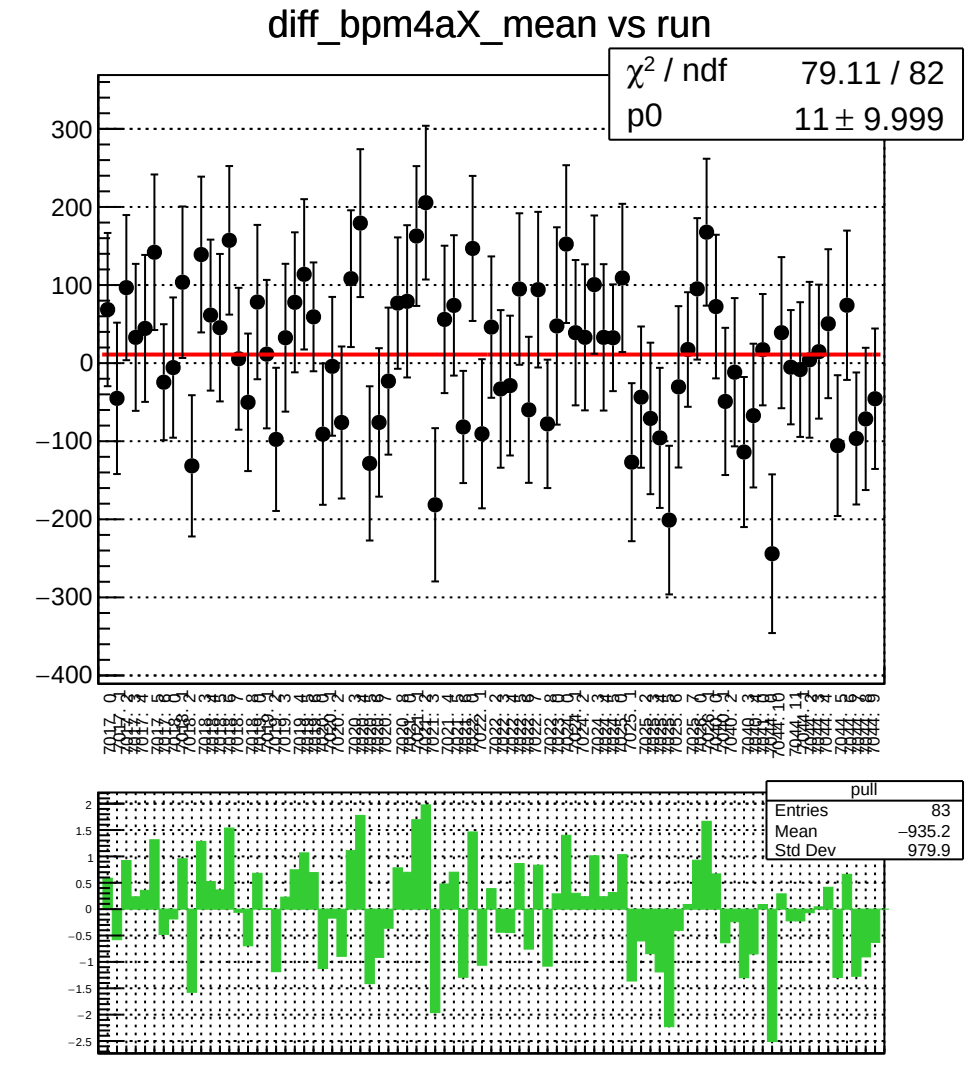
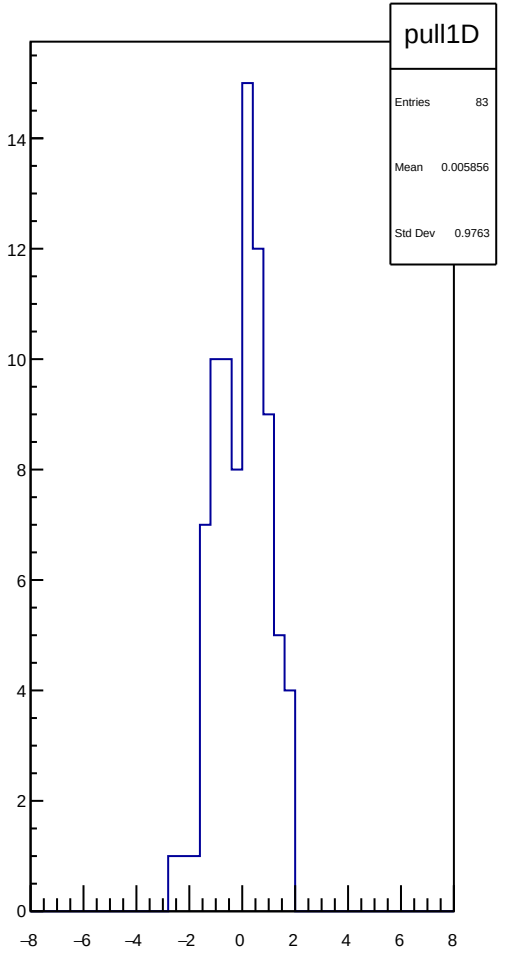
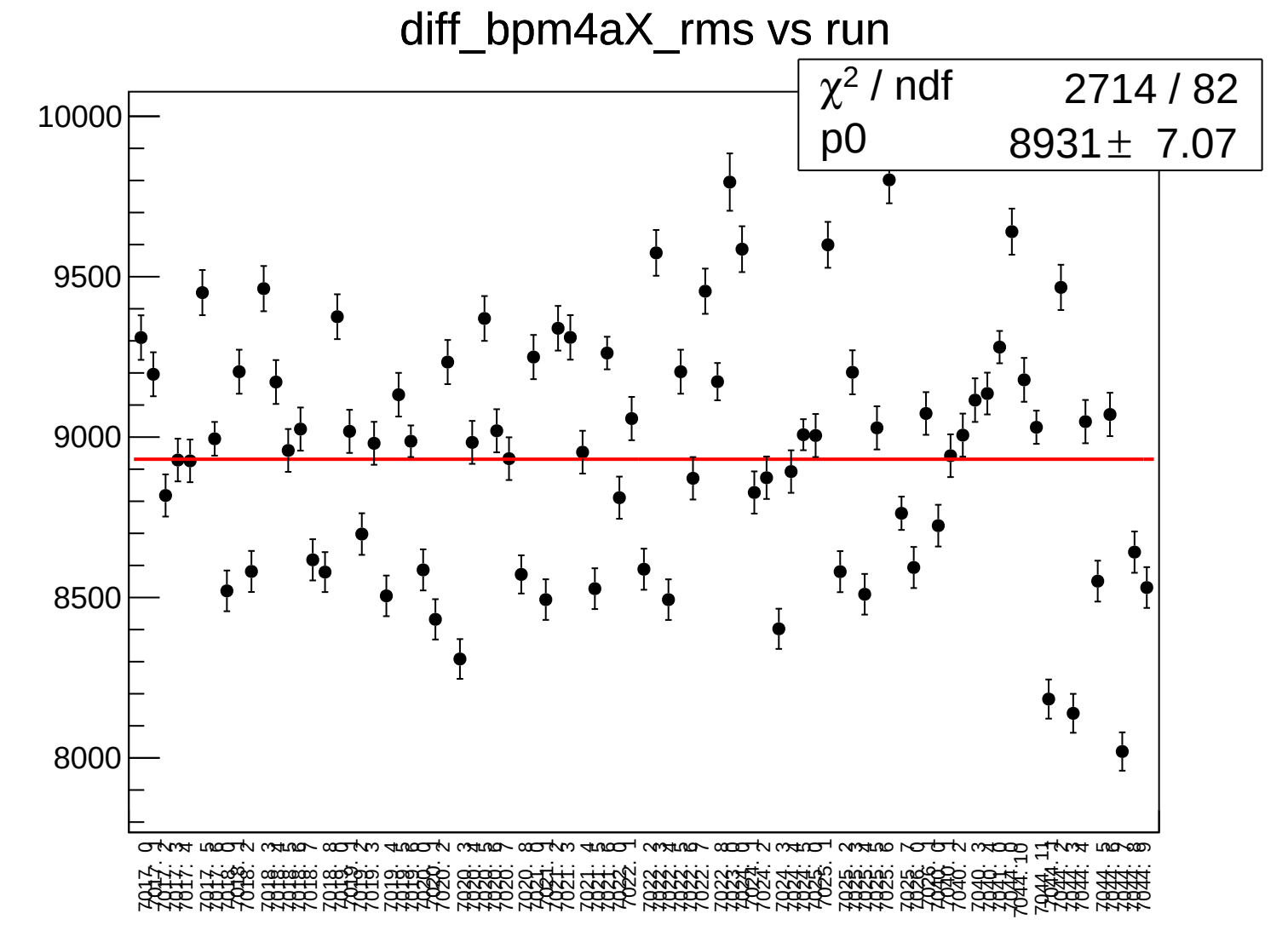
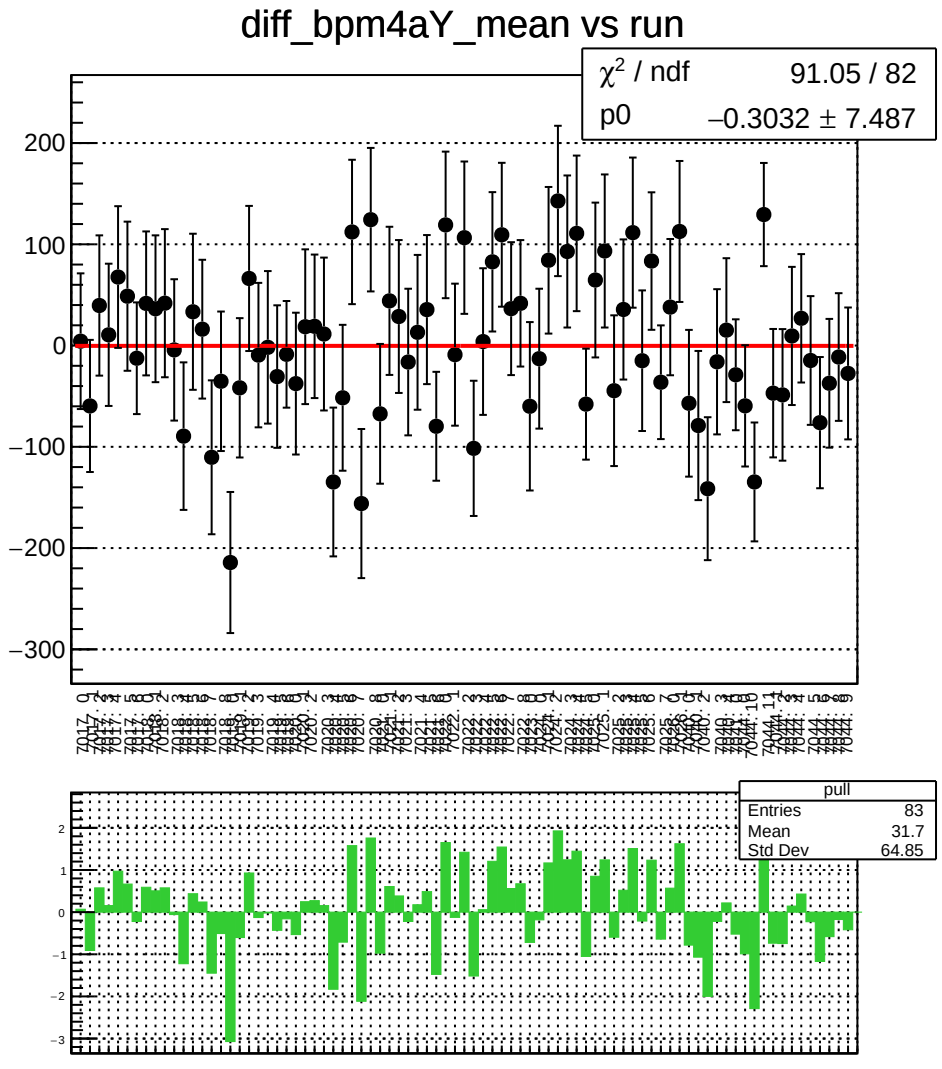
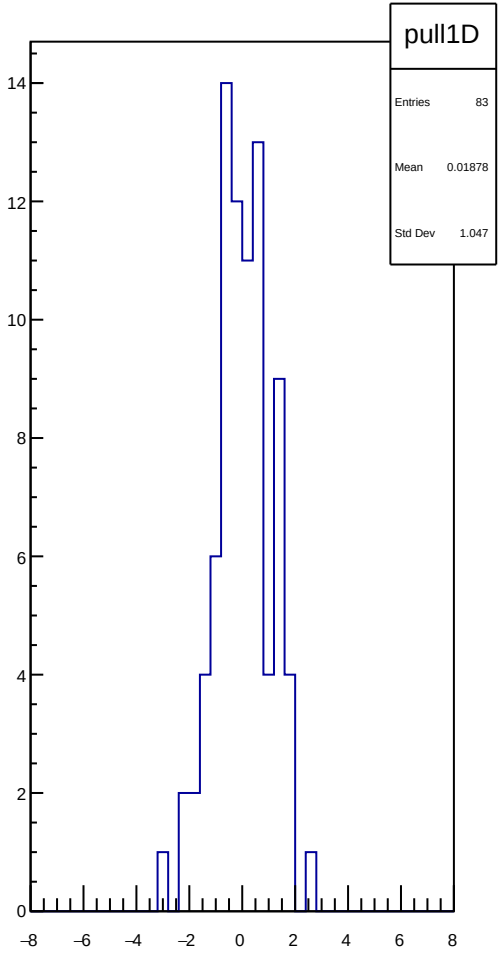
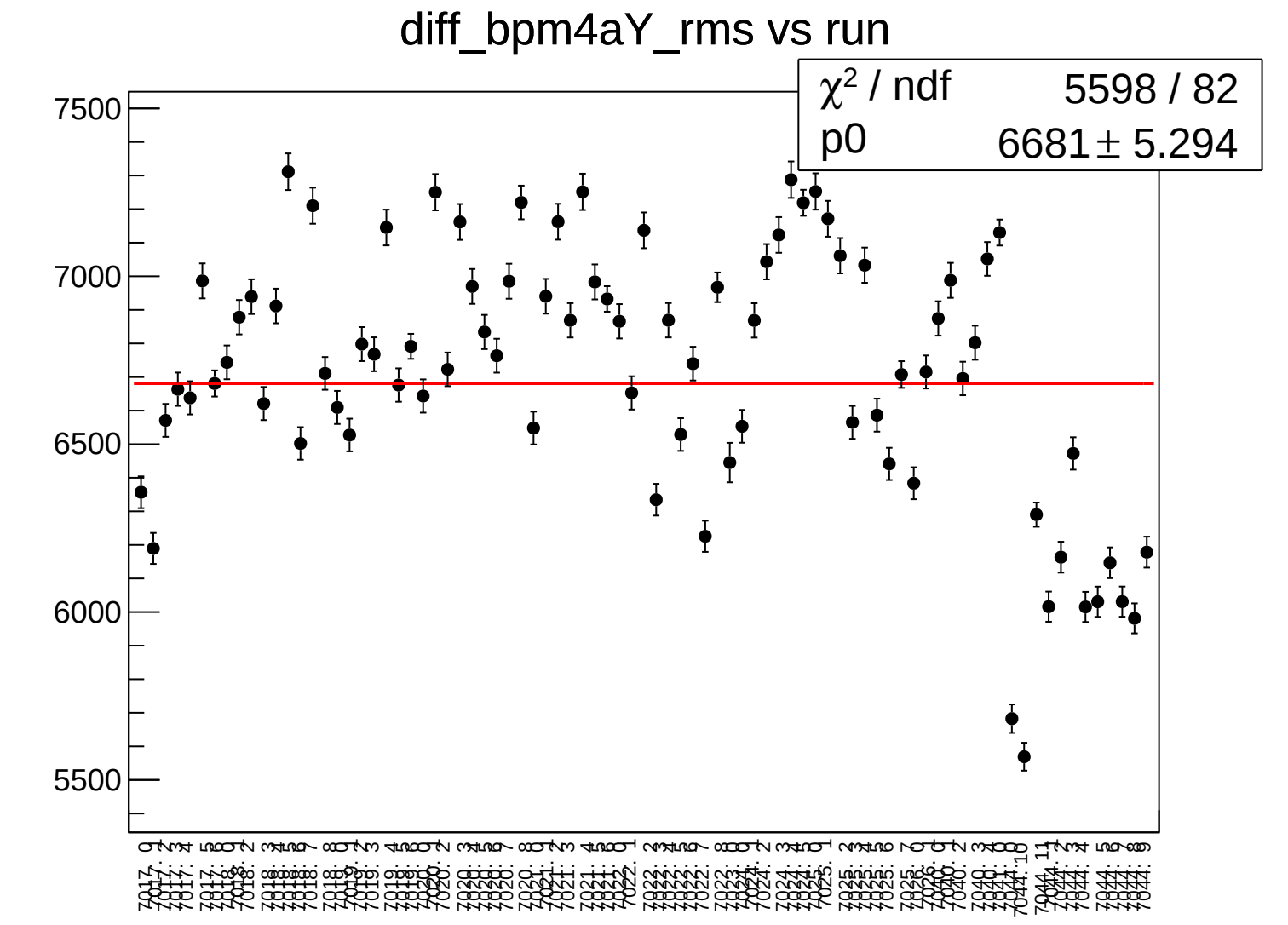

diff_bpm4aX_mean vs run
χ² / ndf 79.11 / 82
p0 11 ± 9.999
pull
Entries 83
Mean −935.2
Std Dev 979.9

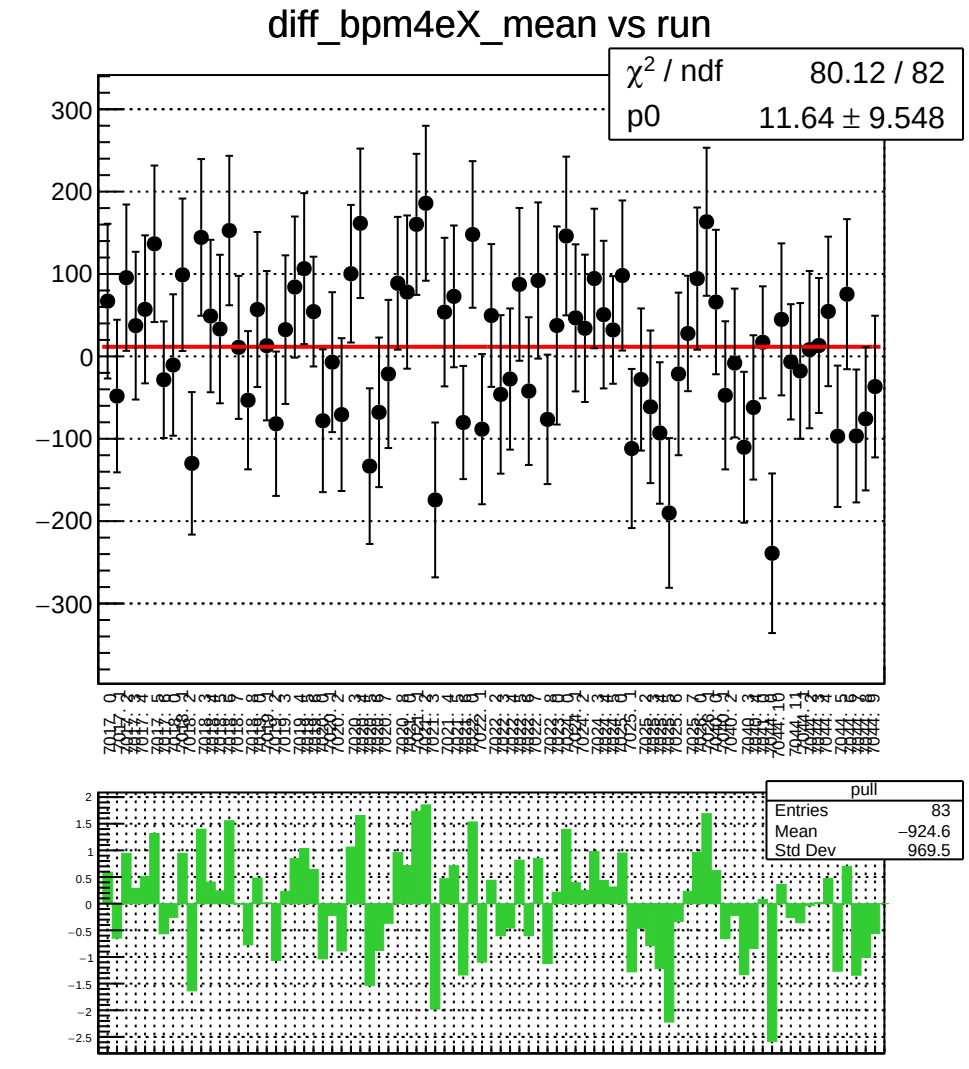

pull1D
Entries 83
Mean 0.005856
Std Dev 0.9763

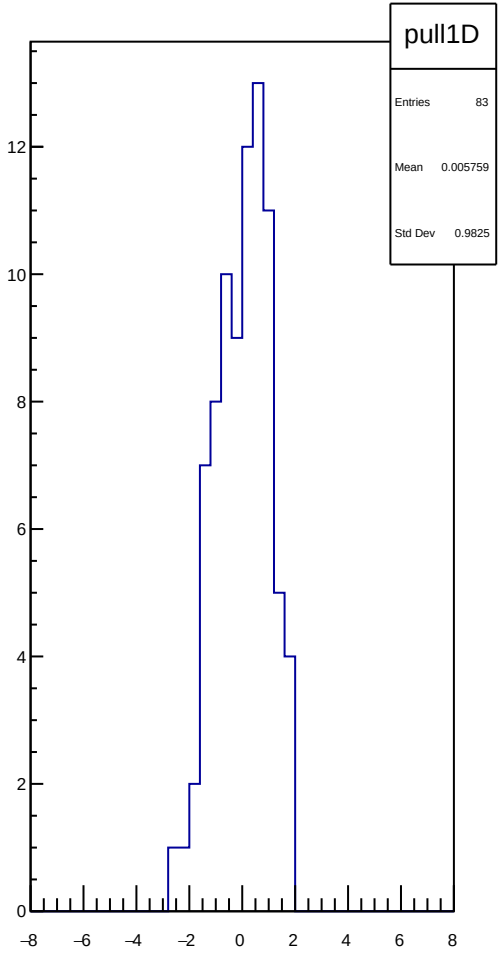

diff_bpm4aX_rms vs run
χ² / ndf 2714 / 82
p0 8931 ± 7.07
10000
9500
9000
8500
8000

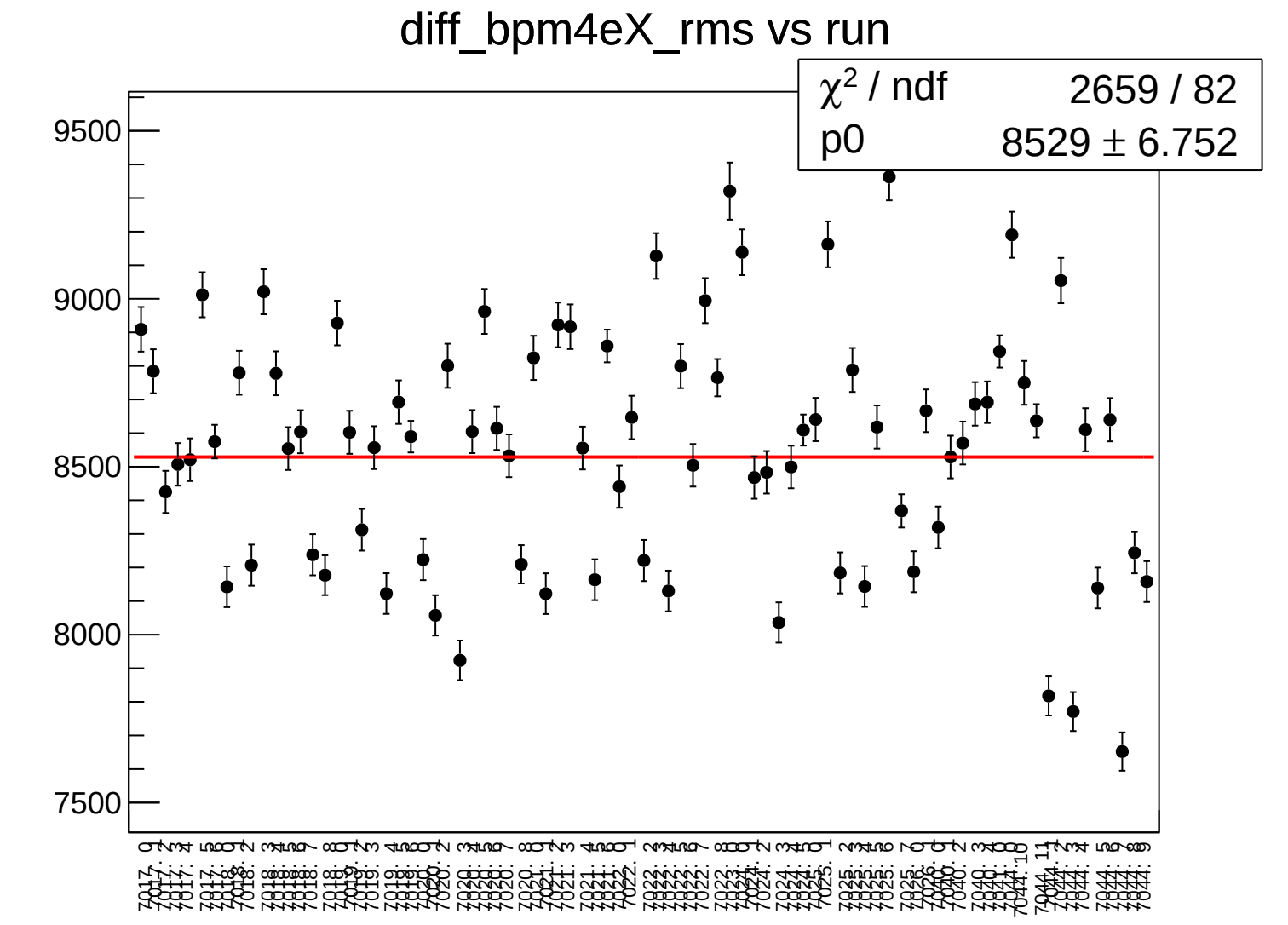

diff_bpm4aY_mean vs run
χ² / ndf 91.05 / 82
p0 −0.3032 ± 7.487
pull
Entries 83
Mean 31.7
Std Dev 64.85

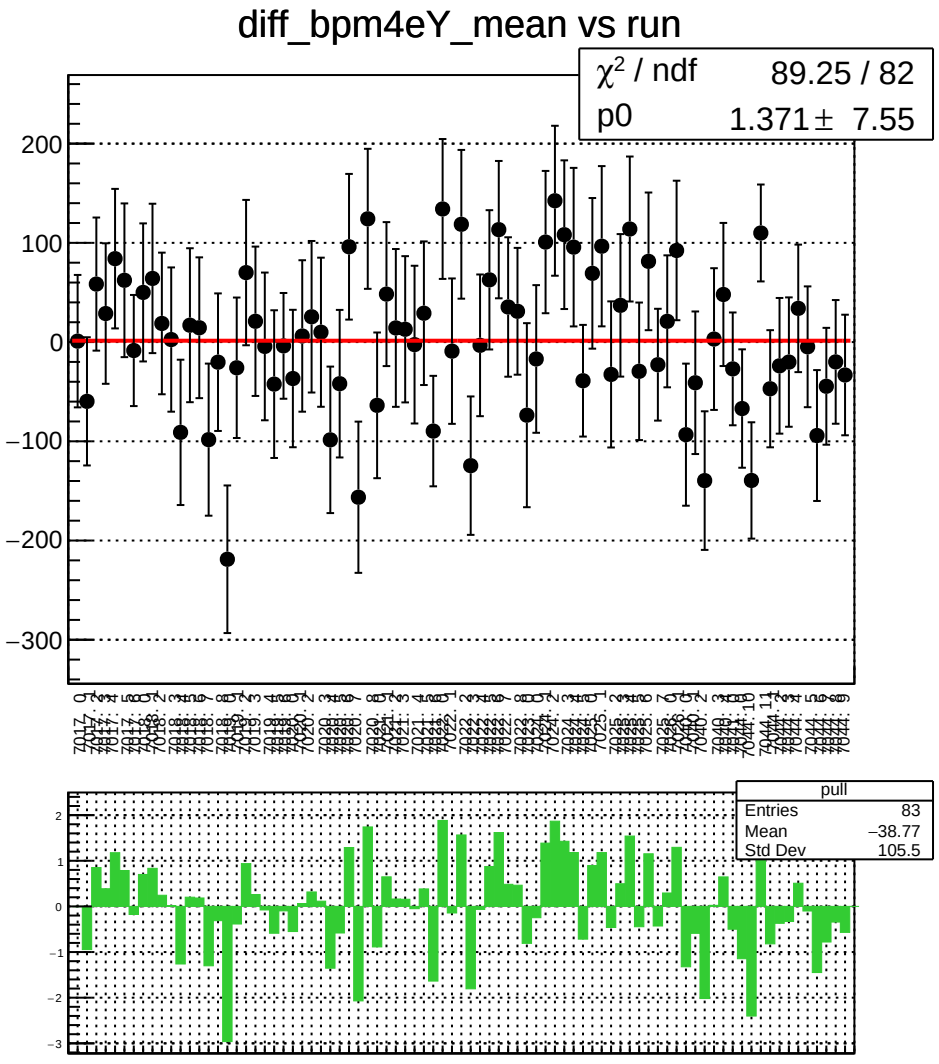

pull1D
Entries 83
Mean 0.01878
Std Dev 1.047

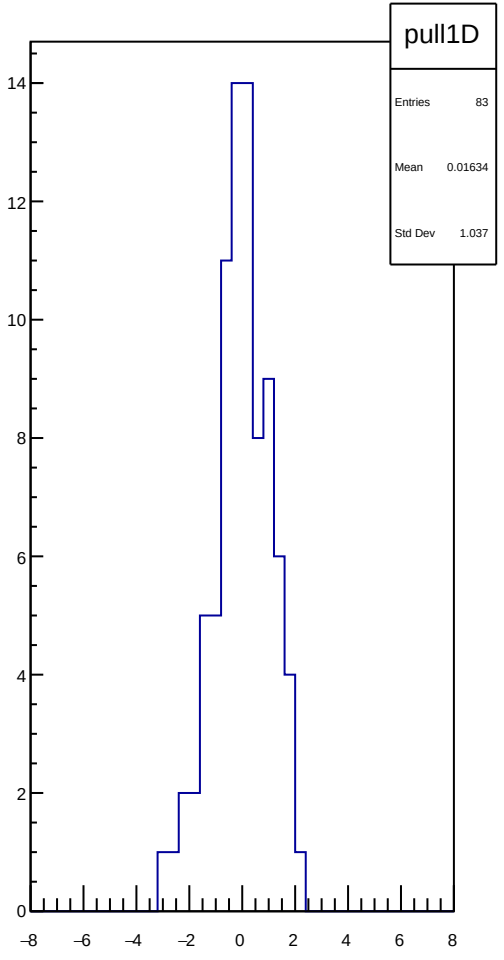

diff_bpm4aY_rms vs run
χ² / ndf 5598 / 82
p0 6681 ± 5.294
7500
7000
6500
6000
5500

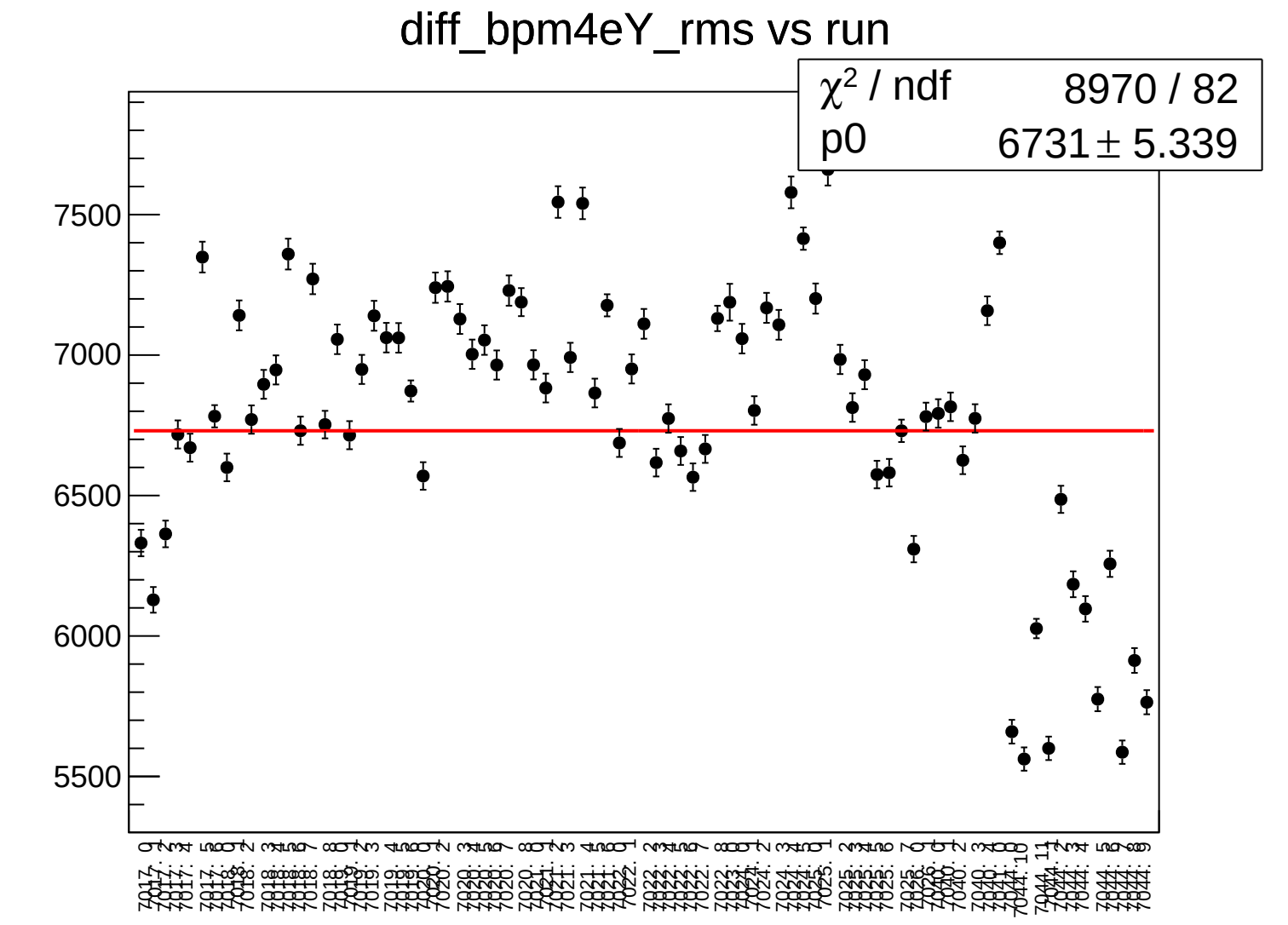

diff_bpm4eX_mean vs run
χ^2 / ndf 80.12 / 82
p0 11.64 ± 9.548
pull
Entries 83
Mean −924.6
Std Dev 969.5

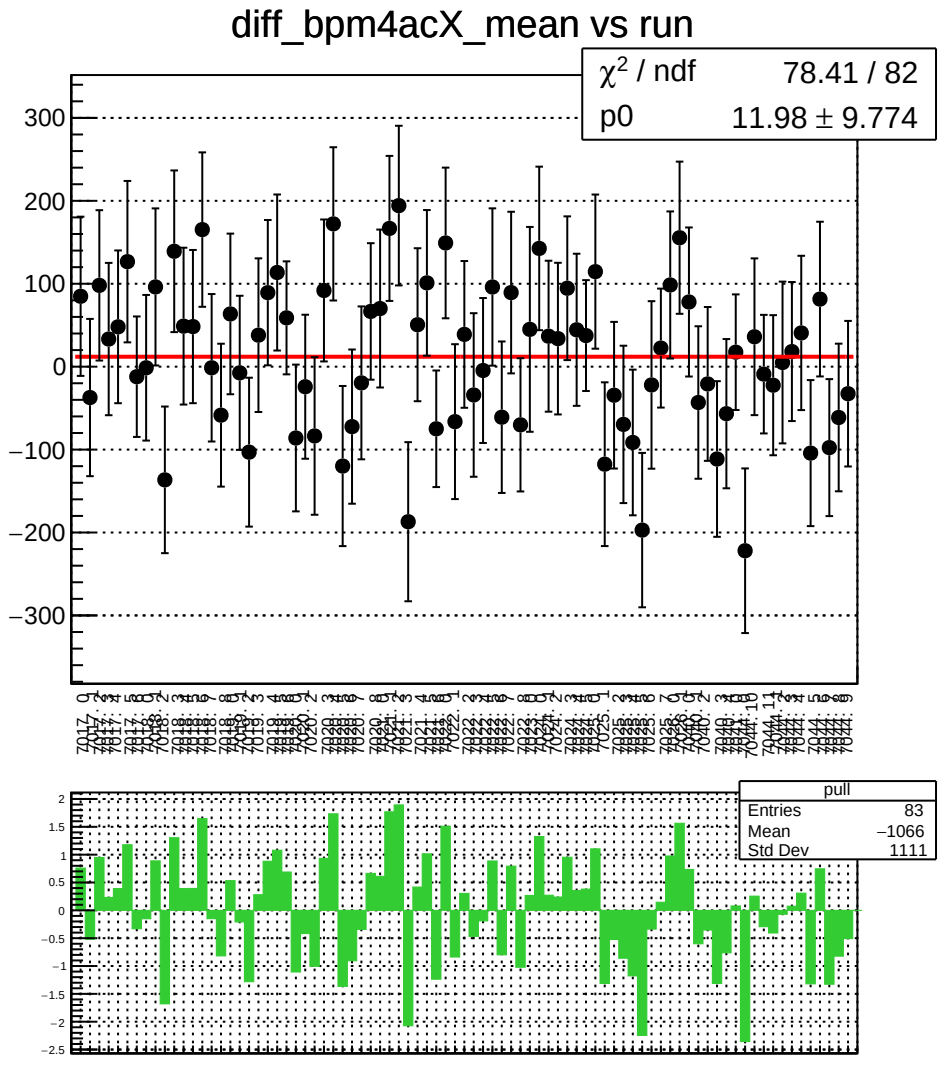

pull1D
Entries 83
Mean 0.005759
Std Dev 0.9825

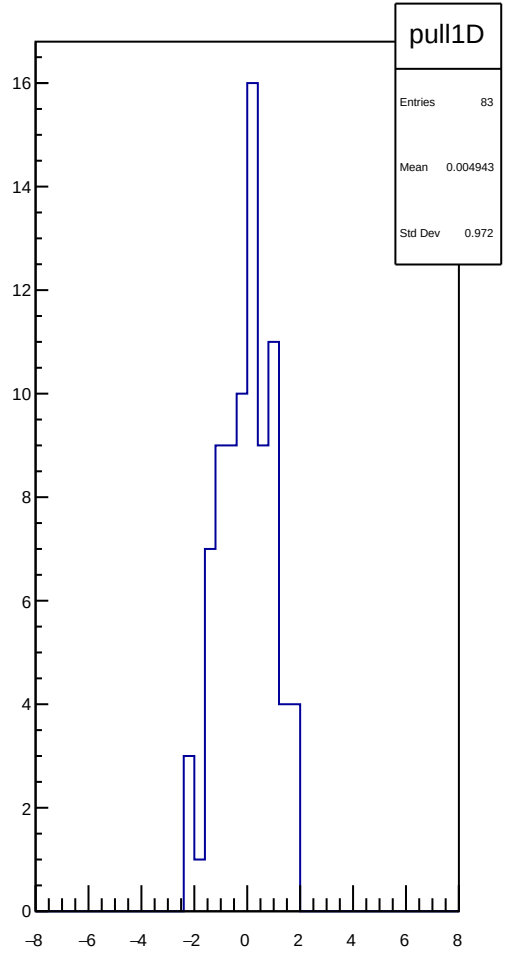

diff_bpm4eX_rms vs run
χ² / ndf 2659 / 82
p0 8529 ± 6.752
9500
9000
8500
8000
7500

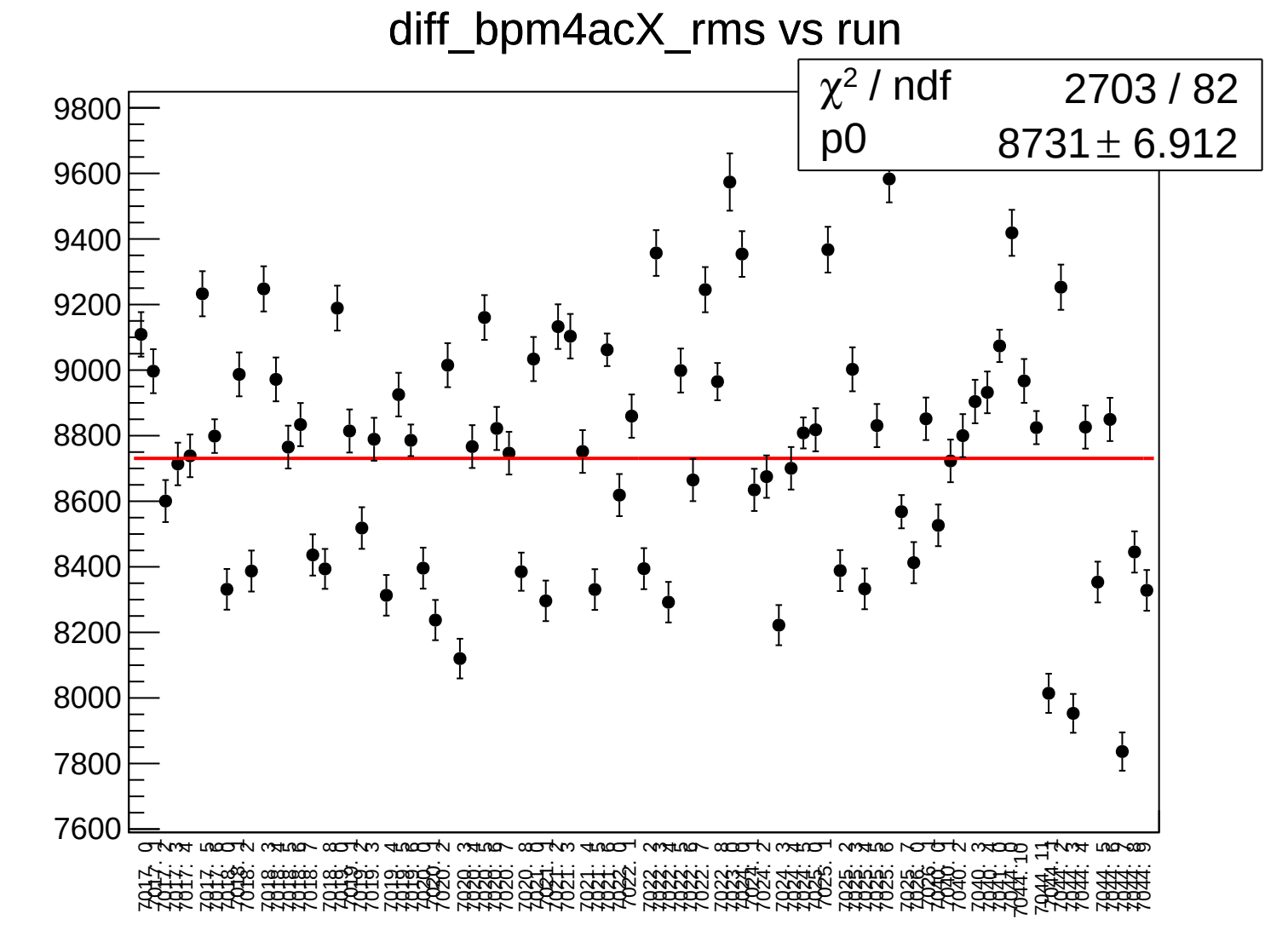

diff_bpm4eY_mean vs run
χ² / ndf 89.25 / 82
p0 1.371 ± 7.55
200
100
0
−100
−200
−300
pull
Entries 83
Mean −38.77
Std Dev 105.5
2
1
0
−1
−2
−3

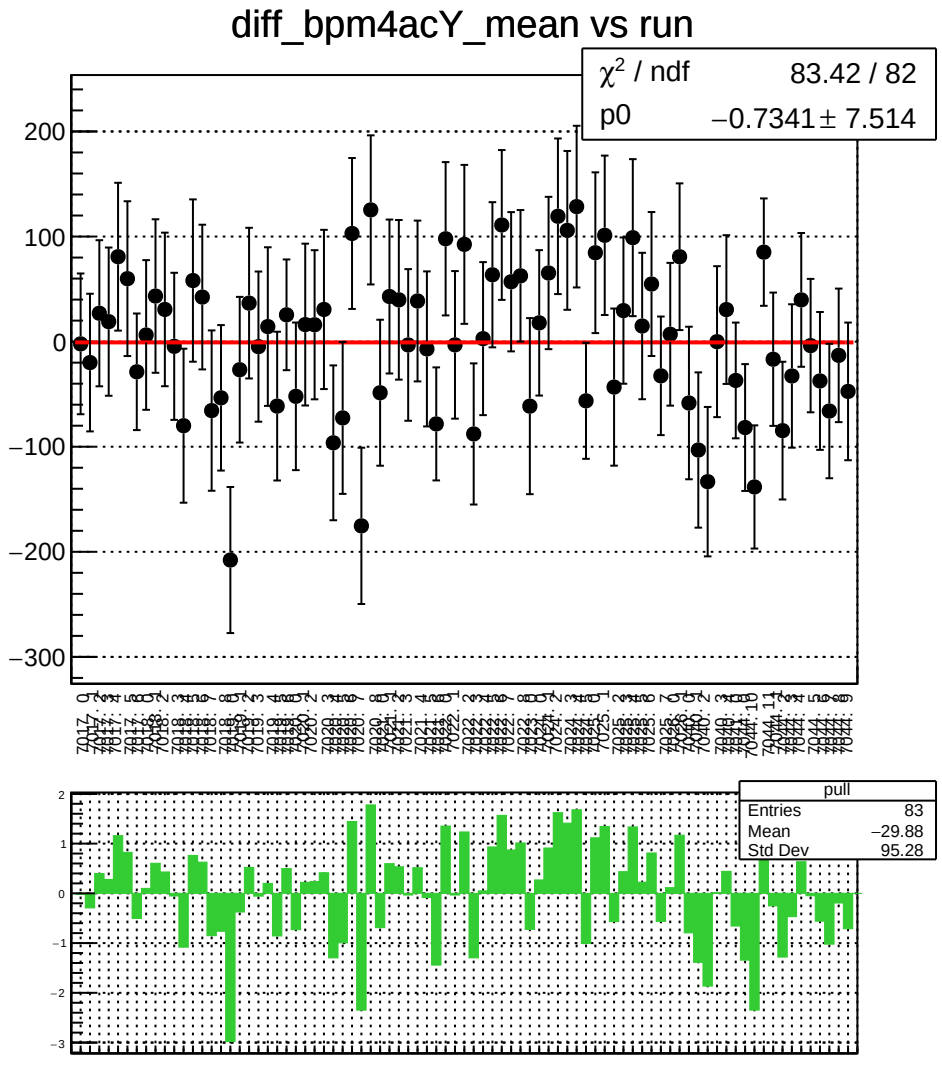

pull1D
Entries 83
Mean 0.01634
Std Dev 1.037
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

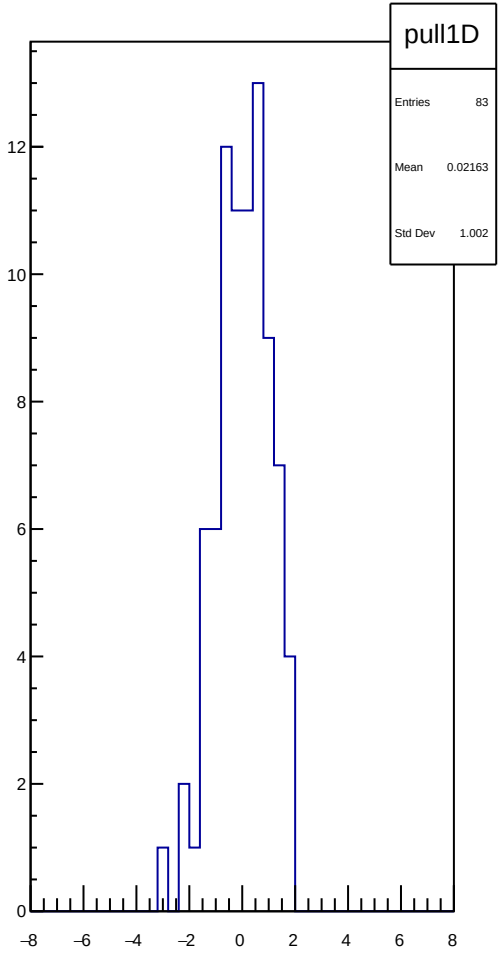

diff_bpm4eY_rms vs run
χ² / ndf 8970 / 82
p0 6731 ± 5.339
7500
7000
6500
6000
5500

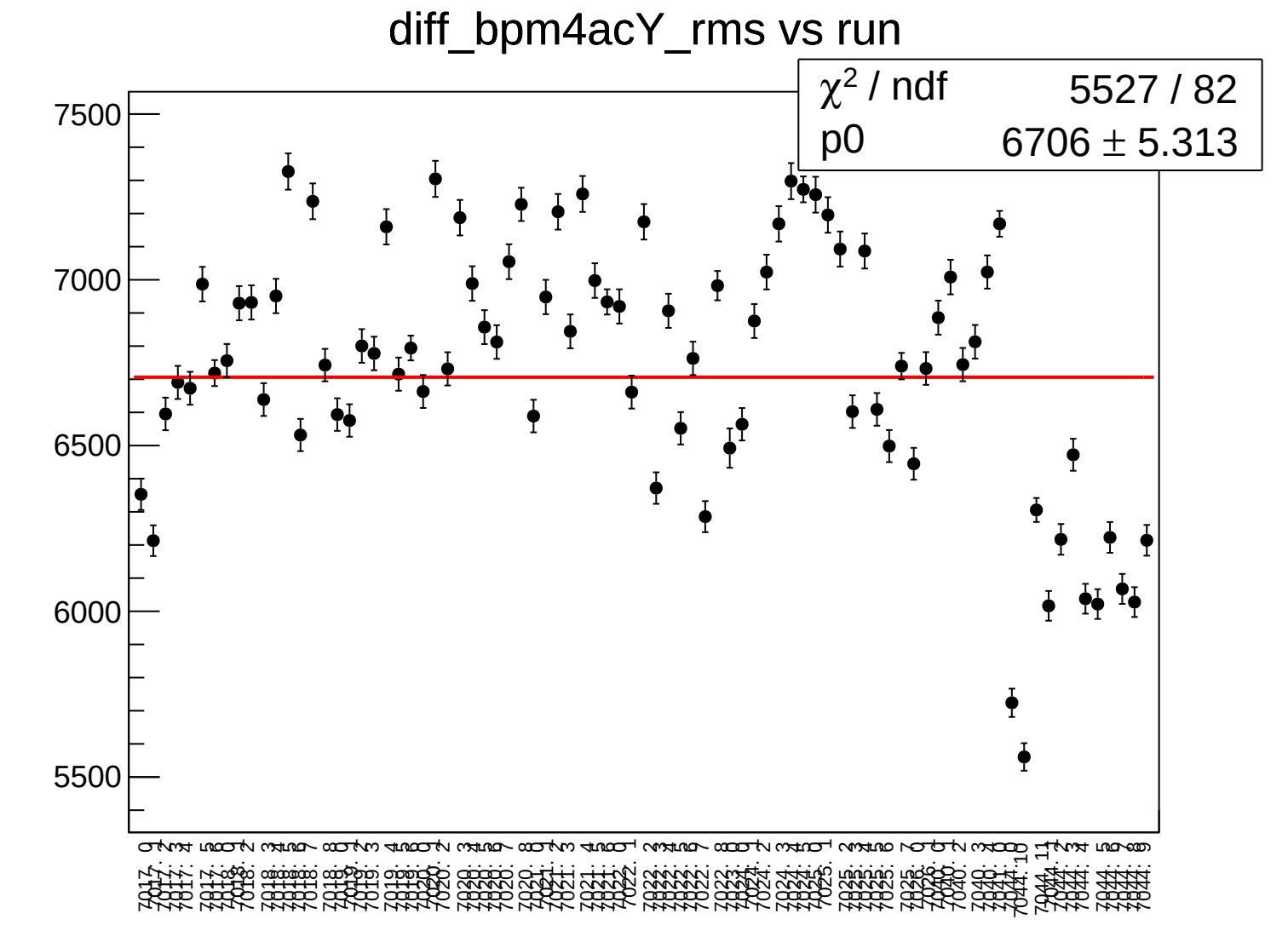

diff_bpm4acX_mean vs run
χ^2 / ndf 78.41 / 82
p0 11.98 ± 9.774
300
200
100
0
−100
−200
−300
pull
Entries 83
Mean −1066
Std Dev 1111
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

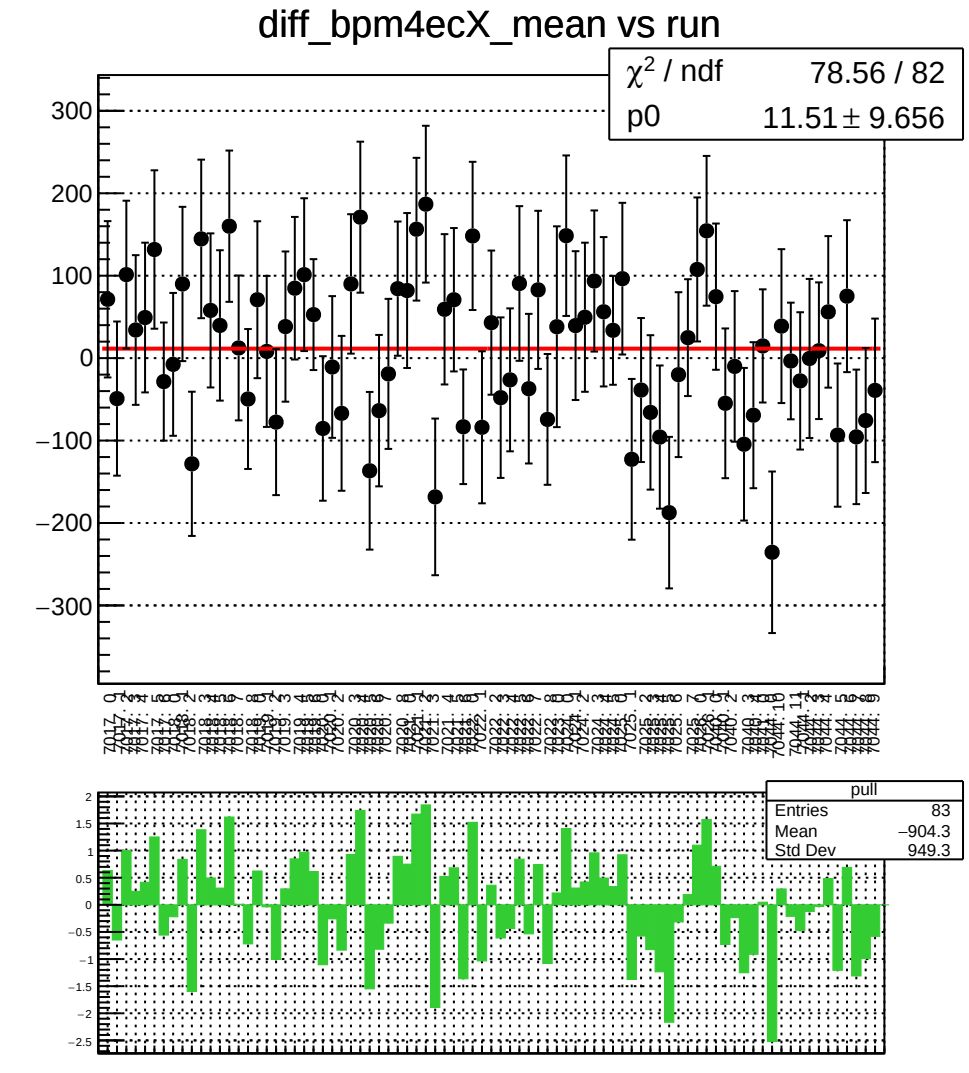

pull1D
Entries 83
Mean 0.004943
Std Dev 0.972
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

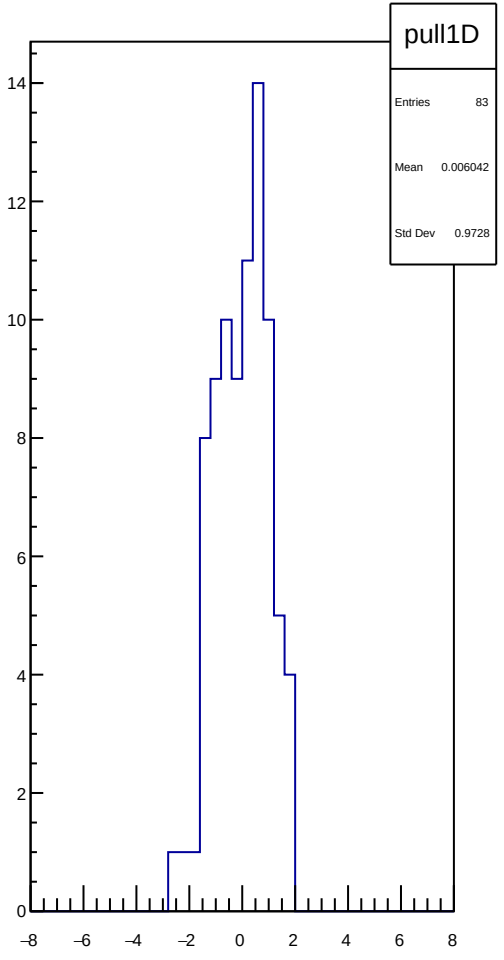

diff_bpm4acX_rms vs run
χ² / ndf 2703 / 82
p0 8731 ± 6.912
9800
9600
9400
9200
9000
8800
8600
8400
8200
8000
7800
7600

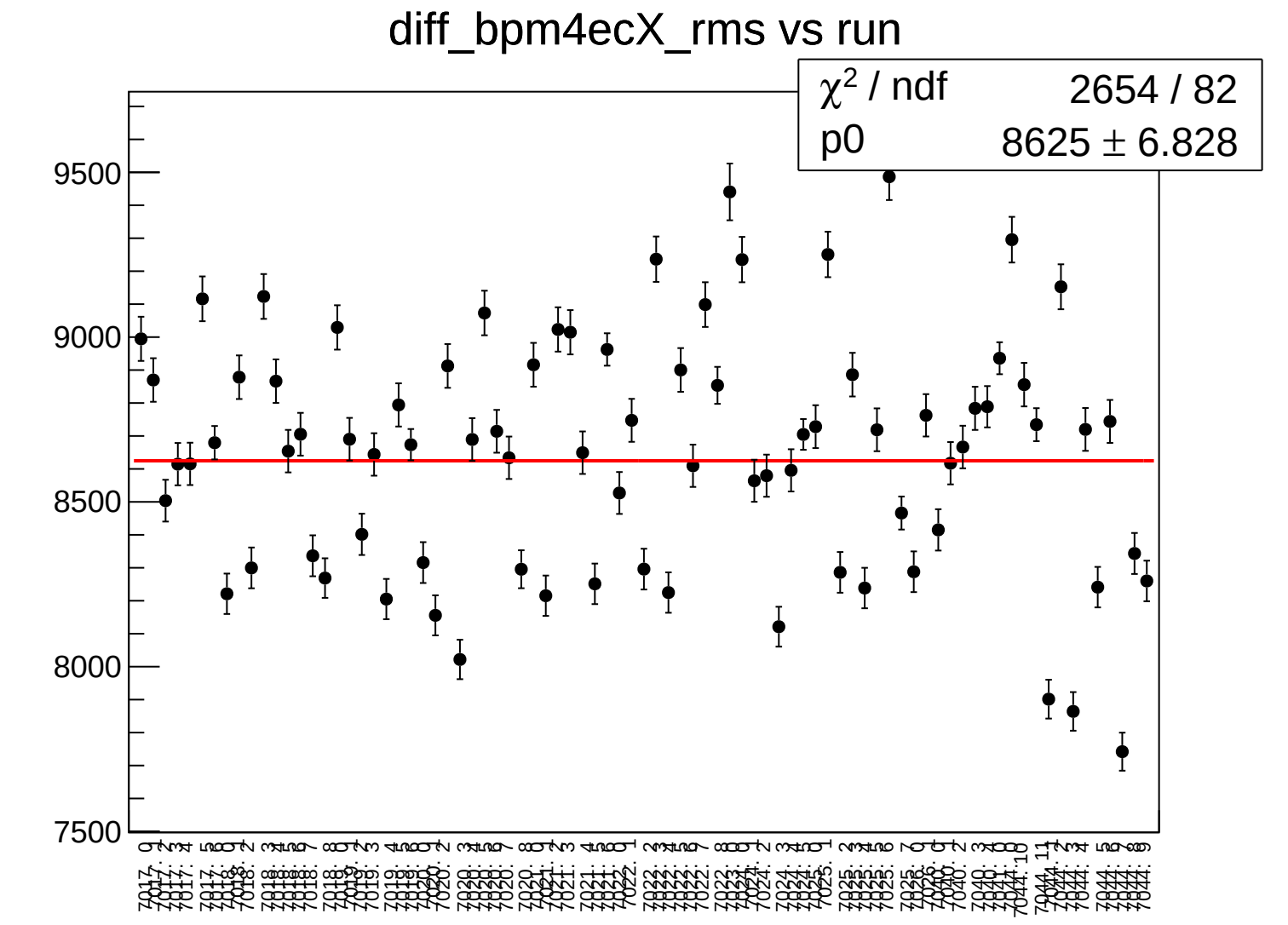

diff_bpm4acY_mean vs run
χ² / ndf 83.42 / 82
p0 −0.7341 ± 7.514
pull
Entries 83
Mean −29.88
Std Dev 95.28

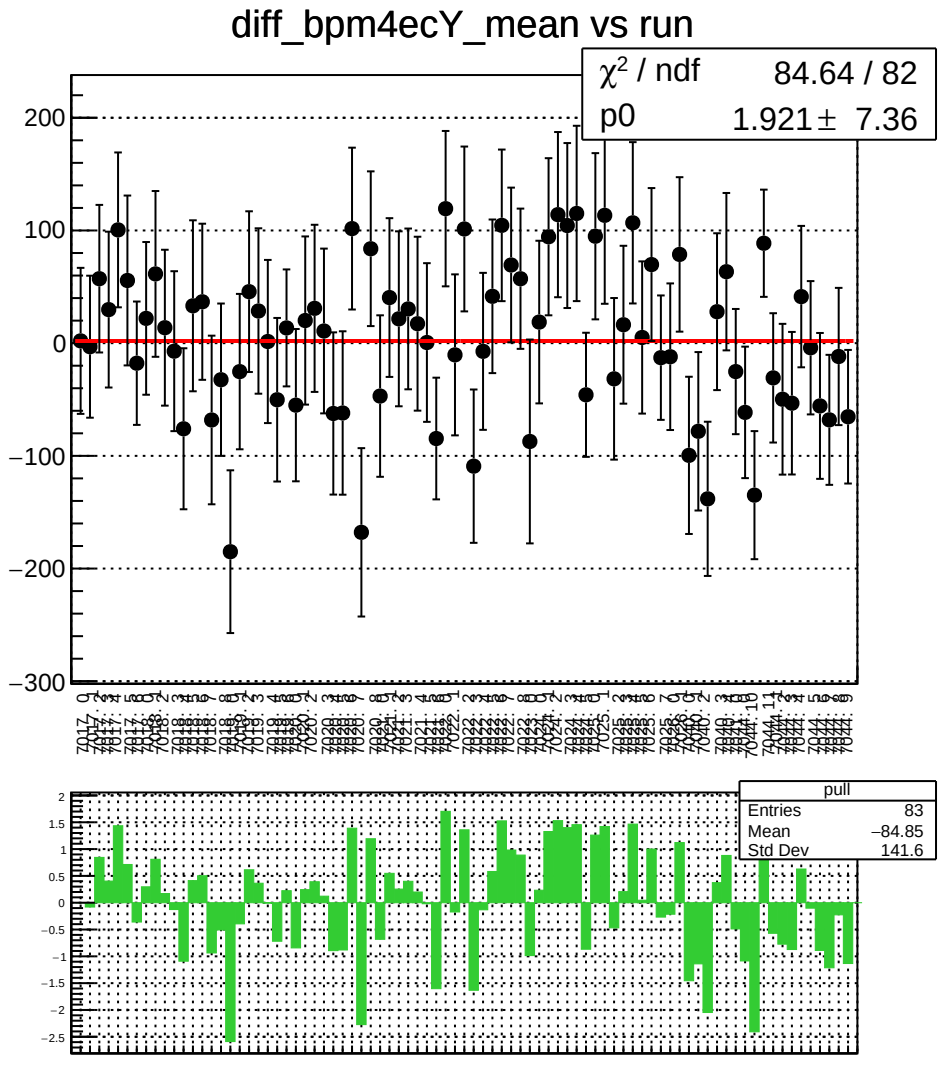

pull1D
Entries 83
Mean 0.02163
Std Dev 1.002

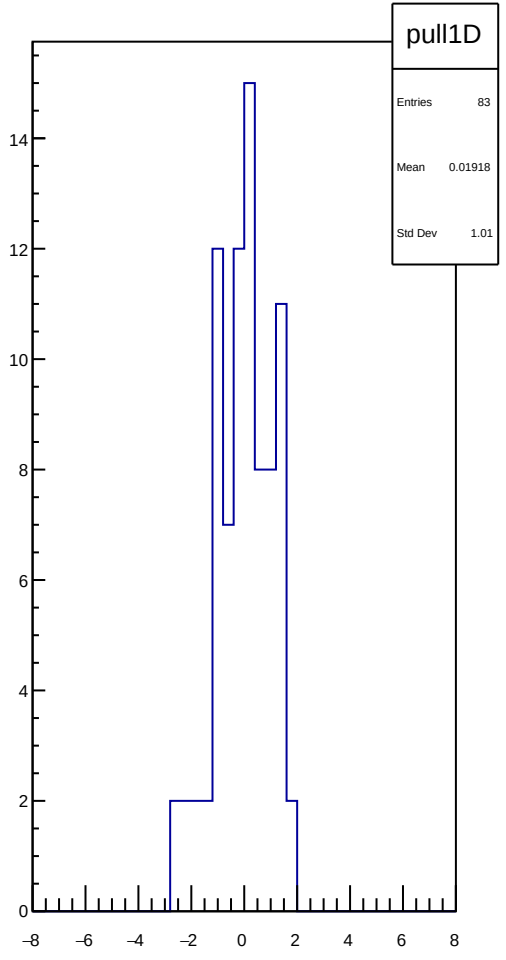

diff_bpm4acY_rms vs run
χ² / ndf 5527 / 82
p0 6706 ± 5.313
7500
7000
6500
6000
5500

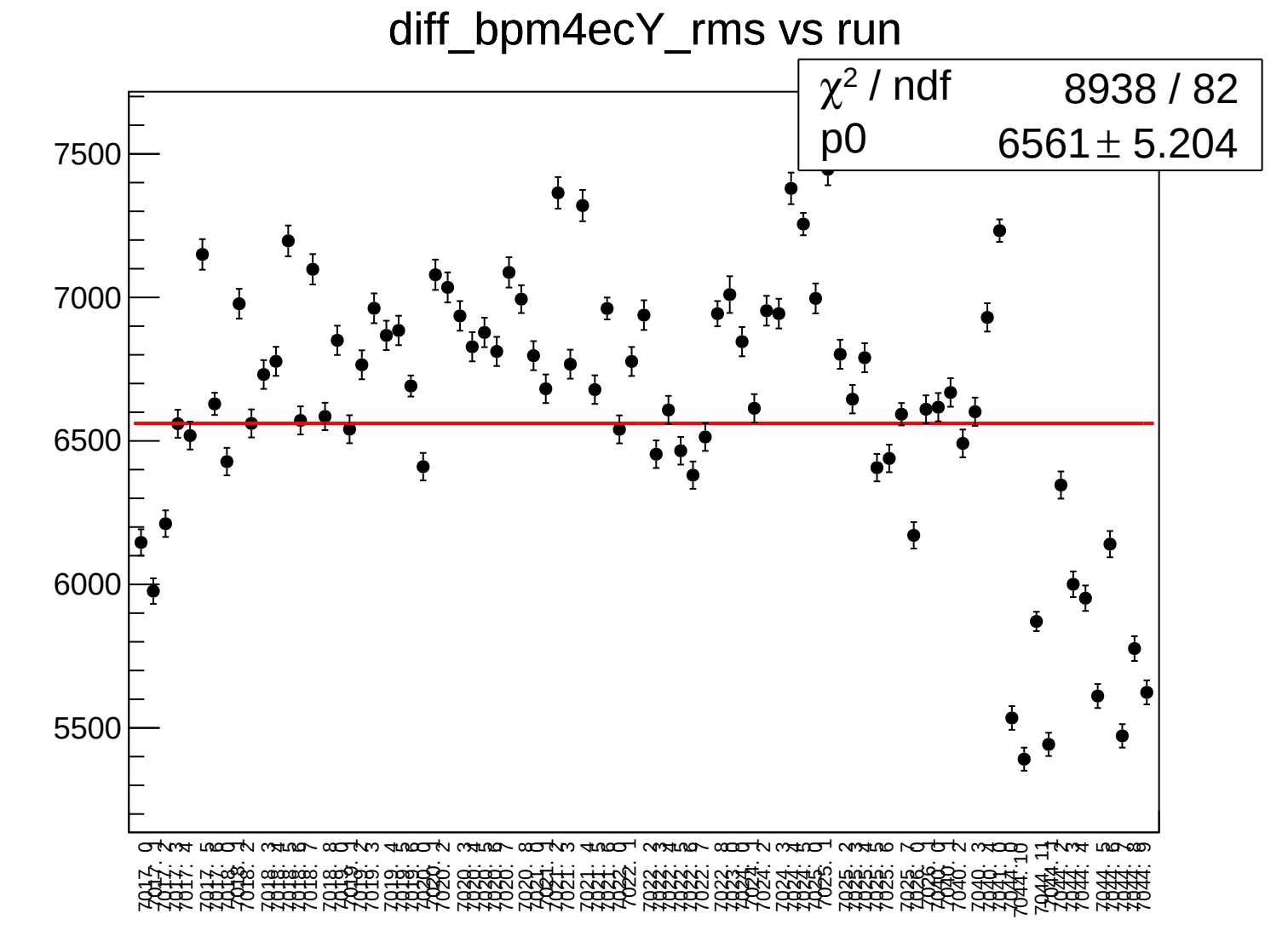

diff_bpm4ecX_mean vs run
χ^2 / ndf 78.56 / 82
p0 11.51 ± 9.656
pull
Entries 83
Mean −904.3
Std Dev 949.3

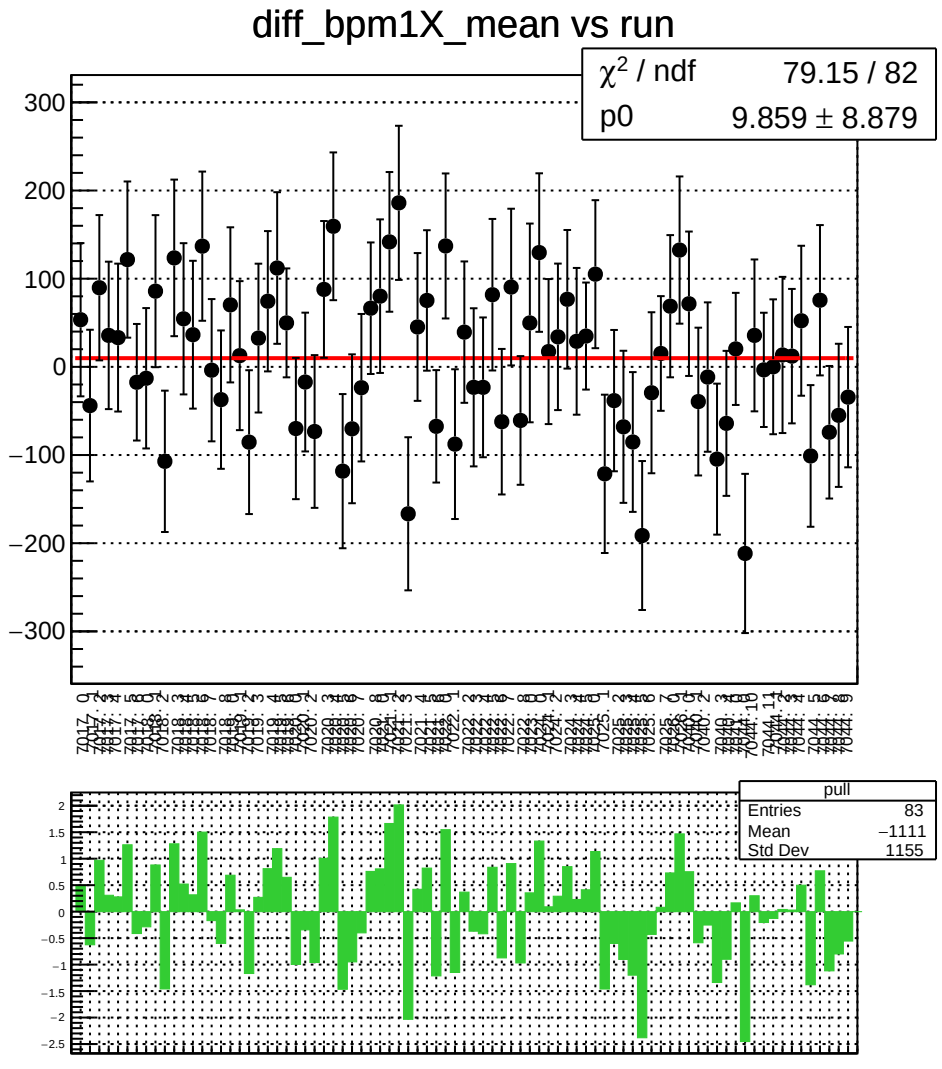

pull1D
Entries 83
Mean 0.006042
Std Dev 0.9728

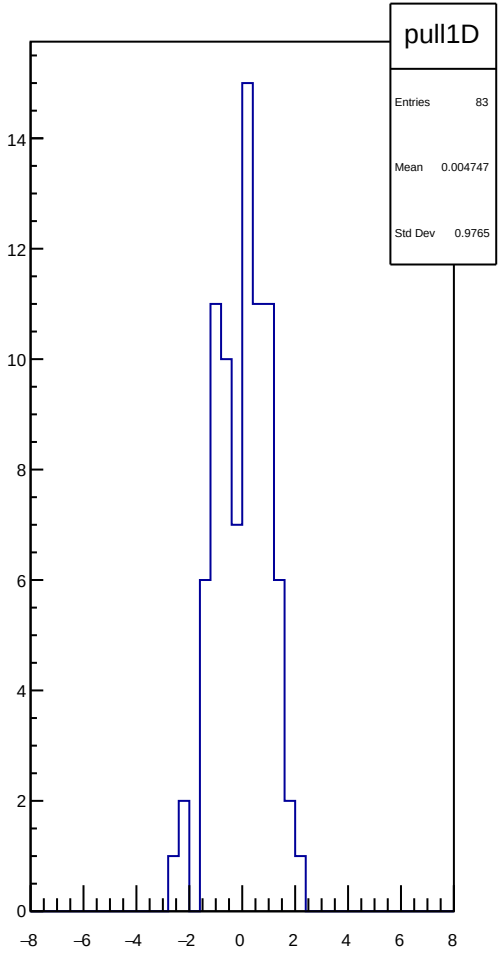

diff_bpm4ecX_rms vs run
χ² / ndf 2654 / 82
p0 8625 ± 6.828
9500
9000
8500
8000
7500

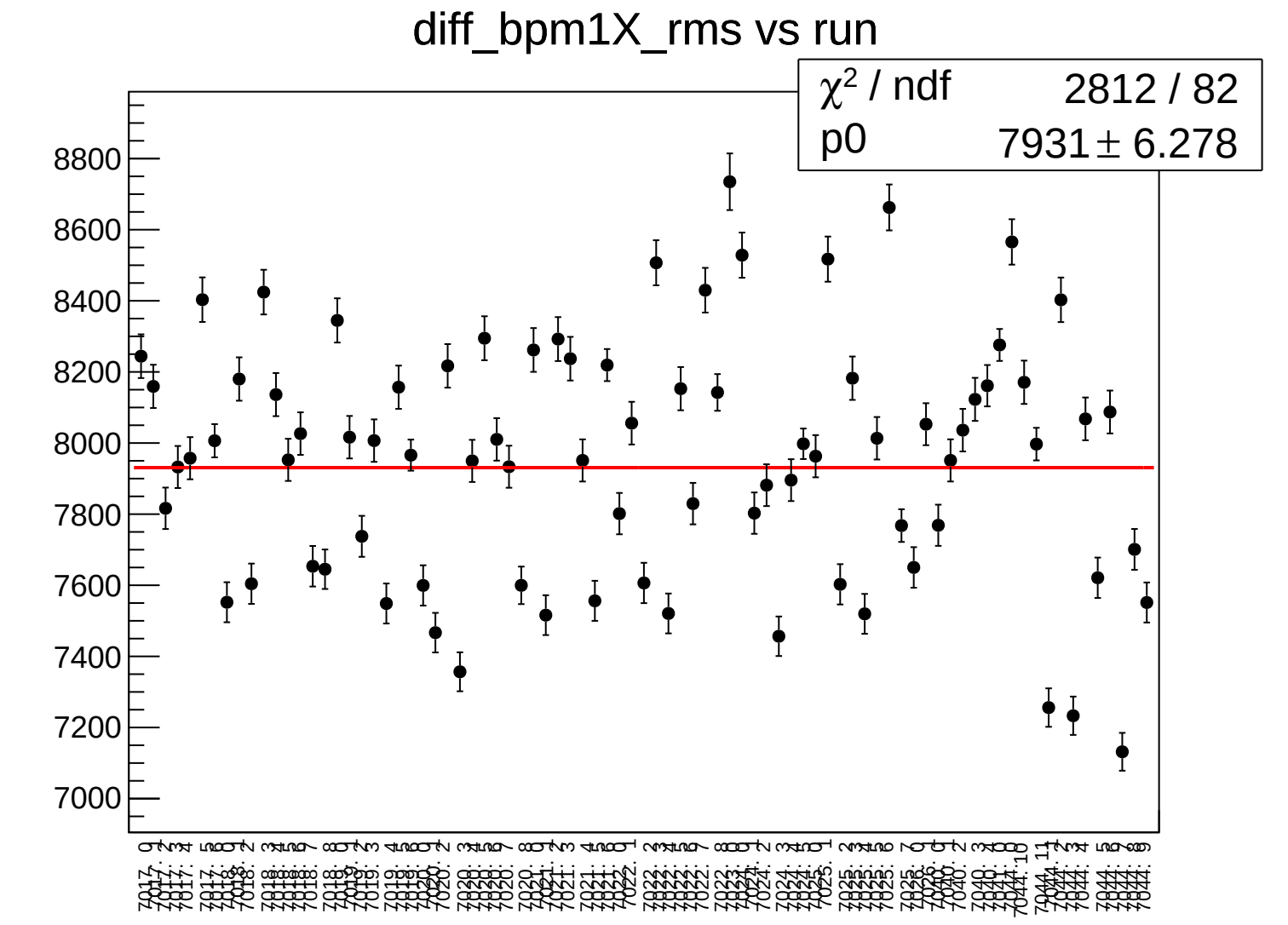

diff_bpm4ecY_mean vs run
χ² / ndf 84.64 / 82
p0 1.921 ± 7.36
pull
Entries 83
Mean −84.85
Std Dev 141.6

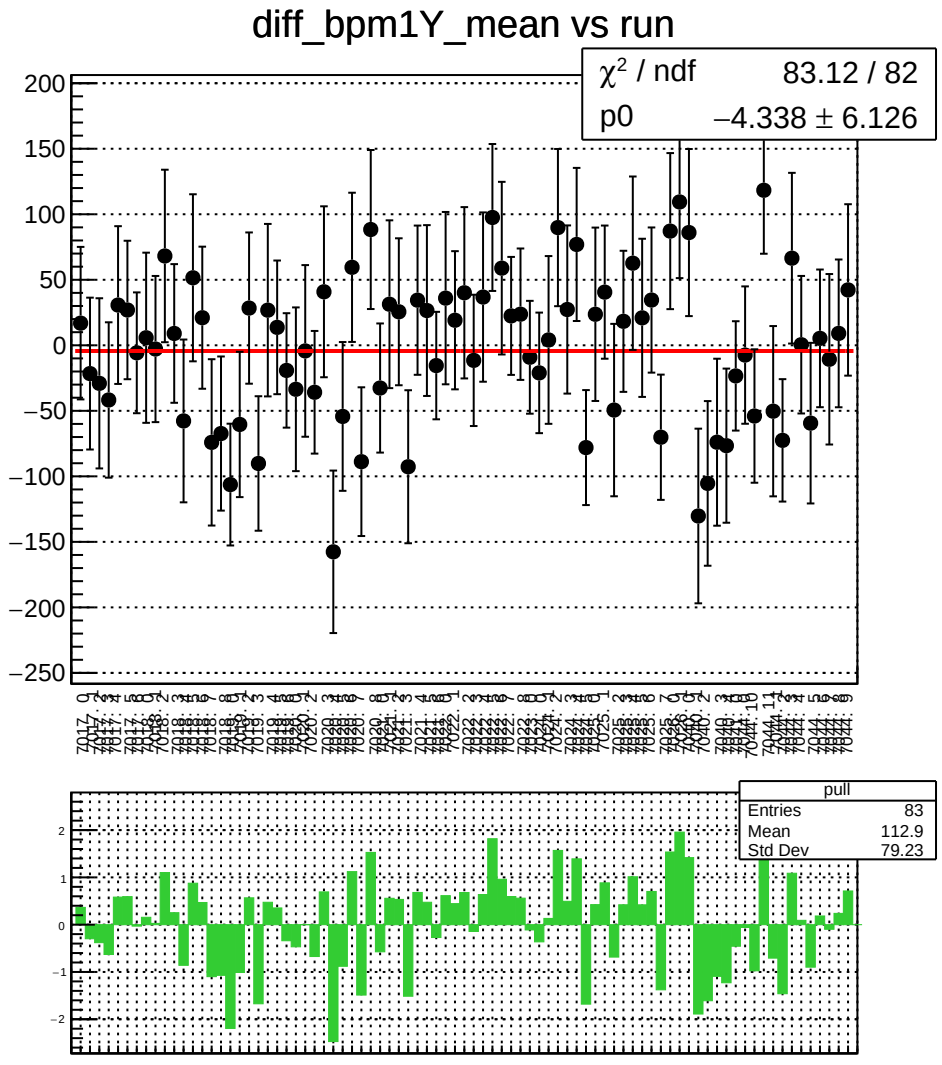

pull1D
Entries 83
Mean 0.01918
Std Dev 1.01

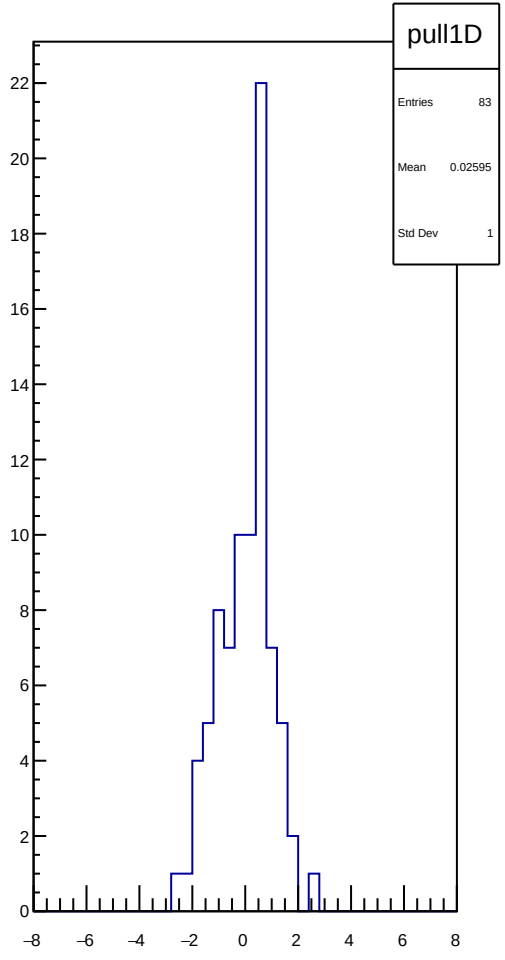

diff_bpm4ecY_rms vs run
χ² / ndf 8938 / 82
p0 6561 ± 5.204
7500
7000
6500
6000
5500

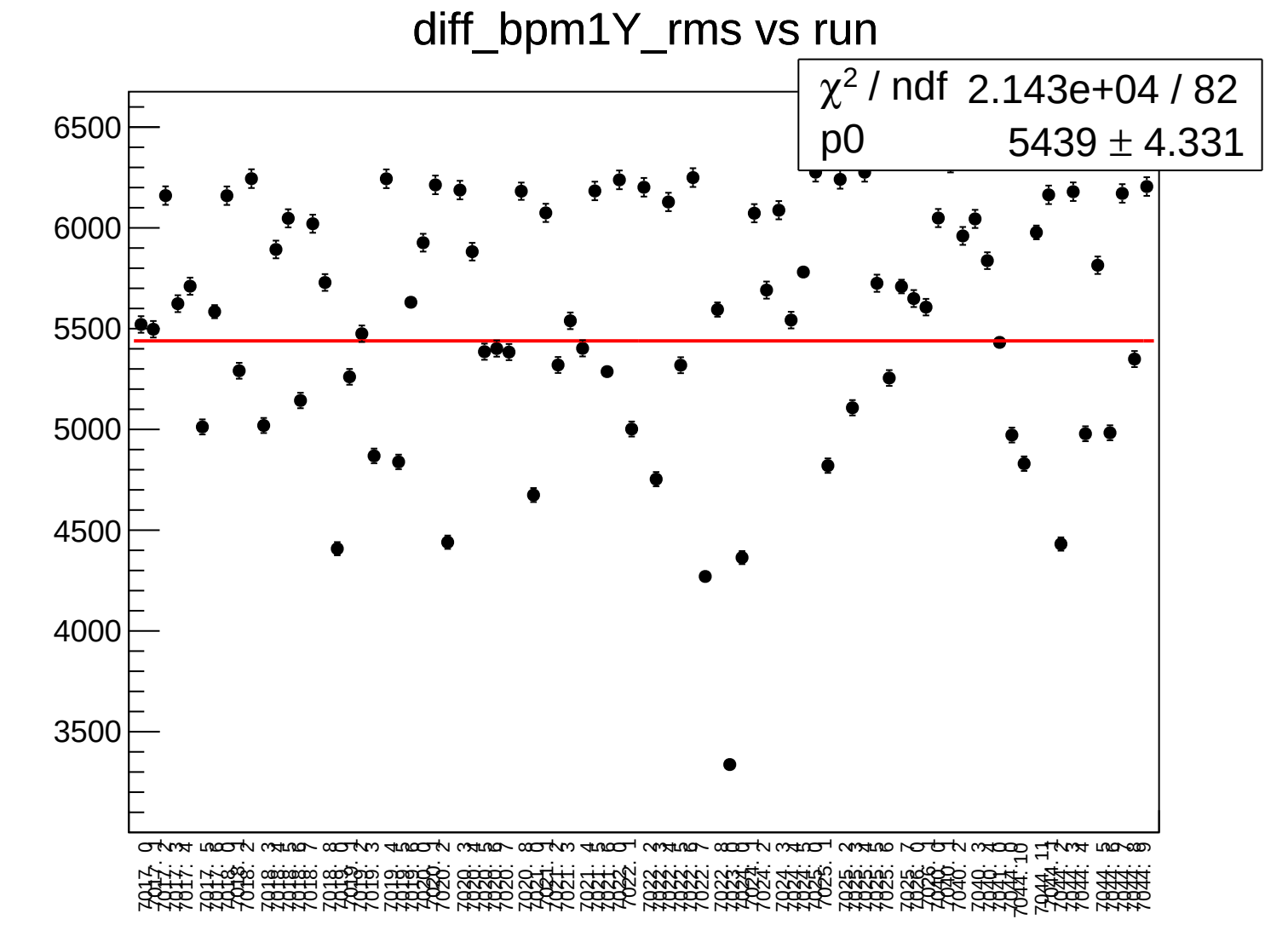

diff_bpm1X_mean vs run
χ^2 / ndf 79.15 / 82
p0 9.859 ± 8.879
pull
Entries 83
Mean −1111
Std Dev 1155

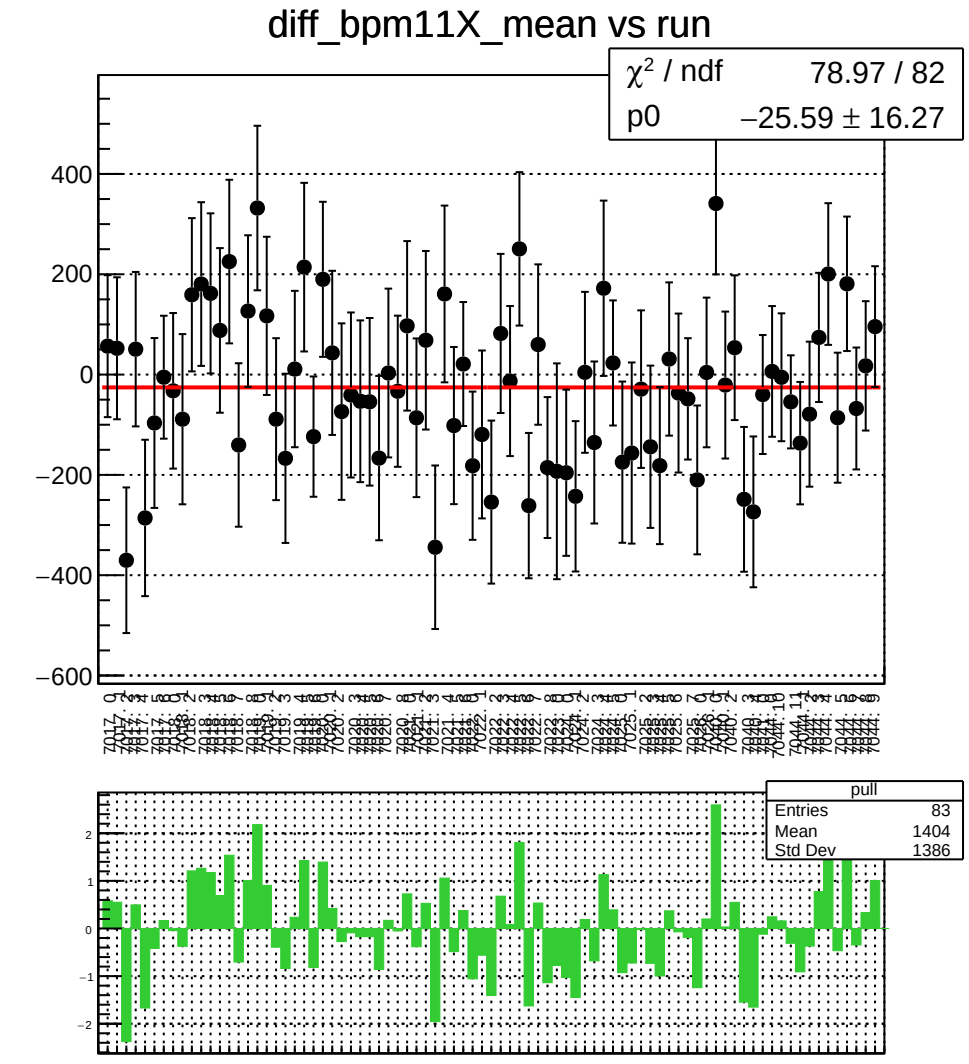

pull1D
Entries 83
Mean 0.004747
Std Dev 0.9765

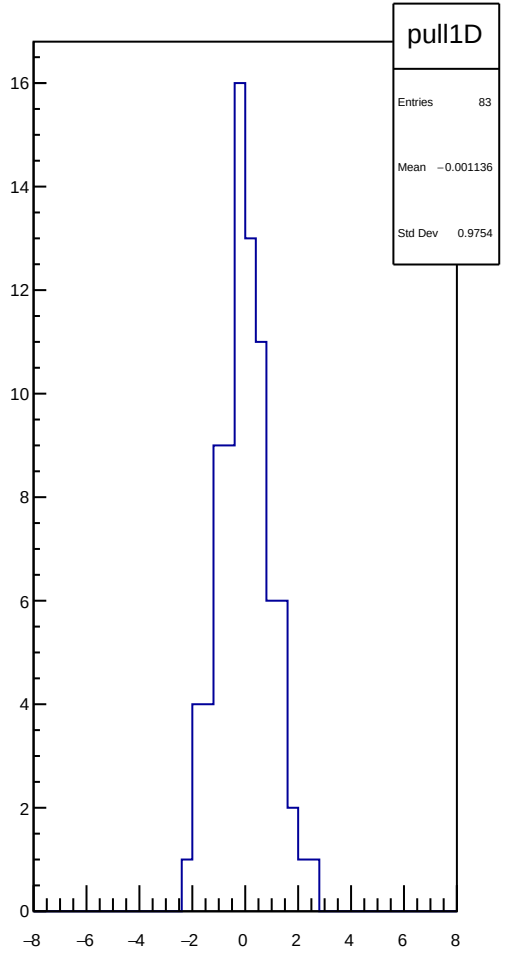

diff_bpm1X_rms vs run
χ² / ndf 2812 / 82
p0 7931 ± 6.278
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000

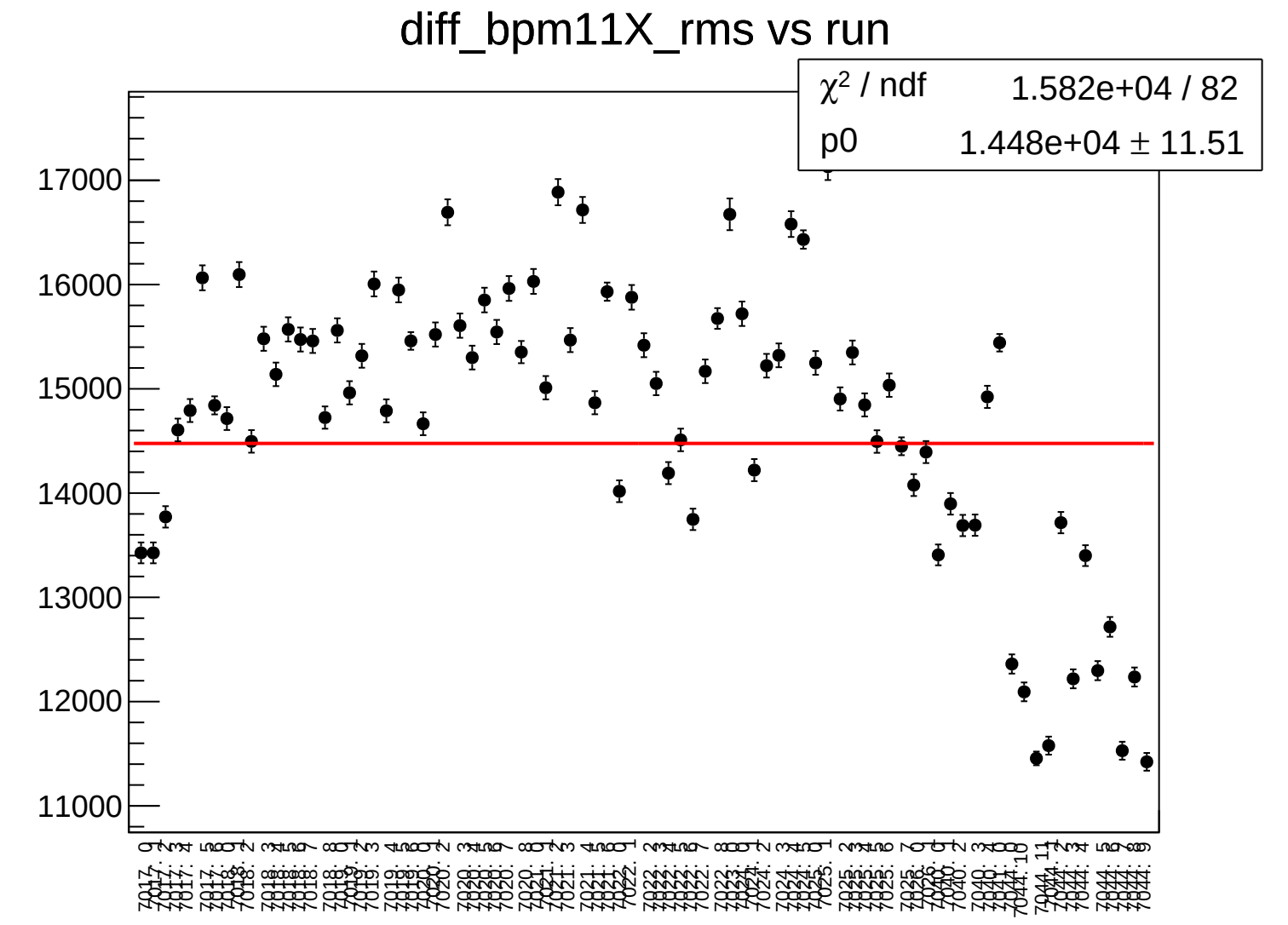

diff_bpm1Y_mean vs run
χ² / ndf 83.12 / 82
p0 −4.338 ± 6.126
pull
Entries 83
Mean 112.9
Std Dev 79.23

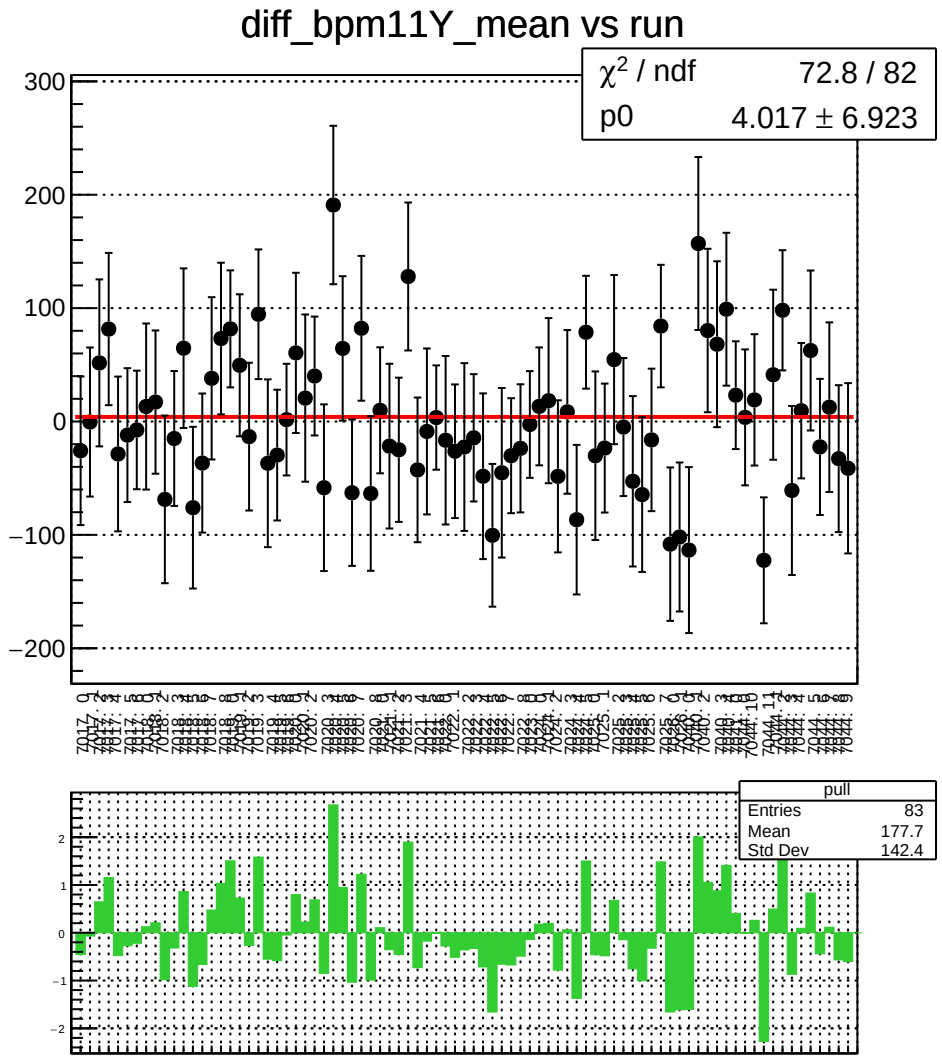

pull1D
Entries 83
Mean 0.02595
Std Dev 1

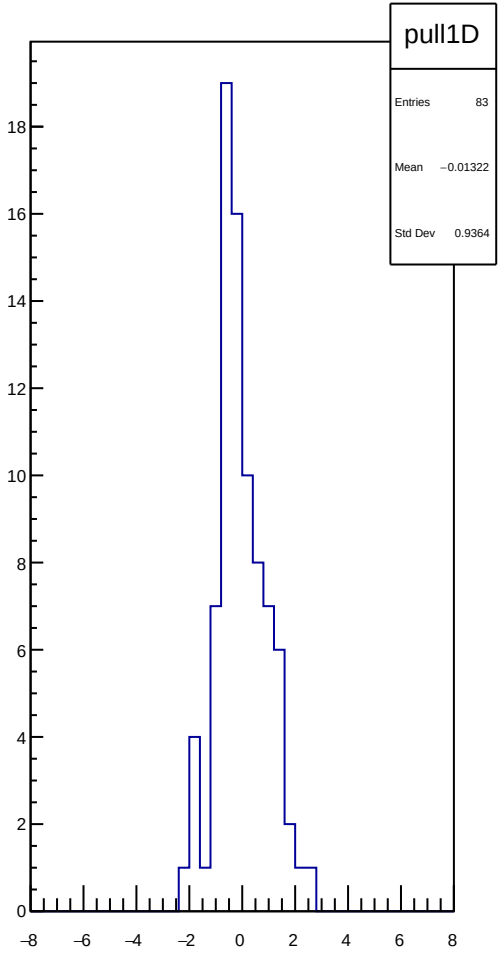

diff_bpm1Y_rms vs run
χ² / ndf 2.143e+04 / 82
p0 5439 ± 4.331
6500
6000
5500
5000
4500
4000
3500

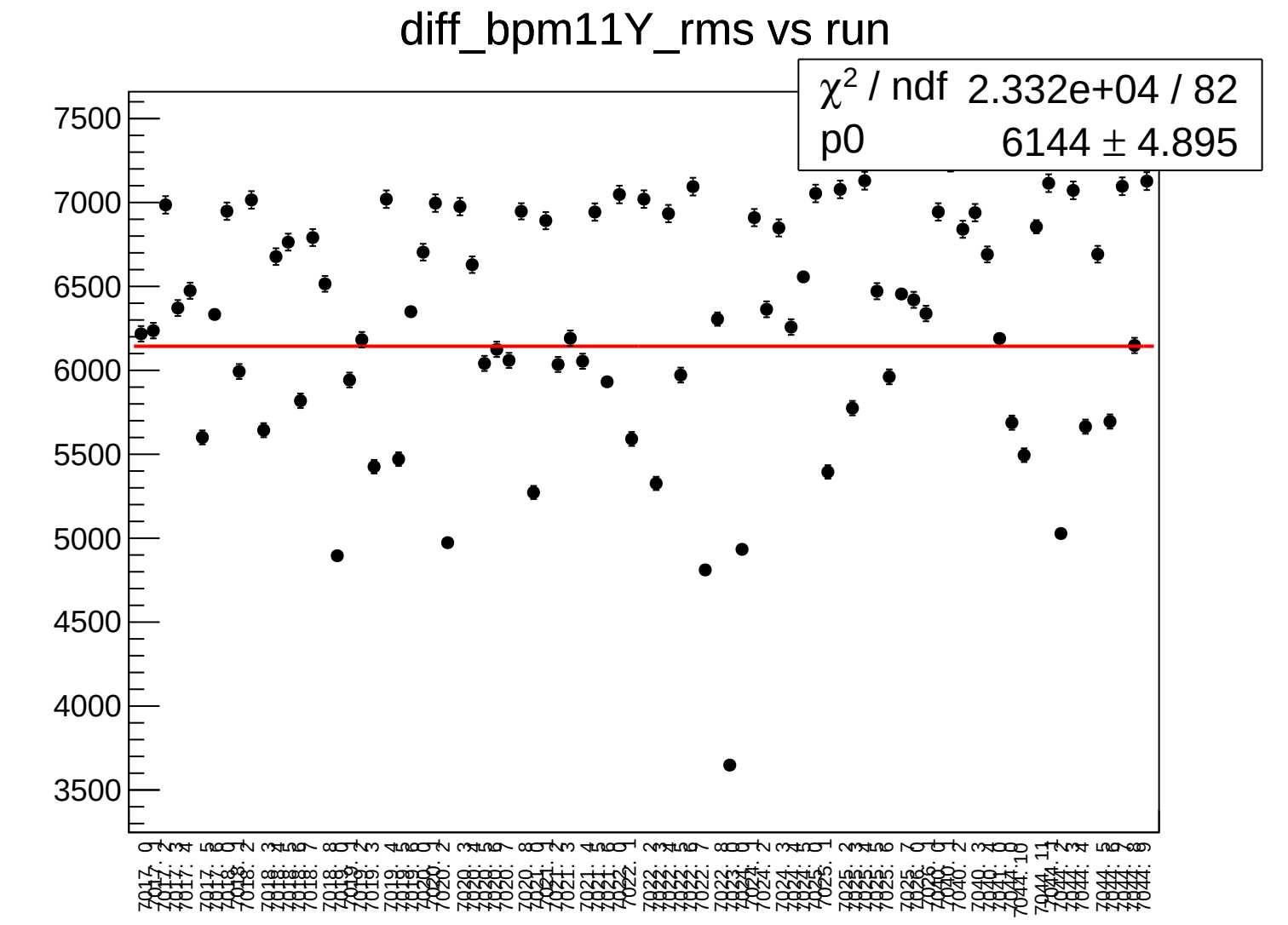

diff_bpm11X_mean vs run
χ² / ndf 78.97 / 82
p0 −25.59 ± 16.27
pull
Entries 83
Mean 1404
Std Dev 1386

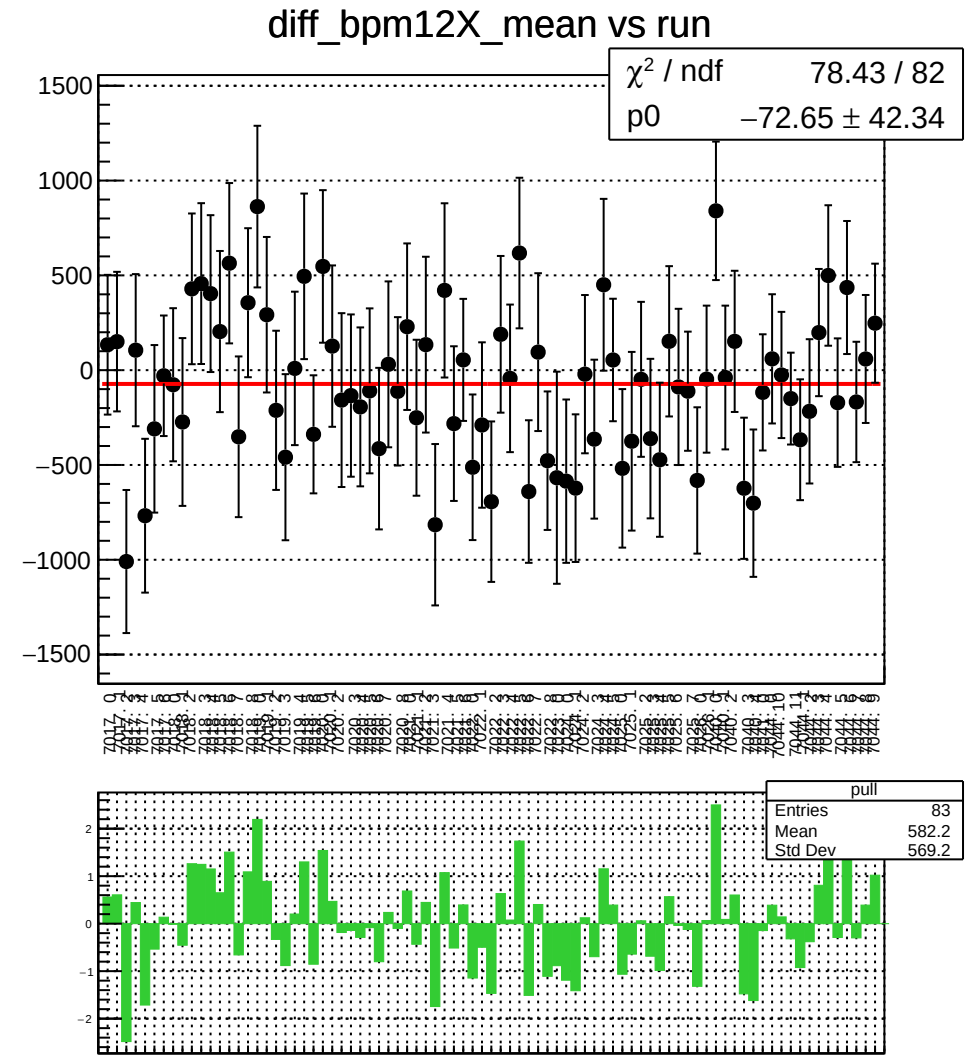

pull1D
Entries 83
Mean −0.001136
Std Dev 0.9754

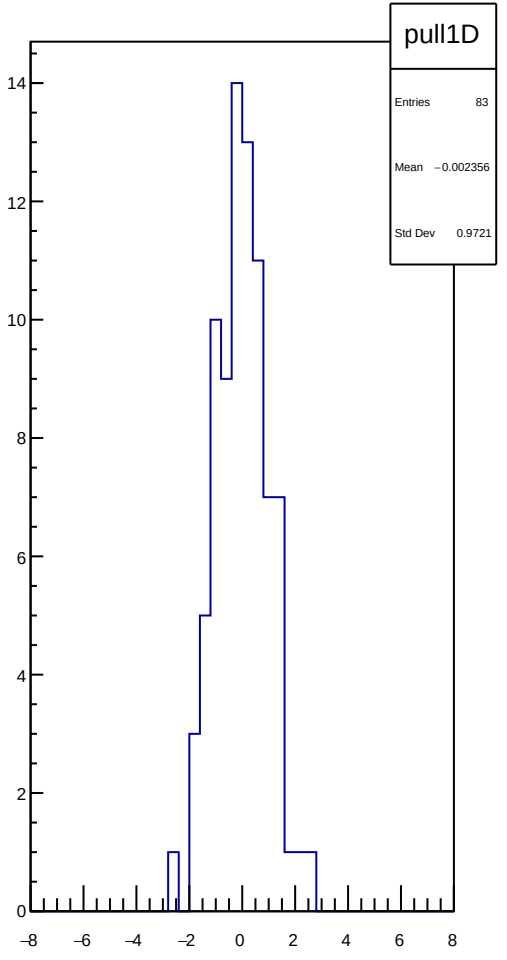

diff_bpm11X_rms vs run
χ² / ndf 1.582e+04 / 82
p0 1.448e+04 ± 11.51
17000
16000
15000
14000
13000
12000
11000

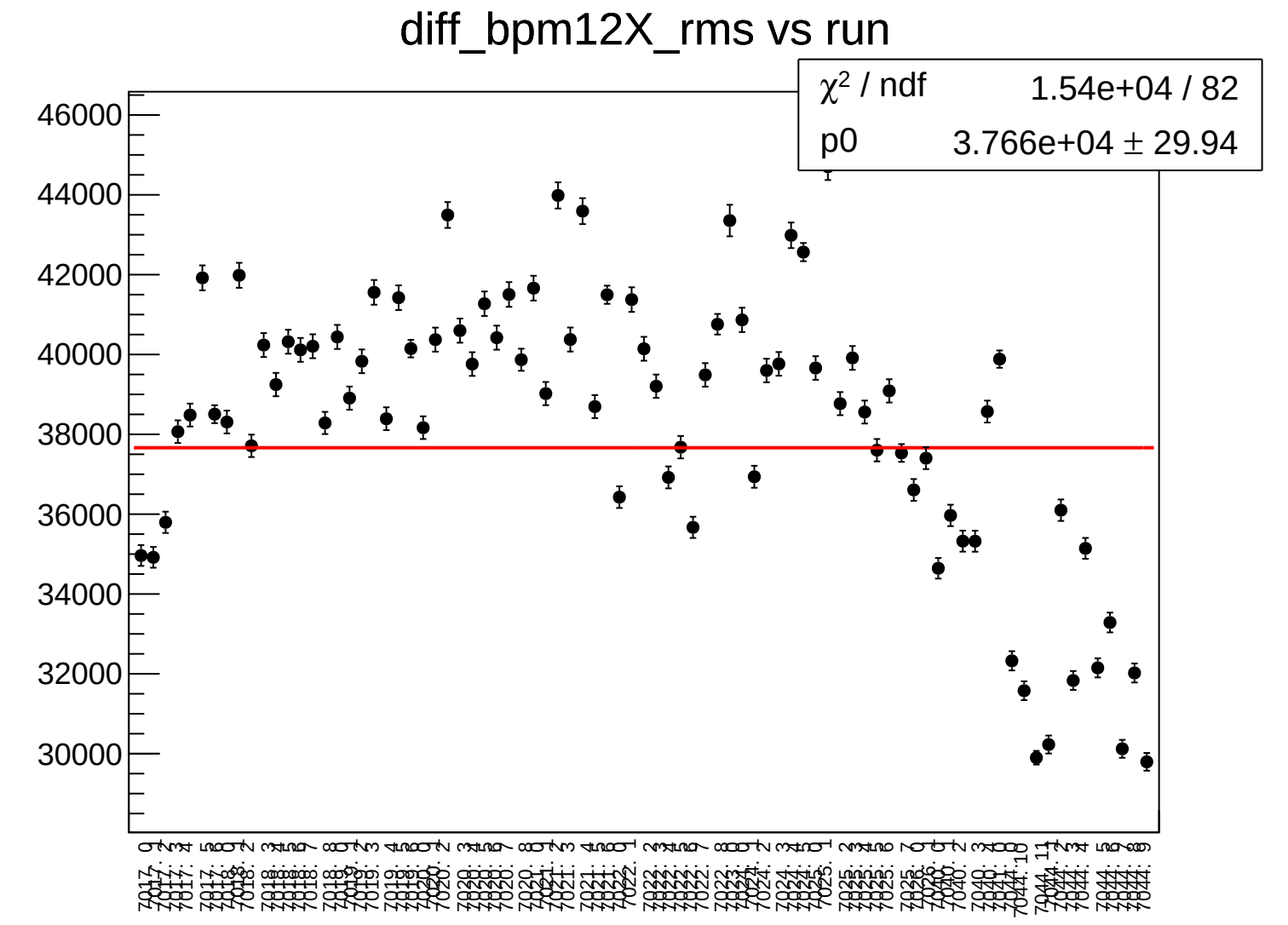

diff_bpm11Y_mean vs run
χ² / ndf 72.8 / 82
p0 4.017 ± 6.923
pull
Entries 83
Mean 177.7
Std Dev 142.4

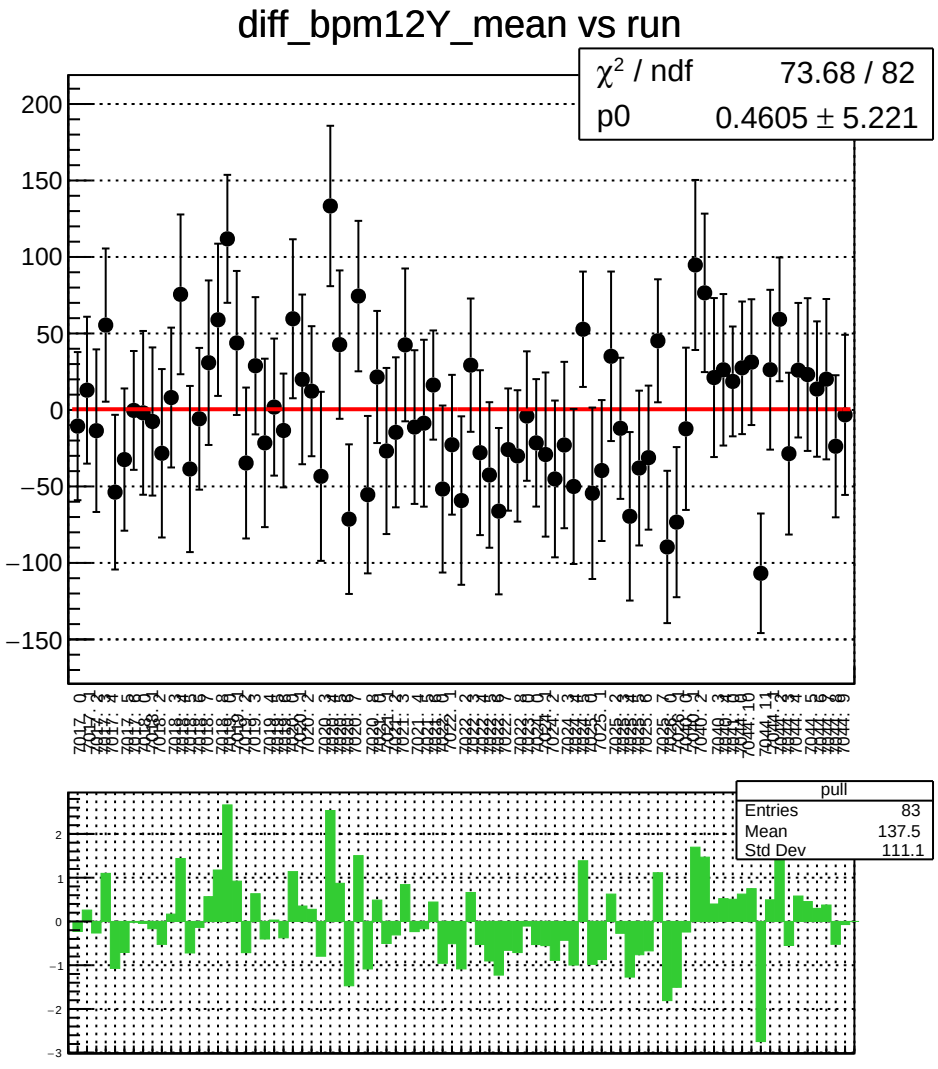

pull1D
Entries 83
Mean −0.01322
Std Dev 0.9364

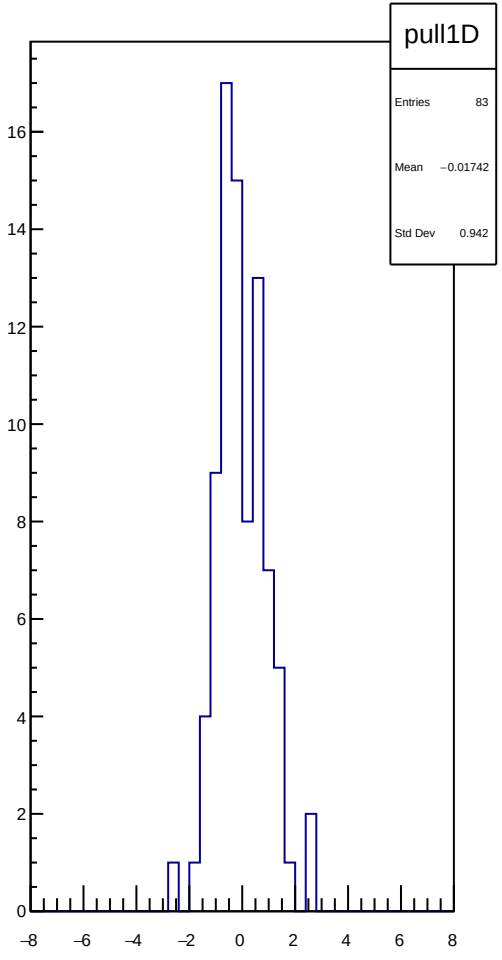

diff_bpm11Y_rms vs run
χ² / ndf 2.332e+04 / 82
p0 6144 ± 4.895
7500
7000
6500
6000
5500
5000
4500
4000
3500

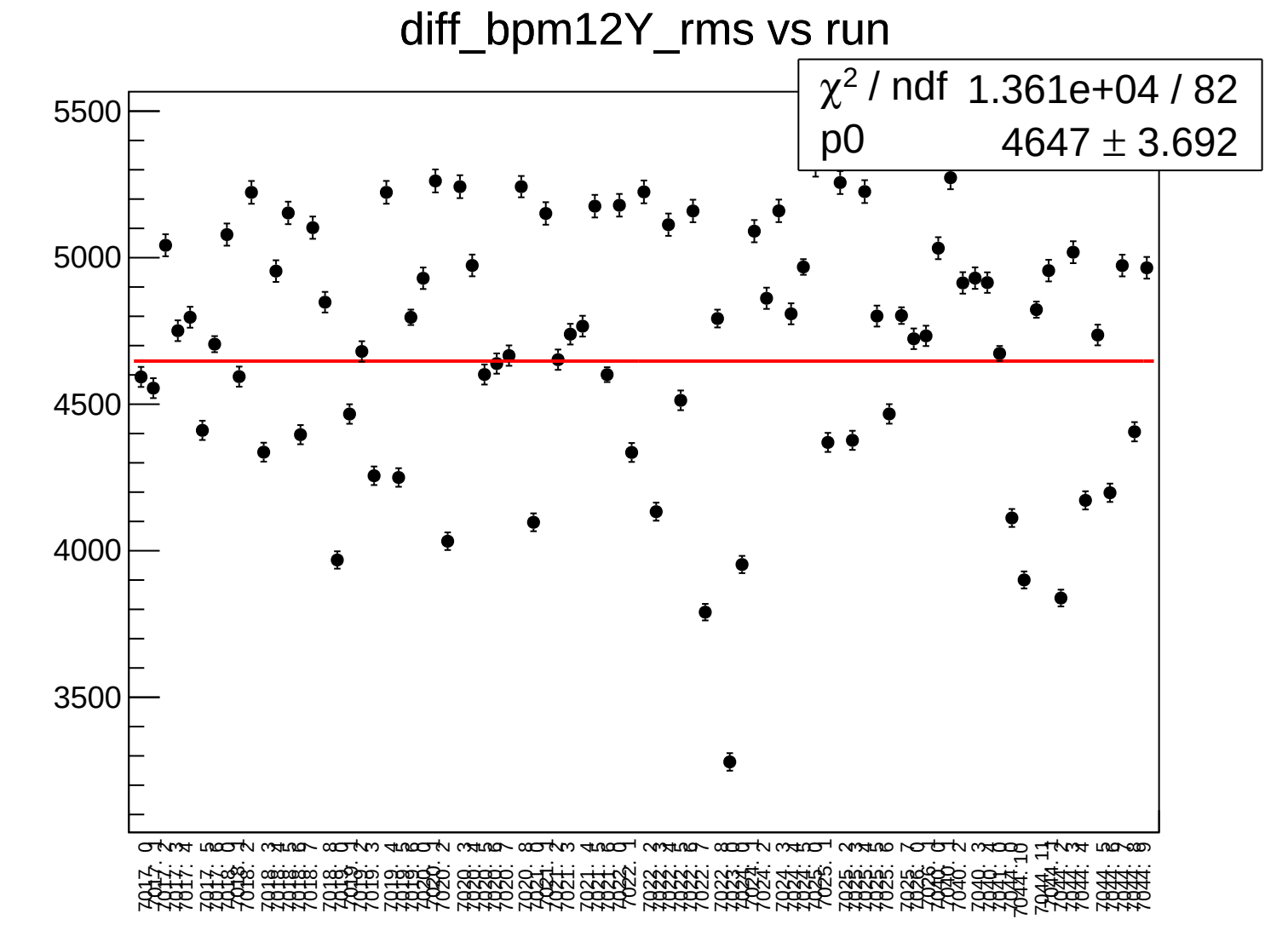

diff_bpm12X_mean vs run
χ² / ndf 78.43 / 82
p0 −72.65 ± 42.34
pull
Entries 83
Mean 582.2
Std Dev 569.2

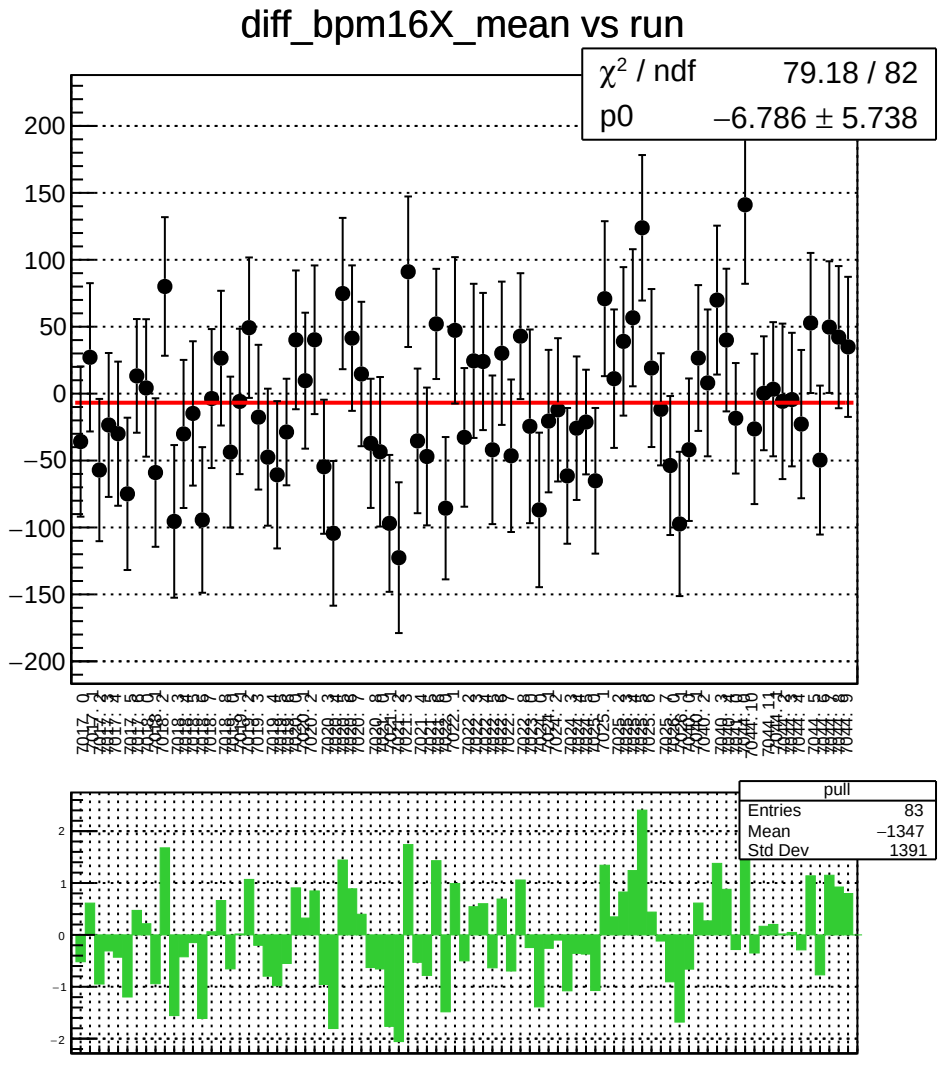

pull1D
Entries 83
Mean −0.002356
Std Dev 0.9721

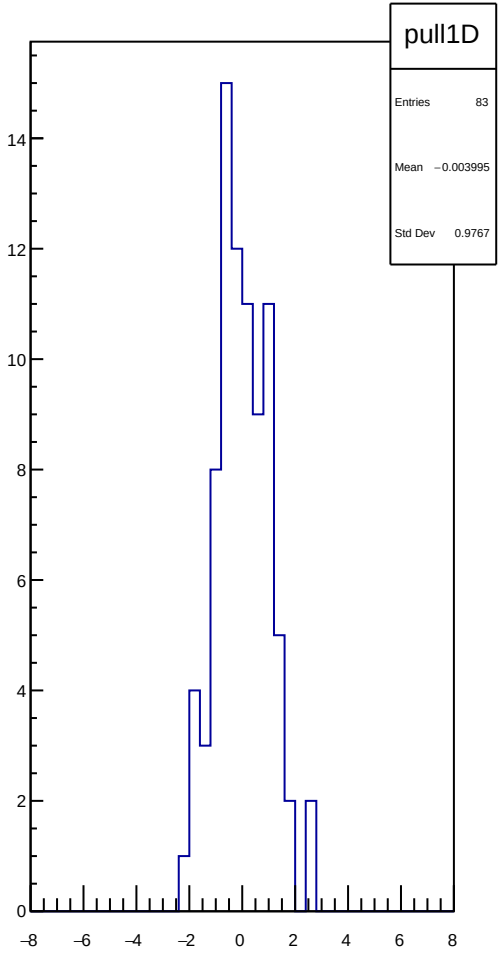

diff_bpm12X_rms vs run
χ² / ndf 1.54e+04 / 82
p0 3.766e+04 ± 29.94
46000
44000
42000
40000
38000
36000
34000
32000
30000

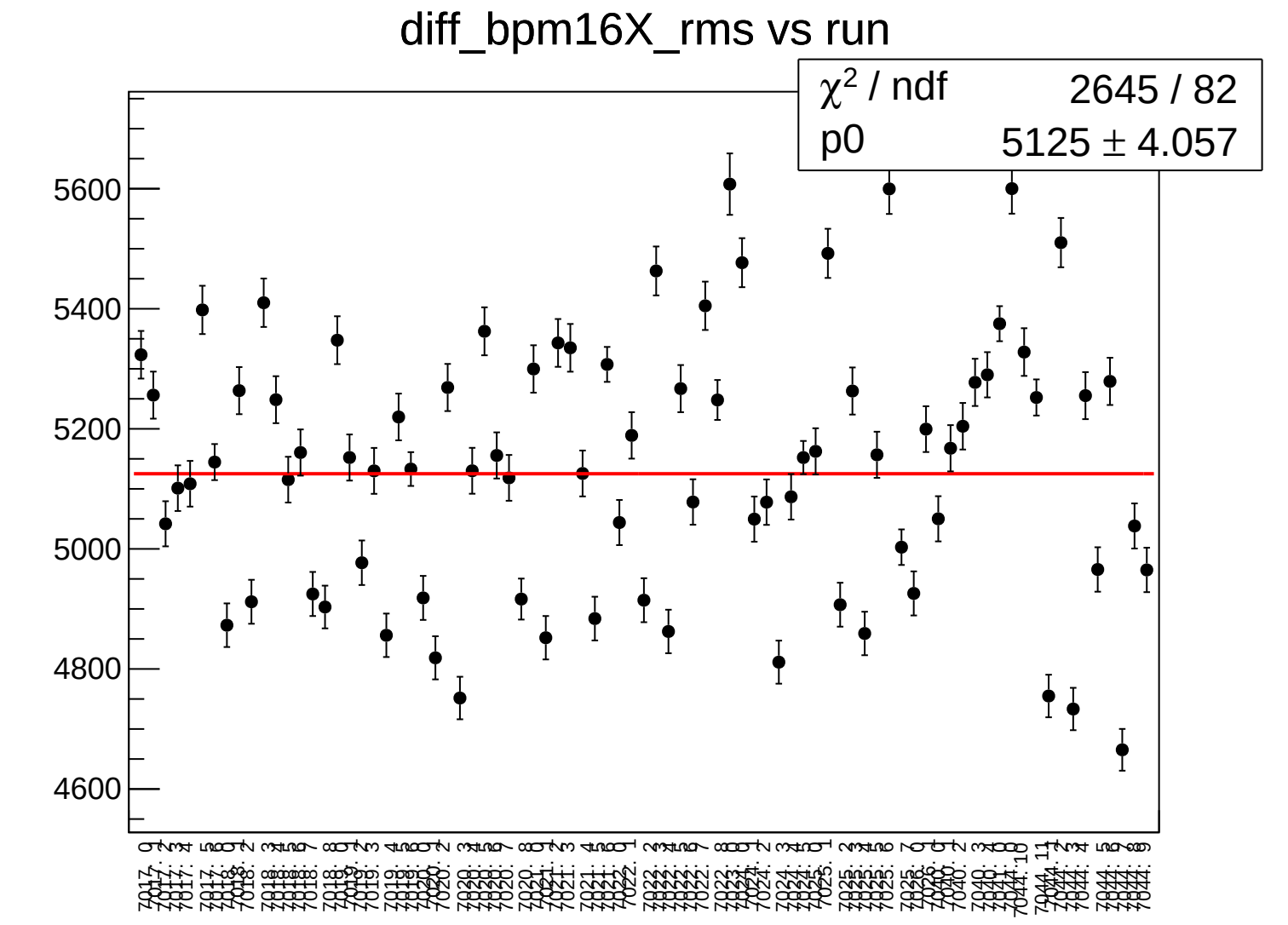

diff_bpm12Y_mean vs run
χ² / ndf 73.68 / 82
p0 0.4605 ± 5.221
pull
Entries 83
Mean 137.5
Std Dev 111.1

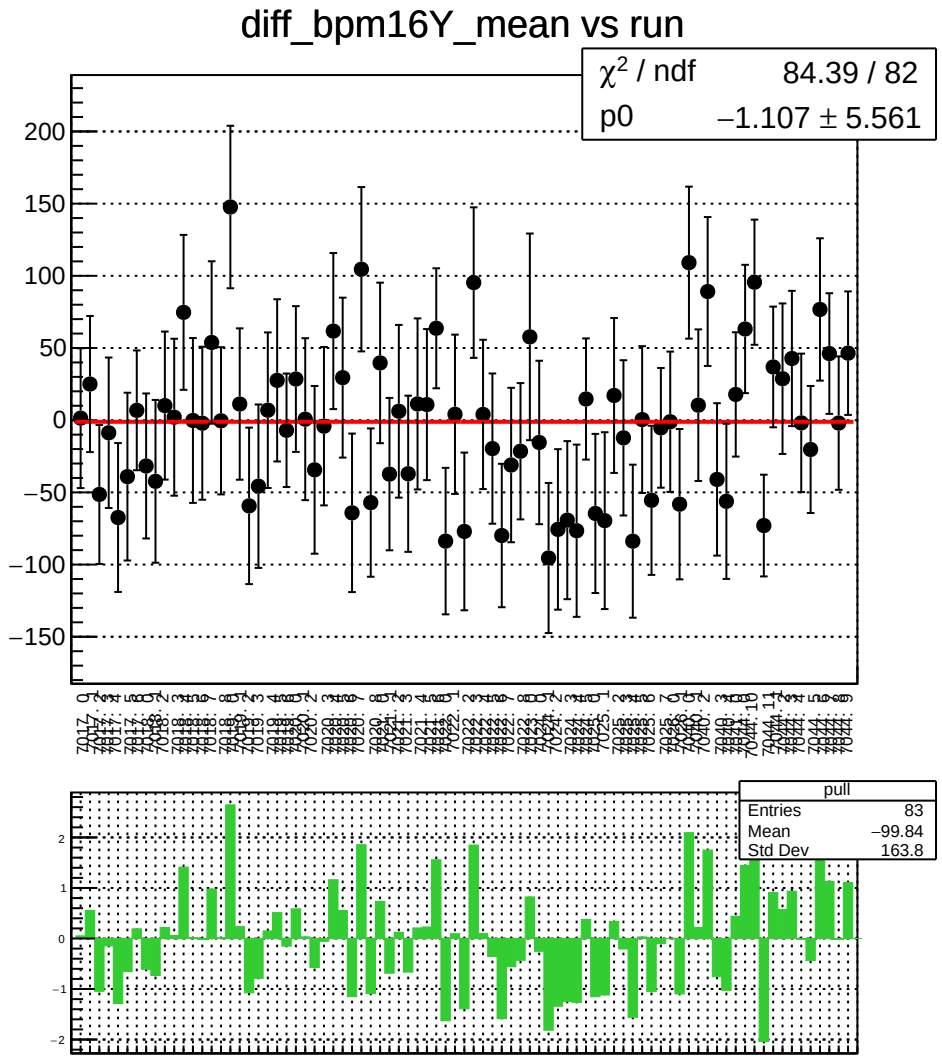

pull1D
Entries 83
Mean −0.01742
Std Dev 0.942

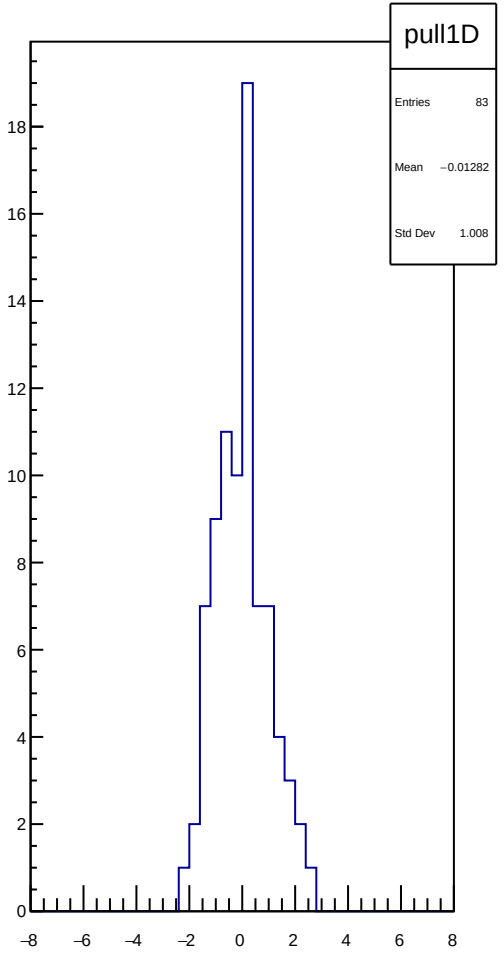

diff_bpm12Y_rms vs run
χ² / ndf 1.361e+04 / 82
p0 4647 ± 3.692
5500
5000
4500
4000
3500

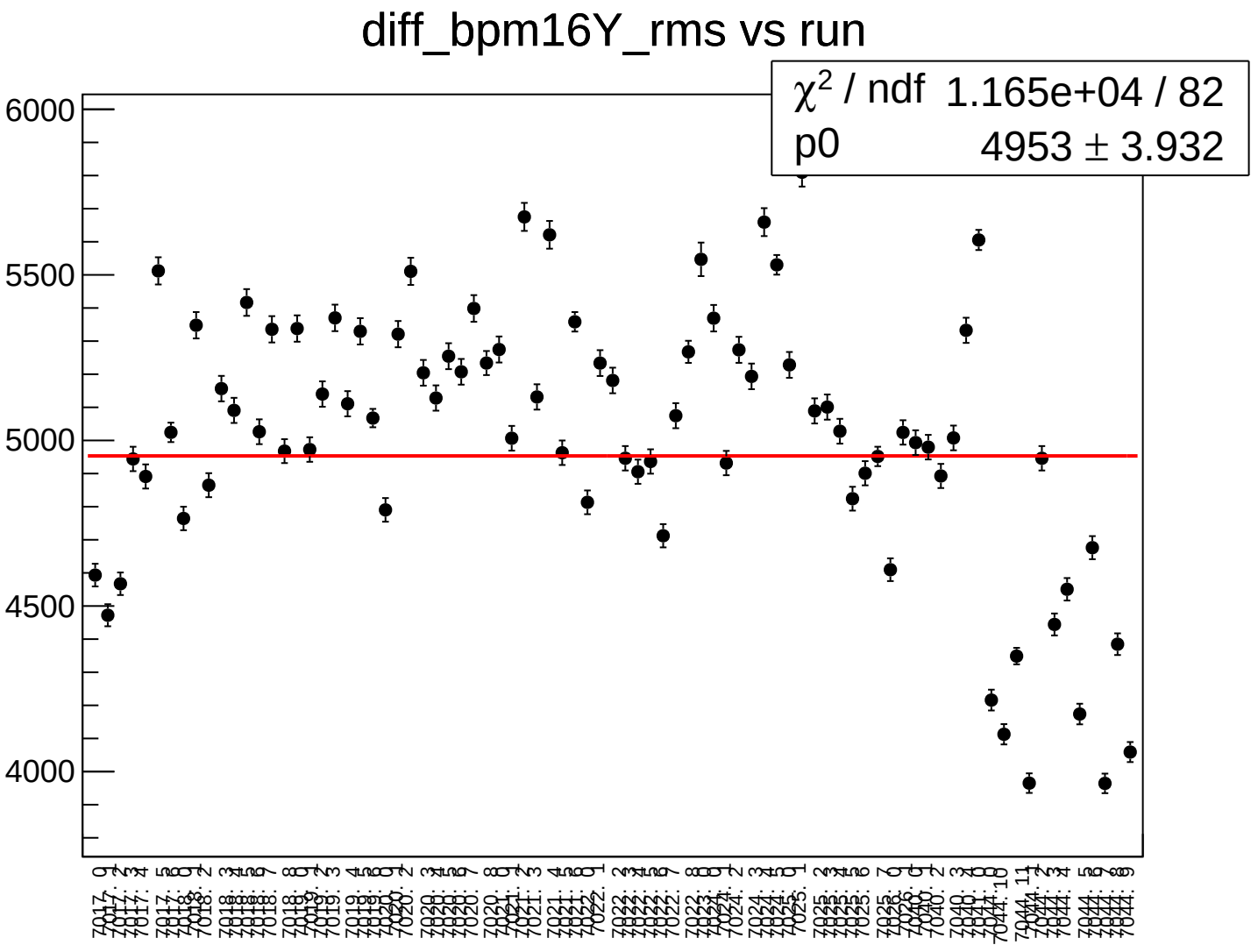

diff_bpm16X_mean vs run
χ² / ndf 79.18 / 82
p0 −6.786 ± 5.738
pull
Entries 83
Mean −1347
Std Dev 1391

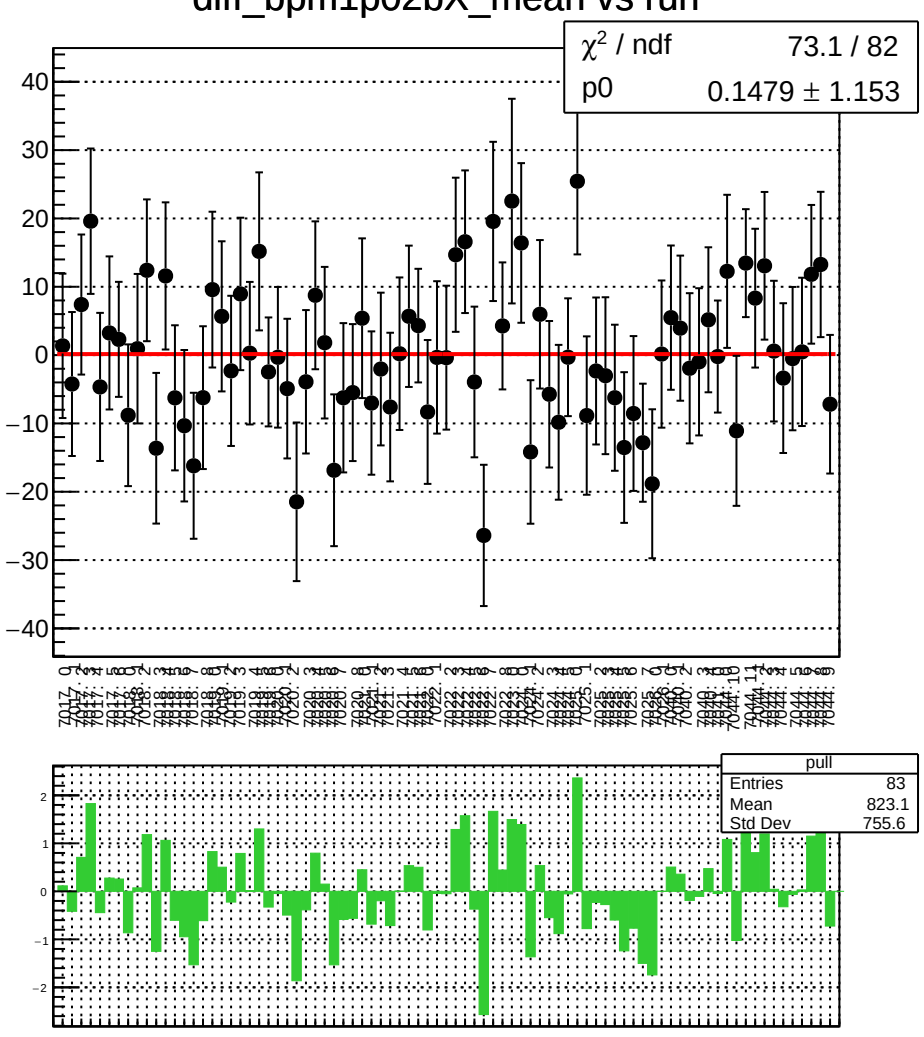

pull1D
Entries 83
Mean −0.003995
Std Dev 0.9767

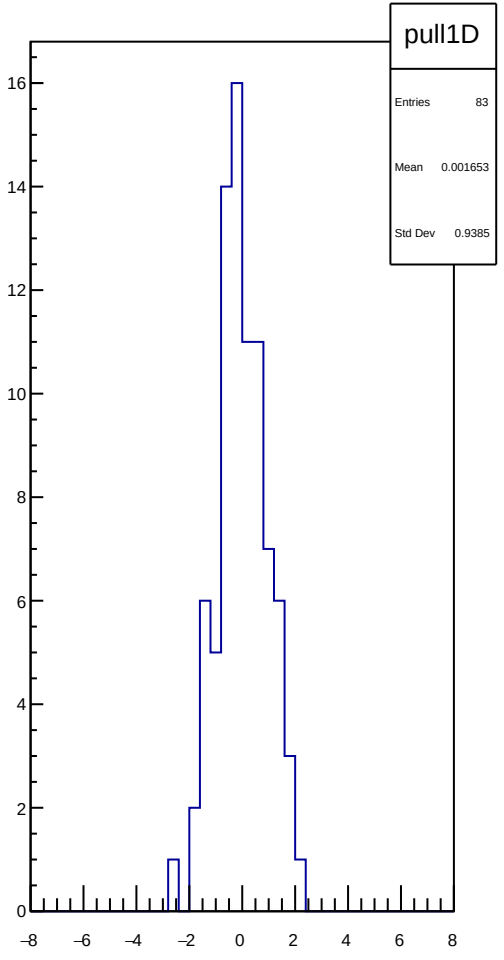

diff_bpm16X_rms vs run
χ^2 / ndf 2645 / 82
p0 5125 ± 4.057
5600
5400
5200
5000
4800
4600

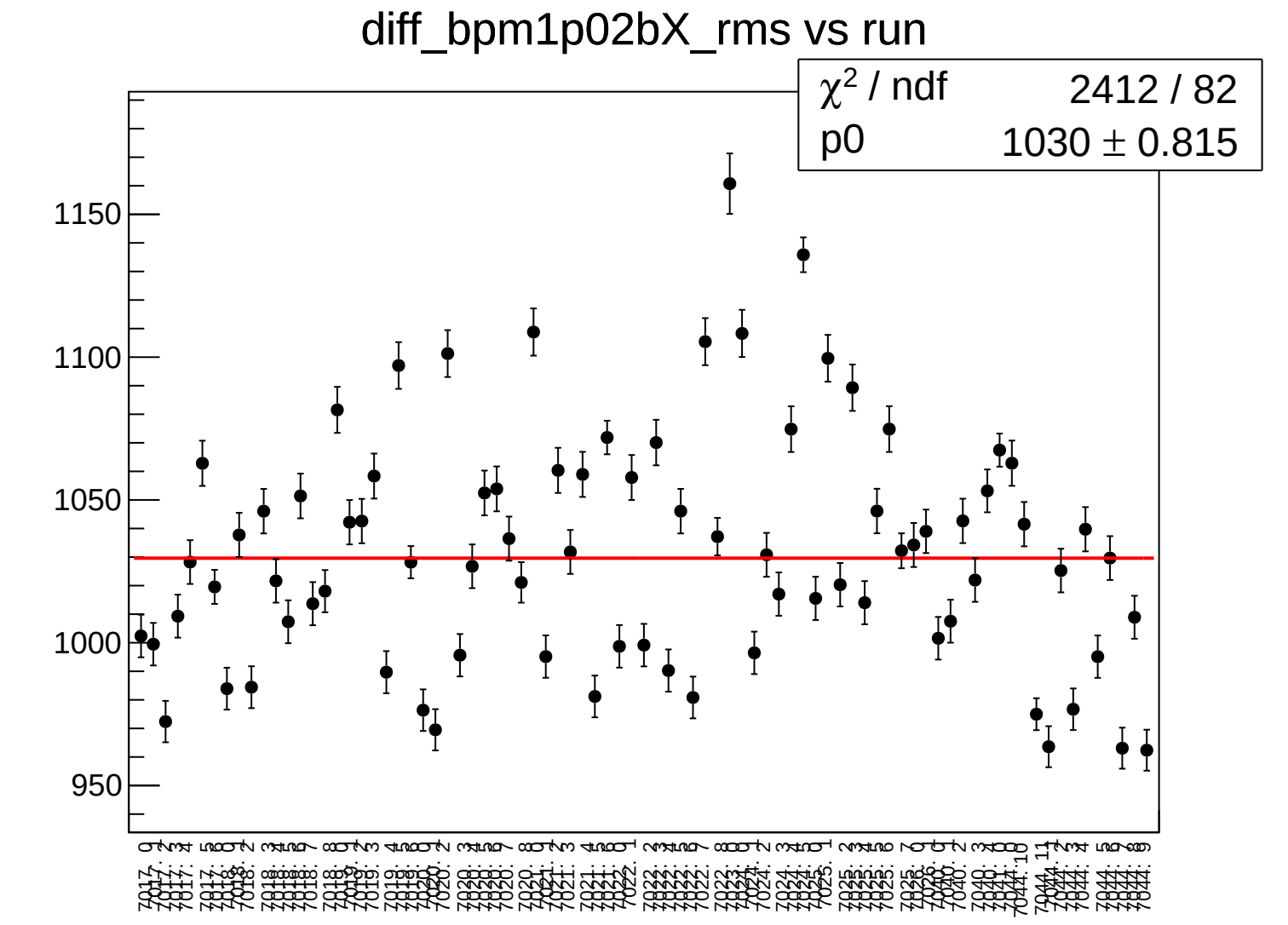

diff_bpm16Y_mean vs run
χ² / ndf 84.39 / 82
p0 −1.107 ± 5.561
pull
Entries 83
Mean −99.84
Std Dev 163.8

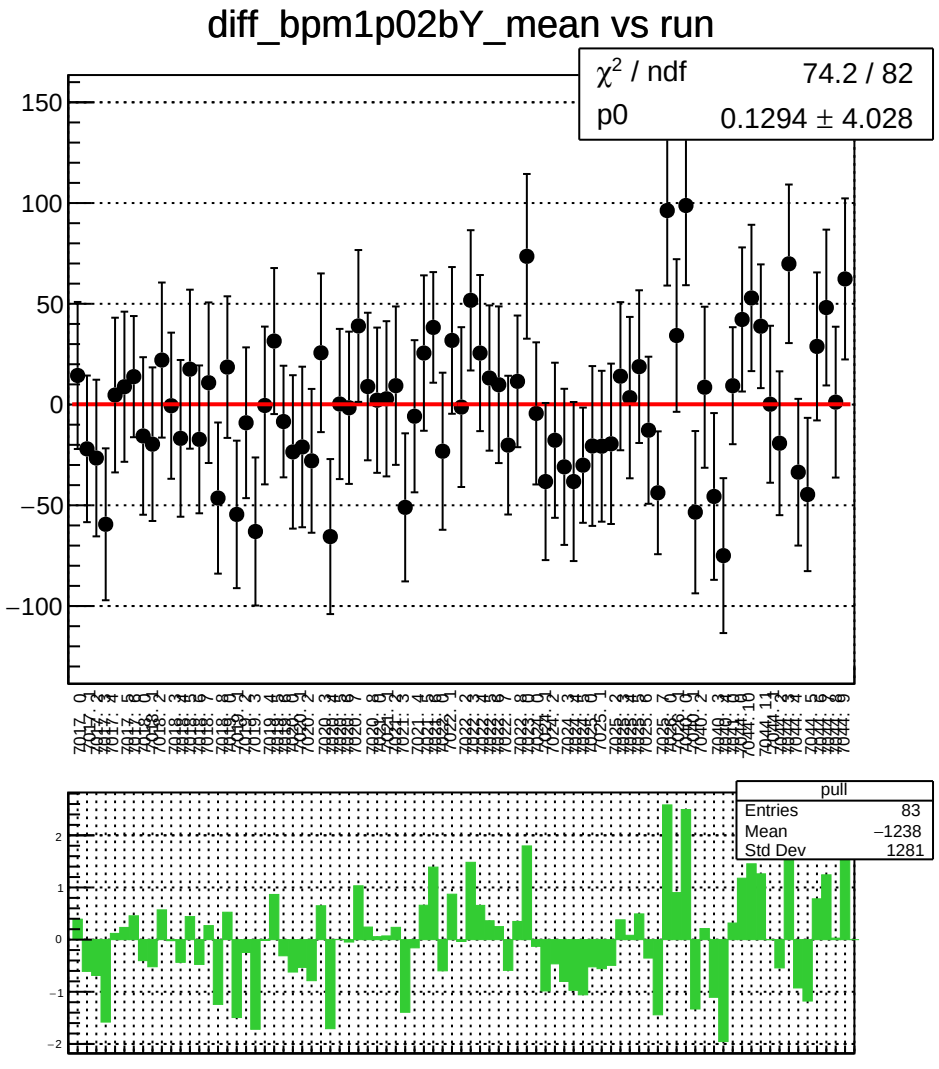

pull1D
Entries 83
Mean −0.01282
Std Dev 1.008

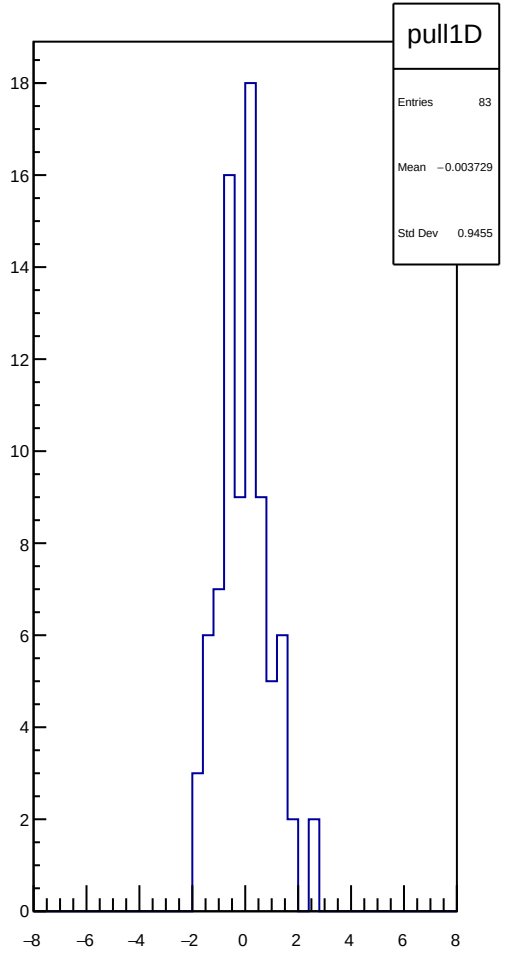

diff_bpm16Y_rms vs run
χ² / ndf 1.165e+04 / 82
p0 4953 ± 3.932
6000
5500
5000
4500
4000

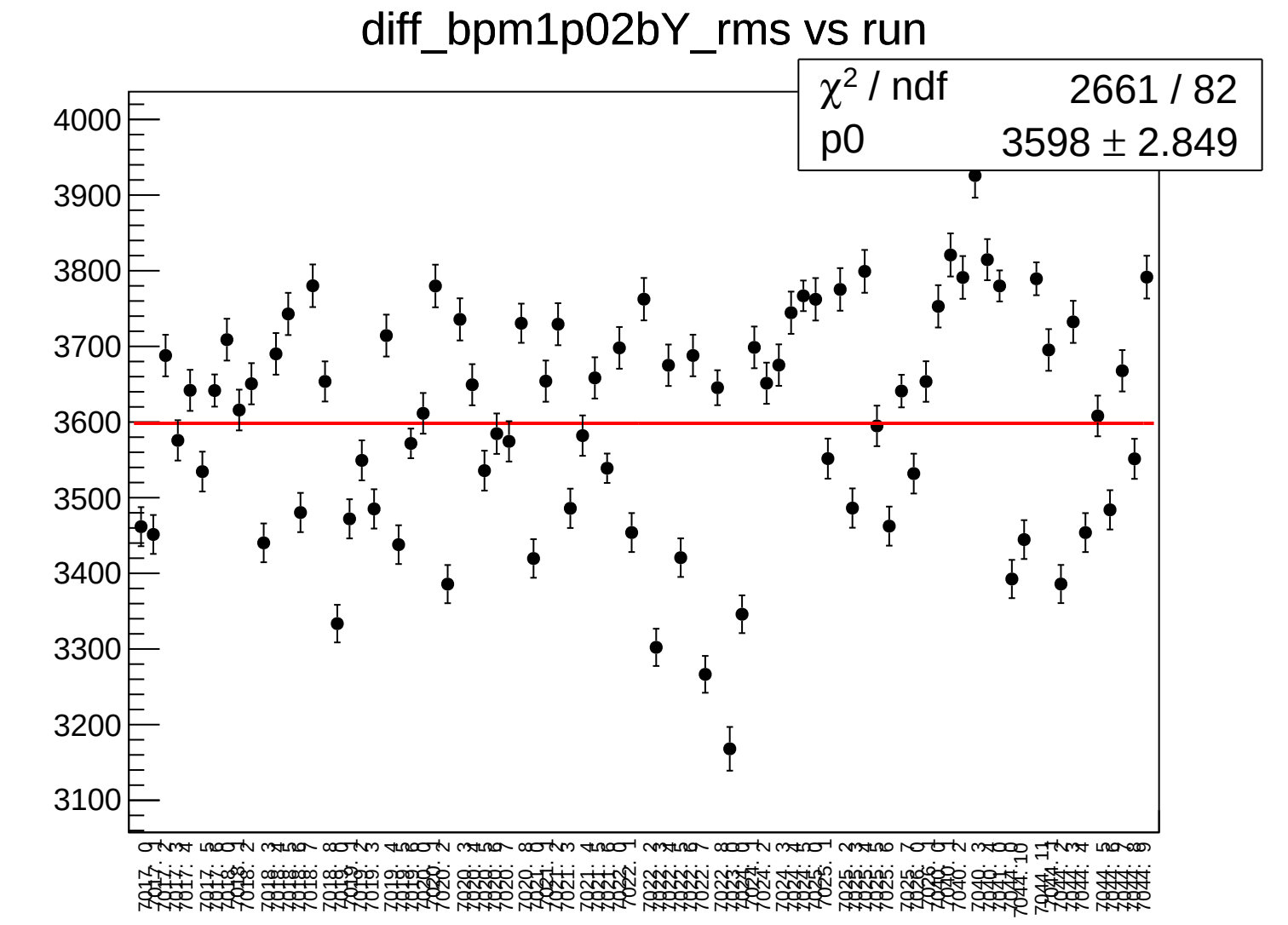

diff_bpm1p02bX_mean vs run
χ² / ndf 73.1 / 82
p0 0.1479 ± 1.153
pull
Entries 83
Mean 823.1
Std Dev 755.6

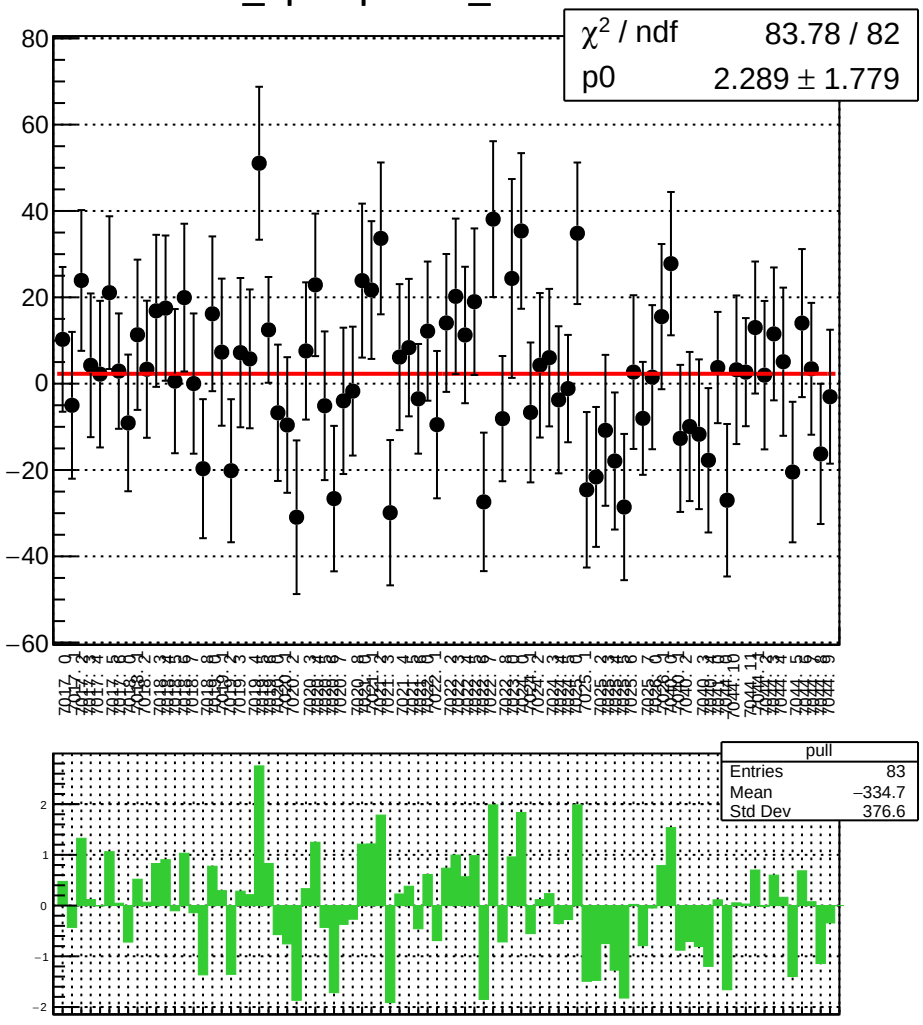

pull1D
Entries 83
Mean 0.001653
Std Dev 0.9385

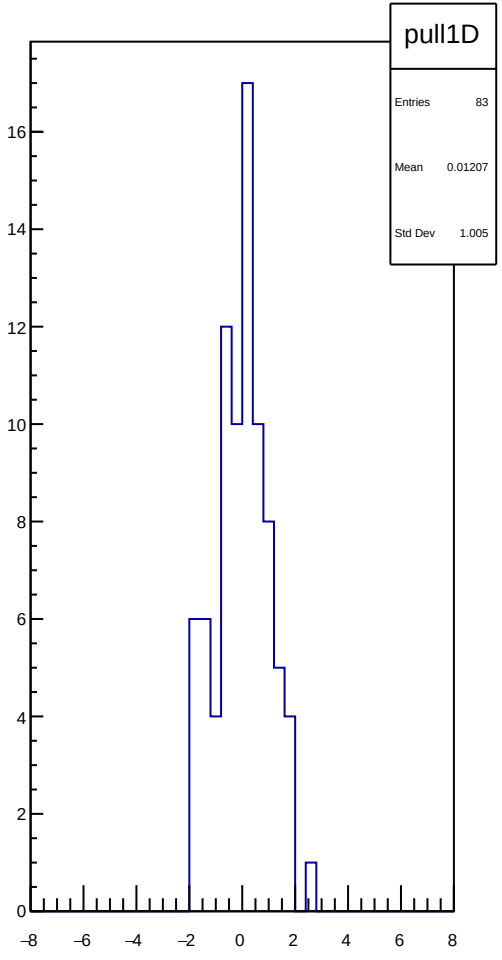

diff_bpm1p02bX_rms vs run
χ² / ndf 2412 / 82
p0 1030 ± 0.815
1150
1100
1050
1000
950

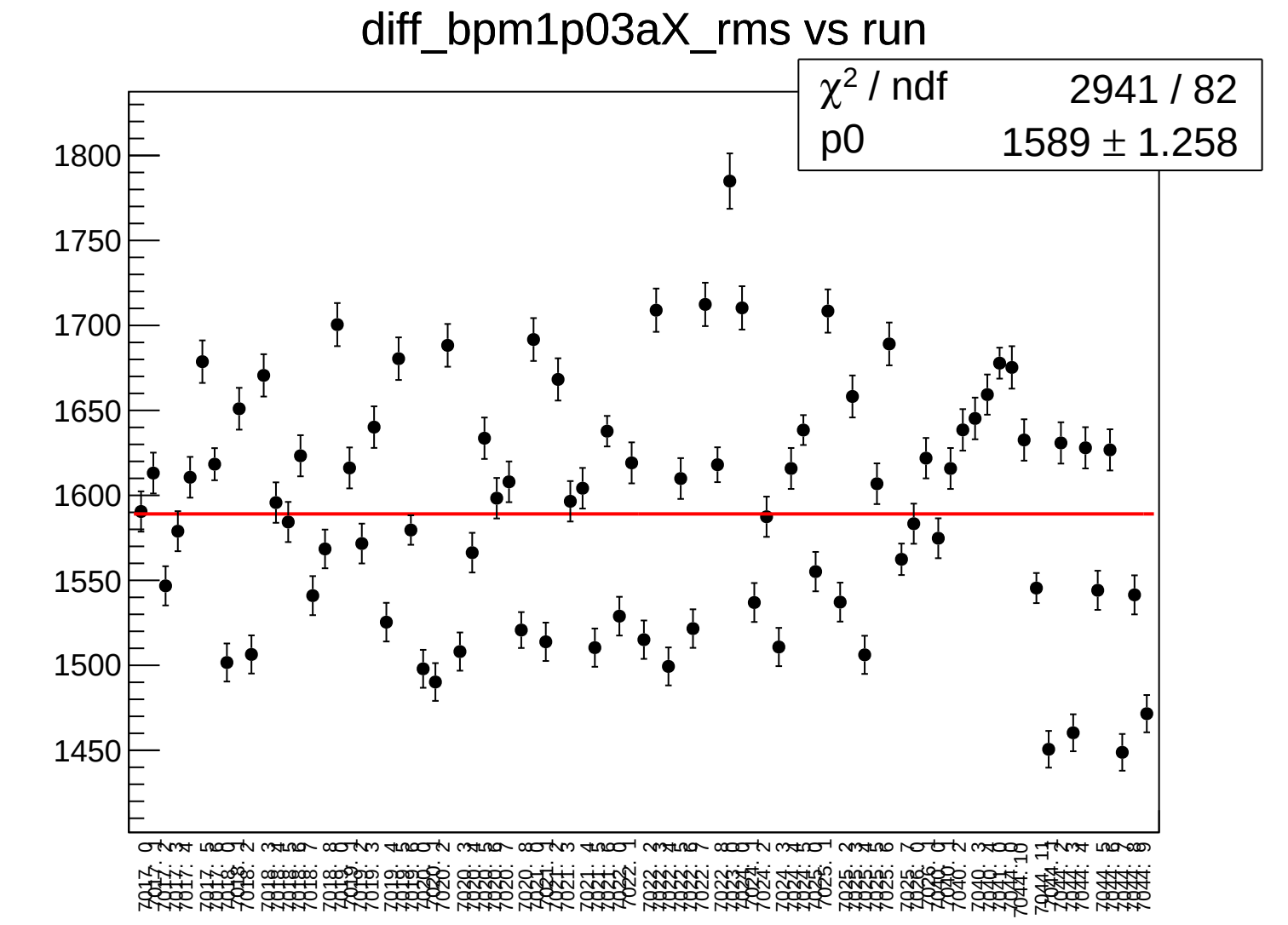

diff_bpm1p02bY_mean vs run
χ² / ndf 74.2 / 82
p0 0.1294 ± 4.028
150
100
50
0
−50
−100
pull
Entries 83
Mean −1238
Std Dev 1281
2
1
0
−1
−2

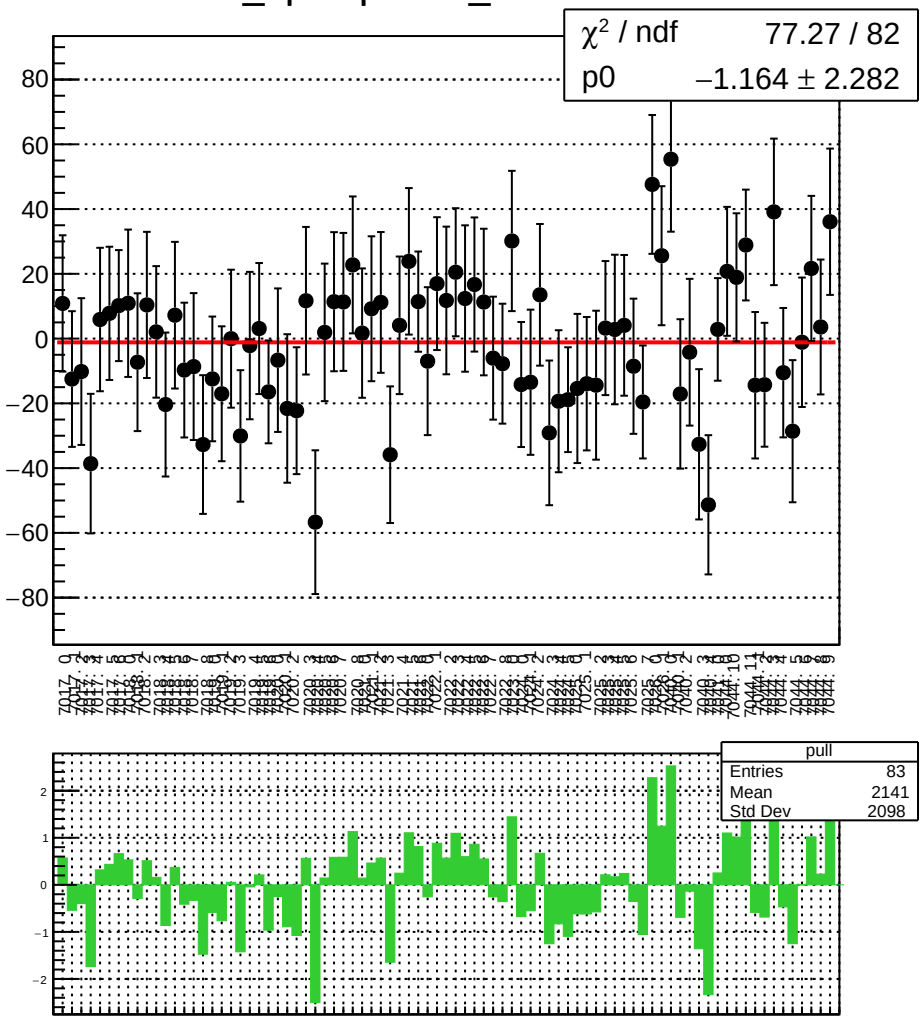

pull1D
Entries 83
Mean −0.003729
Std Dev 0.9455
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

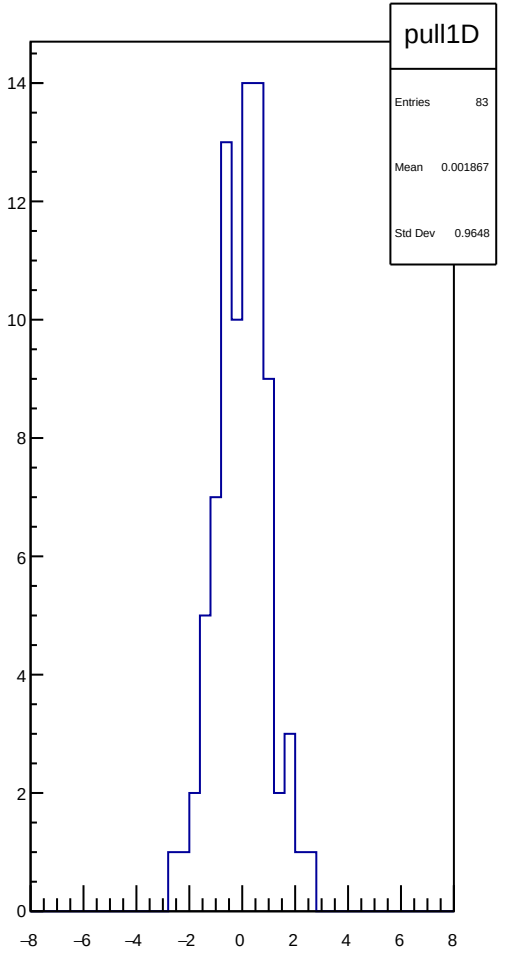

diff_bpm1p02bY_rms vs run
χ² / ndf 2661 / 82
p0 3598 ± 2.849
4000
3900
3800
3700
3600
3500
3400
3300
3200
3100

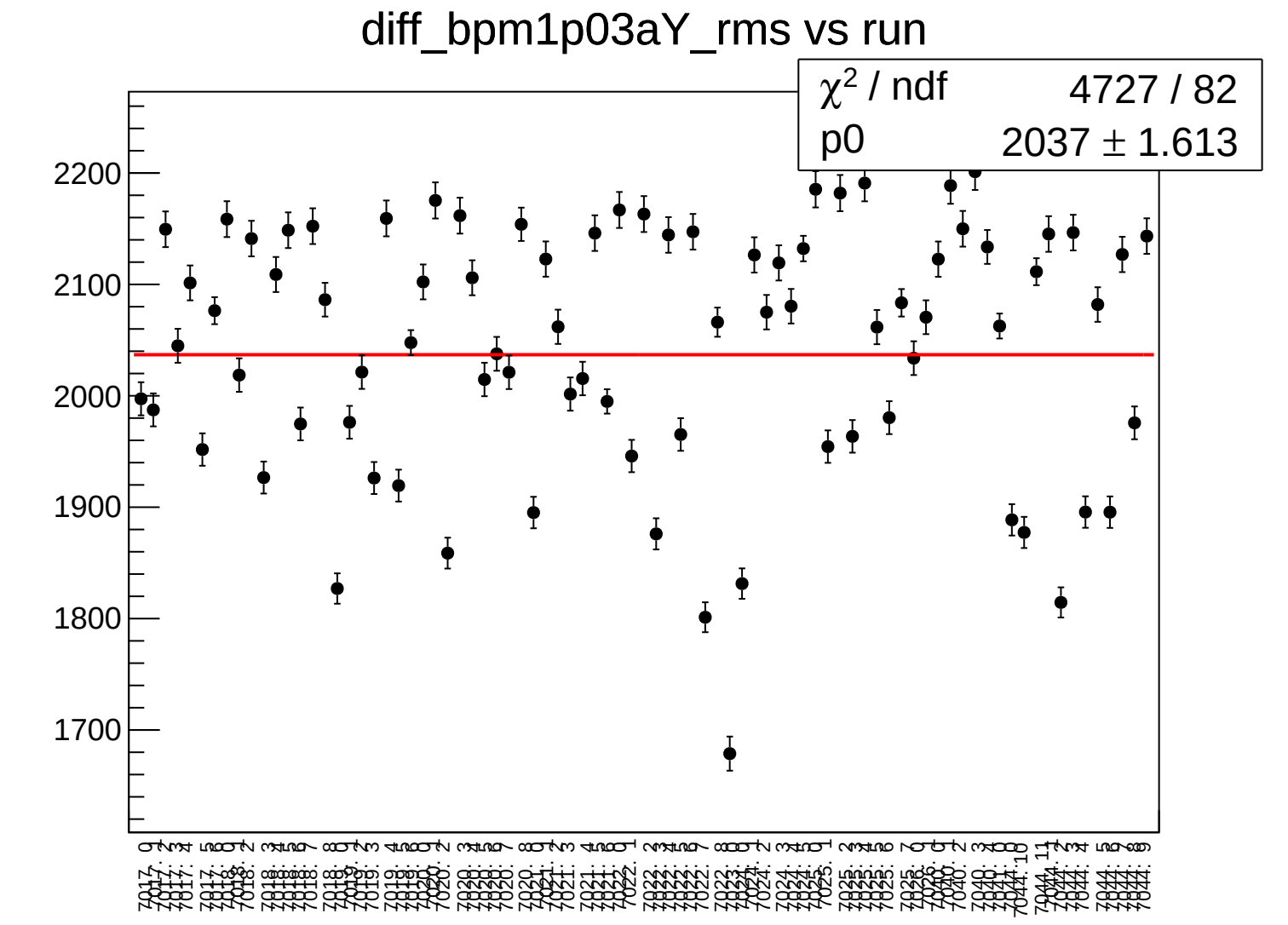

diff_bpm1p03aX_mean vs run
χ^2 / ndf 83.78 / 82
p0 2.289 ± 1.779
pull
Entries 83
Mean −334.7
Std Dev 376.6

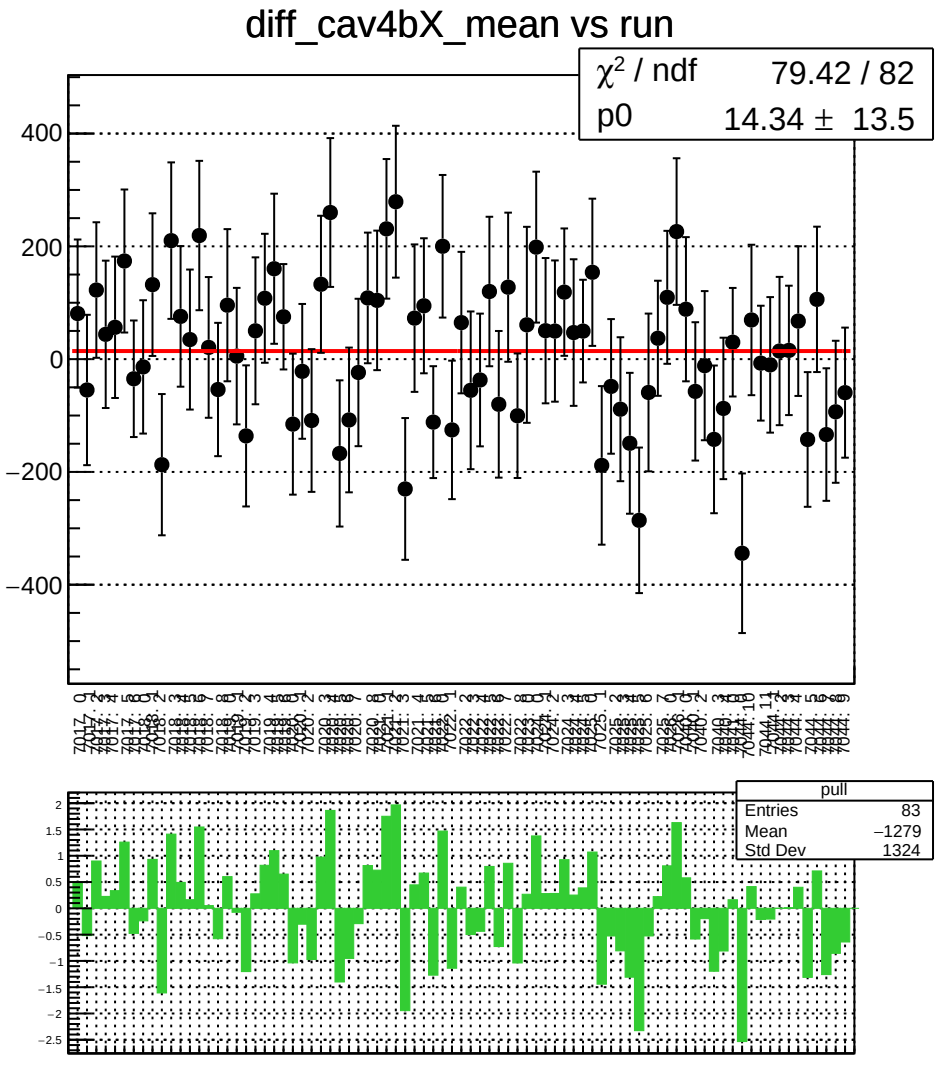

pull1D
Entries 83
Mean 0.01207
Std Dev 1.005

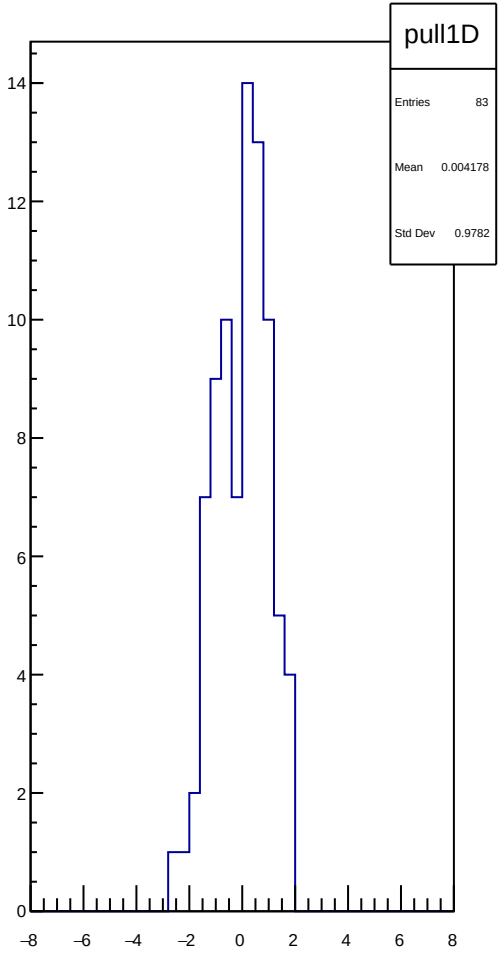

diff_bpm1p03aX_rms vs run
χ² / ndf 2941 / 82
p0 1589 ± 1.258
1800
1750
1700
1650
1600
1550
1500
1450

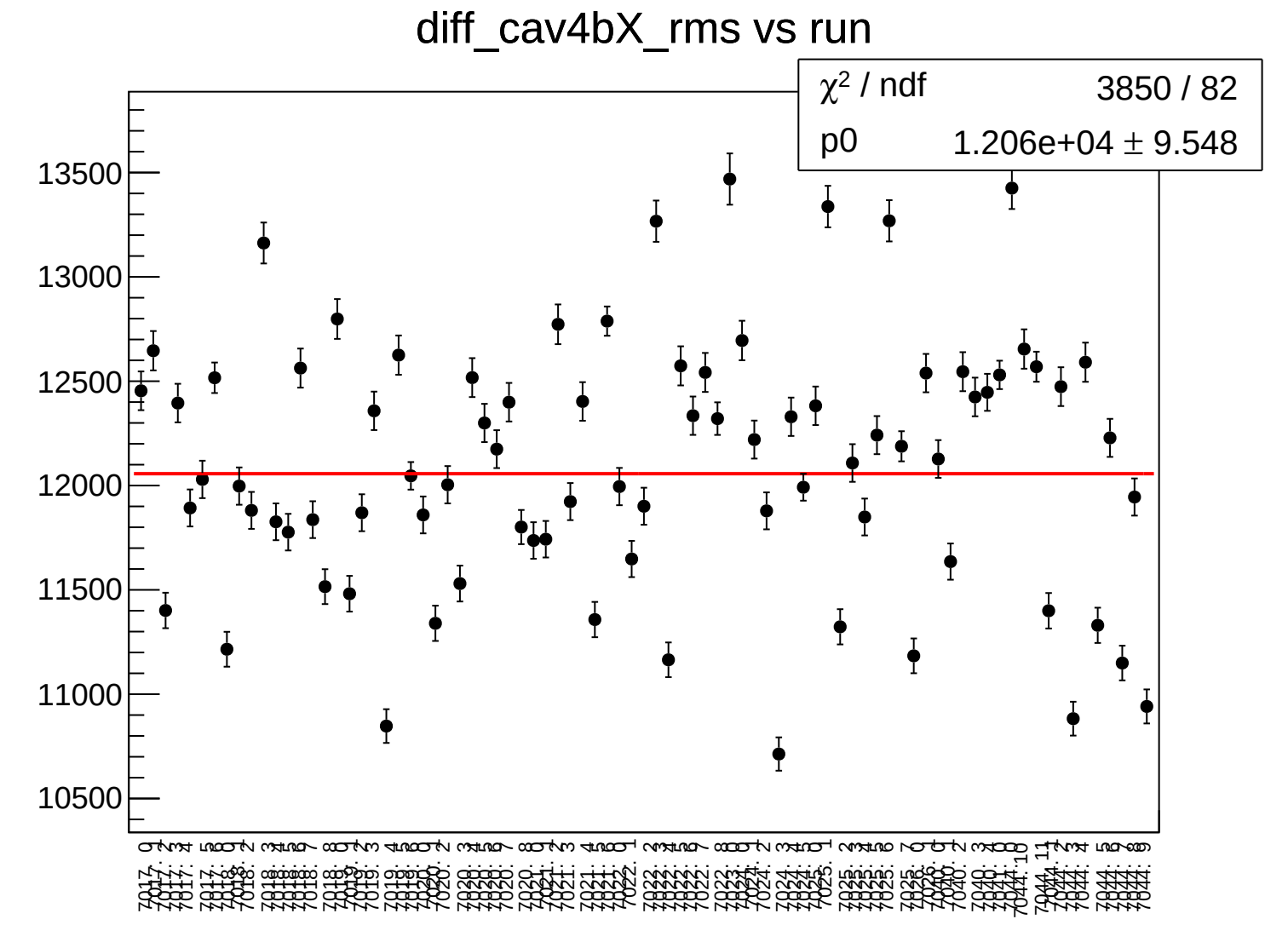

diff_bpm1p03aY_mean vs run
χ² / ndf 77.27 / 82
p0 −1.164 ± 2.282
pull
Entries 83
Mean 2141
Std Dev 2098

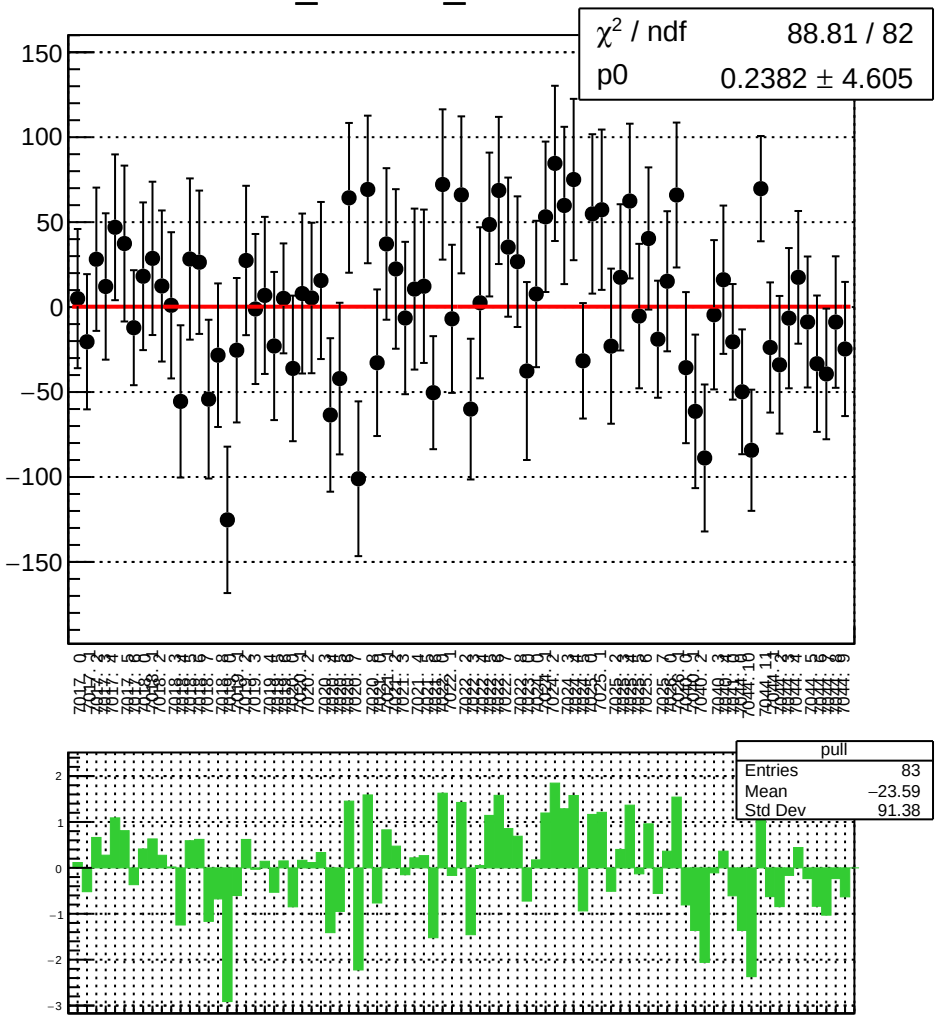

pull1D
Entries 83
Mean 0.001867
Std Dev 0.9648

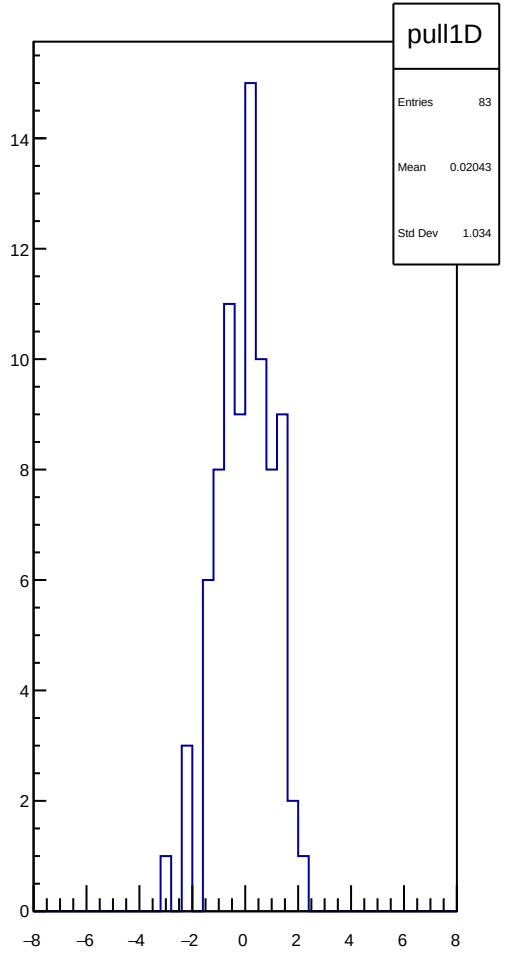

diff_bpm1p03aY_rms vs run
χ² / ndf 4727 / 82
p0 2037 ± 1.613
2200
2100
2000
1900
1800
1700

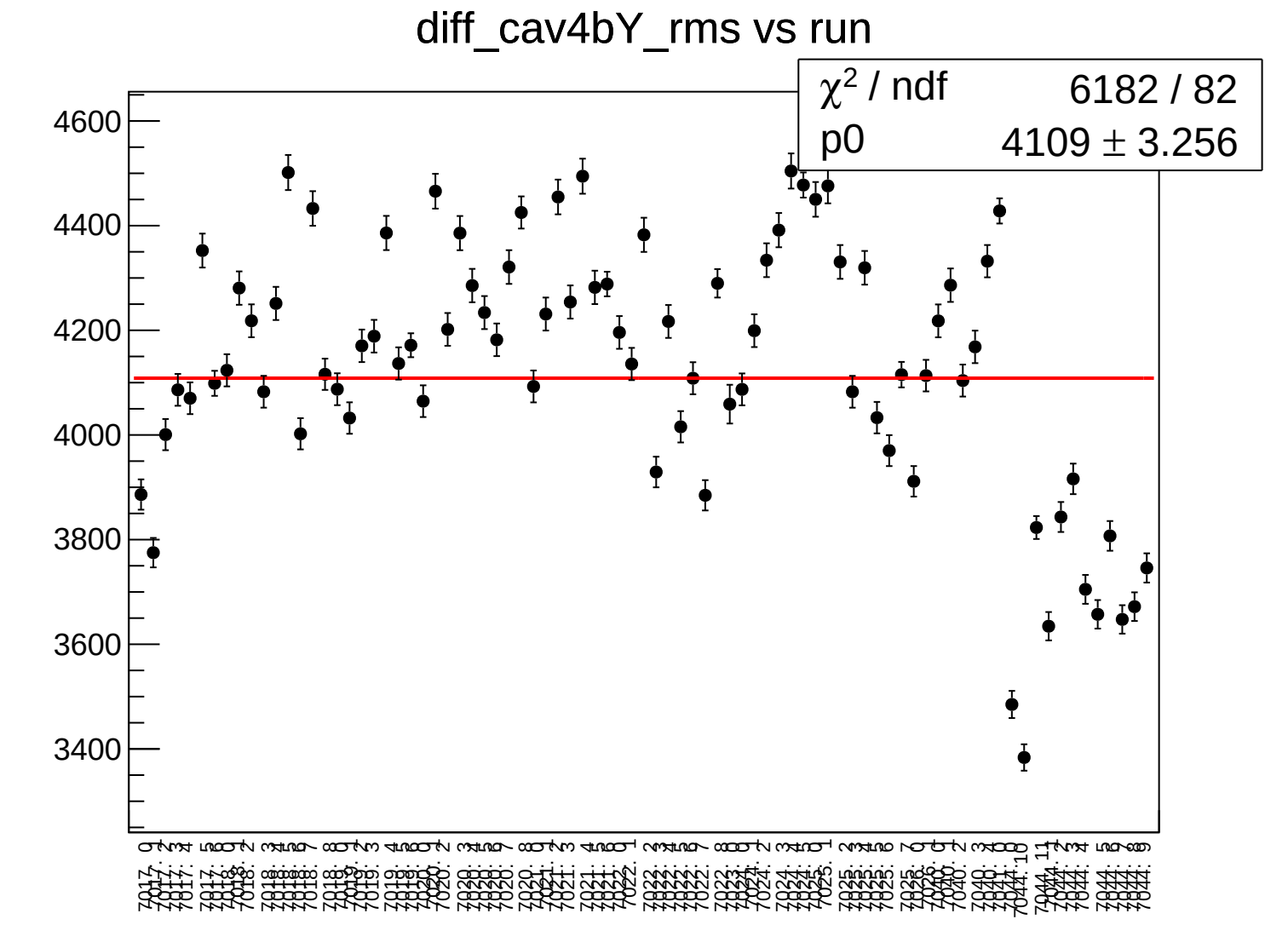

diff_cav4bX_mean vs run
χ² / ndf 79.42 / 82
p0 14.34 ± 13.5
pull
Entries 83
Mean −1279
Std Dev 1324

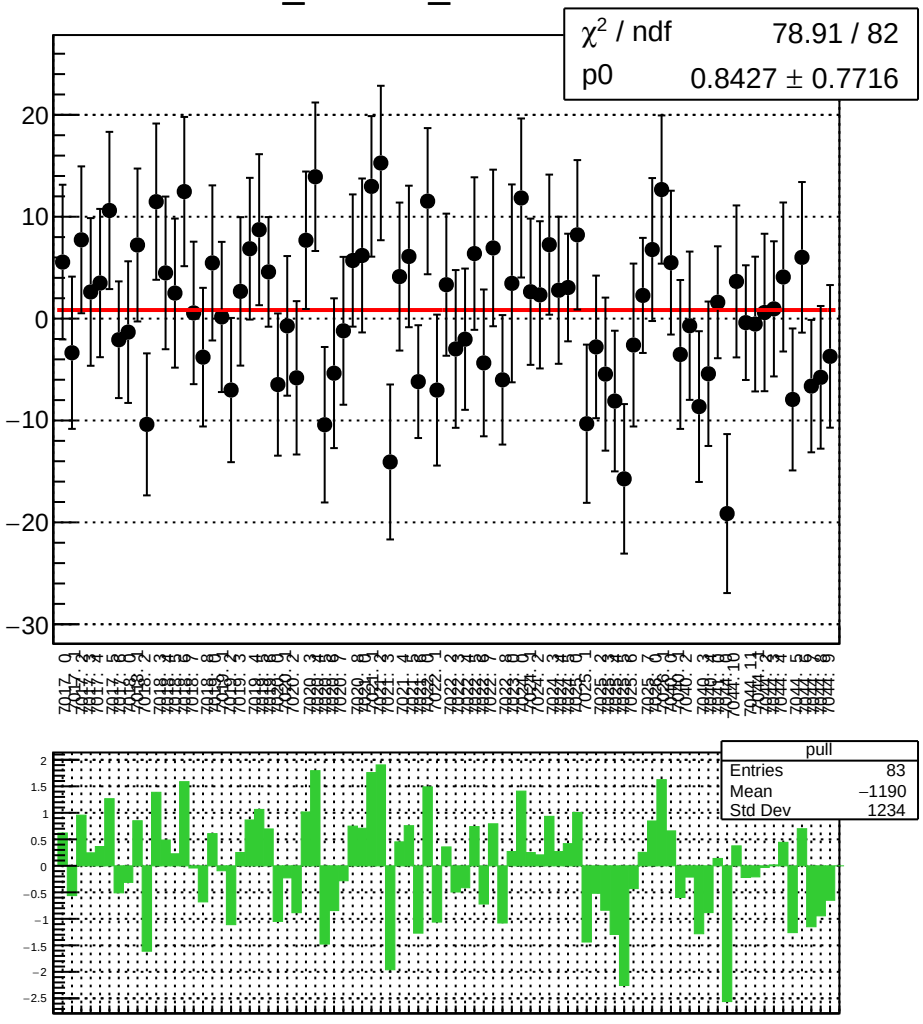

pull1D
Entries 83
Mean 0.004178
Std Dev 0.9782

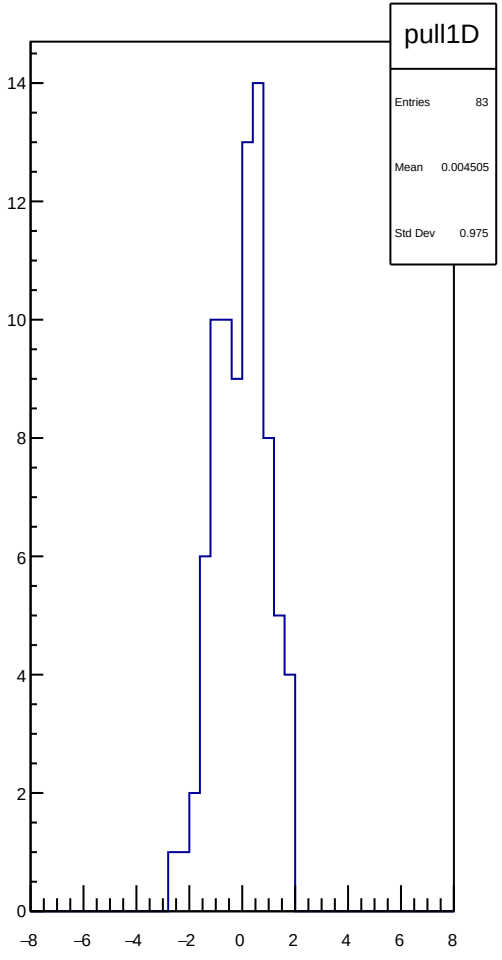

diff_cav4bX_rms vs run
χ² / ndf 3850 / 82
p0 1.206e+04 ± 9.548
13500
13000
12500
12000
11500
11000
10500

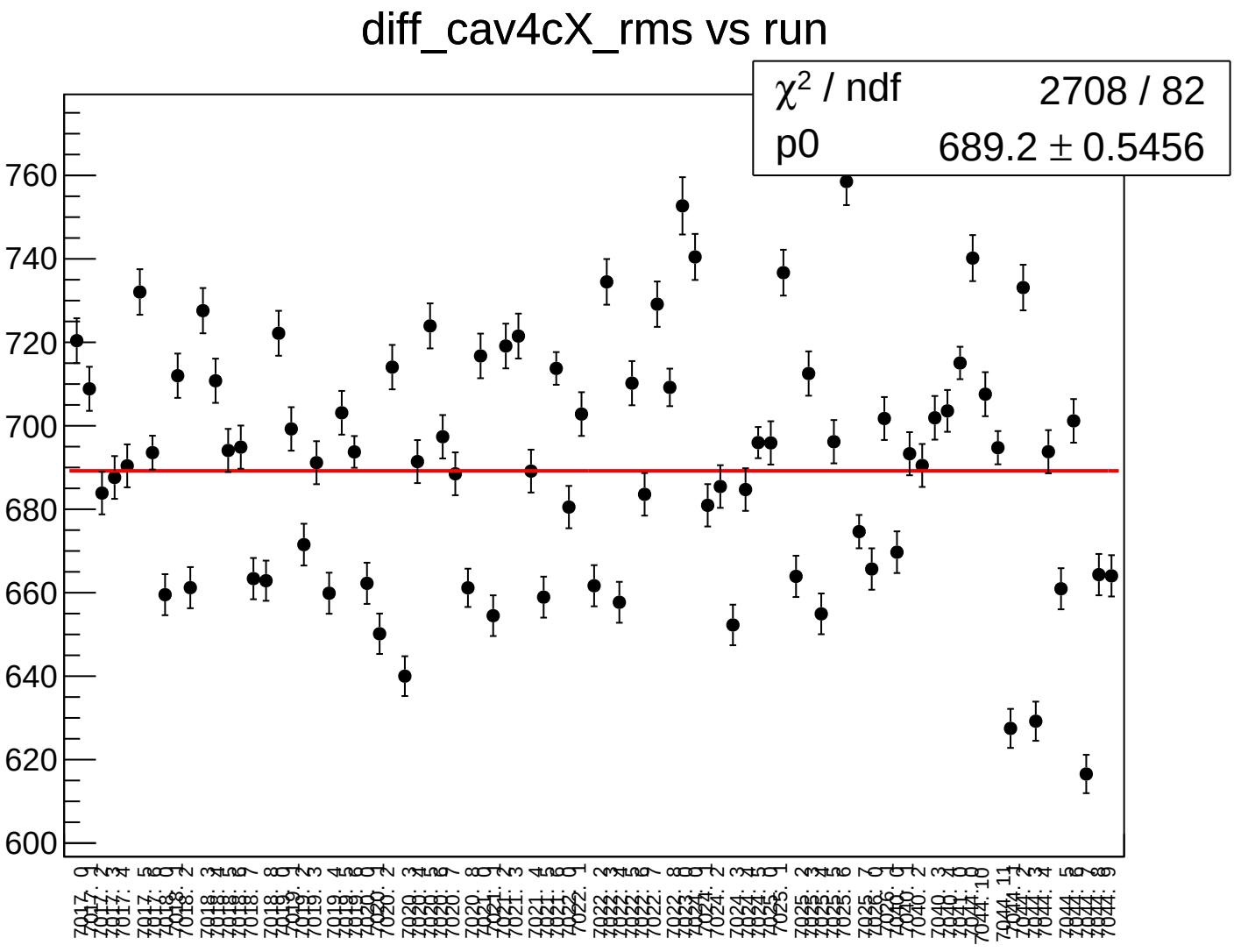

diff_cav4bY_mean vs run
χ² / ndf 88.81 / 82
p0 0.2382 ± 4.605
150
100
50
0
−50
−100
−150
pull
Entries 83
Mean −23.59
Std Dev 91.38
2
1
0
−1
−2
−3

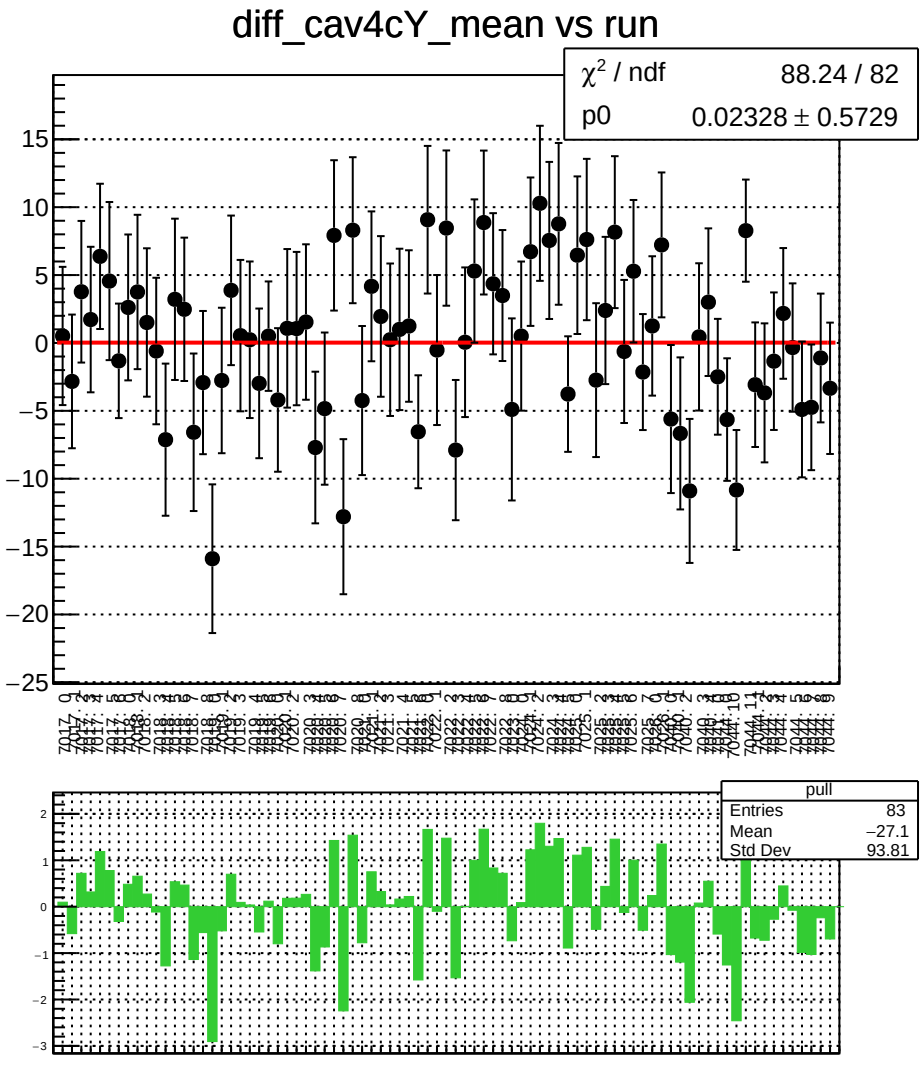

pull1D
Entries 83
Mean 0.02043
Std Dev 1.034
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

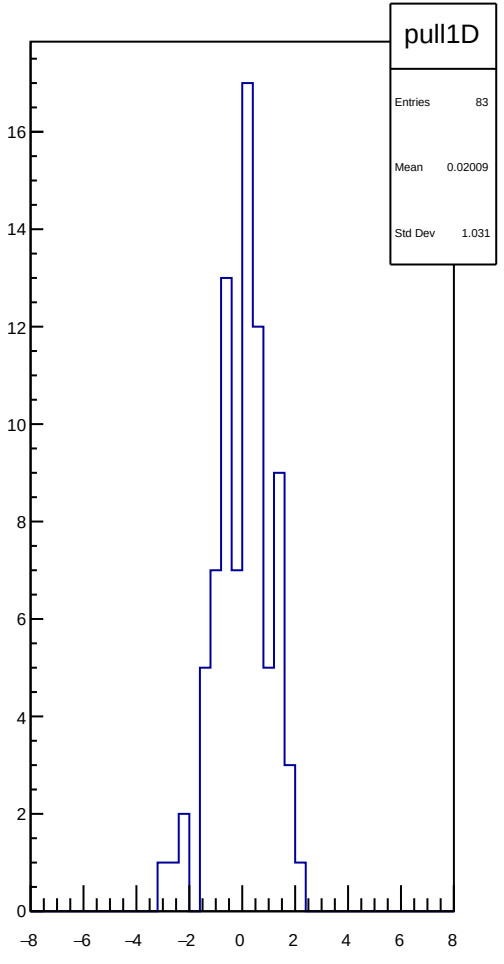

diff_cav4bY_rms vs run
χ² / ndf 6182 / 82
p0 4109 ± 3.256
4600
4400
4200
4000
3800
3600
3400

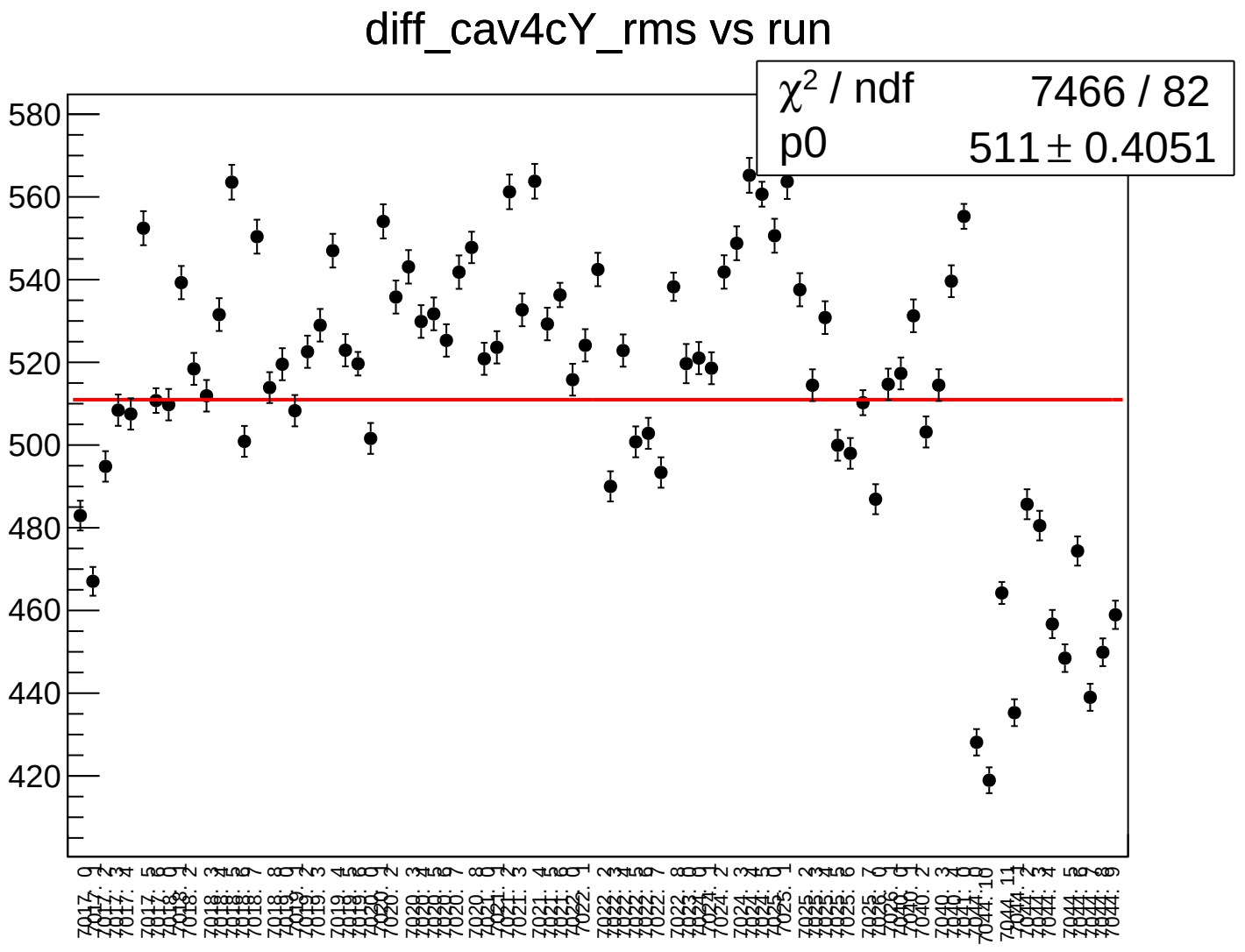

diff_cav4cX_mean vs run
χ² / ndf 78.91 / 82
p0 0.8427 ± 0.7716
pull
Entries 83
Mean −1190
Std Dev 1234

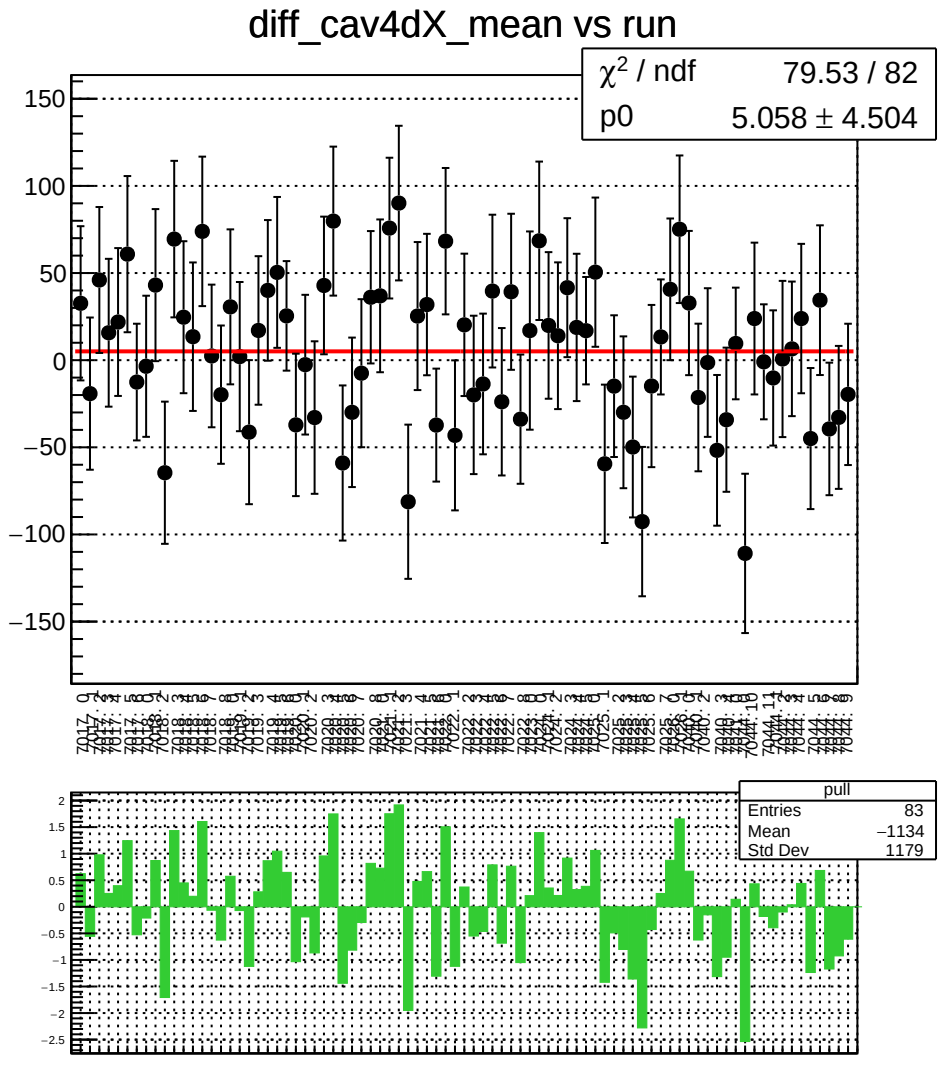

pull1D
Entries 83
Mean 0.004505
Std Dev 0.975

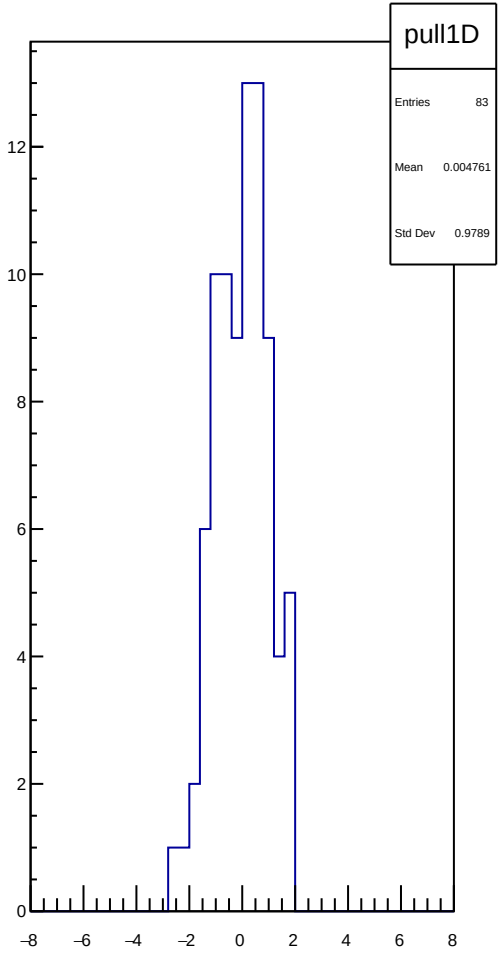

diff_cav4cX_rms vs run
χ² / ndf 2708 / 82
p0 689.2 ± 0.5456
760
740
720
700
680
660
640
620
600

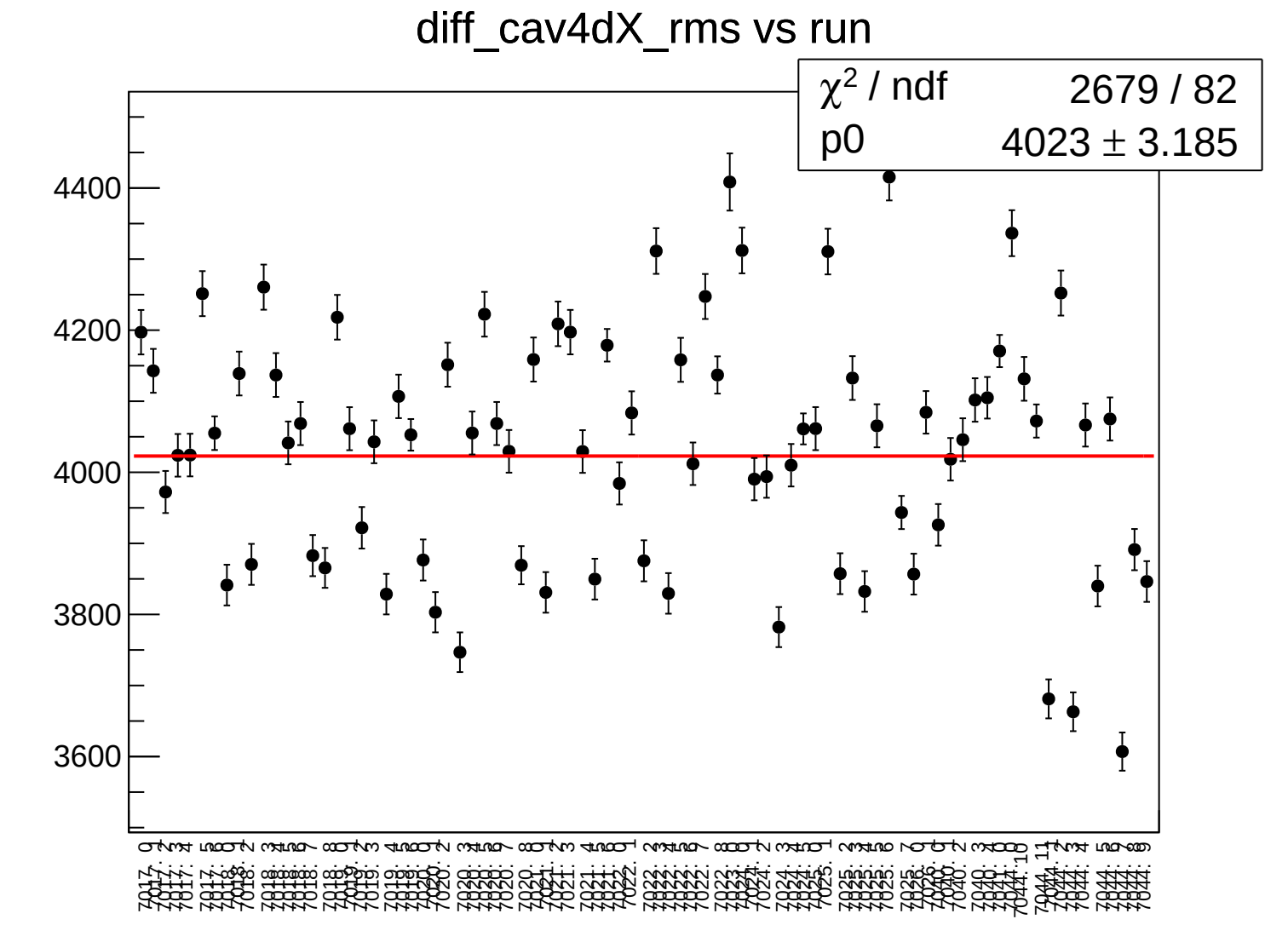

diff_cav4cY_mean vs run
χ² / ndf 88.24 / 82
p0 0.02328 ± 0.5729
pull
Entries 83
Mean −27.1
Std Dev 93.81

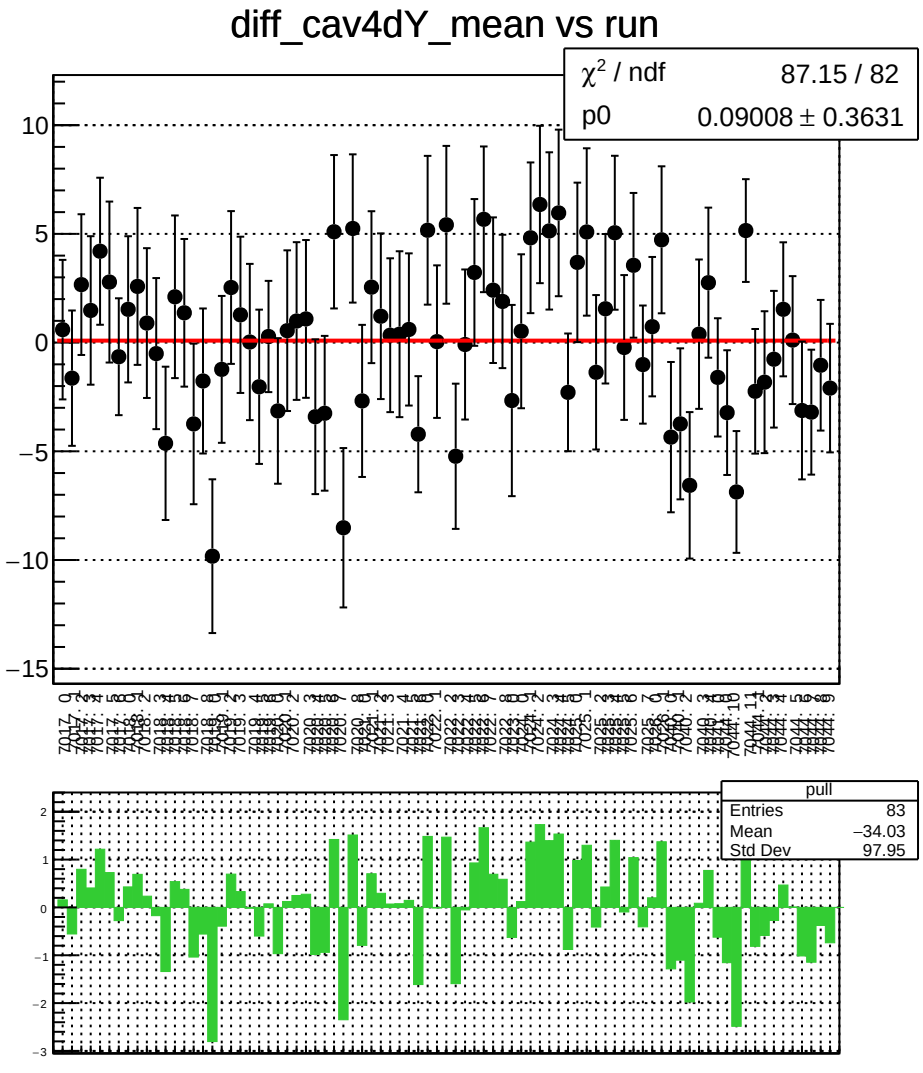

pull1D
Entries 83
Mean 0.02009
Std Dev 1.031

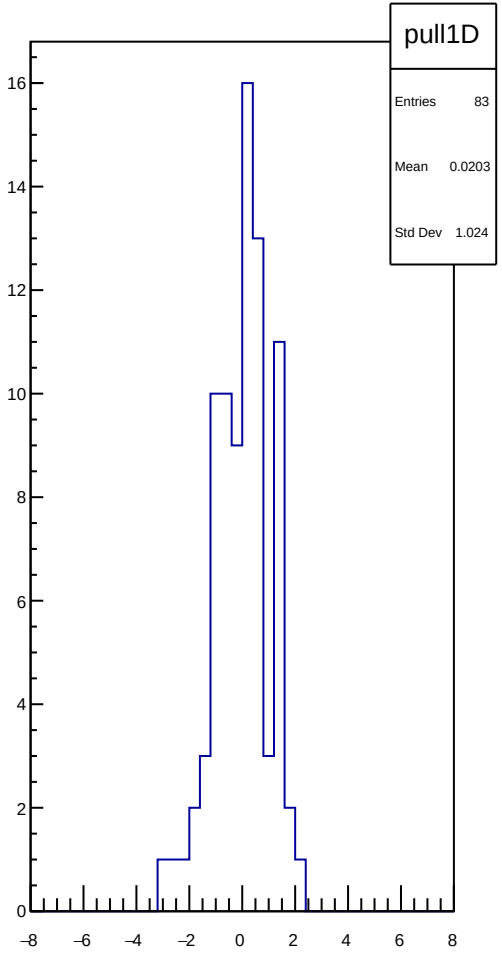

diff_cav4cY_rms vs run
χ² / ndf 7466 / 82
p0 511 ± 0.4051
580
560
540
520
500
480
460
440
420

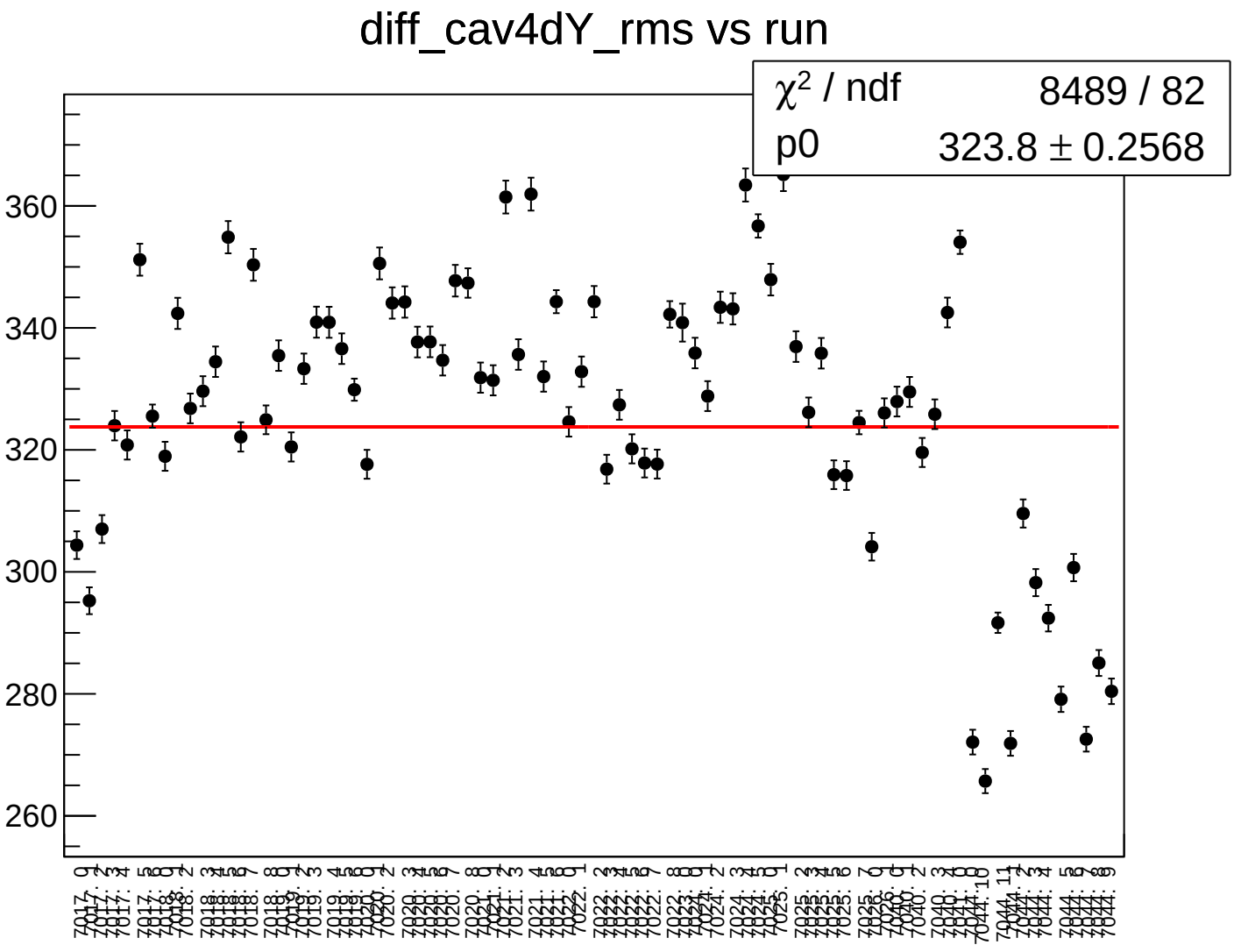

diff_cav4dX_mean vs run
χ² / ndf 79.53 / 82
p0 5.058 ± 4.504
150
100
50
0
−50
−100
−150
pull
Entries 83
Mean −1134
Std Dev 1179
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

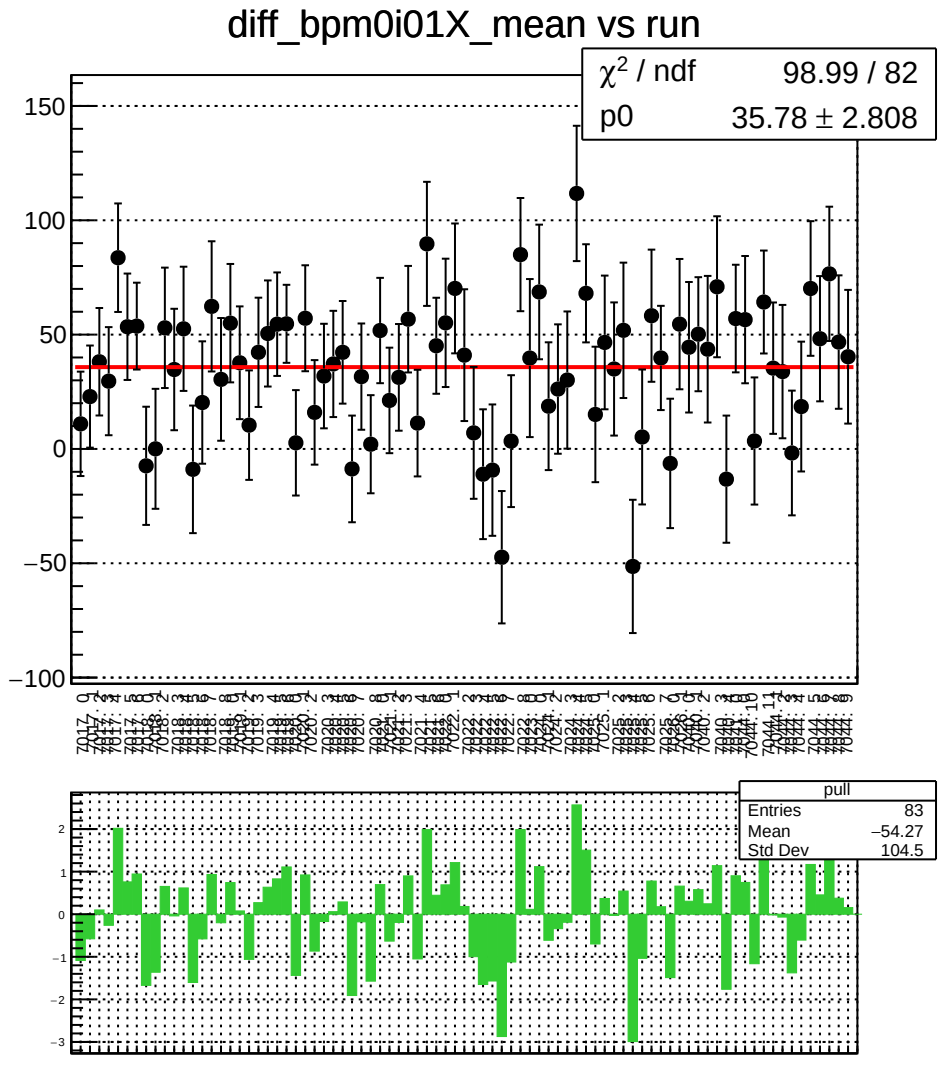

pull1D
Entries 83
Mean 0.004761
Std Dev 0.9789
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

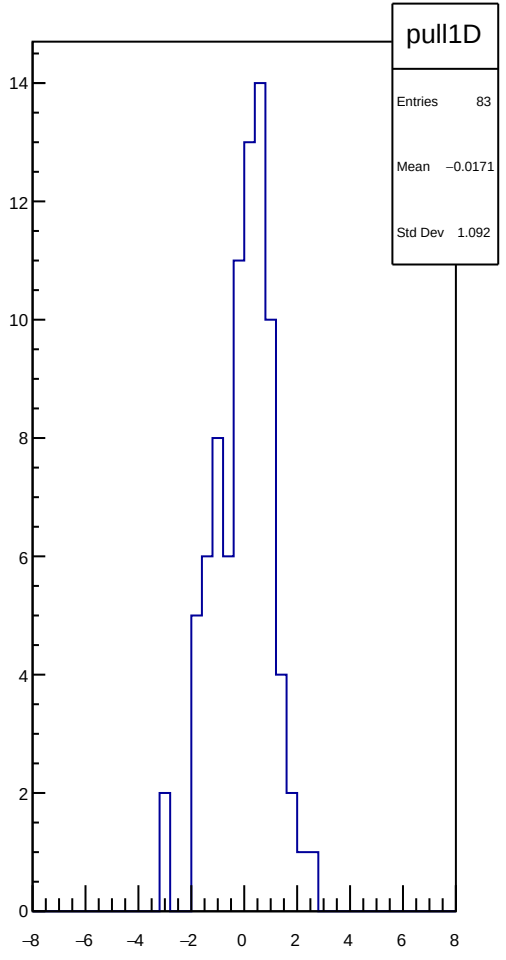

diff_cav4dX_rms vs run
χ² / ndf 2679 / 82
p0 4023 ± 3.185
4400
4200
4000
3800
3600

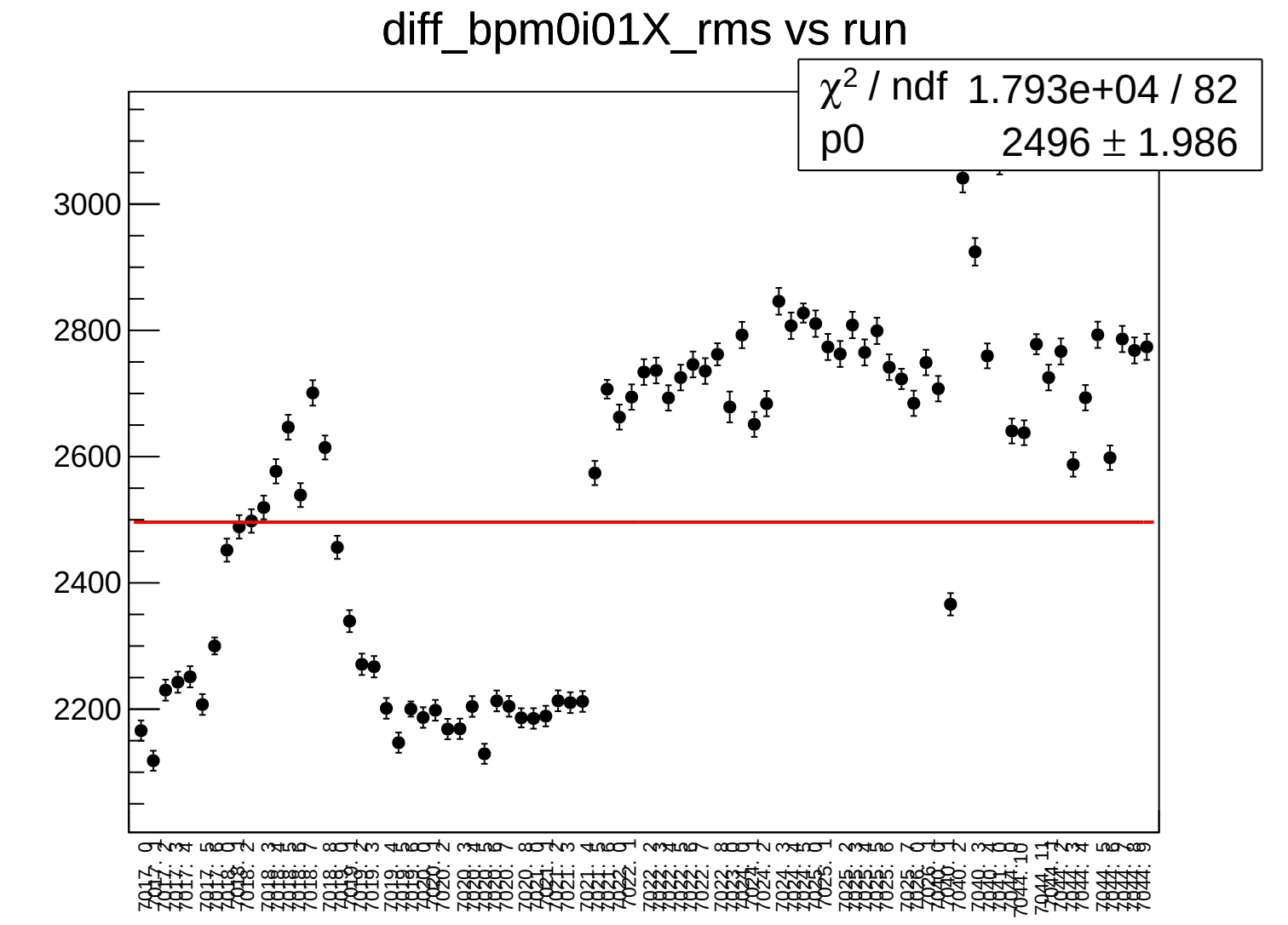

diff_cav4dY_mean vs run
χ^2 / ndf 87.15 / 82
p0 0.09008 ± 0.3631
pull
Entries 83
Mean −34.03
Std Dev 97.95

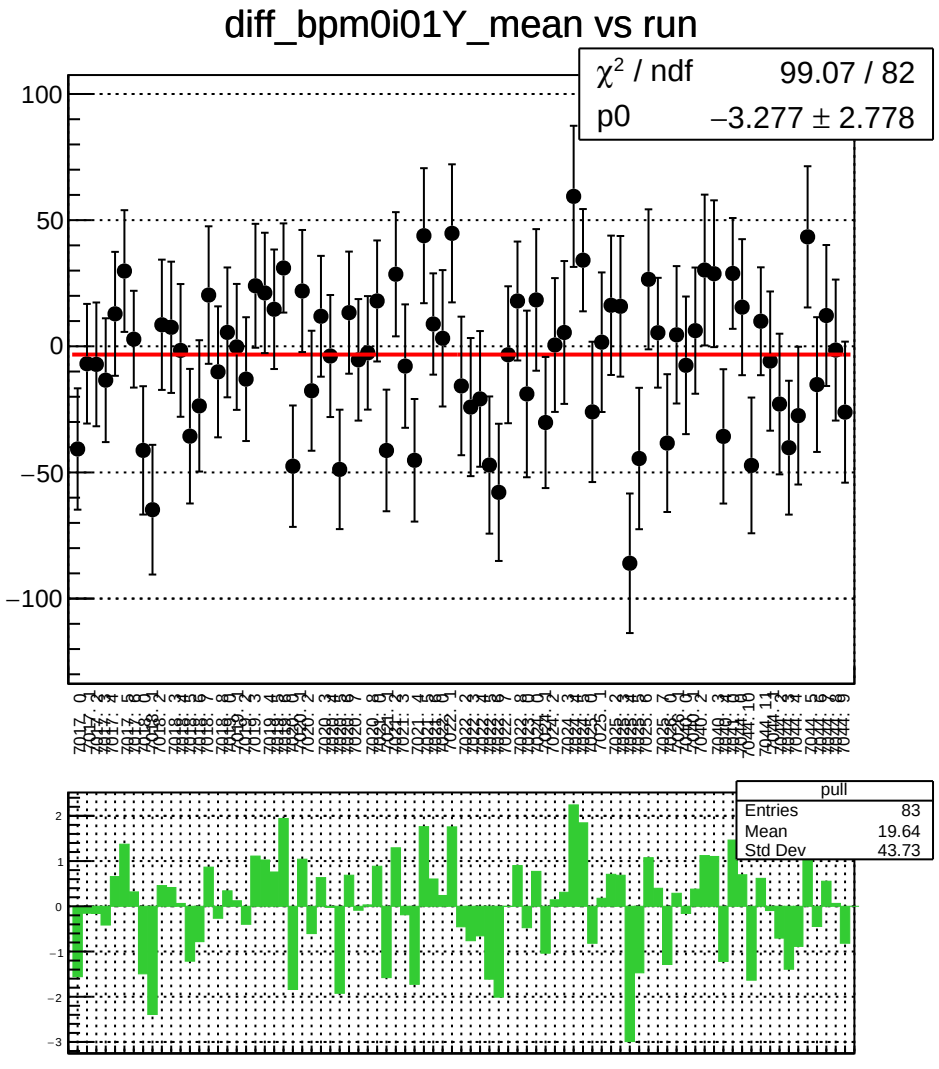

pull1D
Entries 83
Mean 0.0203
Std Dev 1.024

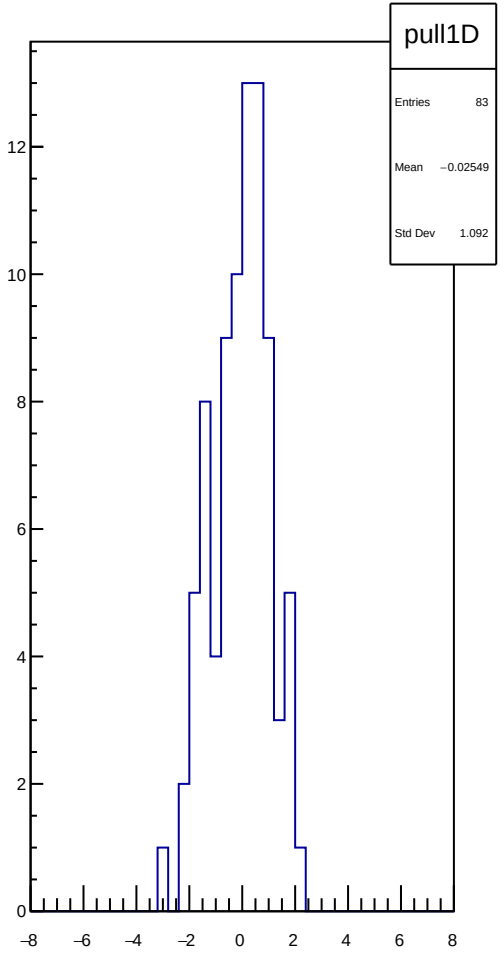

diff_cav4dY_rms vs run
χ² / ndf 8489 / 82
p0 323.8 ± 0.2568
360
340
320
300
280
260

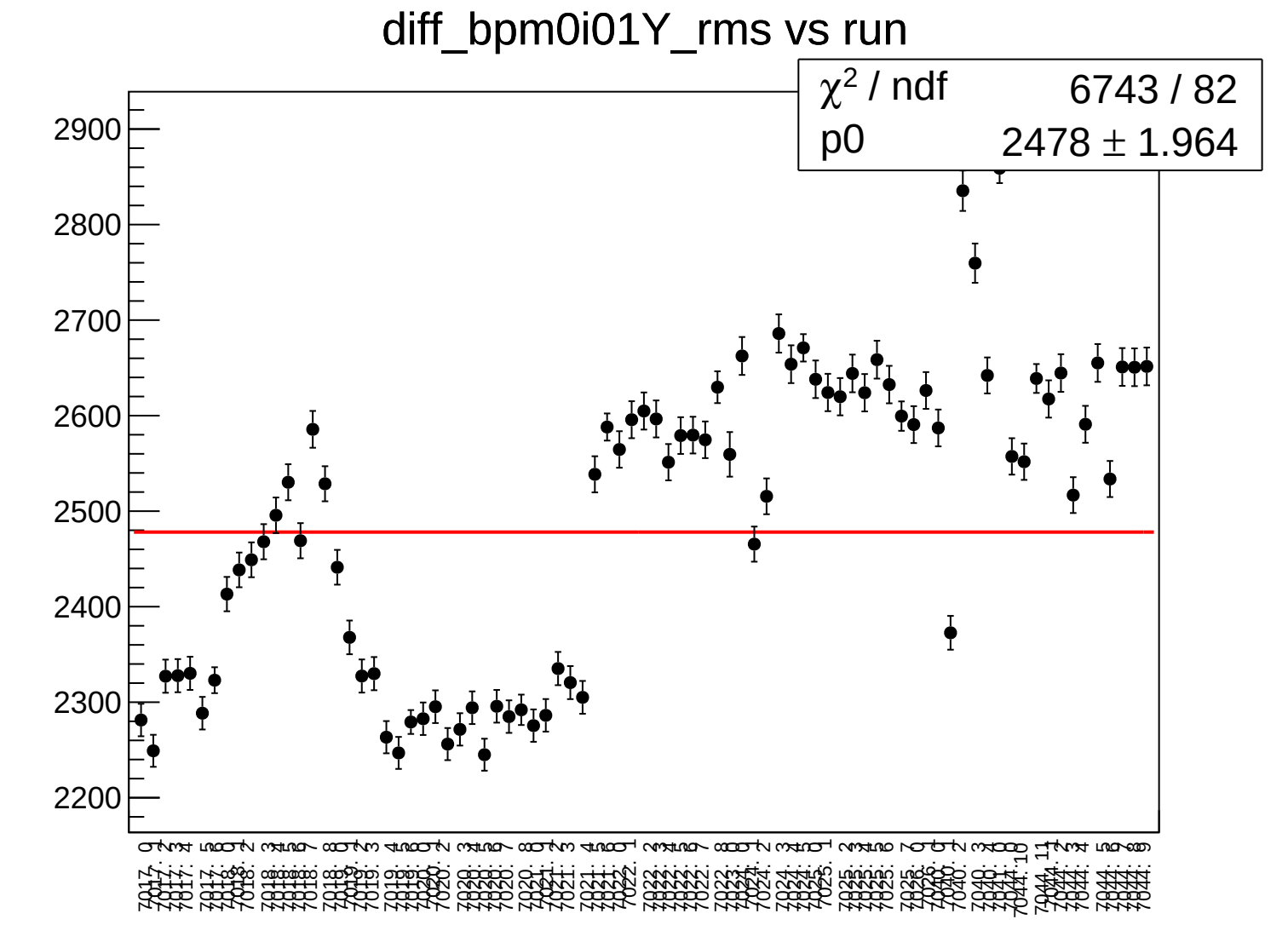

diff_bpm0i01X_mean vs run
χ^2 / ndf 98.99 / 82
p0 35.78 ± 2.808
150
100
50
0
−50
−100
pull
Entries 83
Mean −54.27
Std Dev 104.5
2
1
0
−1
−2
−3

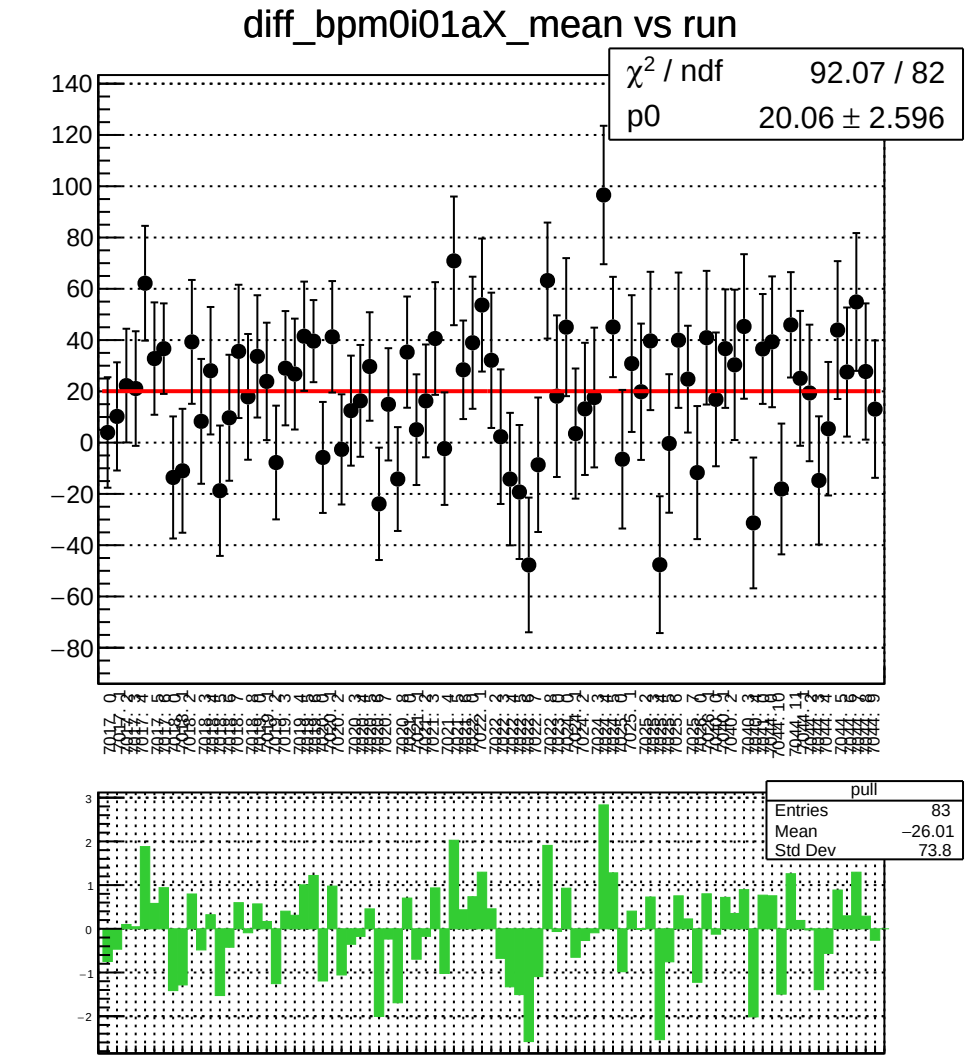

pull1D
Entries 83
Mean −0.0171
Std Dev 1.092
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

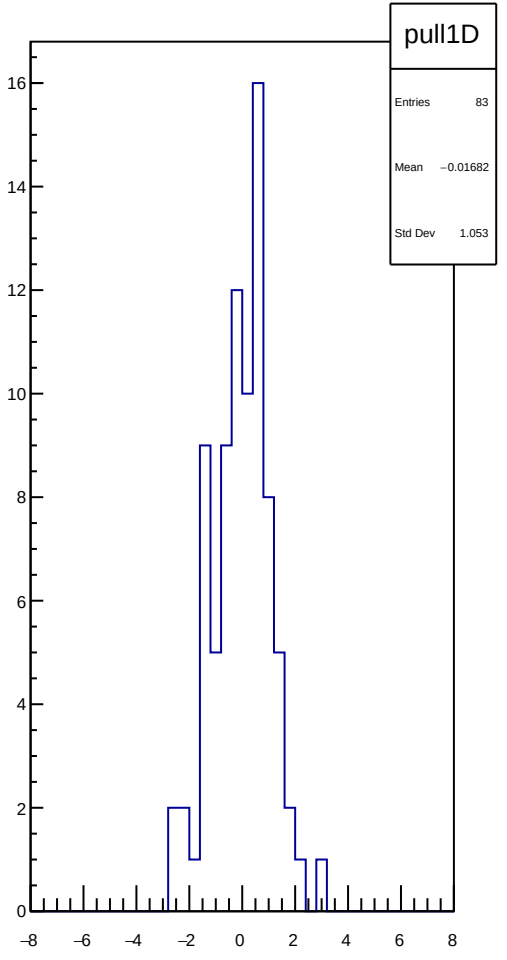

diff_bpm0i01X_rms vs run
χ² / ndf 1.793e+04 / 82
p0 2496 ± 1.986
3000
2800
2600
2400
2200

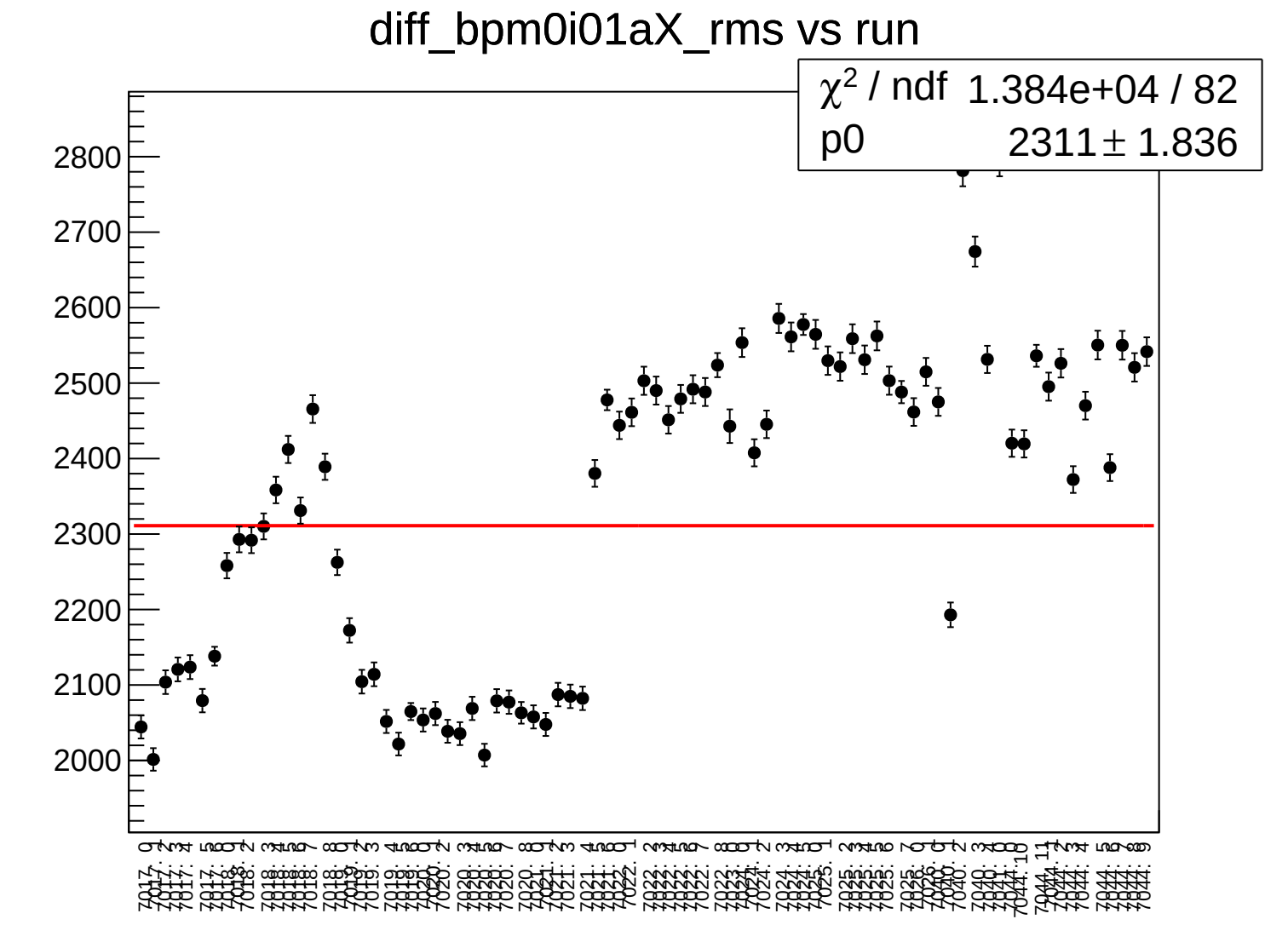

diff_bpm0i01Y_mean vs run
χ² / ndf 99.07 / 82
p0 −3.277 ± 2.778
pull
Entries 83
Mean 19.64
Std Dev 43.73

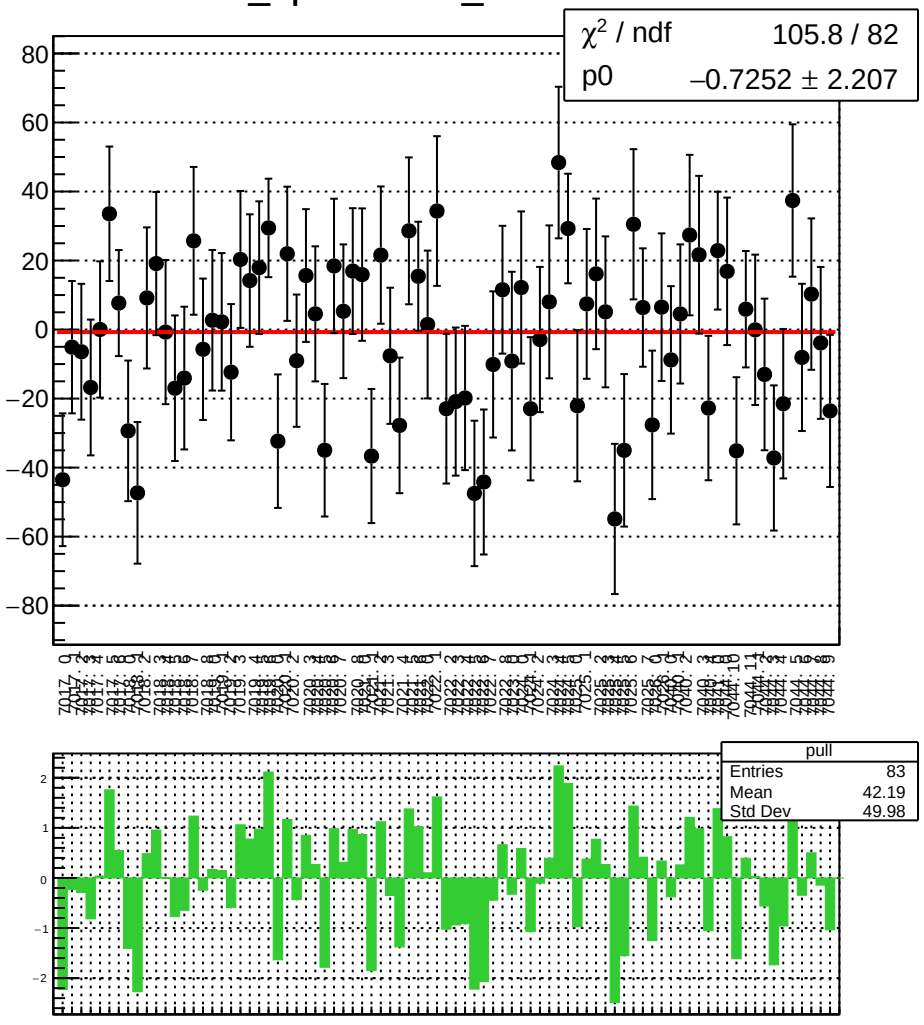

pull1D
Entries 83
Mean −0.02549
Std Dev 1.092

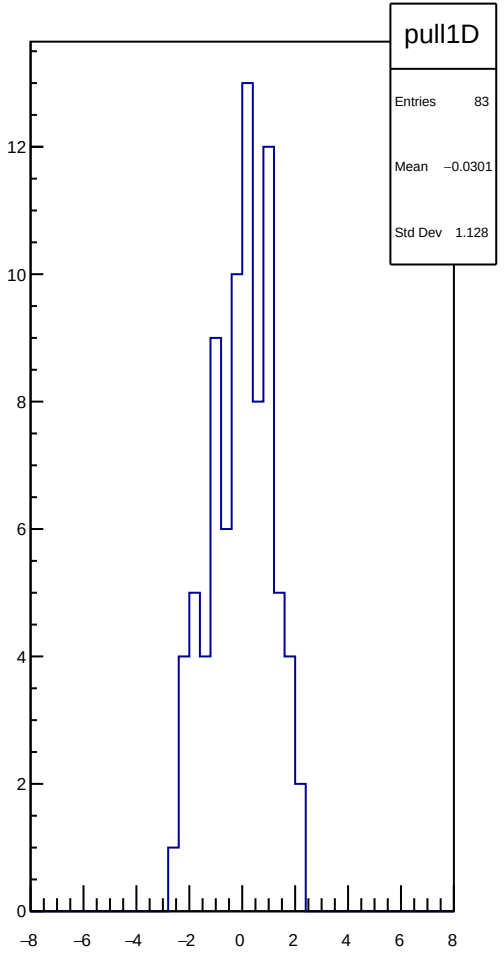

diff_bpm0i01Y_rms vs run
χ² / ndf 6743 / 82
p0 2478 ± 1.964
2900
2800
2700
2600
2500
2400
2300
2200

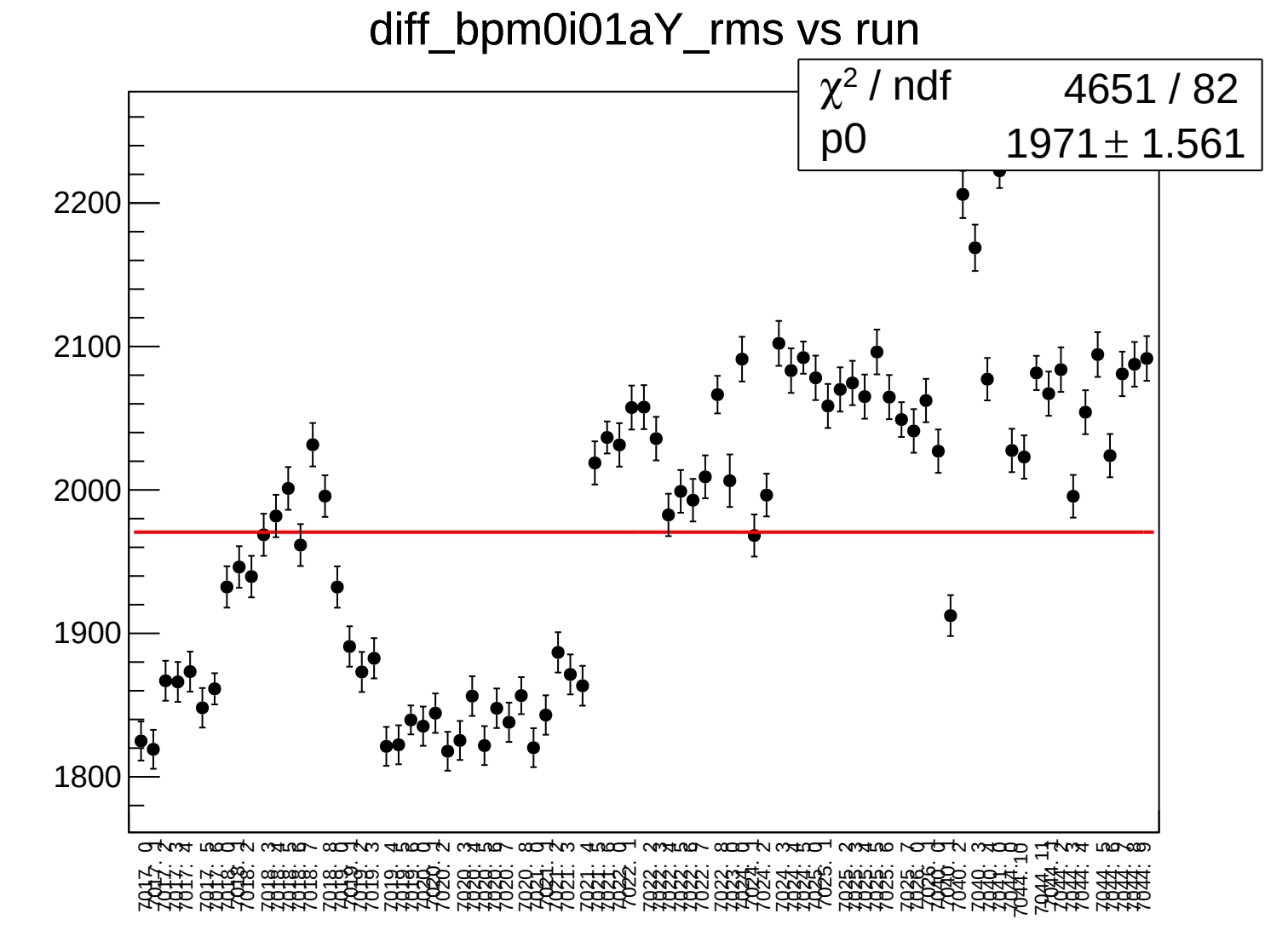

diff_bpm0i01aX_mean vs run
χ² / ndf 92.07 / 82
p0 20.06 ± 2.596
pull
Entries 83
Mean −26.01
Std Dev 73.8

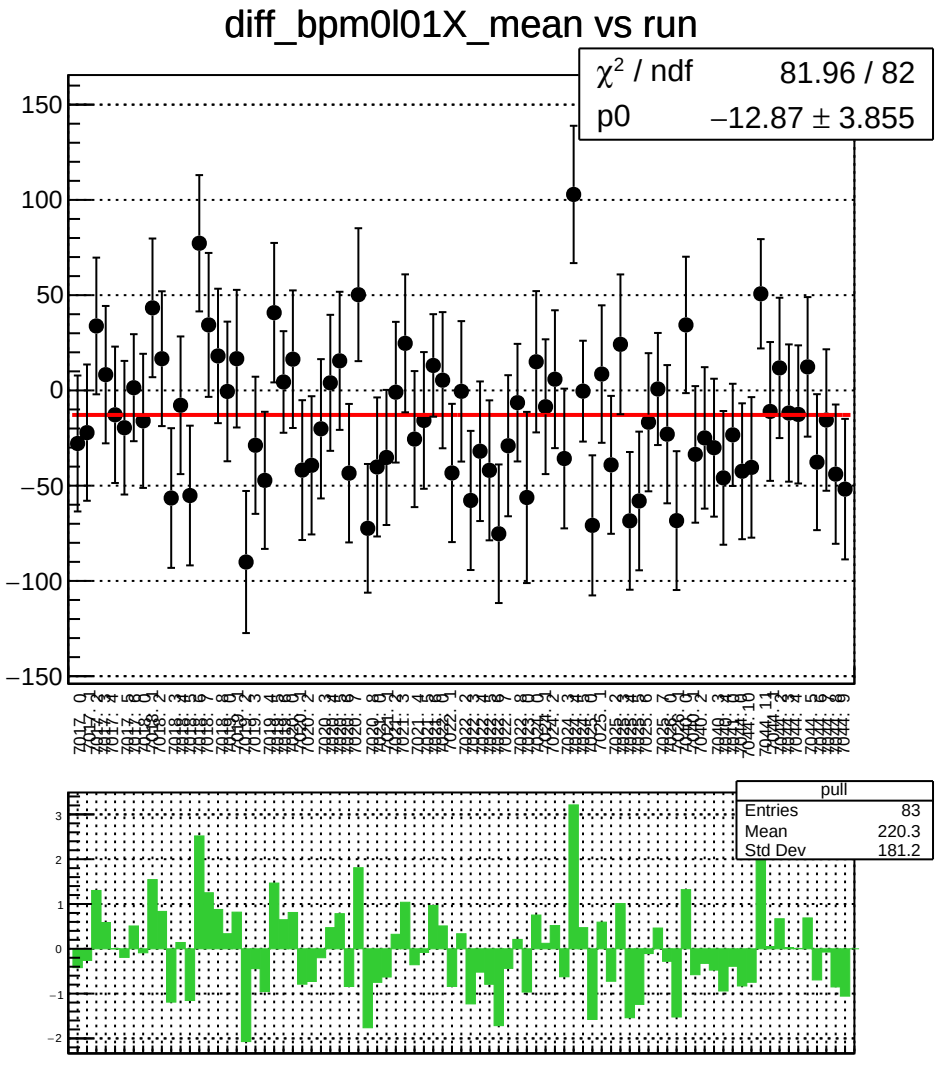

pull1D
Entries 83
Mean −0.01682
Std Dev 1.053

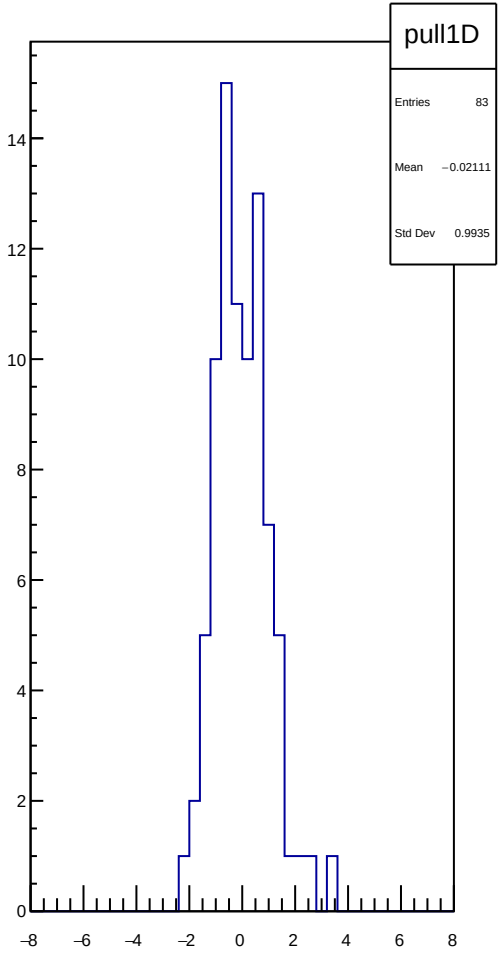

diff_bpm0i01aX_rms vs run
χ² / ndf 1.384e+04 / 82
p0 2311 ± 1.836
2800
2700
2600
2500
2400
2300
2200
2100
2000

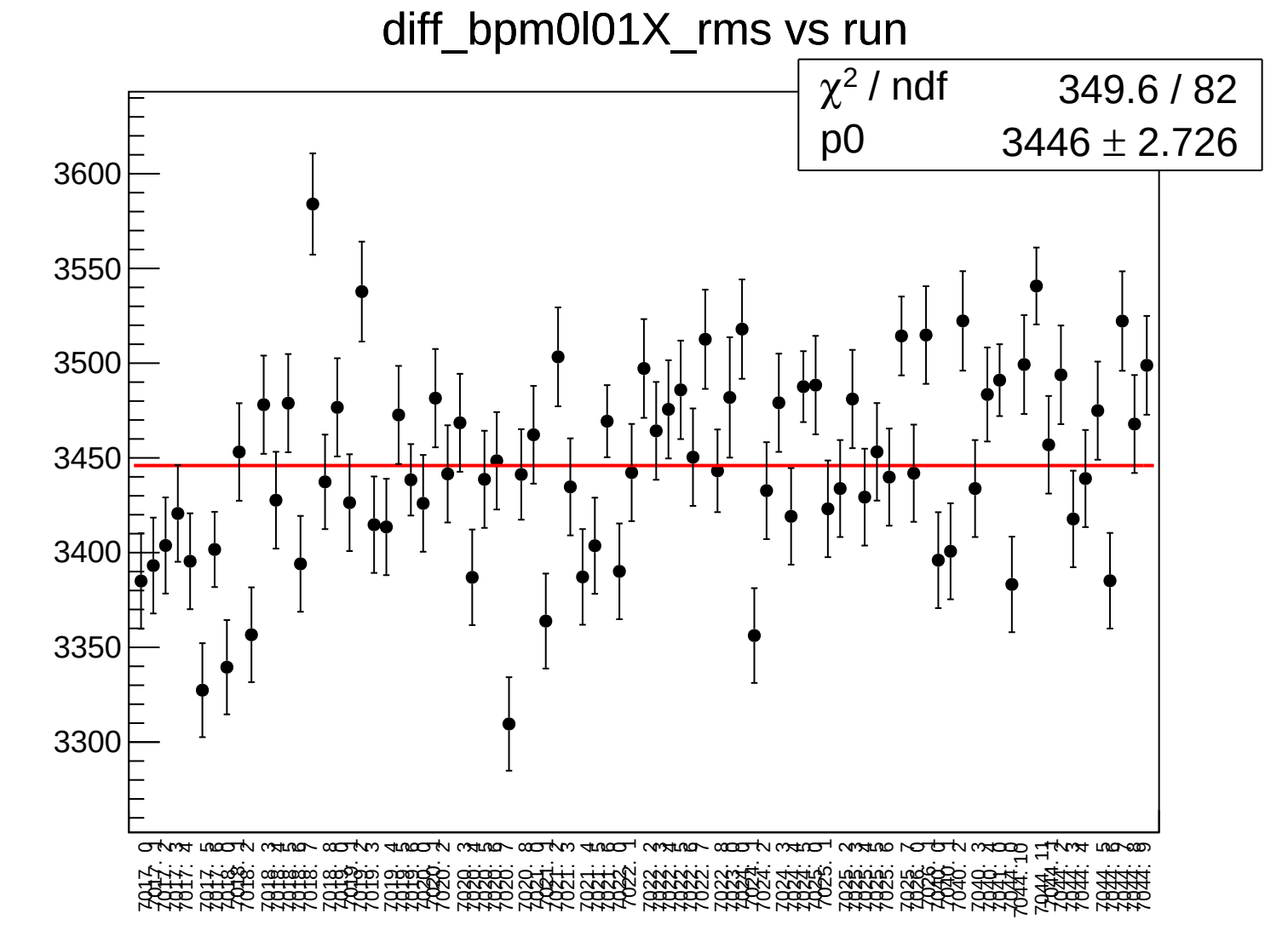

diff_bpm0i01aY_mean vs run
χ² / ndf 105.8 / 82
p0 −0.7252 ± 2.207
pull
Entries 83
Mean 42.19
Std Dev 49.98

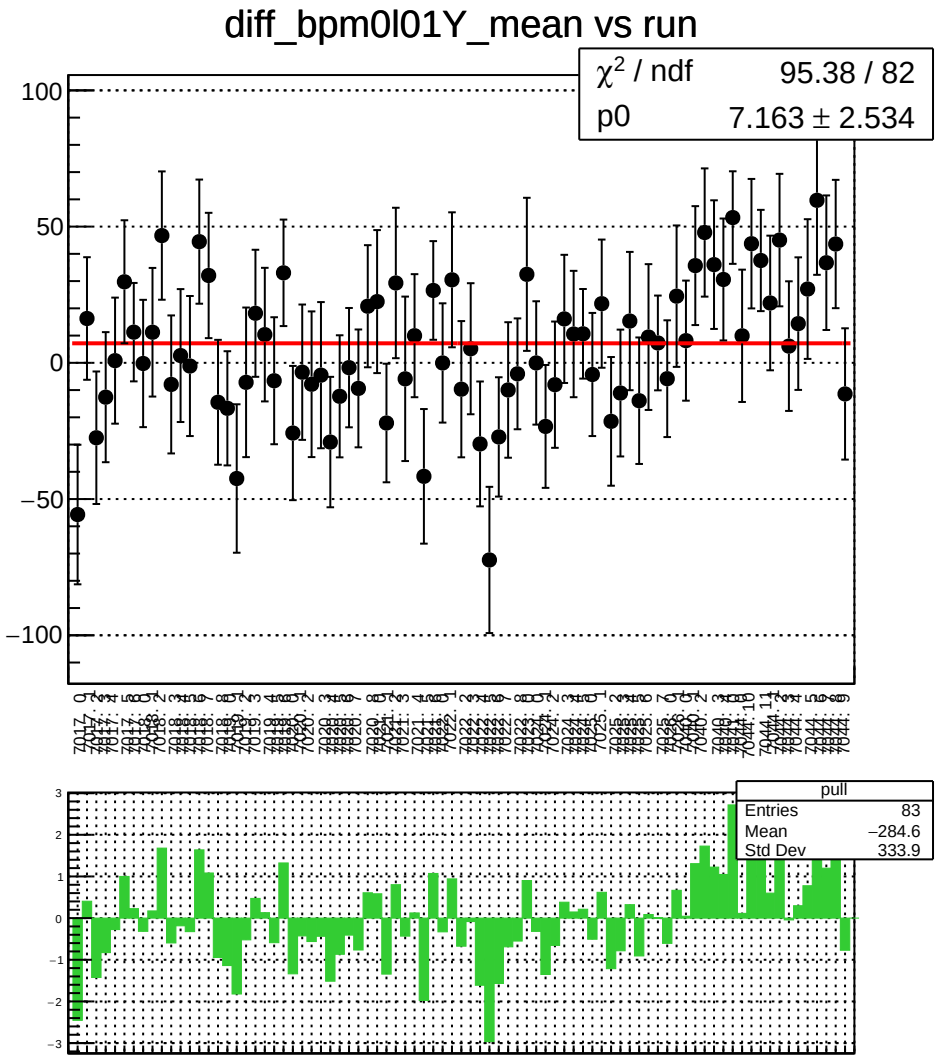

pull1D
Entries 83
Mean −0.0301
Std Dev 1.128

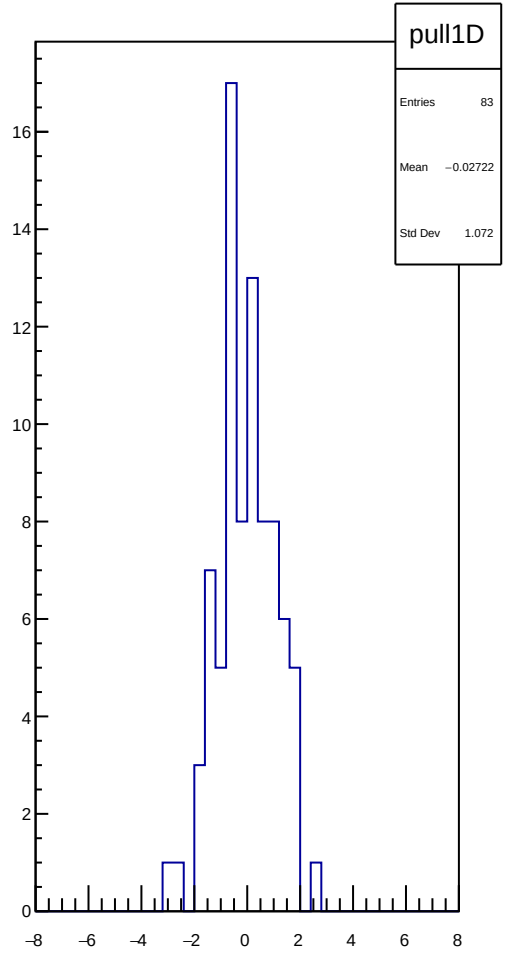

diff_bpm0i01aY_rms vs run
χ² / ndf 4651 / 82
p0 1971 ± 1.561
2200
2100
2000
1900
1800

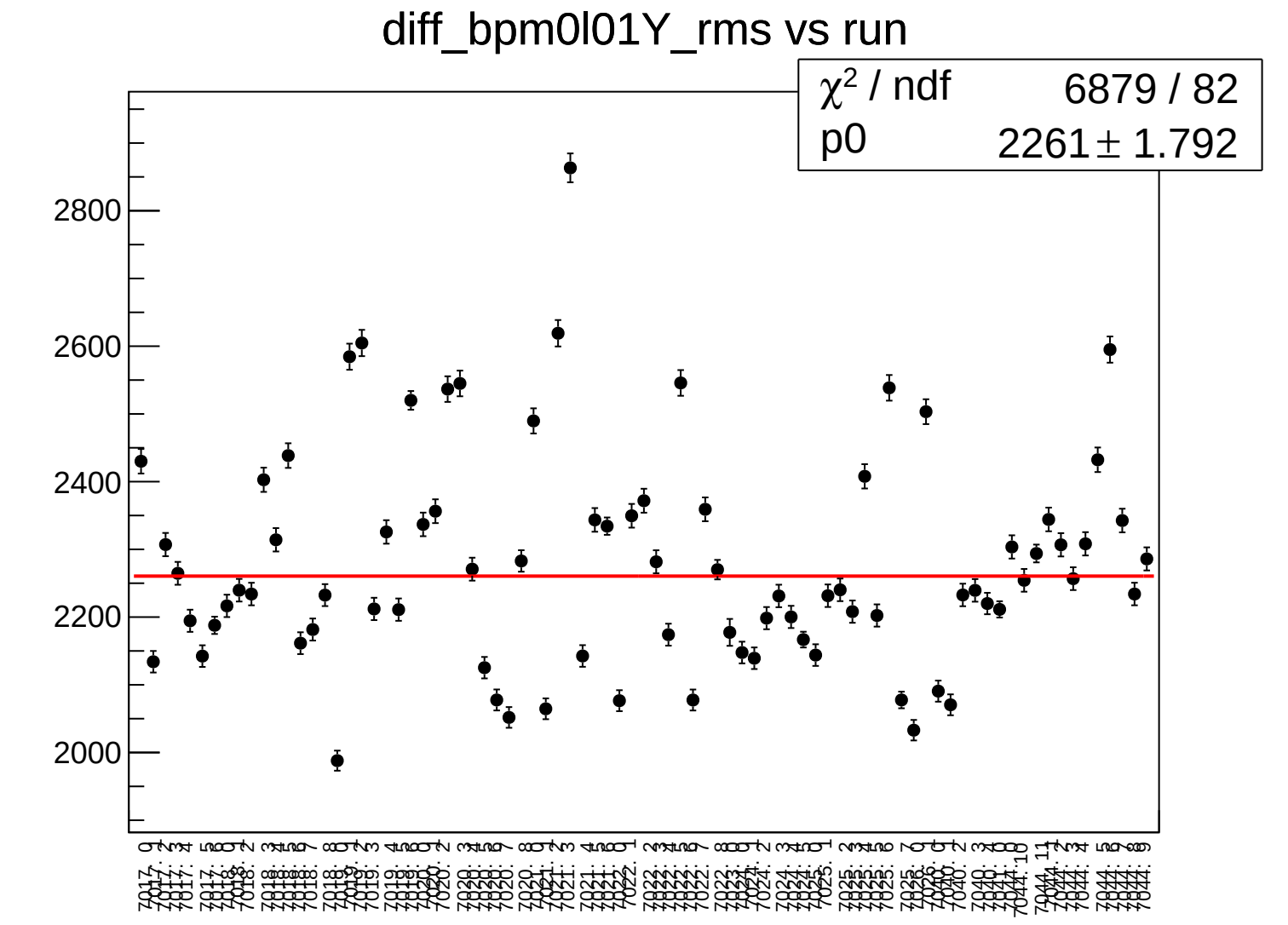

diff_bpm0l01X_mean vs run
χ^2 / ndf 81.96 / 82
p0 −12.87 ± 3.855
pull
Entries 83
Mean 220.3
Std Dev 181.2

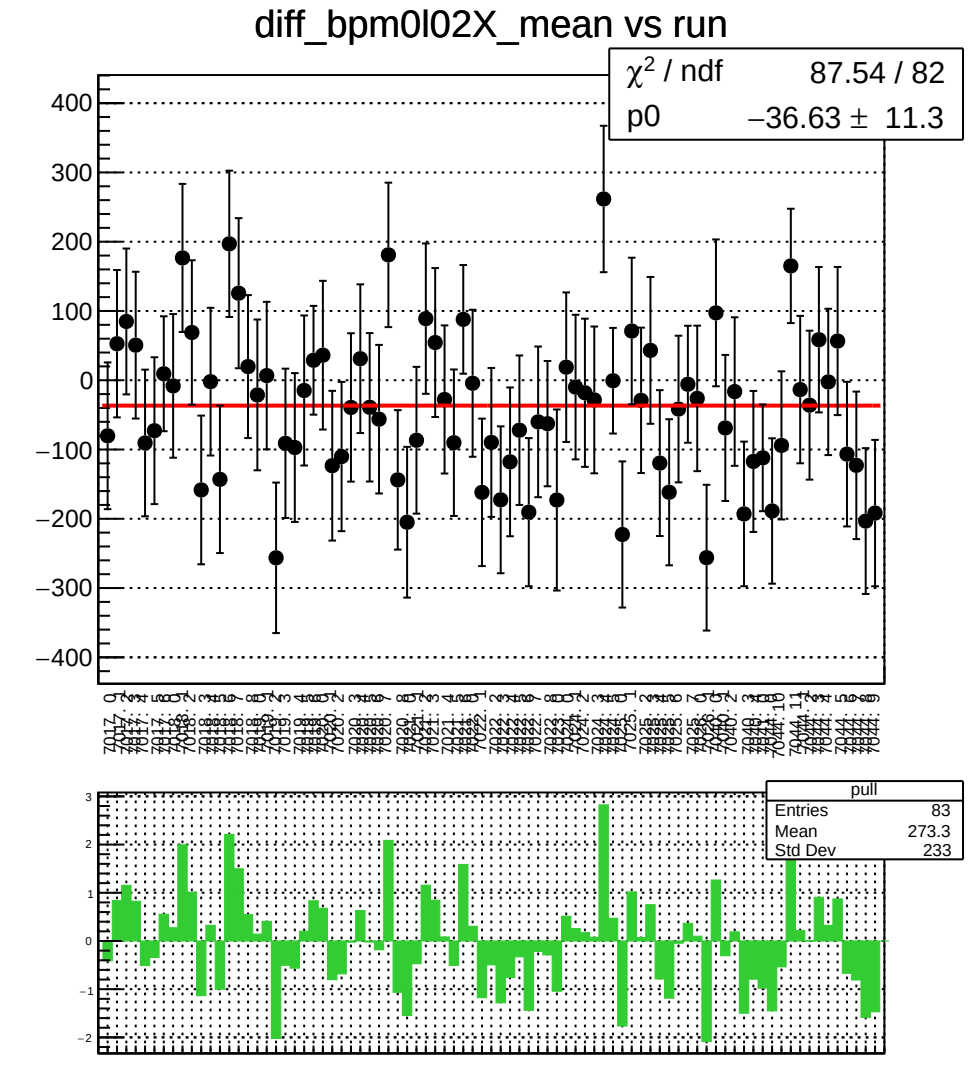

pull1D
Entries 83
Mean −0.02111
Std Dev 0.9935

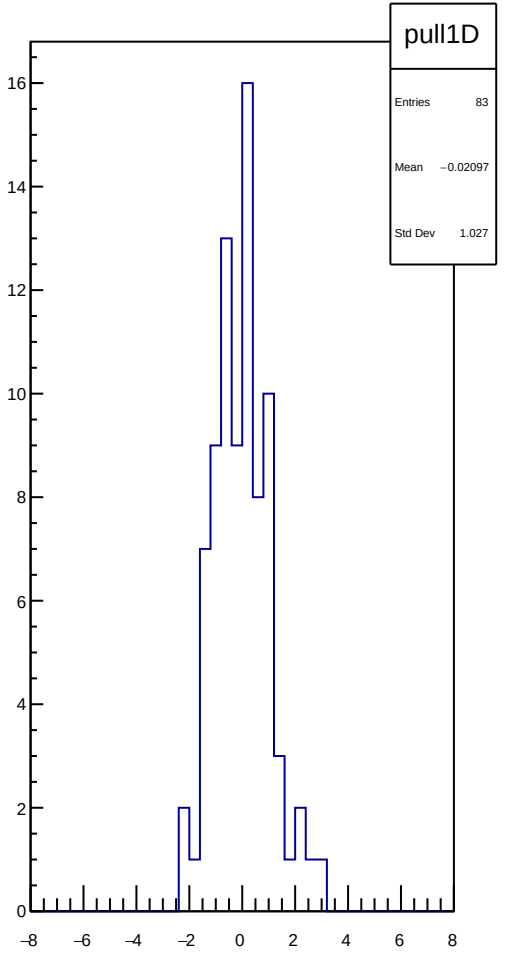

diff_bpm0l01X_rms vs run
χ² / ndf 349.6 / 82
p0 3446 ± 2.726
3600
3550
3500
3450
3400
3350
3300

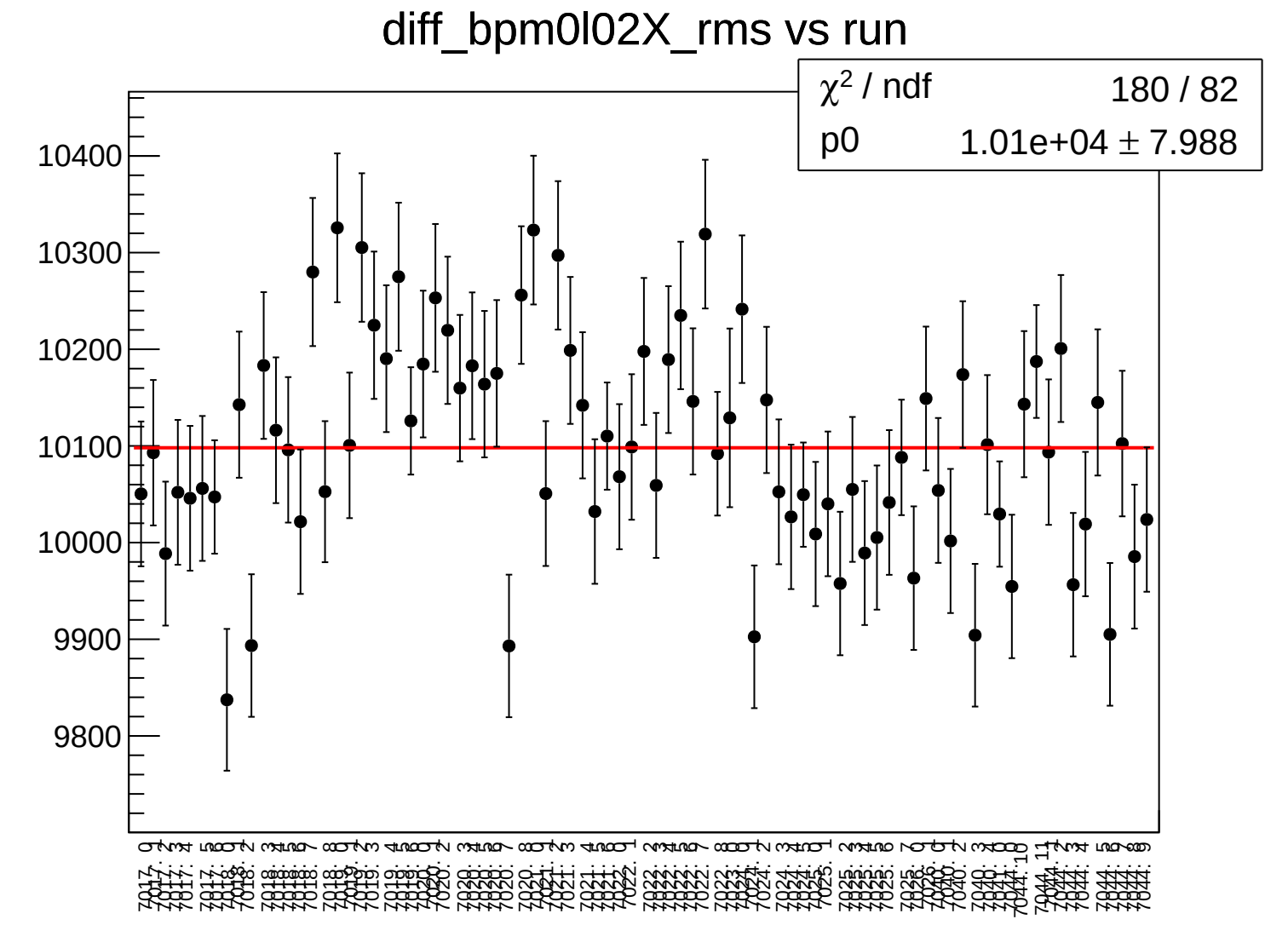

diff_bpm0l01Y_mean vs run
χ^2 / ndf 95.38 / 82
p0 7.163 ± 2.534
100
50
0
−50
−100
pull
Entries 83
Mean −284.6
Std Dev 333.9
3
2
1
0
−1
−2
−3

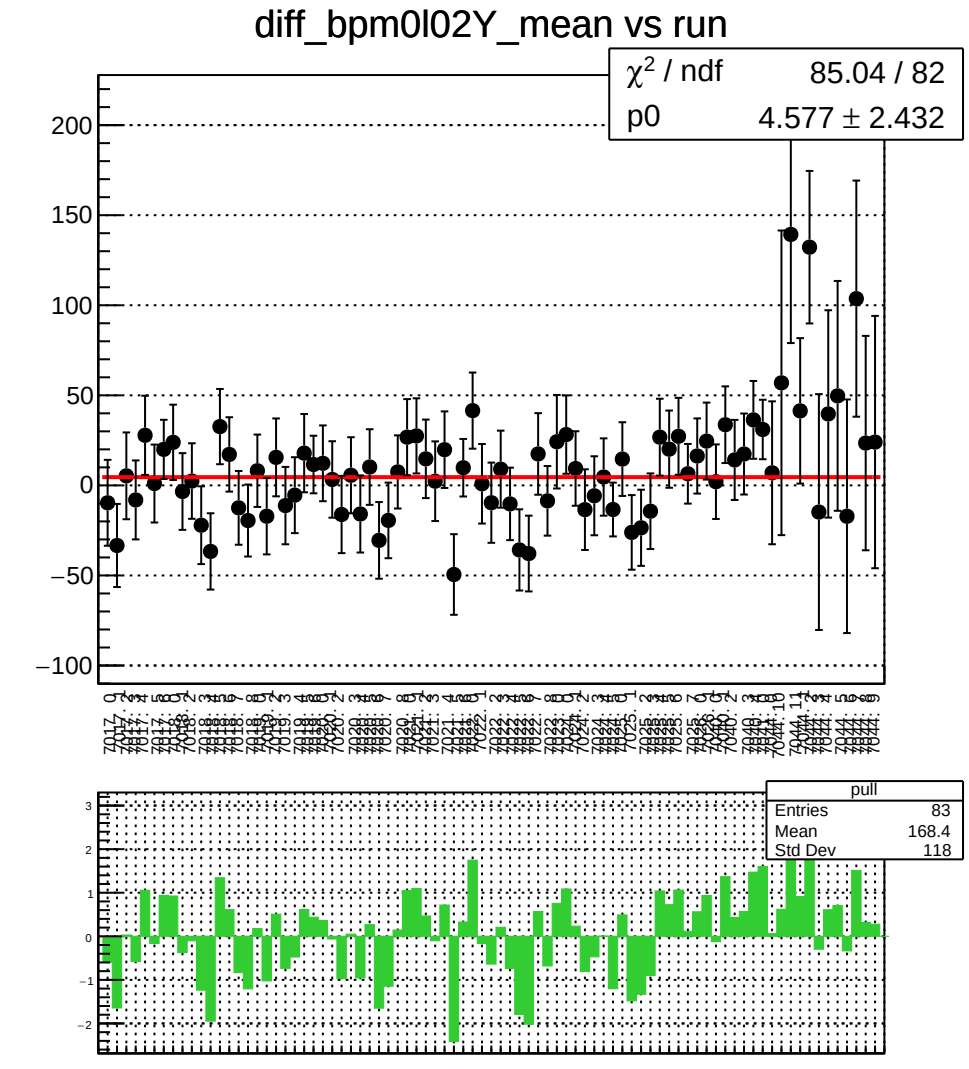

pull1D
Entries 83
Mean −0.02722
Std Dev 1.072
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

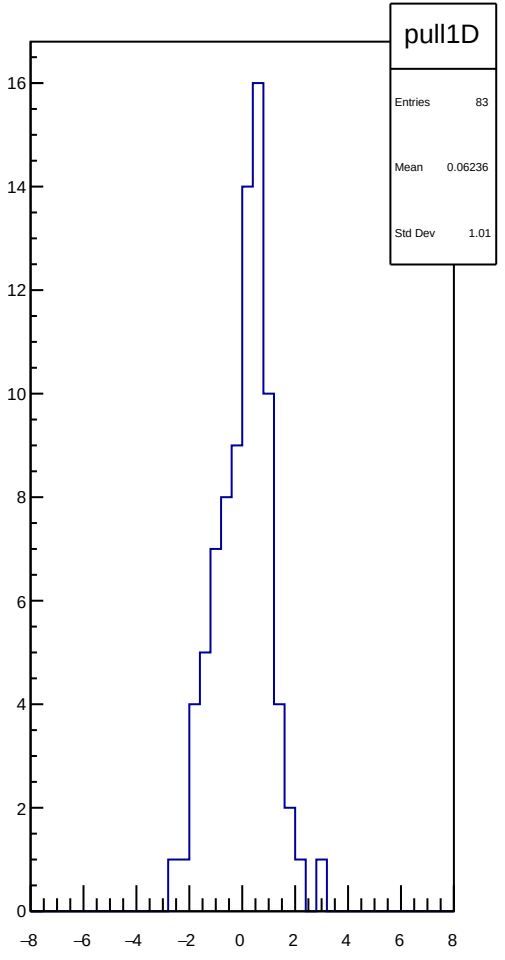

diff_bpm0l01Y_rms vs run
χ² / ndf 6879 / 82
p0 2261 ± 1.792
2800
2600
2400
2200
2000

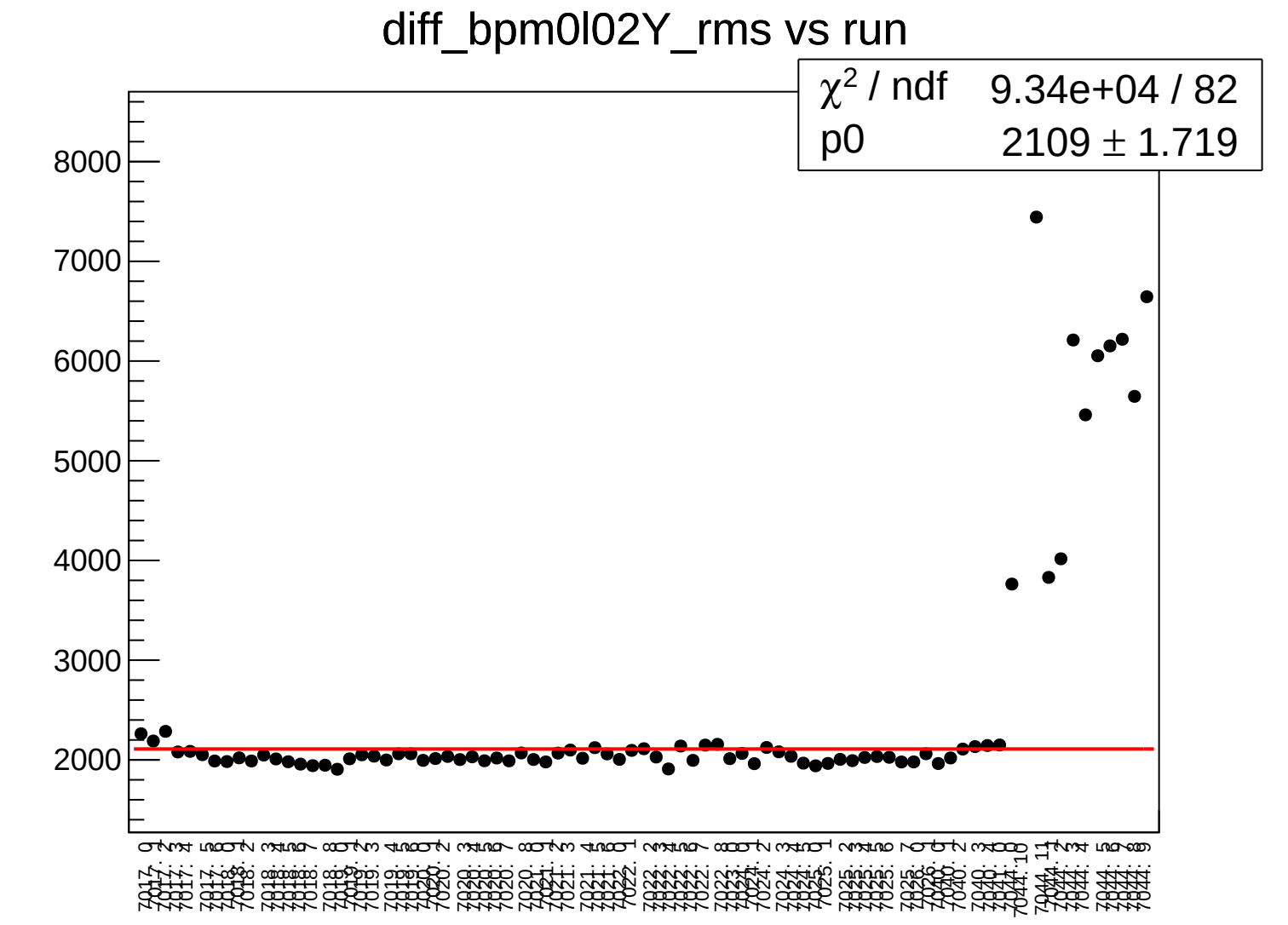

diff_bpm0l02X_mean vs run
χ² / ndf 87.54 / 82
p0 −36.63 ± 11.3
pull
Entries 83
Mean 273.3
Std Dev 233

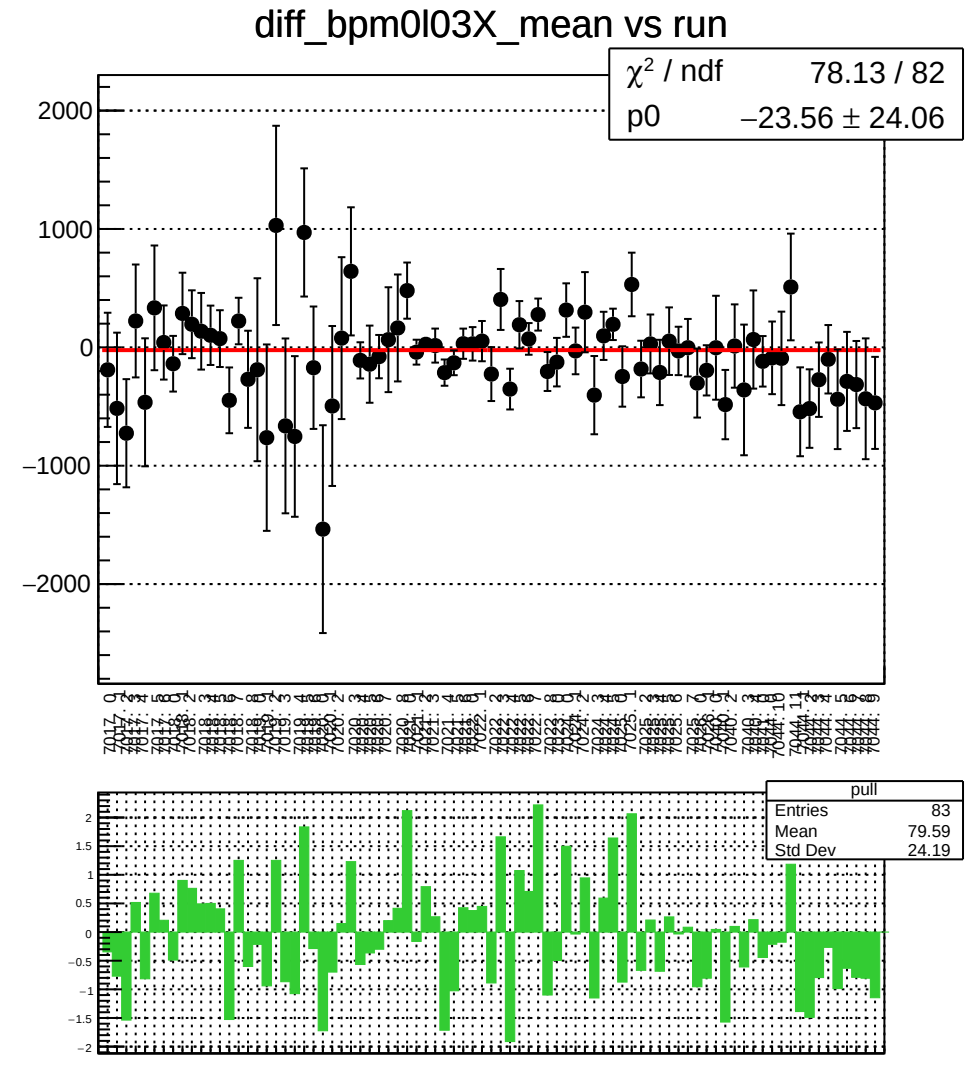

pull1D
Entries 83
Mean −0.02097
Std Dev 1.027

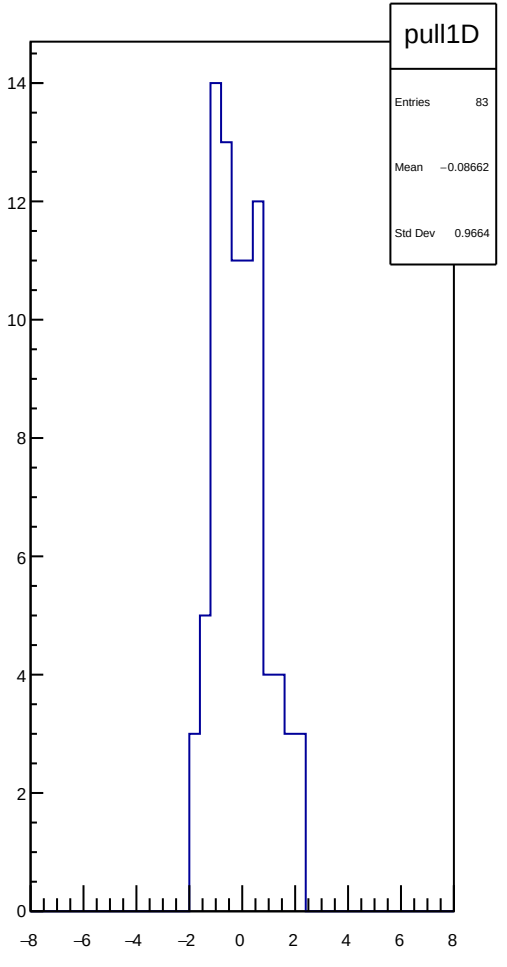

diff_bpm0l02X_rms vs run
χ² / ndf 180 / 82
p0 1.01e+04 ± 7.988
10400
10300
10200
10100
10000
9900
9800

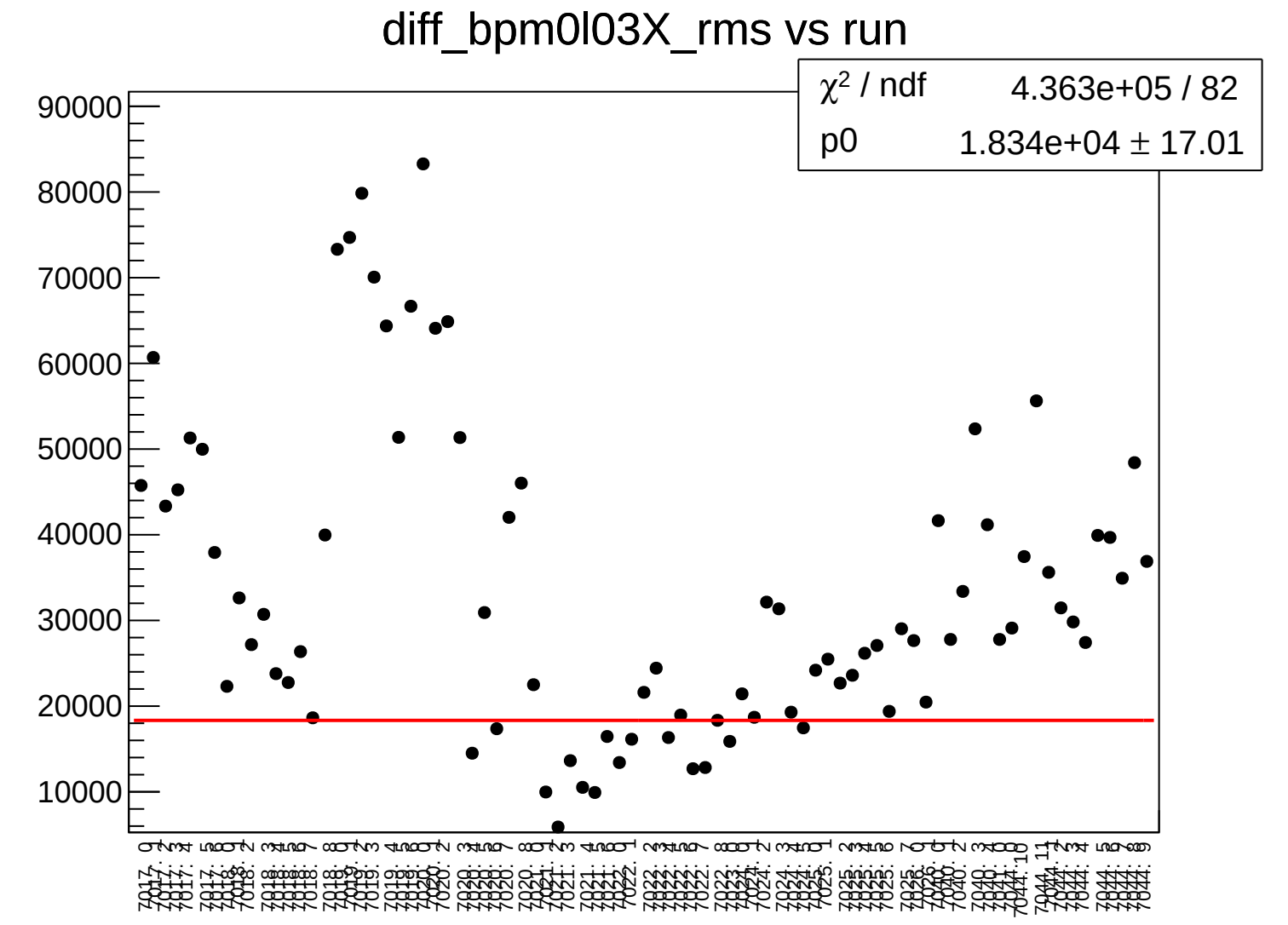

diff_bpm0l02Y_mean vs run
χ² / ndf 85.04 / 82
p0 4.577 ± 2.432
pull
Entries 83
Mean 168.4
Std Dev 118

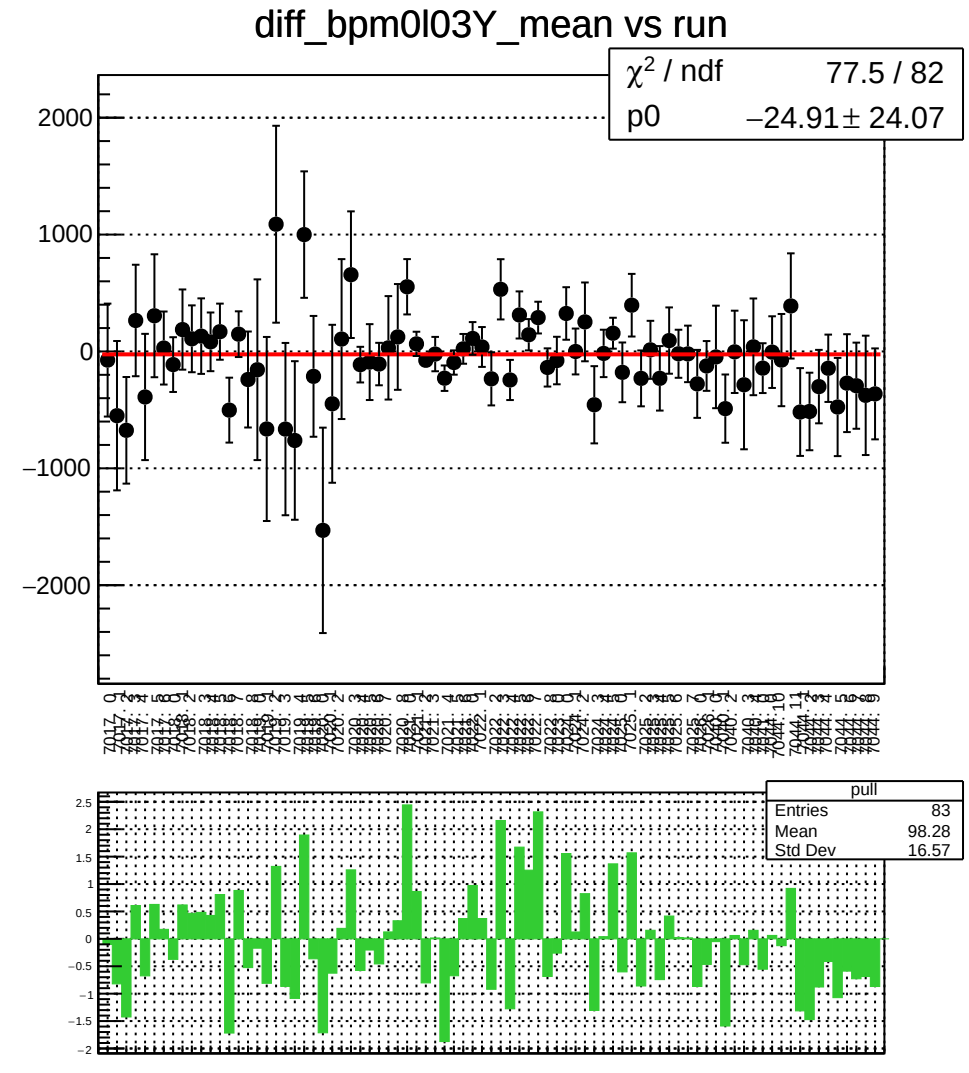

pull1D
Entries 83
Mean 0.06236
Std Dev 1.01

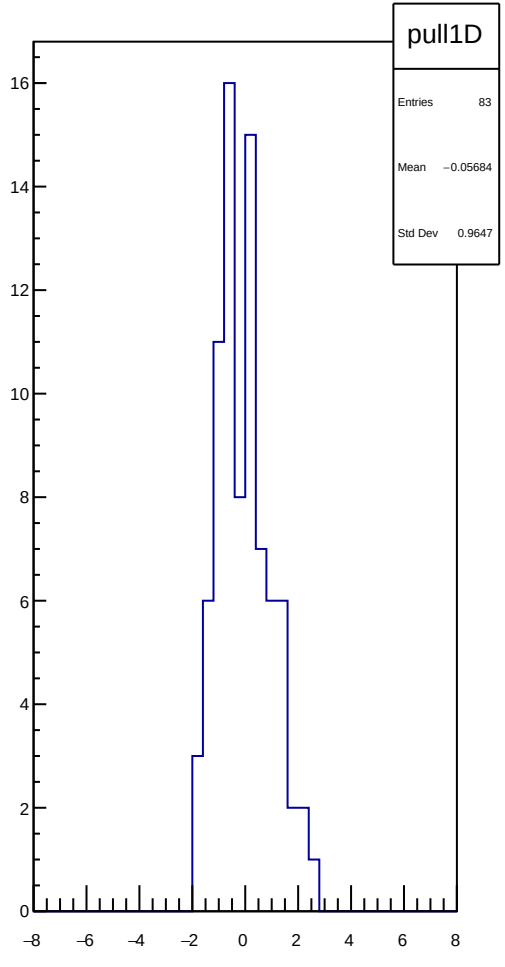

diff_bpm0l02Y_rms vs run
χ² / ndf 9.34e+04 / 82
p0 2109 ± 1.719
8000
7000
6000
5000
4000
3000
2000

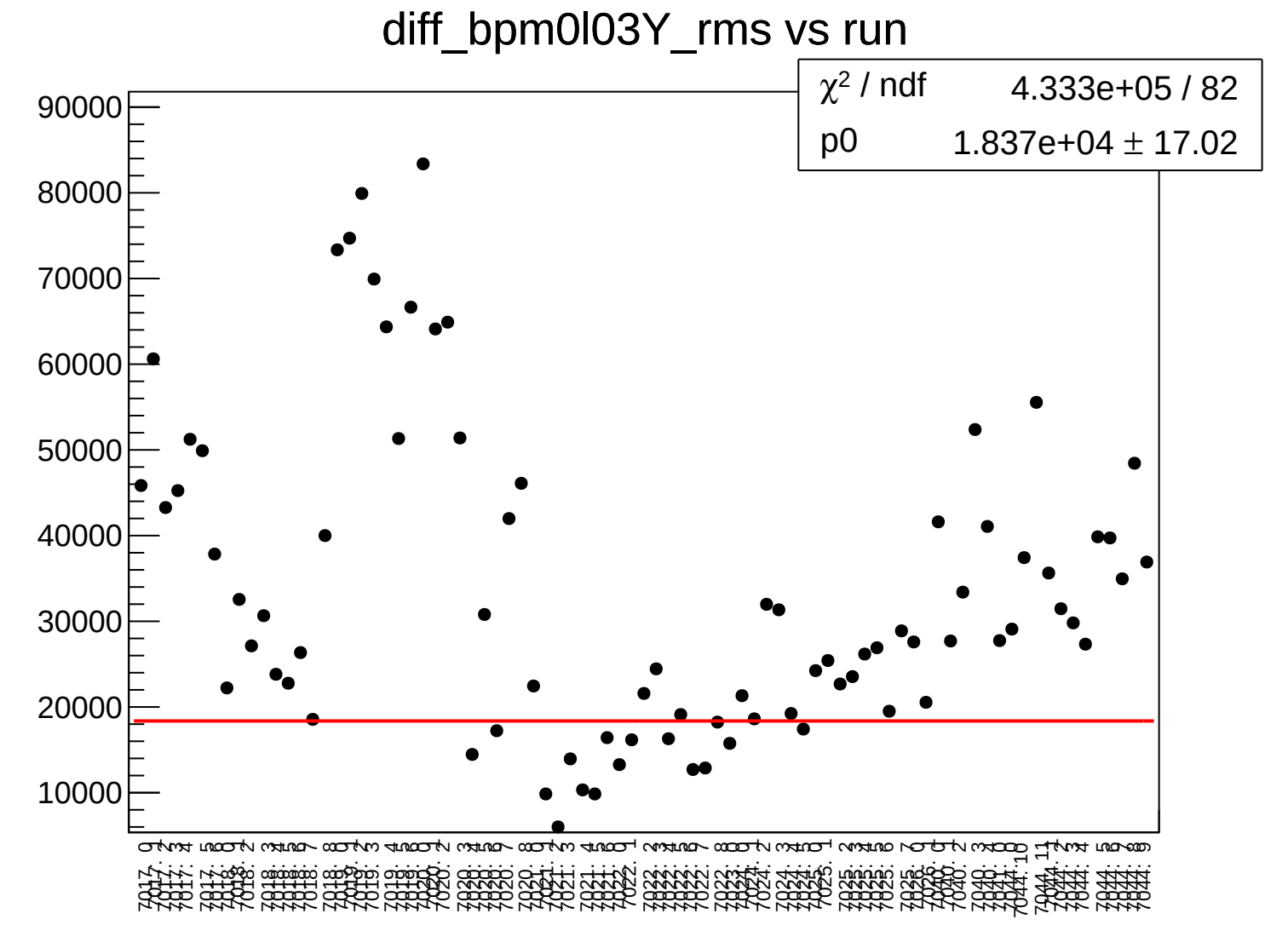

diff_bpm0l03X_mean vs run
χ² / ndf 78.13 / 82
p0 −23.56 ± 24.06
2000
1000
0
−1000
−2000
pull
Entries 83
Mean 79.59
Std Dev 24.19
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

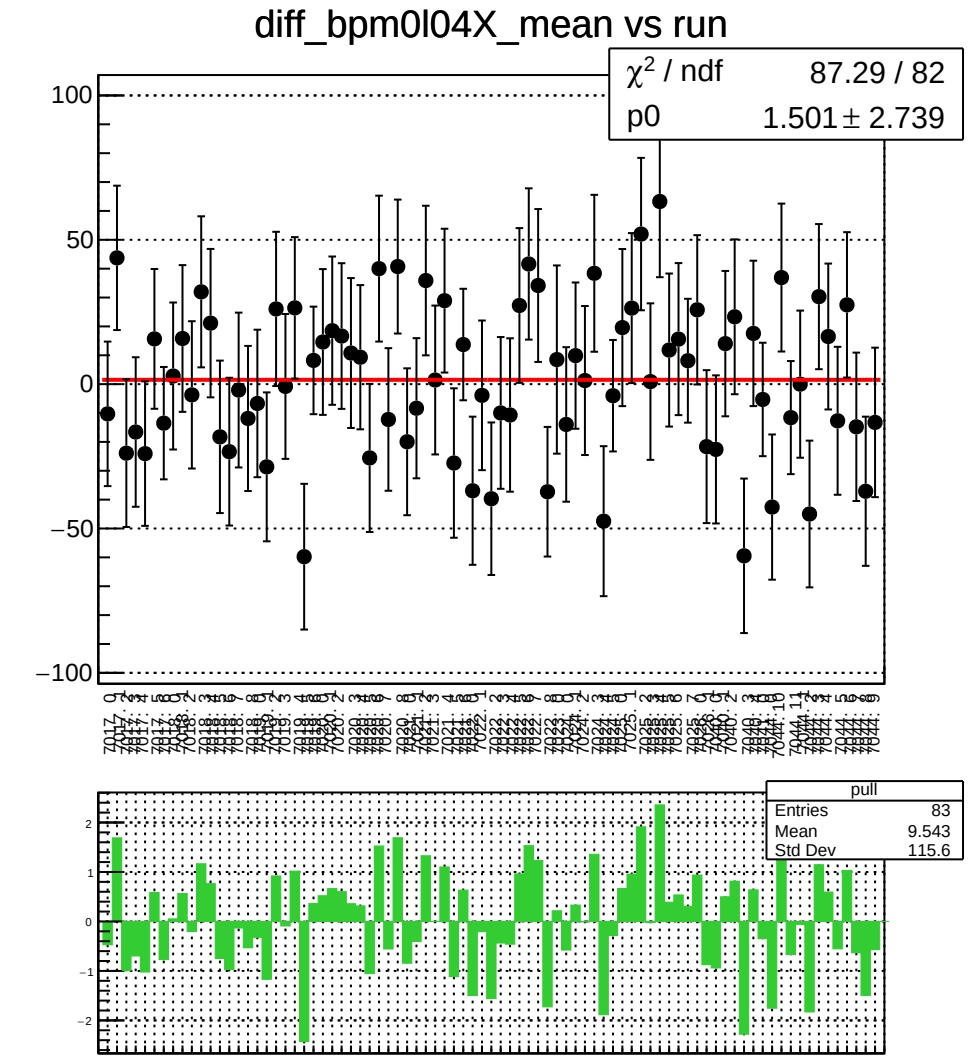

pull1D
Entries 83
Mean −0.08662
Std Dev 0.9664
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

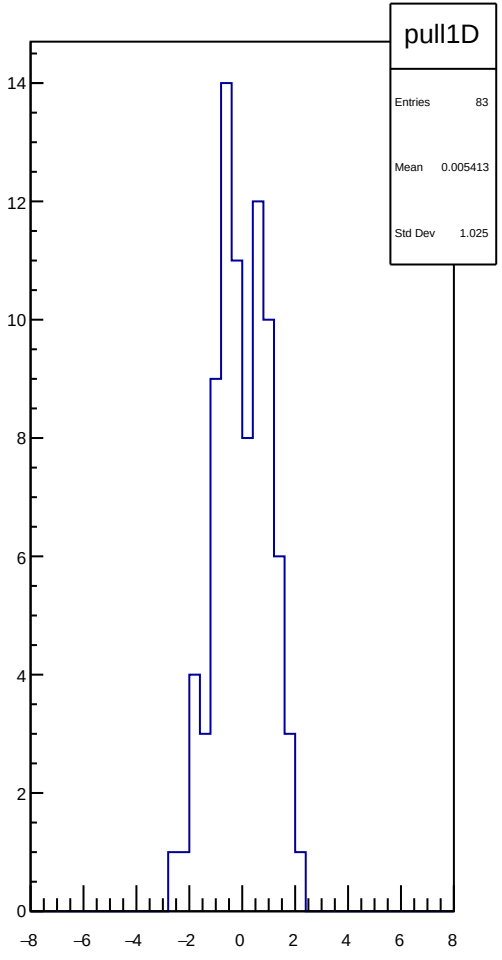

diff_bpm0l03X_rms vs run
χ² / ndf 4.363e+05 / 82
p0 1.834e+04 ± 17.01
90000
80000
70000
60000
50000
40000
30000
20000
10000

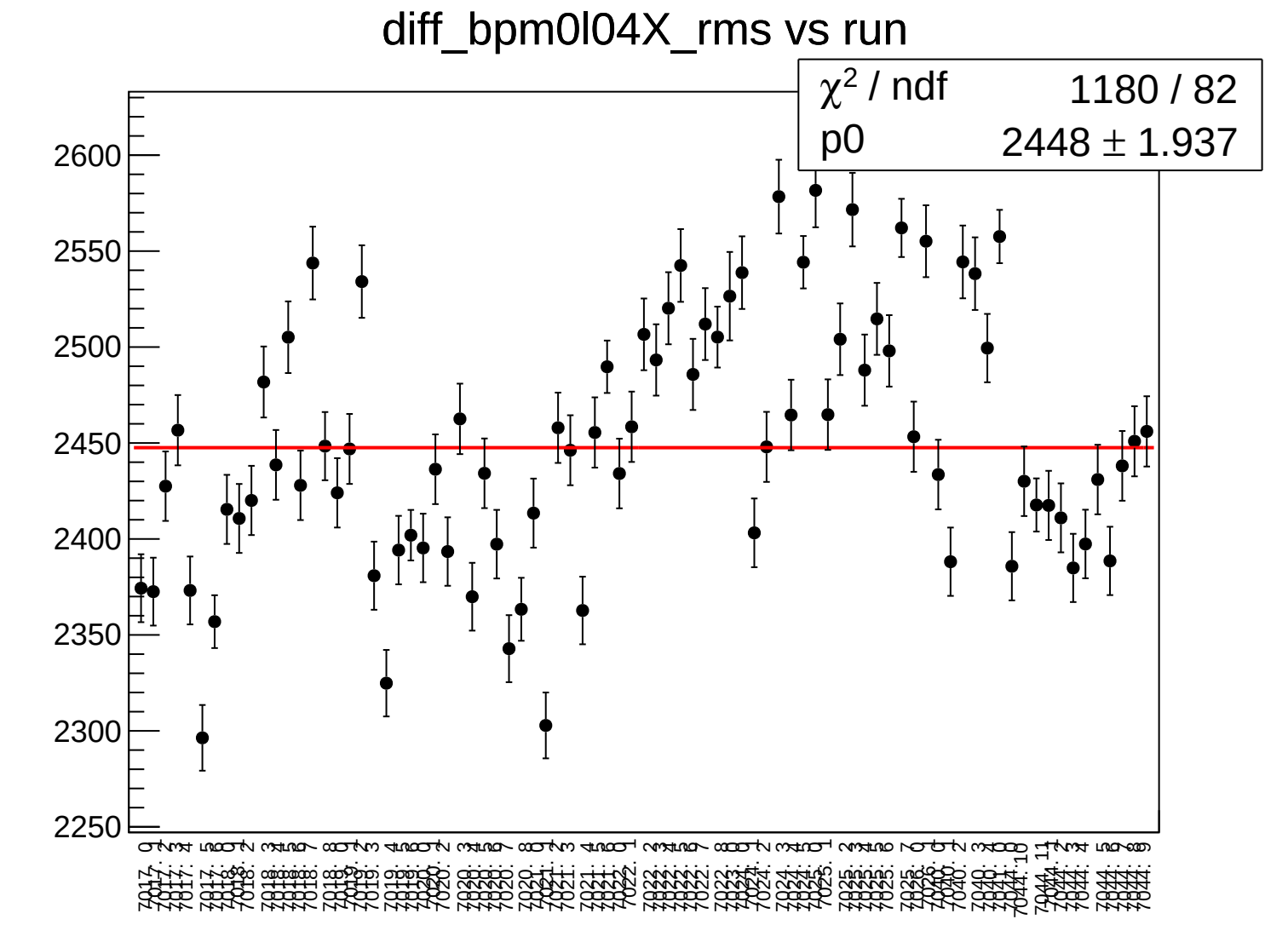

diff_bpm0l03Y_mean vs run
χ² / ndf 77.5 / 82
p0 −24.91 ± 24.07
2000
1000
0
−1000
−2000
pull
Entries 83
Mean 98.28
Std Dev 16.57
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

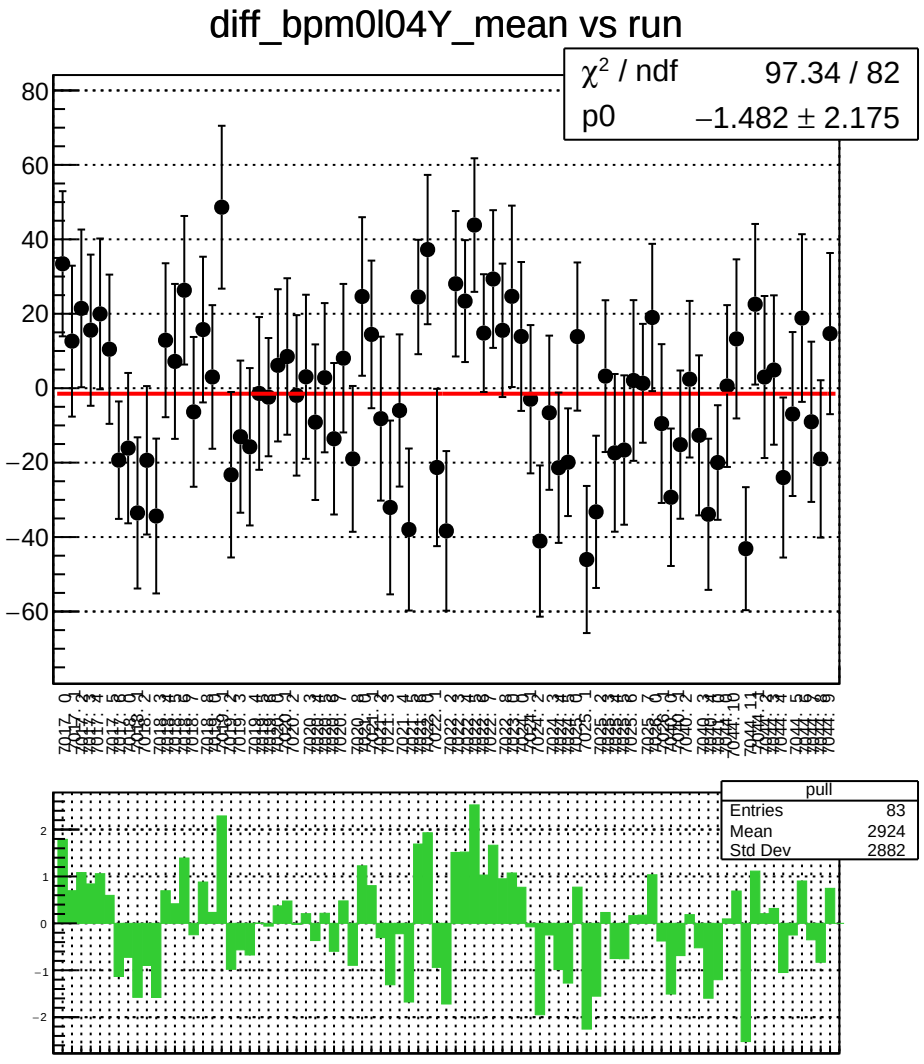

pull1D
Entries 83
Mean −0.05684
Std Dev 0.9647
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

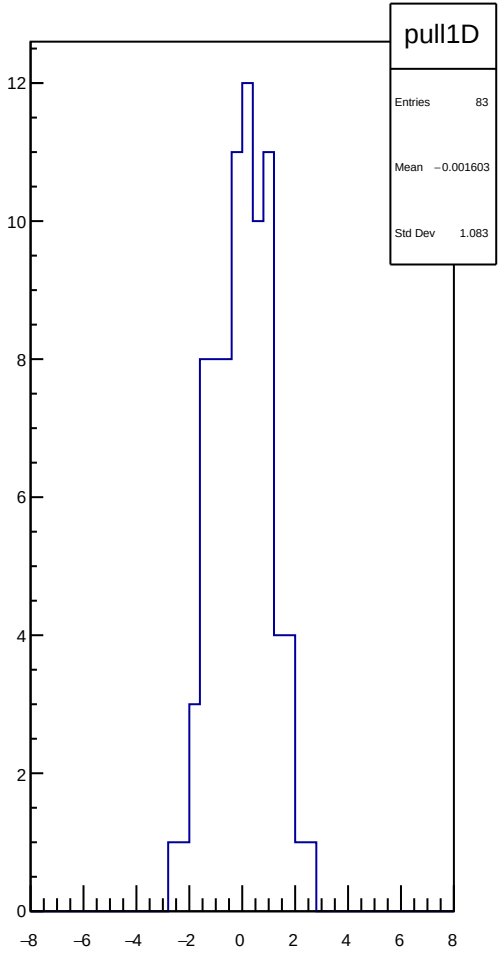

diff_bpm0l03Y_rms vs run
χ² / ndf 4.333e+05 / 82
p0 1.837e+04 ± 17.02
90000
80000
70000
60000
50000
40000
30000
20000
10000

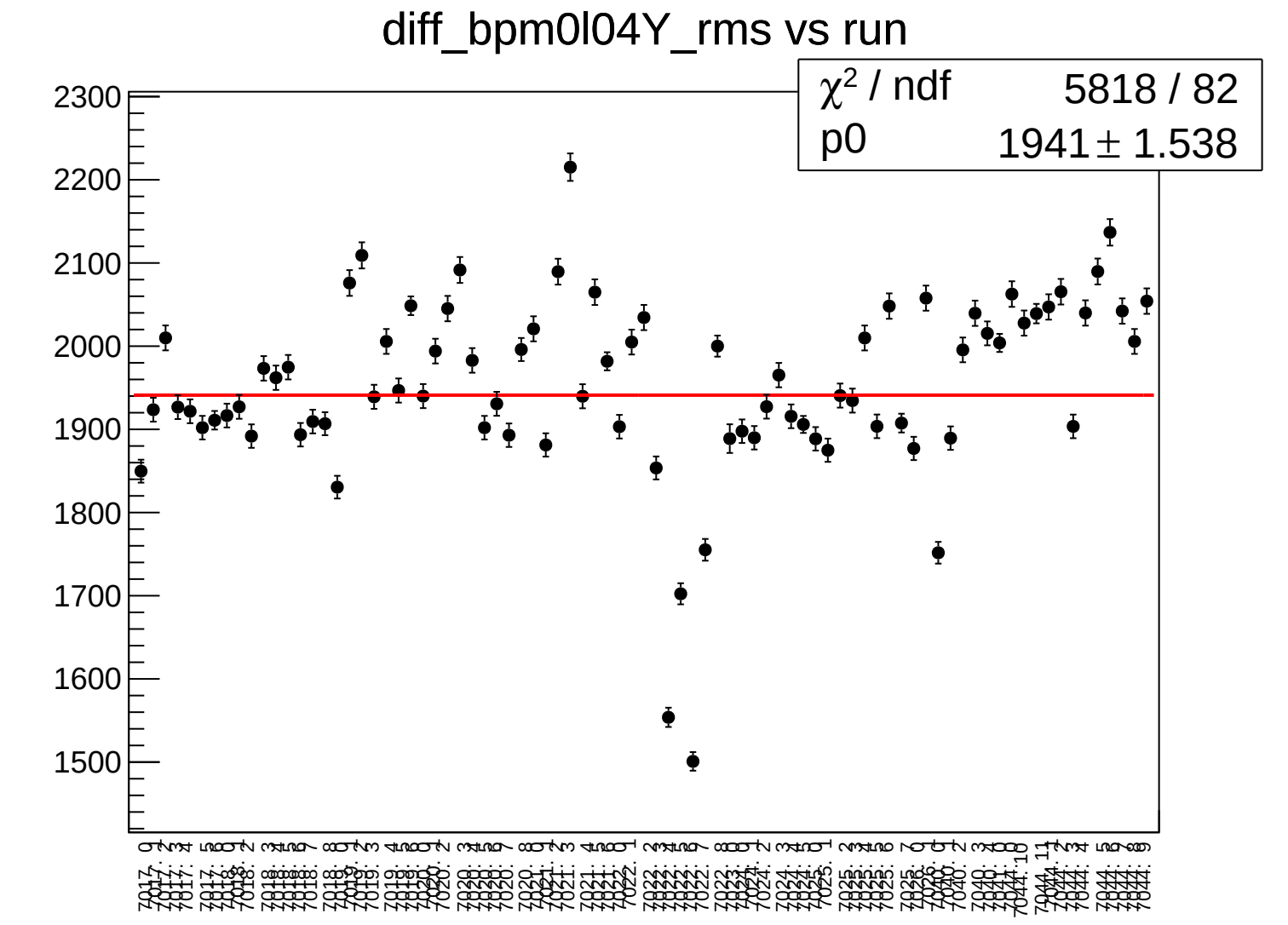

diff_bpm0l04X_mean vs run
χ² / ndf 87.29 / 82
p0 1.501 ± 2.739
pull
Entries 83
Mean 9.543
Std Dev 115.6

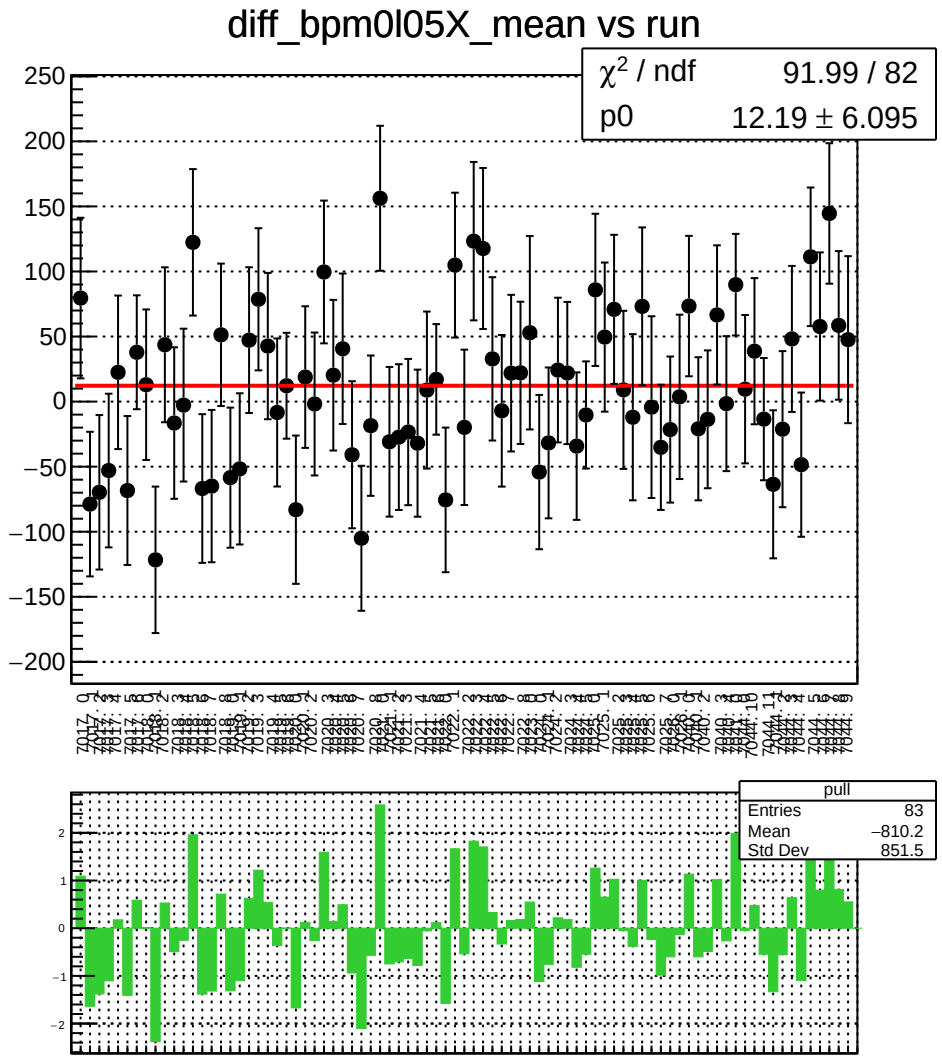

pull1D
Entries 83
Mean 0.005413
Std Dev 1.025

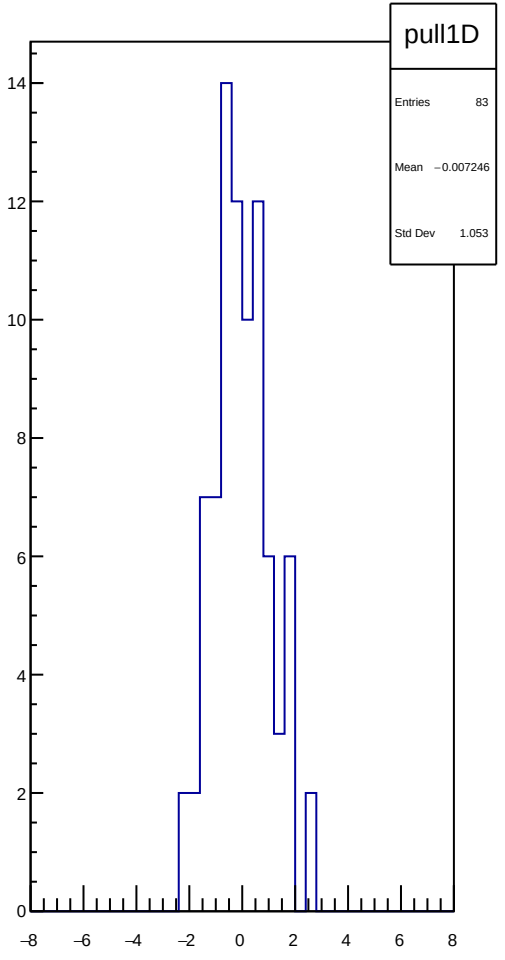

diff_bpm0l04X_rms vs run
χ² / ndf 1180 / 82
p0 2448 ± 1.937
2600
2550
2500
2450
2400
2350
2300
2250

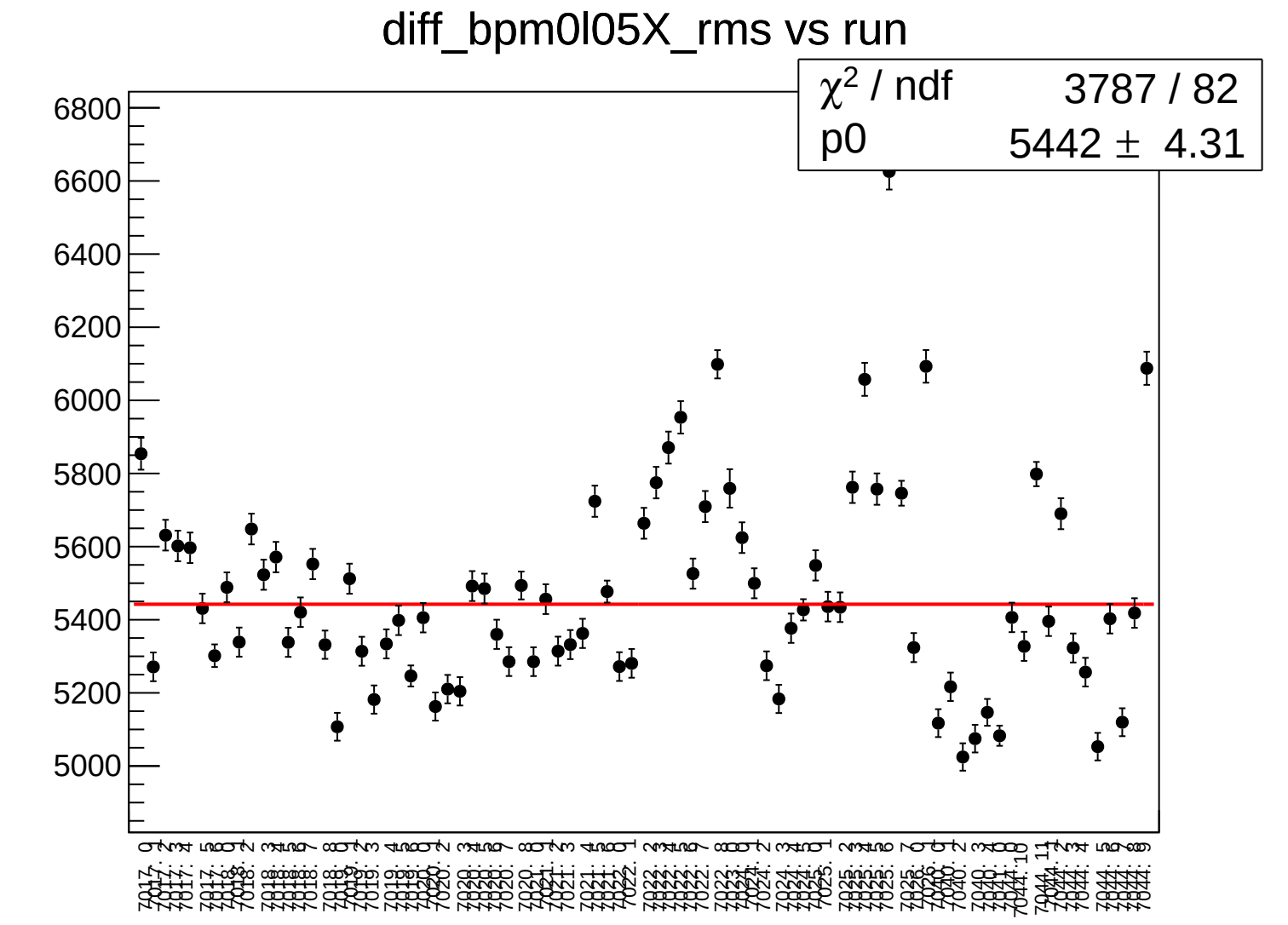

diff_bpm0l04Y_mean vs run
χ² / ndf 97.34 / 82
p0 −1.482 ± 2.175
pull
Entries 83
Mean 2924
Std Dev 2882

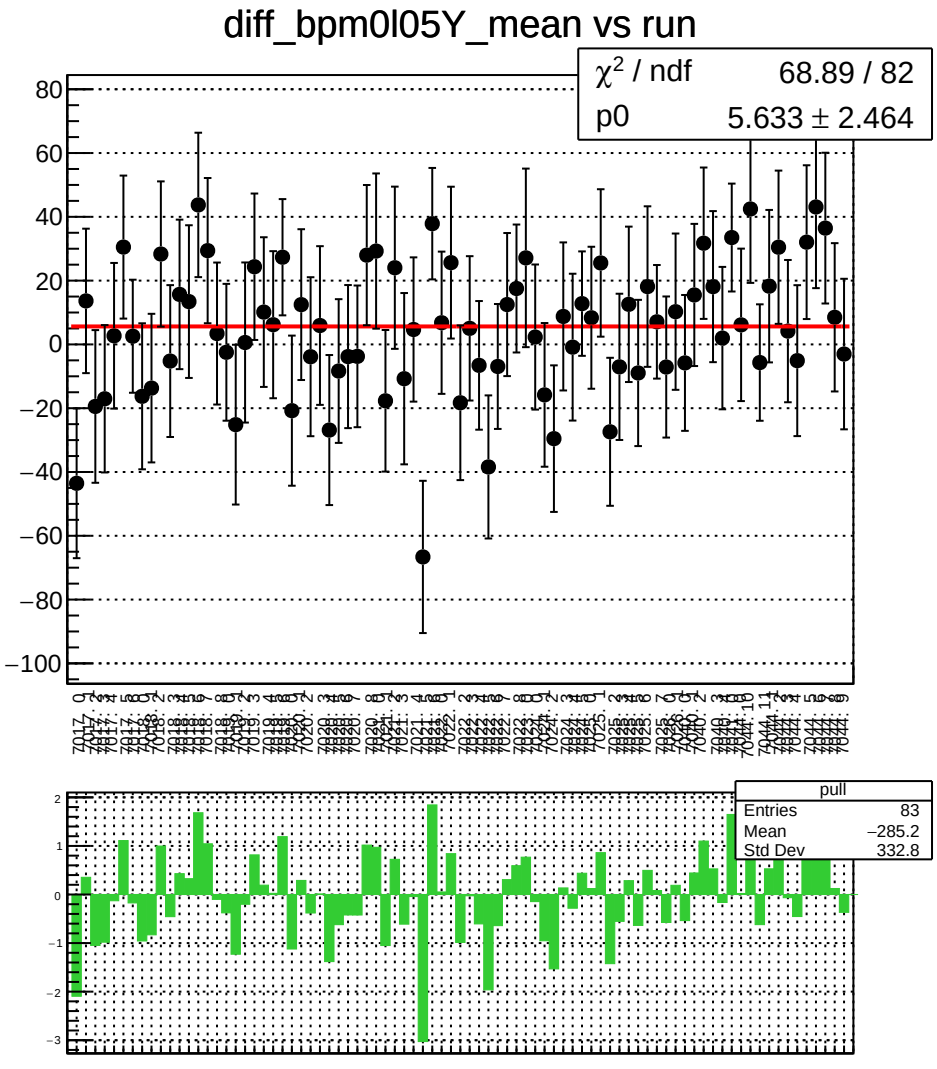

pull1D
Entries 83
Mean −0.001603
Std Dev 1.083

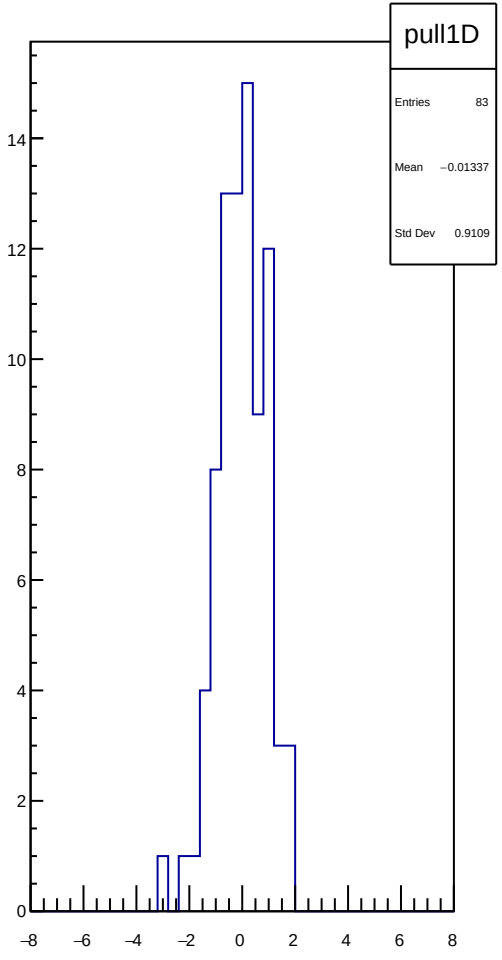

diff_bpm0l04Y_rms vs run
χ² / ndf 5818 / 82
p0 1941 ± 1.538
2300
2200
2100
2000
1900
1800
1700
1600
1500

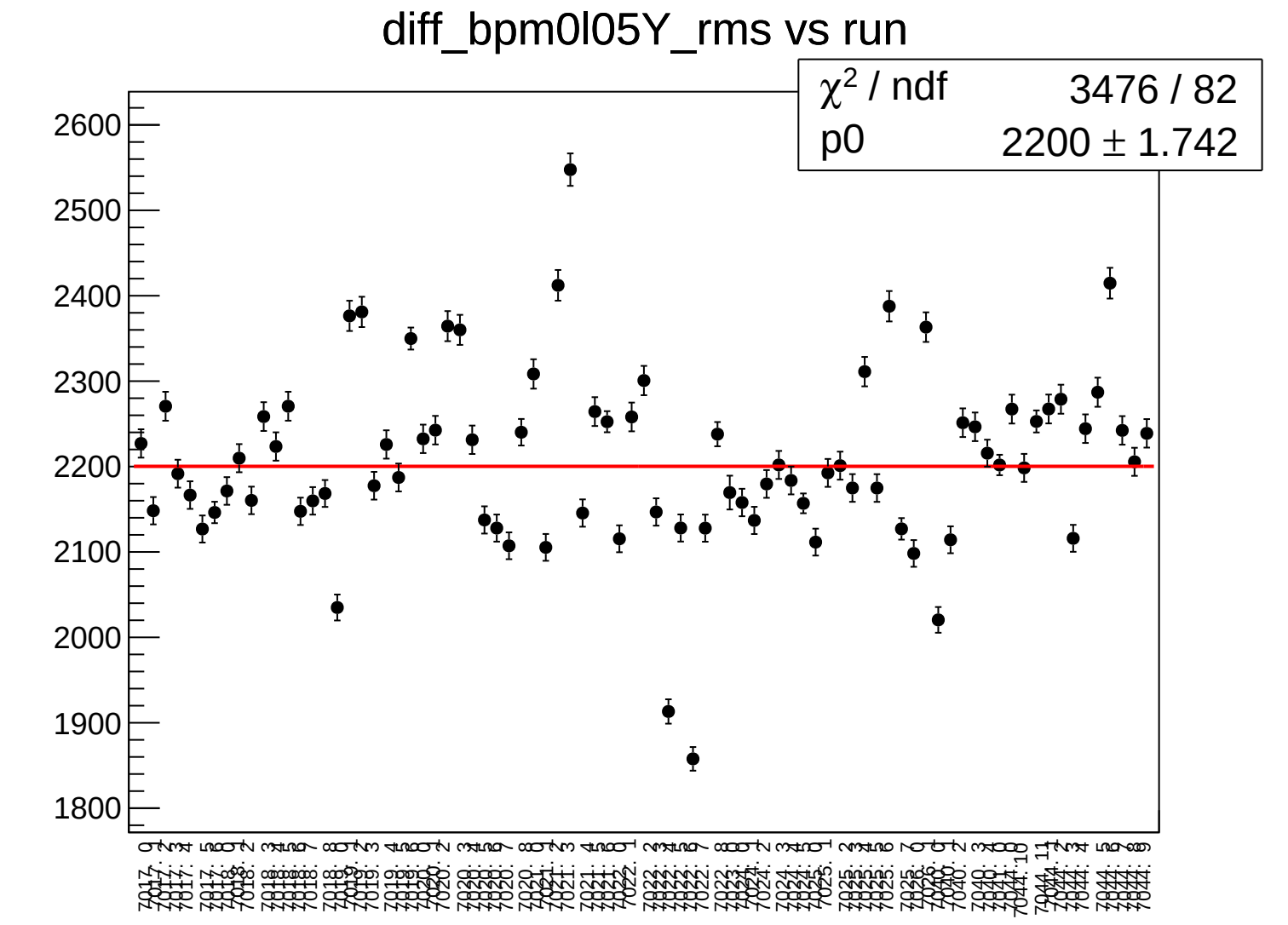

diff_bpm0l05X_mean vs run
χ^2 / ndf 91.99 / 82
p0 12.19 ± 6.095
pull
Entries 83
Mean −810.2
Std Dev 851.5

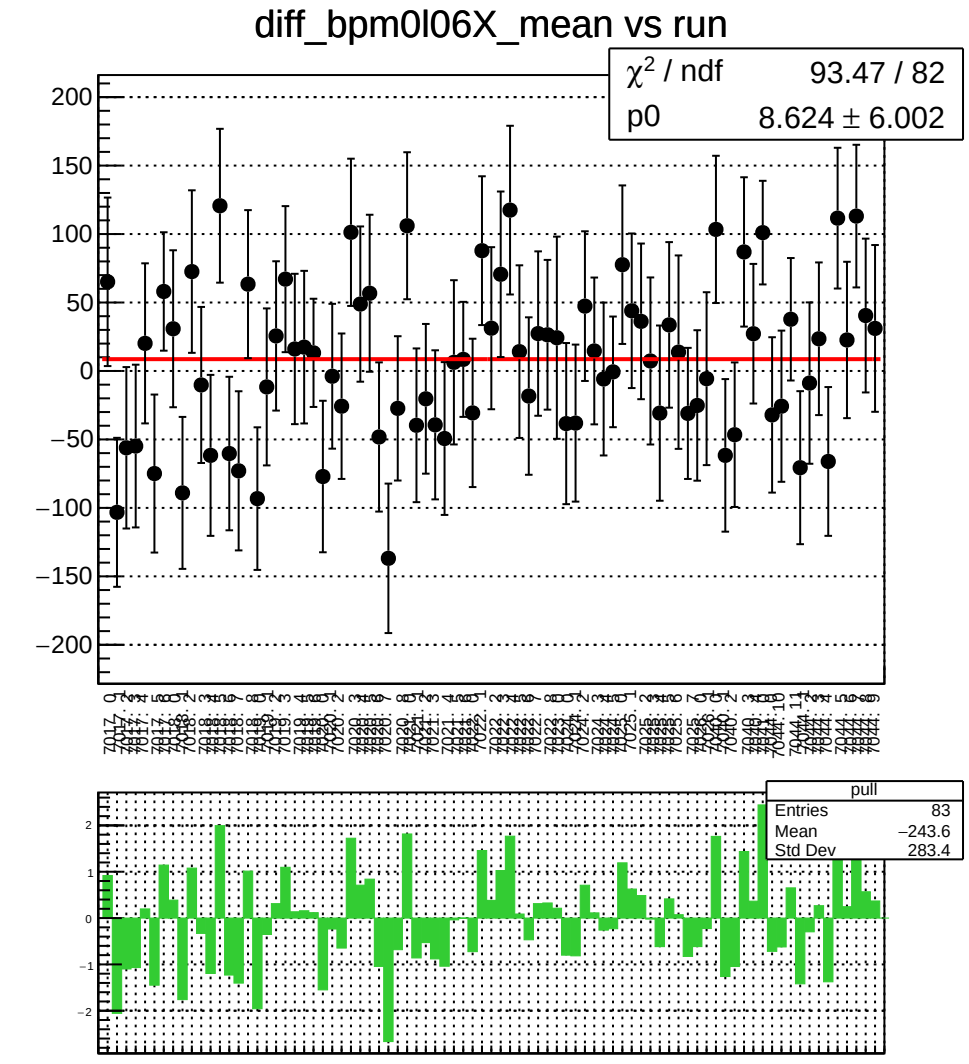

pull1D
Entries 83
Mean −0.007246
Std Dev 1.053

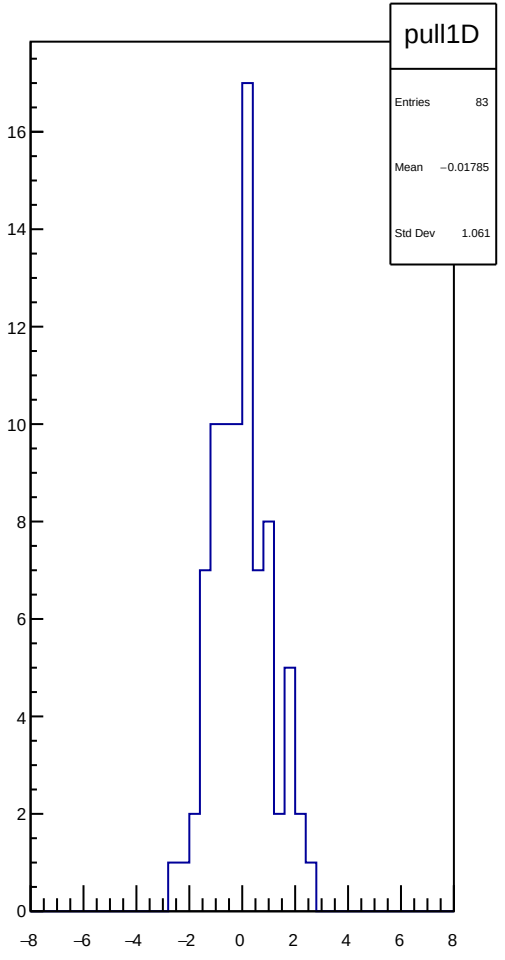

diff_bpm0l05X_rms vs run
χ² / ndf 3787 / 82
p0 5442 ± 4.31
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000

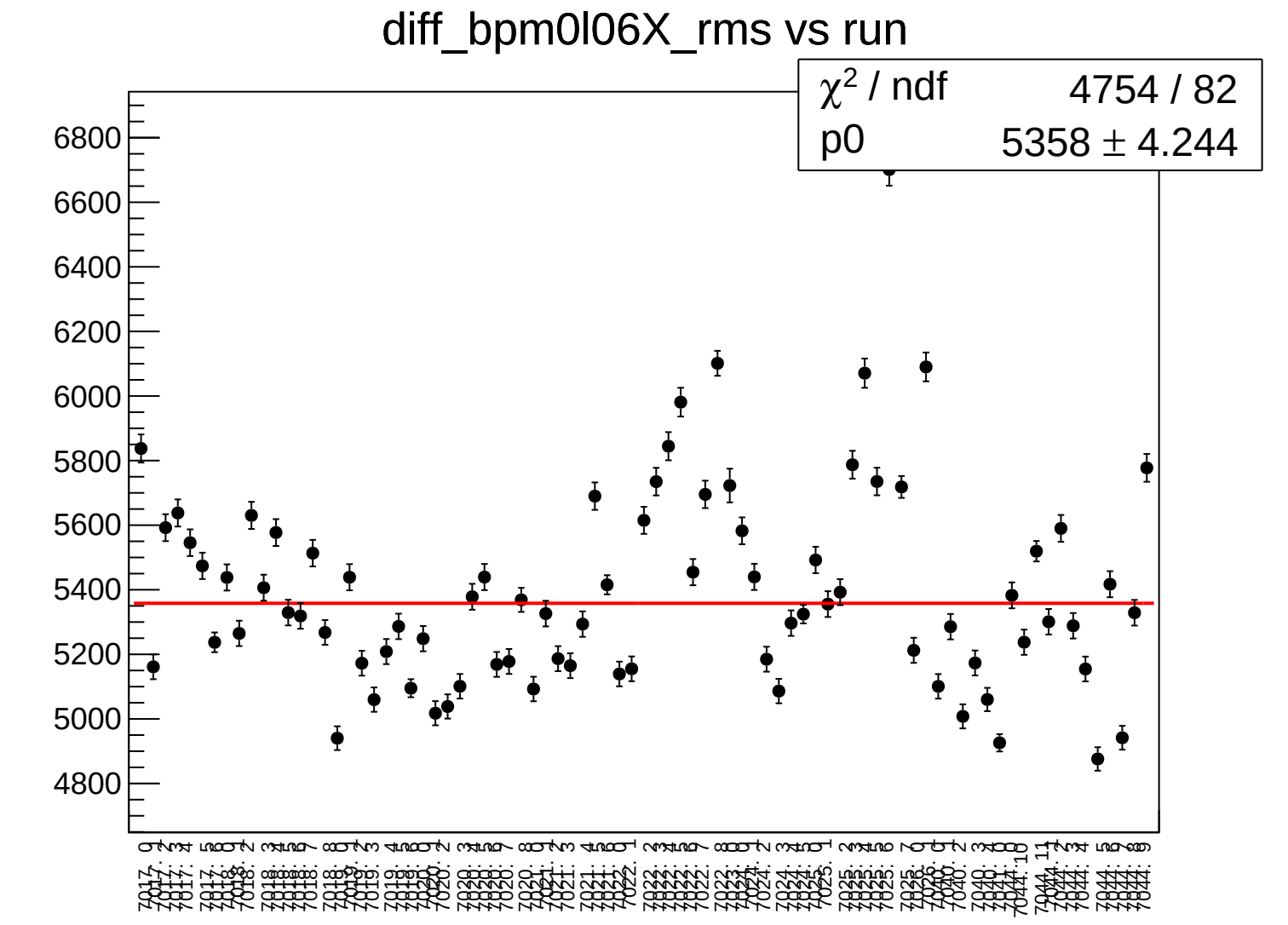

diff_bpm0l05Y_mean vs run
χ^2 / ndf 68.89 / 82
p0 5.633 ± 2.464
pull
Entries 83
Mean −285.2
Std Dev 332.8

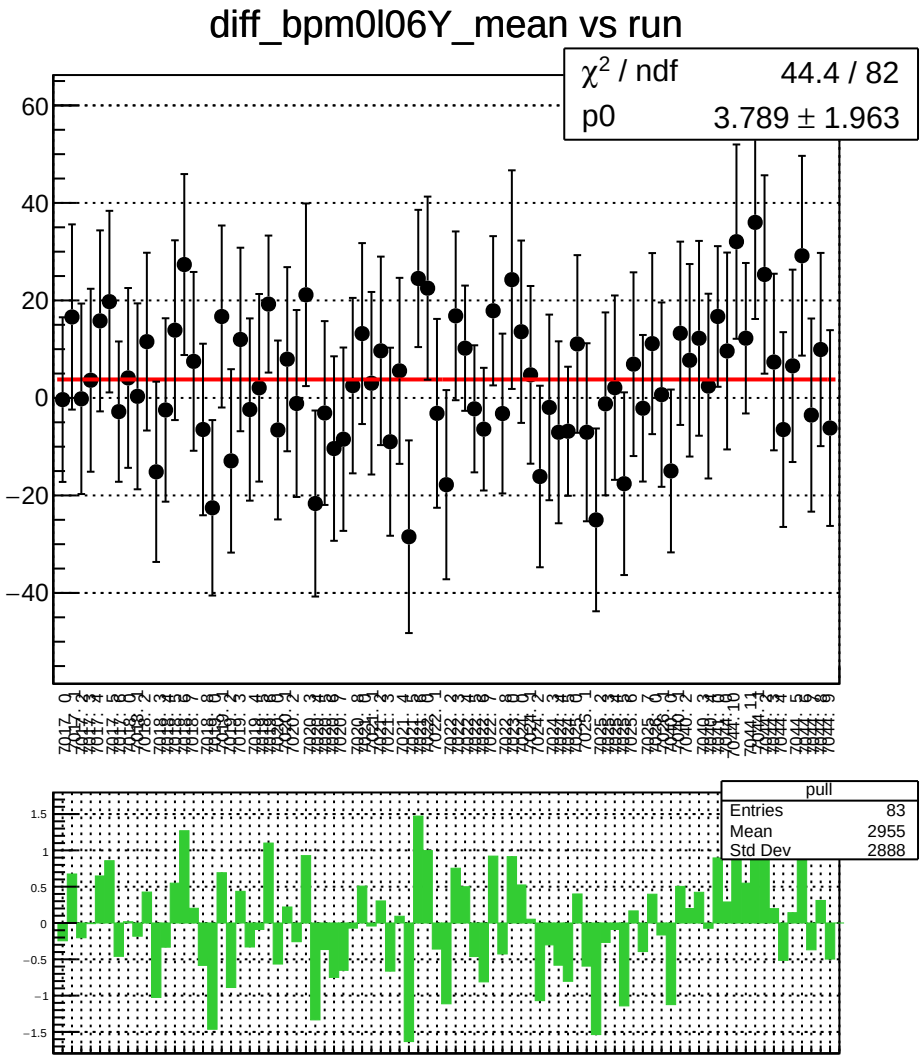

pull1D
Entries 83
Mean −0.01337
Std Dev 0.9109

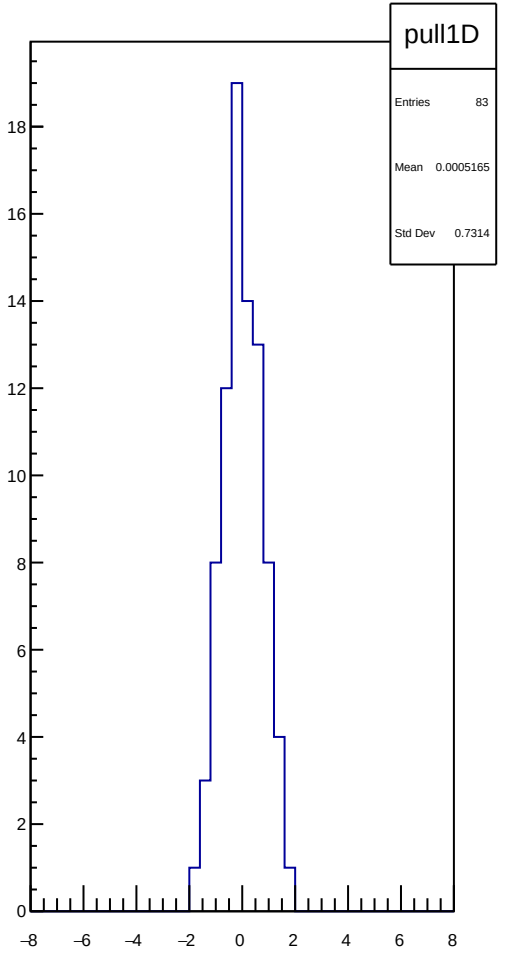

diff_bpm0l05Y_rms vs run
χ² / ndf 3476 / 82
p0 2200 ± 1.742
2600
2500
2400
2300
2200
2100
2000
1900
1800

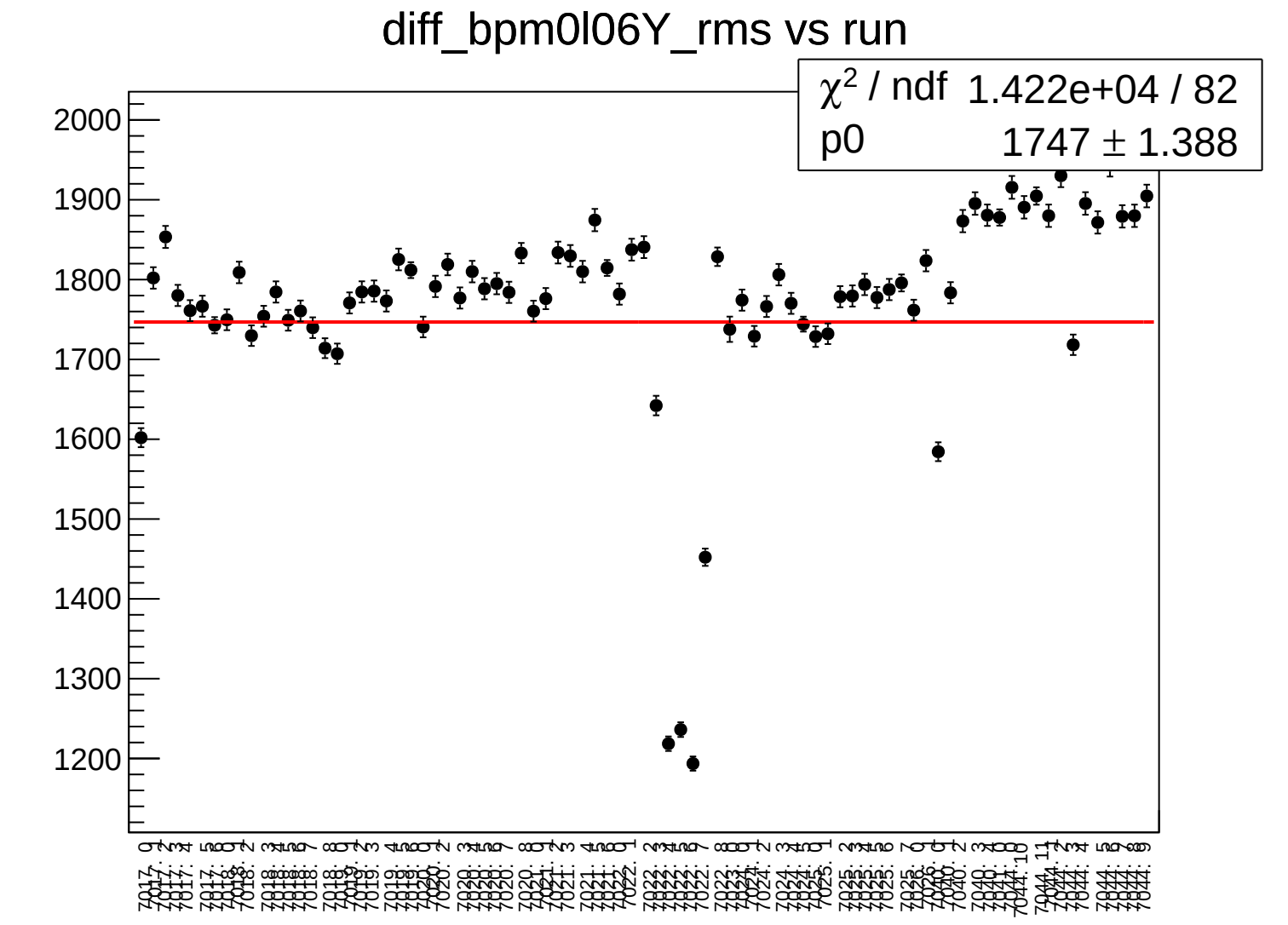

diff_bpm0l06X_mean vs run
χ² / ndf 93.47 / 82
p0 8.624 ± 6.002
pull
Entries 83
Mean −243.6
Std Dev 283.4

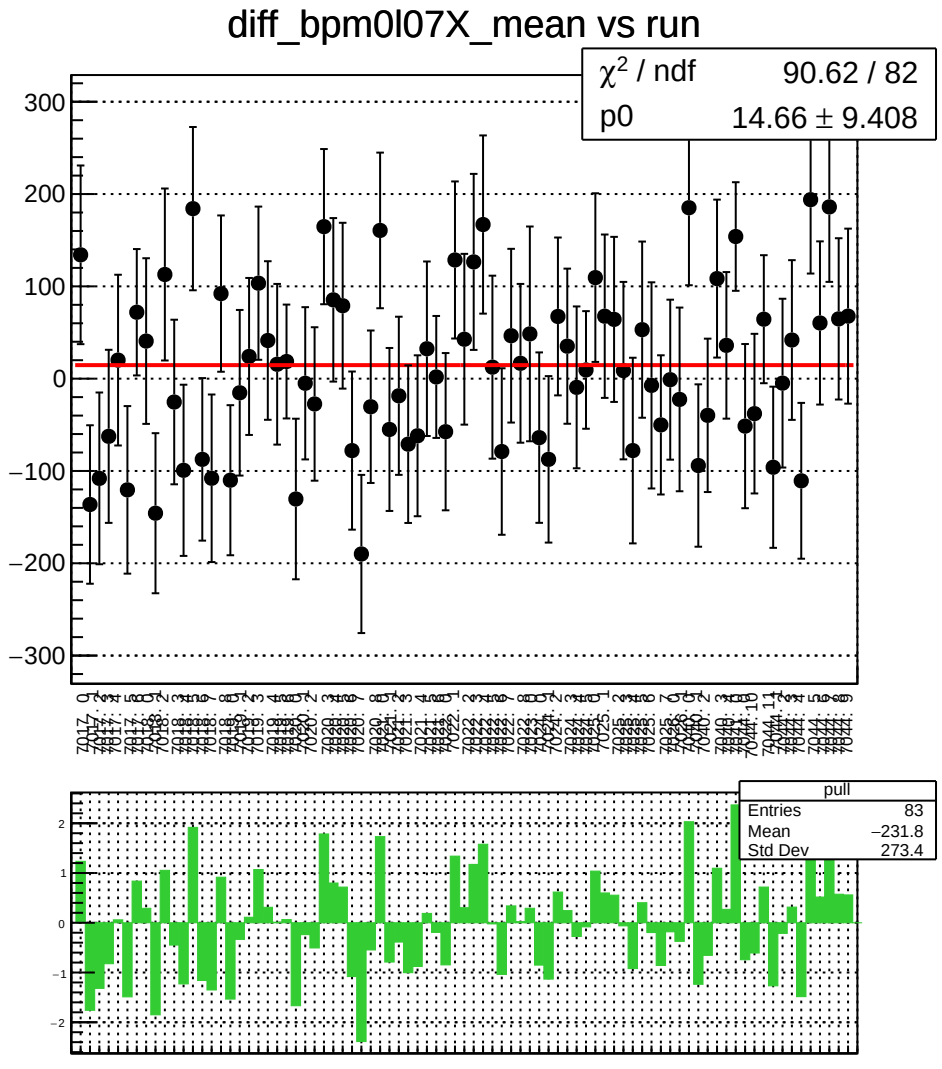

pull1D
Entries 83
Mean −0.01785
Std Dev 1.061

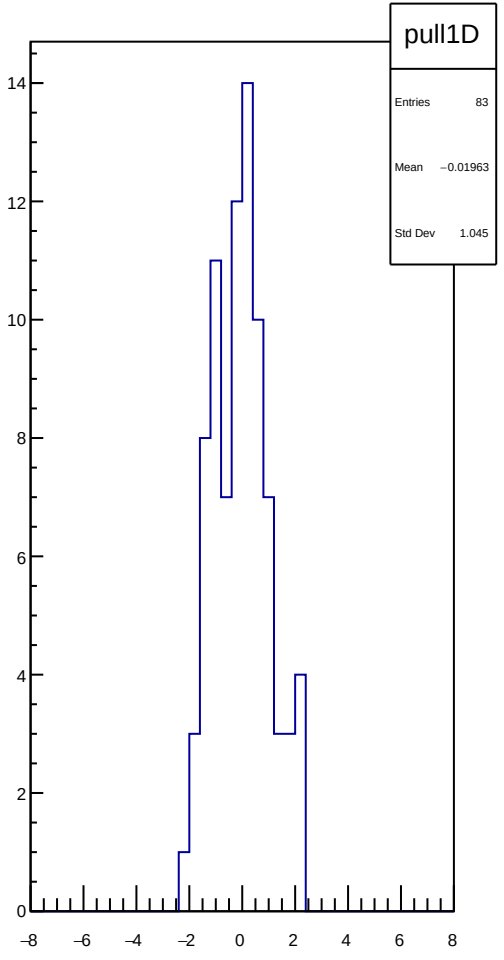

diff_bpm0l06X_rms vs run
χ² / ndf 4754 / 82
p0 5358 ± 4.244
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

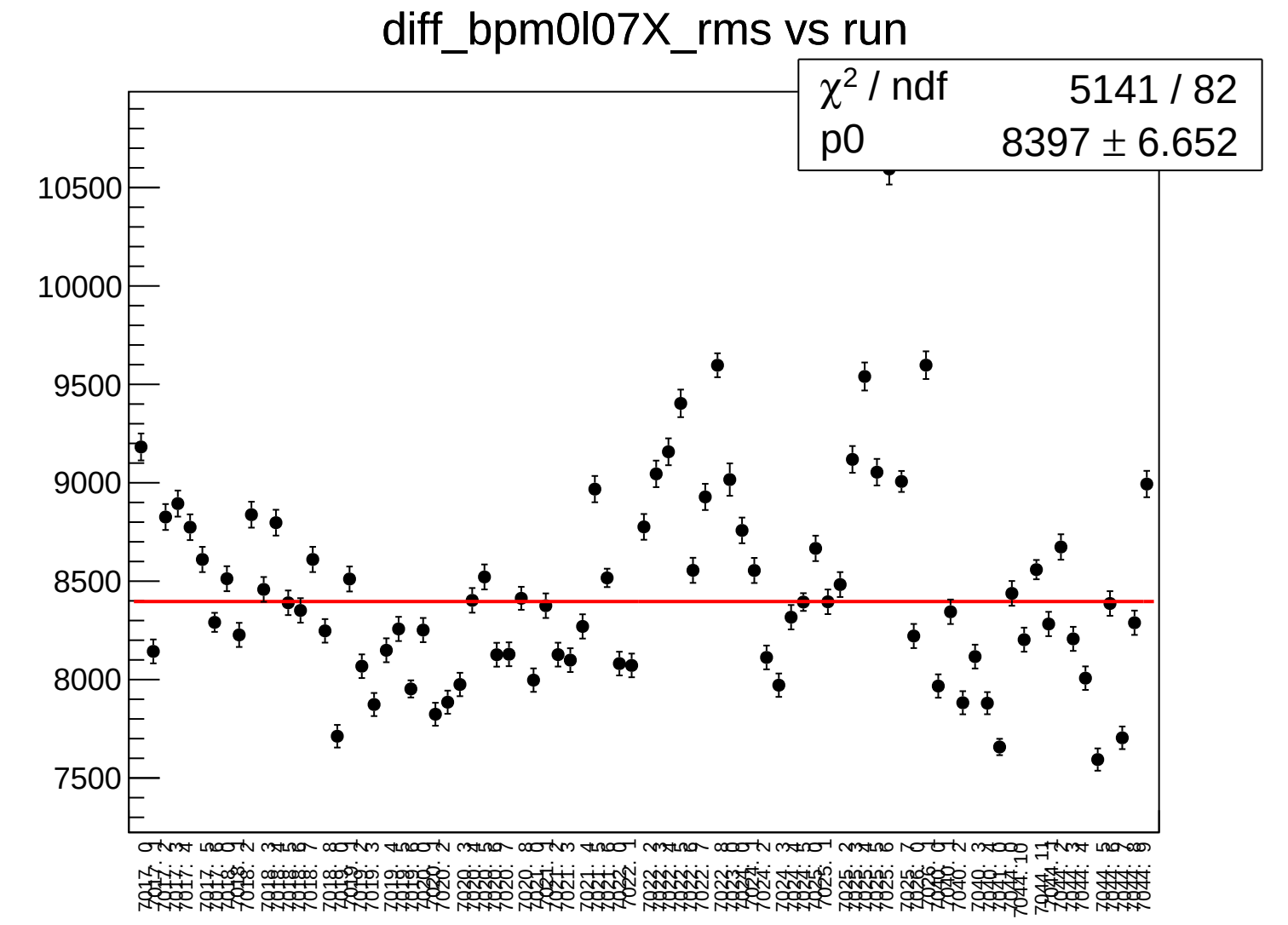

diff_bpm0l06Y_mean vs run
χ² / ndf 44.4 / 82
p0 3.789 ± 1.963
pull
Entries 83
Mean 2955
Std Dev 2888

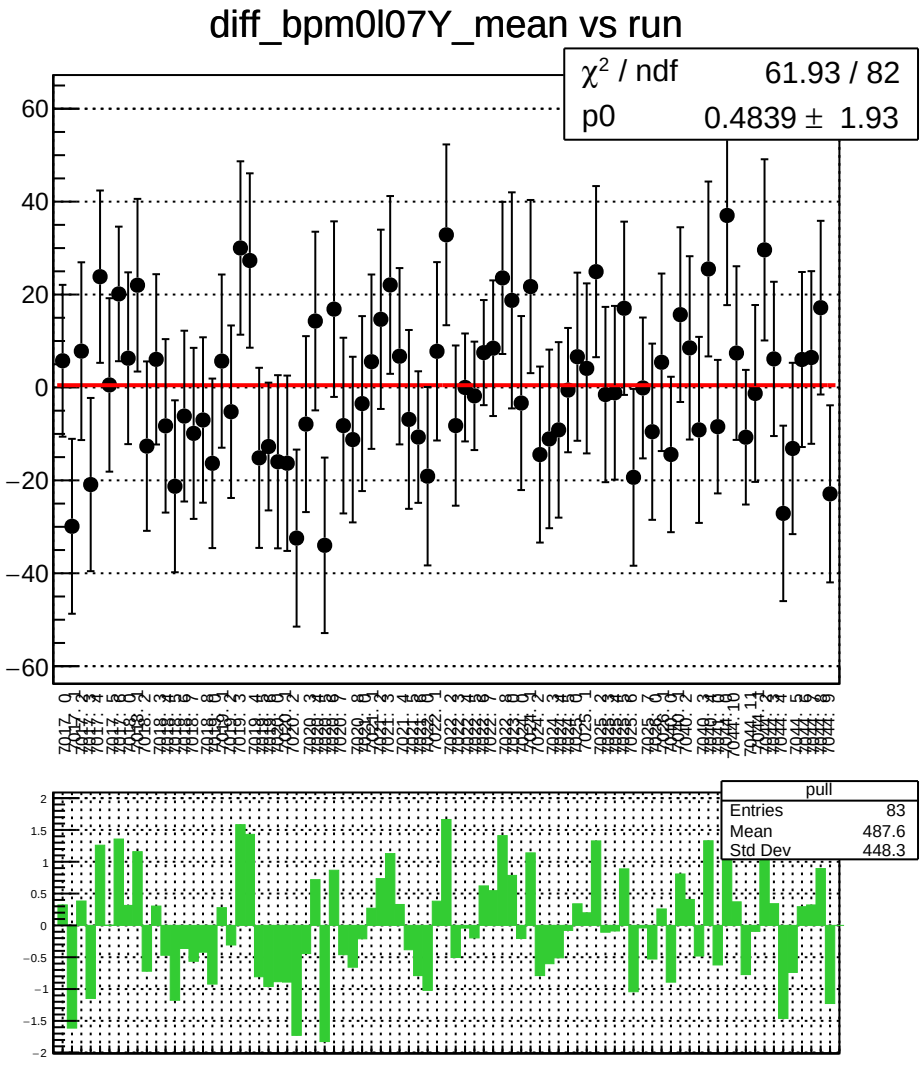

pull1D
Entries 83
Mean 0.0005165
Std Dev 0.7314

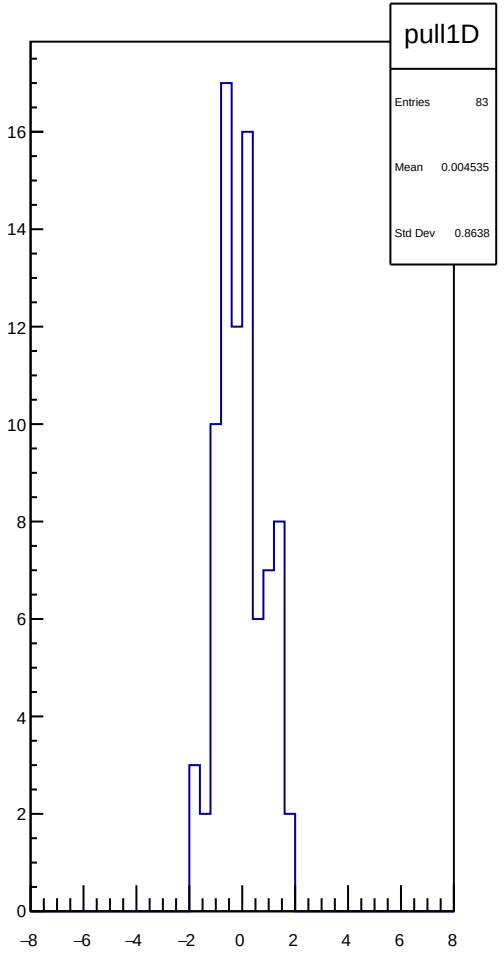

diff_bpm0l06Y_rms vs run
χ² / ndf 1.422e+04 / 82
p0 1747 ± 1.388
2000
1900
1800
1700
1600
1500
1400
1300
1200

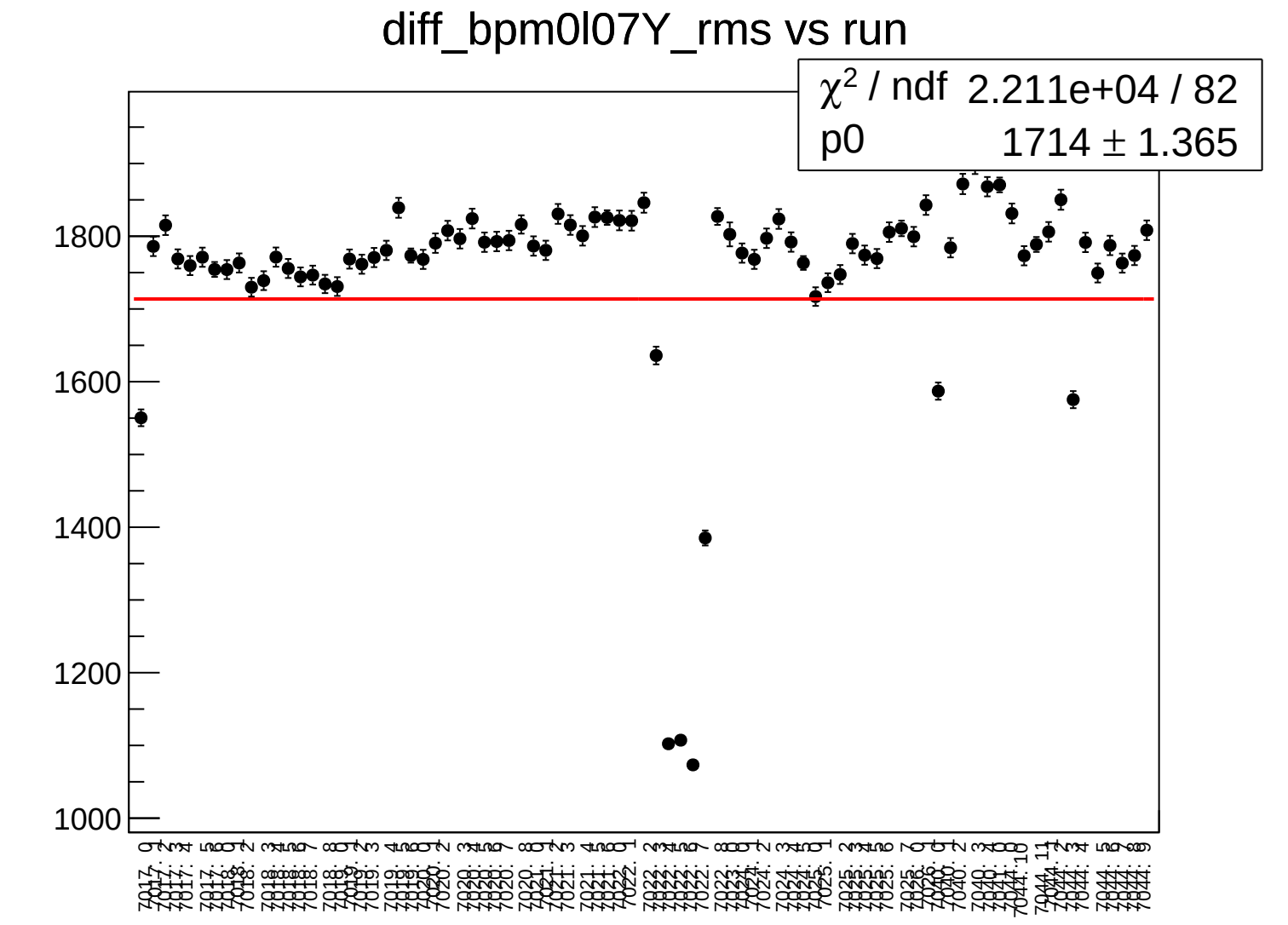

diff_bpm0l07X_mean vs run
χ^2 / ndf 90.62 / 82
p0 14.66 ± 9.408
pull
Entries 83
Mean −231.8
Std Dev 273.4

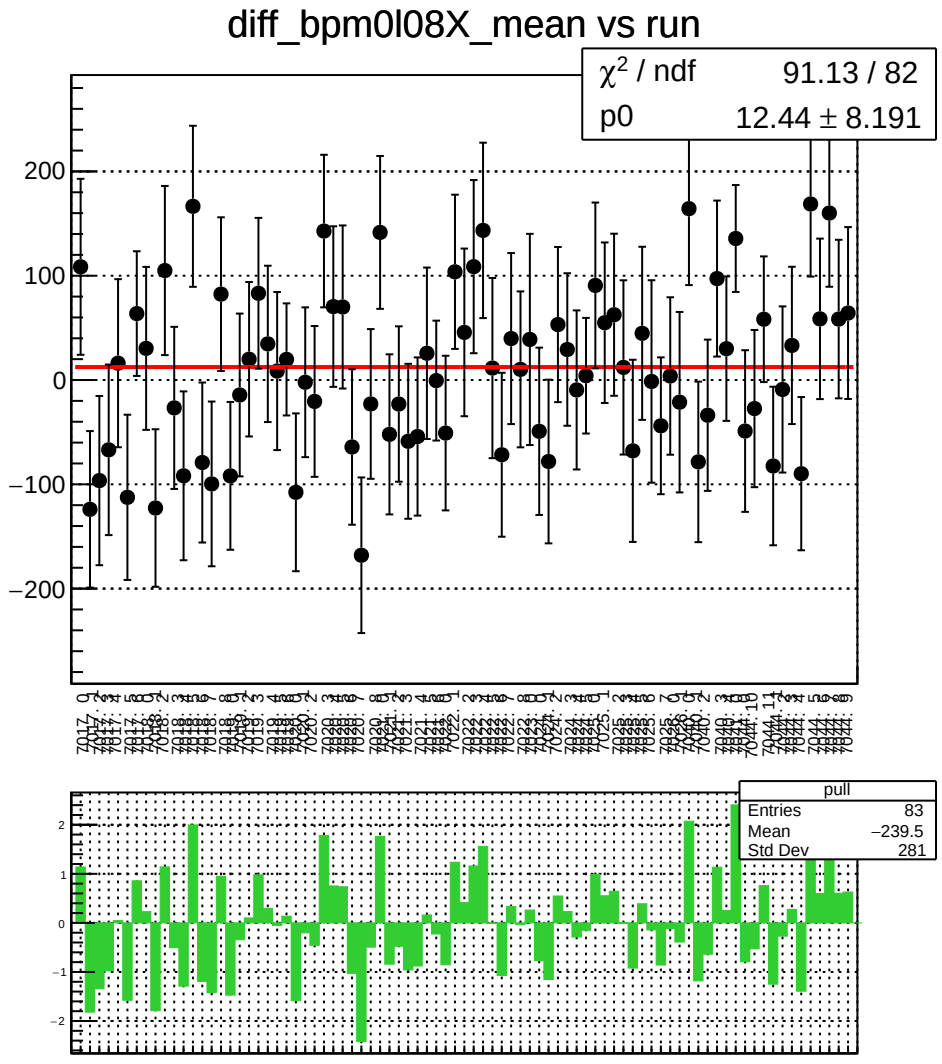

pull1D
Entries 83
Mean −0.01963
Std Dev 1.045

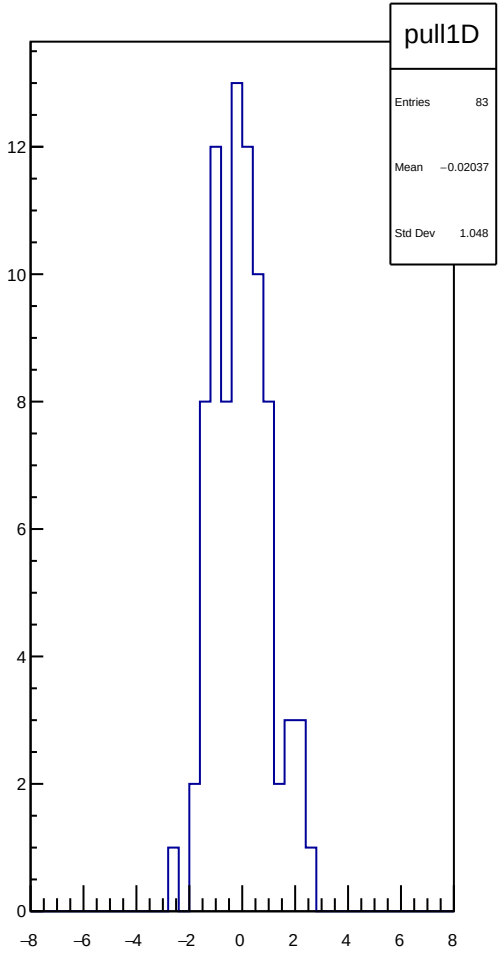

diff_bpm0l07X_rms vs run
χ² / ndf 5141 / 82
p0 8397 ± 6.652
10500
10000
9500
9000
8500
8000
7500

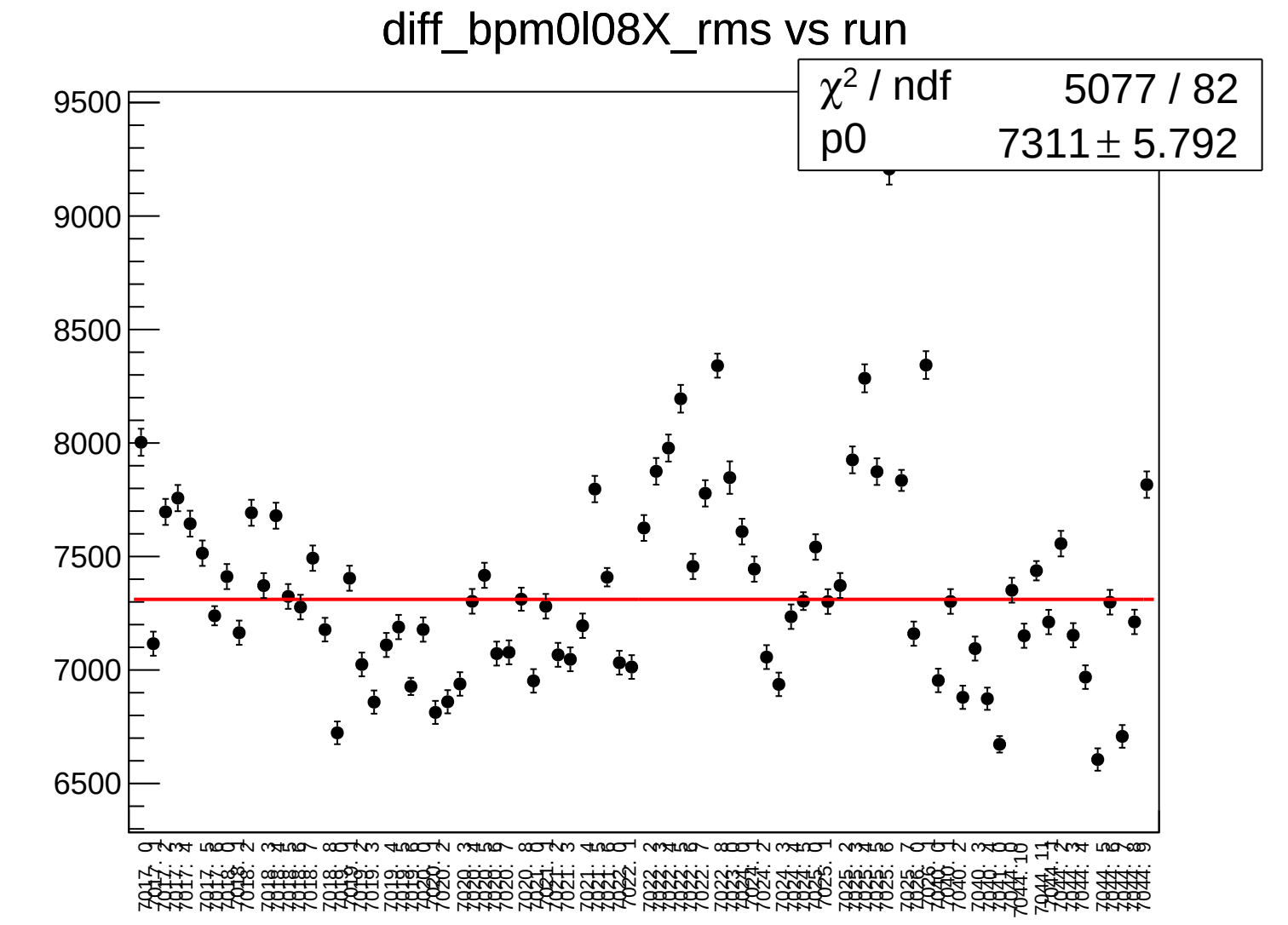

diff_bpm0l07Y_mean vs run
χ² / ndf 61.93 / 82
p0 0.4839 ± 1.93
pull
Entries 83
Mean 487.6
Std Dev 448.3

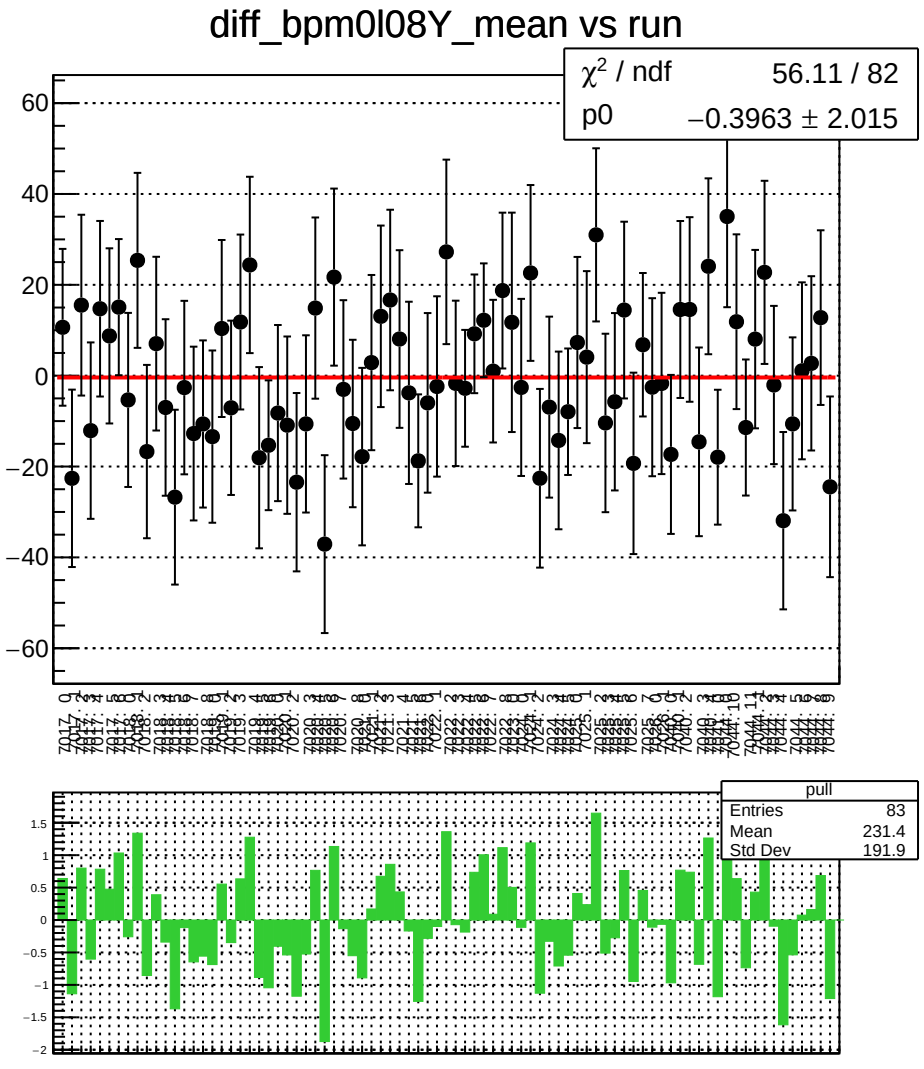

pull1D
Entries 83
Mean 0.004535
Std Dev 0.8638

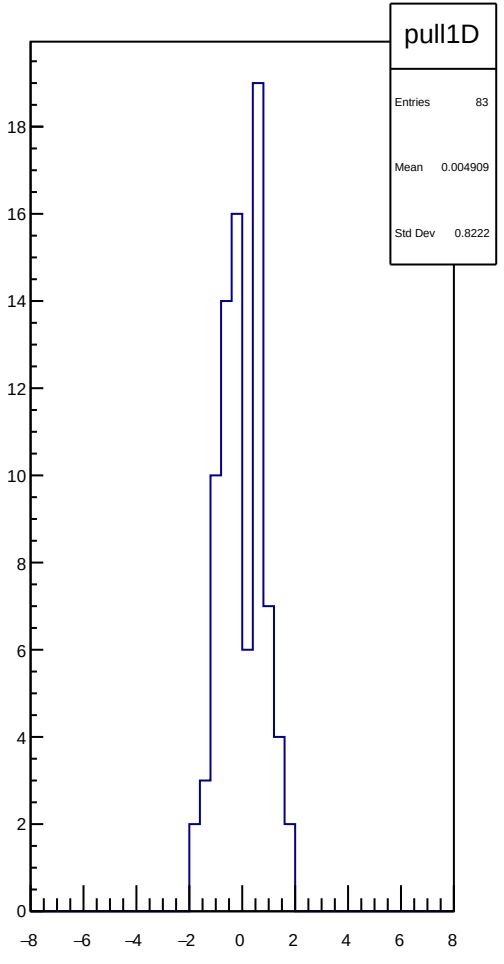

diff_bpm0l07Y_rms vs run
χ² / ndf 2.211e+04 / 82
p0 1714 ± 1.365
1800
1600
1400
1200
1000

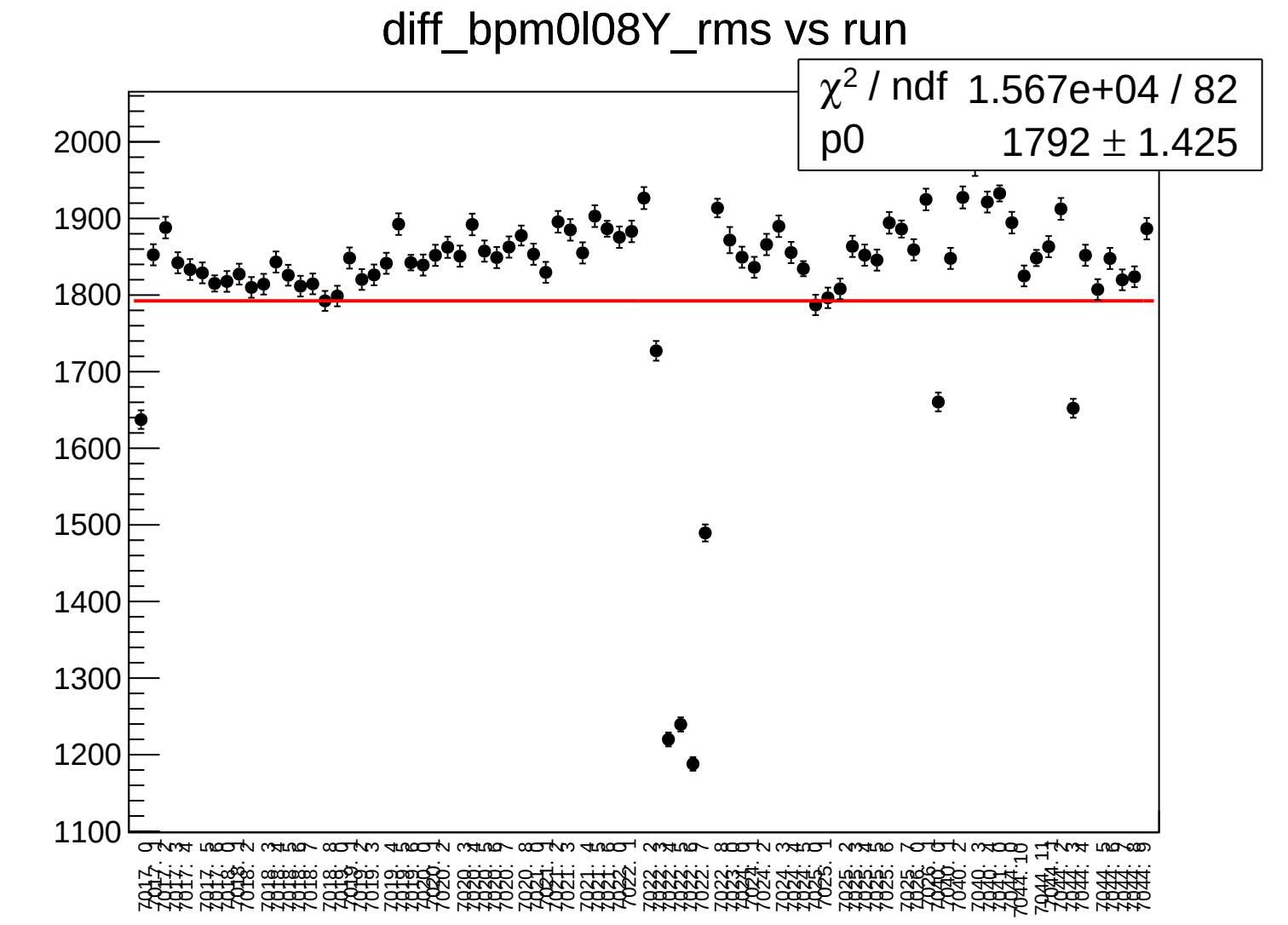

diff_bpm0l08X_mean vs run
χ^2 / ndf 91.13 / 82
p0 12.44 ± 8.191
200
100
0
−100
−200
pull
Entries 83
Mean −239.5
Std Dev 281
2
1
0
−1
−2

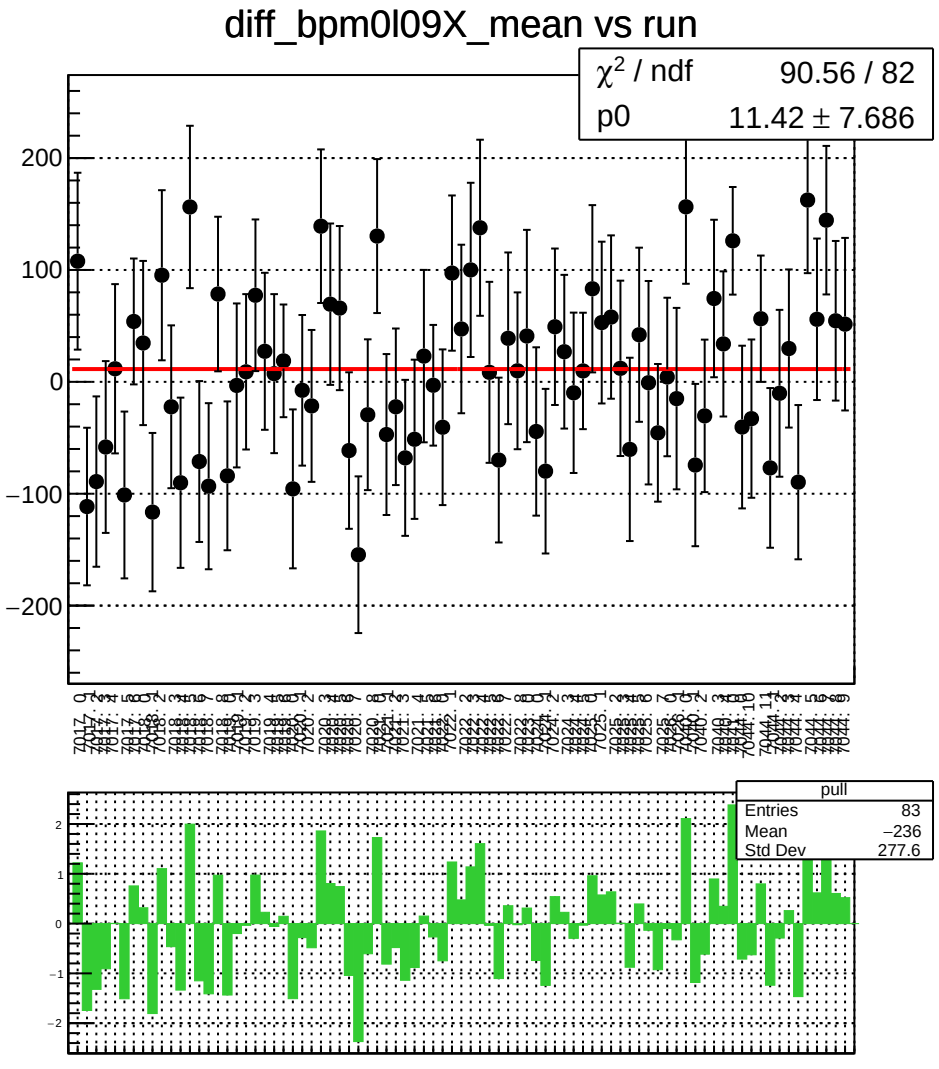

pull1D
Entries 83
Mean −0.02037
Std Dev 1.048
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

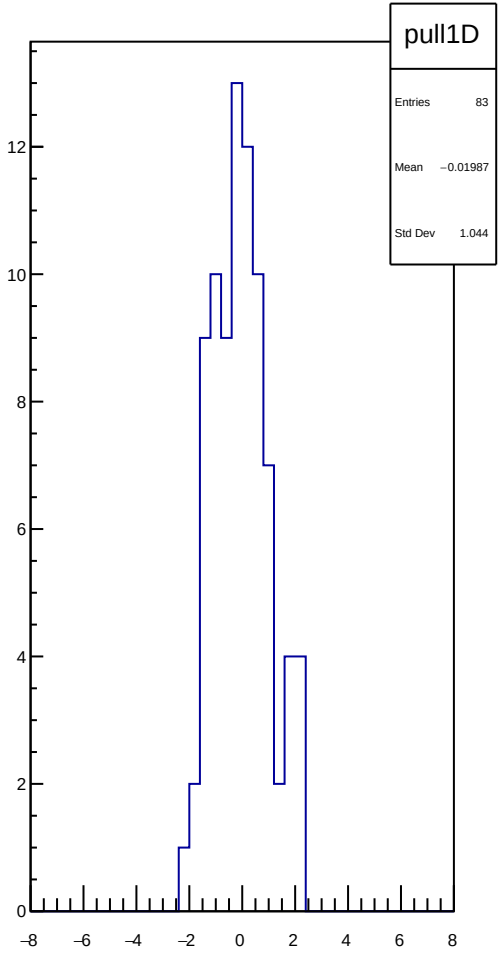

diff_bpm0l08X_rms vs run
χ² / ndf 5077 / 82
p0 7311 ± 5.792
9500
9000
8500
8000
7500
7000
6500

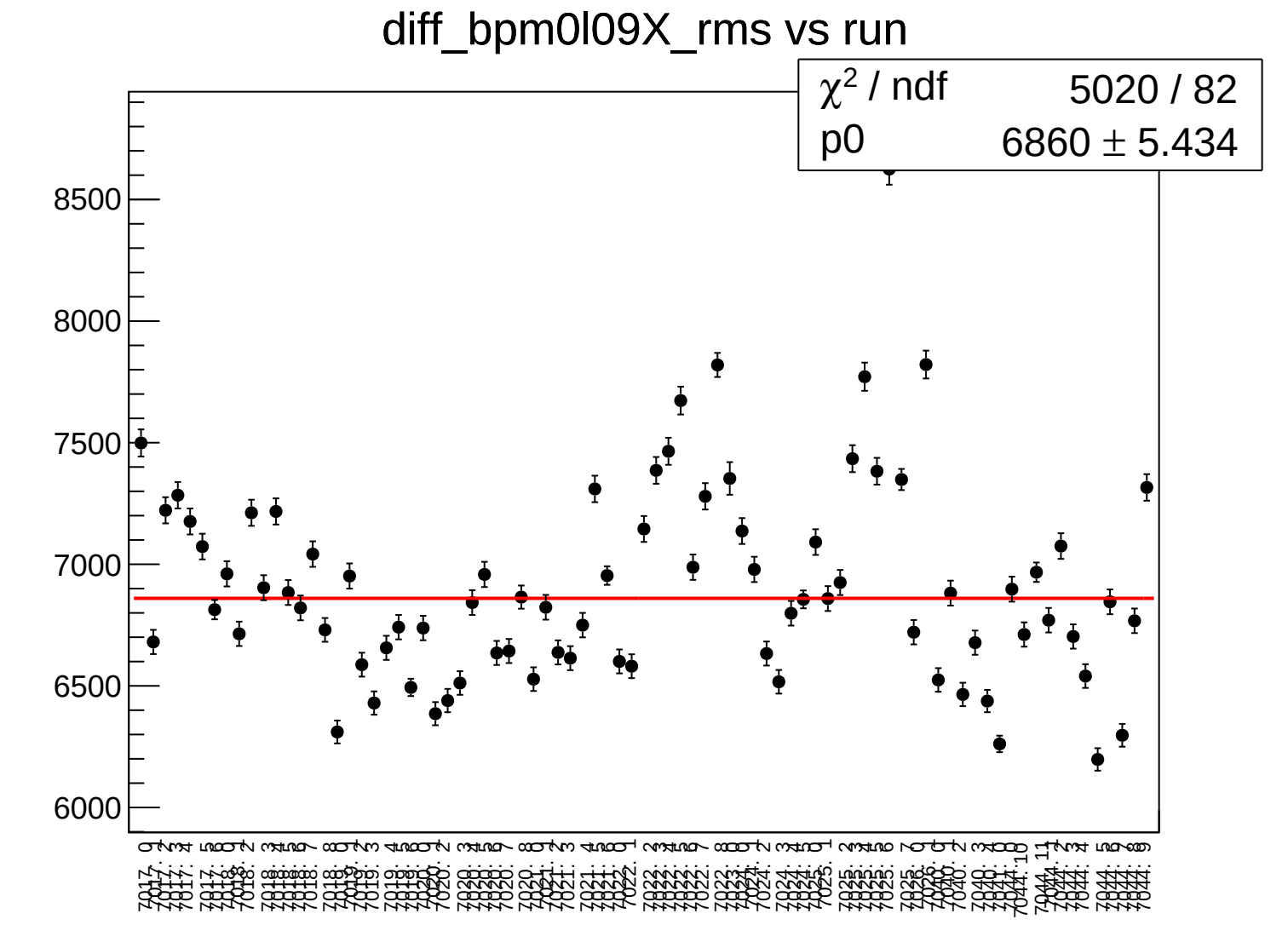

diff_bpm0l08Y_mean vs run
χ² / ndf 56.11 / 82
p0 −0.3963 ± 2.015
pull
Entries 83
Mean 231.4
Std Dev 191.9

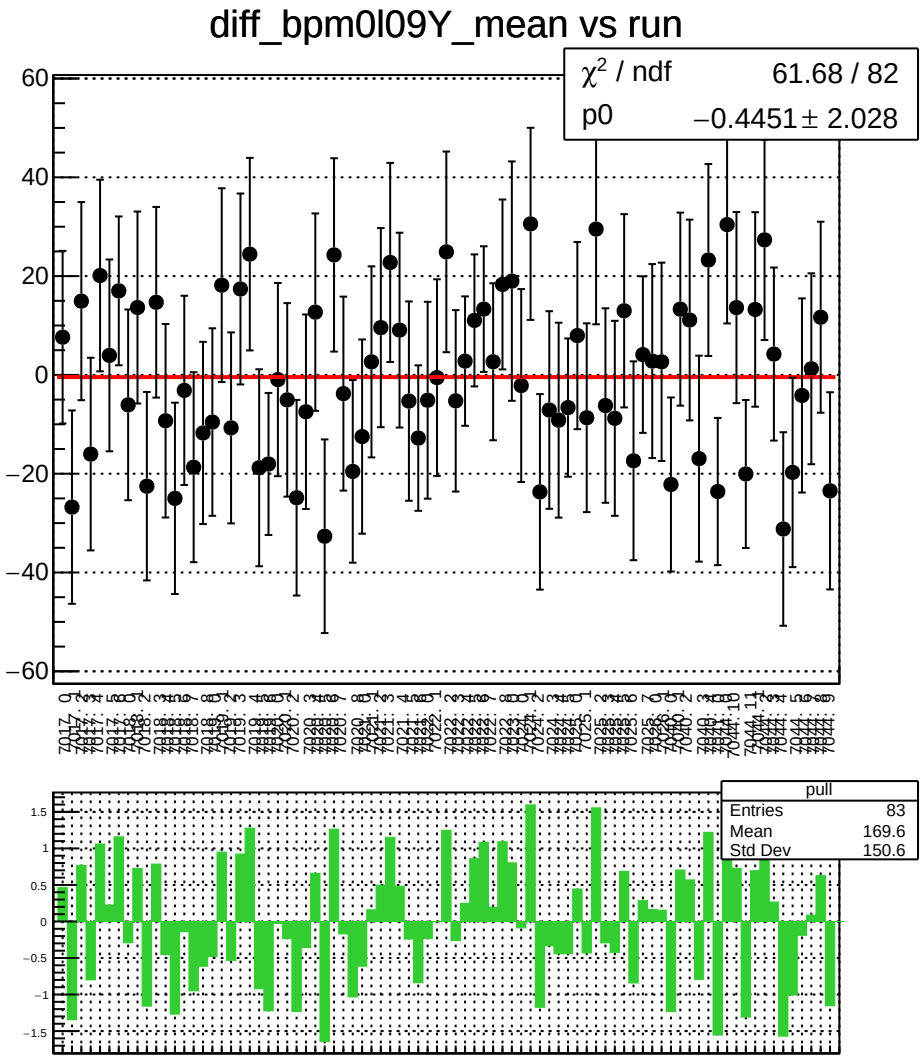

pull1D
Entries 83
Mean 0.004909
Std Dev 0.8222

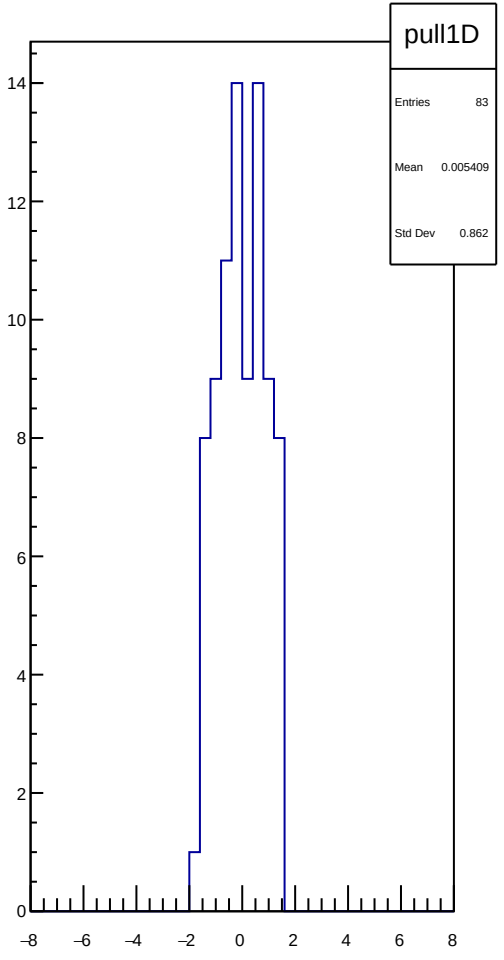

diff_bpm0l08Y_rms vs run
χ² / ndf 1.567e+04 / 82
p0 1792 ± 1.425
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100

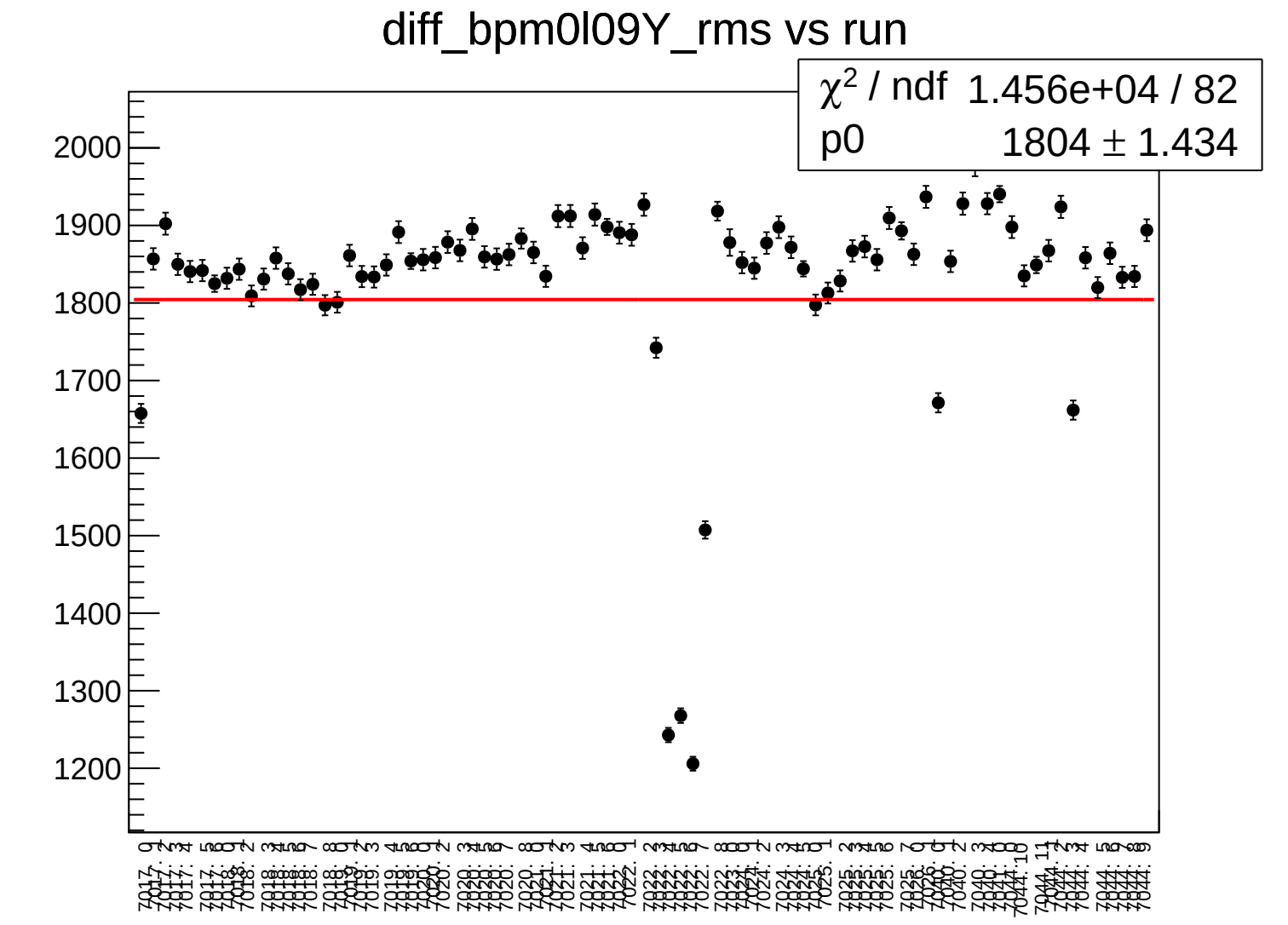

diff_bpm0l09X_mean vs run
χ^2 / ndf 90.56 / 82
p0 11.42 ± 7.686
200
100
0
−100
−200
pull
Entries 83
Mean −236
Std Dev 277.6
2
1
0
−1
−2

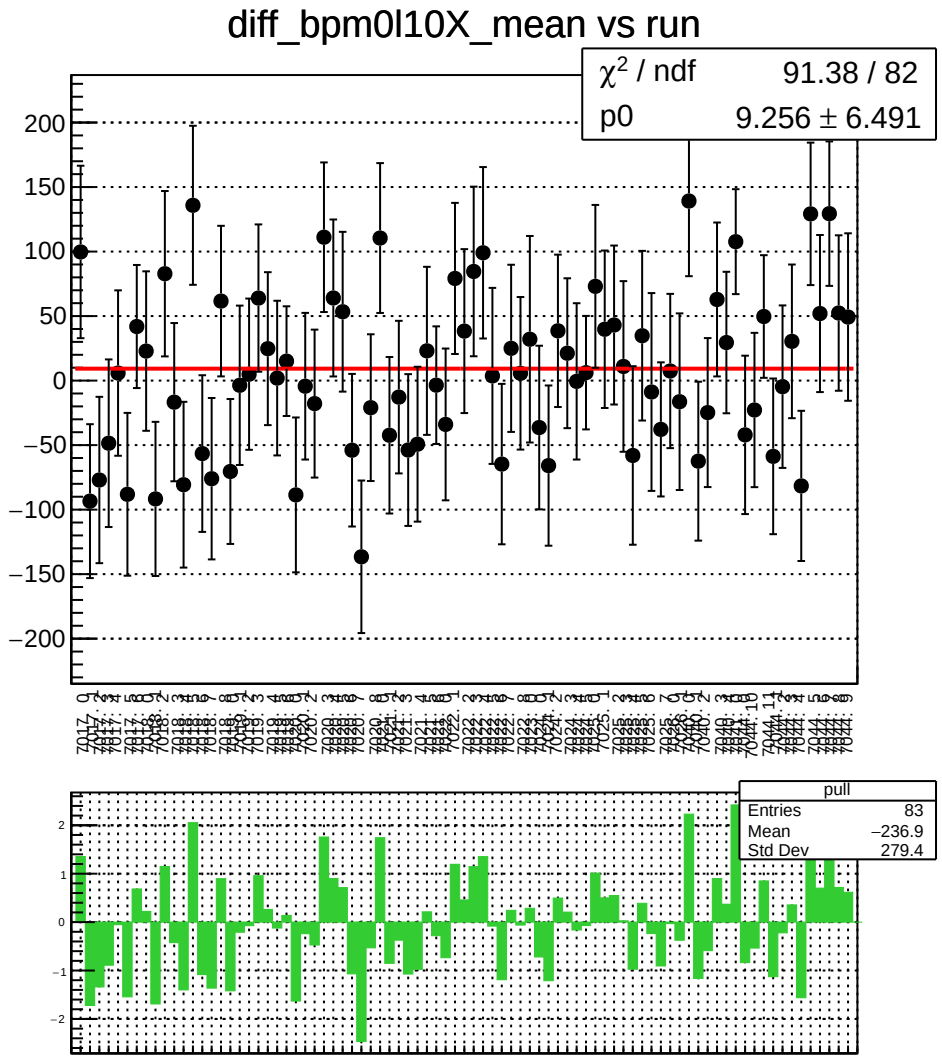

pull1D
Entries 83
Mean −0.01987
Std Dev 1.044
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

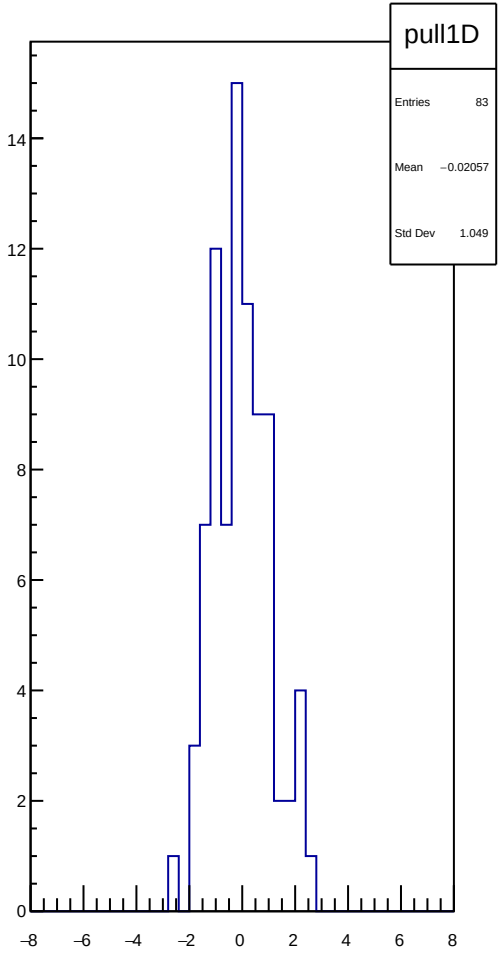

diff_bpm0l09X_rms vs run
χ² / ndf 5020 / 82
p0 6860 ± 5.434
8500
8000
7500
7000
6500
6000

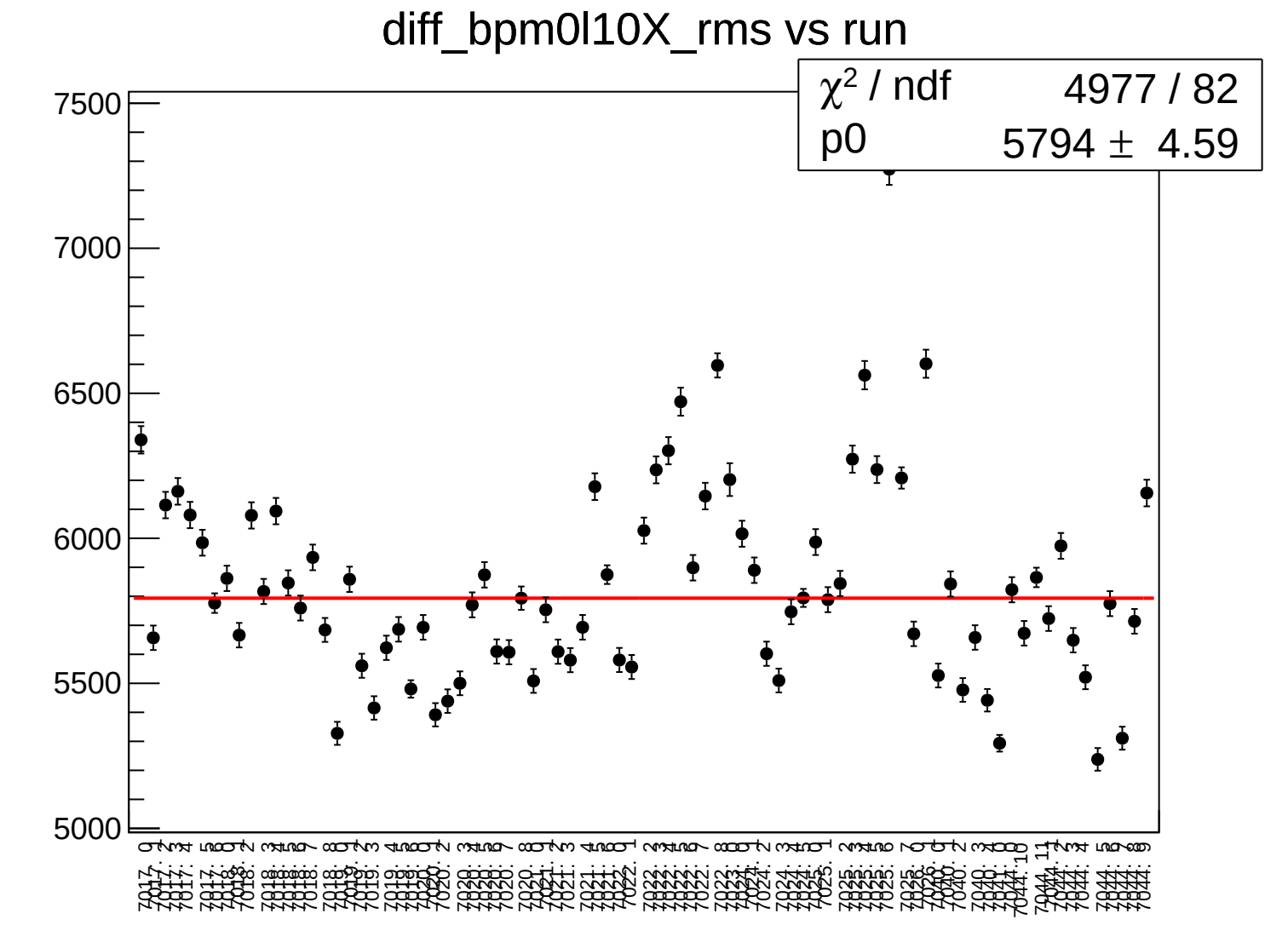

diff_bpm0l09Y_mean vs run
χ^2 / ndf 61.68 / 82
p0 −0.4451 ± 2.028
pull
Entries 83
Mean 169.6
Std Dev 150.6

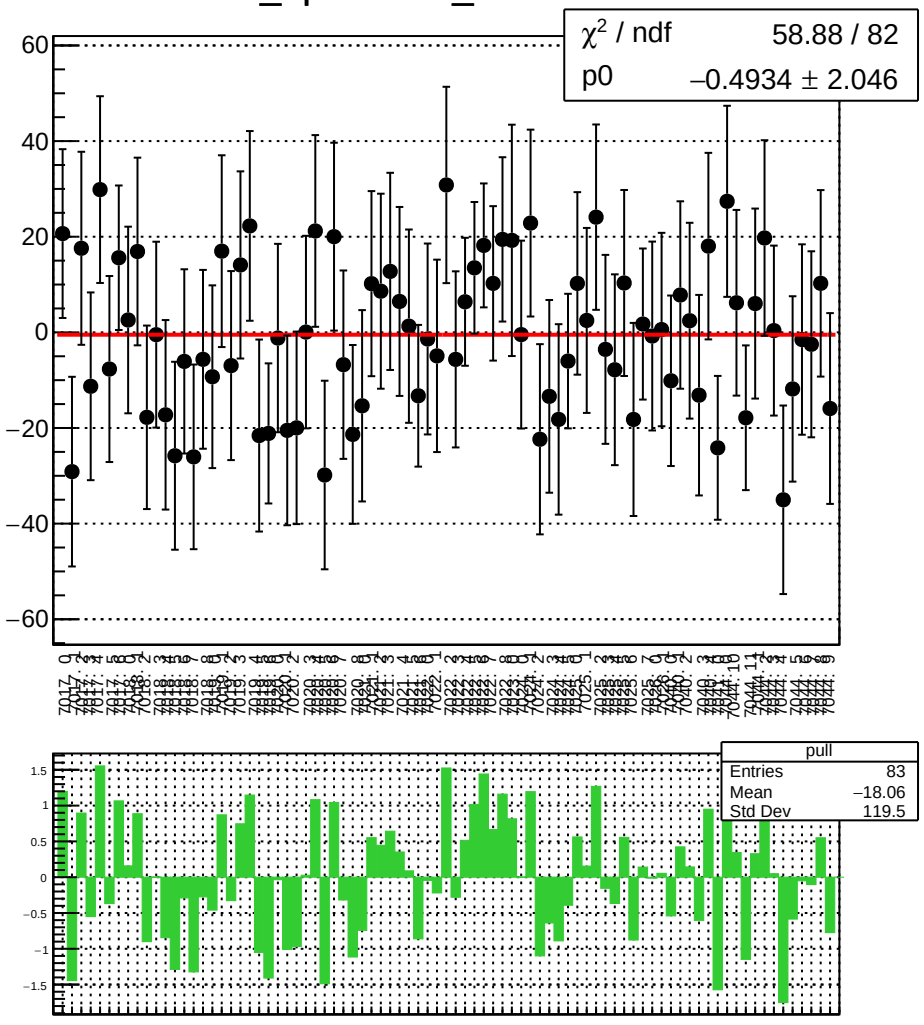

pull1D
Entries 83
Mean 0.005409
Std Dev 0.862

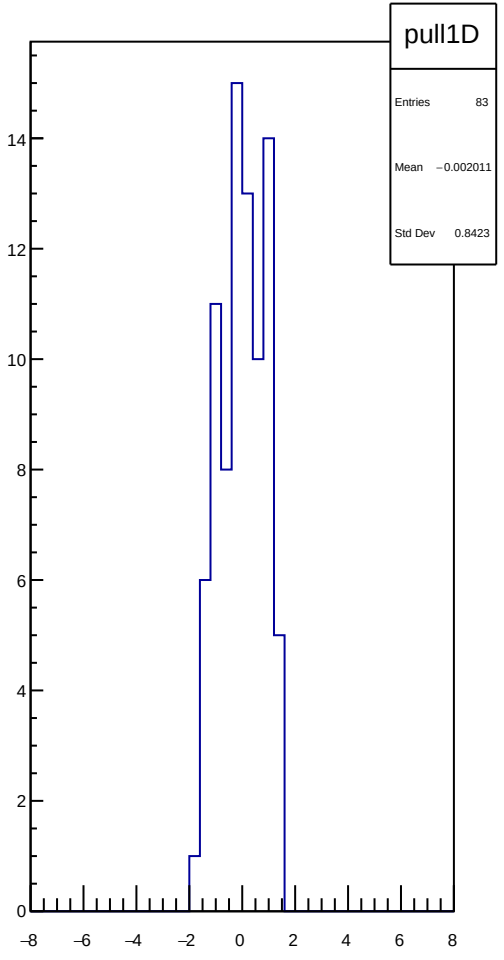

diff_bpm0l09Y_rms vs run
χ² / ndf 1.456e+04 / 82
p0 1804 ± 1.434
2000
1900
1800
1700
1600
1500
1400
1300
1200

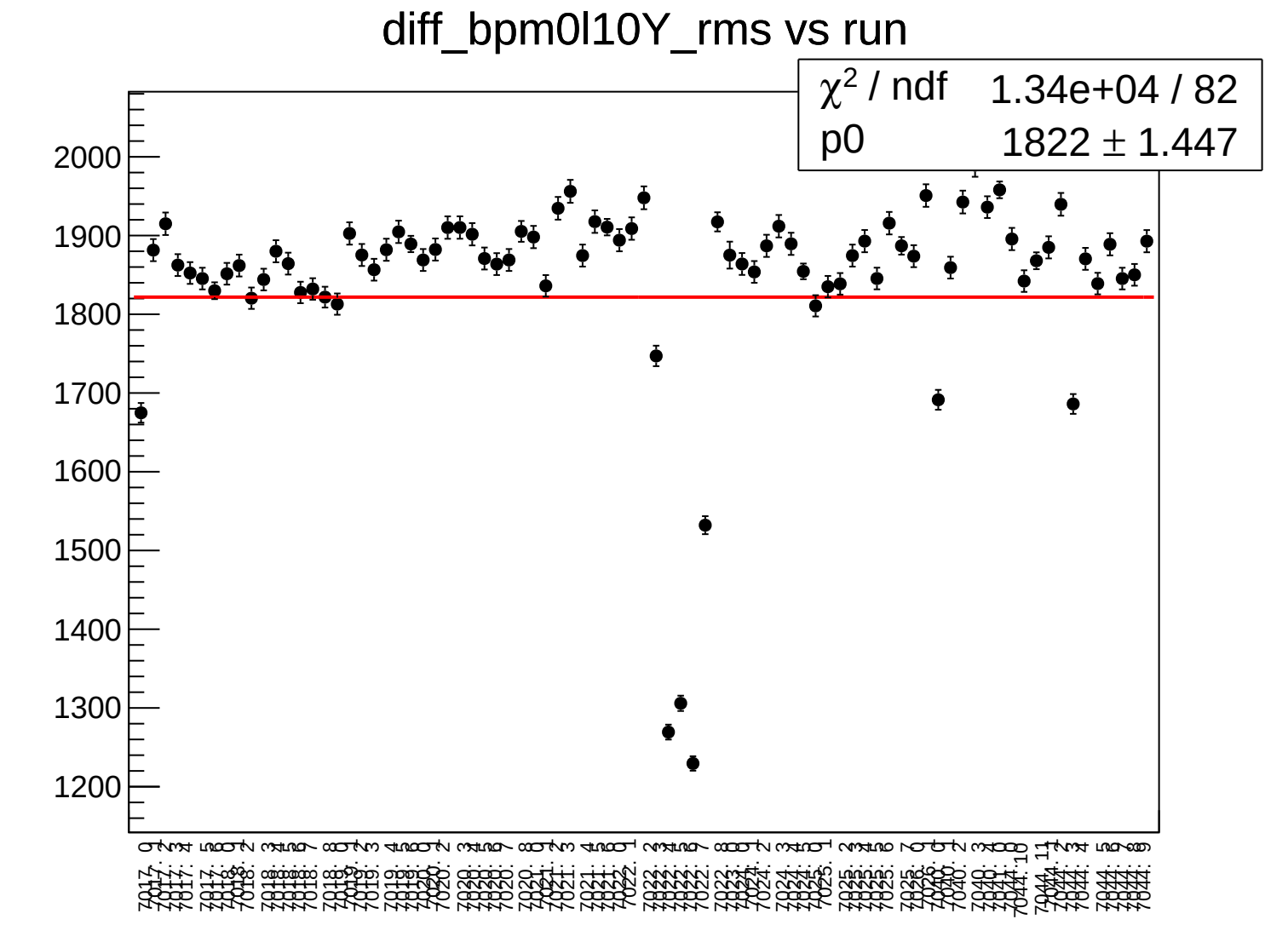

diff_bpm0l10X_mean vs run
χ^2 / ndf 91.38 / 82
p0 9.256 ± 6.491
pull
Entries 83
Mean −236.9
Std Dev 279.4

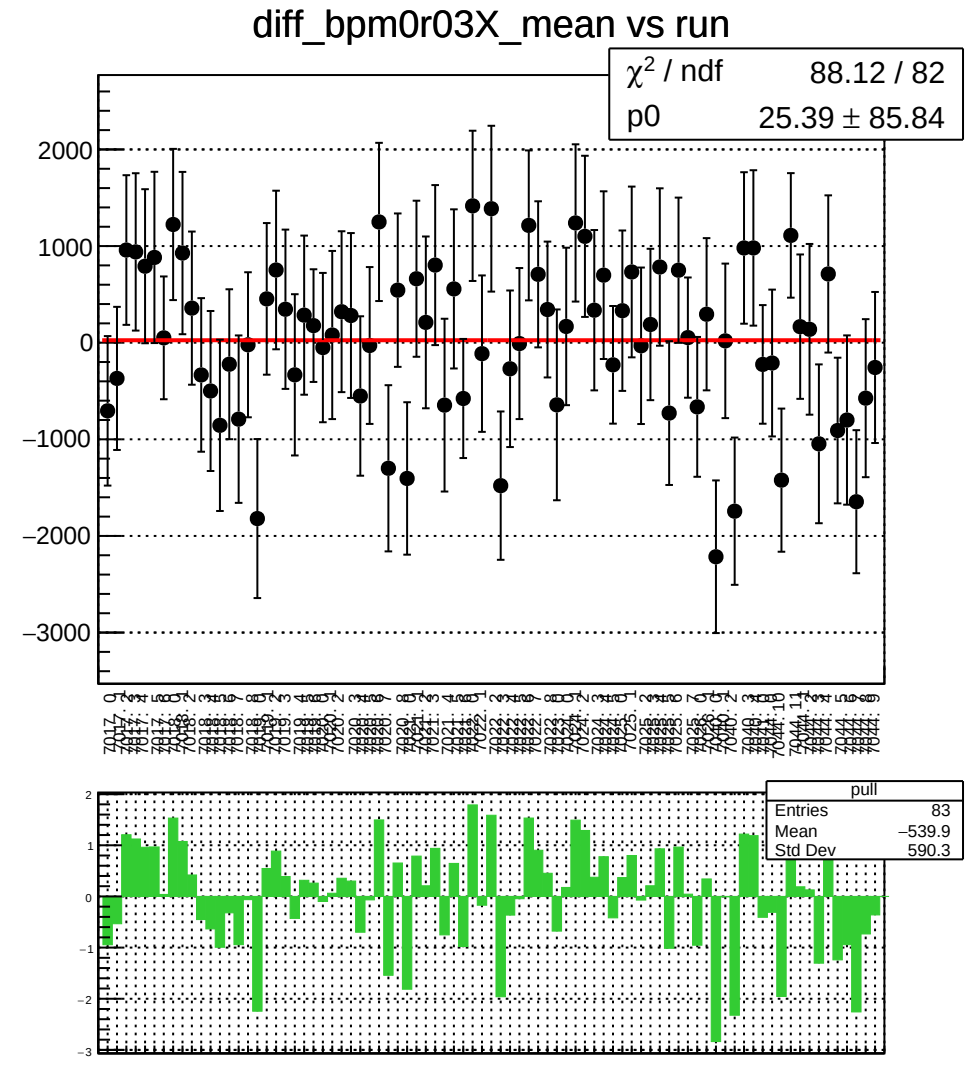

pull1D
Entries 83
Mean −0.02057
Std Dev 1.049

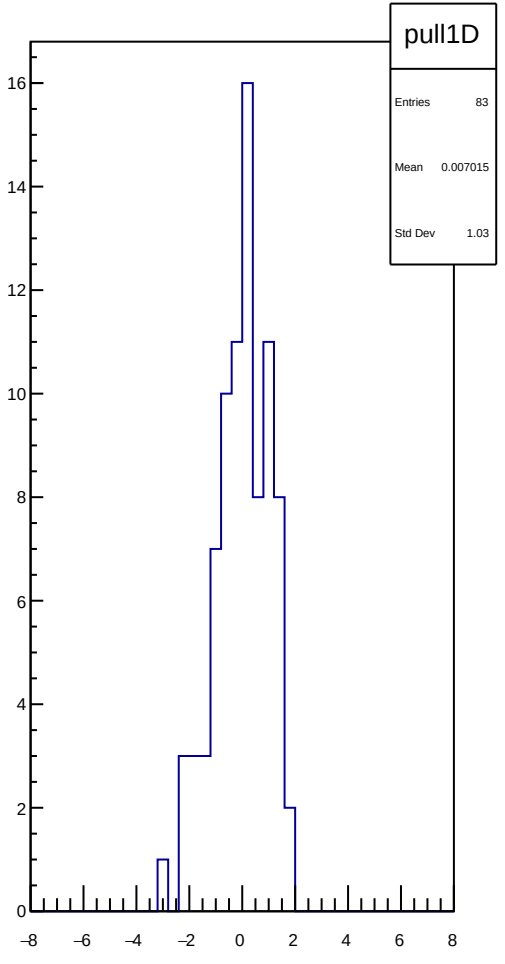

diff_bpm0l10X_rms vs run
χ² / ndf 4977 / 82
p0 5794 ± 4.59
7500
7000
6500
6000
5500
5000

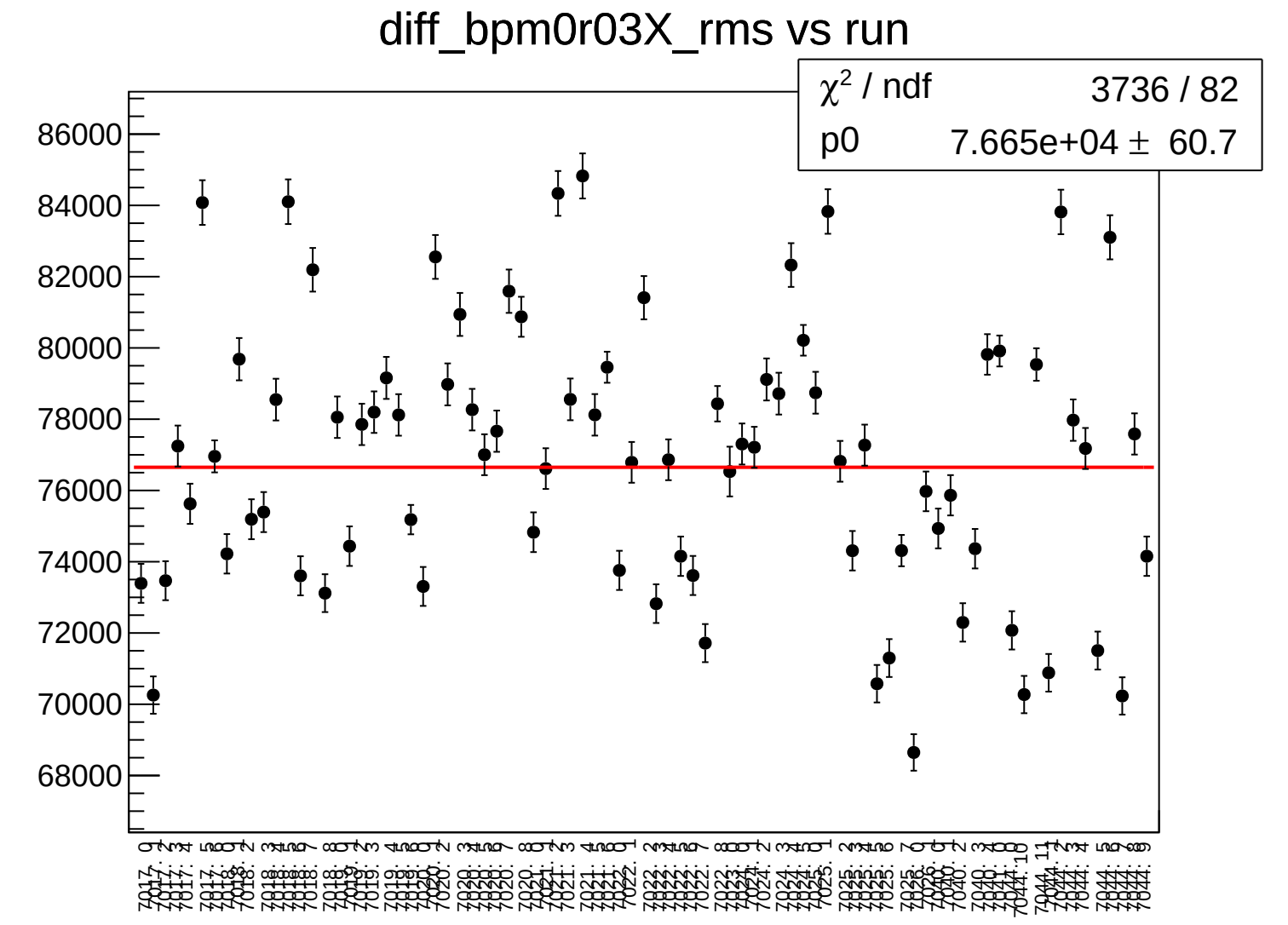

diff_bpm0l10Y_mean vs run
χ² / ndf 58.88 / 82
p0 −0.4934 ± 2.046
pull
Entries 83
Mean −18.06
Std Dev 119.5

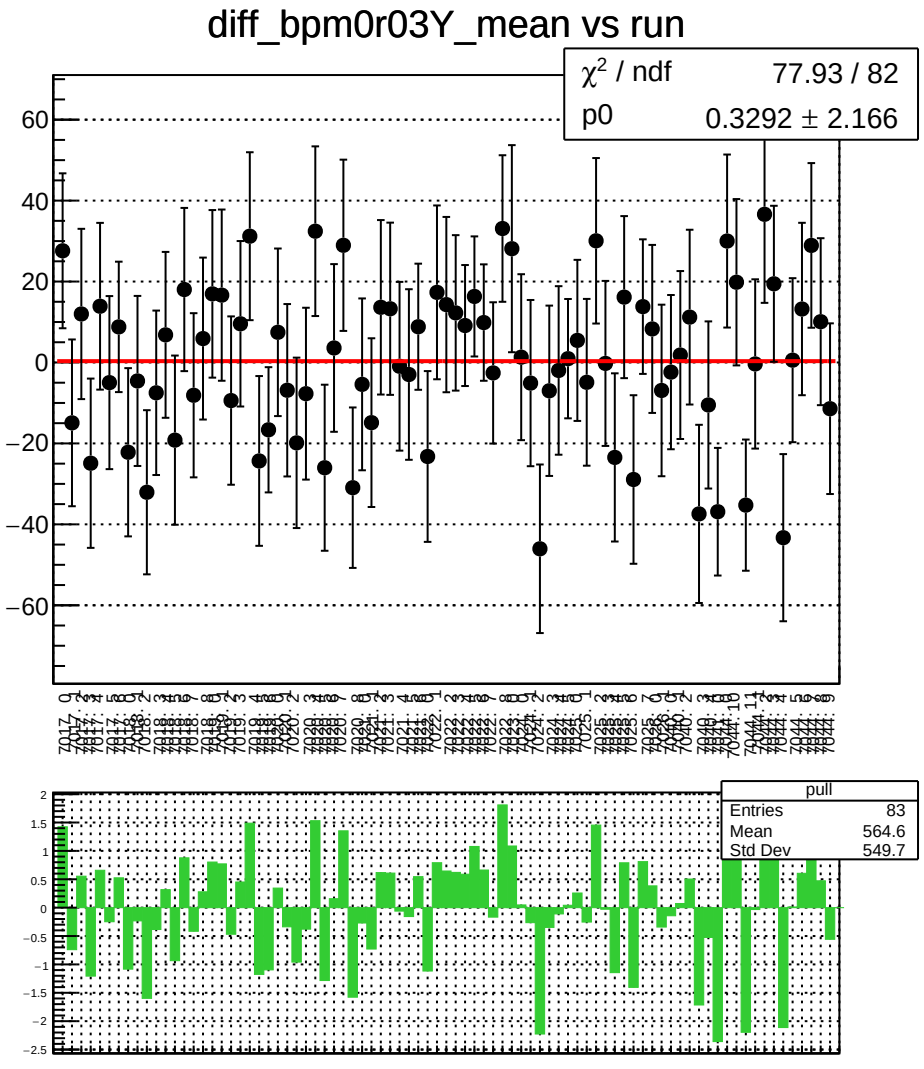

pull1D
Entries 83
Mean −0.002011
Std Dev 0.8423

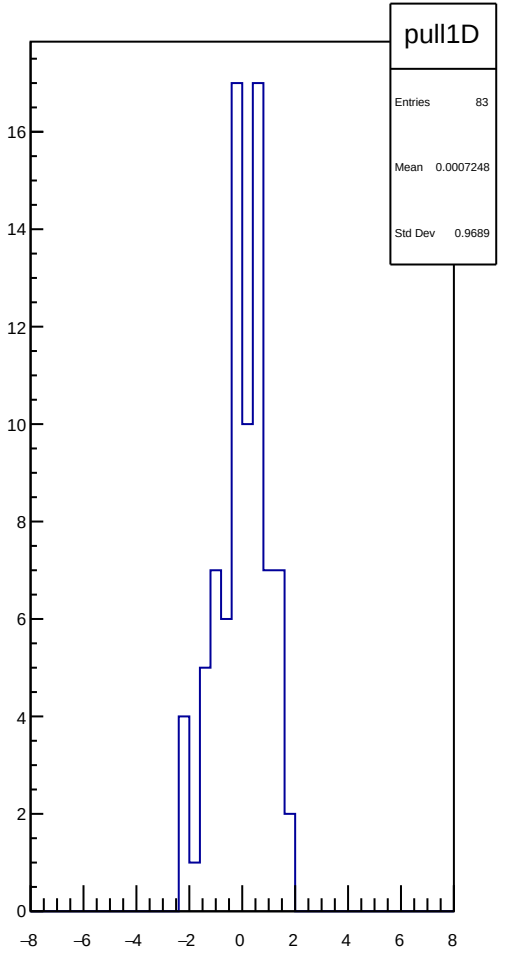

diff_bpm0l10Y_rms vs run
χ² / ndf 1.34e+04 / 82
p0 1822 ± 1.447
2000
1900
1800
1700
1600
1500
1400
1300
1200

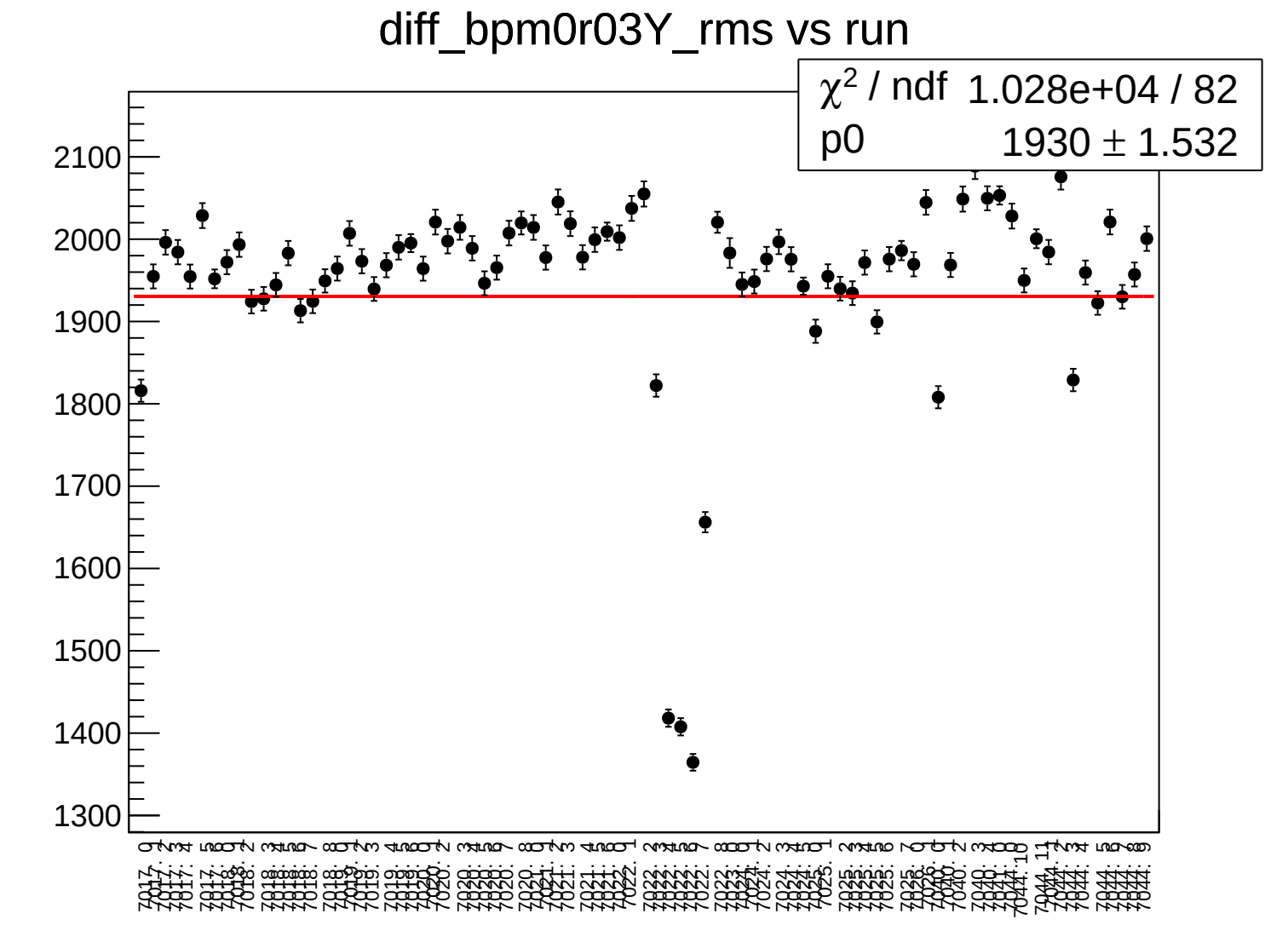

diff_bpm0r03X_mean vs run
χ² / ndf 88.12 / 82
p0 25.39 ± 85.84
pull
Entries 83
Mean −539.9
Std Dev 590.3

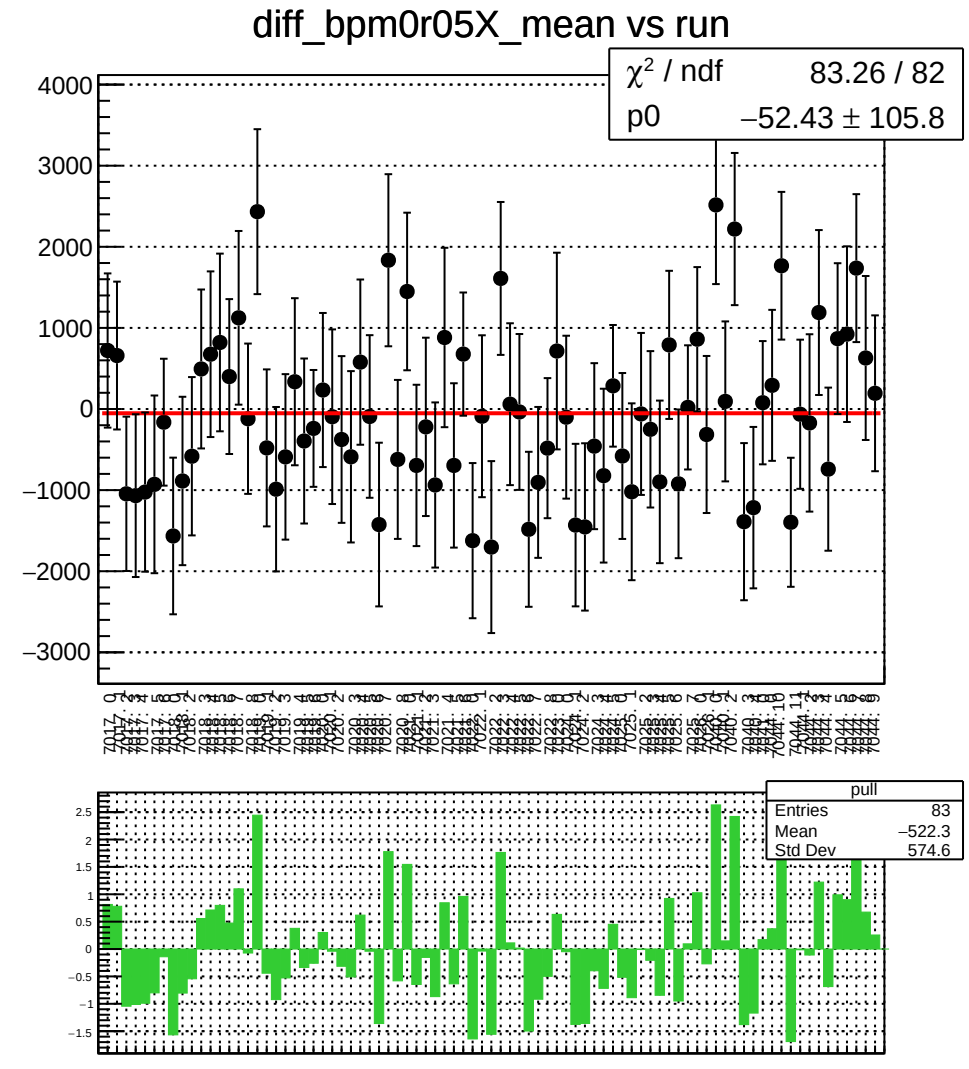

pull1D
Entries 83
Mean 0.007015
Std Dev 1.03

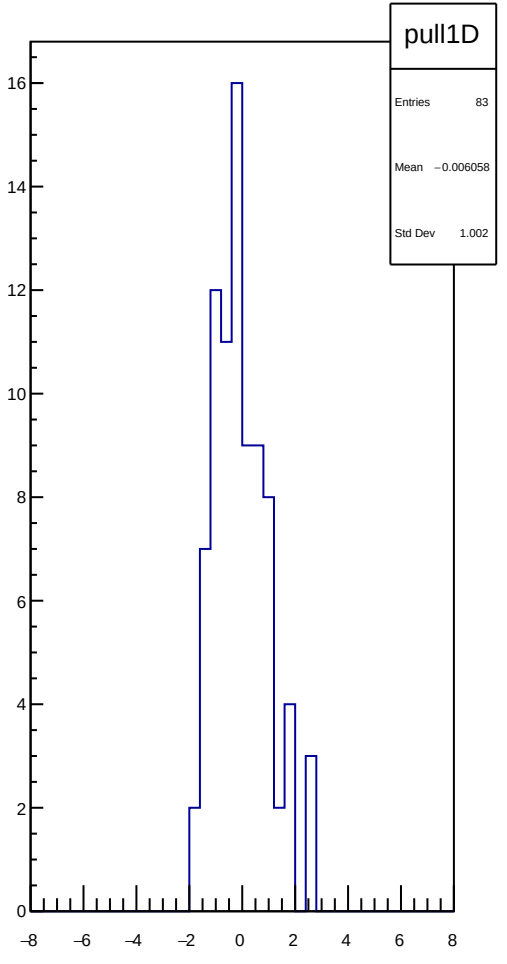

diff_bpm0r03X_rms vs run
χ² / ndf 3736 / 82
p0 7.665e+04 ± 60.7
86000
84000
82000
80000
78000
76000
74000
72000
70000
68000

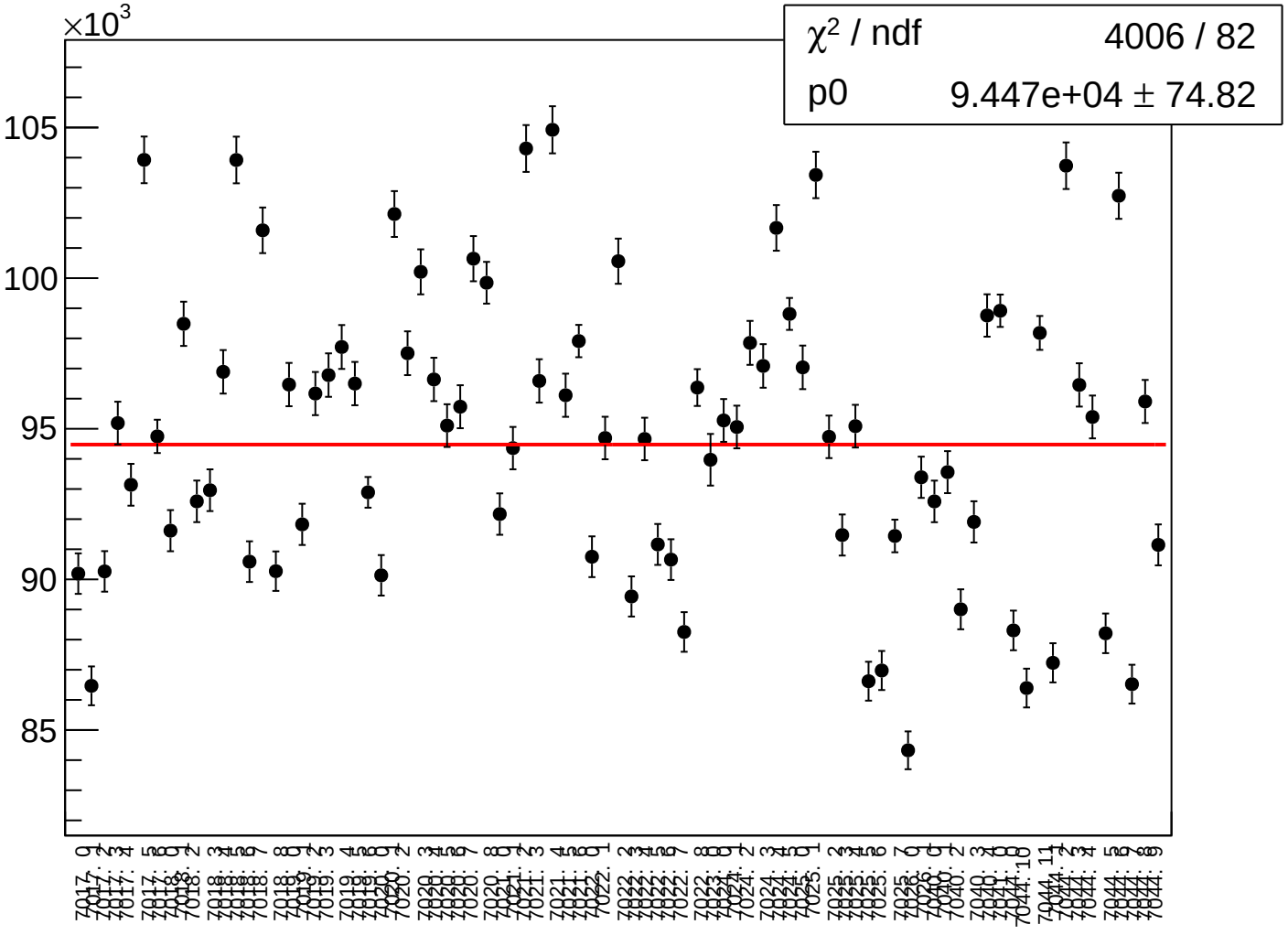

diff_bpm0r03Y_mean vs run
χ² / ndf 77.93 / 82
p0 0.3292 ± 2.166
pull
Entries 83
Mean 564.6
Std Dev 549.7

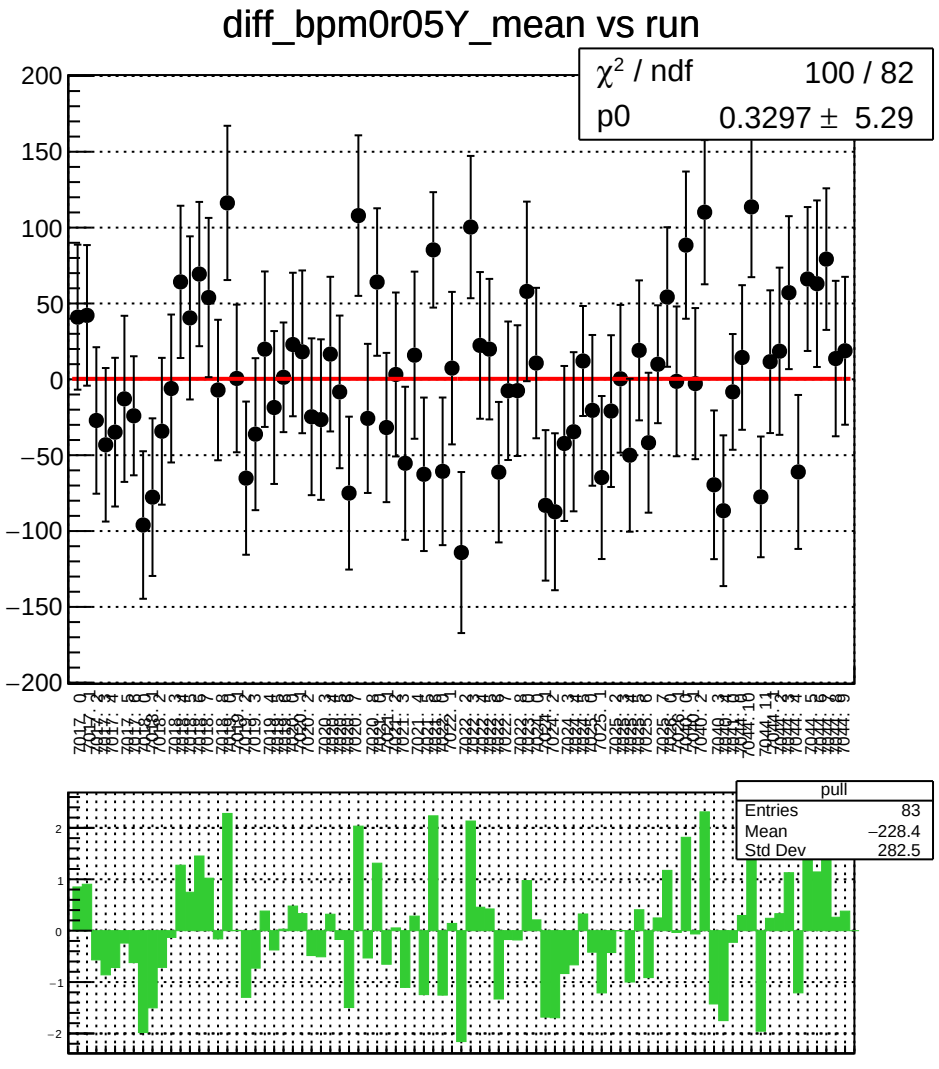

pull1D
Entries 83
Mean 0.0007248
Std Dev 0.9689

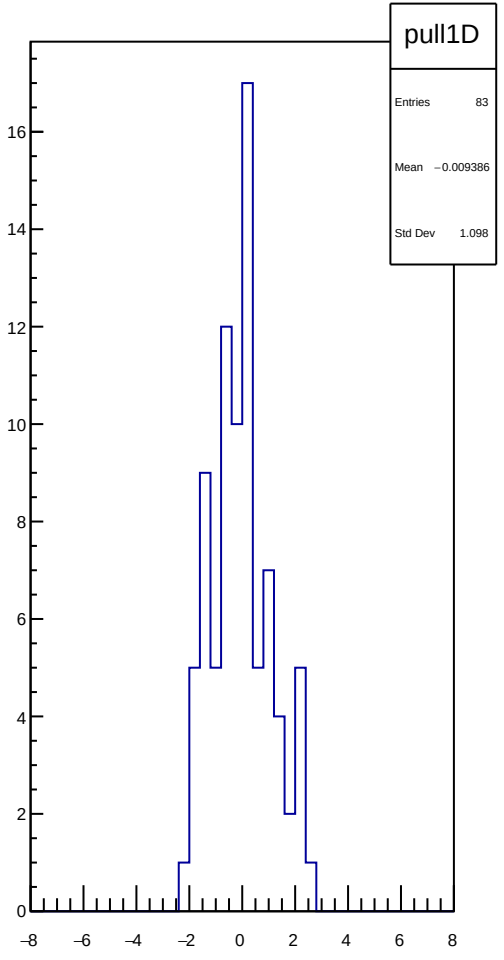

diff_bpm0r03Y_rms vs run
χ^2 / ndf 1.028e+04 / 82
p0 1930 ± 1.532
2100
2000
1900
1800
1700
1600
1500
1400
1300

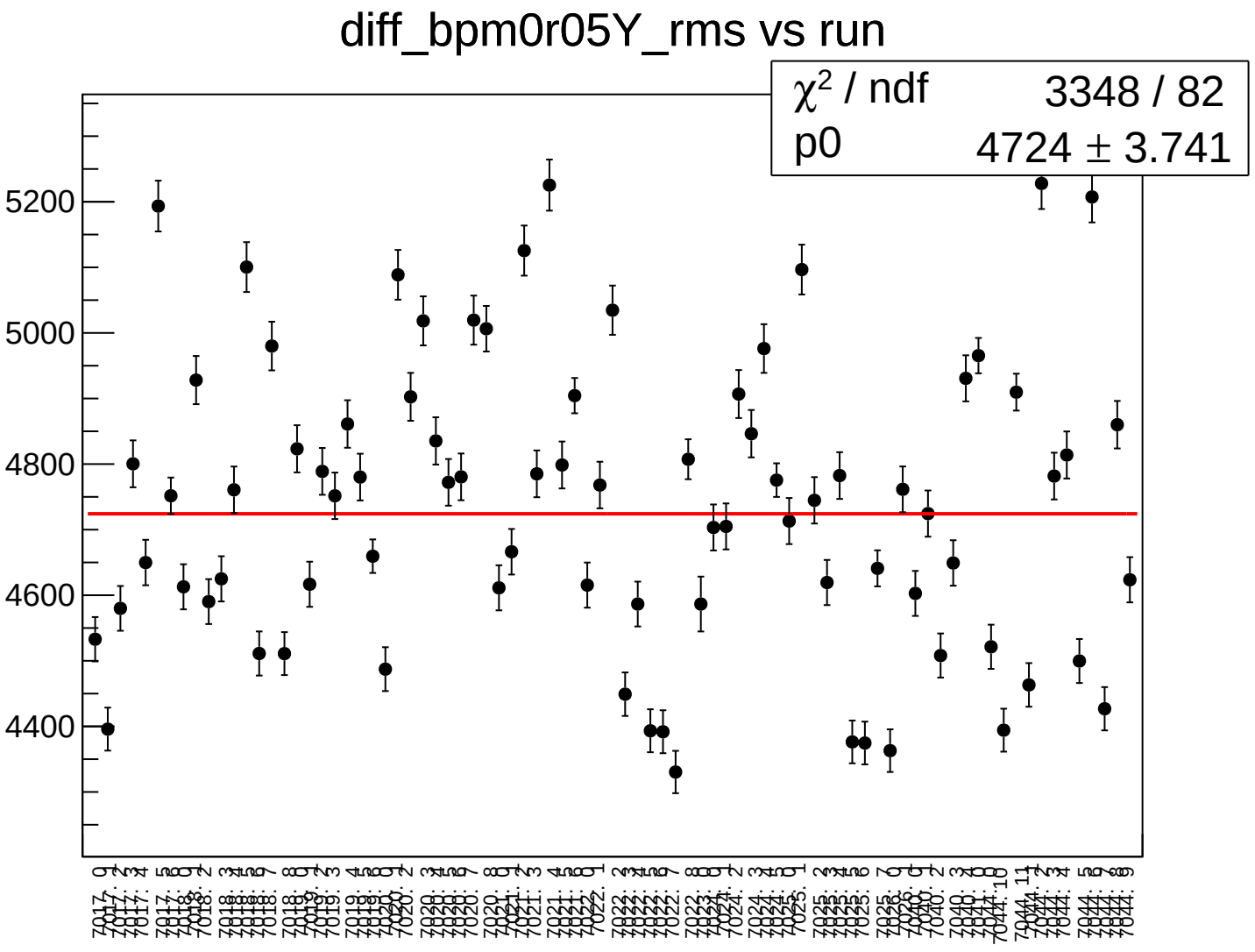

diff_bpm0r05X_mean vs run
χ² / ndf 83.26 / 82
p0 −52.43 ± 105.8
pull
Entries 83
Mean −522.3
Std Dev 574.6

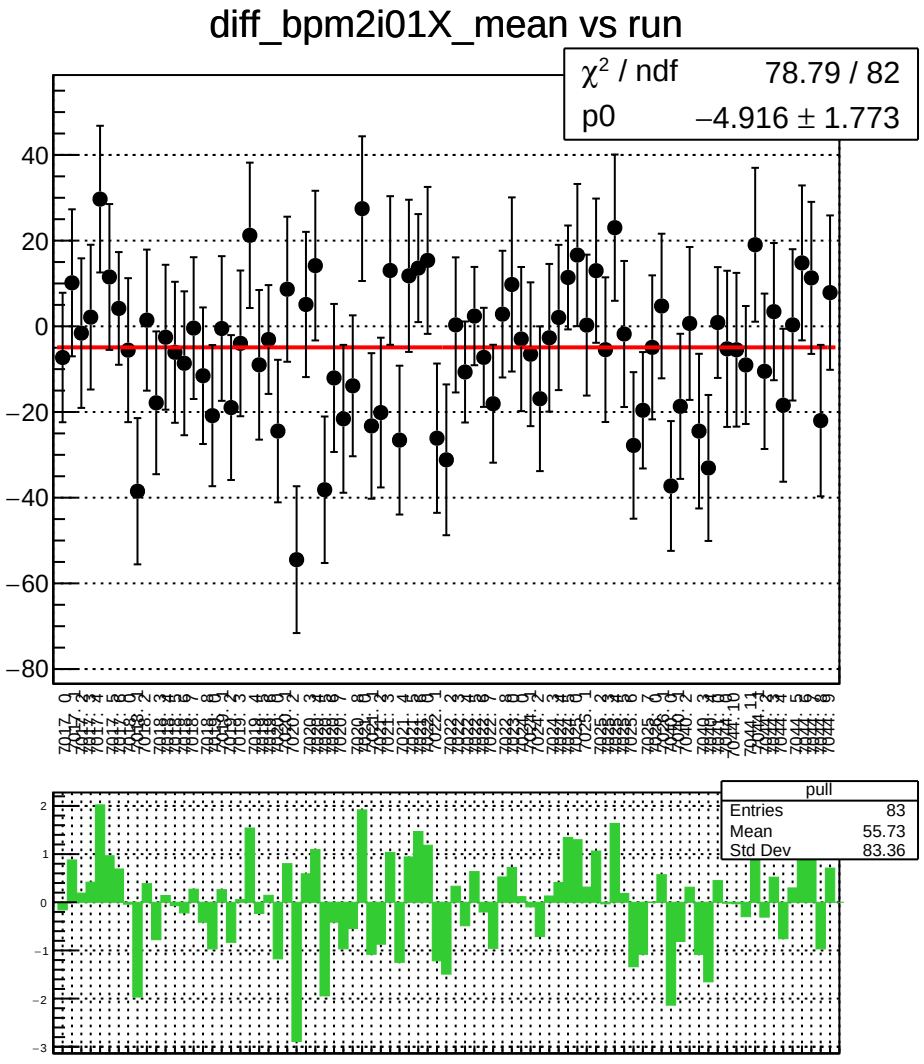

pull1D
Entries 83
Mean −0.006058
Std Dev 1.002

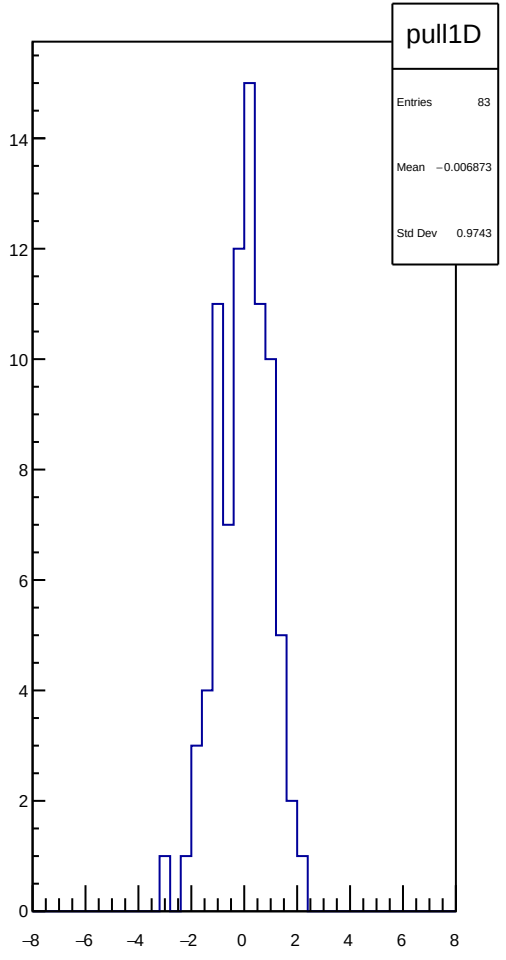

diff_bpm0r05X_rms vs run
×10^3
χ² / ndf 4006 / 82
p0 9.447e+04 ± 74.82
105
100
95
90
85

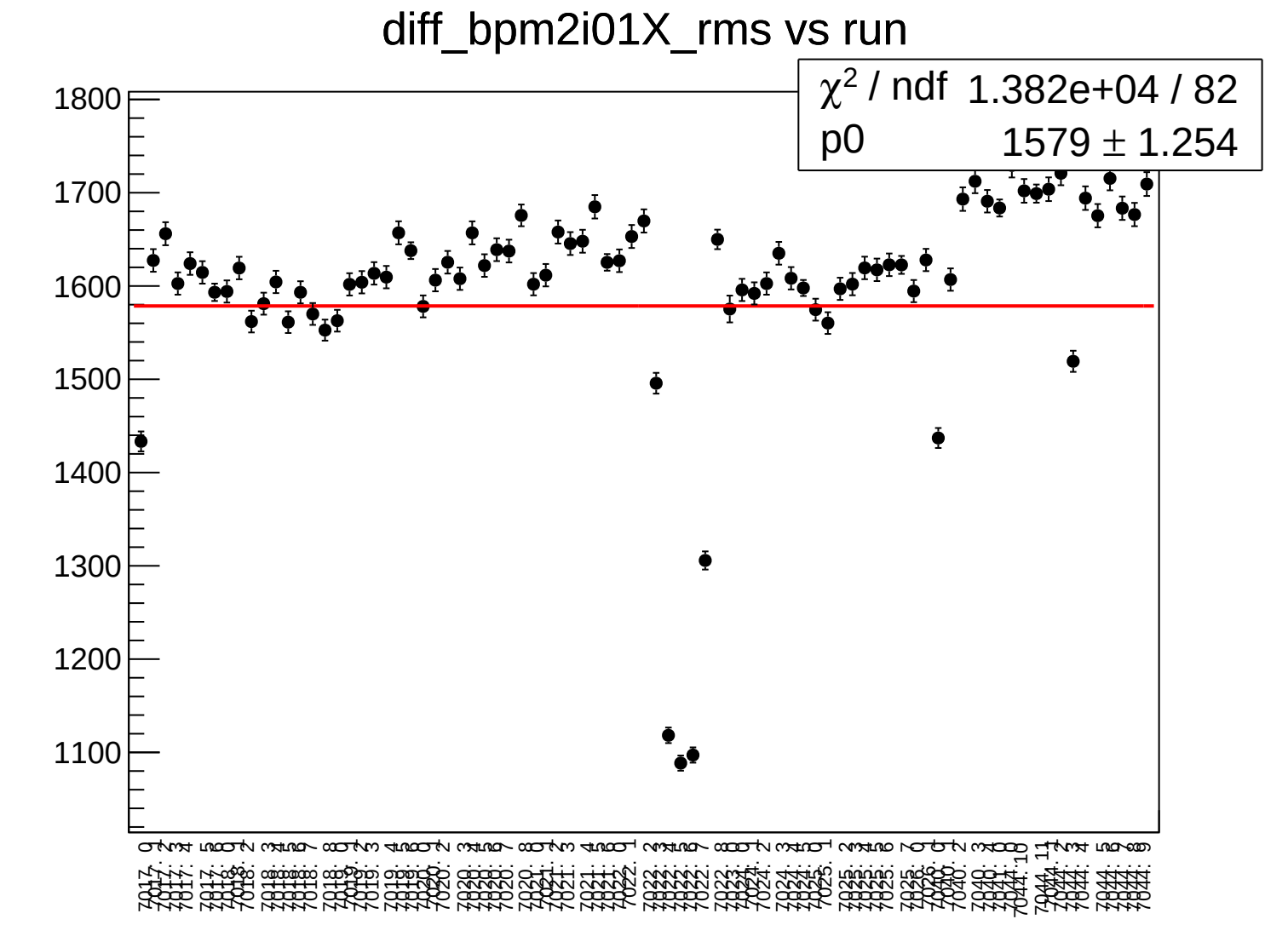

diff_bpm0r05Y_mean vs run
χ² / ndf 100 / 82
p0 0.3297 ± 5.29
pull
Entries 83
Mean −228.4
Std Dev 282.5

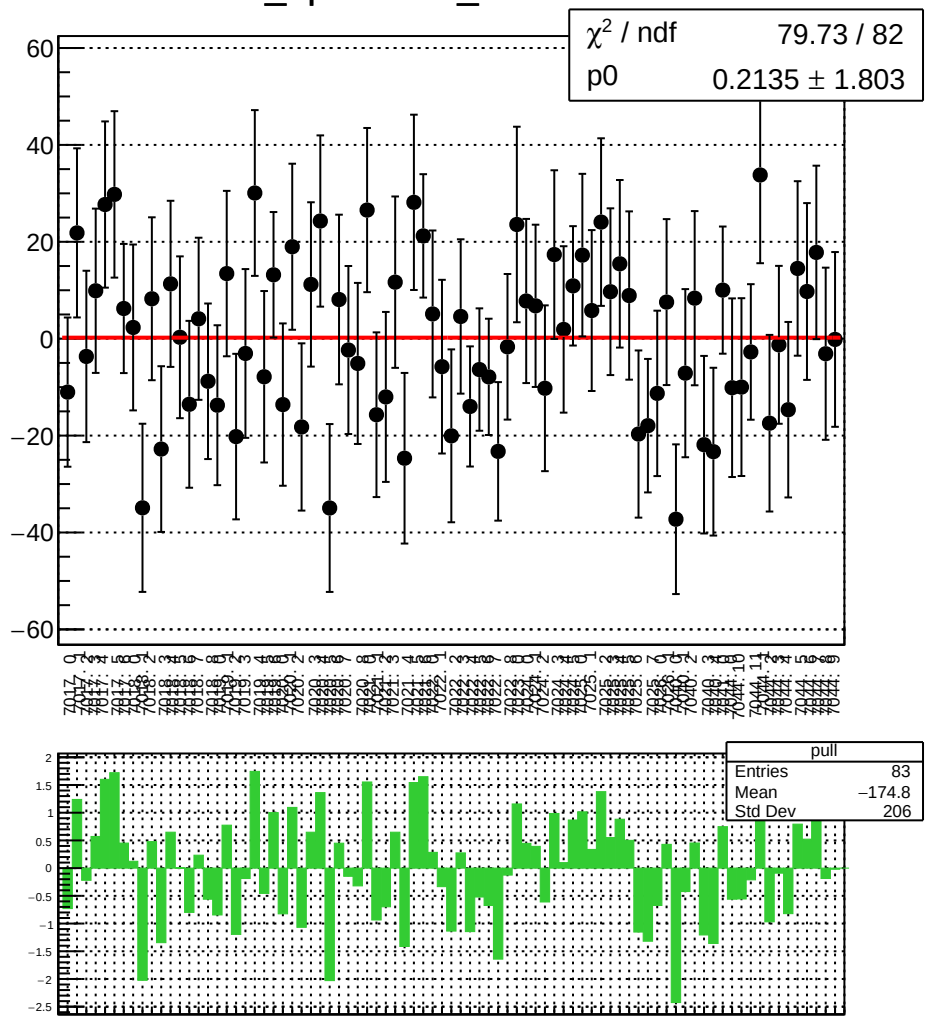

pull1D
Entries 83
Mean −0.009386
Std Dev 1.098

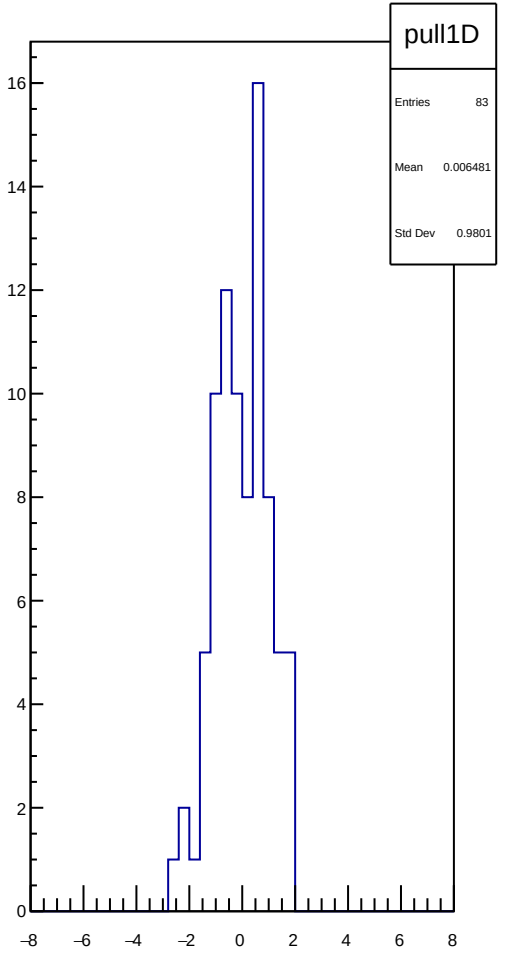

diff_bpm0r05Y_rms vs run
χ² / ndf 3348 / 82
p0 4724 ± 3.741
5200
5000
4800
4600
4400

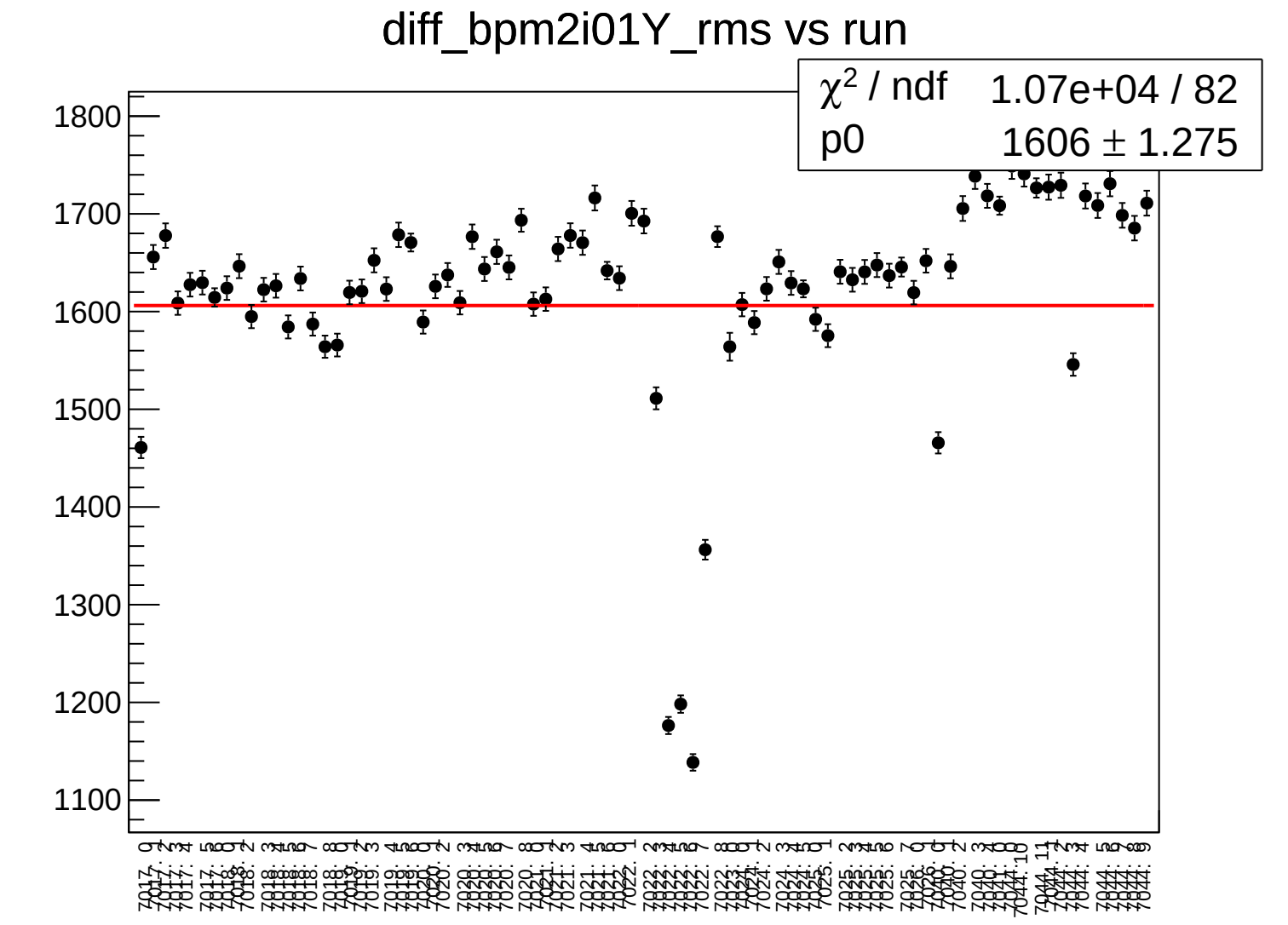

diff_bpm2i01X_mean vs run
χ² / ndf 78.79 / 82
p0 −4.916 ± 1.773
pull
Entries 83
Mean 55.73
Std Dev 83.36

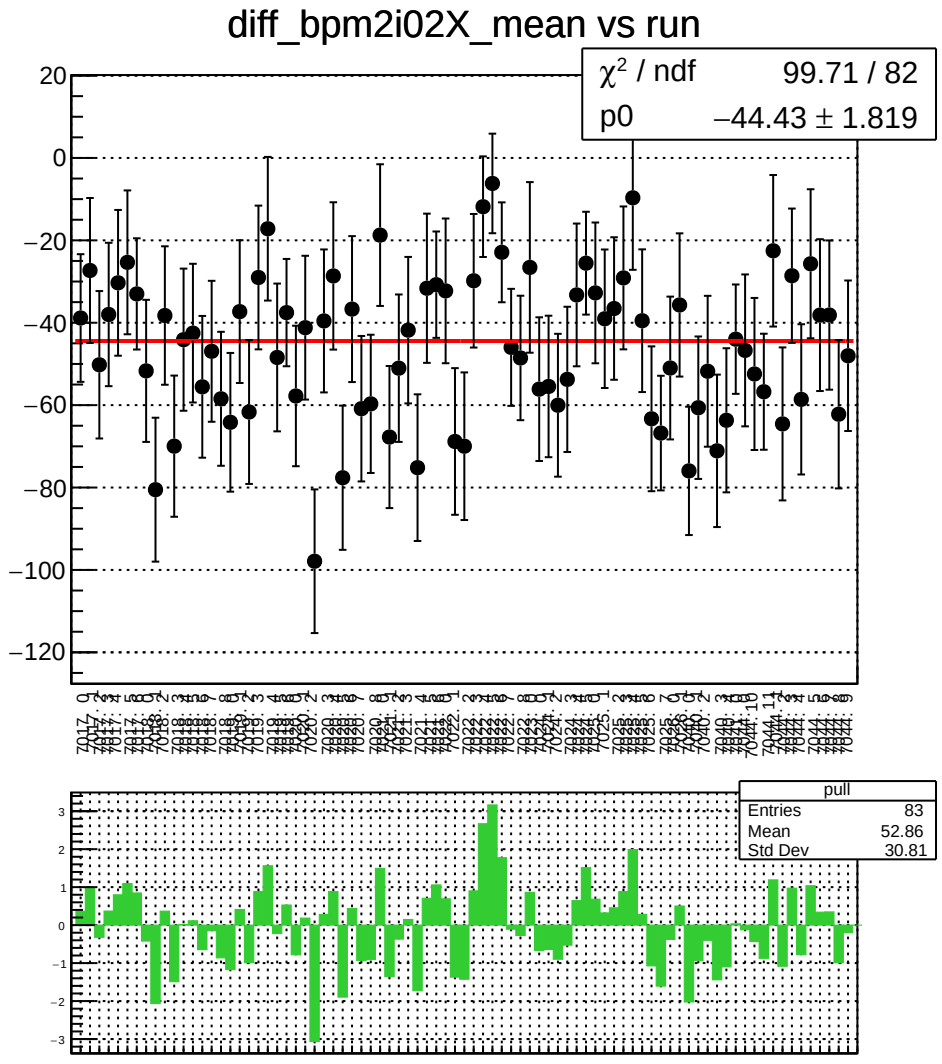

pull1D
Entries 83
Mean −0.006873
Std Dev 0.9743

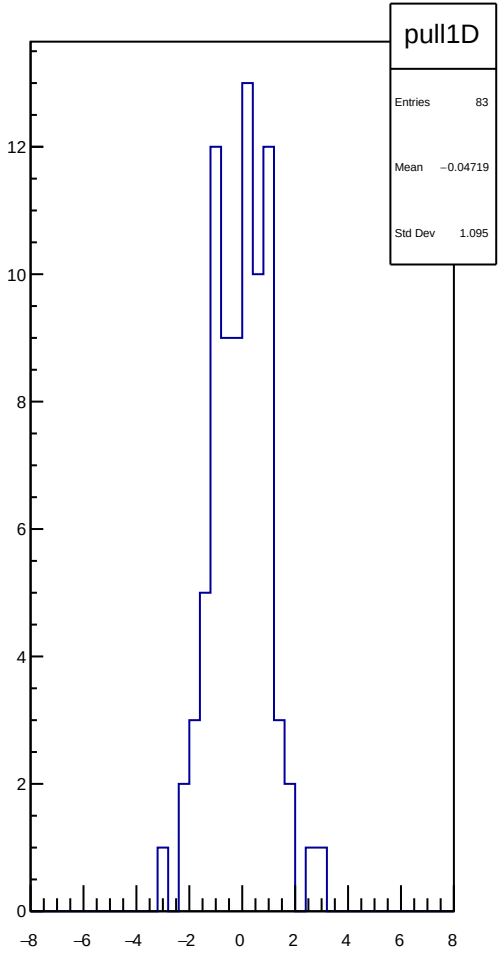

diff_bpm2i01X_rms vs run
χ² / ndf 1.382e+04 / 82
p0 1579 ± 1.254
1800
1700
1600
1500
1400
1300
1200
1100

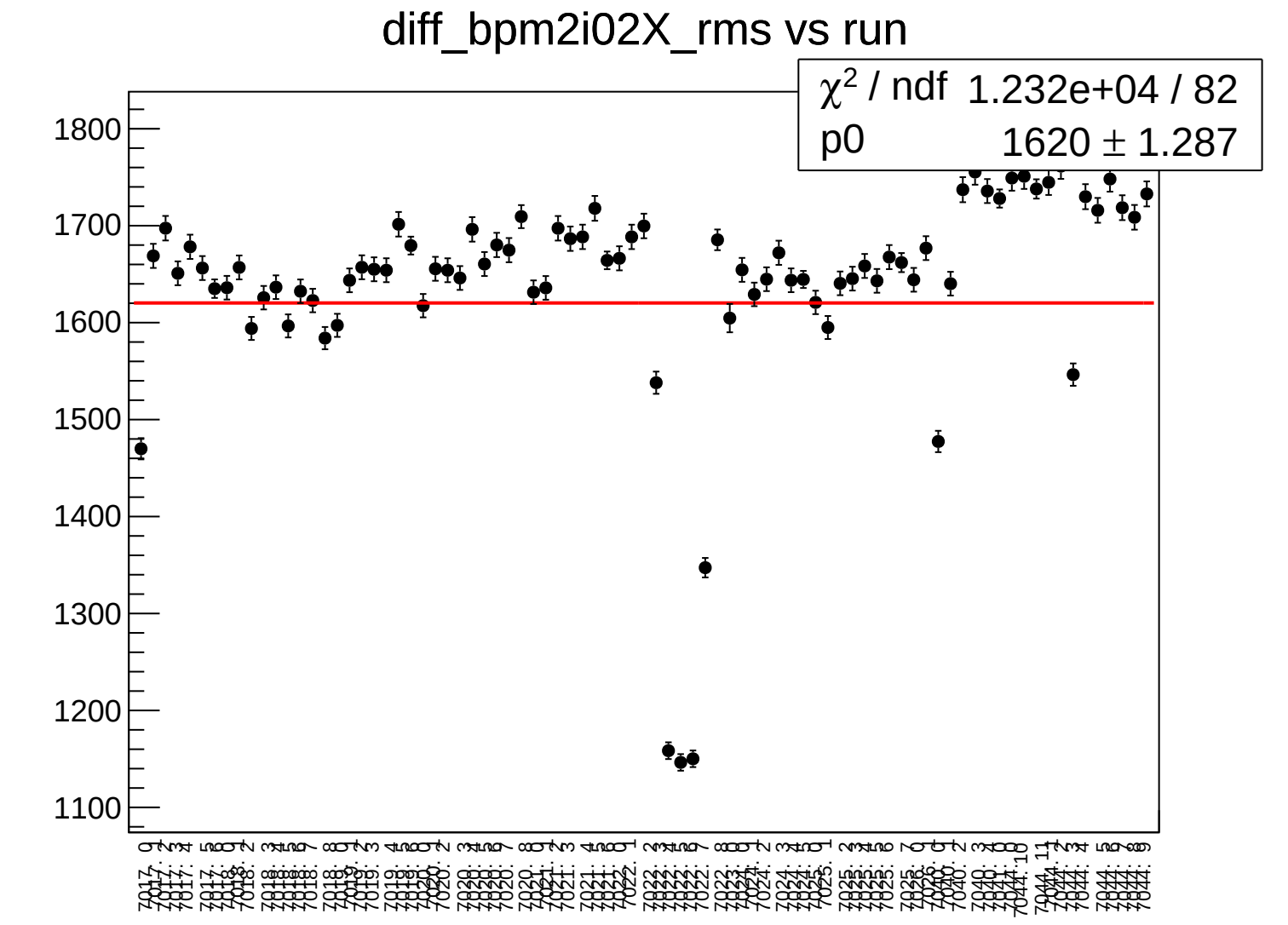

diff_bpm2i01Y_mean vs run
χ^2 / ndf 79.73 / 82
p0 0.2135 ± 1.803
pull
Entries 83
Mean −174.8
Std Dev 206

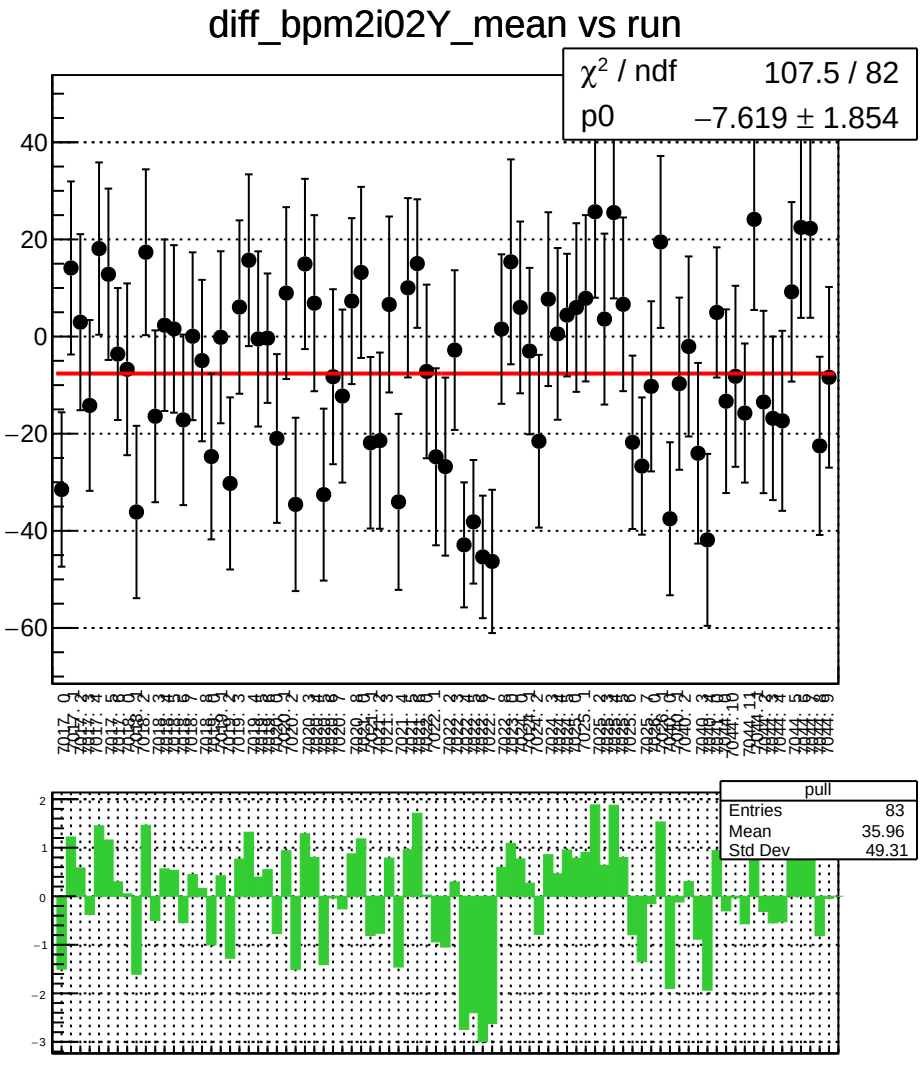

pull1D
Entries 83
Mean 0.006481
Std Dev 0.9801

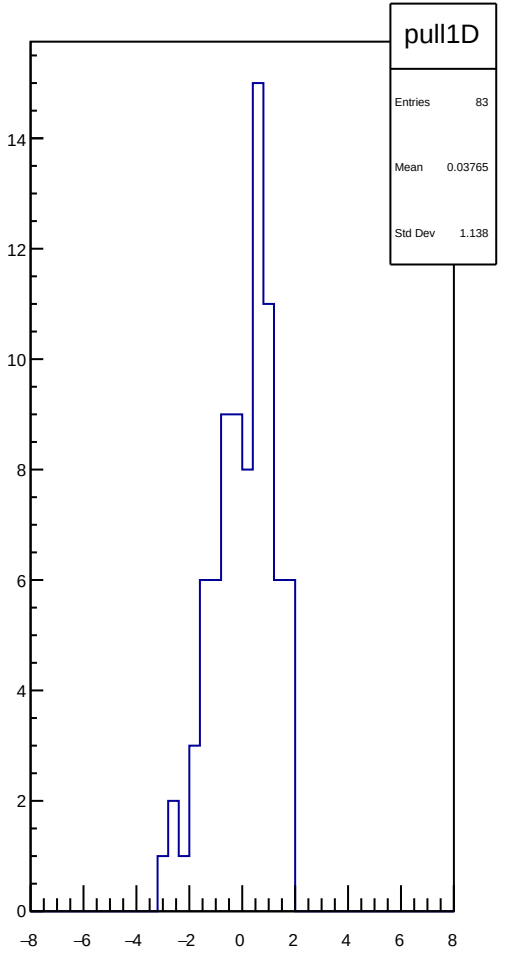

diff_bpm2i01Y_rms vs run
χ² / ndf 1.07e+04 / 82
p0 1606 ± 1.275
1800
1700
1600
1500
1400
1300
1200
1100

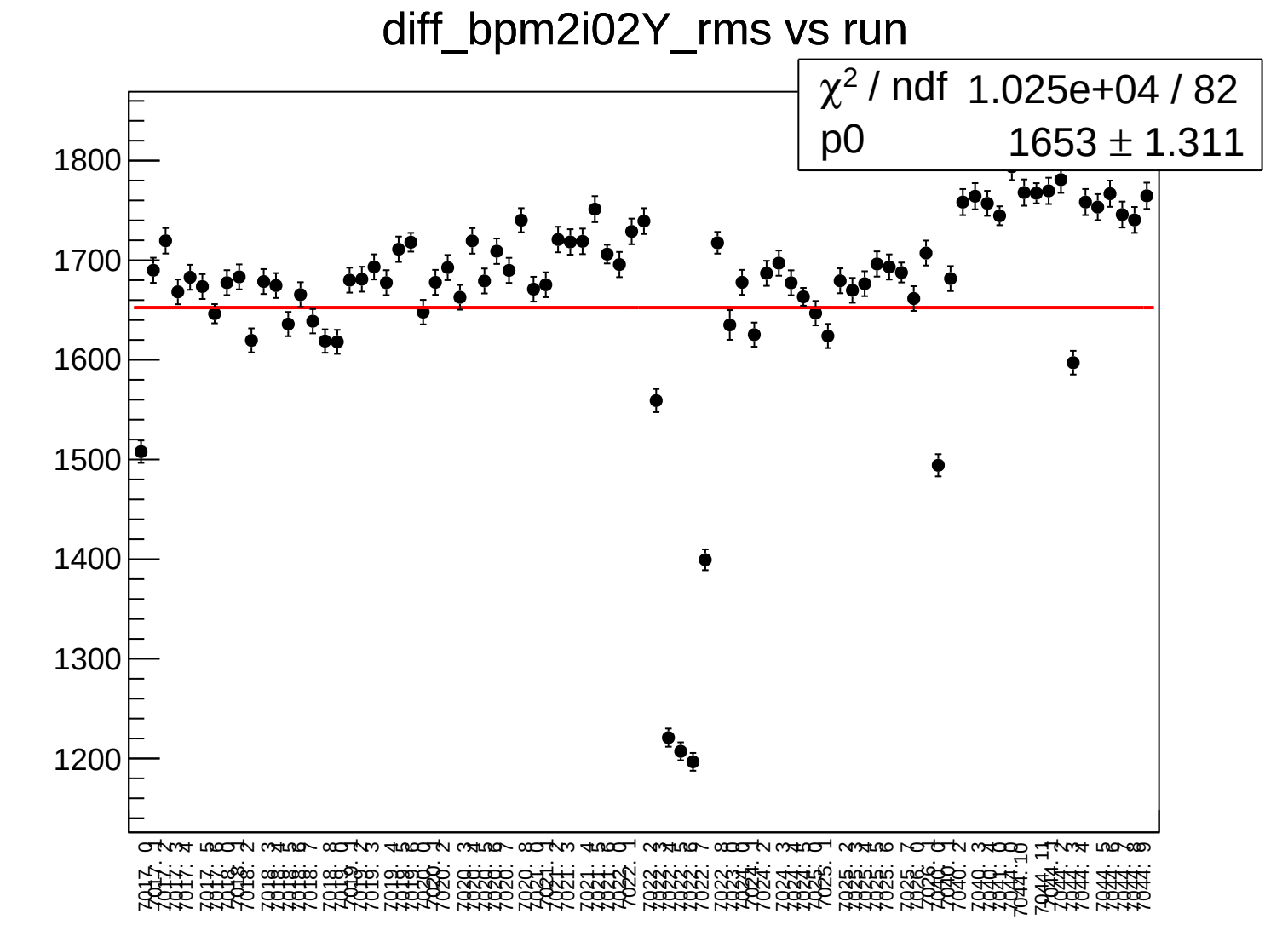

diff_bpm2i02X_mean vs run
χ² / ndf 99.71 / 82
p0 −44.43 ± 1.819
pull
Entries 83
Mean 52.86
Std Dev 30.81

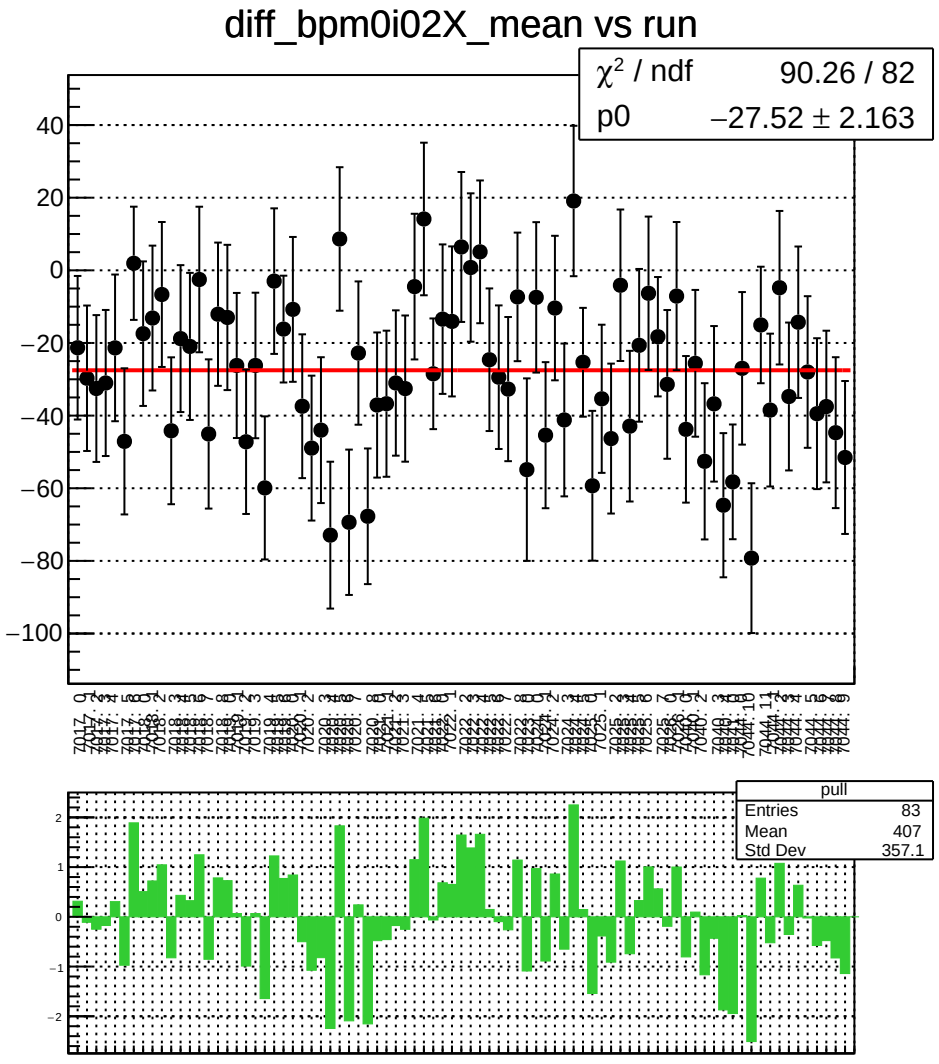

pull1D
Entries 83
Mean −0.04719
Std Dev 1.095

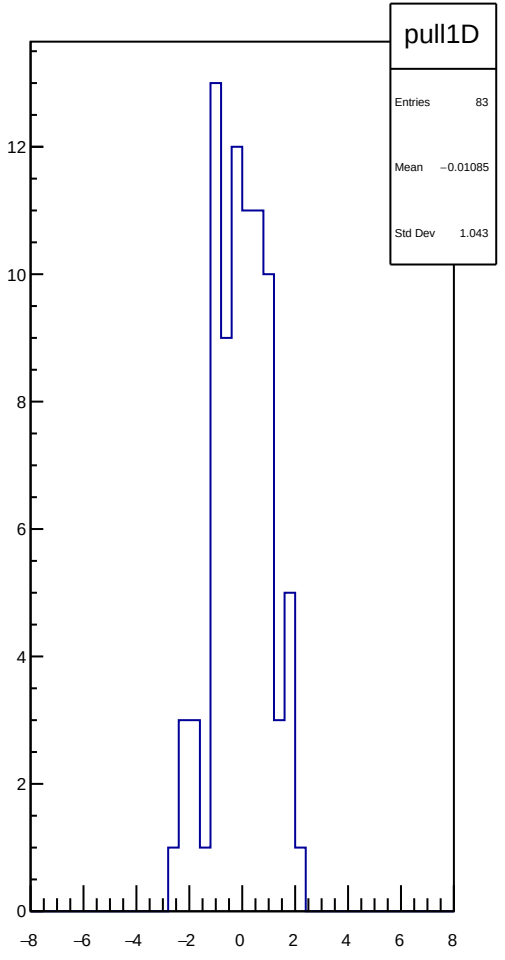

diff_bpm2i02X_rms vs run
χ² / ndf 1.232e+04 / 82
p0 1620 ± 1.287
1800
1700
1600
1500
1400
1300
1200
1100

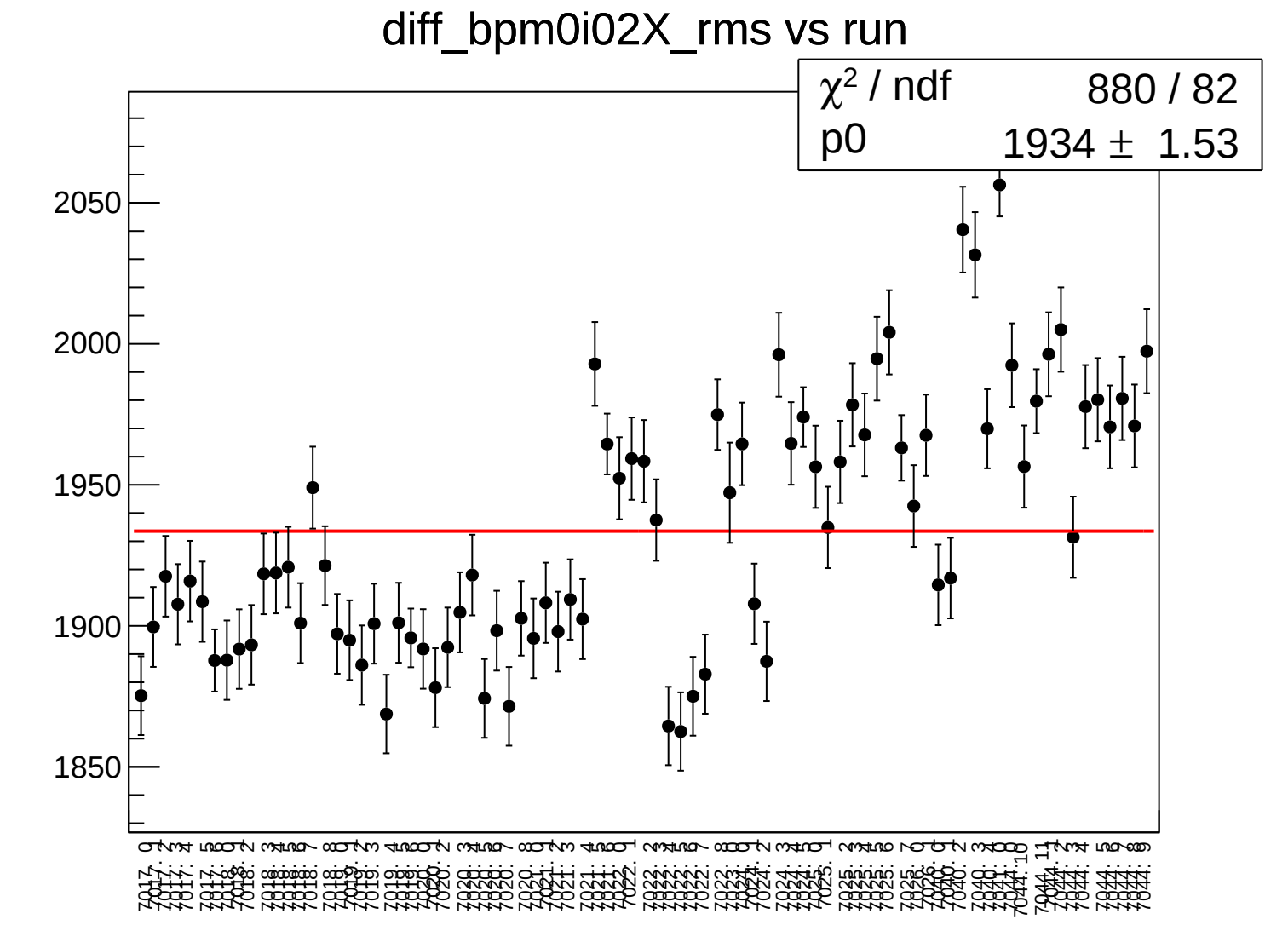

diff_bpm2i02Y_mean vs run
χ² / ndf 107.5 / 82
p0 −7.619 ± 1.854
pull
Entries 83
Mean 35.96
Std Dev 49.31

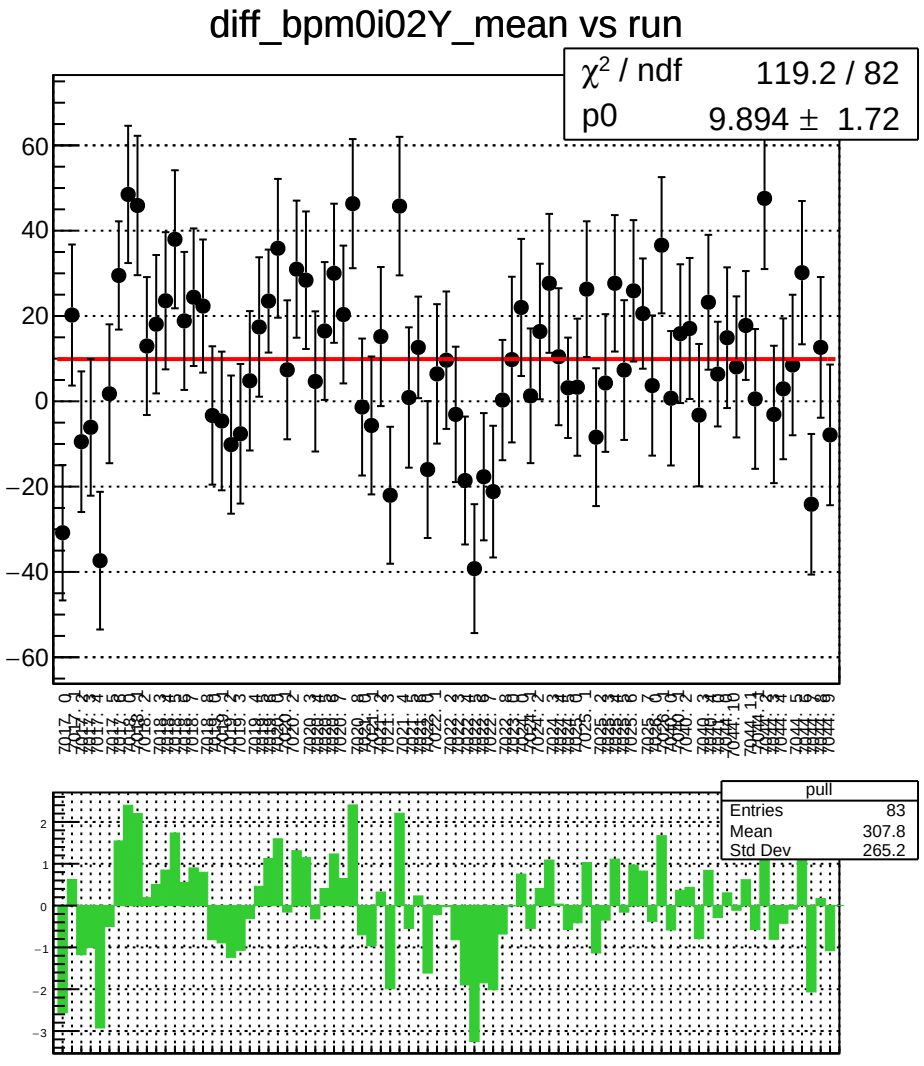

pull1D
Entries 83
Mean 0.03765
Std Dev 1.138

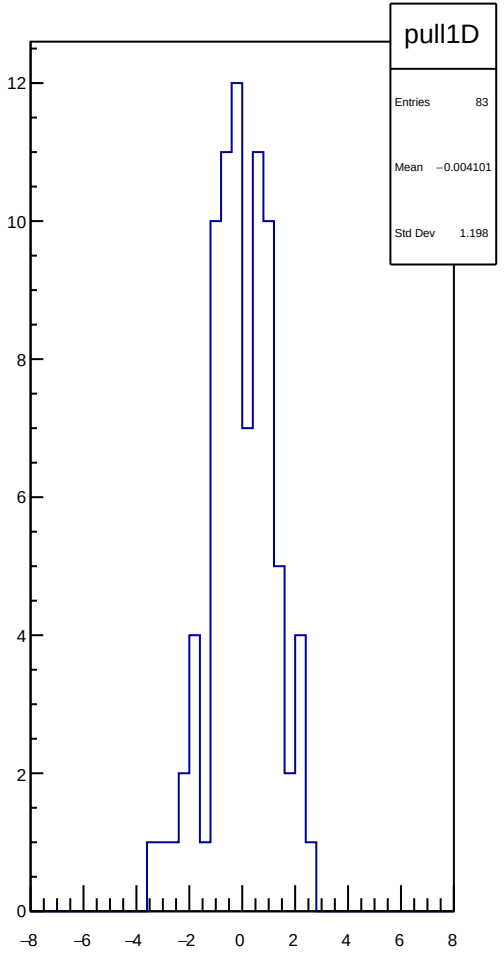

diff_bpm2i02Y_rms vs run
χ² / ndf 1.025e+04 / 82
p0 1653 ± 1.311
1800
1700
1600
1500
1400
1300
1200

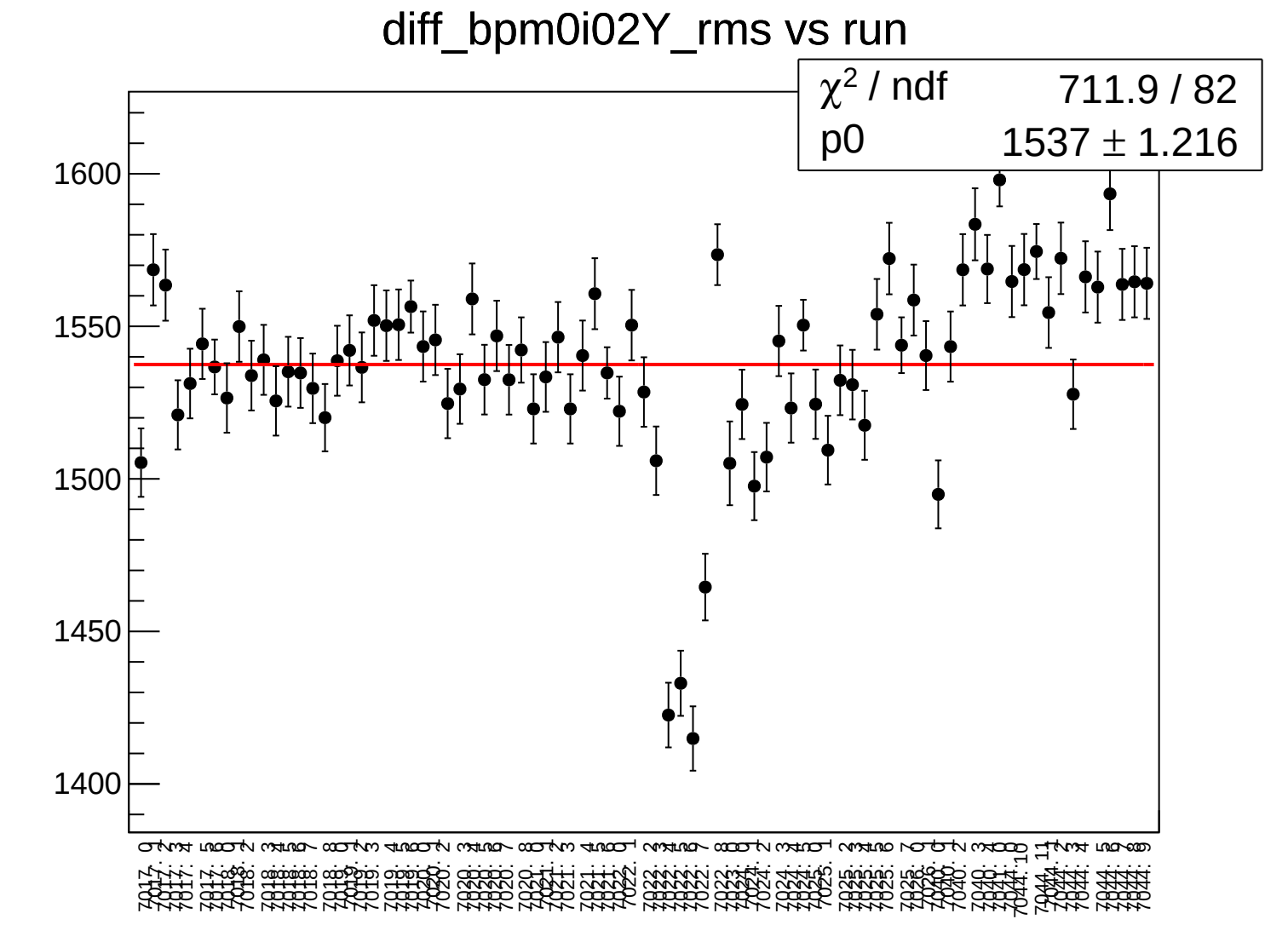

diff_bpm0i02X_mean vs run
χ² / ndf 90.26 / 82
p0 −27.52 ± 2.163
pull
Entries 83
Mean 407
Std Dev 357.1

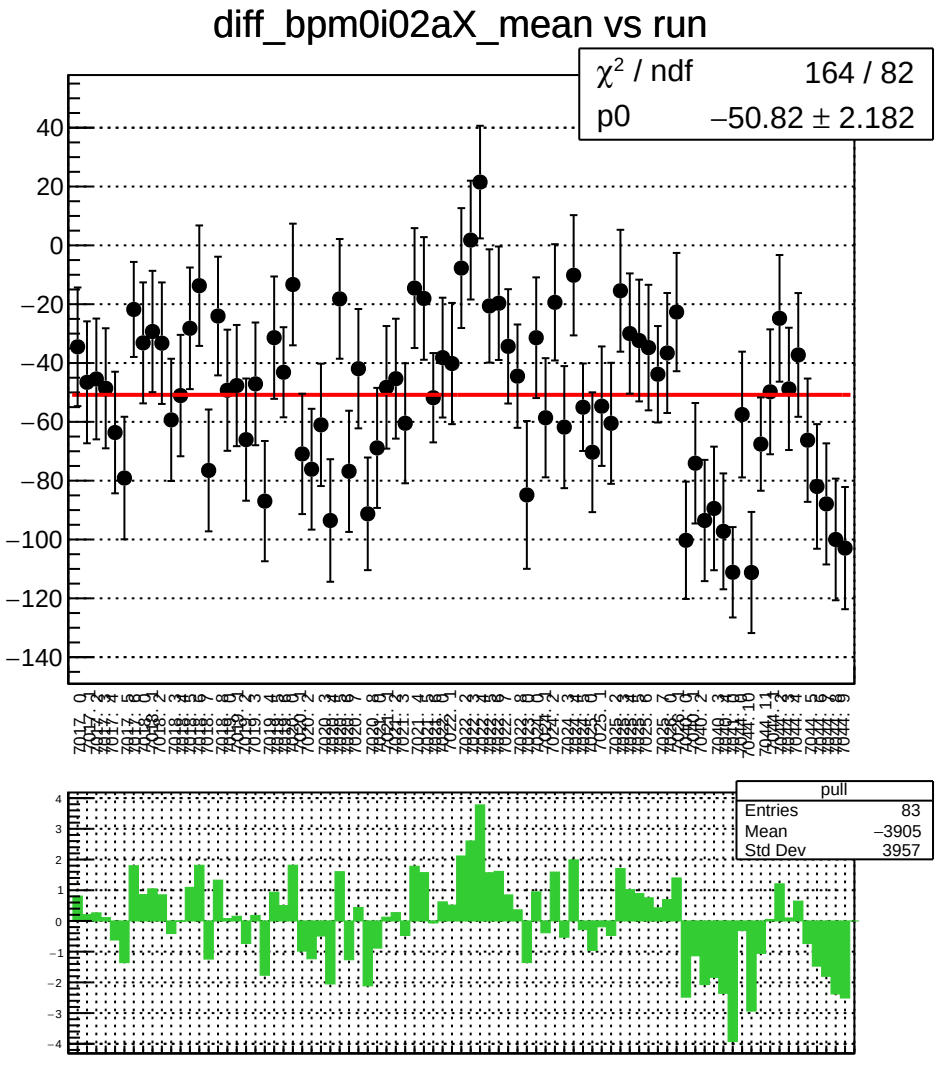

pull1D
Entries 83
Mean −0.01085
Std Dev 1.043

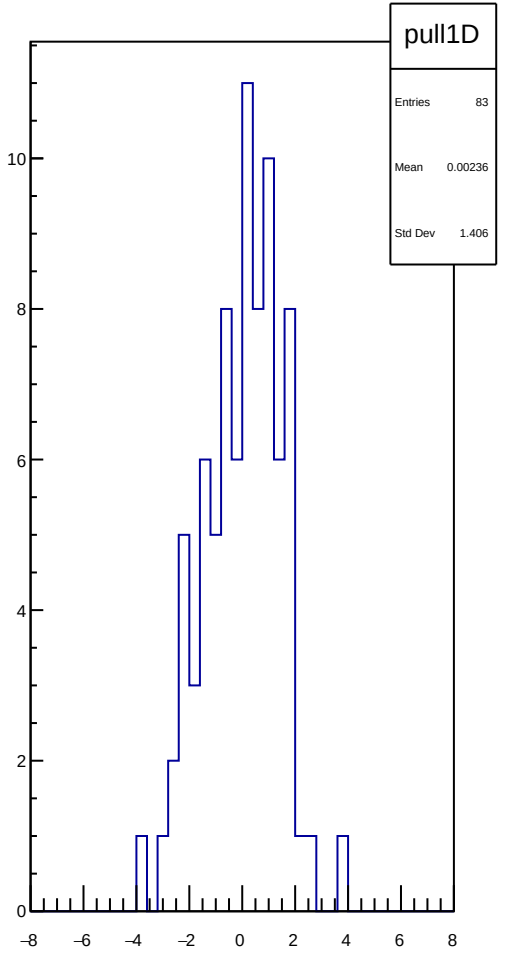

diff_bpm0i02X_rms vs run
χ² / ndf 880 / 82
p0 1934 ± 1.53
2050
2000
1950
1900
1850

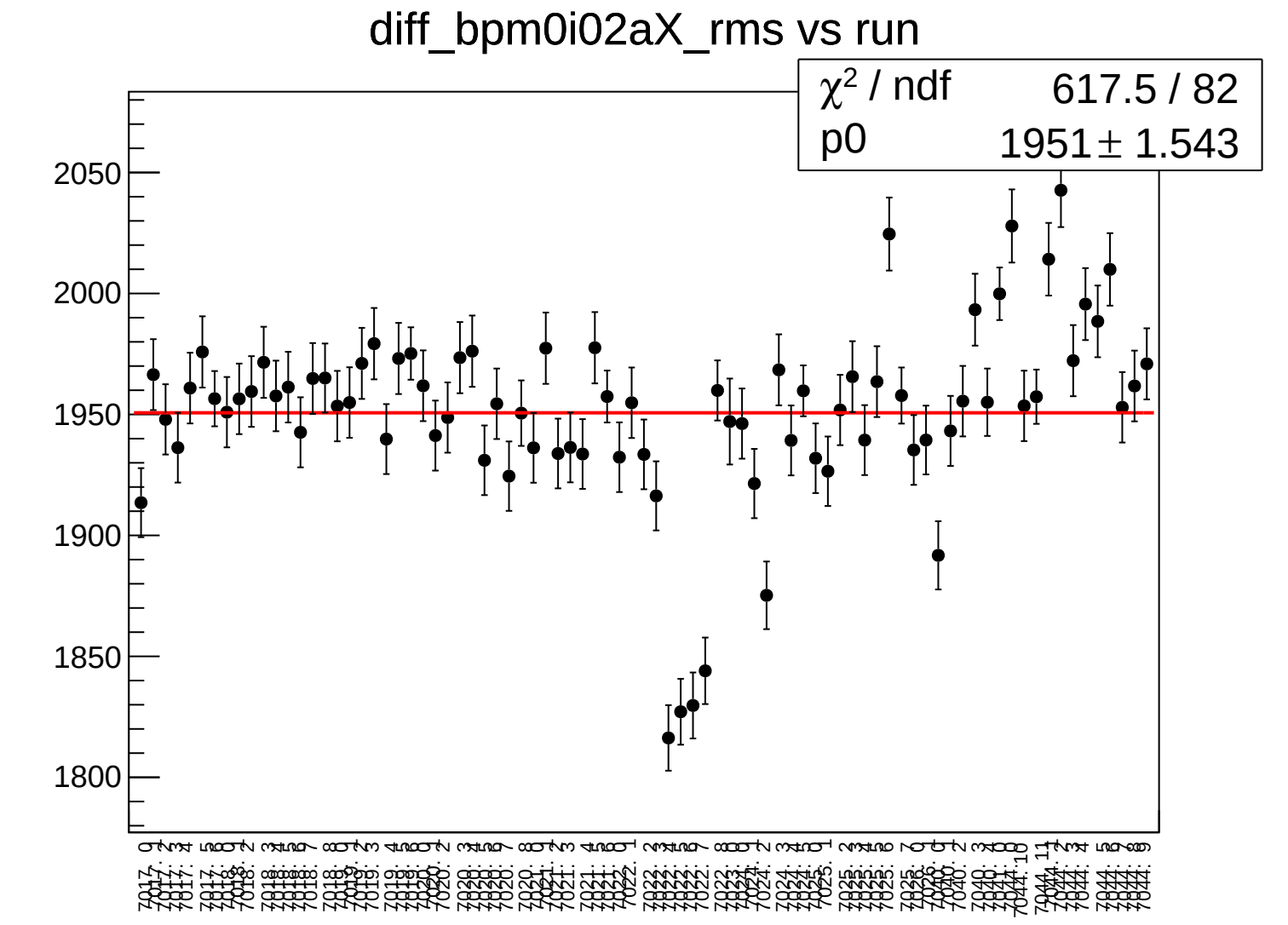

diff_bpm0i02Y_mean vs run
χ^2 / ndf 119.2 / 82
p0 9.894 ± 1.72
pull
Entries 83
Mean 307.8
Std Dev 265.2

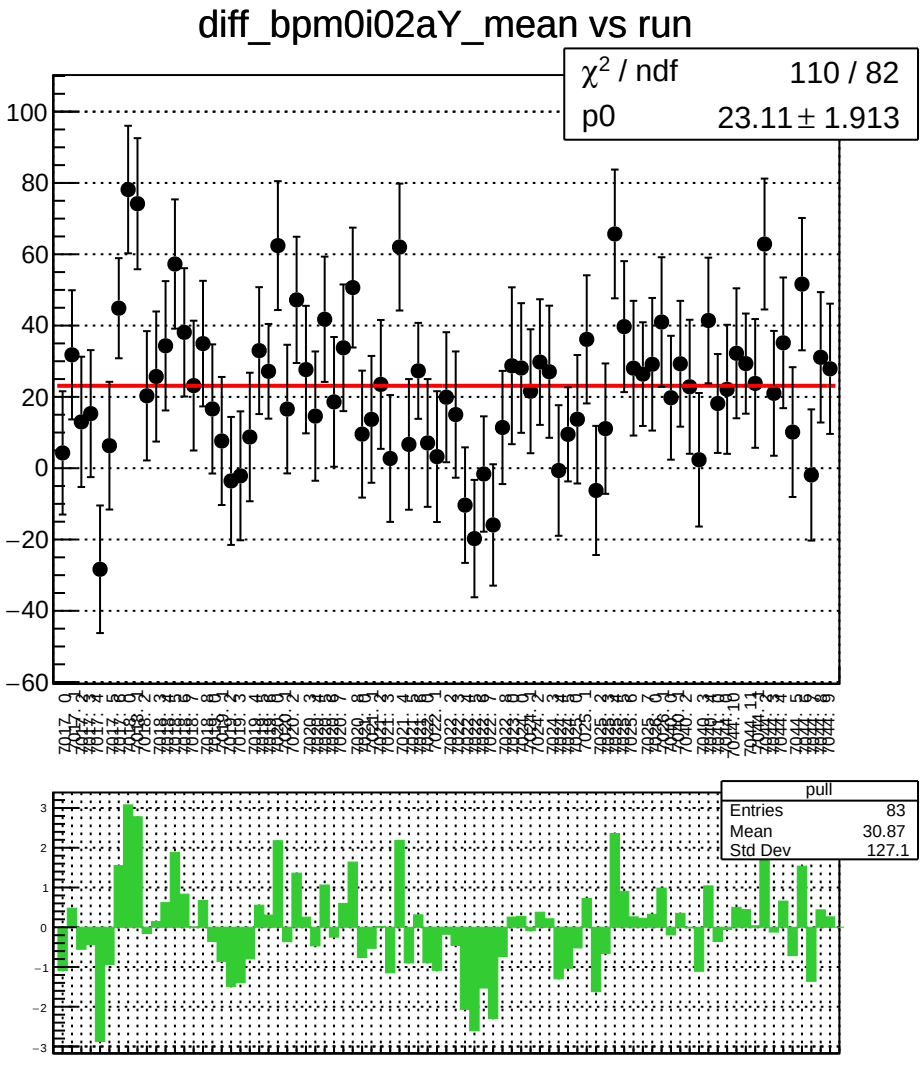

pull1D
Entries 83
Mean −0.004101
Std Dev 1.198

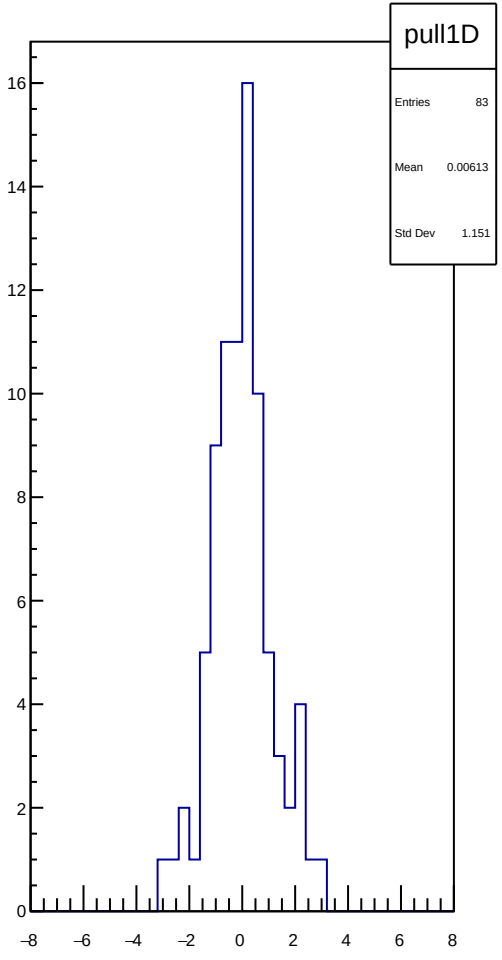

diff_bpm0i02Y_rms vs run
χ² / ndf 711.9 / 82
p0 1537 ± 1.216
1600
1550
1500
1450
1400

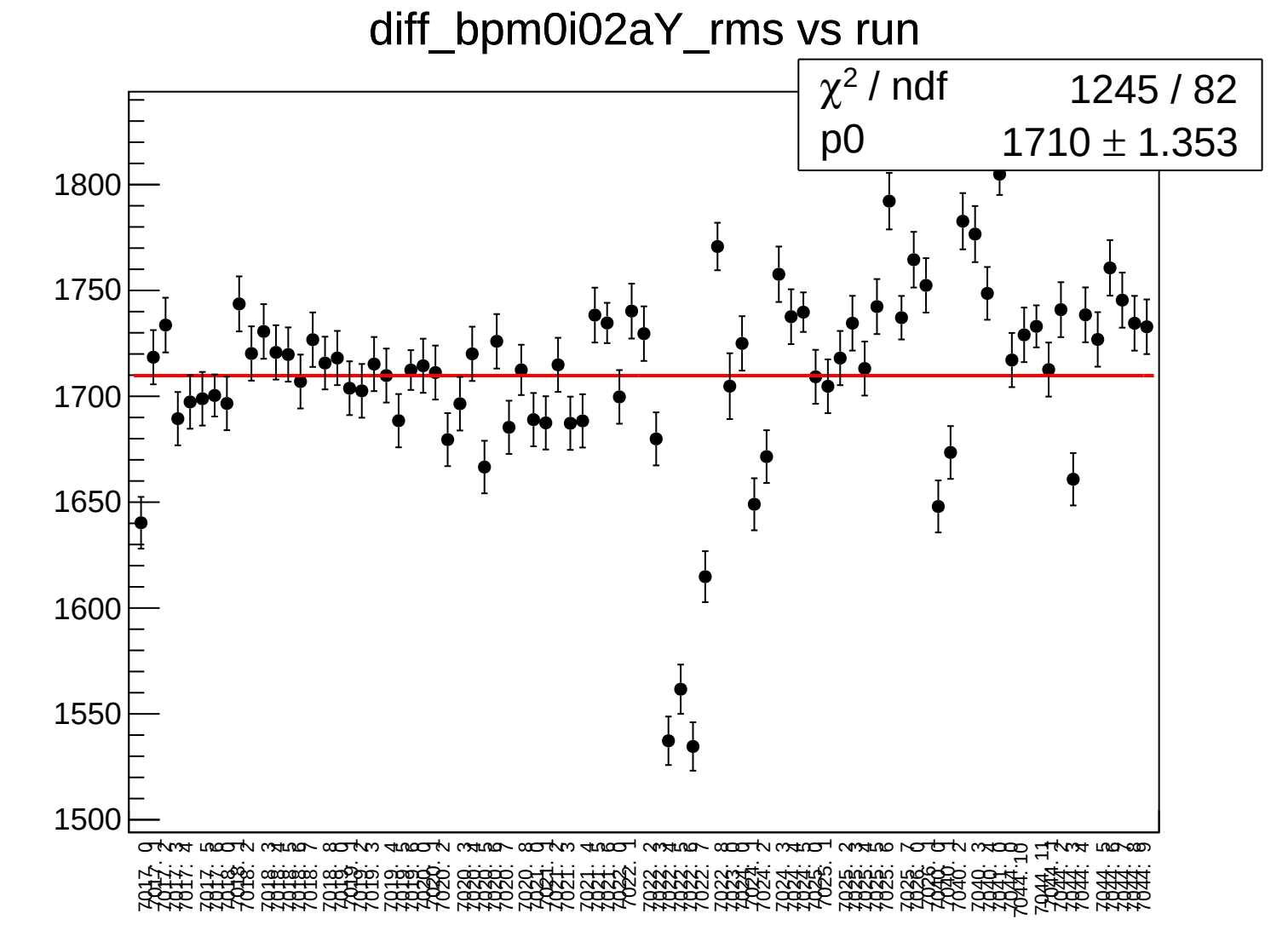

diff_bpm0i02aX_mean vs run
χ² / ndf 164 / 82
p0 −50.82 ± 2.182
pull
Entries 83
Mean −3905
Std Dev 3957

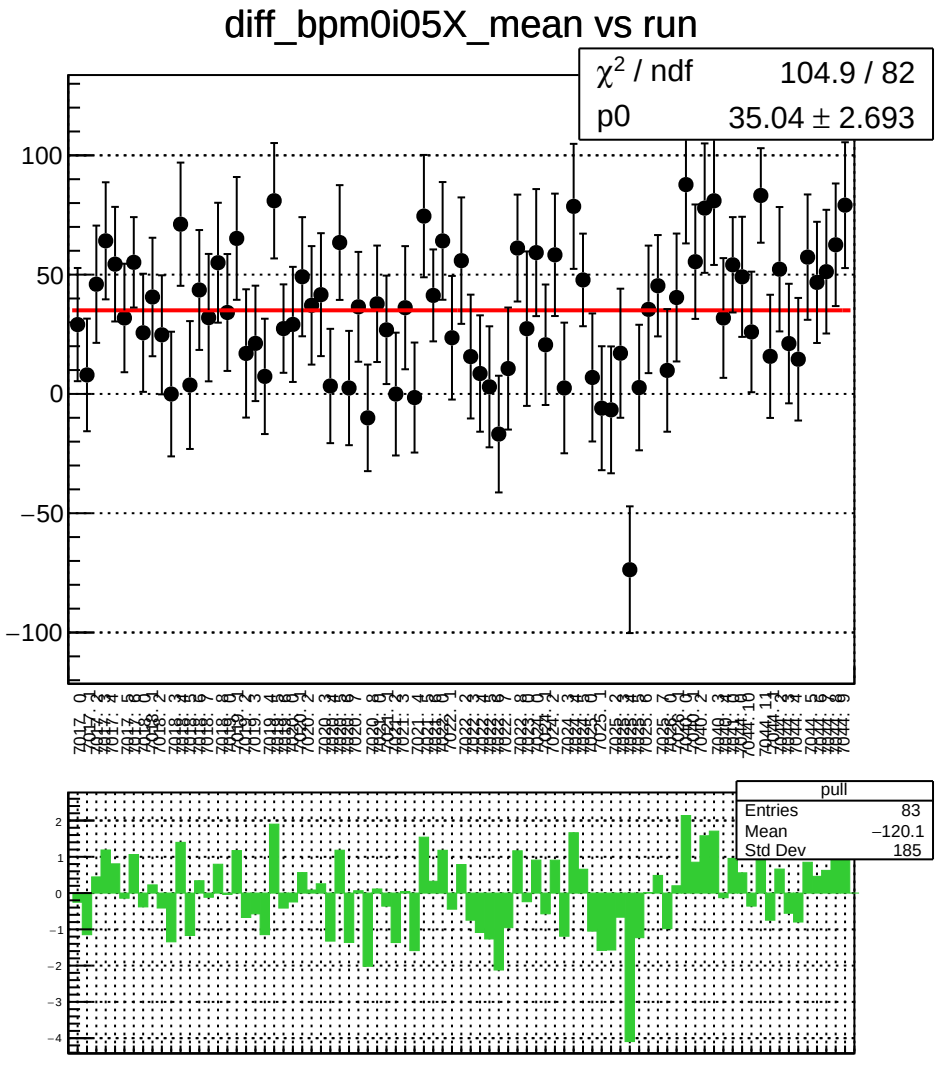

pull1D
Entries 83
Mean 0.00236
Std Dev 1.406

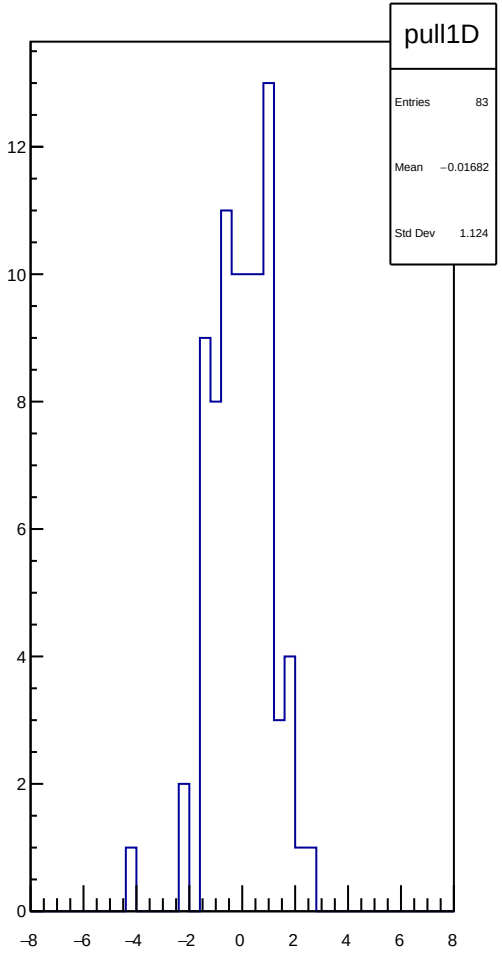

diff_bpm0i02aX_rms vs run
χ² / ndf 617.5 / 82
p0 1951 ± 1.543
2050
2000
1950
1900
1850
1800

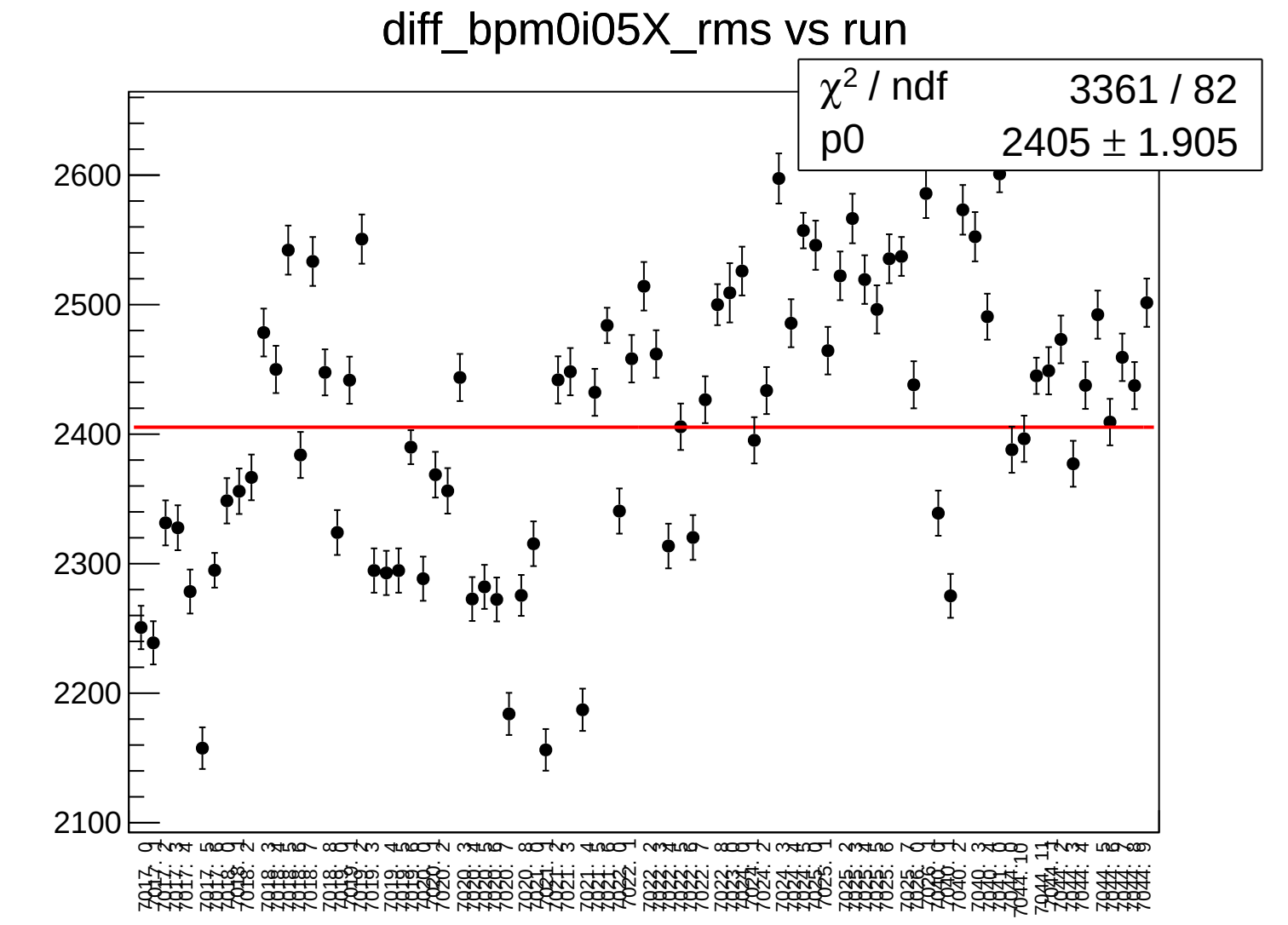

diff_bpm0i02aY_mean vs run
χ^2 / ndf 110 / 82
p0 23.11 ± 1.913
pull
Entries 83
Mean 30.87
Std Dev 127.1

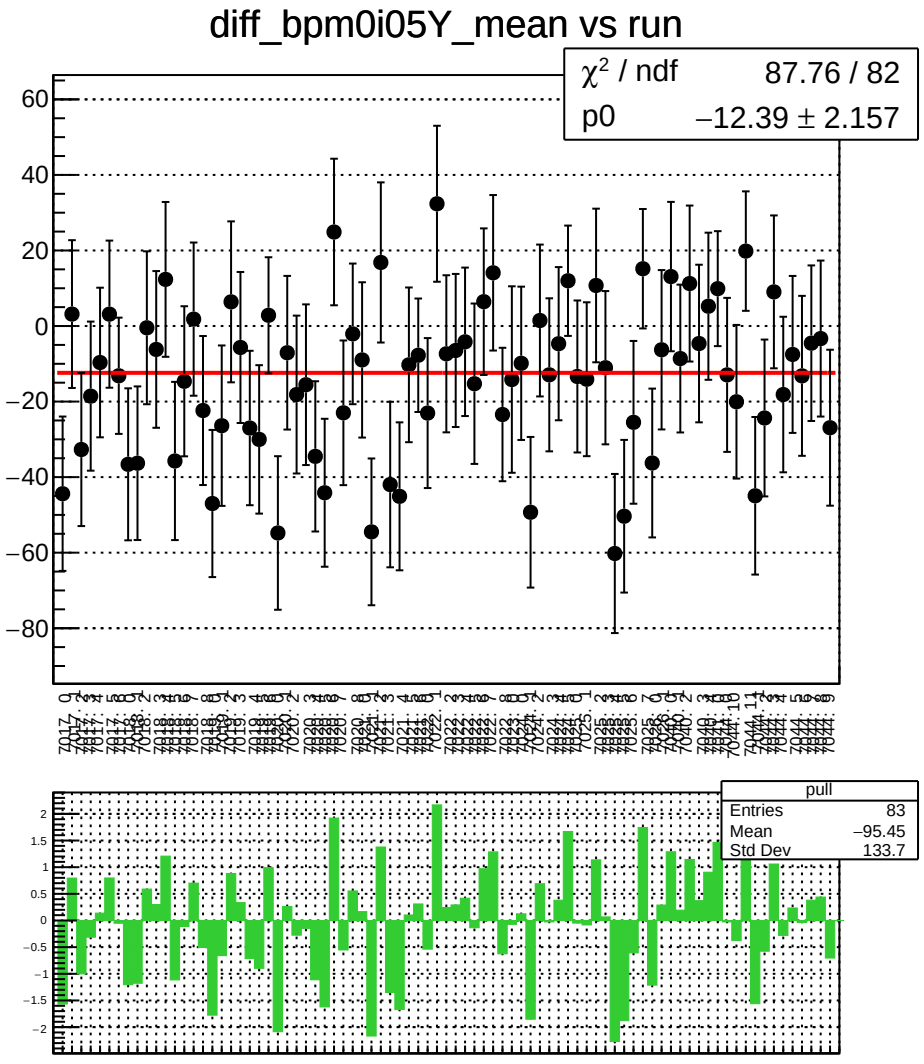

pull1D
Entries 83
Mean 0.00613
Std Dev 1.151

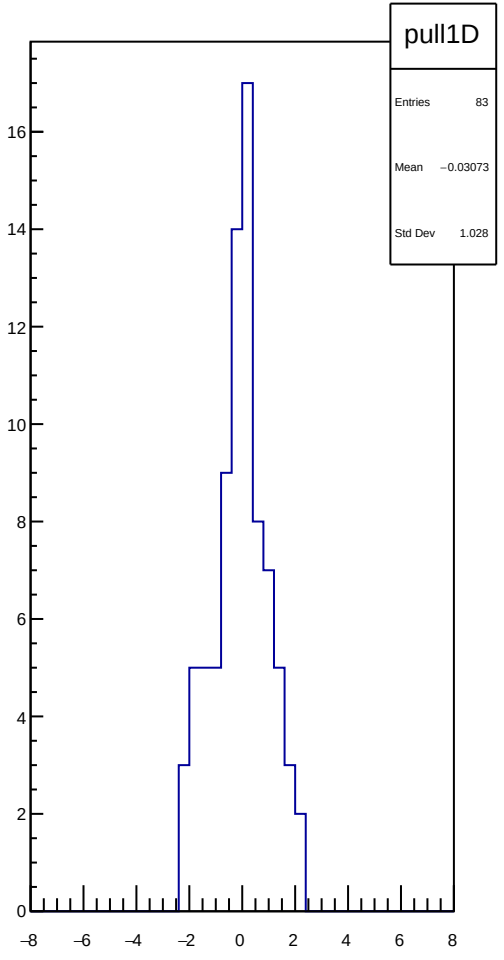

diff_bpm0i02aY_rms vs run
χ² / ndf 1245 / 82
p0 1710 ± 1.353
1800
1750
1700
1650
1600
1550
1500

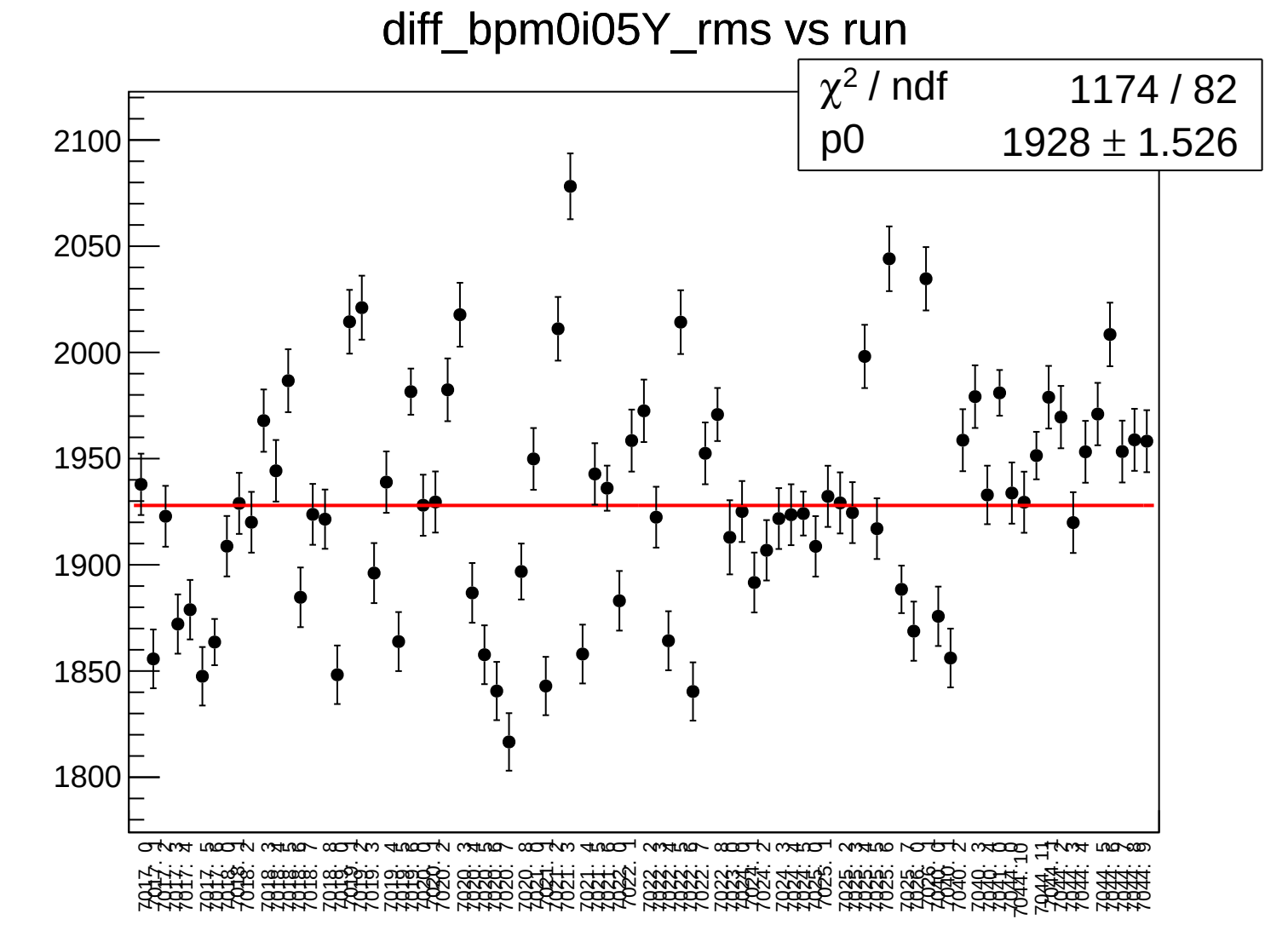

diff_bpm0i05X_mean vs run
χ^2 / ndf 104.9 / 82
p0 35.04 ± 2.693
100
50
0
−50
−100
pull
Entries 83
Mean −120.1
Std Dev 185
2
1
0
−1
−2
−3
−4

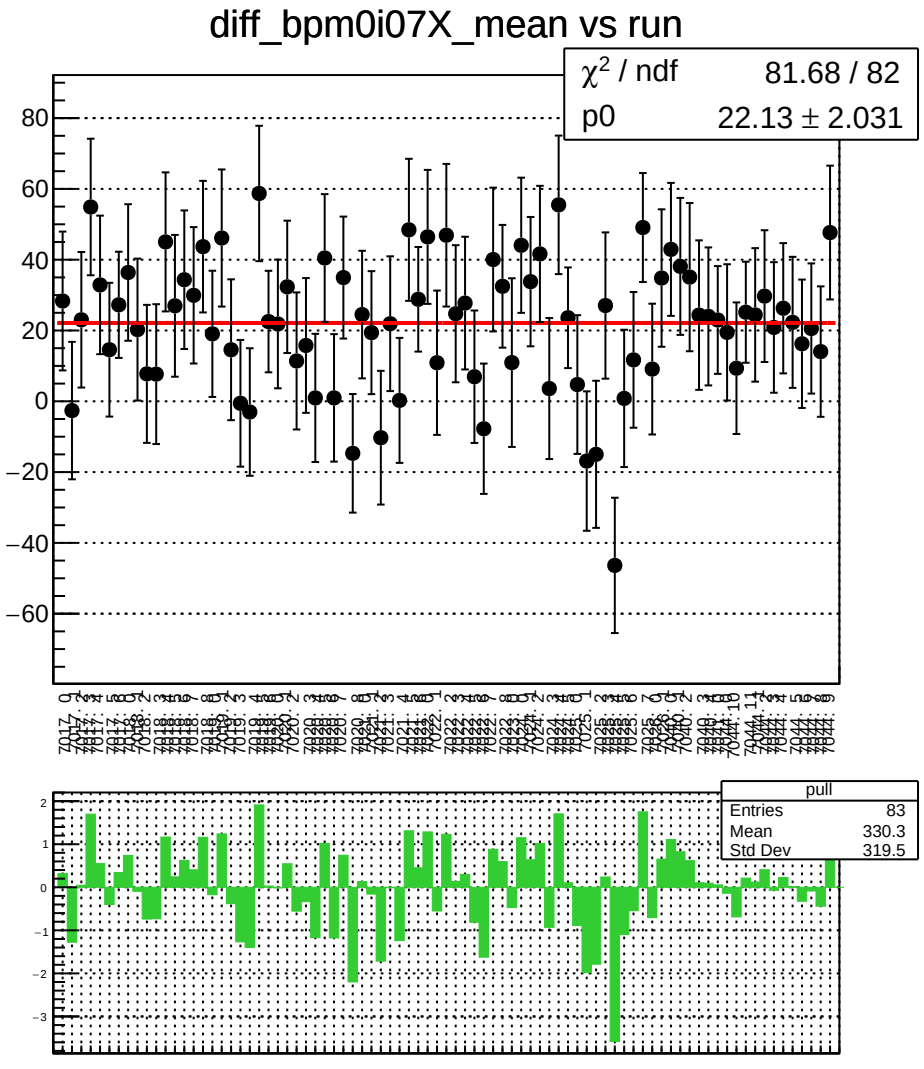

pull1D
Entries 83
Mean −0.01682
Std Dev 1.124
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

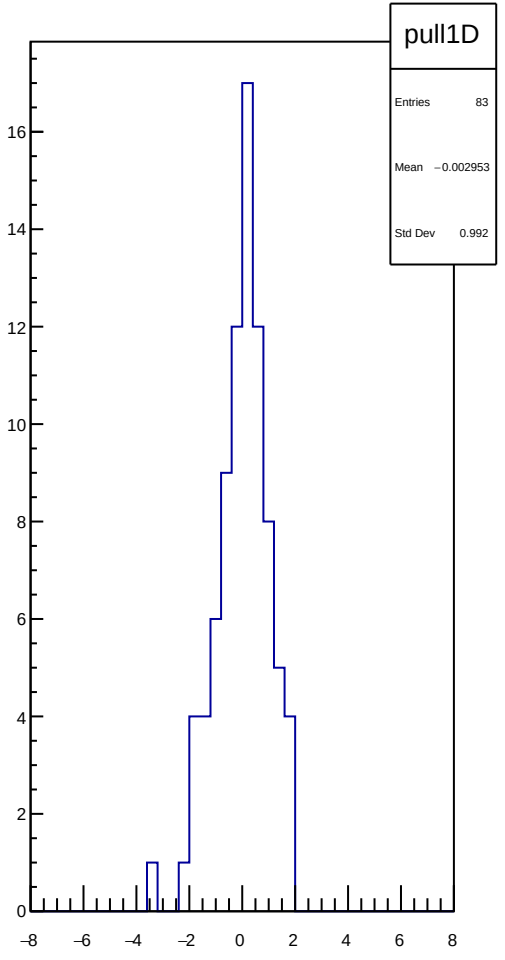

diff_bpm0i05X_rms vs run
χ² / ndf 3361 / 82
p0 2405 ± 1.905
2600
2500
2400
2300
2200
2100

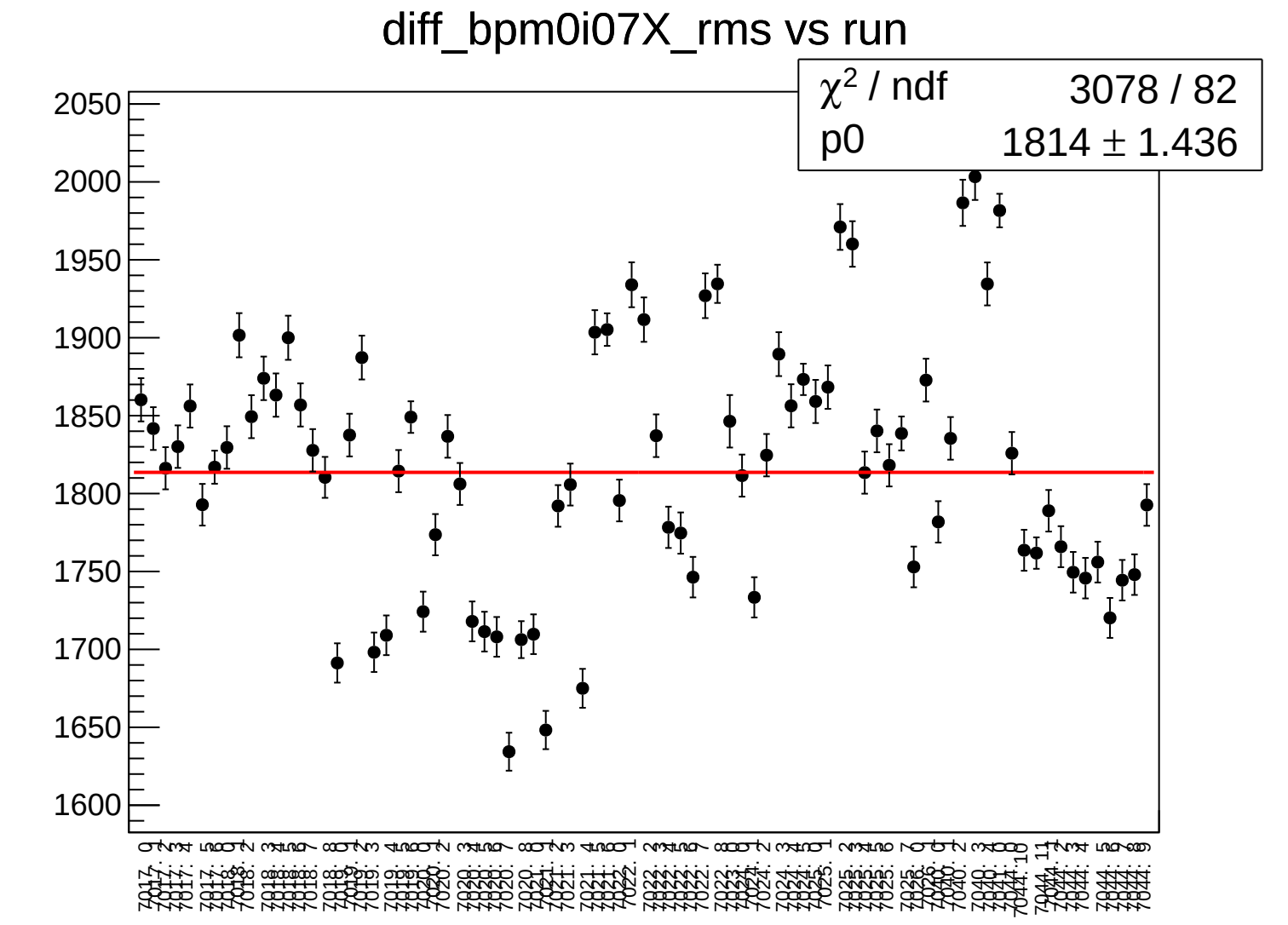

diff_bpm0i05Y_mean vs run
χ² / ndf 87.76 / 82
p0 −12.39 ± 2.157
pull
Entries 83
Mean −95.45
Std Dev 133.7

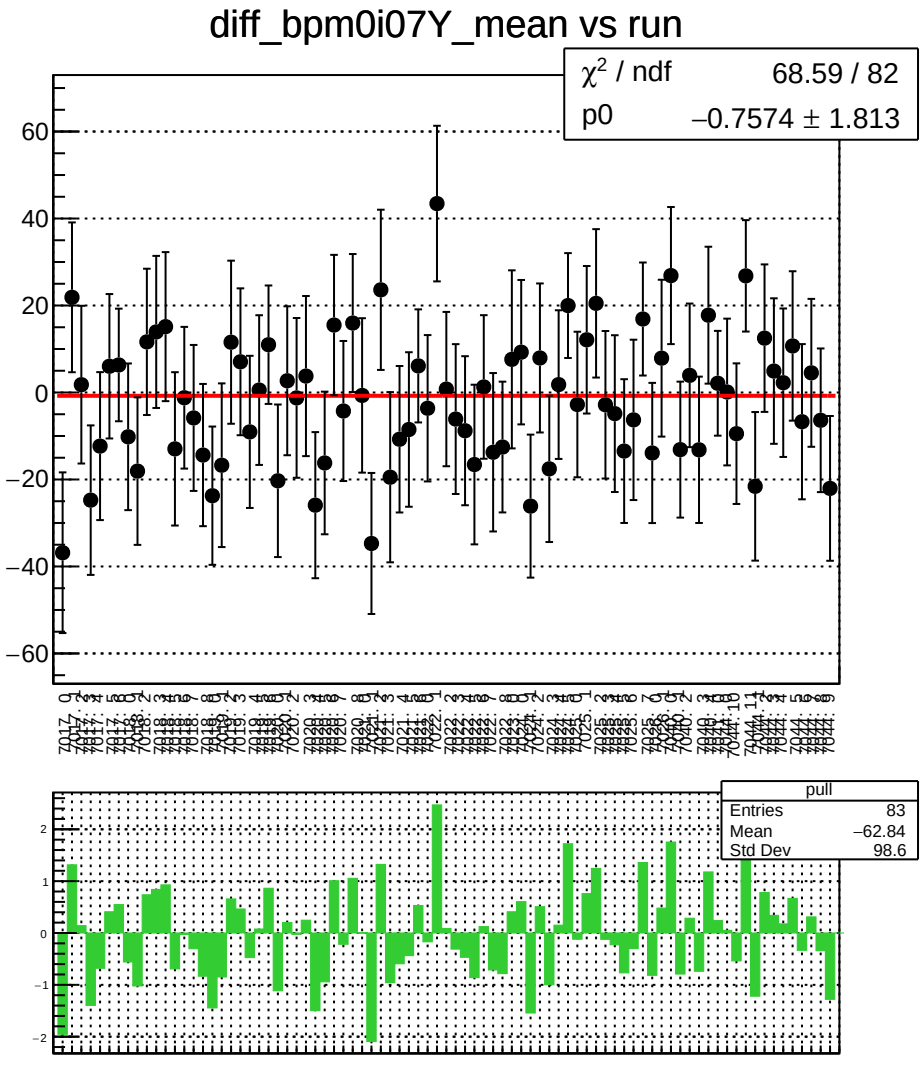

pull1D
Entries 83
Mean −0.03073
Std Dev 1.028

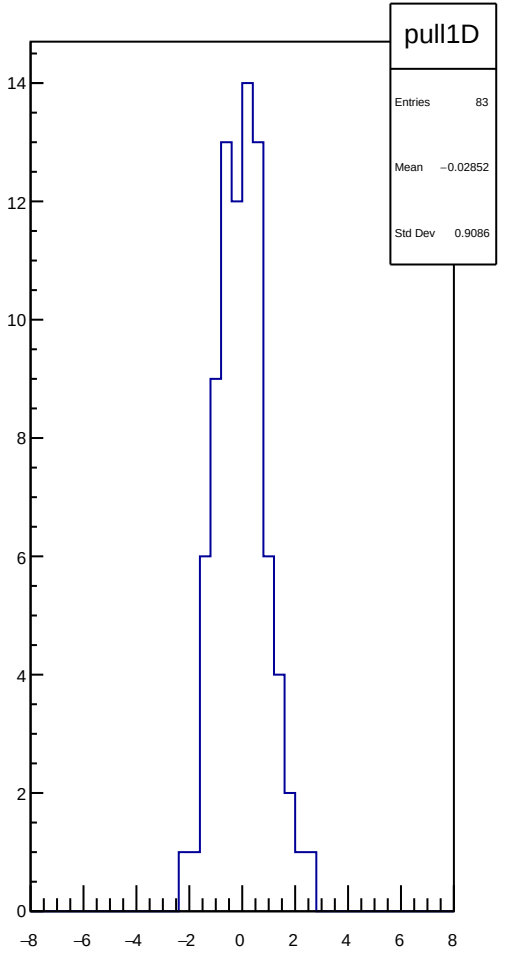

diff_bpm0i05Y_rms vs run
χ² / ndf 1174 / 82
p0 1928 ± 1.526
2100
2050
2000
1950
1900
1850
1800

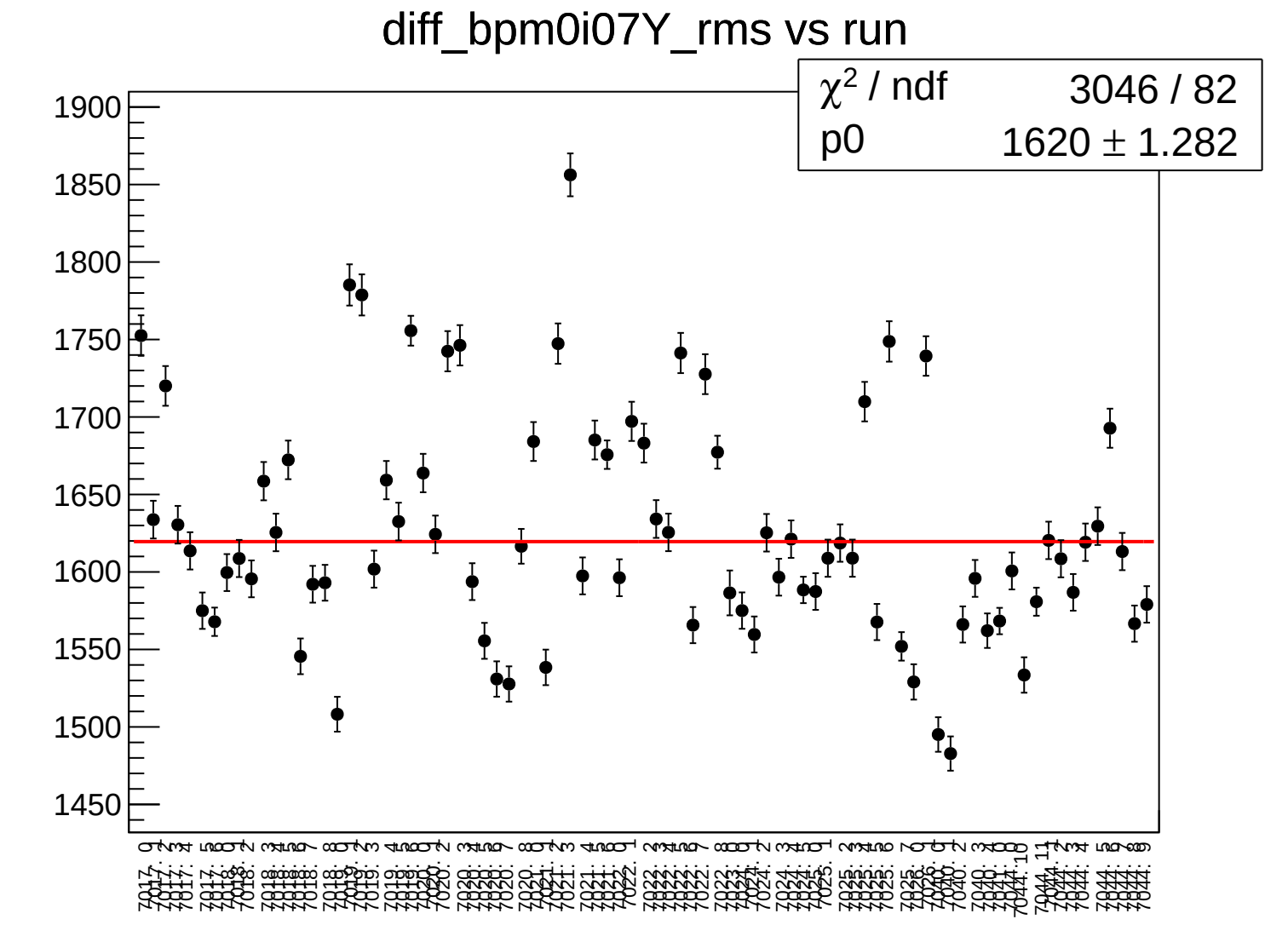

diff_bpm0i07X_mean vs run
χ^2 / ndf 81.68 / 82
p0 22.13 ± 2.031
pull
Entries 83
Mean 330.3
Std Dev 319.5

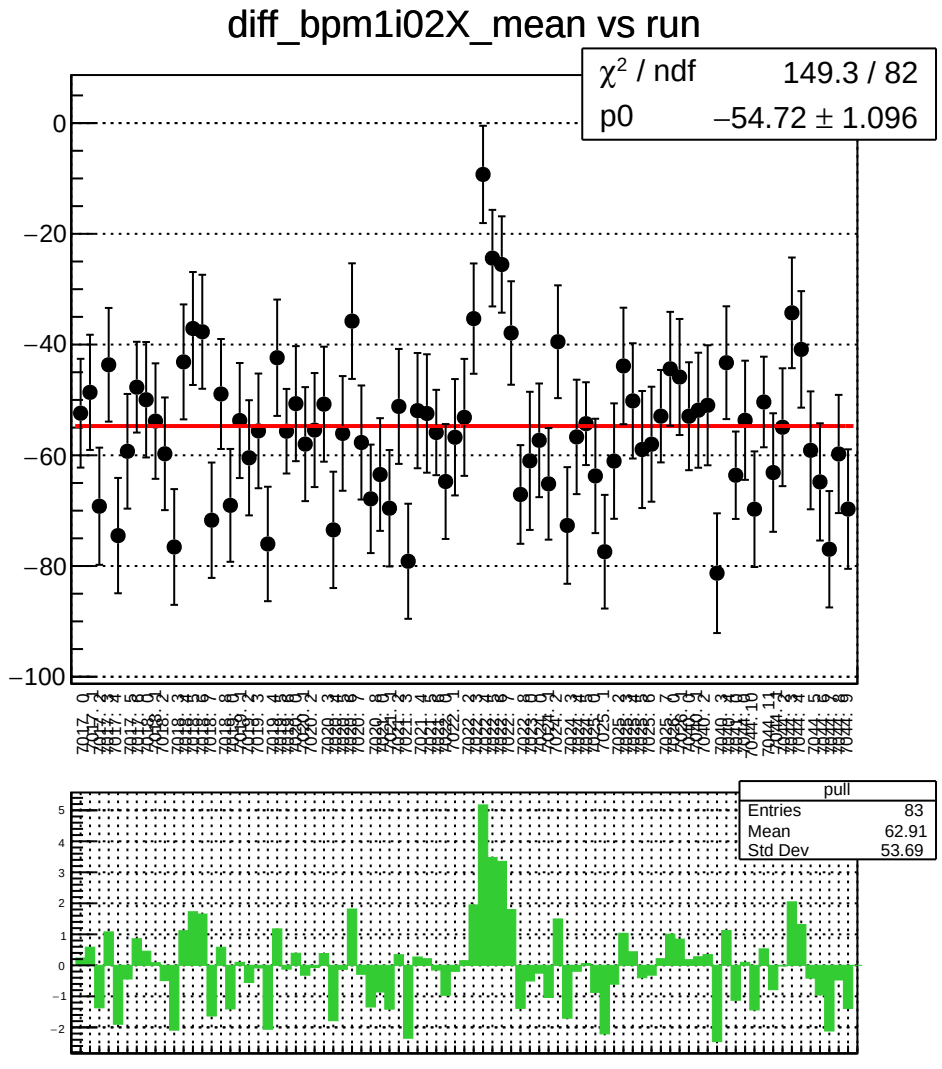

pull1D
Entries 83
Mean −0.002953
Std Dev 0.992

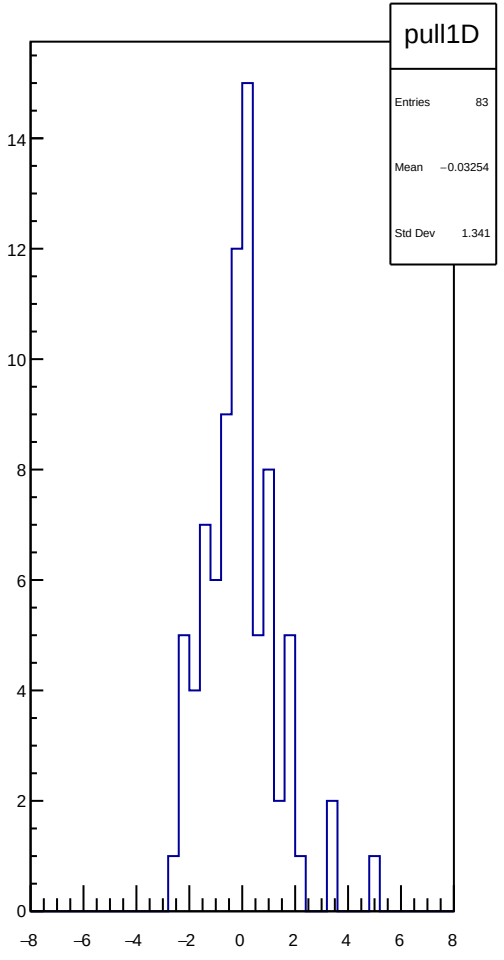

diff_bpm0i07X_rms vs run
χ² / ndf 3078 / 82
p0 1814 ± 1.436
2050
2000
1950
1900
1850
1800
1750
1700
1650
1600

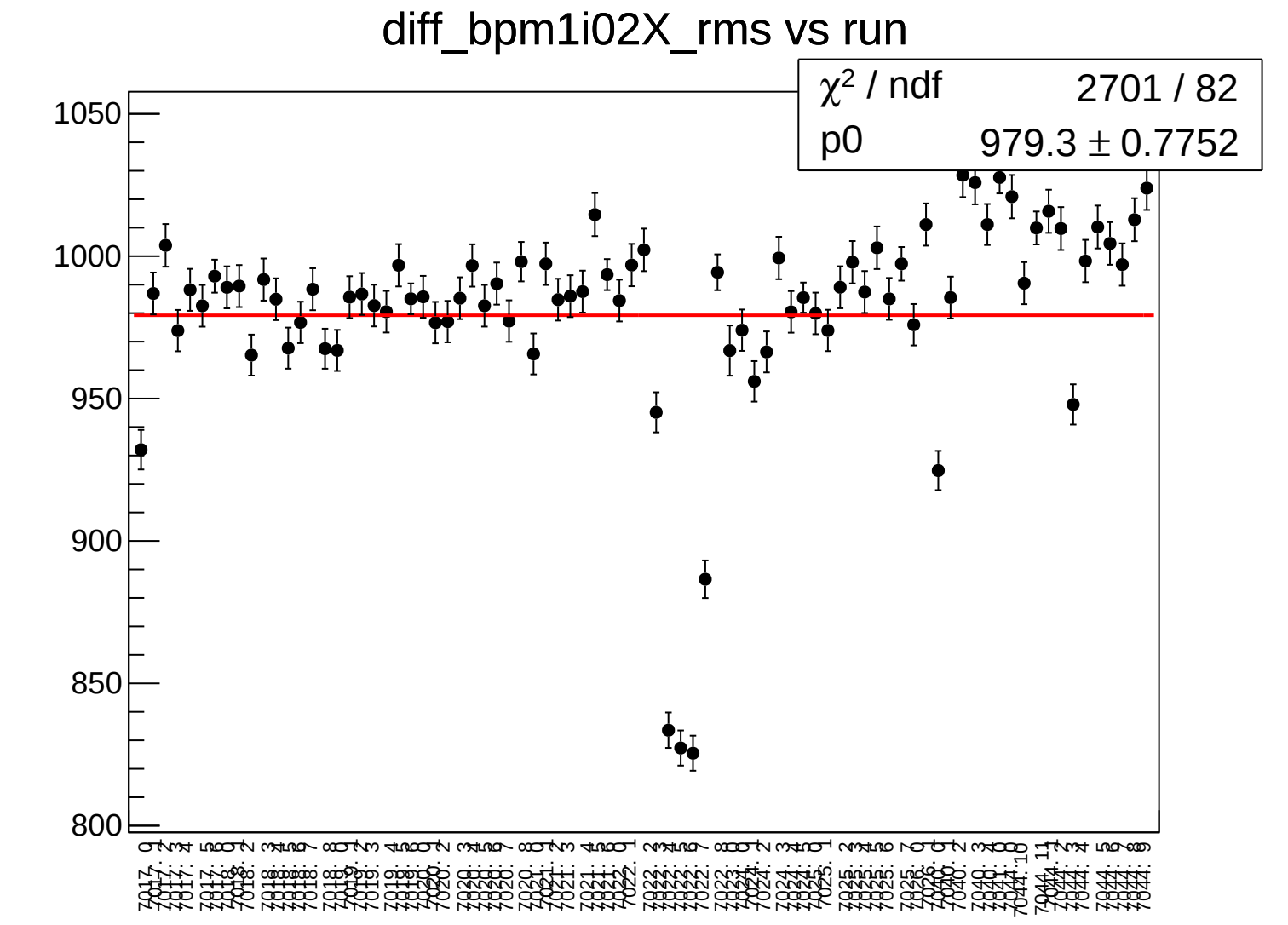

diff_bpm0i07Y_mean vs run
χ² / ndf 68.59 / 82
p0 −0.7574 ± 1.813
pull
Entries 83
Mean −62.84
Std Dev 98.6

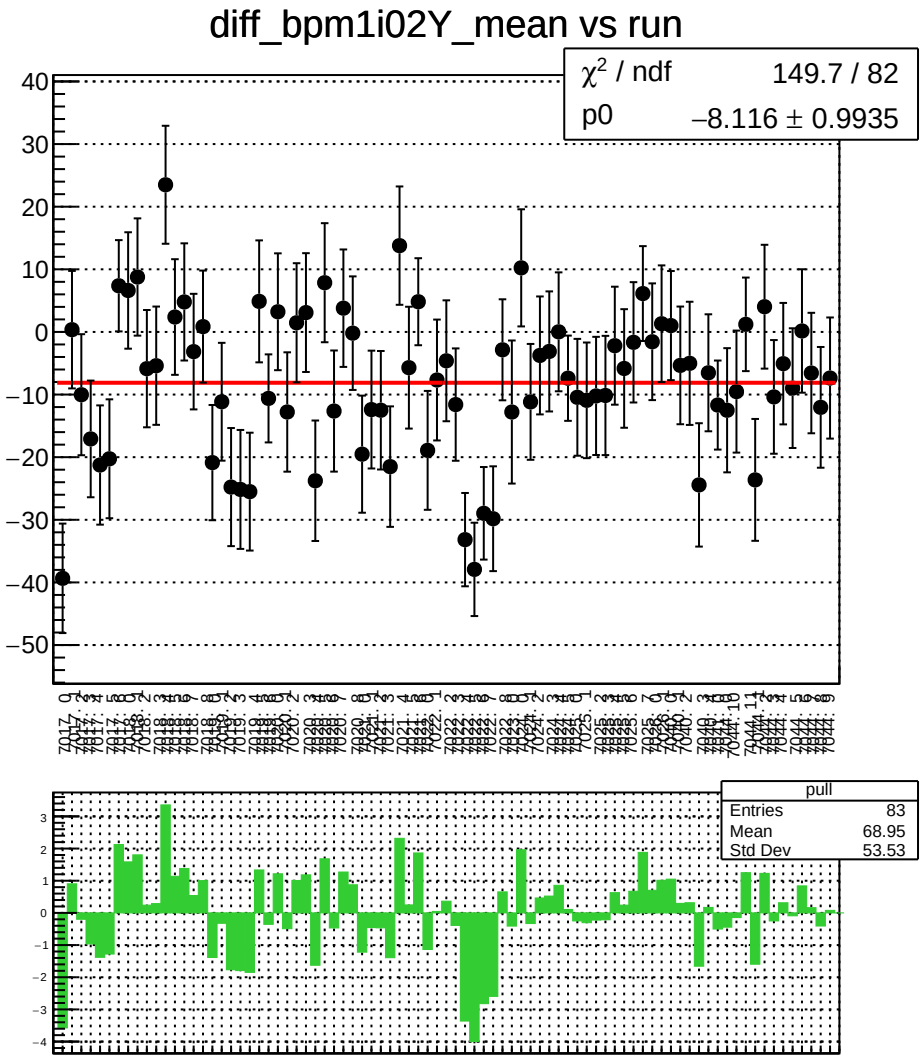

pull1D
Entries 83
Mean −0.02852
Std Dev 0.9086

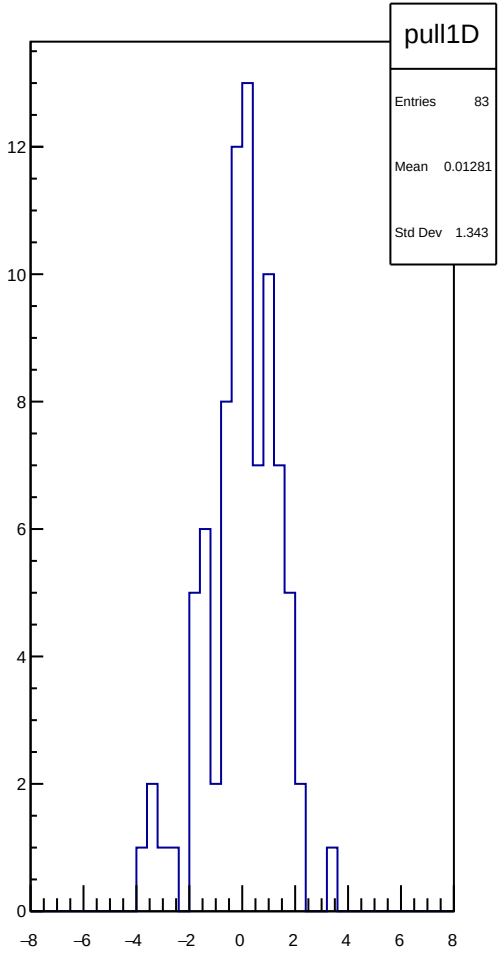

diff_bpm0i07Y_rms vs run
χ² / ndf 3046 / 82
p0 1620 ± 1.282
1900
1850
1800
1750
1700
1650
1600
1550
1500
1450

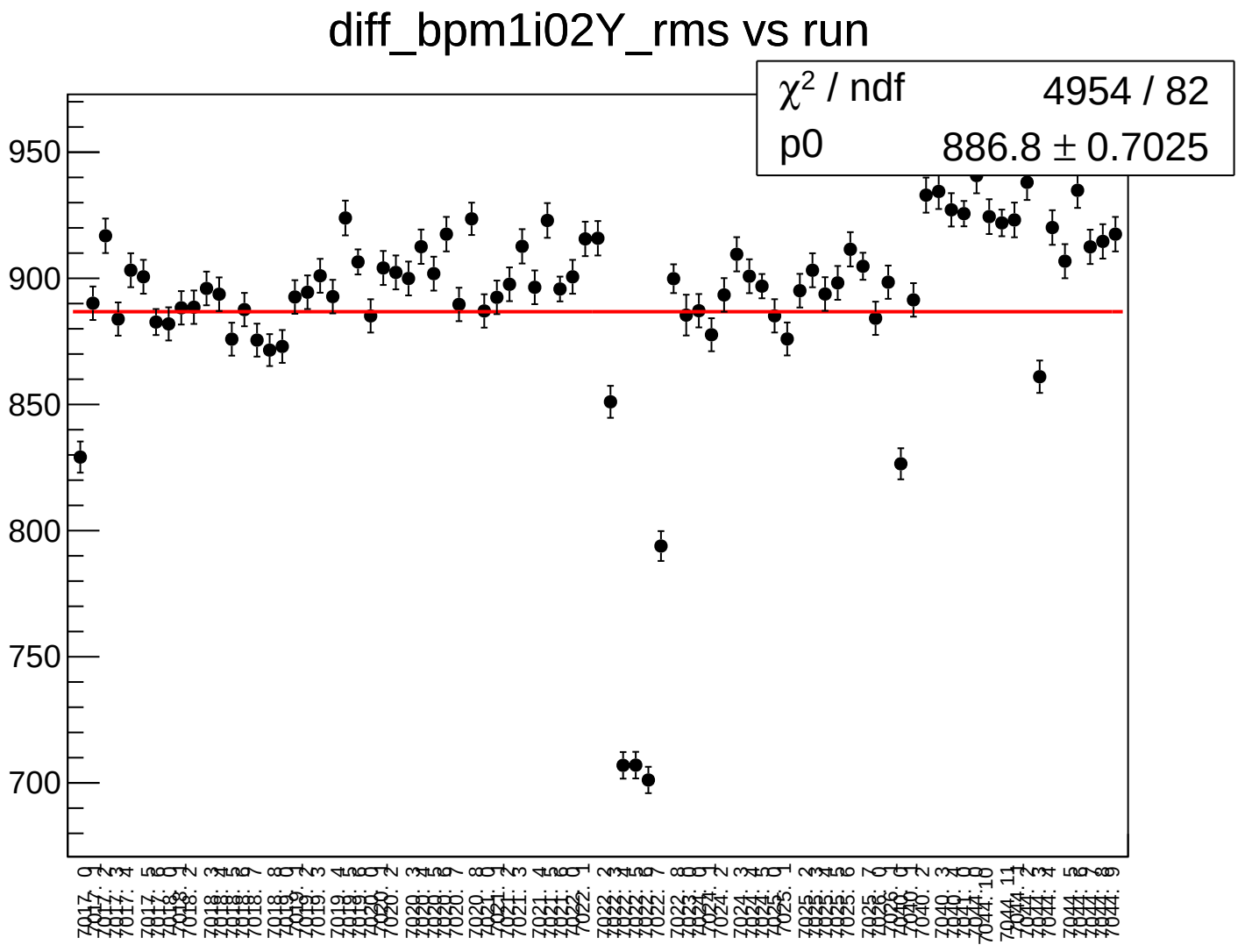

diff_bpm1i02X_mean vs run
χ² / ndf 149.3 / 82
p0 −54.72 ± 1.096
pull
Entries 83
Mean 62.91
Std Dev 53.69

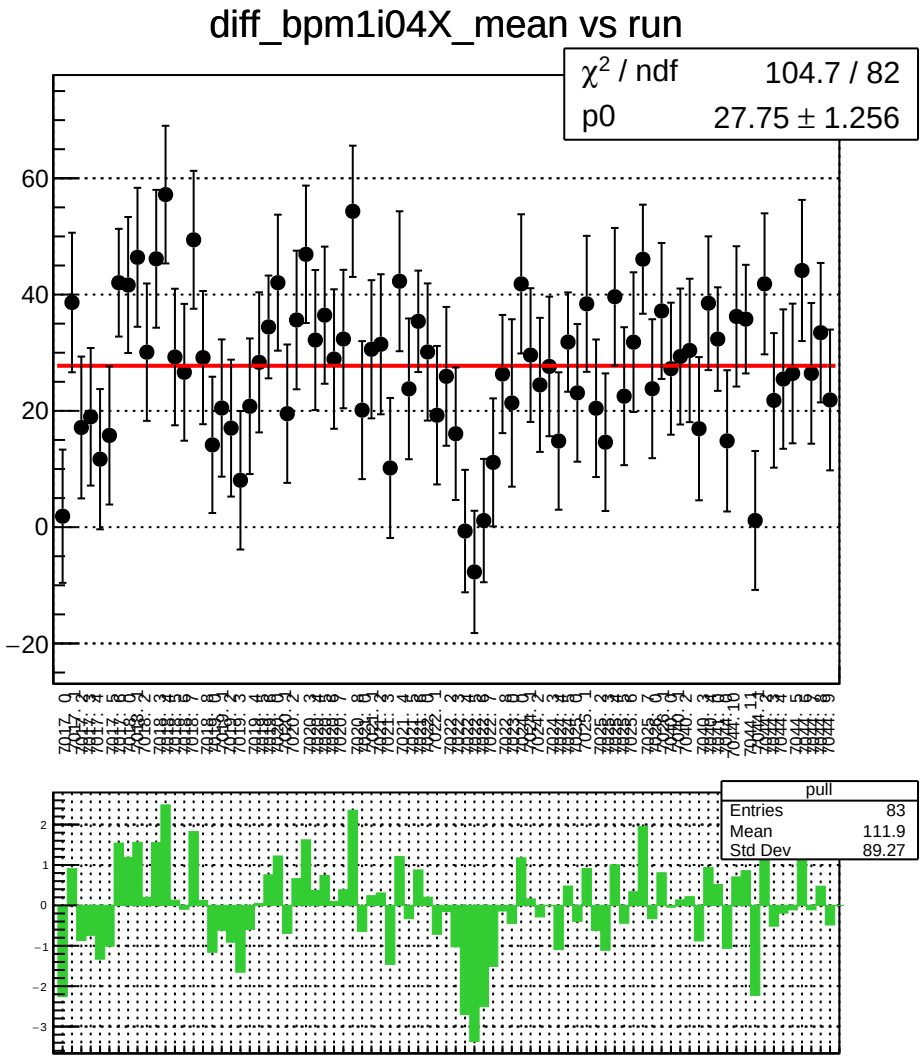

pull1D
Entries 83
Mean −0.03254
Std Dev 1.341

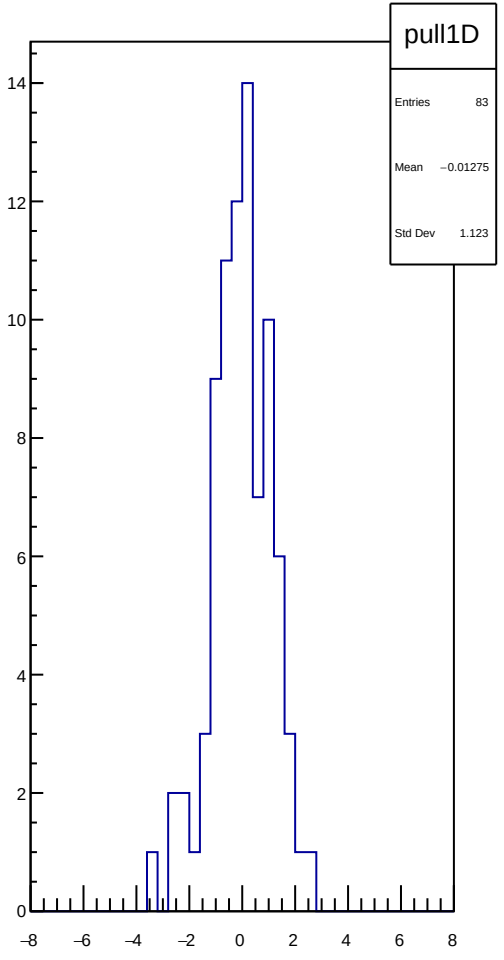

diff_bpm1i02X_rms vs run
χ² / ndf 2701 / 82
p0 979.3 ± 0.7752
1050
1000
950
900
850
800

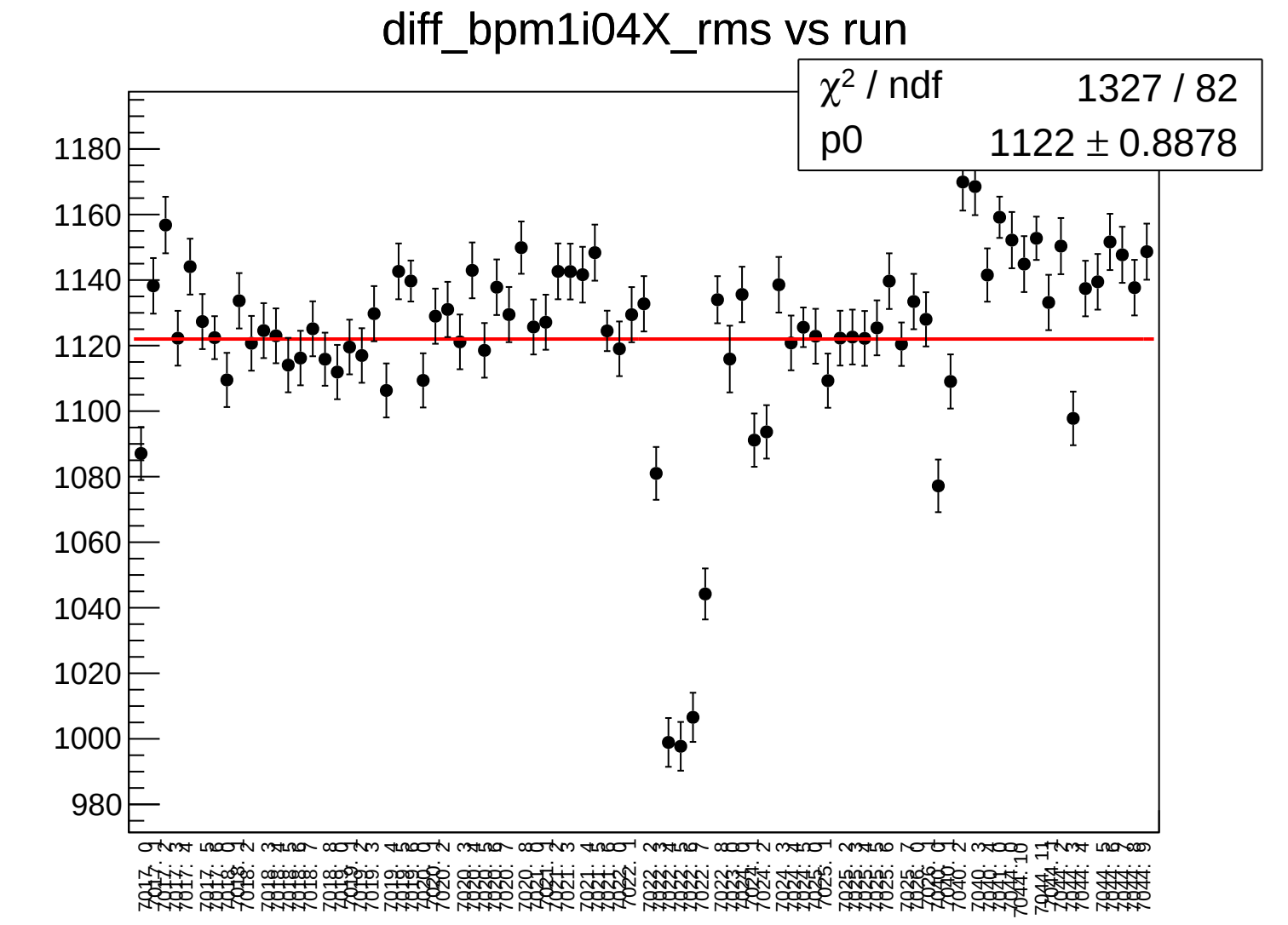

diff_bpm1i02Y_mean vs run
χ² / ndf 149.7 / 82
p0 −8.116 ± 0.9935
pull
Entries 83
Mean 68.95
Std Dev 53.53

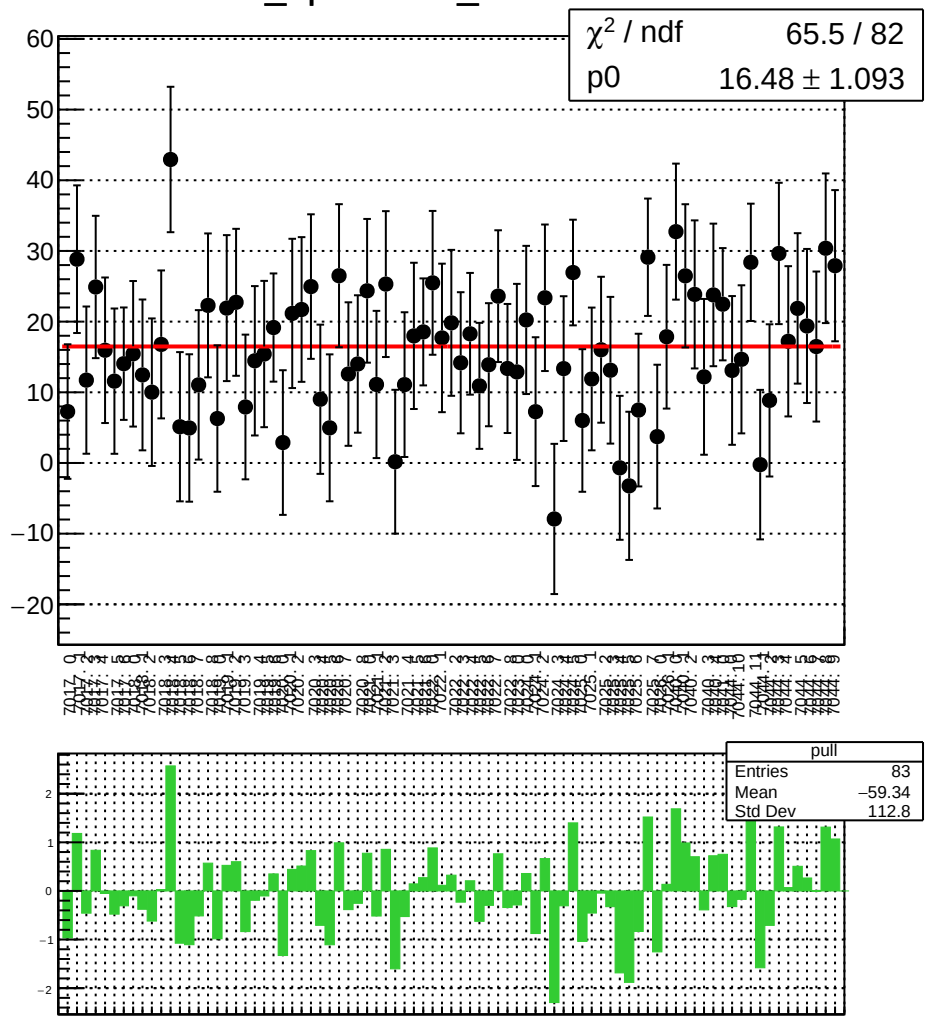

pull1D
Entries 83
Mean 0.01281
Std Dev 1.343

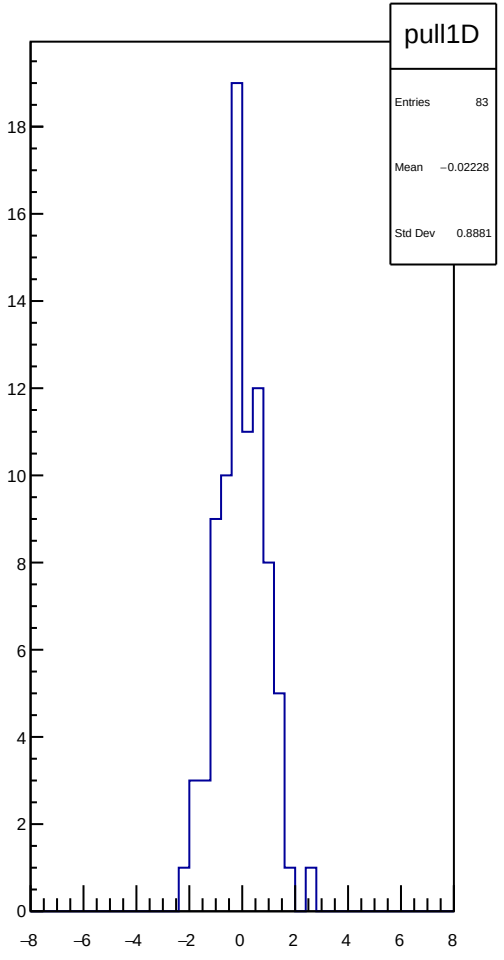

diff_bpm1i02Y_rms vs run
χ² / ndf 4954 / 82
p0 886.8 ± 0.7025
950
900
850
800
750
700

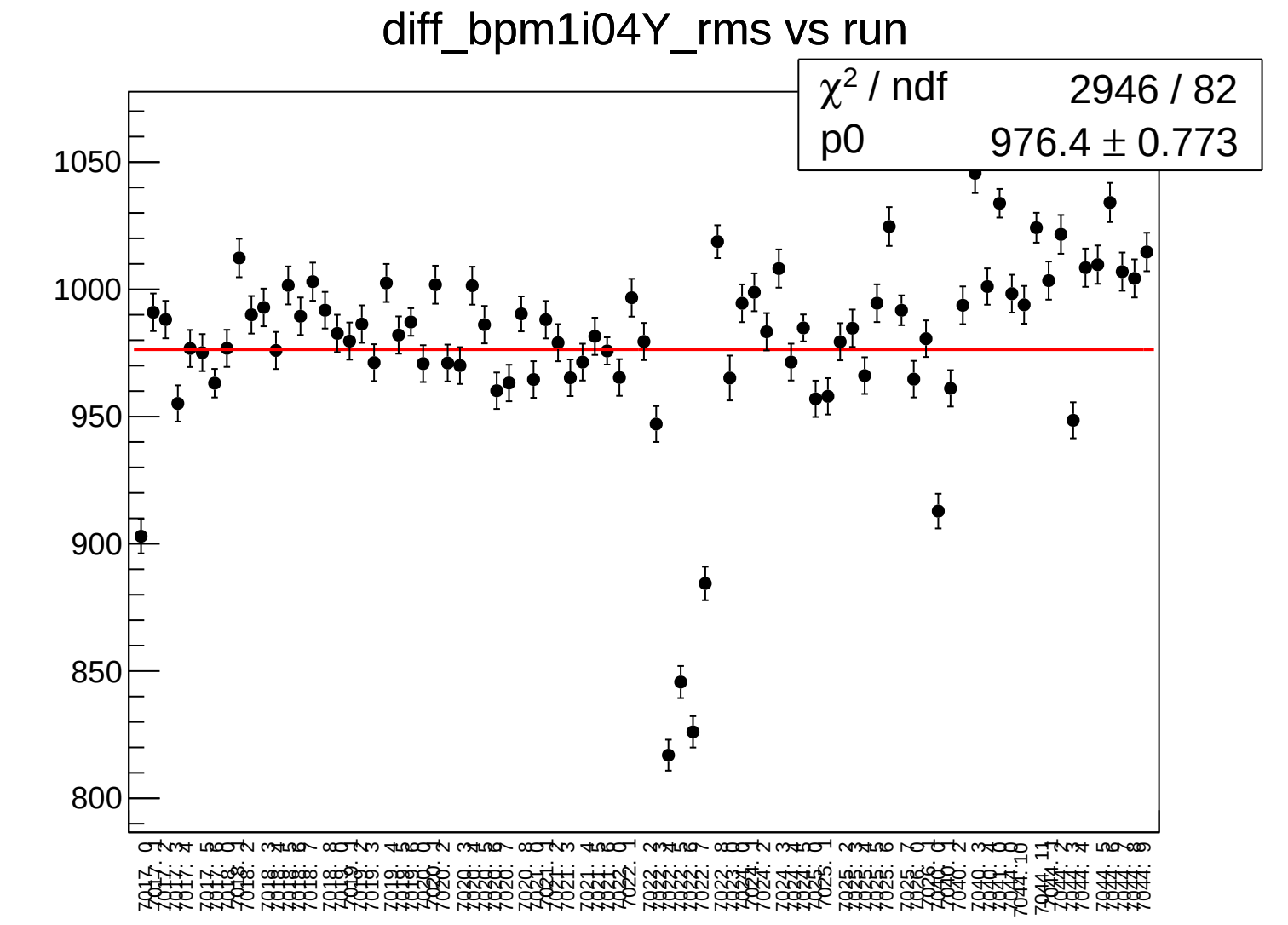

diff_bpm1i04X_mean vs run
χ^2 / ndf 104.7 / 82
p0 27.75 ± 1.256
pull
Entries 83
Mean 111.9
Std Dev 89.27

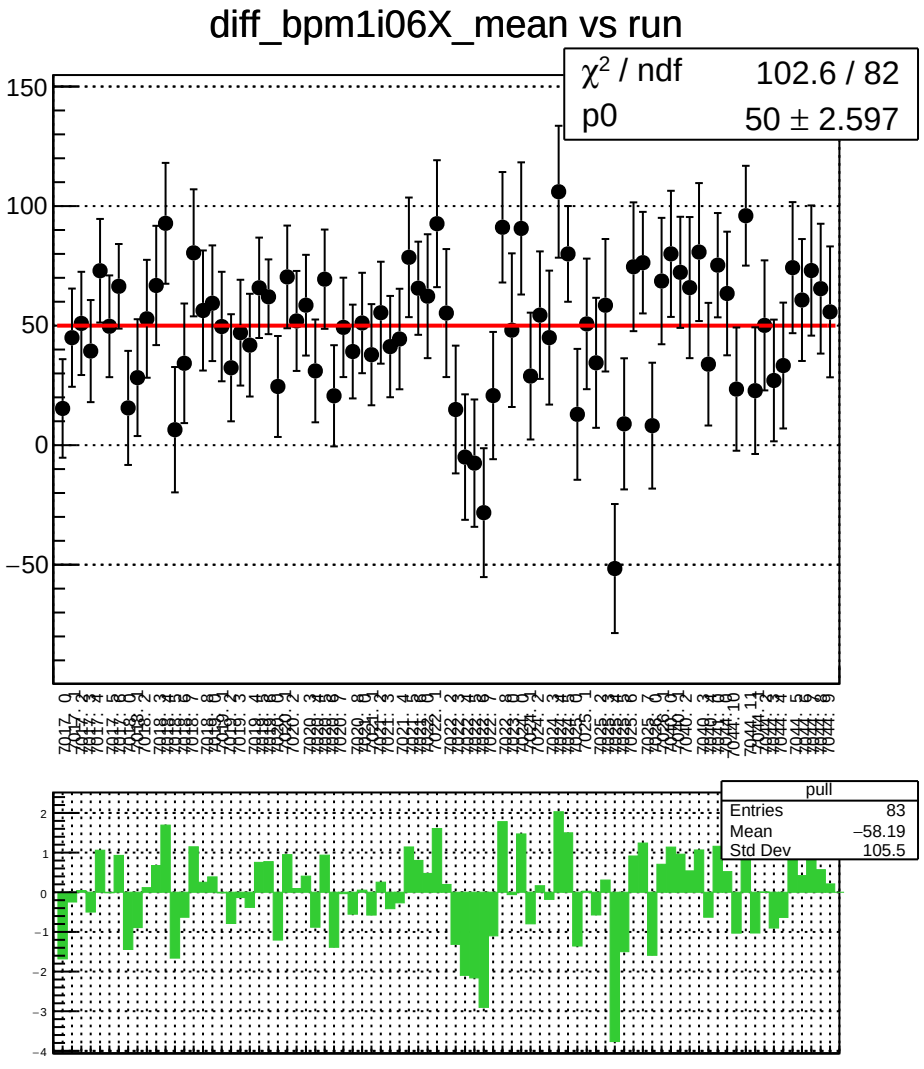

pull1D
Entries 83
Mean −0.01275
Std Dev 1.123

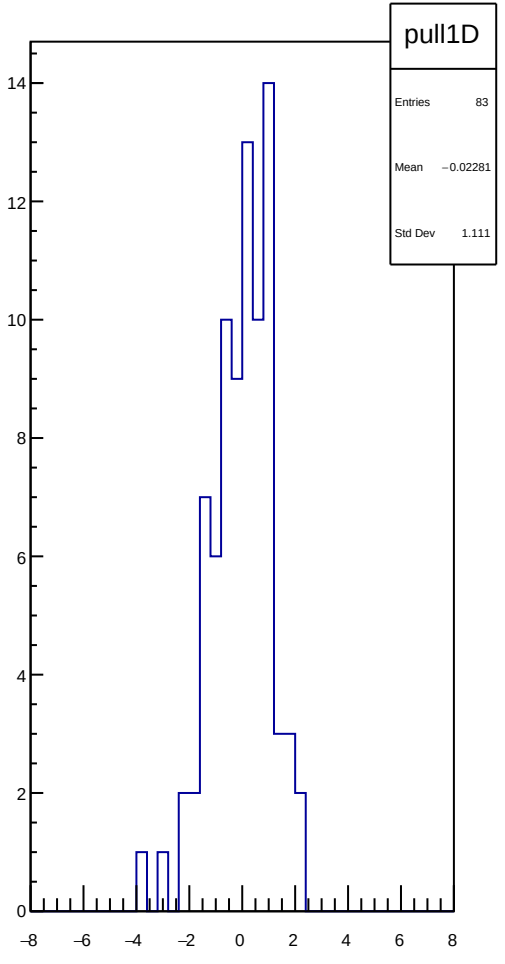

diff_bpm1i04X_rms vs run
χ² / ndf 1327 / 82
p0 1122 ± 0.8878
1180
1160
1140
1120
1100
1080
1060
1040
1020
1000
980

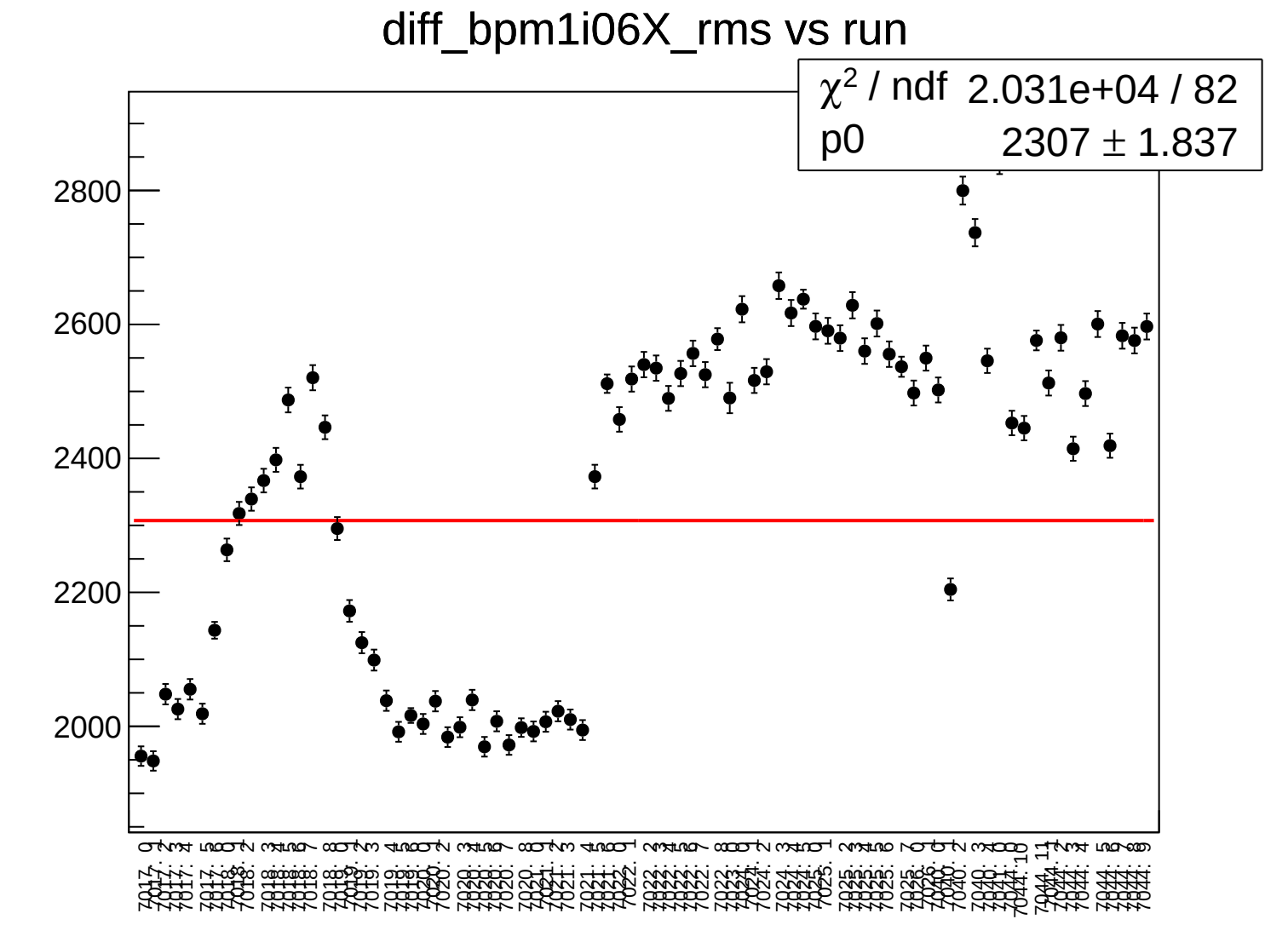

diff_bpm1i04Y_mean vs run
χ^2 / ndf 65.5 / 82
p0 16.48 ± 1.093
pull
Entries 83
Mean −59.34
Std Dev 112.8

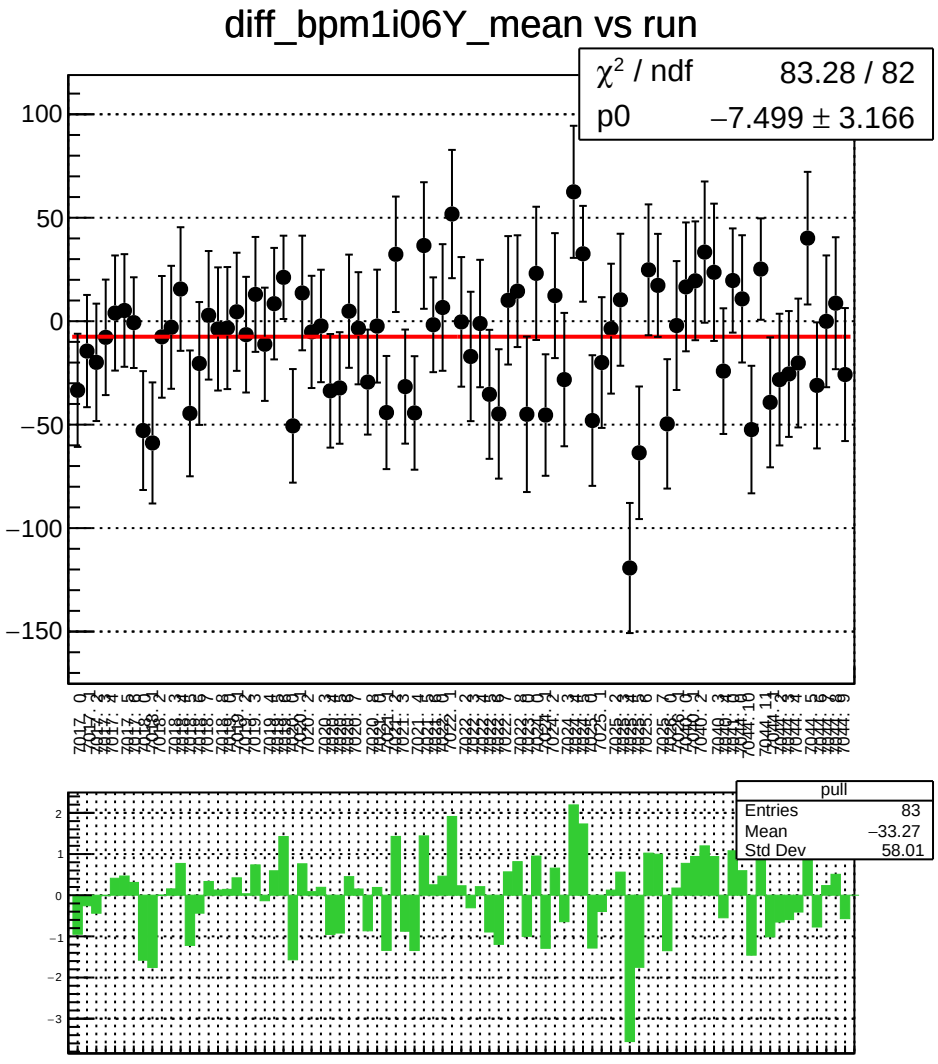

pull1D
Entries 83
Mean −0.02228
Std Dev 0.8881

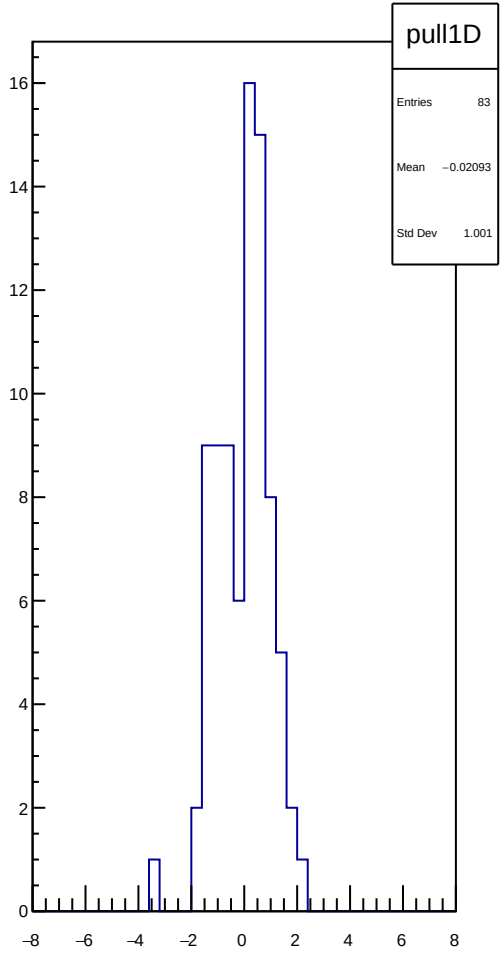

diff_bpm1i04Y_rms vs run
χ² / ndf 2946 / 82
p0 976.4 ± 0.773
1050
1000
950
900
850
800

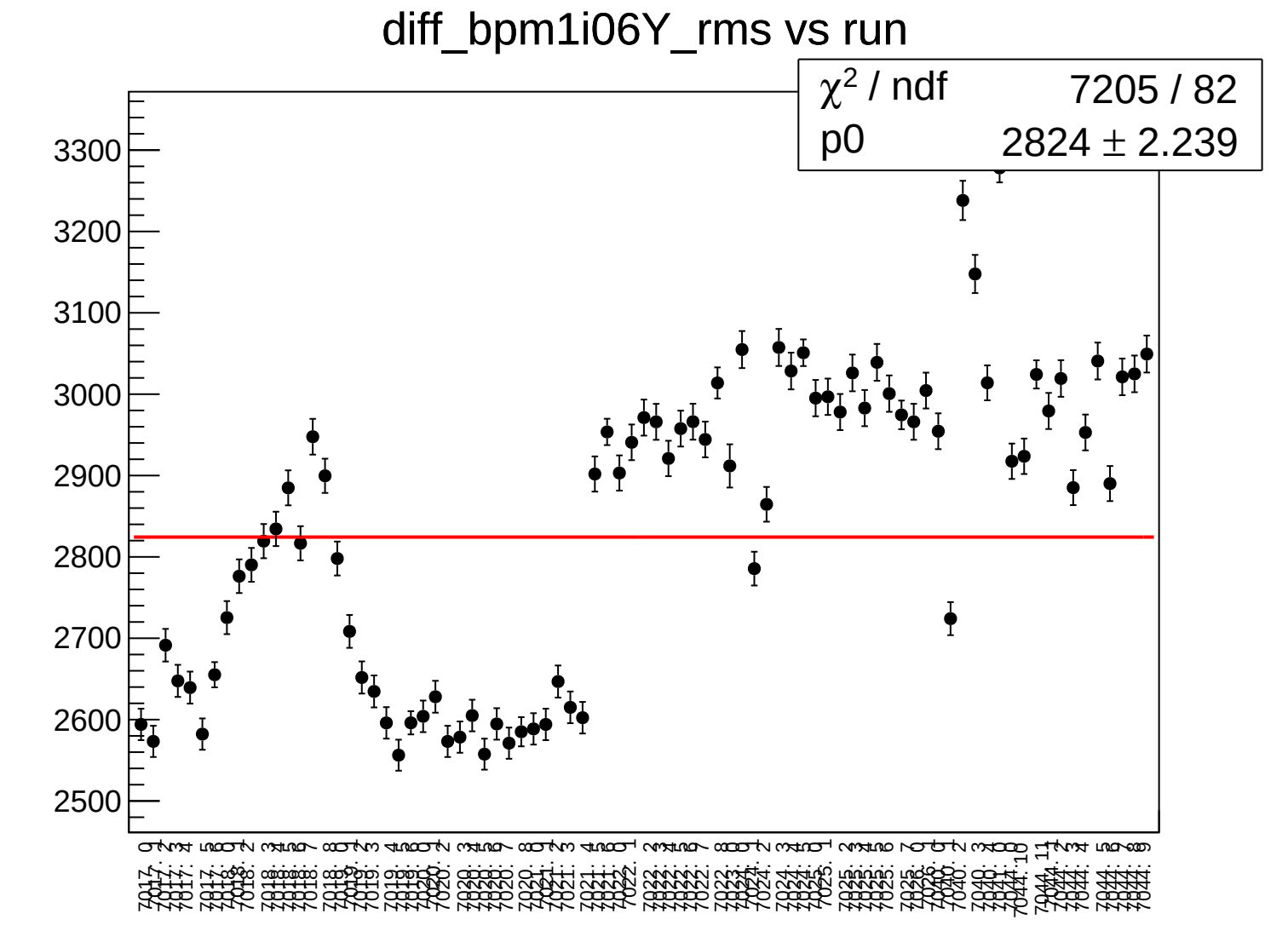

diff_bpm1i06X_mean vs run
χ^2 / ndf 102.6 / 82
p0 50 ± 2.597
150
100
50
0
−50
pull
Entries 83
Mean −58.19
Std Dev 105.5
2
1
0
−1
−2
−3
−4

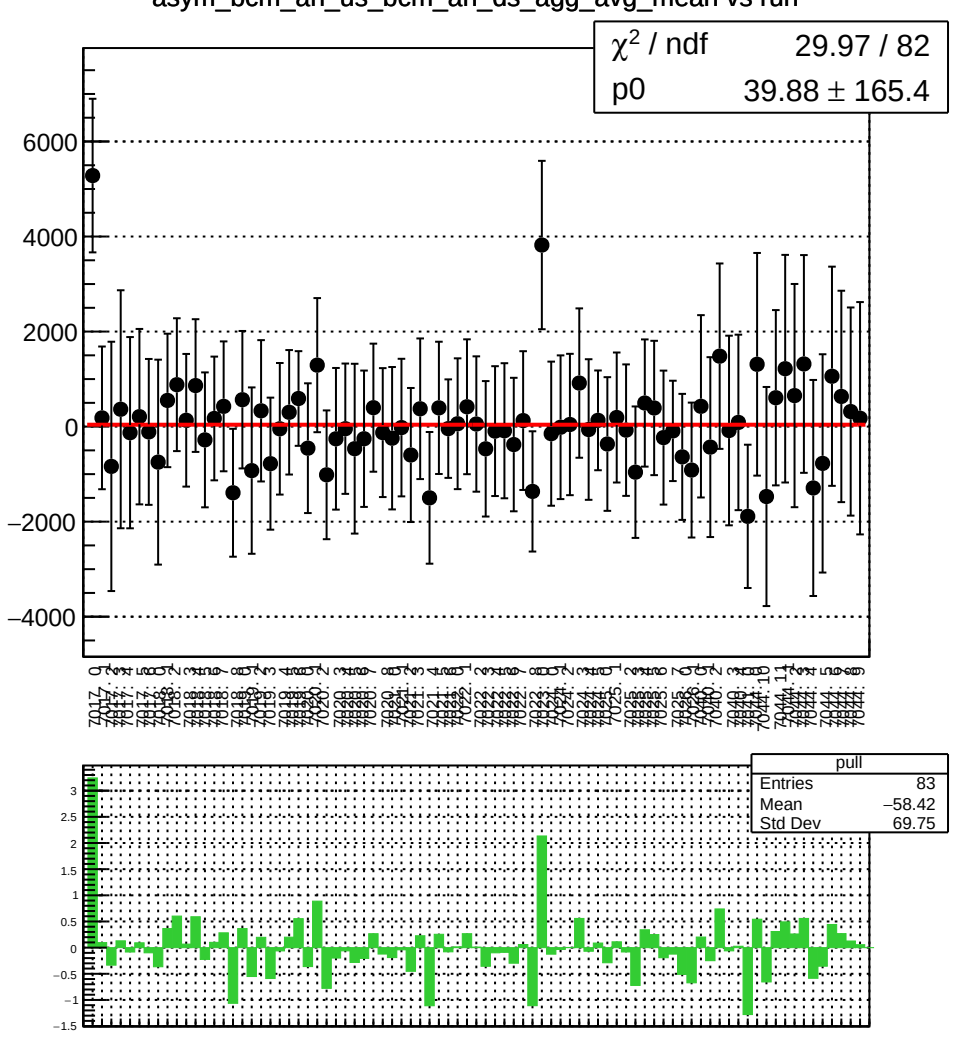

pull1D
Entries 83
Mean −0.02281
Std Dev 1.111
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

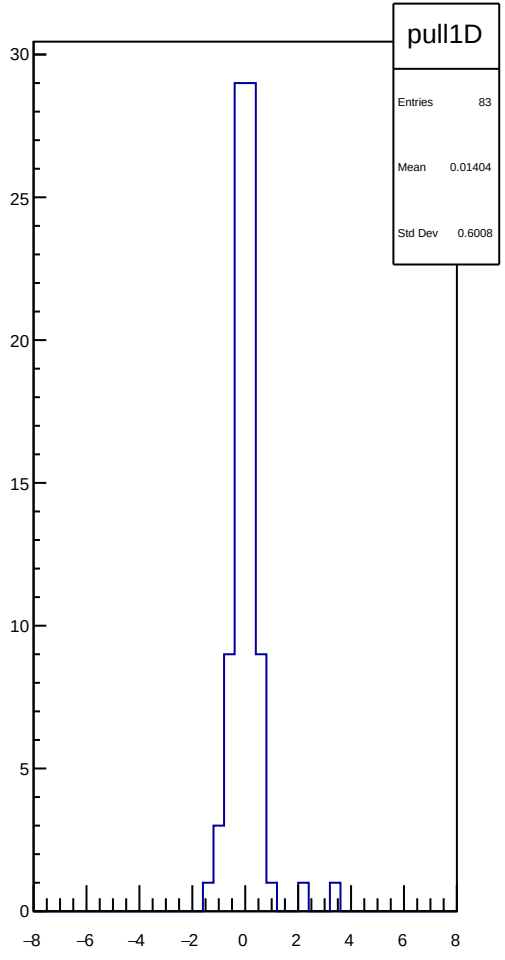

diff_bpm1i06X_rms vs run
χ² / ndf 2.031e+04 / 82
p0 2307 ± 1.837
2800
2600
2400
2200
2000

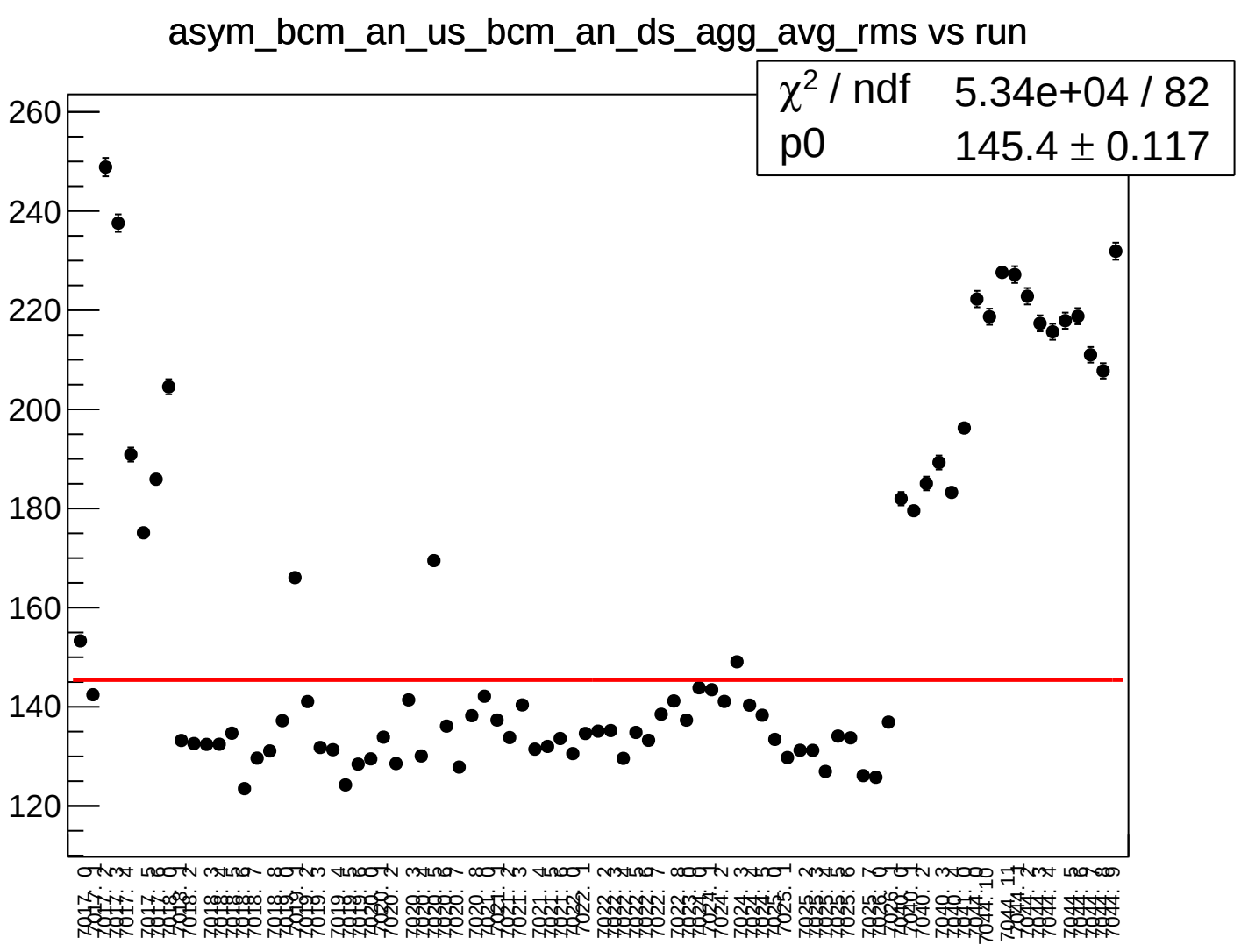

diff_bpm1i06Y_mean vs run
χ^2 / ndf 83.28 / 82
p0 −7.499 ± 3.166
100
50
0
−50
−100
−150
pull
Entries 83
Mean −33.27
Std Dev 58.01
2
1
0
−1
−2
−3

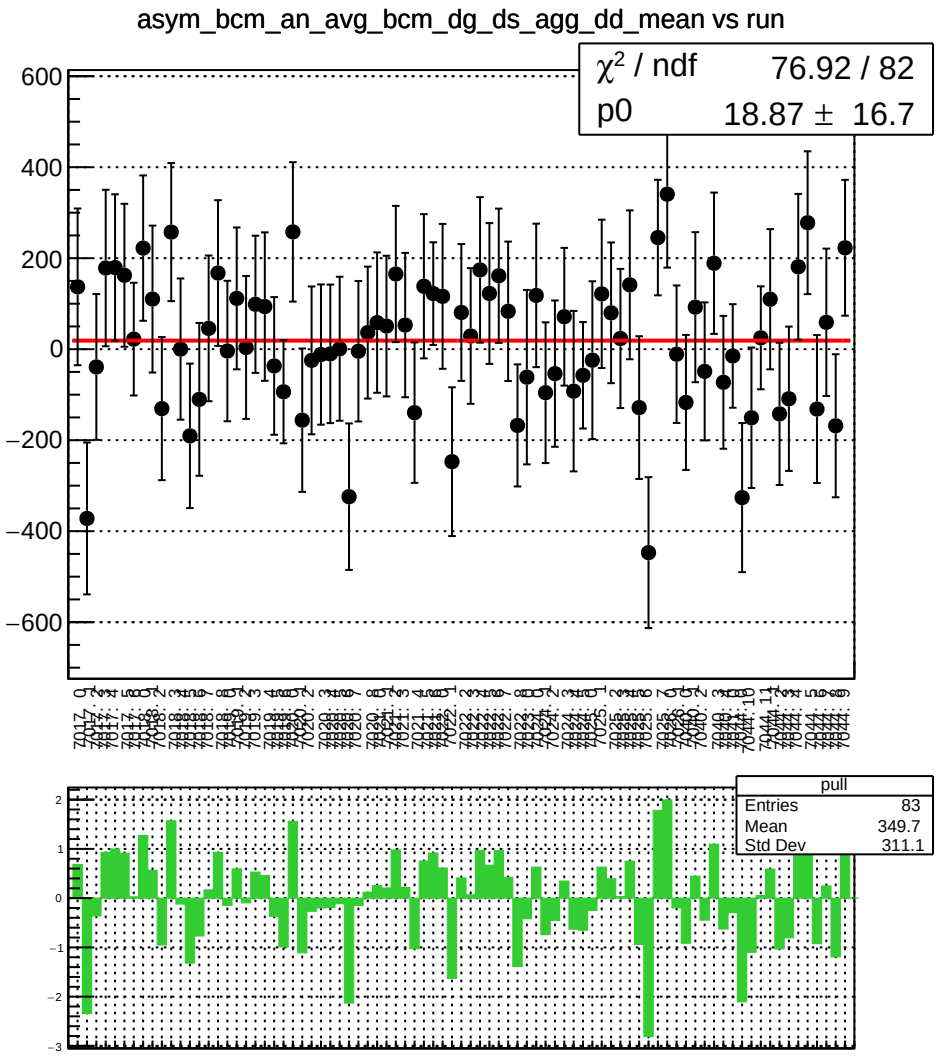

pull1D
Entries 83
Mean −0.02093
Std Dev 1.001
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

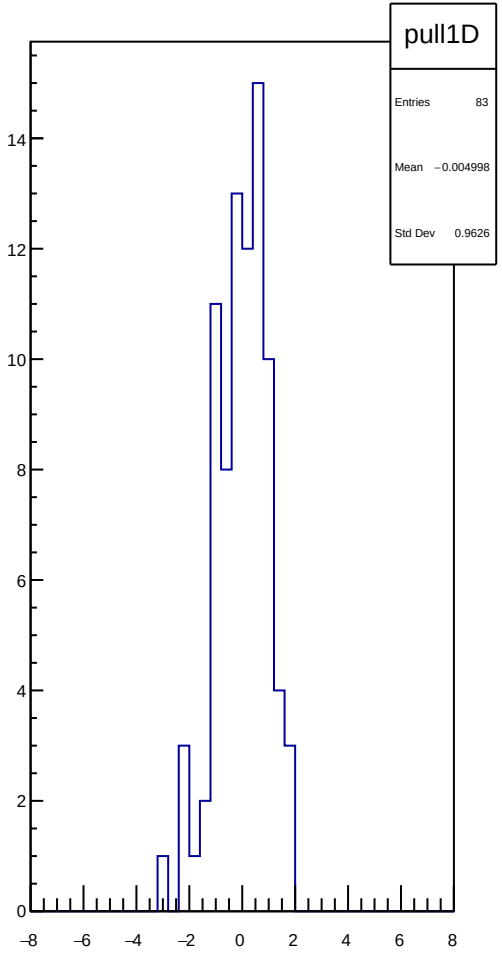

diff_bpm1i06Y_rms vs run
χ² / ndf 7205 / 82
p0 2824 ± 2.239
3300
3200
3100
3000
2900
2800
2700
2600
2500

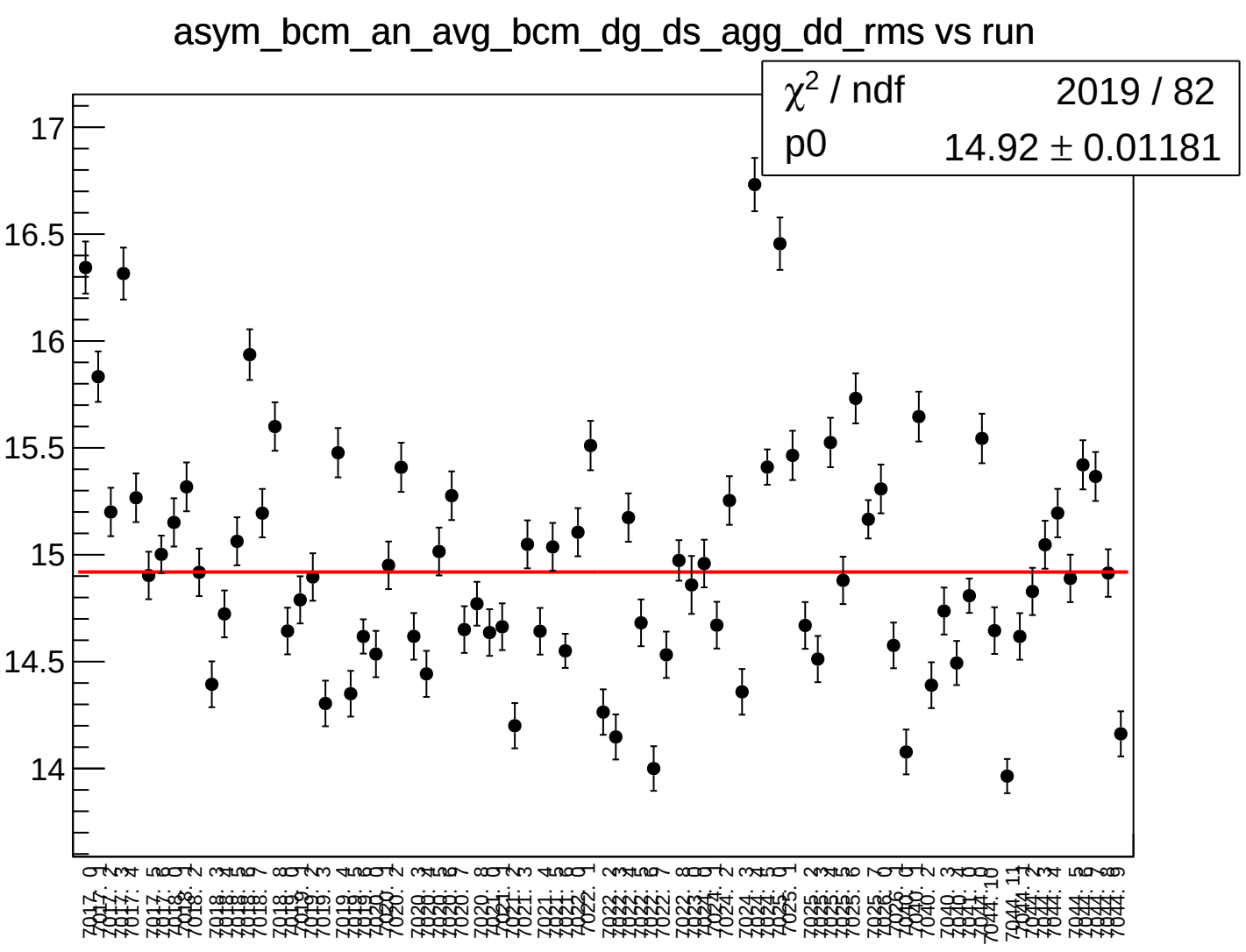

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 29.97 / 82
p0 39.88 ± 165.4
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −58.42
Std Dev 69.75
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

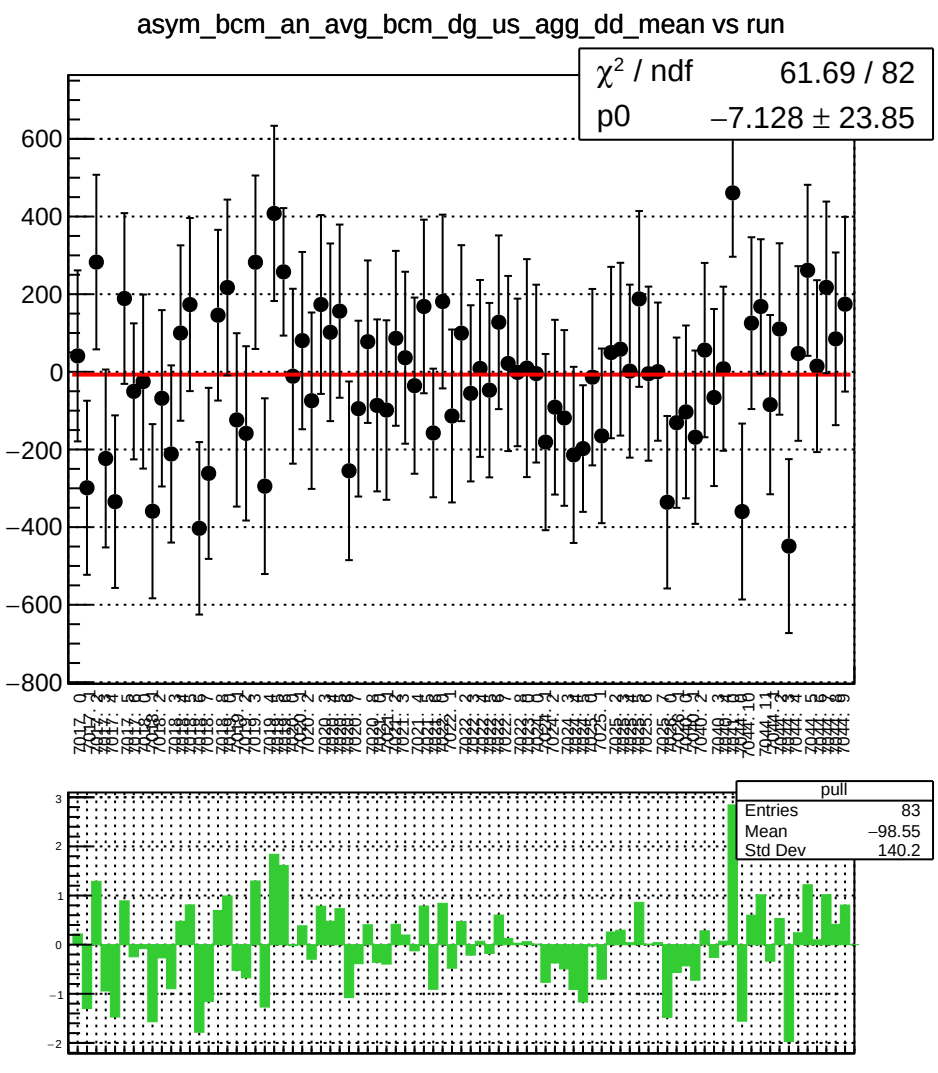

pull1D
Entries 83
Mean 0.01404
Std Dev 0.6008
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

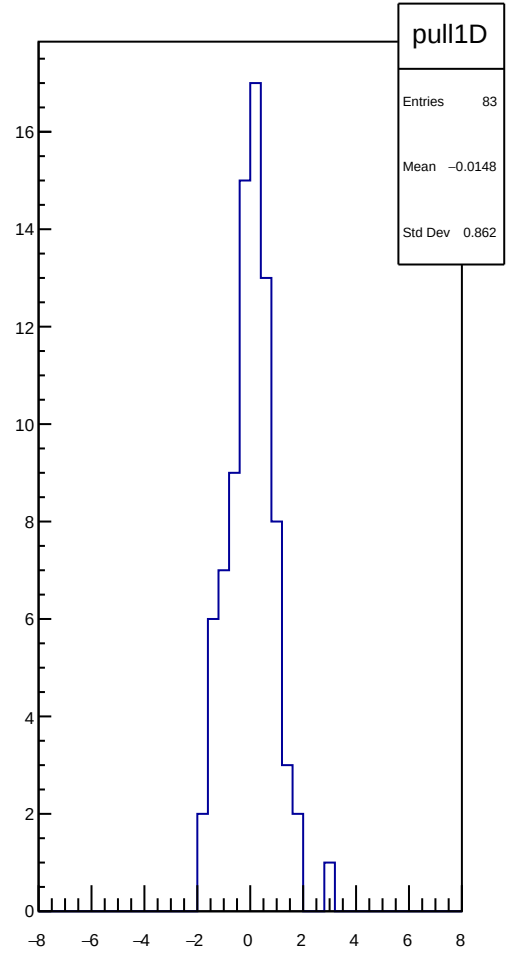

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 5.34e+04 / 82
p0 145.4 ± 0.117
260
240
220
200
180
160
140
120

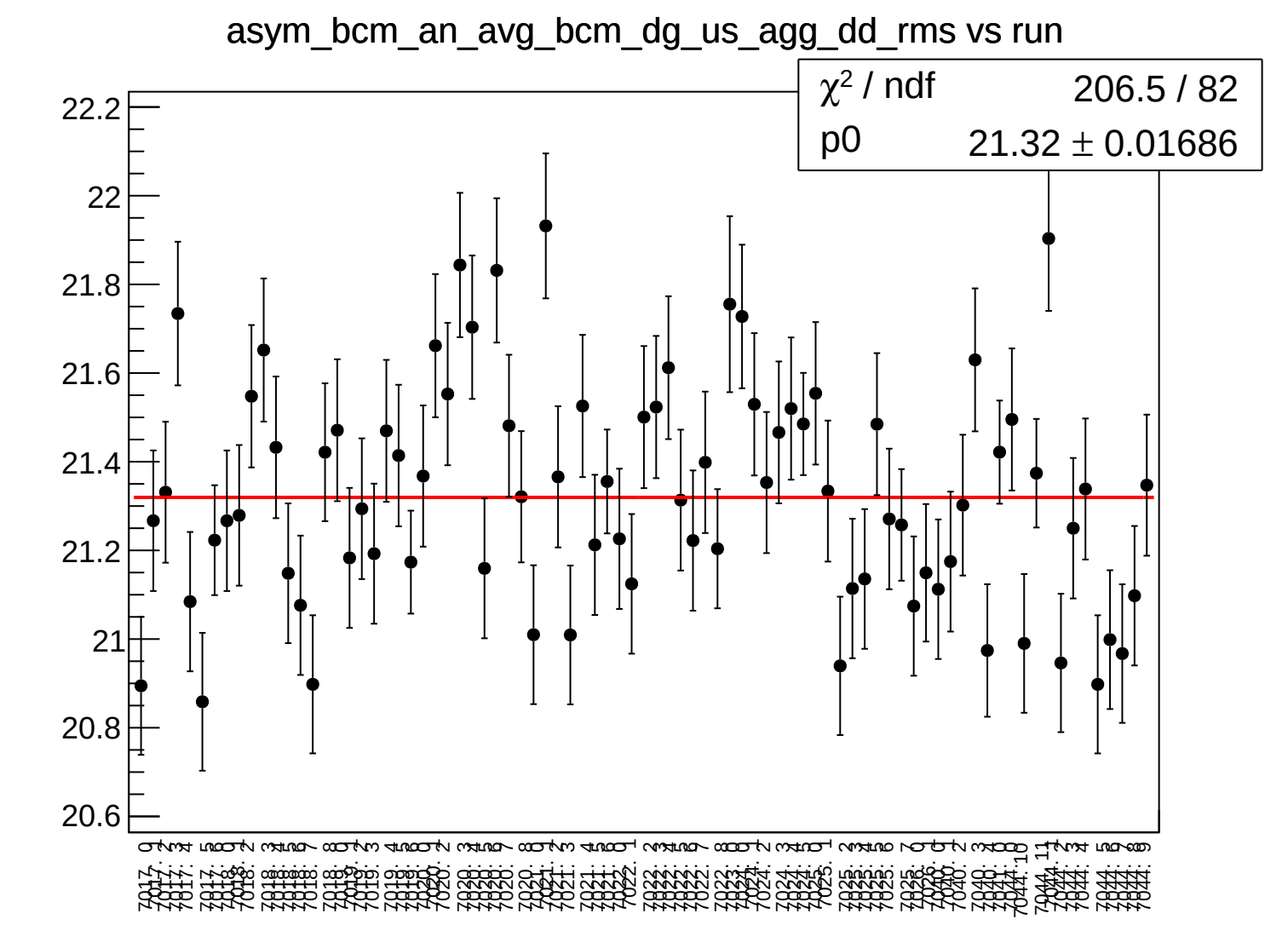

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 76.92 / 82
p0 18.87 ± 16.7
pull
Entries 83
Mean 349.7
Std Dev 311.1

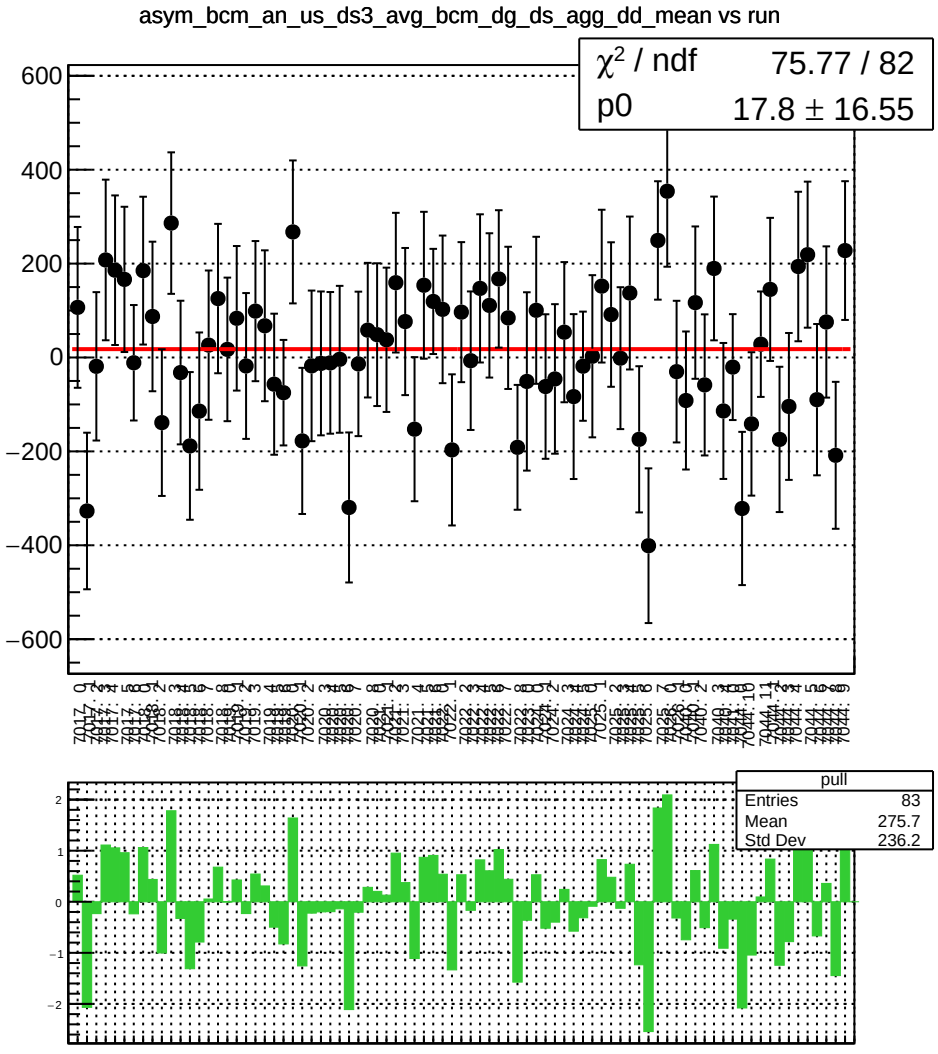

pull1D
Entries 83
Mean −0.004998
Std Dev 0.9626

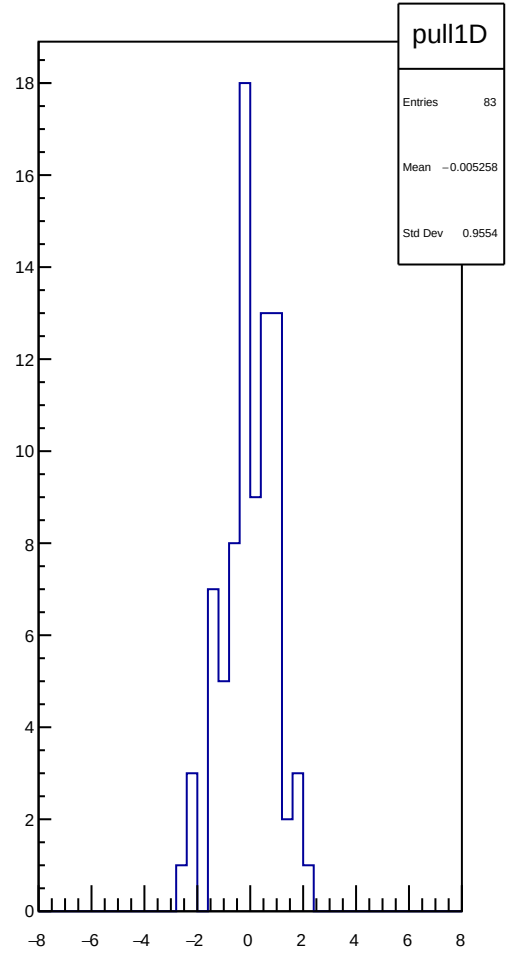

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2019 / 82
p0 14.92 ± 0.01181
17
16.5
16
15.5
15
14.5
14

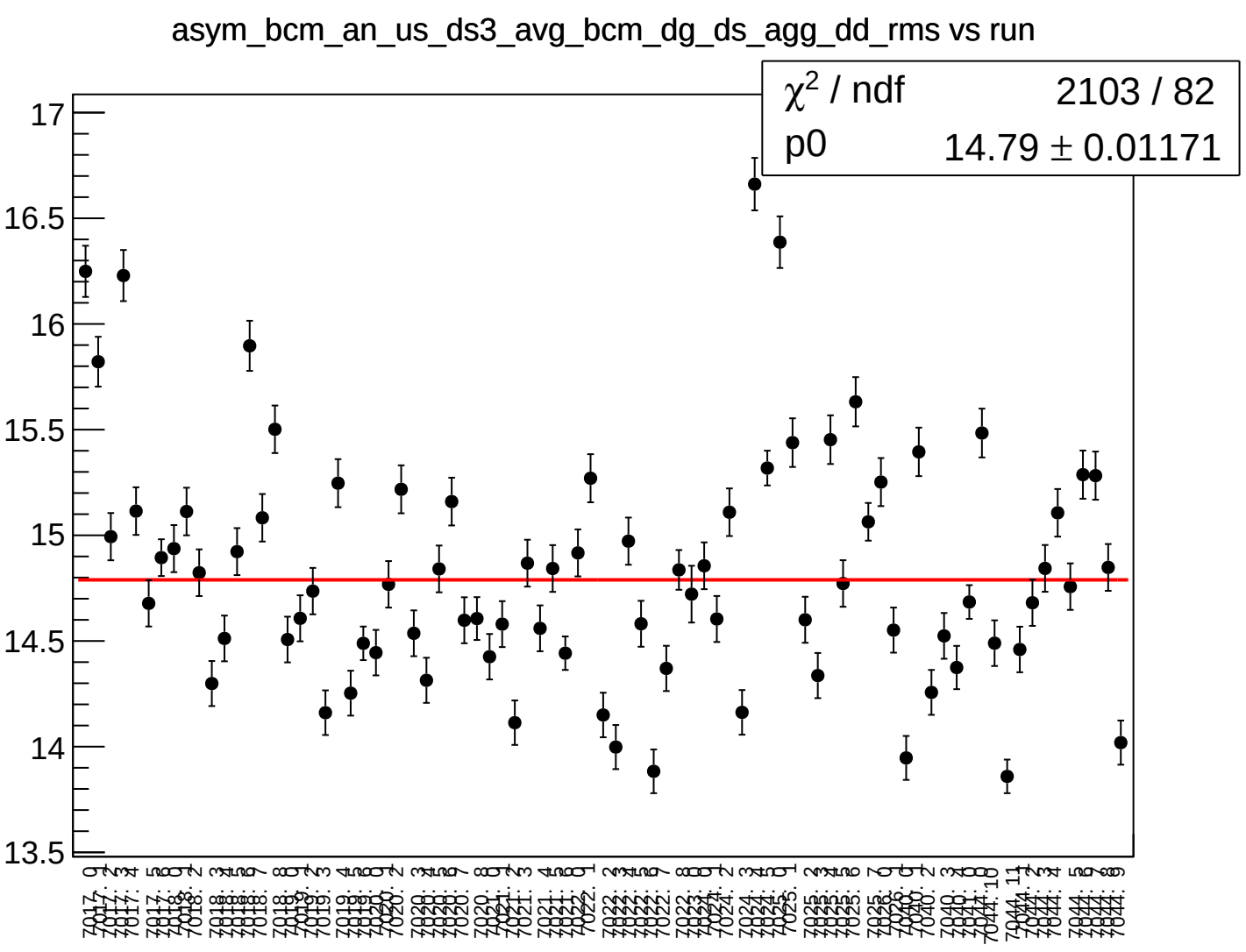

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 61.69 / 82
p0 −7.128 ± 23.85
pull
Entries 83
Mean −98.55
Std Dev 140.2

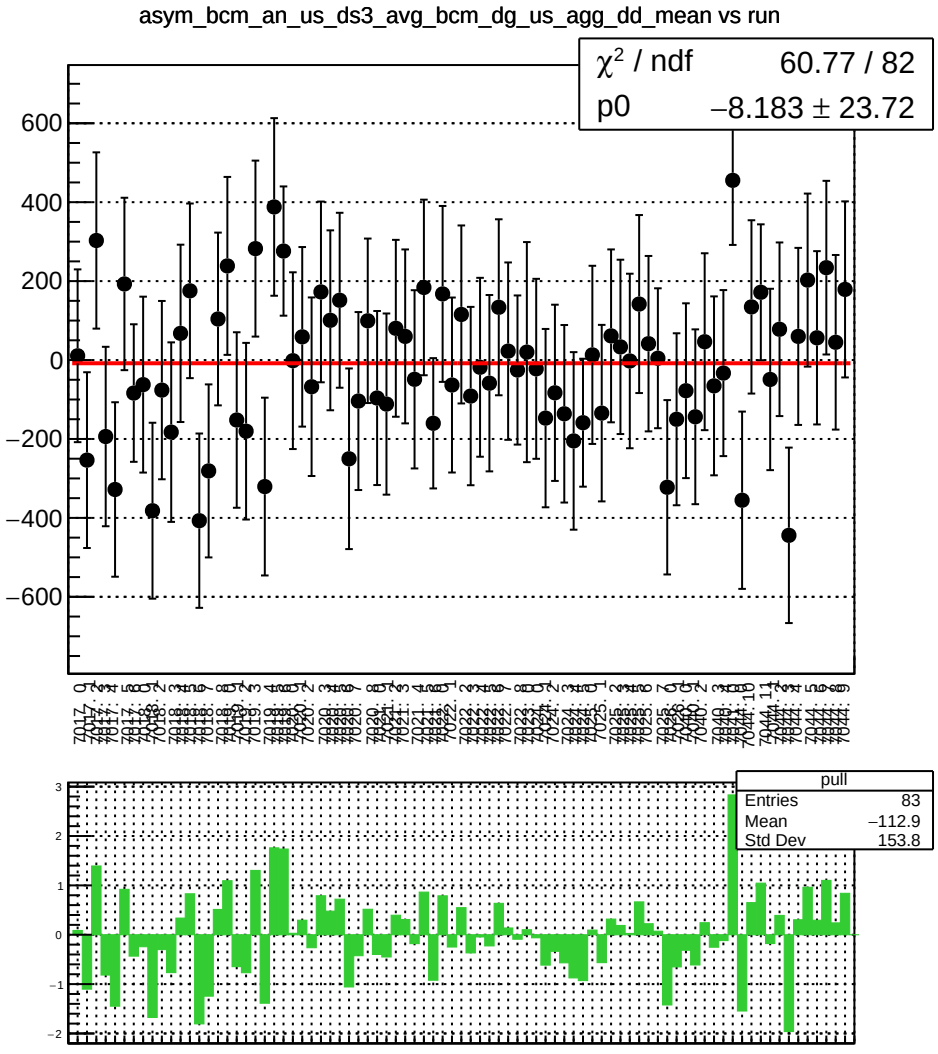

pull1D
Entries 83
Mean −0.0148
Std Dev 0.862

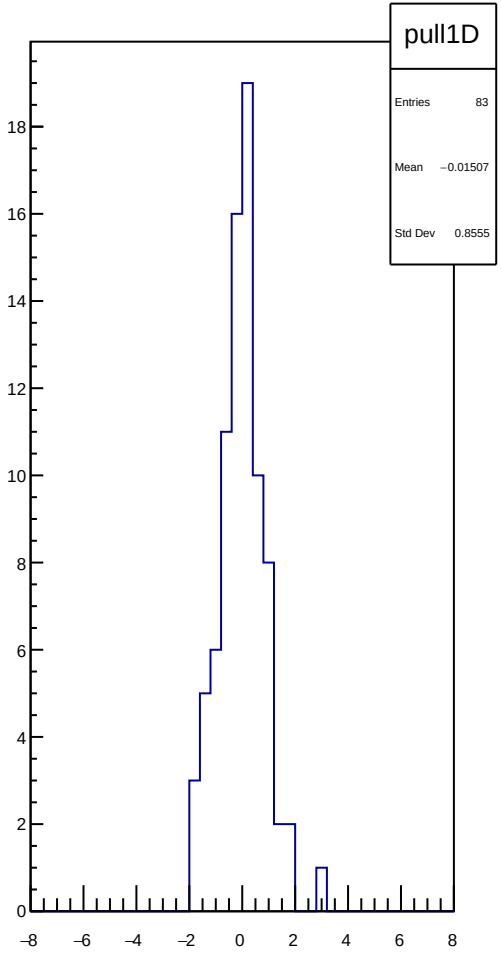

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 206.5 / 82
p0 21.32 ± 0.01686
22.2
22
21.8
21.6
21.4
21.2
21
20.8
20.6

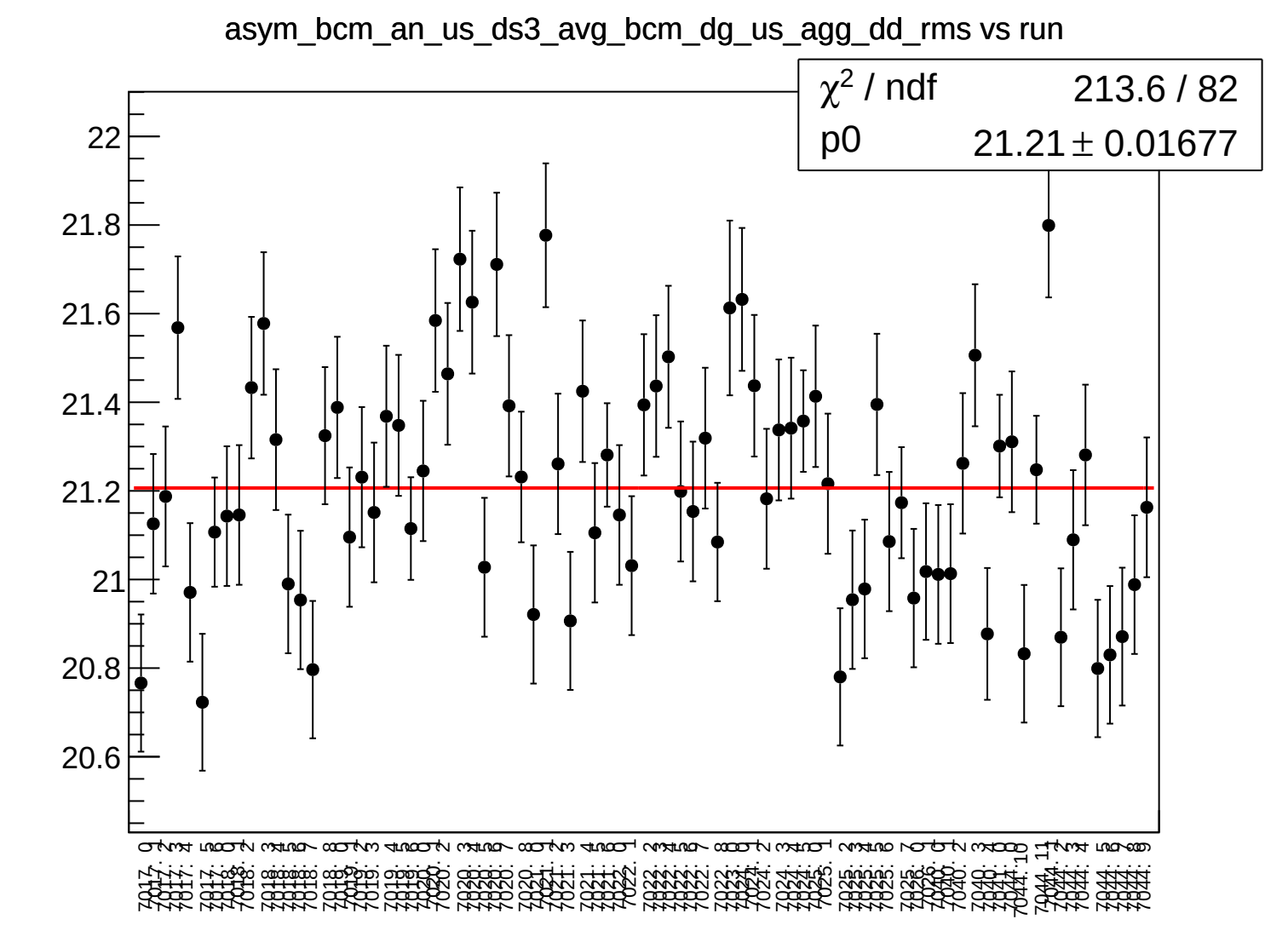

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 75.77 / 82
p0 17.8 ± 16.55
pull
Entries 83
Mean 275.7
Std Dev 236.2

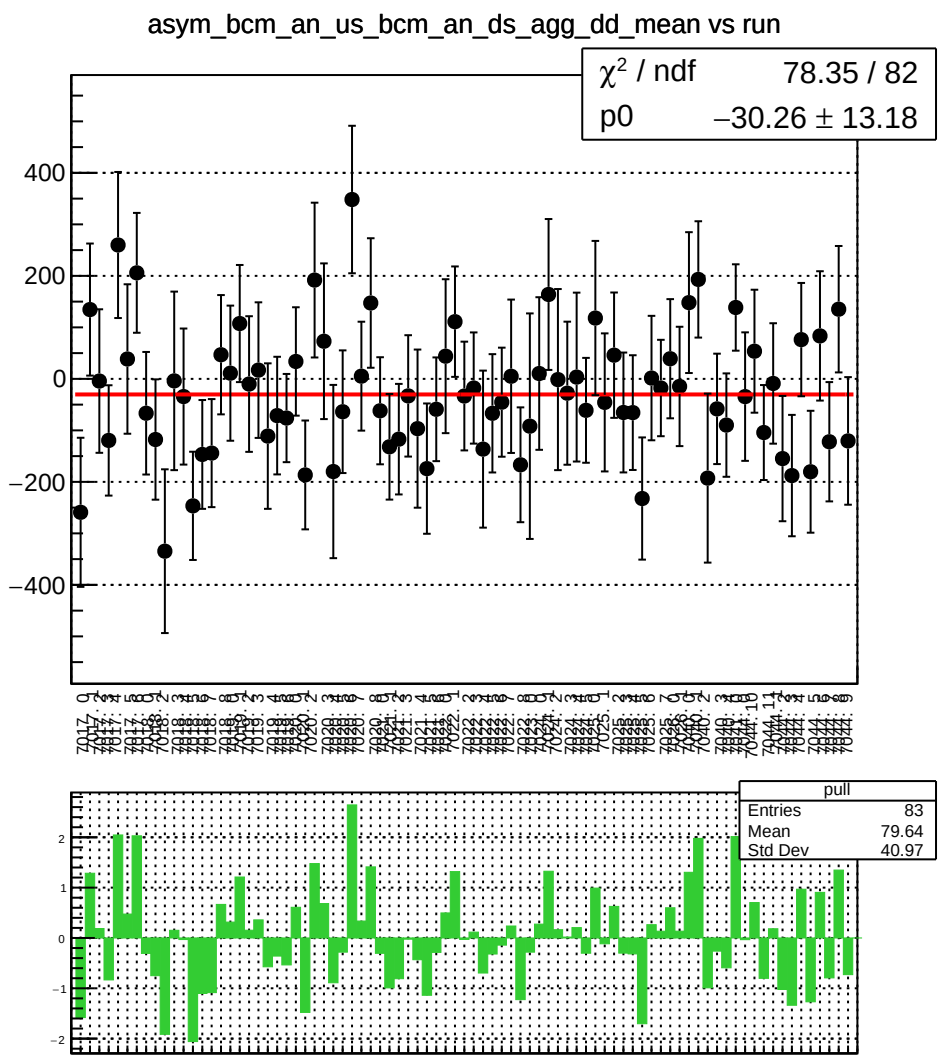

pull1D
Entries 83
Mean −0.005258
Std Dev 0.9554

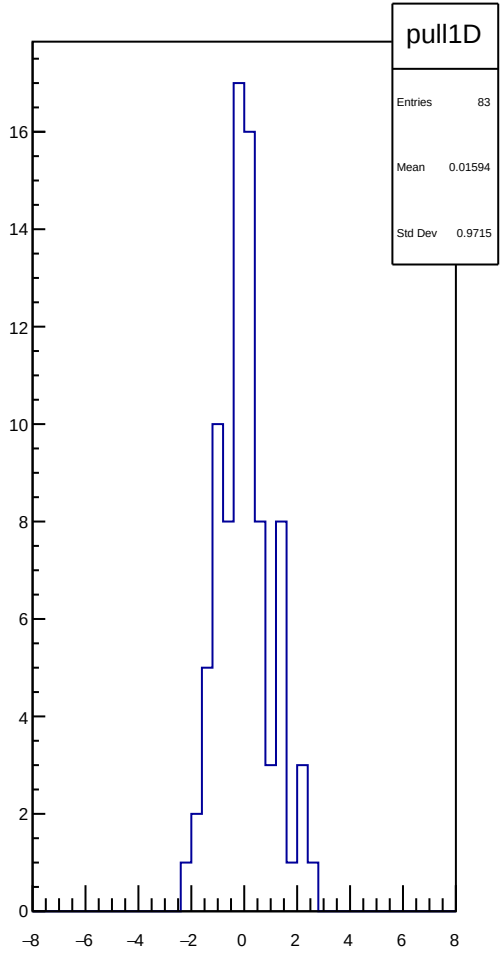

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2103 / 82
p0 14.79 ± 0.01171
17
16.5
16
15.5
15
14.5
14
13.5

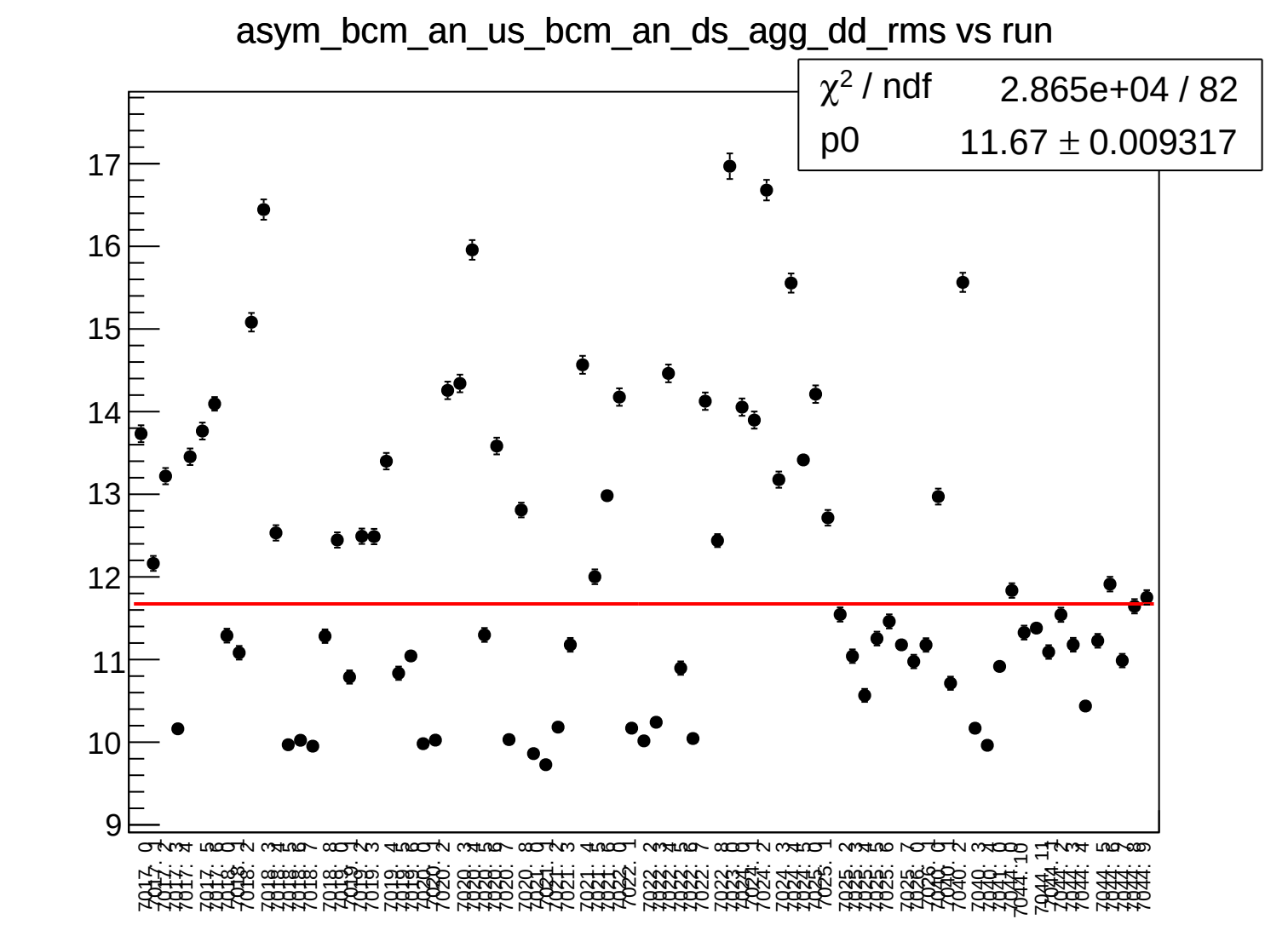

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 60.77 / 82
p0 −8.183 ± 23.72
600
400
200
0
−200
−400
−600
pull
Entries 83
Mean −112.9
Std Dev 153.8
3
2
1
0
−1
−2

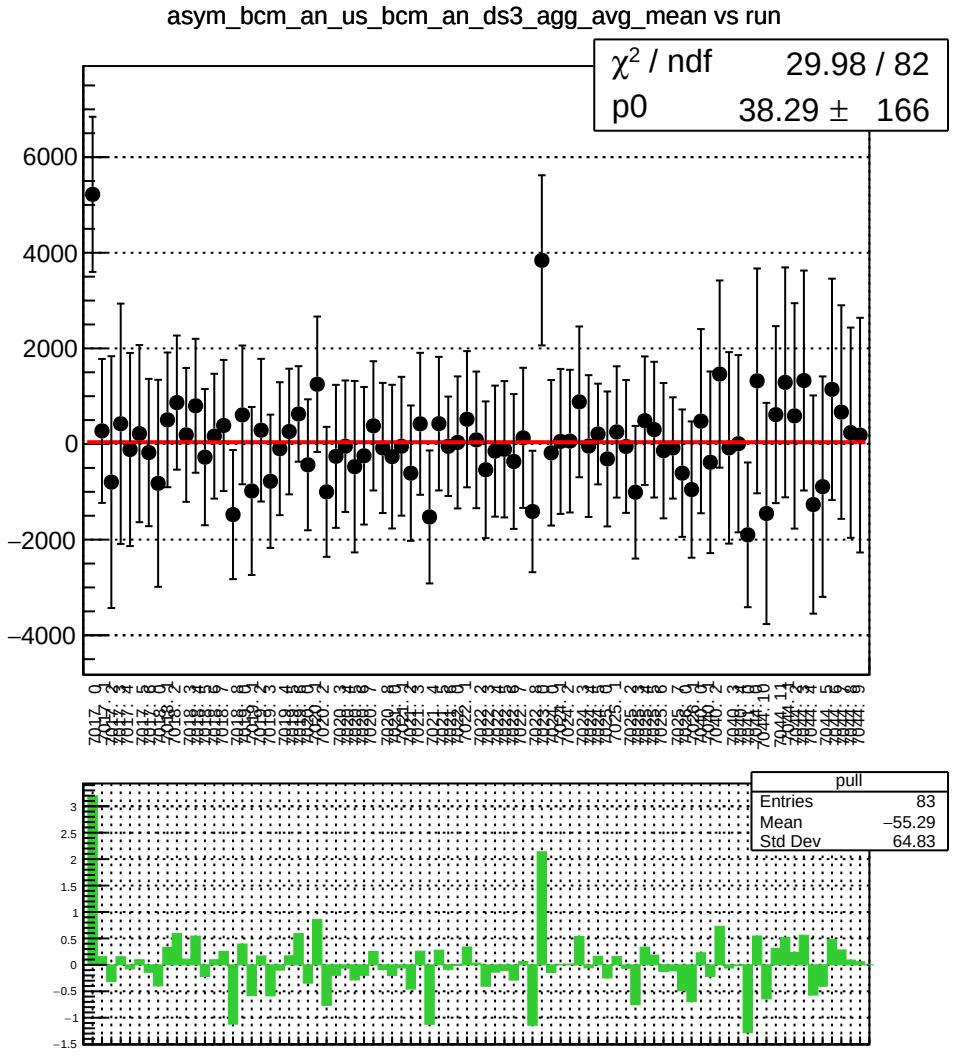

pull1D
Entries 83
Mean −0.01507
Std Dev 0.8555
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

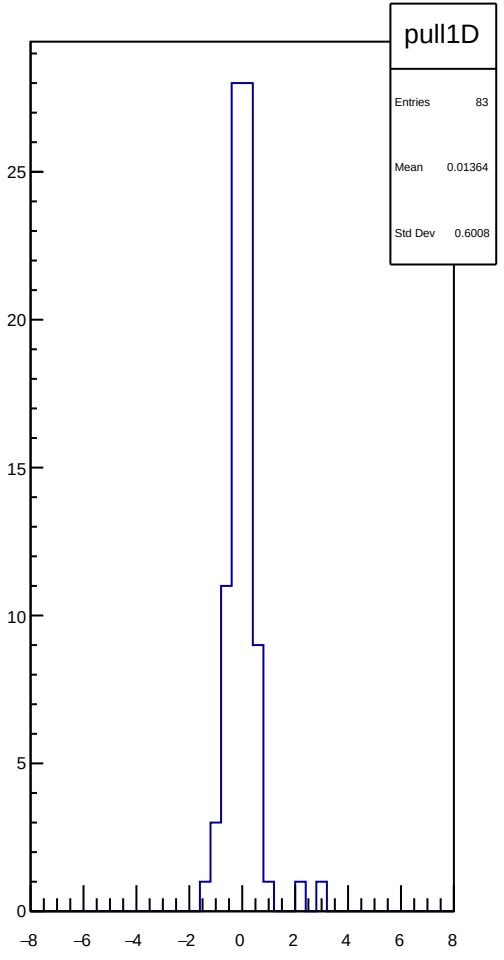

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 213.6 / 82
p0 21.21 ± 0.01677
22
21.8
21.6
21.4
21.2
21
20.8
20.6

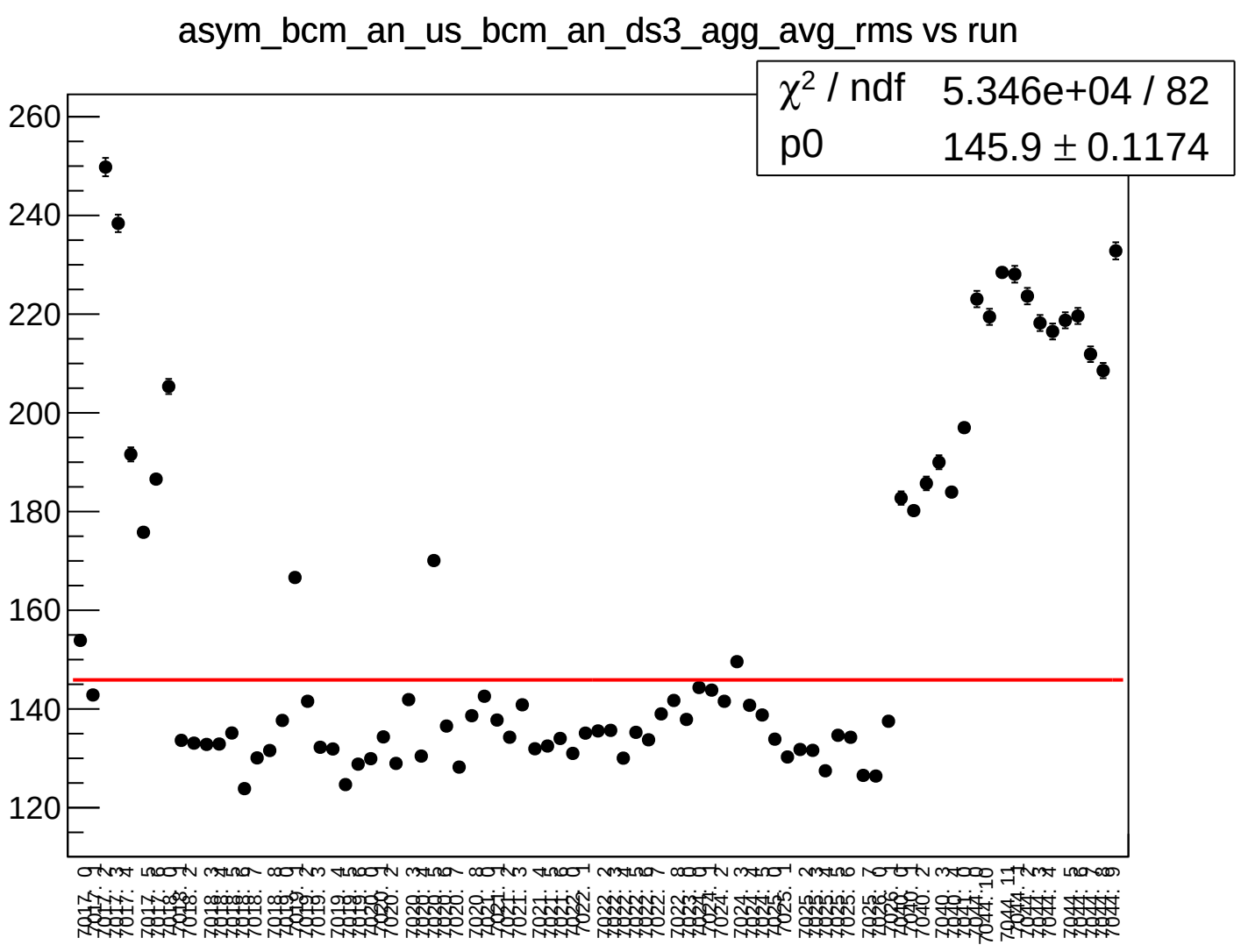

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 78.35 / 82
p0 −30.26 ± 13.18
400
200
0
−200
−400
pull
Entries 83
Mean 79.64
Std Dev 40.97
2
1
0
−1
−2

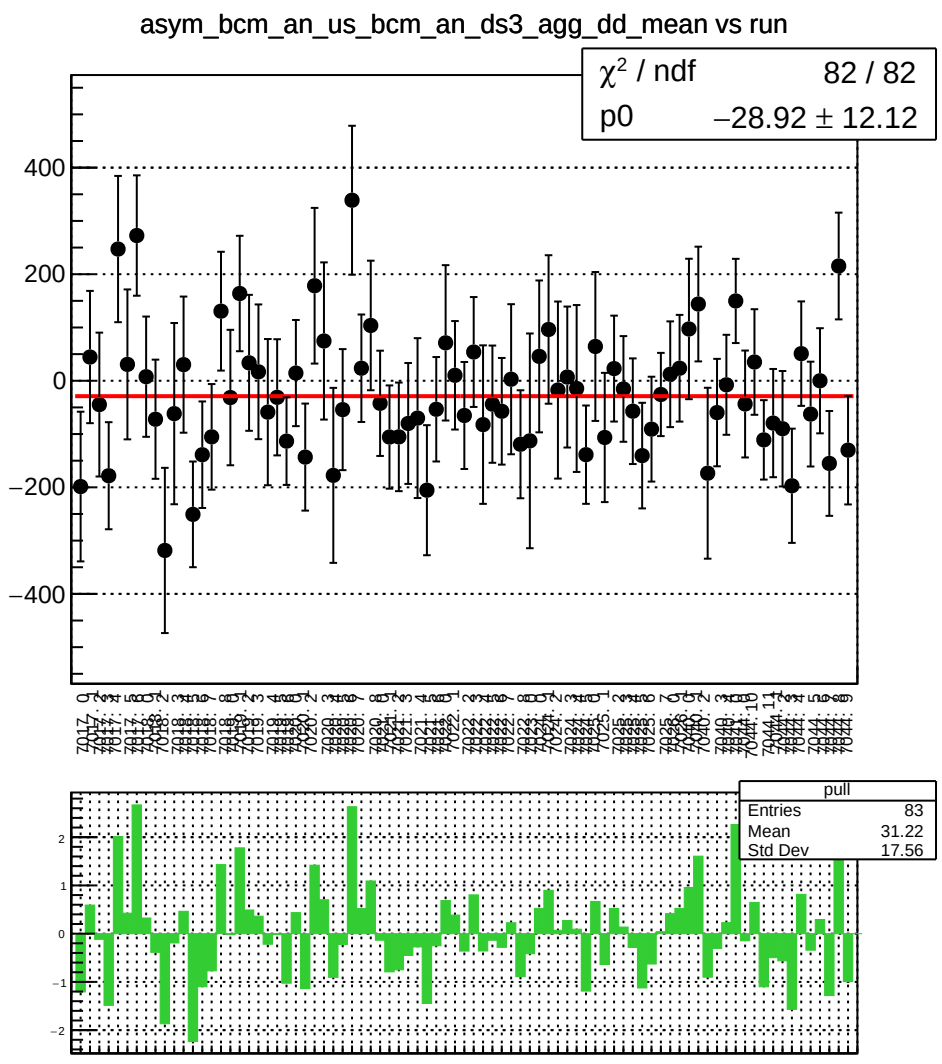

pull1D
Entries 83
Mean 0.01594
Std Dev 0.9715
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

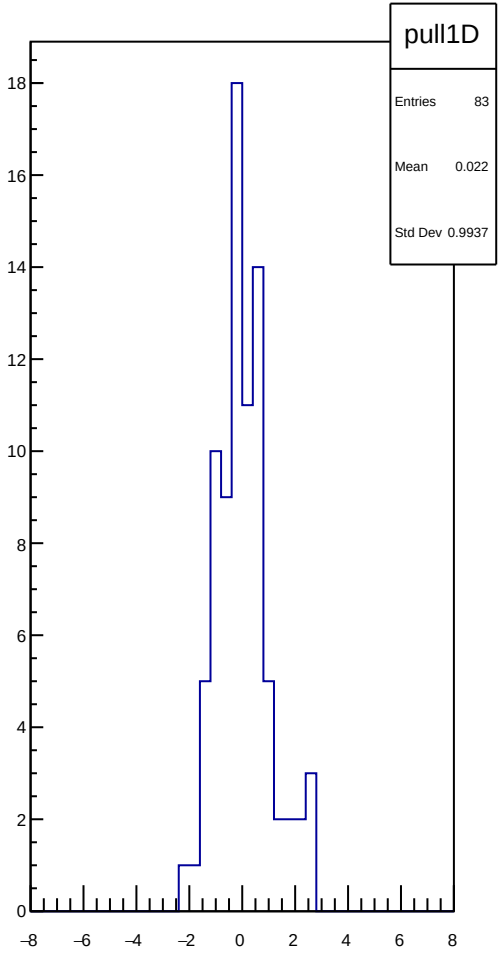

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2.865e+04 / 82
p0 11.67 ± 0.009317
17
16
15
14
13
12
11
10
9

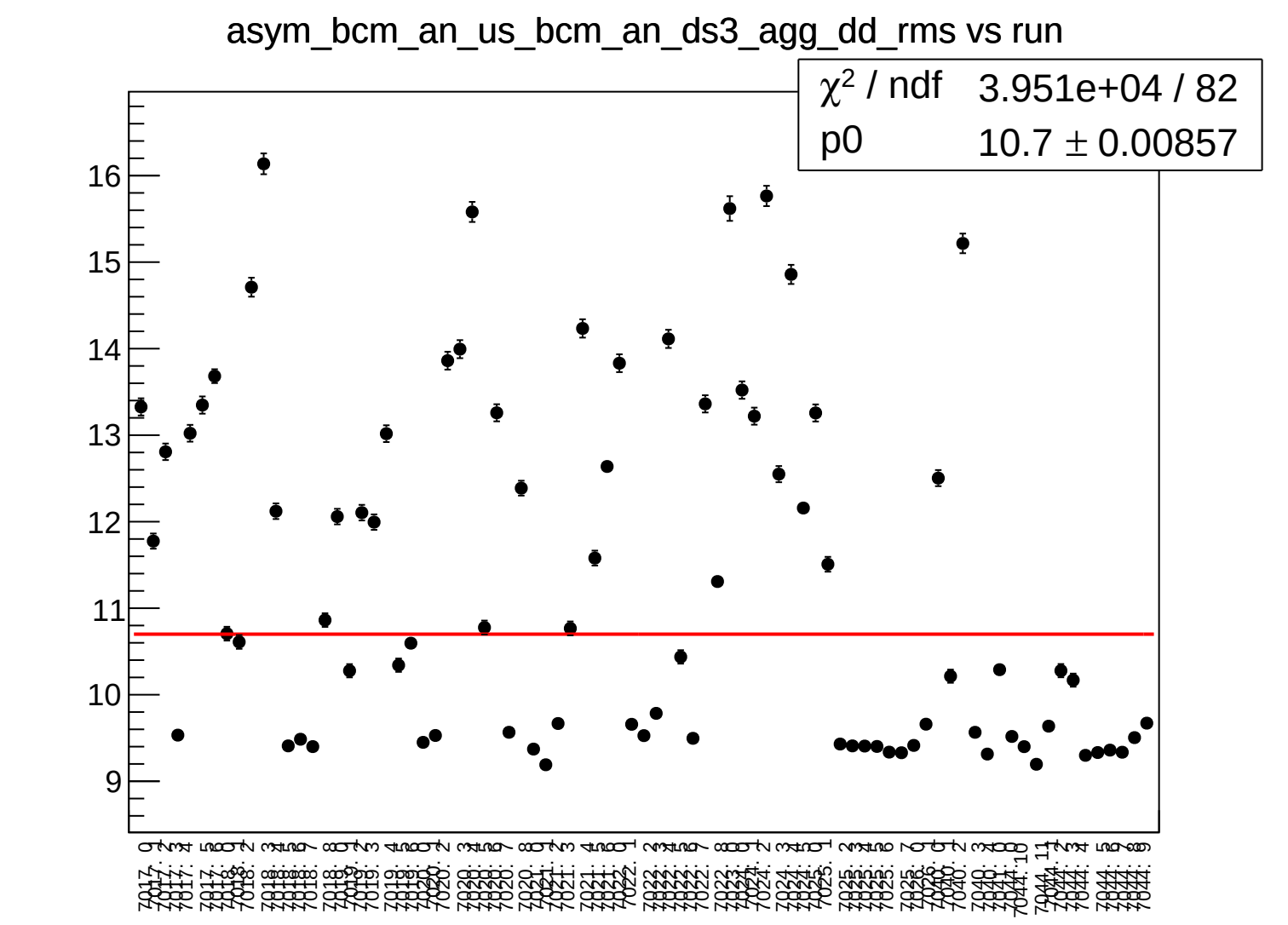

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 29.98 / 82
p0 38.29 ± 166
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −55.29
Std Dev 64.83
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

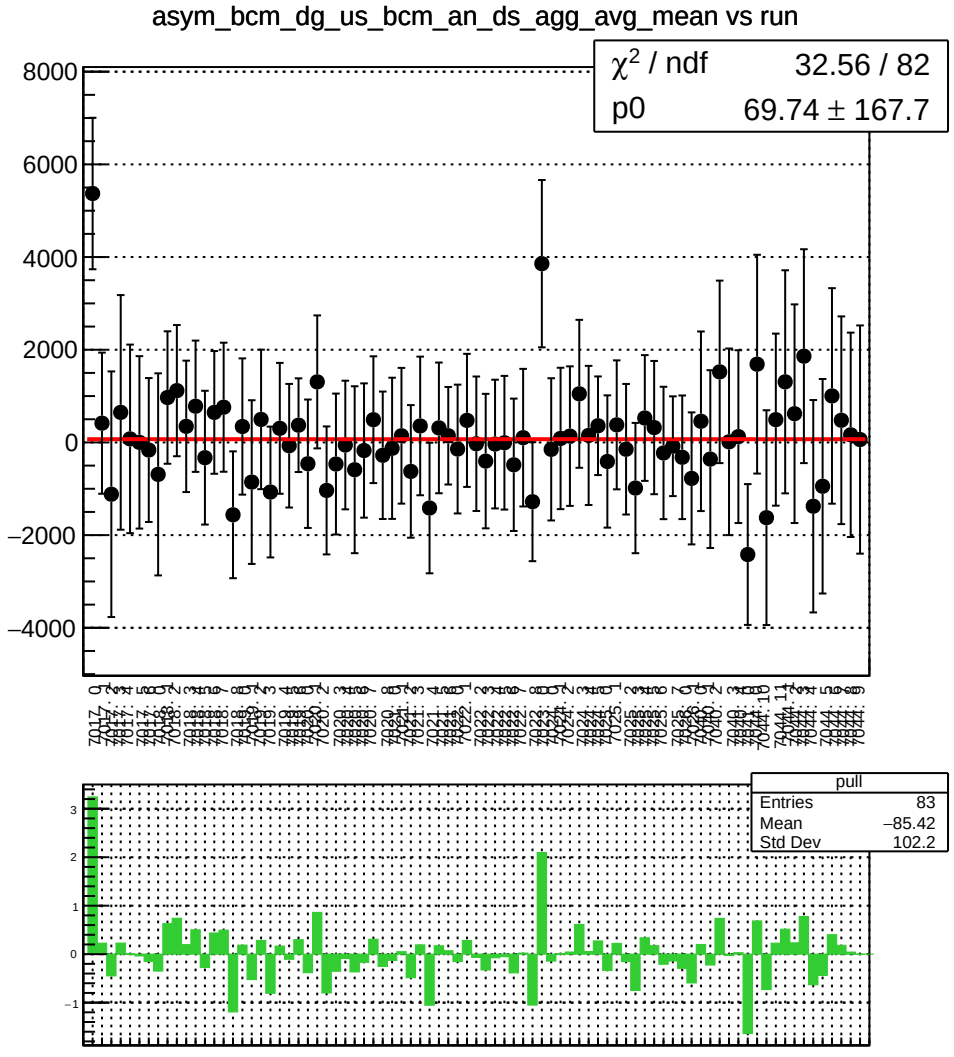

pull1D
Entries 83
Mean 0.01364
Std Dev 0.6008
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

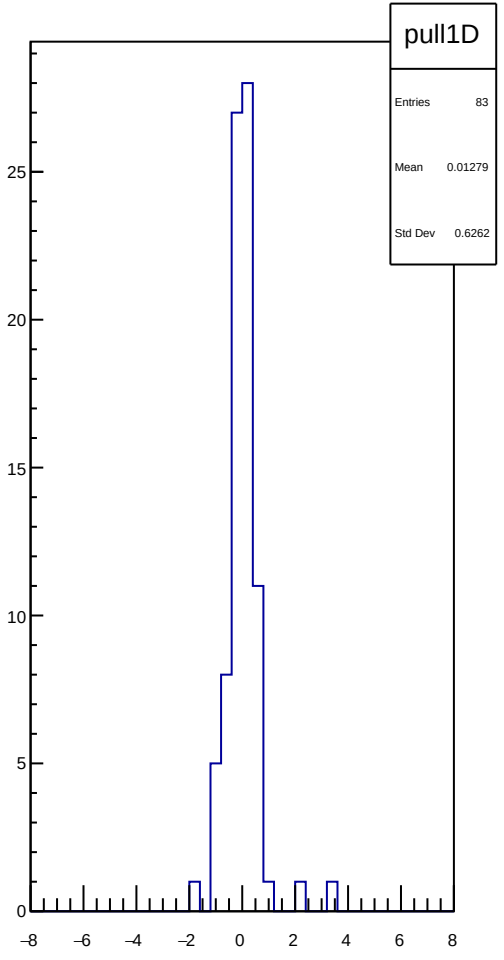

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 5.346e+04 / 82
p0 145.9 ± 0.1174
260
240
220
200
180
160
140
120

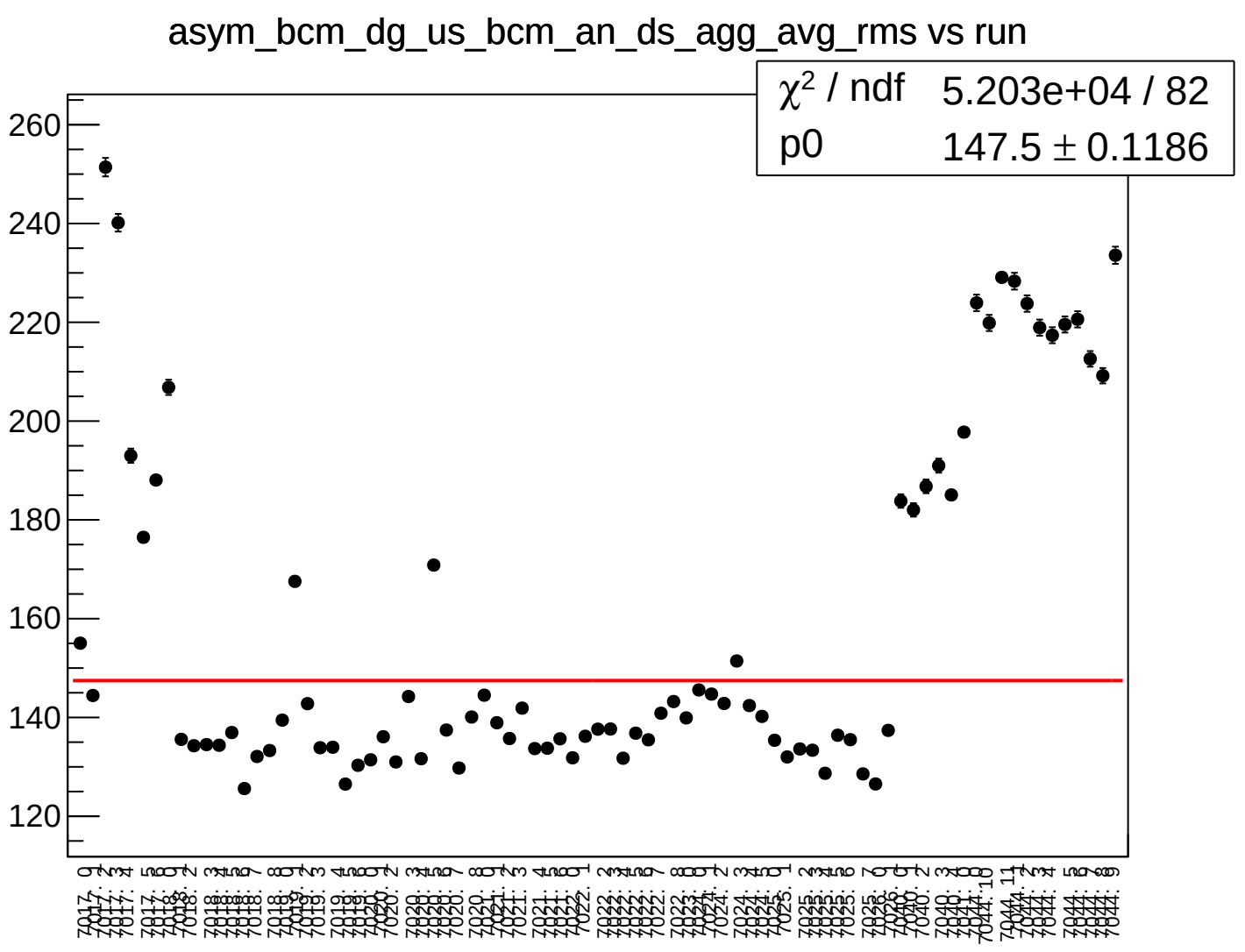

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 82 / 82
p0 −28.92 ± 12.12
400
200
0
−200
−400
pull
Entries 83
Mean 31.22
Std Dev 17.56
2
1
0
−1
−2

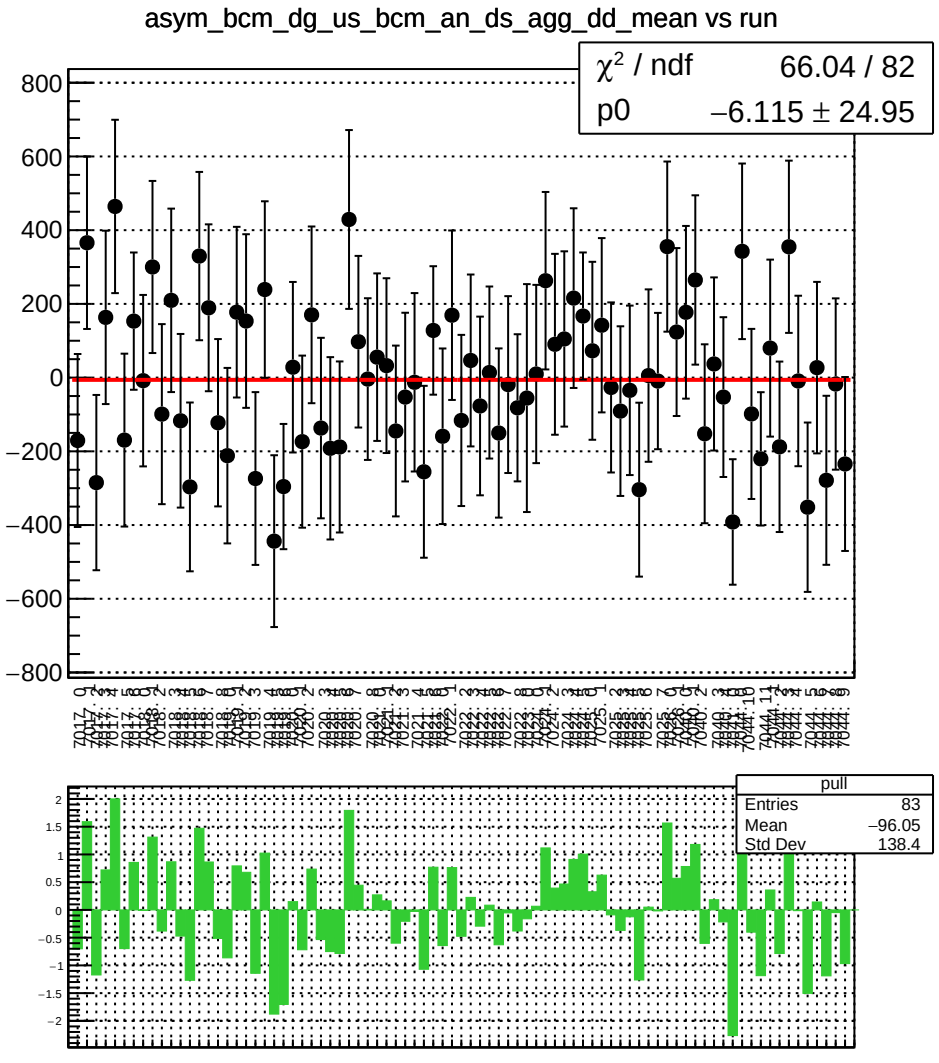

pull1D
Entries 83
Mean 0.022
Std Dev 0.9937
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

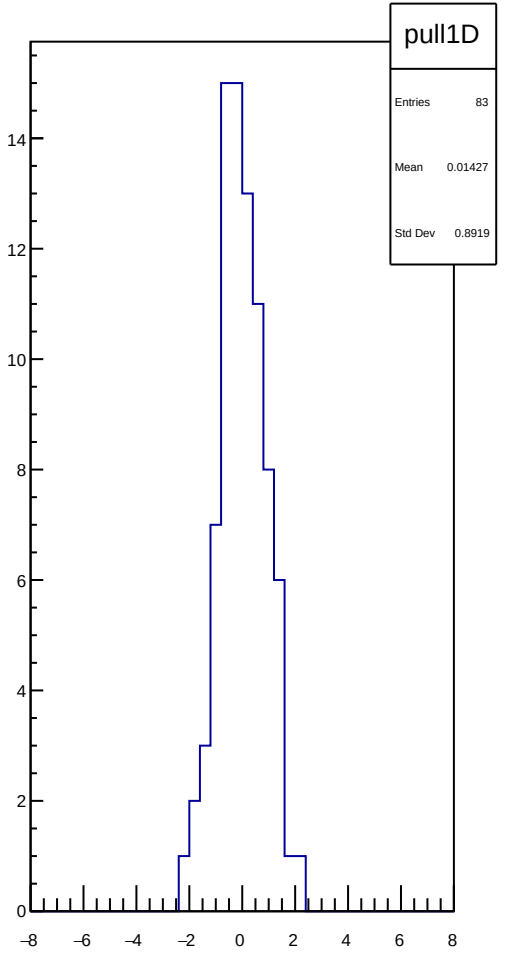

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 3.951e+04 / 82
p0 10.7 ± 0.00857
16
15
14
13
12
11
10
9

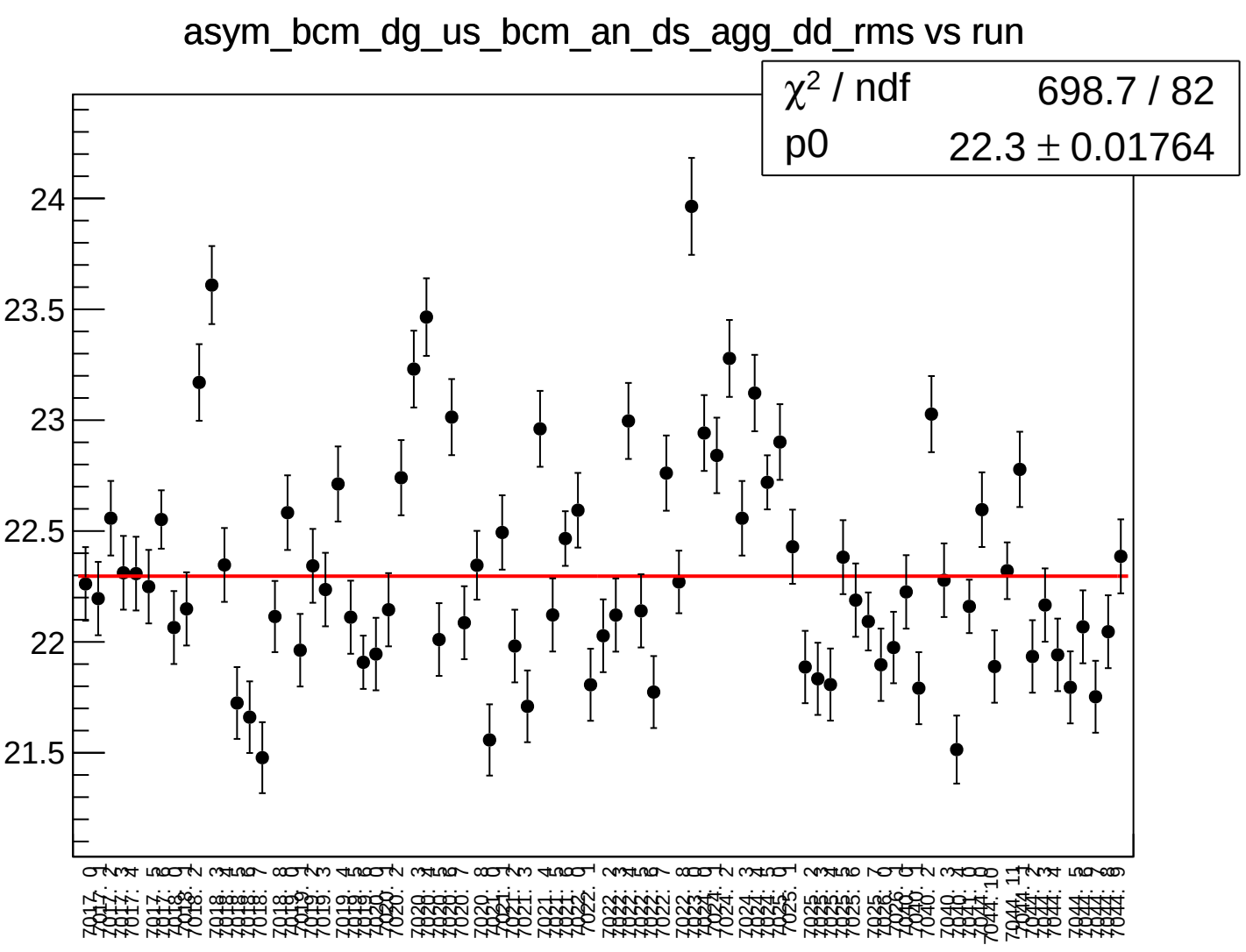

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 32.56 / 82
p0 69.74 ± 167.7
pull
Entries 83
Mean −85.42
Std Dev 102.2

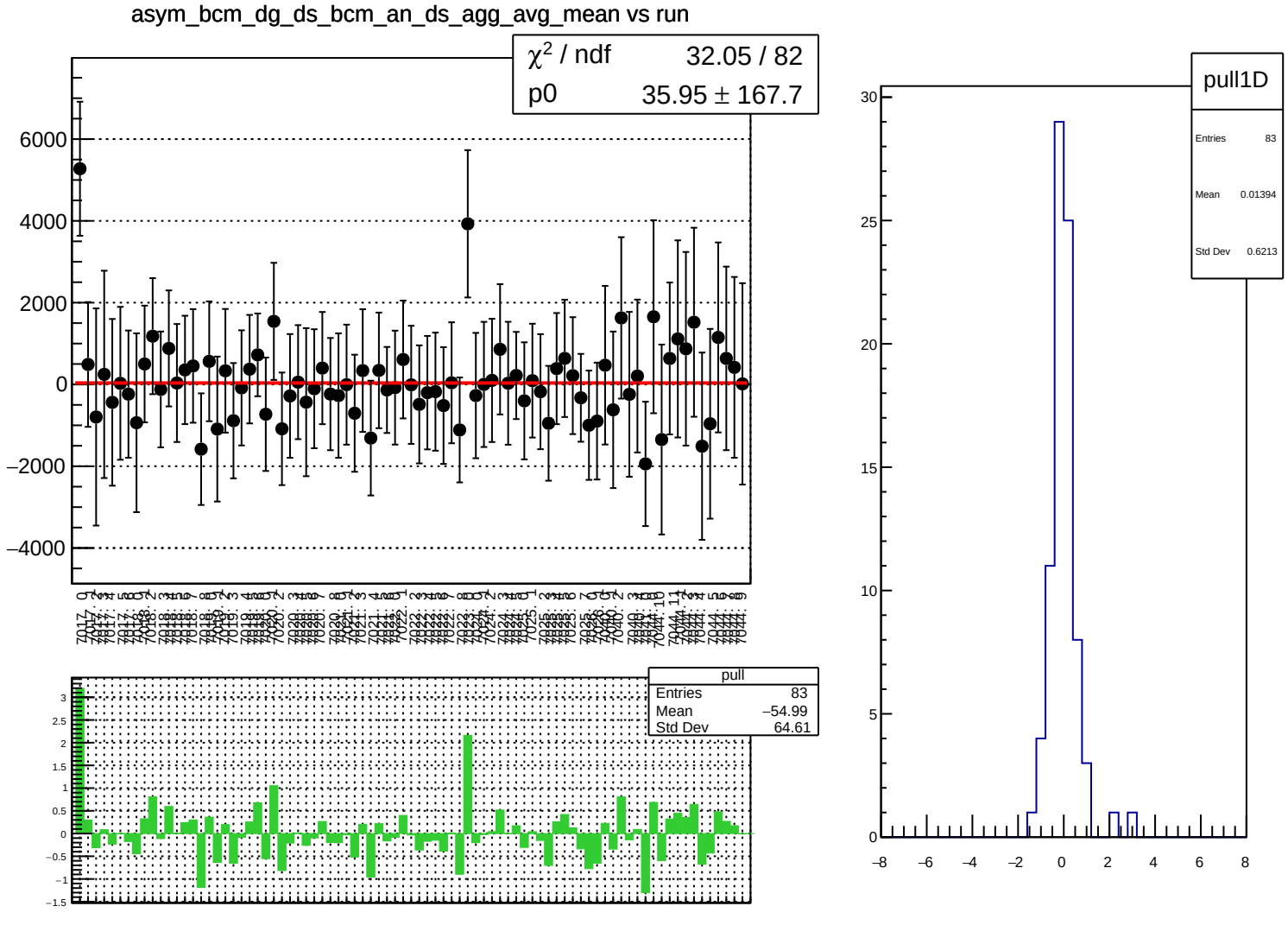

pull1D
Entries 83
Mean 0.01279
Std Dev 0.6262

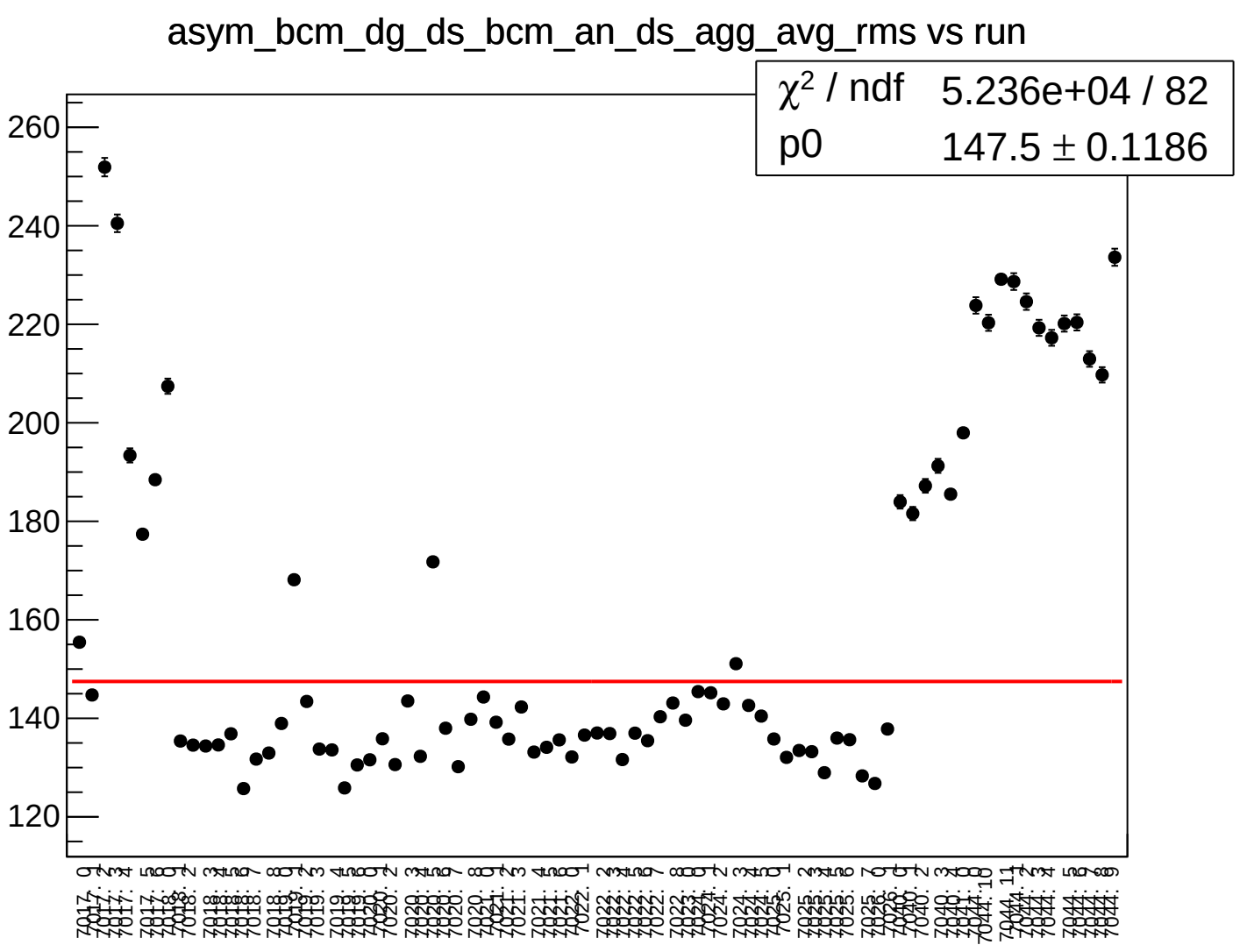

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 5.203e+04 / 82
p0 147.5 ± 0.1186
260
240
220
200
180
160
140
120

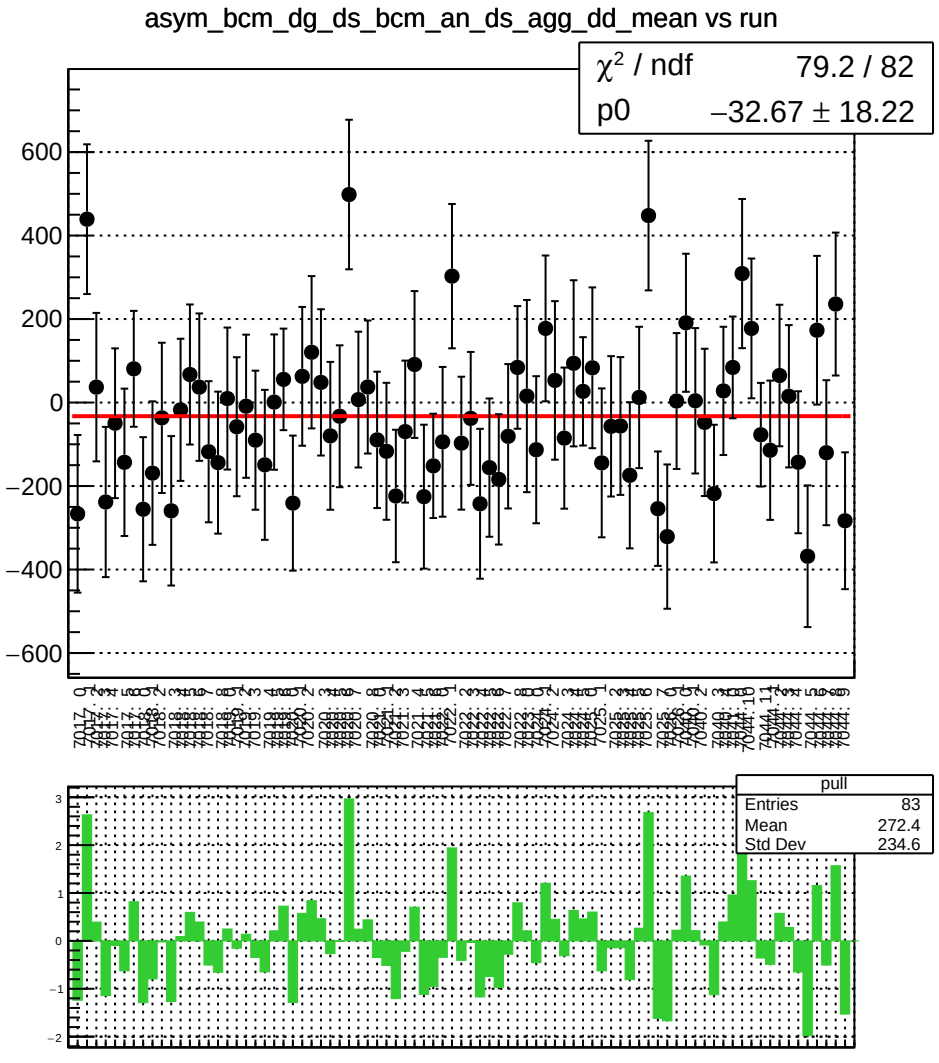

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 66.04 / 82
p0 −6.115 ± 24.95
pull
Entries 83
Mean −96.05
Std Dev 138.4

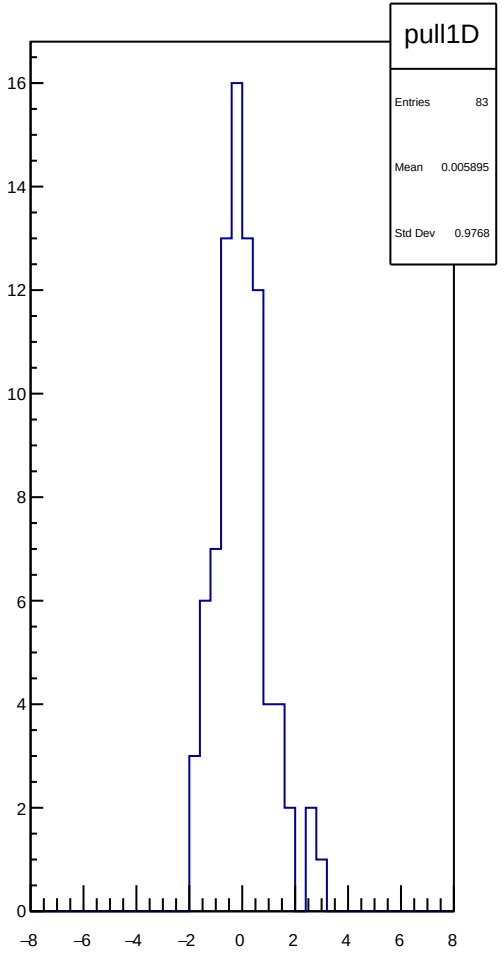

pull1D
Entries 83
Mean 0.01427
Std Dev 0.8919

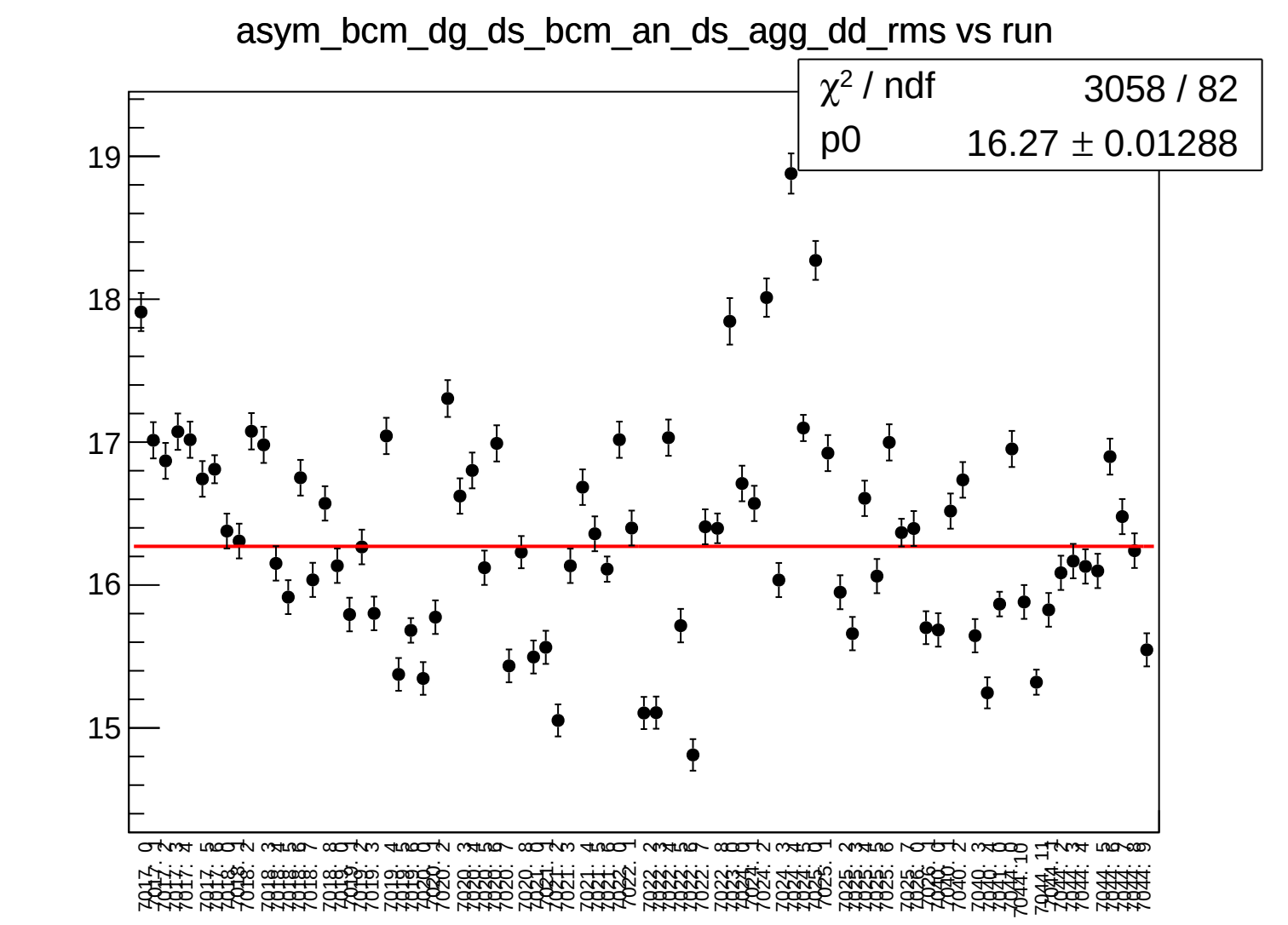

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 698.7 / 82
p0 22.3 ± 0.01764
24
23.5
23
22.5
22
21.5

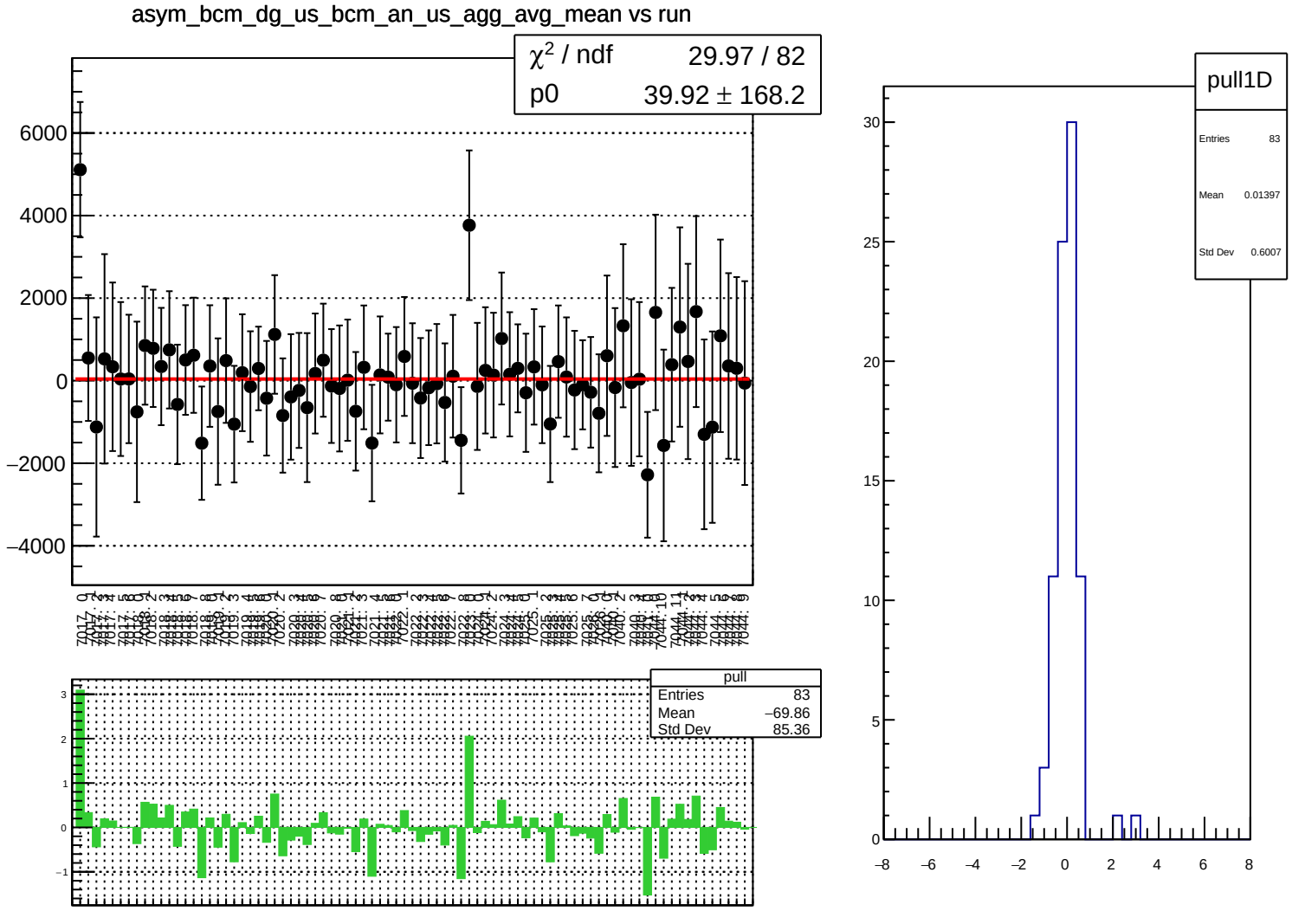

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 32.05 / 82
p0 35.95 ± 167.7
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −54.99
Std Dev 64.61
3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 83
Mean 0.01394
Std Dev 0.6213
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

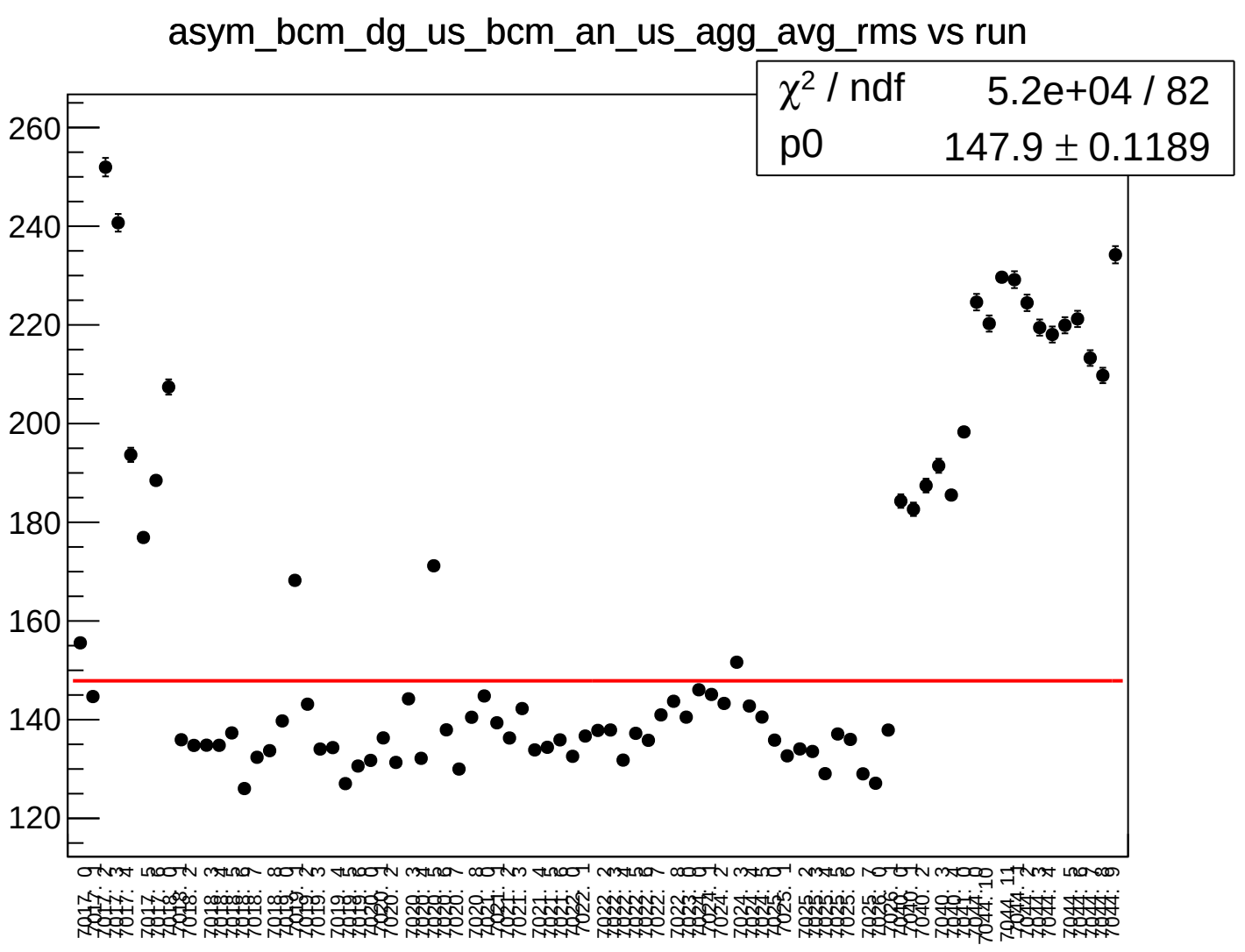

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 5.236e+04 / 82
p0 147.5 ± 0.1186
260
240
220
200
180
160
140
120

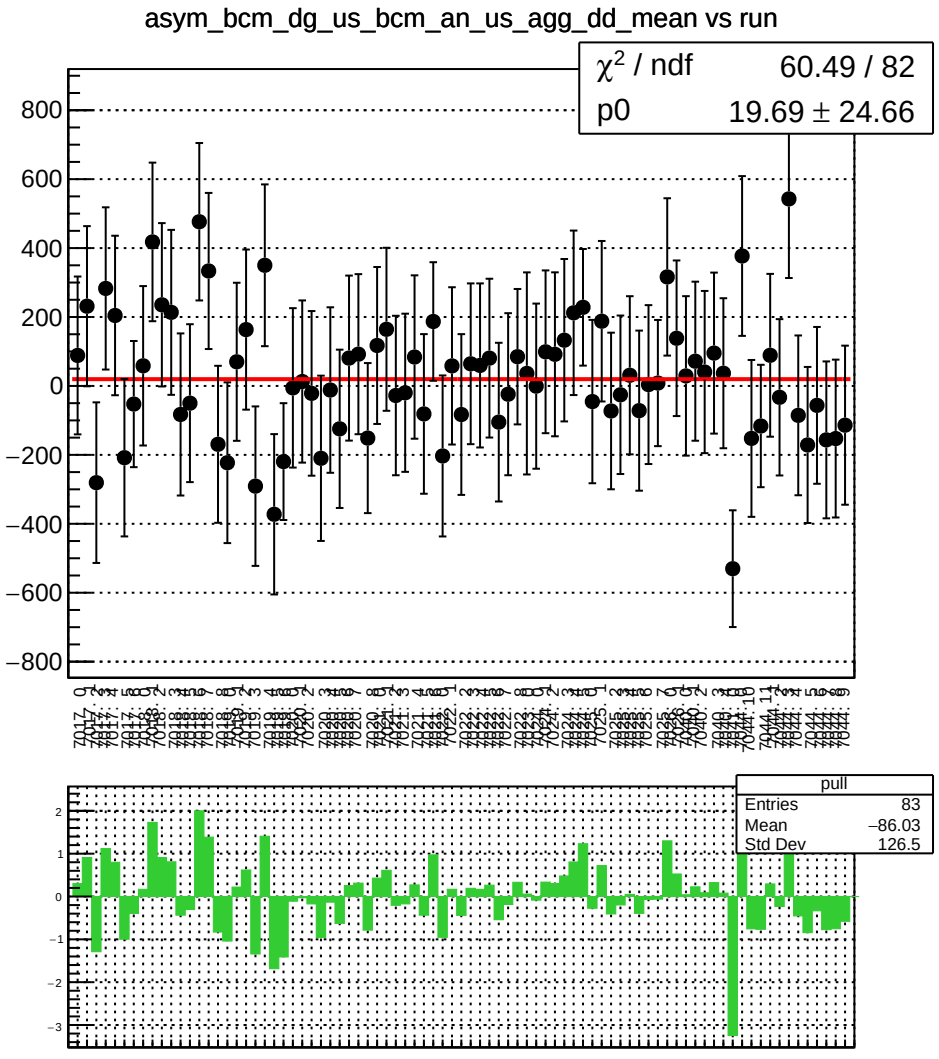

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 79.2 / 82
p0 −32.67 ± 18.22
pull
Entries 83
Mean 272.4
Std Dev 234.6

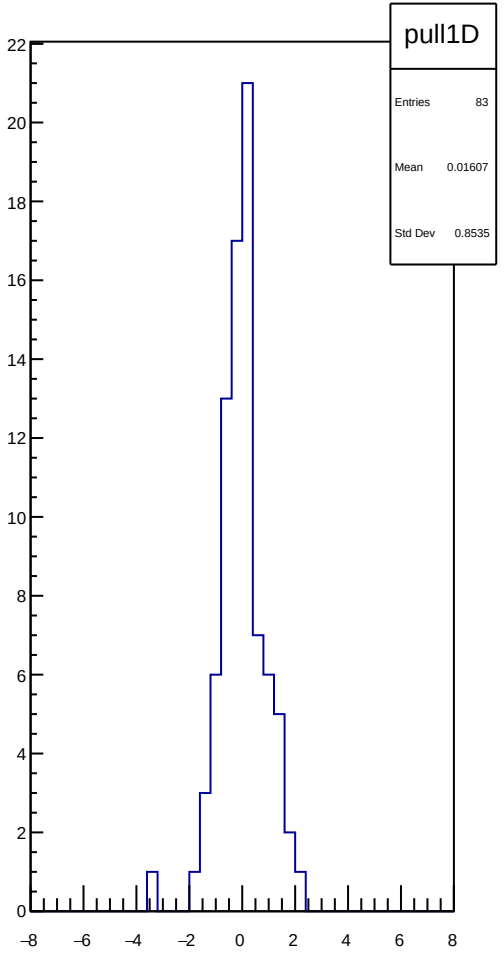

pull1D
Entries 83
Mean 0.005895
Std Dev 0.9768

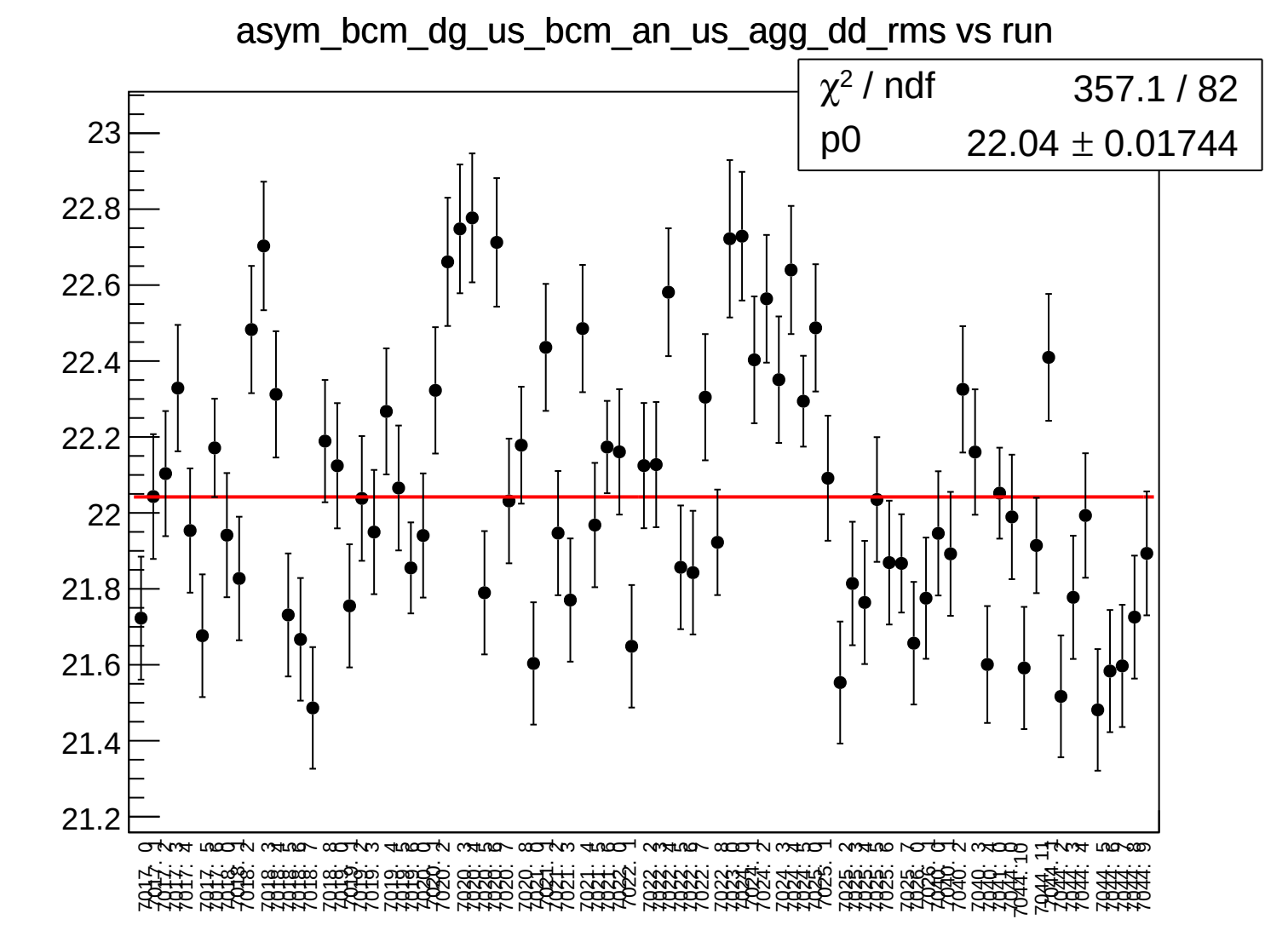

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3058 / 82
p0 16.27 ± 0.01288
19
18
17
16
15

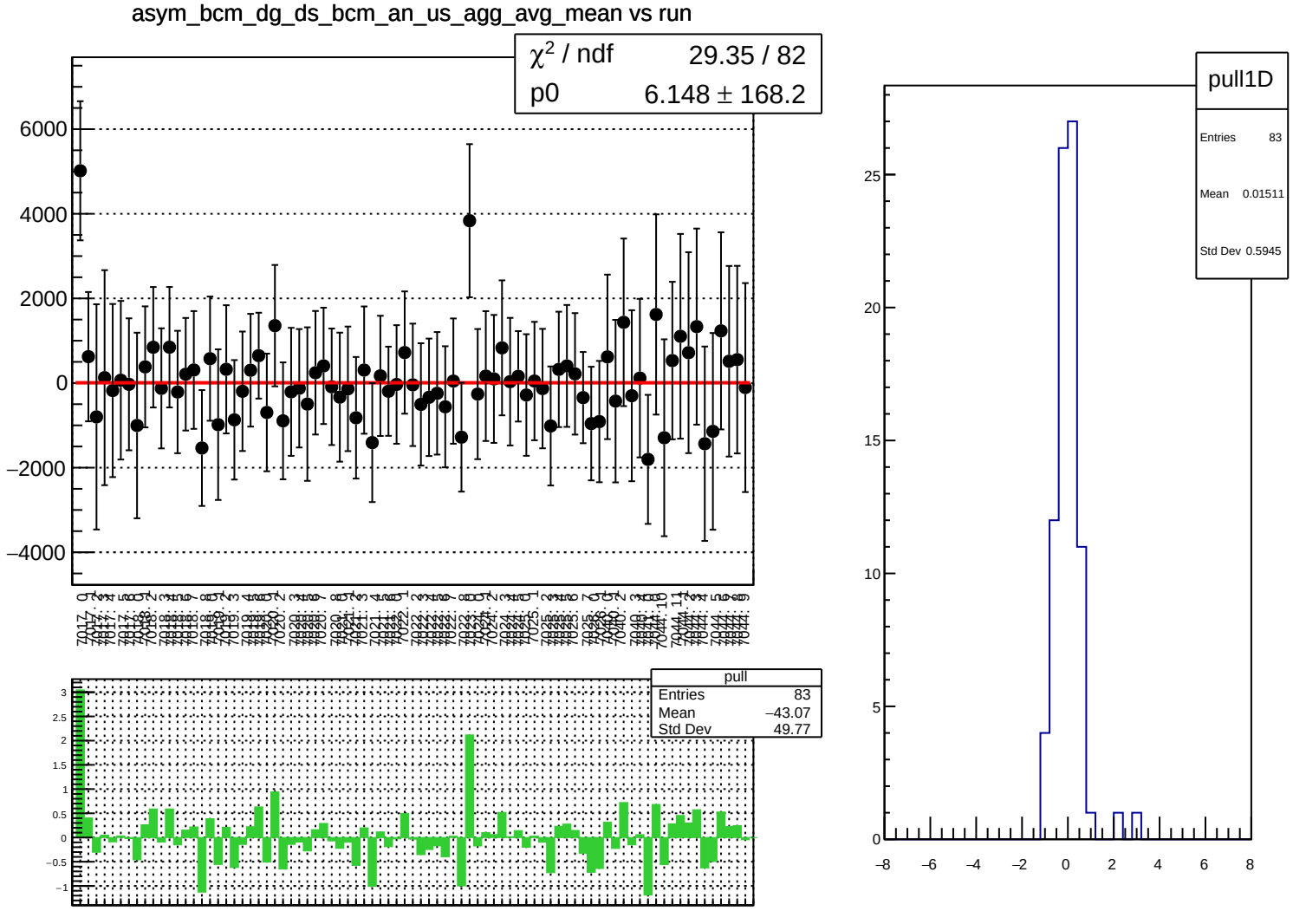

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 29.97 / 82
p0 39.92 ± 168.2
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −69.86
Std Dev 85.36
3
2
1
0
−1
pull1D
Entries 83
Mean 0.01397
Std Dev 0.6007
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

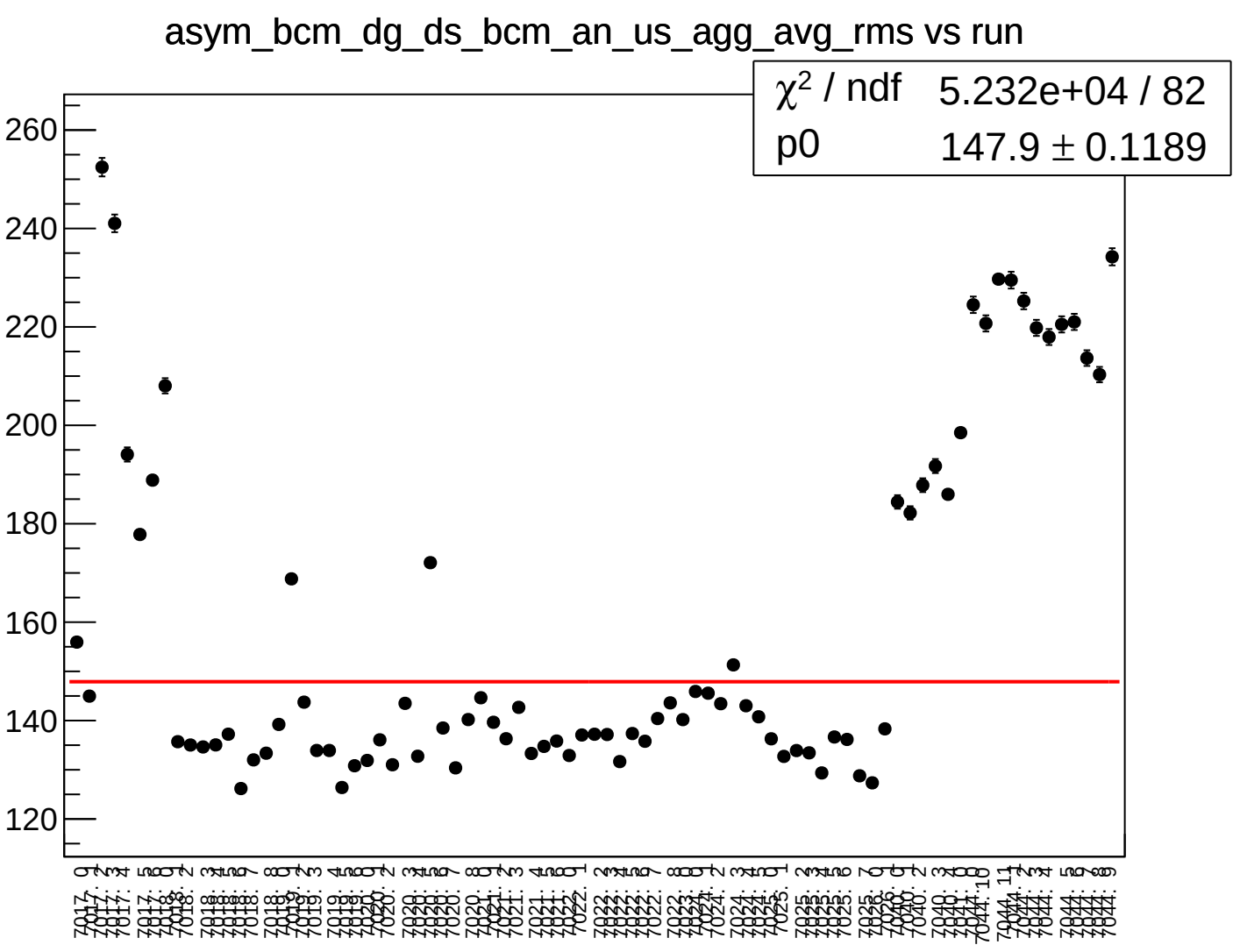

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 5.2e+04 / 82
p0 147.9 ± 0.1189
260
240
220
200
180
160
140
120

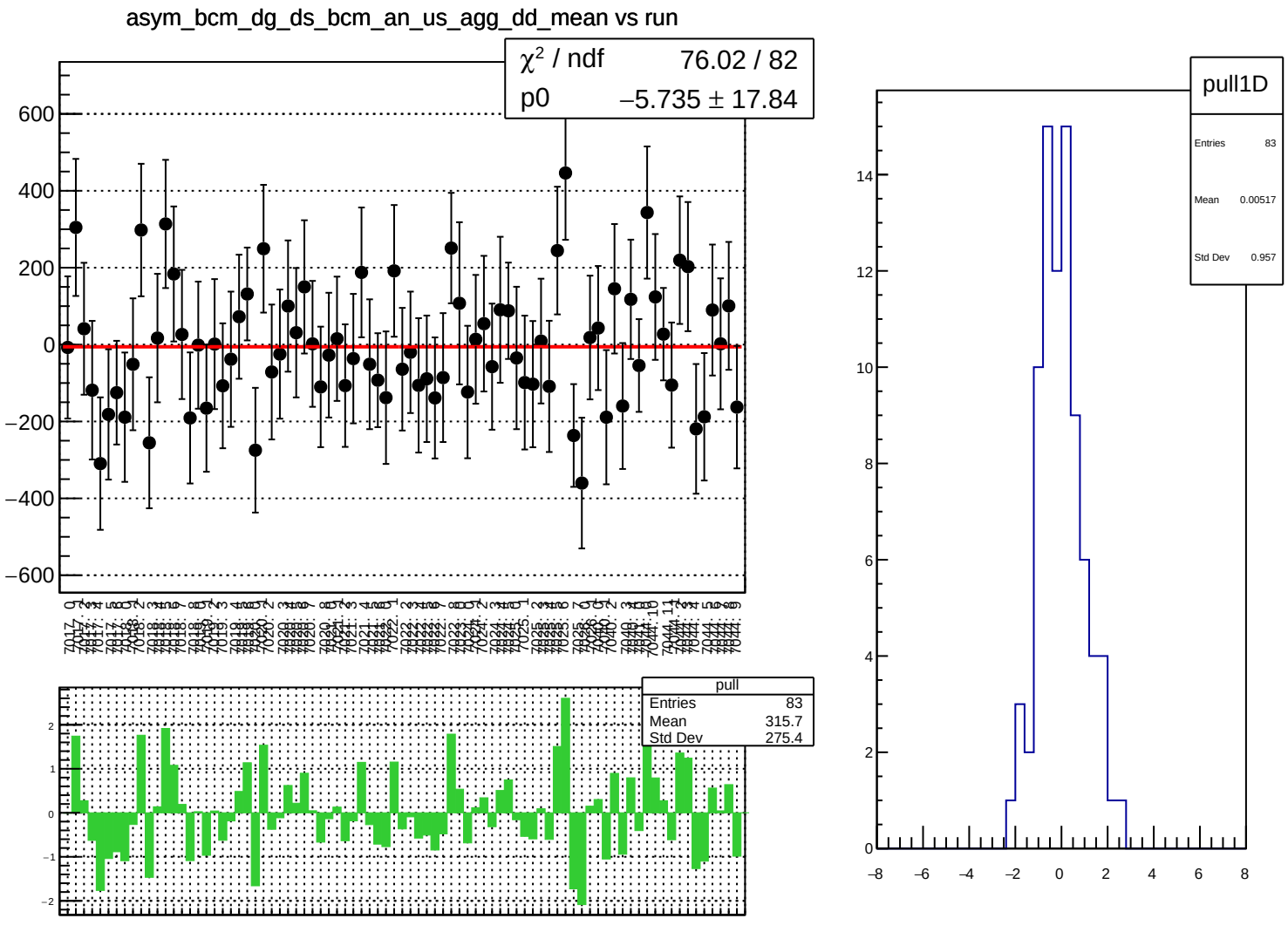

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 60.49 / 82
p0 19.69 ± 24.66
pull
Entries 83
Mean −86.03
Std Dev 126.5

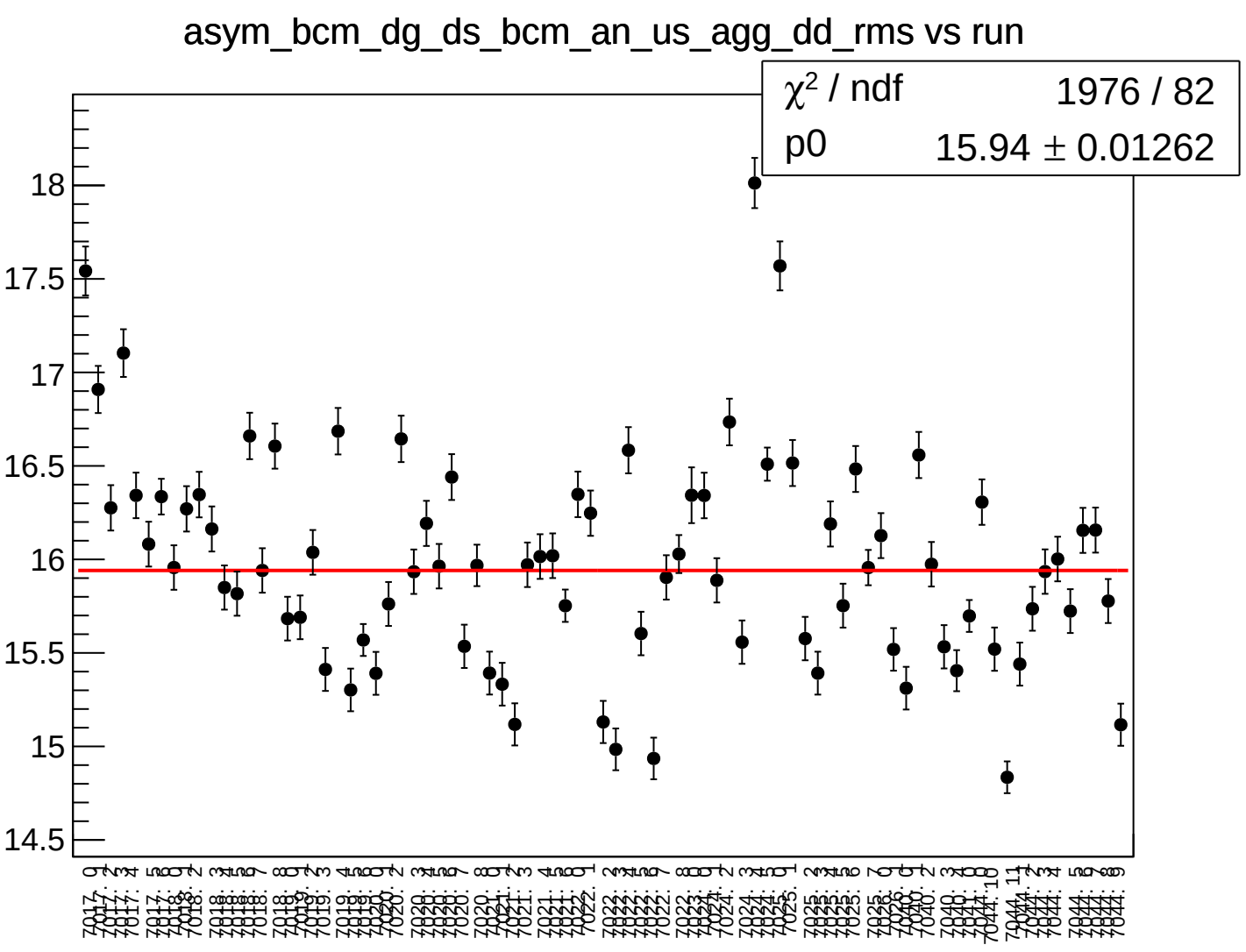

pull1D
Entries 83
Mean 0.01607
Std Dev 0.8535

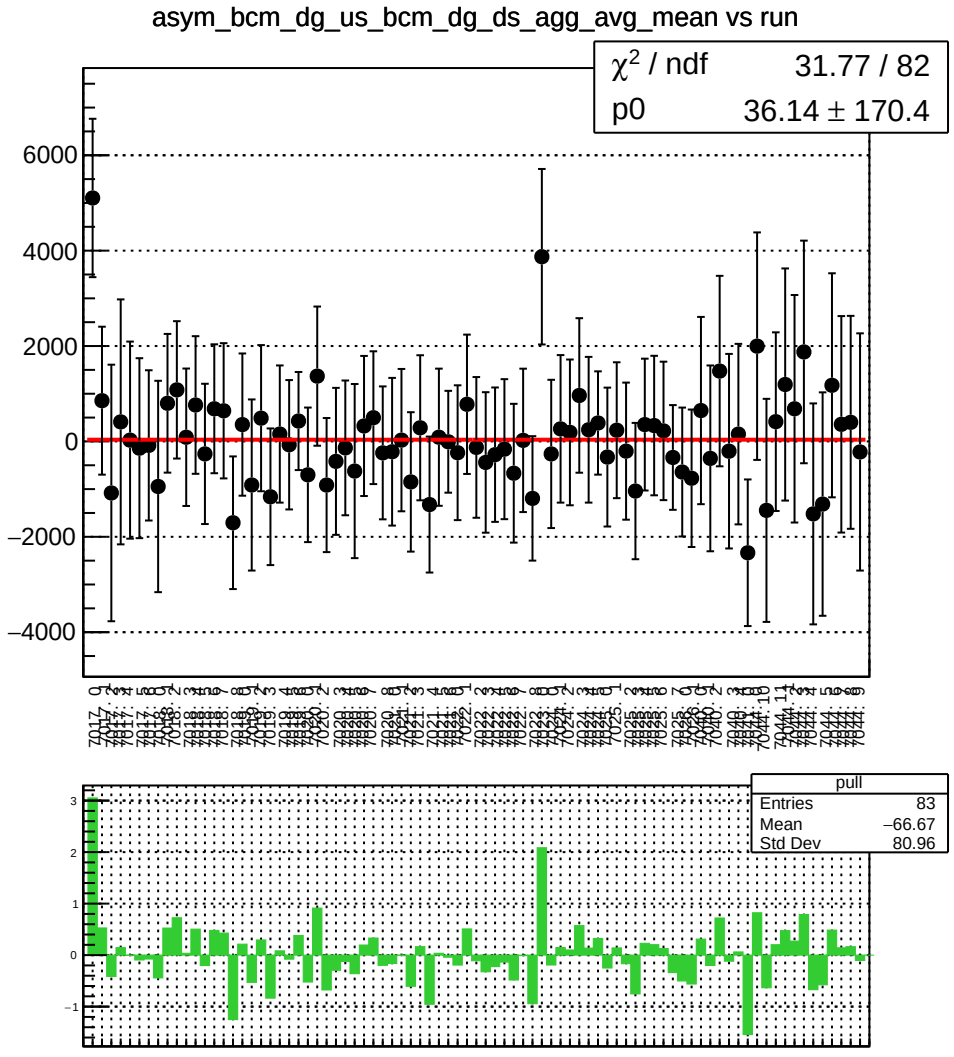

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 357.1 / 82
p0 22.04 ± 0.01744
23
22.8
22.6
22.4
22.2
22
21.8
21.6
21.4
21.2

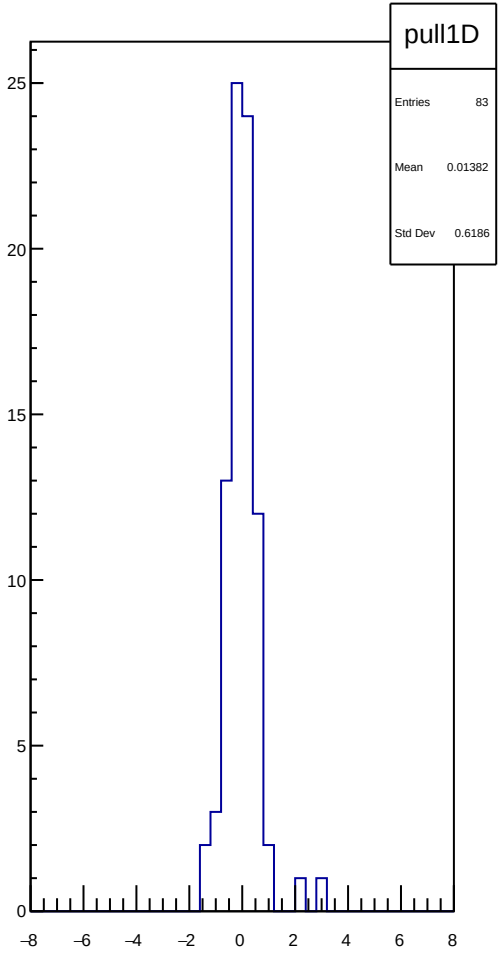

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 29.35 / 82
p0 6.148 ± 168.2
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −43.07
Std Dev 49.77
3
2.5
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 83
Mean 0.01511
Std Dev 0.5945
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

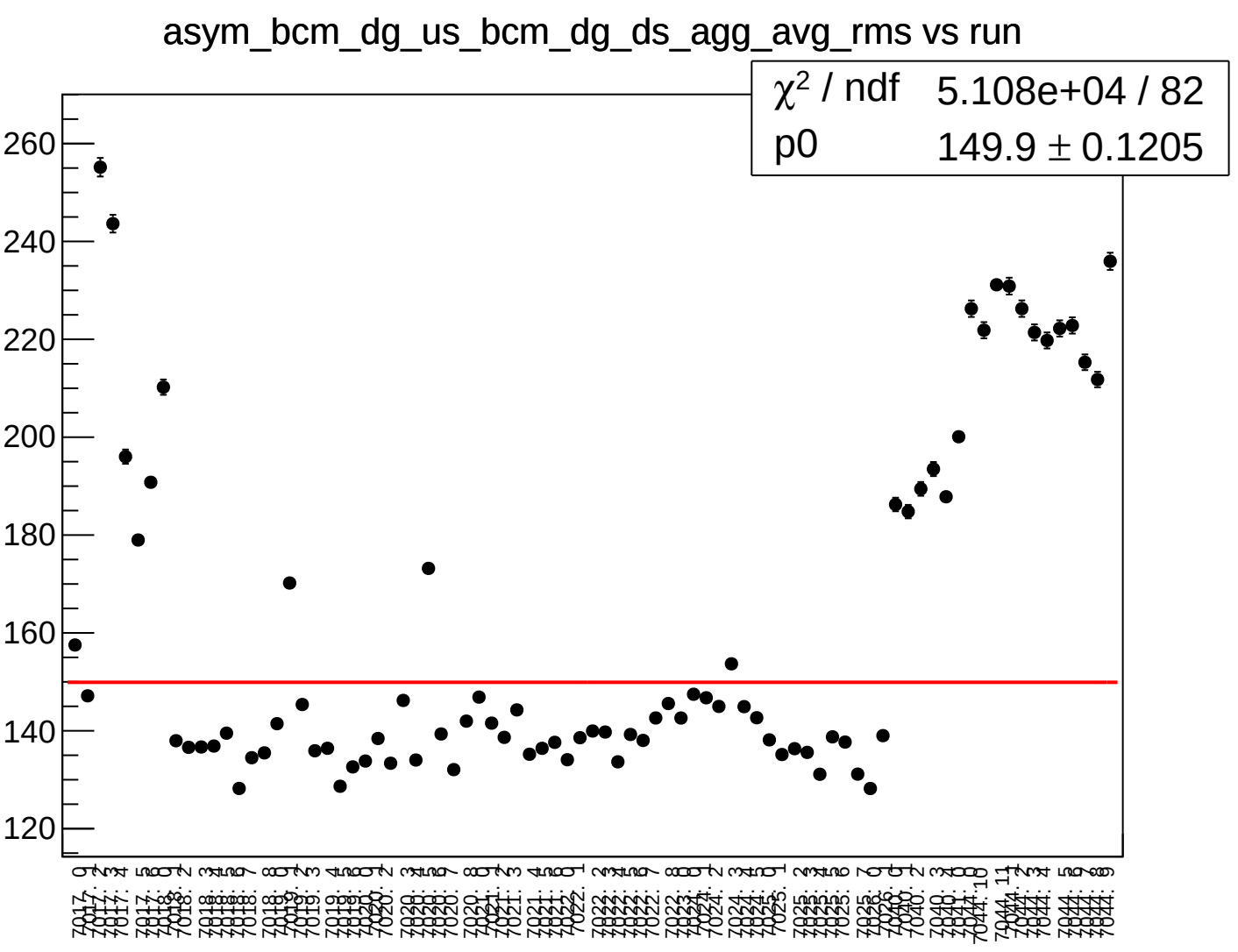

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 5.232e+04 / 82
p0 147.9 ± 0.1189
260
240
220
200
180
160
140
120

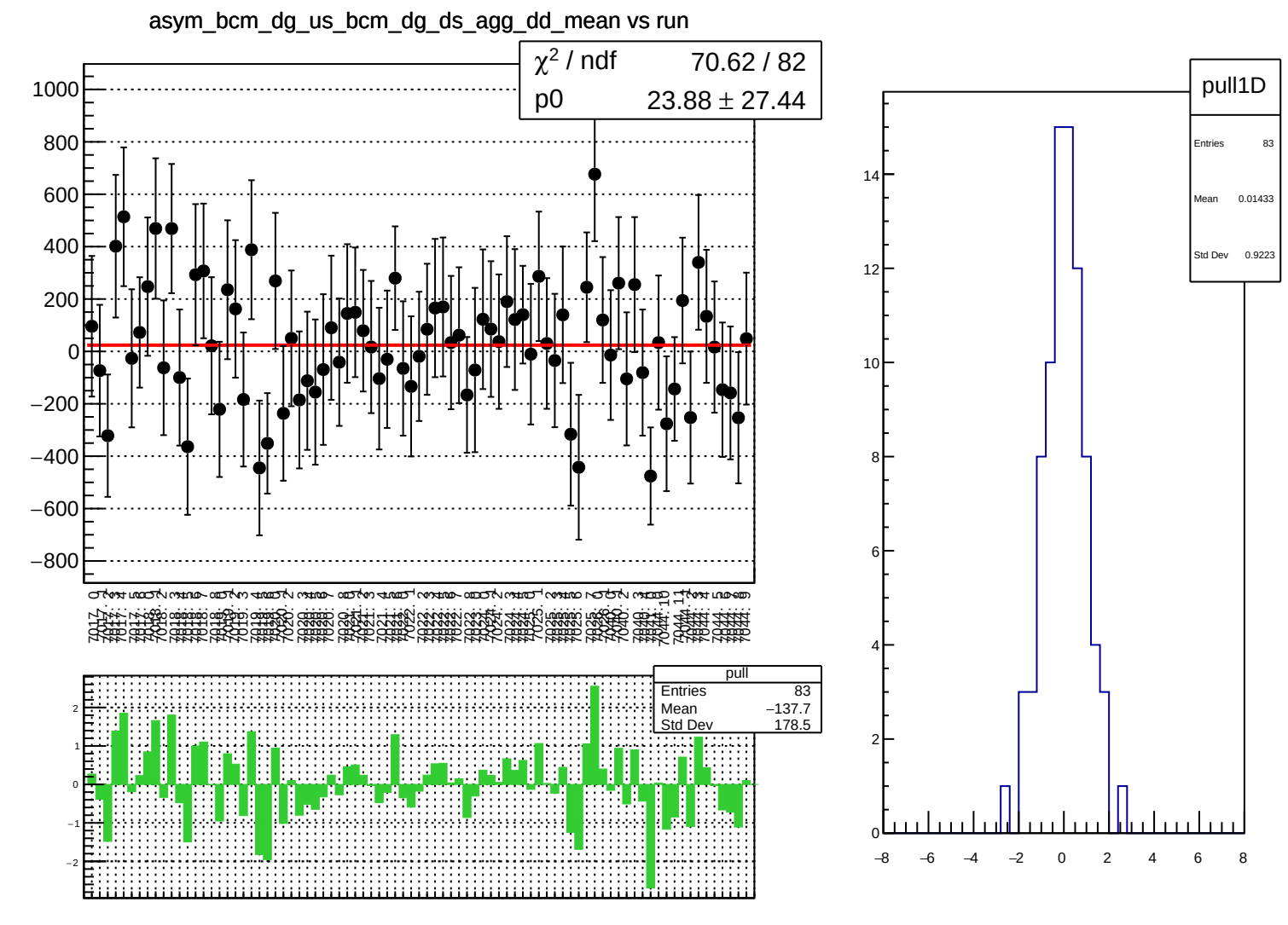

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 76.02 / 82
p0 −5.735 ± 17.84
pull
Entries 83
Mean 315.7
Std Dev 275.4
pull1D
Entries 83
Mean 0.00517
Std Dev 0.957

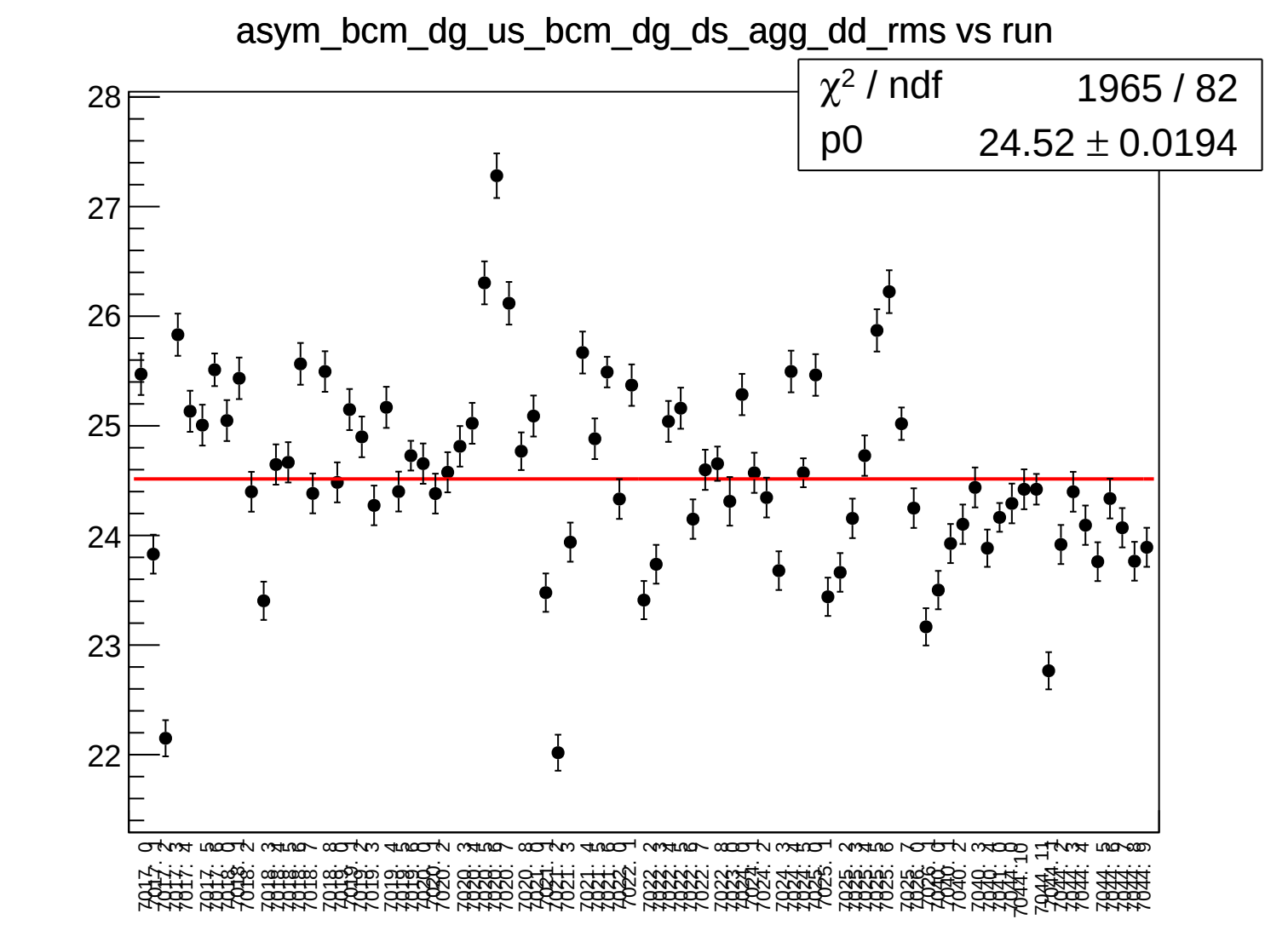

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1976 / 82
p0 15.94 ± 0.01262
18
17.5
17
16.5
16
15.5
15
14.5

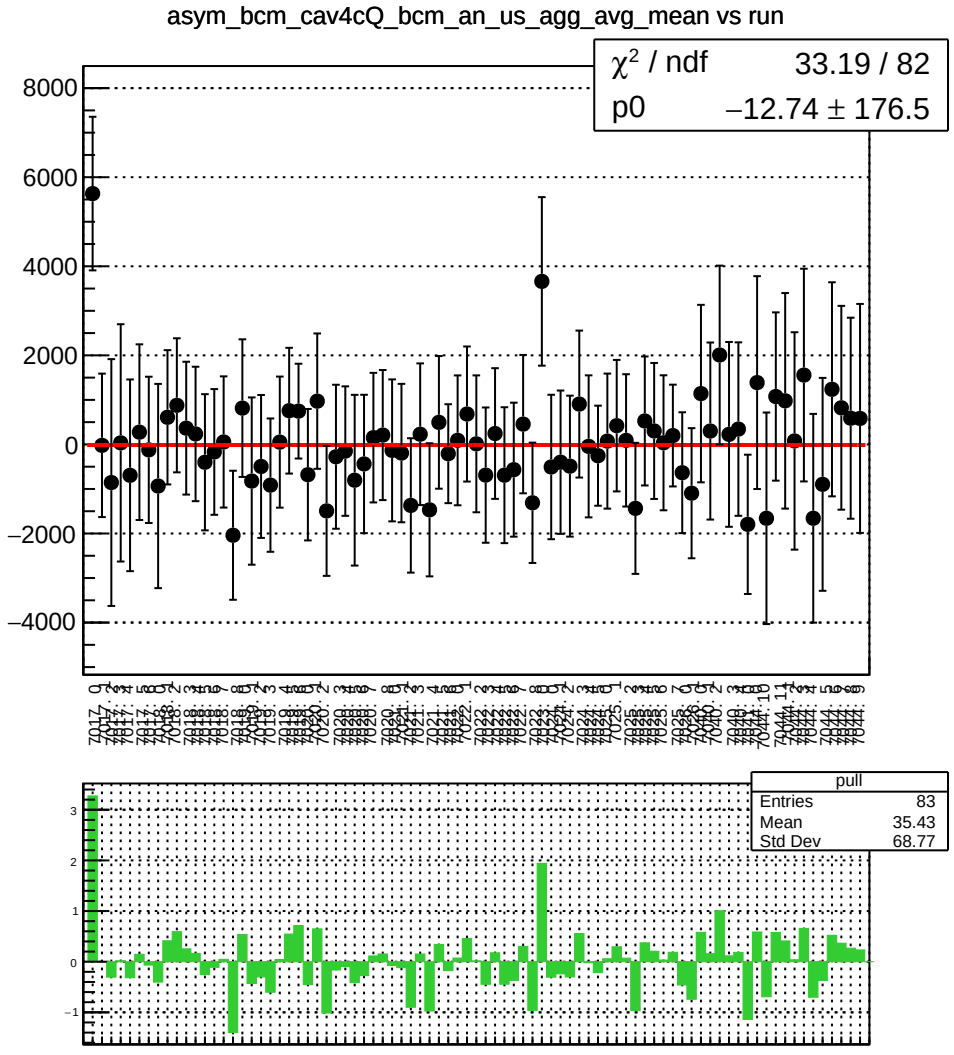

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 31.77 / 82
p0 36.14 ± 170.4
pull
Entries 83
Mean −66.67
Std Dev 80.96

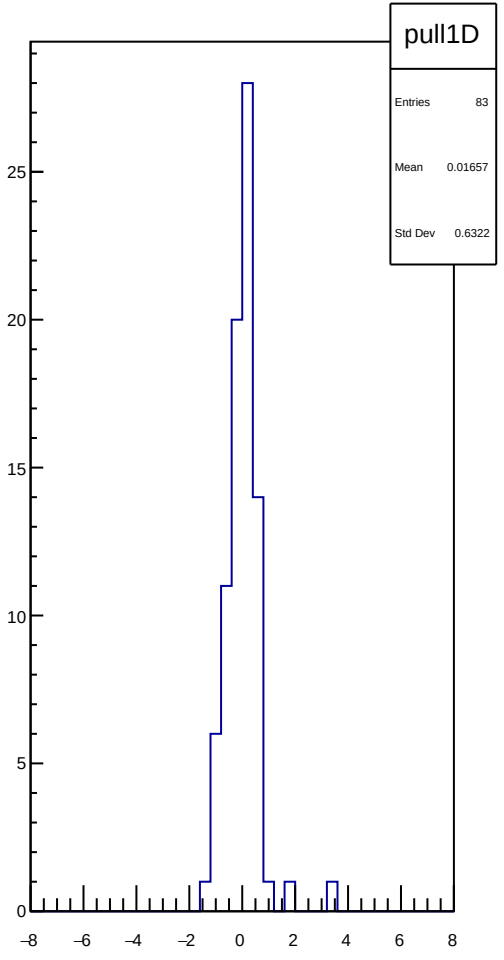

pull1D
Entries 83
Mean 0.01382
Std Dev 0.6186

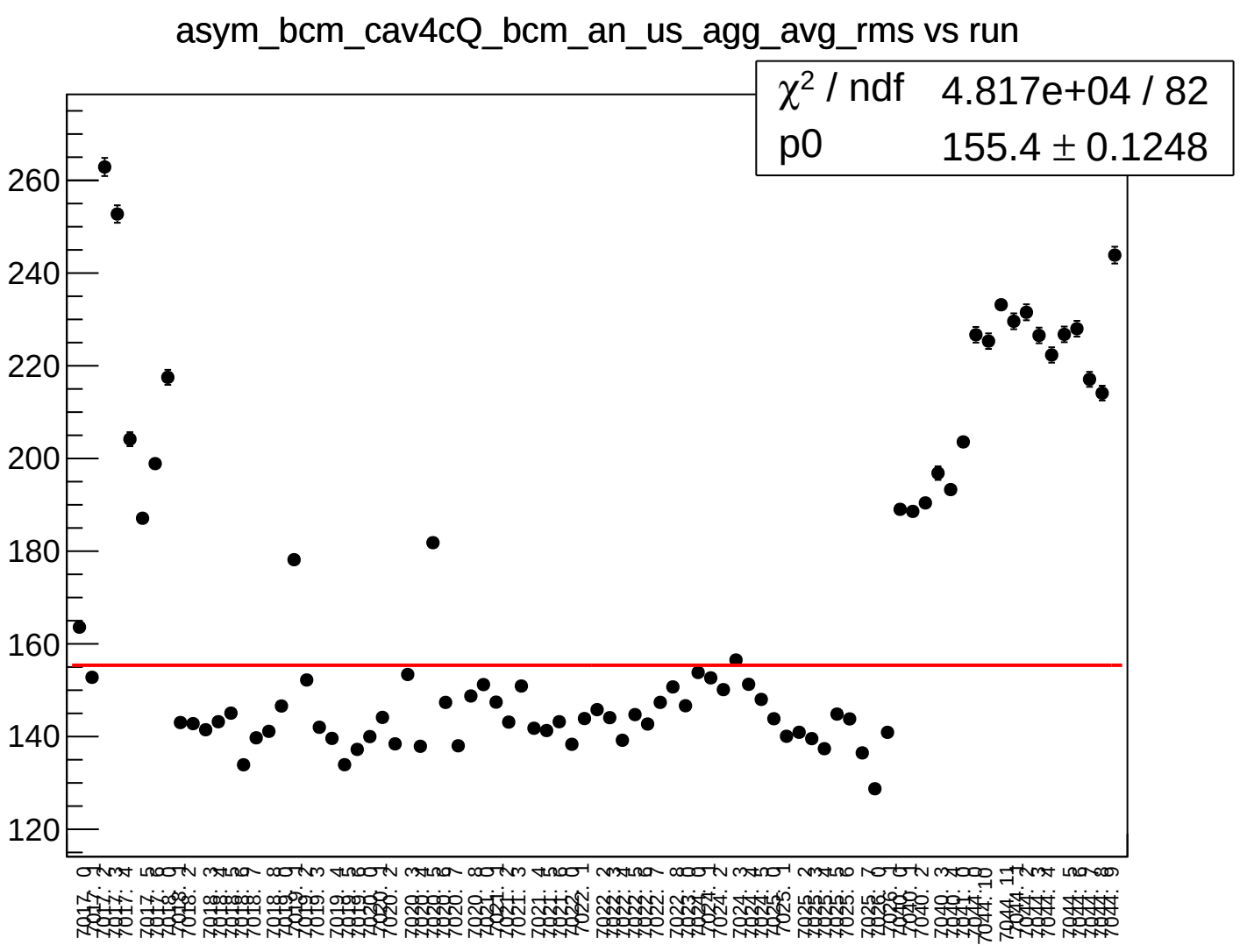

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 5.108e+04 / 82
p0 149.9 ± 0.1205
260
240
220
200
180
160
140
120

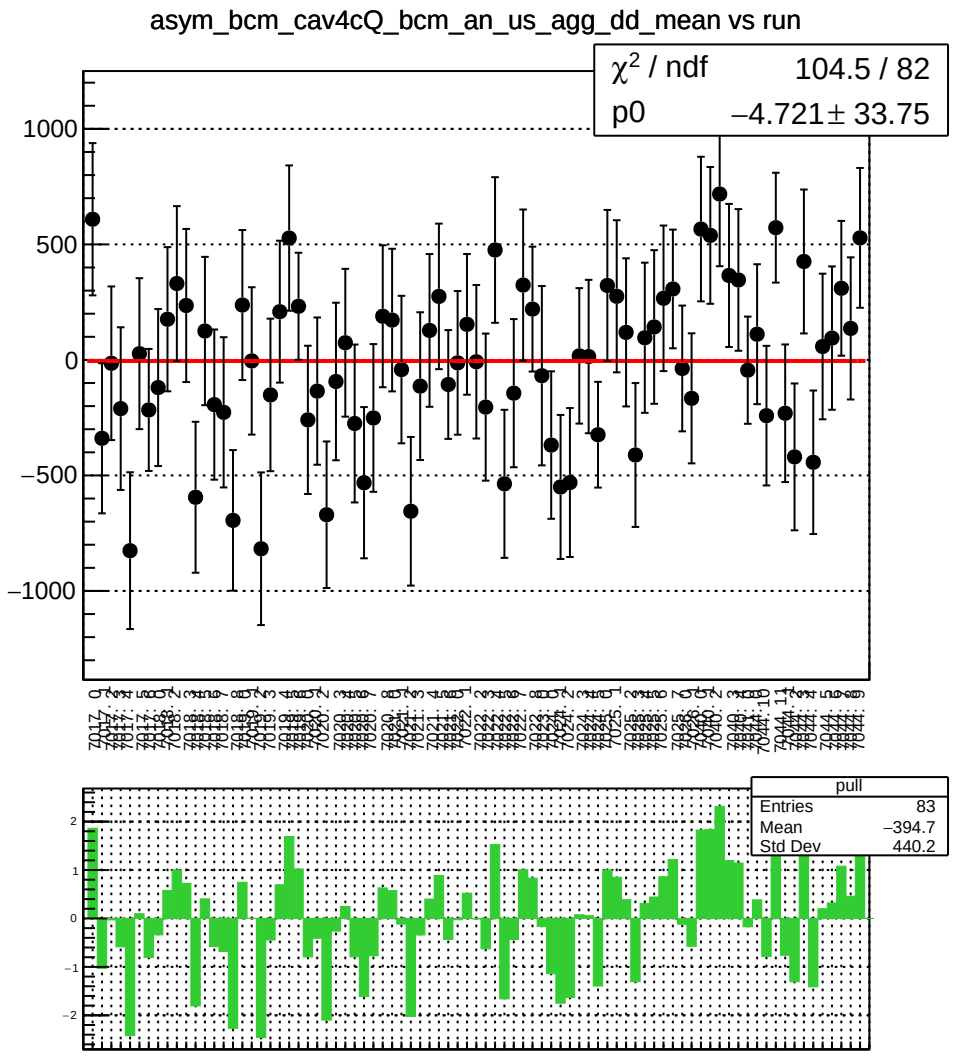

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 70.62 / 82
p0 23.88 ± 27.44
pull
Entries 83
Mean −137.7
Std Dev 178.5
pull1D
Entries 83
Mean 0.01433
Std Dev 0.9223

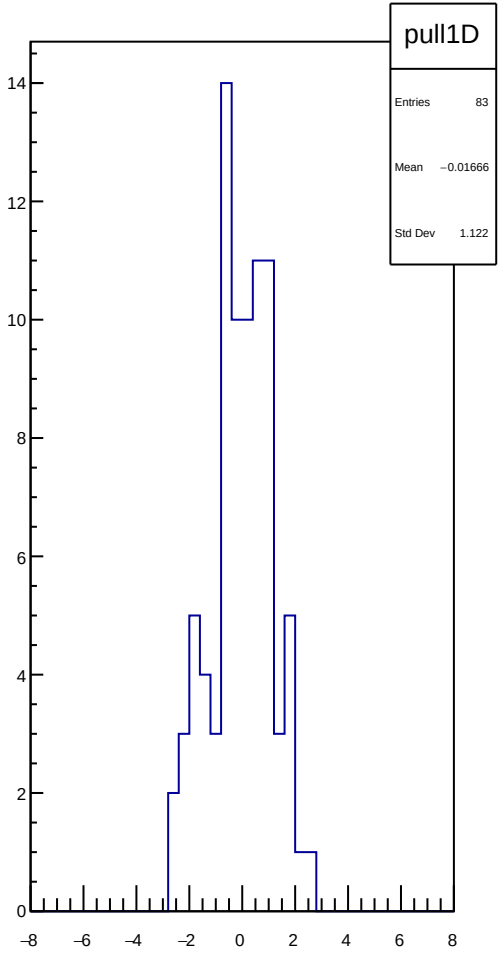

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1965 / 82
p0 24.52 ± 0.0194
28
27
26
25
24
23
22

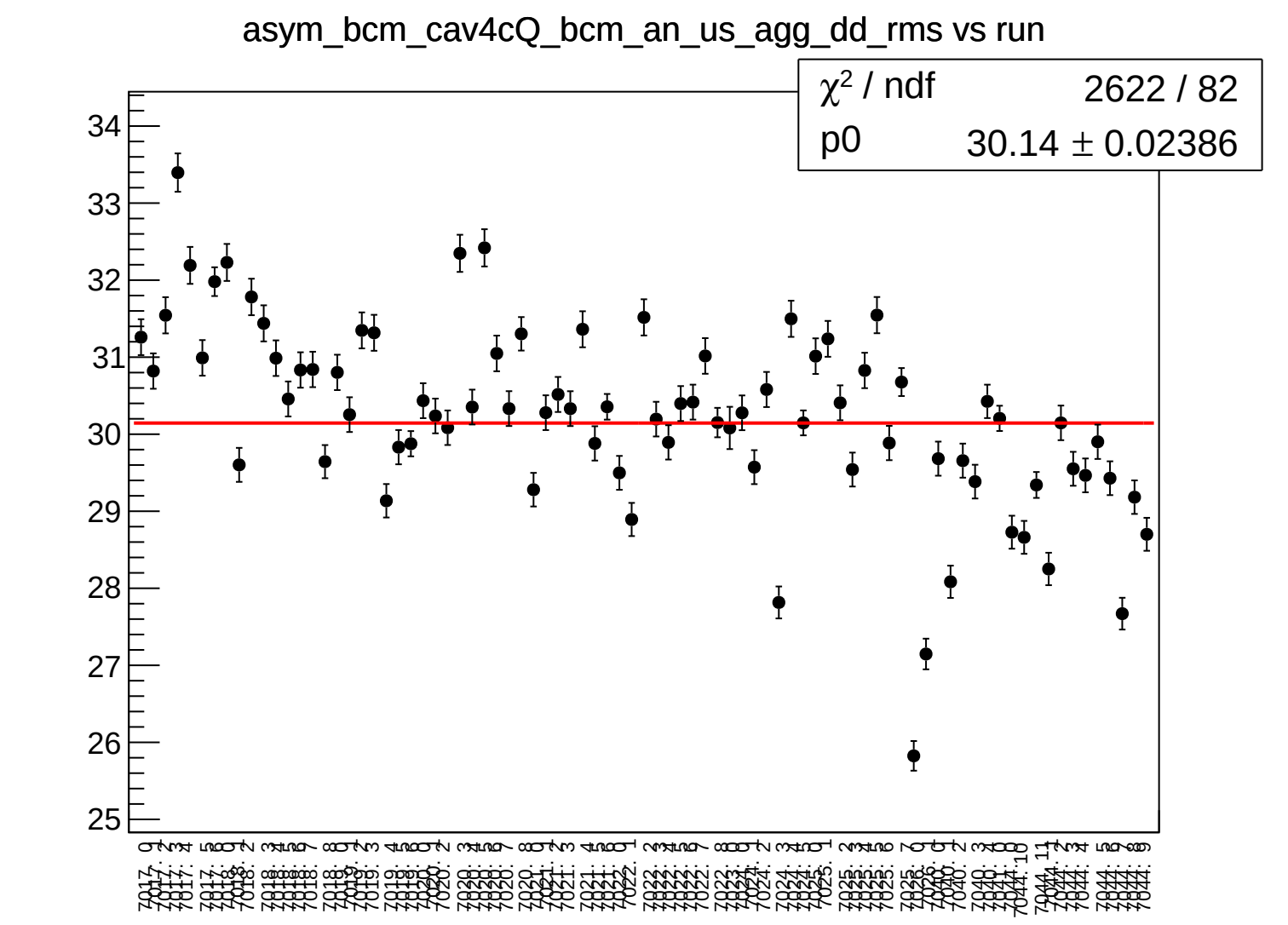

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 33.19 / 82
p0 −12.74 ± 176.5
pull
Entries 83
Mean 35.43
Std Dev 68.77

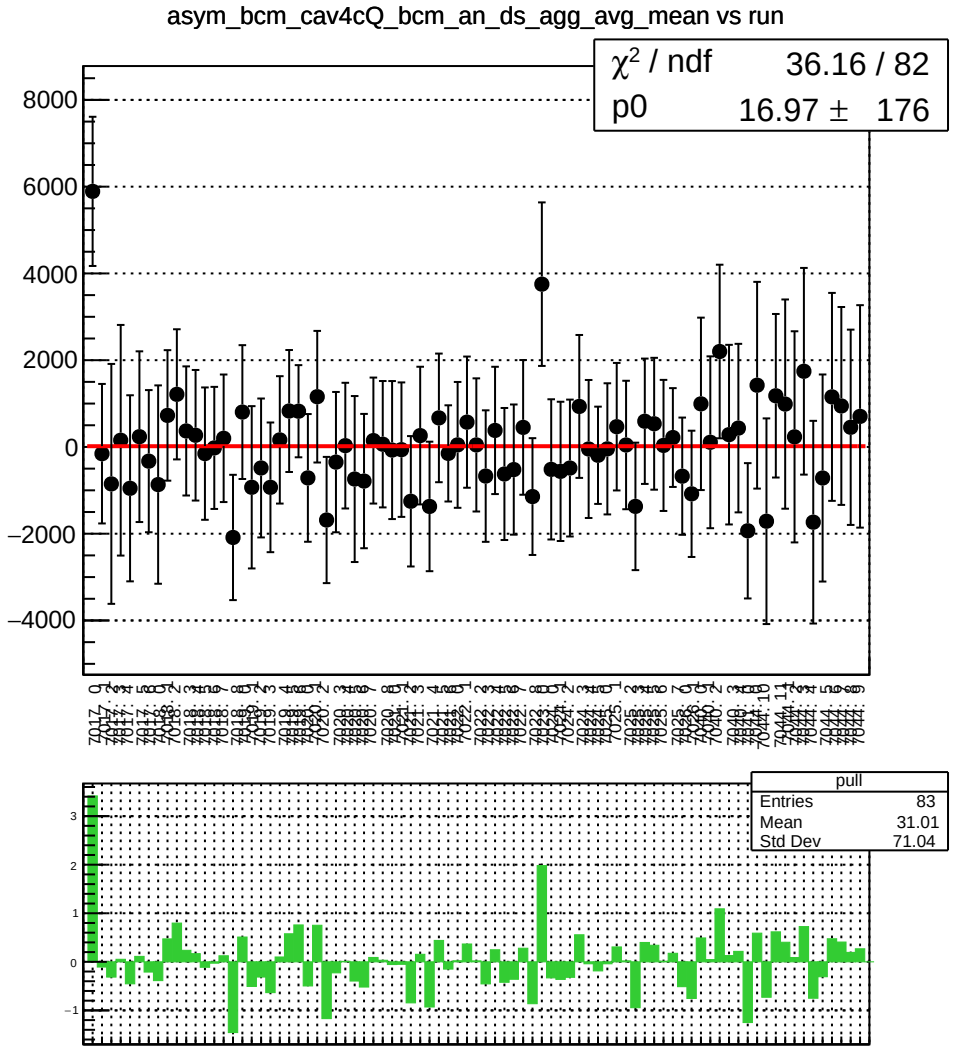

pull1D
Entries 83
Mean 0.01657
Std Dev 0.6322

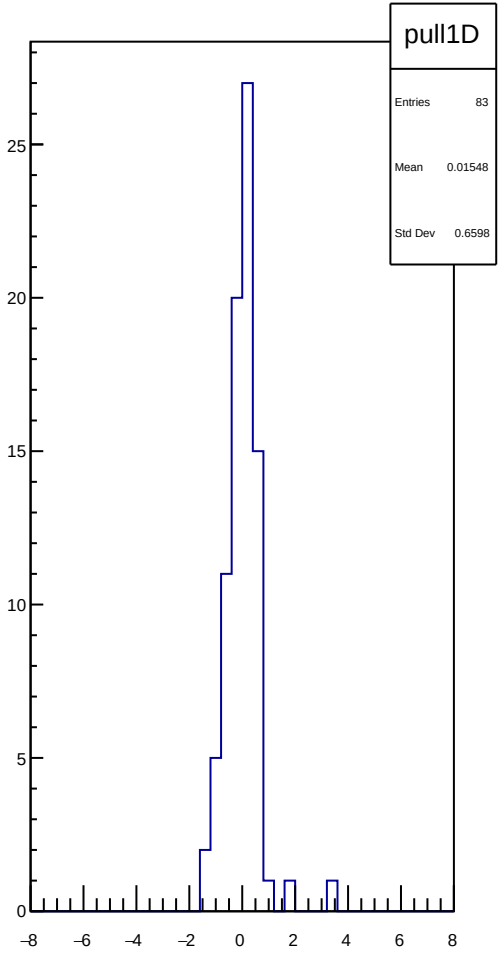

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 4.817e+04 / 82
p0 155.4 ± 0.1248
260
240
220
200
180
160
140
120

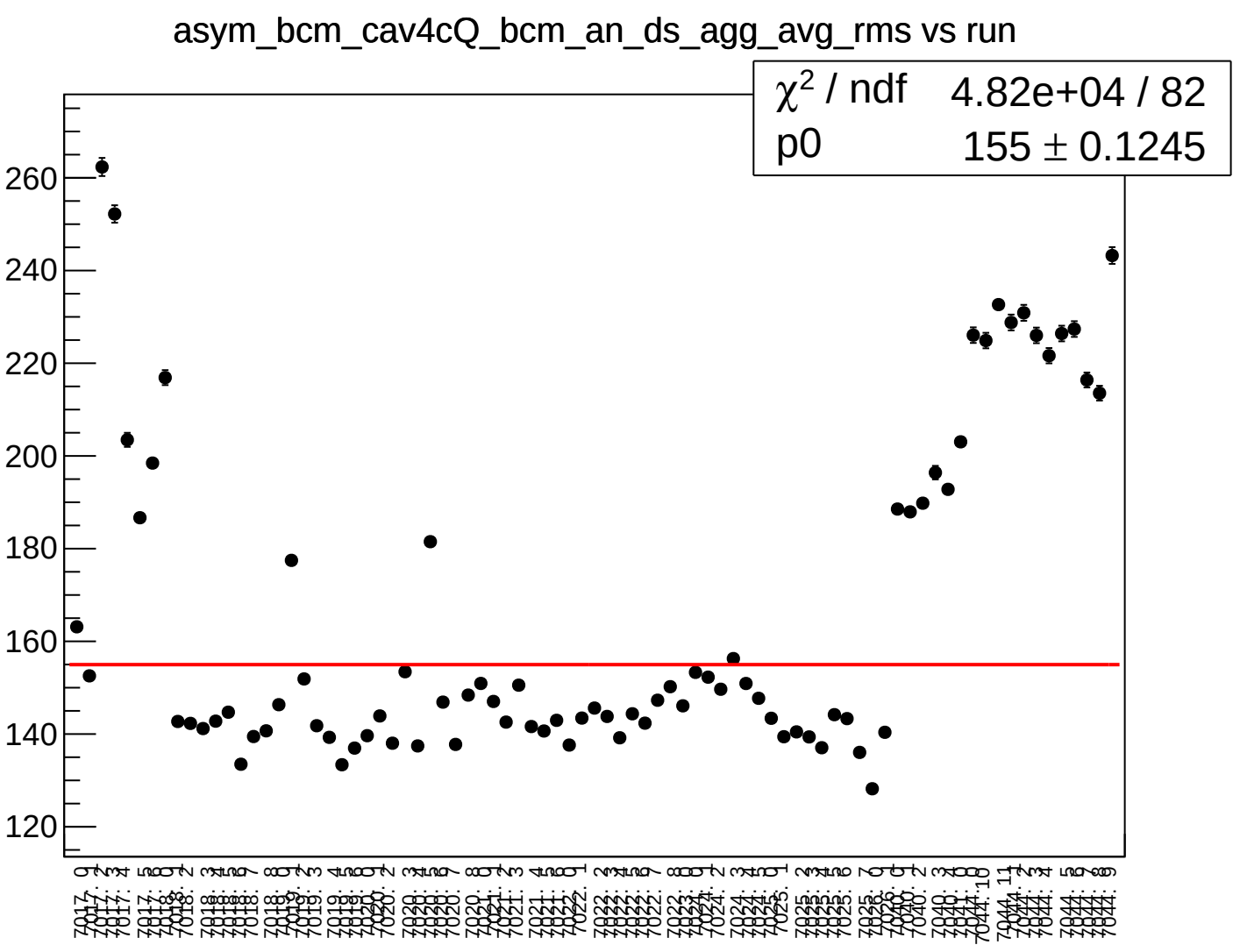

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 104.5 / 82
p0 −4.721 ± 33.75
1000
500
0
−500
−1000
pull
Entries 83
Mean −394.7
Std Dev 440.2
2
1
0
−1
−2

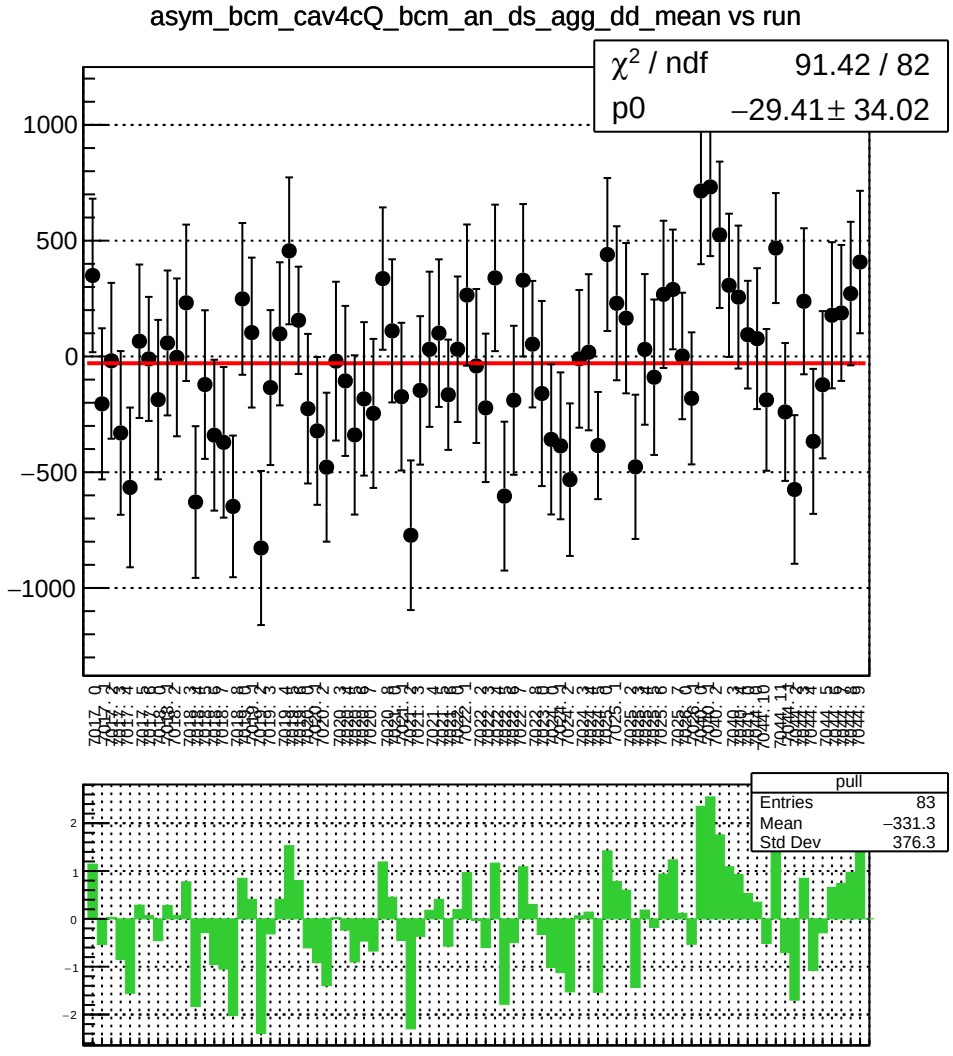

pull1D
Entries 83
Mean −0.01666
Std Dev 1.122
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

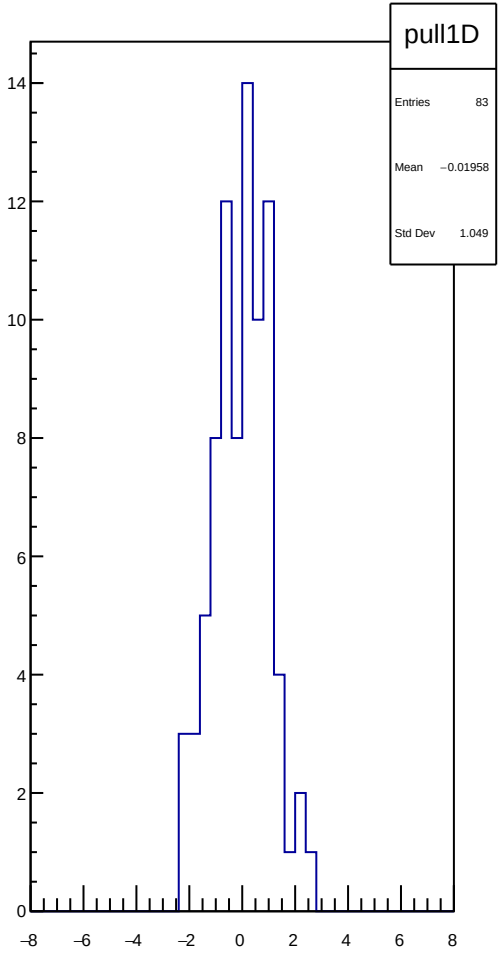

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2622 / 82
p0 30.14 ± 0.02386
34
33
32
31
30
29
28
27
26
25

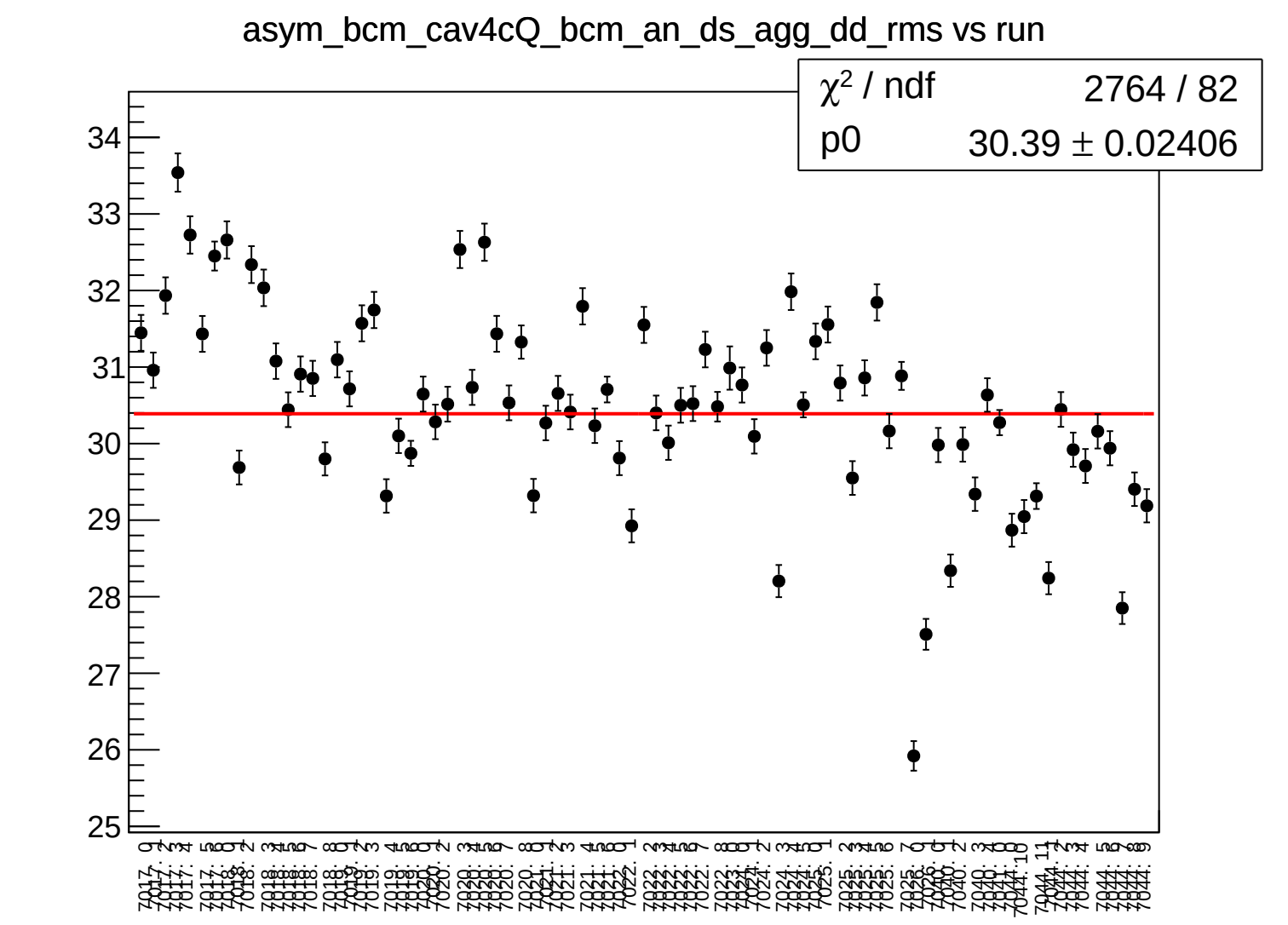

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 36.16 / 82
p0 16.97 ± 176
pull
Entries 83
Mean 31.01
Std Dev 71.04

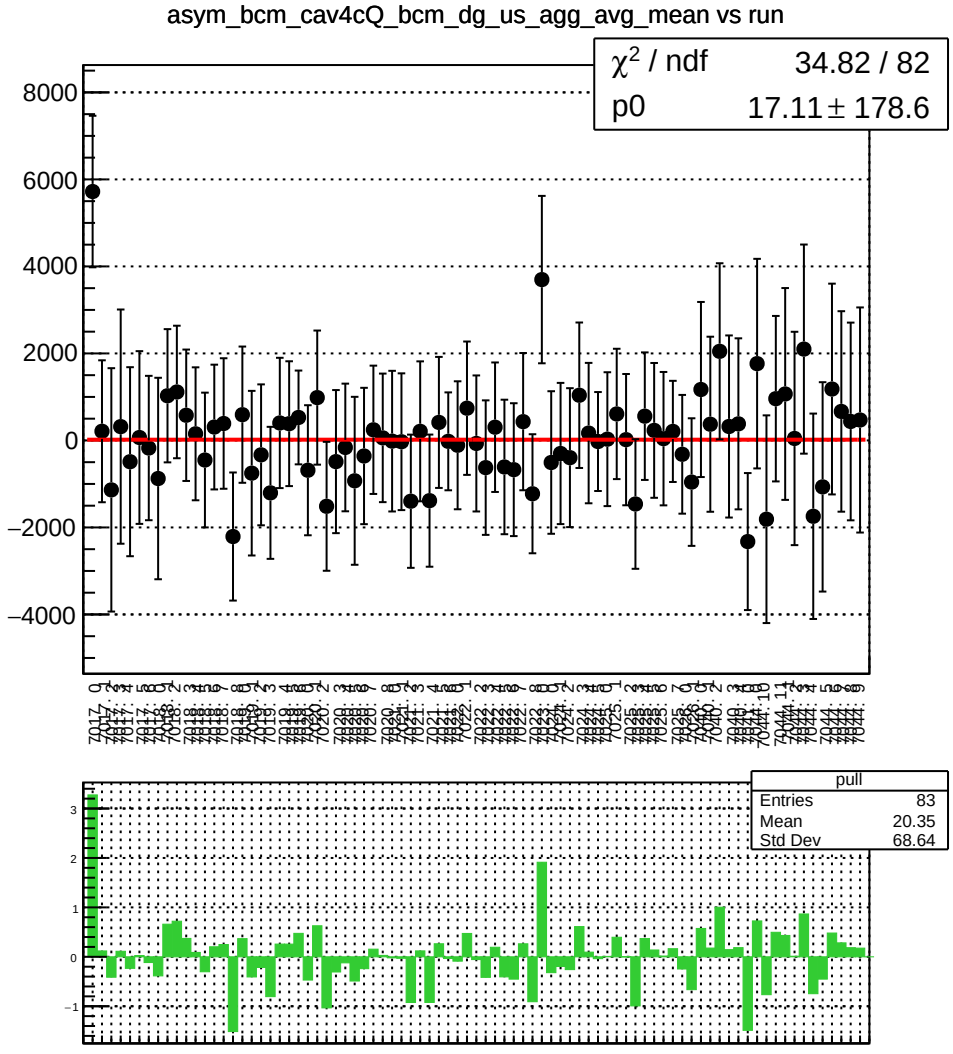

pull1D
Entries 83
Mean 0.01548
Std Dev 0.6598

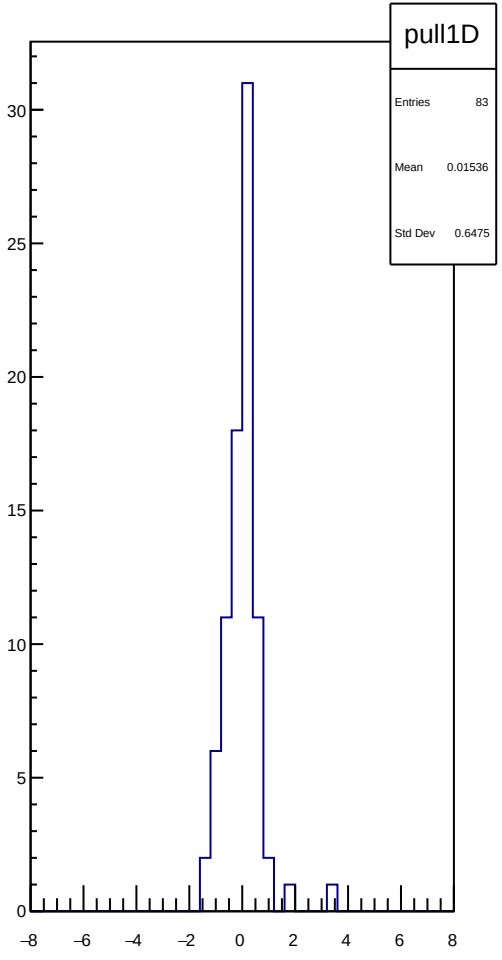

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4.82e+04 / 82
p0 155 ± 0.1245
260
240
220
200
180
160
140
120

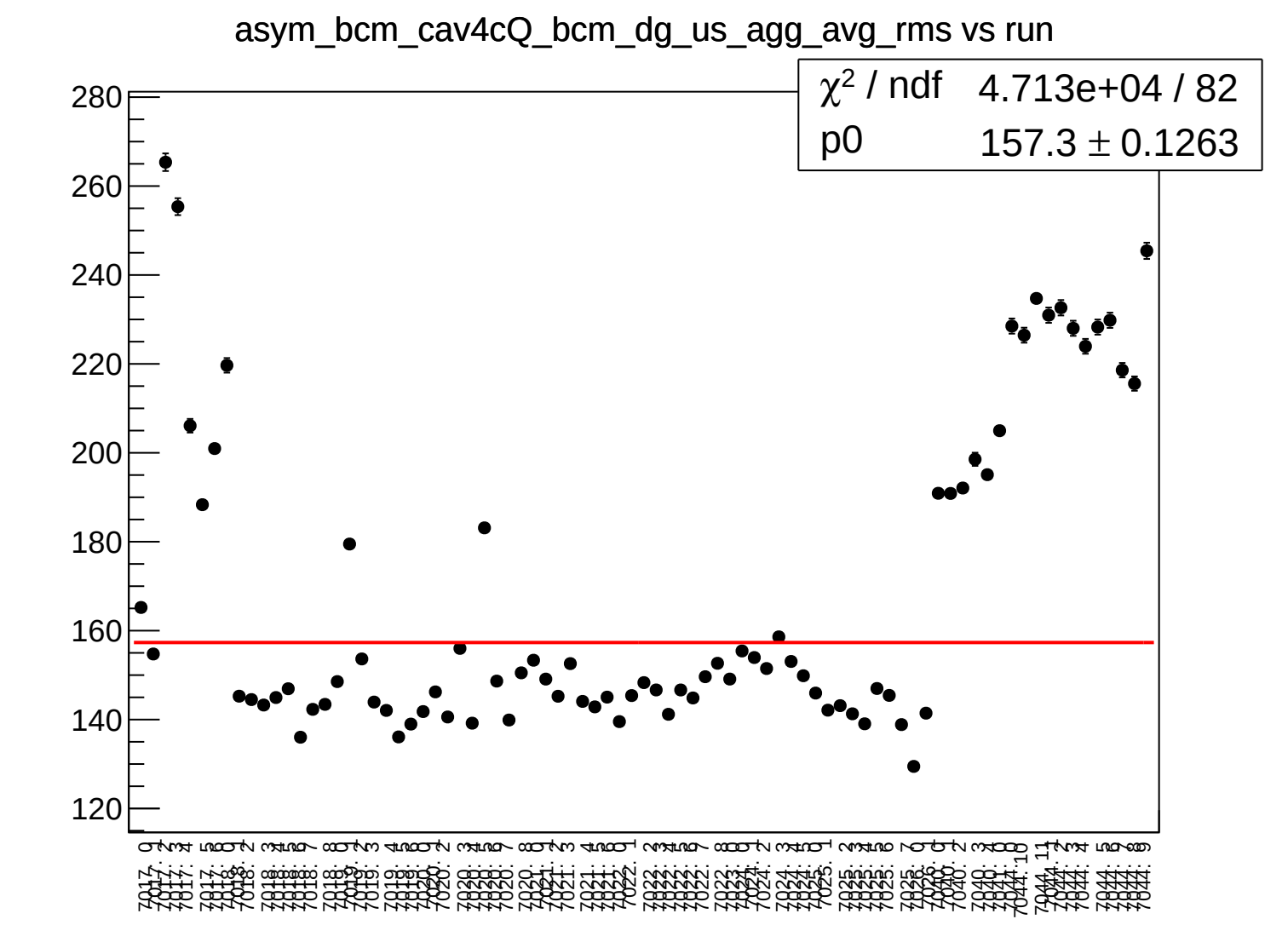

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 91.42 / 82
p0 −29.41 ± 34.02
1000
500
0
−500
−1000
pull
Entries 83
Mean −331.3
Std Dev 376.3
2
1
0
−1
−2

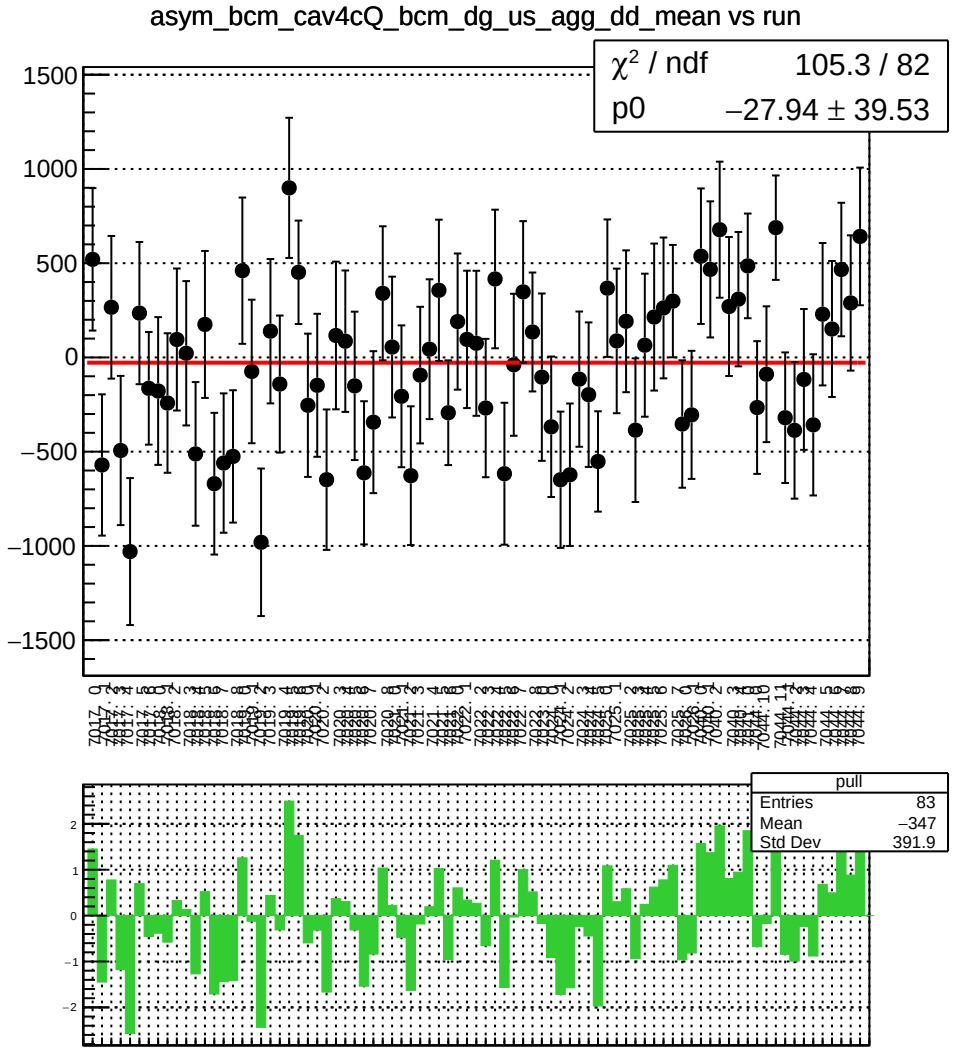

pull1D
Entries 83
Mean −0.01958
Std Dev 1.049
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

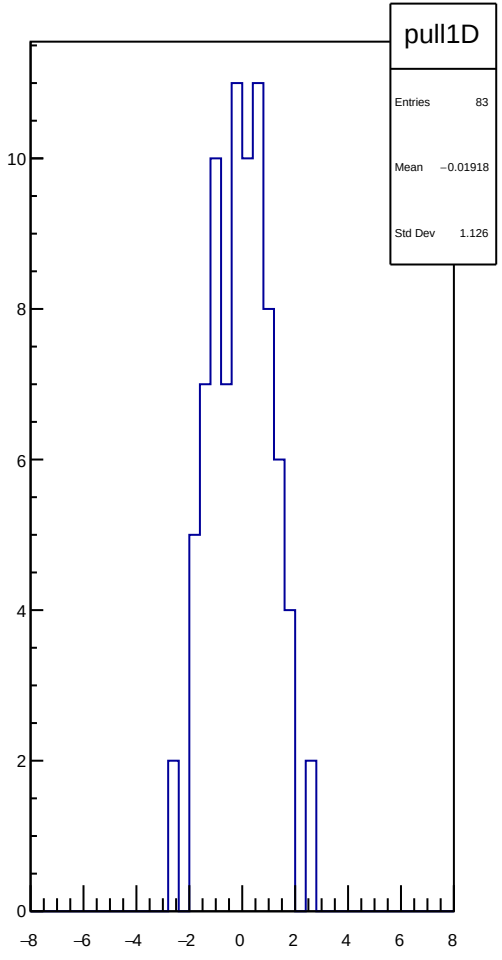

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2764 / 82
p0 30.39 ± 0.02406
34
33
32
31
30
29
28
27
26
25

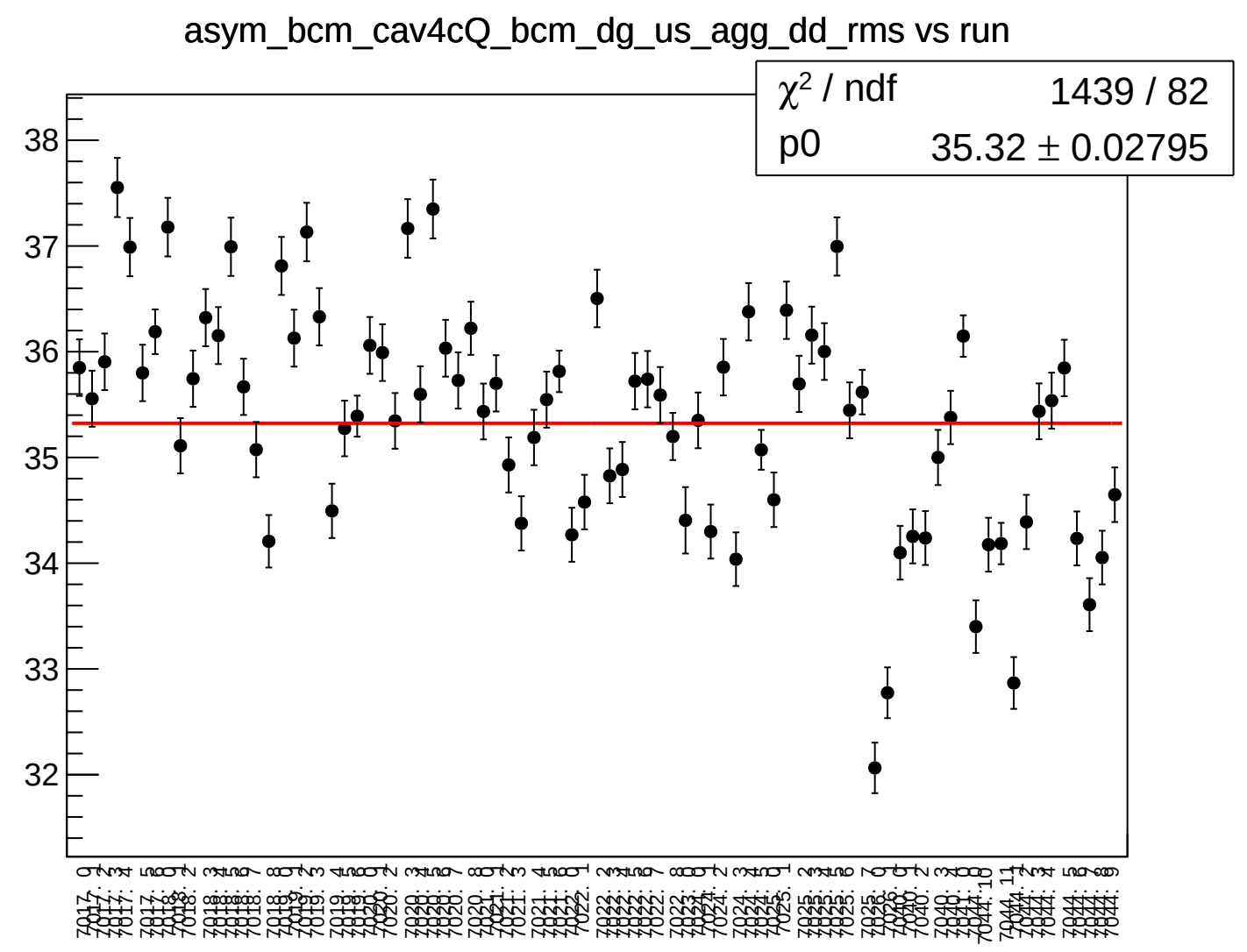

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 34.82 / 82
p0 17.11 ± 178.6
pull
Entries 83
Mean 20.35
Std Dev 68.64

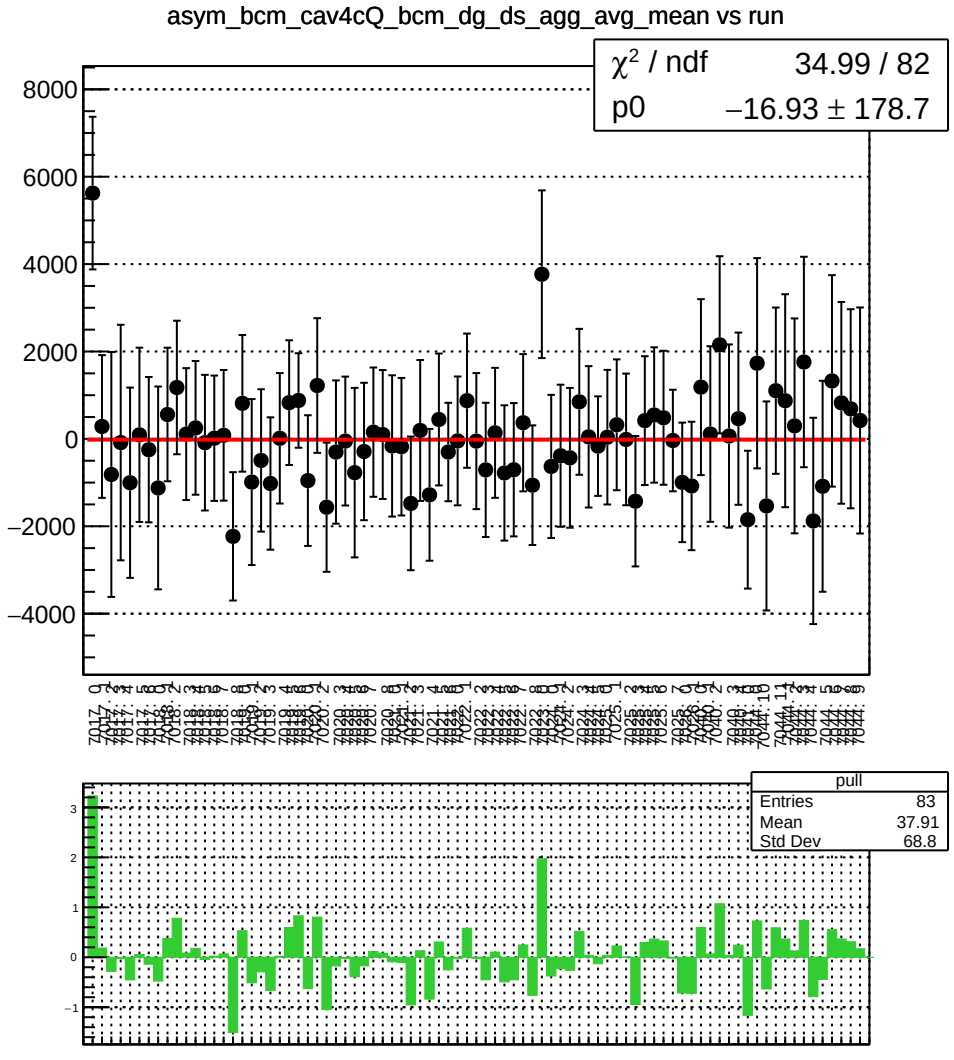

pull1D
Entries 83
Mean 0.01536
Std Dev 0.6475

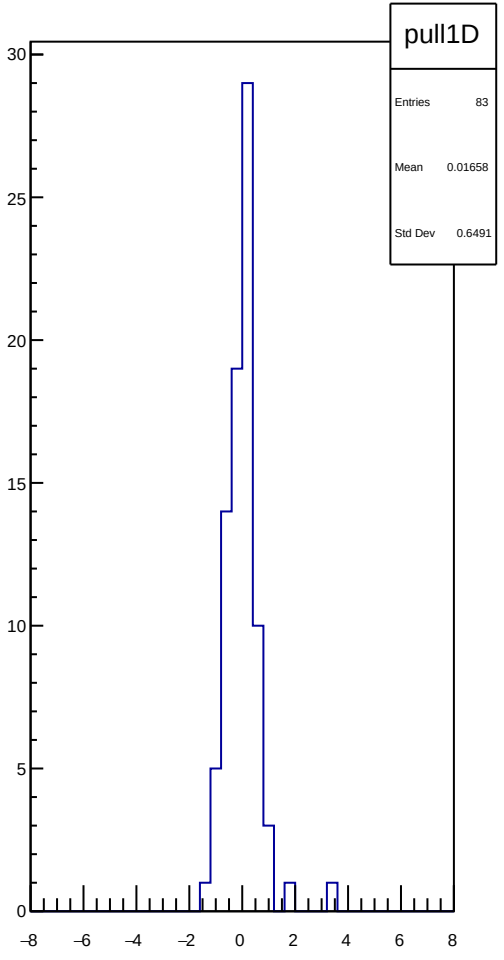

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 4.713e+04 / 82
p0 157.3 ± 0.1263
280
260
240
220
200
180
160
140
120

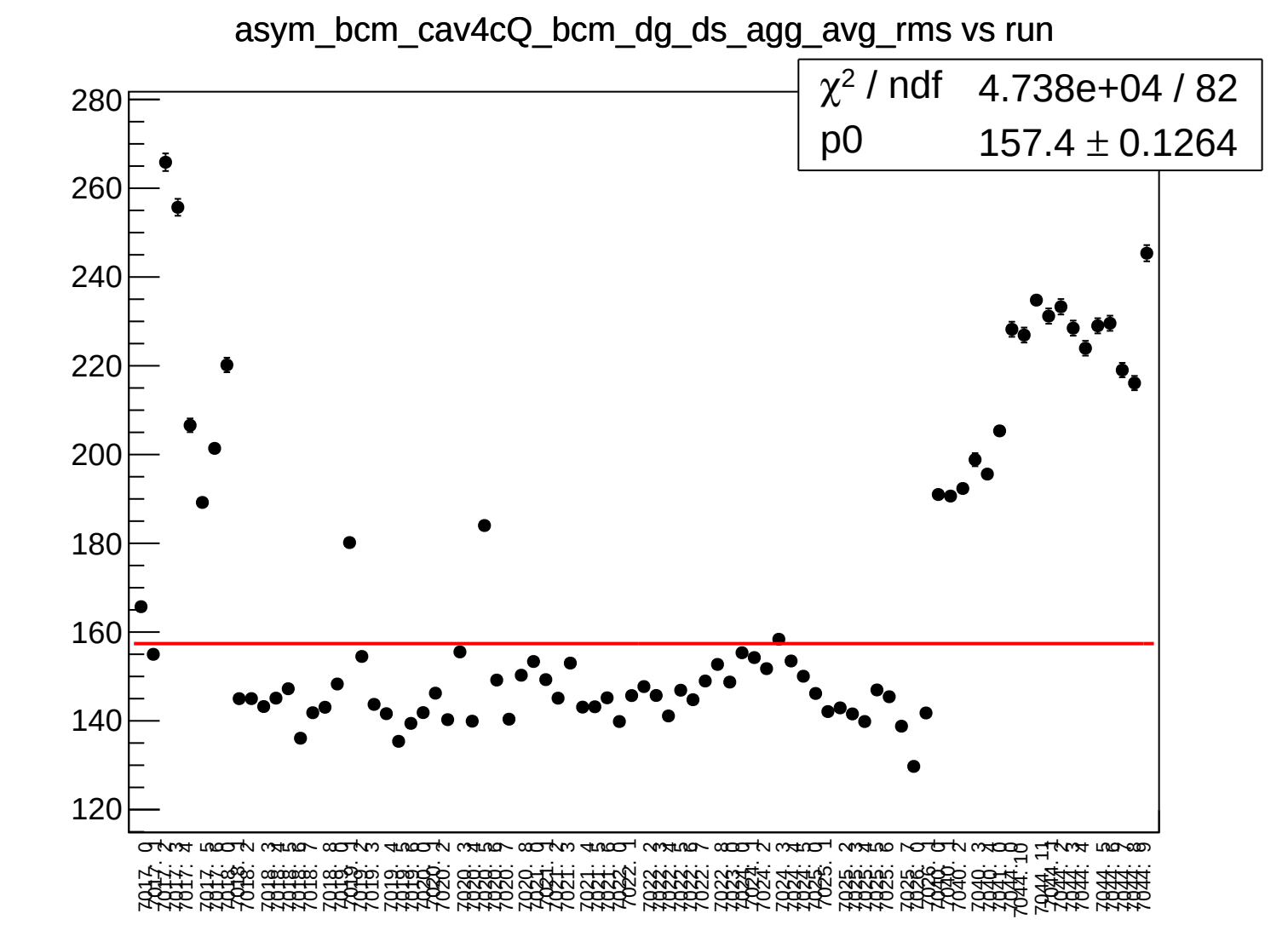

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 105.3 / 82
p0 −27.94 ± 39.53
pull
Entries 83
Mean −347
Std Dev 391.9

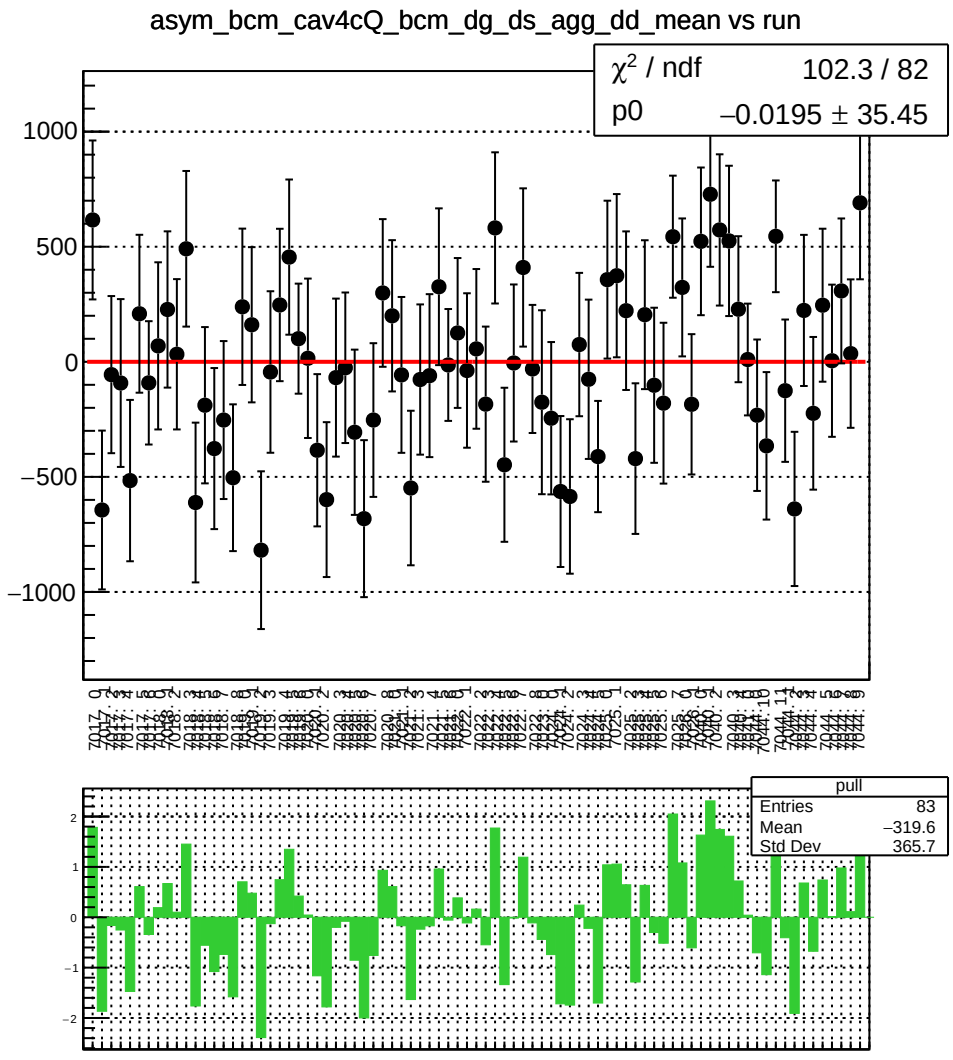

pull1D
Entries 83
Mean −0.01918
Std Dev 1.126

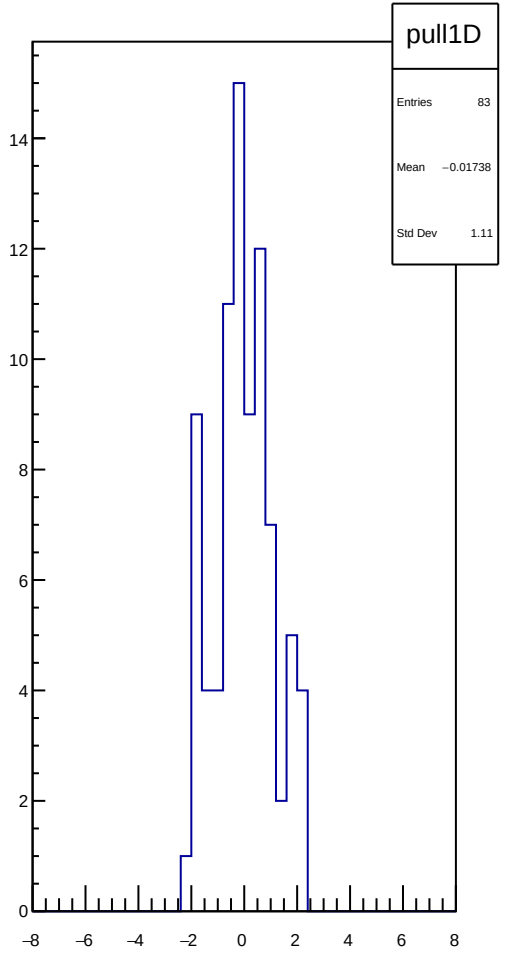

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1439 / 82
p0 35.32 ± 0.02795
38
37
36
35
34
33
32

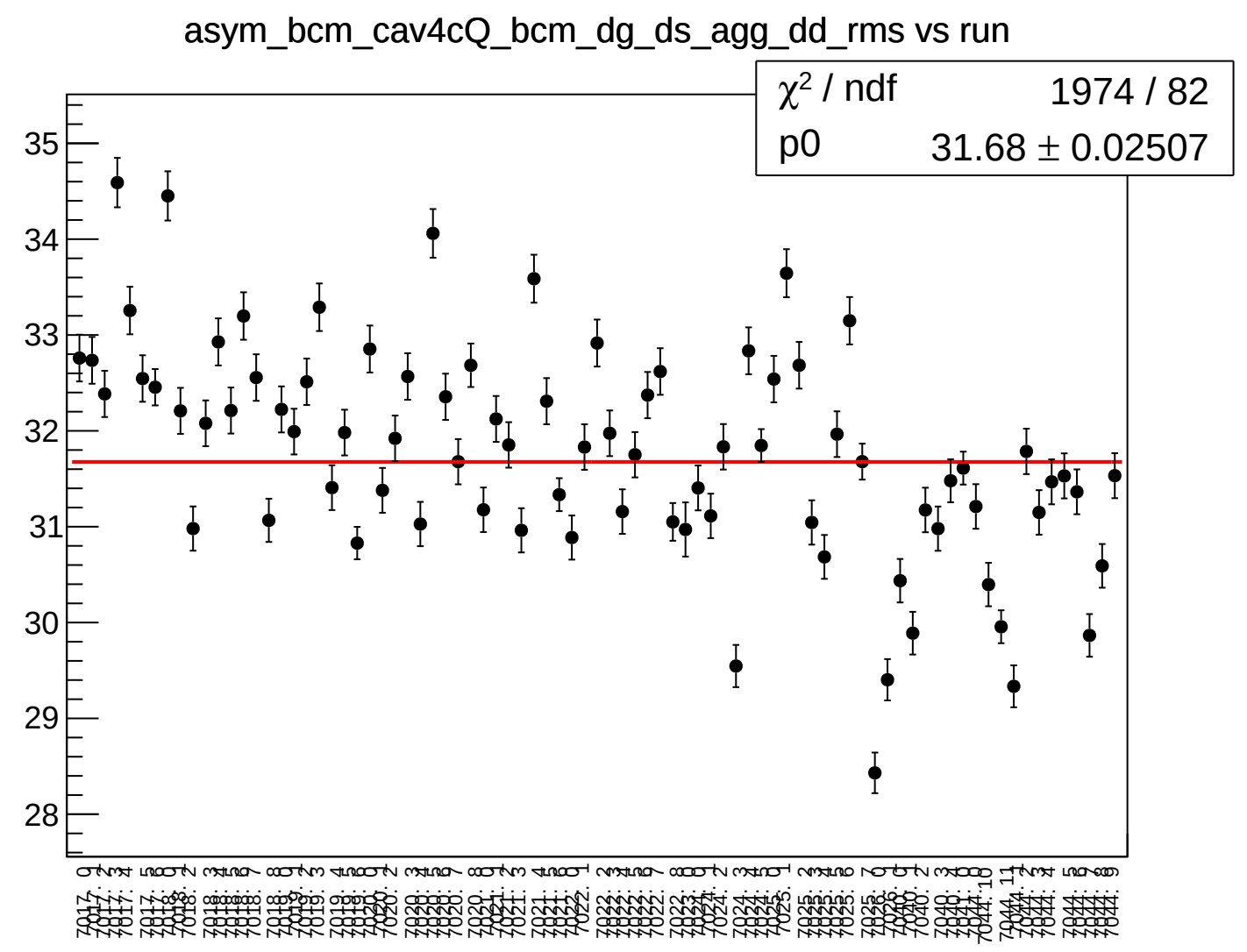

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 34.99 / 82
p0 −16.93 ± 178.7
pull
Entries 83
Mean 37.91
Std Dev 68.8

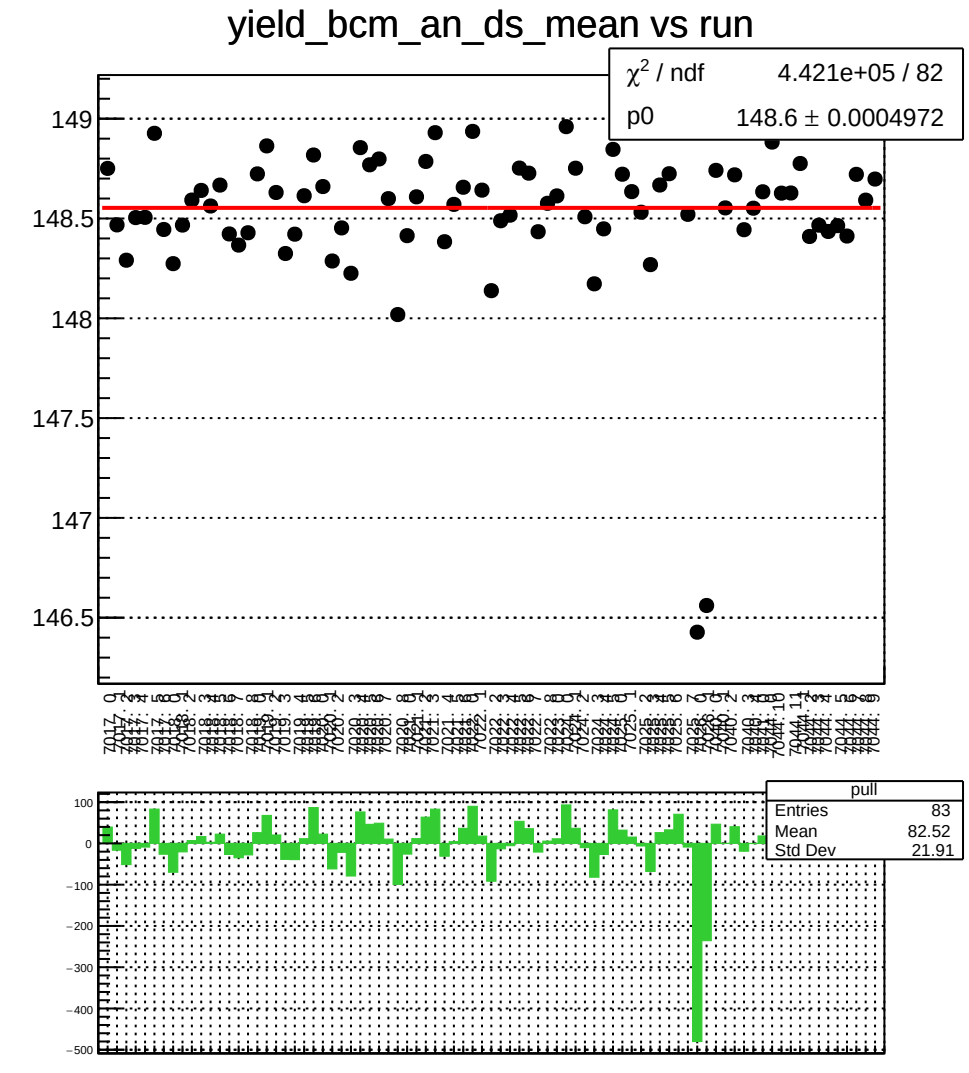

pull1D
Entries 83
Mean 0.01658
Std Dev 0.6491

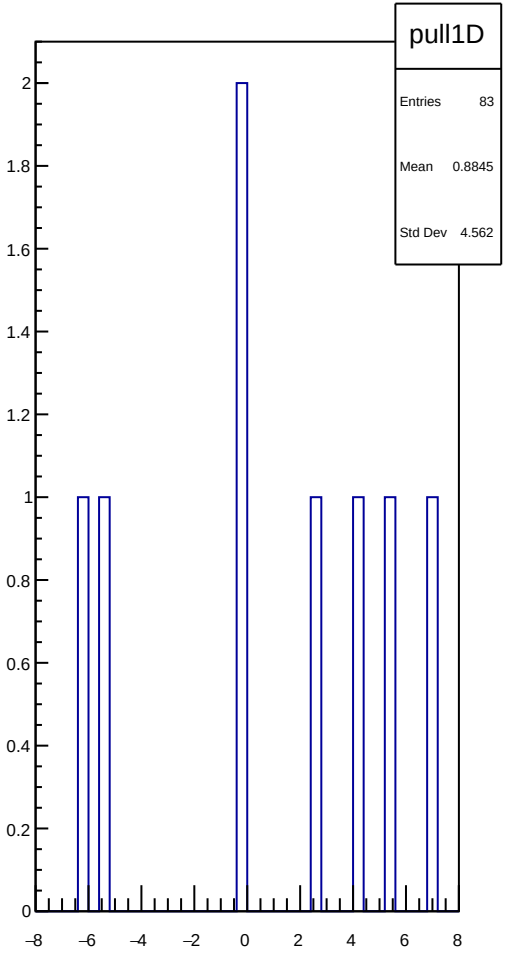

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 4.738e+04 / 82
p0 157.4 ± 0.1264
280
260
240
220
200
180
160
140
120

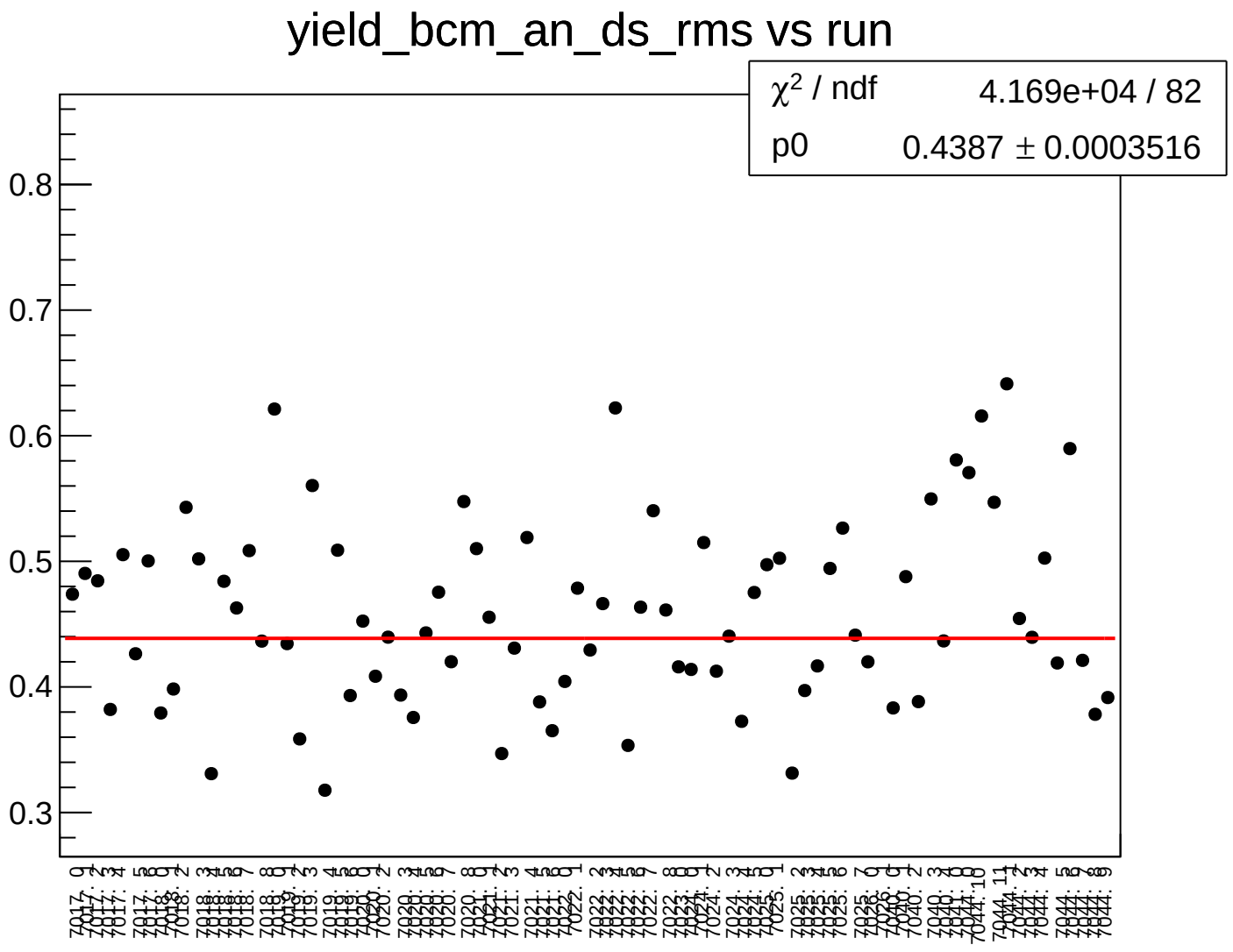

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 102.3 / 82
p0 −0.0195 ± 35.45
1000
500
0
−500
−1000
pull
Entries 83
Mean −319.6
Std Dev 365.7
2
1
0
−1
−2

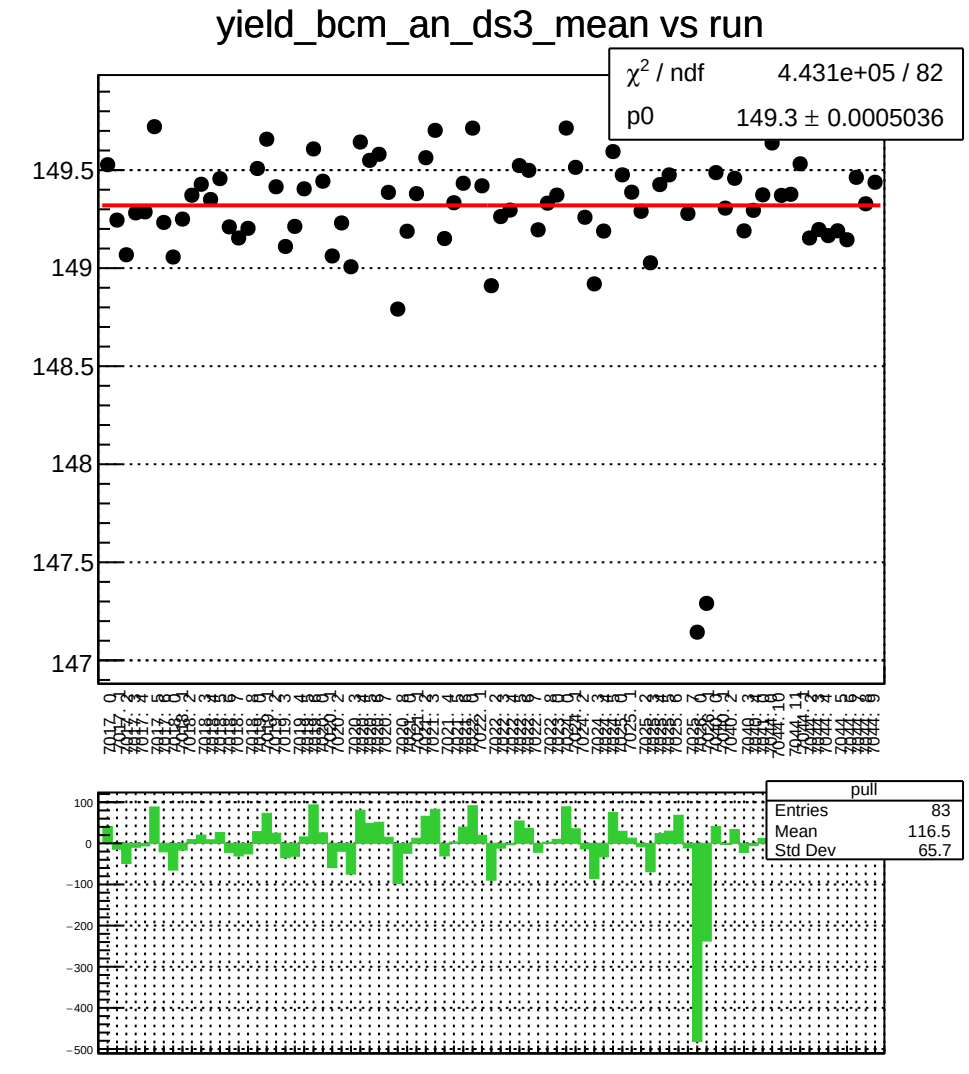

pull1D
Entries 83
Mean −0.01738
Std Dev 1.11
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

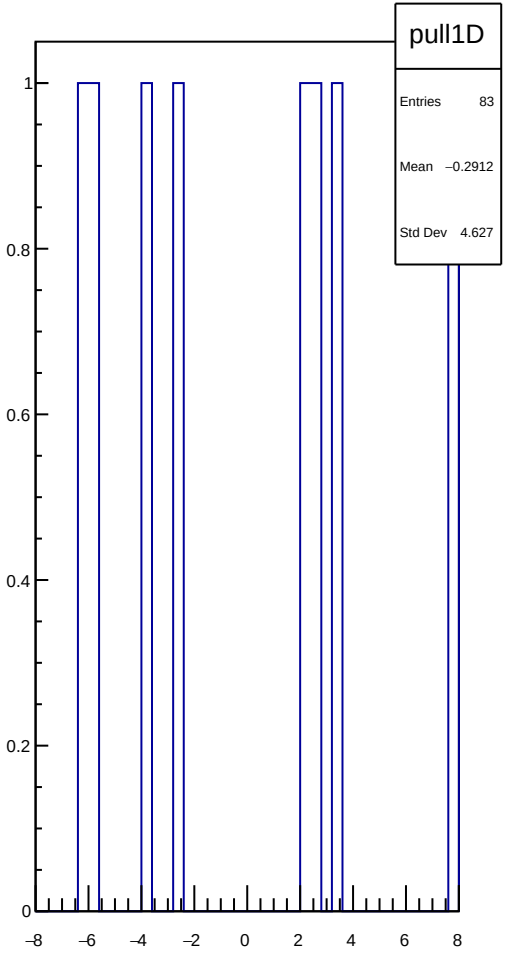

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1974 / 82
p0 31.68 ± 0.02507
35
34
33
32
31
30
29
28

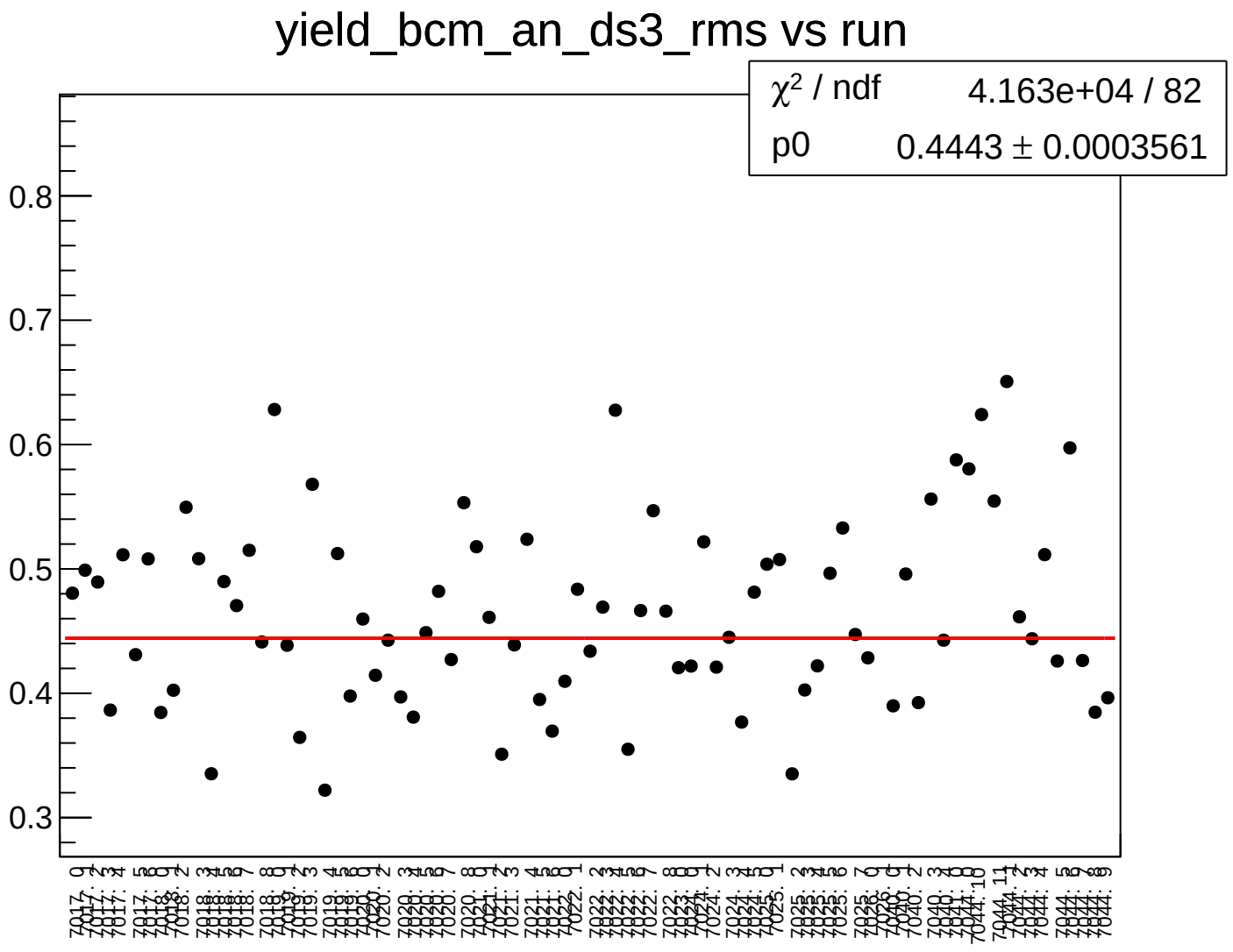

yield_bcm_an_ds_mean vs run
χ² / ndf 4.421e+05 / 82
p0 148.6 ± 0.0004972
149
148.5
148
147.5
147
146.5
pull
Entries 83
Mean 82.52
Std Dev 21.91
100
0
−100
−200
−300
−400
−500

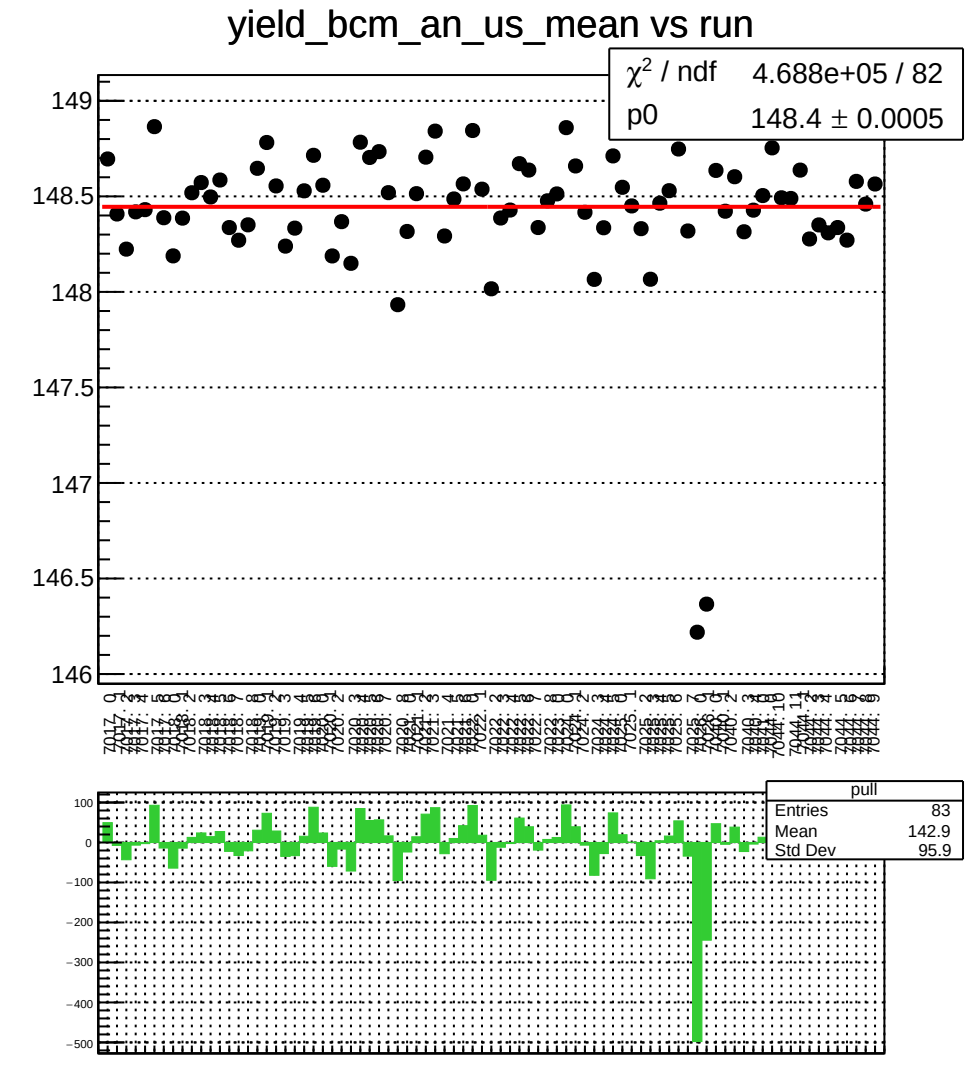

pull1D
Entries 83
Mean 0.8845
Std Dev 4.562
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

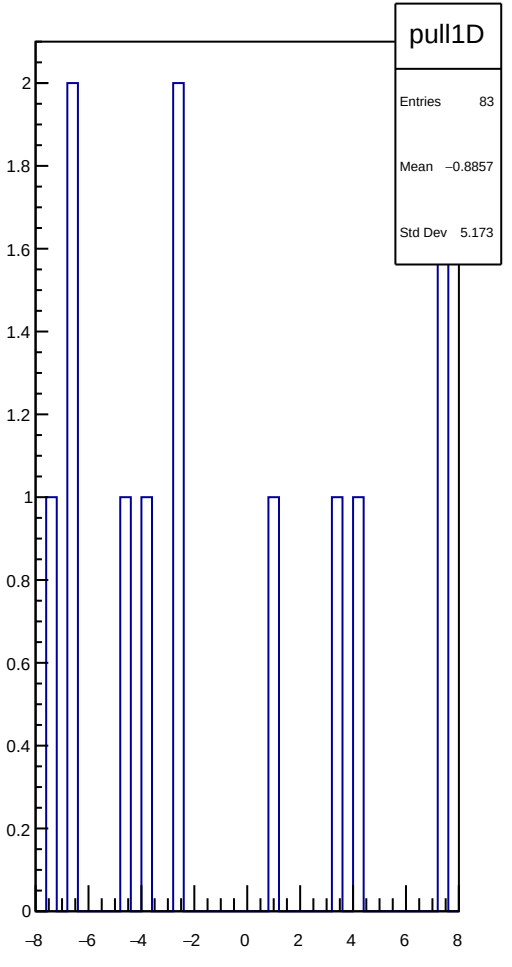

yield_bcm_an_ds_rms vs run
χ² / ndf 4.169e+04 / 82
p0 0.4387 ± 0.0003516
0.8
0.7
0.6
0.5
0.4
0.3

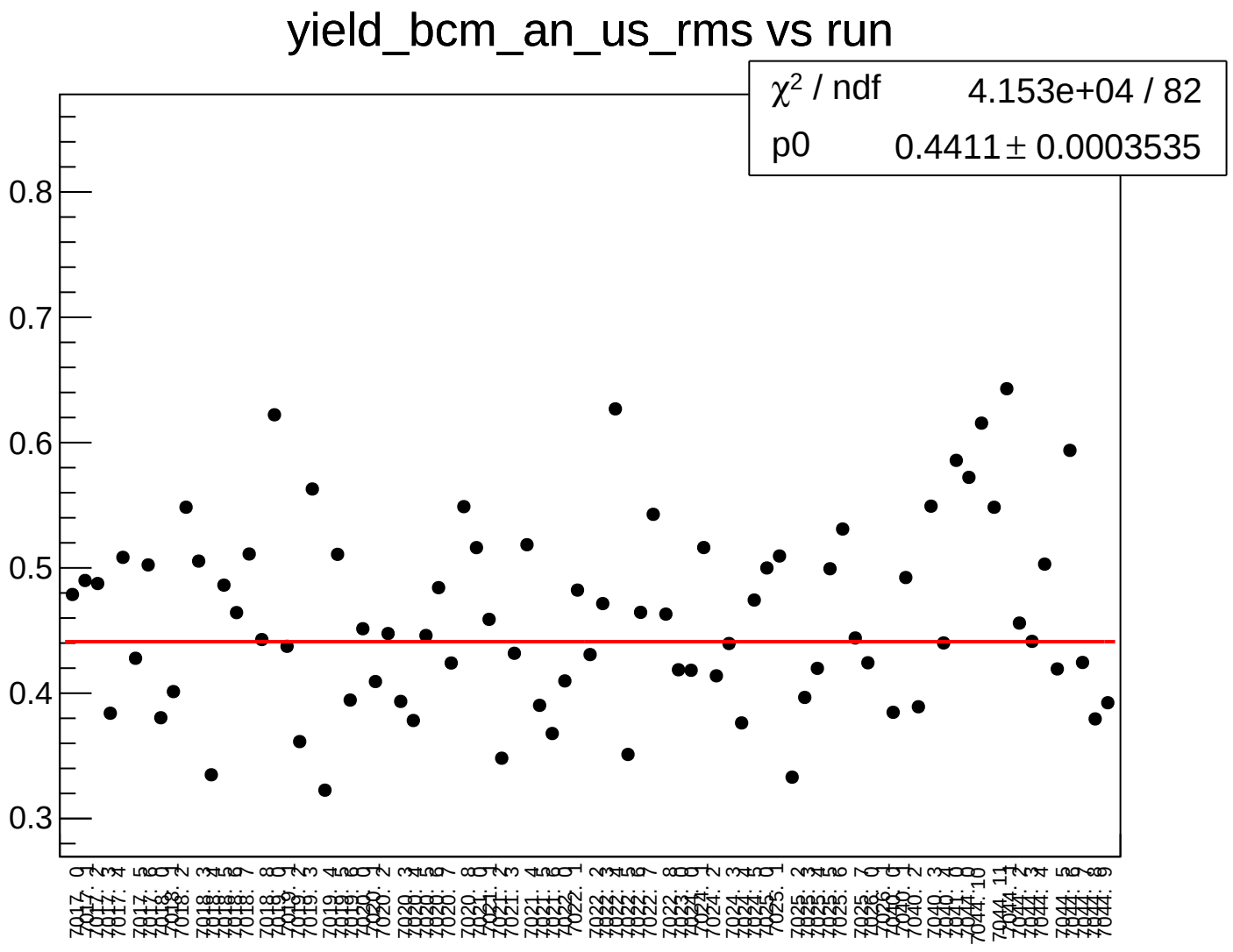

yield_bcm_an_ds3_mean vs run
χ² / ndf 4.431e+05 / 82
p0 149.3 ± 0.0005036
149.5
149
148.5
148
147.5
147
pull
Entries 83
Mean 116.5
Std Dev 65.7
100
0
−100
−200
−300
−400
−500

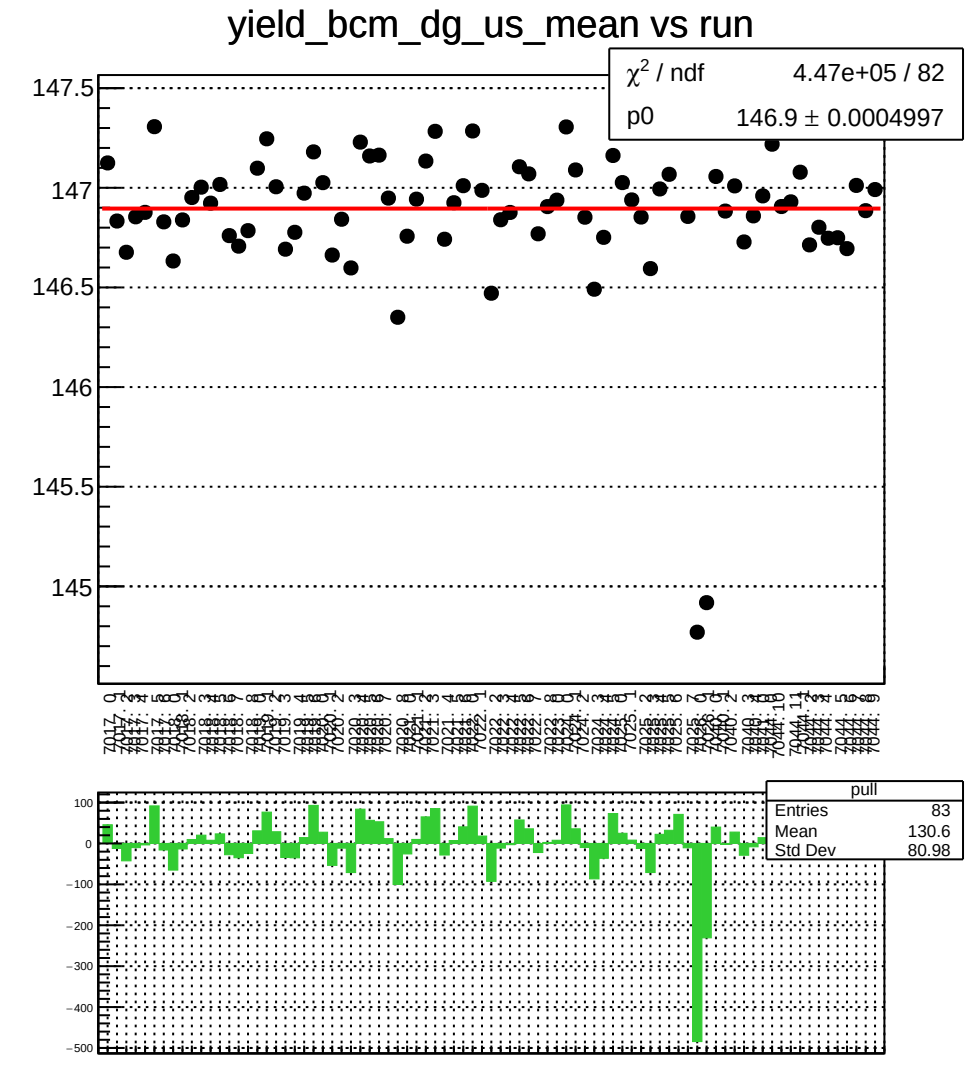

pull1D
Entries 83
Mean −0.2912
Std Dev 4.627
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

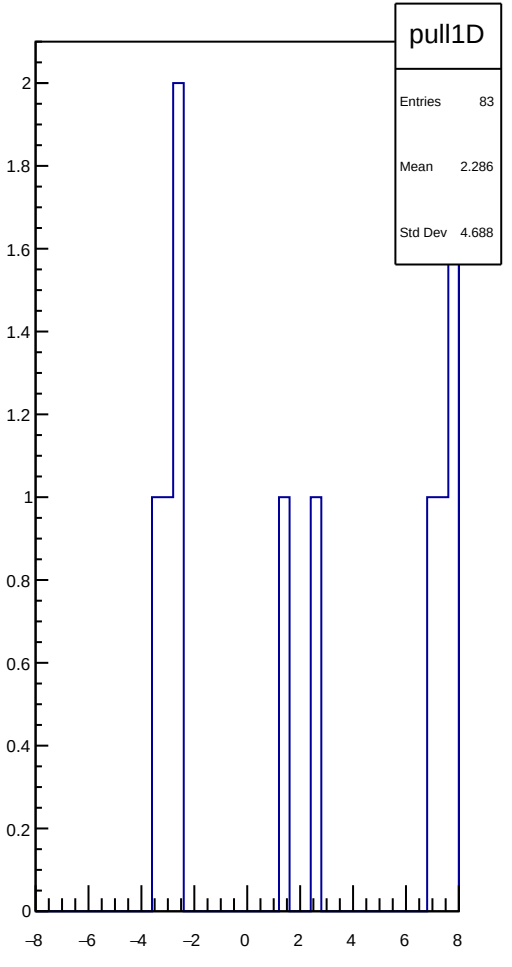

yield_bcm_an_ds3_rms vs run
χ² / ndf 4.163e+04 / 82
p0 0.4443 ± 0.0003561
0.8
0.7
0.6
0.5
0.4
0.3

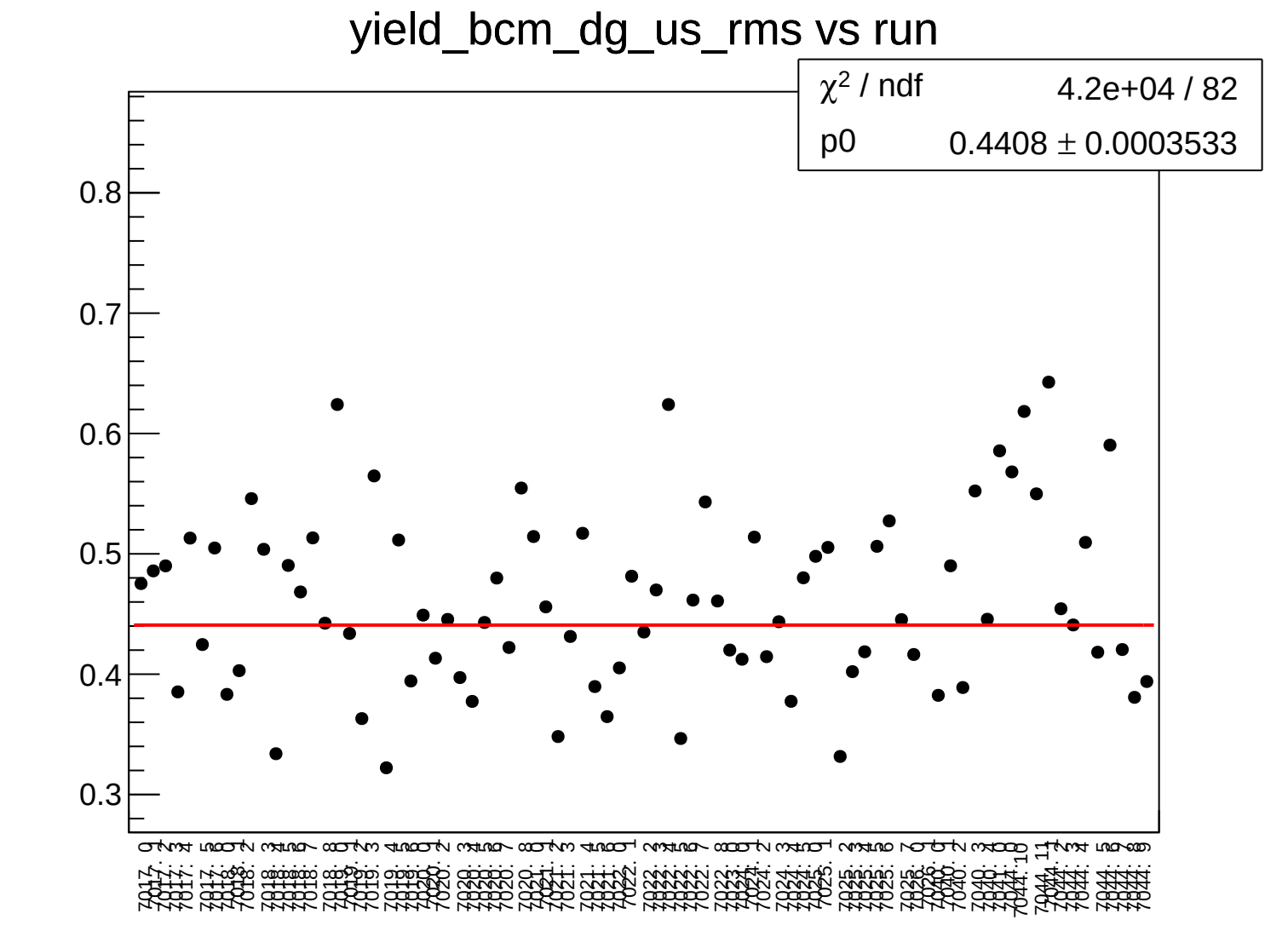

yield_bcm_an_us_mean vs run
χ² / ndf 4.688e+05 / 82
p0 148.4 ± 0.0005
149
148.5
148
147.5
147
146.5
146
pull
Entries 83
Mean 142.9
Std Dev 95.9
100
0
−100
−200
−300
−400
−500

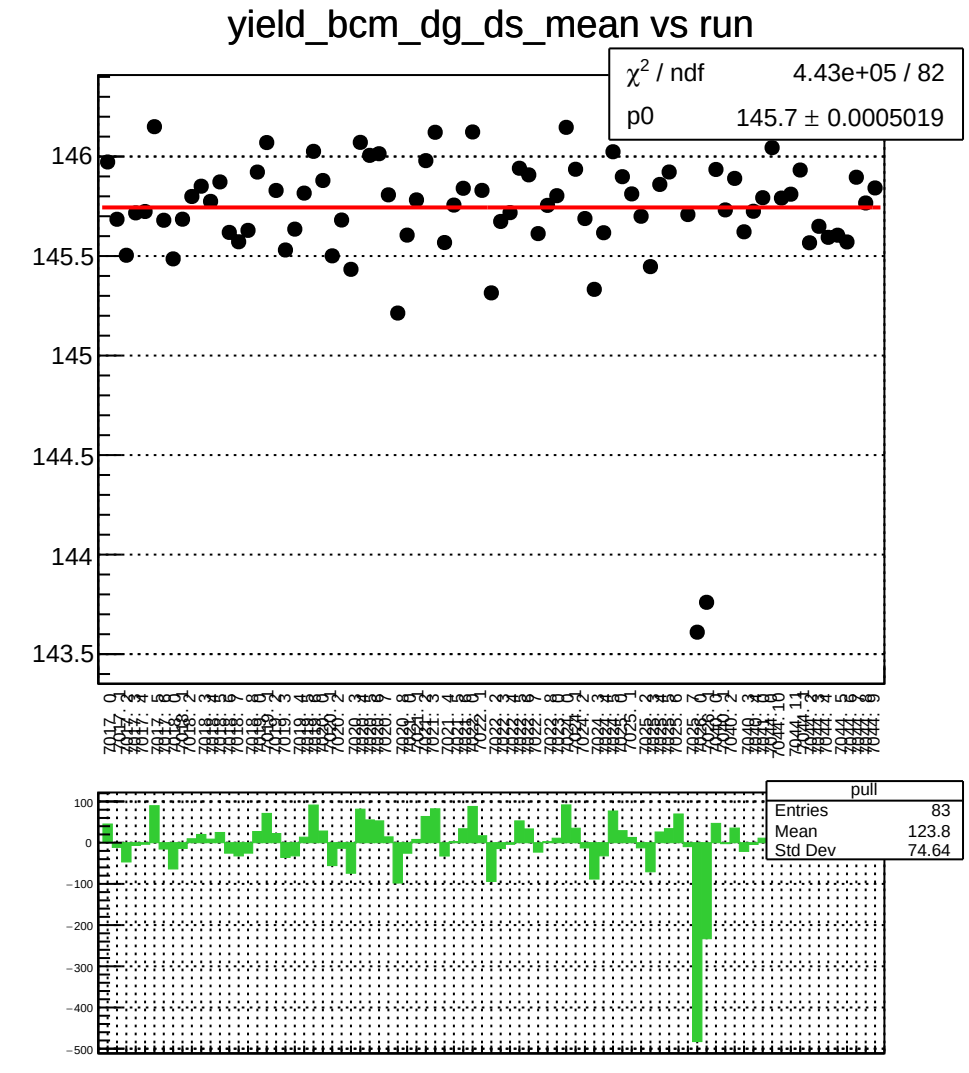

pull1D
Entries 83
Mean −0.8857
Std Dev 5.173
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

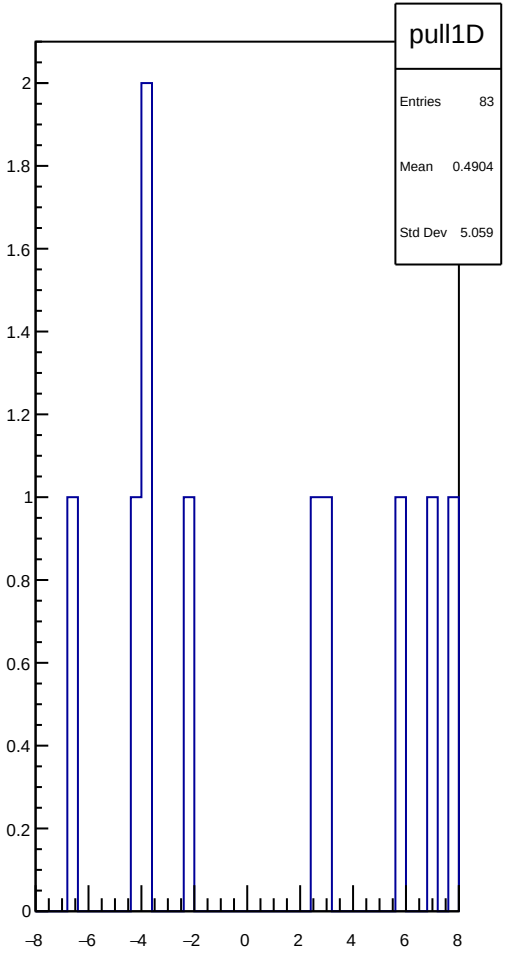

yield_bcm_an_us_rms vs run
χ² / ndf 4.153e+04 / 82
p0 0.4411 ± 0.0003535
0.8
0.7
0.6
0.5
0.4
0.3

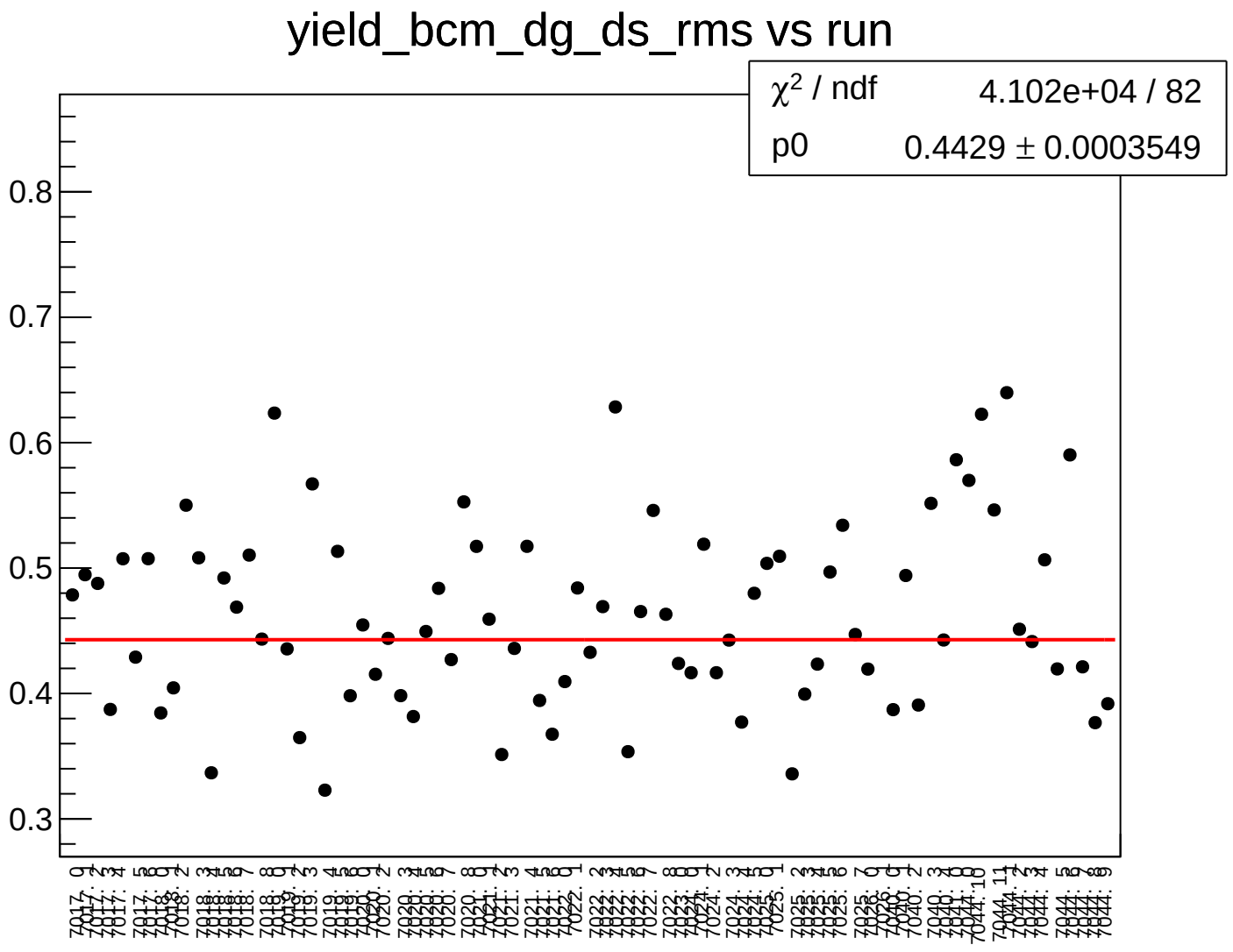

yield_bcm_dg_us_mean vs run
χ² / ndf 4.47e+05 / 82
p0 146.9 ± 0.0004997
147.5
147
146.5
146
145.5
145
pull
Entries 83
Mean 130.6
Std Dev 80.98
100
0
−100
−200
−300
−400
−500

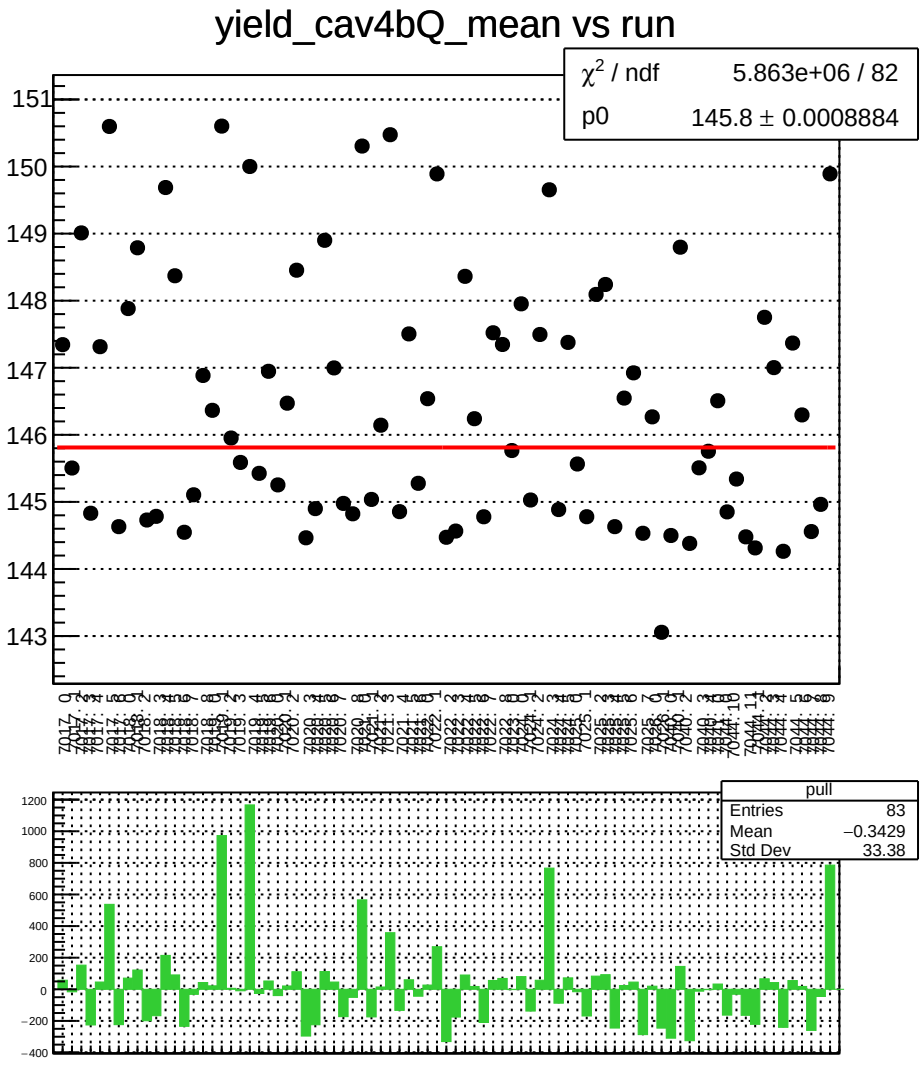

pull1D
Entries 83
Mean 2.286
Std Dev 4.688
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

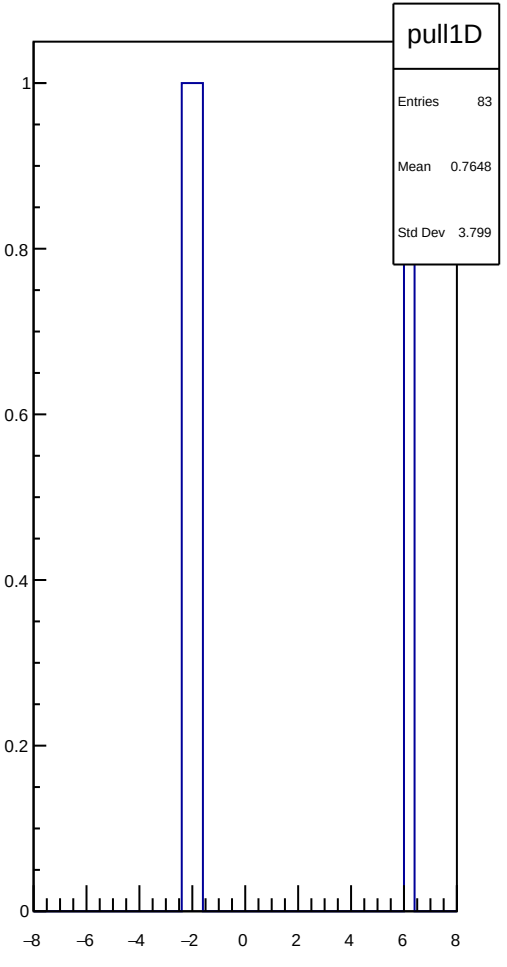

yield_bcm_dg_us_rms vs run
χ² / ndf 4.2e+04 / 82
p0 0.4408 ± 0.0003533
0.8
0.7
0.6
0.5
0.4
0.3

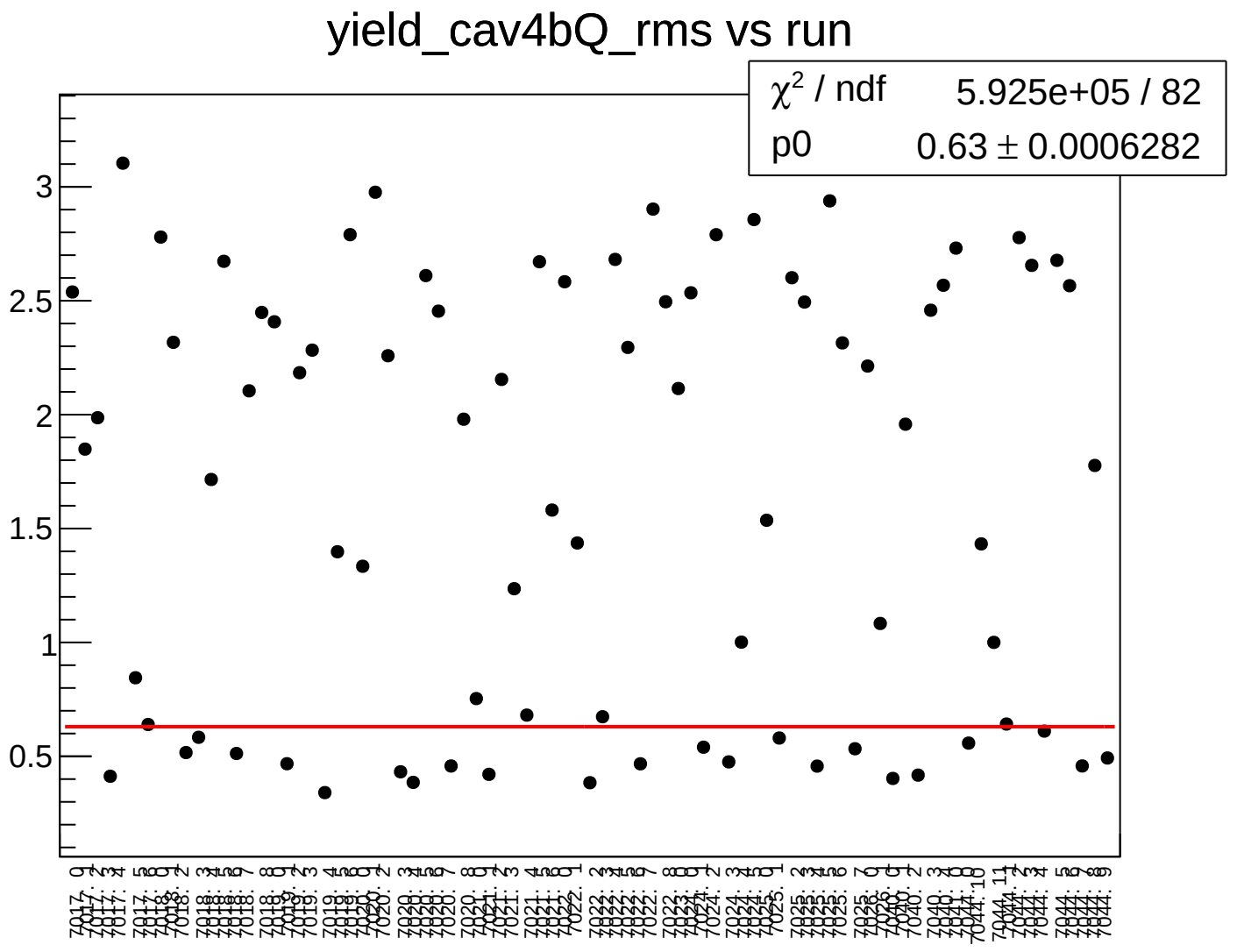

yield_bcm_dg_ds_mean vs run
χ² / ndf 4.43e+05 / 82
p0 145.7 ± 0.0005019
146
145.5
145
144.5
144
143.5
pull
Entries 83
Mean 123.8
Std Dev 74.64
100
0
−100
−200
−300
−400
−500

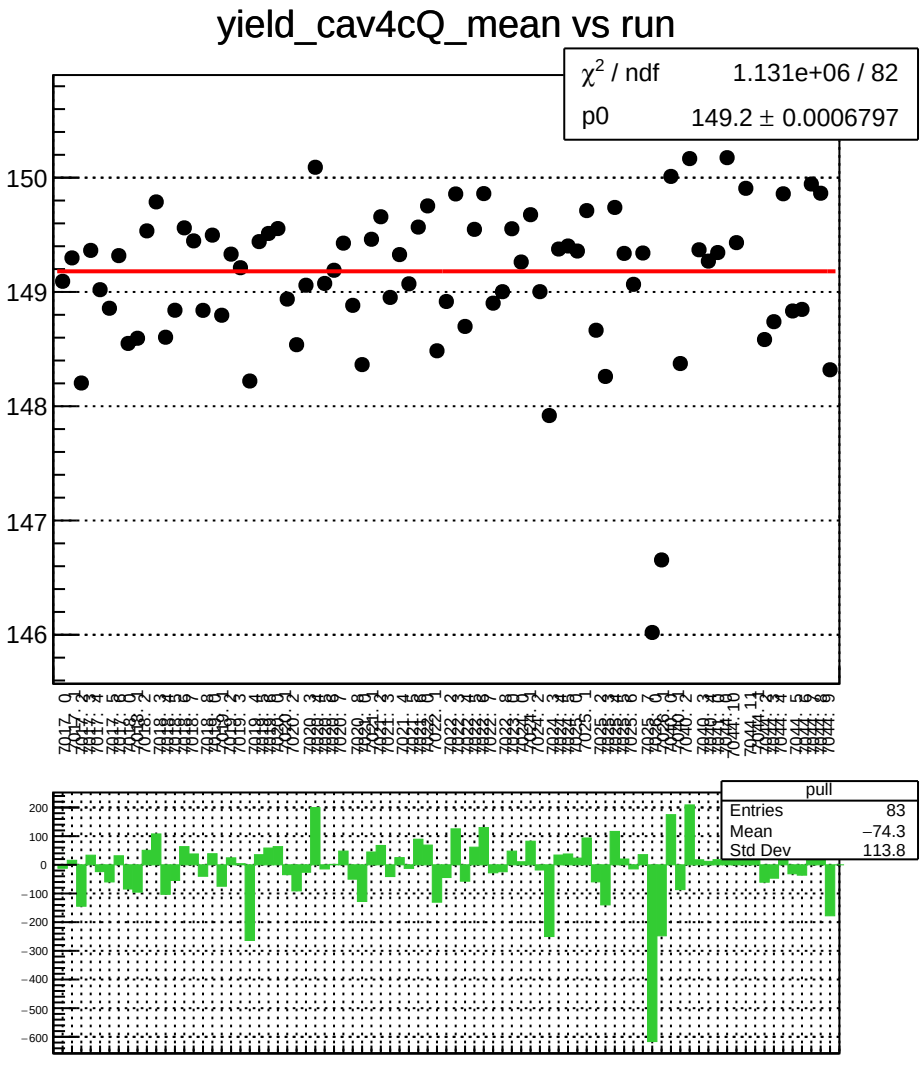

pull1D
Entries 83
Mean 0.4904
Std Dev 5.059
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

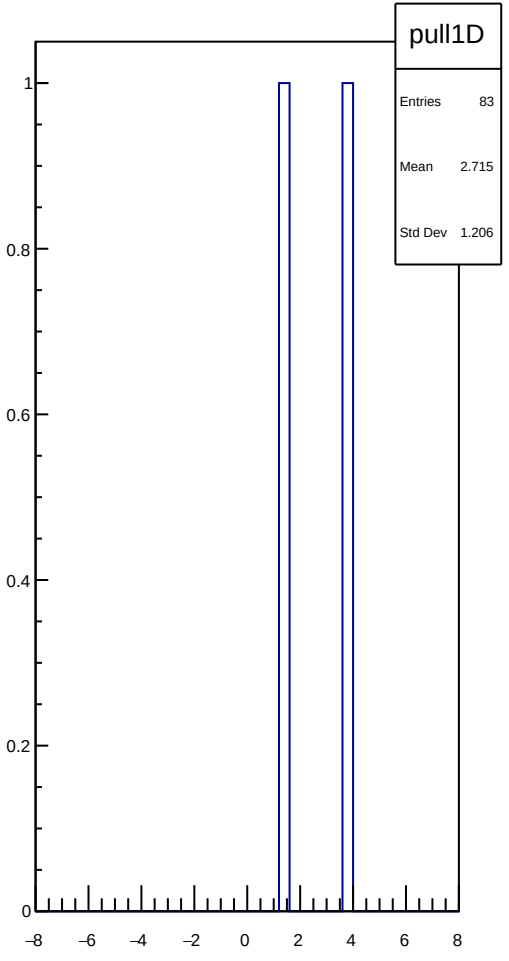

yield_bcm_dg_ds_rms vs run
χ² / ndf 4.102e+04 / 82
p0 0.4429 ± 0.0003549
0.8
0.7
0.6
0.5
0.4
0.3

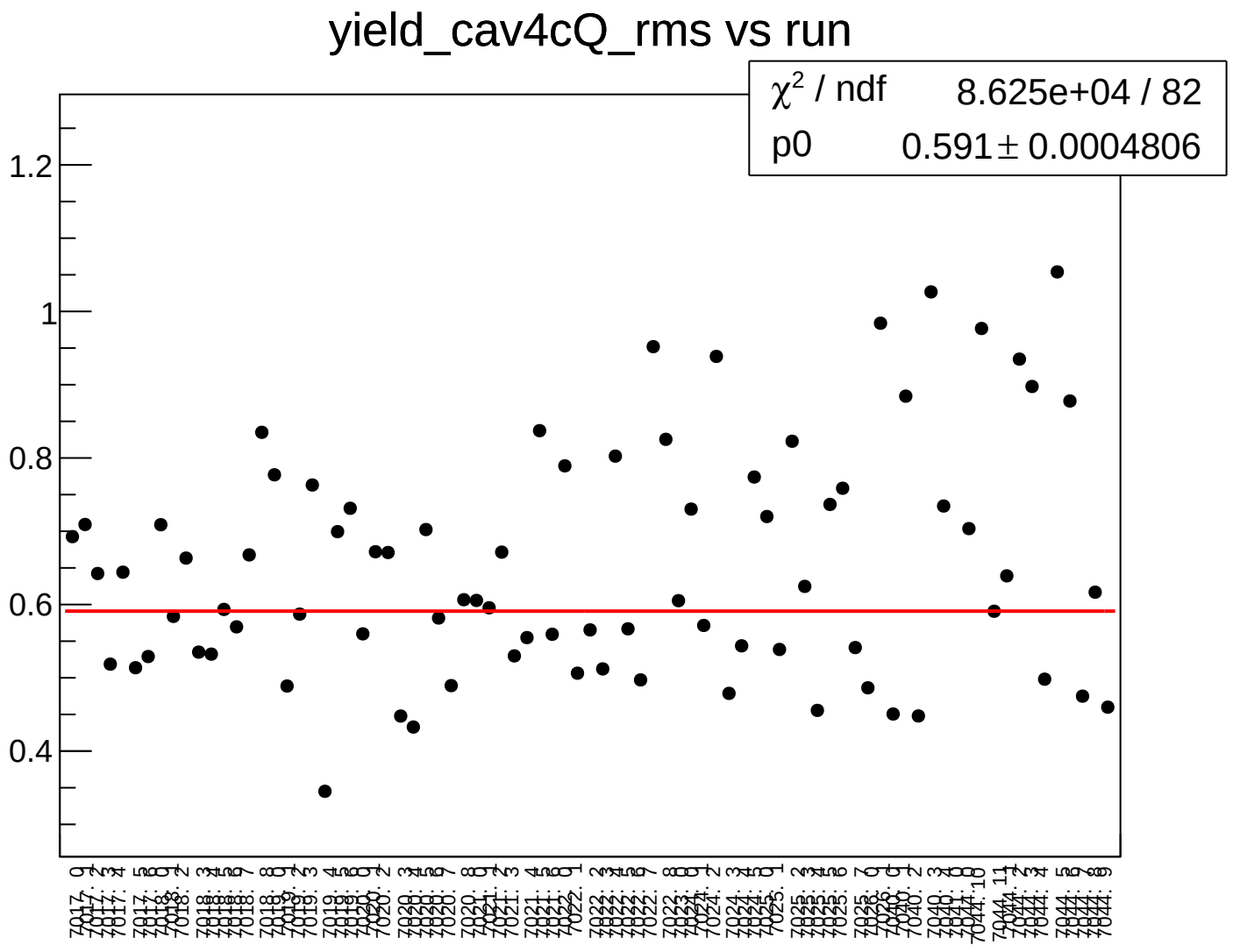

yield_cav4bQ_mean vs run
χ² / ndf 5.863e+06 / 82
p0 145.8 ± 0.0008884
151
150
149
148
147
146
145
144
143
pull
Entries 83
Mean −0.3429
Std Dev 33.38
1200
1000
800
600
400
200
0
−200
−400

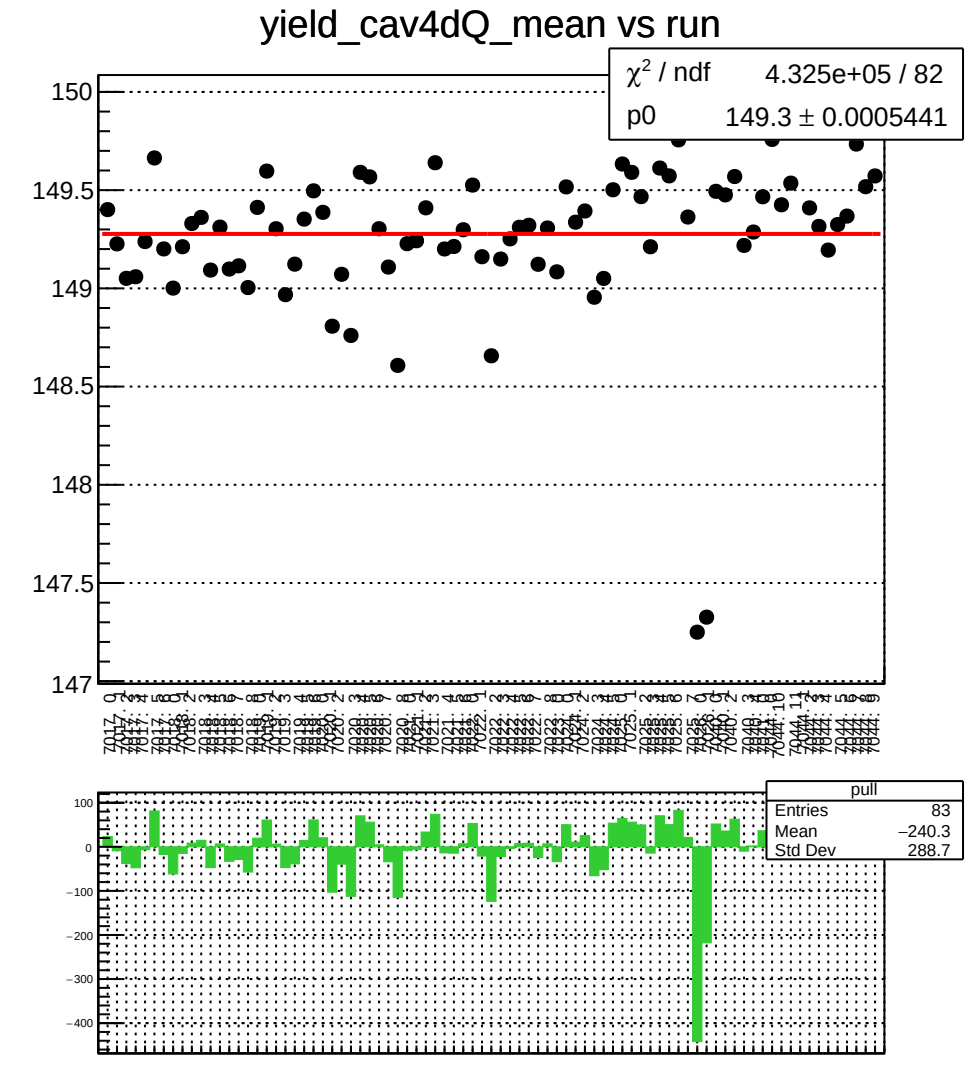

pull1D
Entries 83
Mean 0.7648
Std Dev 3.799
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

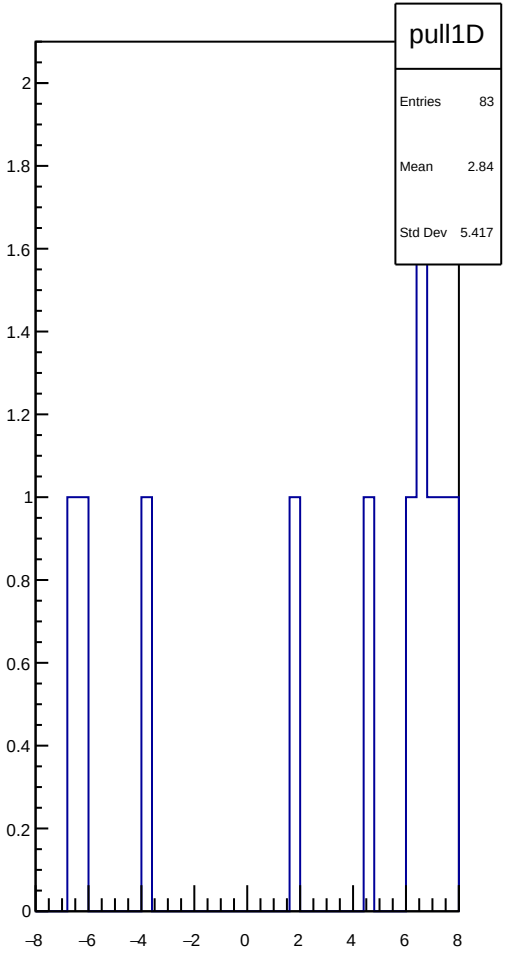

yield_cav4bQ_rms vs run
χ^2 / ndf 5.925e+05 / 82
p0 0.63 ± 0.0006282
3
2.5
2
1.5
1
0.5

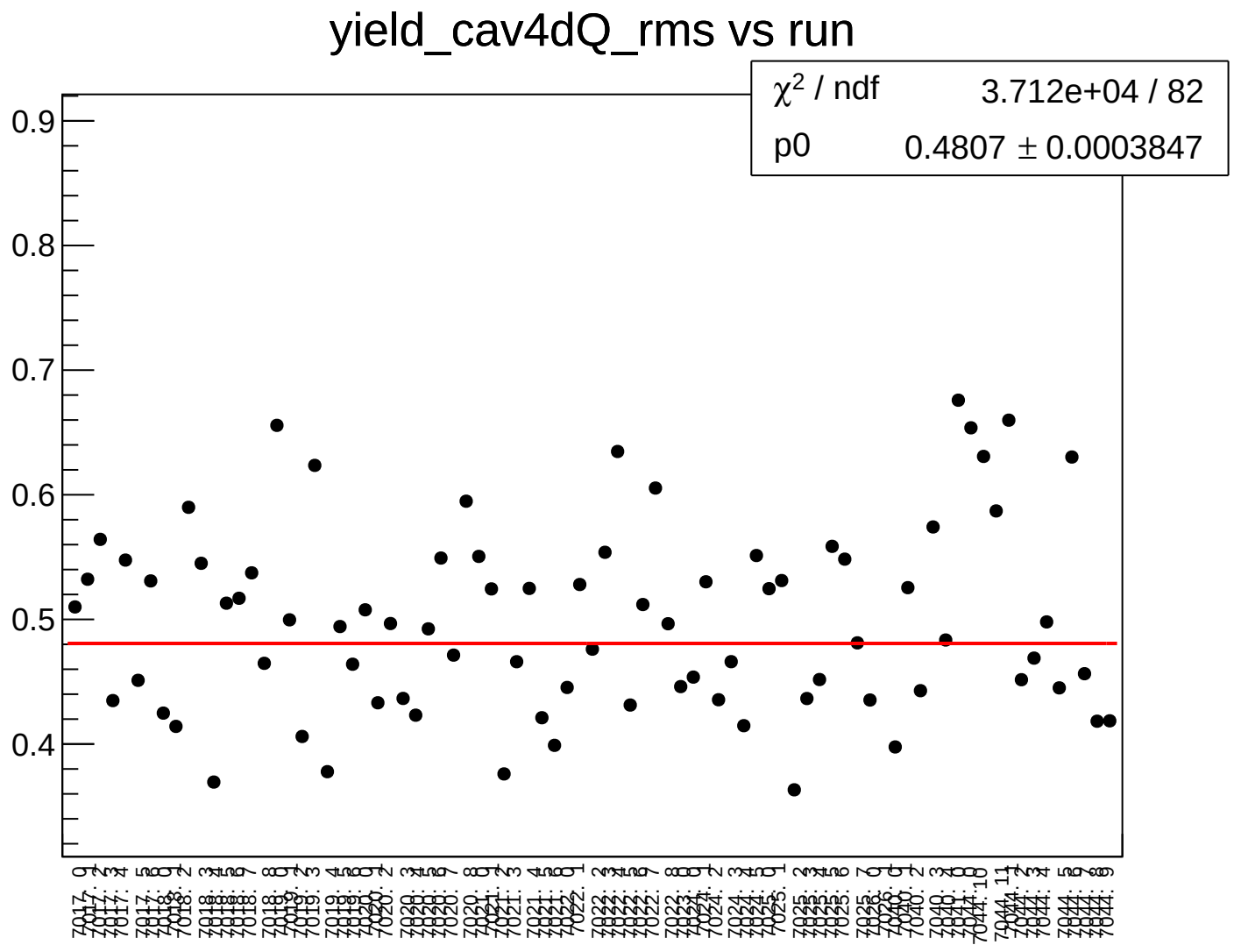

yield_cav4cQ_mean vs run
χ² / ndf 1.131e+06 / 82
p0 149.2 ± 0.0006797
150
149
148
147
146
pull
Entries 83
Mean −74.3
Std Dev 113.8
200
100
0
−100
−200
−300
−400
−500
−600

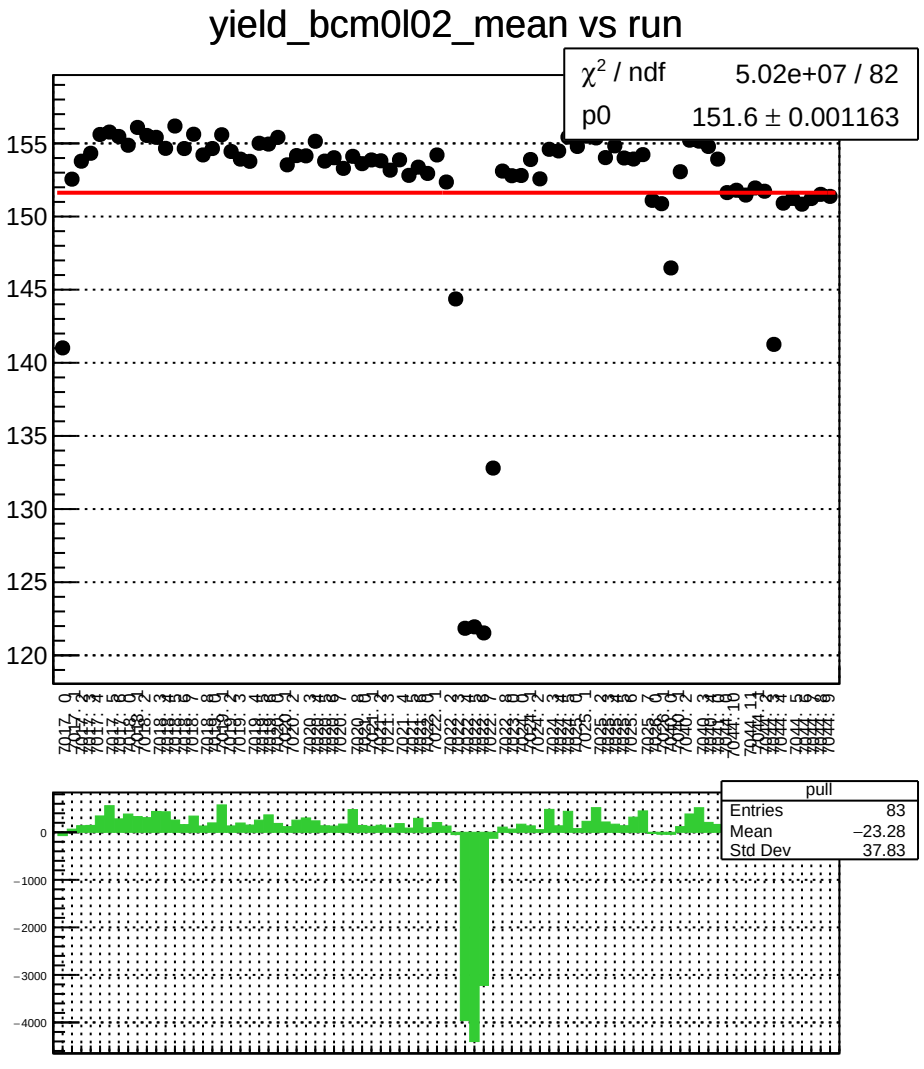

pull1D
Entries 83
Mean 2.715
Std Dev 1.206
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

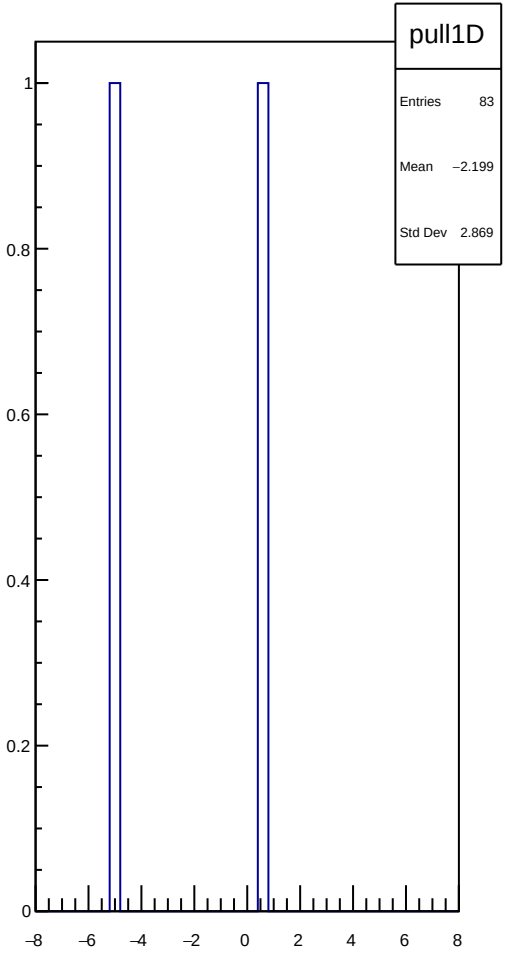

yield_cav4cQ_rms vs run
χ² / ndf 8.625e+04 / 82
p0 0.591 ± 0.0004806
1.2
1
0.8
0.6
0.4

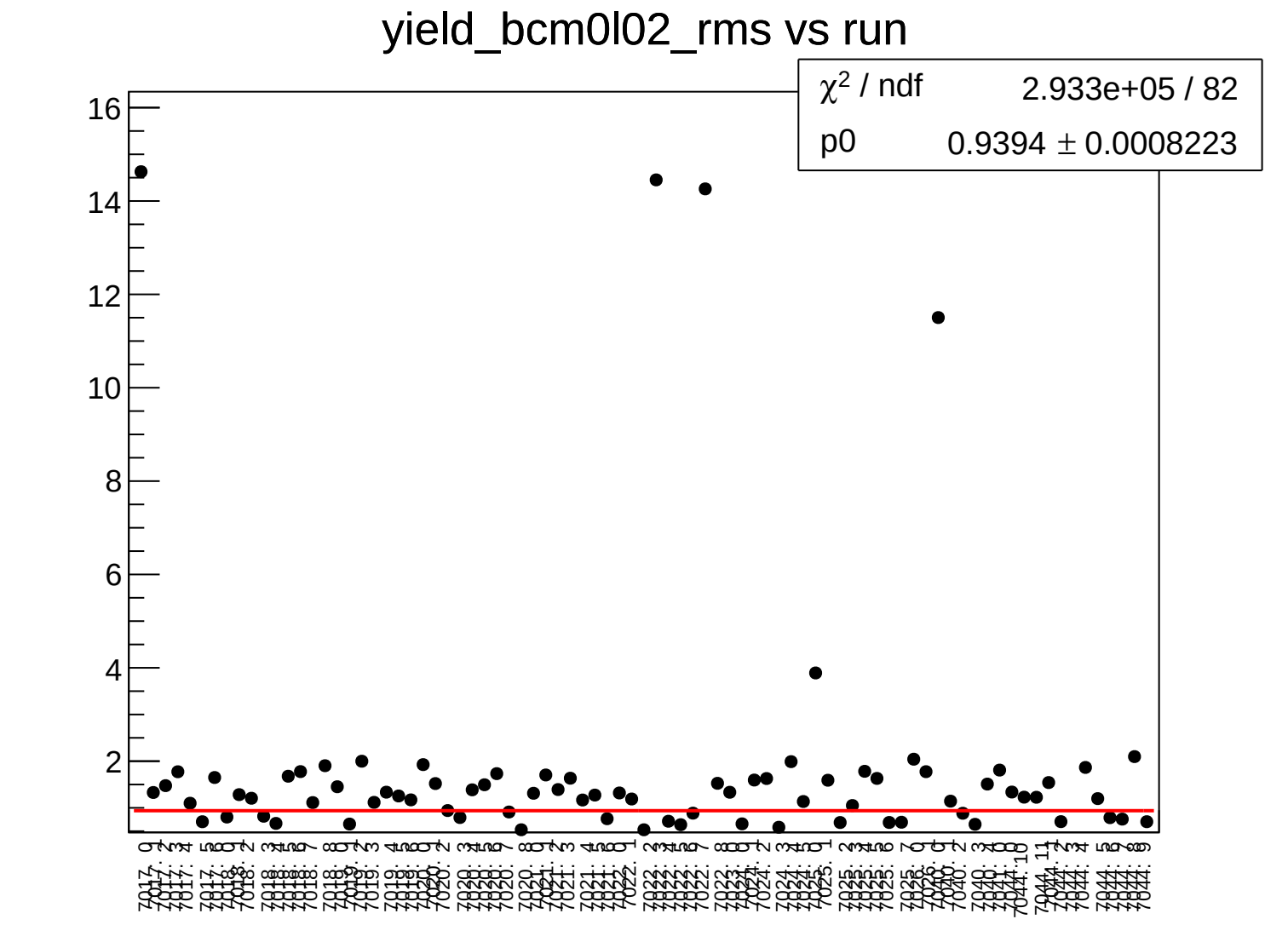

yield_cav4dQ_mean vs run
χ² / ndf 4.325e+05 / 82
p0 149.3 ± 0.0005441
150
149.5
149
148.5
148
147.5
147
pull
Entries 83
Mean −240.3
Std Dev 288.7
100
0
−100
−200
−300
−400

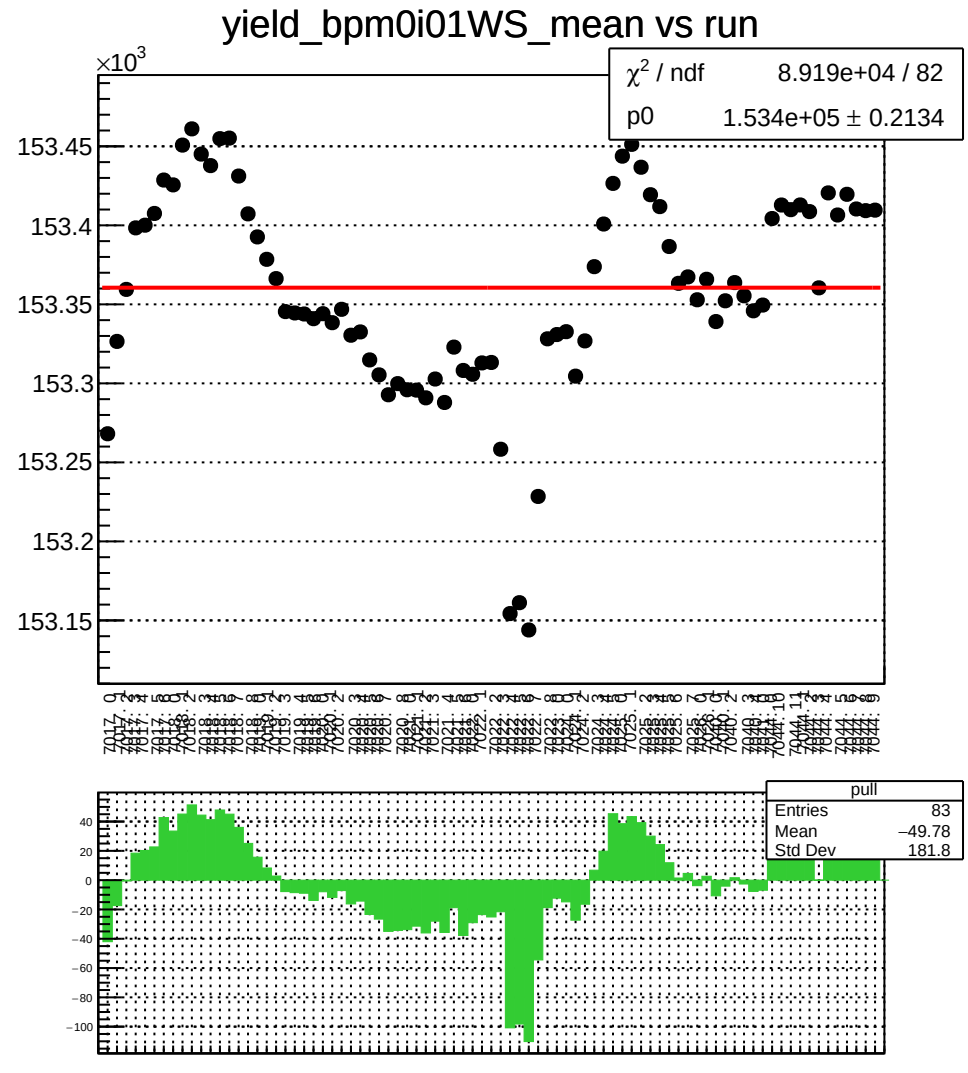

pull1D
Entries 83
Mean 2.84
Std Dev 5.417
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

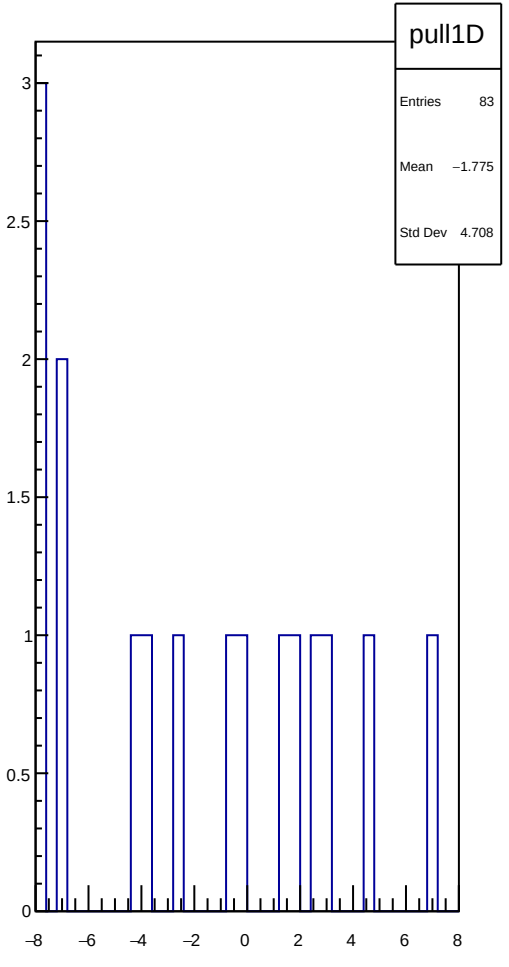

yield_cav4dQ_rms vs run
χ² / ndf 3.712e+04 / 82
p0 0.4807 ± 0.0003847
0.9
0.8
0.7
0.6
0.5
0.4

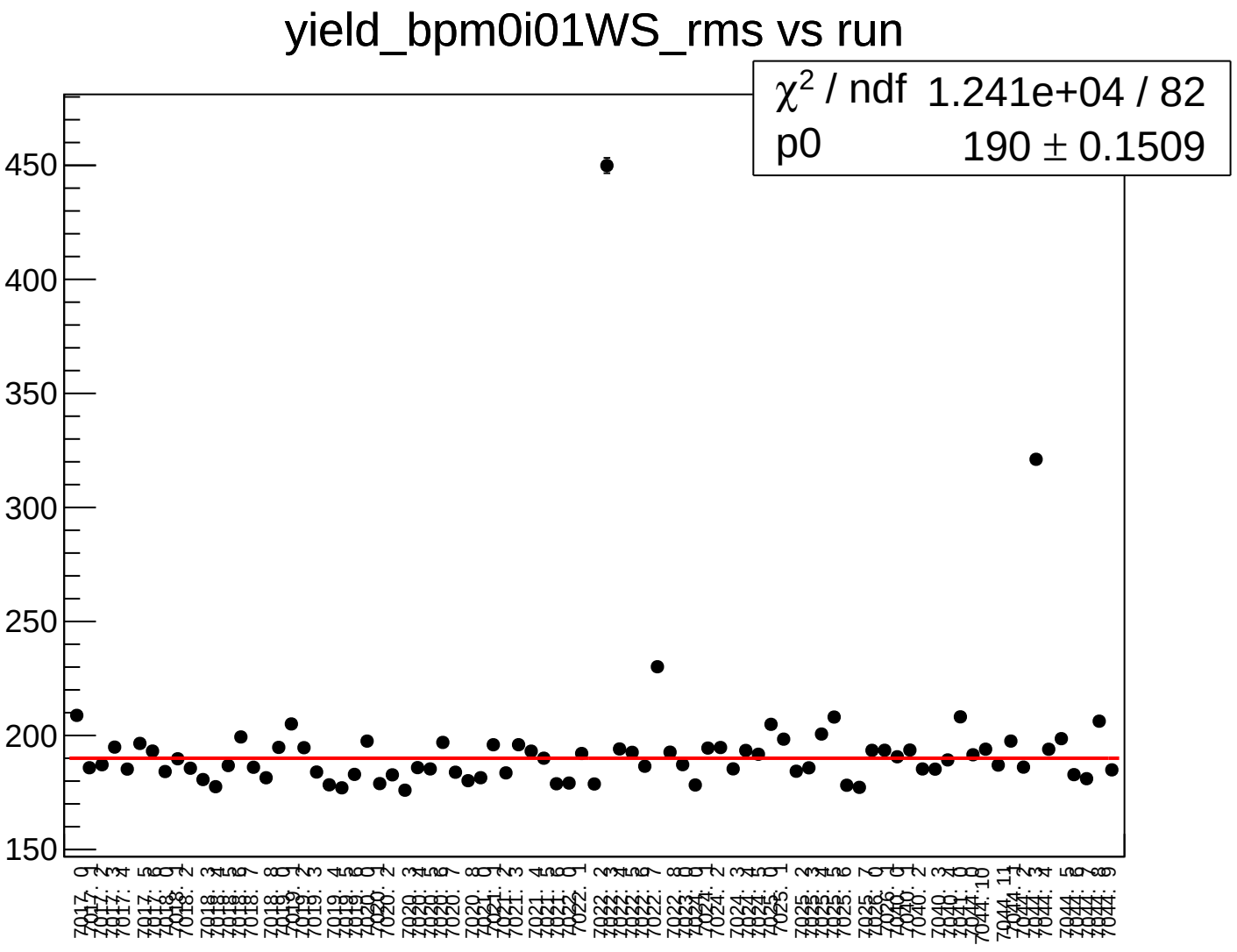

yield_bcm0l02_mean vs run
χ² / ndf 5.02e+07 / 82
p0 151.6 ± 0.001163
155
150
145
140
135
130
125
120
pull
Entries 83
Mean −23.28
Std Dev 37.83
0
−1000
−2000
−3000
−4000

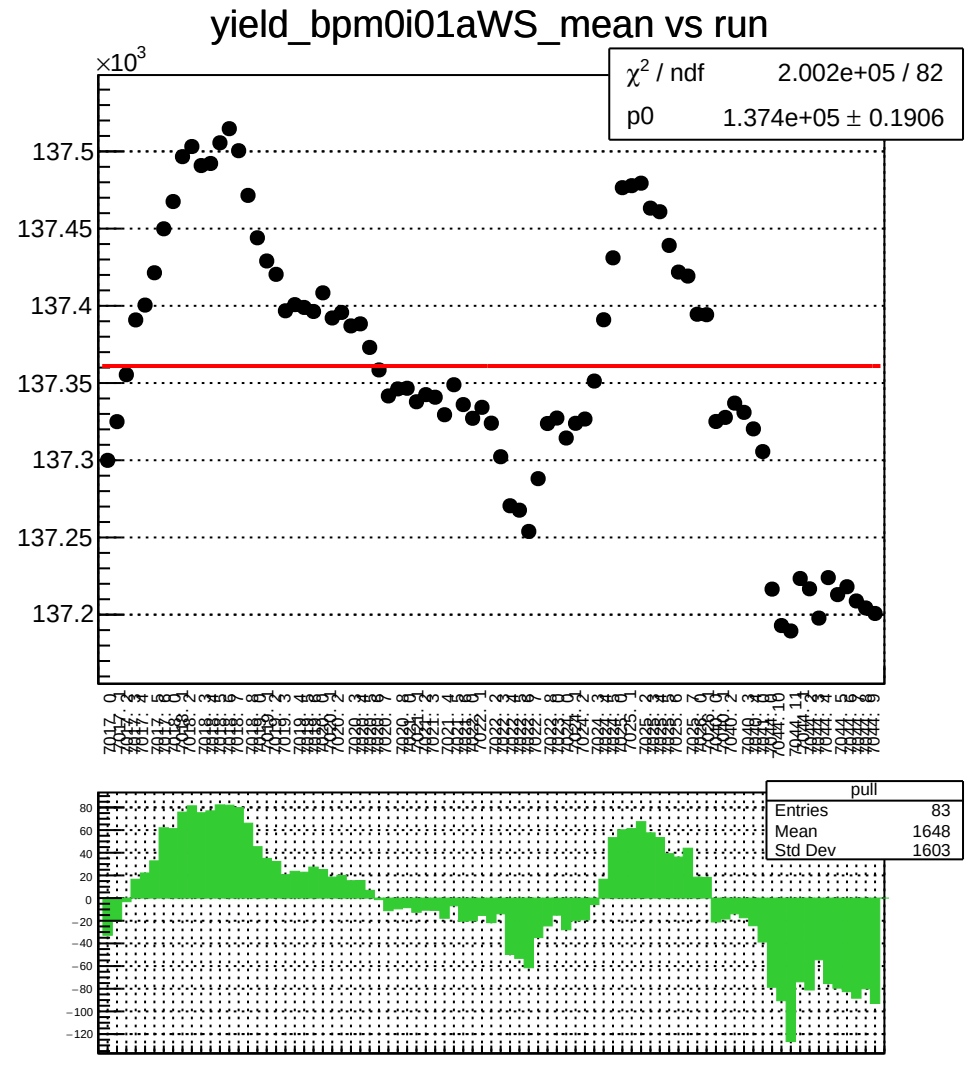

pull1D
Entries 83
Mean −2.199
Std Dev 2.869
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

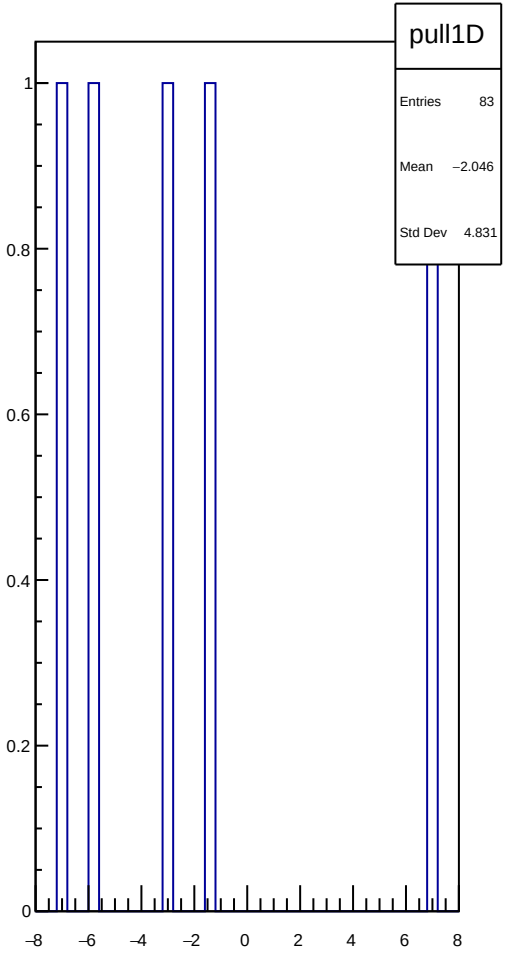

yield_bcm0l02_rms vs run
χ² / ndf 2.933e+05 / 82
p0 0.9394 ± 0.0008223
16
14
12
10
8
6
4
2

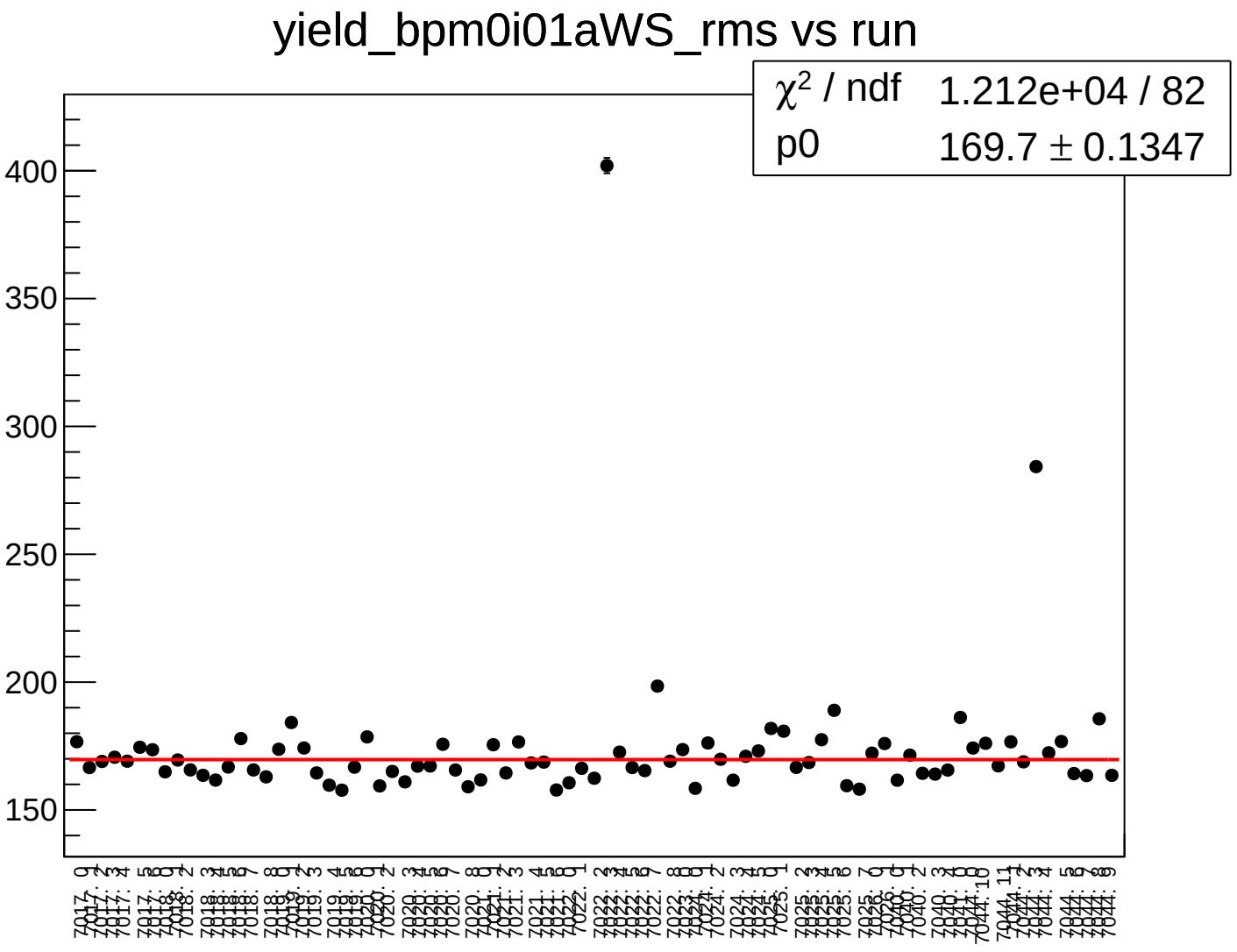

yield_bpm0i01WS_mean vs run
×10^3
χ² / ndf 8.919e+04 / 82
p0 1.534e+05 ± 0.2134
153.45
153.4
153.35
153.3
153.25
153.2
153.15
pull
Entries 83
Mean −49.78
Std Dev 181.8
40
20
0
−20
−40
−60
−80
−100

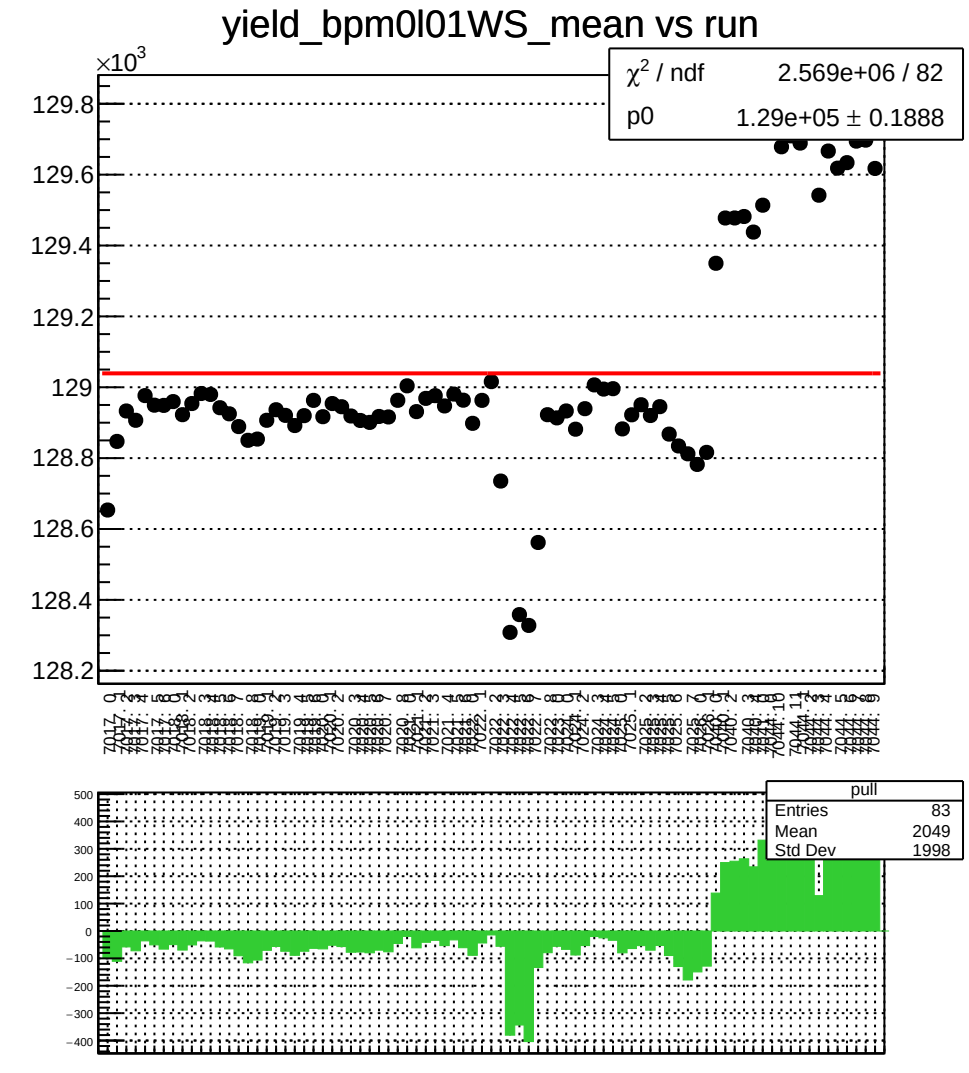

pull1D
Entries 83
Mean −1.775
Std Dev 4.708
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

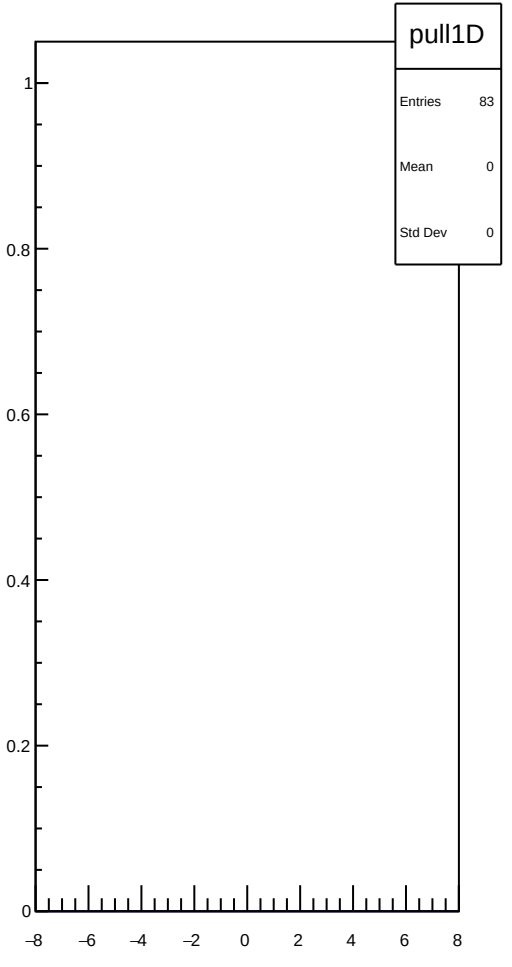

yield_bpm0i01WS_rms vs run
χ^2 / ndf 1.241e+04 / 82
p0 190 ± 0.1509
450
400
350
300
250
200
150

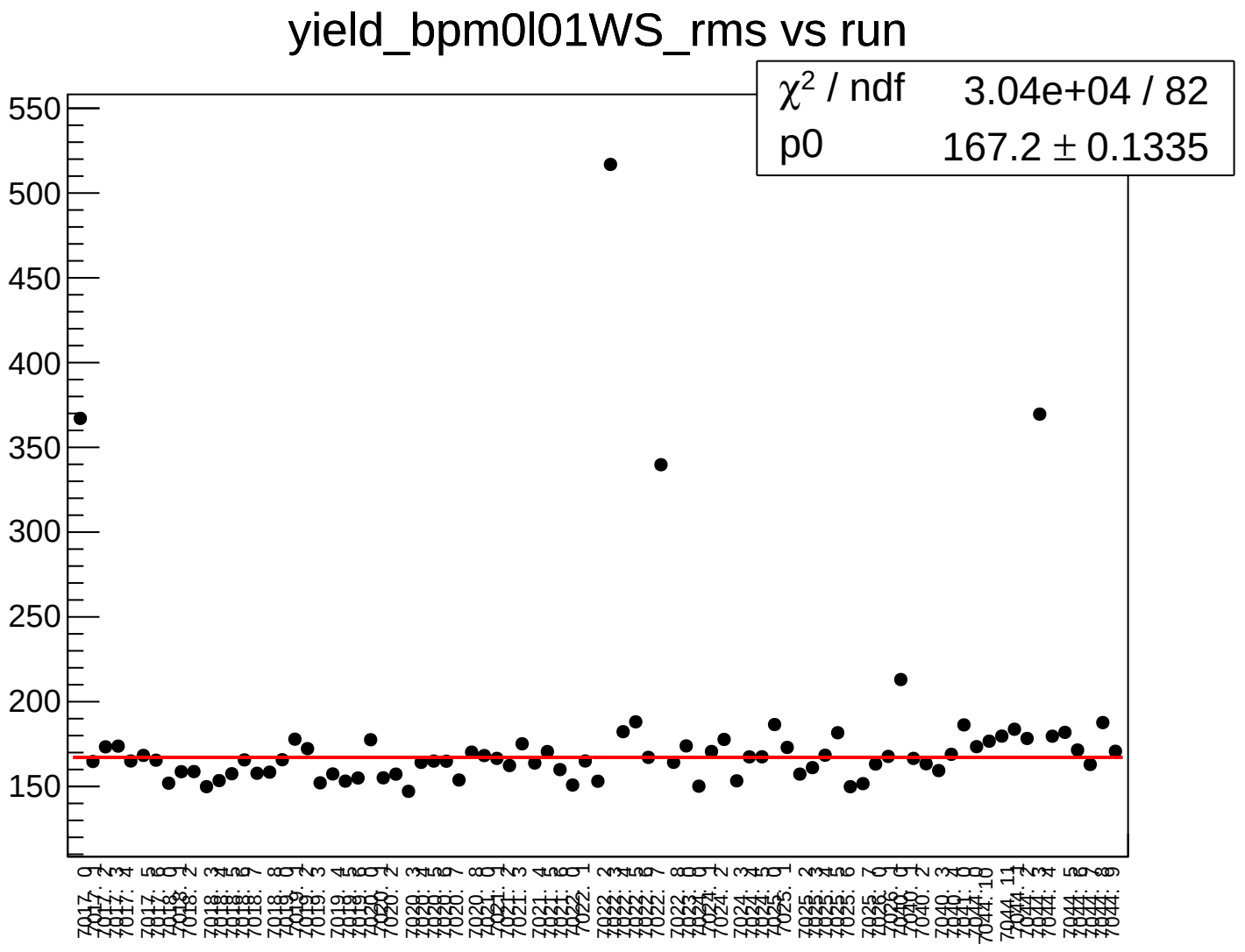

yield_bpm0i01aWS_mean vs run
×10^3
χ² / ndf 2.002e+05 / 82
p0 1.374e+05 ± 0.1906
137.5
137.45
137.4
137.35
137.3
137.25
137.2
pull
Entries 83
Mean 1648
Std Dev 1603
80
60
40
20
0
−20
−40
−60
−80
−100
−120

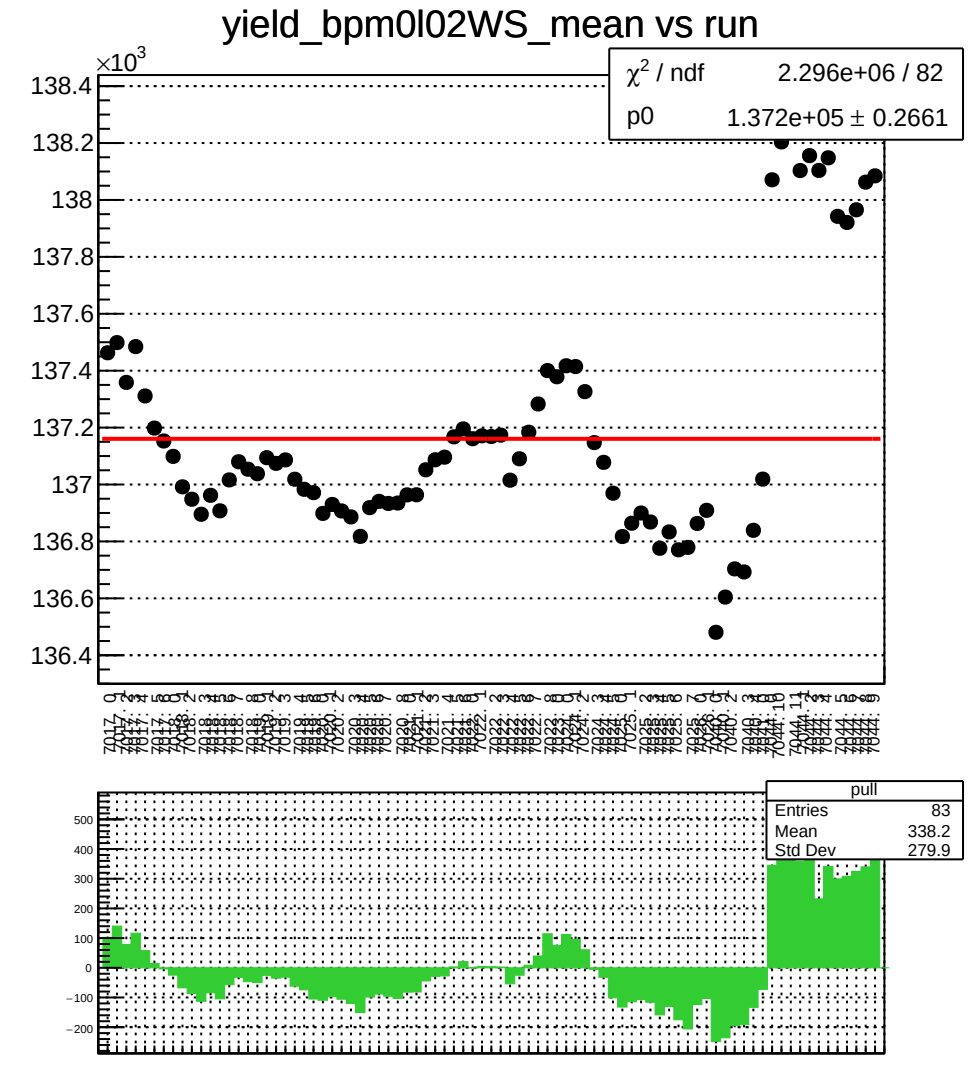

pull1D
Entries 83
Mean −2.046
Std Dev 4.831
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

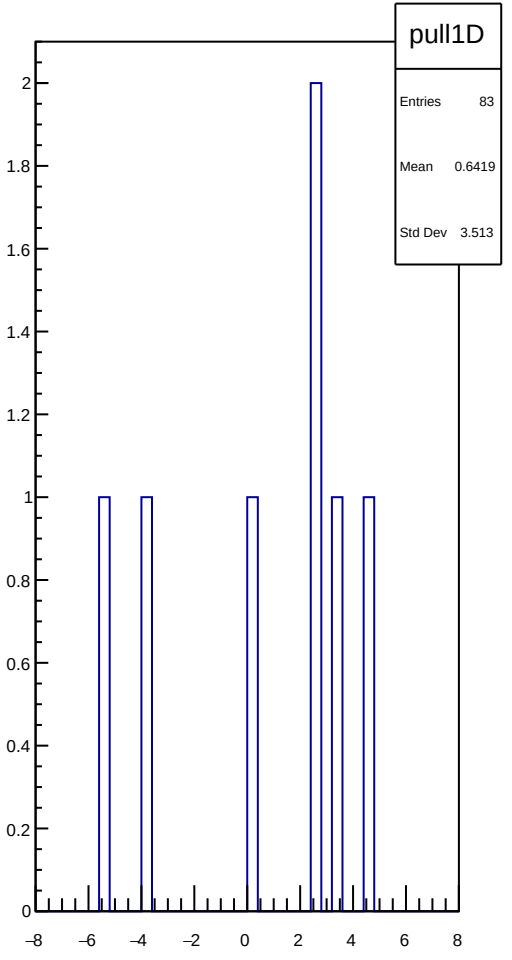

yield_bpm0i01aWS_rms vs run
χ² / ndf 1.212e+04 / 82
p0 169.7 ± 0.1347
400
350
300
250
200
150

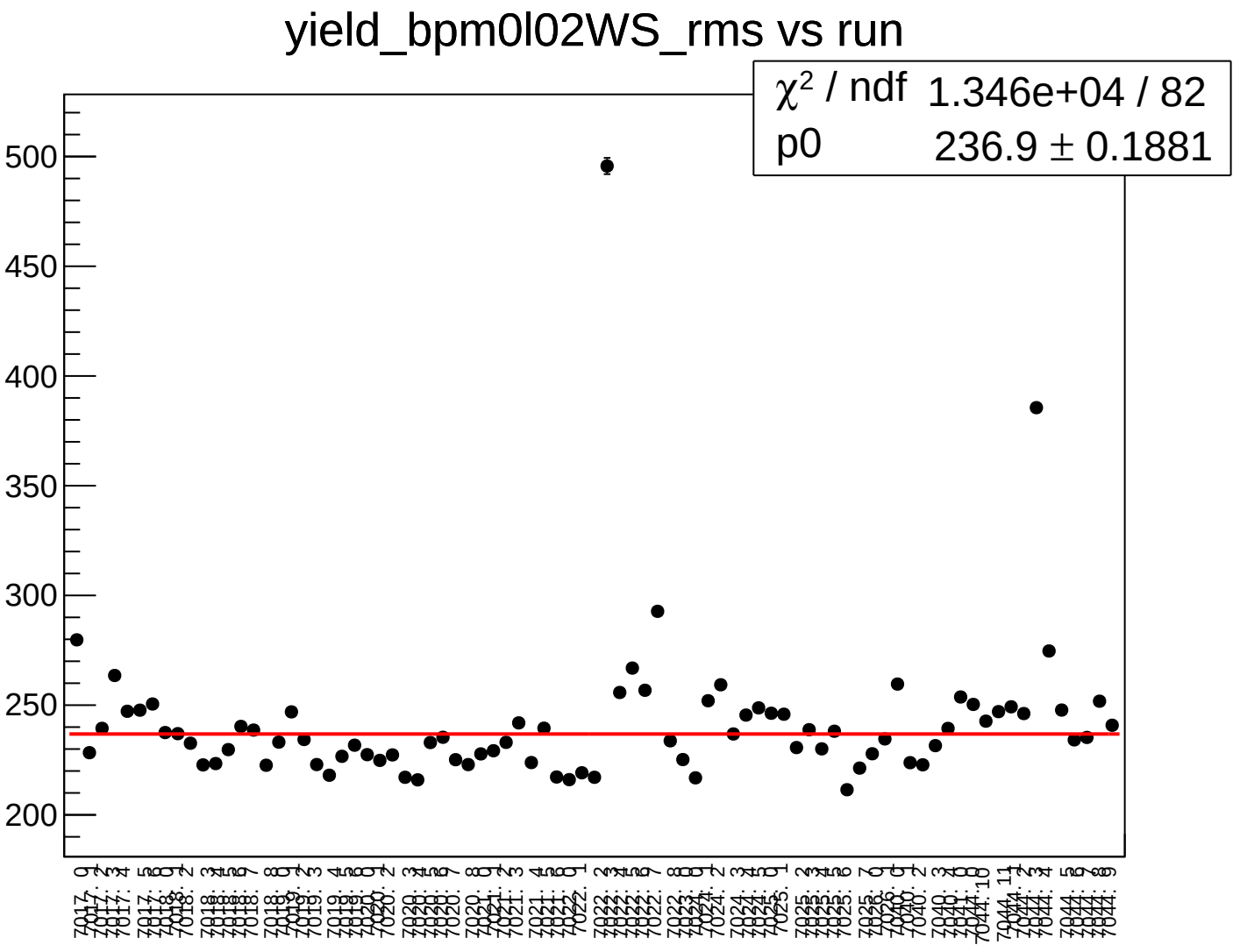

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 2.569e+06 / 82
p0 1.29e+05 ± 0.1888
129.8
129.6
129.4
129.2
129
128.8
128.6
128.4
128.2
pull
Entries 83
Mean 2049
Std Dev 1998
500
400
300
200
100
0
−100
−200
−300
−400

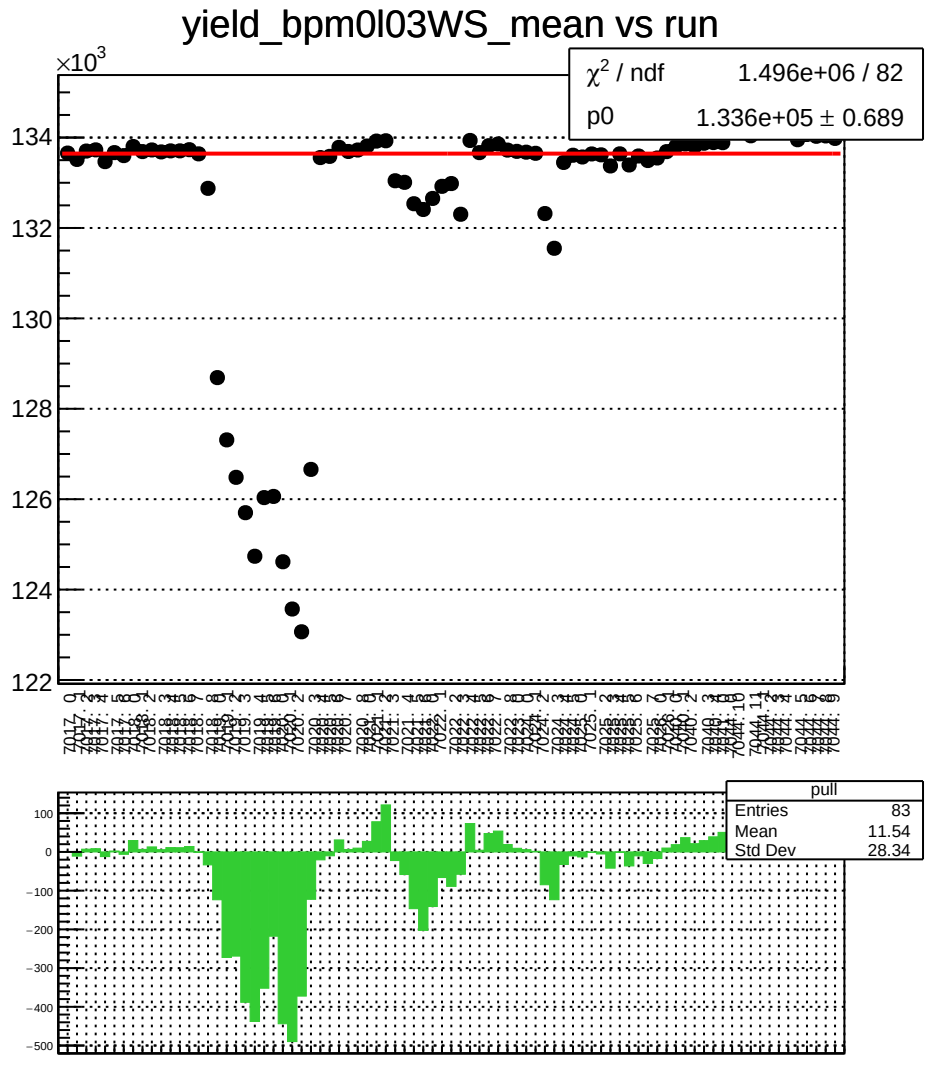

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

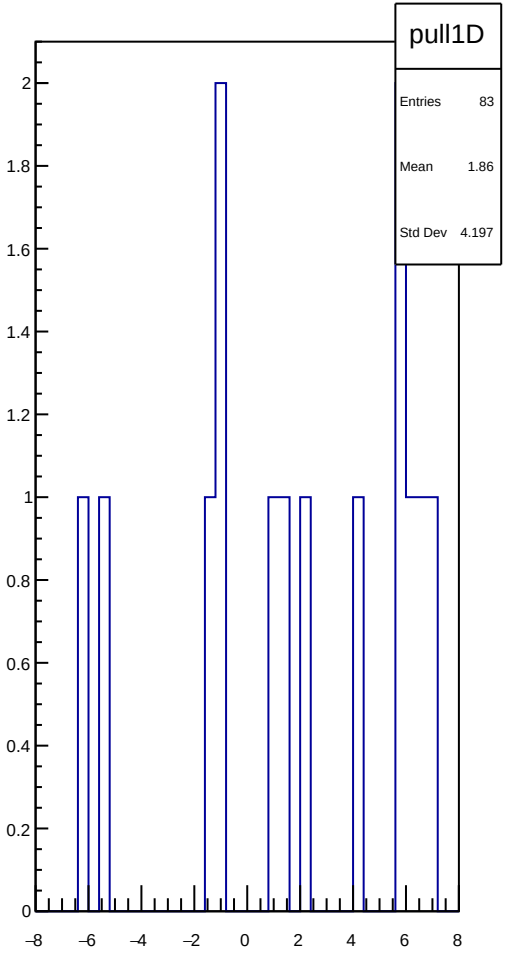

yield_bpm0l01WS_rms vs run
χ² / ndf 3.04e+04 / 82
p0 167.2 ± 0.1335
550
500
450
400
350
300
250
200
150

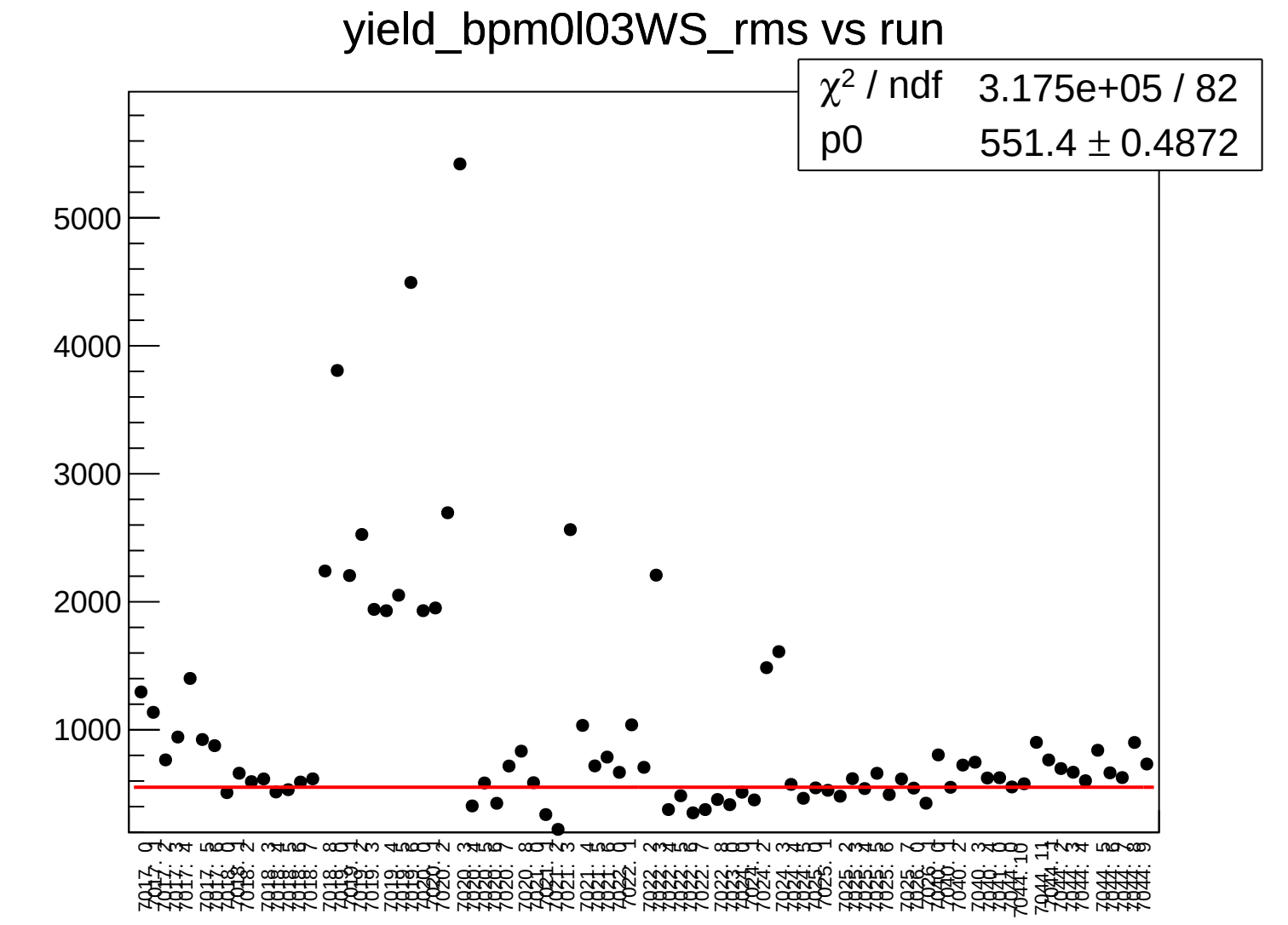

yield_bpm0l02WS_mean vs run
×10^3
χ^2 / ndf 2.296e+06 / 82
p0 1.372e+05 ± 0.2661
138.4
138.2
138
137.8
137.6
137.4
137.2
137
136.8
136.6
136.4
pull
Entries 83
Mean 338.2
Std Dev 279.9
500
400
300
200
100
0
−100
−200

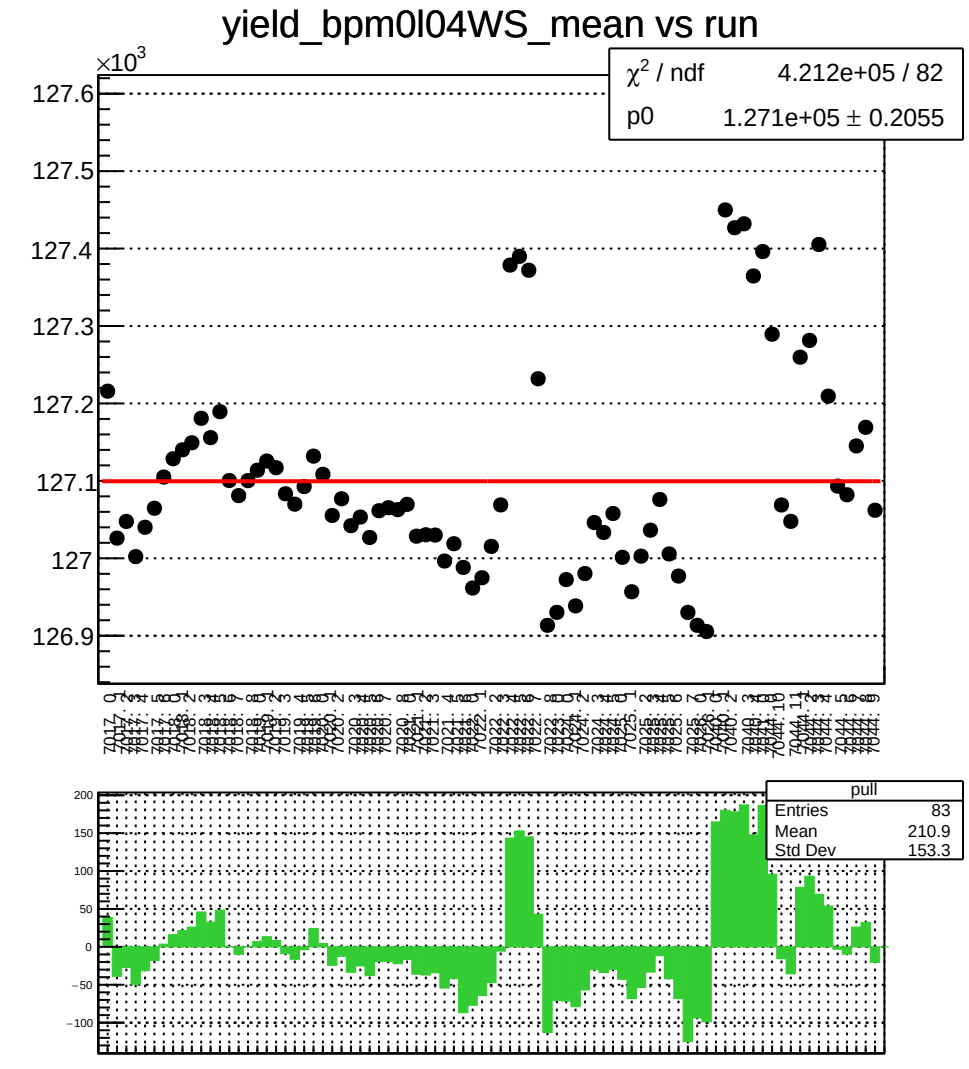

pull1D
Entries 83
Mean 0.6419
Std Dev 3.513
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

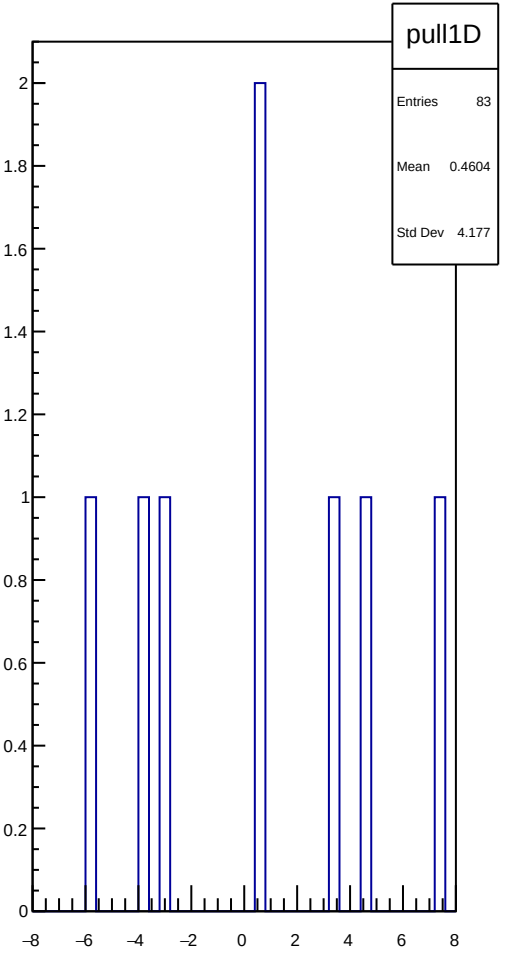

yield_bpm0l02WS_rms vs run
χ² / ndf 1.346e+04 / 82
p0 236.9 ± 0.1881
500
450
400
350
300
250
200

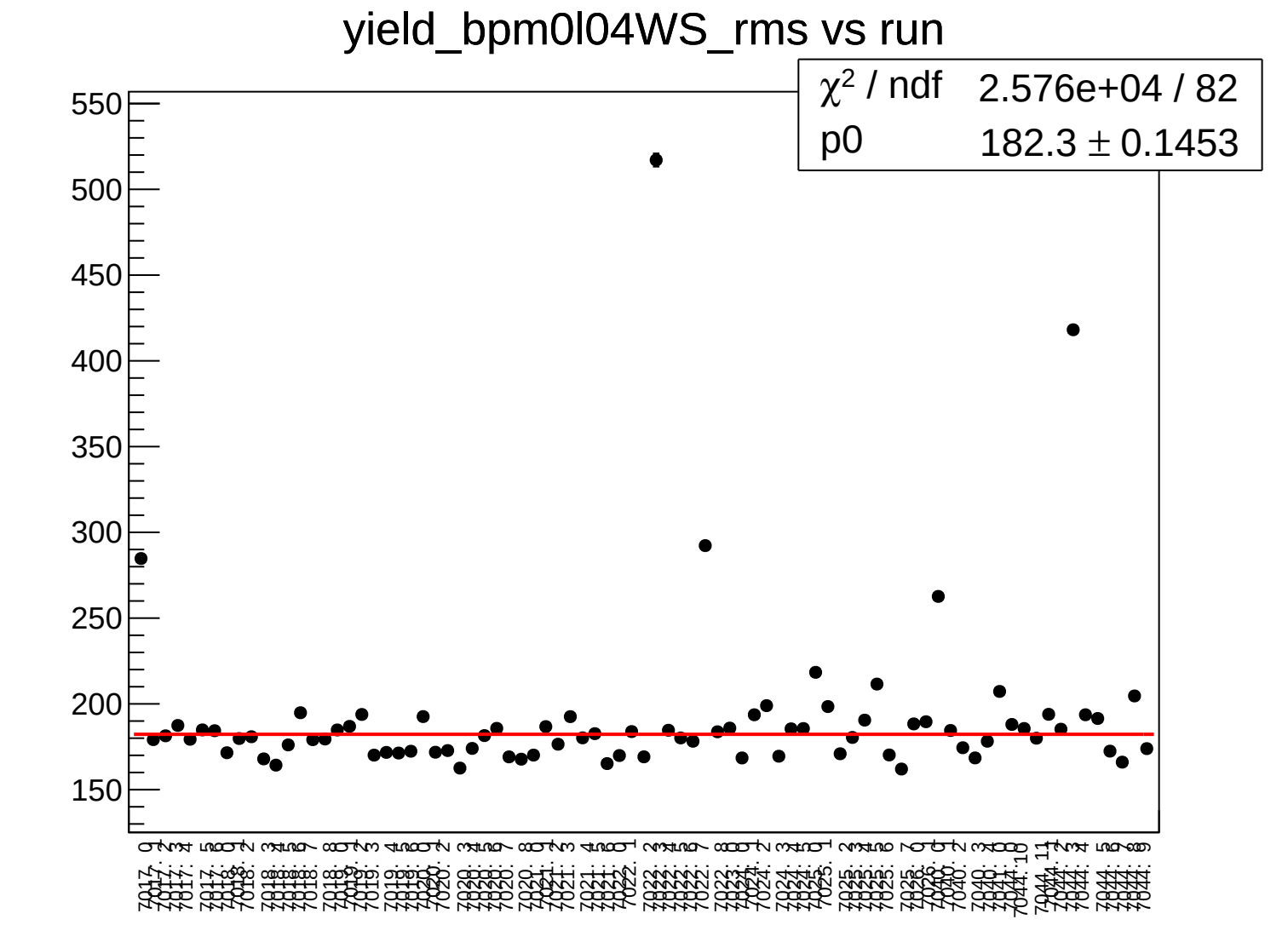

yield_bpm0l03WS_mean vs run
×10^3
χ² / ndf 1.496e+06 / 82
p0 1.336e+05 ± 0.689
134
132
130
128
126
124
122
pull
Entries 83
Mean 11.54
Std Dev 28.34
100
0
−100
−200
−300
−400
−500

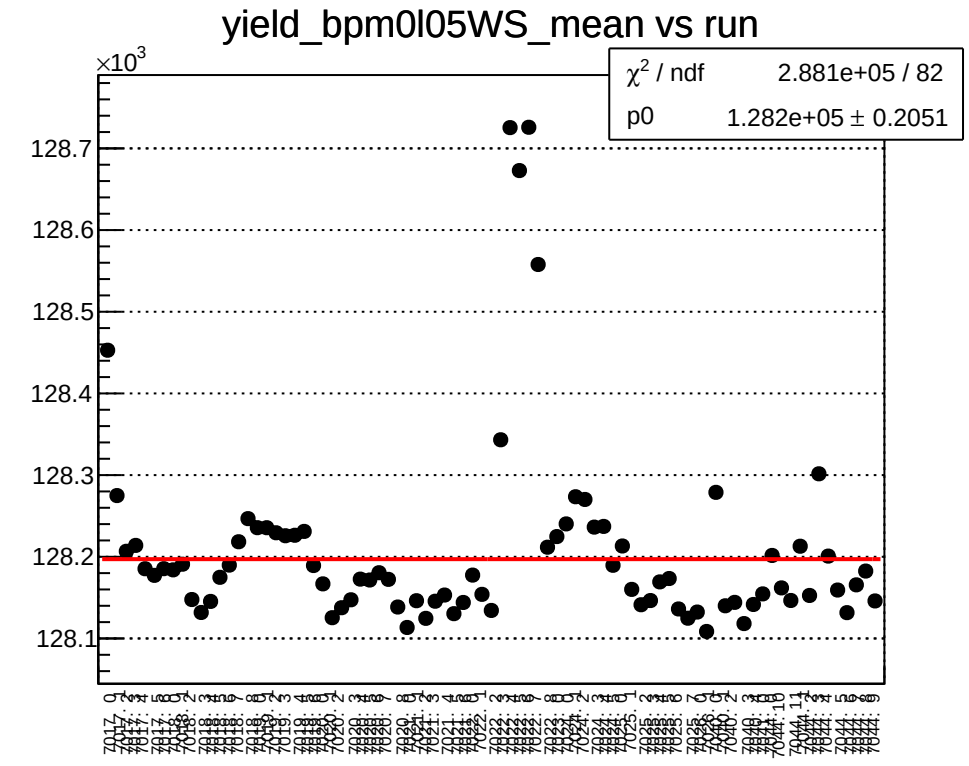

pull1D
Entries 83
Mean 1.86
Std Dev 4.197
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

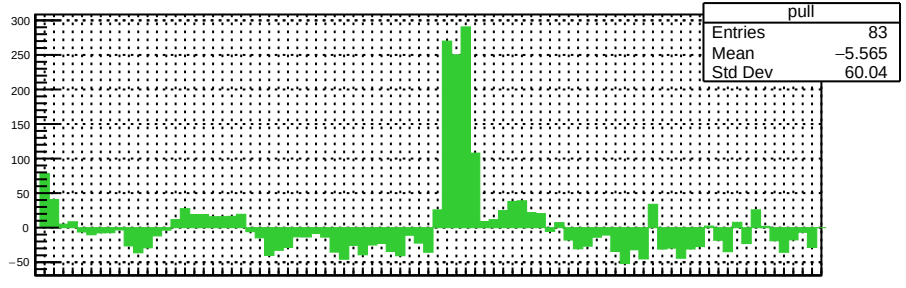

yield_bpm0l03WS_rms vs run
χ² / ndf 3.175e+05 / 82
p0 551.4 ± 0.4872
5000
4000
3000
2000
1000

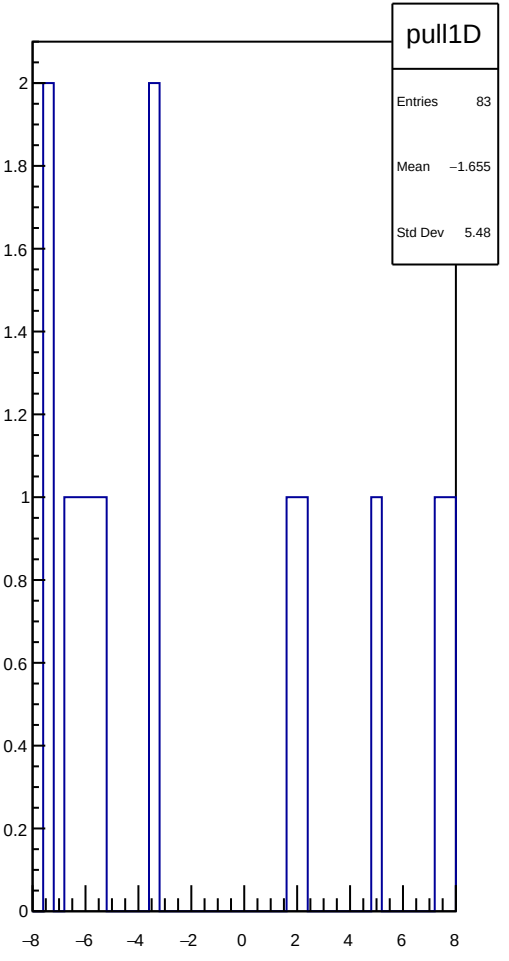

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 4.212e+05 / 82
p0 1.271e+05 ± 0.2055
127.6
127.5
127.4
127.3
127.2
127.1
127
126.9
pull
Entries 83
Mean 210.9
Std Dev 153.3
200
150
100
50
0
−50
−100

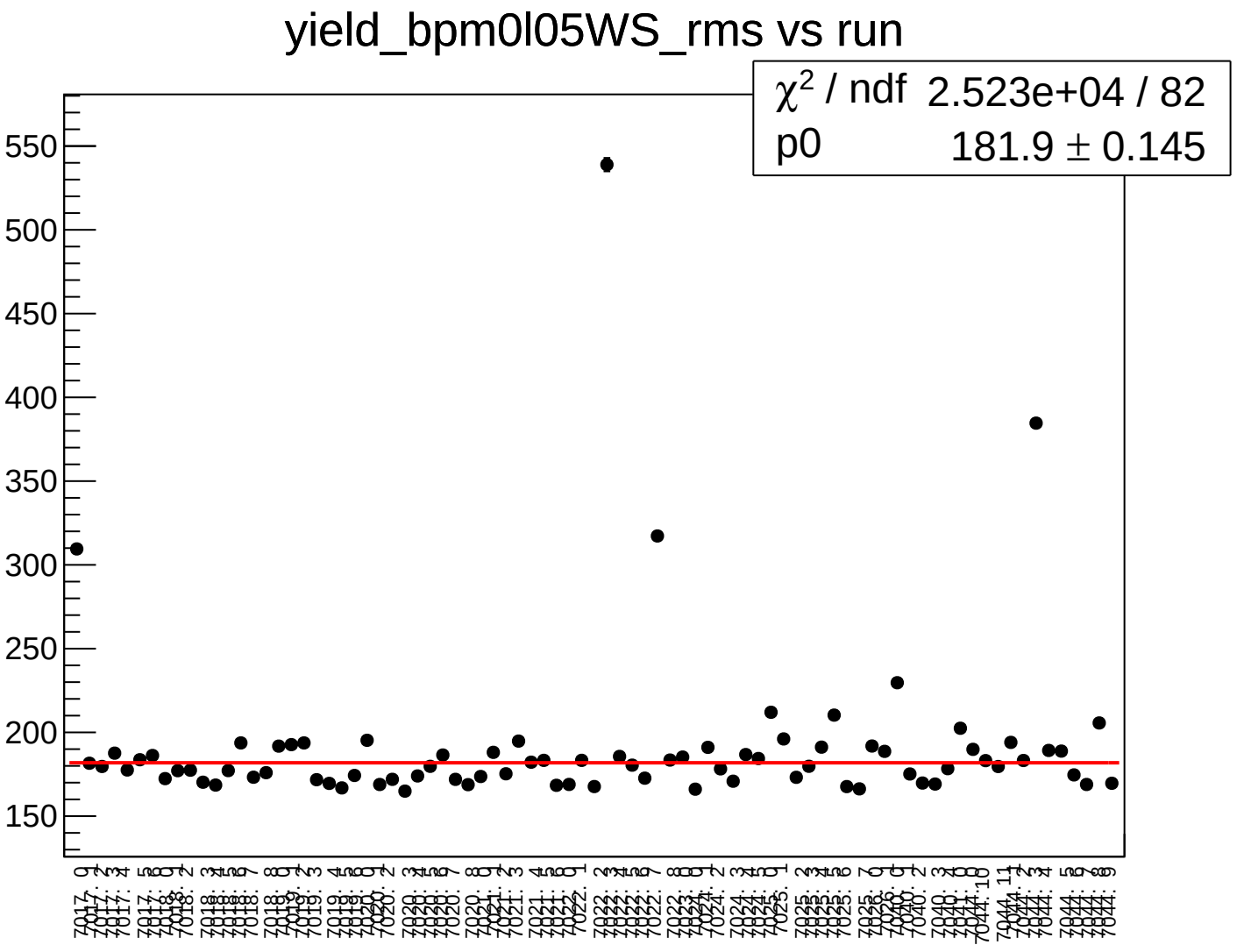

pull1D
Entries 83
Mean 0.4604
Std Dev 4.177
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

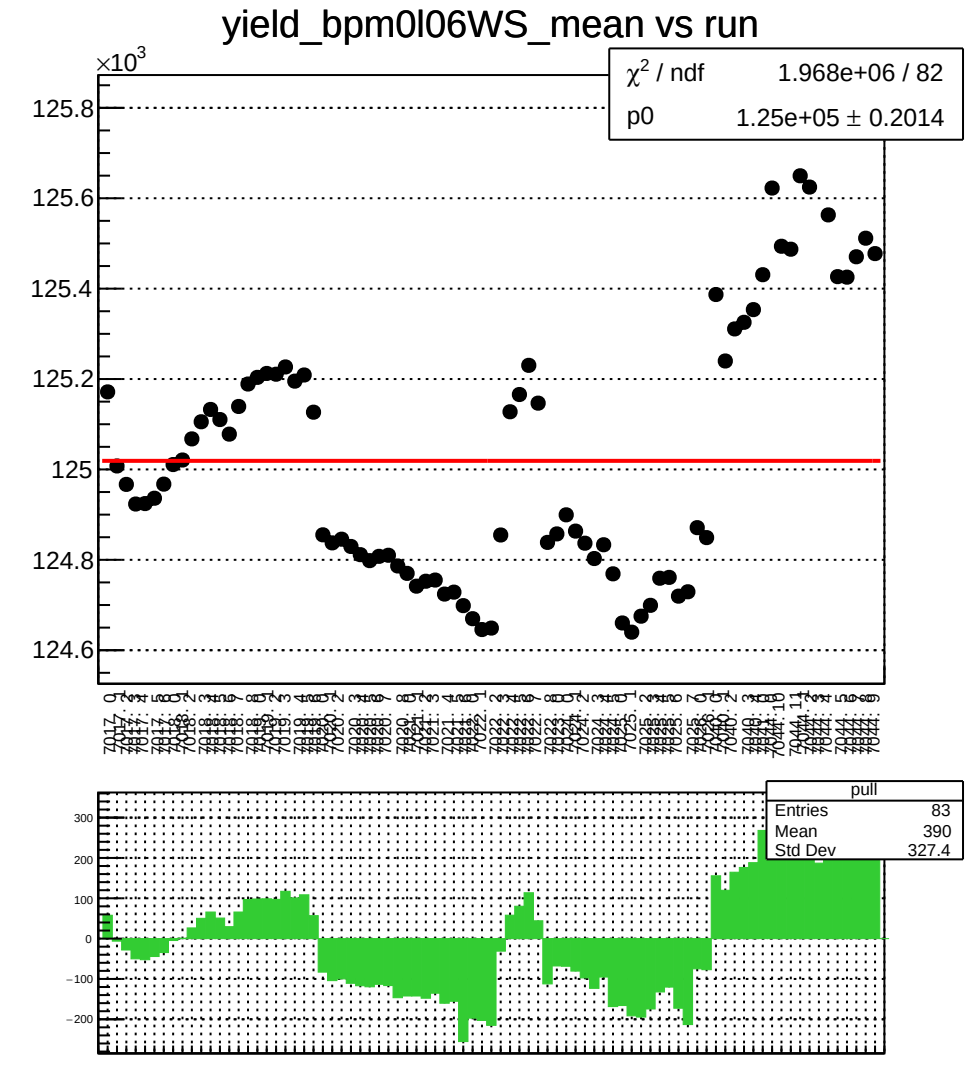

yield_bpm0l04WS_rms vs run
χ² / ndf 2.576e+04 / 82
p0 182.3 ± 0.1453
550
500
450
400
350
300
250
200
150

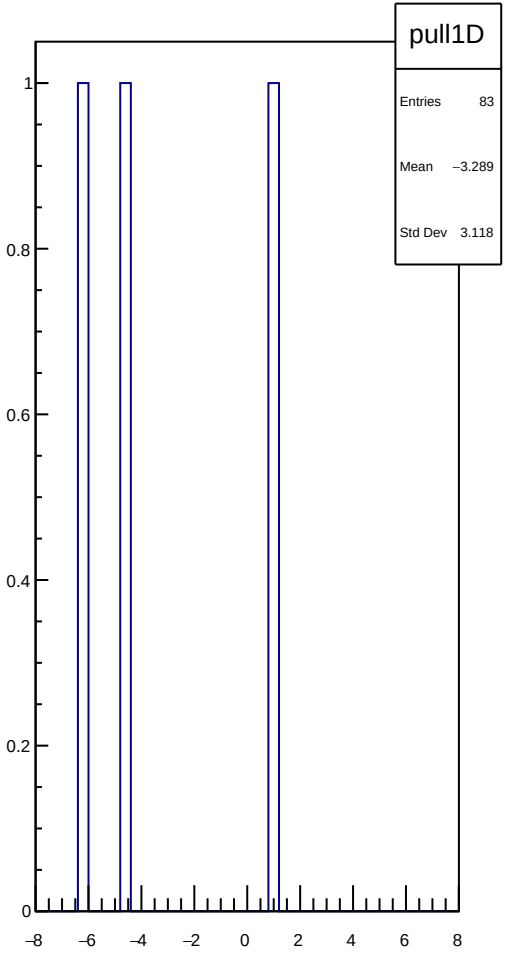

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 2.881e+05 / 82
p0 1.282e+05 ± 0.2051
128.7
128.6
128.5
128.4
128.3
128.2
128.1

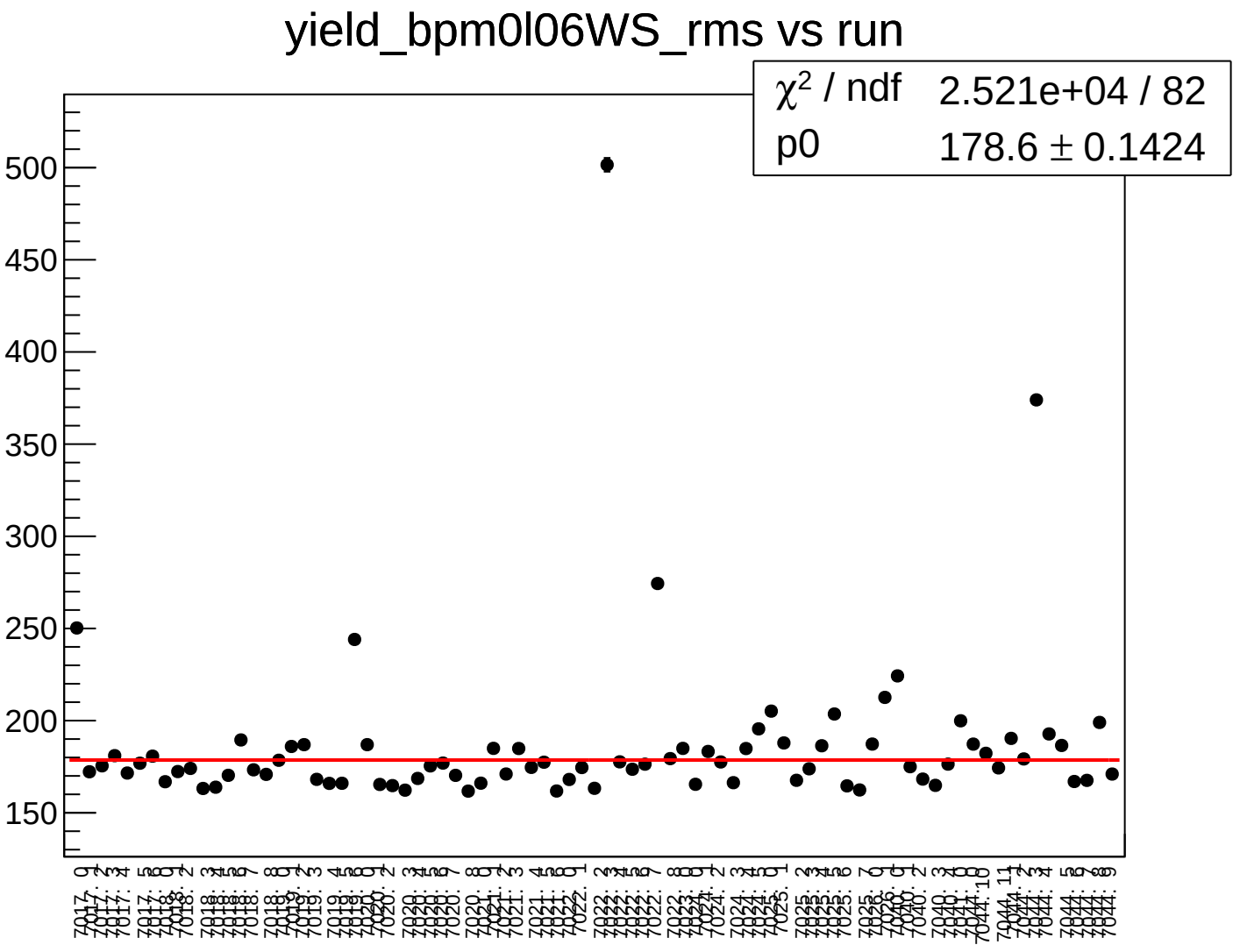

pull
Entries 83
Mean −5.565
Std Dev 60.04
300
250
200
150
100
50
0
−50

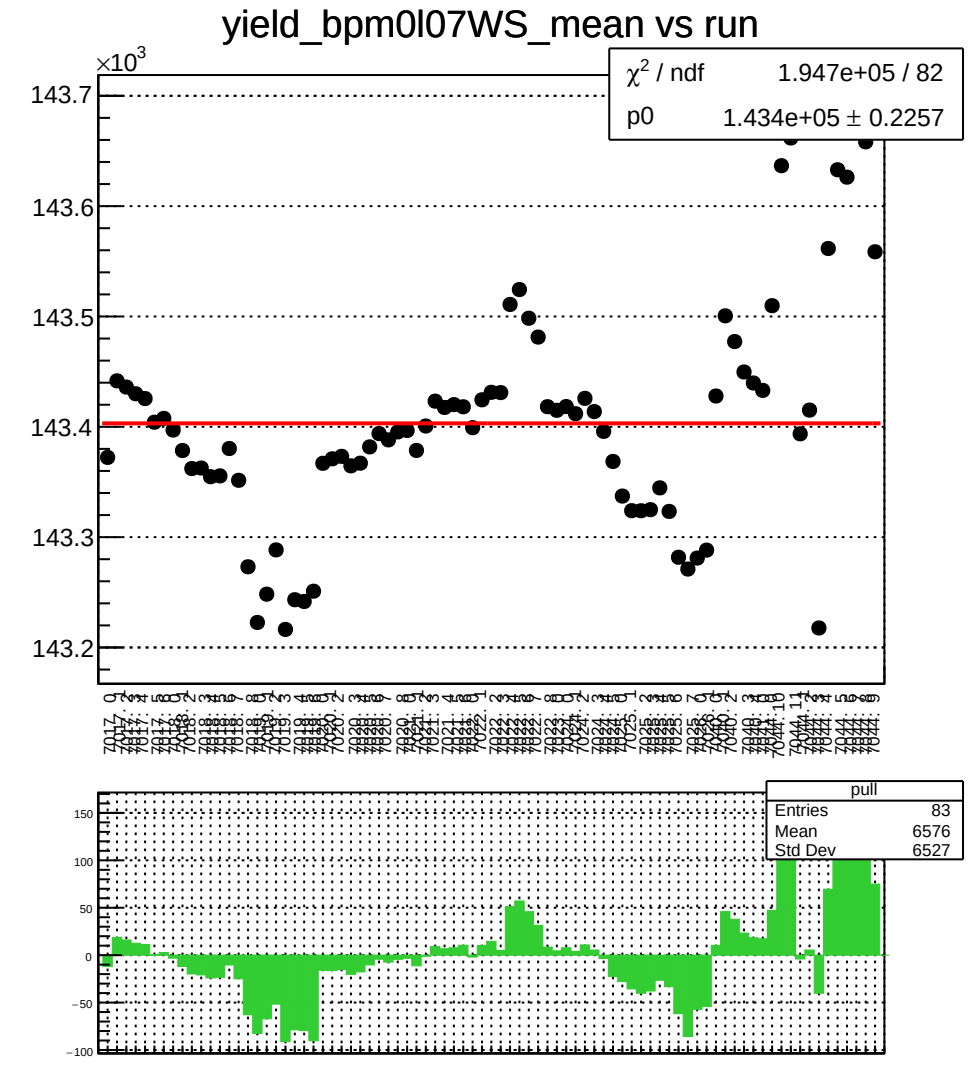

pull1D
Entries 83
Mean −1.655
Std Dev 5.48
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

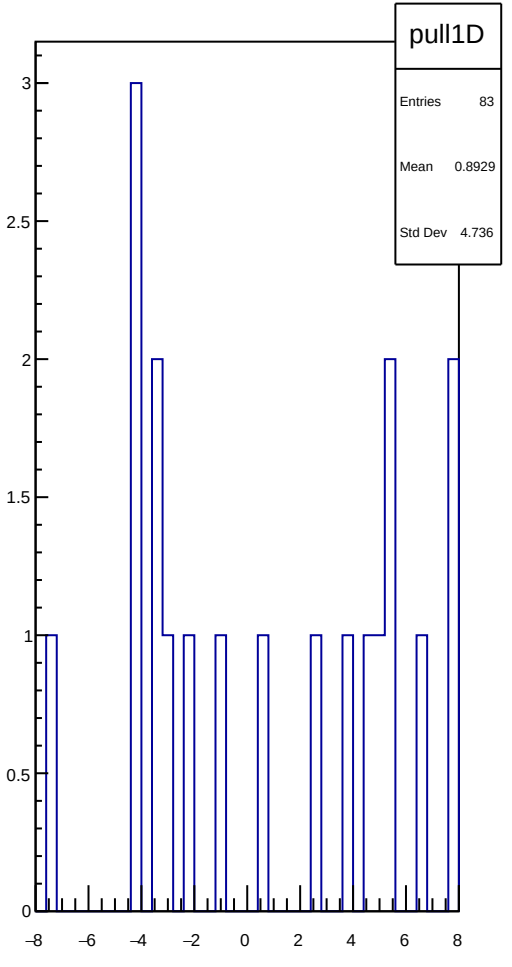

yield_bpm0l05WS_rms vs run
χ² / ndf 2.523e+04 / 82
p0 181.9 ± 0.145
550
500
450
400
350
300
250
200
150

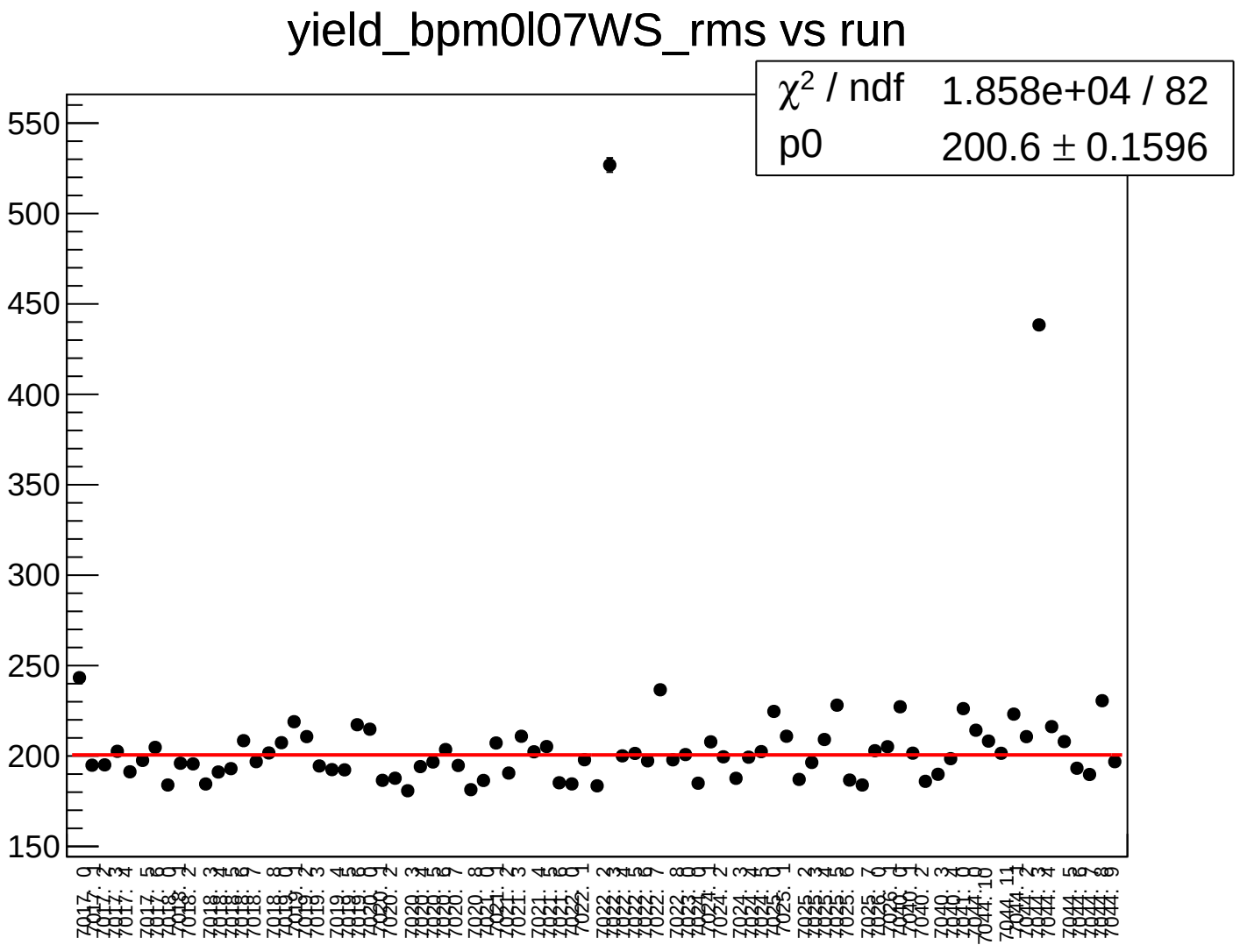

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 1.968e+06 / 82
p0 1.25e+05 ± 0.2014
125.8
125.6
125.4
125.2
125
124.8
124.6
pull
Entries 83
Mean 390
Std Dev 327.4
300
200
100
0
−100
−200

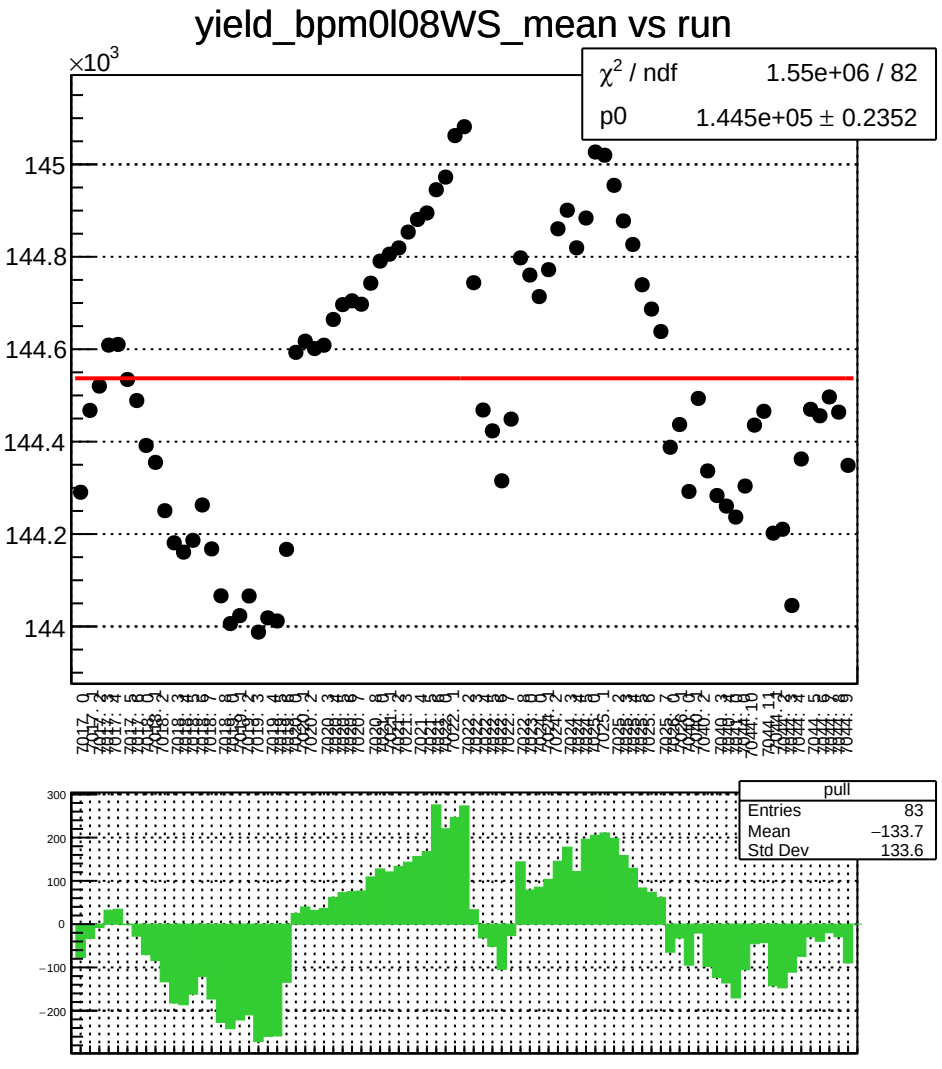

pull1D
Entries 83
Mean −3.289
Std Dev 3.118
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

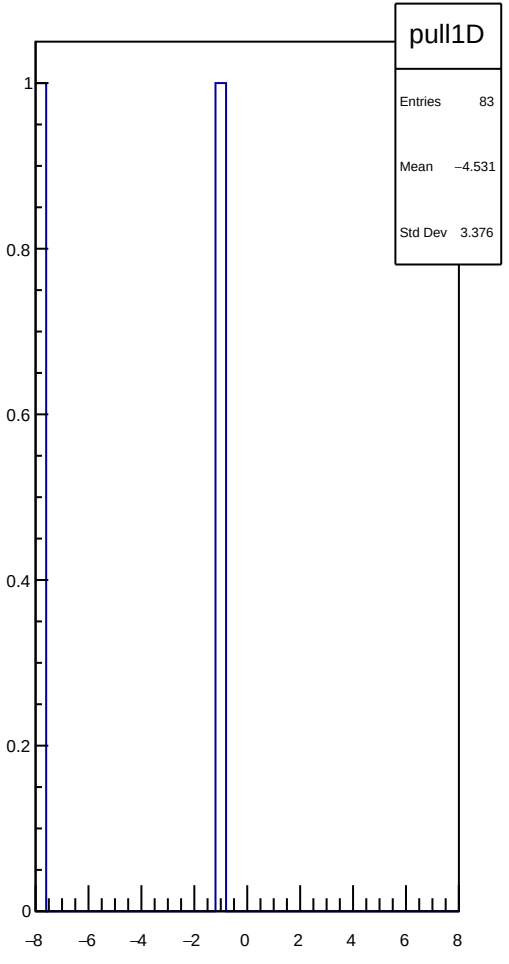

yield_bpm0l06WS_rms vs run
χ² / ndf 2.521e+04 / 82
p0 178.6 ± 0.1424
500
450
400
350
300
250
200
150

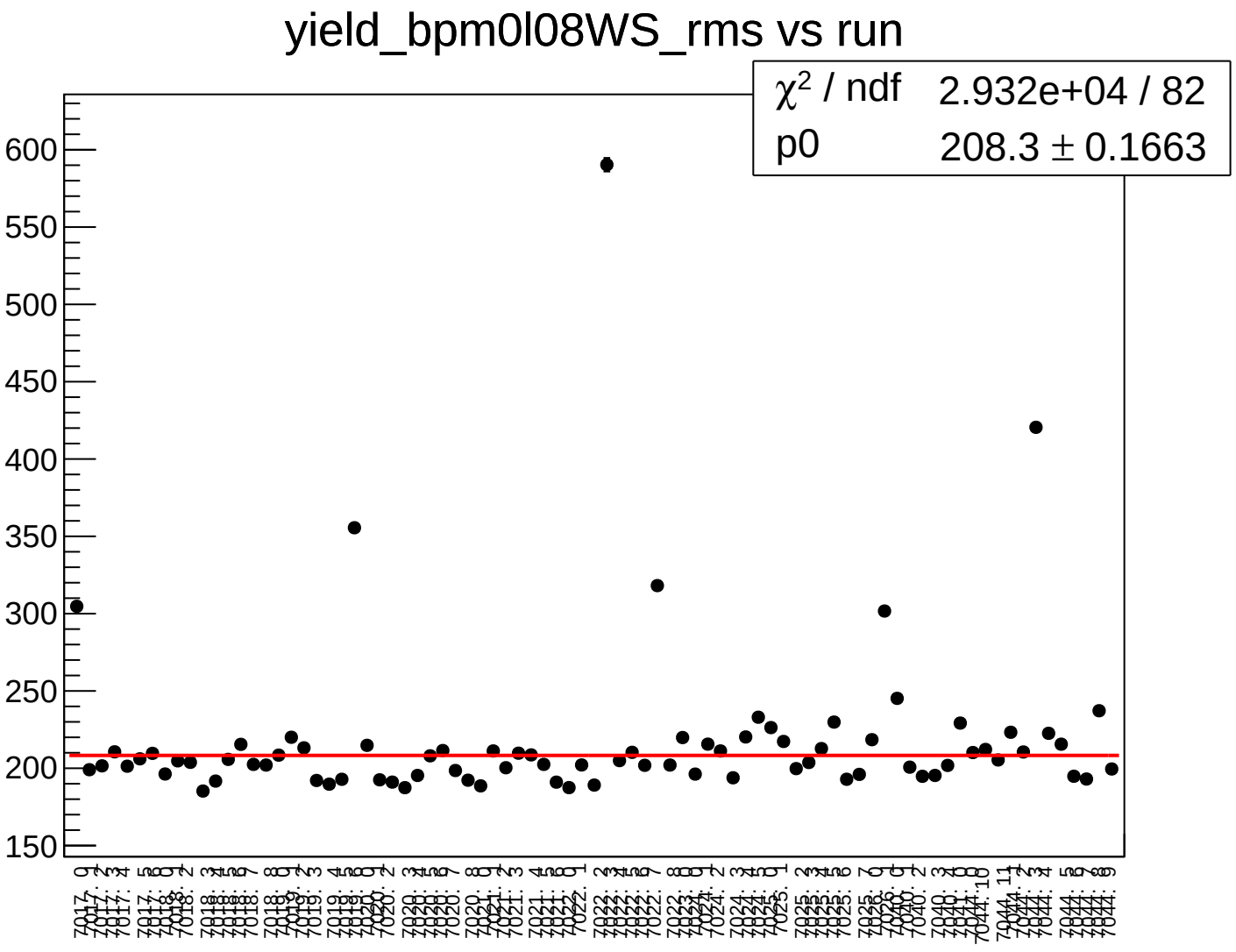

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 1.947e+05 / 82
p0 1.434e+05 ± 0.2257
143.7
143.6
143.5
143.4
143.3
143.2
pull
Entries 83
Mean 6576
Std Dev 6527
150
100
50
0
−50
−100

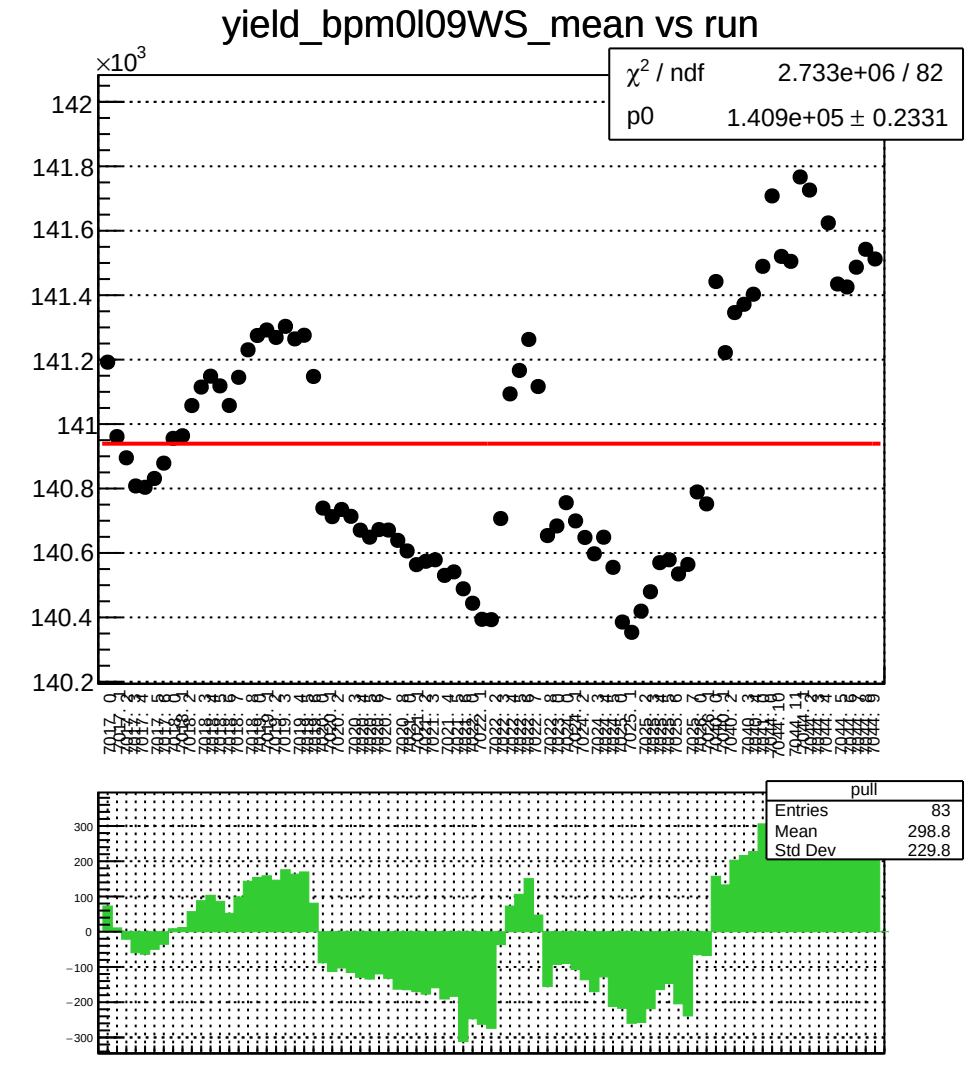

pull1D
Entries 83
Mean 0.8929
Std Dev 4.736
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

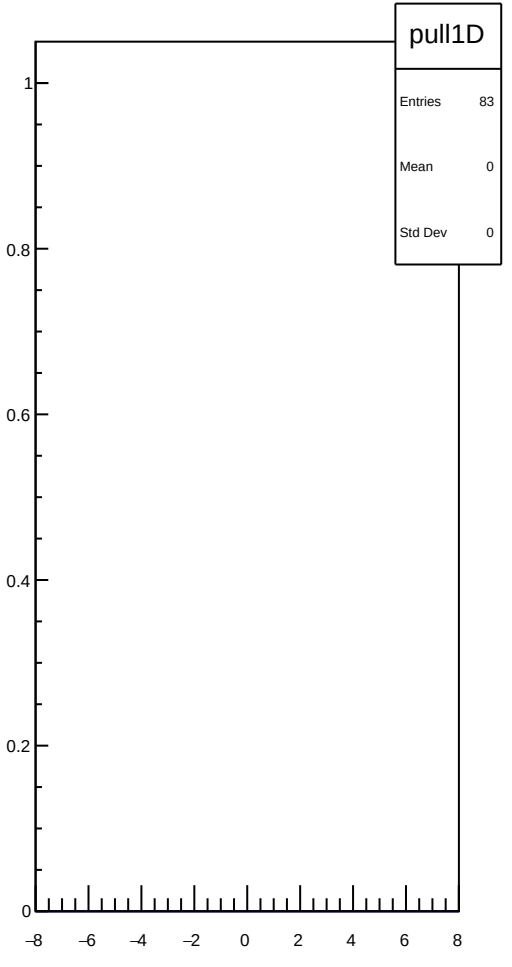

yield_bpm0l07WS_rms vs run
χ² / ndf 1.858e+04 / 82
p0 200.6 ± 0.1596
550
500
450
400
350
300
250
200
150

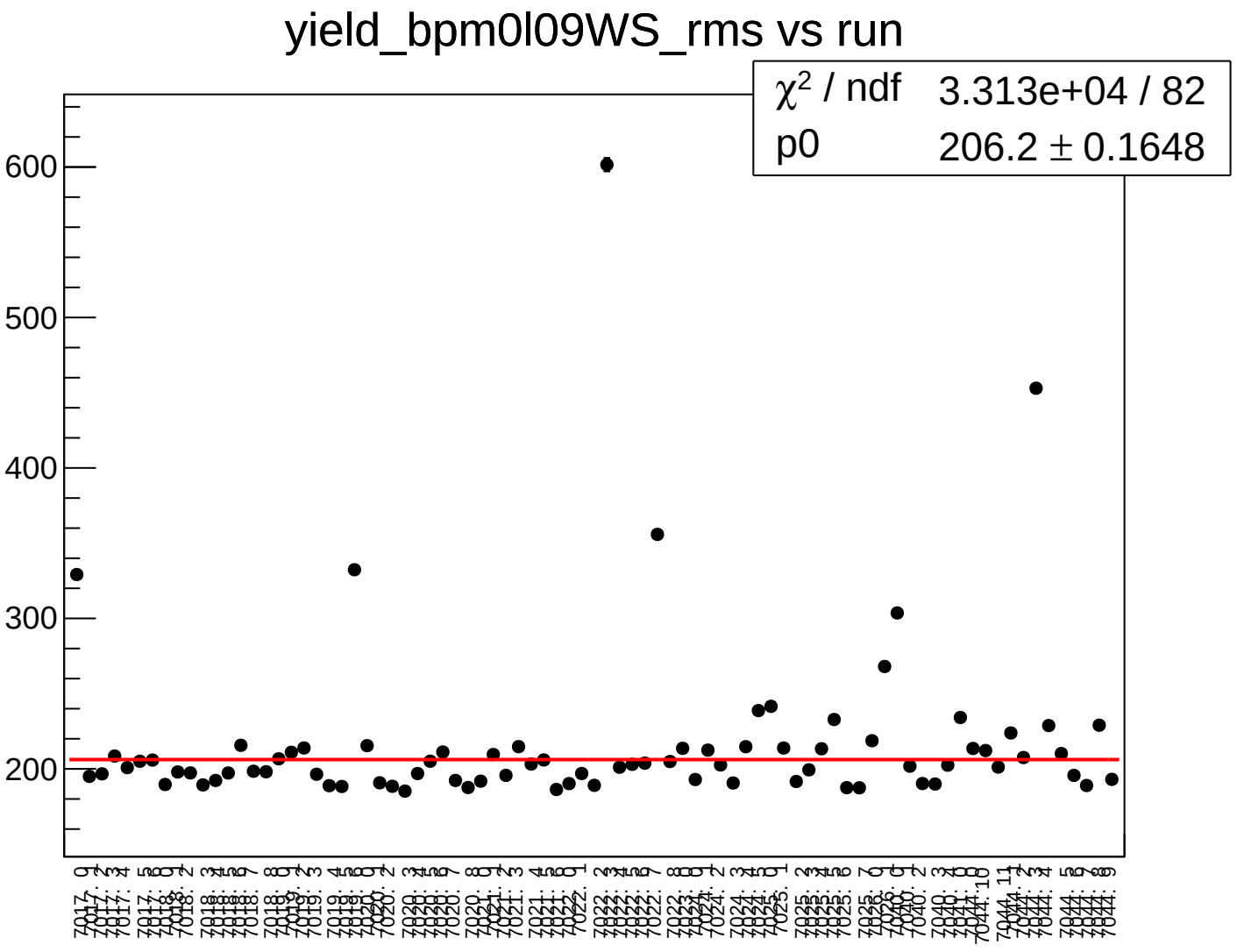

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 1.55e+06 / 82
p0 1.445e+05 ± 0.2352
145
144.8
144.6
144.4
144.2
144
pull
Entries 83
Mean −133.7
Std Dev 133.6
300
200
100
0
−100
−200

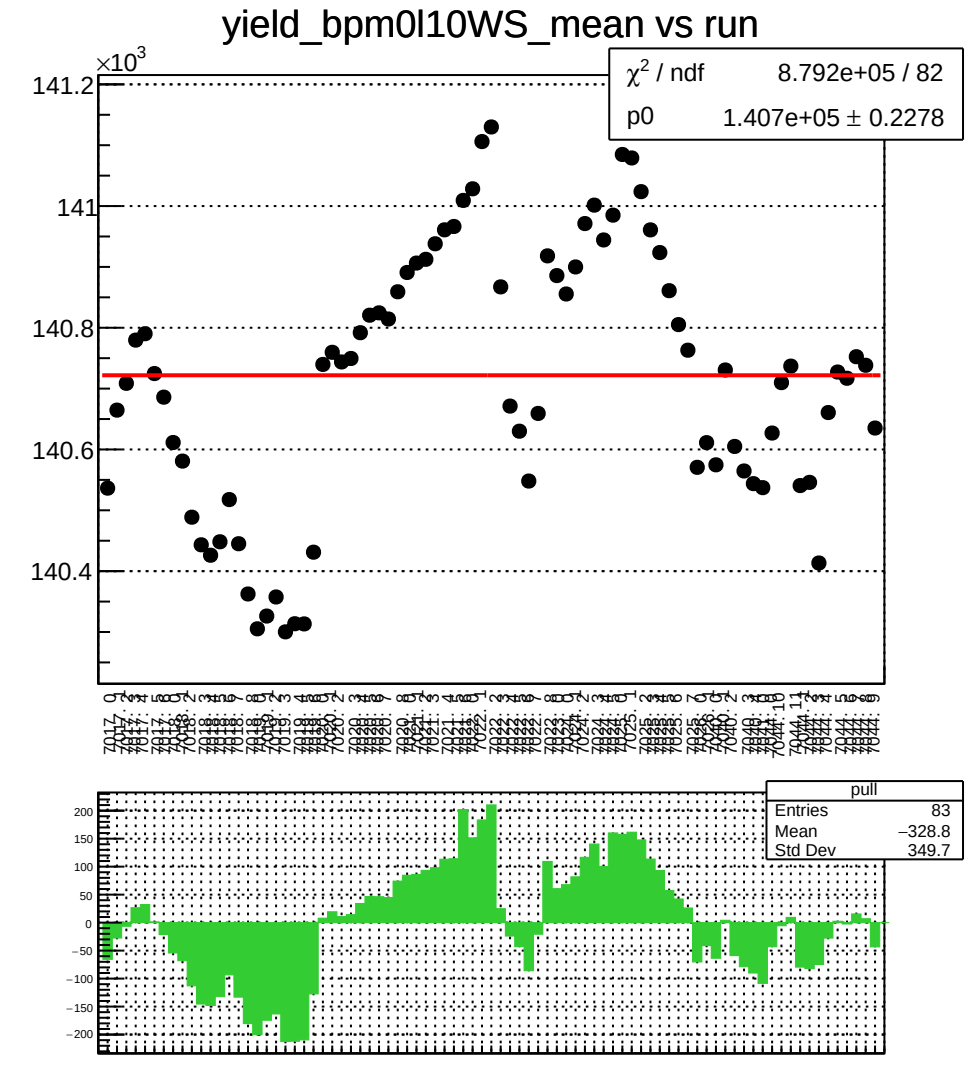

pull1D
Entries 83
Mean −4.531
Std Dev 3.376
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

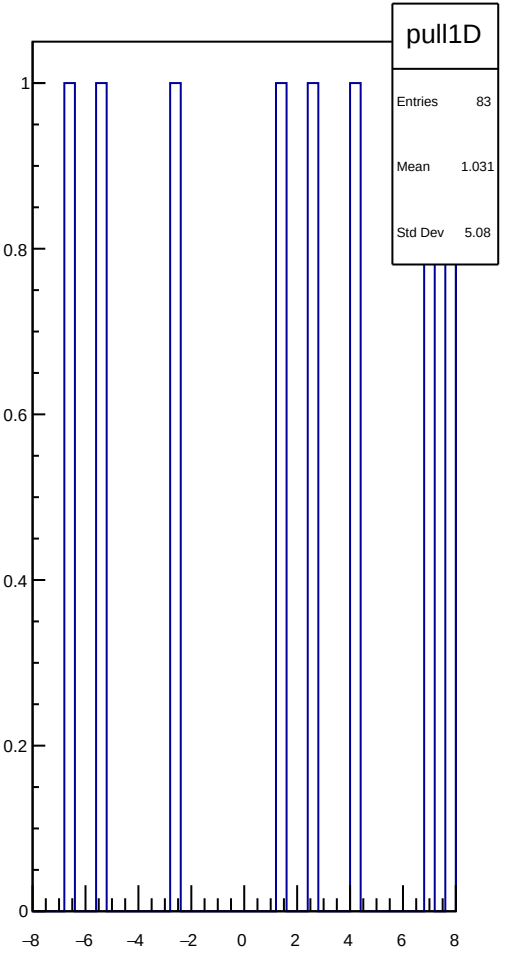

yield_bpm0l08WS_rms vs run
χ² / ndf 2.932e+04 / 82
p0 208.3 ± 0.1663
600
550
500
450
400
350
300
250
200
150

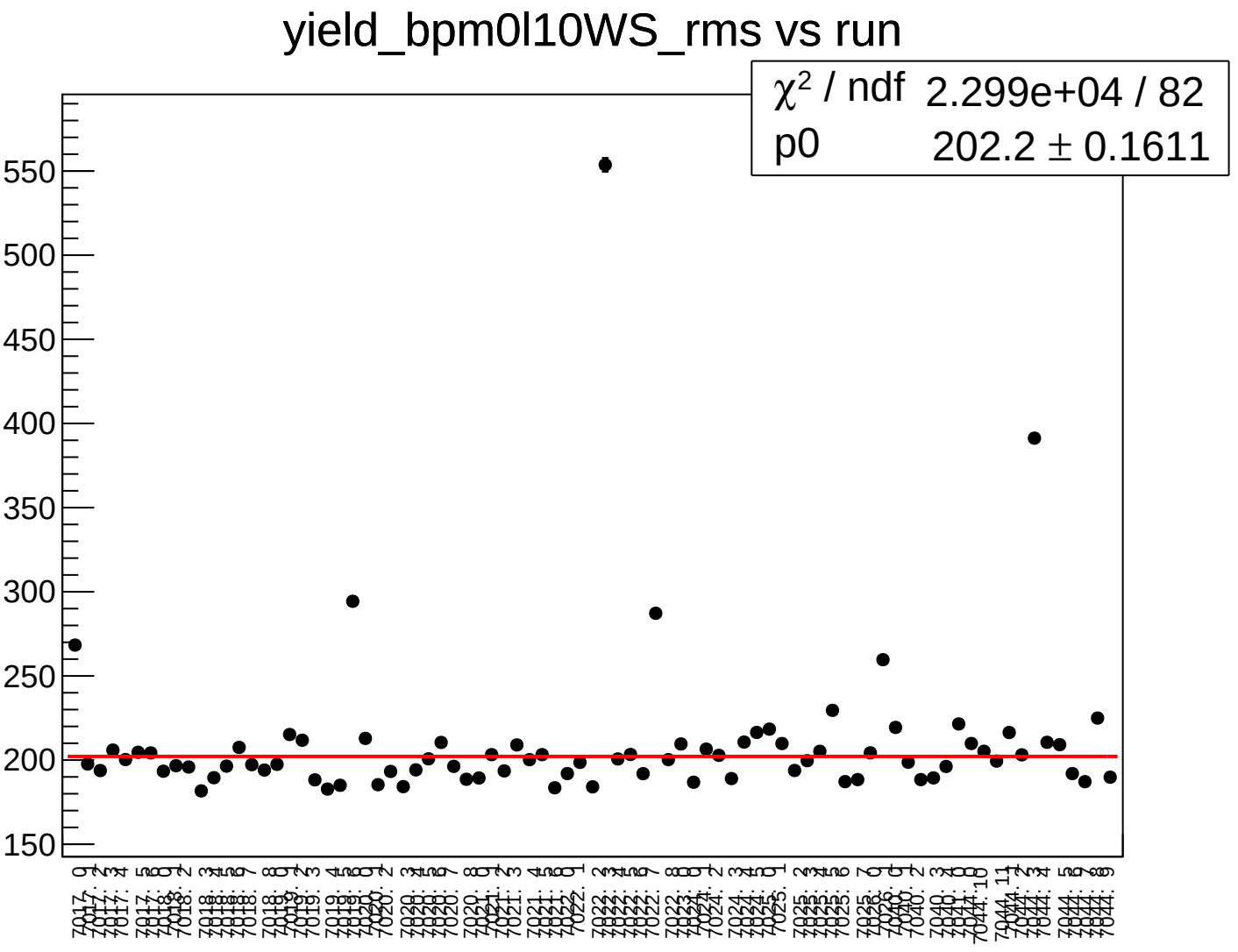

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 2.733e+06 / 82
p0 1.409e+05 ± 0.2331
142
141.8
141.6
141.4
141.2
141
140.8
140.6
140.4
140.2
pull
Entries 83
Mean 298.8
Std Dev 229.8
300
200
100
0
−100
−200
−300

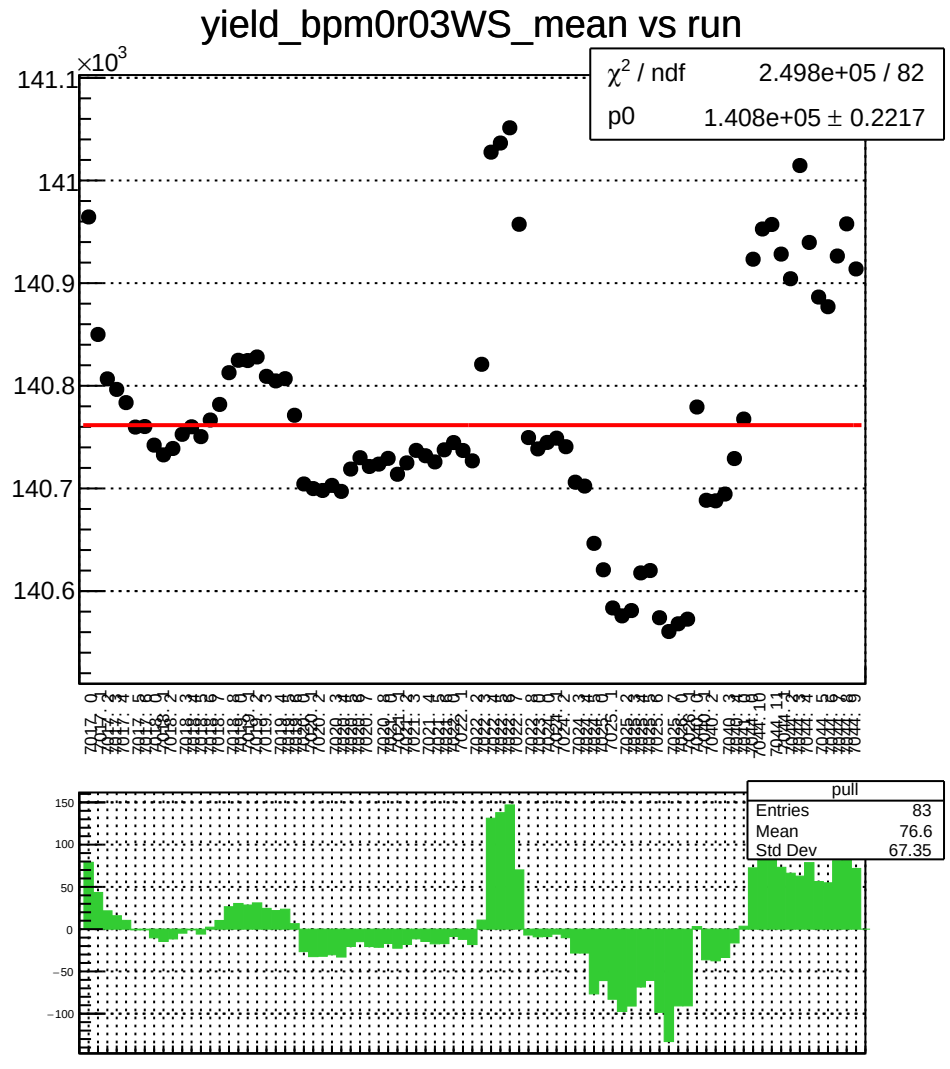

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

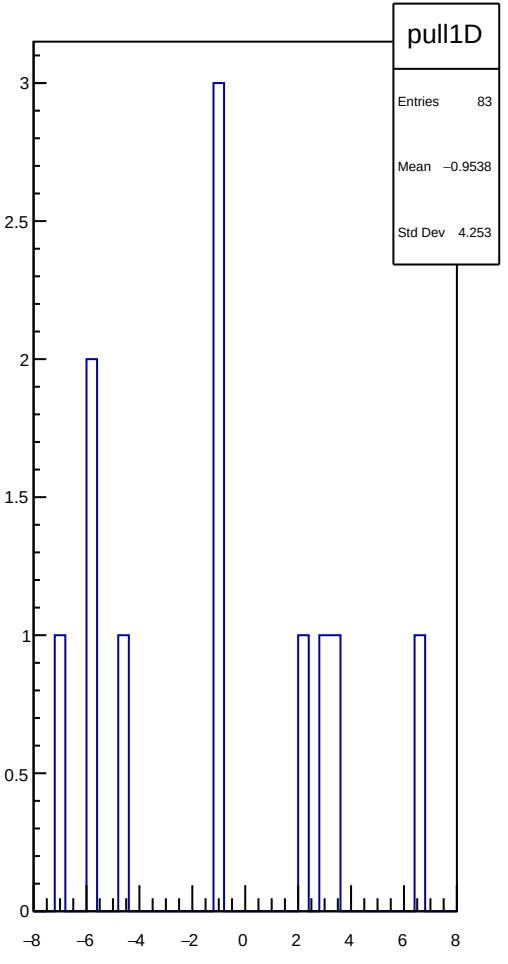

yield_bpm0l09WS_rms vs run
χ² / ndf 3.313e+04 / 82
p0 206.2 ± 0.1648
600
500
400
300
200

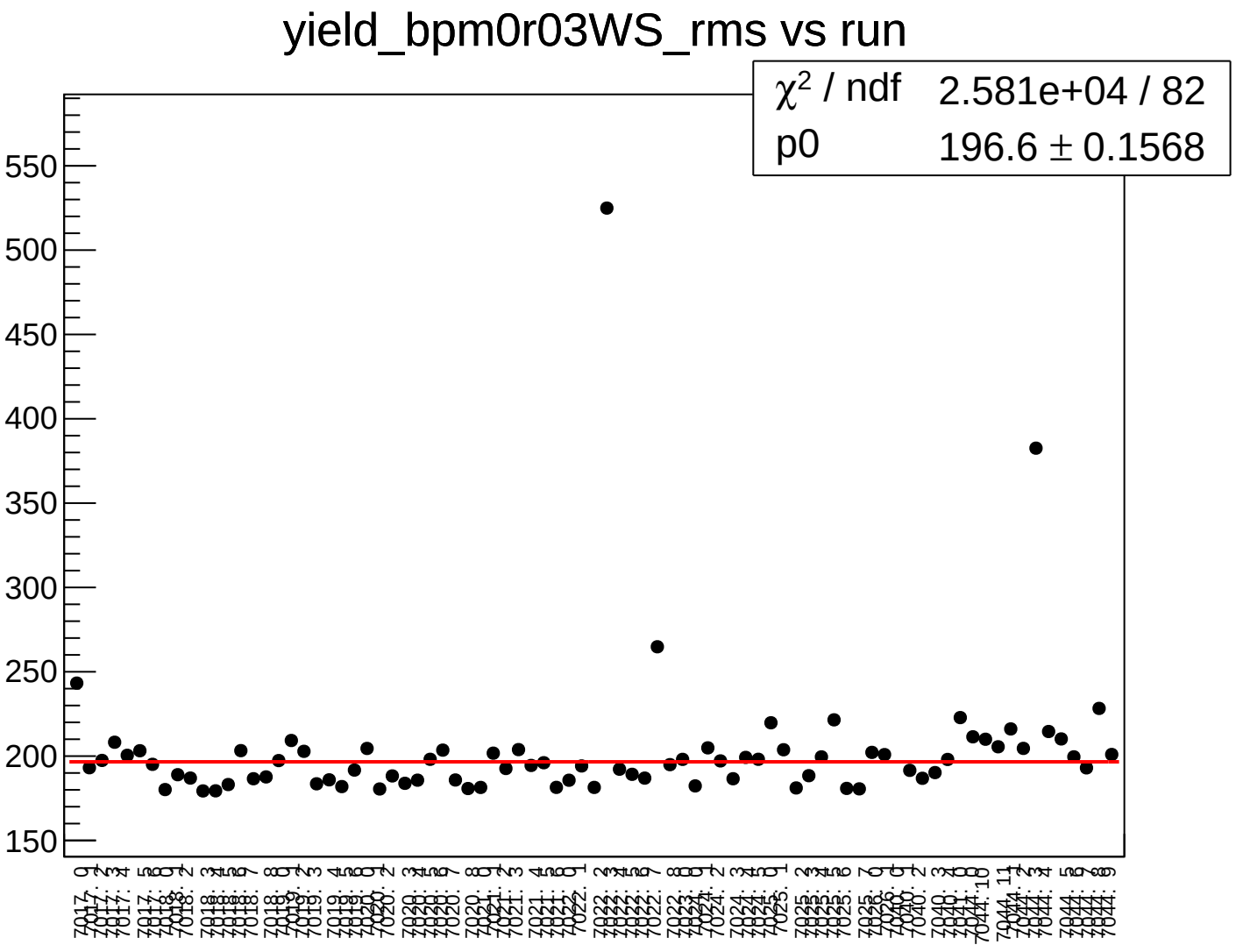

yield_bpm0l10WS_mean vs run
×10^3
141.2
141
140.8
140.6
140.4
χ² / ndf 8.792e+05 / 82
p0 1.407e+05 ± 0.2278
pull
Entries 83
Mean −328.8
Std Dev 349.7
200
150
100
50
0
−50
−100
−150
−200

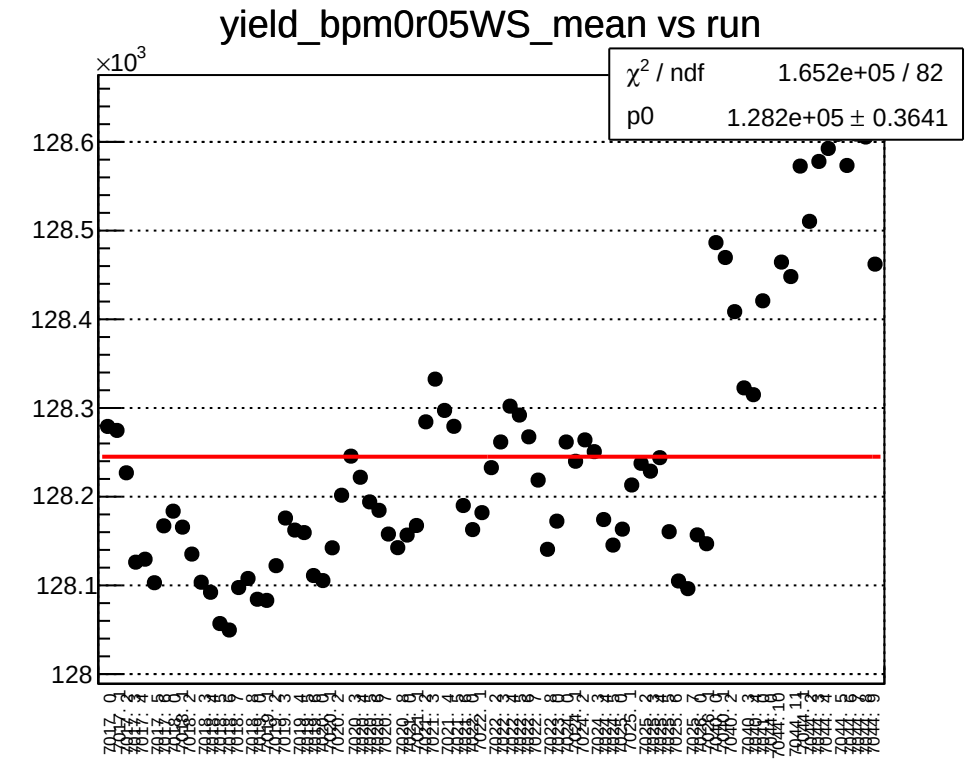

pull1D
Entries 83
Mean 1.031
Std Dev 5.08
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

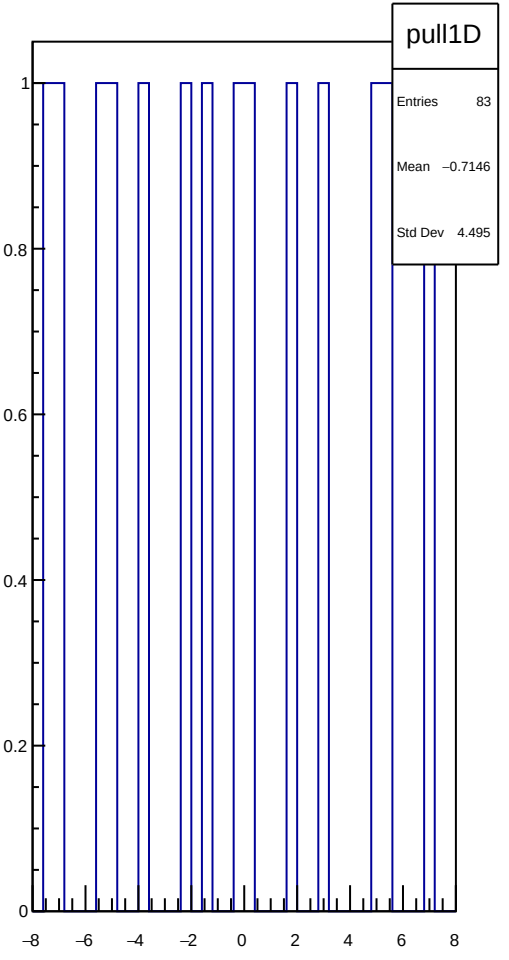

yield_bpm0l10WS_rms vs run
χ² / ndf 2.299e+04 / 82
p0 202.2 ± 0.1611
550
500
450
400
350
300
250
200
150

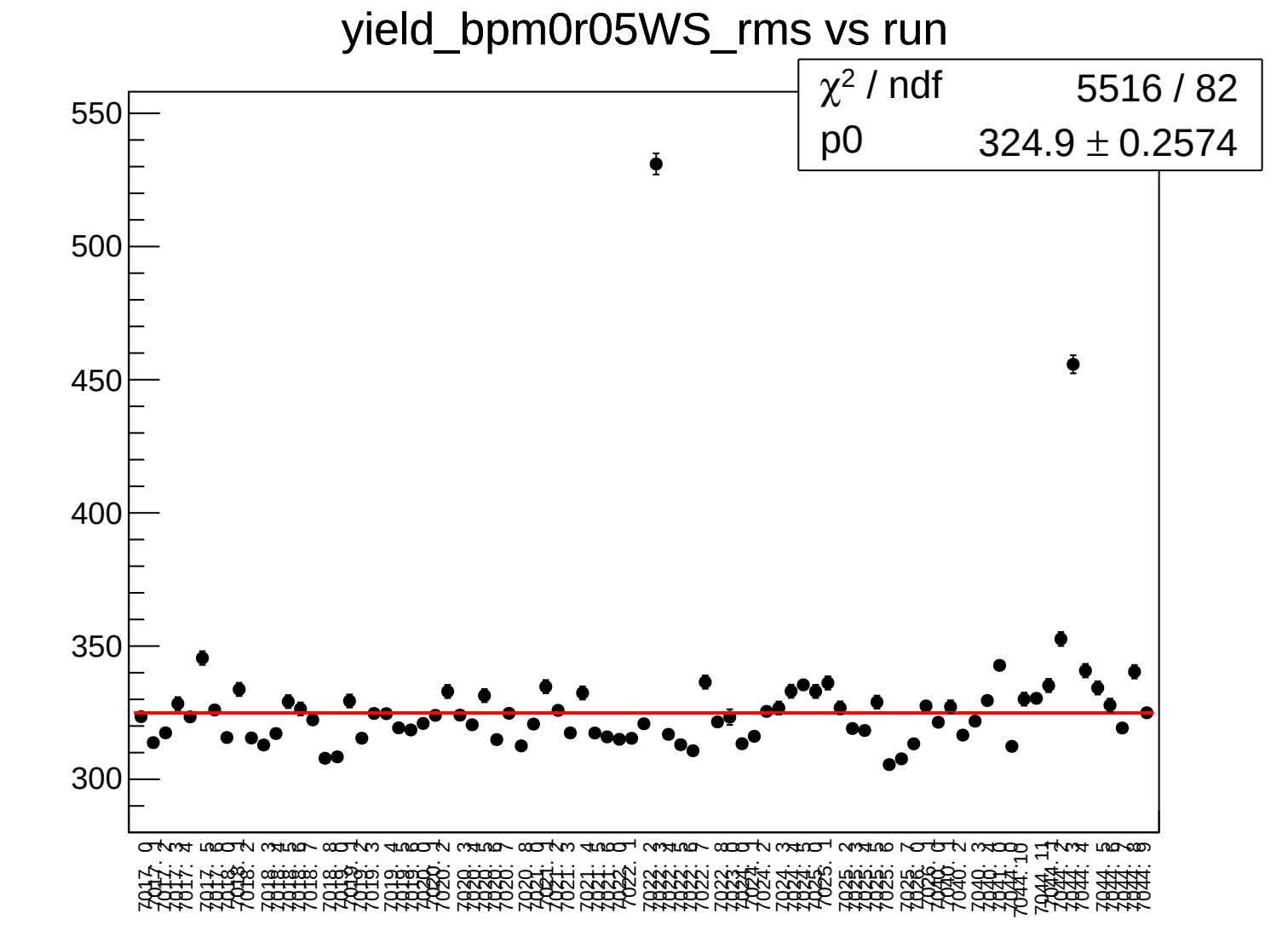

yield_bpm0r03WS_mean vs run
×10^3
141.1
141
140.9
140.8
140.7
140.6
χ² / ndf 2.498e+05 / 82
p0 1.408e+05 ± 0.2217
pull
Entries 83
Mean 76.6
Std Dev 67.35
150
100
50
0
−50
−100

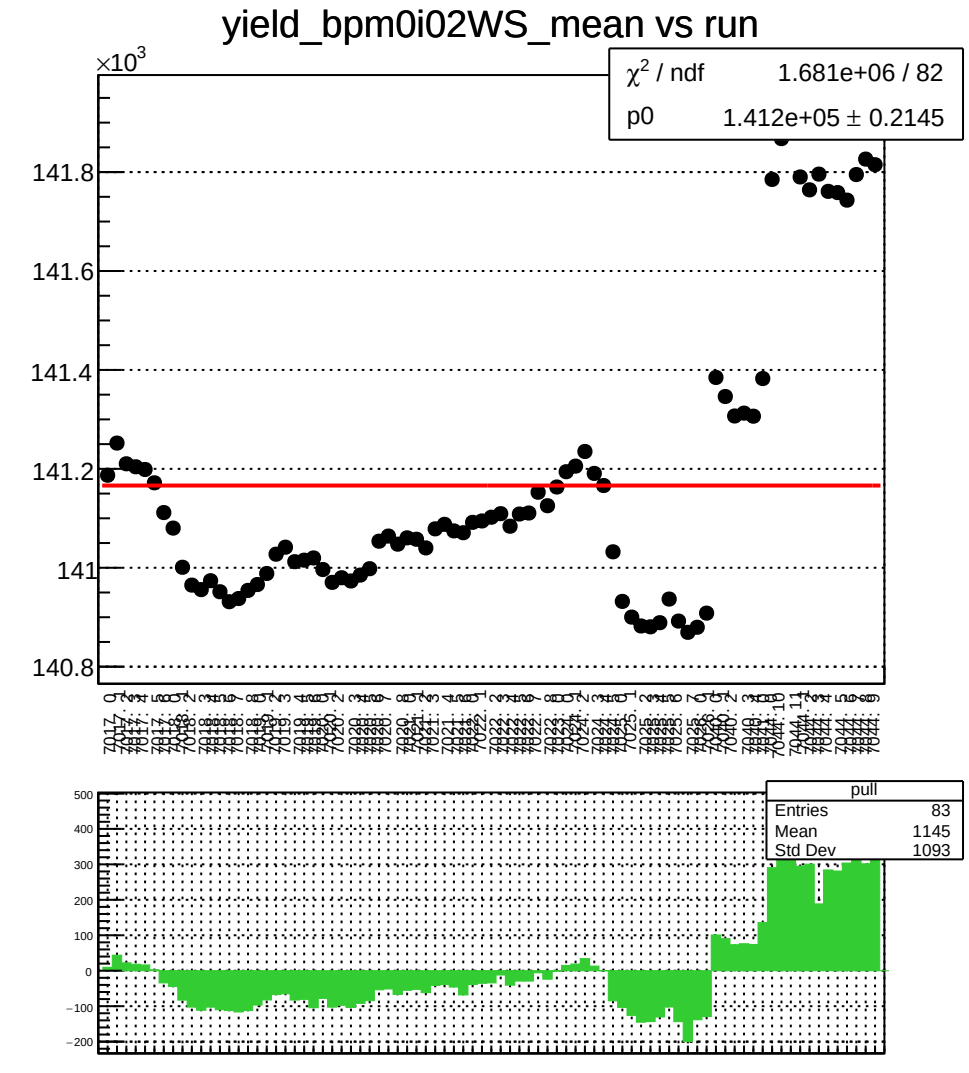

pull1D
Entries 83
Mean −0.9538
Std Dev 4.253
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

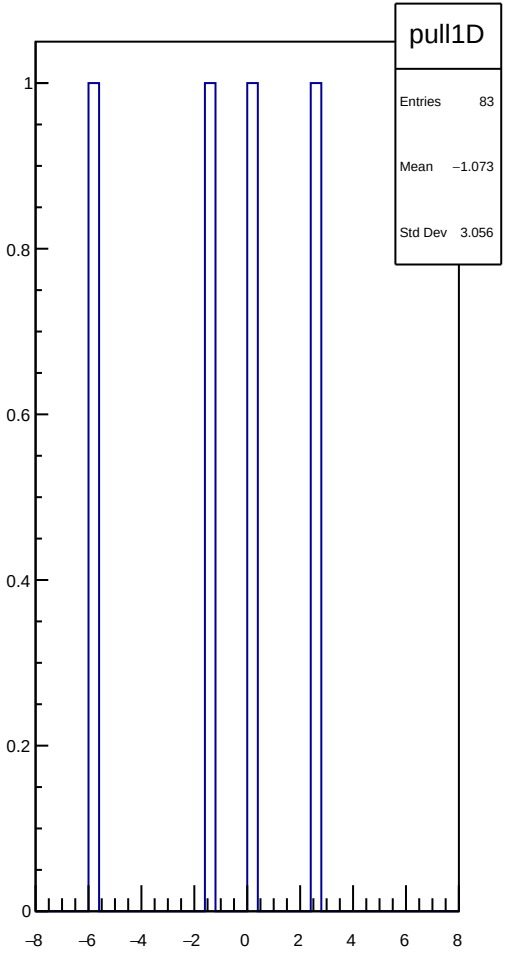

yield_bpm0r03WS_rms vs run
χ² / ndf 2.581e+04 / 82
p0 196.6 ± 0.1568
550
500
450
400
350
300
250
200
150

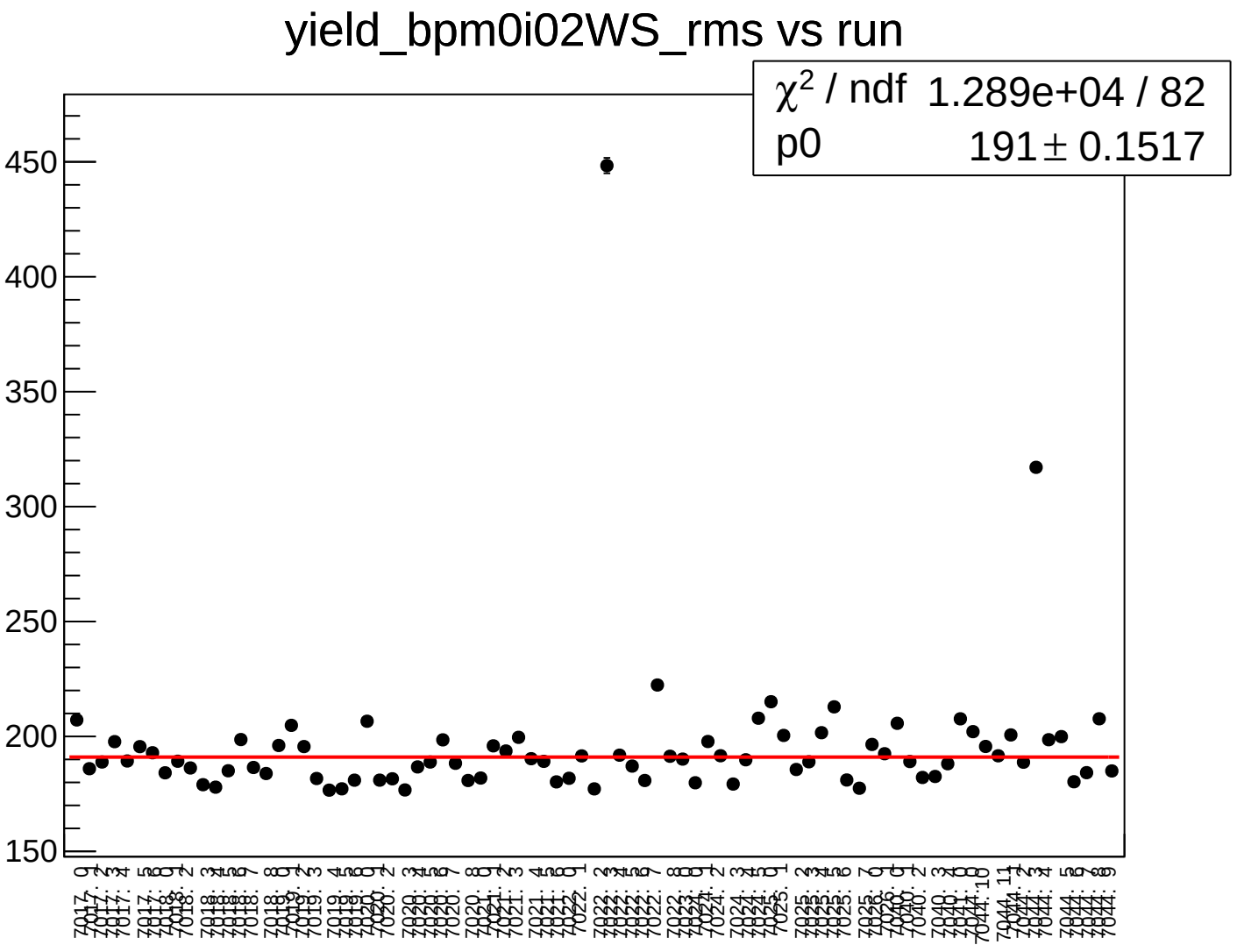

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 1.652e+05 / 82
p0 1.282e+05 ± 0.3641
128.6
128.5
128.4
128.3
128.2
128.1
128
pull
Entries 83
Mean 826.7
Std Dev 778.8
120
100
80
60
40
20
0
−20
−40
−60

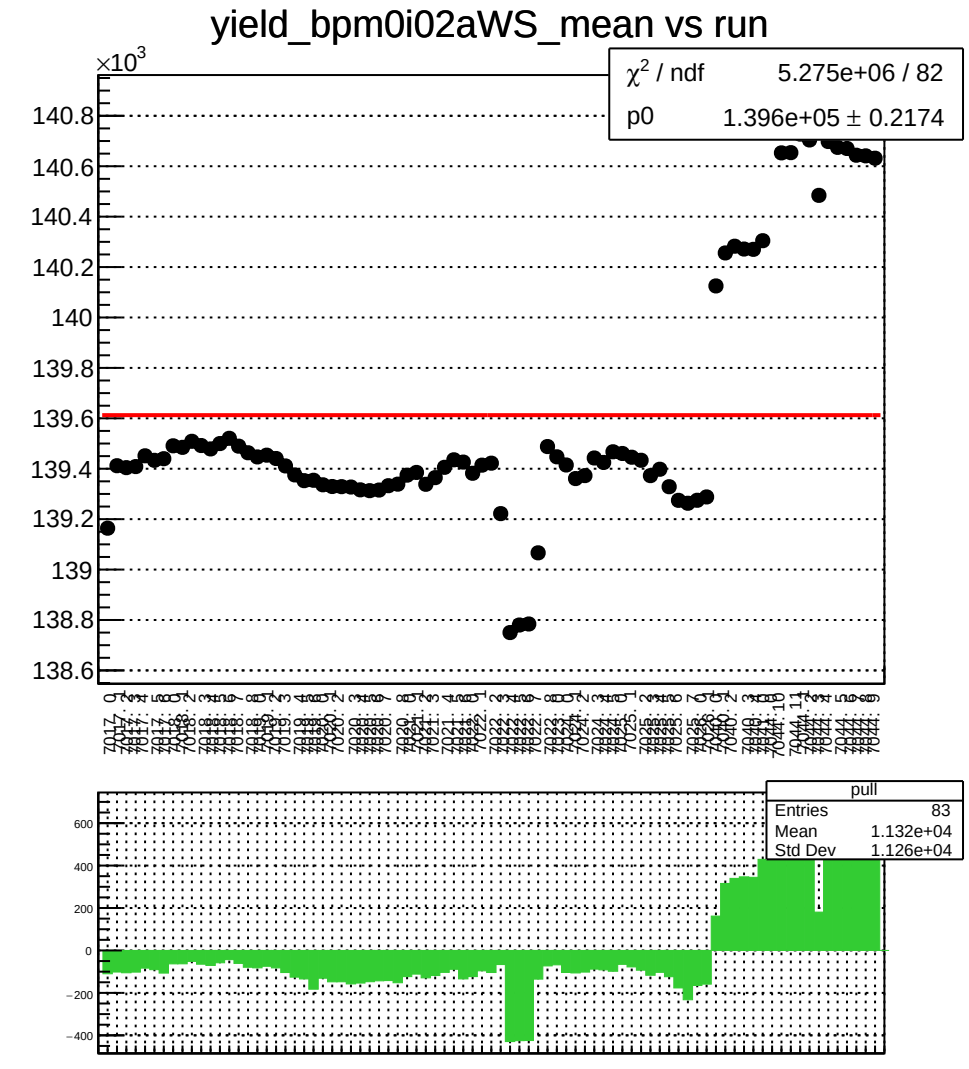

pull1D
Entries 83
Mean −0.7146
Std Dev 4.495
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

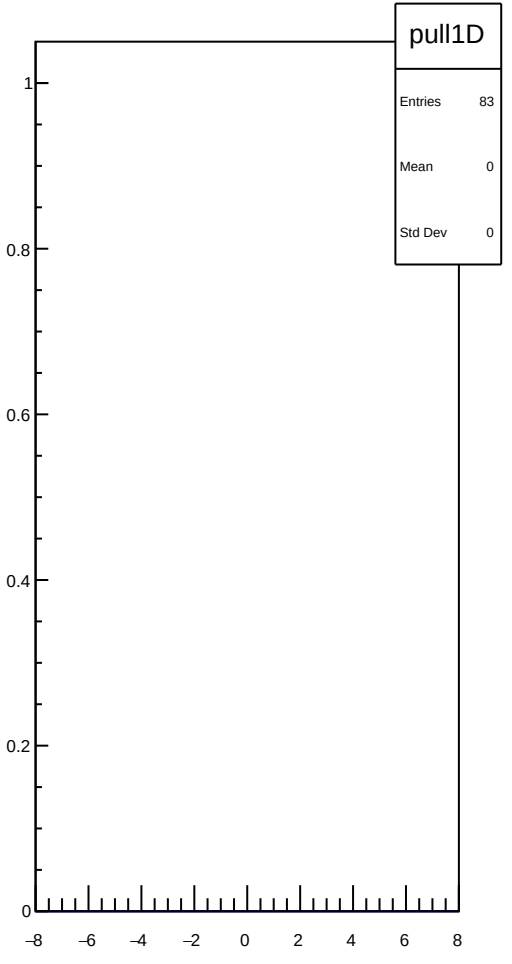

yield_bpm0r05WS_rms vs run
χ² / ndf 5516 / 82
p0 324.9 ± 0.2574
550
500
450
400
350
300

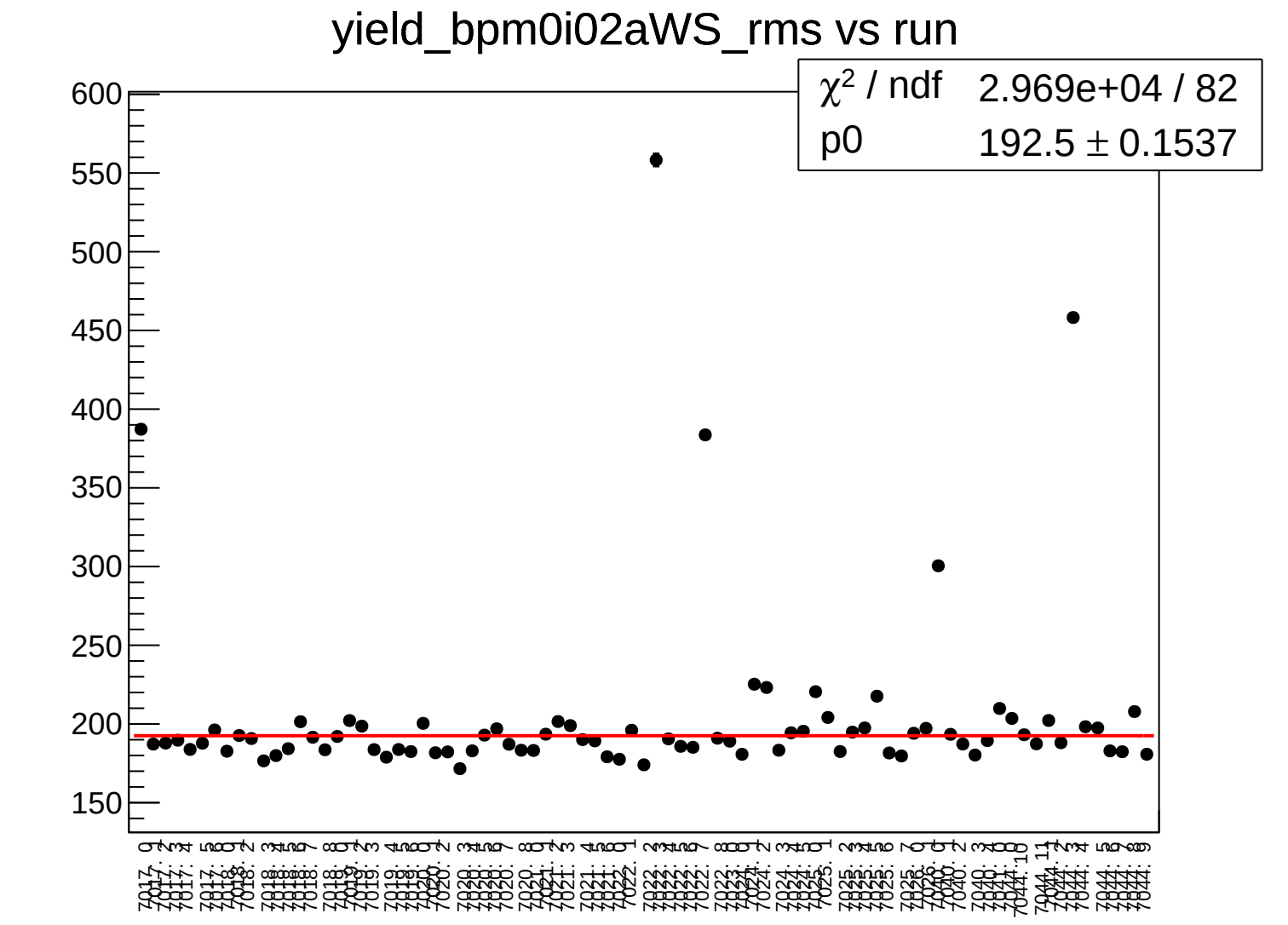

yield_bpm0i02WS_mean vs run
×10^3
χ² / ndf 1.681e+06 / 82
p0 1.412e+05 ± 0.2145
141.8
141.6
141.4
141.2
141
140.8
pull
Entries 83
Mean 1145
Std Dev 1093
500
400
300
200
100
0
−100
−200

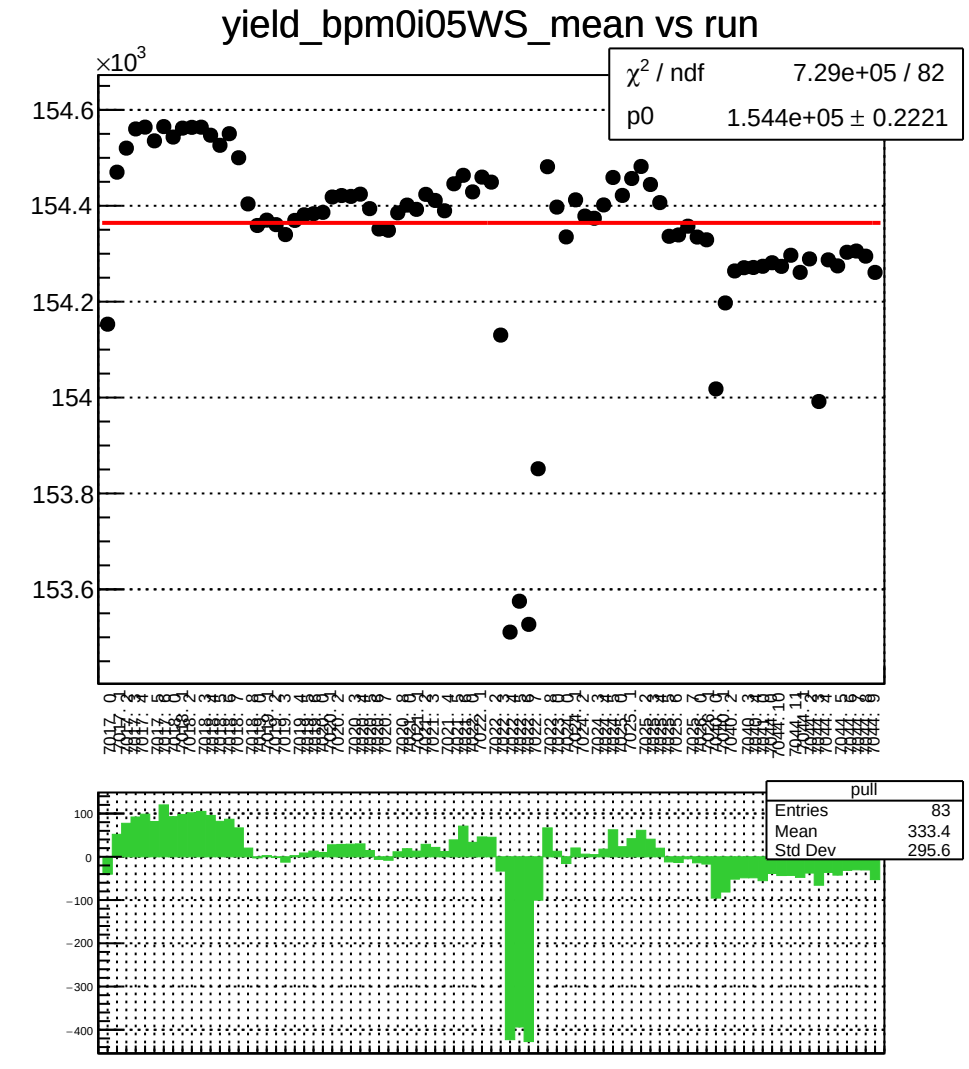

pull1D
Entries 83
Mean −1.073
Std Dev 3.056
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

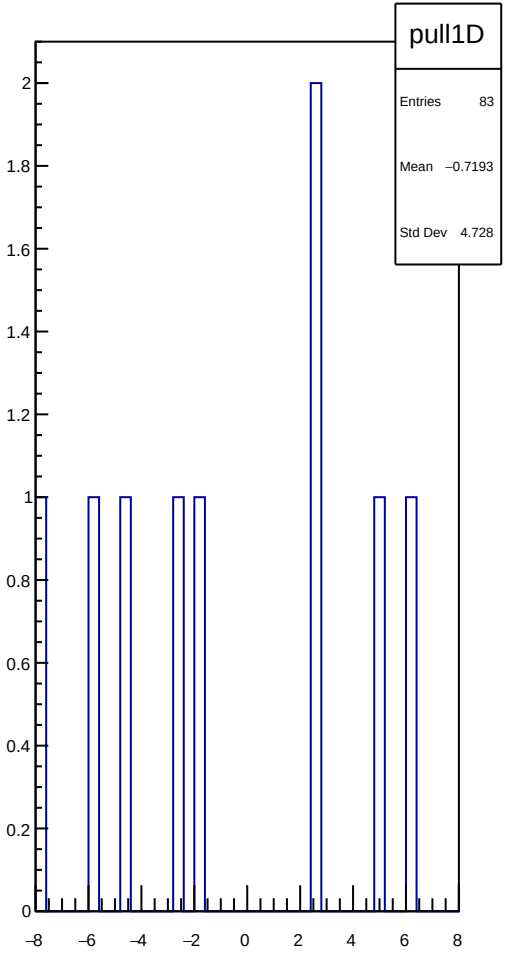

yield_bpm0i02WS_rms vs run
χ² / ndf 1.289e+04 / 82
p0 191 ± 0.1517
450
400
350
300
250
200
150

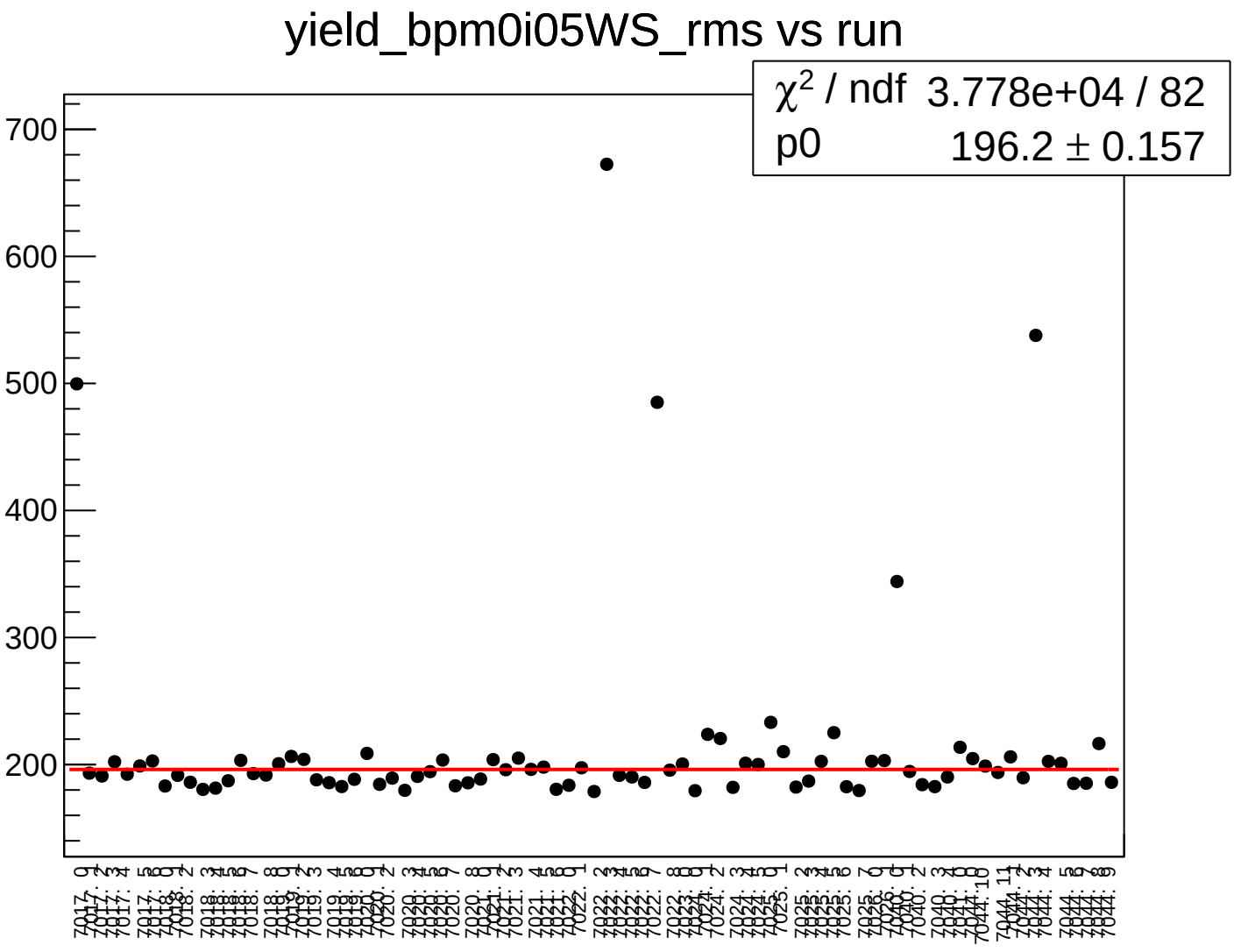

yield_bpm0i02aWS_mean vs run
×10^3
χ² / ndf 5.275e+06 / 82
p0 1.396e+05 ± 0.2174
140.8
140.6
140.4
140.2
140
139.8
139.6
139.4
139.2
139
138.8
138.6
pull
Entries 83
Mean 1.132e+04
Std Dev 1.126e+04
600
400
200
0
−200
−400

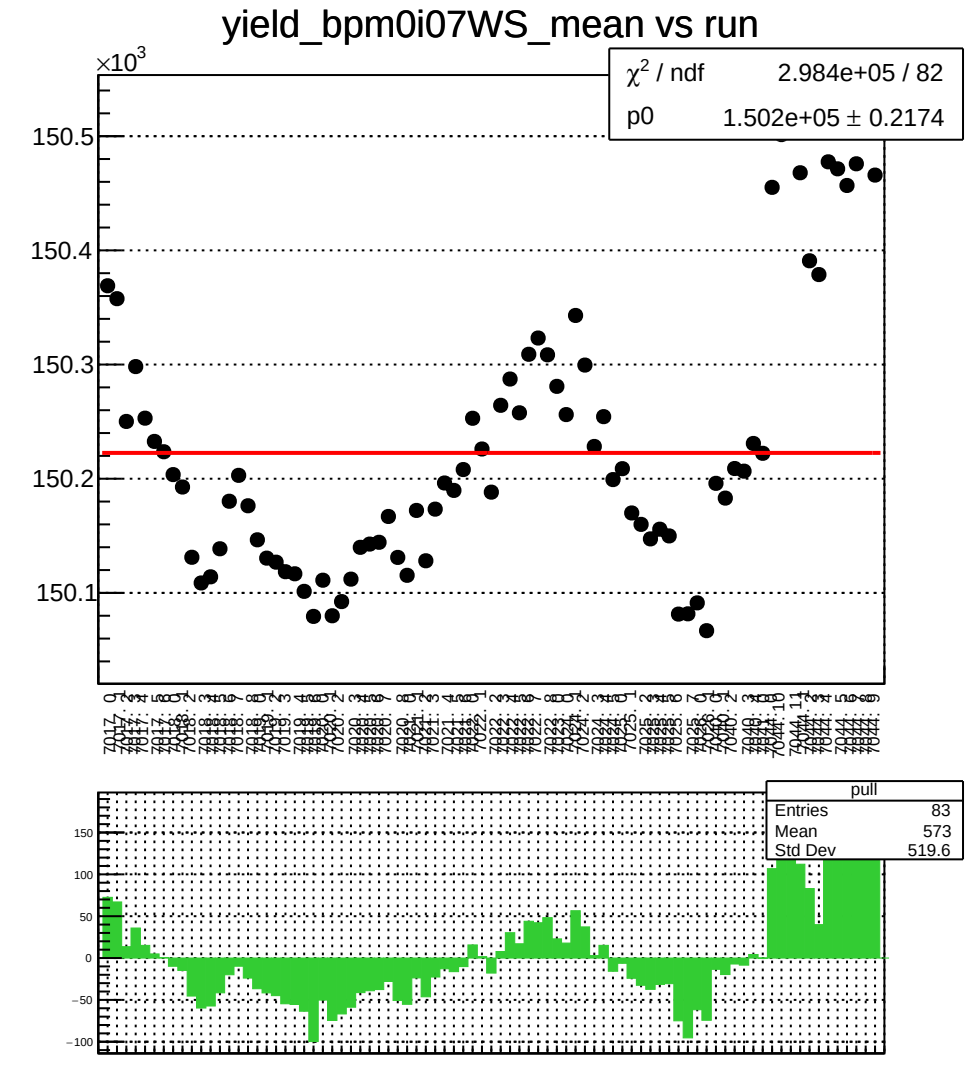

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

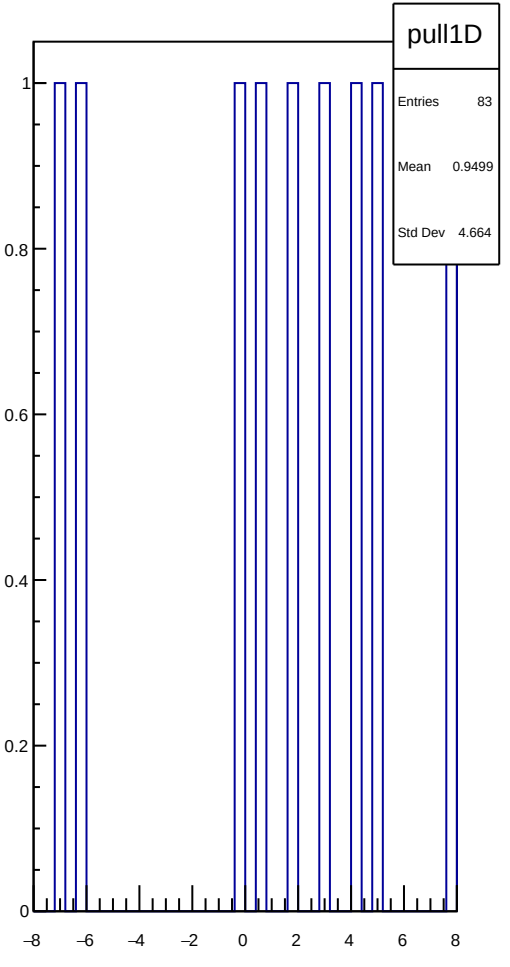

yield_bpm0i02aWS_rms vs run
χ^2 / ndf 2.969e+04 / 82
p0 192.5 ± 0.1537
600
550
500
450
400
350
300
250
200
150

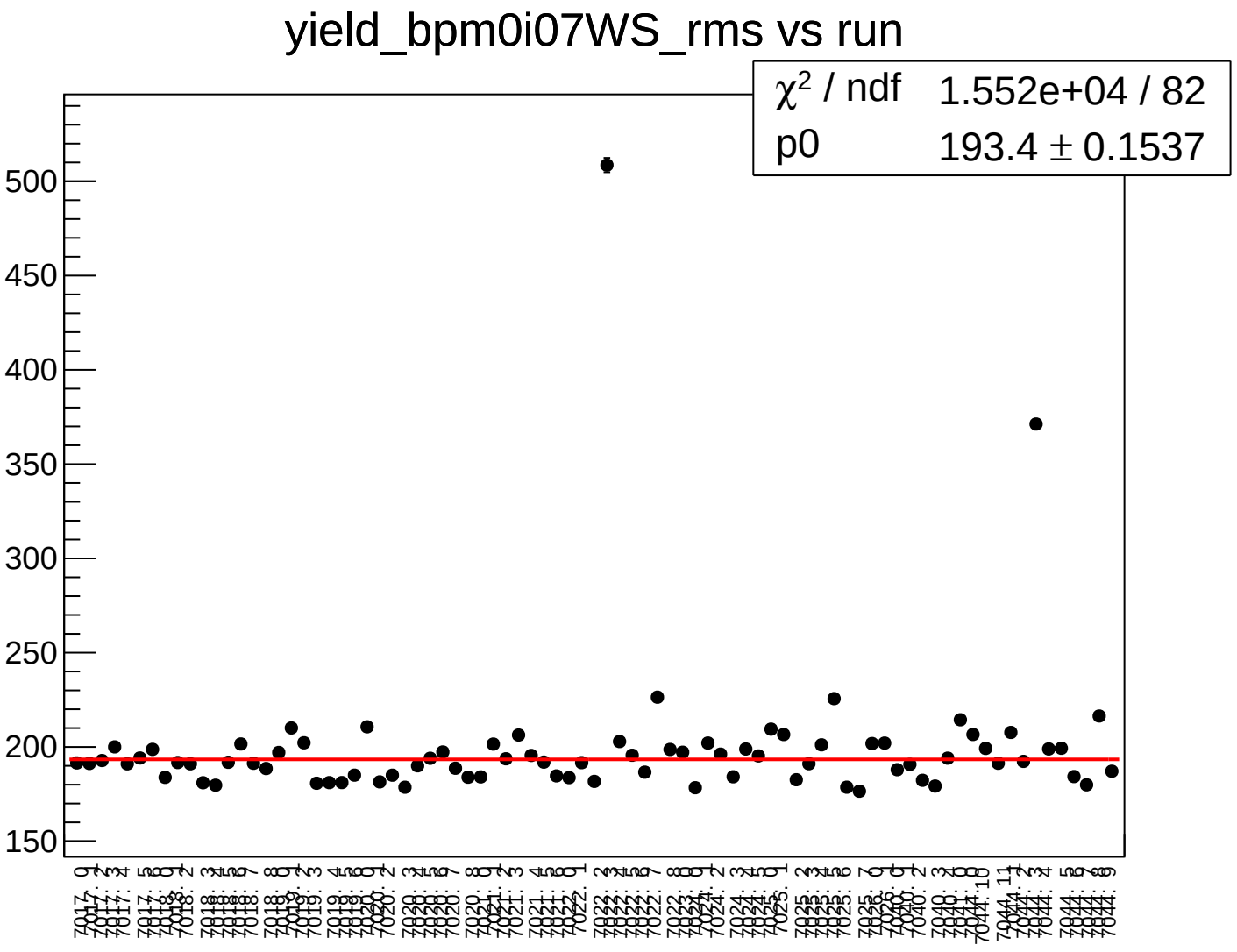

yield_bpm0i05WS_mean vs run
×10^3
154.6
154.4
154.2
154
153.8
153.6
χ² / ndf 7.29e+05 / 82
p0 1.544e+05 ± 0.2221
pull
Entries 83
Mean 333.4
Std Dev 295.6
100
0
−100
−200
−300
−400

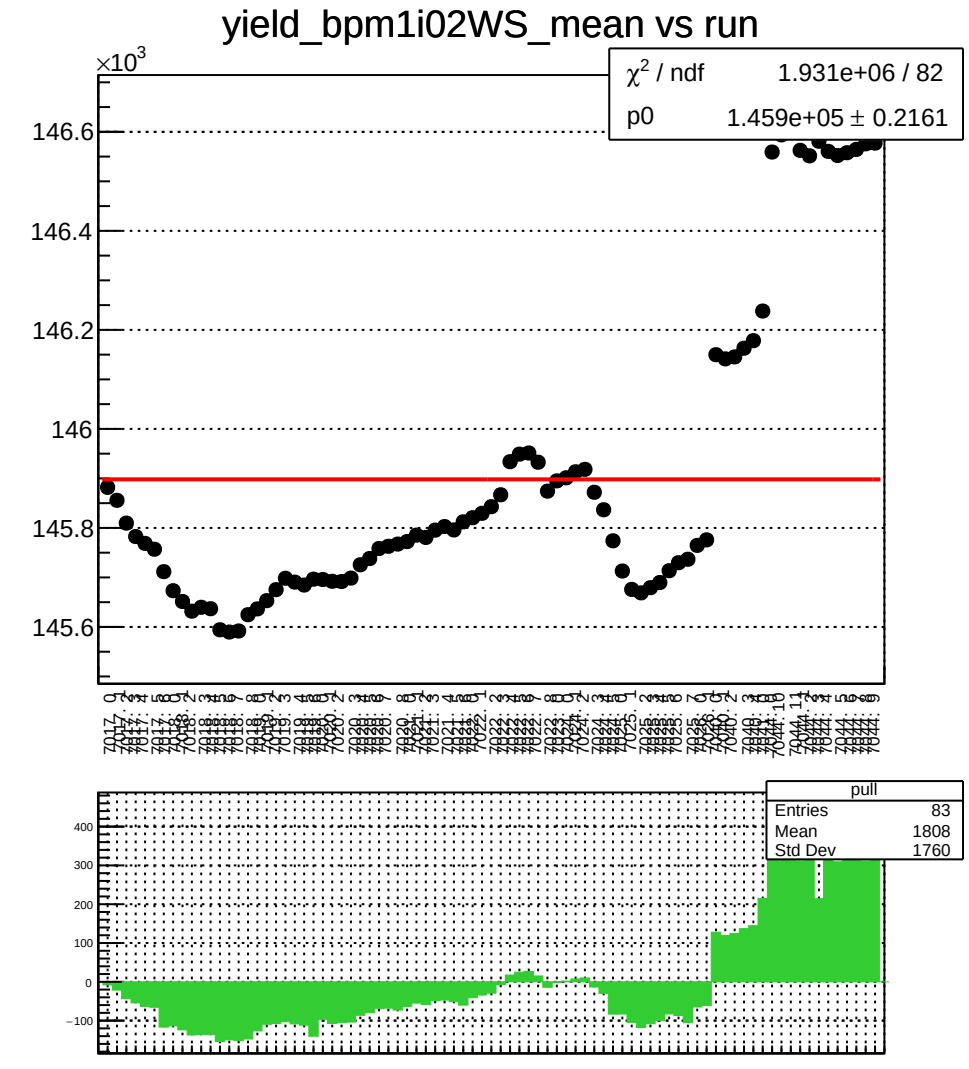

pull1D
Entries 83
Mean −0.7193
Std Dev 4.728
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

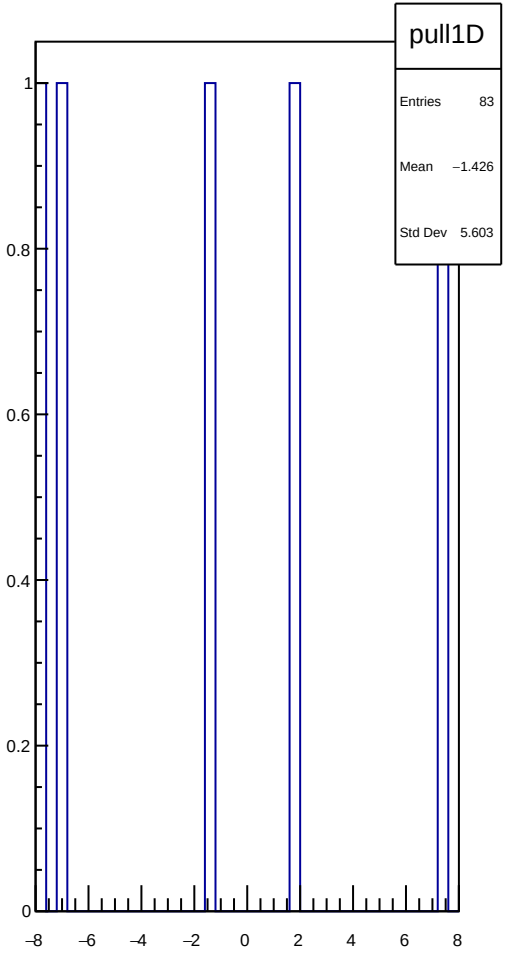

yield_bpm0i05WS_rms vs run
χ² / ndf 3.778e+04 / 82
p0 196.2 ± 0.157
700
600
500
400
300
200

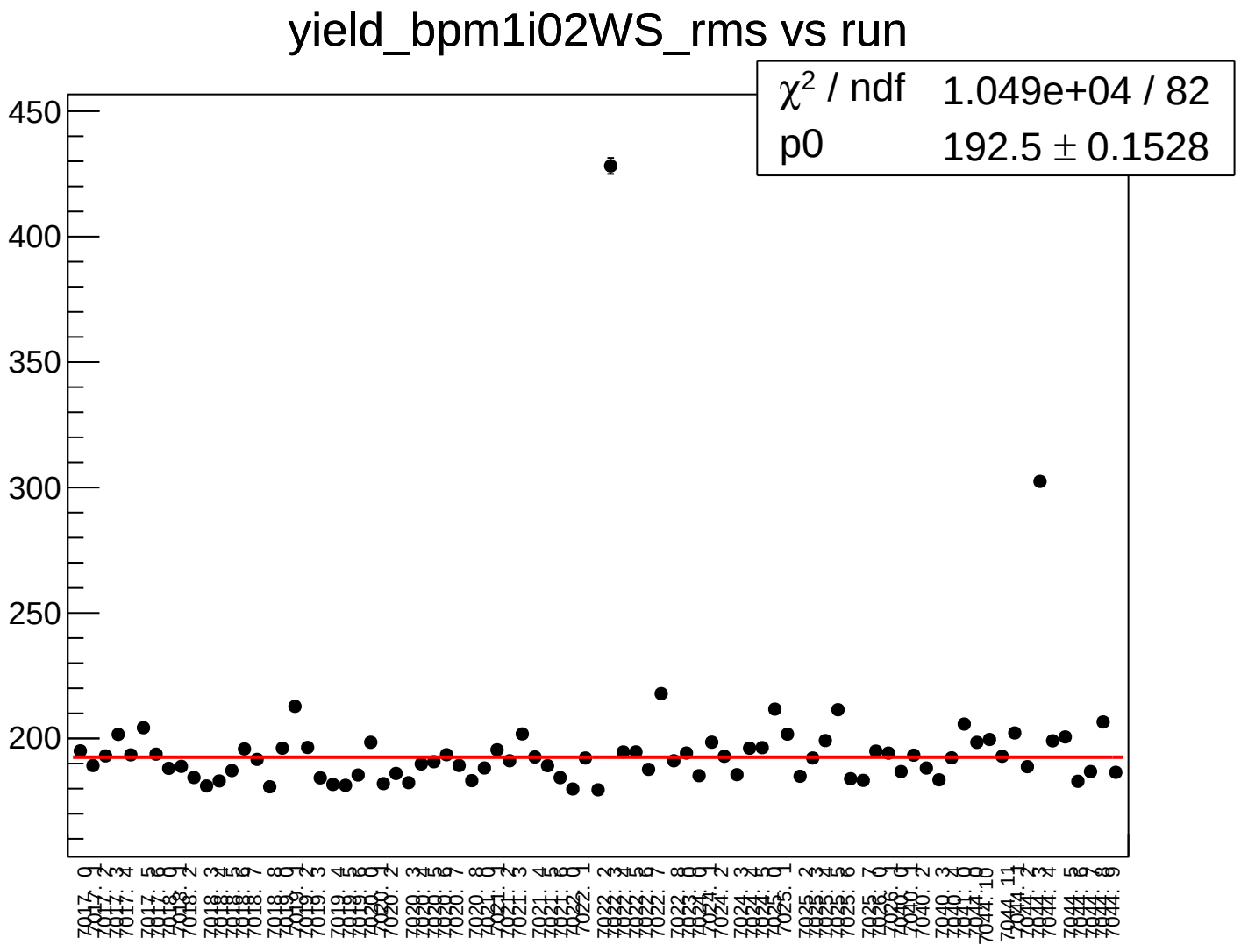

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 2.984e+05 / 82
p0 1.502e+05 ± 0.2174
150.5
150.4
150.3
150.2
150.1
pull
Entries 83
Mean 573
Std Dev 519.6
150
100
50
0
−50
−100

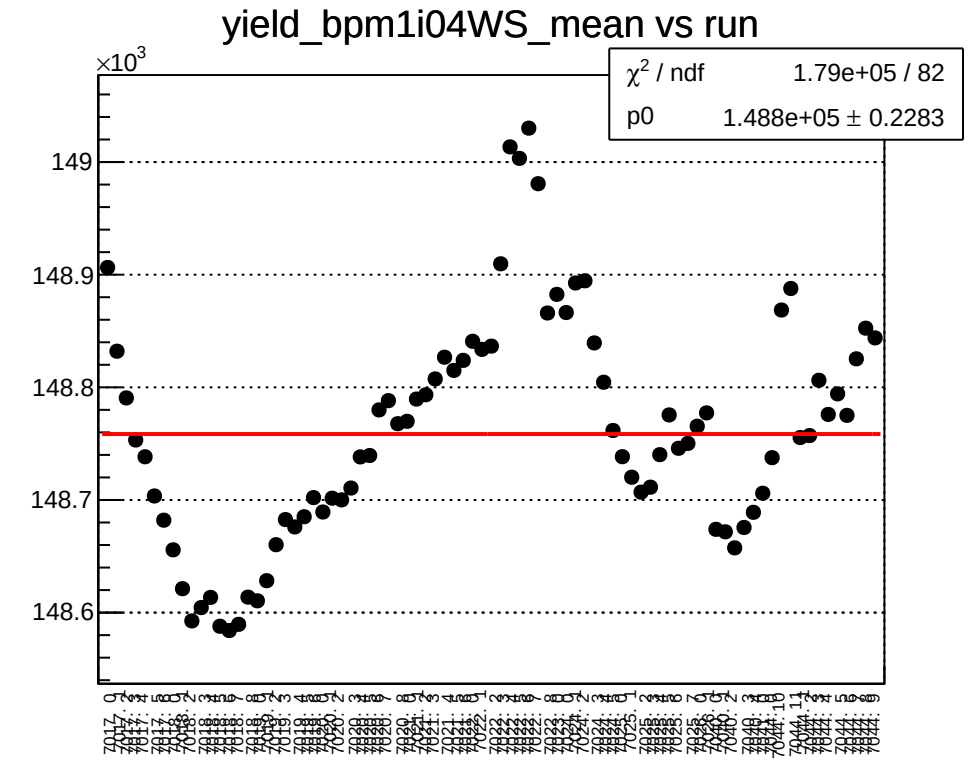

pull1D
Entries 83
Mean 0.9499
Std Dev 4.664
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

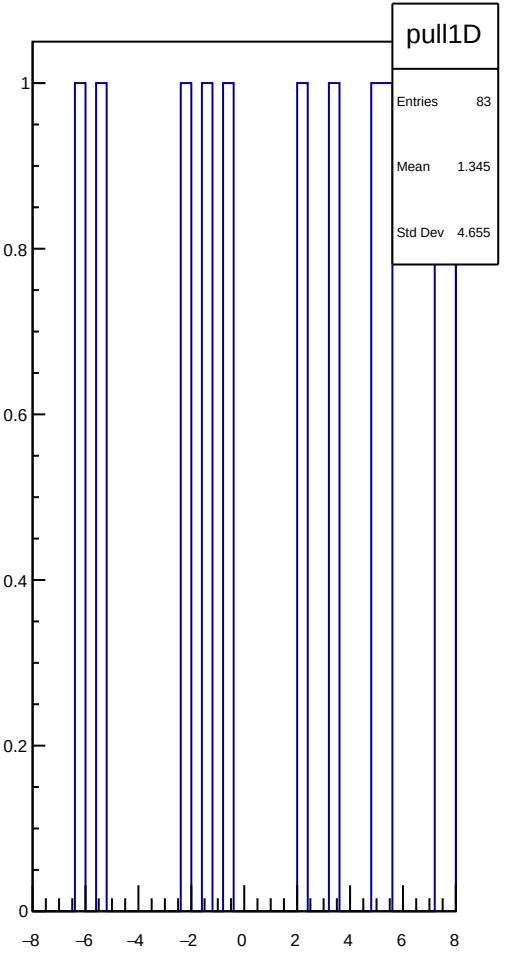

yield_bpm0i07WS_rms vs run
χ² / ndf 1.552e+04 / 82
p0 193.4 ± 0.1537
500
450
400
350
300
250
200
150

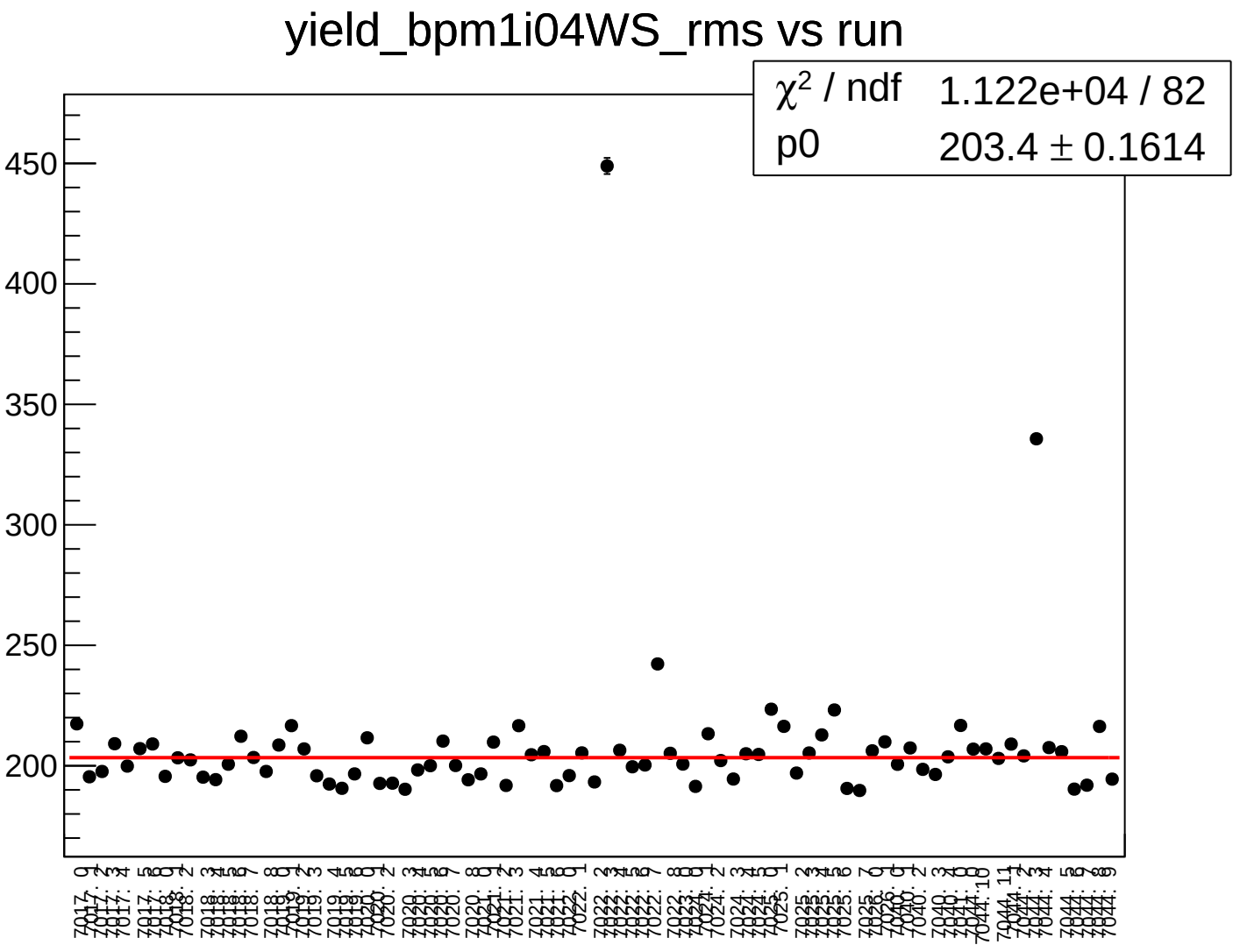

yield_bpm1i02WS_mean vs run
×10^3
χ² / ndf 1.931e+06 / 82
p0 1.459e+05 ± 0.2161
146.6
146.4
146.2
146
145.8
145.6
pull
Entries 83
Mean 1808
Std Dev 1760
400
300
200
100
0
−100

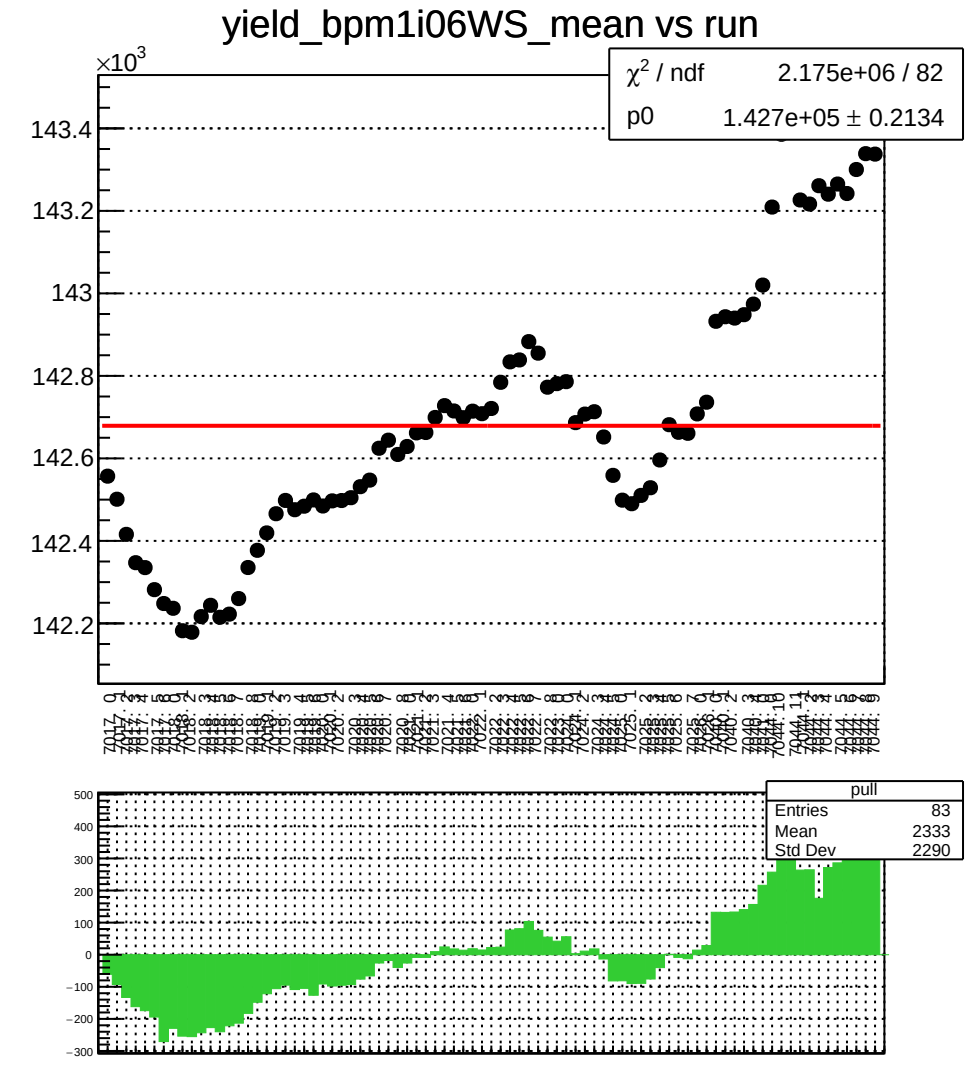

pull1D
Entries 83
Mean −1.426
Std Dev 5.603
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

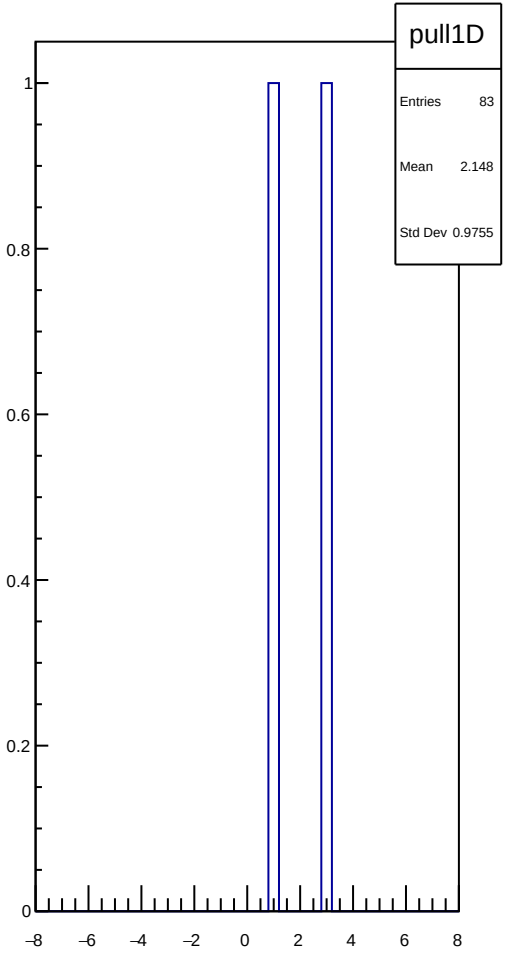

yield_bpm1i02WS_rms vs run
χ² / ndf 1.049e+04 / 82
p0 192.5 ± 0.1528
450
400
350
300
250
200

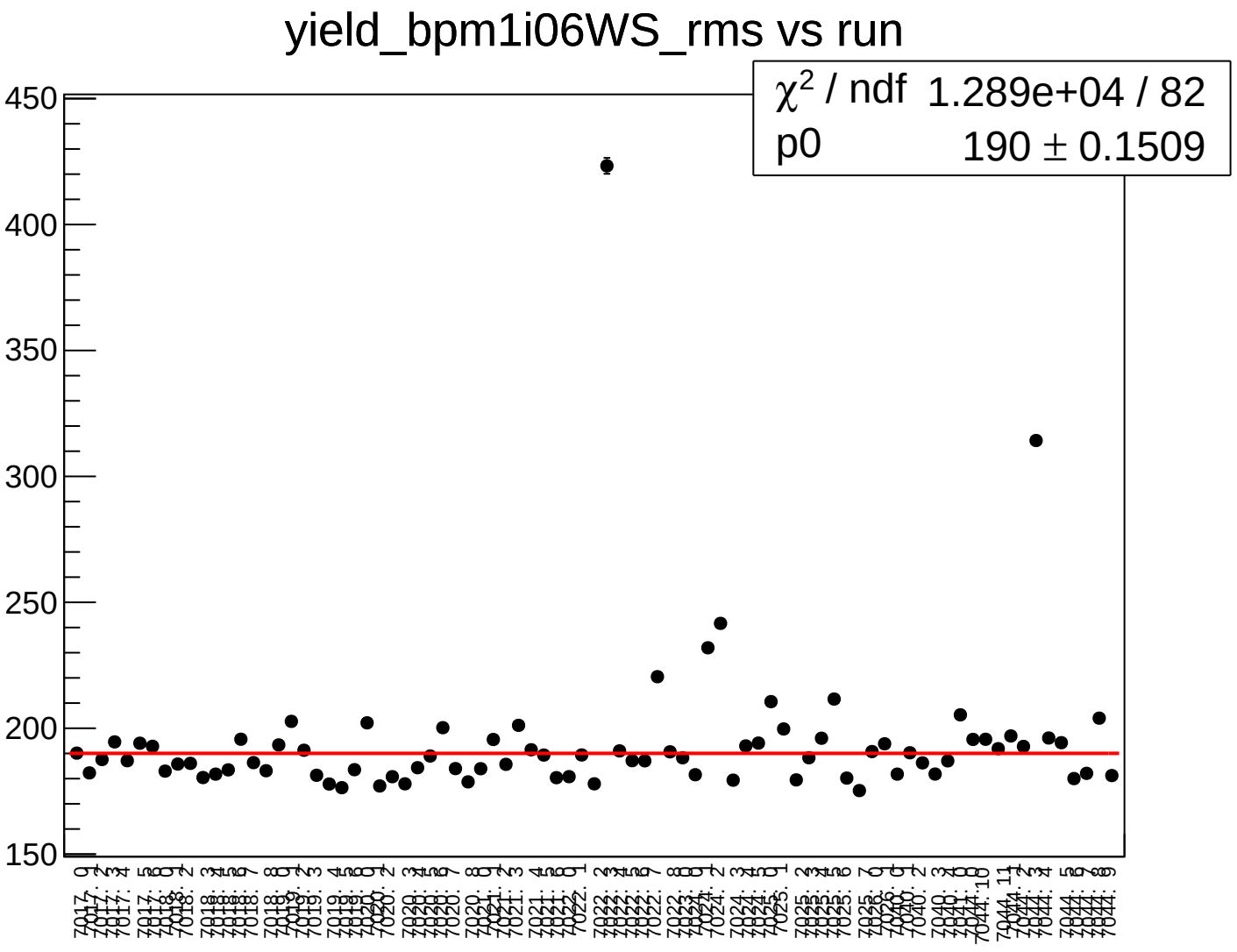

yield_bpm1i04WS_mean vs run
×10^3
χ² / ndf 1.79e+05 / 82
p0 1.488e+05 ± 0.2283
149
148.9
148.8
148.7
148.6
pull
Entries 83
Mean 870
Std Dev 835.5
120
100
80
60
40
20
0
−20
−40
−60
−80

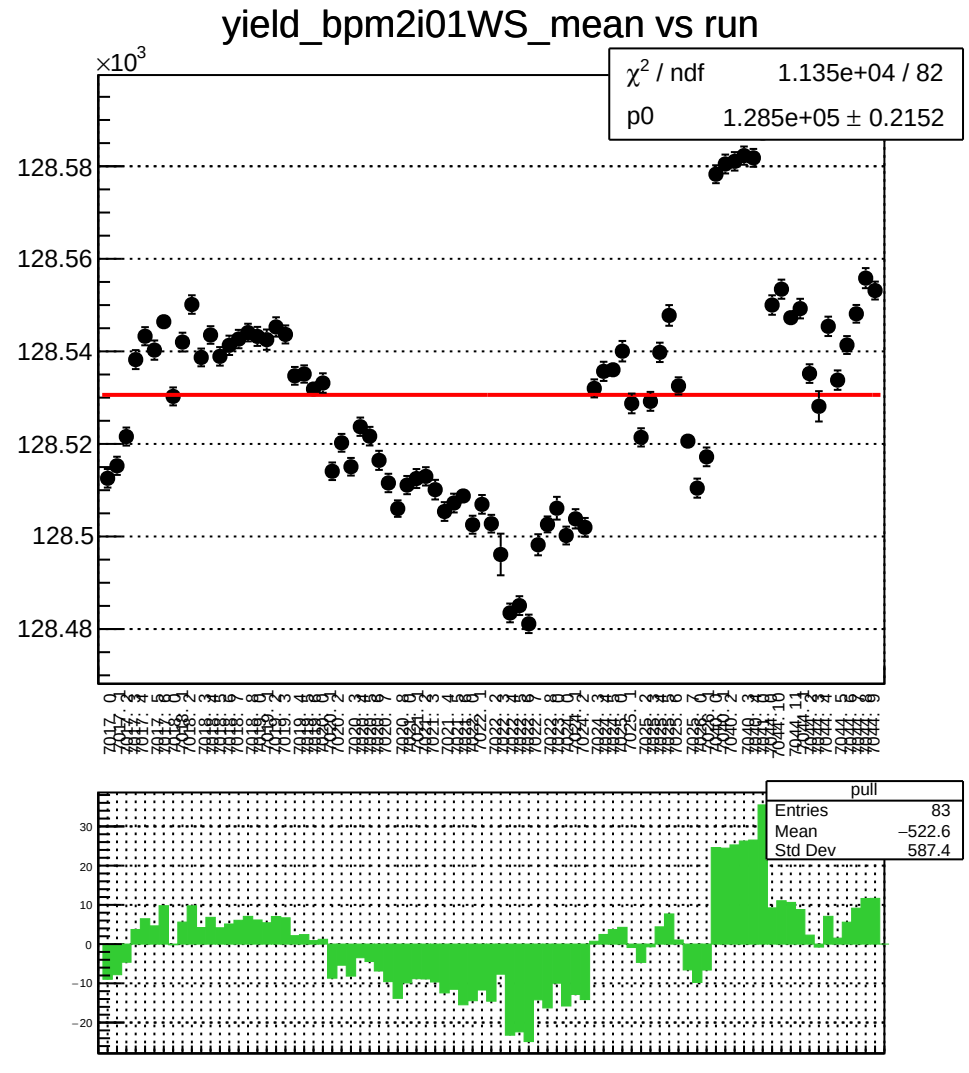

pull1D
Entries 83
Mean 1.345
Std Dev 4.655
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

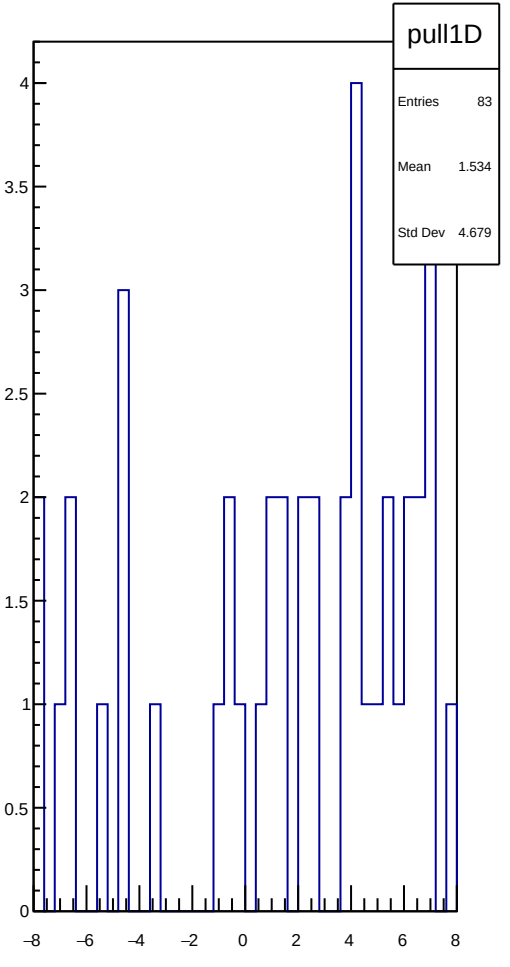

yield_bpm1i04WS_rms vs run
χ^2 / ndf 1.122e+04 / 82
p0 203.4 ± 0.1614
450
400
350
300
250
200

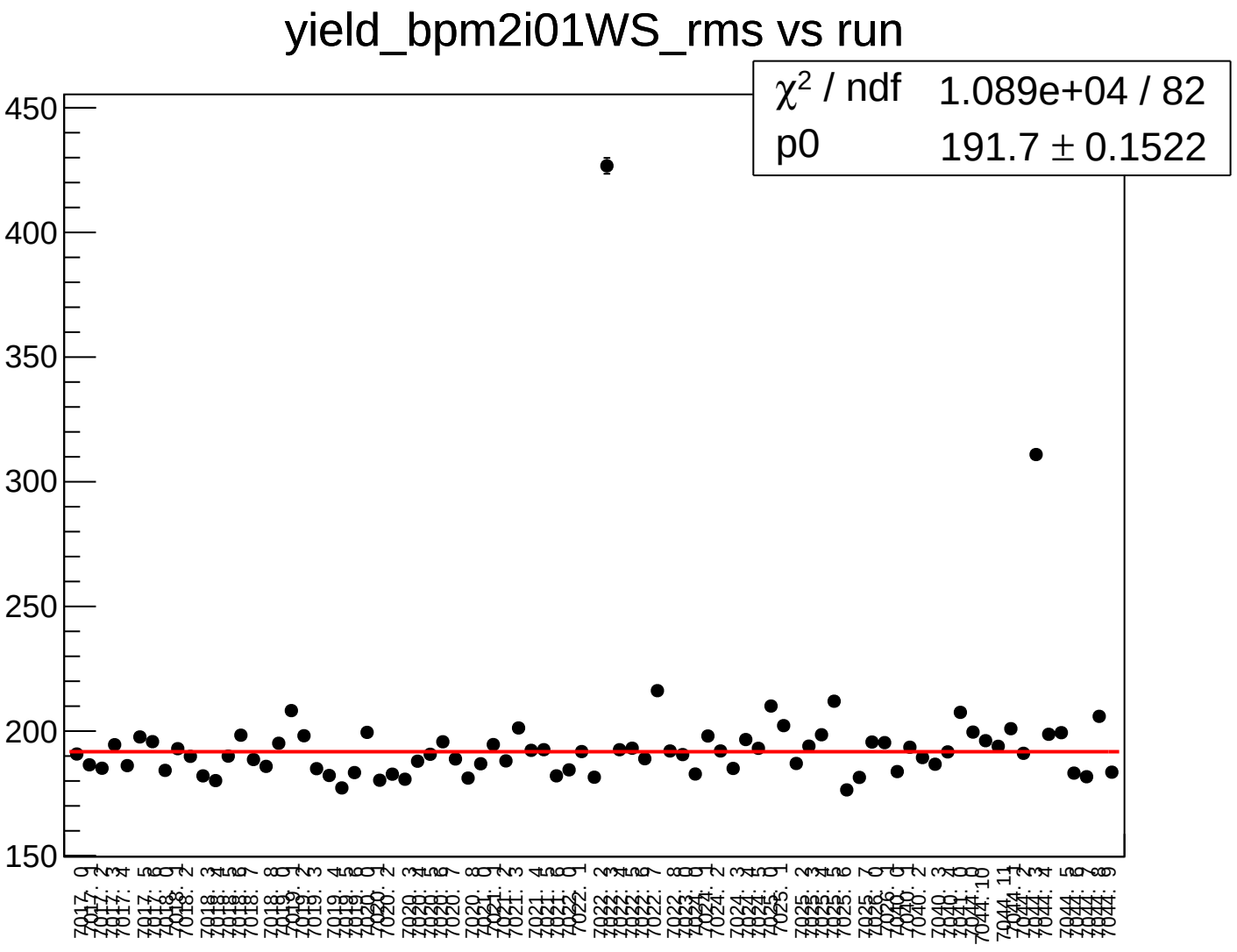

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 2.175e+06 / 82
p0 1.427e+05 ± 0.2134
143.4
143.2
143
142.8
142.6
142.4
142.2
pull
Entries 83
Mean 2333
Std Dev 2290
500
400
300
200
100
0
−100
−200
−300

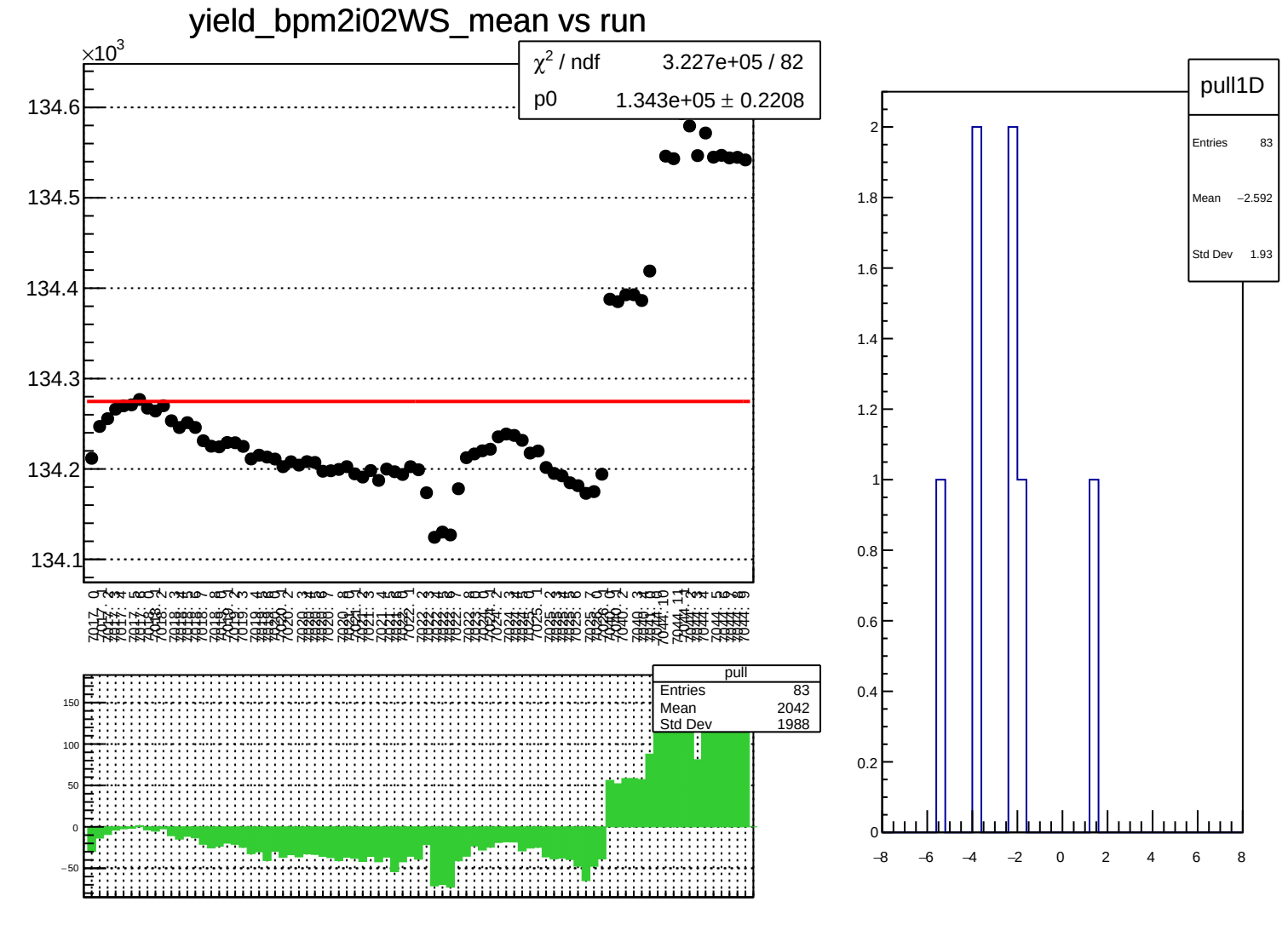

pull1D
Entries 83
Mean 2.148
Std Dev 0.9755
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

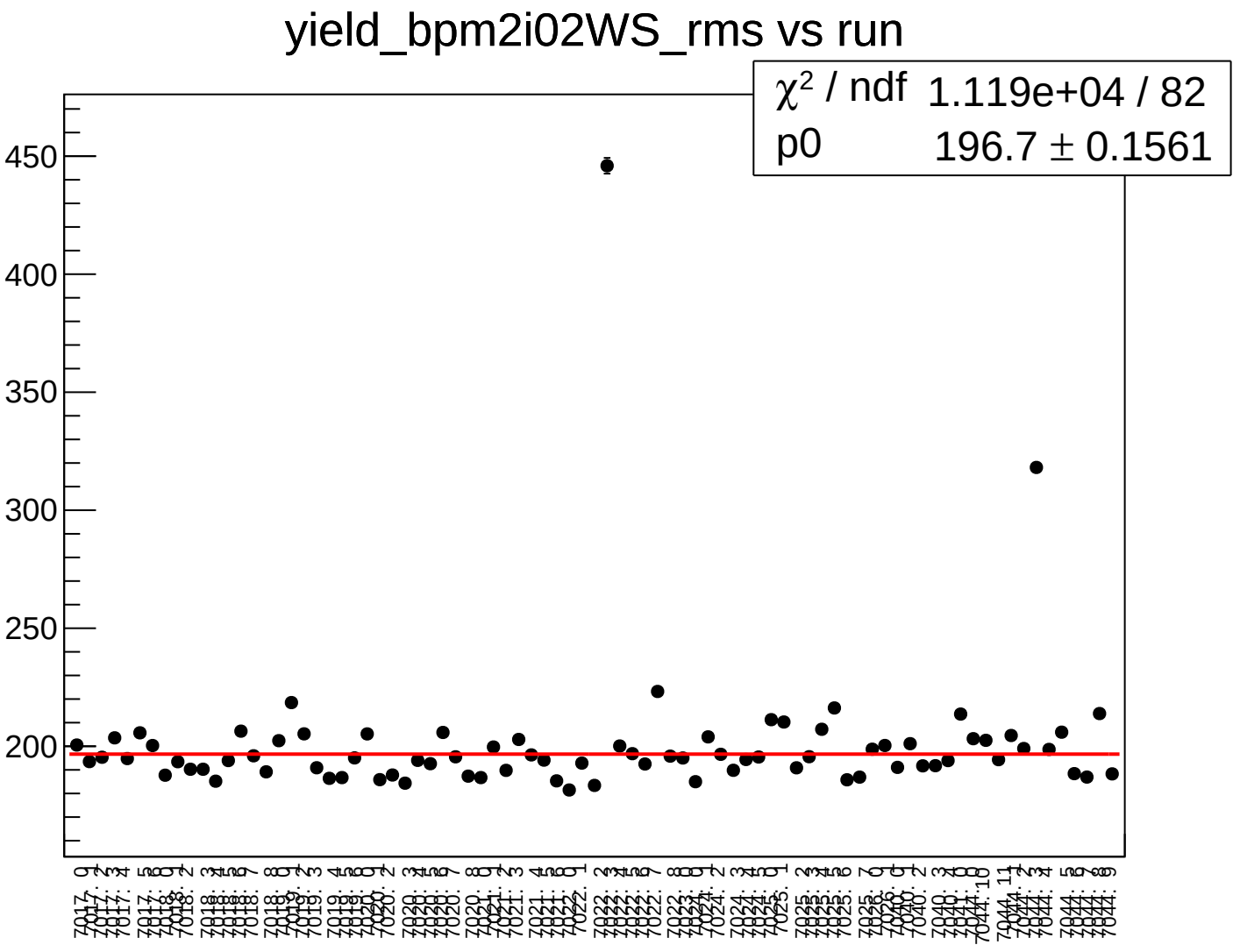

yield_bpm1i06WS_rms vs run
χ^2 / ndf 1.289e+04 / 82
p0 190 ± 0.1509
450
400
350
300
250
200
150

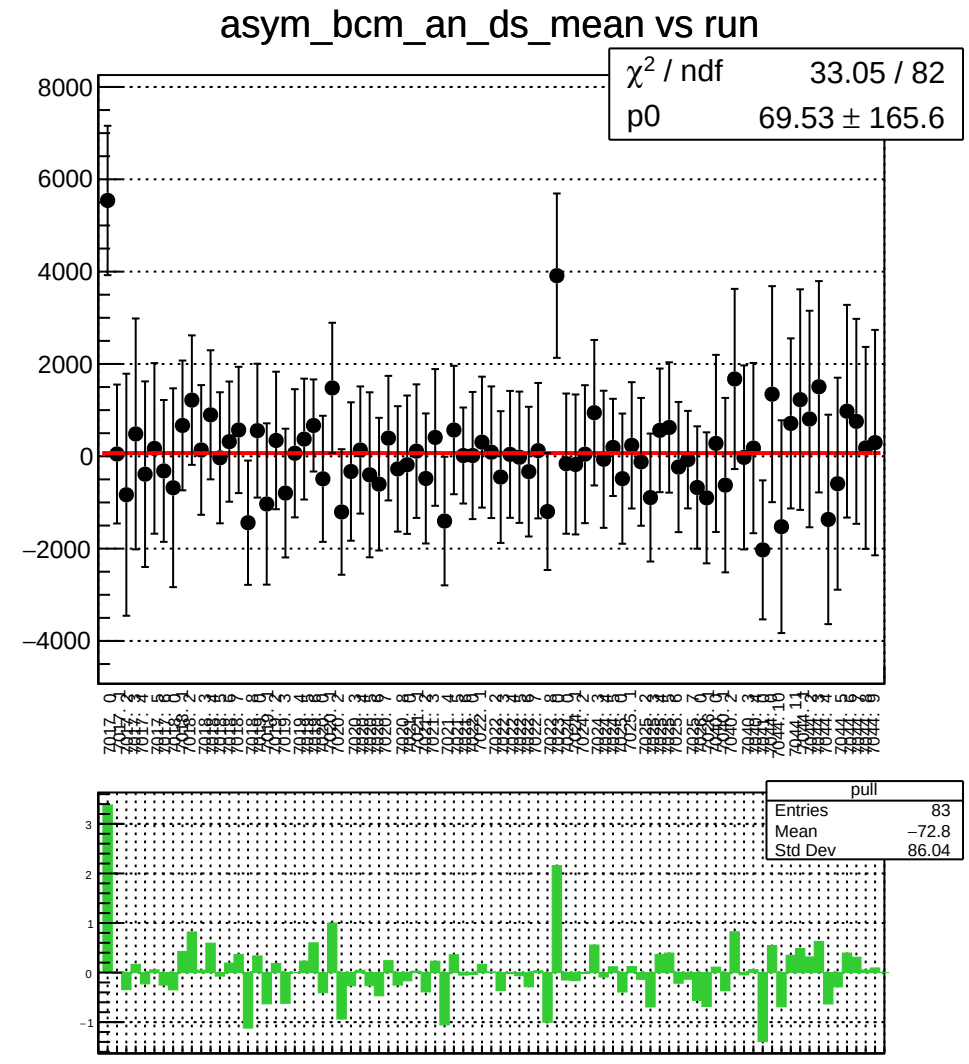

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 1.135e+04 / 82
p0 1.285e+05 ± 0.2152
128.58
128.56
128.54
128.52
128.5
128.48
pull
Entries 83
Mean −522.6
Std Dev 587.4
30
20
10
0
−10
−20

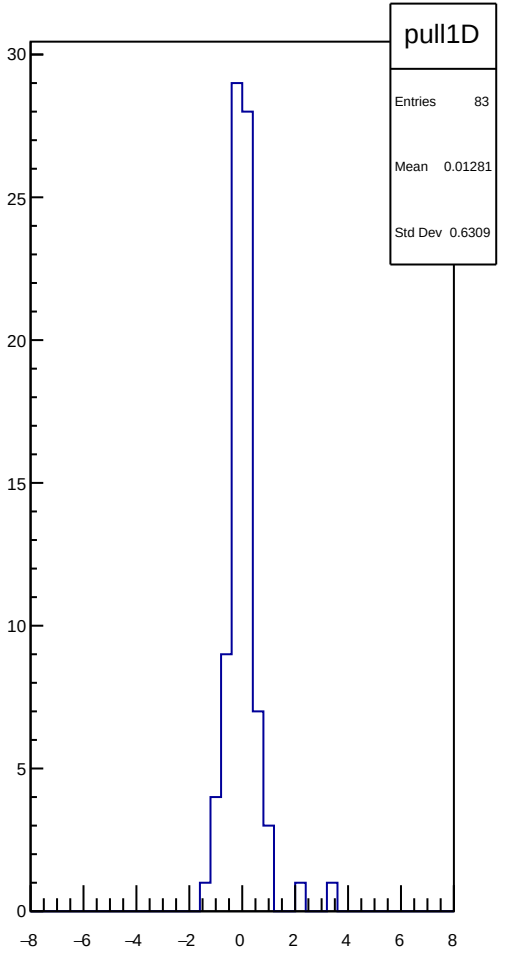

pull1D
Entries 83
Mean 1.534
Std Dev 4.679
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

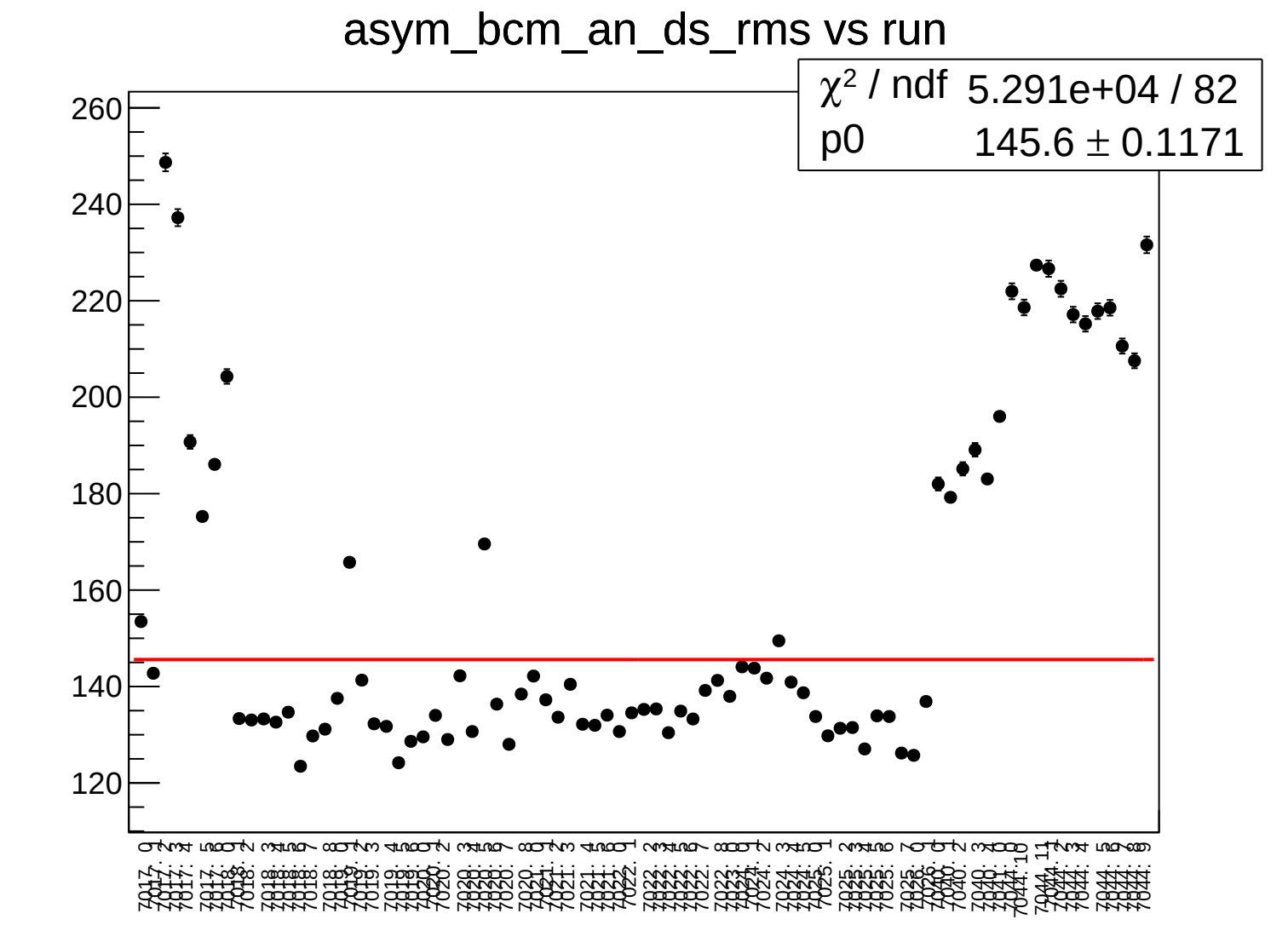

yield_bpm2i01WS_rms vs run
χ² / ndf 1.089e+04 / 82
p0 191.7 ± 0.1522
450
400
350
300
250
200
150

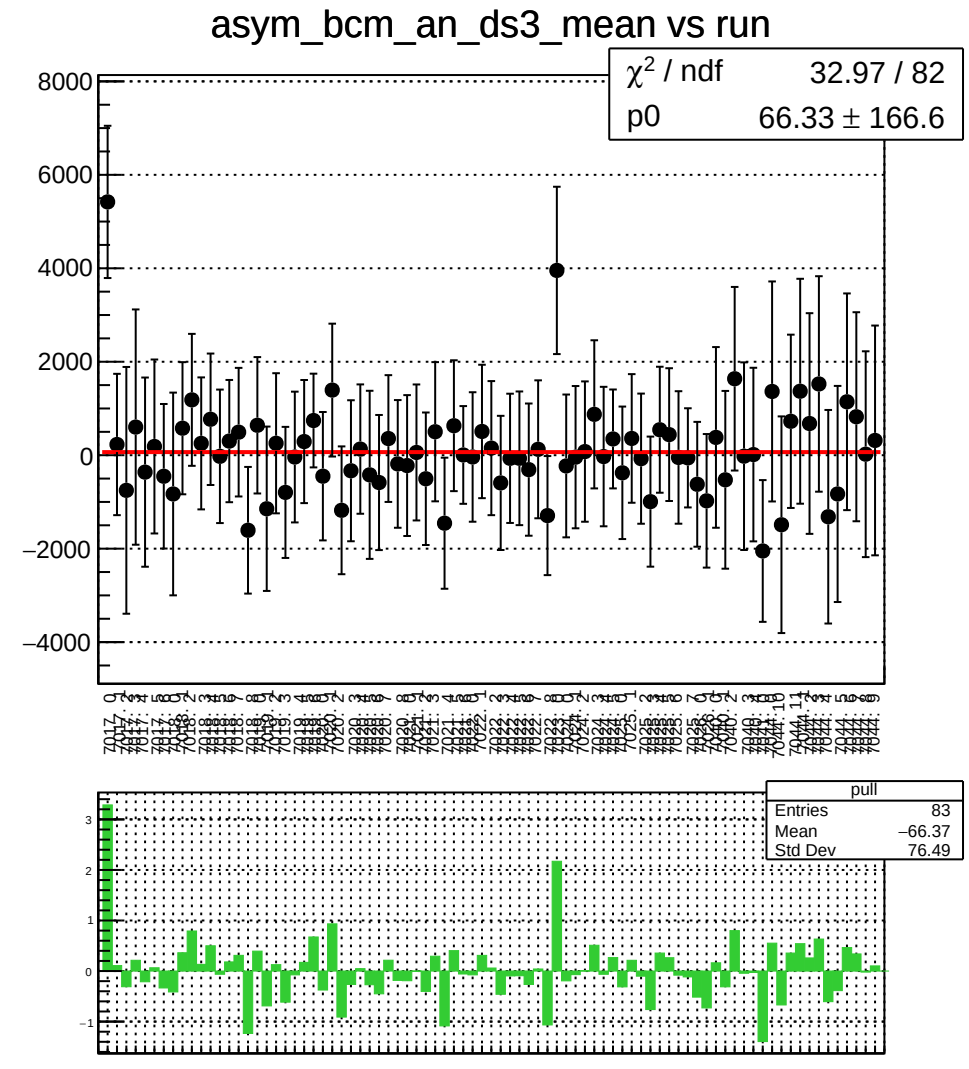

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 3.227e+05 / 82
p0 1.343e+05 ± 0.2208
134.6
134.5
134.4
134.3
134.2
134.1
pull
Entries 83
Mean 2042
Std Dev 1988
150
100
50
0
−50
pull1D
Entries 83
Mean −2.592
Std Dev 1.93
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

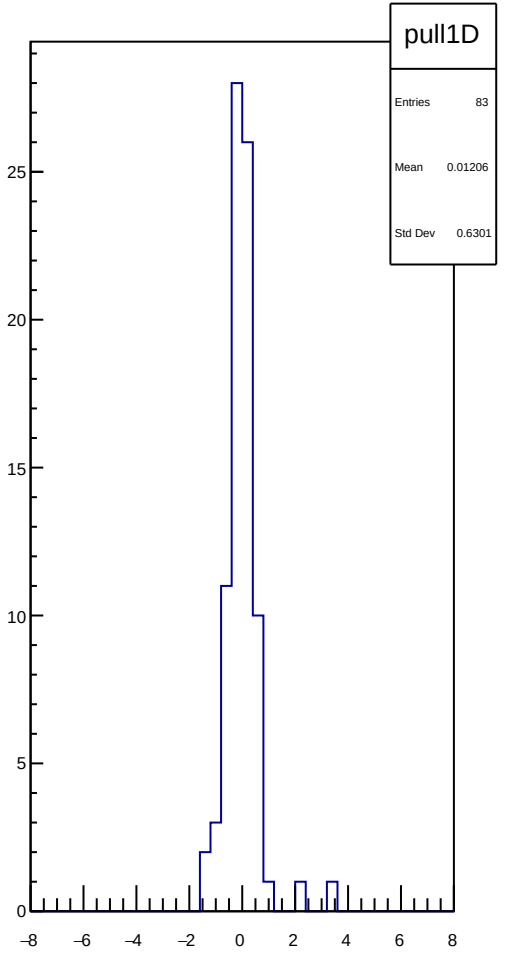

yield_bpm2i02WS_rms vs run
χ² / ndf 1.119e+04 / 82
p0 196.7 ± 0.1561
450
400
350
300
250
200

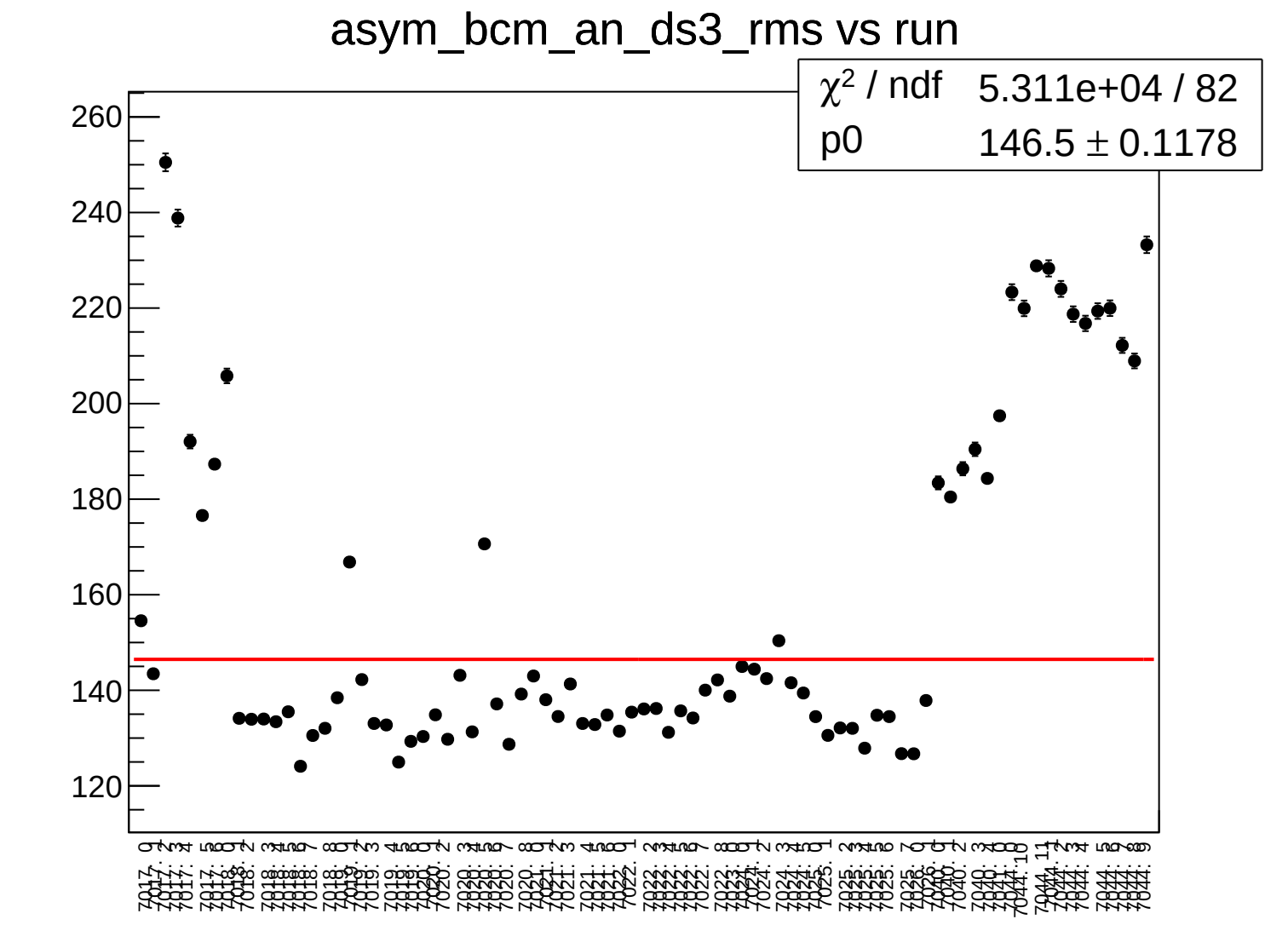

asym_bcm_an_ds_mean vs run
χ² / ndf 33.05 / 82
p0 69.53 ± 165.6
pull
Entries 83
Mean −72.8
Std Dev 86.04

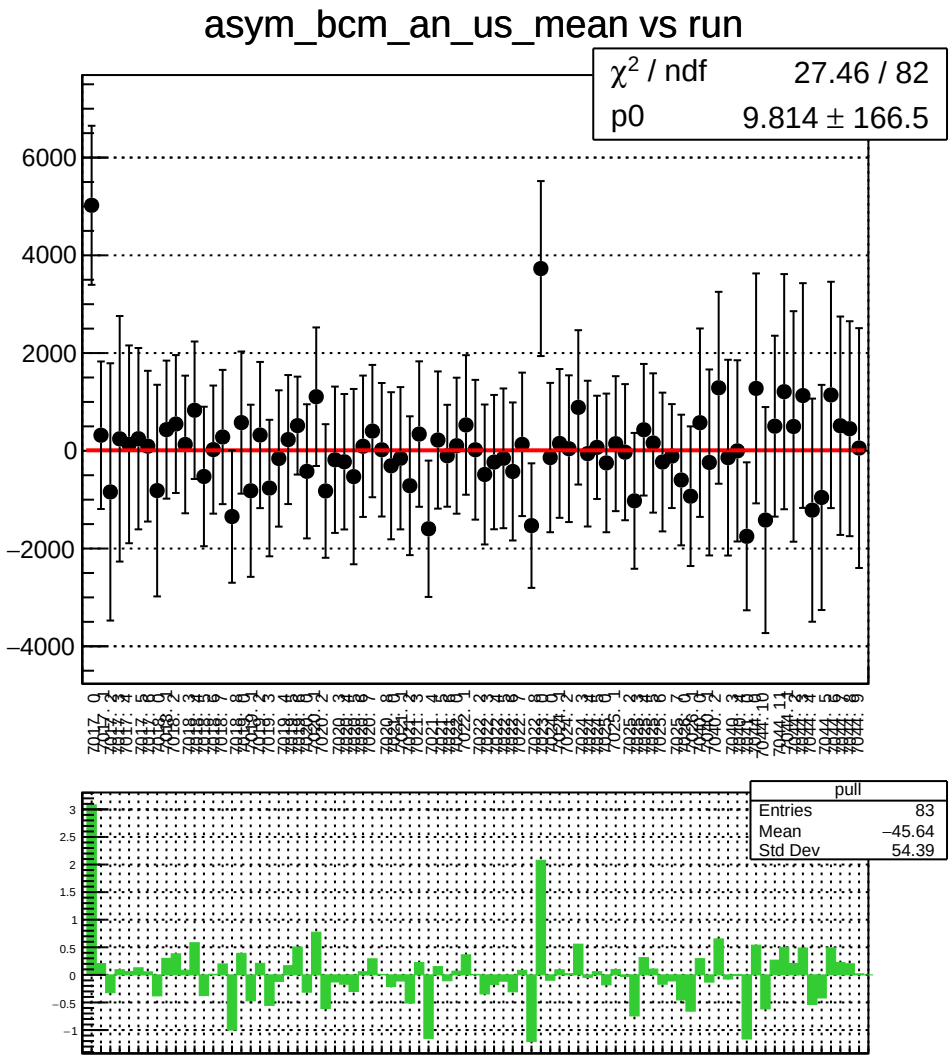

pull1D
Entries 83
Mean 0.01281
Std Dev 0.6309

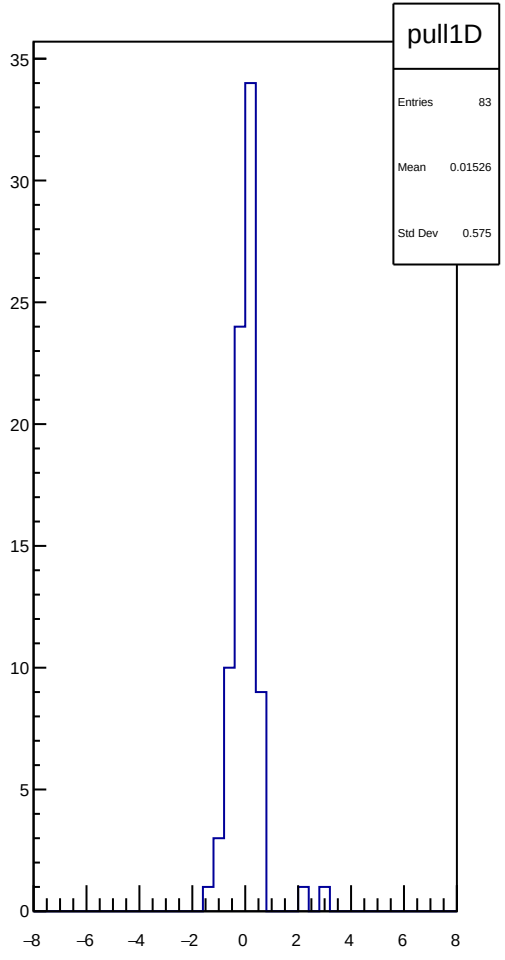

asym_bcm_an_ds_rms vs run
χ² / ndf 5.291e+04 / 82
p0 145.6 ± 0.1171
260
240
220
200
180
160
140
120

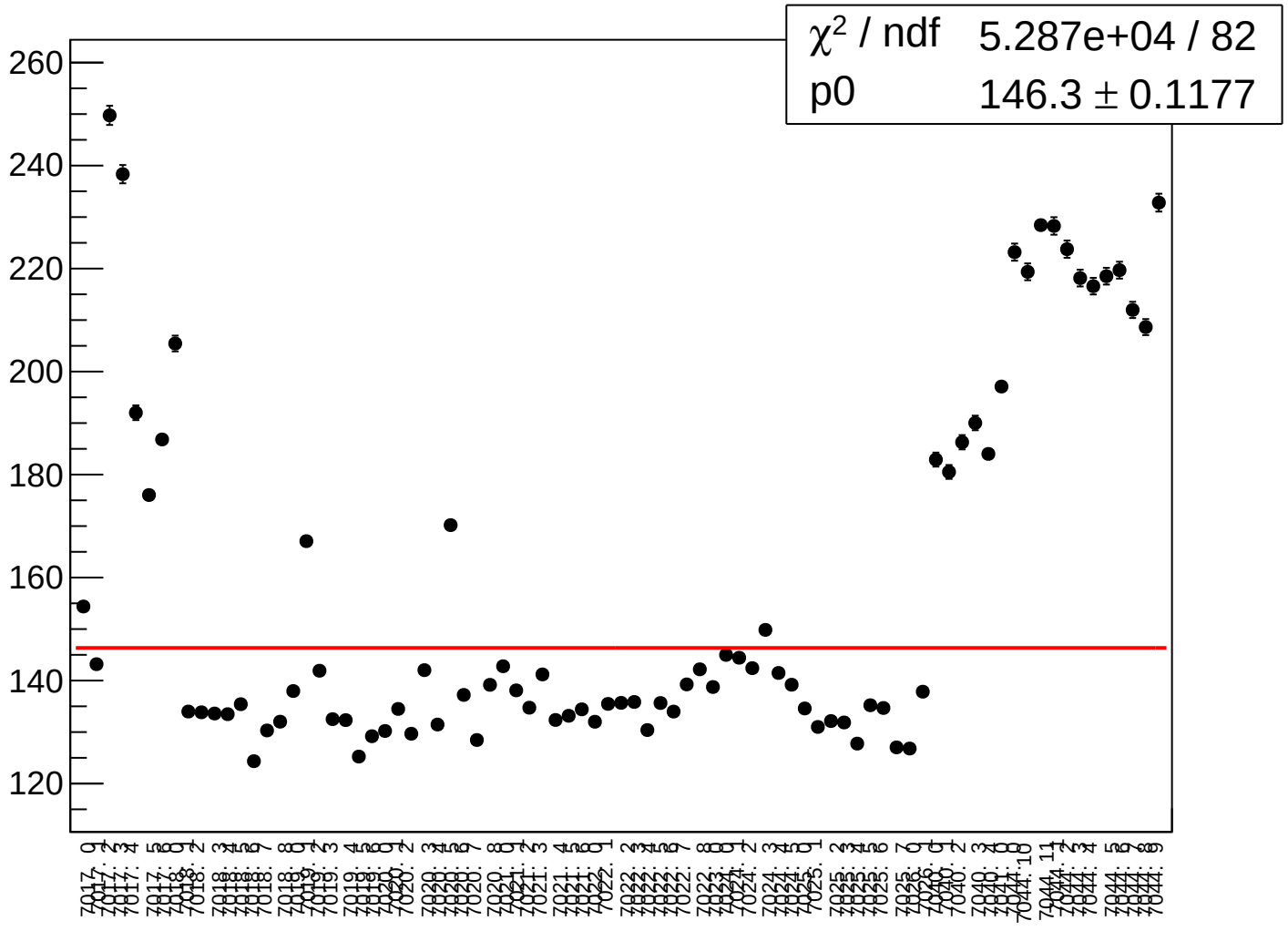

asym_bcm_an_ds3_mean vs run
χ² / ndf 32.97 / 82
p0 66.33 ± 166.6
8000
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −66.37
Std Dev 76.49
3
2
1
0
−1

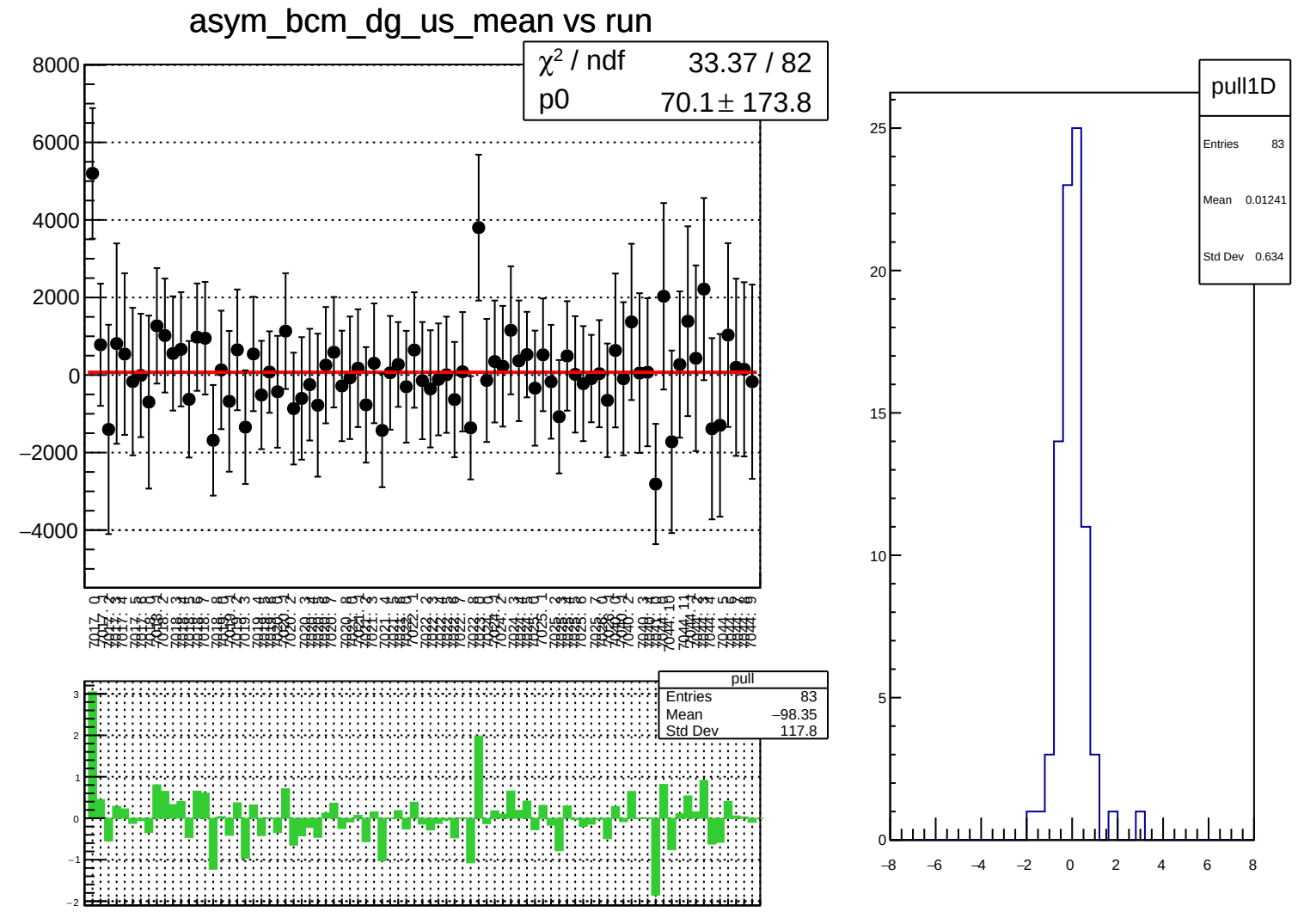

pull1D
Entries 83
Mean 0.01206
Std Dev 0.6301
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

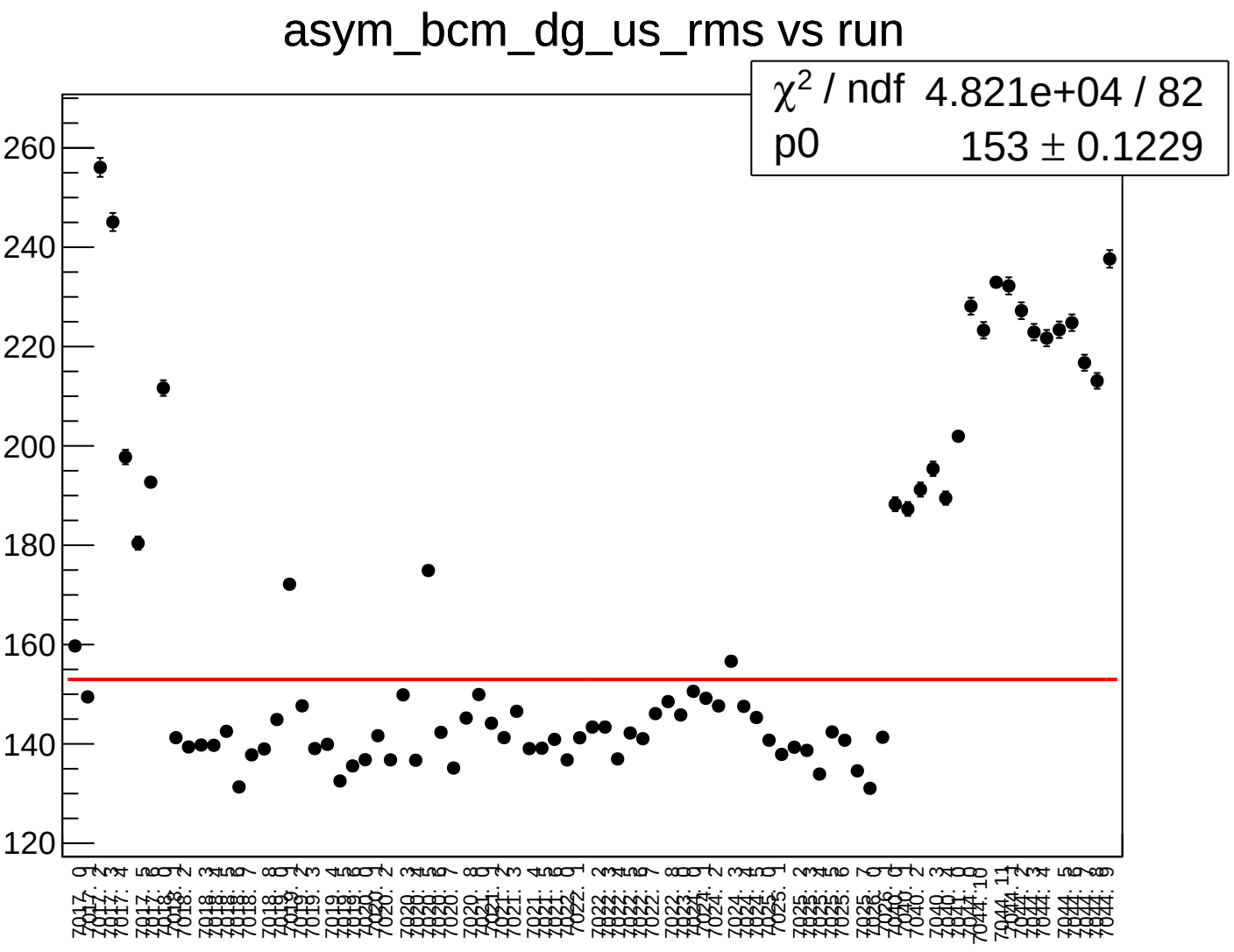

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 5.311e+04 / 82
p0 146.5 ± 0.1178
260
240
220
200
180
160
140
120

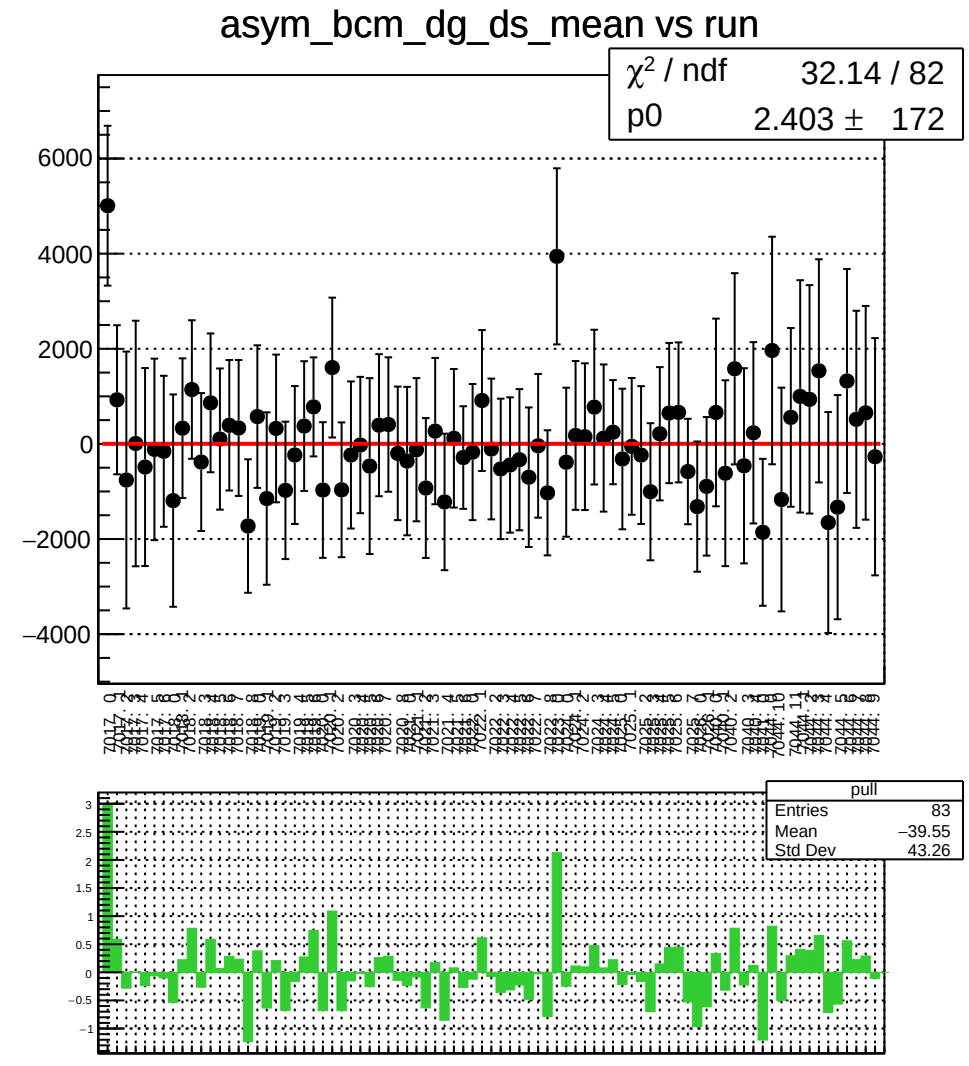

asym_bcm_an_us_mean vs run
χ² / ndf 27.46 / 82
p0 9.814 ± 166.5
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −45.64
Std Dev 54.39
3
2.5
2
1.5
1
0.5
0
−0.5
−1

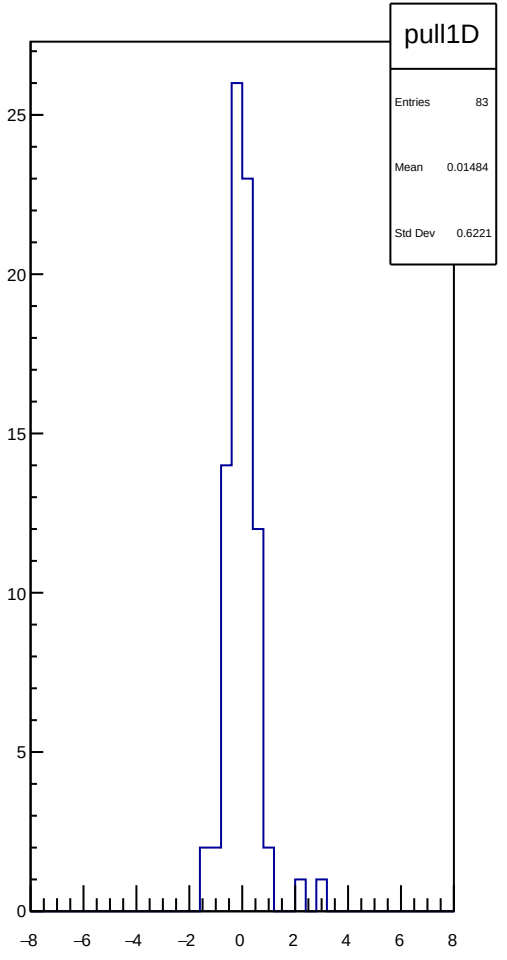

pull1D
Entries 83
Mean 0.01526
Std Dev 0.575
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

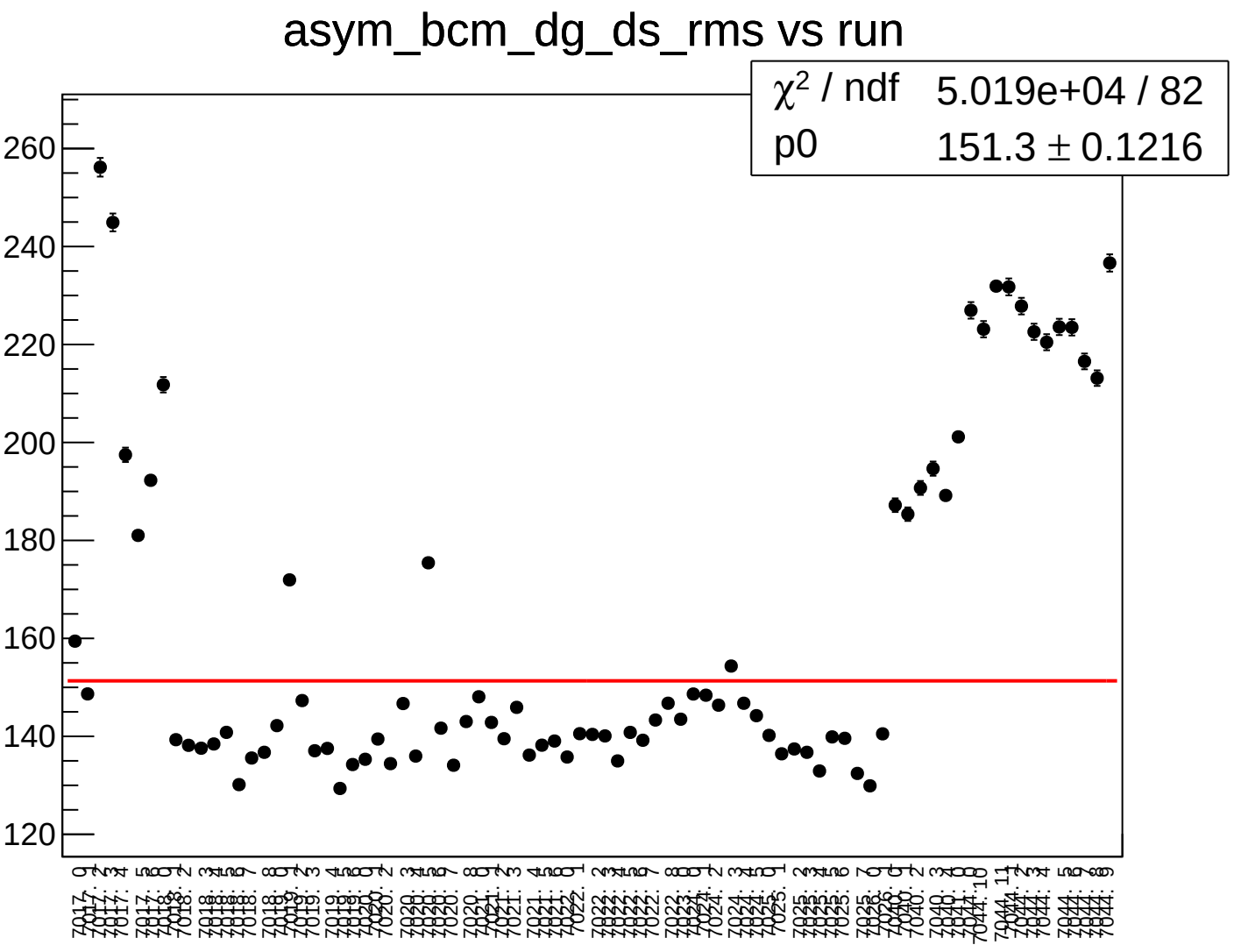

asym_bcm_an_us_rms vs run
χ² / ndf 5.287e+04 / 82
p0 146.3 ± 0.1177
260
240
220
200
180
160
140
120

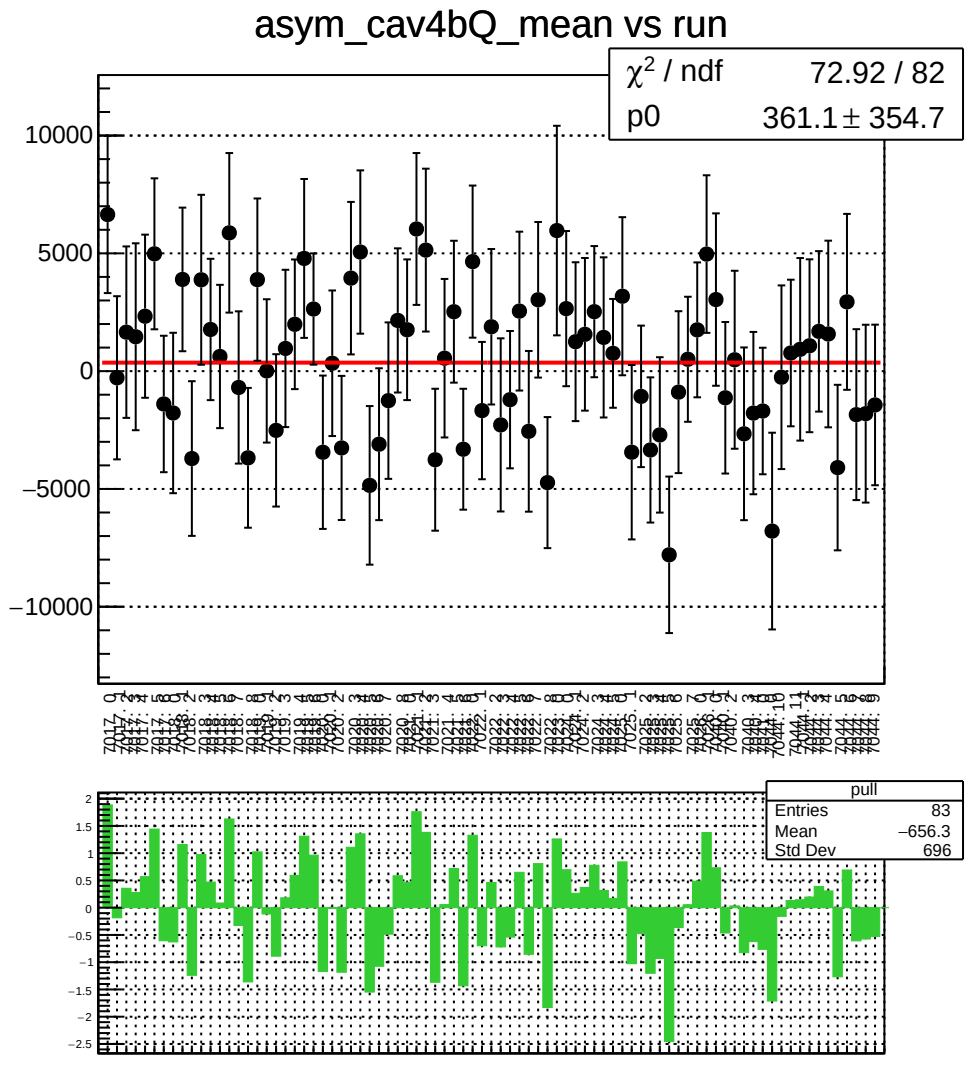

asym_bcm_dg_us_mean vs run
χ² / ndf 33.37 / 82
p0 70.1 ± 173.8
8000
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −98.35
Std Dev 117.8
3
2
1
0
−1
−2
pull1D
Entries 83
Mean 0.01241
Std Dev 0.634
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

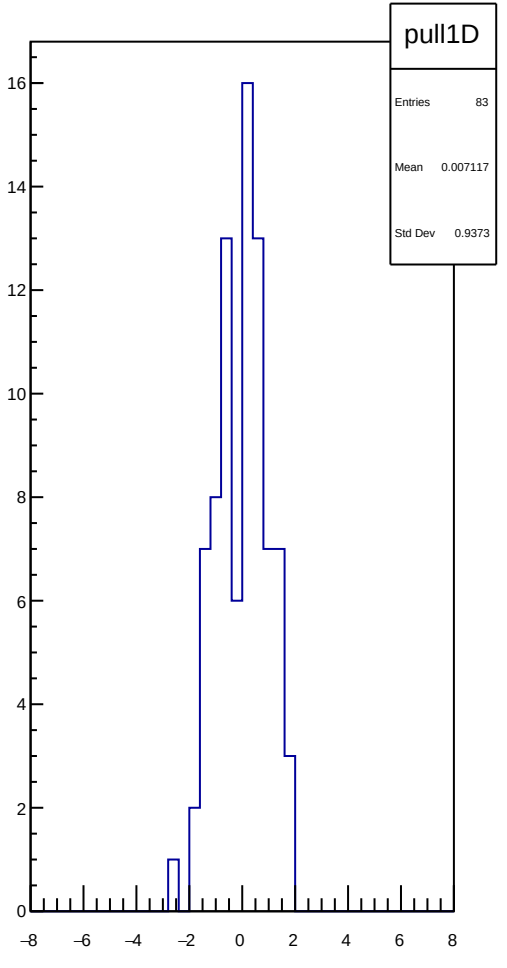

asym_bcm_dg_us_rms vs run
χ² / ndf 4.821e+04 / 82
p0 153 ± 0.1229
260
240
220
200
180
160
140
120

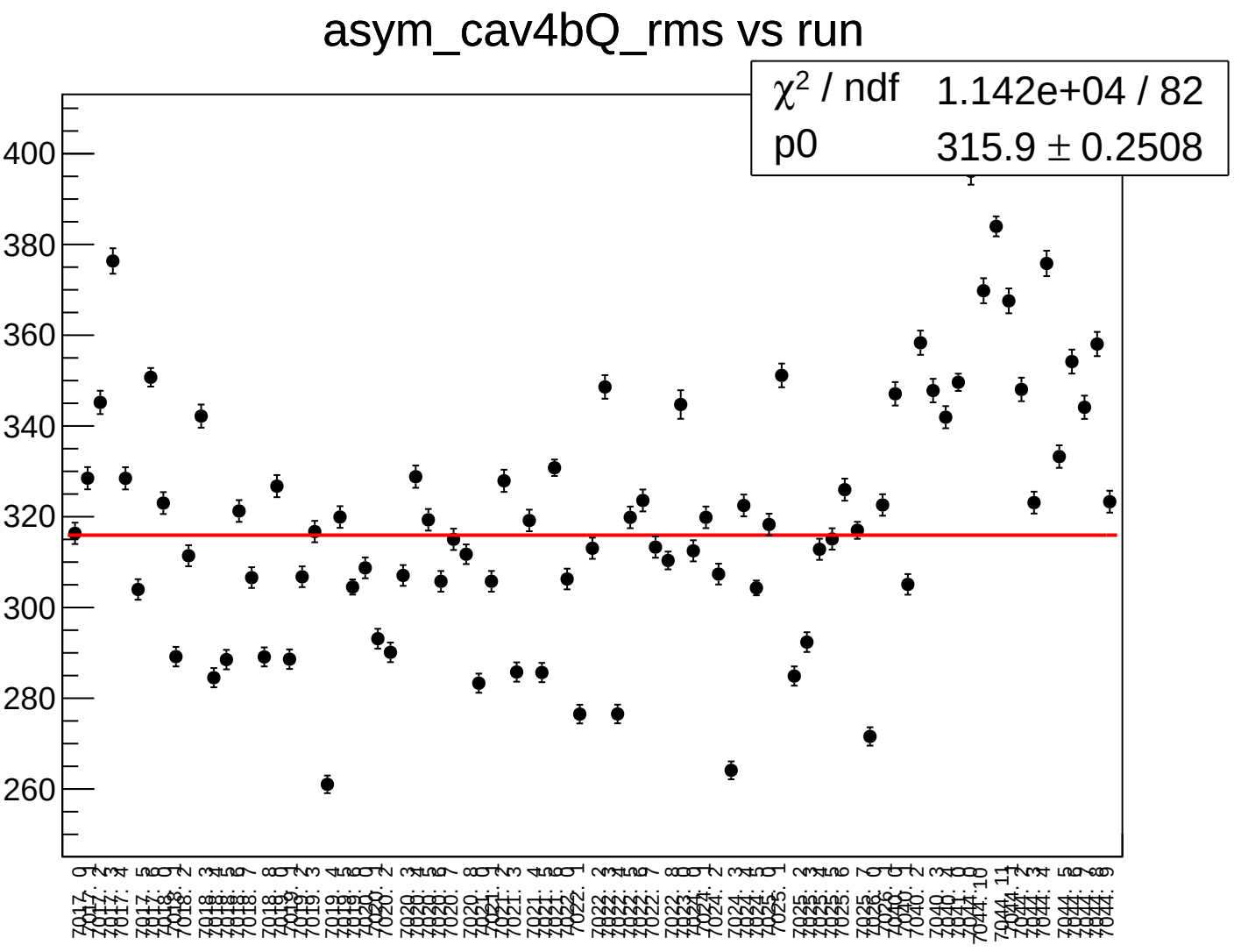

asym_bcm_dg_ds_mean vs run
χ² / ndf 32.14 / 82
p0 2.403 ± 172
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean −39.55
Std Dev 43.26
3
2.5
2
1.5
1
0.5
0
−0.5
−1

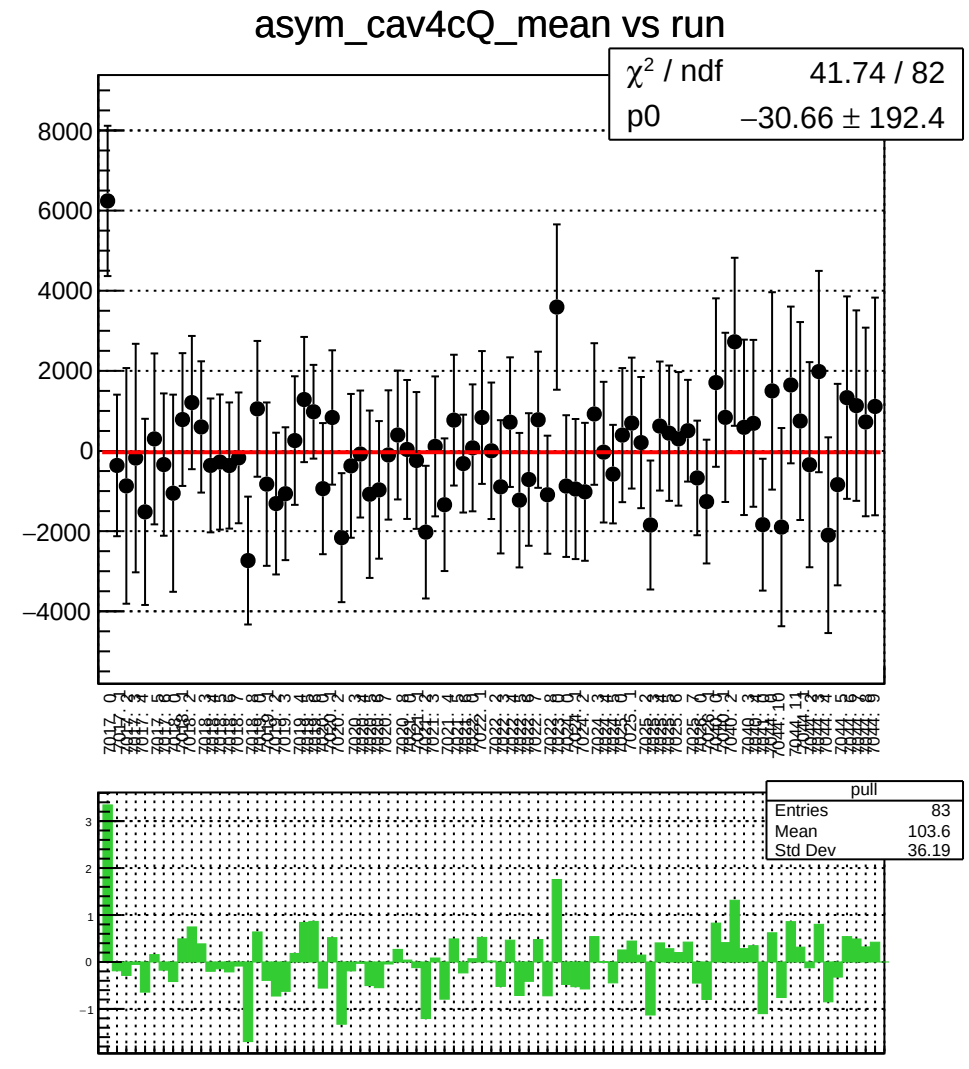

pull1D
Entries 83
Mean 0.01484
Std Dev 0.6221
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

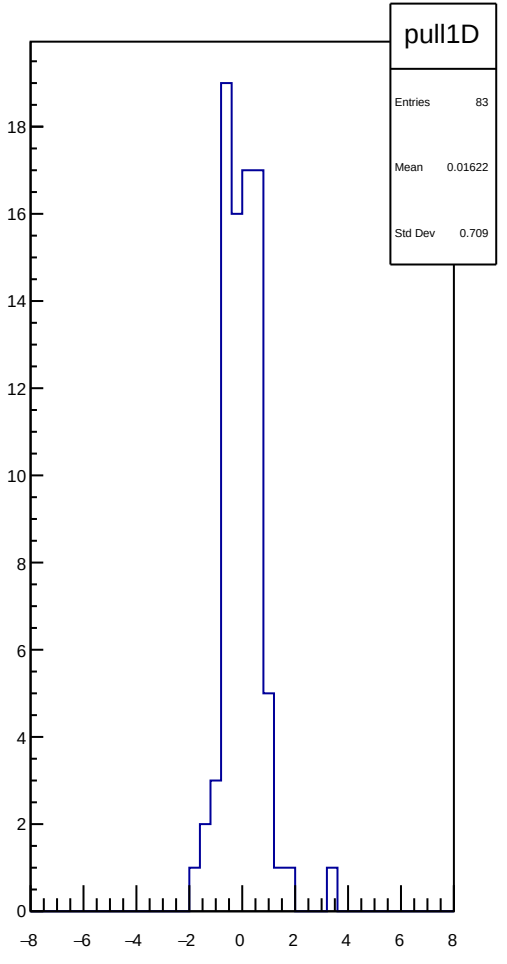

asym_bcm_dg_ds_rms vs run
χ² / ndf 5.019e+04 / 82
p0 151.3 ± 0.1216
260
240
220
200
180
160
140
120

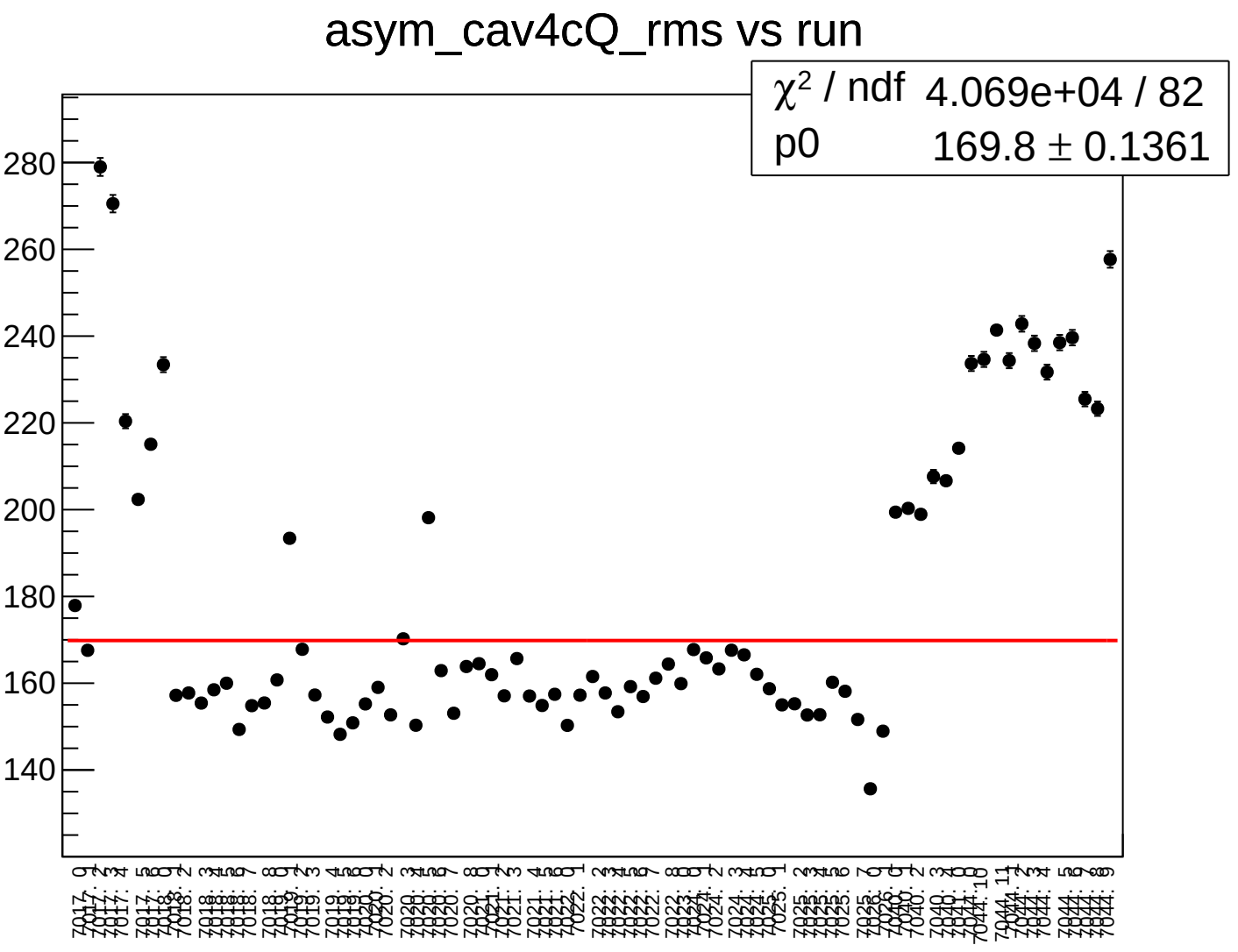

asym_cav4bQ_mean vs run
χ² / ndf 72.92 / 82
p0 361.1 ± 354.7
10000
5000
0
−5000
−10000
pull
Entries 83
Mean −656.3
Std Dev 696
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

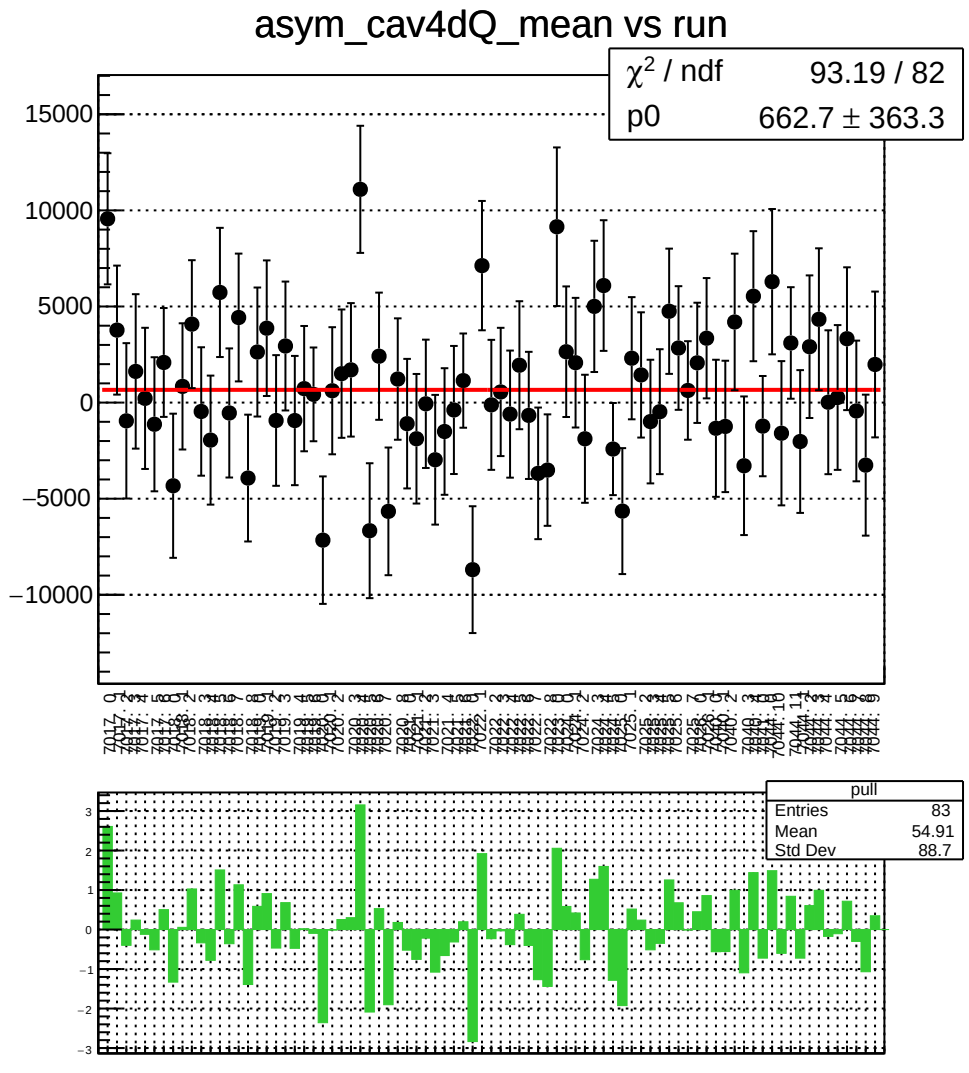

pull1D
Entries 83
Mean 0.007117
Std Dev 0.9373
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

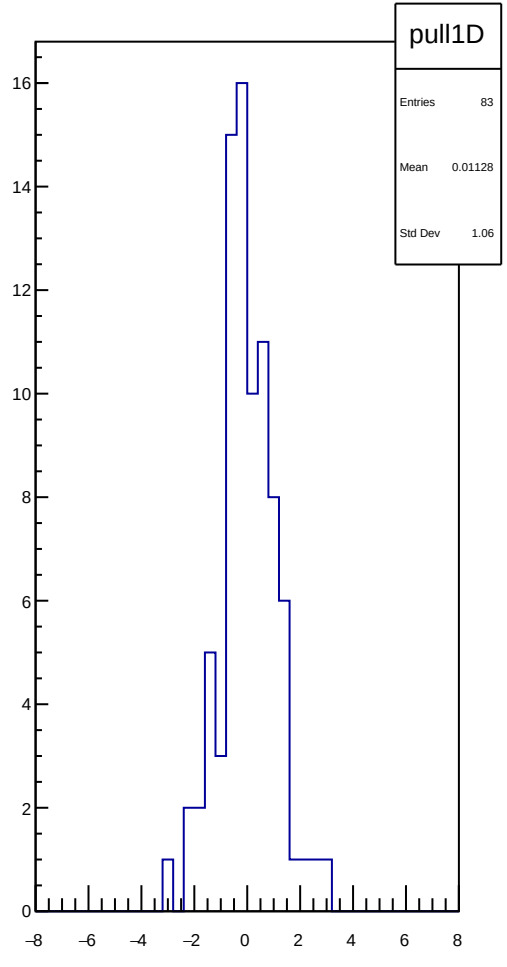

asym_cav4bQ_rms vs run
χ² / ndf 1.142e+04 / 82
p0 315.9 ± 0.2508
400
380
360
340
320
300
280
260

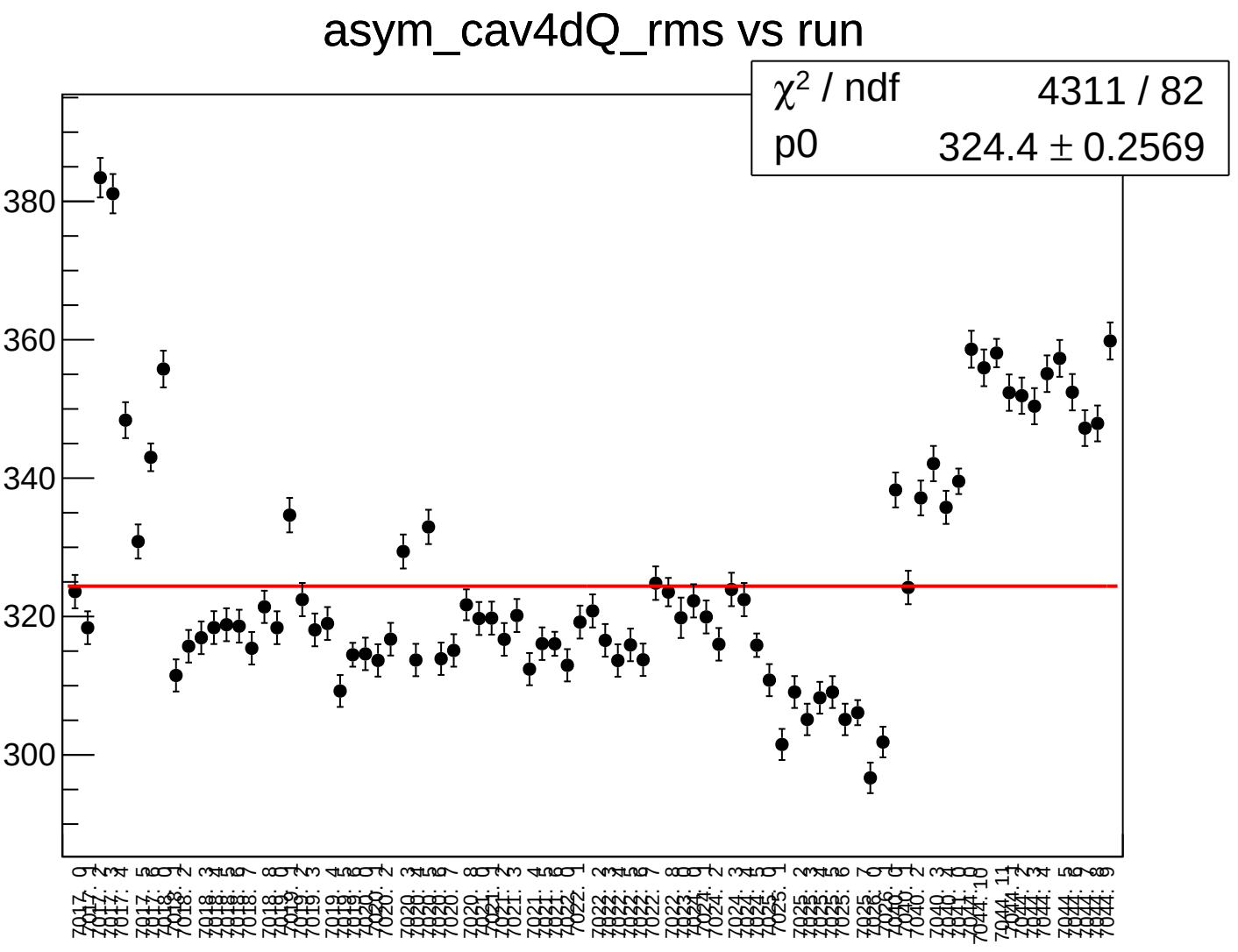

asym_cav4cQ_mean vs run
χ² / ndf 41.74 / 82
p0 −30.66 ± 192.4
8000
6000
4000
2000
0
−2000
−4000
pull
Entries 83
Mean 103.6
Std Dev 36.19
3
2
1
0
−1

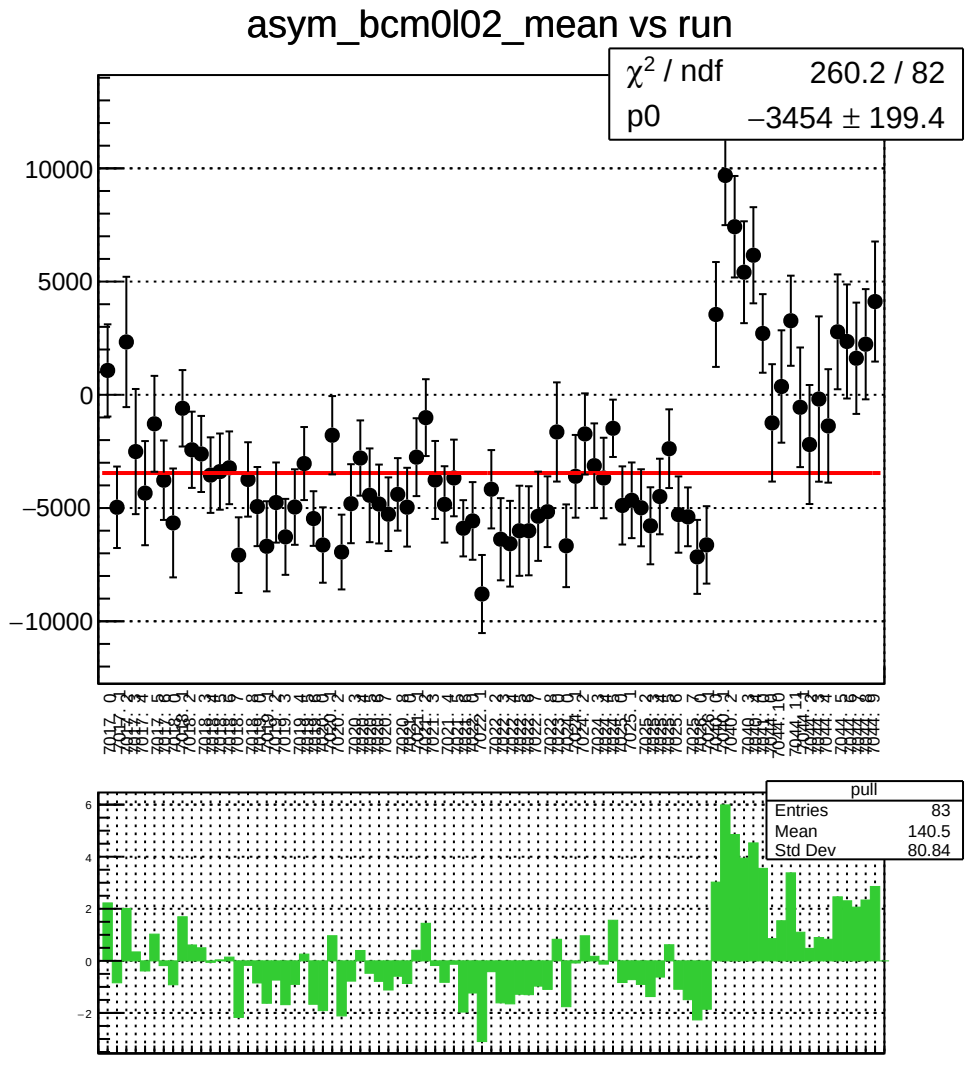

pull1D
Entries 83
Mean 0.01622
Std Dev 0.709
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

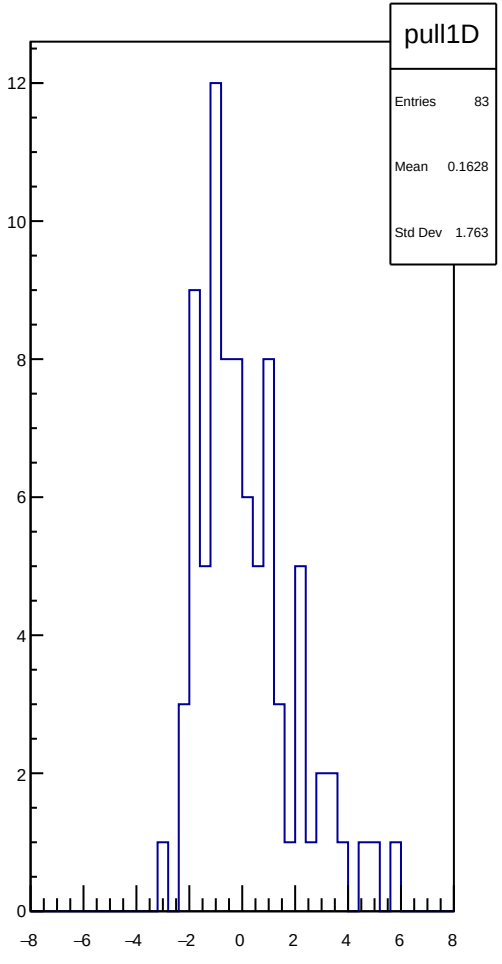

asym_cav4cQ_rms vs run
χ² / ndf 4.069e+04 / 82
p0 169.8 ± 0.1361
280
260
240
220
200
180
160
140

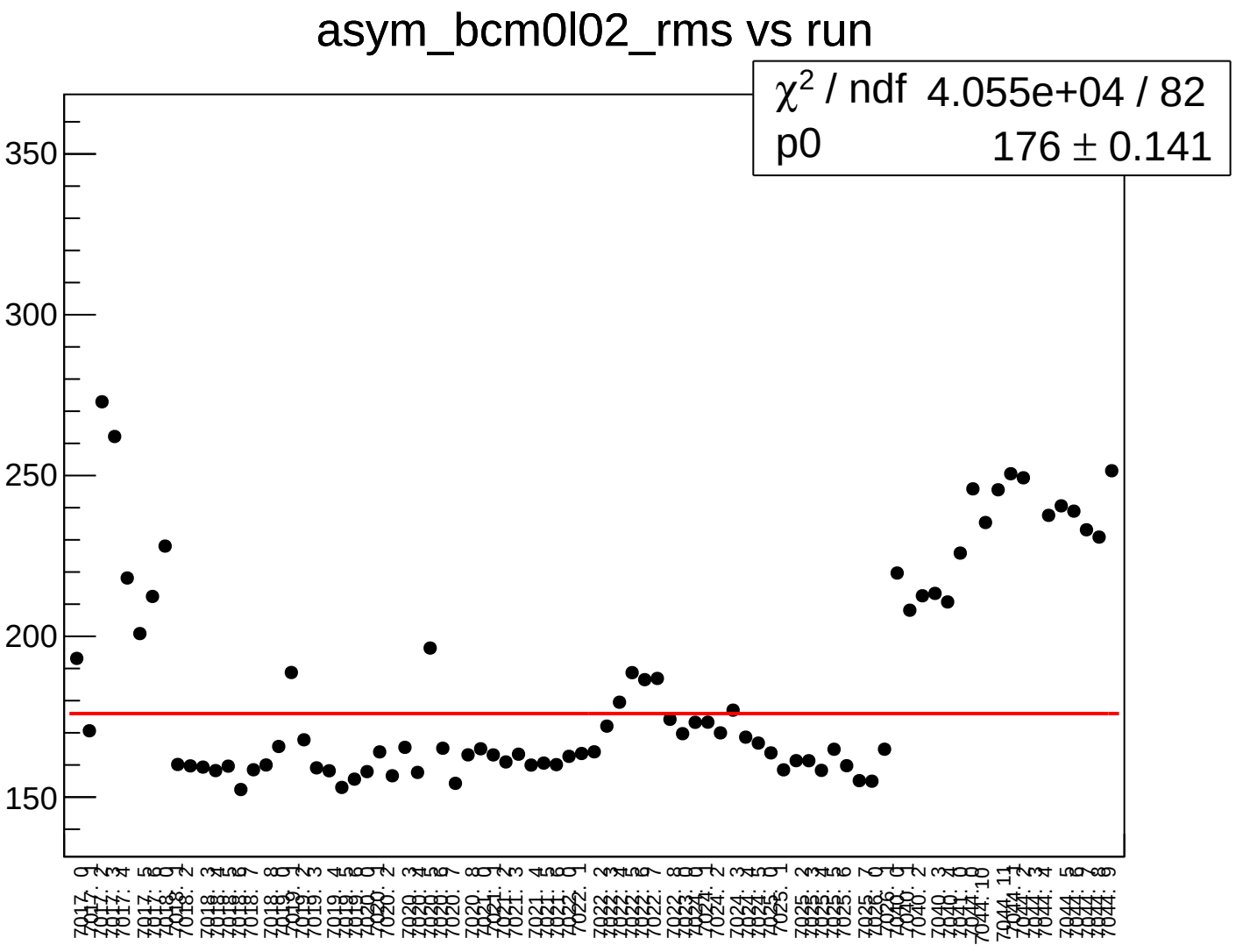

asym_cav4dQ_mean vs run
χ² / ndf 93.19 / 82
p0 662.7 ± 363.3
15000
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 54.91
Std Dev 88.7
3
2
1
0
−1
−2
−3

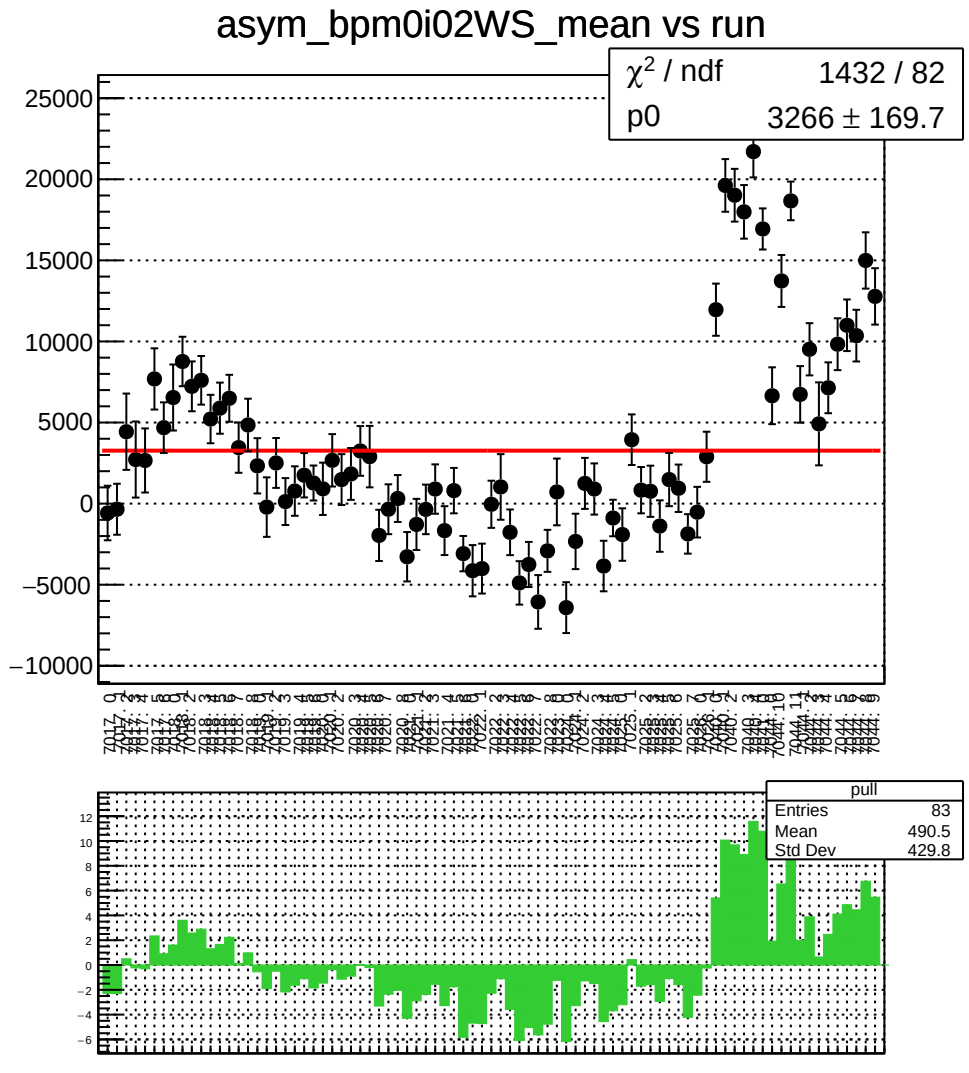

pull1D
Entries 83
Mean 0.01128
Std Dev 1.06
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

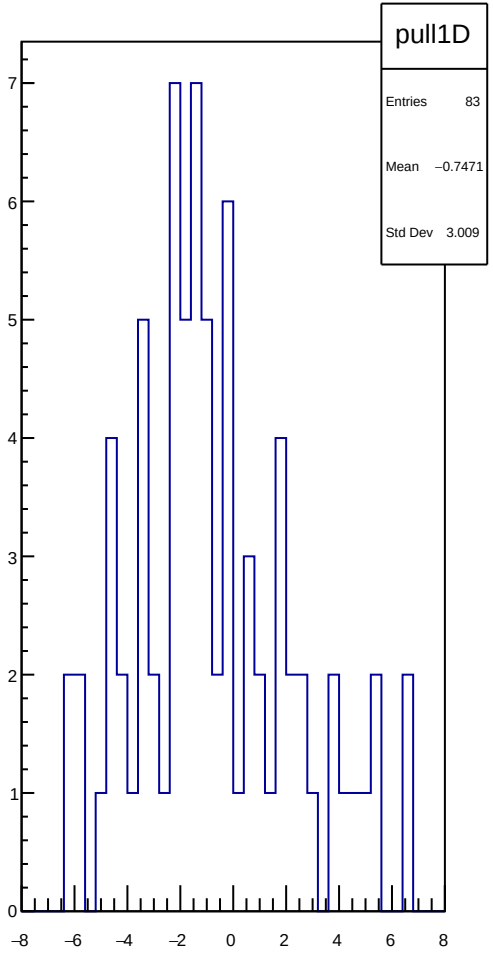

asym_cav4dQ_rms vs run
χ² / ndf 4311 / 82
p0 324.4 ± 0.2569
380
360
340
320
300

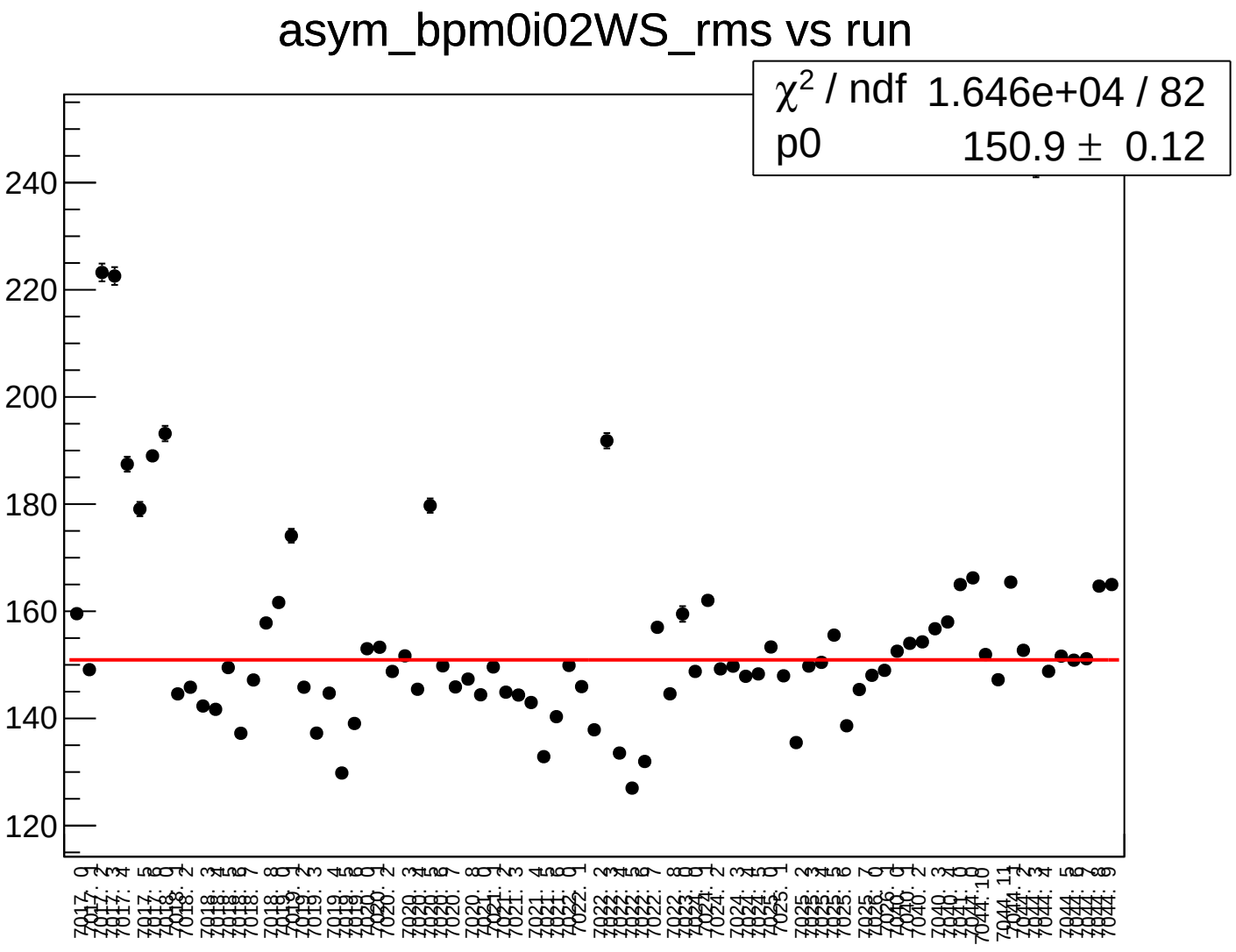

asym_bcm0l02_mean vs run
χ² / ndf 260.2 / 82
p0 −3454 ± 199.4
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 140.5
Std Dev 80.84
6
4
2
0
−2

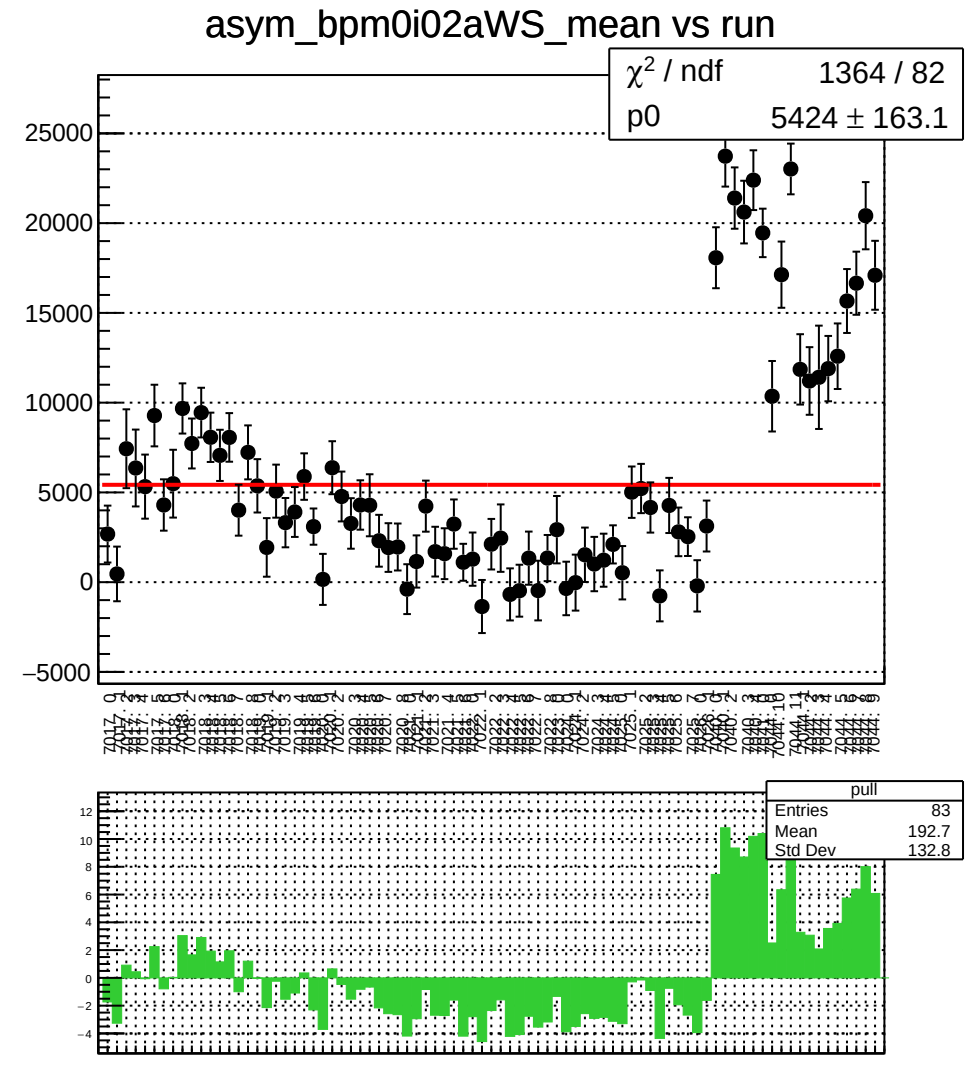

pull1D
Entries 83
Mean 0.1628
Std Dev 1.763
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

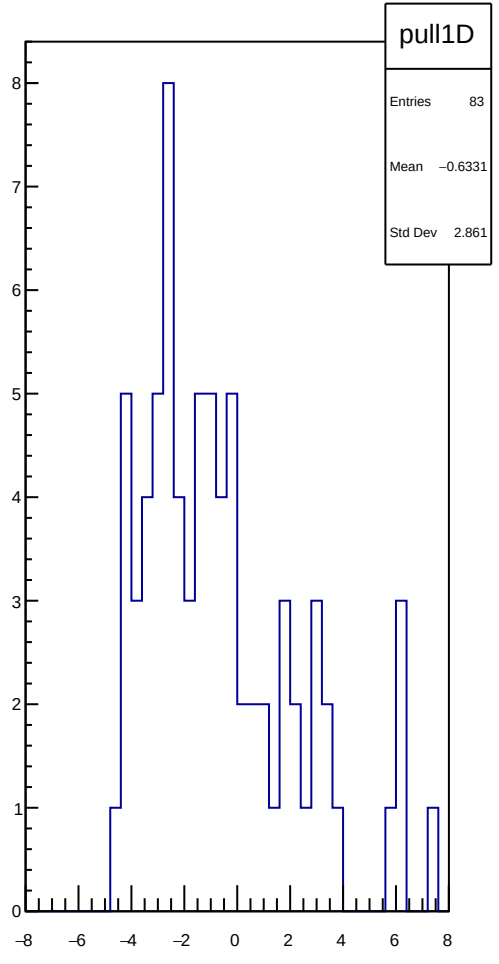

asym_bcm0l02_rms vs run
χ² / ndf 4.055e+04 / 82
p0 176 ± 0.141
350
300
250
200
150

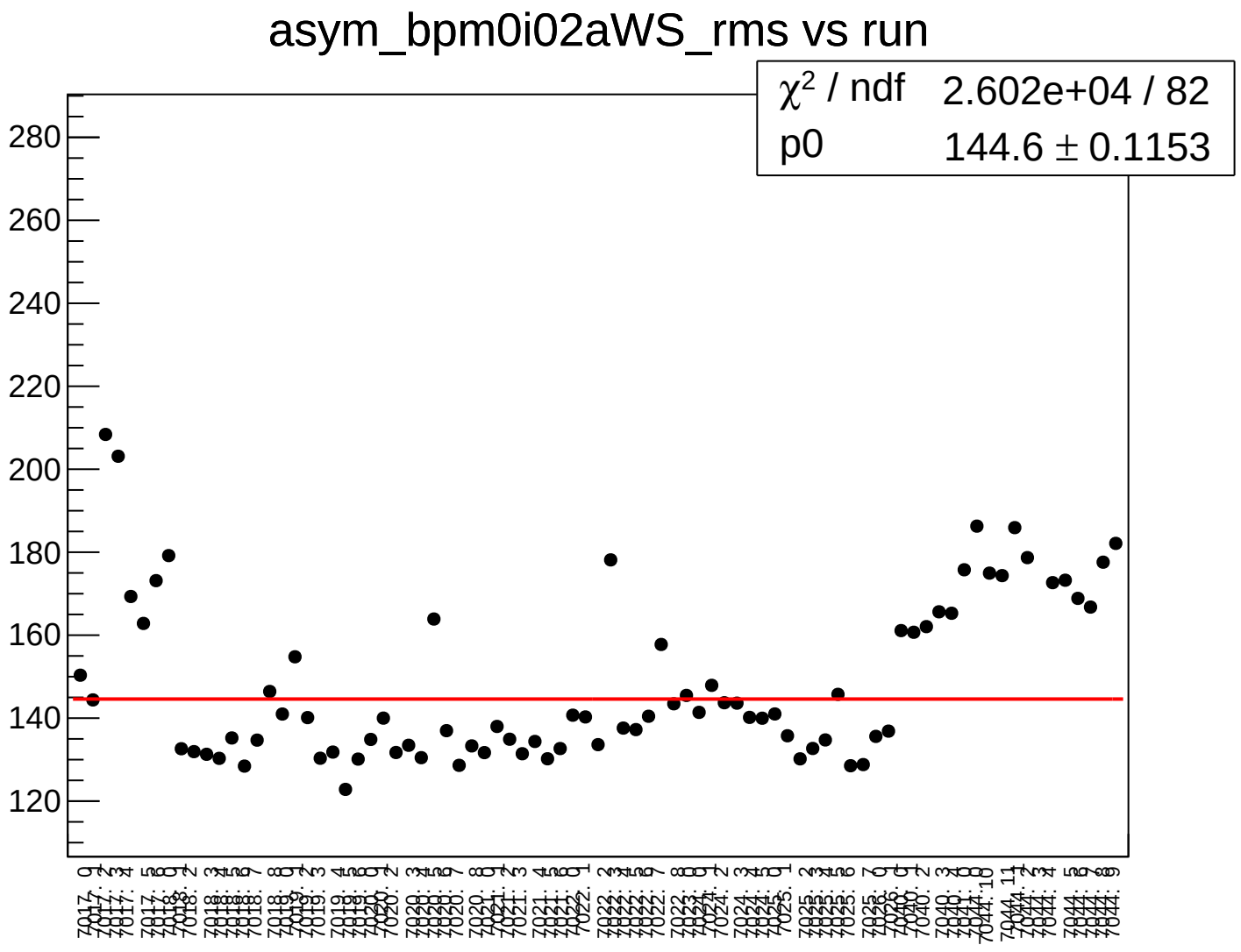

asym_bpm0i02WS_mean vs run
χ² / ndf 1432 / 82
p0 3266 ± 169.7
25000
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 490.5
Std Dev 429.8
12
10
8
6
4
2
0
−2
−4
−6

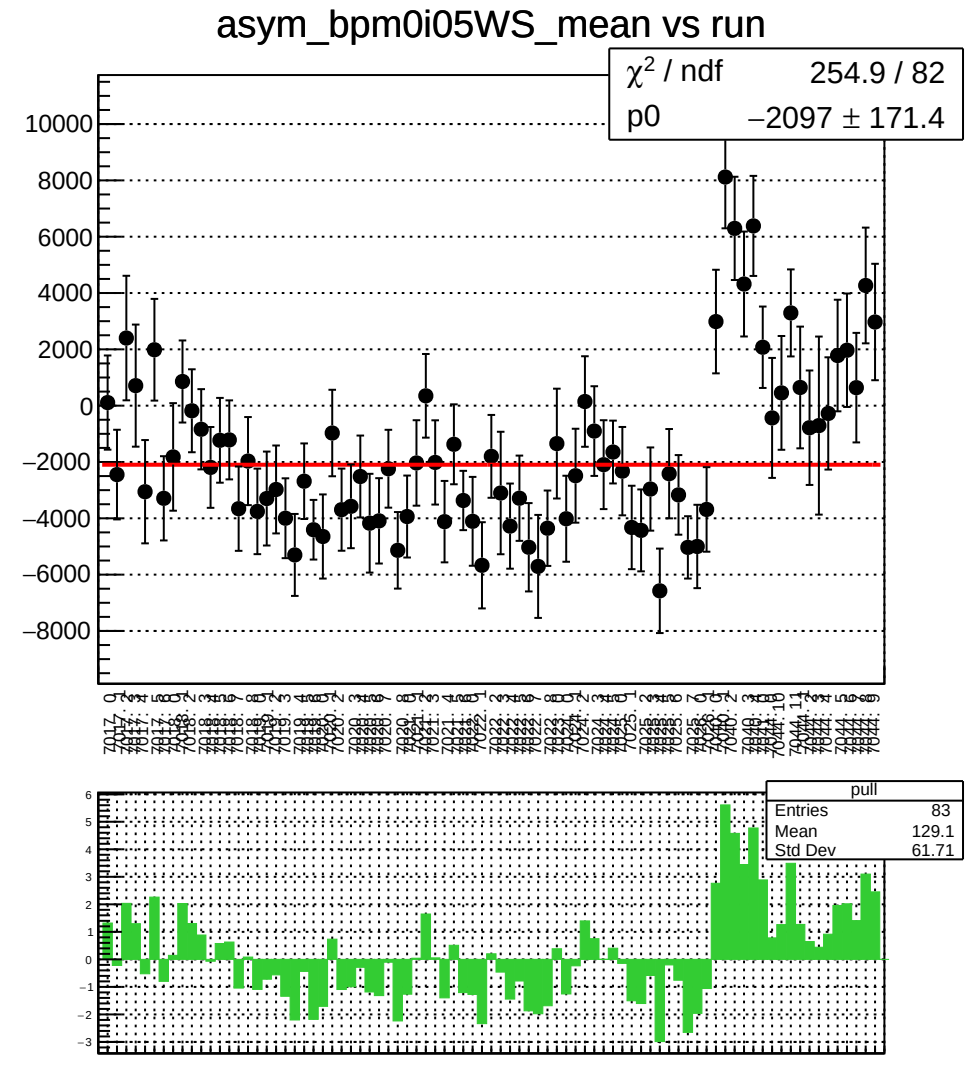

pull1D
Entries 83
Mean −0.7471
Std Dev 3.009
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

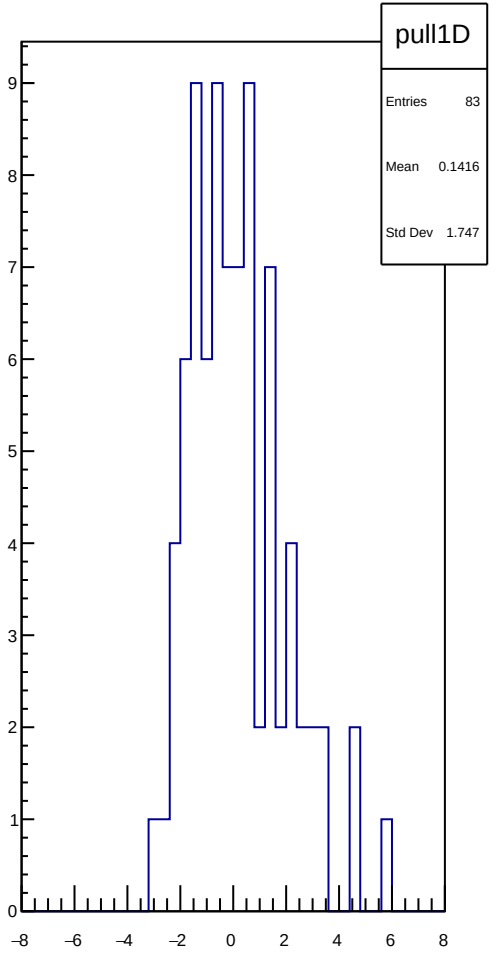

asym_bpm0i02WS_rms vs run
χ² / ndf 1.646e+04 / 82
p0 150.9 ± 0.12
240
220
200
180
160
140
120

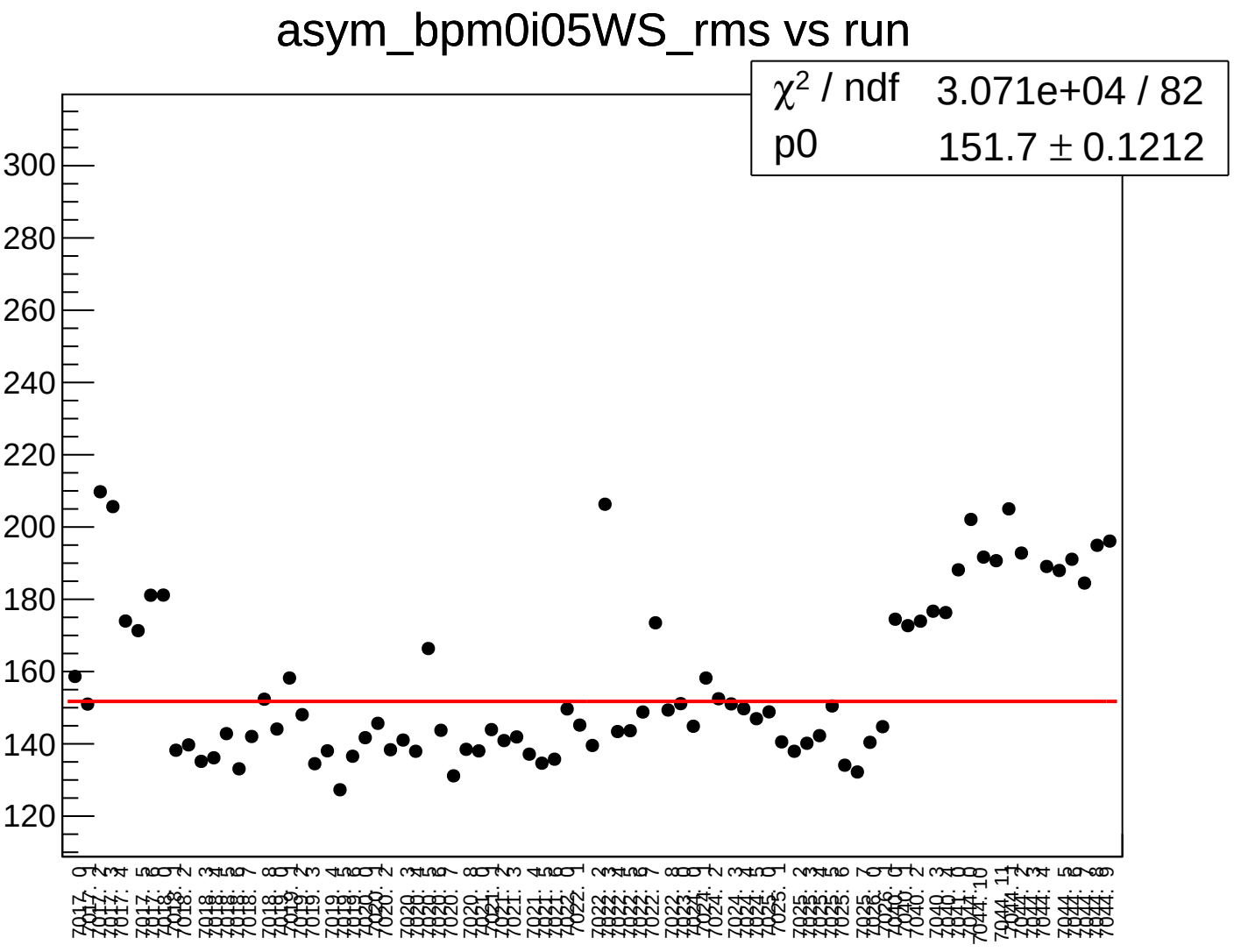

asym_bpm0i02aWS_mean vs run
χ² / ndf 1364 / 82
p0 5424 ± 163.1
pull
Entries 83
Mean 192.7
Std Dev 132.8

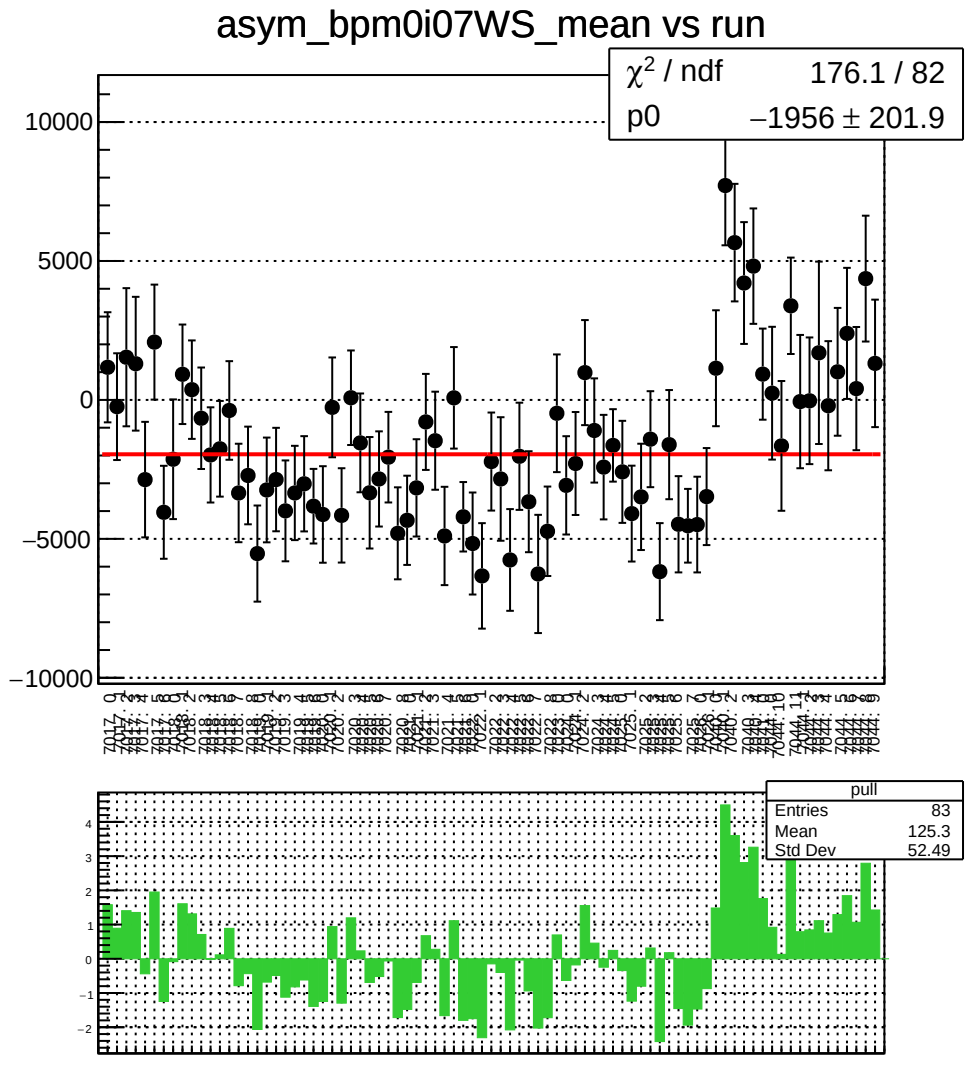

pull1D
Entries 83
Mean −0.6331
Std Dev 2.861

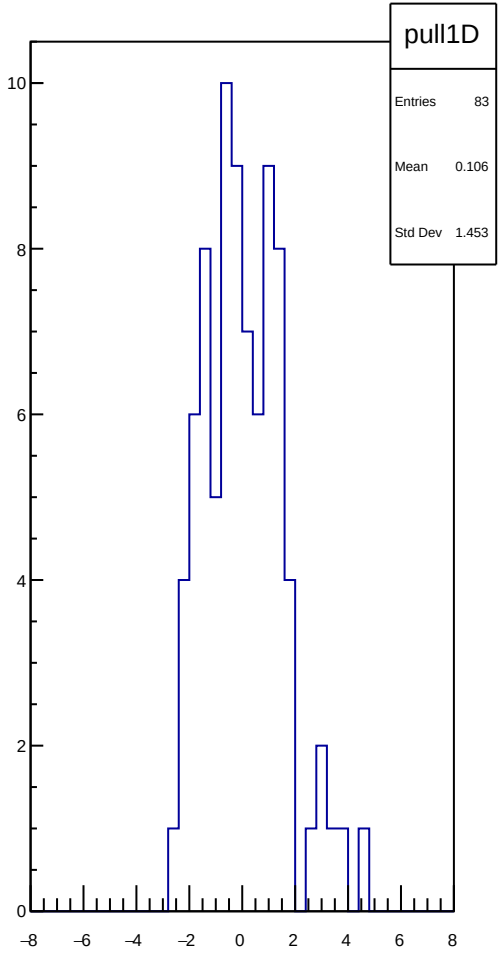

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 2.602e+04 / 82
p0 144.6 ± 0.1153
280
260
240
220
200
180
160
140
120

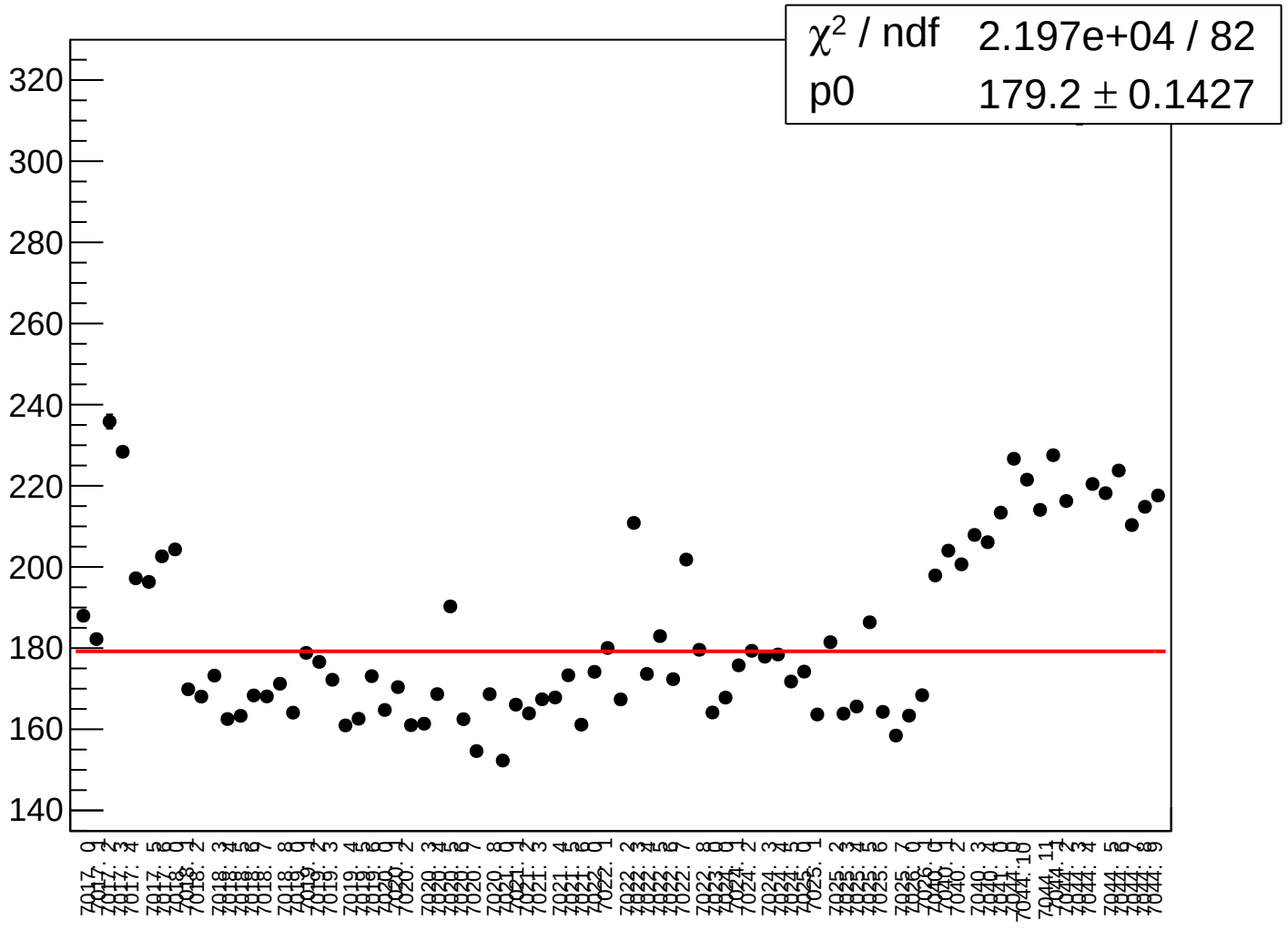

asym_bpm0i05WS_mean vs run
χ² / ndf 254.9 / 82
p0 −2097 ± 171.4
pull
Entries 83
Mean 129.1
Std Dev 61.71

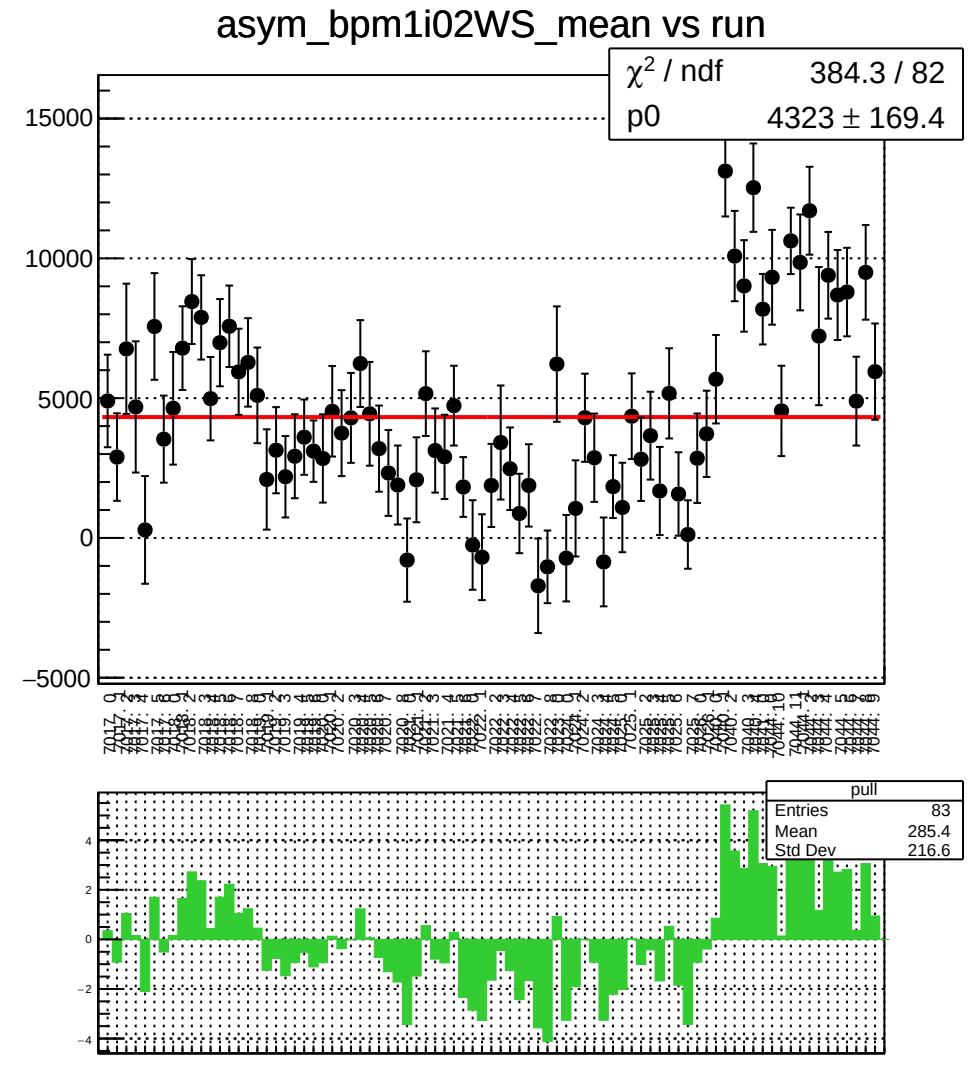

pull1D
Entries 83
Mean 0.1416
Std Dev 1.747

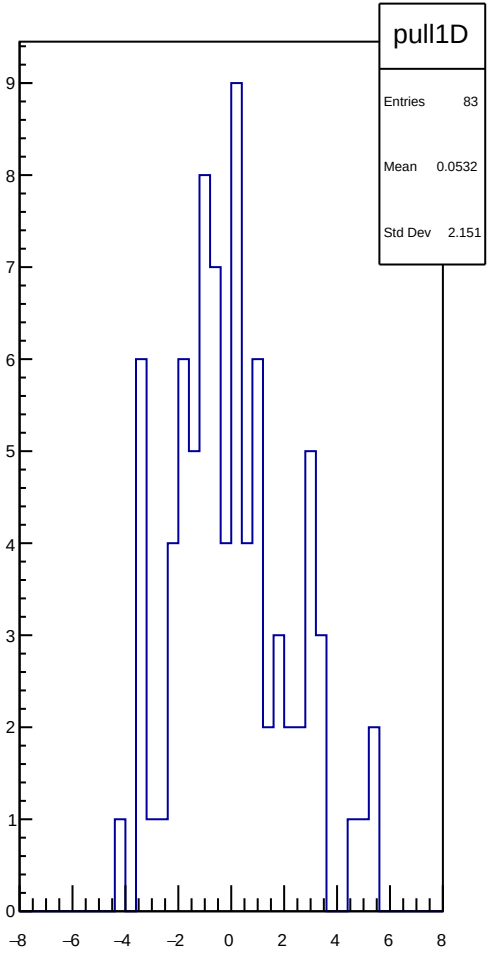

asym_bpm0i05WS_rms vs run
χ² / ndf 3.071e+04 / 82
p0 151.7 ± 0.1212
300
280
260
240
220
200
180
160
140
120

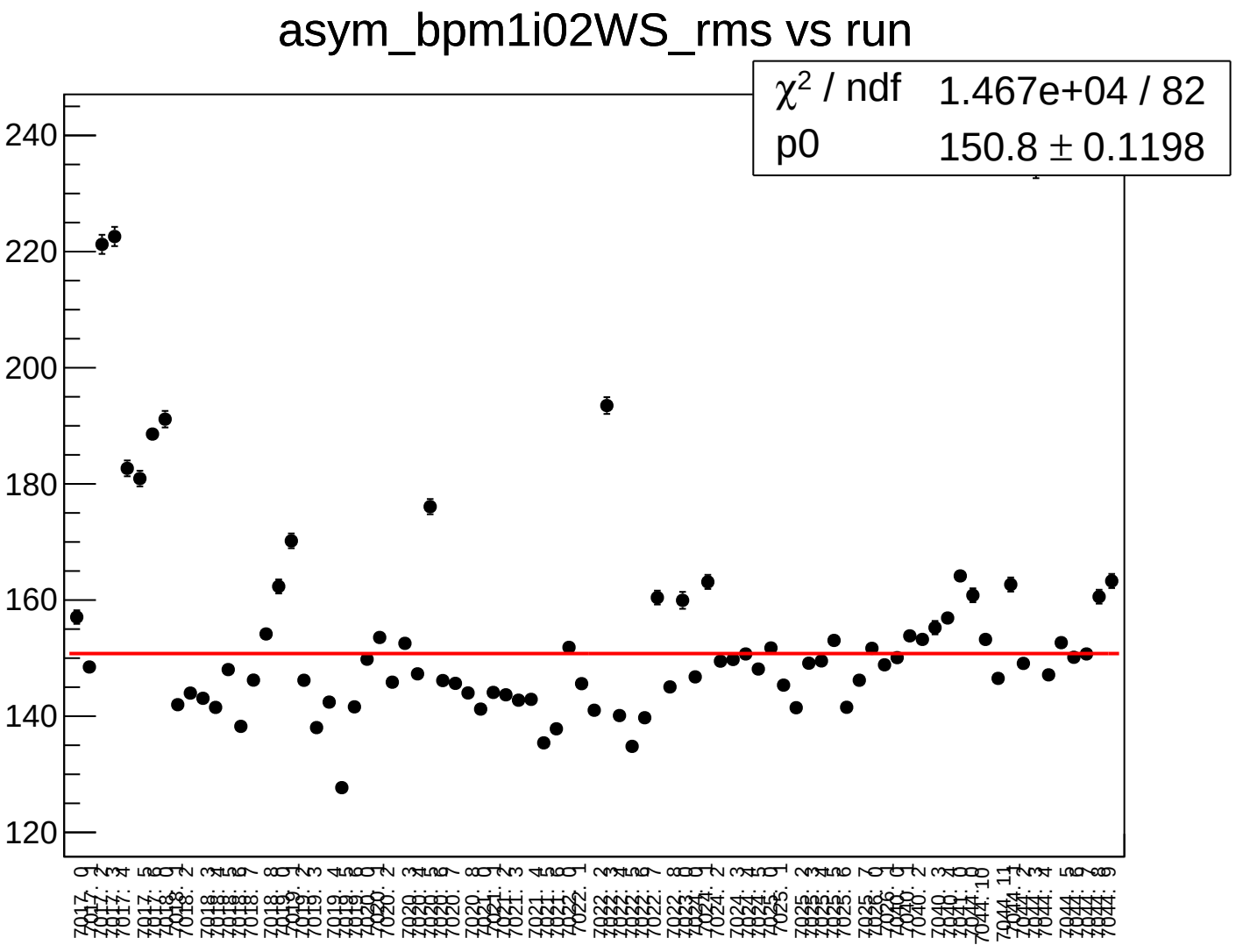

asym_bpm0i07WS_mean vs run
χ^2 / ndf 176.1 / 82
p0 −1956 ± 201.9
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 125.3
Std Dev 52.49
4
3
2
1
0
−1
−2

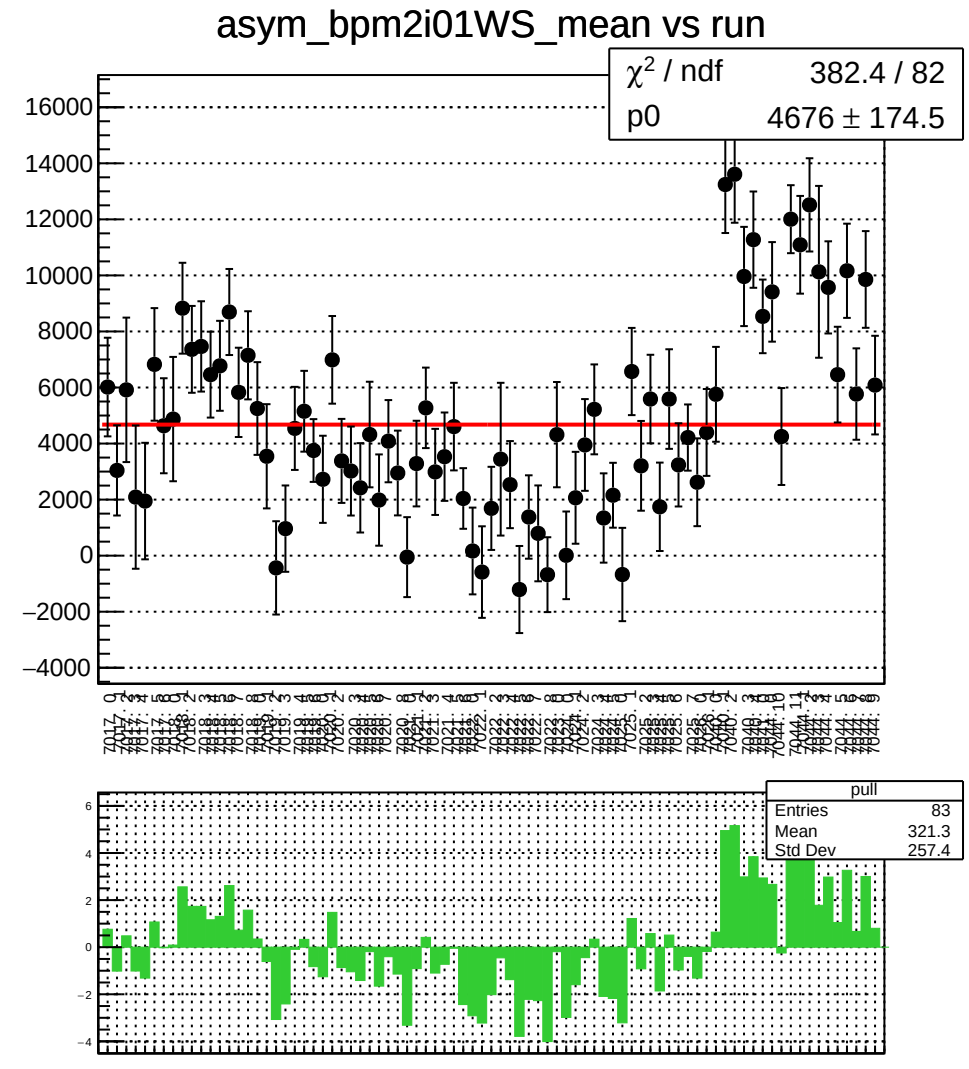

pull1D
Entries 83
Mean 0.106
Std Dev 1.453
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

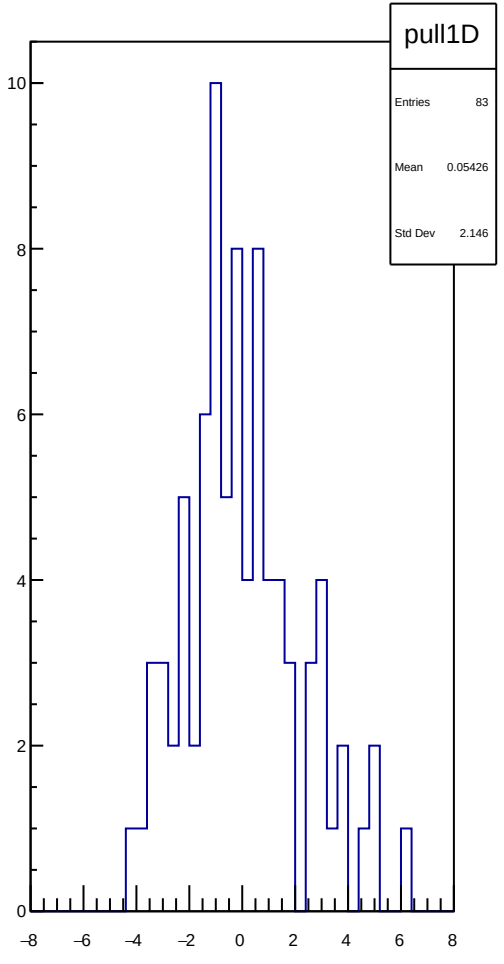

asym_bpm0i07WS_rms vs run
χ² / ndf 2.197e+04 / 82
p0 179.2 ± 0.1427
320
300
280
260
240
220
200
180
160
140

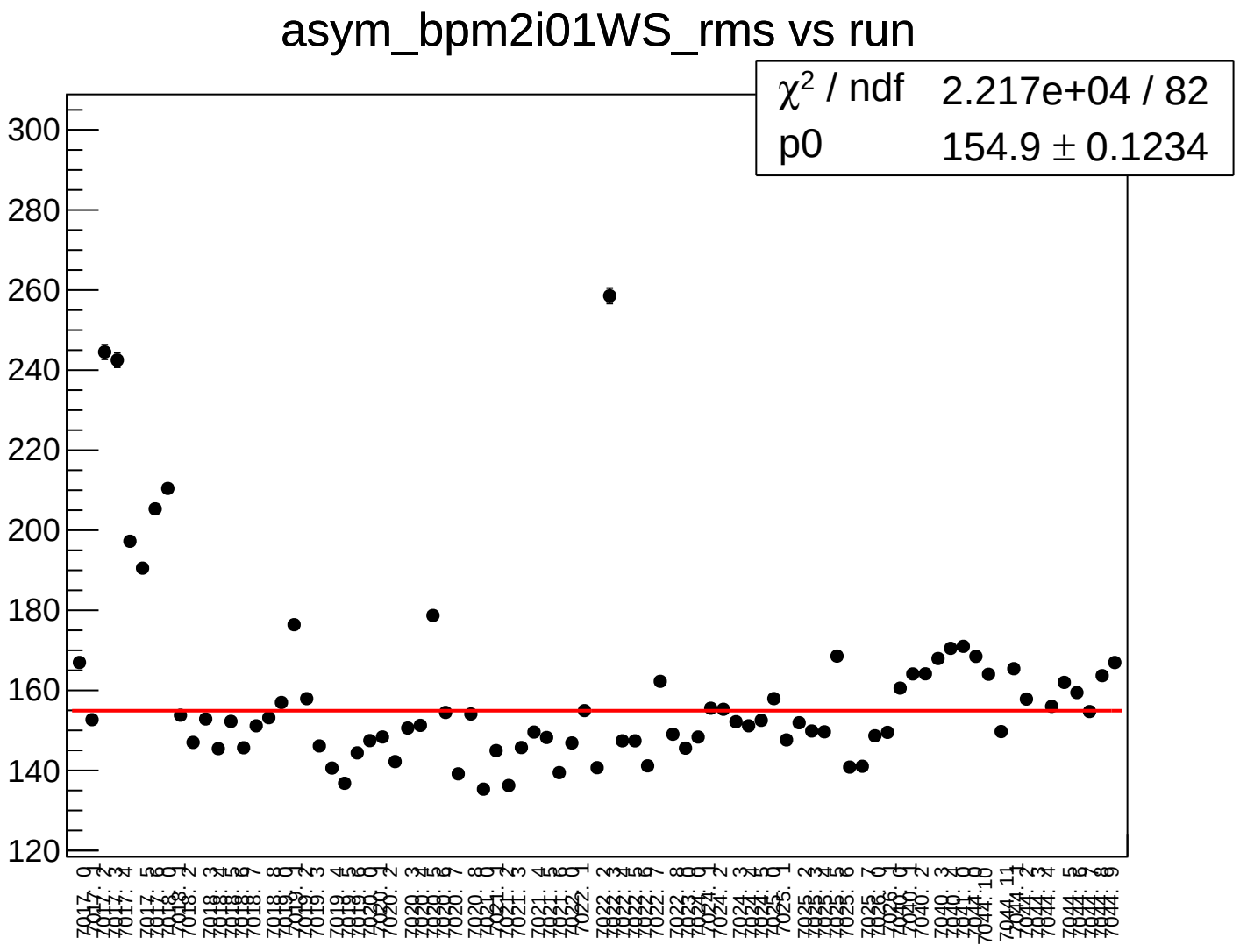

asym_bpm1i02WS_mean vs run
χ² / ndf 384.3 / 82
p0 4323 ± 169.4
15000
10000
5000
0
−5000
pull
Entries 83
Mean 285.4
Std Dev 216.6
4
2
0
−2
−4

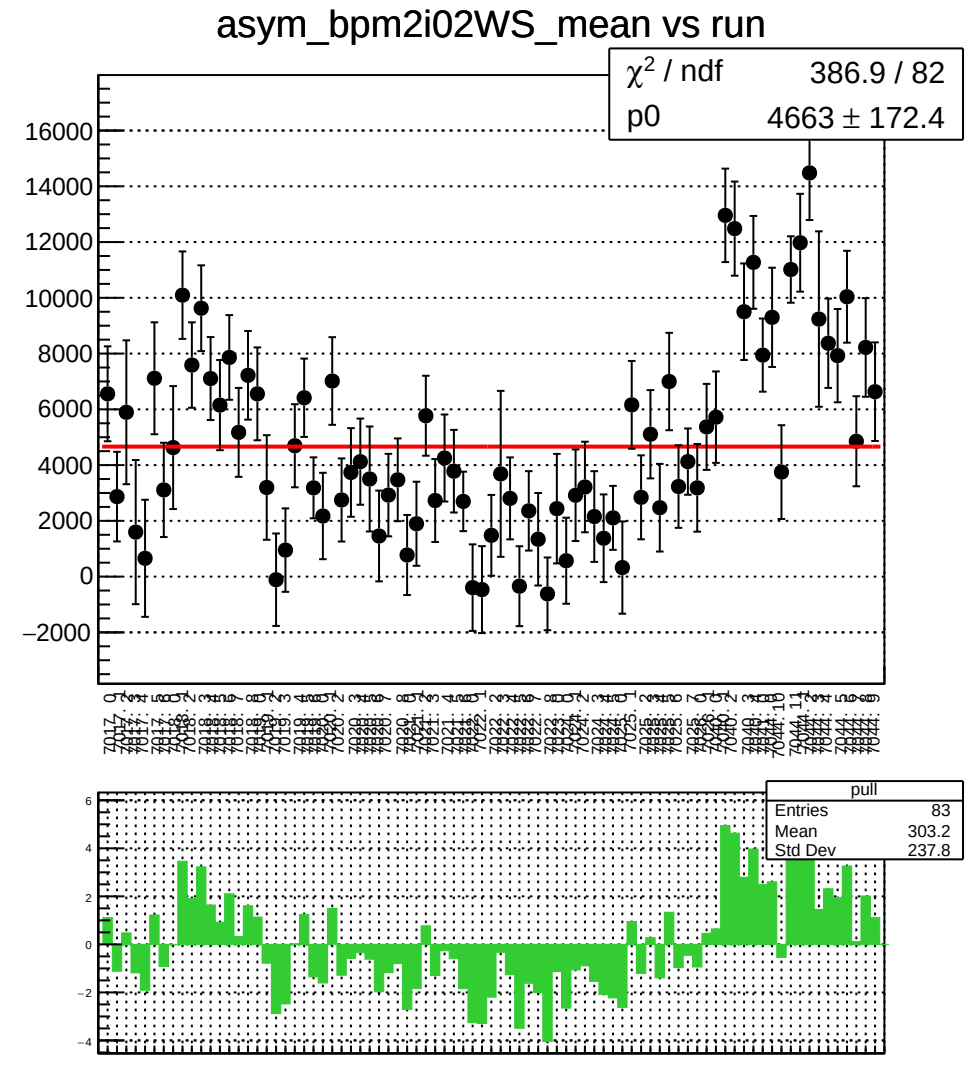

pull1D
Entries 83
Mean 0.0532
Std Dev 2.151
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

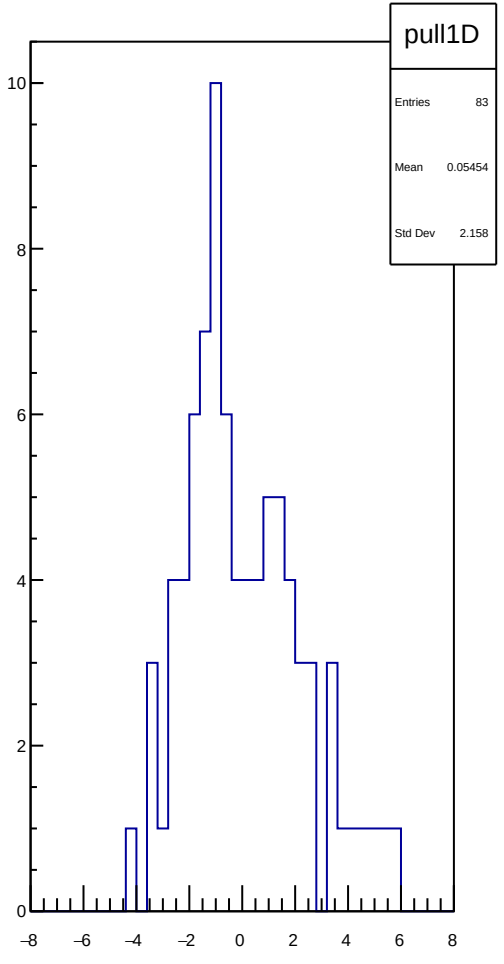

asym_bpm1i02WS_rms vs run
χ^2 / ndf 1.467e+04 / 82
p0 150.8 ± 0.1198
240
220
200
180
160
140
120

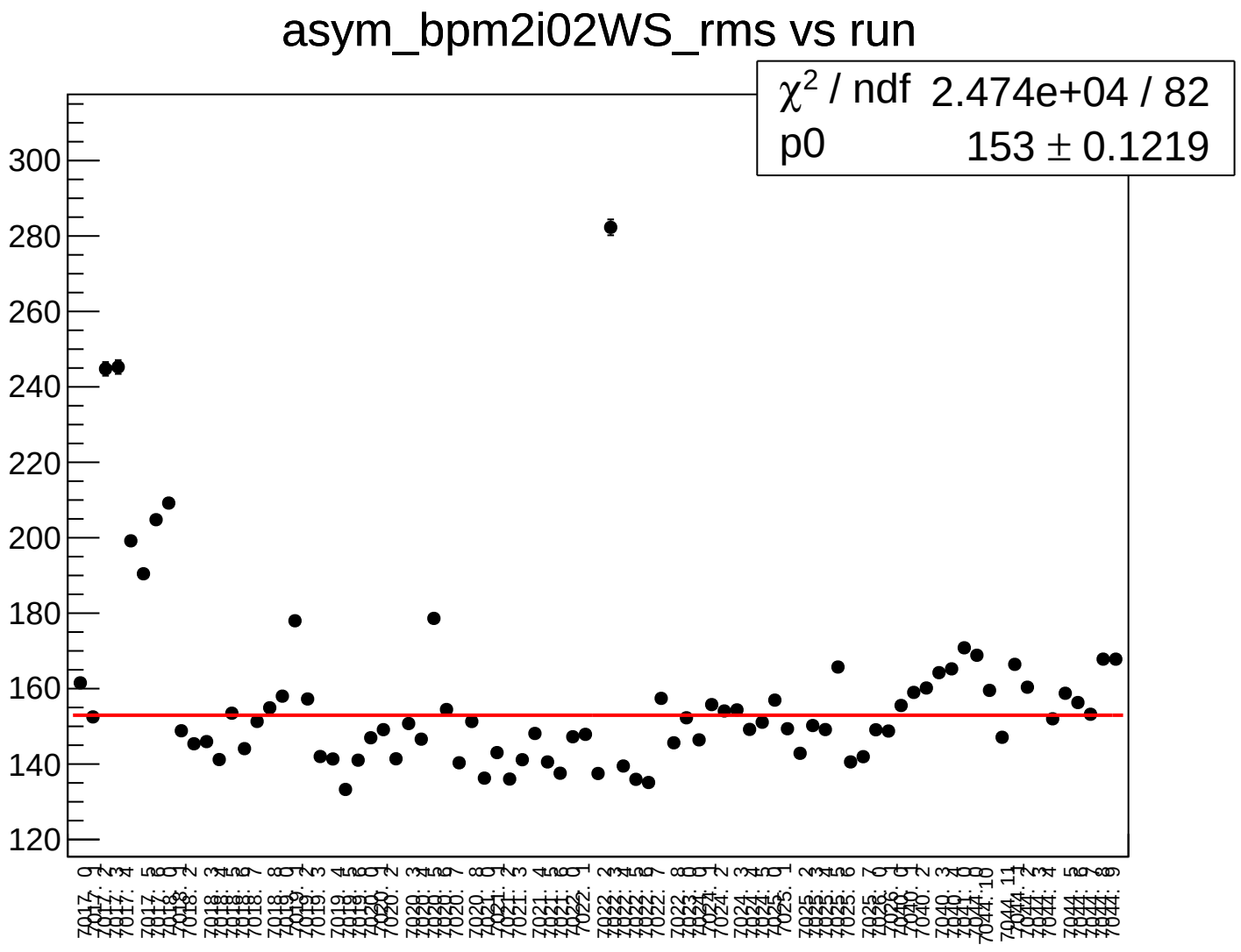

asym_bpm2i01WS_mean vs run
χ² / ndf 382.4 / 82
p0 4676 ± 174.5
pull
Entries 83
Mean 321.3
Std Dev 257.4

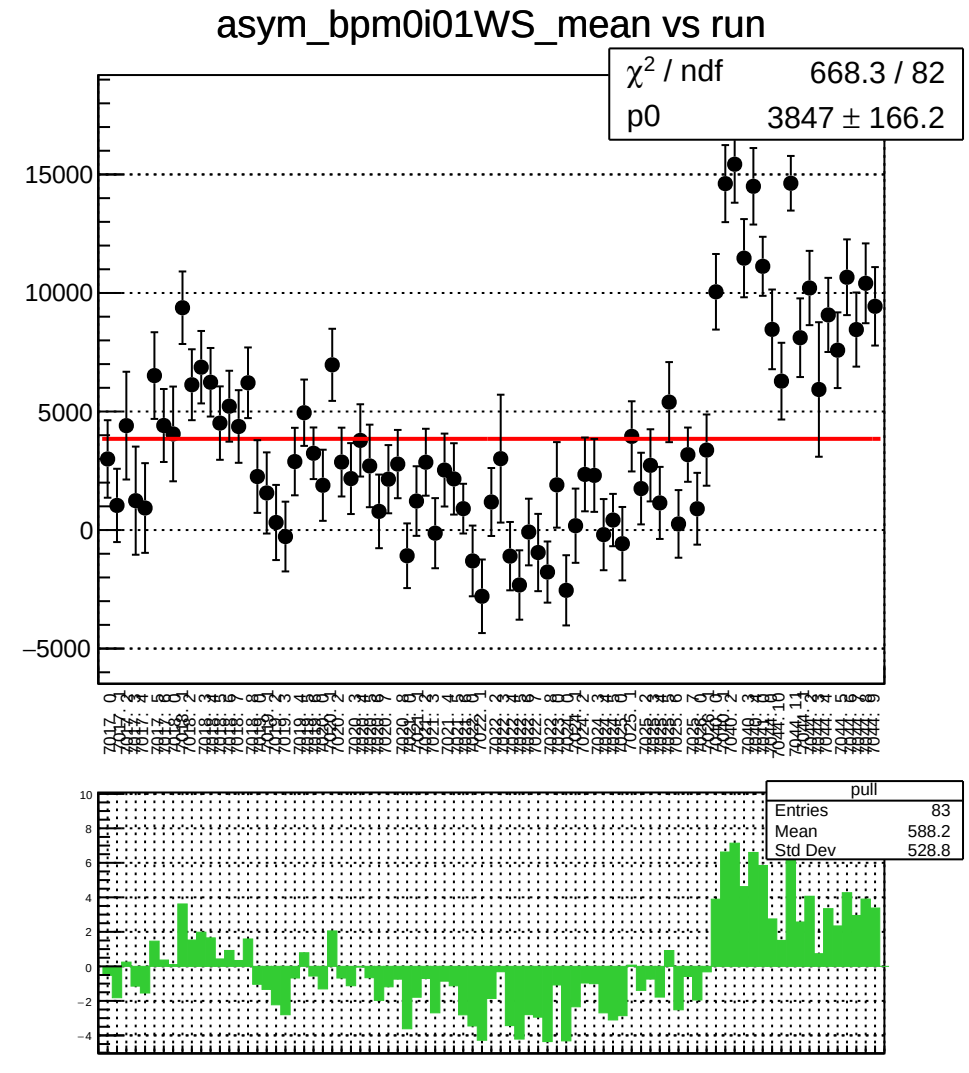

pull1D
Entries 83
Mean 0.05426
Std Dev 2.146

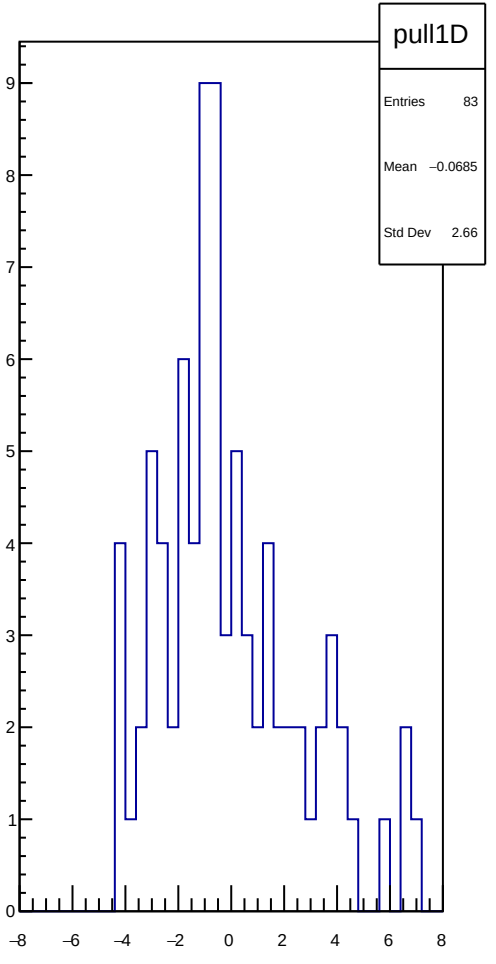

asym_bpm2i01WS_rms vs run
χ² / ndf 2.217e+04 / 82
p0 154.9 ± 0.1234
300
280
260
240
220
200
180
160
140
120

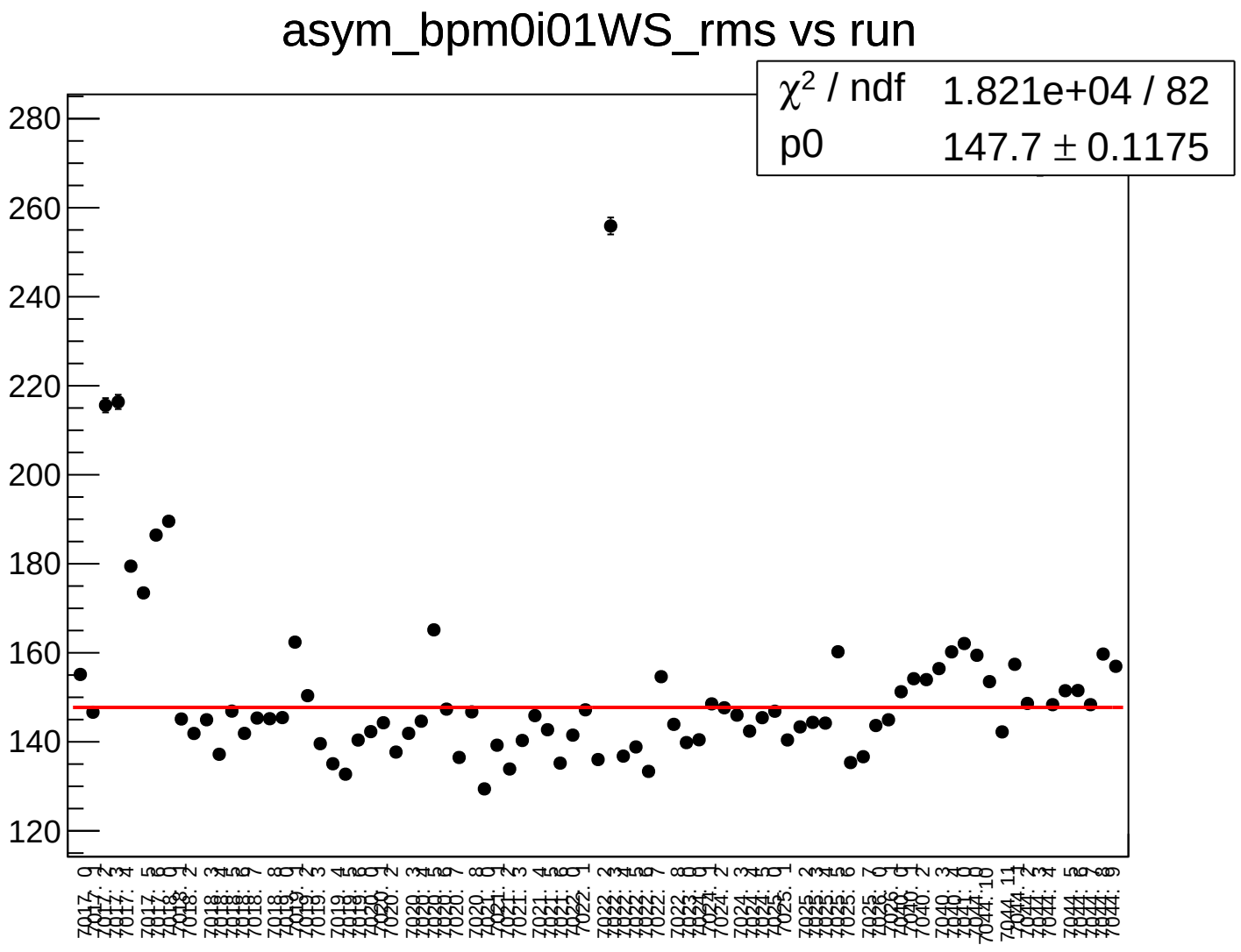

asym_bpm2i02WS_mean vs run
χ² / ndf 386.9 / 82
p0 4663 ± 172.4
pull
Entries 83
Mean 303.2
Std Dev 237.8

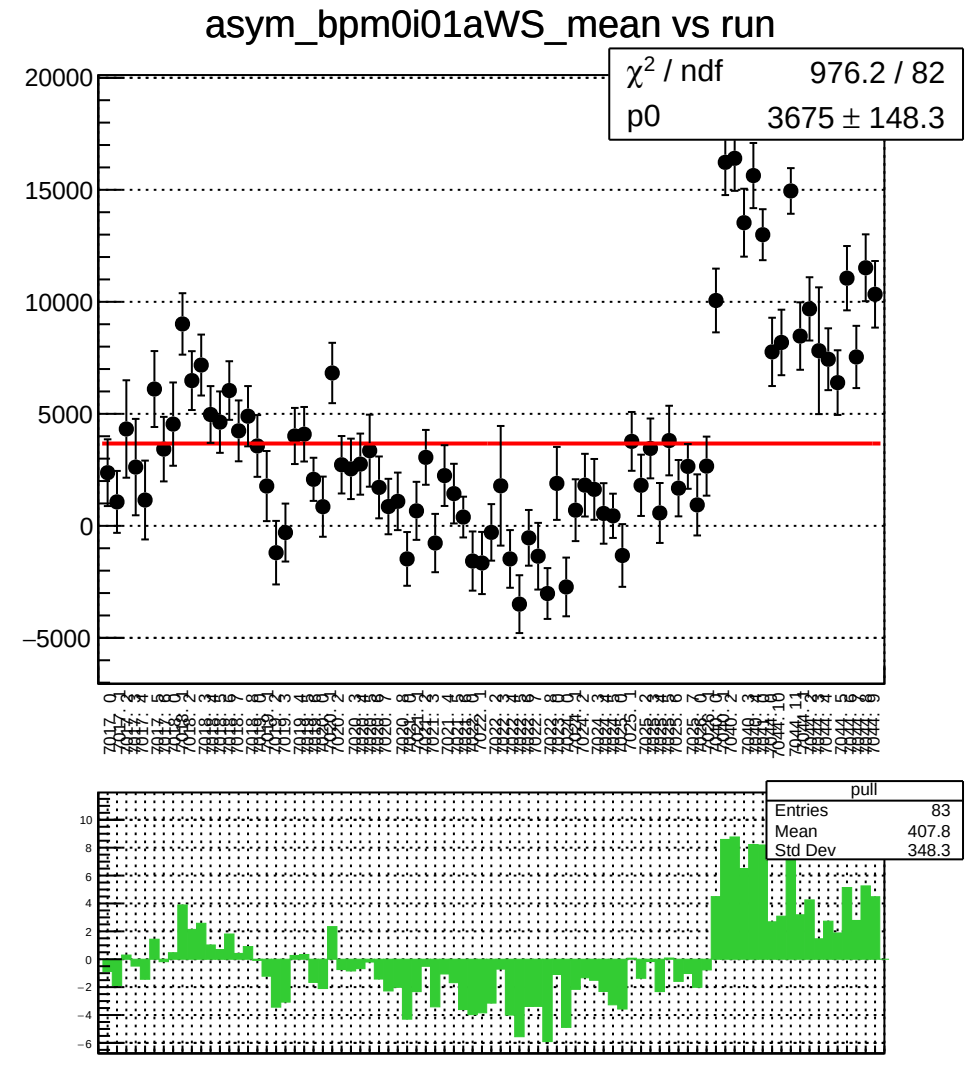

pull1D
Entries 83
Mean 0.05454
Std Dev 2.158

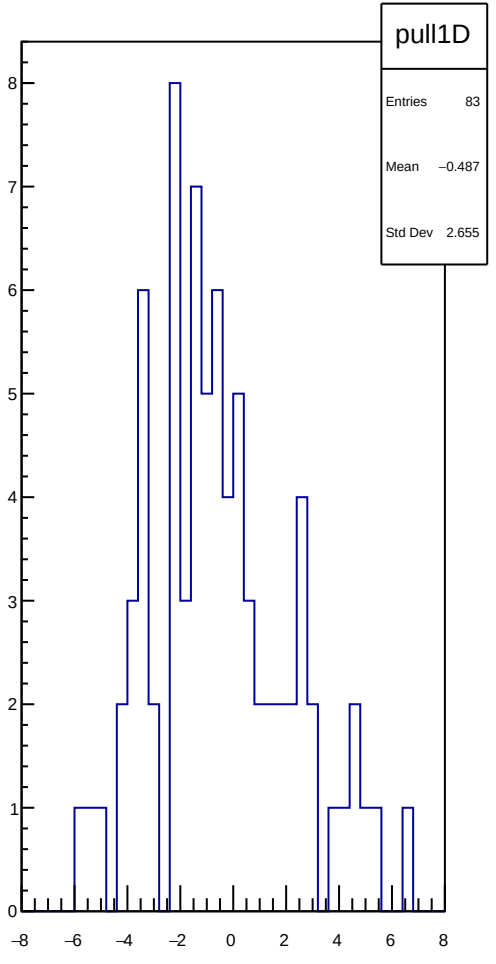

asym_bpm2i02WS_rms vs run
χ^2 / ndf 2.474e+04 / 82
p0 153 ± 0.1219
300
280
260
240
220
200
180
160
140
120

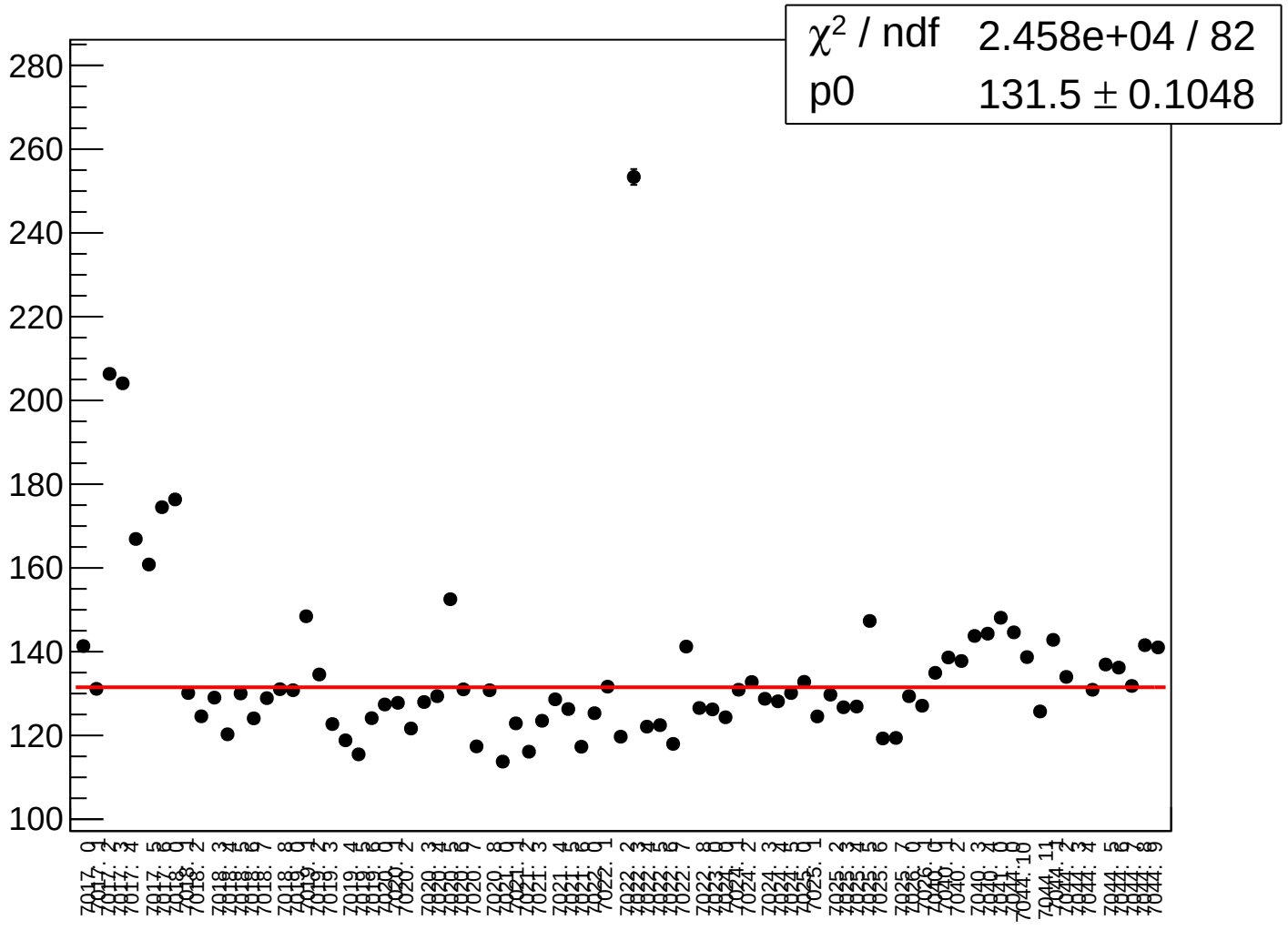

asym_bpm0i01WS_mean vs run
χ² / ndf 668.3 / 82
p0 3847 ± 166.2
15000
10000
5000
0
−5000
pull
Entries 83
Mean 588.2
Std Dev 528.8
10
8
6
4
2
0
−2
−4

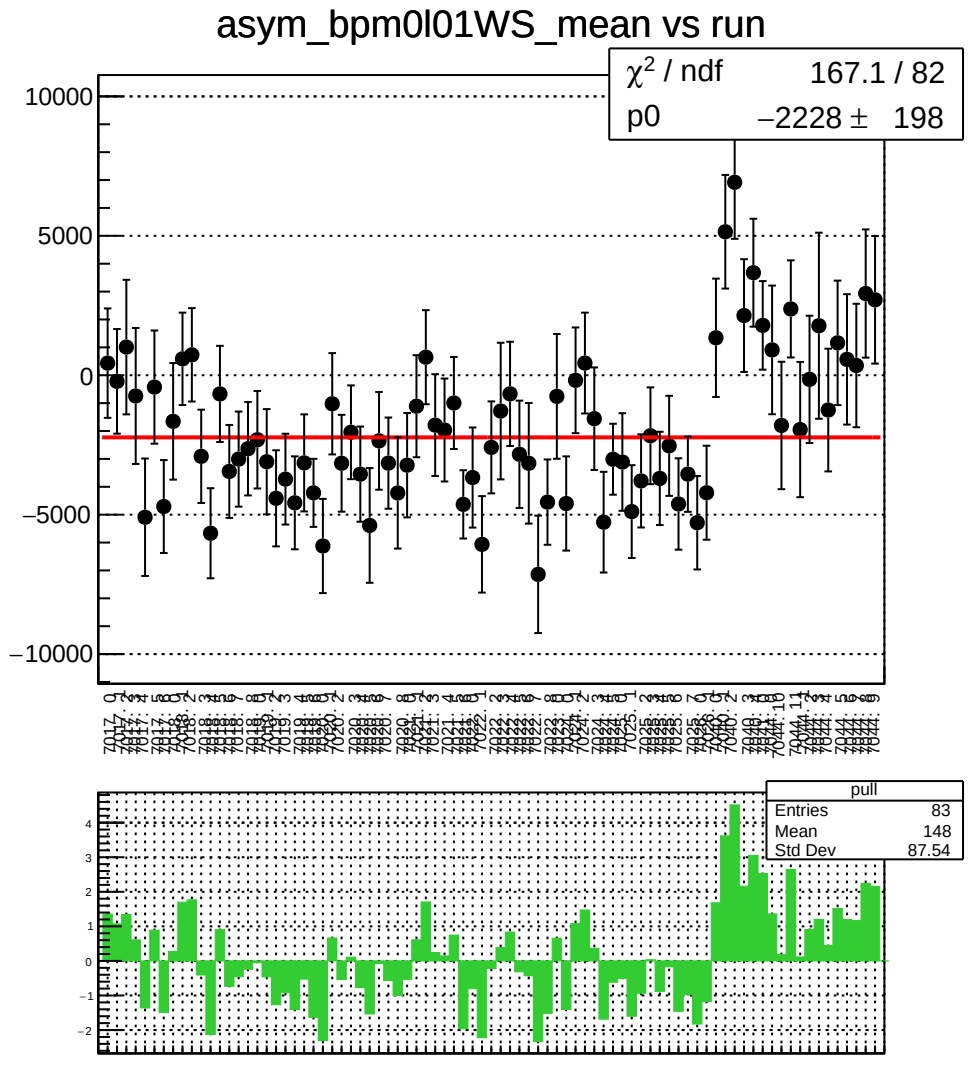

pull1D
Entries 83
Mean −0.0685
Std Dev 2.66
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

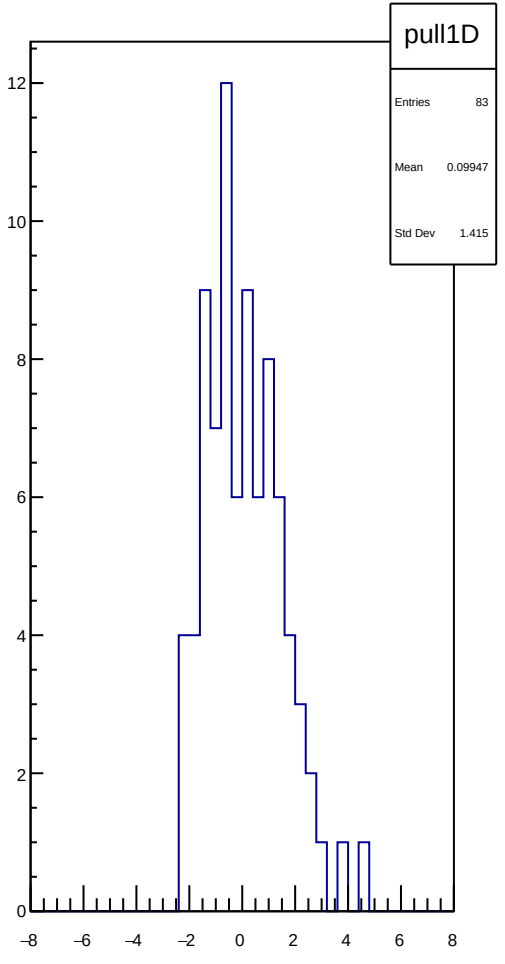

asym_bpm0i01WS_rms vs run
χ^2 / ndf 1.821e+04 / 82
p0 147.7 ± 0.1175
280
260
240
220
200
180
160
140
120

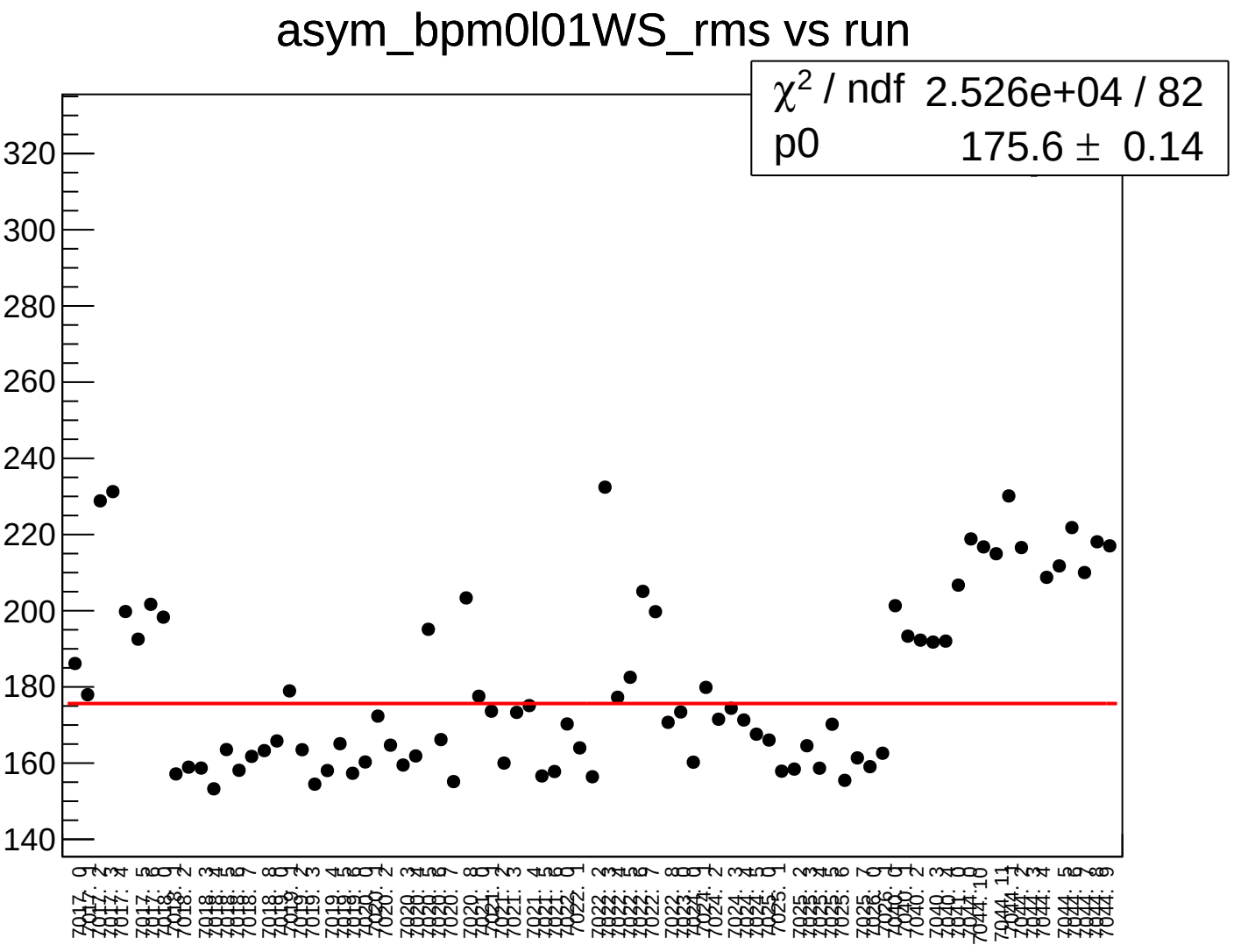

asym_bpm0i01aWS_mean vs run
χ² / ndf 976.2 / 82
p0 3675 ± 148.3
pull
Entries 83
Mean 407.8
Std Dev 348.3

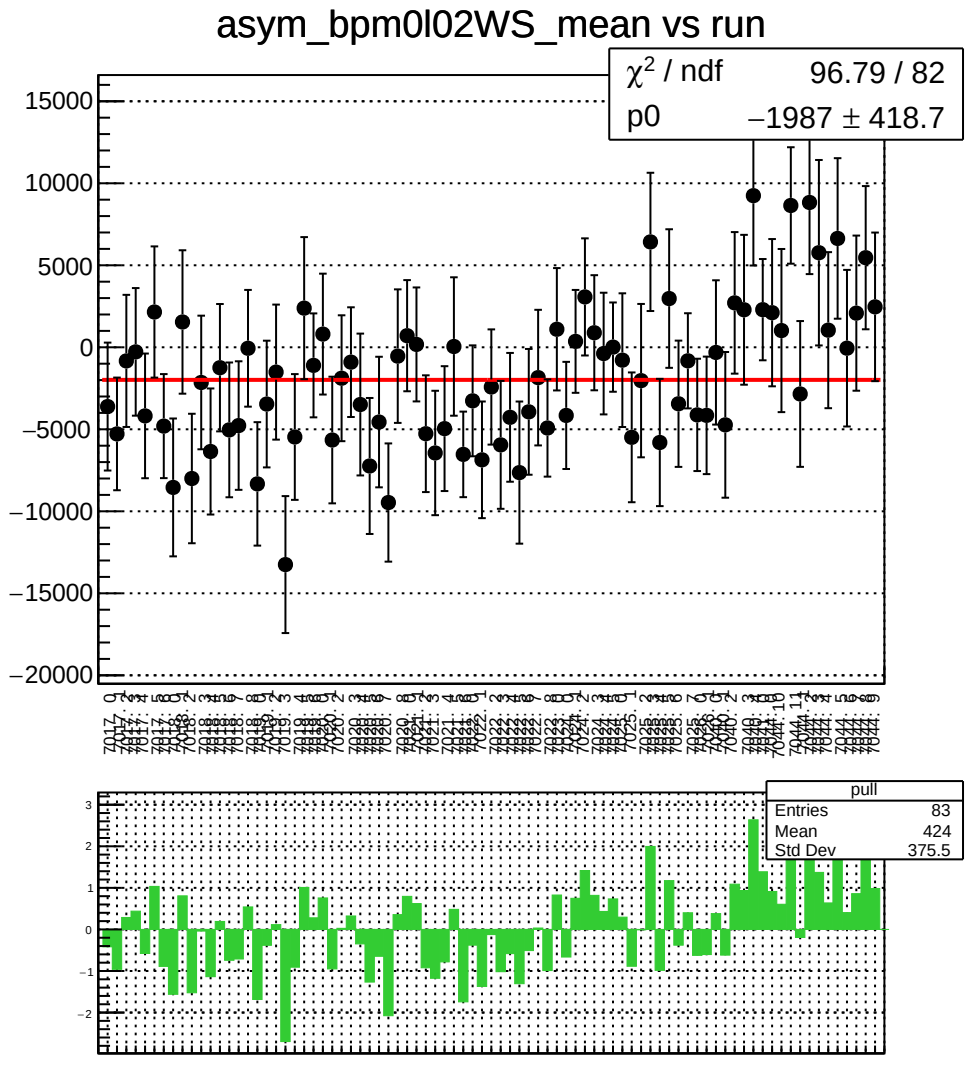

pull1D
Entries 83
Mean −0.487
Std Dev 2.655

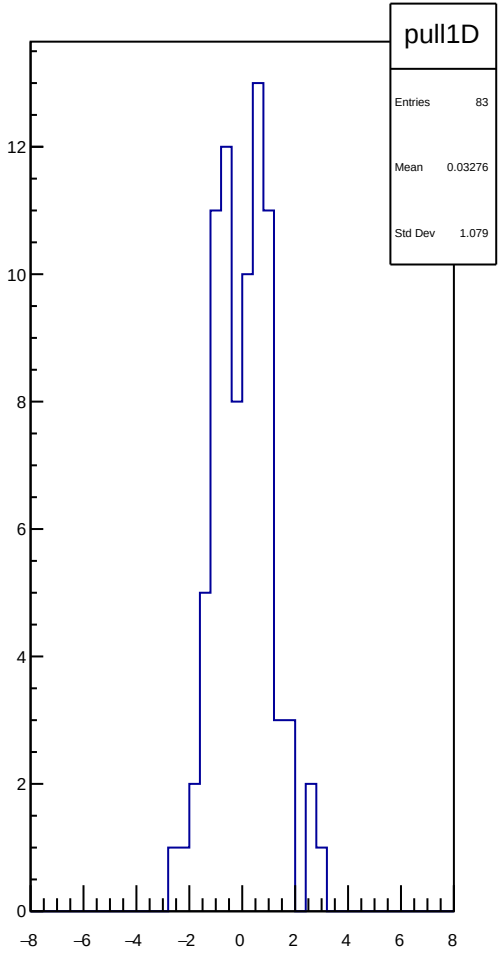

asym_bpm0i01aWS_rms vs run
χ² / ndf 2.458e+04 / 82
p0 131.5 ± 0.1048
280
260
240
220
200
180
160
140
120
100

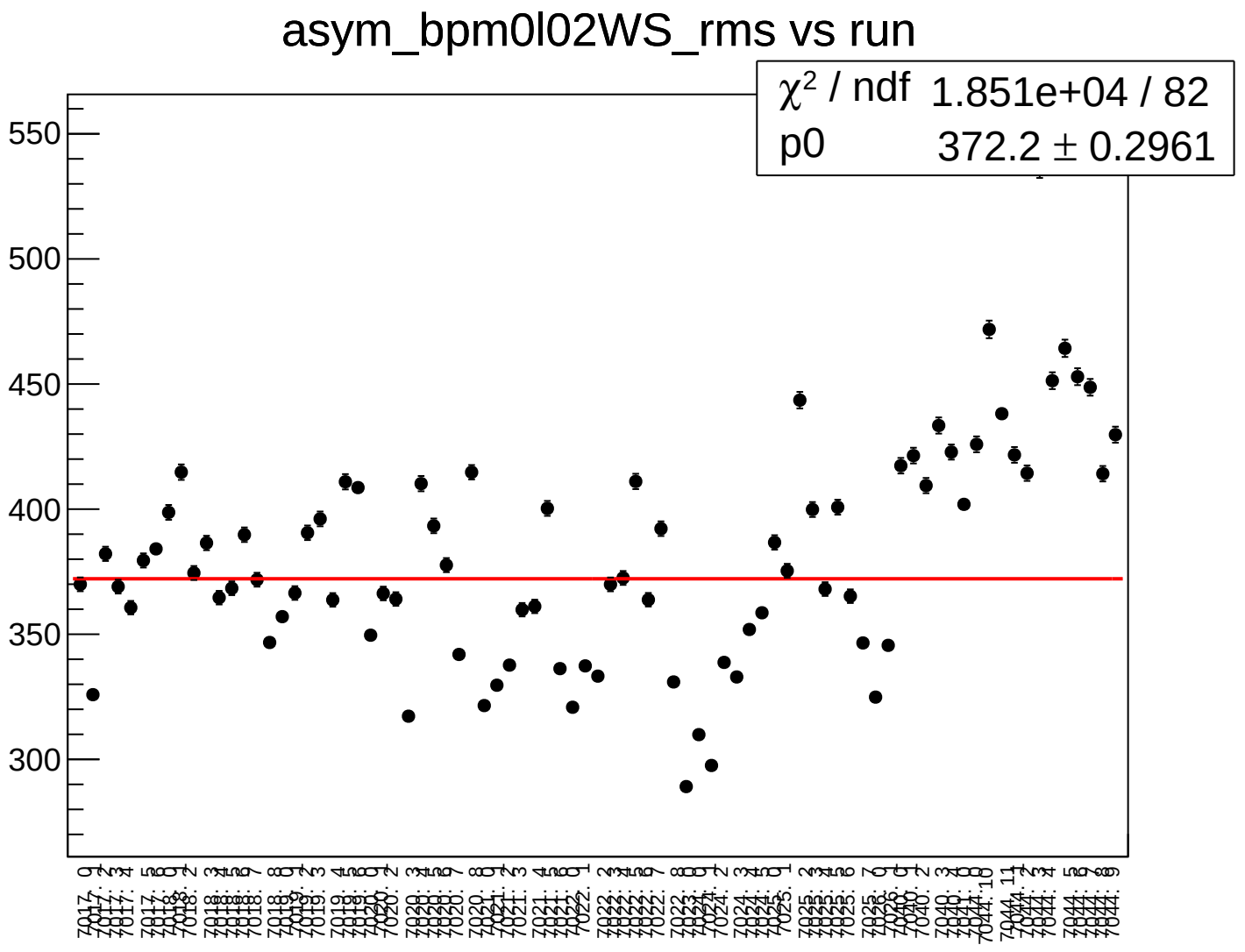

asym_bpm0l01WS_mean vs run
χ² / ndf 167.1 / 82
p0 −2228 ± 198
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 148
Std Dev 87.54
4
3
2
1
0
−1
−2

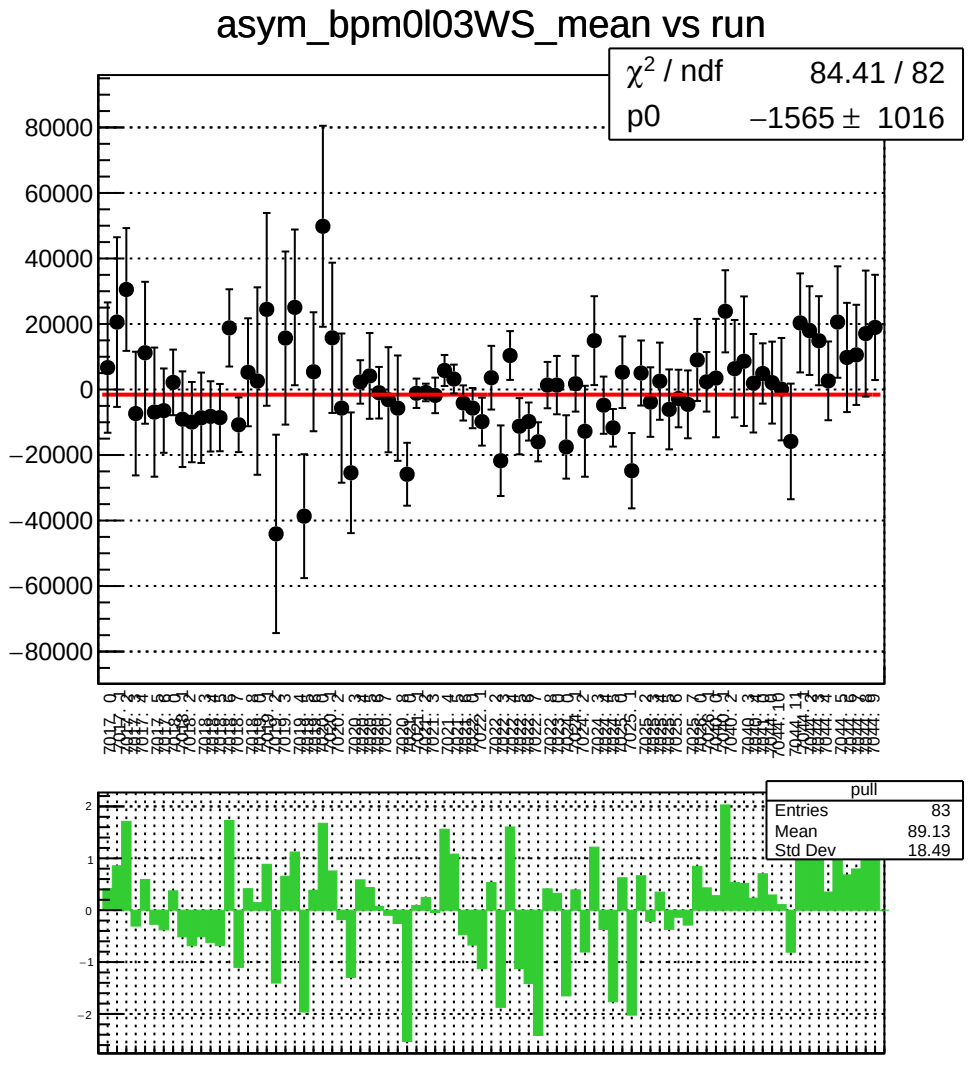

pull1D
Entries 83
Mean 0.09947
Std Dev 1.415
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

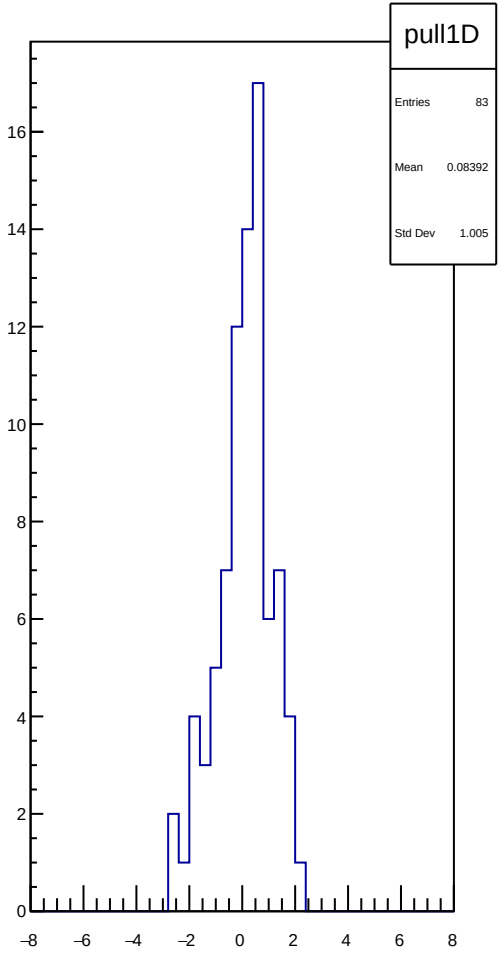

asym_bpm0l01WS_rms vs run
χ² / ndf 2.526e+04 / 82
p0 175.6 ± 0.14
320
300
280
260
240
220
200
180
160
140

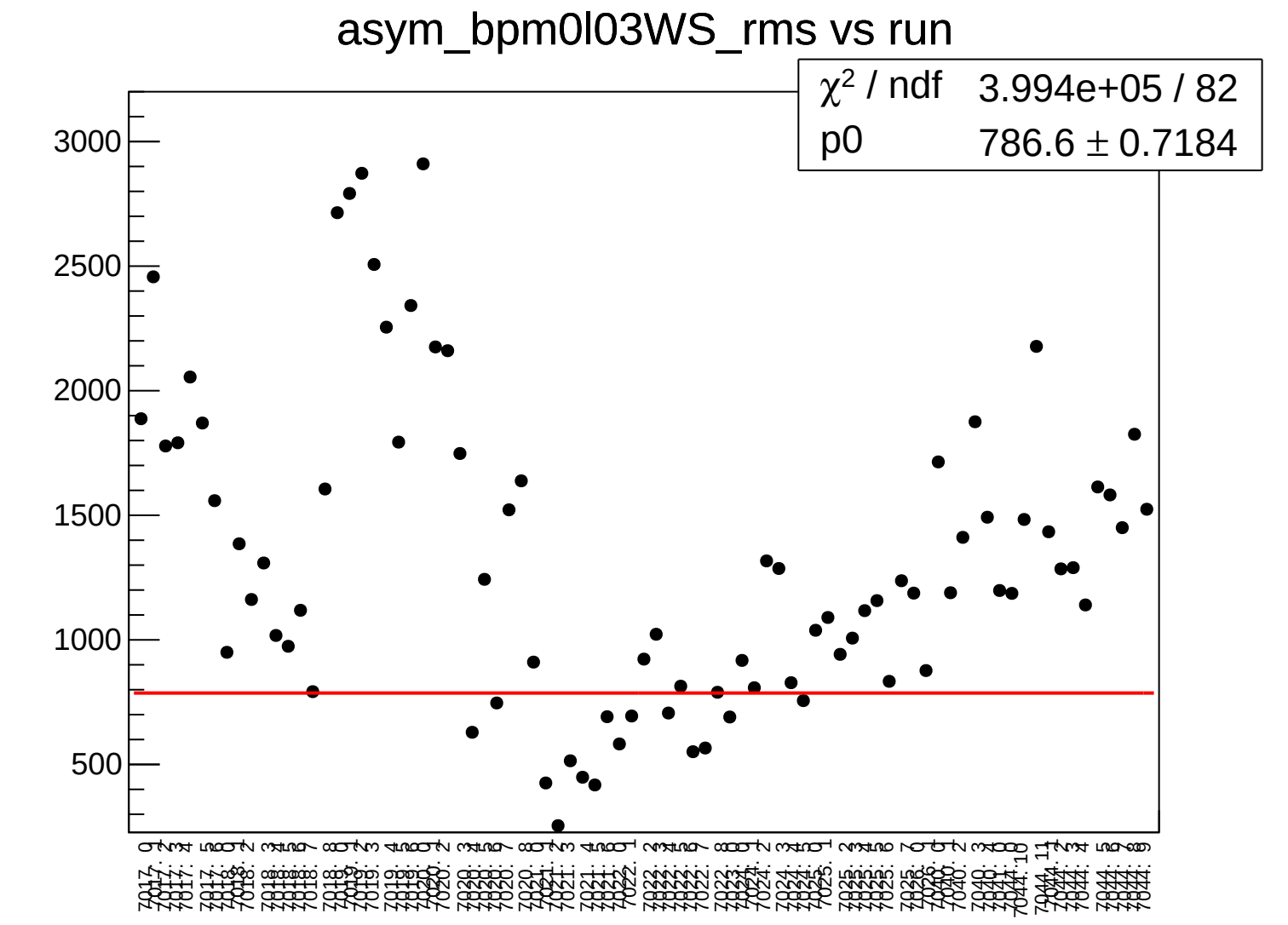

asym_bpm0l02WS_mean vs run
χ² / ndf 96.79 / 82
p0 −1987 ± 418.7
pull
Entries 83
Mean 424
Std Dev 375.5

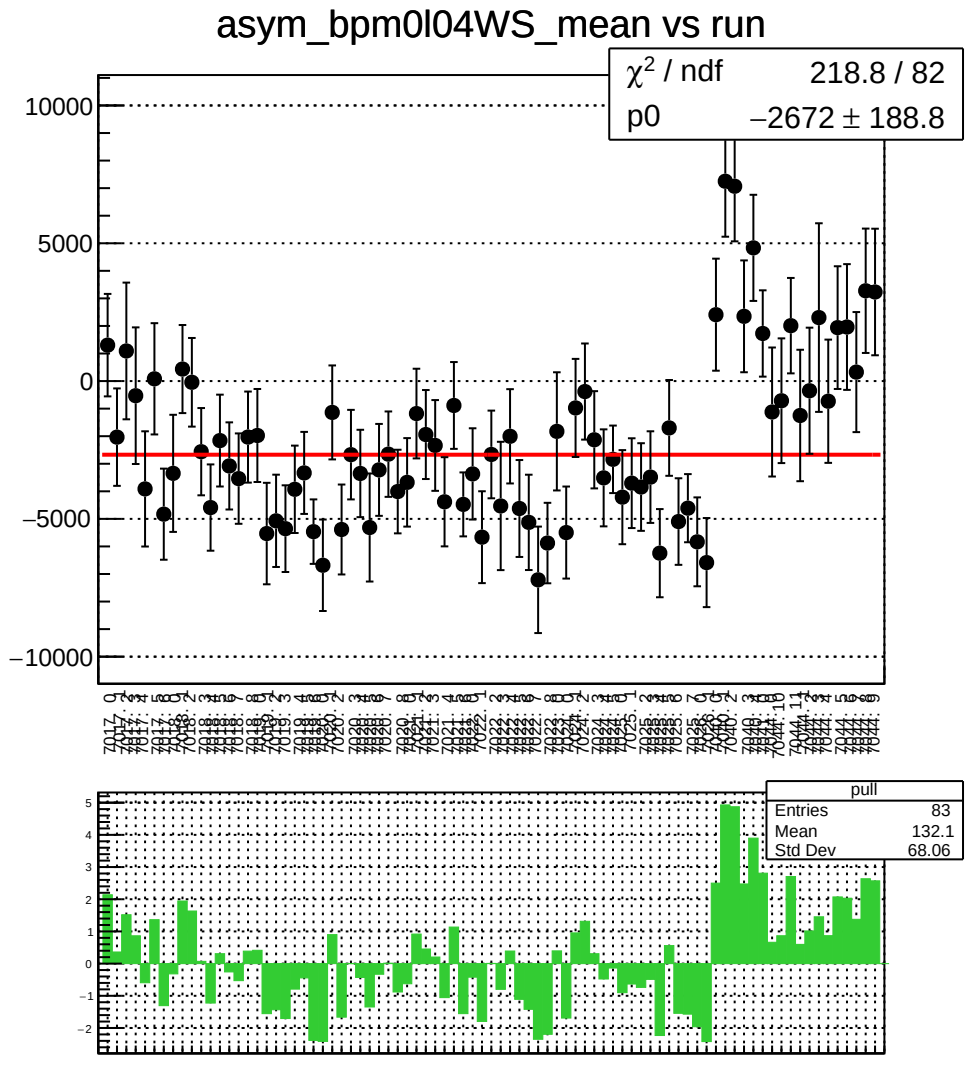

pull1D
Entries 83
Mean 0.03276
Std Dev 1.079

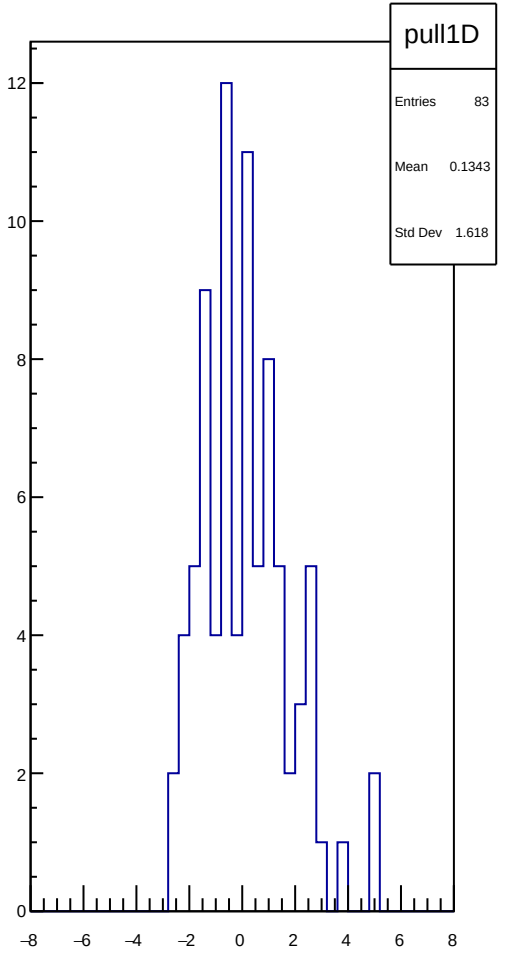

asym_bpm0l02WS_rms vs run
χ² / ndf 1.851e+04 / 82
p0 372.2 ± 0.2961
550
500
450
400
350
300

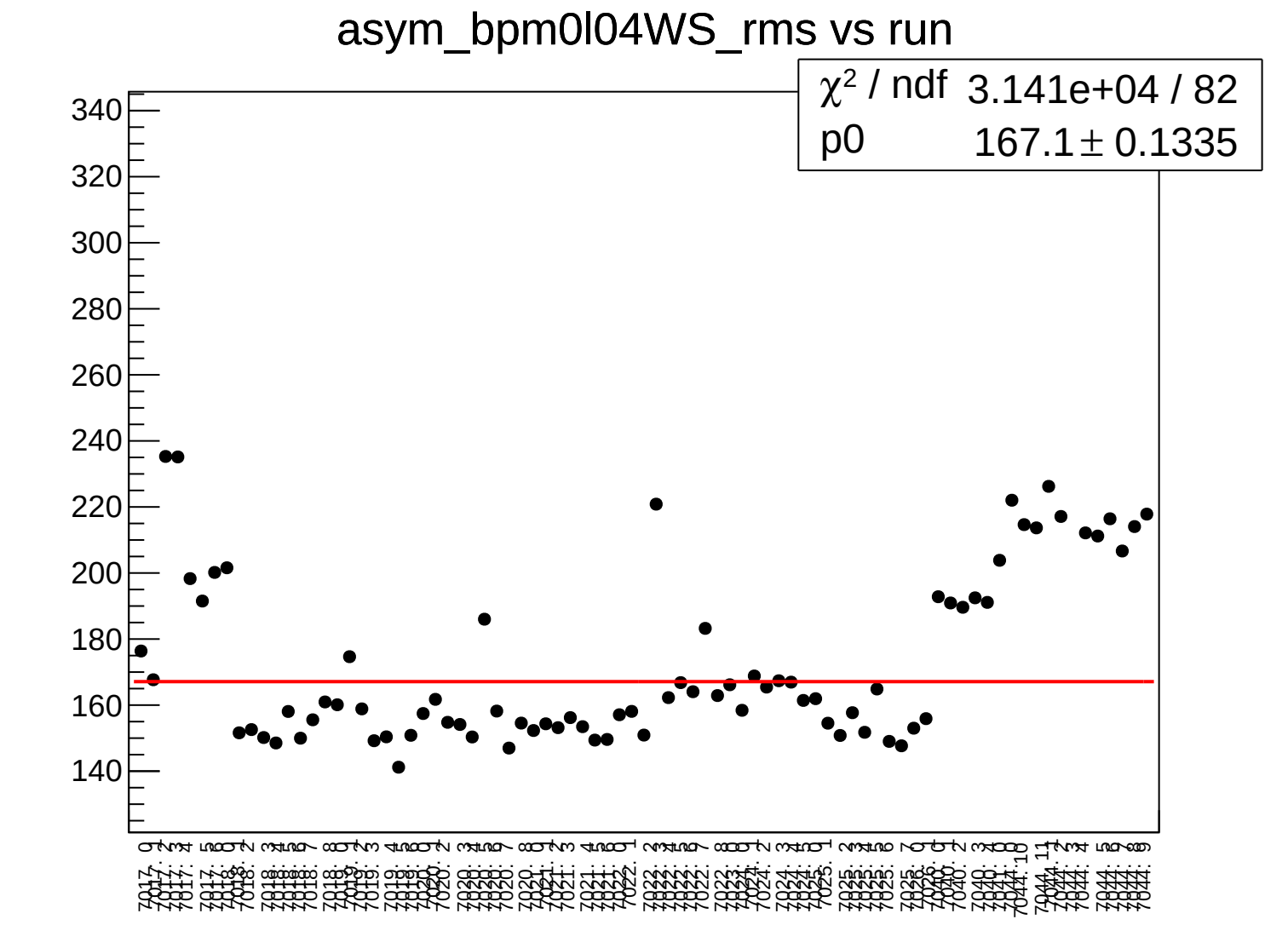

asym_bpm0l03WS_mean vs run
χ² / ndf 84.41 / 82
p0 −1565 ± 1016
pull
Entries 83
Mean 89.13
Std Dev 18.49

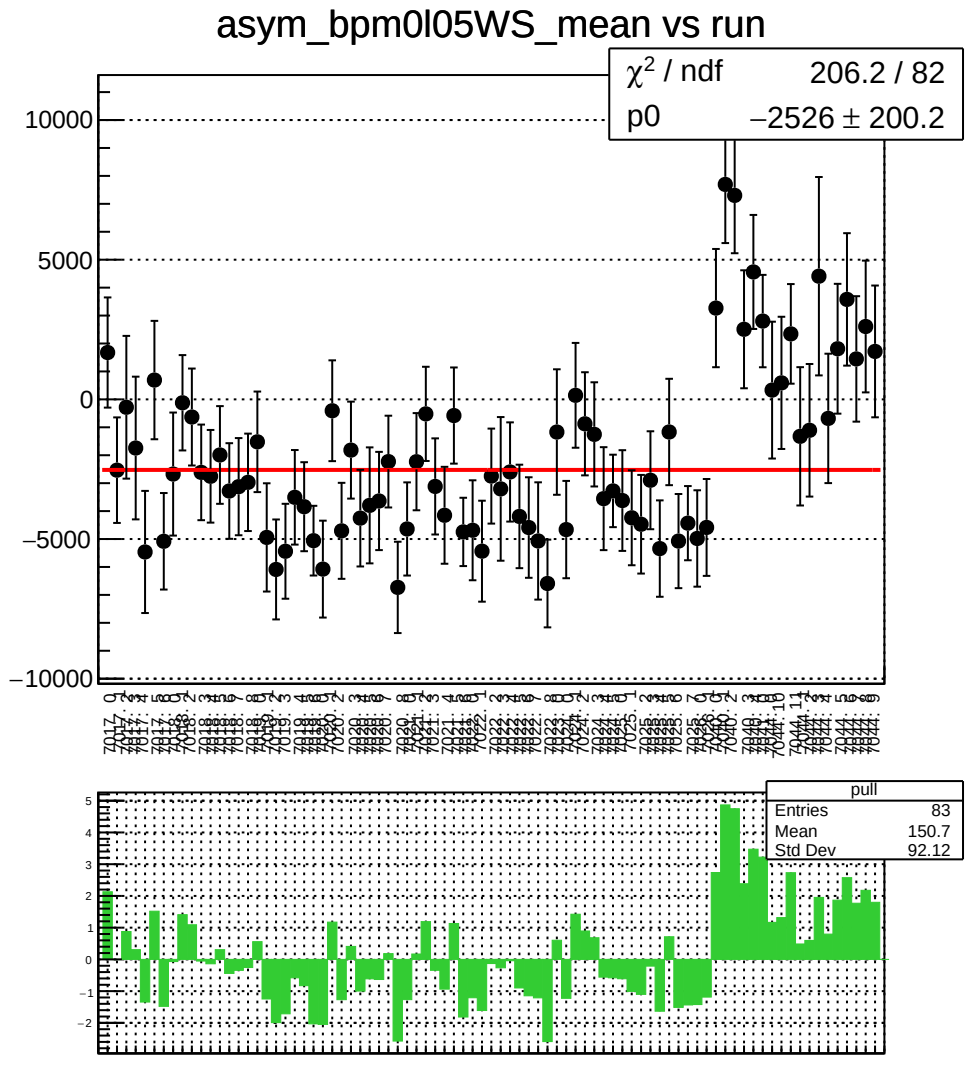

pull1D
Entries 83
Mean 0.08392
Std Dev 1.005

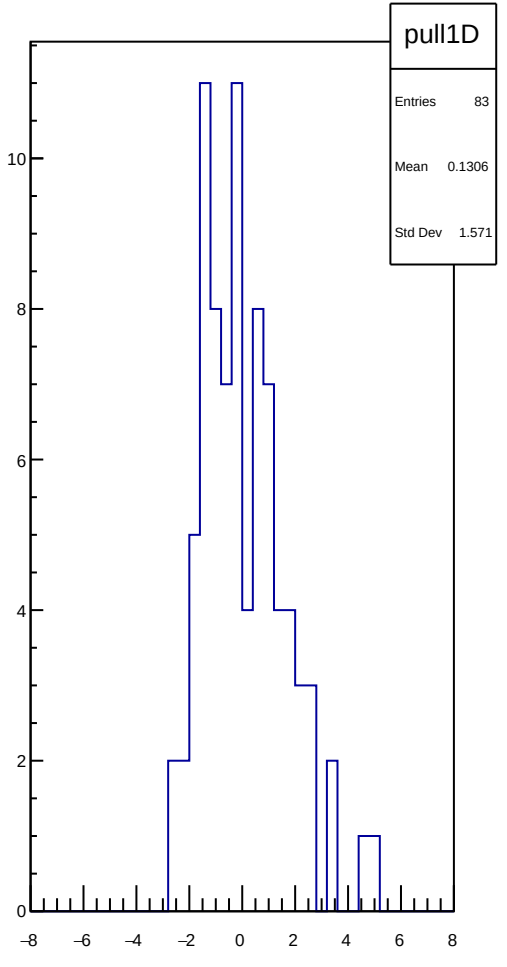

asym_bpm0l03WS_rms vs run
χ² / ndf 3.994e+05 / 82
p0 786.6 ± 0.7184
3000
2500
2000
1500
1000
500

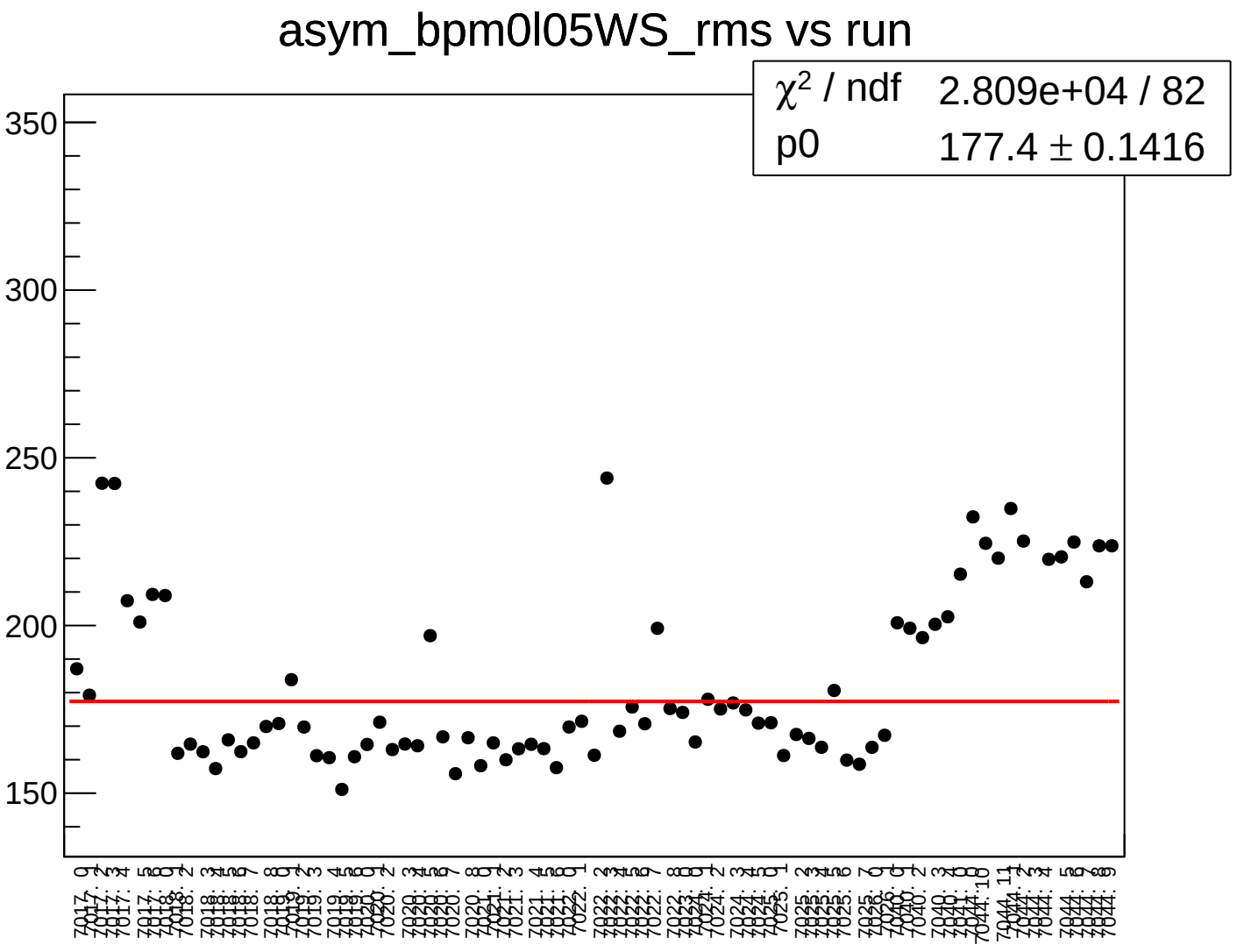

asym_bpm0l04WS_mean vs run
χ^2 / ndf 218.8 / 82
p0 −2672 ± 188.8
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 132.1
Std Dev 68.06
5
4
3
2
1
0
−1
−2

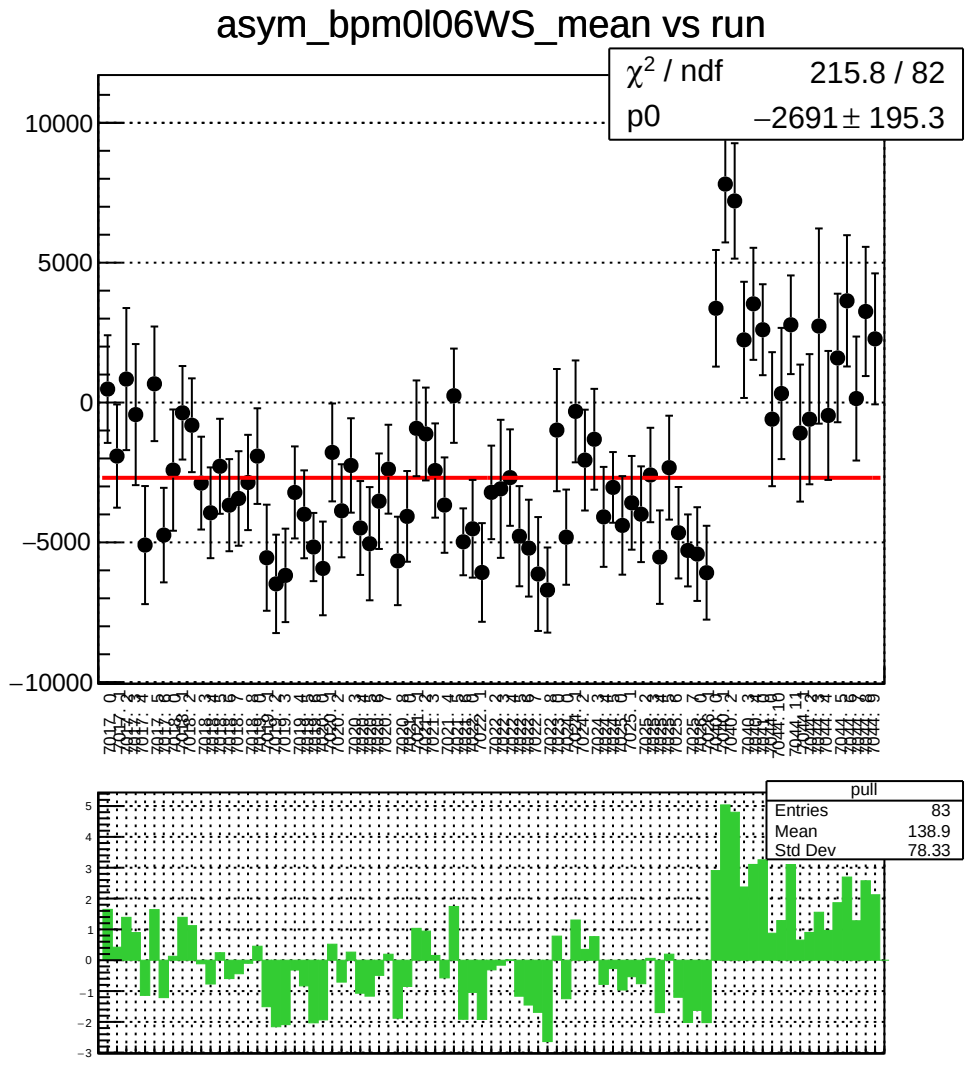

pull1D
Entries 83
Mean 0.1343
Std Dev 1.618
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

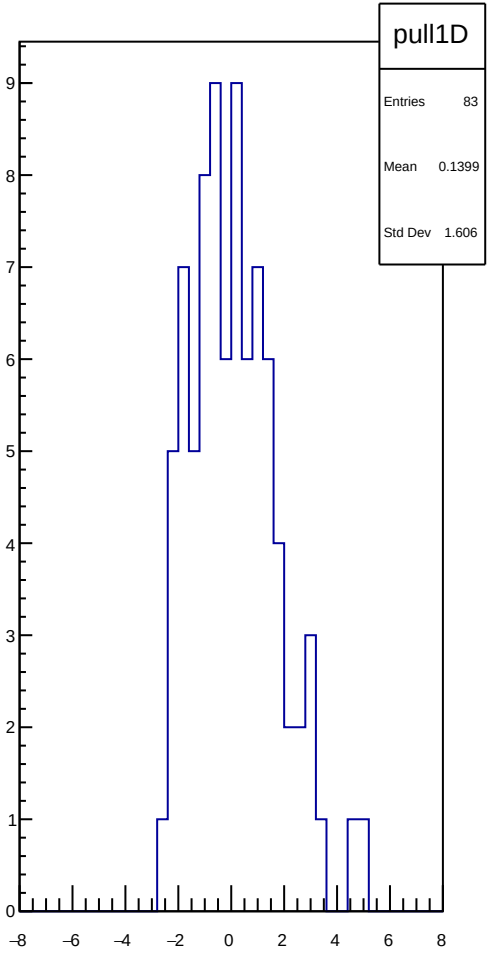

asym_bpm0l04WS_rms vs run
χ² / ndf 3.141e+04 / 82
p0 167.1 ± 0.1335
340
320
300
280
260
240
220
200
180
160
140

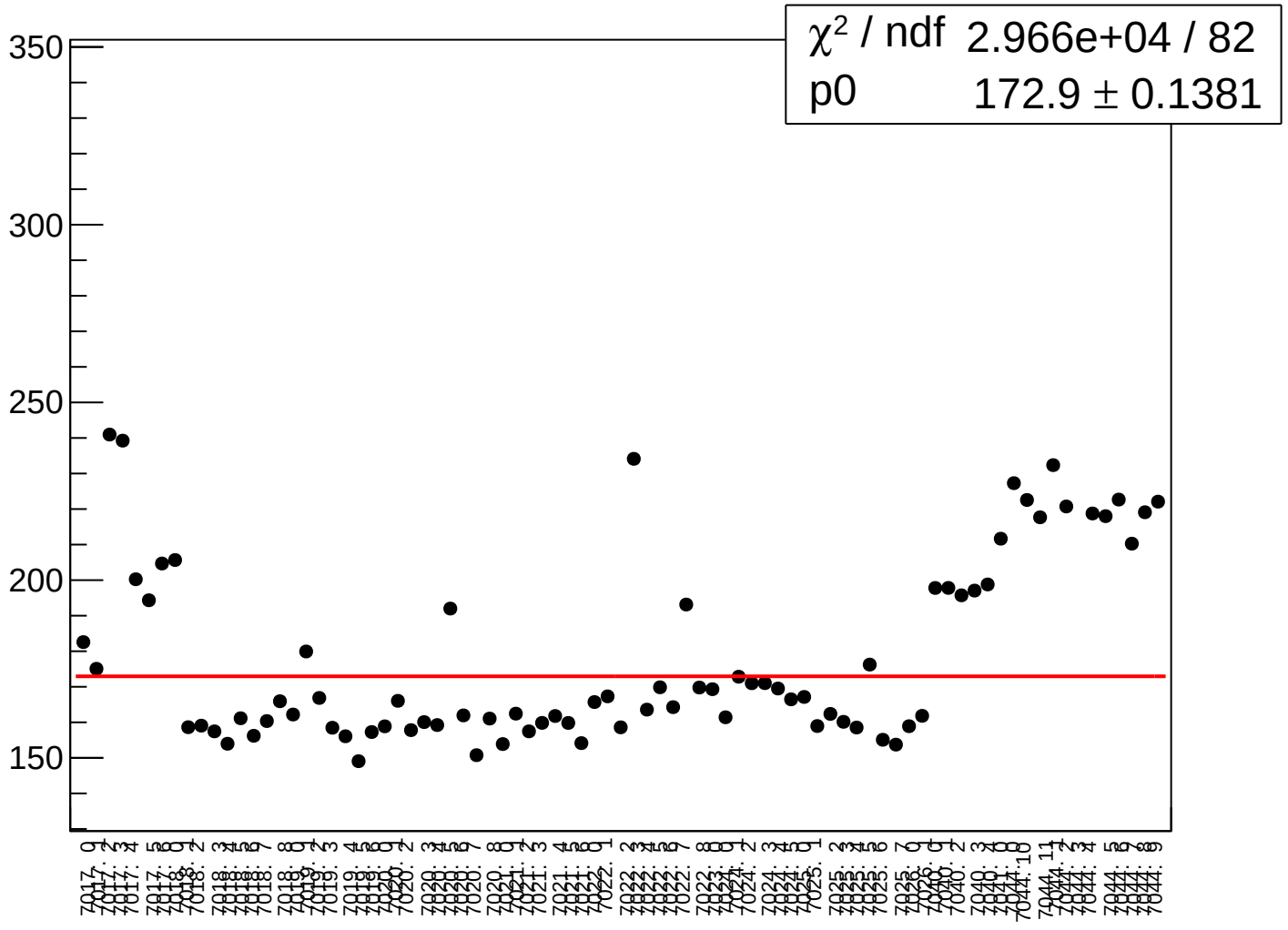

asym_bpm0l05WS_mean vs run
χ² / ndf 206.2 / 82
p0 −2526 ± 200.2
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 150.7
Std Dev 92.12
5
4
3
2
1
0
−1
−2

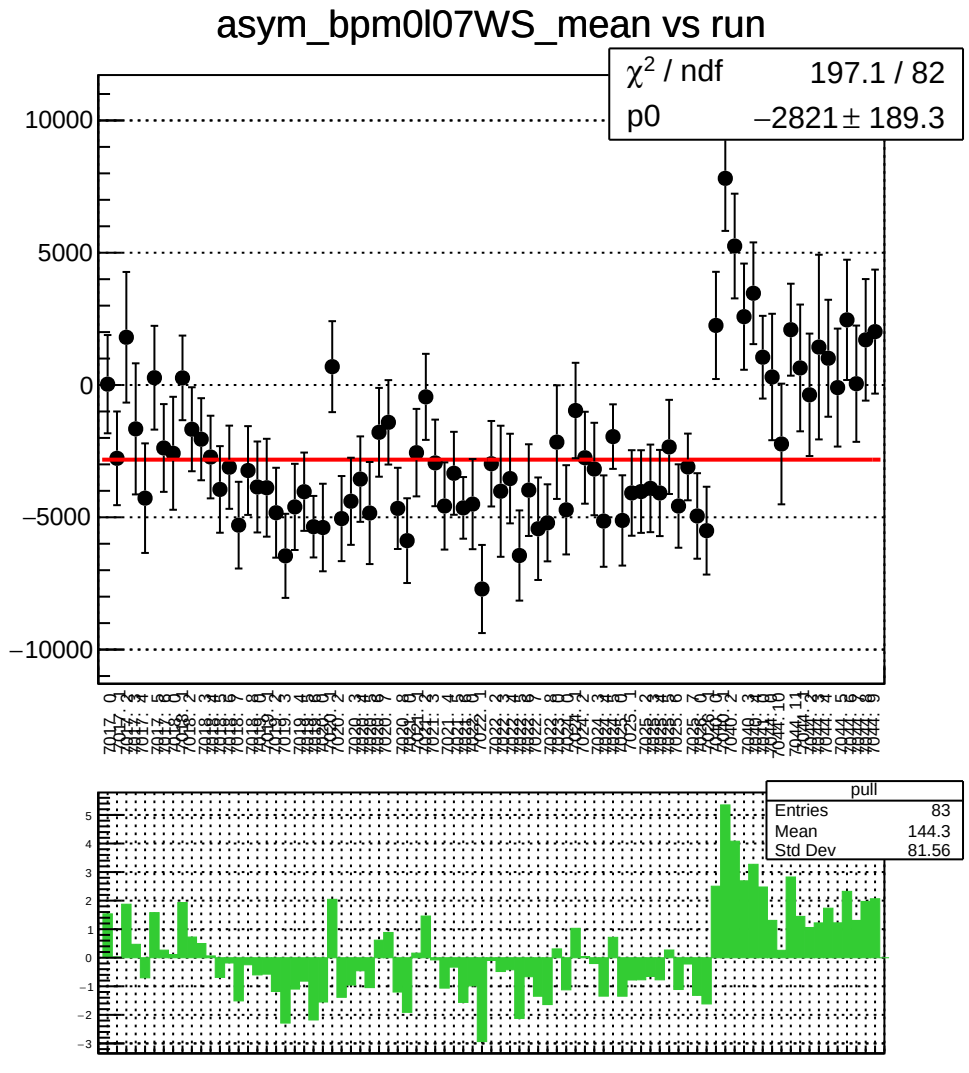

pull1D
Entries 83
Mean 0.1306
Std Dev 1.571
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

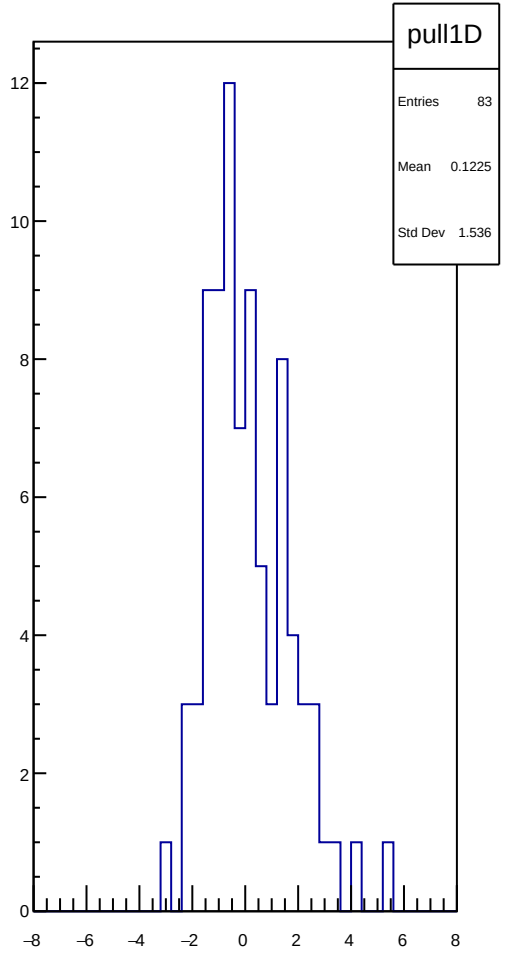

asym_bpm0l05WS_rms vs run
χ² / ndf 2.809e+04 / 82
p0 177.4 ± 0.1416
350
300
250
200
150

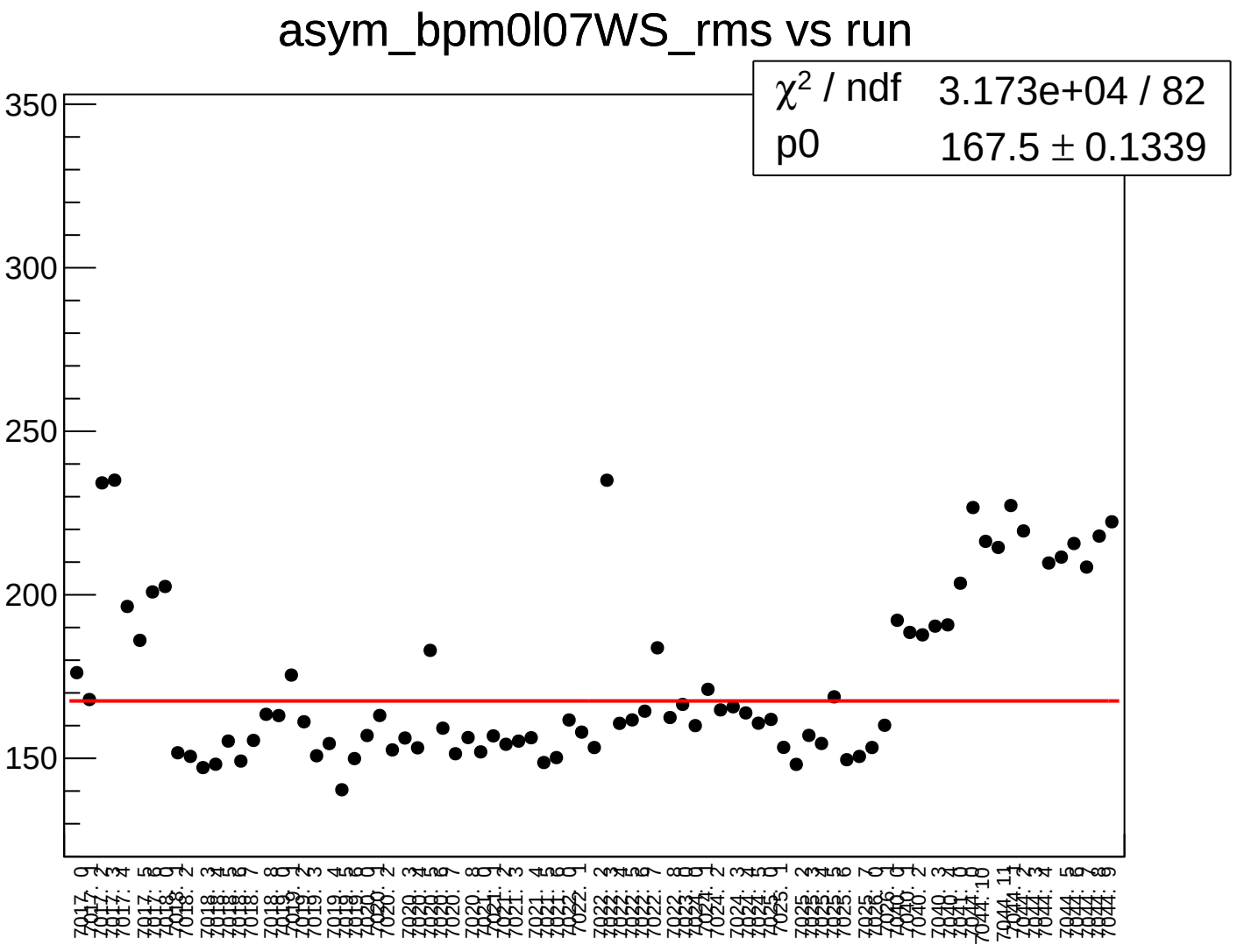

asym_bpm0l06WS_mean vs run
χ² / ndf 215.8 / 82
p0 −2691 ± 195.3
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 138.9
Std Dev 78.33
5
4
3
2
1
0
−1
−2
−3

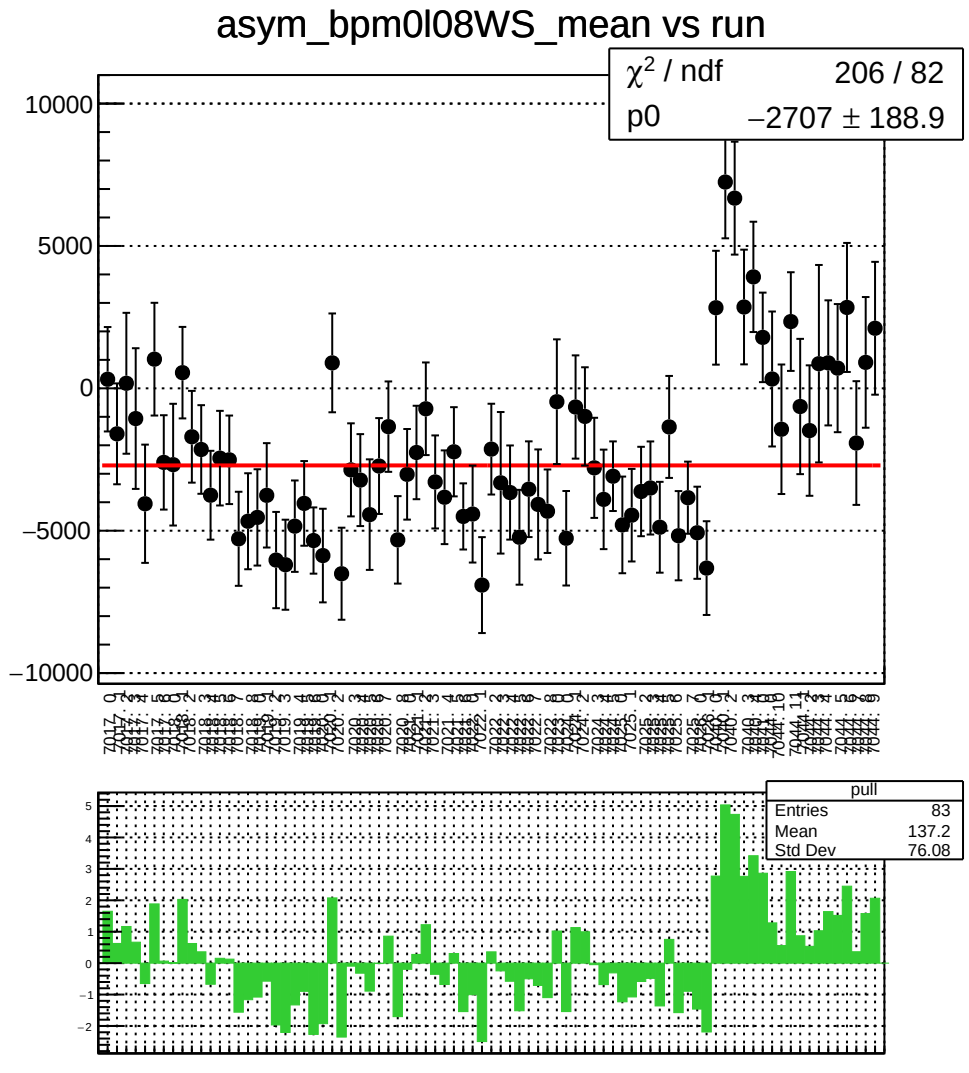

pull1D
Entries 83
Mean 0.1399
Std Dev 1.606
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

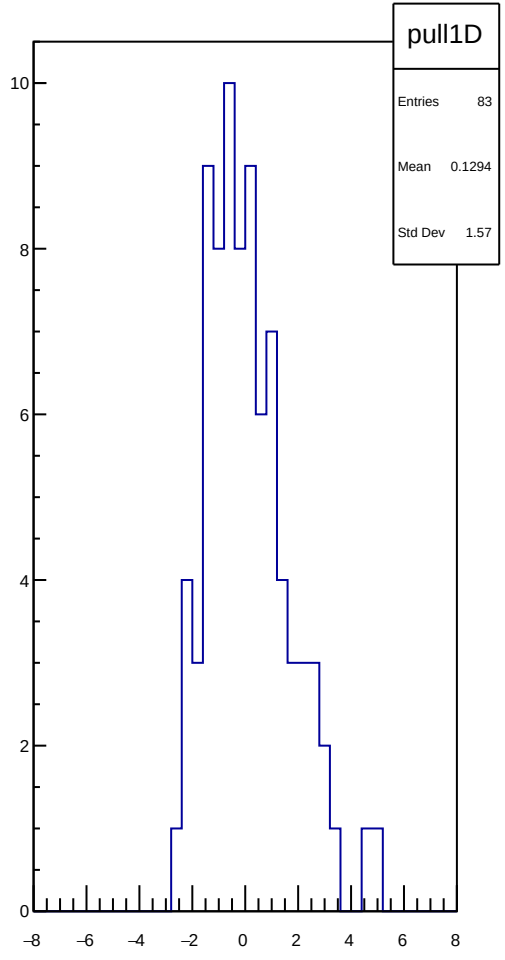

asym_bpm0l06WS_rms vs run
χ² / ndf 2.966e+04 / 82
p0 172.9 ± 0.1381
350
300
250
200
150

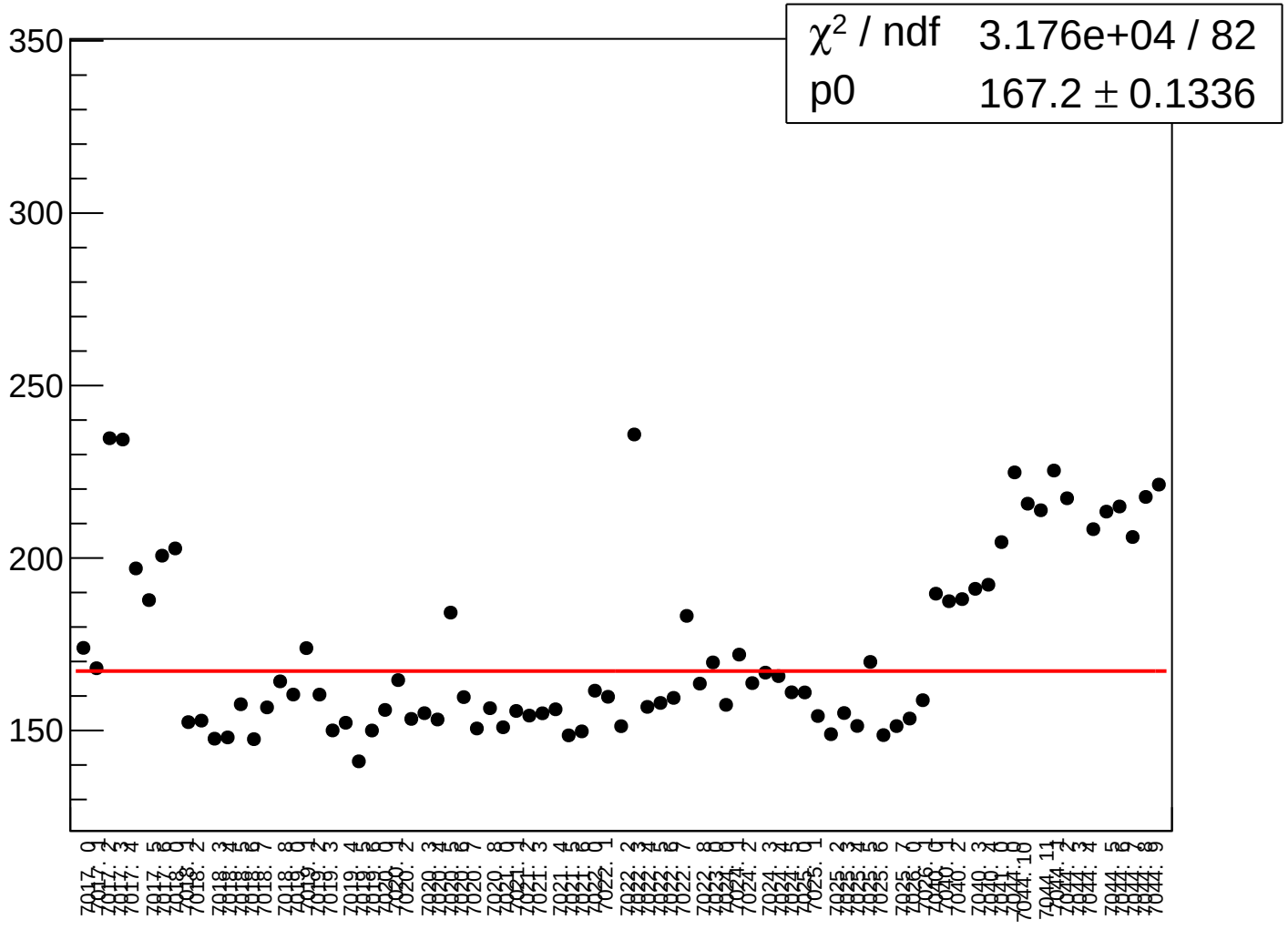

asym_bpm0l07WS_mean vs run
χ² / ndf 197.1 / 82
p0 −2821 ± 189.3
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 144.3
Std Dev 81.56
5
4
3
2
1
0
−1
−2
−3

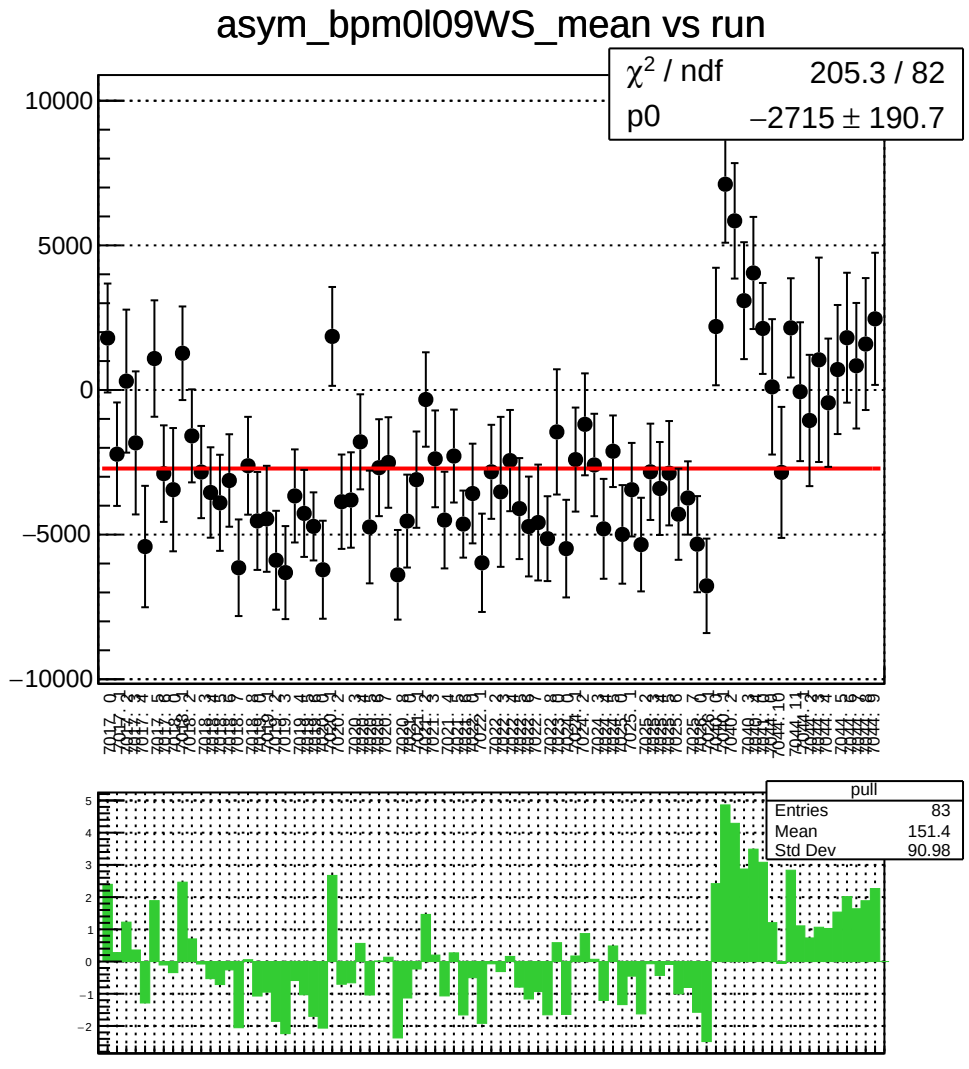

pull1D
Entries 83
Mean 0.1225
Std Dev 1.536
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

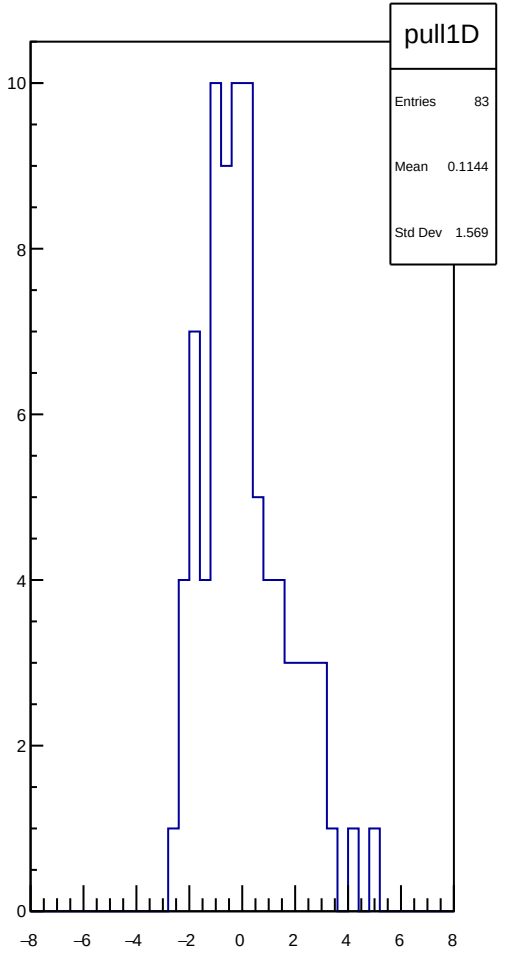

asym_bpm0l07WS_rms vs run
χ² / ndf 3.173e+04 / 82
p0 167.5 ± 0.1339
350
300
250
200
150

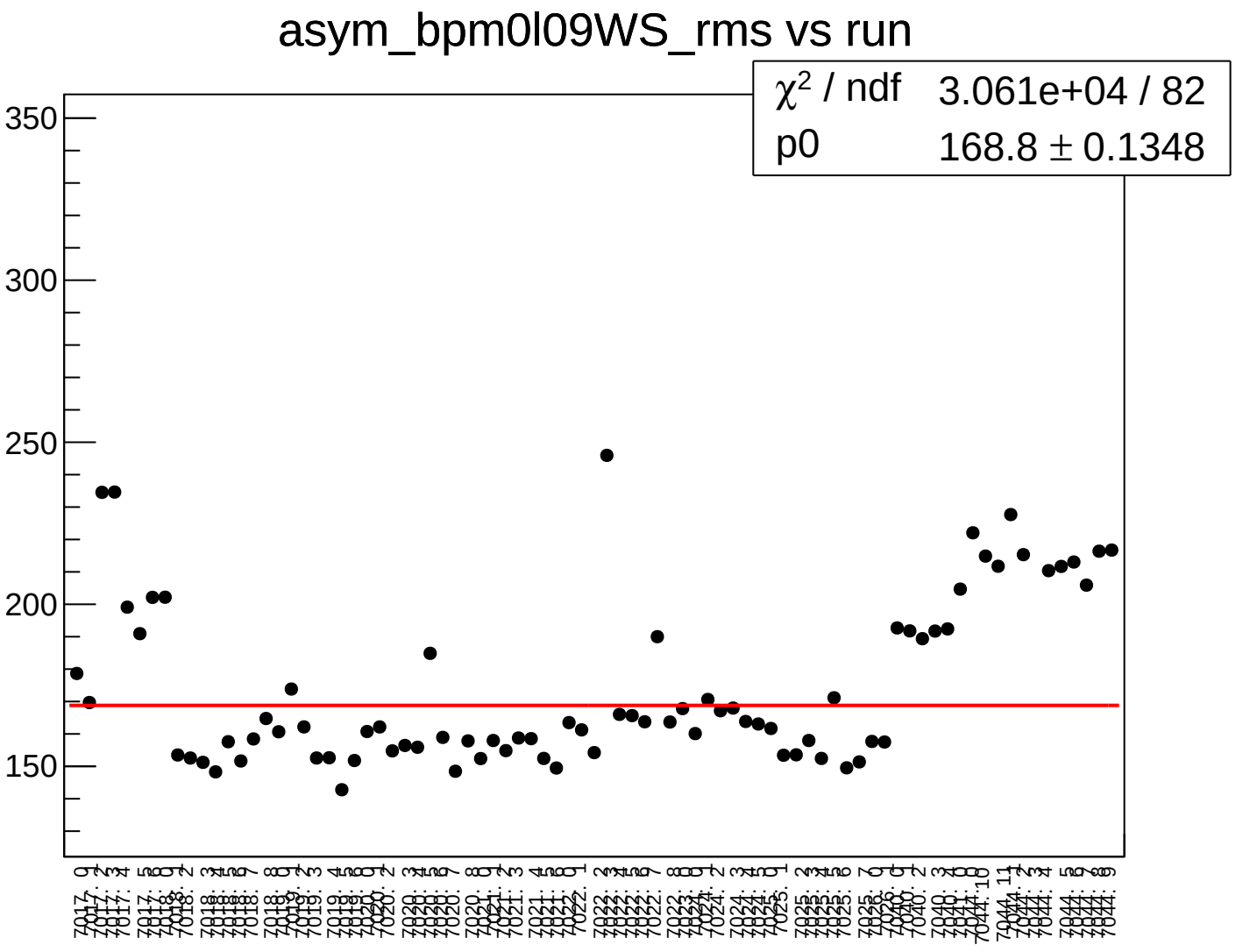

asym_bpm0l08WS_mean vs run
χ² / ndf 206 / 82
p0 −2707 ± 188.9
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 137.2
Std Dev 76.08
5
4
3
2
1
0
−1
−2

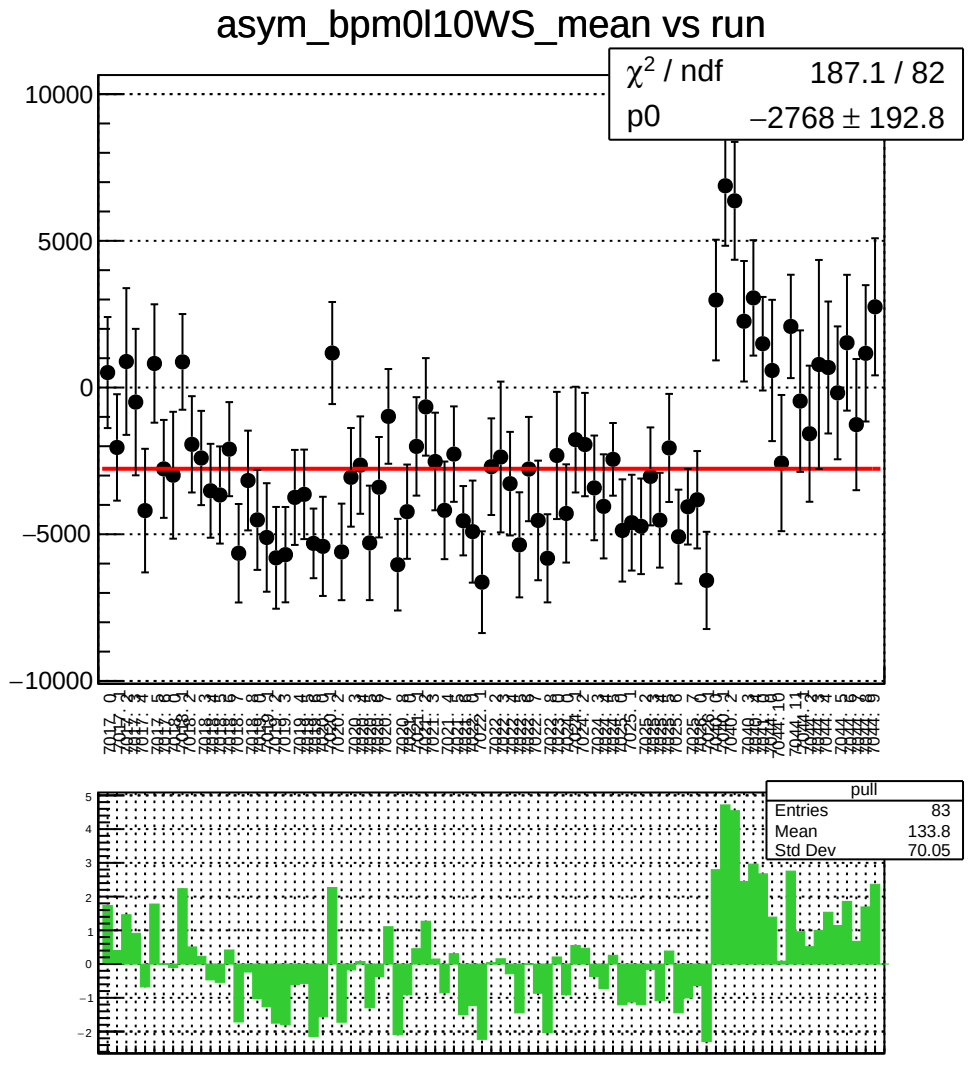

pull1D
Entries 83
Mean 0.1294
Std Dev 1.57
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

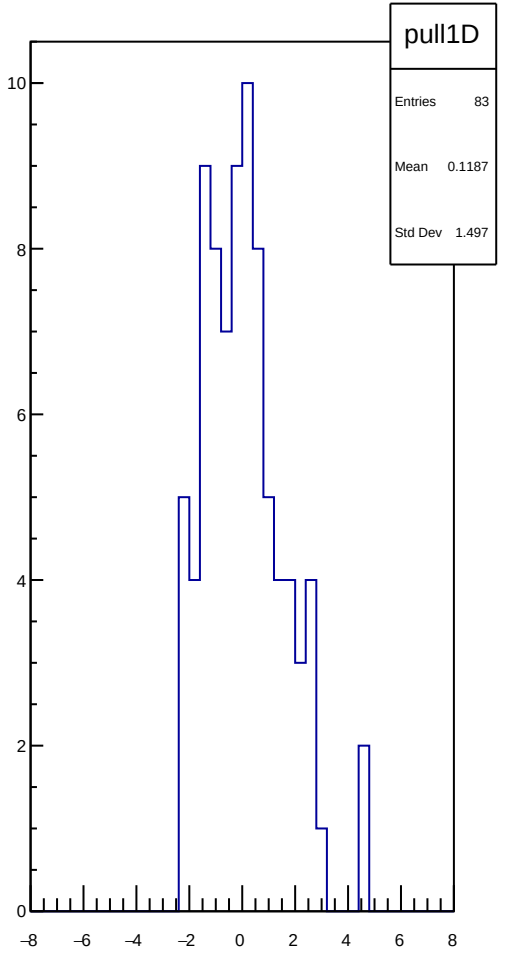

asym_bpm0l08WS_rms vs run
χ² / ndf 3.176e+04 / 82
p0 167.2 ± 0.1336
350
300
250
200
150

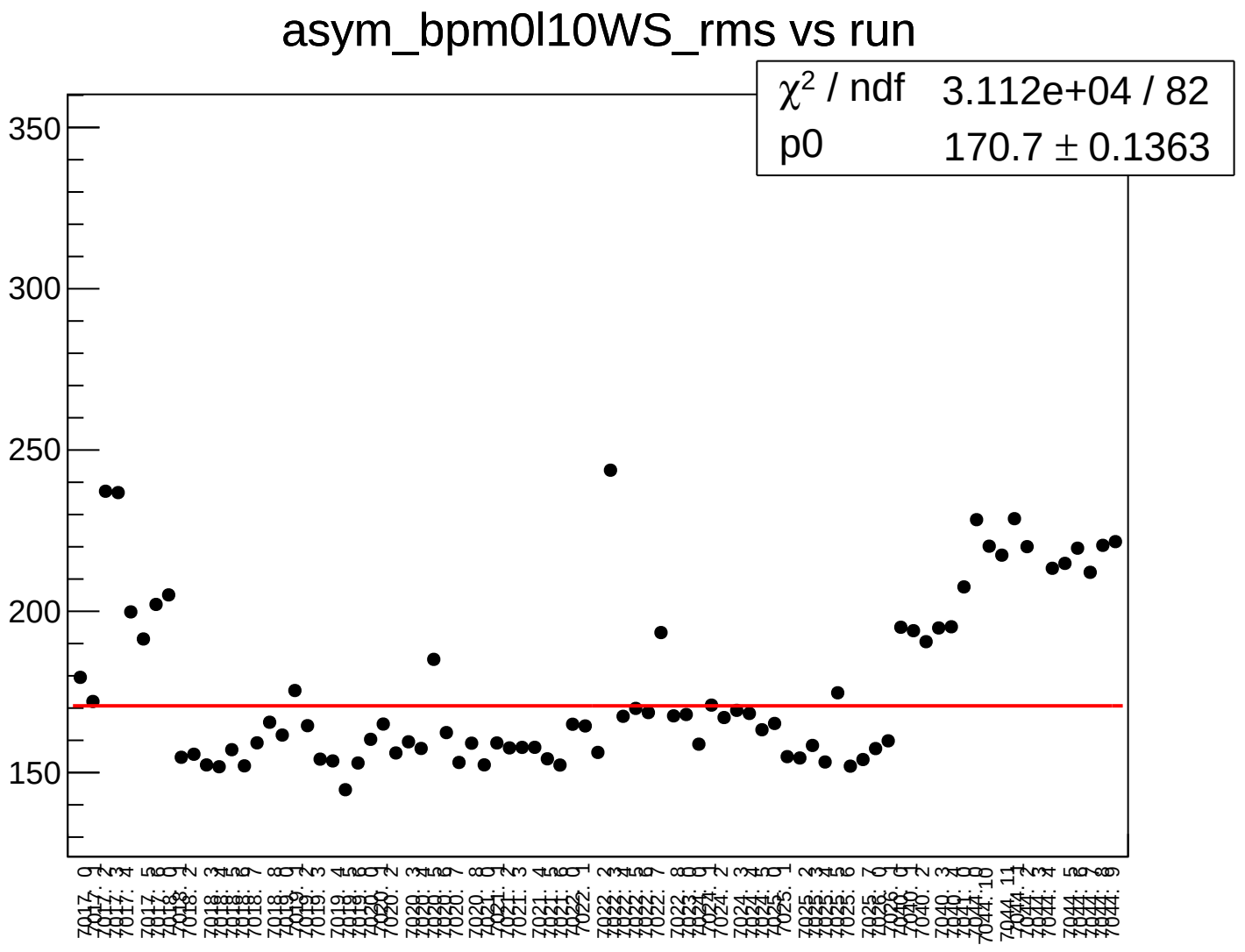

asym_bpm0l09WS_mean vs run
χ² / ndf 205.3 / 82
p0 −2715 ± 190.7
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 151.4
Std Dev 90.98
5
4
3
2
1
0
−1
−2

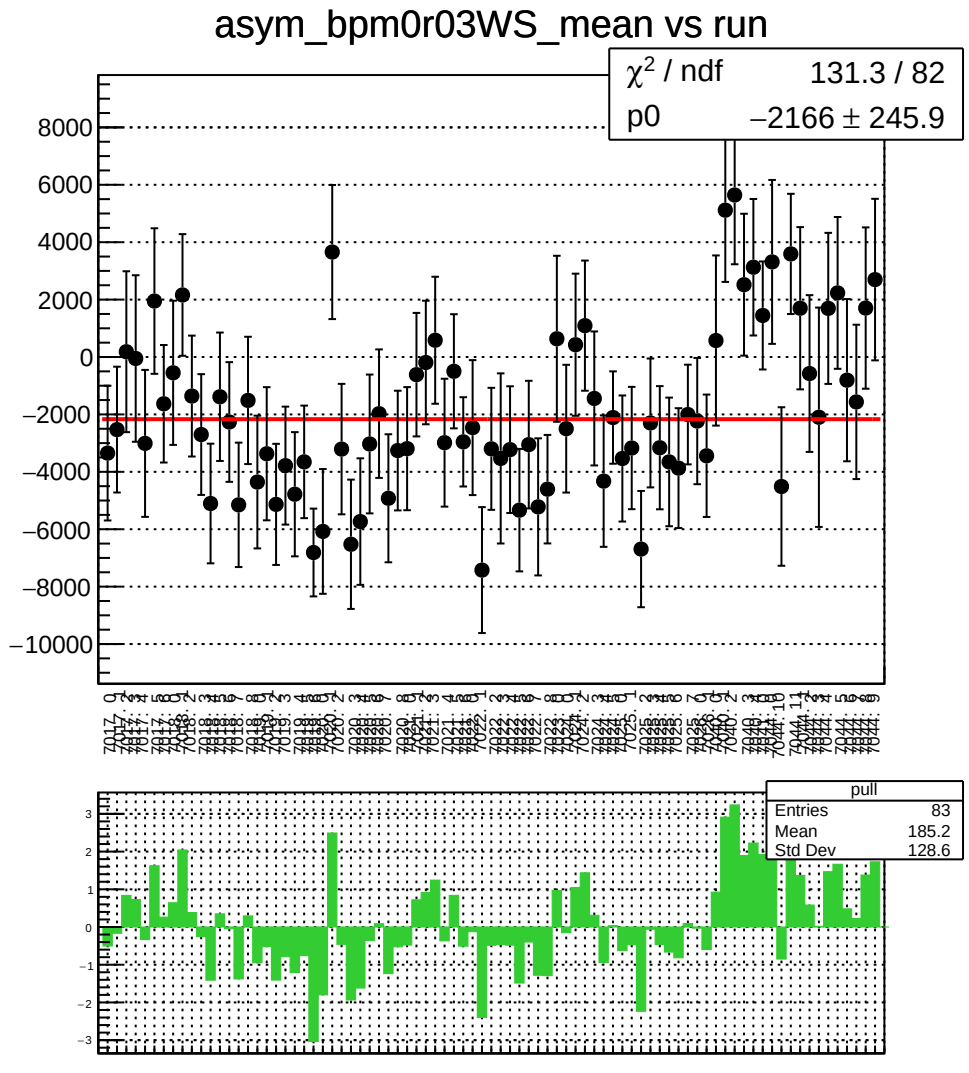

pull1D
Entries 83
Mean 0.1144
Std Dev 1.569
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

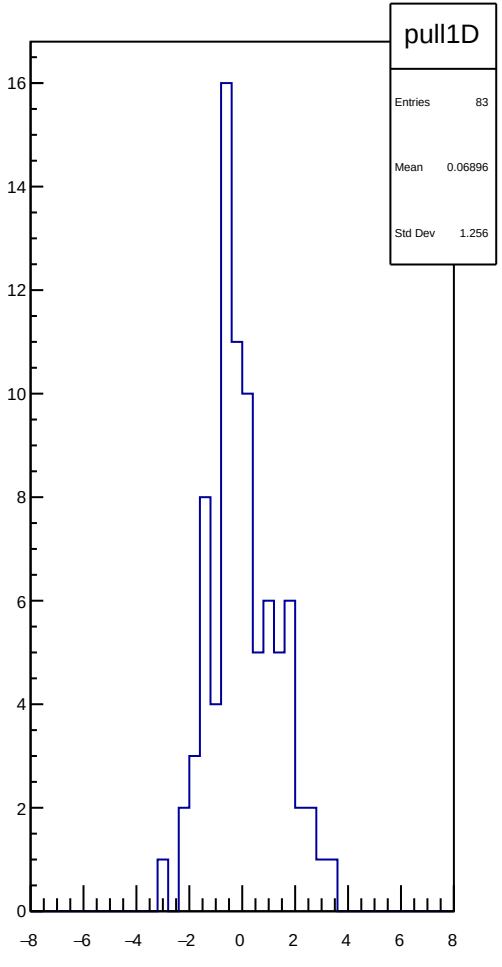

asym_bpm0l09WS_rms vs run
χ² / ndf 3.061e+04 / 82
p0 168.8 ± 0.1348
350
300
250
200
150

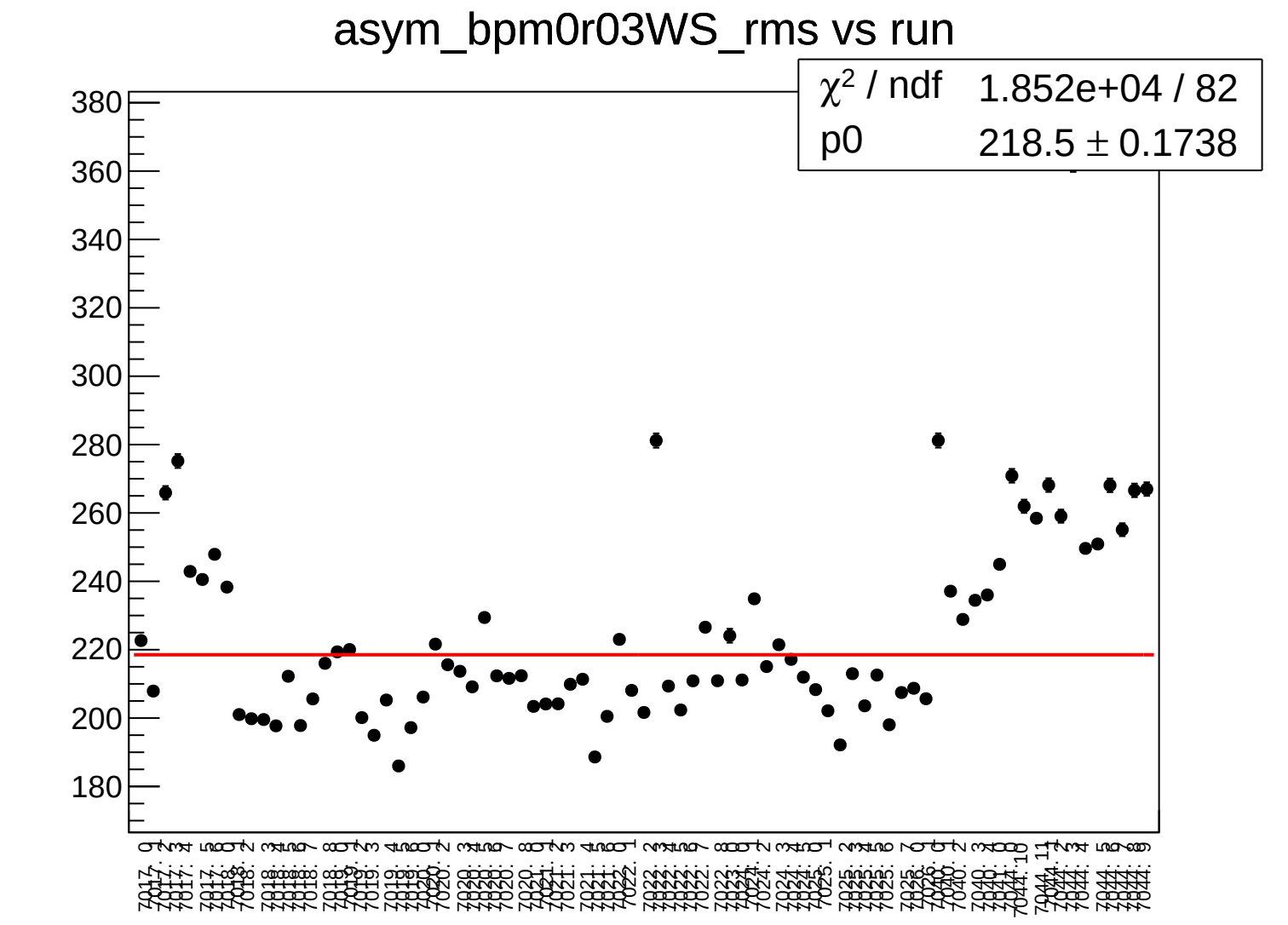

asym_bpm0l10WS_mean vs run
χ² / ndf 187.1 / 82
p0 −2768 ± 192.8
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 133.8
Std Dev 70.05
5
4
3
2
1
0
−1
−2

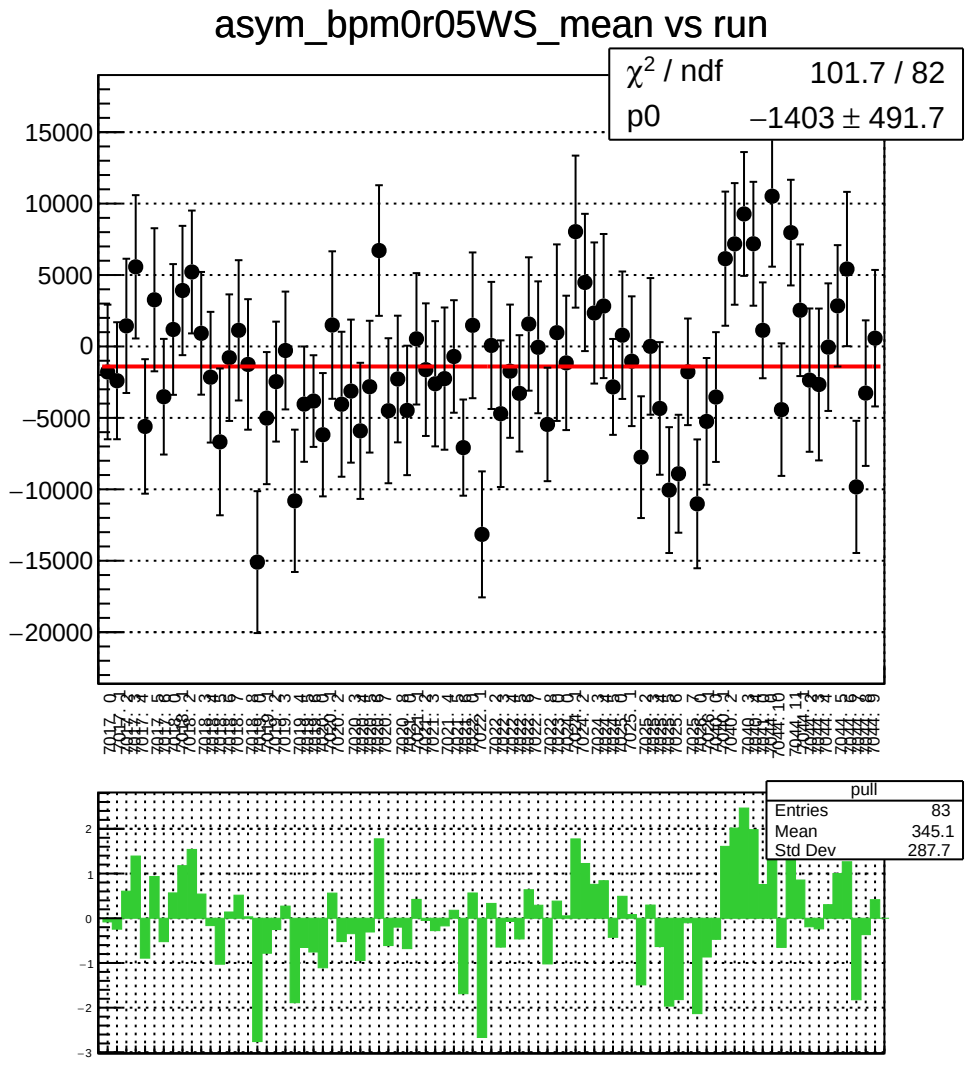

pull1D
Entries 83
Mean 0.1187
Std Dev 1.497
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

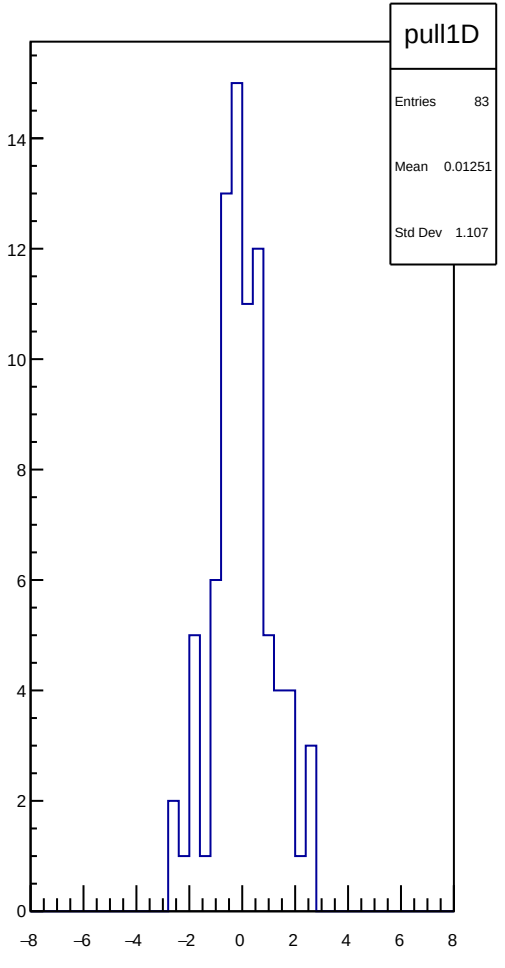

asym_bpm0l10WS_rms vs run
χ² / ndf 3.112e+04 / 82
p0 170.7 ± 0.1363
350
300
250
200
150

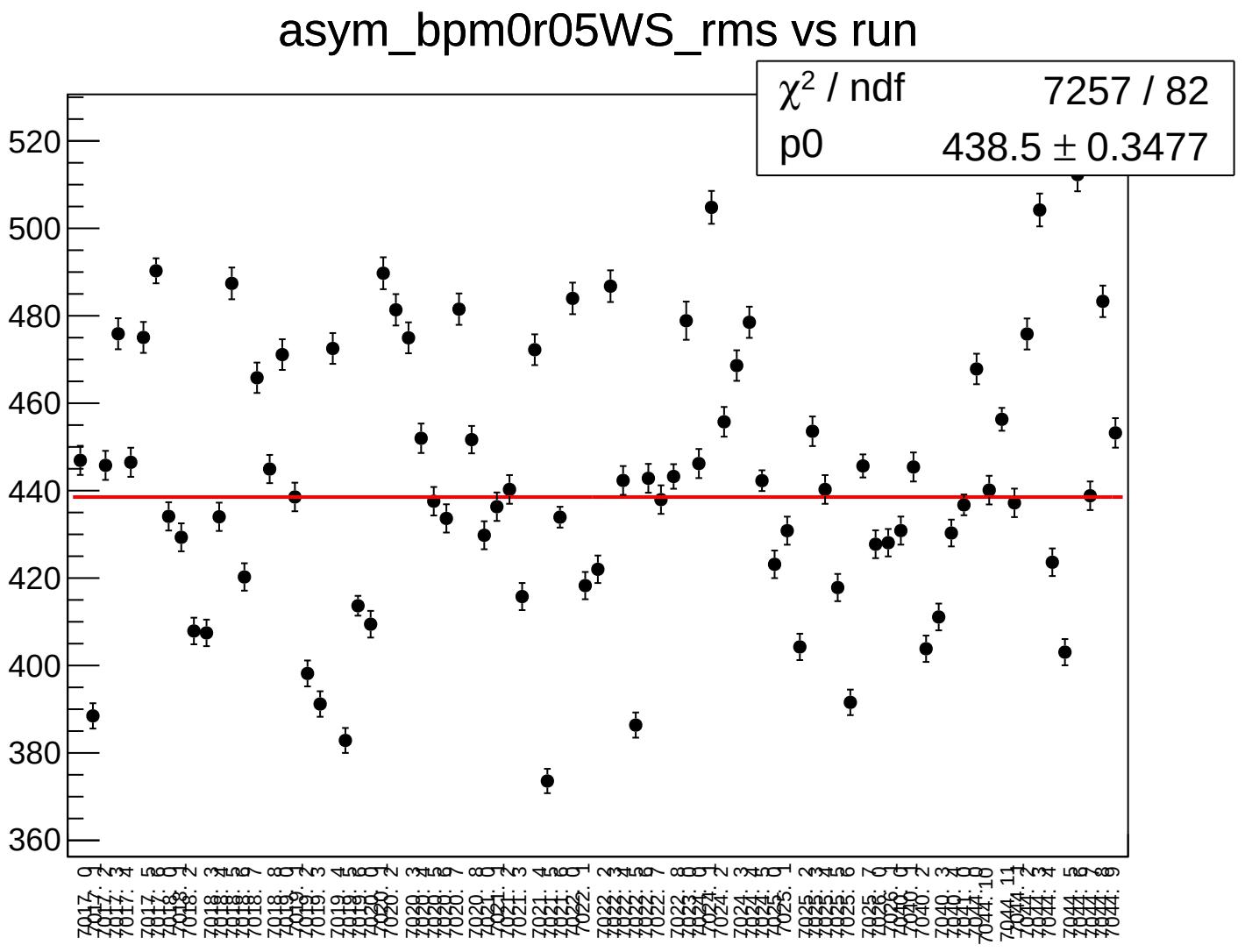

asym_bpm0r03WS_mean vs run
χ² / ndf 131.3 / 82
p0 −2166 ± 245.9
pull
Entries 83
Mean 185.2
Std Dev 128.6

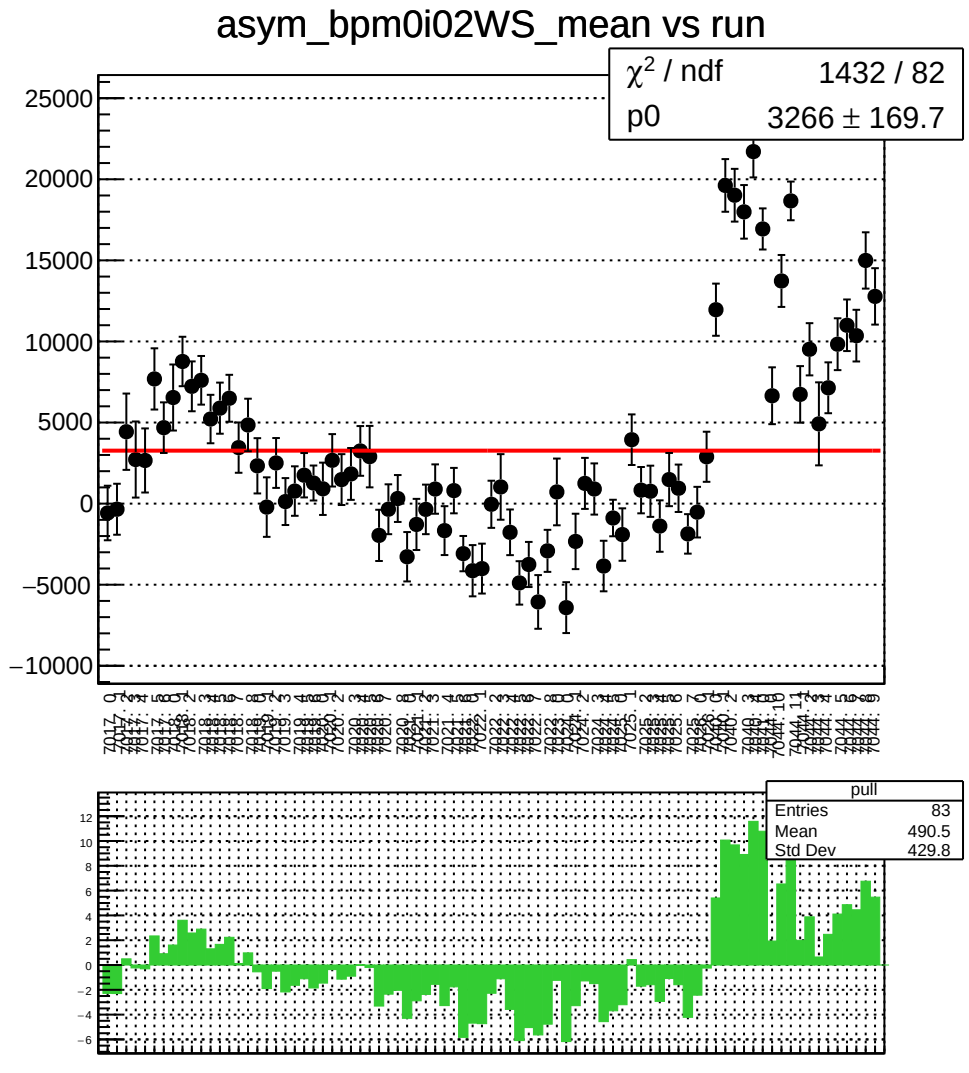

pull1D
Entries 83
Mean 0.06896
Std Dev 1.256

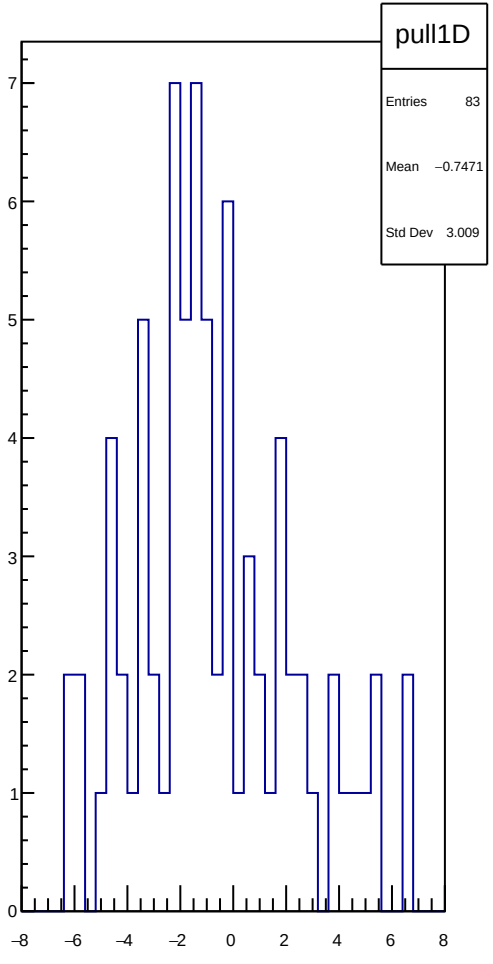

asym_bpm0r03WS_rms vs run
χ² / ndf 1.852e+04 / 82
p0 218.5 ± 0.1738
380
360
340
320
300
280
260
240
220
200
180

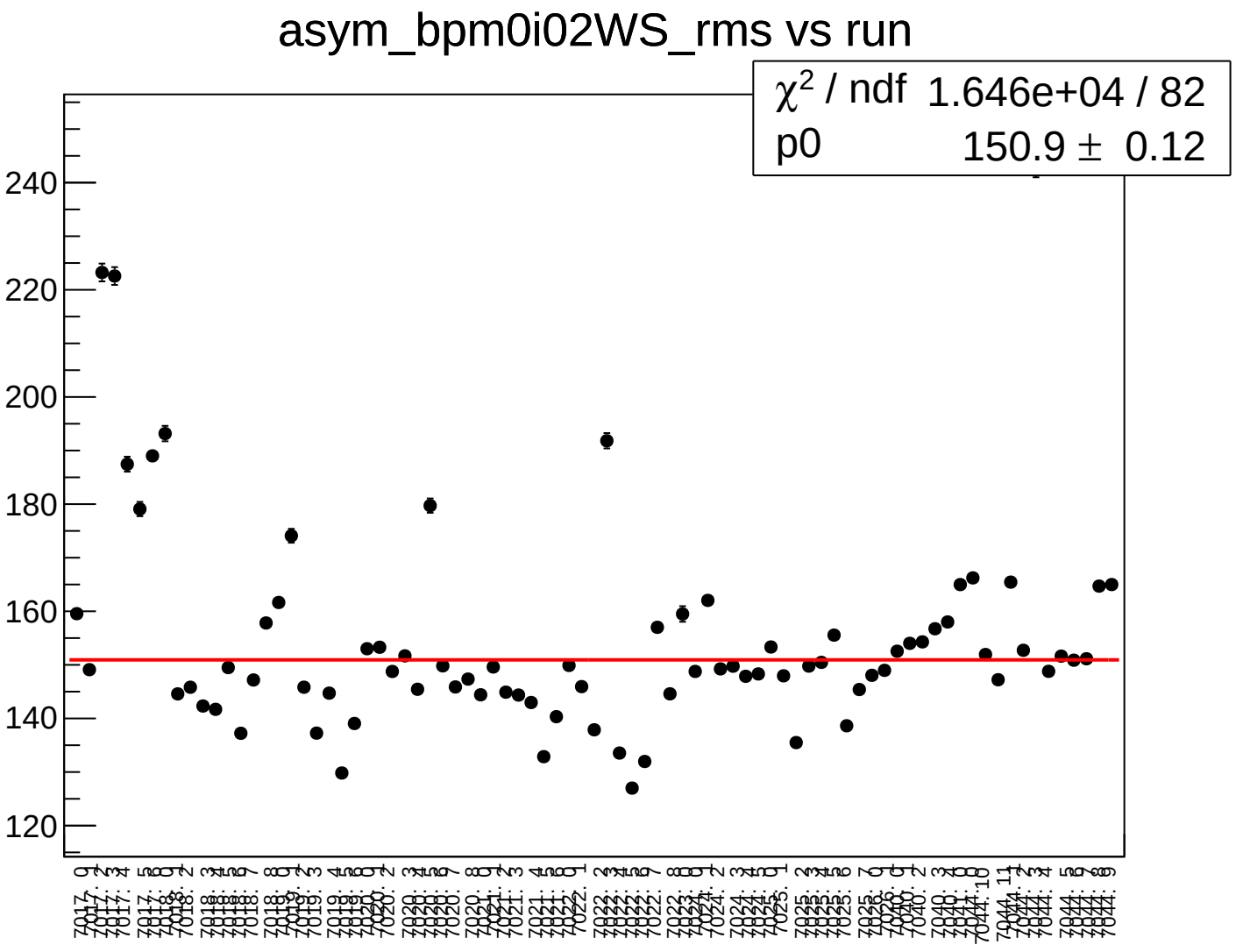

asym_bpm0r05WS_mean vs run
χ² / ndf 101.7 / 82
p0 −1403 ± 491.7
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 83
Mean 345.1
Std Dev 287.7
2
1
0
−1
−2
−3

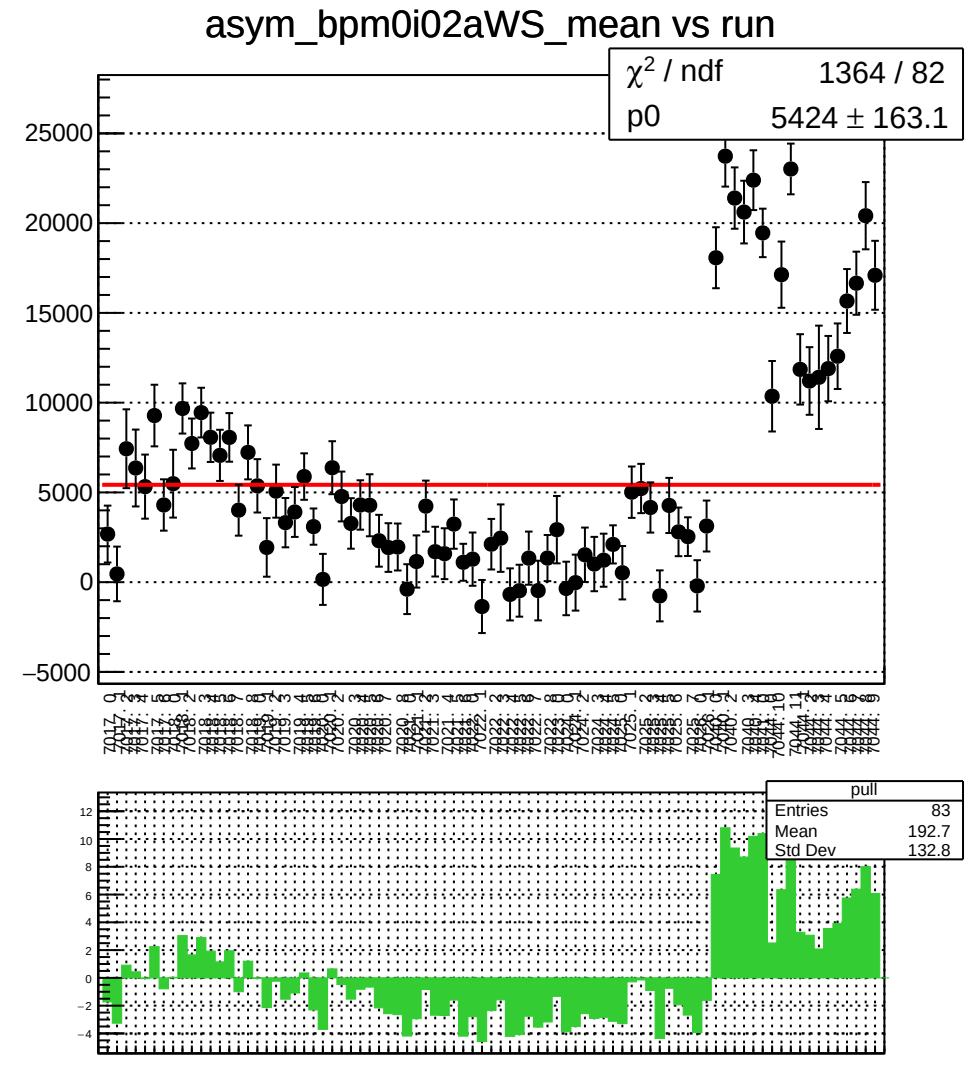

pull1D
Entries 83
Mean 0.01251
Std Dev 1.107
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

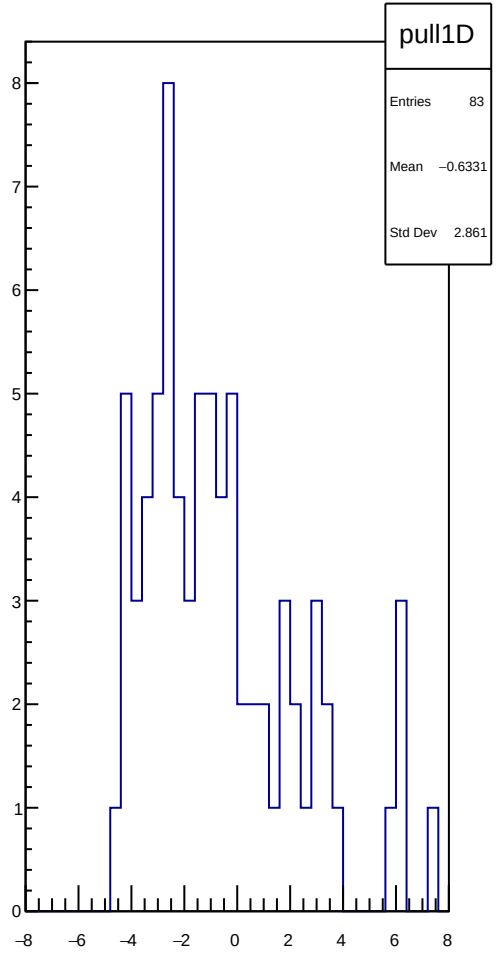

asym_bpm0r05WS_rms vs run
χ² / ndf 7257 / 82
p0 438.5 ± 0.3477
520
500
480
460
440
420
400
380
360

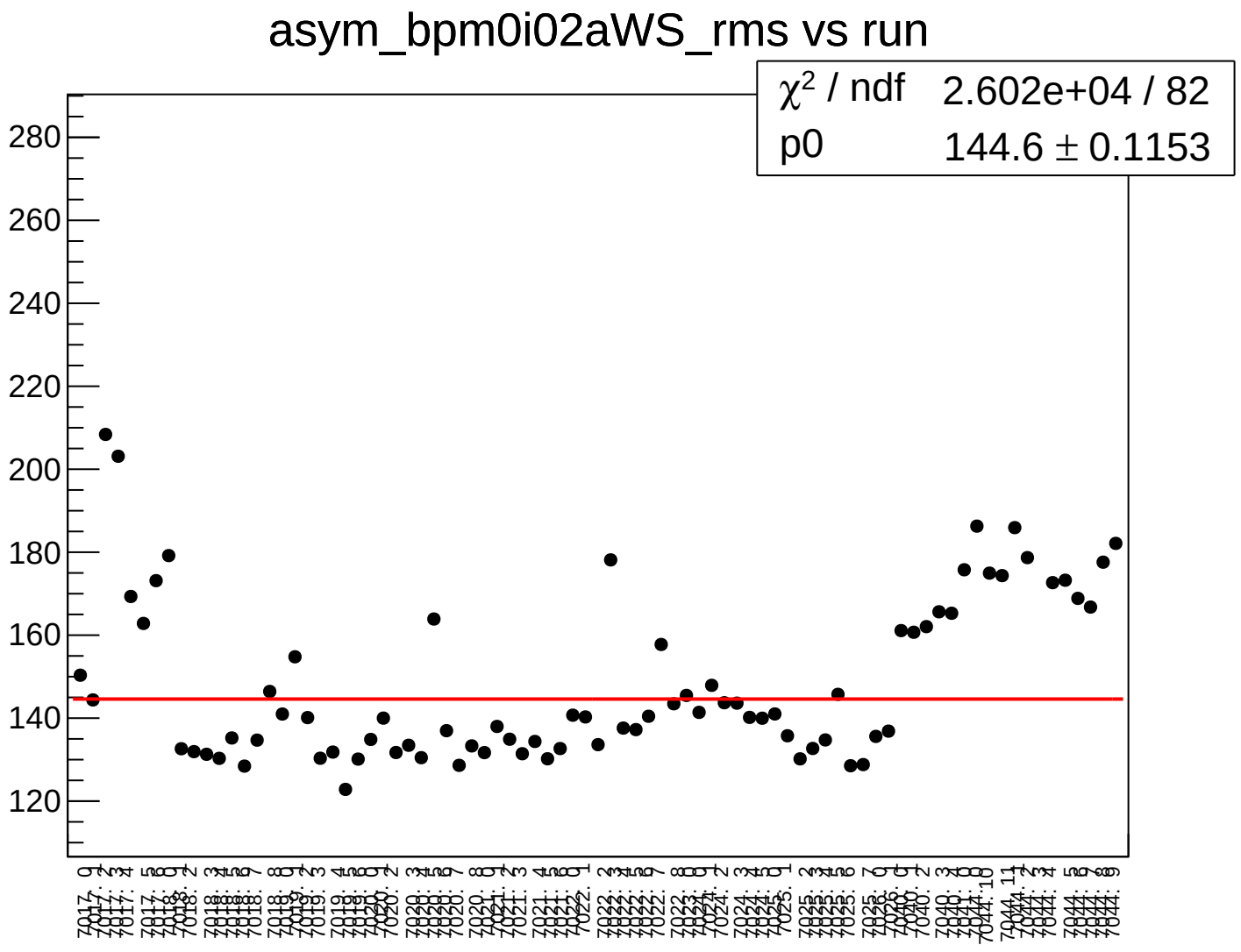

asym_bpm0i02WS_mean vs run
χ² / ndf 1432 / 82
p0 3266 ± 169.7
25000
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 490.5
Std Dev 429.8
12
10
8
6
4
2
0
−2
−4
−6

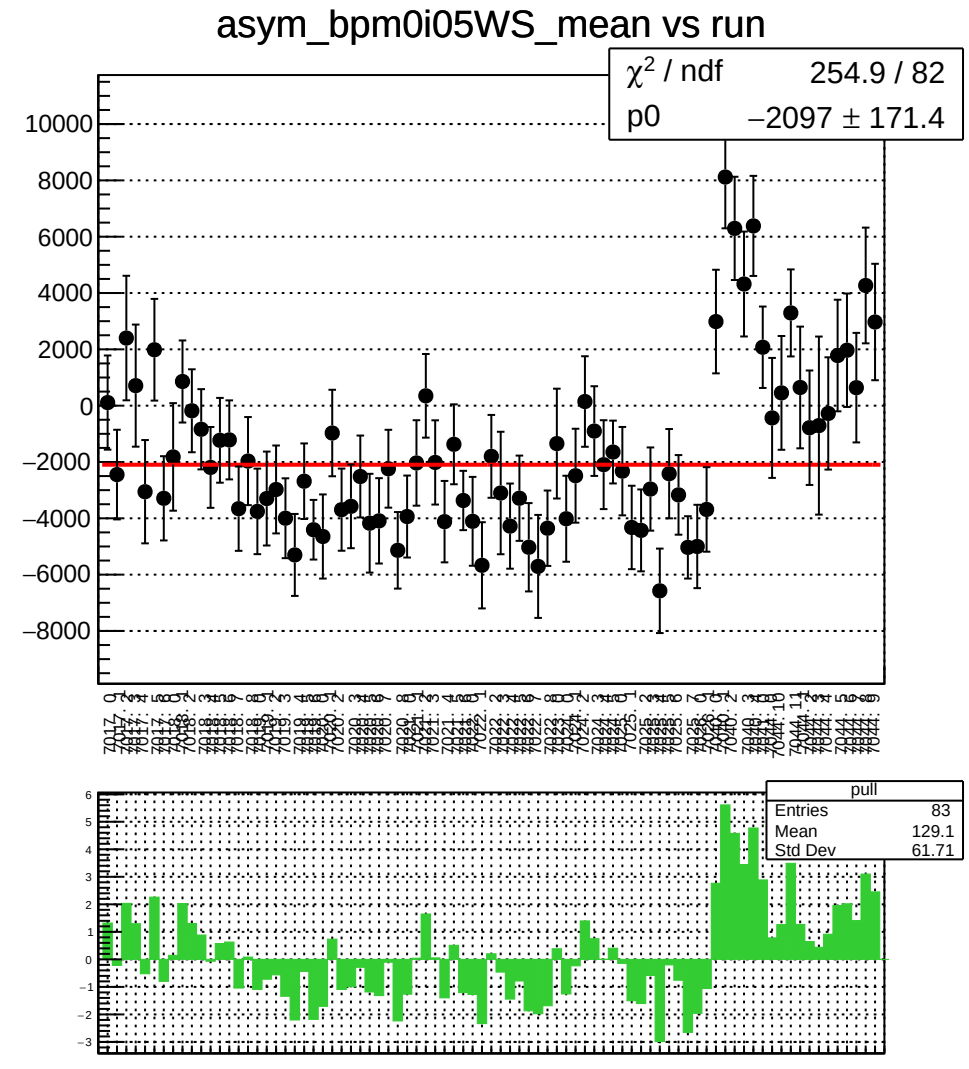

pull1D
Entries 83
Mean −0.7471
Std Dev 3.009
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

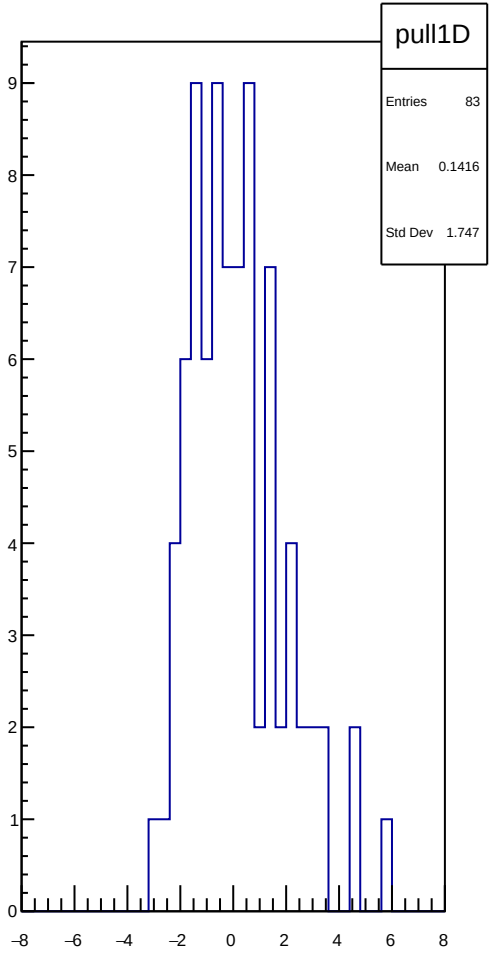

asym_bpm0i02WS_rms vs run
χ² / ndf 1.646e+04 / 82
p0 150.9 ± 0.12
240
220
200
180
160
140
120

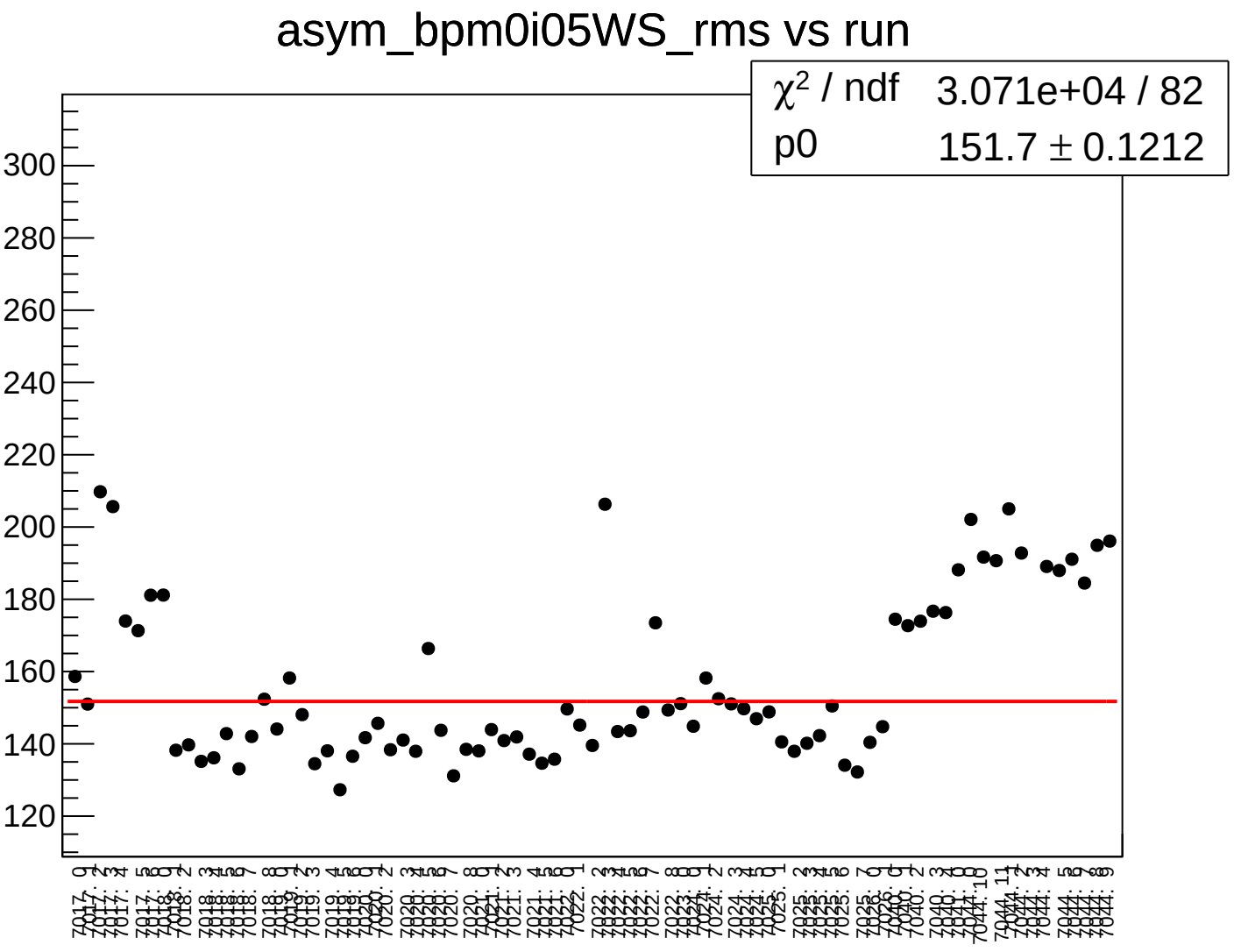

asym_bpm0i02aWS_mean vs run
χ² / ndf 1364 / 82
p0 5424 ± 163.1
pull
Entries 83
Mean 192.7
Std Dev 132.8

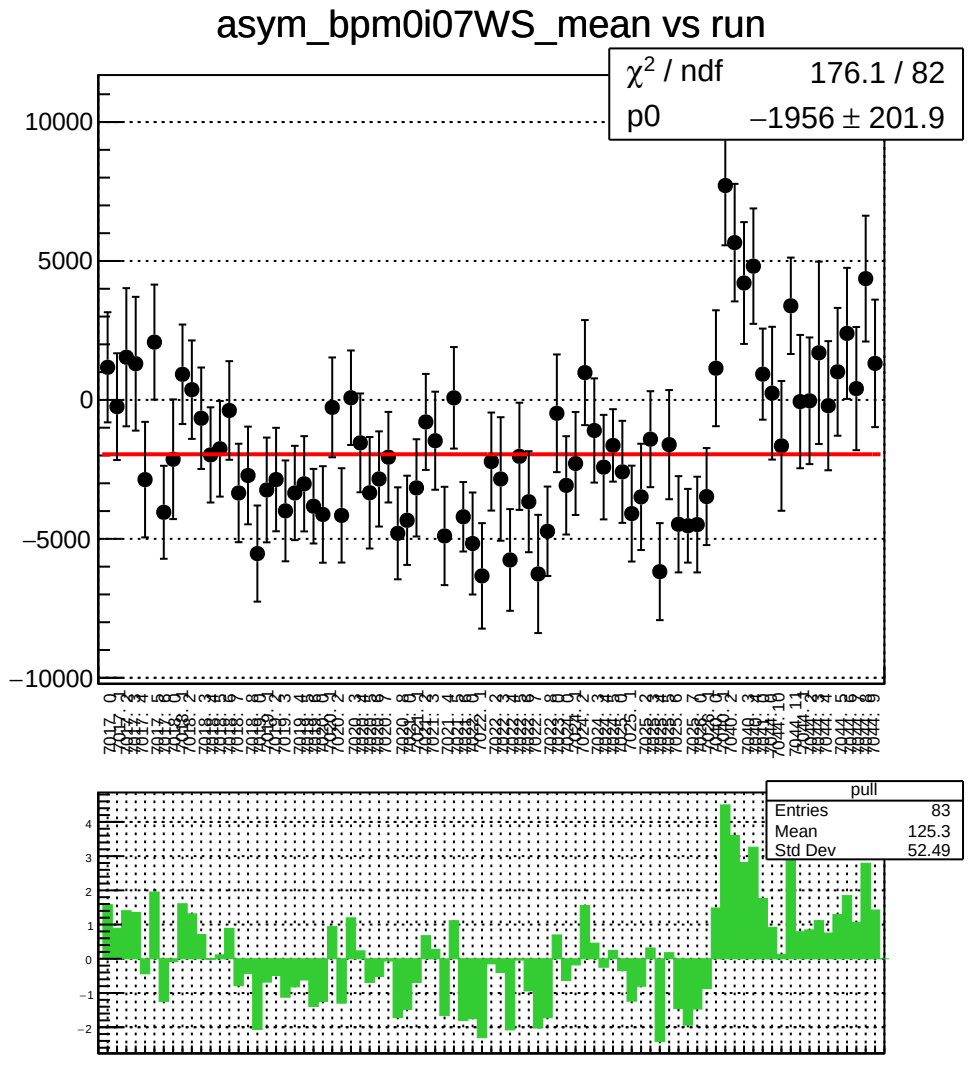

pull1D
Entries 83
Mean −0.6331
Std Dev 2.861

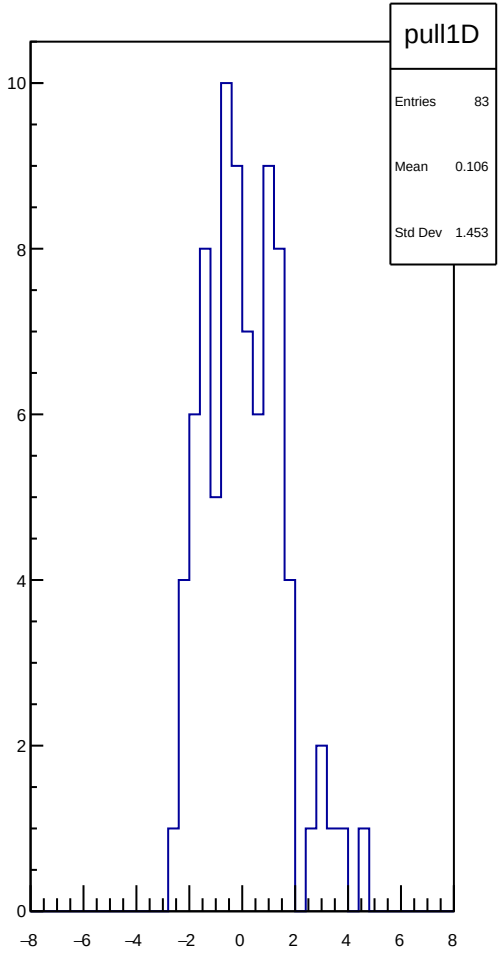

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 2.602e+04 / 82
p0 144.6 ± 0.1153
280
260
240
220
200
180
160
140
120

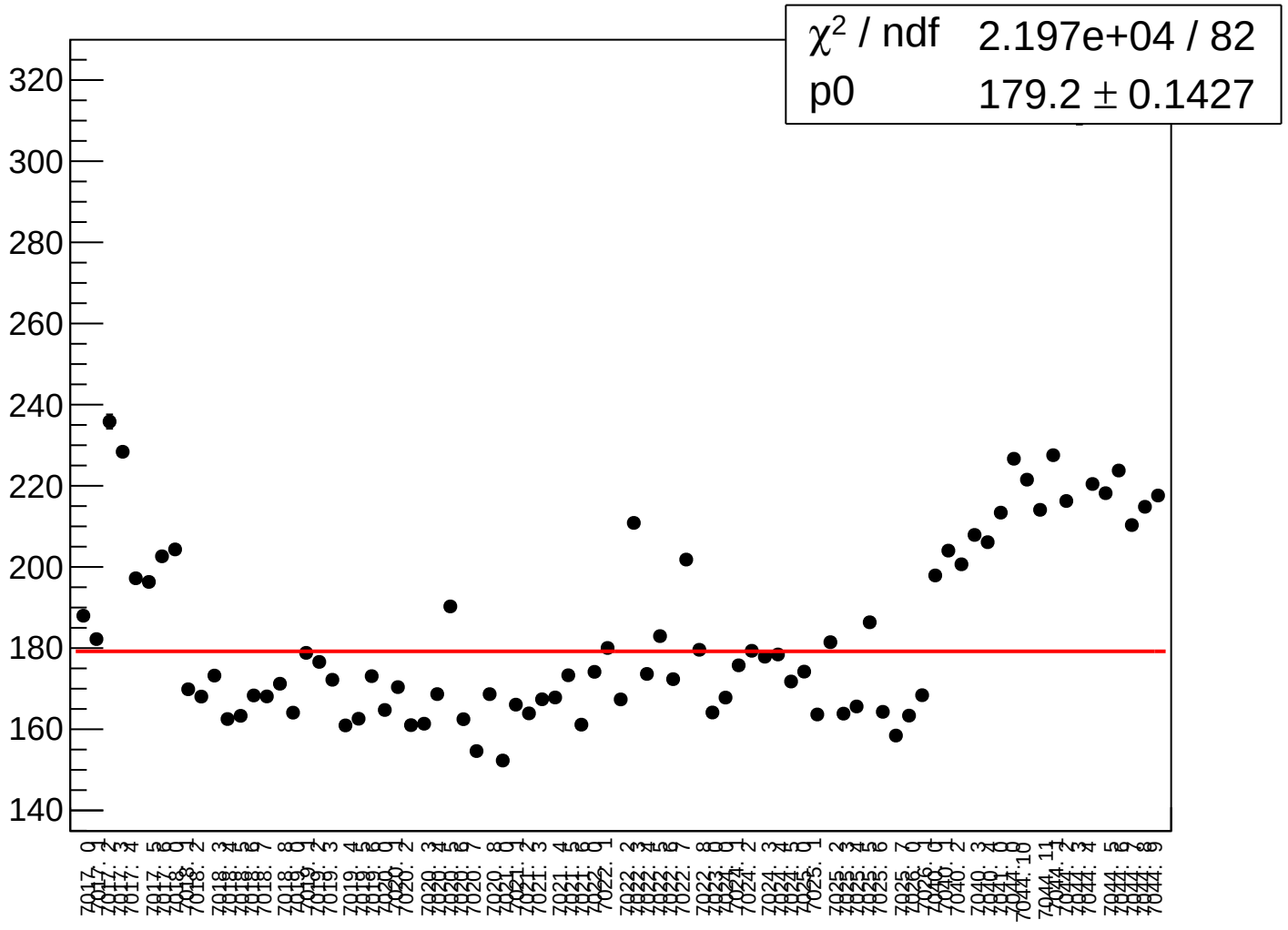

asym_bpm0i05WS_mean vs run
χ² / ndf 254.9 / 82
p0 −2097 ± 171.4
pull
Entries 83
Mean 129.1
Std Dev 61.71

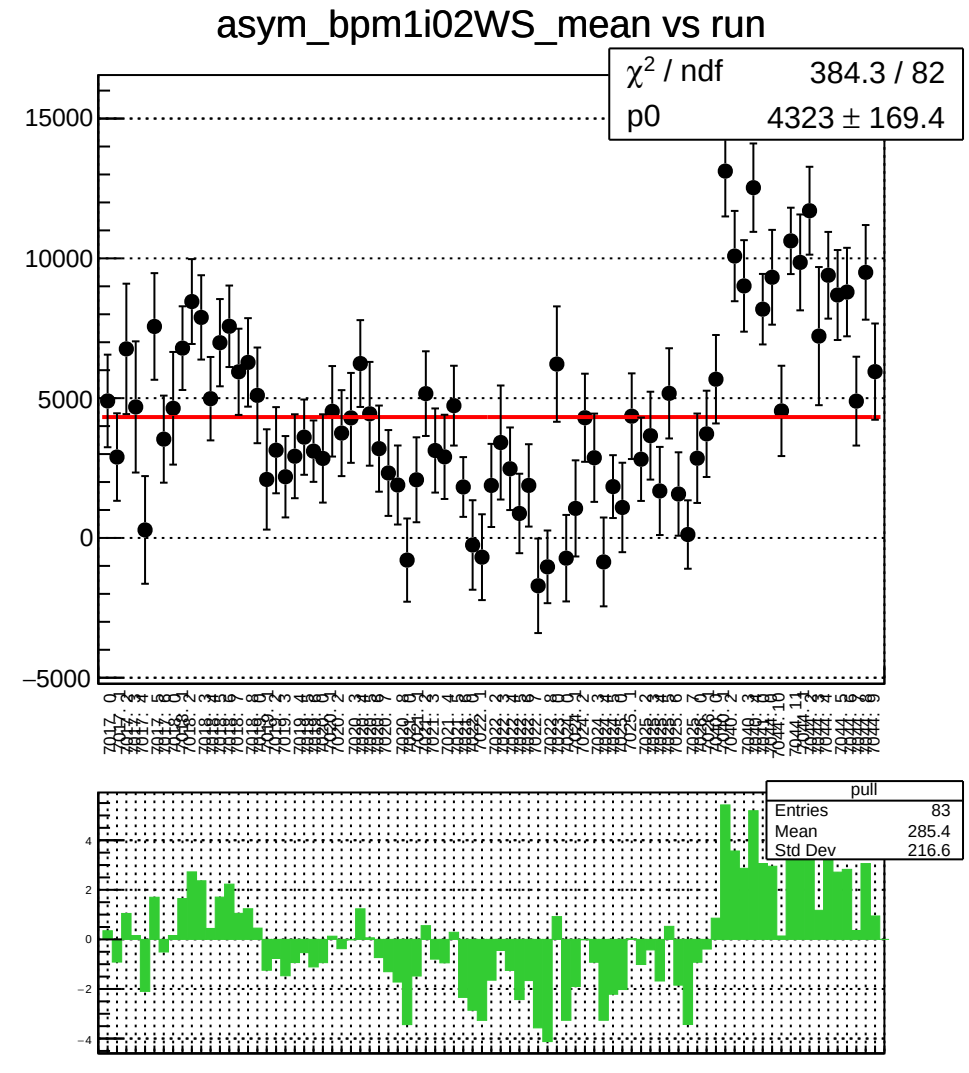

pull1D
Entries 83
Mean 0.1416
Std Dev 1.747

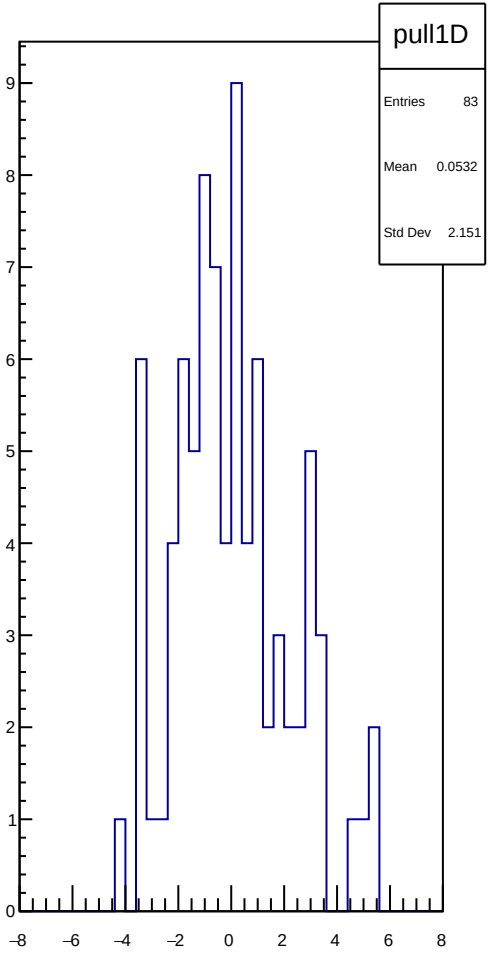

asym_bpm0i05WS_rms vs run
χ² / ndf 3.071e+04 / 82
p0 151.7 ± 0.1212
300
280
260
240
220
200
180
160
140
120

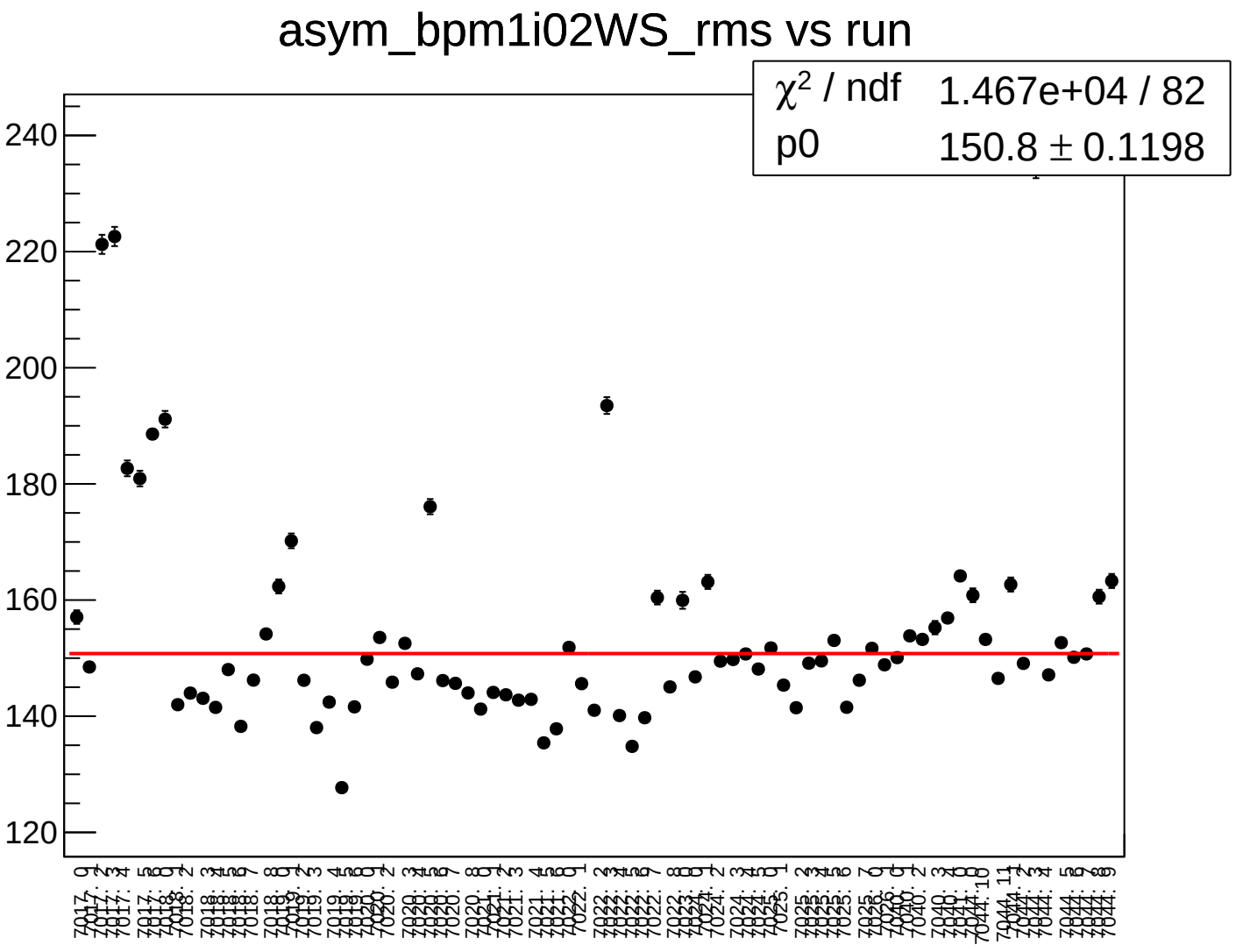

asym_bpm0i07WS_mean vs run
χ^2 / ndf 176.1 / 82
p0 −1956 ± 201.9
10000
5000
0
−5000
−10000
pull
Entries 83
Mean 125.3
Std Dev 52.49
4
3
2
1
0
−1
−2

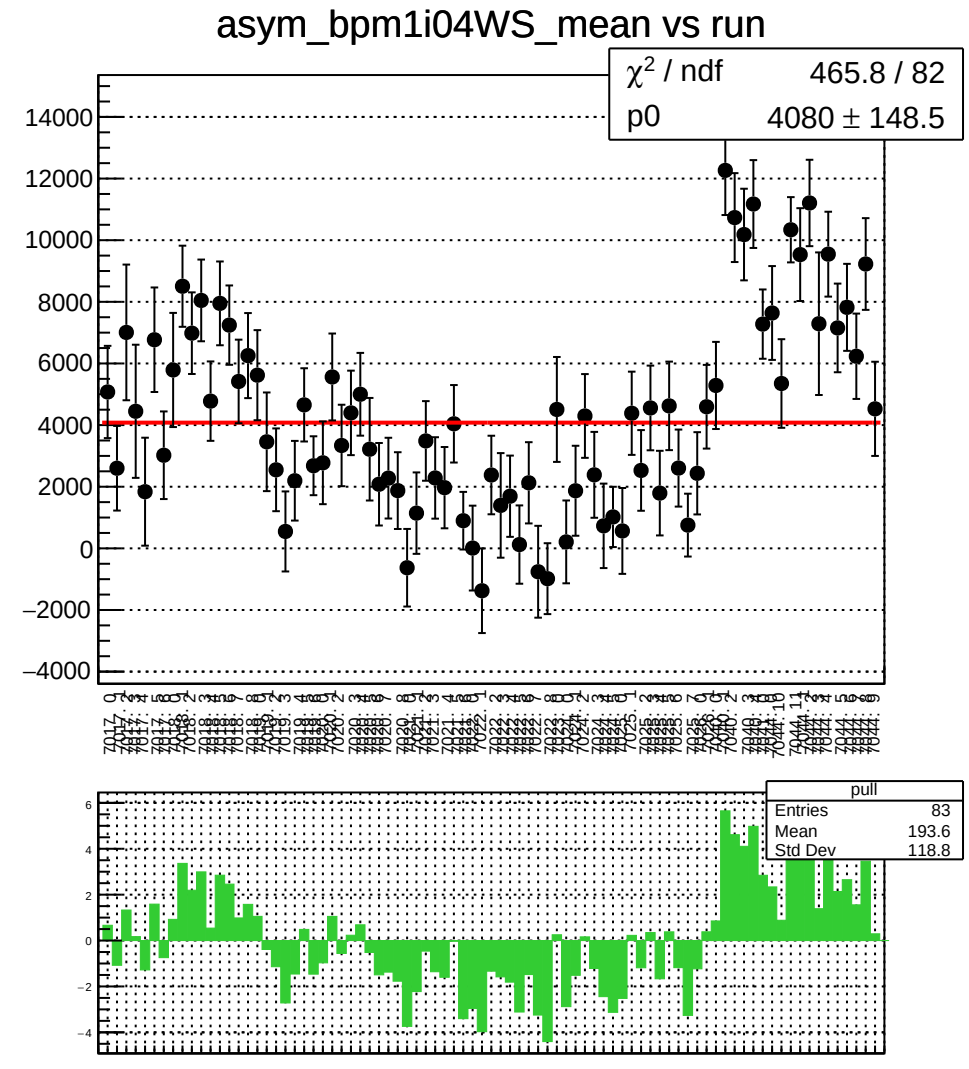

pull1D
Entries 83
Mean 0.106
Std Dev 1.453
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

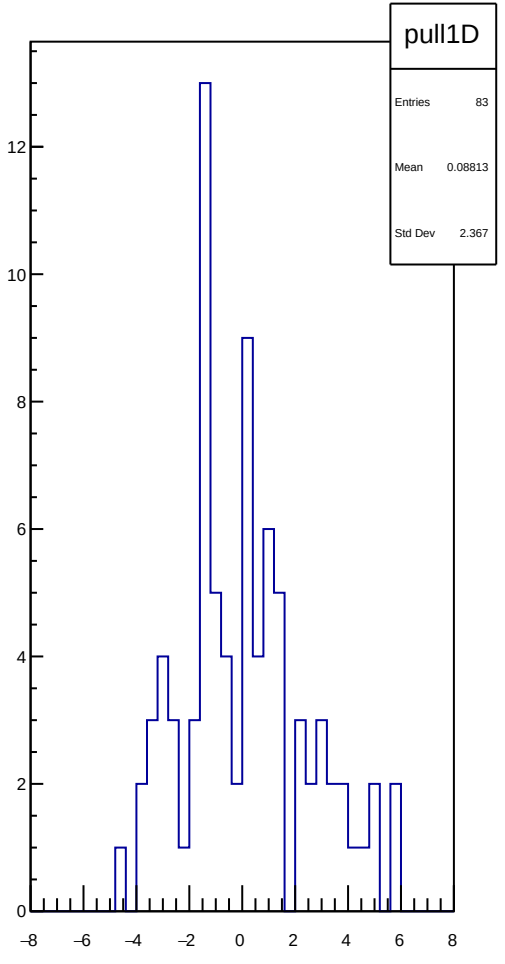

asym_bpm0i07WS_rms vs run
χ² / ndf 2.197e+04 / 82
p0 179.2 ± 0.1427
320
300
280
260
240
220
200
180
160
140

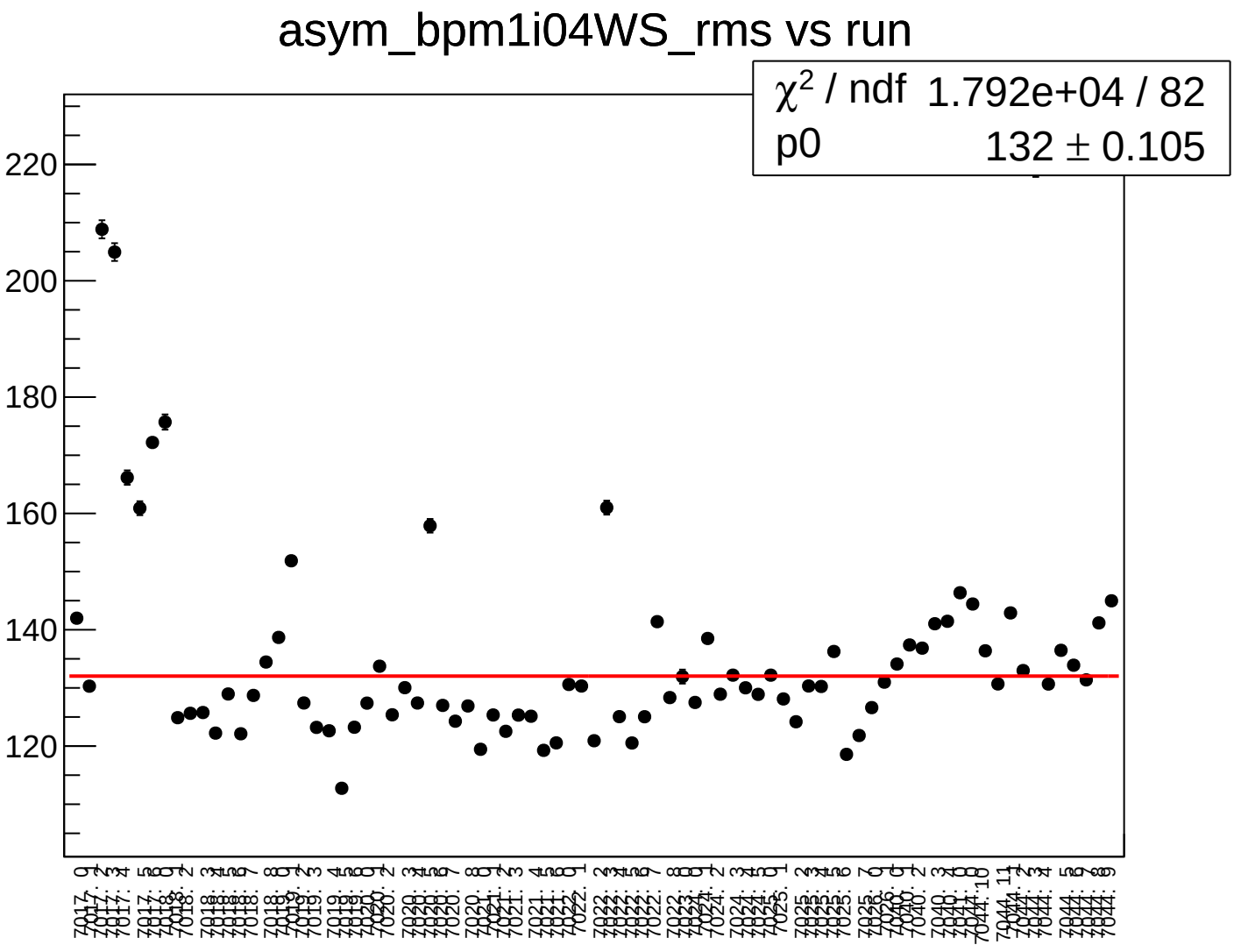

asym_bpm1i02WS_mean vs run
χ² / ndf 384.3 / 82
p0 4323 ± 169.4
15000
10000
5000
0
−5000
pull
Entries 83
Mean 285.4
Std Dev 216.6
4
2
0
−2
−4

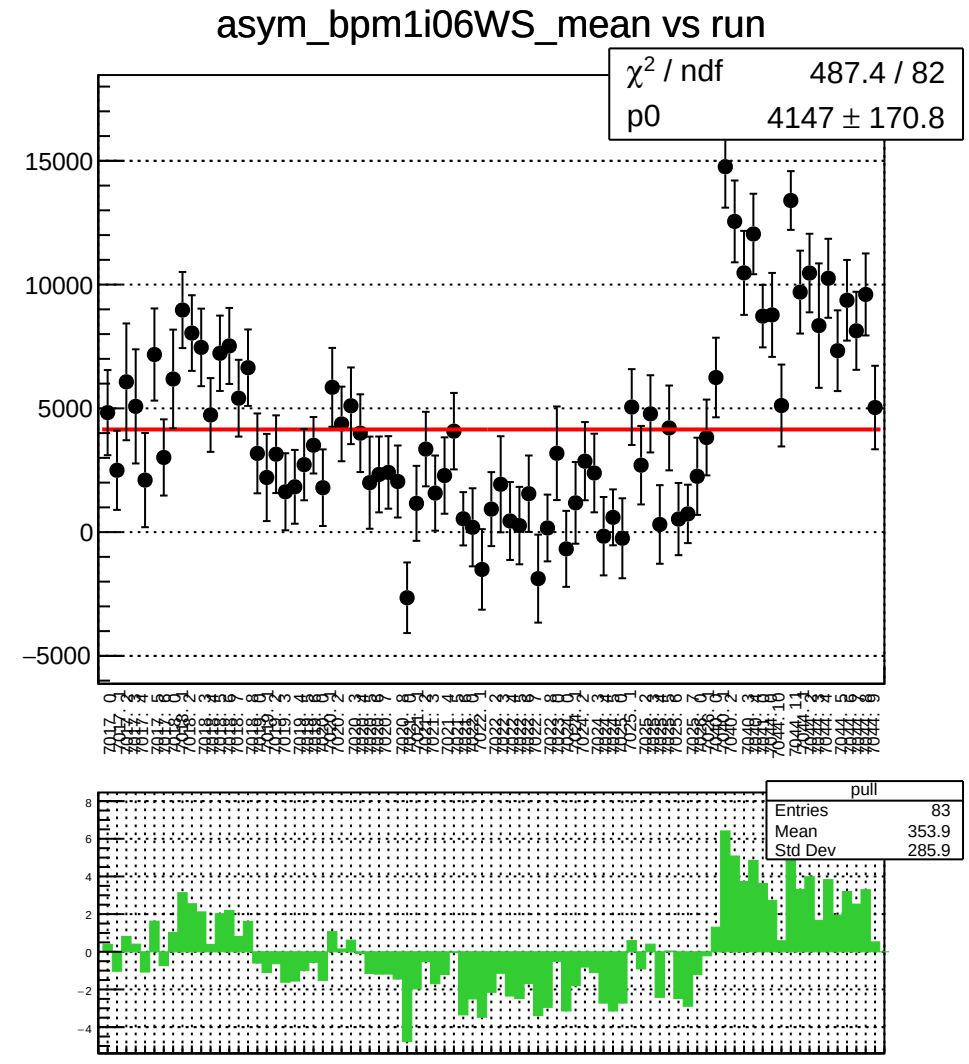

pull1D
Entries 83
Mean 0.0532
Std Dev 2.151
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

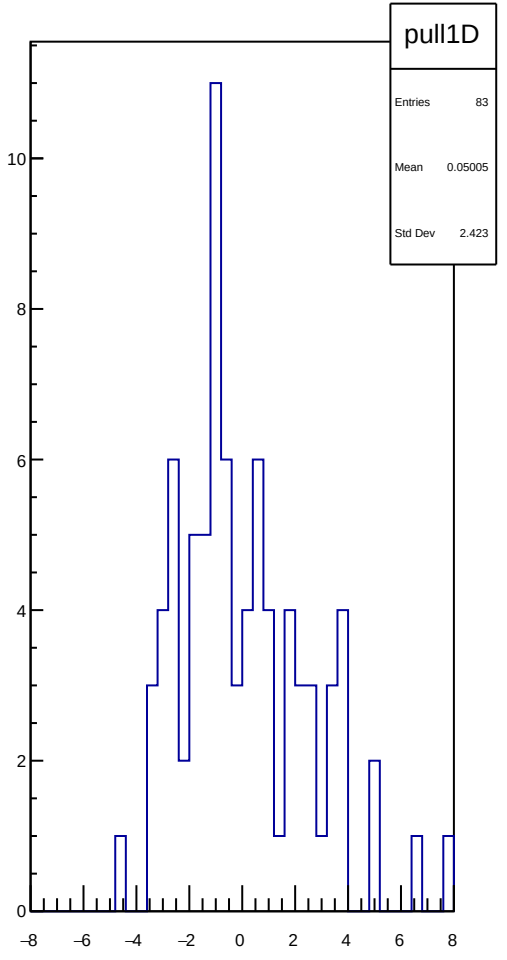

asym_bpm1i02WS_rms vs run
χ^2 / ndf 1.467e+04 / 82
p0 150.8 ± 0.1198
240
220
200
180
160
140
120

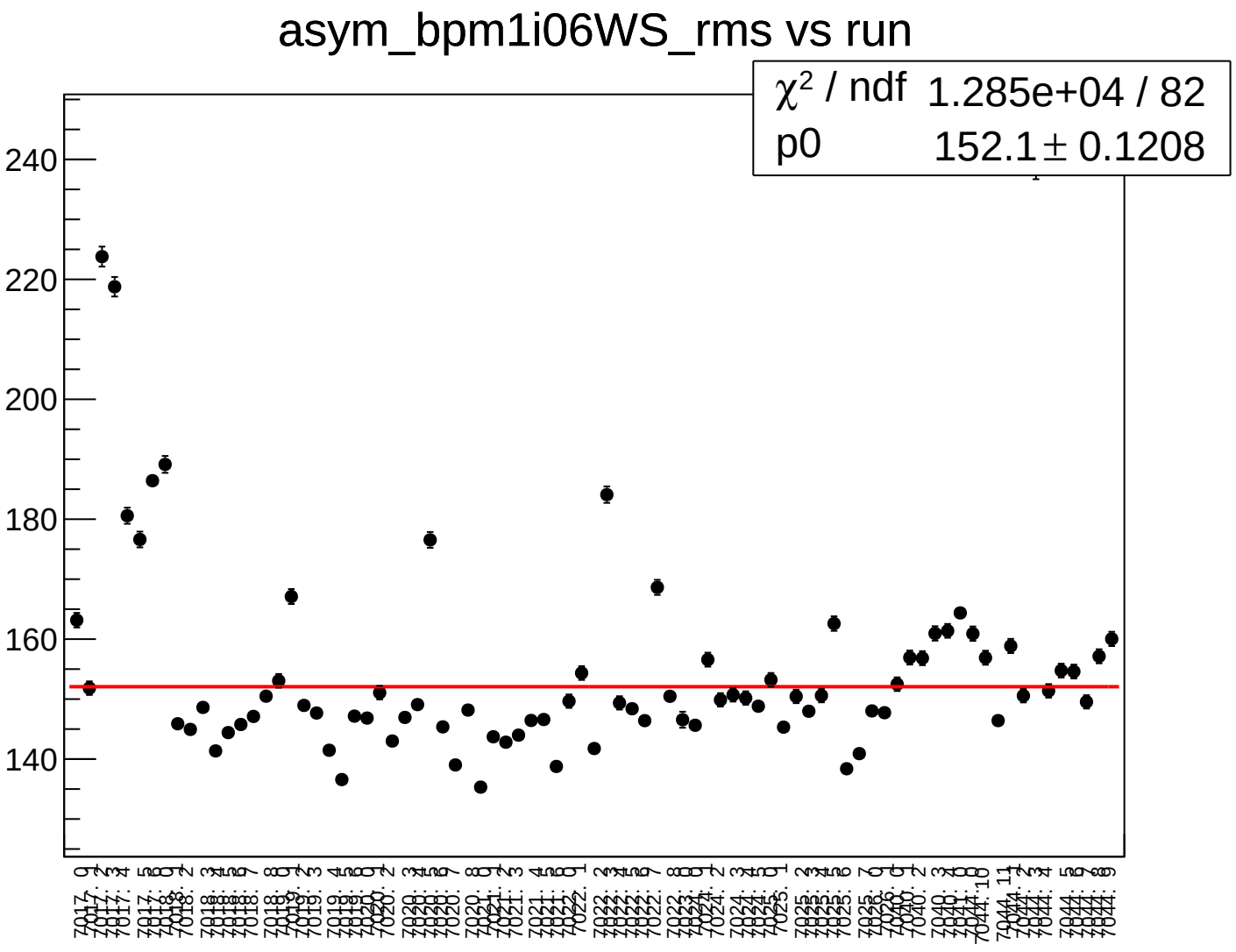

asym_bpm1i04WS_mean vs run
χ² / ndf 465.8 / 82
p0 4080 ± 148.5
pull
Entries 83
Mean 193.6
Std Dev 118.8

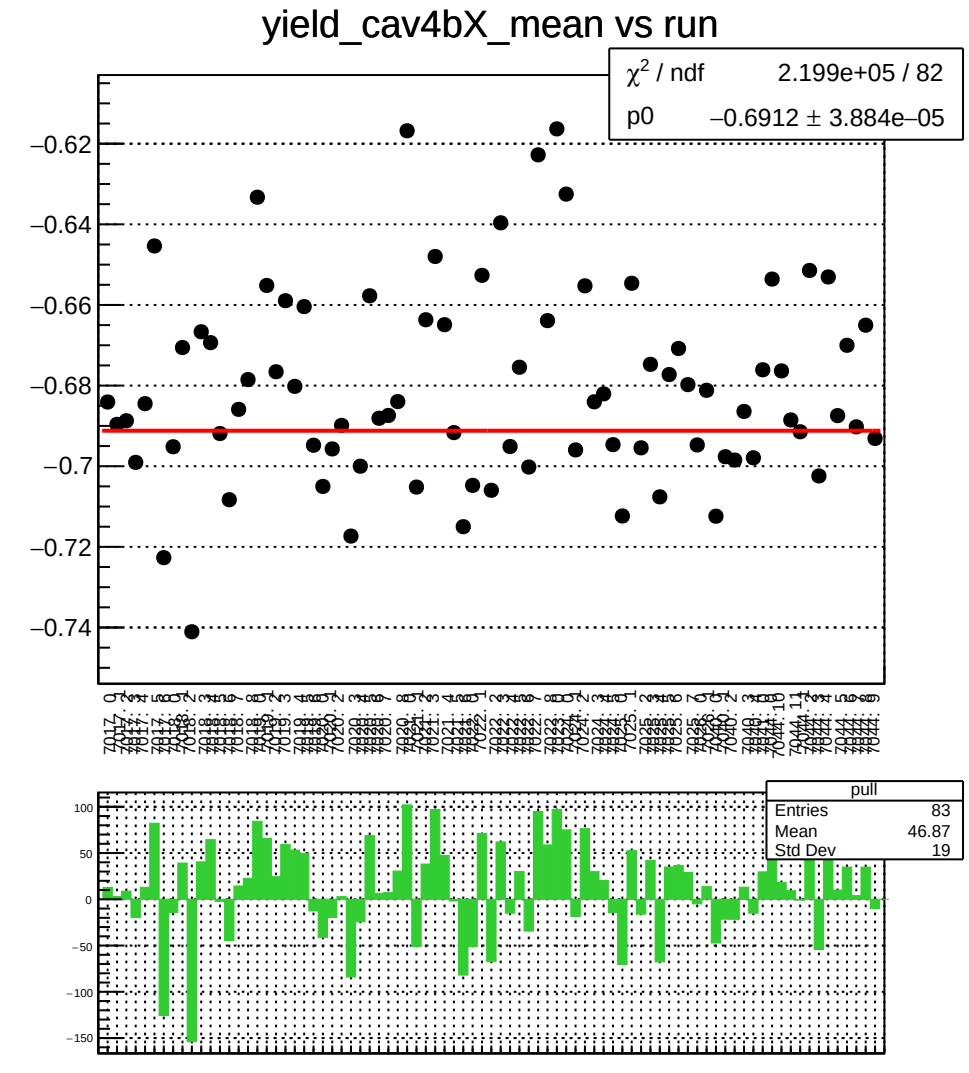

pull1D
Entries 83
Mean 0.08813
Std Dev 2.367

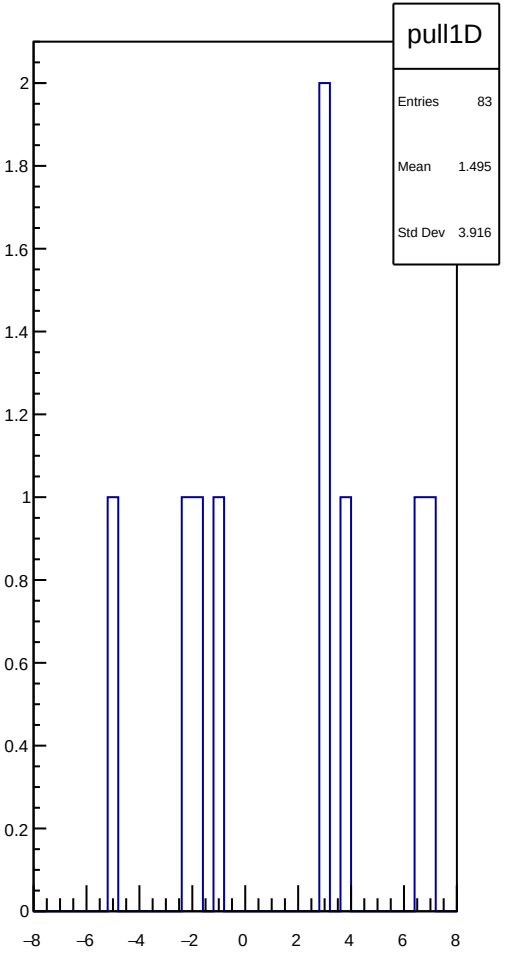

asym_bpm1i04WS_rms vs run
χ^2 / ndf 1.792e+04 / 82
p0 132 ± 0.105
220
200
180
160
140
120

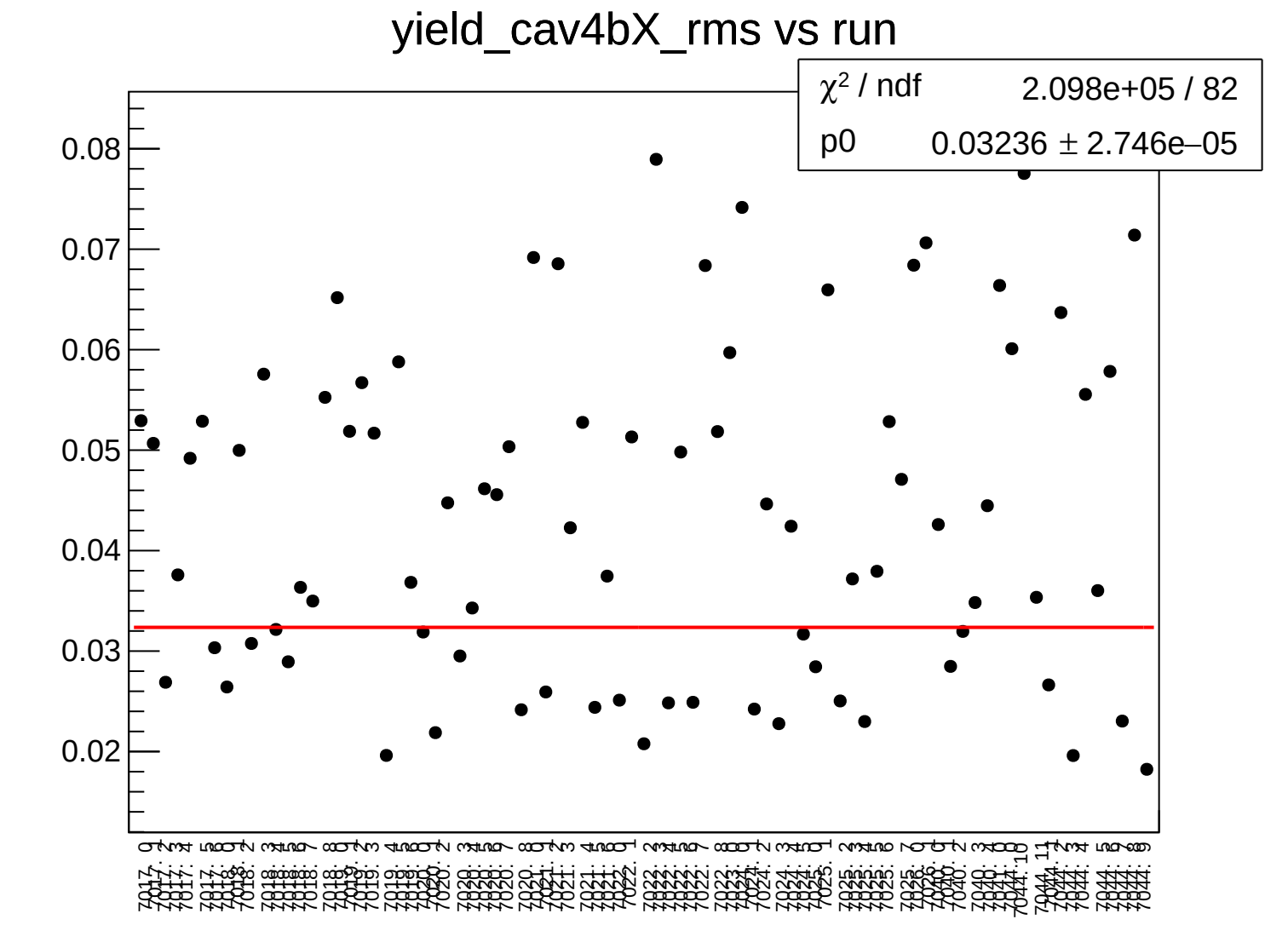

asym_bpm1i06WS_mean vs run
χ² / ndf 487.4 / 82
p0 4147 ± 170.8
15000
10000
5000
0
−5000
pull
Entries 83
Mean 353.9
Std Dev 285.9
8
6
4
2
0
−2
−4

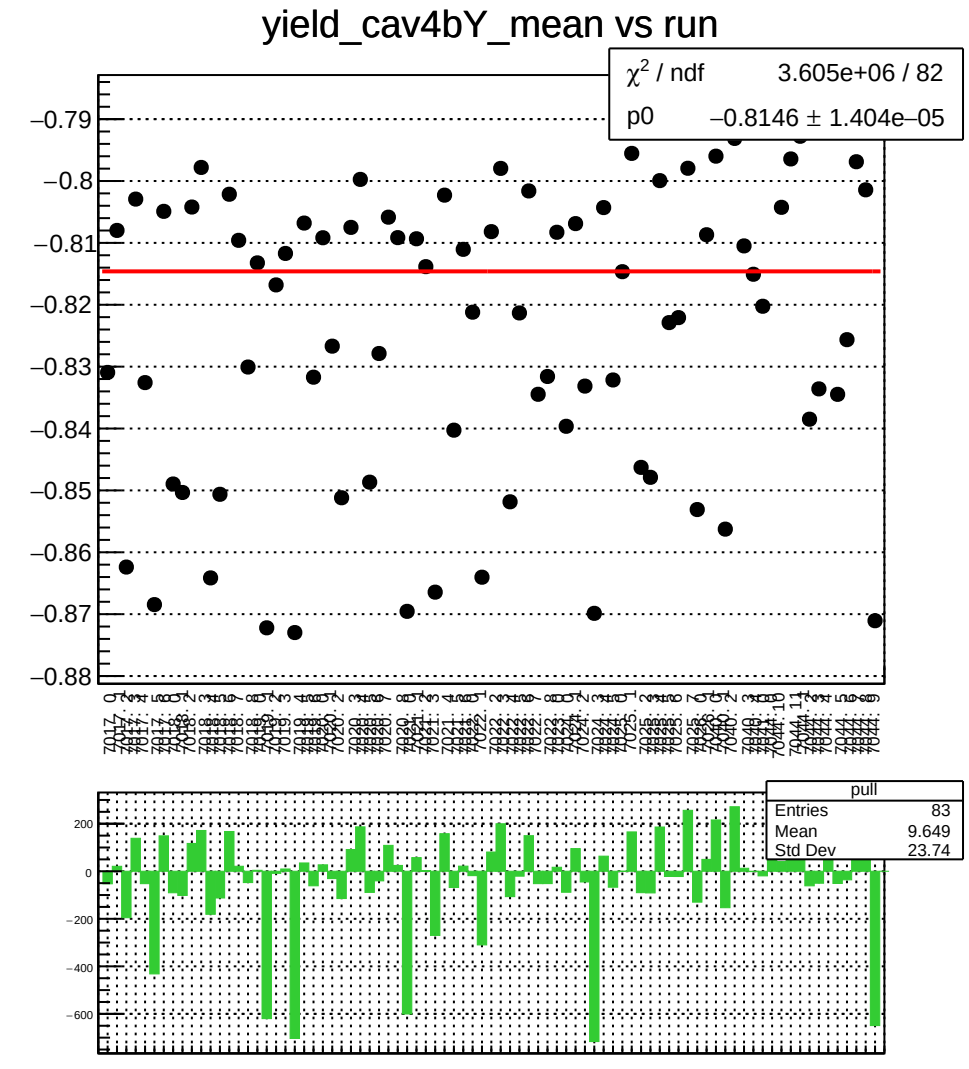

pull1D
Entries 83
Mean 0.05005
Std Dev 2.423
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

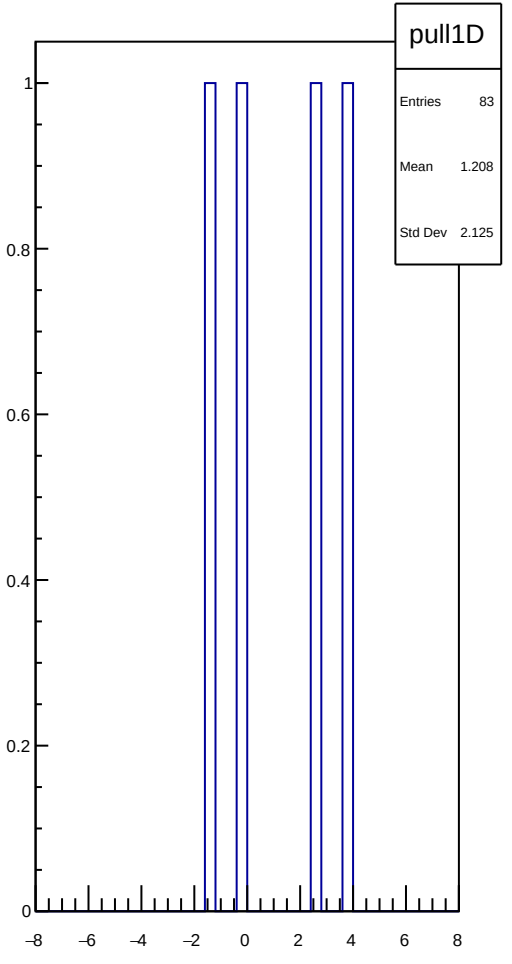

asym_bpm1i06WS_rms vs run
χ² / ndf 1.285e+04 / 82
p0 152.1 ± 0.1208
240
220
200
180
160
140

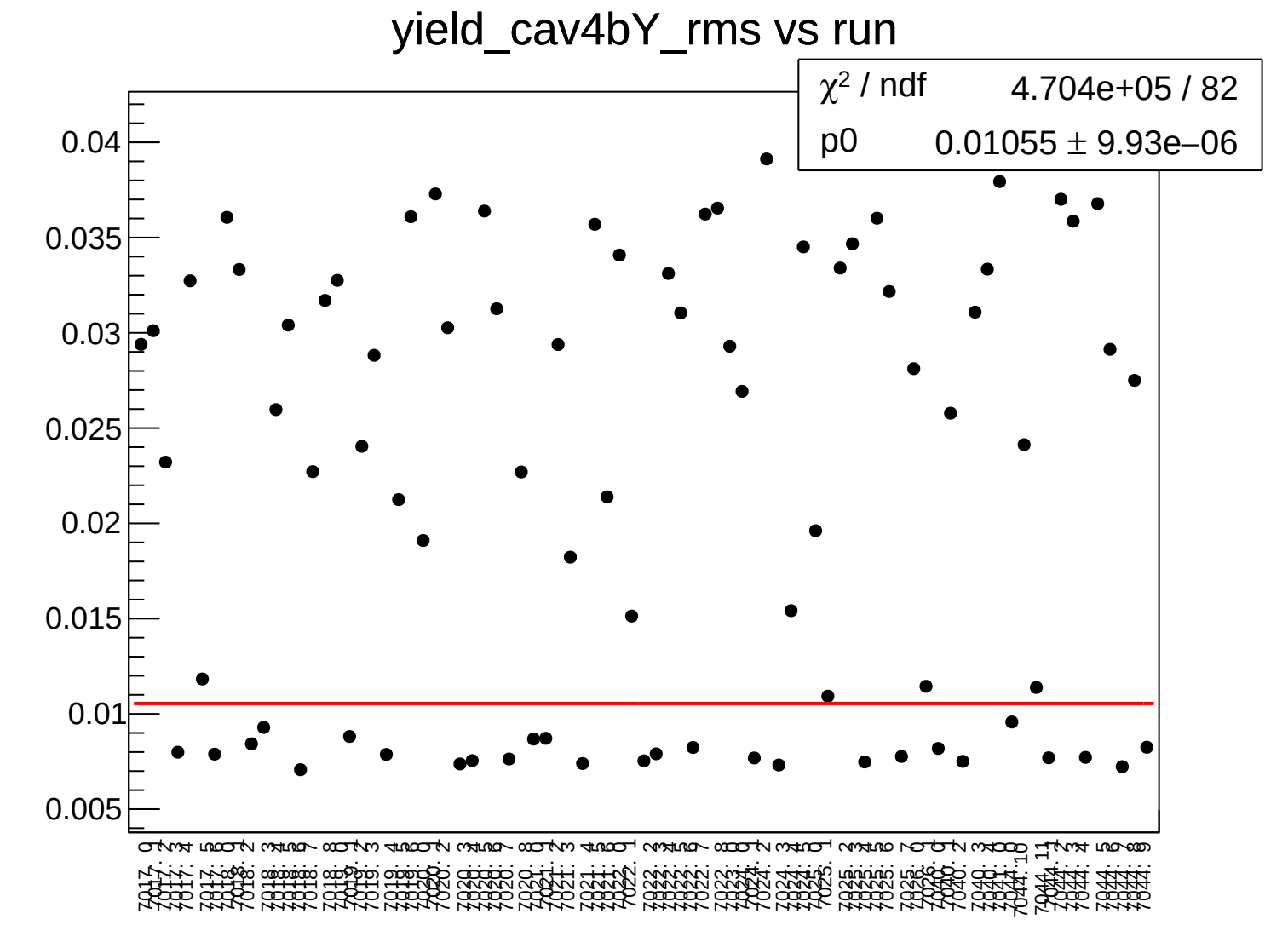

yield_cav4bX_mean vs run
χ² / ndf 2.199e+05 / 82
p0 −0.6912 ± 3.884e−05
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
−0.74
pull
Entries 83
Mean 46.87
Std Dev 19
100
50
0
−50
−100
−150

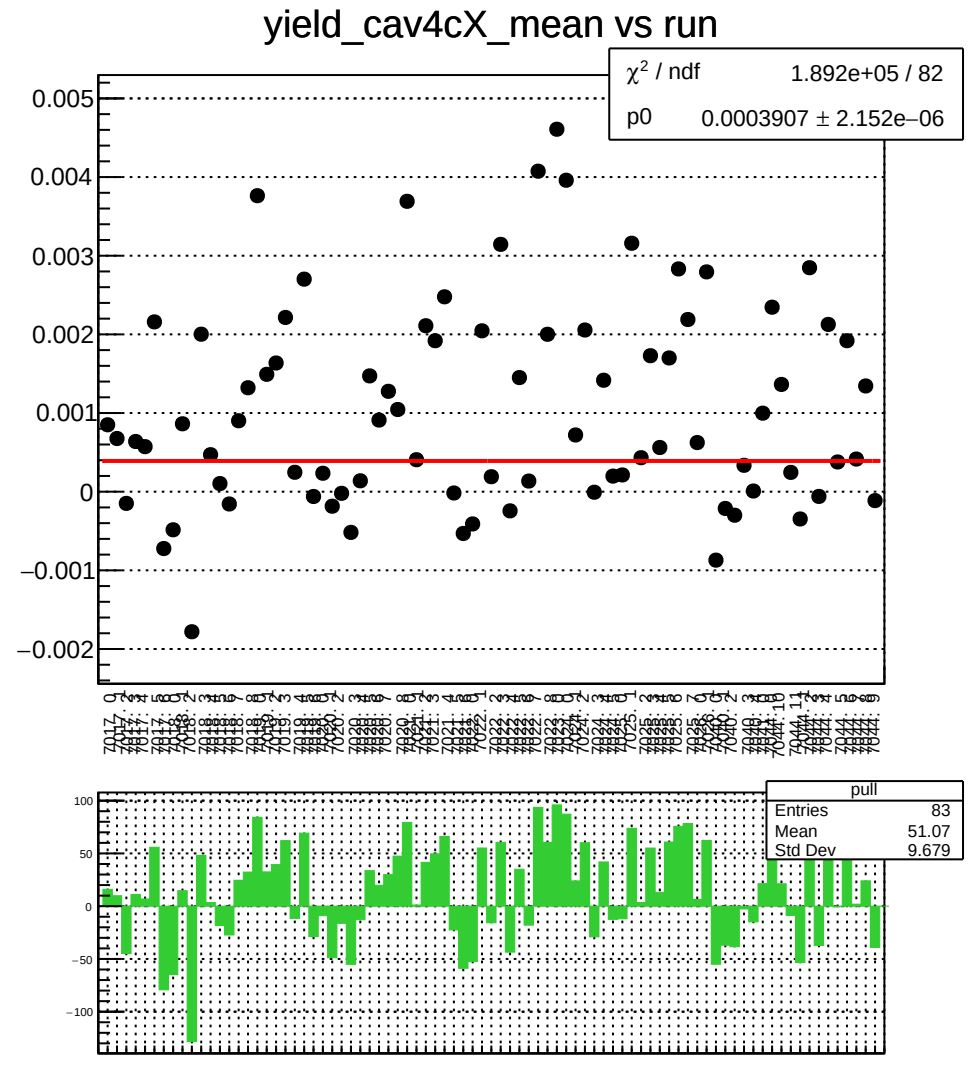

pull1D
Entries 83
Mean 1.495
Std Dev 3.916
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

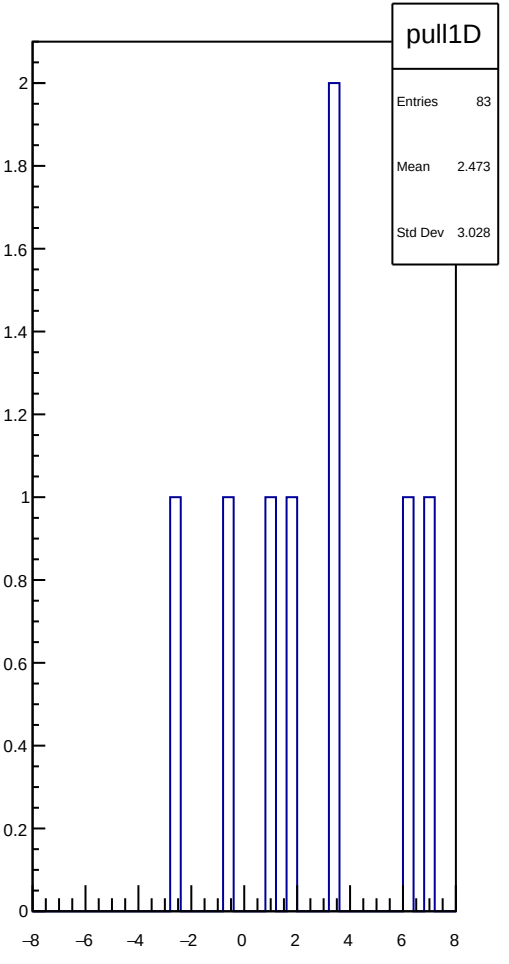

yield_cav4bX_rms vs run
χ² / ndf 2.098e+05 / 82
p0 0.03236 ± 2.746e−05
0.08
0.07
0.06
0.05
0.04
0.03
0.02

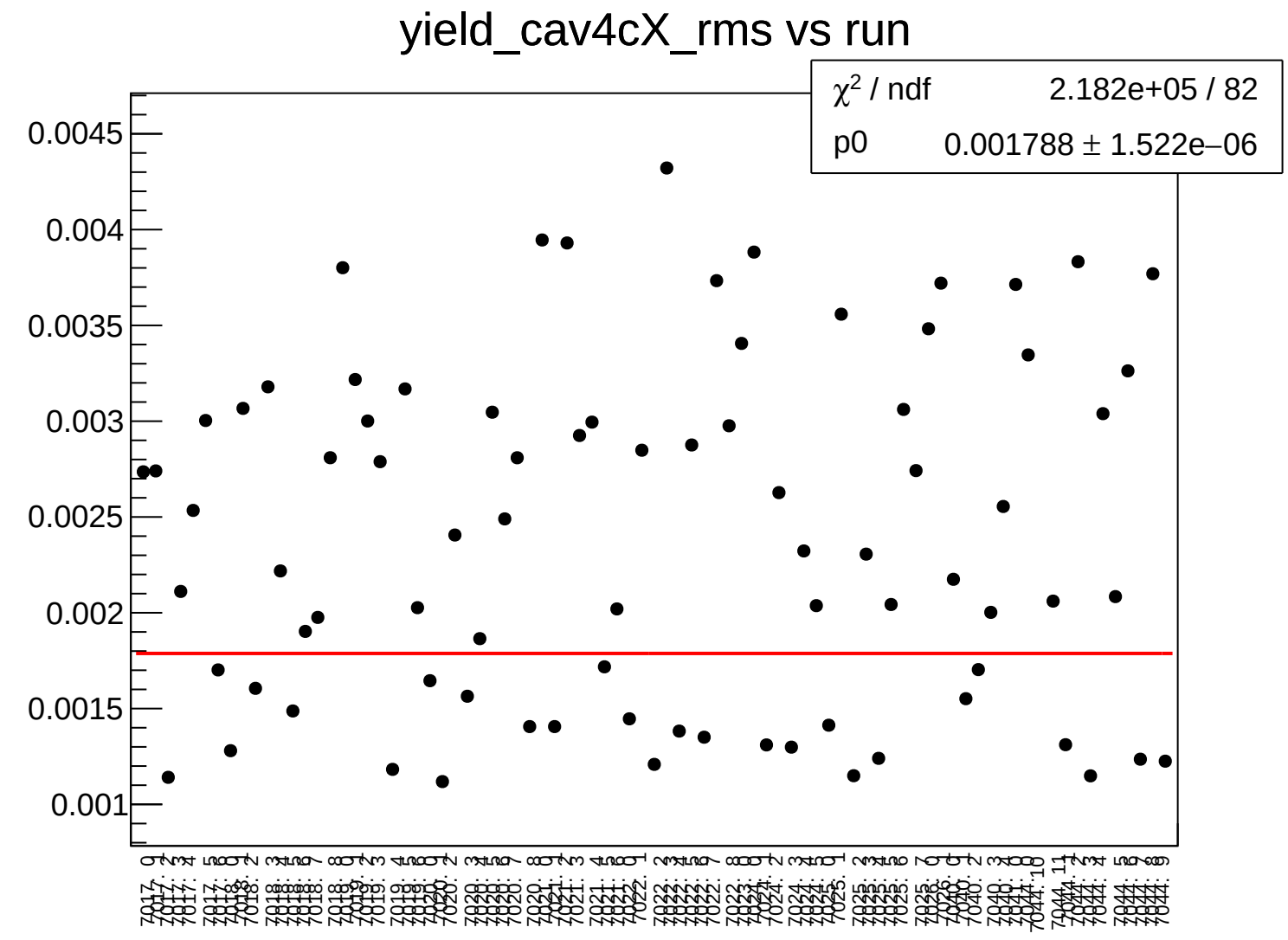

yield_cav4bY_mean vs run
χ² / ndf 3.605e+06 / 82
p0 −0.8146 ± 1.404e−05
−0.79
−0.8
−0.81
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
pull
Entries 83
Mean 9.649
Std Dev 23.74
200
0
−200
−400
−600

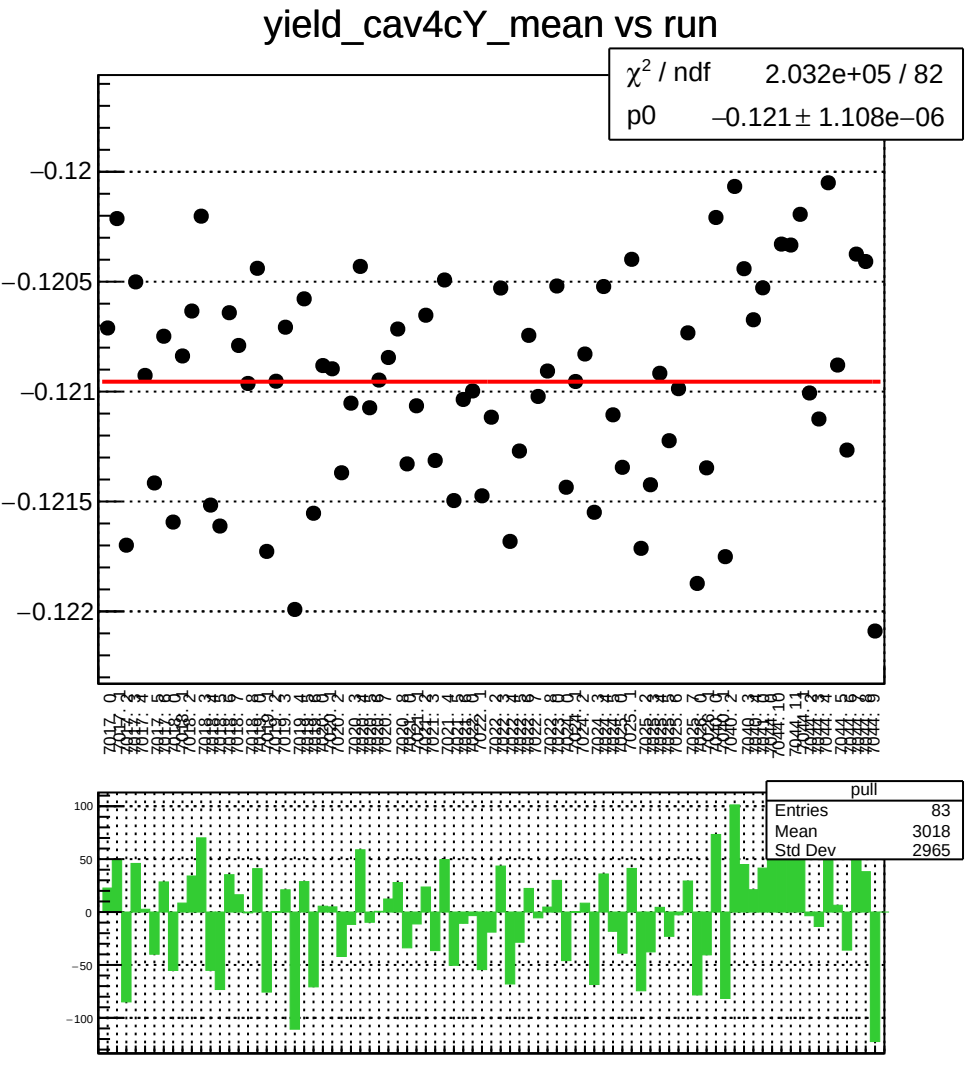

pull1D
Entries 83
Mean 1.208
Std Dev 2.125
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

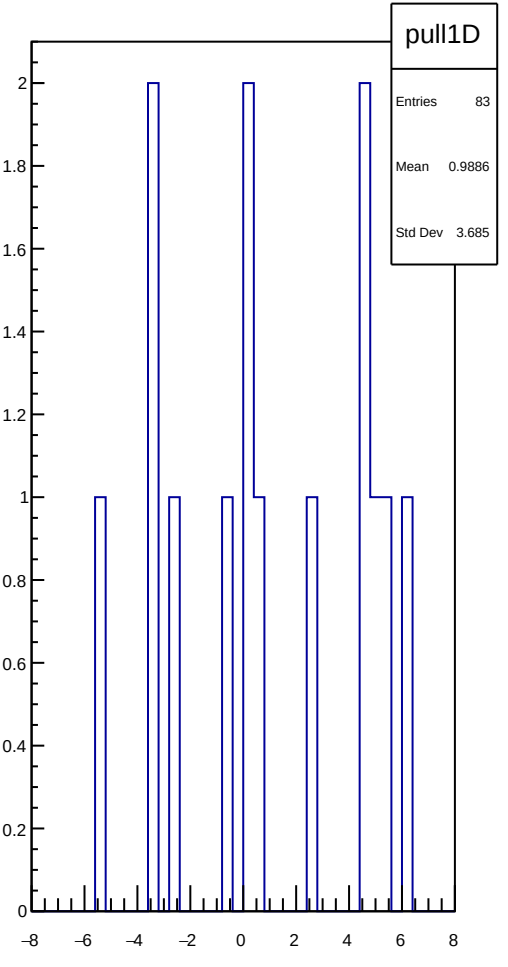

yield_cav4bY_rms vs run
χ² / ndf 4.704e+05 / 82
p0 0.01055 ± 9.93e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

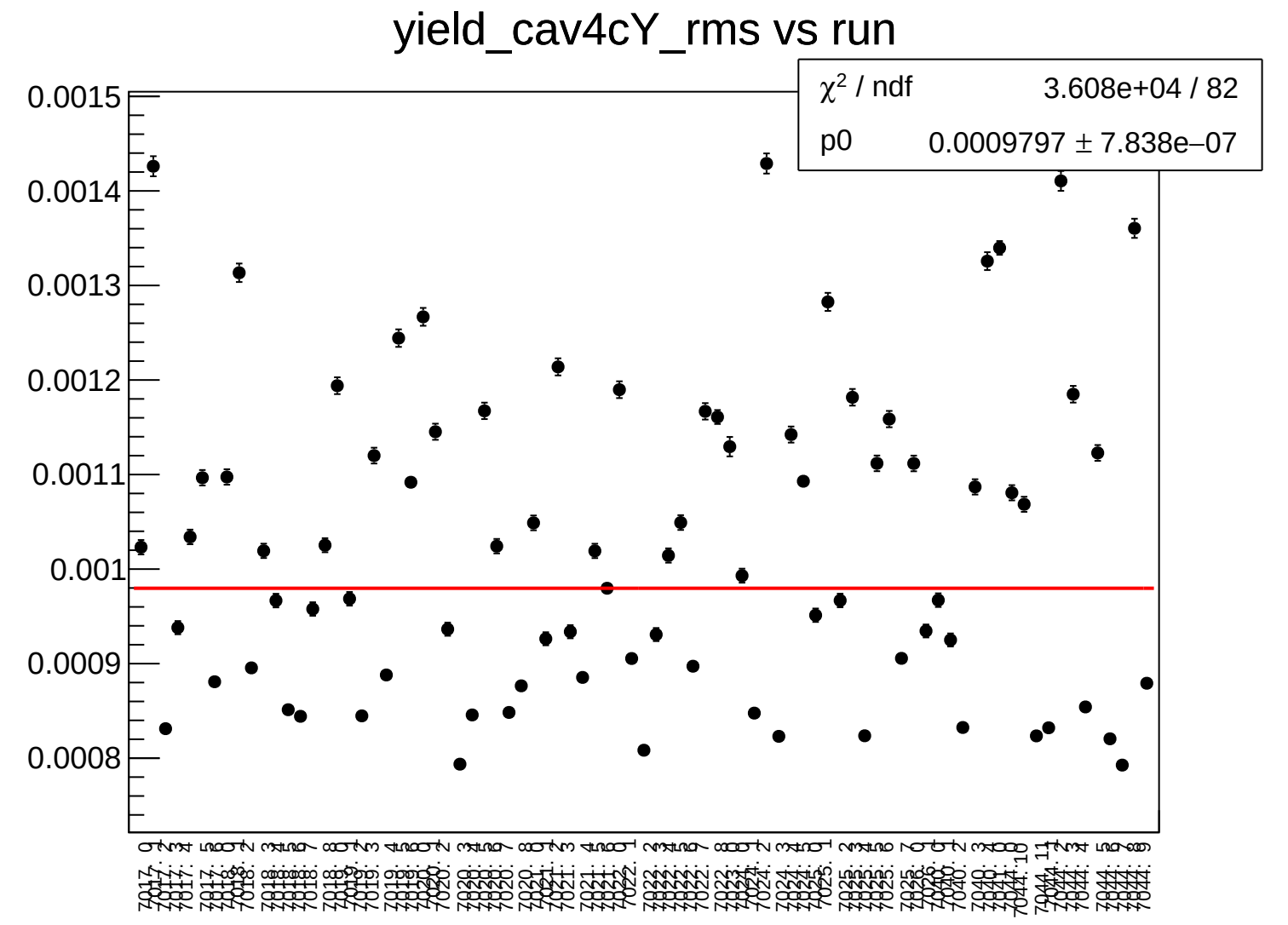

yield_cav4cX_mean vs run
χ² / ndf 1.892e+05 / 82
p0 0.0003907 ± 2.152e−06
0.005
0.004
0.003
0.002
0.001
0
−0.001
−0.002
pull
Entries 83
Mean 51.07
Std Dev 9.679
100
50
0
−50
−100

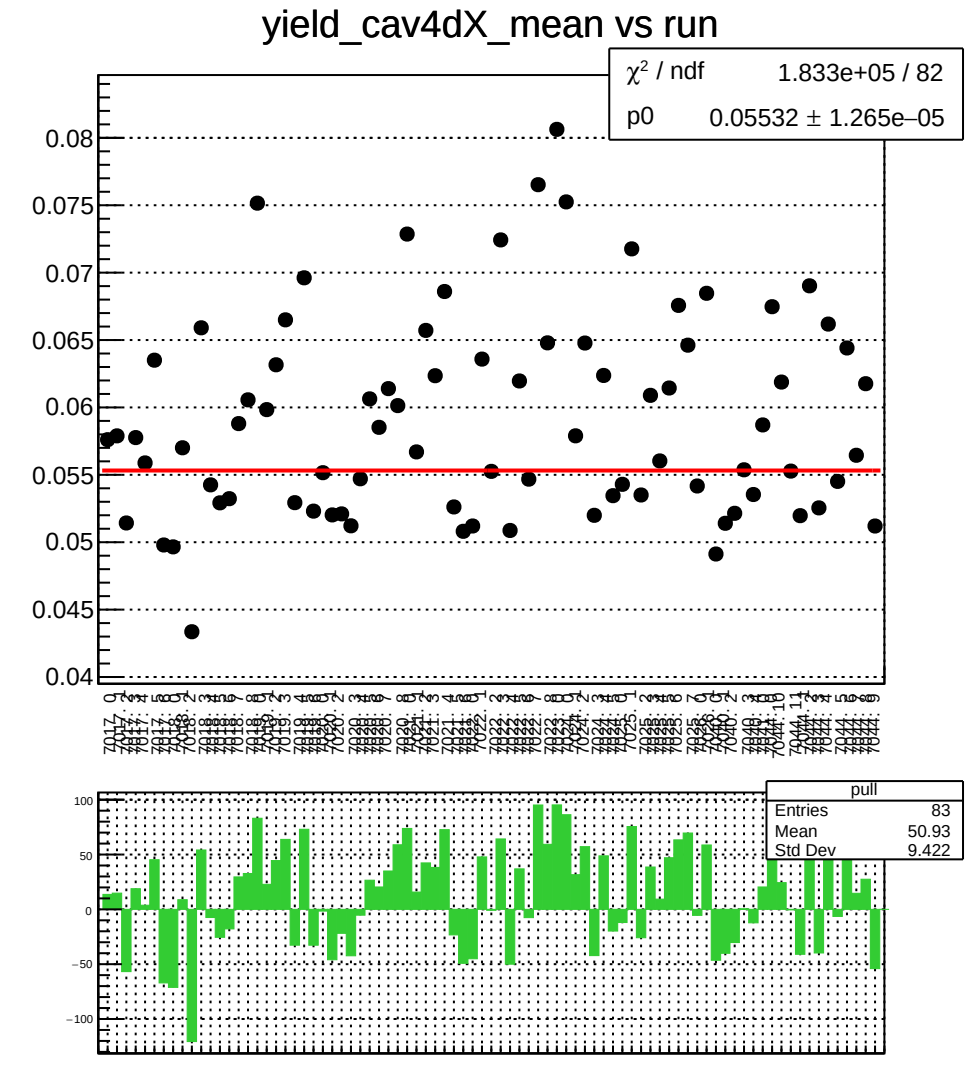

pull1D
Entries 83
Mean 2.473
Std Dev 3.028
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

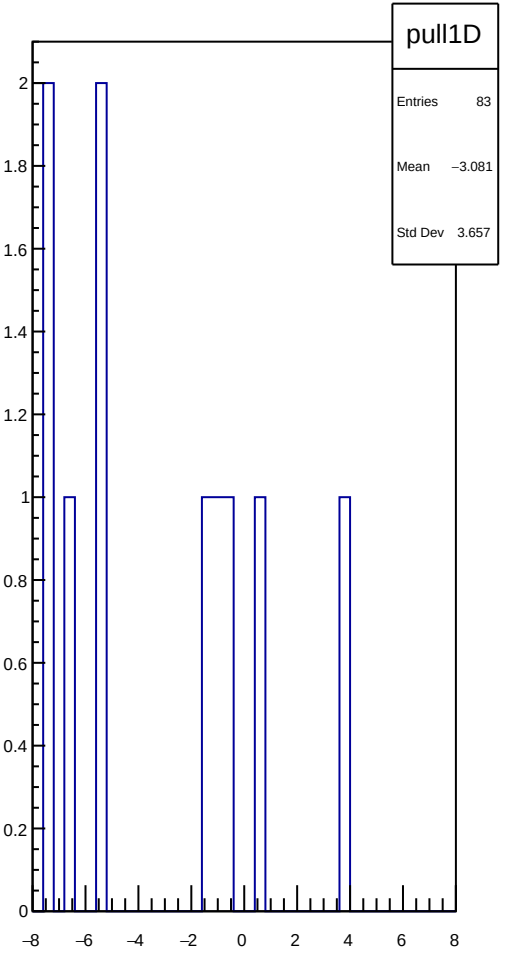

yield_cav4cX_rms vs run
χ² / ndf 2.182e+05 / 82
p0 0.001788 ± 1.522e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

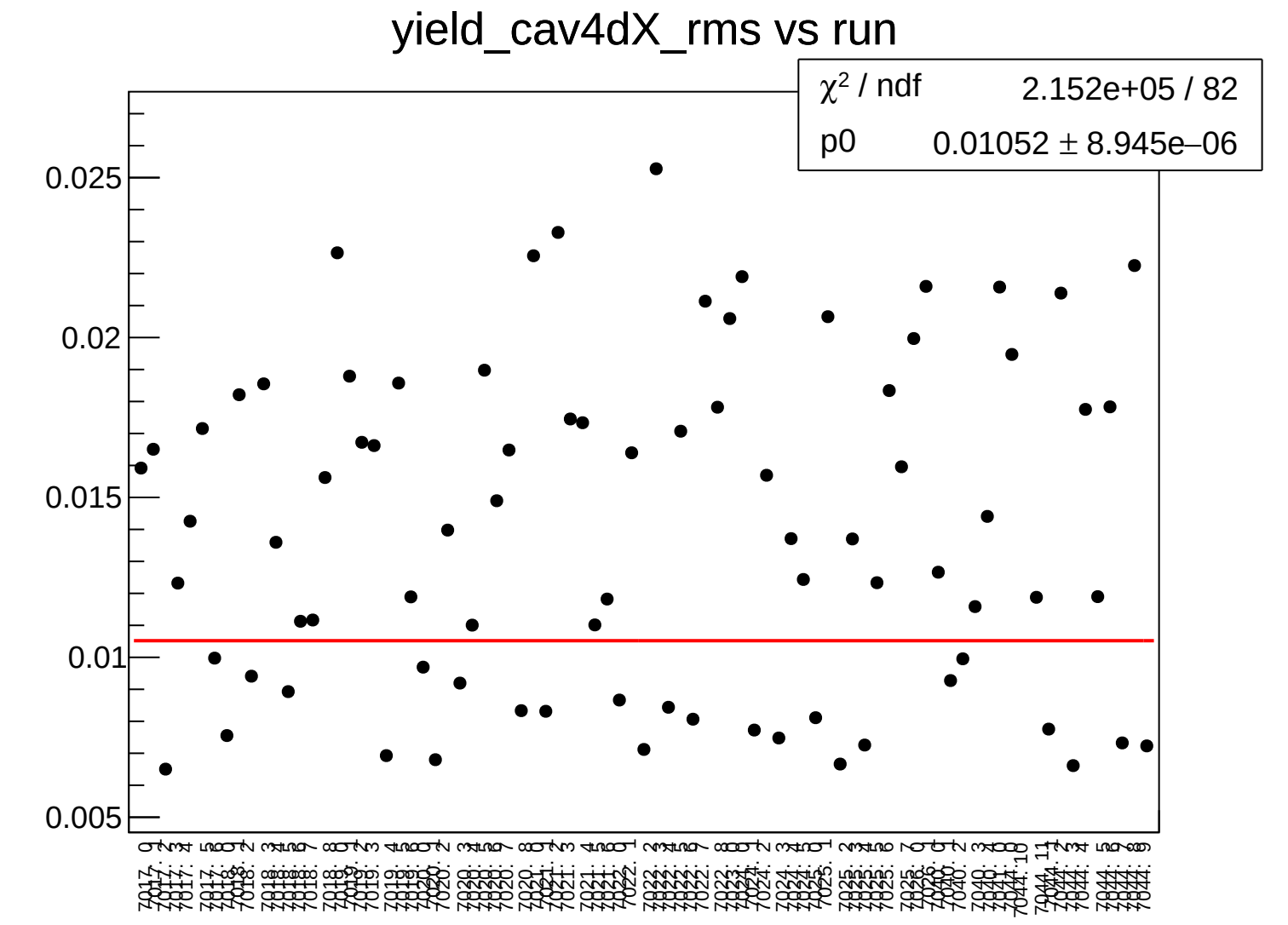

yield_cav4cY_mean vs run
χ² / ndf 2.032e+05 / 82
p0 −0.121 ± 1.108e−06
−0.12
−0.1205
−0.121
−0.1215
−0.122
pull
Entries 83
Mean 3018
Std Dev 2965
100
50
0
−50
−100

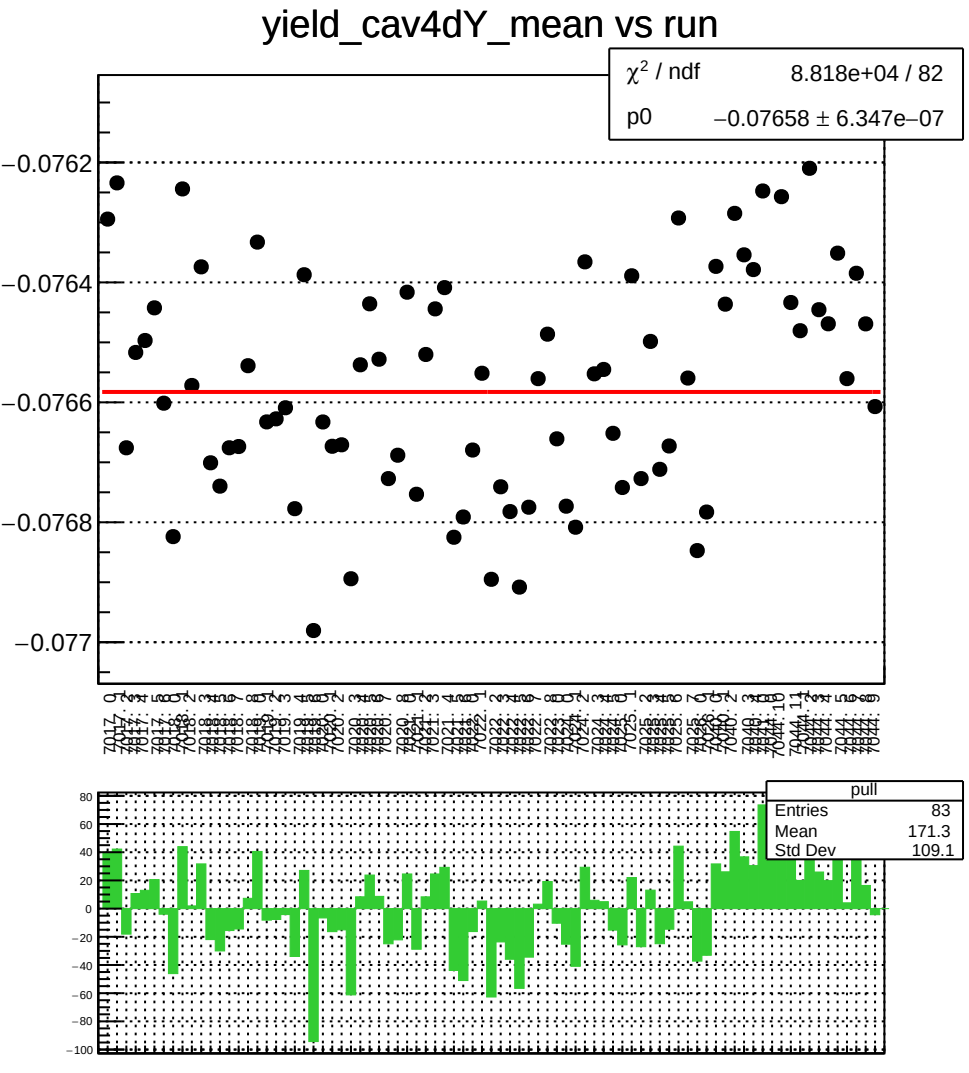

pull1D
Entries 83
Mean 0.9886
Std Dev 3.685
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

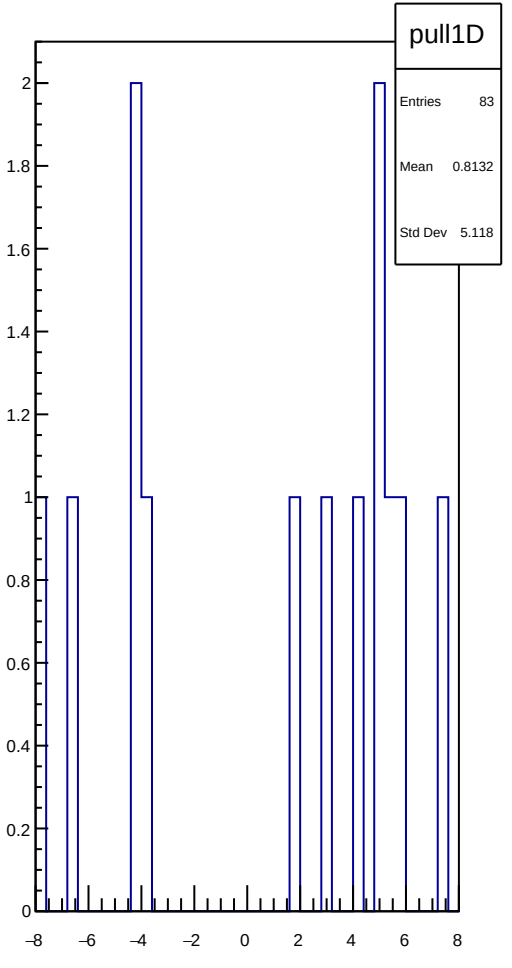

yield_cav4cY_rms vs run
χ² / ndf 3.608e+04 / 82
p0 0.0009797 ± 7.838e−07
0.0015
0.0014
0.0013
0.0012
0.0011
0.001
0.0009
0.0008

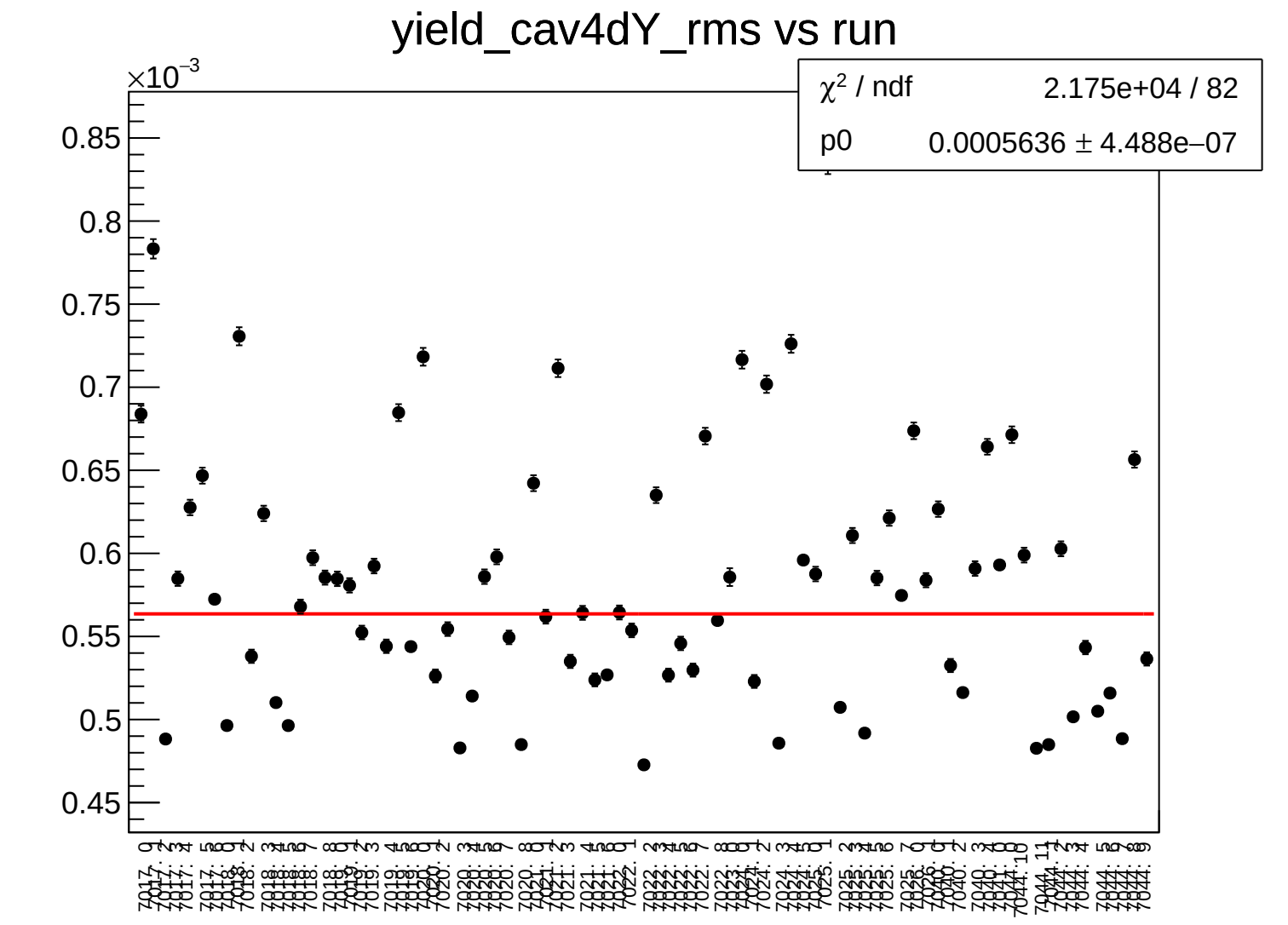

yield_cav4dX_mean vs run
χ² / ndf 1.833e+05 / 82
p0 0.05532 ± 1.265e−05
0.08
0.075
0.07
0.065
0.06
0.055
0.05
0.045
0.04
pull
Entries 83
Mean 50.93
Std Dev 9.422
100
50
0
−50
−100

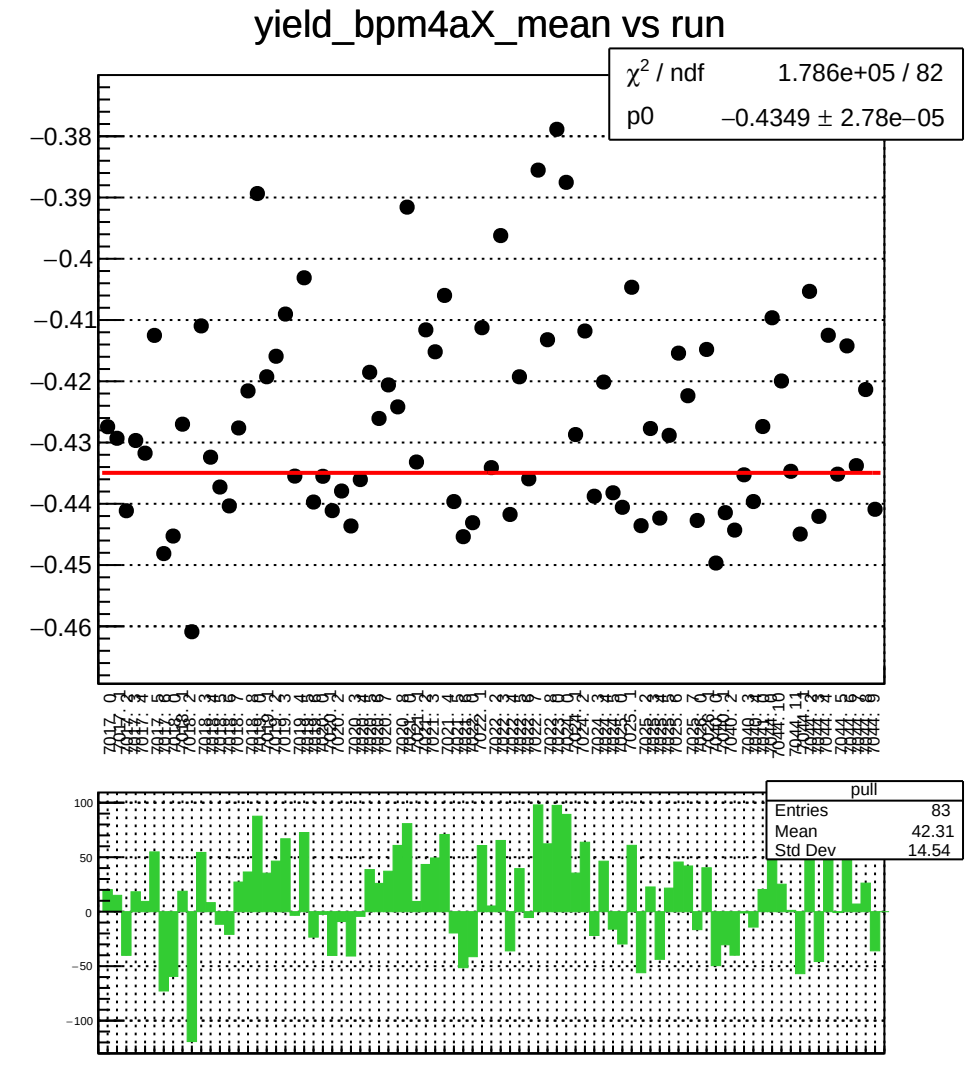

pull1D
Entries 83
Mean −3.081
Std Dev 3.657
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

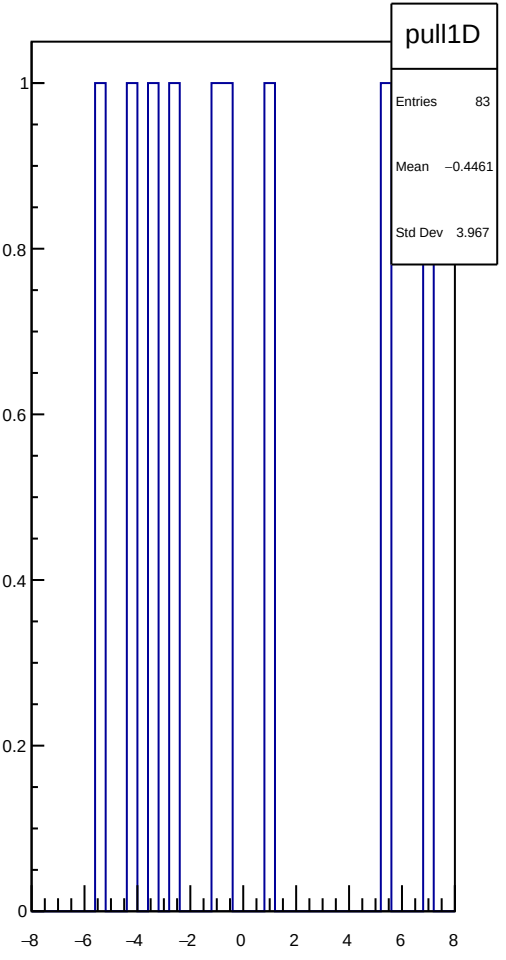

yield_cav4dX_rms vs run
χ² / ndf 2.152e+05 / 82
p0 0.01052 ± 8.945e−06
0.025
0.02
0.015
0.01
0.005

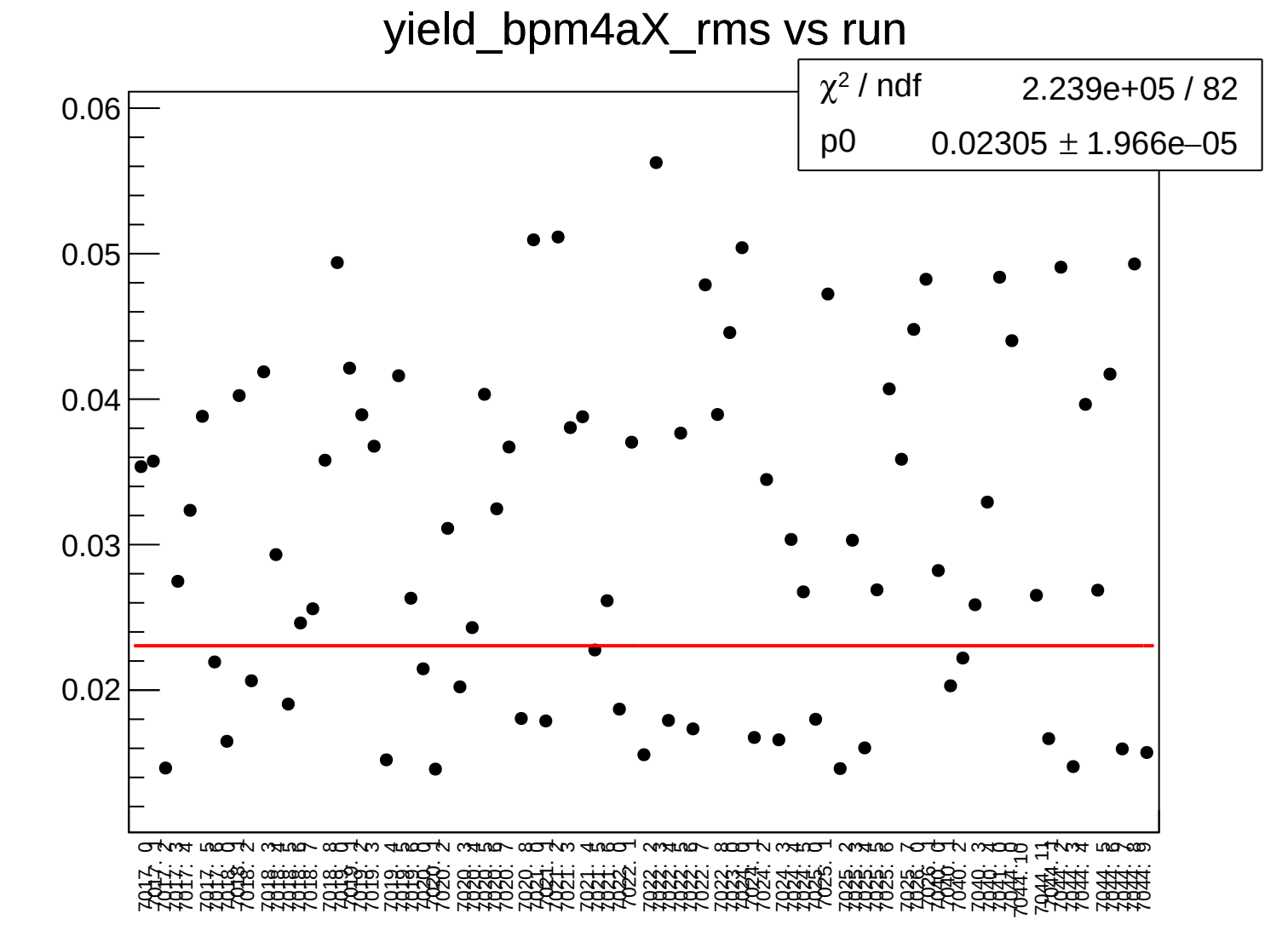

yield_cav4dY_mean vs run
χ² / ndf 8.818e+04 / 82
p0 −0.07658 ± 6.347e−07
−0.0762
−0.0764
−0.0766
−0.0768
−0.077
pull
Entries 83
Mean 171.3
Std Dev 109.1
80
60
40
20
0
−20
−40
−60
−80
−100

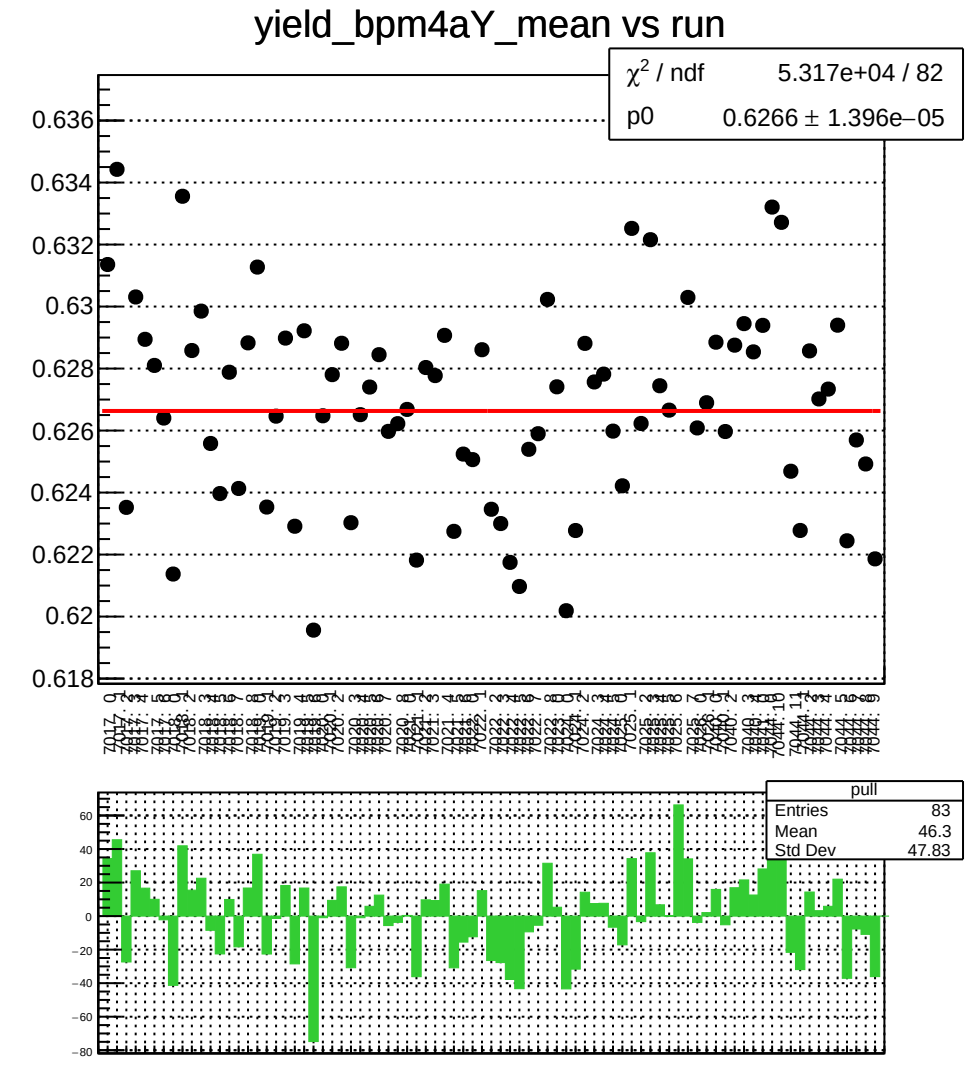

pull1D
Entries 83
Mean 0.8132
Std Dev 5.118
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

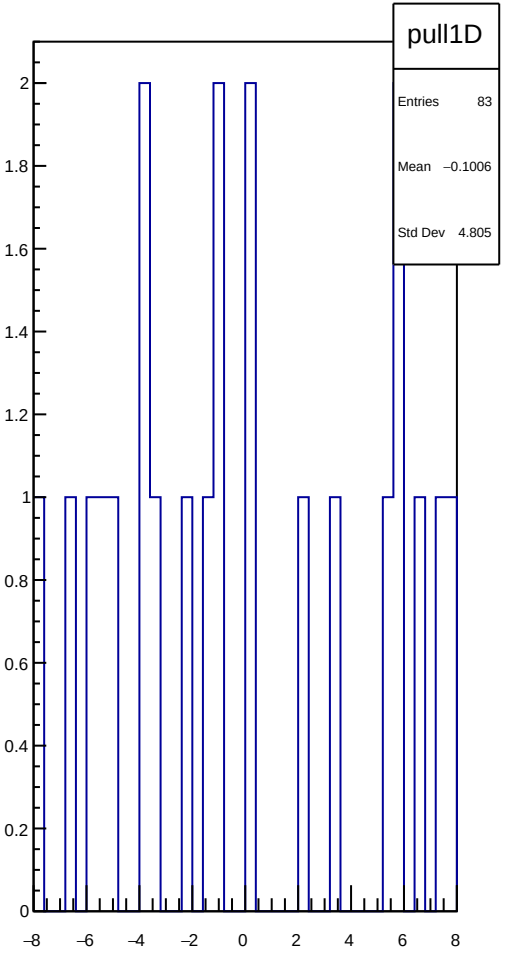

yield_cav4dY_rms vs run
×10⁻³
χ² / ndf 2.175e+04 / 82
p0 0.0005636 ± 4.488e−07
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45

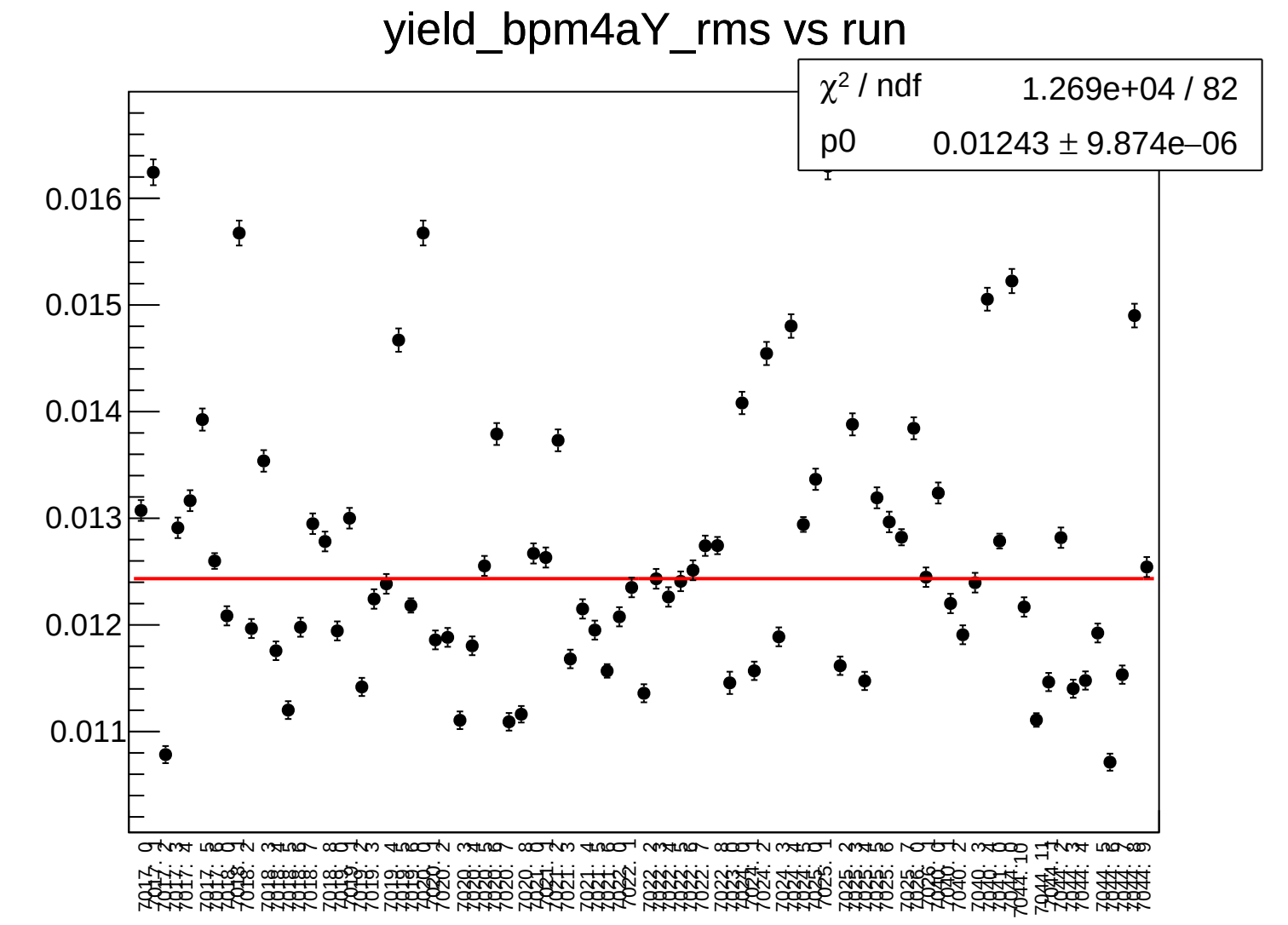

yield_bpm4aX_mean vs run
χ² / ndf 1.786e+05 / 82
p0 −0.4349 ± 2.78e−05
pull
Entries 83
Mean 42.31
Std Dev 14.54

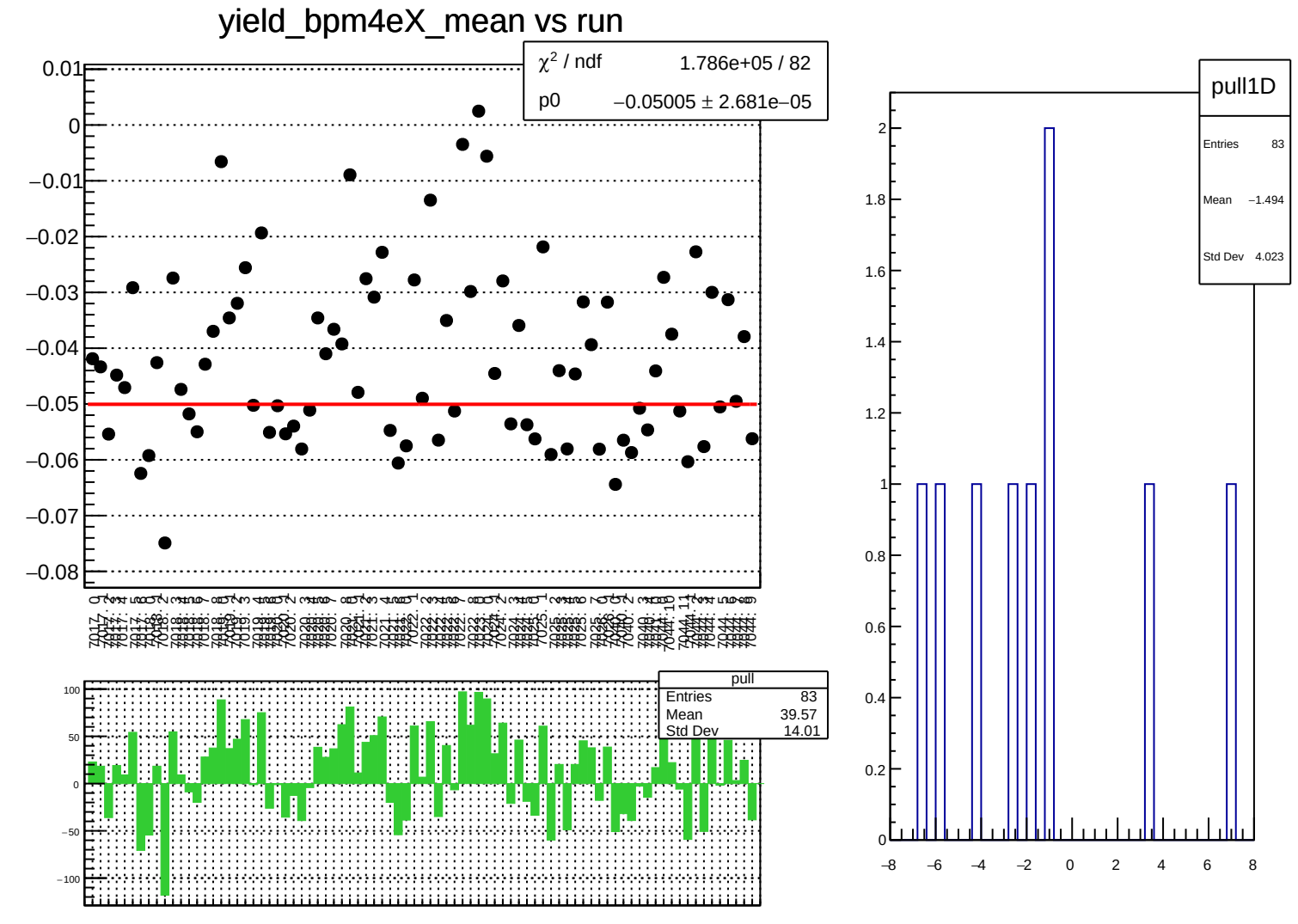

pull1D
Entries 83
Mean −0.4461
Std Dev 3.967

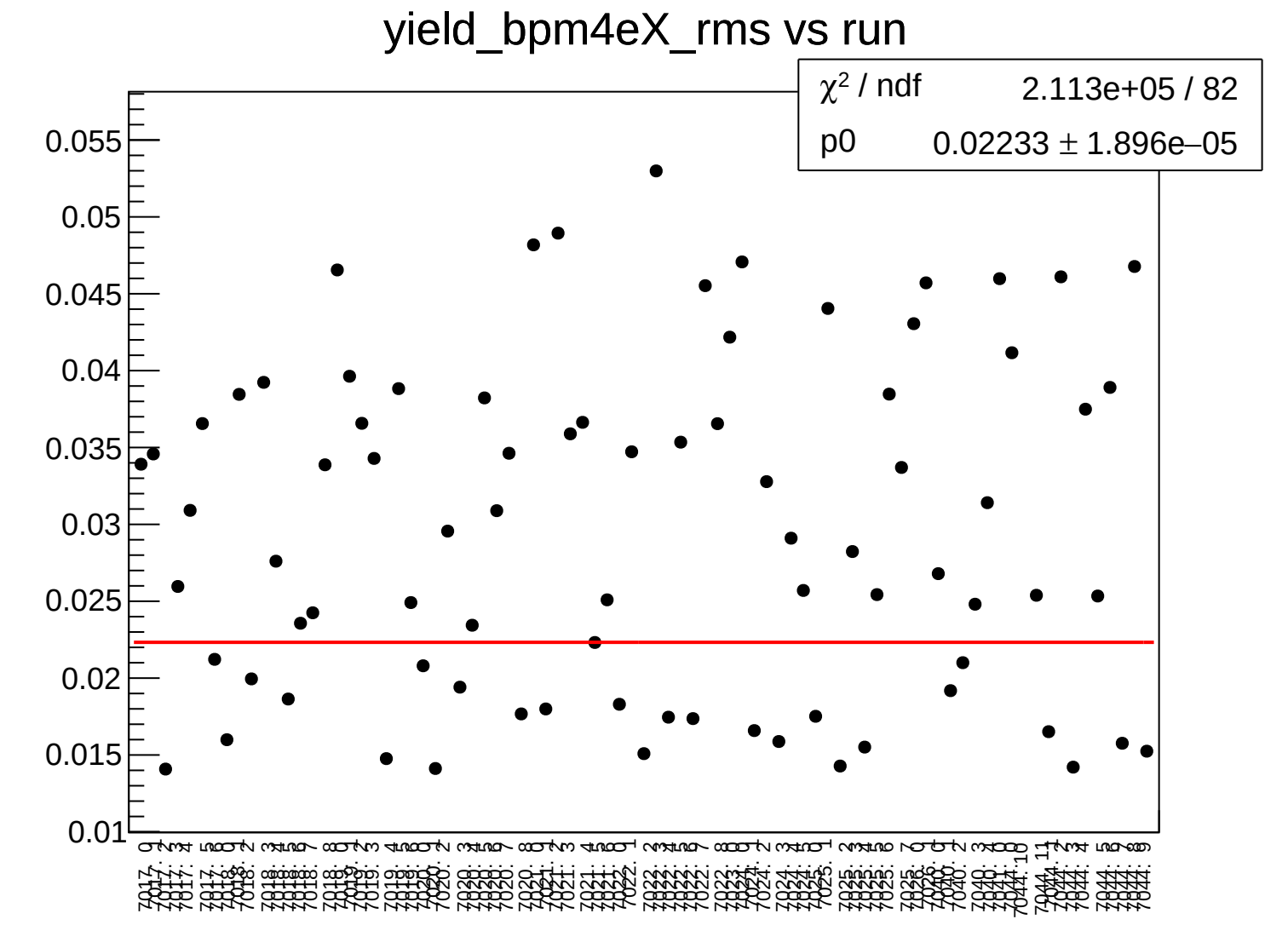

yield_bpm4aX_rms vs run
χ² / ndf 2.239e+05 / 82
p0 0.02305 ± 1.966e–05
0.06
0.05
0.04
0.03
0.02

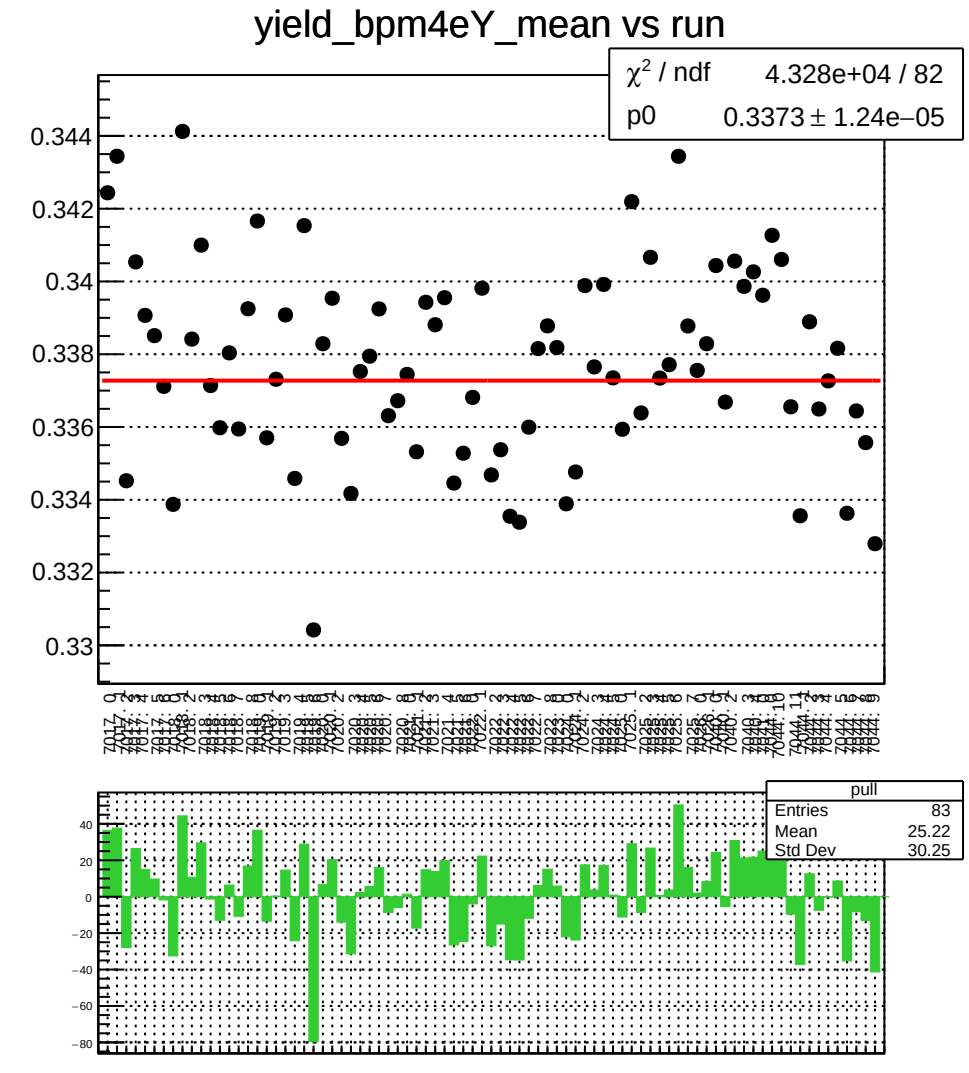

yield_bpm4aY_mean vs run
χ² / ndf 5.317e+04 / 82
p0 0.6266 ± 1.396e−05
0.636
0.634
0.632
0.63
0.628
0.626
0.624
0.622
0.62
0.618
pull
Entries 83
Mean 46.3
Std Dev 47.83
60
40
20
0
−20
−40
−60
−80

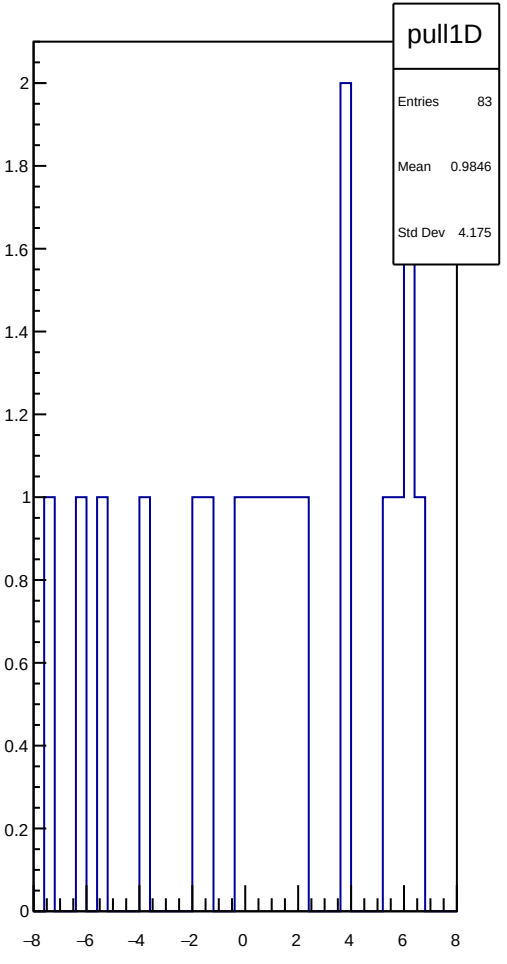

pull1D
Entries 83
Mean −0.1006
Std Dev 4.805
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

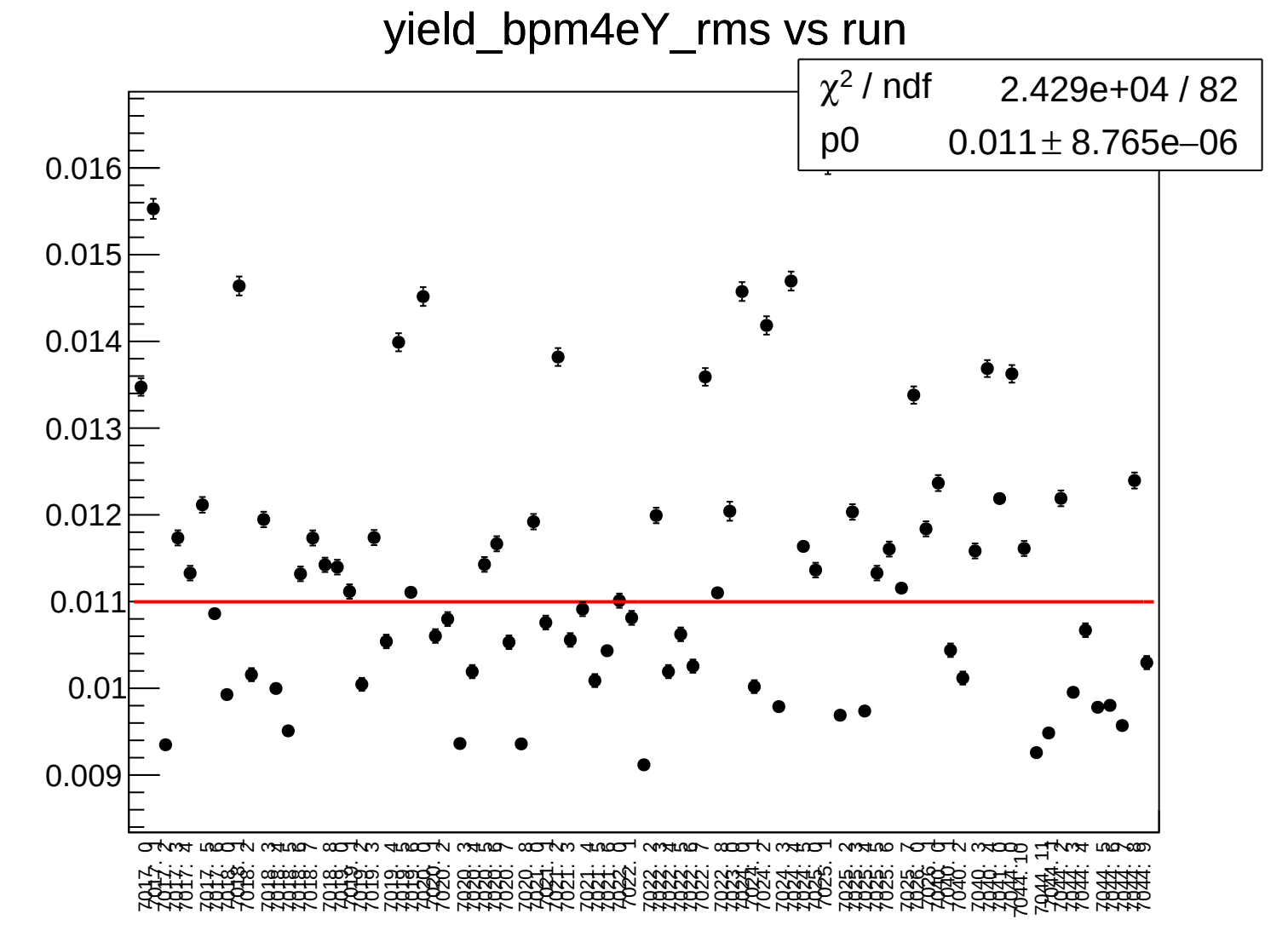

yield_bpm4aY_rms vs run
χ² / ndf 1.269e+04 / 82
p0 0.01243 ± 9.874e–06
0.016
0.015
0.014
0.013
0.012
0.011

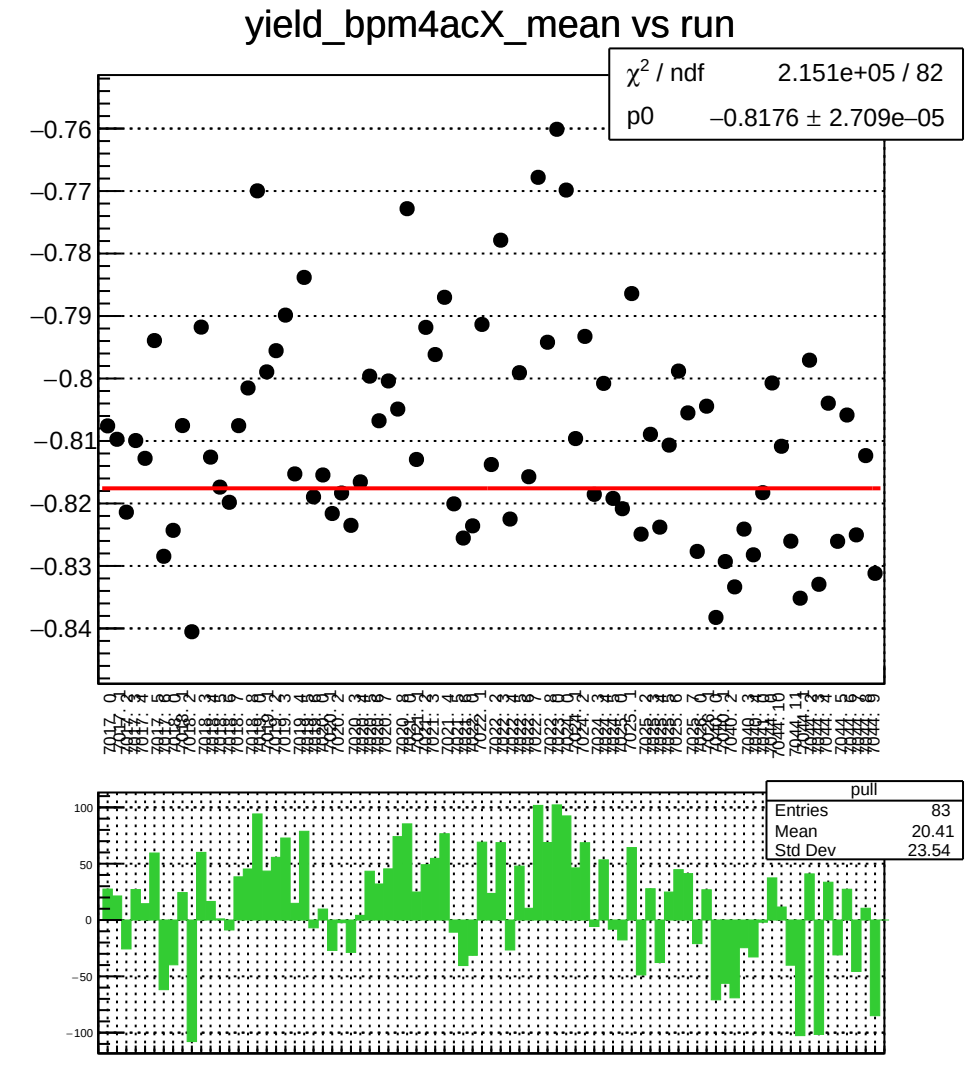

yield_bpm4eX_mean vs run
χ² / ndf 1.786e+05 / 82
p0 −0.05005 ± 2.681e−05
pull
Entries 83
Mean 39.57
Std Dev 14.01
pull1D
Entries 83
Mean −1.494
Std Dev 4.023

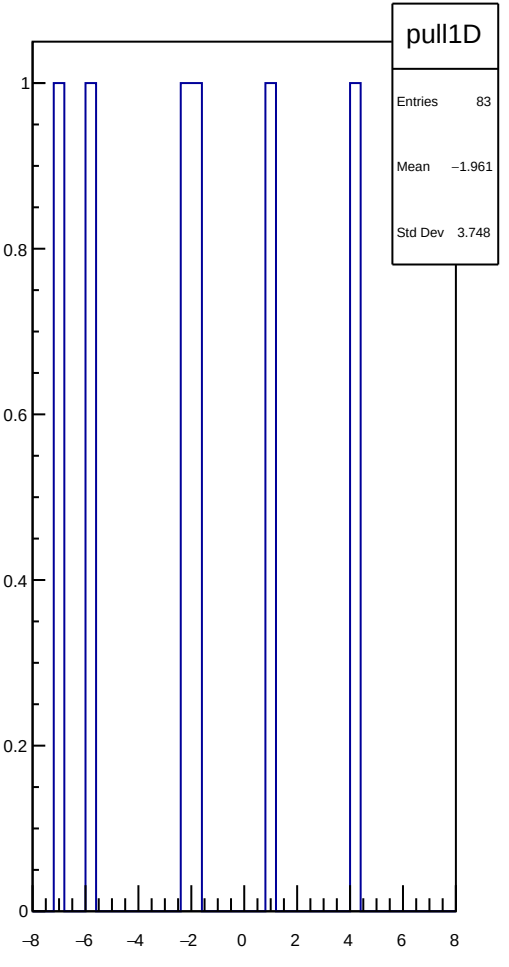

yield_bpm4eX_rms vs run
χ² / ndf 2.113e+05 / 82
p0 0.02233 ± 1.896e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

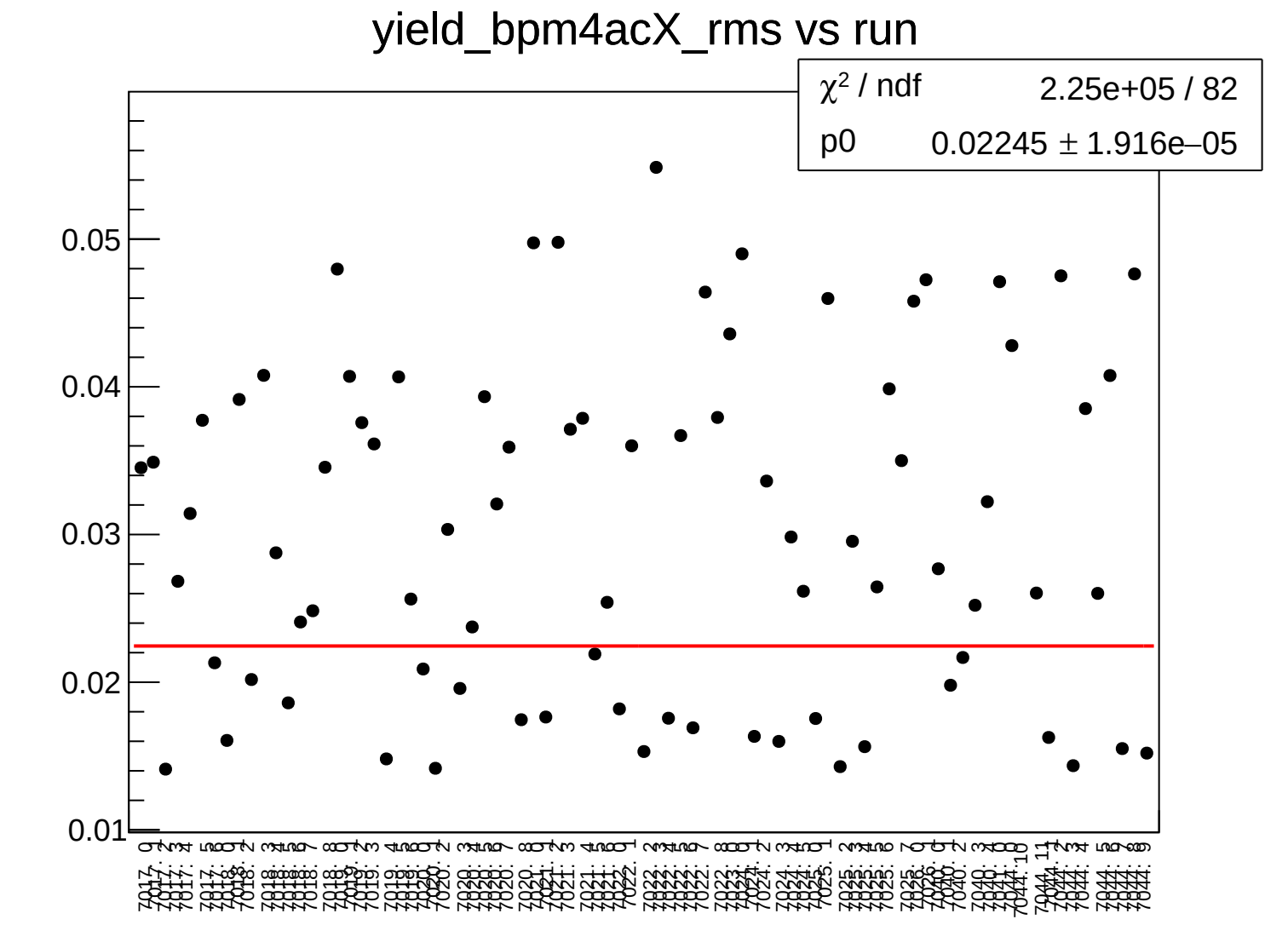

yield_bpm4eY_mean vs run
χ² / ndf 4.328e+04 / 82
p0 0.3373 ± 1.24e−05
0.344
0.342
0.34
0.338
0.336
0.334
0.332
0.33
pull
Entries 83
Mean 25.22
Std Dev 30.25
40
20
0
−20
−40
−60
−80

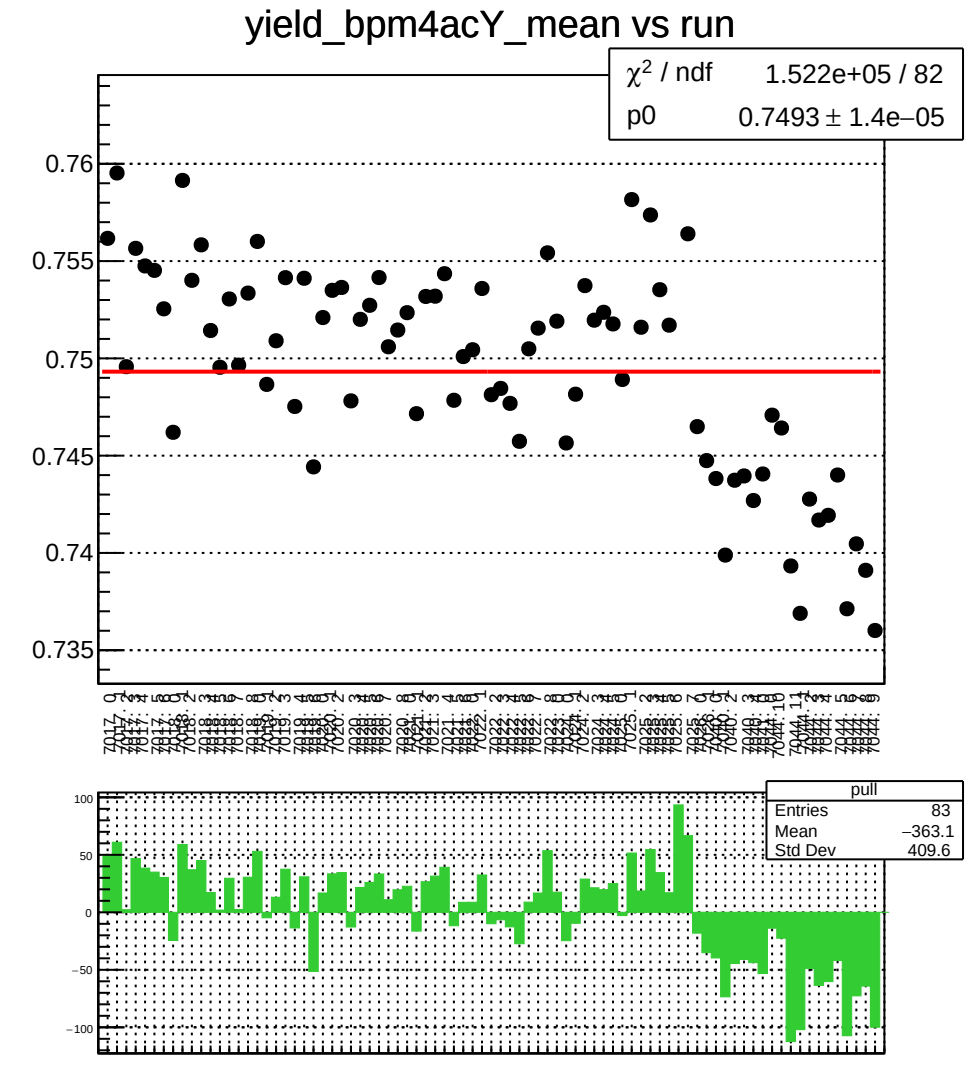

pull1D
Entries 83
Mean 0.9846
Std Dev 4.175
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

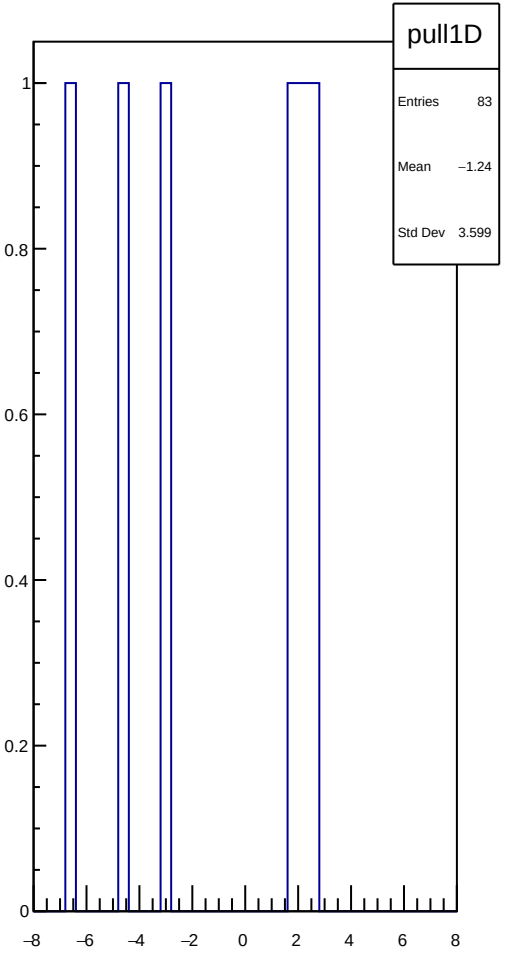

yield_bpm4eY_rms vs run
χ² / ndf 2.429e+04 / 82
p0 0.011 ± 8.765e−06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009

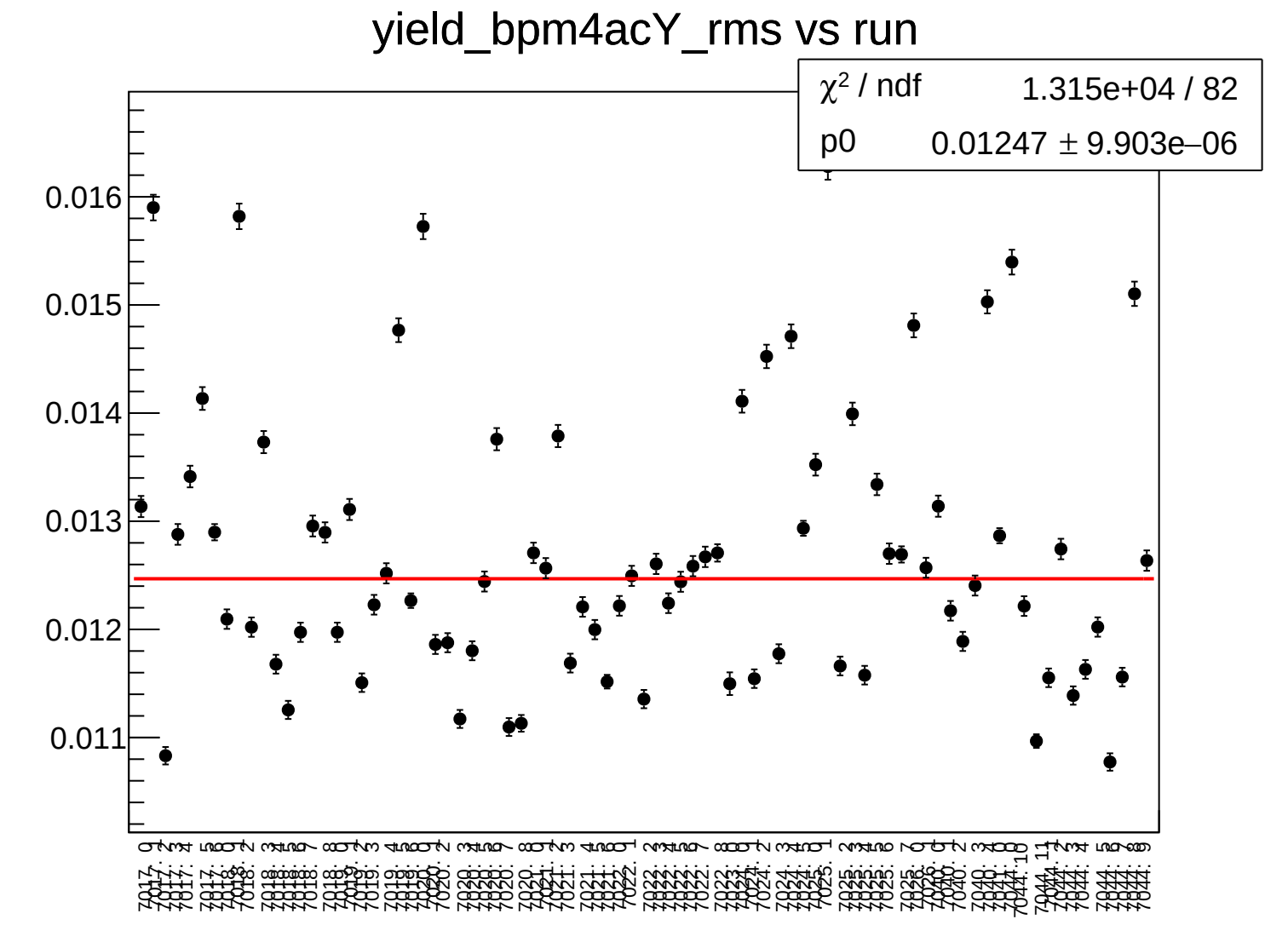

yield_bpm4acX_mean vs run
χ² / ndf 2.151e+05 / 82
p0 −0.8176 ± 2.709e−05
−0.76
−0.77
−0.78
−0.79
−0.8
−0.81
−0.82
−0.83
−0.84
pull
Entries 83
Mean 20.41
Std Dev 23.54
100
50
0
−50
−100

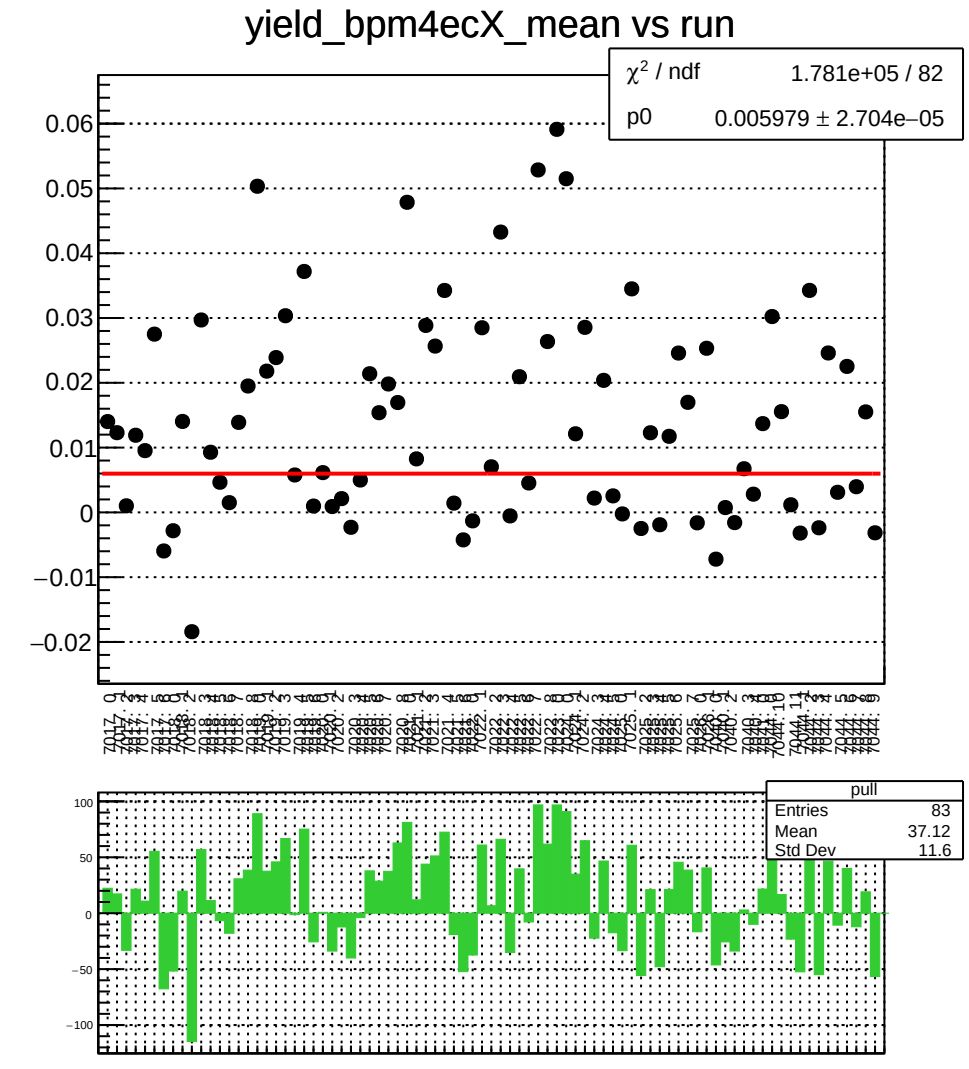

pull1D
Entries 83
Mean −1.961
Std Dev 3.748
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

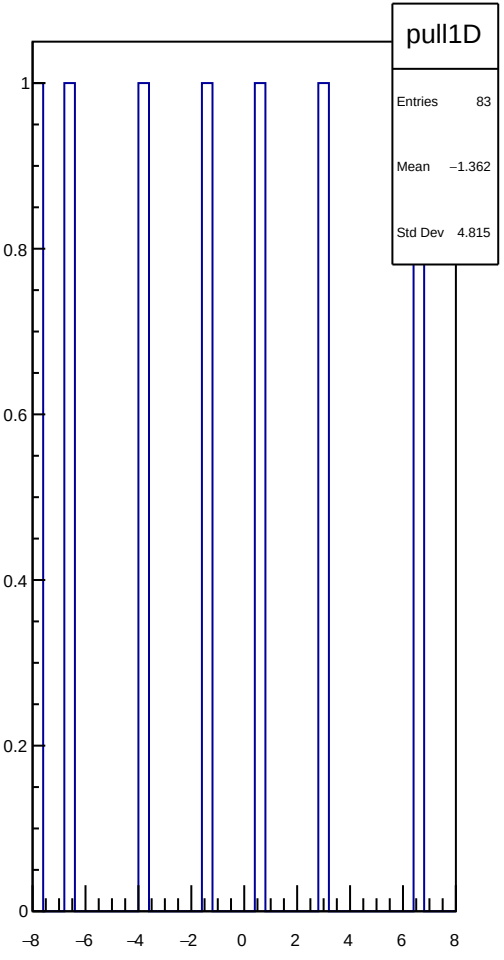

yield_bpm4acX_rms vs run
χ² / ndf 2.25e+05 / 82
p0 0.02245 ± 1.916e−05
0.05
0.04
0.03
0.02
0.01

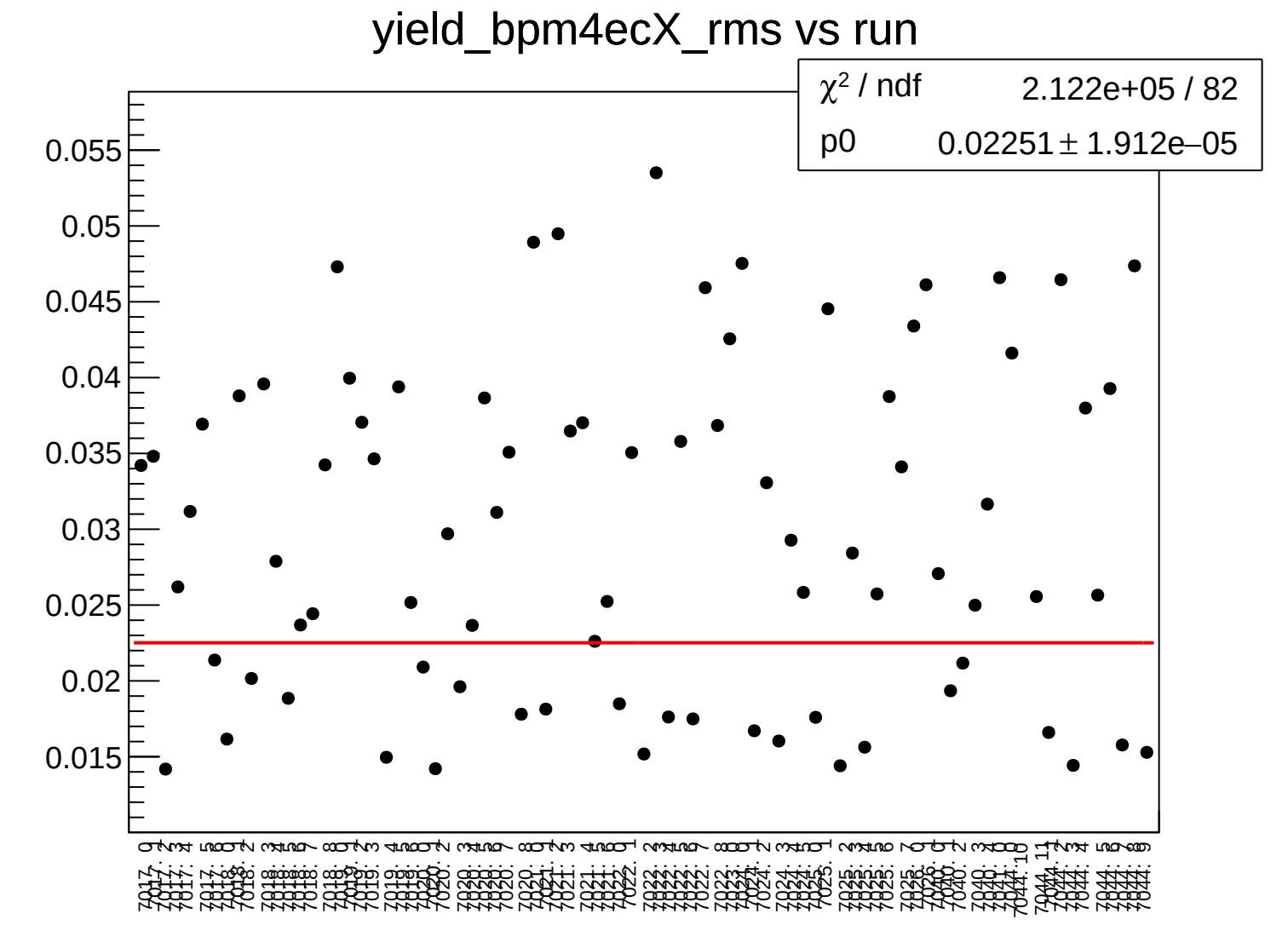

yield_bpm4acY_mean vs run
χ² / ndf 1.522e+05 / 82
p0 0.7493 ± 1.4e−05
0.76
0.755
0.75
0.745
0.74
0.735
pull
Entries 83
Mean −363.1
Std Dev 409.6
100
50
0
−50
−100

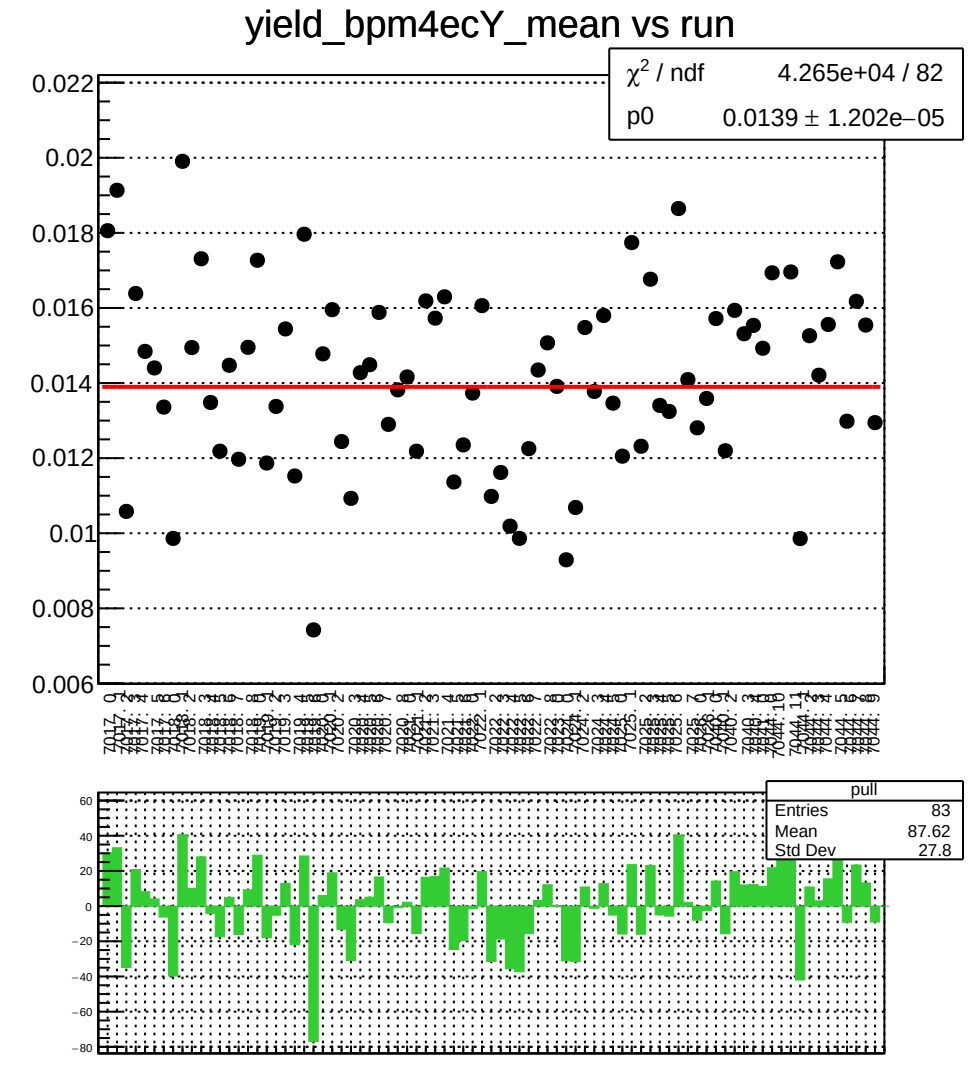

pull1D
Entries 83
Mean −1.24
Std Dev 3.599
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

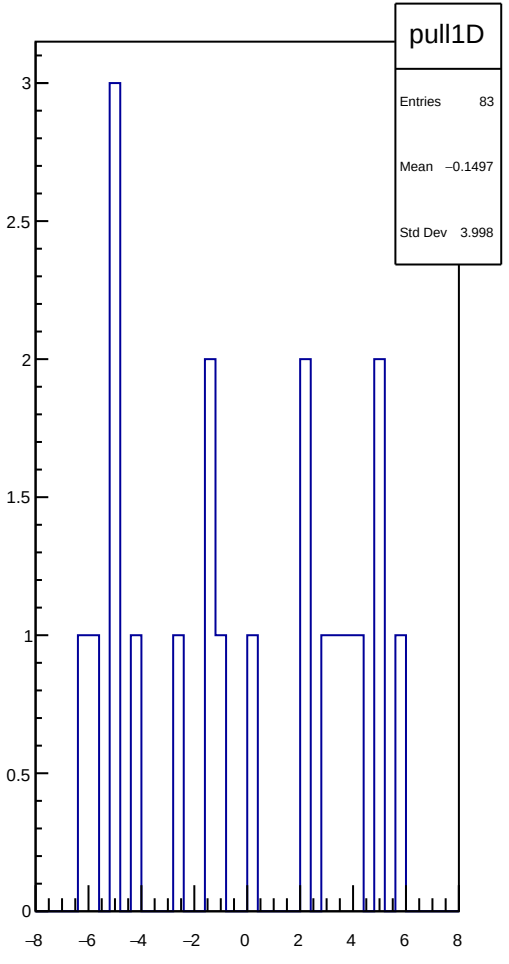

yield_bpm4acY_rms vs run
χ² / ndf 1.315e+04 / 82
p0 0.01247 ± 9.903e–06
0.016
0.015
0.014
0.013
0.012
0.011

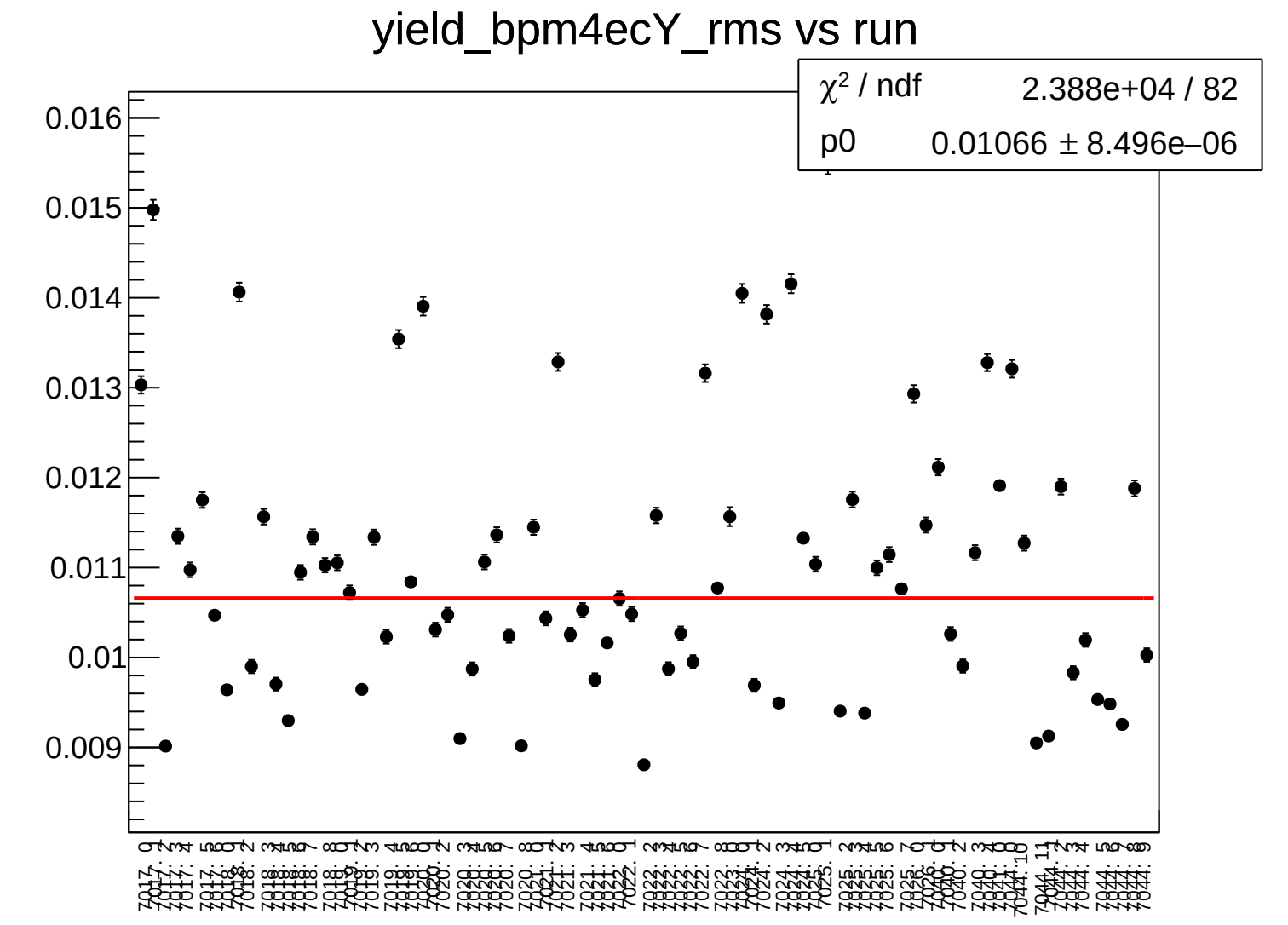

yield_bpm4ecX_mean vs run
χ² / ndf 1.781e+05 / 82
p0 0.005979 ± 2.704e−05
pull
Entries 83
Mean 37.12
Std Dev 11.6

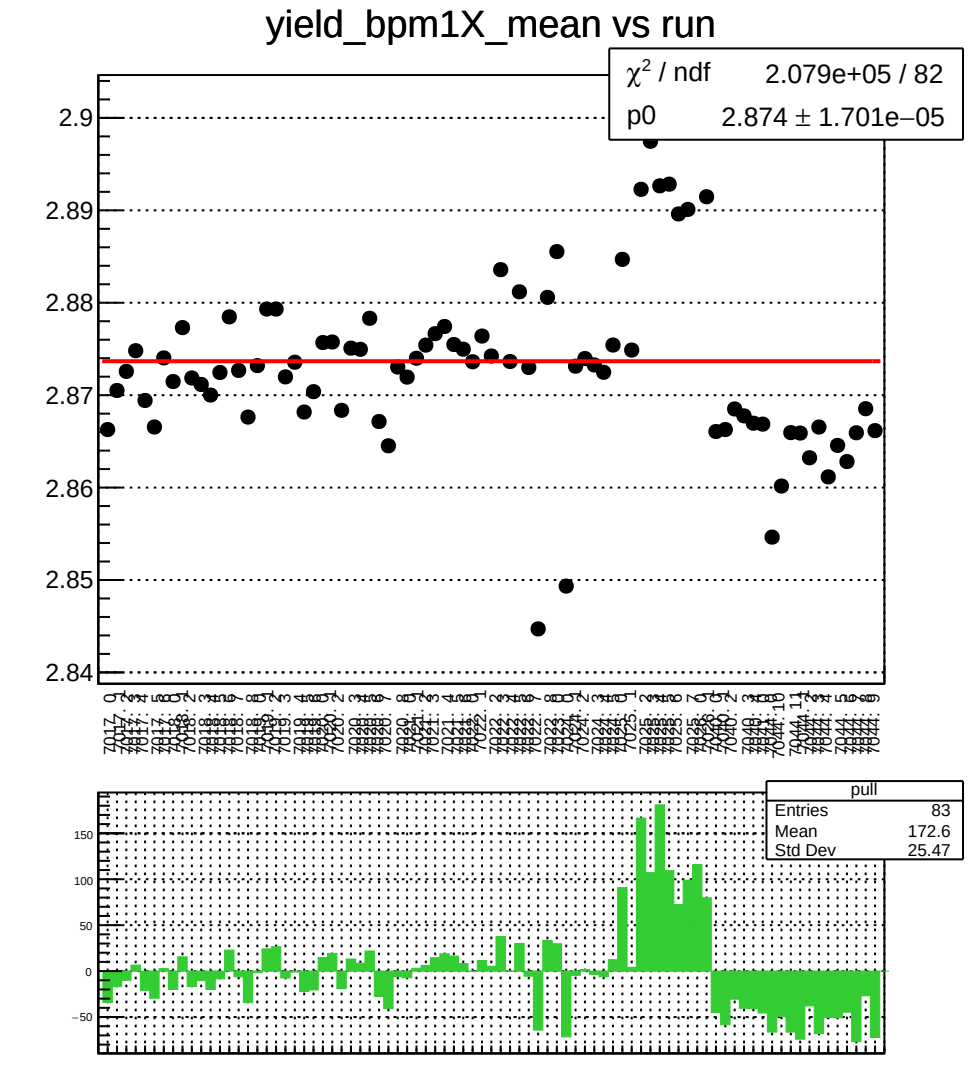

pull1D
Entries 83
Mean −1.362
Std Dev 4.815

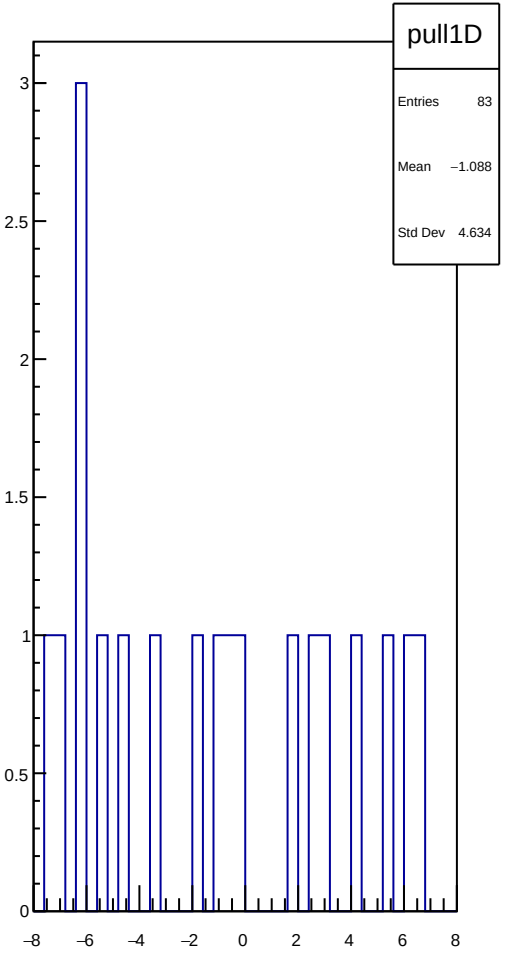

yield_bpm4ecX_rms vs run
χ² / ndf 2.122e+05 / 82
p0 0.02251 ± 1.912e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

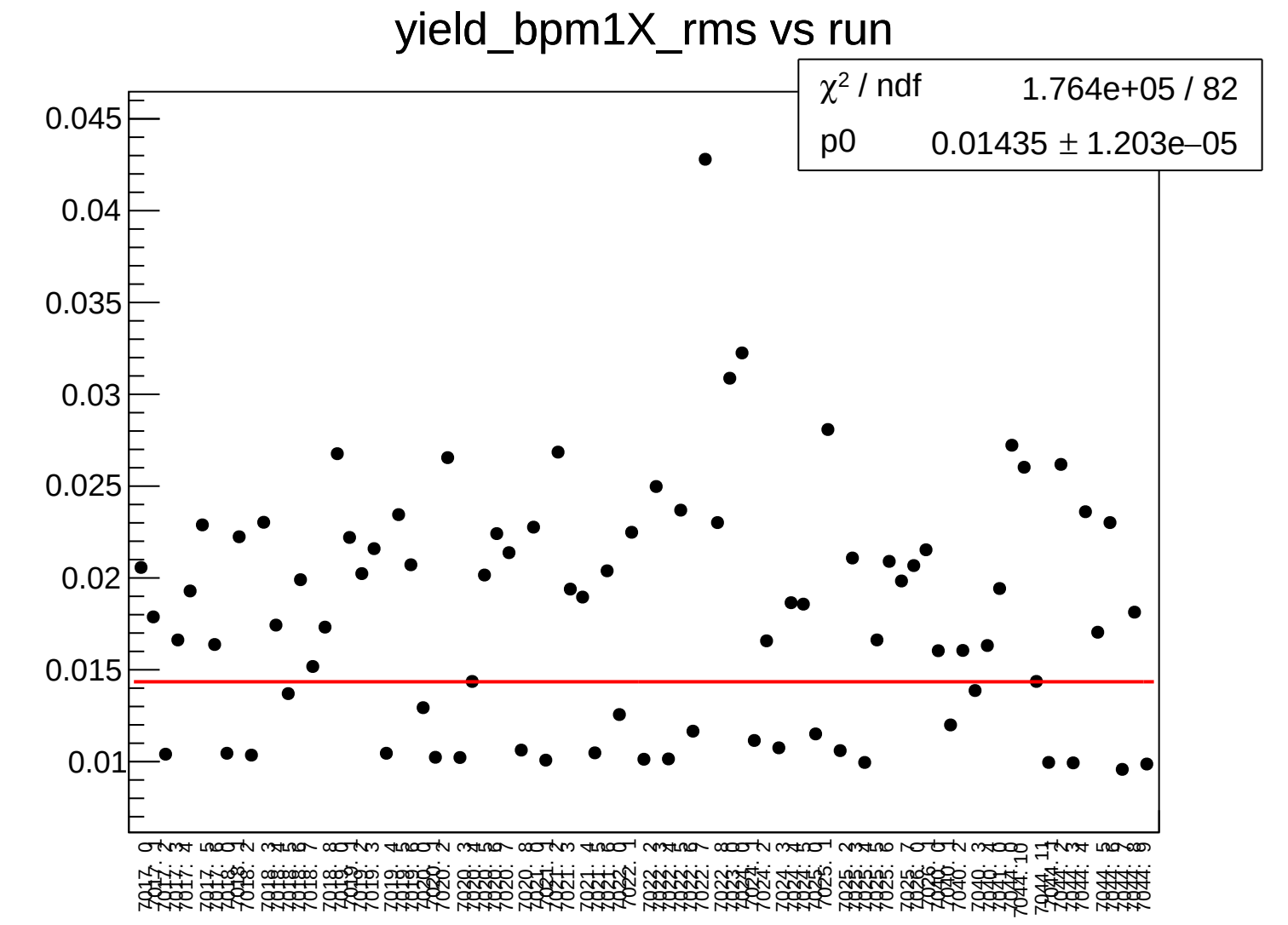

yield_bpm4ecY_mean vs run
χ² / ndf 4.265e+04 / 82
p0 0.0139 ± 1.202e−05
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
pull
Entries 83
Mean 87.62
Std Dev 27.8
60
40
20
0
−20
−40
−60
−80

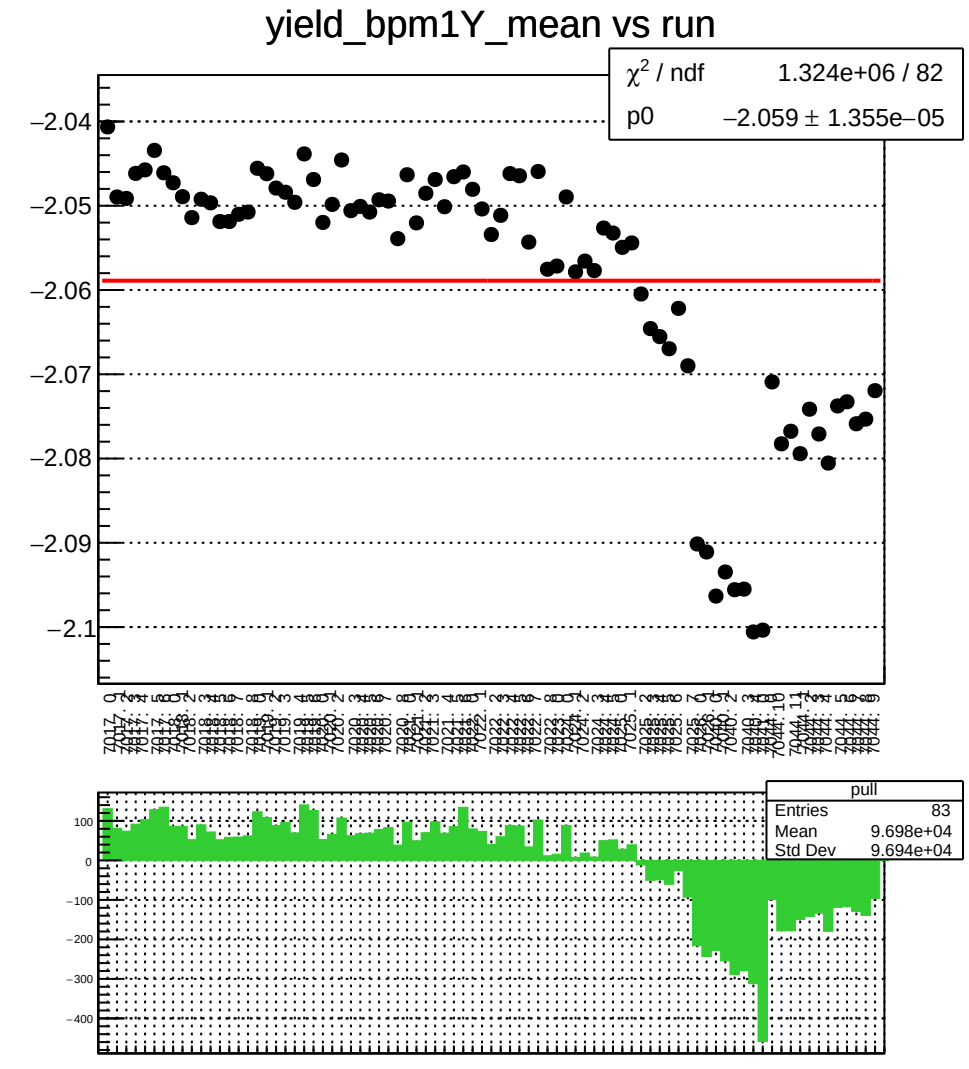

pull1D
Entries 83
Mean −0.1497
Std Dev 3.998
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

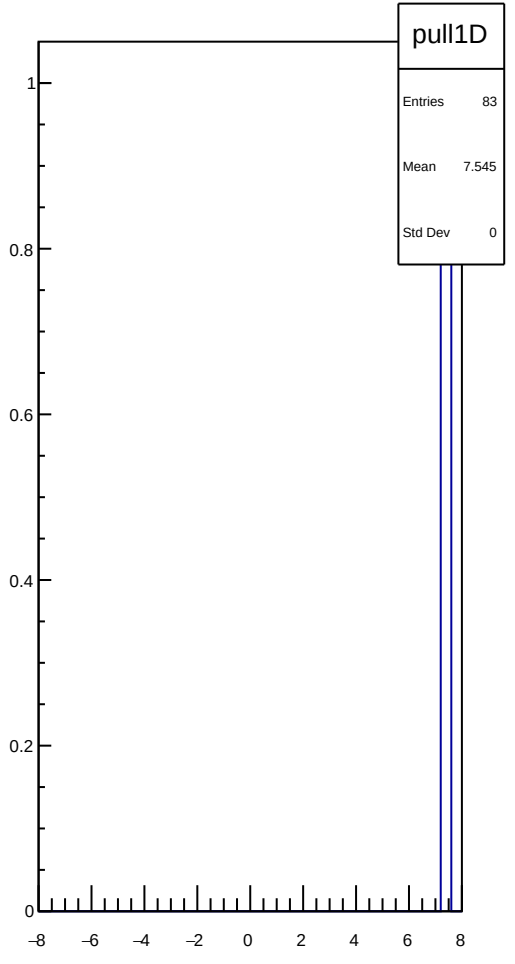

yield_bpm4ecY_rms vs run
χ² / ndf 2.388e+04 / 82
p0 0.01066 ± 8.496e–06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009

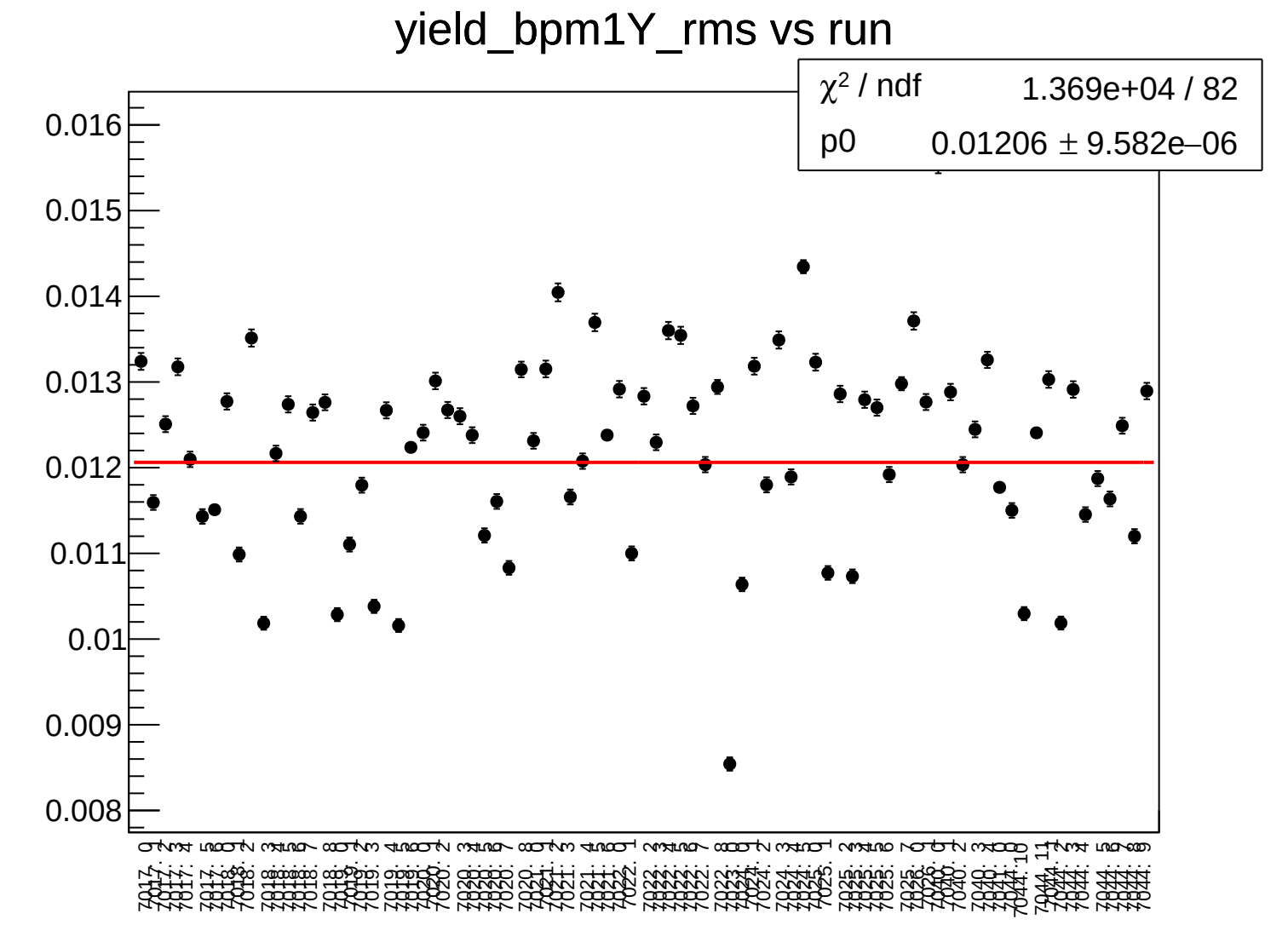

yield_bpm1X_mean vs run
χ² / ndf 2.079e+05 / 82
p0 2.874 ± 1.701e−05
2.9
2.89
2.88
2.87
2.86
2.85
2.84
pull
Entries 83
Mean 172.6
Std Dev 25.47
150
100
50
0
−50

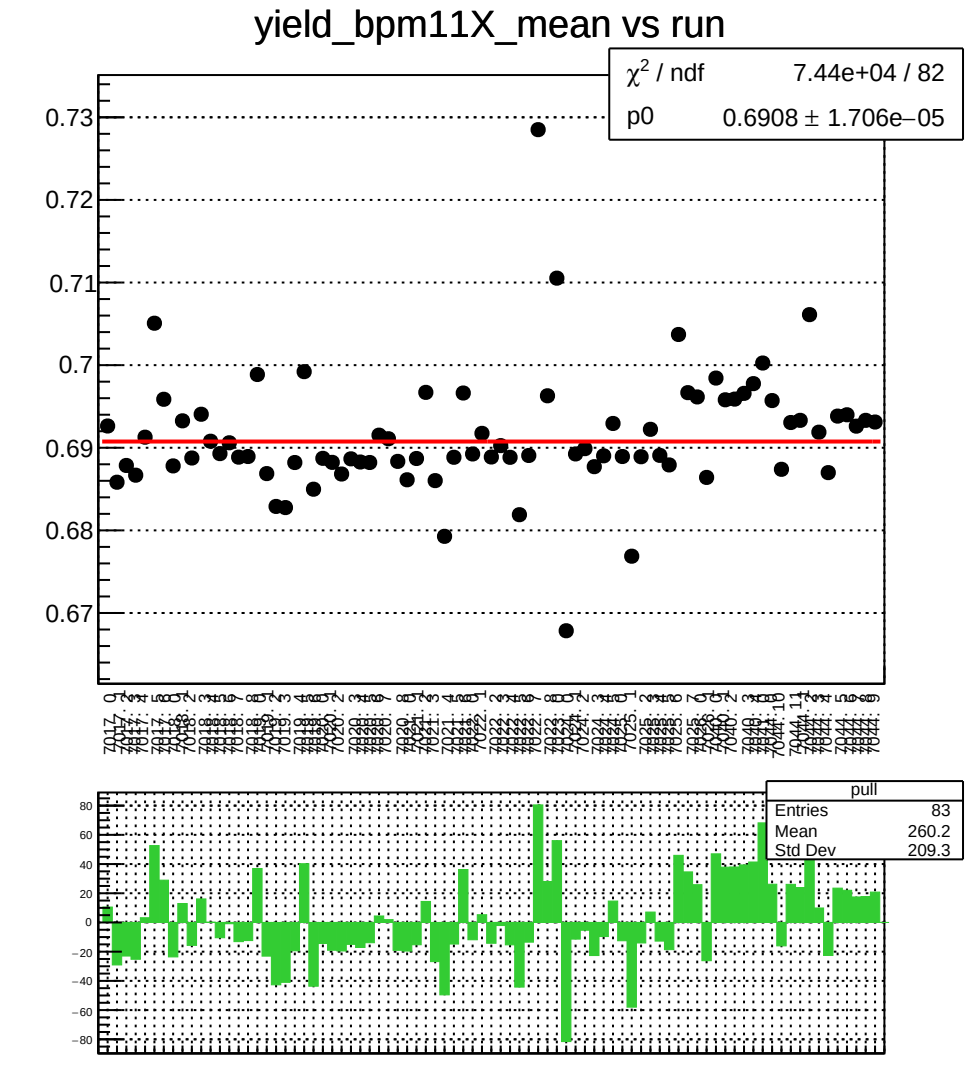

pull1D
Entries 83
Mean −1.088
Std Dev 4.634
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

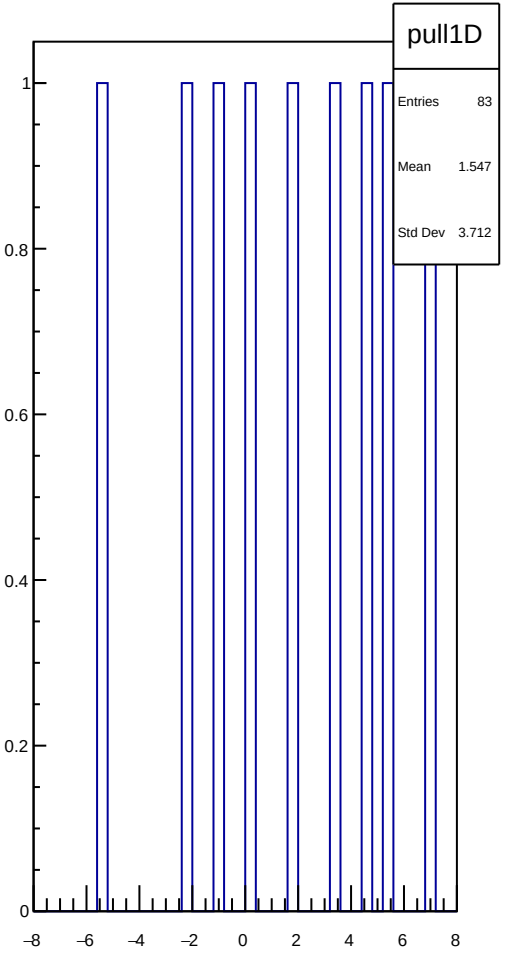

yield_bpm1X_rms vs run
χ² / ndf 1.764e+05 / 82
p0 0.01435 ± 1.203e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

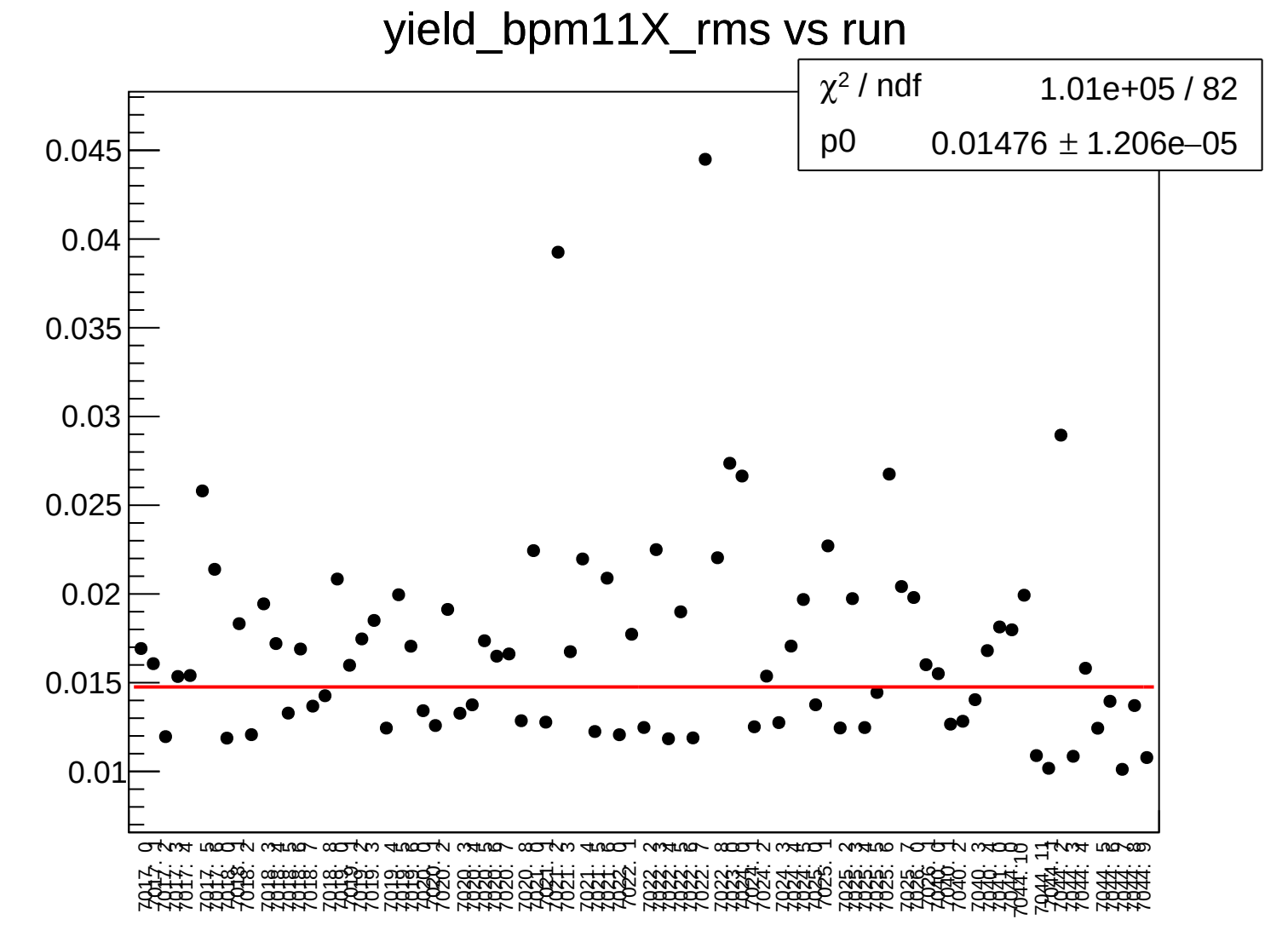

yield_bpm1Y_mean vs run
χ² / ndf 1.324e+06 / 82
p0 −2.059 ± 1.355e−05
−2.04
−2.05
−2.06
−2.07
−2.08
−2.09
−2.1
pull
Entries 83
Mean 9.698e+04
Std Dev 9.694e+04
100
0
−100
−200
−300
−400

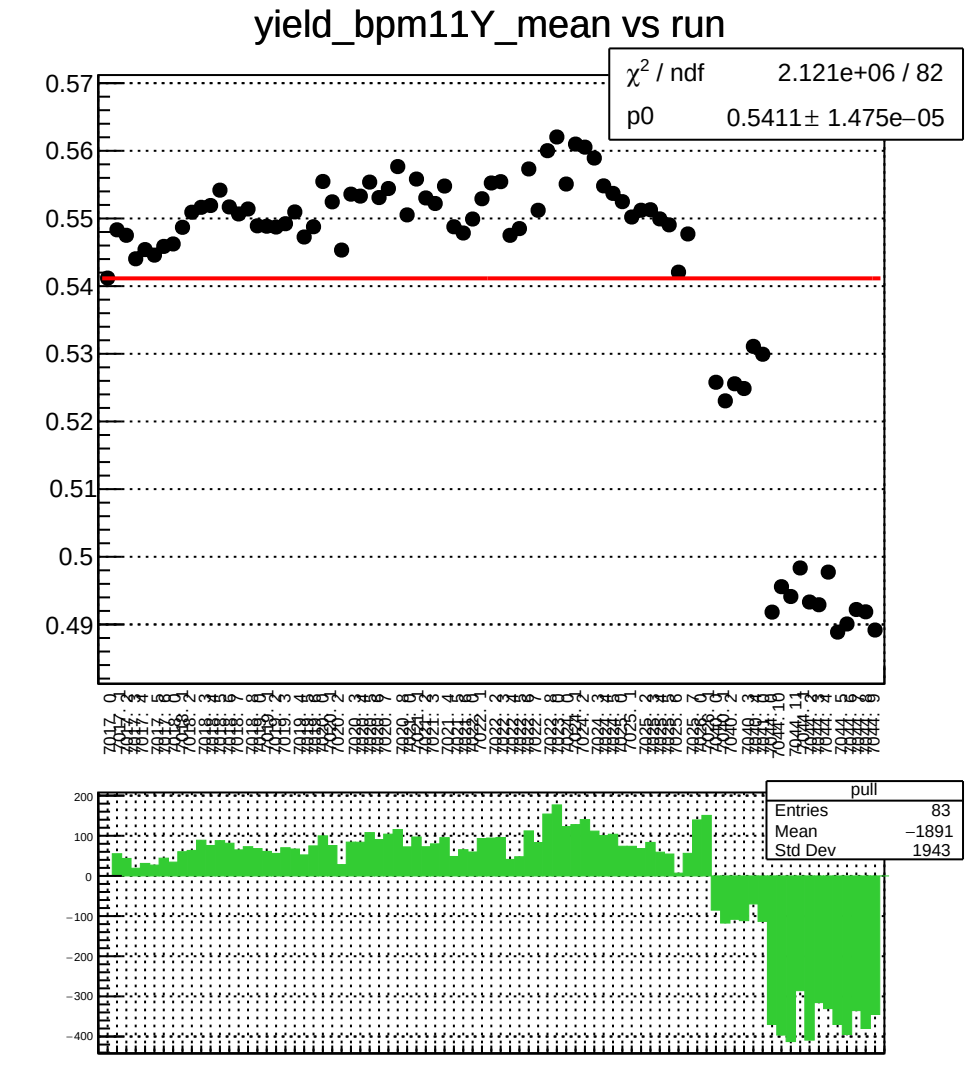

pull1D
Entries 83
Mean 7.545
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

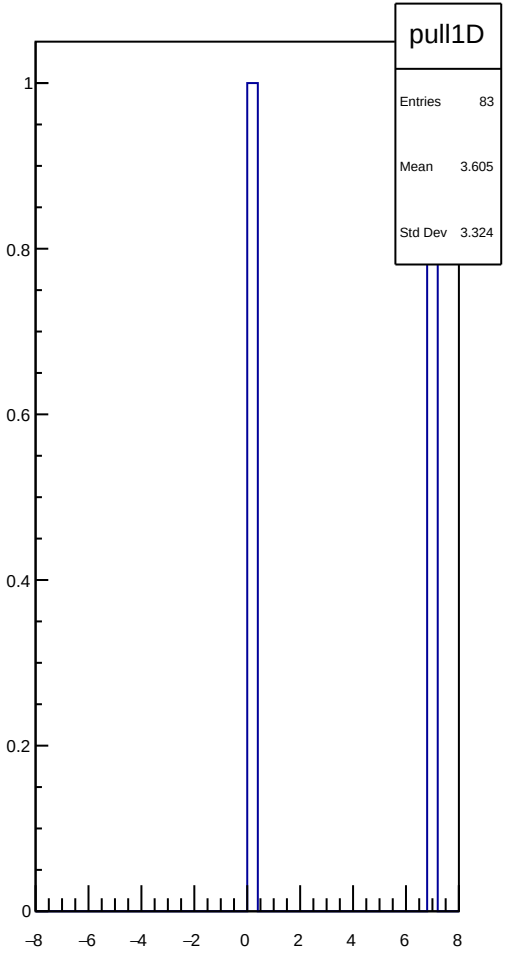

yield_bpm1Y_rms vs run
χ² / ndf 1.369e+04 / 82
p0 0.01206 ± 9.582e–06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

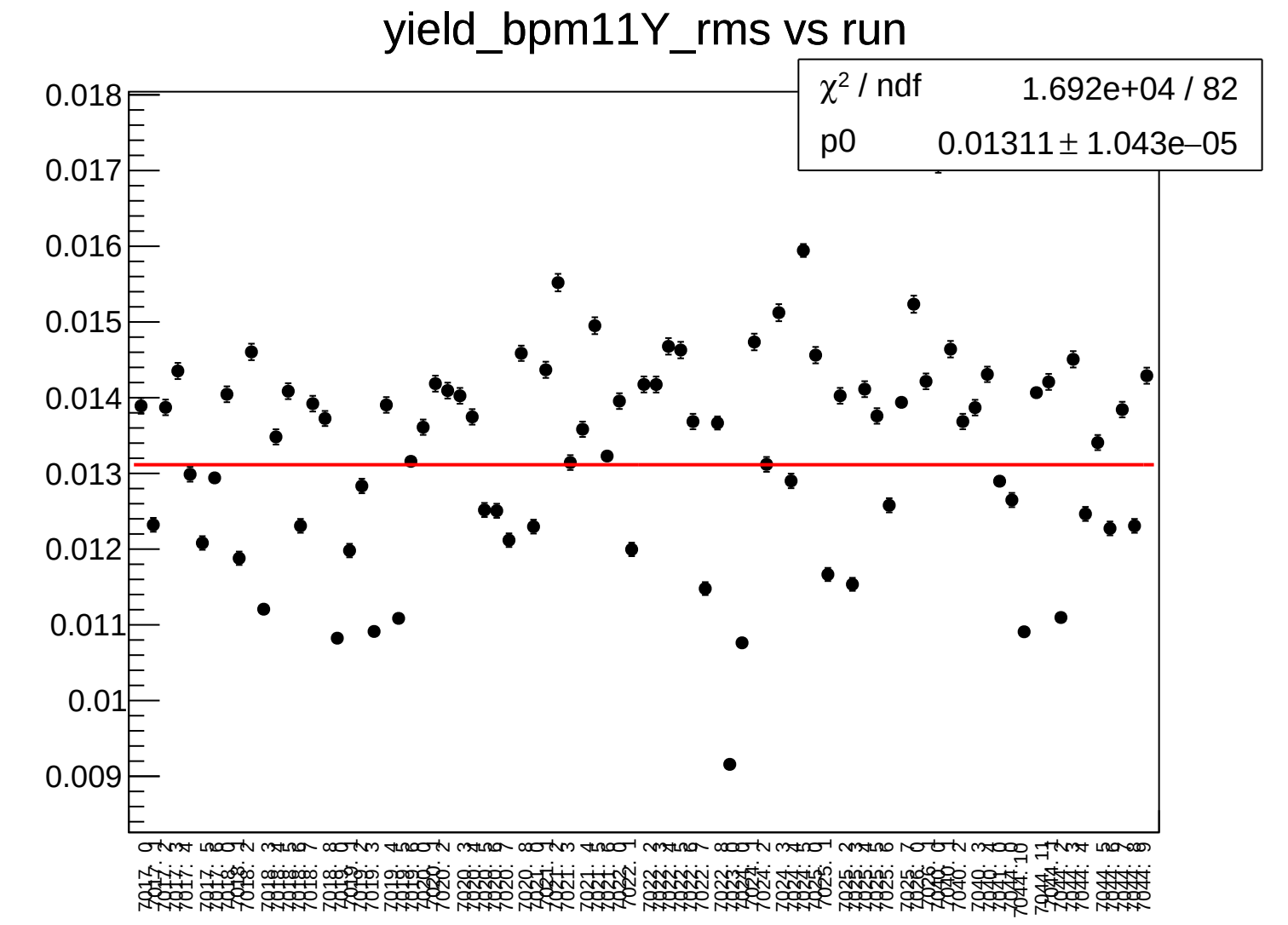

yield_bpm11X_mean vs run
χ² / ndf 7.44e+04 / 82
p0 0.6908 ± 1.706e−05
0.73
0.72
0.71
0.7
0.69
0.68
0.67
pull
Entries 83
Mean 260.2
Std Dev 209.3
80
60
40
20
0
−20
−40
−60
−80

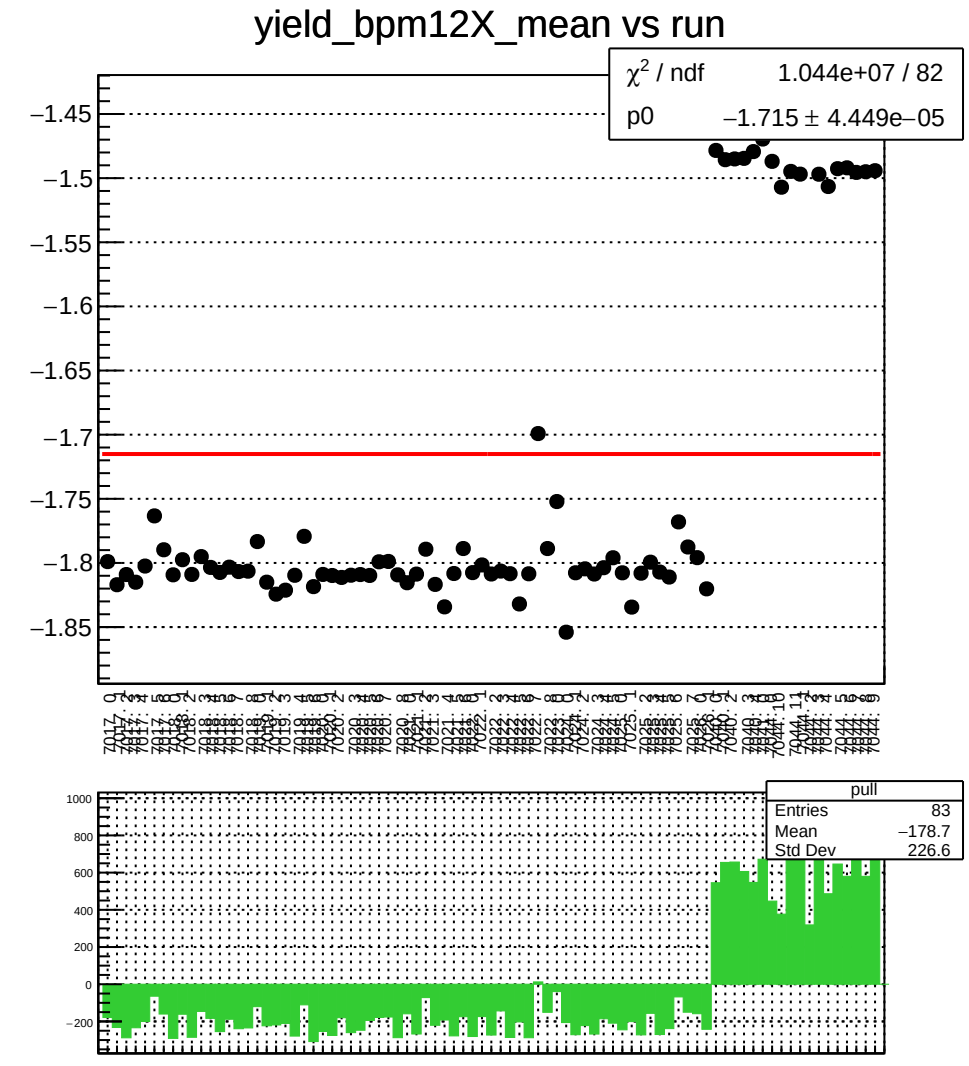

pull1D
Entries 83
Mean 1.547
Std Dev 3.712
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

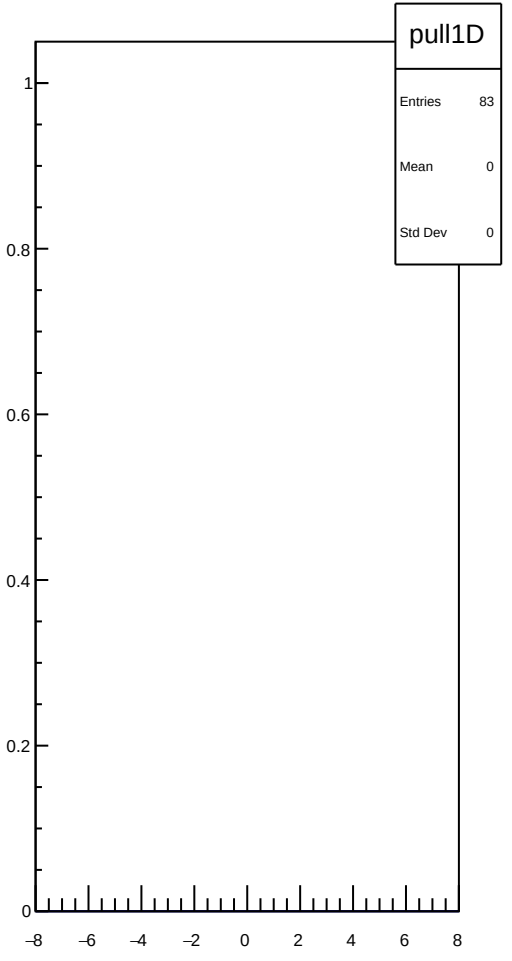

yield_bpm11X_rms vs run
χ² / ndf 1.01e+05 / 82
p0 0.01476 ± 1.206e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

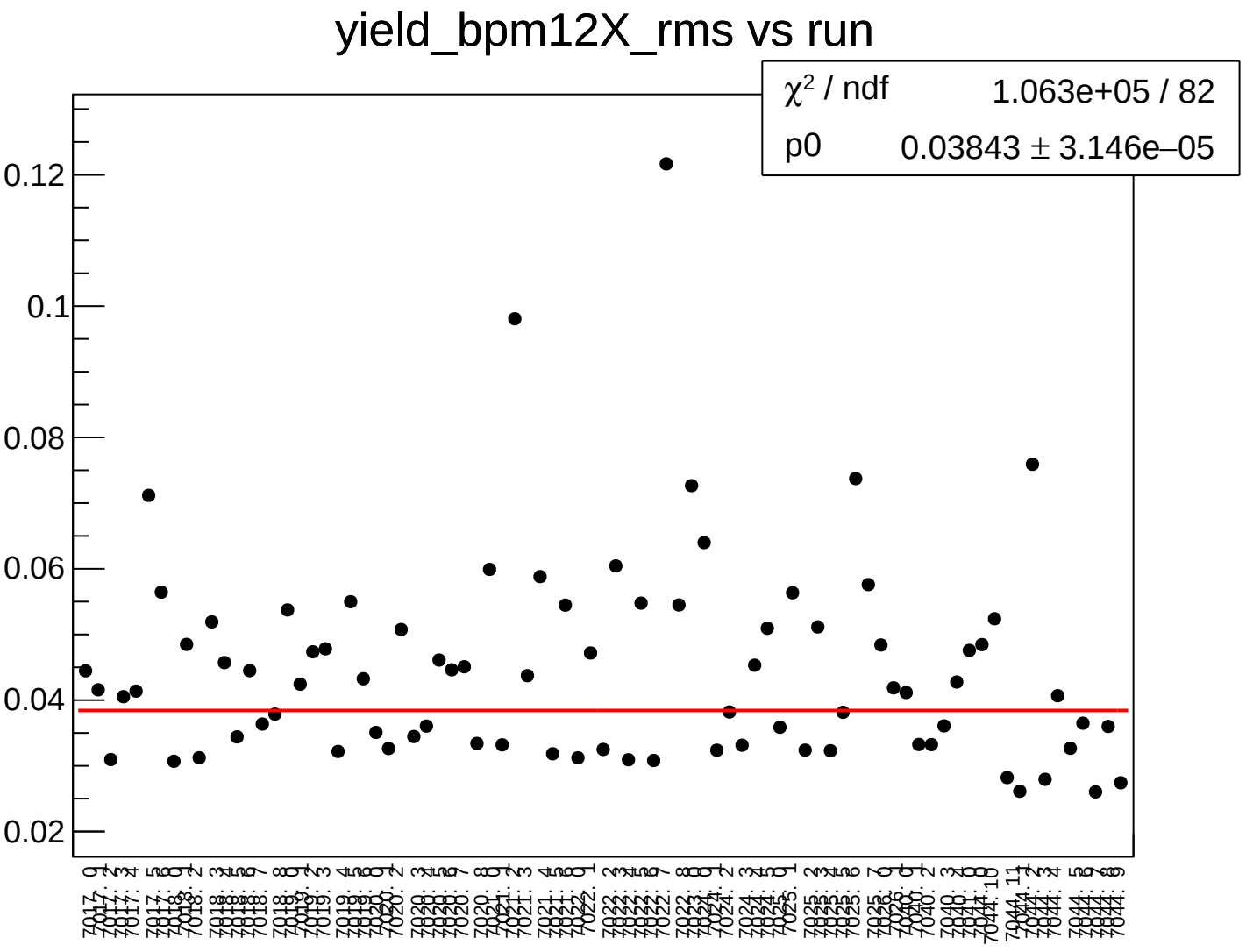

yield_bpm11Y_mean vs run
χ² / ndf 2.121e+06 / 82
p0 0.5411 ± 1.475e−05
0.57
0.56
0.55
0.54
0.53
0.52
0.51
0.5
0.49
pull
Entries 83
Mean −1891
Std Dev 1943
200
100
0
−100
−200
−300
−400

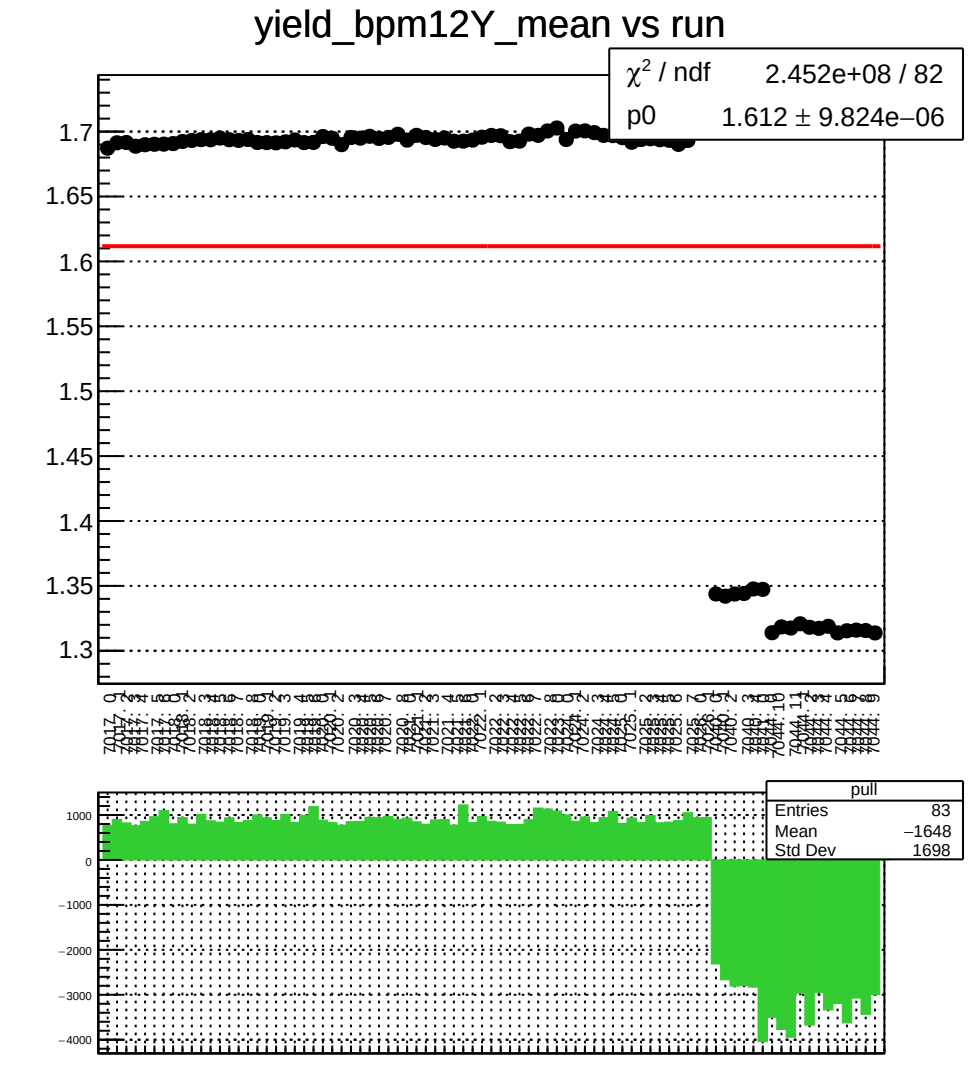

pull1D
Entries 83
Mean 3.605
Std Dev 3.324
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

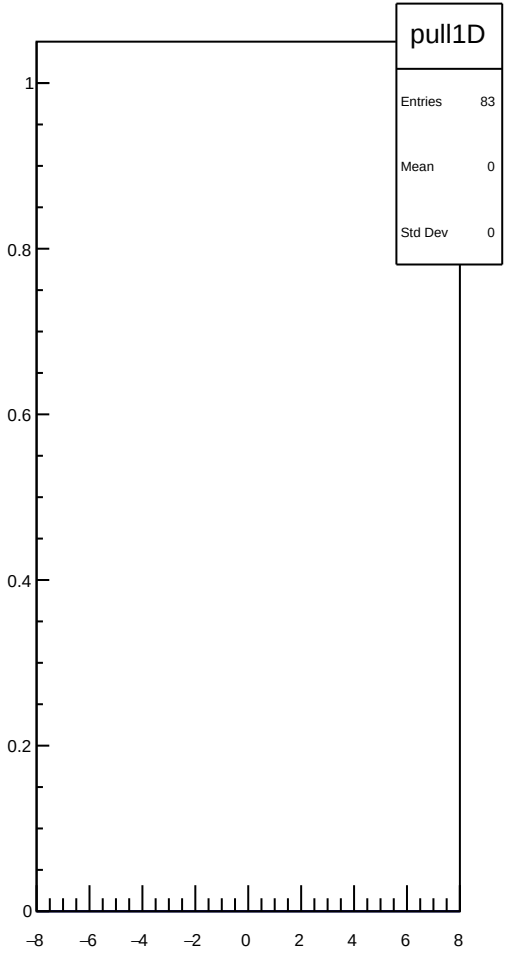

yield_bpm11Y_rms vs run
χ² / ndf 1.692e+04 / 82
p0 0.01311 ± 1.043e−05
0.018
0.017
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009

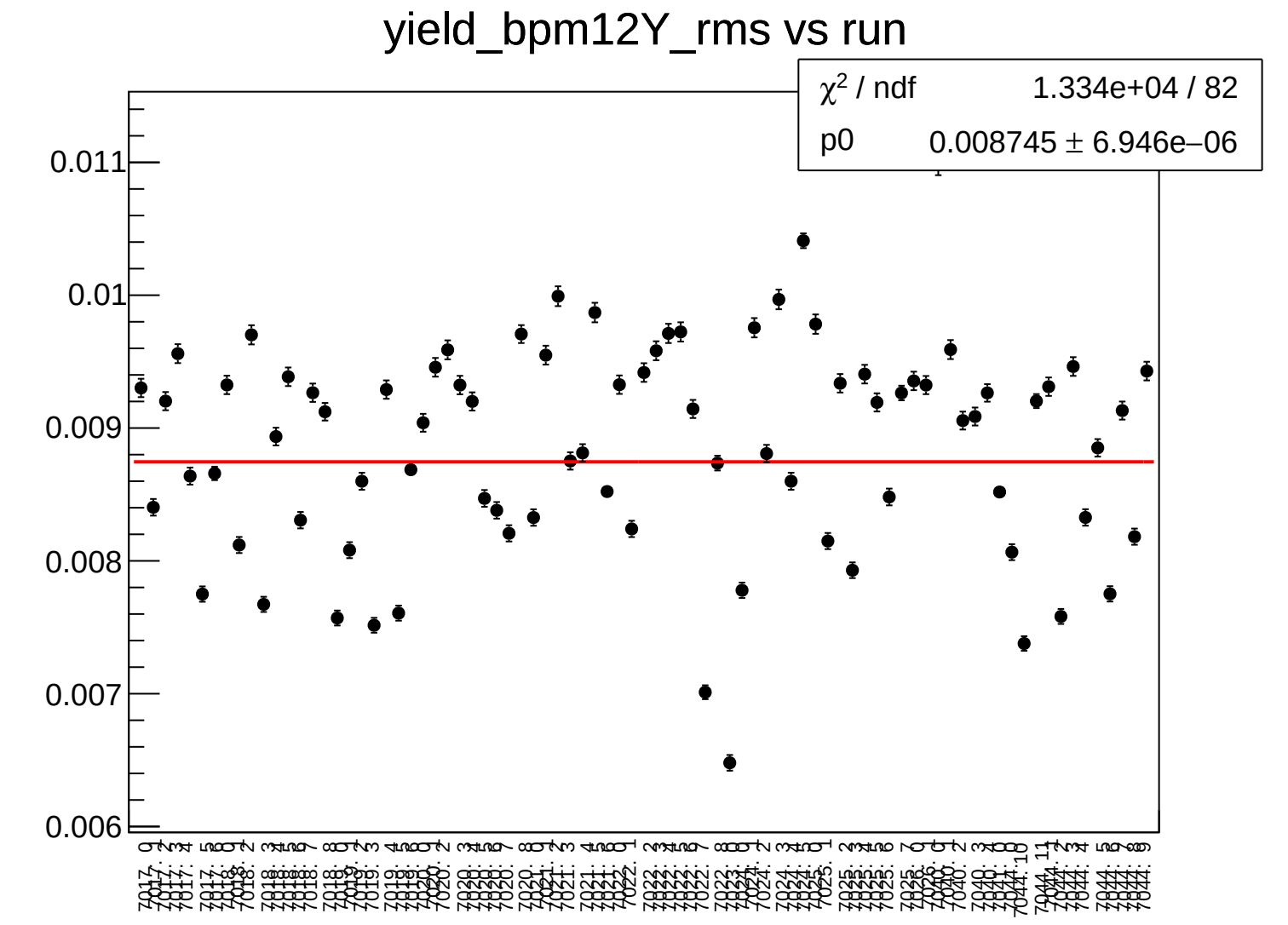

yield_bpm12X_mean vs run
χ² / ndf 1.044e+07 / 82
p0 −1.715 ± 4.449e−05
−1.45
−1.5
−1.55
−1.6
−1.65
−1.7
−1.75
−1.8
−1.85
pull
Entries 83
Mean −178.7
Std Dev 226.6
1000
800
600
400
200
0
−200

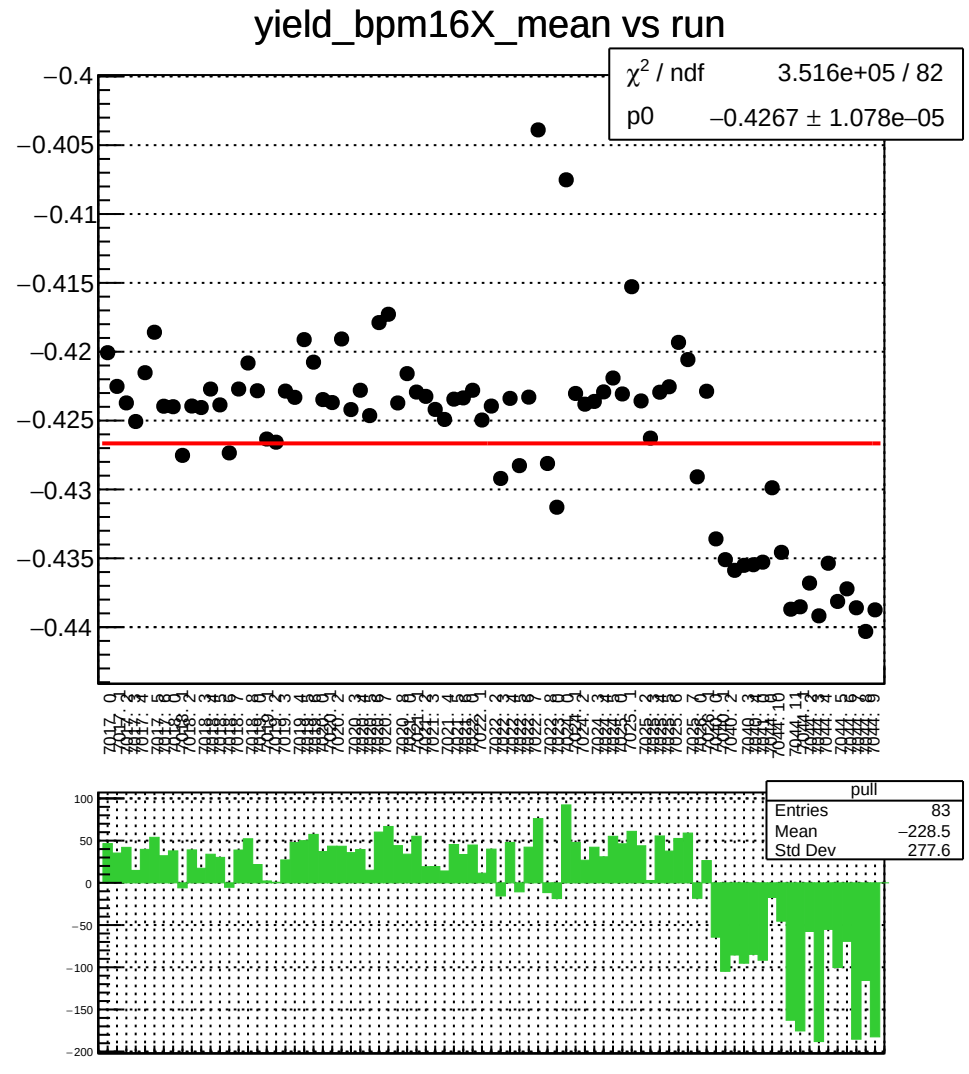

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

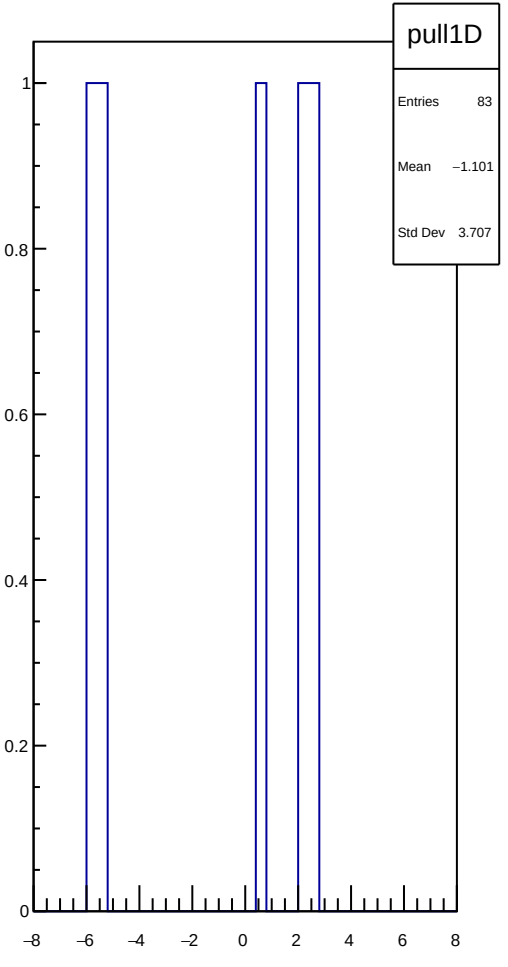

yield_bpm12X_rms vs run
χ² / ndf 1.063e+05 / 82
p0 0.03843 ± 3.146e−05
0.12
0.1
0.08
0.06
0.04
0.02

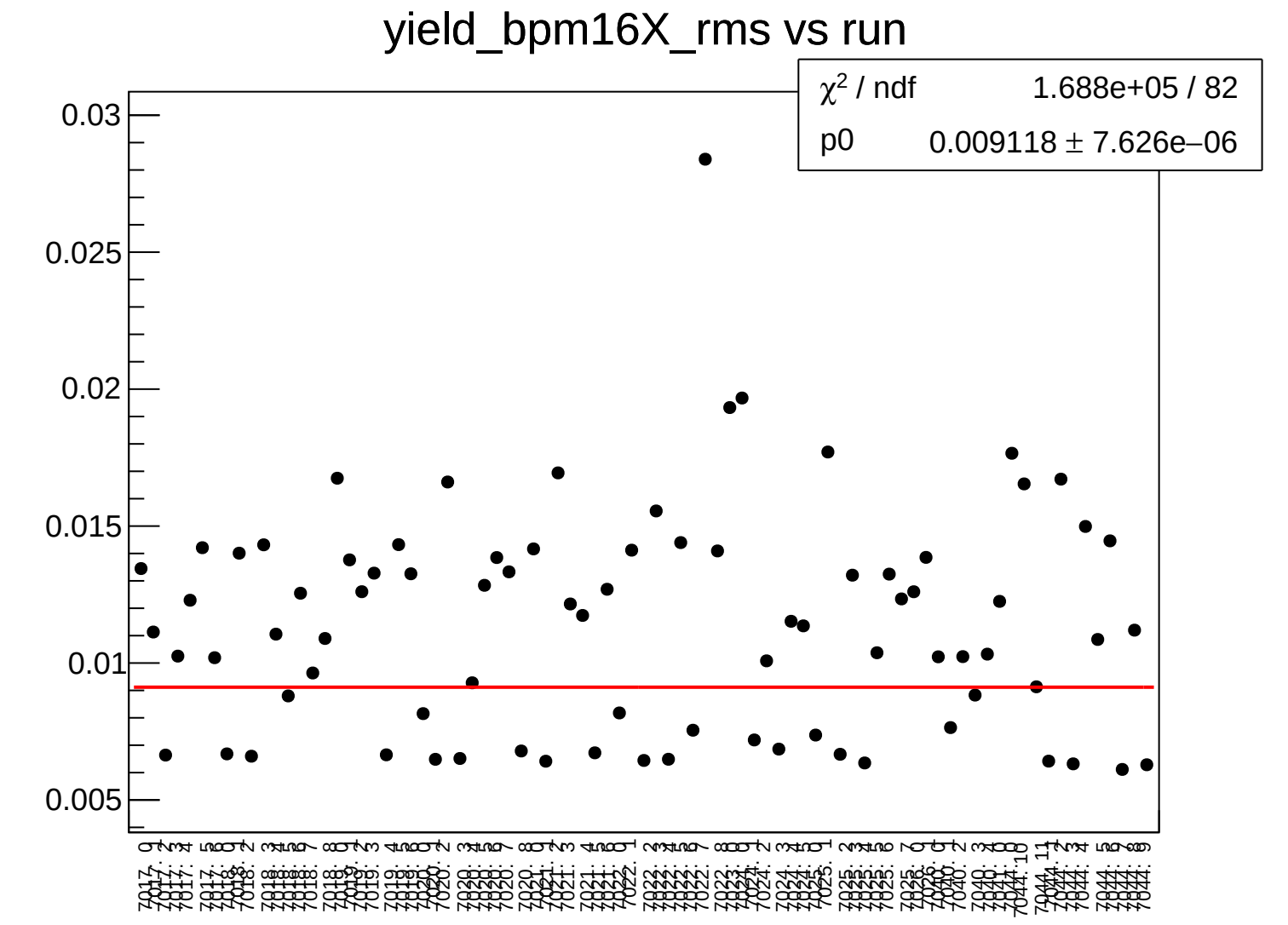

yield_bpm12Y_mean vs run
χ² / ndf 2.452e+08 / 82
p0 1.612 ± 9.824e−06
1.7
1.65
1.6
1.55
1.5
1.45
1.4
1.35
1.3
pull
Entries 83
Mean −1648
Std Dev 1698
1000
0
−1000
−2000
−3000
−4000

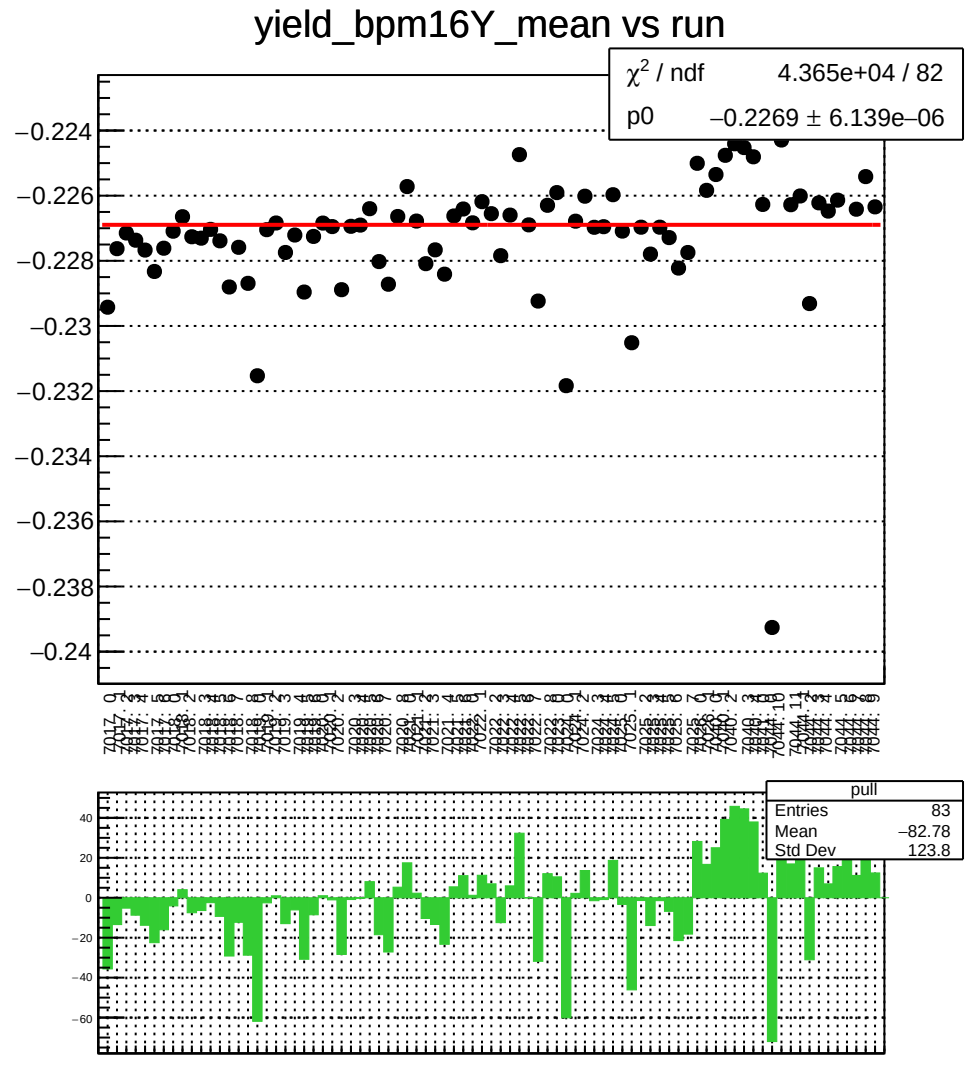

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

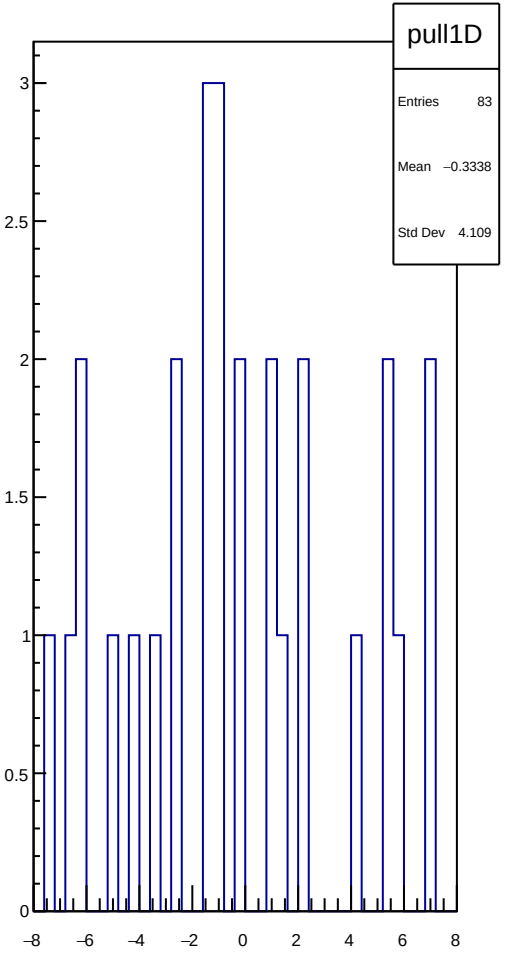

yield_bpm12Y_rms vs run
χ² / ndf 1.334e+04 / 82
p0 0.008745 ± 6.946e−06
0.011
0.01
0.009
0.008
0.007
0.006

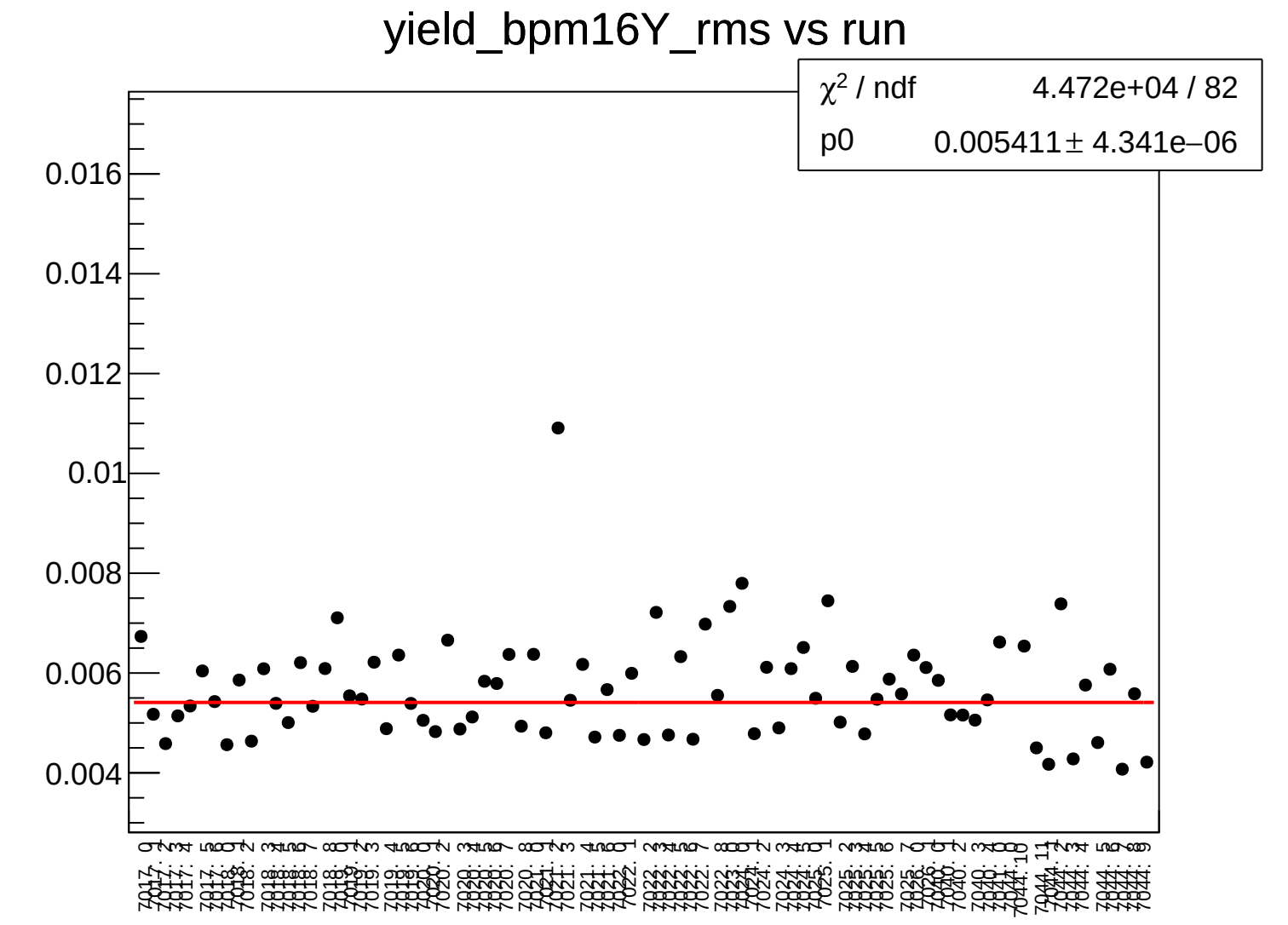

yield_bpm16X_mean vs run
χ² / ndf 3.516e+05 / 82
p0 −0.4267 ± 1.078e−05
pull
Entries 83
Mean −228.5
Std Dev 277.6

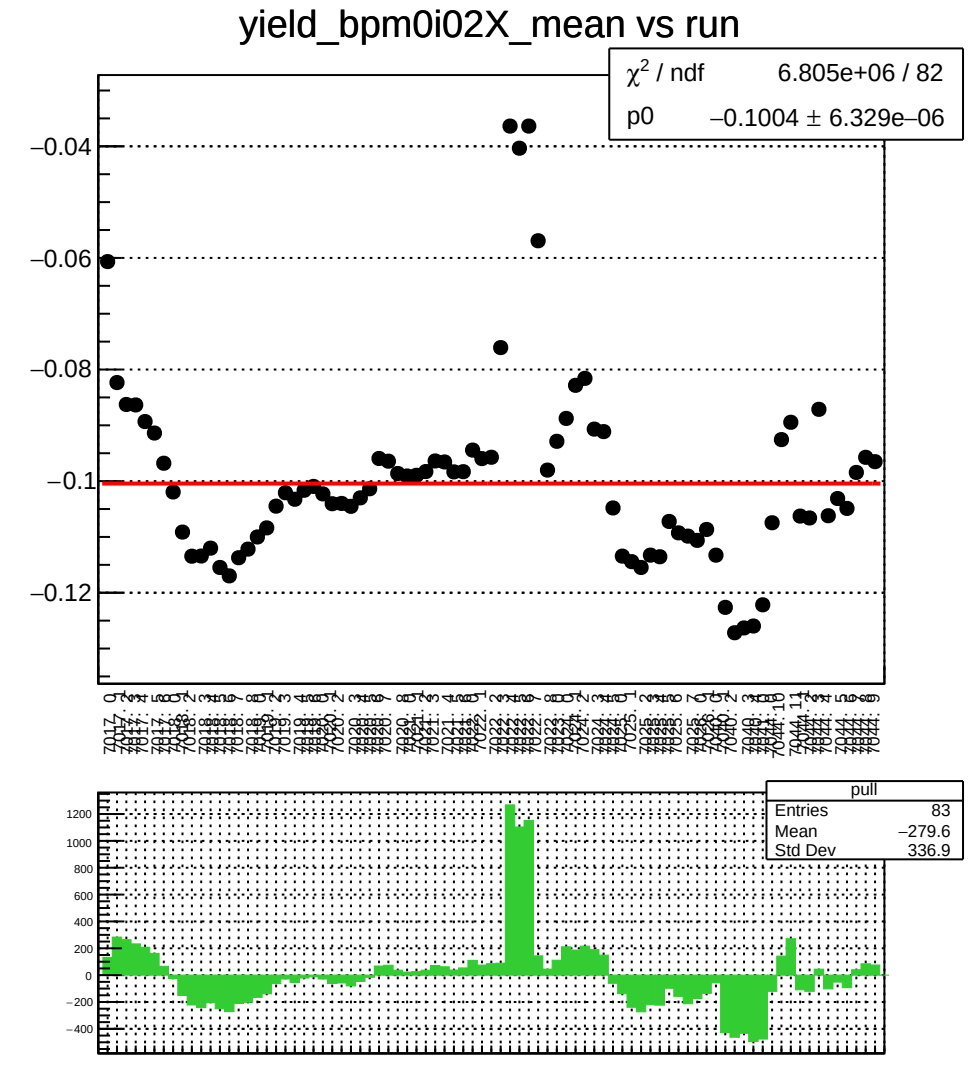

pull1D
Entries 83
Mean −1.101
Std Dev 3.707

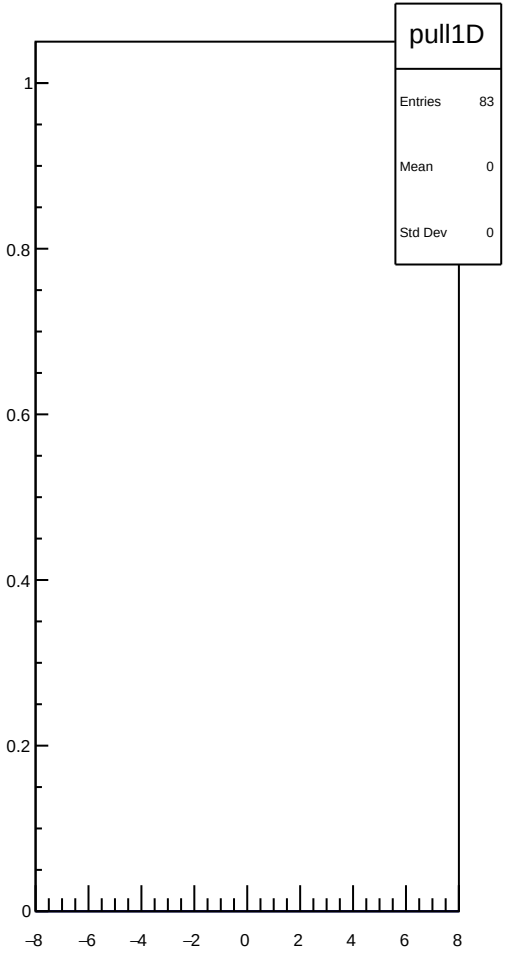

yield_bpm16X_rms vs run
χ² / ndf 1.688e+05 / 82
p0 0.009118 ± 7.626e−06
0.03
0.025
0.02
0.015
0.01
0.005

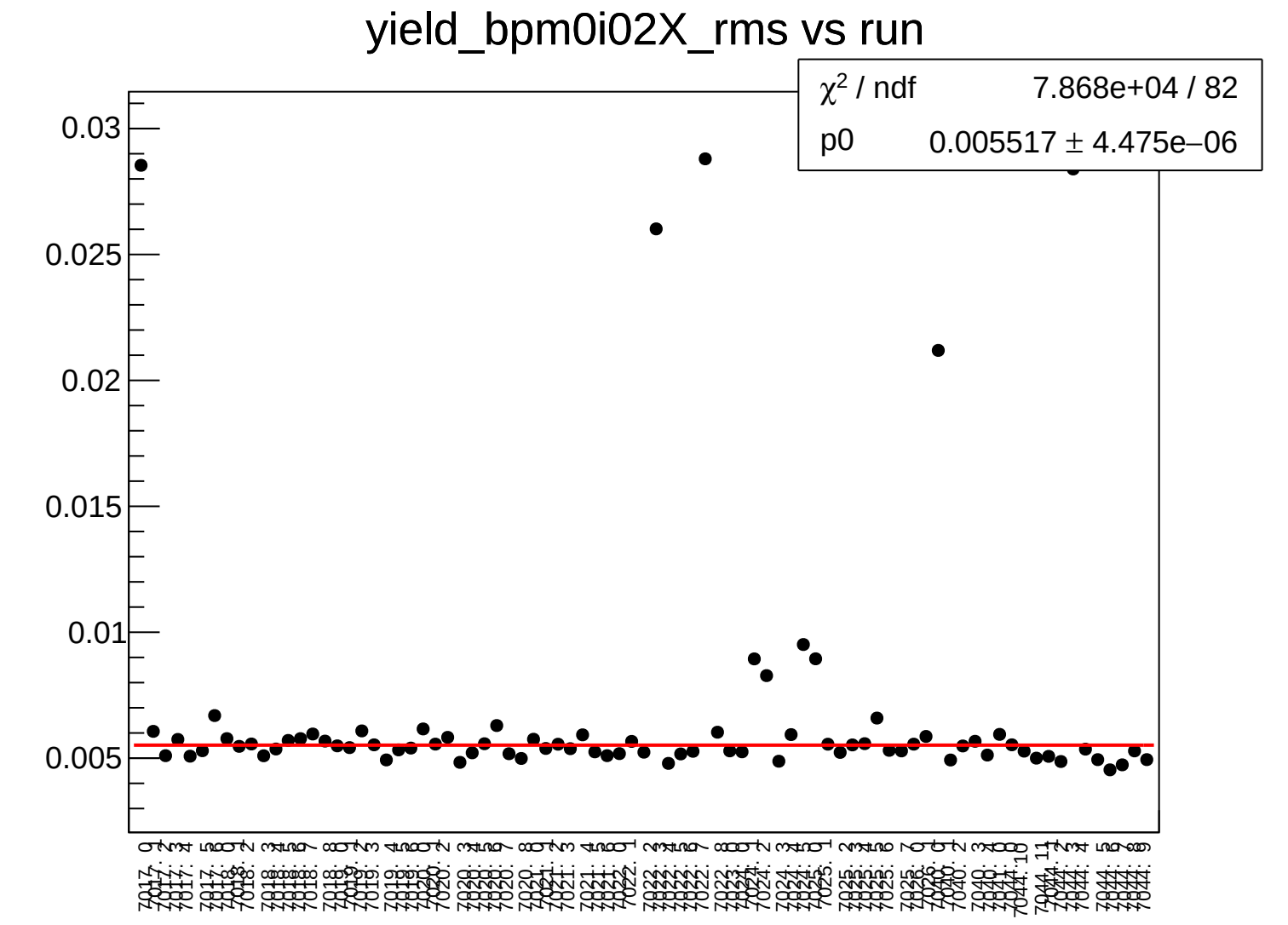

yield_bpm16Y_mean vs run
χ² / ndf 4.365e+04 / 82
p0 −0.2269 ± 6.139e−06
−0.224
−0.226
−0.228
−0.23
−0.232
−0.234
−0.236
−0.238
−0.24
pull
Entries 83
Mean −82.78
Std Dev 123.8
40
20
0
−20
−40
−60

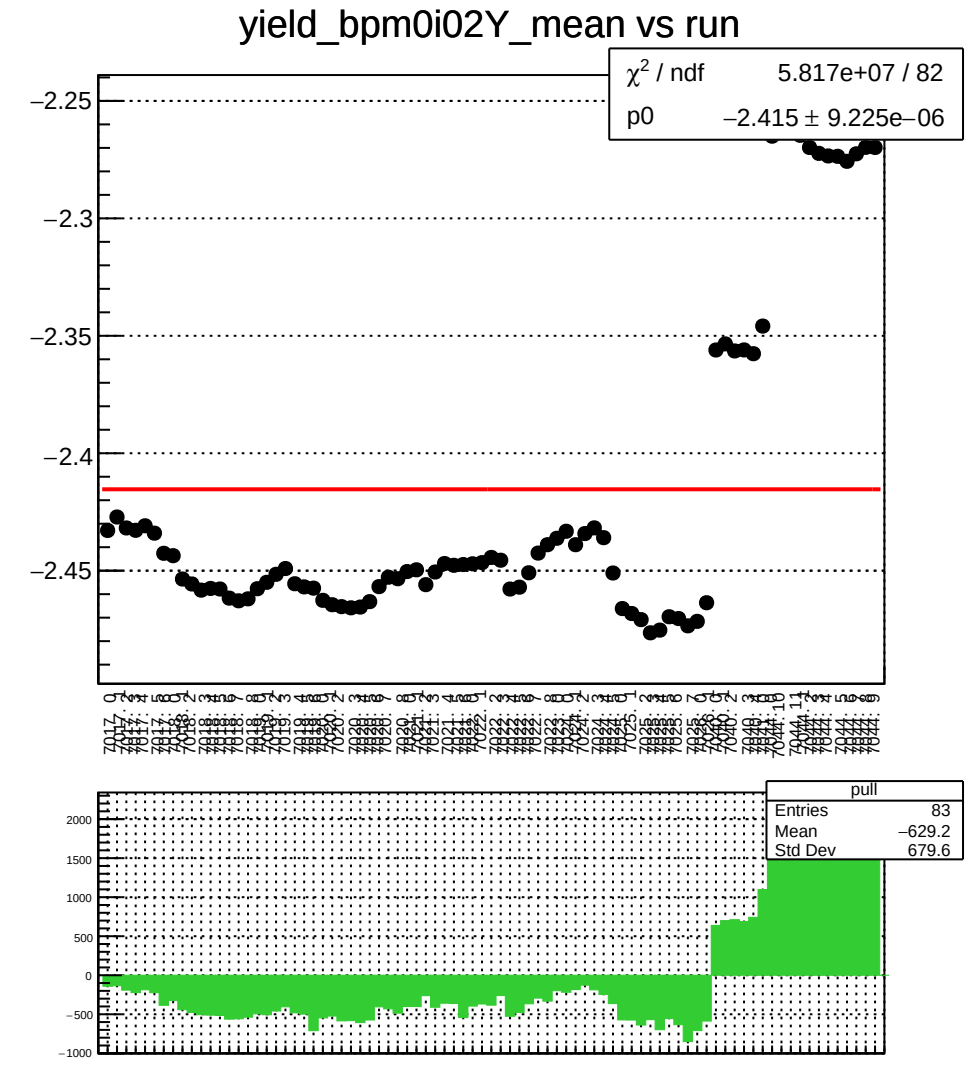

pull1D
Entries 83
Mean −0.3338
Std Dev 4.109
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

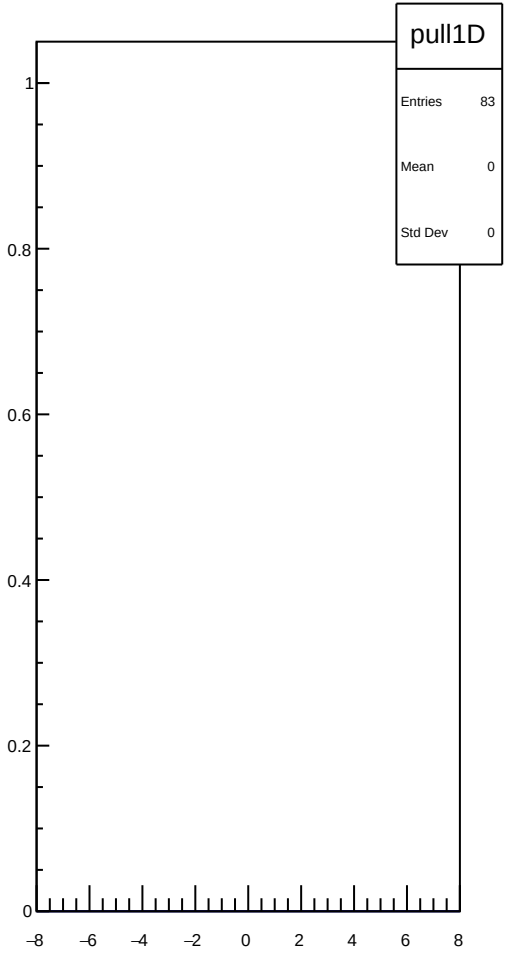

yield_bpm16Y_rms vs run
χ^2 / ndf 4.472e+04 / 82
p0 0.005411 ± 4.341e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004

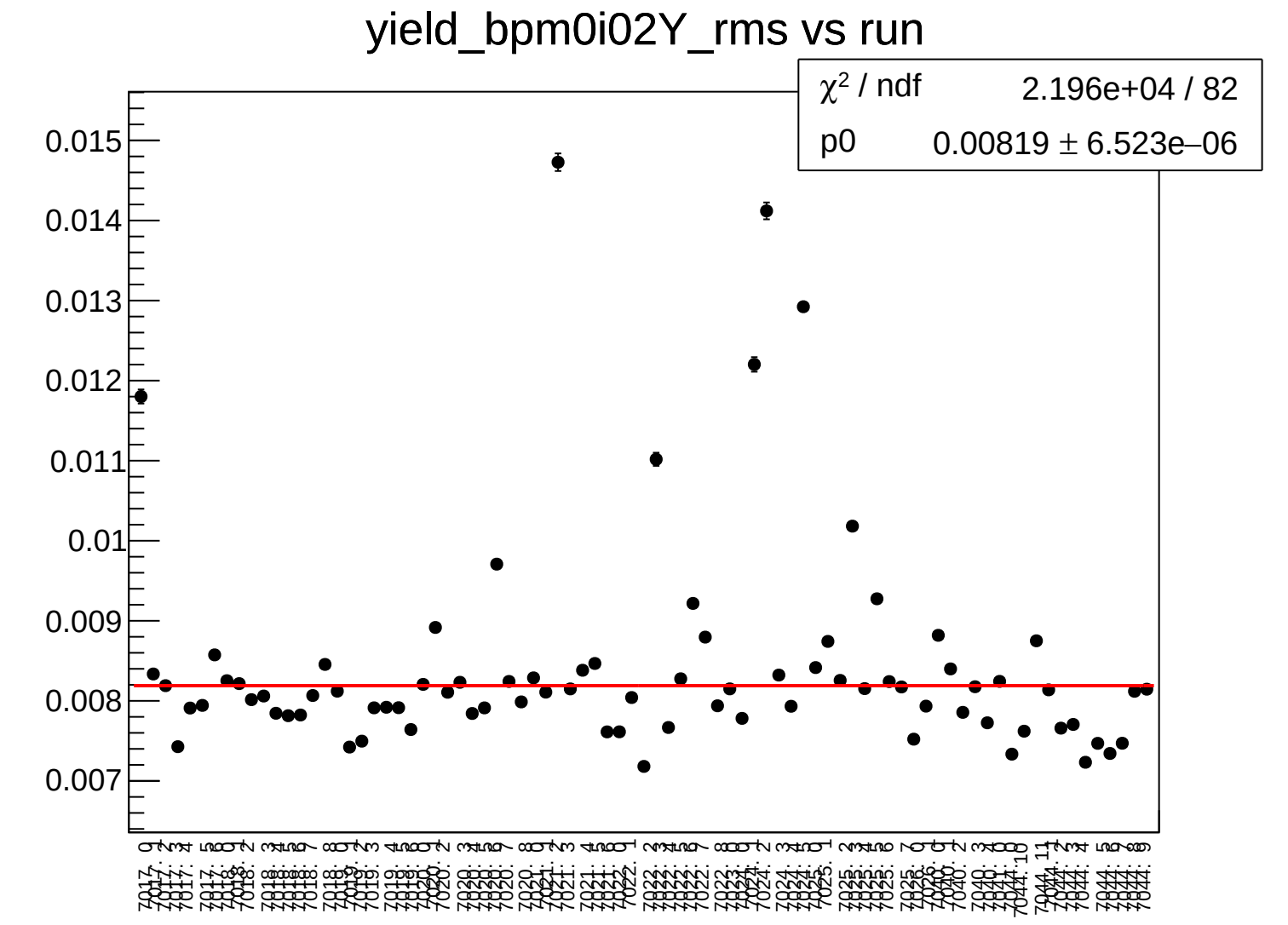

yield_bpm0i02X_mean vs run
χ² / ndf 6.805e+06 / 82
p0 −0.1004 ± 6.329e−06
−0.04
−0.06
−0.08
−0.1
−0.12
pull
Entries 83
Mean −279.6
Std Dev 336.9
1200
1000
800
600
400
200
0
−200
−400

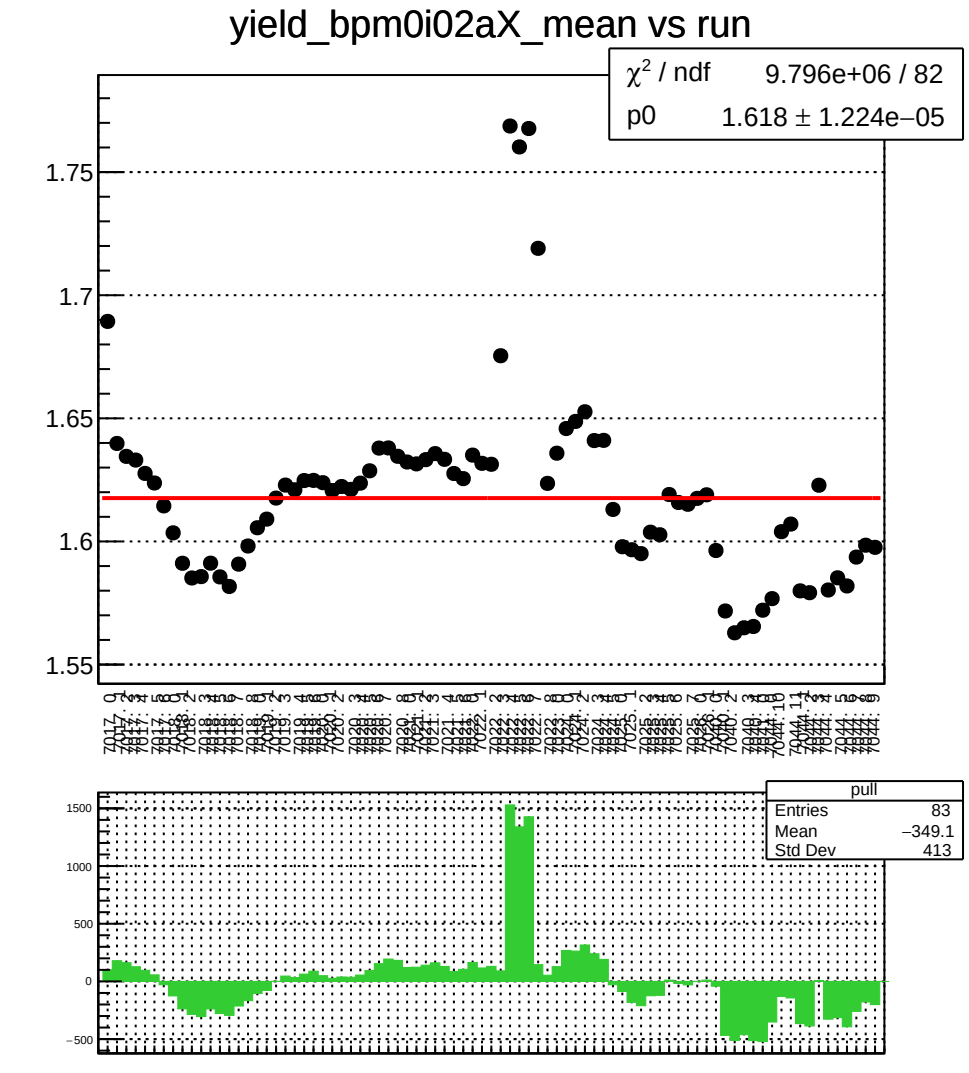

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

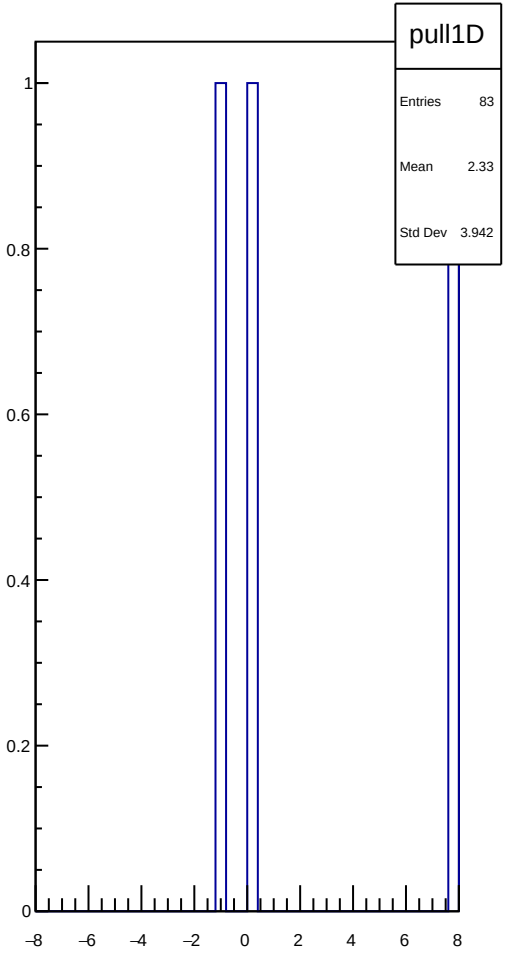

yield_bpm0i02X_rms vs run
χ² / ndf 7.868e+04 / 82
p0 0.005517 ± 4.475e−06
0.03
0.025
0.02
0.015
0.01
0.005

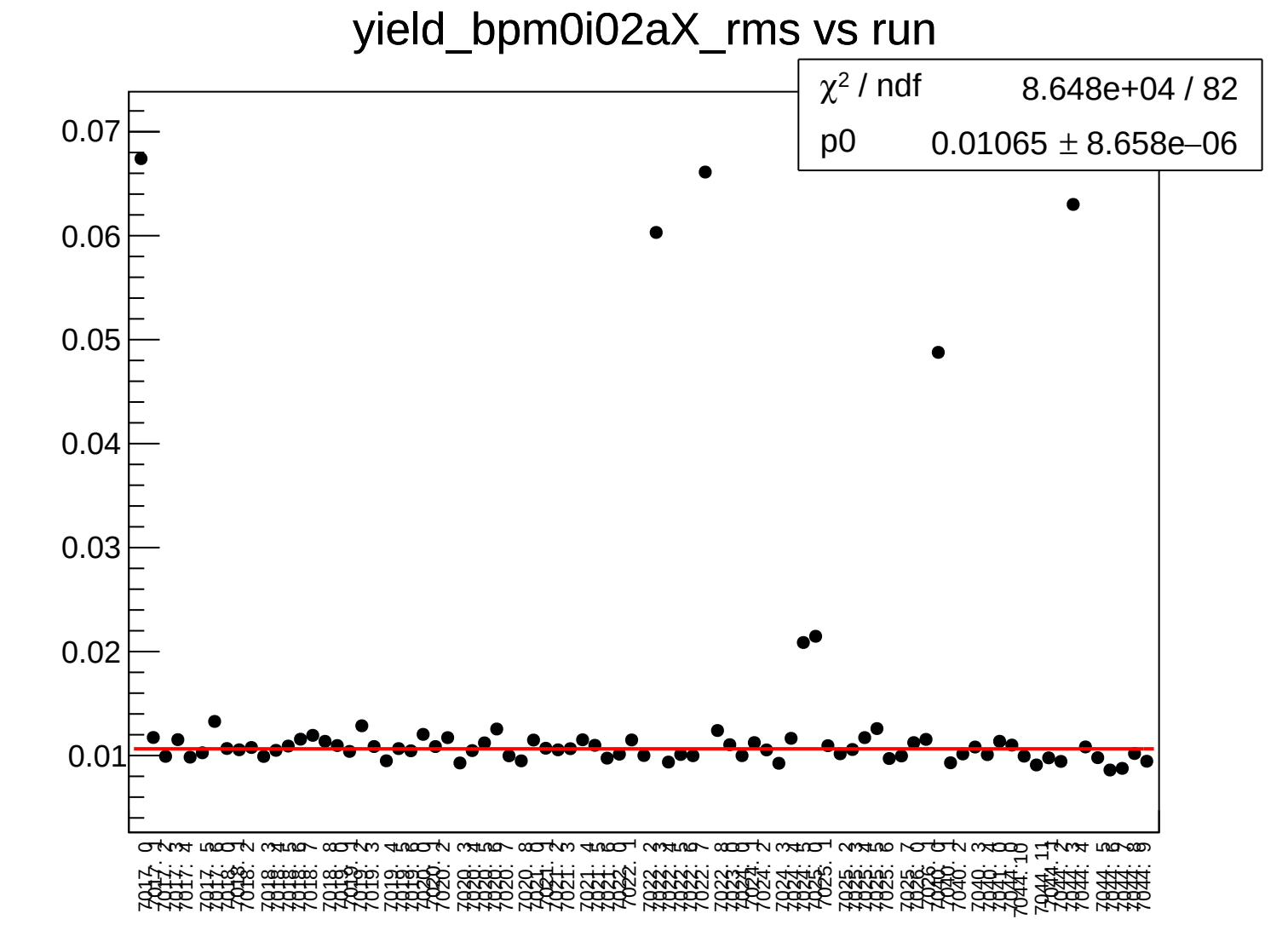

yield_bpm0i02Y_mean vs run
χ² / ndf 5.817e+07 / 82
p0 −2.415 ± 9.225e−06
−2.25
−2.3
−2.35
−2.4
−2.45
pull
Entries 83
Mean −629.2
Std Dev 679.6
2000
1500
1000
500
0
−500
−1000

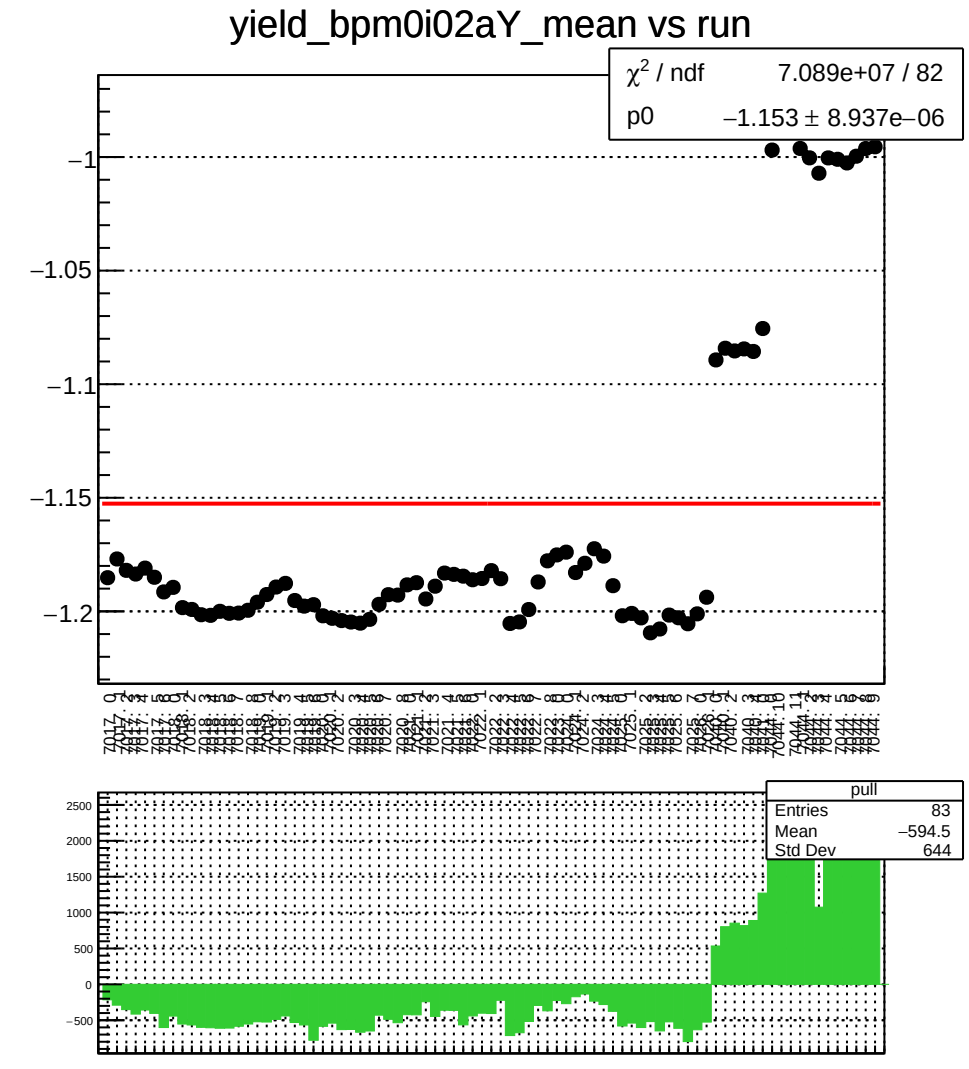

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

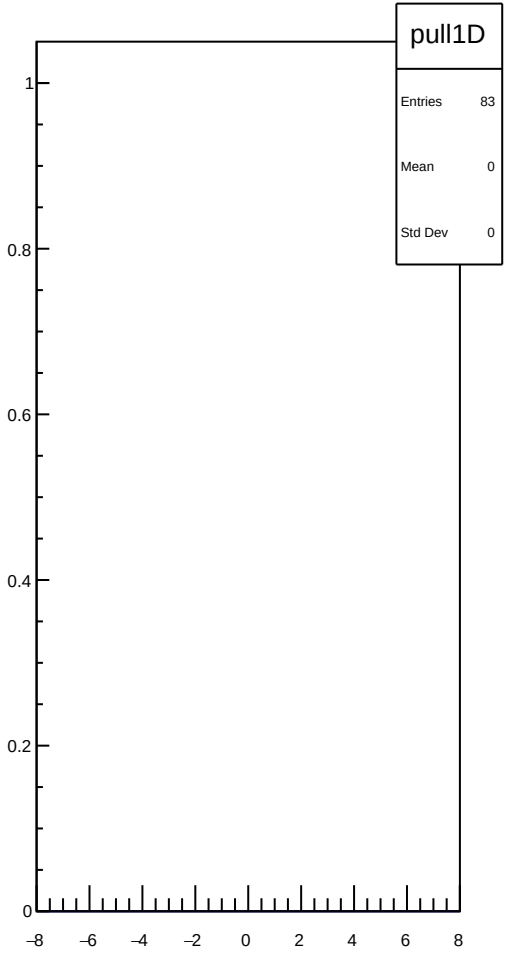

yield_bpm0i02Y_rms vs run
χ² / ndf 2.196e+04 / 82
p0 0.00819 ± 6.523e–06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

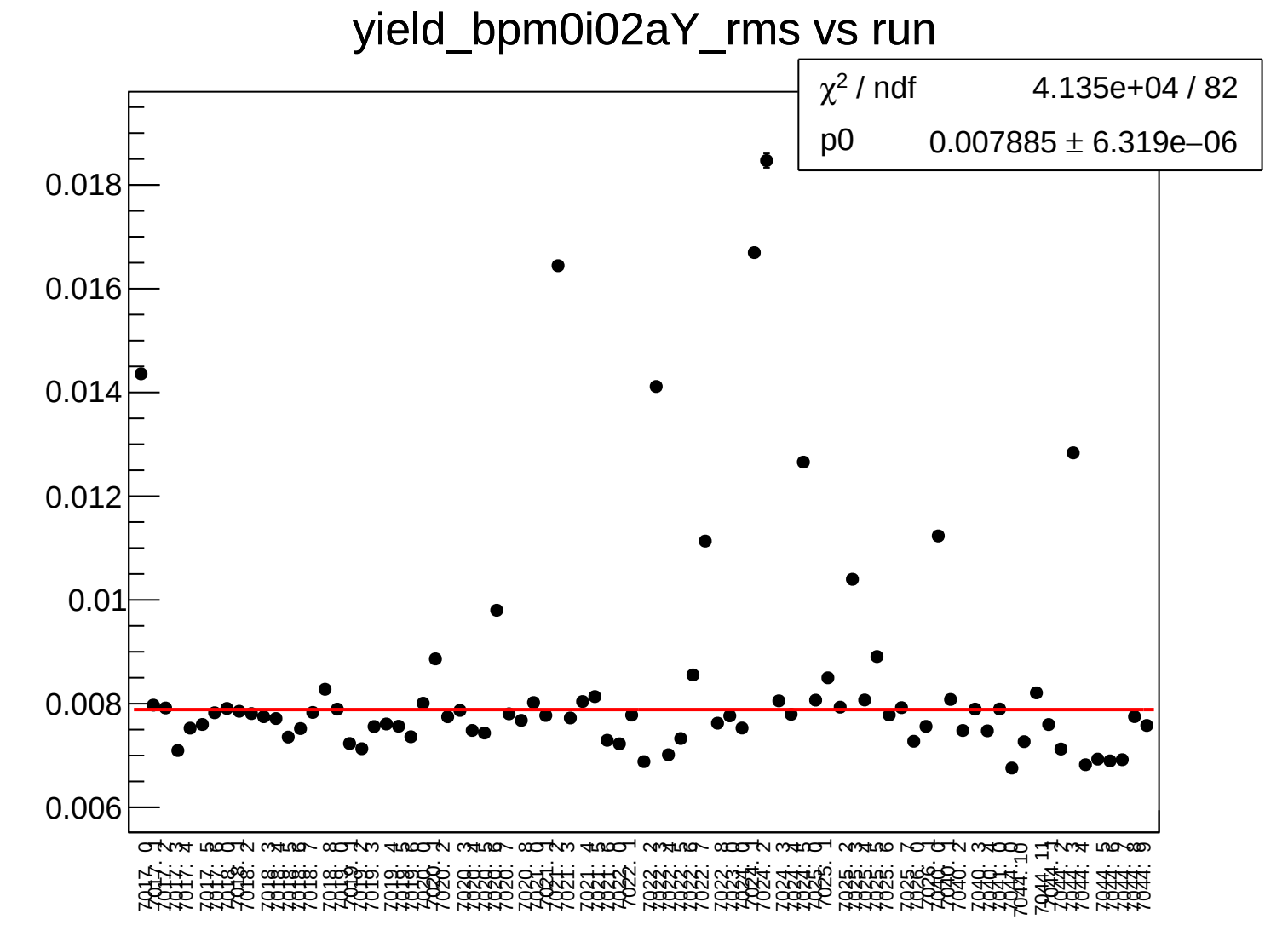

yield_bpm0i02aX_mean vs run
χ² / ndf 9.796e+06 / 82
p0 1.618 ± 1.224e−05
1.75
1.7
1.65
1.6
1.55
pull
Entries 83
Mean −349.1
Std Dev 413
1500
1000
500
0
−500

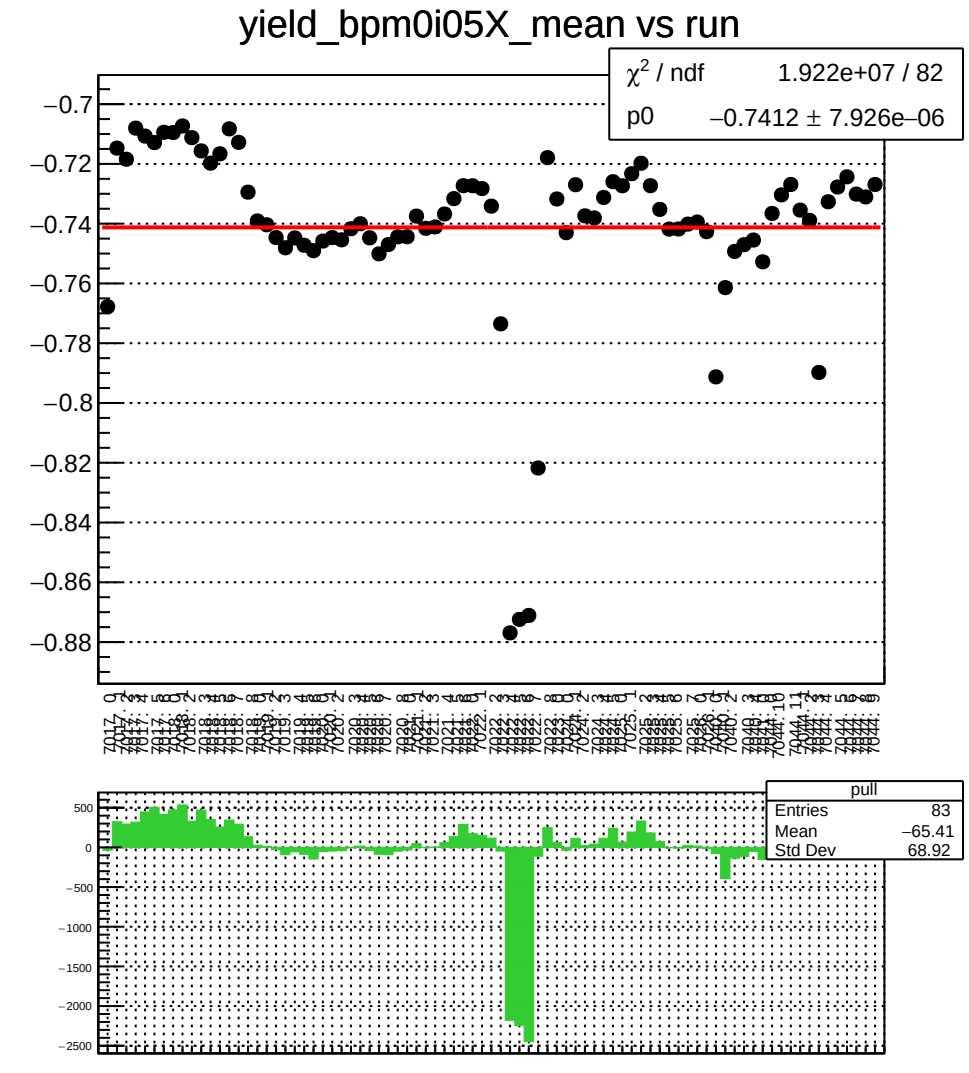

pull1D
Entries 83
Mean 2.33
Std Dev 3.942
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

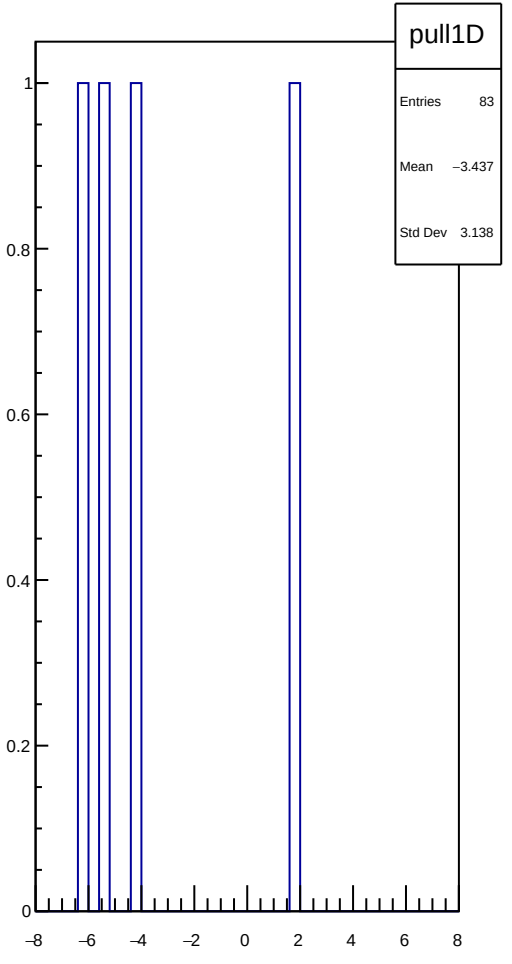

yield_bpm0i02aX_rms vs run
χ² / ndf 8.648e+04 / 82
p0 0.01065 ± 8.658e–06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

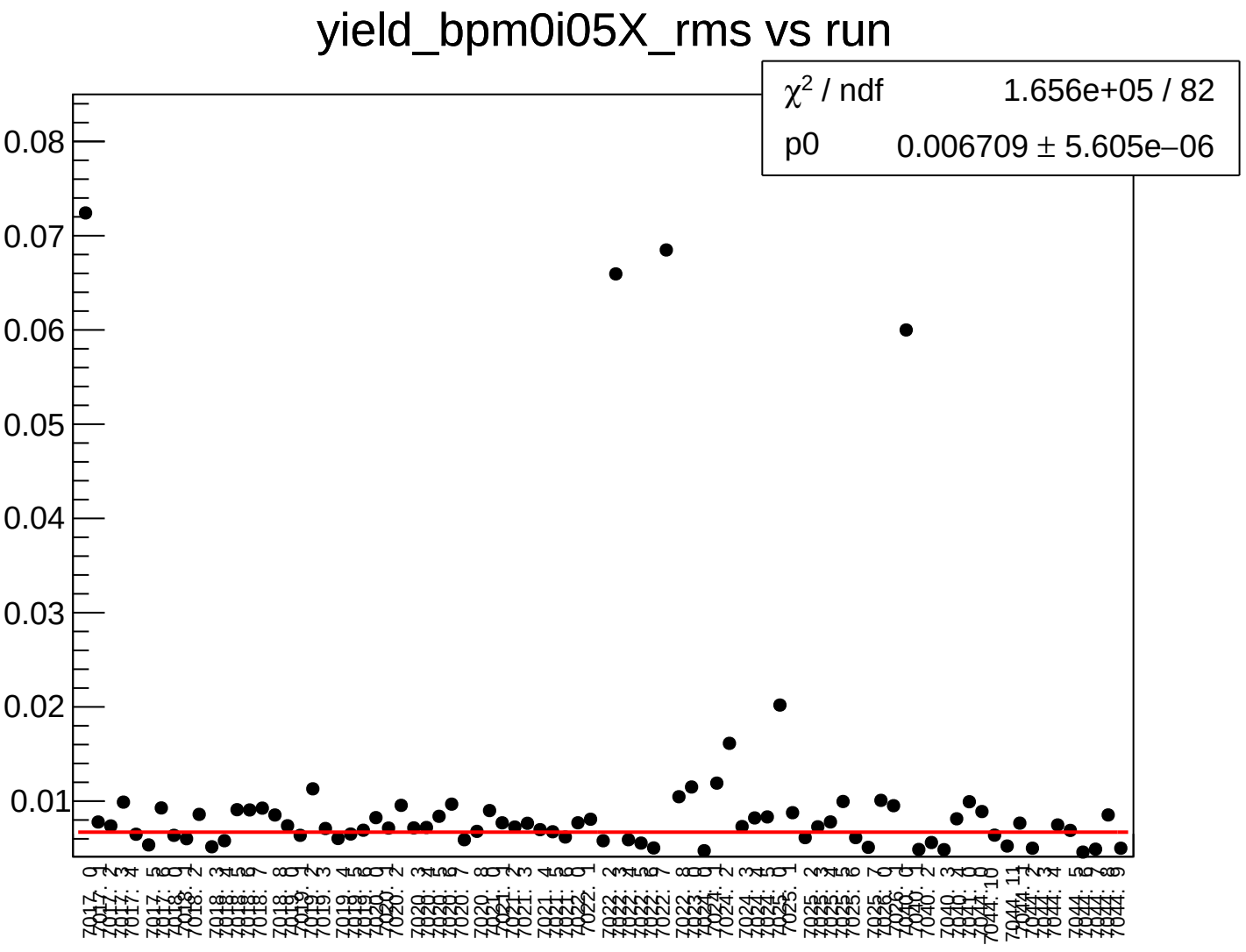

yield_bpm0i02aY_mean vs run
χ² / ndf 7.089e+07 / 82
p0 −1.153 ± 8.937e−06
−1
−1.05
−1.1
−1.15
−1.2
pull
Entries 83
Mean −594.5
Std Dev 644
2500
2000
1500
1000
500
0
−500

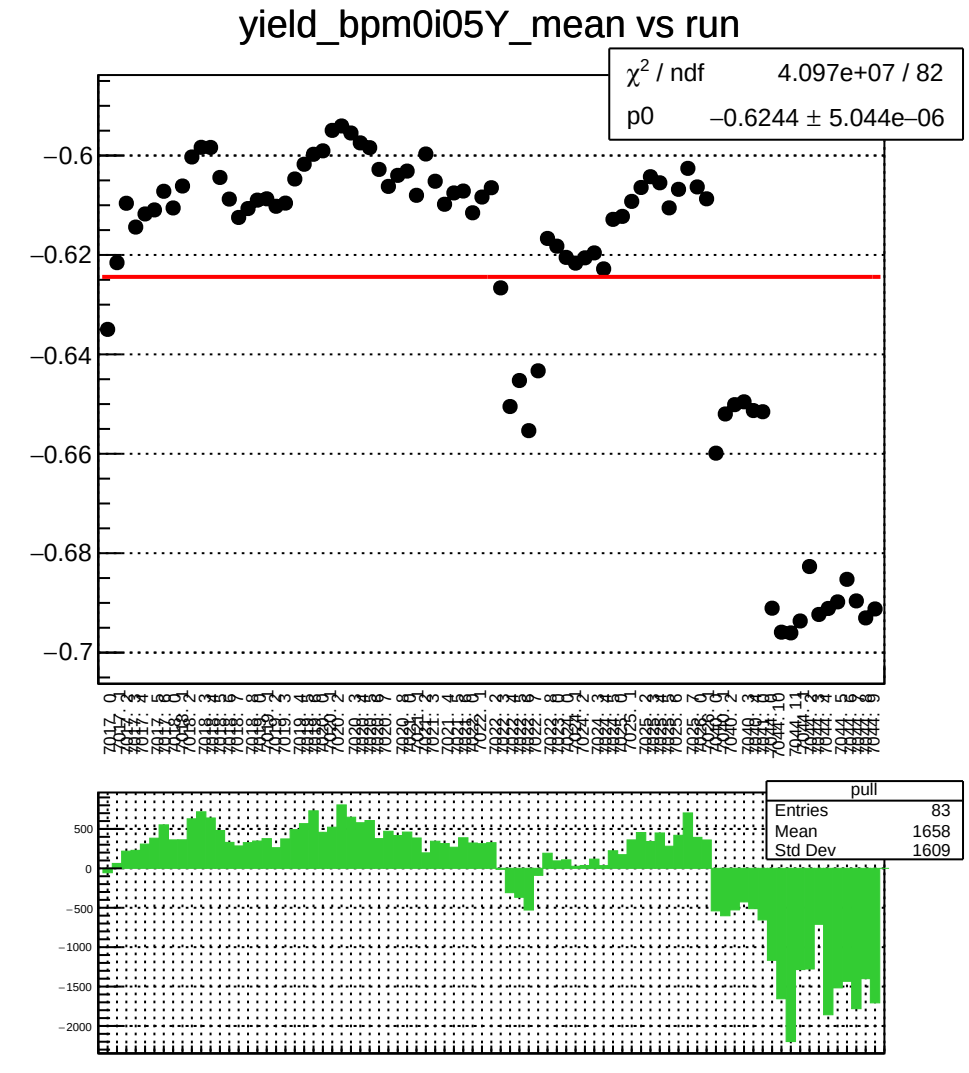

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

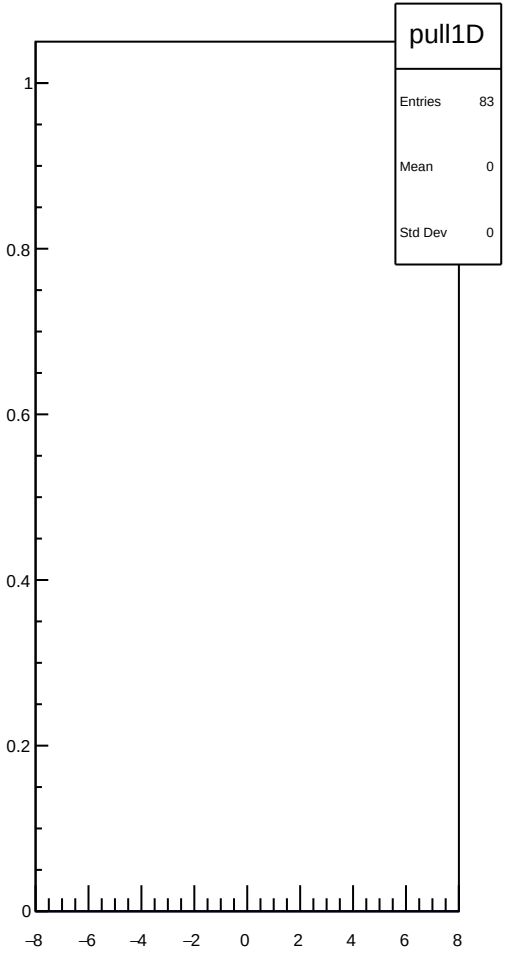

yield_bpm0i02aY_rms vs run
χ² / ndf 4.135e+04 / 82
p0 0.007885 ± 6.319e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006

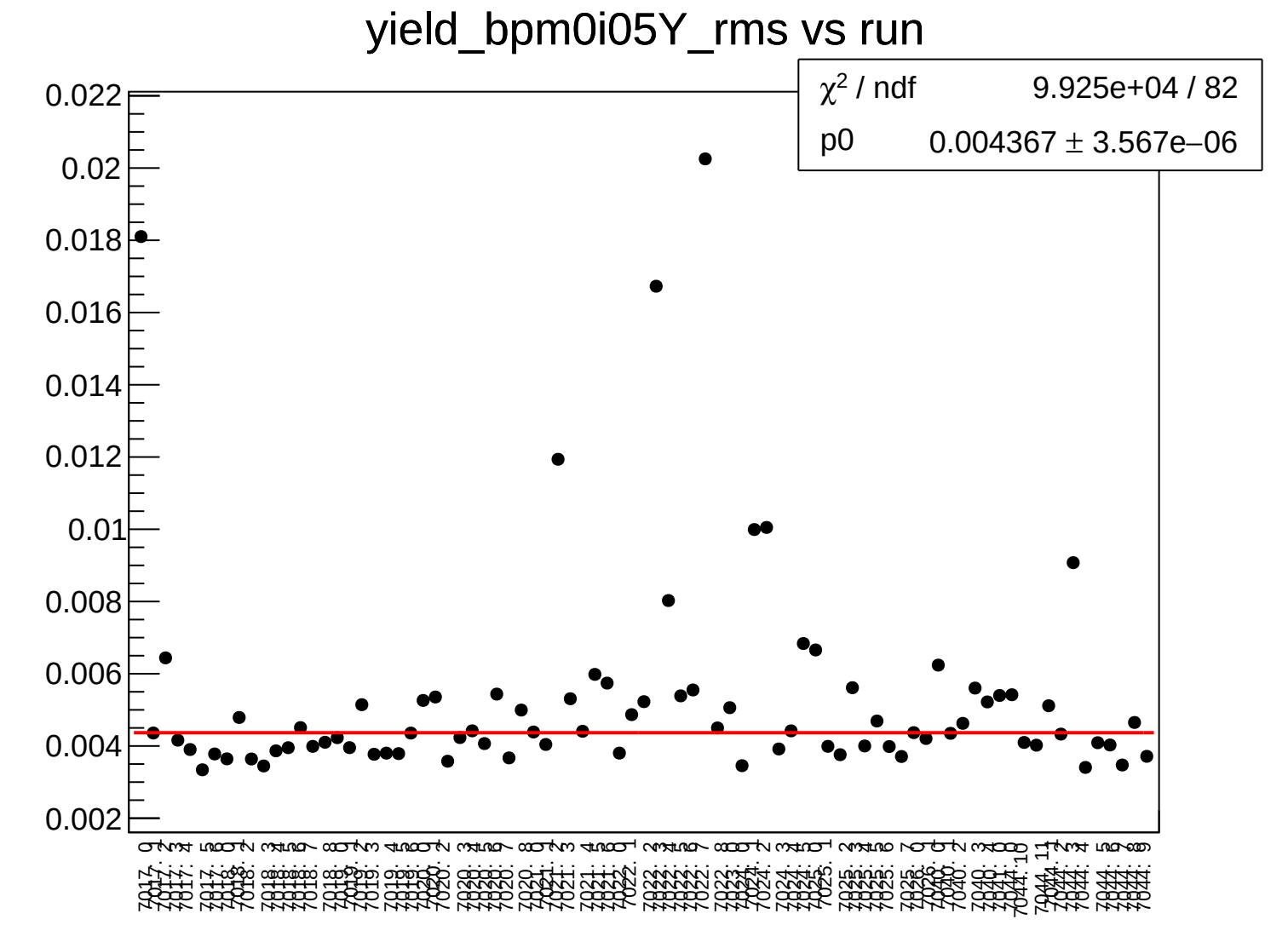

yield_bpm0i05X_mean vs run
χ² / ndf 1.922e+07 / 82
p0 −0.7412 ± 7.926e−06
pull
Entries 83
Mean −65.41
Std Dev 68.92

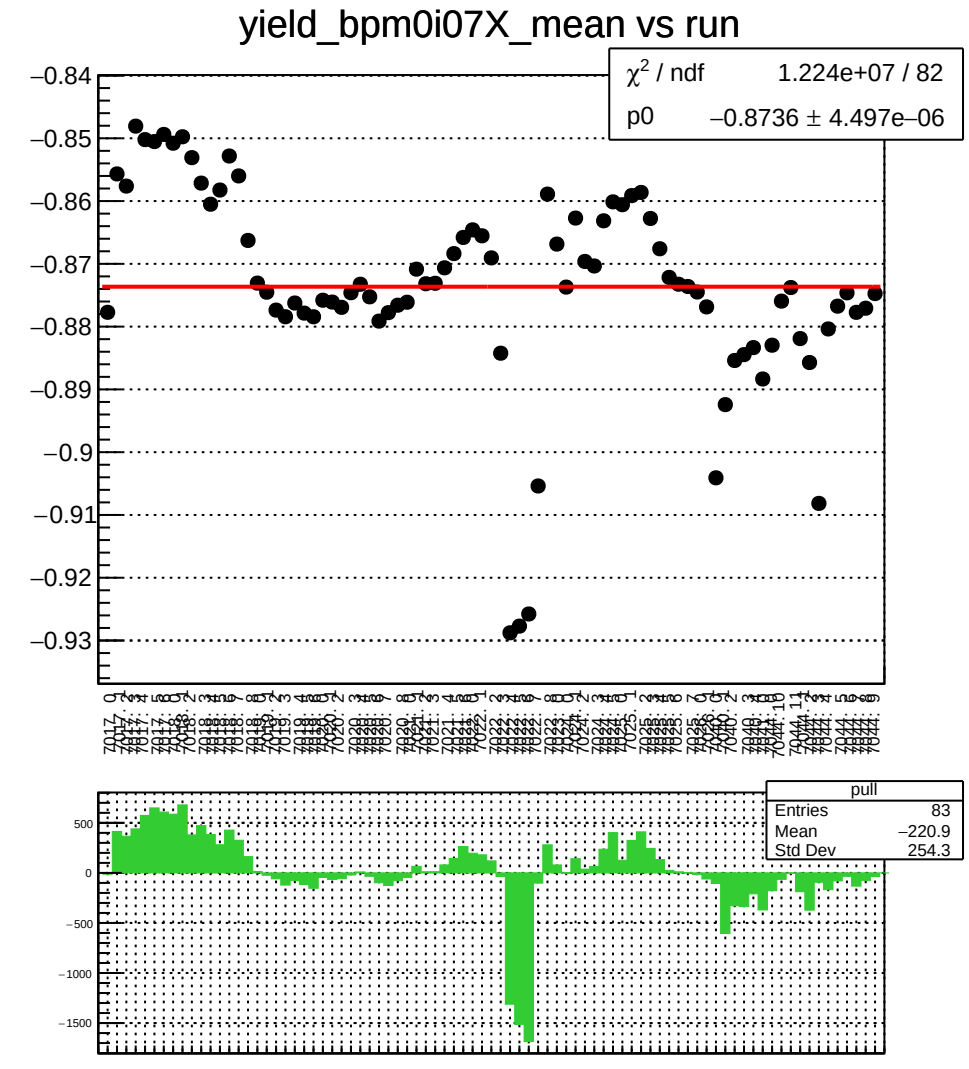

pull1D
Entries 83
Mean −3.437
Std Dev 3.138

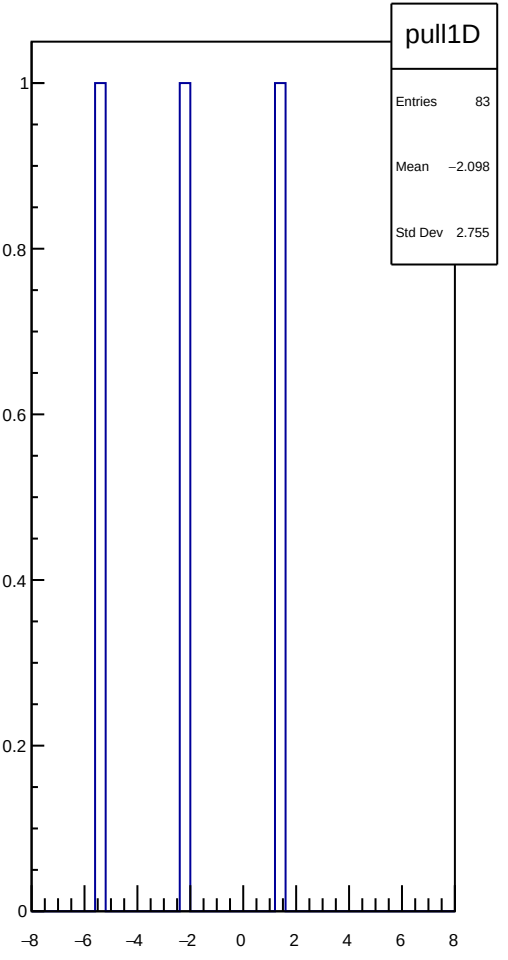

yield_bpm0i05X_rms vs run
χ² / ndf 1.656e+05 / 82
p0 0.006709 ± 5.605e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

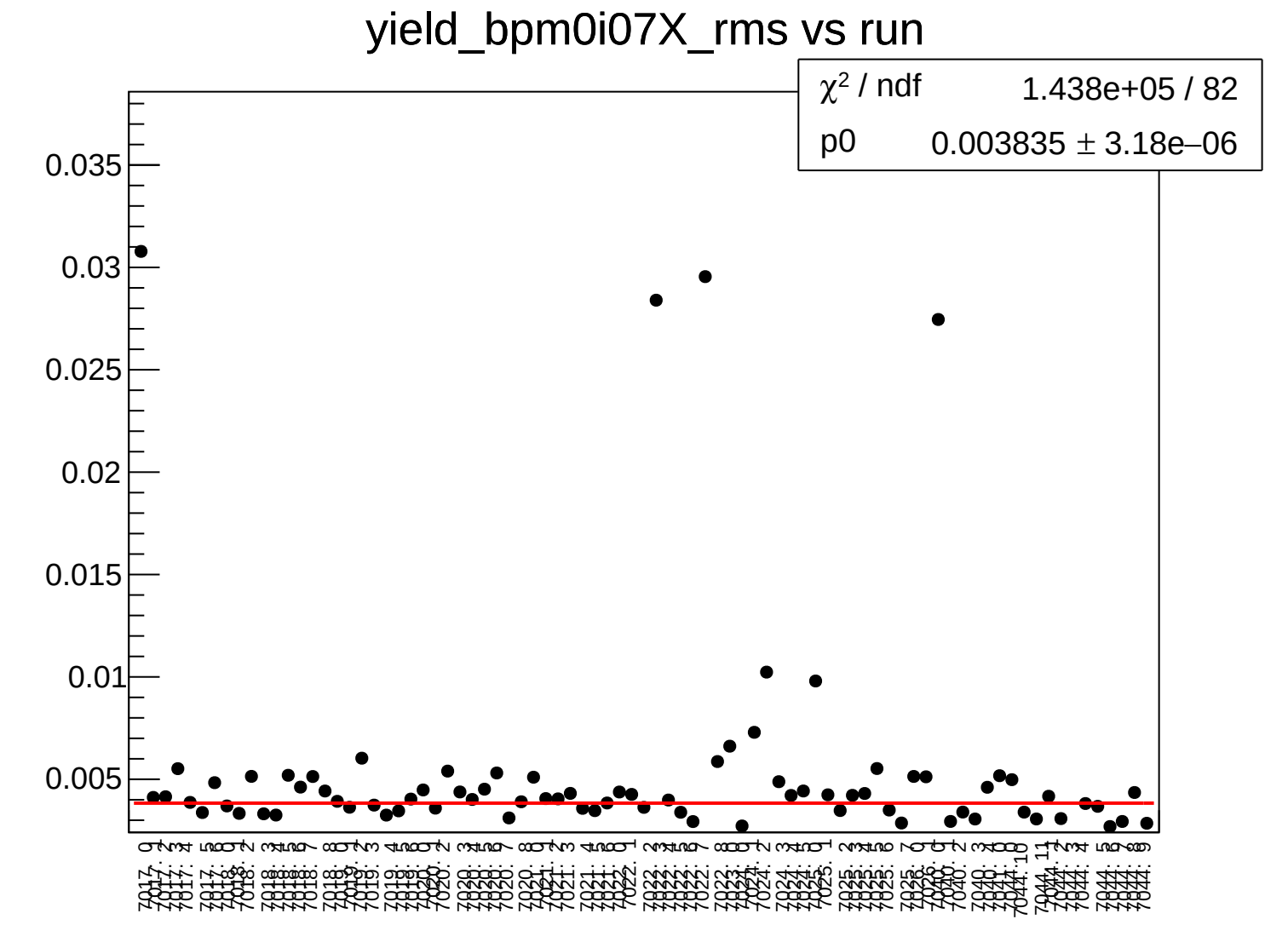

yield_bpm0i05Y_mean vs run
χ² / ndf 4.097e+07 / 82
p0 −0.6244 ± 5.044e−06
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
pull
Entries 83
Mean 1658
Std Dev 1609
500
0
−500
−1000
−1500
−2000

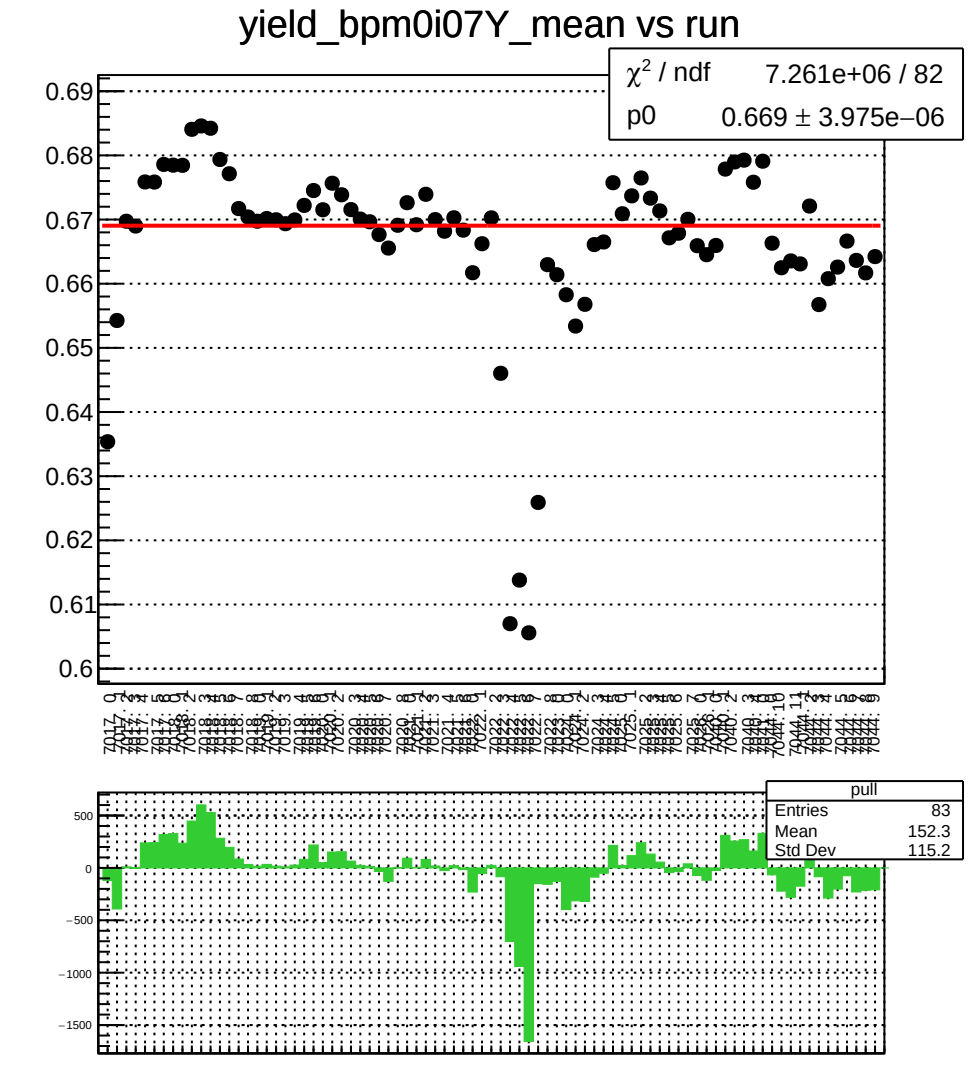

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

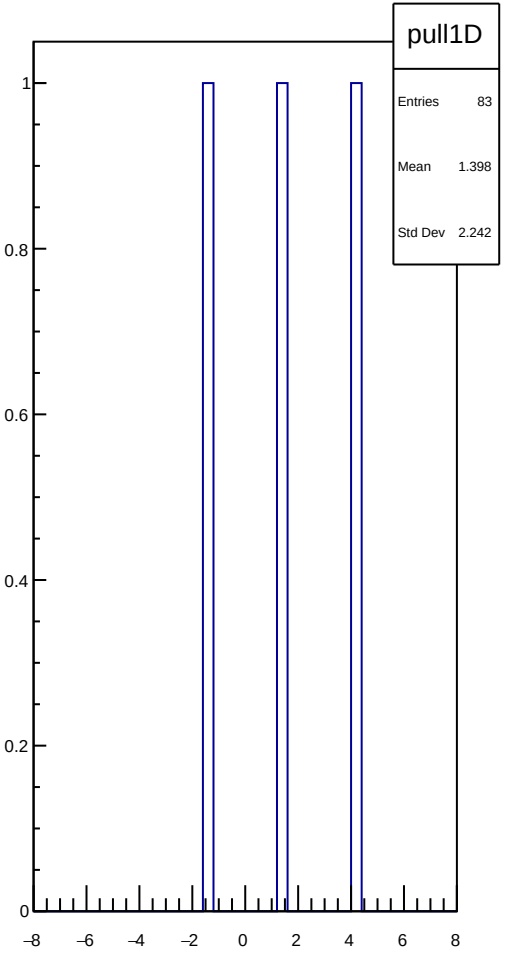

yield_bpm0i05Y_rms vs run
χ² / ndf 9.925e+04 / 82
p0 0.004367 ± 3.567e−06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

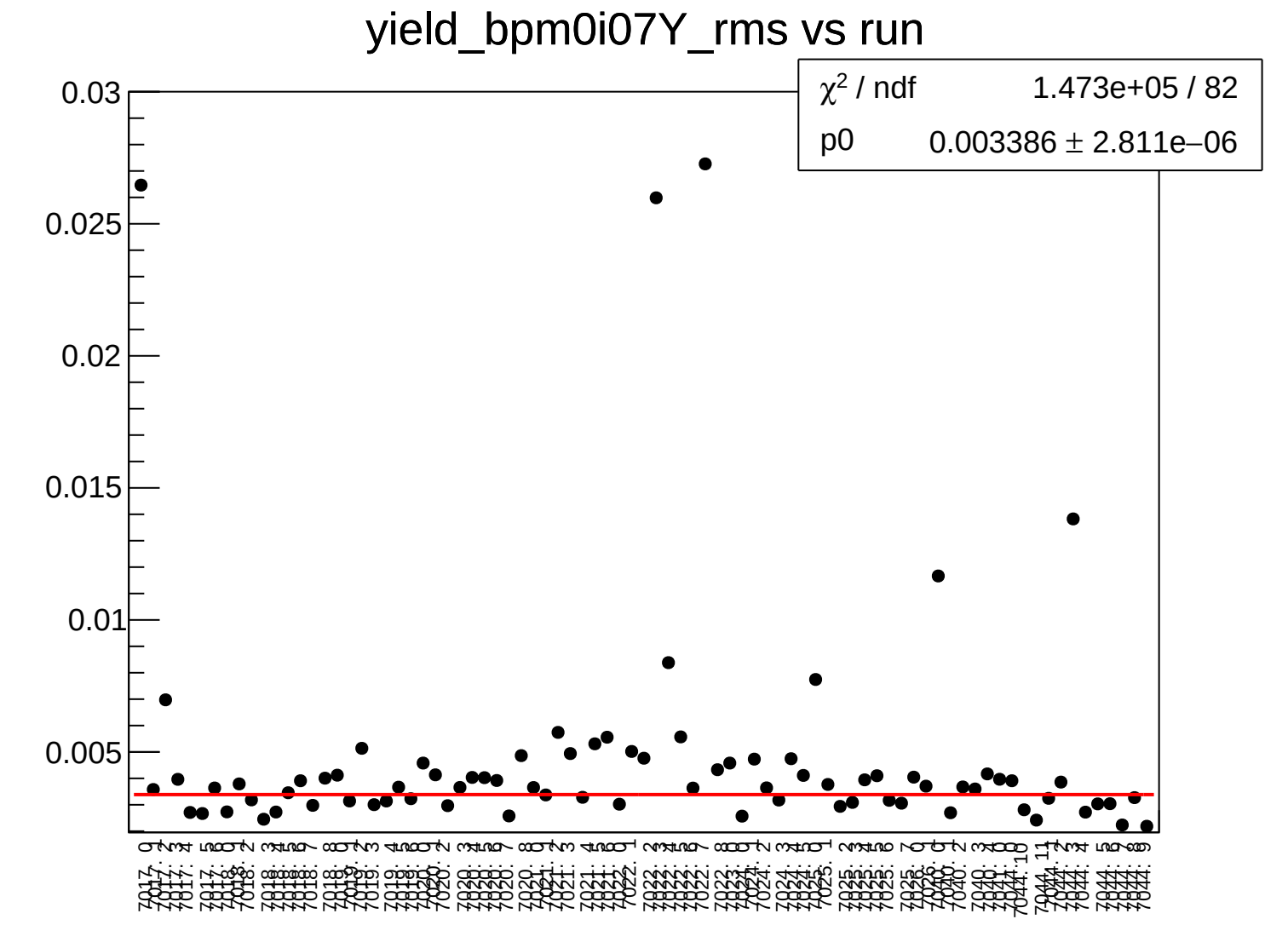

yield_bpm0i07X_mean vs run
χ² / ndf 1.224e+07 / 82
p0 −0.8736 ± 4.497e−06
−0.84
−0.85
−0.86
−0.87
−0.88
−0.89
−0.9
−0.91
−0.92
−0.93
pull
Entries 83
Mean −220.9
Std Dev 254.3
500
0
−500
−1000
−1500

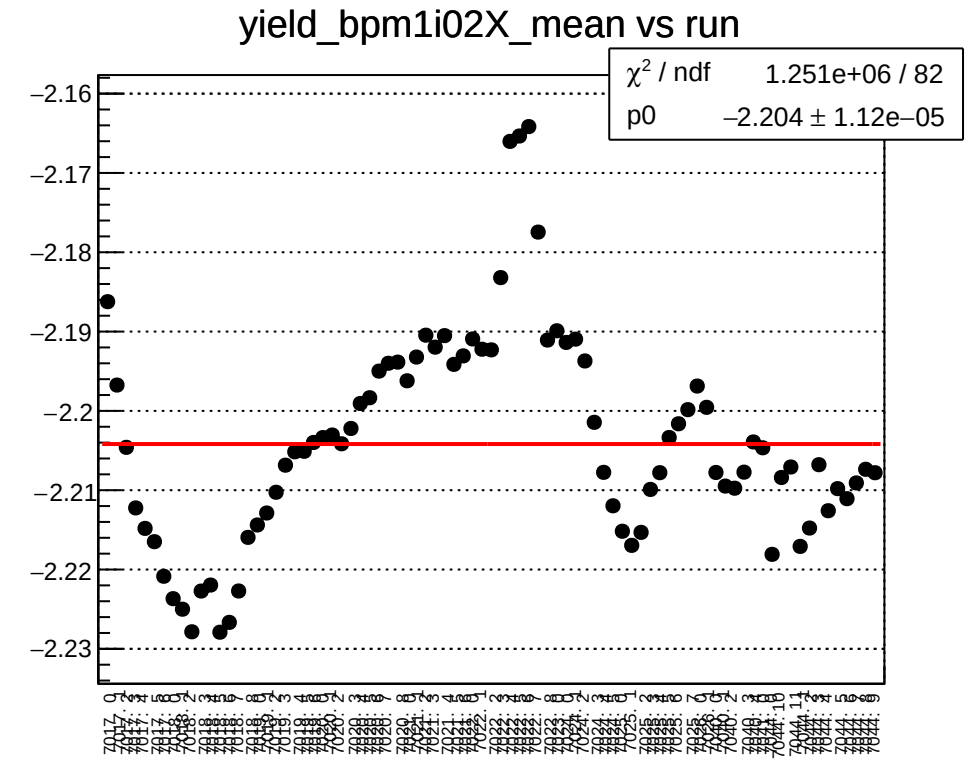

pull1D
Entries 83
Mean −2.098
Std Dev 2.755
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

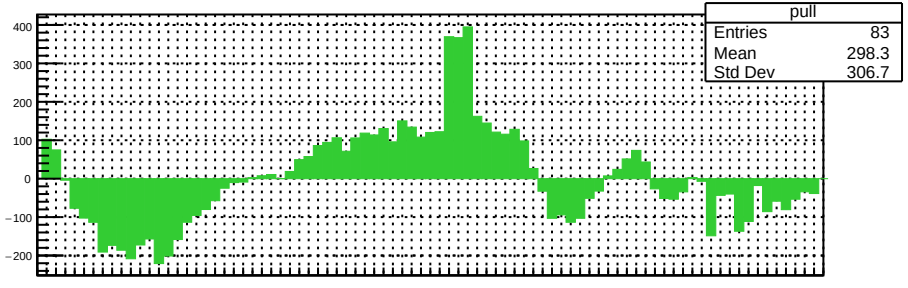

yield_bpm0i07X_rms vs run
χ² / ndf 1.438e+05 / 82
p0 0.003835 ± 3.18e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

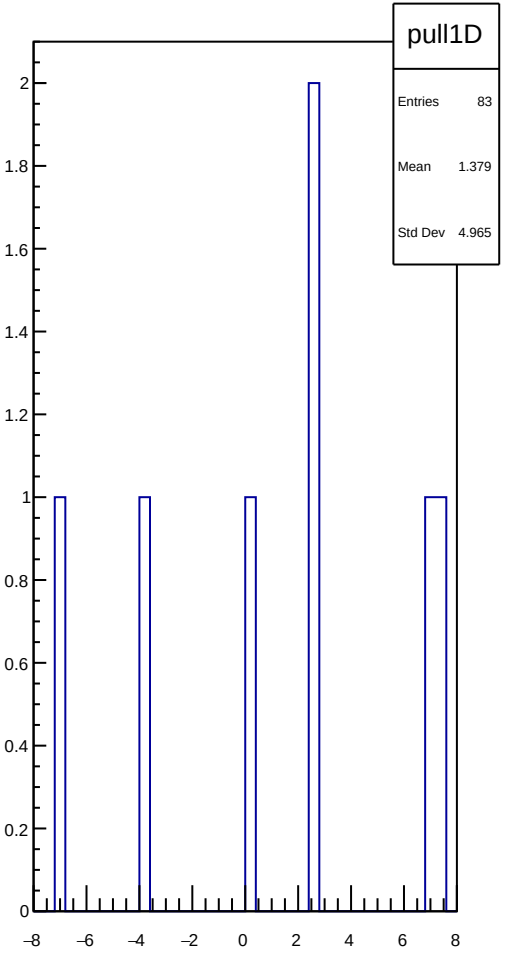

yield_bpm0i07Y_mean vs run
χ² / ndf 7.261e+06 / 82
p0 0.669 ± 3.975e−06
pull
Entries 83
Mean 152.3
Std Dev 115.2

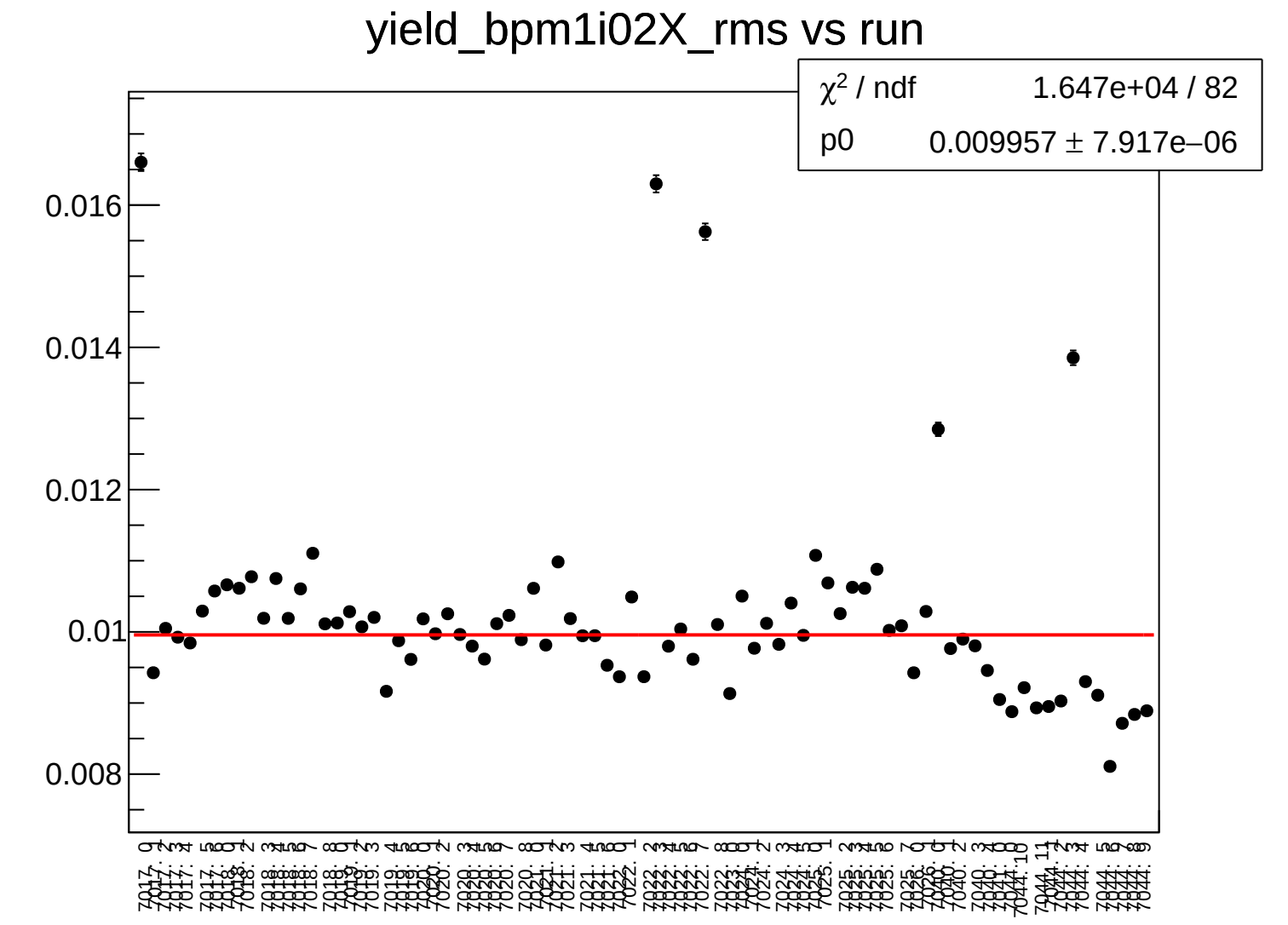

pull1D
Entries 83
Mean 1.398
Std Dev 2.242

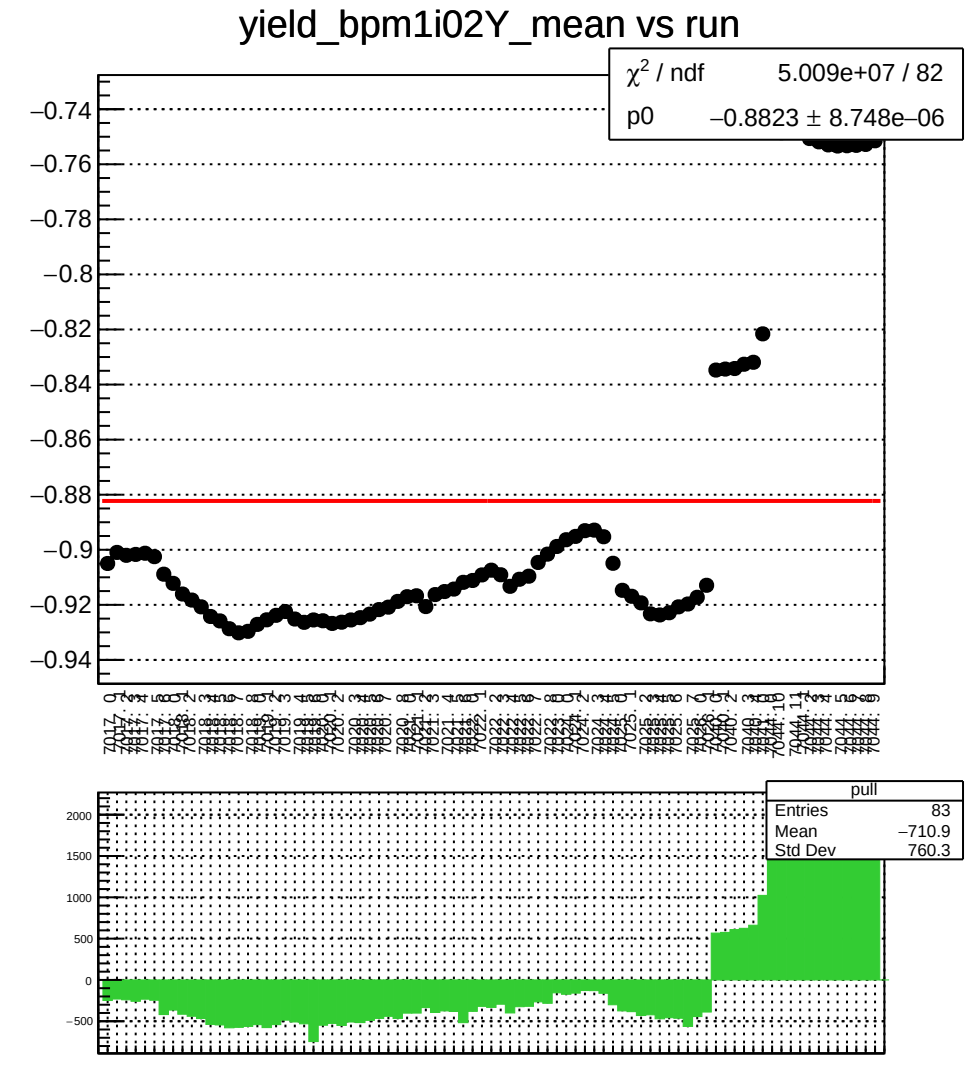

yield_bpm0i07Y_rms vs run
χ^2 / ndf 1.473e+05 / 82
p0 0.003386 ± 2.811e−06
0.03
0.025
0.02
0.015
0.01
0.005

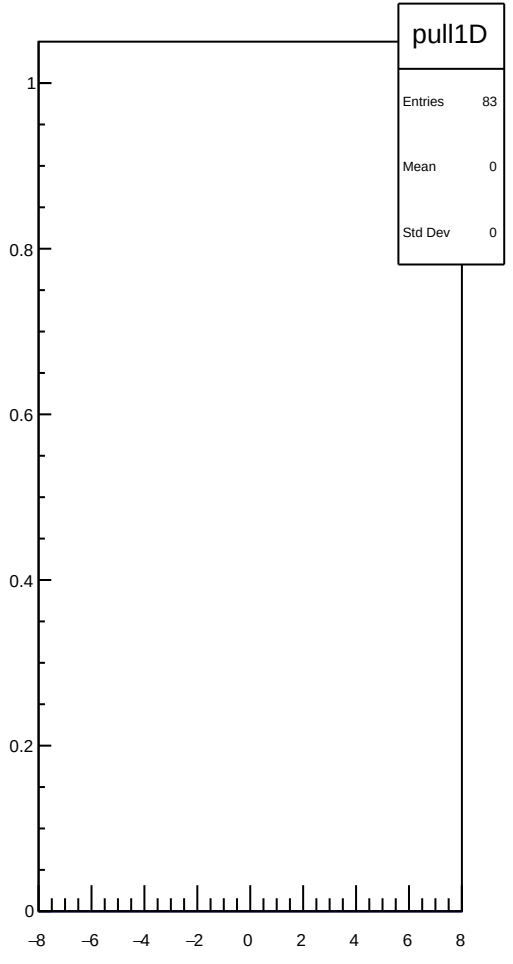

yield_bpm1i02X_mean vs run
χ² / ndf 1.251e+06 / 82
p0 −2.204 ± 1.12e−05
−2.16
−2.17
−2.18
−2.19
−2.2
−2.21
−2.22
−2.23

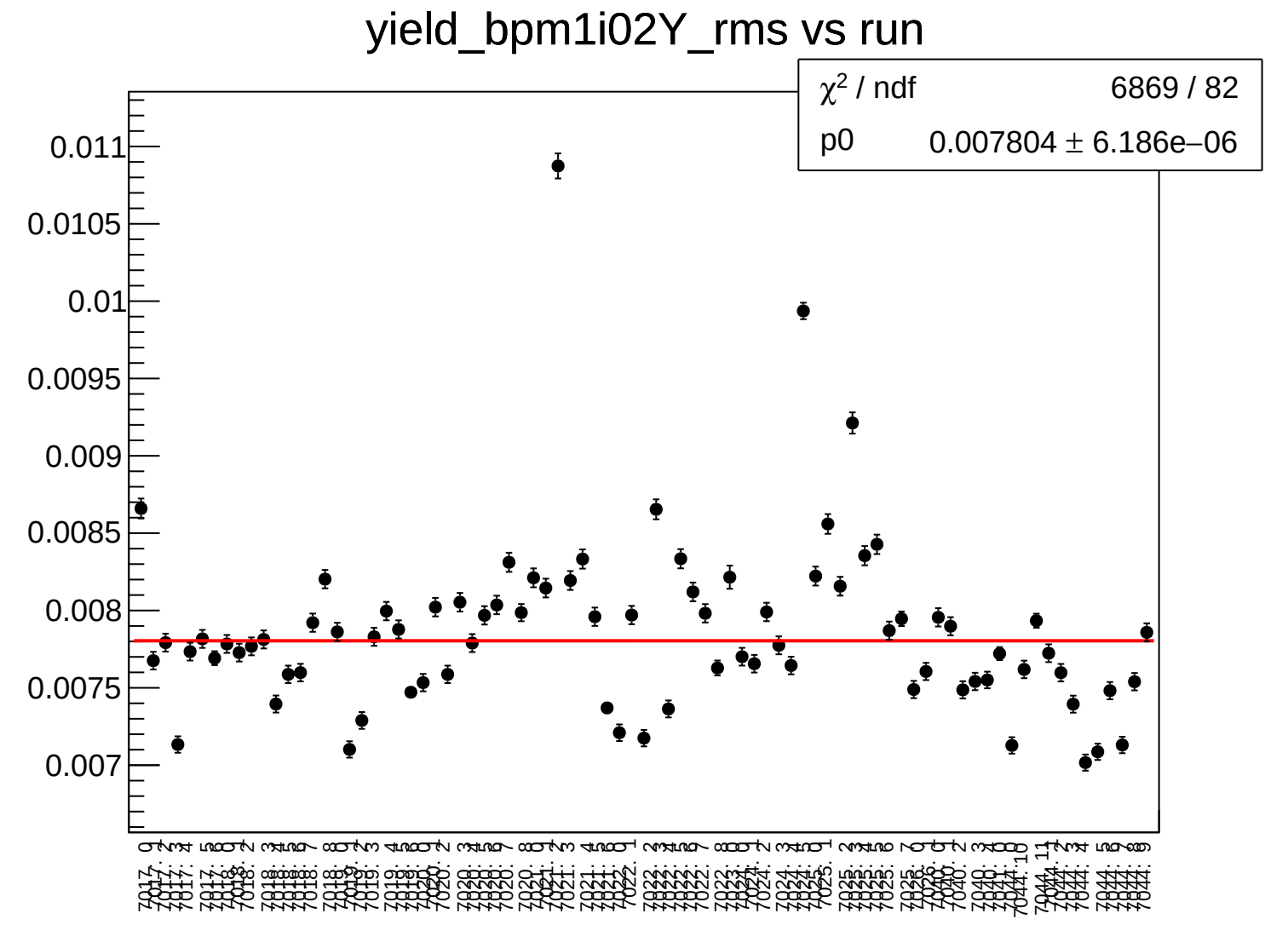

pull
Entries 83
Mean 298.3
Std Dev 306.7
400
300
200
100
0
−100
−200

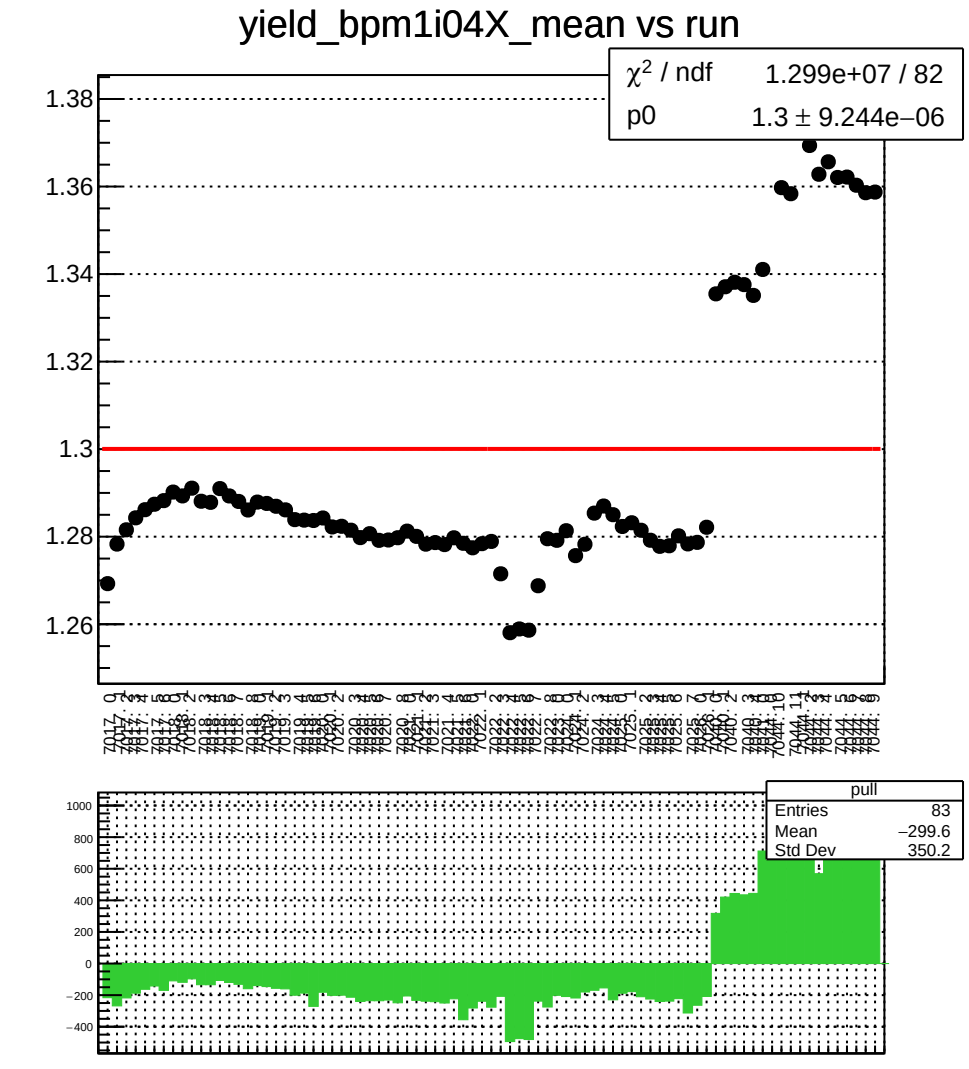

pull1D
Entries 83
Mean 1.379
Std Dev 4.965
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

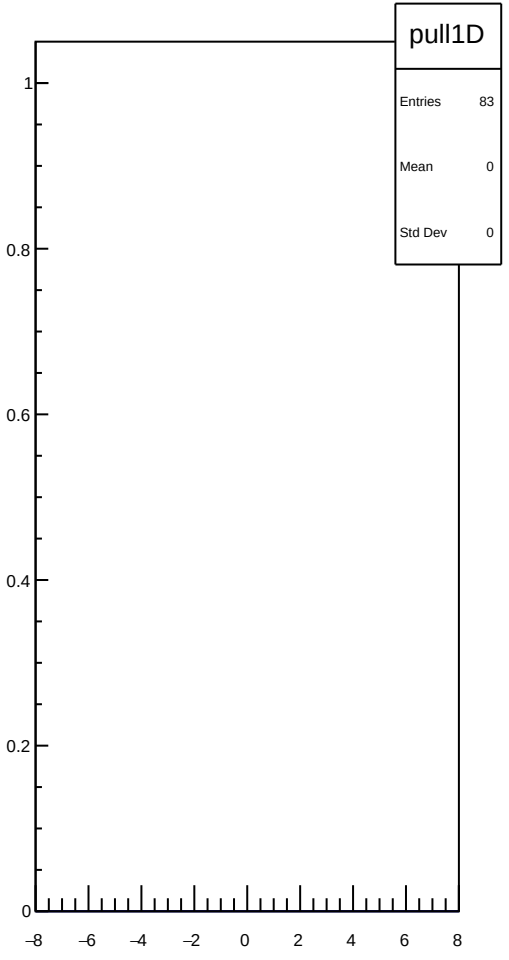

yield_bpm1i02X_rms vs run
χ² / ndf 1.647e+04 / 82
p0 0.009957 ± 7.917e−06
0.016
0.014
0.012
0.01
0.008

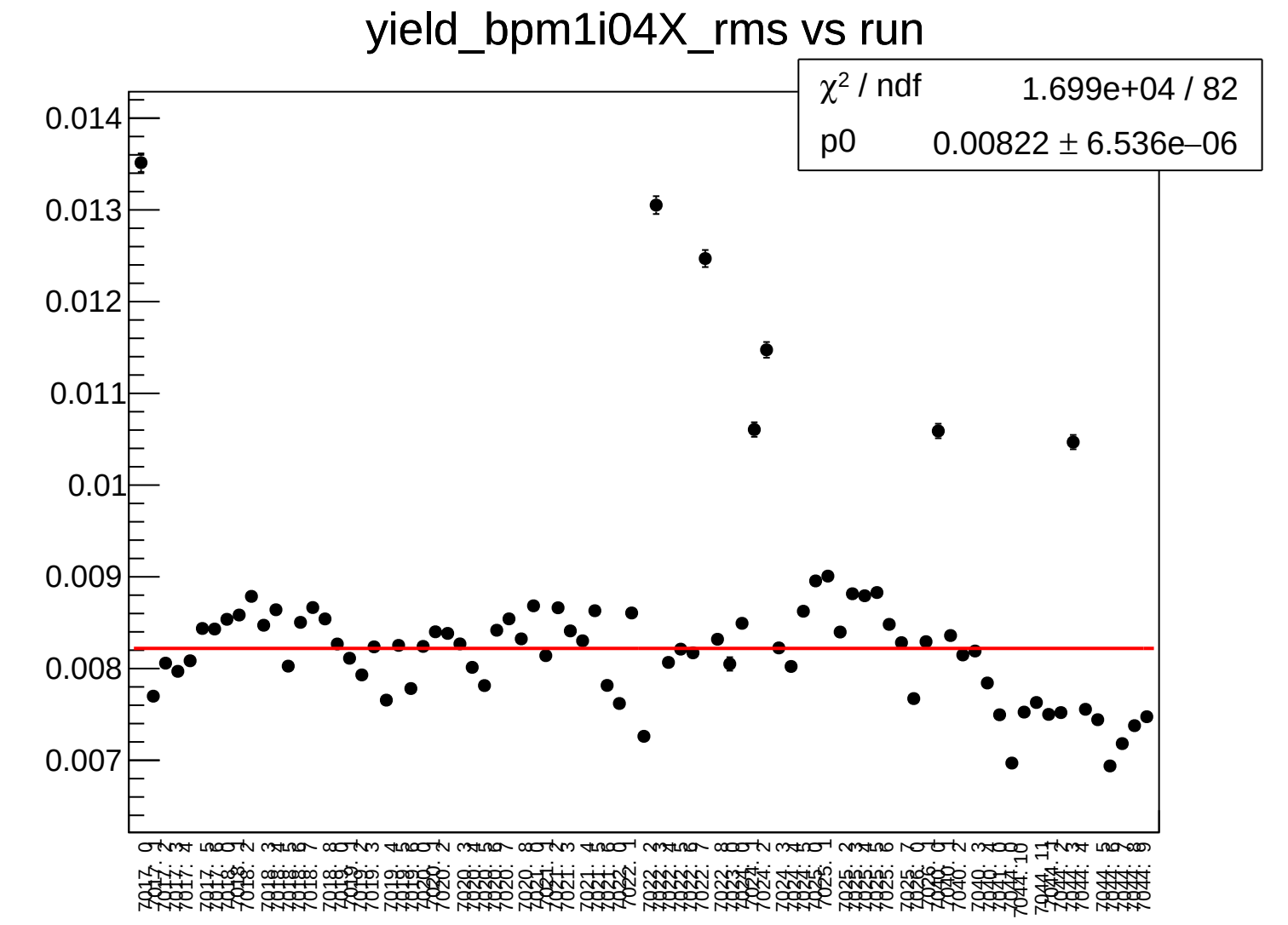

yield_bpm1i02Y_mean vs run
χ² / ndf 5.009e+07 / 82
p0 −0.8823 ± 8.748e−06
pull
Entries 83
Mean −710.9
Std Dev 760.3

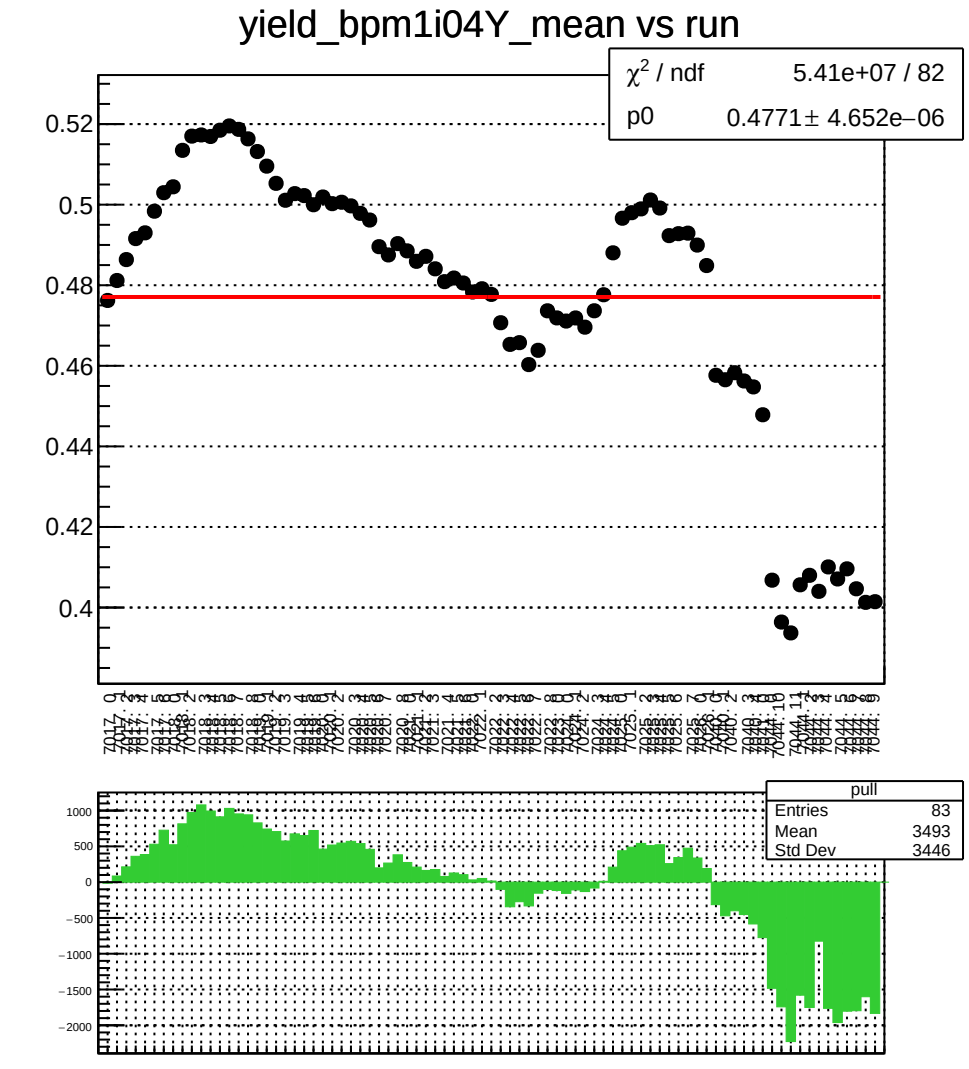

pull1D
Entries 83
Mean 0
Std Dev 0

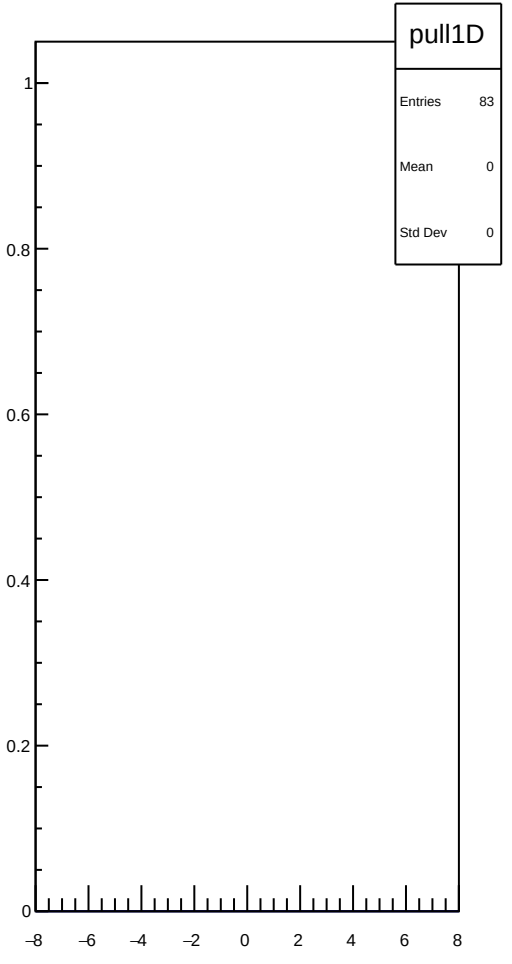

yield_bpm1i02Y_rms vs run
χ² / ndf 6869 / 82
p0 0.007804 ± 6.186e−06
0.011
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007

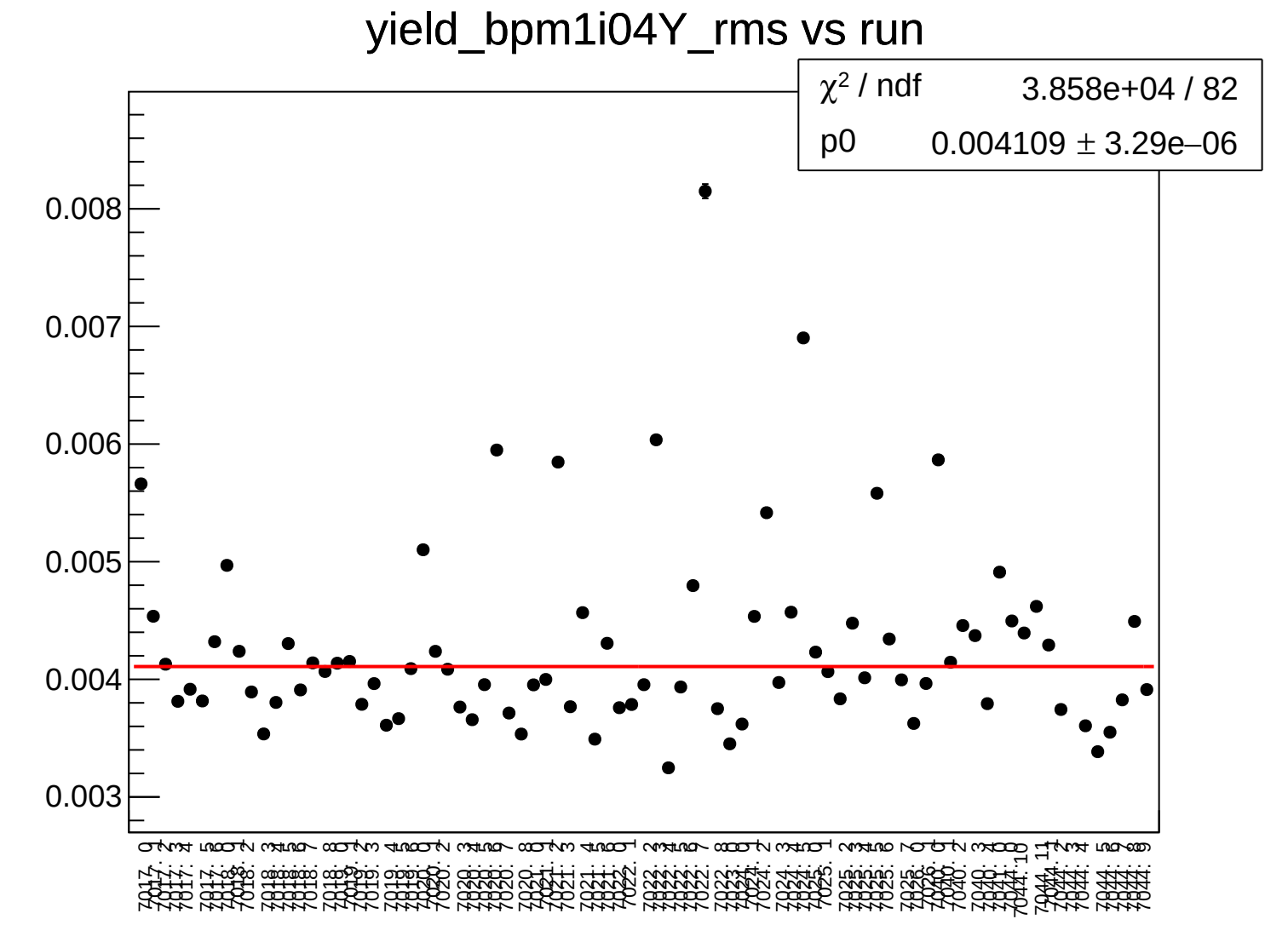

yield_bpm1i04X_mean vs run
χ² / ndf 1.299e+07 / 82
p0 1.3 ± 9.244e−06
1.38
1.36
1.34
1.32
1.3
1.28
1.26
pull
Entries 83
Mean −299.6
Std Dev 350.2
1000
800
600
400
200
0
−200
−400

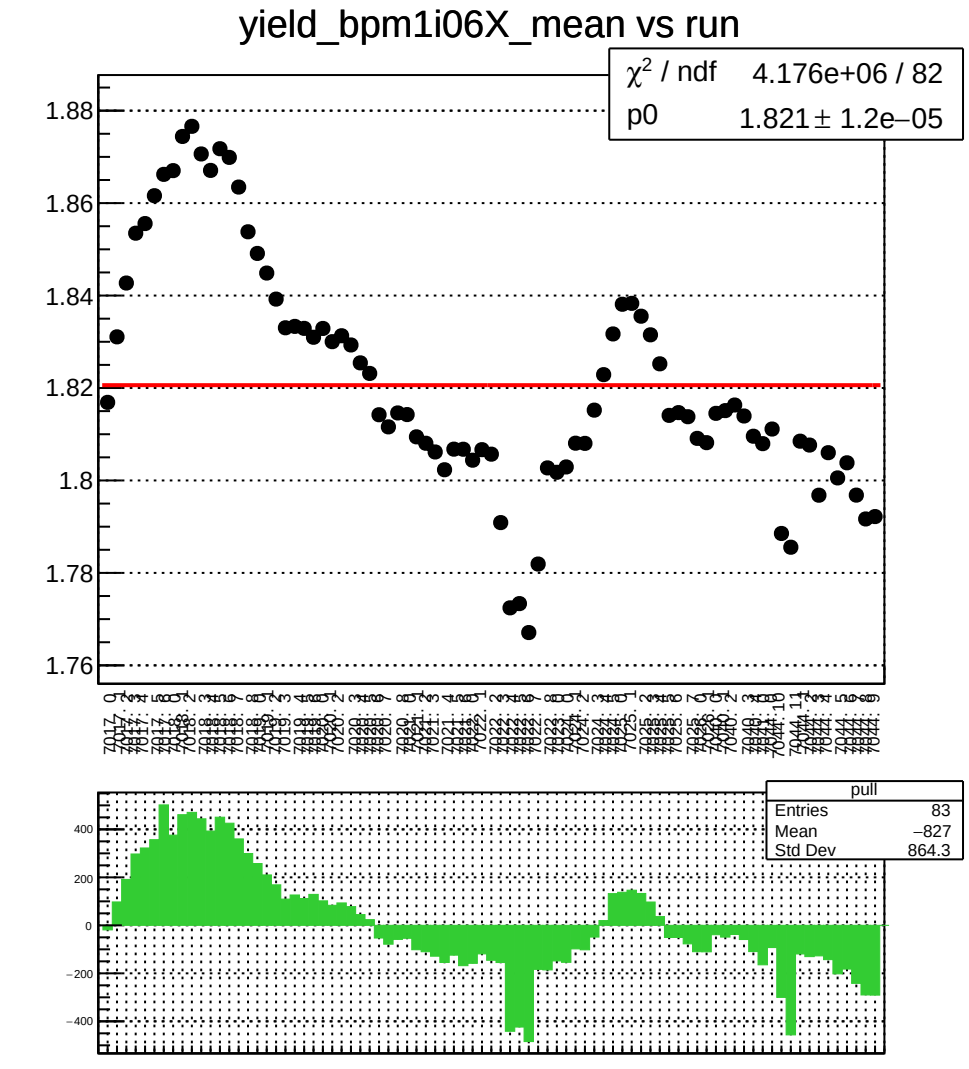

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

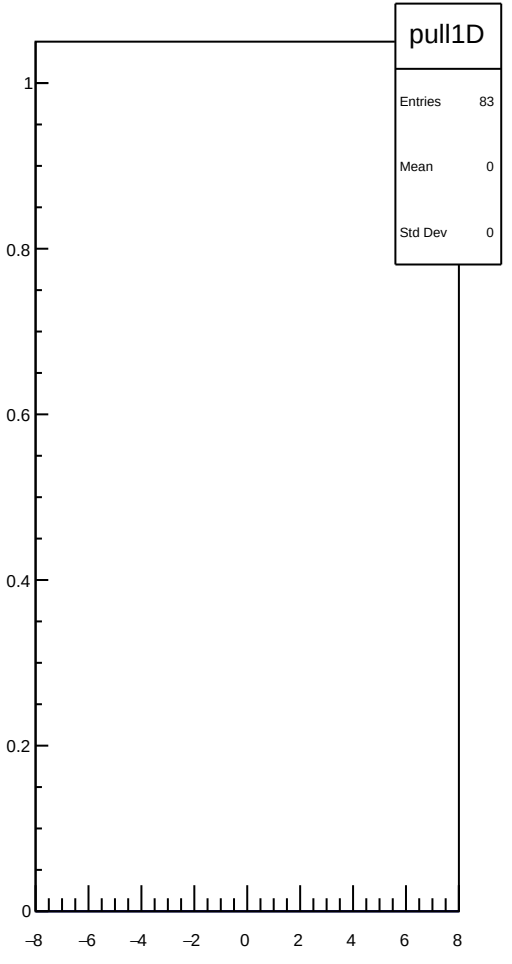

yield_bpm1i04X_rms vs run
χ² / ndf 1.699e+04 / 82
p0 0.00822 ± 6.536e–06
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

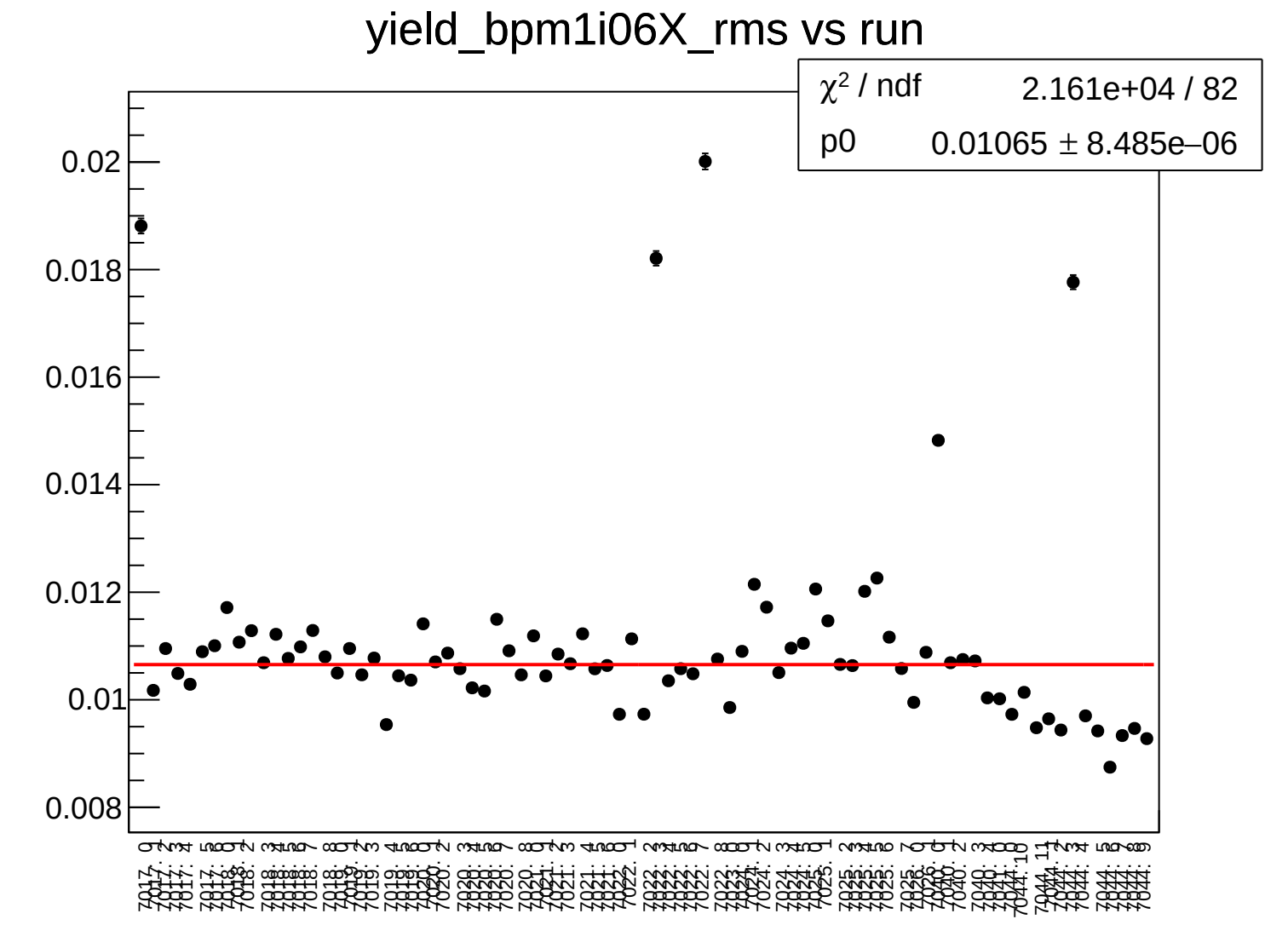

yield_bpm1i04Y_mean vs run
χ² / ndf 5.41e+07 / 82
p0 0.4771 ± 4.652e−06
0.52
0.5
0.48
0.46
0.44
0.42
0.4
pull
Entries 83
Mean 3493
Std Dev 3446
1000
500
0
−500
−1000
−1500
−2000

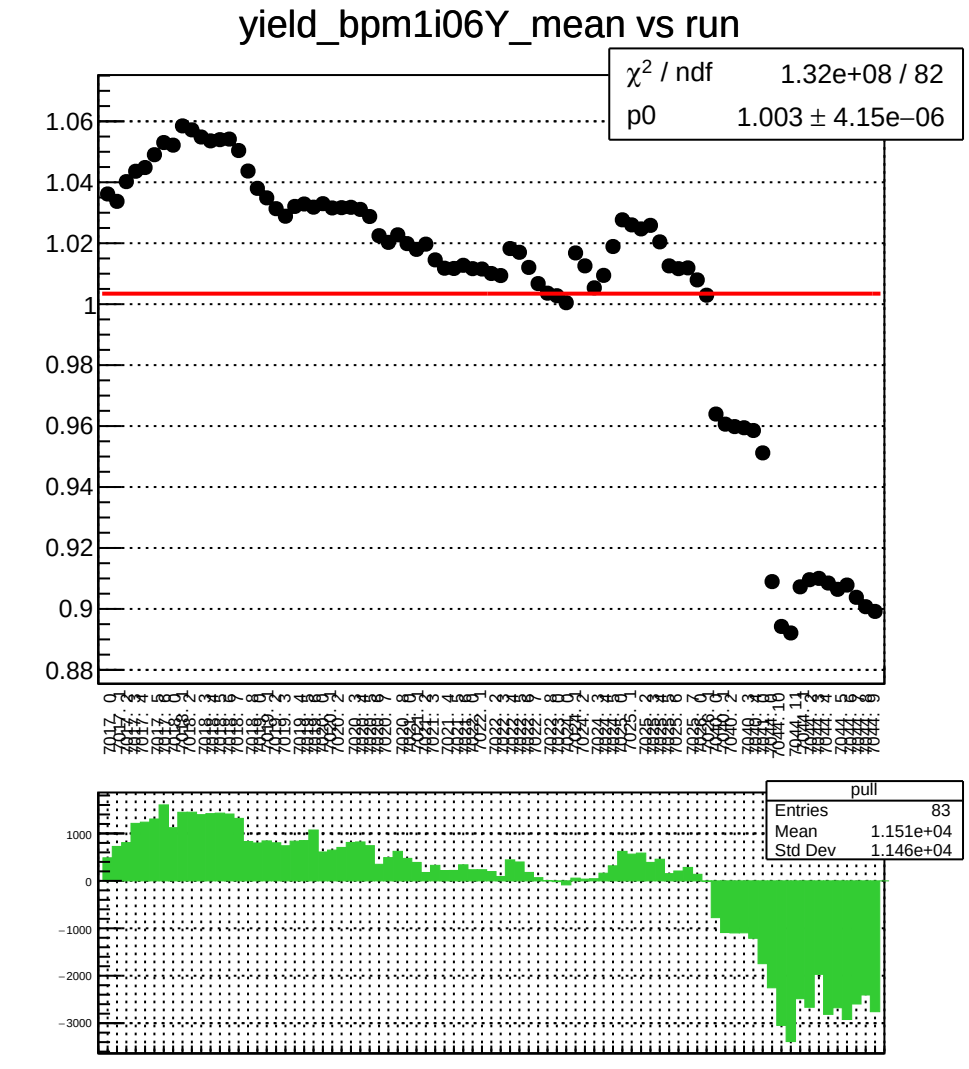

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

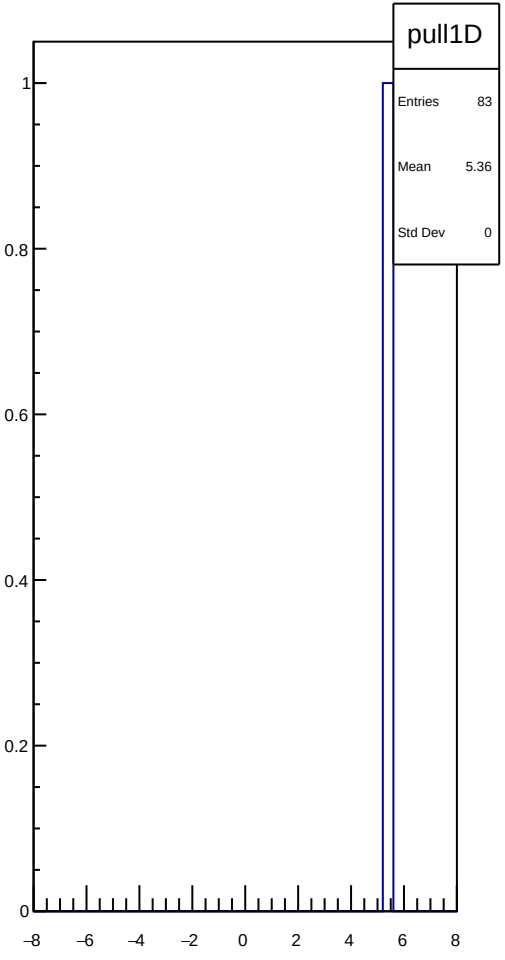

yield_bpm1i04Y_rms vs run
χ² / ndf 3.858e+04 / 82
p0 0.004109 ± 3.29e−06
0.008
0.007
0.006
0.005
0.004
0.003

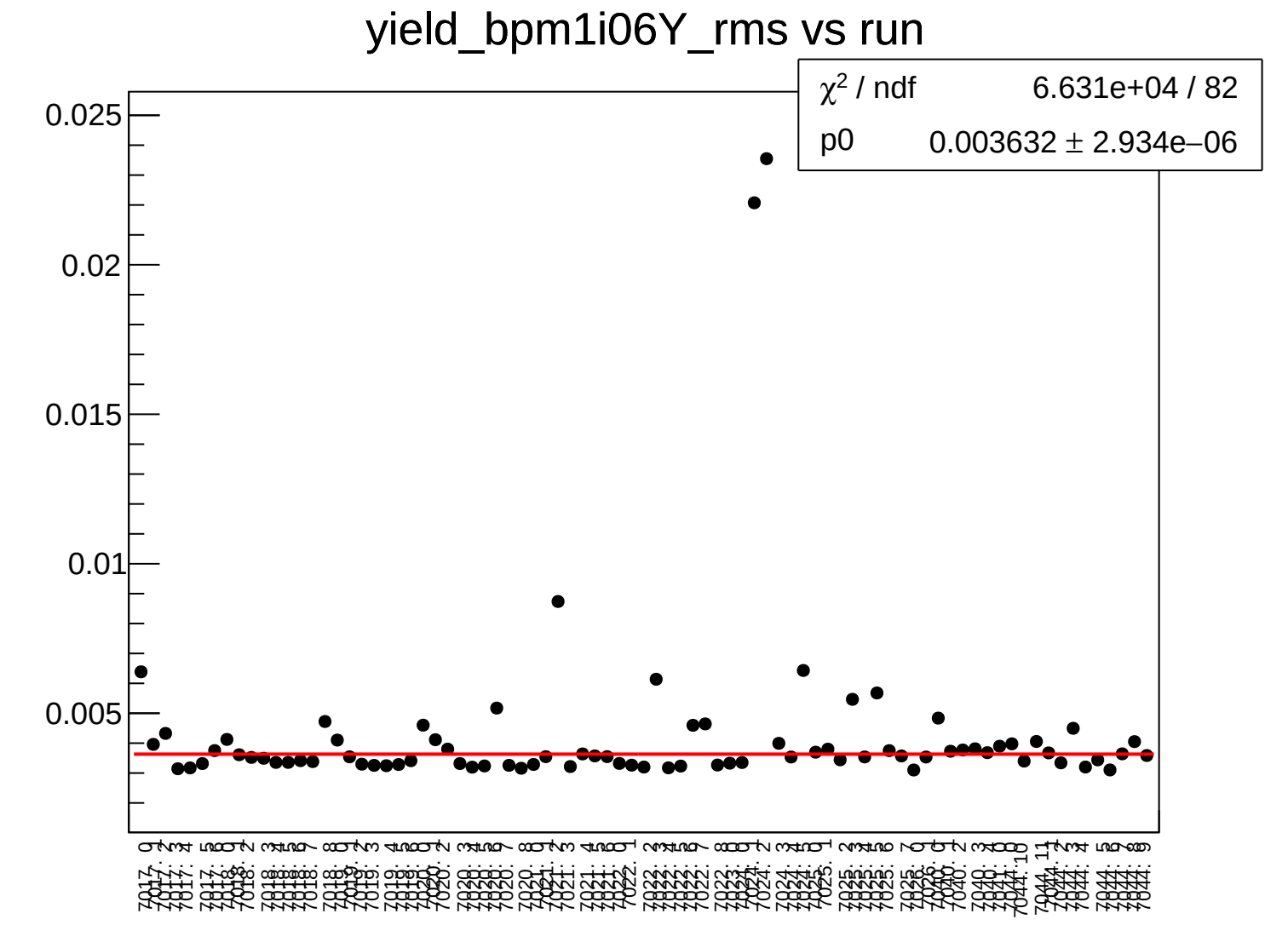

yield_bpm1i06X_mean vs run
χ² / ndf 4.176e+06 / 82
p0 1.821 ± 1.2e−05
1.88
1.86
1.84
1.82
1.8
1.78
1.76
pull
Entries 83
Mean −827
Std Dev 864.3
400
200
0
−200
−400

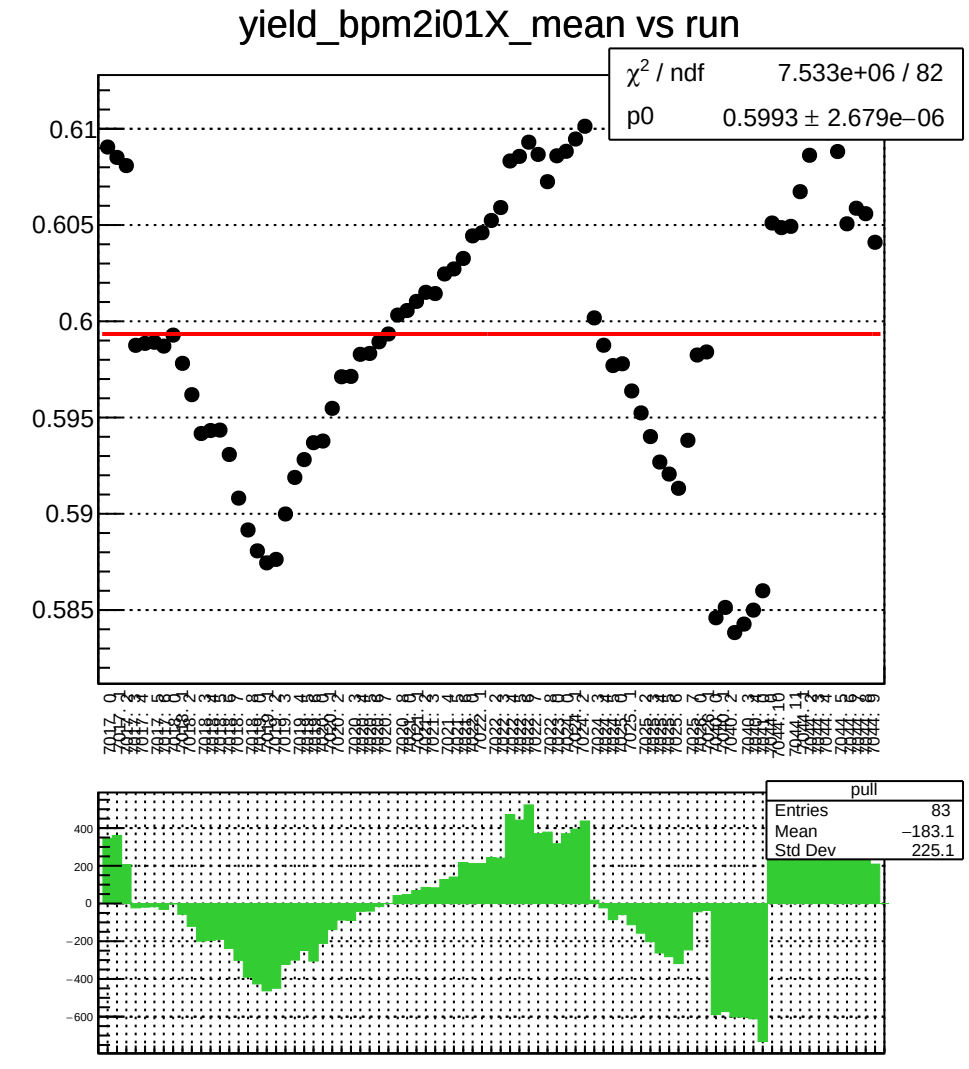

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

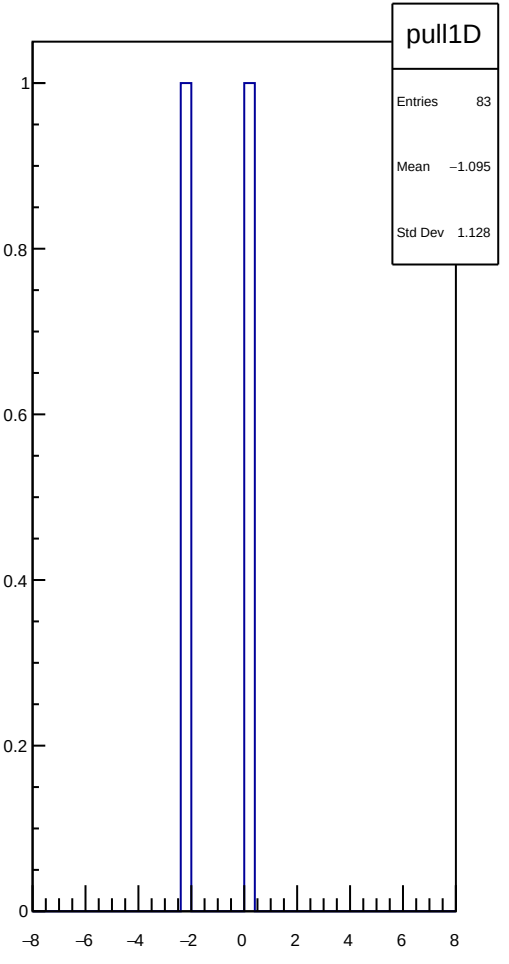

yield_bpm1i06X_rms vs run
χ² / ndf 2.161e+04 / 82
p0 0.01065 ± 8.485e–06
0.02
0.018
0.016
0.014
0.012
0.01
0.008

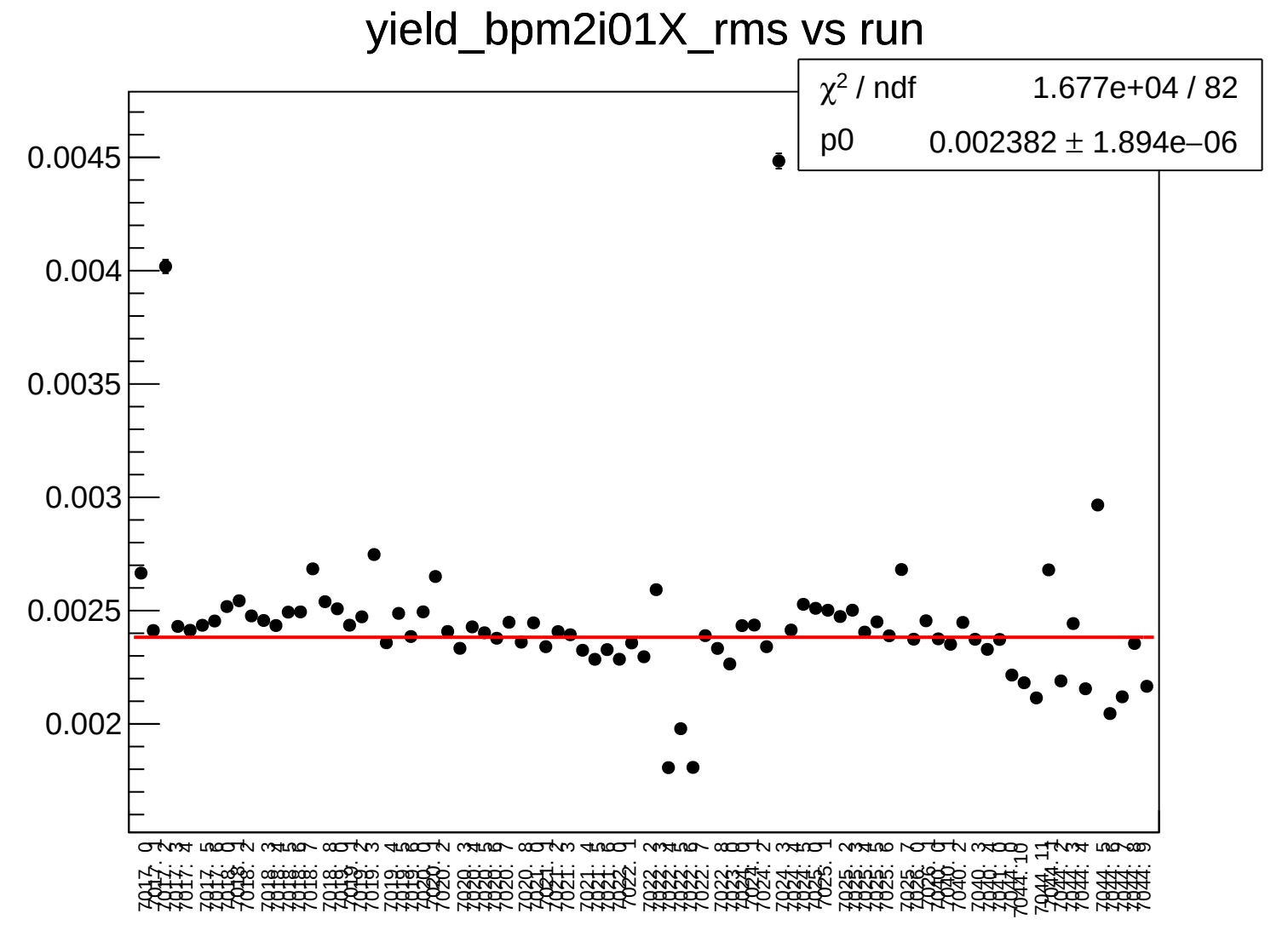

yield_bpm1i06Y_mean vs run
χ² / ndf 1.32e+08 / 82
p0 1.003 ± 4.15e−06
pull
Entries 83
Mean 1.151e+04
Std Dev 1.146e+04

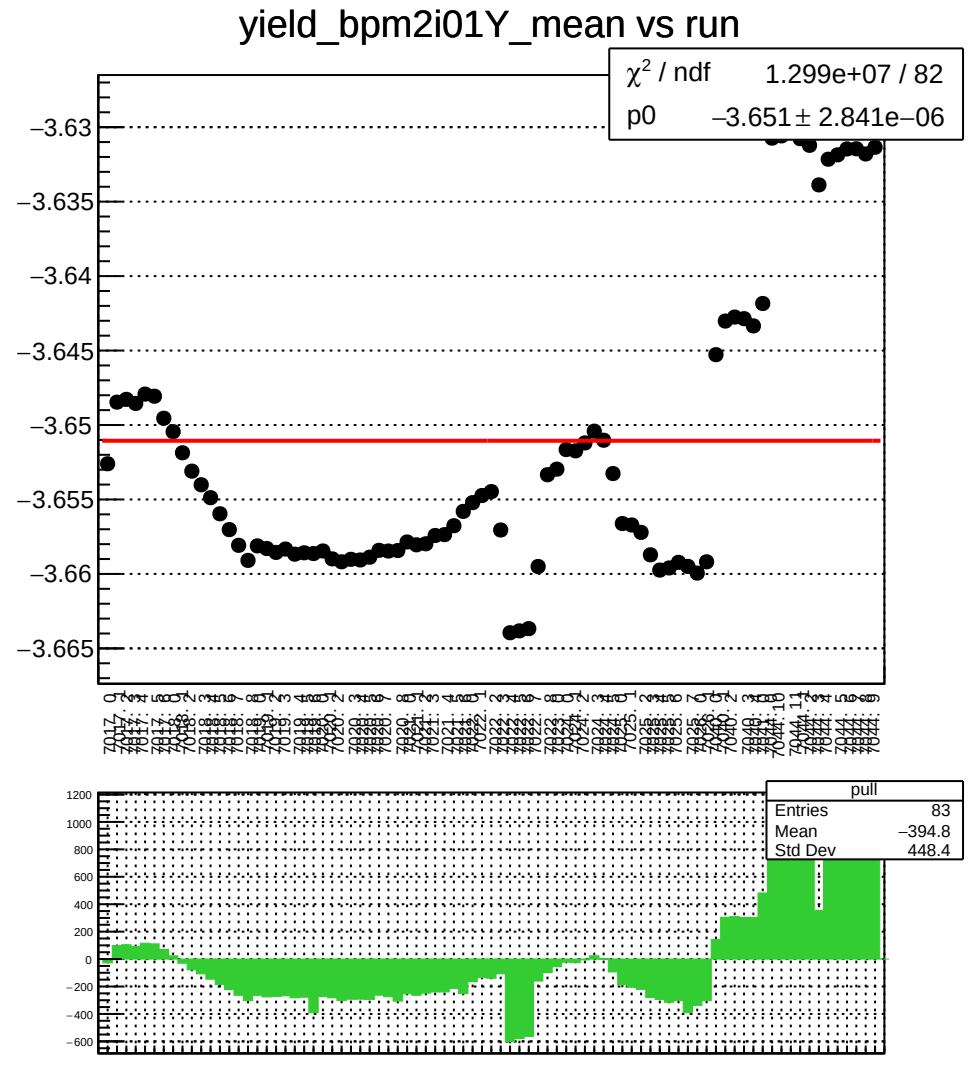

pull1D
Entries 83
Mean 5.36
Std Dev 0

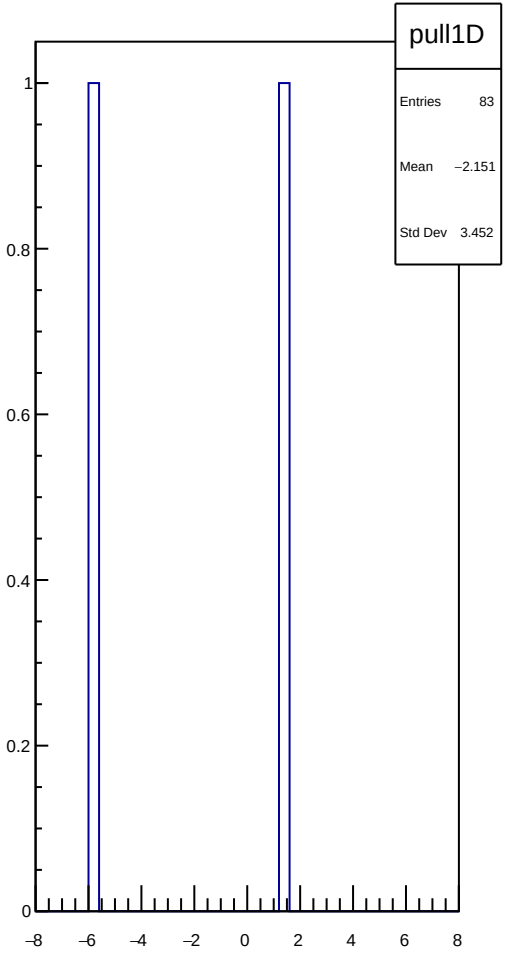

yield_bpm1i06Y_rms vs run
χ² / ndf 6.631e+04 / 82
p0 0.003632 ± 2.934e−06
0.025
0.02
0.015
0.01
0.005

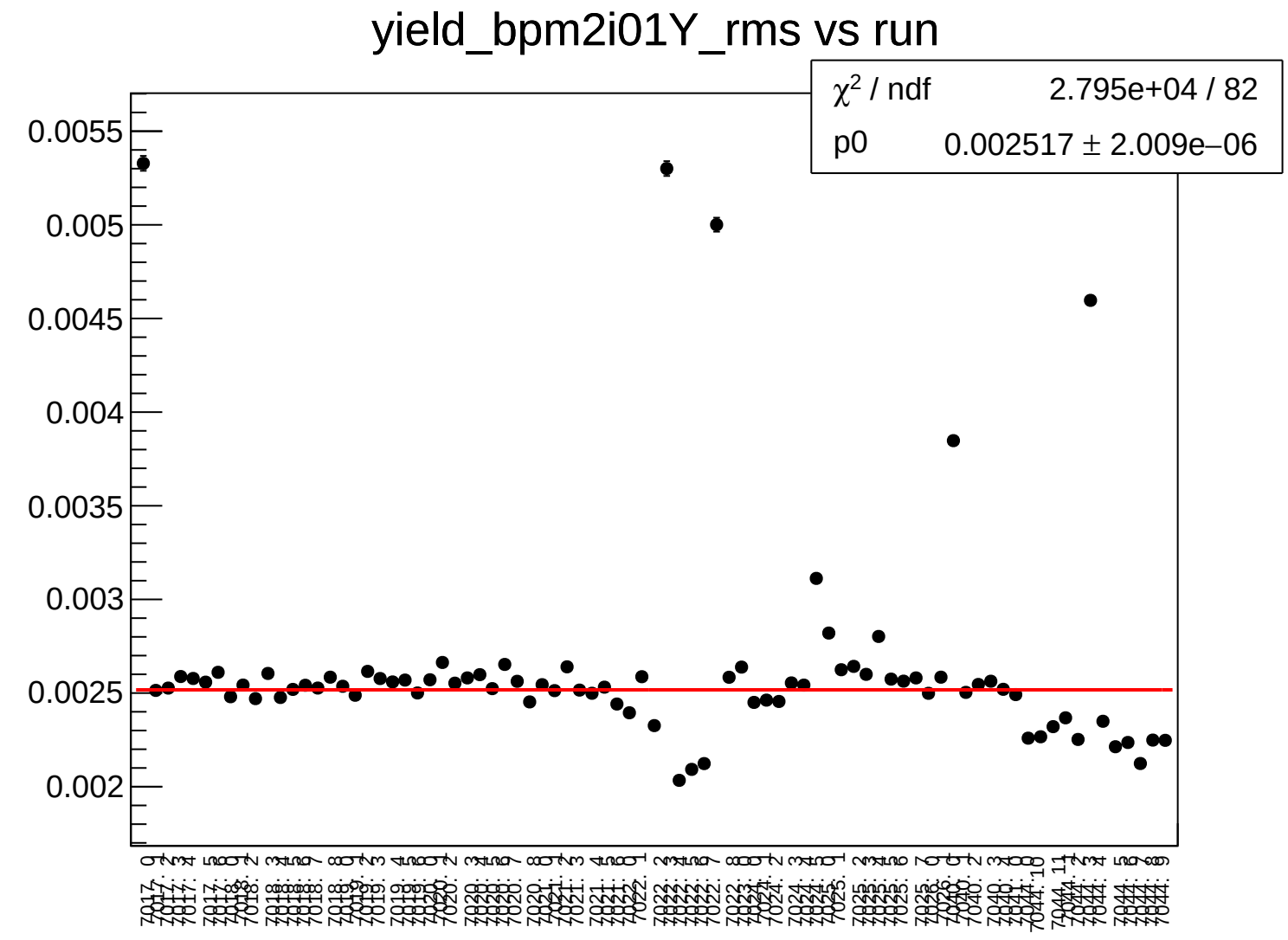

yield_bpm2i01X_mean vs run
χ² / ndf 7.533e+06 / 82
p0 0.5993 ± 2.679e−06
0.61
0.605
0.6
0.595
0.59
0.585
pull
Entries 83
Mean −183.1
Std Dev 225.1
400
200
0
−200
−400
−600

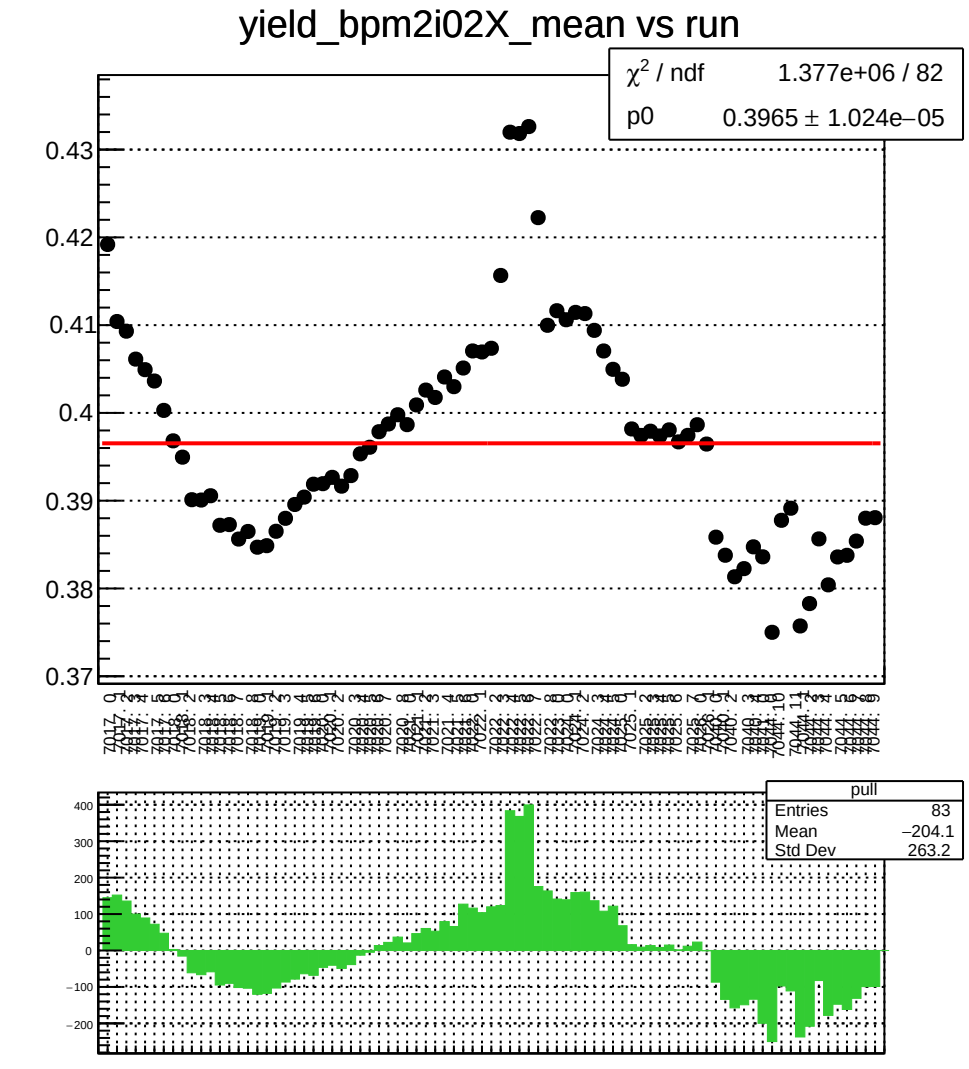

pull1D
Entries 83
Mean −1.095
Std Dev 1.128
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

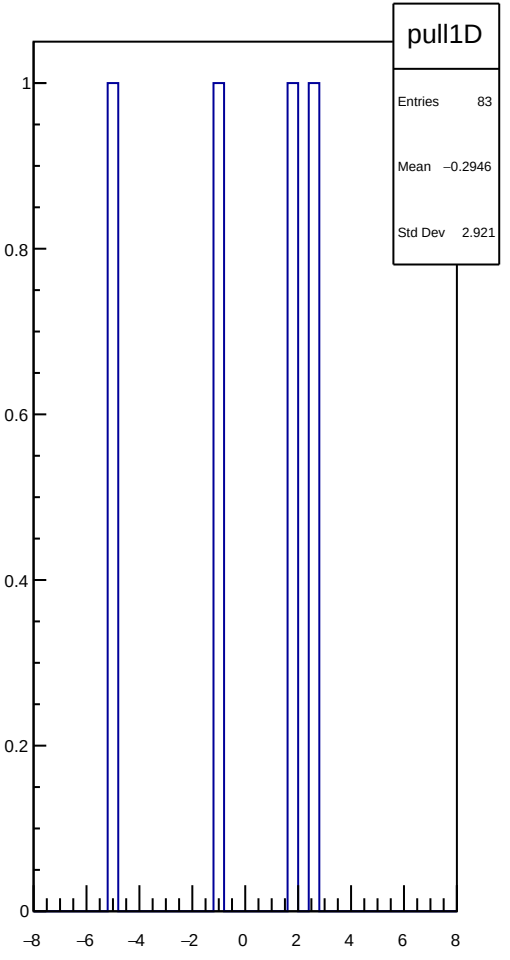

yield_bpm2i01X_rms vs run
χ² / ndf 1.677e+04 / 82
p0 0.002382 ± 1.894e−06
0.0045
0.004
0.0035
0.003
0.0025
0.002

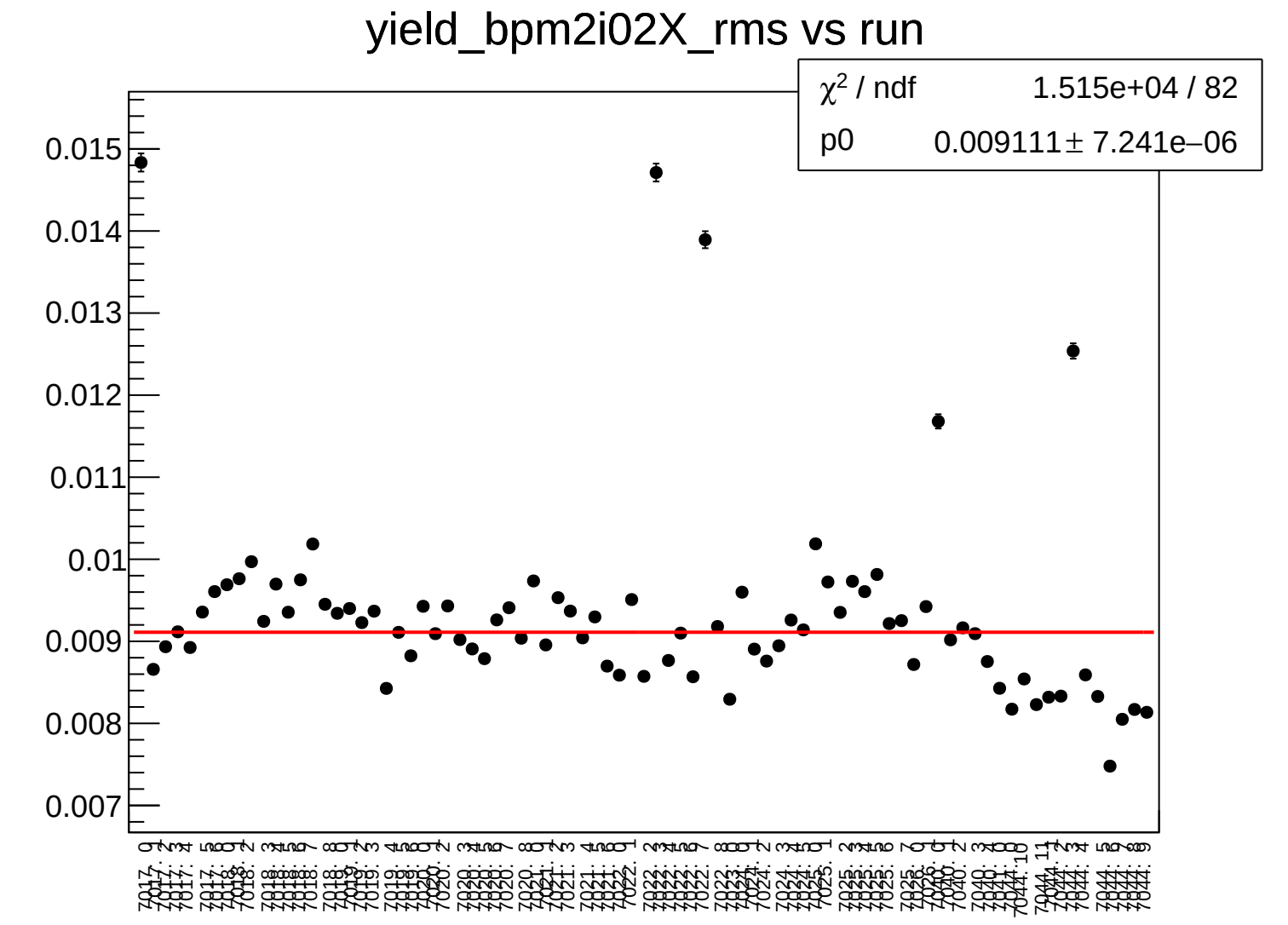

yield_bpm2i01Y_mean vs run
χ² / ndf 1.299e+07 / 82
p0 −3.651 ± 2.841e−06
−3.63
−3.635
−3.64
−3.645
−3.65
−3.655
−3.66
−3.665
pull
Entries 83
Mean −394.8
Std Dev 448.4
1200
1000
800
600
400
200
0
−200
−400
−600

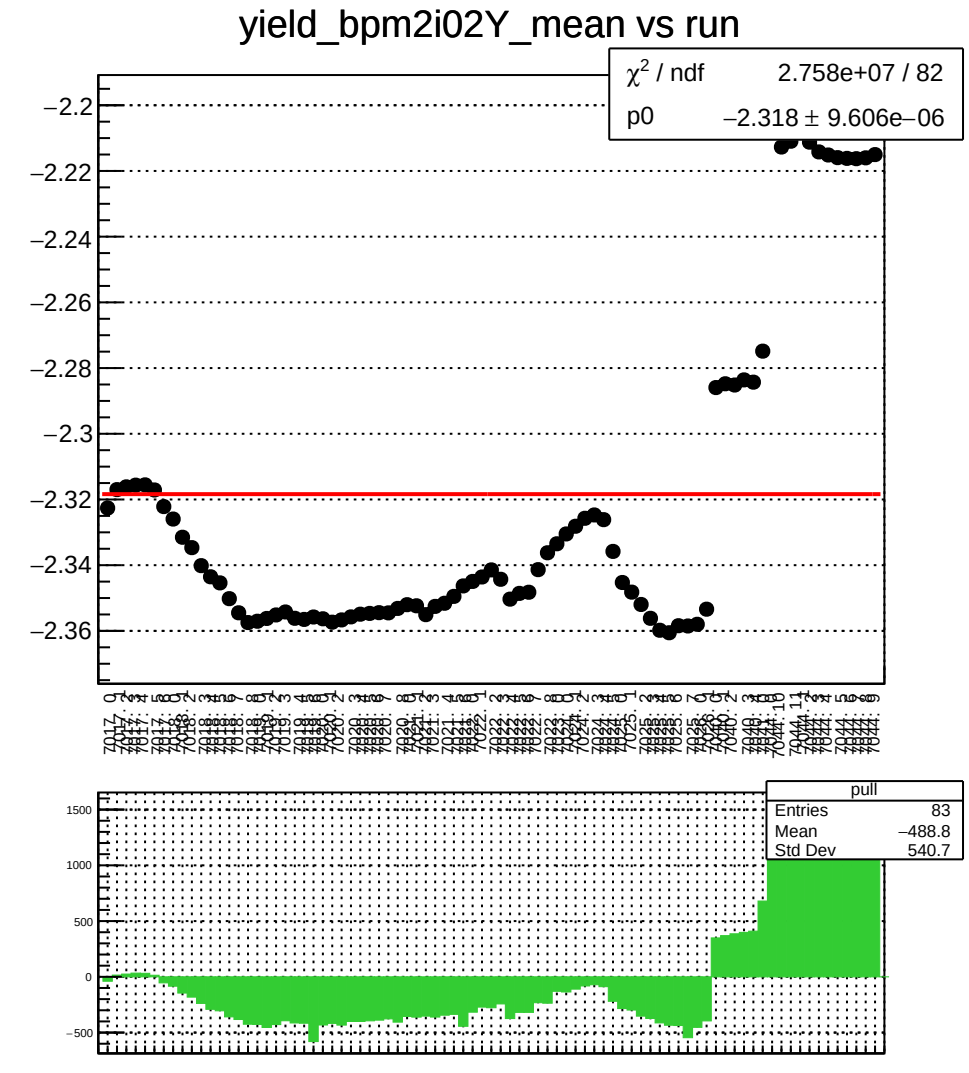

pull1D
Entries 83
Mean −2.151
Std Dev 3.452
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

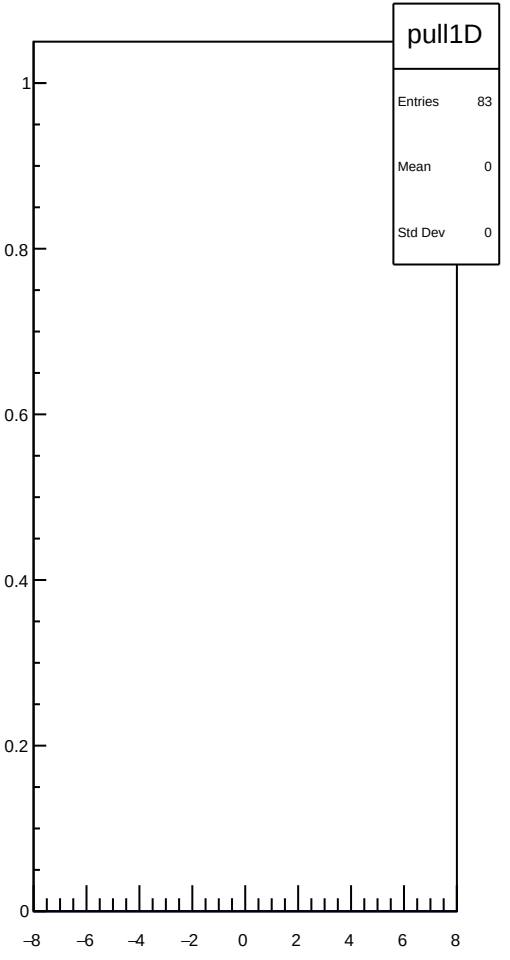

yield_bpm2i01Y_rms vs run
χ² / ndf 2.795e+04 / 82
p0 0.002517 ± 2.009e−06
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

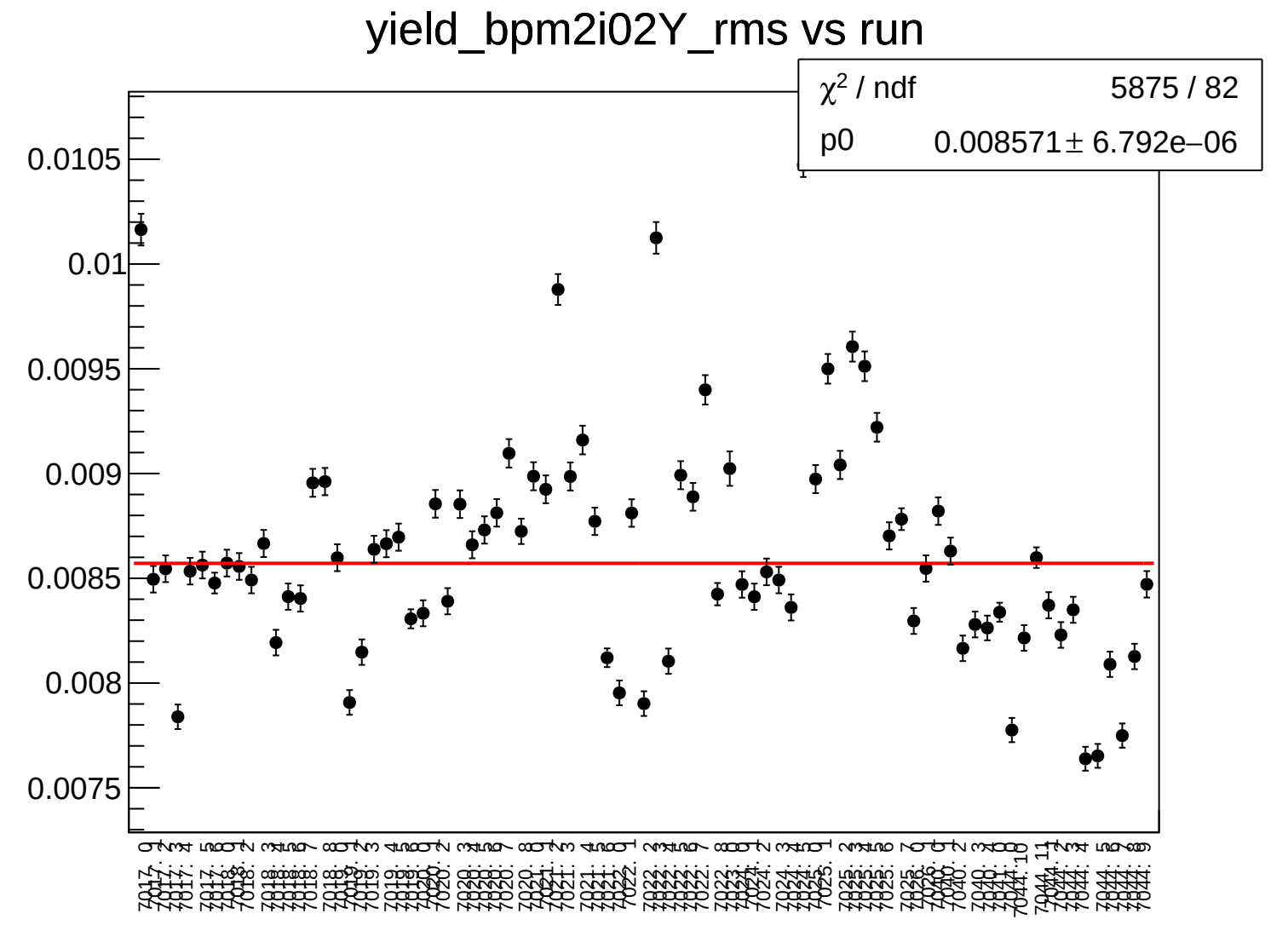

yield_bpm2i02X_mean vs run
χ² / ndf 1.377e+06 / 82
p0 0.3965 ± 1.024e−05
0.43
0.42
0.41
0.4
0.39
0.38
0.37
pull
Entries 83
Mean −204.1
Std Dev 263.2
400
300
200
100
0
−100
−200

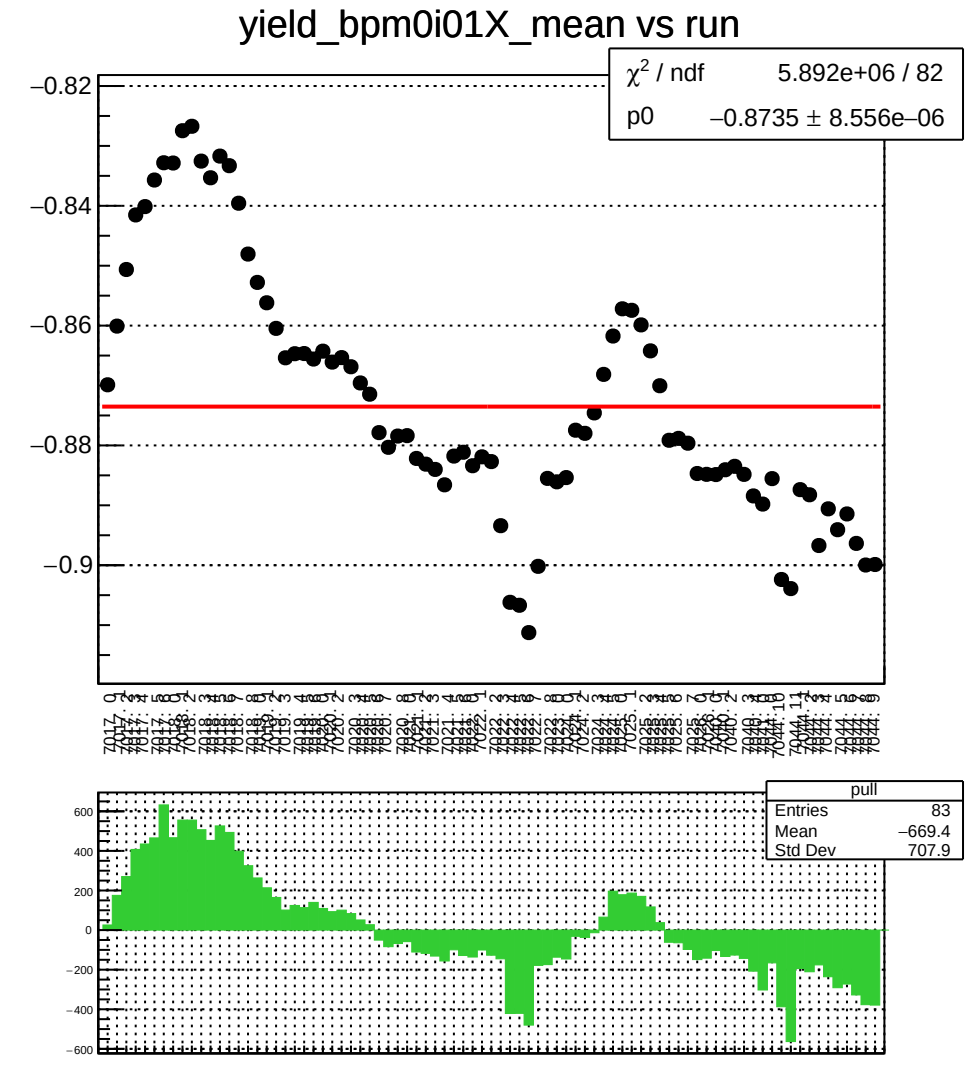

pull1D
Entries 83
Mean −0.2946
Std Dev 2.921
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

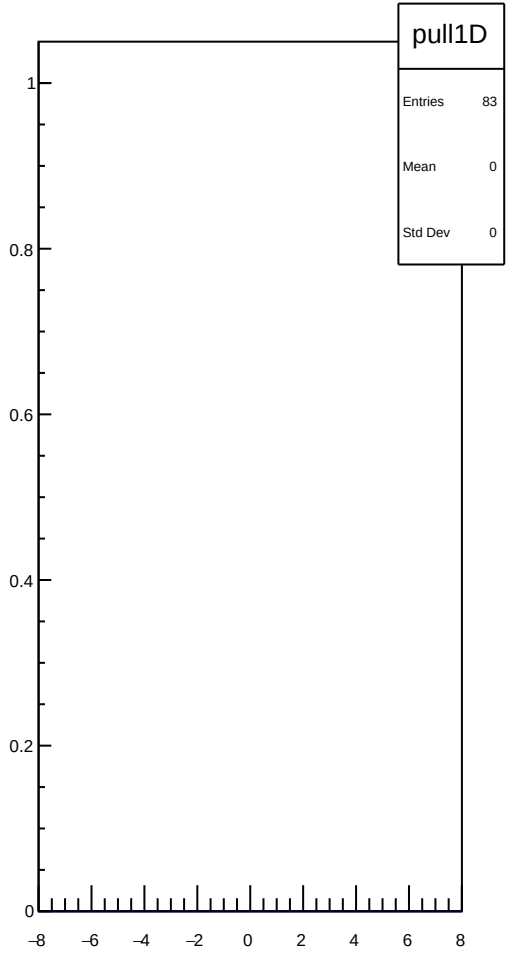

yield_bpm2i02X_rms vs run
χ² / ndf 1.515e+04 / 82
p0 0.009111 ± 7.241e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

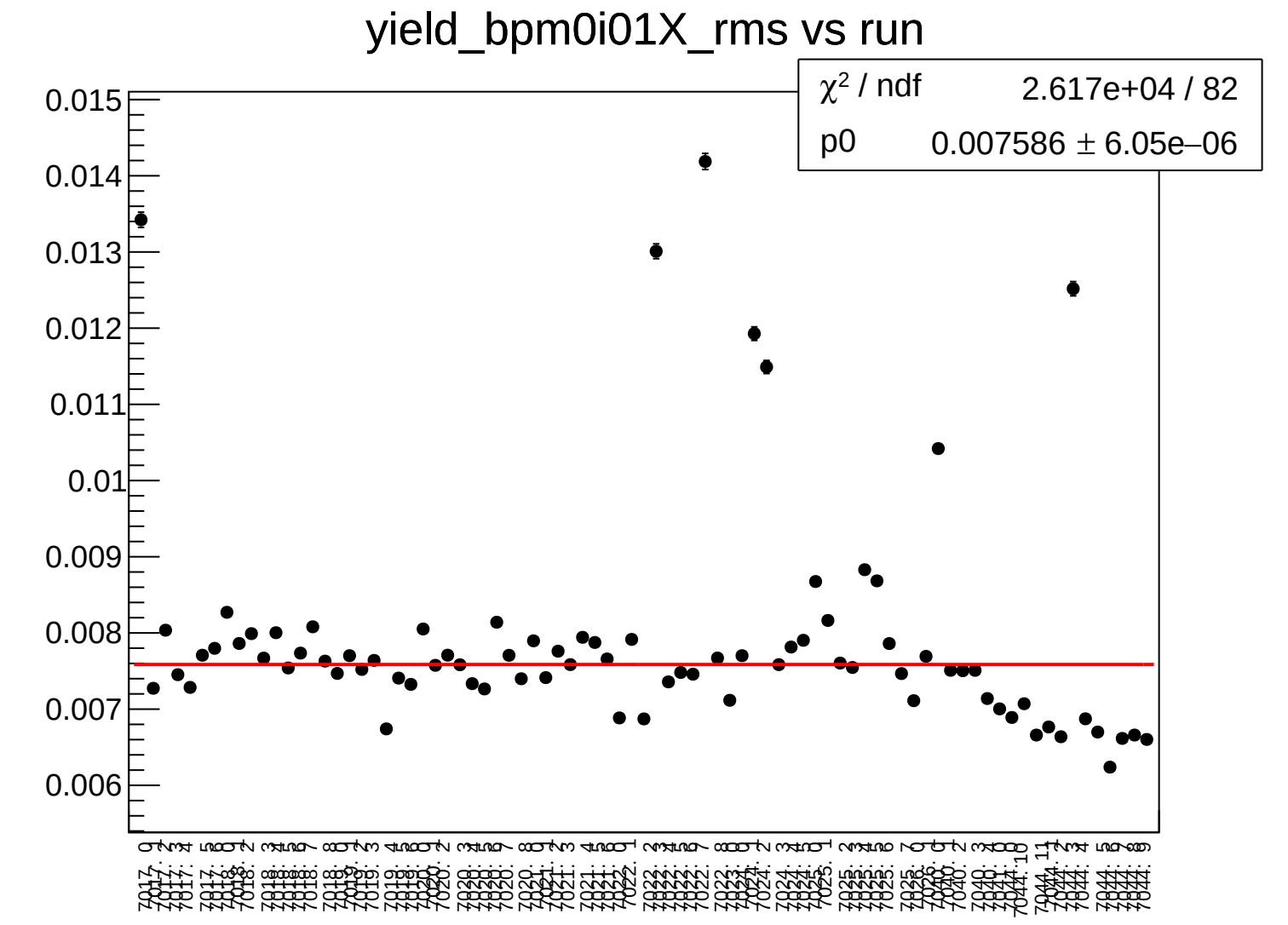

yield_bpm2i02Y_mean vs run
χ² / ndf 2.758e+07 / 82
p0 −2.318 ± 9.606e−06
−2.2
−2.22
−2.24
−2.26
−2.28
−2.3
−2.32
−2.34
−2.36
pull
Entries 83
Mean −488.8
Std Dev 540.7
1500
1000
500
0
−500

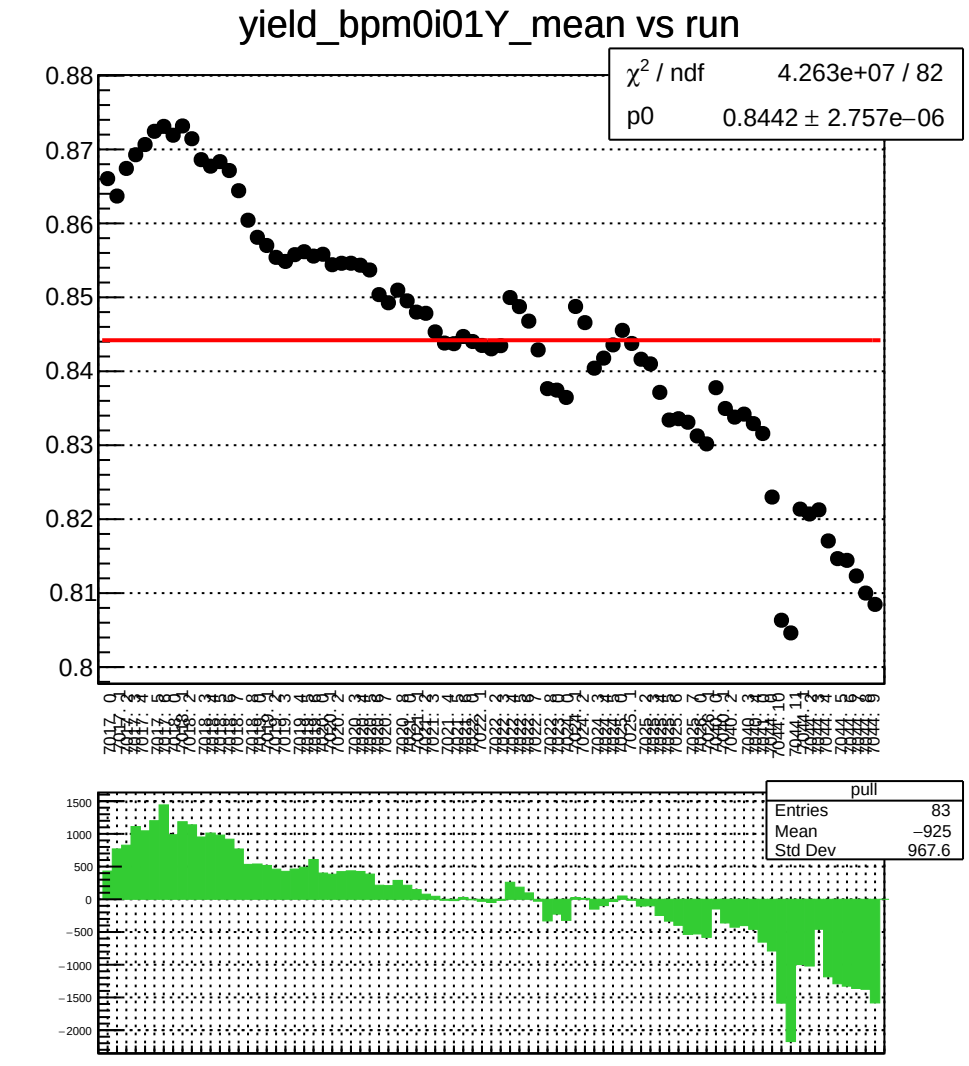

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

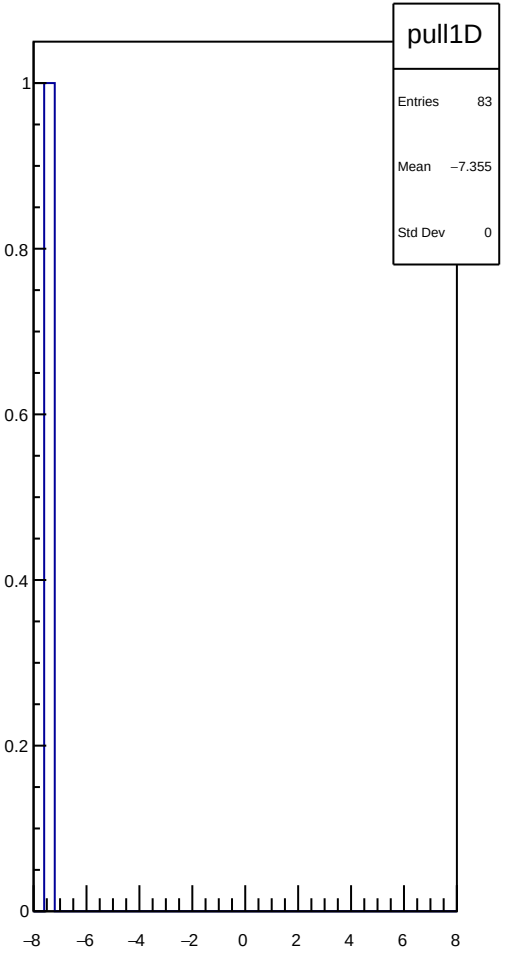

yield_bpm2i02Y_rms vs run
χ² / ndf 5875 / 82
p0 0.008571 ± 6.792e−06
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075

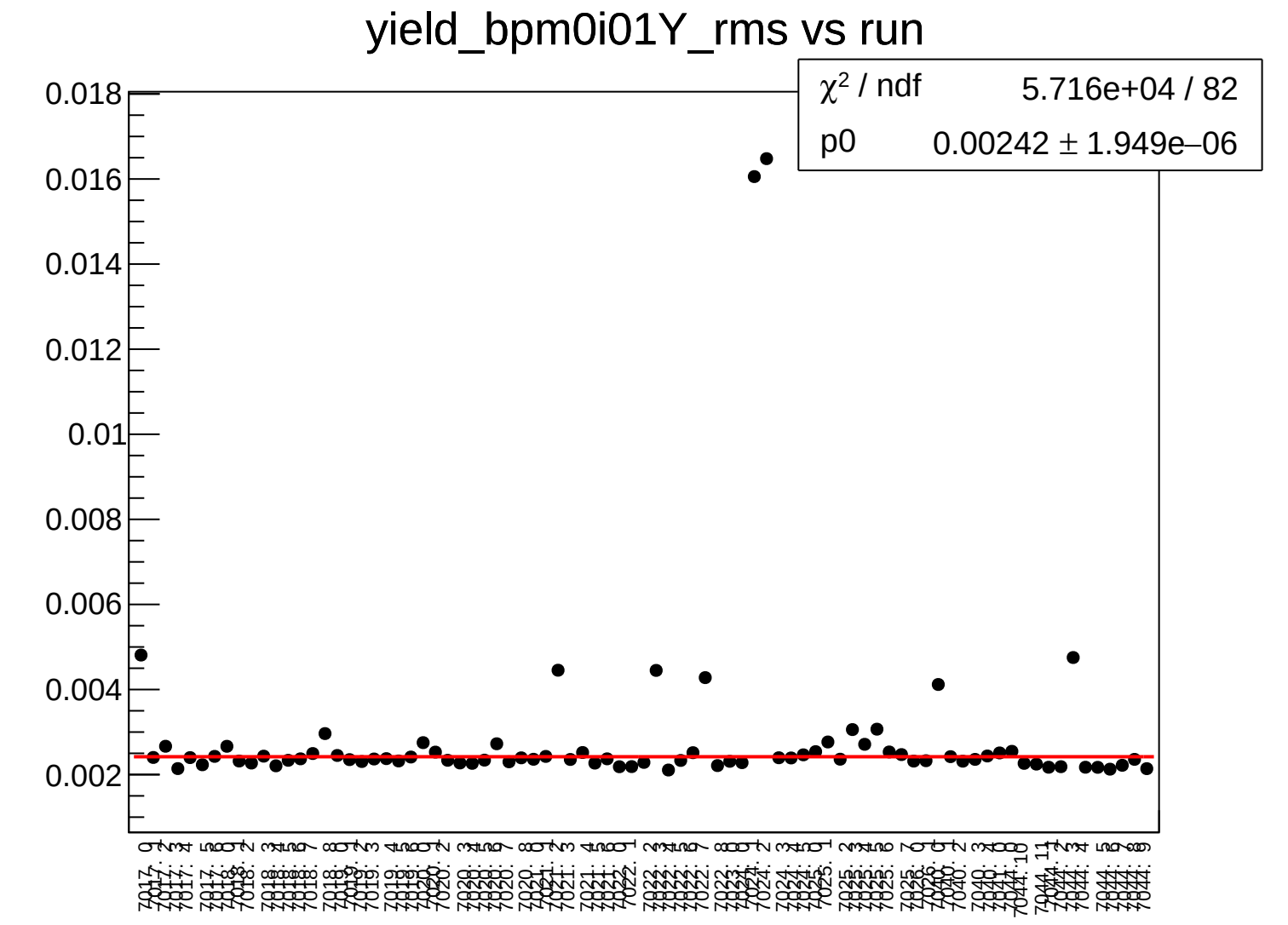

yield_bpm0i01X_mean vs run
χ² / ndf 5.892e+06 / 82
p0 −0.8735 ± 8.556e−06
−0.82
−0.84
−0.86
−0.88
−0.9
pull
Entries 83
Mean −669.4
Std Dev 707.9
600
400
200
0
−200
−400
−600

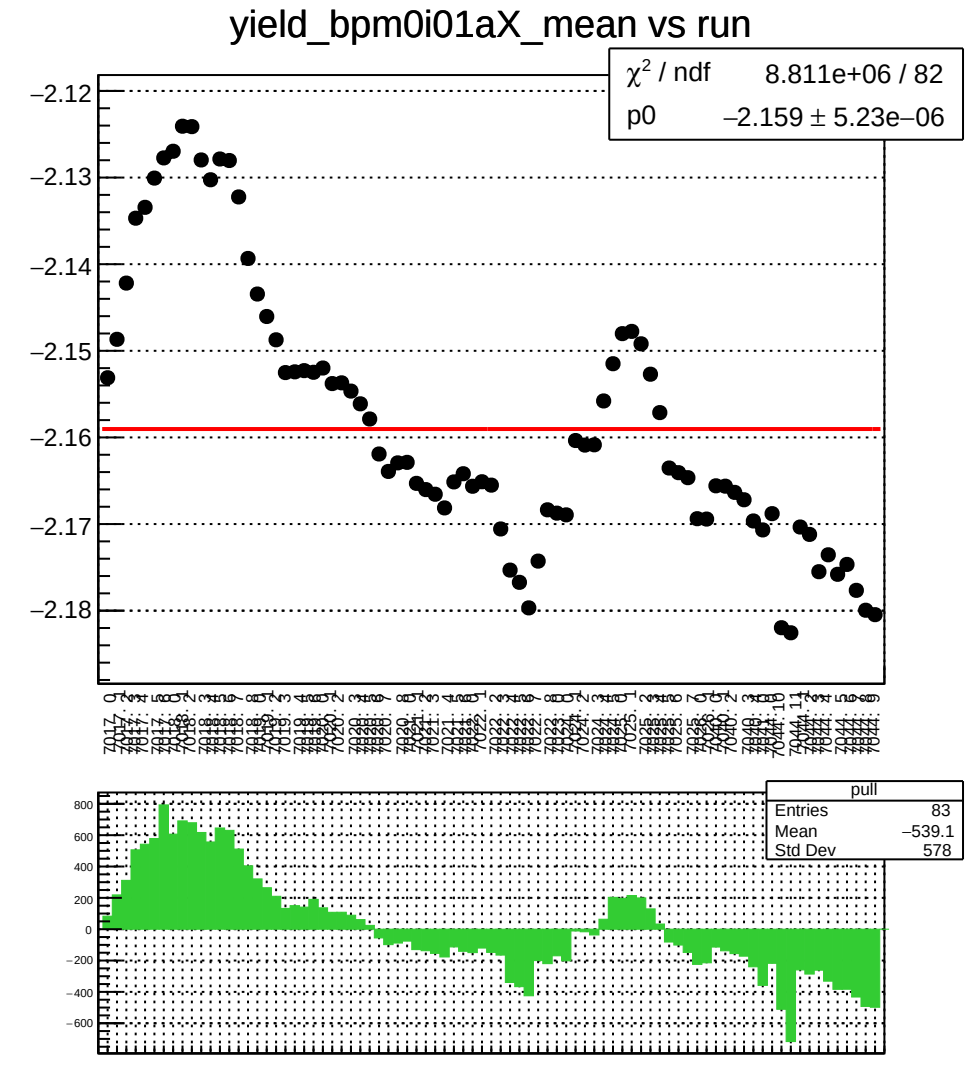

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

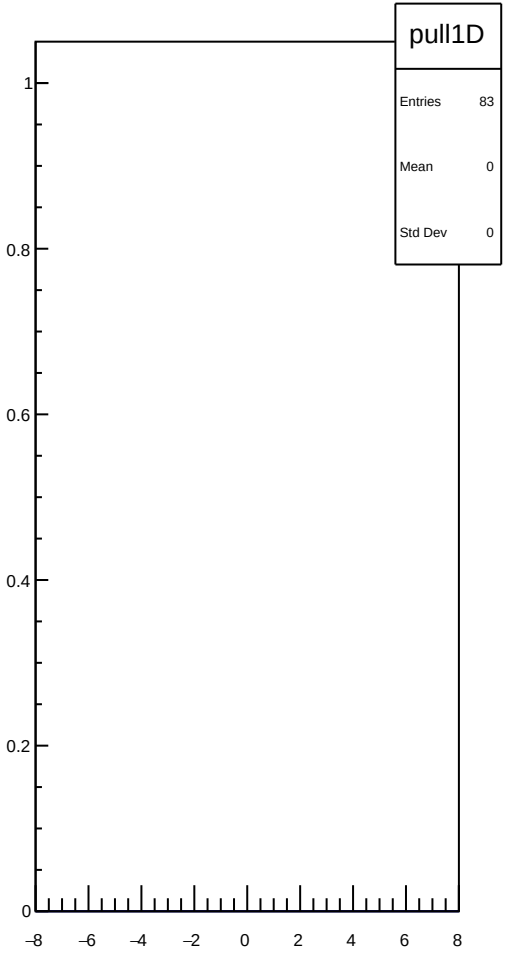

yield_bpm0i01X_rms vs run
χ² / ndf 2.617e+04 / 82
p0 0.007586 ± 6.05e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007
0.006

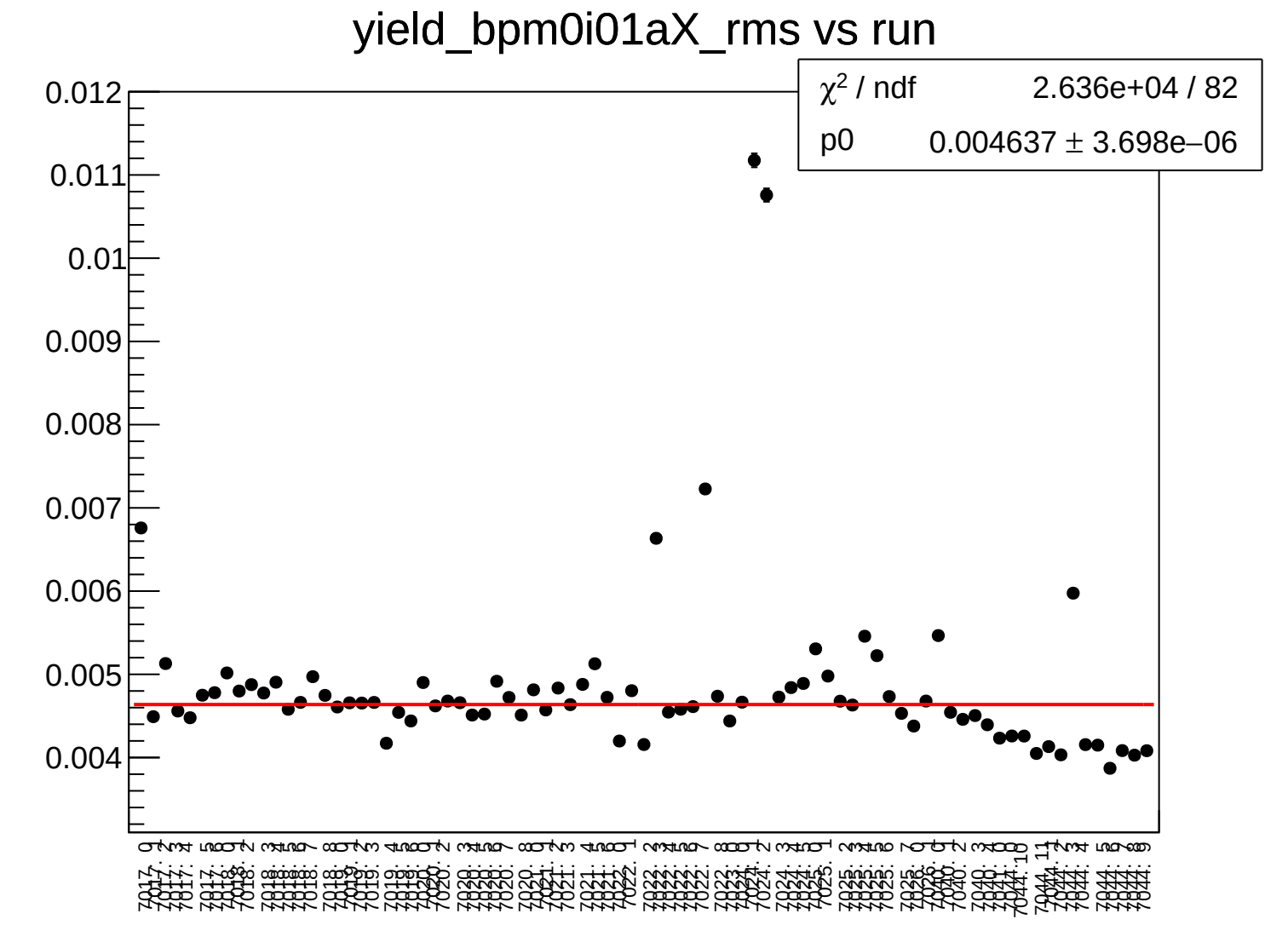

yield_bpm0i01Y_mean vs run
χ² / ndf 4.263e+07 / 82
p0 0.8442 ± 2.757e−06
pull
Entries 83
Mean −925
Std Dev 967.6

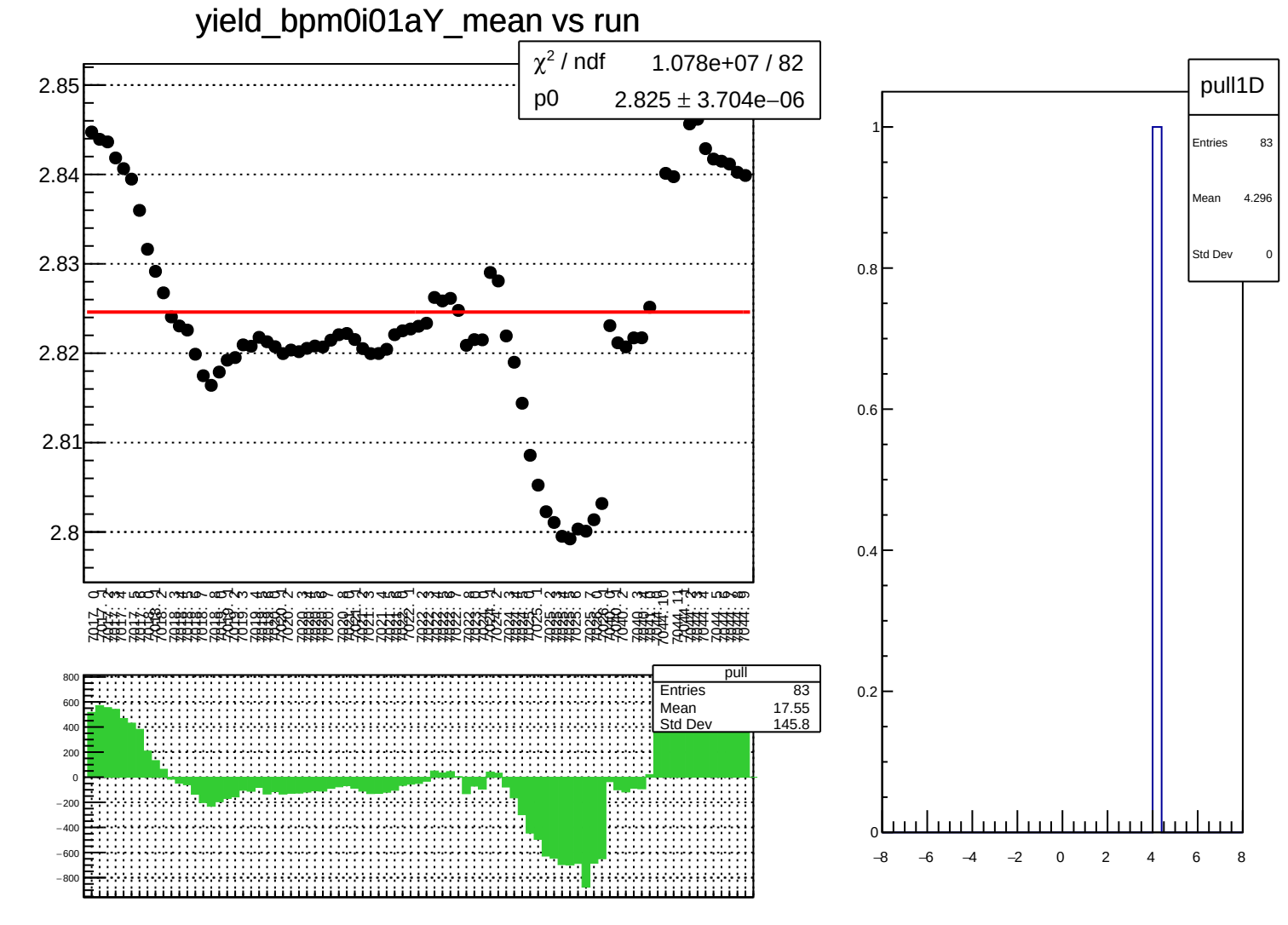

pull1D
Entries 83
Mean −7.355
Std Dev 0

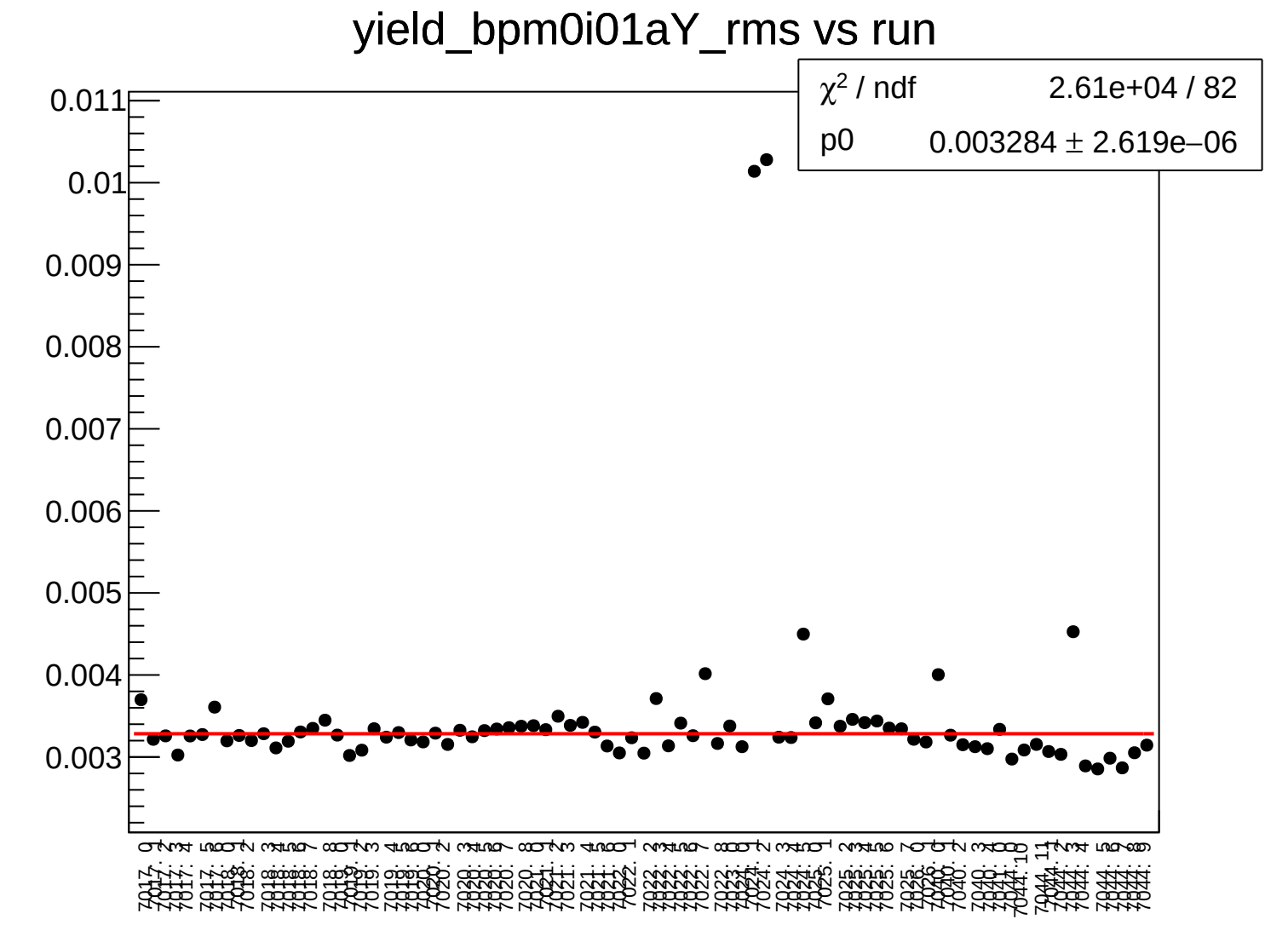

yield_bpm0i01Y_rms vs run
χ² / ndf 5.716e+04 / 82
p0 0.00242 ± 1.949e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

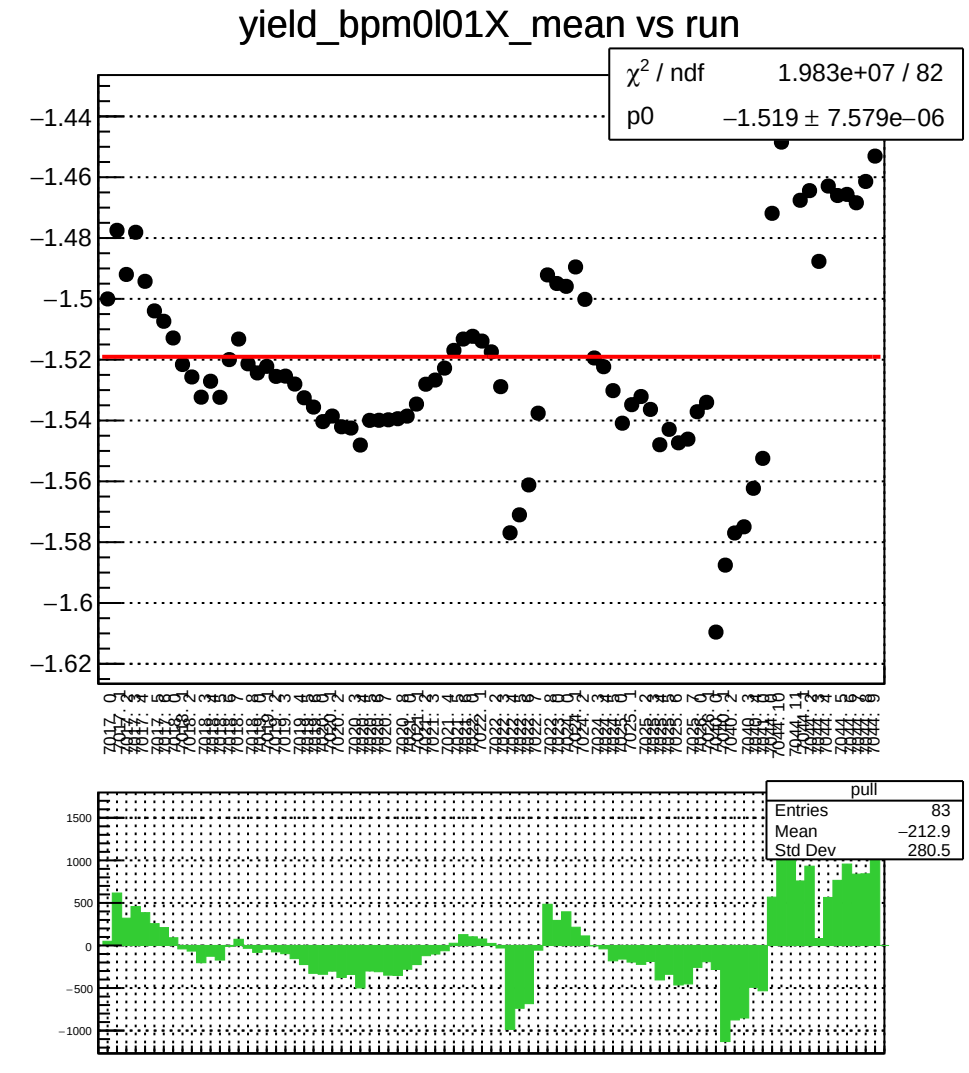

yield_bpm0i01aX_mean vs run
χ² / ndf 8.811e+06 / 82
p0 −2.159 ± 5.23e−06
−2.12
−2.13
−2.14
−2.15
−2.16
−2.17
−2.18
pull
Entries 83
Mean −539.1
Std Dev 578
800
600
400
200
0
−200
−400
−600

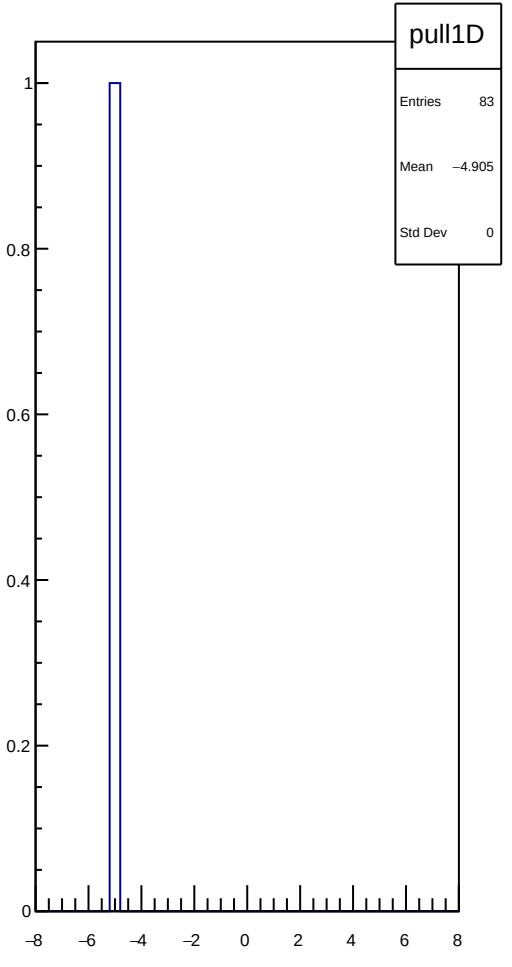

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

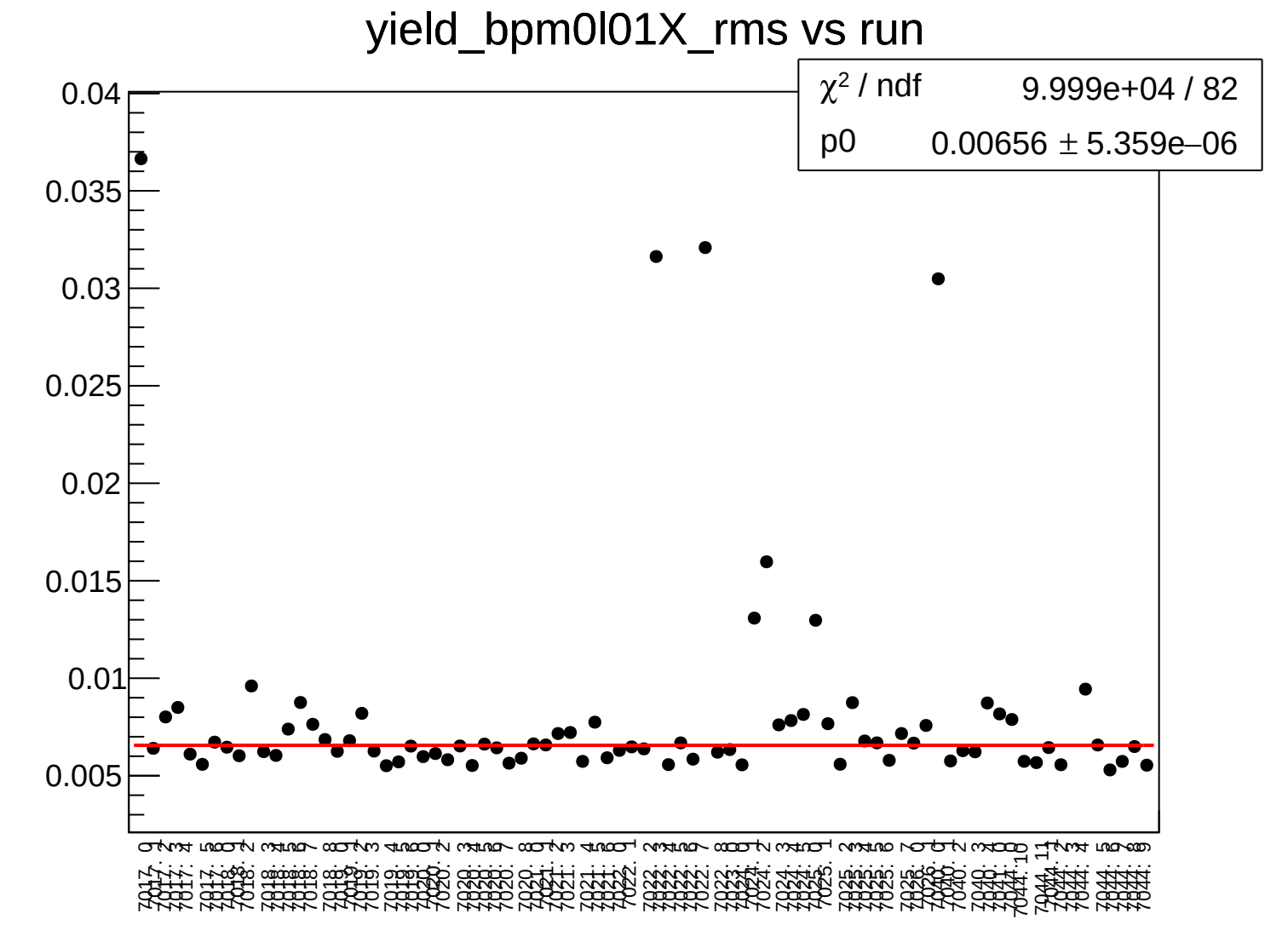

yield_bpm0i01aX_rms vs run
χ² / ndf 2.636e+04 / 82
p0 0.004637 ± 3.698e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

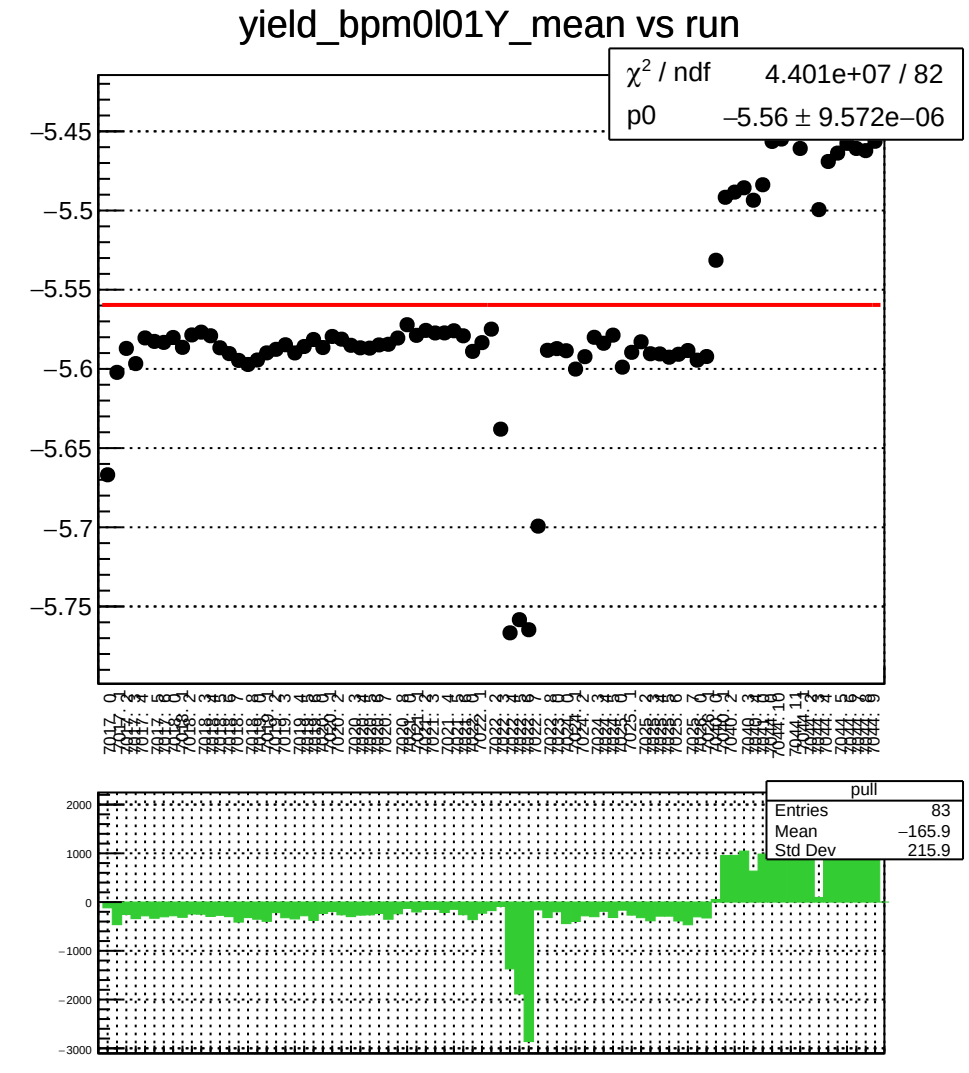

yield_bpm0i01aY_mean vs run
χ² / ndf 1.078e+07 / 82
p0 2.825 ± 3.704e−06
2.85
2.84
2.83
2.82
2.81
2.8
pull
Entries 83
Mean 17.55
Std Dev 145.8
800
600
400
200
0
−200
−400
−600
−800
pull1D
Entries 83
Mean 4.296
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

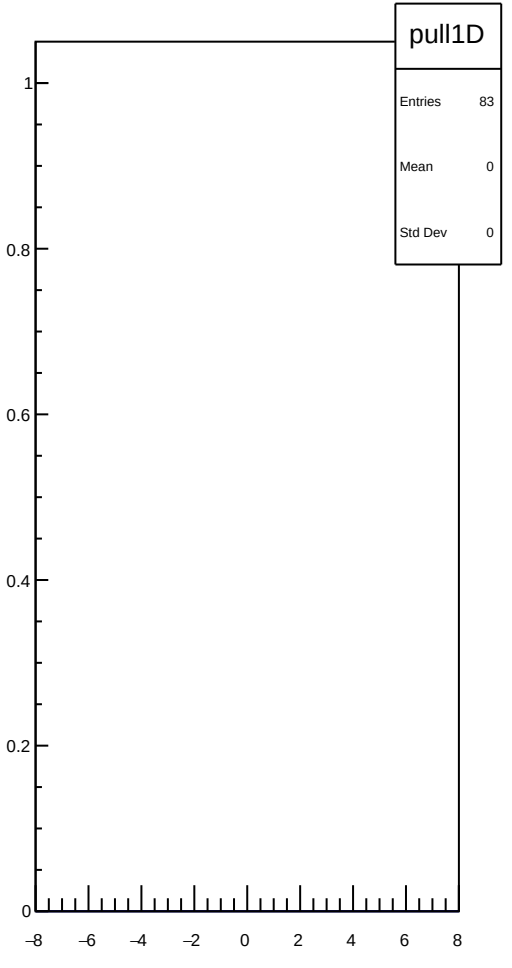

yield_bpm0i01aY_rms vs run
χ² / ndf 2.61e+04 / 82
p0 0.003284 ± 2.619e−06
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

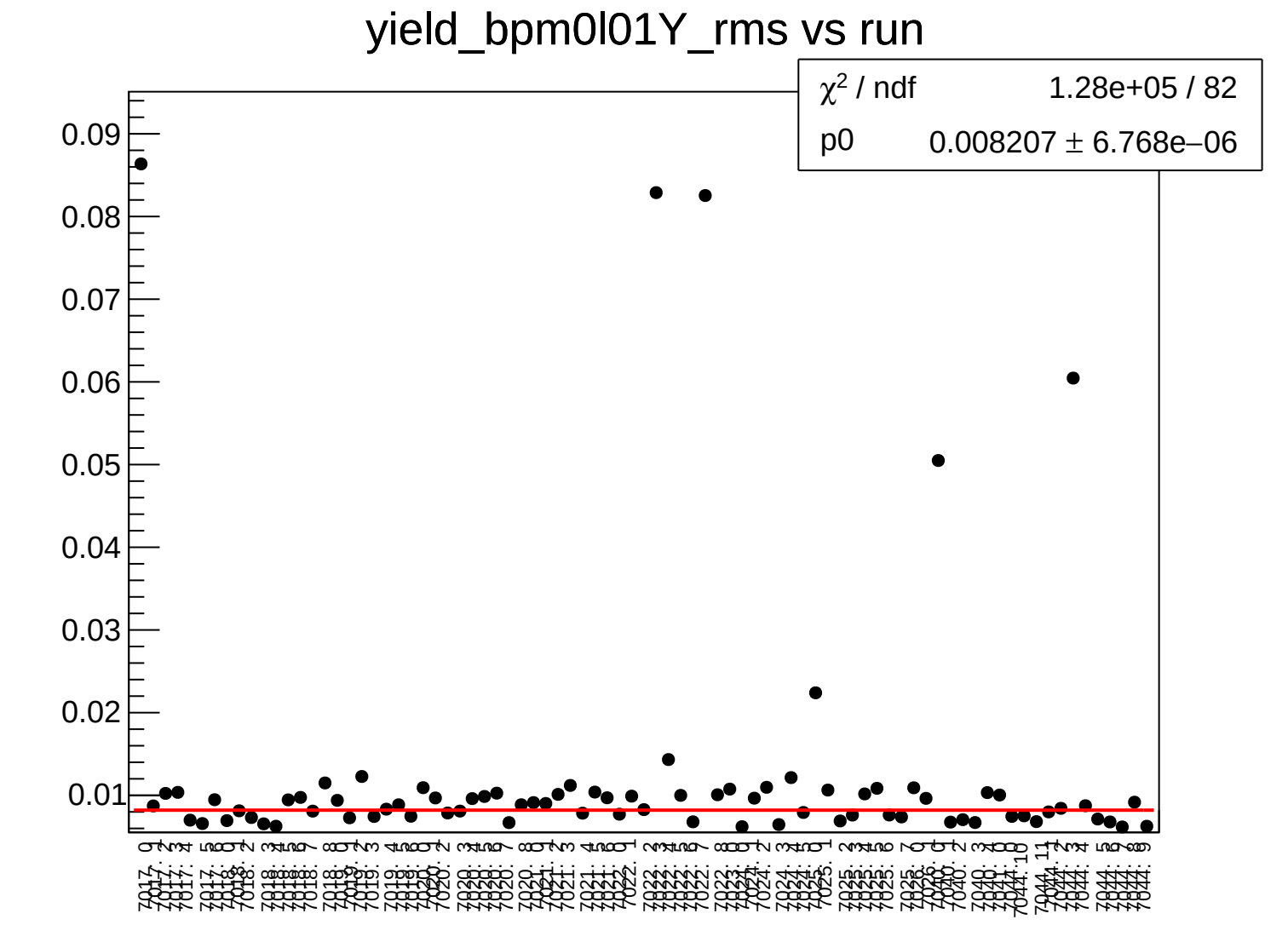

yield_bpm0l01X_mean vs run
χ² / ndf 1.983e+07 / 82
p0 −1.519 ± 7.579e−06
−1.44
−1.46
−1.48
−1.5
−1.52
−1.54
−1.56
−1.58
−1.6
−1.62
pull
Entries 83
Mean −212.9
Std Dev 280.5
1500
1000
500
0
−500
−1000

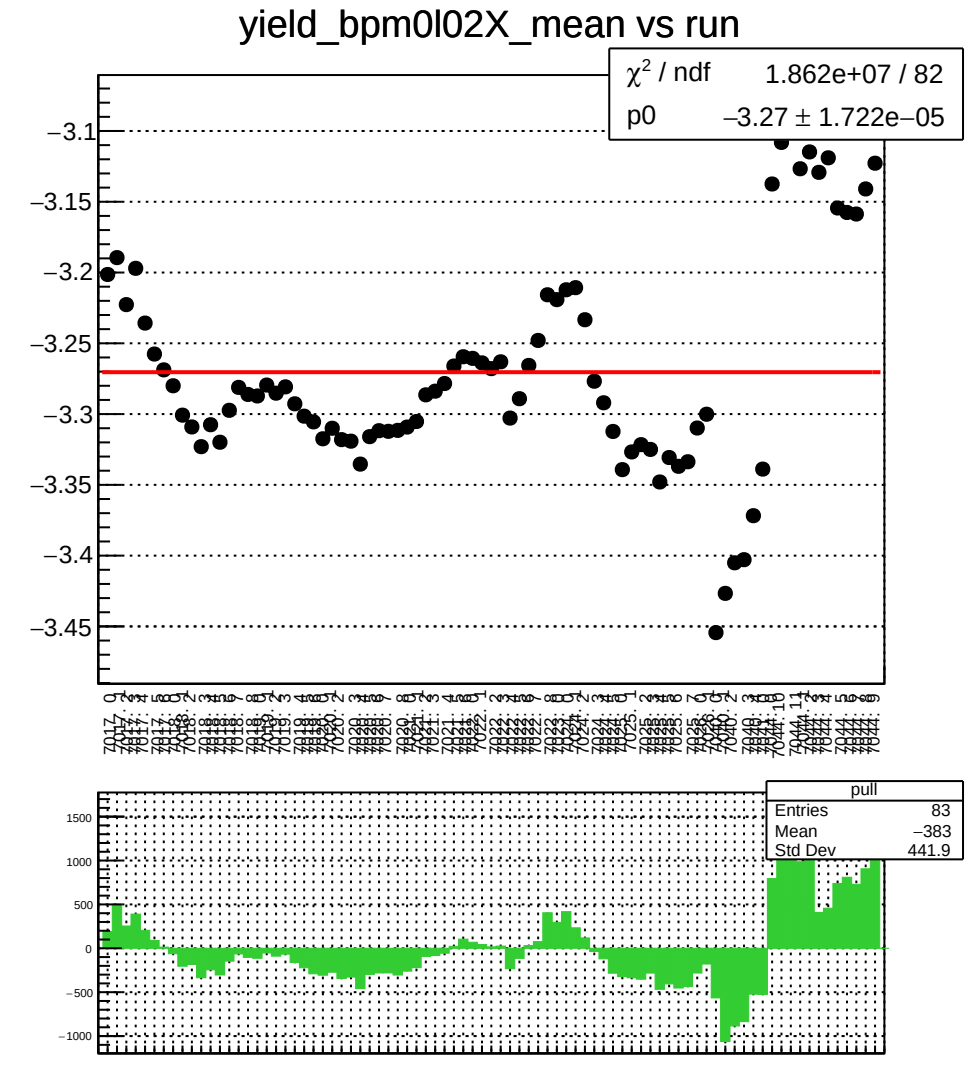

pull1D
Entries 83
Mean −4.905
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

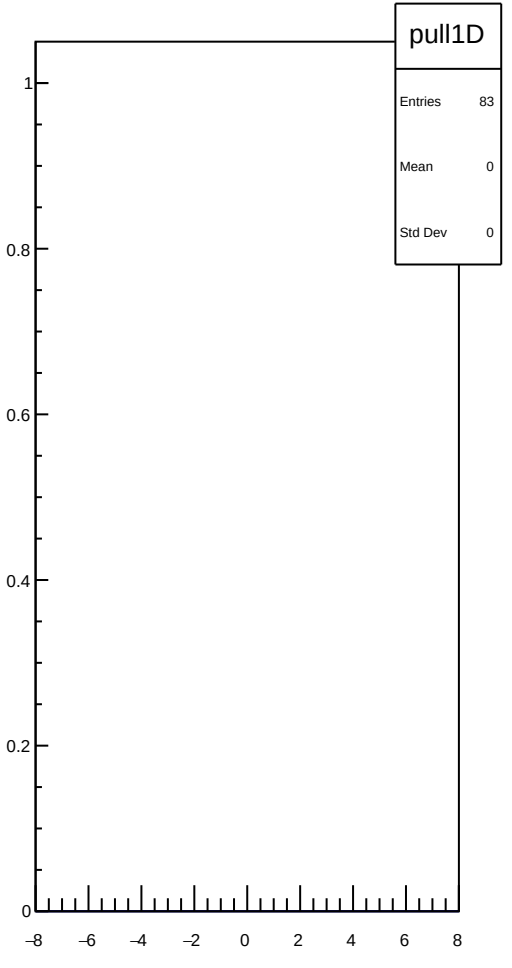

yield_bpm0l01X_rms vs run
χ² / ndf 9.999e+04 / 82
p0 0.00656 ± 5.359e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

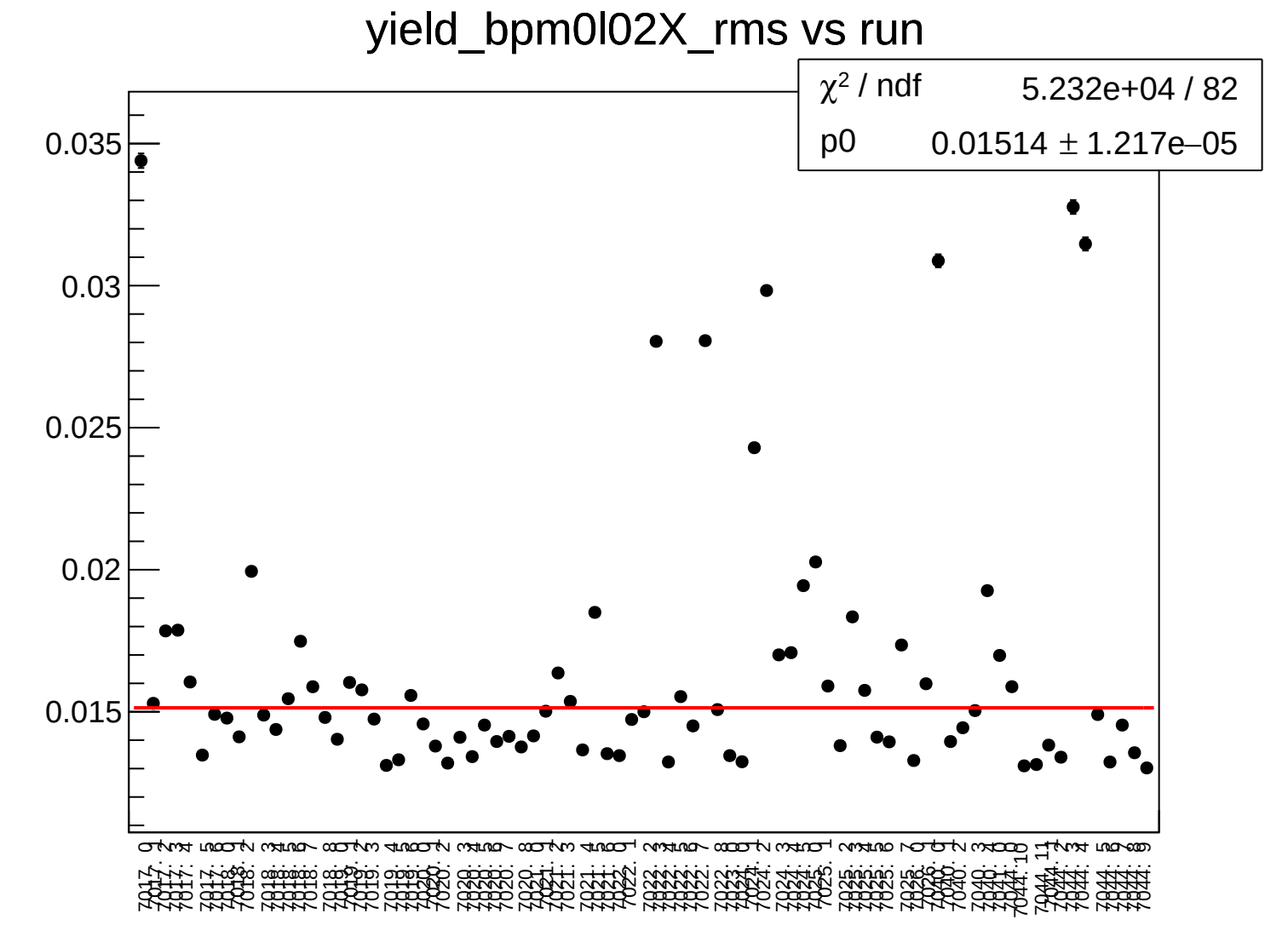

yield_bpm0l01Y_mean vs run
χ² / ndf 4.401e+07 / 82
p0 −5.56 ± 9.572e−06
−5.45
−5.5
−5.55
−5.6
−5.65
−5.7
−5.75
pull
Entries 83
Mean −165.9
Std Dev 215.9
2000
1000
0
−1000
−2000
−3000

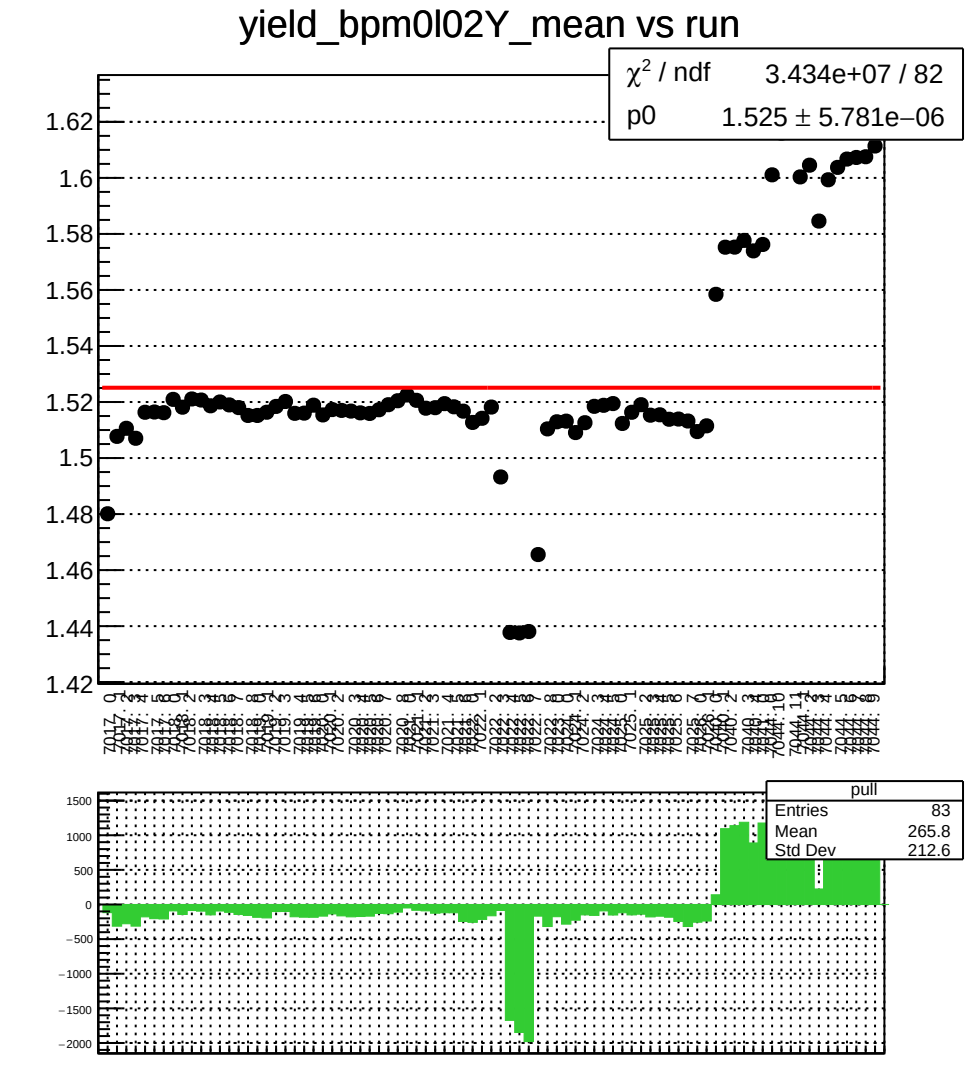

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

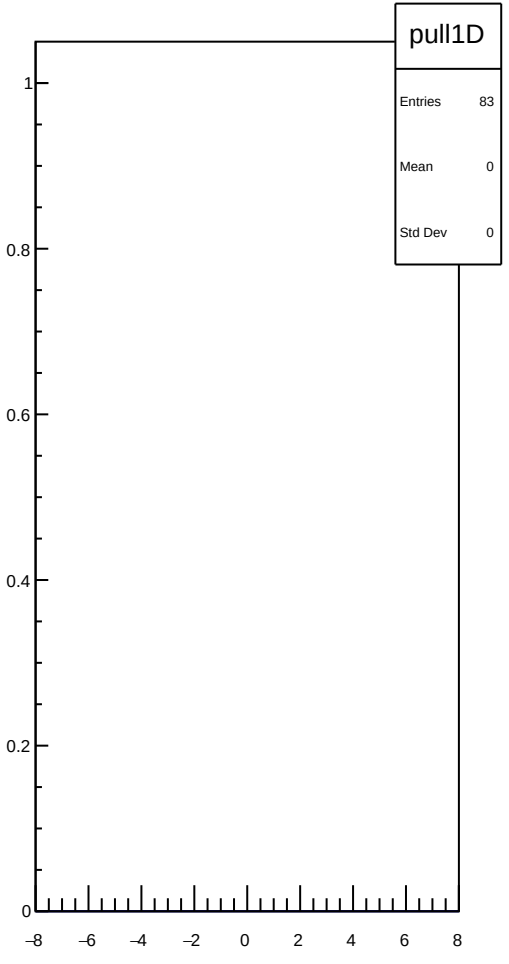

yield_bpm0l01Y_rms vs run
χ² / ndf 1.28e+05 / 82
p0 0.008207 ± 6.768e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

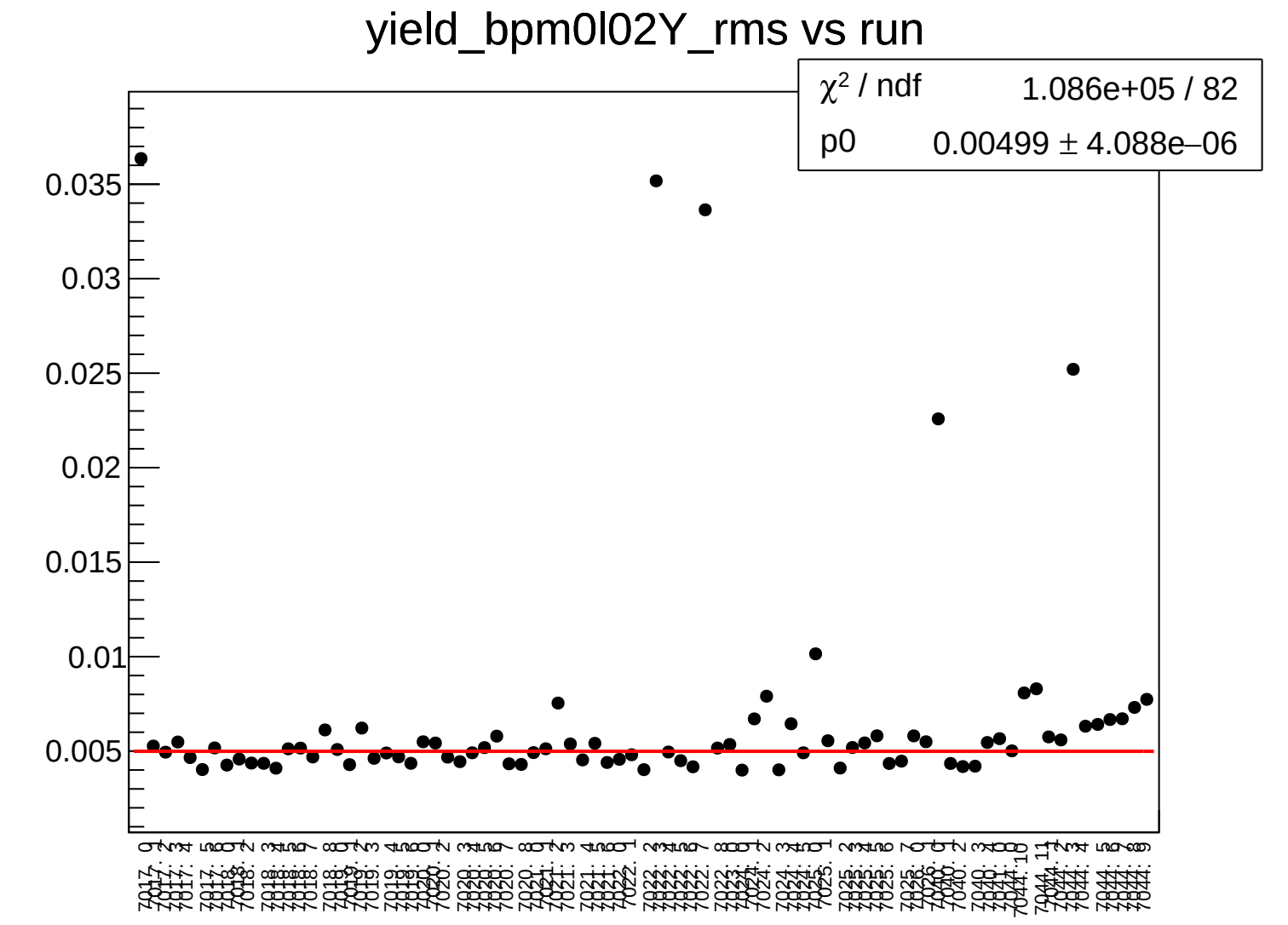

yield_bpm0l02X_mean vs run
χ² / ndf 1.862e+07 / 82
p0 −3.27 ± 1.722e−05
−3.1
−3.15
−3.2
−3.25
−3.3
−3.35
−3.4
−3.45
pull
Entries 83
Mean −383
Std Dev 441.9
1500
1000
500
0
−500
−1000

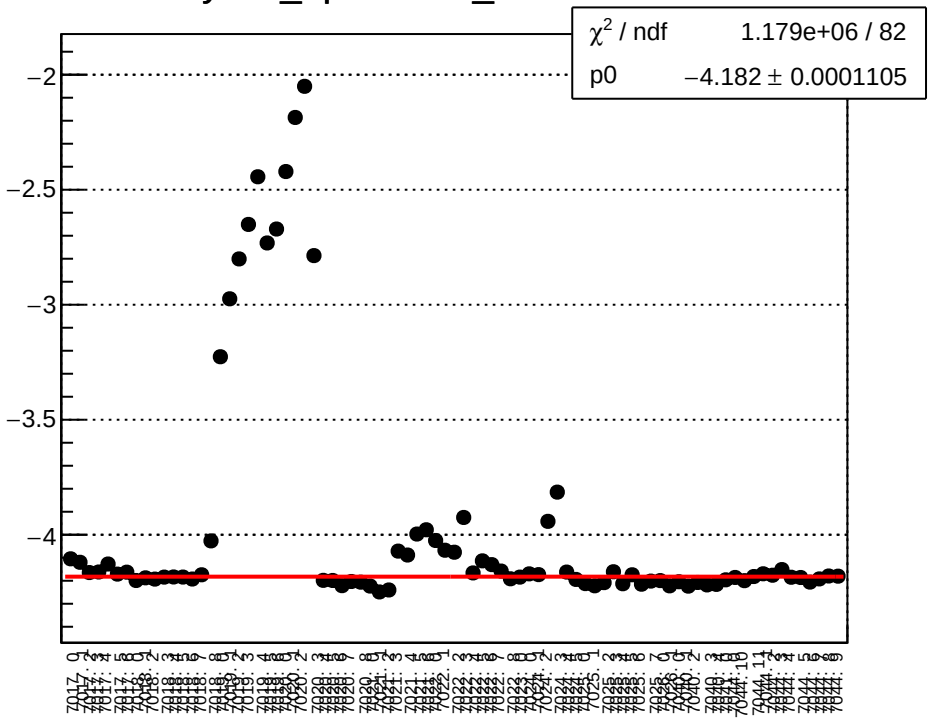

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

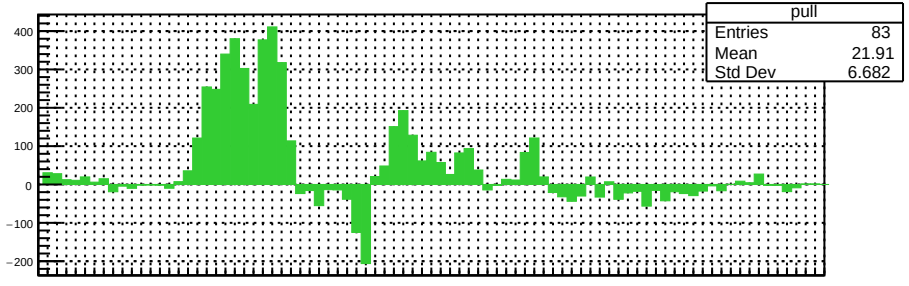

yield_bpm0l02X_rms vs run
χ² / ndf 5.232e+04 / 82
p0 0.01514 ± 1.217e–05
0.035
0.03
0.025
0.02
0.015

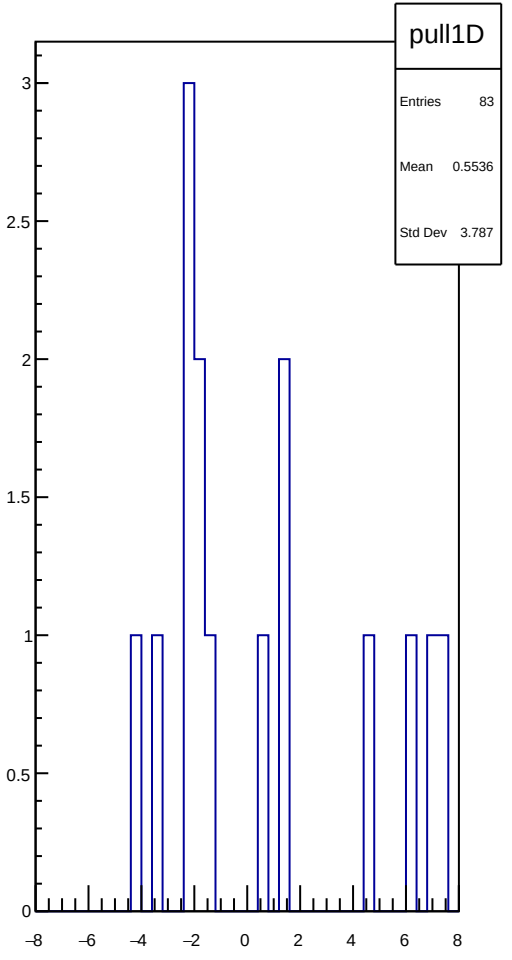

yield_bpm0l02Y_mean vs run
χ² / ndf 3.434e+07 / 82
p0 1.525 ± 5.781e−06
pull
Entries 83
Mean 265.8
Std Dev 212.6

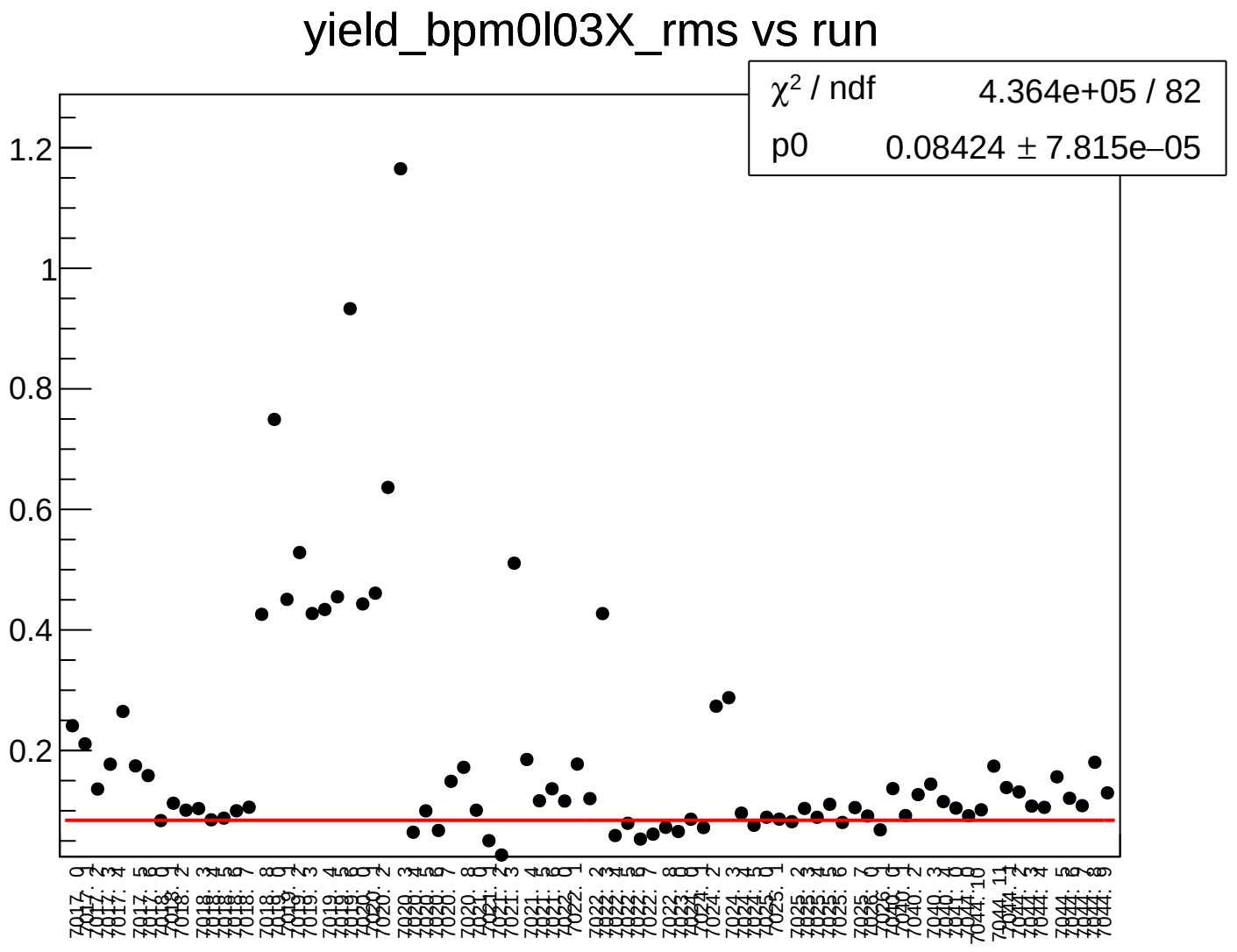

pull1D
Entries 83
Mean 0
Std Dev 0

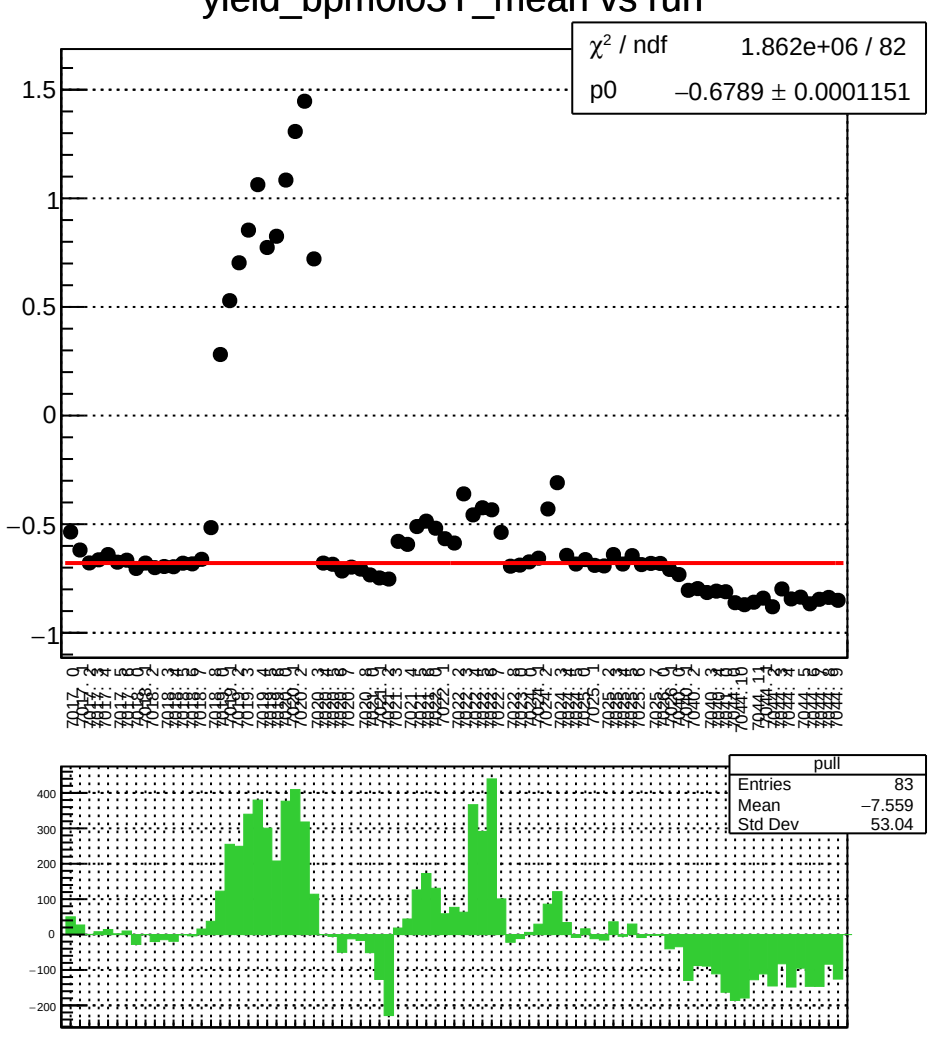

yield_bpm0l02Y_rms vs run
χ² / ndf 1.086e+05 / 82
p0 0.00499 ± 4.088e–06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

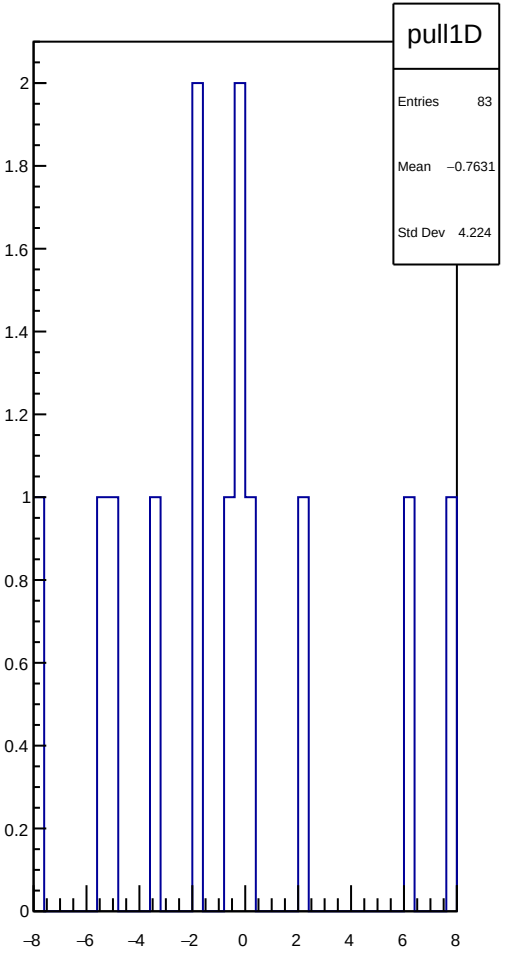

yield_bpm0l03X_mean vs run
χ² / ndf 1.179e+06 / 82
p0 −4.182 ± 0.0001105
−2
−2.5
−3
−3.5
−4

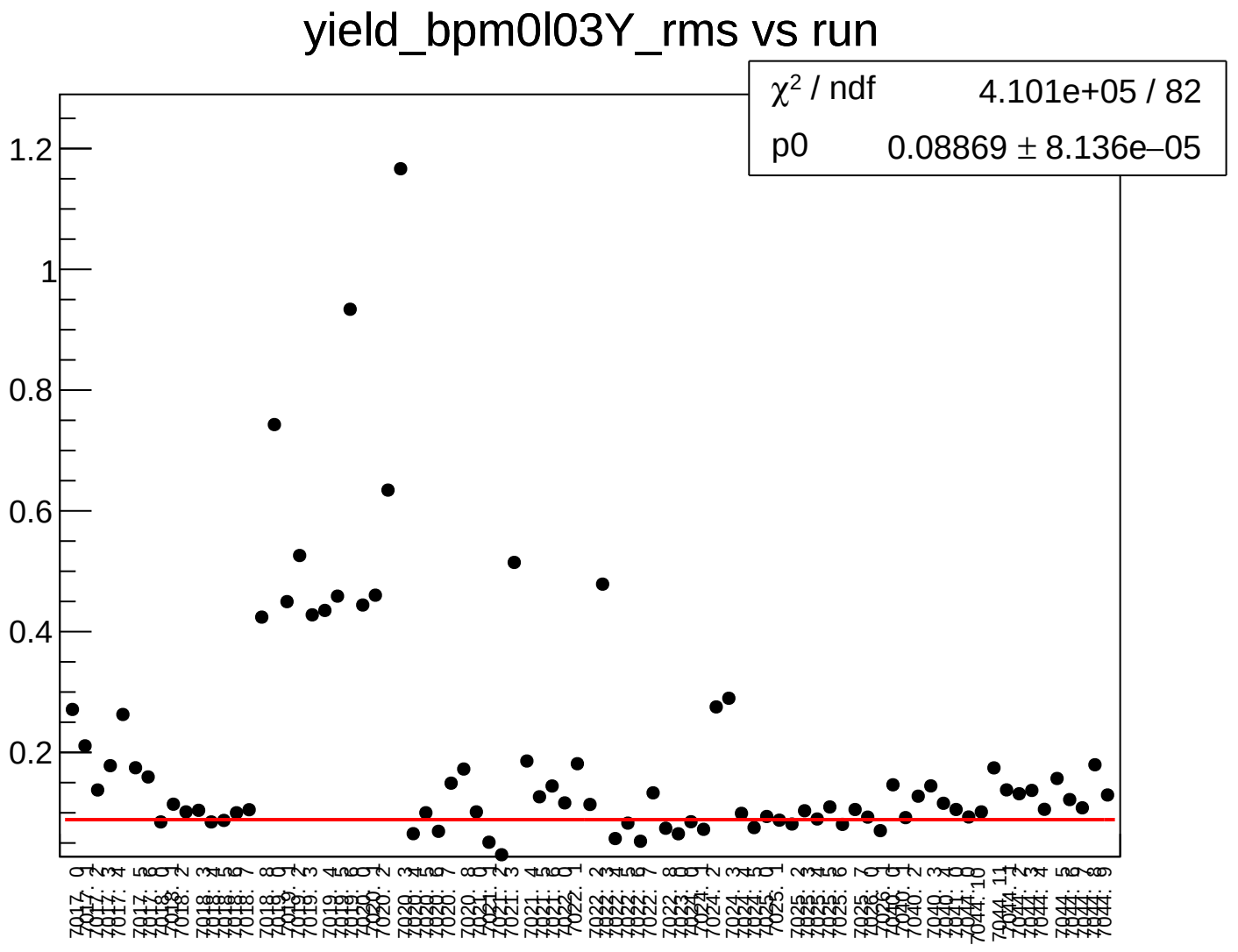

pull
Entries 83
Mean 21.91
Std Dev 6.682
400
300
200
100
0
−100
−200

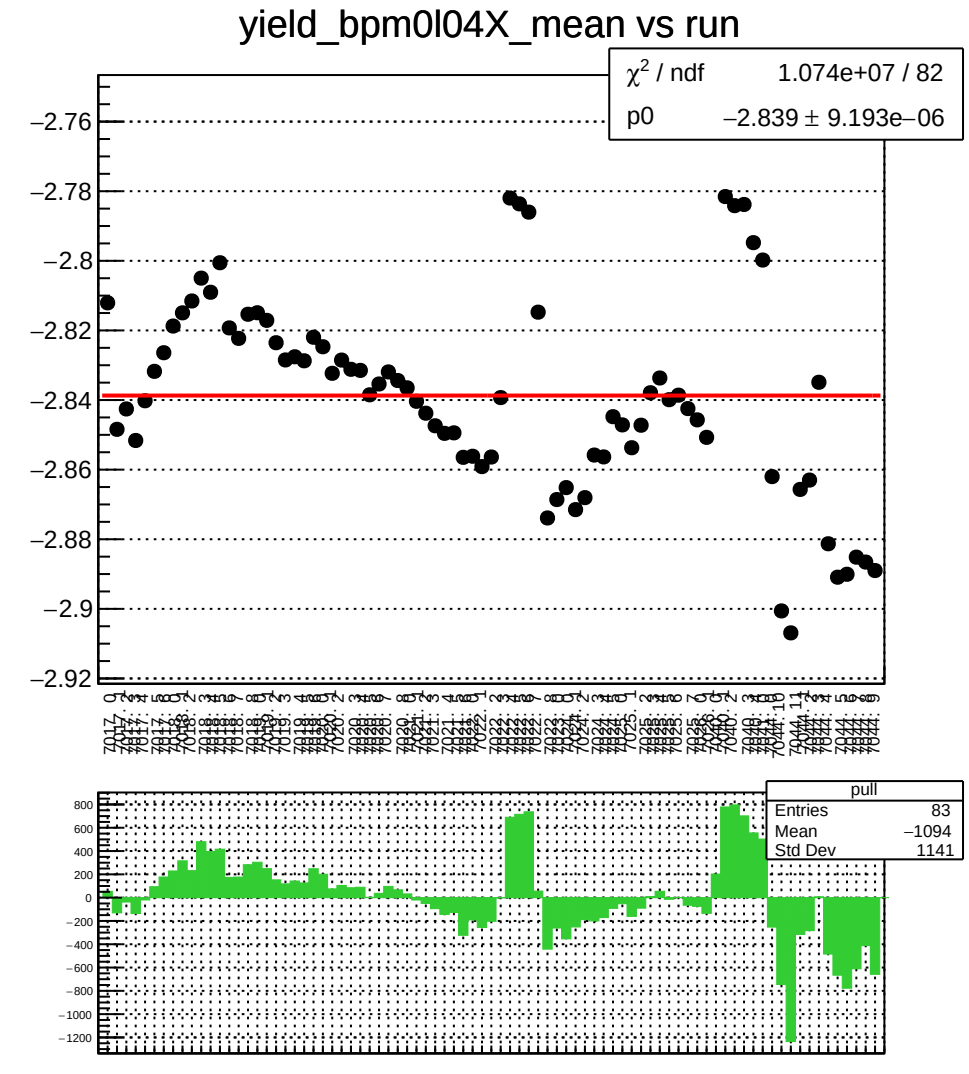

pull1D
Entries 83
Mean 0.5536
Std Dev 3.787
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

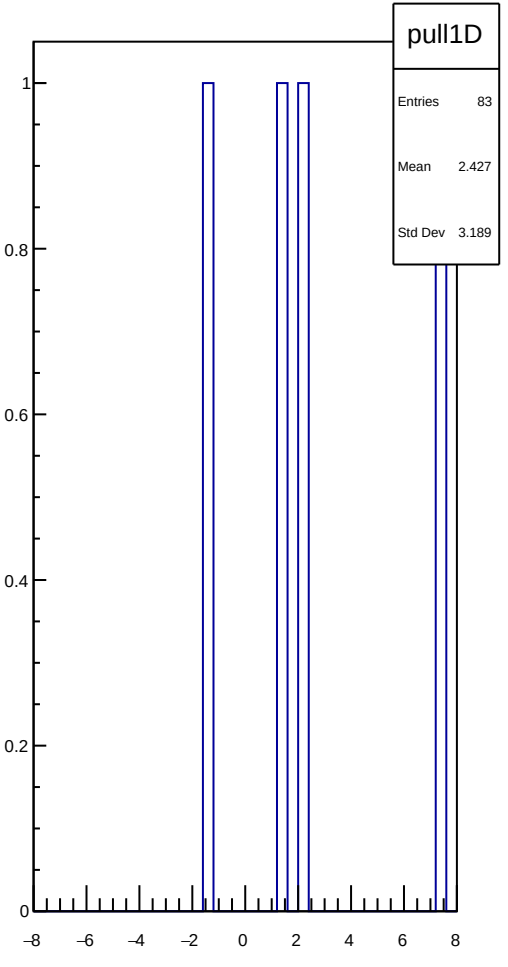

yield_bpm0l03X_rms vs run
χ² / ndf 4.364e+05 / 82
p0 0.08424 ± 7.815e−05
1.2
1
0.8
0.6
0.4
0.2

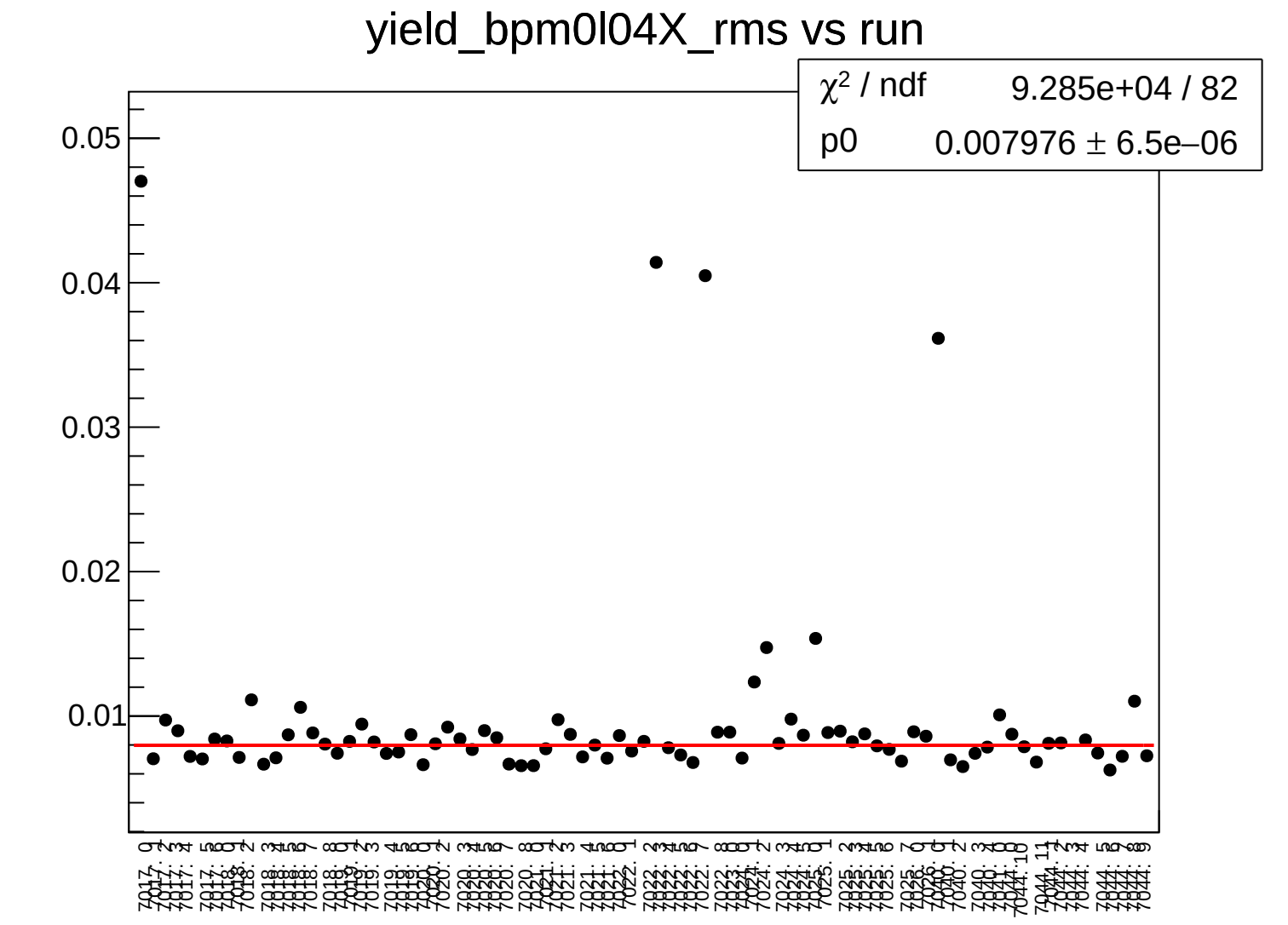

yield_bpm0l03Y_mean vs run
χ² / ndf 1.862e+06 / 82
p0 −0.6789 ± 0.0001151
pull
Entries 83
Mean −7.559
Std Dev 53.04

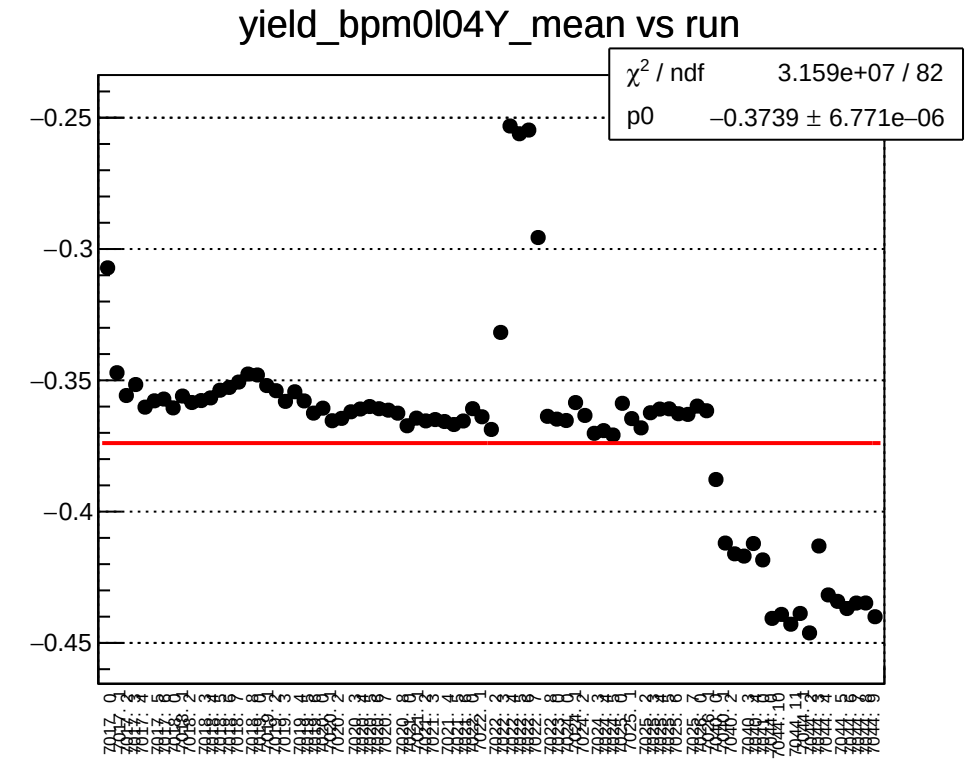

pull1D
Entries 83
Mean −0.7631
Std Dev 4.224

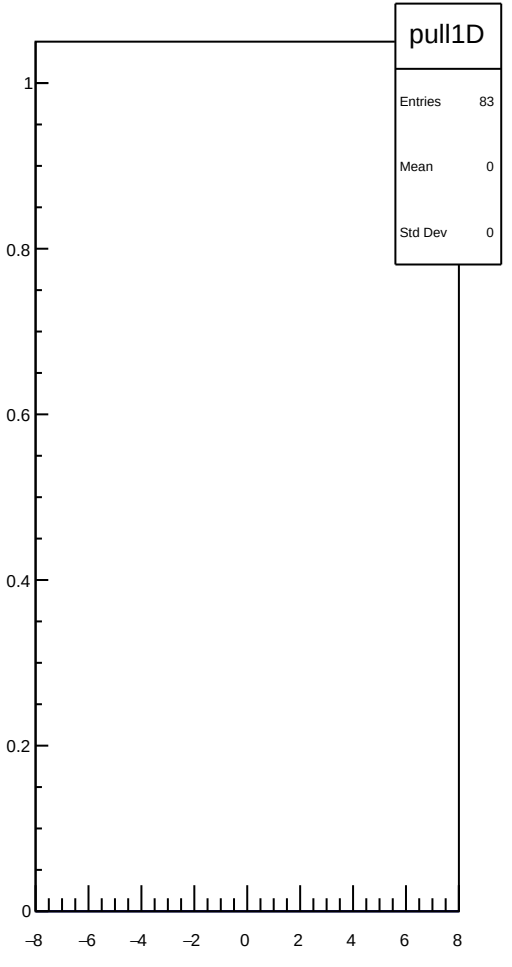

yield_bpm0l03Y_rms vs run
χ² / ndf 4.101e+05 / 82
p0 0.08869 ± 8.136e–05
1.2
1
0.8
0.6
0.4
0.2

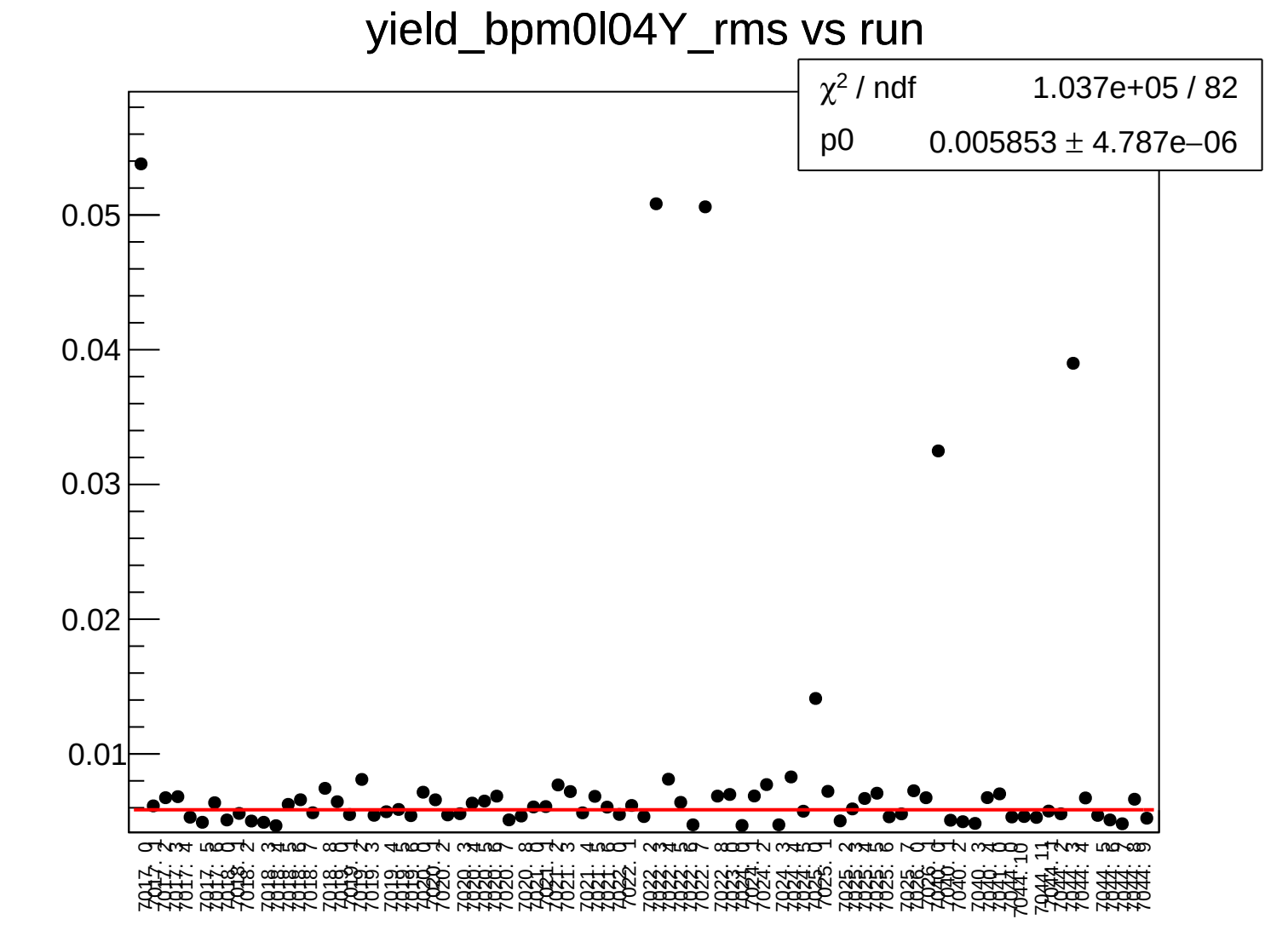

yield_bpm0l04X_mean vs run
χ² / ndf 1.074e+07 / 82
p0 −2.839 ± 9.193e−06
−2.76
−2.78
−2.8
−2.82
−2.84
−2.86
−2.88
−2.9
−2.92
pull
Entries 83
Mean −1094
Std Dev 1141
800
600
400
200
0
−200
−400
−600
−800
−1000
−1200

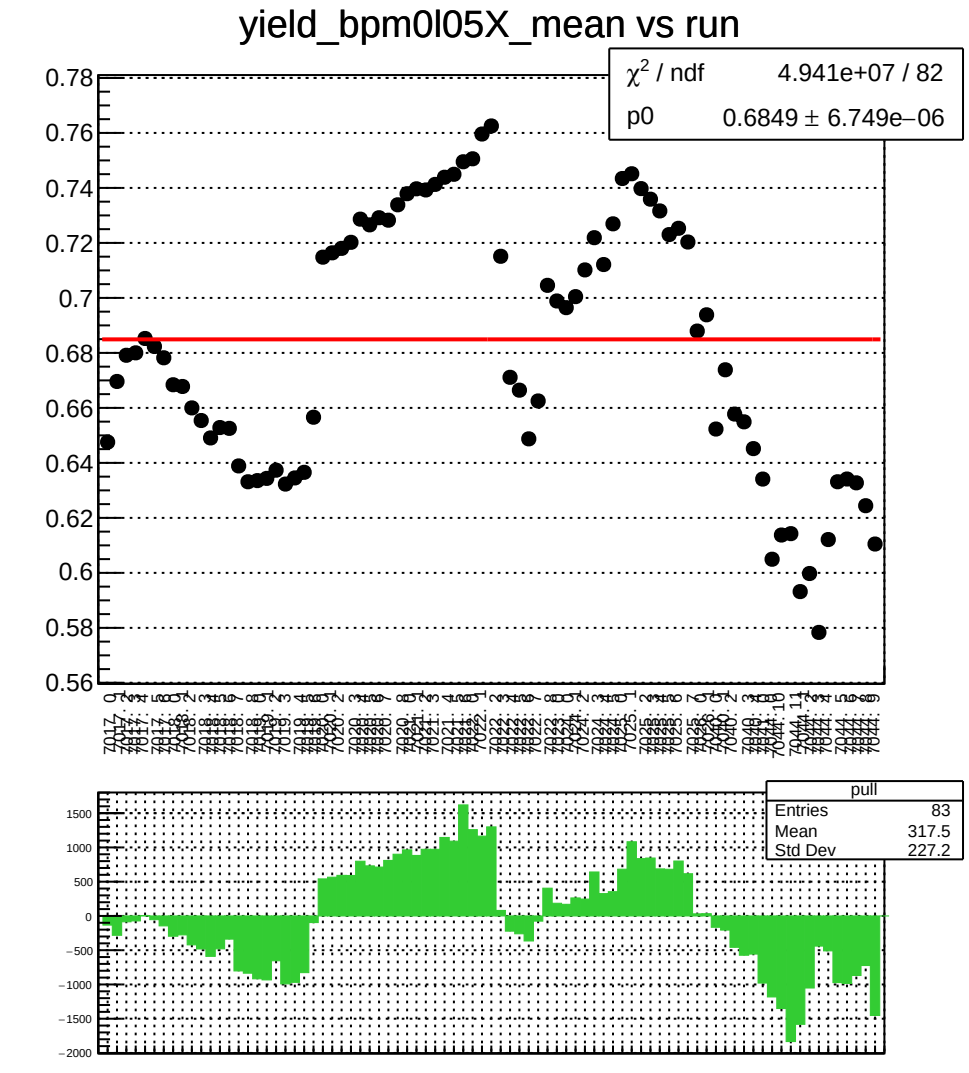

pull1D
Entries 83
Mean 2.427
Std Dev 3.189
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

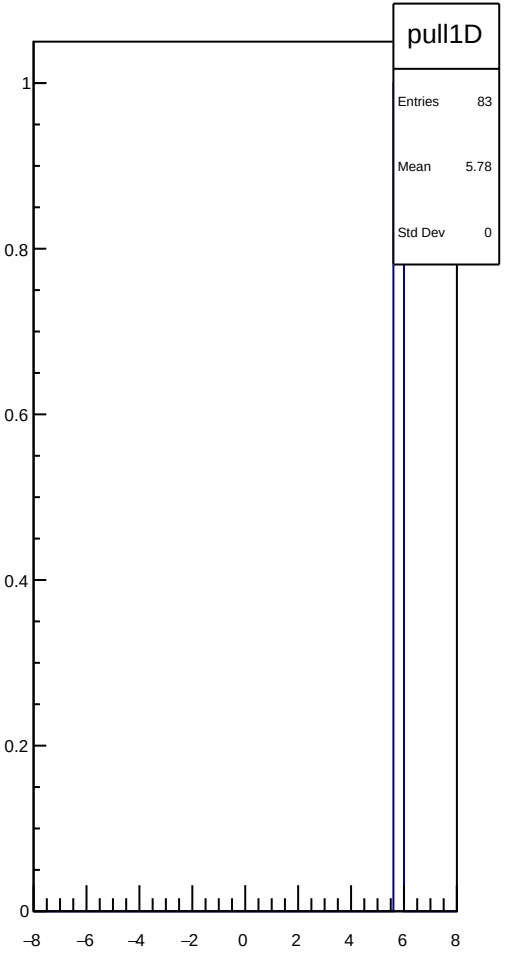

yield_bpm0l04X_rms vs run
χ² / ndf 9.285e+04 / 82
p0 0.007976 ± 6.5e−06
0.05
0.04
0.03
0.02
0.01

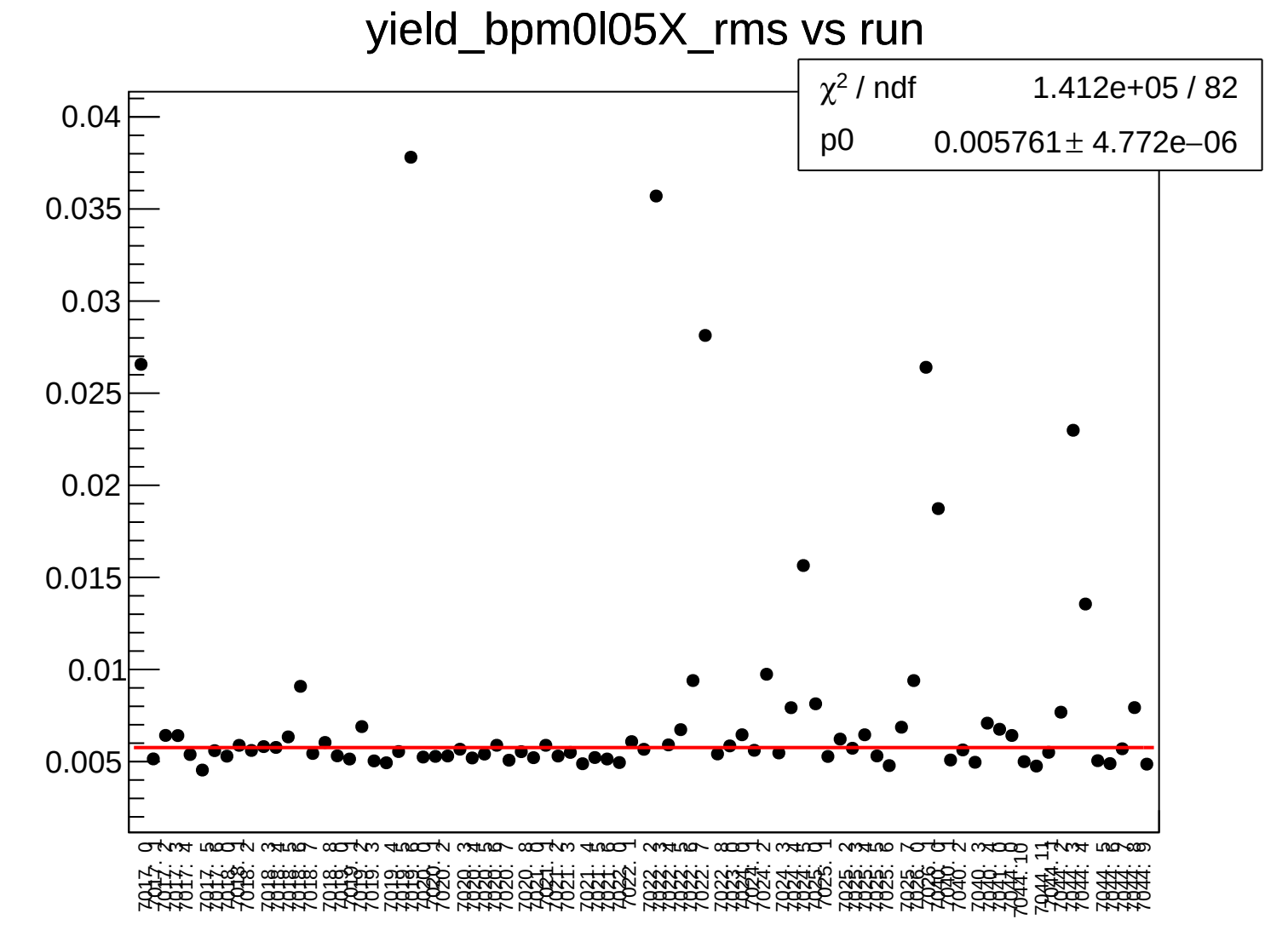

yield_bpm0l04Y_mean vs run
χ² / ndf 3.159e+07 / 82
p0 −0.3739 ± 6.771e−06
−0.25
−0.3
−0.35
−0.4
−0.45
pull
Entries 83
Mean −325.7
Std Dev 374.9
2500
2000
1500
1000
500
0
−500
−1000
−1500

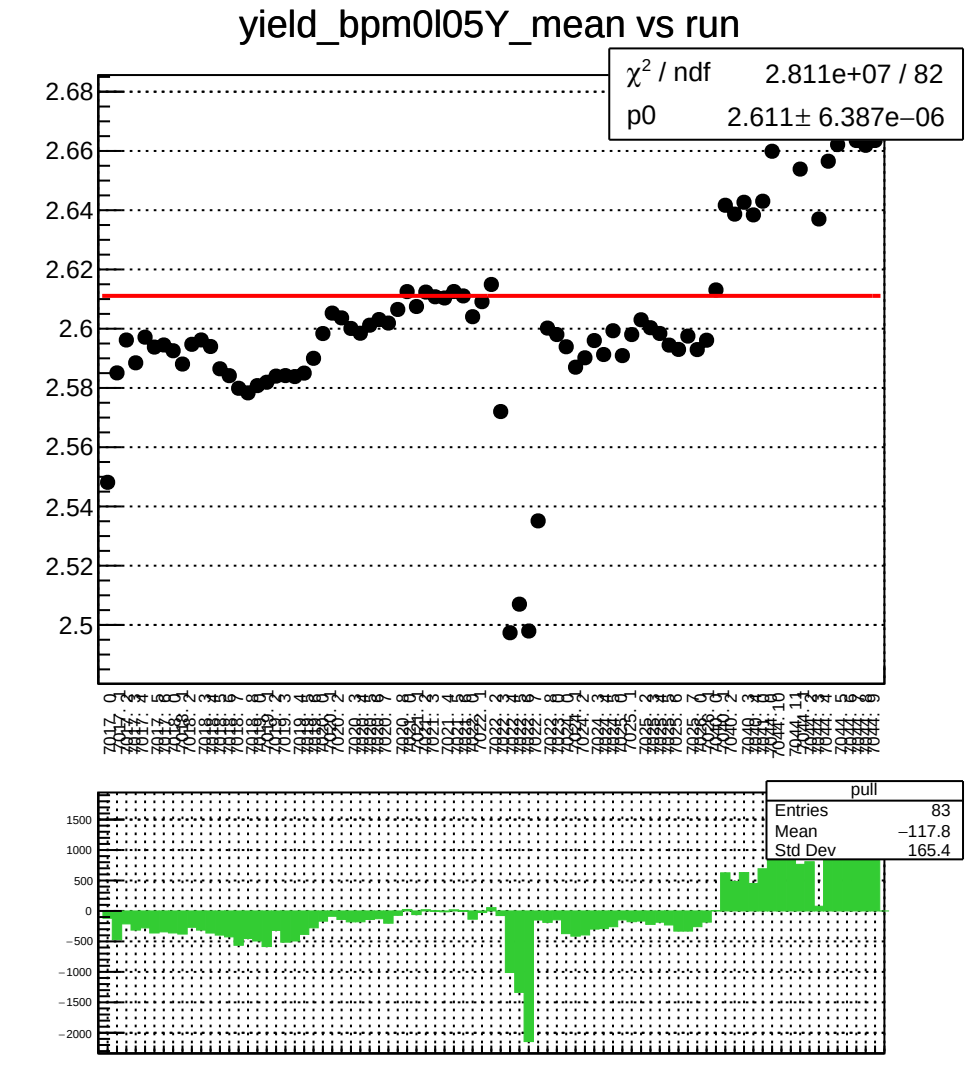

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

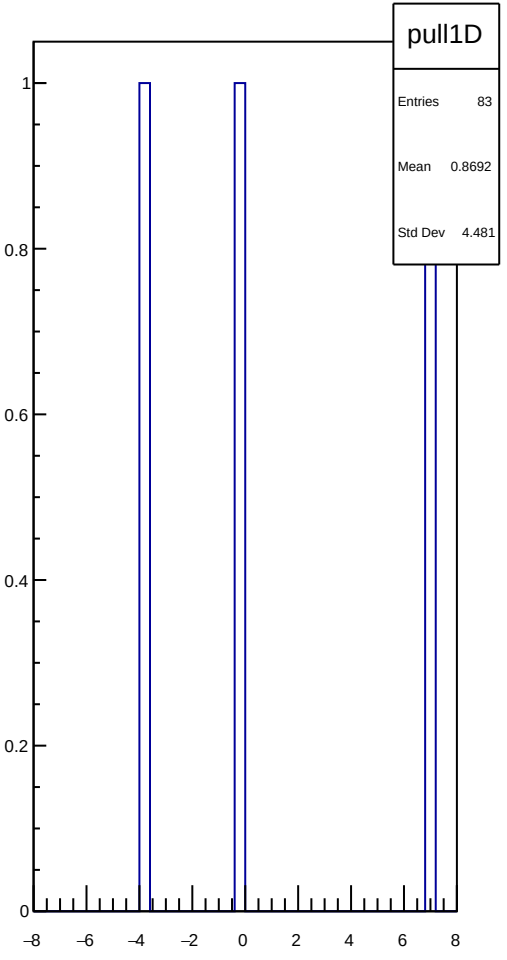

yield_bpm0l04Y_rms vs run
χ² / ndf 1.037e+05 / 82
p0 0.005853 ± 4.787e−06
0.05
0.04
0.03
0.02
0.01

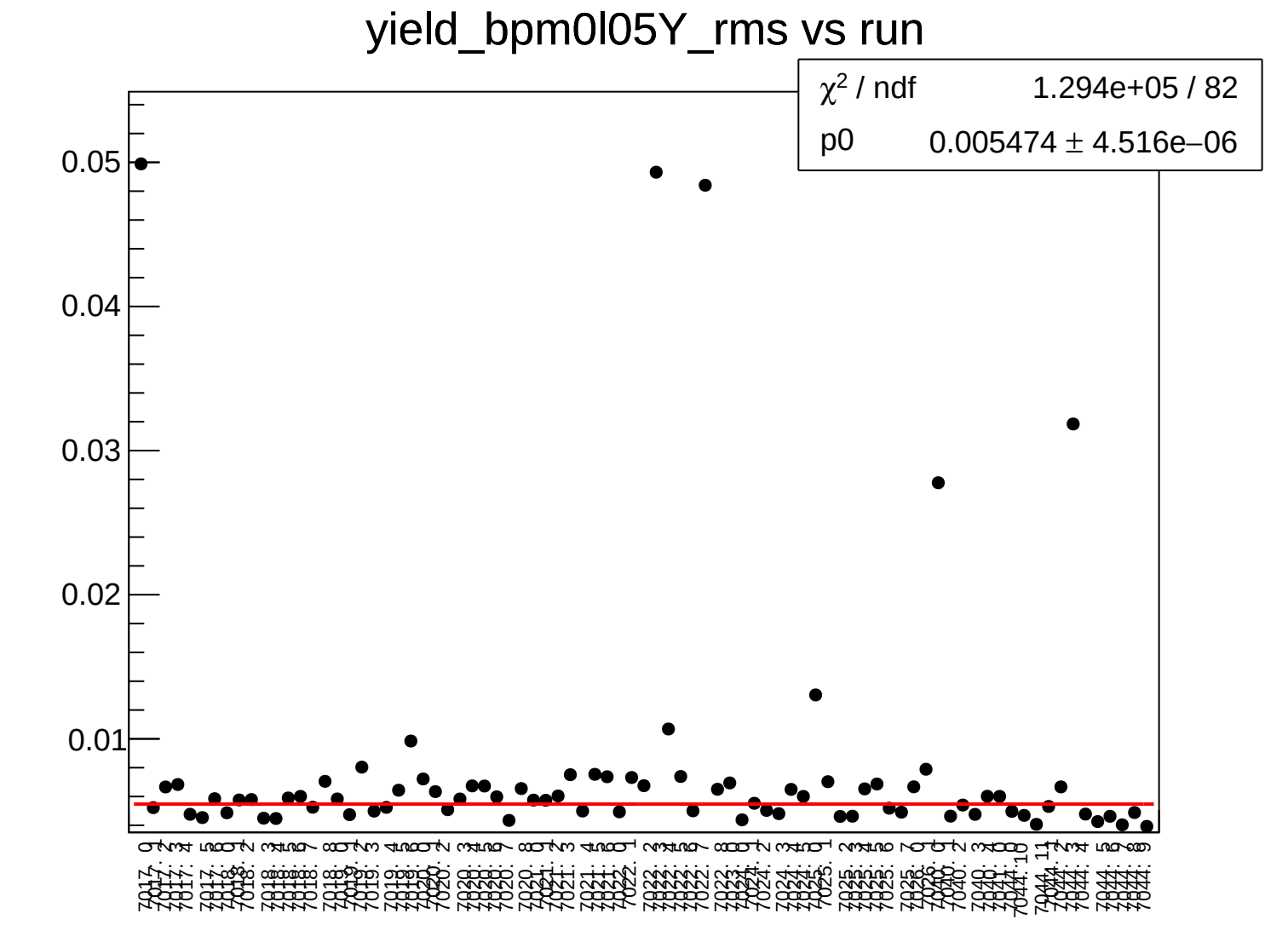

yield_bpm0l05X_mean vs run
χ² / ndf 4.941e+07 / 82
p0 0.6849 ± 6.749e−06
pull
Entries 83
Mean 317.5
Std Dev 227.2

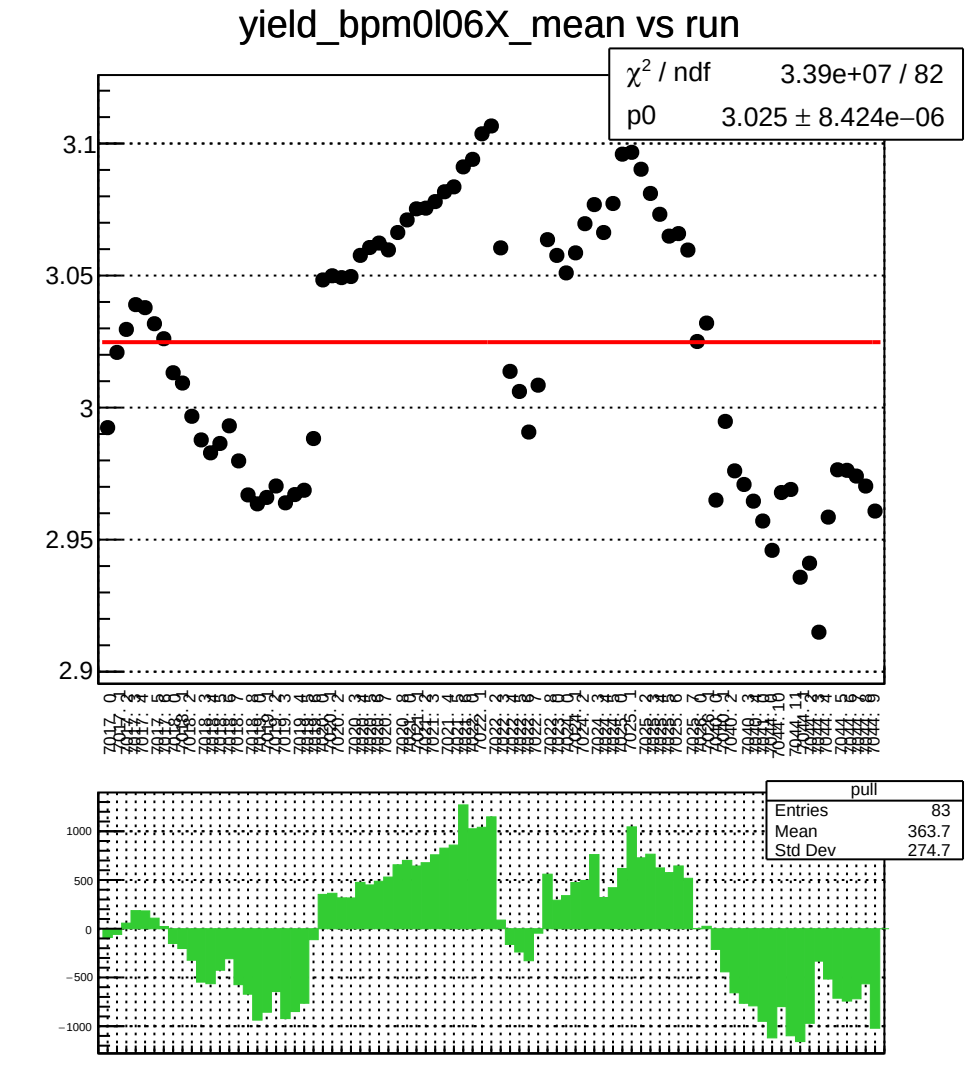

pull1D
Entries 83
Mean 5.78
Std Dev 0

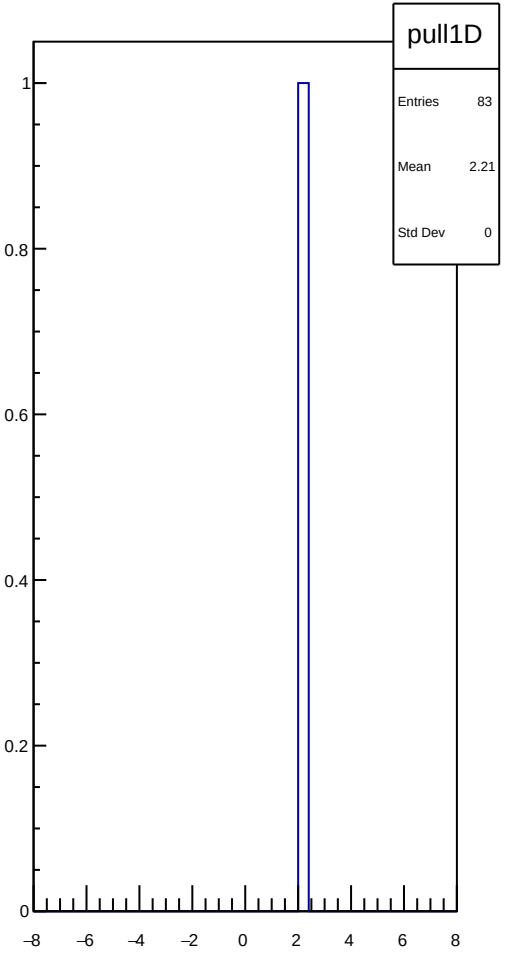

yield_bpm0l05X_rms vs run
χ² / ndf 1.412e+05 / 82
p0 0.005761 ± 4.772e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

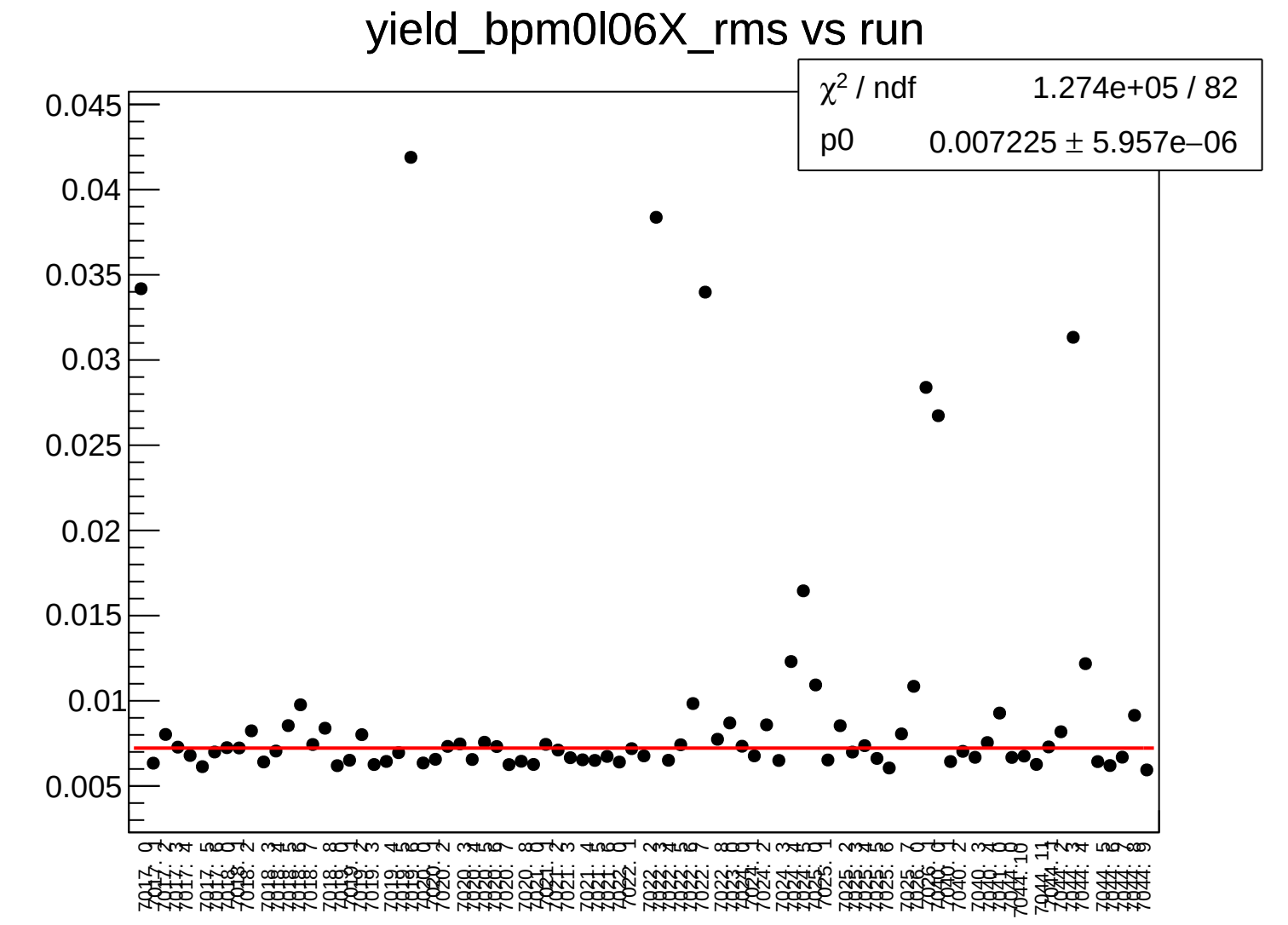

yield_bpm0l05Y_mean vs run
χ² / ndf 2.811e+07 / 82
p0 2.611± 6.387e−06
pull
Entries 83
Mean −117.8
Std Dev 165.4

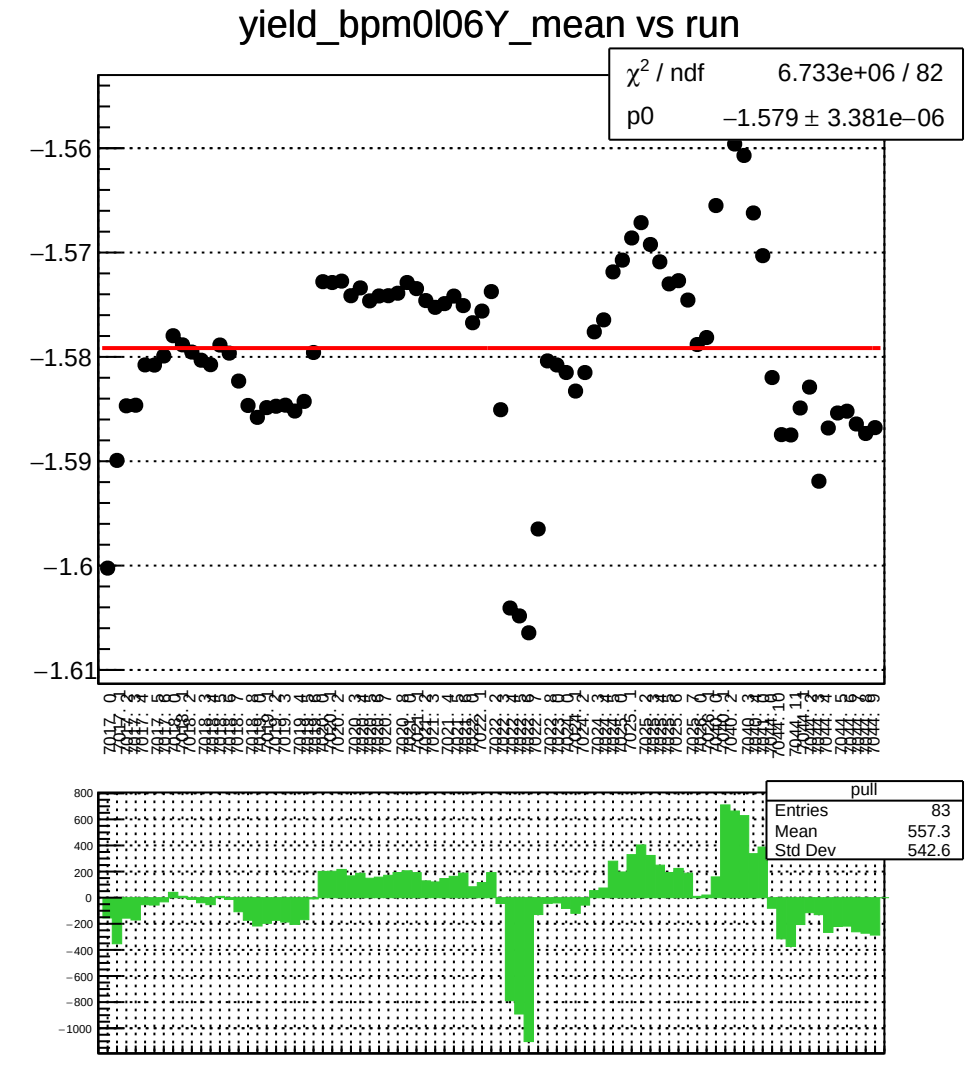

pull1D
Entries 83
Mean 0.8692
Std Dev 4.481

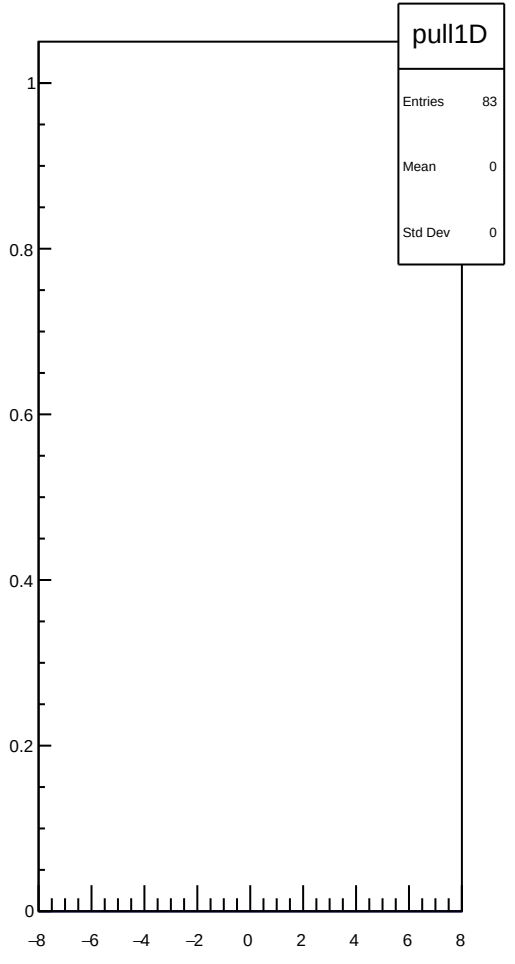

yield_bpm0l05Y_rms vs run
χ² / ndf 1.294e+05 / 82
p0 0.005474 ± 4.516e−06
0.05
0.04
0.03
0.02
0.01

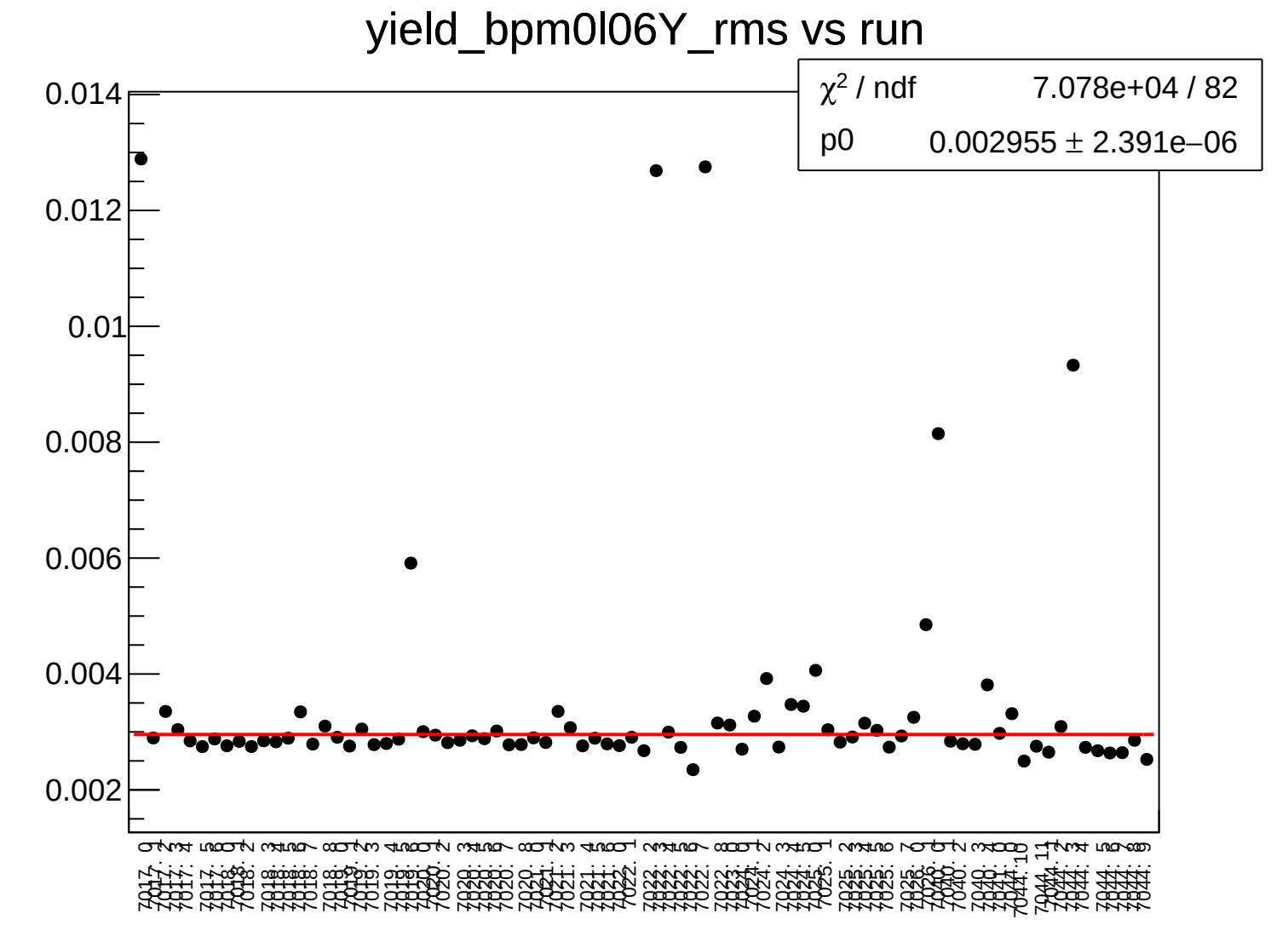

yield_bpm0l06X_mean vs run
χ² / ndf 3.39e+07 / 82
p0 3.025 ± 8.424e−06
3.1
3.05
3
2.95
2.9
pull
Entries 83
Mean 363.7
Std Dev 274.7
1000
500
0
−500
−1000

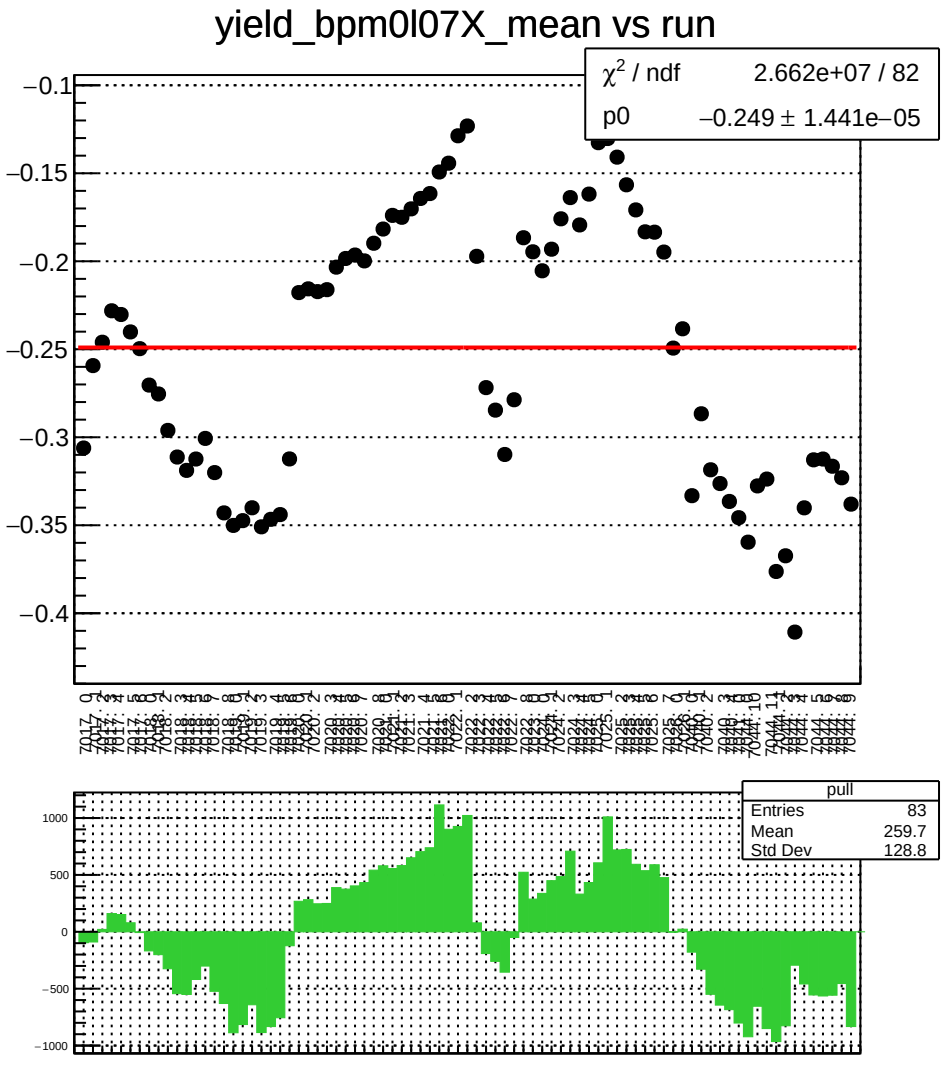

pull1D
Entries 83
Mean 2.21
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

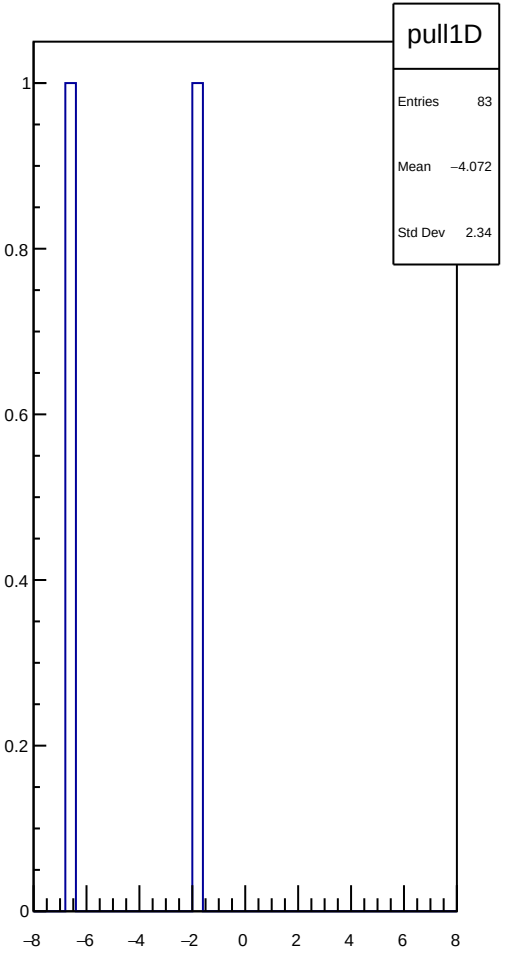

yield_bpm0l06X_rms vs run
χ^2 / ndf 1.274e+05 / 82
p0 0.007225 ± 5.957e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

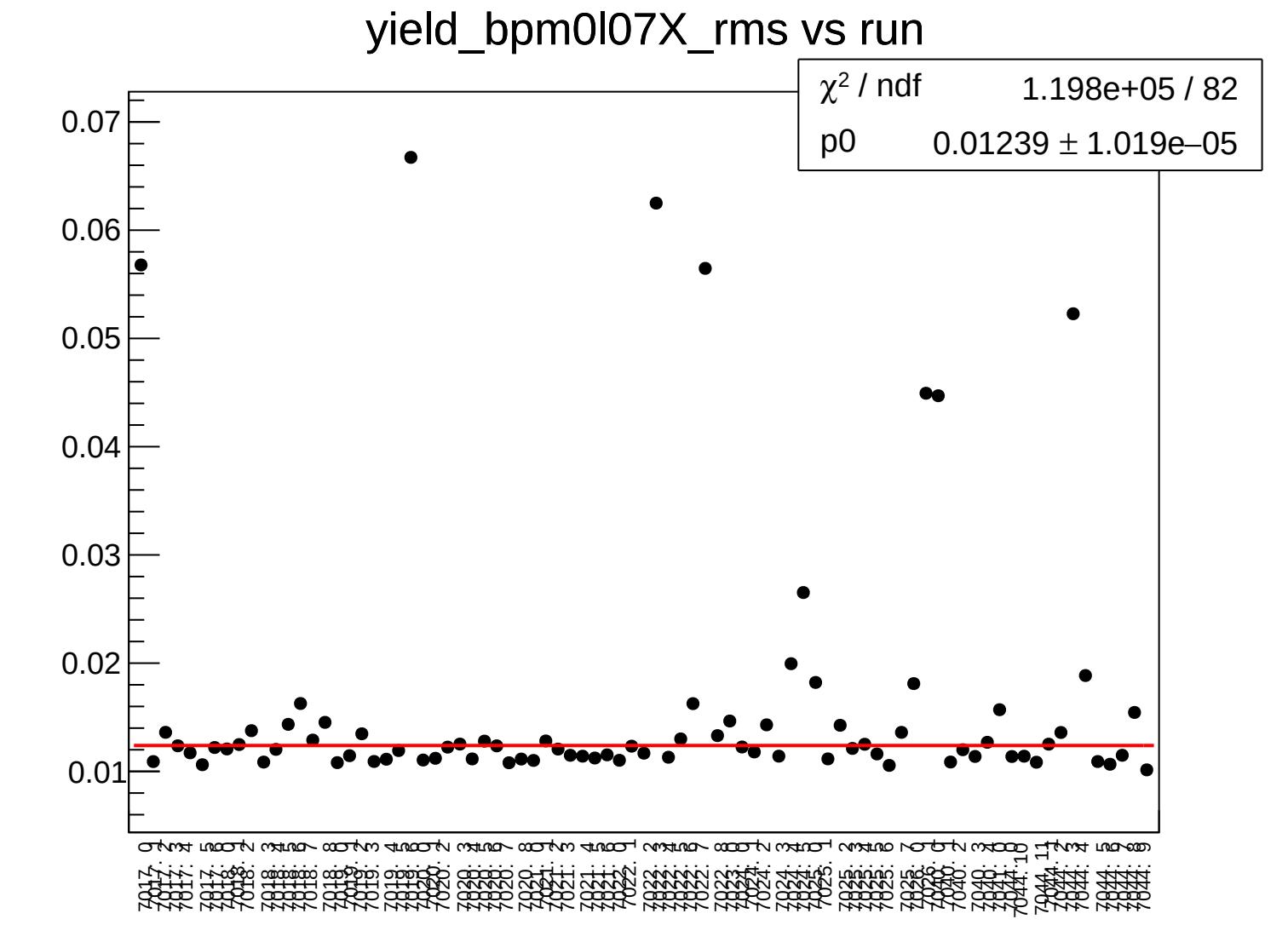

yield_bpm0l06Y_mean vs run
χ² / ndf 6.733e+06 / 82
p0 −1.579 ± 3.381e−06
−1.56
−1.57
−1.58
−1.59
−1.6
−1.61
pull
Entries 83
Mean 557.3
Std Dev 542.6
800
600
400
200
0
−200
−400
−600
−800
−1000

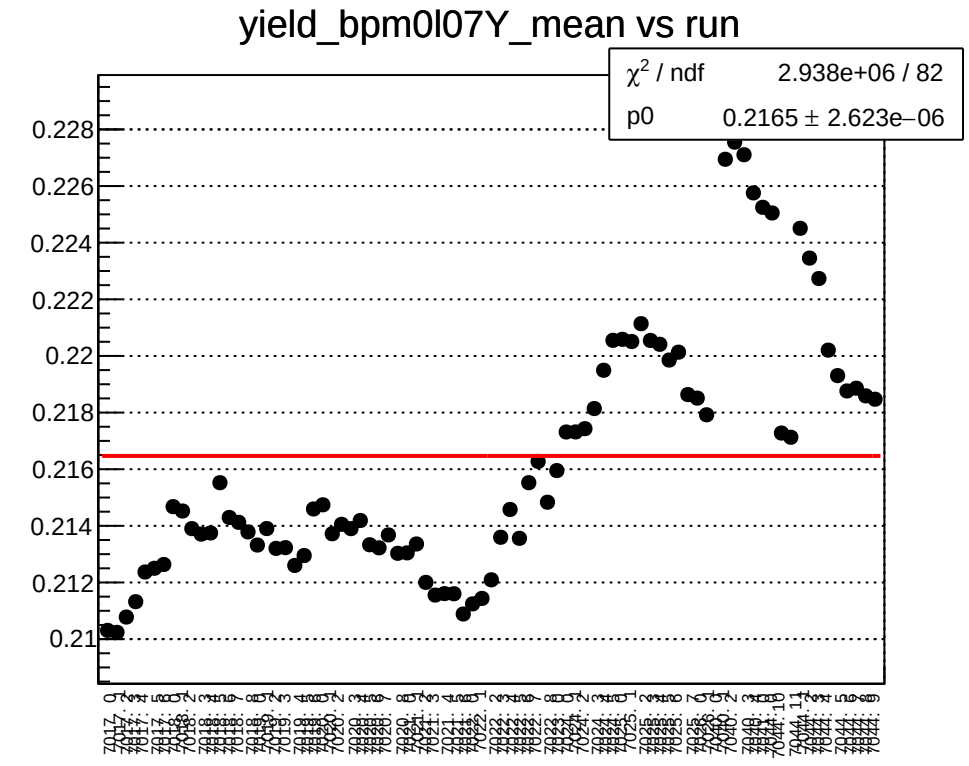

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

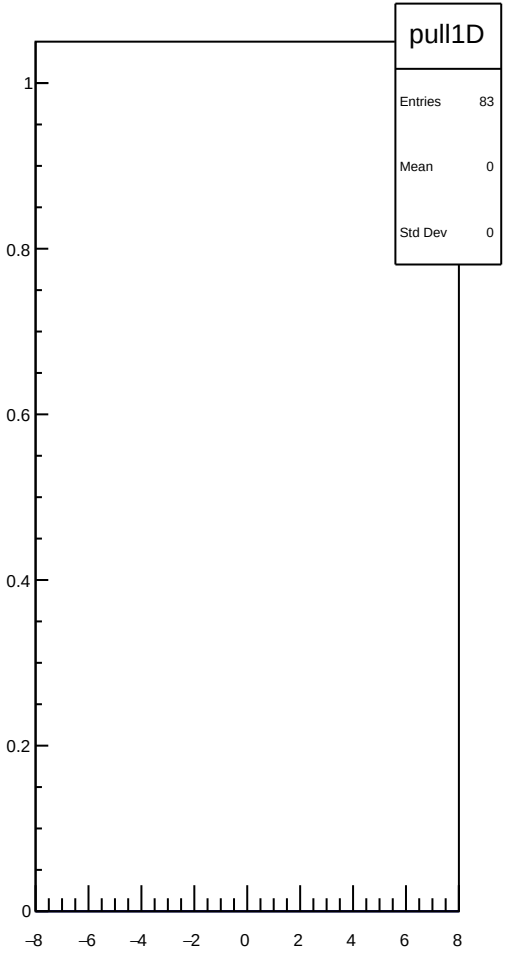

yield_bpm0l06Y_rms vs run
χ² / ndf 7.078e+04 / 82
p0 0.002955 ± 2.391e−06
0.014
0.012
0.01
0.008
0.006
0.004
0.002

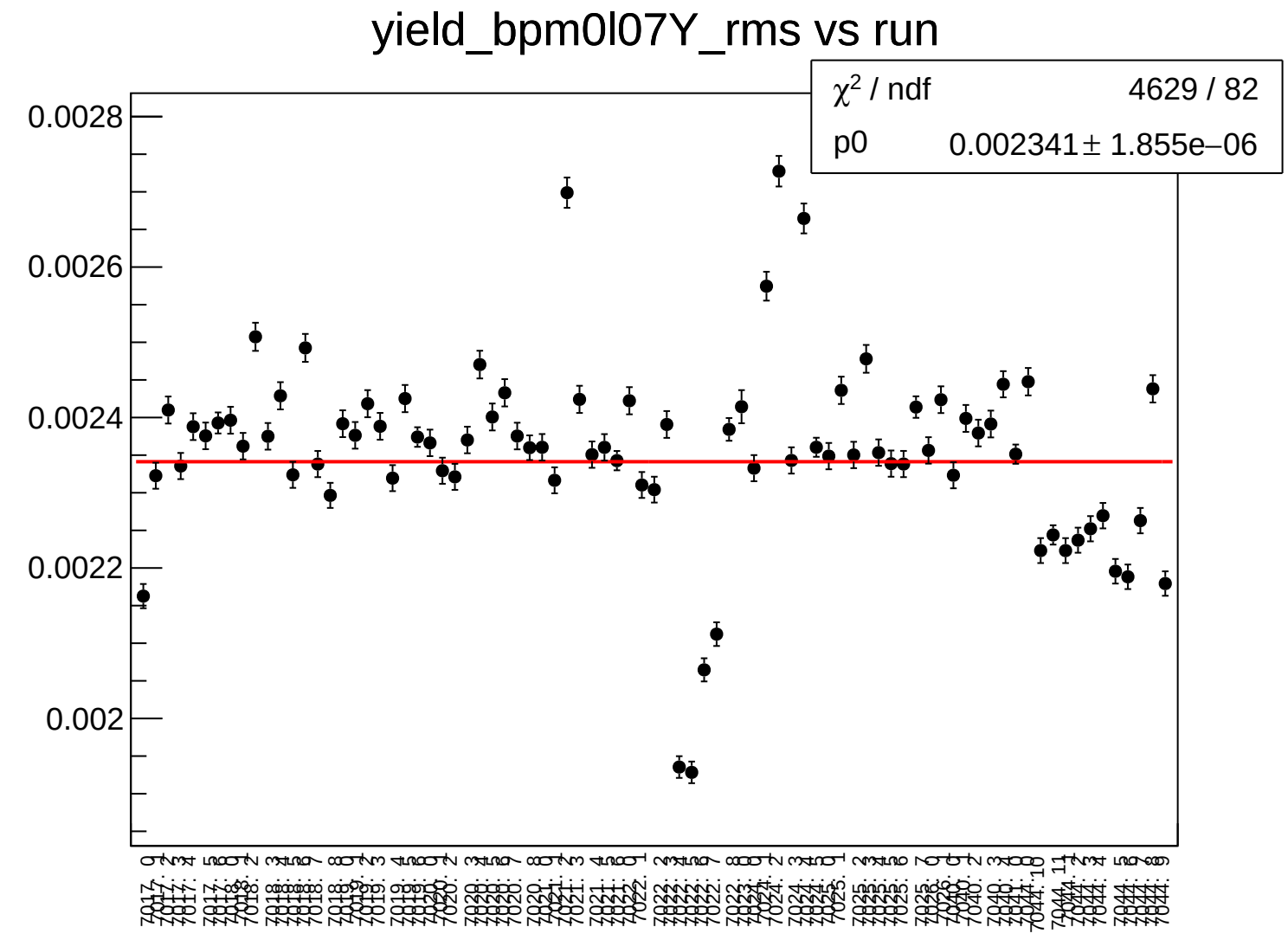

yield_bpm0l07X_mean vs run
χ² / ndf 2.662e+07 / 82
p0 −0.249 ± 1.441e−05
pull
Entries 83
Mean 259.7
Std Dev 128.8

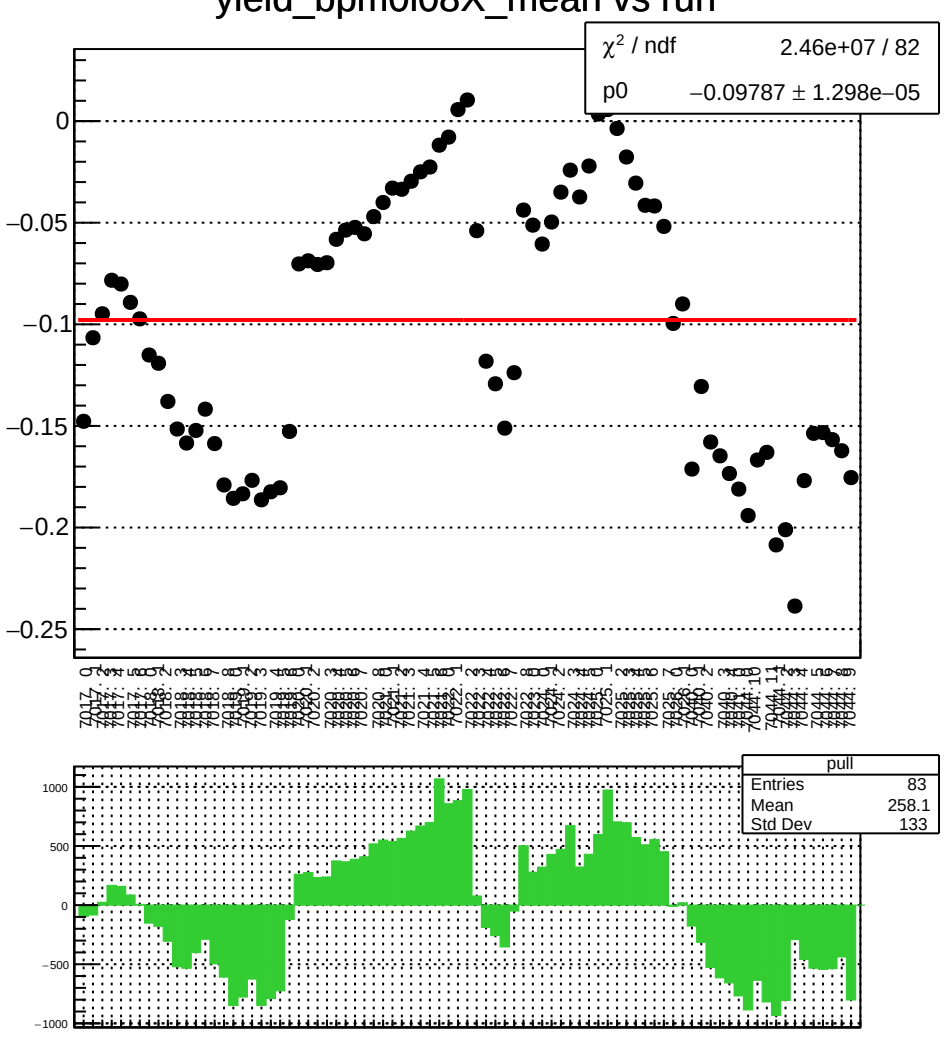

pull1D
Entries 83
Mean −4.072
Std Dev 2.34

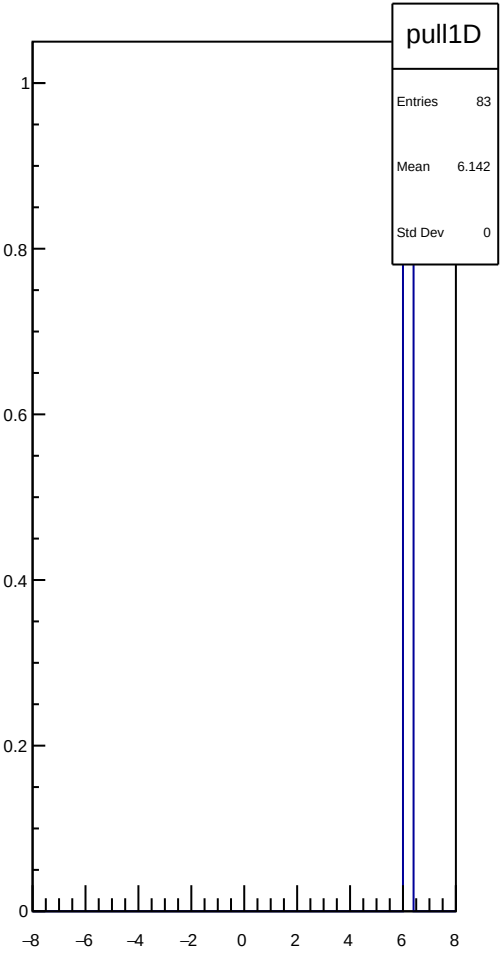

yield_bpm0l07X_rms vs run
χ^2 / ndf 1.198e+05 / 82
p0 0.01239 ± 1.019e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

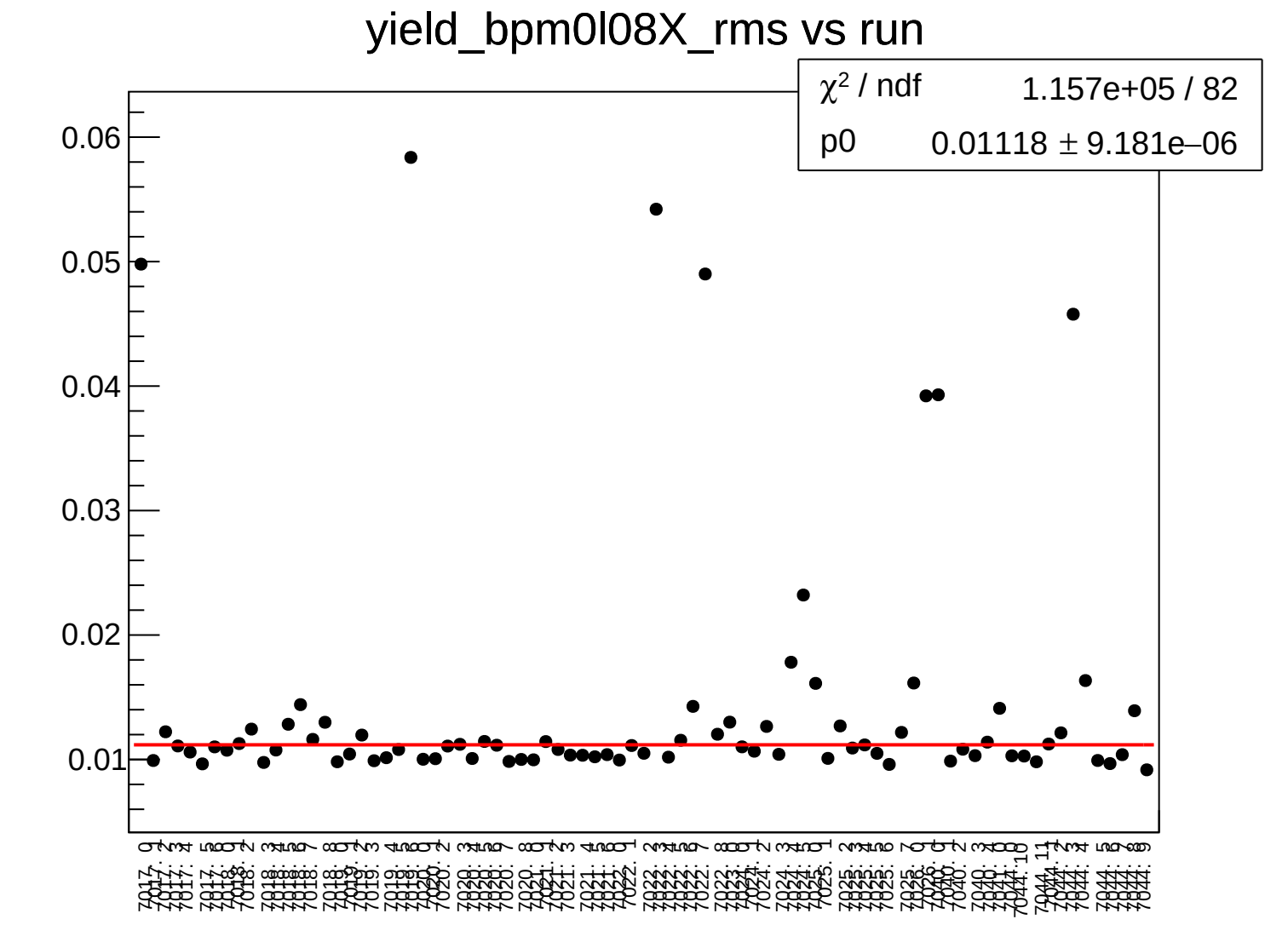

yield_bpm0l07Y_mean vs run
χ² / ndf 2.938e+06 / 82
p0 0.2165 ± 2.623e−06
0.228
0.226
0.224
0.222
0.22
0.218
0.216
0.214
0.212
0.21
pull
Entries 83
Mean −3083
Std Dev 3126
500
400
300
200
100
0
−100
−200
−300

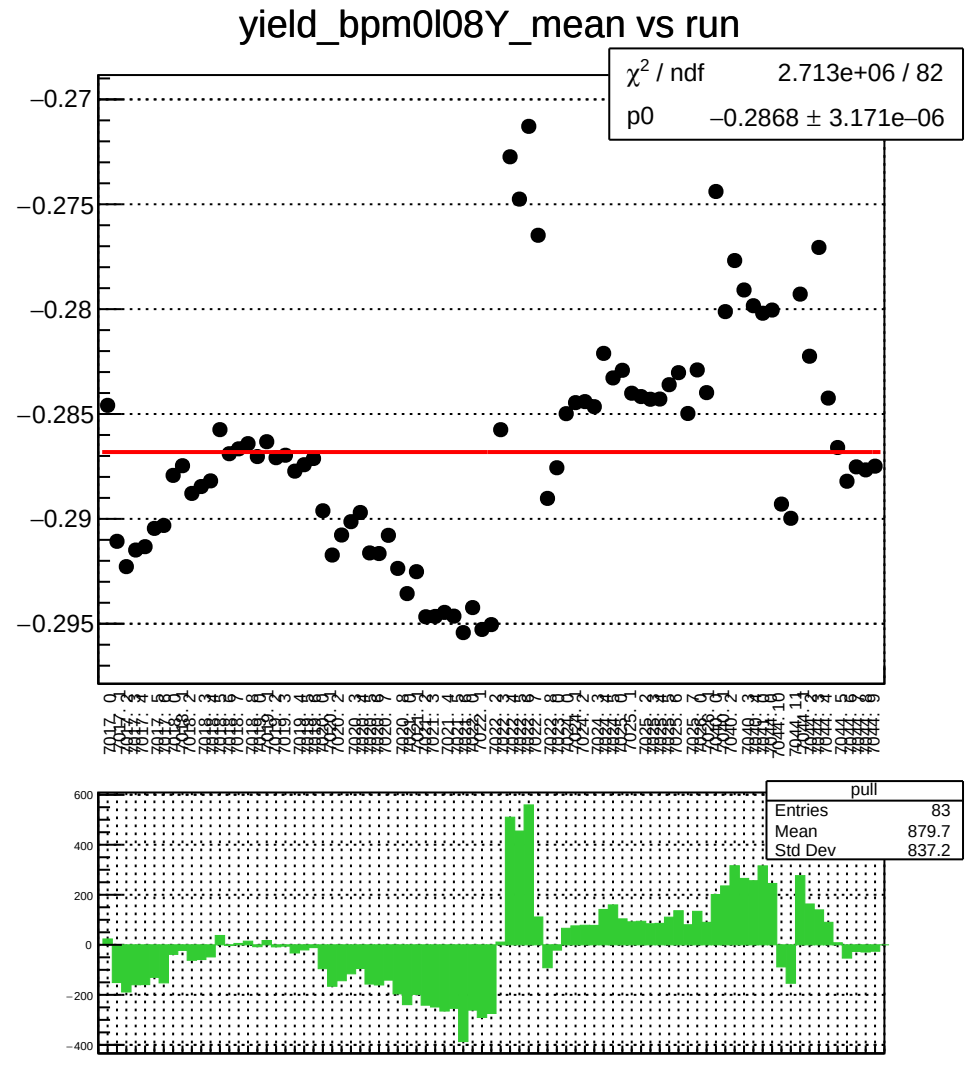

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

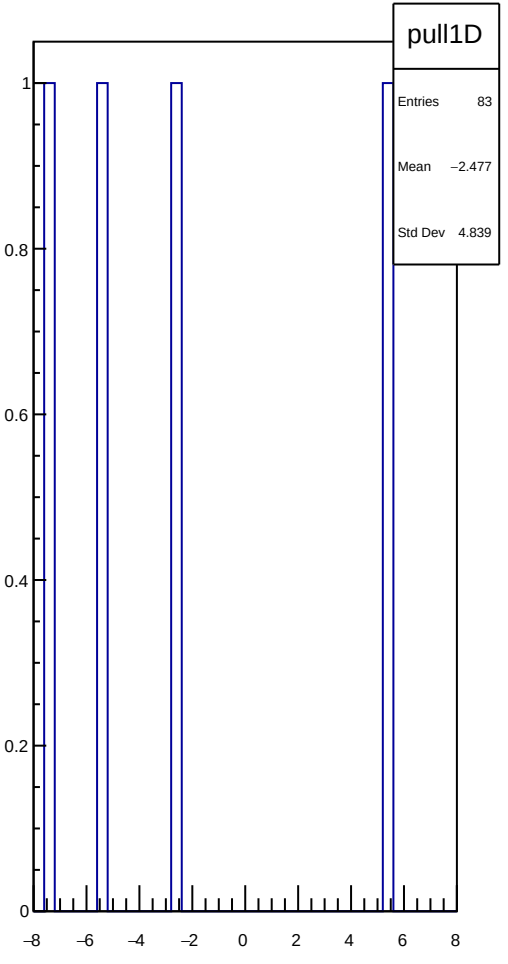

yield_bpm0l07Y_rms vs run
χ² / ndf 4629 / 82
p0 0.002341 ± 1.855e−06
0.0028
0.0026
0.0024
0.0022
0.002

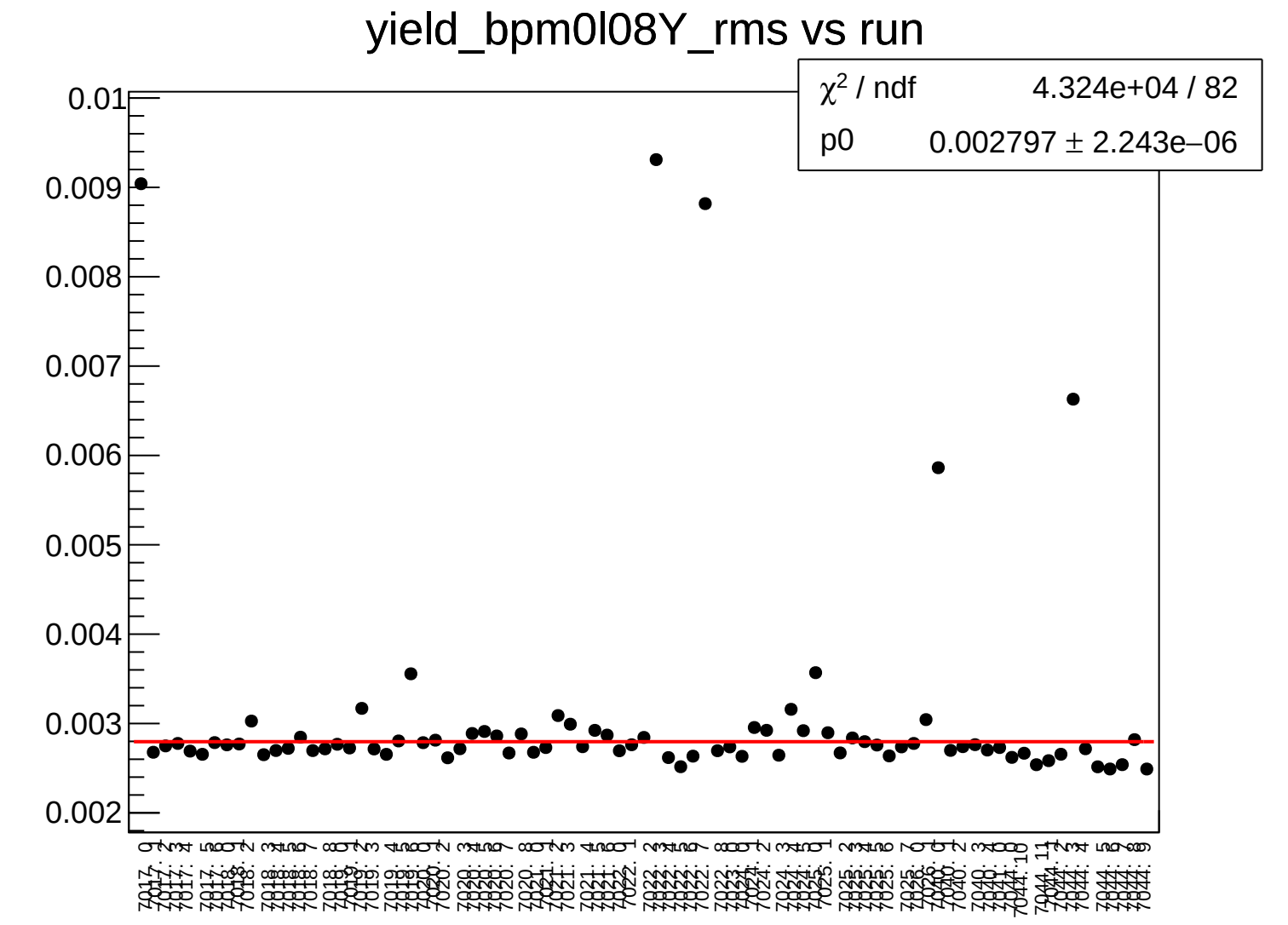

yield_bpm0l08X_mean vs run
χ² / ndf 2.46e+07 / 82
p0 −0.09787 ± 1.298e−05
pull
Entries 83
Mean 258.1
Std Dev 133

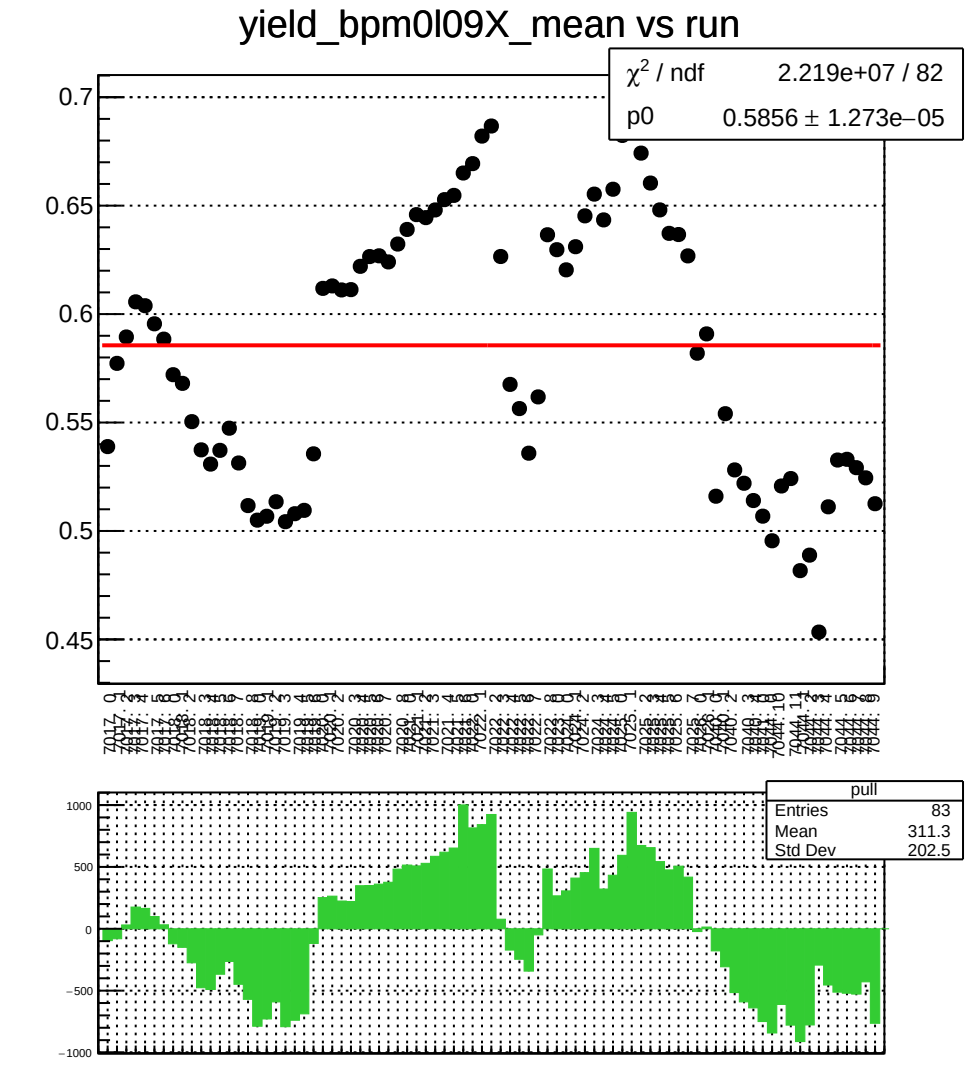

pull1D
Entries 83
Mean 6.142
Std Dev 0

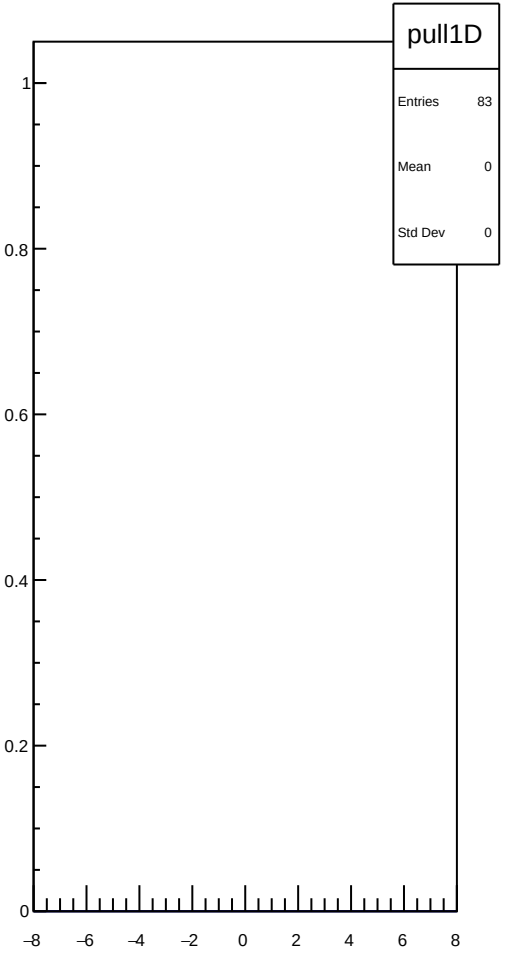

yield_bpm0l08X_rms vs run
χ² / ndf 1.157e+05 / 82
p0 0.01118 ± 9.181e–06
0.06
0.05
0.04
0.03
0.02
0.01

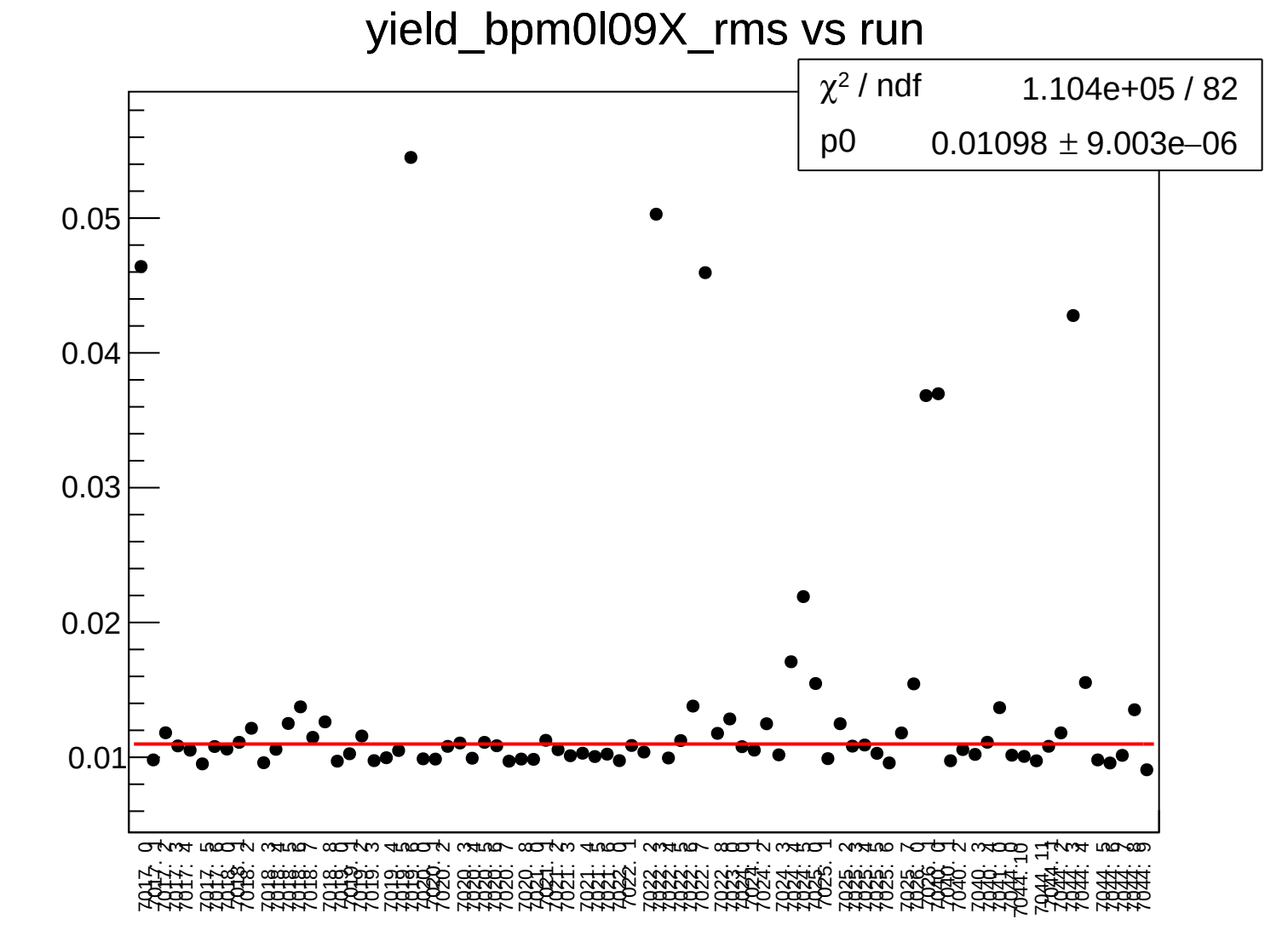

yield_bpm0l08Y_mean vs run
χ² / ndf 2.713e+06 / 82
p0 −0.2868 ± 3.171e−06
−0.27
−0.275
−0.28
−0.285
−0.29
−0.295
pull
Entries 83
Mean 879.7
Std Dev 837.2
600
400
200
0
−200
−400

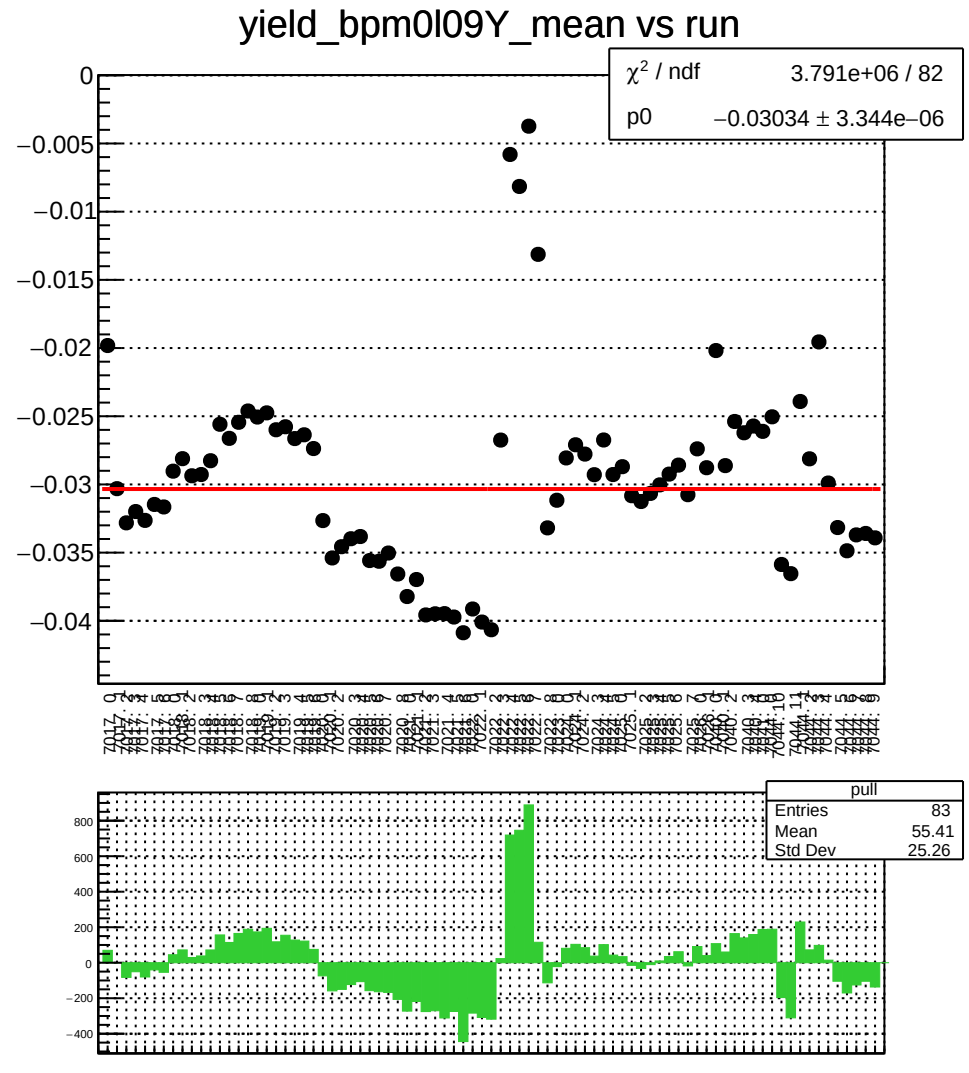

pull1D
Entries 83
Mean −2.477
Std Dev 4.839
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

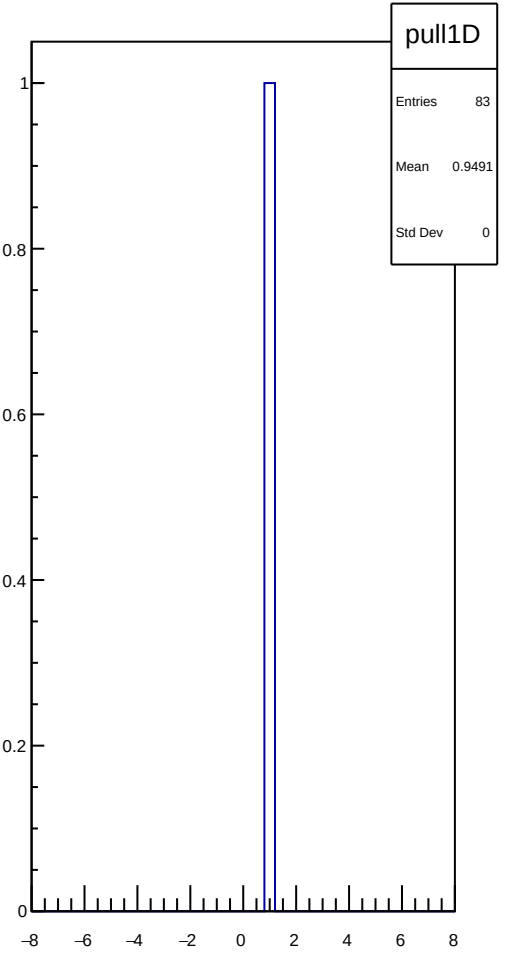

yield_bpm0l08Y_rms vs run
χ² / ndf 4.324e+04 / 82
p0 0.002797 ± 2.243e−06
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

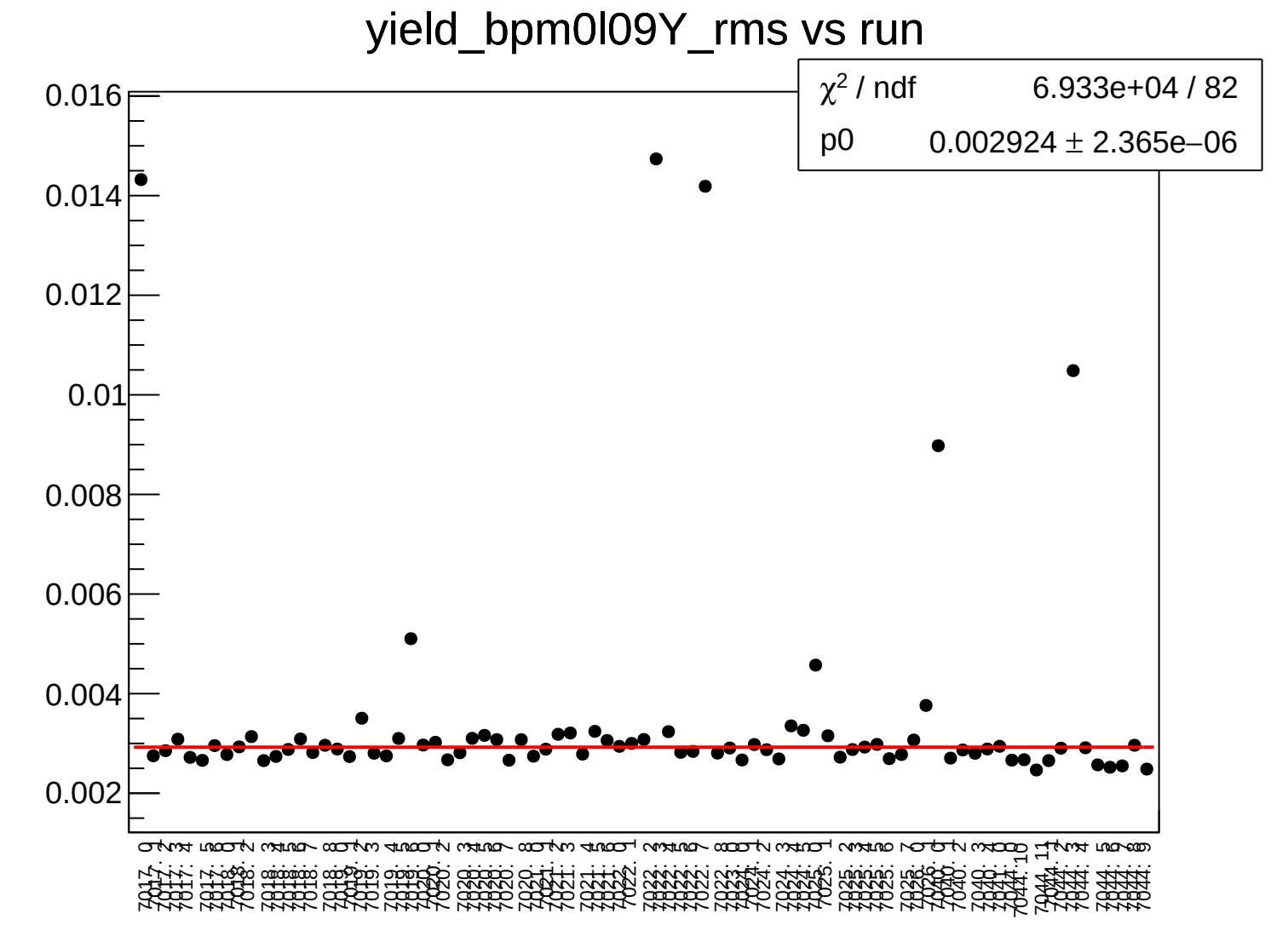

yield_bpm0l09X_mean vs run
χ² / ndf 2.219e+07 / 82
p0 0.5856 ± 1.273e−05
0.7
0.65
0.6
0.55
0.5
0.45
pull
Entries 83
Mean 311.3
Std Dev 202.5
1000
500
0
−500
−1000

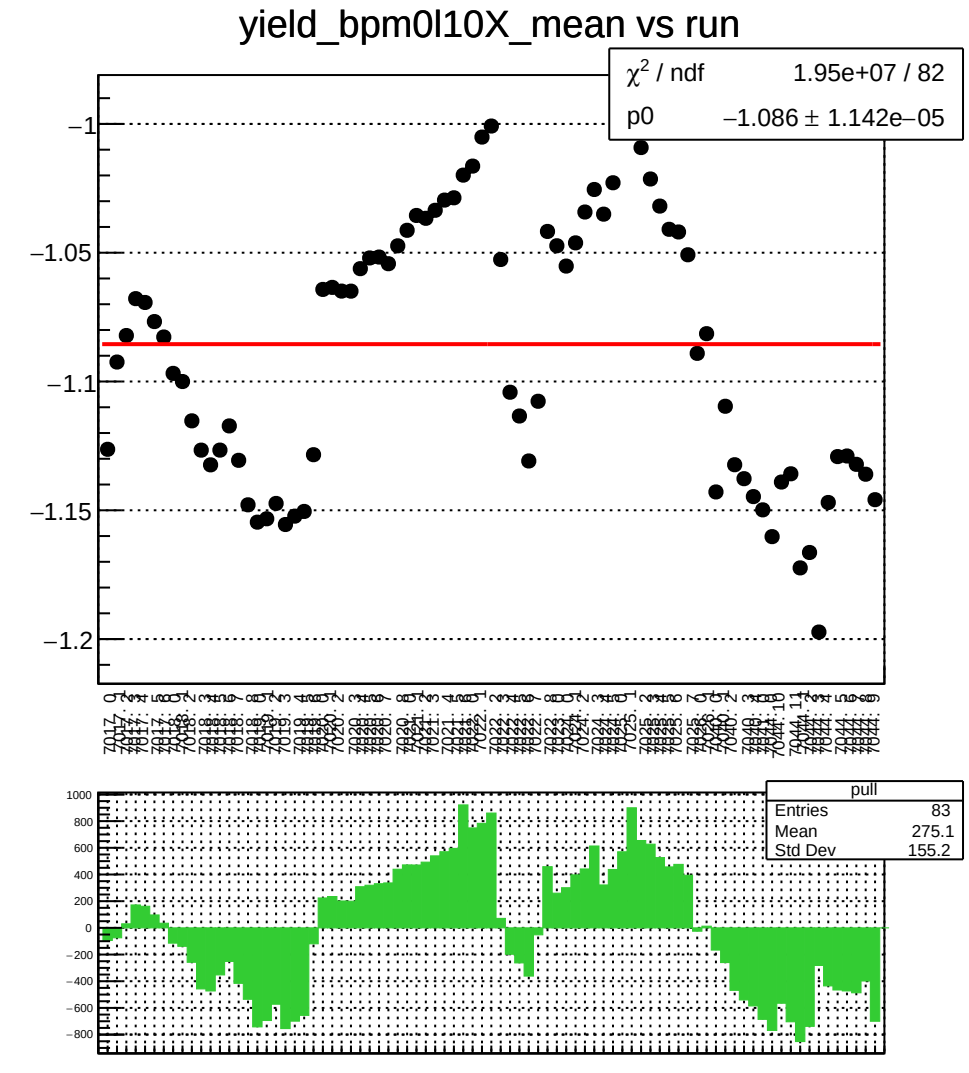

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

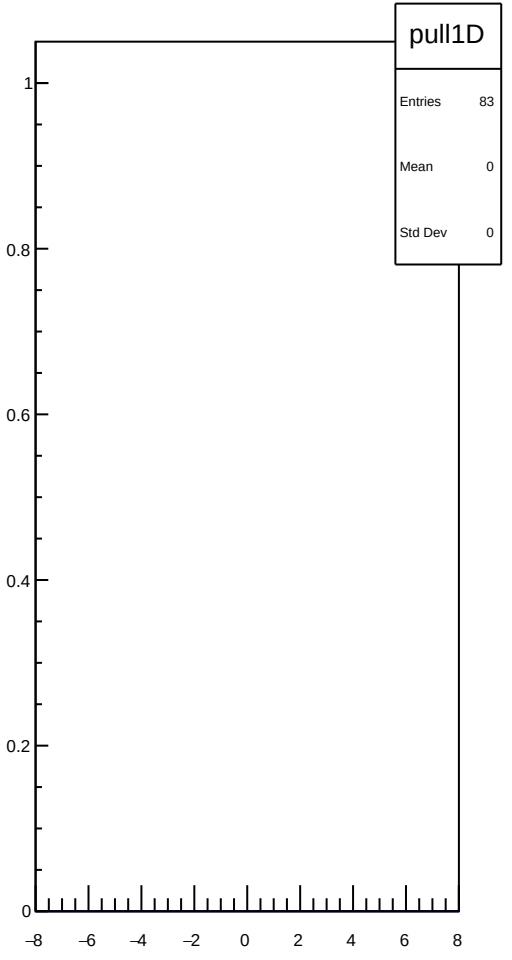

yield_bpm0l09X_rms vs run
χ² / ndf 1.104e+05 / 82
p0 0.01098 ± 9.003e–06
0.05
0.04
0.03
0.02
0.01

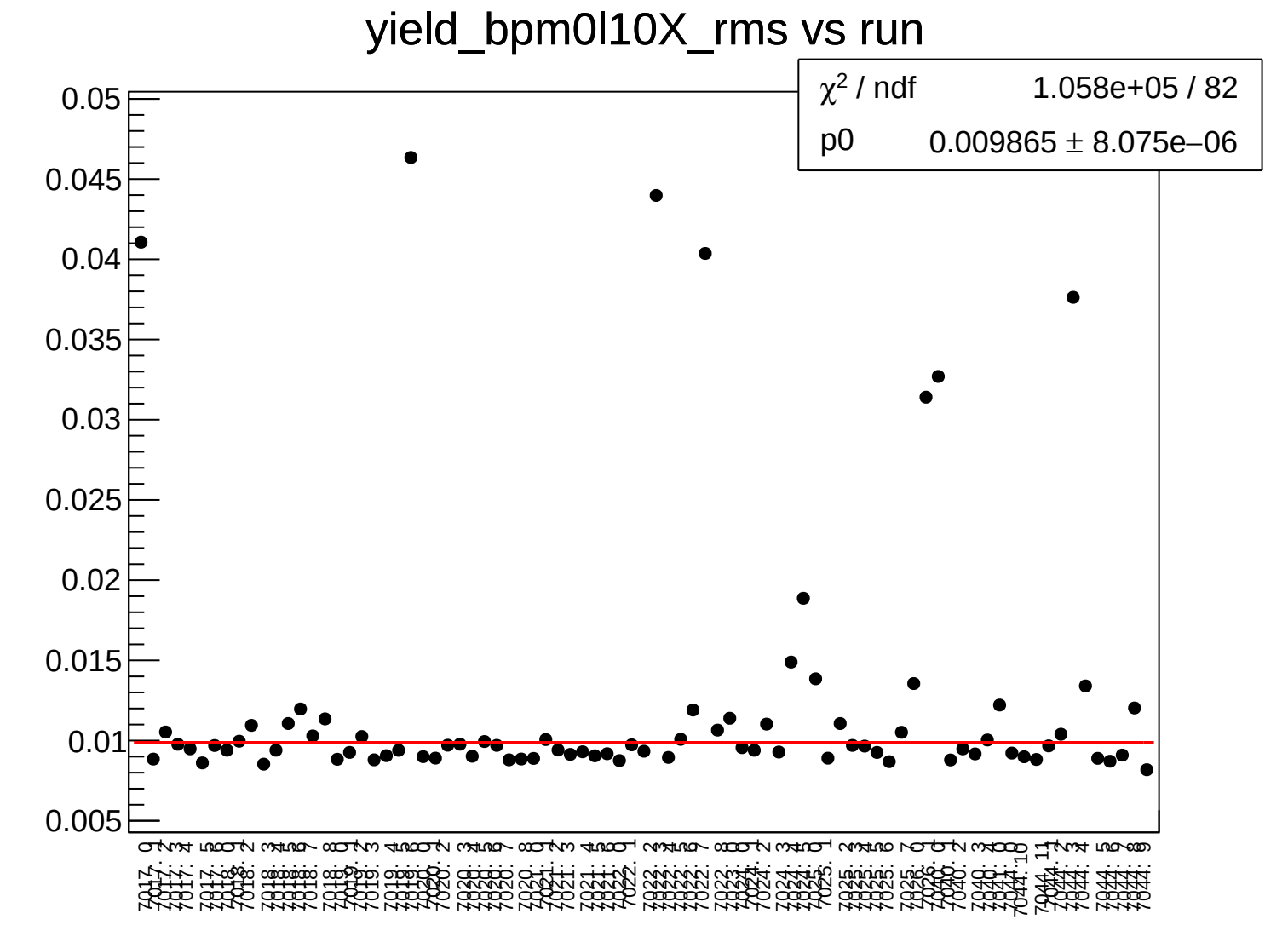

yield_bpm0l09Y_mean vs run
χ² / ndf 3.791e+06 / 82
p0 −0.03034 ± 3.344e−06
pull
Entries 83
Mean 55.41
Std Dev 25.26

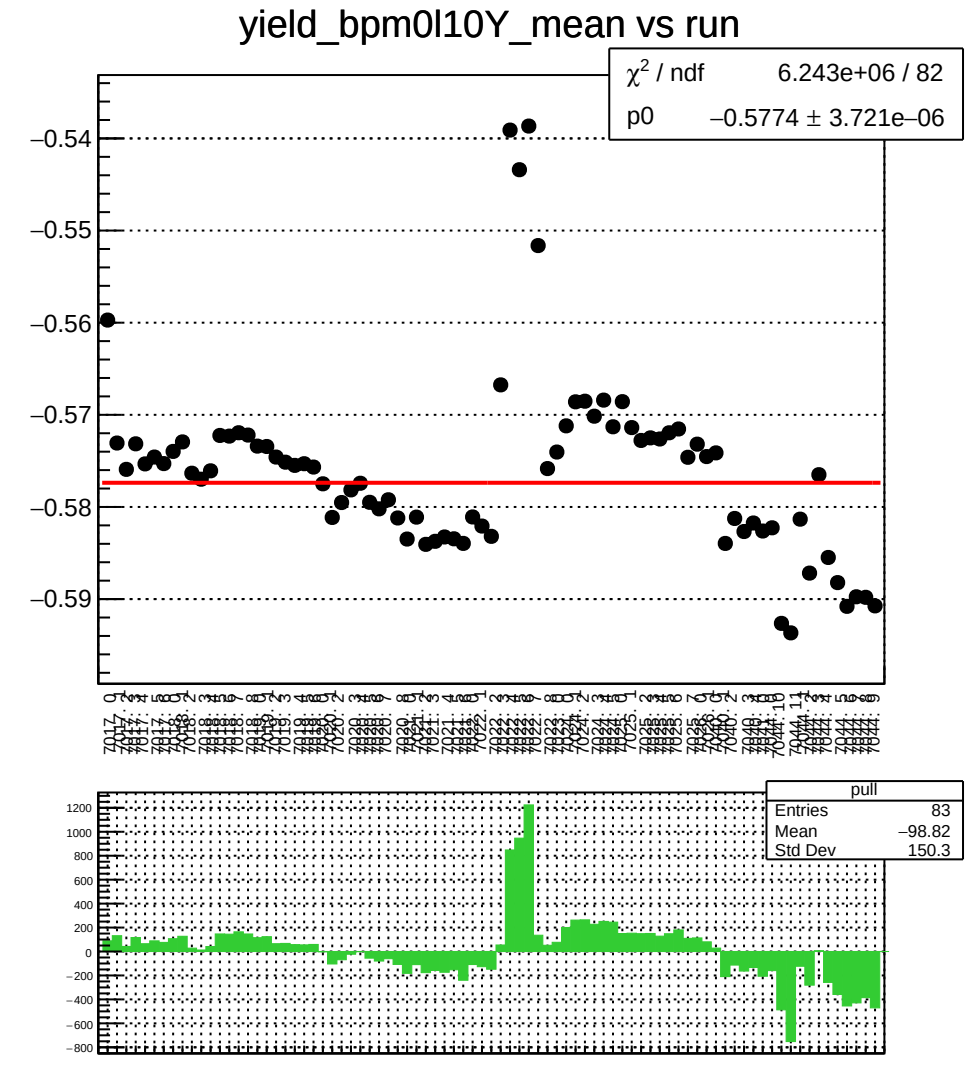

pull1D
Entries 83
Mean 0.9491
Std Dev 0

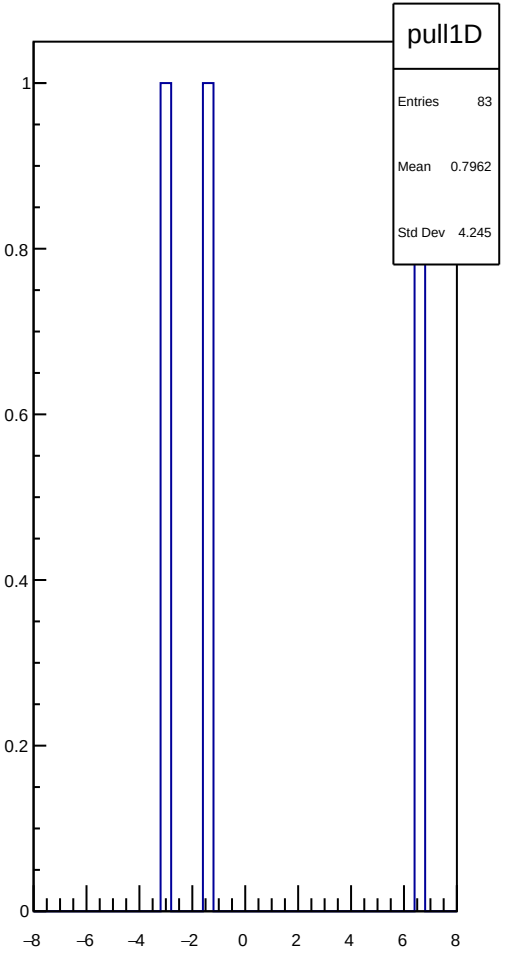

yield_bpm0l09Y_rms vs run
χ² / ndf 6.933e+04 / 82
p0 0.002924 ± 2.365e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

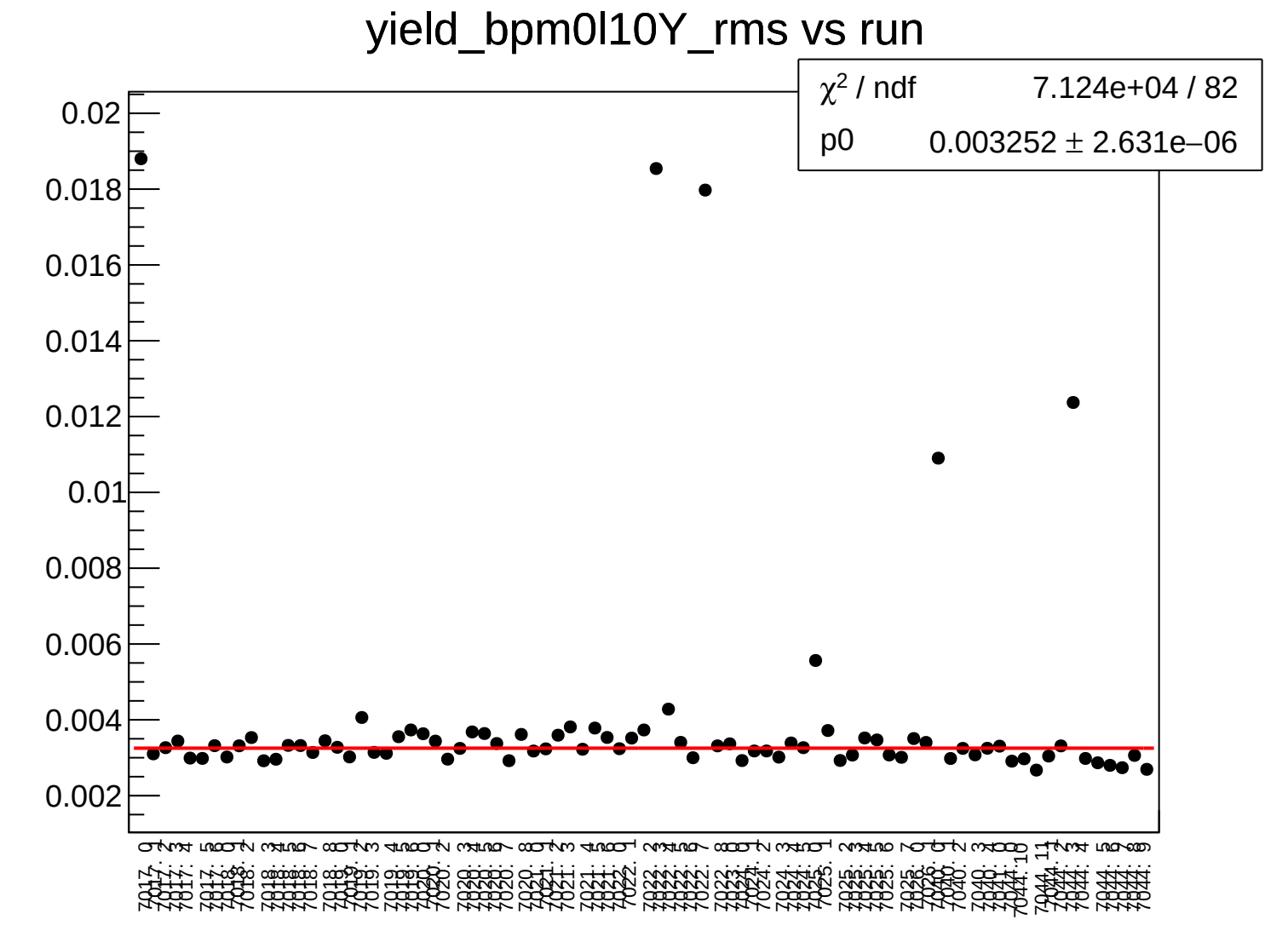

yield_bpm0l10X_mean vs run
χ² / ndf 1.95e+07 / 82
p0 −1.086 ± 1.142e−05
−1
−1.05
−1.1
−1.15
−1.2
pull
Entries 83
Mean 275.1
Std Dev 155.2
1000
800
600
400
200
0
−200
−400
−600
−800

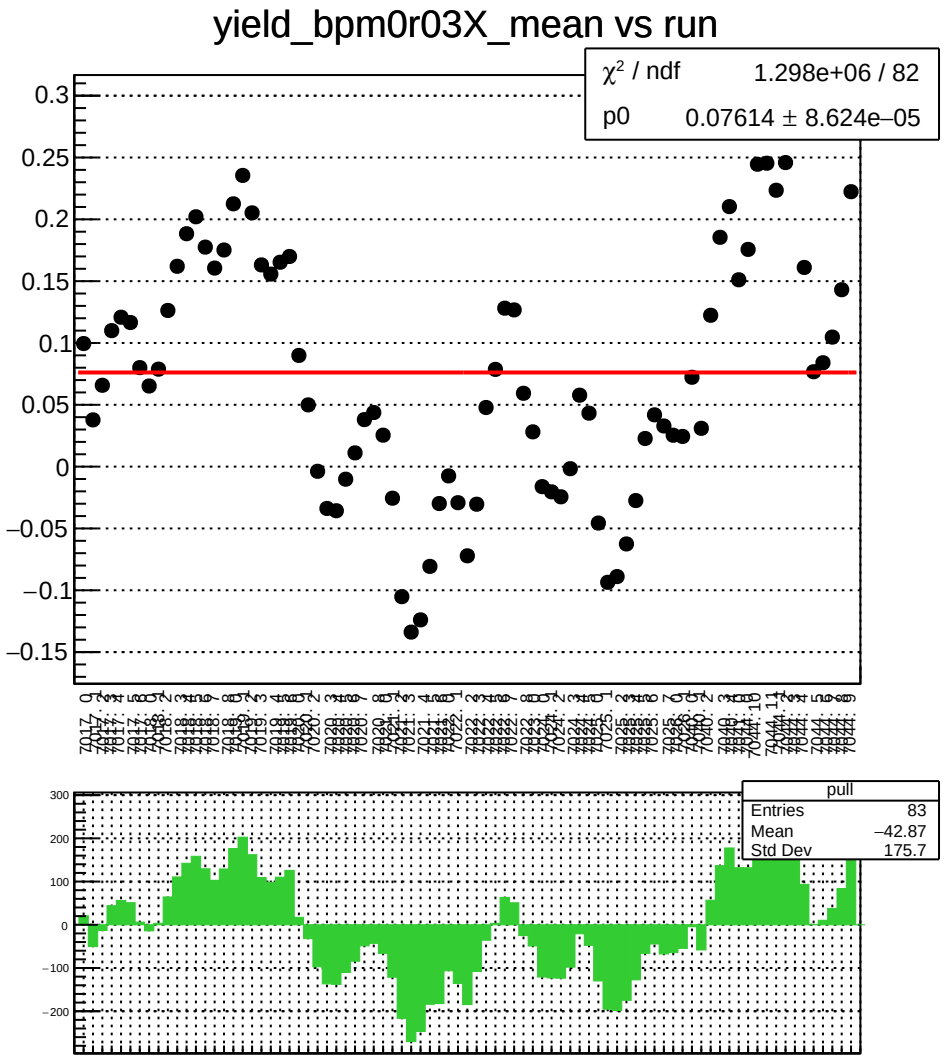

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

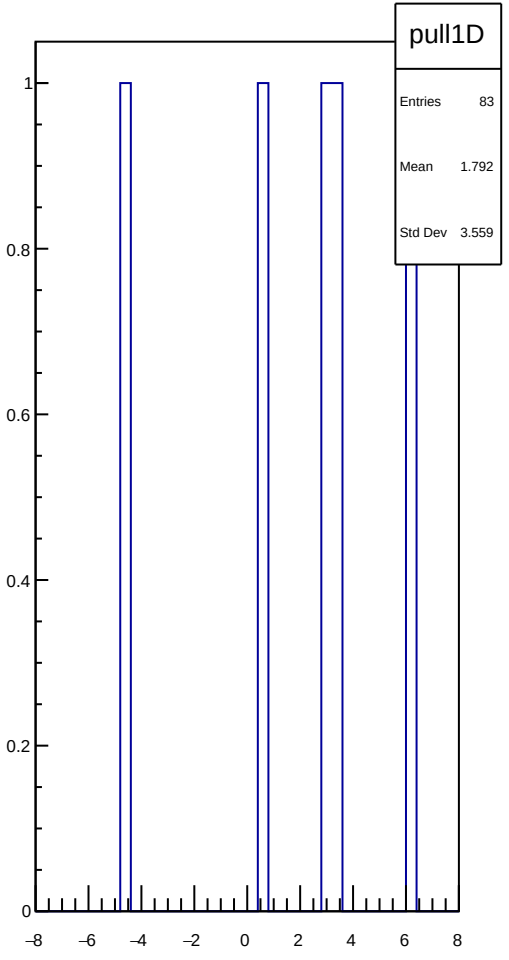

yield_bpm0l10X_rms vs run
χ^2 / ndf 1.058e+05 / 82
p0 0.009865 ± 8.075e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

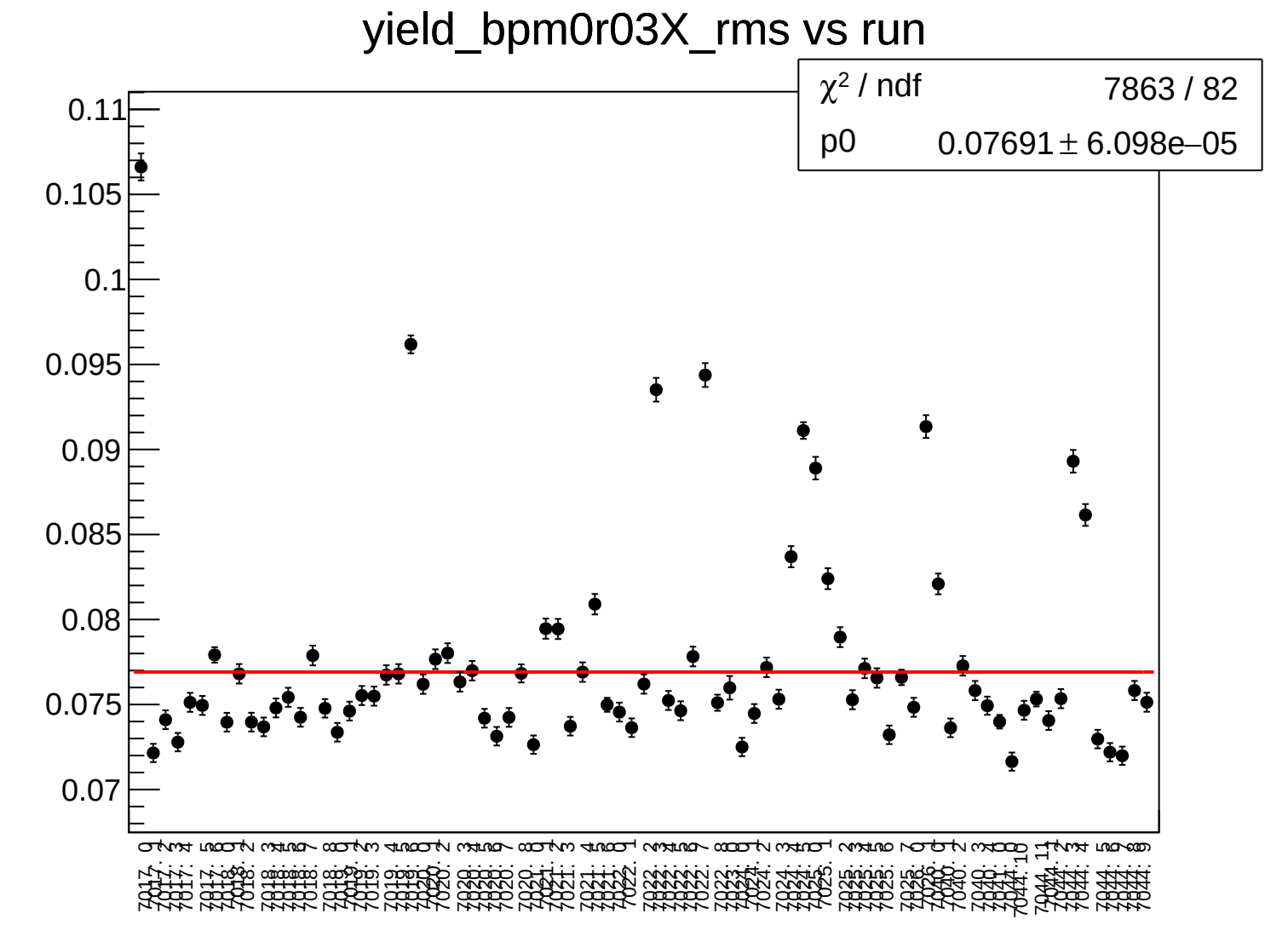

yield_bpm0l10Y_mean vs run
χ² / ndf 6.243e+06 / 82
p0 −0.5774 ± 3.721e−06
−0.54
−0.55
−0.56
−0.57
−0.58
−0.59
pull
Entries 83
Mean −98.82
Std Dev 150.3
1200
1000
800
600
400
200
0
−200
−400
−600
−800

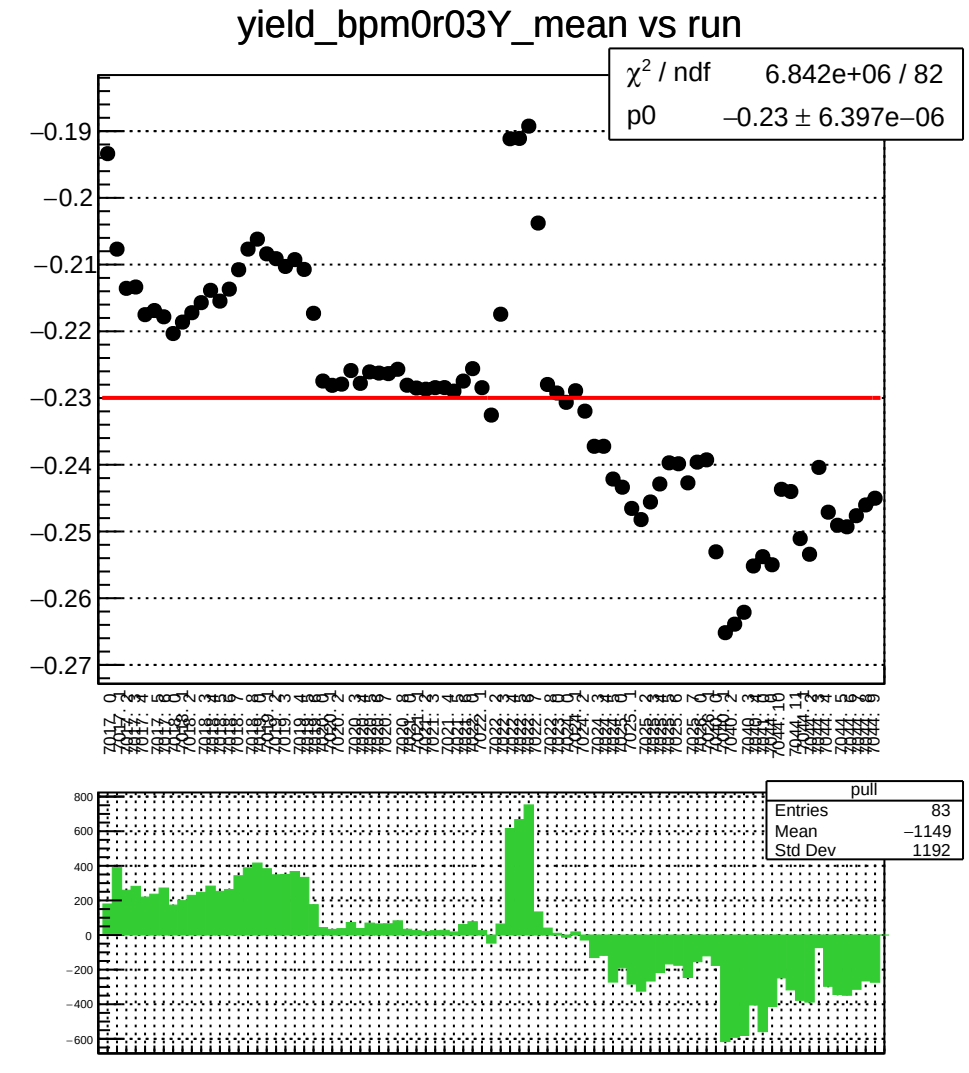

pull1D
Entries 83
Mean 0.7962
Std Dev 4.245
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

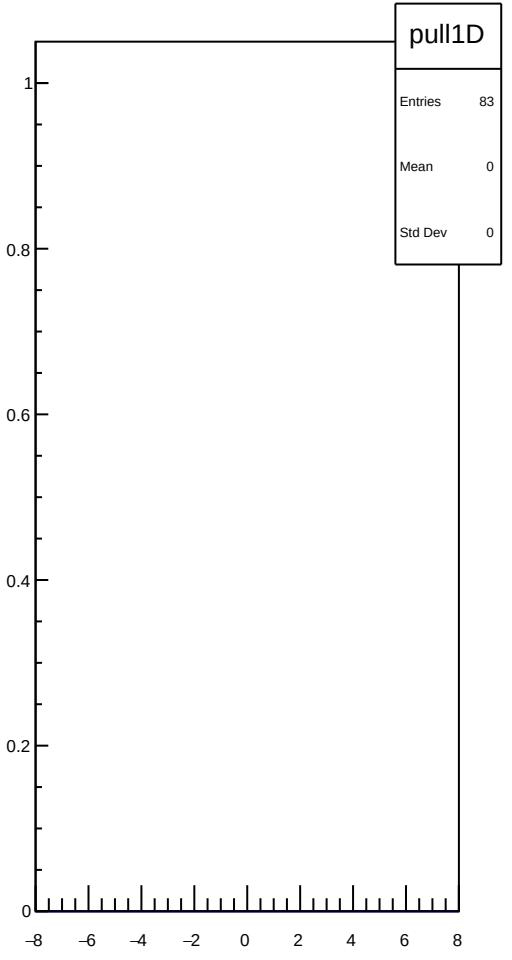

yield_bpm0l10Y_rms vs run
χ^2 / ndf 7.124e+04 / 82
p0 0.003252 ± 2.631e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

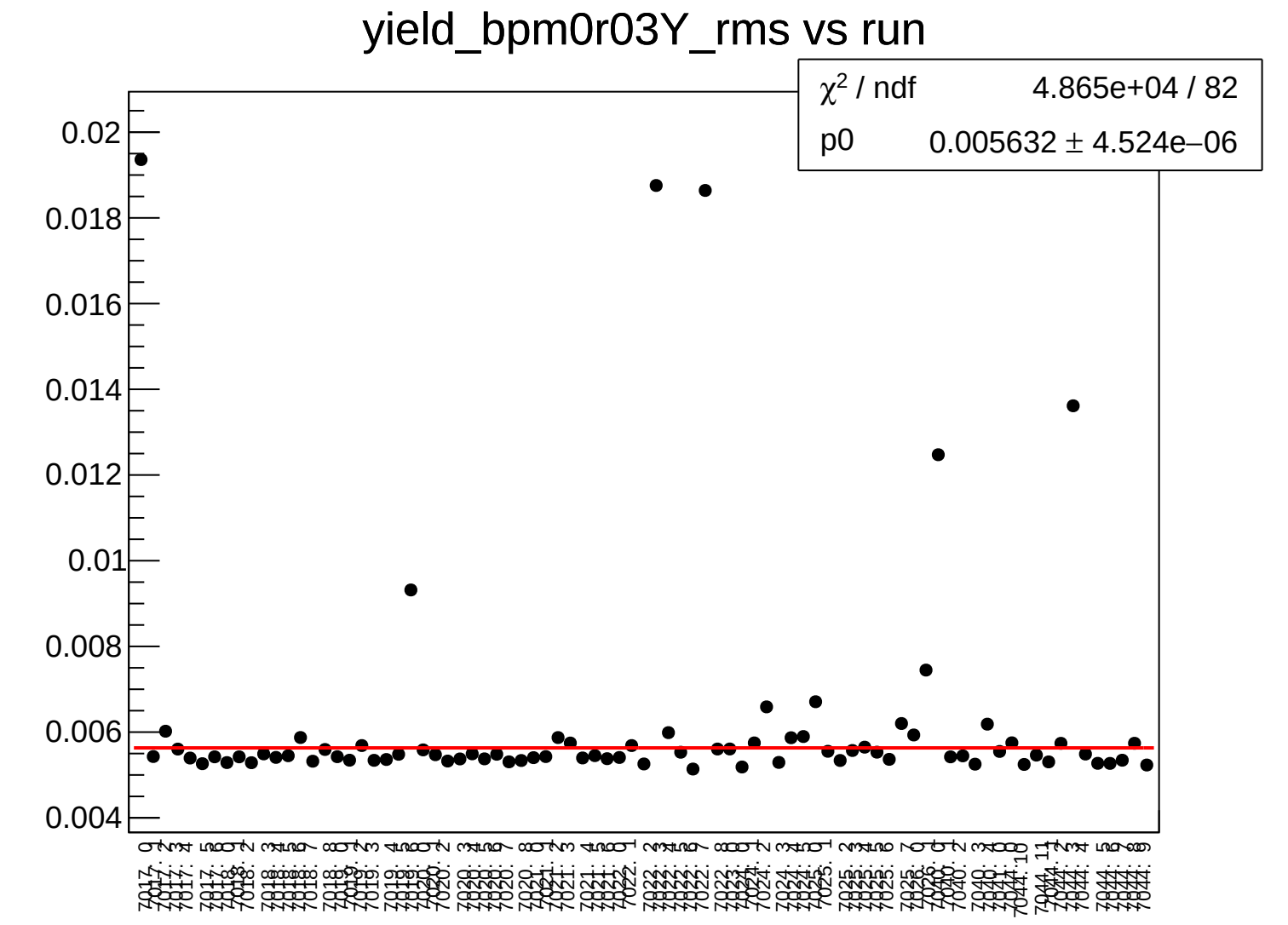

yield_bpm0r03X_mean vs run
χ² / ndf 1.298e+06 / 82
p0 0.07614 ± 8.624e−05
pull
Entries 83
Mean −42.87
Std Dev 175.7

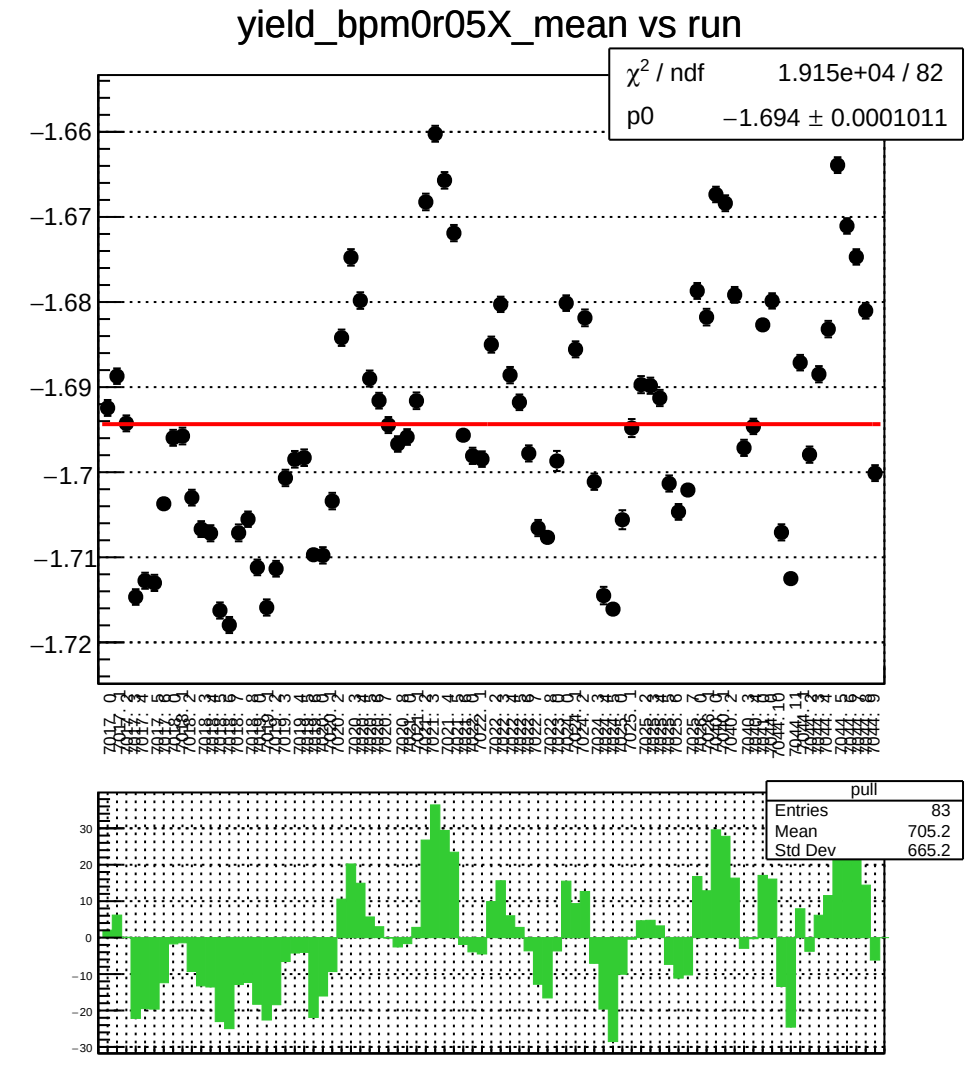

pull1D
Entries 83
Mean 1.792
Std Dev 3.559

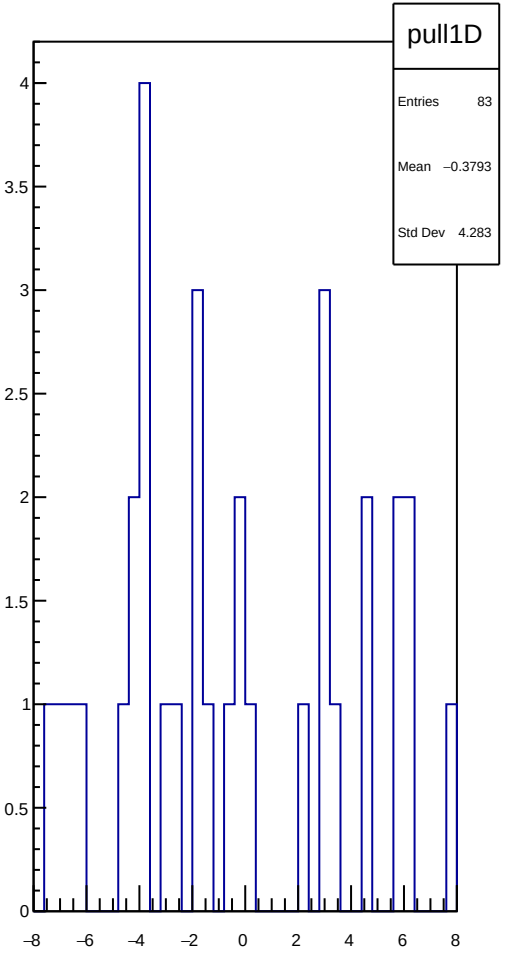

yield_bpm0r03X_rms vs run
χ² / ndf 7863 / 82
p0 0.07691 ± 6.098e–05
0.11
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07

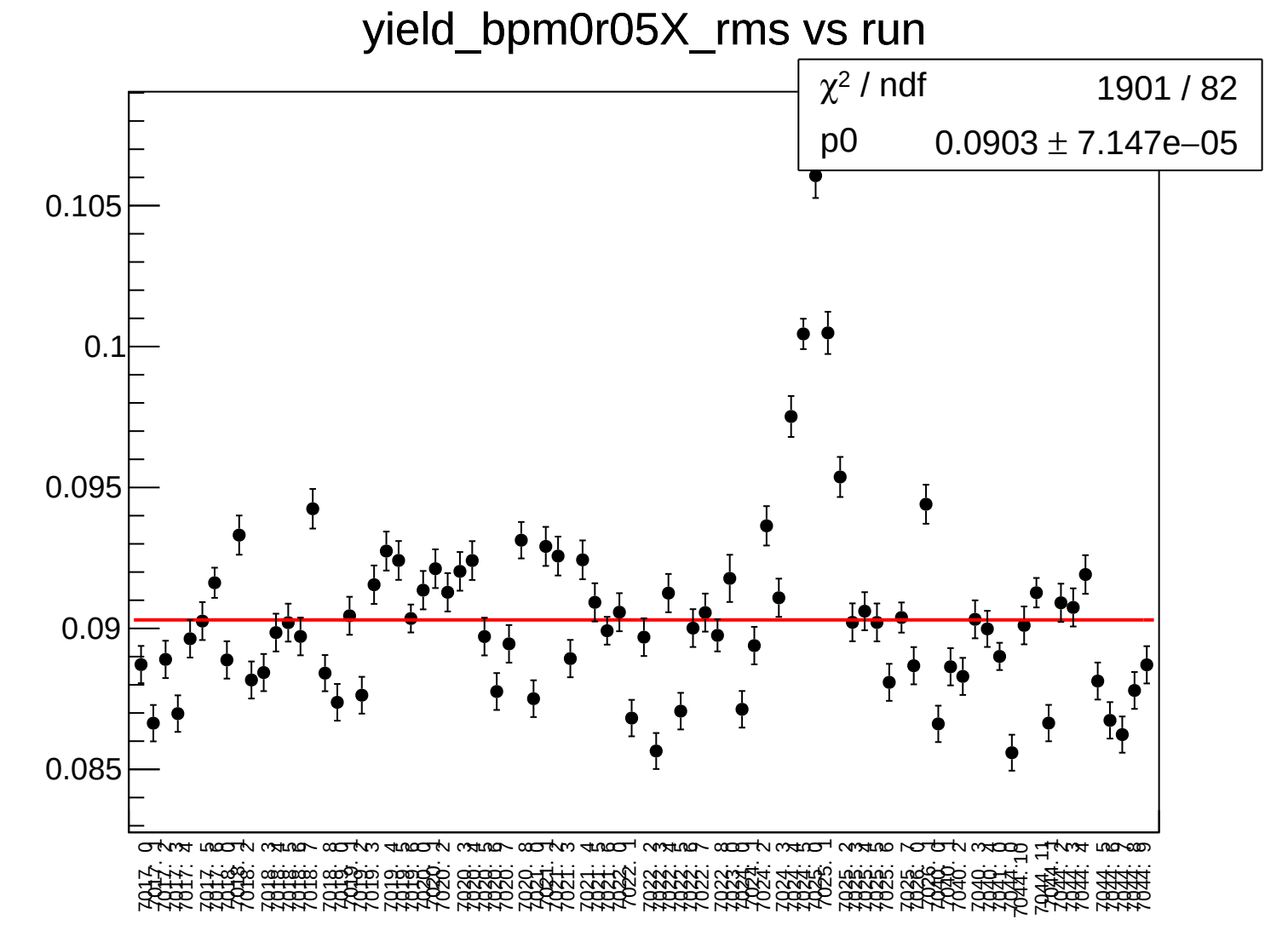

yield_bpm0r03Y_mean vs run
χ² / ndf 6.842e+06 / 82
p0 −0.23 ± 6.397e−06
−0.19
−0.2
−0.21
−0.22
−0.23
−0.24
−0.25
−0.26
−0.27
pull
Entries 83
Mean −1149
Std Dev 1192
800
600
400
200
0
−200
−400
−600

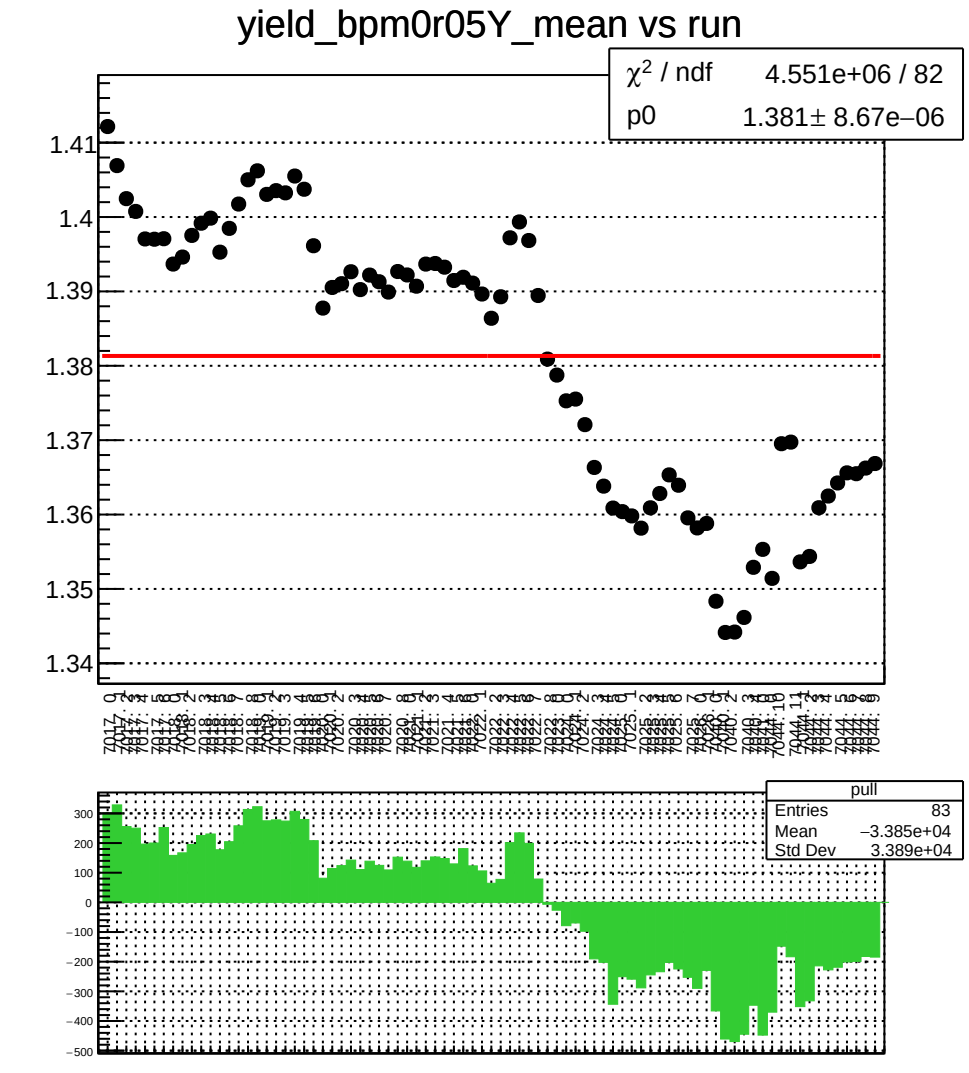

pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

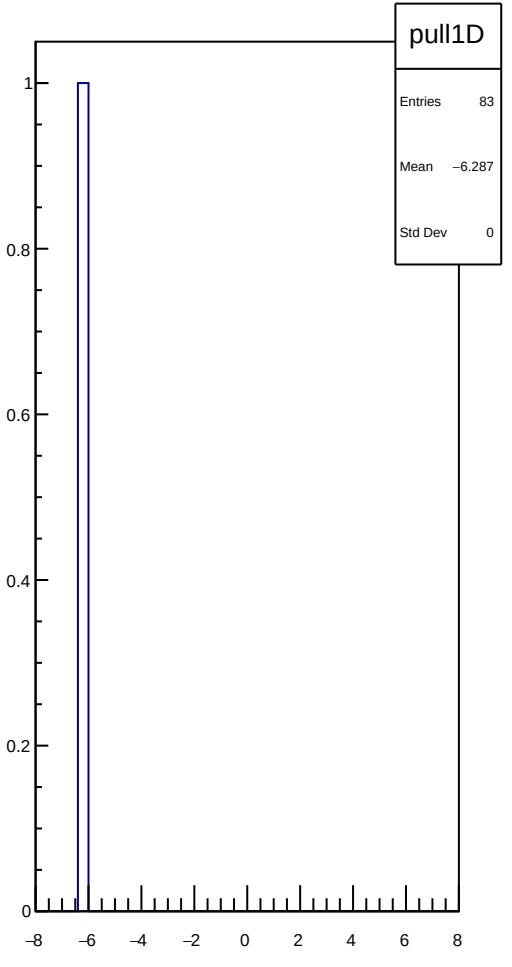

yield_bpm0r03Y_rms vs run
χ^2 / ndf 4.865e+04 / 82
p0 0.005632 ± 4.524e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

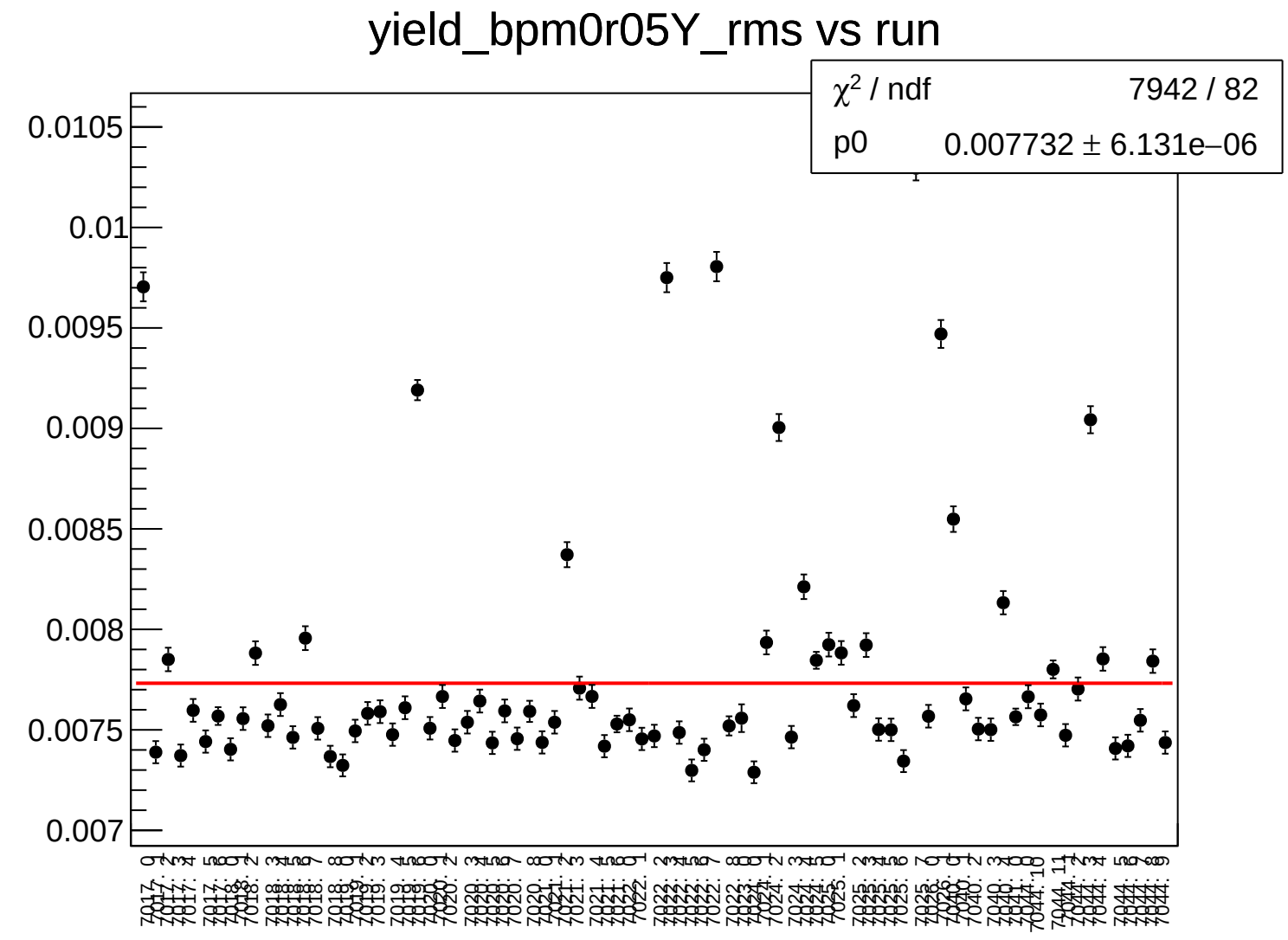

yield_bpm0r05X_mean vs run
χ² / ndf 1.915e+04 / 82
p0 −1.694 ± 0.0001011
−1.66
−1.67
−1.68
−1.69
−1.7
−1.71
−1.72
pull
Entries 83
Mean 705.2
Std Dev 665.2
30
20
10
0
−10
−20
−30

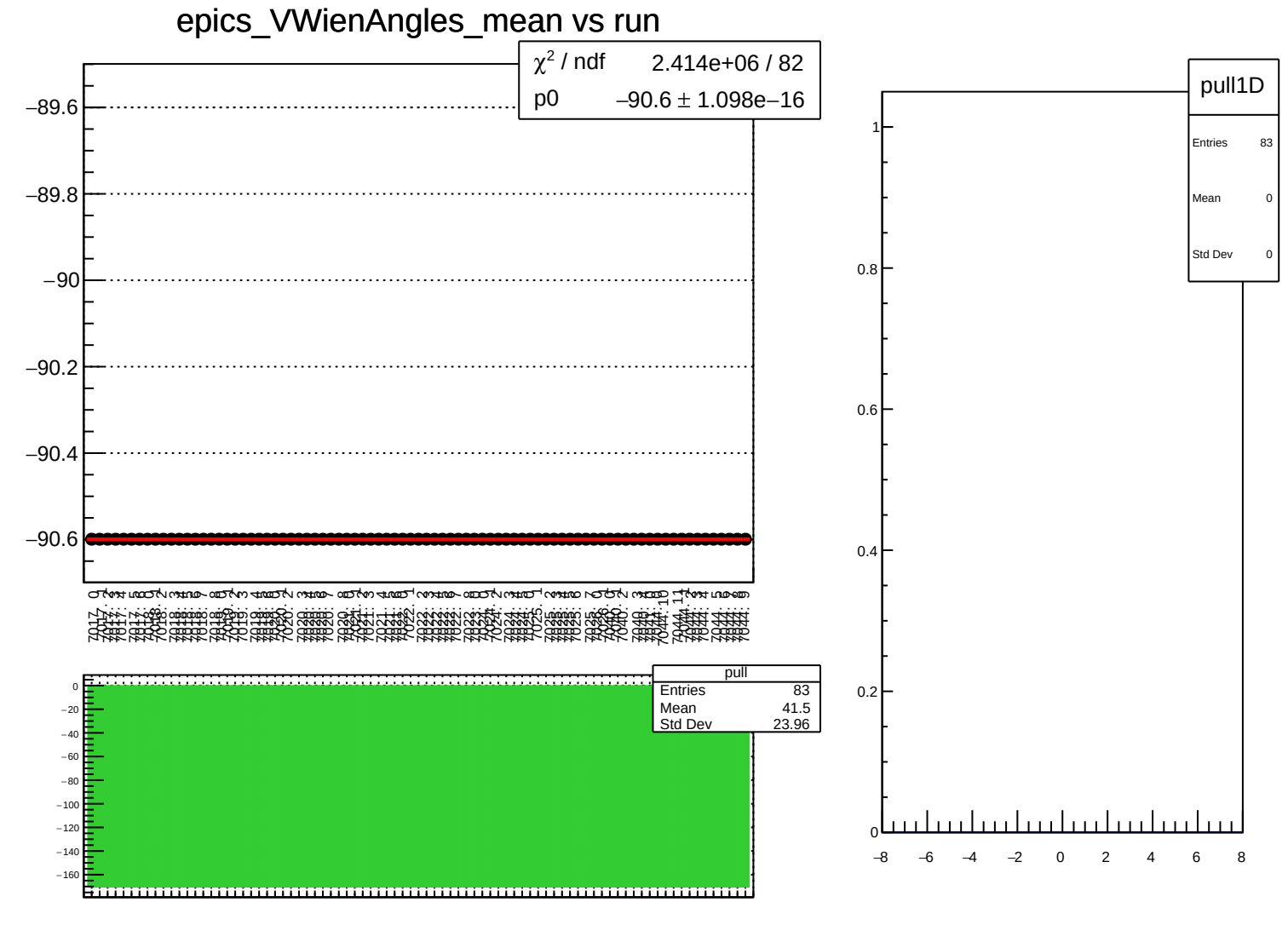

pull1D
Entries 83
Mean −0.3793
Std Dev 4.283
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

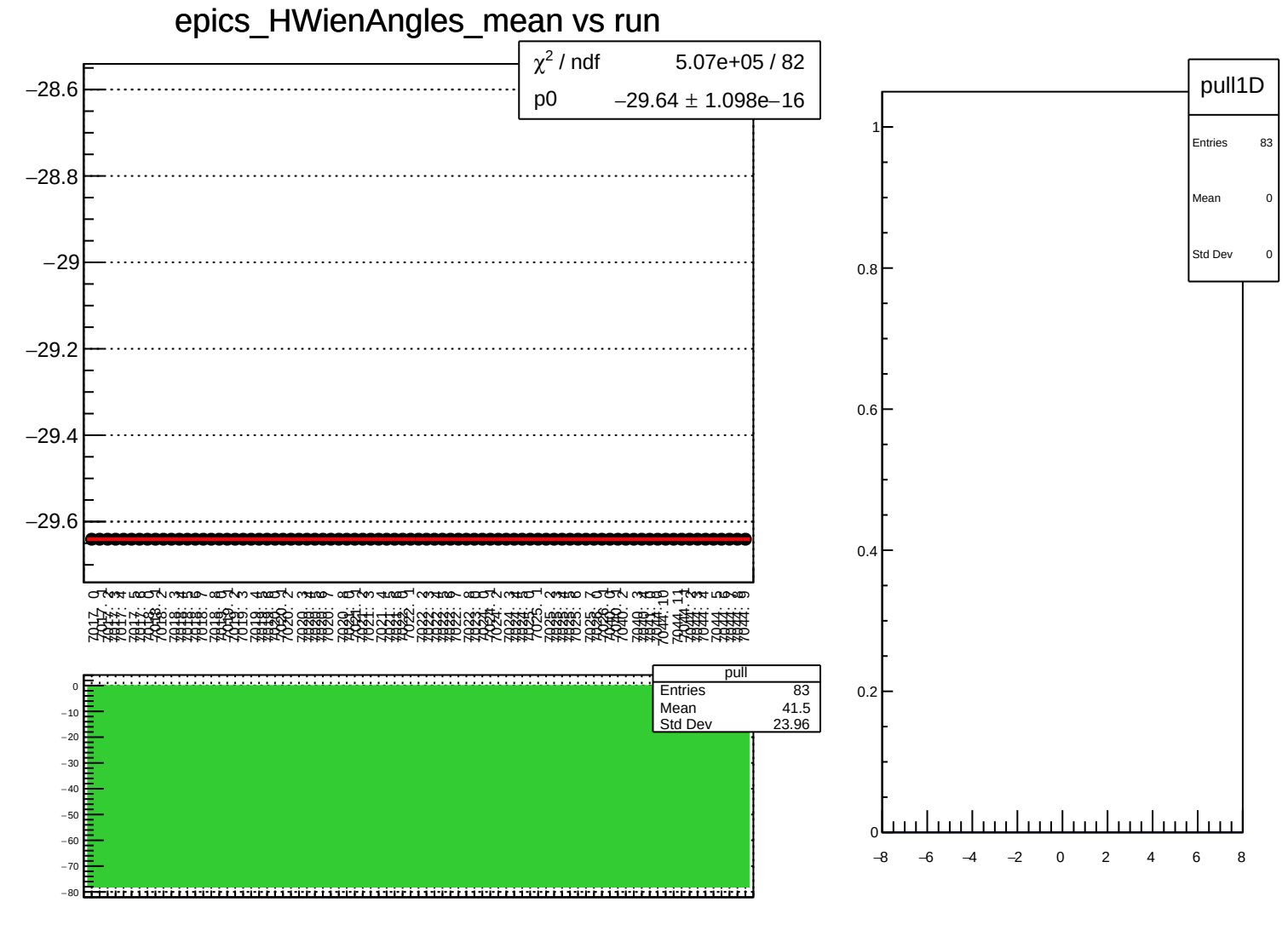

yield_bpm0r05X_rms vs run
χ² / ndf 1901 / 82
p0 0.0903 ± 7.147e−05
0.105
0.1
0.095
0.09
0.085

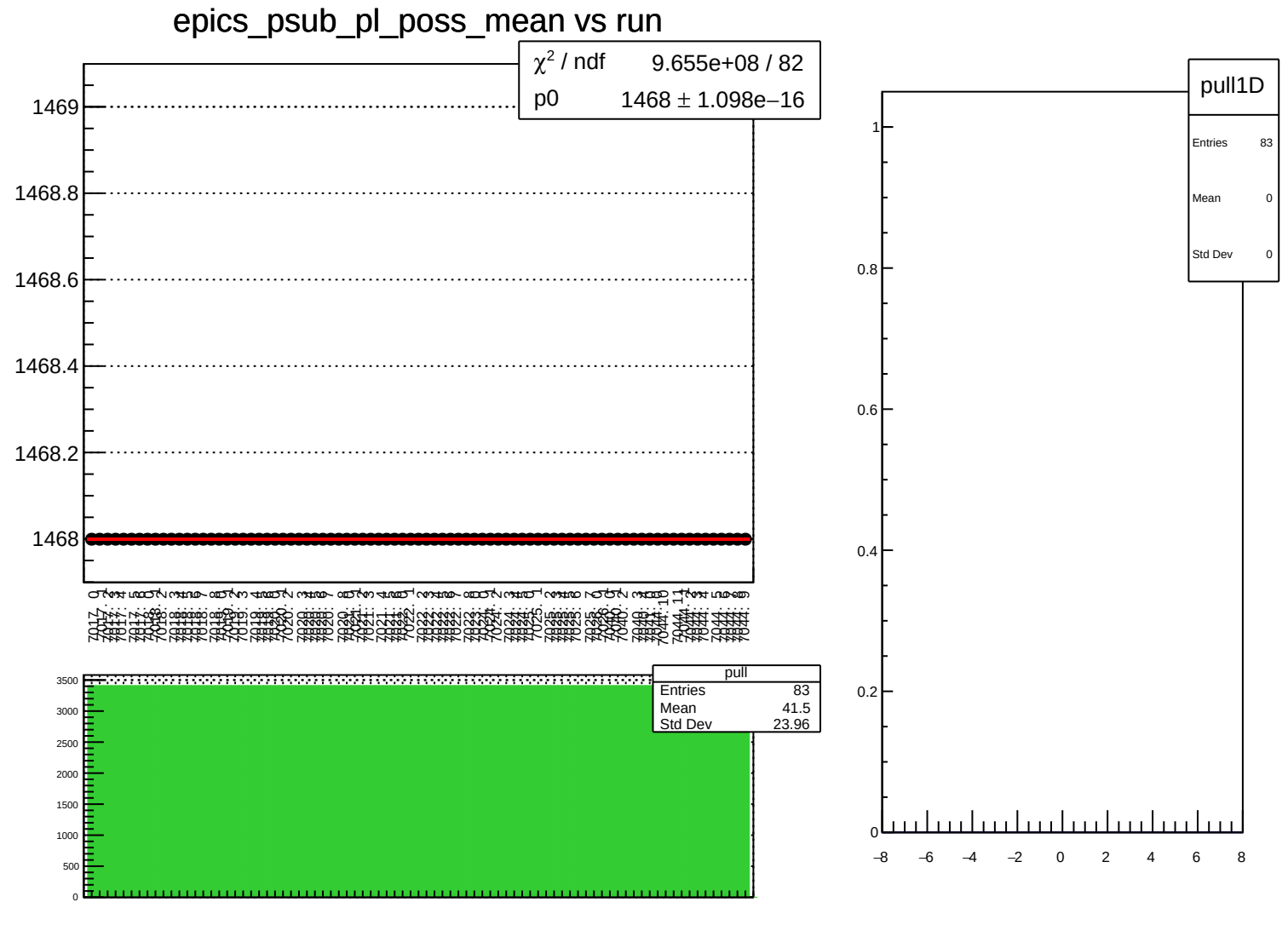

yield_bpm0r05Y_mean vs run
χ² / ndf 4.551e+06 / 82
p0 1.381± 8.67e−06
1.41
1.4
1.39
1.38
1.37
1.36
1.35
1.34
pull
Entries 83
Mean −3.385e+04
Std Dev 3.389e+04
300
200
100
0
−100
−200
−300
−400
−500

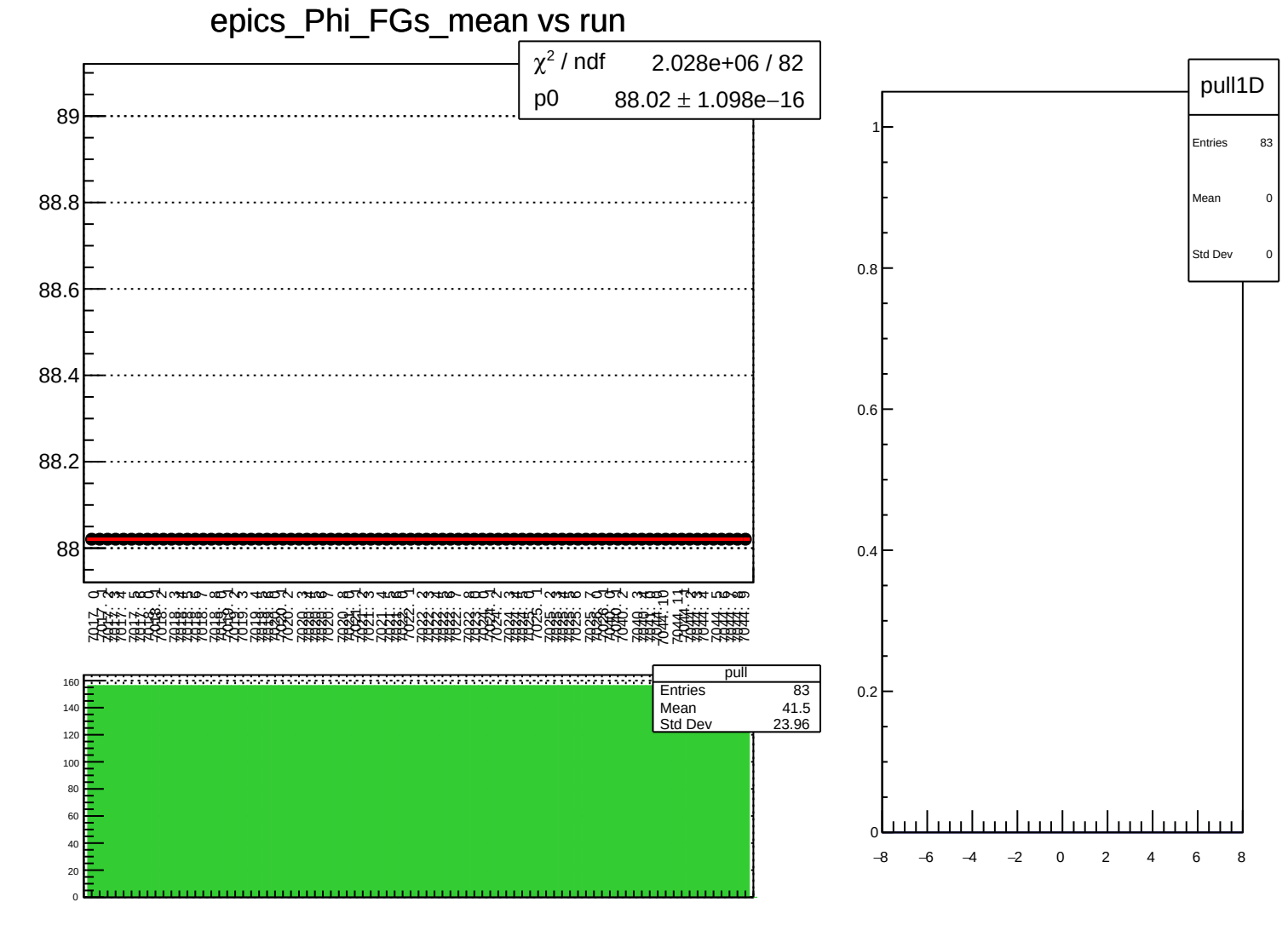

pull1D
Entries 83
Mean −6.287
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

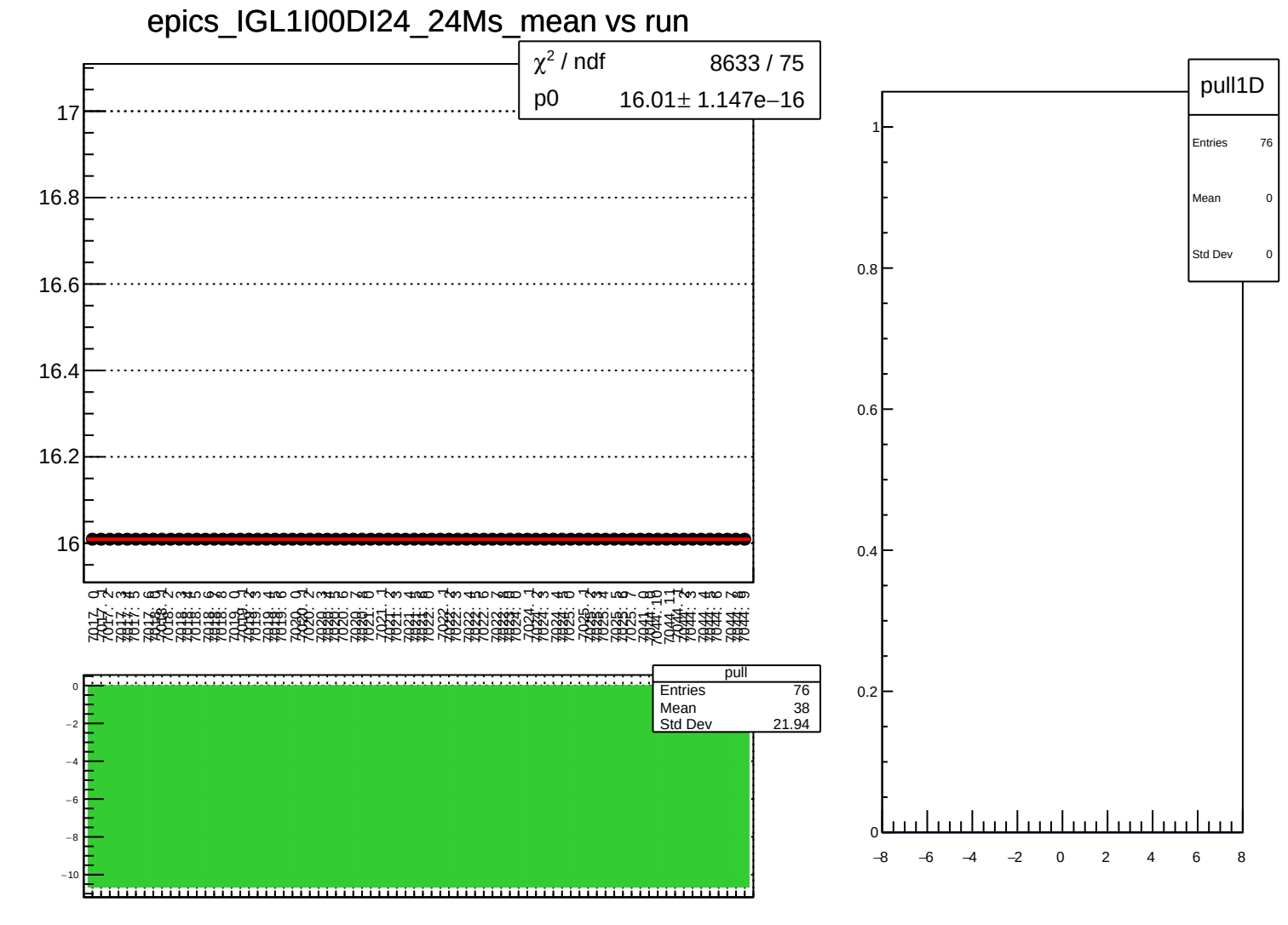

yield_bpm0r05Y_rms vs run
χ² / ndf 7942 / 82
p0 0.007732 ± 6.131e−06
0.0105
0.01
0.0095
0.009
0.0085
0.008
0.0075
0.007

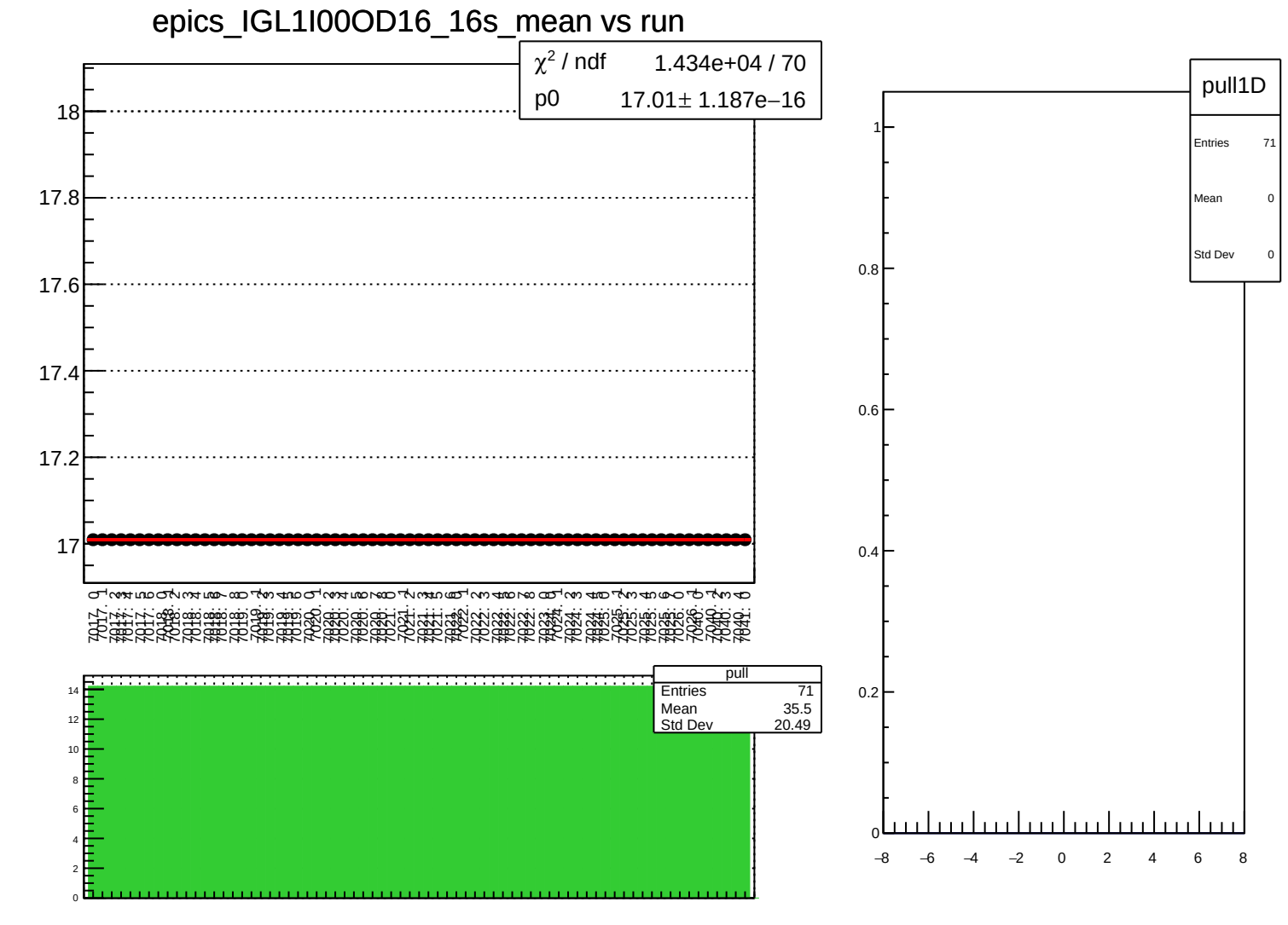

epics_VWienAngles_mean vs run
χ² / ndf 2.414e+06 / 82
p0 −90.6 ± 1.098e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 83
Mean 41.5
Std Dev 23.96
0
−20
−40
−60
−80
−100
−120
−140
−160
pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

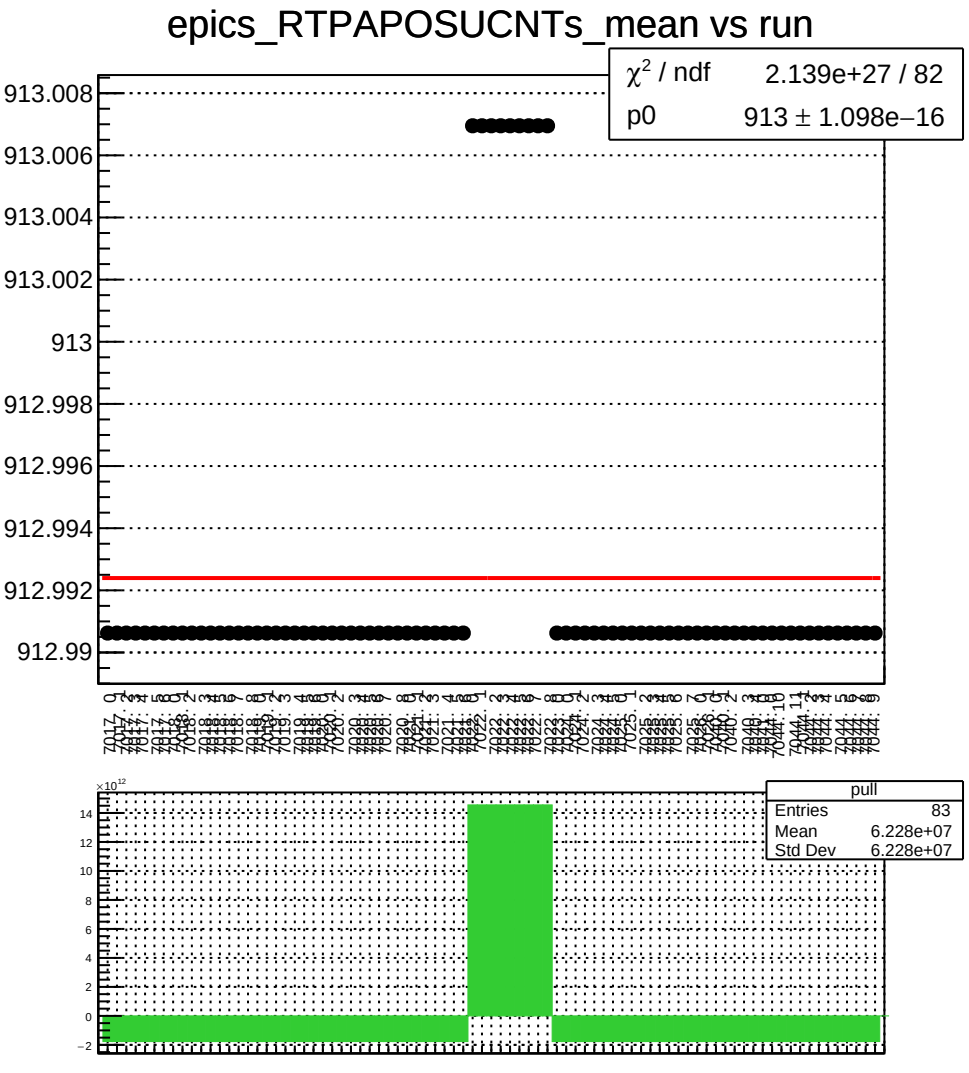

epics_HWienAngles_mean vs run
χ² / ndf 5.07e+05 / 82
p0 −29.64 ± 1.098e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 83
Mean 41.5
Std Dev 23.96
0
−10
−20
−30
−40
−50
−60
−70
−80
pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

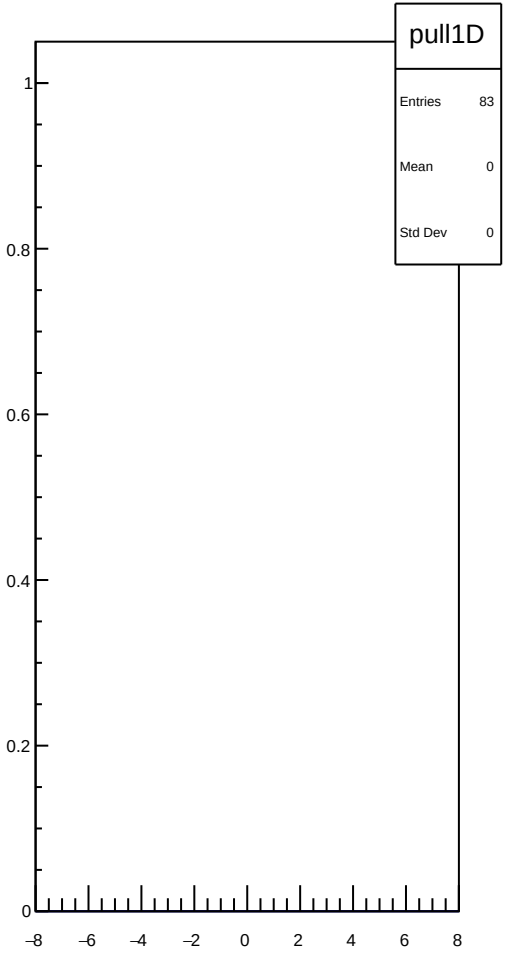

epics_psub_pl_poss_mean vs run
χ² / ndf 9.655e+08 / 82
p0 1468 ± 1.098e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 83
Mean 41.5
Std Dev 23.96
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

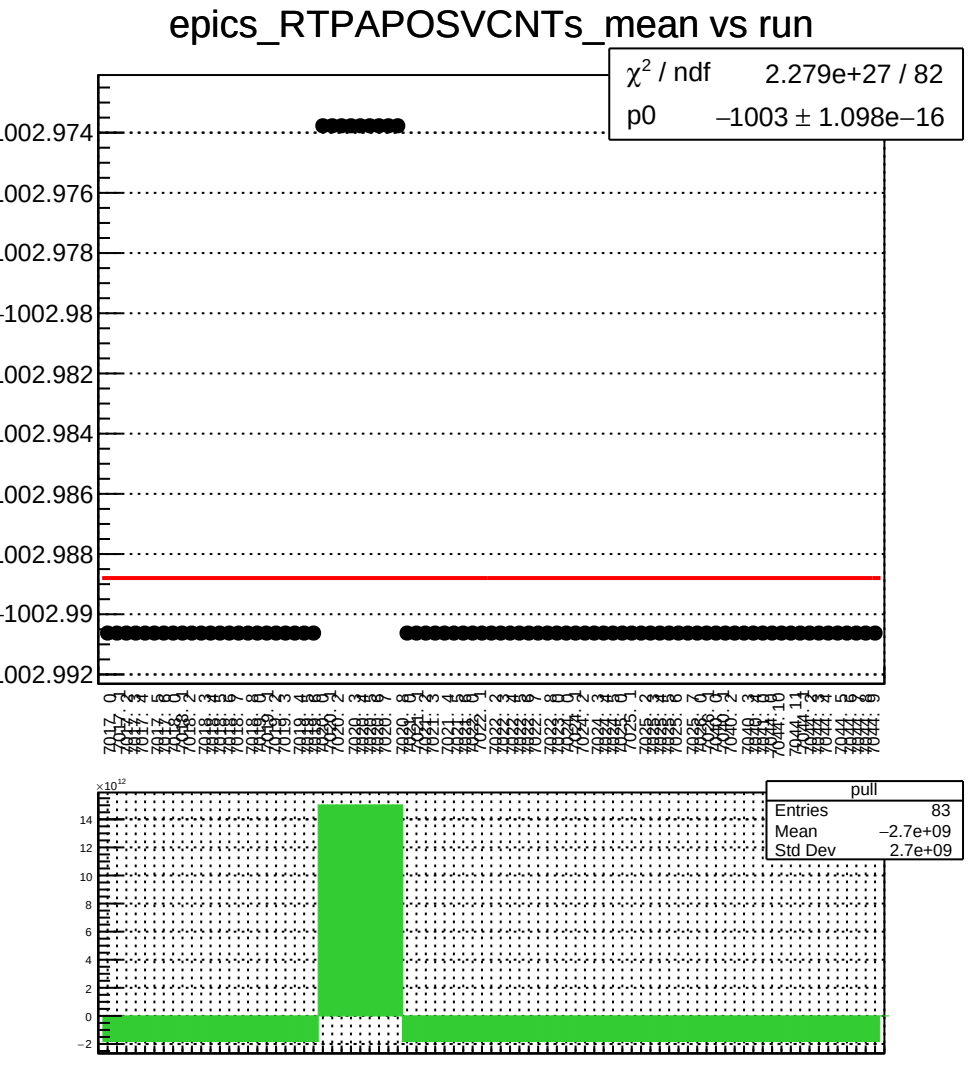

epics_Phi_FGs_mean vs run
χ² / ndf 2.028e+06 / 82
p0 88.02 ± 1.098e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 83
Mean 41.5
Std Dev 23.96
160
140
120
100
80
60
40
20
0
pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

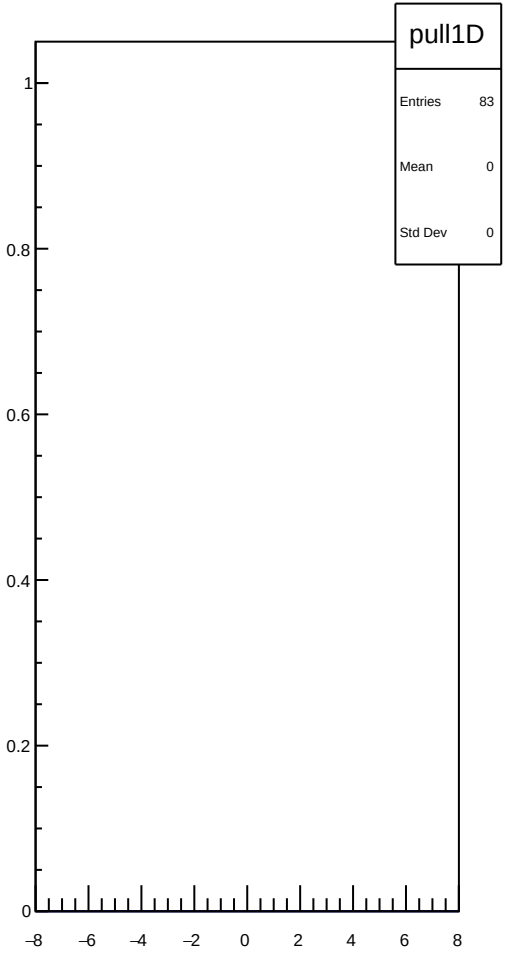

epics_IGL1I00DI24_24Ms_mean vs run
χ² / ndf 8633 / 75
p0 16.01± 1.147e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 76
Mean 38
Std Dev 21.94
0
−2
−4
−6
−8
−10
pull1D
Entries 76
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 1.434e+04 / 70
p0 17.01± 1.187e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 71
Mean 35.5
Std Dev 20.49
14
12
10
8
6
4
2
0
pull1D
Entries 71
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 2.139e+27 / 82
p0 913 ± 1.098e−16
913.008
913.006
913.004
913.002
913
912.998
912.996
912.994
912.992
912.99
pull
Entries 83
Mean 6.228e+07
Std Dev 6.228e+07
×10¹²
14
12
10
8
6
4
2
0
−2


pull1D
Entries 83
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 2.279e+27 / 82
p0 −1003 ± 1.098e−16
−1002.974
−1002.976
−1002.978
−1002.98
−1002.982
−1002.984
−1002.986
−1002.988
−1002.99
−1002.992
pull
Entries 83
Mean −2.7e+09
Std Dev 2.7e+09
×10¹²
14
12
10
8
6
4
2
0
−2


pull1D
Entries 83
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8