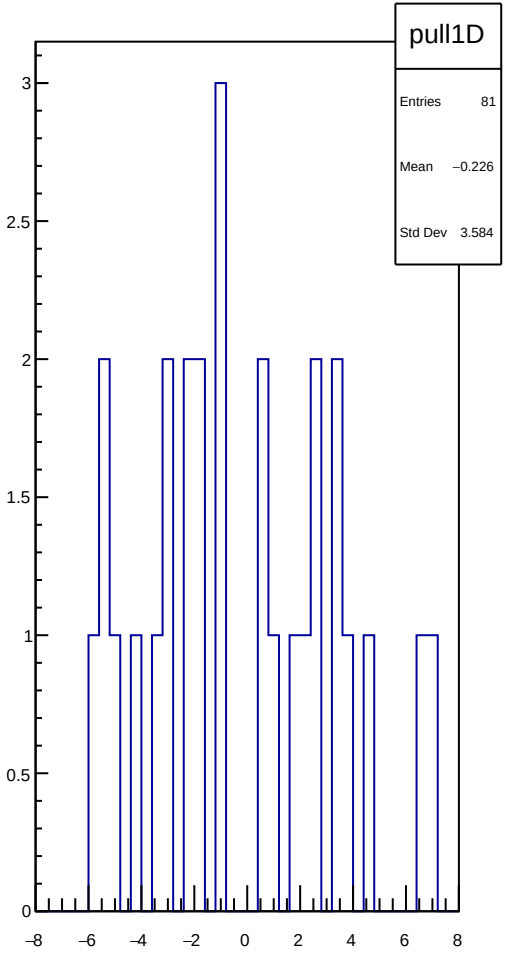

yield_bpm0l03WS_rms vs run
χ² / ndf 3.87e+05 / 80
p0 347.3 ± 0.3143
5000
4000
3000
2000
1000

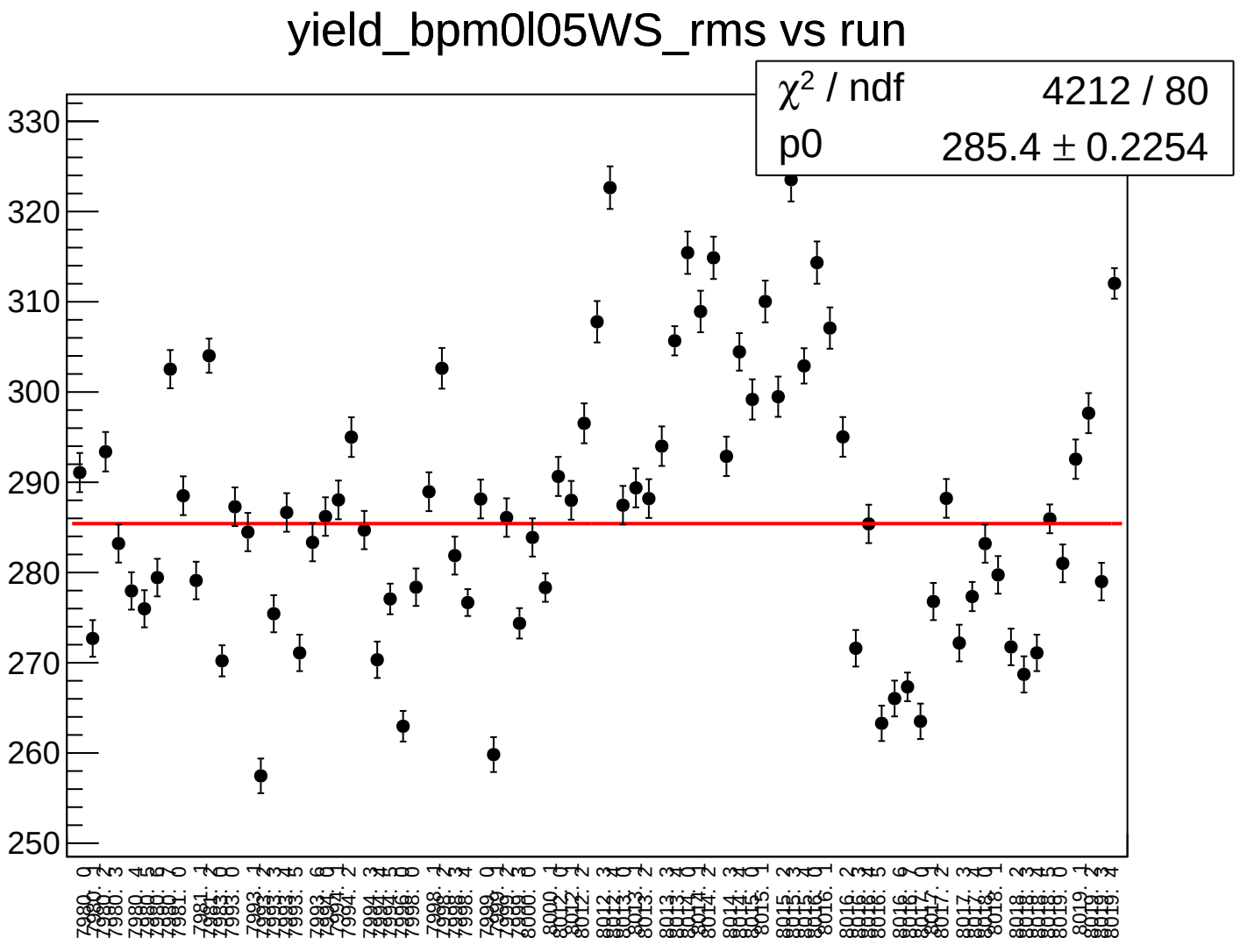

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 9.559e+05 / 80
p0 1.329e+05 ± 0.3792
135
134.5
134
133.5
133
132.5
132
pull
Entries 81
Mean 702.9
Std Dev 665.3
600
500
400
300
200
100
0
−100
−200

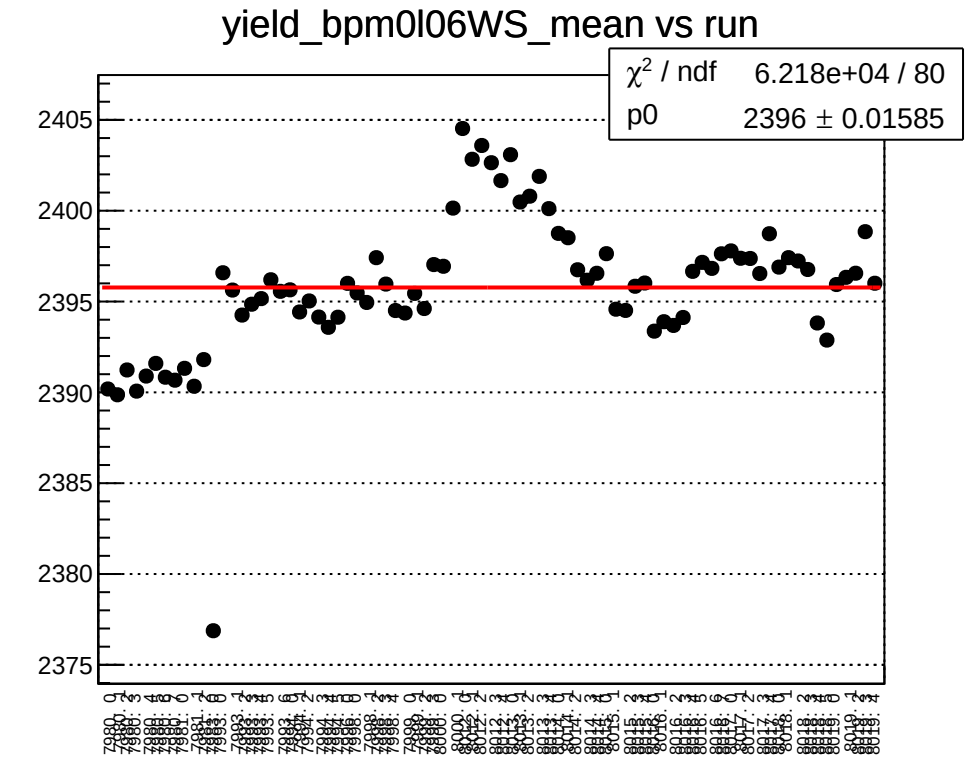

pull1D
Entries 81
Mean −0.5319
Std Dev 4.429
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

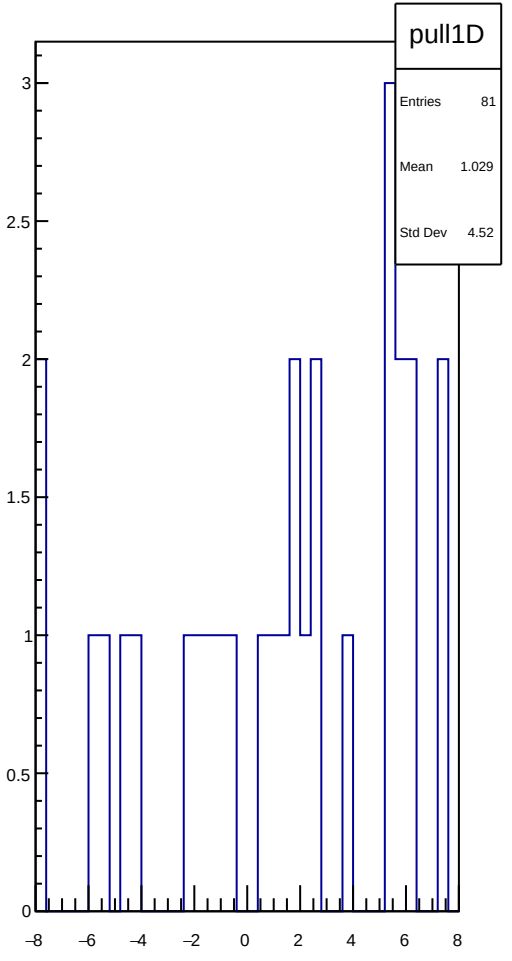

yield_bpm0l04WS_rms vs run
χ² / ndf 1.236e+04 / 80
p0 338.6 ± 0.2681
500
450
400
350
300

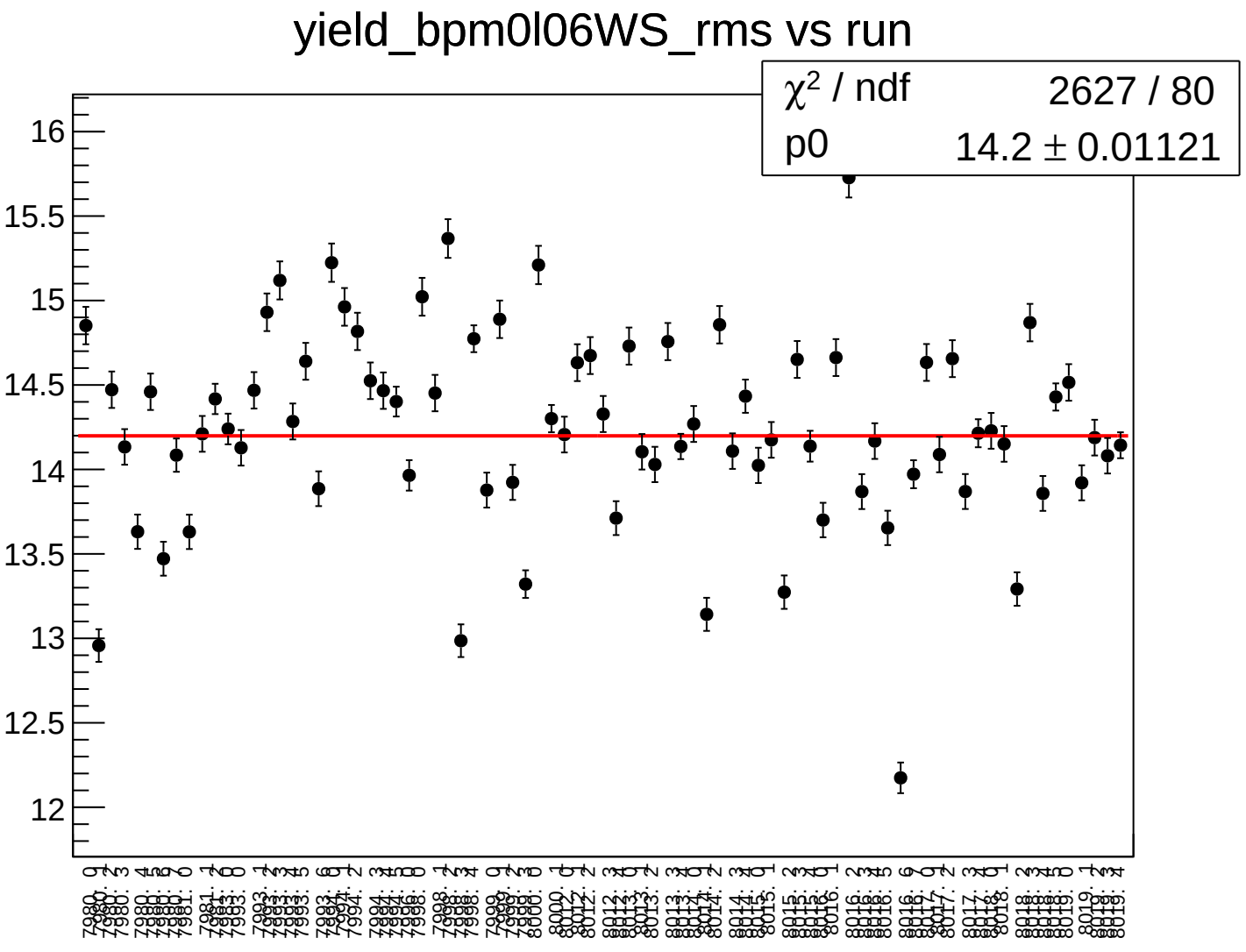

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 4.951e+04 / 80
p0 1.387e+05 ± 0.3188
138.9
138.85
138.8
138.75
138.7
138.65
138.6
pull
Entries 81
Mean 681.7
Std Dev 635.9
80
60
40
20
0
−20
−40

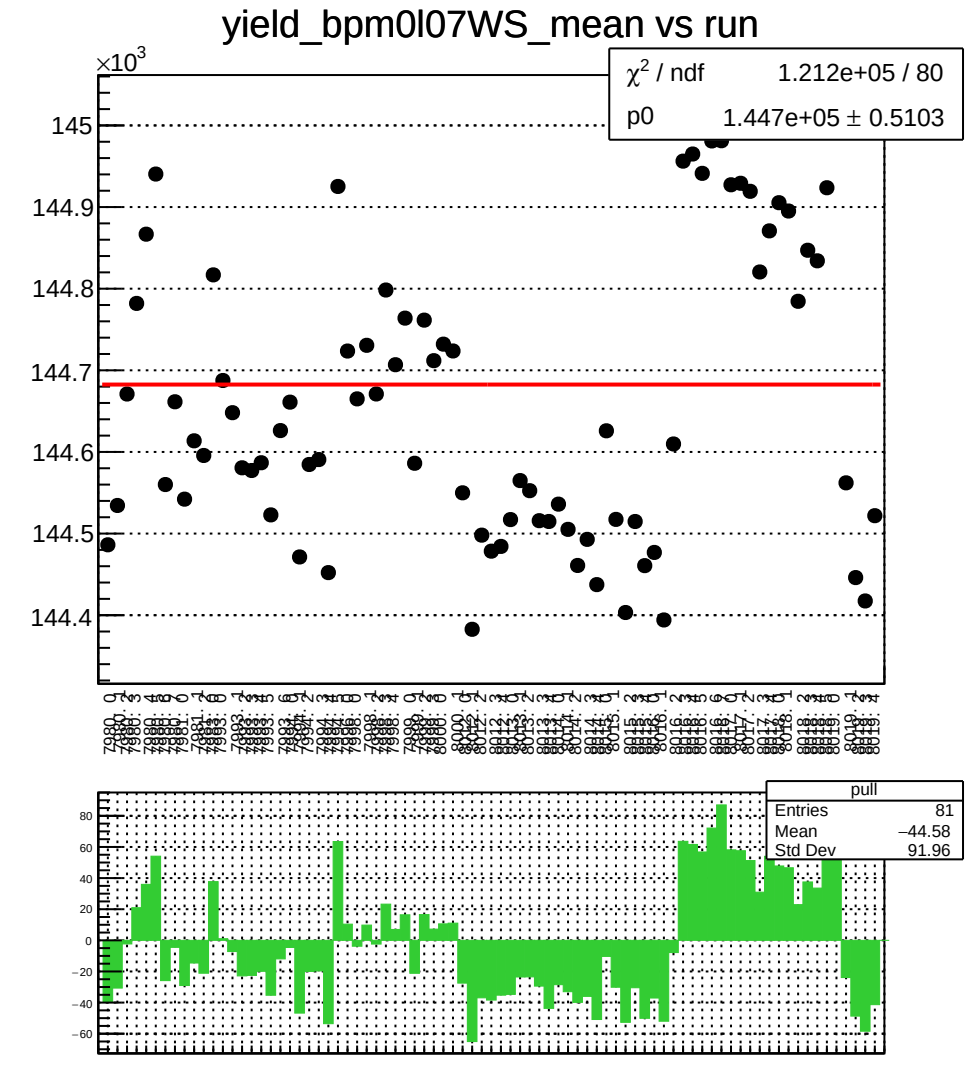

pull1D
Entries 81
Mean −0.226
Std Dev 3.584
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

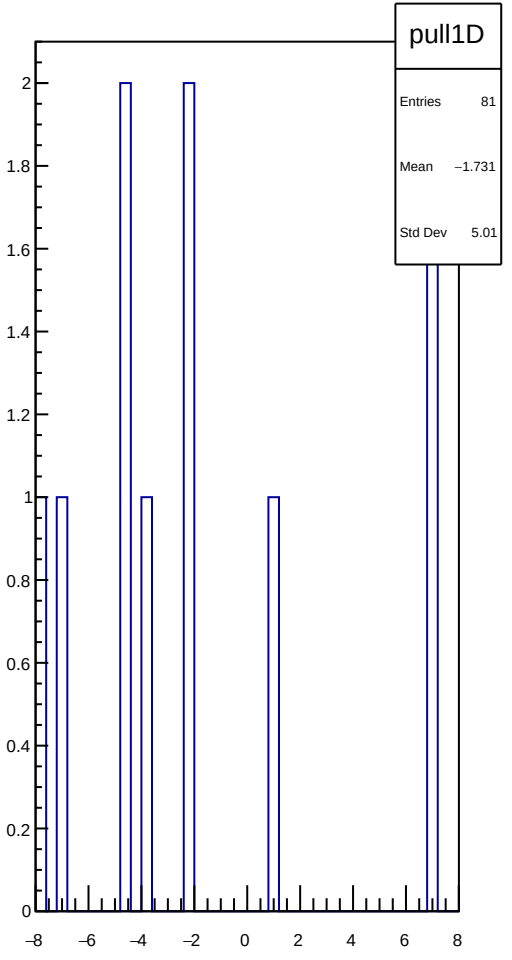

yield_bpm0l05WS_rms vs run
χ² / ndf 4212 / 80
p0 285.4 ± 0.2254
330
320
310
300
290
280
270
260
250

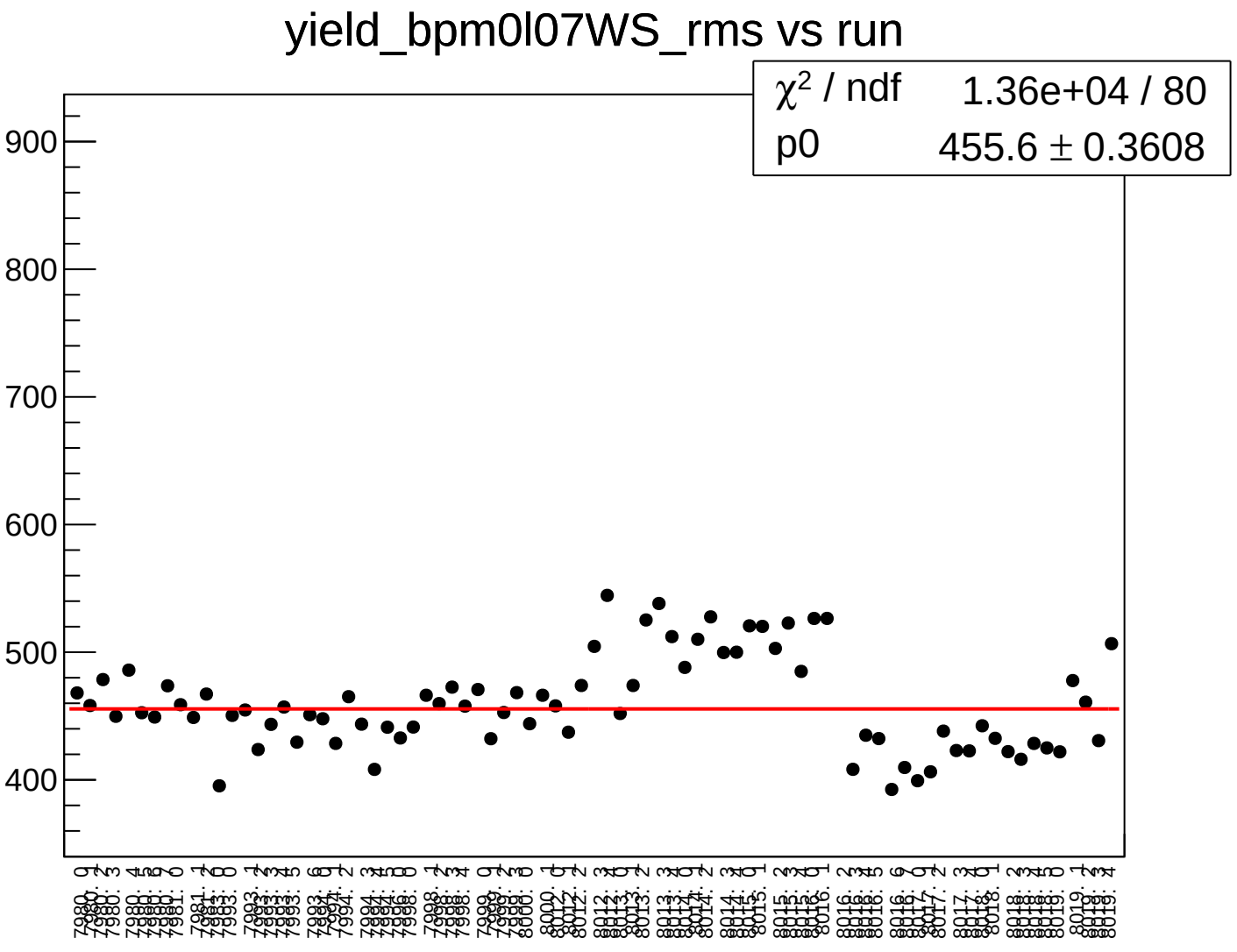

yield_bpm0l06WS_mean vs run
χ² / ndf 6.218e+04 / 80
p0 2396 ± 0.01585
2405
2400
2395
2390
2385
2380
2375
pull
Entries 81
Mean 2809
Std Dev 2780
50
0
−50
−100
−150

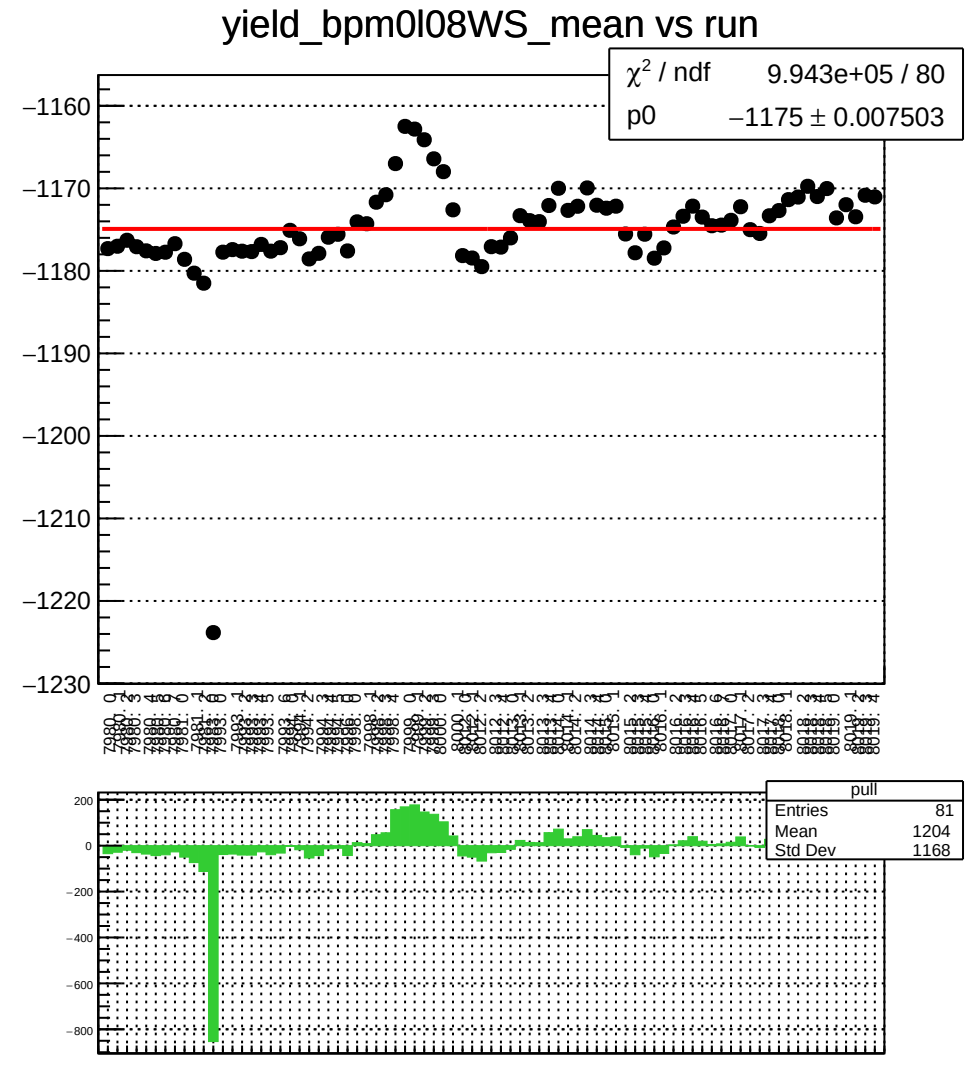

pull1D
Entries 81
Mean 1.029
Std Dev 4.52
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

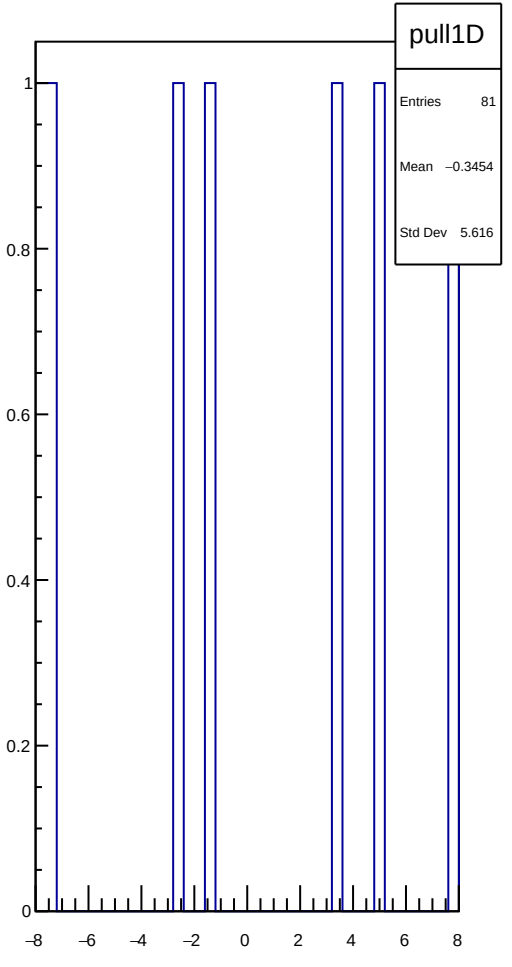

yield_bpm0l06WS_rms vs run
χ² / ndf 2627 / 80
p0 14.2 ± 0.01121
16
15.5
15
14.5
14
13.5
13
12.5
12

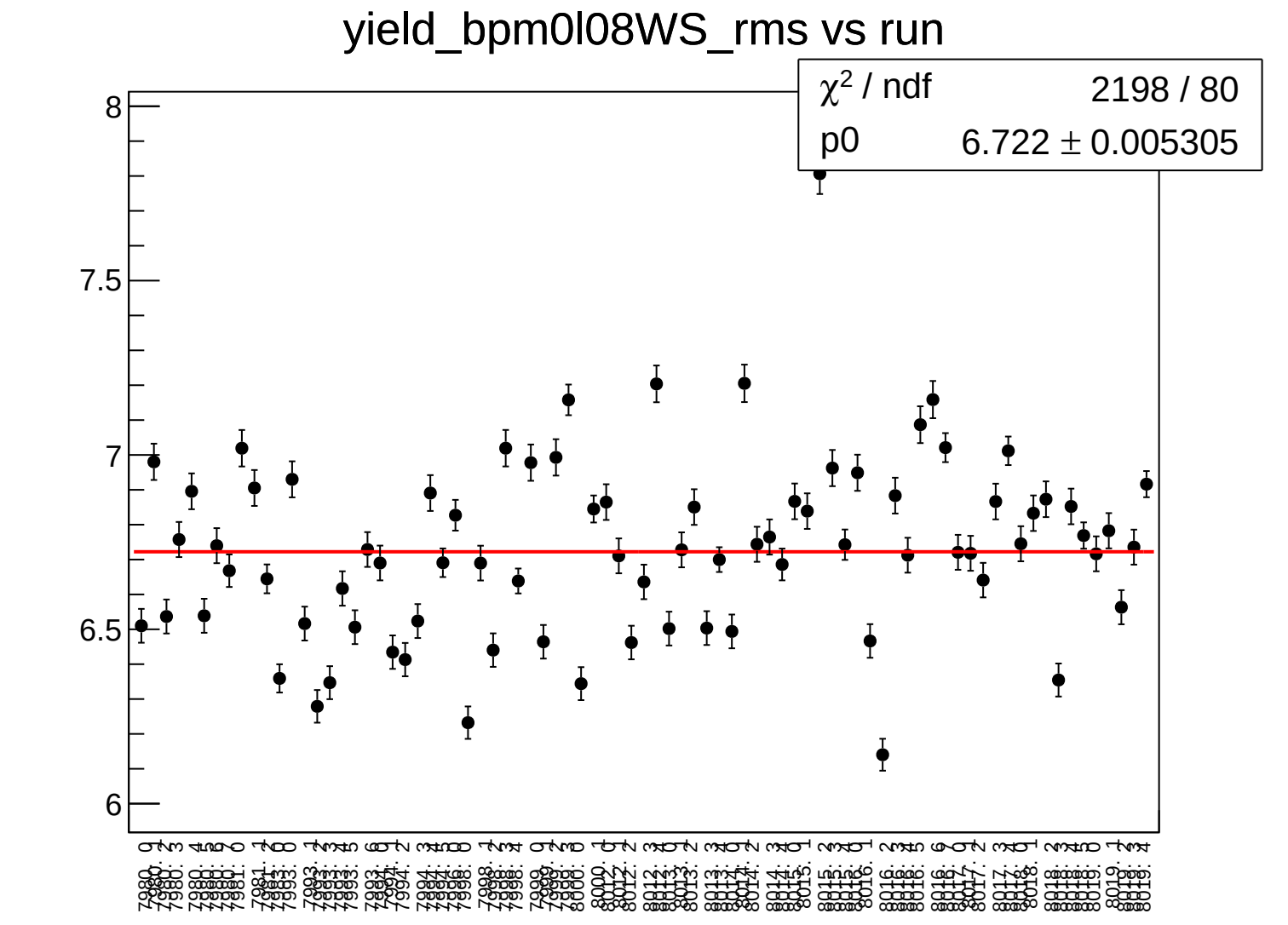

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 1.212e+05 / 80
p0 1.447e+05 ± 0.5103
145
144.9
144.8
144.7
144.6
144.5
144.4
pull
Entries 81
Mean −44.58
Std Dev 91.96
80
60
40
20
0
−20
−40
−60

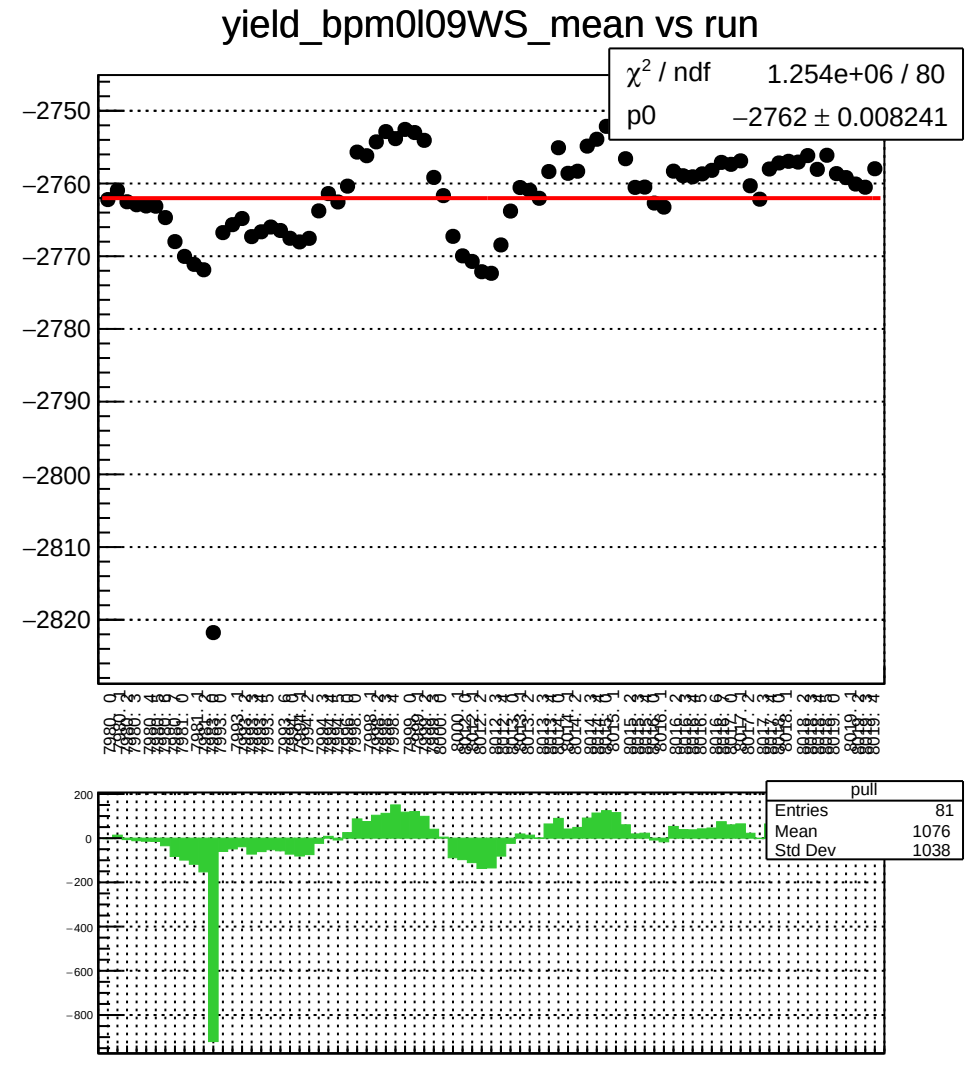

pull1D
Entries 81
Mean −1.731
Std Dev 5.01
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

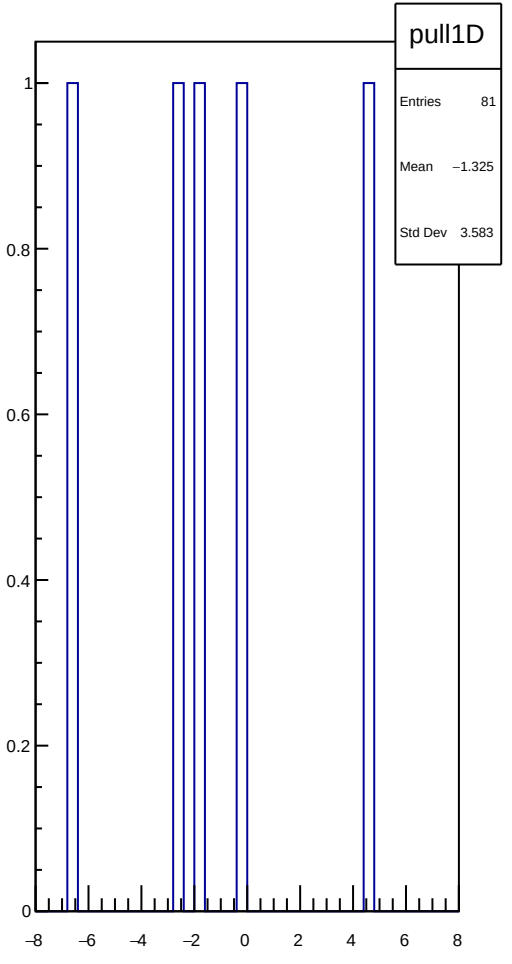

yield_bpm0l07WS_rms vs run
χ² / ndf 1.36e+04 / 80
p0 455.6 ± 0.3608
900
800
700
600
500
400

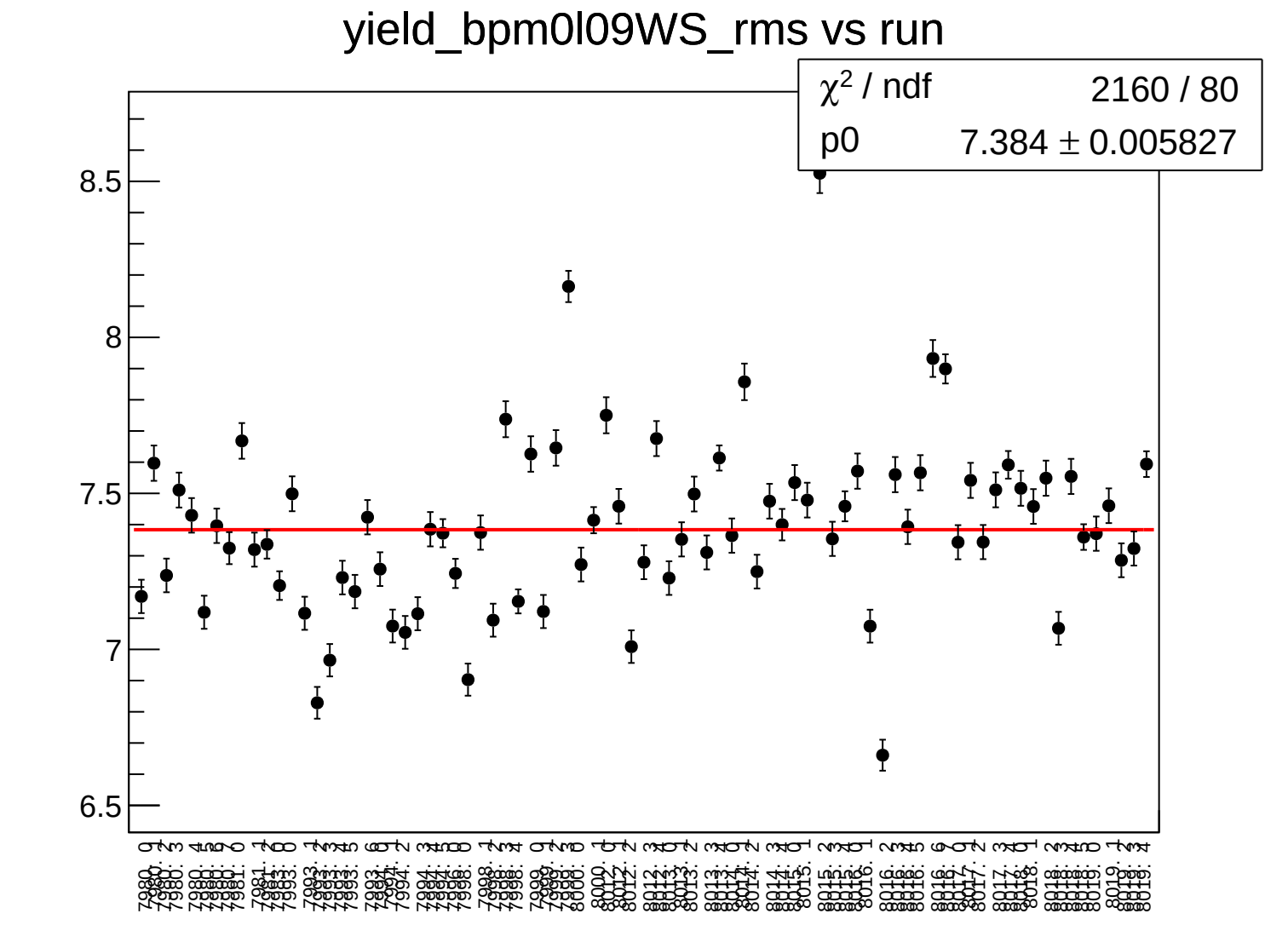

yield_bpm0l08WS_mean vs run
χ² / ndf 9.943e+05 / 80
p0 −1175 ± 0.007503
−1160
−1170
−1180
−1190
−1200
−1210
−1220
−1230
pull
Entries 81
Mean 1204
Std Dev 1168
200
0
−200
−400
−600
−800

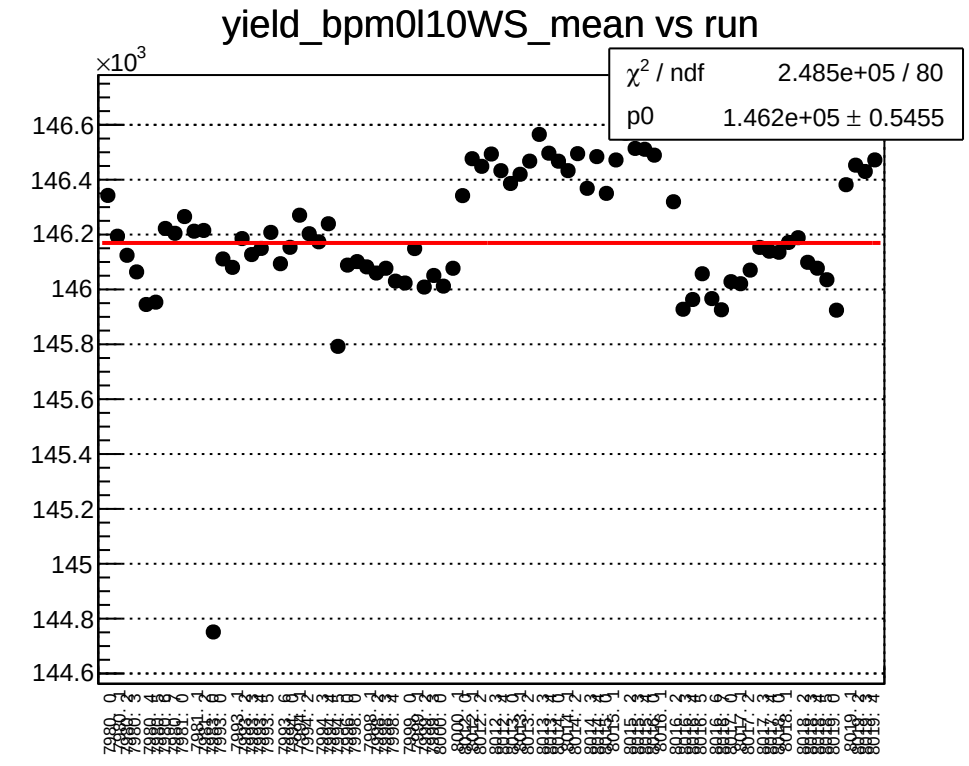

pull1D
Entries 81
Mean −0.3454
Std Dev 5.616
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

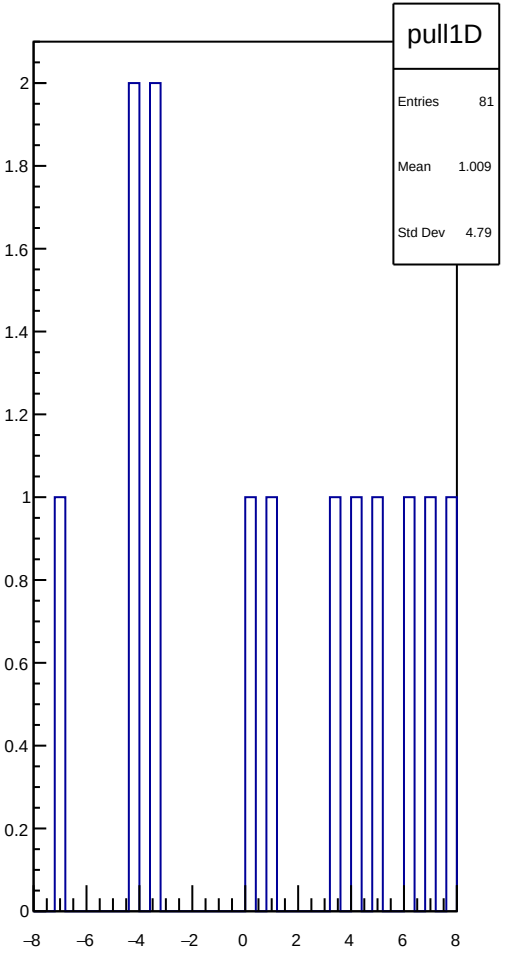

yield_bpm0l08WS_rms vs run
χ² / ndf 2198 / 80
p0 6.722 ± 0.005305
8
7.5
7
6.5
6

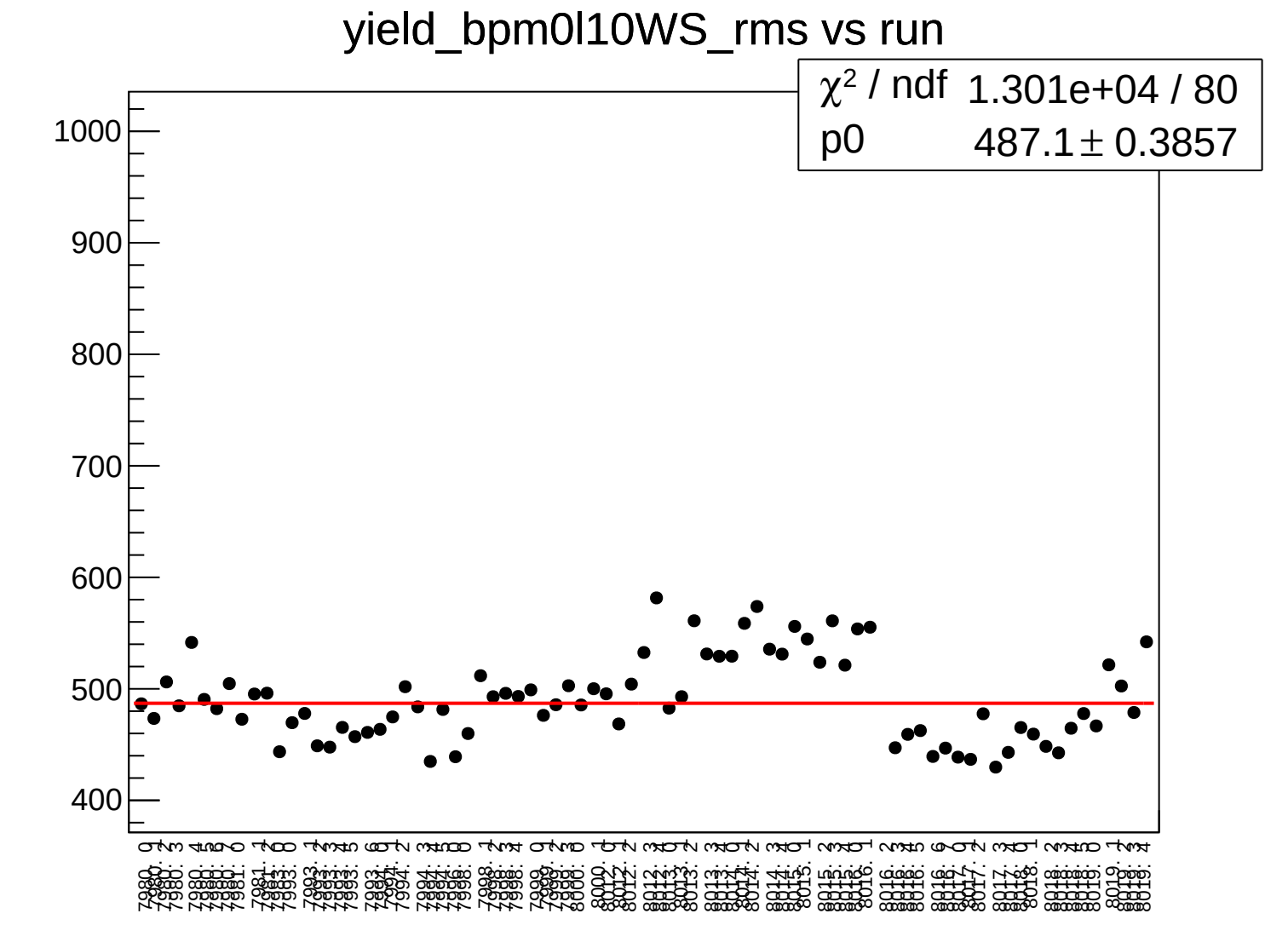

yield_bpm0l09WS_mean vs run
χ² / ndf 1.254e+06 / 80
p0 −2762 ± 0.008241
−2750
−2760
−2770
−2780
−2790
−2800
−2810
−2820
pull
Entries 81
Mean 1076
Std Dev 1038
200
0
−200
−400
−600
−800

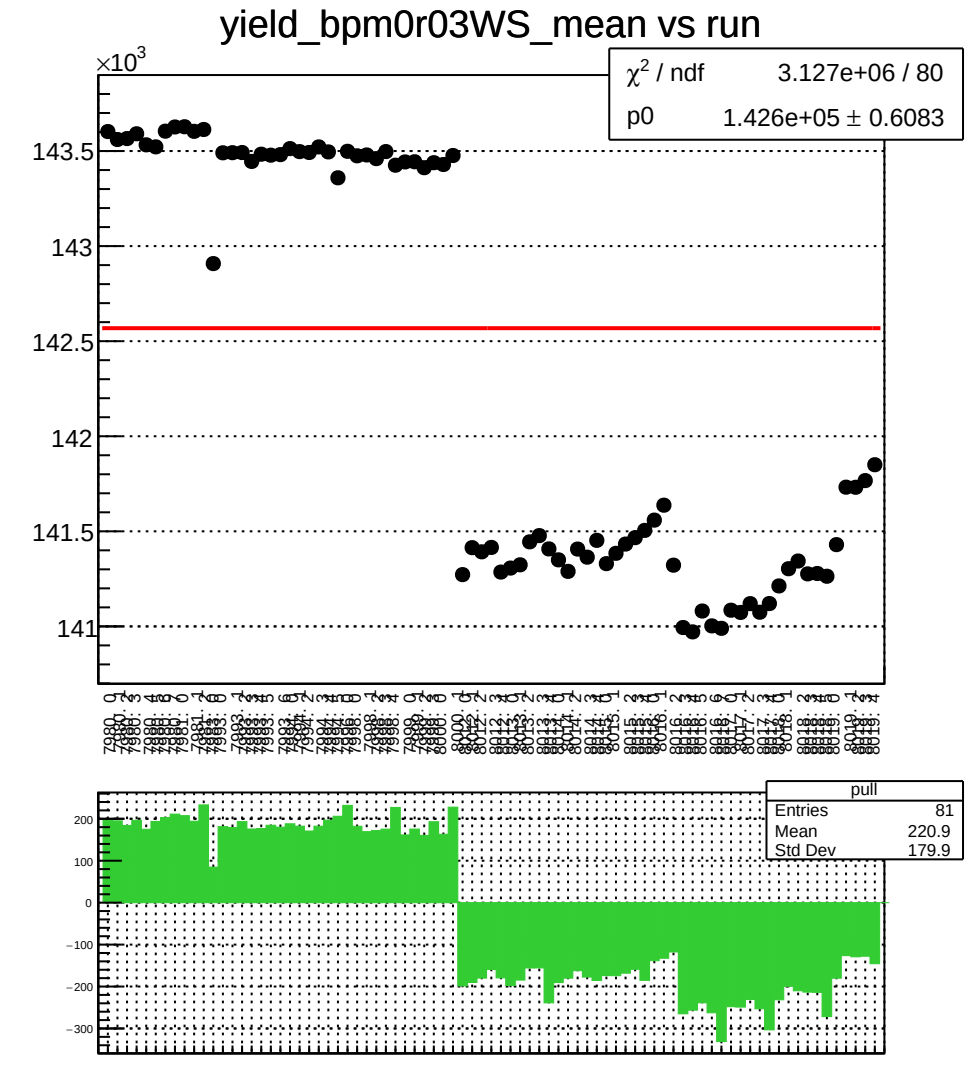

pull1D
Entries 81
Mean −1.325
Std Dev 3.583
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

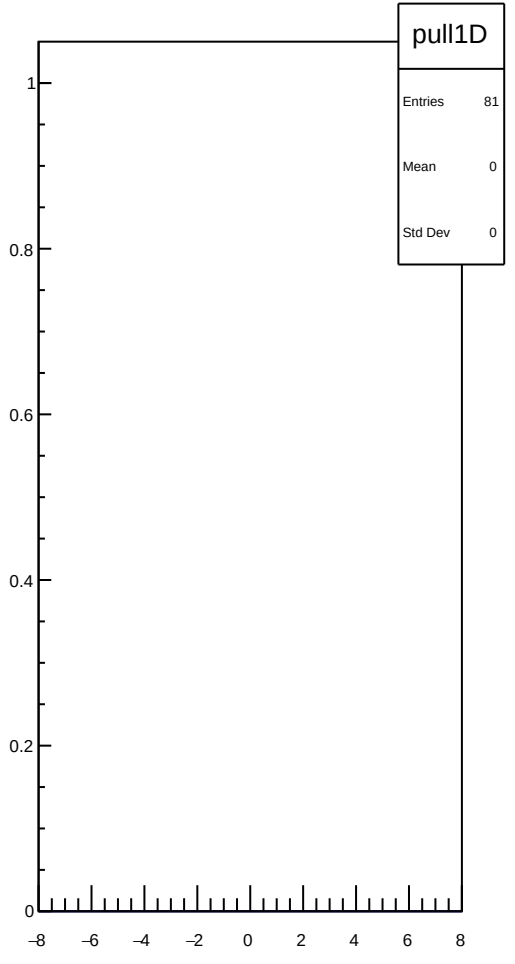

yield_bpm0l09WS_rms vs run
χ² / ndf 2160 / 80
p0 7.384 ± 0.005827
8.5
8
7.5
7
6.5

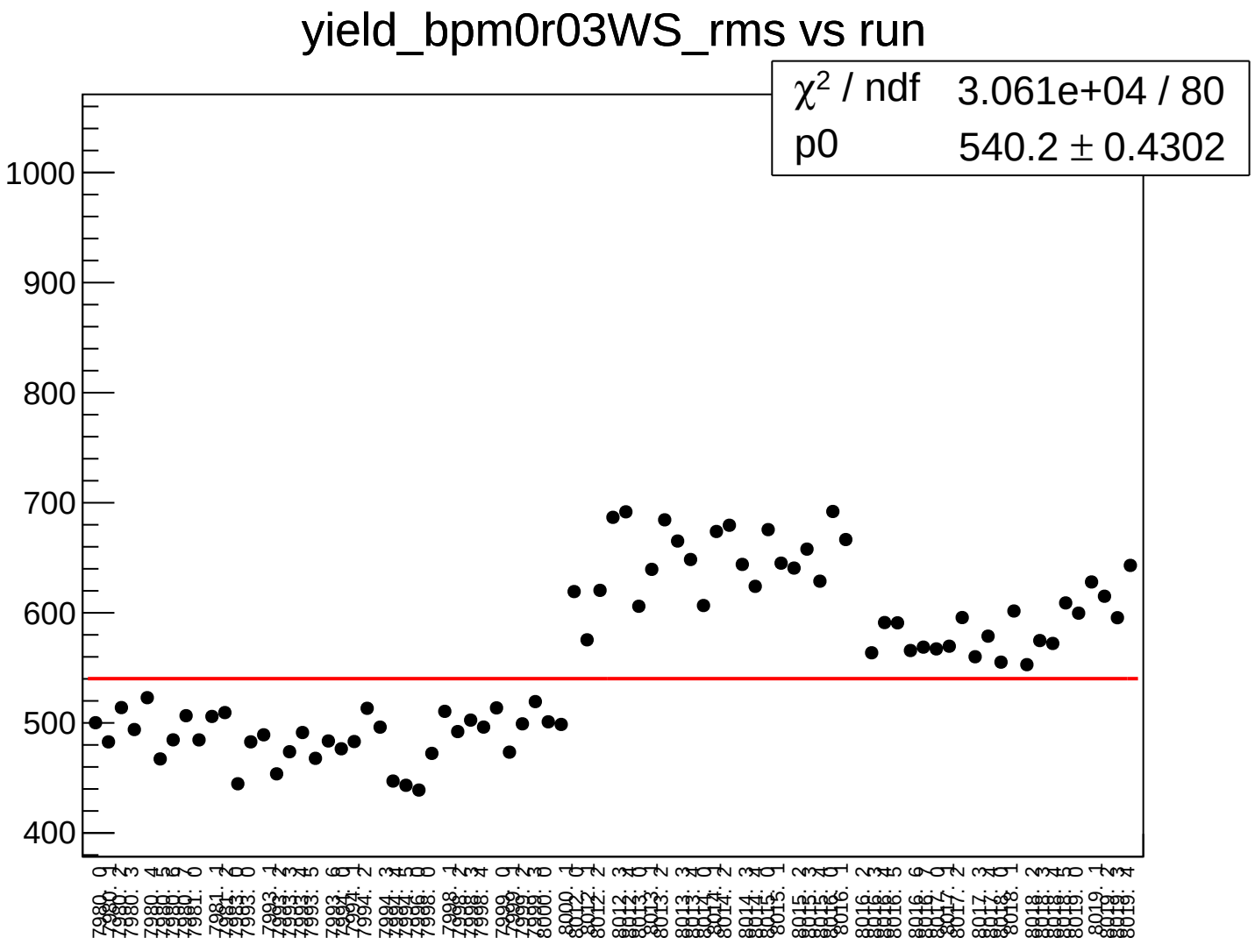

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 2.485e+05 / 80
p0 1.462e+05 ± 0.5455
146.6
146.4
146.2
146
145.8
145.6
145.4
145.2
145
144.8
144.6
pull
Entries 81
Mean 125.8
Std Dev 90.94
100
50
0
−50
−100
−150
−200
−250
−300
−350

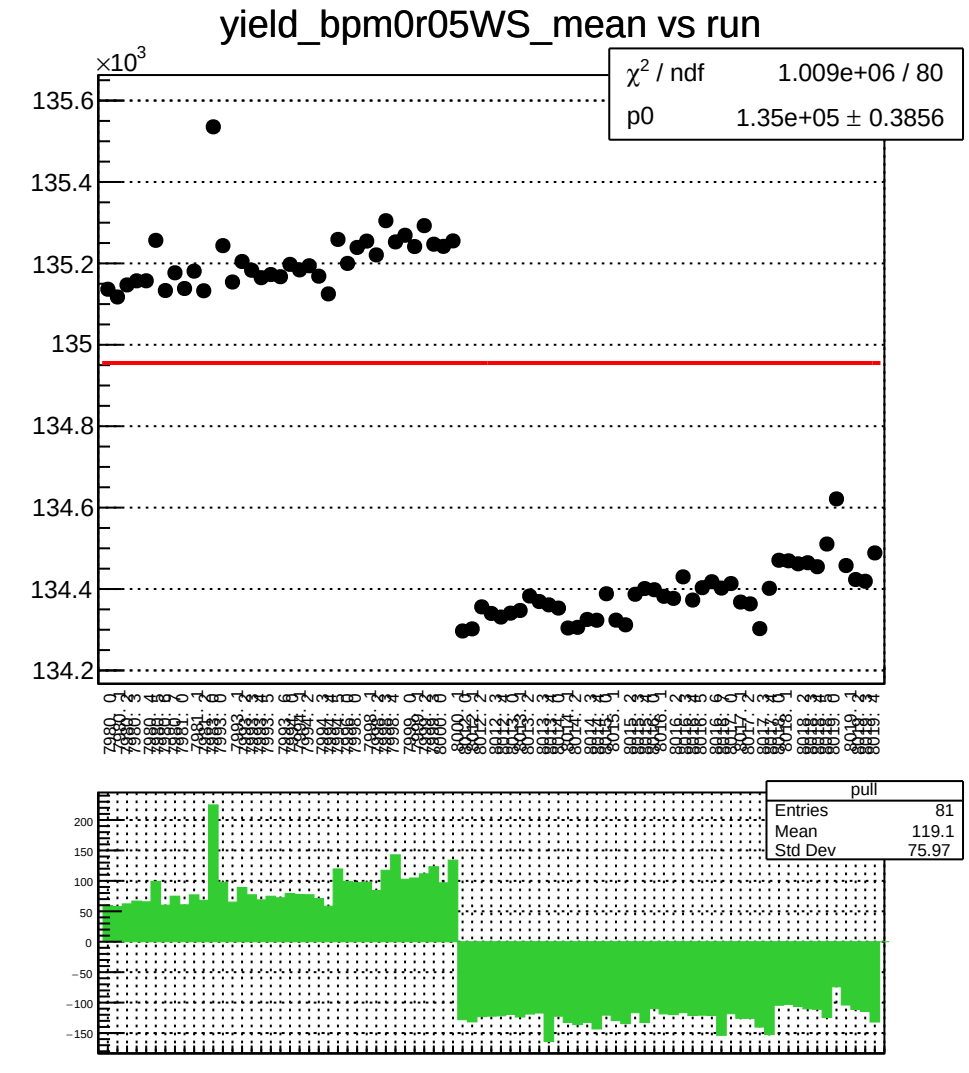

pull1D
Entries 81
Mean 1.009
Std Dev 4.79
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

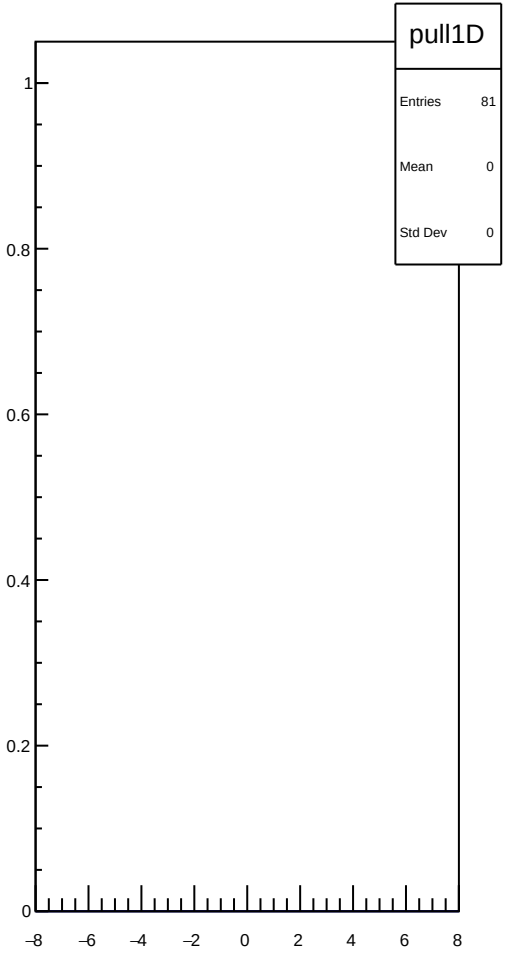

yield_bpm0l10WS_rms vs run
χ² / ndf 1.301e+04 / 80
p0 487.1 ± 0.3857
1000
900
800
700
600
500
400

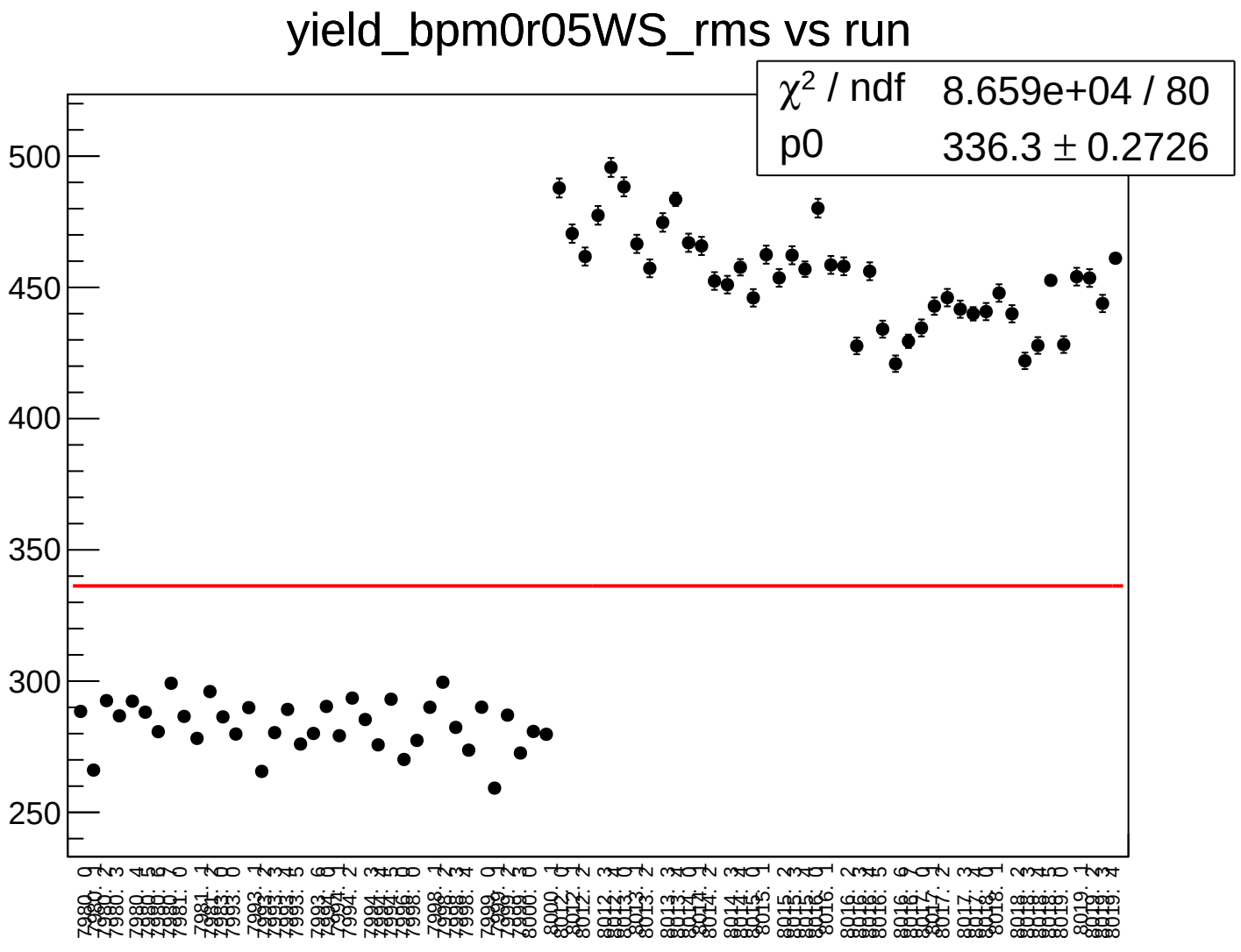

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 3.127e+06 / 80
p0 1.426e+05 ± 0.6083
143.5
143
142.5
142
141.5
141
pull
Entries 81
Mean 220.9
Std Dev 179.9
200
100
0
−100
−200
−300

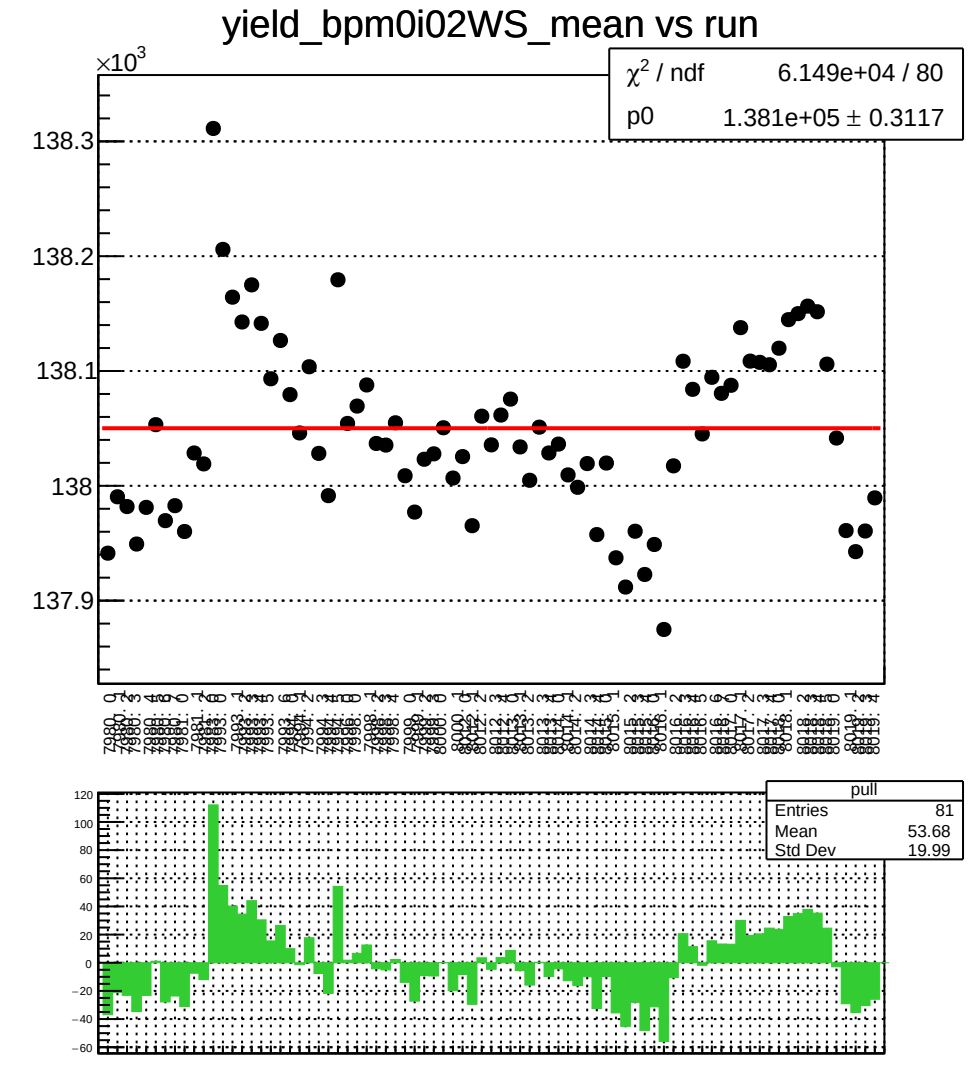

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

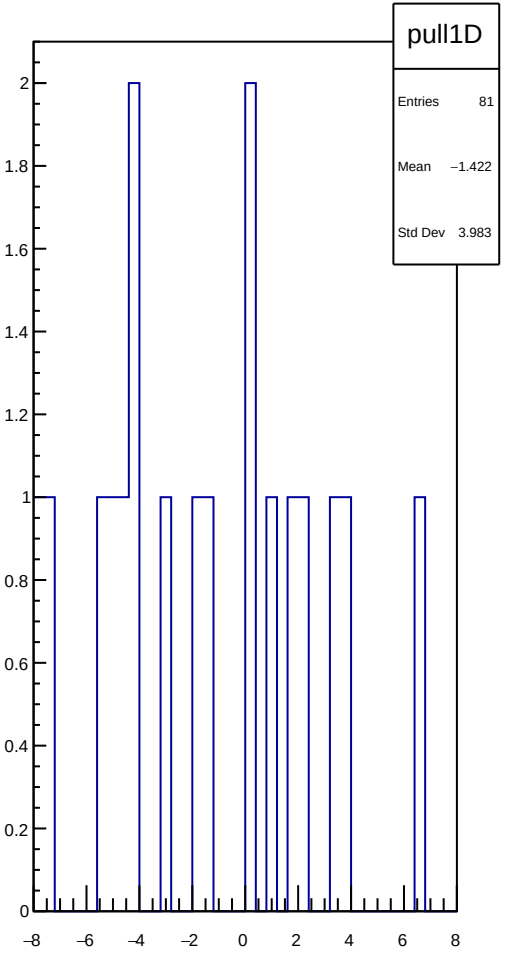

yield_bpm0r03WS_rms vs run
χ² / ndf 3.061e+04 / 80
p0 540.2 ± 0.4302
1000
900
800
700
600
500
400

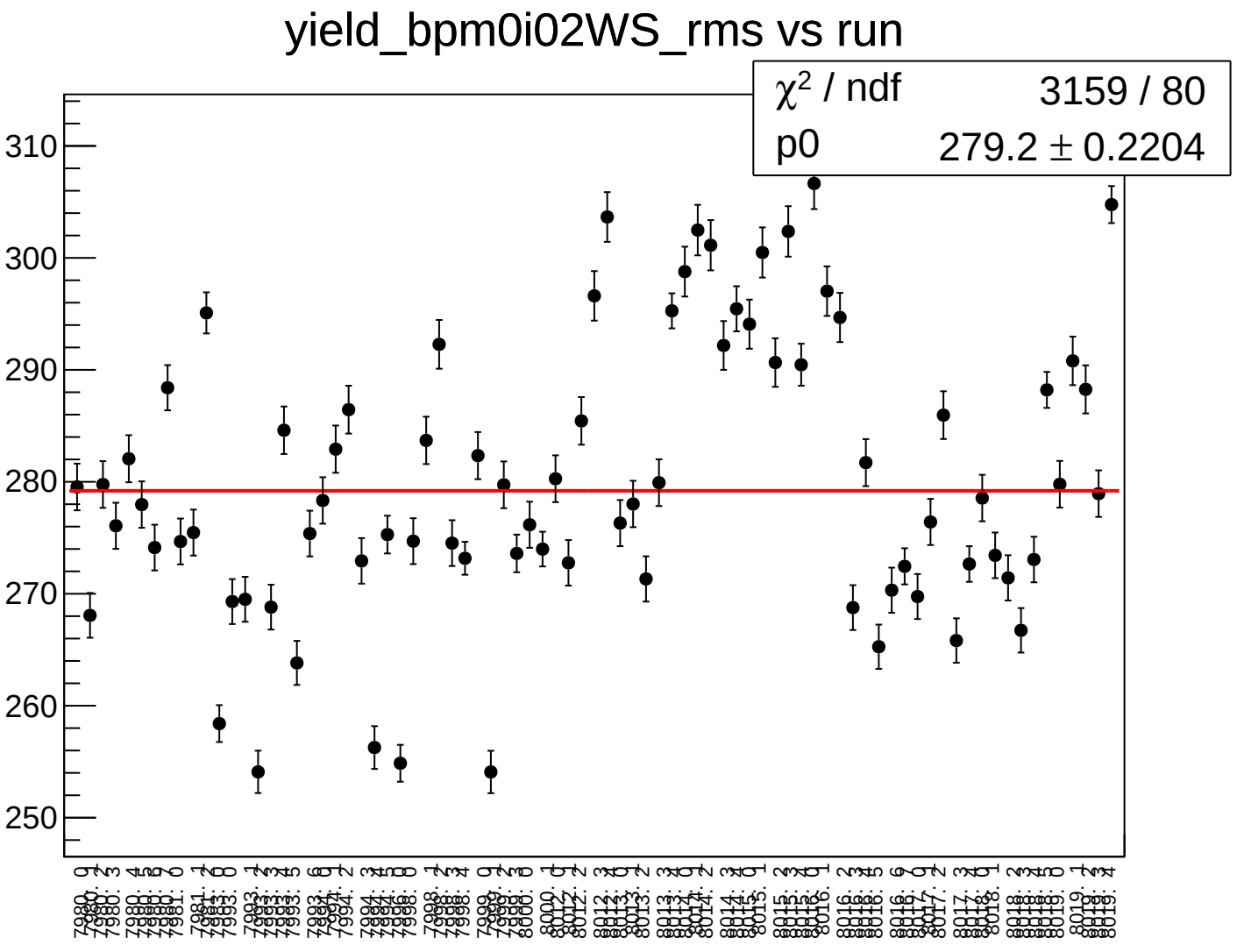

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 1.009e+06 / 80
p0 1.35e+05 ± 0.3856
135.6
135.4
135.2
135
134.8
134.6
134.4
134.2
pull
Entries 81
Mean 119.1
Std Dev 75.97
200
150
100
50
0
−50
−100
−150

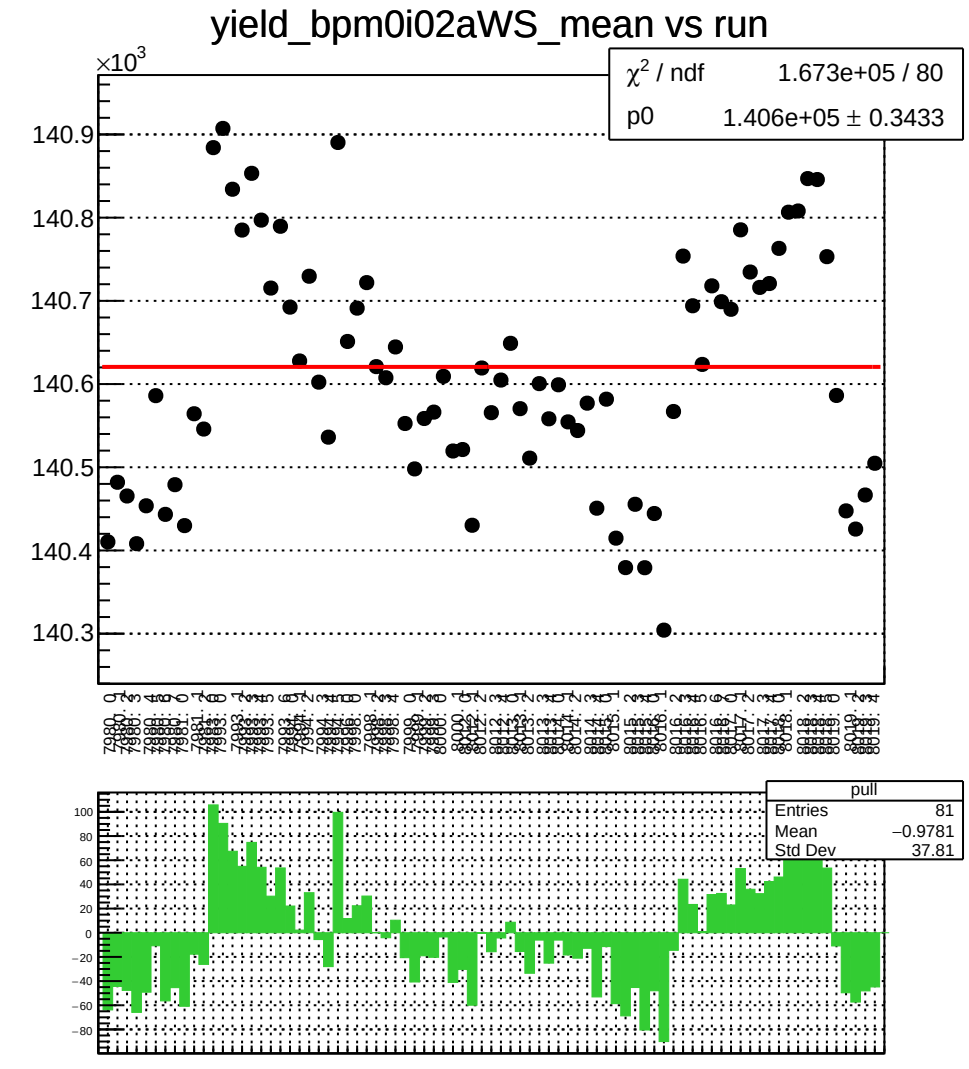

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

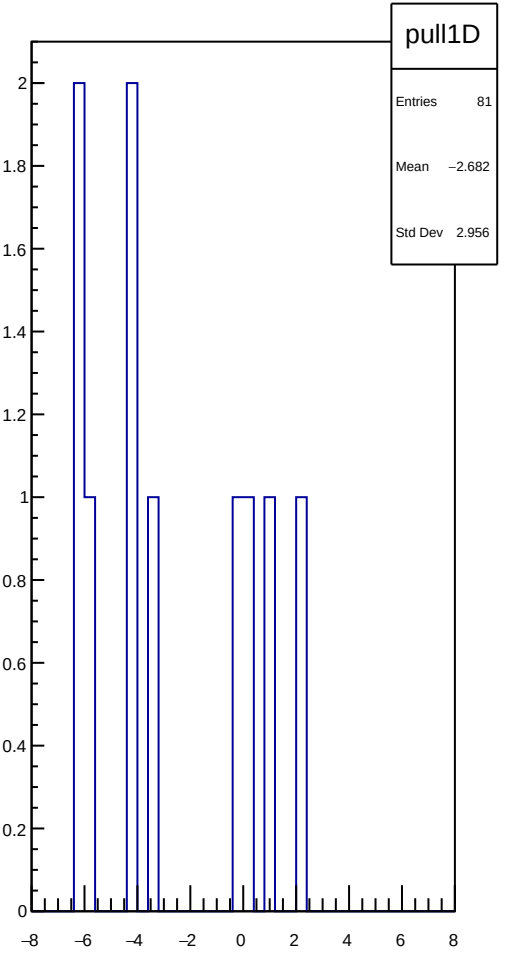

yield_bpm0r05WS_rms vs run
χ² / ndf 8.659e+04 / 80
p0 336.3 ± 0.2726
500
450
400
350
300
250

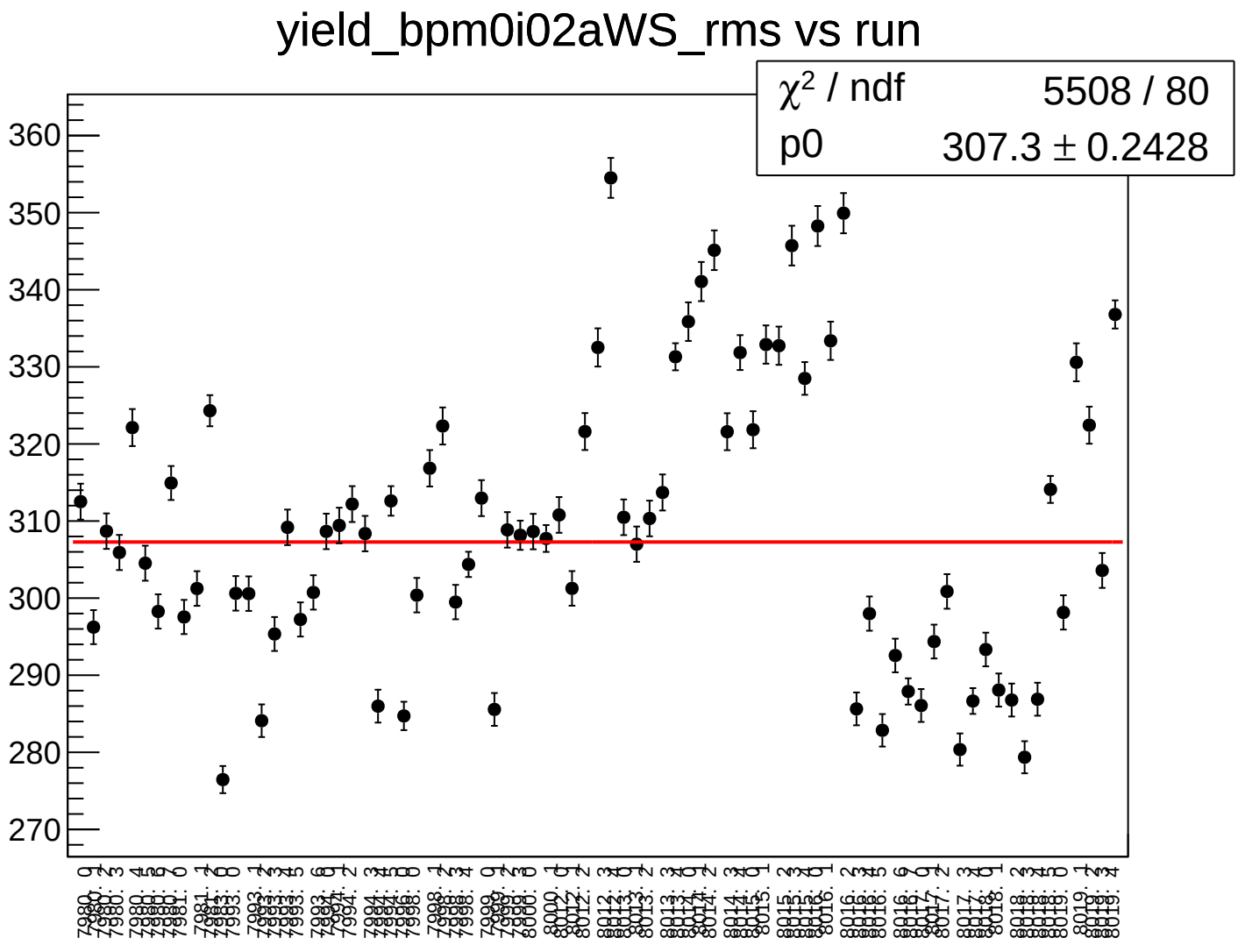

yield_bpm0i02WS_mean vs run
χ² / ndf 6.149e+04 / 80
p0 1.381e+05 ± 0.3117
×10³
138.3
138.2
138.1
138
137.9
pull
Entries 81
Mean 53.68
Std Dev 19.99
120
100
80
60
40
20
0
−20
−40
−60

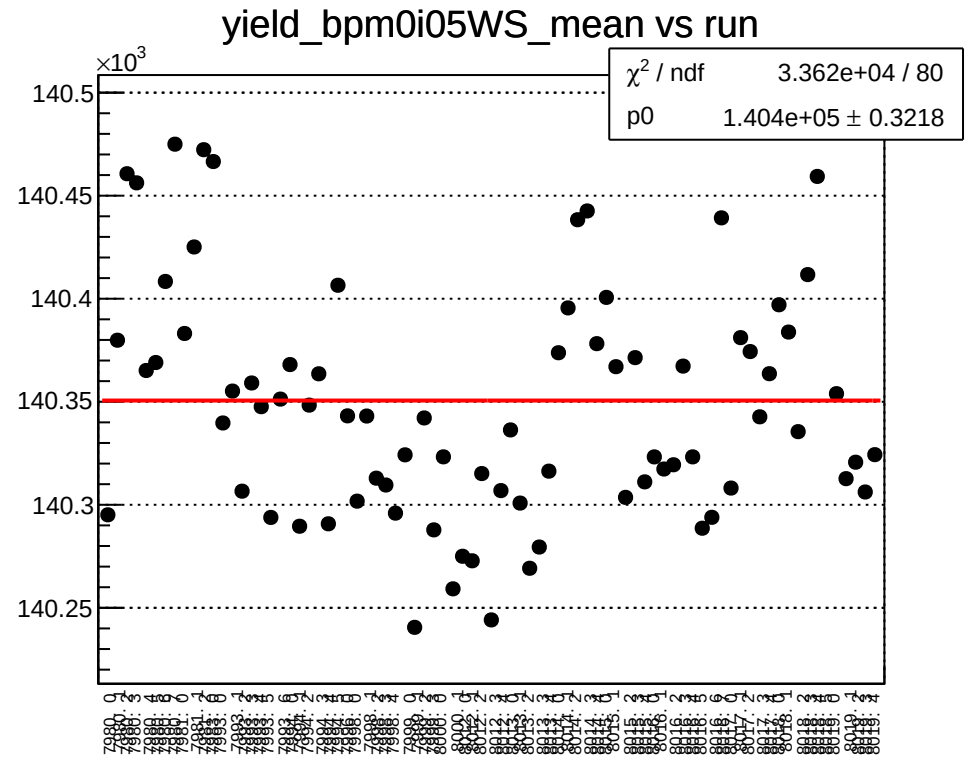

pull1D
Entries 81
Mean −1.422
Std Dev 3.983
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

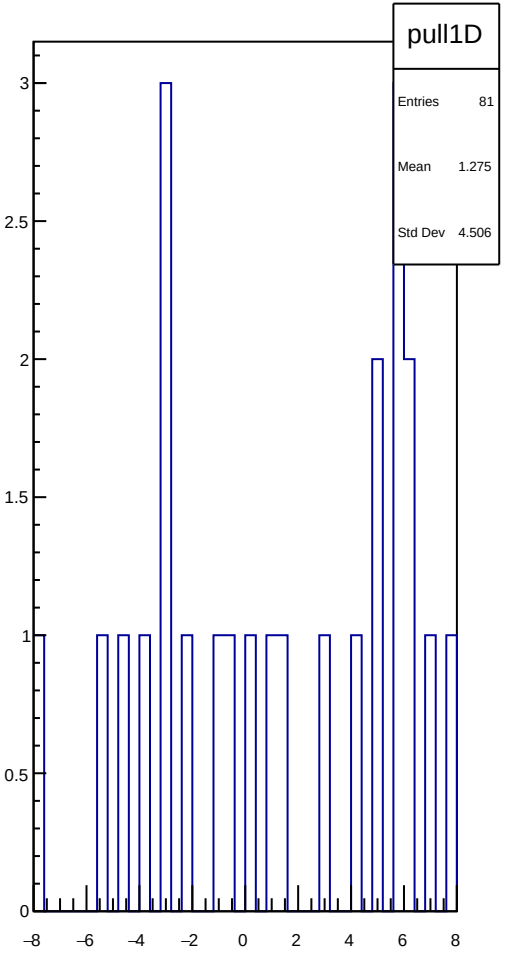

yield_bpm0i02WS_rms vs run
χ² / ndf 3159 / 80
p0 279.2 ± 0.2204
310
300
290
280
270
260
250

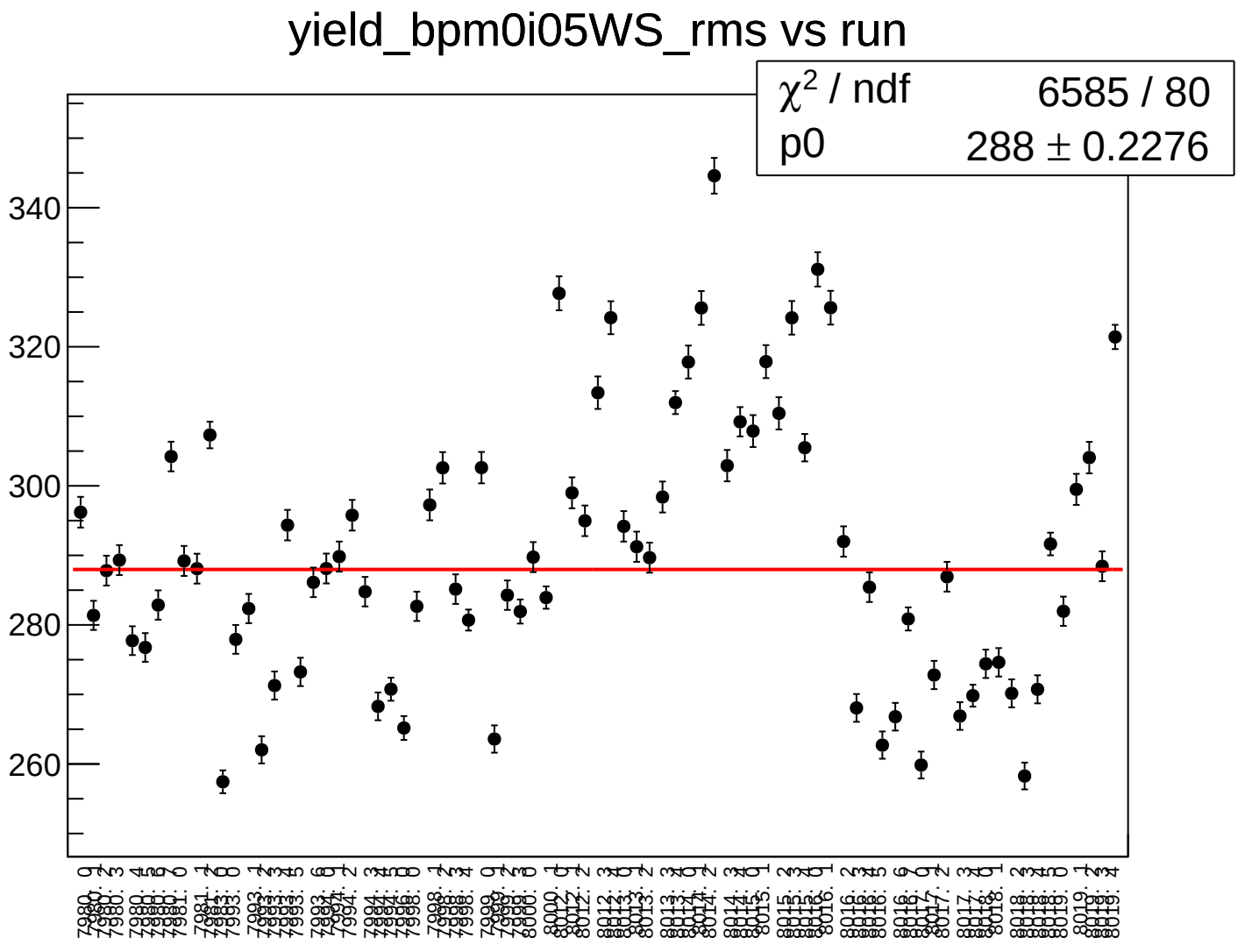

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 1.673e+05 / 80
p0 1.406e+05 ± 0.3433
140.9
140.8
140.7
140.6
140.5
140.4
140.3
pull
Entries 81
Mean −0.9781
Std Dev 37.81
100
80
60
40
20
0
−20
−40
−60
−80

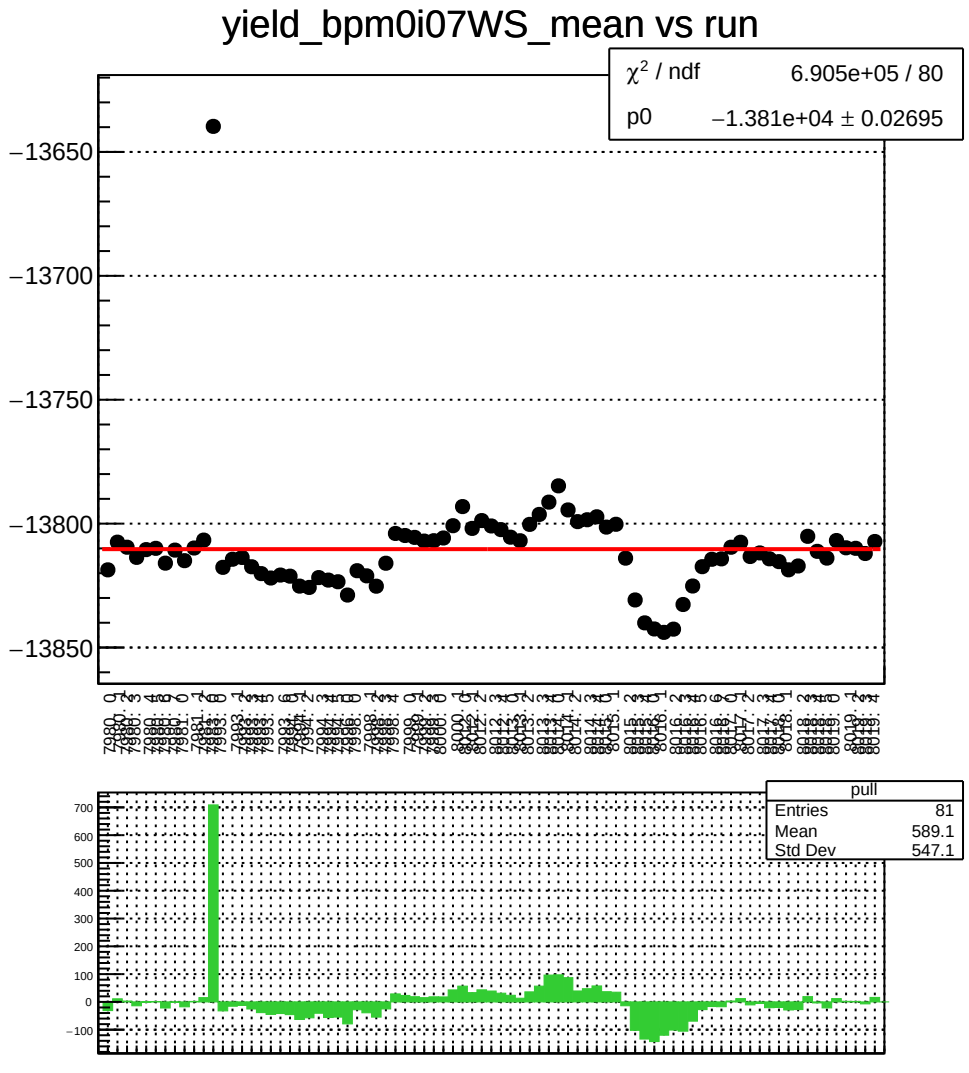

pull1D
Entries 81
Mean −2.682
Std Dev 2.956
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

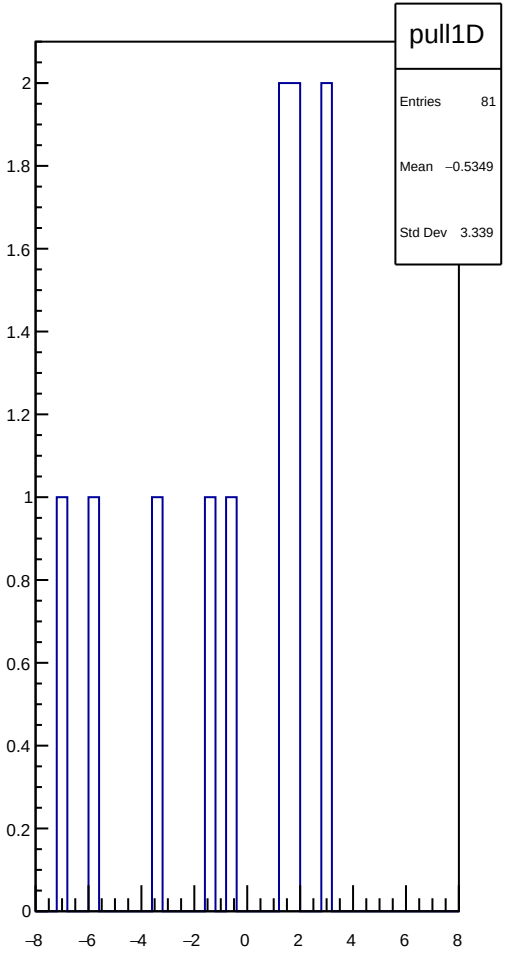

yield_bpm0i02aWS_rms vs run
χ² / ndf 5508 / 80
p0 307.3 ± 0.2428
360
350
340
330
320
310
300
290
280
270

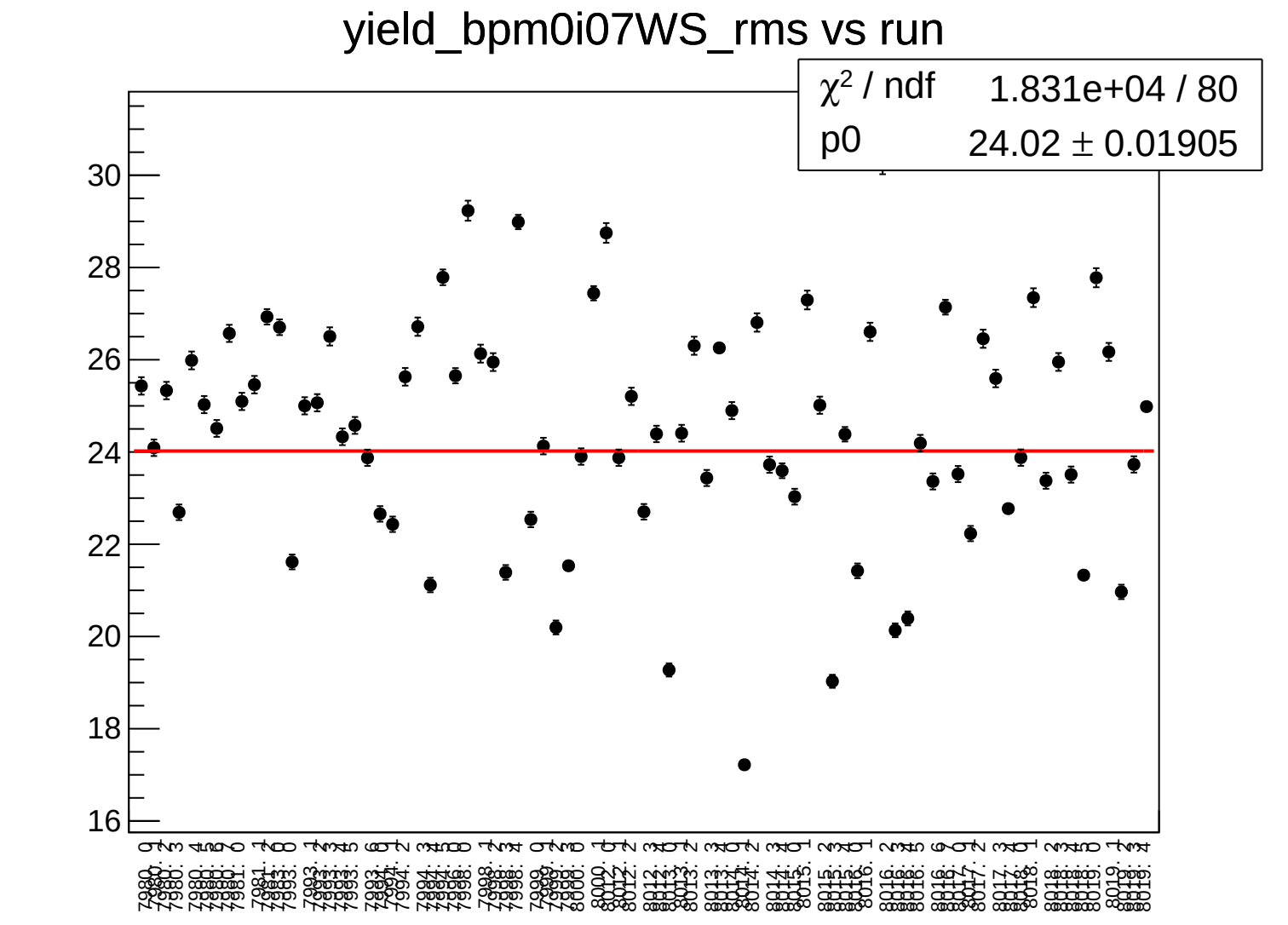

yield_bpm0i05WS_mean vs run
×10^3
χ² / ndf 3.362e+04 / 80
p0 1.404e+05 ± 0.3218
140.5
140.45
140.4
140.35
140.3
140.25
pull
Entries 81
Mean 195
Std Dev 202.1
60
40
20
0
−20
−40

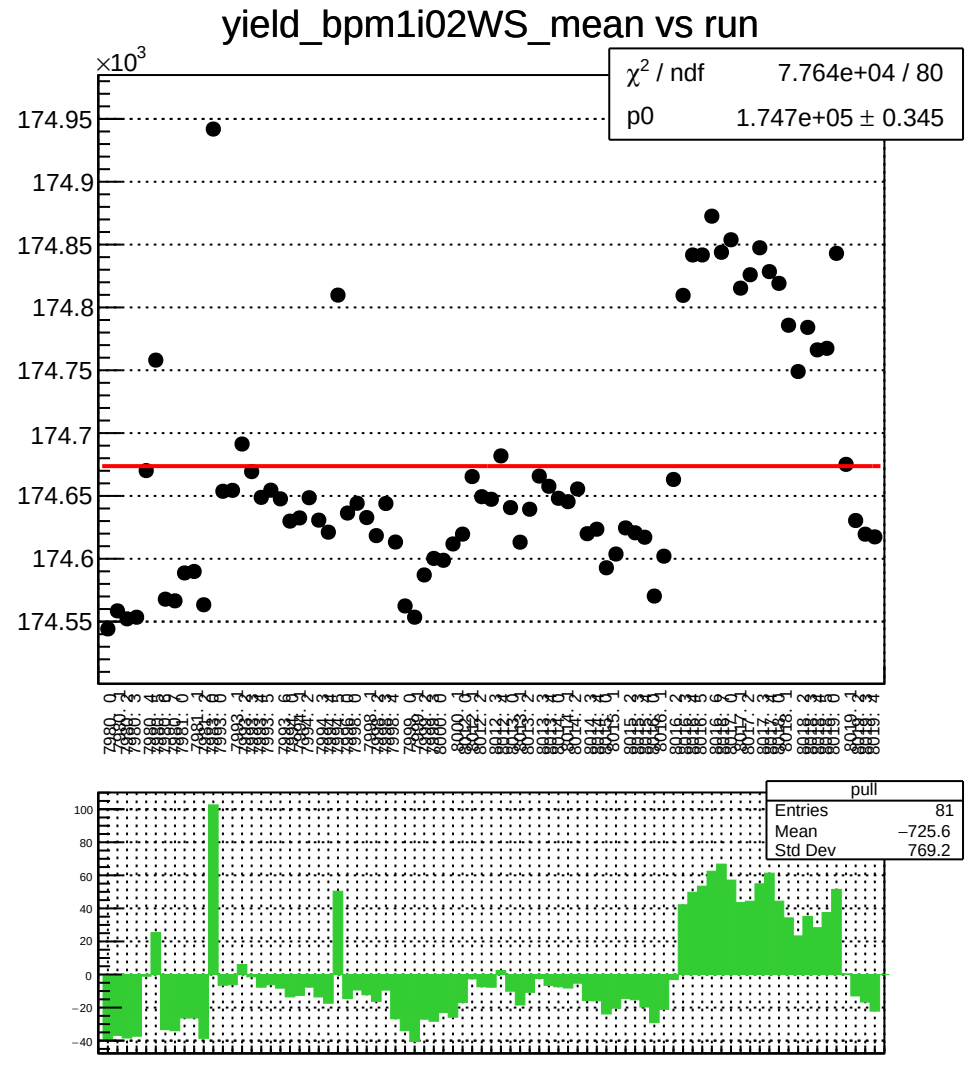

pull1D
Entries 81
Mean 1.275
Std Dev 4.506
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

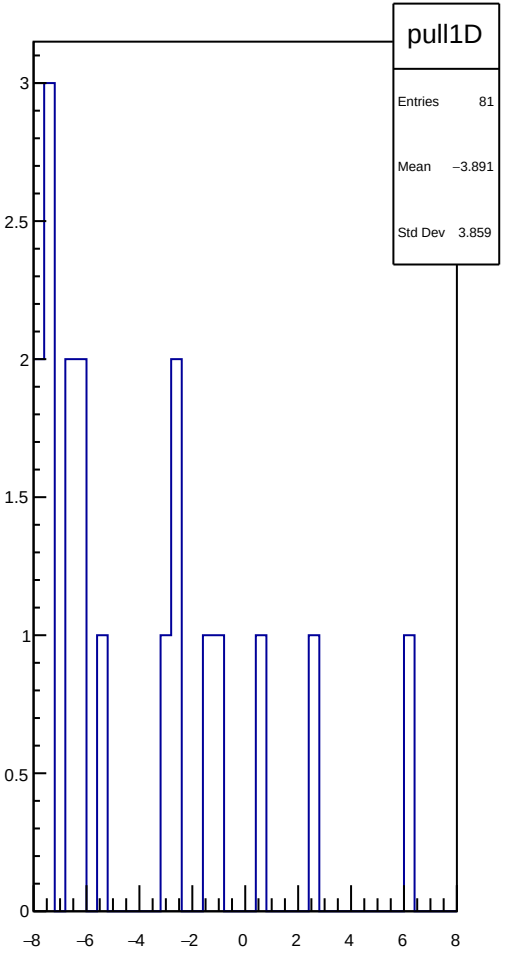

yield_bpm0i05WS_rms vs run
χ² / ndf 6585 / 80
p0 288 ± 0.2276
340
320
300
280
260

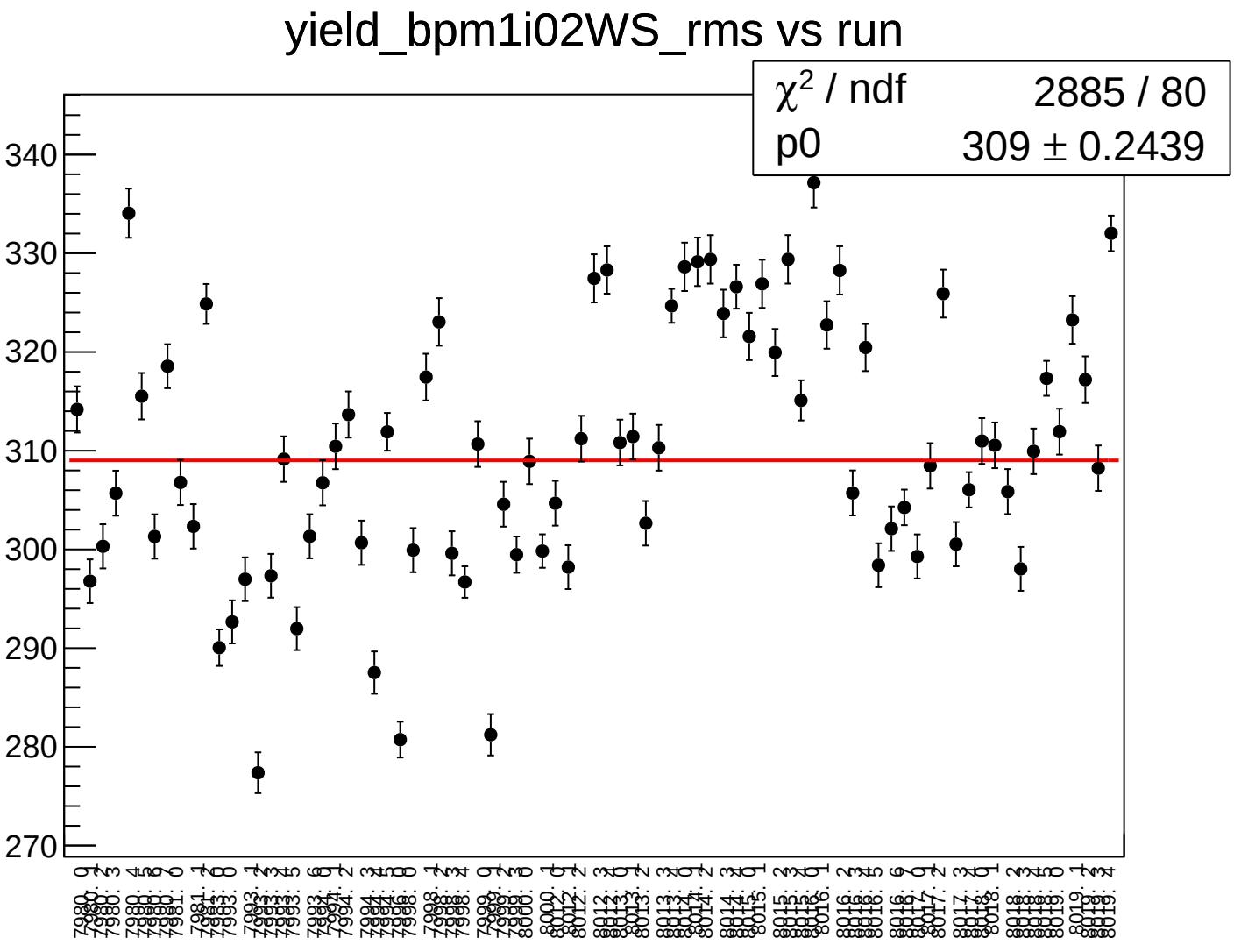

yield_bpm0i07WS_mean vs run
χ² / ndf 6.905e+05 / 80
p0 −1.381e+04 ± 0.02695
−13650
−13700
−13750
−13800
−13850
pull
Entries 81
Mean 589.1
Std Dev 547.1
700
600
500
400
300
200
100
0
−100

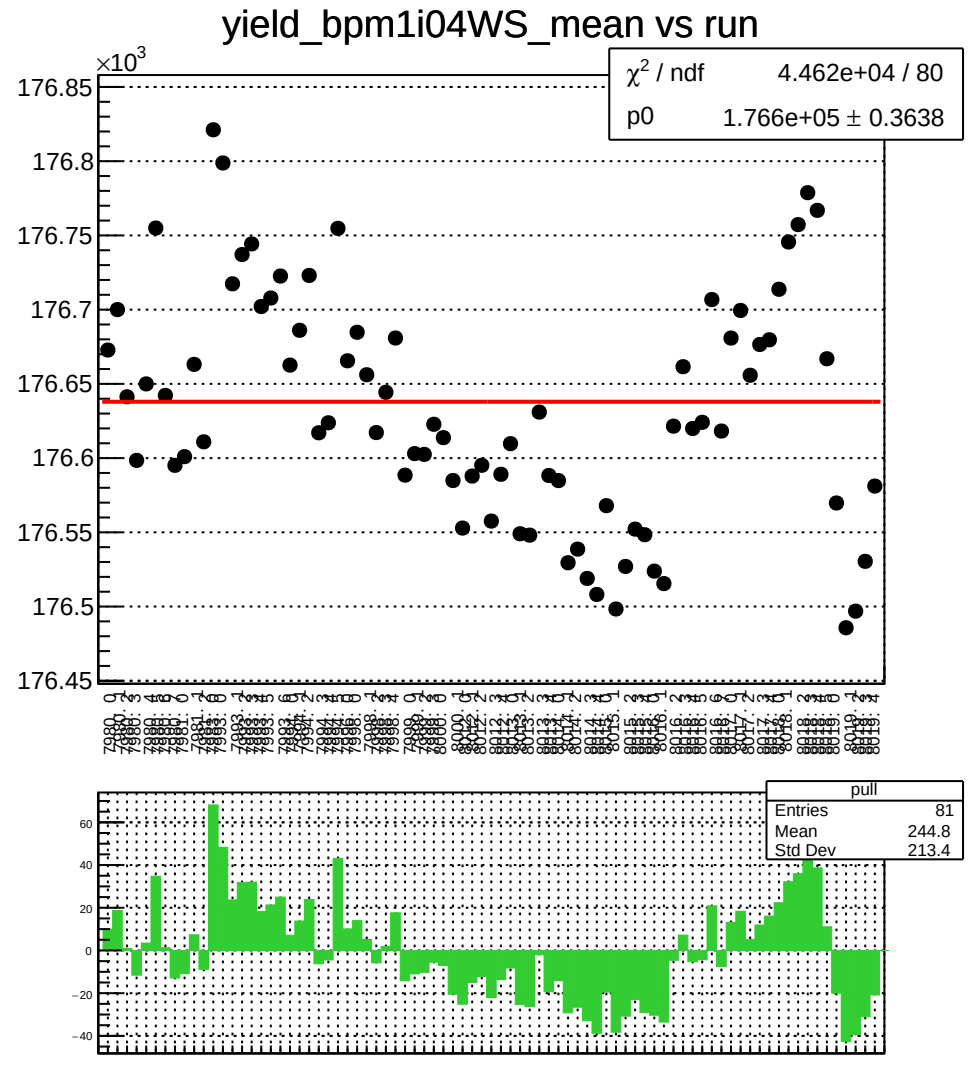

pull1D
Entries 81
Mean −0.5349
Std Dev 3.339
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

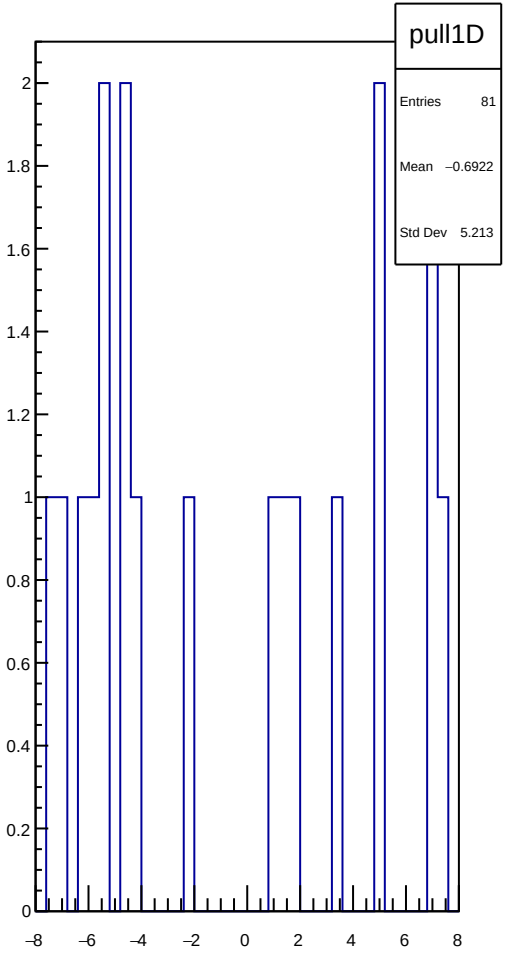

yield_bpm0i07WS_rms vs run
χ² / ndf 1.831e+04 / 80
p0 24.02 ± 0.01905
30
28
26
24
22
20
18
16

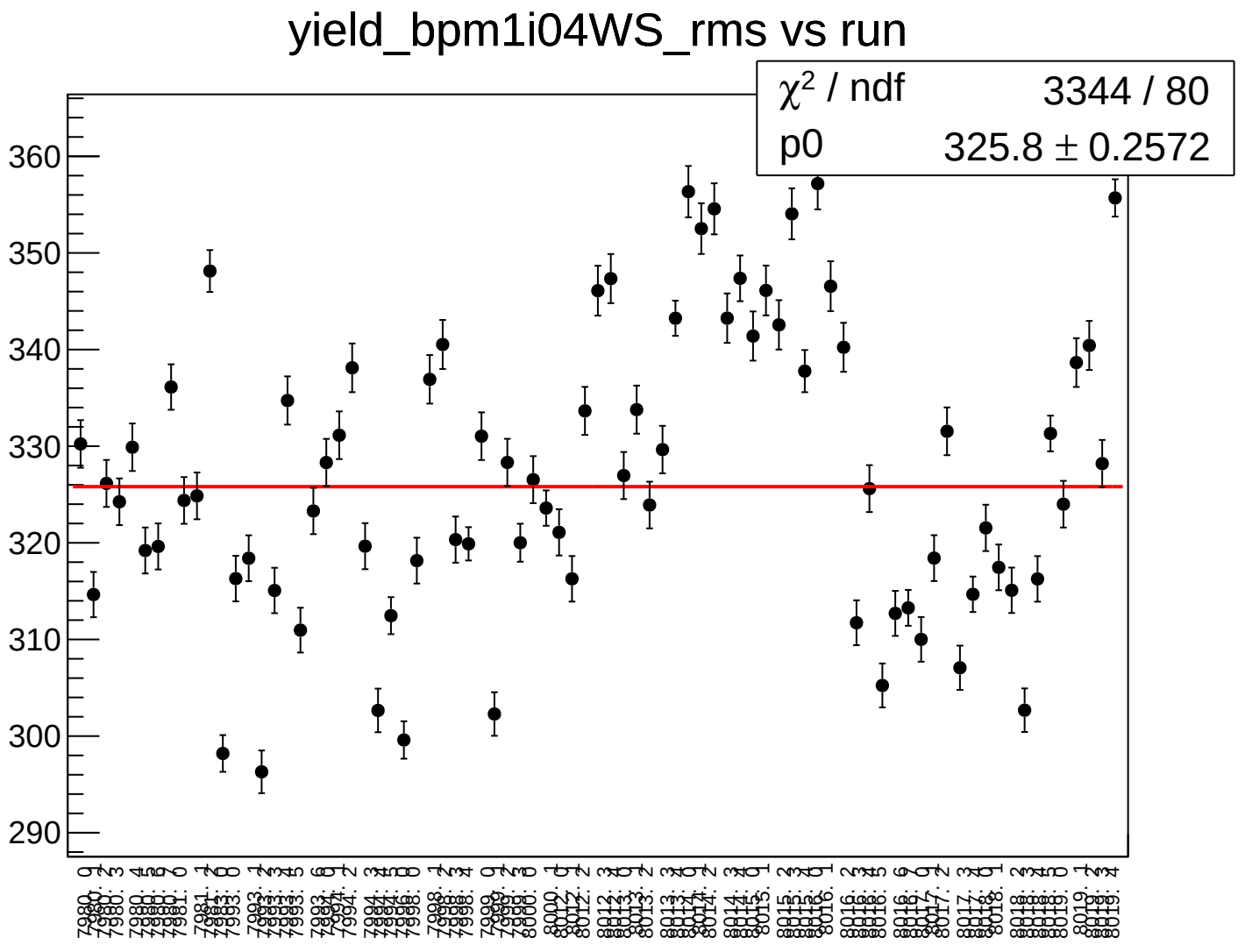

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 7.764e+04 / 80
p0 1.747e+05 ± 0.345
174.95
174.9
174.85
174.8
174.75
174.7
174.65
174.6
174.55
pull
Entries 81
Mean −725.6
Std Dev 769.2
100
80
60
40
20
0
−20
−40

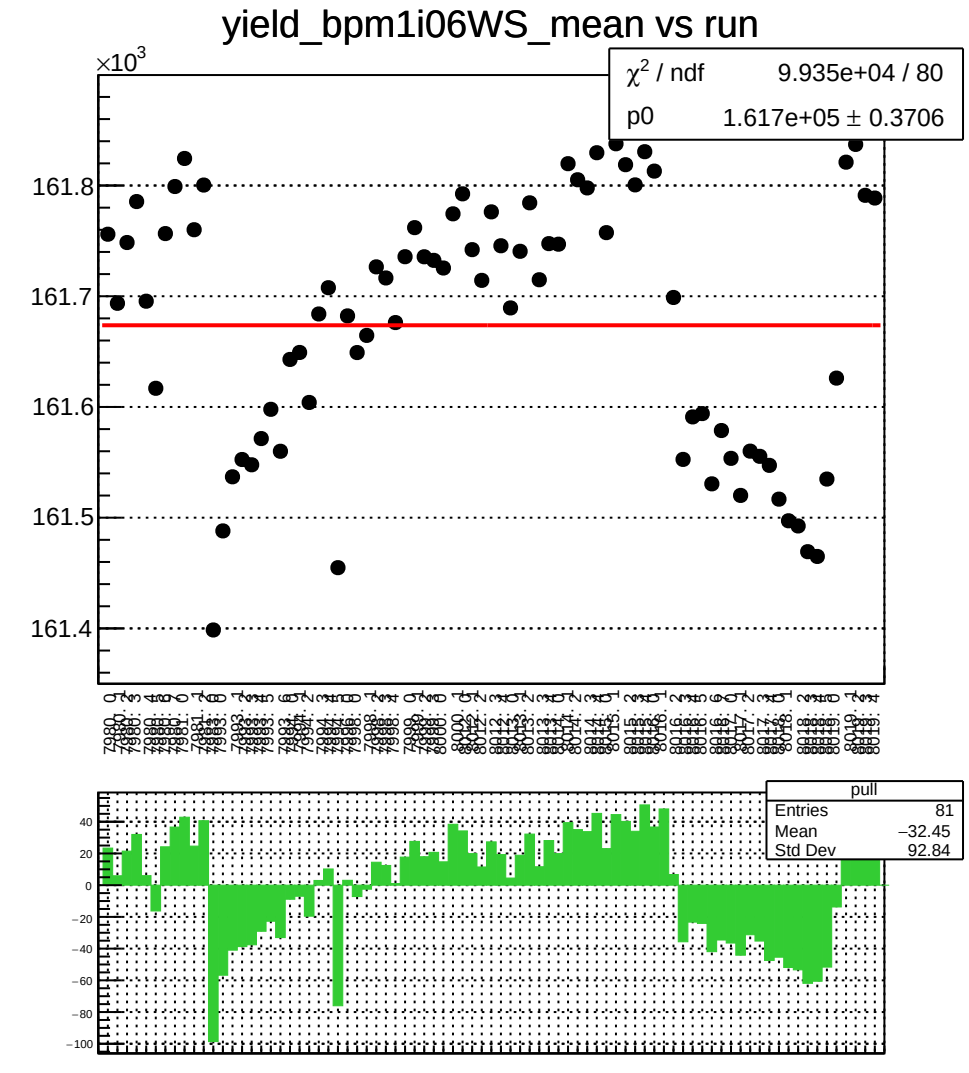

pull1D
Entries 81
Mean −3.891
Std Dev 3.859
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

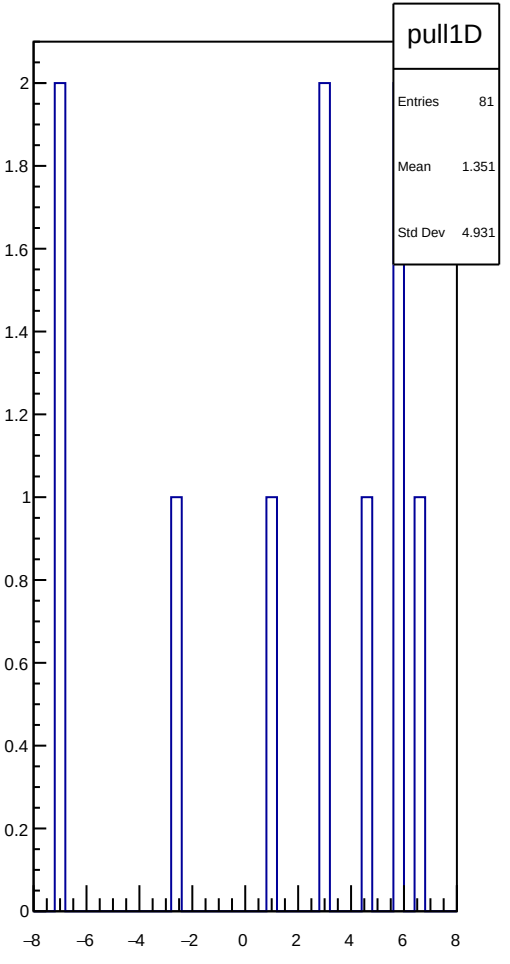

yield_bpm1i02WS_rms vs run
χ² / ndf 2885 / 80
p0 309 ± 0.2439
340
330
320
310
300
290
280
270

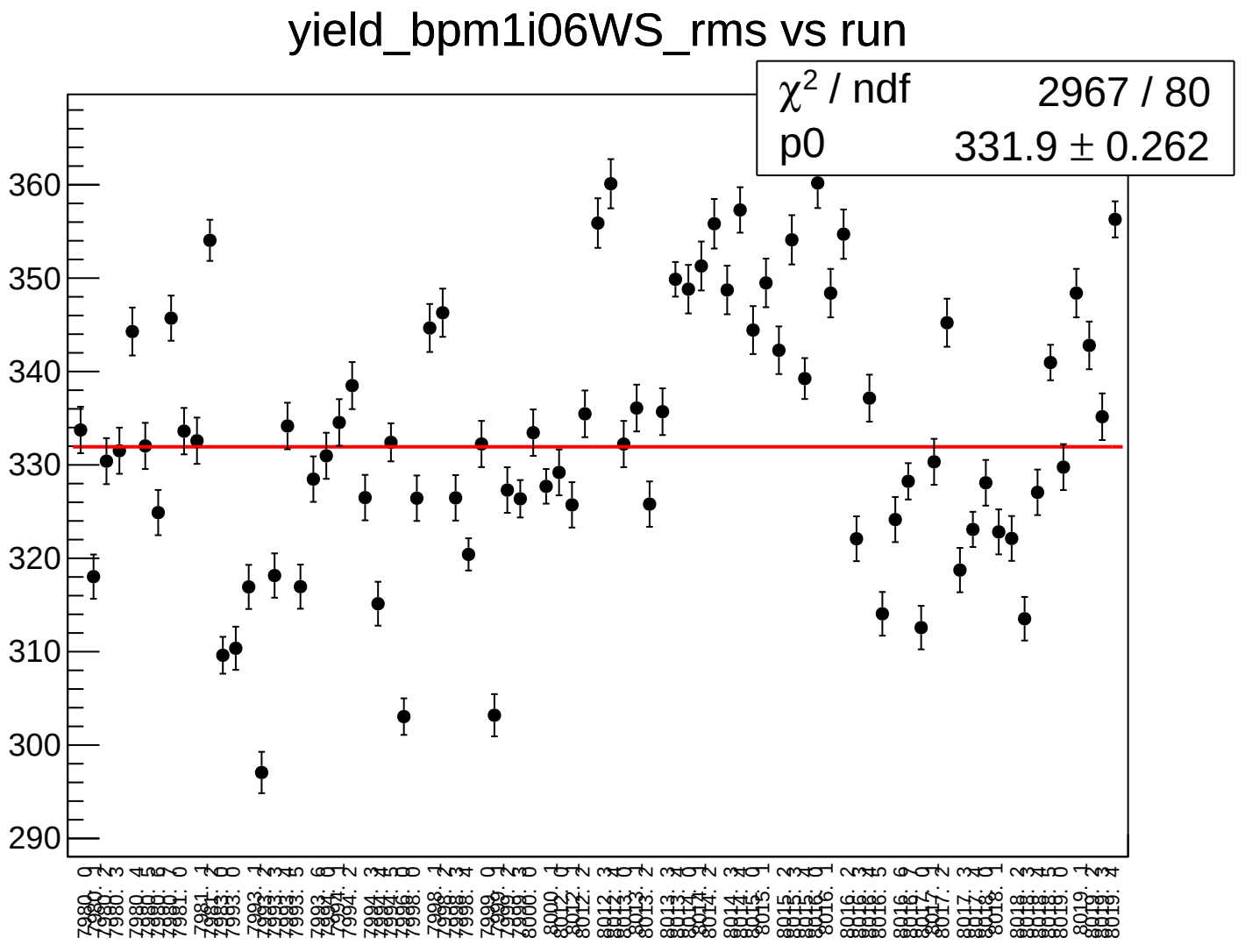

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 4.462e+04 / 80
p0 1.766e+05 ± 0.3638
176.85
176.8
176.75
176.7
176.65
176.6
176.55
176.5
176.45
pull
Entries 81
Mean 244.8
Std Dev 213.4
60
40
20
0
−20
−40

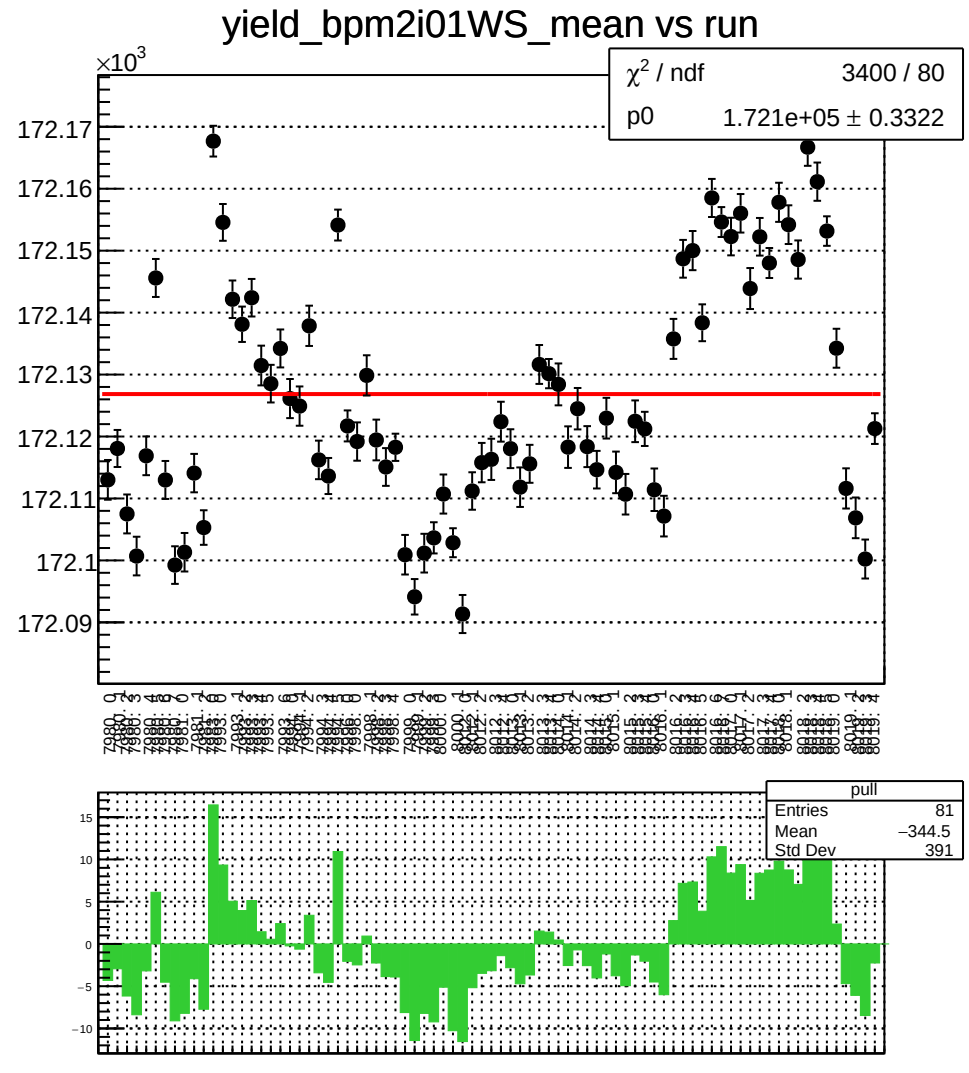

pull1D
Entries 81
Mean −0.6922
Std Dev 5.213
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

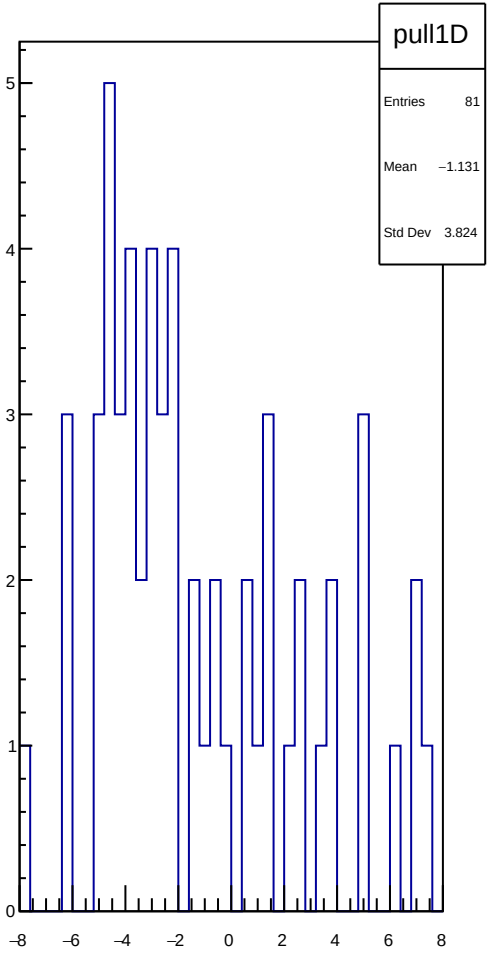

yield_bpm1i04WS_rms vs run
χ² / ndf 3344 / 80
p0 325.8 ± 0.2572
360
350
340
330
320
310
300
290

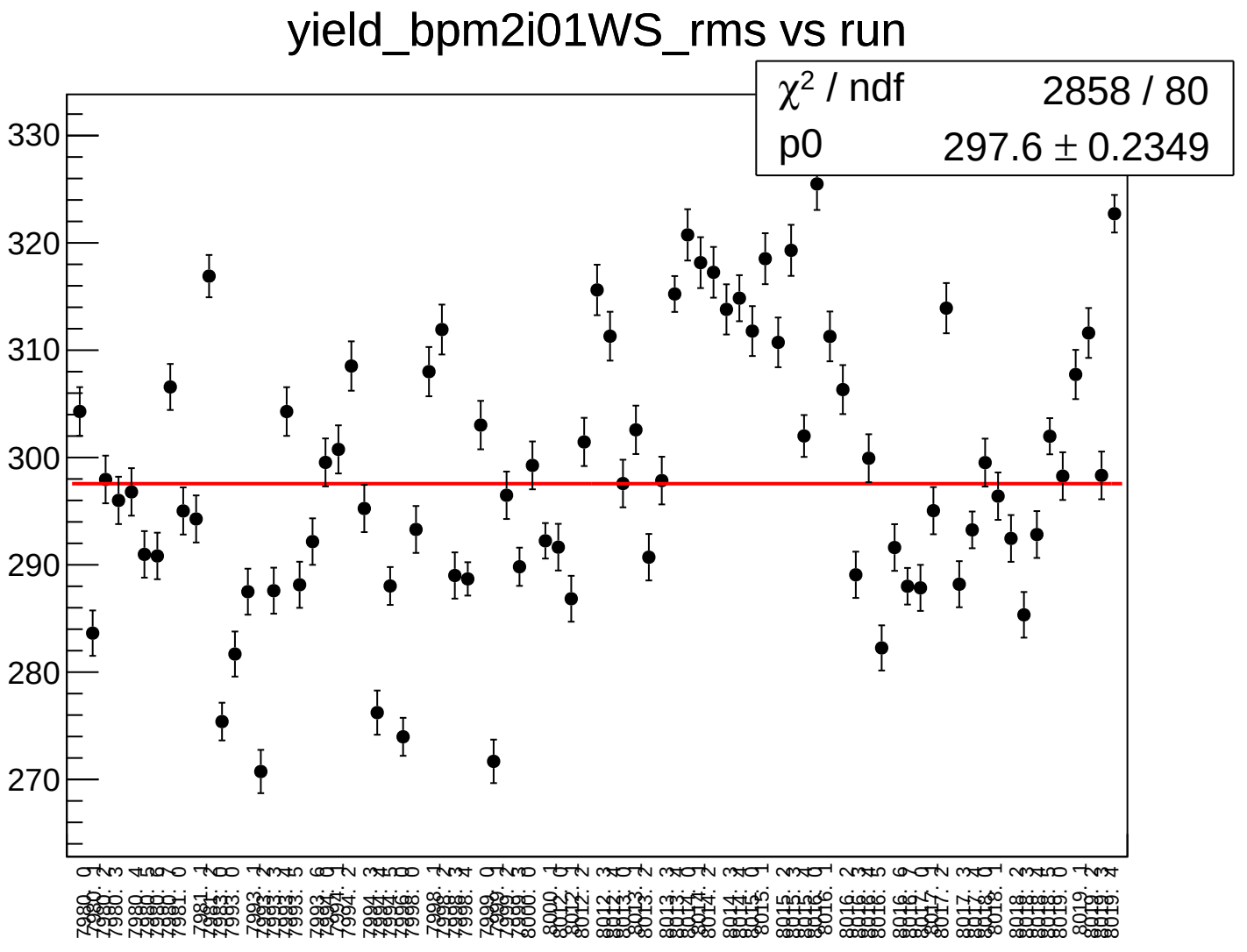

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 9.935e+04 / 80
p0 1.617e+05 ± 0.3706
161.8
161.7
161.6
161.5
161.4
pull
Entries 81
Mean −32.45
Std Dev 92.84
40
20
0
−20
−40
−60
−80
−100

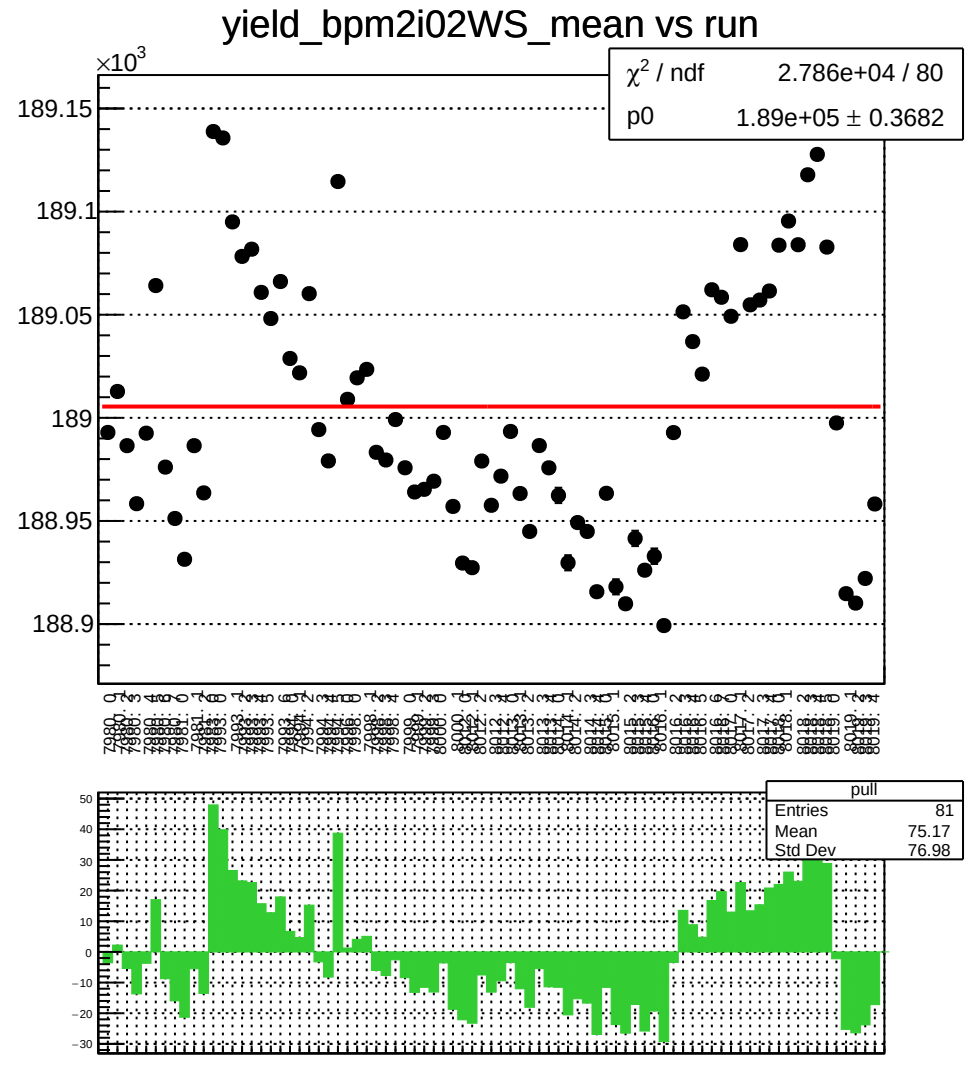

pull1D
Entries 81
Mean 1.351
Std Dev 4.931
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

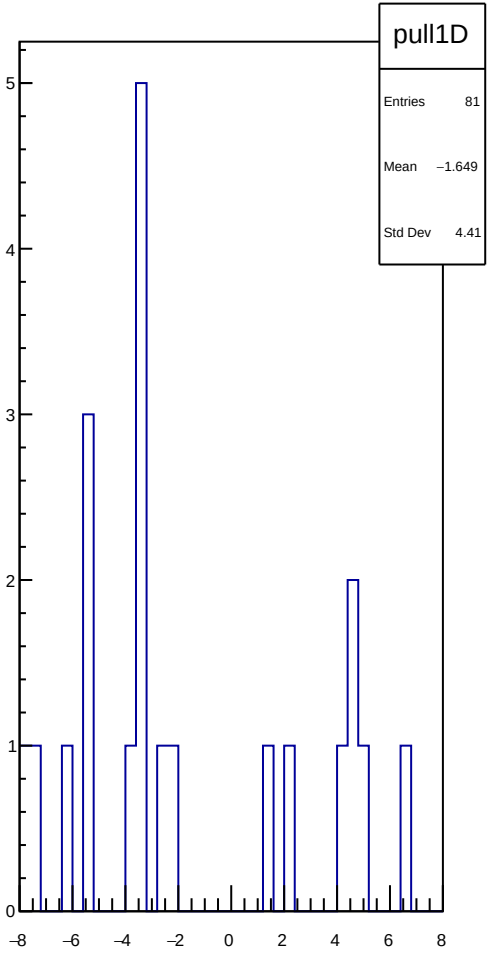

yield_bpm1i06WS_rms vs run
χ² / ndf 2967 / 80
p0 331.9 ± 0.262
360
350
340
330
320
310
300
290

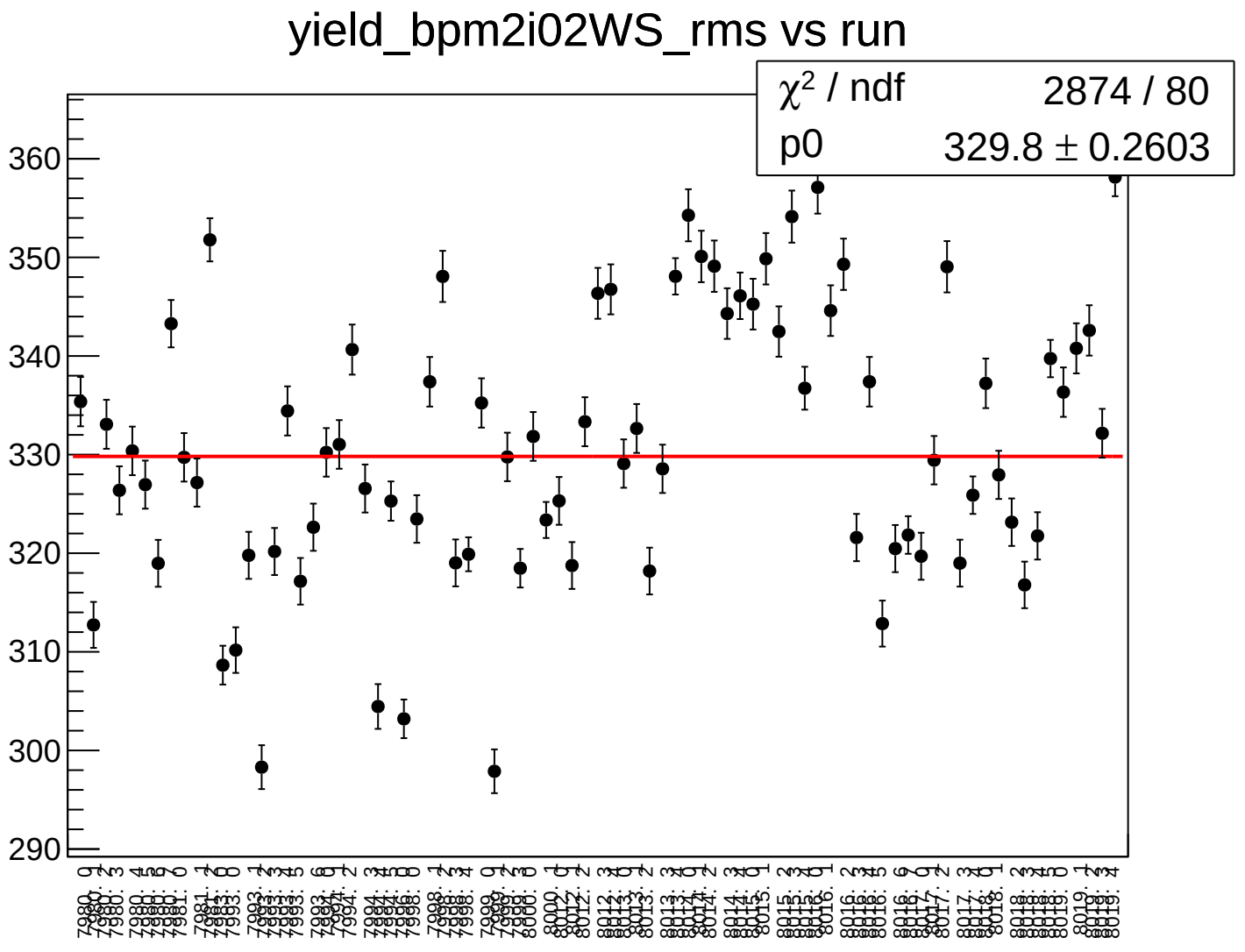

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 3400 / 80
p0 1.721e+05 ± 0.3322
172.17
172.16
172.15
172.14
172.13
172.12
172.11
172.1
172.09
pull
Entries 81
Mean −344.5
Std Dev 391
15
10
5
0
−5
−10

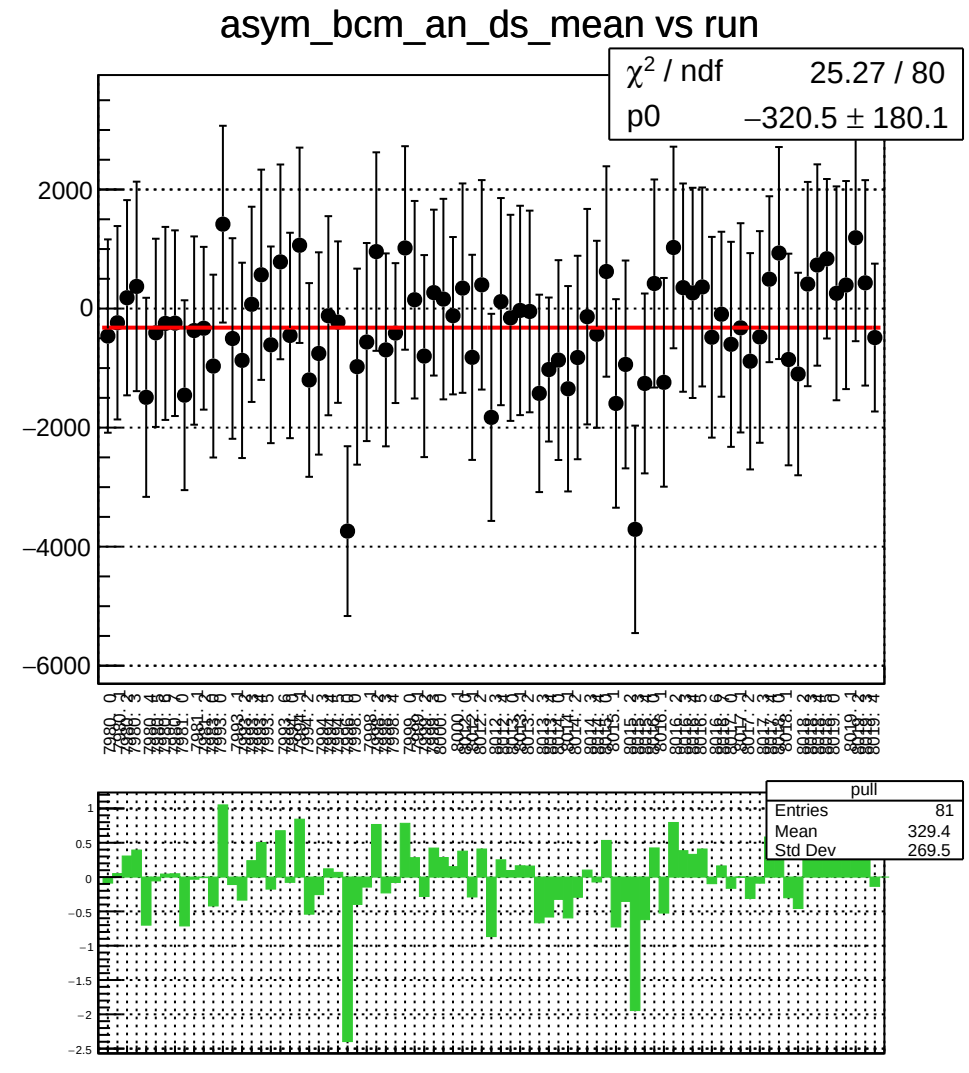

pull1D
Entries 81
Mean −1.131
Std Dev 3.824
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

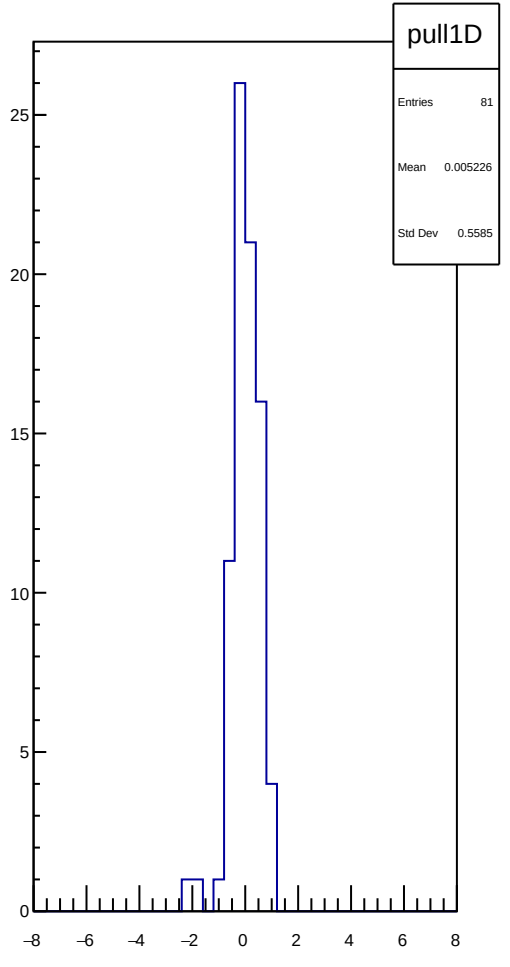

yield_bpm2i01WS_rms vs run
χ² / ndf 2858 / 80
p0 297.6 ± 0.2349
330
320
310
300
290
280
270

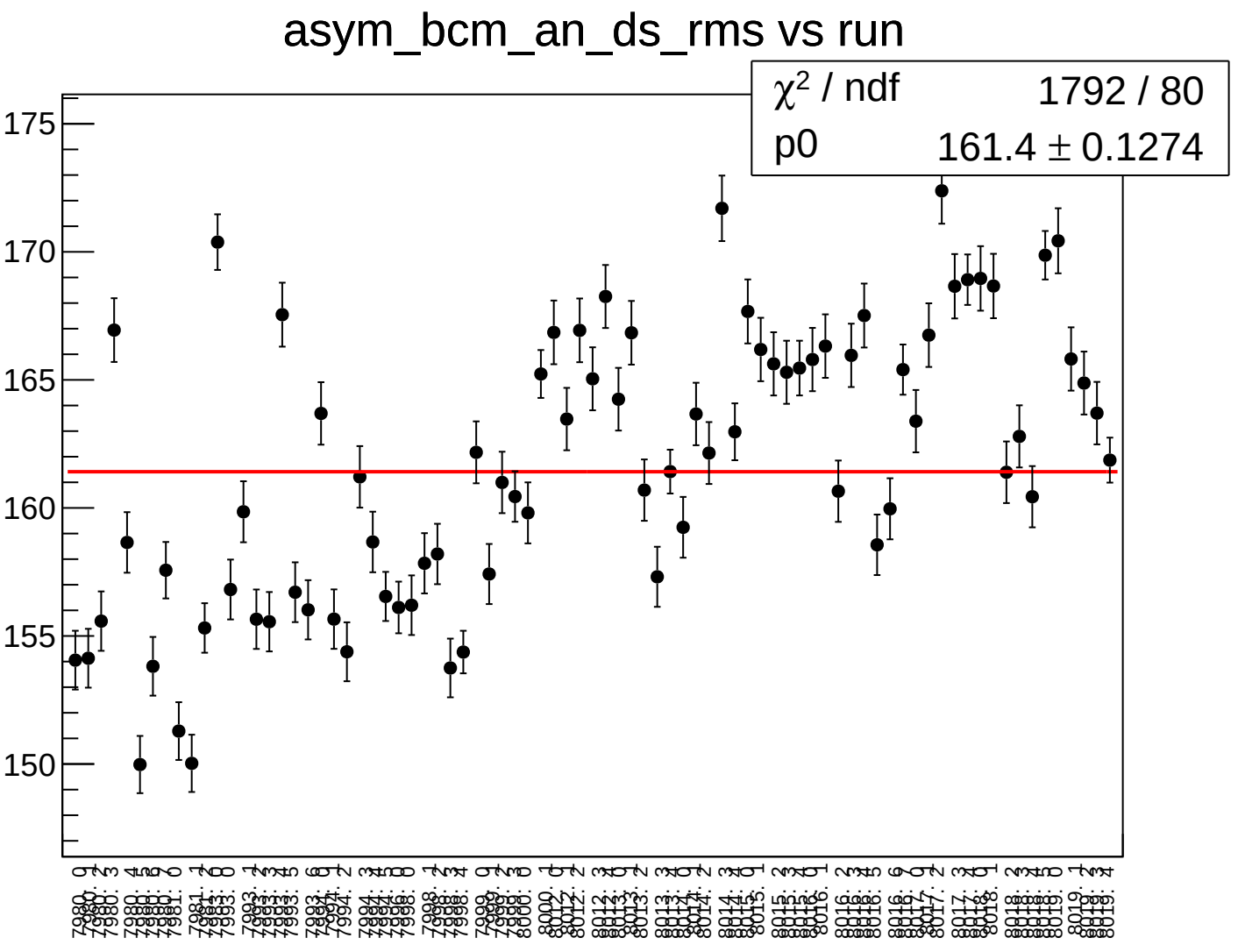

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 2.786e+04 / 80
p0 1.89e+05 ± 0.3682
189.15
189.1
189.05
189
188.95
188.9
pull
Entries 81
Mean 75.17
Std Dev 76.98
50
40
30
20
10
0
−10
−20
−30

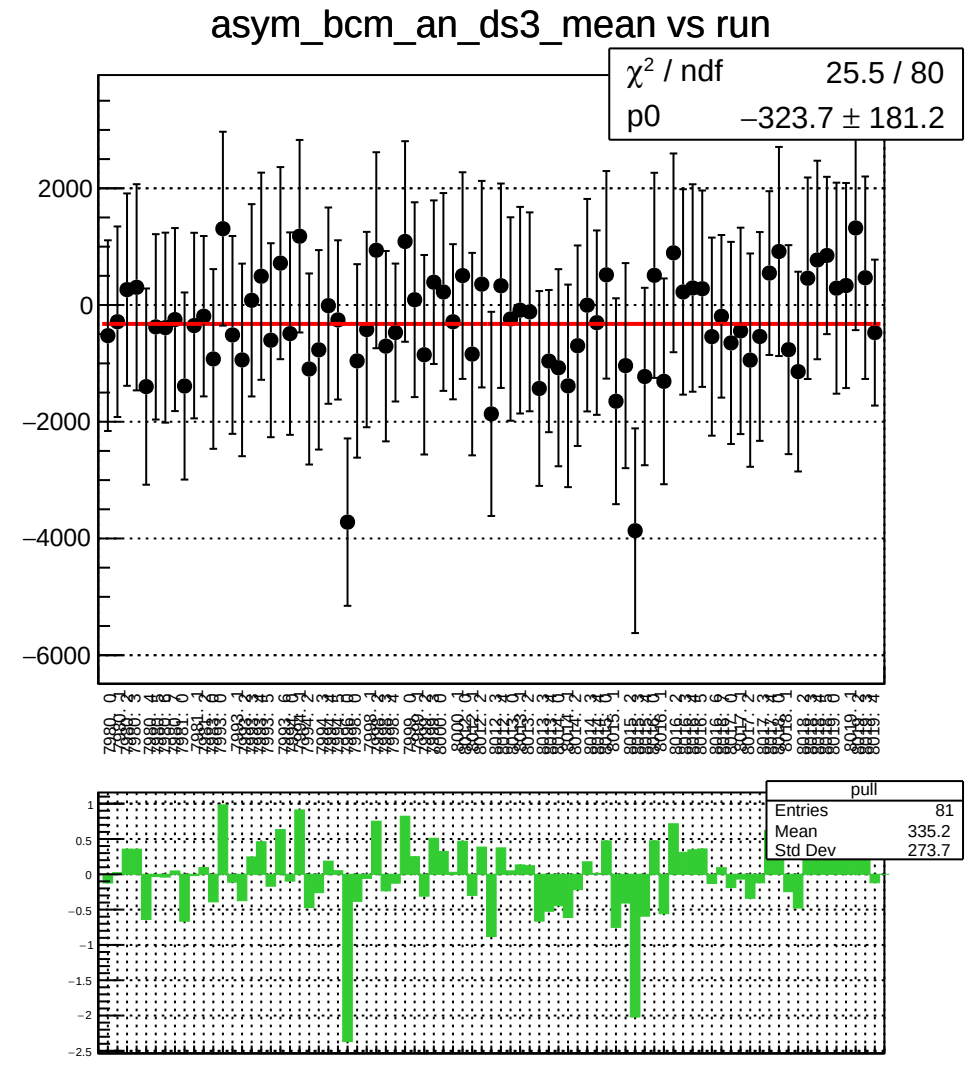

pull1D
Entries 81
Mean −1.649
Std Dev 4.41
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

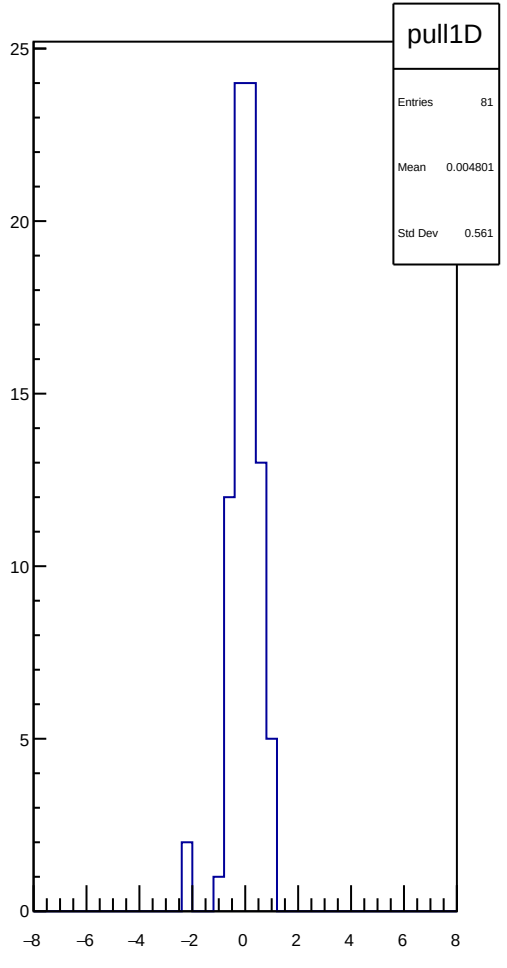

yield_bpm2i02WS_rms vs run
χ² / ndf 2874 / 80
p0 329.8 ± 0.2603
360
350
340
330
320
310
300
290

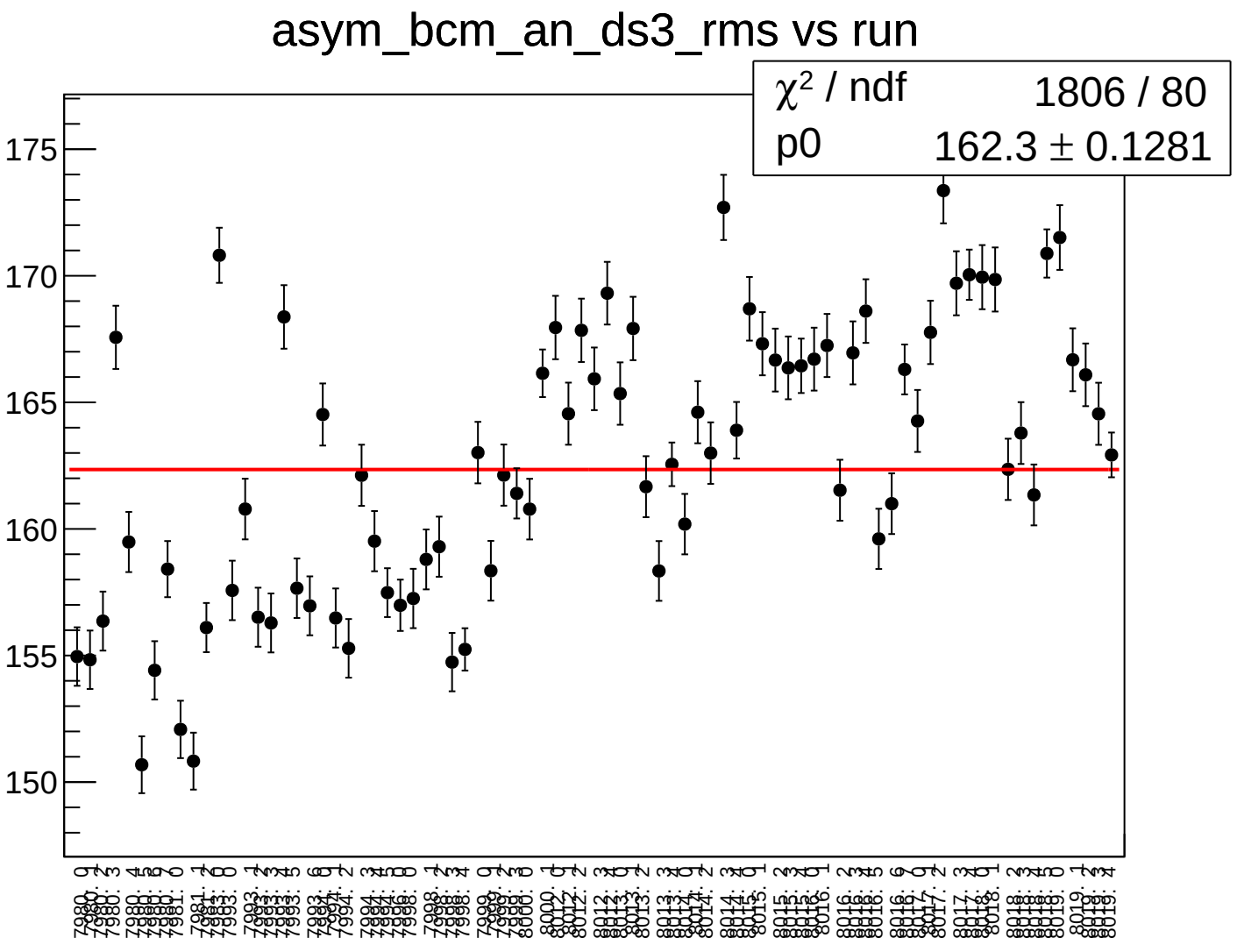

asym_bcm_an_ds_mean vs run
χ² / ndf 25.27 / 80
p0 −320.5 ± 180.1
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 329.4
Std Dev 269.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

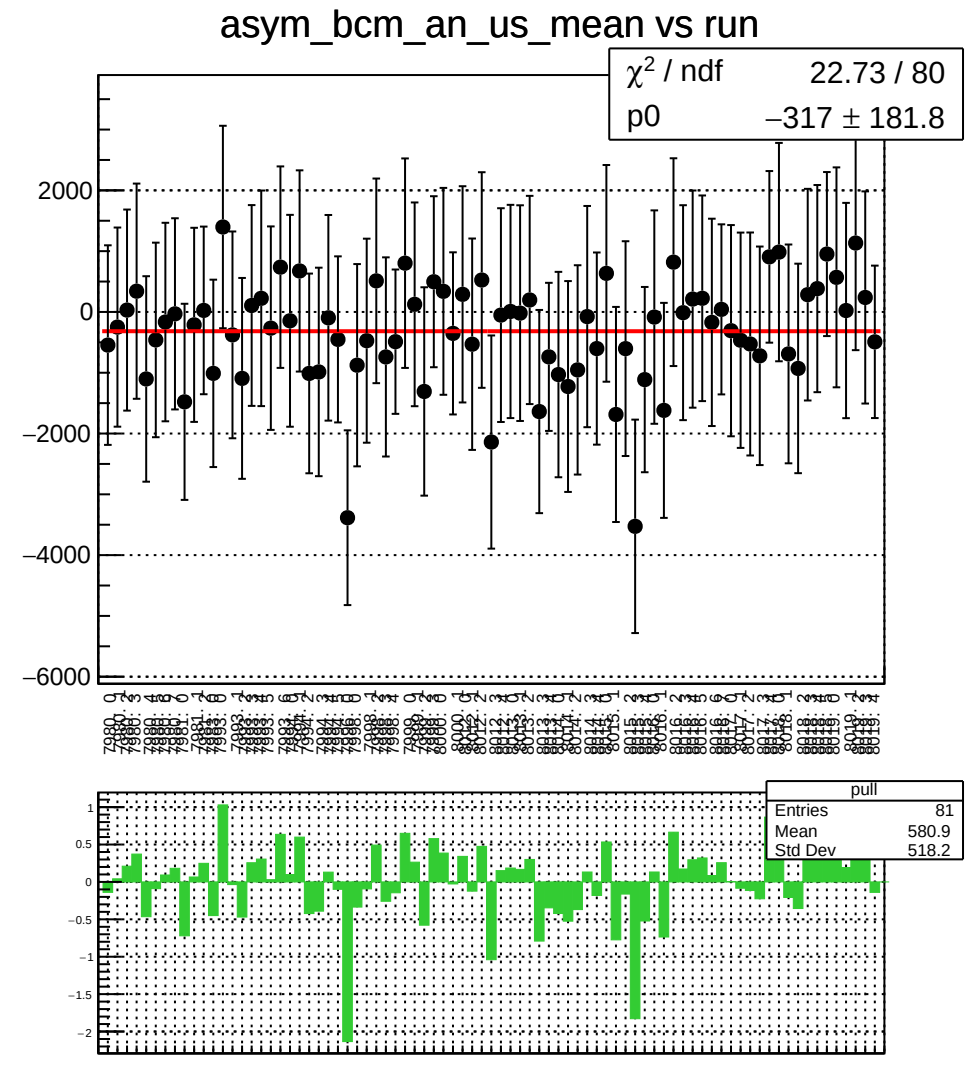

pull1D
Entries 81
Mean 0.005226
Std Dev 0.5585
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

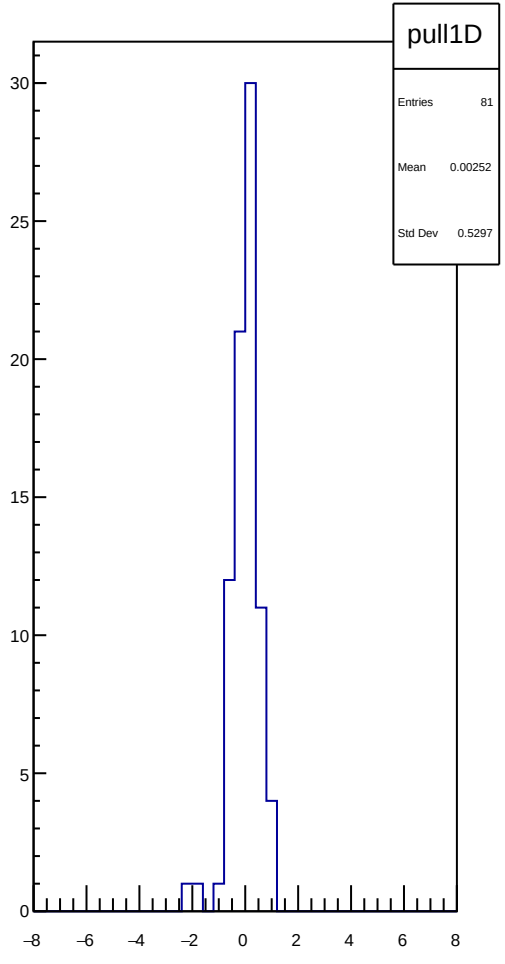

asym_bcm_an_ds_rms vs run
χ² / ndf 1792 / 80
p0 161.4 ± 0.1274
175
170
165
160
155
150

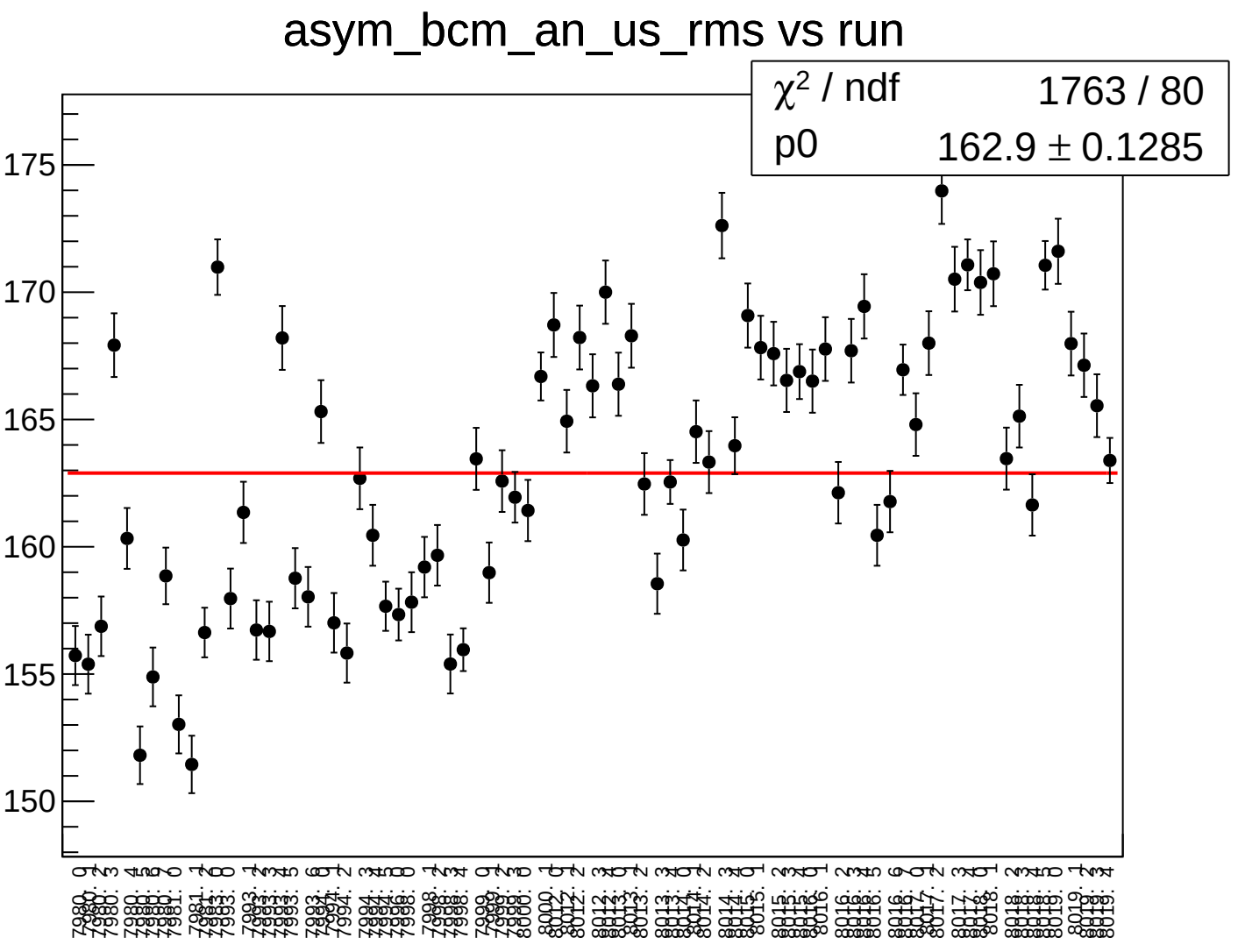

asym_bcm_an_ds3_mean vs run
χ² / ndf 25.5 / 80
p0 −323.7 ± 181.2
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 335.2
Std Dev 273.7
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

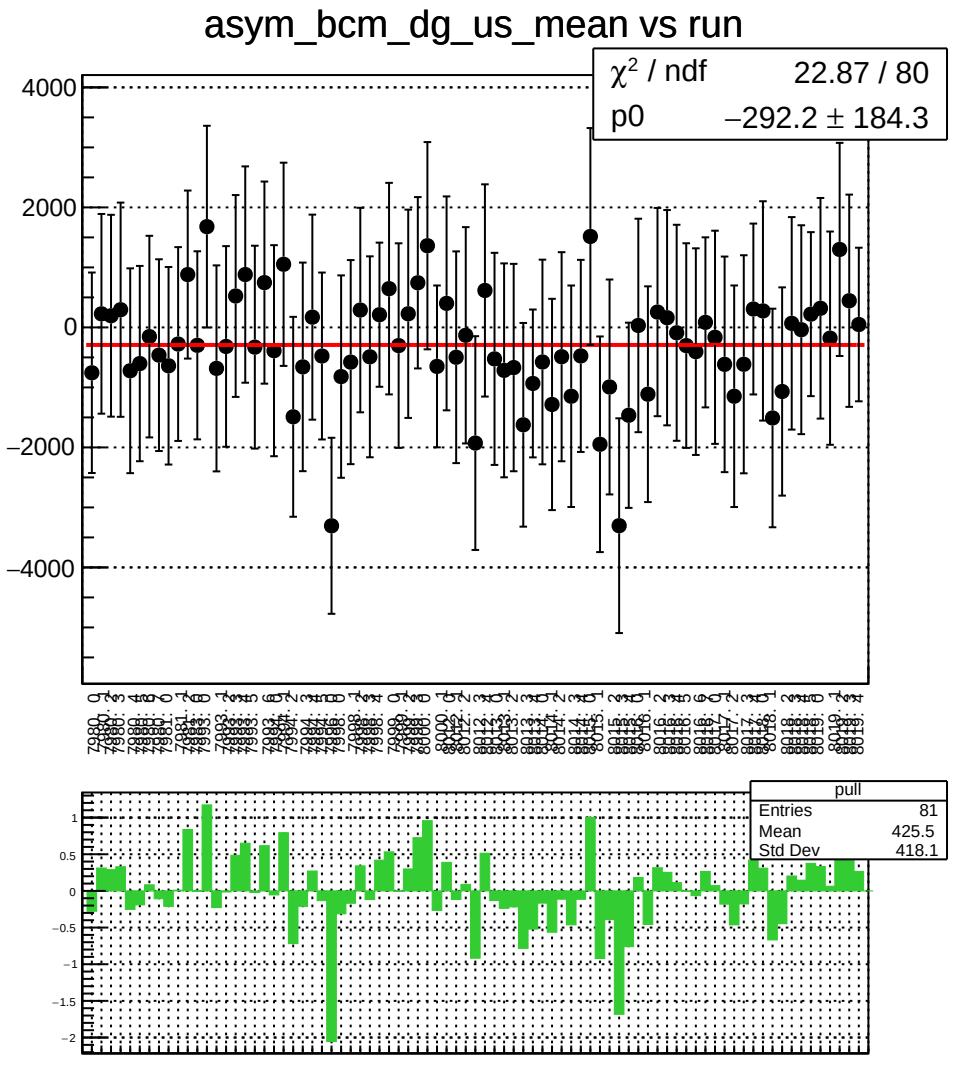

pull1D
Entries 81
Mean 0.004801
Std Dev 0.561
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

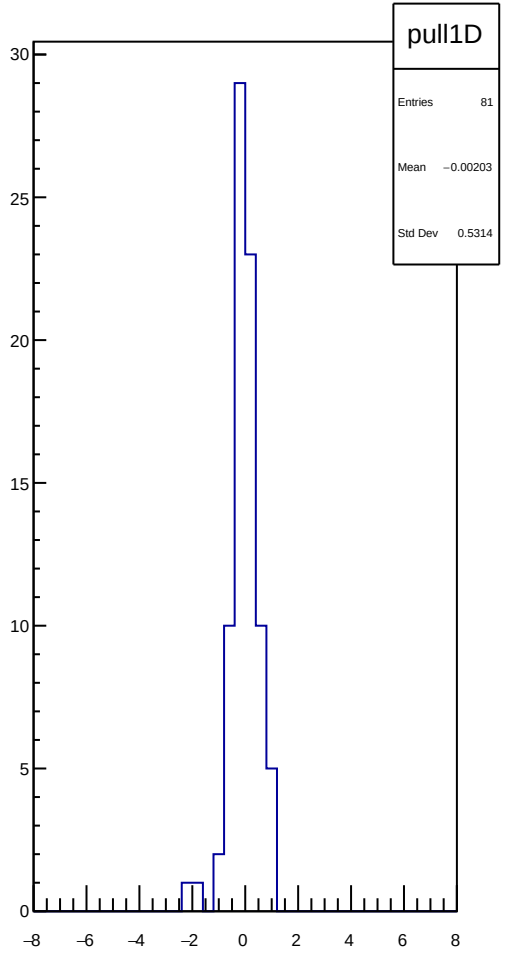

asym_bcm_an_ds3_rms vs run
χ² / ndf 1806 / 80
p0 162.3 ± 0.1281
175
170
165
160
155
150

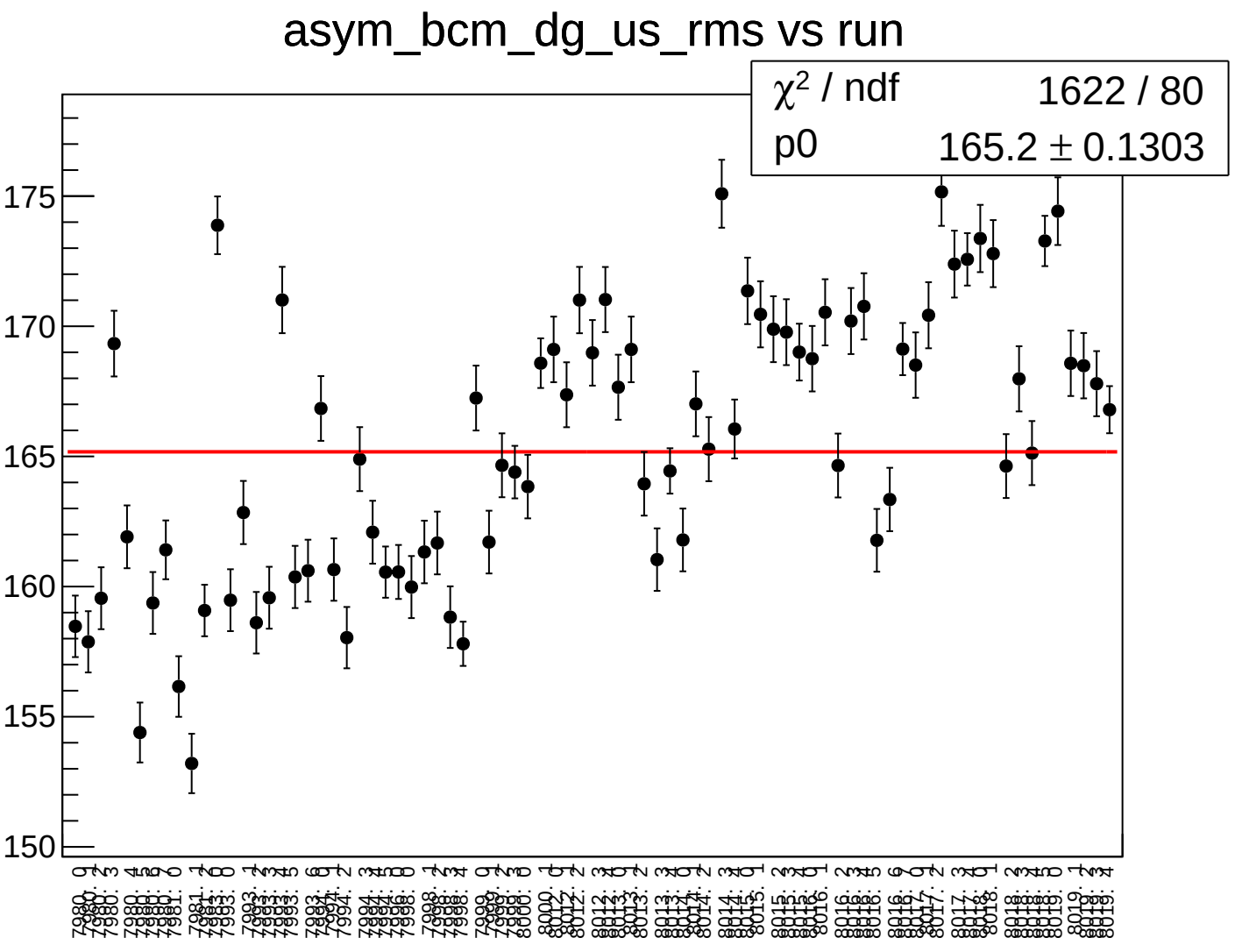

asym_bcm_an_us_mean vs run
χ² / ndf 22.73 / 80
p0 −317 ± 181.8
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 580.9
Std Dev 518.2
1
0.5
0
−0.5
−1
−1.5
−2

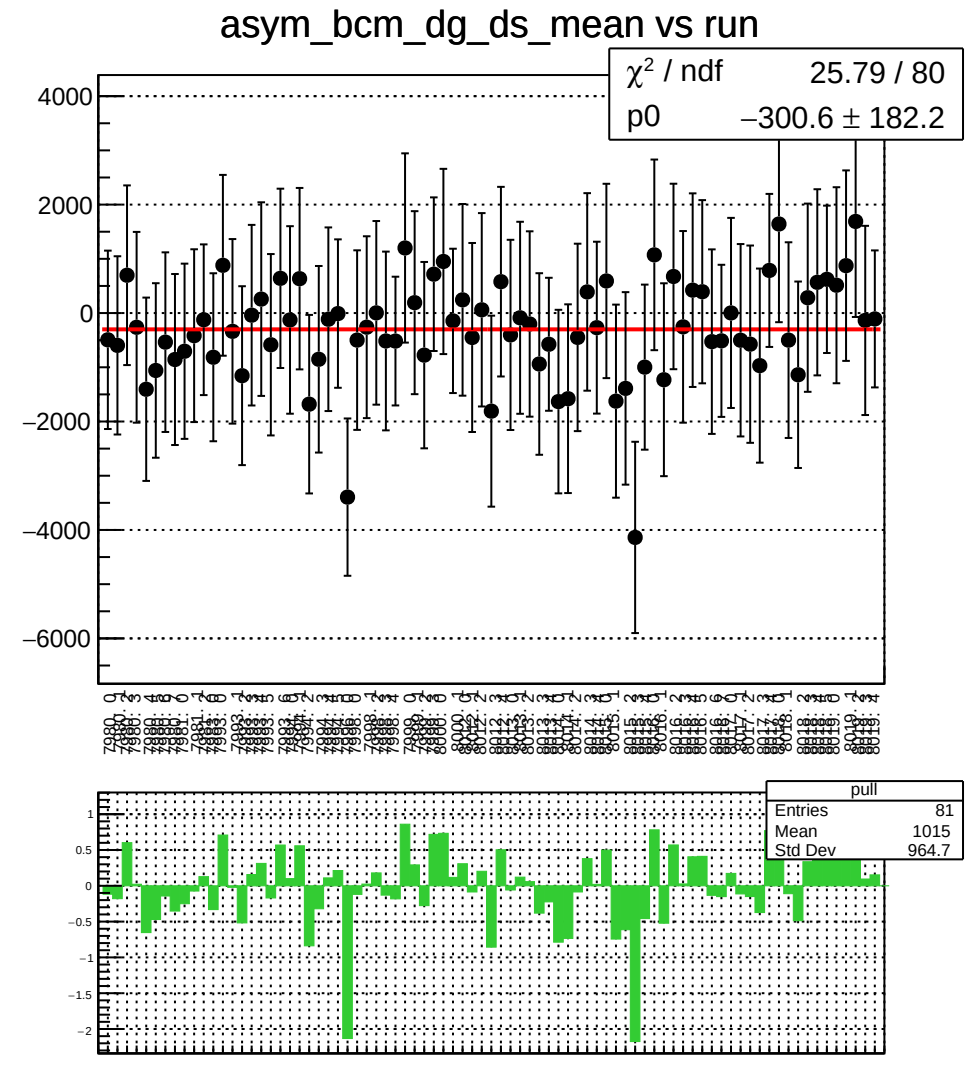

pull1D
Entries 81
Mean 0.00252
Std Dev 0.5297
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

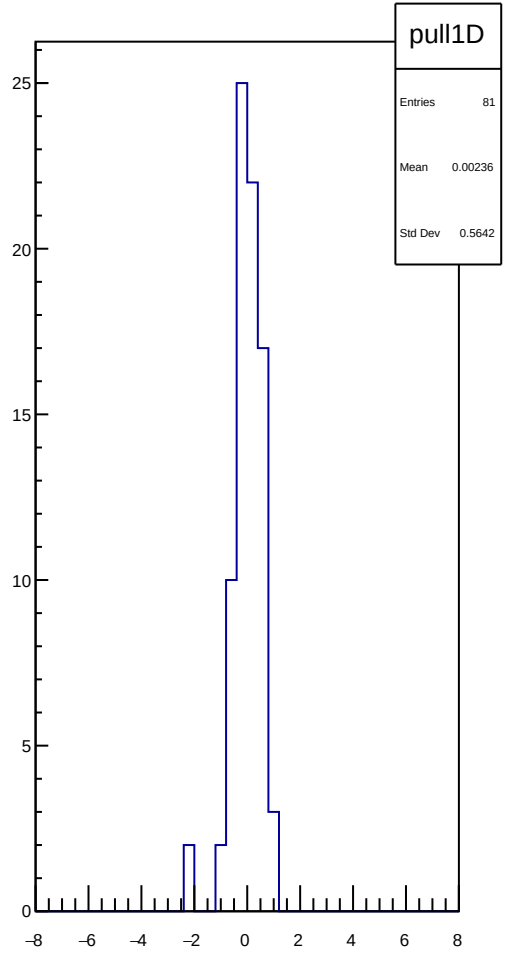

asym_bcm_an_us_rms vs run
χ² / ndf 1763 / 80
p0 162.9 ± 0.1285
175
170
165
160
155
150

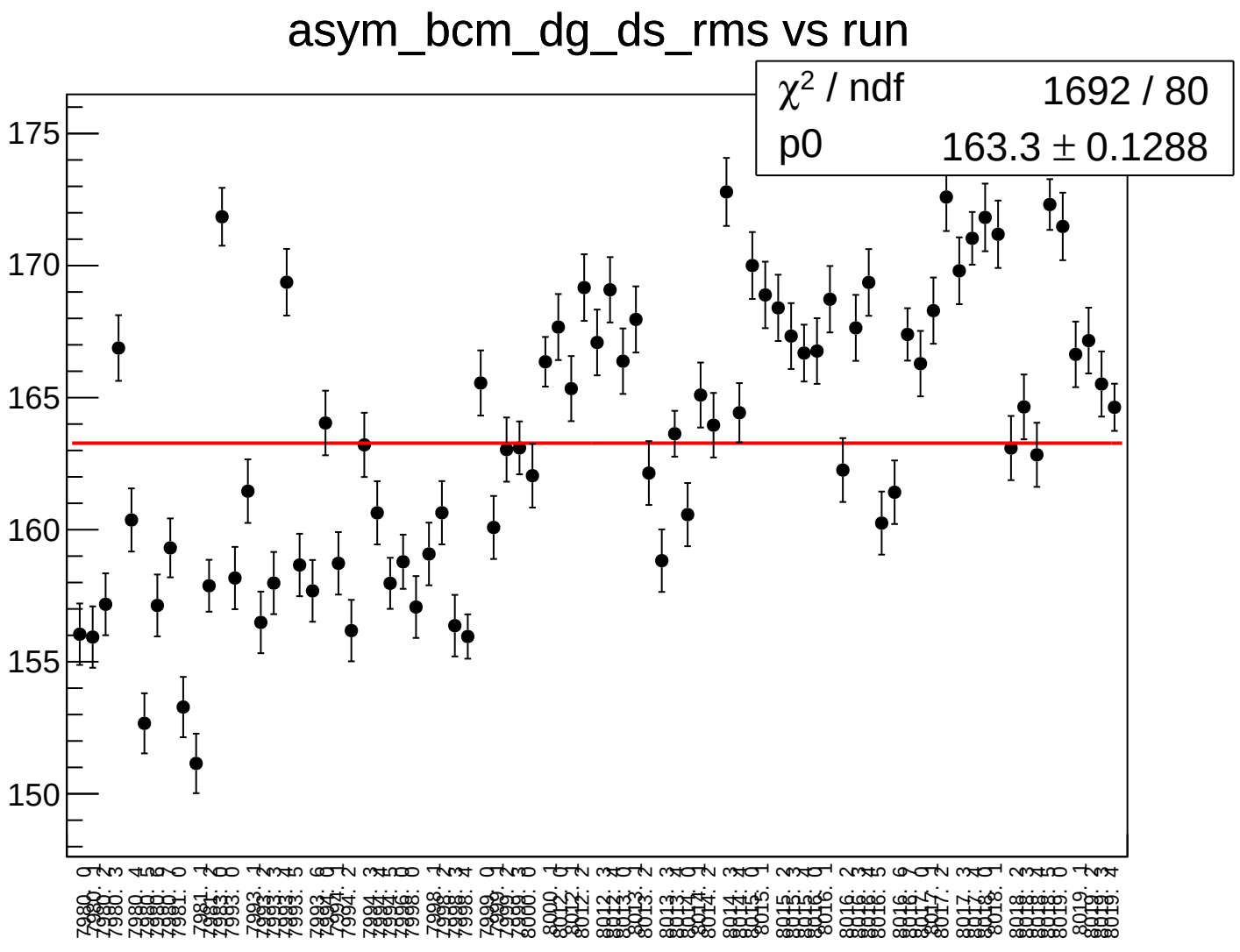

asym_bcm_dg_us_mean vs run
χ² / ndf 22.87 / 80
p0 −292.2 ± 184.3
4000
2000
0
−2000
−4000
pull
Entries 81
Mean 425.5
Std Dev 418.1
1
0.5
0
−0.5
−1
−1.5
−2

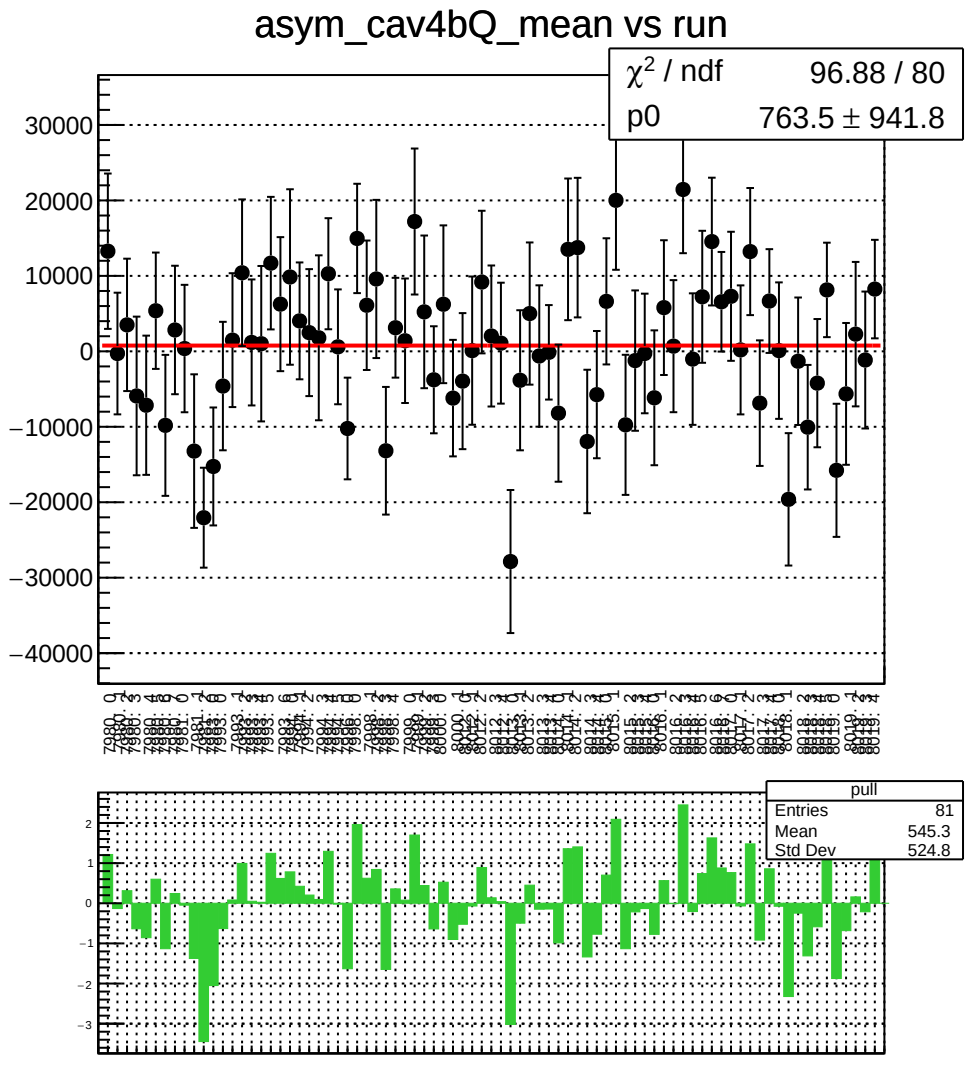

pull1D
Entries 81
Mean −0.00203
Std Dev 0.5314
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

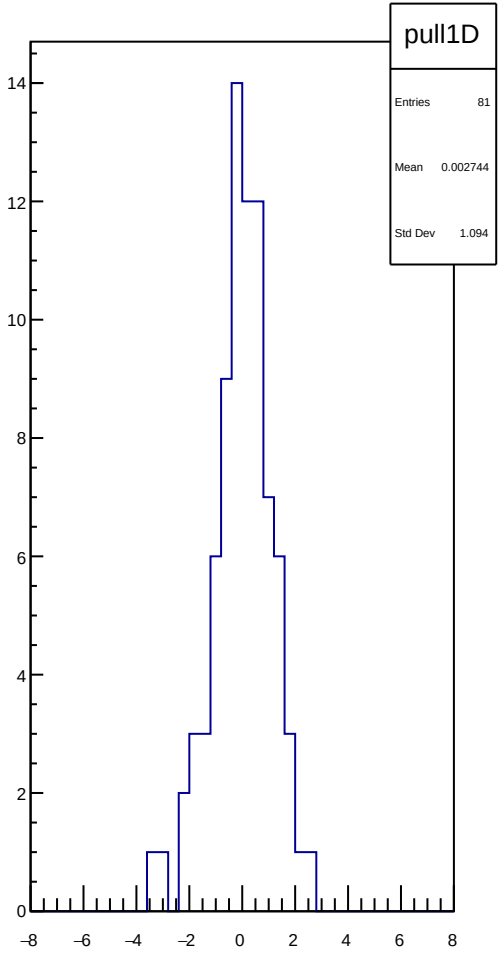

asym_bcm_dg_us_rms vs run
χ^2 / ndf 1622 / 80
p0 165.2 ± 0.1303
175
170
165
160
155
150

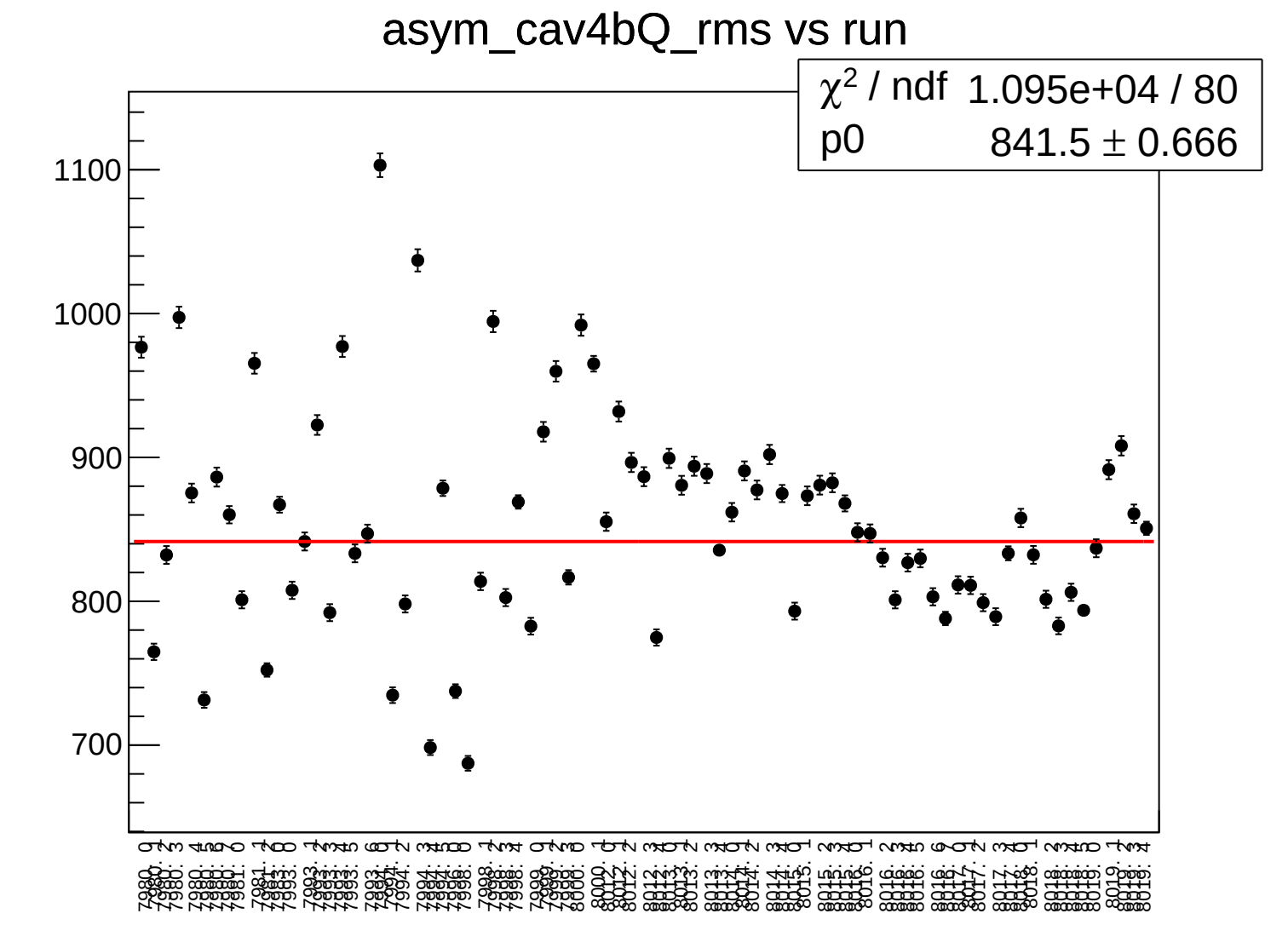

asym_bcm_dg_ds_mean vs run
χ² / ndf 25.79 / 80
p0 −300.6 ± 182.2
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 1015
Std Dev 964.7
1
0.5
0
−0.5
−1
−1.5
−2

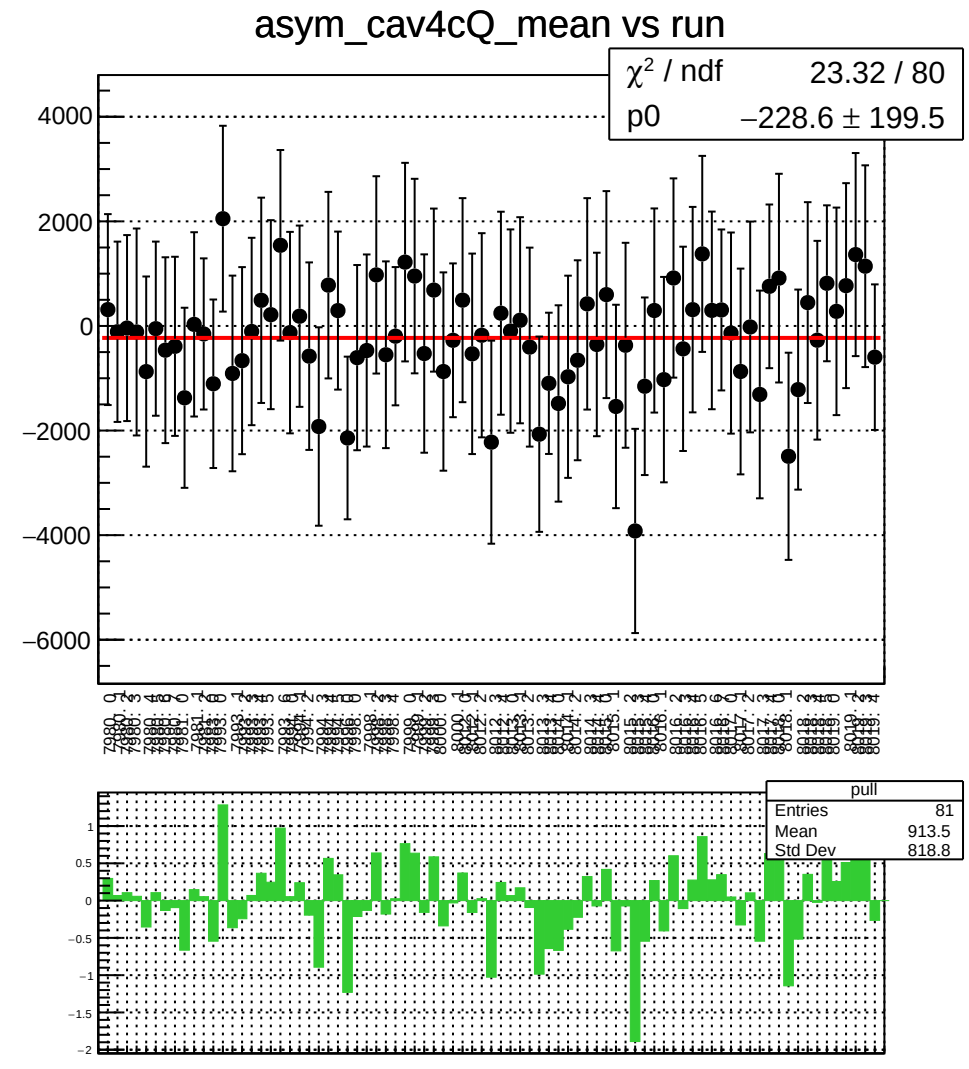

pull1D
Entries 81
Mean 0.00236
Std Dev 0.5642
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

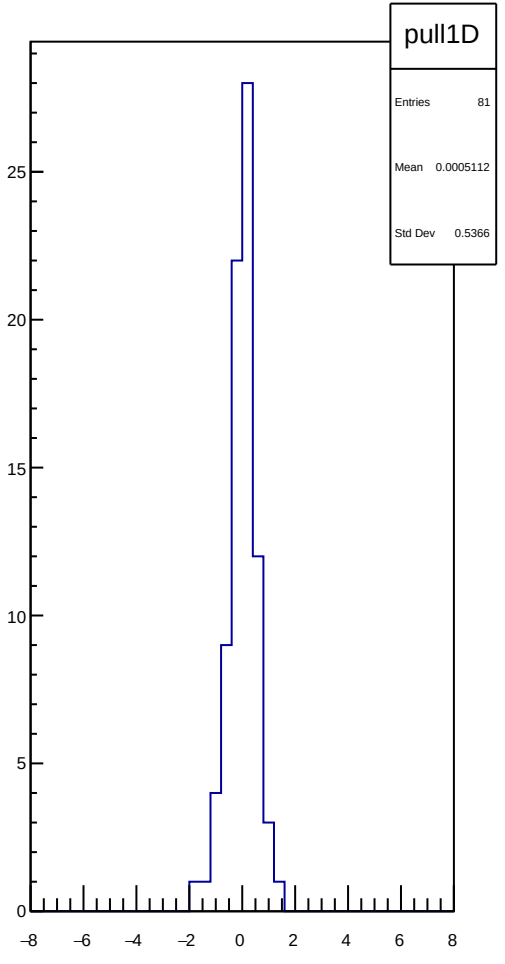

asym_bcm_dg_ds_rms vs run
χ² / ndf 1692 / 80
p0 163.3 ± 0.1288
175
170
165
160
155
150

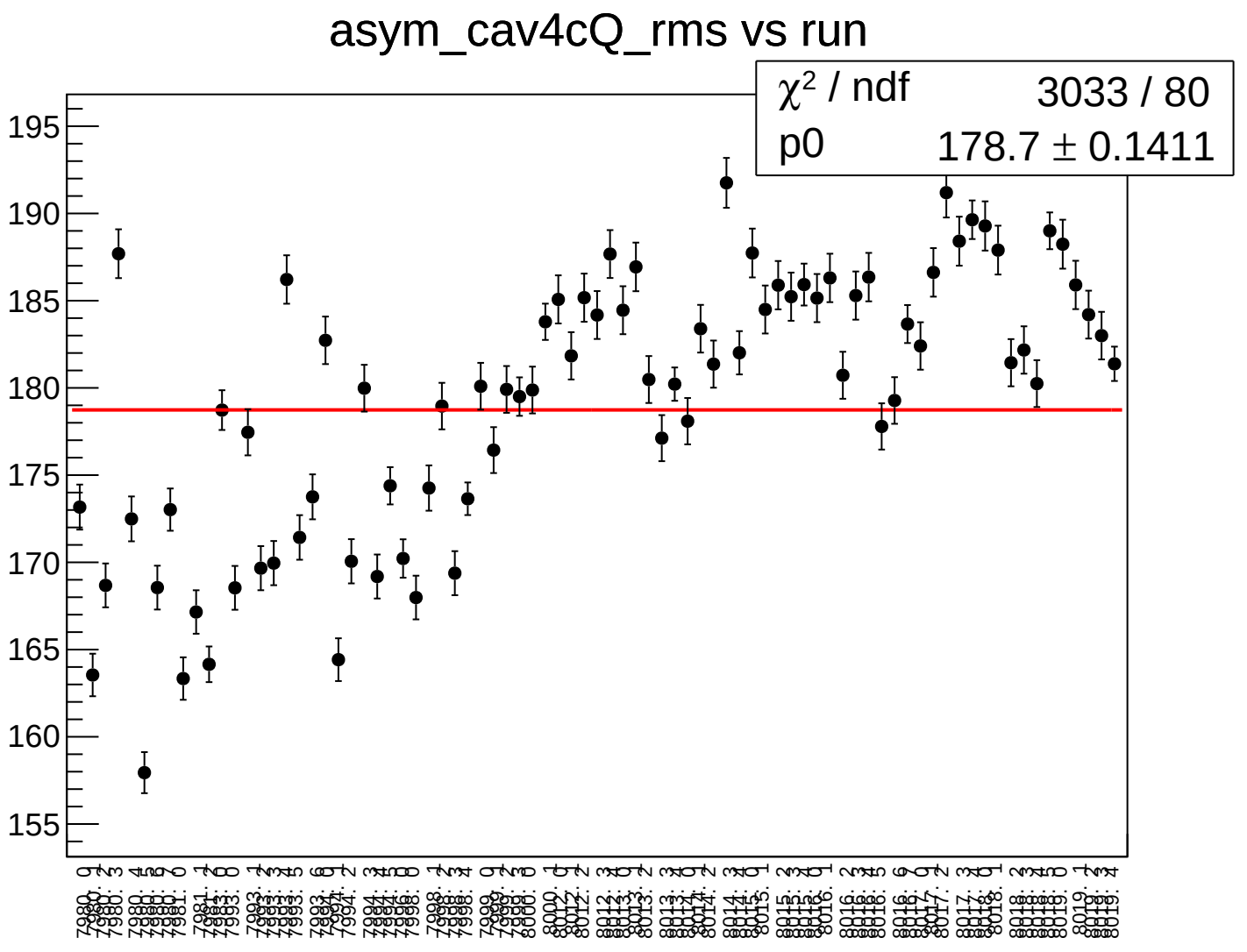

asym_cav4bQ_mean vs run
χ² / ndf 96.88 / 80
p0 763.5 ± 941.8
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 81
Mean 545.3
Std Dev 524.8
2
1
0
−1
−2
−3

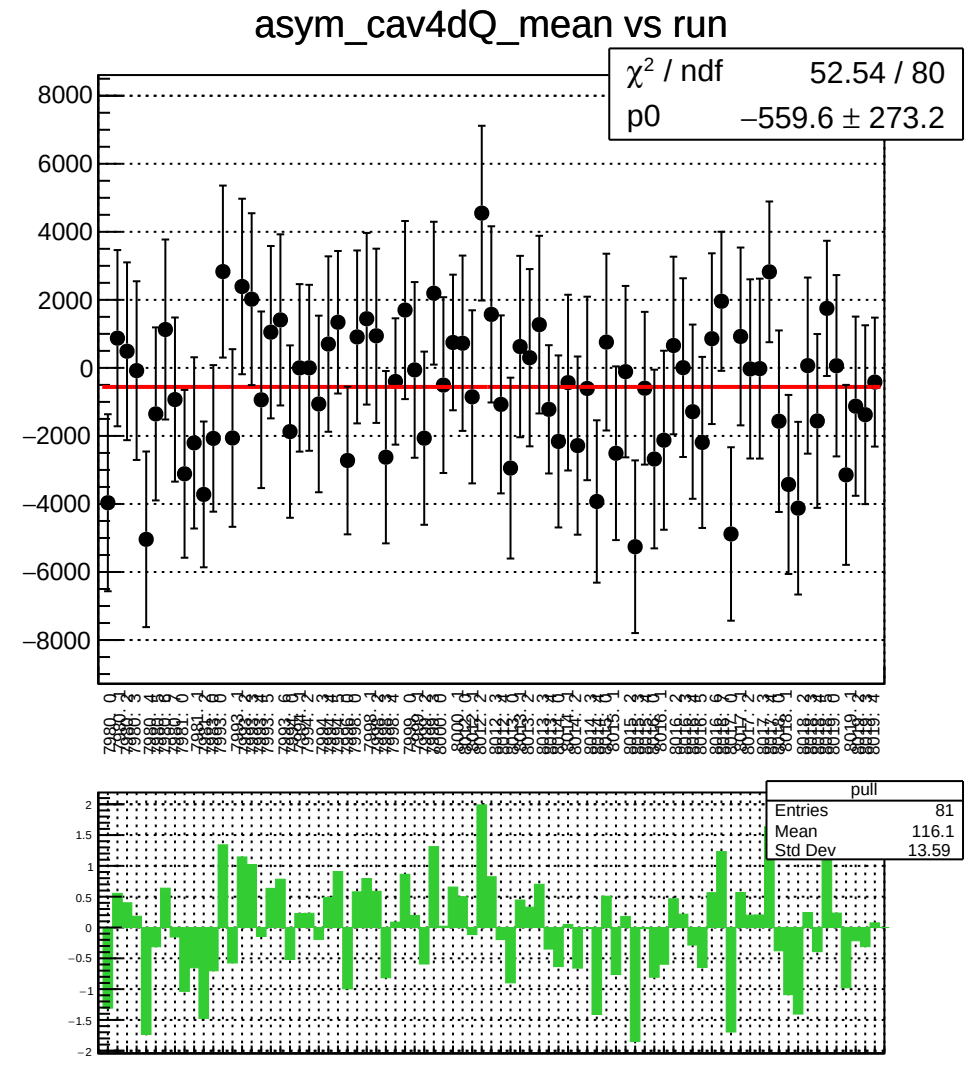

pull1D
Entries 81
Mean 0.002744
Std Dev 1.094
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

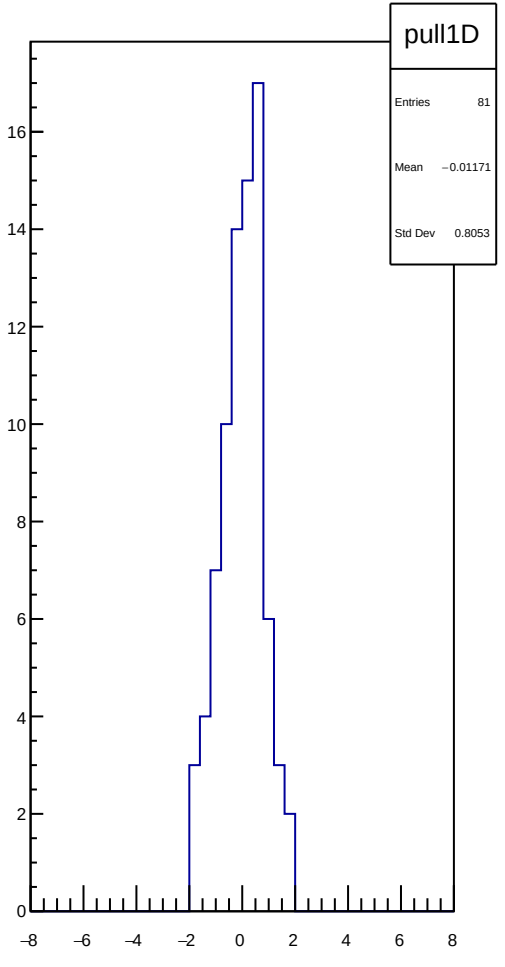

asym_cav4bQ_rms vs run
χ² / ndf 1.095e+04 / 80
p0 841.5 ± 0.666
1100
1000
900
800
700

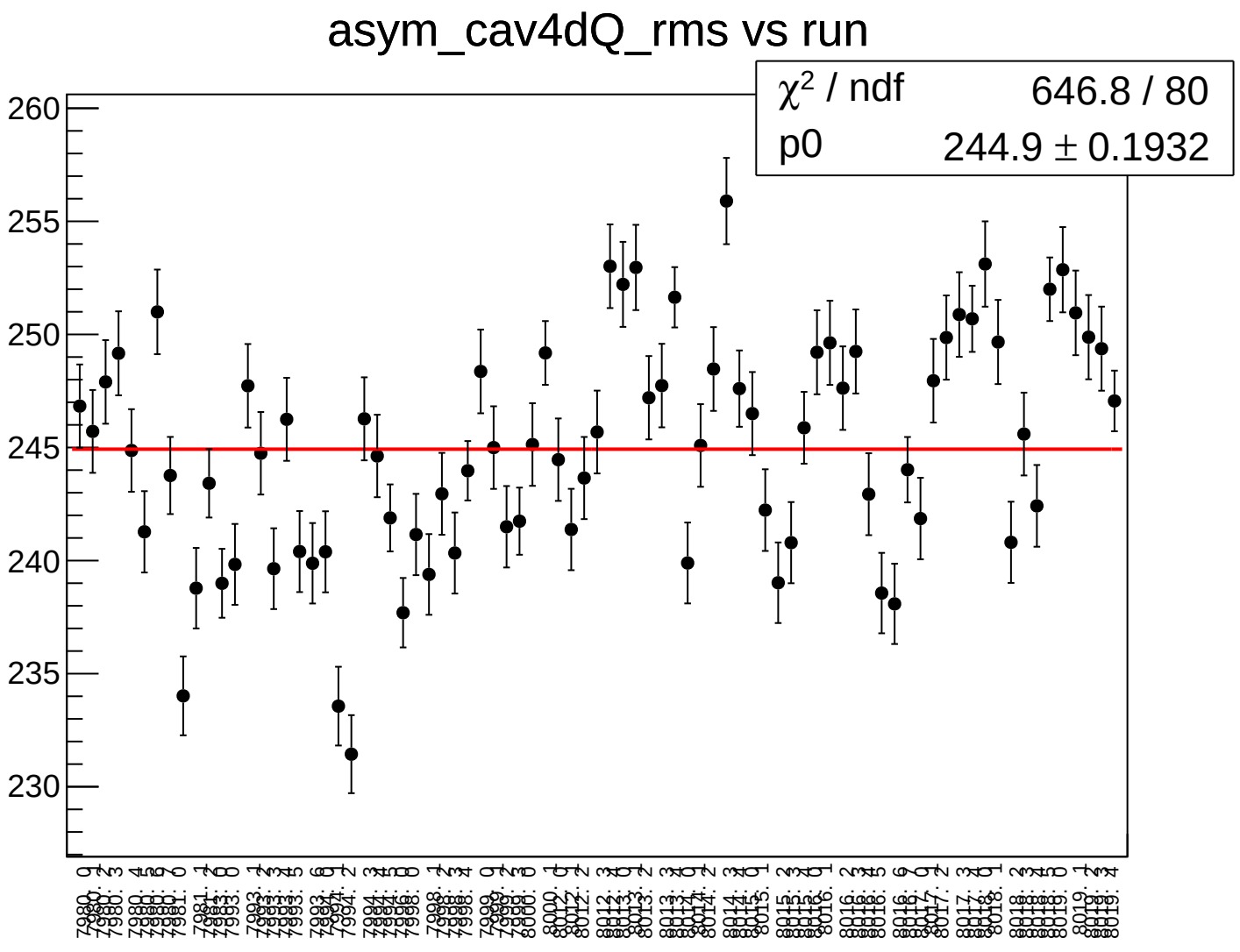

asym_cav4cQ_mean vs run
χ² / ndf 23.32 / 80
p0 −228.6 ± 199.5
4000
2000
0
−2000
−4000
−6000
pull
Entries 81
Mean 913.5
Std Dev 818.8
1
0.5
0
−0.5
−1
−1.5
−2

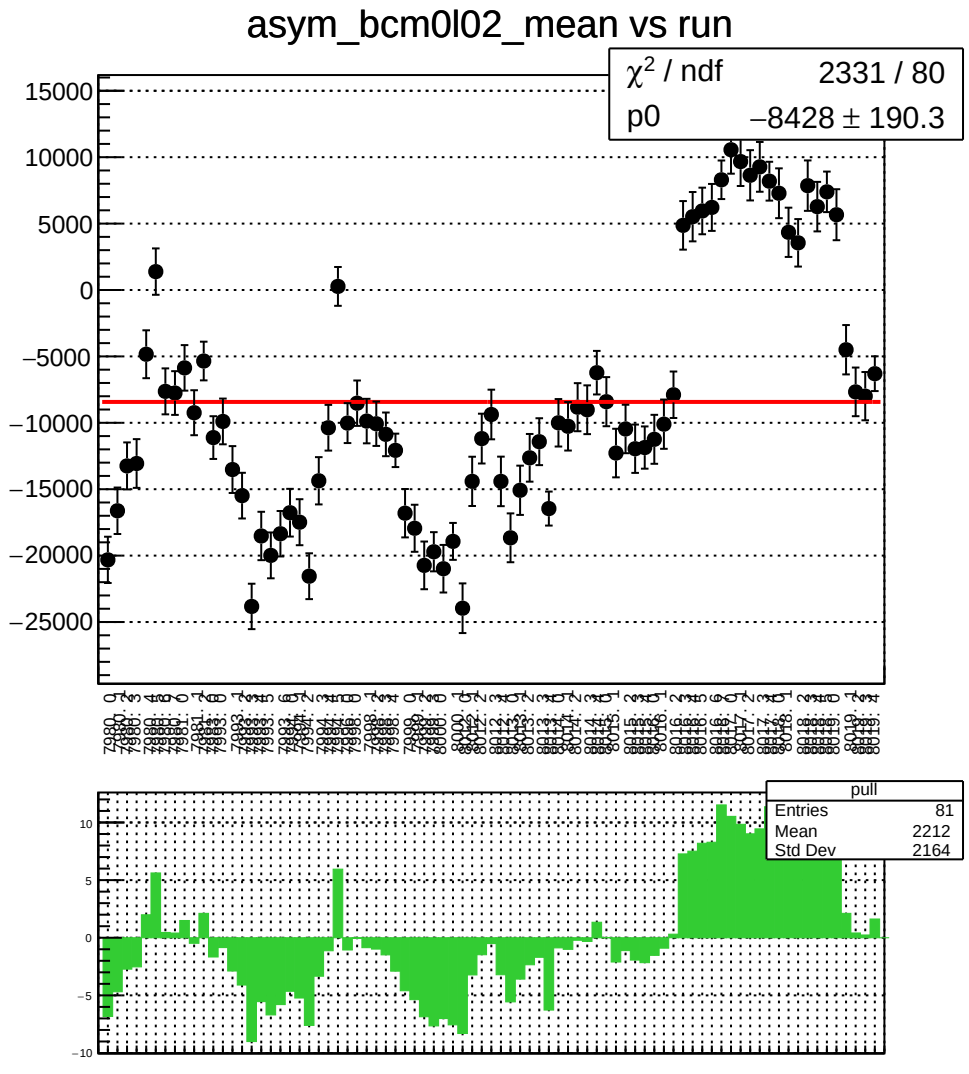

pull1D
Entries 81
Mean 0.0005112
Std Dev 0.5366
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

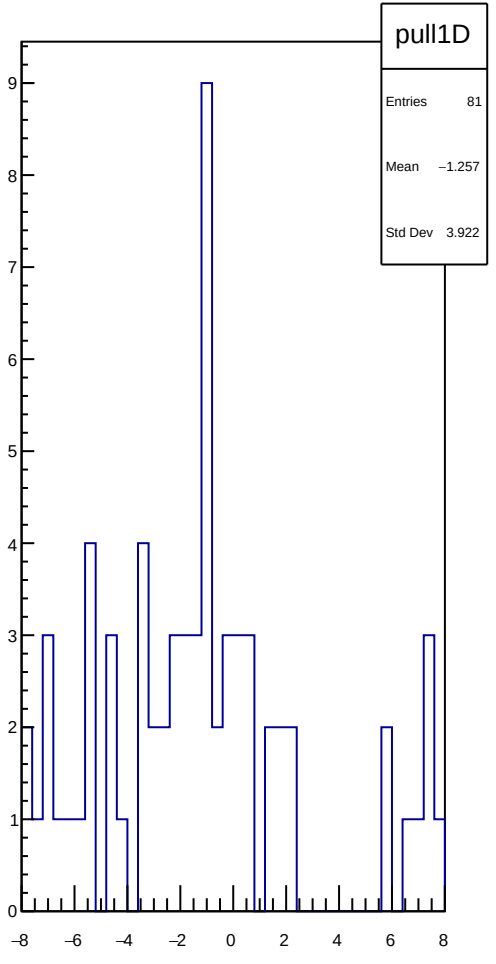

asym_cav4cQ_rms vs run
χ² / ndf 3033 / 80
p0 178.7 ± 0.1411
195
190
185
180
175
170
165
160
155

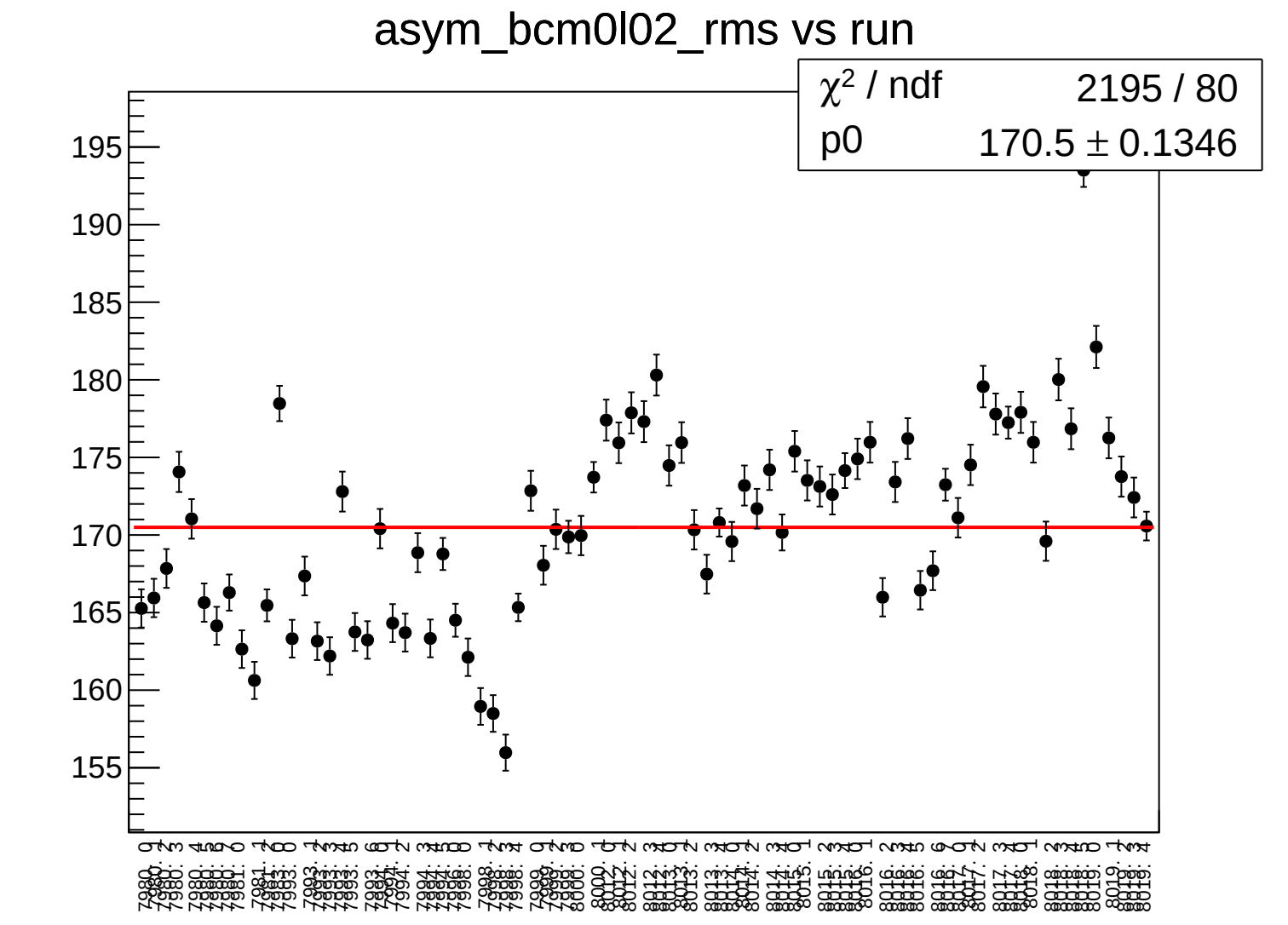

asym_cav4dQ_mean vs run
χ² / ndf 52.54 / 80
p0 −559.6 ± 273.2
pull
Entries 81
Mean 116.1
Std Dev 13.59

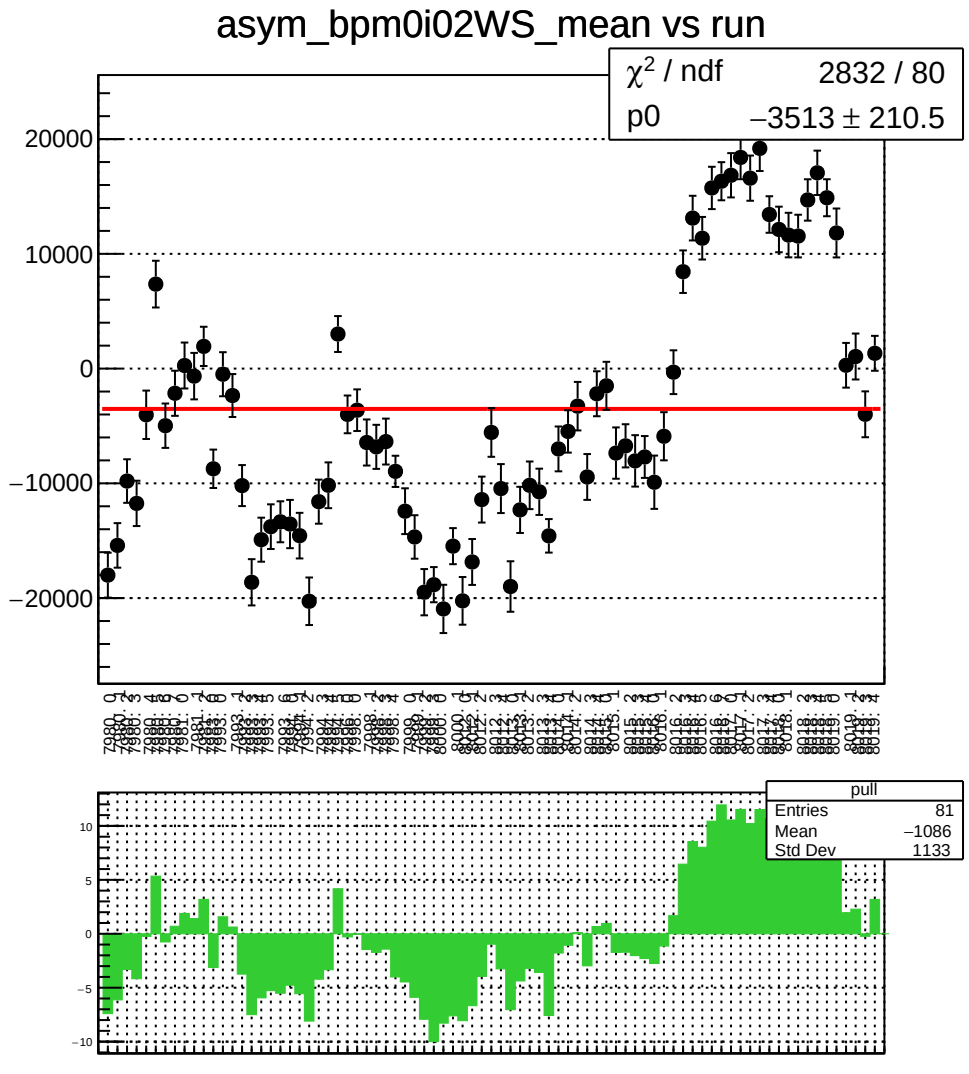

pull1D
Entries 81
Mean −0.01171
Std Dev 0.8053

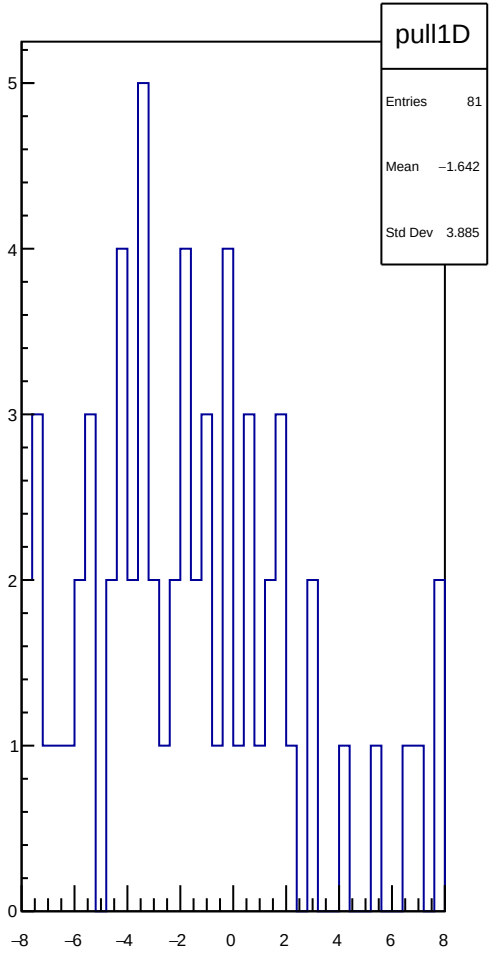

asym_cav4dQ_rms vs run
χ² / ndf 646.8 / 80
p0 244.9 ± 0.1932
260
255
250
245
240
235
230

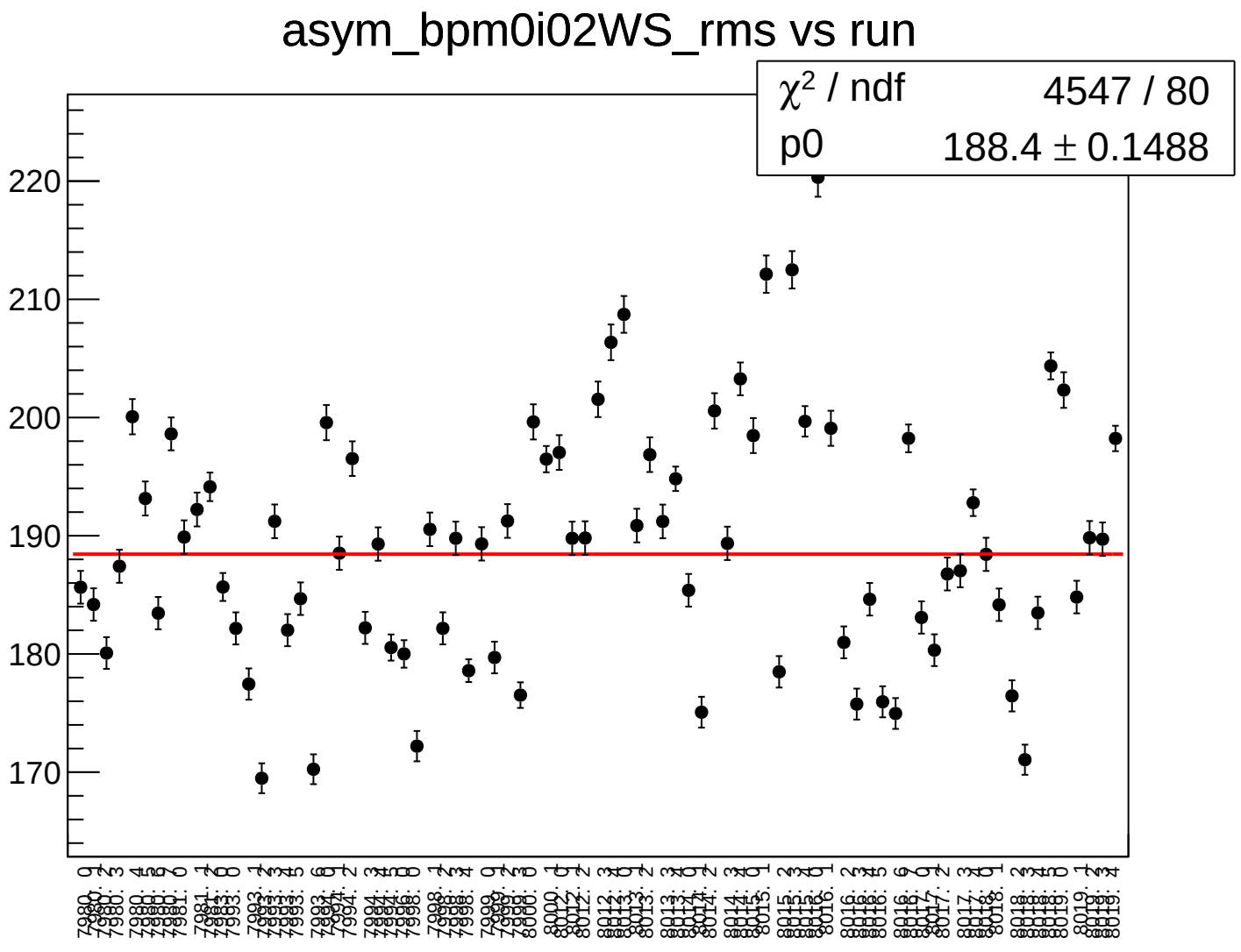

asym_bcm0l02_mean vs run
χ² / ndf 2331 / 80
p0 −8428 ± 190.3
pull
Entries 81
Mean 2212
Std Dev 2164

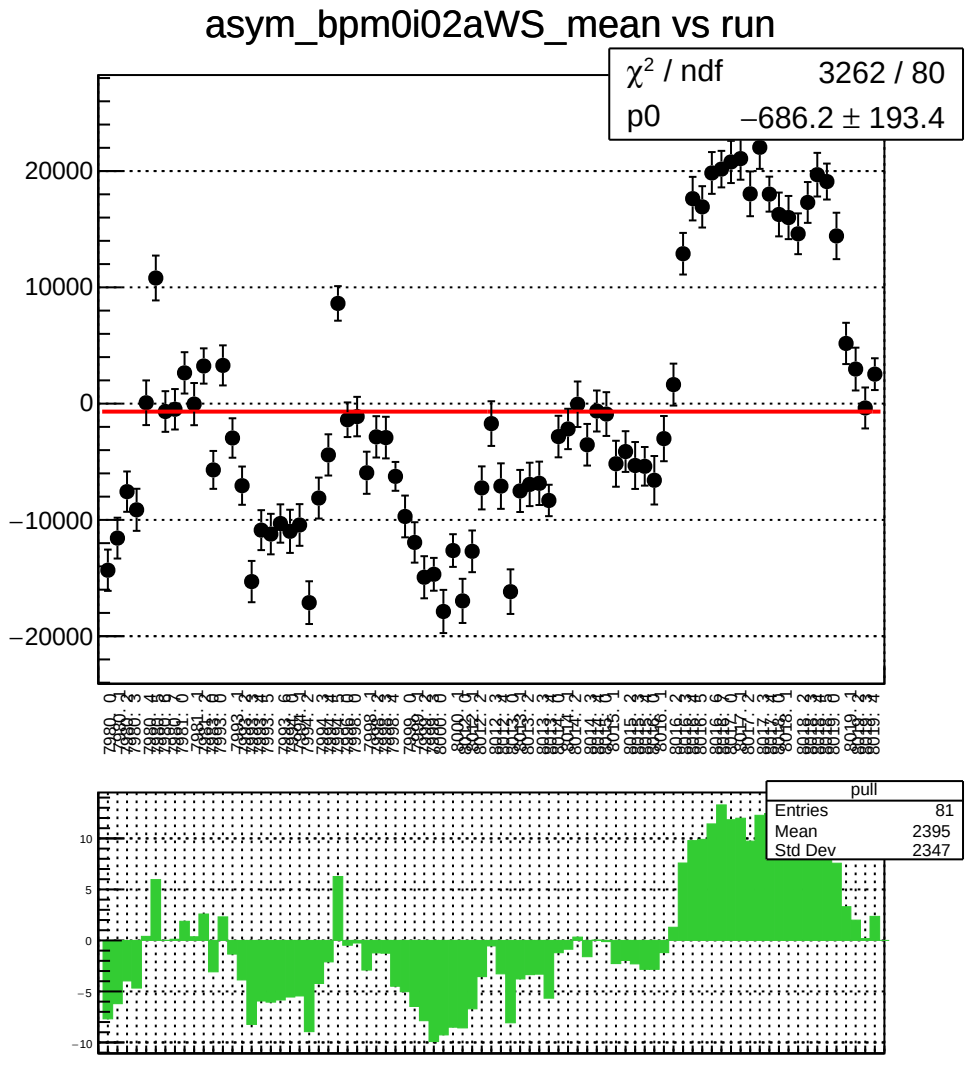

pull1D
Entries 81
Mean −1.257
Std Dev 3.922

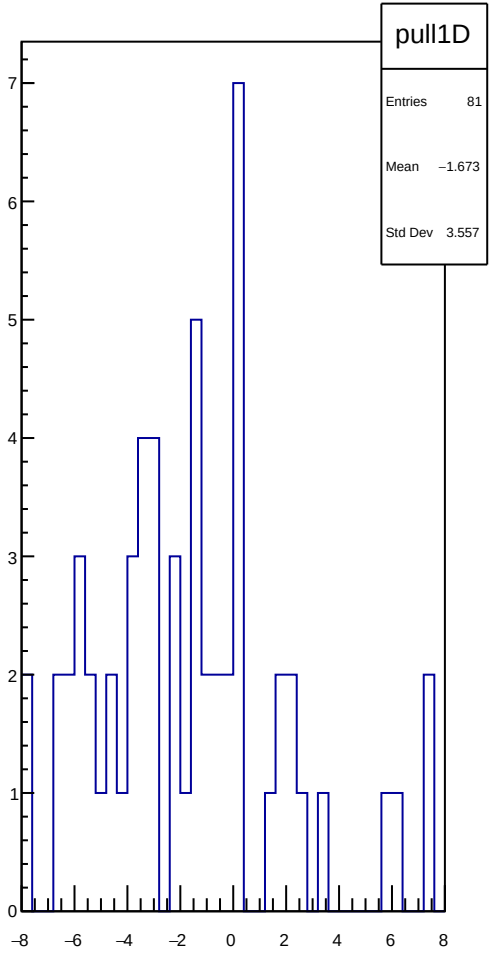

asym_bcm0l02_rms vs run
χ² / ndf 2195 / 80
p0 170.5 ± 0.1346
195
190
185
180
175
170
165
160
155

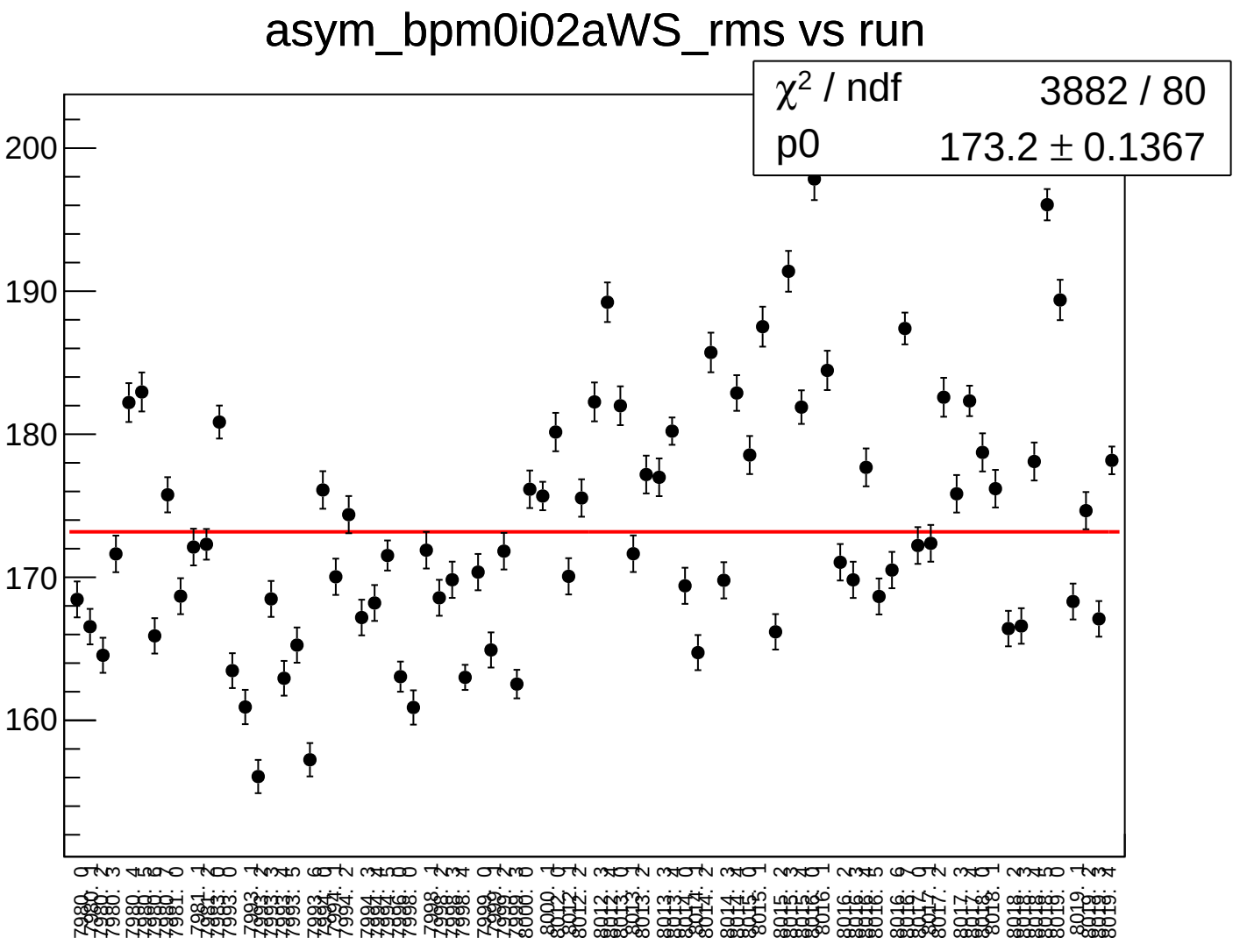

asym_bpm0i02WS_mean vs run
χ² / ndf 2832 / 80
p0 −3513 ± 210.5
20000
10000
0
−10000
−20000
pull
Entries 81
Mean −1086
Std Dev 1133
10
5
0
−5
−10

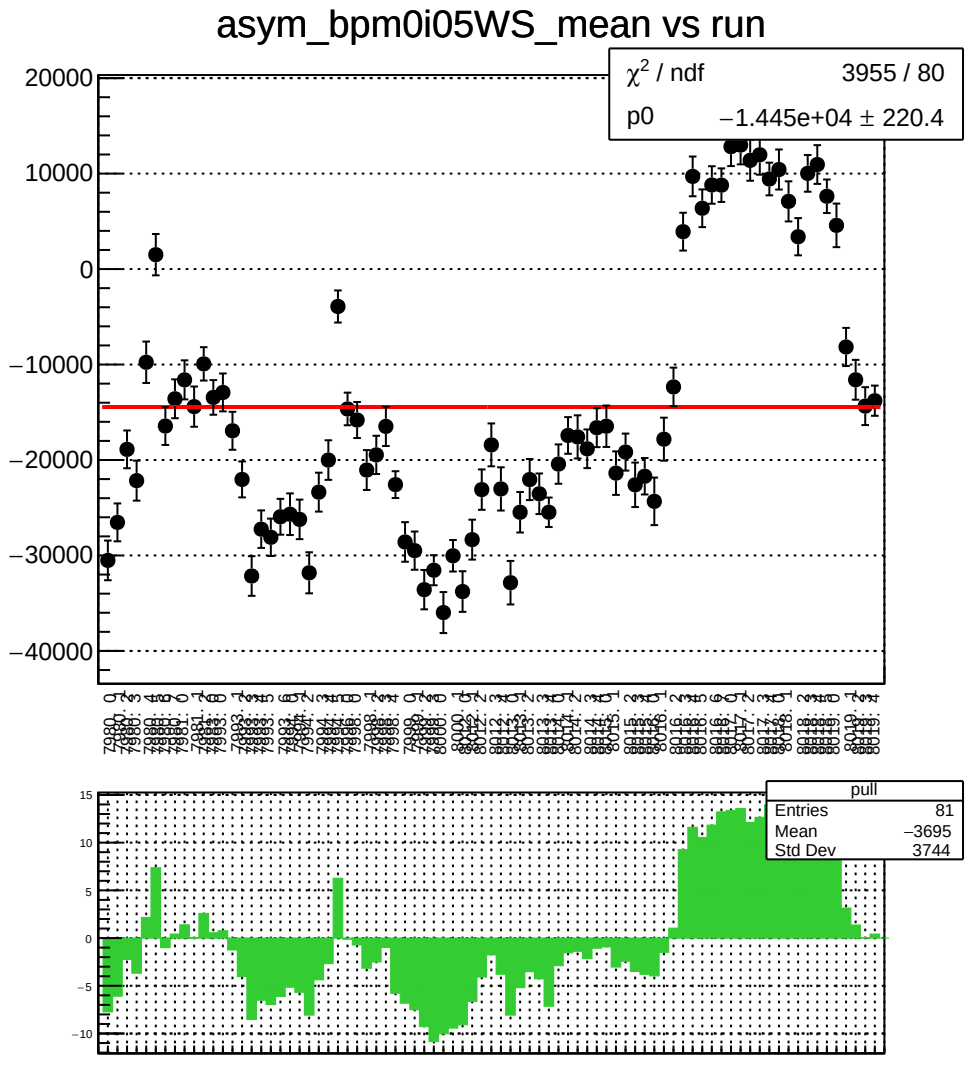

pull1D
Entries 81
Mean −1.642
Std Dev 3.885
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

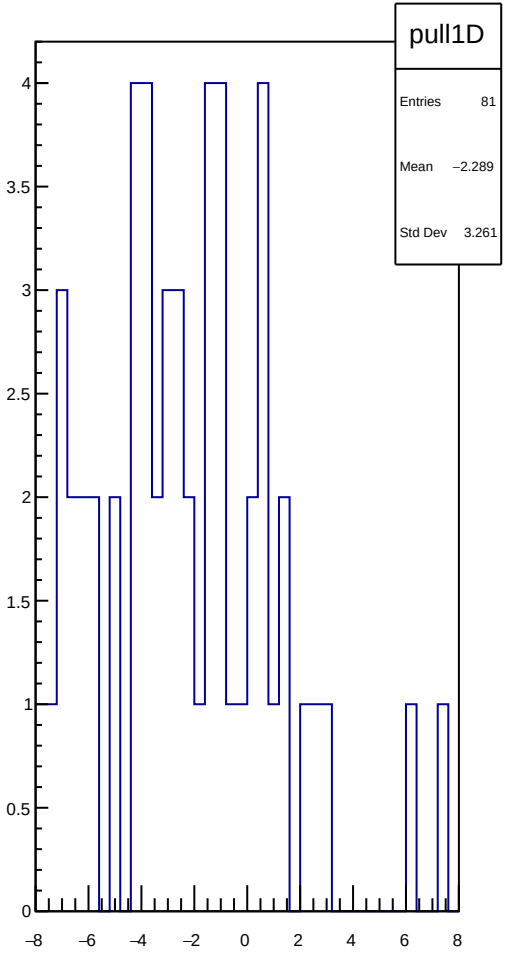

asym_bpm0i02WS_rms vs run
χ² / ndf 4547 / 80
p0 188.4 ± 0.1488
220
210
200
190
180
170

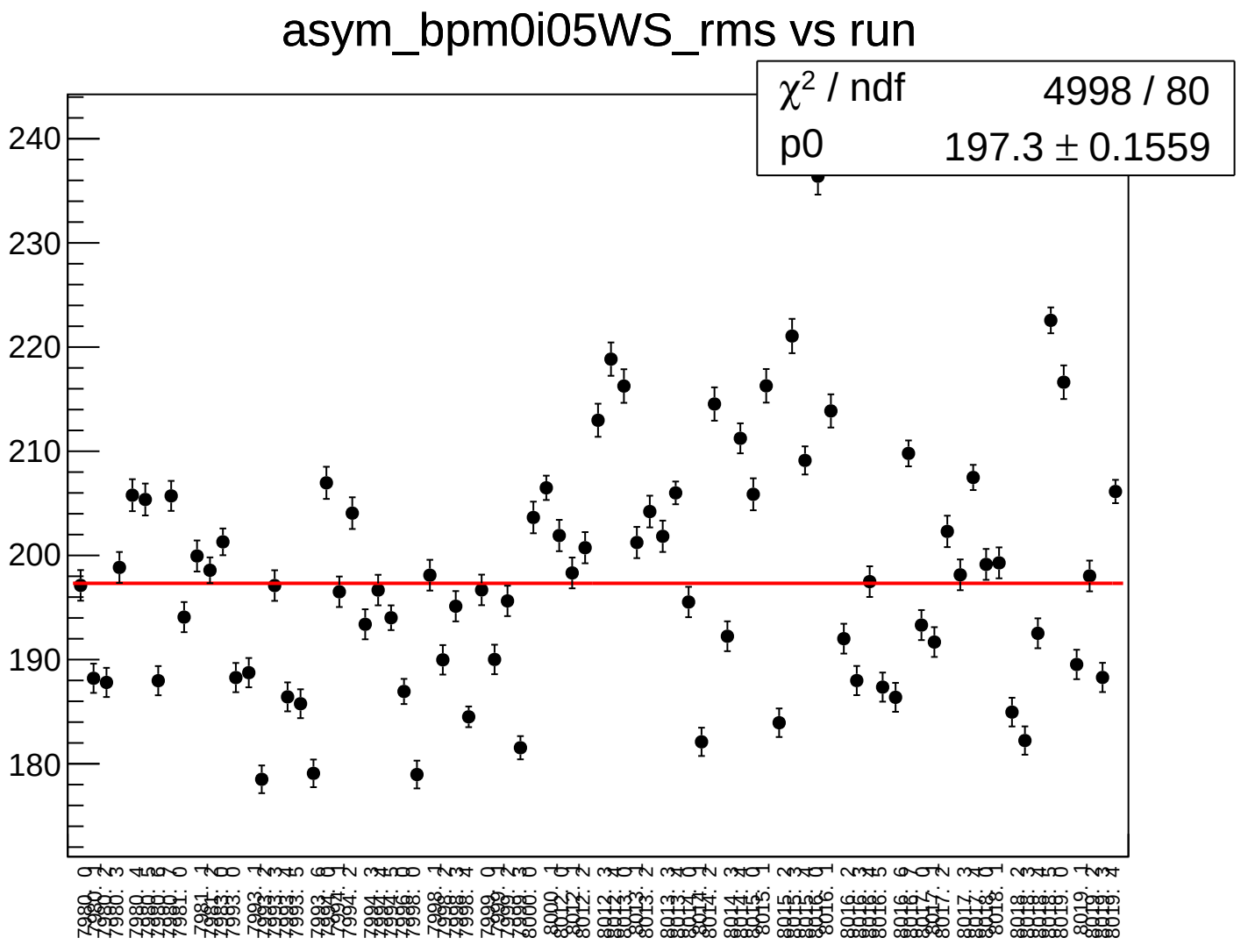

asym_bpm0i02aWS_mean vs run
χ² / ndf 3262 / 80
p0 −686.2 ± 193.4
20000
10000
0
−10000
−20000
pull
Entries 81
Mean 2395
Std Dev 2347
10
5
0
−5
−10

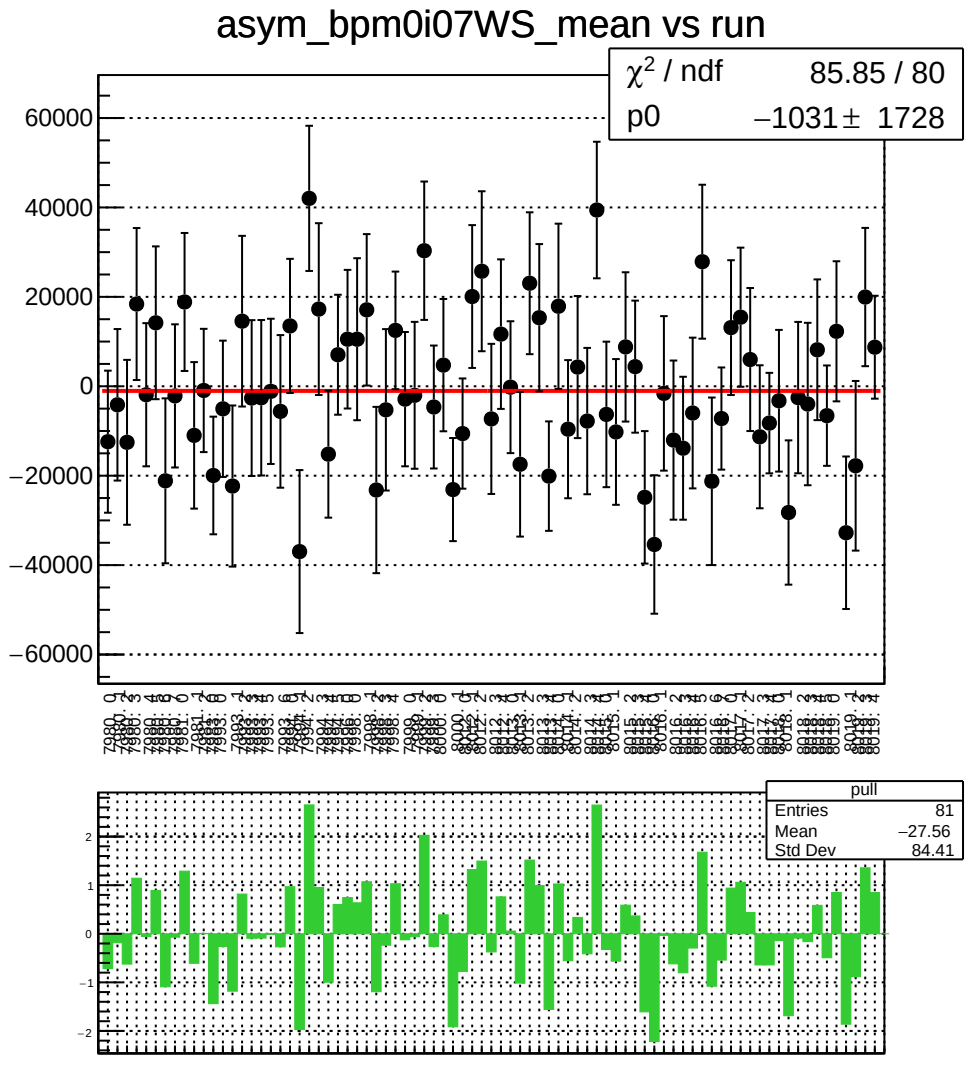

pull1D
Entries 81
Mean −1.673
Std Dev 3.557
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

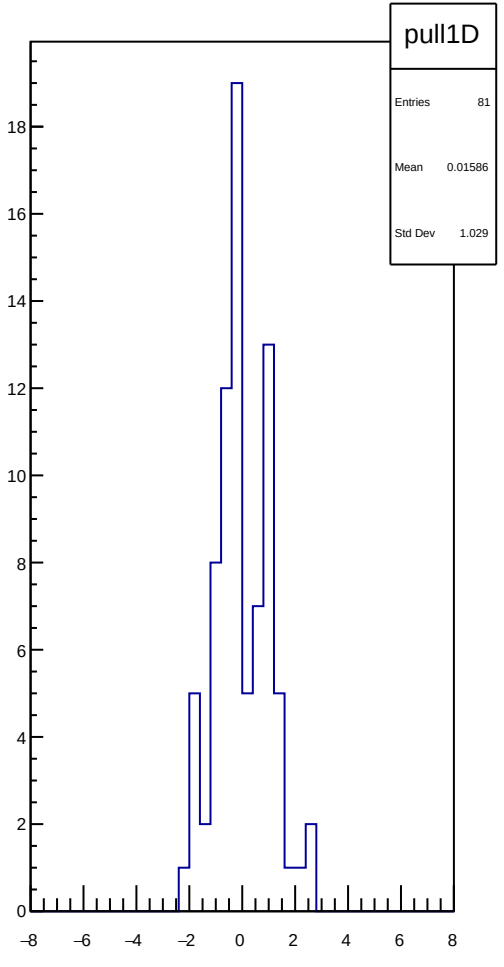

asym_bpm0i02aWS_rms vs run
χ² / ndf 3882 / 80
p0 173.2 ± 0.1367
200
190
180
170
160

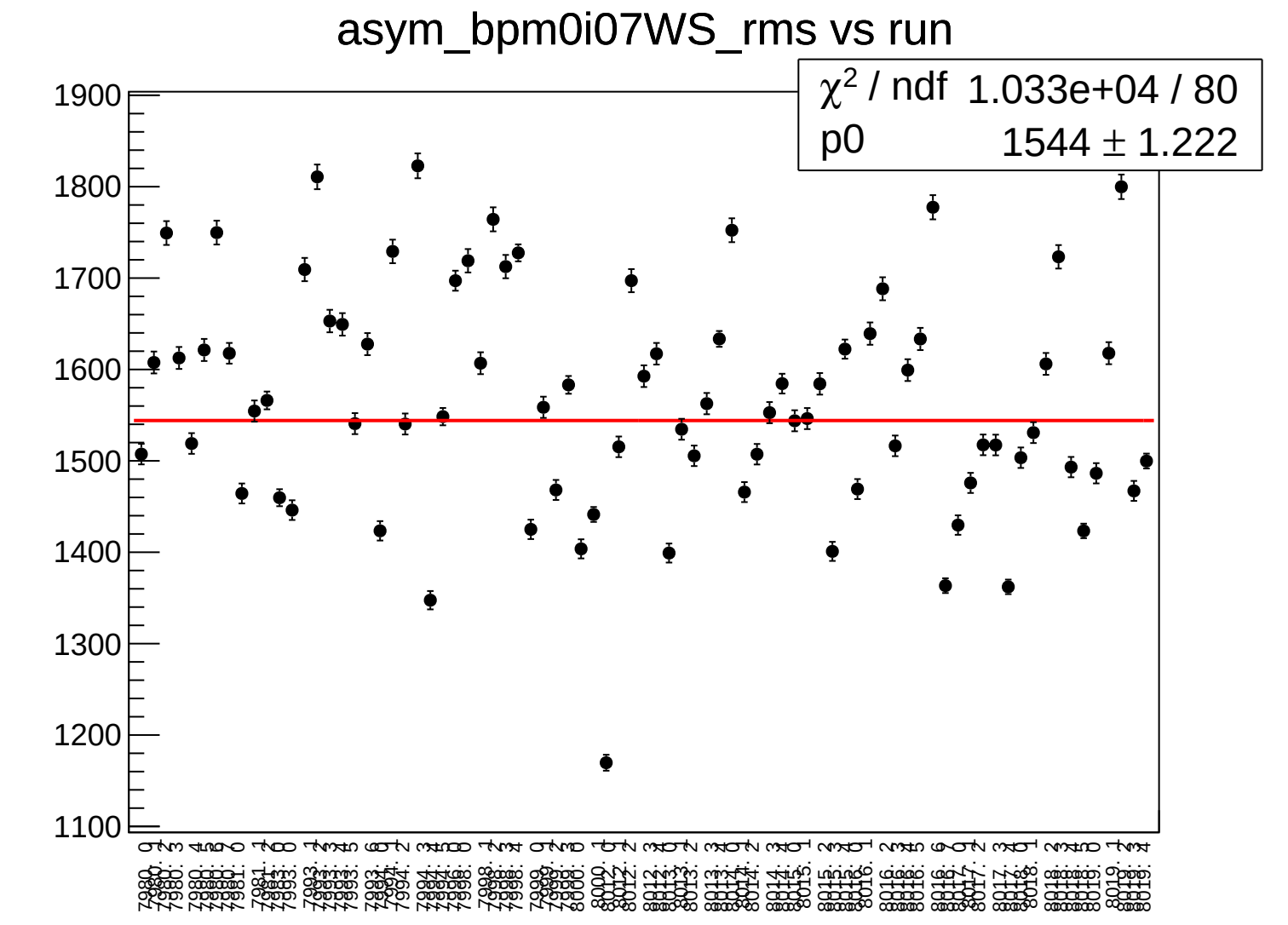

asym_bpm0i05WS_mean vs run
χ² / ndf 3955 / 80
p0 −1.445e+04 ± 220.4
pull
Entries 81
Mean −3695
Std Dev 3744

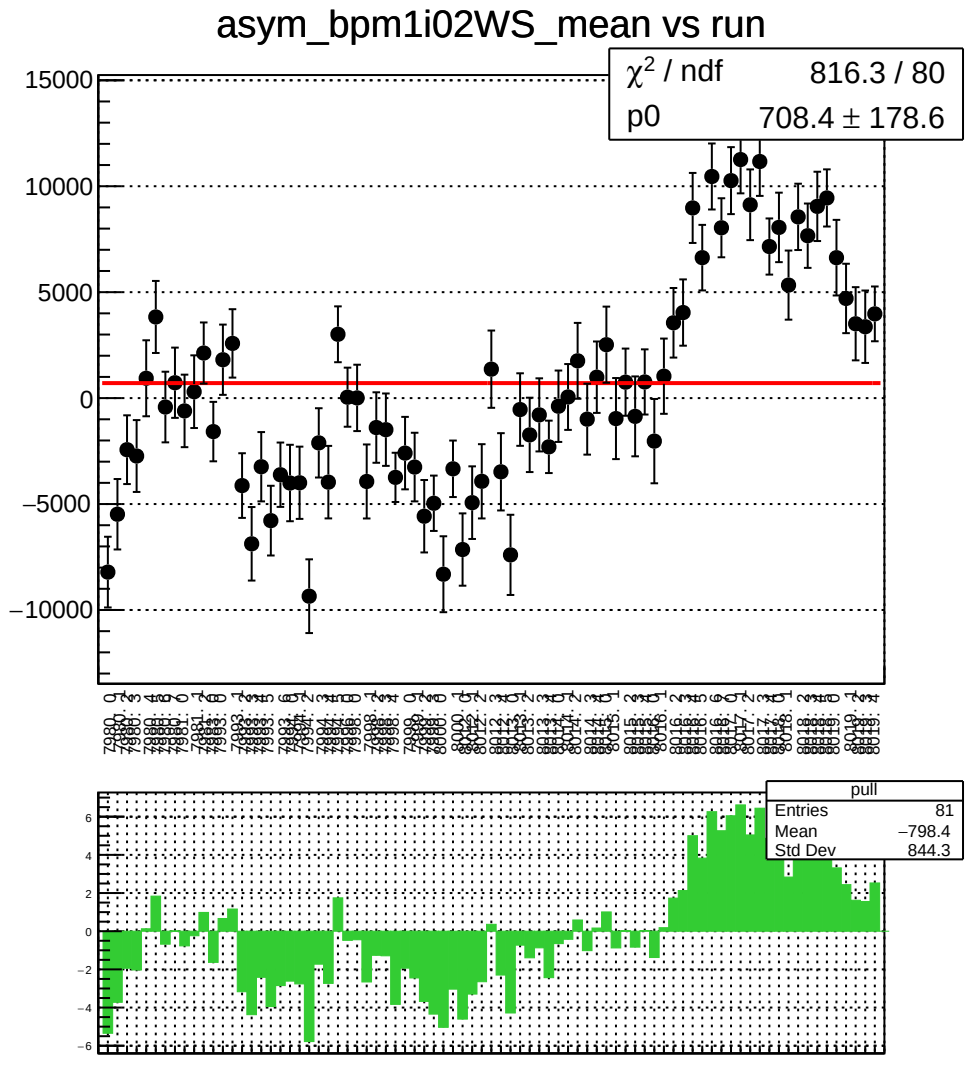

pull1D
Entries 81
Mean −2.289
Std Dev 3.261

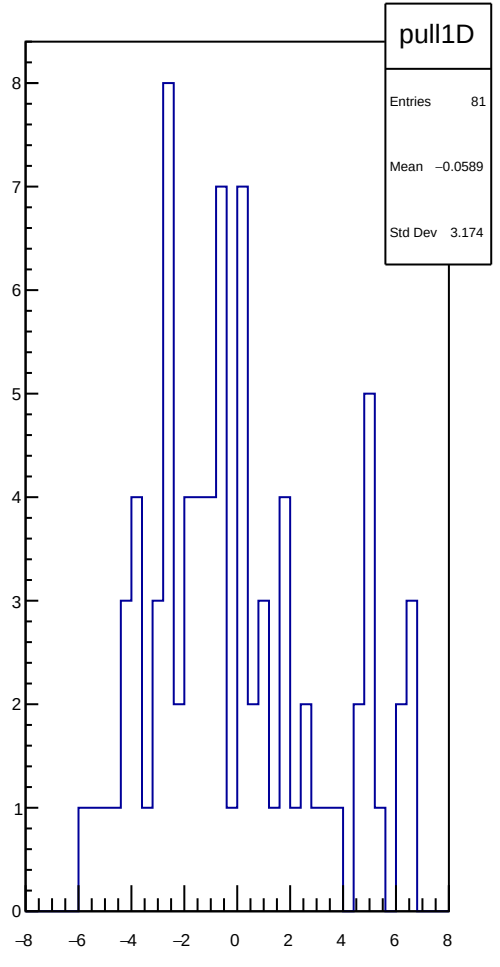

asym_bpm0i05WS_rms vs run
χ² / ndf 4998 / 80
p0 197.3 ± 0.1559
240
230
220
210
200
190
180

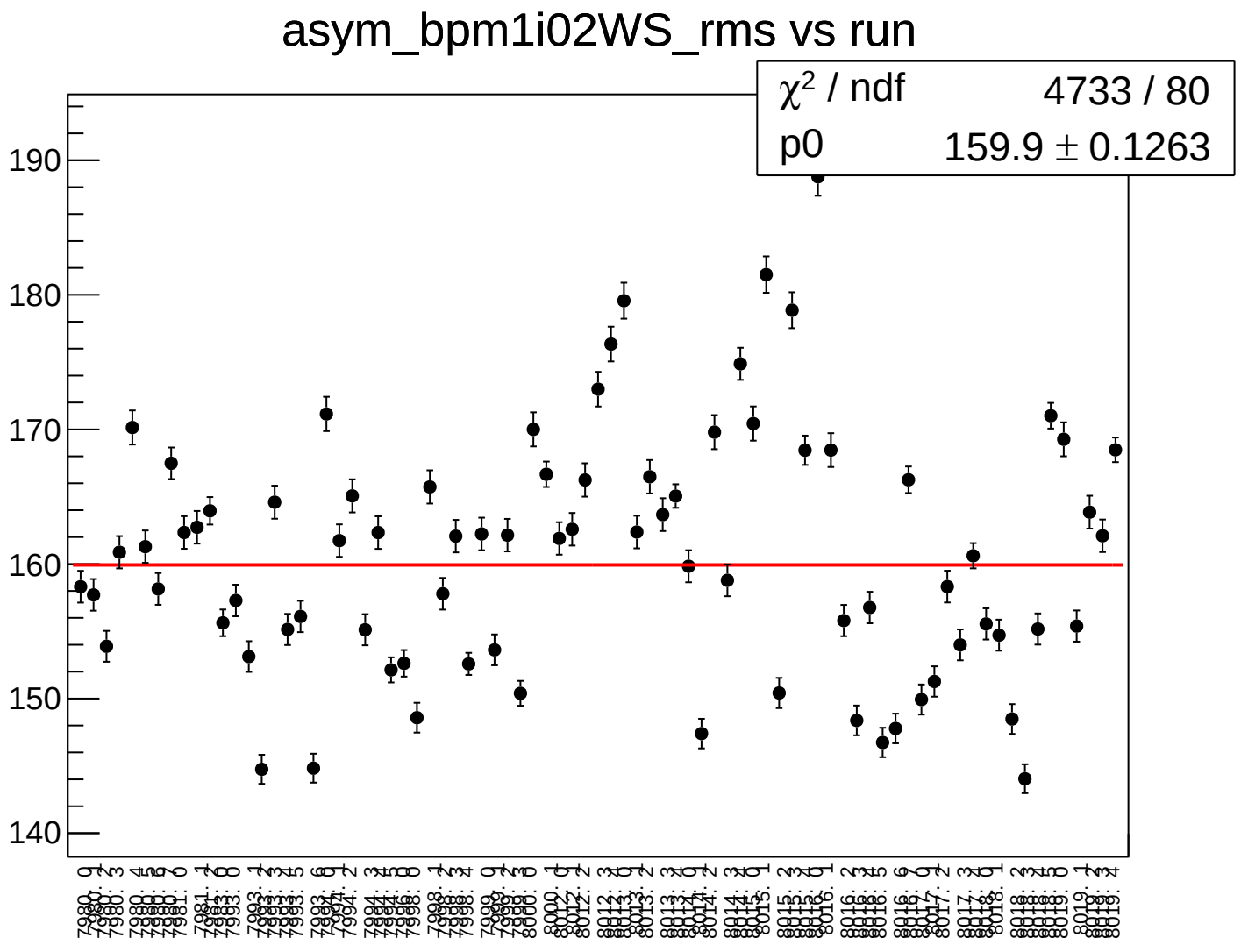

asym_bpm0i07WS_mean vs run
χ² / ndf 85.85 / 80
p0 −1031 ± 1728
pull
Entries 81
Mean −27.56
Std Dev 84.41

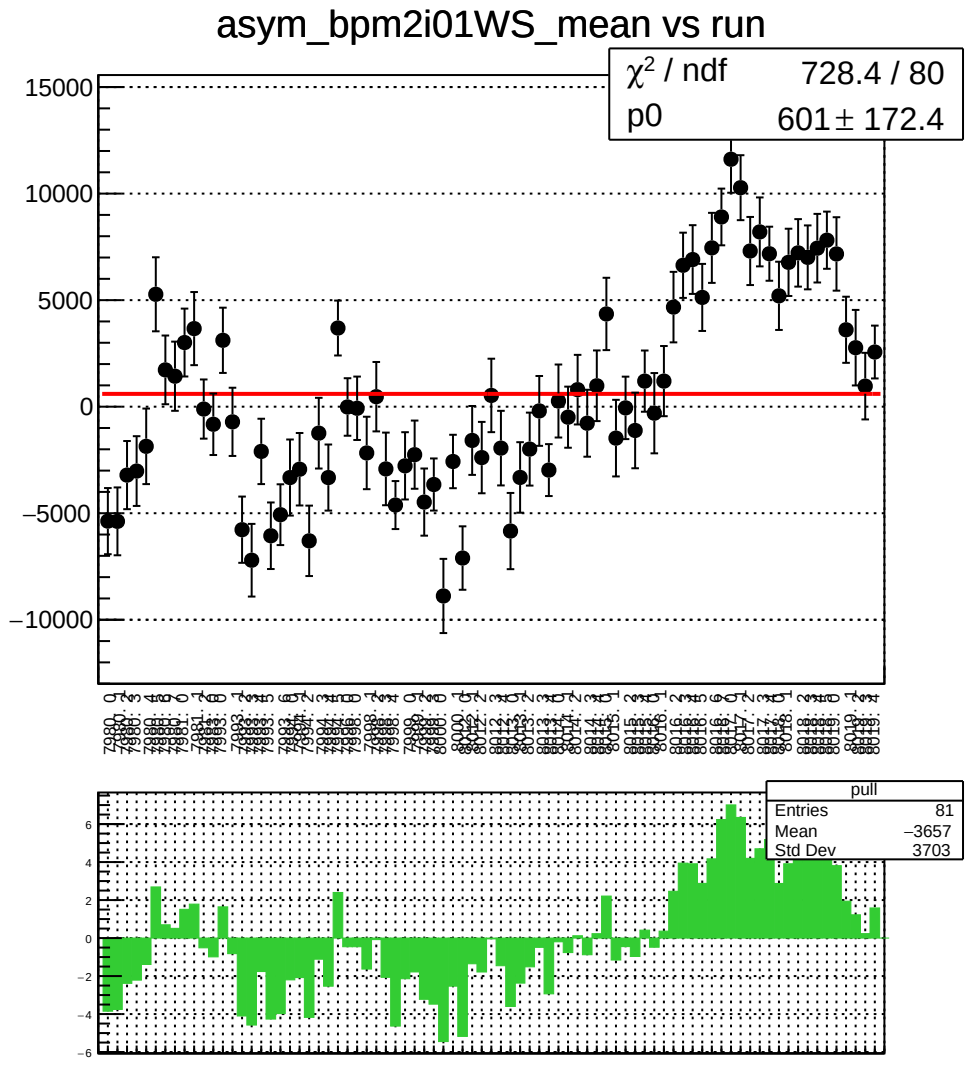

pull1D
Entries 81
Mean 0.01586
Std Dev 1.029

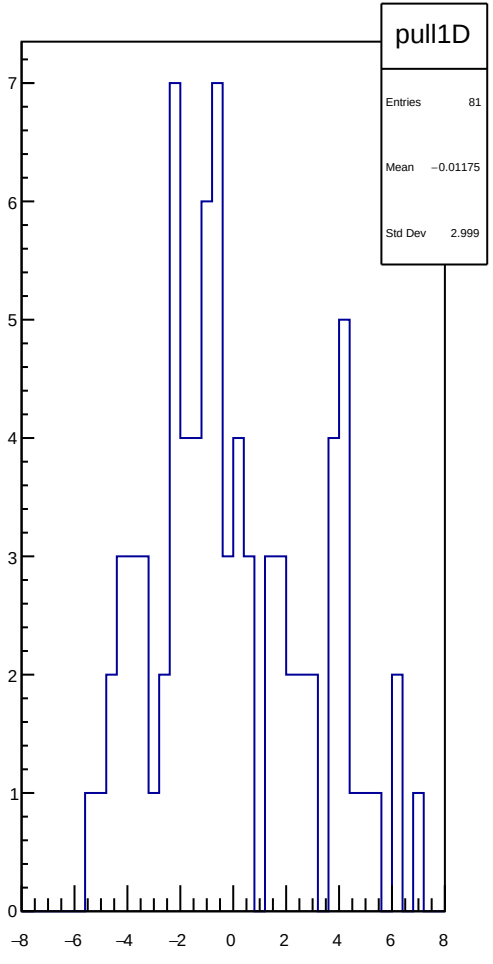

asym_bpm0i07WS_rms vs run
χ² / ndf 1.033e+04 / 80
p0 1544 ± 1.222
1900
1800
1700
1600
1500
1400
1300
1200
1100

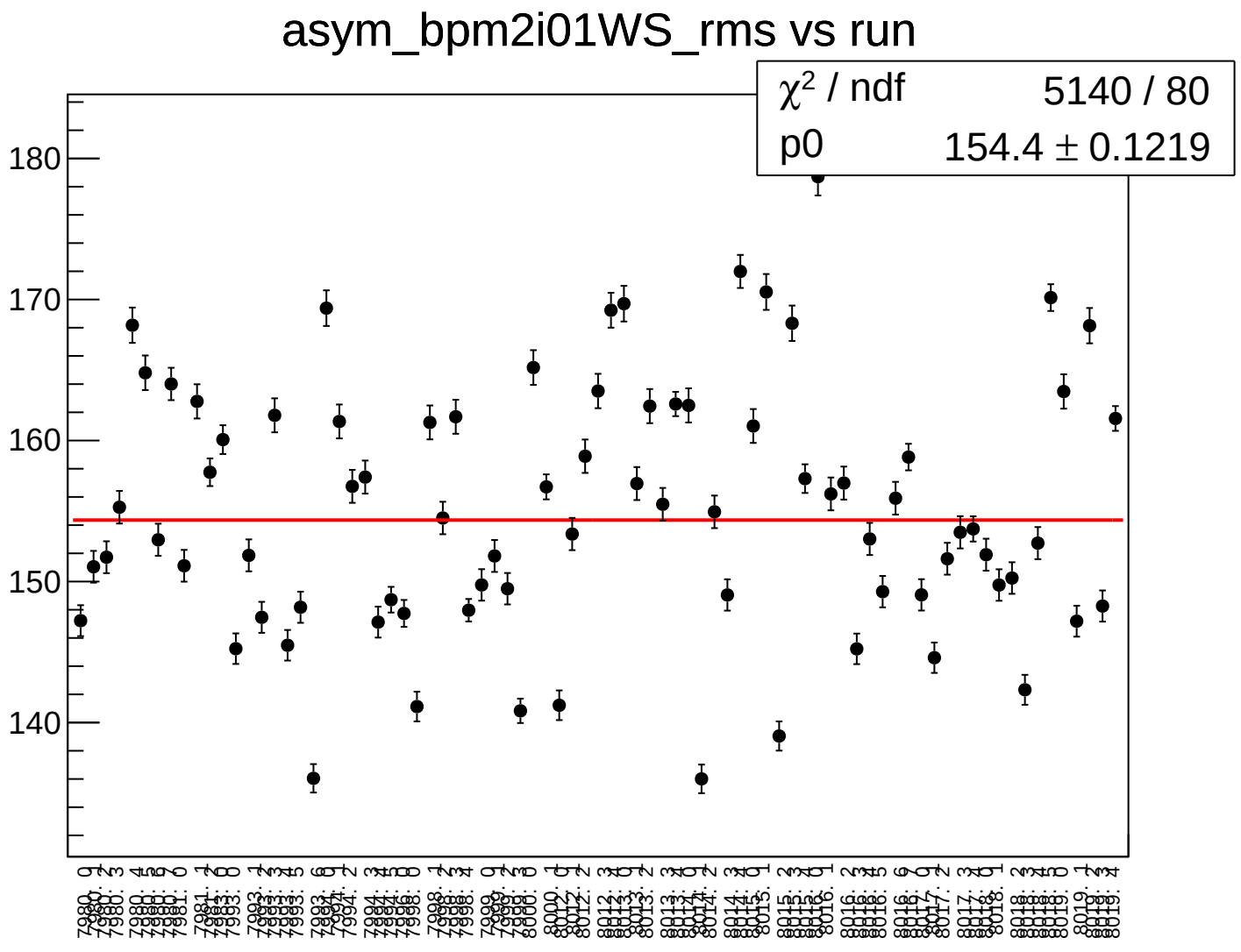

asym_bpm1i02WS_mean vs run
χ² / ndf 816.3 / 80
p0 708.4 ± 178.6
pull
Entries 81
Mean −798.4
Std Dev 844.3

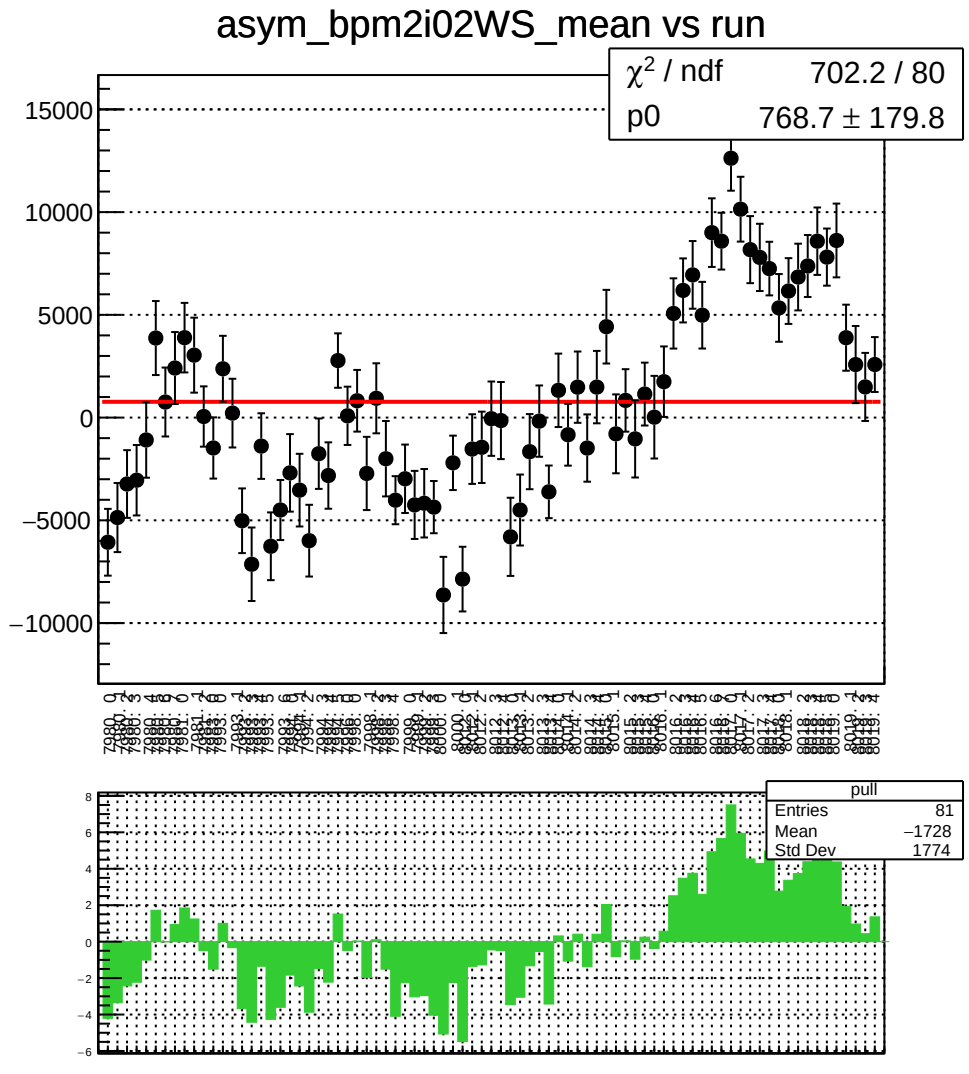

pull1D
Entries 81
Mean −0.0589
Std Dev 3.174

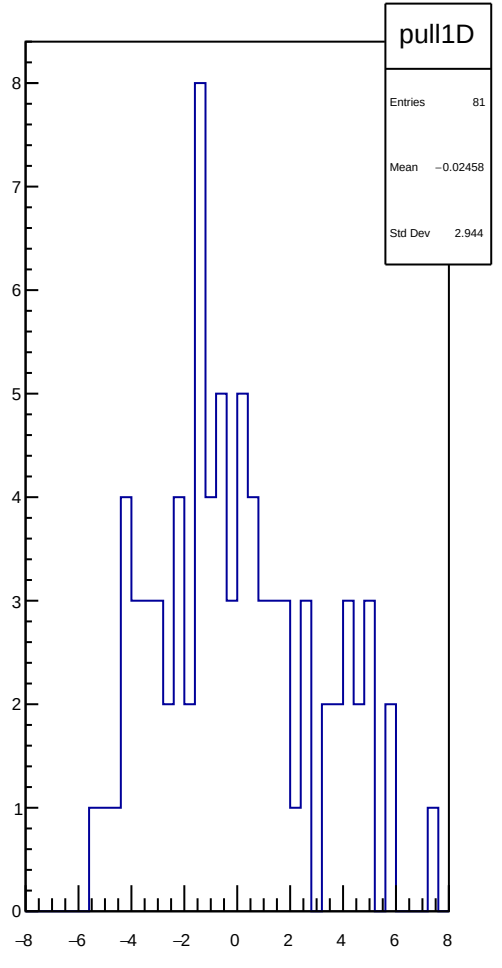

asym_bpm1i02WS_rms vs run
χ² / ndf 4733 / 80
p0 159.9 ± 0.1263
190
180
170
160
150
140

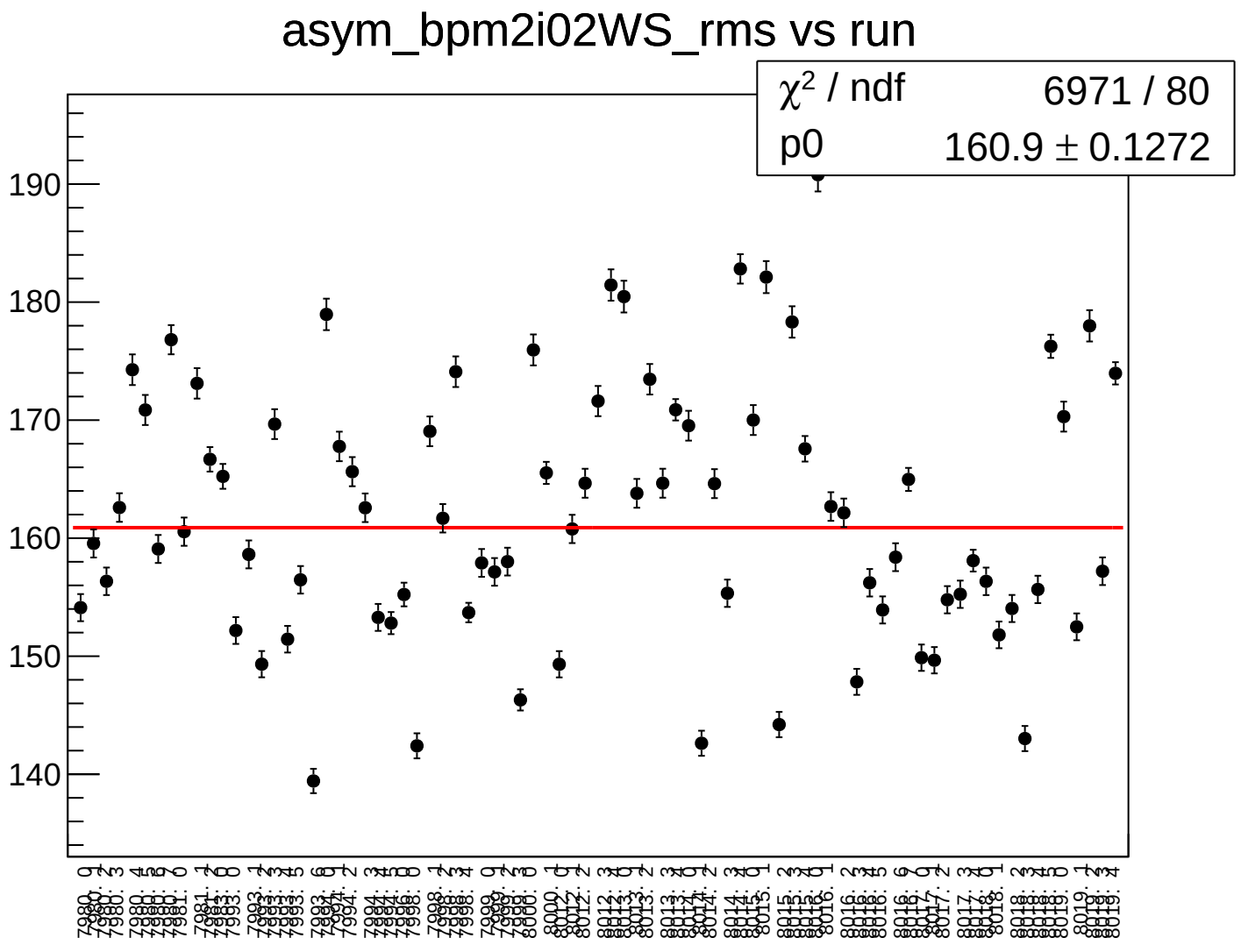

asym_bpm2i01WS_mean vs run
χ² / ndf 728.4 / 80
p0 601 ± 172.4
15000
10000
5000
0
−5000
−10000
pull
Entries 81
Mean −3657
Std Dev 3703
6
4
2
0
−2
−4
−6

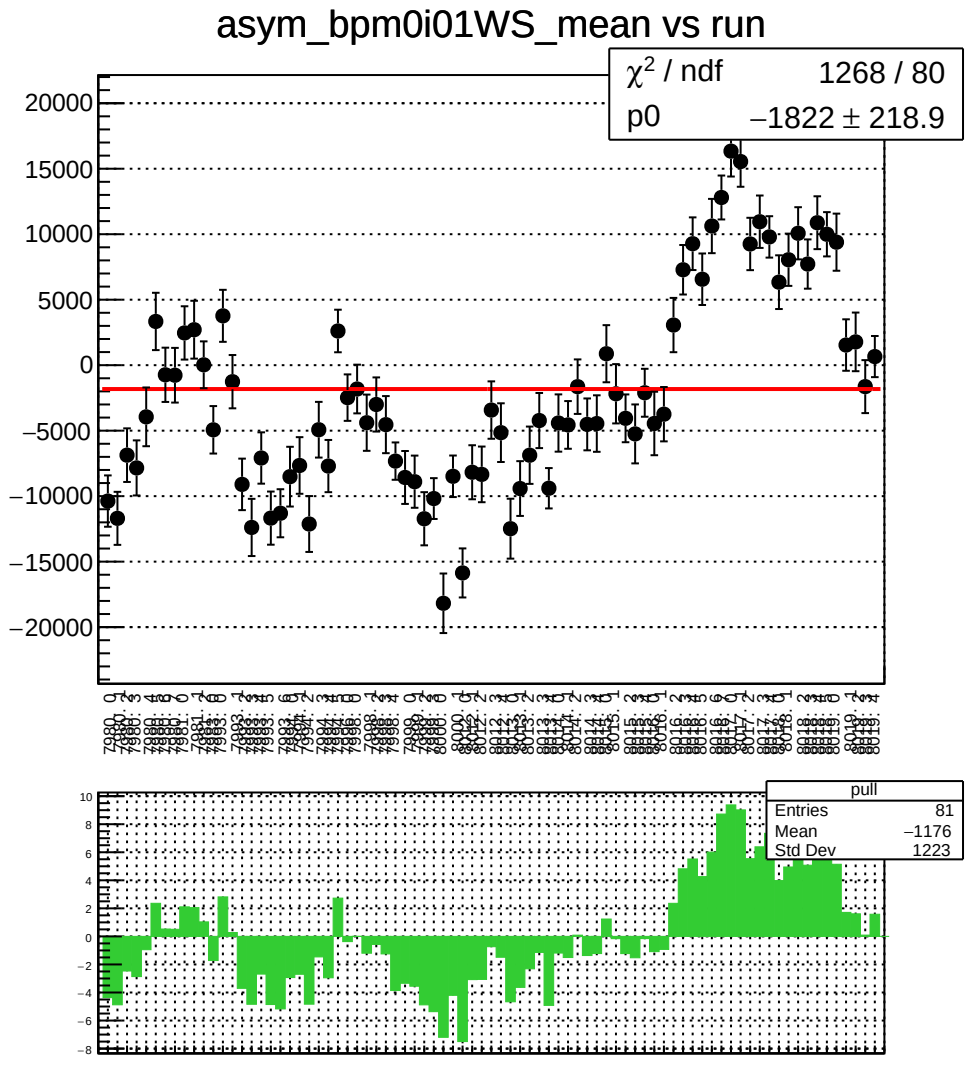

pull1D
Entries 81
Mean −0.01175
Std Dev 2.999
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

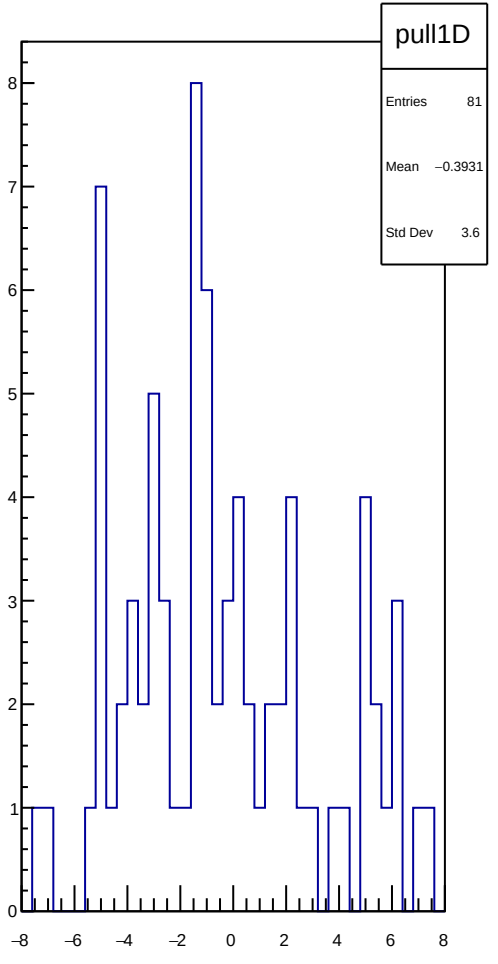

asym_bpm2i01WS_rms vs run
χ² / ndf 5140 / 80
p0 154.4 ± 0.1219
180
170
160
150
140

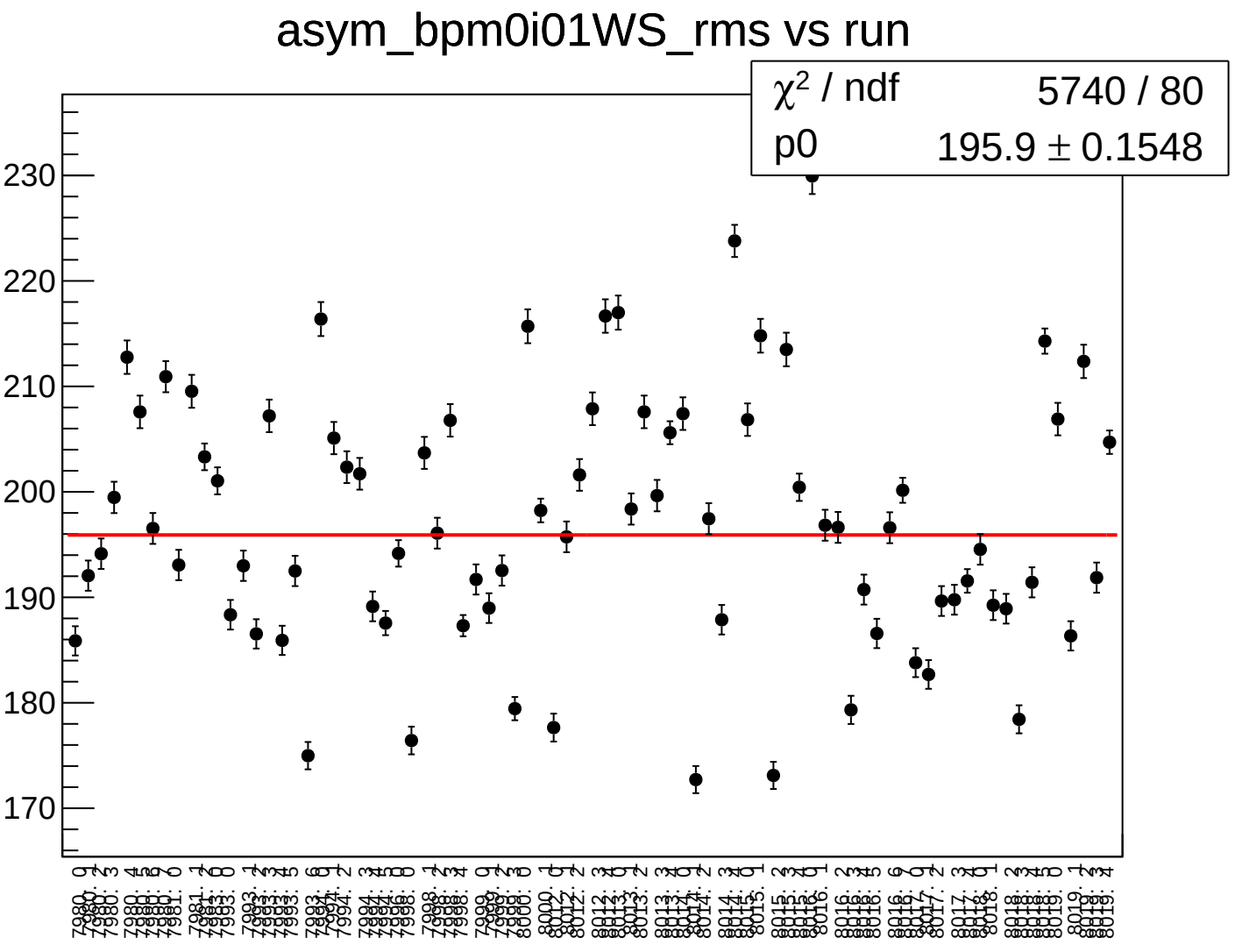

asym_bpm2i02WS_mean vs run
χ² / ndf 702.2 / 80
p0 768.7 ± 179.8
15000
10000
5000
0
−5000
−10000
pull
Entries 81
Mean −1728
Std Dev 1774
8
6
4
2
0
−2
−4
−6

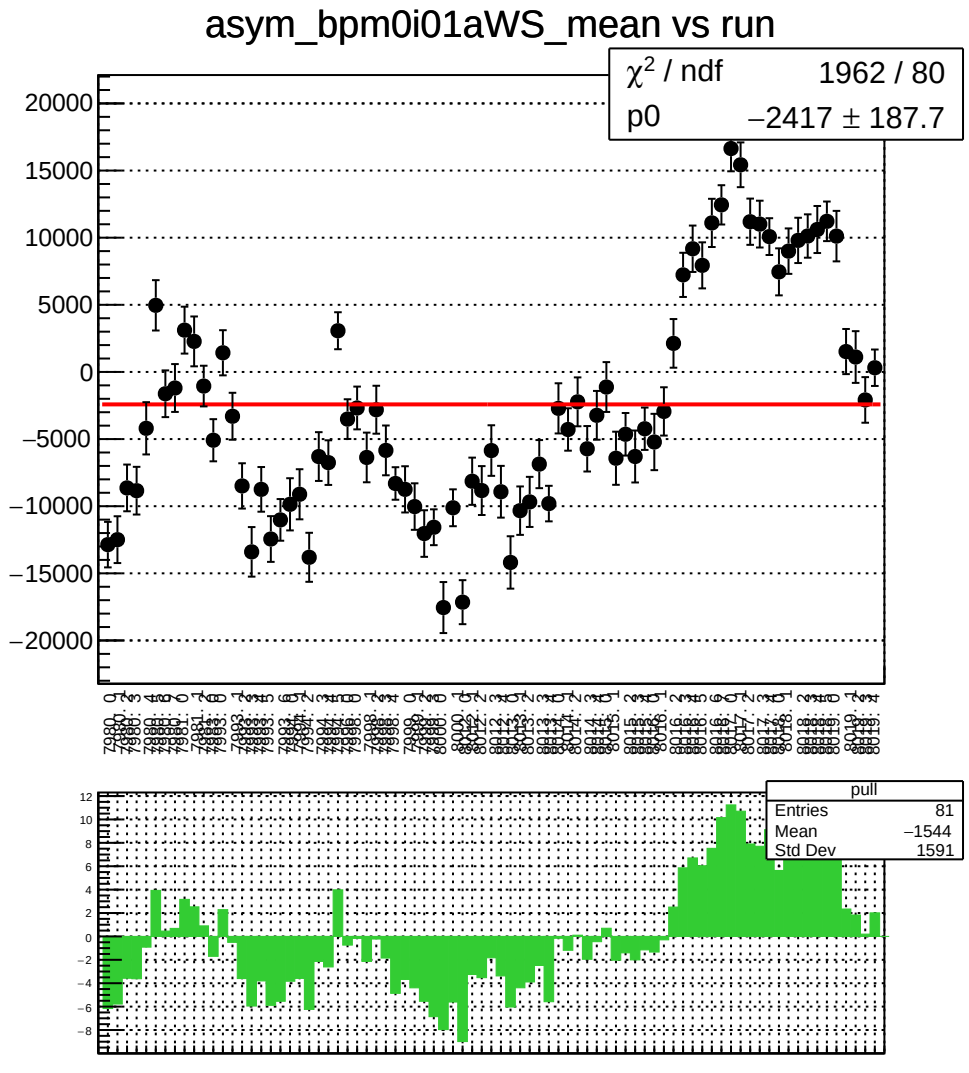

pull1D
Entries 81
Mean −0.02458
Std Dev 2.944
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

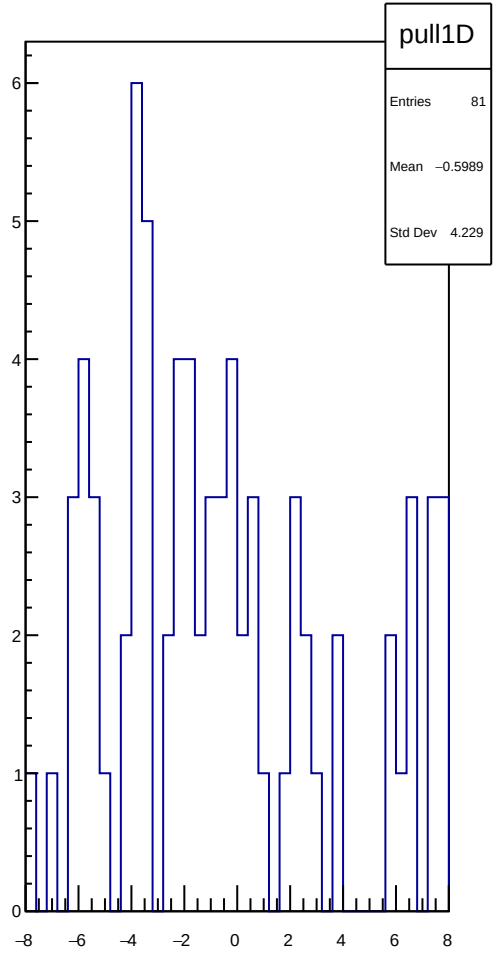

asym_bpm2i02WS_rms vs run
χ² / ndf 6971 / 80
p0 160.9 ± 0.1272
190
180
170
160
150
140

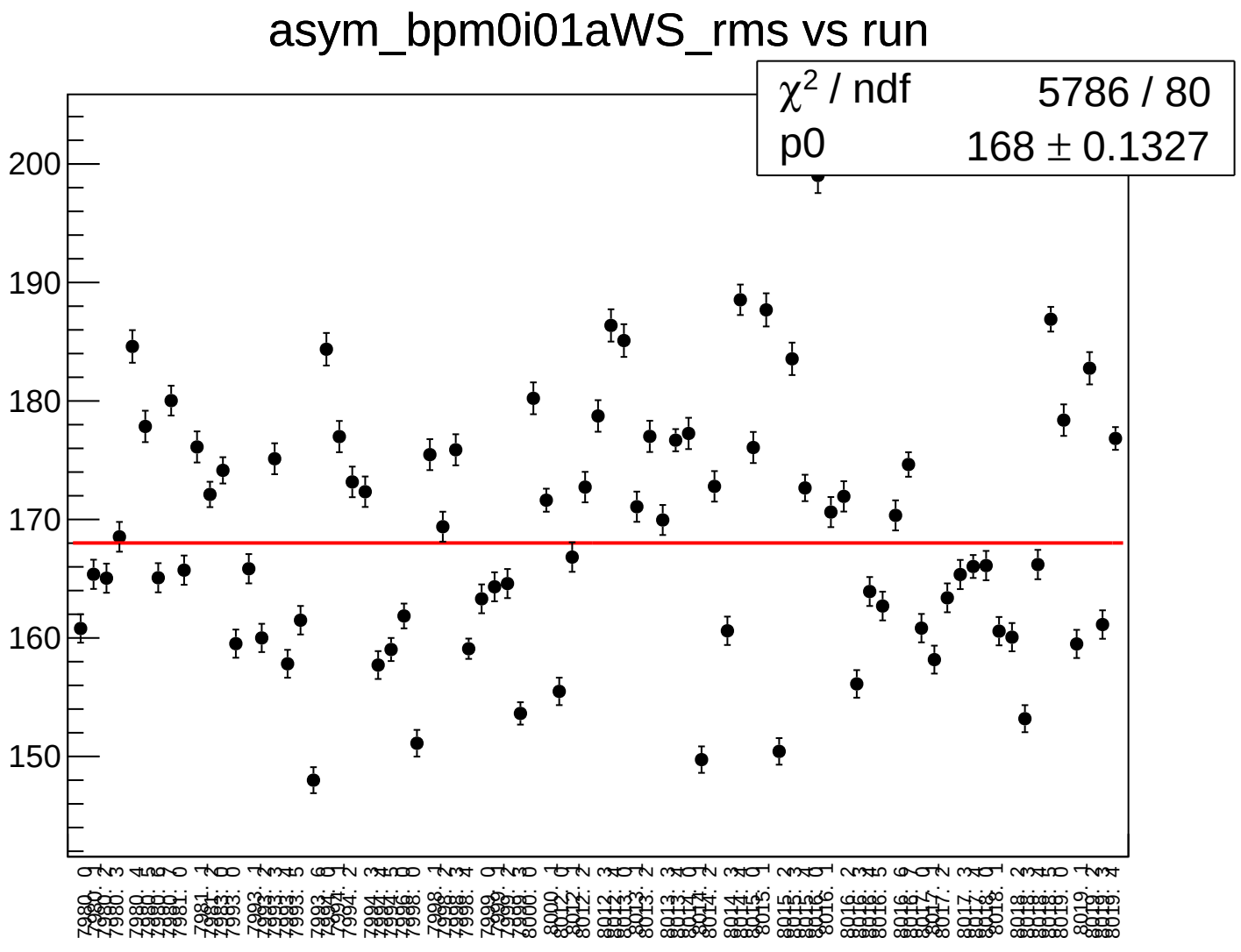

asym_bpm0i01WS_mean vs run
χ² / ndf 1268 / 80
p0 −1822 ± 218.9
pull
Entries 81
Mean −1176
Std Dev 1223

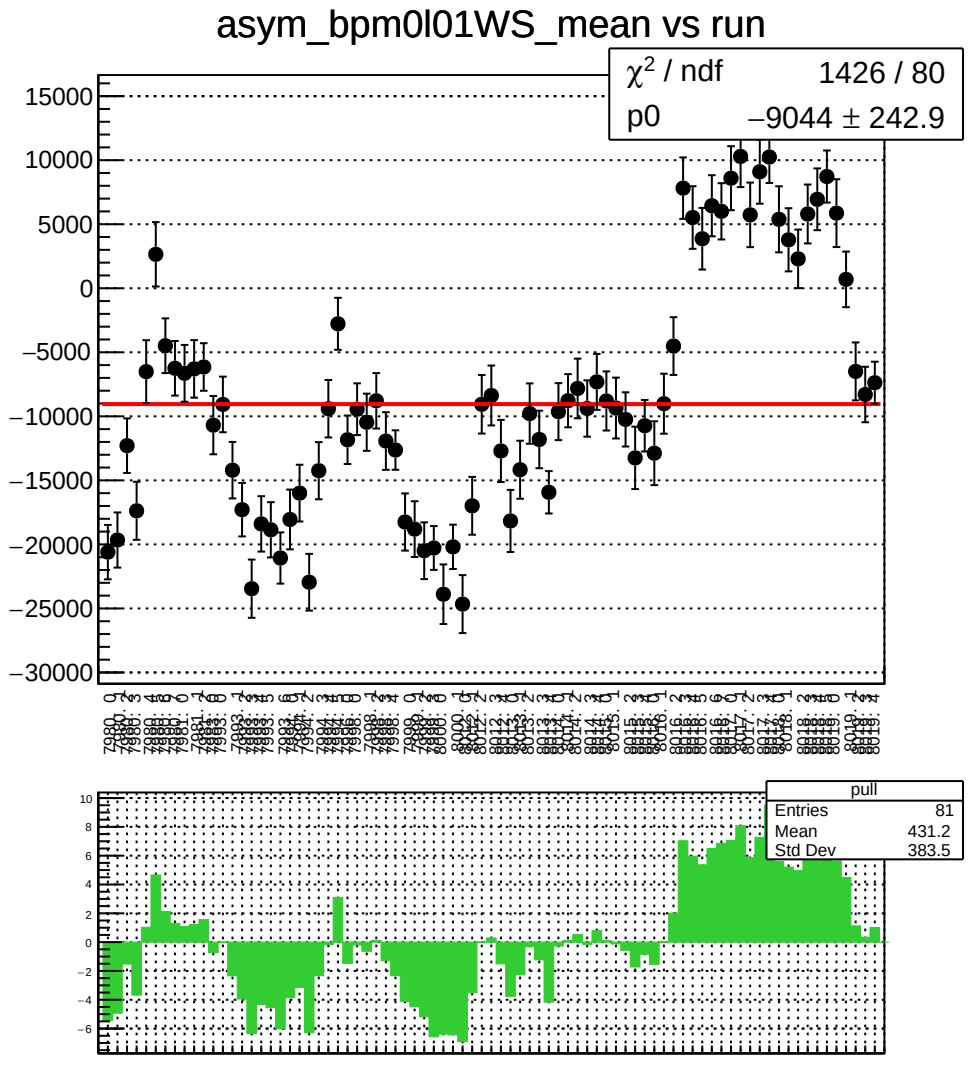

pull1D
Entries 81
Mean −0.3931
Std Dev 3.6

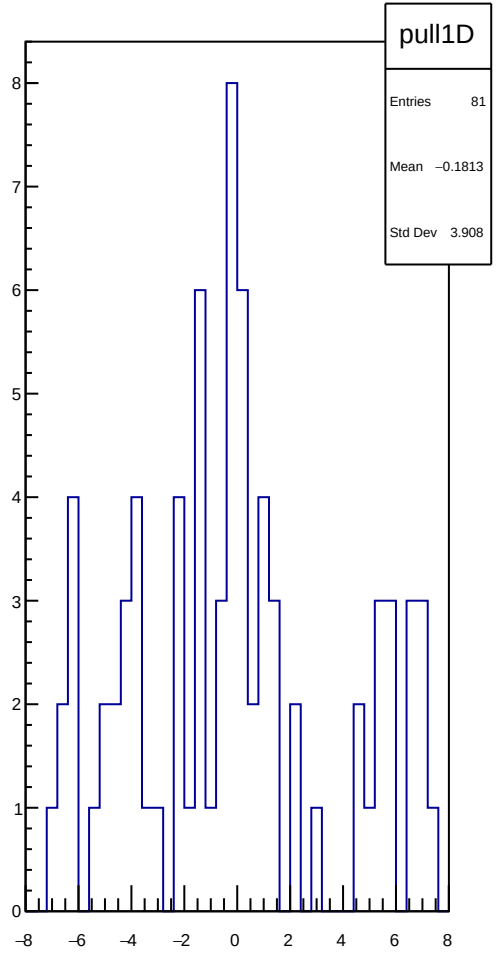

asym_bpm0i01WS_rms vs run
χ² / ndf 5740 / 80
p0 195.9 ± 0.1548
230
220
210
200
190
180
170

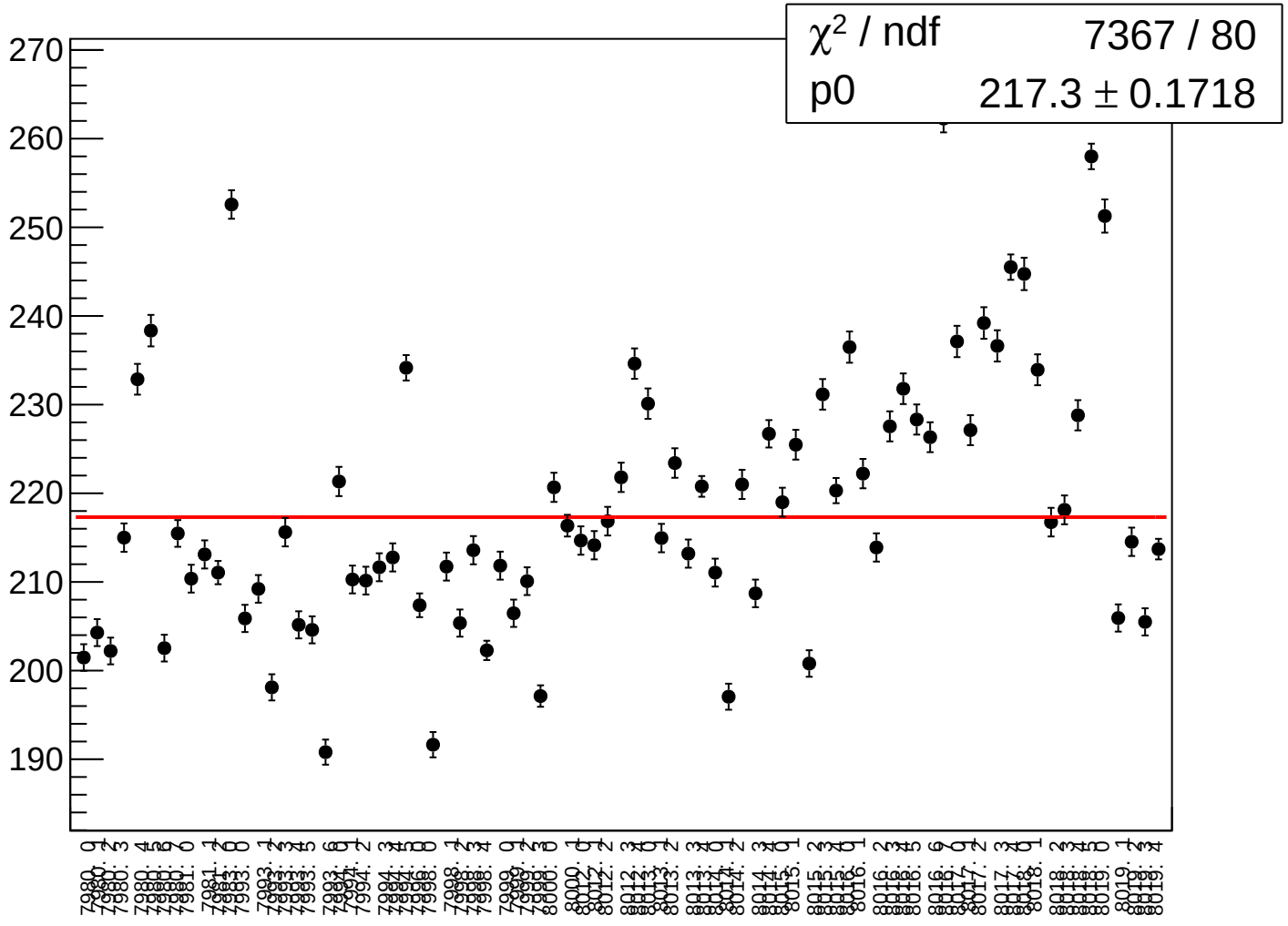

asym_bpm0i01aWS_mean vs run
χ² / ndf 1962 / 80
p0 −2417 ± 187.7
pull
Entries 81
Mean −1544
Std Dev 1591

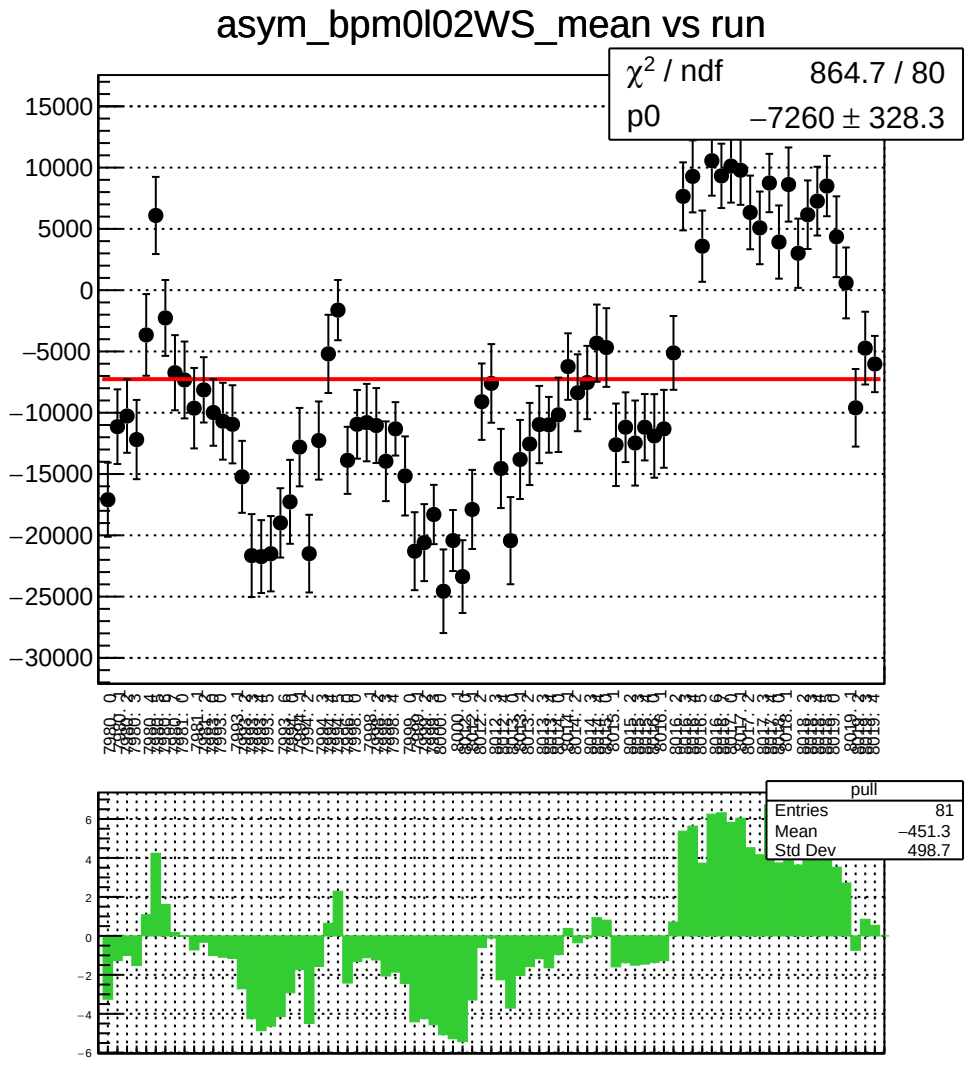

pull1D
Entries 81
Mean −0.5989
Std Dev 4.229

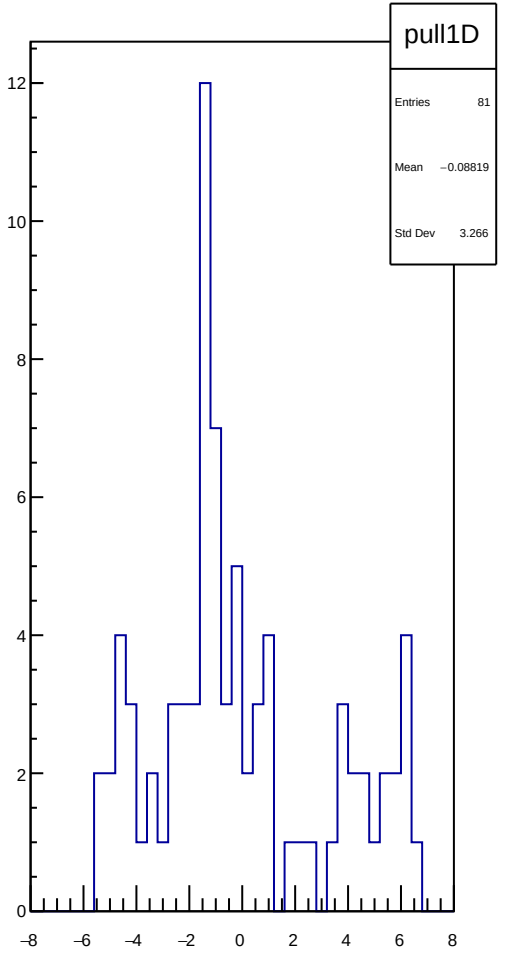

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 5786 / 80
p0 168 ± 0.1327
200
190
180
170
160
150

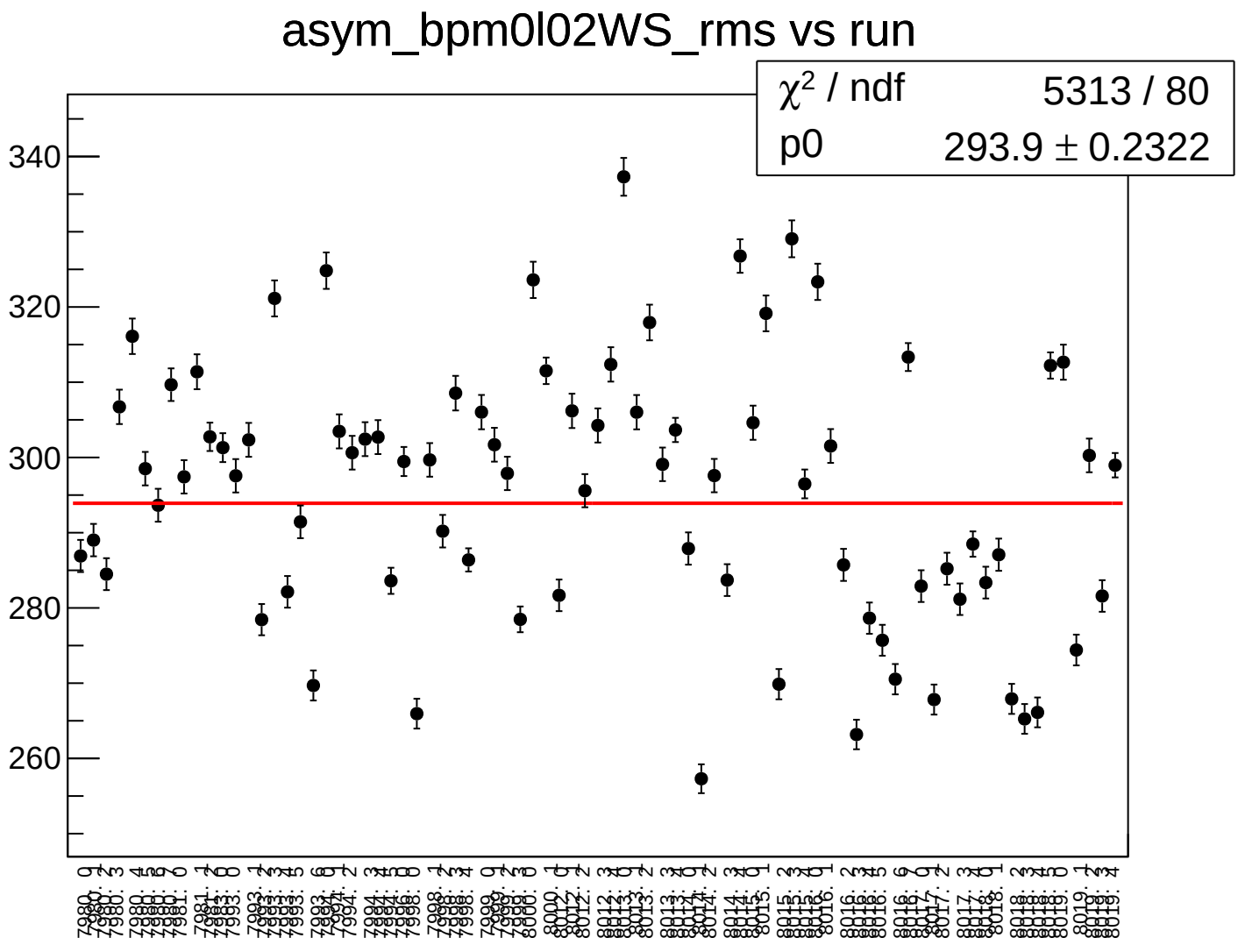

asym_bpm0l01WS_mean vs run
χ² / ndf 1426 / 80
p0 −9044 ± 242.9
pull
Entries 81
Mean 431.2
Std Dev 383.5

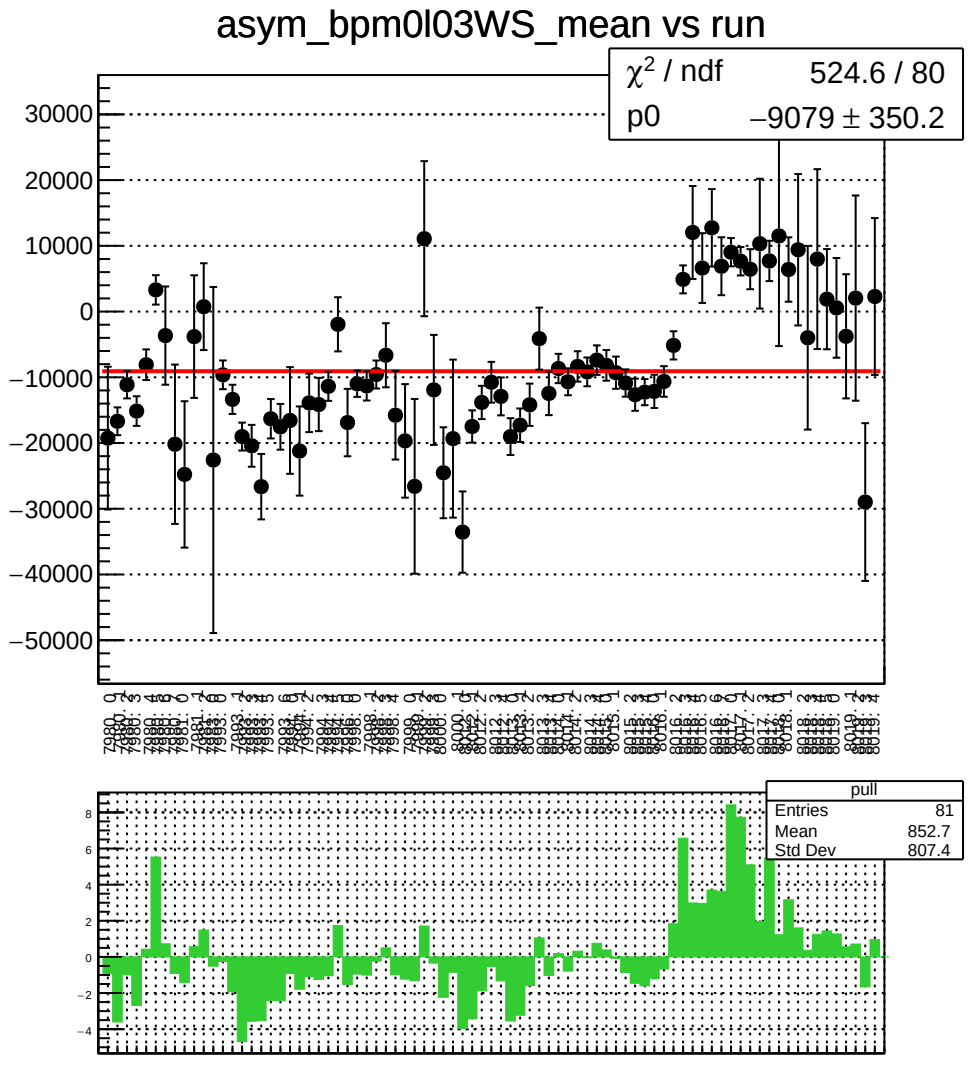

pull1D
Entries 81
Mean −0.1813
Std Dev 3.908

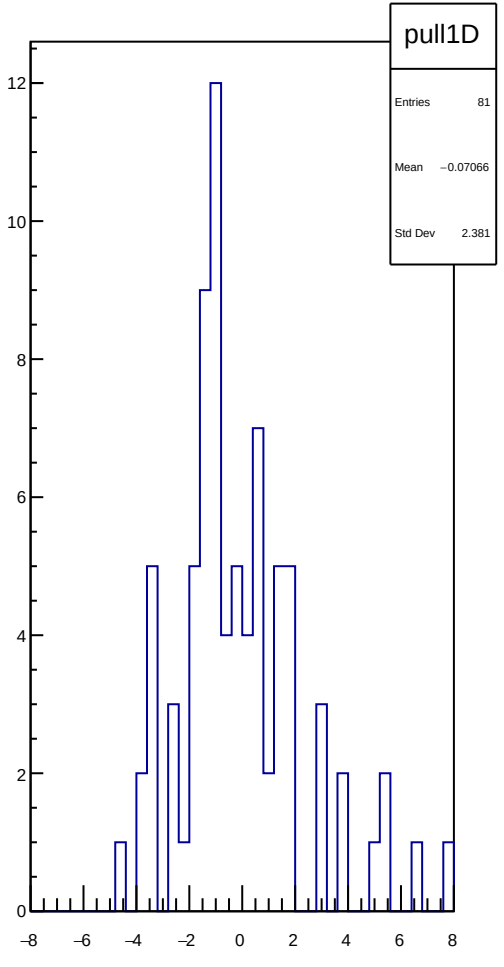

asym_bpm0l01WS_rms vs run
χ² / ndf 7367 / 80
p0 217.3 ± 0.1718
270
260
250
240
230
220
210
200
190

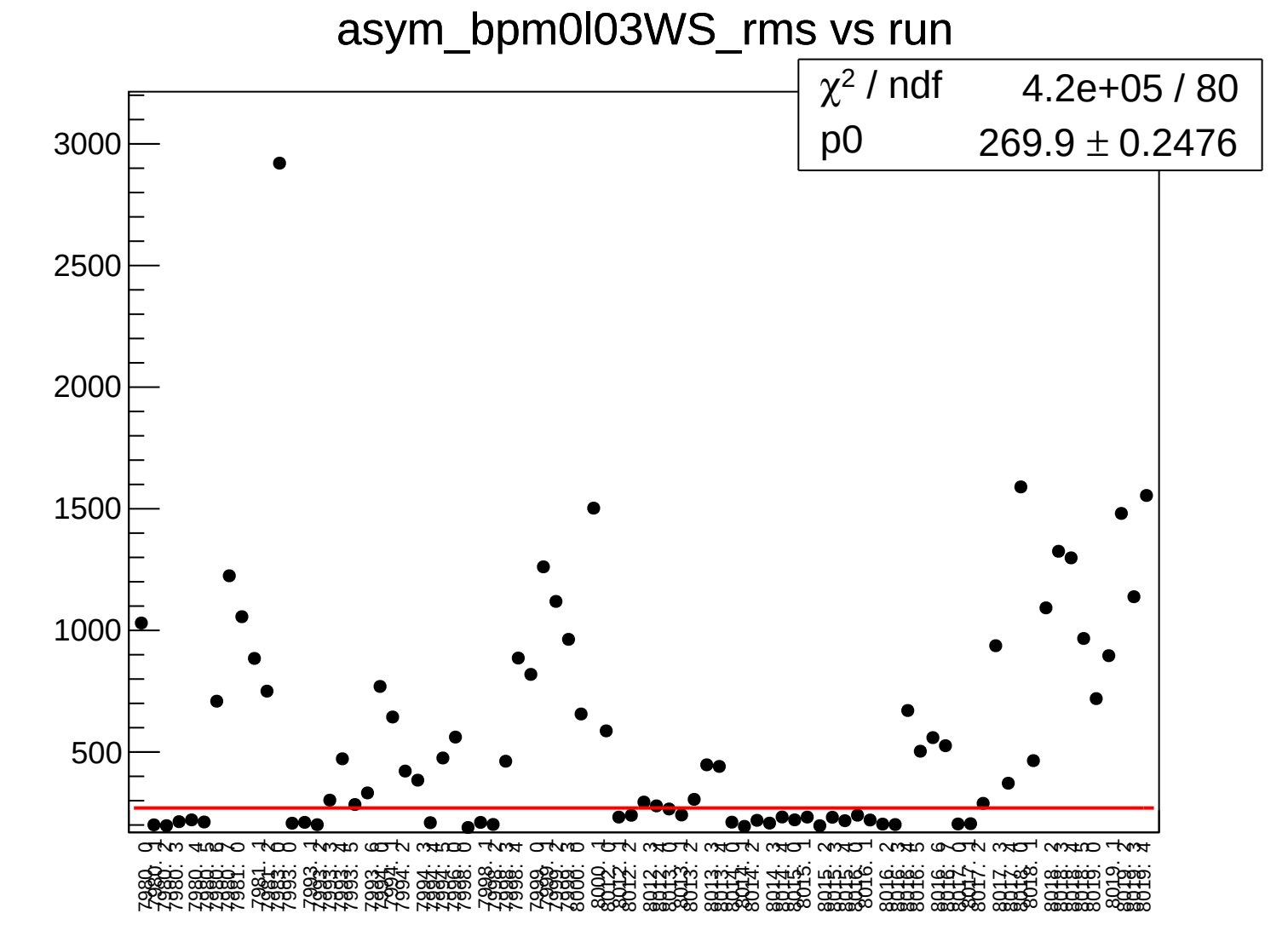

asym_bpm0l02WS_mean vs run
χ² / ndf 864.7 / 80
p0 −7260 ± 328.3
pull
Entries 81
Mean −451.3
Std Dev 498.7

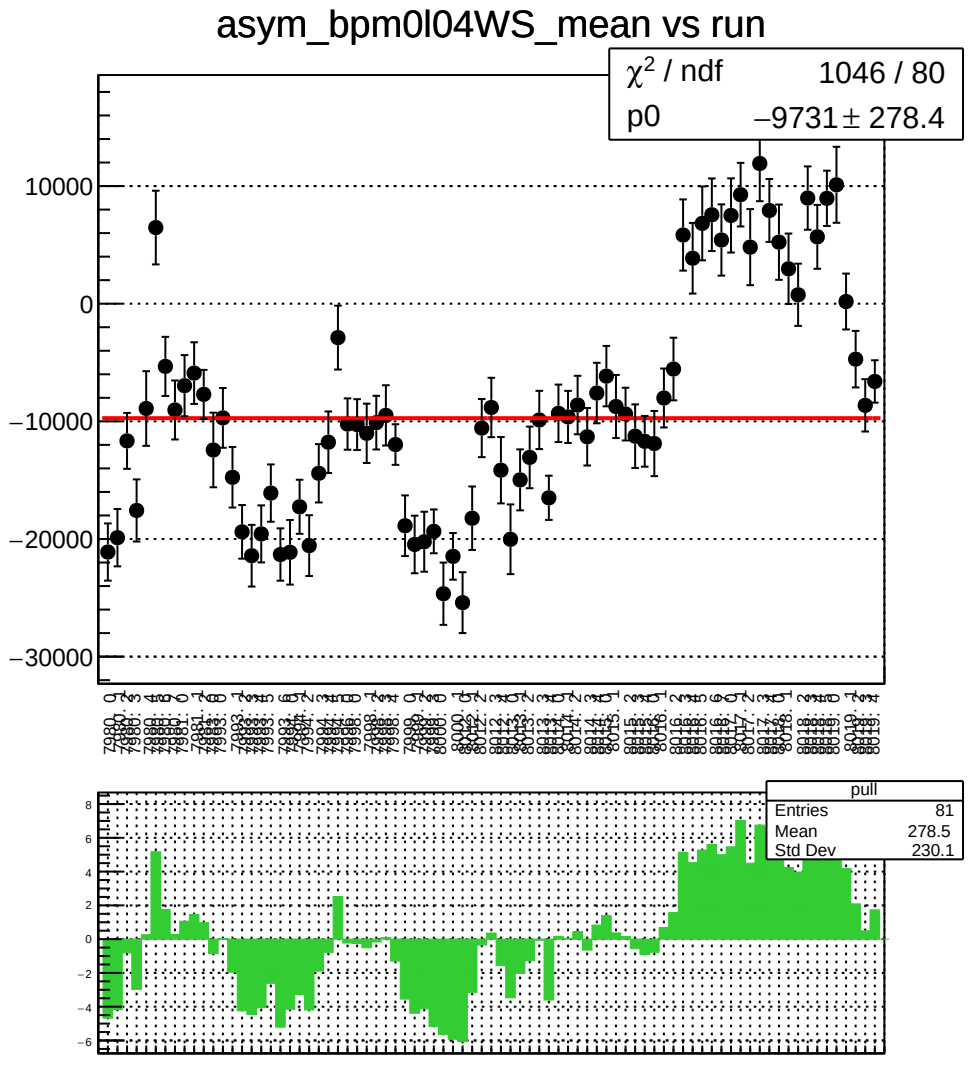

pull1D
Entries 81
Mean −0.08819
Std Dev 3.266

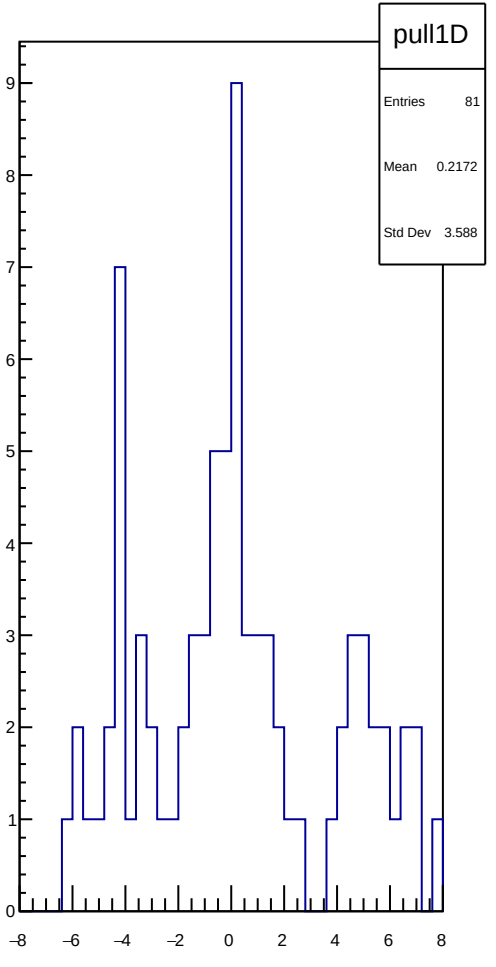

asym_bpm0l02WS_rms vs run
χ² / ndf 5313 / 80
p0 293.9 ± 0.2322
340
320
300
280
260

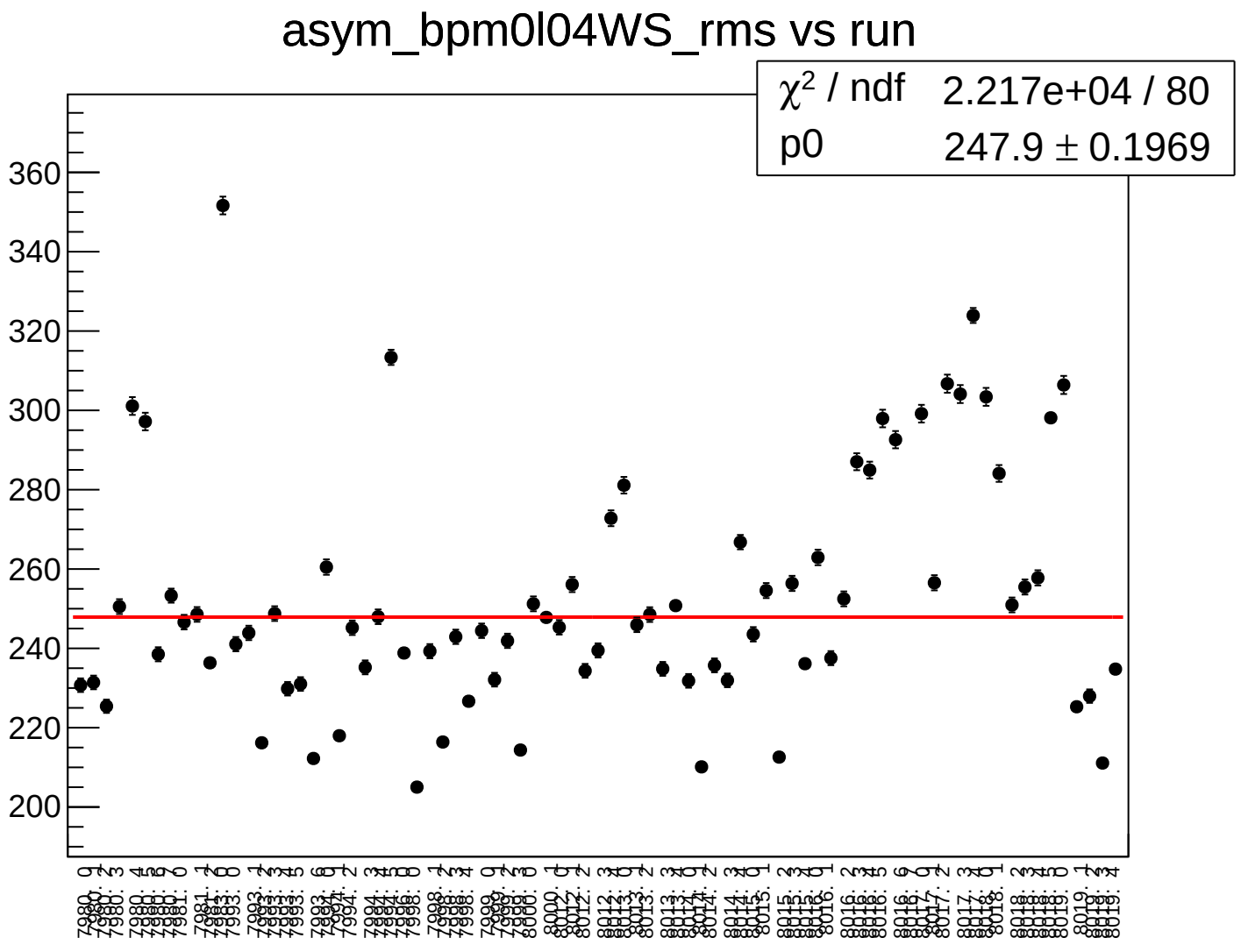

asym_bpm0l03WS_mean vs run
χ² / ndf 524.6 / 80
p0 −9079 ± 350.2
pull
Entries 81
Mean 852.7
Std Dev 807.4

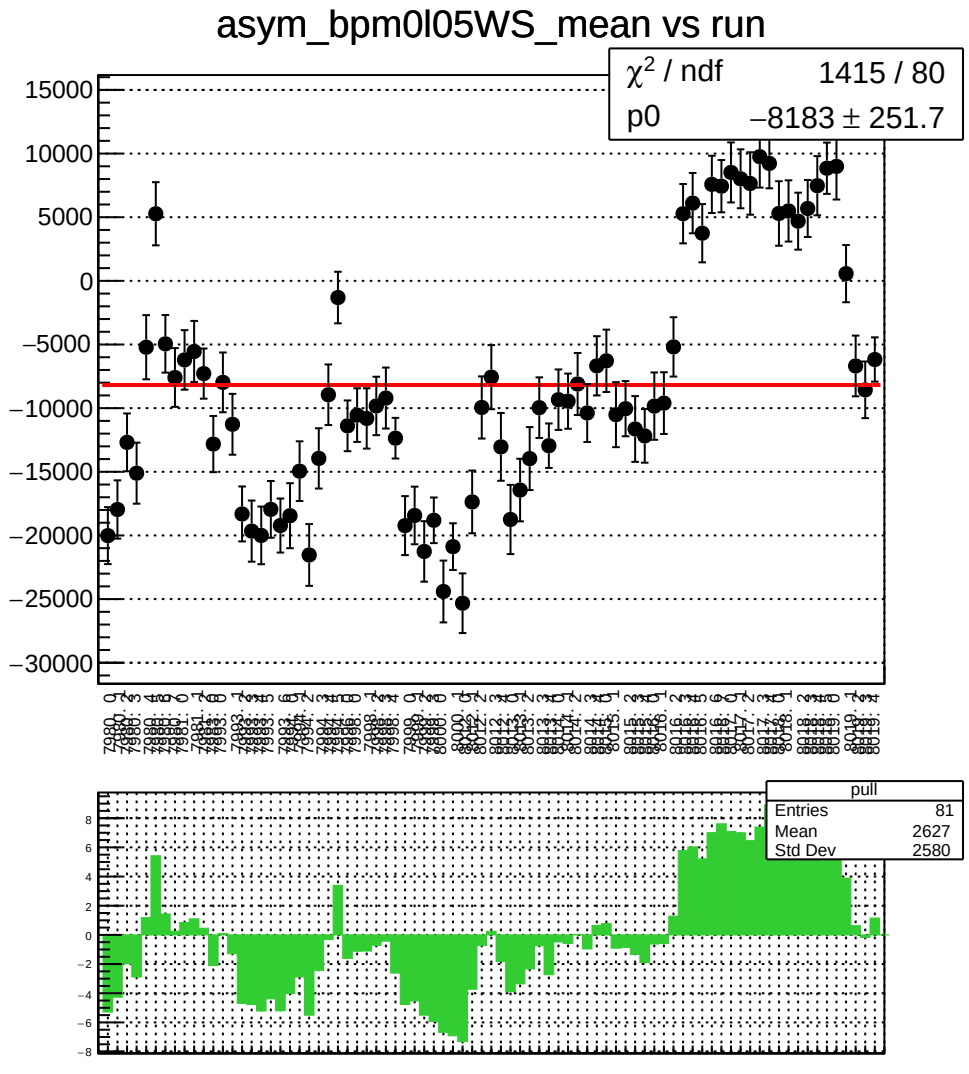

pull1D
Entries 81
Mean −0.07066
Std Dev 2.381

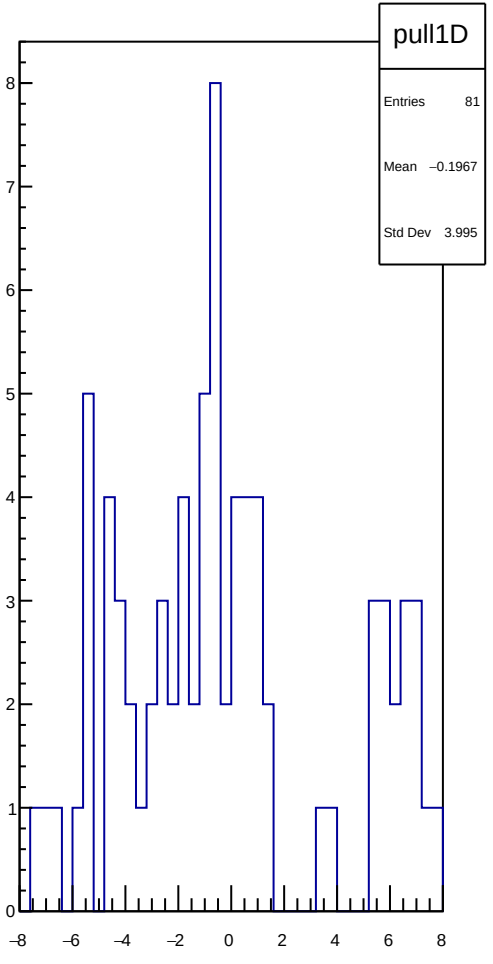

asym_bpm0l03WS_rms vs run
χ² / ndf 4.2e+05 / 80
p0 269.9 ± 0.2476
3000
2500
2000
1500
1000
500

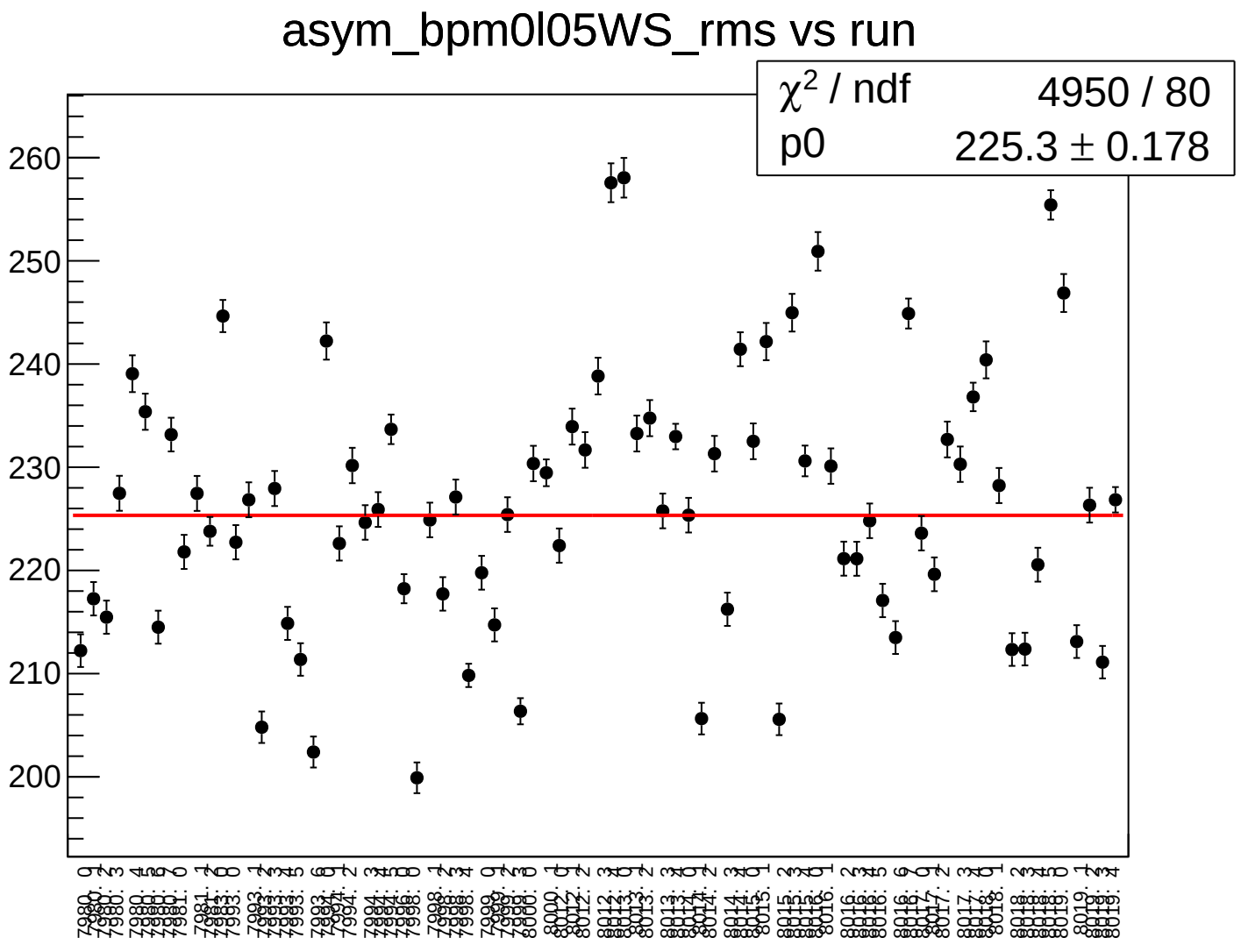

asym_bpm0l04WS_mean vs run
χ² / ndf 1046 / 80
p0 −9731 ± 278.4
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean 278.5
Std Dev 230.1
8
6
4
2
0
−2
−4
−6

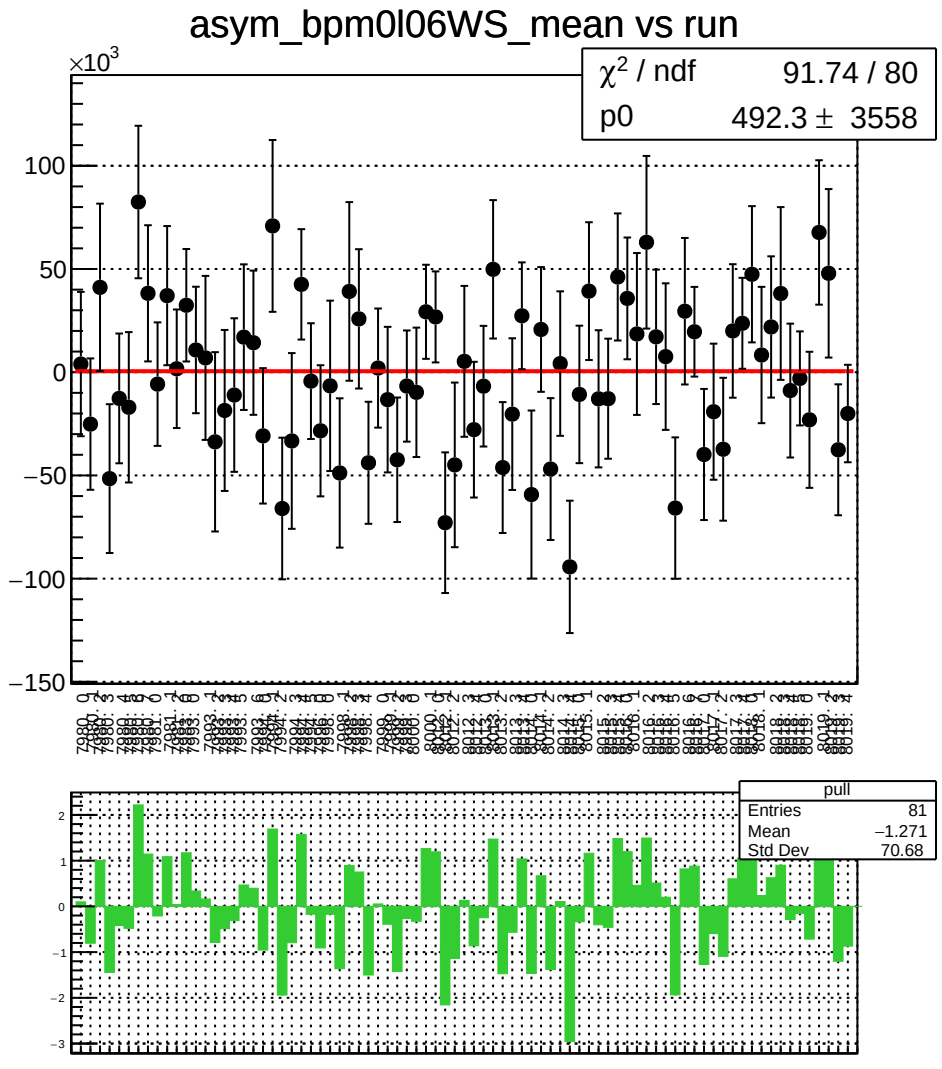

pull1D
Entries 81
Mean 0.2172
Std Dev 3.588
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

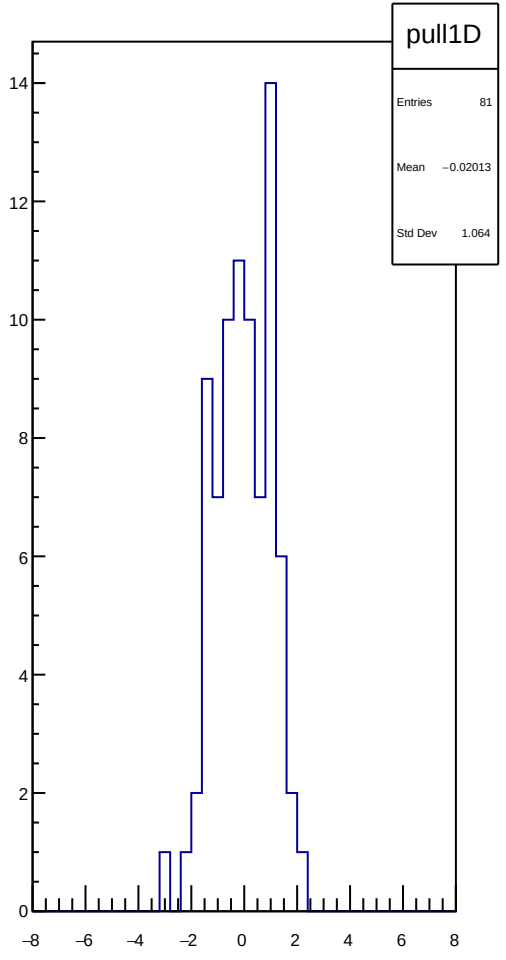

asym_bpm0l04WS_rms vs run
χ^2 / ndf 2.217e+04 / 80
p0 247.9 ± 0.1969
360
340
320
300
280
260
240
220
200

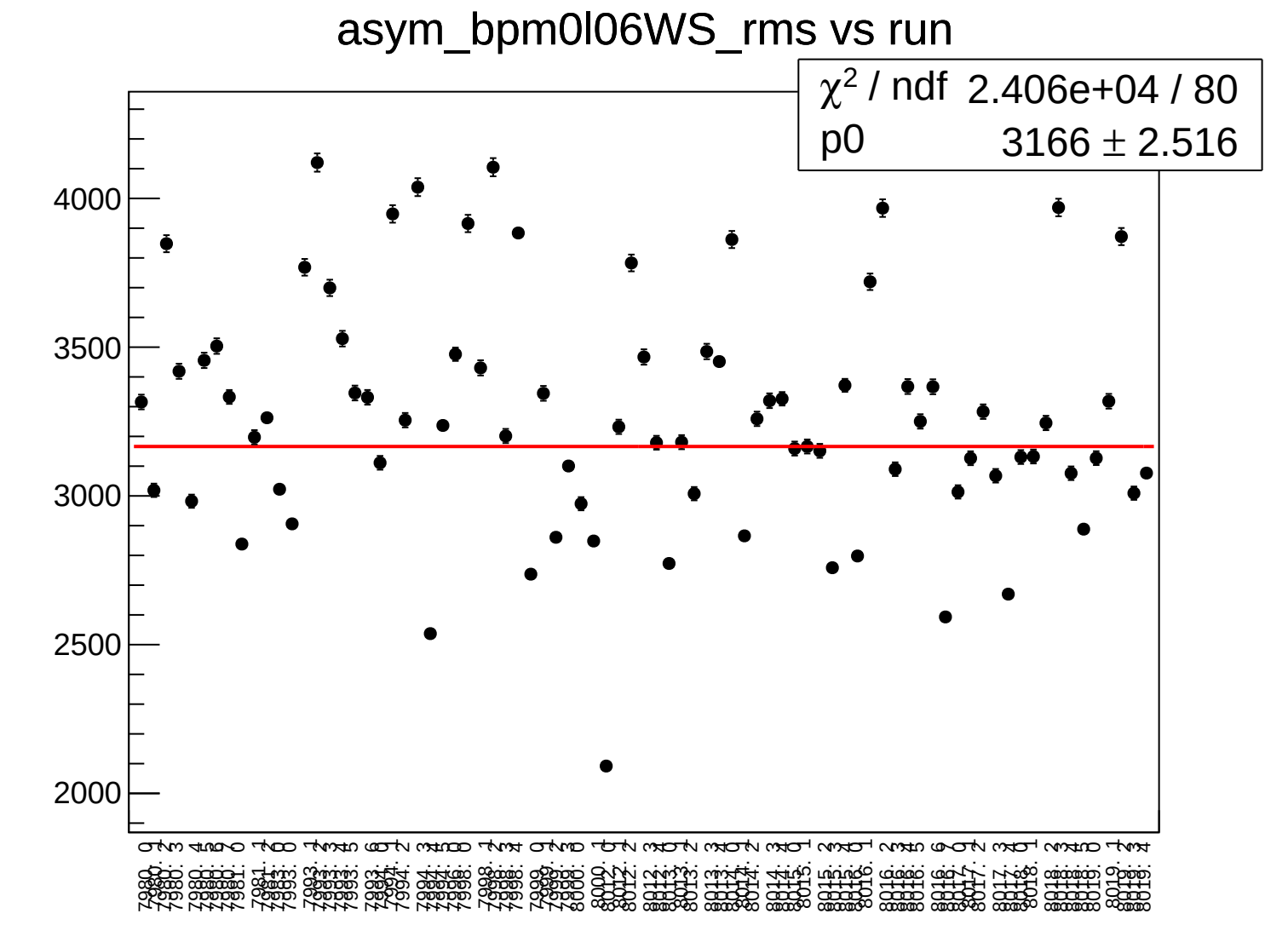

asym_bpm0l05WS_mean vs run
χ² / ndf 1415 / 80
p0 −8183 ± 251.7
pull
Entries 81
Mean 2627
Std Dev 2580

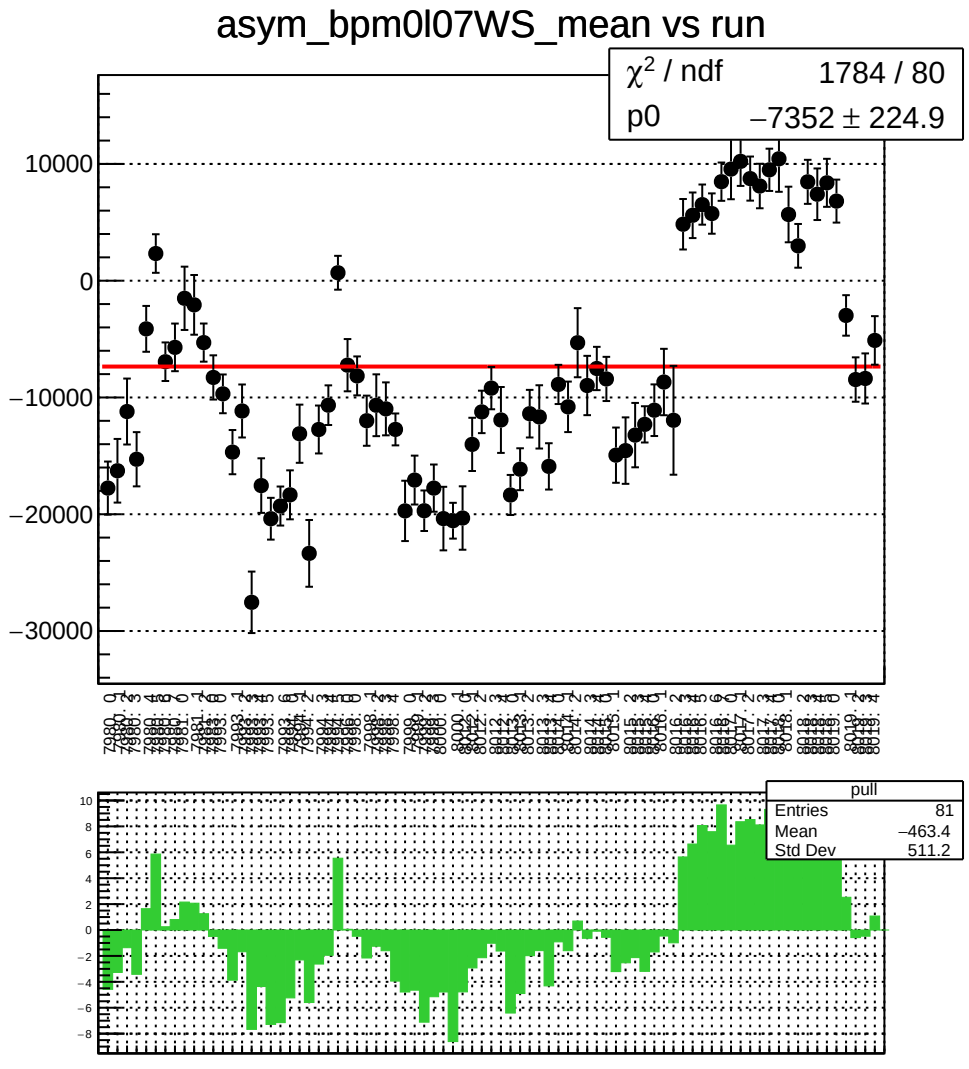

pull1D
Entries 81
Mean −0.1967
Std Dev 3.995

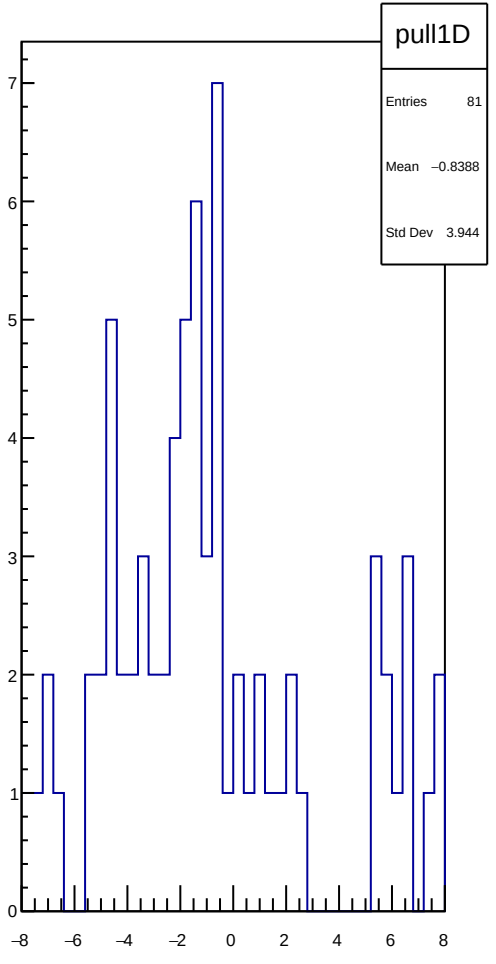

asym_bpm0l05WS_rms vs run
χ² / ndf 4950 / 80
p0 225.3 ± 0.178
260
250
240
230
220
210
200

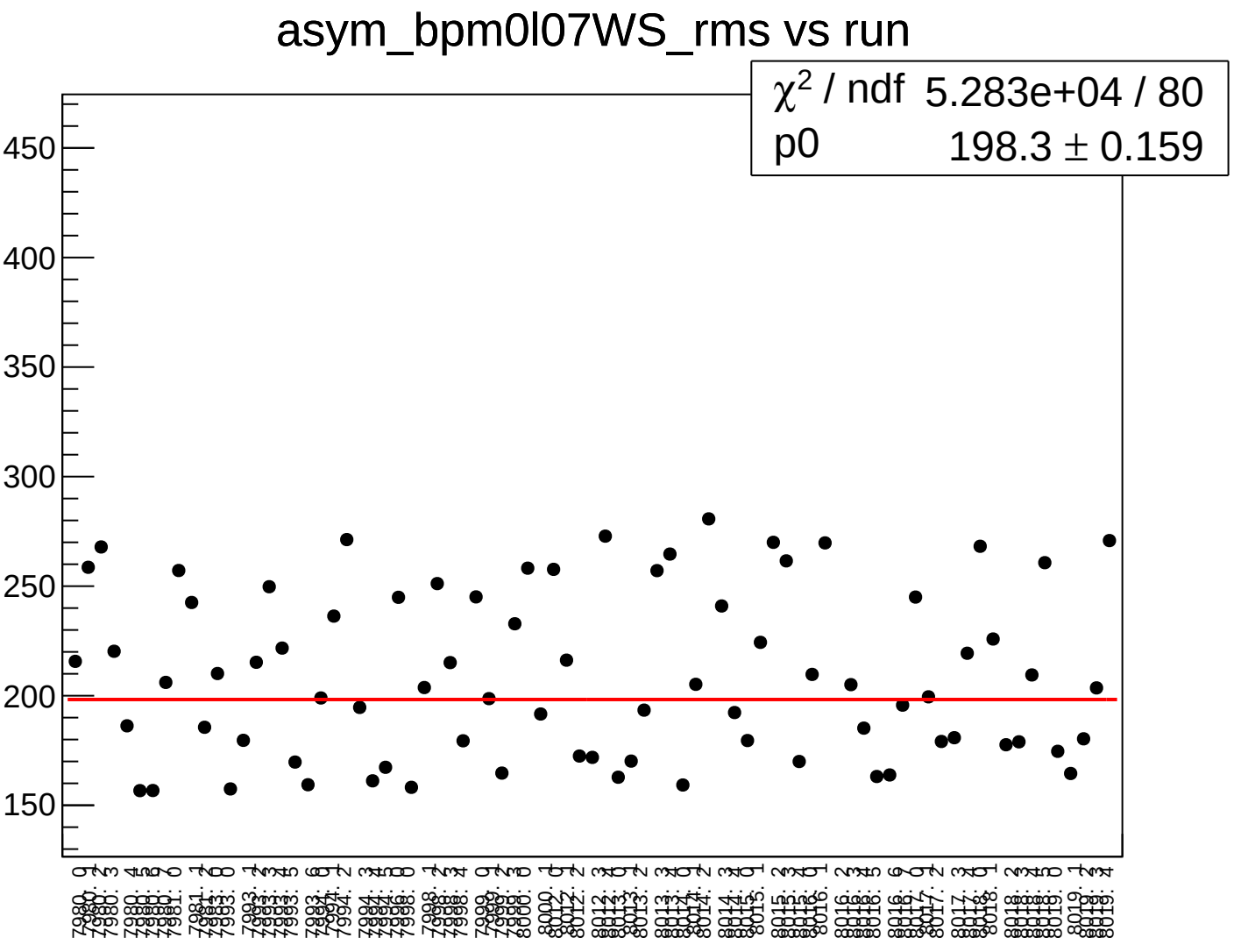

asym_bpm0l06WS_mean vs run
×10^3
χ^2 / ndf 91.74 / 80
p0 492.3 ± 3558
100
50
0
−50
−100
−150
pull
Entries 81
Mean −1.271
Std Dev 70.68
2
1
0
−1
−2
−3

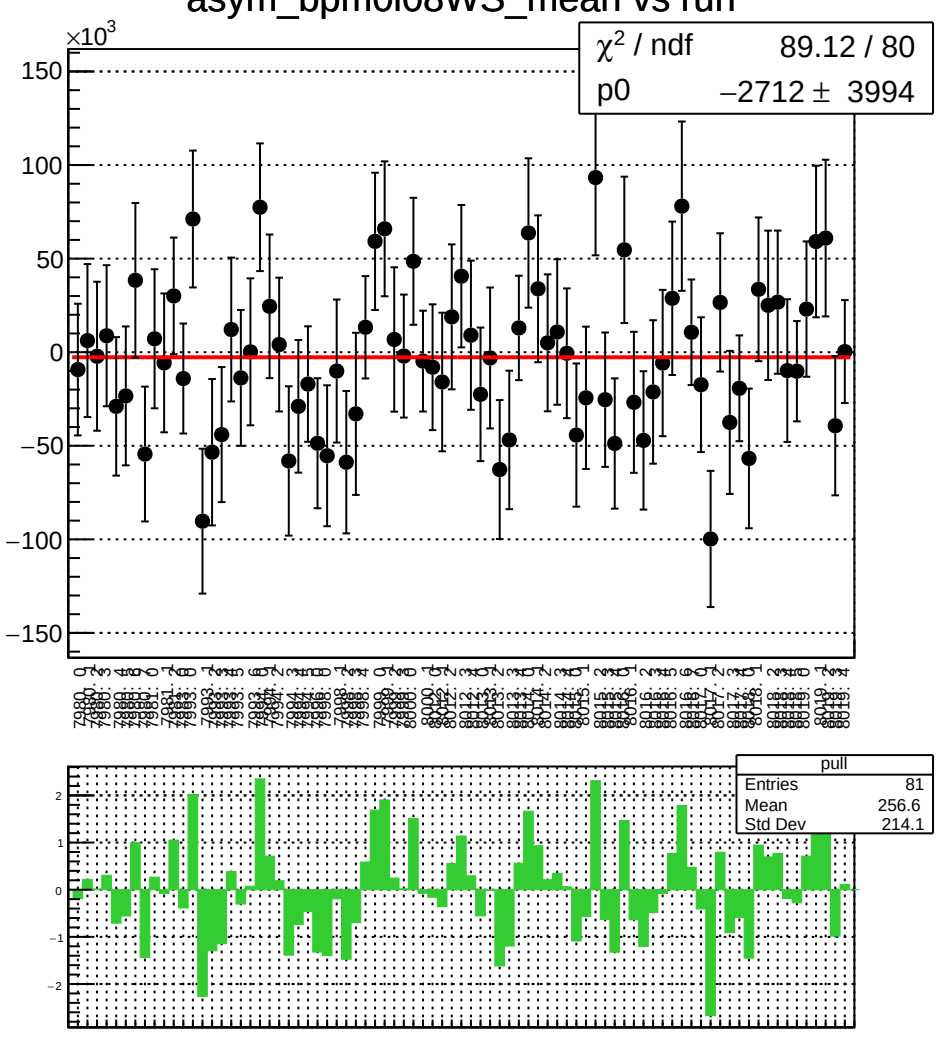

pull1D
Entries 81
Mean −0.02013
Std Dev 1.064
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

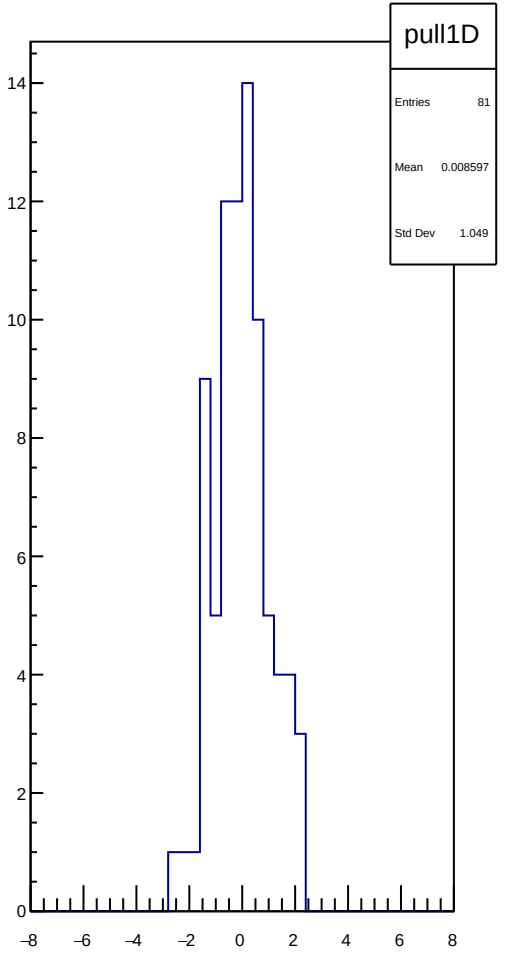

asym_bpm0l06WS_rms vs run
χ² / ndf 2.406e+04 / 80
p0 3166 ± 2.516
4000
3500
3000
2500
2000

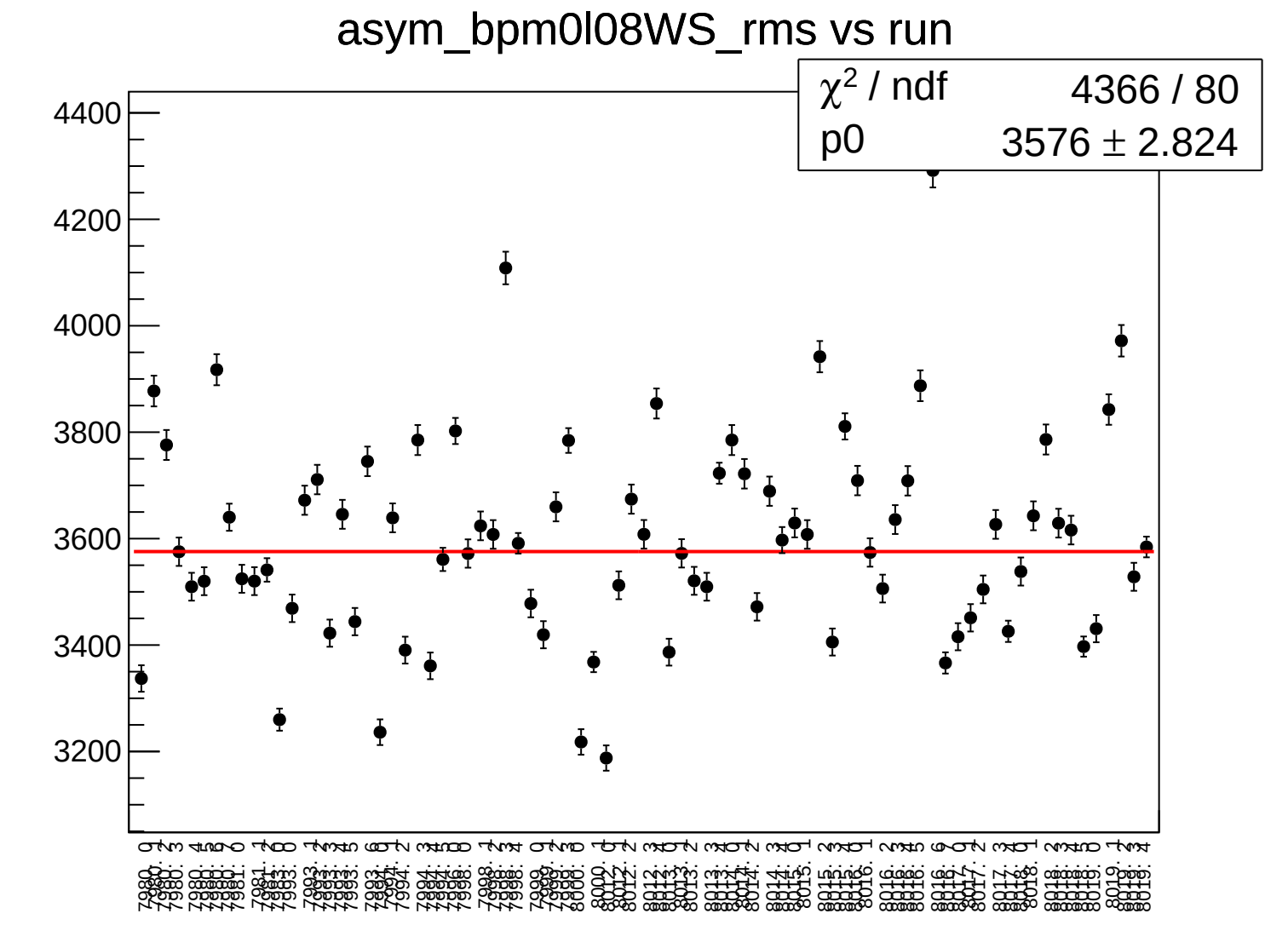

asym_bpm0l07WS_mean vs run
χ² / ndf 1784 / 80
p0 −7352 ± 224.9
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean −463.4
Std Dev 511.2

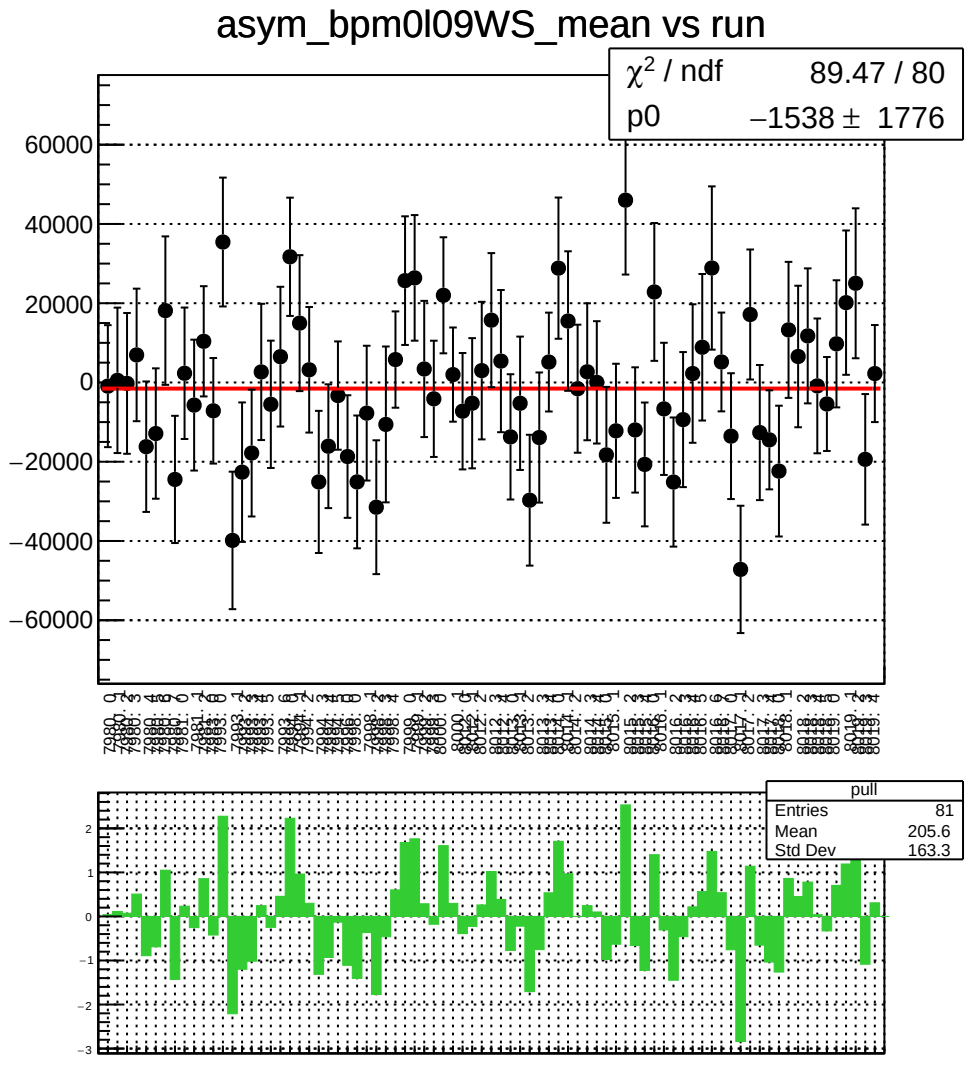

pull1D
Entries 81
Mean −0.8388
Std Dev 3.944

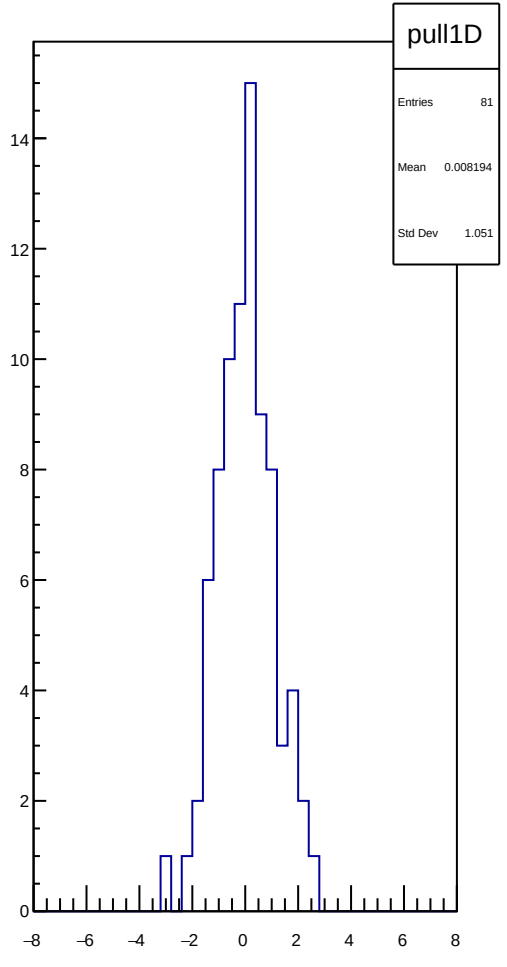

asym_bpm0l07WS_rms vs run
χ^2 / ndf 5.283e+04 / 80
p0 198.3 ± 0.159
450
400
350
300
250
200
150

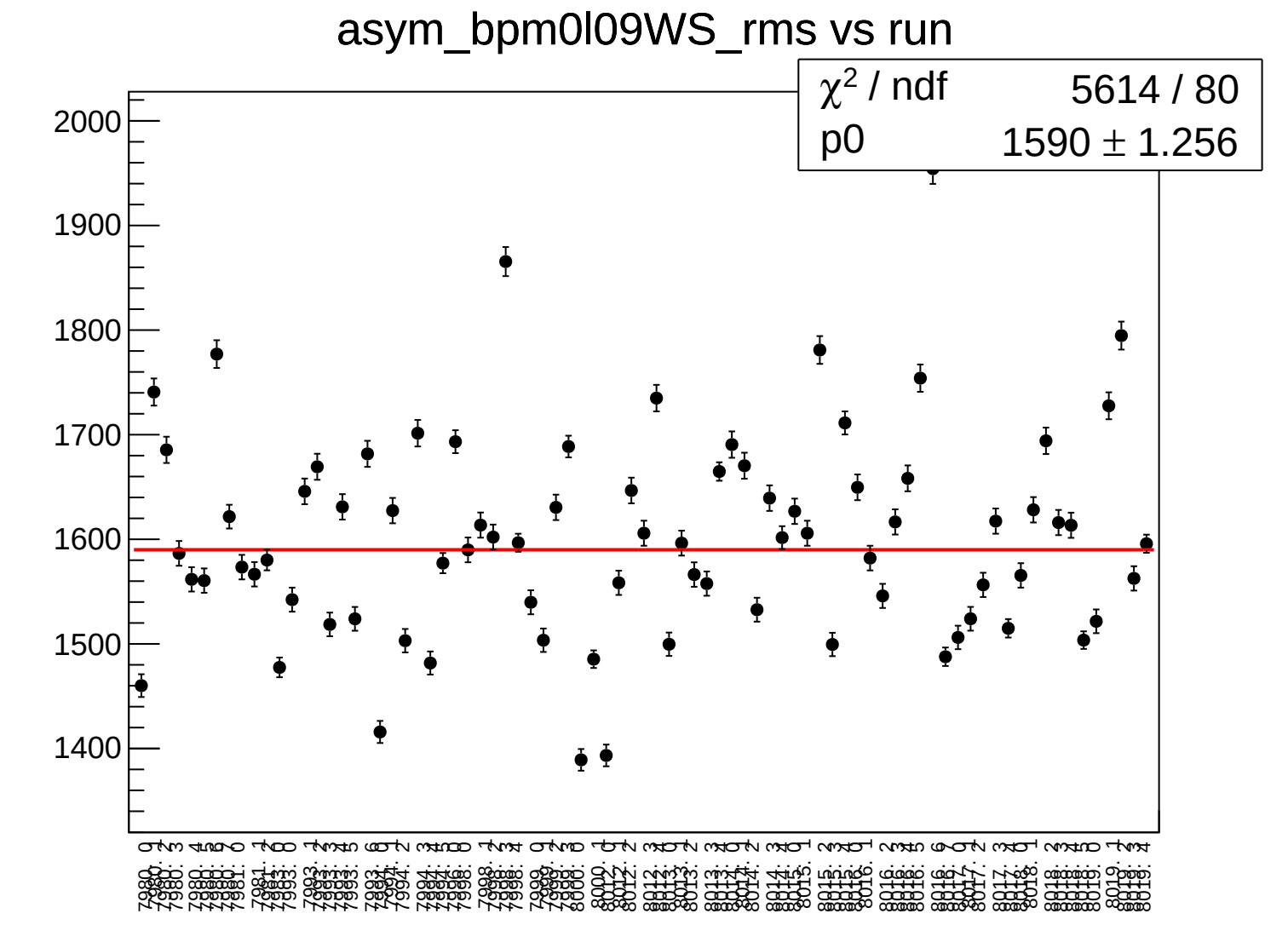

asym_bpm0l08WS_mean vs run
×10^3
χ² / ndf 89.12 / 80
p0 −2712 ± 3994
pull
Entries 81
Mean 256.6
Std Dev 214.1

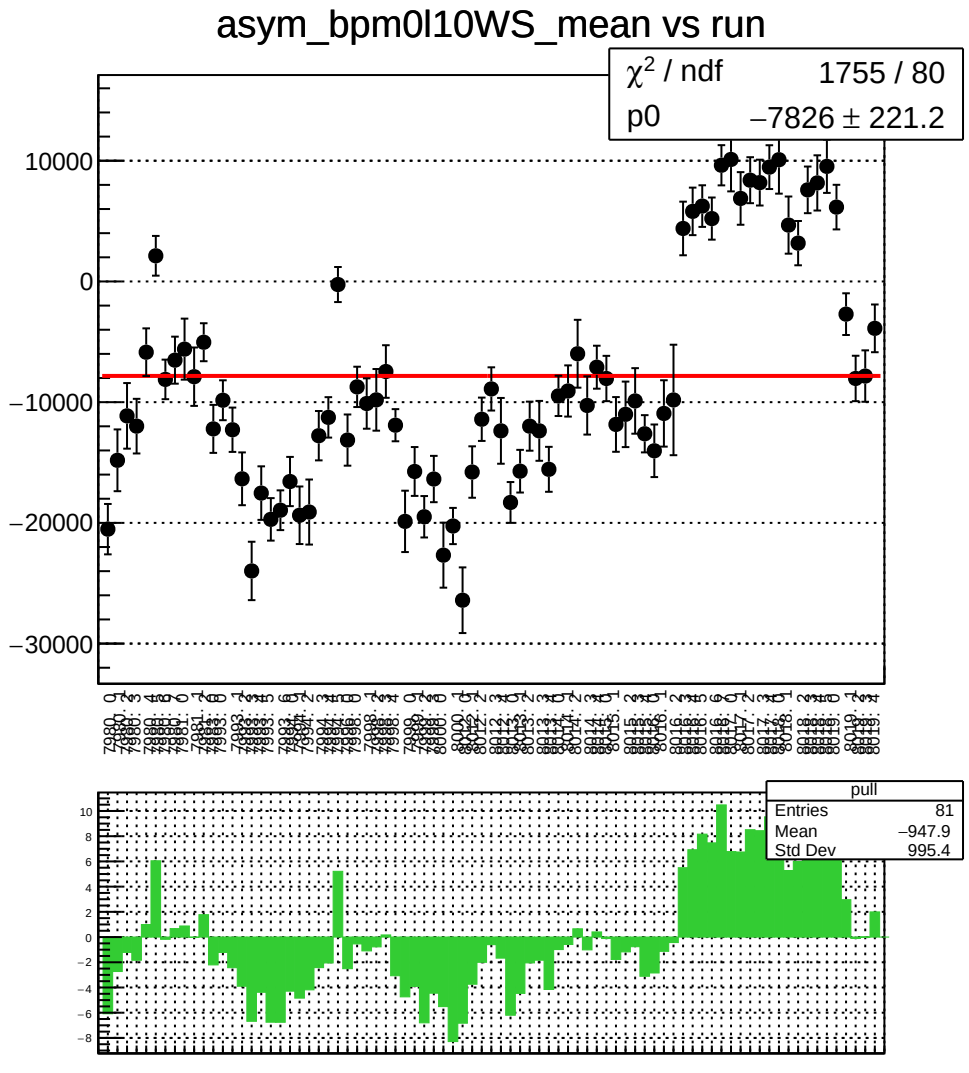

pull1D
Entries 81
Mean 0.008597
Std Dev 1.049

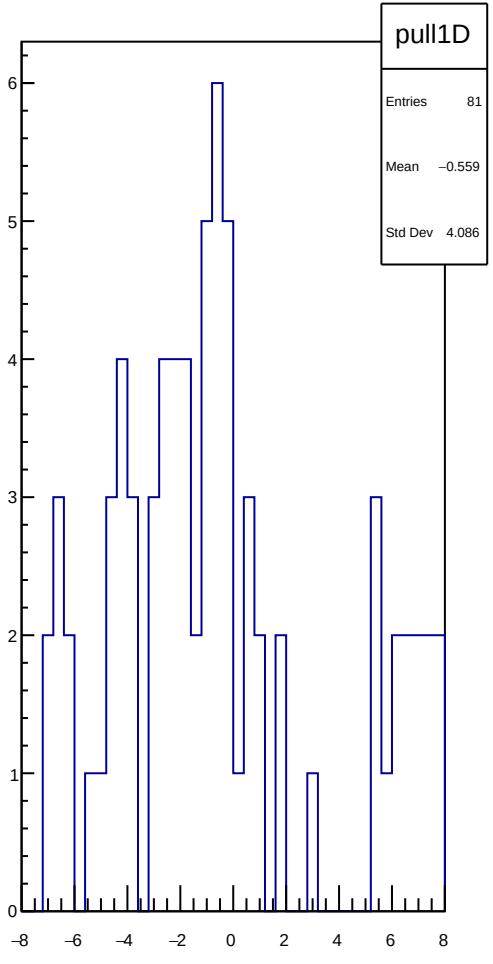

asym_bpm0l08WS_rms vs run
χ² / ndf 4366 / 80
p0 3576 ± 2.824
4400
4200
4000
3800
3600
3400
3200

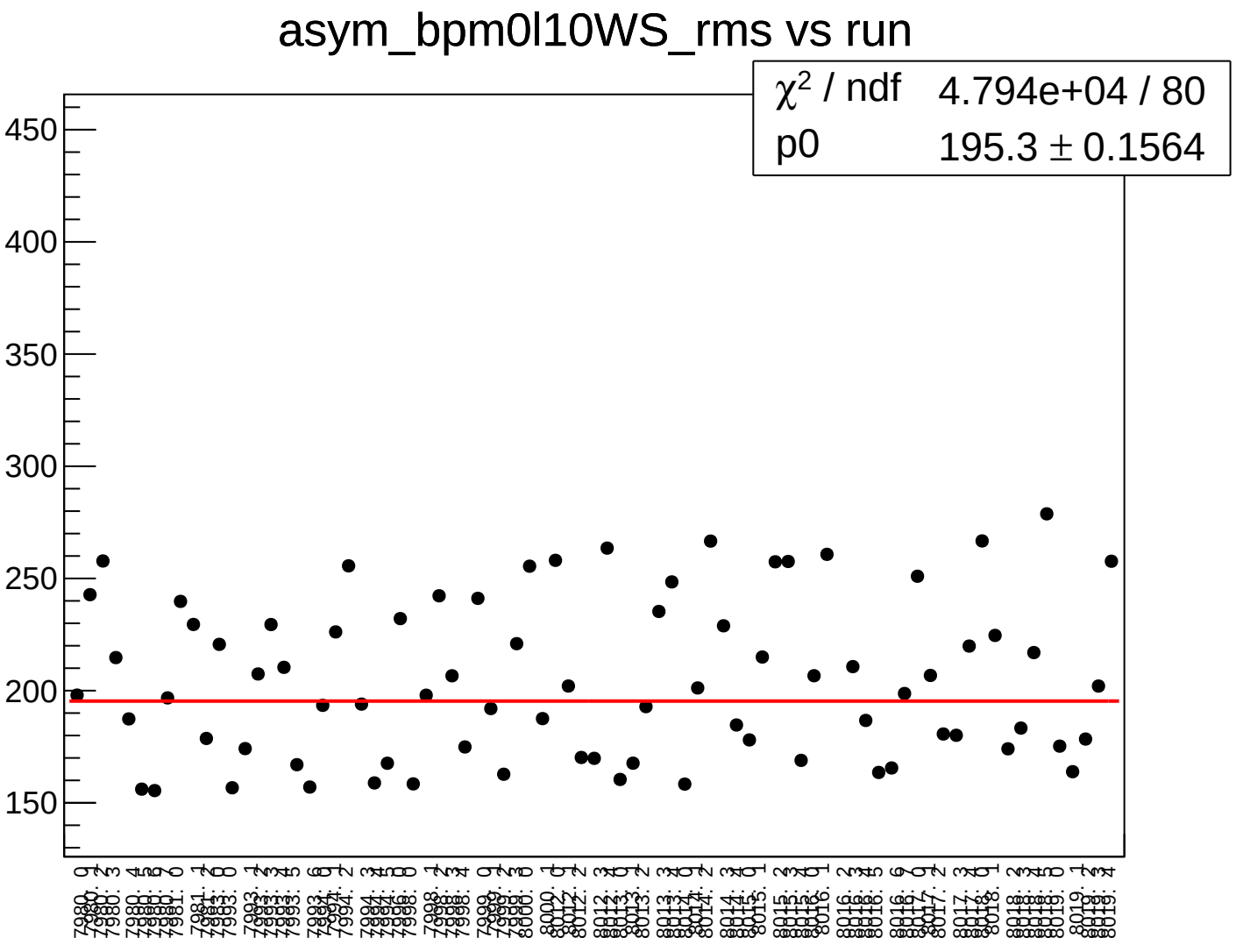

asym_bpm0l09WS_mean vs run
χ² / ndf 89.47 / 80
p0 −1538 ± 1776
pull
Entries 81
Mean 205.6
Std Dev 163.3

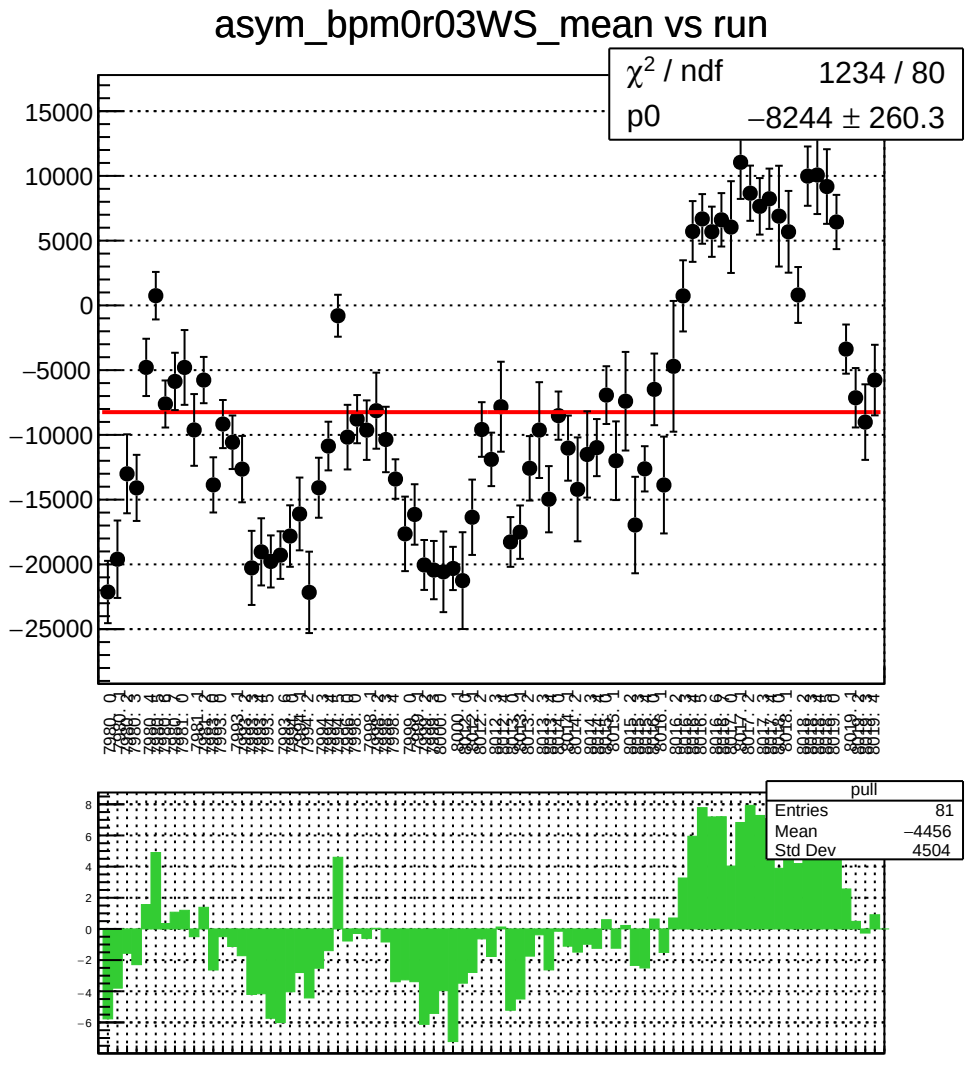

pull1D
Entries 81
Mean 0.008194
Std Dev 1.051

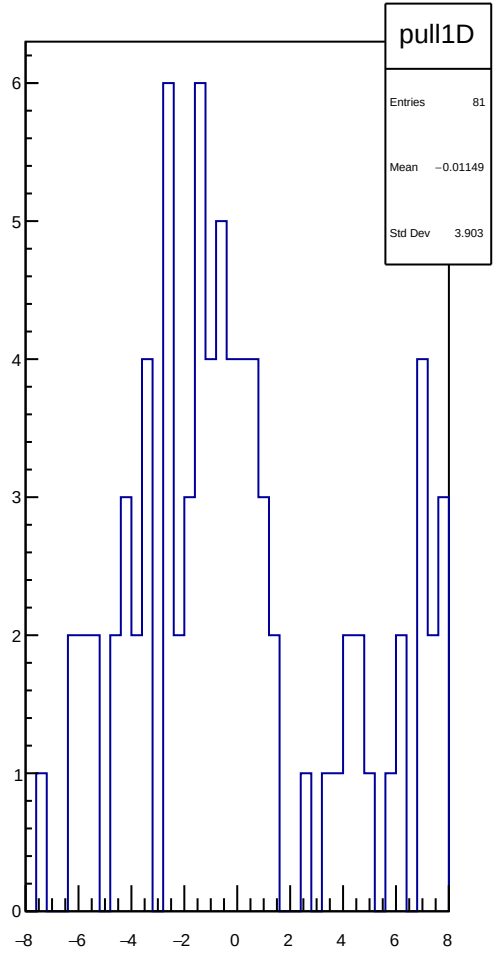

asym_bpm0l09WS_rms vs run
χ² / ndf 5614 / 80
p0 1590 ± 1.256
2000
1900
1800
1700
1600
1500
1400

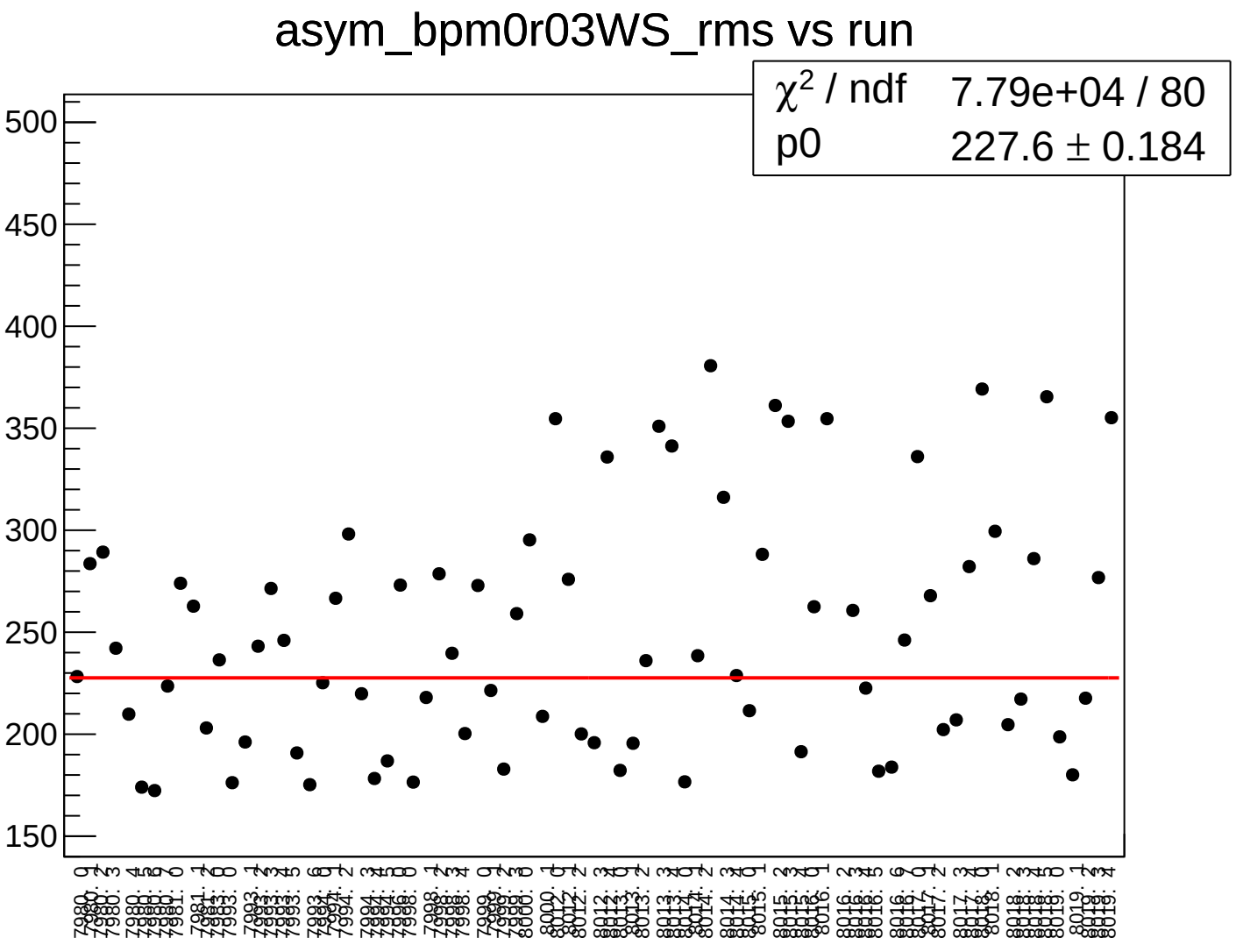

asym_bpm0l10WS_mean vs run
χ² / ndf 1755 / 80
p0 −7826 ± 221.2
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean −947.9
Std Dev 995.4
10
8
6
4
2
0
−2
−4
−6
−8

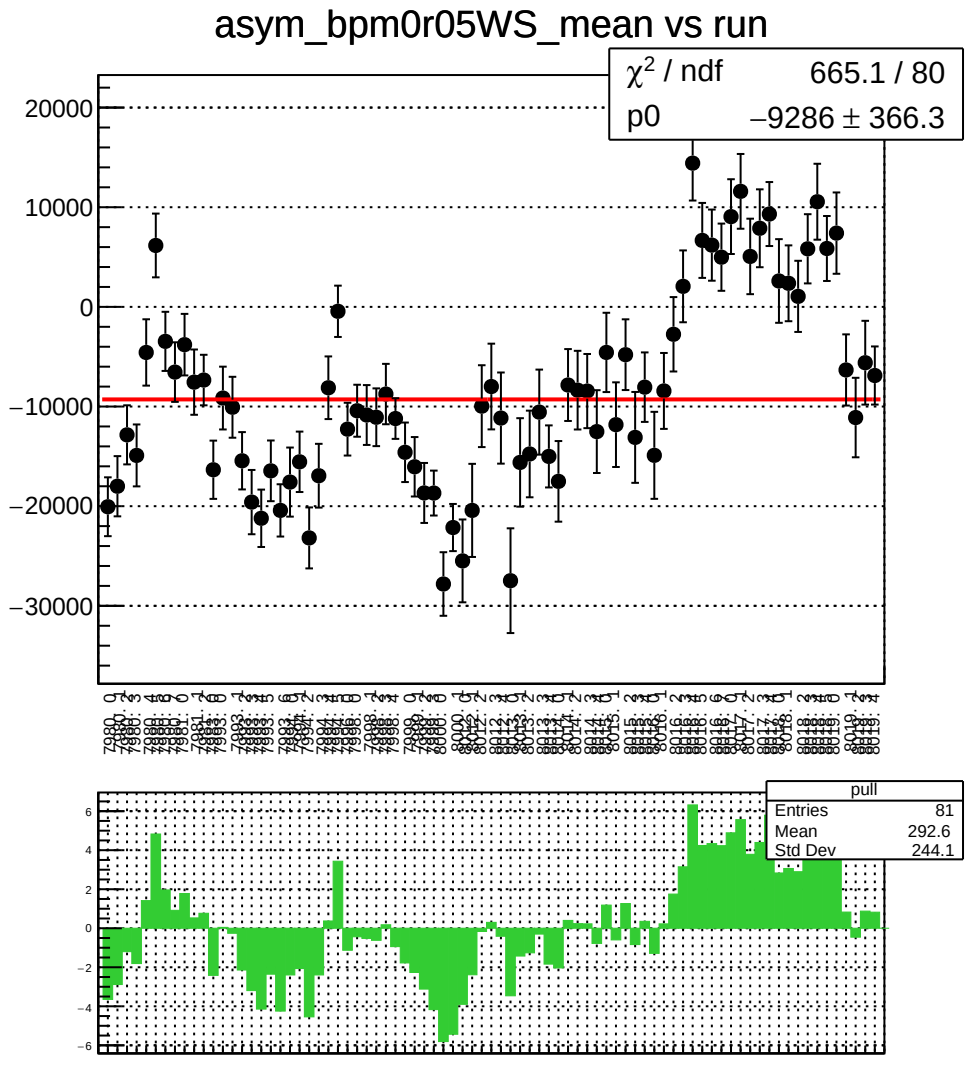

pull1D
Entries 81
Mean −0.559
Std Dev 4.086
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

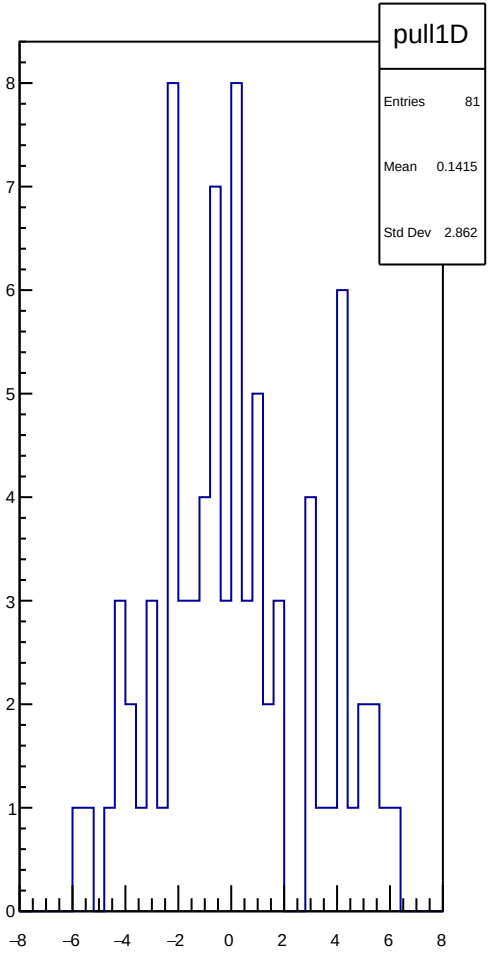

asym_bpm0l10WS_rms vs run
χ^2 / ndf 4.794e+04 / 80
p0 195.3 ± 0.1564
450
400
350
300
250
200
150

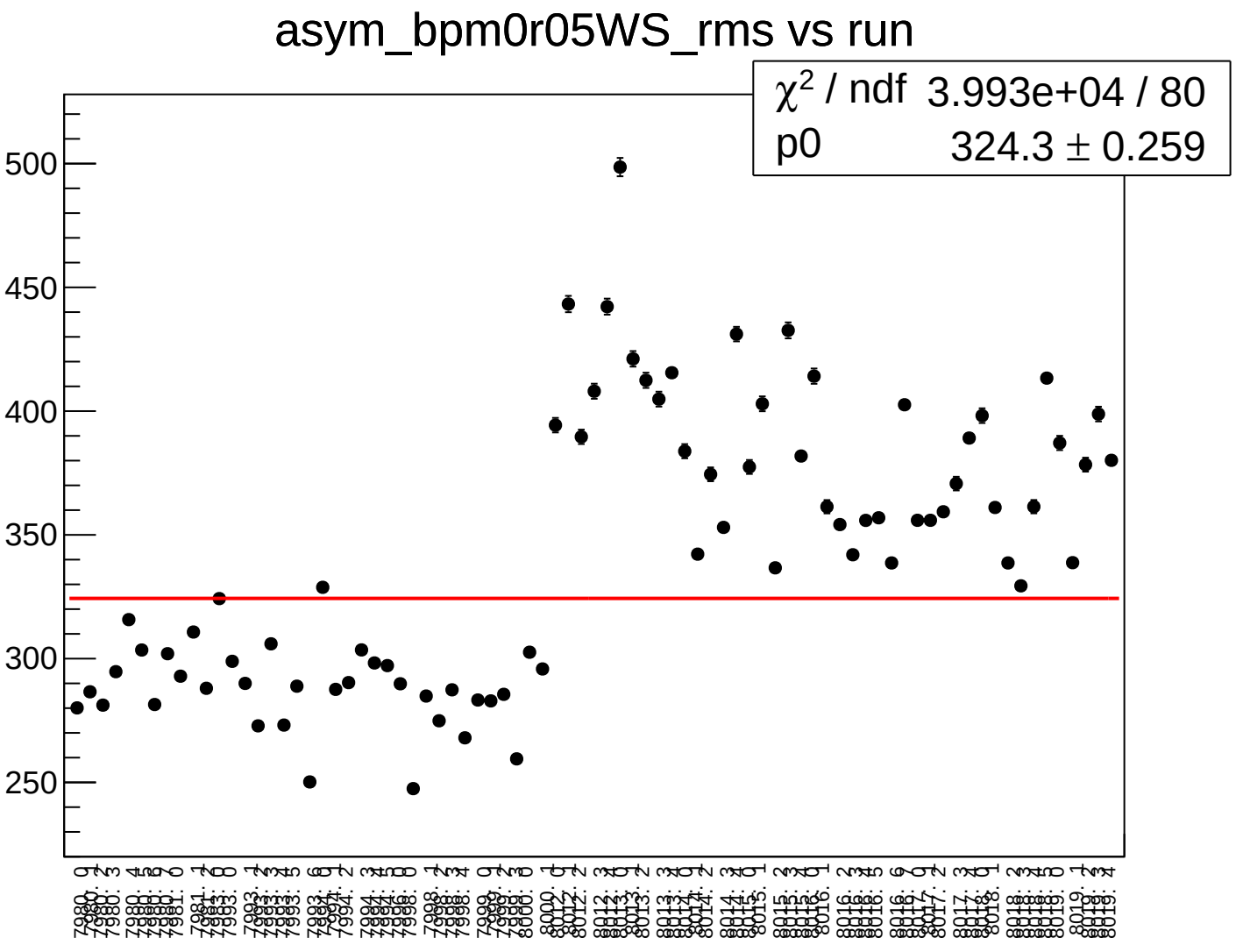

asym_bpm0r03WS_mean vs run
χ² / ndf 1234 / 80
p0 −8244 ± 260.3
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 81
Mean −4456
Std Dev 4504
8
6
4
2
0
−2
−4
−6

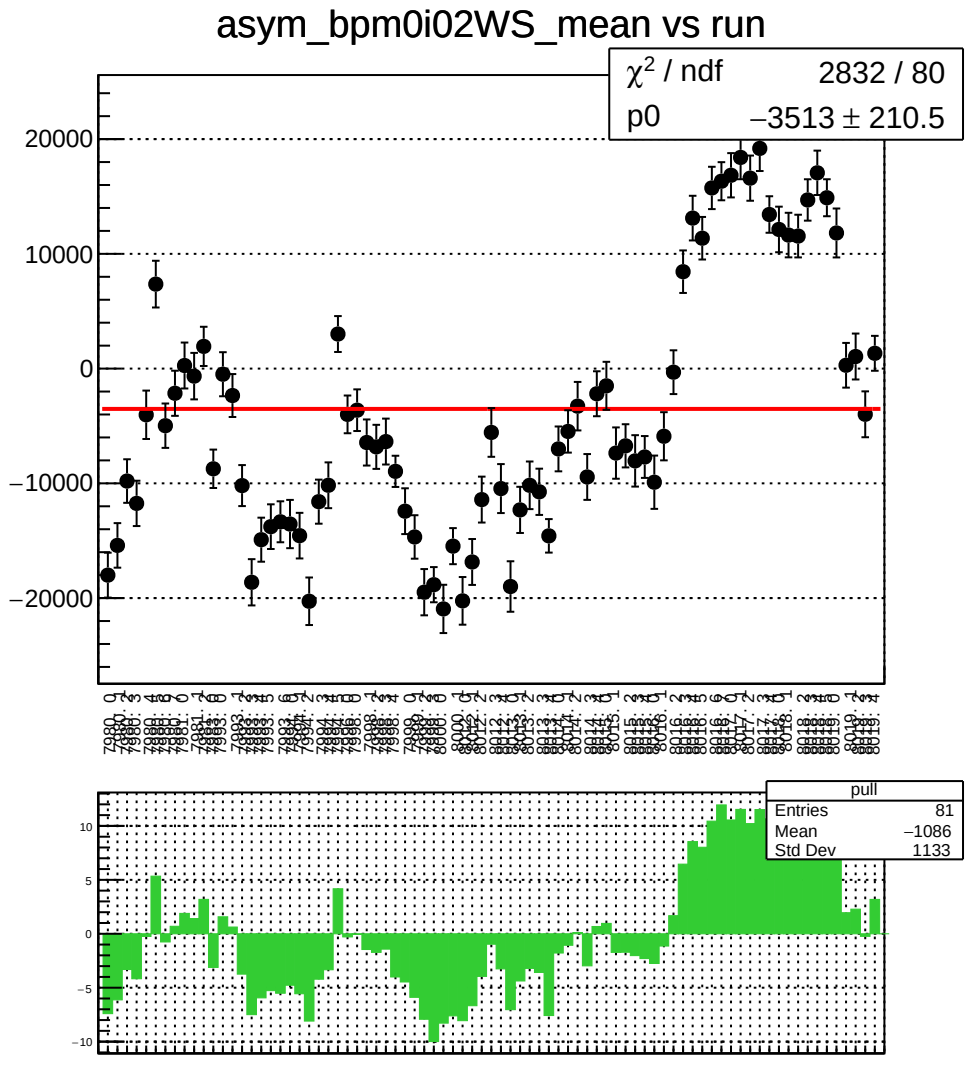

pull1D
Entries 81
Mean −0.01149
Std Dev 3.903
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

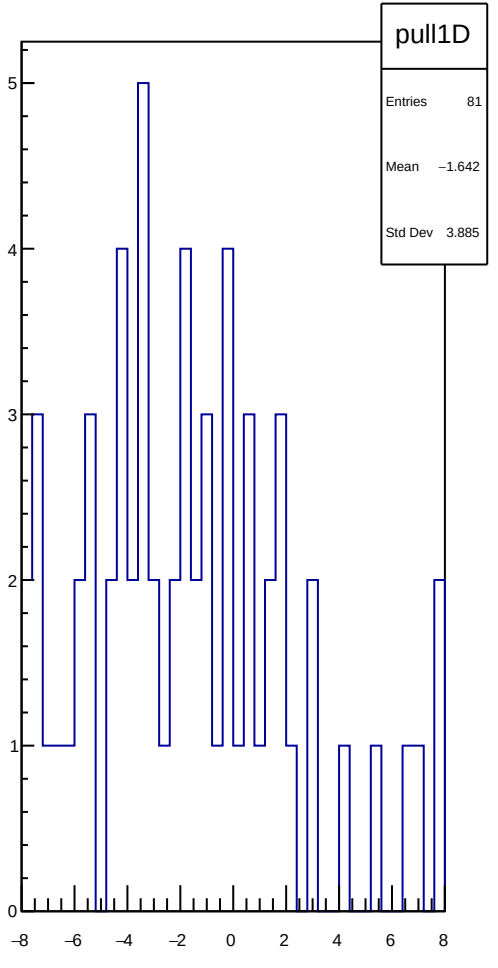

asym_bpm0r03WS_rms vs run
χ² / ndf 7.79e+04 / 80
p0 227.6 ± 0.184
500
450
400
350
300
250
200
150

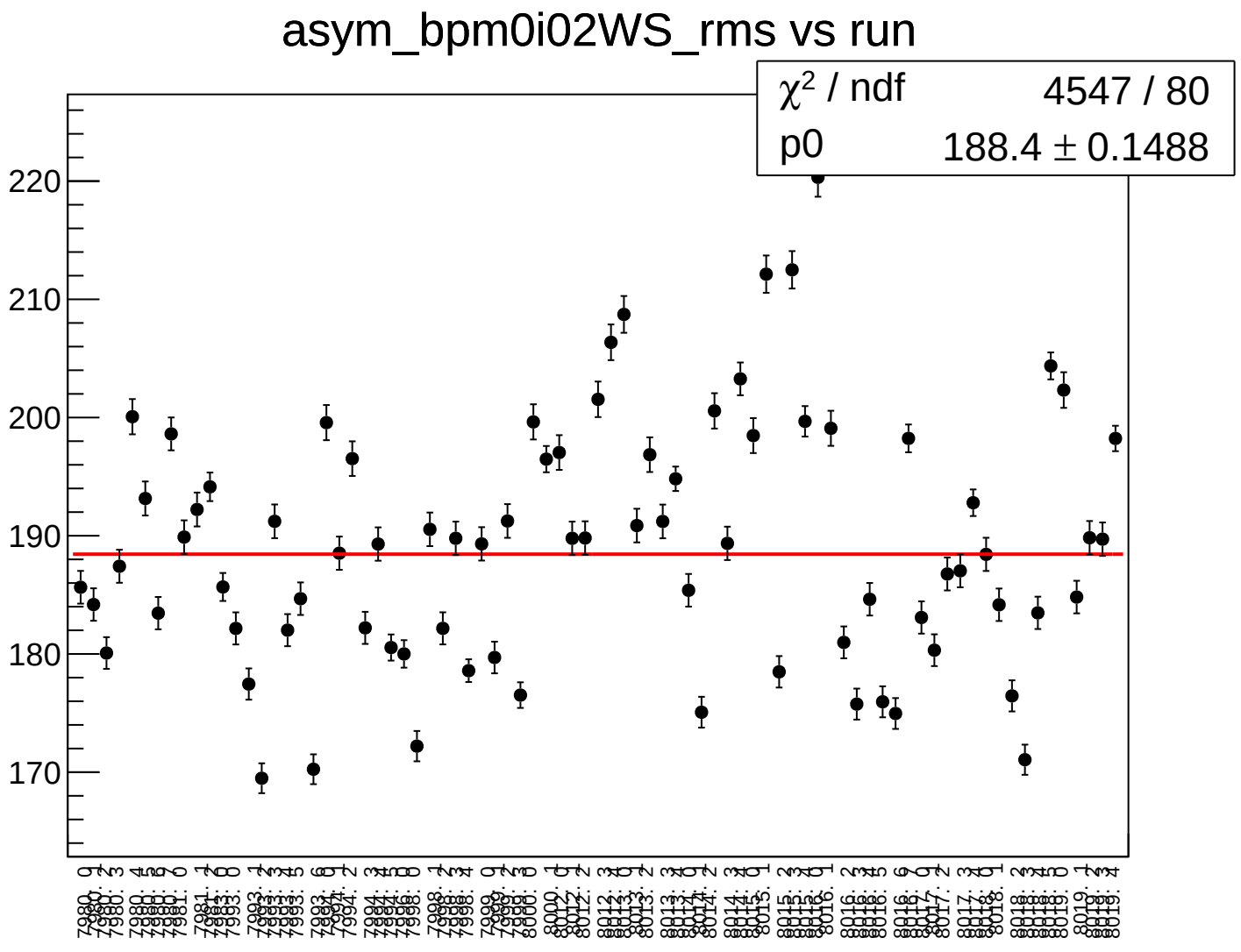

asym_bpm0r05WS_mean vs run
χ² / ndf 665.1 / 80
p0 −9286 ± 366.3
20000
10000
0
−10000
−20000
−30000
pull
Entries 81
Mean 292.6
Std Dev 244.1
6
4
2
0
−2
−4
−6

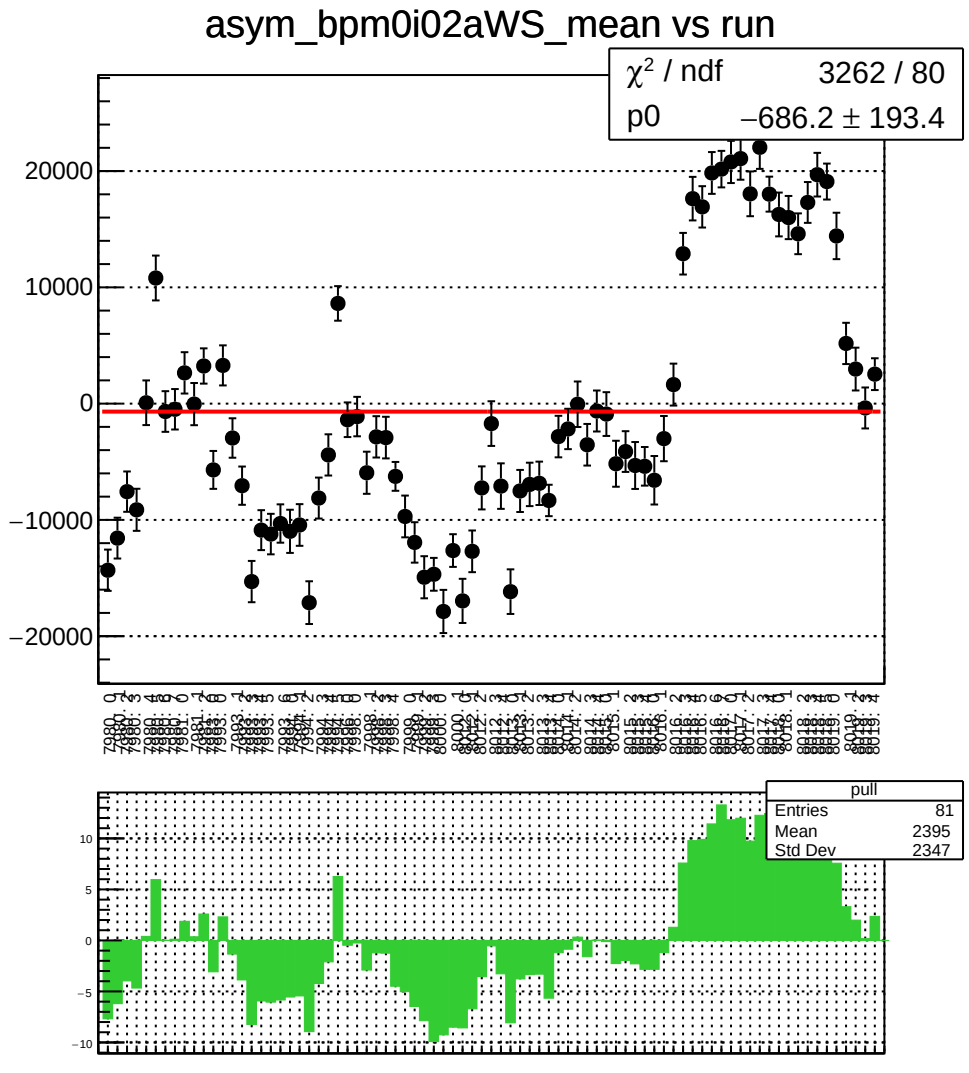

pull1D
Entries 81
Mean 0.1415
Std Dev 2.862
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

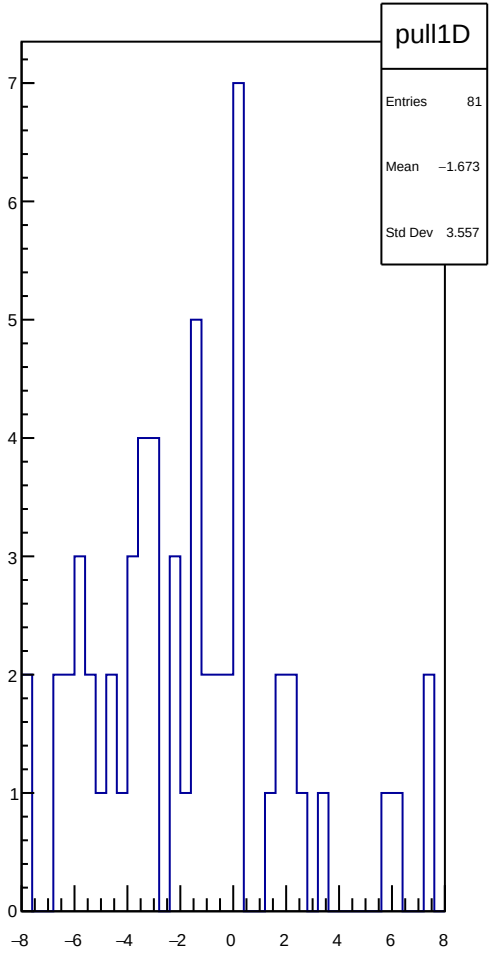

asym_bpm0r05WS_rms vs run
χ² / ndf 3.993e+04 / 80
p0 324.3 ± 0.259
500
450
400
350
300
250

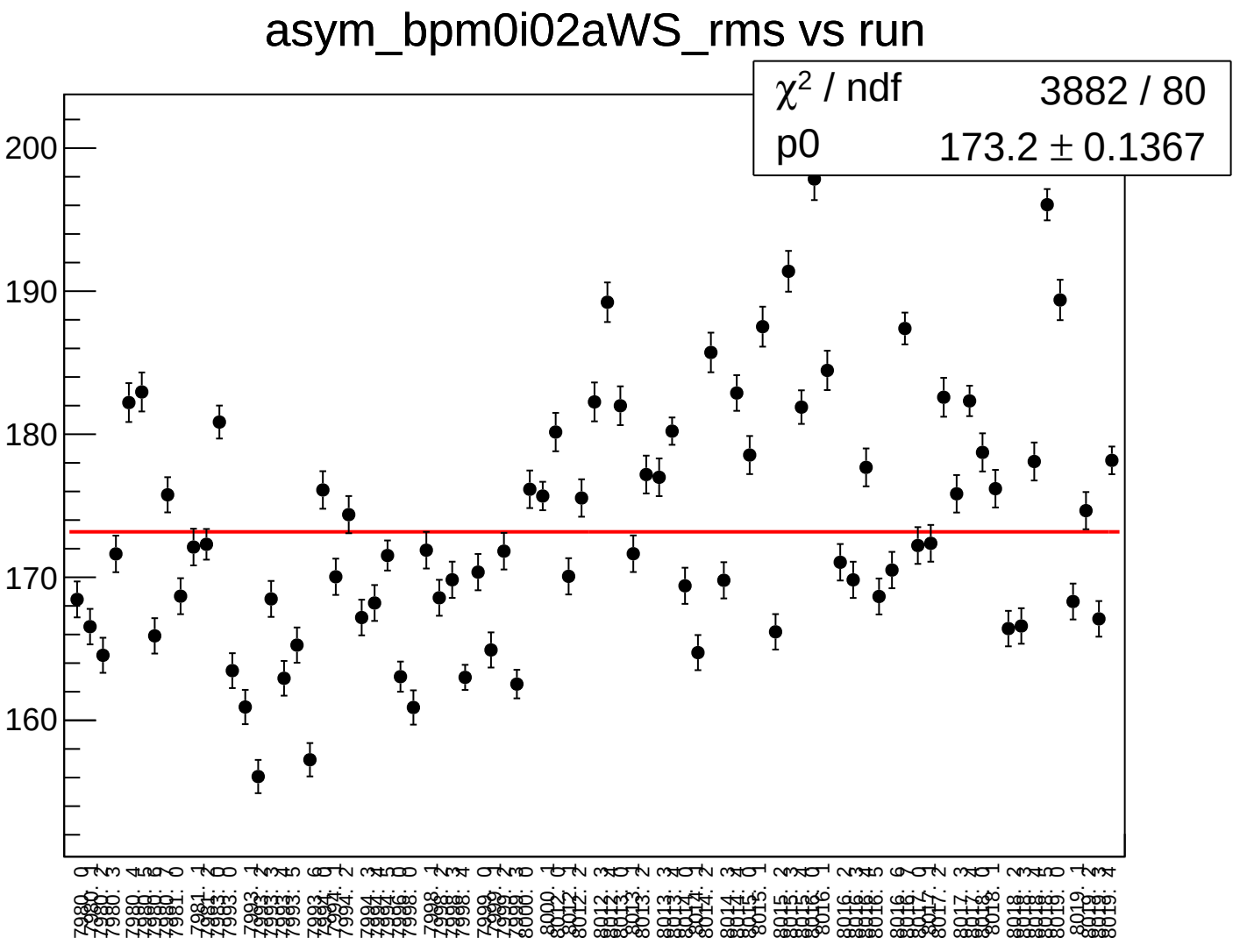

asym_bpm0i02WS_mean vs run
χ² / ndf 2832 / 80
p0 −3513 ± 210.5
20000
10000
0
−10000
−20000
pull
Entries 81
Mean −1086
Std Dev 1133
10
5
0
−5
−10

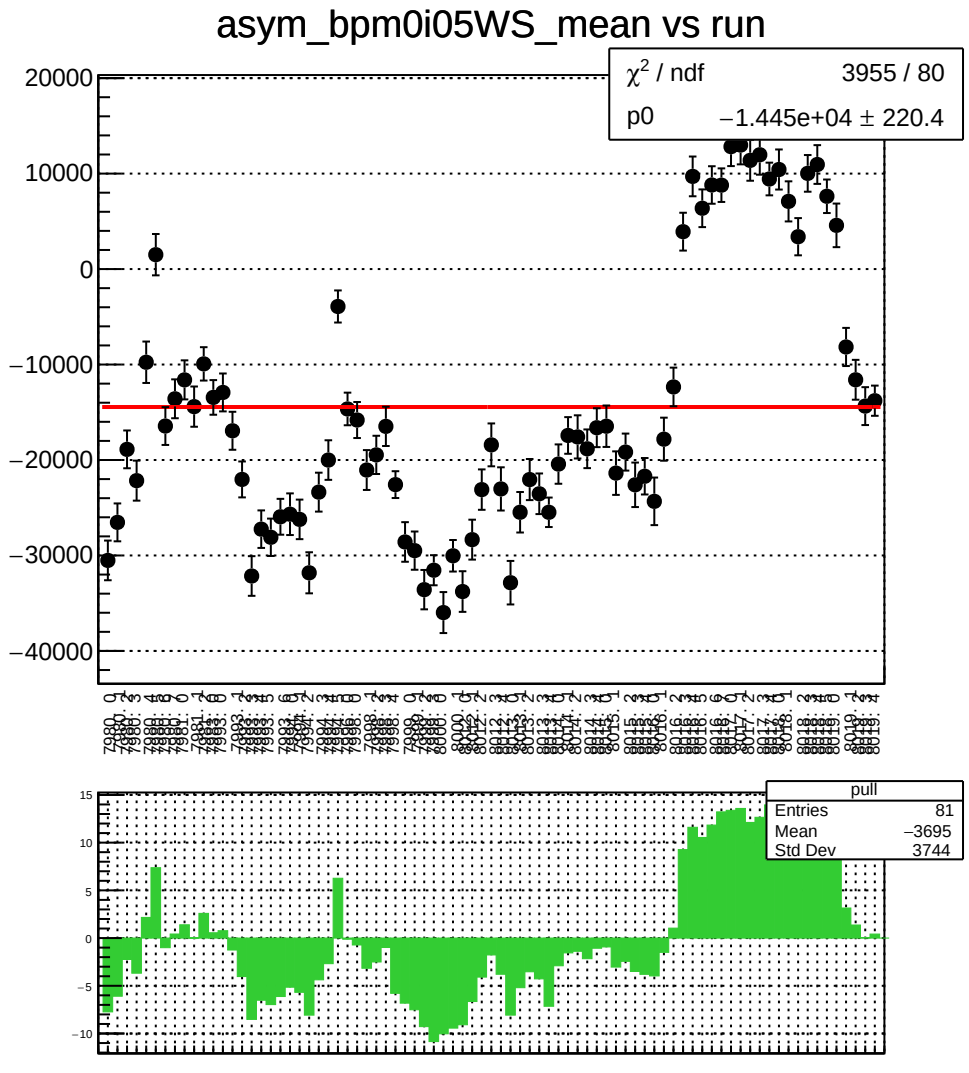

pull1D
Entries 81
Mean −1.642
Std Dev 3.885
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

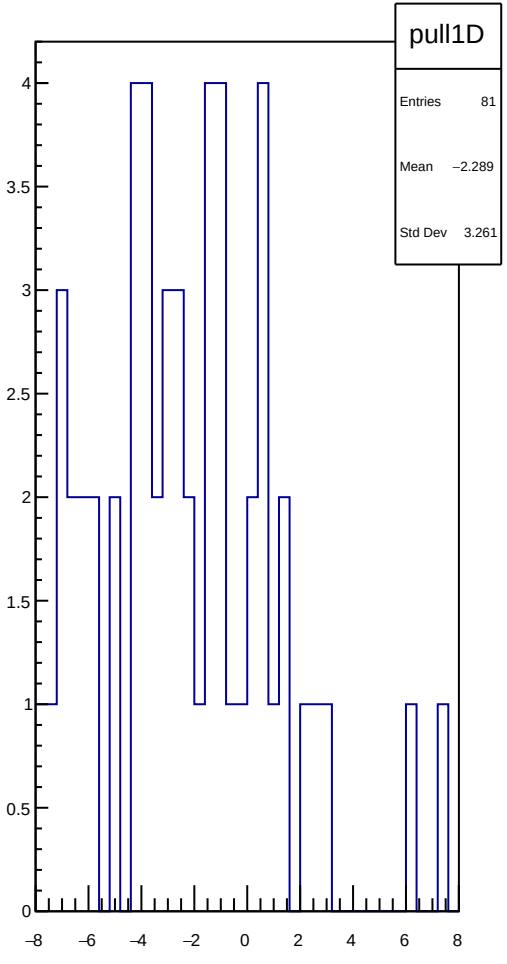

asym_bpm0i02WS_rms vs run
χ² / ndf 4547 / 80
p0 188.4 ± 0.1488
220
210
200
190
180
170

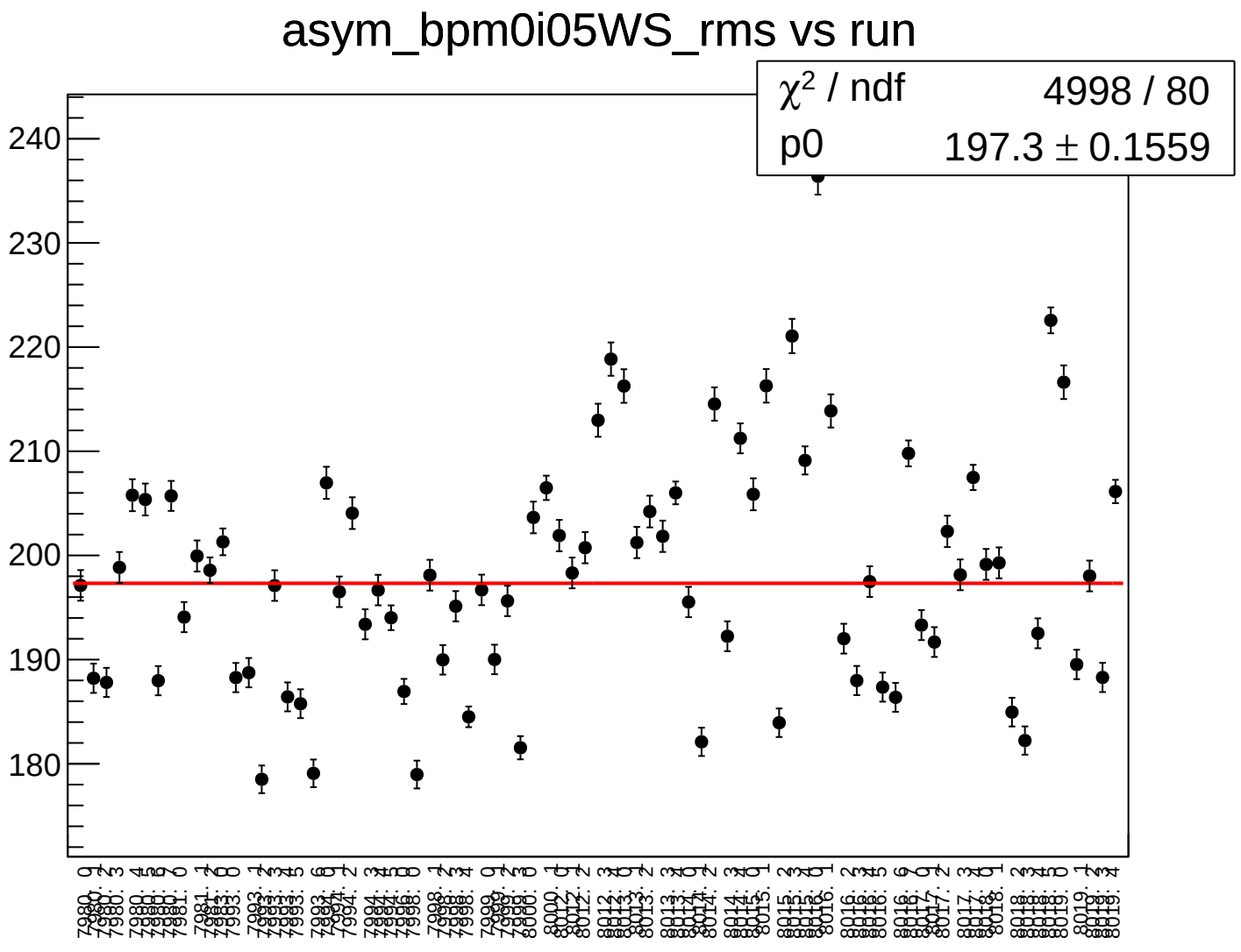

asym_bpm0i02aWS_mean vs run
χ² / ndf 3262 / 80
p0 −686.2 ± 193.4
20000
10000
0
−10000
−20000
pull
Entries 81
Mean 2395
Std Dev 2347
10
5
0
−5
−10

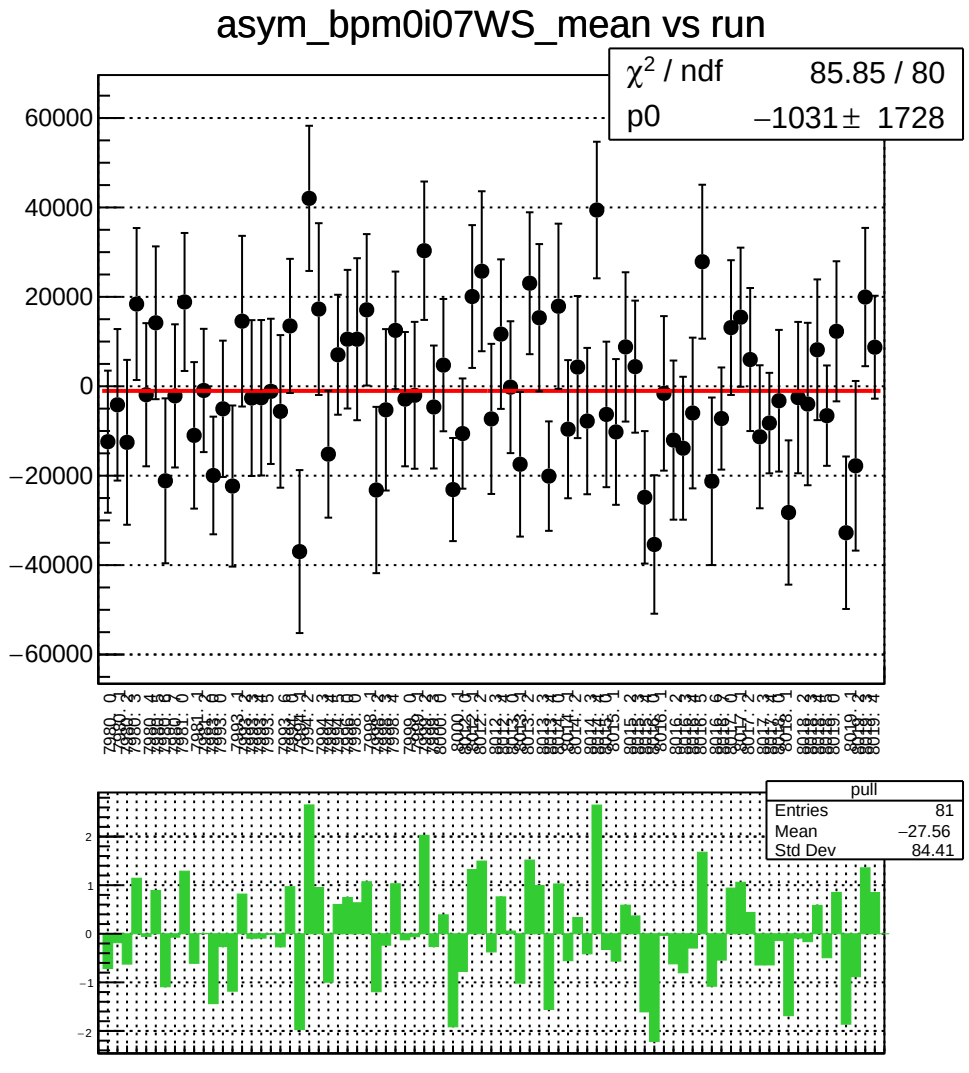

pull1D
Entries 81
Mean −1.673
Std Dev 3.557
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

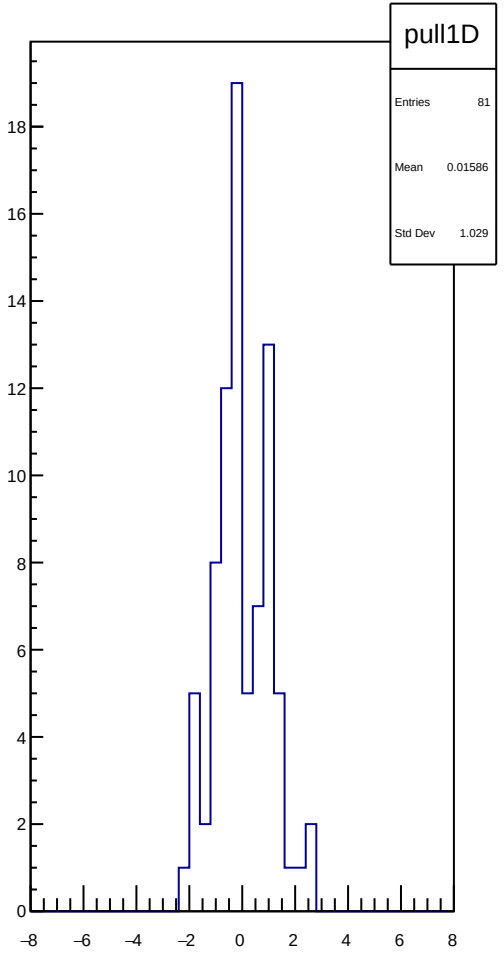

asym_bpm0i02aWS_rms vs run
χ² / ndf 3882 / 80
p0 173.2 ± 0.1367
200
190
180
170
160

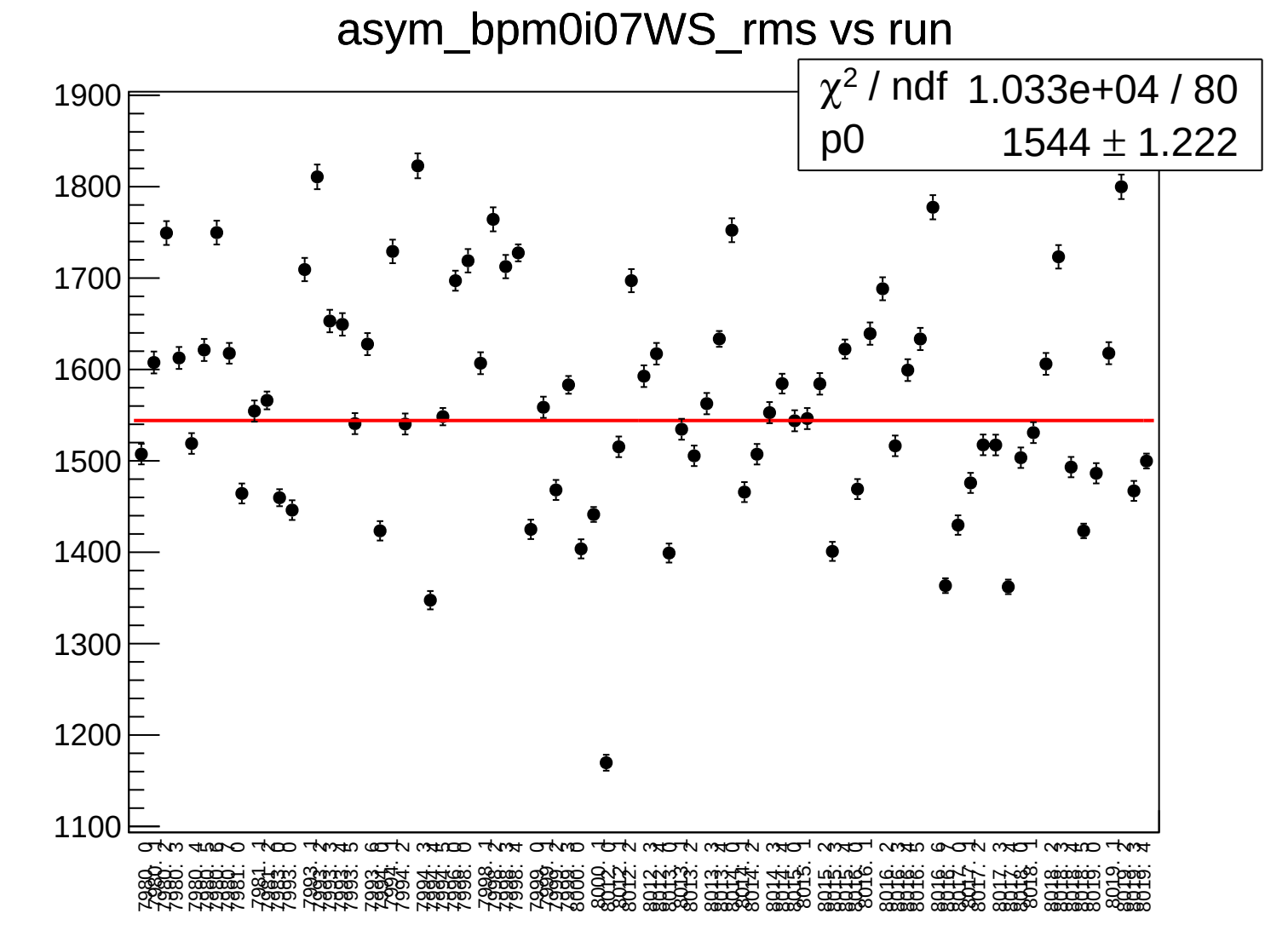

asym_bpm0i05WS_mean vs run
χ² / ndf 3955 / 80
p0 −1.445e+04 ± 220.4
pull
Entries 81
Mean −3695
Std Dev 3744

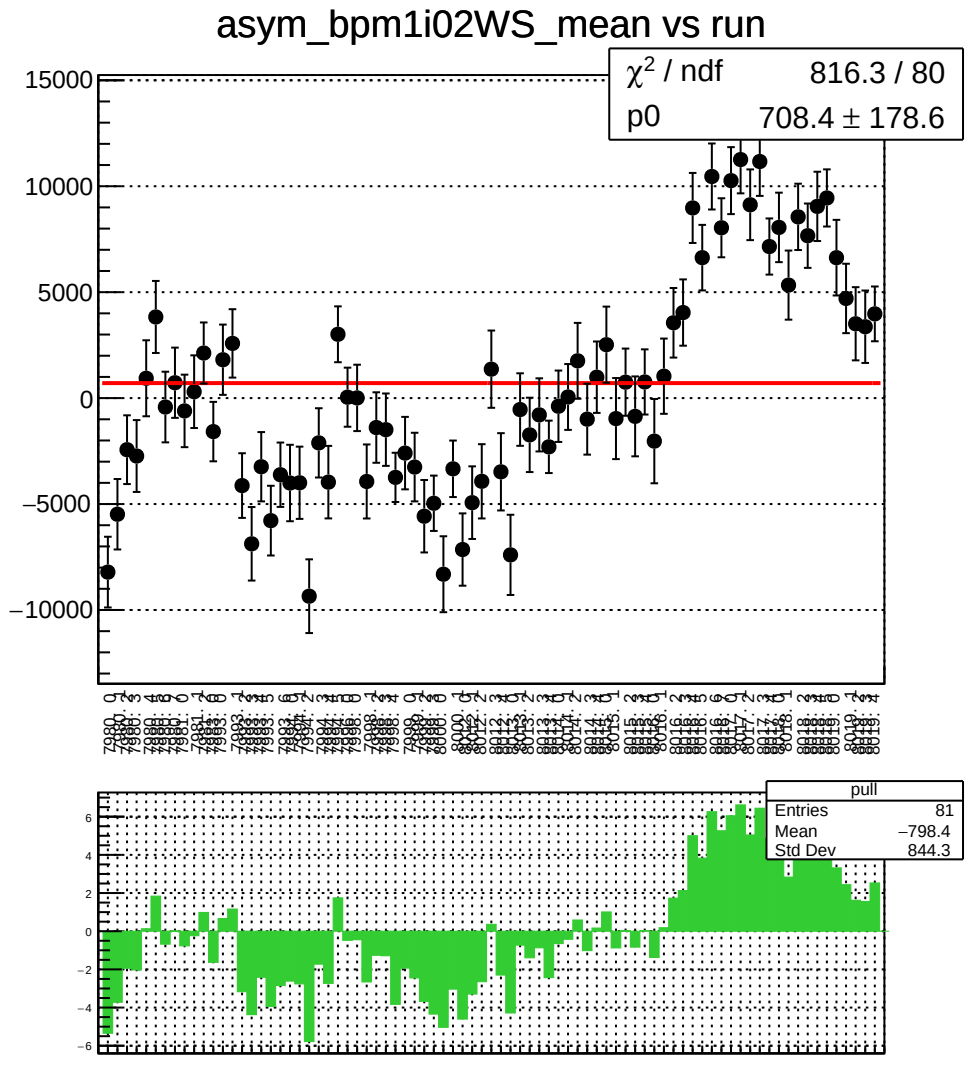

pull1D
Entries 81
Mean −2.289
Std Dev 3.261

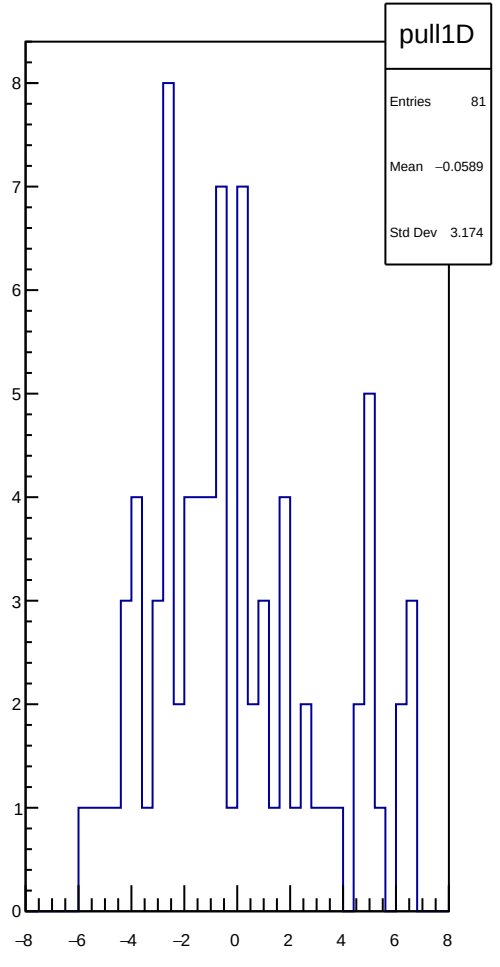

asym_bpm0i05WS_rms vs run
χ² / ndf 4998 / 80
p0 197.3 ± 0.1559
240
230
220
210
200
190
180

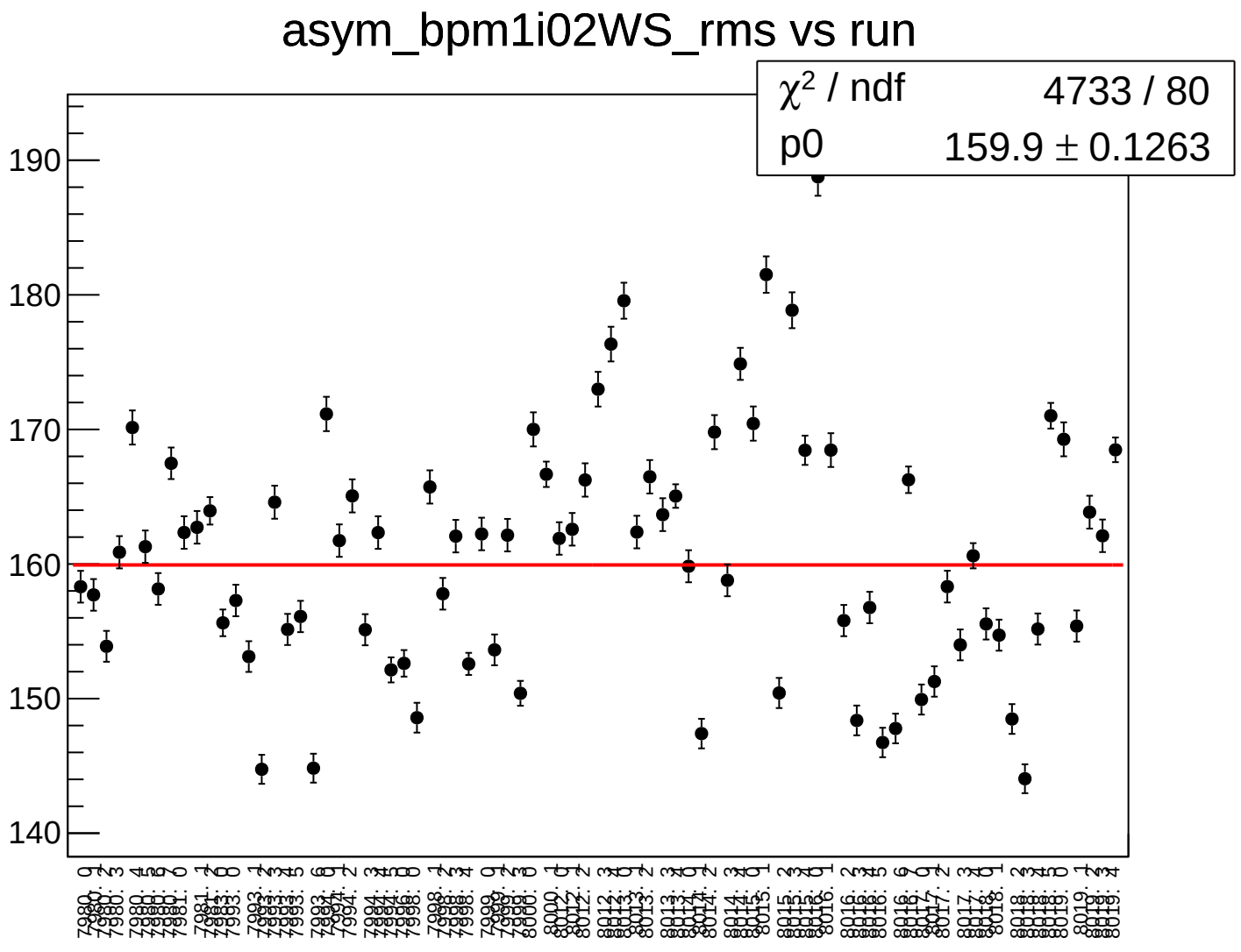

asym_bpm0i07WS_mean vs run
χ² / ndf 85.85 / 80
p0 −1031 ± 1728
pull
Entries 81
Mean −27.56
Std Dev 84.41

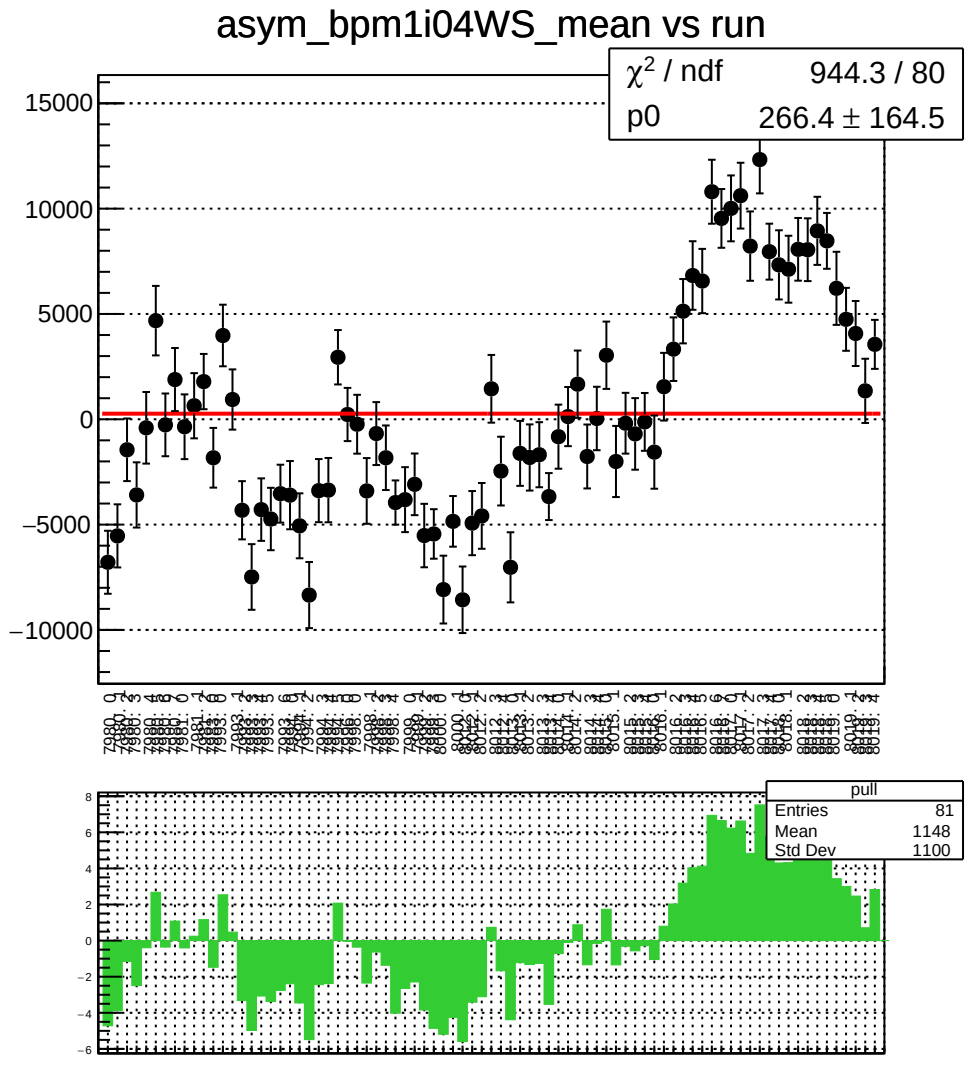

pull1D
Entries 81
Mean 0.01586
Std Dev 1.029

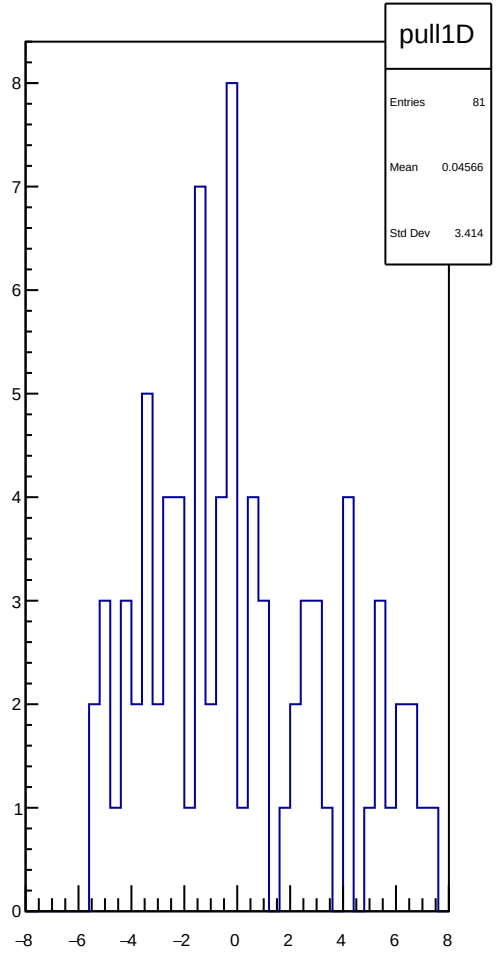

asym_bpm0i07WS_rms vs run
χ² / ndf 1.033e+04 / 80
p0 1544 ± 1.222
1900
1800
1700
1600
1500
1400
1300
1200
1100

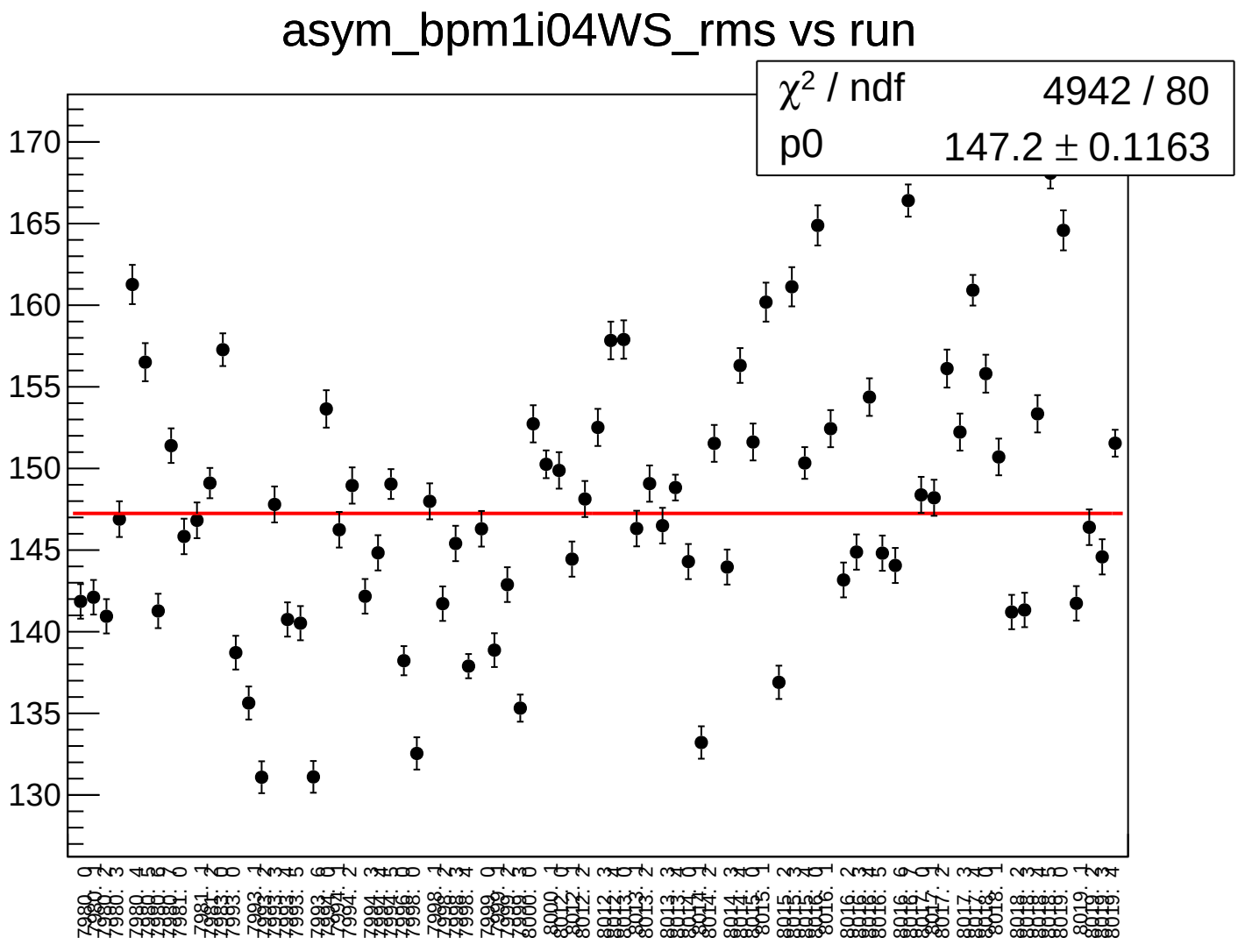

asym_bpm1i02WS_mean vs run
χ² / ndf 816.3 / 80
p0 708.4 ± 178.6
pull
Entries 81
Mean −798.4
Std Dev 844.3

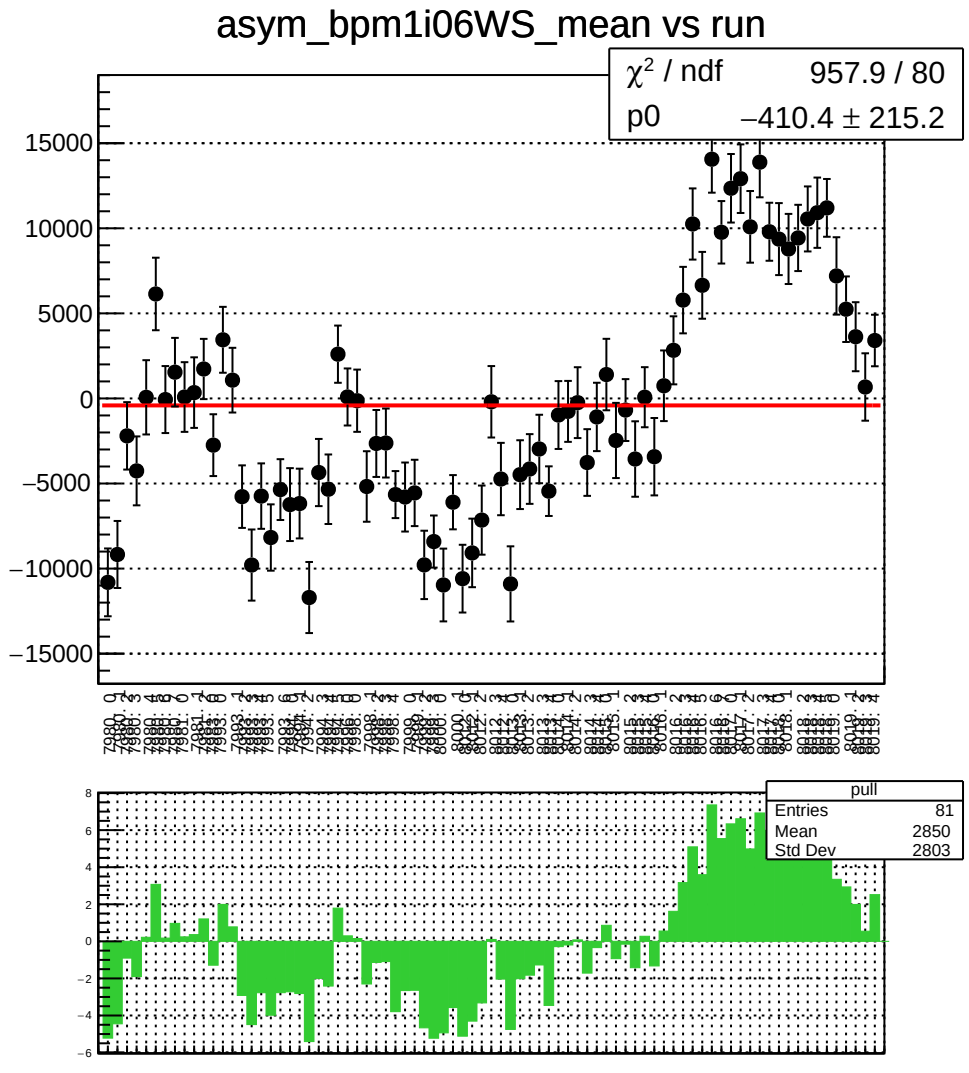

pull1D
Entries 81
Mean −0.0589
Std Dev 3.174

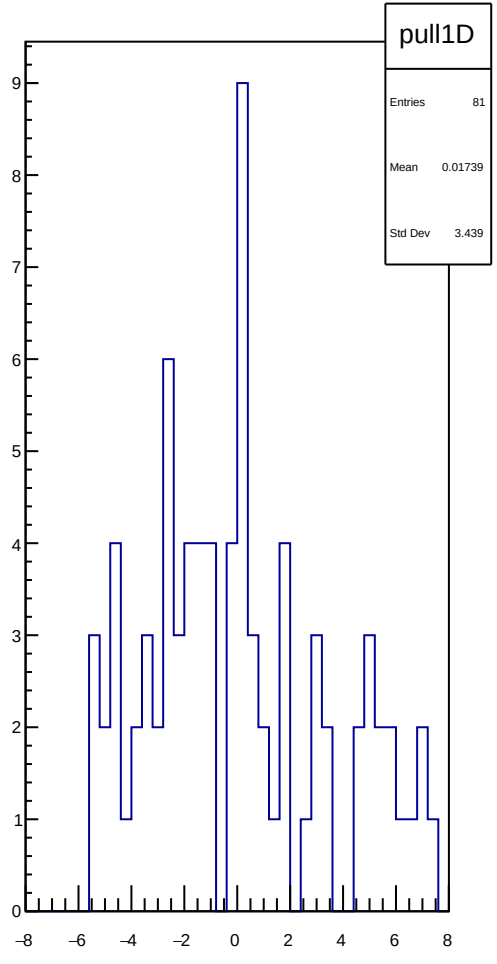

asym_bpm1i02WS_rms vs run
χ² / ndf 4733 / 80
p0 159.9 ± 0.1263
190
180
170
160
150
140

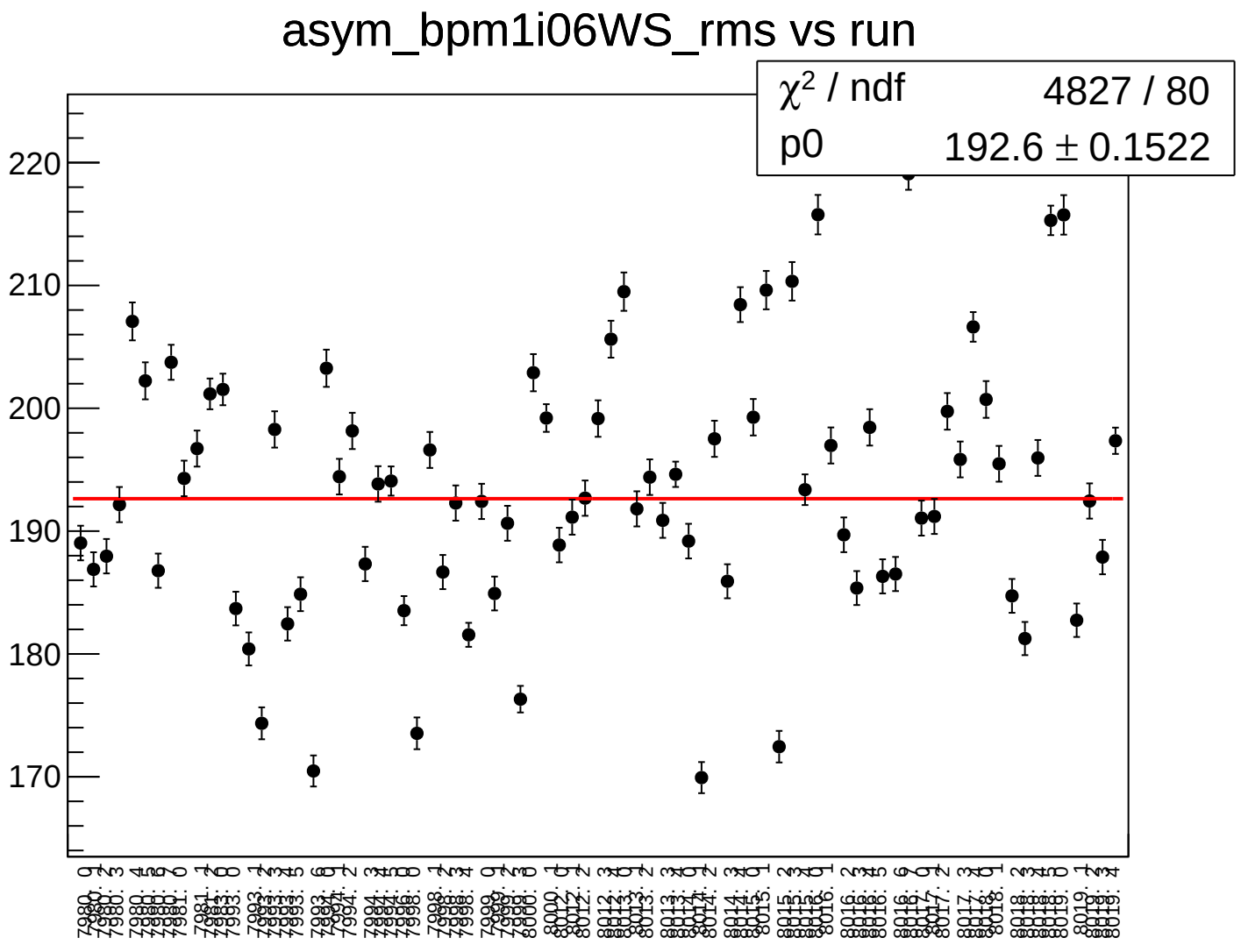

asym_bpm1i04WS_mean vs run
χ² / ndf 944.3 / 80
p0 266.4 ± 164.5
15000
10000
5000
0
−5000
−10000
pull
Entries 81
Mean 1148
Std Dev 1100
8
6
4
2
0
−2
−4
−6

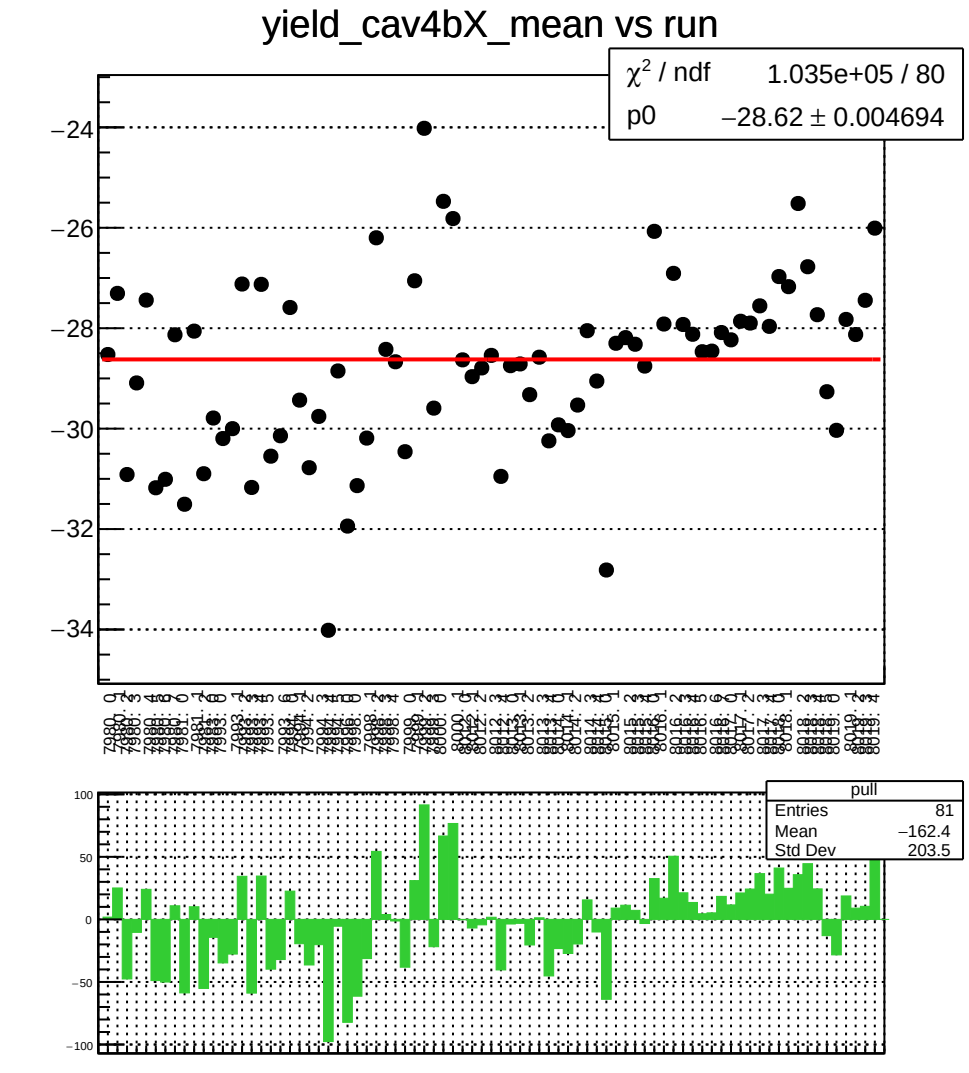

pull1D
Entries 81
Mean 0.04566
Std Dev 3.414
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

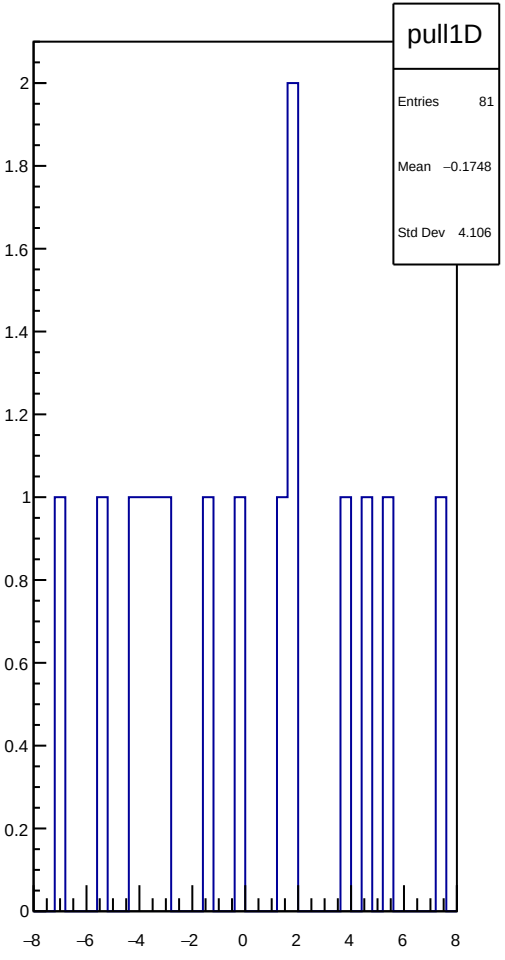

asym_bpm1i04WS_rms vs run
χ^2 / ndf 4942 / 80
p0 147.2 ± 0.1163
170
165
160
155
150
145
140
135
130

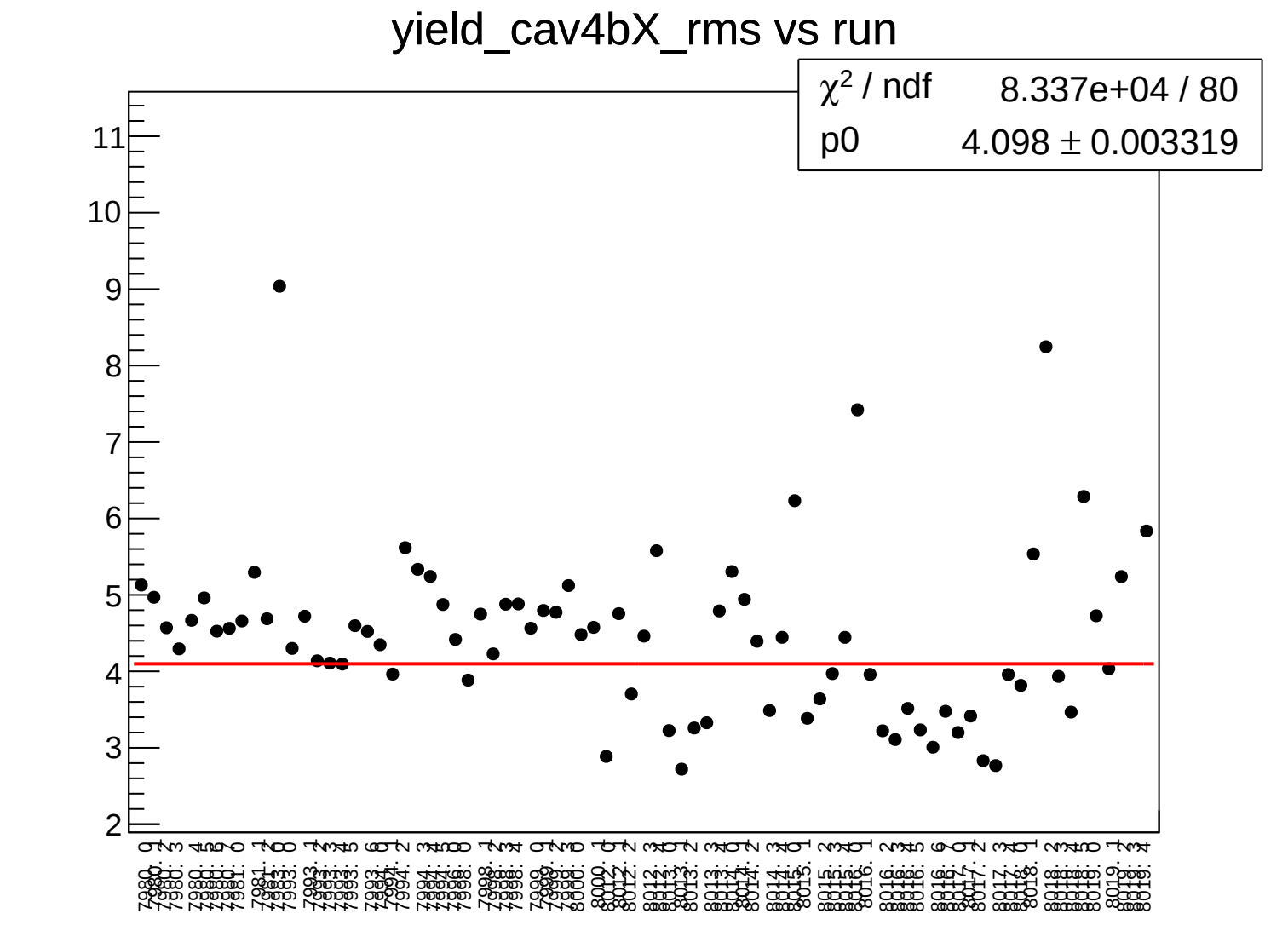

asym_bpm1i06WS_mean vs run
χ² / ndf 957.9 / 80
p0 −410.4 ± 215.2
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 81
Mean 2850
Std Dev 2803
8
6
4
2
0
−2
−4
−6

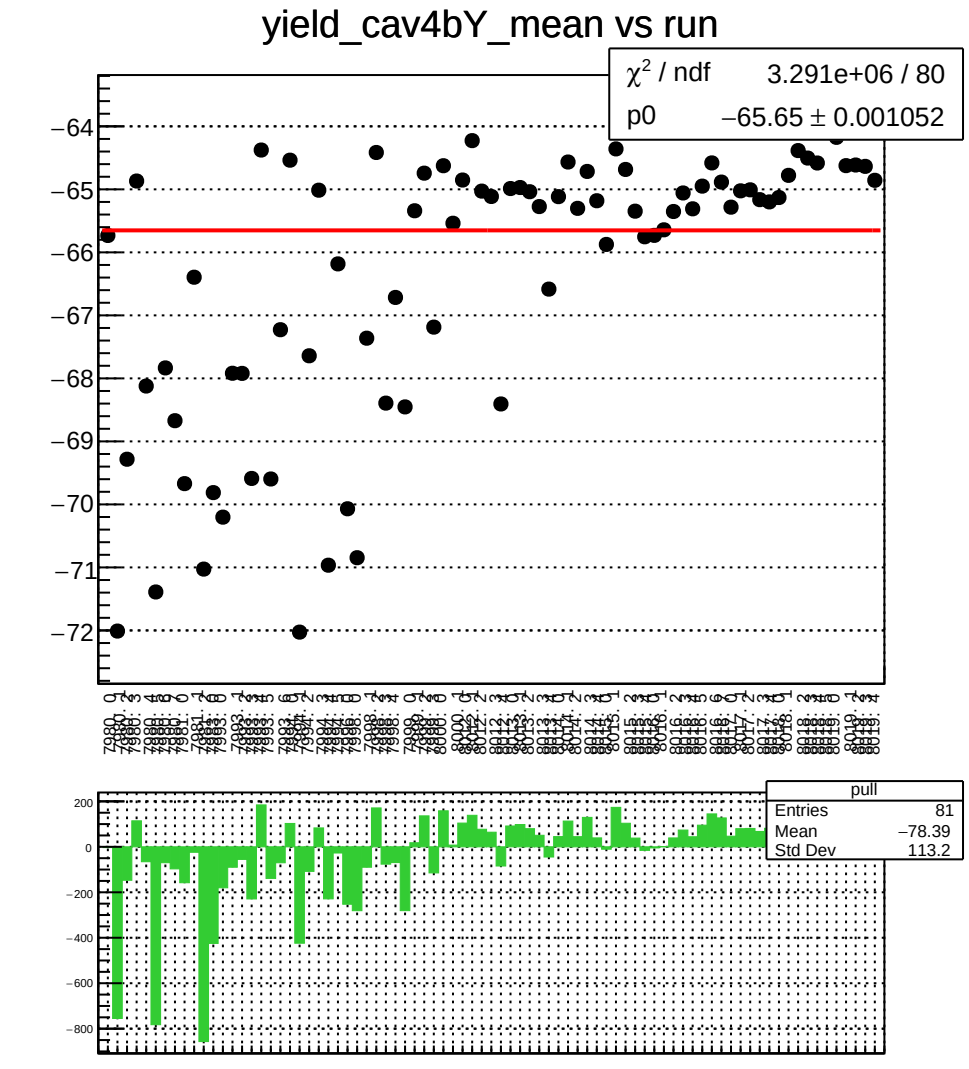

pull1D
Entries 81
Mean 0.01739
Std Dev 3.439
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

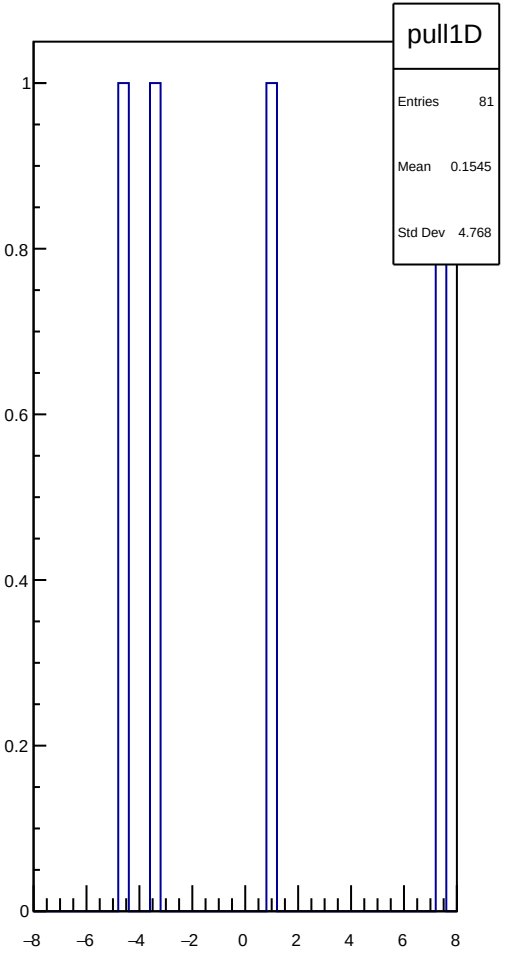

asym_bpm1i06WS_rms vs run
χ² / ndf 4827 / 80
p0 192.6 ± 0.1522
220
210
200
190
180
170

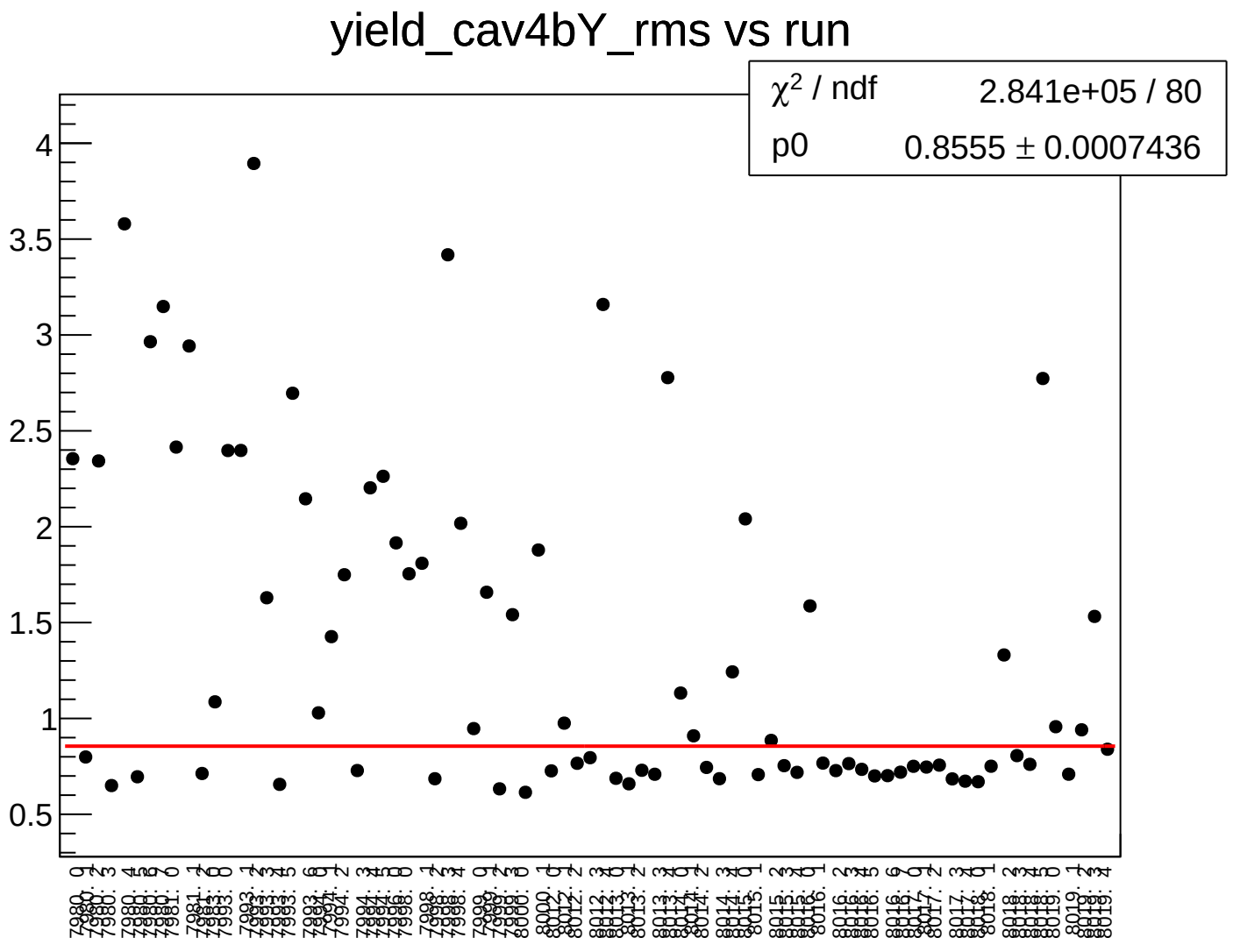

yield_cav4bX_mean vs run
χ² / ndf 1.035e+05 / 80
p0 −28.62 ± 0.004694
−24
−26
−28
−30
−32
−34
pull
Entries 81
Mean −162.4
Std Dev 203.5
100
50
0
−50
−100

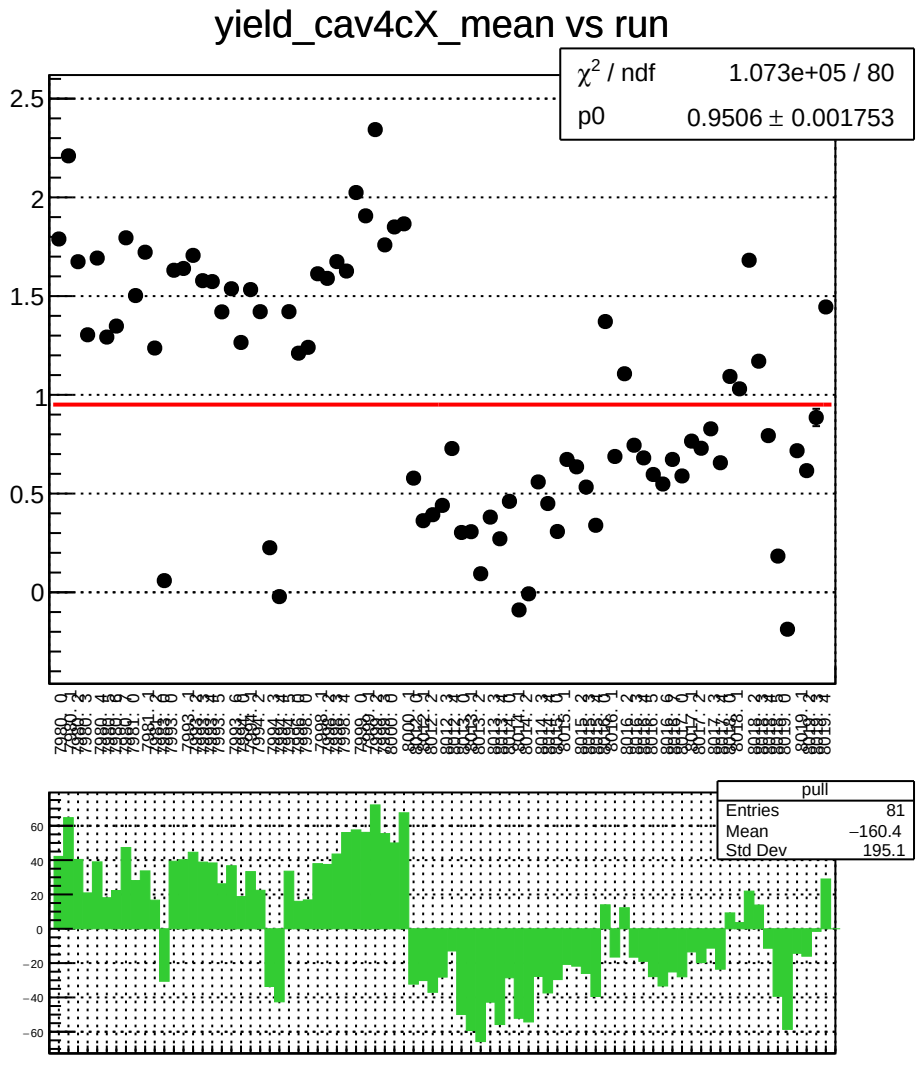

pull1D
Entries 81
Mean −0.1748
Std Dev 4.106
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

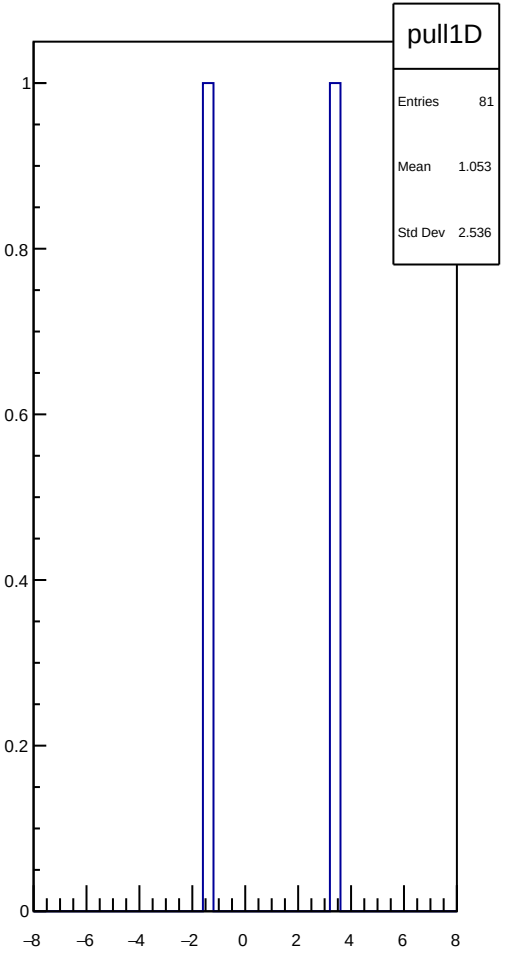

yield_cav4bX_rms vs run
χ^2 / ndf 8.337e+04 / 80
p0 4.098 ± 0.003319
11
10
9
8
7
6
5
4
3
2

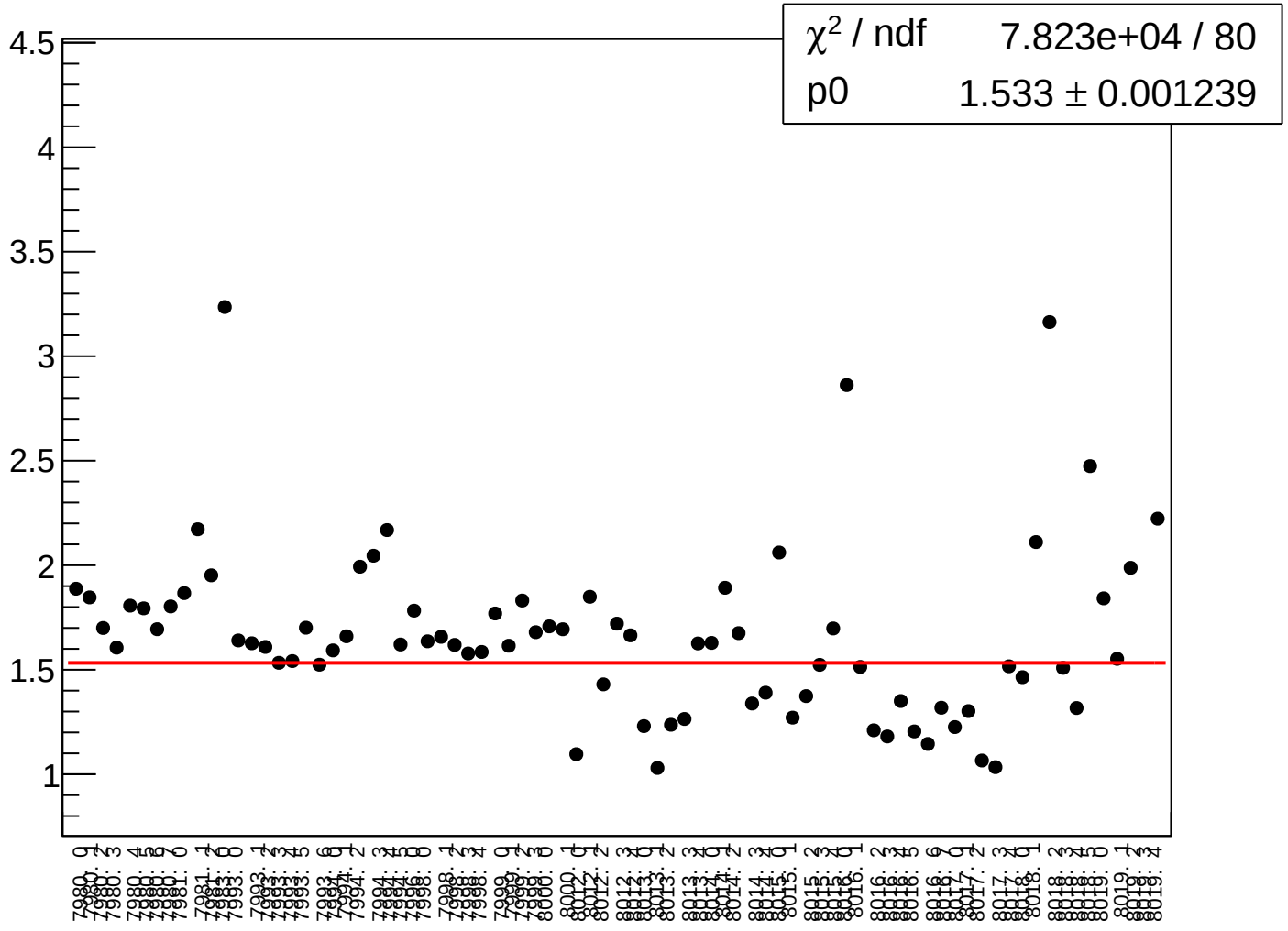

yield_cav4bY_mean vs run
χ² / ndf 3.291e+06 / 80
p0 −65.65 ± 0.001052
pull
Entries 81
Mean −78.39
Std Dev 113.2

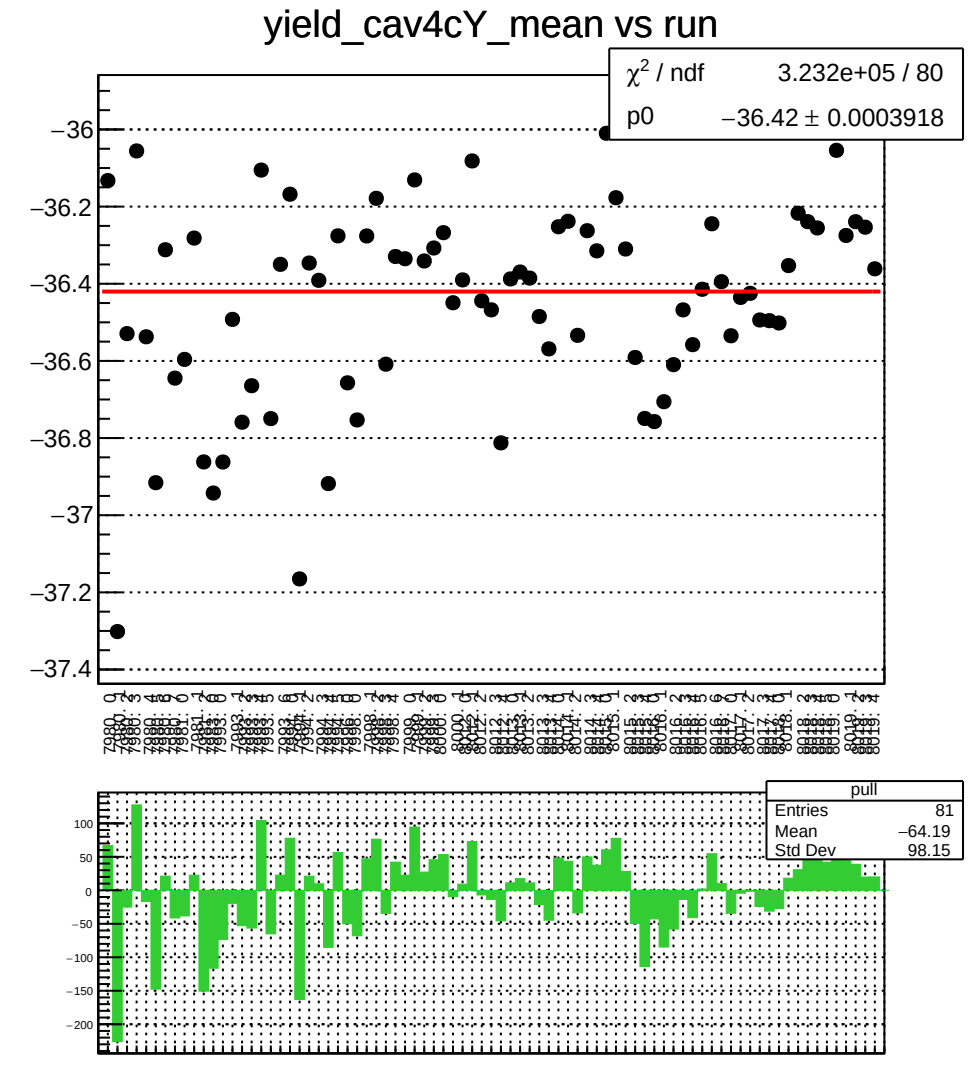

pull1D
Entries 81
Mean 0.1545
Std Dev 4.768

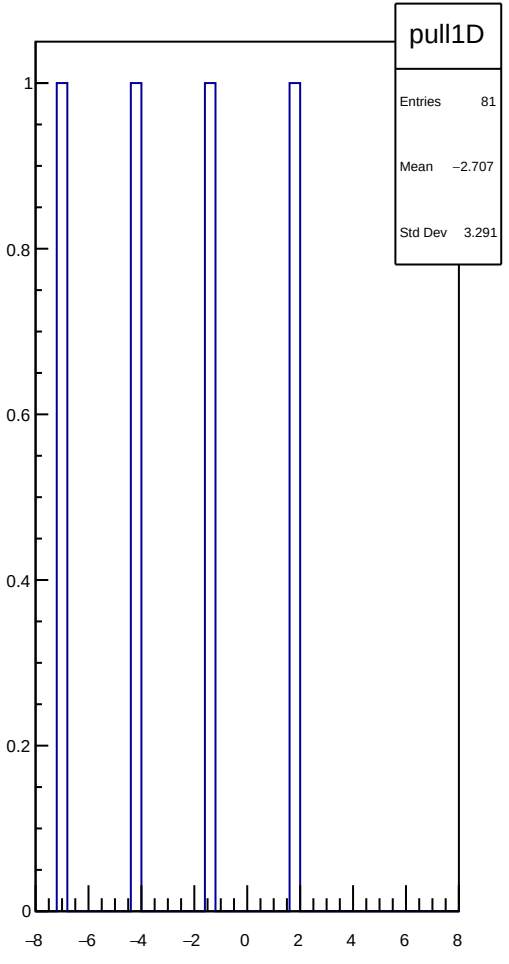

yield_cav4bY_rms vs run
χ² / ndf 2.841e+05 / 80
p0 0.8555 ± 0.0007436
4
3.5
3
2.5
2
1.5
1
0.5

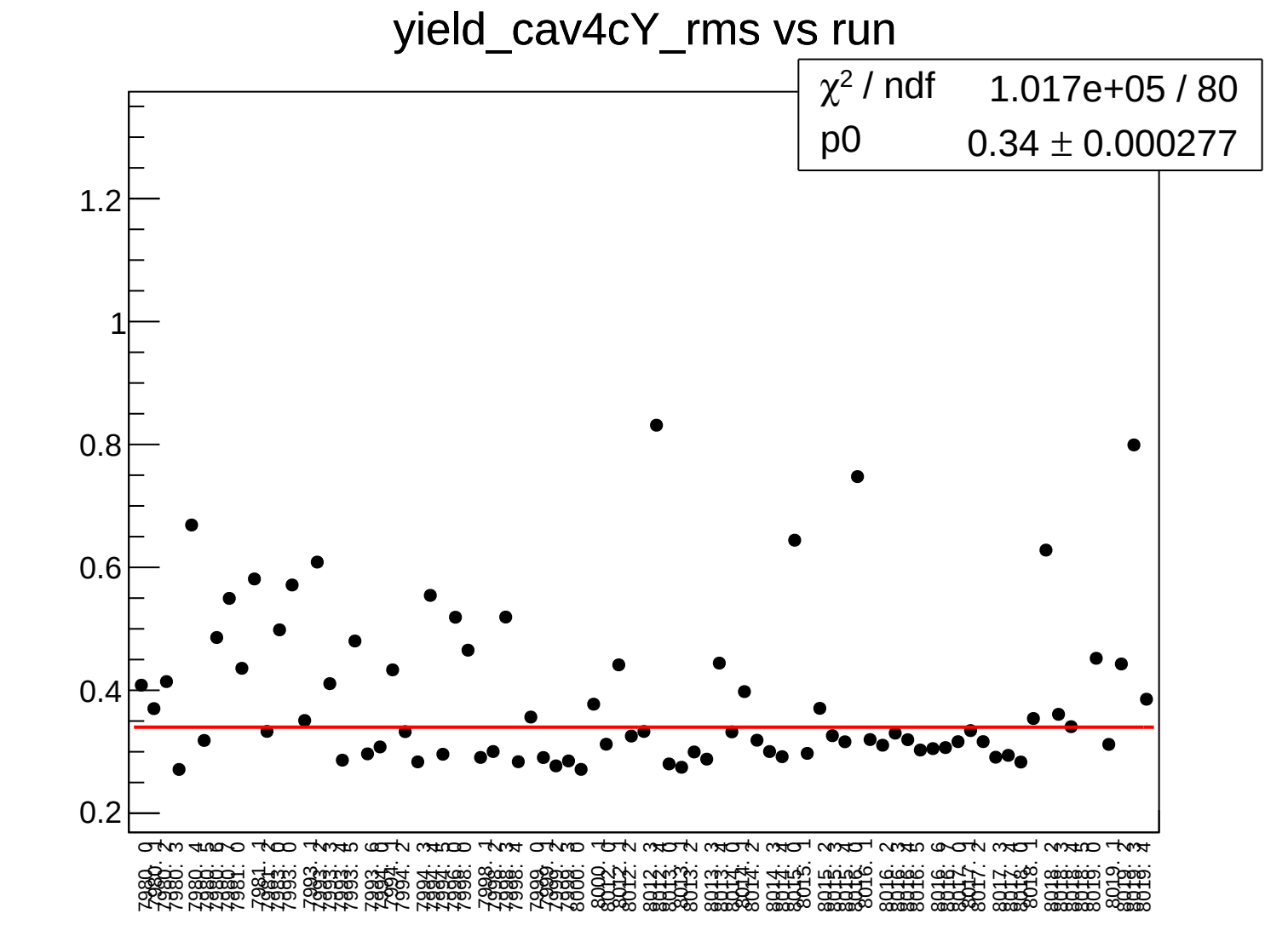

yield_cav4cX_mean vs run
χ² / ndf 1.073e+05 / 80
p0 0.9506 ± 0.001753
pull
Entries 81
Mean −160.4
Std Dev 195.1

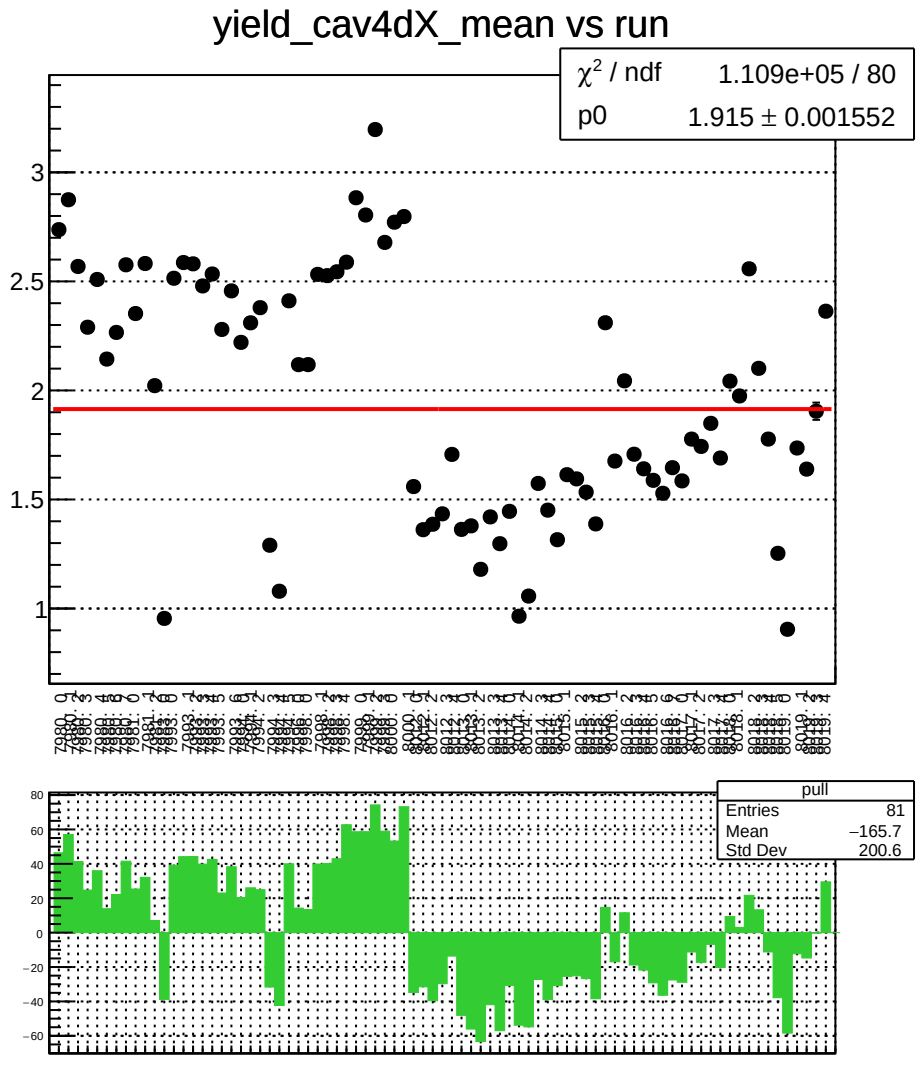

pull1D
Entries 81
Mean 1.053
Std Dev 2.536

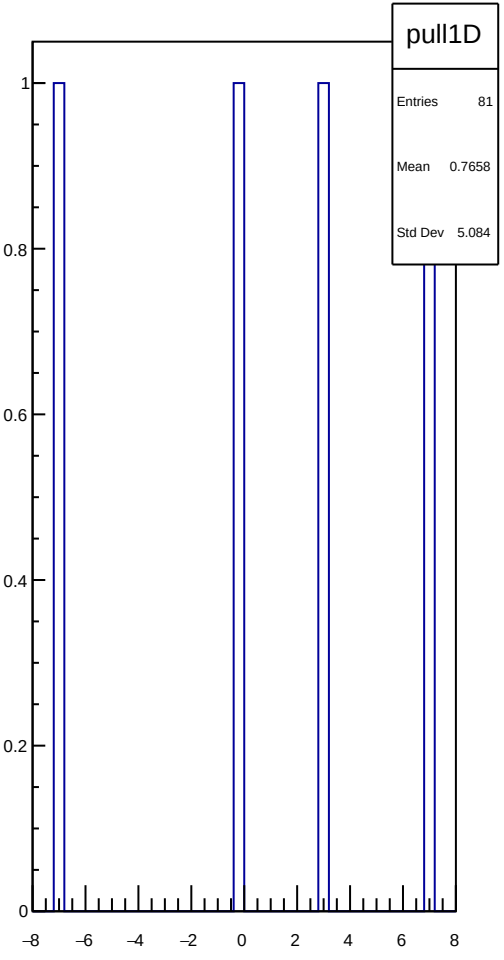

yield_cav4cX_rms vs run
χ² / ndf 7.823e+04 / 80
p0 1.533 ± 0.001239
4.5
4
3.5
3
2.5
2
1.5
1

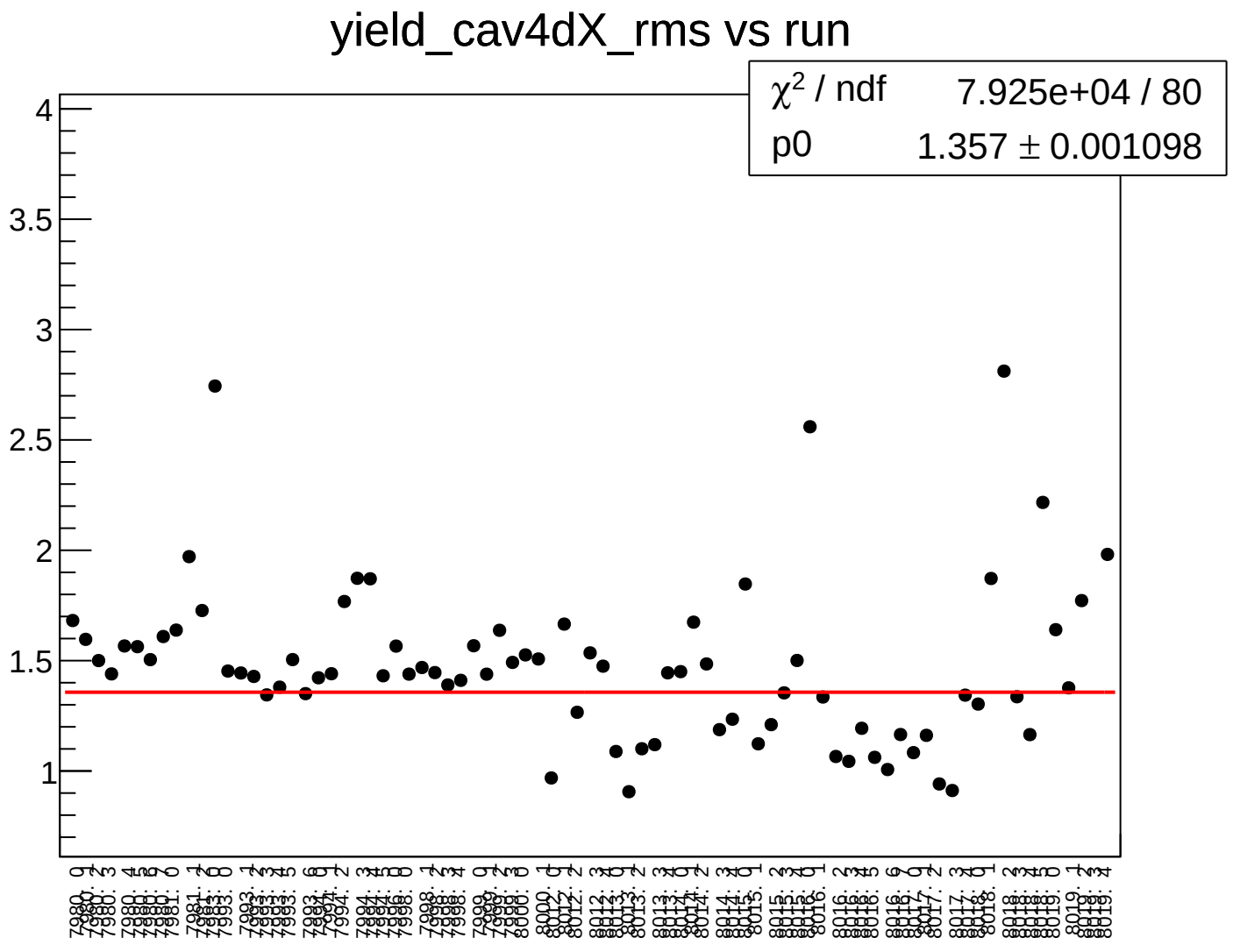

yield_cav4cY_mean vs run
χ² / ndf 3.232e+05 / 80
p0 −36.42 ± 0.0003918
−36
−36.2
−36.4
−36.6
−36.8
−37
−37.2
−37.4
pull
Entries 81
Mean −64.19
Std Dev 98.15
100
50
0
−50
−100
−150
−200

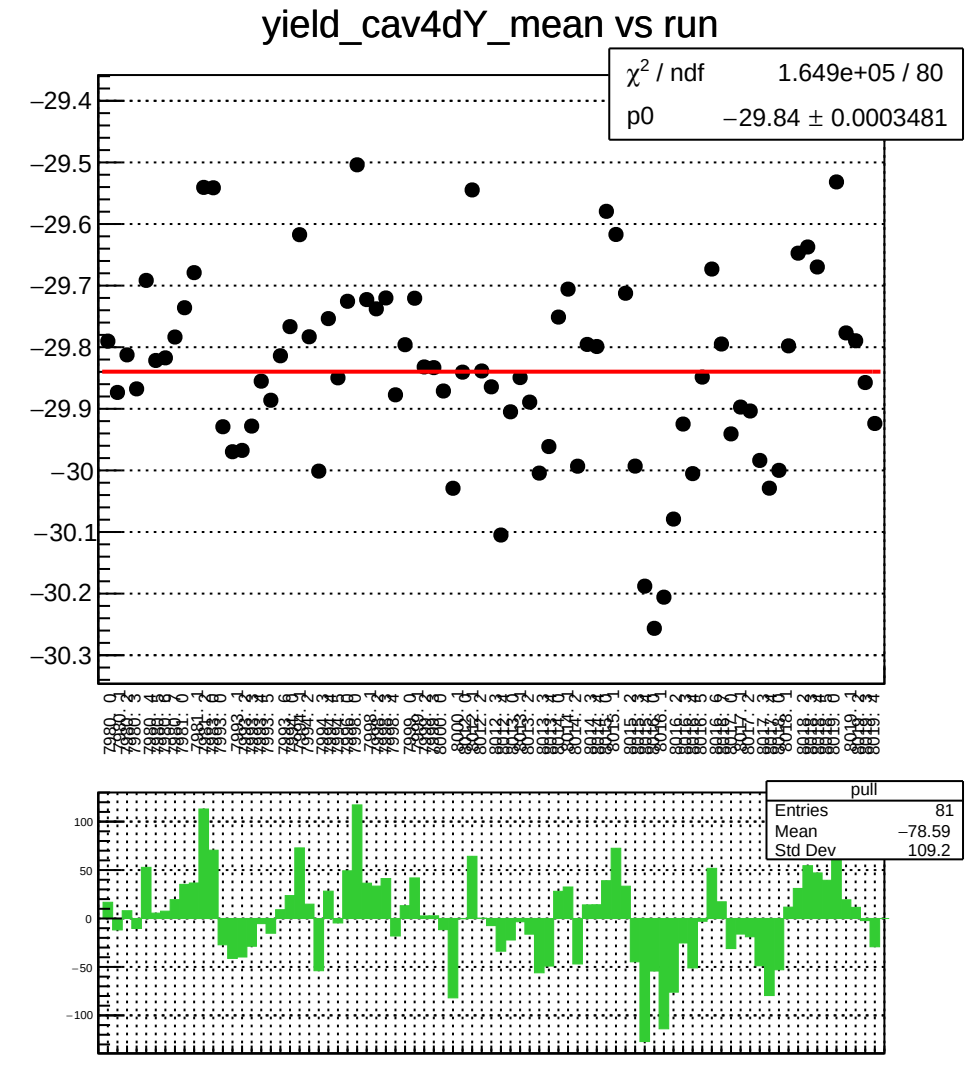

pull1D
Entries 81
Mean −2.707
Std Dev 3.291
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

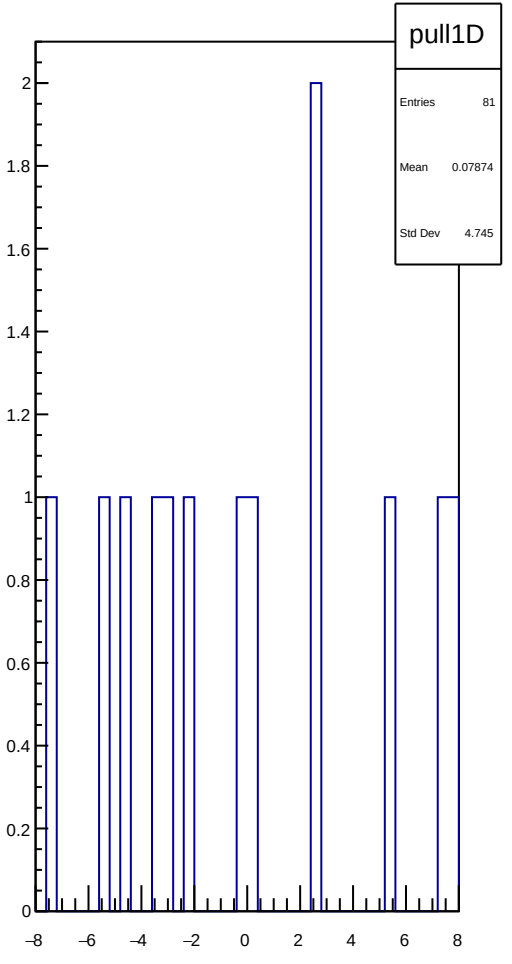

yield_cav4cY_rms vs run
χ² / ndf 1.017e+05 / 80
p0 0.34 ± 0.000277
1.2
1
0.8
0.6
0.4
0.2

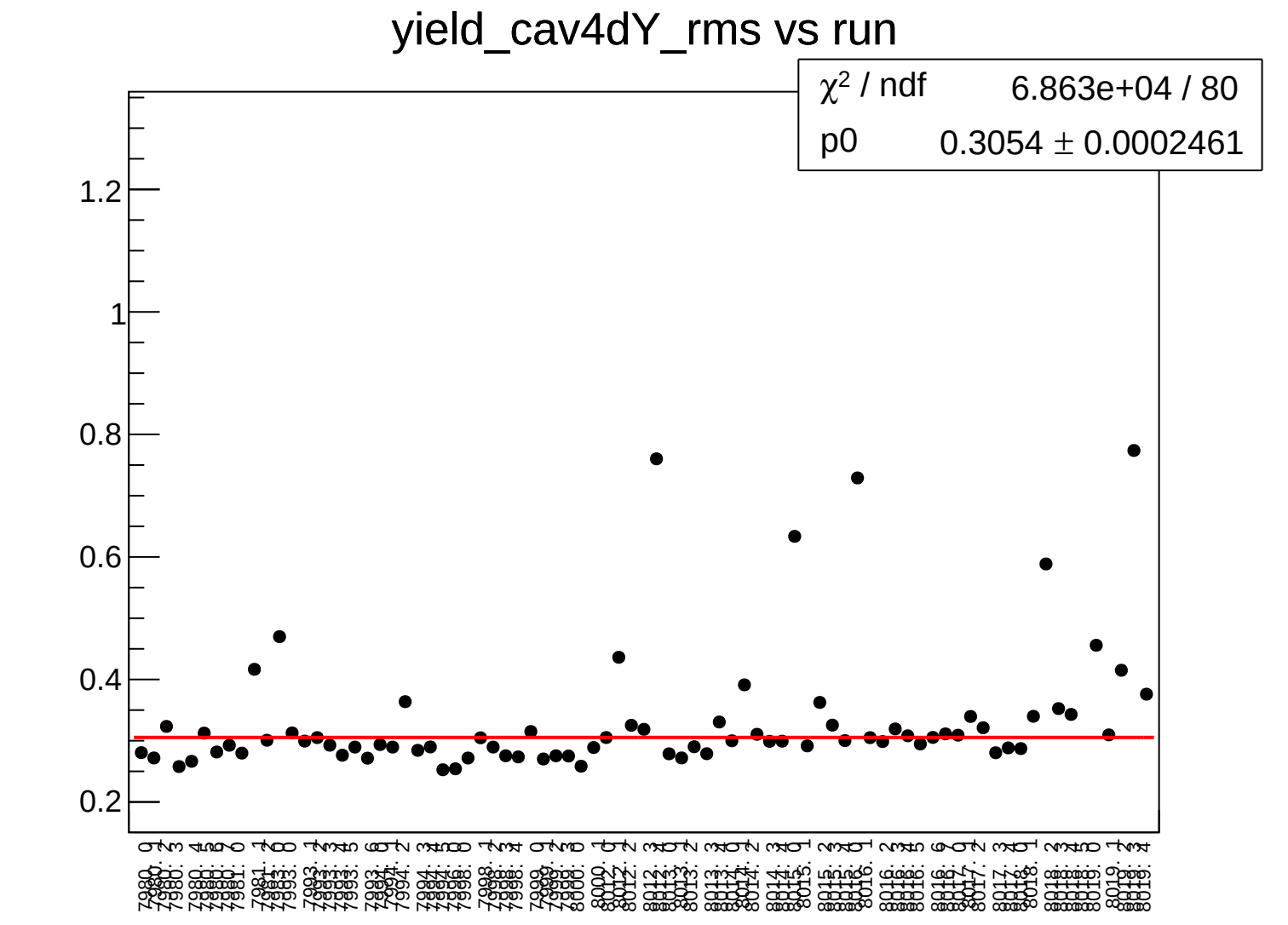

yield_cav4dX_mean vs run
χ² / ndf 1.109e+05 / 80
p0 1.915 ± 0.001552
pull
Entries 81
Mean −165.7
Std Dev 200.6

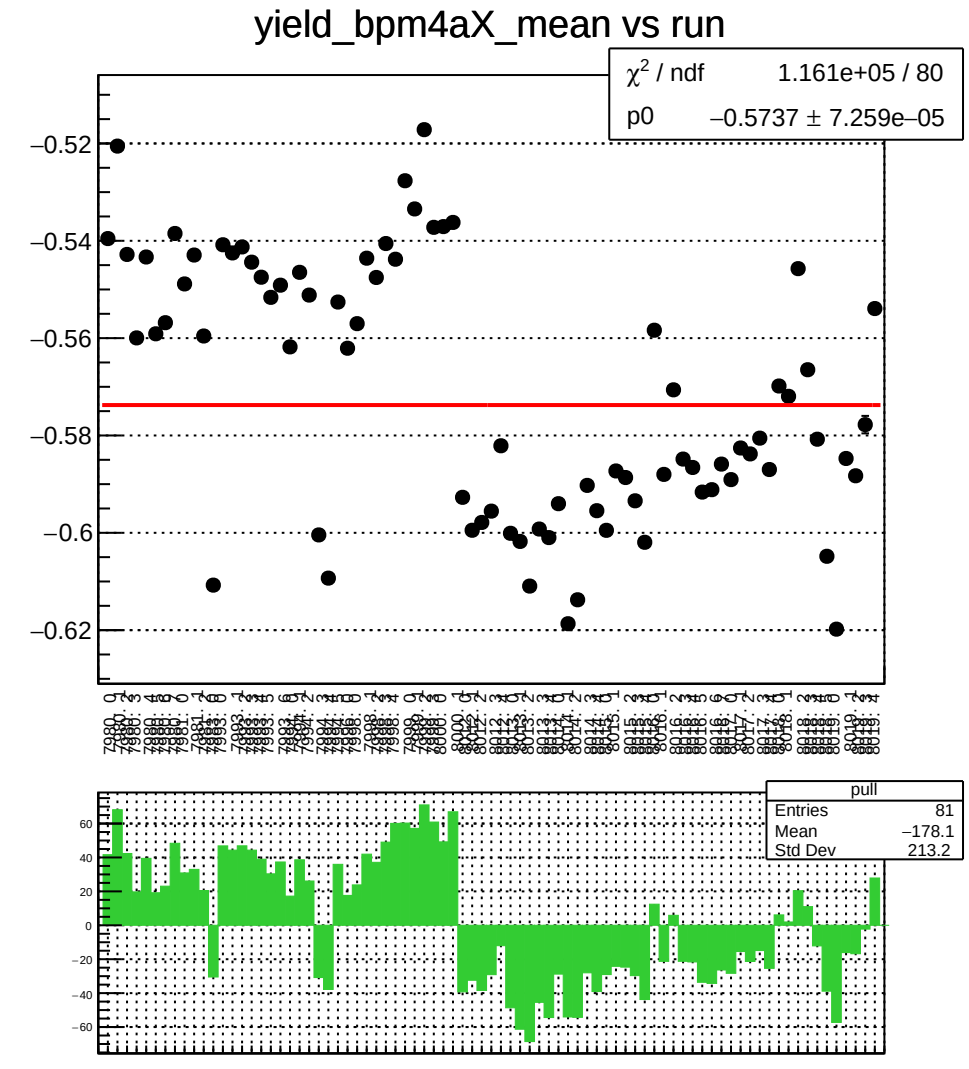

pull1D
Entries 81
Mean 0.7658
Std Dev 5.084

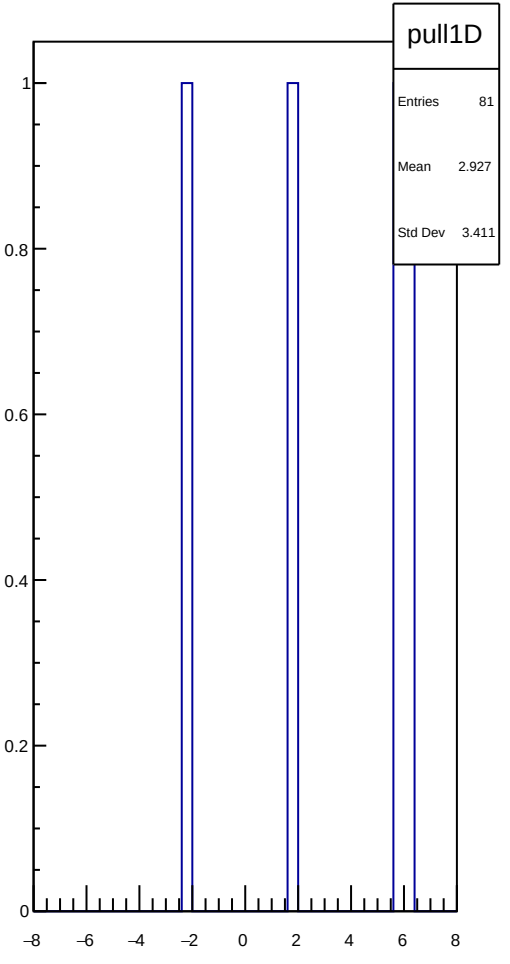

yield_cav4dX_rms vs run
χ² / ndf 7.925e+04 / 80
p0 1.357 ± 0.001098
4
3.5
3
2.5
2
1.5
1

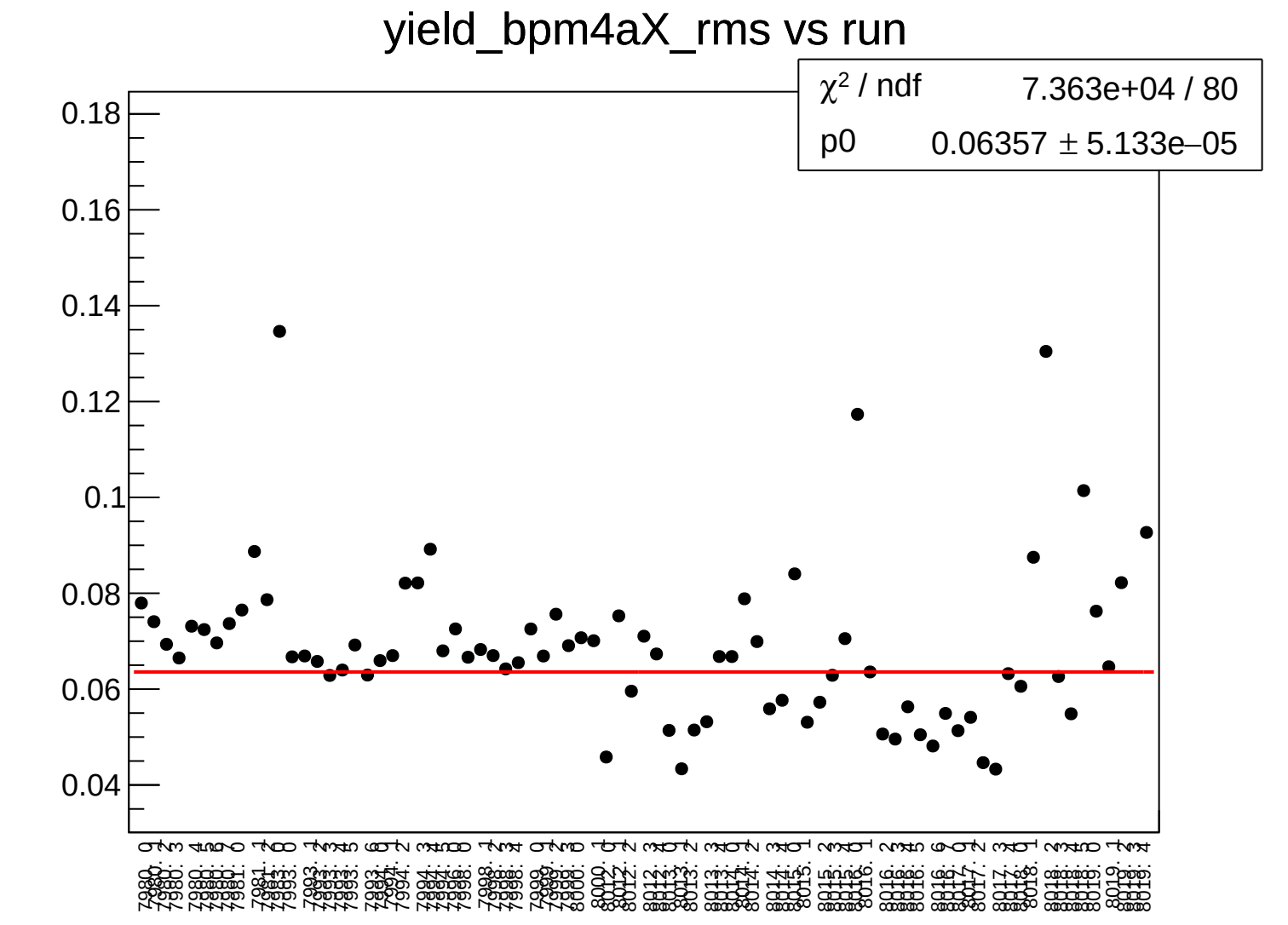

yield_cav4dY_mean vs run
χ² / ndf 1.649e+05 / 80
p0 −29.84 ± 0.0003481
−29.4
−29.5
−29.6
−29.7
−29.8
−29.9
−30
−30.1
−30.2
−30.3
pull
Entries 81
Mean −78.59
Std Dev 109.2
100
50
0
−50
−100

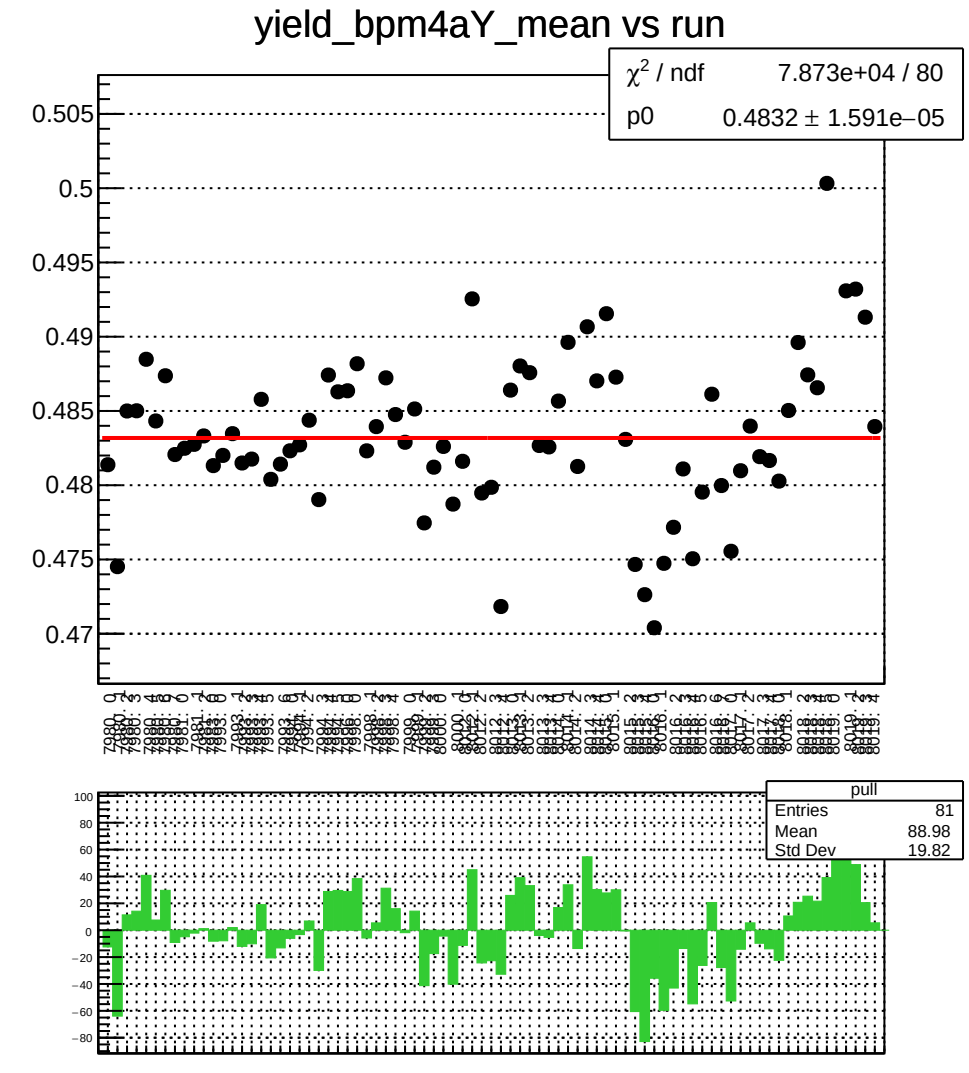

pull1D
Entries 81
Mean 0.07874
Std Dev 4.745
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

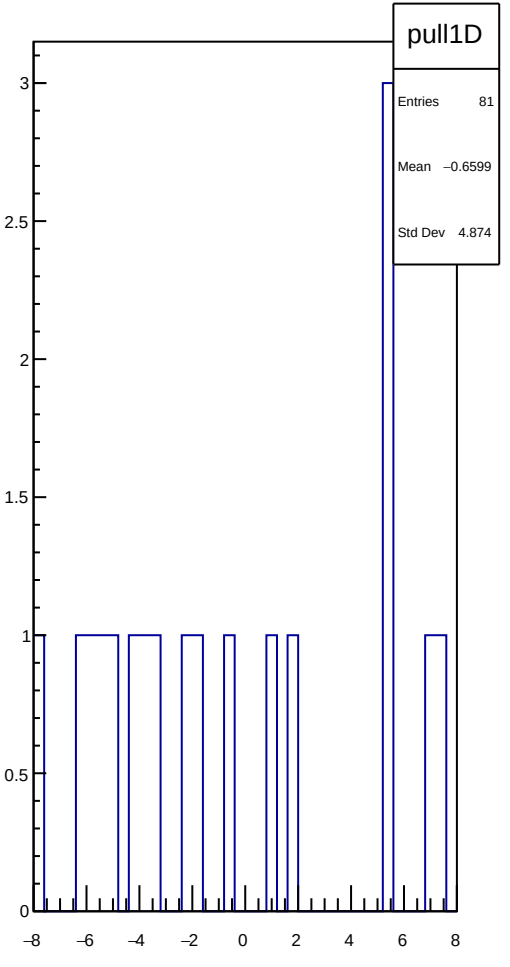

yield_cav4dY_rms vs run
χ² / ndf 6.863e+04 / 80
p0 0.3054 ± 0.0002461
1.2
1
0.8
0.6
0.4
0.2

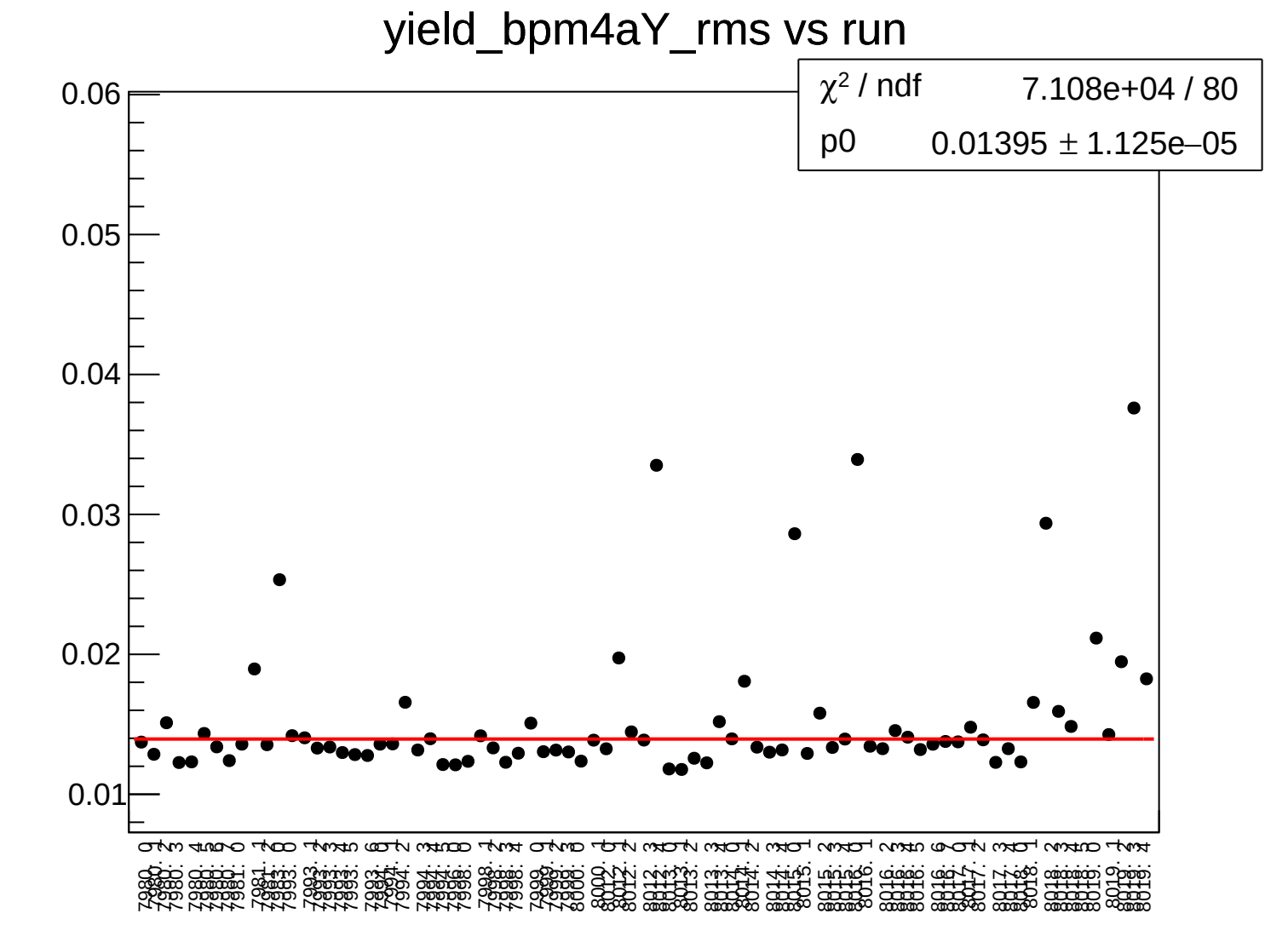

yield_bpm4aX_mean vs run
χ² / ndf 1.161e+05 / 80
p0 −0.5737 ± 7.259e−05
−0.52
−0.54
−0.56
−0.58
−0.6
−0.62
pull
Entries 81
Mean −178.1
Std Dev 213.2
60
40
20
0
−20
−40
−60

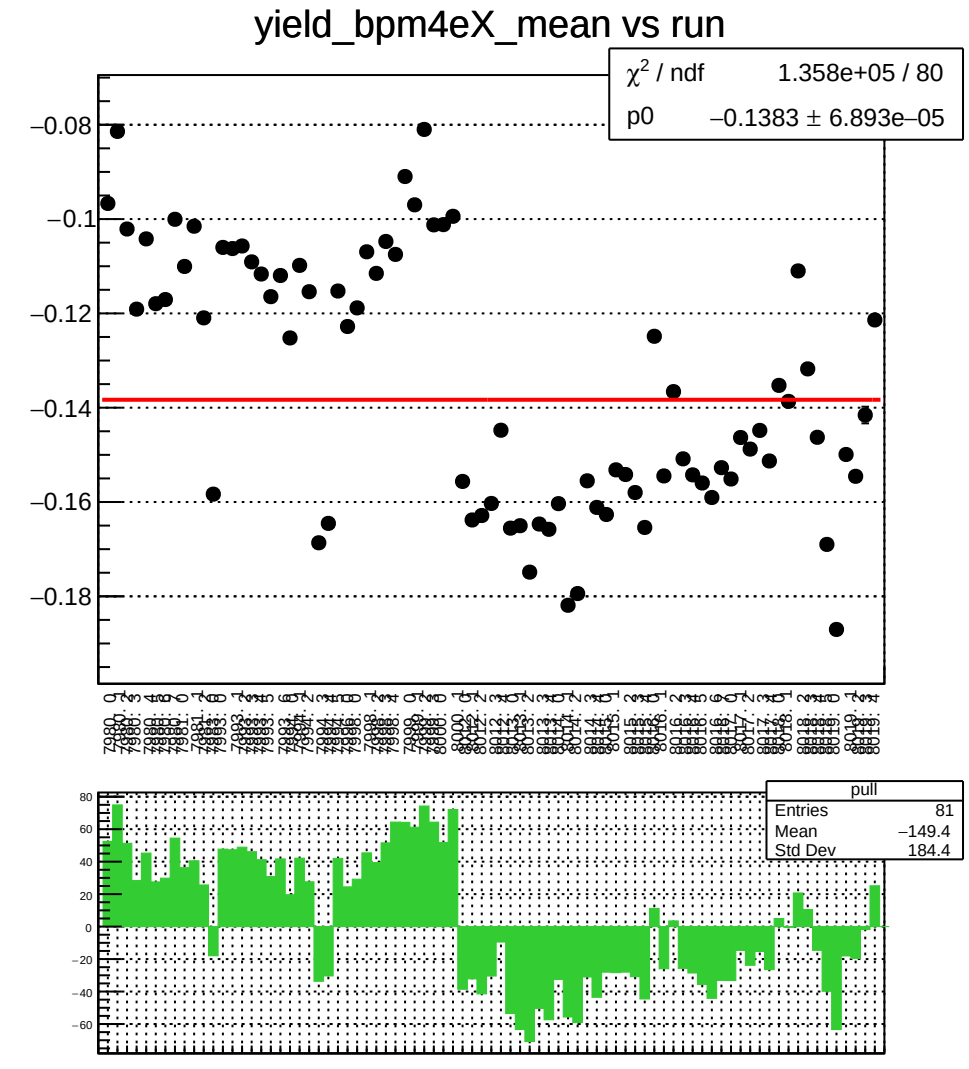

pull1D
Entries 81
Mean 2.927
Std Dev 3.411
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

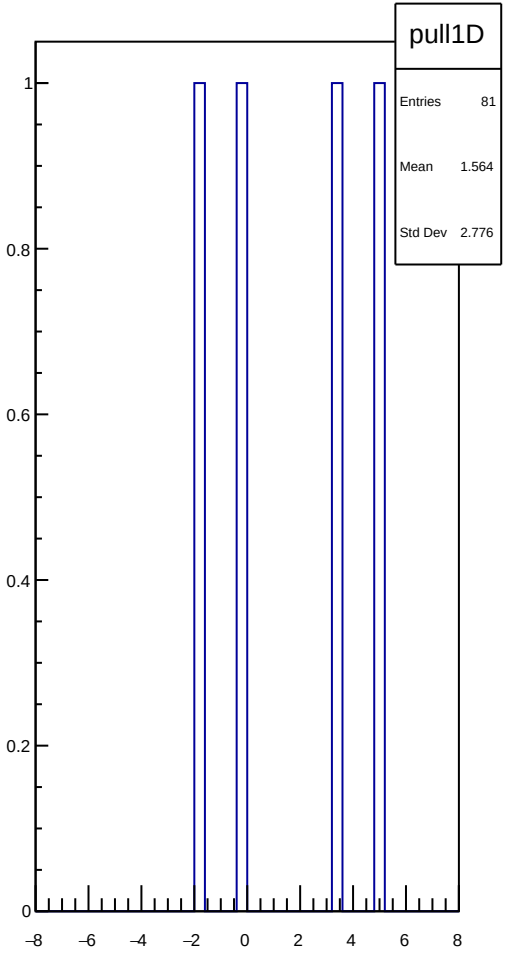

yield_bpm4aX_rms vs run
χ² / ndf 7.363e+04 / 80
p0 0.06357 ± 5.133e–05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

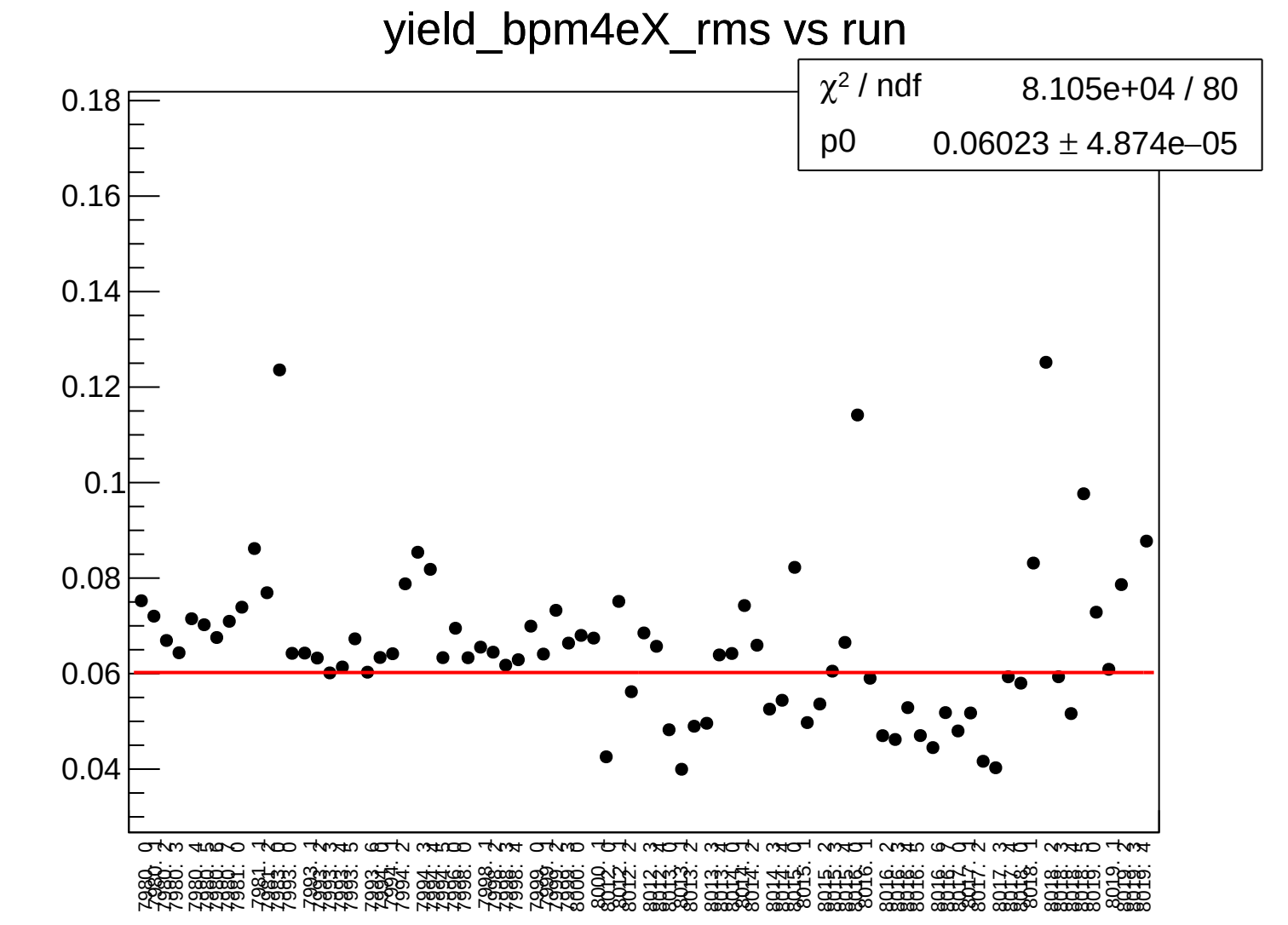

yield_bpm4aY_mean vs run
χ² / ndf 7.873e+04 / 80
p0 0.4832 ± 1.591e−05
0.505
0.5
0.495
0.49
0.485
0.48
0.475
0.47
pull
Entries 81
Mean 88.98
Std Dev 19.82
100
80
60
40
20
0
−20
−40
−60
−80

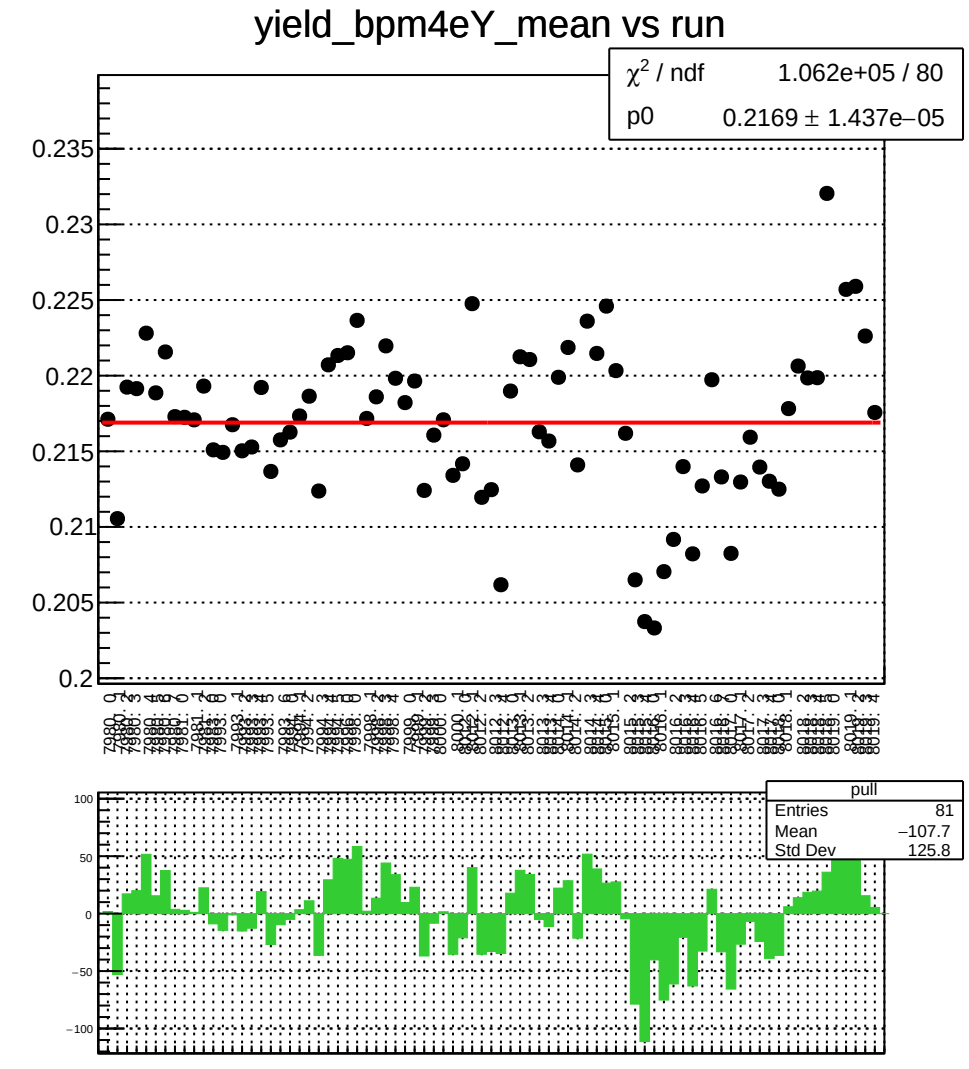

pull1D
Entries 81
Mean −0.6599
Std Dev 4.874
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

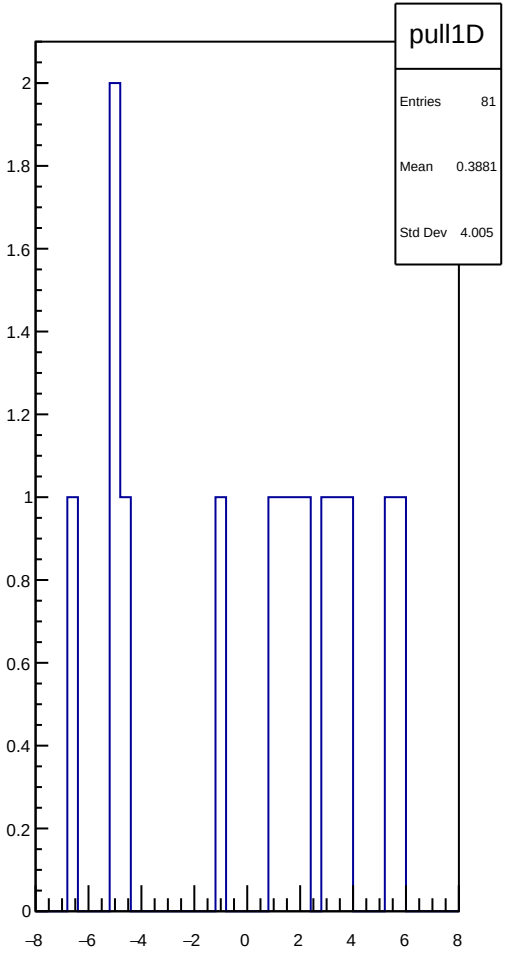

yield_bpm4aY_rms vs run
χ² / ndf 7.108e+04 / 80
p0 0.01395 ± 1.125e–05
0.06
0.05
0.04
0.03
0.02
0.01

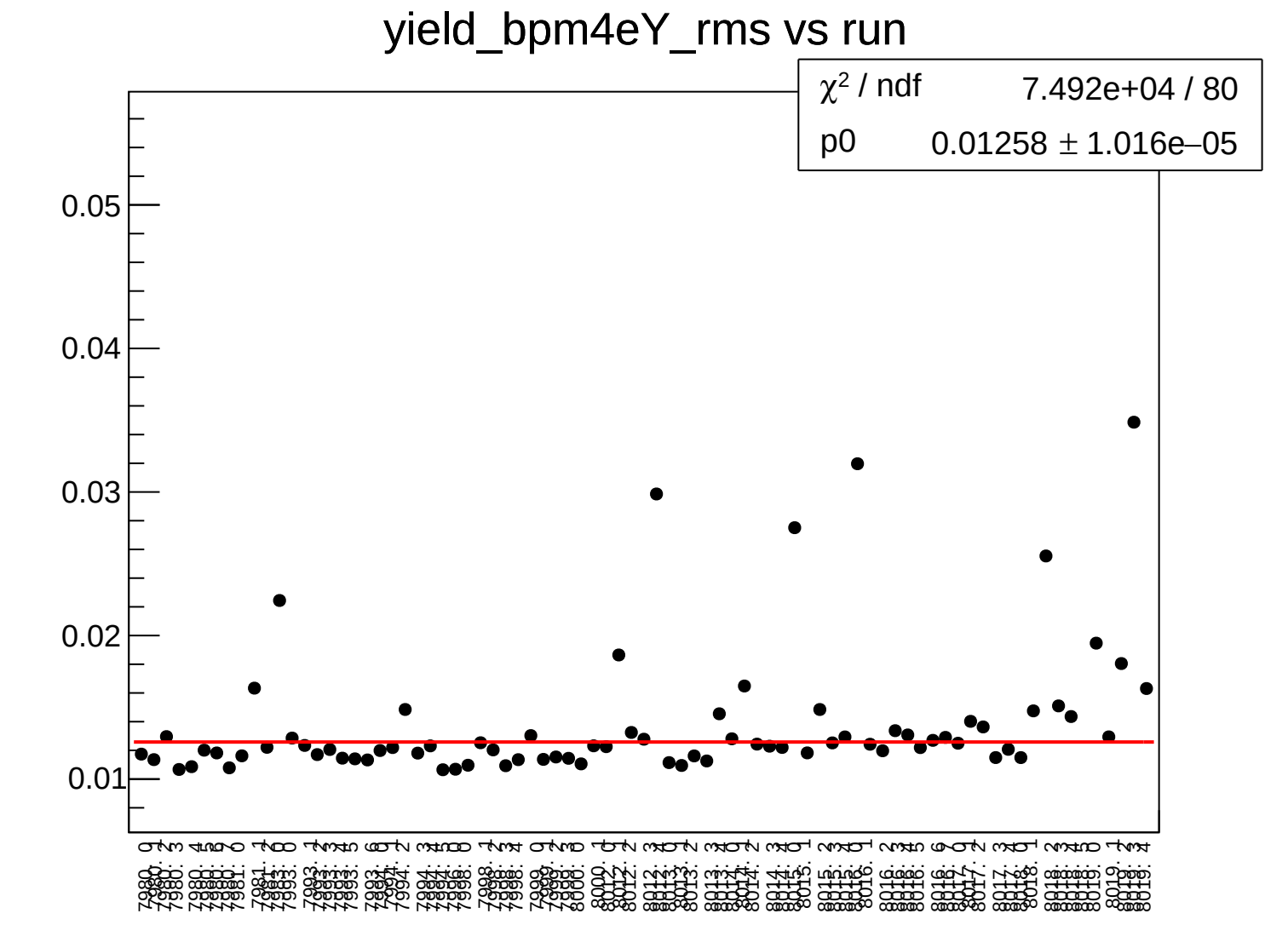

yield_bpm4eX_mean vs run
χ² / ndf 1.358e+05 / 80
p0 −0.1383 ± 6.893e−05
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 81
Mean −149.4
Std Dev 184.4
80
60
40
20
0
−20
−40
−60

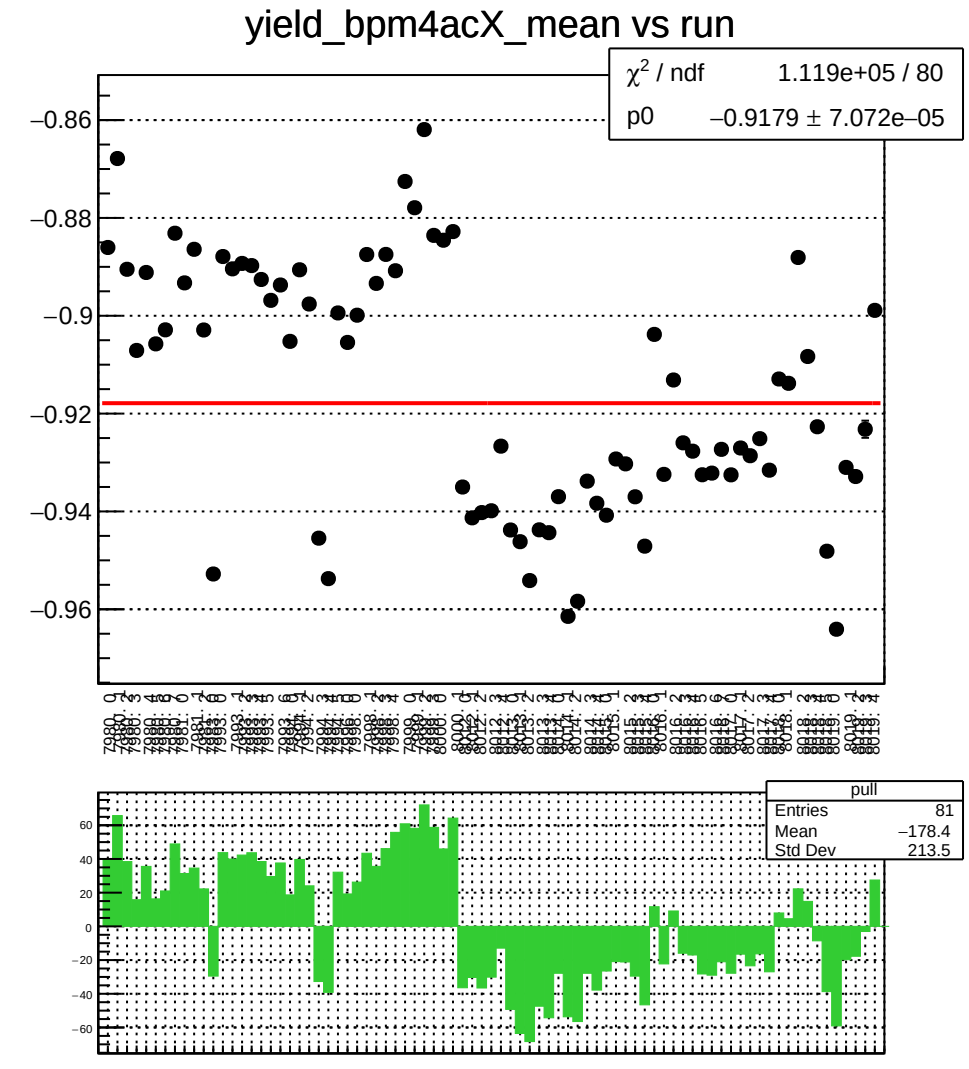

pull1D
Entries 81
Mean 1.564
Std Dev 2.776
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

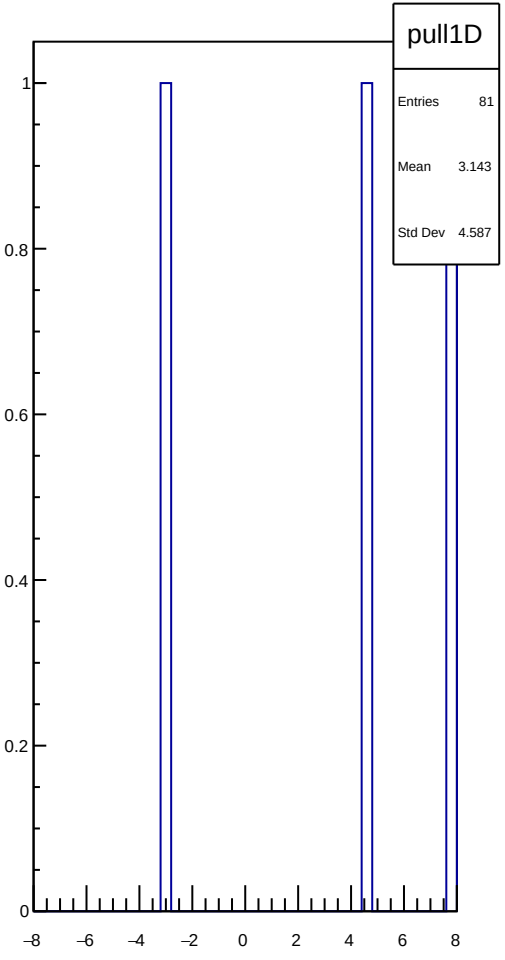

yield_bpm4eX_rms vs run
χ² / ndf 8.105e+04 / 80
p0 0.06023 ± 4.874e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

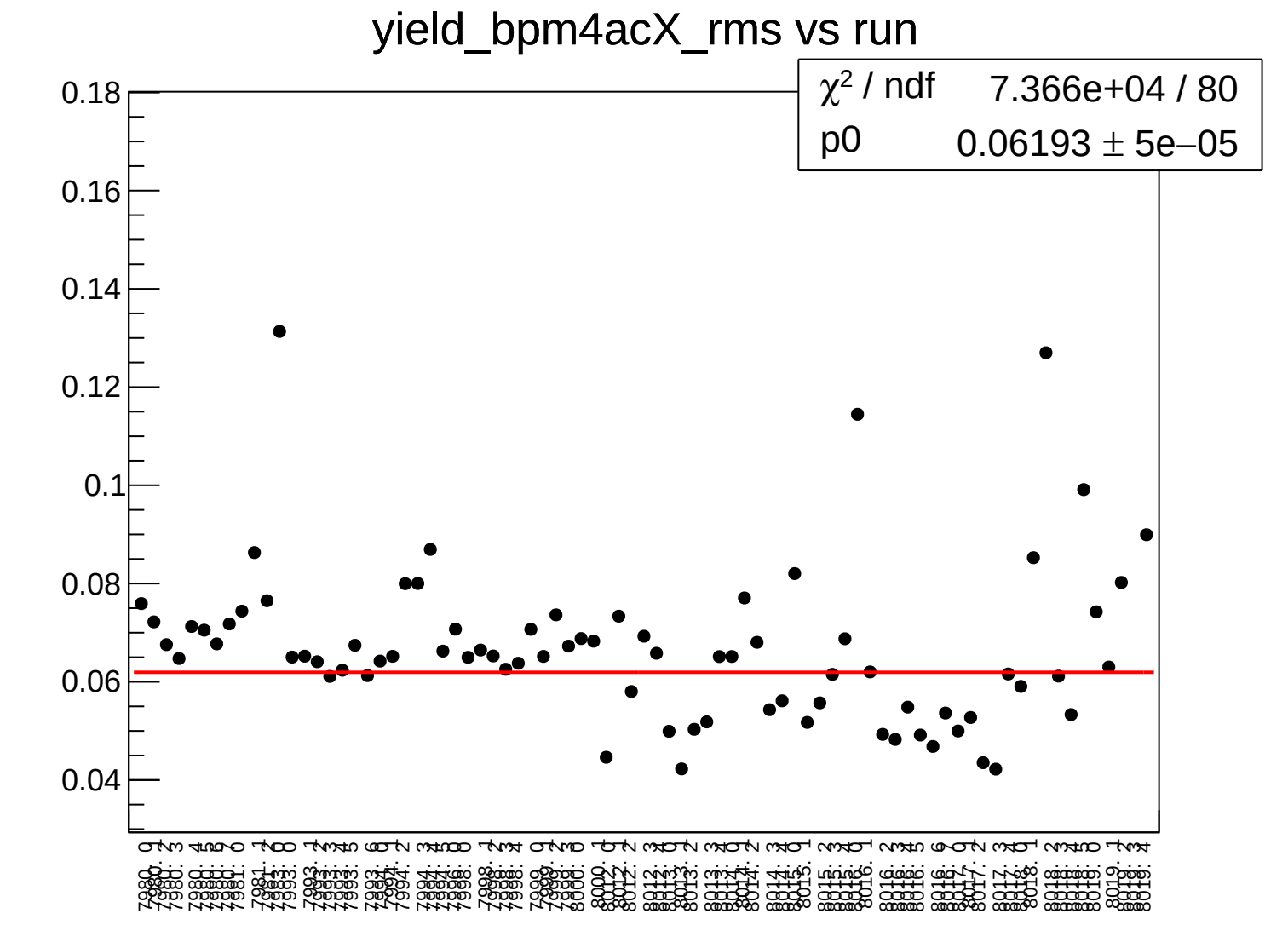

yield_bpm4eY_mean vs run
χ² / ndf 1.062e+05 / 80
p0 0.2169 ± 1.437e−05
0.235
0.23
0.225
0.22
0.215
0.21
0.205
0.2
pull
Entries 81
Mean −107.7
Std Dev 125.8
100
50
0
−50
−100

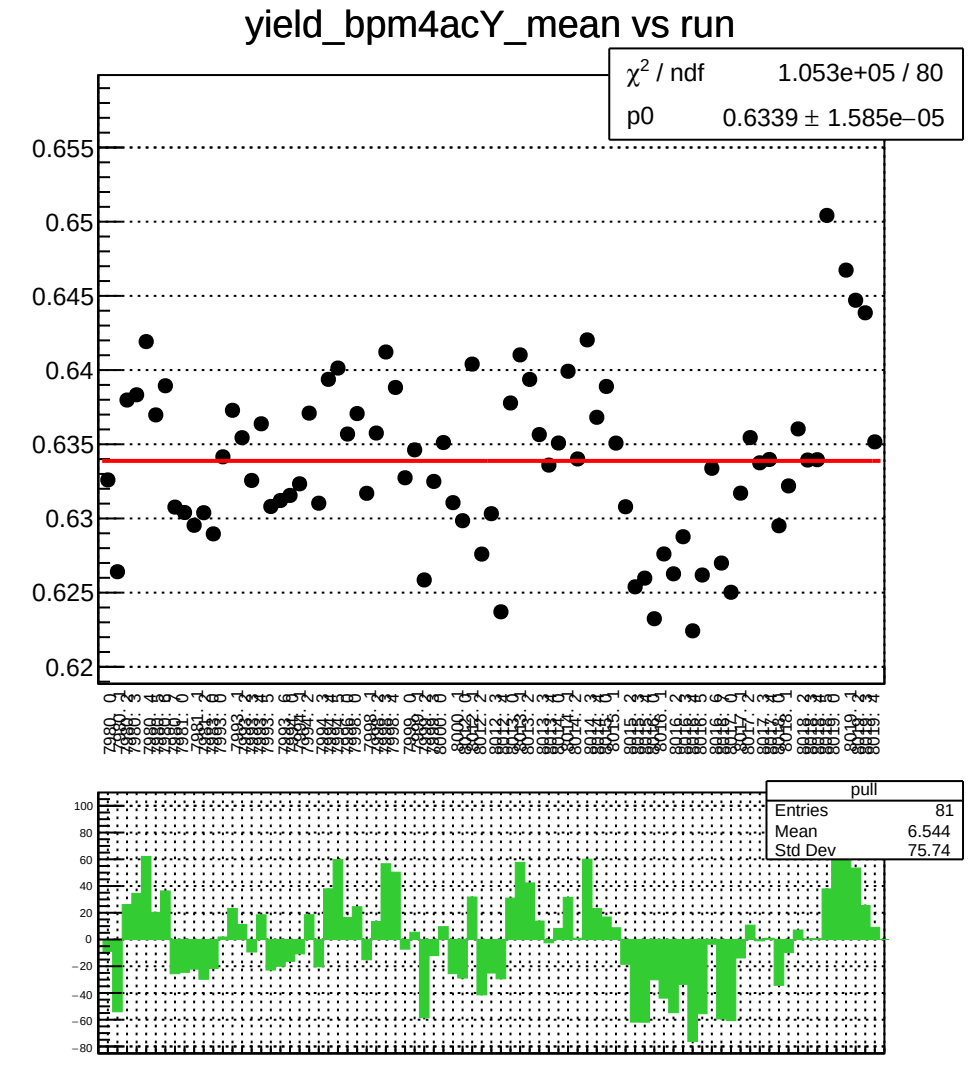

pull1D
Entries 81
Mean 0.3881
Std Dev 4.005
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

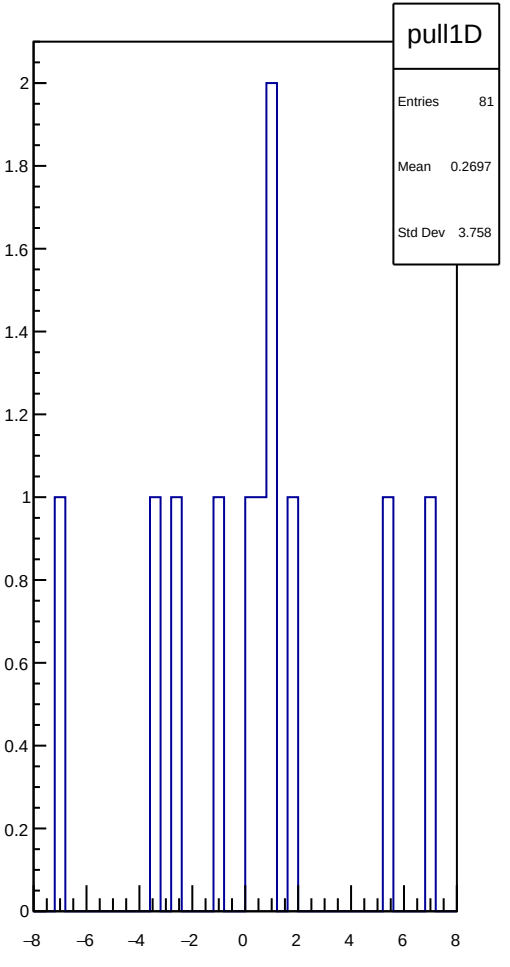

yield_bpm4eY_rms vs run
χ² / ndf 7.492e+04 / 80
p0 0.01258 ± 1.016e–05
0.05
0.04
0.03
0.02
0.01

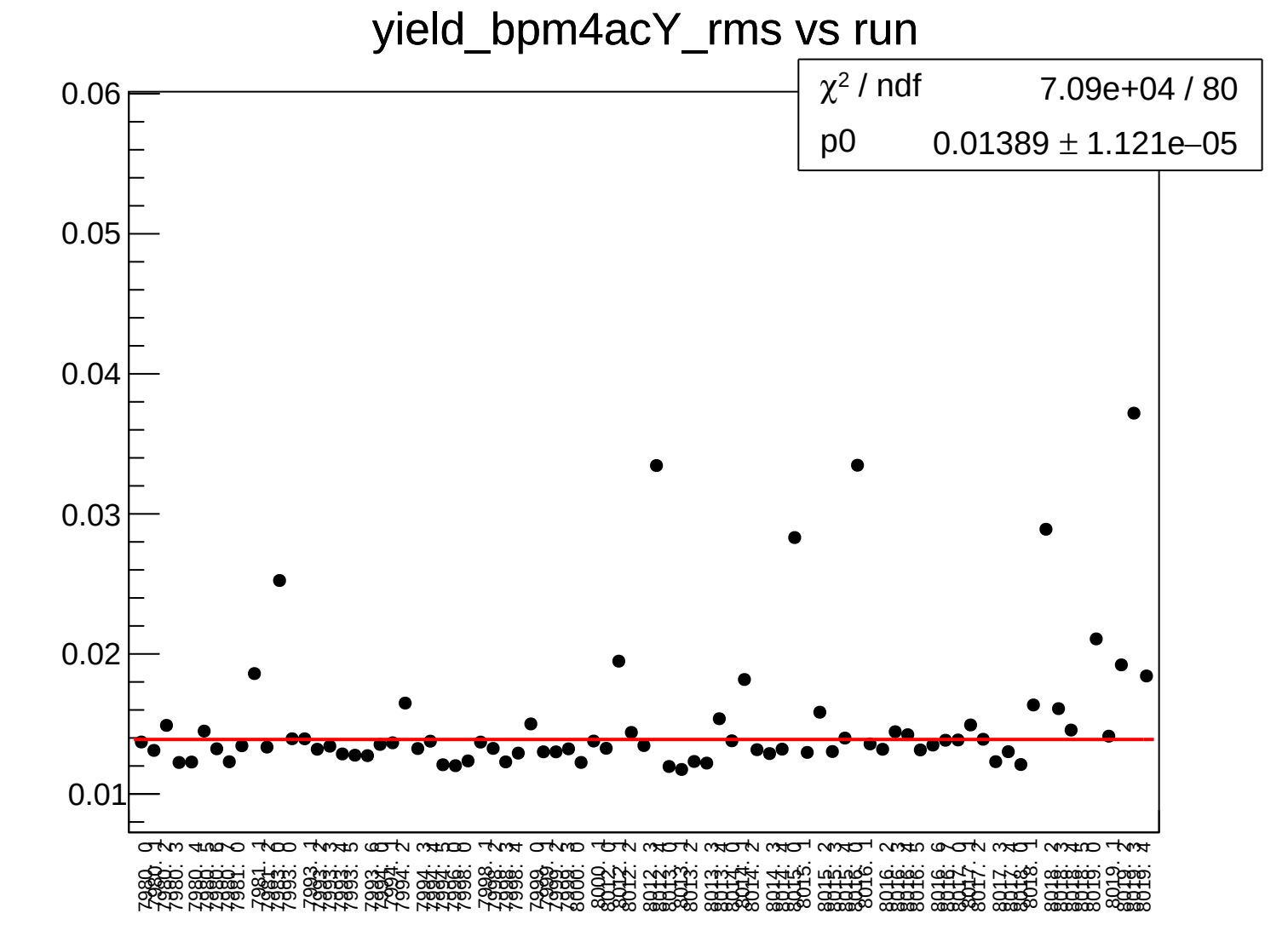

yield_bpm4acX_mean vs run
χ² / ndf 1.119e+05 / 80
p0 −0.9179 ± 7.072e−05
−0.86
−0.88
−0.9
−0.92
−0.94
−0.96
pull
Entries 81
Mean −178.4
Std Dev 213.5
60
40
20
0
−20
−40
−60

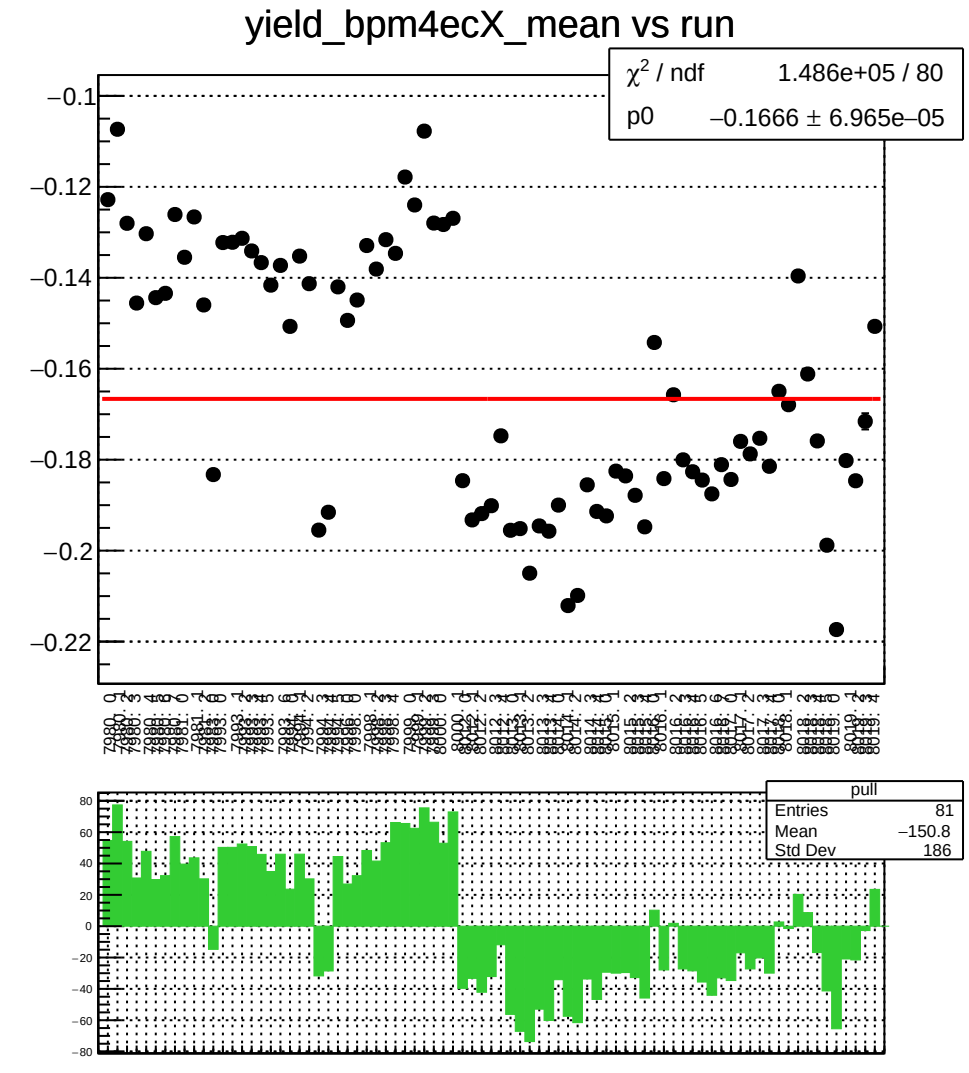

pull1D
Entries 81
Mean 3.143
Std Dev 4.587
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

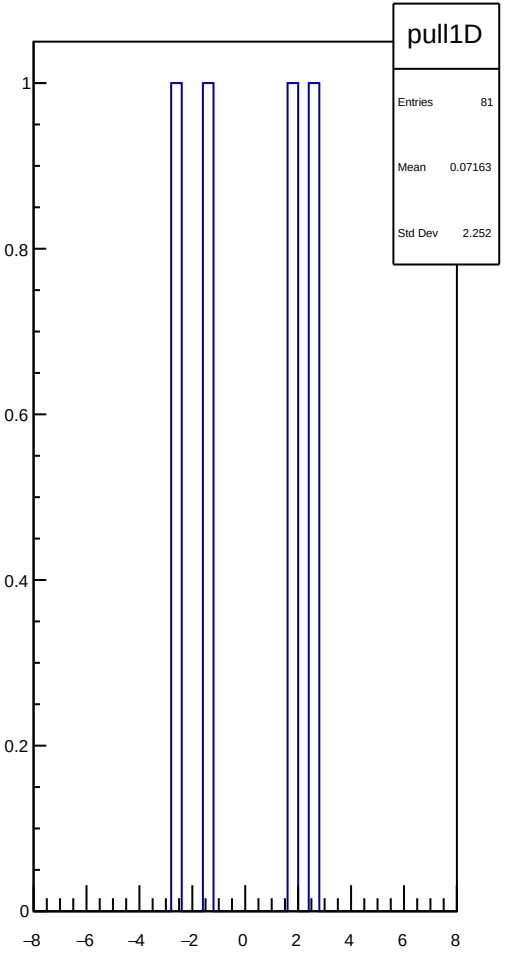

yield_bpm4acX_rms vs run
χ² / ndf 7.366e+04 / 80
p0 0.06193 ± 5e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

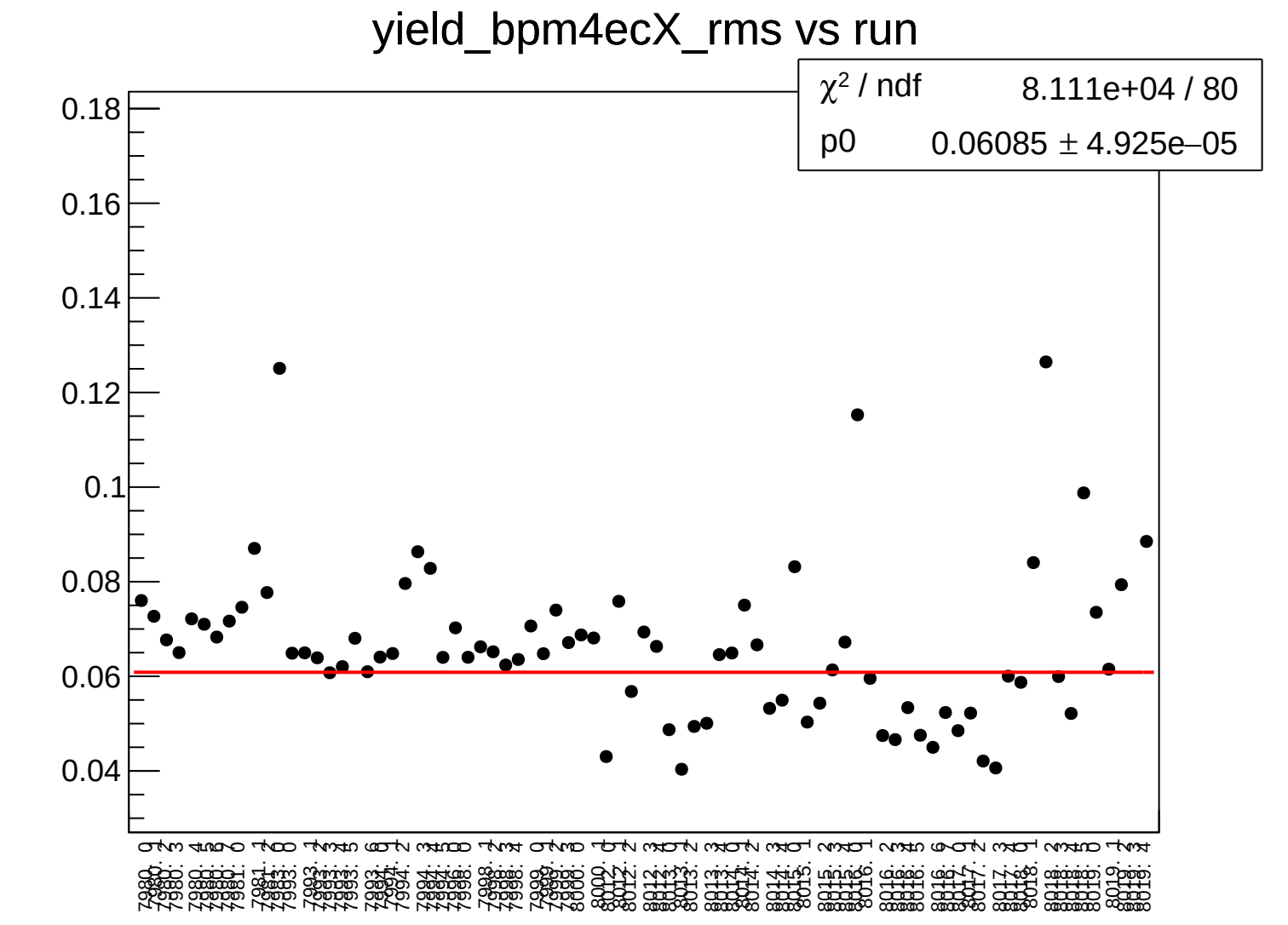

yield_bpm4acY_mean vs run
χ² / ndf 1.053e+05 / 80
p0 0.6339 ± 1.585e−05
0.655
0.65
0.645
0.64
0.635
0.63
0.625
0.62
pull
Entries 81
Mean 6.544
Std Dev 75.74
100
80
60
40
20
0
−20
−40
−60
−80

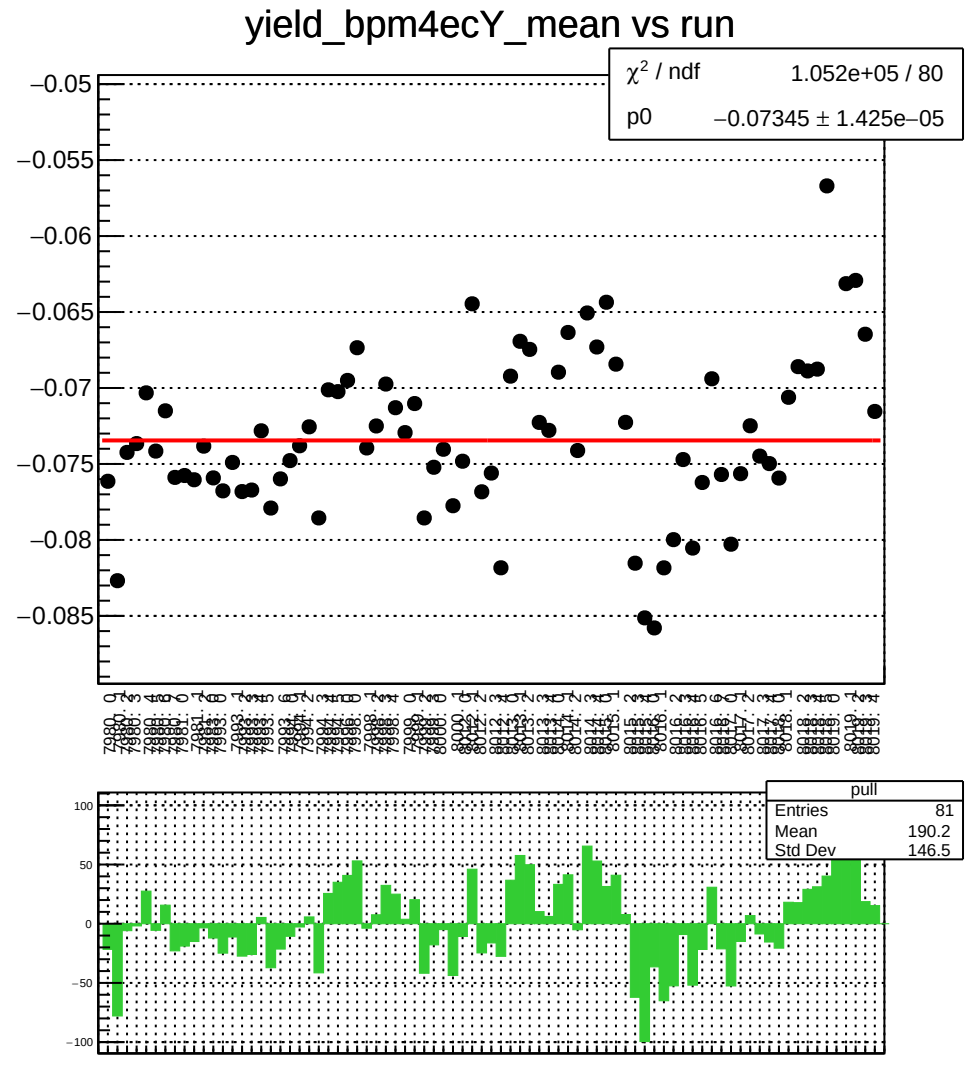

pull1D
Entries 81
Mean 0.2697
Std Dev 3.758
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

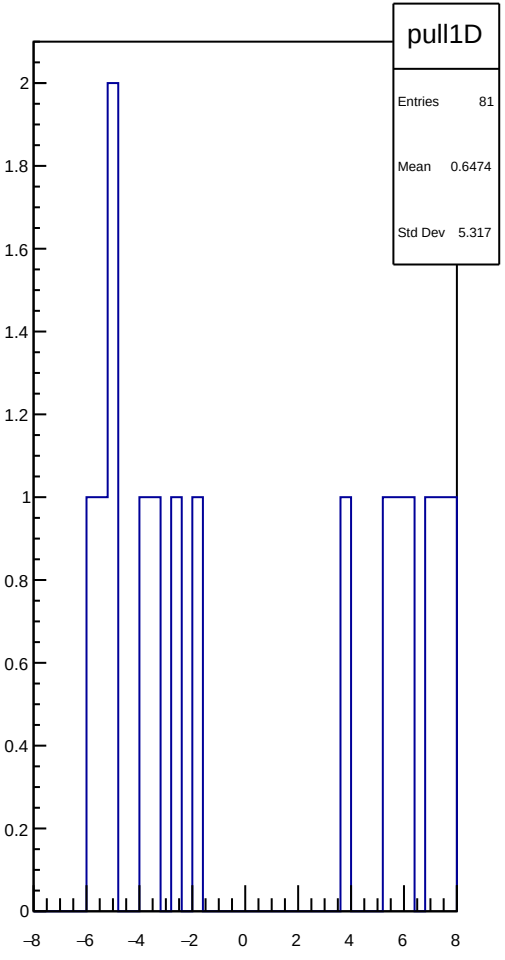

yield_bpm4acY_rms vs run
χ² / ndf 7.09e+04 / 80
p0 0.01389 ± 1.121e−05
0.06
0.05
0.04
0.03
0.02
0.01

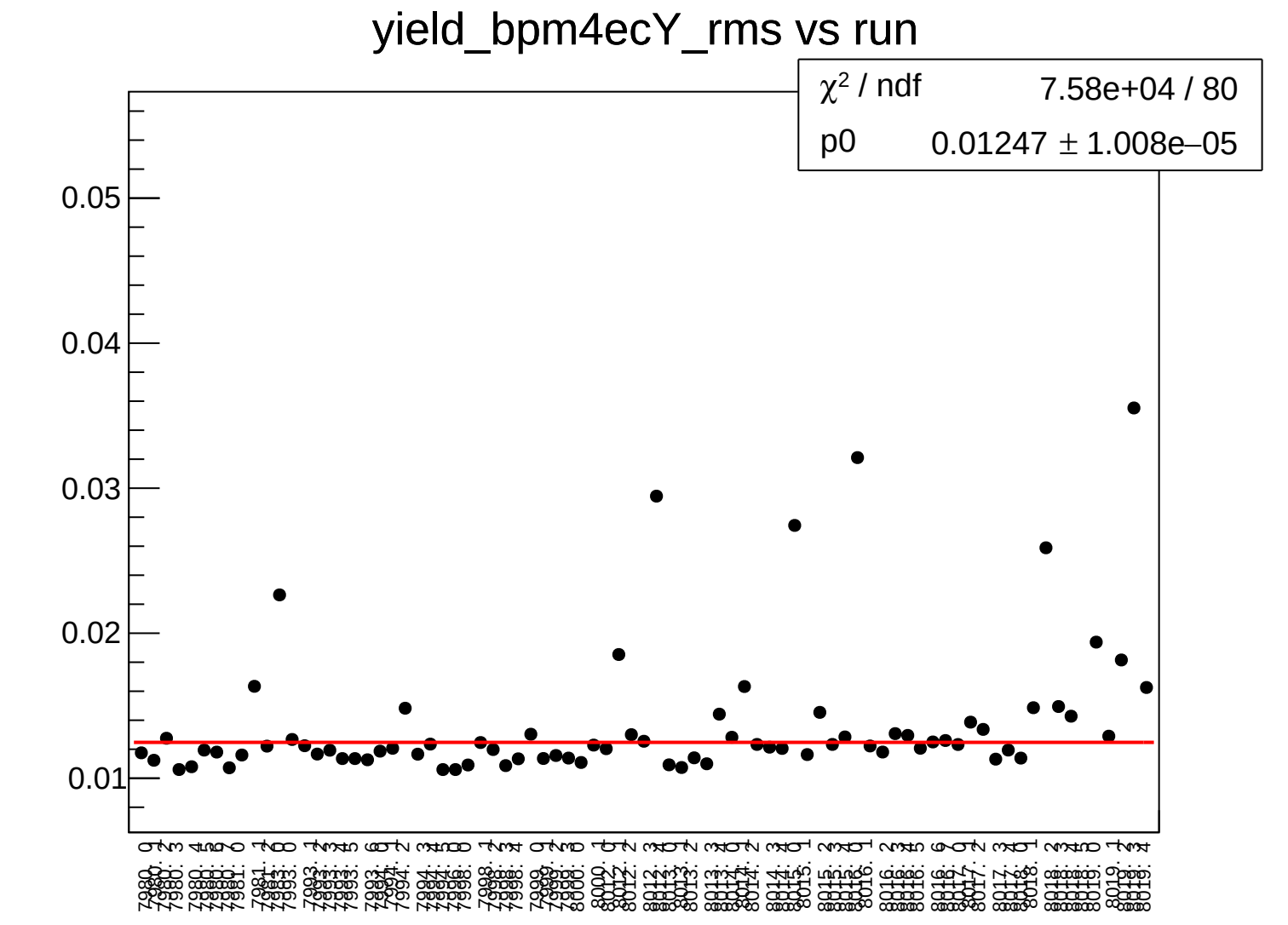

yield_bpm4ecX_mean vs run
χ² / ndf 1.486e+05 / 80
p0 −0.1666 ± 6.965e−05
pull
Entries 81
Mean −150.8
Std Dev 186

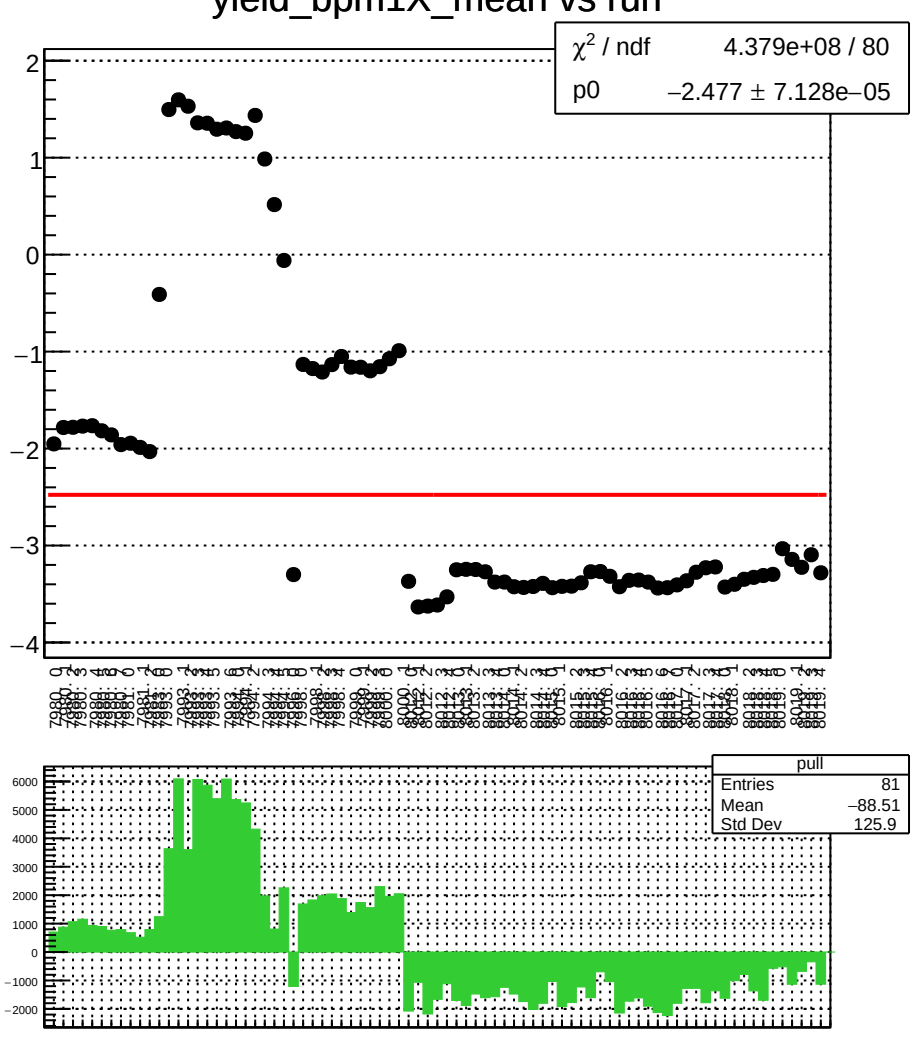

pull1D
Entries 81
Mean 0.07163
Std Dev 2.252

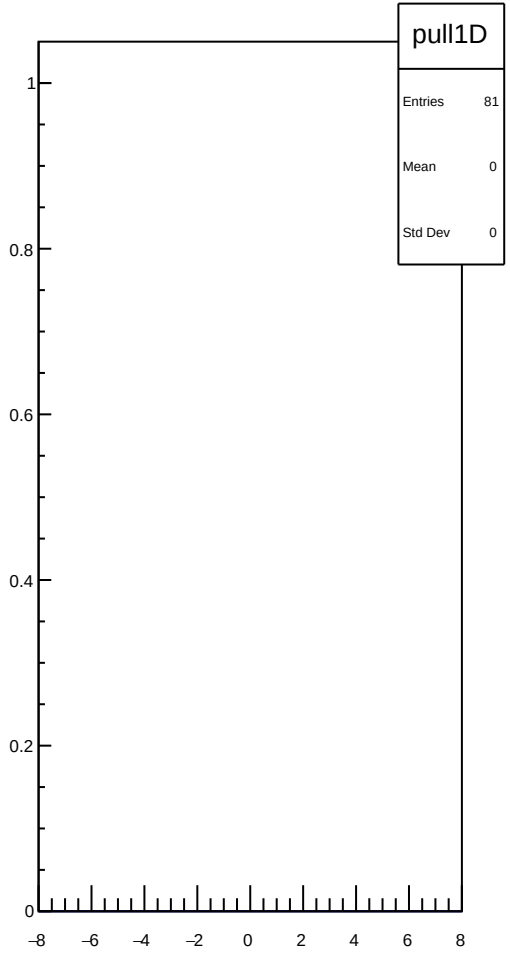

yield_bpm4ecX_rms vs run
χ² / ndf 8.111e+04 / 80
p0 0.06085 ± 4.925e−05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04

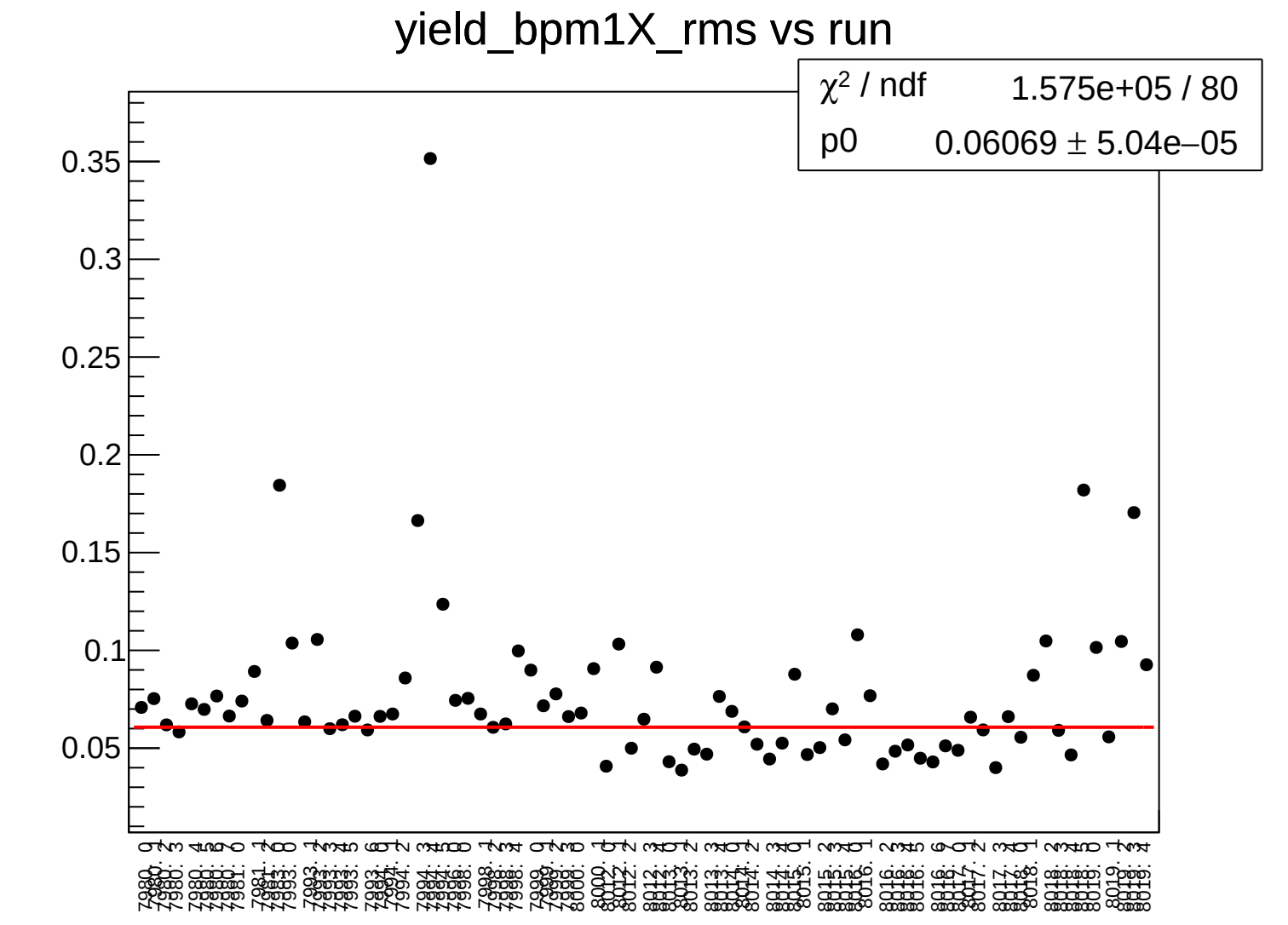

yield_bpm4ecY_mean vs run
χ² / ndf 1.052e+05 / 80
p0 −0.07345 ± 1.425e−05
pull
Entries 81
Mean 190.2
Std Dev 146.5

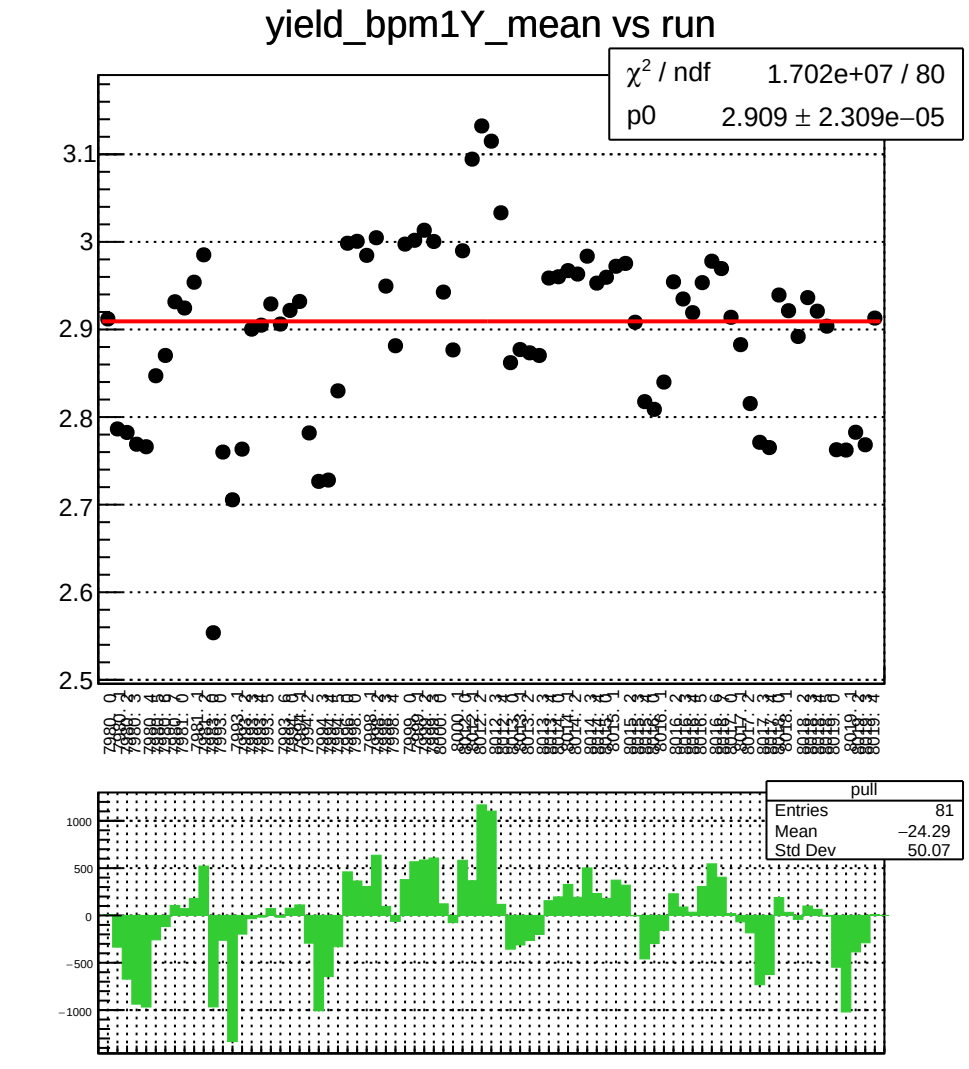

pull1D
Entries 81
Mean 0.6474
Std Dev 5.317

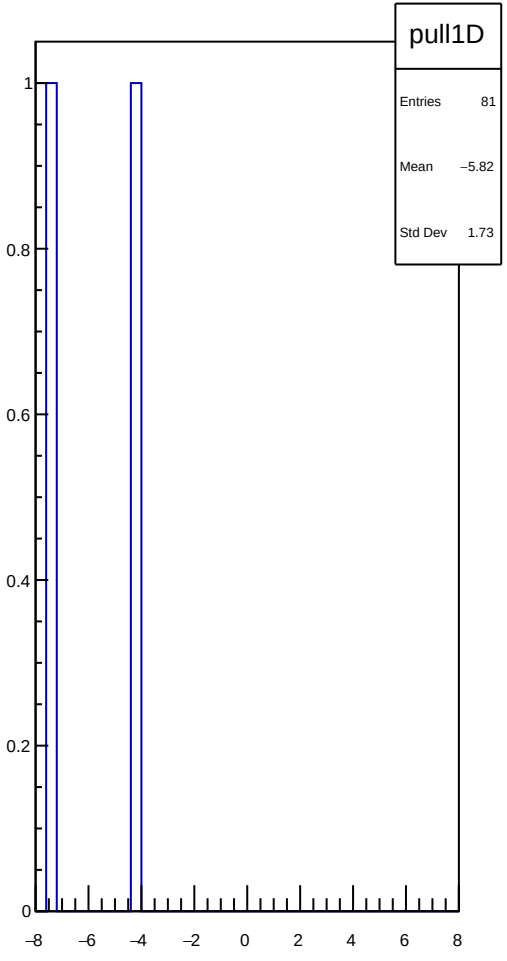

yield_bpm4ecY_rms vs run
χ² / ndf 7.58e+04 / 80
p0 0.01247 ± 1.008e−05
0.05
0.04
0.03
0.02
0.01

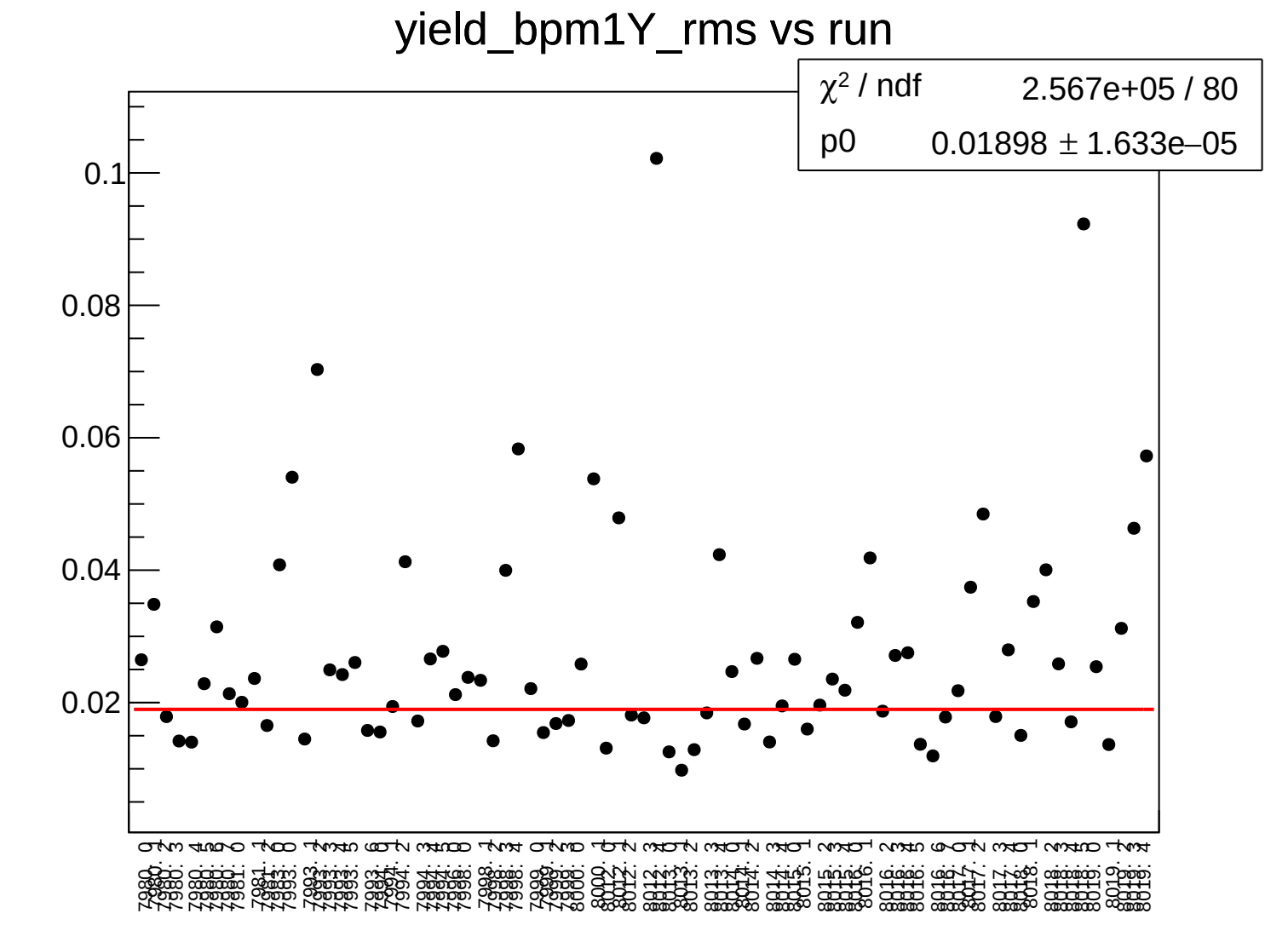

yield_bpm1X_mean vs run
χ² / ndf 4.379e+08 / 80
p0 −2.477 ± 7.128e−05
pull
Entries 81
Mean −88.51
Std Dev 125.9

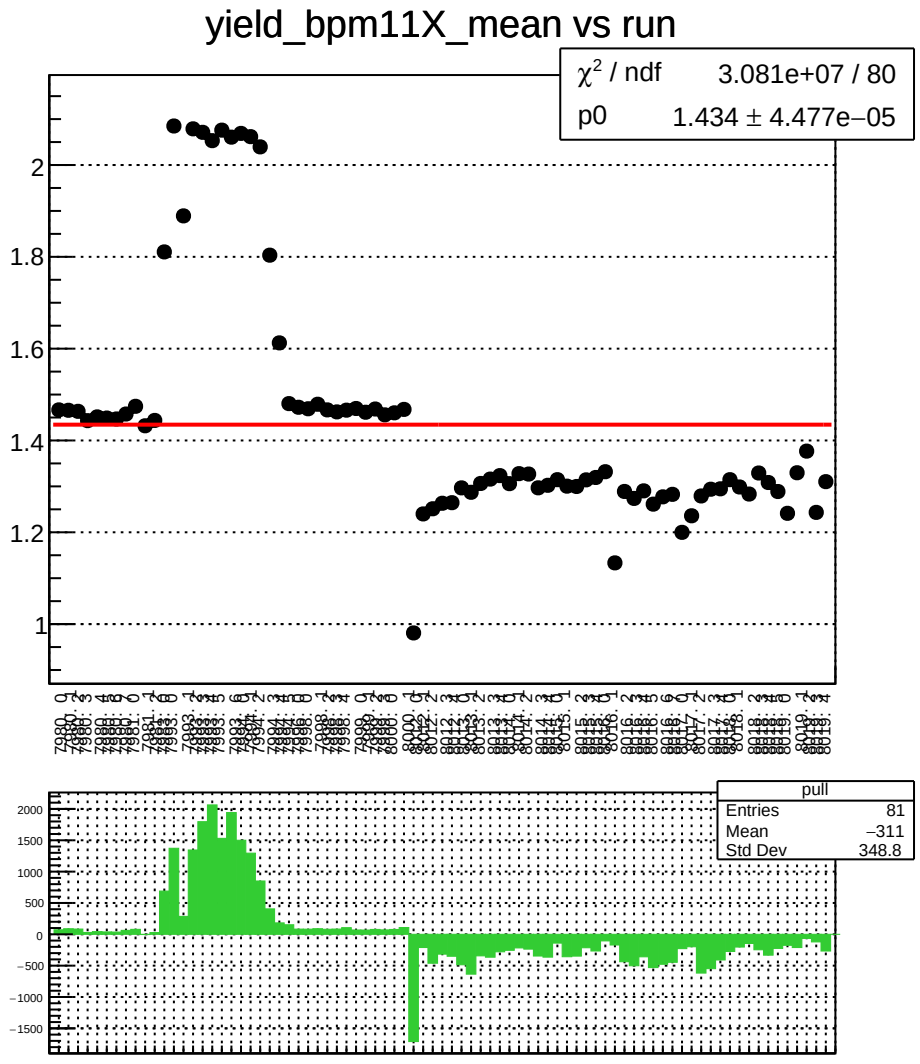

pull1D
Entries 81
Mean 0
Std Dev 0

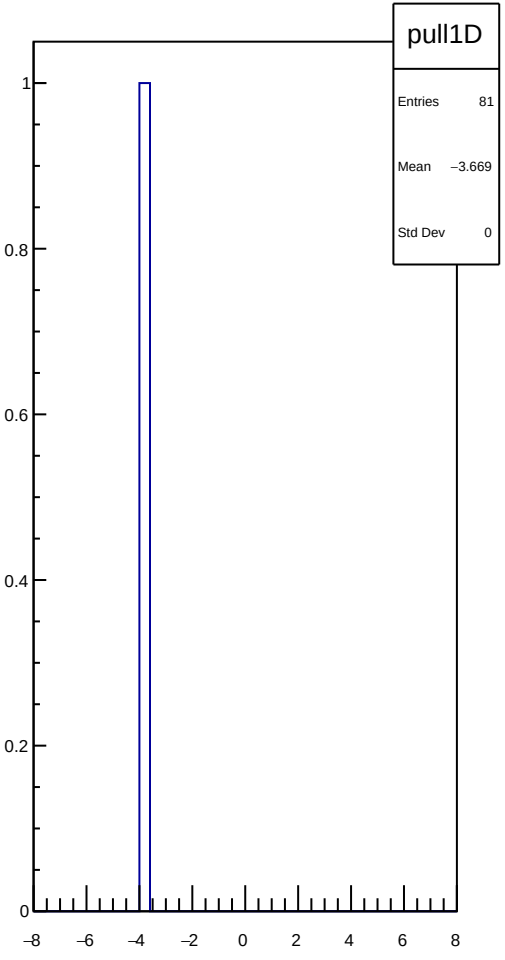

yield_bpm1X_rms vs run
χ² / ndf 1.575e+05 / 80
p0 0.06069 ± 5.04e−05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

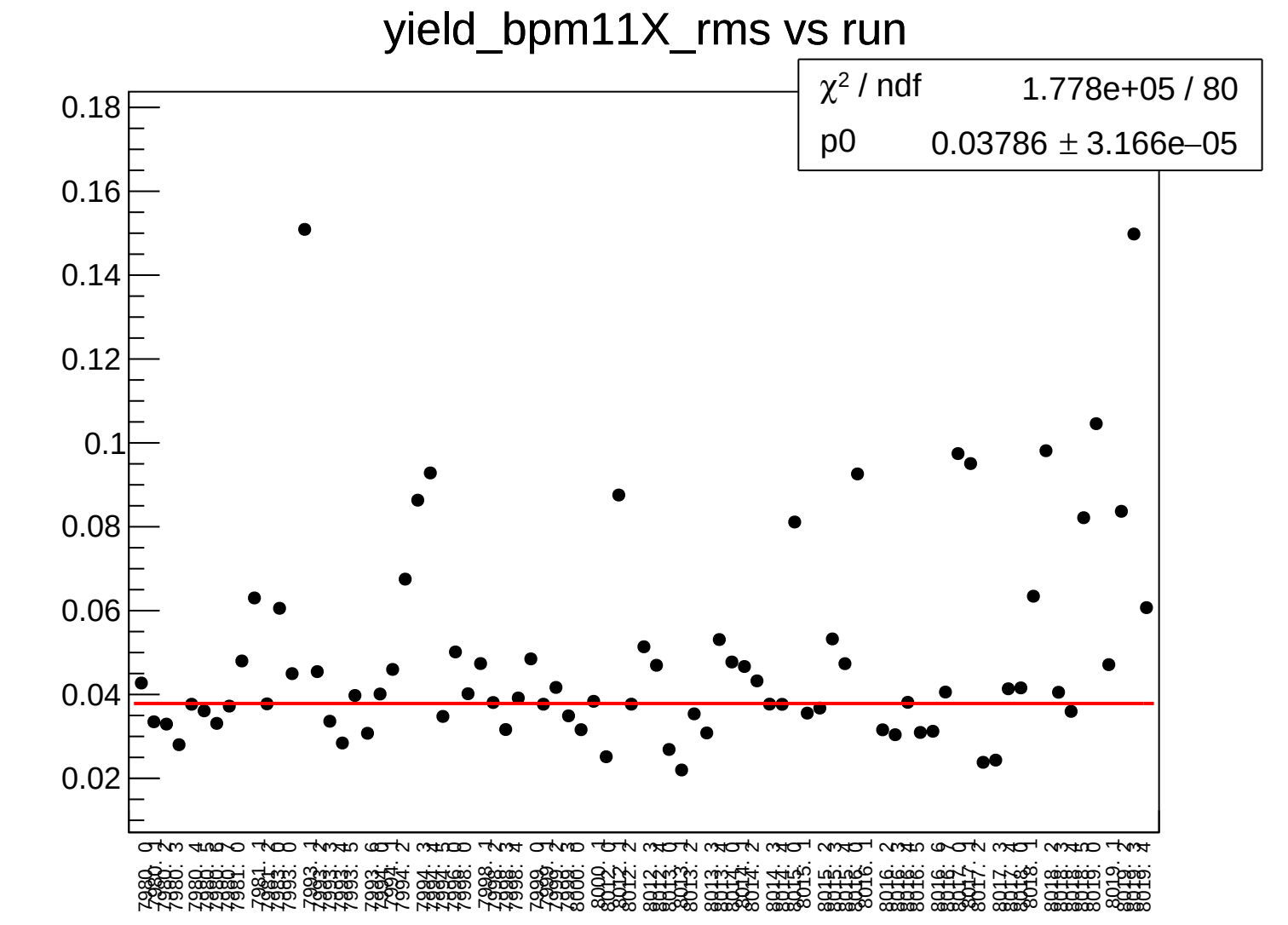

yield_bpm1Y_mean vs run
χ² / ndf 1.702e+07 / 80
p0 2.909 ± 2.309e−05
3.1
3
2.9
2.8
2.7
2.6
2.5
pull
Entries 81
Mean −24.29
Std Dev 50.07
1000
500
0
−500
−1000

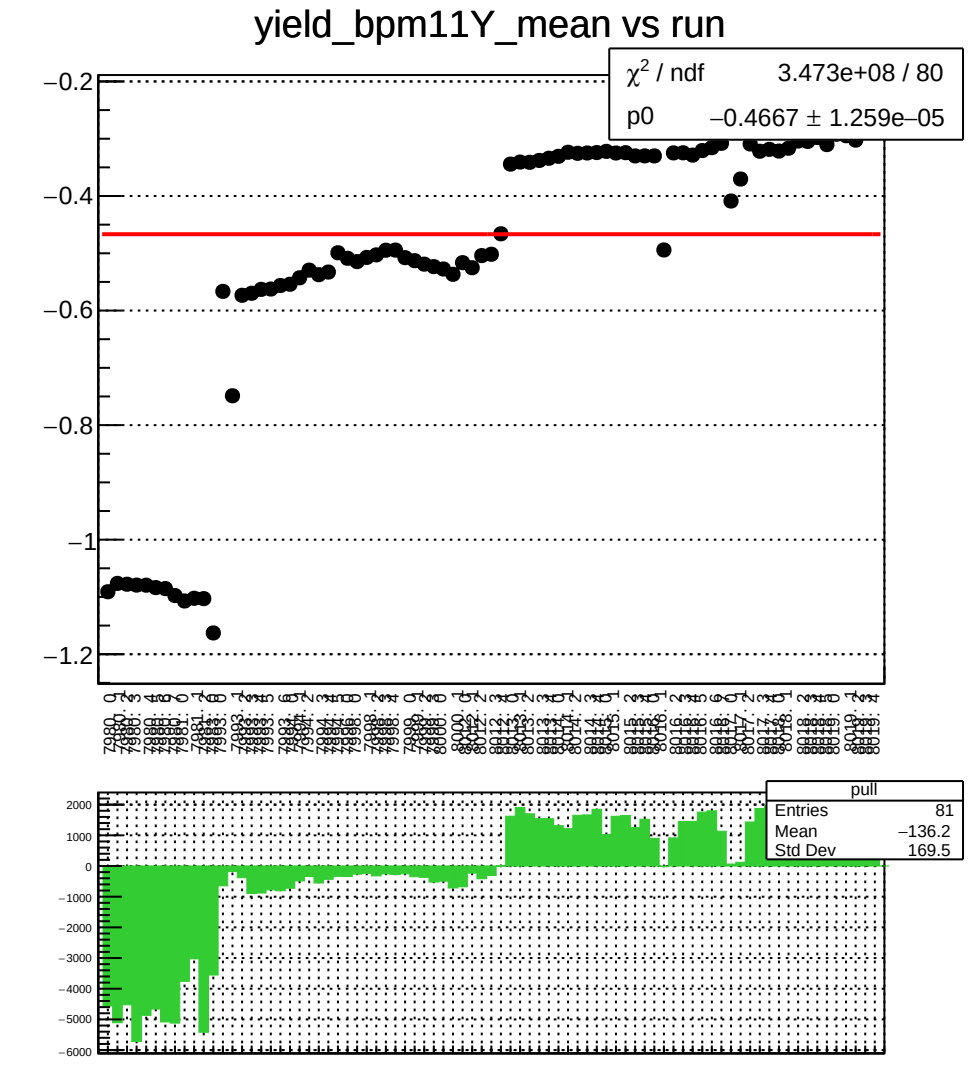

pull1D
Entries 81
Mean −5.82
Std Dev 1.73
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

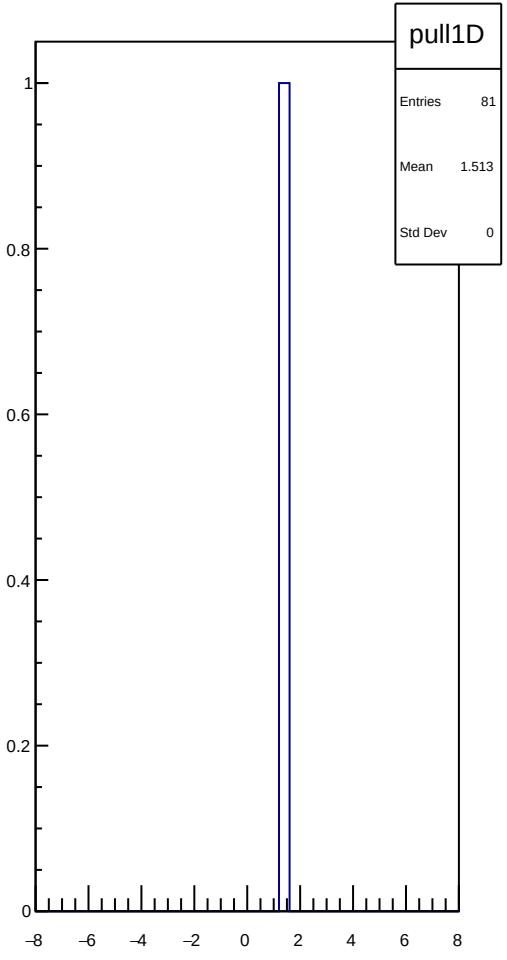

yield_bpm1Y_rms vs run
χ² / ndf 2.567e+05 / 80
p0 0.01898 ± 1.633e–05
0.1
0.08
0.06
0.04
0.02

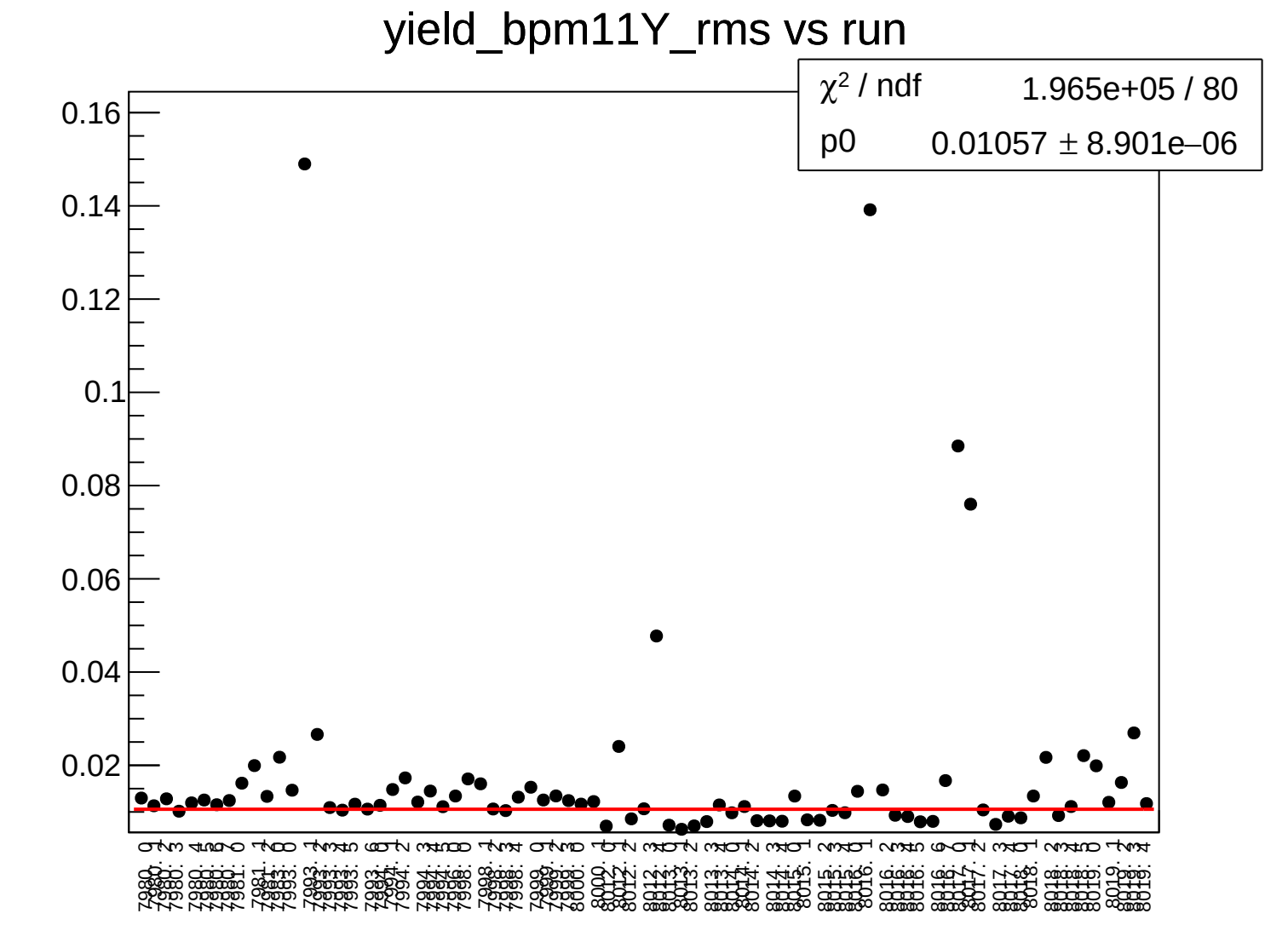

yield_bpm11X_mean vs run
χ² / ndf 3.081e+07 / 80
p0 1.434 ± 4.477e−05
pull
Entries 81
Mean −311
Std Dev 348.8

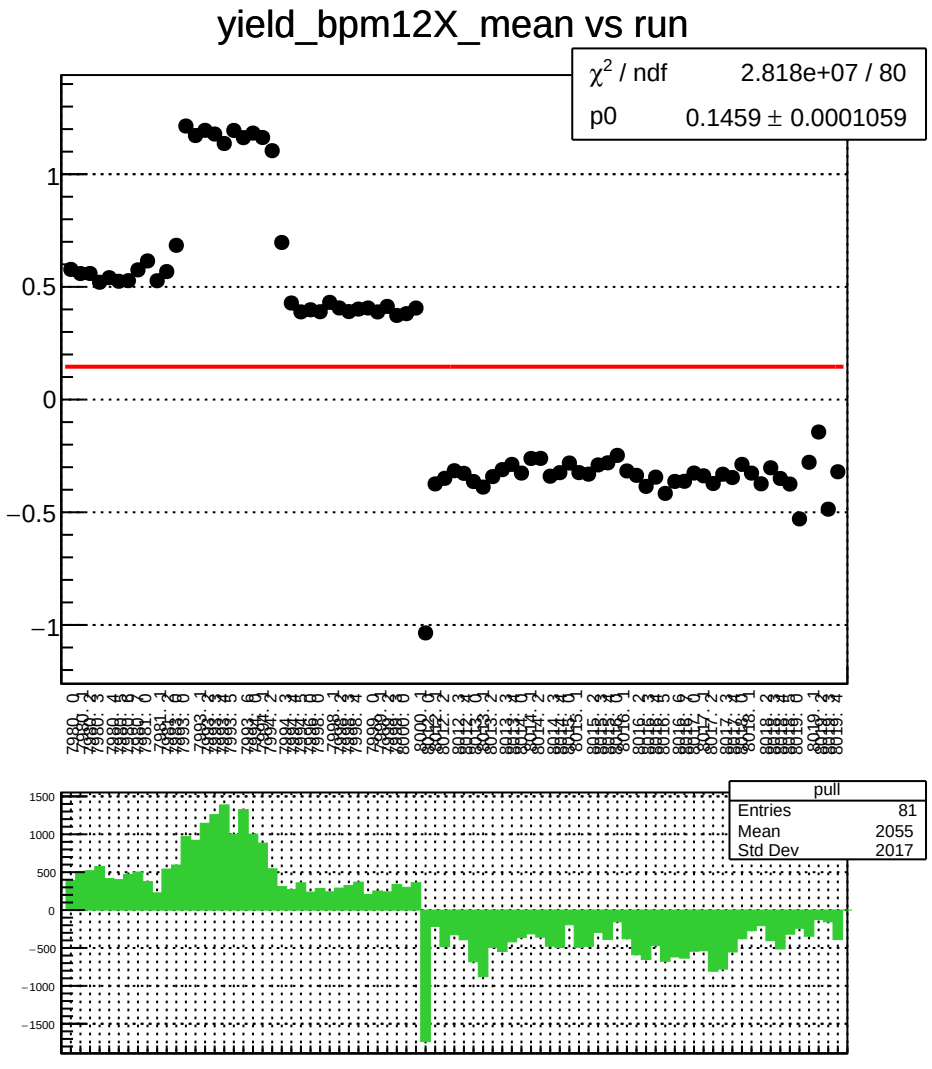

pull1D
Entries 81
Mean −3.669
Std Dev 0

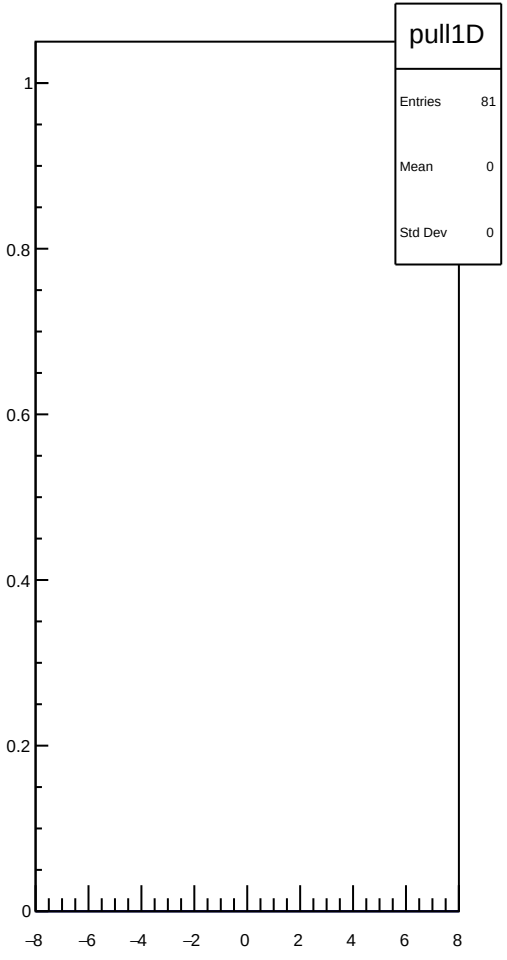

yield_bpm11X_rms vs run
χ² / ndf 1.778e+05 / 80
p0 0.03786 ± 3.166e–05
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

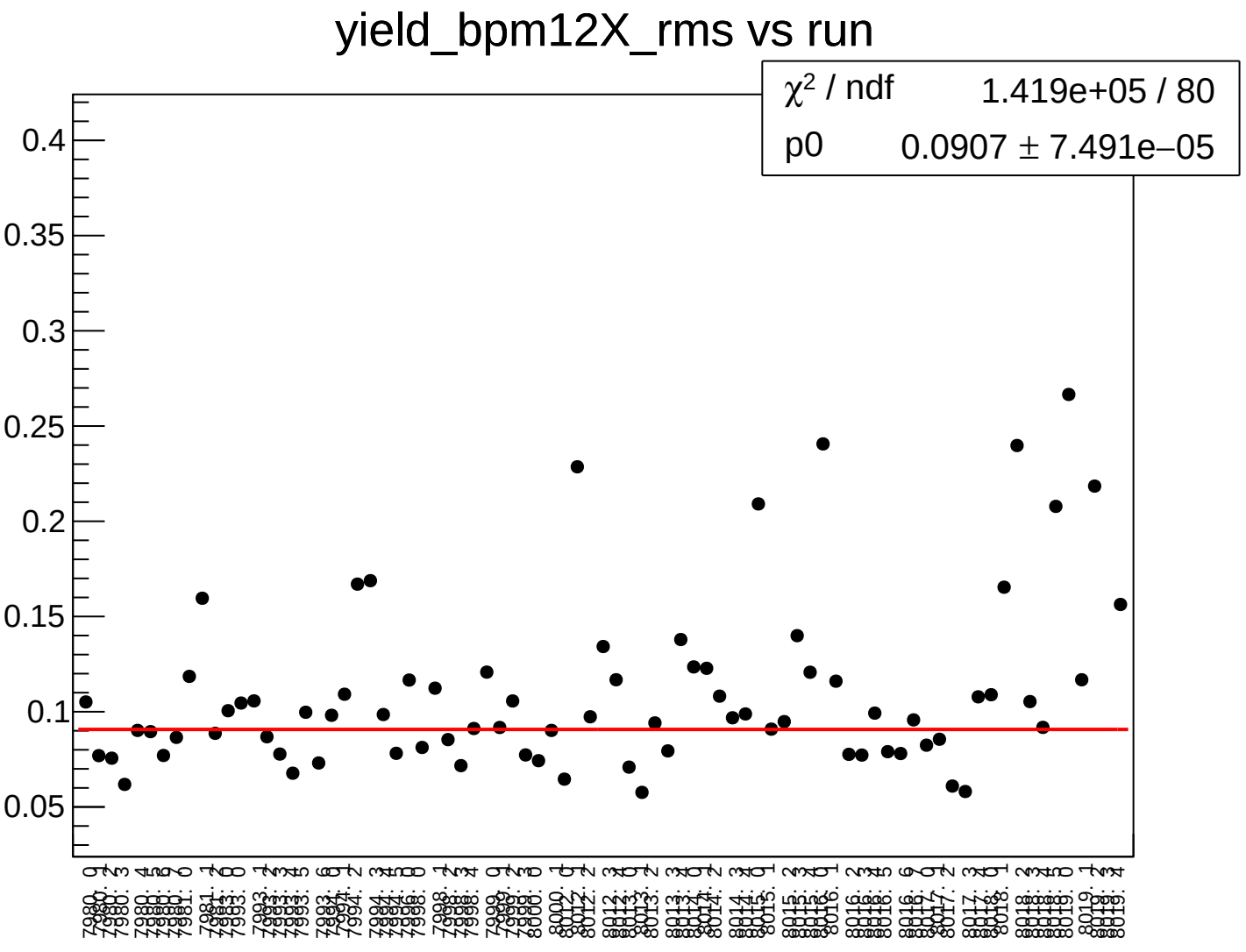

yield_bpm11Y_mean vs run
χ² / ndf 3.473e+08 / 80
p0 −0.4667 ± 1.259e−05
pull
Entries 81
Mean −136.2
Std Dev 169.5

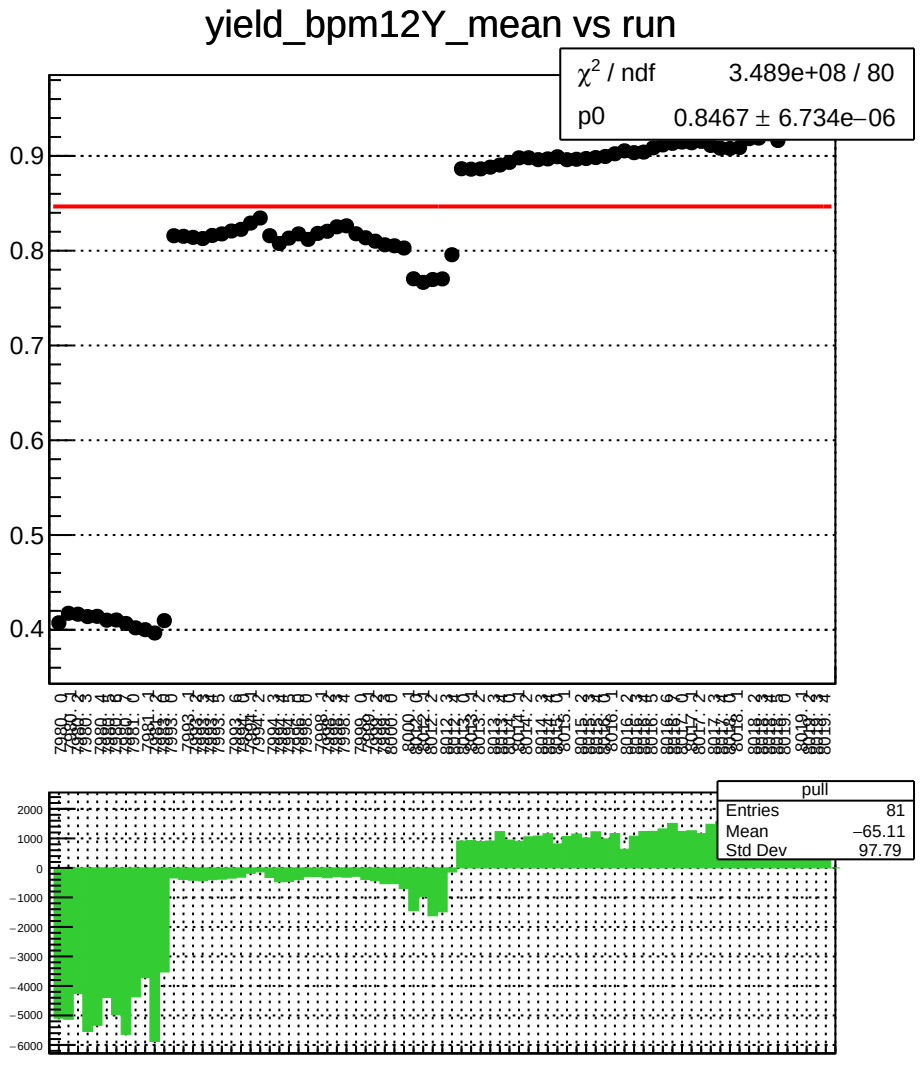

pull1D
Entries 81
Mean 1.513
Std Dev 0

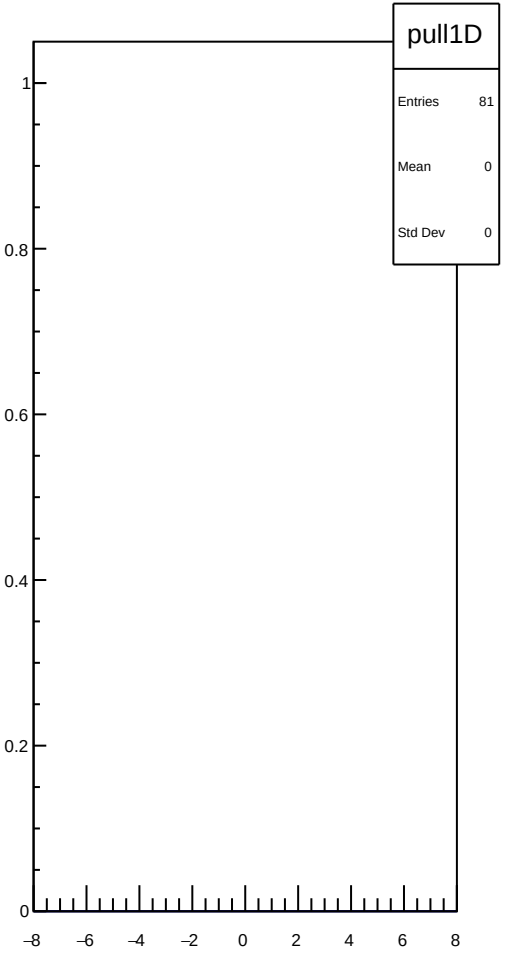

yield_bpm11Y_rms vs run
χ² / ndf 1.965e+05 / 80
p0 0.01057 ± 8.901e–06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

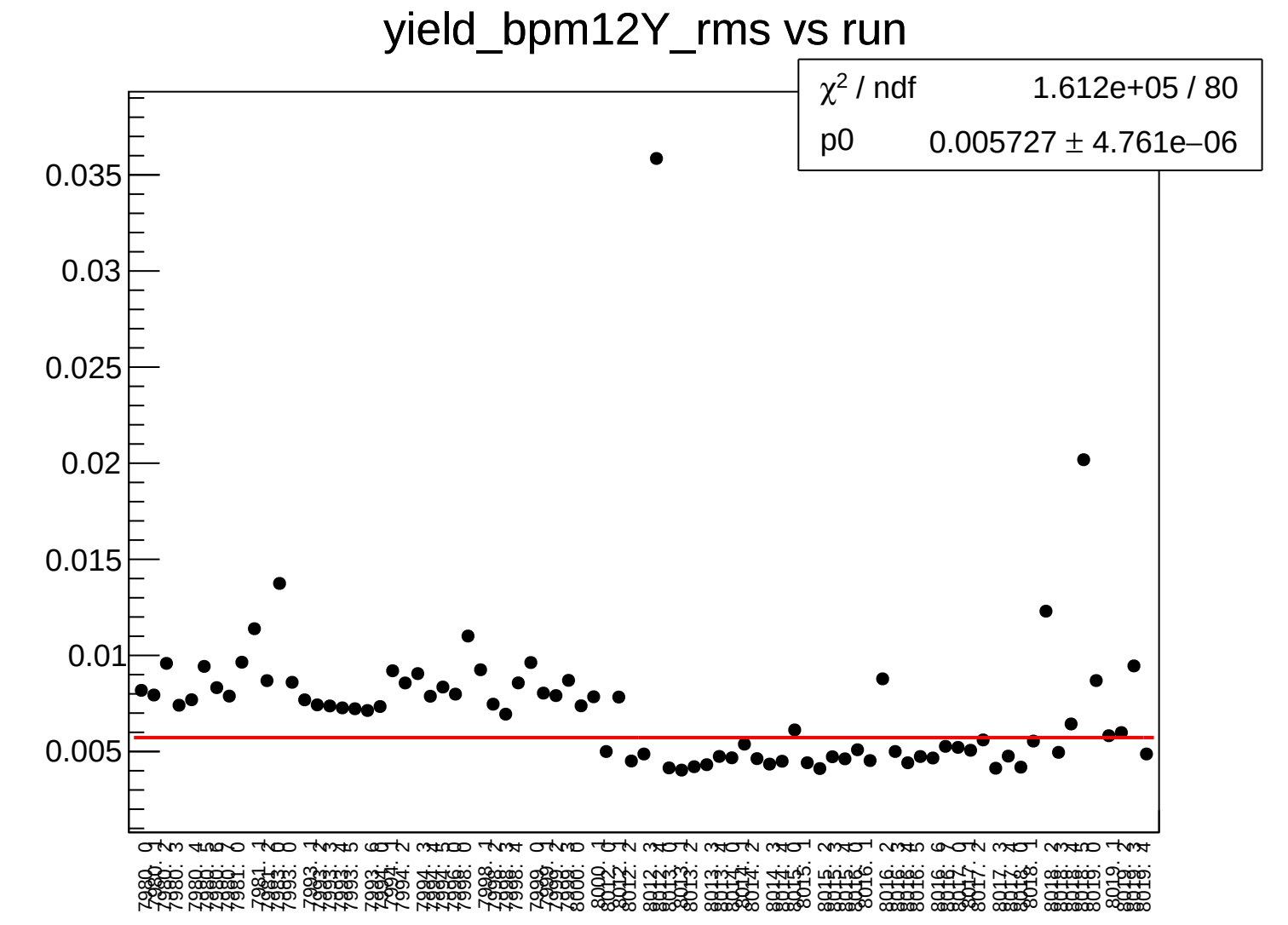

yield_bpm12X_mean vs run
χ² / ndf 2.818e+07 / 80
p0 0.1459 ± 0.0001059
pull
Entries 81
Mean 2055
Std Dev 2017

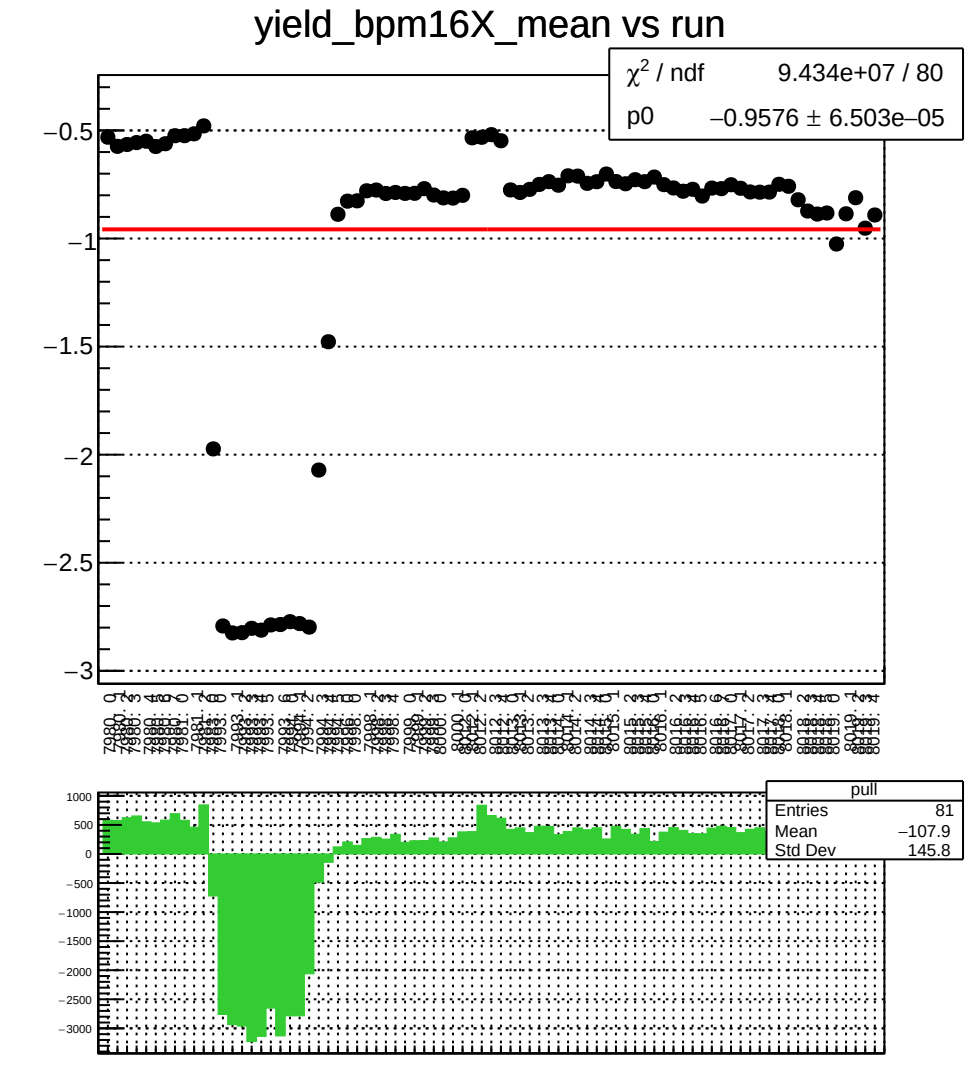

pull1D
Entries 81
Mean 0
Std Dev 0

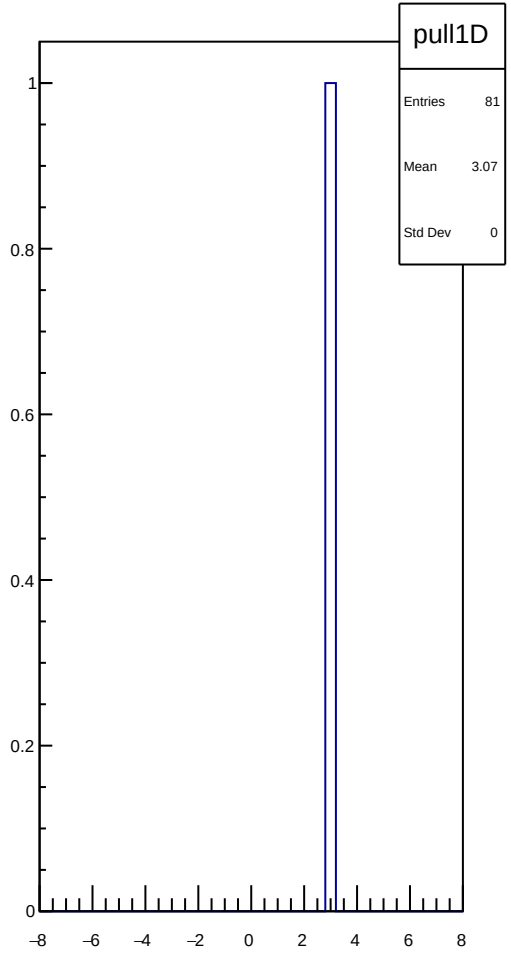

yield_bpm12X_rms vs run
χ² / ndf 1.419e+05 / 80
p0 0.0907 ± 7.491e−05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

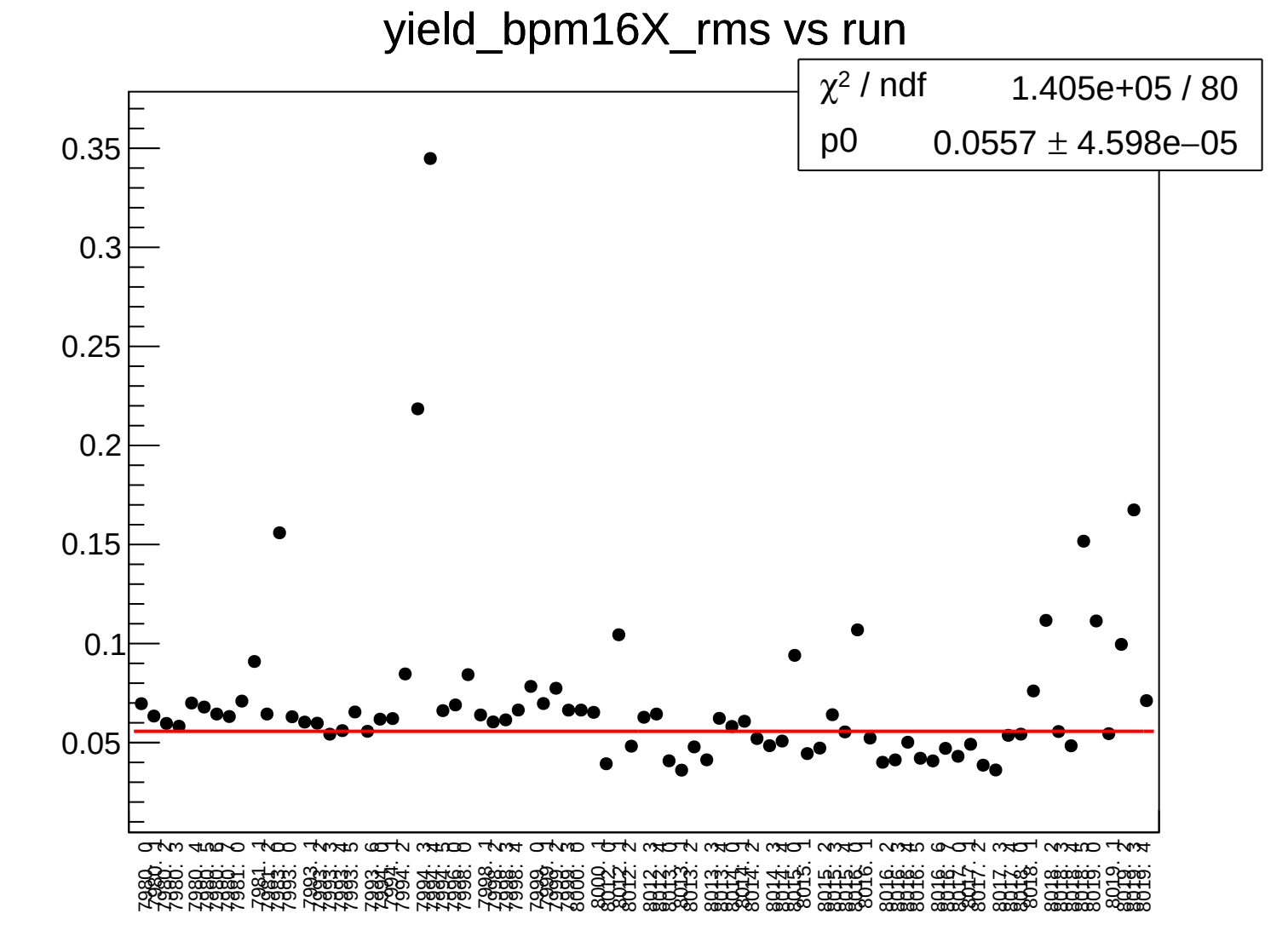

yield_bpm12Y_mean vs run
χ² / ndf 3.489e+08 / 80
p0 0.8467 ± 6.734e−06
pull
Entries 81
Mean −65.11
Std Dev 97.79

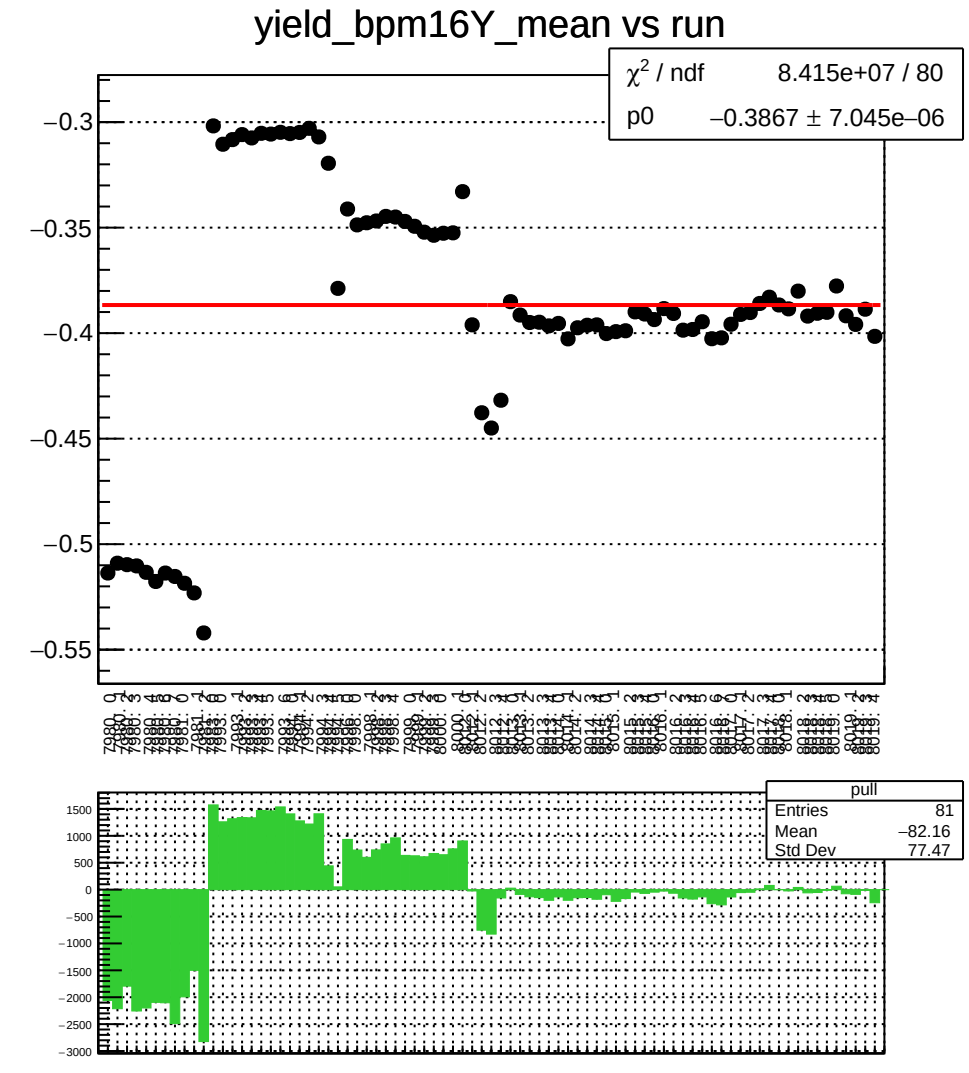

pull1D
Entries 81
Mean 0
Std Dev 0

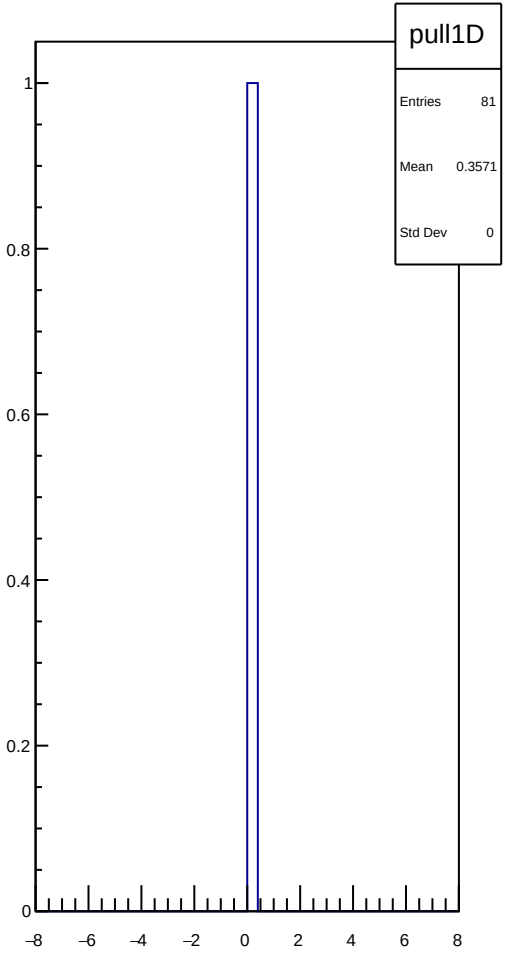

yield_bpm12Y_rms vs run
χ^2 / ndf 1.612e+05 / 80
p0 0.005727 ± 4.761e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

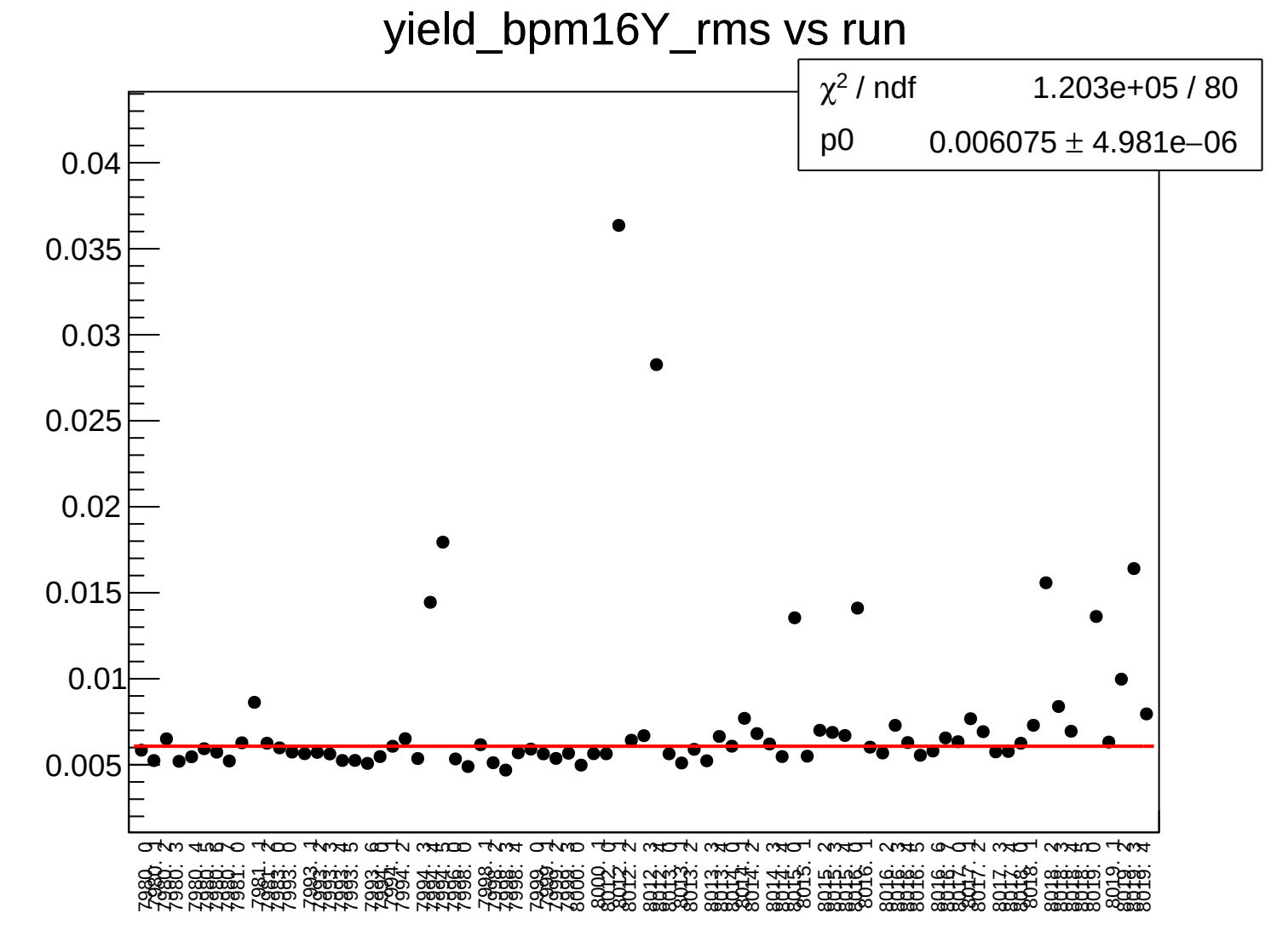

yield_bpm16X_mean vs run
χ² / ndf 9.434e+07 / 80
p0 −0.9576 ± 6.503e−05
pull
Entries 81
Mean −107.9
Std Dev 145.8

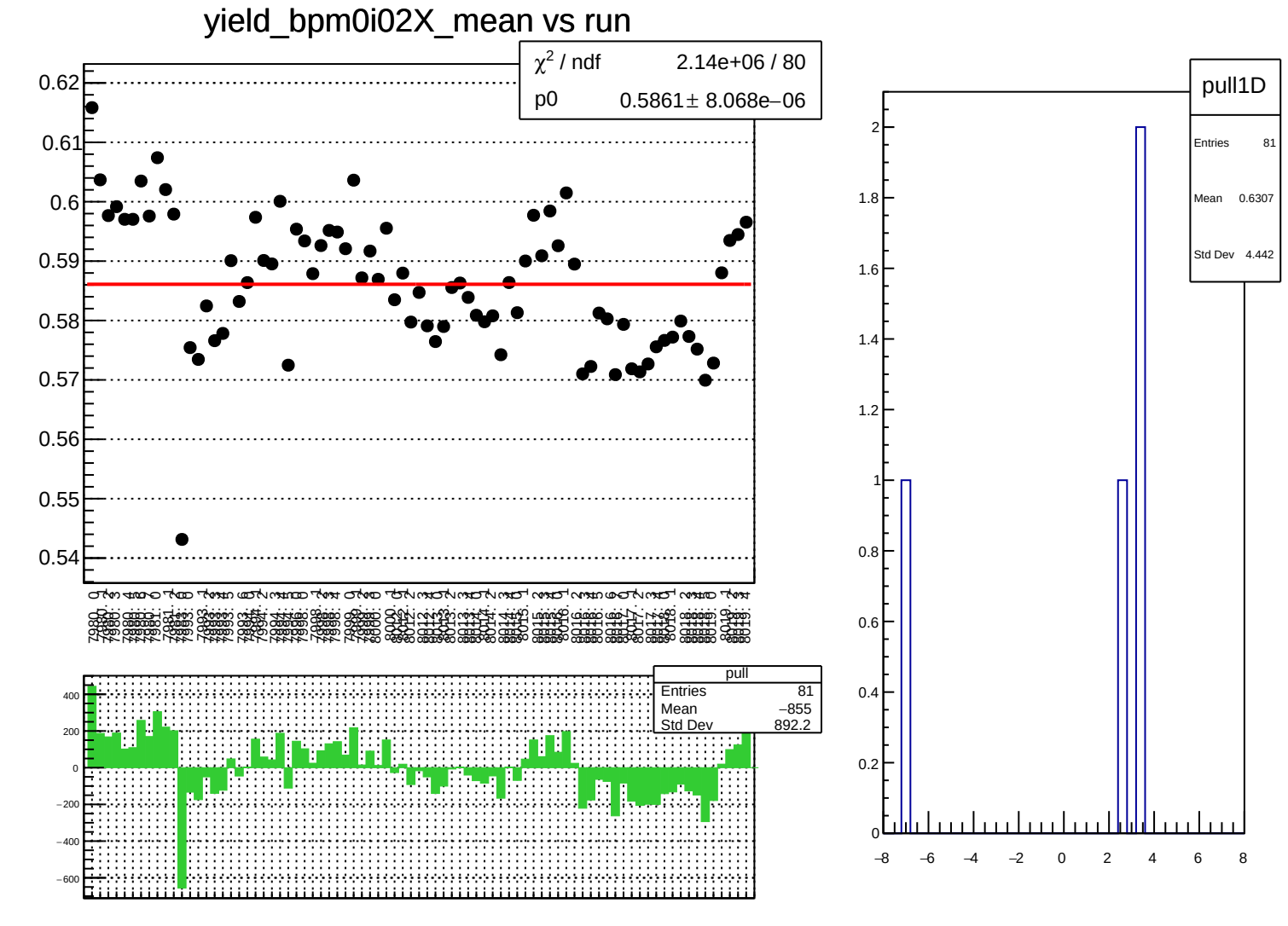

pull1D
Entries 81
Mean 3.07
Std Dev 0

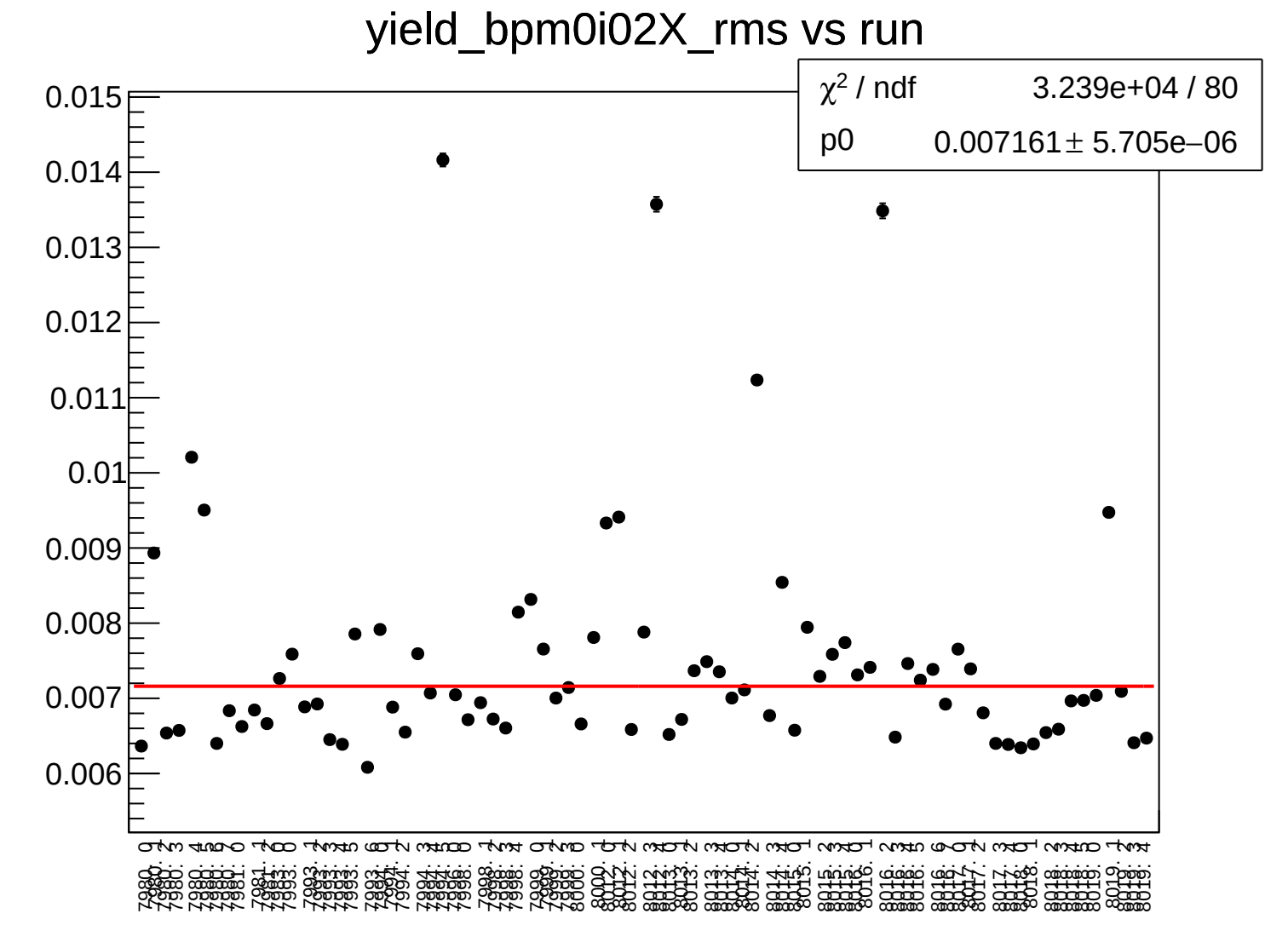

yield_bpm16X_rms vs run
χ² / ndf 1.405e+05 / 80
p0 0.0557 ± 4.598e−05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

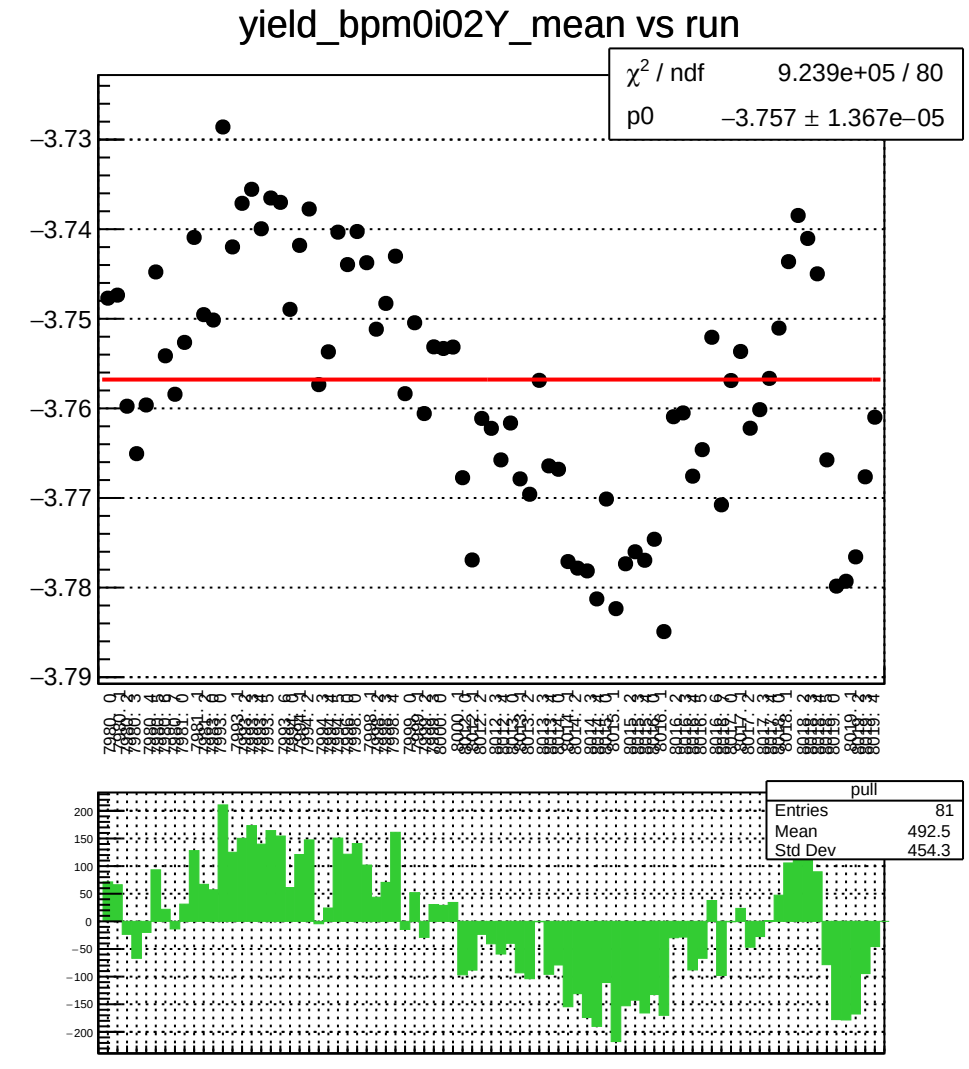

yield_bpm16Y_mean vs run
χ² / ndf 8.415e+07 / 80
p0 −0.3867 ± 7.045e−06
−0.3
−0.35
−0.4
−0.45
−0.5
−0.55
pull
Entries 81
Mean −82.16
Std Dev 77.47
1500
1000
500
0
−500
−1000
−1500
−2000
−2500
−3000

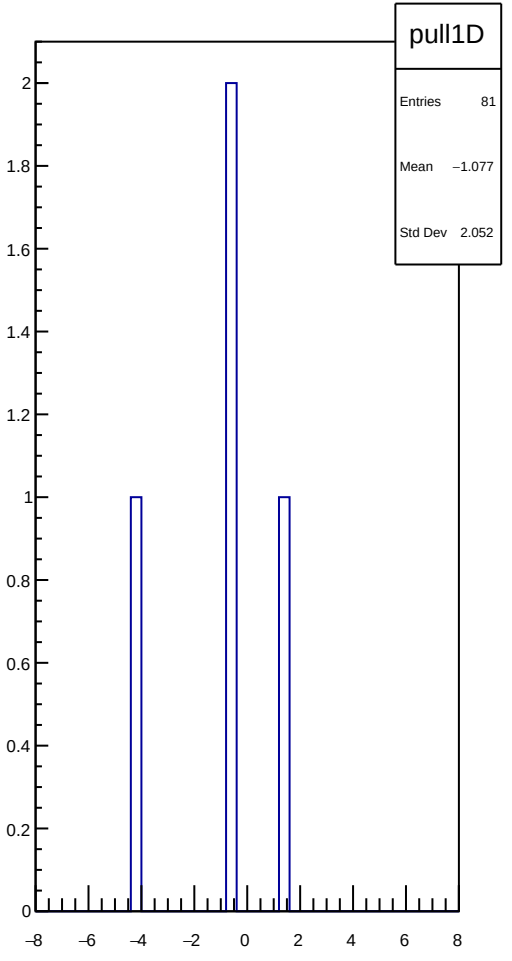

pull1D
Entries 81
Mean 0.3571
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

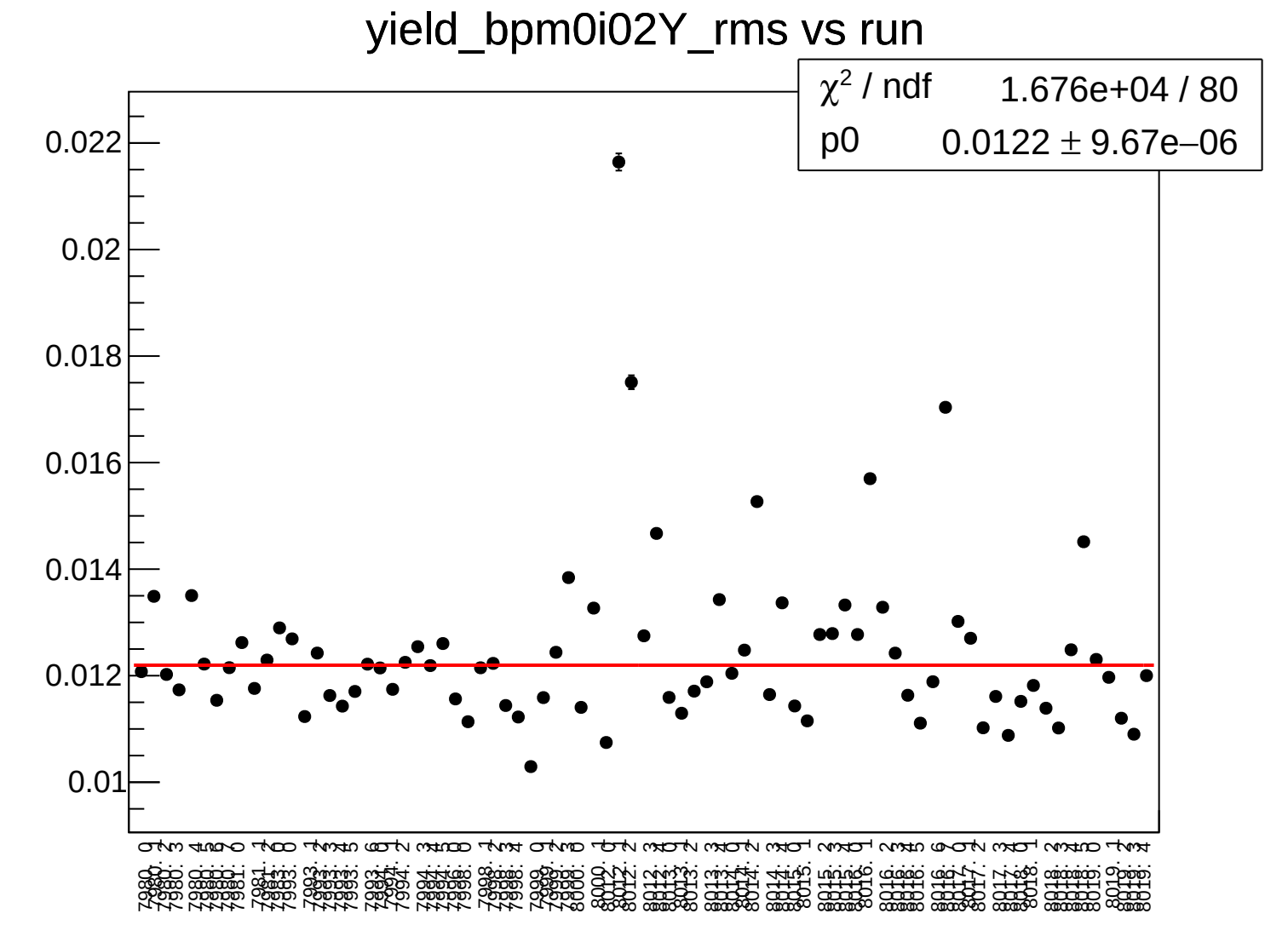

yield_bpm16Y_rms vs run
χ² / ndf 1.203e+05 / 80
p0 0.006075 ± 4.981e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

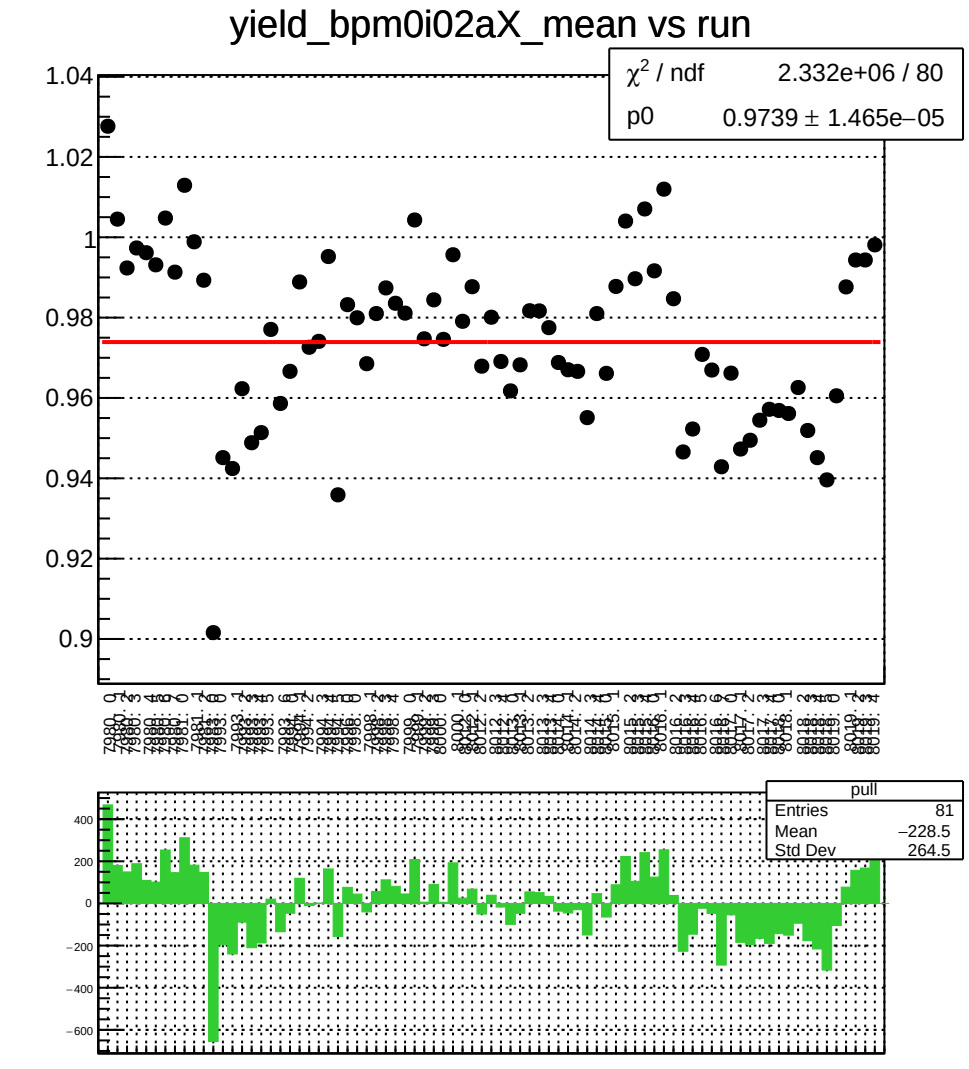

yield_bpm0i02X_mean vs run
χ² / ndf 2.14e+06 / 80
p0 0.5861 ± 8.068e−06
0.62
0.61
0.6
0.59
0.58
0.57
0.56
0.55
0.54
pull
Entries 81
Mean −855
Std Dev 892.2
400
200
0
−200
−400
−600
pull1D
Entries 81
Mean 0.6307
Std Dev 4.442
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

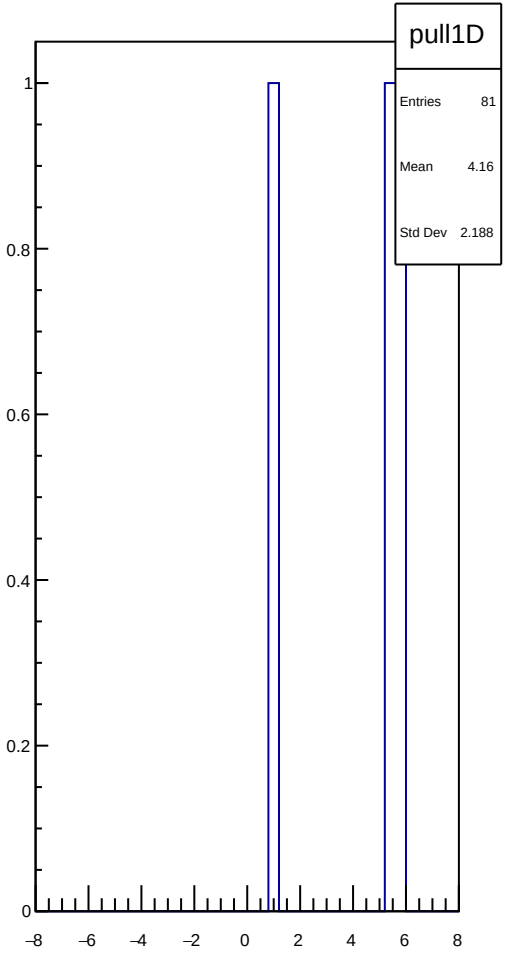

yield_bpm0i02X_rms vs run
χ² / ndf 3.239e+04 / 80
p0 0.007161 ± 5.705e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

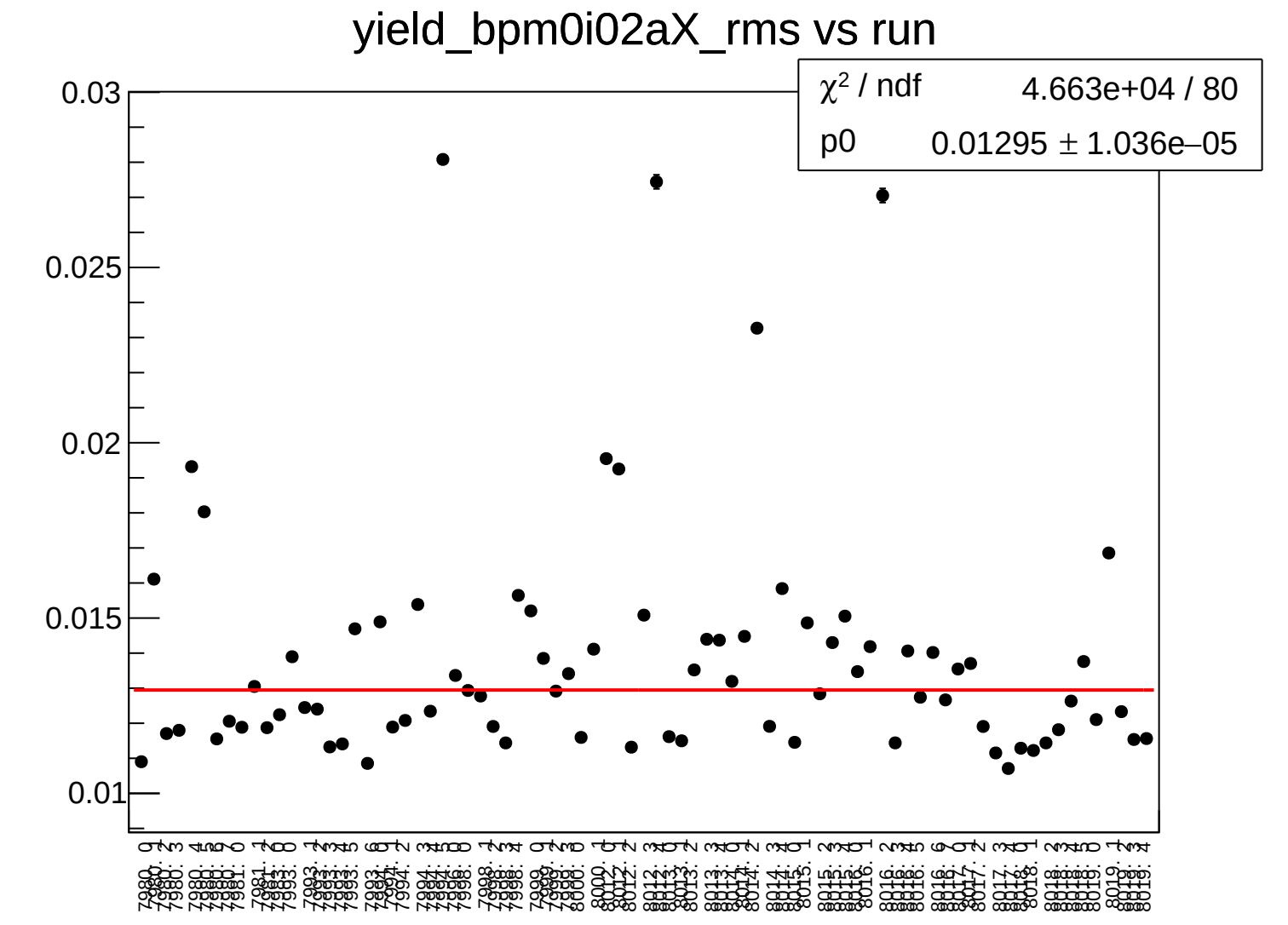

yield_bpm0i02Y_mean vs run
χ² / ndf 9.239e+05 / 80
p0 −3.757 ± 1.367e−05
−3.73
−3.74
−3.75
−3.76
−3.77
−3.78
−3.79
pull
Entries 81
Mean 492.5
Std Dev 454.3
200
150
100
50
0
−50
−100
−150
−200

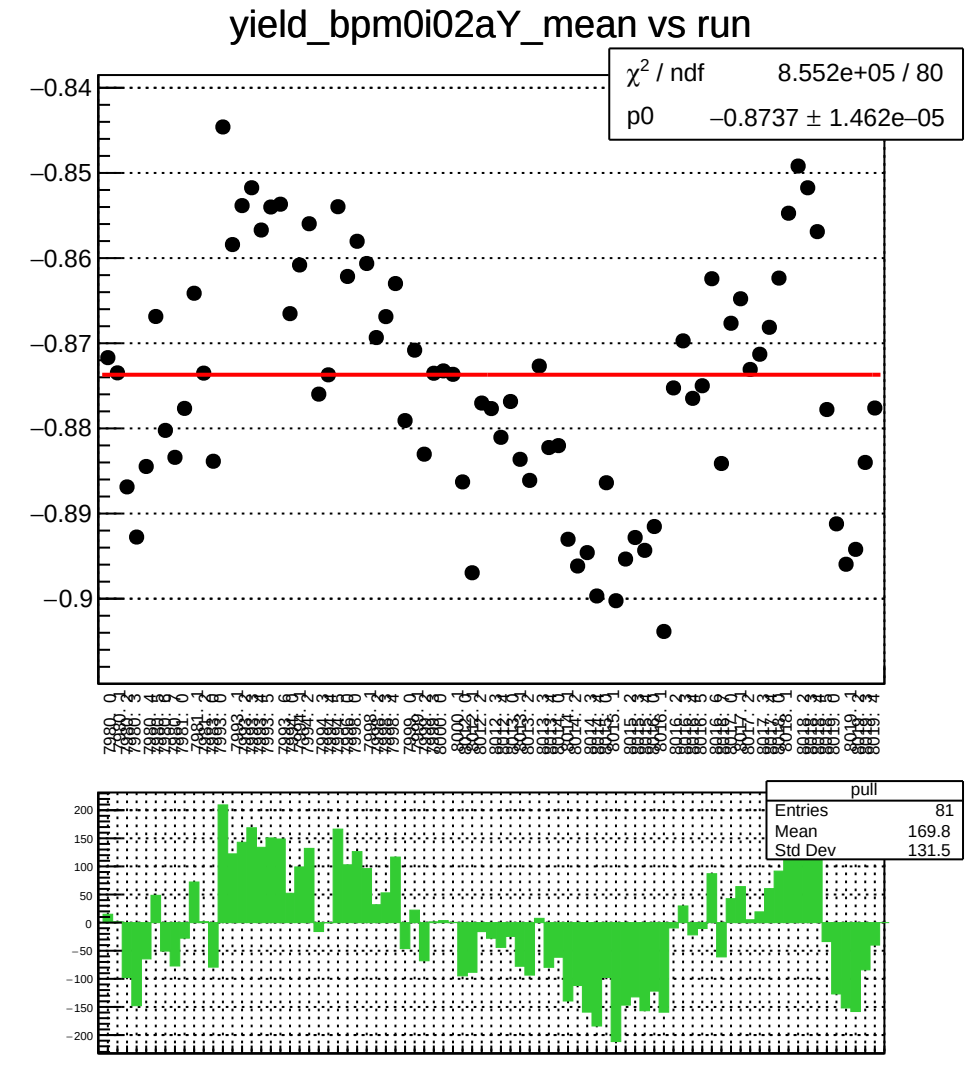

pull1D
Entries 81
Mean −1.077
Std Dev 2.052
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

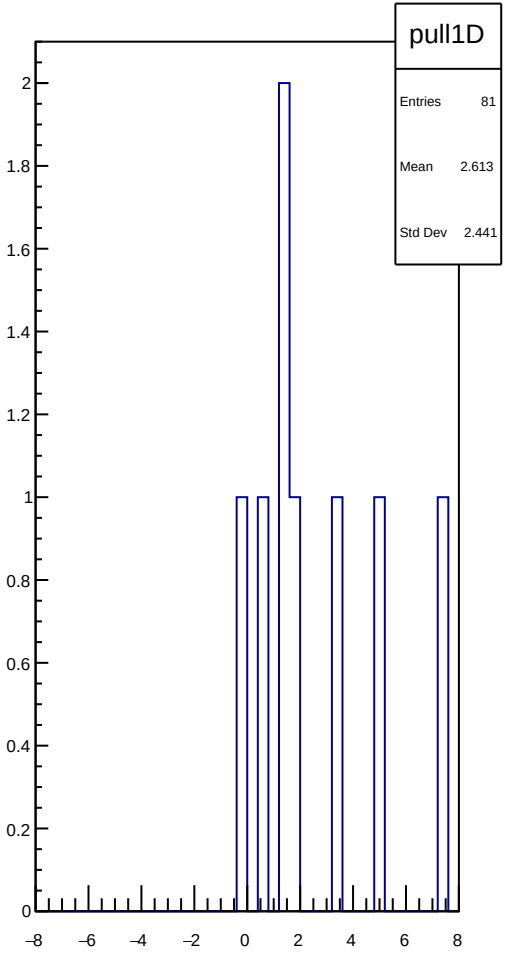

yield_bpm0i02Y_rms vs run
χ² / ndf 1.676e+04 / 80
p0 0.0122 ± 9.67e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01

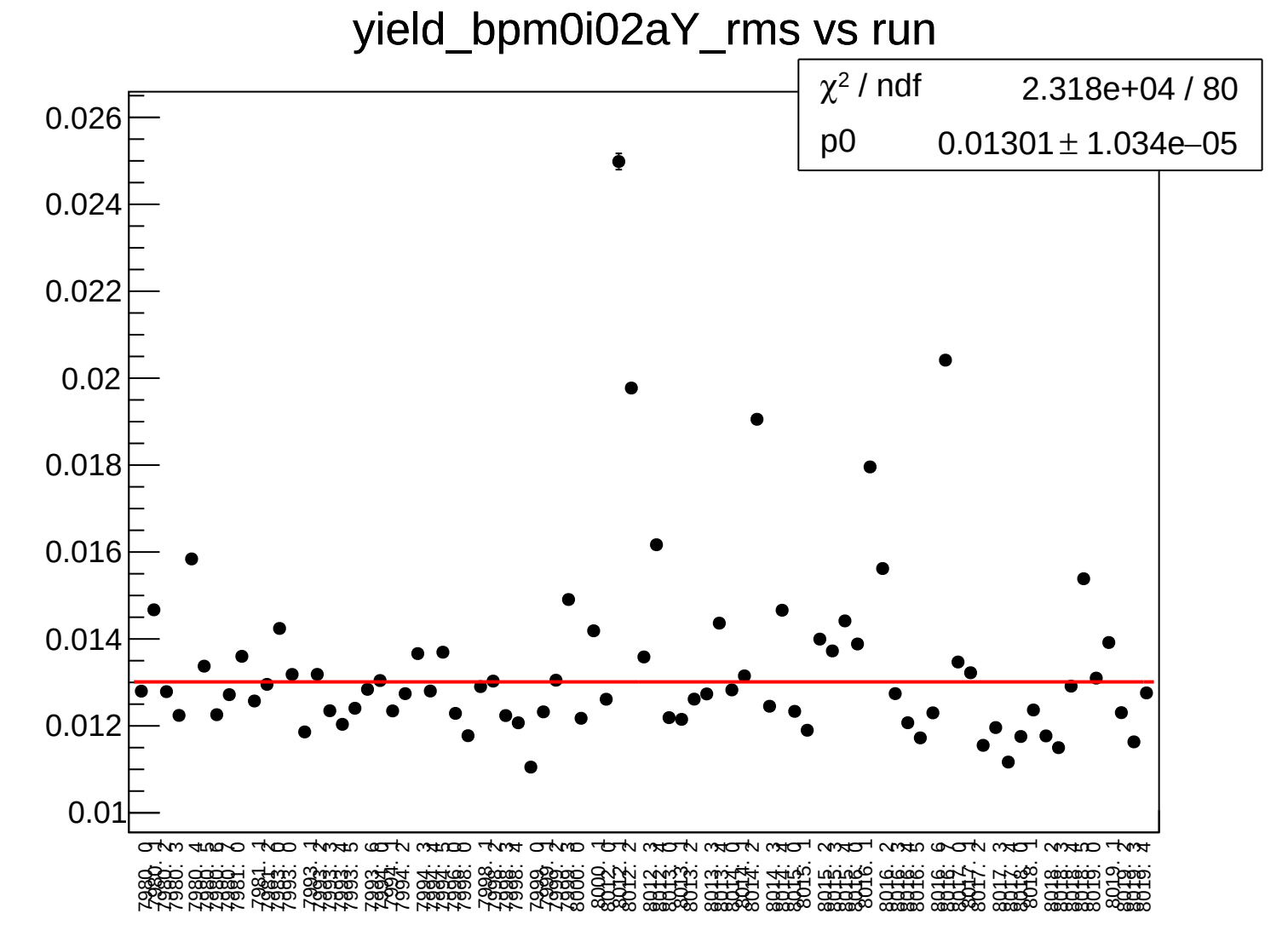

yield_bpm0i02aX_mean vs run
χ² / ndf 2.332e+06 / 80
p0 0.9739 ± 1.465e−05
1.04
1.02
1
0.98
0.96
0.94
0.92
0.9
pull
Entries 81
Mean −228.5
Std Dev 264.5
400
200
0
−200
−400
−600

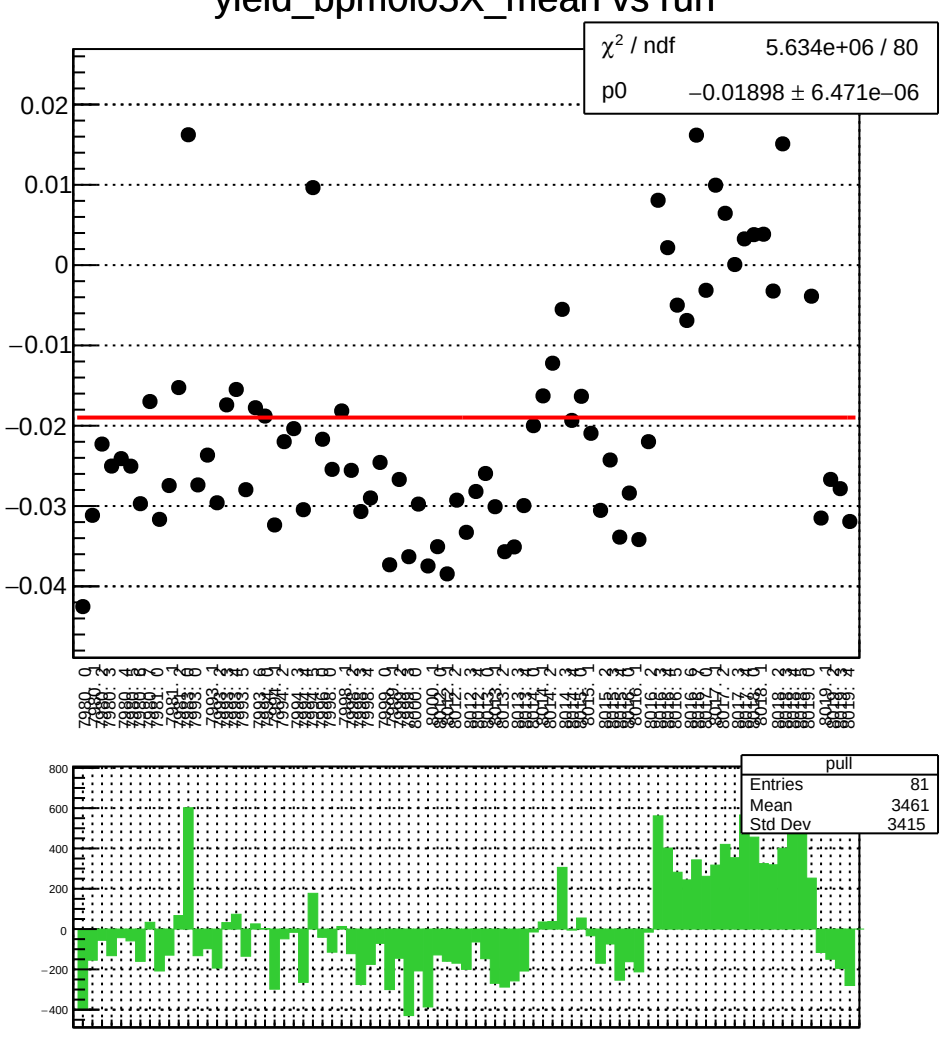

pull1D
Entries 81
Mean 4.16
Std Dev 2.188
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

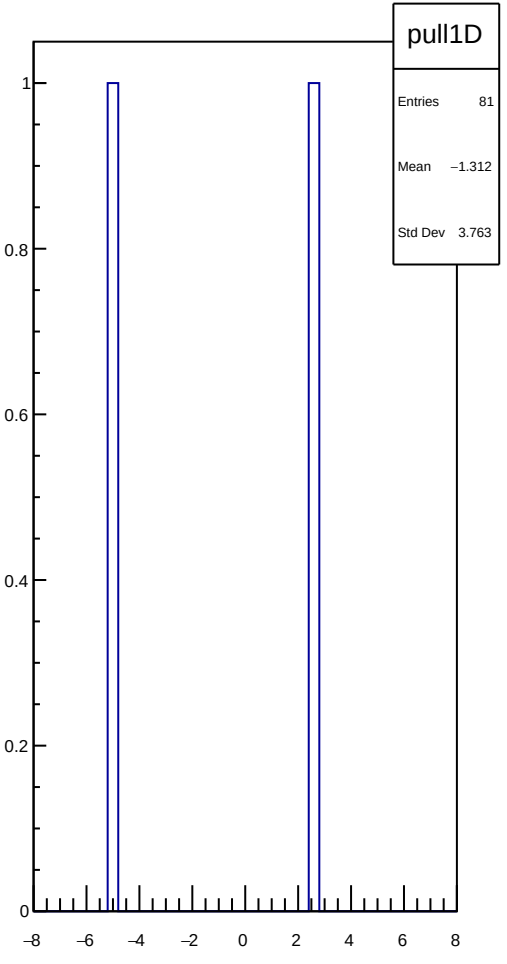

yield_bpm0i02aX_rms vs run
χ² / ndf 4.663e+04 / 80
p0 0.01295 ± 1.036e–05
0.03
0.025
0.02
0.015
0.01

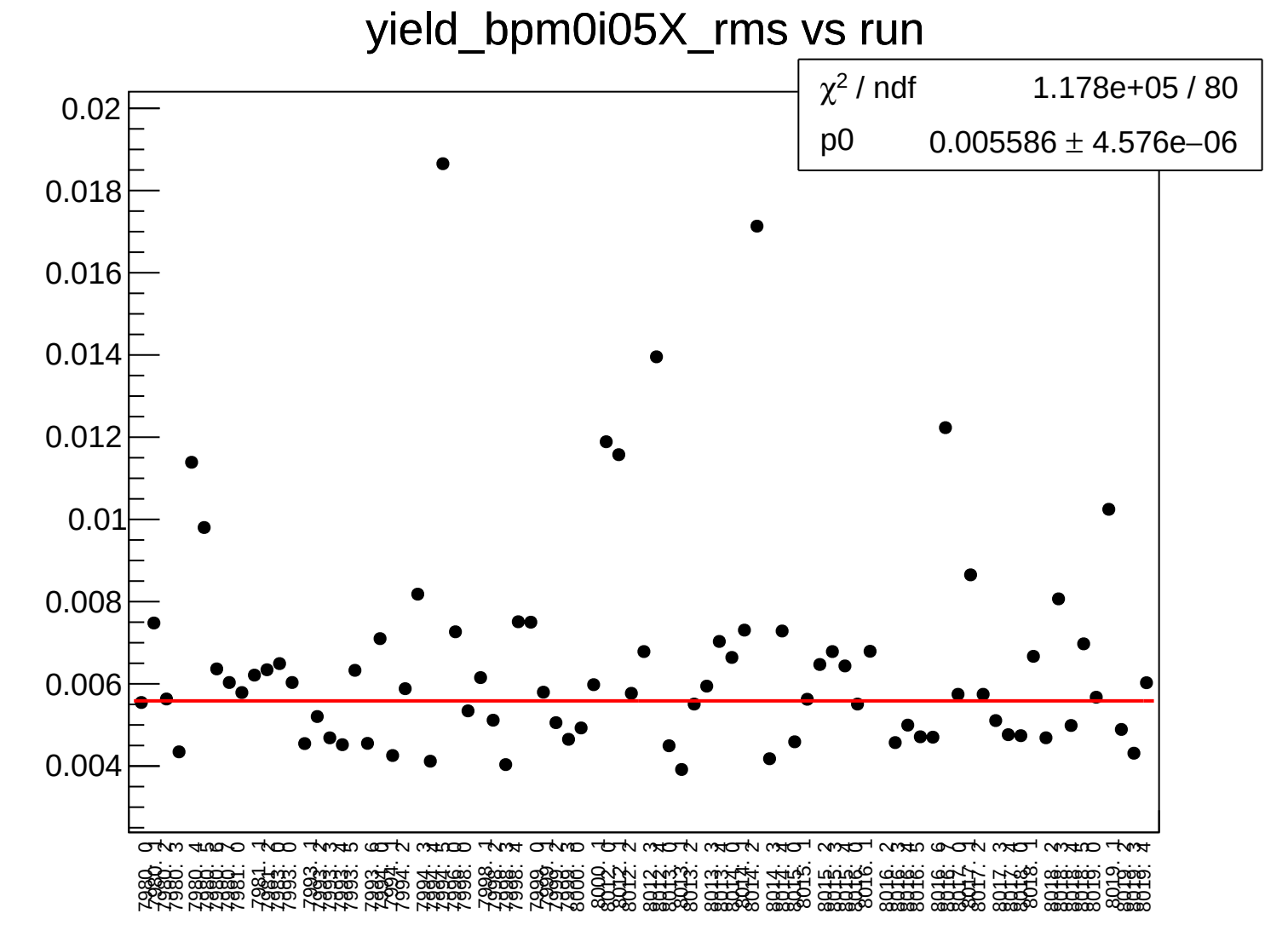

yield_bpm0i02aY_mean vs run
χ² / ndf 8.552e+05 / 80
p0 −0.8737 ± 1.462e−05
−0.84
−0.85
−0.86
−0.87
−0.88
−0.89
−0.9
pull
Entries 81
Mean 169.8
Std Dev 131.5
200
150
100
50
0
−50
−100
−150
−200

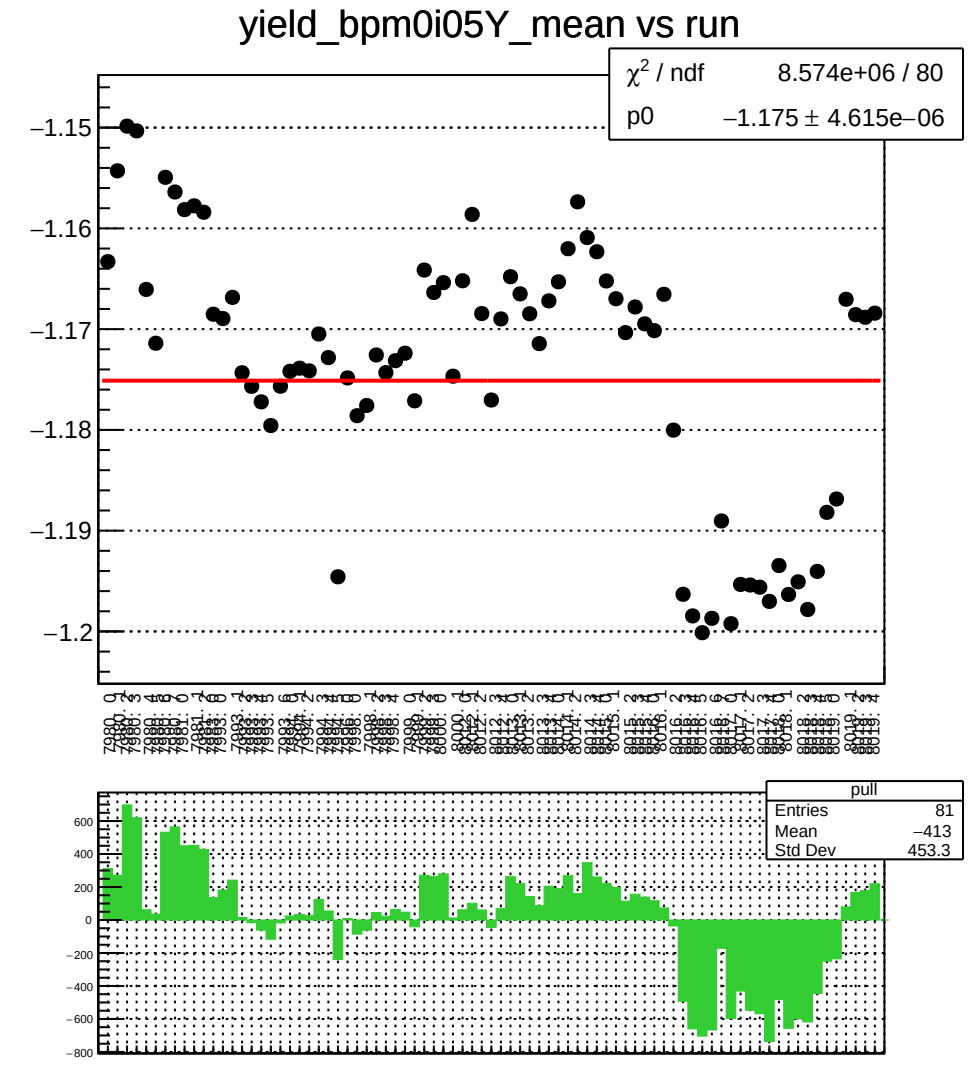

pull1D
Entries 81
Mean 2.613
Std Dev 2.441
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

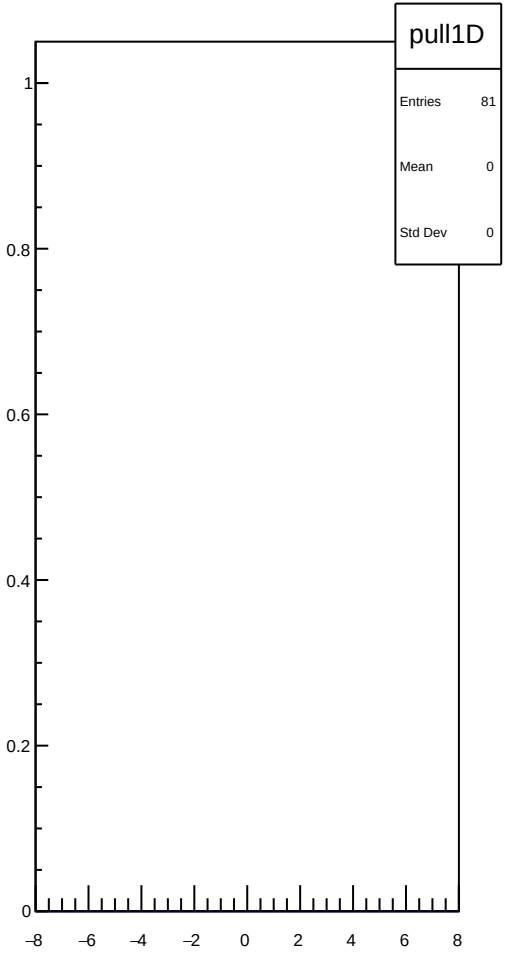

yield_bpm0i02aY_rms vs run
χ² / ndf 2.318e+04 / 80
p0 0.01301 ± 1.034e–05
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01

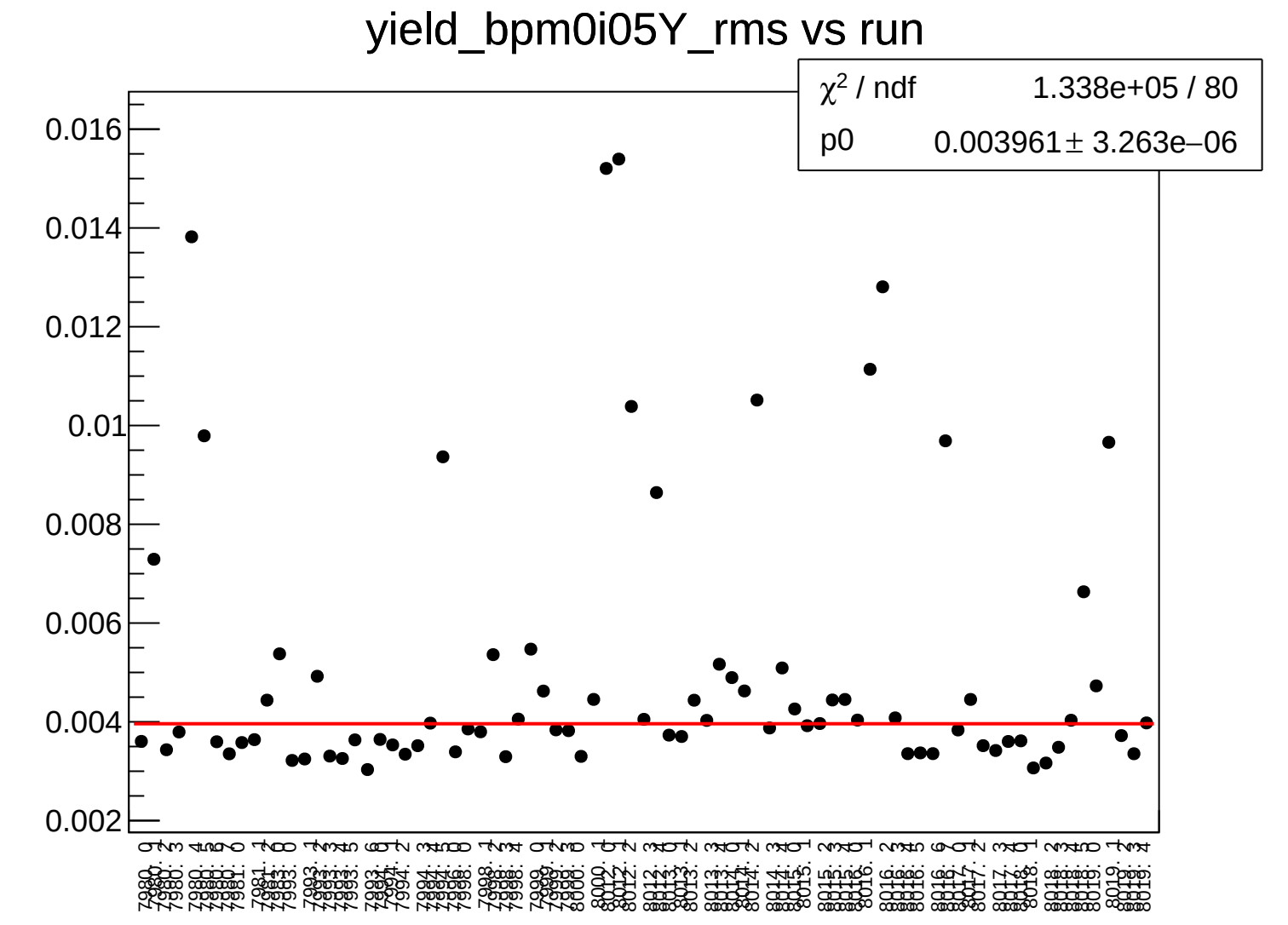

yield_bpm0i05X_mean vs run
χ² / ndf 5.634e+06 / 80
p0 −0.01898 ± 6.471e−06
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
pull
Entries 81
Mean 3461
Std Dev 3415
800
600
400
200
0
−200
−400

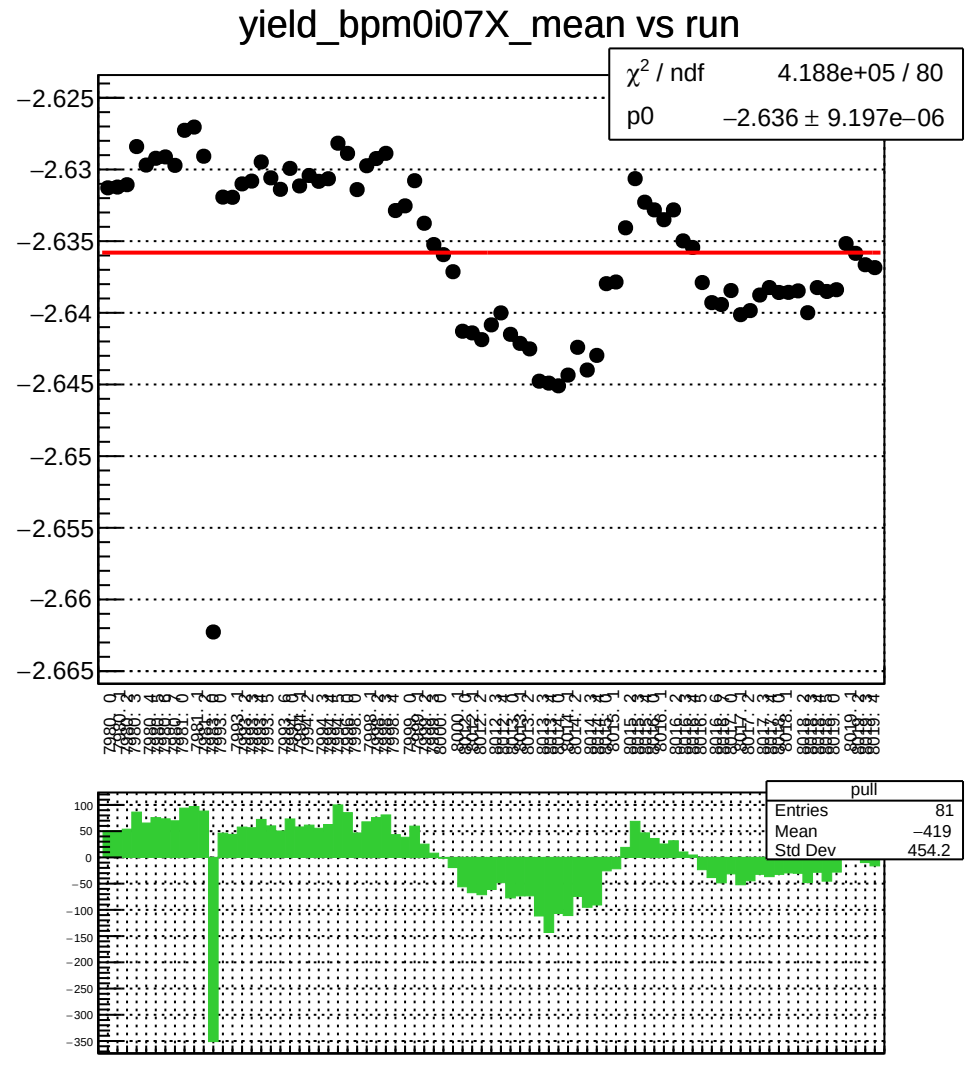

pull1D
Entries 81
Mean −1.312
Std Dev 3.763
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

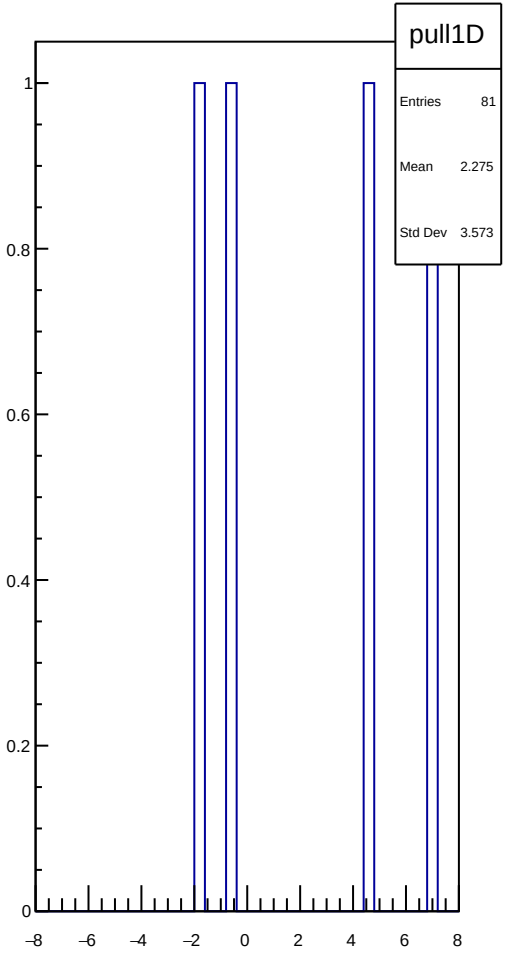

yield_bpm0i05X_rms vs run
χ^2 / ndf 1.178e+05 / 80
p0 0.005586 ± 4.576e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

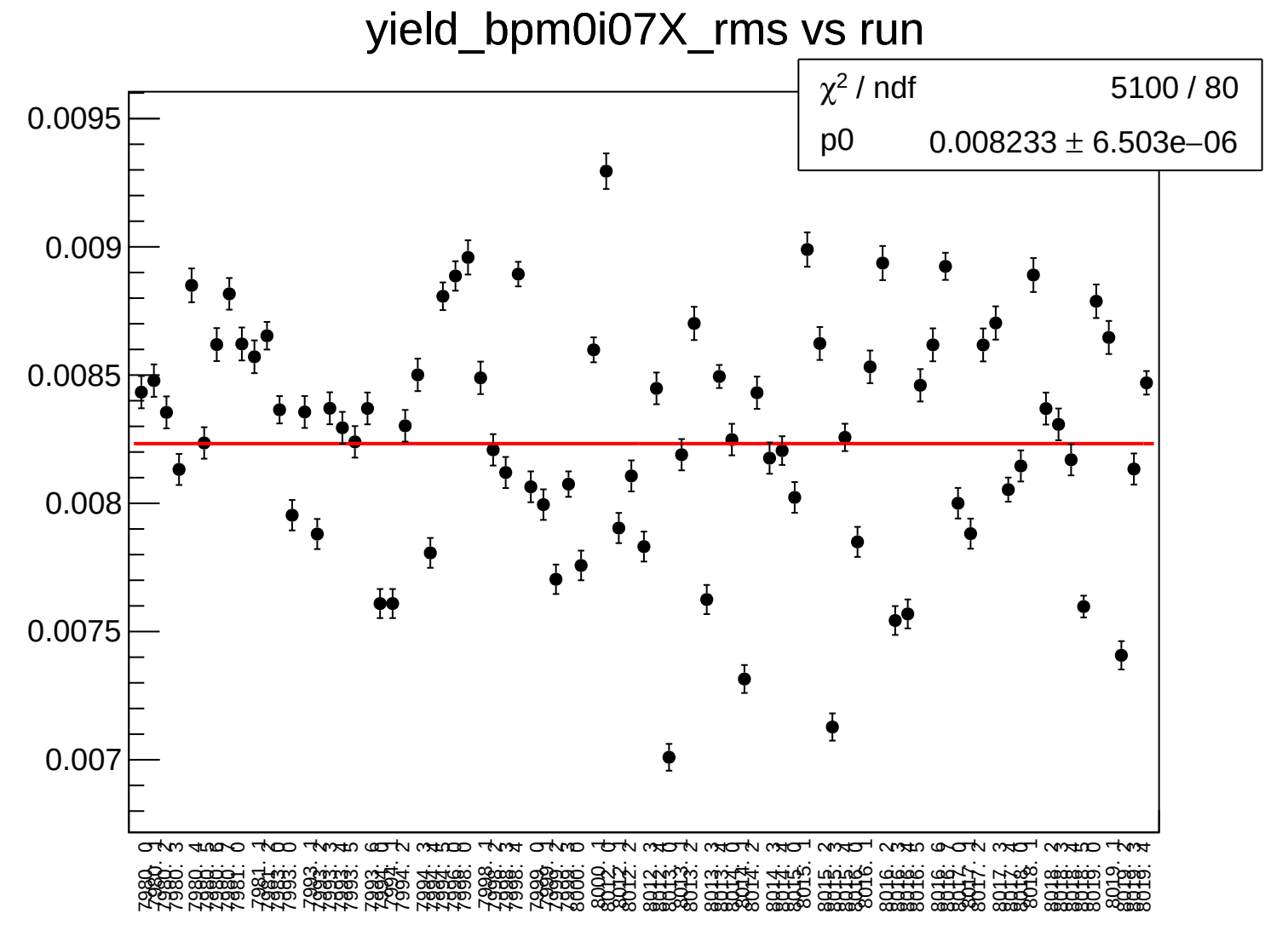

yield_bpm0i05Y_mean vs run
χ² / ndf 8.574e+06 / 80
p0 −1.175 ± 4.615e−06
−1.15
−1.16
−1.17
−1.18
−1.19
−1.2
pull
Entries 81
Mean −413
Std Dev 453.3
600
400
200
0
−200
−400
−600
−800

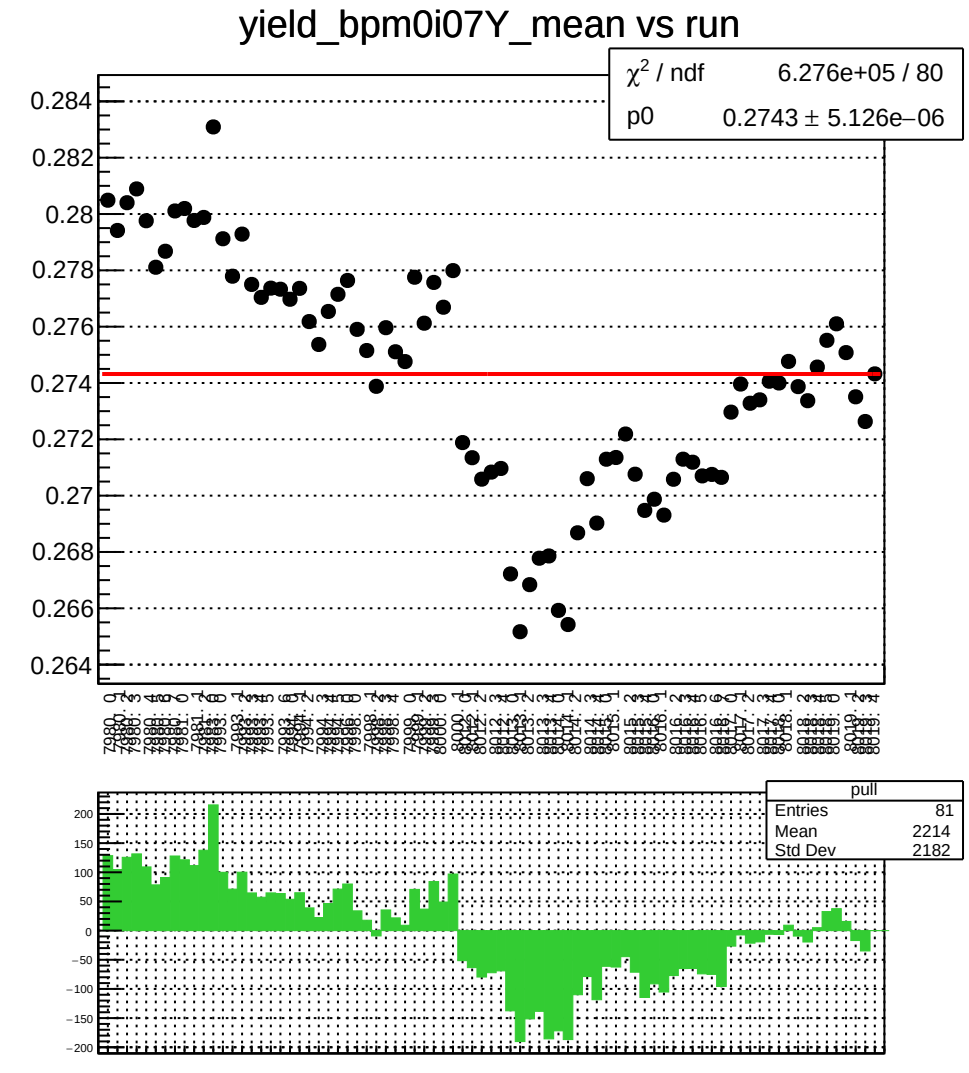

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

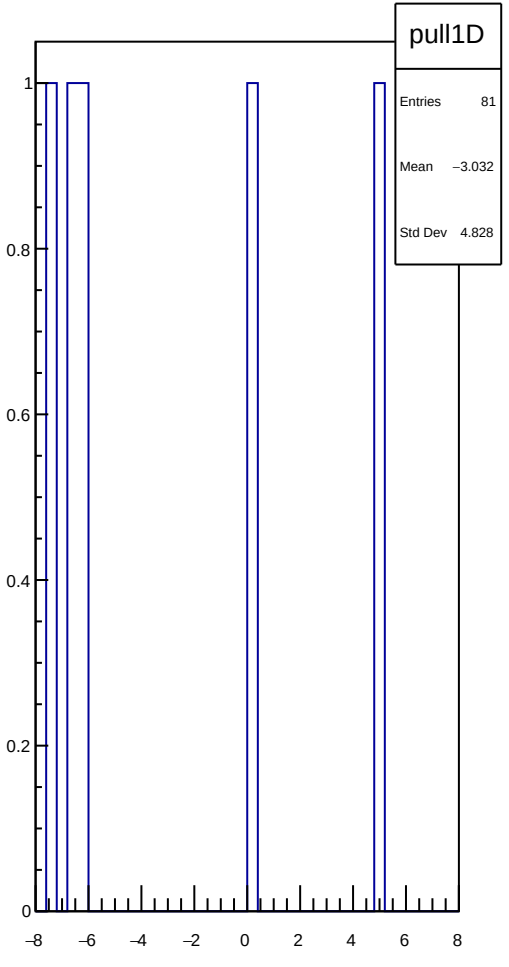

yield_bpm0i05Y_rms vs run
χ² / ndf 1.338e+05 / 80
p0 0.003961 ± 3.263e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

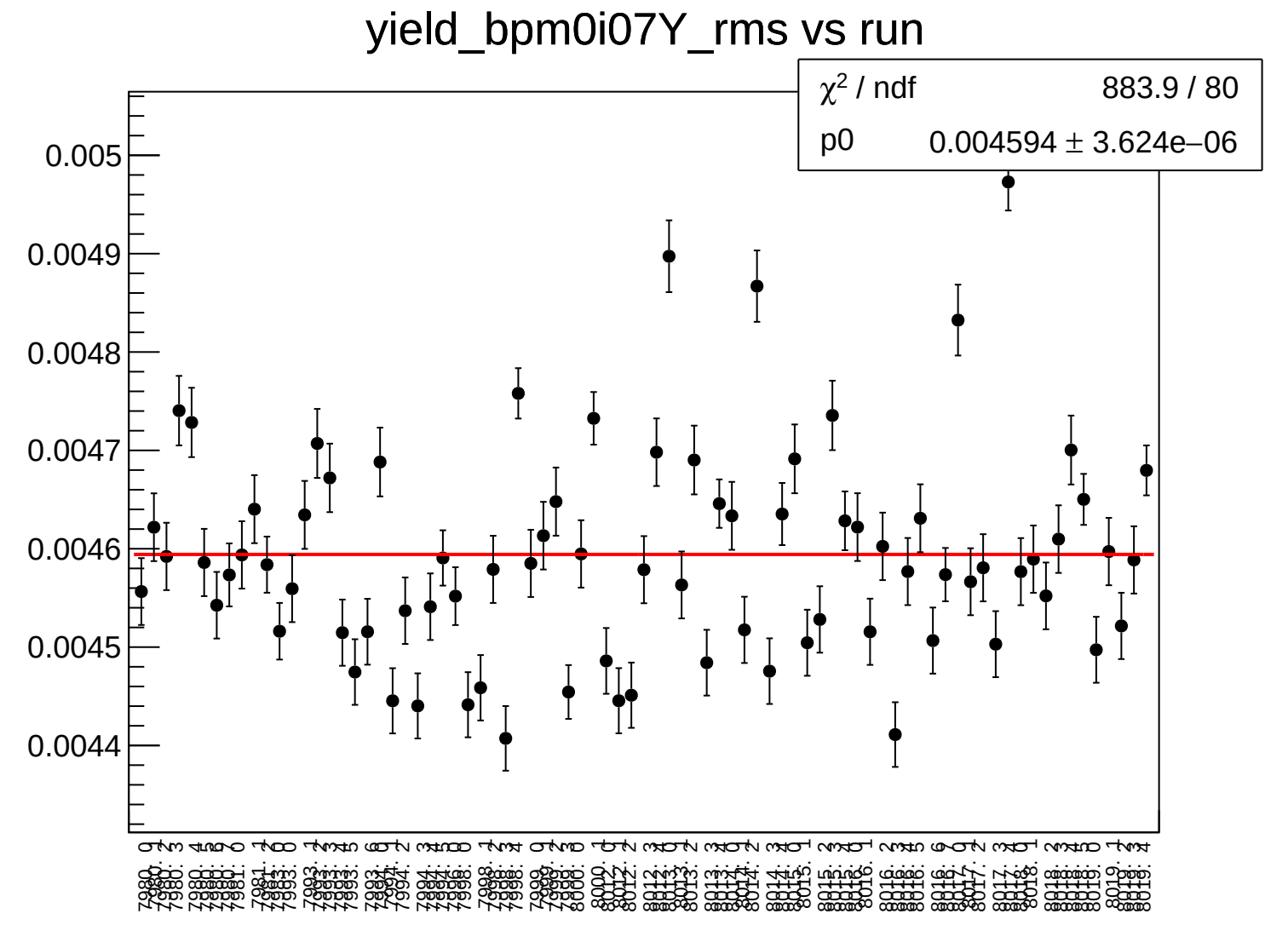

yield_bpm0i07X_mean vs run
χ² / ndf 4.188e+05 / 80
p0 −2.636 ± 9.197e−06
−2.625
−2.63
−2.635
−2.64
−2.645
−2.65
−2.655
−2.66
−2.665
pull
Entries 81
Mean −419
Std Dev 454.2
100
50
0
−50
−100
−150
−200
−250
−300
−350

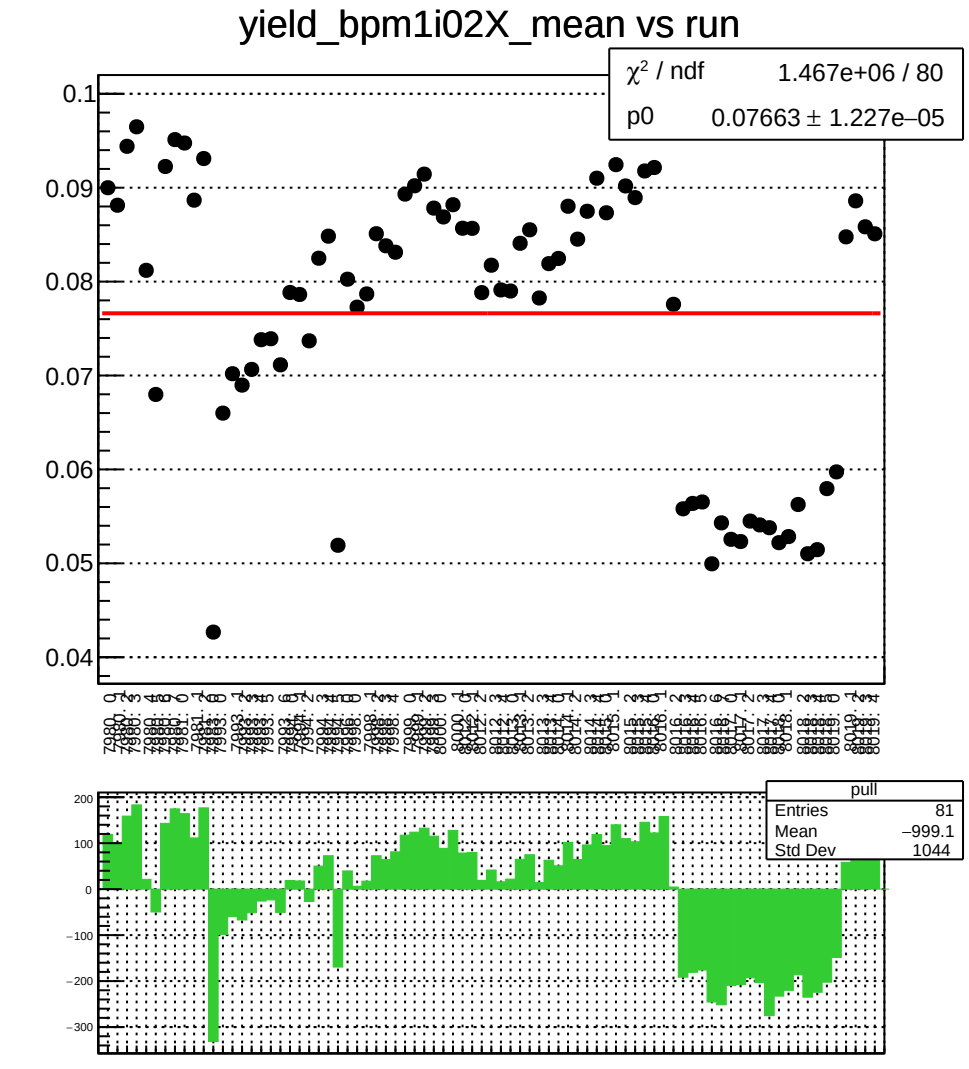

pull1D
Entries 81
Mean 2.275
Std Dev 3.573
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

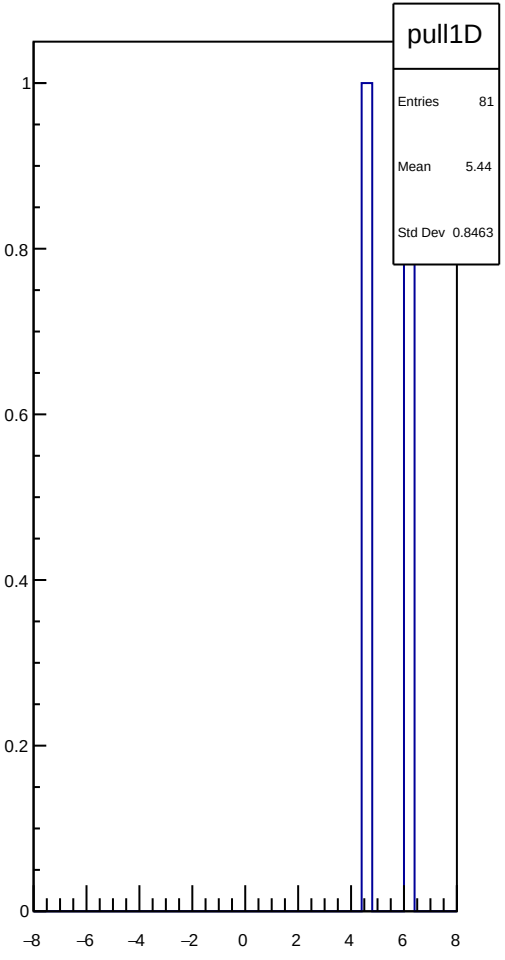

yield_bpm0i07X_rms vs run
χ² / ndf 5100 / 80
p0 0.008233 ± 6.503e−06
0.0095
0.009
0.0085
0.008
0.0075
0.007

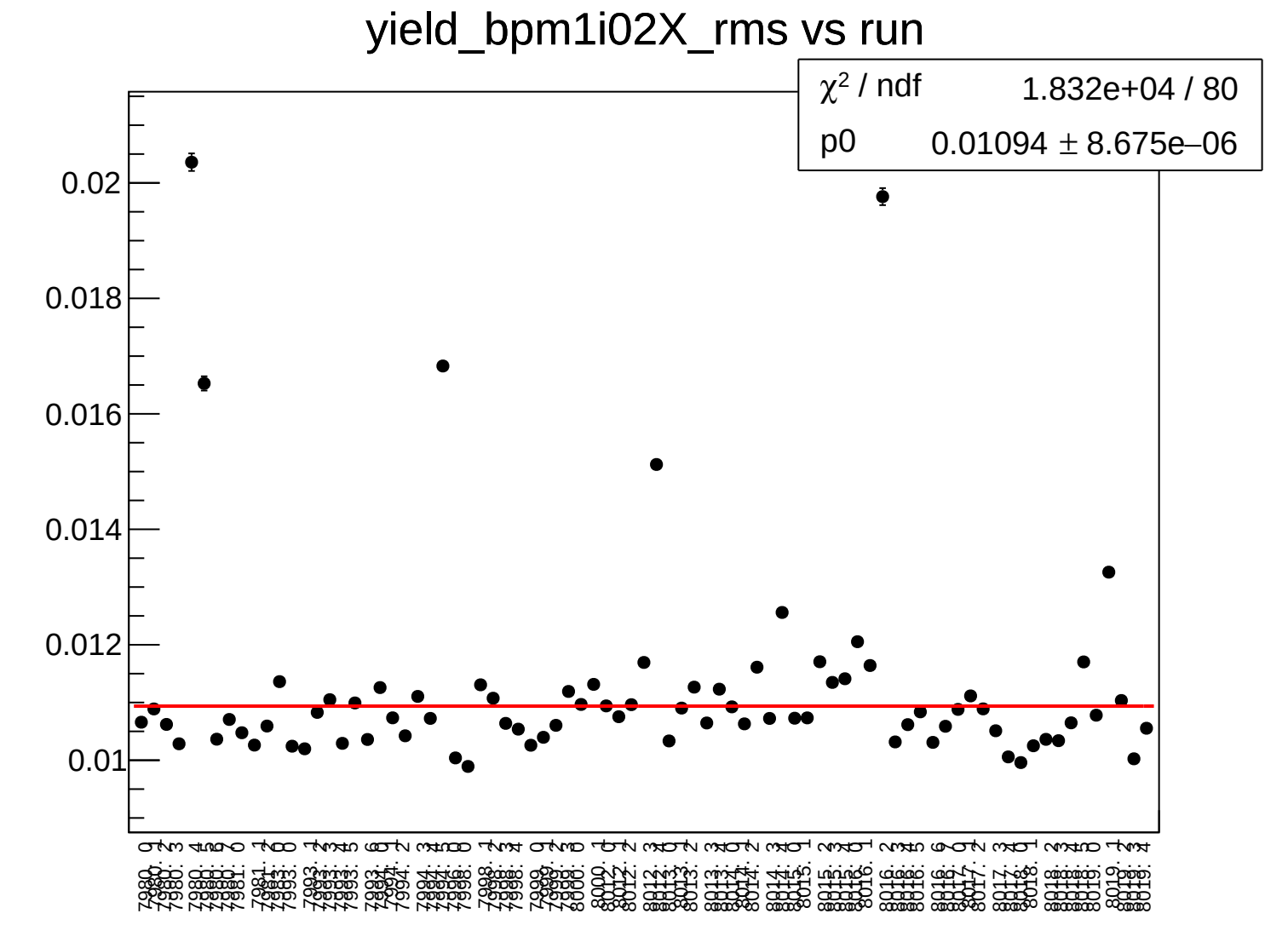

yield_bpm0i07Y_mean vs run
χ² / ndf 6.276e+05 / 80
p0 0.2743 ± 5.126e−06
0.284
0.282
0.28
0.278
0.276
0.274
0.272
0.27
0.268
0.266
0.264
pull
Entries 81
Mean 2214
Std Dev 2182
200
150
100
50
0
−50
−100
−150
−200

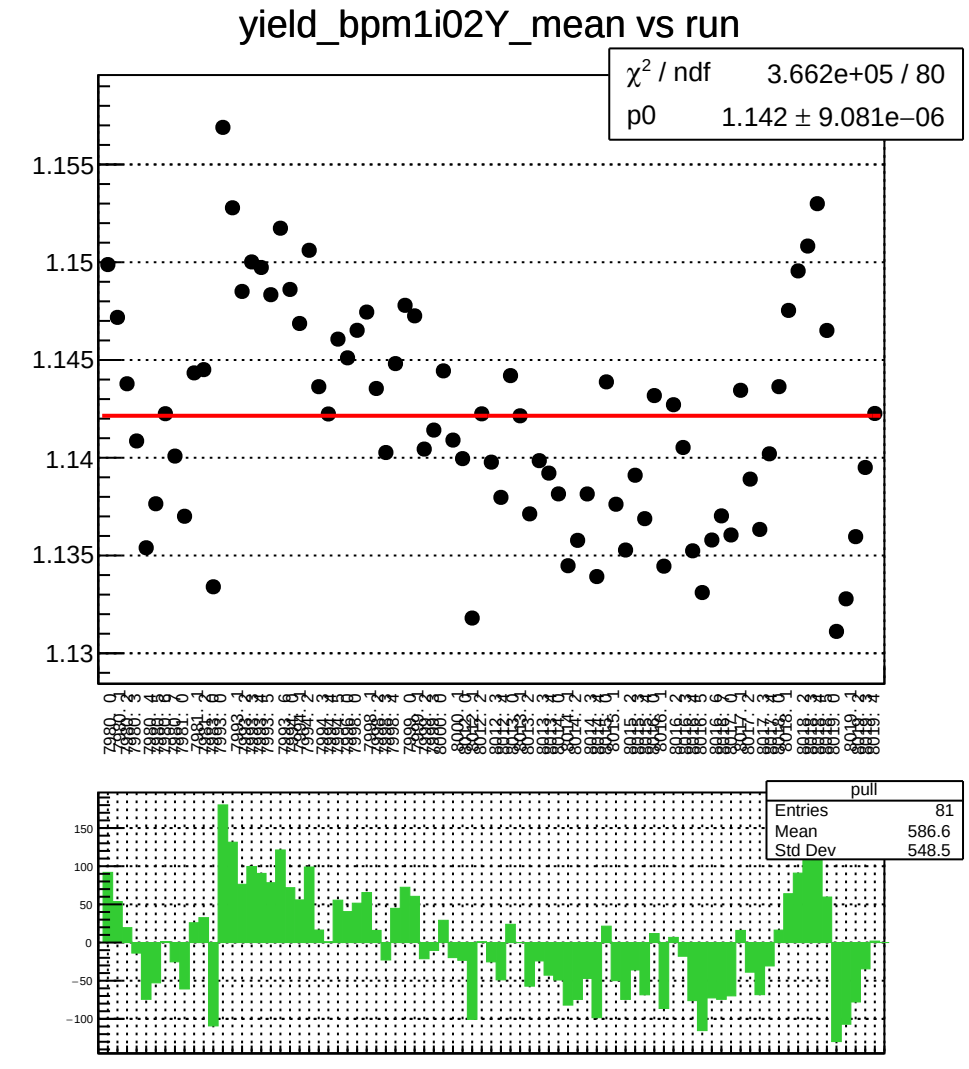

pull1D
Entries 81
Mean −3.032
Std Dev 4.828
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

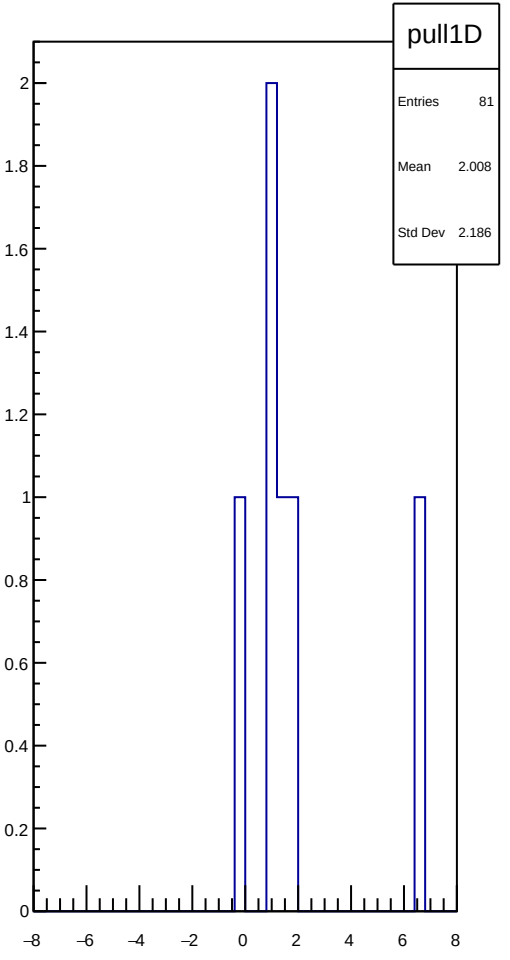

yield_bpm0i07Y_rms vs run
χ² / ndf 883.9 / 80
p0 0.004594 ± 3.624e−06
0.005
0.0049
0.0048
0.0047
0.0046
0.0045
0.0044

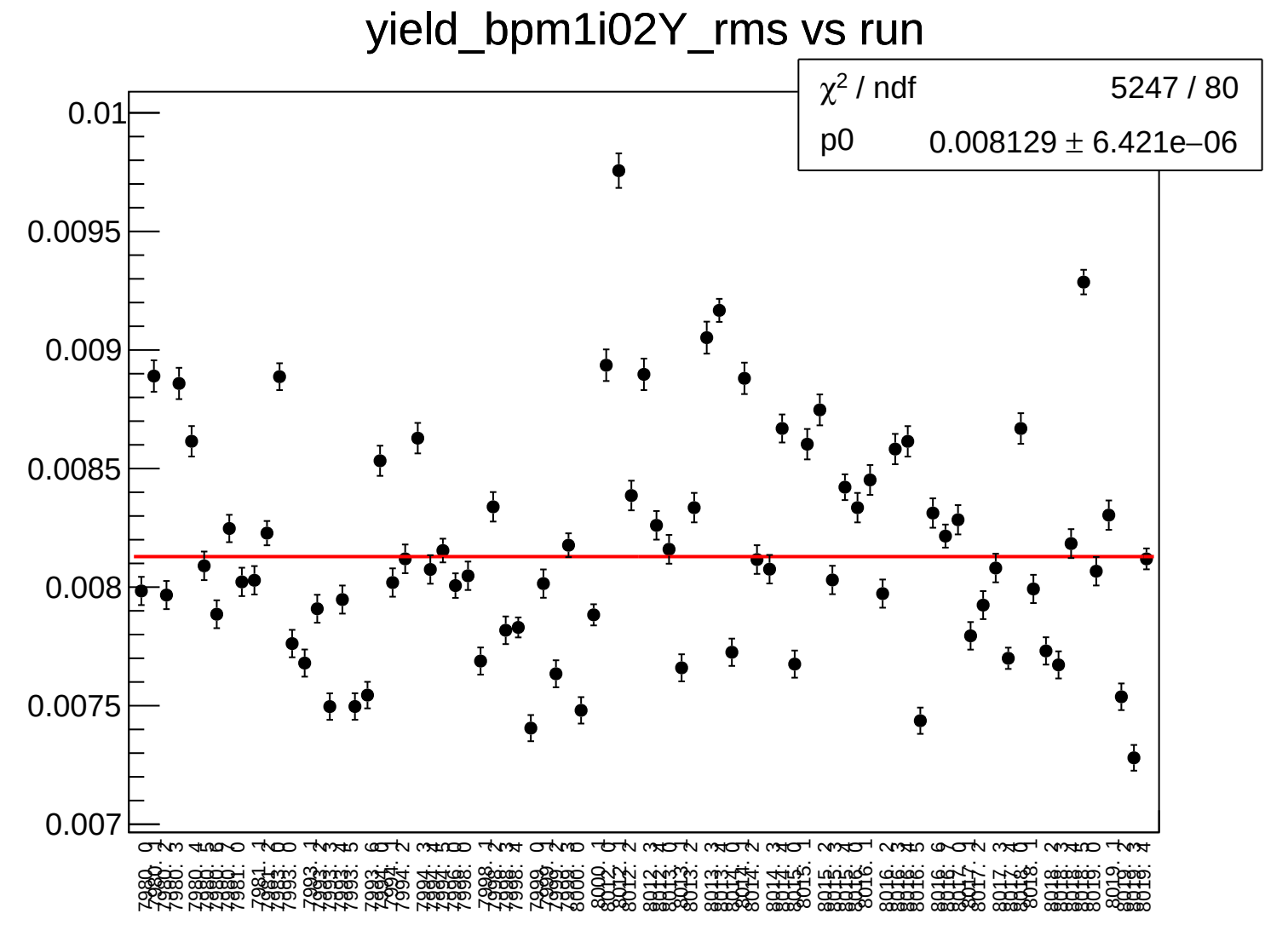

yield_bpm1i02X_mean vs run
χ² / ndf 1.467e+06 / 80
p0 0.07663 ± 1.227e−05
pull
Entries 81
Mean −999.1
Std Dev 1044

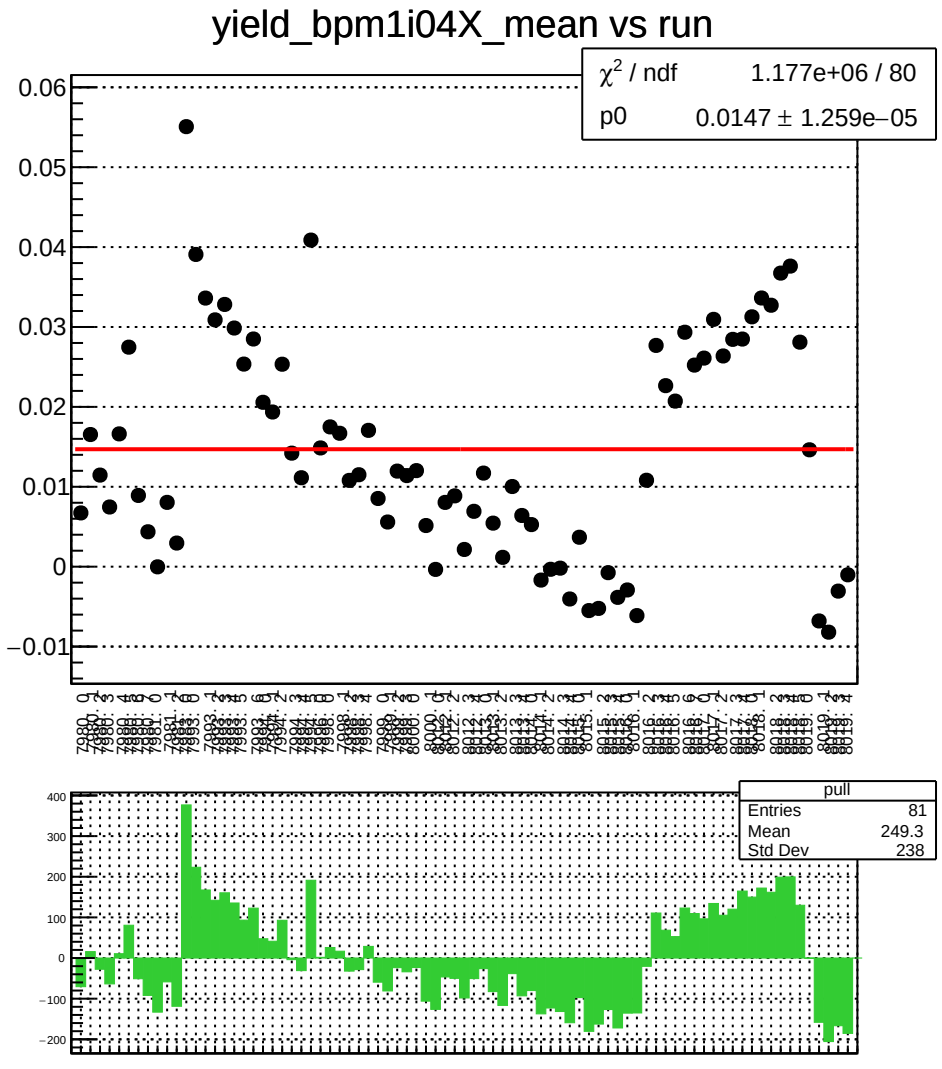

pull1D
Entries 81
Mean 5.44
Std Dev 0.8463

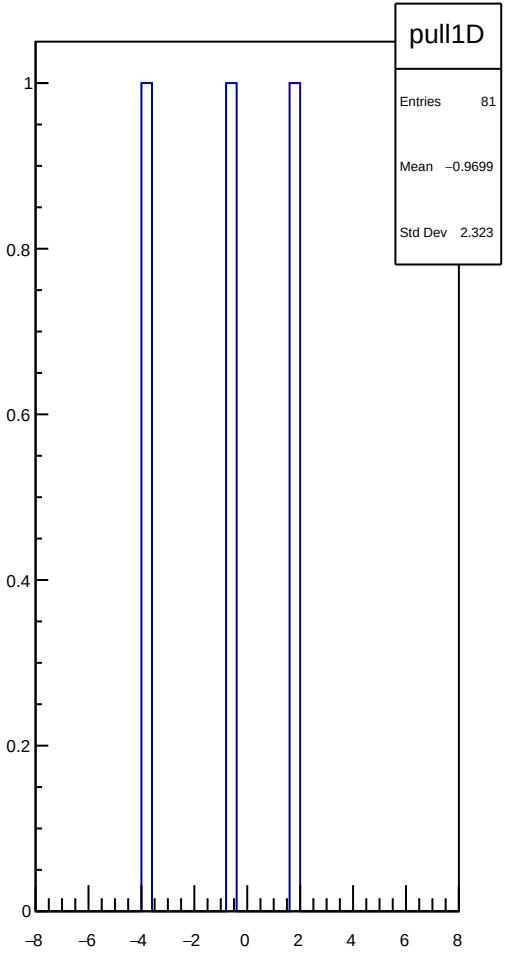

yield_bpm1i02X_rms vs run
χ² / ndf 1.832e+04 / 80
p0 0.01094 ± 8.675e−06
0.02
0.018
0.016
0.014
0.012
0.01

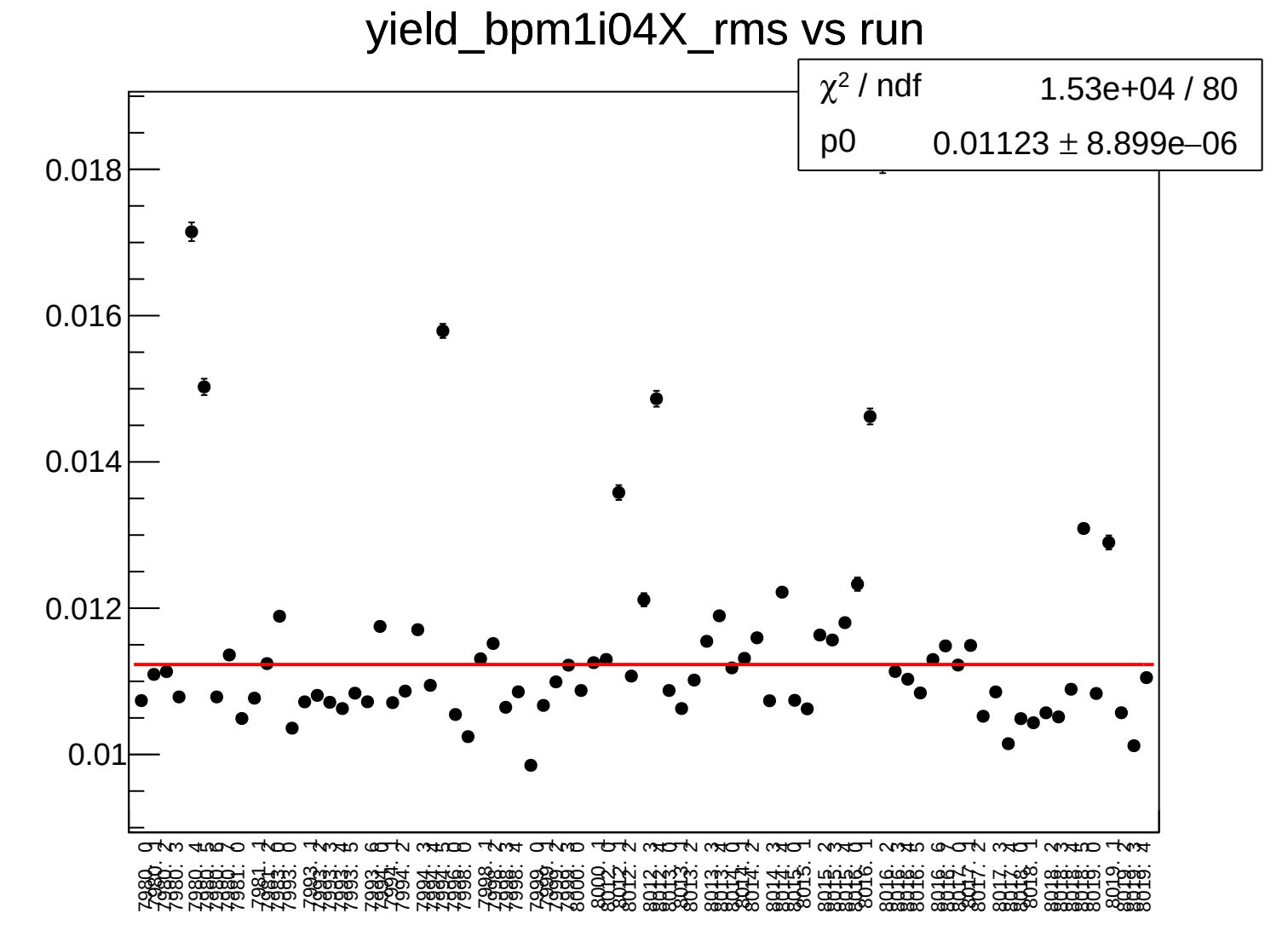

yield_bpm1i02Y_mean vs run
χ² / ndf 3.662e+05 / 80
p0 1.142 ± 9.081e−06
1.155
1.15
1.145
1.14
1.135
1.13
pull
Entries 81
Mean 586.6
Std Dev 548.5
150
100
50
0
−50
−100

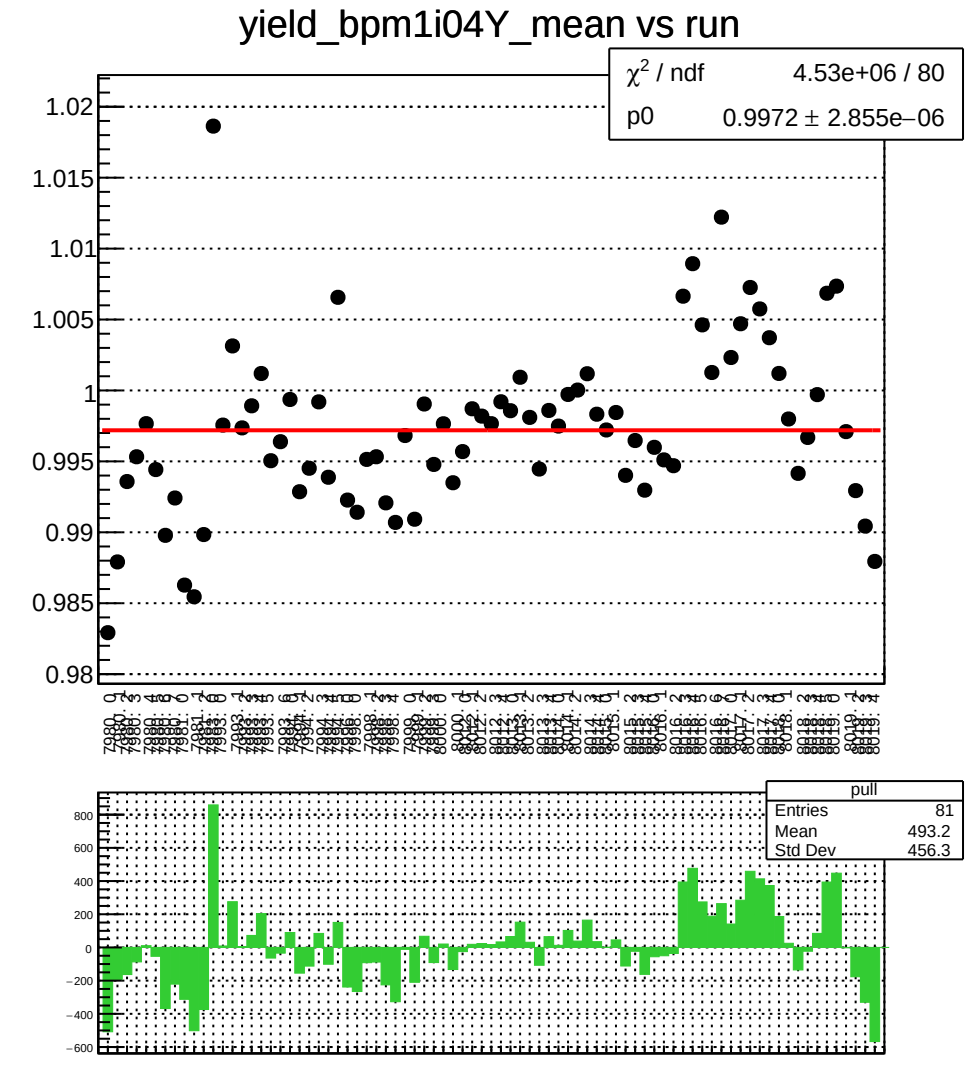

pull1D
Entries 81
Mean 2.008
Std Dev 2.186
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

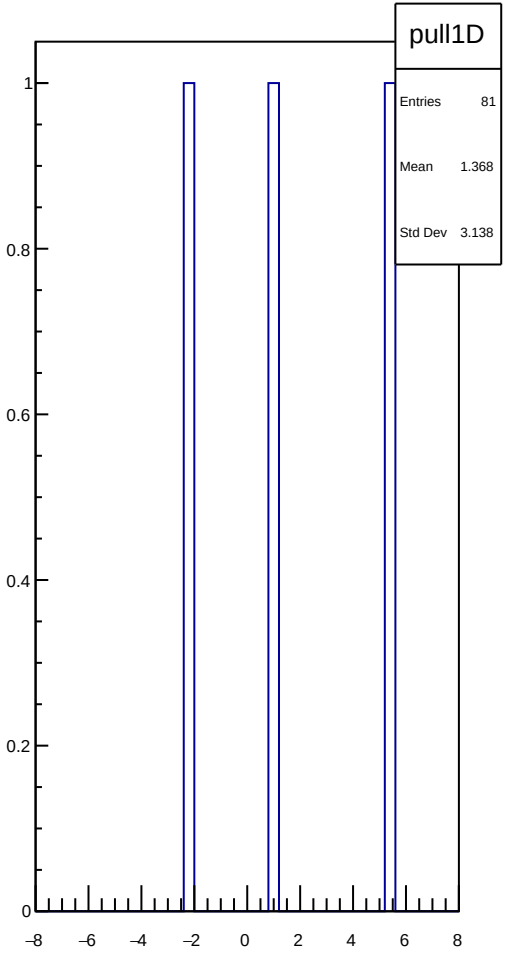

yield_bpm1i02Y_rms vs run
χ² / ndf 5247 / 80
p0 0.008129 ± 6.421e−06
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007

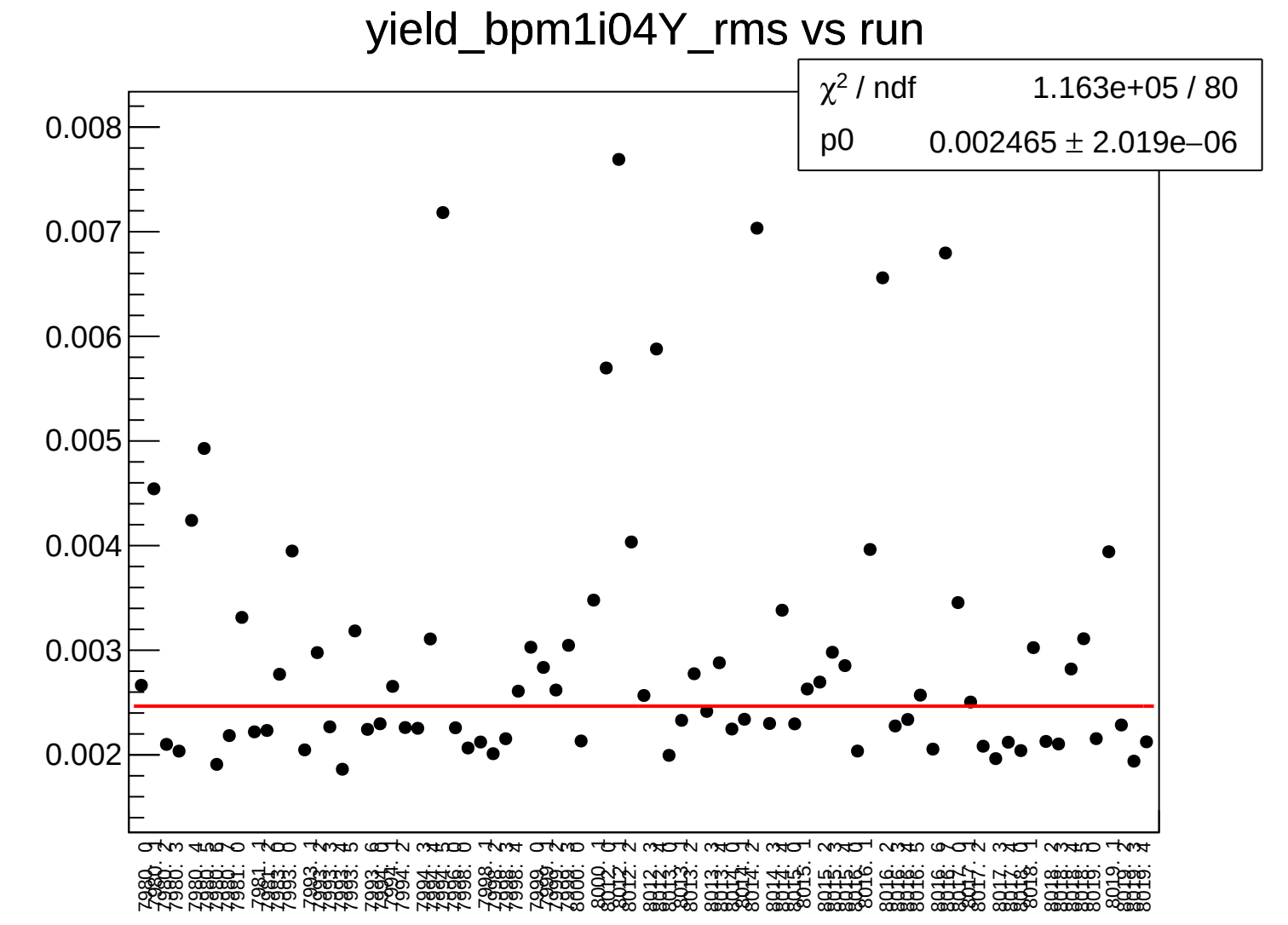

yield_bpm1i04X_mean vs run
χ² / ndf 1.177e+06 / 80
p0 0.0147 ± 1.259e−05
pull
Entries 81
Mean 249.3
Std Dev 238

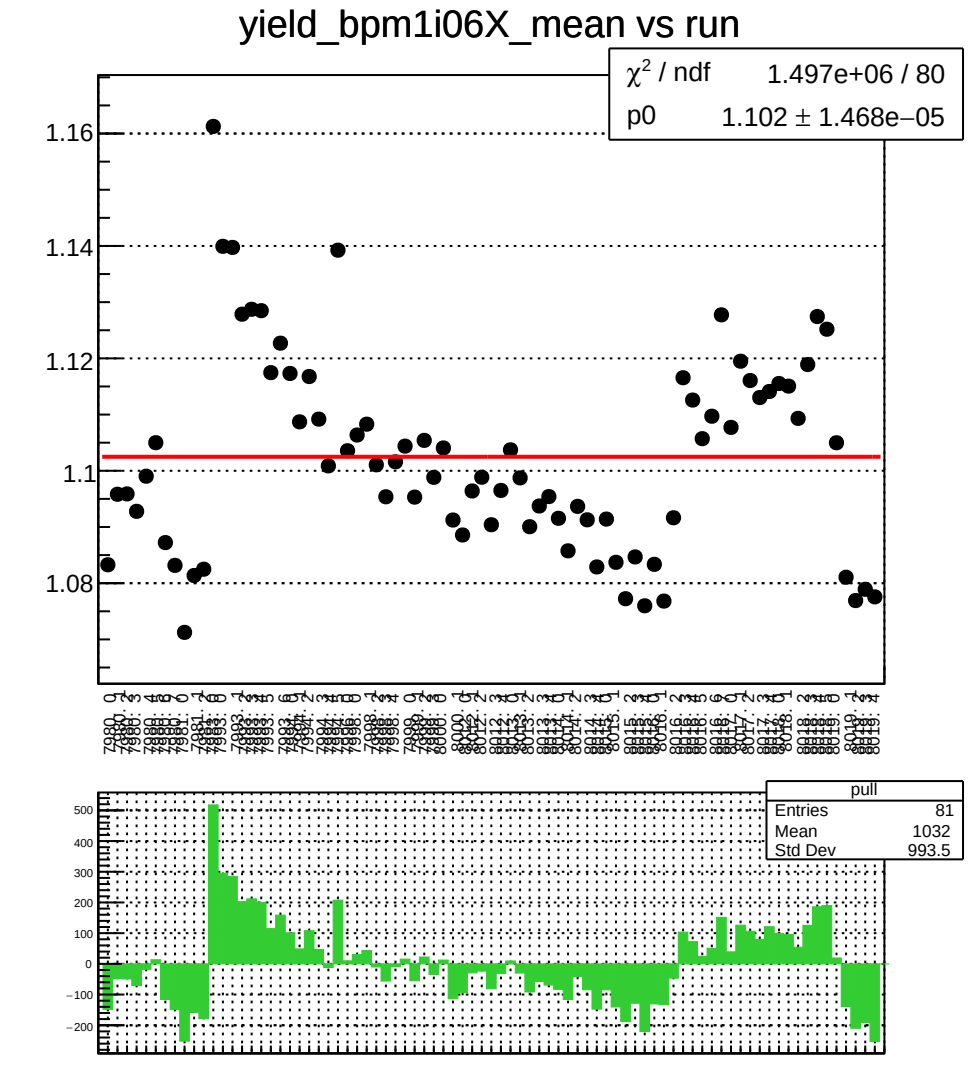

pull1D
Entries 81
Mean −0.9699
Std Dev 2.323

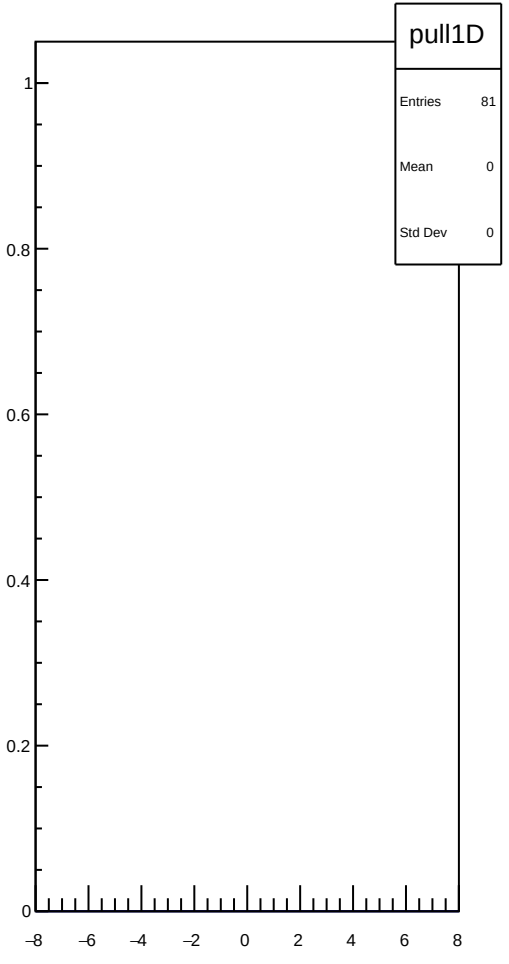

yield_bpm1i04X_rms vs run
χ² / ndf 1.53e+04 / 80
p0 0.01123 ± 8.899e–06
0.018
0.016
0.014
0.012
0.01

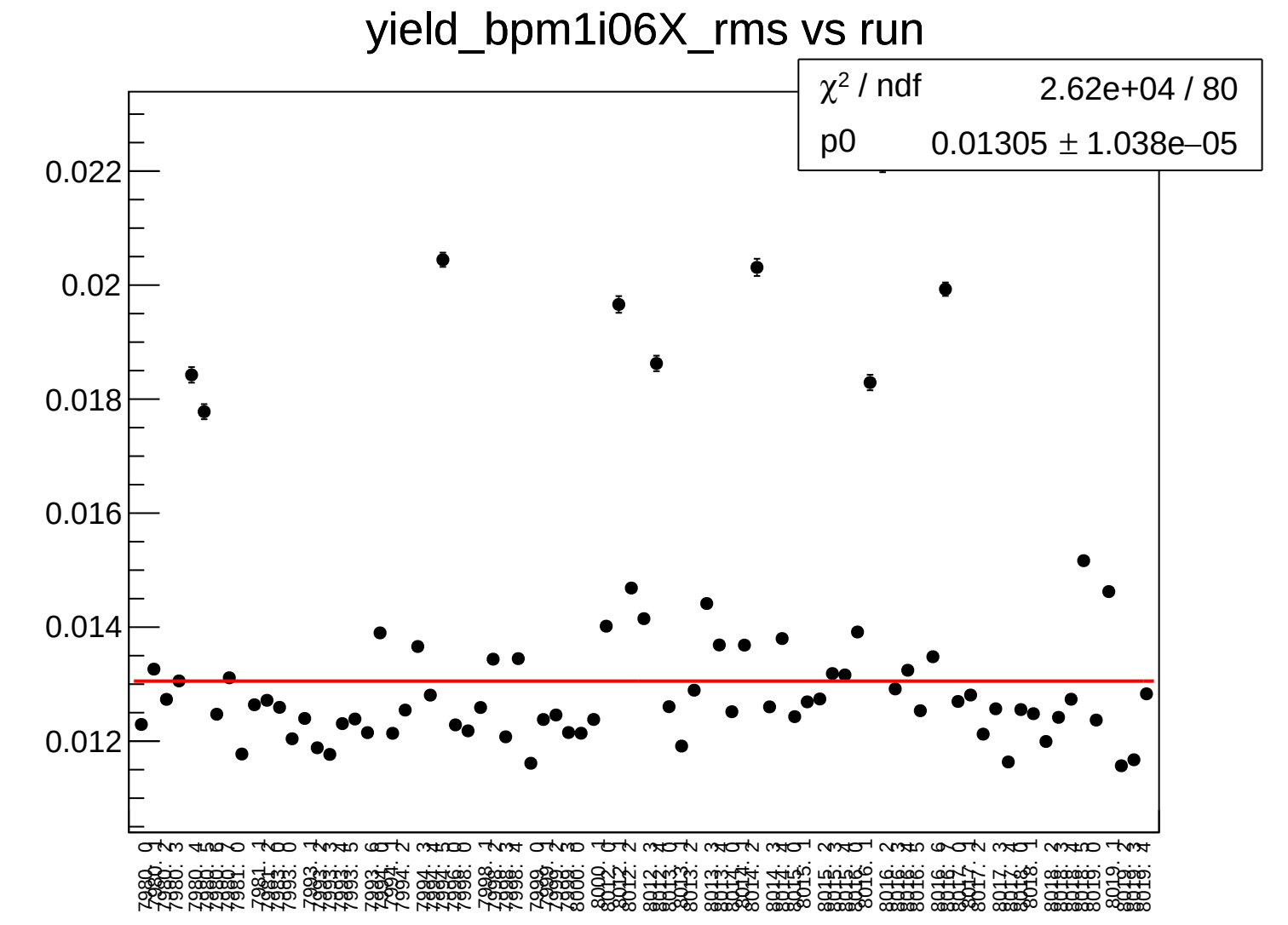

yield_bpm1i04Y_mean vs run
χ² / ndf 4.53e+06 / 80
p0 0.9972 ± 2.855e−06
1.02
1.015
1.01
1.005
1
0.995
0.99
0.985
0.98
pull
Entries 81
Mean 493.2
Std Dev 456.3
800
600
400
200
0
−200
−400
−600

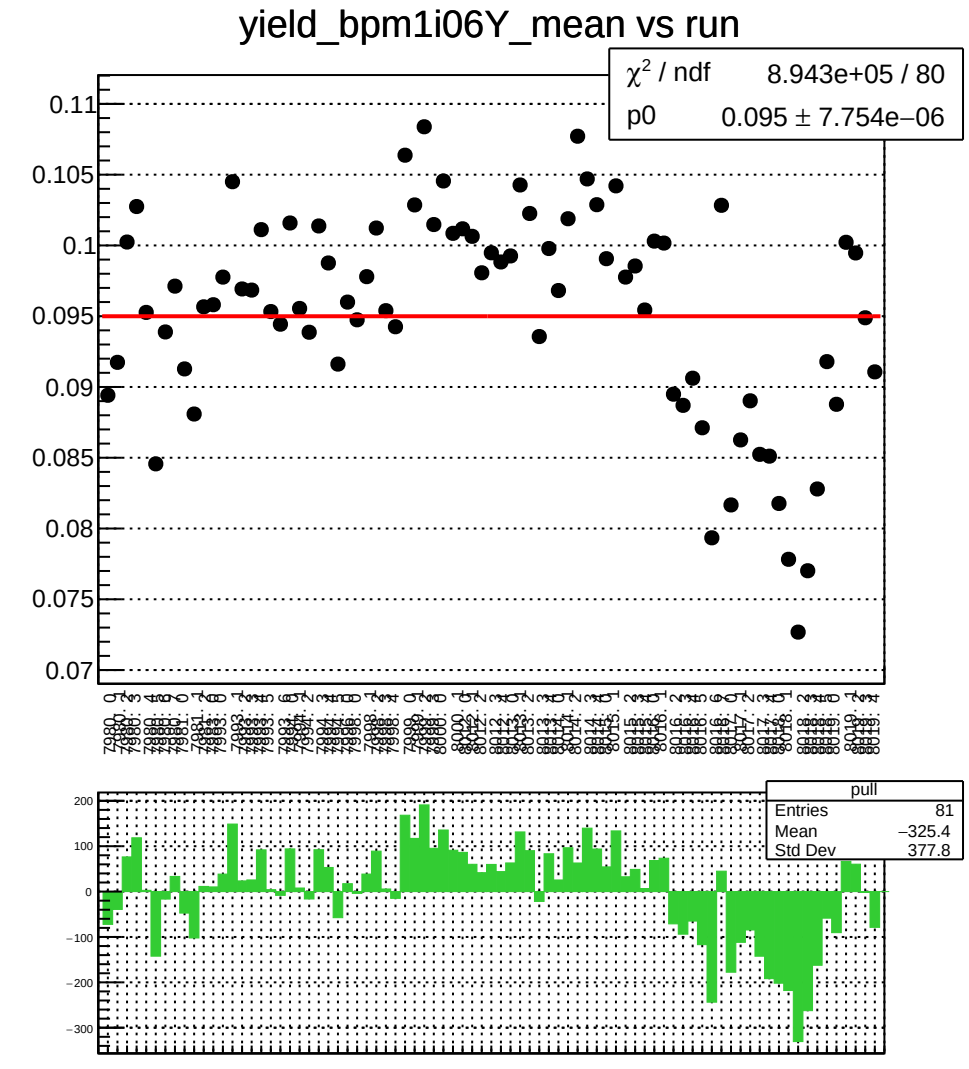

pull1D
Entries 81
Mean 1.368
Std Dev 3.138
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

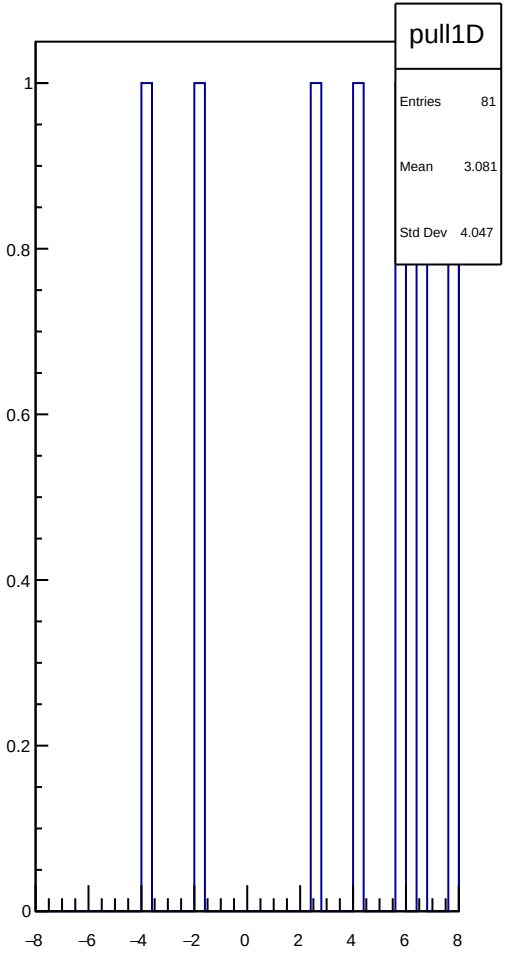

yield_bpm1i04Y_rms vs run
χ^2 / ndf 1.163e+05 / 80
p0 0.002465 ± 2.019e−06
0.008
0.007
0.006
0.005
0.004
0.003
0.002

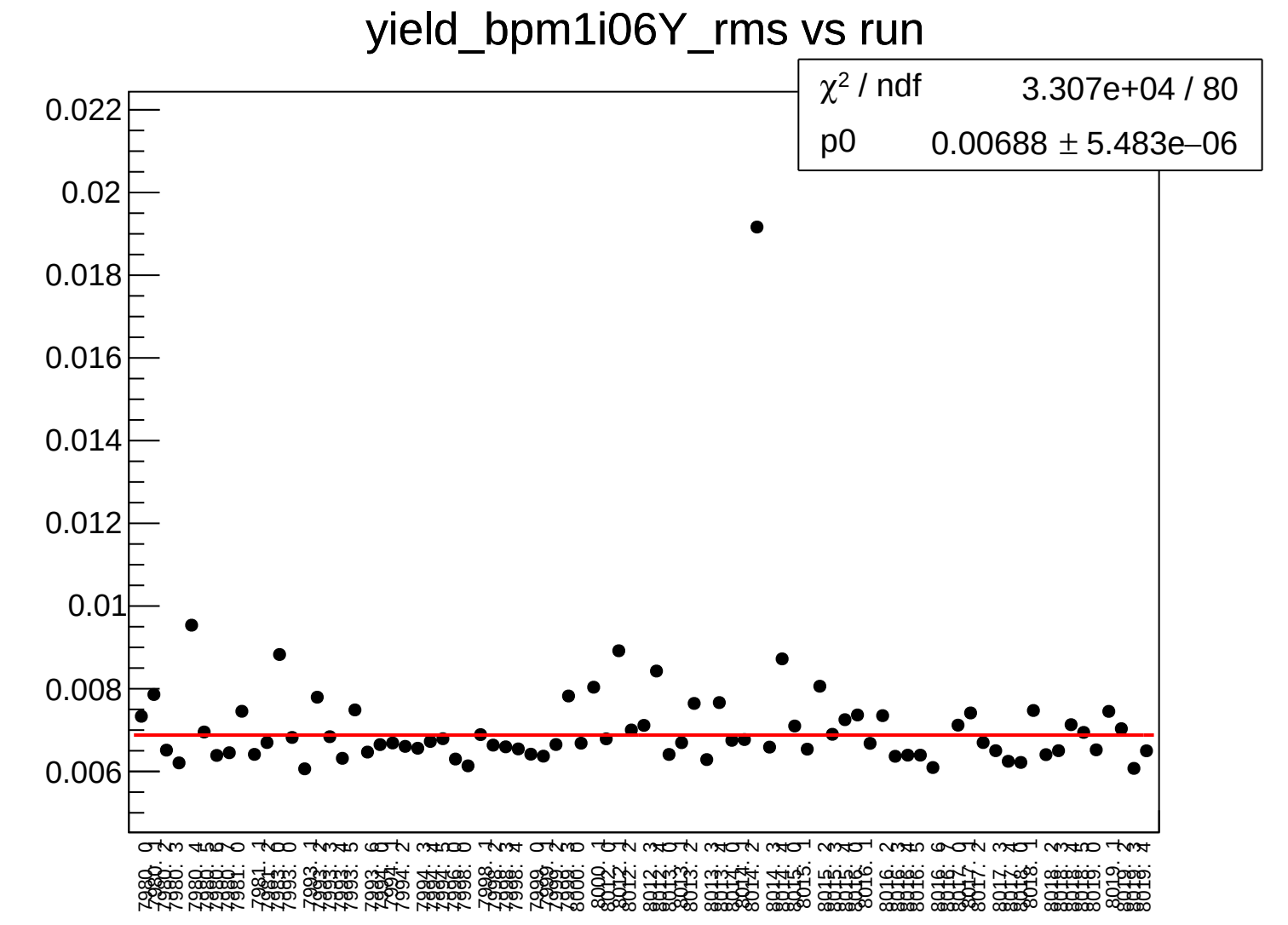

yield_bpm1i06X_mean vs run
χ² / ndf 1.497e+06 / 80
p0 1.102 ± 1.468e−05
1.16
1.14
1.12
1.1
1.08
pull
Entries 81
Mean 1032
Std Dev 993.5
500
400
300
200
100
0
−100
−200

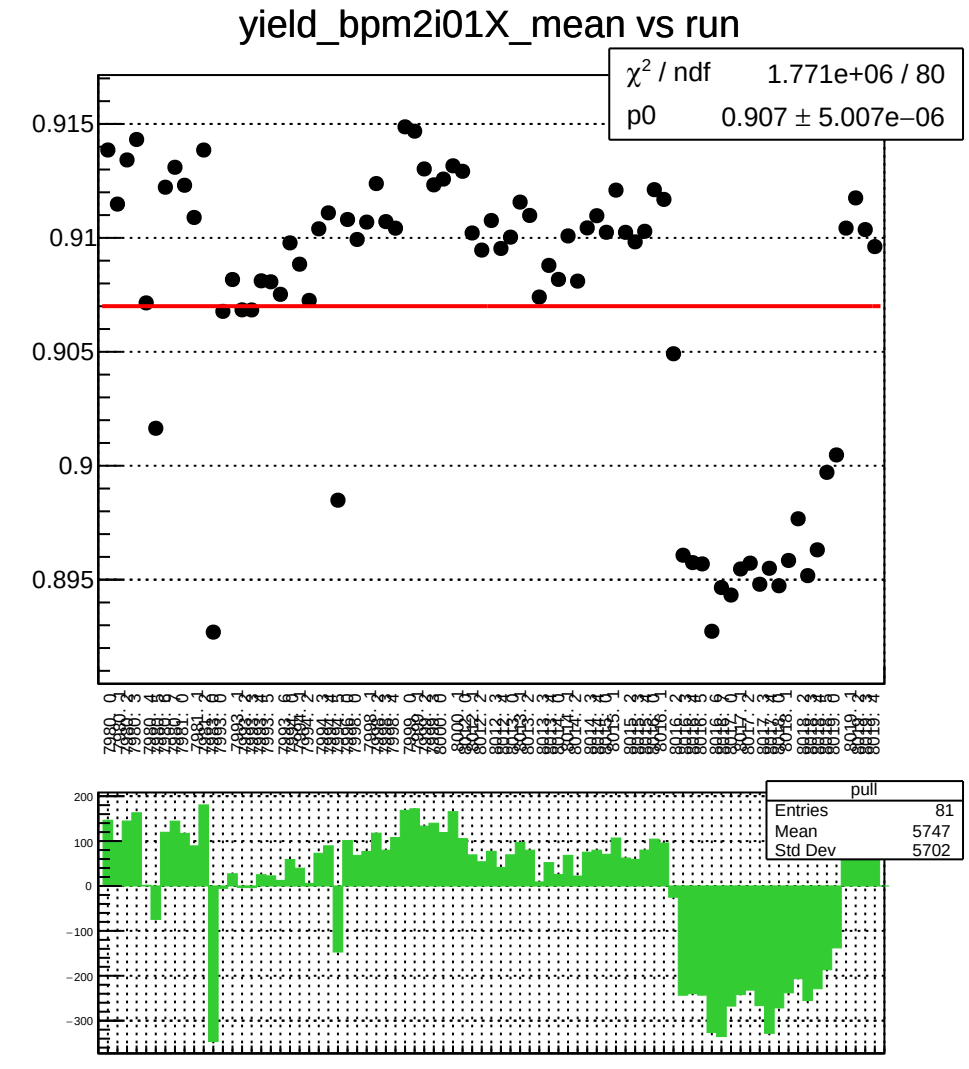

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

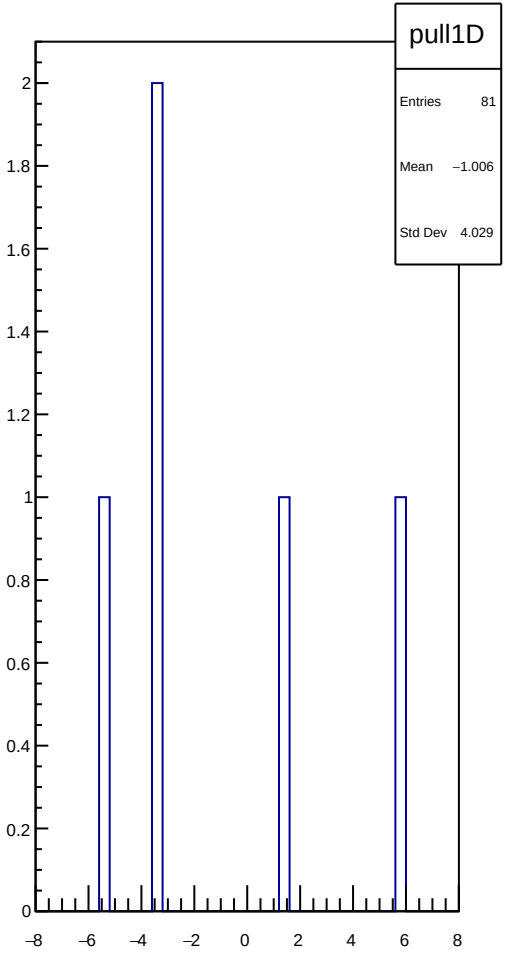

yield_bpm1i06X_rms vs run
χ² / ndf 2.62e+04 / 80
p0 0.01305 ± 1.038e–05
0.022
0.02
0.018
0.016
0.014
0.012

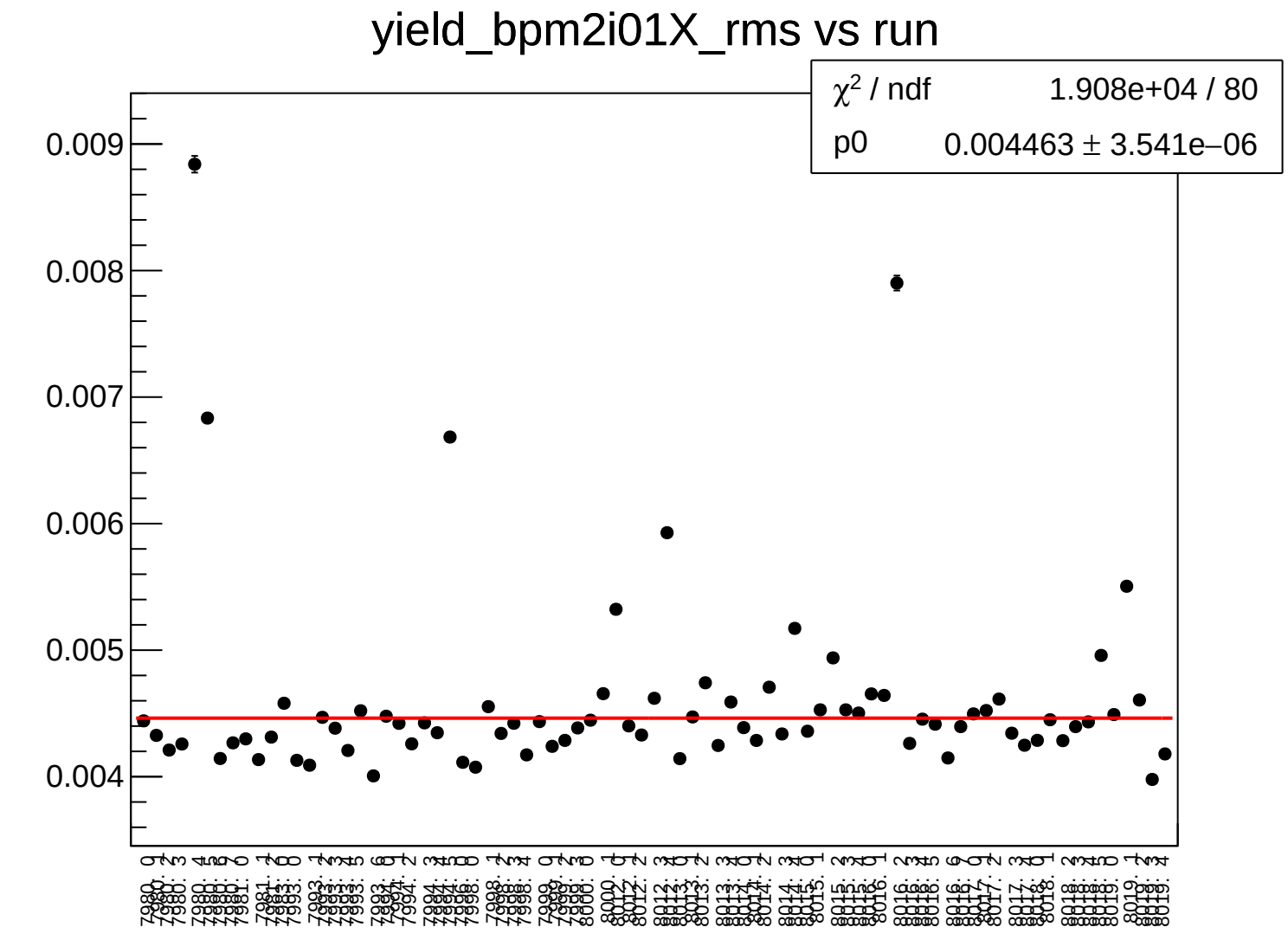

yield_bpm1i06Y_mean vs run
χ² / ndf 8.943e+05 / 80
p0 0.095 ± 7.754e−06
pull
Entries 81
Mean −325.4
Std Dev 377.8

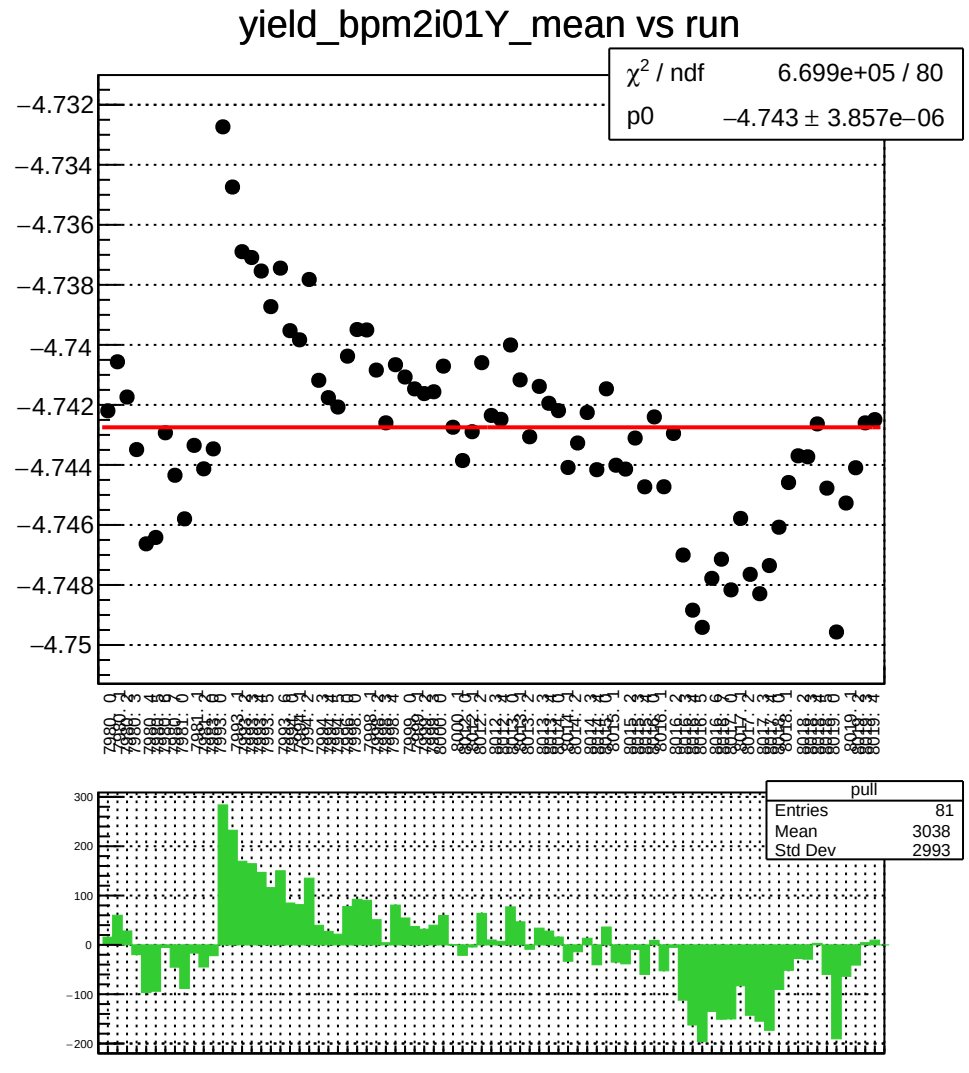

pull1D
Entries 81
Mean 3.081
Std Dev 4.047

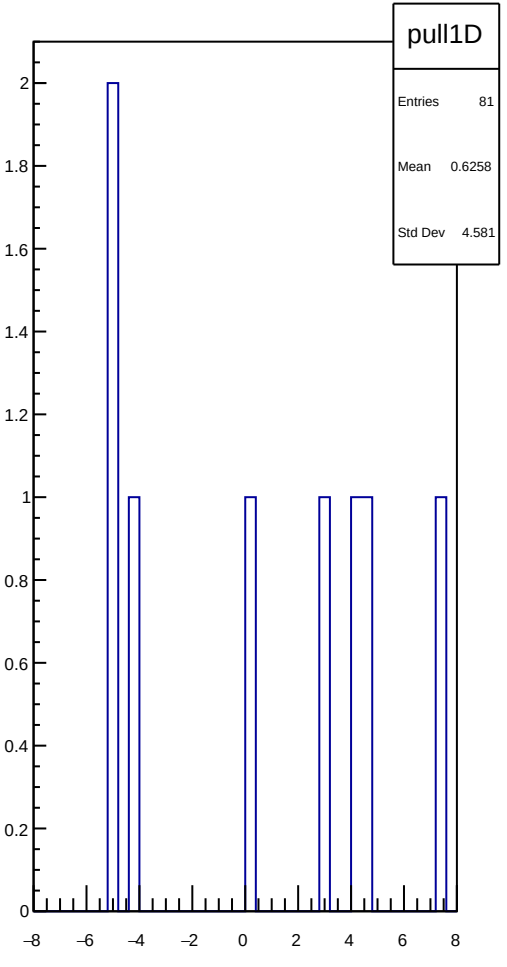

yield_bpm1i06Y_rms vs run
χ² / ndf 3.307e+04 / 80
p0 0.00688 ± 5.483e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

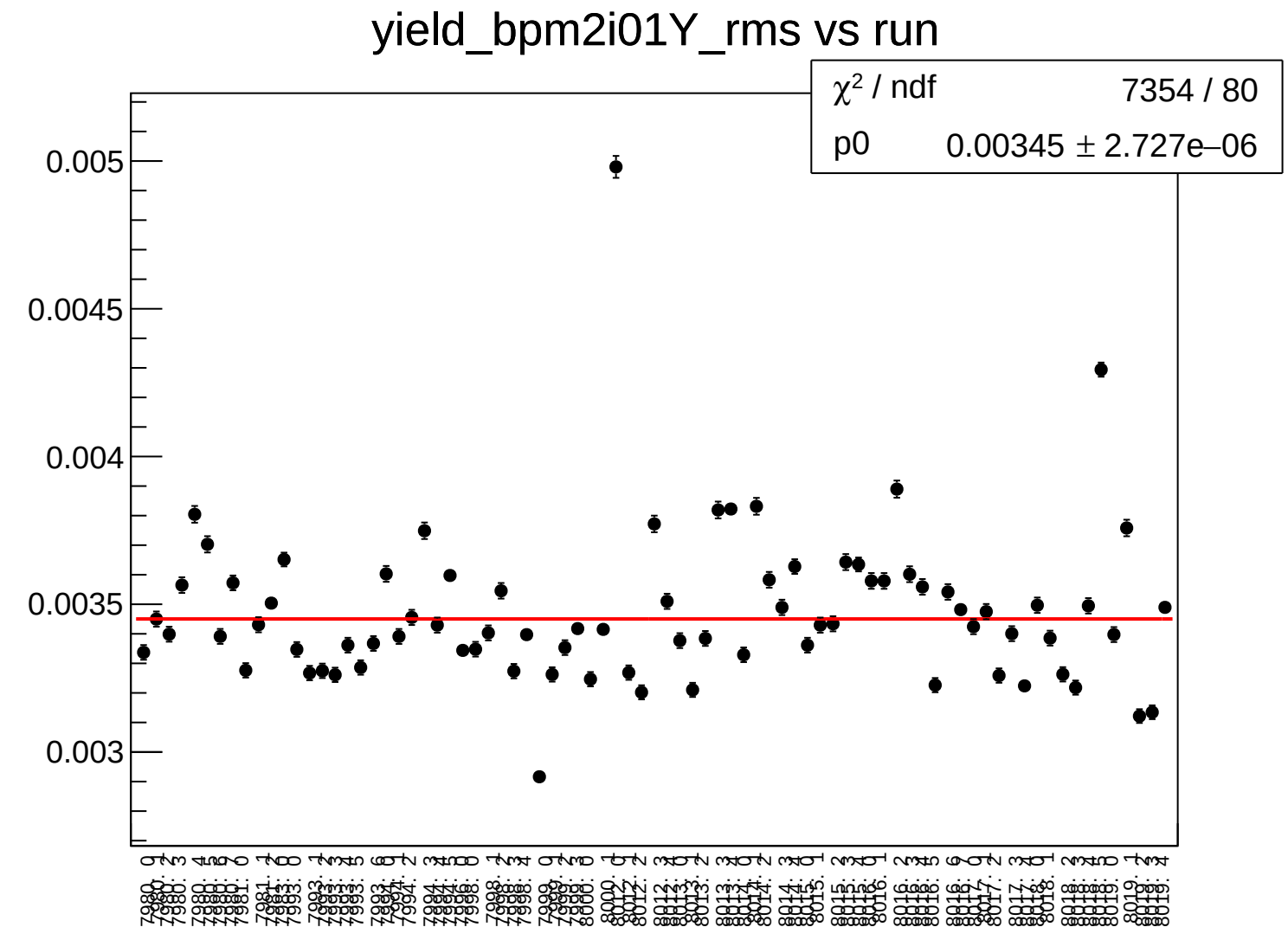

yield_bpm2i01X_mean vs run
χ² / ndf 1.771e+06 / 80
p0 0.907 ± 5.007e−06
0.915
0.91
0.905
0.9
0.895
pull
Entries 81
Mean 5747
Std Dev 5702
200
100
0
−100
−200
−300

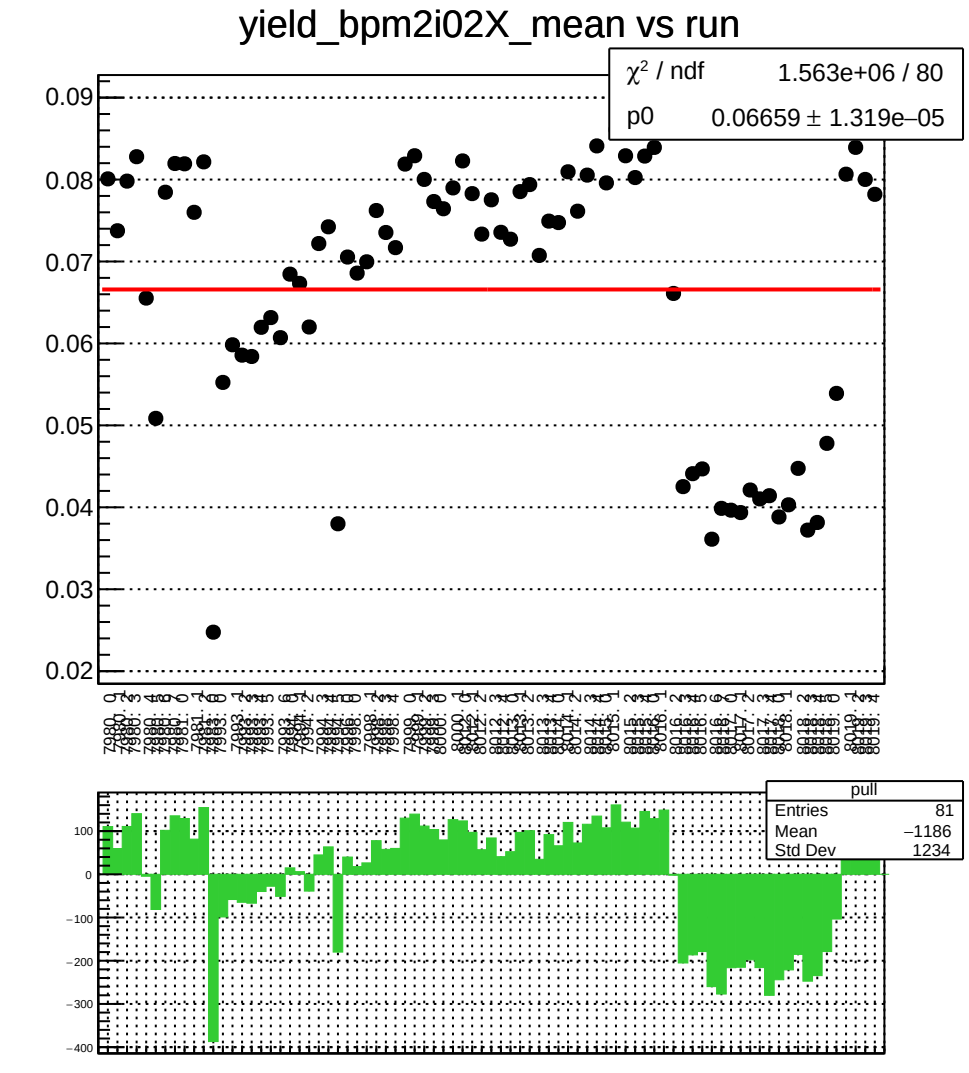

pull1D
Entries 81
Mean −1.006
Std Dev 4.029
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

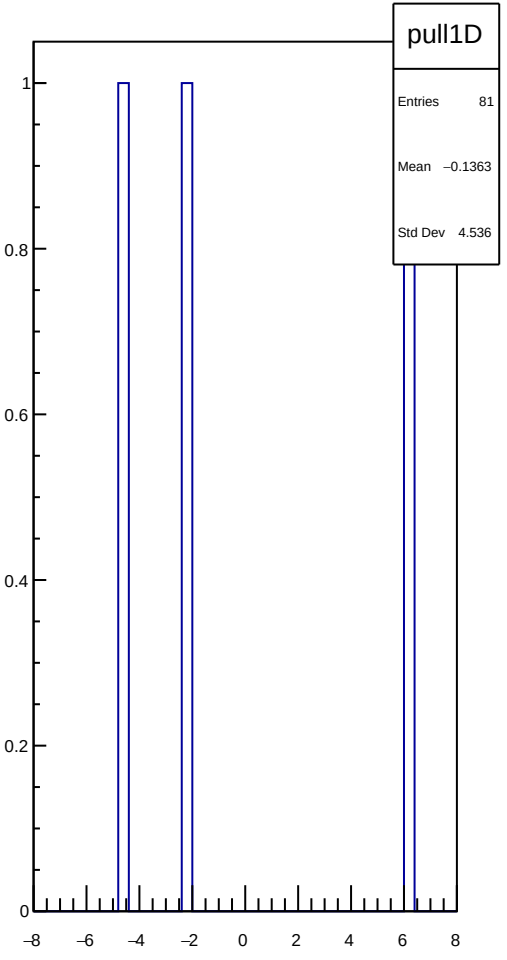

yield_bpm2i01X_rms vs run
χ² / ndf 1.908e+04 / 80
p0 0.004463 ± 3.541e−06
0.009
0.008
0.007
0.006
0.005
0.004

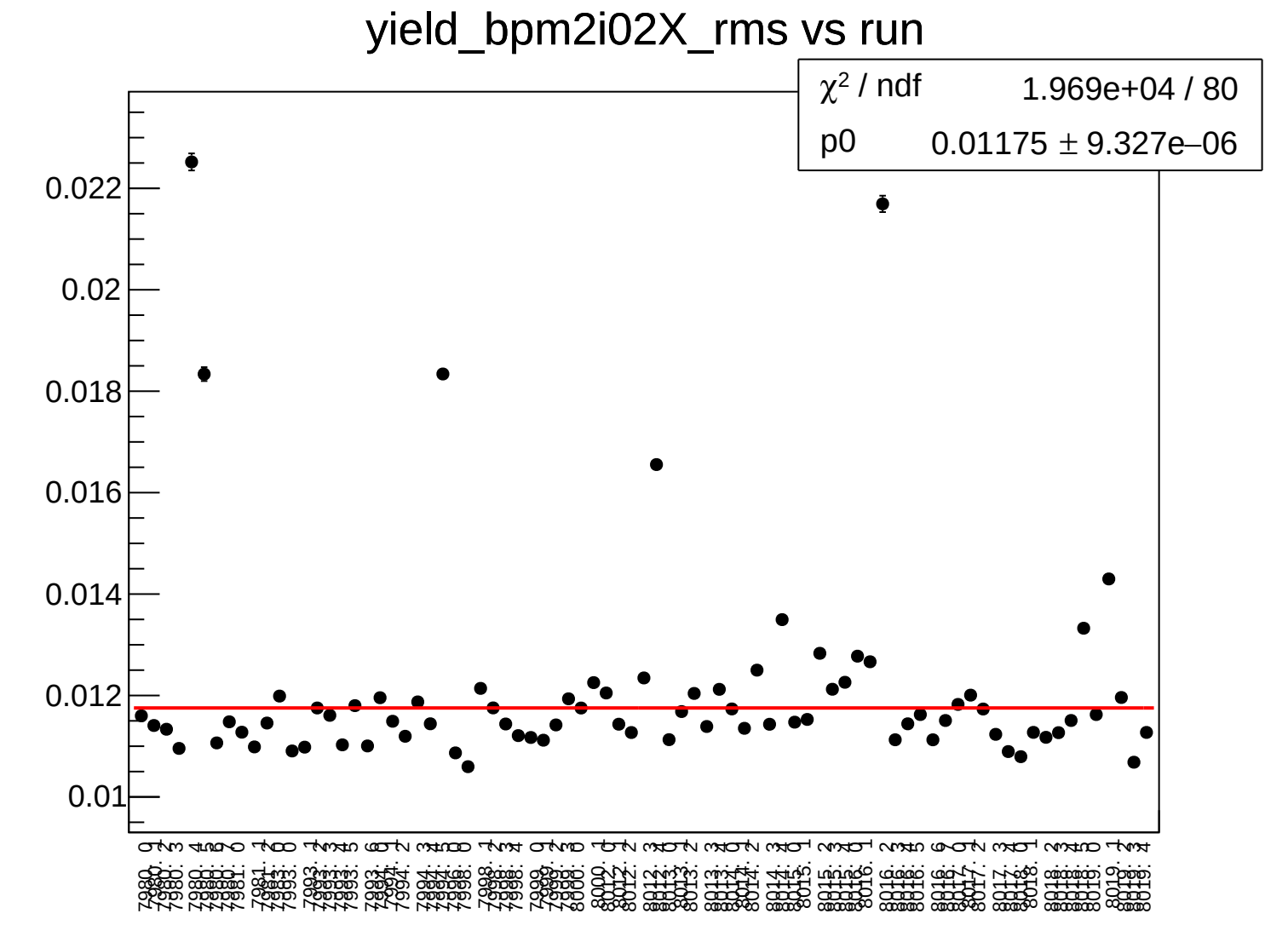

yield_bpm2i01Y_mean vs run
χ² / ndf 6.699e+05 / 80
p0 −4.743 ± 3.857e−06
−4.732
−4.734
−4.736
−4.738
−4.74
−4.742
−4.744
−4.746
−4.748
−4.75
pull
Entries 81
Mean 3038
Std Dev 2993
300
200
100
0
−100
−200

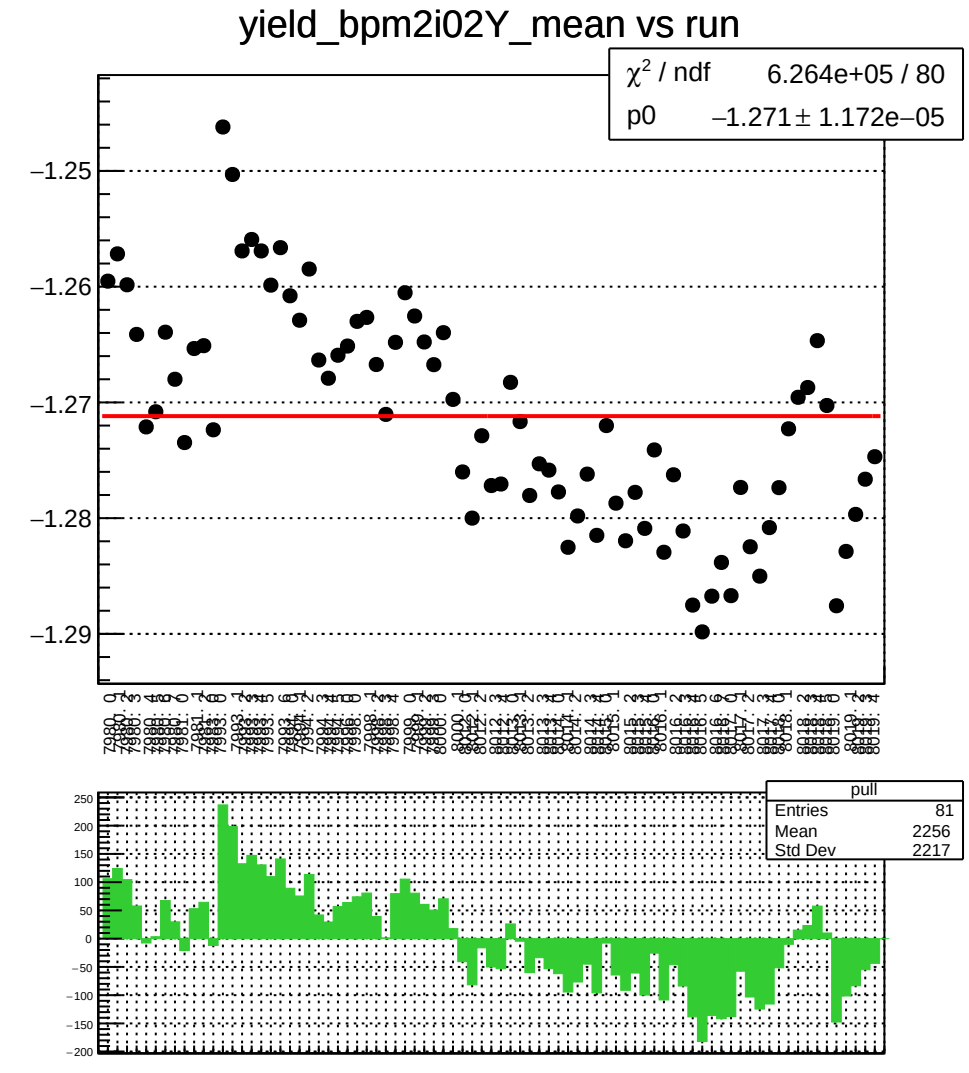

pull1D
Entries 81
Mean 0.6258
Std Dev 4.581
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

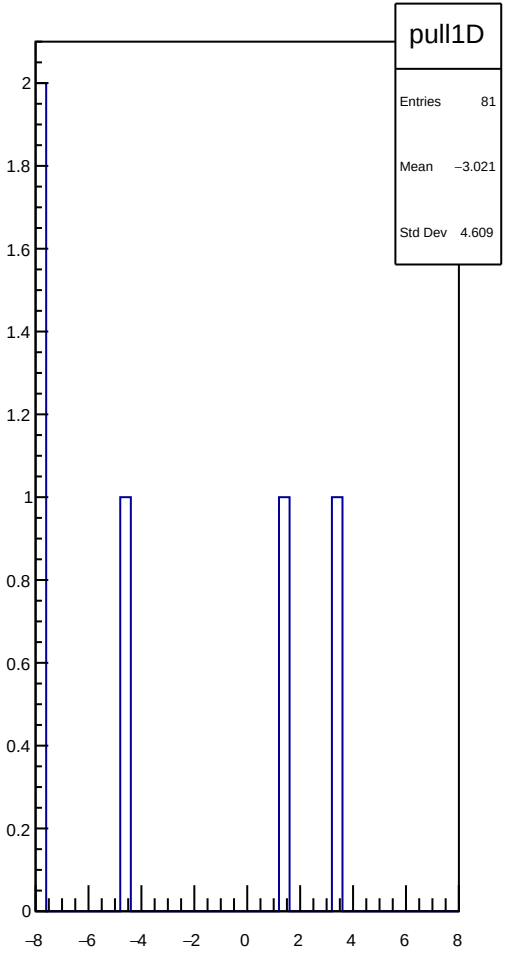

yield_bpm2i01Y_rms vs run
χ² / ndf 7354 / 80
p0 0.00345 ± 2.727e–06
0.005
0.0045
0.004
0.0035
0.003

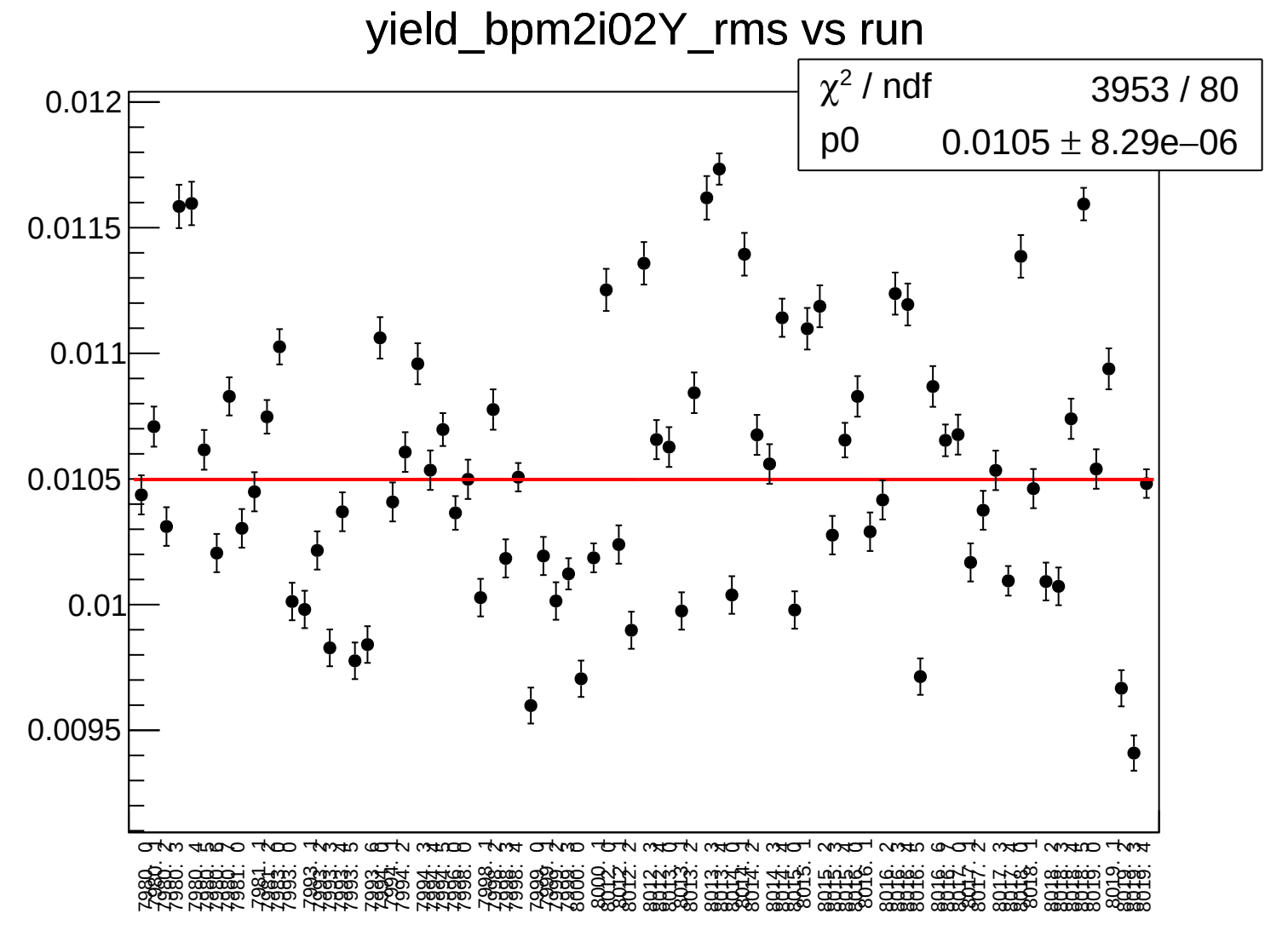

yield_bpm2i02X_mean vs run
χ² / ndf 1.563e+06 / 80
p0 0.06659 ± 1.319e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
pull
Entries 81
Mean −1186
Std Dev 1234
100
0
−100
−200
−300
−400

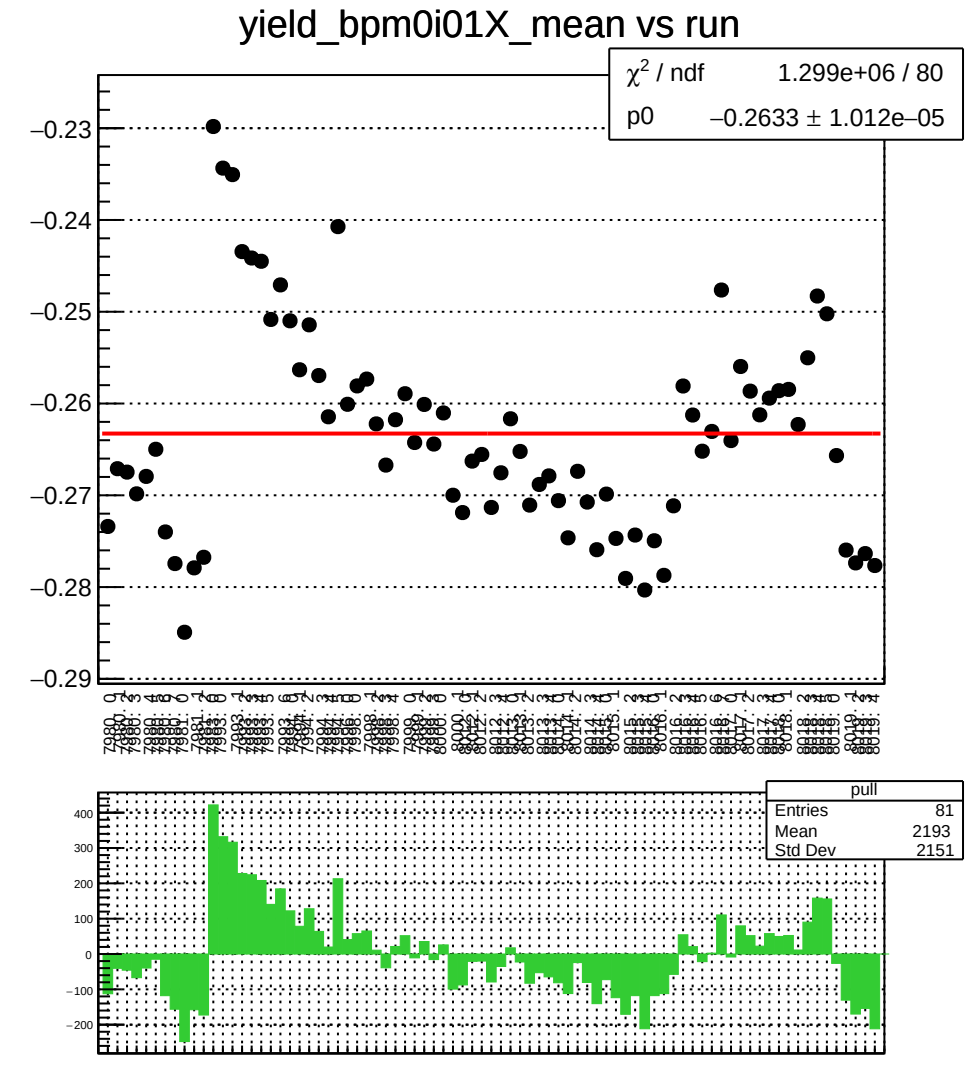

pull1D
Entries 81
Mean −0.1363
Std Dev 4.536
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

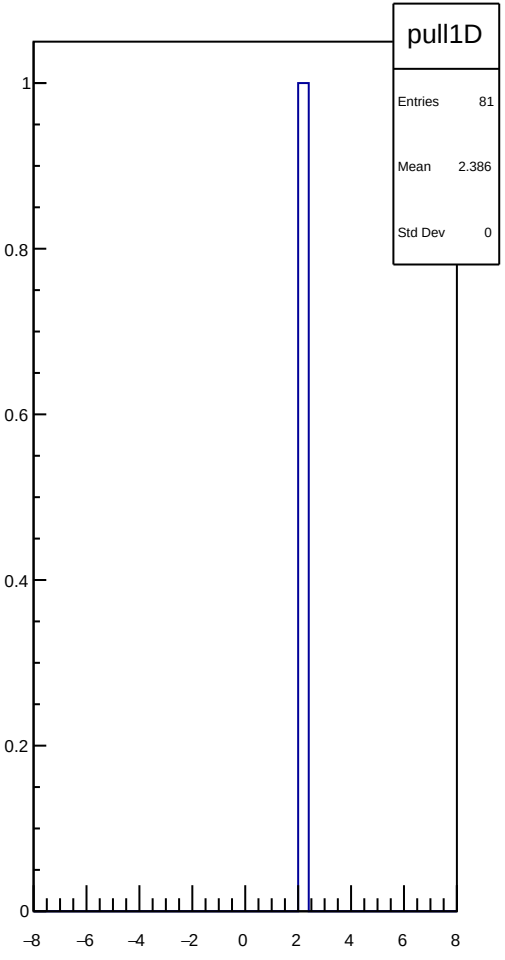

yield_bpm2i02X_rms vs run
χ² / ndf 1.969e+04 / 80
p0 0.01175 ± 9.327e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01

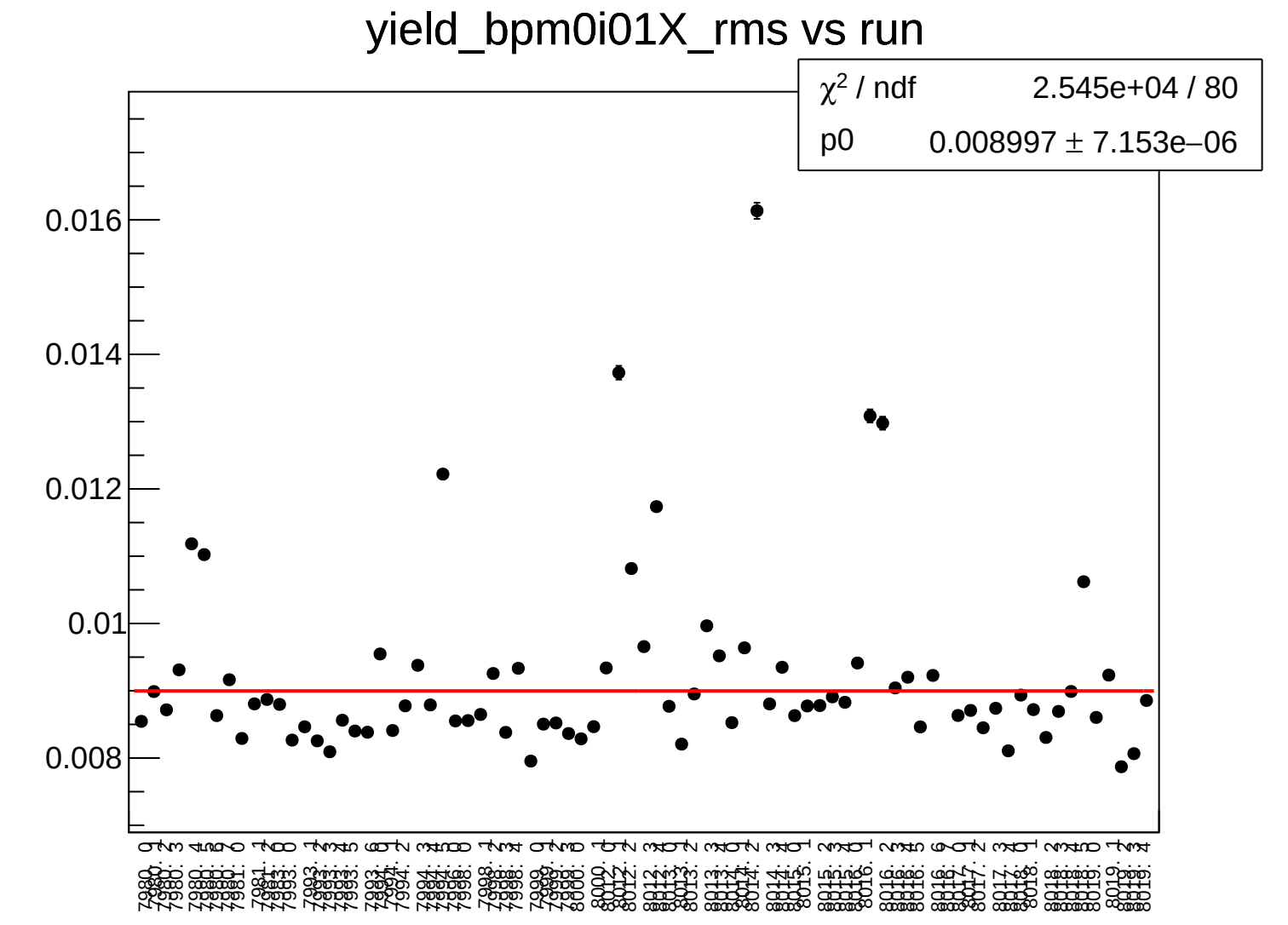

yield_bpm2i02Y_mean vs run
χ² / ndf 6.264e+05 / 80
p0 −1.271 ± 1.172e−05
−1.25
−1.26
−1.27
−1.28
−1.29
pull
Entries 81
Mean 2256
Std Dev 2217
250
200
150
100
50
0
−50
−100
−150
−200

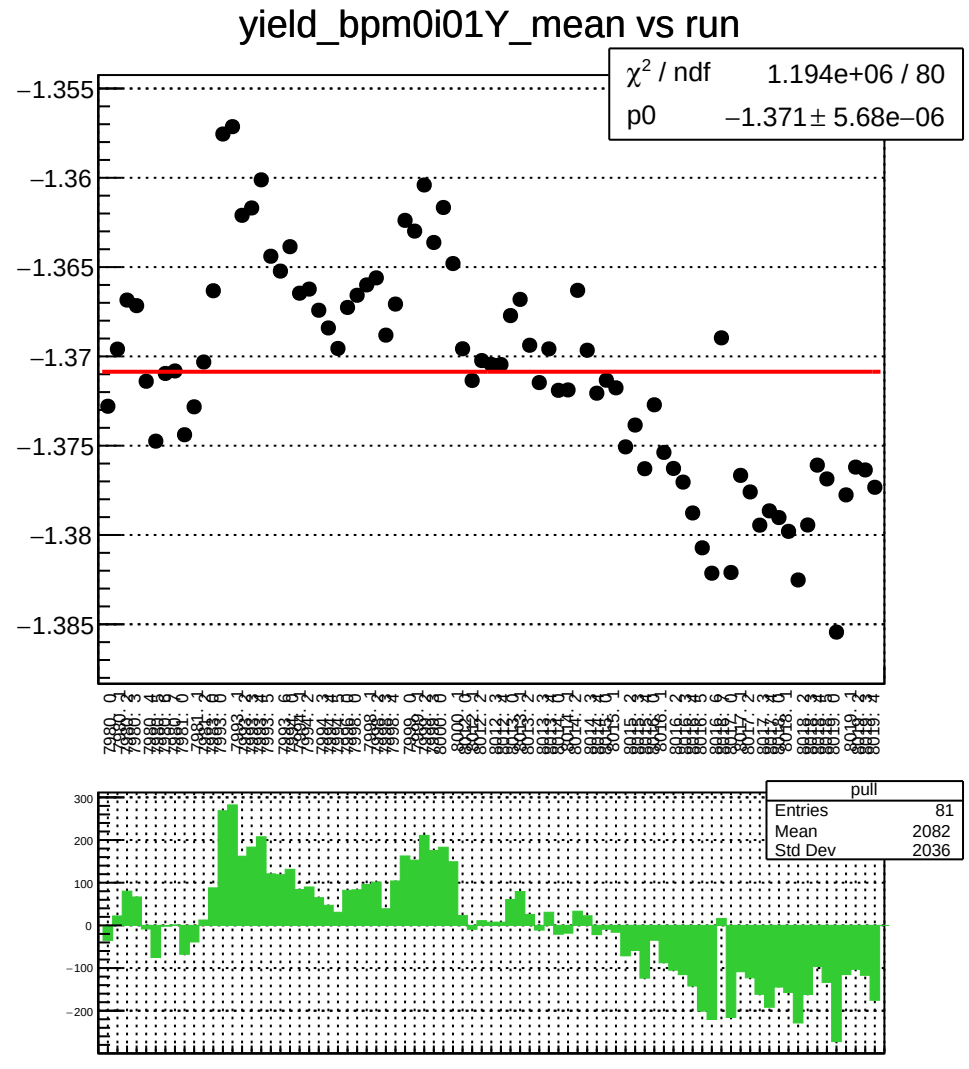

pull1D
Entries 81
Mean −3.021
Std Dev 4.609
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

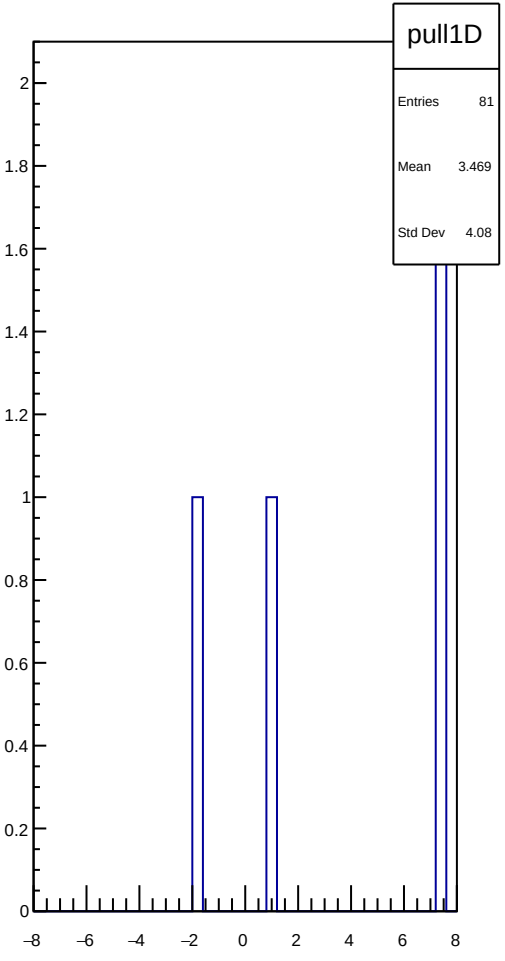

yield_bpm2i02Y_rms vs run
χ² / ndf 3953 / 80
p0 0.0105 ± 8.29e−06
0.012
0.0115
0.011
0.0105
0.01
0.0095

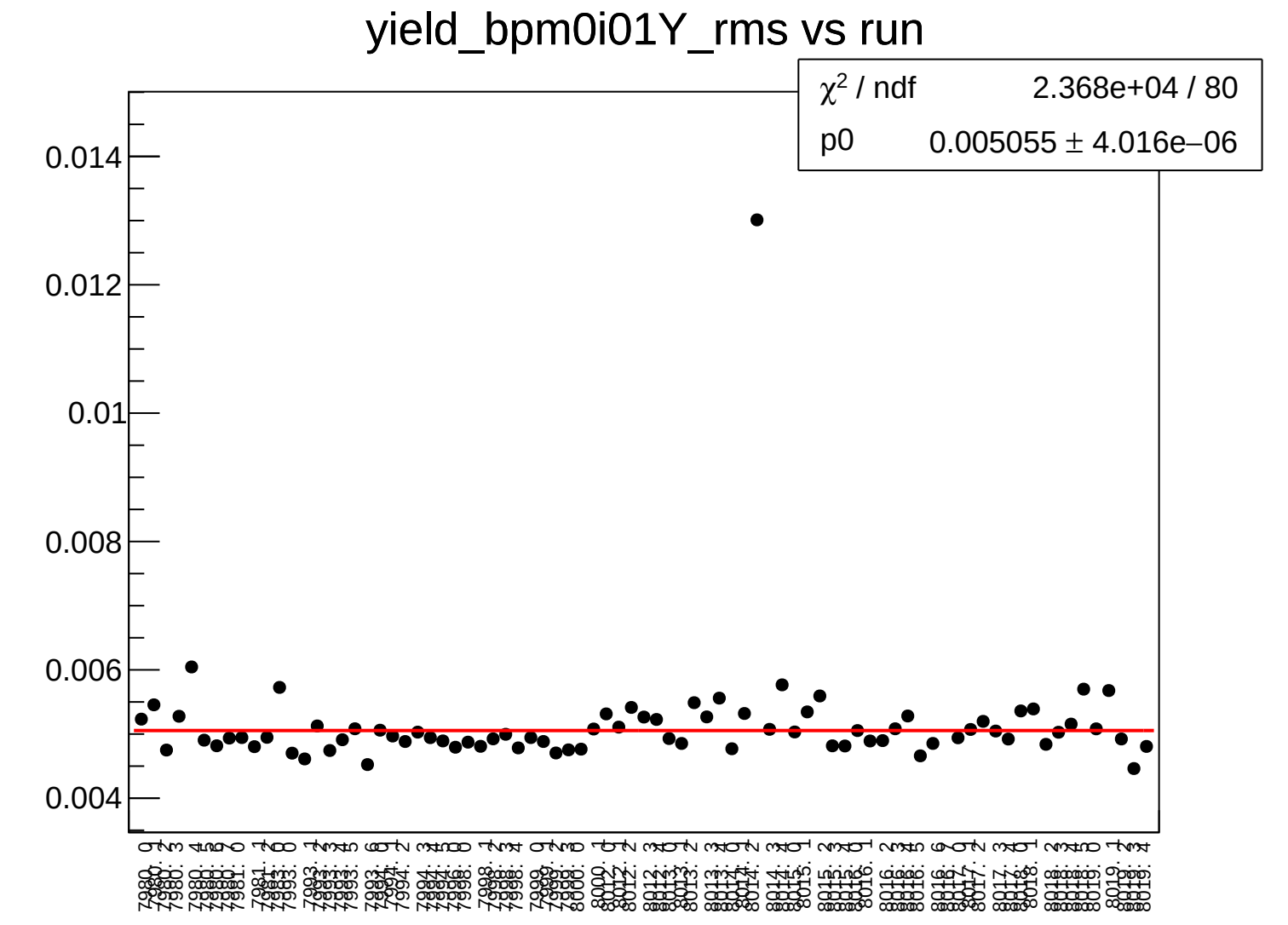

yield_bpm0i01X_mean vs run
χ² / ndf 1.299e+06 / 80
p0 −0.2633 ± 1.012e−05
−0.23
−0.24
−0.25
−0.26
−0.27
−0.28
−0.29
pull
Entries 81
Mean 2193
Std Dev 2151
400
300
200
100
0
−100
−200

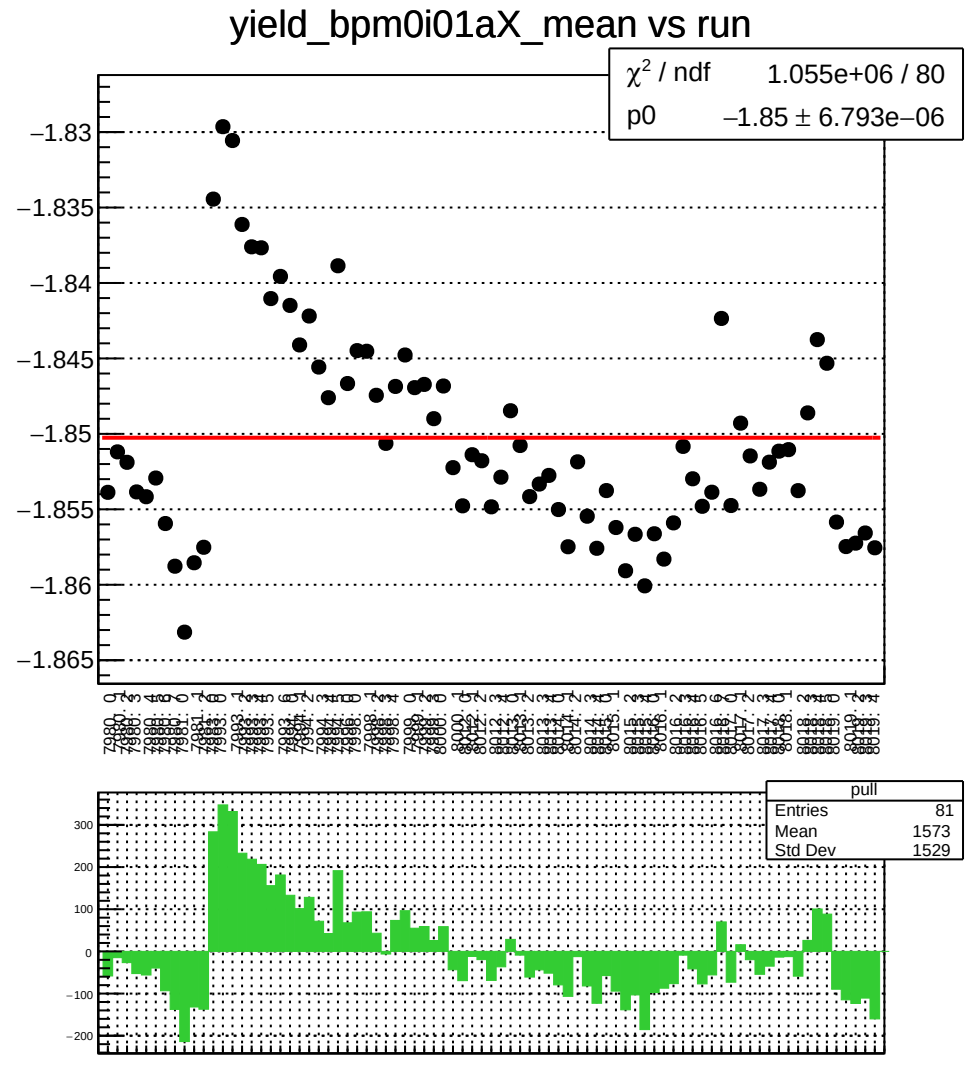

pull1D
Entries 81
Mean 2.386
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

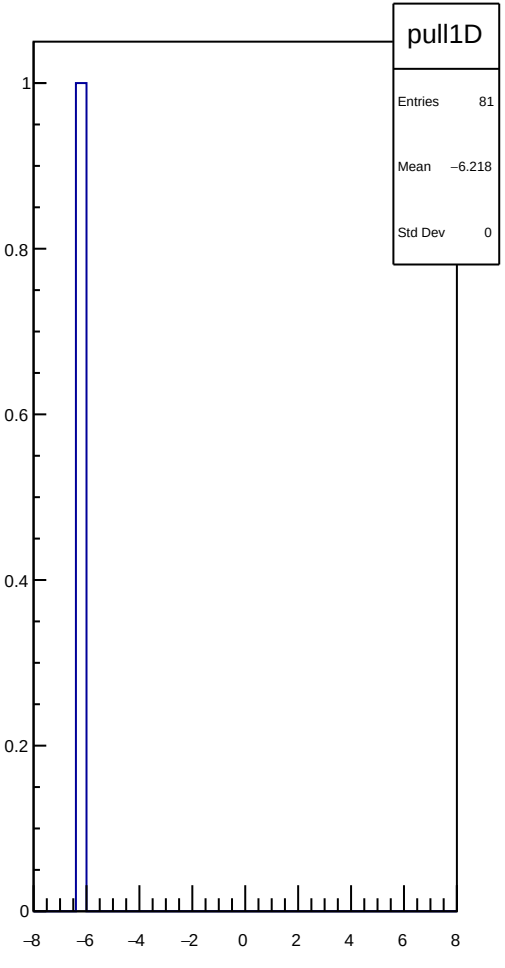

yield_bpm0i01X_rms vs run
χ² / ndf 2.545e+04 / 80
p0 0.008997 ± 7.153e−06
0.016
0.014
0.012
0.01
0.008

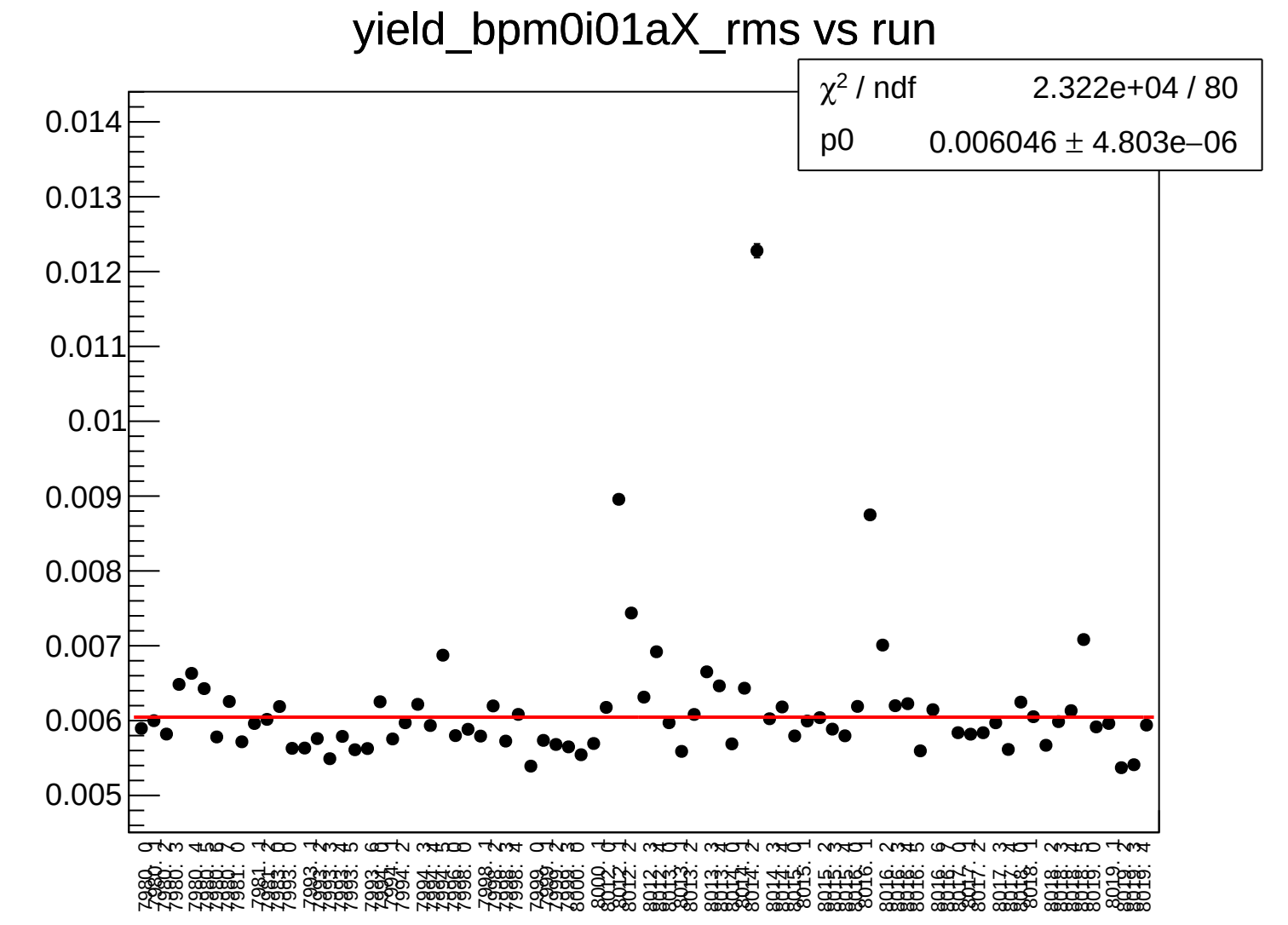

yield_bpm0i01Y_mean vs run
χ² / ndf 1.194e+06 / 80
p0 −1.371 ± 5.68e−06
−1.355
−1.36
−1.365
−1.37
−1.375
−1.38
−1.385
pull
Entries 81
Mean 2082
Std Dev 2036
300
200
100
0
−100
−200

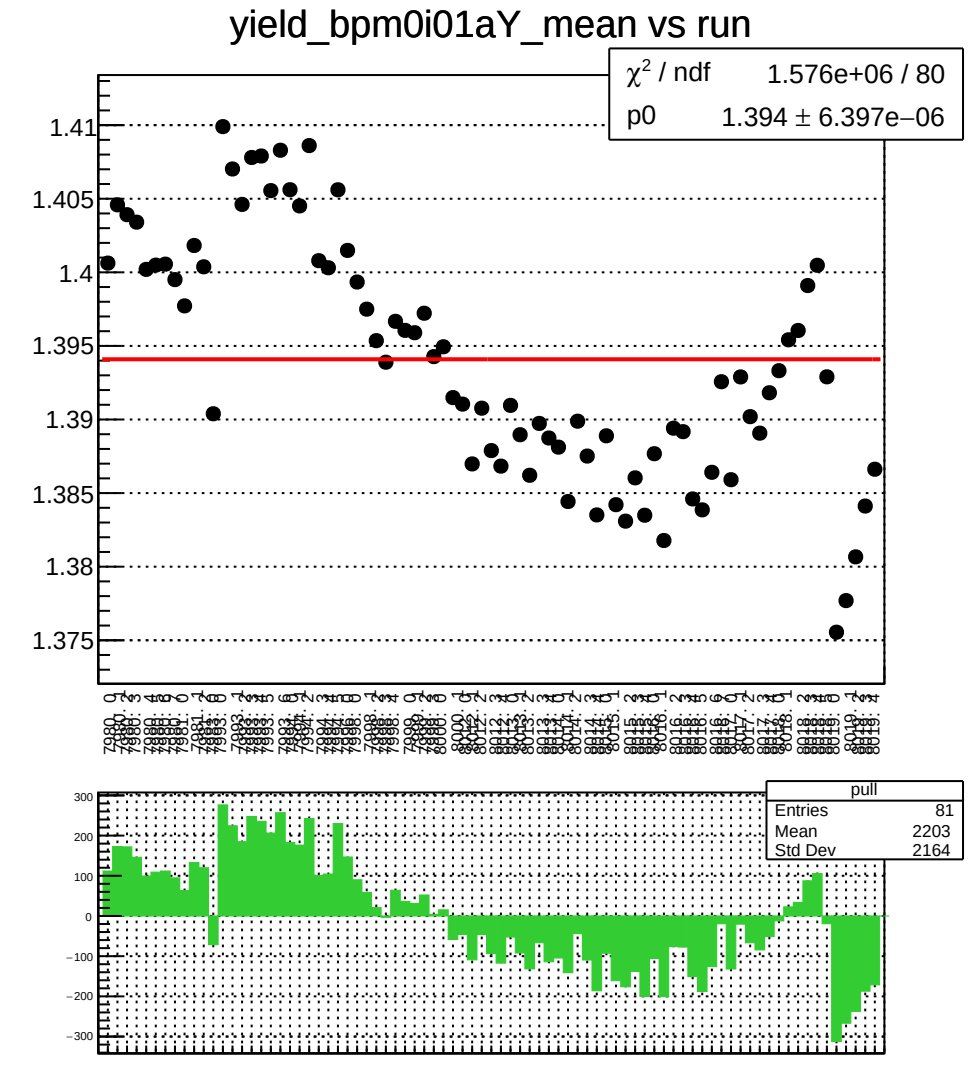

pull1D
Entries 81
Mean 3.469
Std Dev 4.08
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

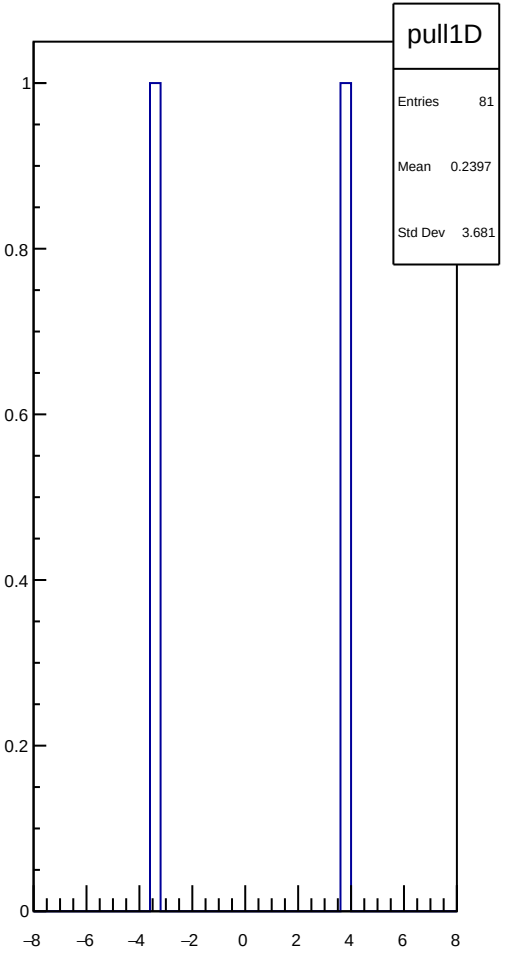

yield_bpm0i01Y_rms vs run
χ² / ndf 2.368e+04 / 80
p0 0.005055 ± 4.016e−06
0.014
0.012
0.01
0.008
0.006
0.004

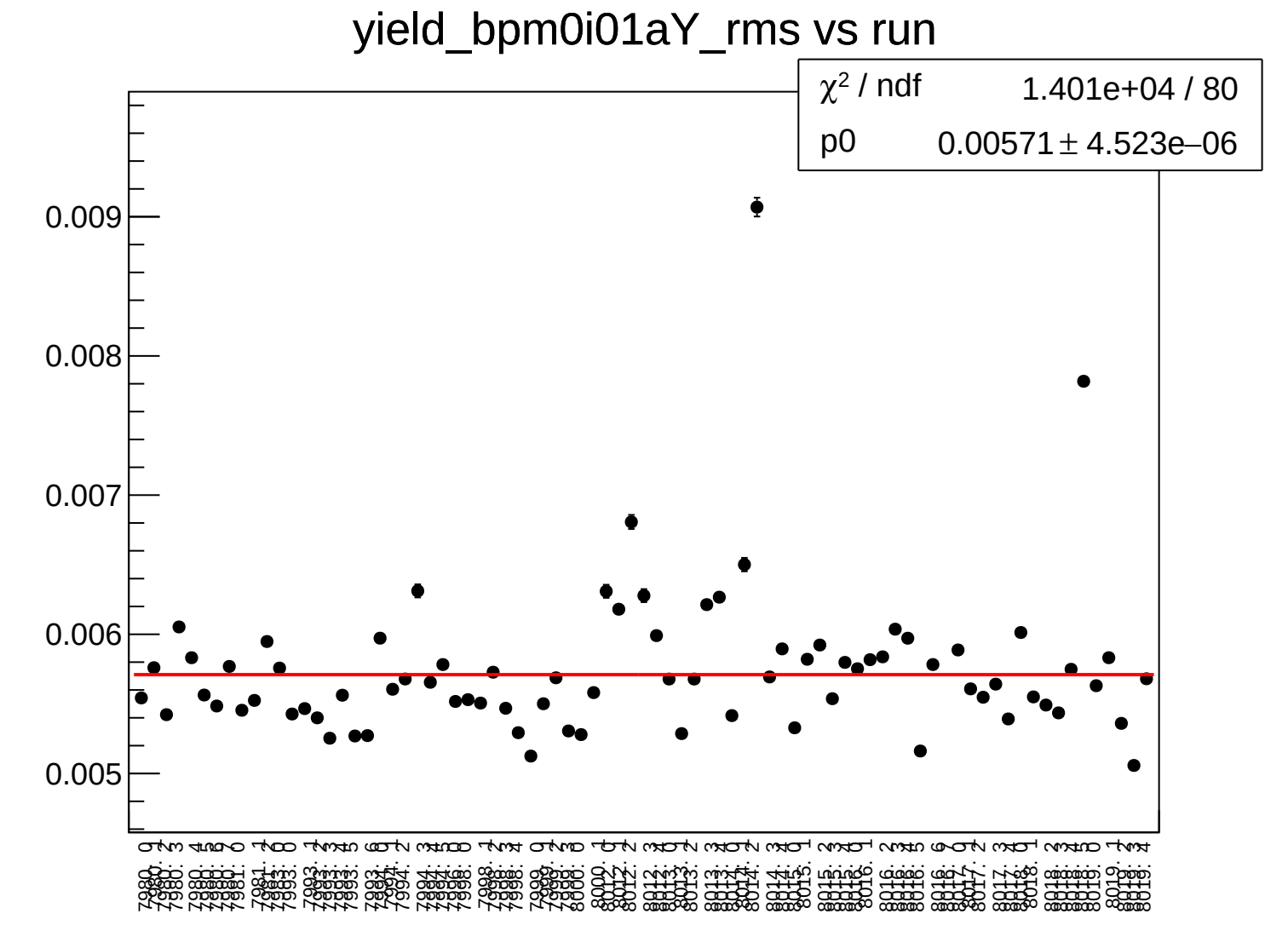

yield_bpm0i01aX_mean vs run
χ² / ndf 1.055e+06 / 80
p0 −1.85 ± 6.793e−06
−1.83
−1.835
−1.84
−1.845
−1.85
−1.855
−1.86
−1.865
pull
Entries 81
Mean 1573
Std Dev 1529
300
200
100
0
−100
−200

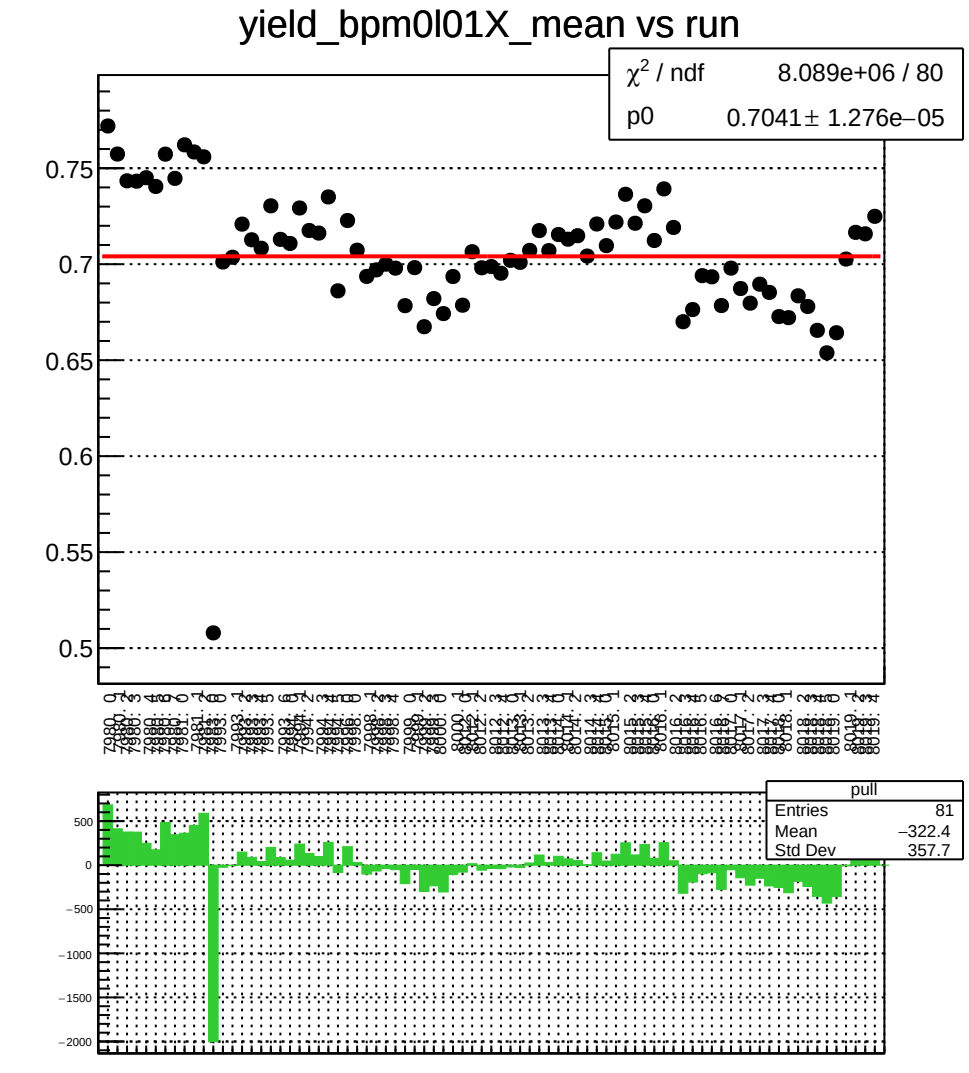

pull1D
Entries 81
Mean −6.218
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

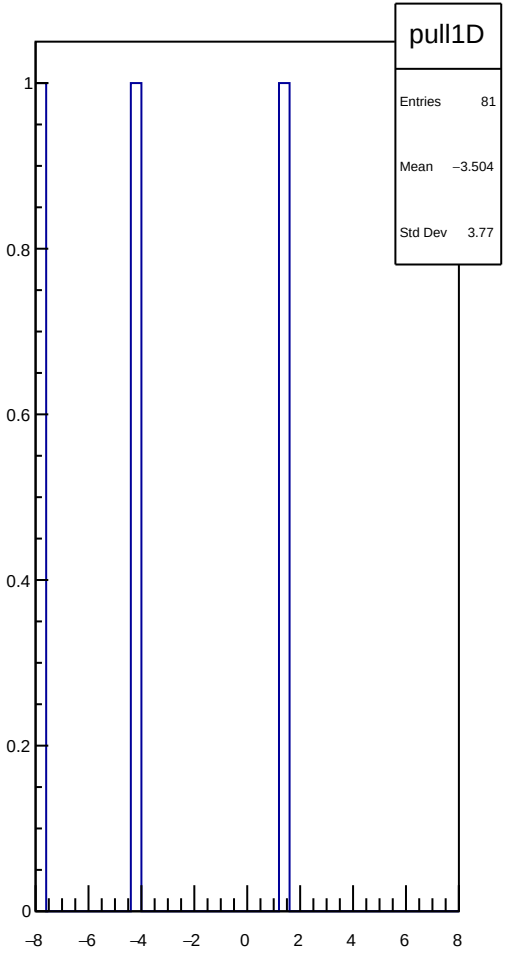

yield_bpm0i01aX_rms vs run
χ² / ndf 2.322e+04 / 80
p0 0.006046 ± 4.803e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005

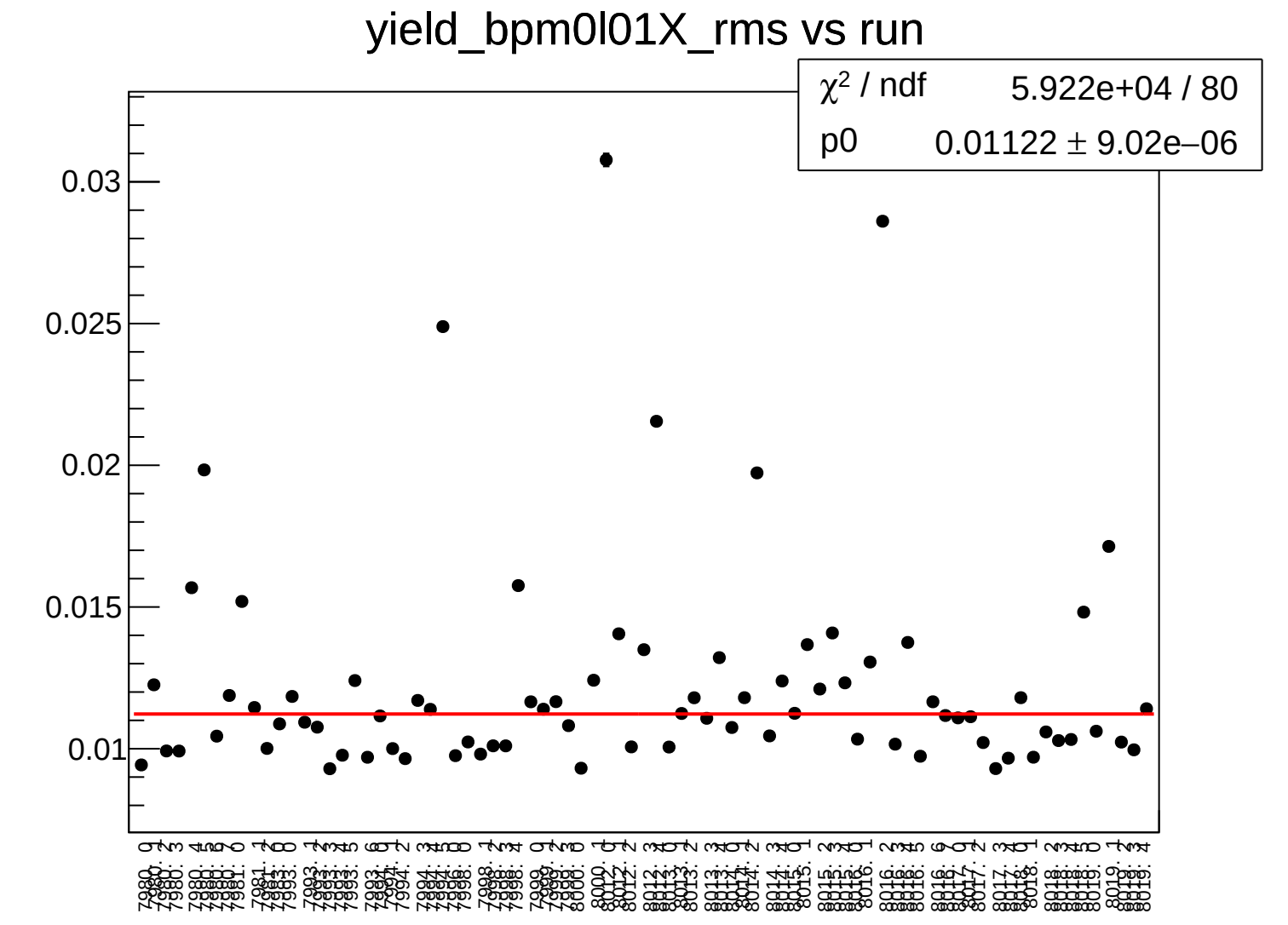

yield_bpm0i01aY_mean vs run
χ² / ndf 1.576e+06 / 80
p0 1.394 ± 6.397e−06
1.41
1.405
1.4
1.395
1.39
1.385
1.38
1.375
pull
Entries 81
Mean 2203
Std Dev 2164
300
200
100
0
−100
−200
−300

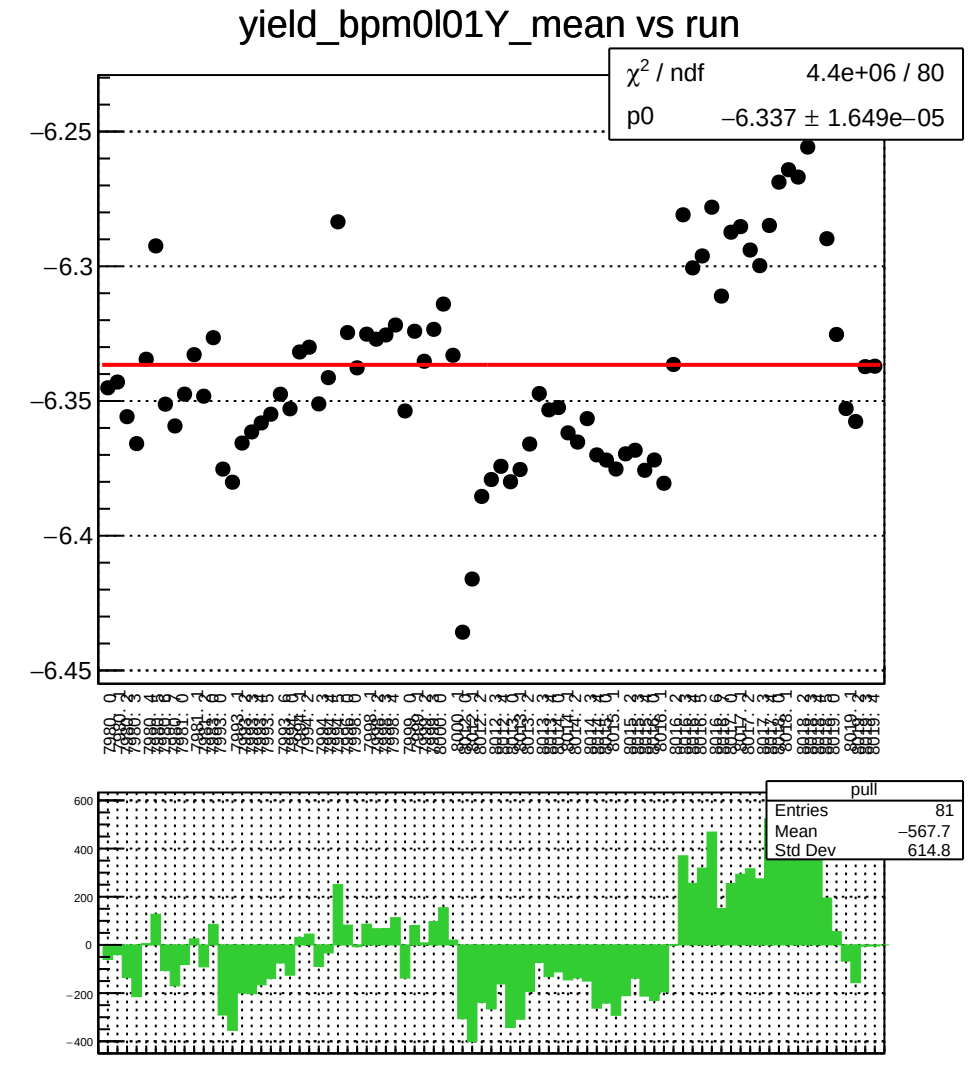

pull1D
Entries 81
Mean 0.2397
Std Dev 3.681
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

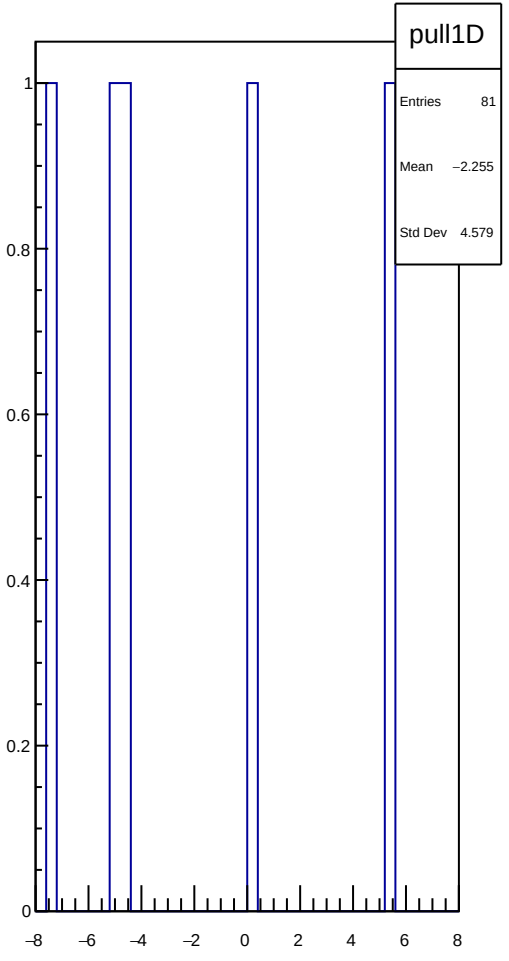

yield_bpm0i01aY_rms vs run
χ² / ndf 1.401e+04 / 80
p0 0.00571 ± 4.523e–06
0.009
0.008
0.007
0.006
0.005

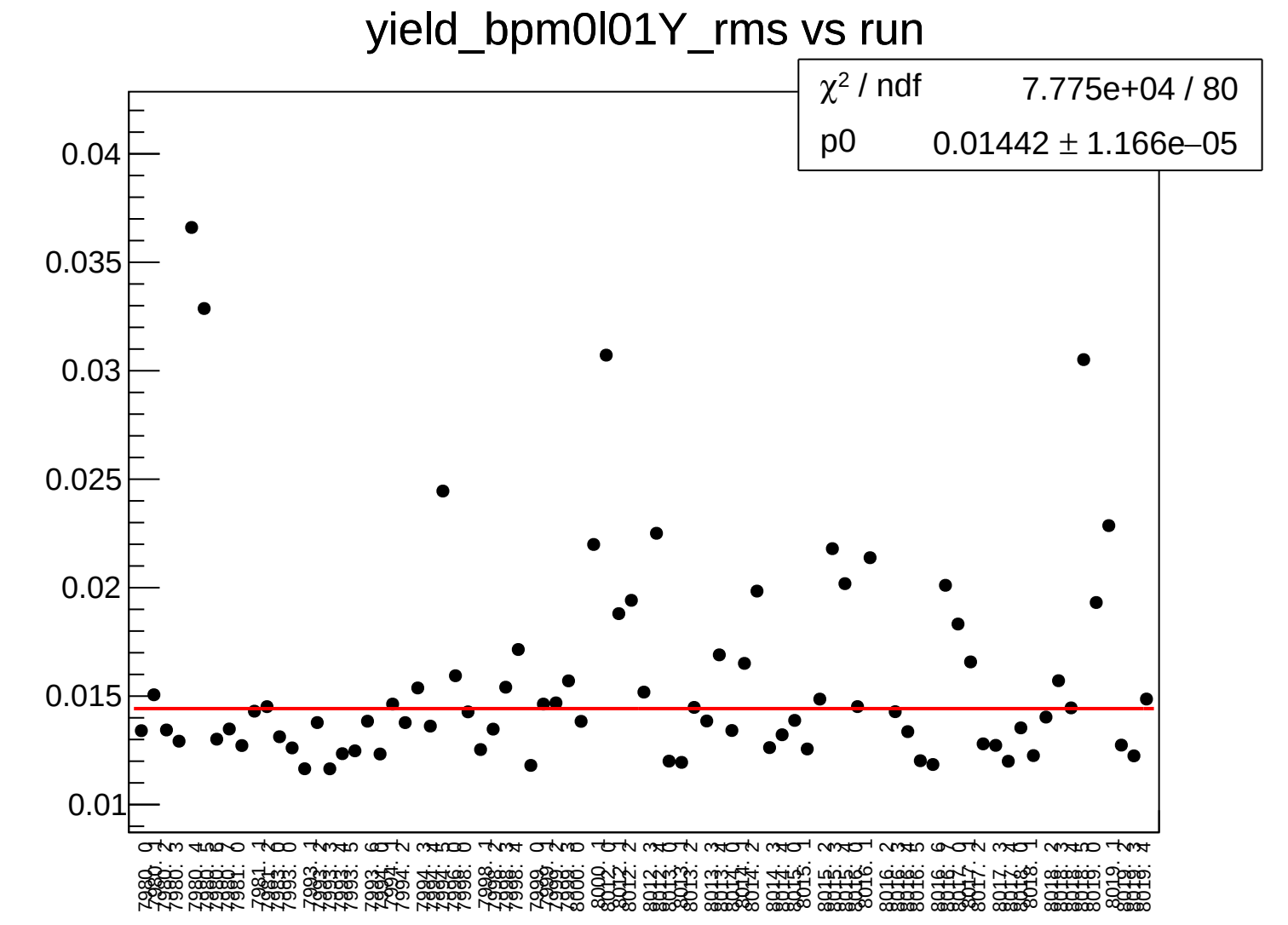

yield_bpm0l01X_mean vs run
χ² / ndf 8.089e+06 / 80
p0 0.7041 ± 1.276e−05
0.75
0.7
0.65
0.6
0.55
0.5
pull
Entries 81
Mean −322.4
Std Dev 357.7
500
0
−500
−1000
−1500
−2000

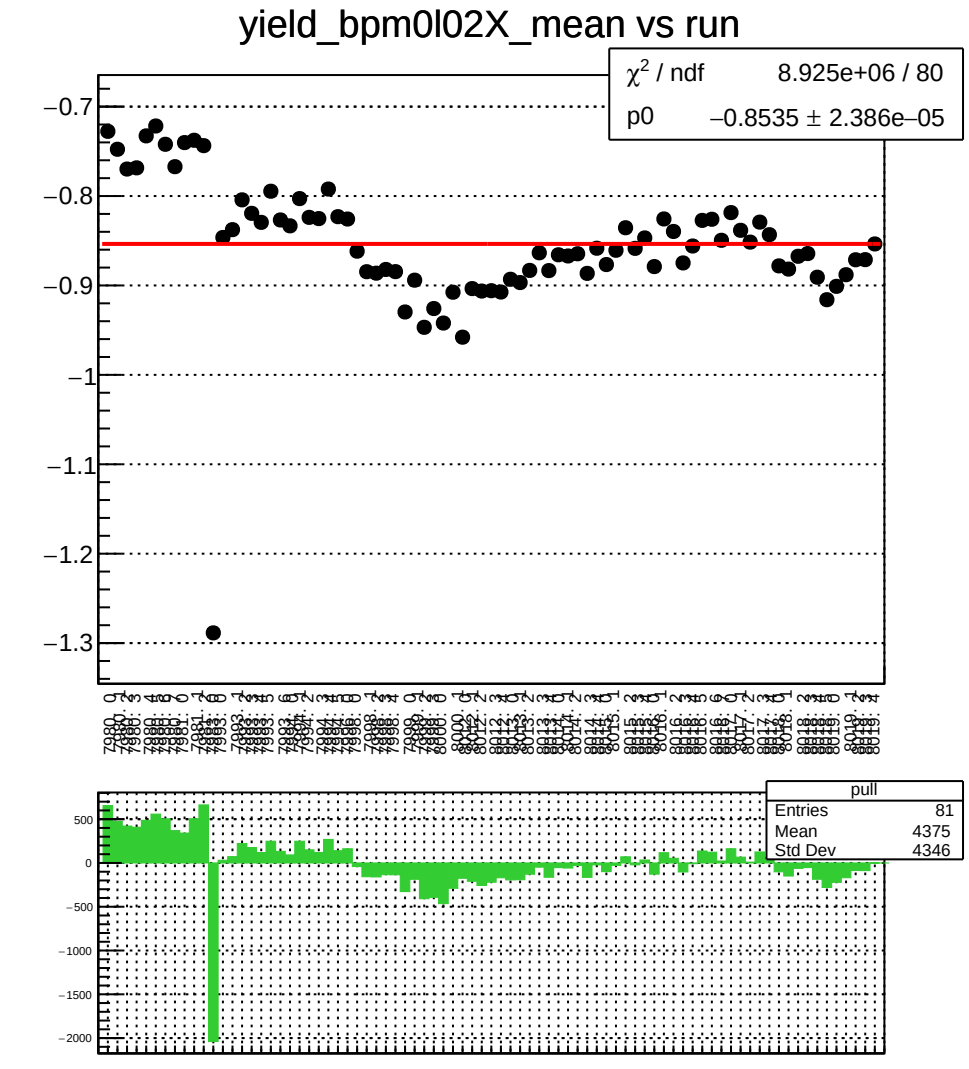

pull1D
Entries 81
Mean −3.504
Std Dev 3.77
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

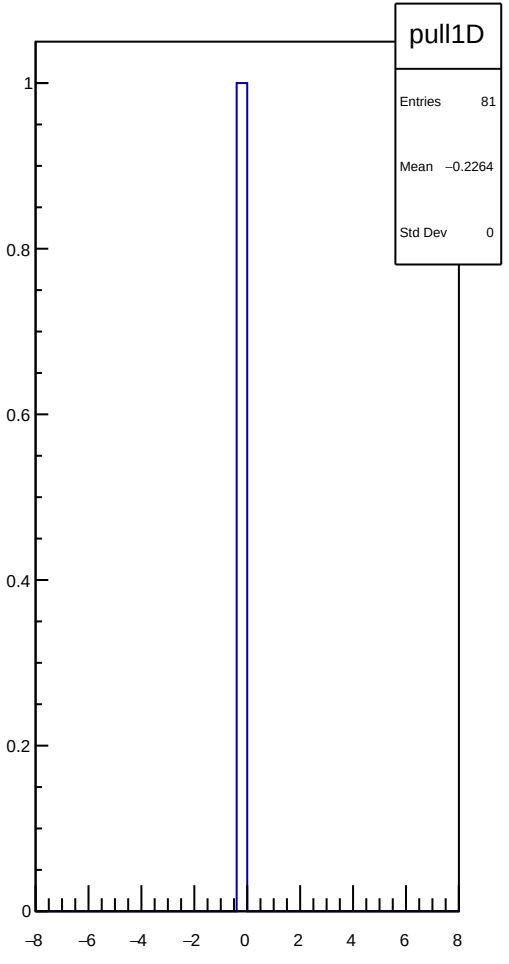

yield_bpm0l01X_rms vs run
χ² / ndf 5.922e+04 / 80
p0 0.01122 ± 9.02e−06
0.03
0.025
0.02
0.015
0.01

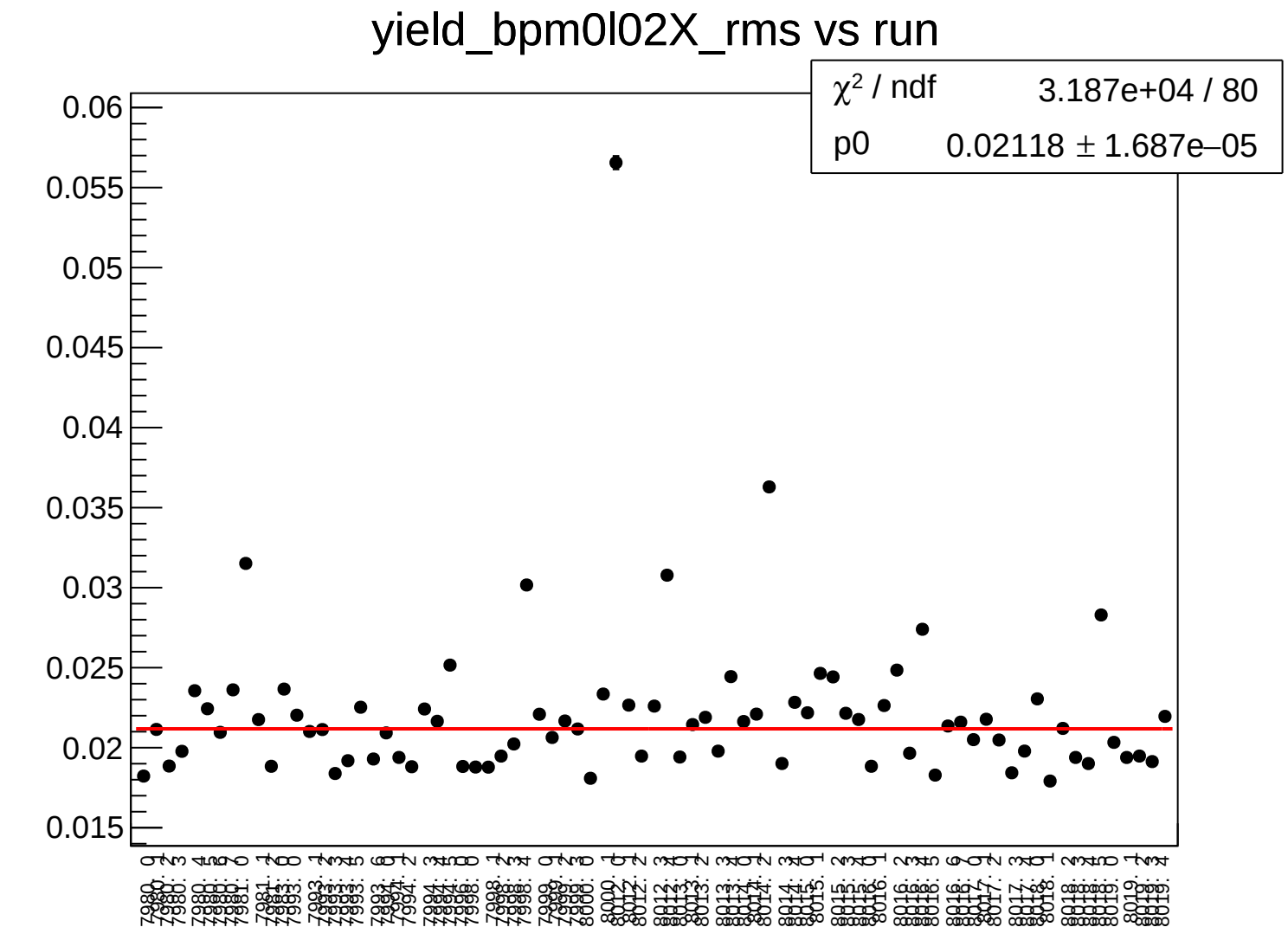

yield_bpm0l01Y_mean vs run
χ² / ndf 4.4e+06 / 80
p0 −6.337 ± 1.649e−05
−6.25
−6.3
−6.35
−6.4
−6.45
pull
Entries 81
Mean −567.7
Std Dev 614.8
600
400
200
0
−200
−400

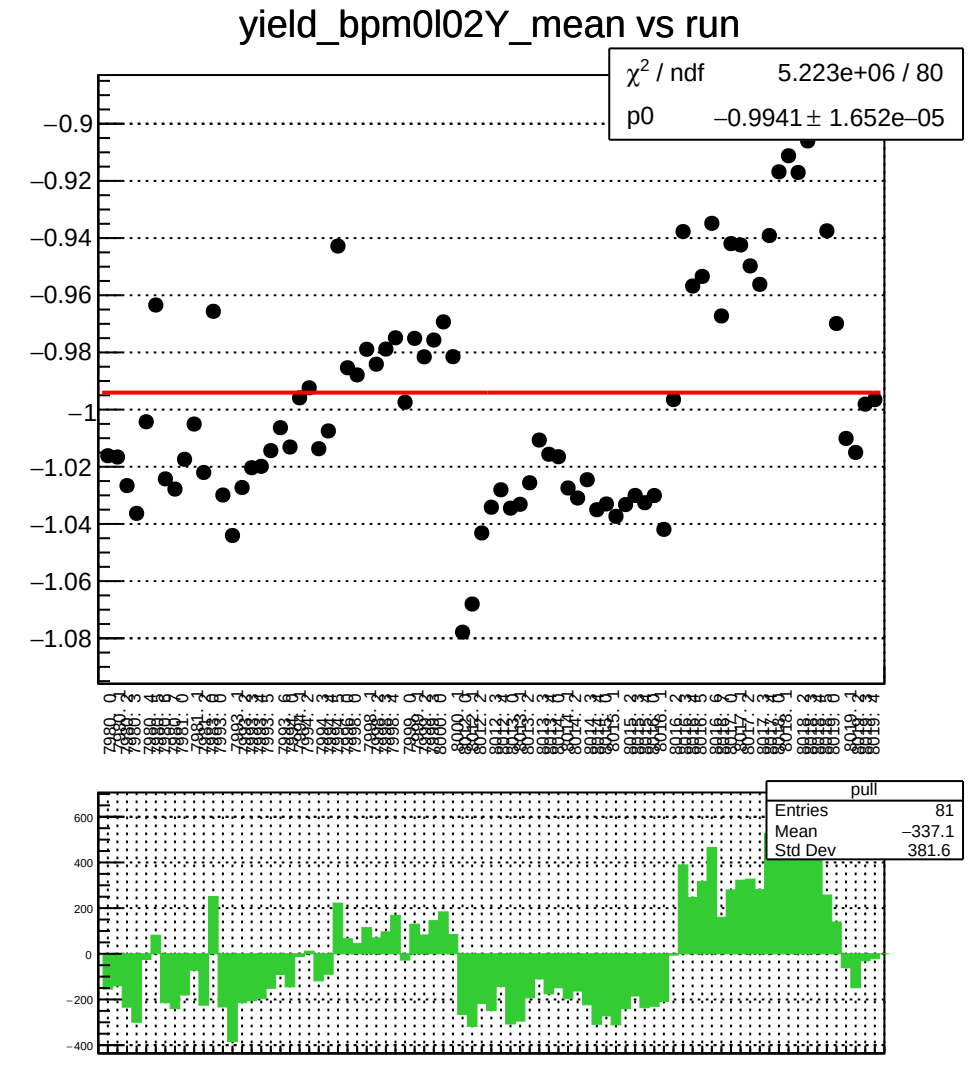

pull1D
Entries 81
Mean −2.255
Std Dev 4.579
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

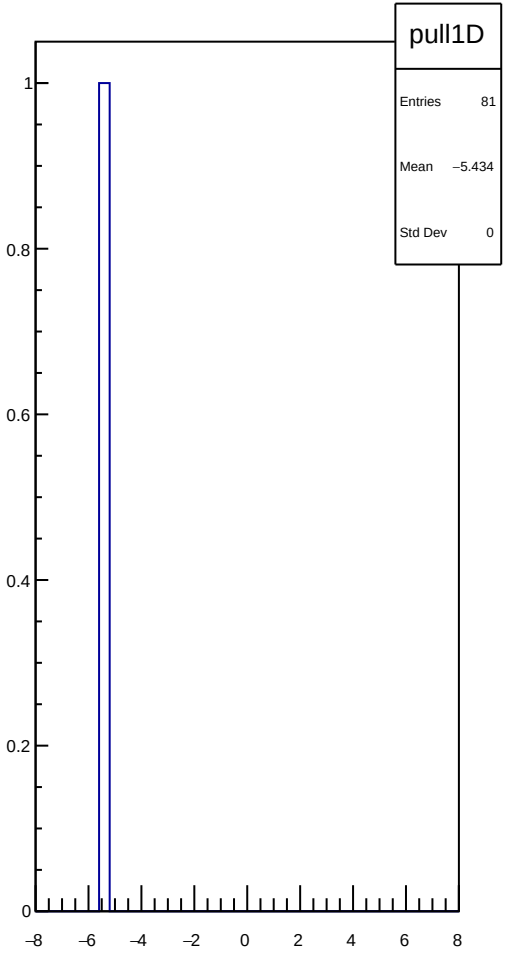

yield_bpm0l01Y_rms vs run
χ² / ndf 7.775e+04 / 80
p0 0.01442 ± 1.166e–05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

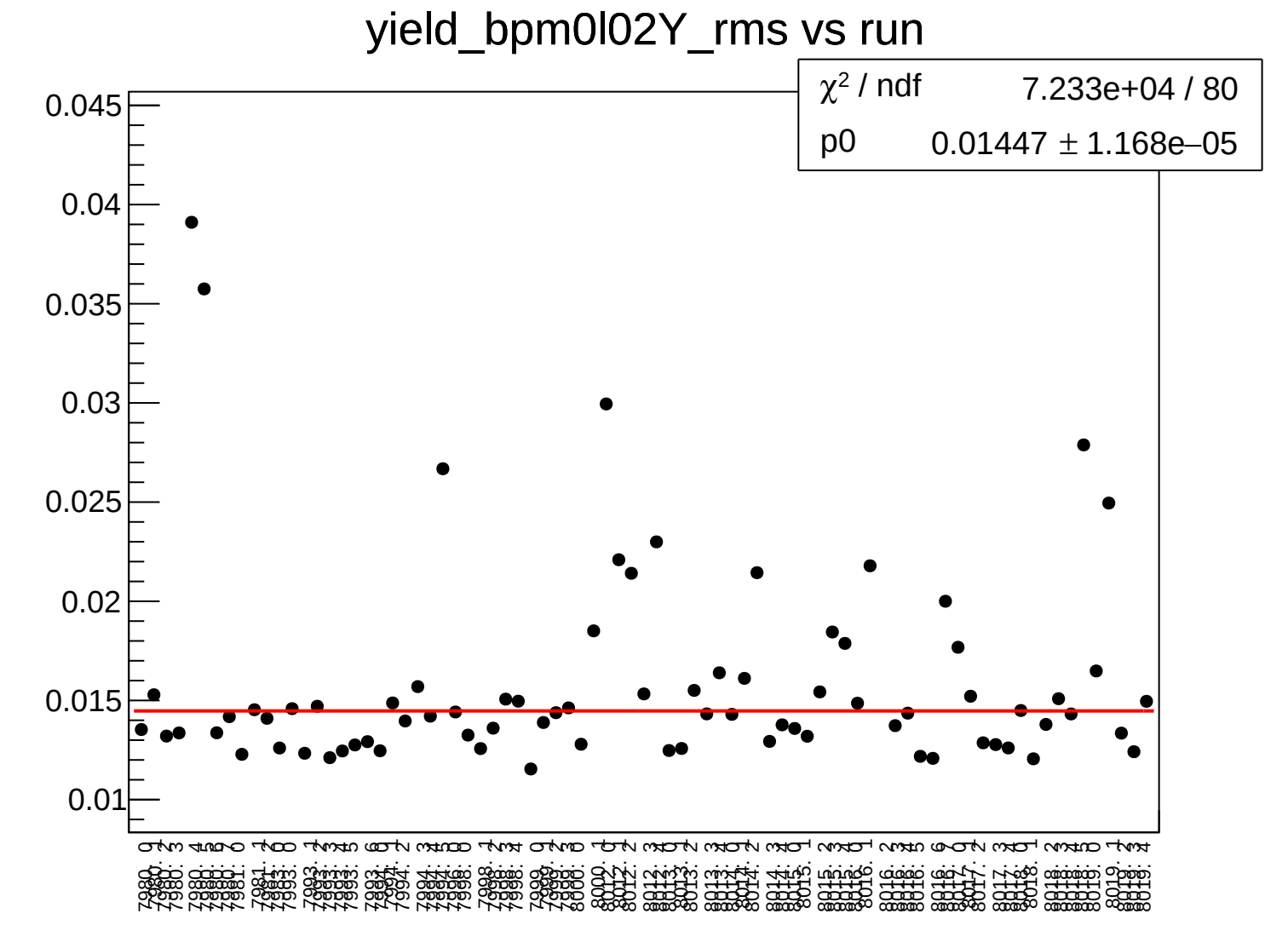

yield_bpm0l02X_mean vs run
χ² / ndf 8.925e+06 / 80
p0 −0.8535 ± 2.386e−05
−0.7
−0.8
−0.9
−1
−1.1
−1.2
−1.3
pull
Entries 81
Mean 4375
Std Dev 4346
500
0
−500
−1000
−1500
−2000

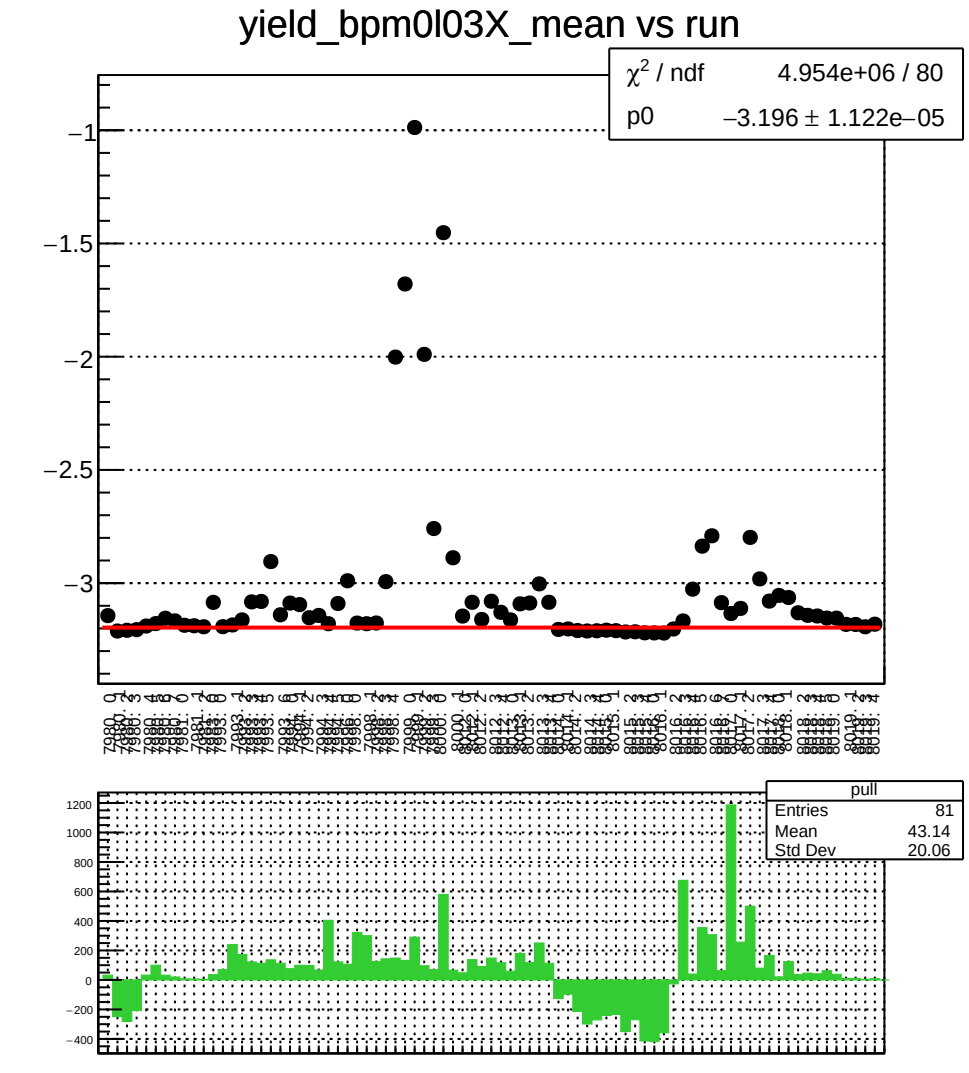

pull1D
Entries 81
Mean −0.2264
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

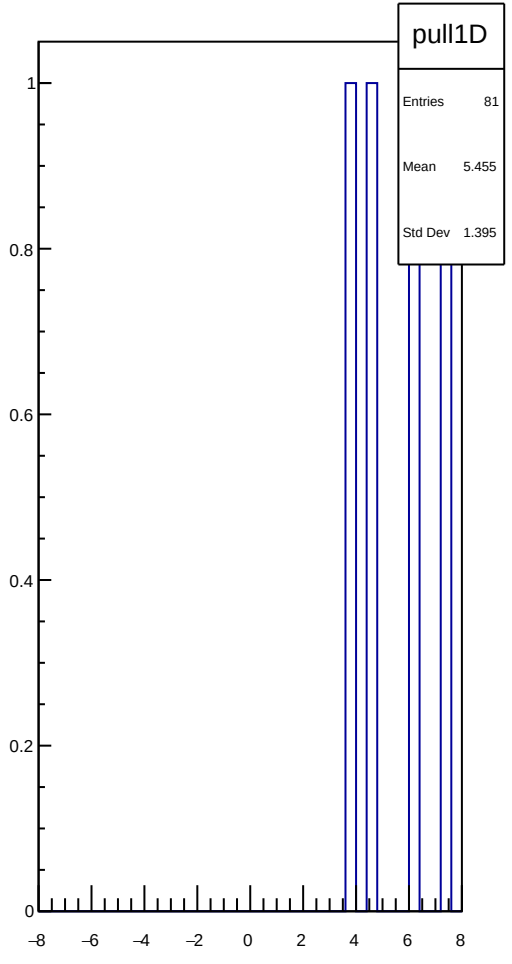

yield_bpm0l02X_rms vs run
χ² / ndf 3.187e+04 / 80
p0 0.02118 ± 1.687e–05
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

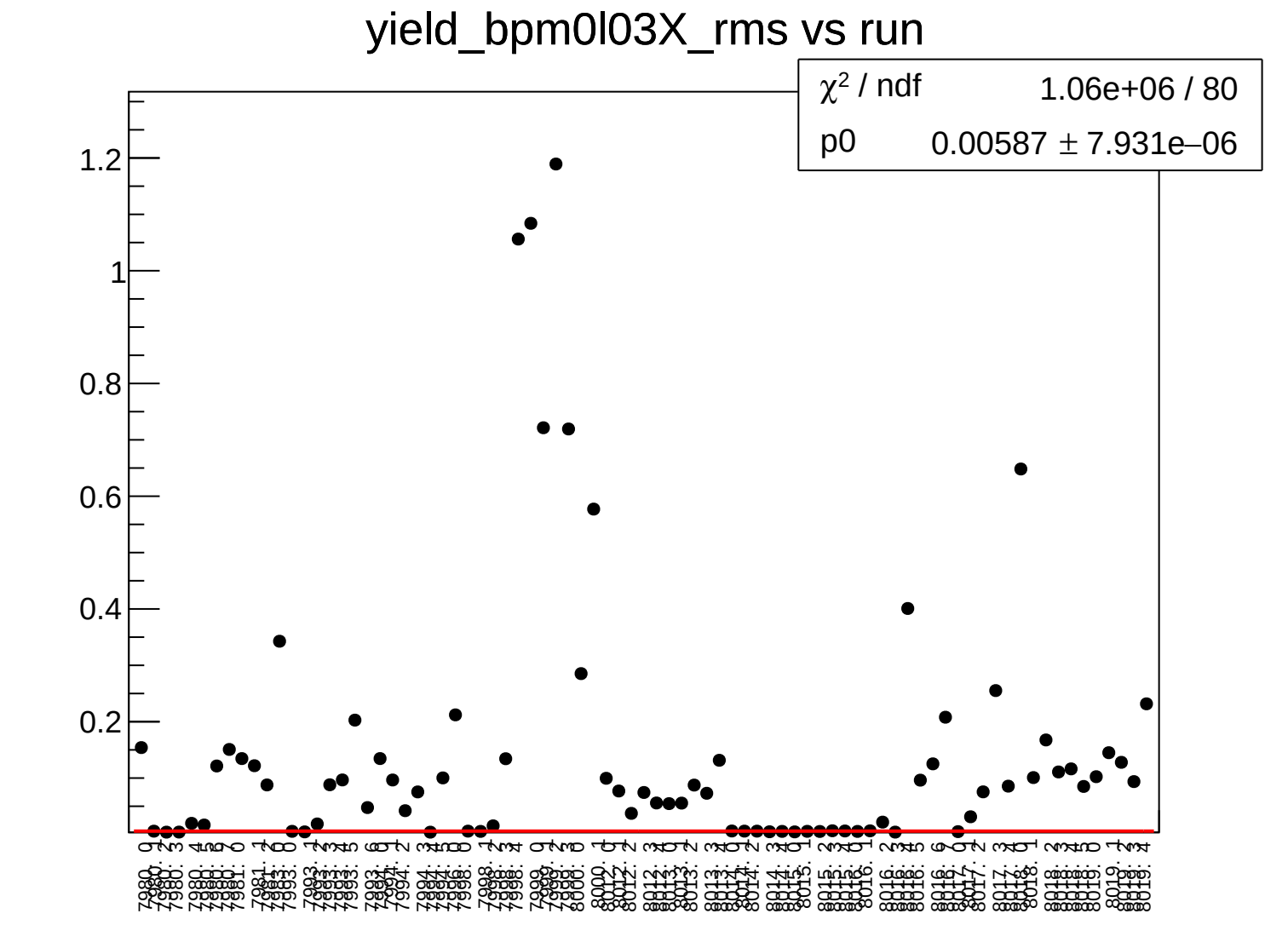

yield_bpm0l02Y_mean vs run
χ² / ndf 5.223e+06 / 80
p0 −0.9941 ± 1.652e−05
−0.9
−0.92
−0.94
−0.96
−0.98
−1
−1.02
−1.04
−1.06
−1.08
pull
Entries 81
Mean −337.1
Std Dev 381.6
600
400
200
0
−200
−400

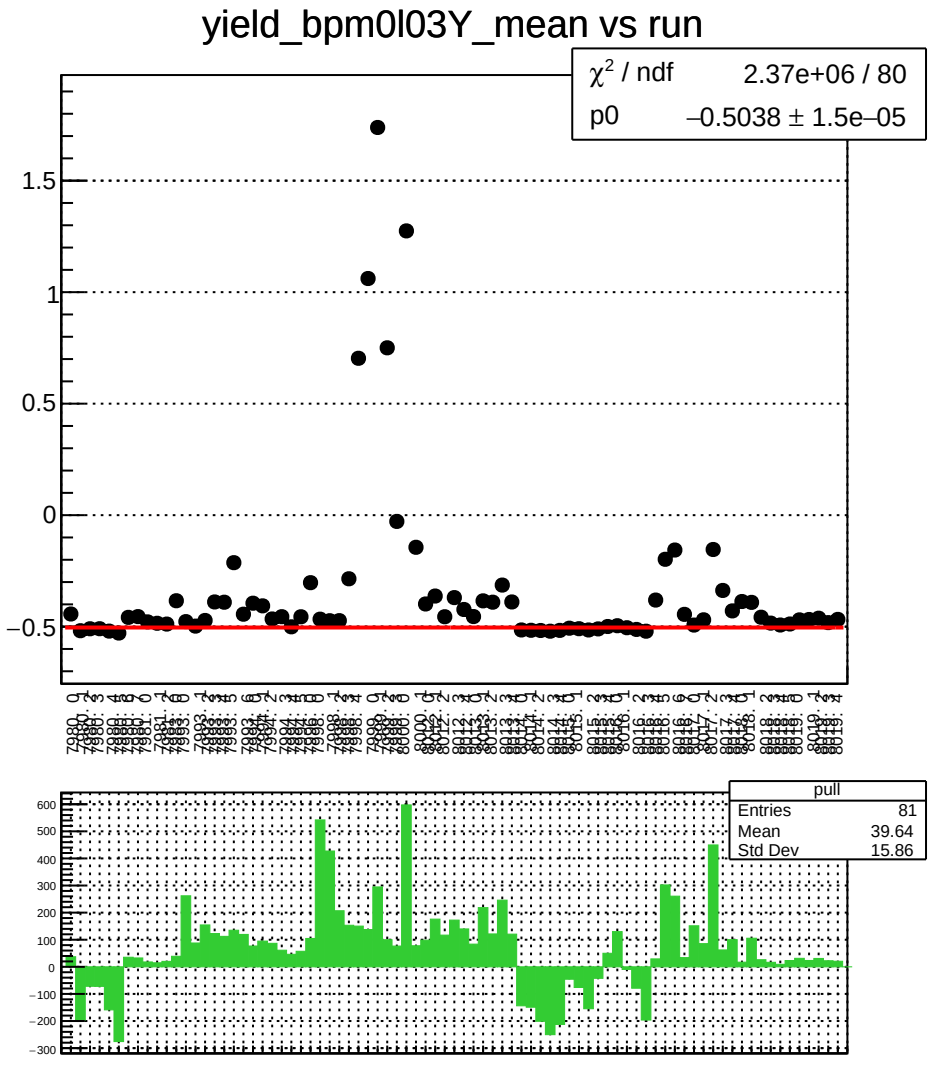

pull1D
Entries 81
Mean −5.434
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

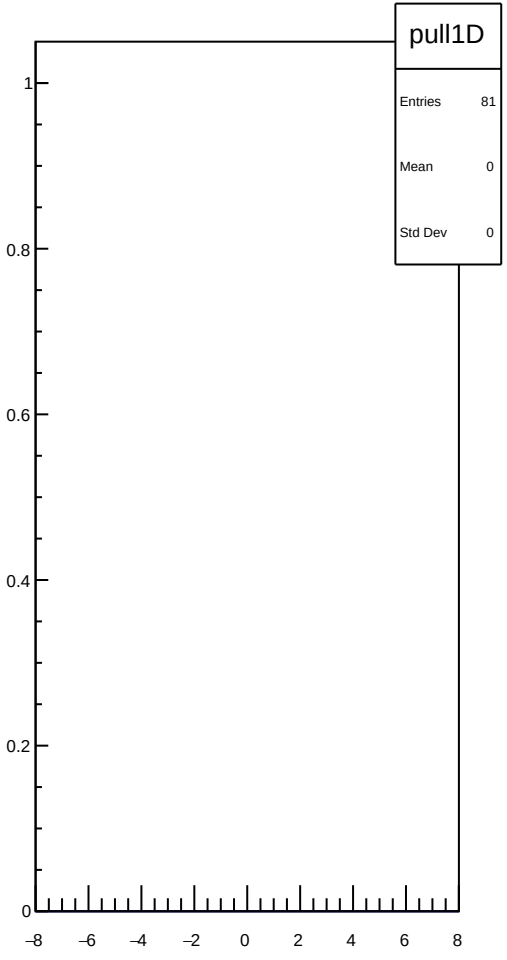

yield_bpm0l02Y_rms vs run
χ² / ndf 7.233e+04 / 80
p0 0.01447 ± 1.168e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

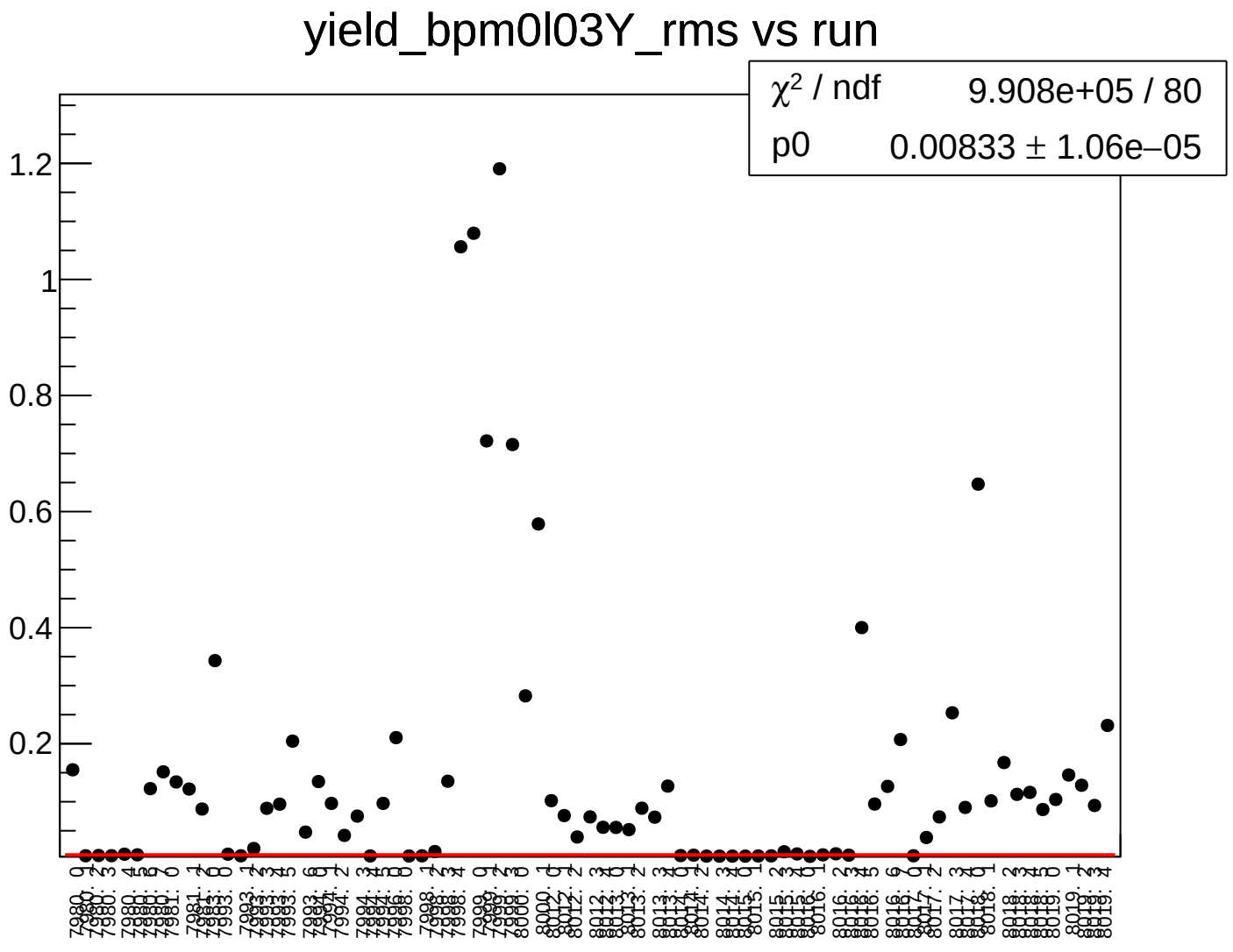

yield_bpm0l03X_mean vs run
χ² / ndf 4.954e+06 / 80
p0 −3.196 ± 1.122e−05
pull
Entries 81
Mean 43.14
Std Dev 20.06

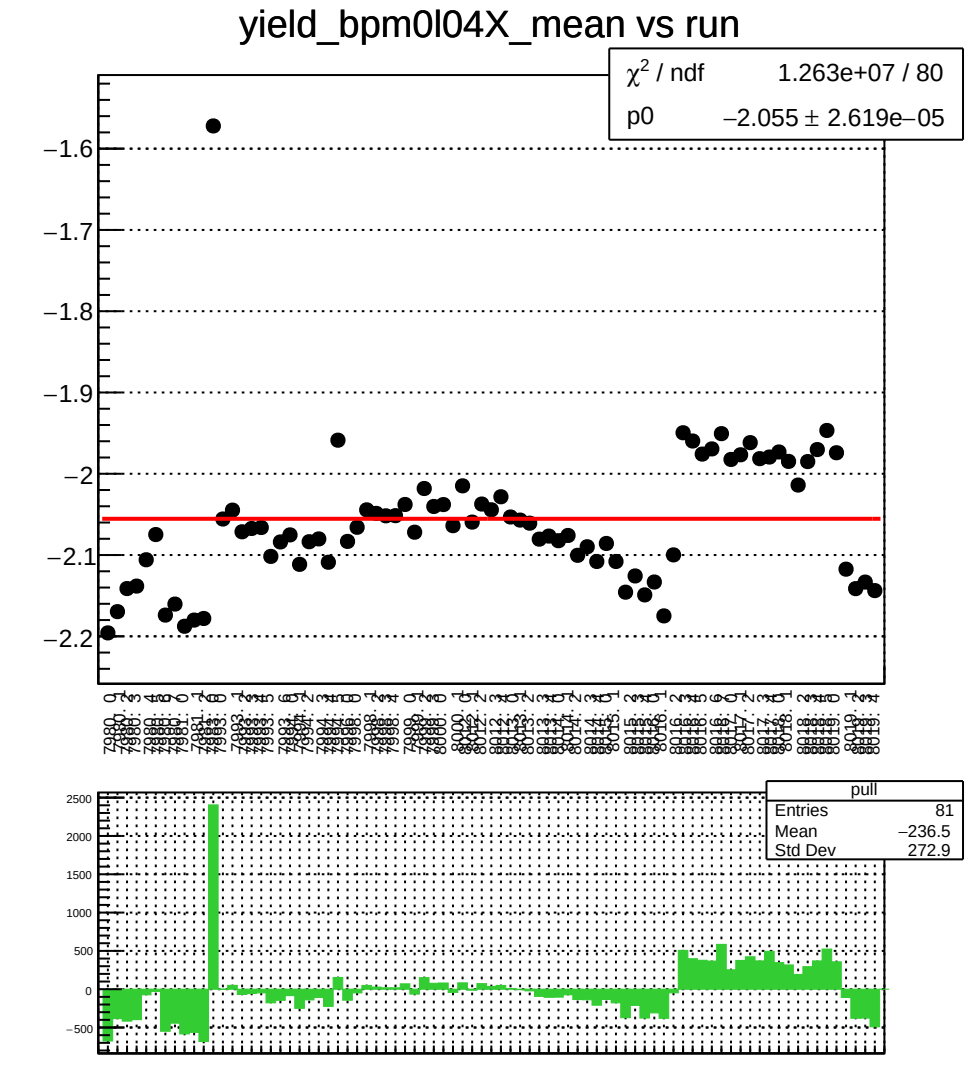

pull1D
Entries 81
Mean 5.455
Std Dev 1.395

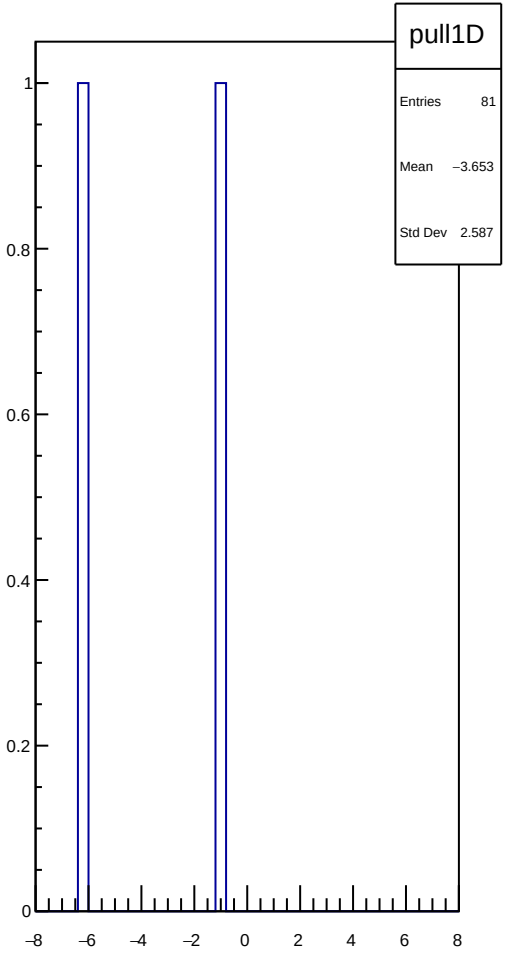

yield_bpm0l03X_rms vs run
χ² / ndf 1.06e+06 / 80
p0 0.00587 ± 7.931e–06
1.2
1
0.8
0.6
0.4
0.2

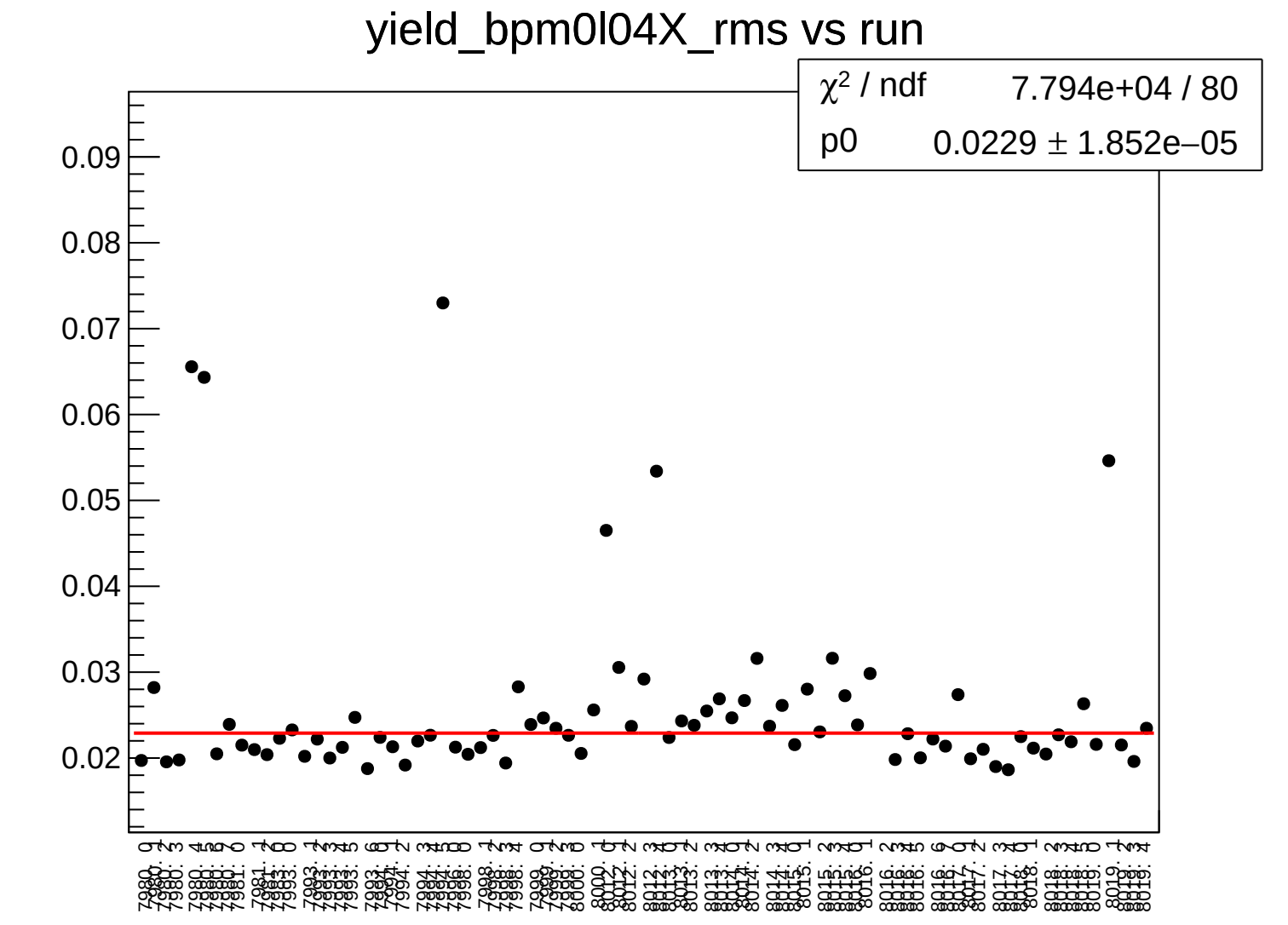

yield_bpm0l03Y_mean vs run
χ² / ndf 2.37e+06 / 80
p0 –0.5038 ± 1.5e–05
pull
Entries 81
Mean 39.64
Std Dev 15.86

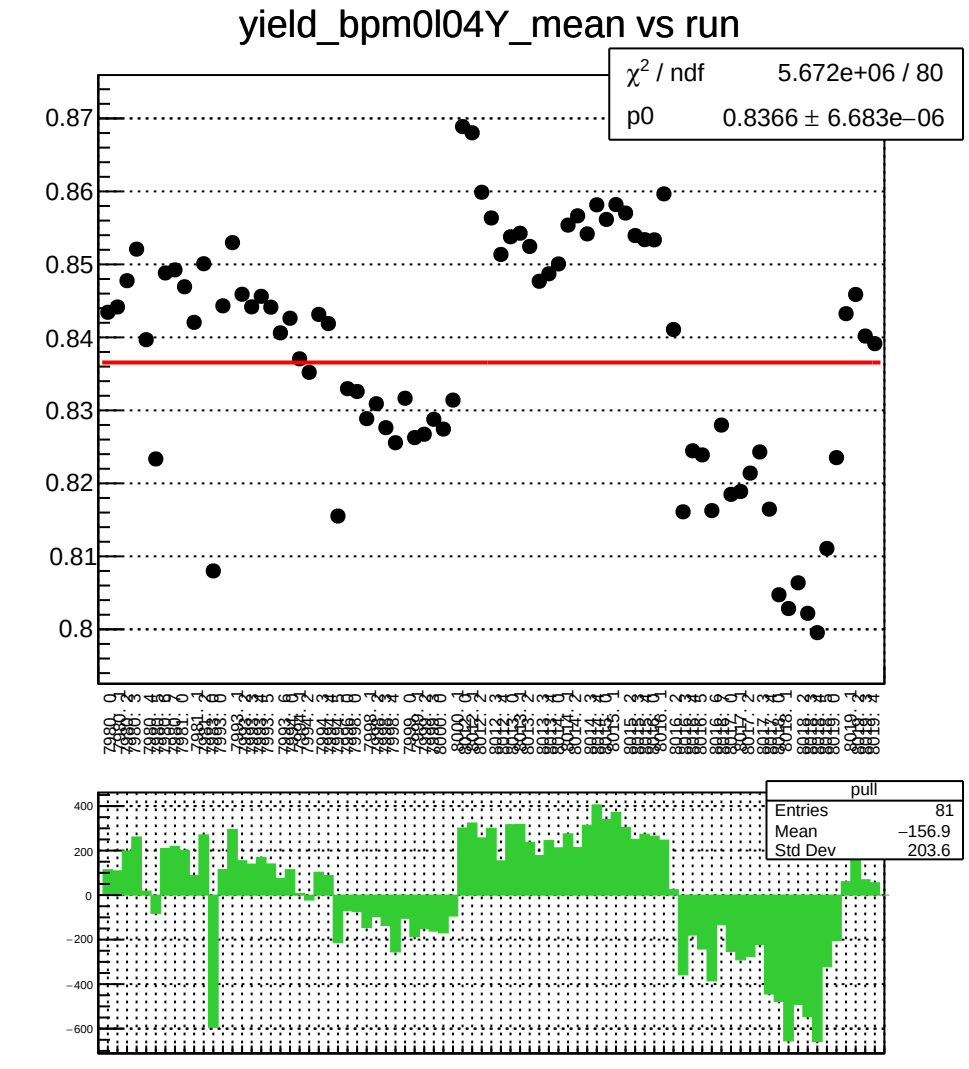

pull1D
Entries 81
Mean 0
Std Dev 0

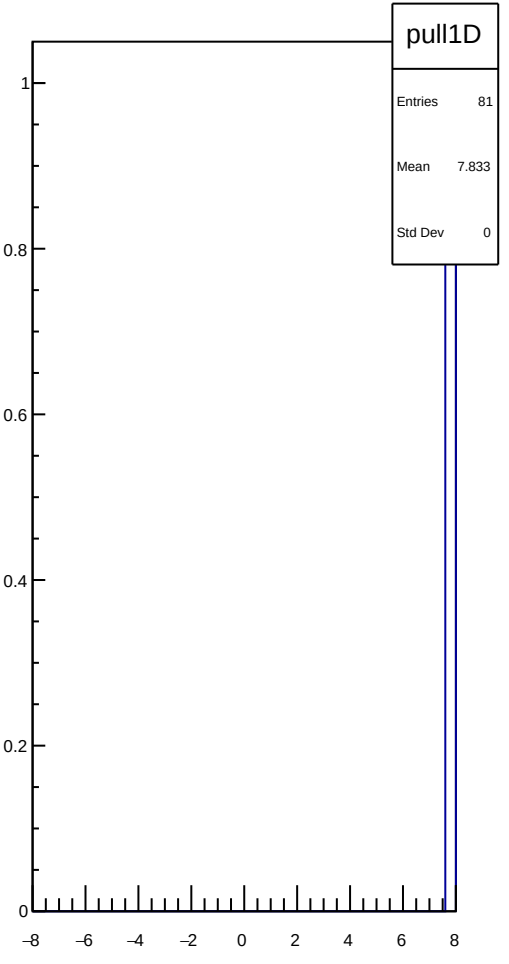

yield_bpm0l03Y_rms vs run
χ² / ndf 9.908e+05 / 80
p0 0.00833 ± 1.06e−05
1.2
1
0.8
0.6
0.4
0.2

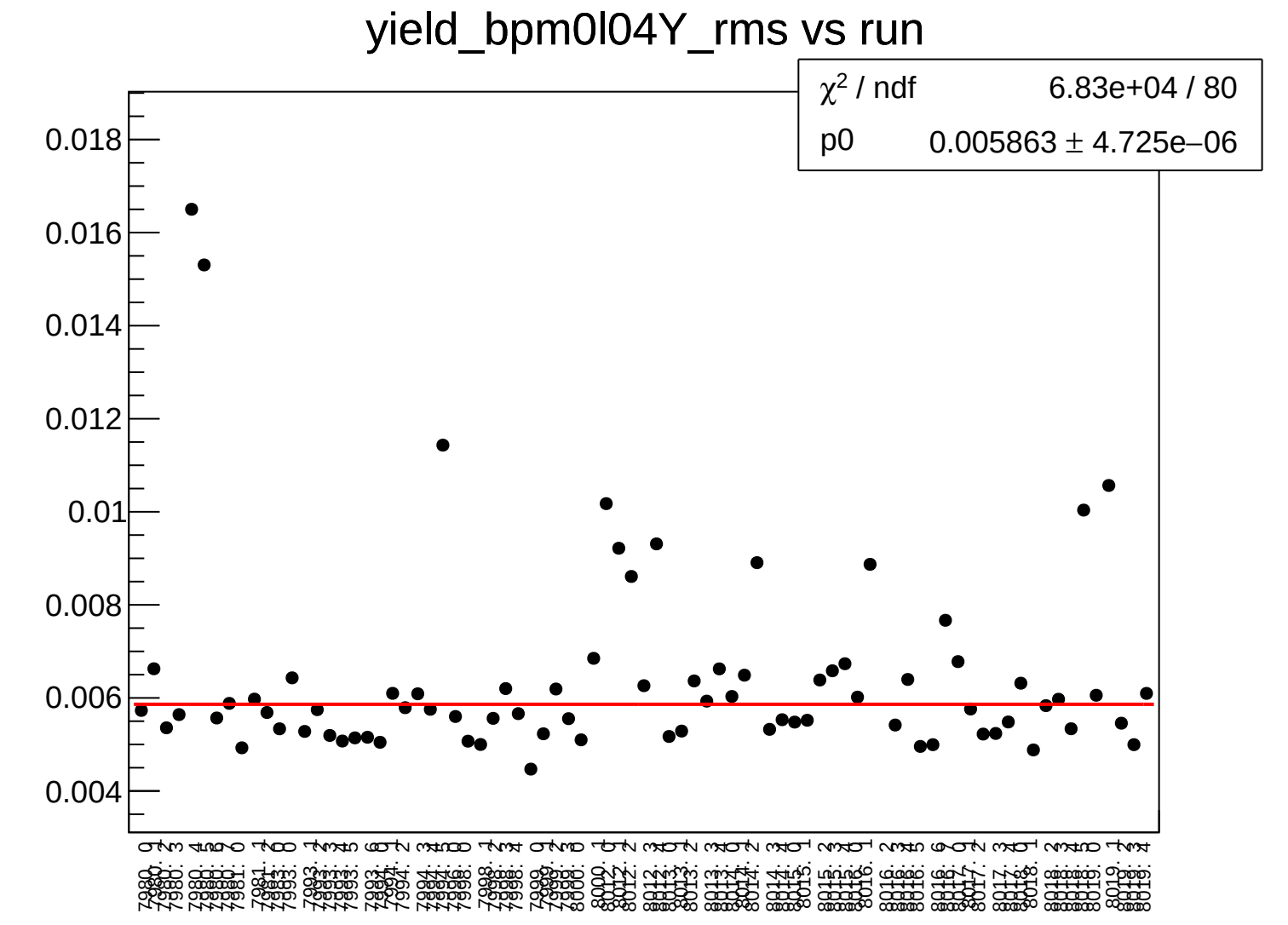

yield_bpm0l04X_mean vs run
χ² / ndf 1.263e+07 / 80
p0 −2.055 ± 2.619e−05
−1.6
−1.7
−1.8
−1.9
−2
−2.1
−2.2
pull
Entries 81
Mean −236.5
Std Dev 272.9
2500
2000
1500
1000
500
0
−500

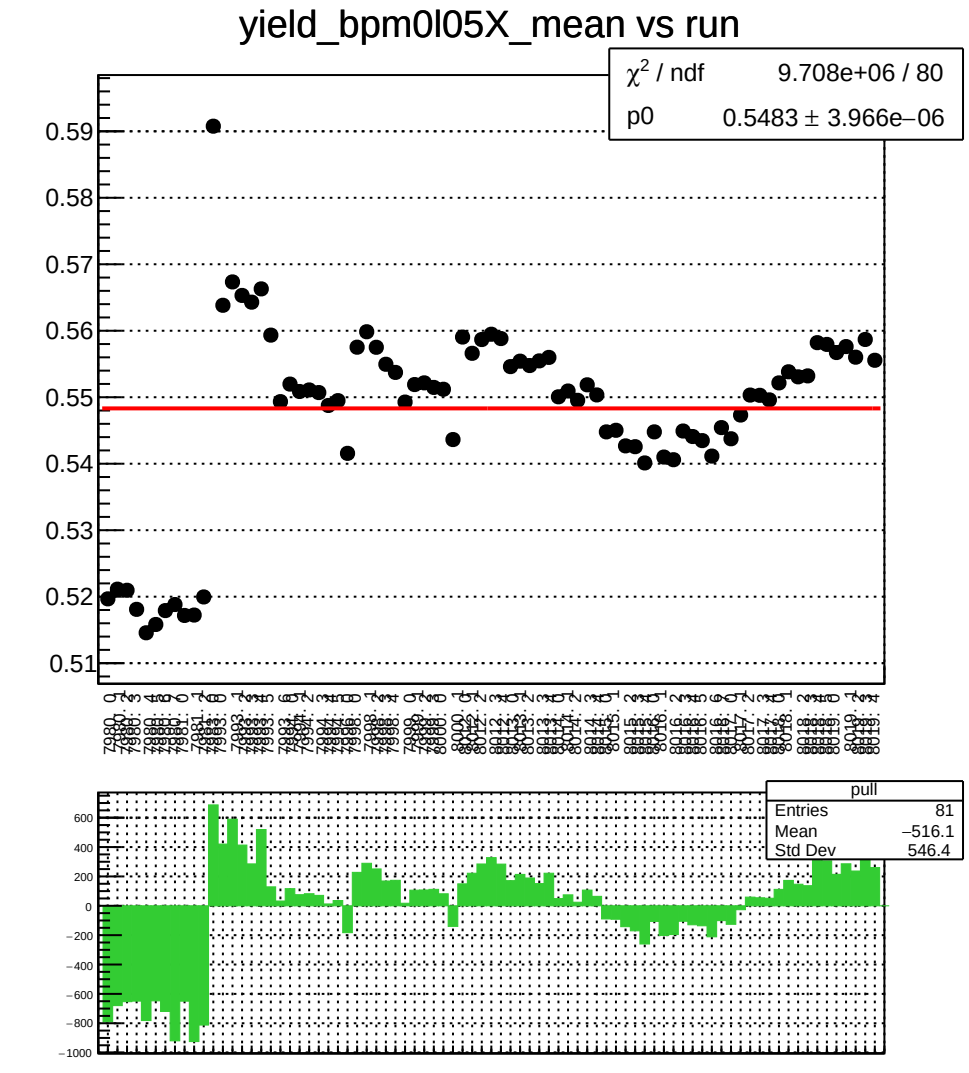

pull1D
Entries 81
Mean −3.653
Std Dev 2.587
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

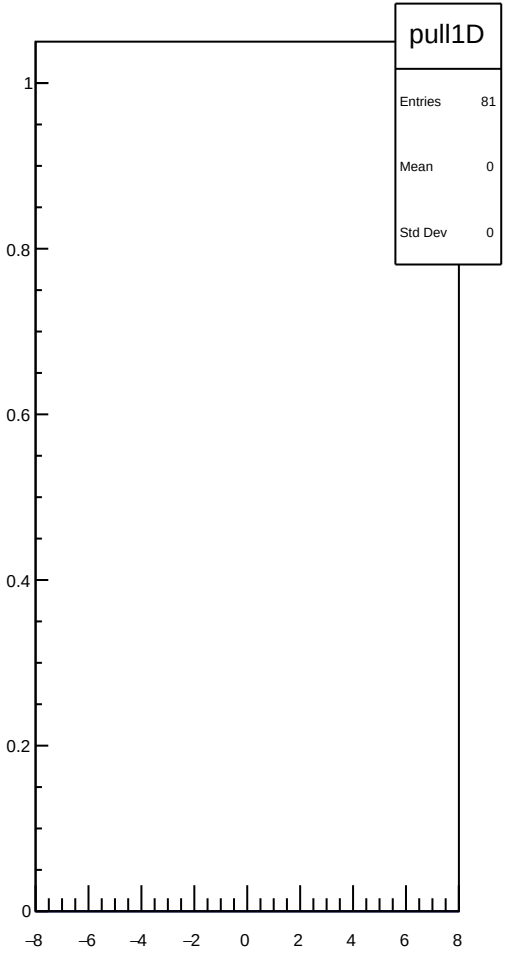

yield_bpm0l04X_rms vs run
χ² / ndf 7.794e+04 / 80
p0 0.0229 ± 1.852e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02

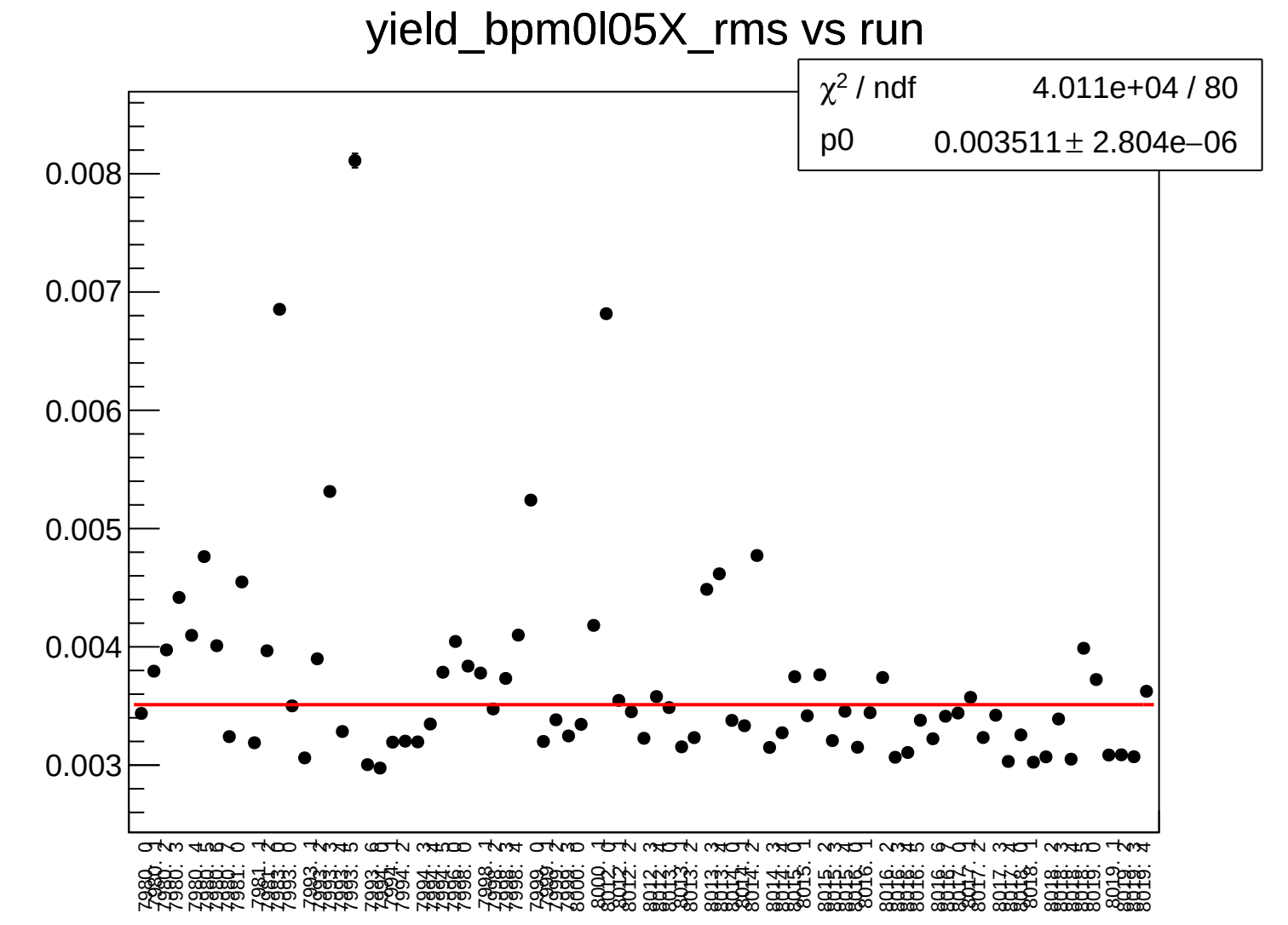

yield_bpm0l04Y_mean vs run
χ² / ndf 5.672e+06 / 80
p0 0.8366 ± 6.683e−06
0.87
0.86
0.85
0.84
0.83
0.82
0.81
0.8
pull
Entries 81
Mean −156.9
Std Dev 203.6
400
200
0
−200
−400
−600

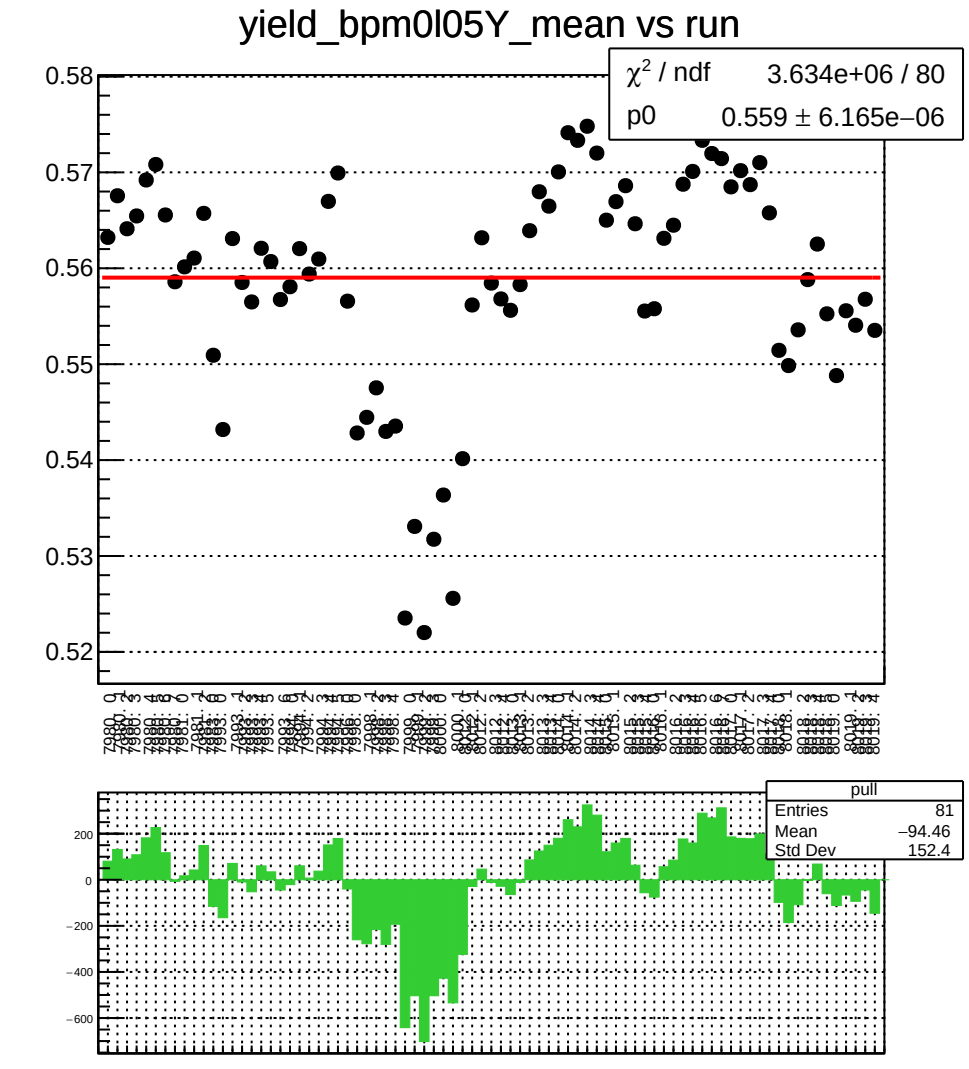

pull1D
Entries 81
Mean 7.833
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

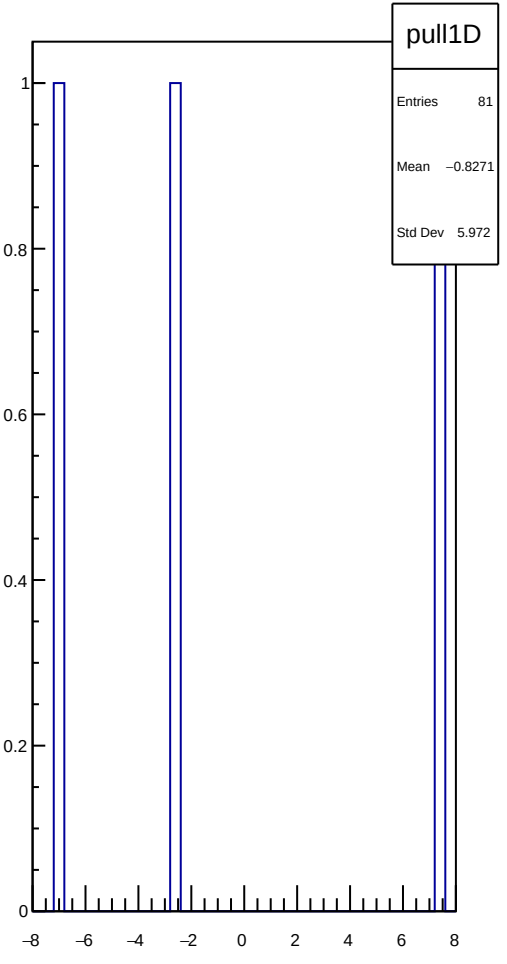

yield_bpm0l04Y_rms vs run
χ² / ndf 6.83e+04 / 80
p0 0.005863 ± 4.725e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

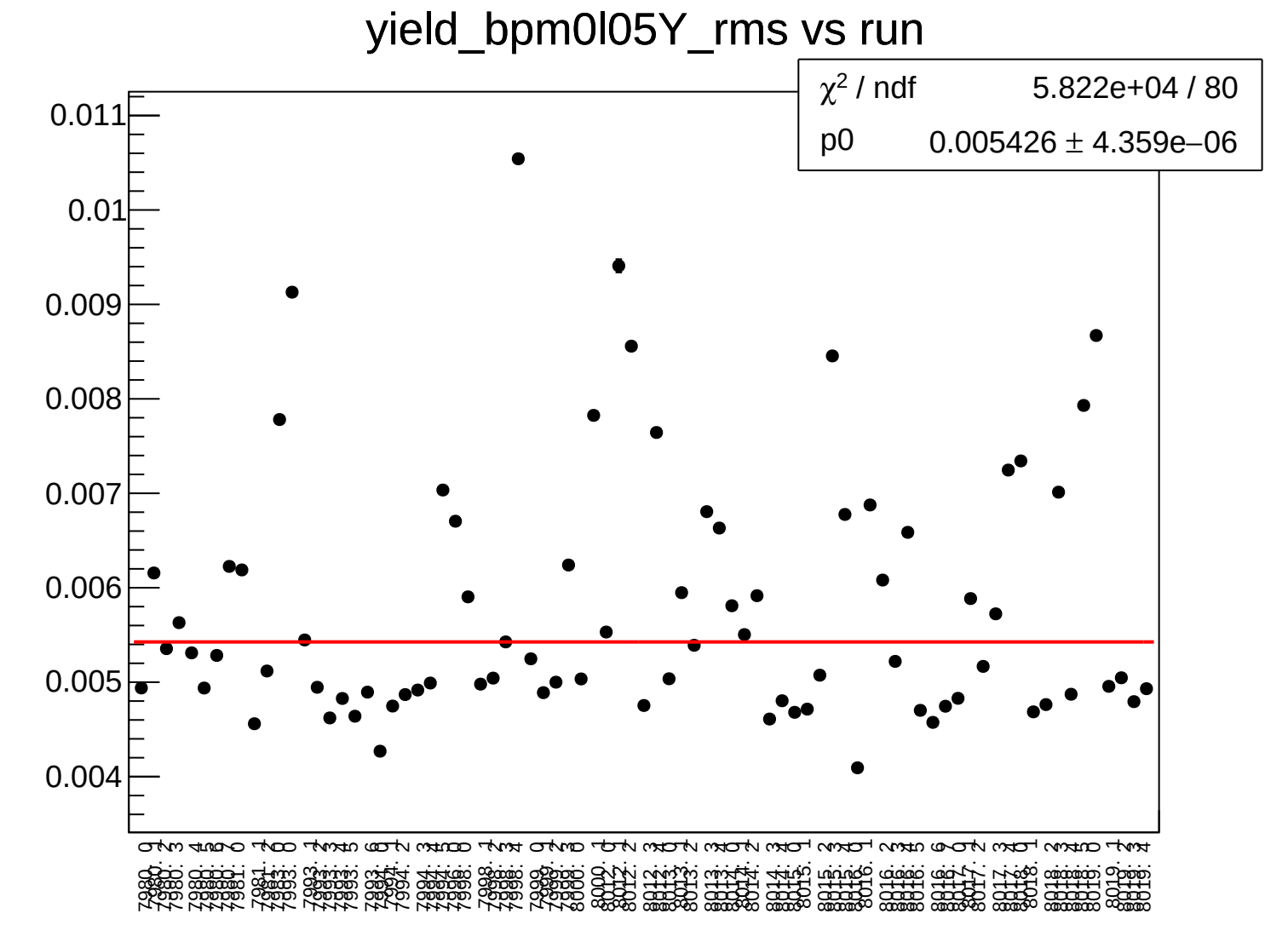

yield_bpm0l05X_mean vs run
χ² / ndf 9.708e+06 / 80
p0 0.5483 ± 3.966e−06
0.59
0.58
0.57
0.56
0.55
0.54
0.53
0.52
0.51
pull
Entries 81
Mean −516.1
Std Dev 546.4
600
400
200
0
−200
−400
−600
−800
−1000

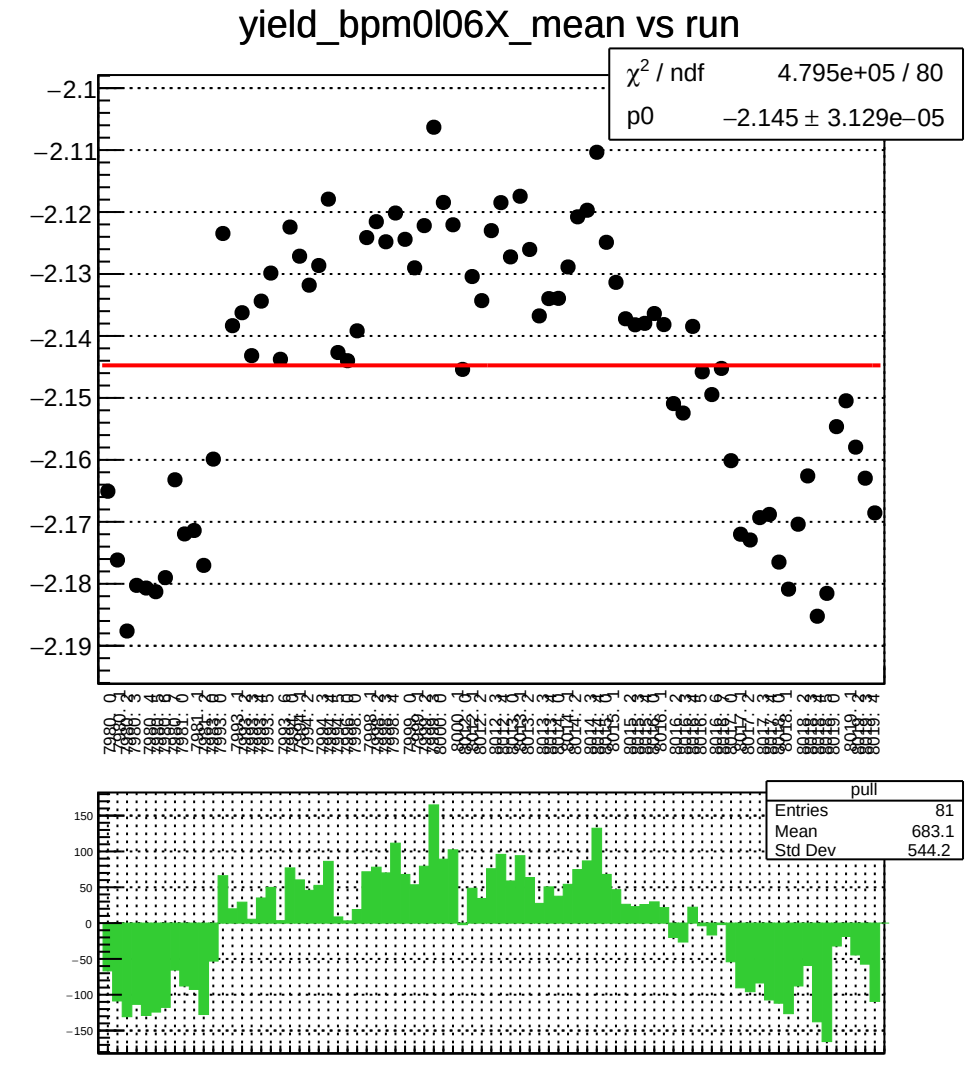

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

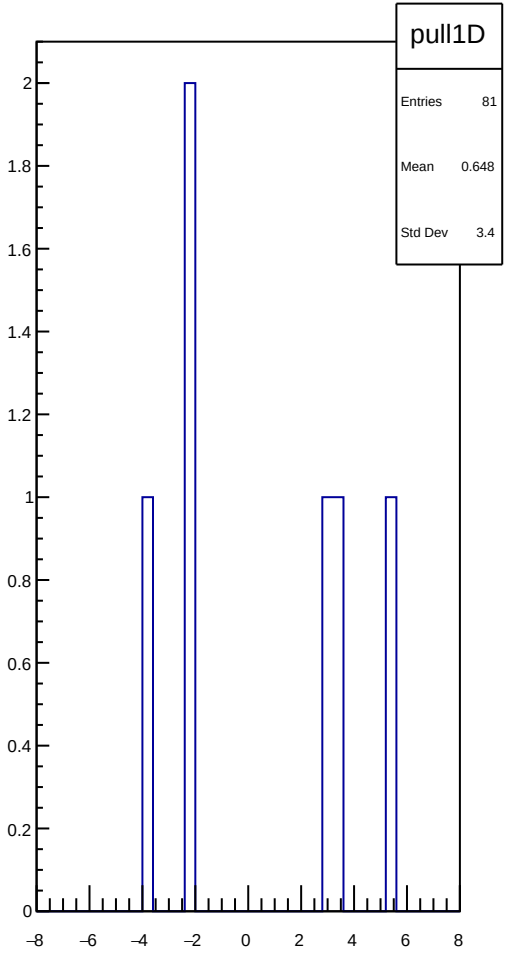

yield_bpm0l05X_rms vs run
χ² / ndf 4.011e+04 / 80
p0 0.003511 ± 2.804e−06
0.008
0.007
0.006
0.005
0.004
0.003

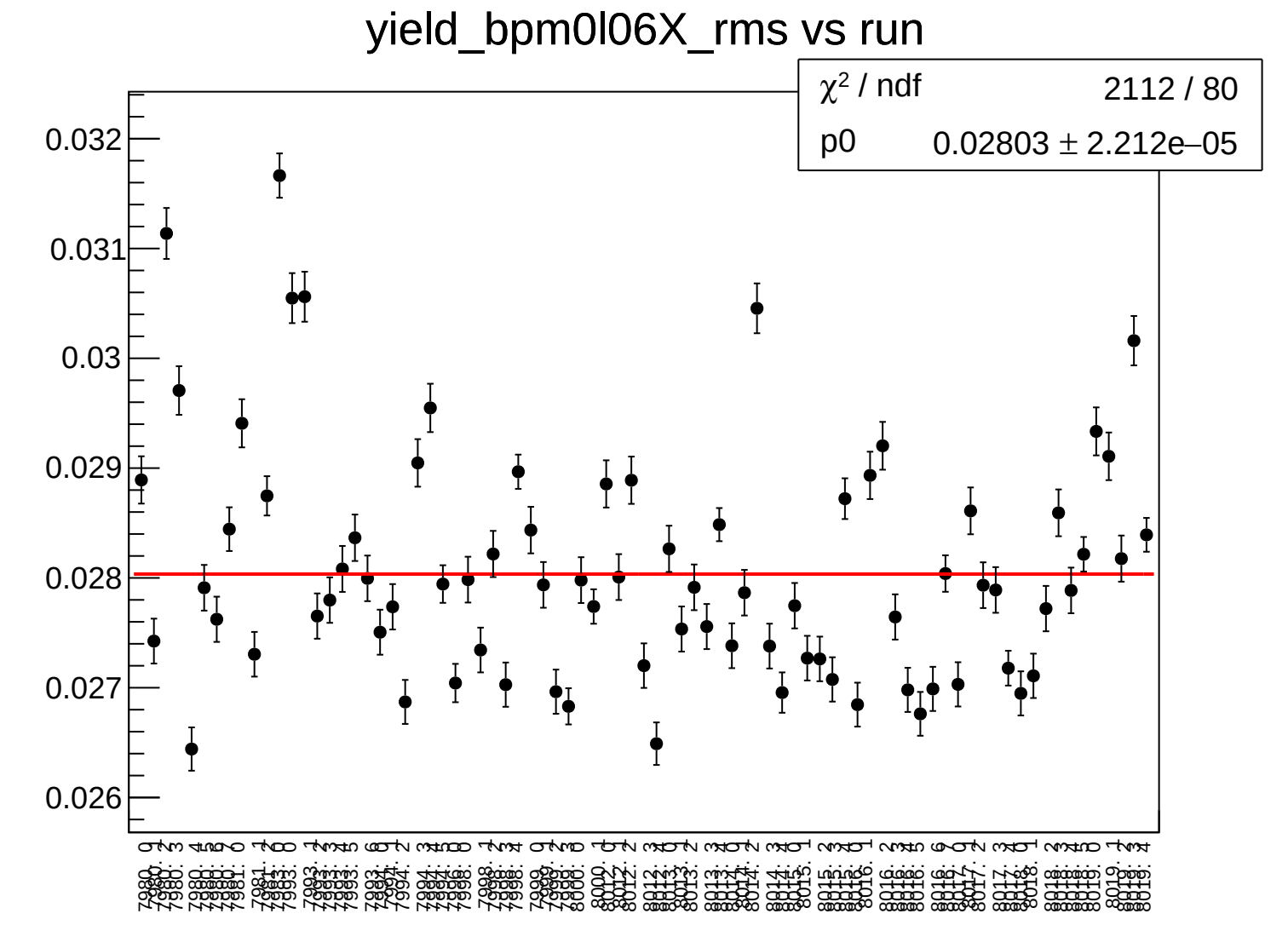

yield_bpm0l05Y_mean vs run
χ² / ndf 3.634e+06 / 80
p0 0.559 ± 6.165e−06
0.58
0.57
0.56
0.55
0.54
0.53
0.52
pull
Entries 81
Mean −94.46
Std Dev 152.4
200
0
−200
−400
−600

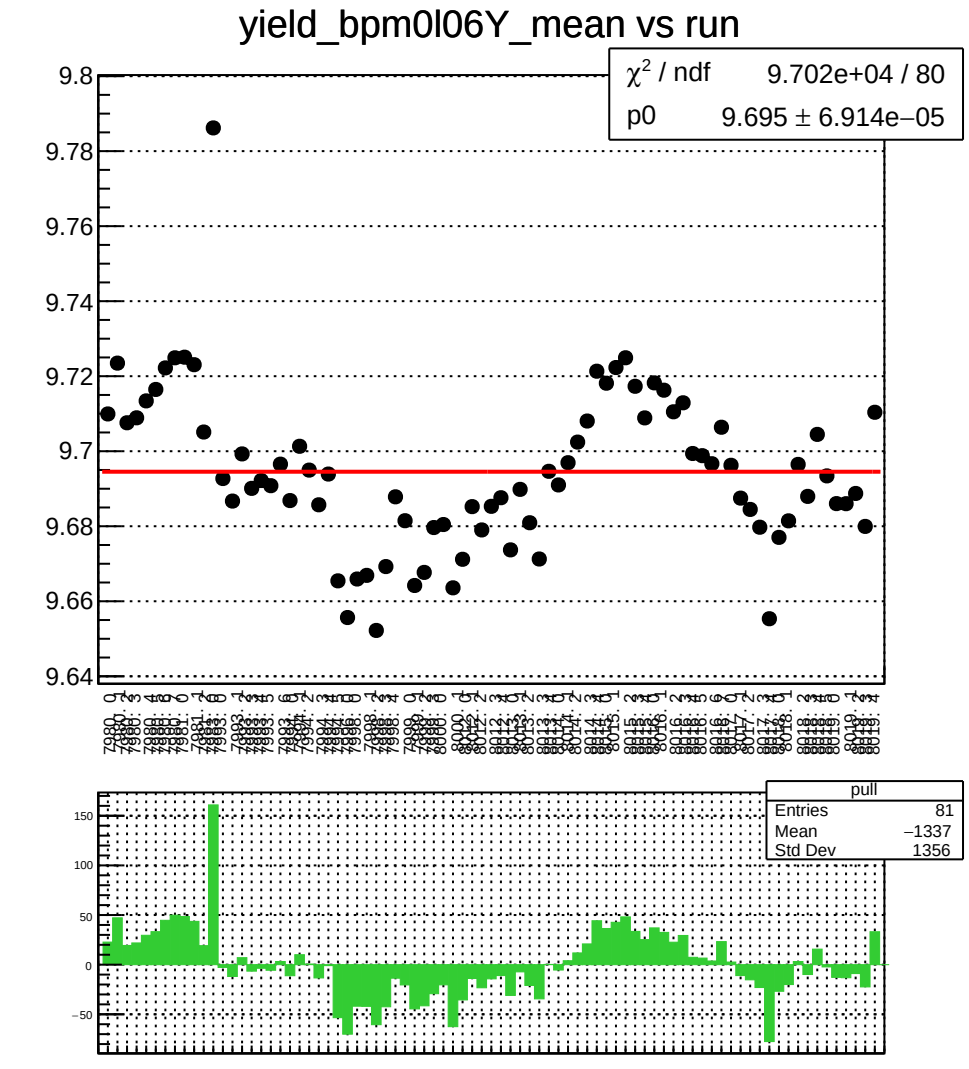

pull1D
Entries 81
Mean −0.8271
Std Dev 5.972
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

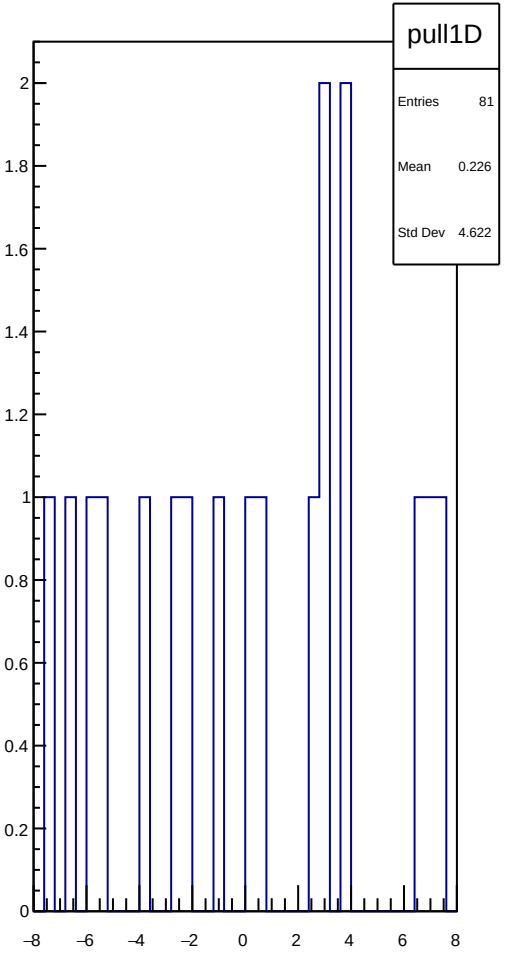

yield_bpm0l05Y_rms vs run
χ² / ndf 5.822e+04 / 80
p0 0.005426 ± 4.359e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

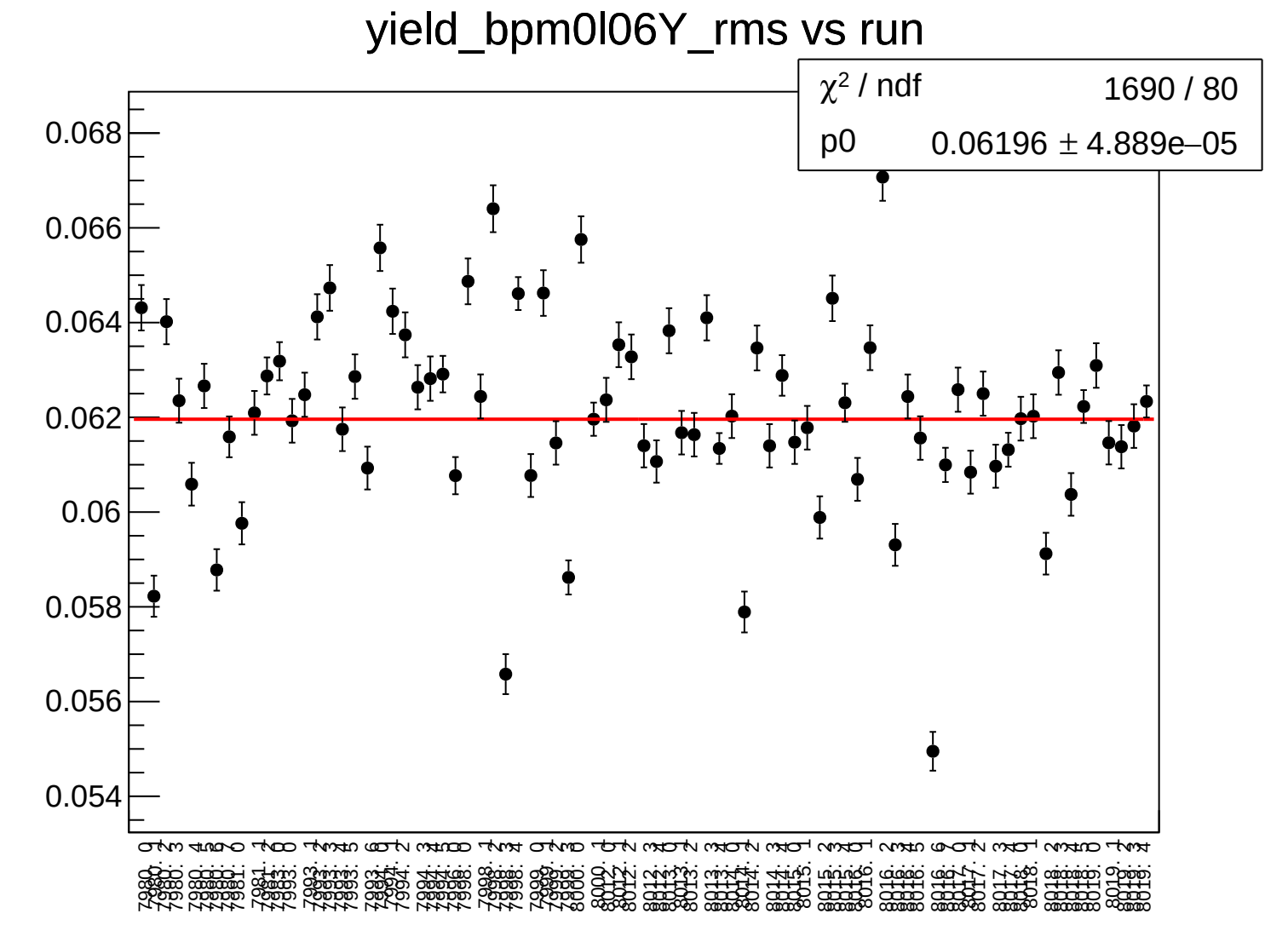

yield_bpm0l06X_mean vs run
χ² / ndf 4.795e+05 / 80
p0 −2.145 ± 3.129e−05
pull
Entries 81
Mean 683.1
Std Dev 544.2

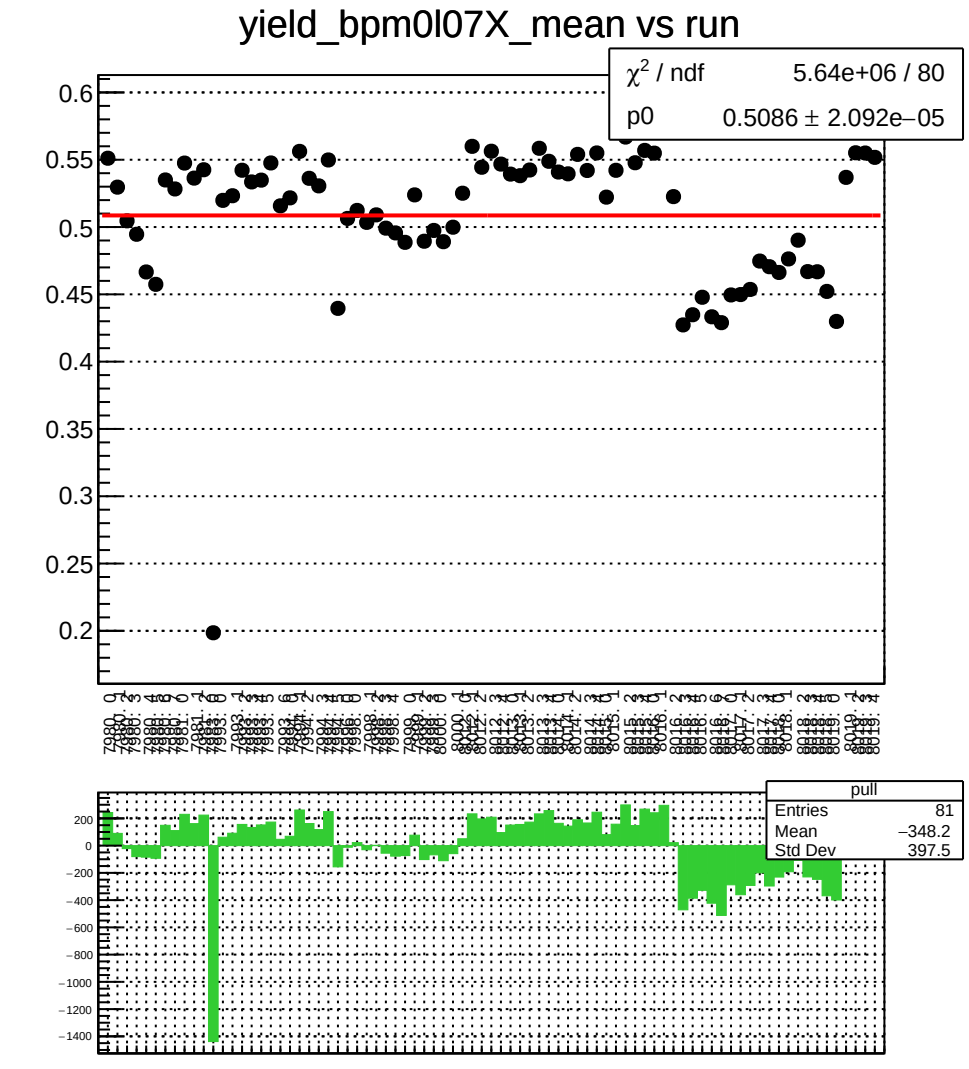

pull1D
Entries 81
Mean 0.648
Std Dev 3.4

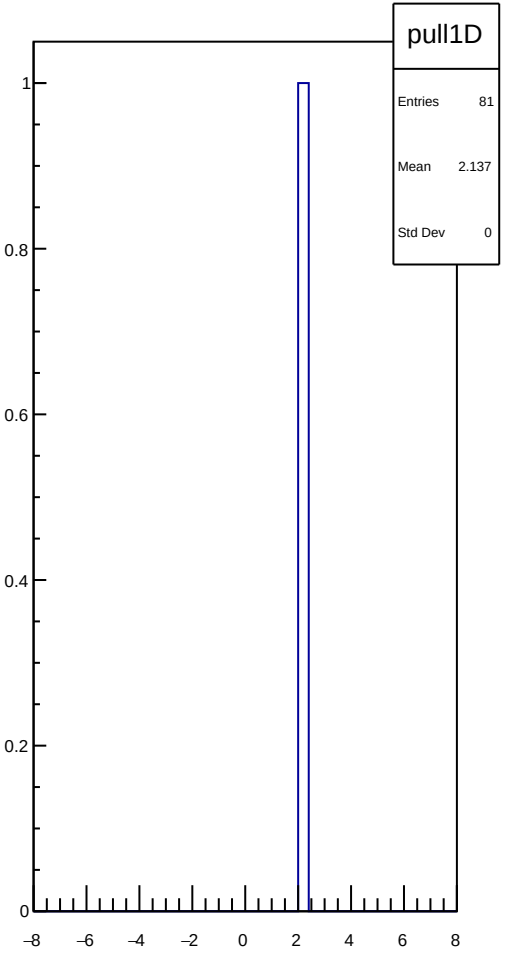

yield_bpm0l06X_rms vs run
χ² / ndf 2112 / 80
p0 0.02803 ± 2.212e–05
0.032
0.031
0.03
0.029
0.028
0.027
0.026

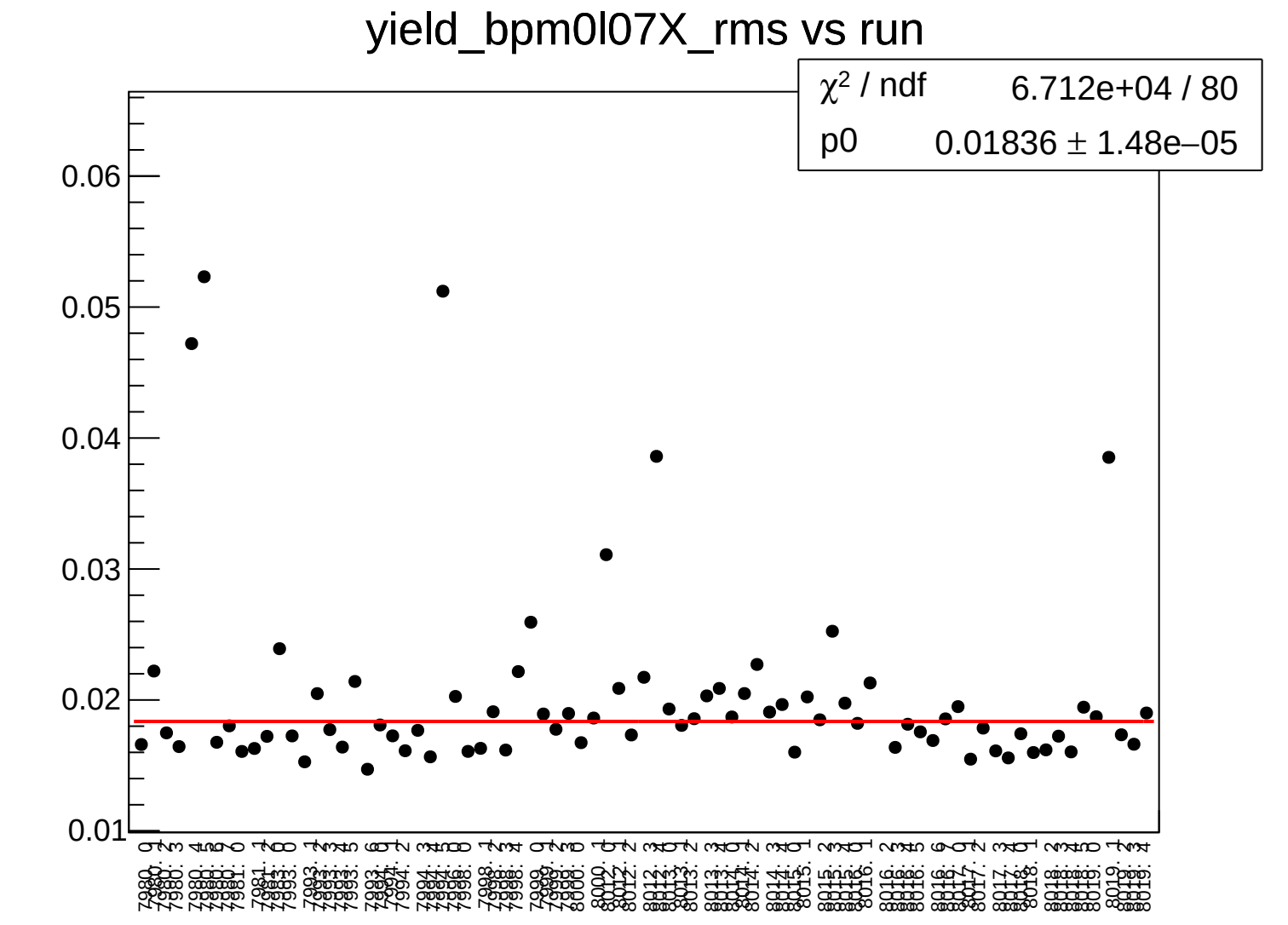

yield_bpm0l06Y_mean vs run
χ² / ndf 9.702e+04 / 80
p0 9.695 ± 6.914e−05
9.8
9.78
9.76
9.74
9.72
9.7
9.68
9.66
9.64
pull
Entries 81
Mean −1337
Std Dev 1356
150
100
50
0
−50

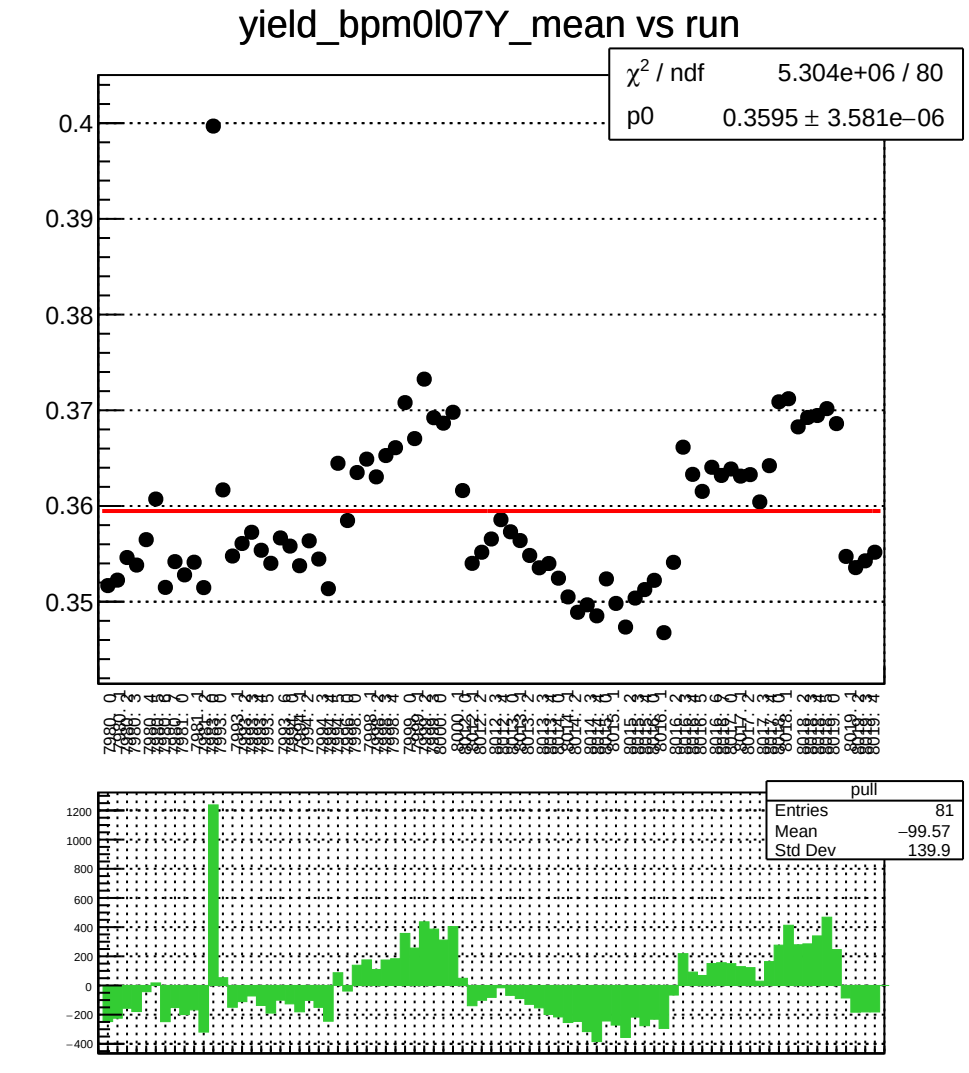

pull1D
Entries 81
Mean 0.226
Std Dev 4.622
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

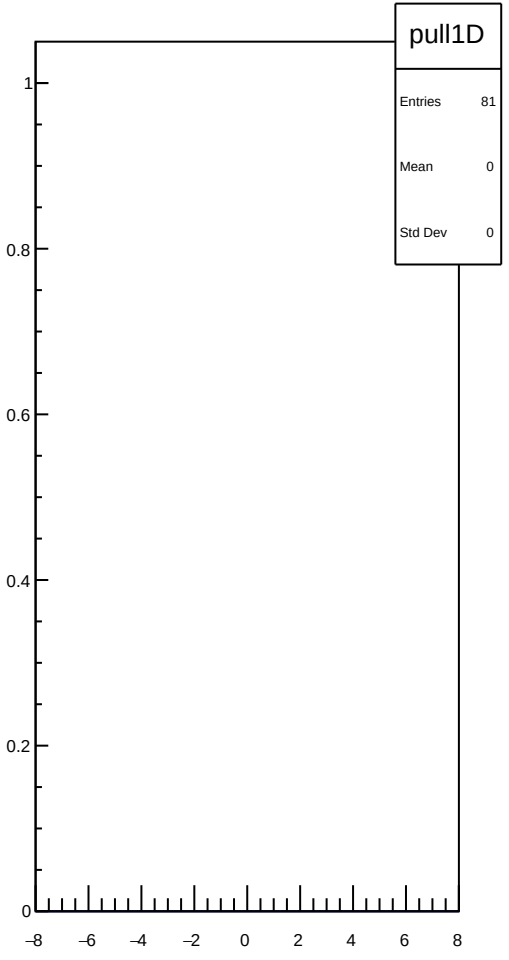

yield_bpm0l06Y_rms vs run
χ² / ndf 1690 / 80
p0 0.06196 ± 4.889e−05
0.068
0.066
0.064
0.062
0.06
0.058
0.056
0.054

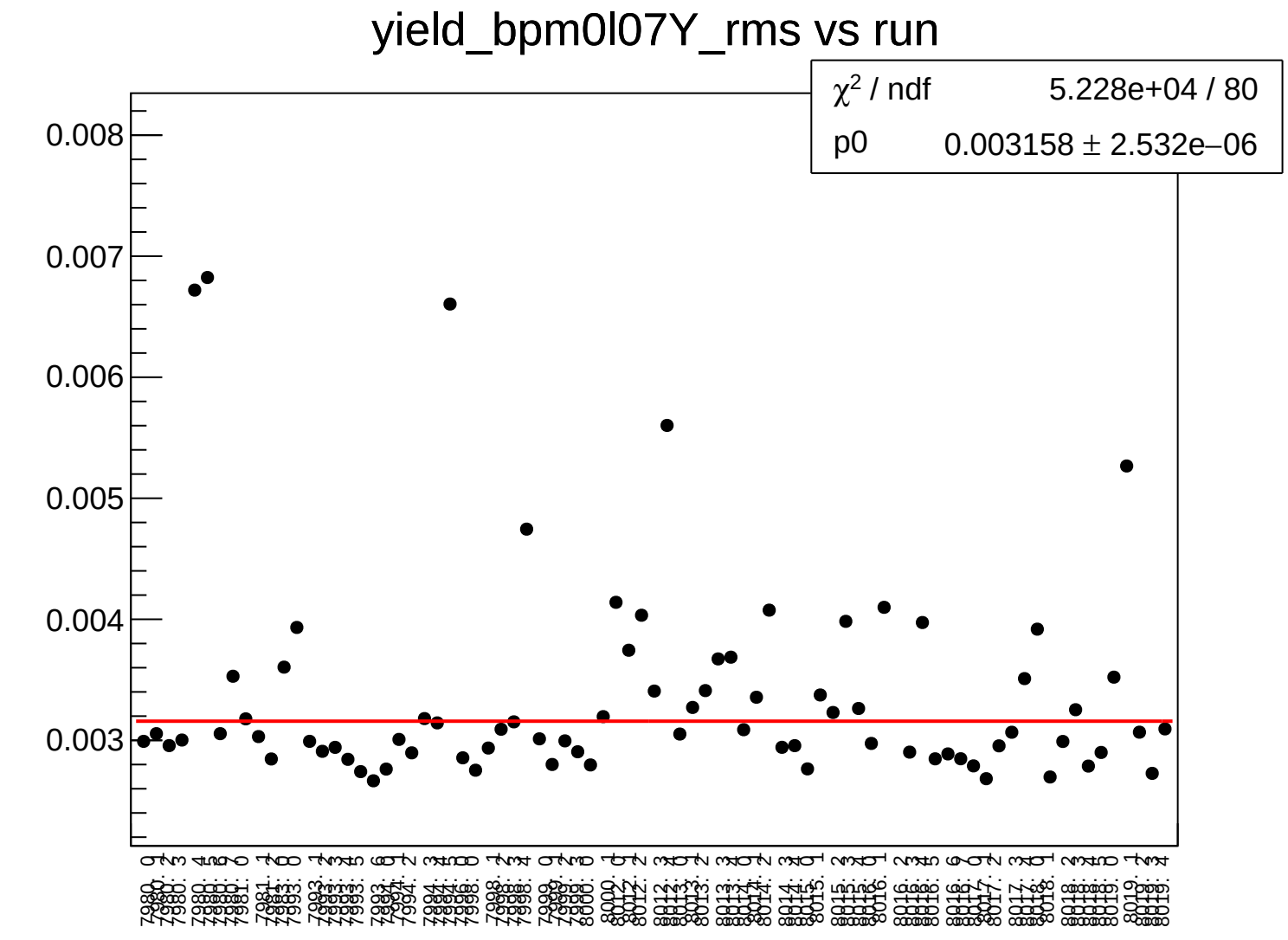

yield_bpm0l07X_mean vs run
χ² / ndf 5.64e+06 / 80
p0 0.5086 ± 2.092e−05
pull
Entries 81
Mean −348.2
Std Dev 397.5

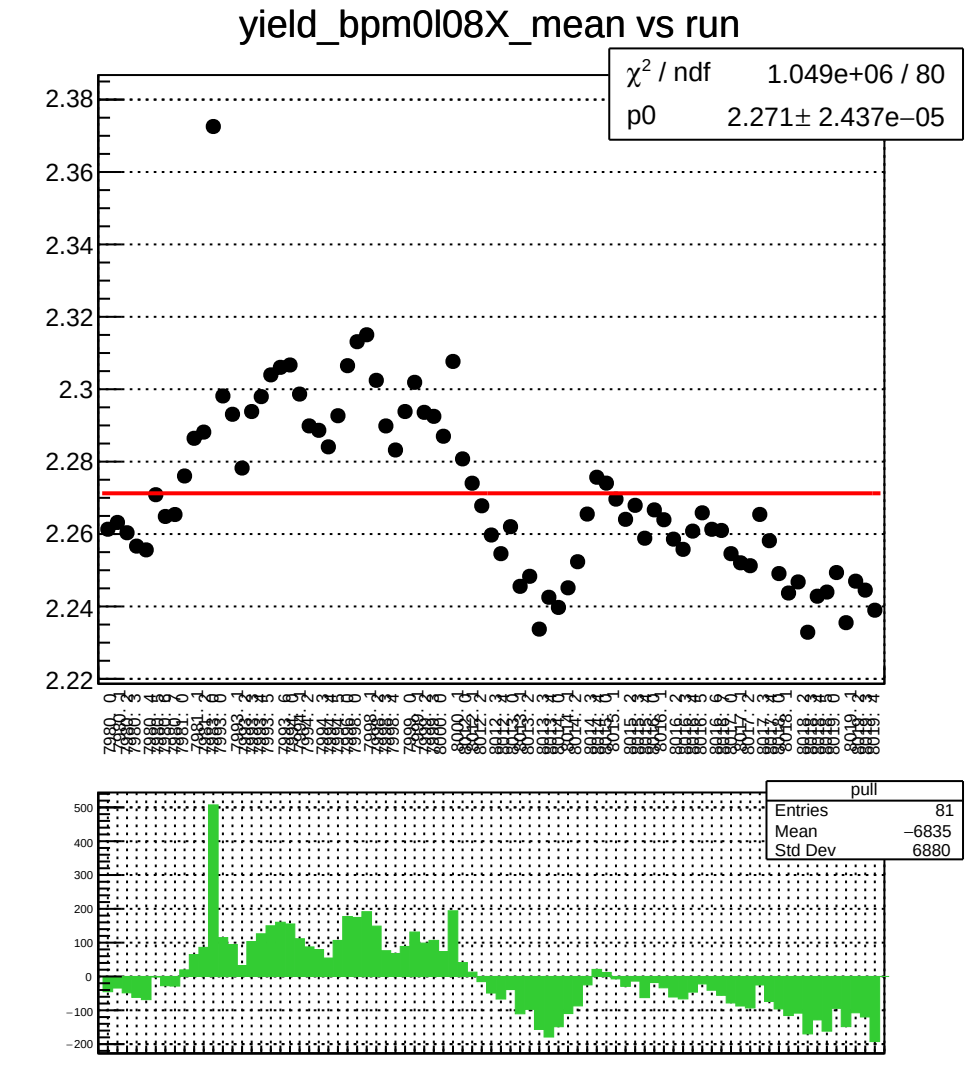

pull1D
Entries 81
Mean 2.137
Std Dev 0

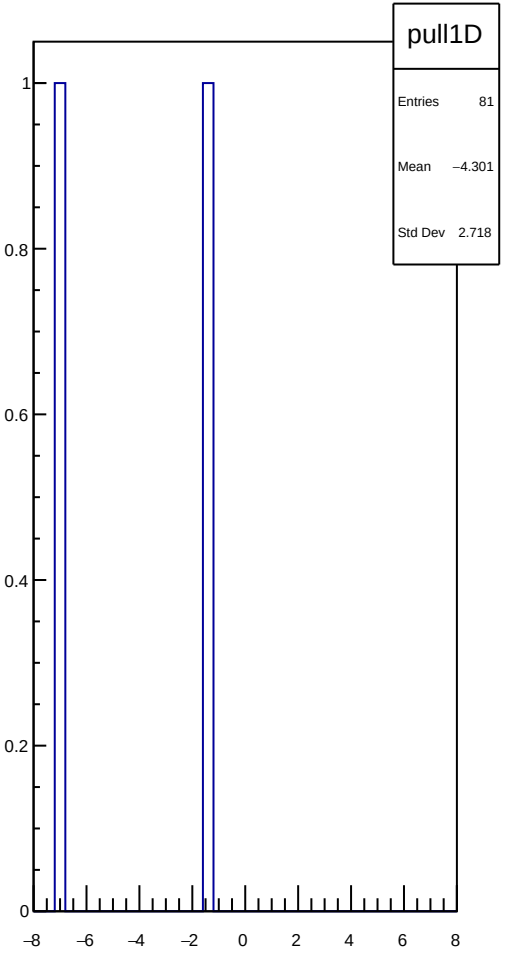

yield_bpm0l07X_rms vs run
χ² / ndf 6.712e+04 / 80
p0 0.01836 ± 1.48e−05
0.06
0.05
0.04
0.03
0.02
0.01

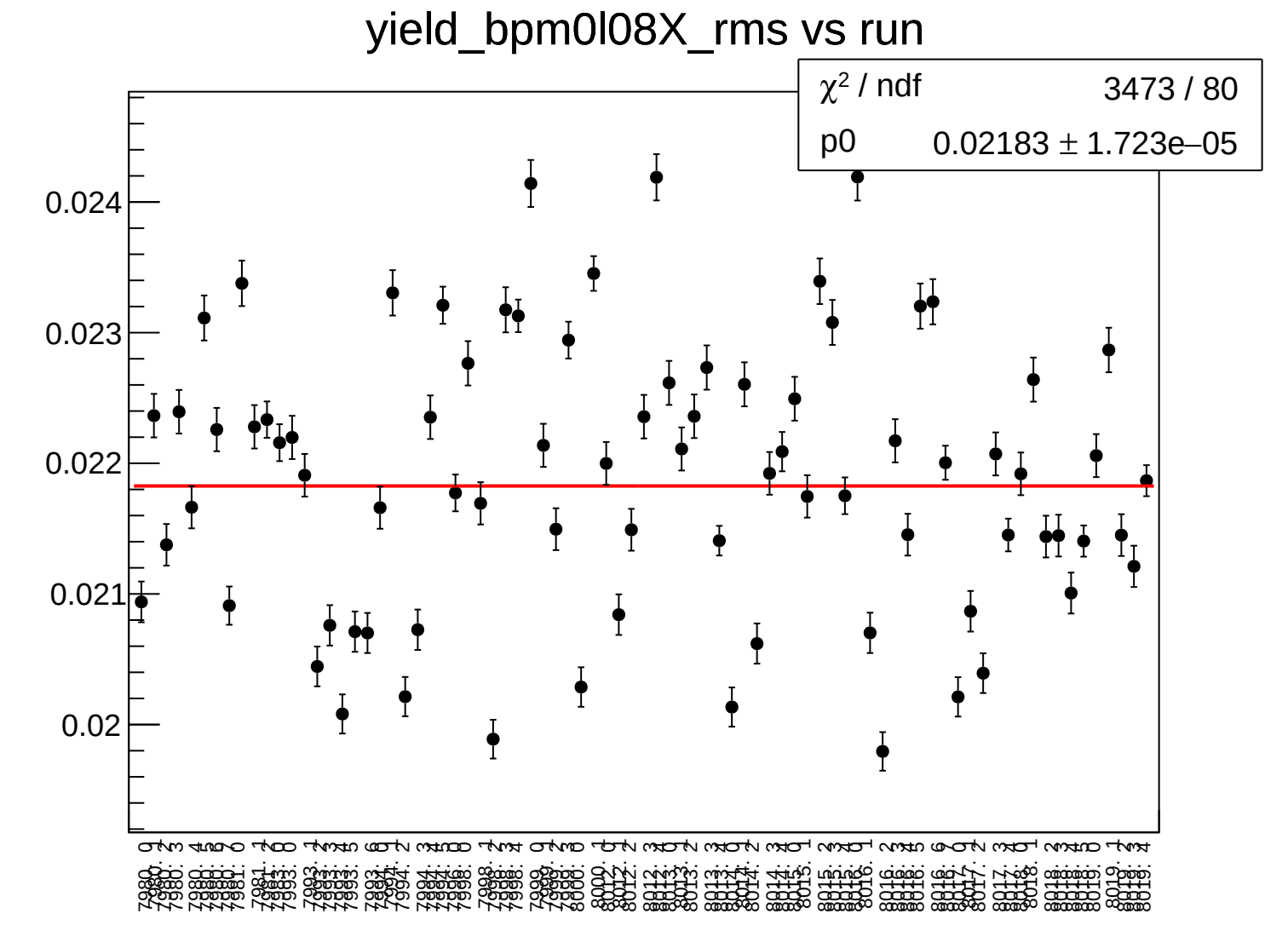

yield_bpm0l07Y_mean vs run
χ² / ndf 5.304e+06 / 80
p0 0.3595 ± 3.581e−06
0.4
0.39
0.38
0.37
0.36
0.35
pull
Entries 81
Mean −99.57
Std Dev 139.9
1200
1000
800
600
400
200
0
−200
−400

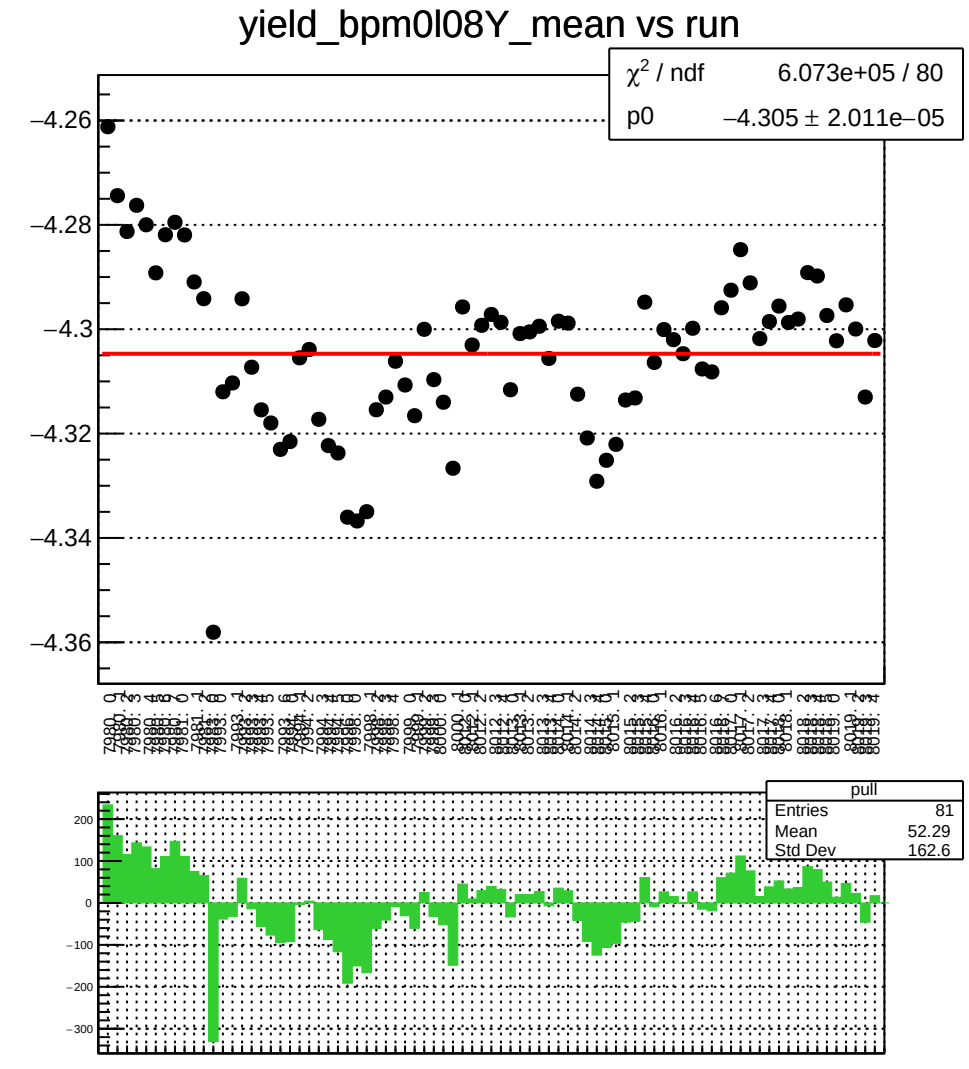

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

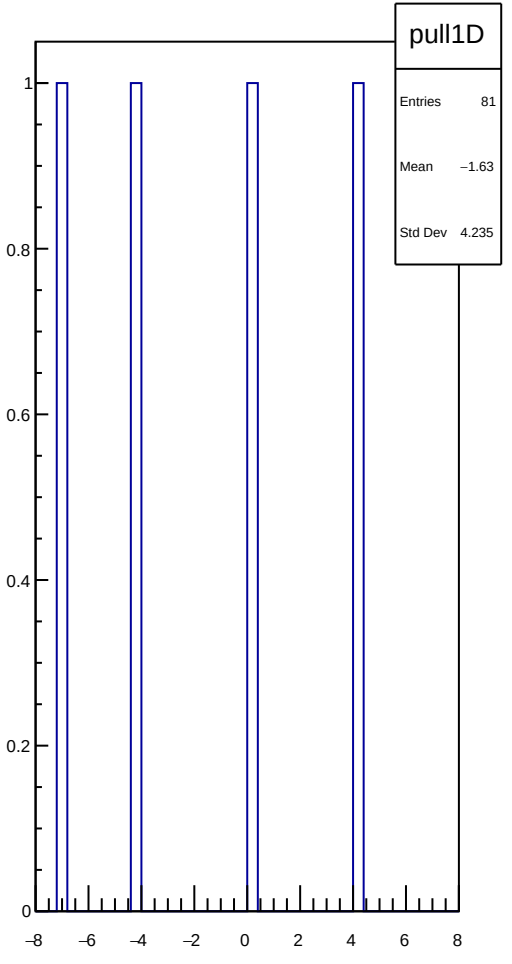

yield_bpm0l07Y_rms vs run
χ^2 / ndf 5.228e+04 / 80
p0 0.003158 ± 2.532e−06
0.008
0.007
0.006
0.005
0.004
0.003

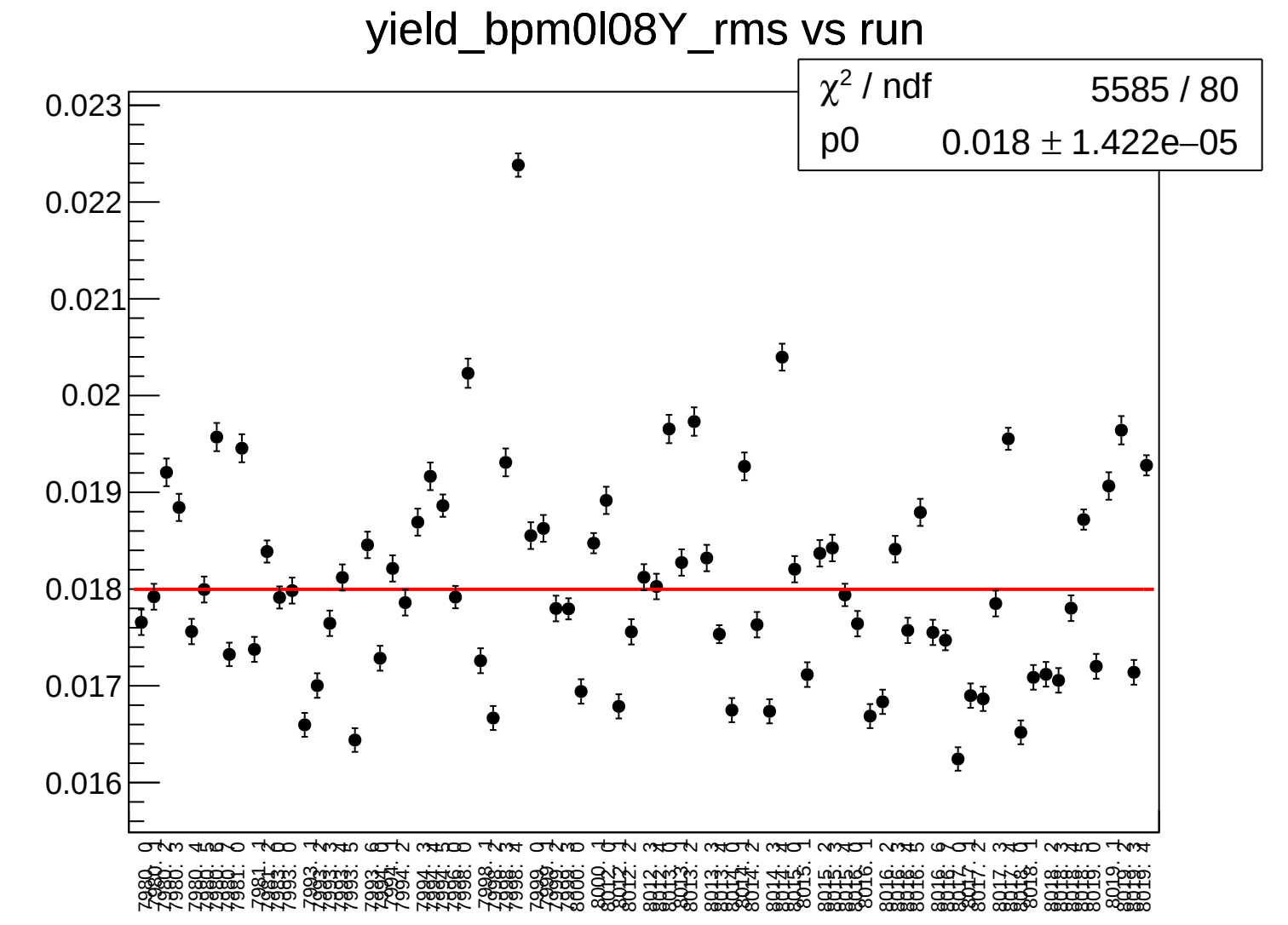

yield_bpm0l08X_mean vs run
χ² / ndf 1.049e+06 / 80
p0 2.271± 2.437e−05
pull
Entries 81
Mean −6835
Std Dev 6880

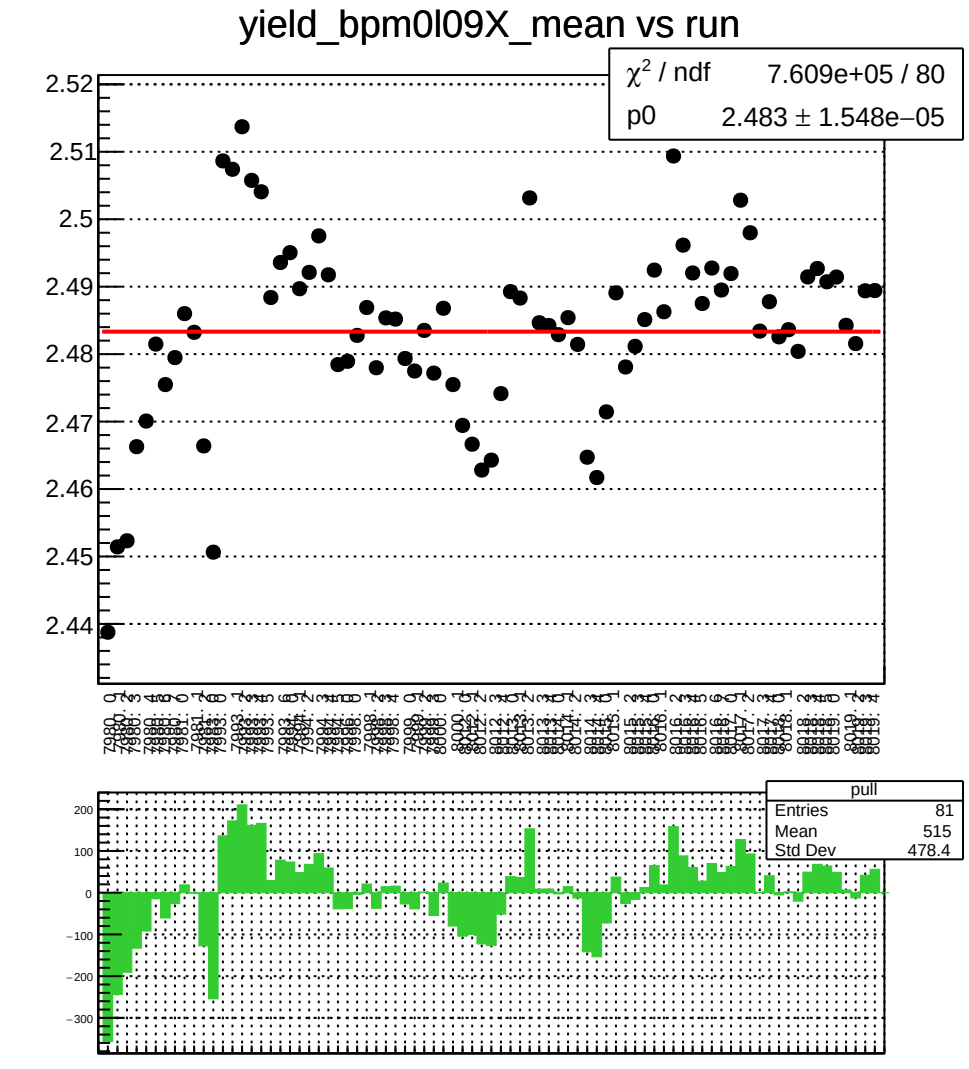

pull1D
Entries 81
Mean −4.301
Std Dev 2.718

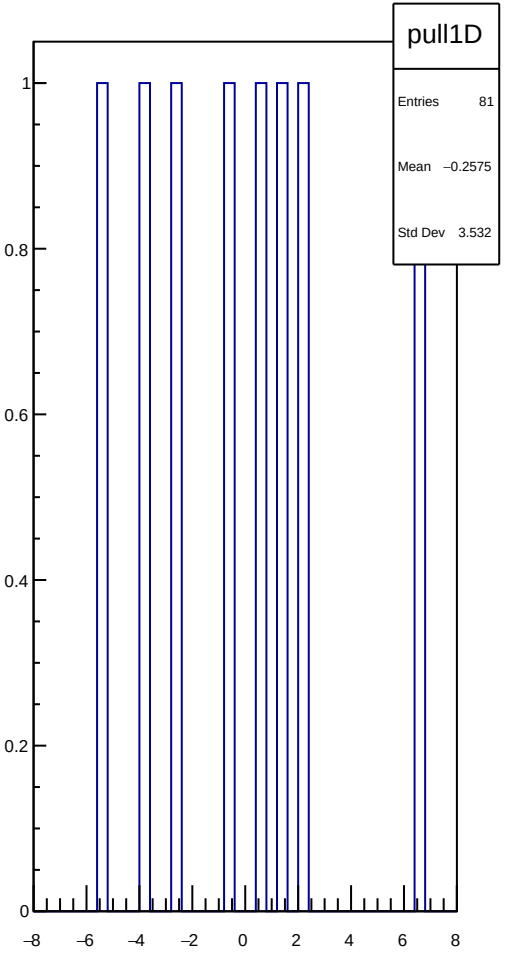

yield_bpm0l08X_rms vs run
χ² / ndf 3473 / 80
p0 0.02183 ± 1.723e−05
0.024
0.023
0.022
0.021
0.02

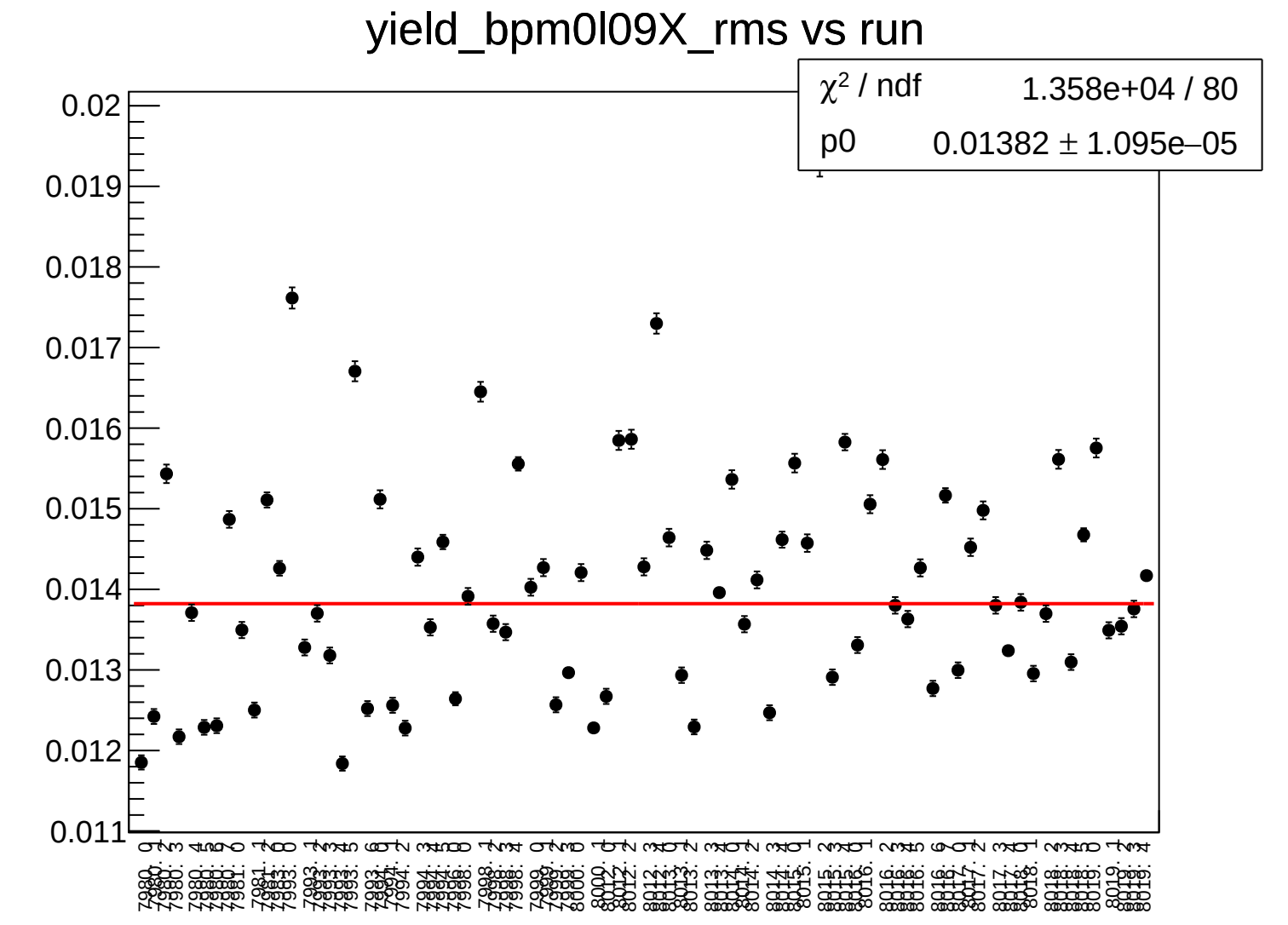

yield_bpm0l08Y_mean vs run
χ² / ndf 6.073e+05 / 80
p0 −4.305 ± 2.011e−05
−4.26
−4.28
−4.3
−4.32
−4.34
−4.36
pull
Entries 81
Mean 52.29
Std Dev 162.6
200
100
0
−100
−200
−300

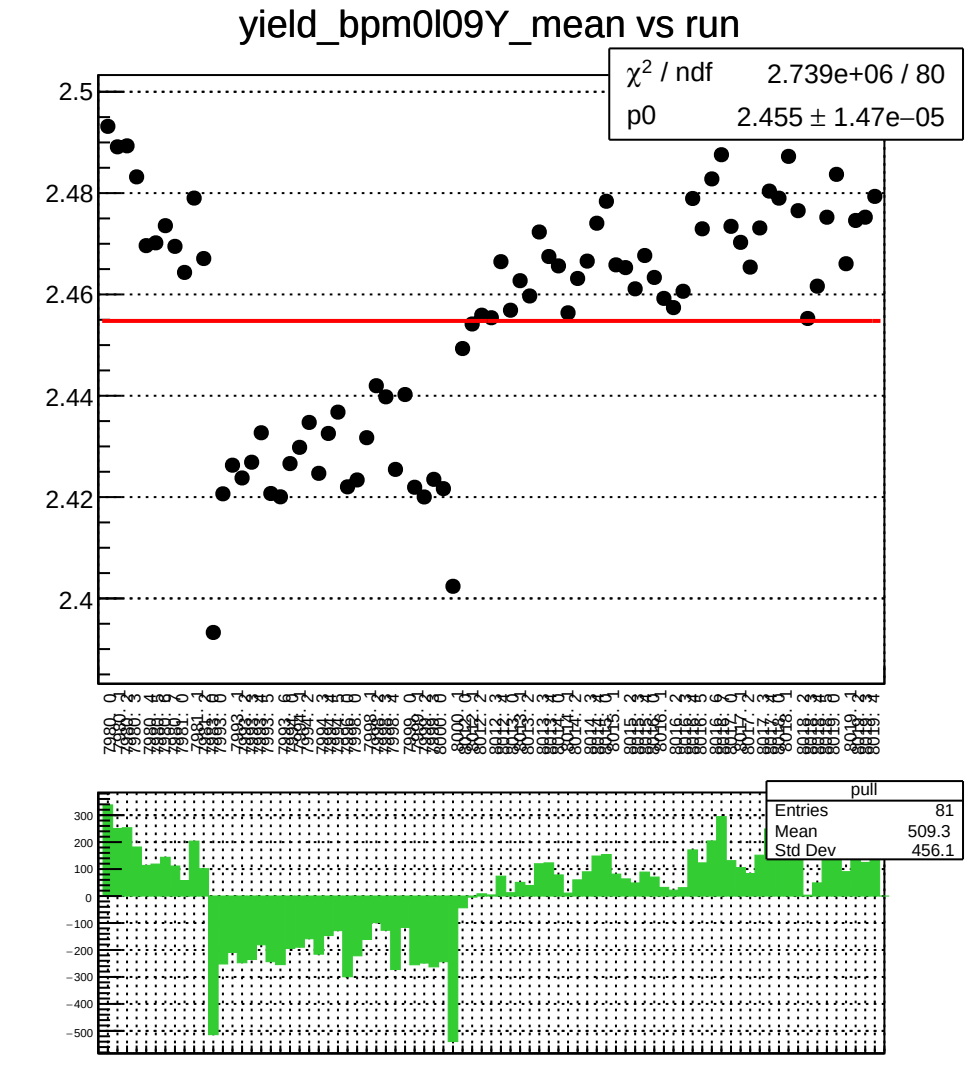

pull1D
Entries 81
Mean −1.63
Std Dev 4.235
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

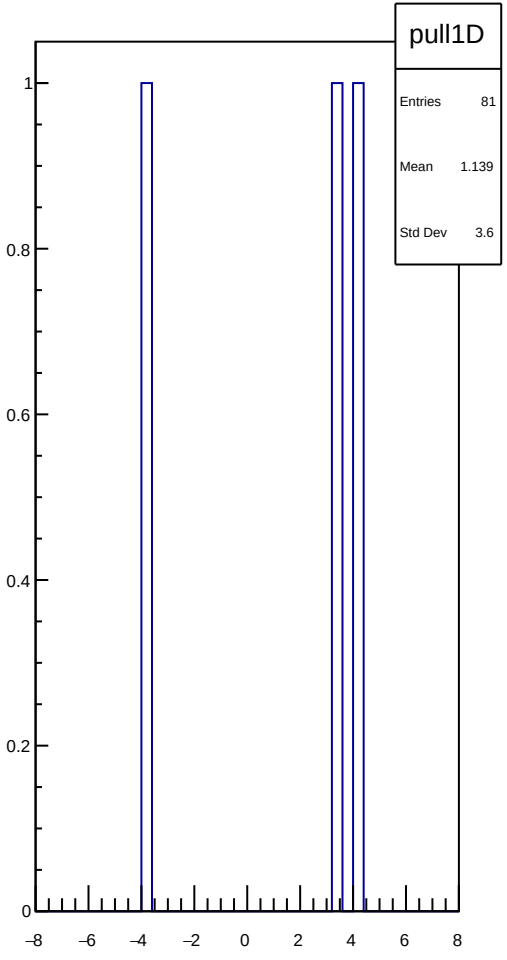

yield_bpm0l08Y_rms vs run
χ² / ndf 5585 / 80
p0 0.018 ± 1.422e−05
0.023
0.022
0.021
0.02
0.019
0.018
0.017
0.016

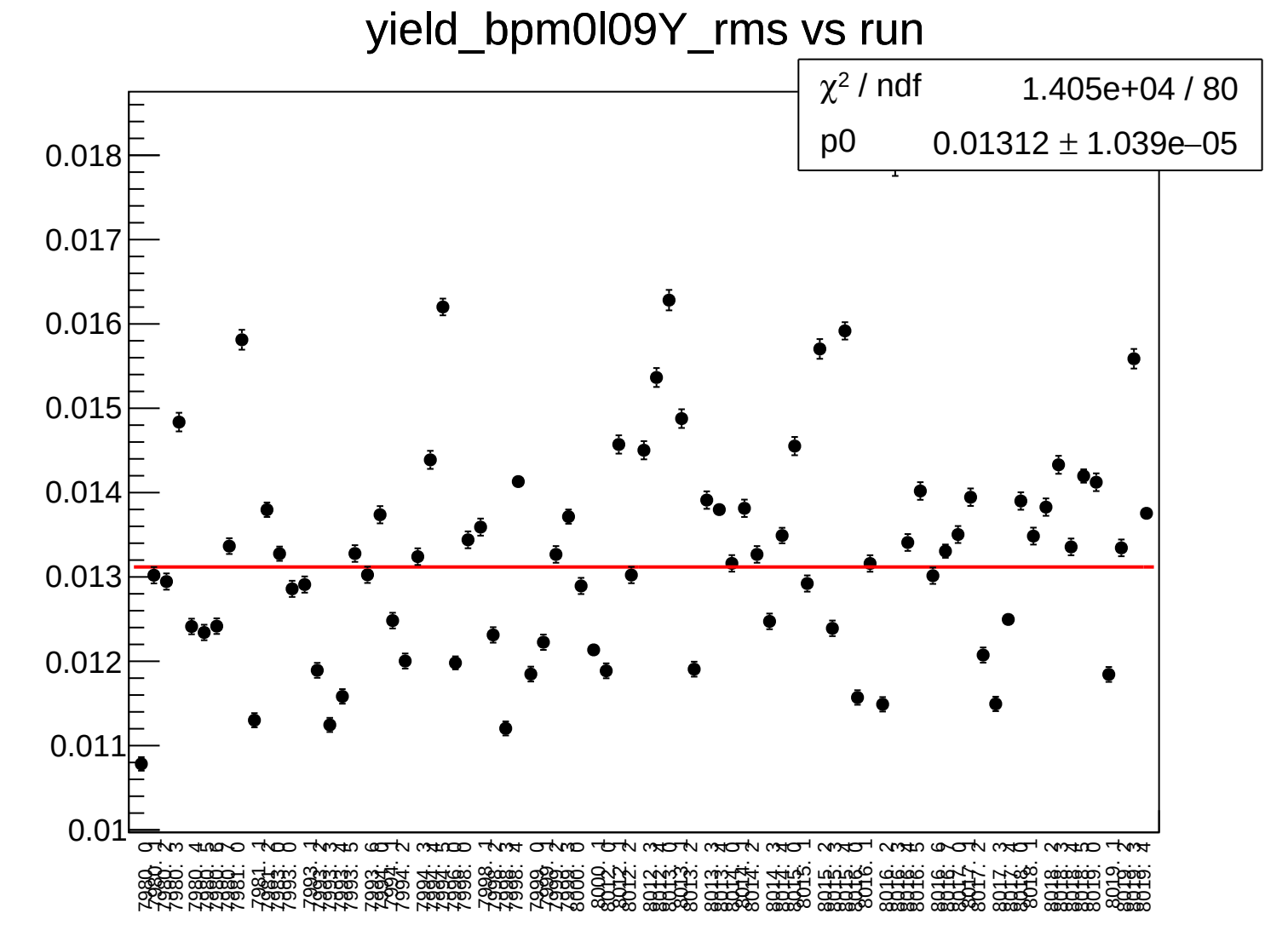

yield_bpm0l09X_mean vs run
χ² / ndf 7.609e+05 / 80
p0 2.483 ± 1.548e−05
2.52
2.51
2.5
2.49
2.48
2.47
2.46
2.45
2.44
pull
Entries 81
Mean 515
Std Dev 478.4
200
100
0
−100
−200
−300

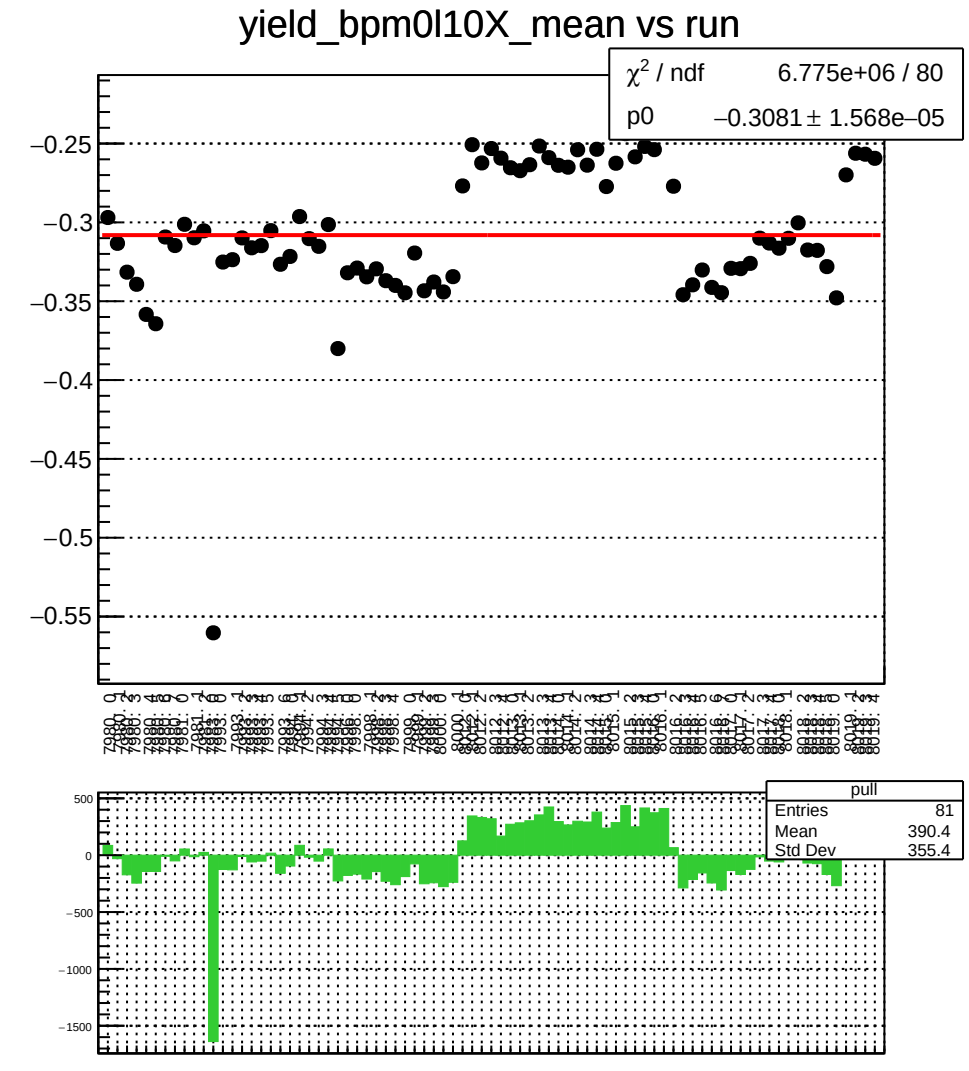

pull1D
Entries 81
Mean −0.2575
Std Dev 3.532
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

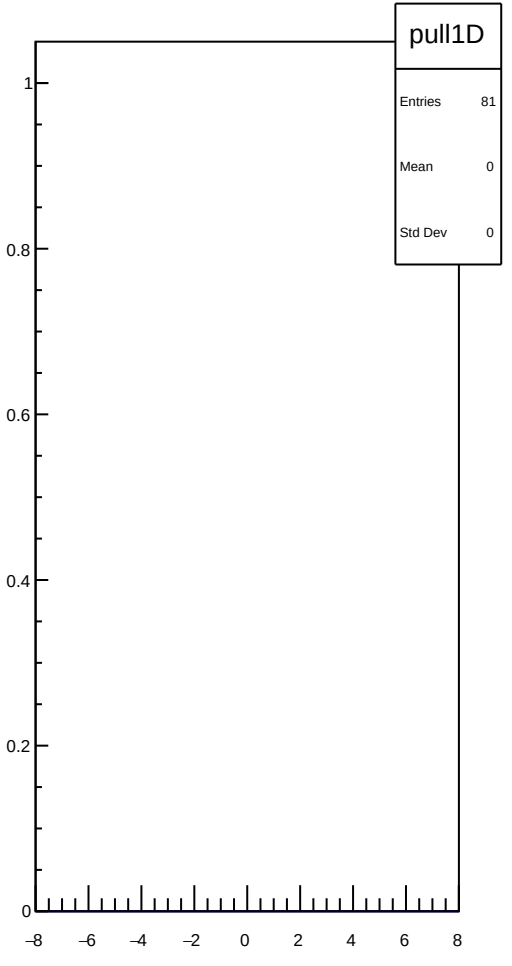

yield_bpm0l09X_rms vs run
χ² / ndf 1.358e+04 / 80
p0 0.01382 ± 1.095e−05
0.02
0.019
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011

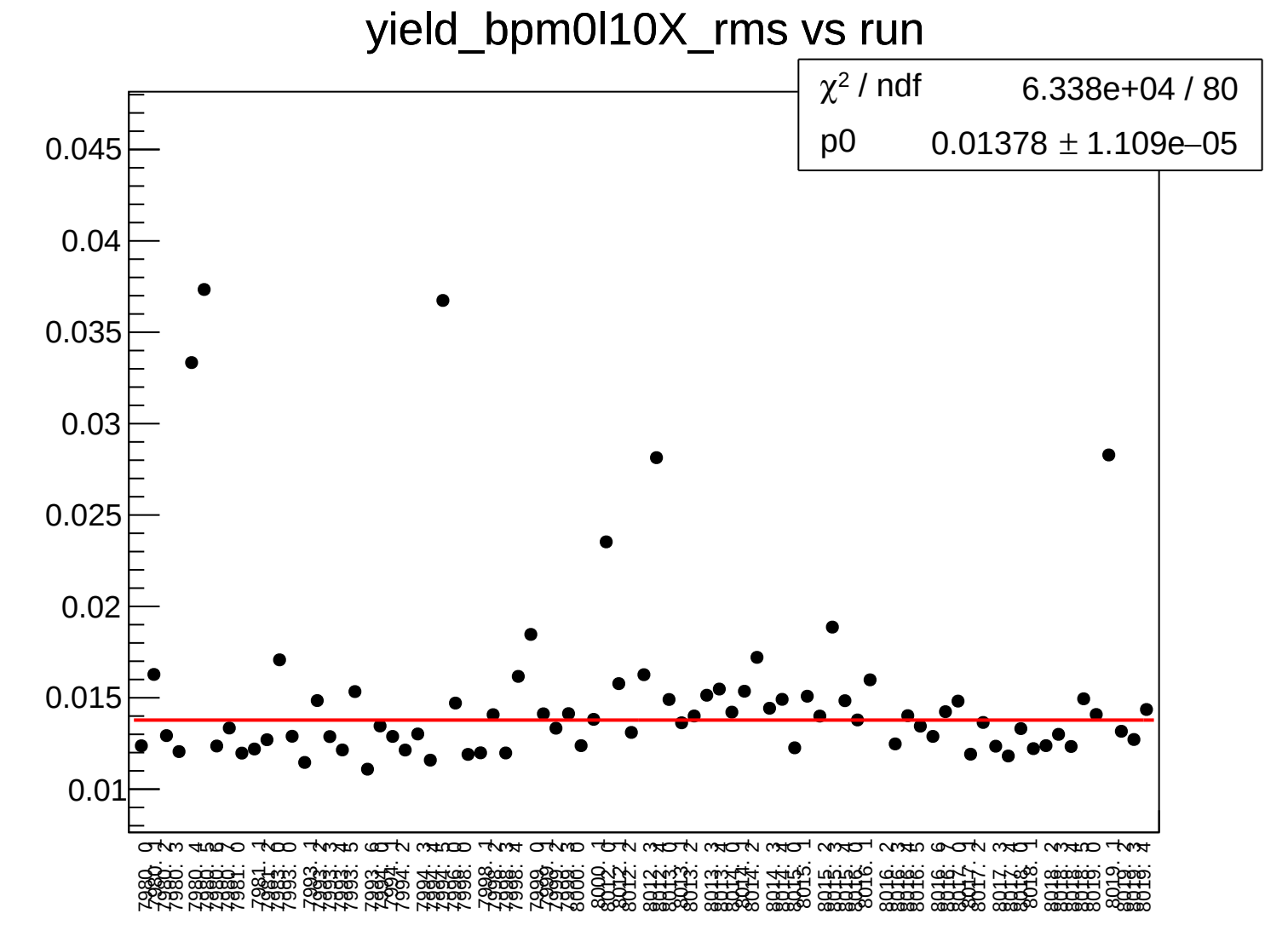

yield_bpm0l09Y_mean vs run
χ² / ndf 2.739e+06 / 80
p0 2.455 ± 1.47e−05
2.5
2.48
2.46
2.44
2.42
2.4
pull
Entries 81
Mean 509.3
Std Dev 456.1
300
200
100
0
−100
−200
−300
−400
−500

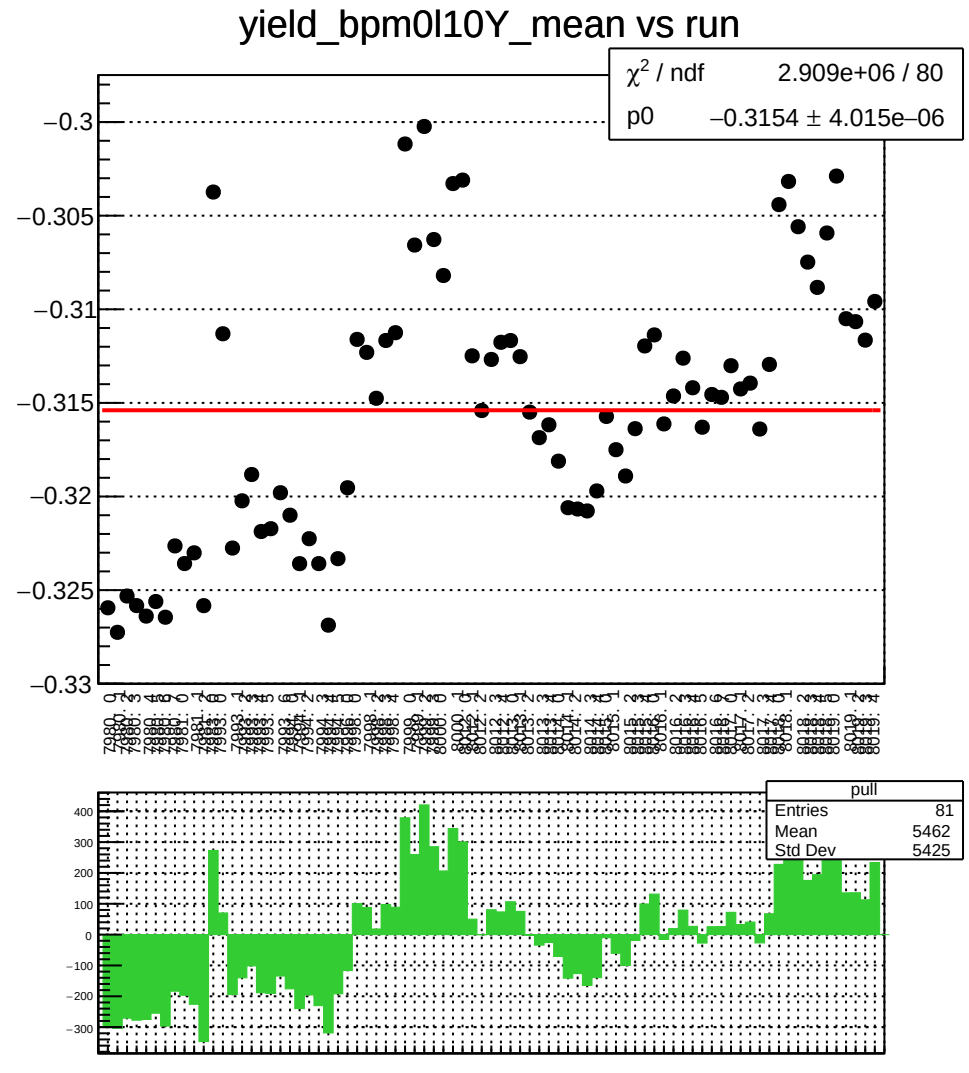

pull1D
Entries 81
Mean 1.139
Std Dev 3.6
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

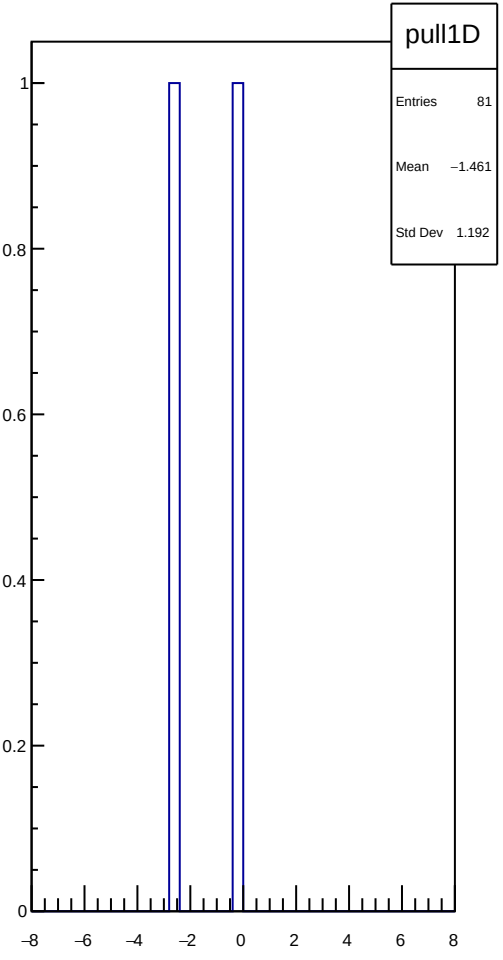

yield_bpm0l09Y_rms vs run
χ² / ndf 1.405e+04 / 80
p0 0.01312 ± 1.039e−05
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01

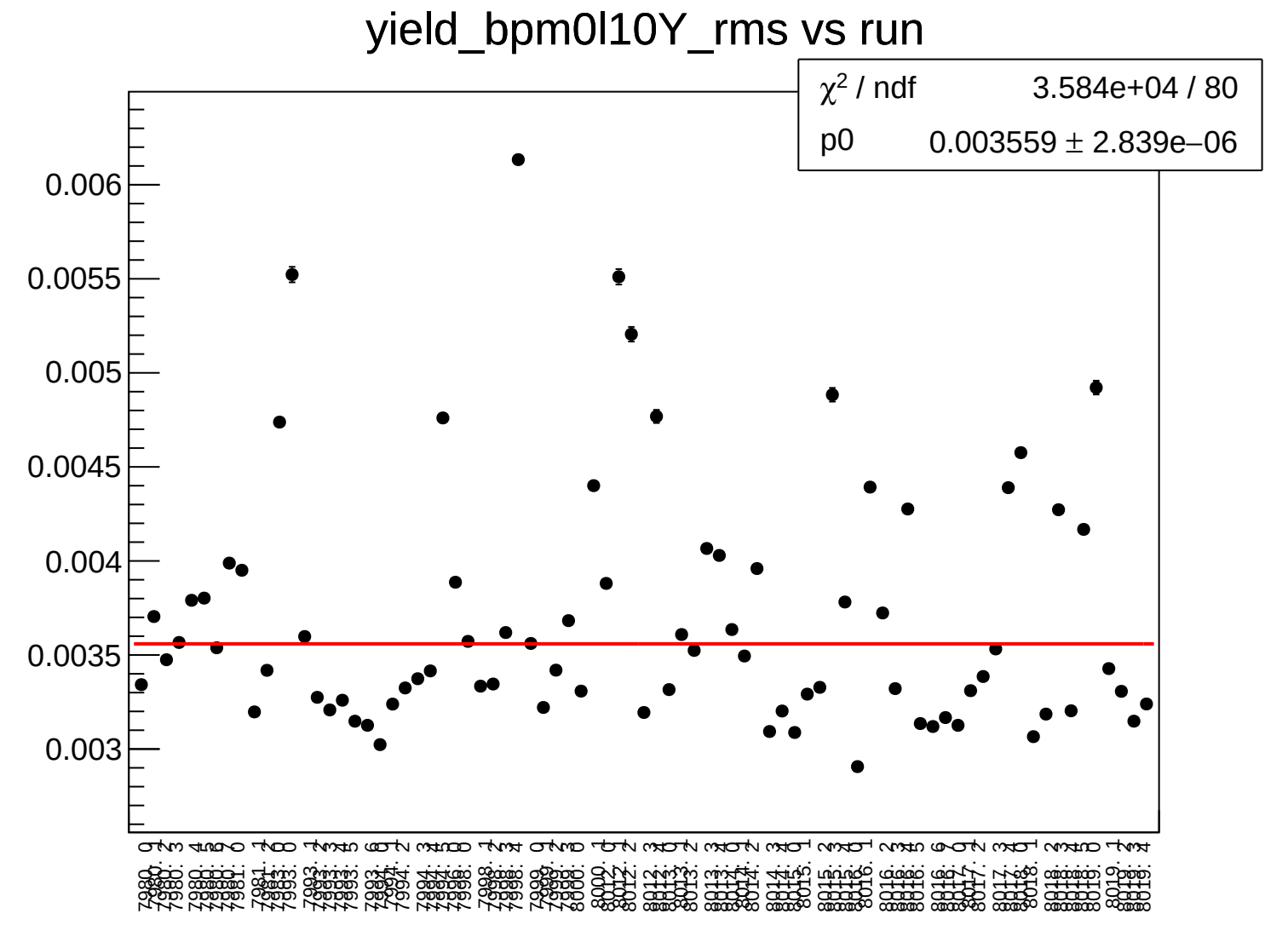

yield_bpm0l10X_mean vs run
χ² / ndf 6.775e+06 / 80
p0 −0.3081 ± 1.568e−05
−0.25
−0.3
−0.35
−0.4
−0.45
−0.5
−0.55
pull
Entries 81
Mean 390.4
Std Dev 355.4
500
0
−500
−1000
−1500

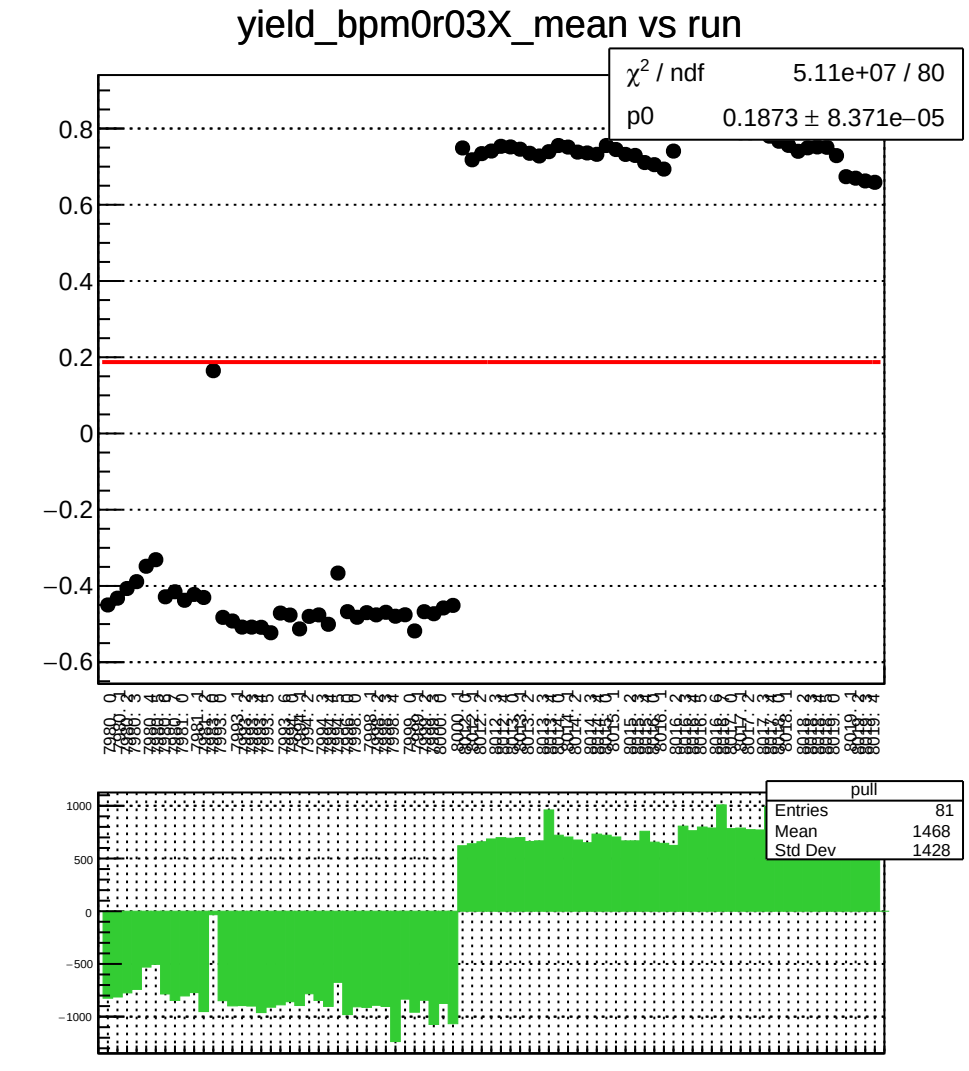

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

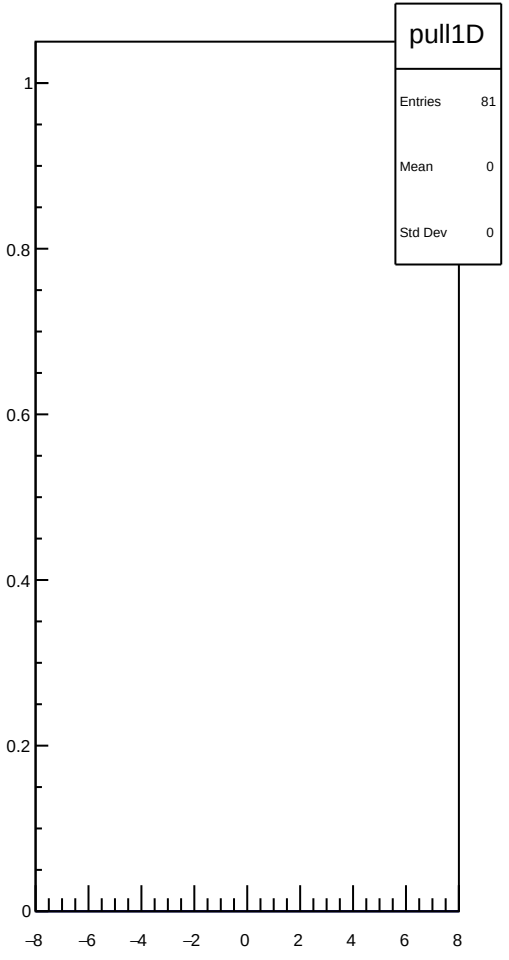

yield_bpm0l10X_rms vs run
χ² / ndf 6.338e+04 / 80
p0 0.01378 ± 1.109e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

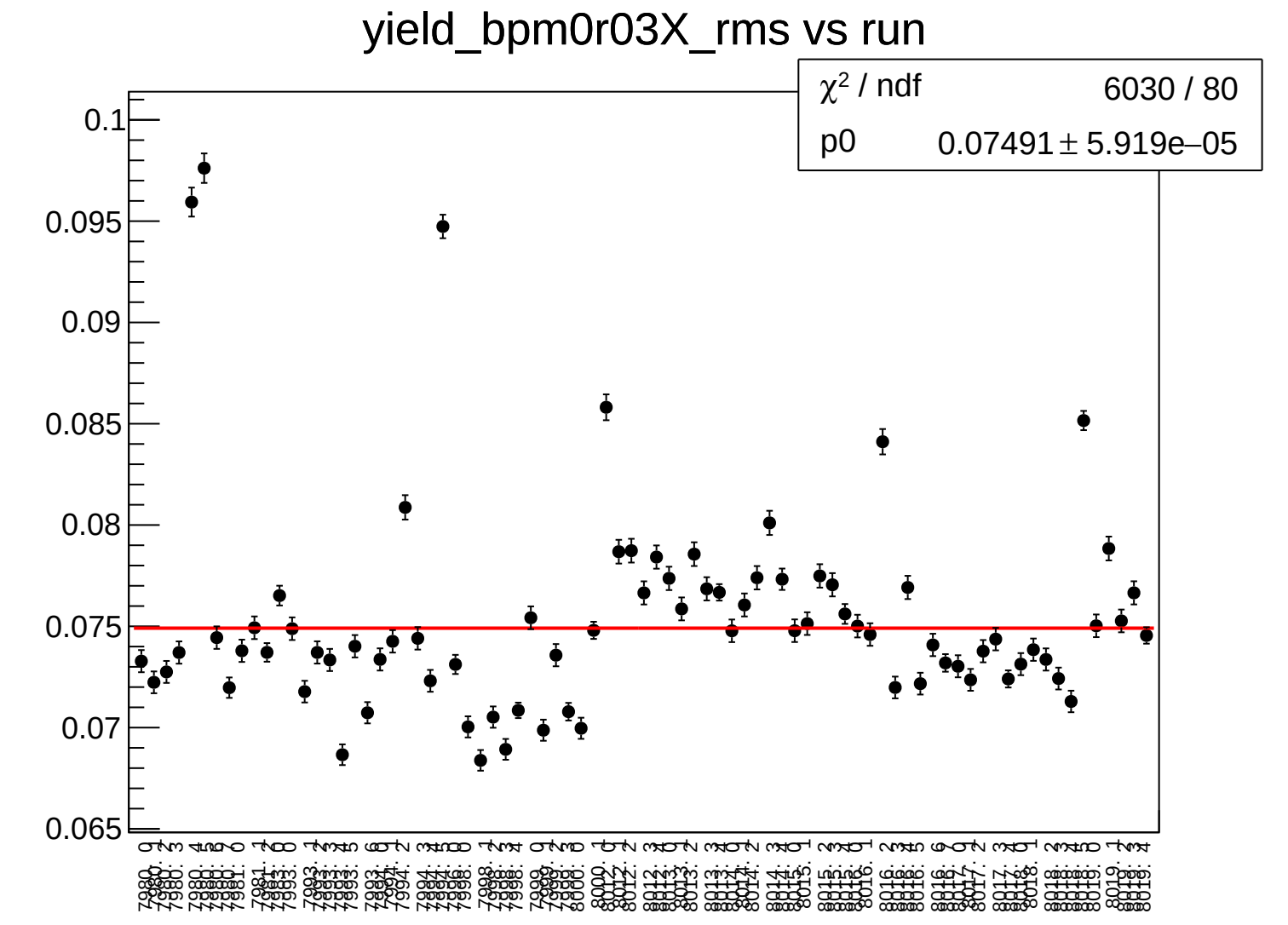

yield_bpm0l10Y_mean vs run
χ² / ndf 2.909e+06 / 80
p0 −0.3154 ± 4.015e−06
−0.3
−0.305
−0.31
−0.315
−0.32
−0.325
−0.33
pull
Entries 81
Mean 5462
Std Dev 5425
400
300
200
100
0
−100
−200
−300

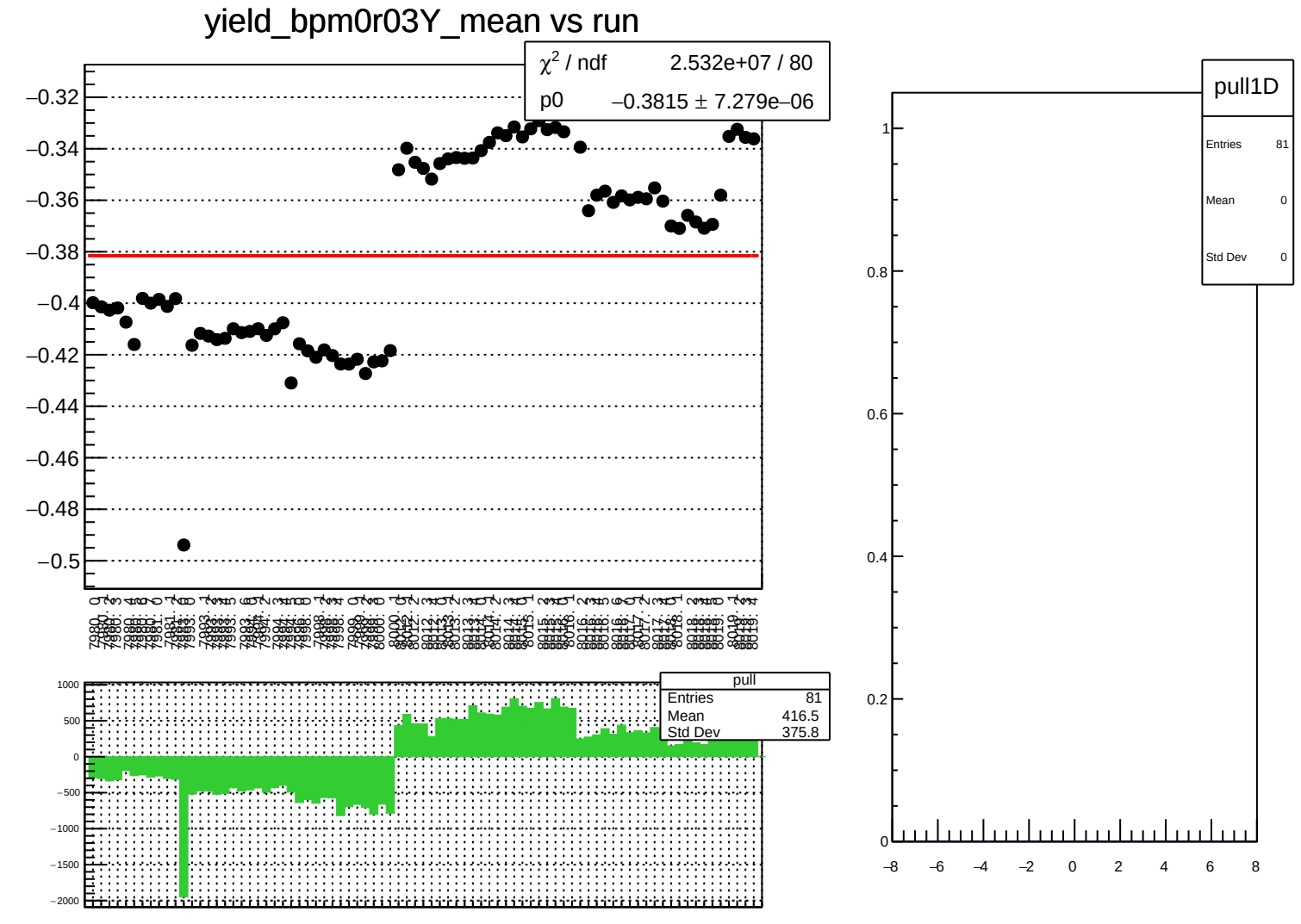

pull1D
Entries 81
Mean −1.461
Std Dev 1.192
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

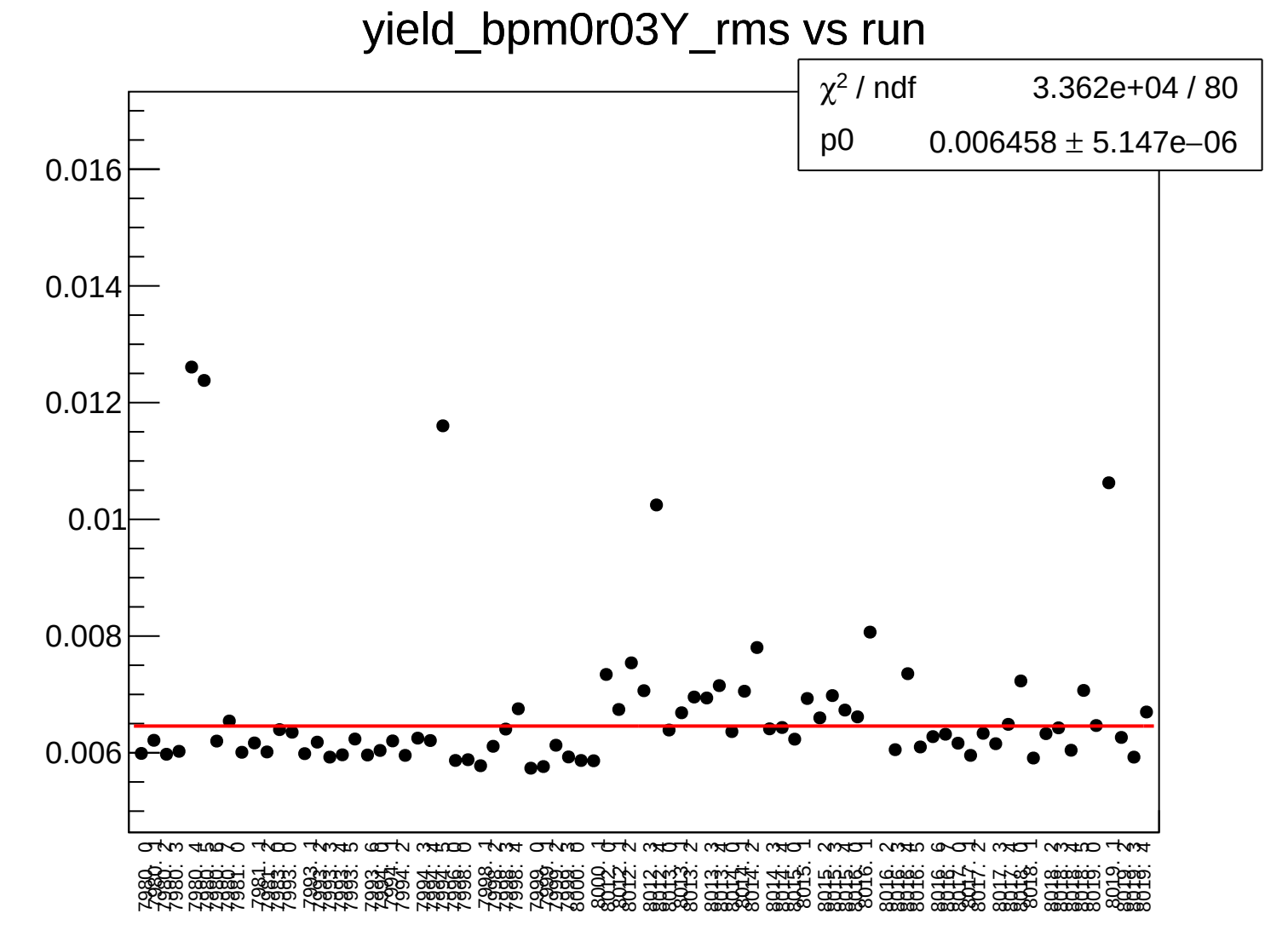

yield_bpm0l10Y_rms vs run
χ² / ndf 3.584e+04 / 80
p0 0.003559 ± 2.839e−06
0.006
0.0055
0.005
0.0045
0.004
0.0035
0.003

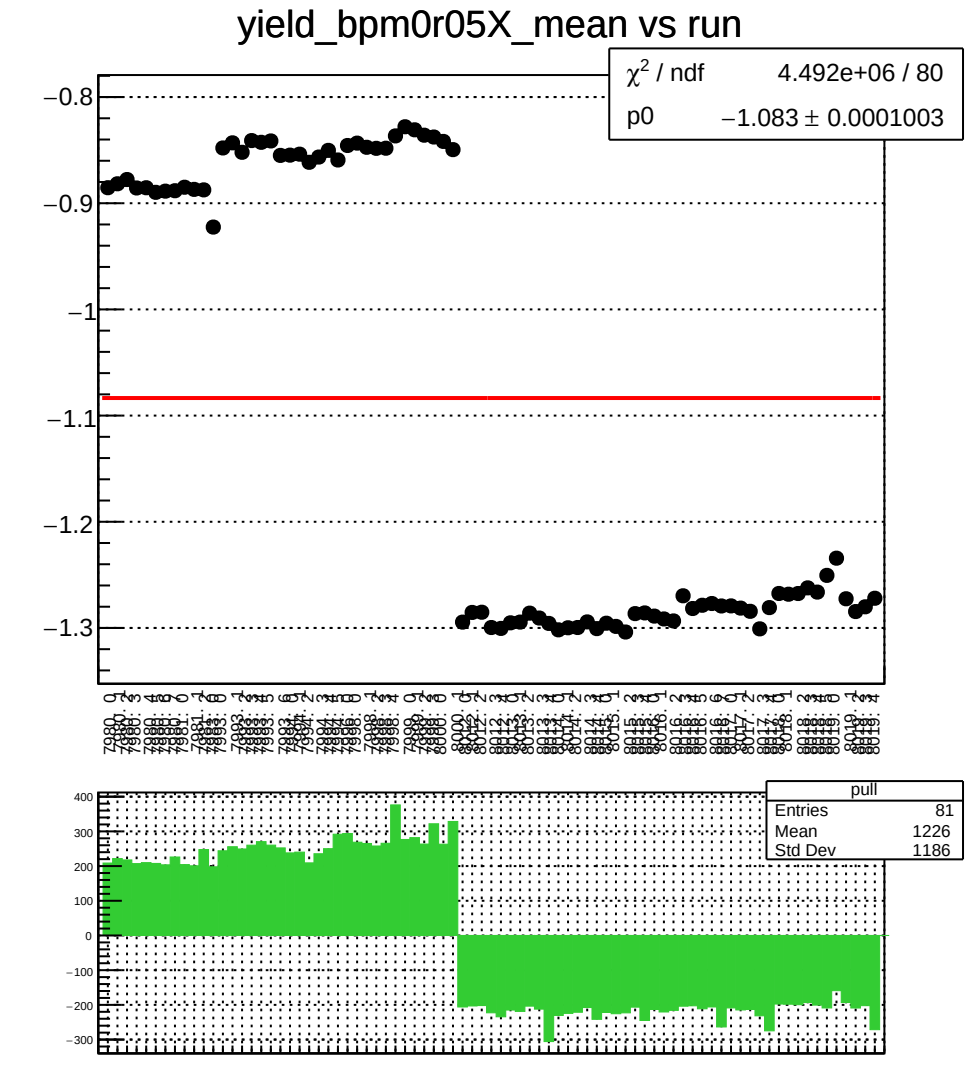

yield_bpm0r03X_mean vs run
χ² / ndf 5.11e+07 / 80
p0 0.1873 ± 8.371e−05
pull
Entries 81
Mean 1468
Std Dev 1428

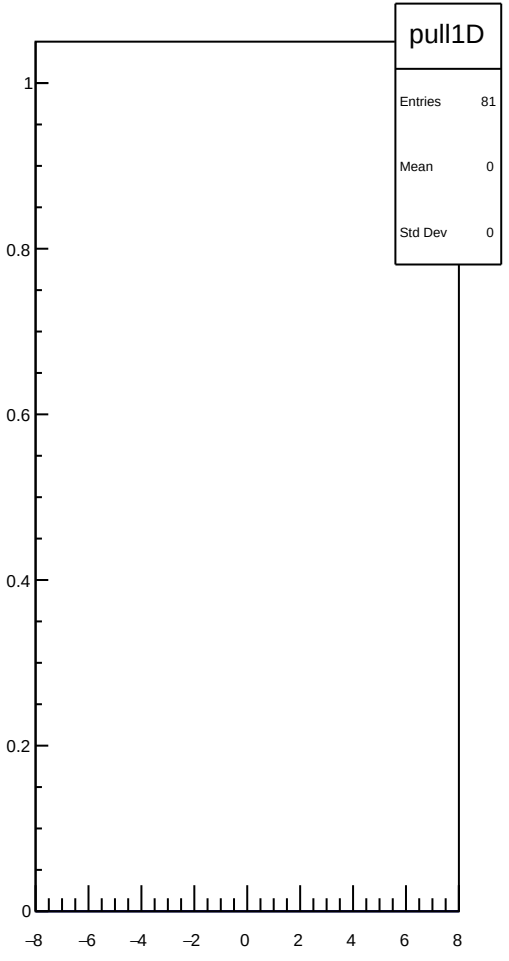

pull1D
Entries 81
Mean 0
Std Dev 0

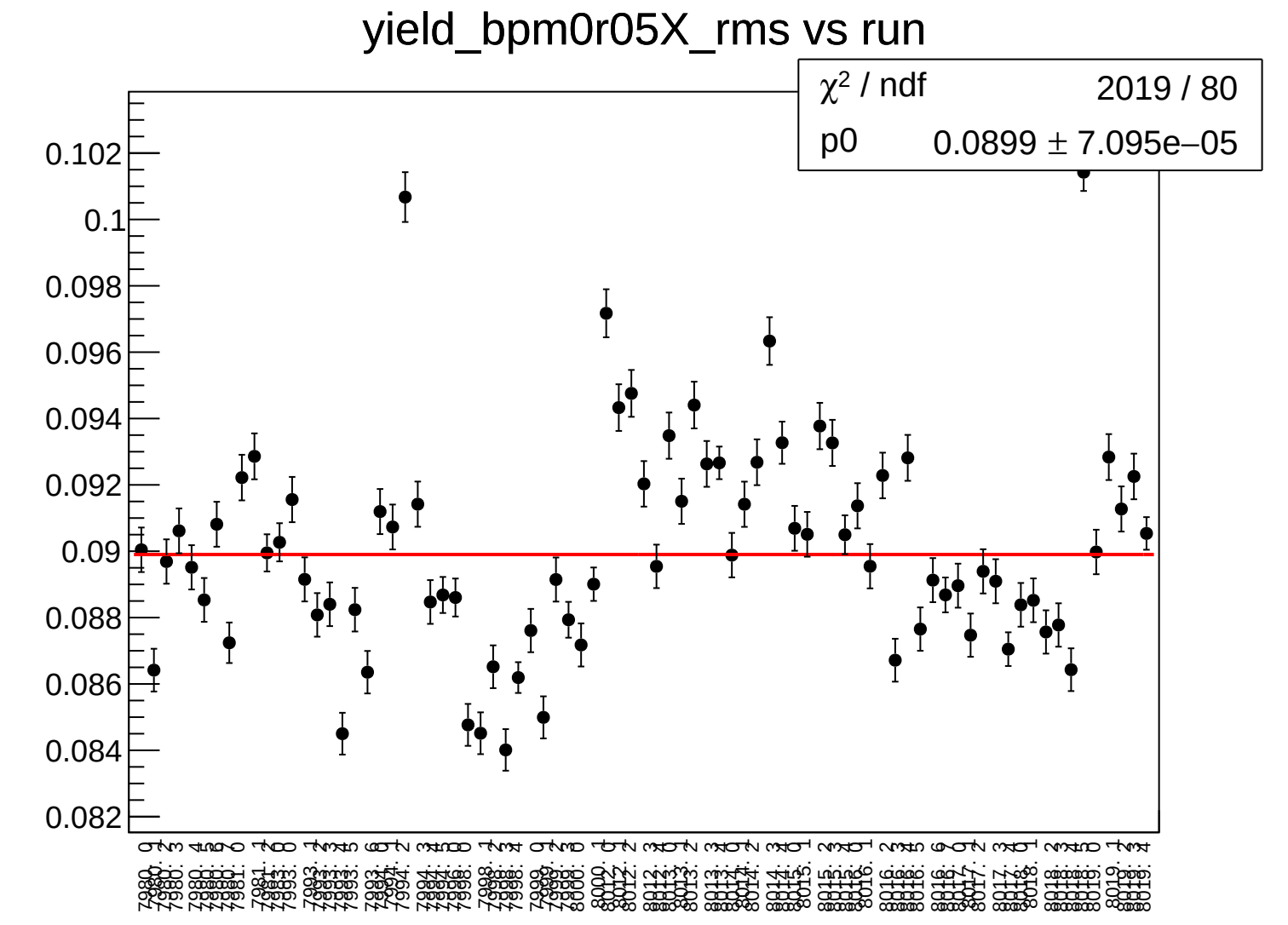

yield_bpm0r03X_rms vs run
χ² / ndf 6030 / 80
p0 0.07491 ± 5.919e–05
0.1
0.095
0.09
0.085
0.08
0.075
0.07
0.065

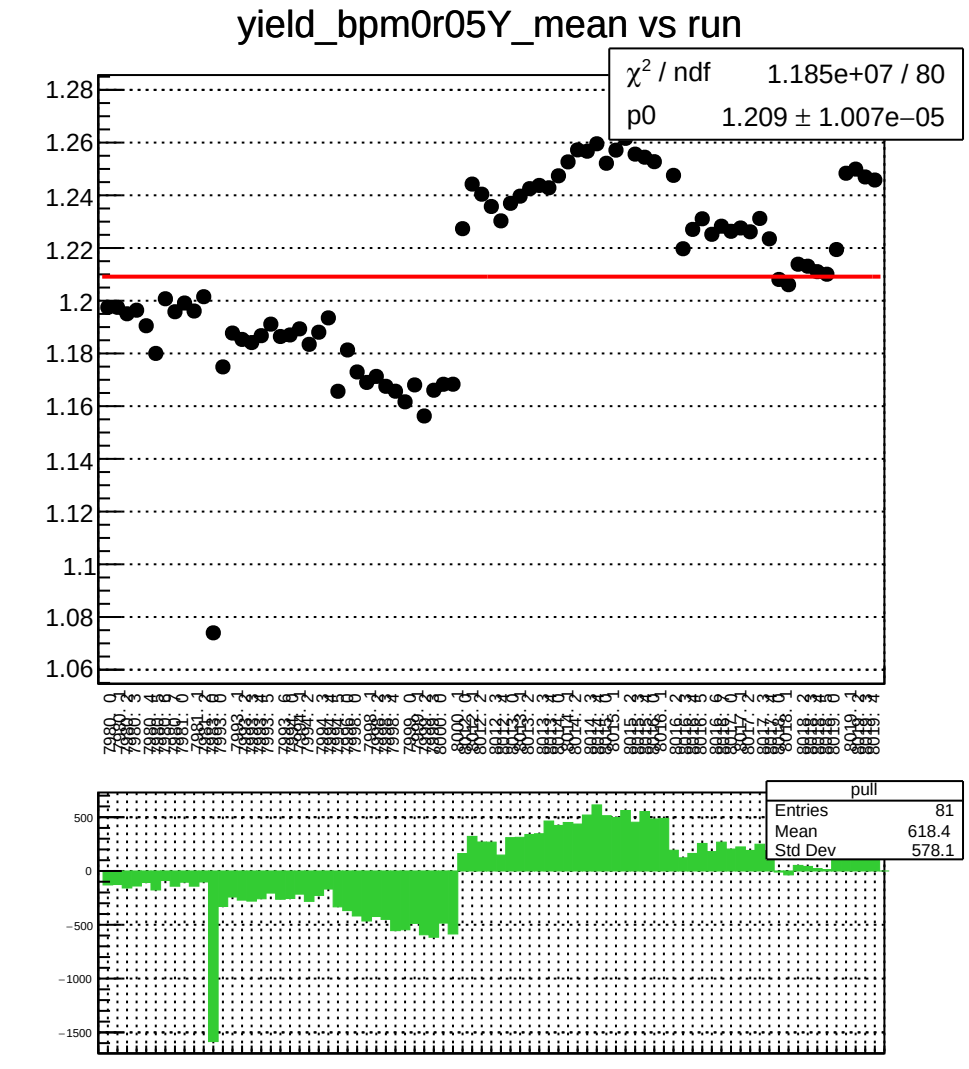

yield_bpm0r03Y_mean vs run
χ² / ndf 2.532e+07 / 80
p0 −0.3815 ± 7.279e−06
−0.32
−0.34
−0.36
−0.38
−0.4
−0.42
−0.44
−0.46
−0.48
−0.5
pull
Entries 81
Mean 416.5
Std Dev 375.8
1000
500
0
−500
−1000
−1500
−2000
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

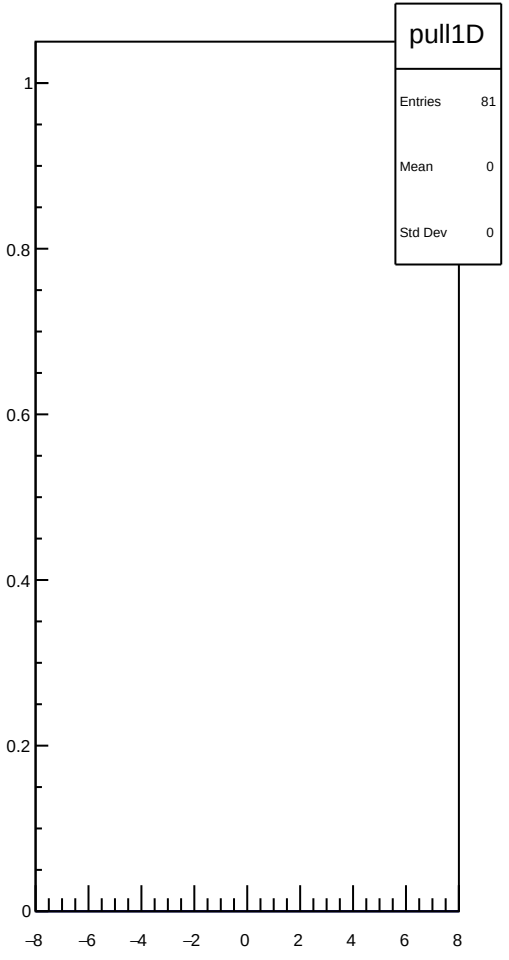

yield_bpm0r03Y_rms vs run
χ^2 / ndf 3.362e+04 / 80
p0 0.006458 ± 5.147e−06
0.016
0.014
0.012
0.01
0.008
0.006

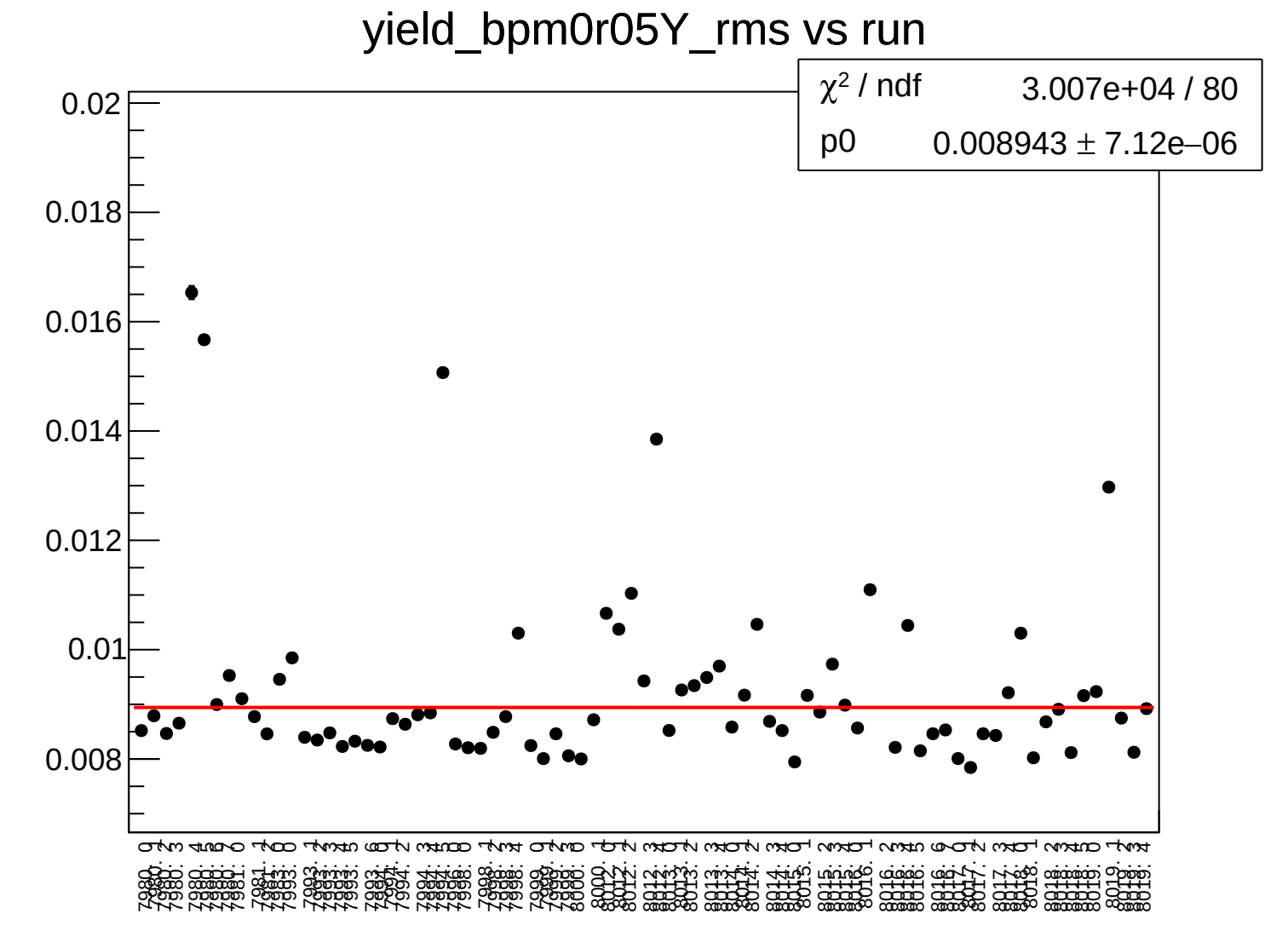

yield_bpm0r05X_mean vs run
χ² / ndf 4.492e+06 / 80
p0 −1.083 ± 0.0001003
−0.8
−0.9
−1
−1.1
−1.2
−1.3
pull
Entries 81
Mean 1226
Std Dev 1186
400
300
200
100
0
−100
−200
−300

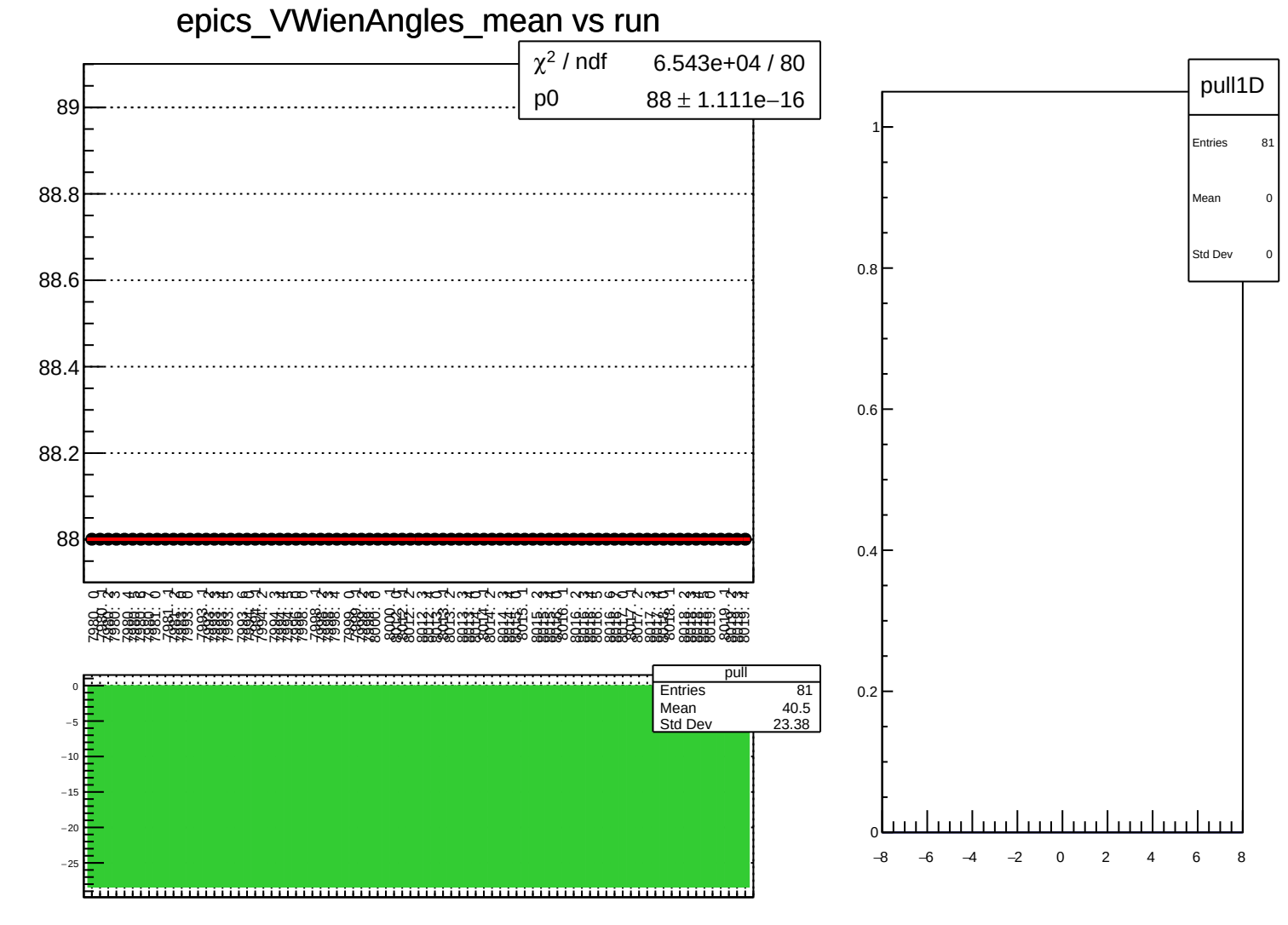

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

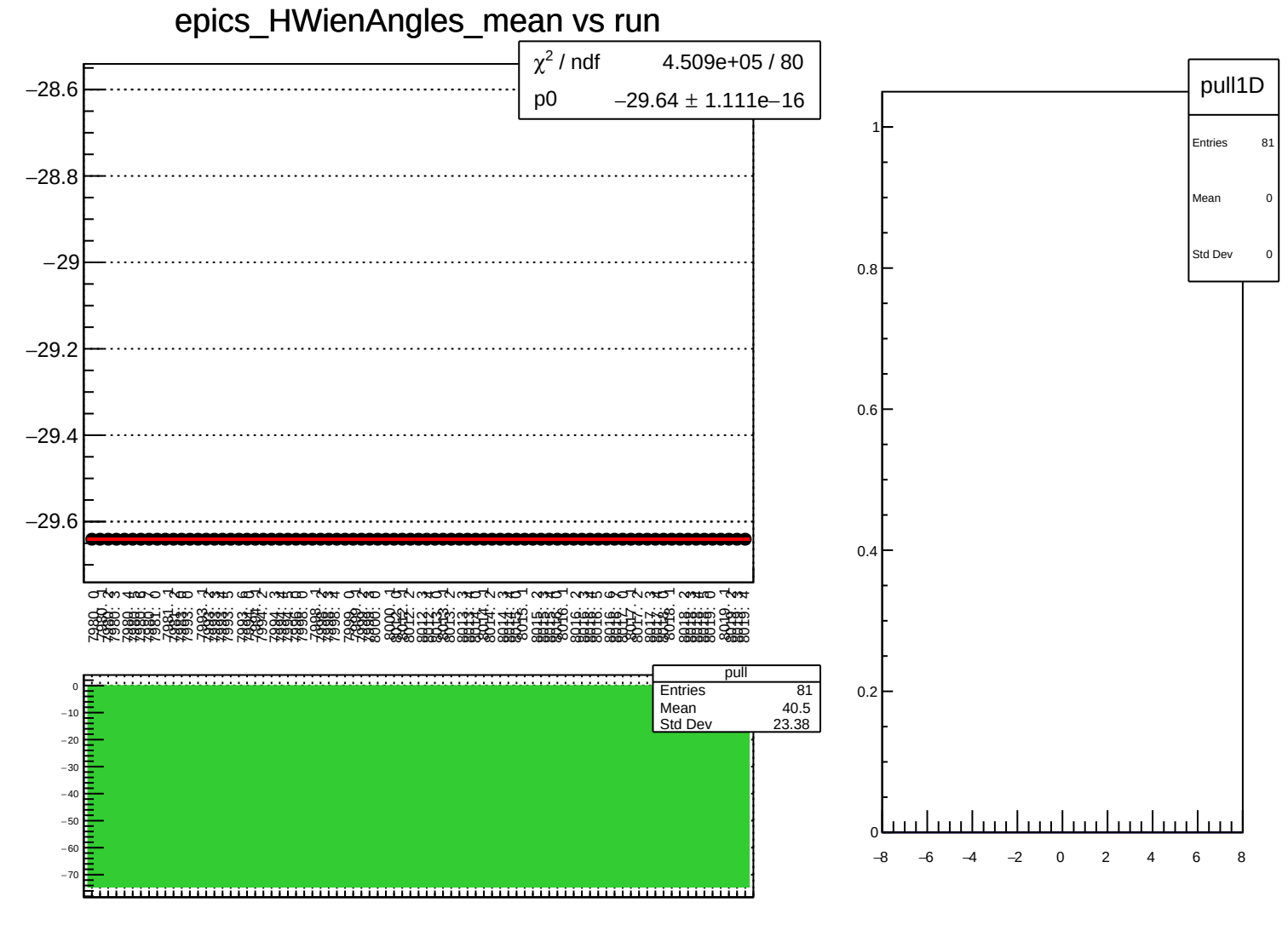

yield_bpm0r05X_rms vs run
χ² / ndf 2019 / 80
p0 0.0899 ± 7.095e−05
0.102
0.1
0.098
0.096
0.094
0.092
0.09
0.088
0.086
0.084
0.082

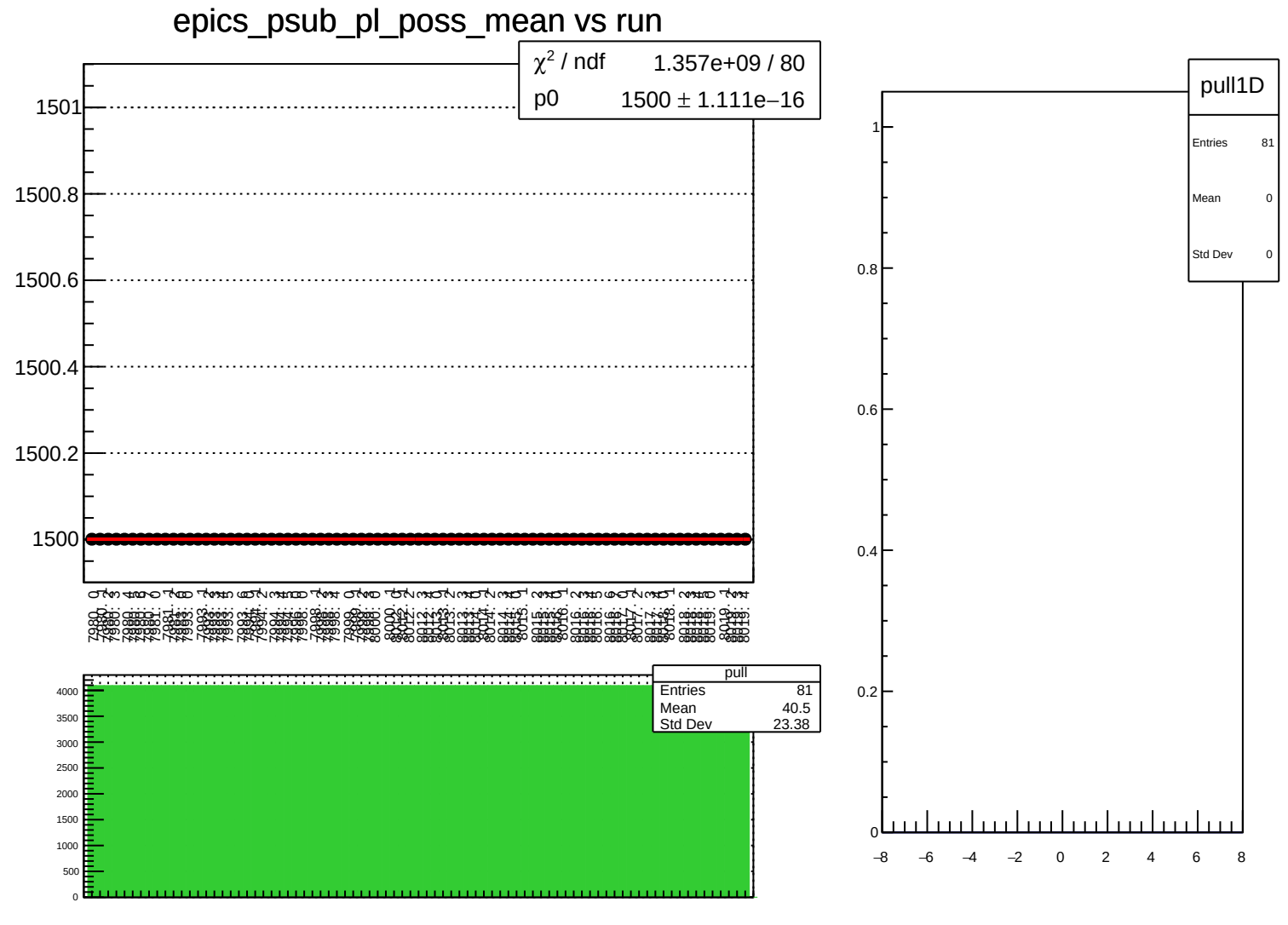

yield_bpm0r05Y_mean vs run
χ² / ndf 1.185e+07 / 80
p0 1.209 ± 1.007e−05
1.28
1.26
1.24
1.22
1.2
1.18
1.16
1.14
1.12
1.1
1.08
1.06
pull
Entries 81
Mean 618.4
Std Dev 578.1
500
0
−500
−1000
−1500

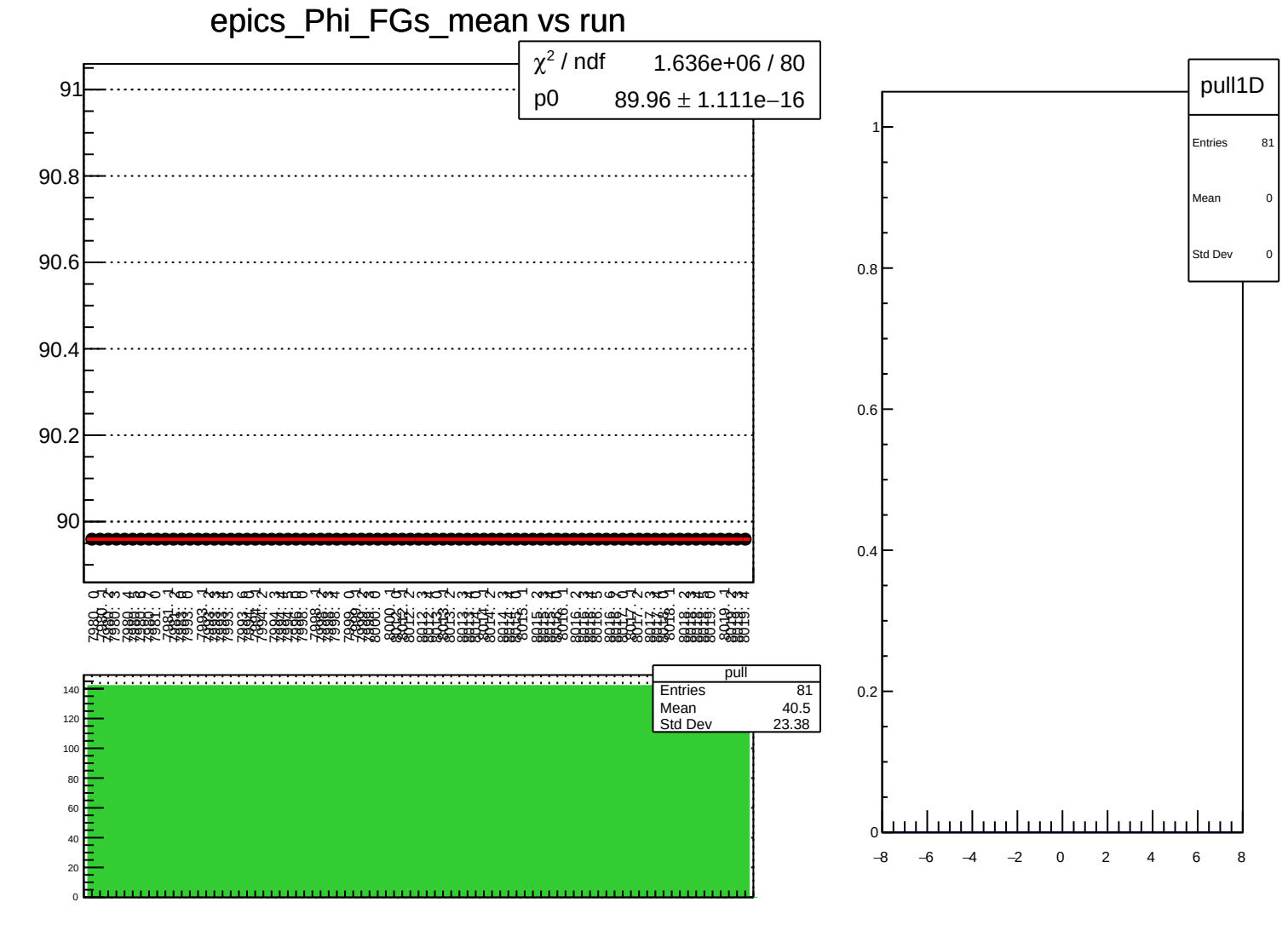

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

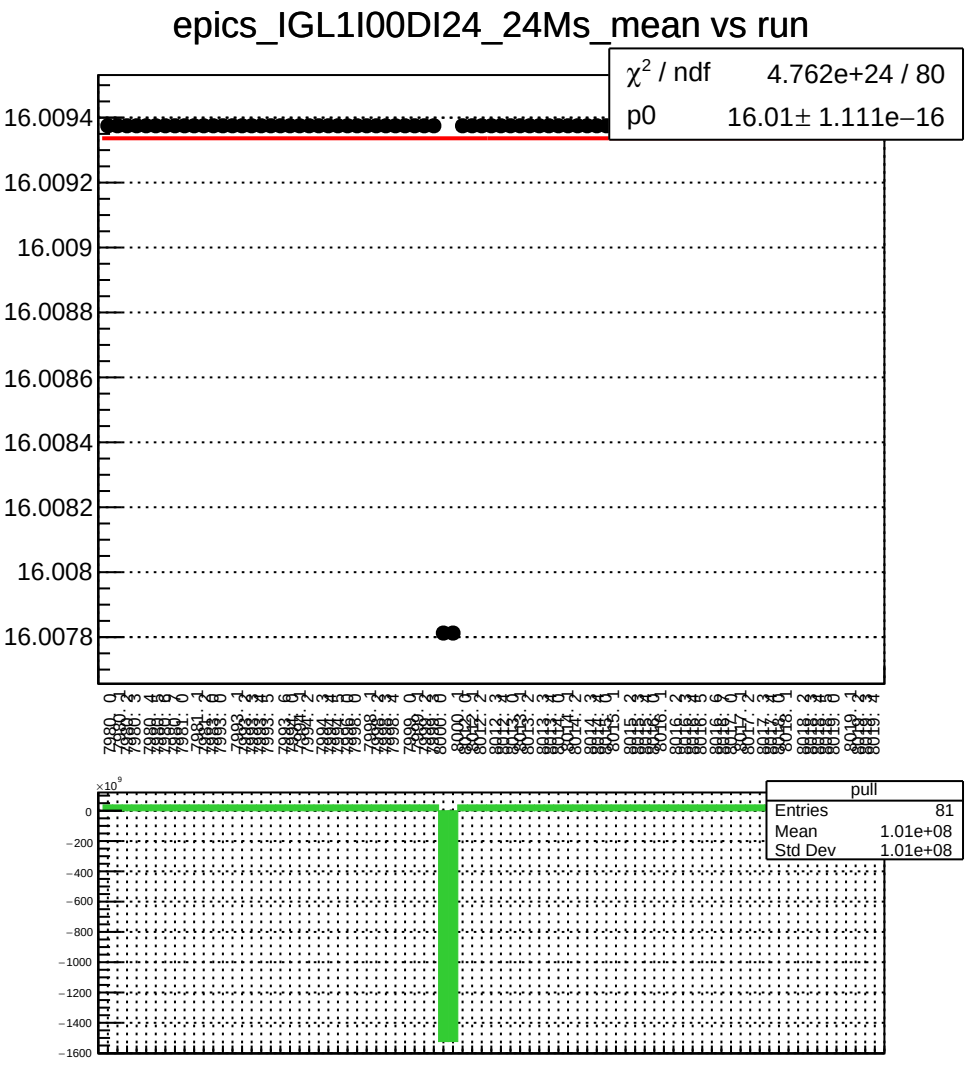

yield_bpm0r05Y_rms vs run
χ² / ndf 3.007e+04 / 80
p0 0.008943 ± 7.12e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008

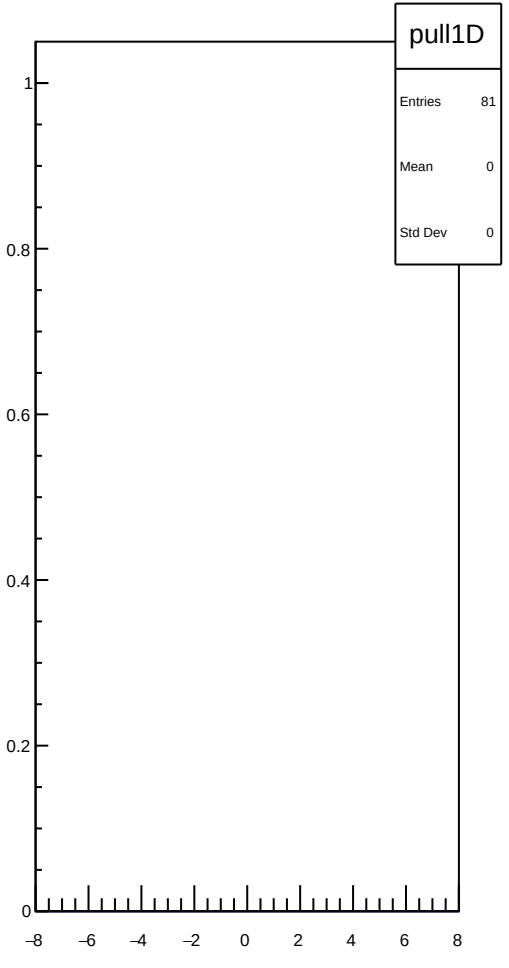

epics_VWienAngles_mean vs run
χ² / ndf 6.543e+04 / 80
p0 88 ± 1.111e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 81
Mean 40.5
Std Dev 23.38
0
−5
−10
−15
−20
−25
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

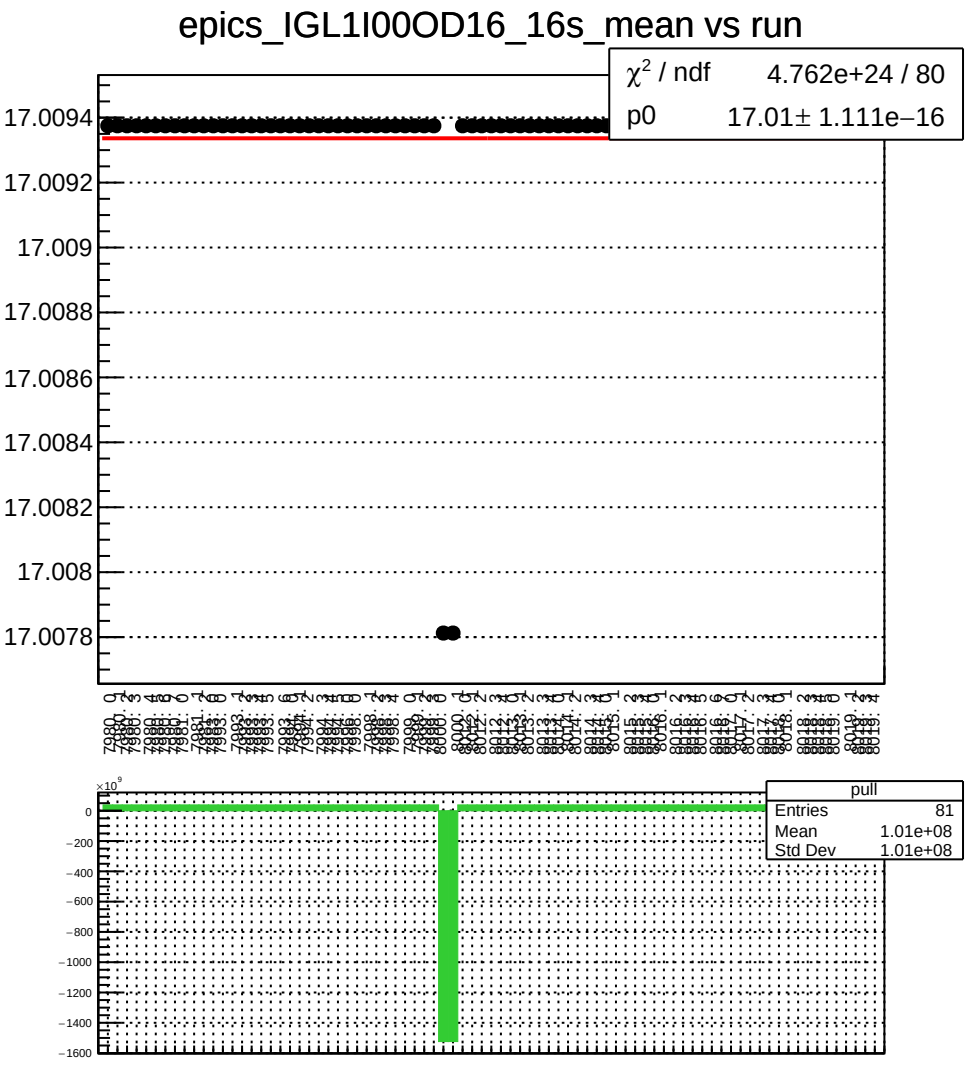

epics_HWienAngles_mean vs run
χ² / ndf 4.509e+05 / 80
p0 −29.64 ± 1.111e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 81
Mean 40.5
Std Dev 23.38
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

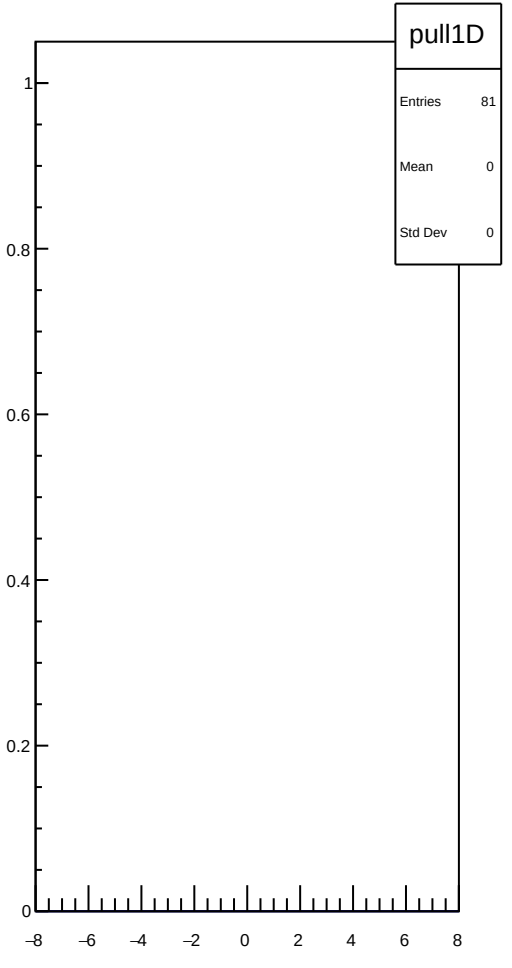

epics_psub_pl_poss_mean vs run
χ² / ndf 1.357e+09 / 80
p0 1500 ± 1.111e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 81
Mean 40.5
Std Dev 23.38
4000
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

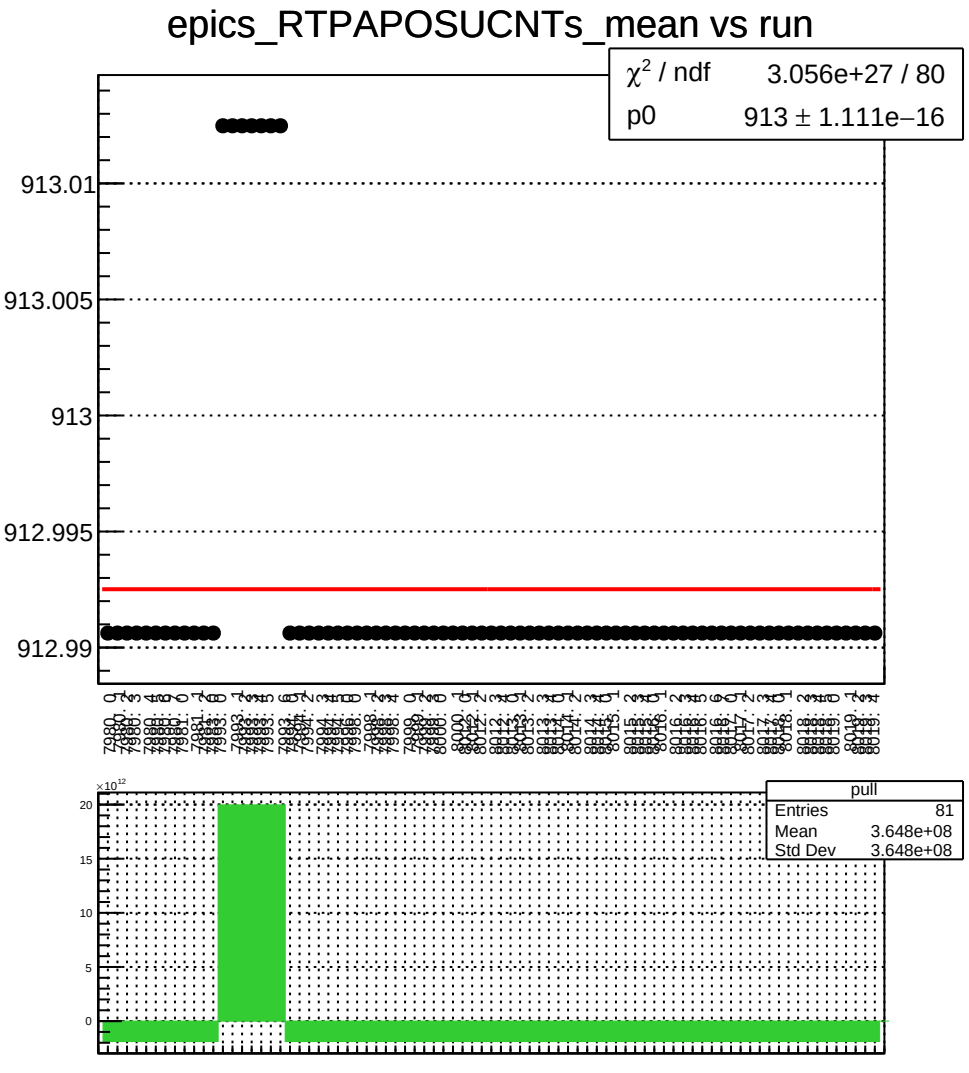

epics_Phi_FGs_mean vs run
χ² / ndf 1.636e+06 / 80
p0 89.96 ± 1.111e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 81
Mean 40.5
Std Dev 23.38
140
120
100
80
60
40
20
0
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

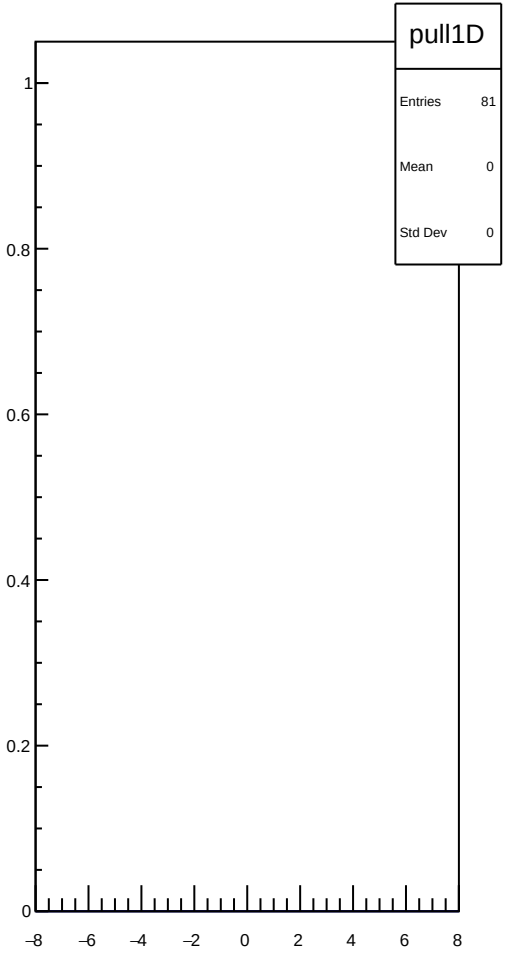

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 4.762e+24 / 80
p0 16.01± 1.111e−16
16.0094
16.0092
16.009
16.0088
16.0086
16.0084
16.0082
16.008
16.0078
pull
Entries 81
Mean 1.01e+08
Std Dev 1.01e+08
×10⁹
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600

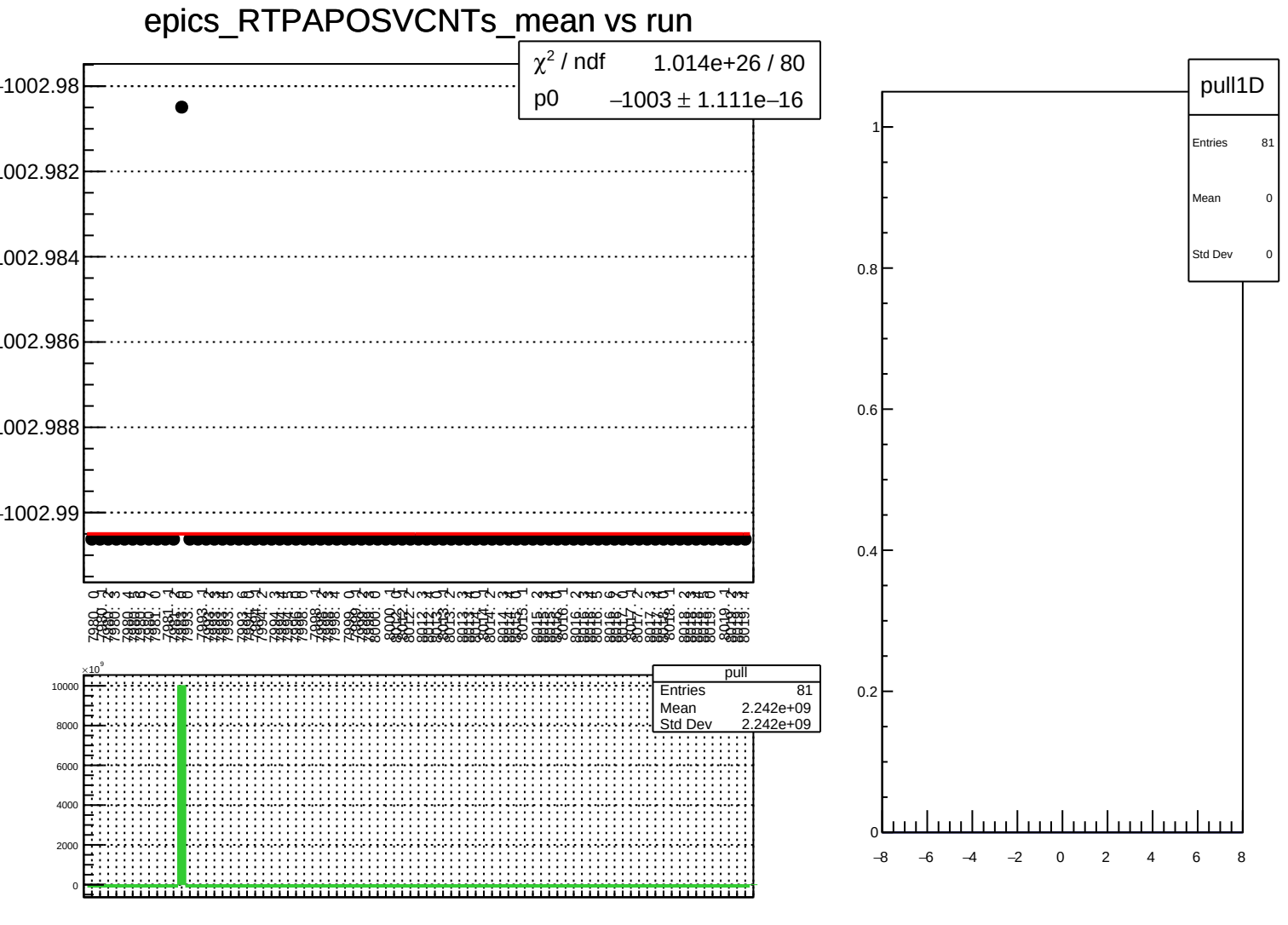

pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 4.762e+24 / 80
p0 17.01± 1.111e−16
17.0094
17.0092
17.009
17.0088
17.0086
17.0084
17.0082
17.008
17.0078
pull
Entries 81
Mean 1.01e+08
Std Dev 1.01e+08
×10⁹
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600


pull1D
Entries 81
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 3.056e+27 / 80
p0 913 ± 1.111e−16
913.01
913.005
913
912.995
912.99
×10¹²
20
15
10
5
0
pull
Entries 81
Mean 3.648e+08
Std Dev 3.648e+08


pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 1.014e+26 / 80
p0 −1003 ± 1.111e−16
−1002.98
−1002.982
−1002.984
−1002.986
−1002.988
−1002.99
pull
Entries 81
Mean 2.242e+09
Std Dev 2.242e+09
×10⁹
10000
8000
6000
4000
2000
0
pull1D
Entries 81
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8