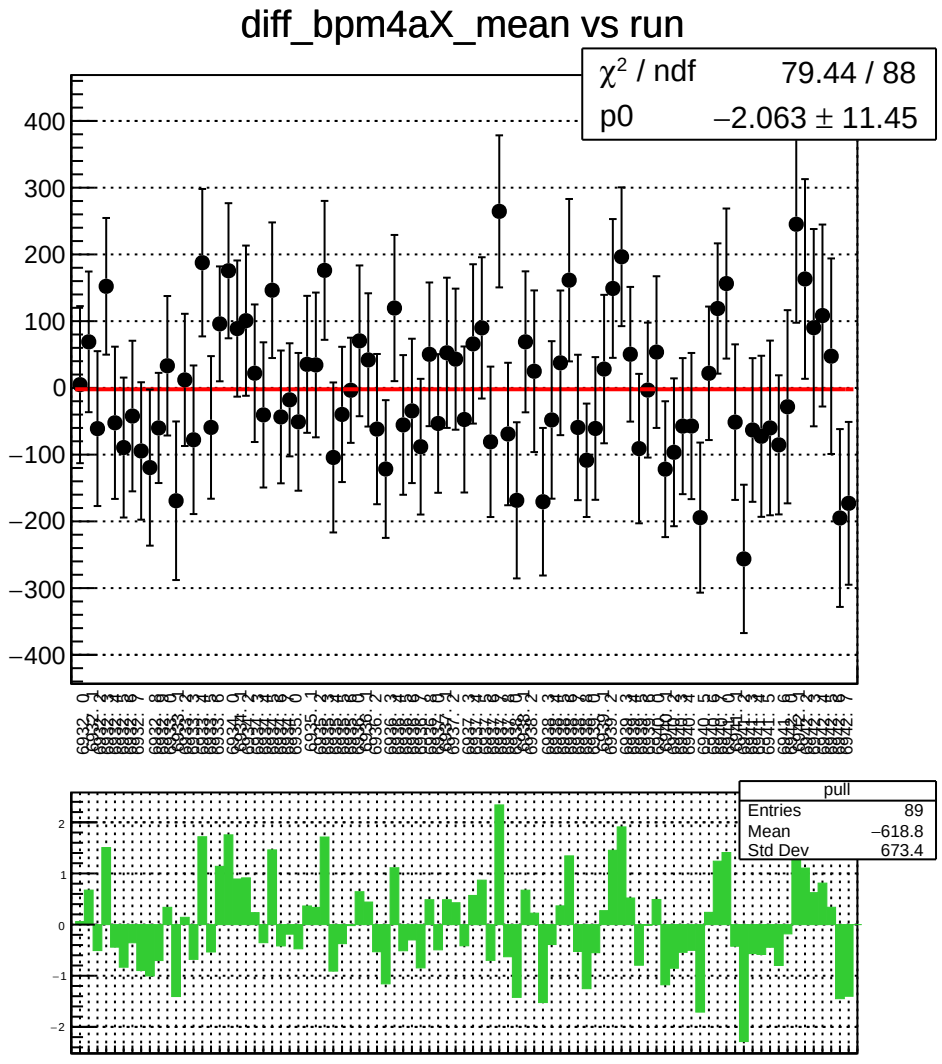
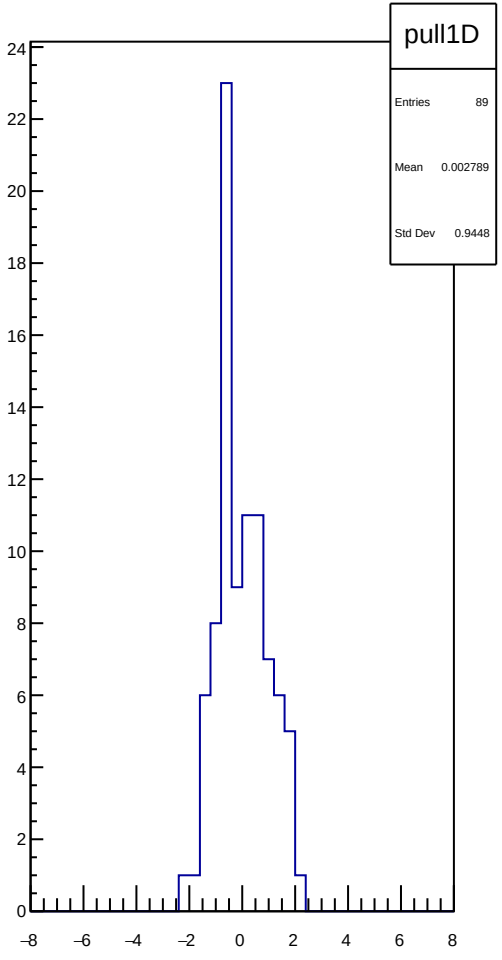
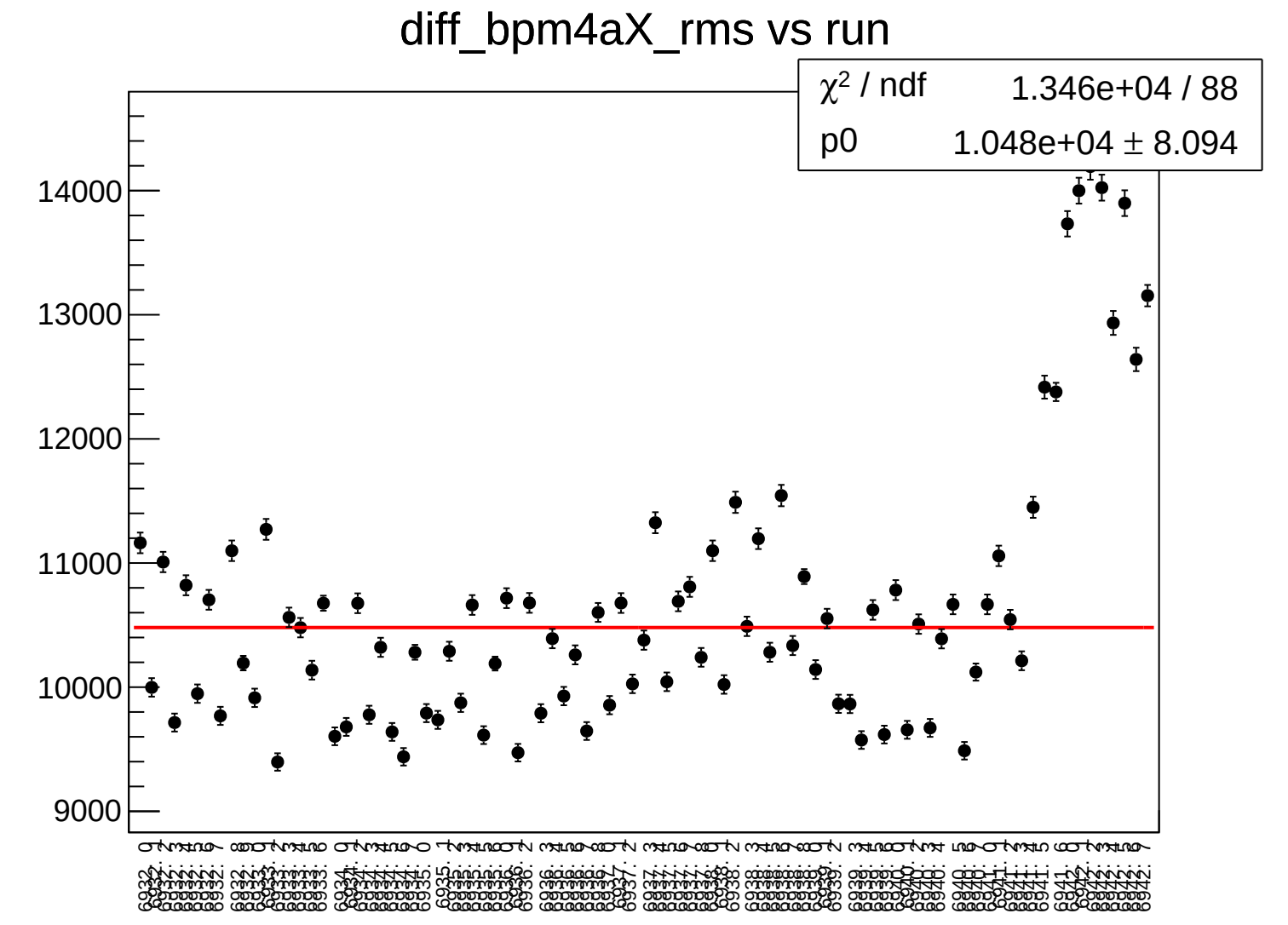
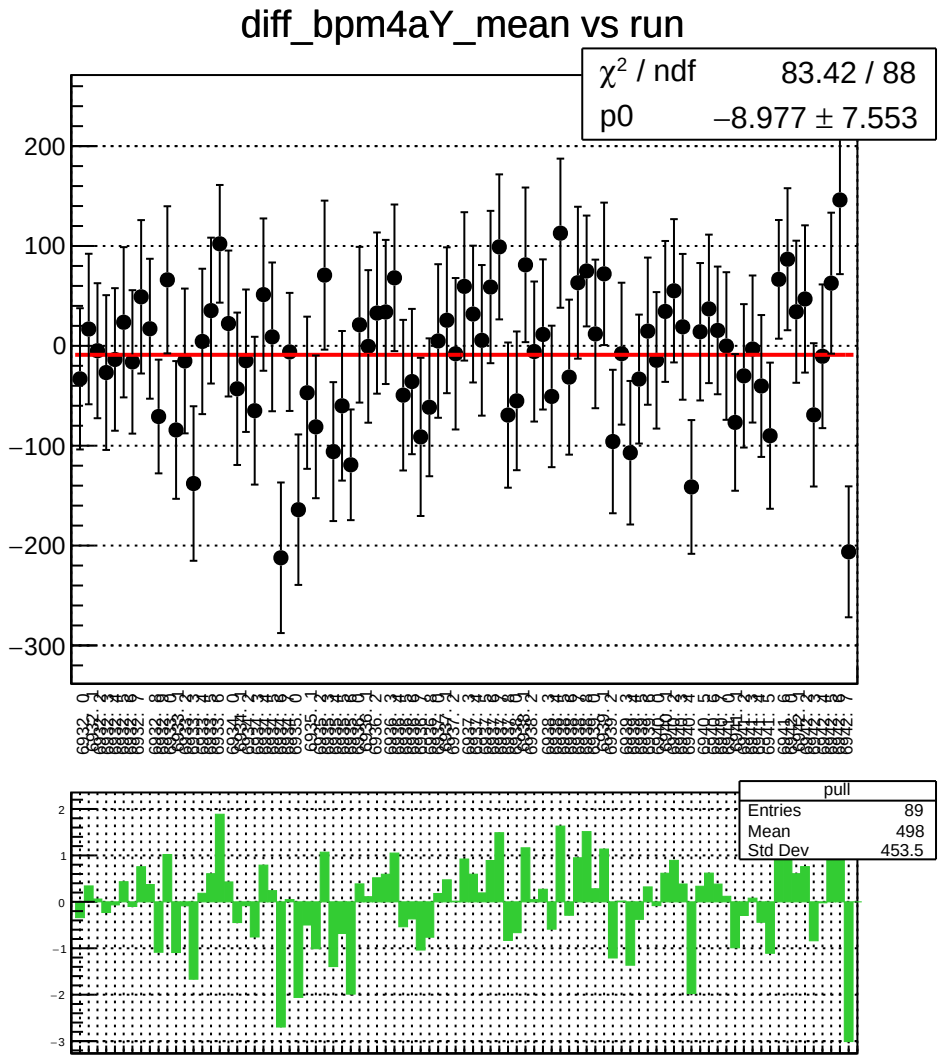
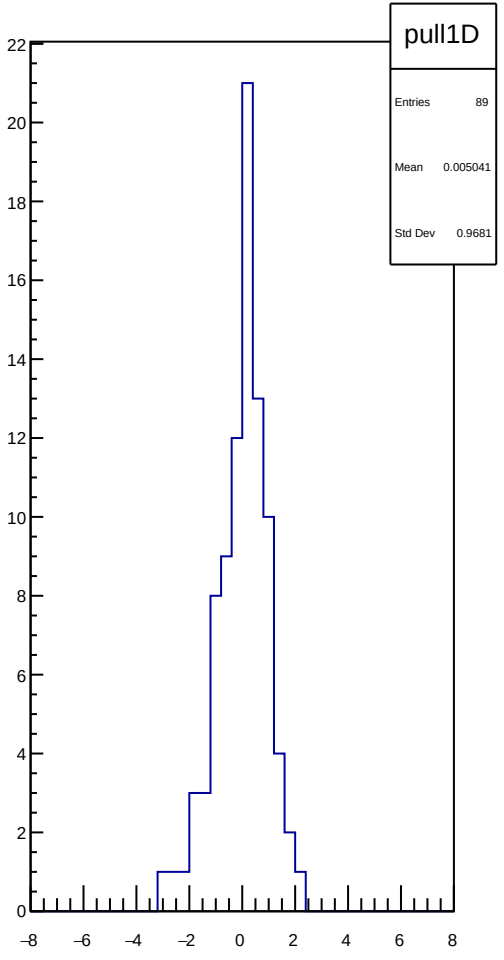
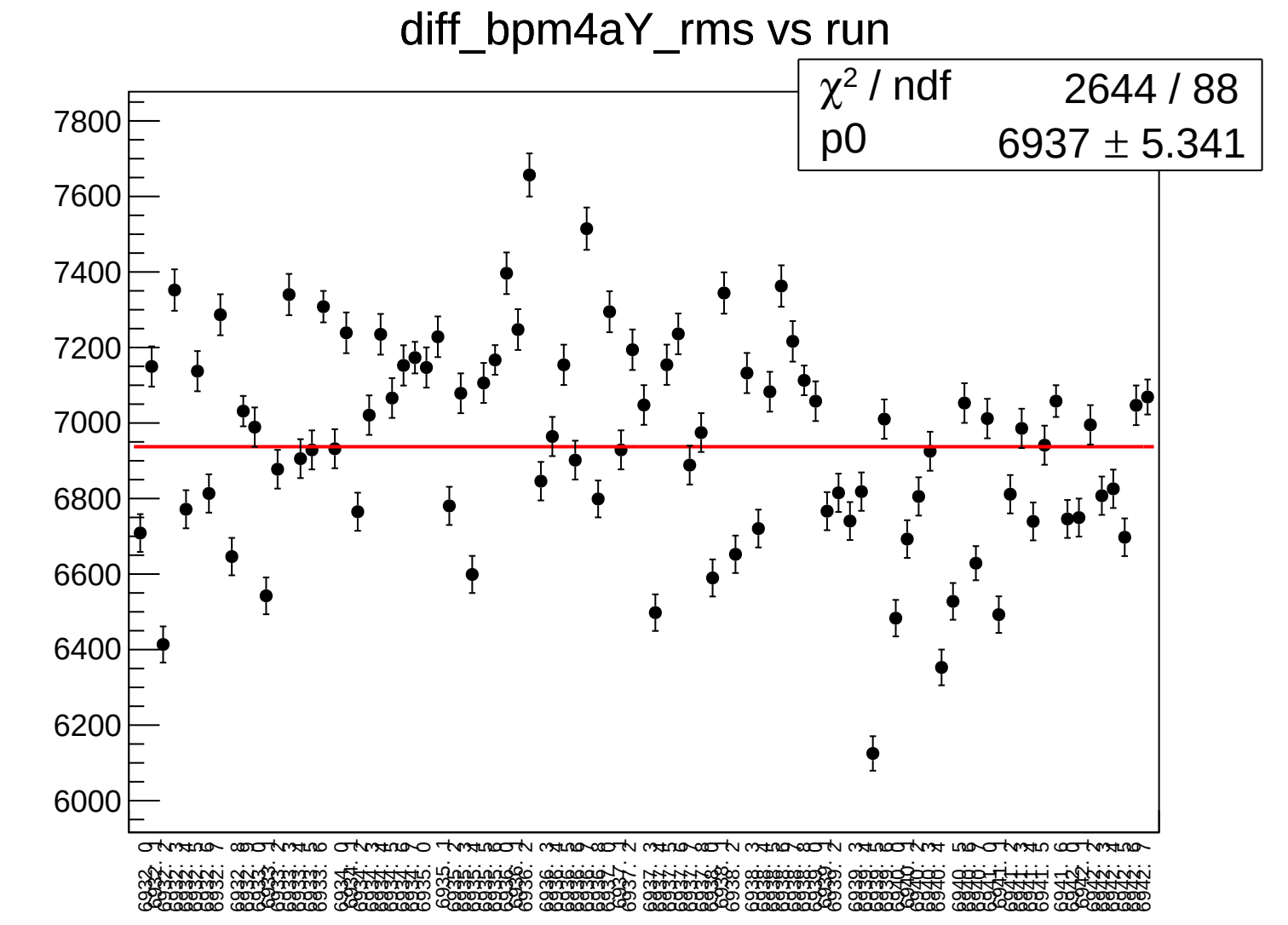

diff_bpm4aX_mean vs run
χ² / ndf 79.44 / 88
p0 −2.063 ± 11.45
pull
Entries 89
Mean −618.8
Std Dev 673.4

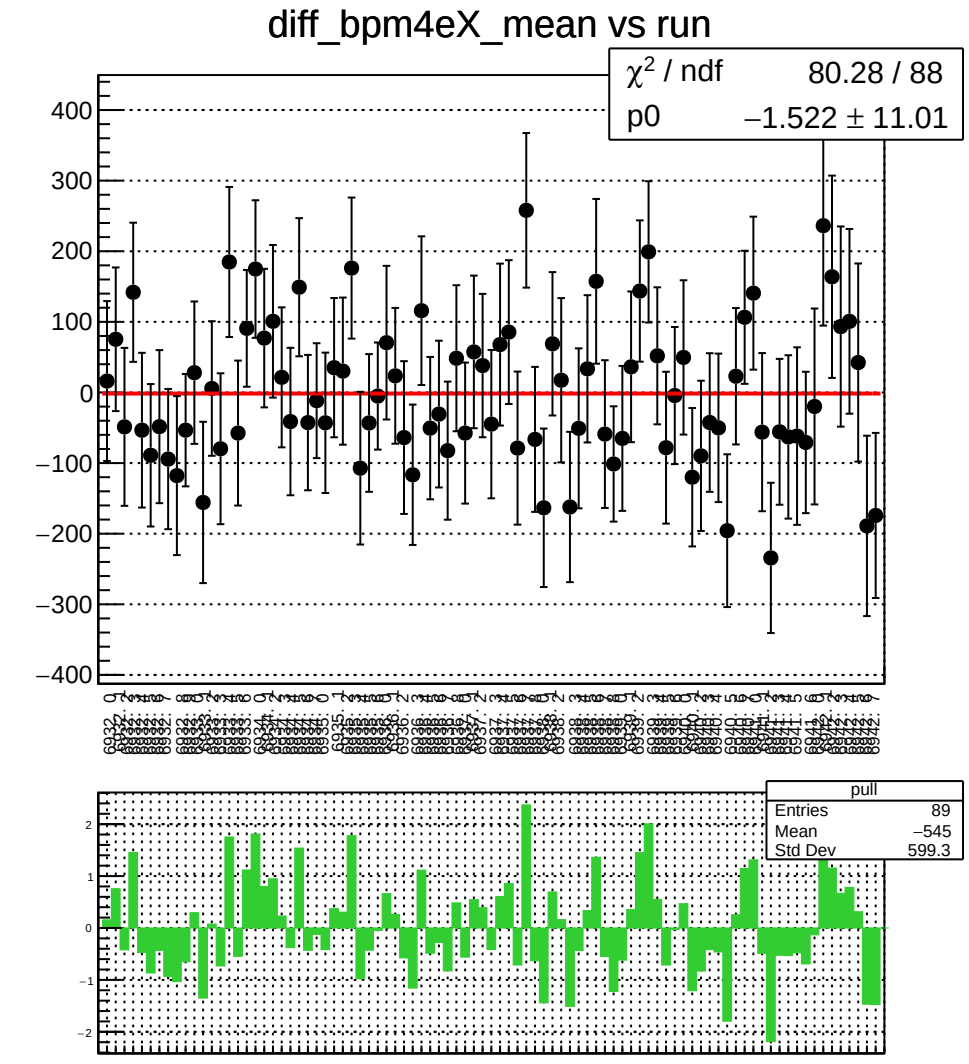

pull1D
Entries 89
Mean 0.002789
Std Dev 0.9448

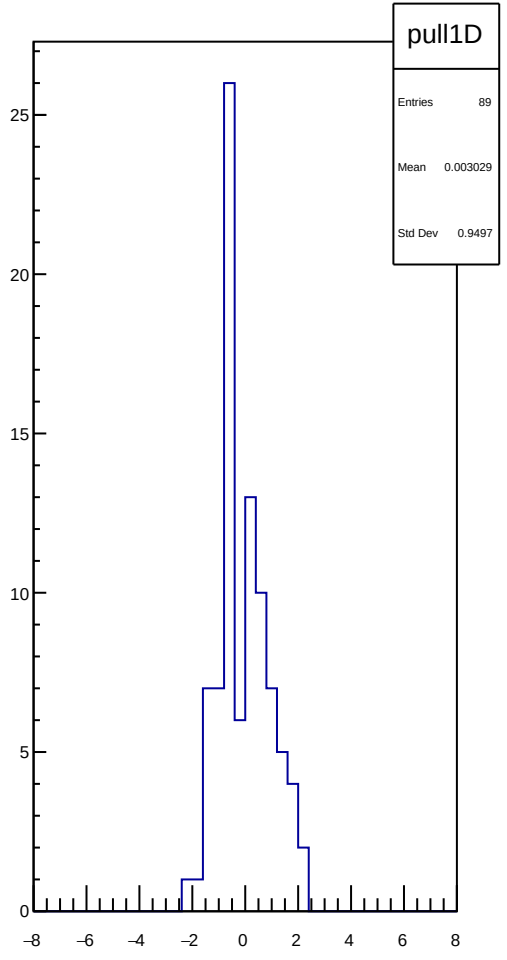

diff_bpm4aX_rms vs run
χ² / ndf 1.346e+04 / 88
p0 1.048e+04 ± 8.094
14000
13000
12000
11000
10000
9000

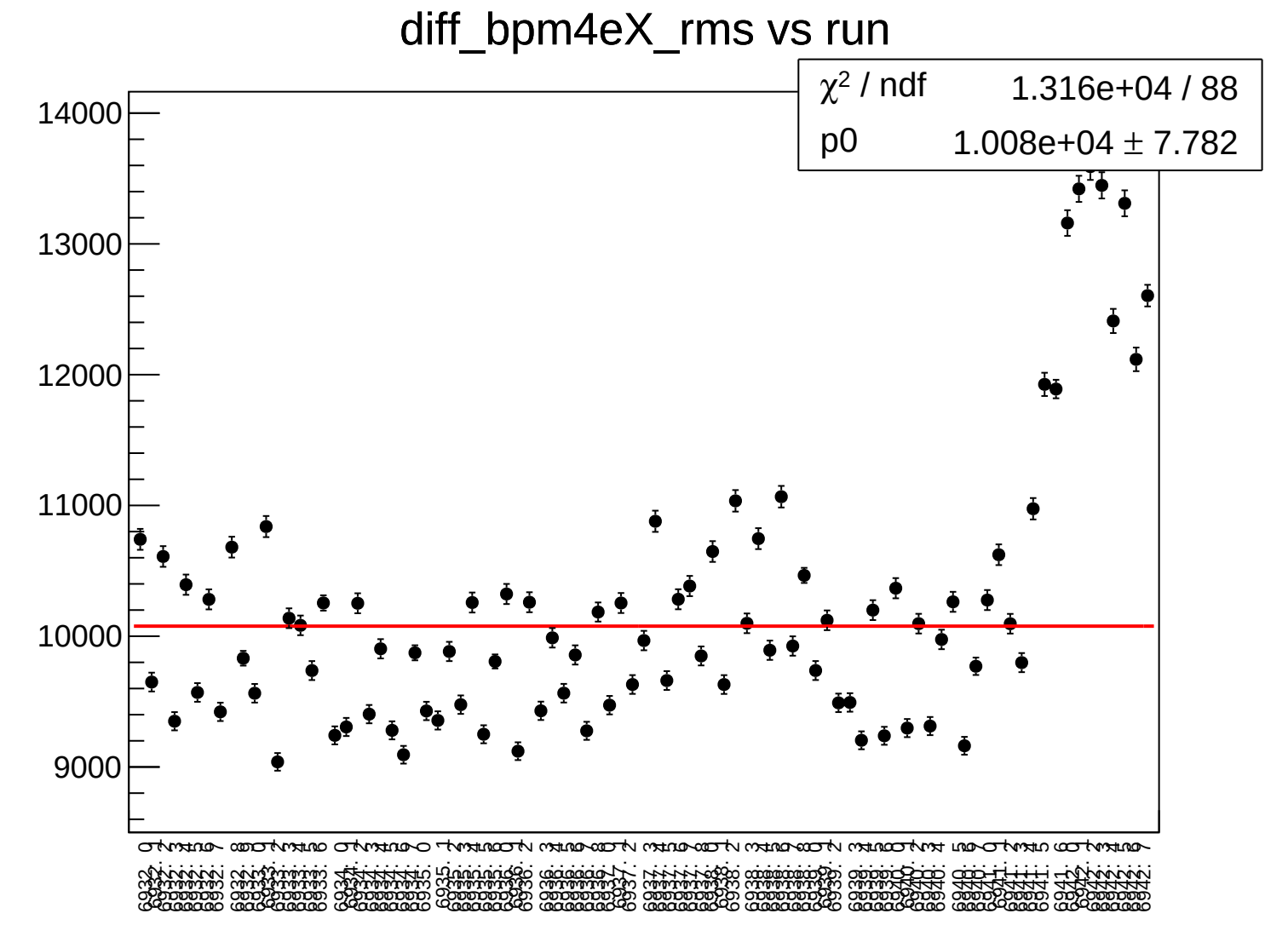

diff_bpm4aY_mean vs run
χ² / ndf 83.42 / 88
p0 −8.977 ± 7.553
200
100
0
−100
−200
−300
pull
Entries 89
Mean 498
Std Dev 453.5
2
1
0
−1
−2
−3

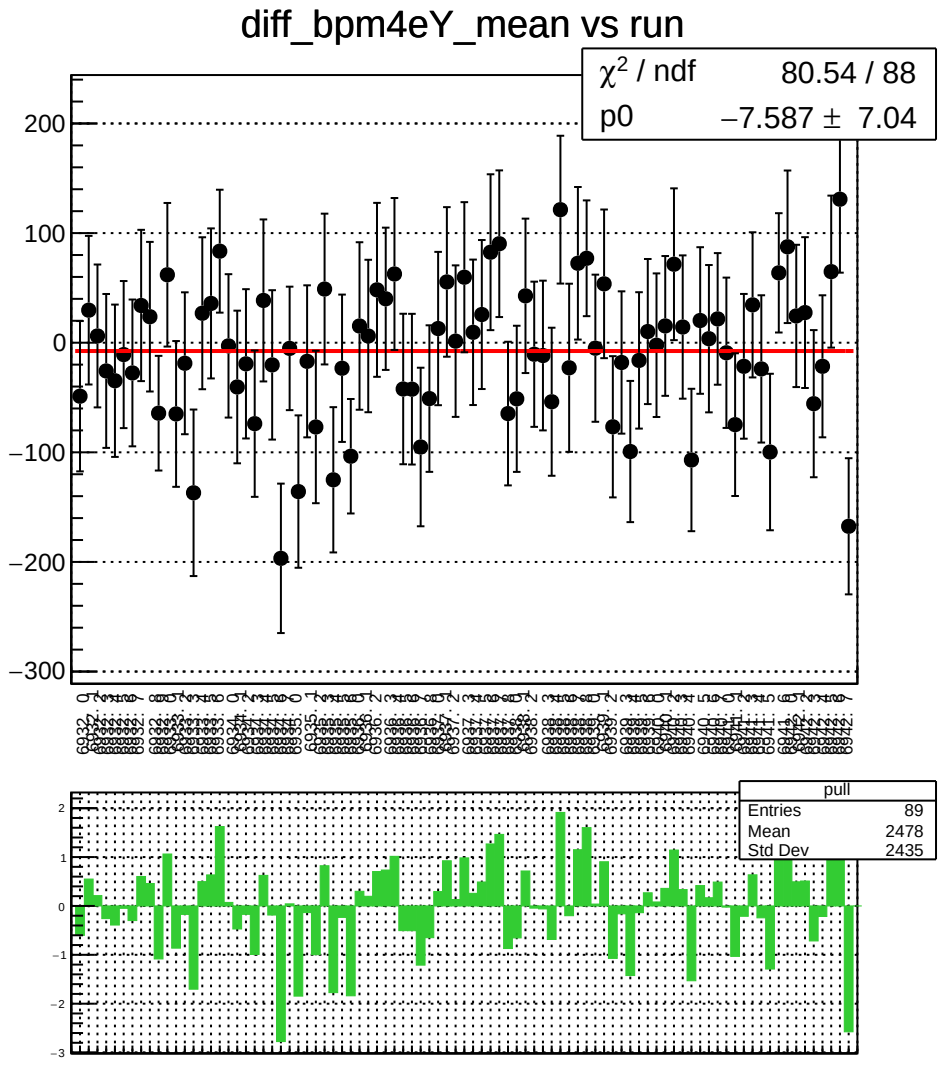

pull1D
Entries 89
Mean 0.005041
Std Dev 0.9681
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

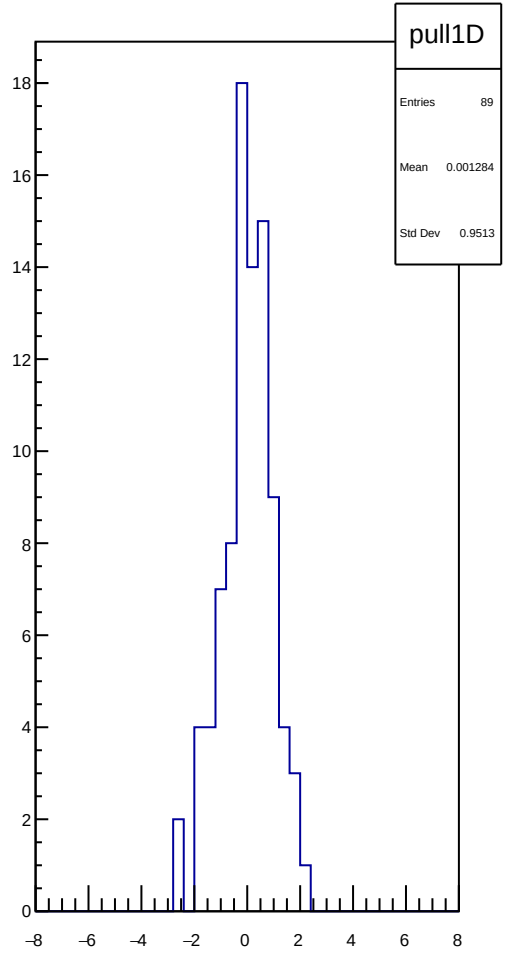

diff_bpm4aY_rms vs run
χ² / ndf 2644 / 88
p0 6937 ± 5.341
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000

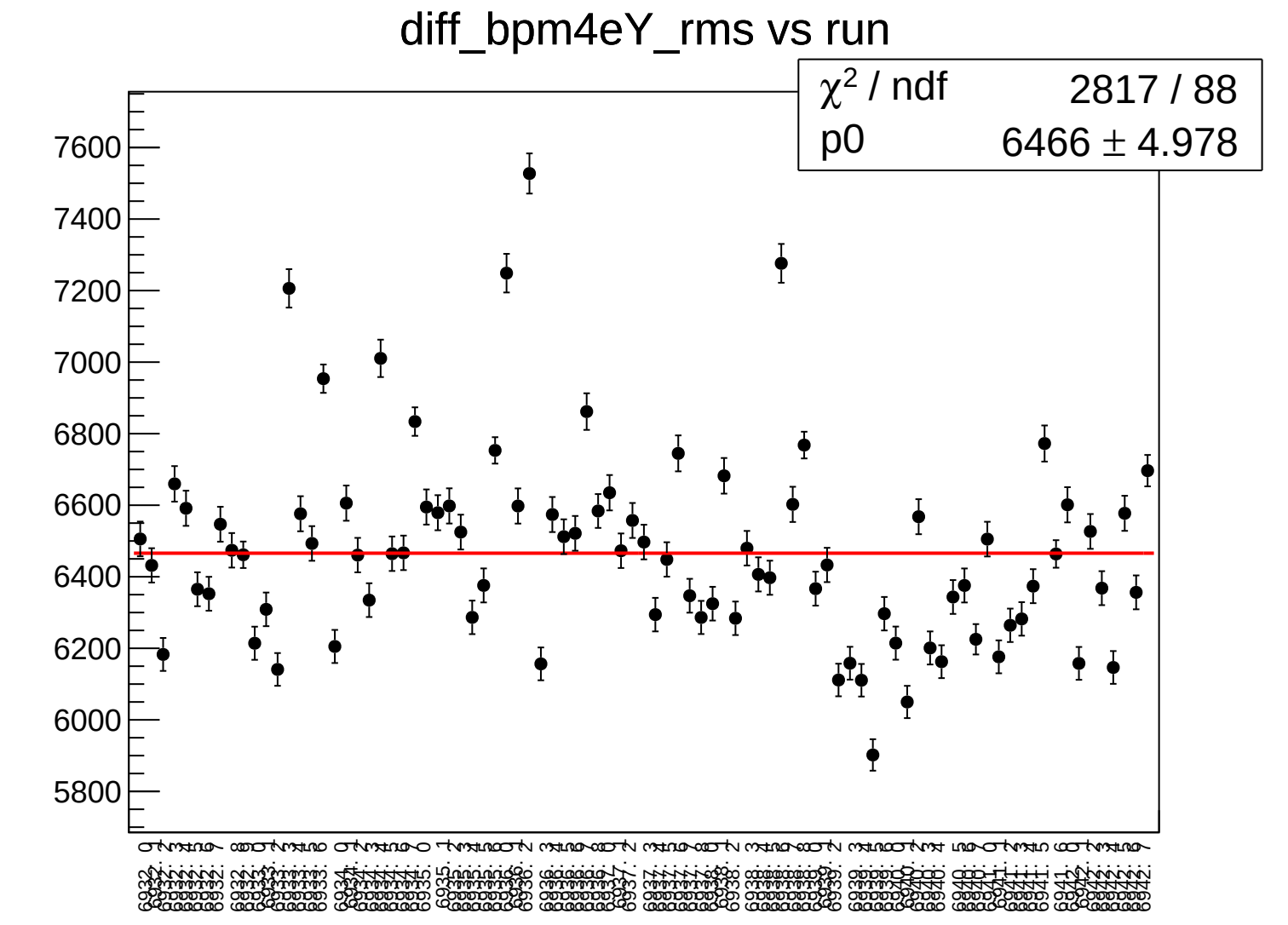

diff_bpm4eX_mean vs run
χ² / ndf 80.28 / 88
p0 −1.522 ± 11.01
pull
Entries 89
Mean −545
Std Dev 599.3

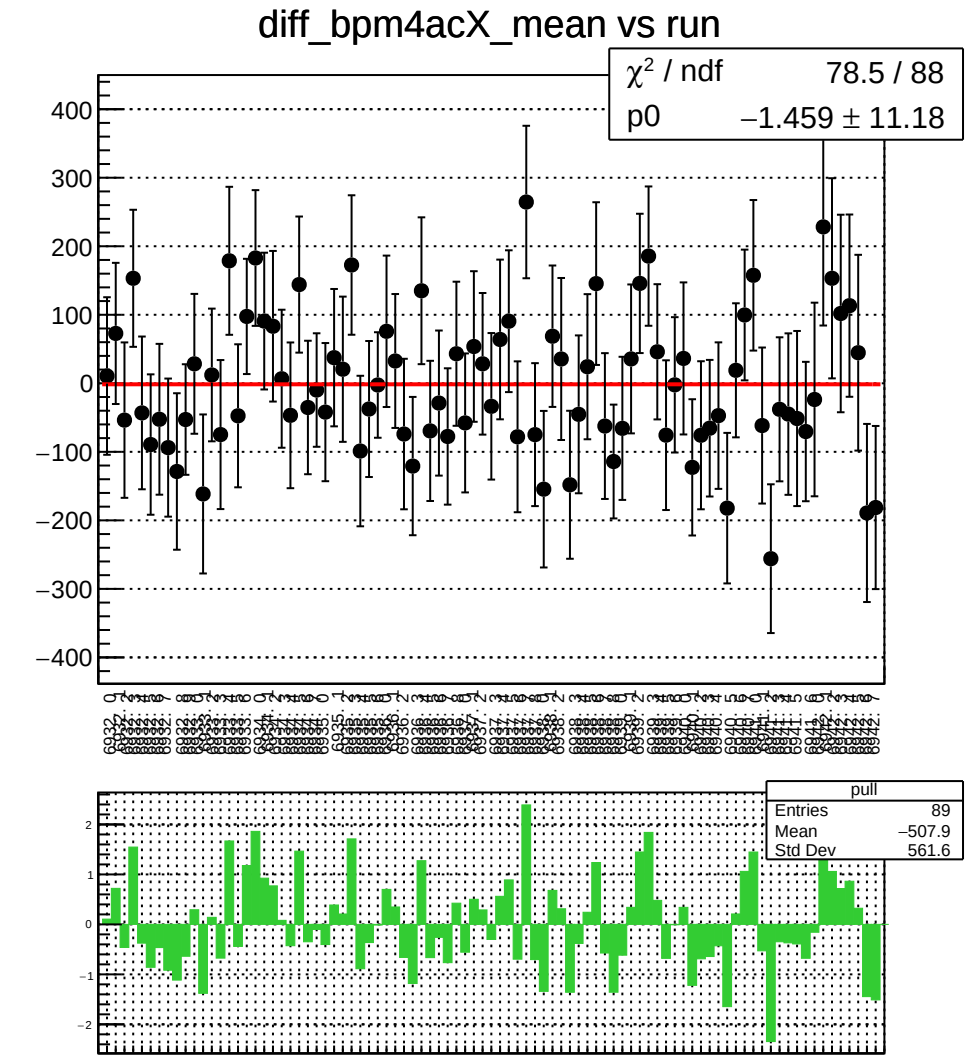

pull1D
Entries 89
Mean 0.003029
Std Dev 0.9497

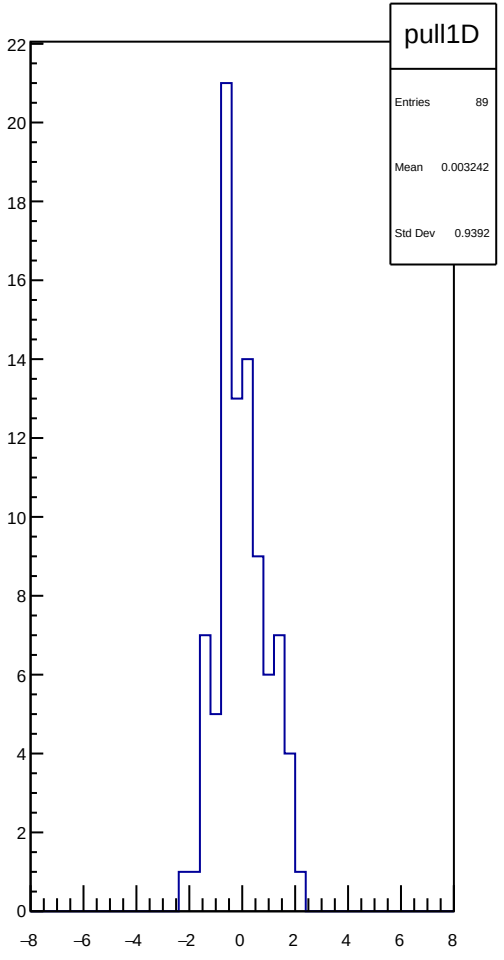

diff_bpm4eX_rms vs run
χ² / ndf 1.316e+04 / 88
p0 1.008e+04 ± 7.782
14000
13000
12000
11000
10000
9000

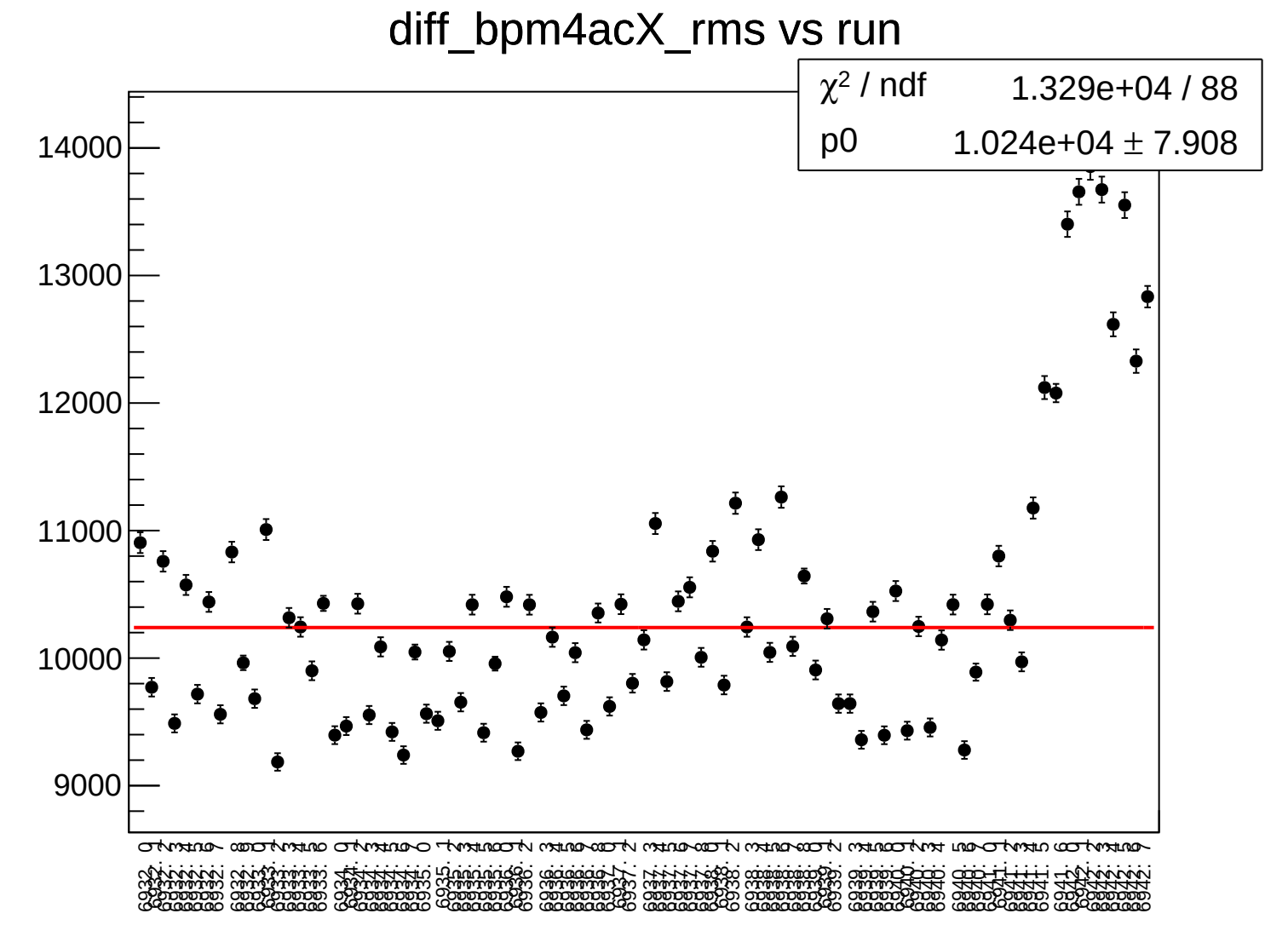

diff_bpm4eY_mean vs run
χ² / ndf 80.54 / 88
p0 −7.587 ± 7.04
200
100
0
−100
−200
−300
pull
Entries 89
Mean 2478
Std Dev 2435
2
1
0
−1
−2
−3

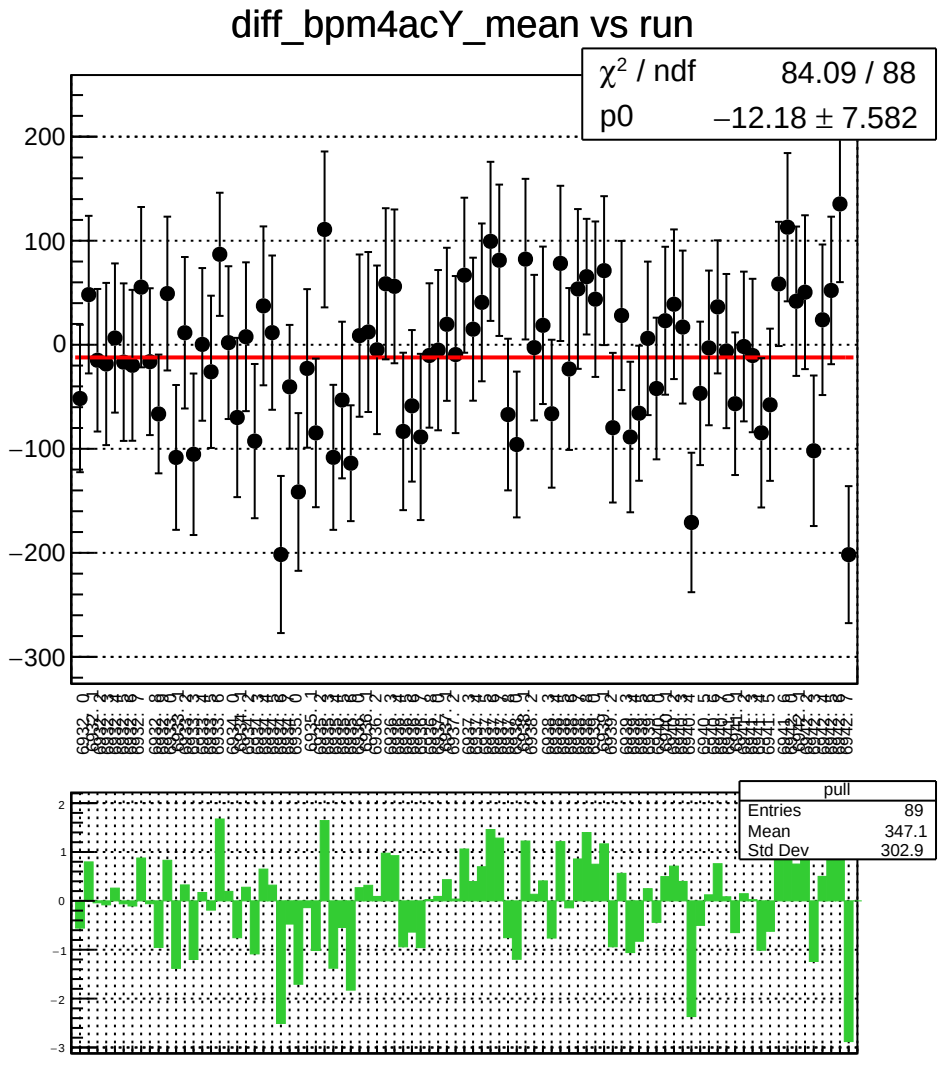

pull1D
Entries 89
Mean 0.001284
Std Dev 0.9513
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

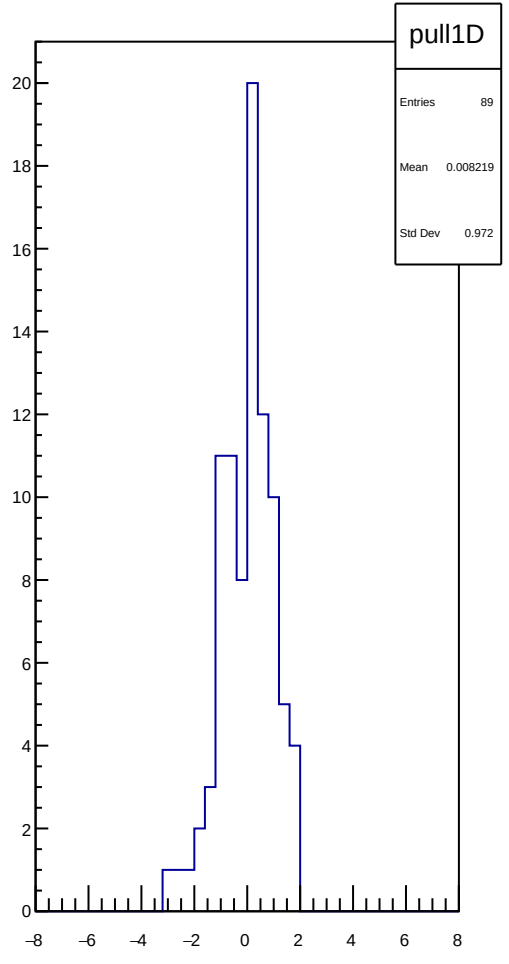

diff_bpm4eY_rms vs run
χ^2 / ndf 2817 / 88
p0 6466 ± 4.978
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800

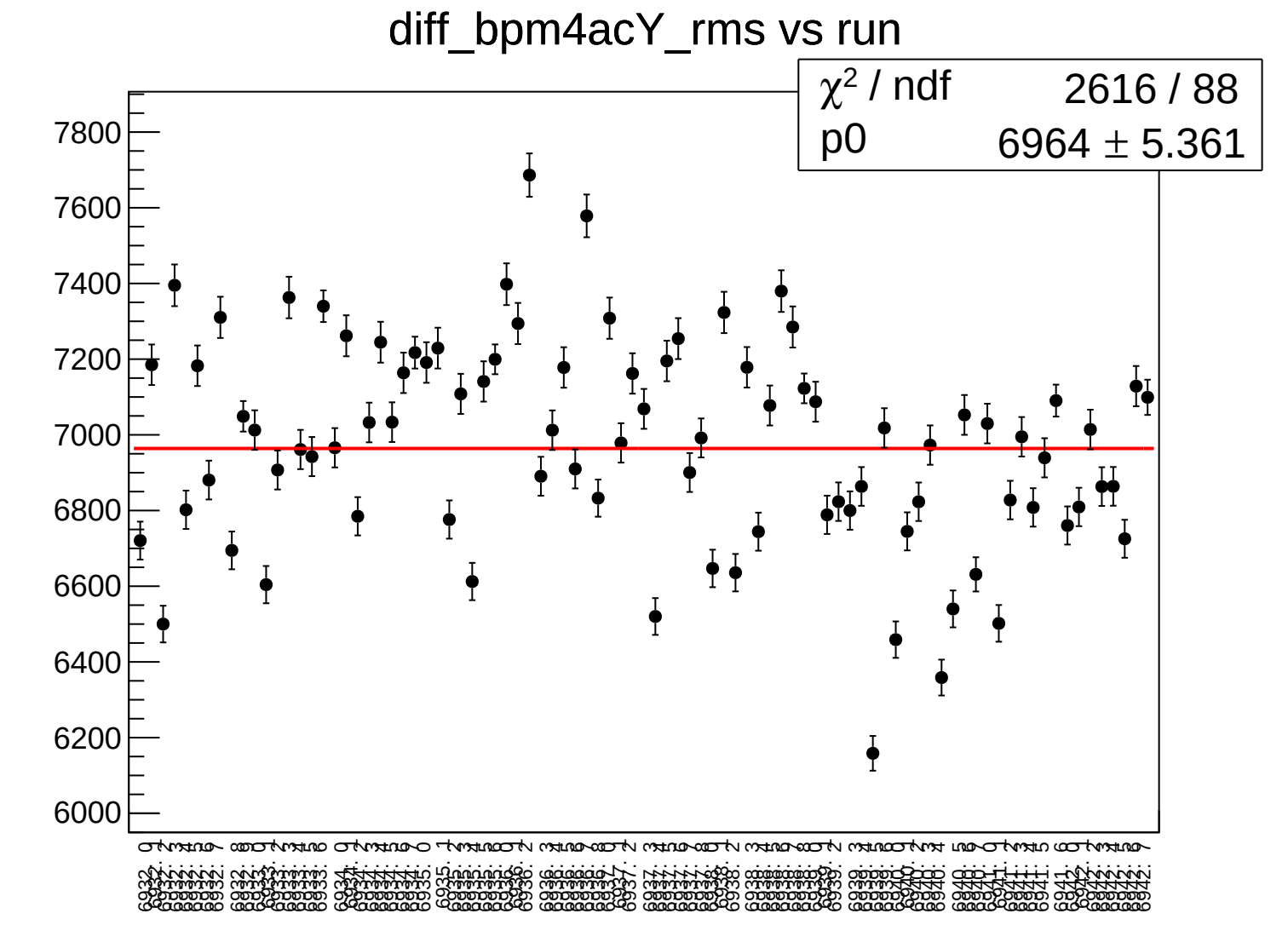

diff_bpm4acX_mean vs run
χ² / ndf 78.5 / 88
p0 −1.459 ± 11.18
pull
Entries 89
Mean −507.9
Std Dev 561.6

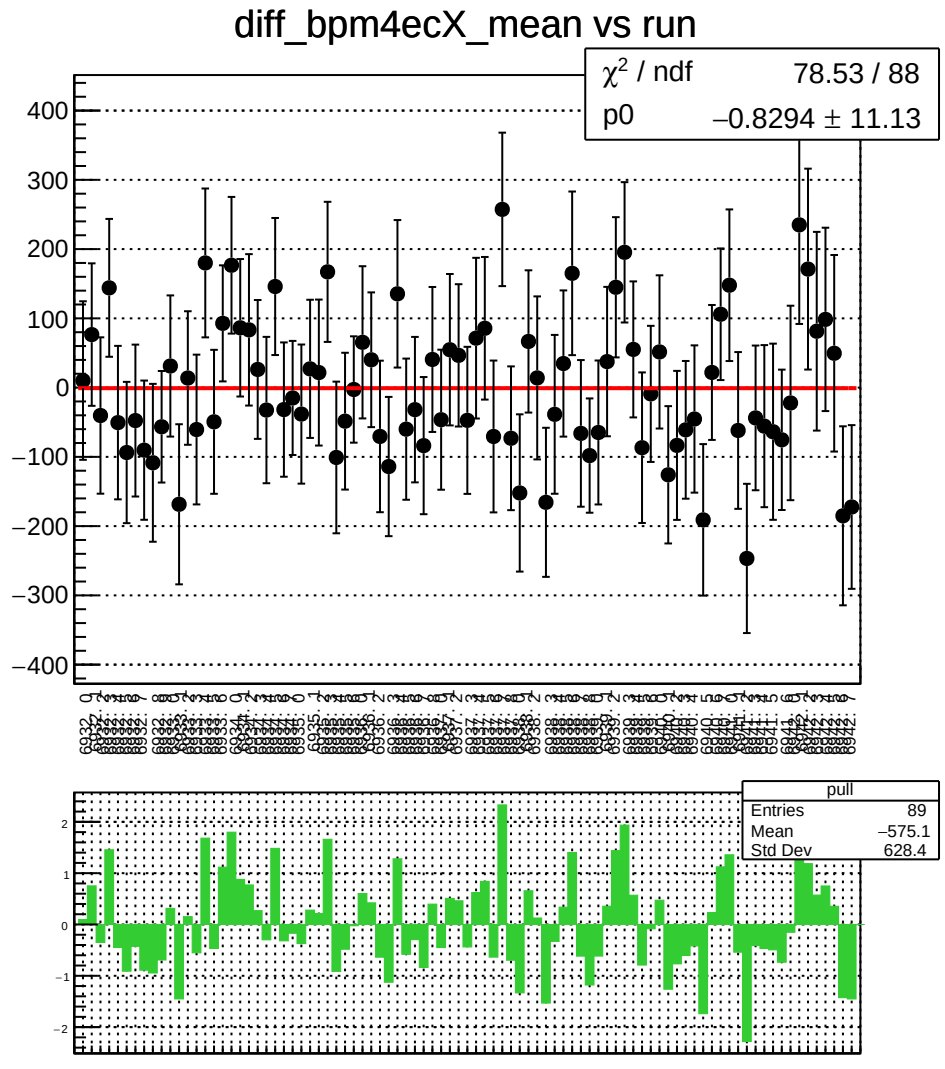

pull1D
Entries 89
Mean 0.003242
Std Dev 0.9392

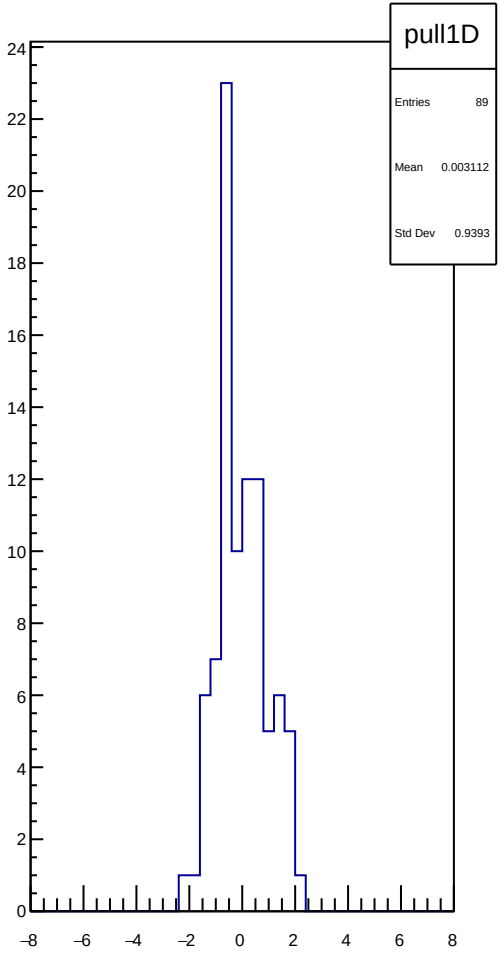

diff_bpm4acX_rms vs run
χ² / ndf 1.329e+04 / 88
p0 1.024e+04 ± 7.908
14000
13000
12000
11000
10000
9000

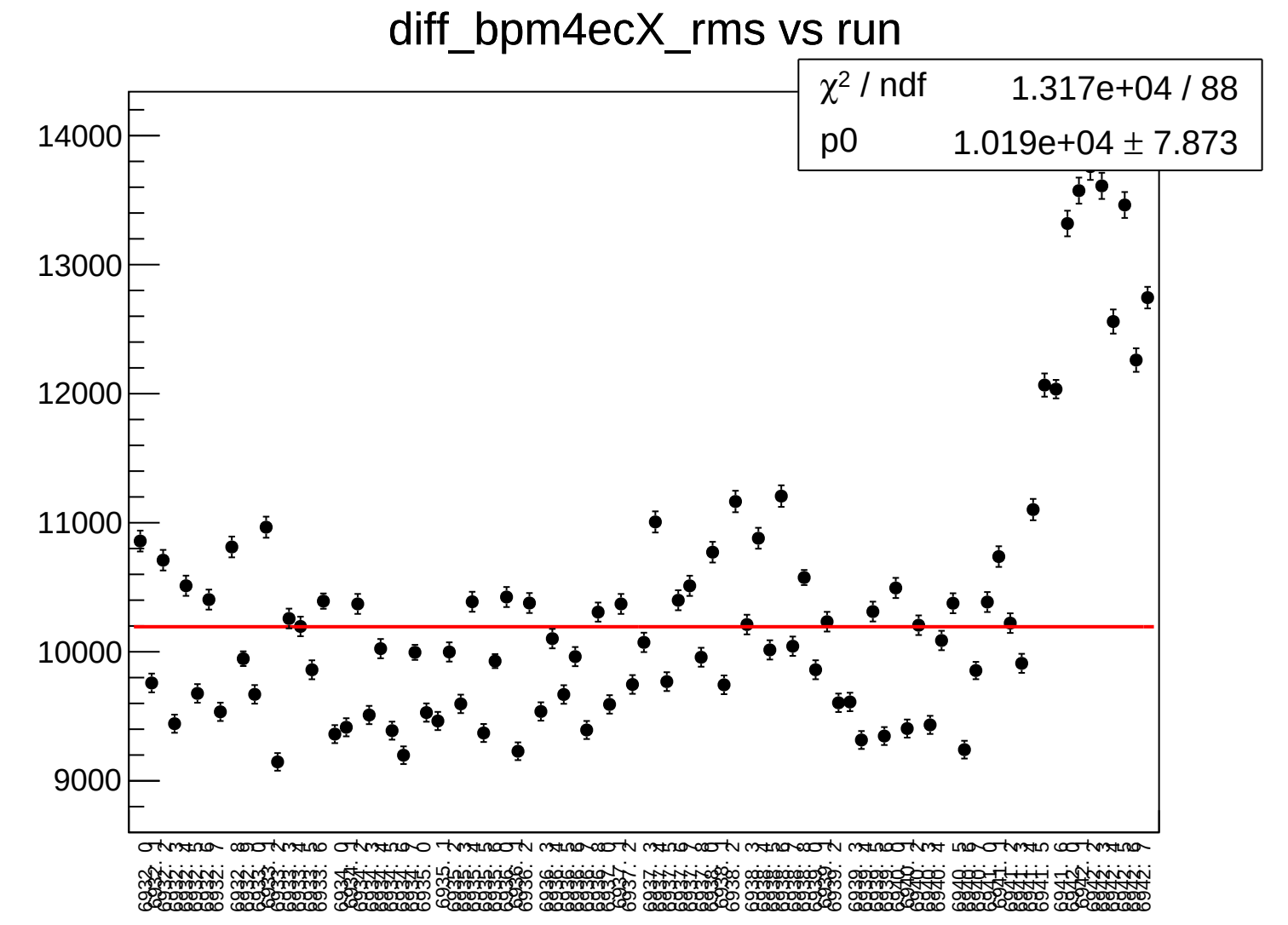

diff_bpm4acY_mean vs run
χ² / ndf 84.09 / 88
p0 −12.18 ± 7.582
200
100
0
−100
−200
−300
pull
Entries 89
Mean 347.1
Std Dev 302.9
2
1
0
−1
−2
−3

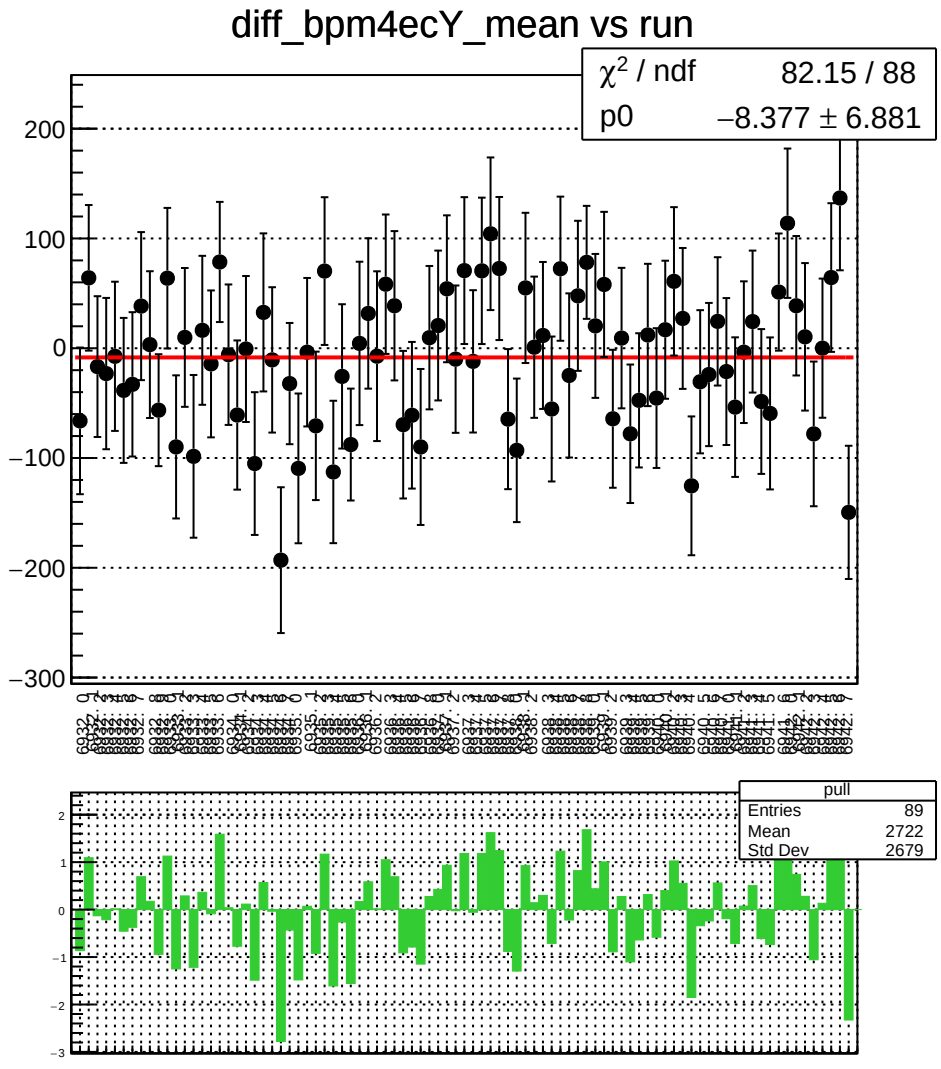

pull1D
Entries 89
Mean 0.008219
Std Dev 0.972
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

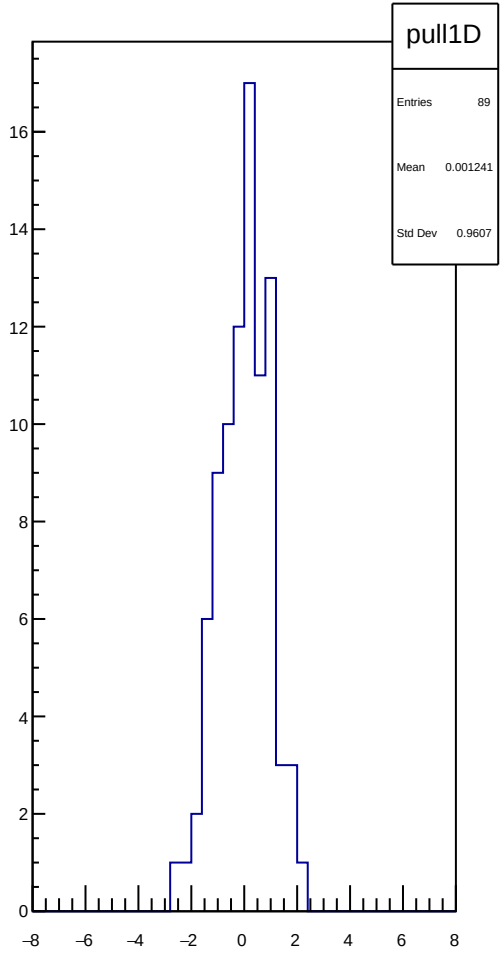

diff_bpm4acY_rms vs run
χ² / ndf 2616 / 88
p0 6964 ± 5.361
7800
7600
7400
7200
7000
6800
6600
6400
6200
6000

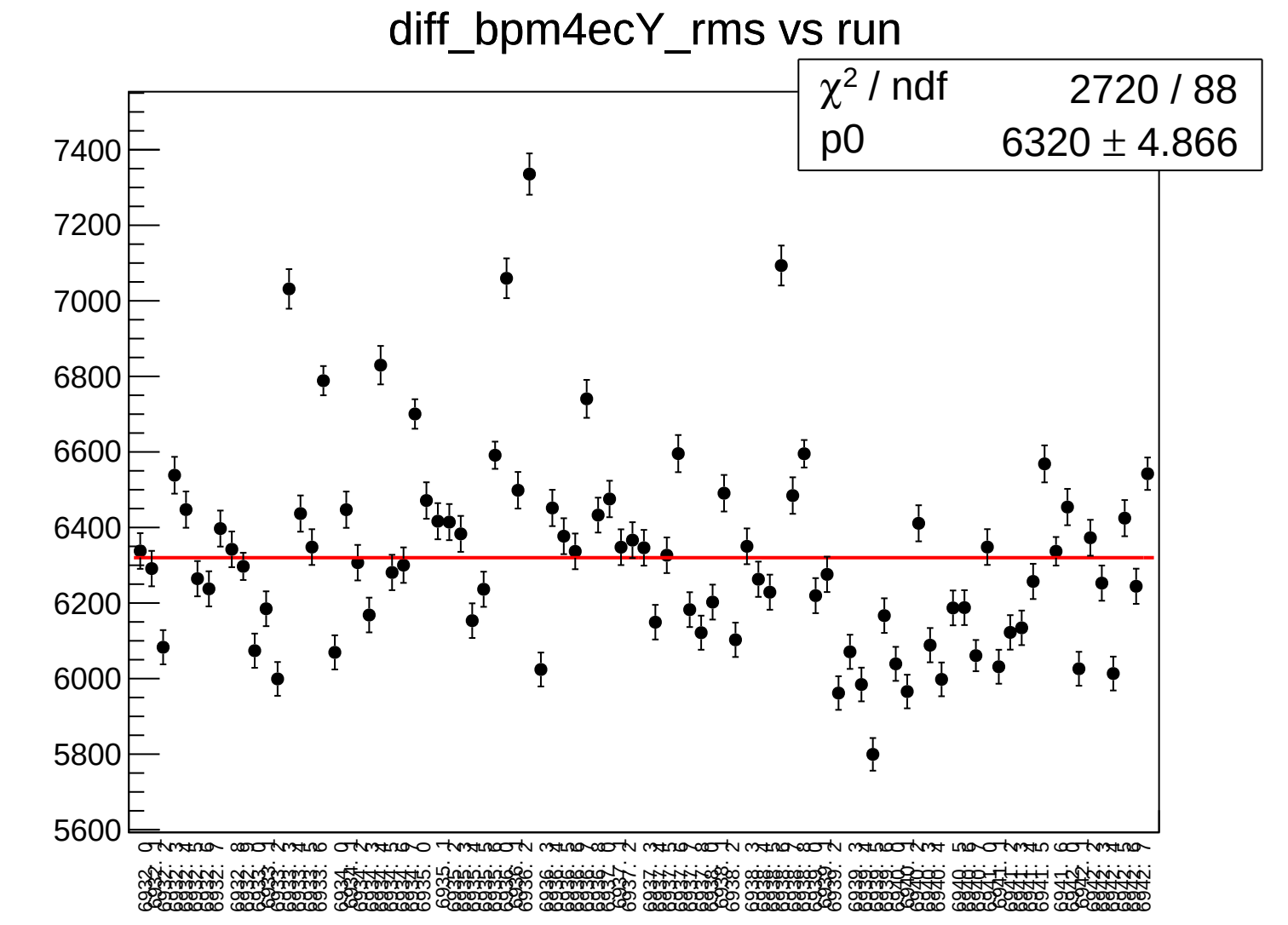

diff_bpm4ecX_mean vs run
χ² / ndf 78.53 / 88
p0 −0.8294 ± 11.13
pull
Entries 89
Mean −575.1
Std Dev 628.4

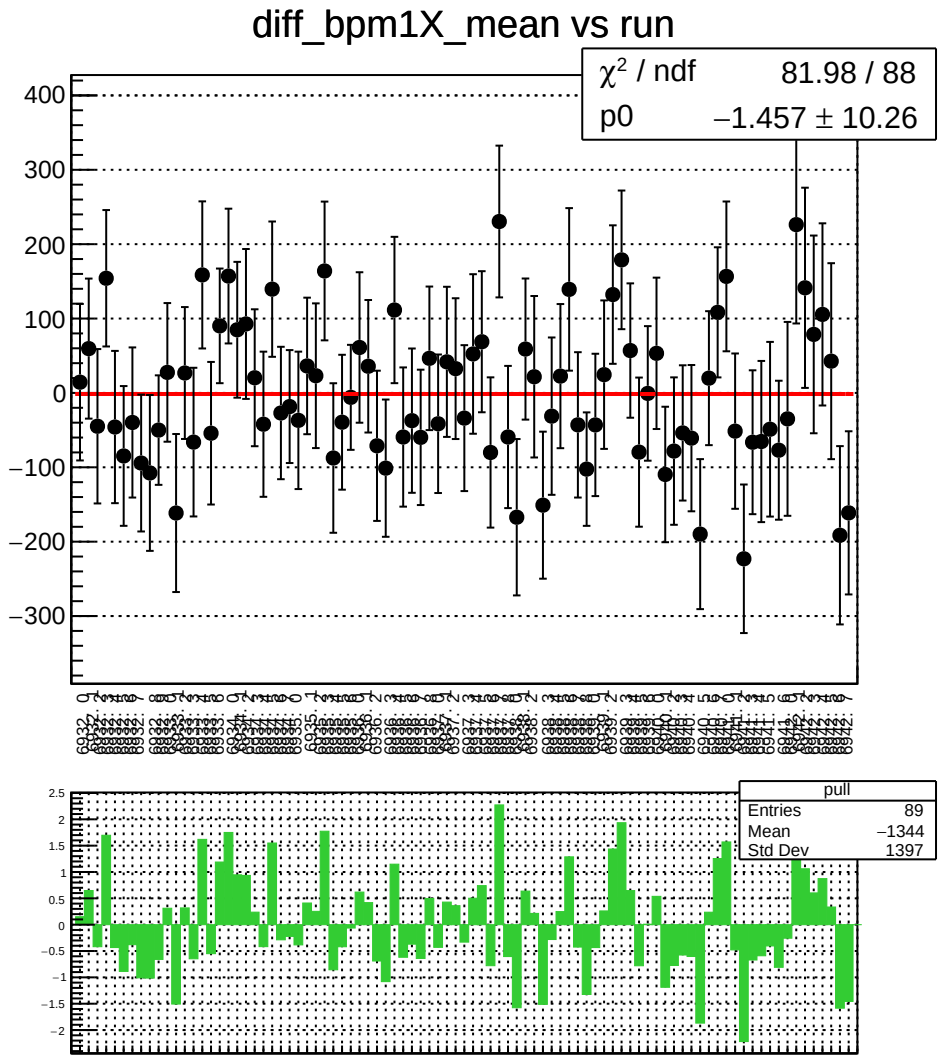

pull1D
Entries 89
Mean 0.003112
Std Dev 0.9393

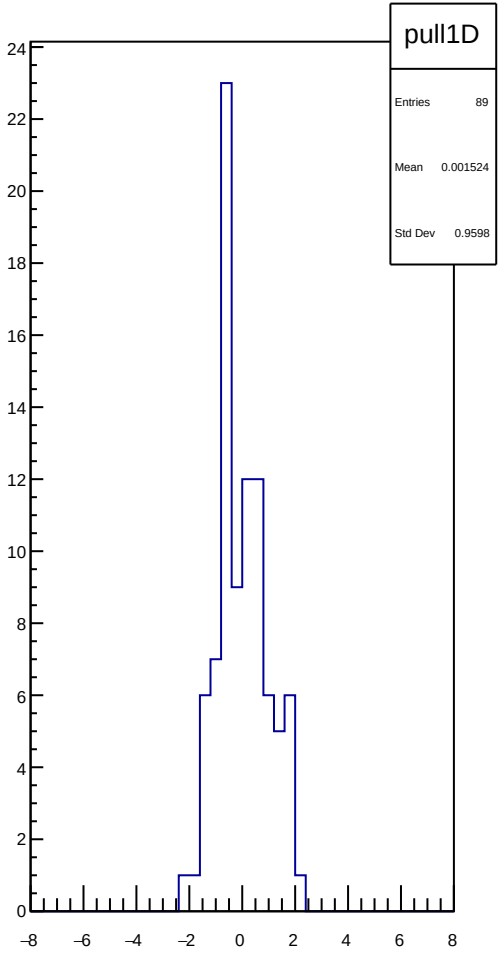

diff_bpm4ecX_rms vs run
χ² / ndf 1.317e+04 / 88
p0 1.019e+04 ± 7.873
14000
13000
12000
11000
10000
9000

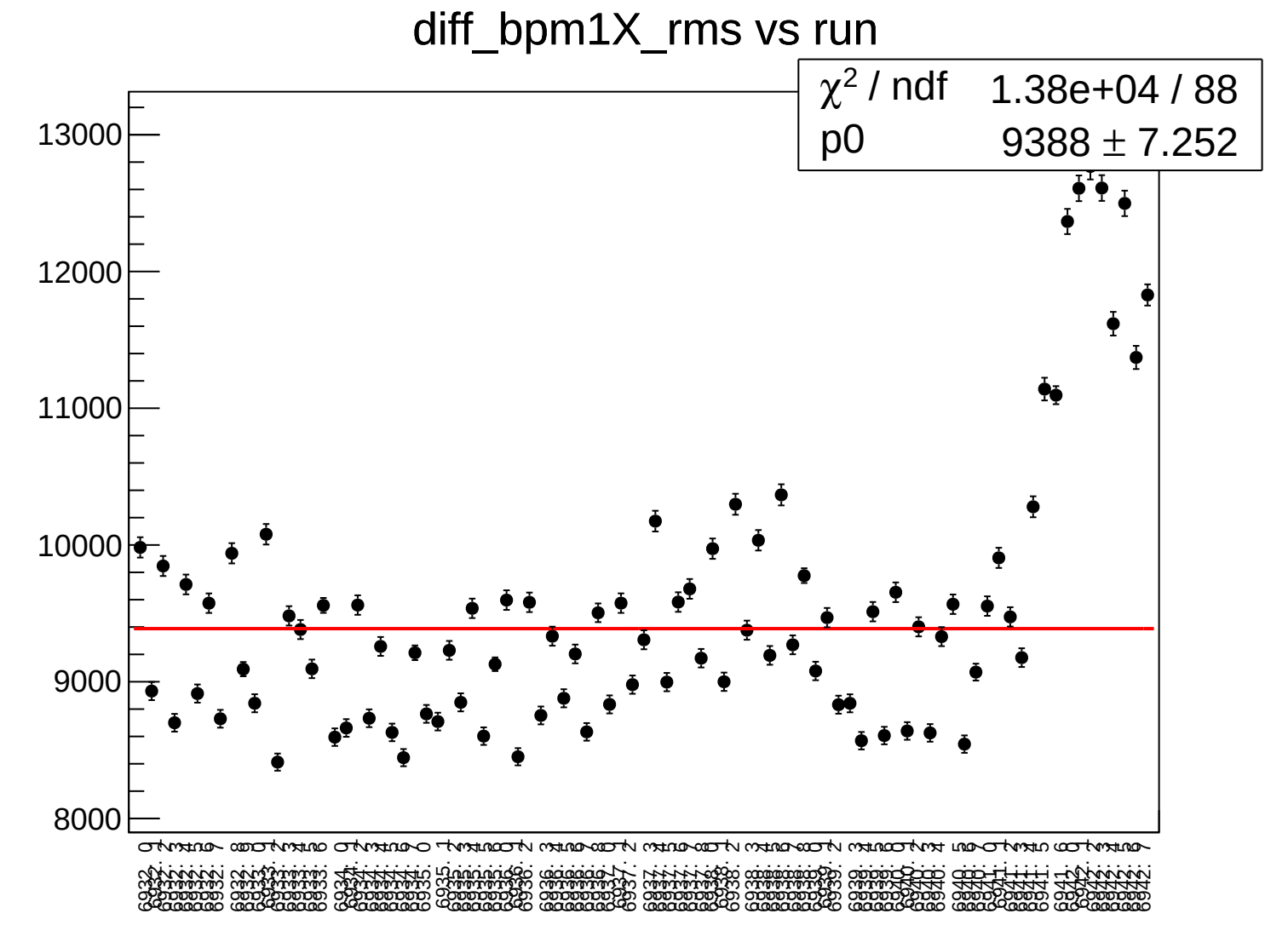

diff_bpm4ecY_mean vs run
χ² / ndf 82.15 / 88
p0 −8.377 ± 6.881
pull
Entries 89
Mean 2722
Std Dev 2679

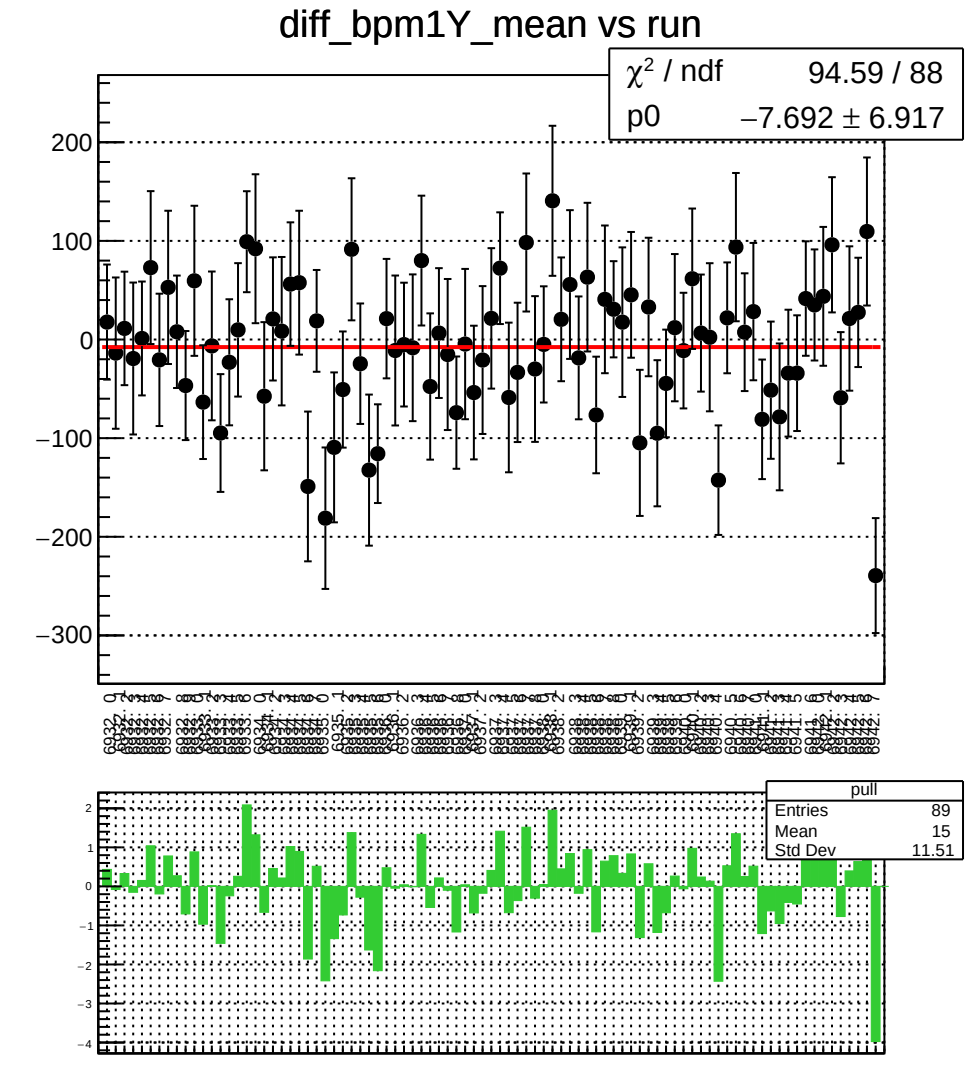

pull1D
Entries 89
Mean 0.001241
Std Dev 0.9607

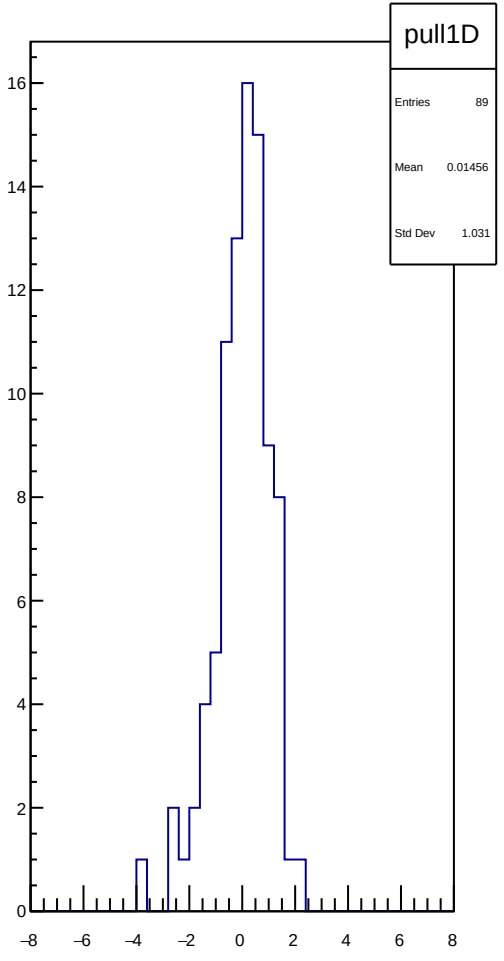

diff_bpm4ecY_rms vs run
χ² / ndf 2720 / 88
p0 6320 ± 4.866
7400
7200
7000
6800
6600
6400
6200
6000
5800
5600

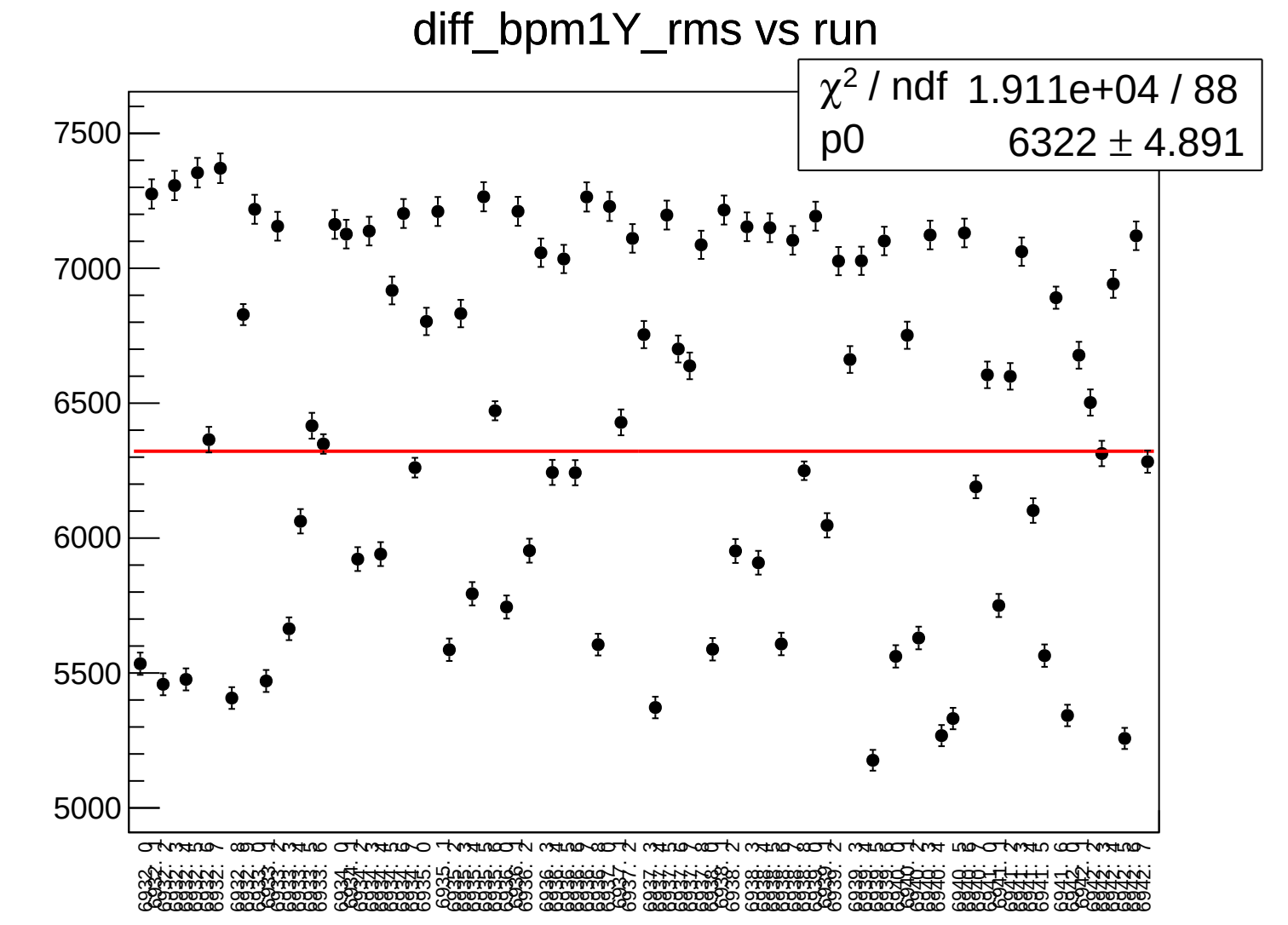

diff_bpm1X_mean vs run
χ² / ndf 81.98 / 88
p0 −1.457 ± 10.26
pull
Entries 89
Mean −1344
Std Dev 1397

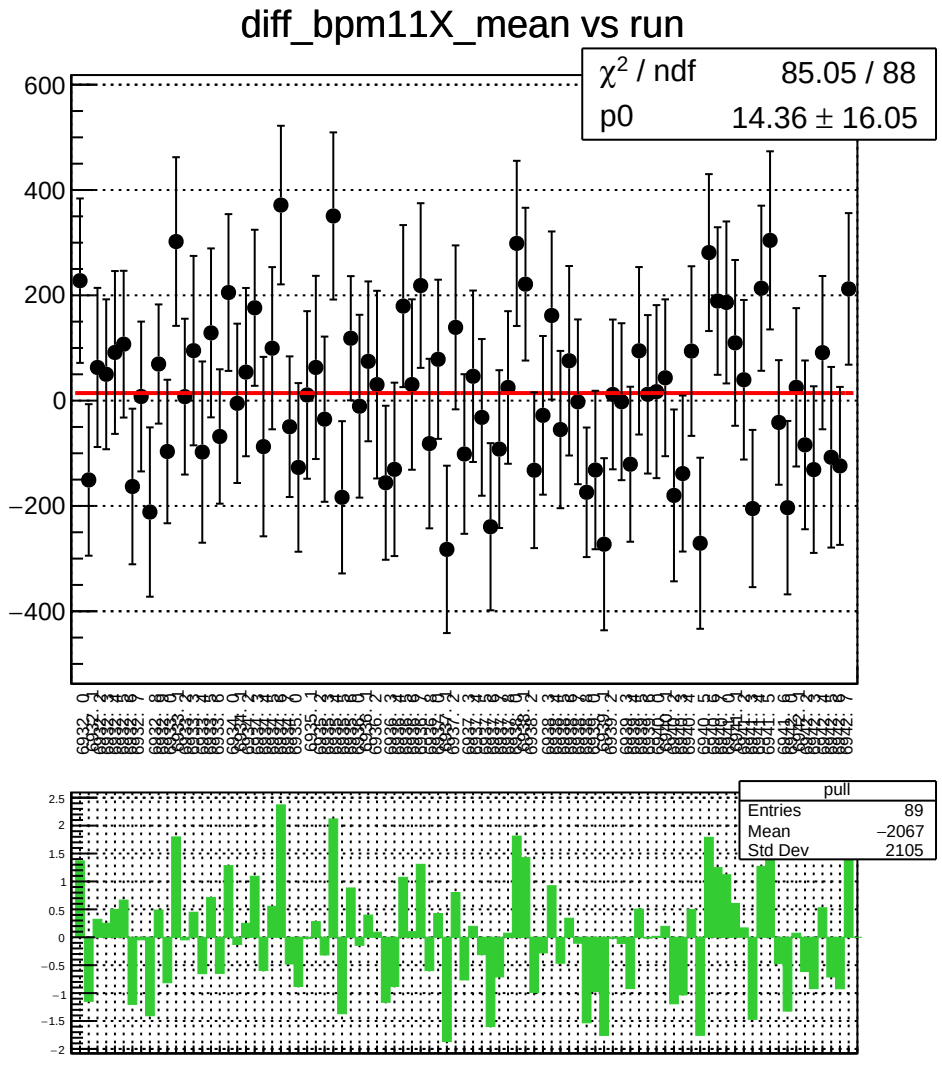

pull1D
Entries 89
Mean 0.001524
Std Dev 0.9598

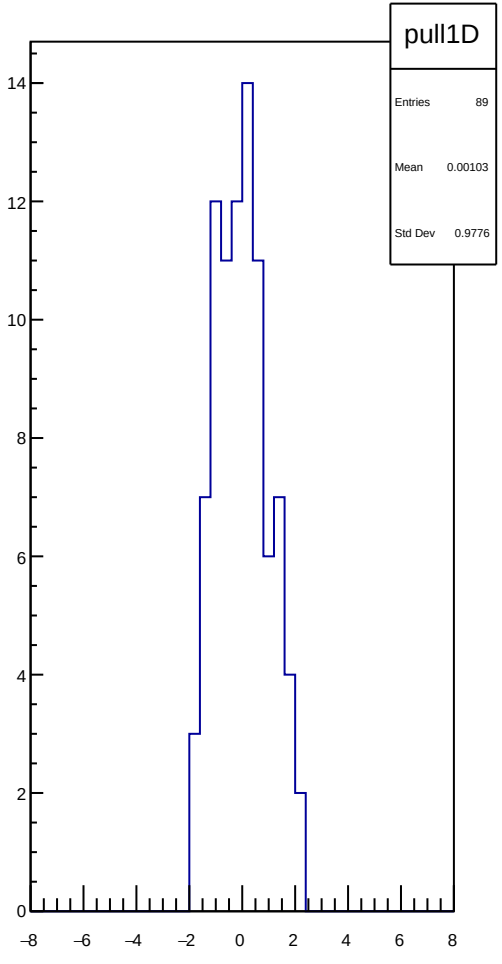

diff_bpm1X_rms vs run
χ² / ndf 1.38e+04 / 88
p0 9388 ± 7.252
13000
12000
11000
10000
9000
8000

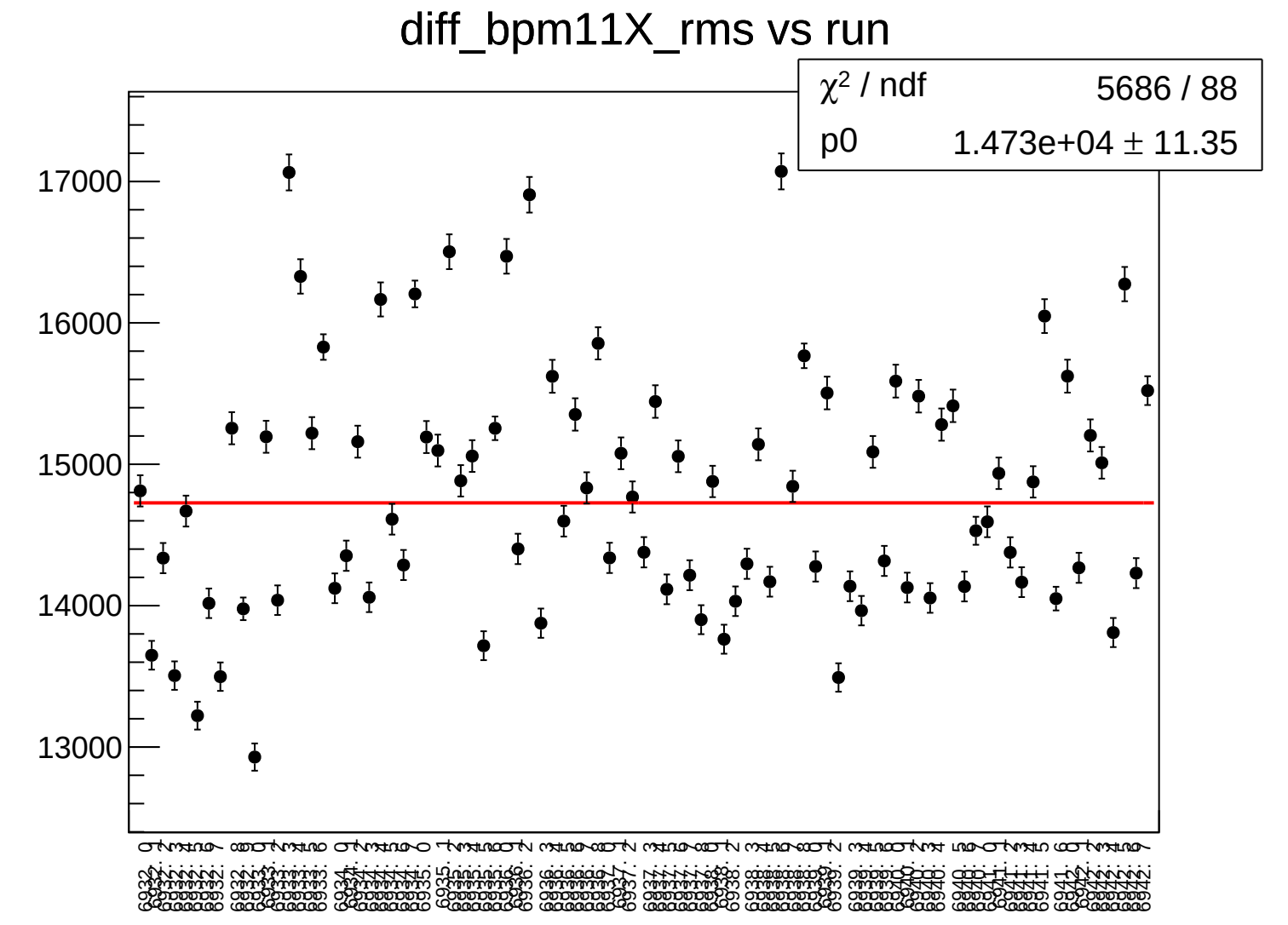

diff_bpm1Y_mean vs run
χ² / ndf 94.59 / 88
p0 −7.692 ± 6.917
200
100
0
−100
−200
−300
pull
Entries 89
Mean 15
Std Dev 11.51
2
1
0
−1
−2
−3
−4

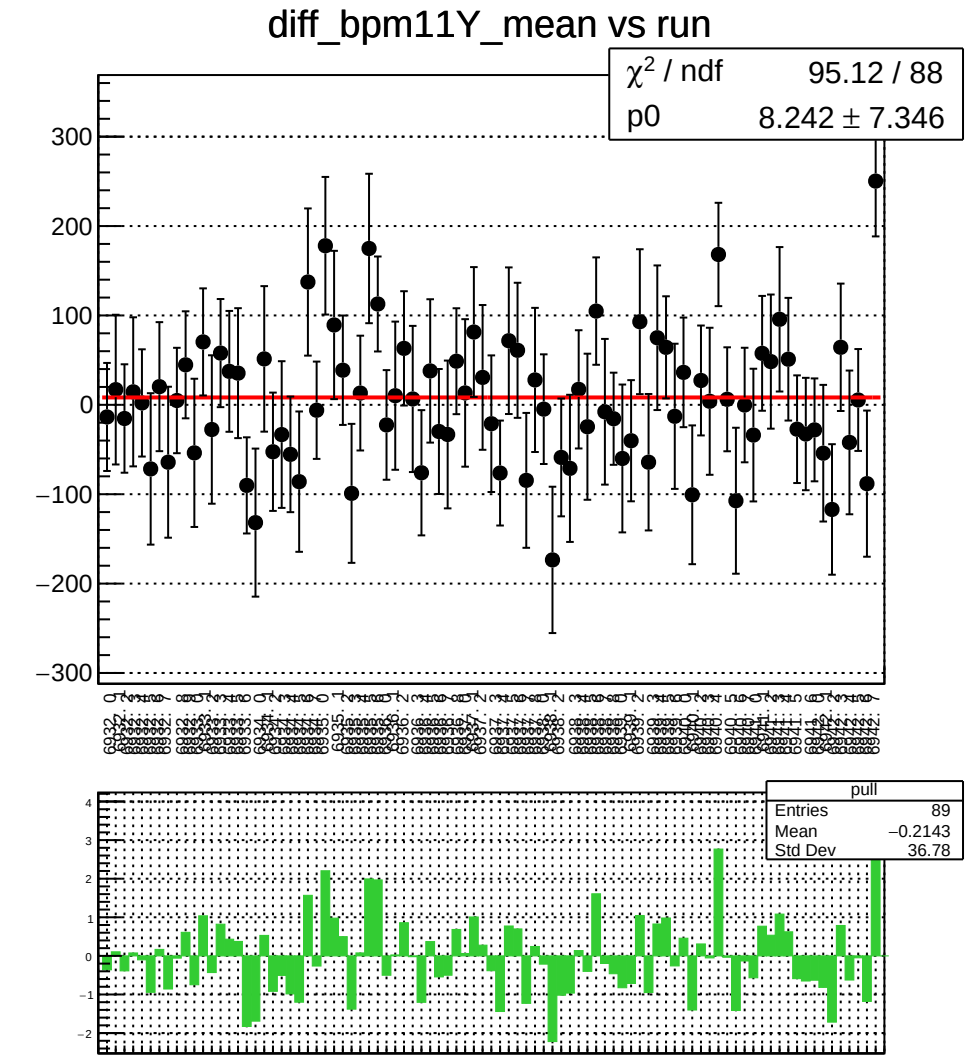

pull1D
Entries 89
Mean 0.01456
Std Dev 1.031
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

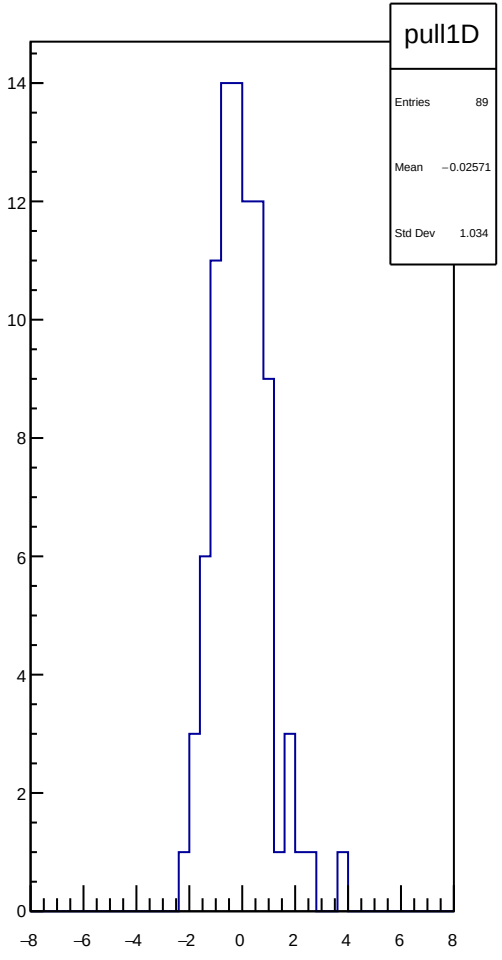

diff_bpm1Y_rms vs run
χ² / ndf 1.911e+04 / 88
p0 6322 ± 4.891
7500
7000
6500
6000
5500
5000

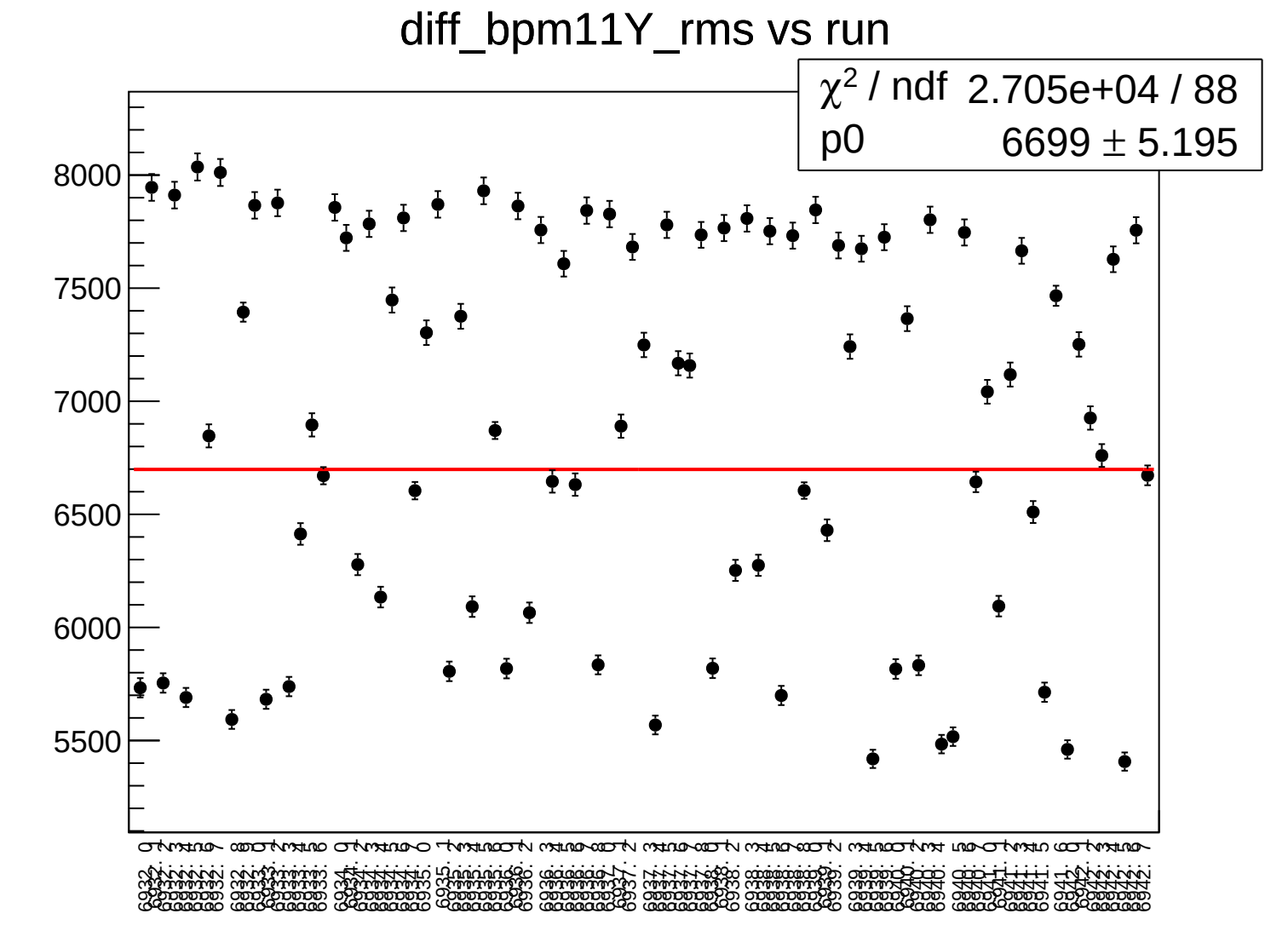

diff_bpm11X_mean vs run
χ^2 / ndf 85.05 / 88
p0 14.36 ± 16.05
600
400
200
0
−200
−400
pull
Entries 89
Mean −2067
Std Dev 2105
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

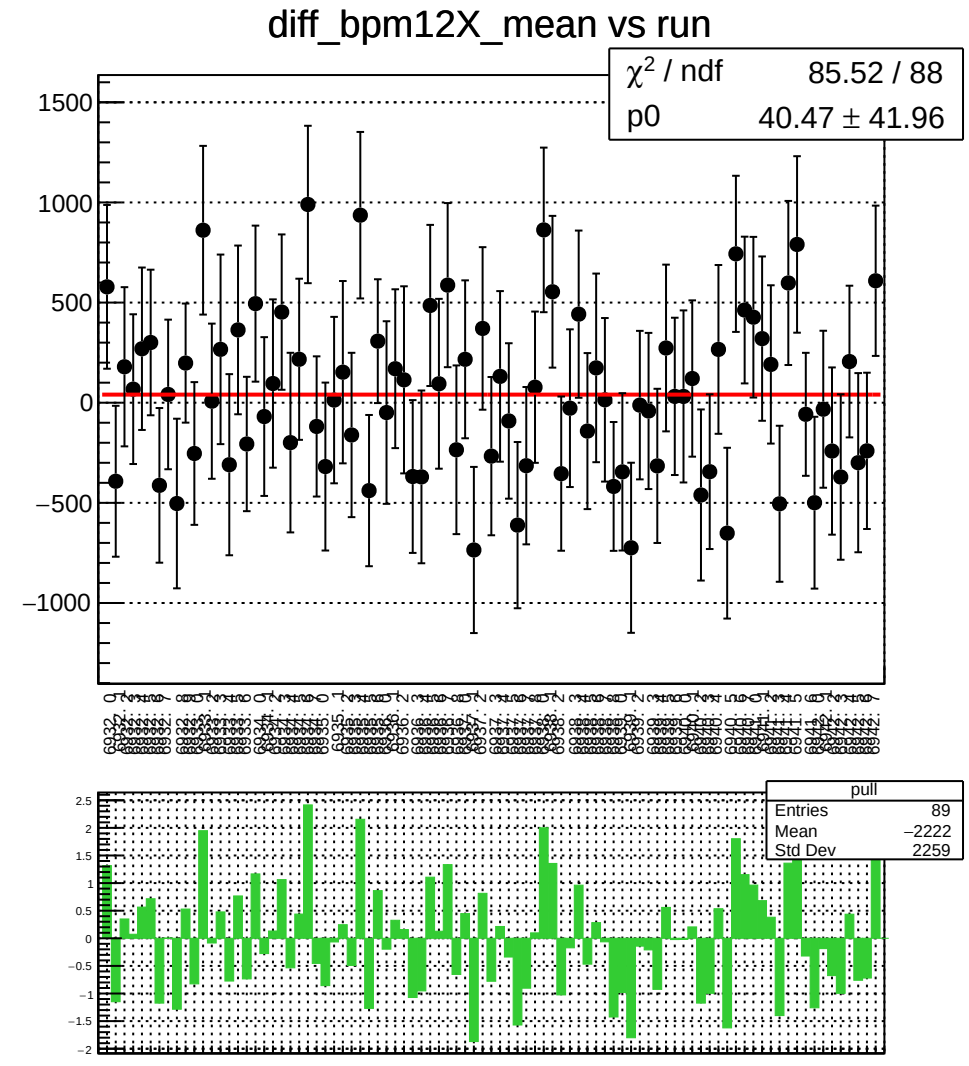

pull1D
Entries 89
Mean 0.00103
Std Dev 0.9776
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

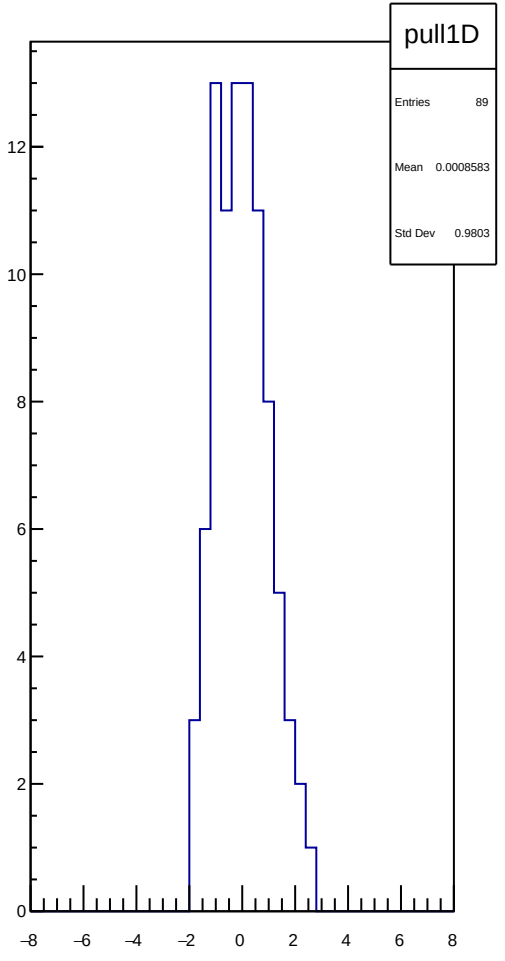

diff_bpm11X_rms vs run
χ² / ndf 5686 / 88
p0 1.473e+04 ± 11.35
17000
16000
15000
14000
13000

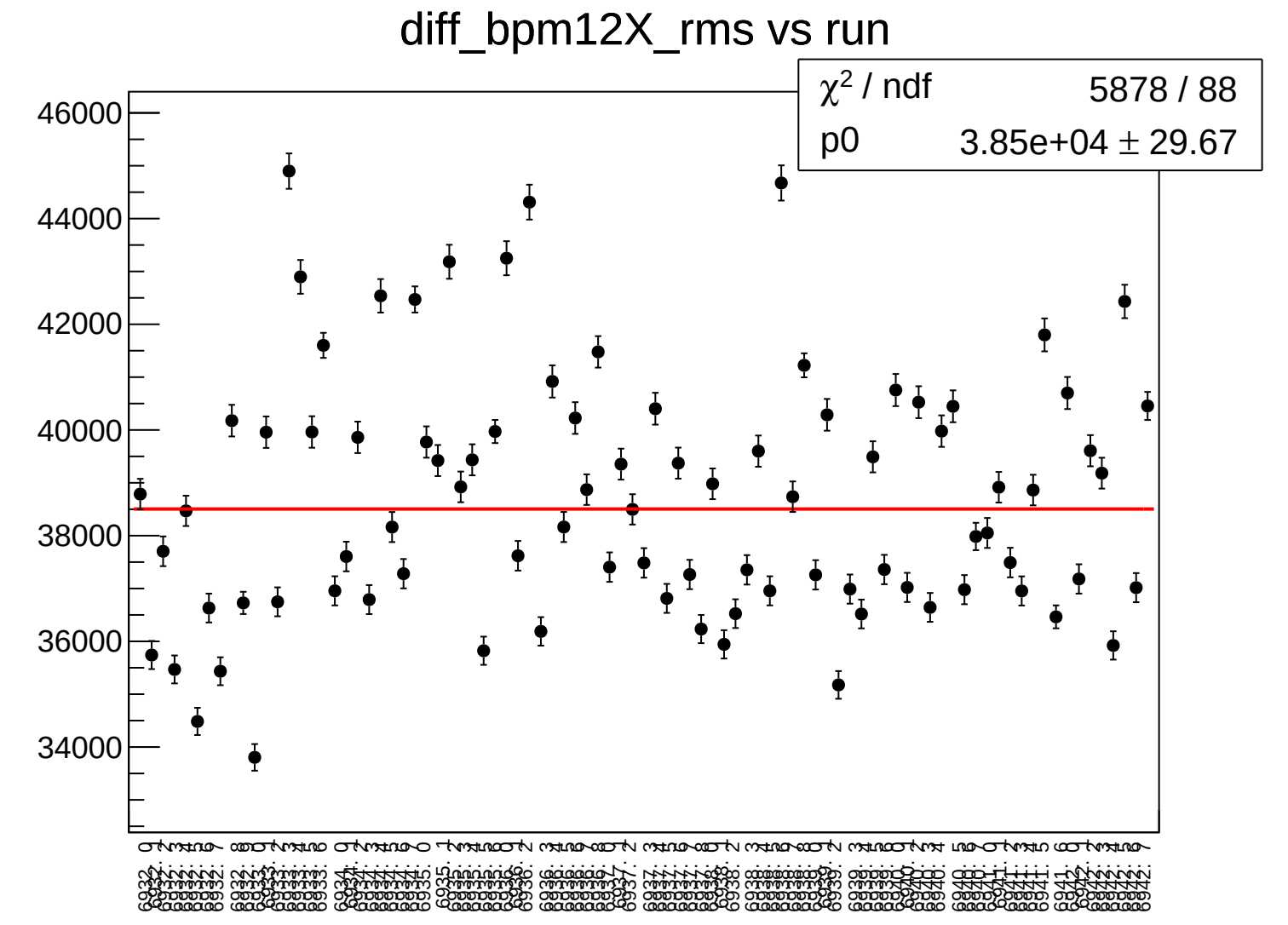

diff_bpm11Y_mean vs run
χ² / ndf 95.12 / 88
p0 8.242 ± 7.346
300
200
100
0
−100
−200
−300
pull
Entries 89
Mean −0.2143
Std Dev 36.78
4
3
2
1
0
−1
−2

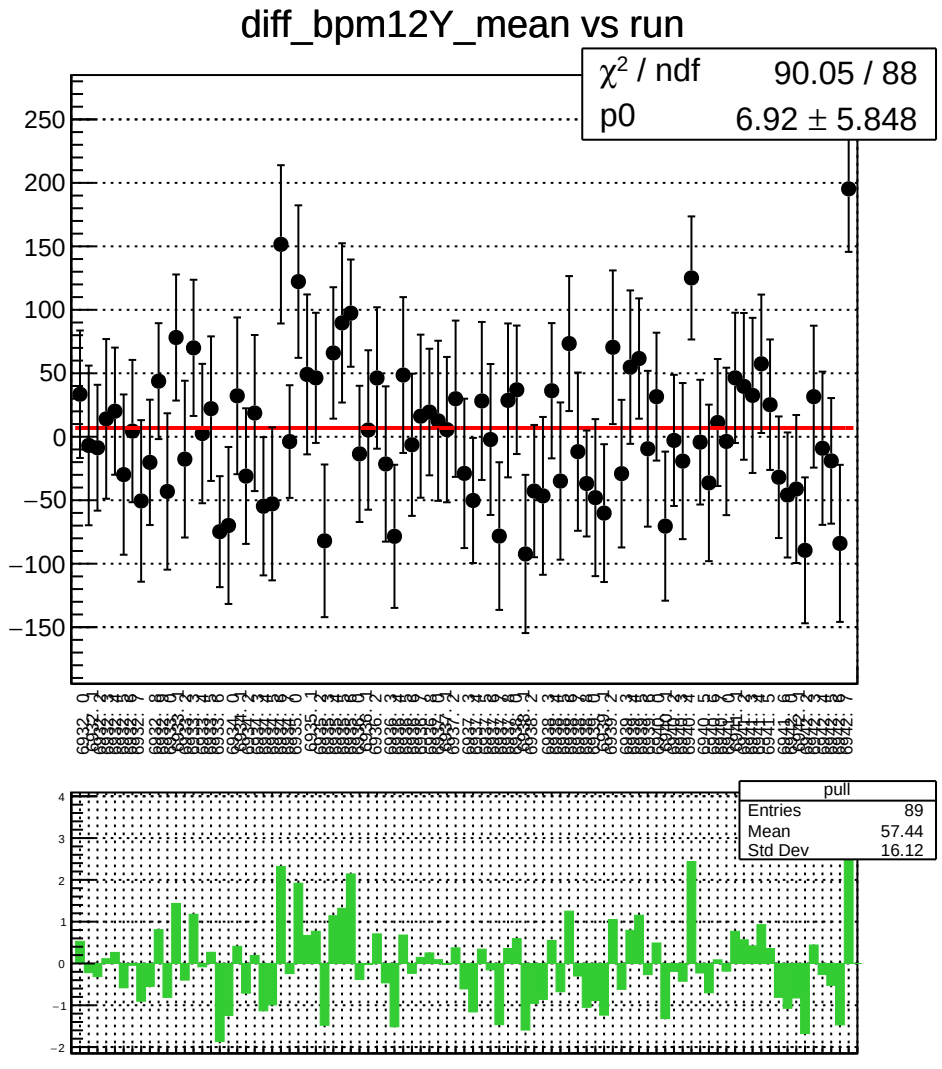

pull1D
Entries 89
Mean −0.02571
Std Dev 1.034
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

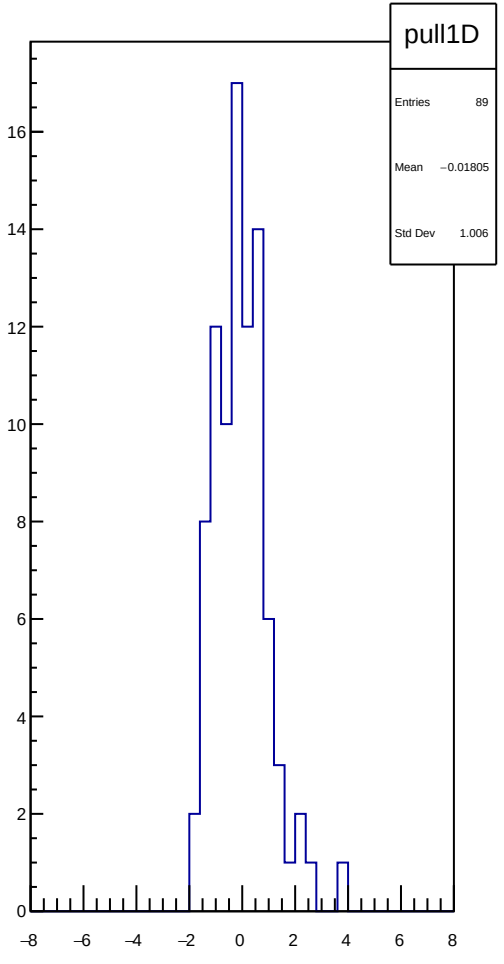

diff_bpm11Y_rms vs run
χ² / ndf 2.705e+04 / 88
p0 6699 ± 5.195
8000
7500
7000
6500
6000
5500

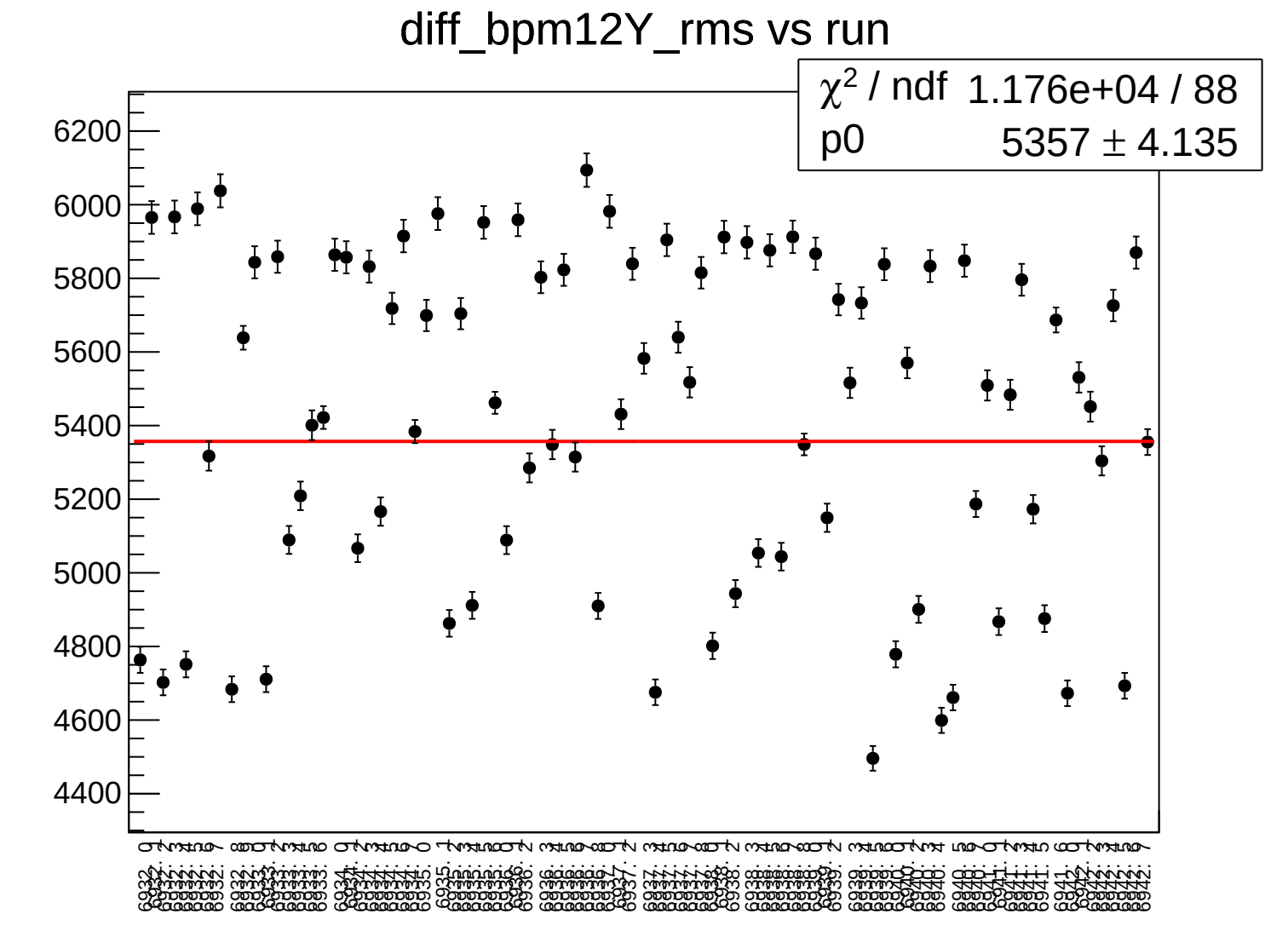

diff_bpm12X_mean vs run
χ² / ndf 85.52 / 88
p0 40.47 ± 41.96
1500
1000
500
0
−500
−1000
pull
Entries 89
Mean −2222
Std Dev 2259
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

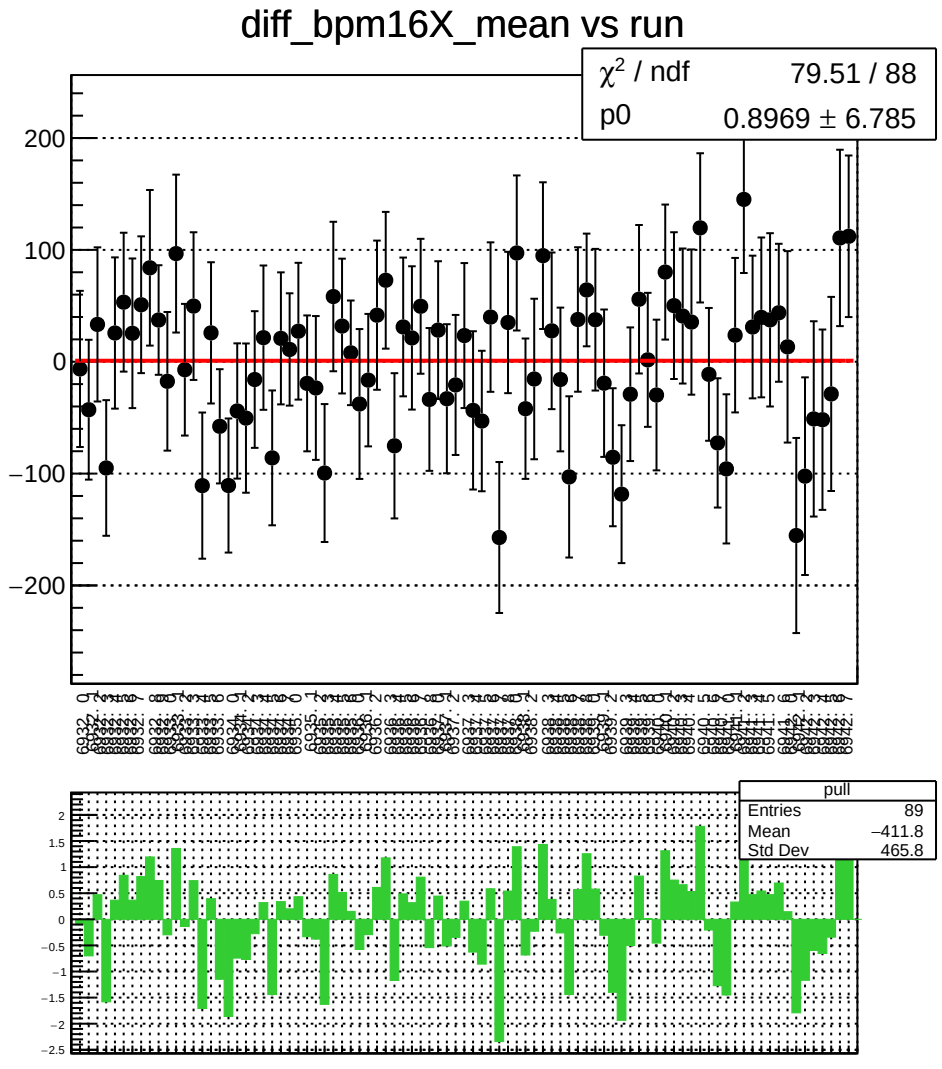

pull1D
Entries 89
Mean 0.0008583
Std Dev 0.9803
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

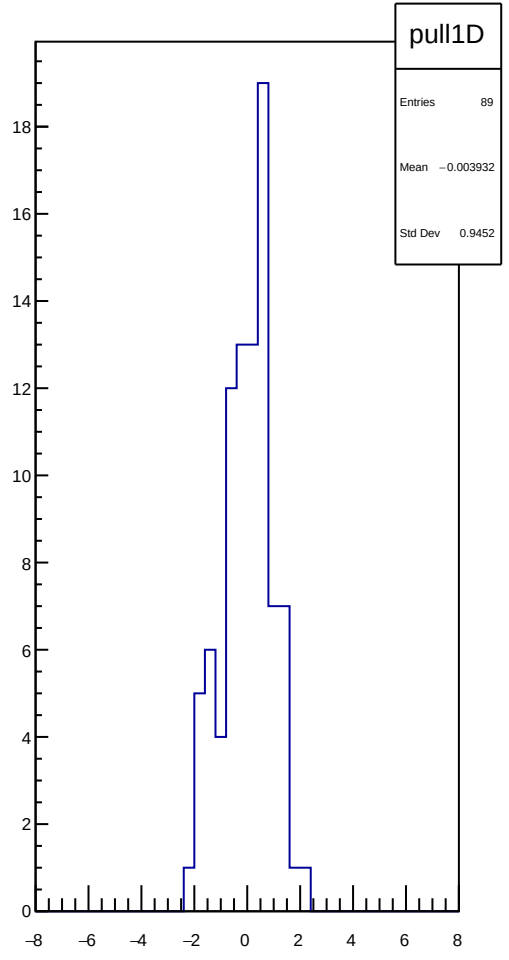

diff_bpm12X_rms vs run
χ^2 / ndf 5878 / 88
p0 3.85e+04 ± 29.67
46000
44000
42000
40000
38000
36000
34000

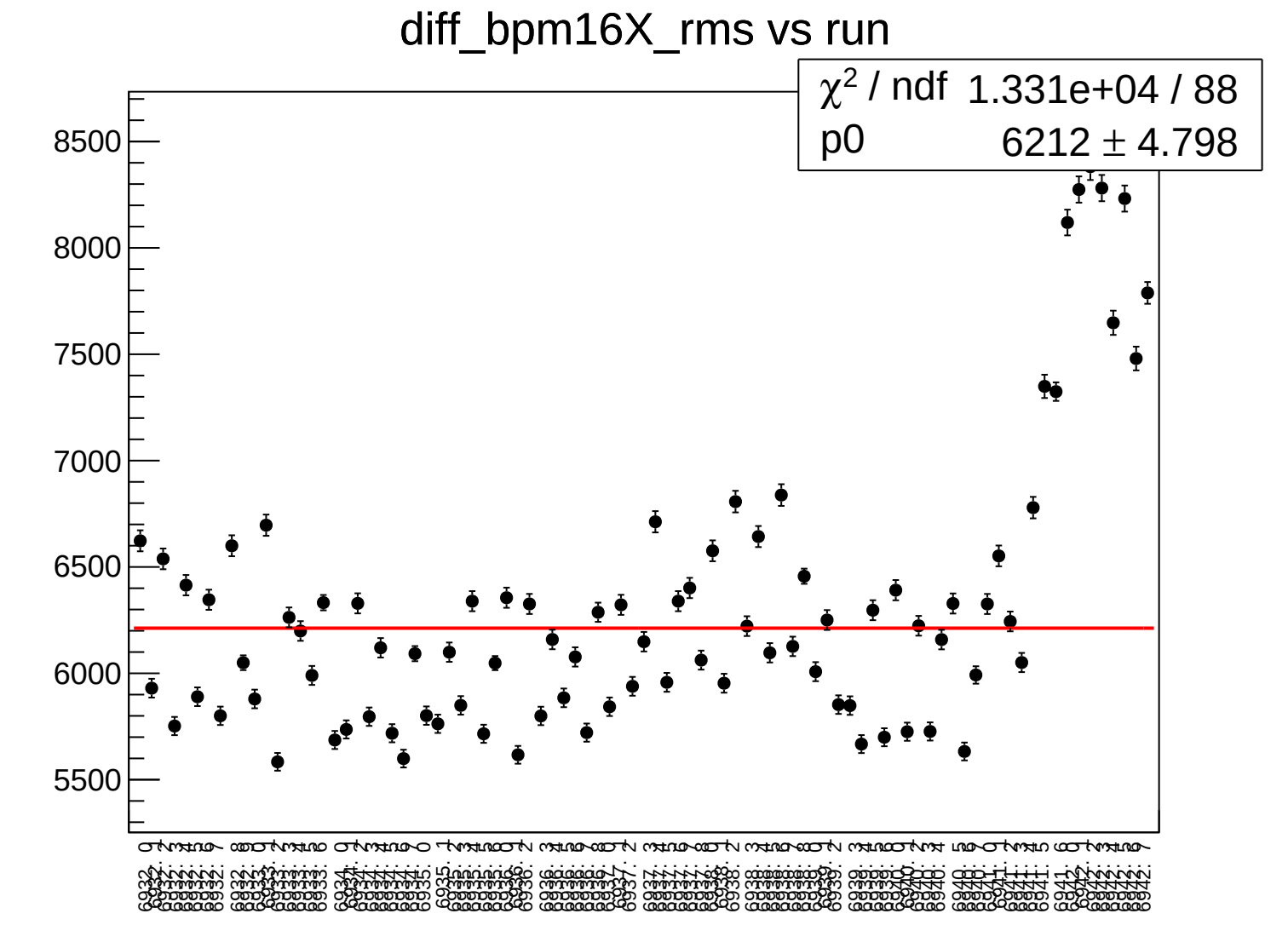

diff_bpm12Y_mean vs run
χ² / ndf 90.05 / 88
p0 6.92 ± 5.848
pull
Entries 89
Mean 57.44
Std Dev 16.12

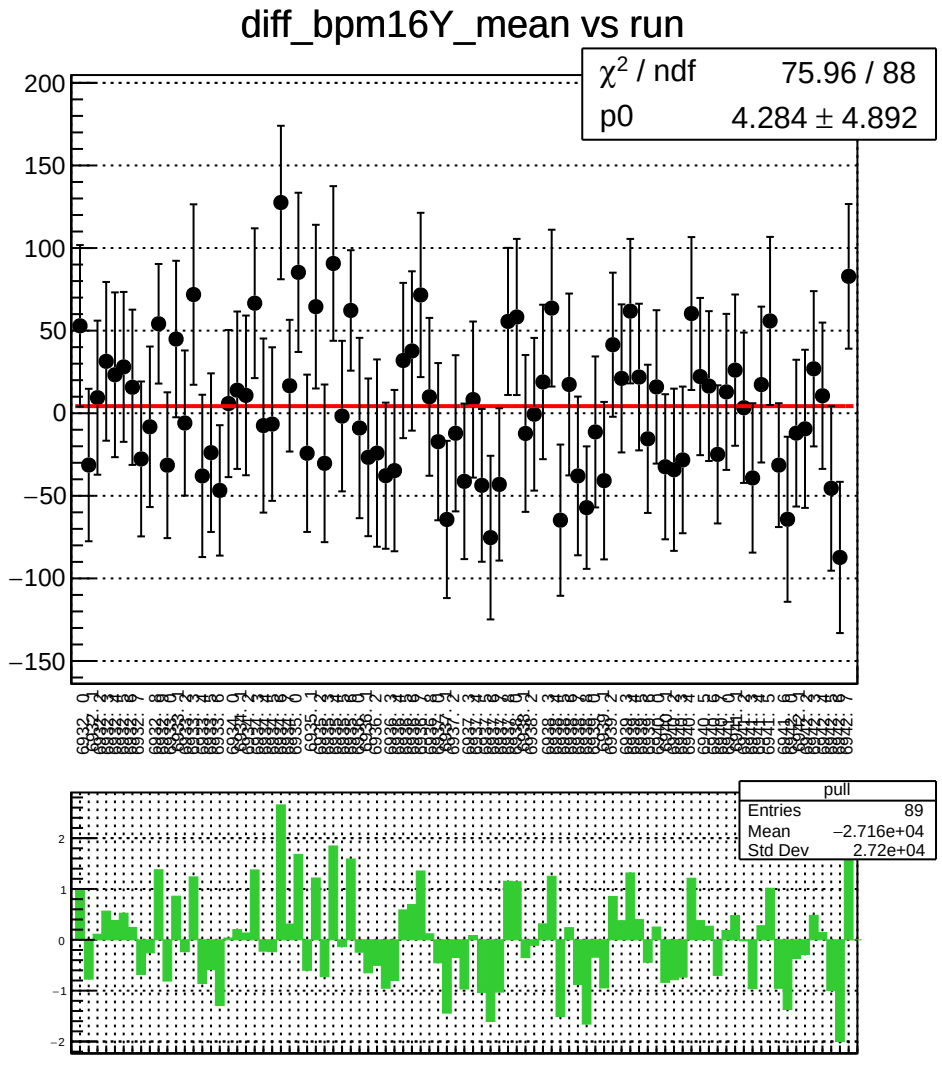

pull1D
Entries 89
Mean −0.01805
Std Dev 1.006

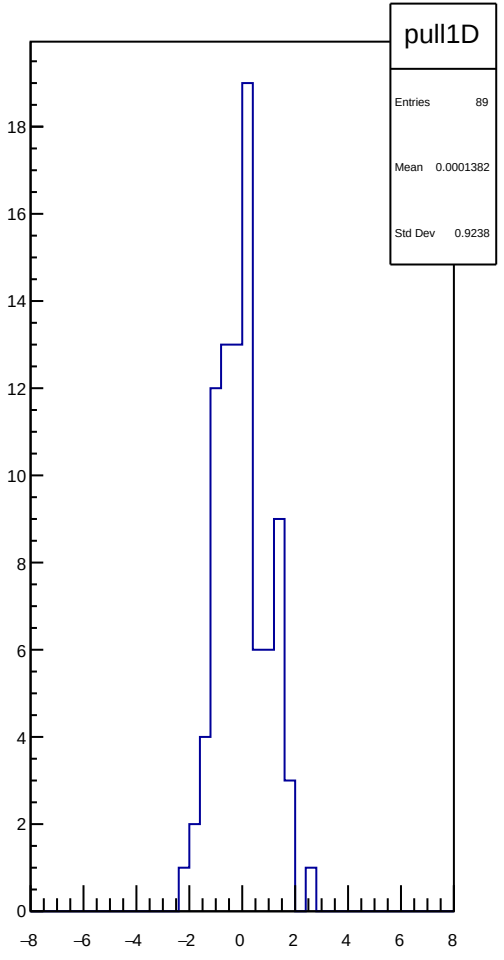

diff_bpm12Y_rms vs run
χ² / ndf 1.176e+04 / 88
p0 5357 ± 4.135
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400

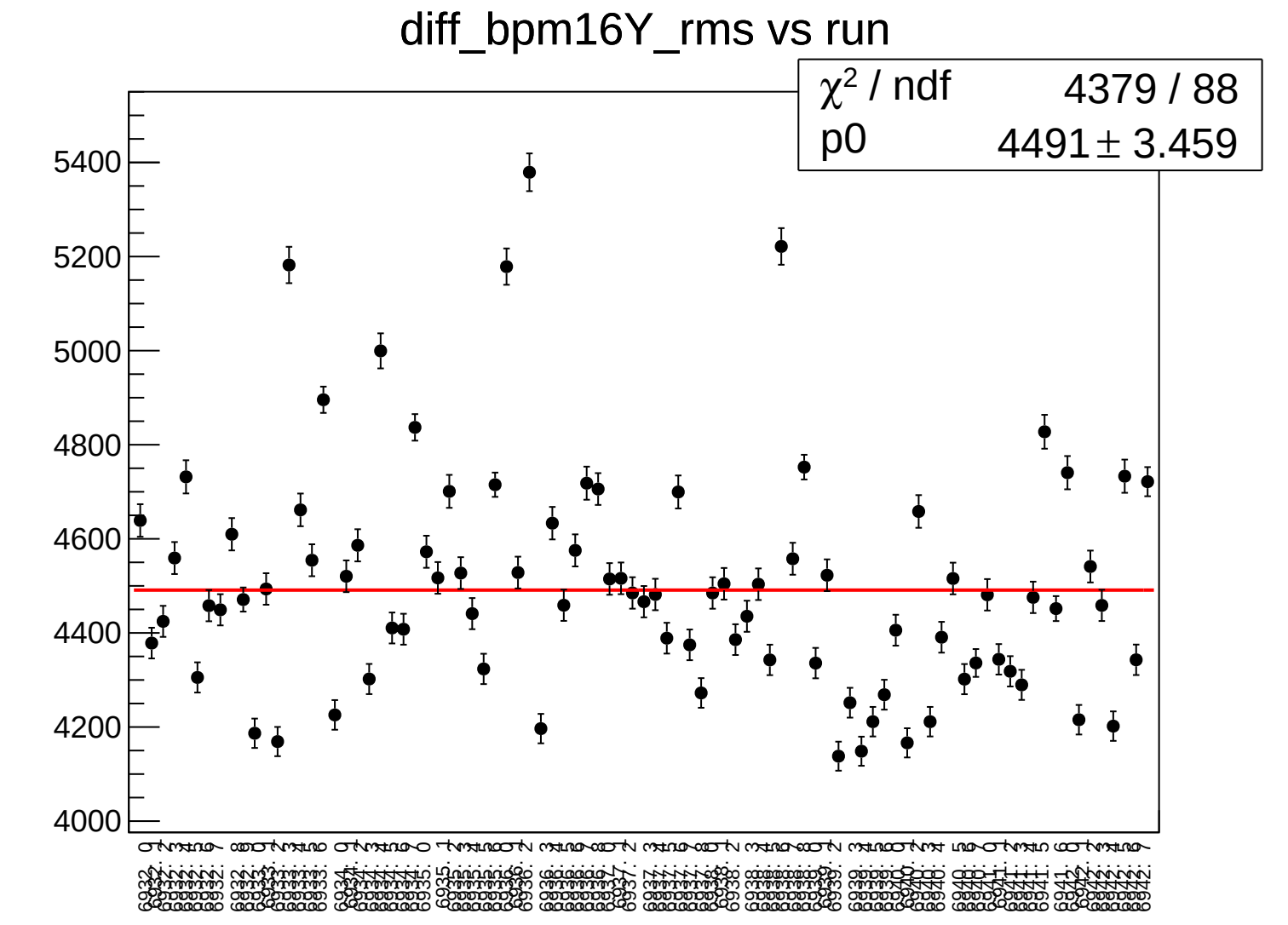

diff_bpm16X_mean vs run
χ² / ndf 79.51 / 88
p0 0.8969 ± 6.785
200
100
0
−100
−200
pull
Entries 89
Mean −411.8
Std Dev 465.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

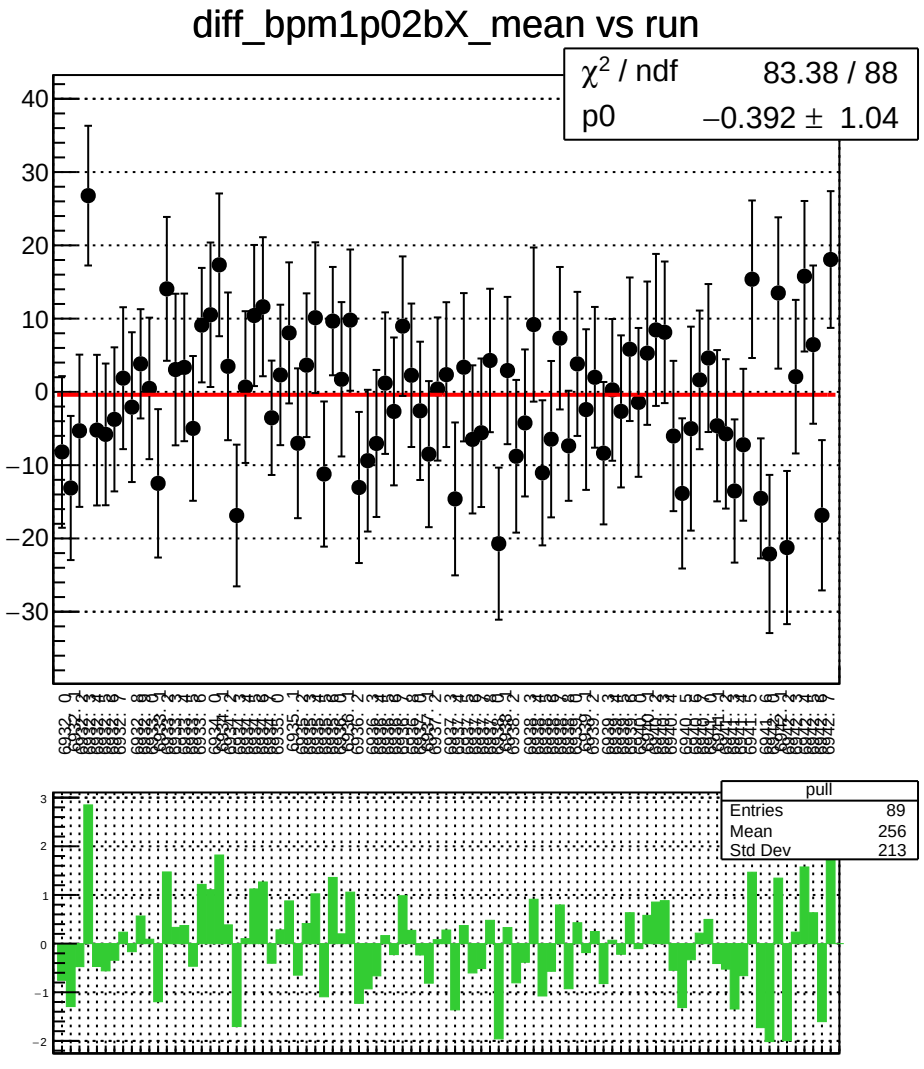

pull1D
Entries 89
Mean −0.003932
Std Dev 0.9452
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

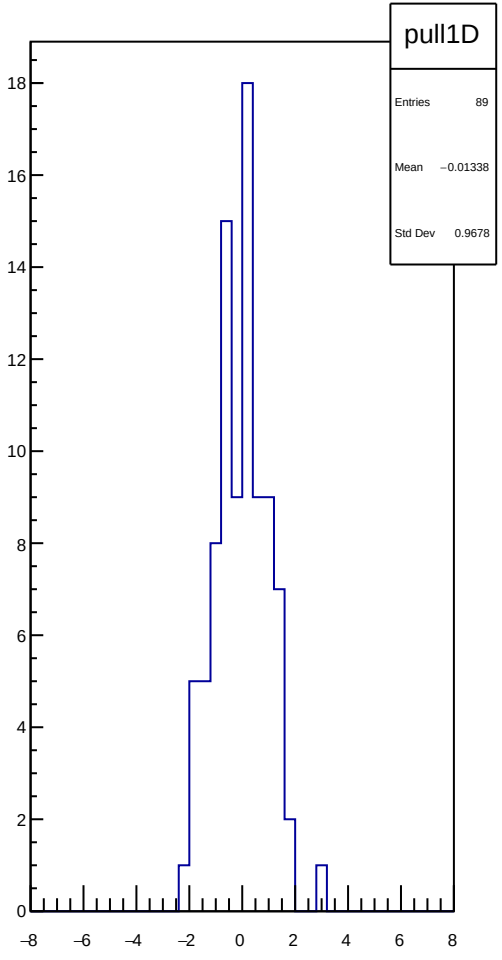

diff_bpm16X_rms vs run
χ^2 / ndf 1.331e+04 / 88
p0 6212 ± 4.798
8500
8000
7500
7000
6500
6000
5500

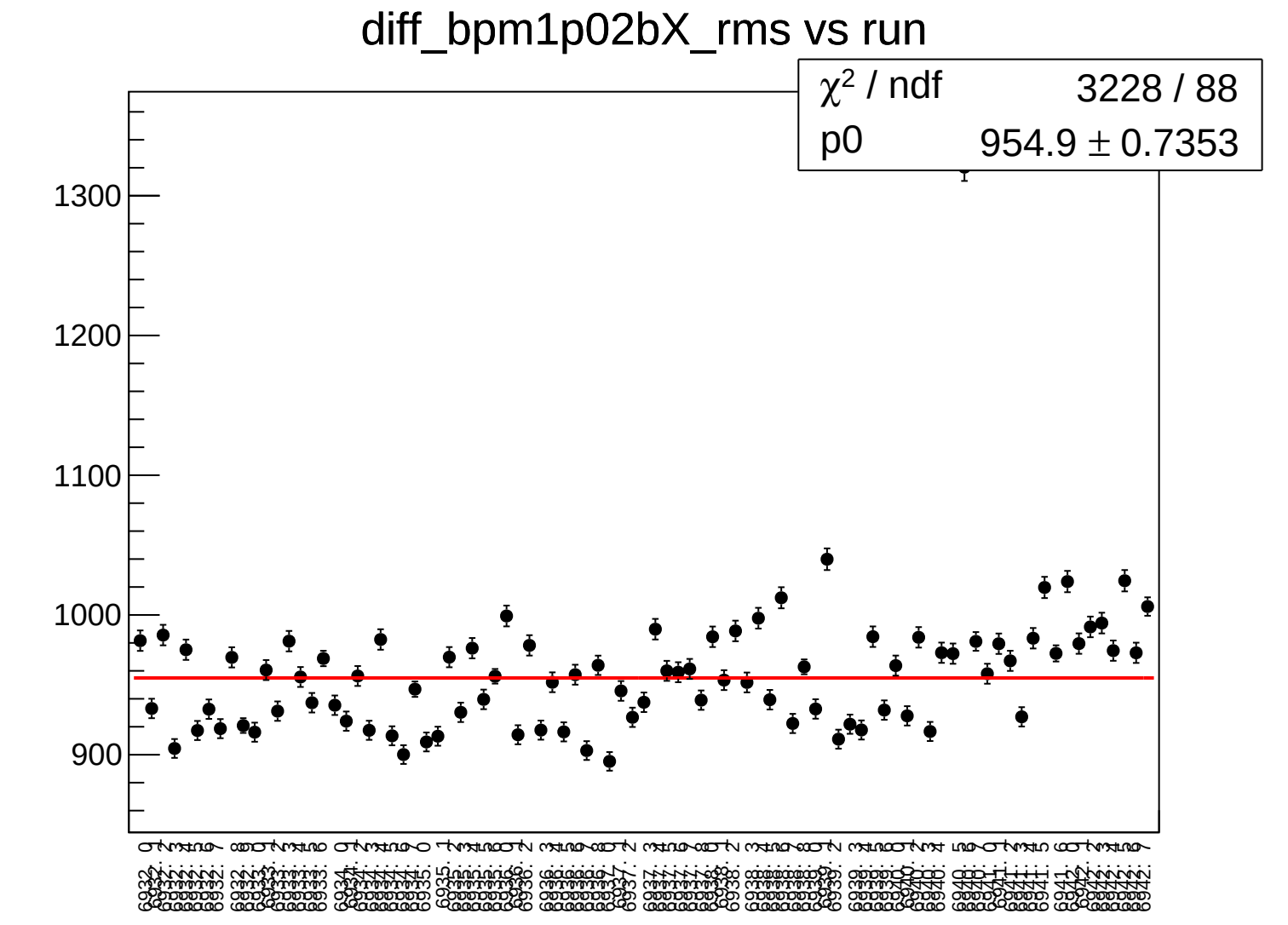

diff_bpm16Y_mean vs run
χ² / ndf 75.96 / 88
p0 4.284 ± 4.892
pull
Entries 89
Mean −2.716e+04
Std Dev 2.72e+04

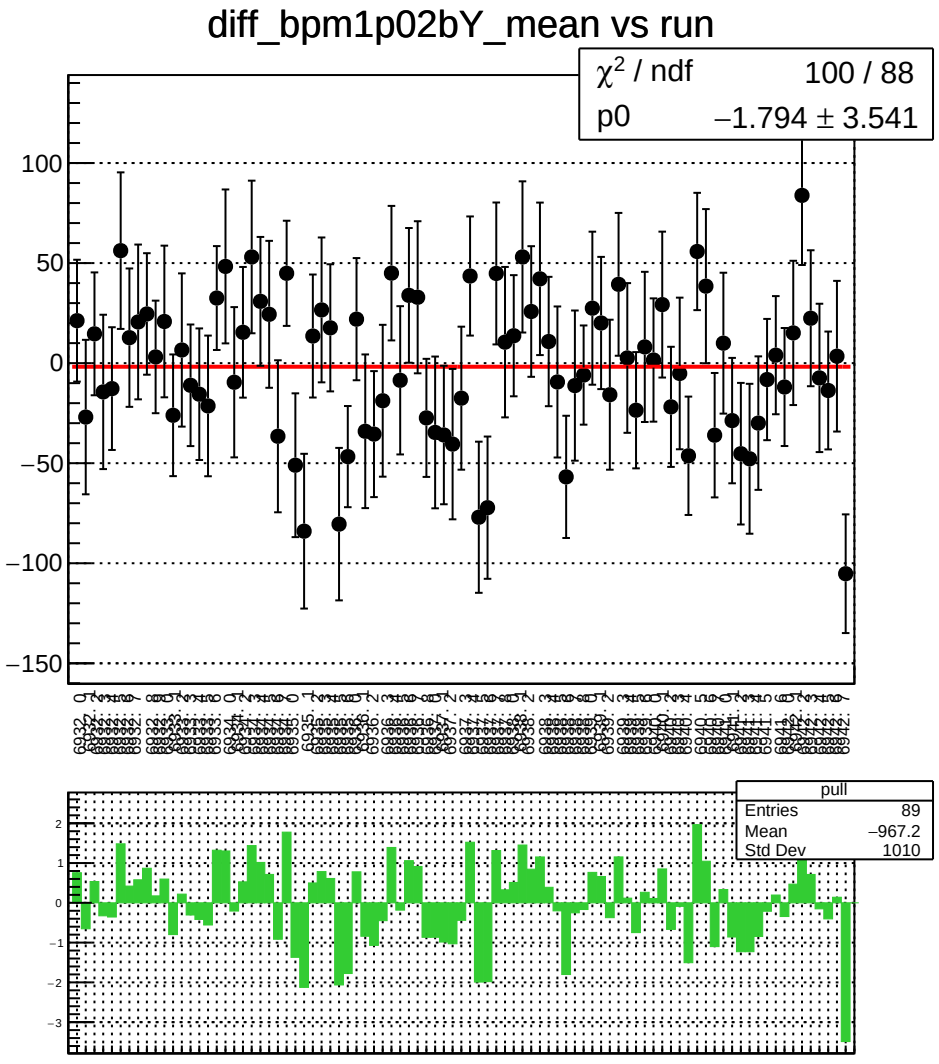

pull1D
Entries 89
Mean 0.0001382
Std Dev 0.9238

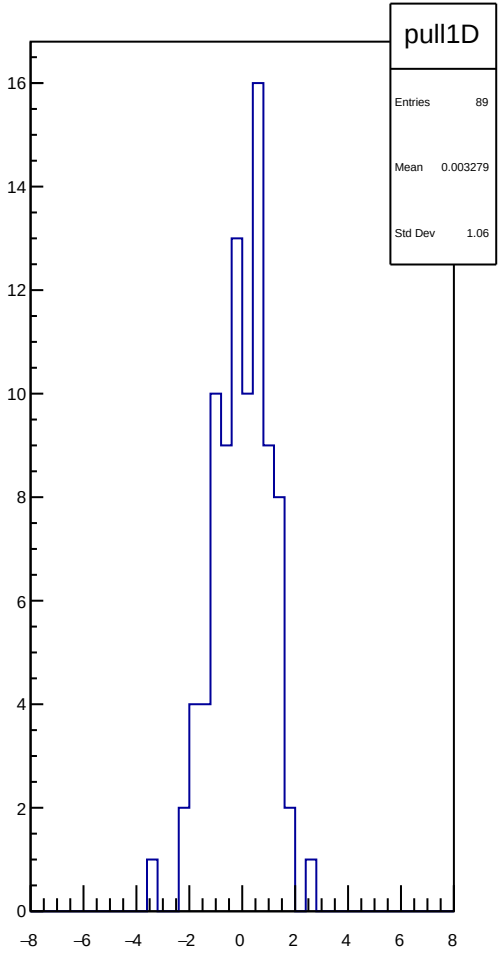

diff_bpm16Y_rms vs run
χ² / ndf 4379 / 88
p0 4491 ± 3.459
5400
5200
5000
4800
4600
4400
4200
4000

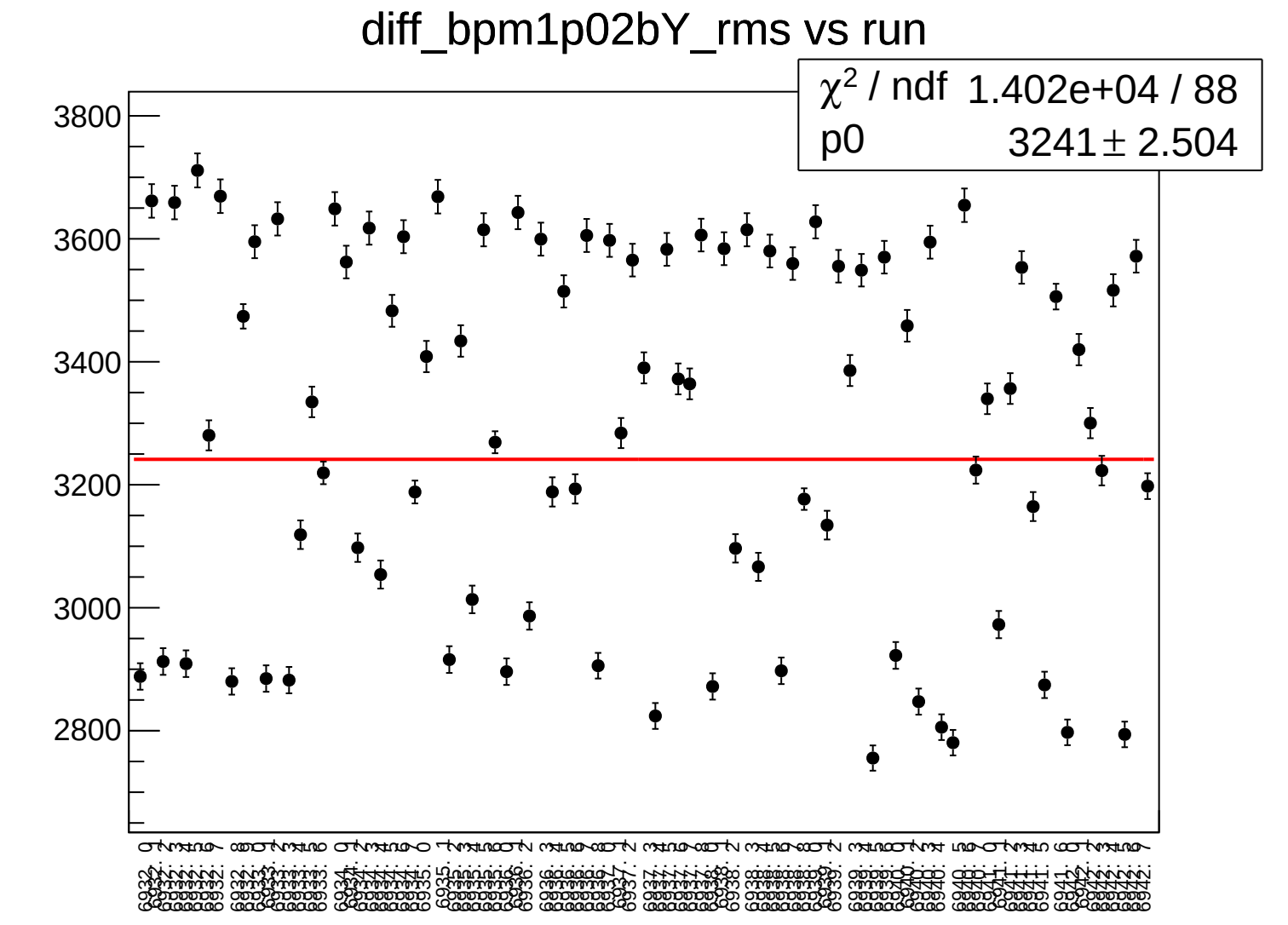

diff_bpm1p02bX_mean vs run
χ^2 / ndf 83.38 / 88
p0 −0.392 ± 1.04
pull
Entries 89
Mean 256
Std Dev 213

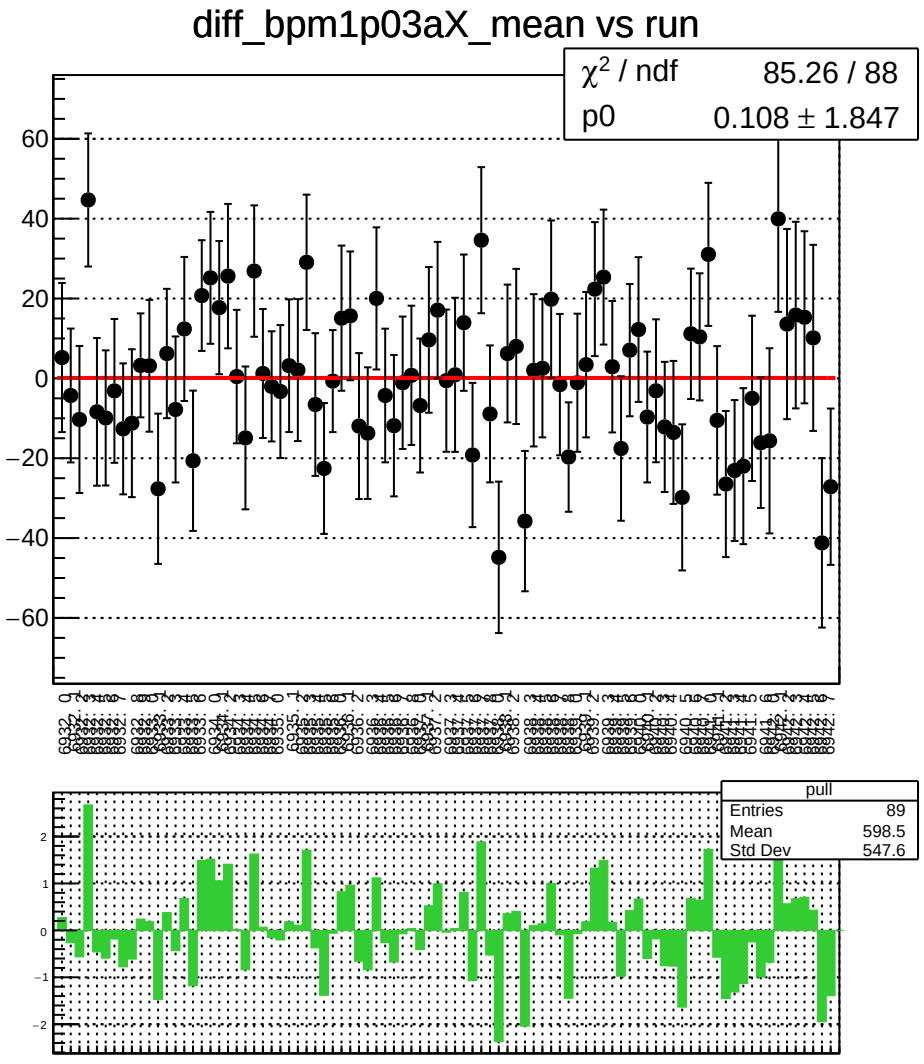

pull1D
Entries 89
Mean −0.01338
Std Dev 0.9678

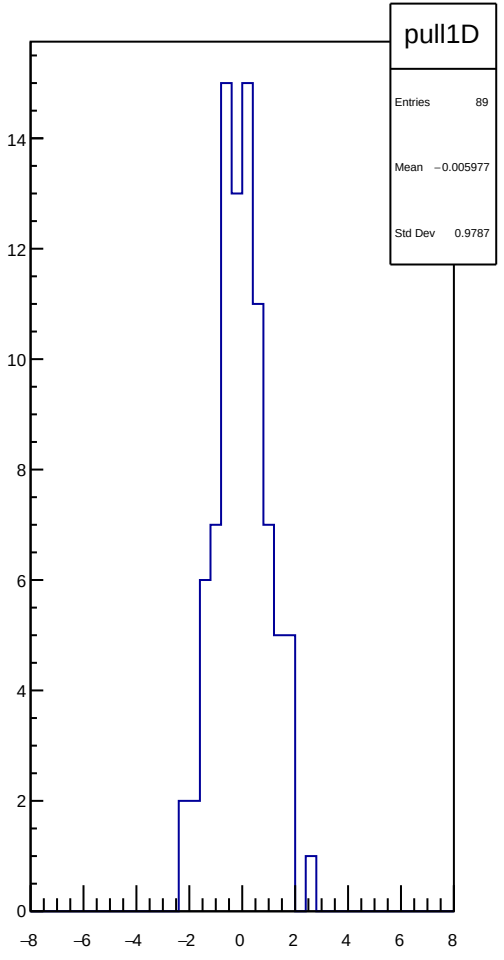

diff_bpm1p02bX_rms vs run
χ² / ndf 3228 / 88
p0 954.9 ± 0.7353
1300
1200
1100
1000
900

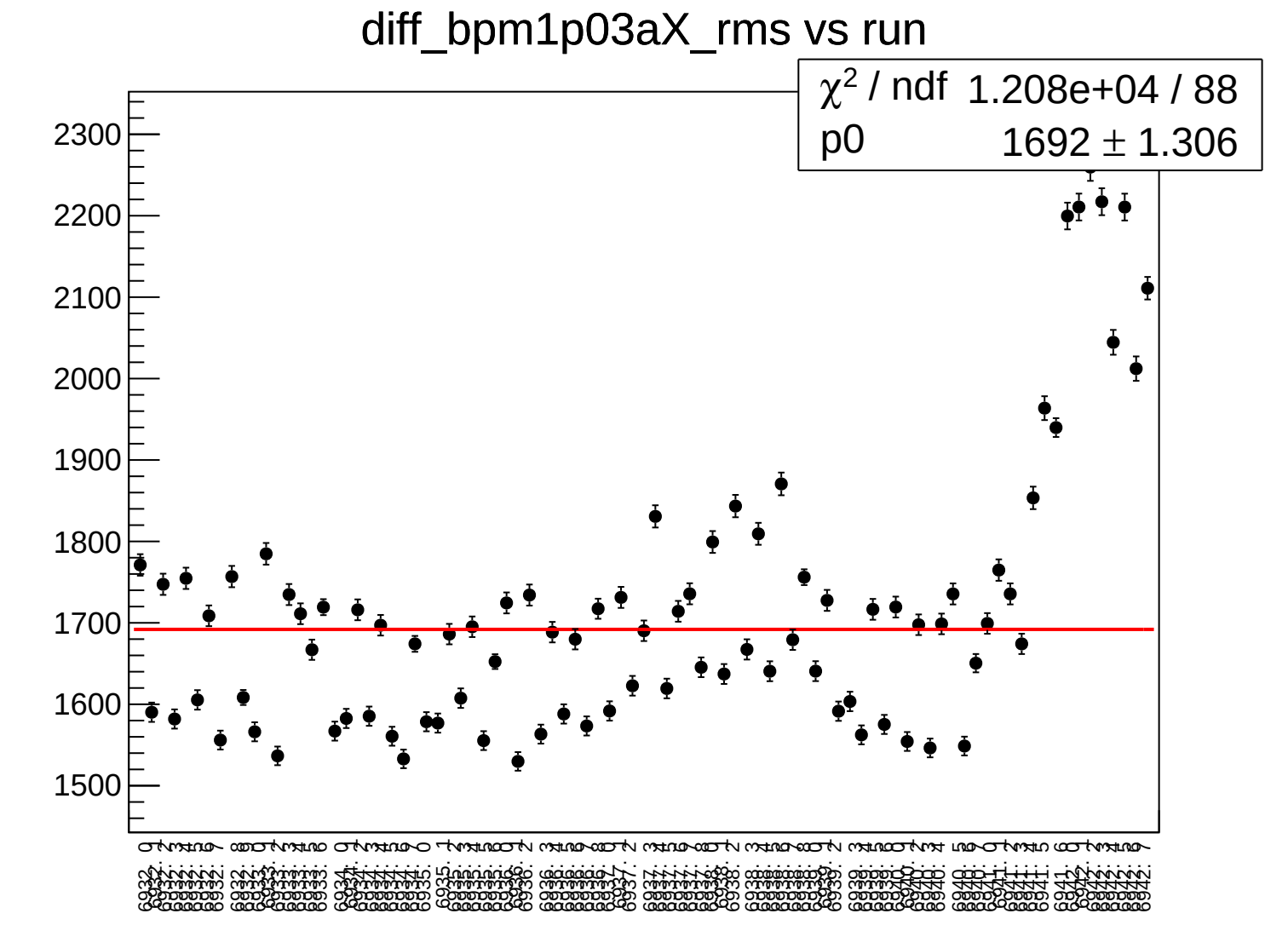

diff_bpm1p02bY_mean vs run
χ² / ndf 100 / 88
p0 −1.794 ± 3.541
pull
Entries 89
Mean −967.2
Std Dev 1010

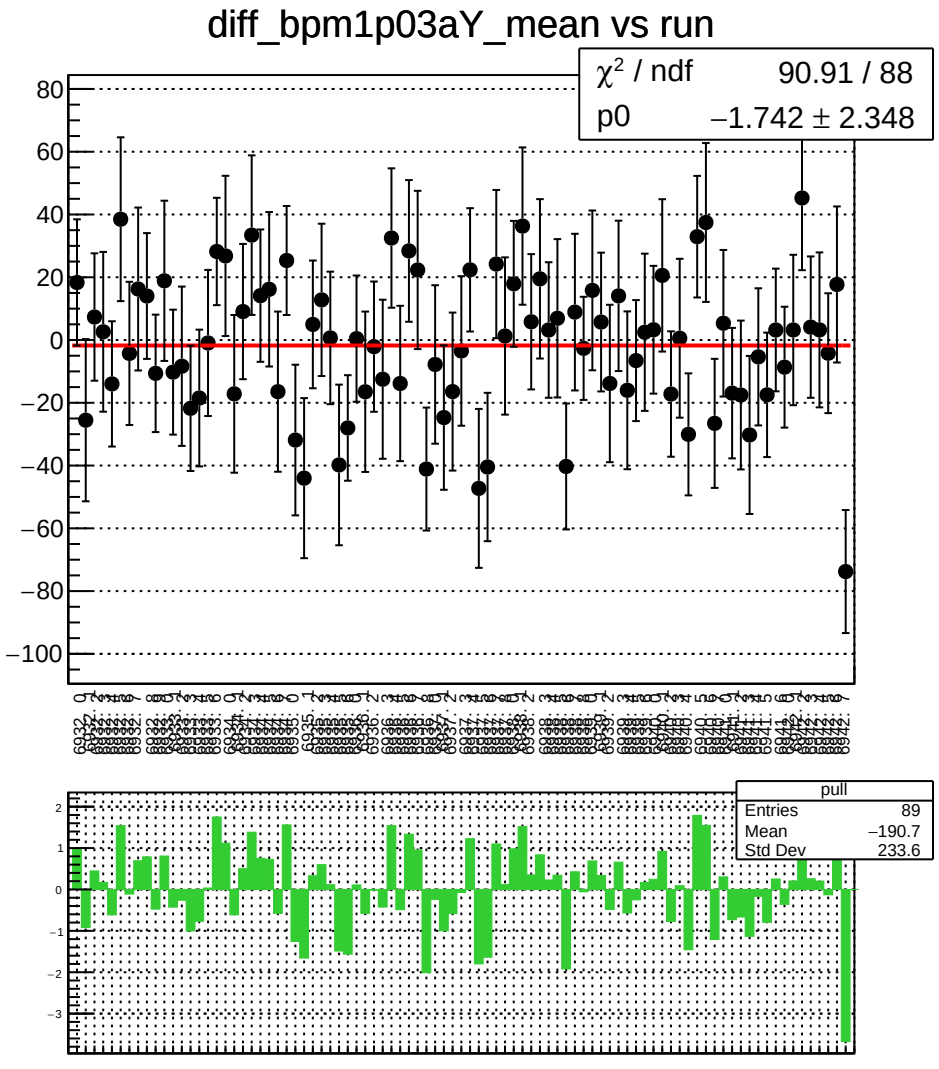

pull1D
Entries 89
Mean 0.003279
Std Dev 1.06

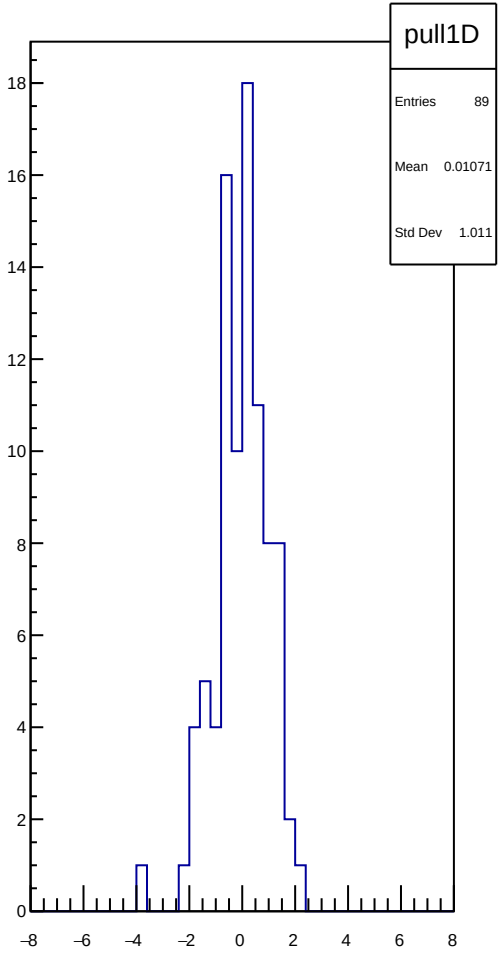

diff_bpm1p02bY_rms vs run
χ² / ndf 1.402e+04 / 88
p0 3241 ± 2.504
3800
3600
3400
3200
3000
2800

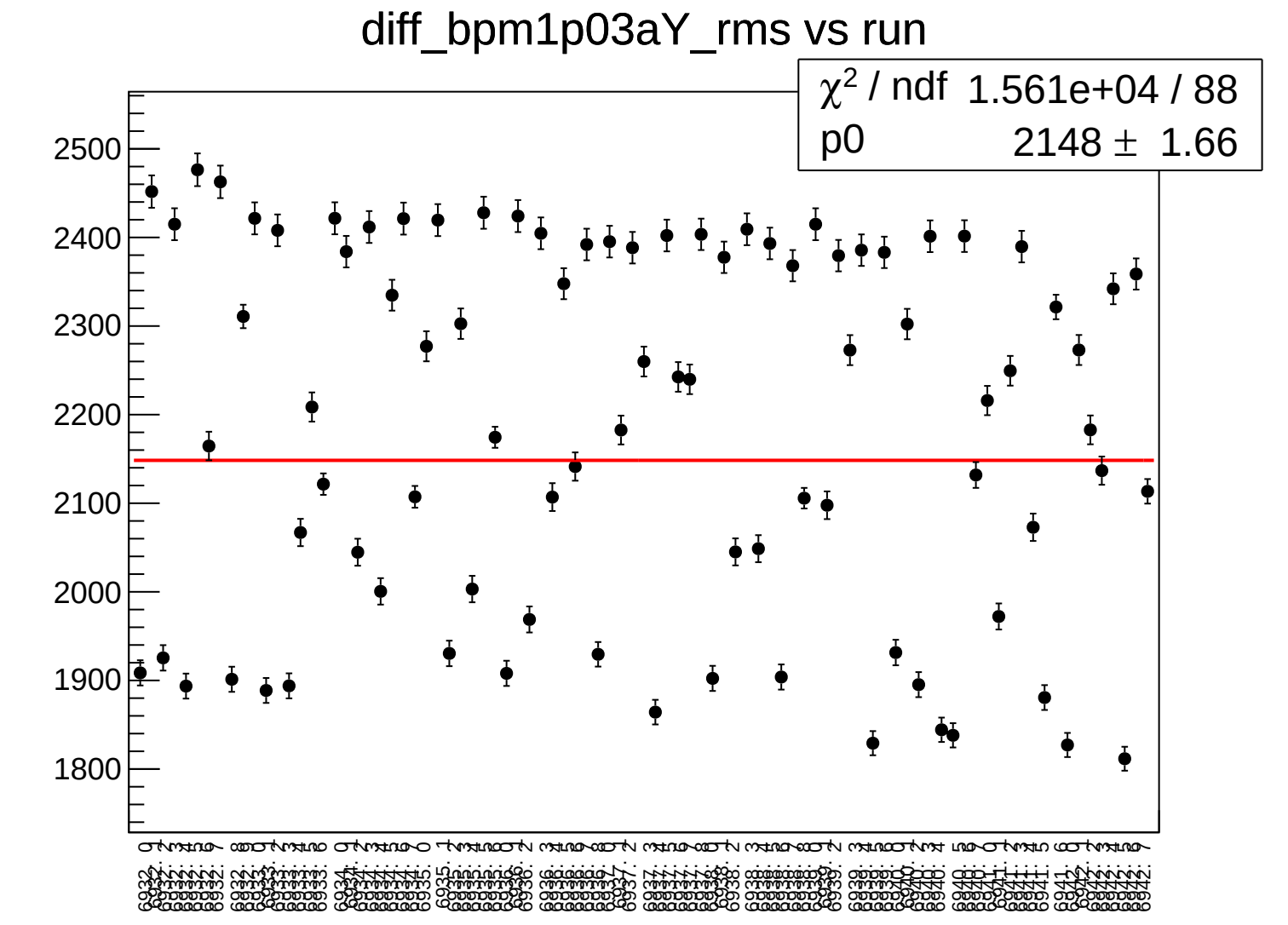

diff_bpm1p03aX_mean vs run
χ² / ndf 85.26 / 88
p0 0.108 ± 1.847
pull
Entries 89
Mean 598.5
Std Dev 547.6

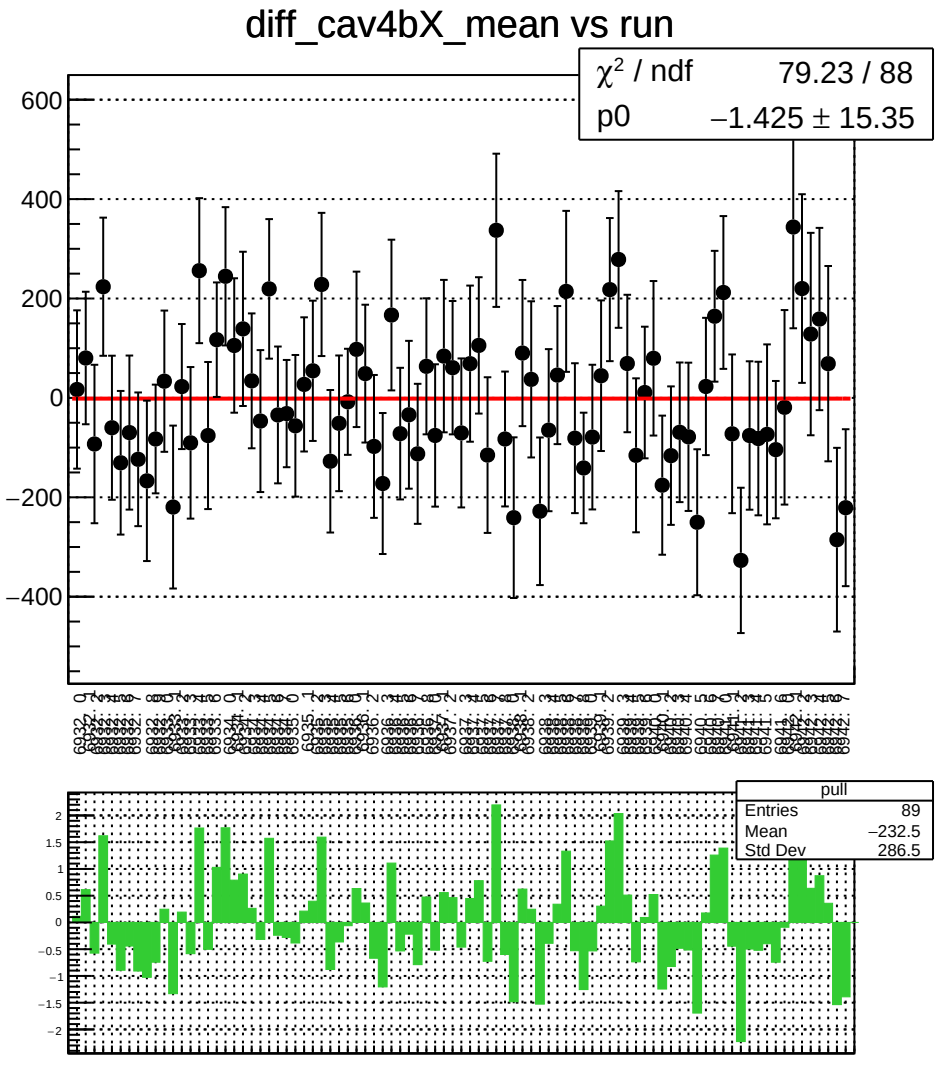

pull1D
Entries 89
Mean −0.005977
Std Dev 0.9787

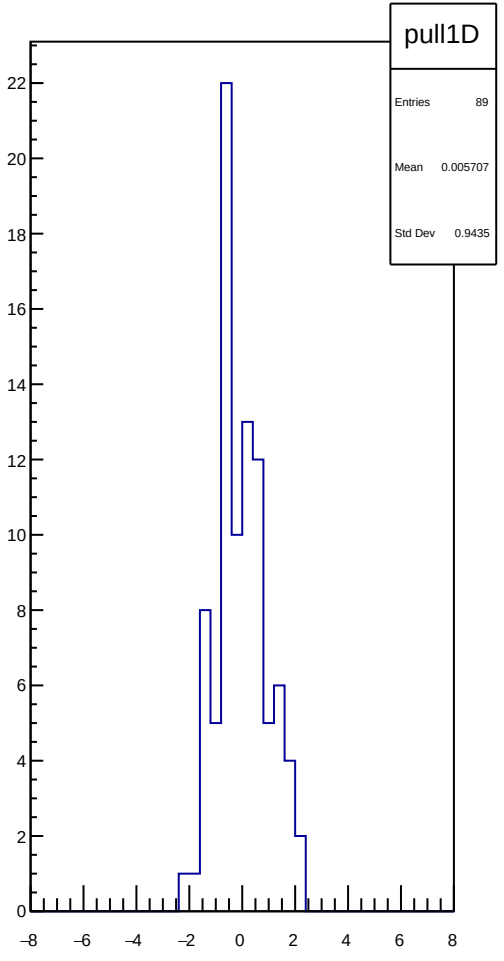

diff_bpm1p03aX_rms vs run
χ² / ndf 1.208e+04 / 88
p0 1692 ± 1.306
2300
2200
2100
2000
1900
1800
1700
1600
1500

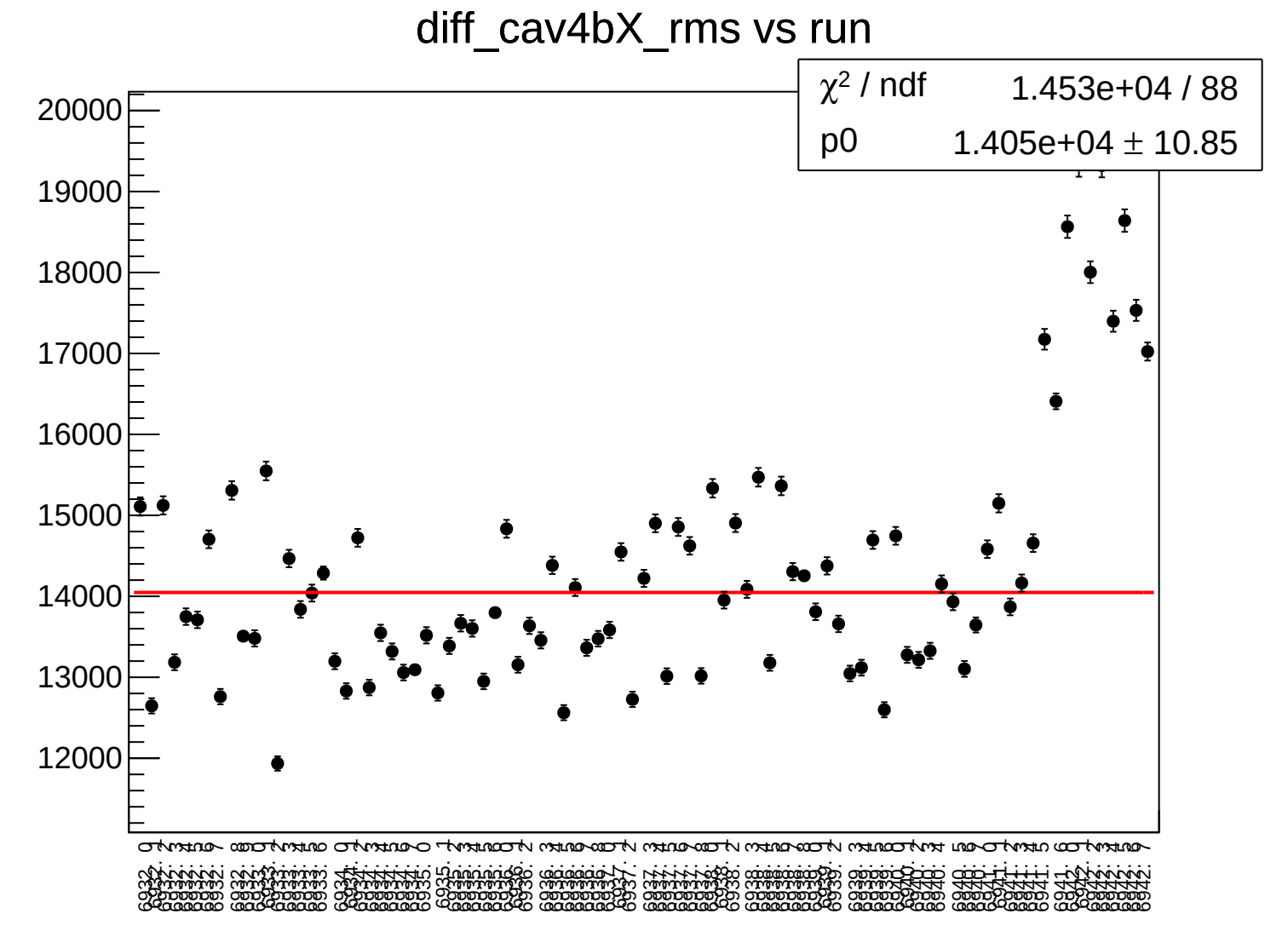

diff_bpm1p03aY_mean vs run
χ² / ndf 90.91 / 88
p0 −1.742 ± 2.348
pull
Entries 89
Mean −190.7
Std Dev 233.6

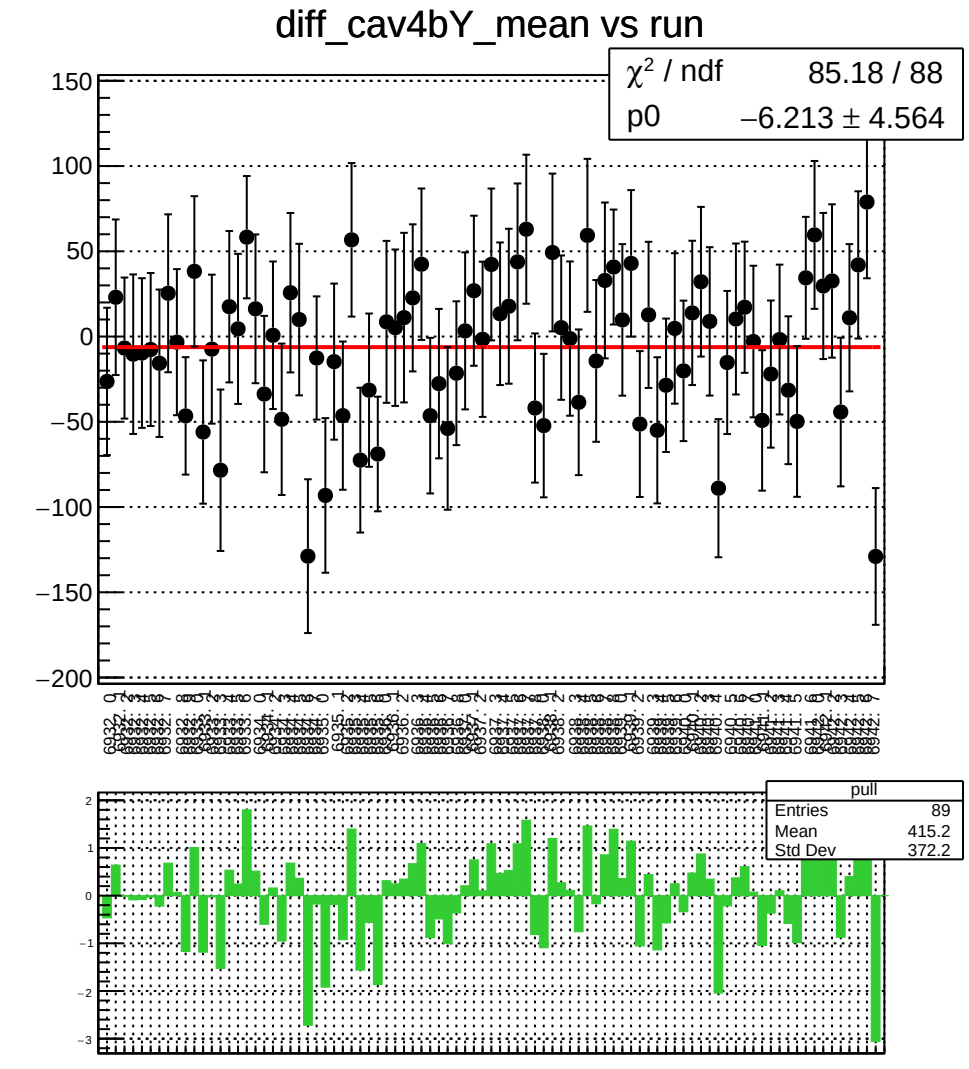

pull1D
Entries 89
Mean 0.01071
Std Dev 1.011

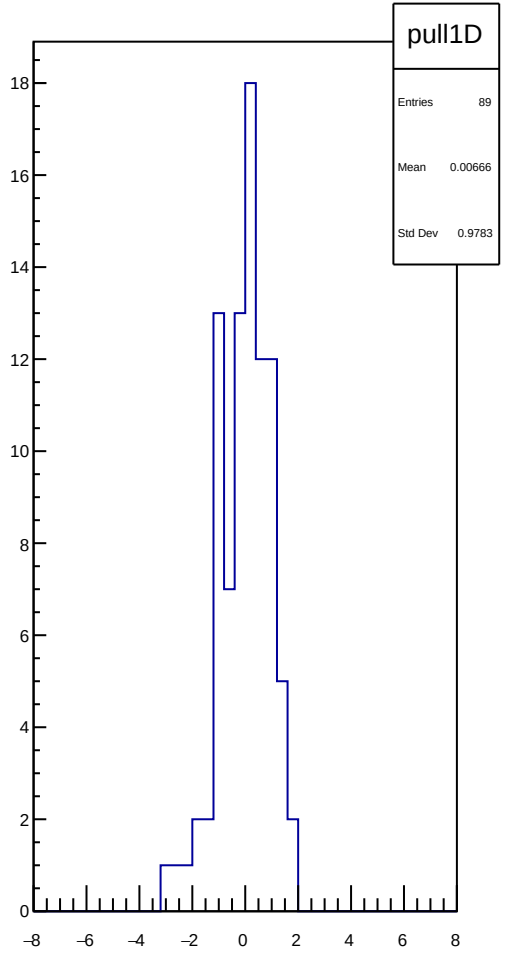

diff_bpm1p03aY_rms vs run
χ² / ndf 1.561e+04 / 88
p0 2148 ± 1.66
2500
2400
2300
2200
2100
2000
1900
1800

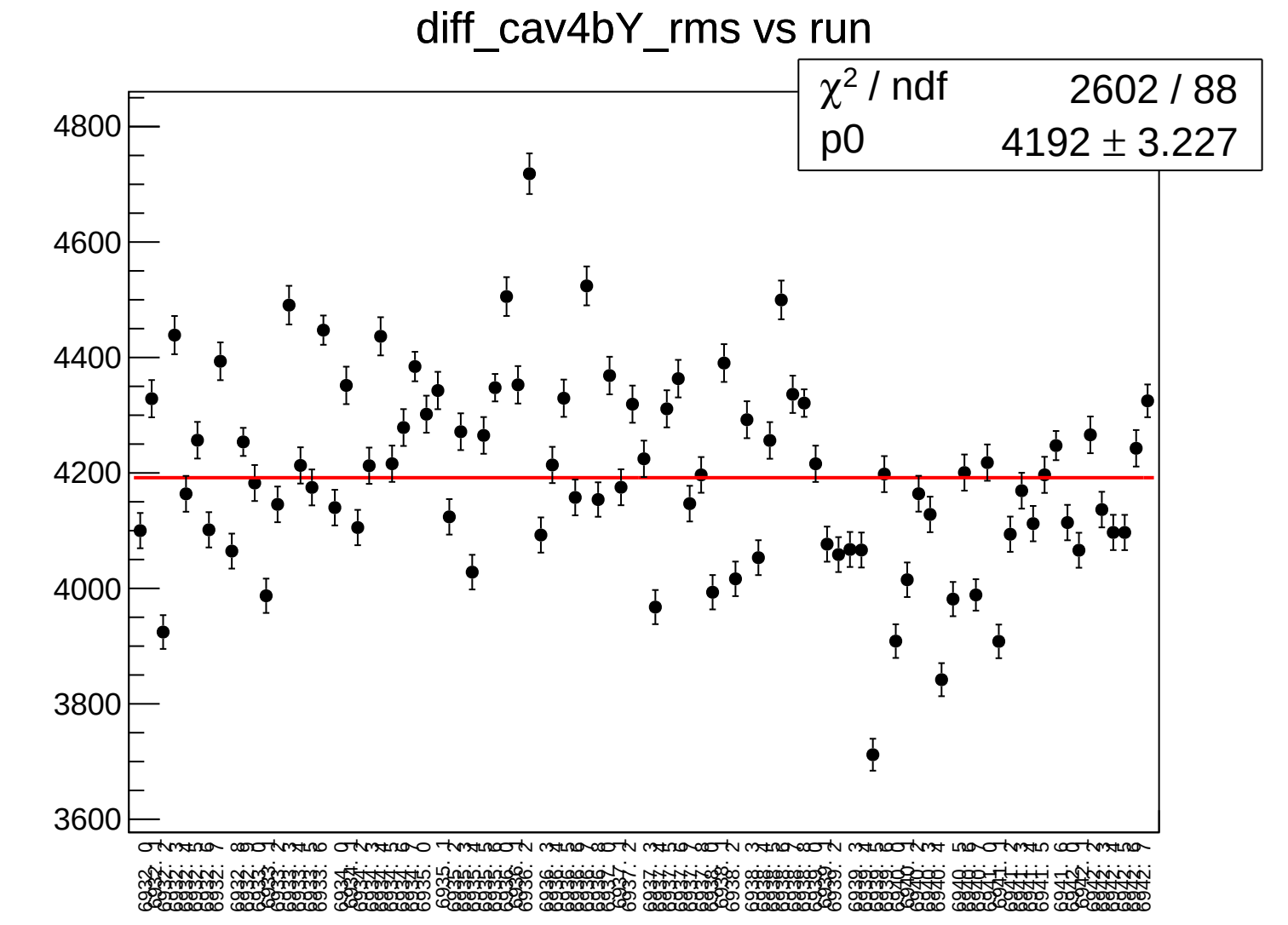

diff_cav4bX_mean vs run
χ² / ndf 79.23 / 88
p0 −1.425 ± 15.35
600
400
200
0
−200
−400
pull
Entries 89
Mean −232.5
Std Dev 286.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

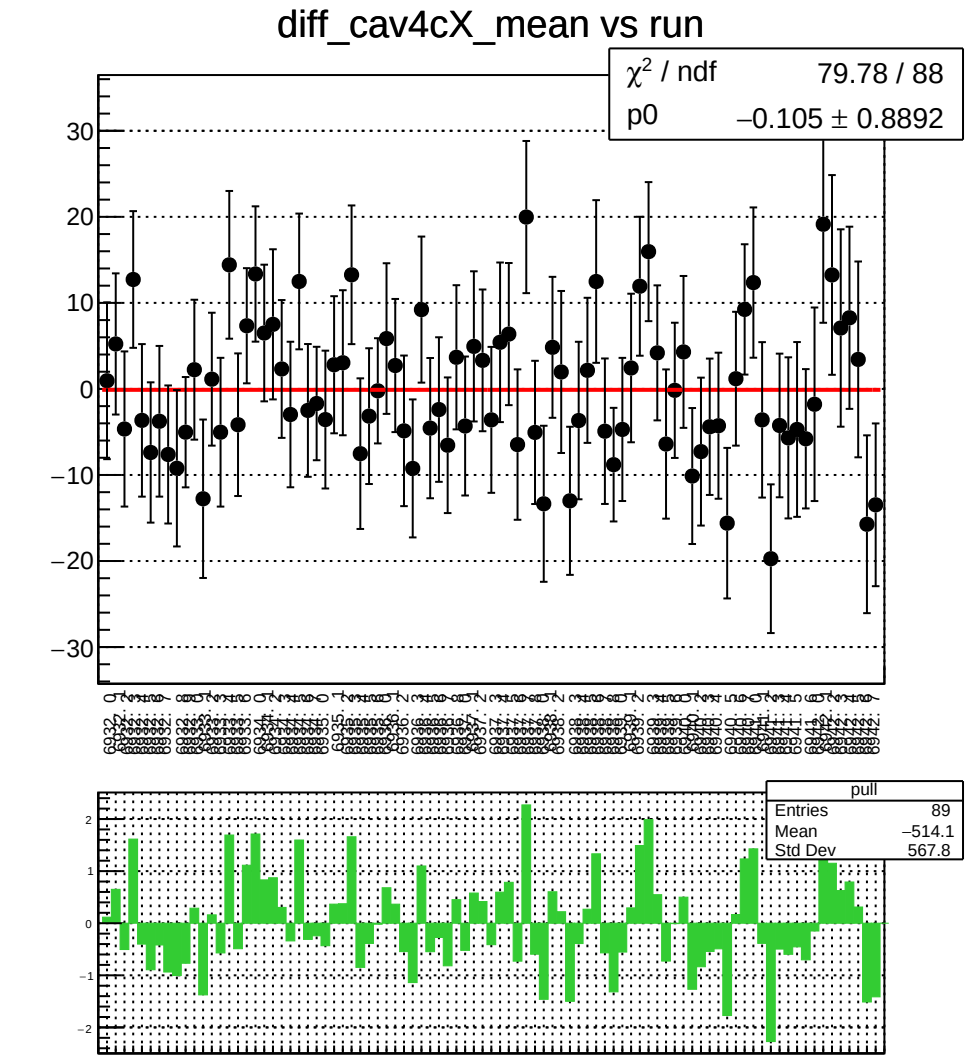

pull1D
Entries 89
Mean 0.005707
Std Dev 0.9435
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

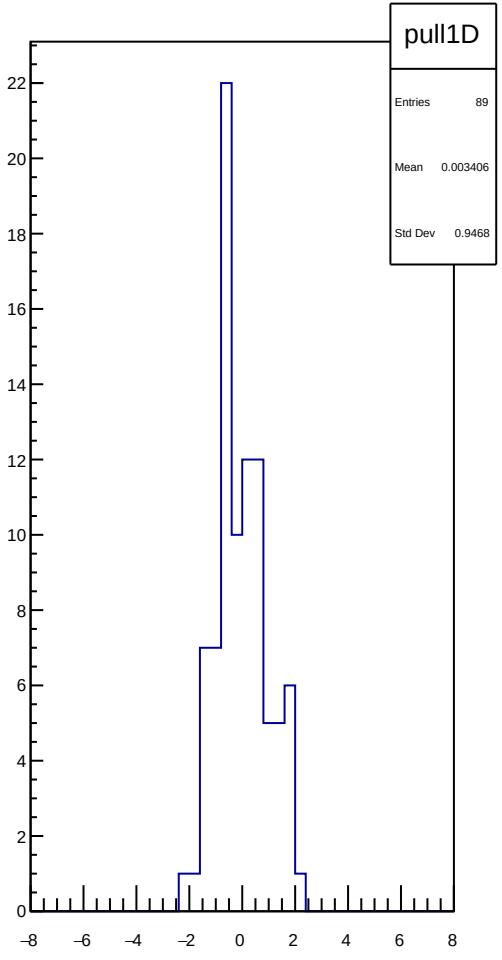

diff_cav4bX_rms vs run
χ² / ndf 1.453e+04 / 88
p0 1.405e+04 ± 10.85
20000
19000
18000
17000
16000
15000
14000
13000
12000

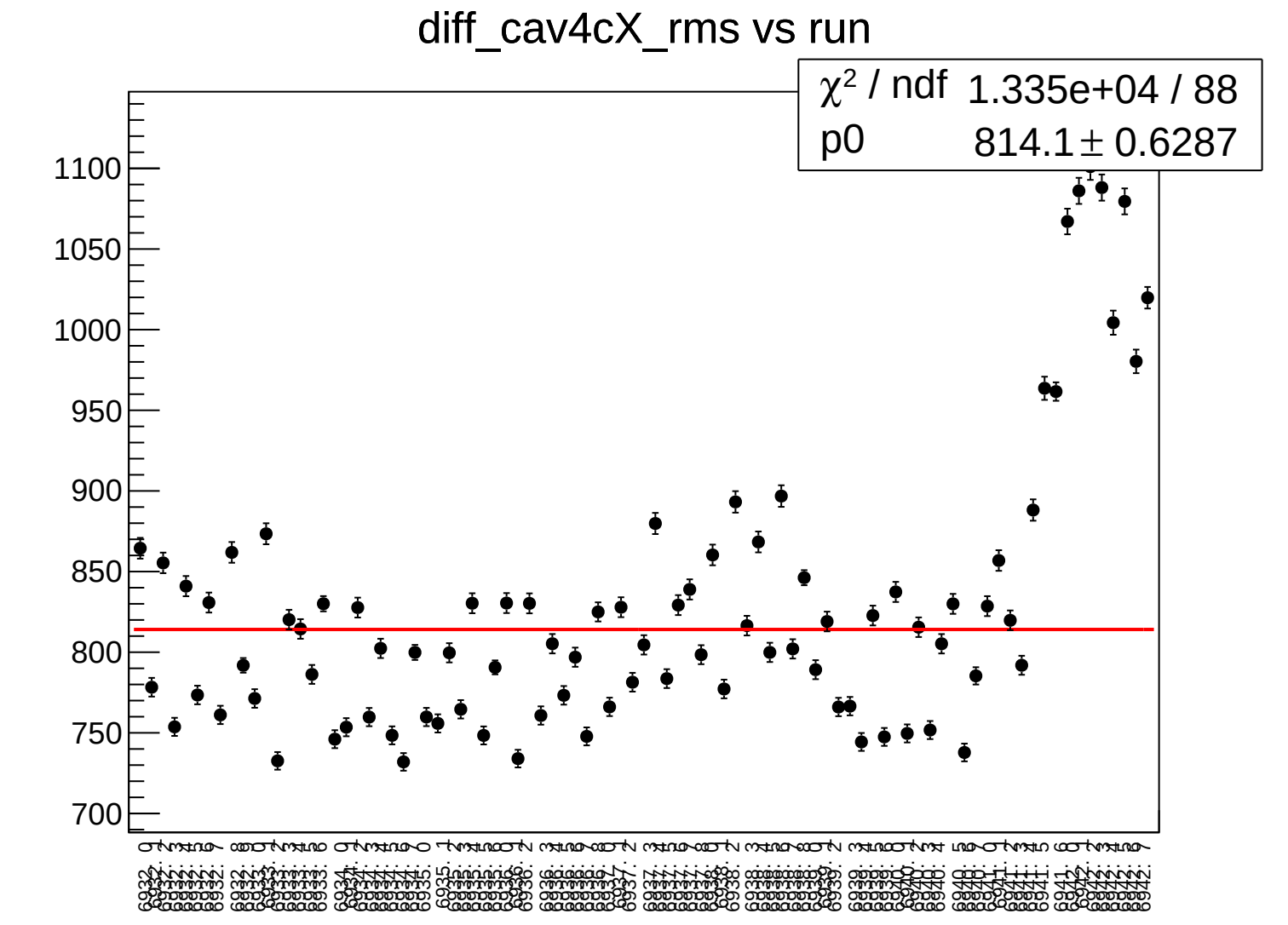

diff_cav4bY_mean vs run
χ² / ndf 85.18 / 88
p0 −6.213 ± 4.564
150
100
50
0
−50
−100
−150
−200
pull
Entries 89
Mean 415.2
Std Dev 372.2
2
1
0
−1
−2
−3

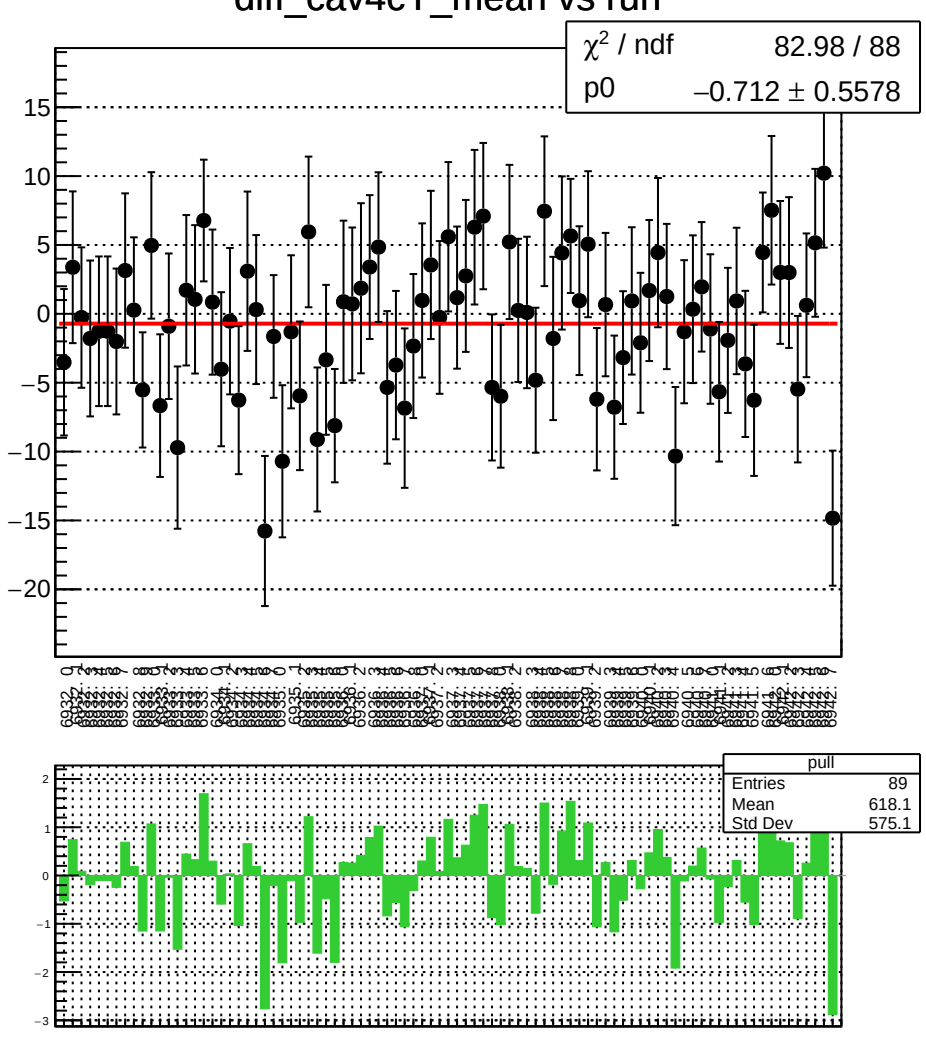

pull1D
Entries 89
Mean 0.00666
Std Dev 0.9783
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

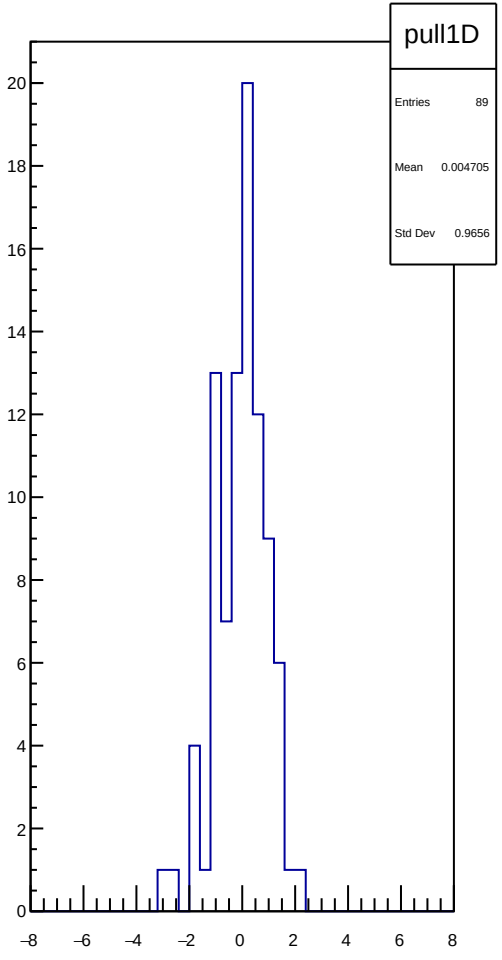

diff_cav4bY_rms vs run
χ² / ndf 2602 / 88
p0 4192 ± 3.227
4800
4600
4400
4200
4000
3800
3600

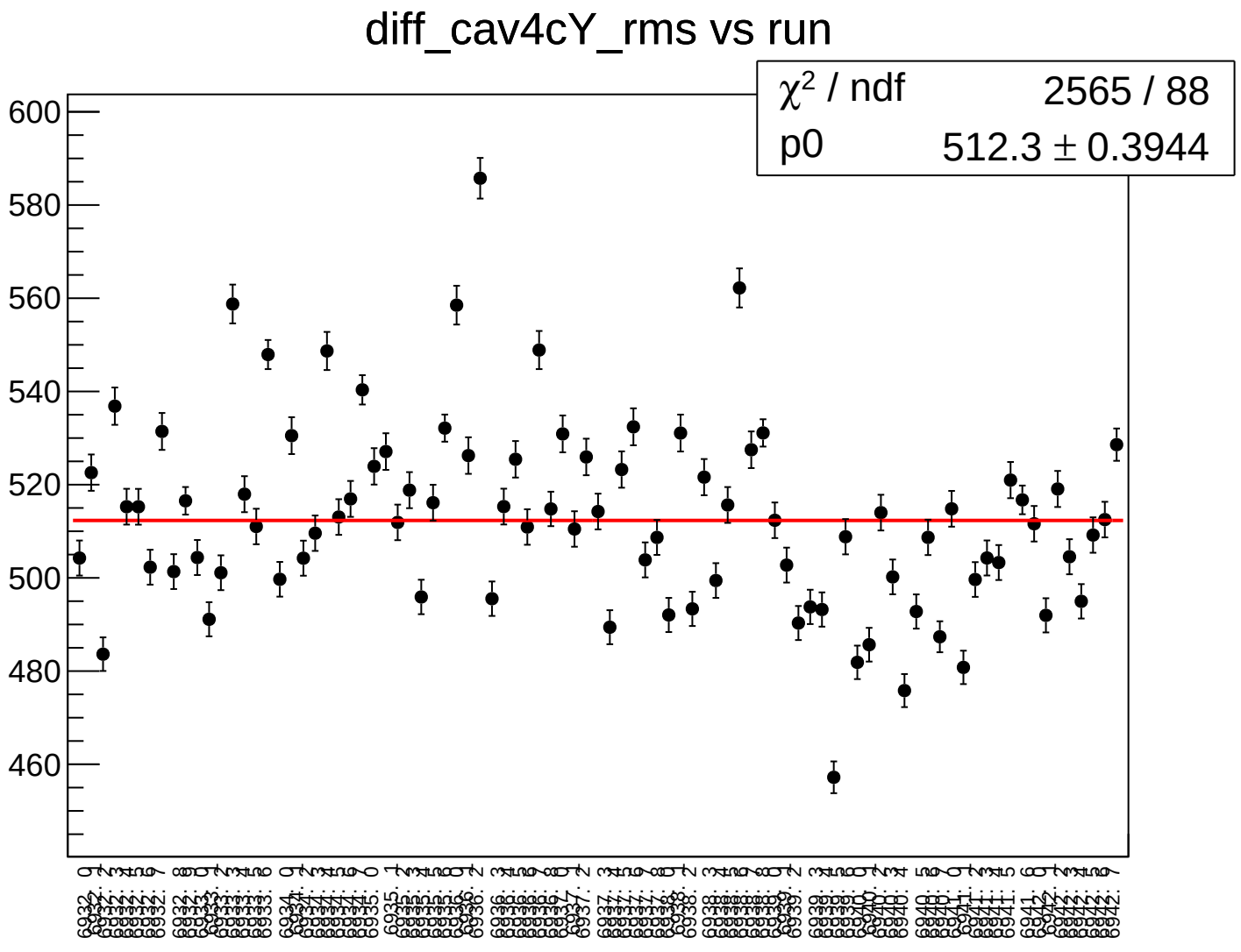

diff_cav4cX_mean vs run
χ² / ndf 79.78 / 88
p0 −0.105 ± 0.8892
pull
Entries 89
Mean −514.1
Std Dev 567.8

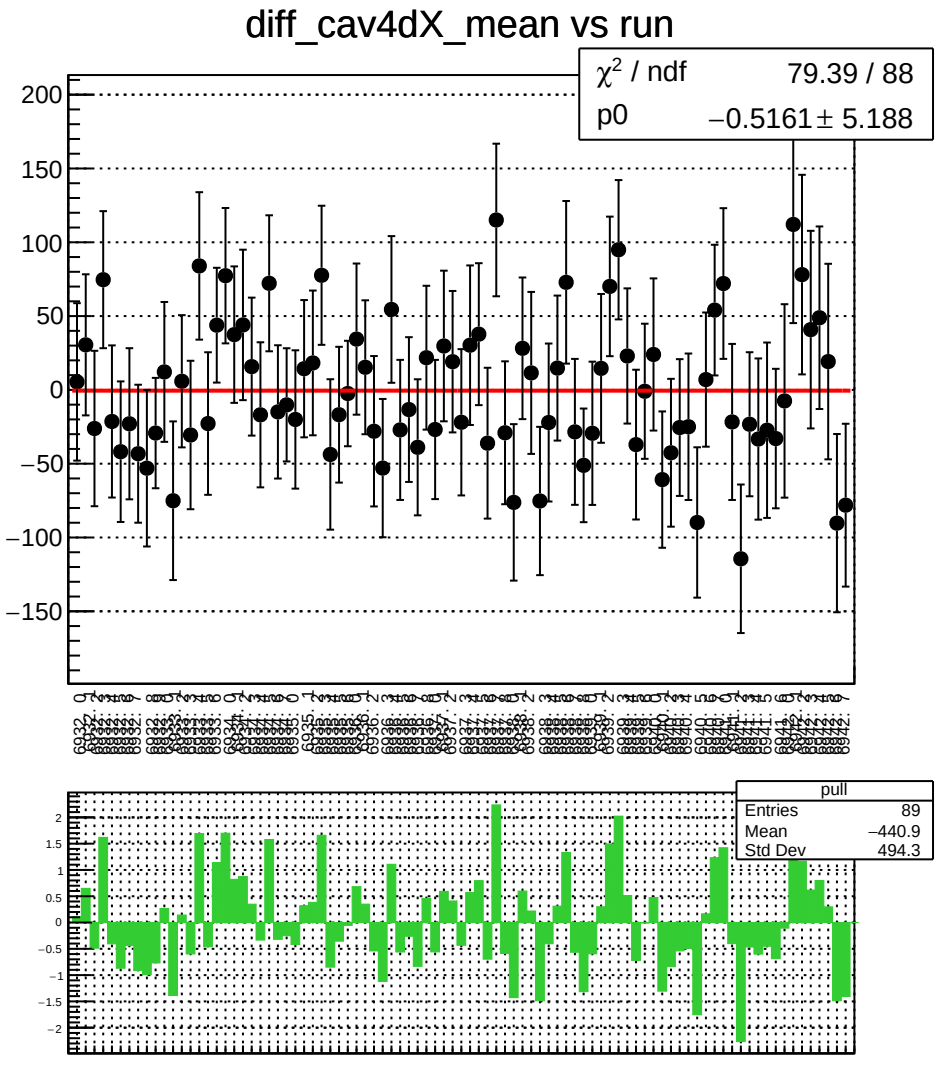

pull1D
Entries 89
Mean 0.003406
Std Dev 0.9468

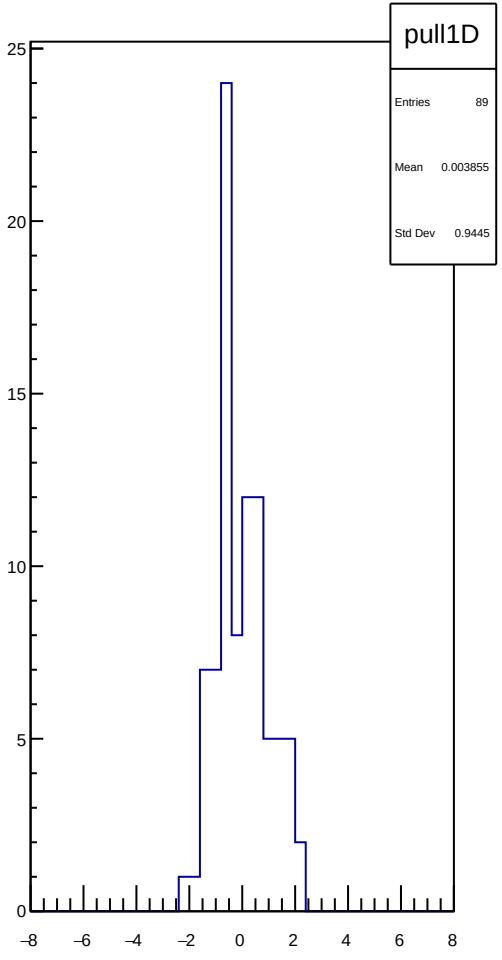

diff_cav4cX_rms vs run
χ² / ndf 1.335e+04 / 88
p0 814.1 ± 0.6287
1100
1050
1000
950
900
850
800
750
700

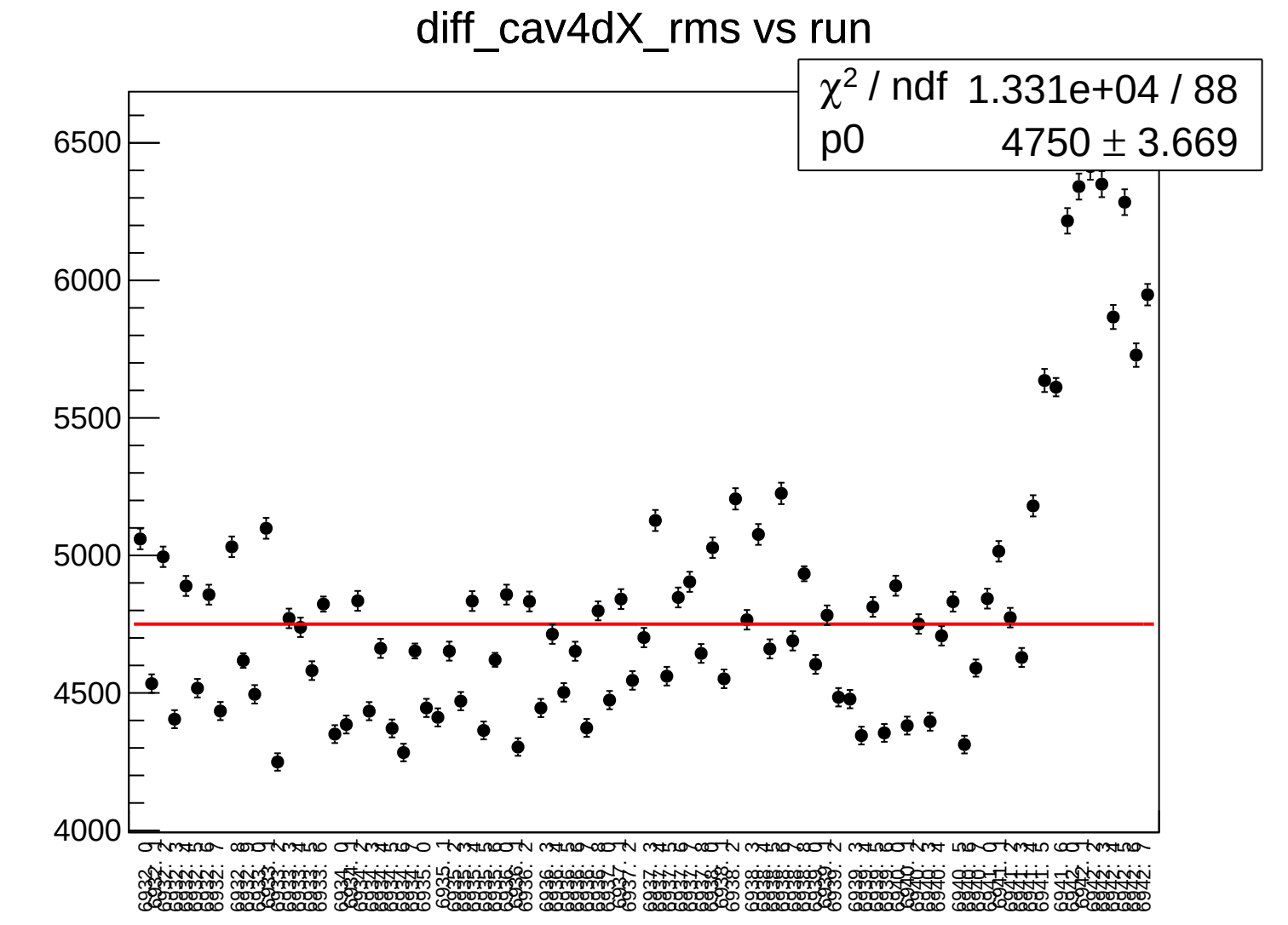

diff_cav4cY_mean vs run
χ² / ndf 82.98 / 88
p0 −0.712 ± 0.5578
pull
Entries 89
Mean 618.1
Std Dev 575.1

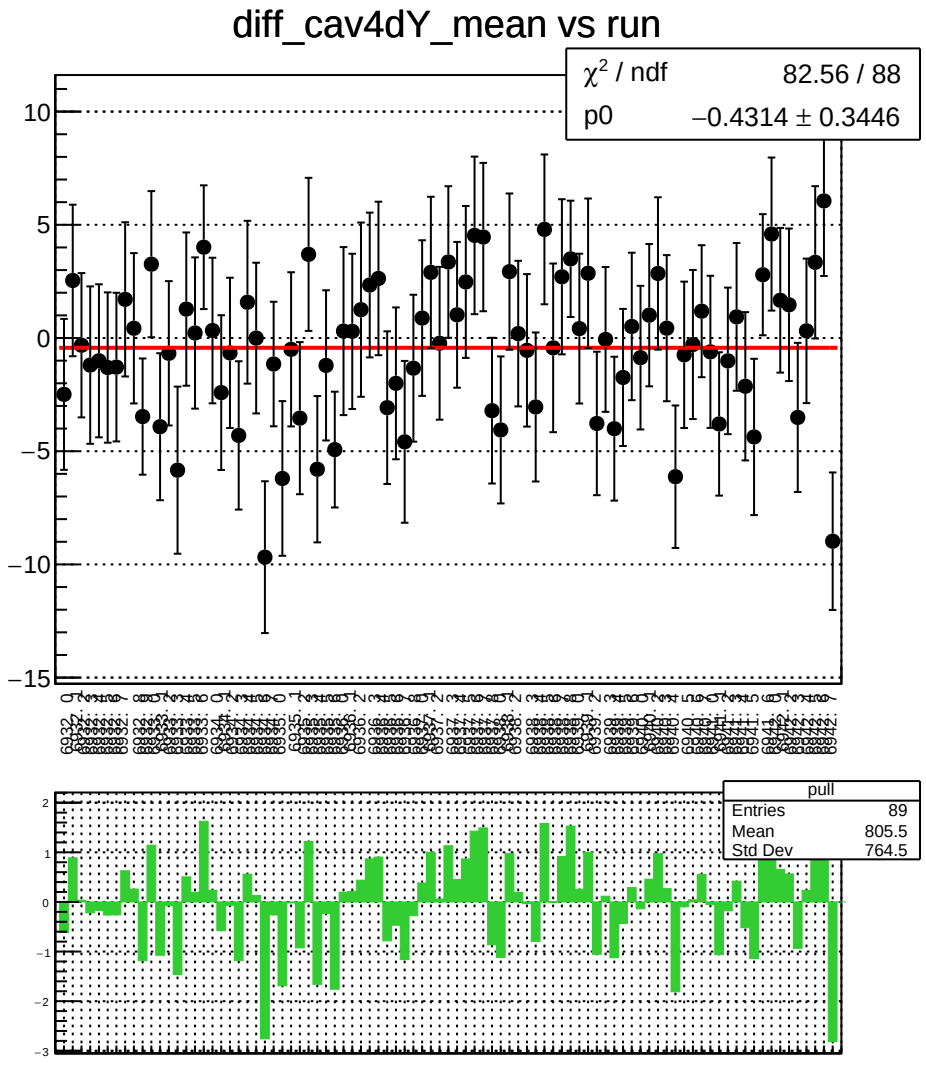

pull1D
Entries 89
Mean 0.004705
Std Dev 0.9656

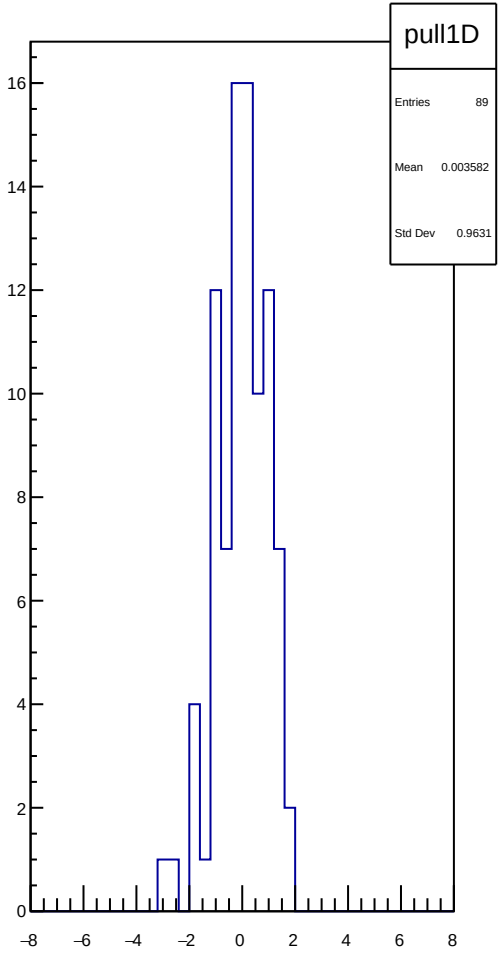

diff_cav4cY_rms vs run
χ² / ndf 2565 / 88
p0 512.3 ± 0.3944
600
580
560
540
520
500
480
460

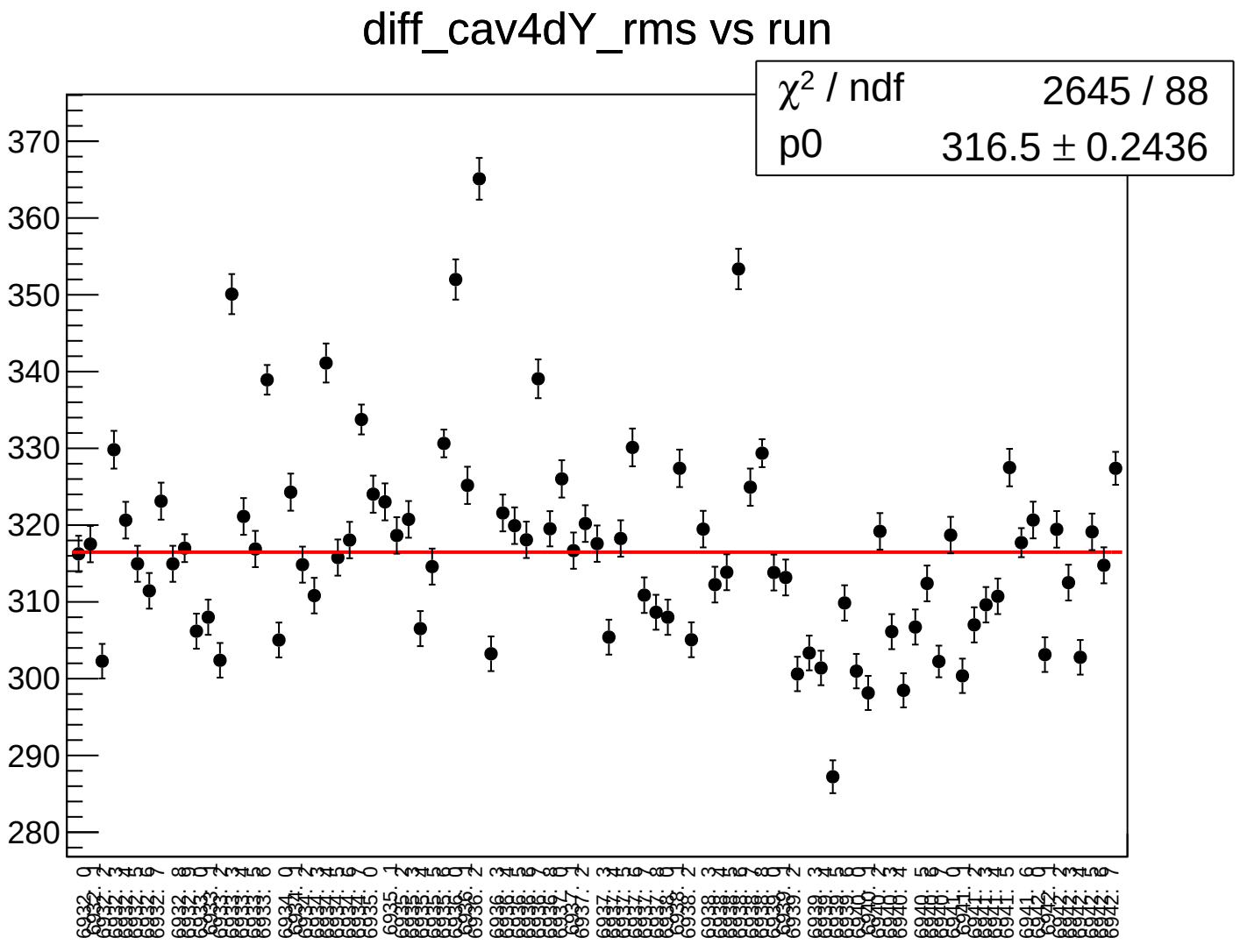

diff_cav4dX_mean vs run
χ² / ndf 79.39 / 88
p0 −0.5161 ± 5.188
pull
Entries 89
Mean −440.9
Std Dev 494.3

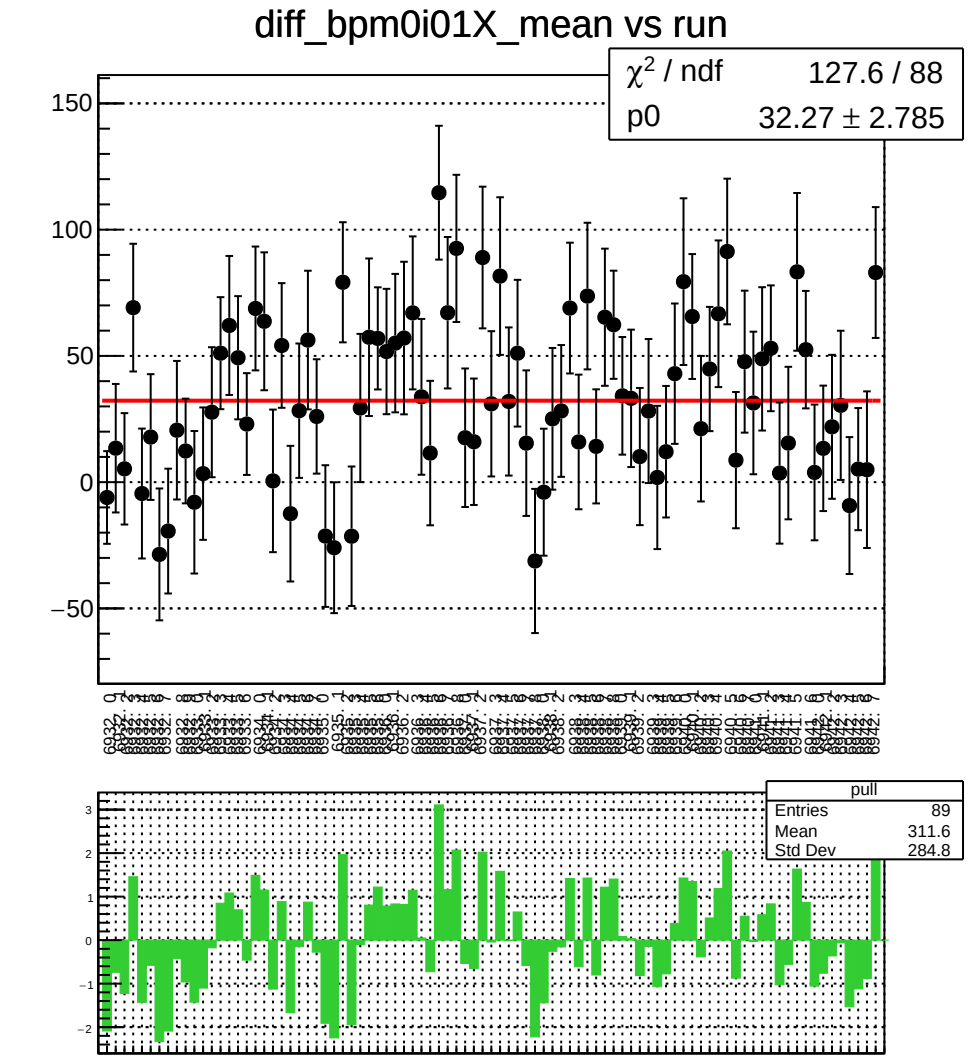

pull1D
Entries 89
Mean 0.003855
Std Dev 0.9445

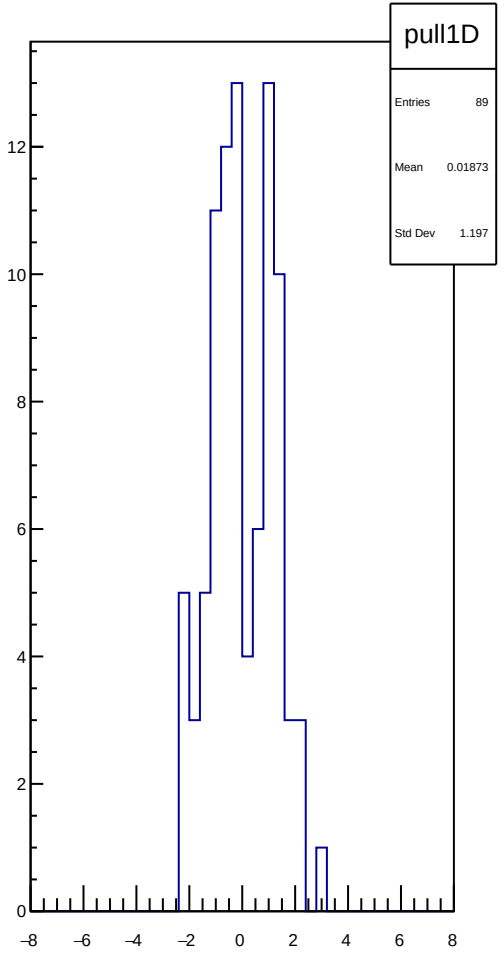

diff_cav4dX_rms vs run
χ² / ndf 1.331e+04 / 88
p0 4750 ± 3.669
6500
6000
5500
5000
4500
4000

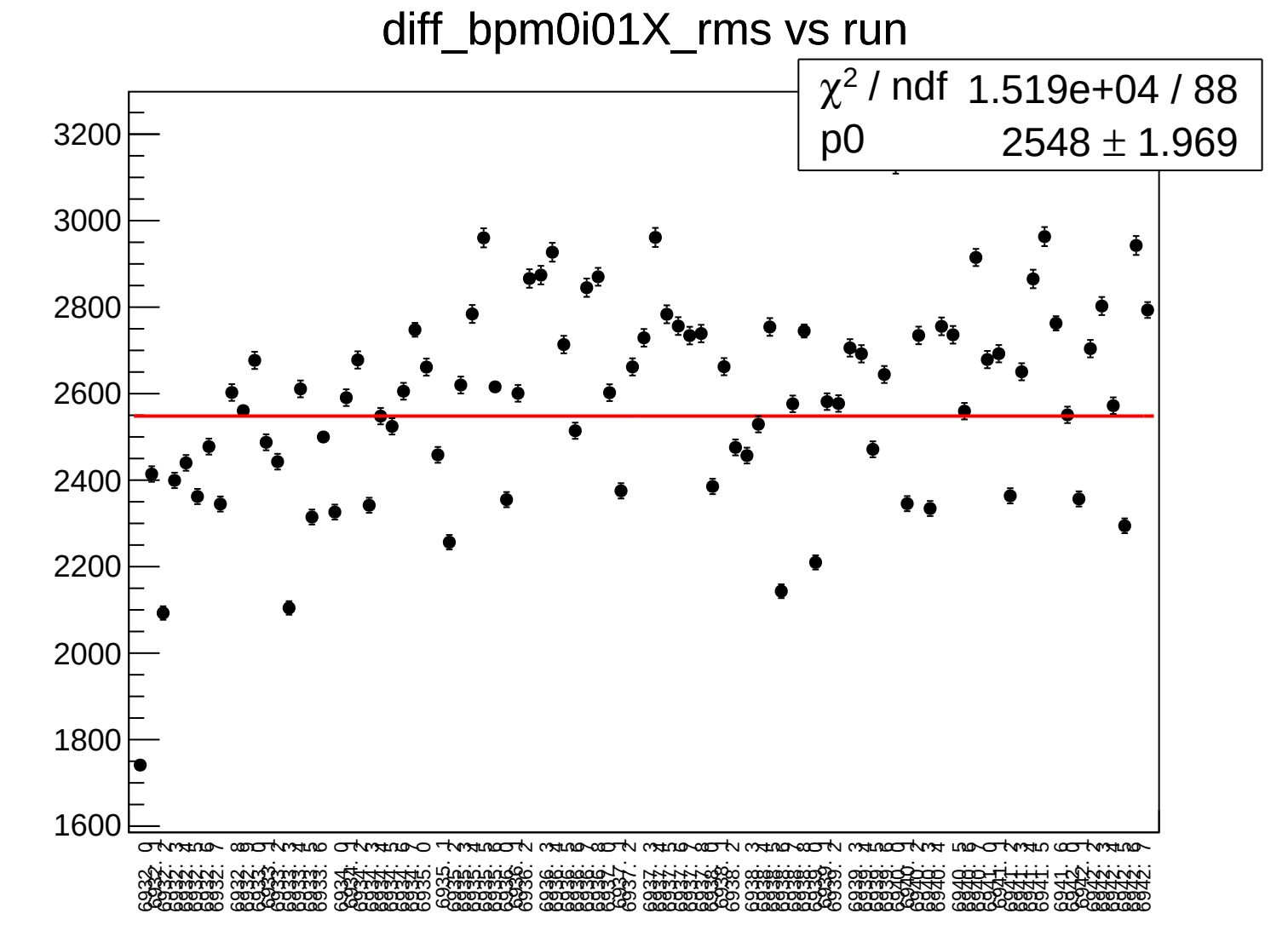

diff_cav4dY_mean vs run
χ² / ndf 82.56 / 88
p0 −0.4314 ± 0.3446
pull
Entries 89
Mean 805.5
Std Dev 764.5

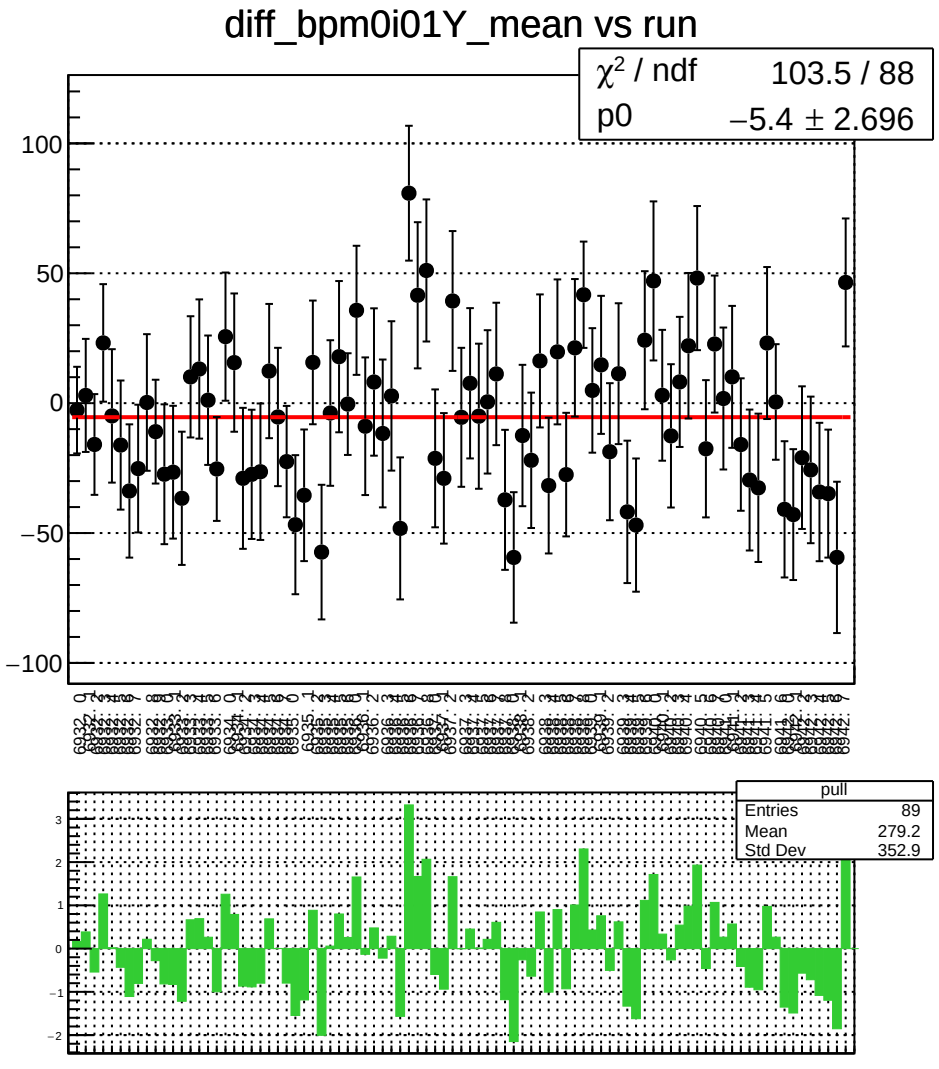

pull1D
Entries 89
Mean 0.003582
Std Dev 0.9631

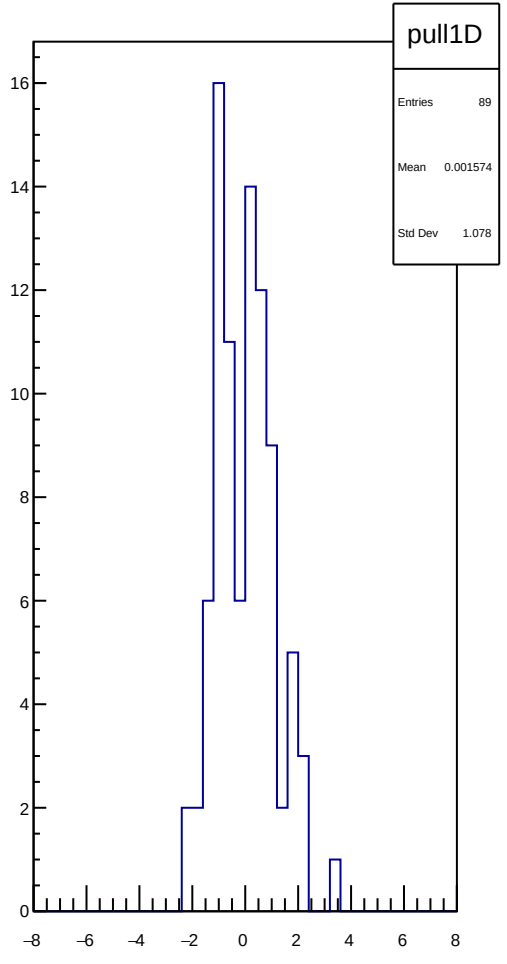

diff_cav4dY_rms vs run
χ² / ndf 2645 / 88
p0 316.5 ± 0.2436
370
360
350
340
330
320
310
300
290
280

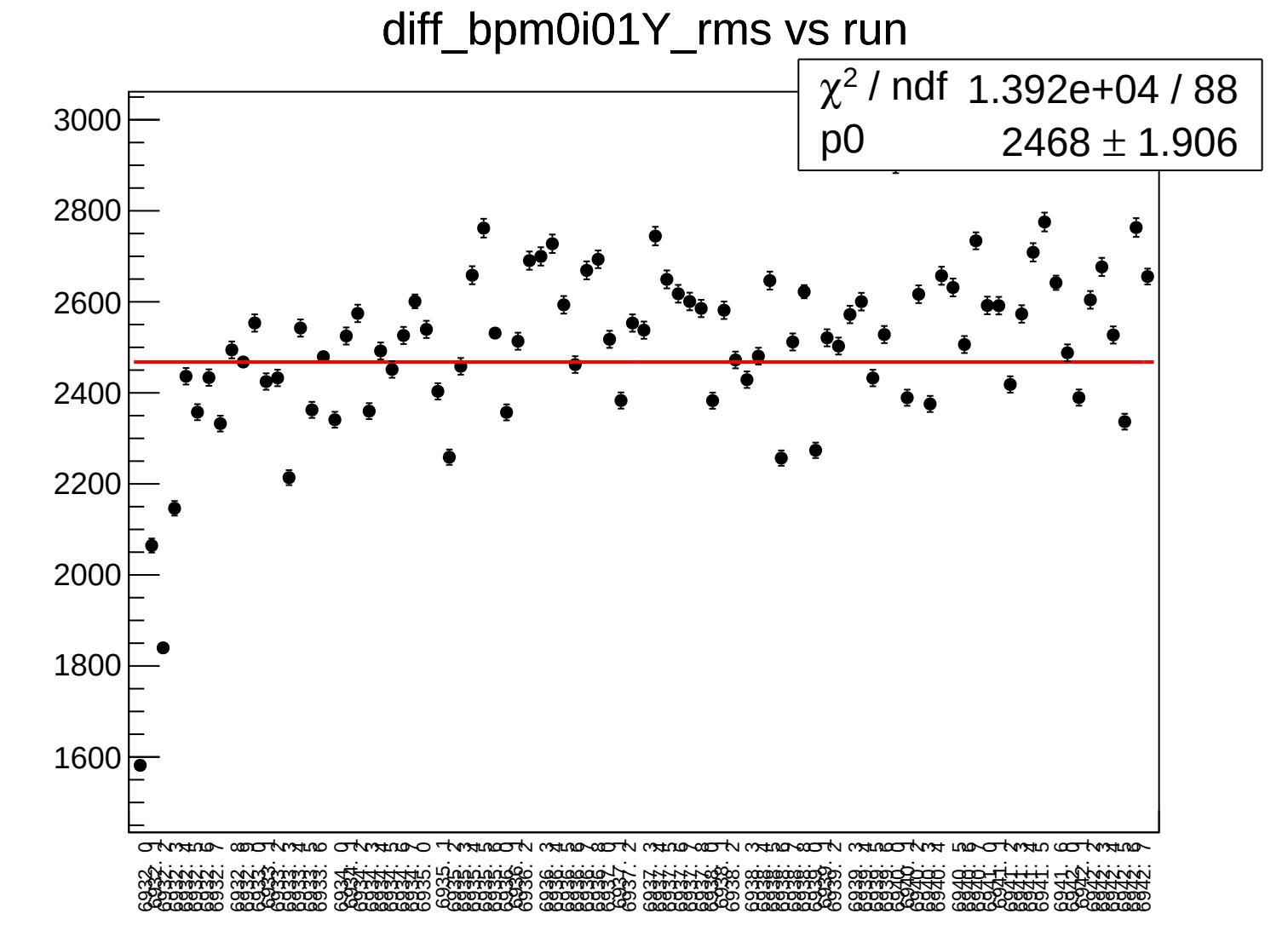

diff_bpm0i01X_mean vs run
χ² / ndf 127.6 / 88
p0 32.27 ± 2.785
150
100
50
0
−50
pull
Entries 89
Mean 311.6
Std Dev 284.8
3
2
1
0
−1
−2

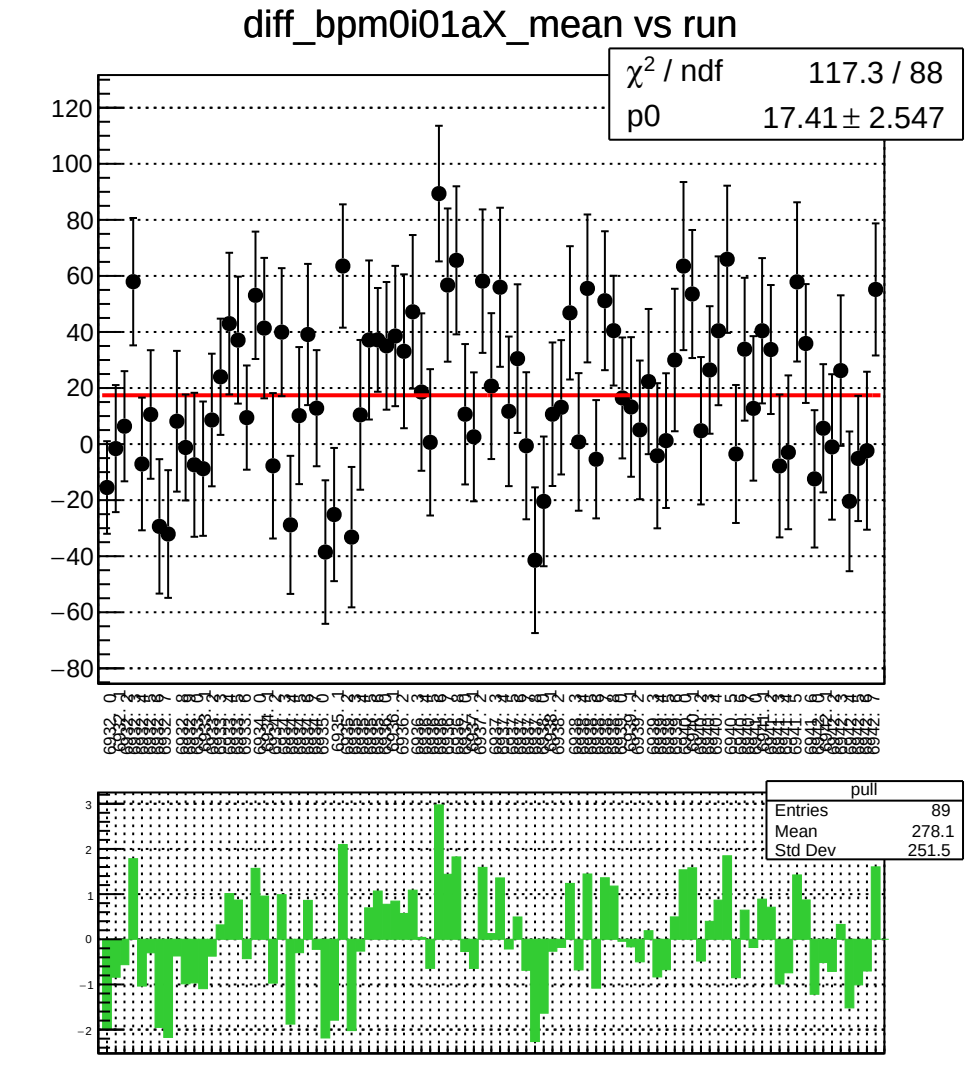

pull1D
Entries 89
Mean 0.01873
Std Dev 1.197
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

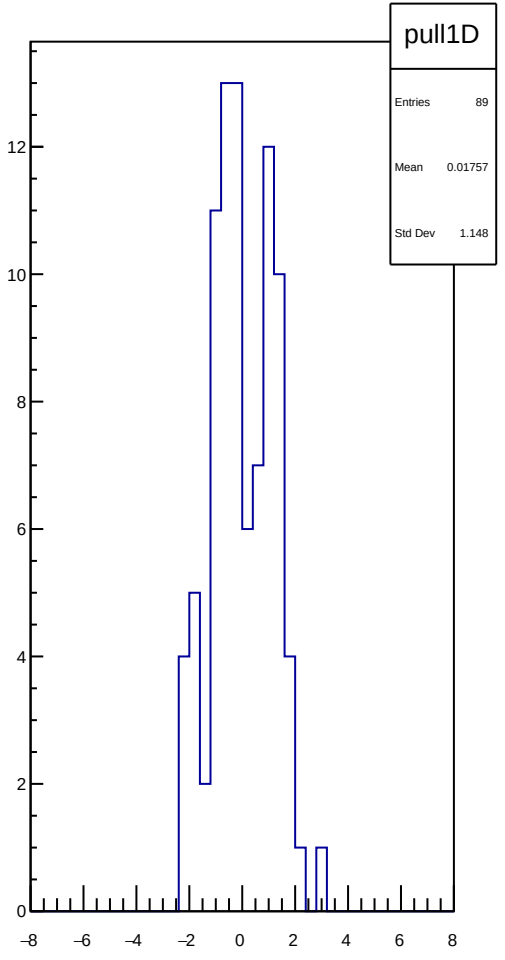

diff_bpm0i01X_rms vs run
χ² / ndf 1.519e+04 / 88
p0 2548 ± 1.969
3200
3000
2800
2600
2400
2200
2000
1800
1600

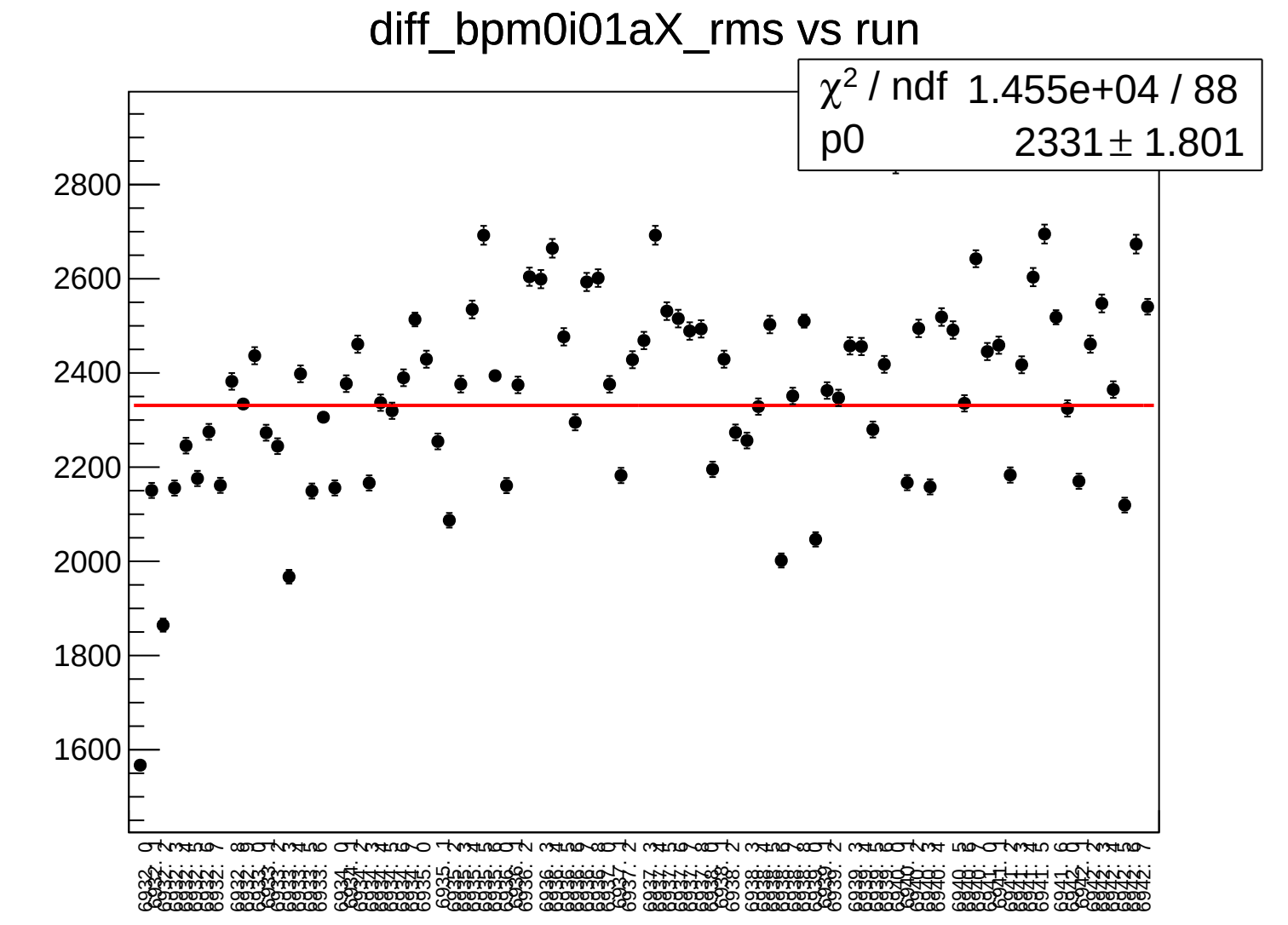

diff_bpm0i01Y_mean vs run
χ² / ndf 103.5 / 88
p0 −5.4 ± 2.696
100
50
0
−50
−100
pull
Entries 89
Mean 279.2
Std Dev 352.9
3
2
1
0
−1
−2

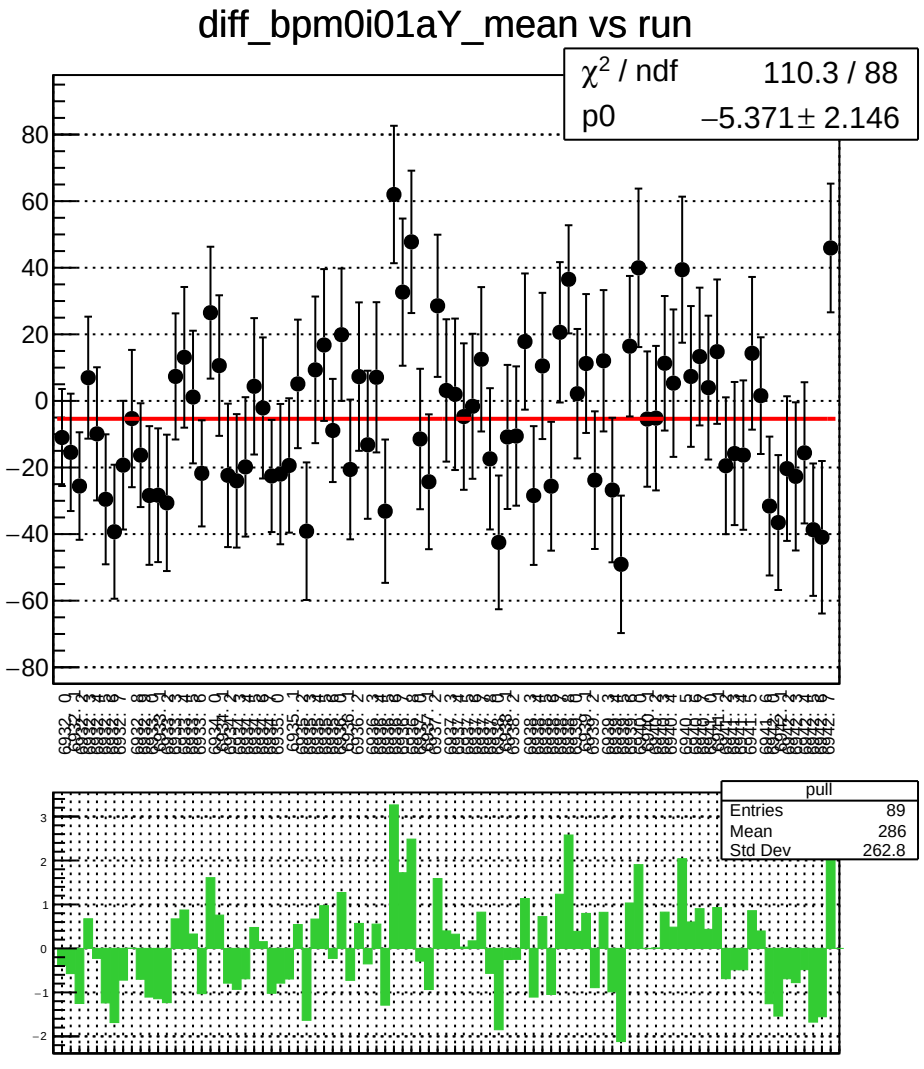

pull1D
Entries 89
Mean 0.001574
Std Dev 1.078
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

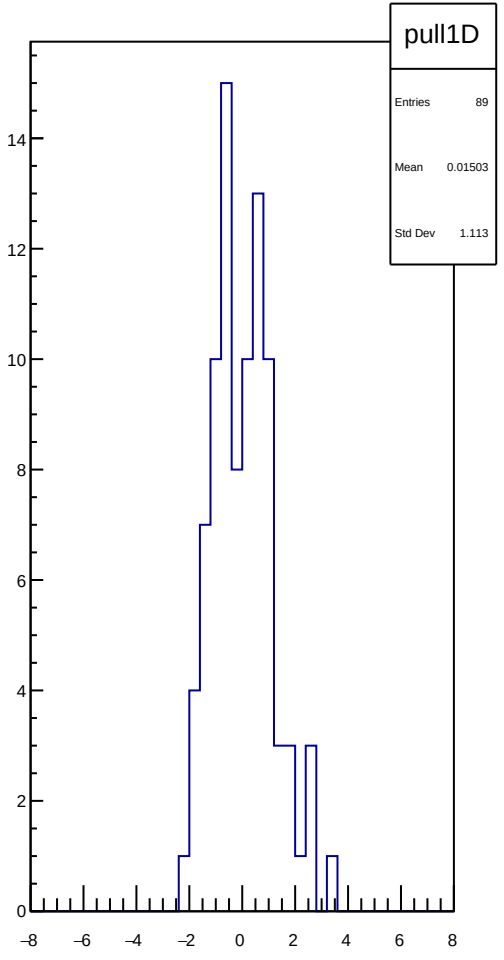

diff_bpm0i01Y_rms vs run
χ² / ndf 1.392e+04 / 88
p0 2468 ± 1.906
3000
2800
2600
2400
2200
2000
1800
1600

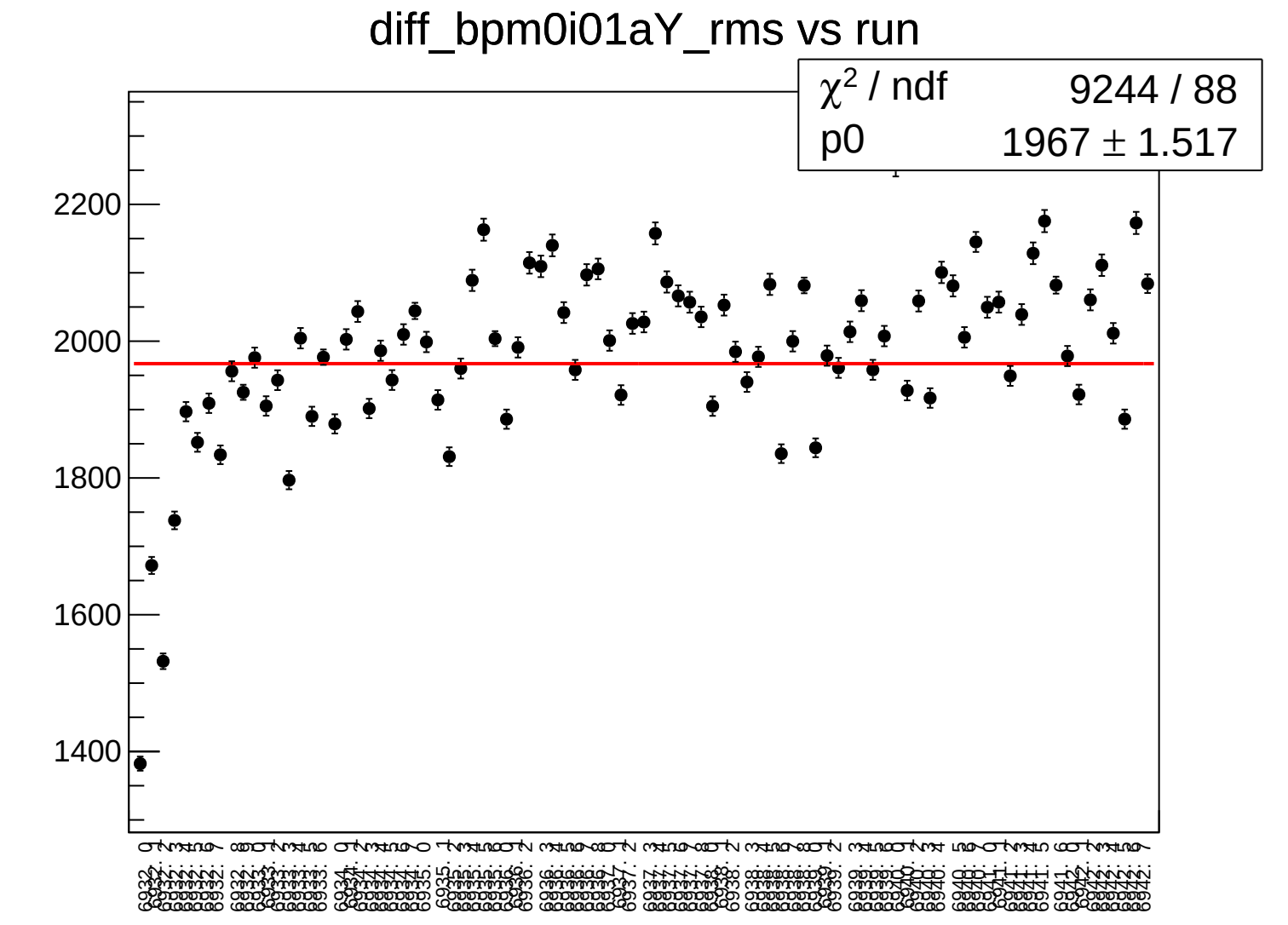

diff_bpm0i01aX_mean vs run
χ² / ndf 117.3 / 88
p0 17.41 ± 2.547
pull
Entries 89
Mean 278.1
Std Dev 251.5

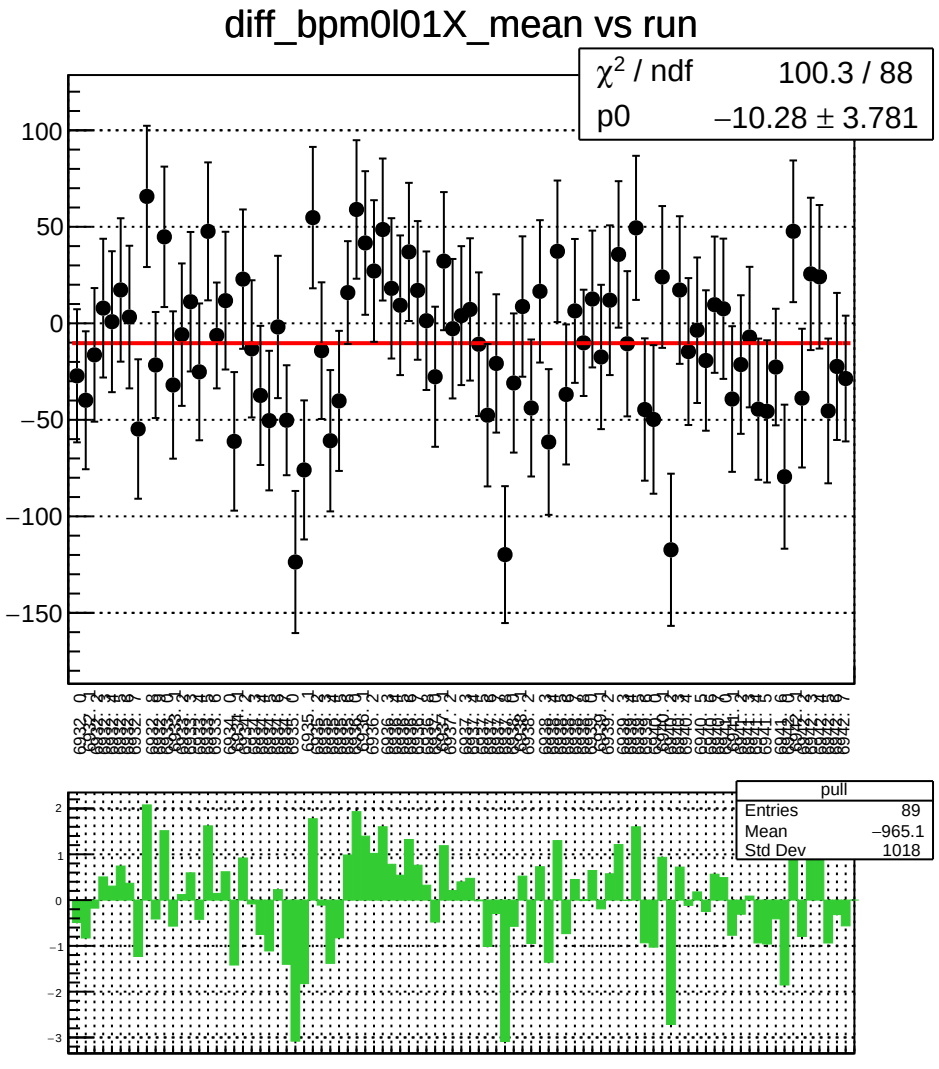

pull1D
Entries 89
Mean 0.01757
Std Dev 1.148

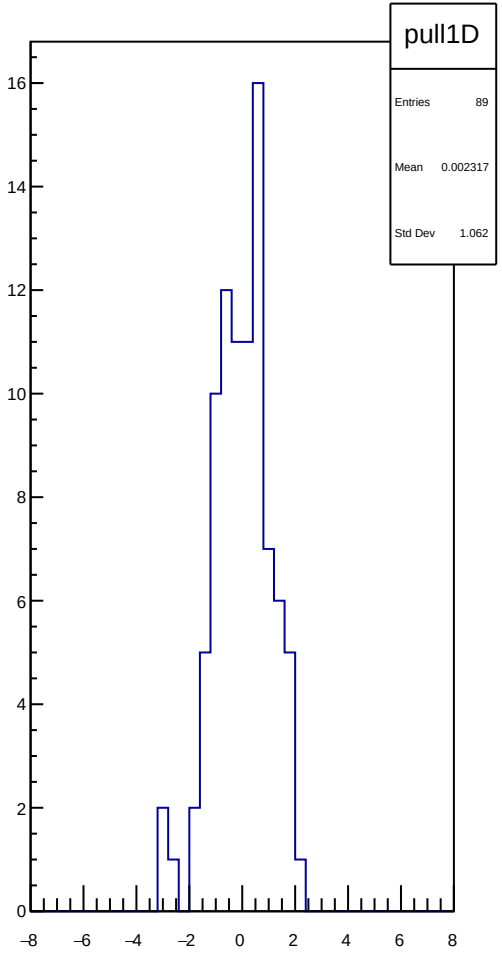

diff_bpm0i01aX_rms vs run
χ² / ndf 1.455e+04 / 88
p0 2331 ± 1.801
2800
2600
2400
2200
2000
1800
1600

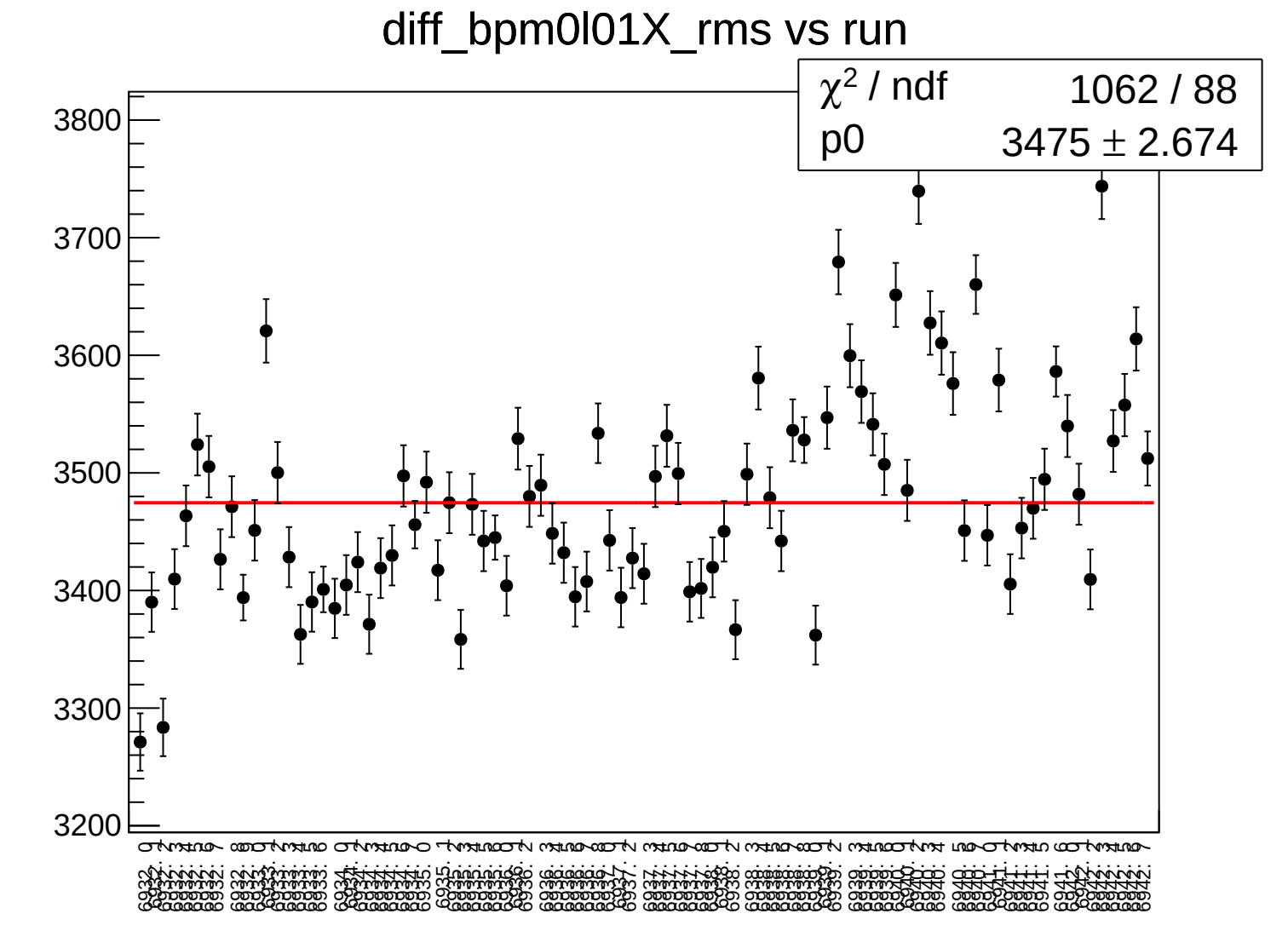

diff_bpm0i01aY_mean vs run
χ² / ndf 110.3 / 88
p0 −5.371 ± 2.146
pull
Entries 89
Mean 286
Std Dev 262.8

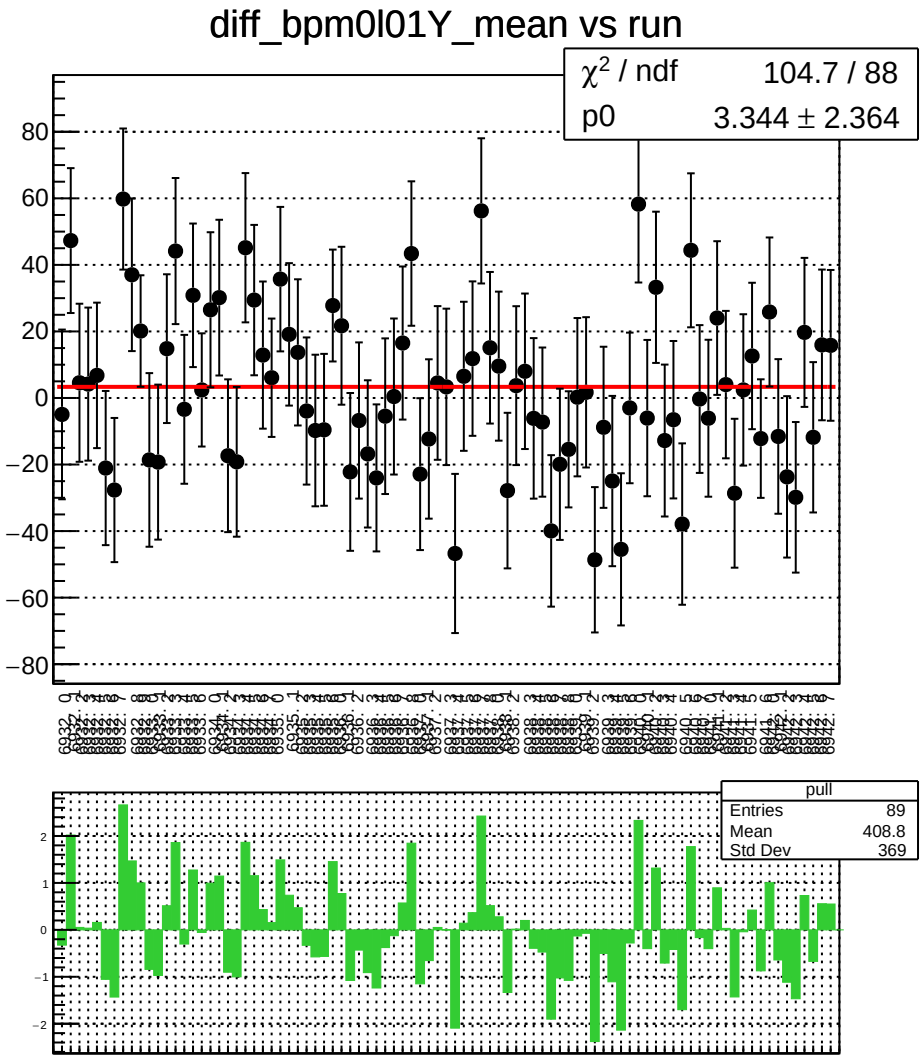

pull1D
Entries 89
Mean 0.01503
Std Dev 1.113

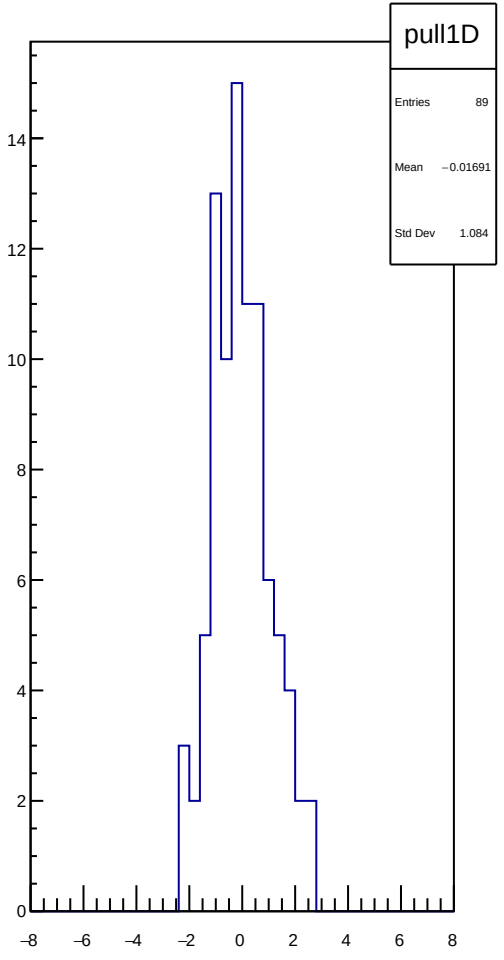

diff_bpm0i01aY_rms vs run
χ² / ndf 9244 / 88
p0 1967 ± 1.517
2200
2000
1800
1600
1400

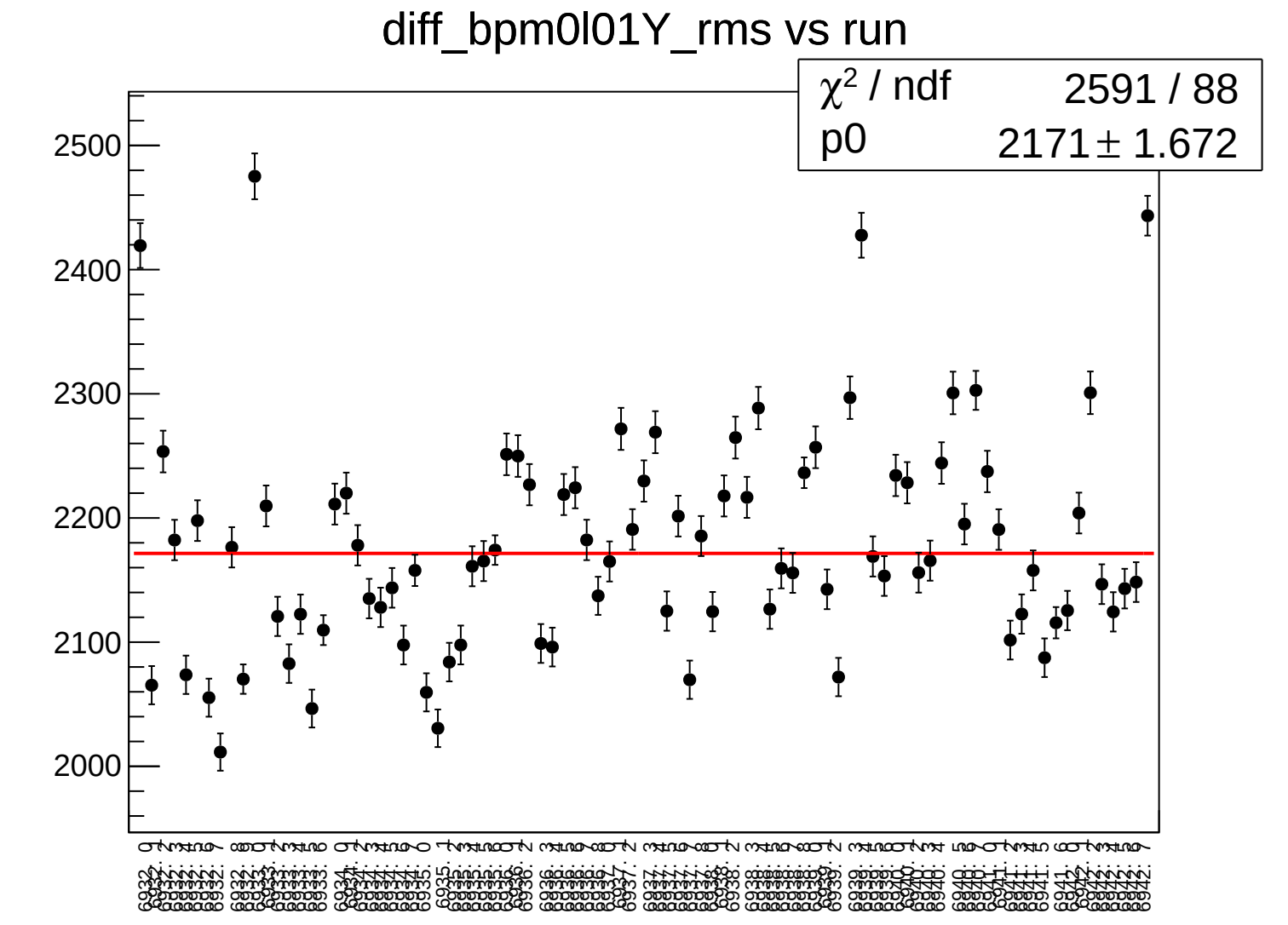

diff_bpm0l01X_mean vs run
χ² / ndf 100.3 / 88
p0 −10.28 ± 3.781
pull
Entries 89
Mean −965.1
Std Dev 1018

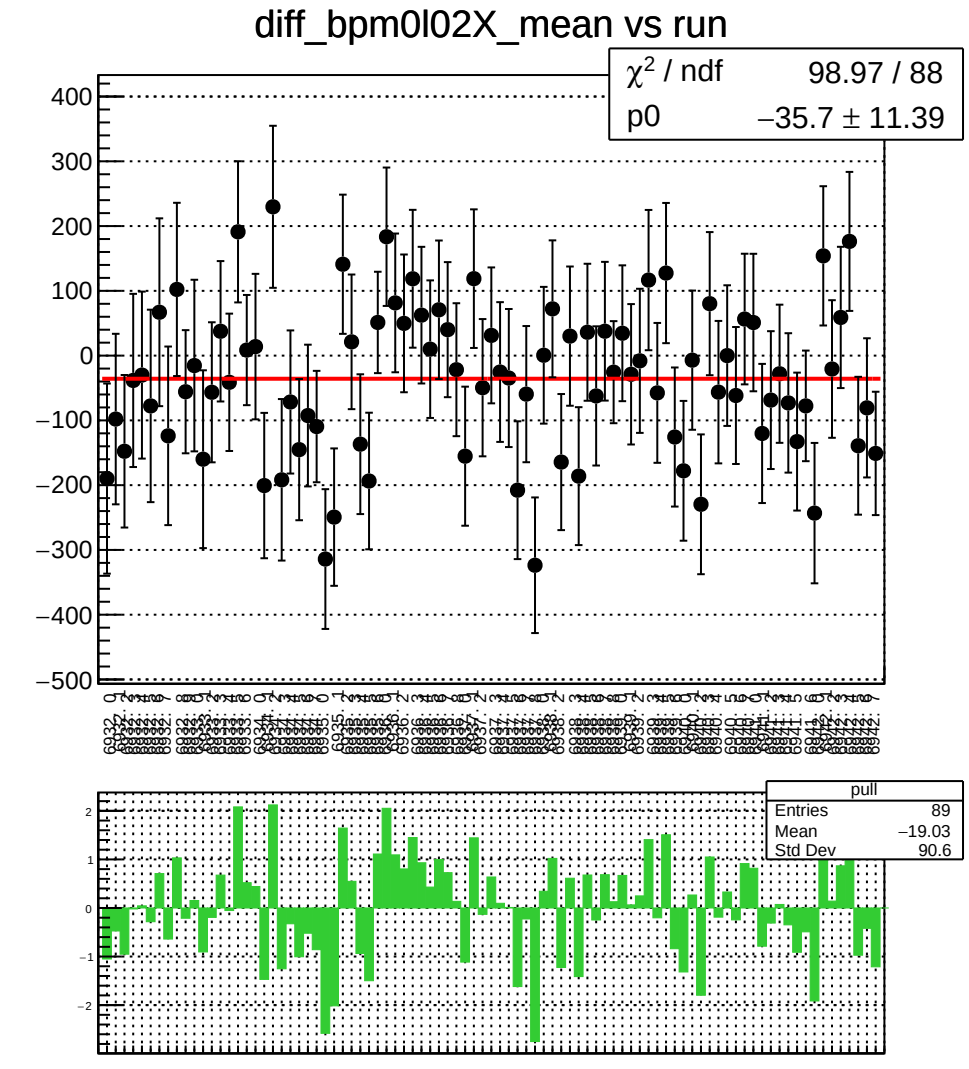

pull1D
Entries 89
Mean 0.002317
Std Dev 1.062

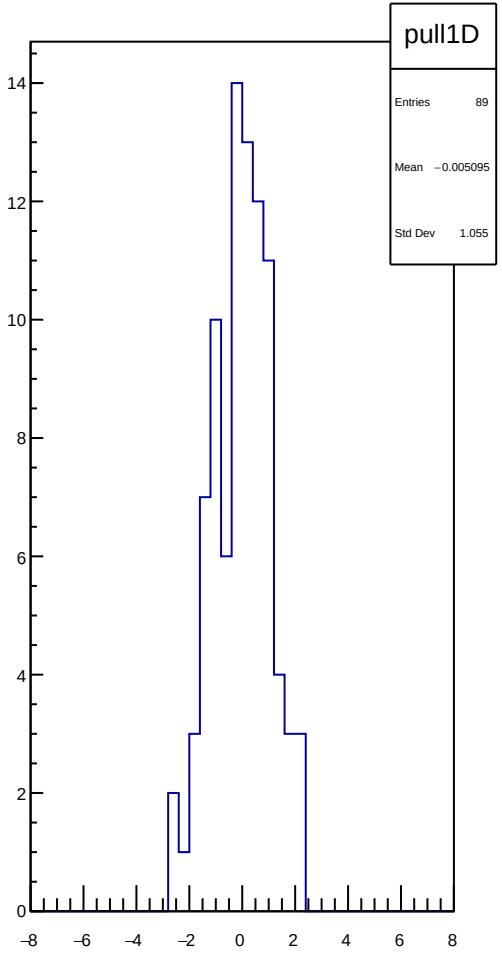

diff_bpm0l01X_rms vs run
χ² / ndf 1062 / 88
p0 3475 ± 2.674
3800
3700
3600
3500
3400
3300
3200

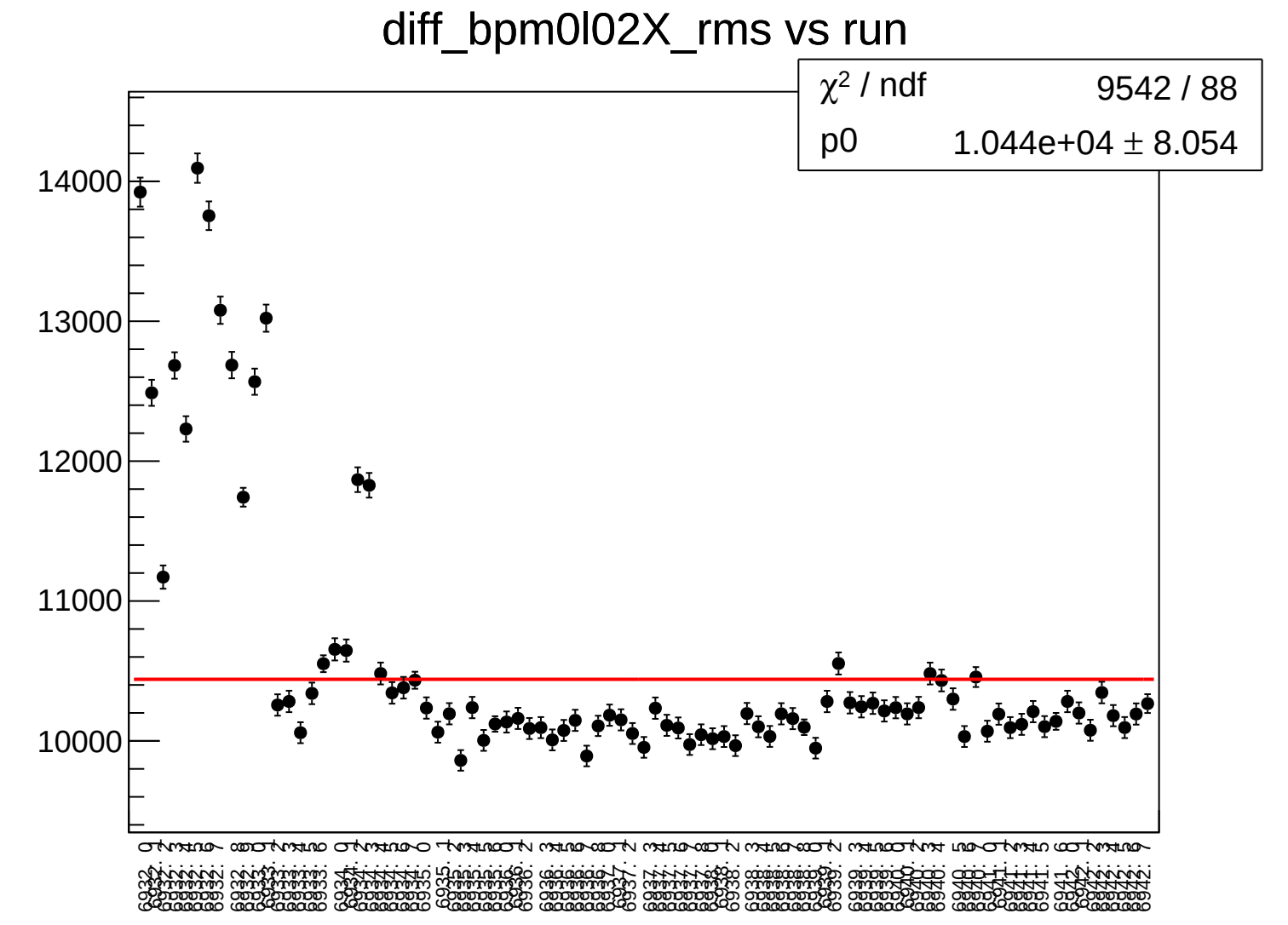

diff_bpm0l01Y_mean vs run
χ² / ndf 104.7 / 88
p0 3.344 ± 2.364
pull
Entries 89
Mean 408.8
Std Dev 369

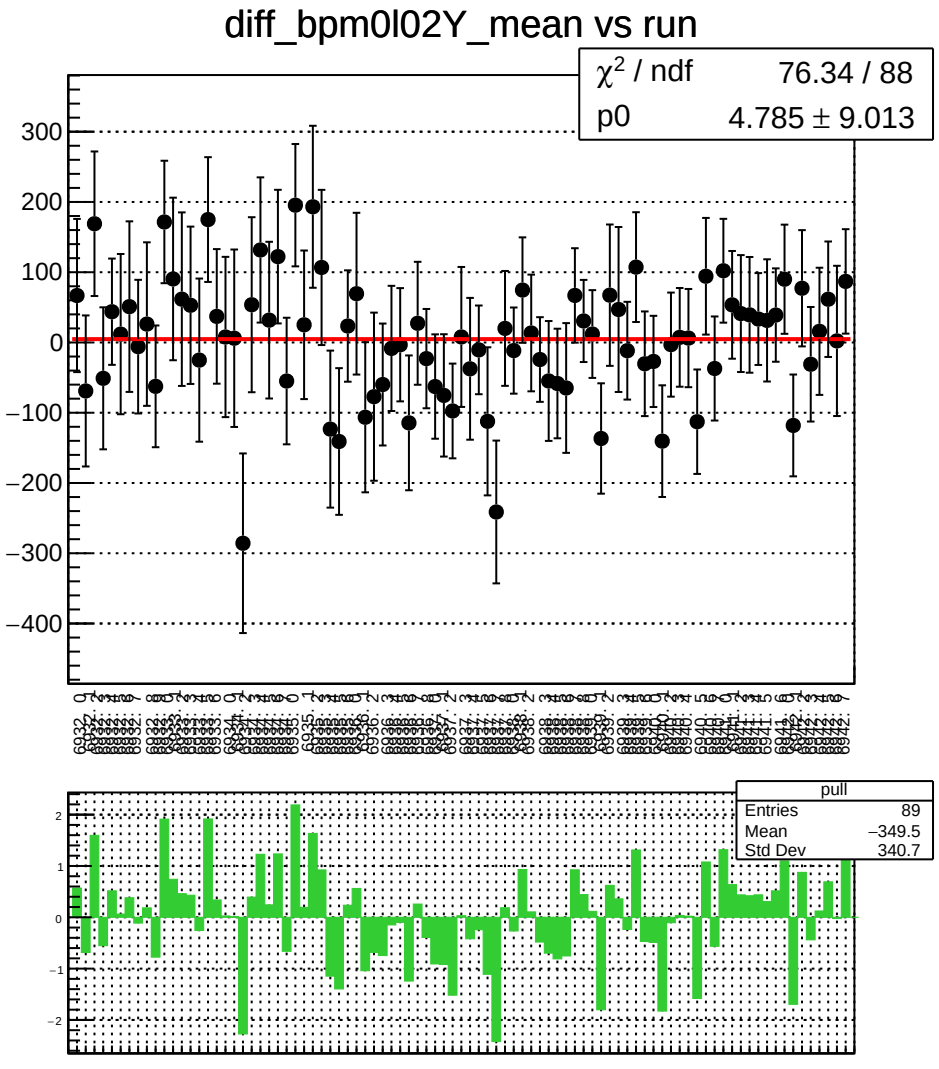

pull1D
Entries 89
Mean −0.01691
Std Dev 1.084

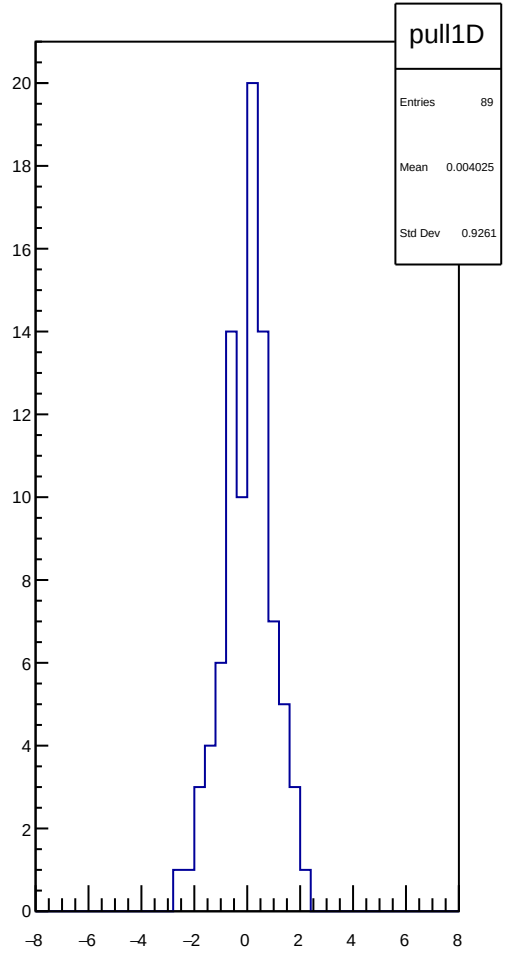

diff_bpm0l01Y_rms vs run
χ² / ndf 2591 / 88
p0 2171 ± 1.672
2500
2400
2300
2200
2100
2000

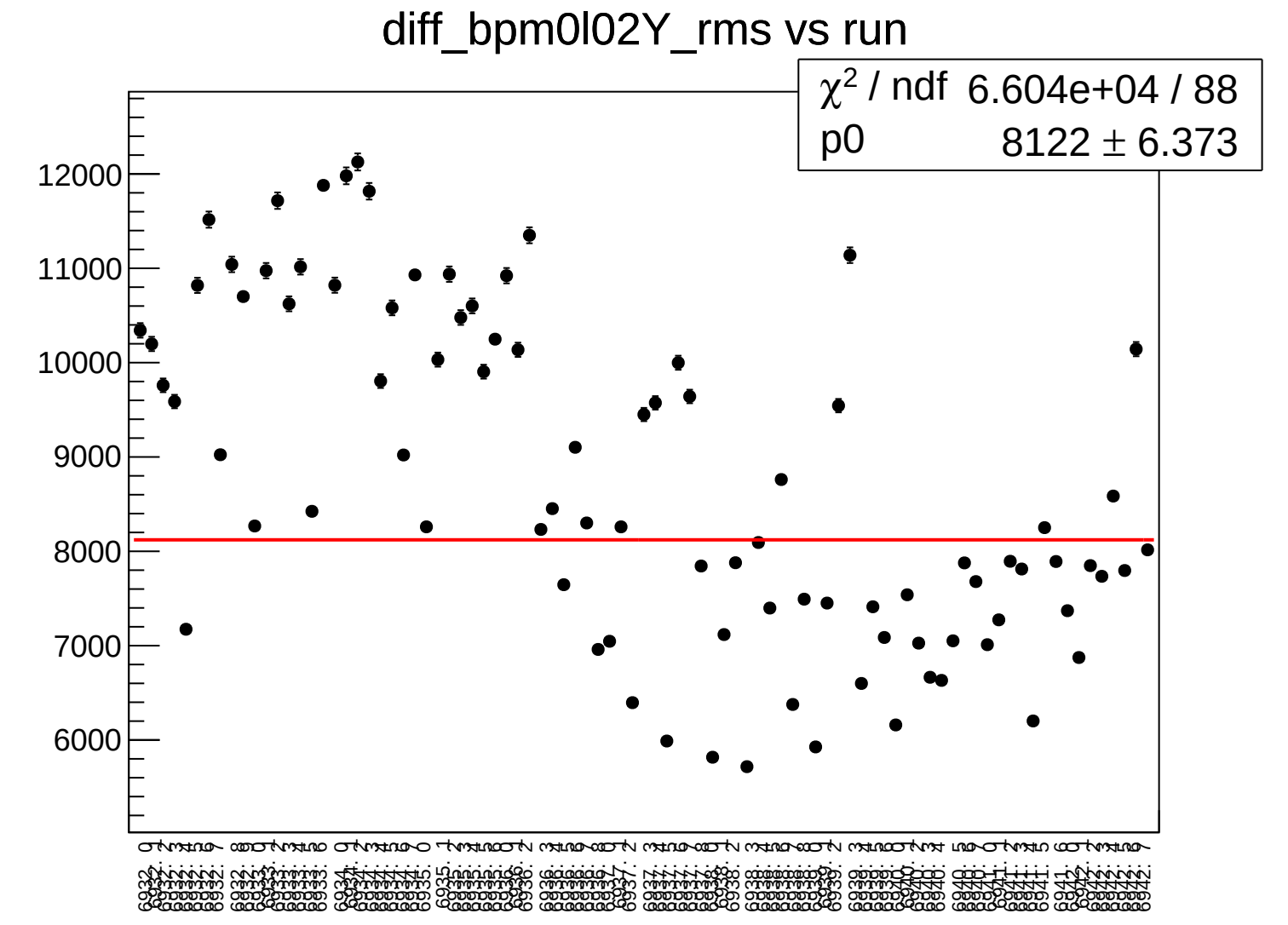

diff_bpm0l02X_mean vs run
χ² / ndf 98.97 / 88
p0 −35.7 ± 11.39
pull
Entries 89
Mean −19.03
Std Dev 90.6

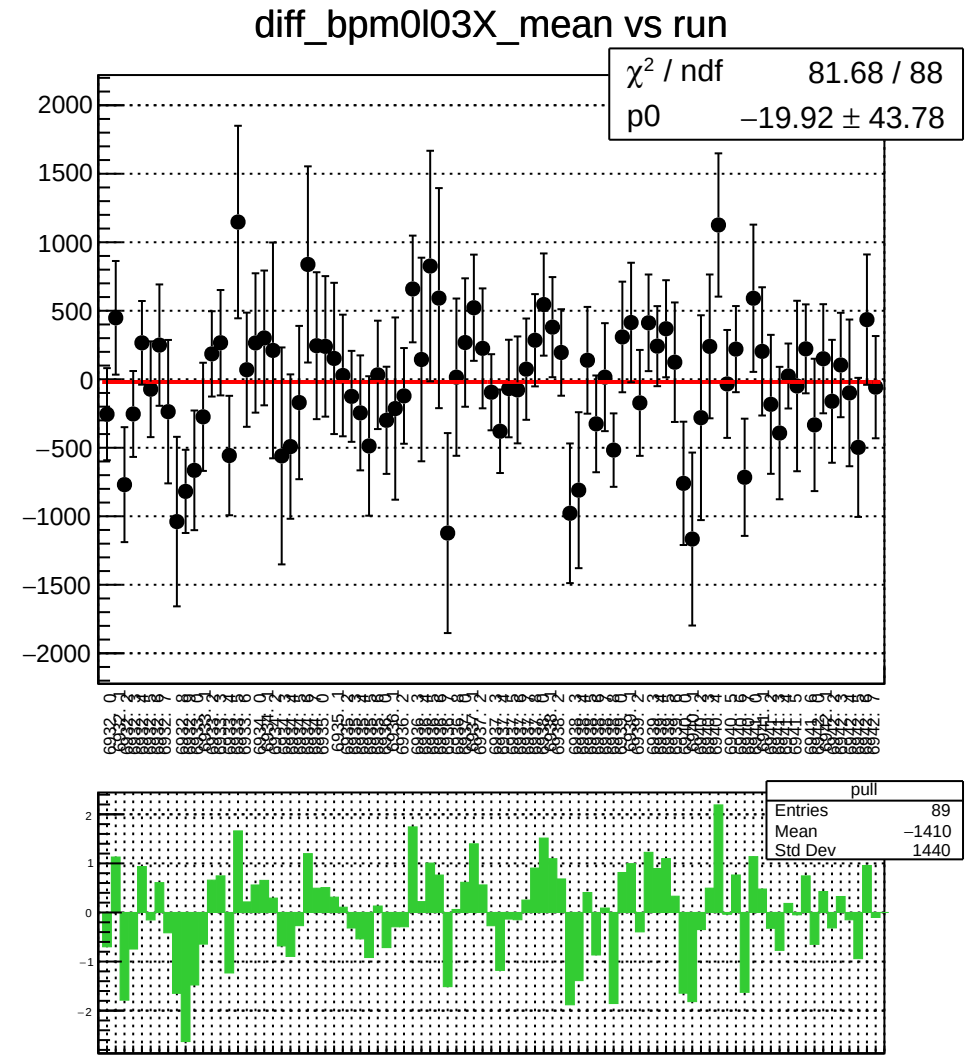

pull1D
Entries 89
Mean −0.005095
Std Dev 1.055

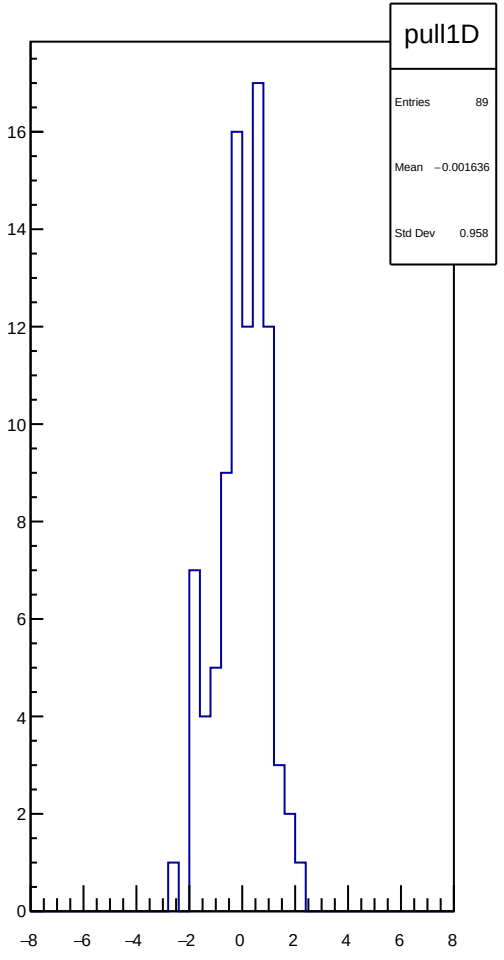

diff_bpm0l02X_rms vs run
χ² / ndf 9542 / 88
p0 1.044e+04 ± 8.054
14000
13000
12000
11000
10000

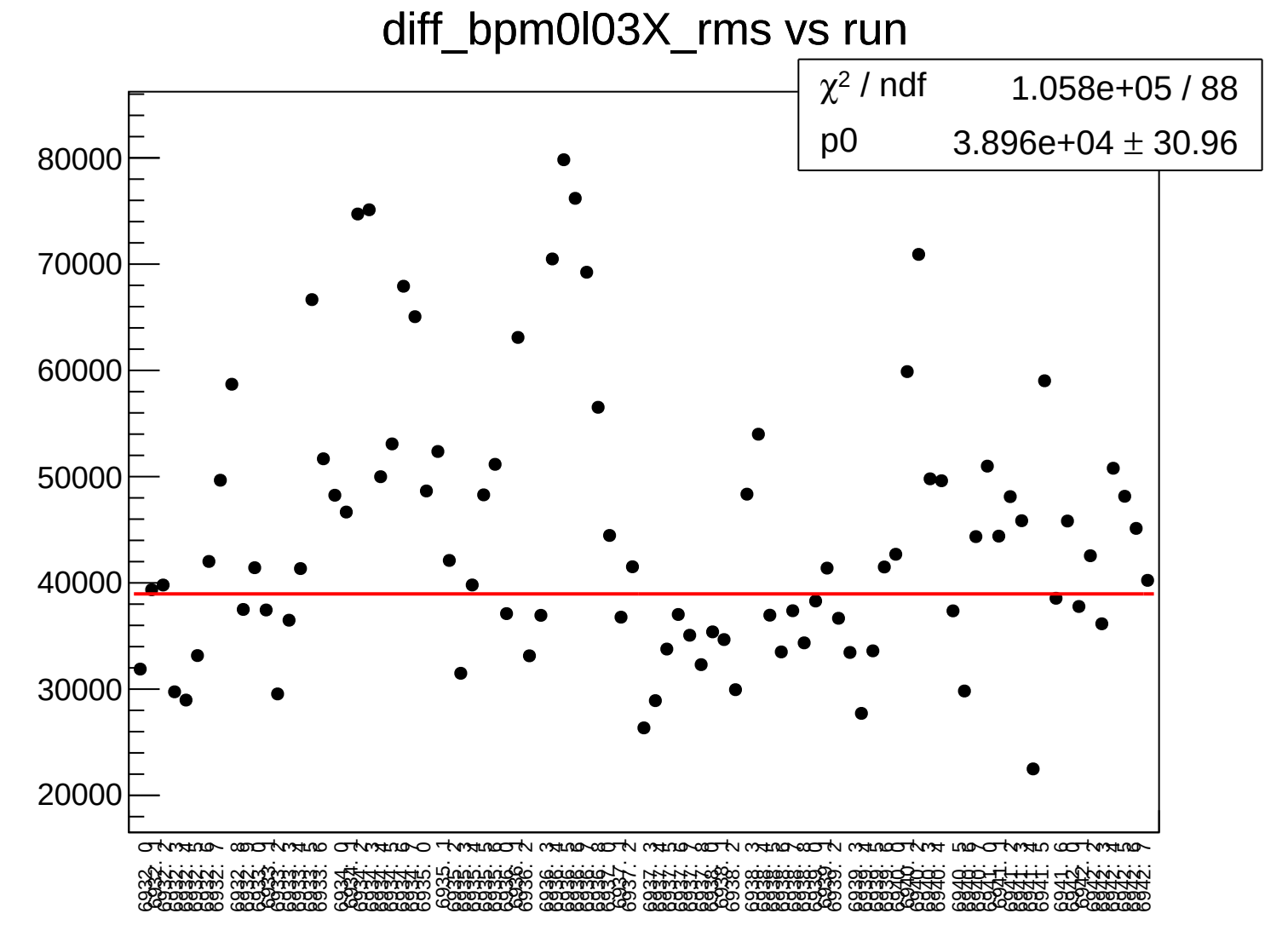

diff_bpm0l02Y_mean vs run
χ² / ndf 76.34 / 88
p0 4.785 ± 9.013
pull
Entries 89
Mean −349.5
Std Dev 340.7

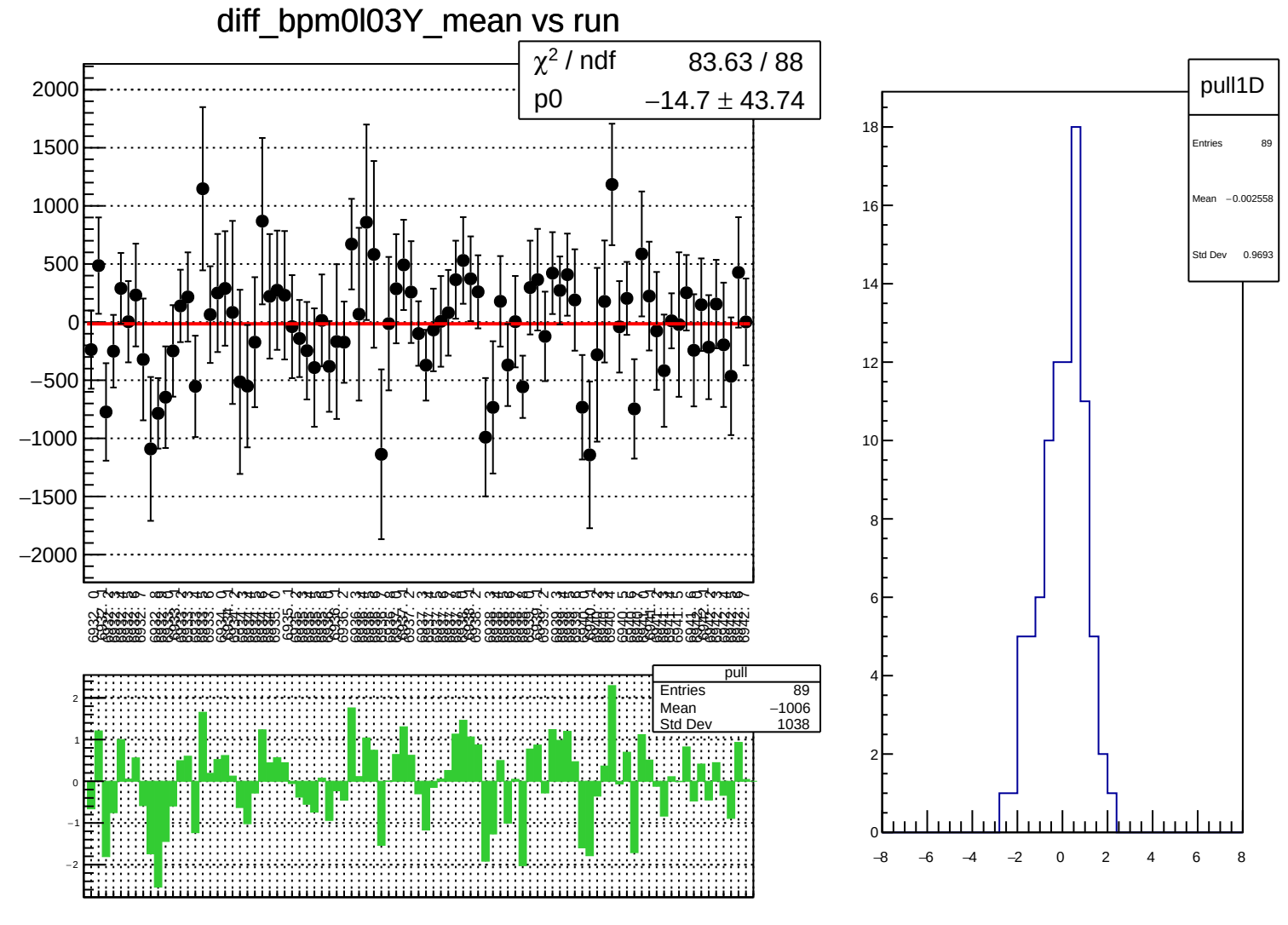

pull1D
Entries 89
Mean 0.004025
Std Dev 0.9261

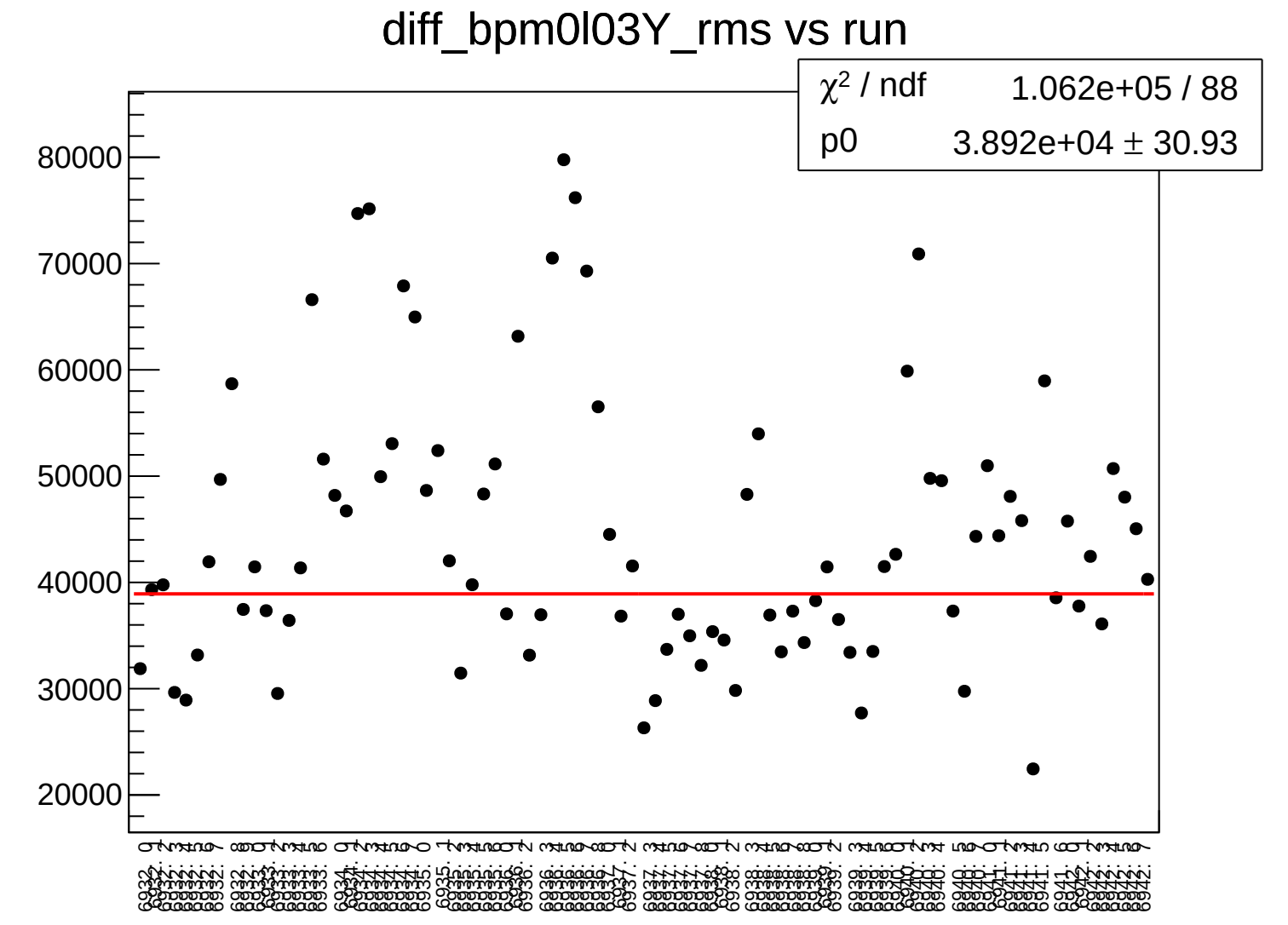

diff_bpm0l02Y_rms vs run
χ² / ndf 6.604e+04 / 88
p0 8122 ± 6.373
12000
11000
10000
9000
8000
7000
6000

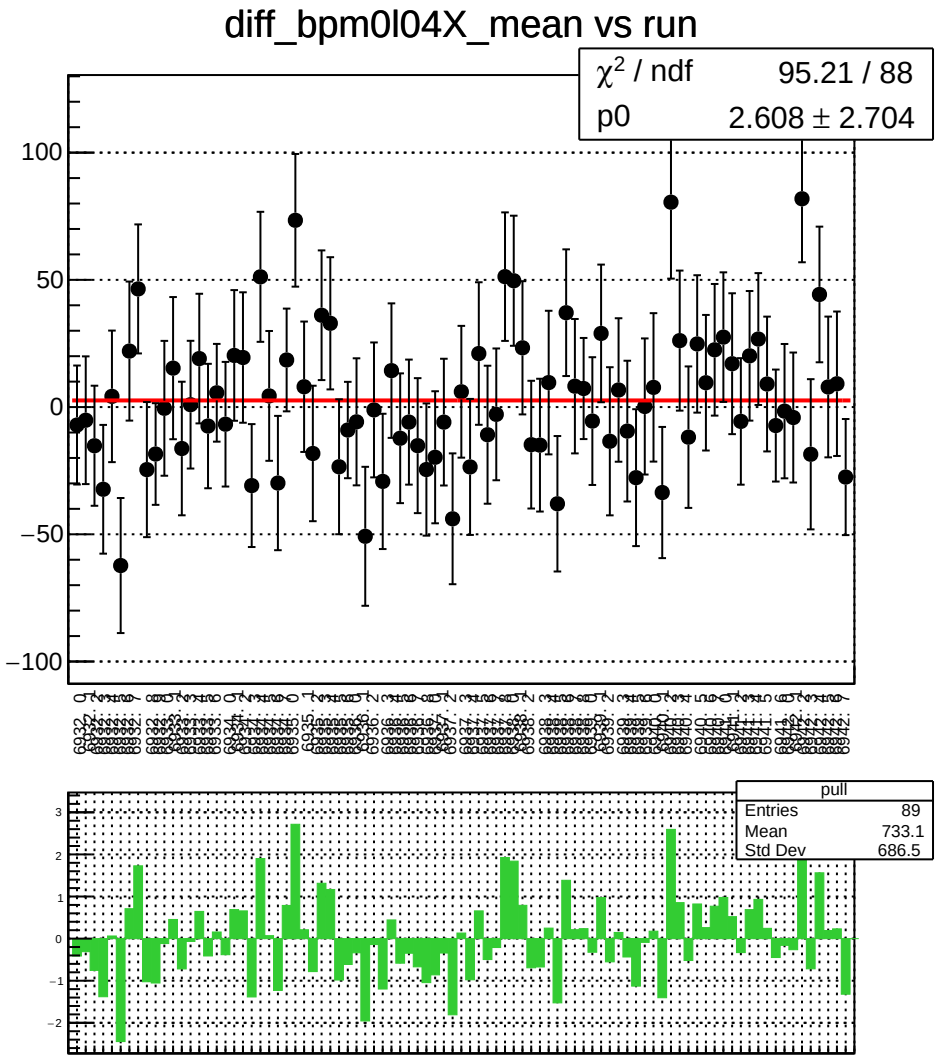

diff_bpm0l03X_mean vs run
χ² / ndf 81.68 / 88
p0 −19.92 ± 43.78
pull
Entries 89
Mean −1410
Std Dev 1440

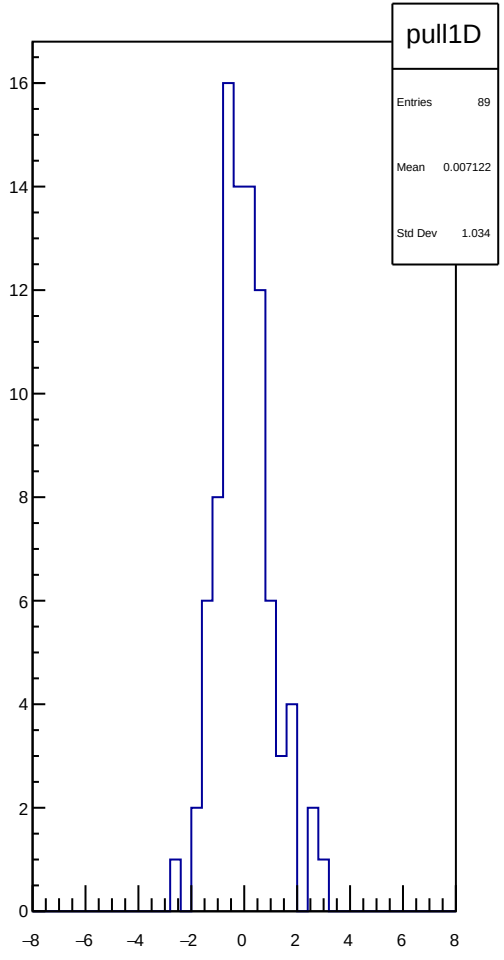

pull1D
Entries 89
Mean −0.001636
Std Dev 0.958

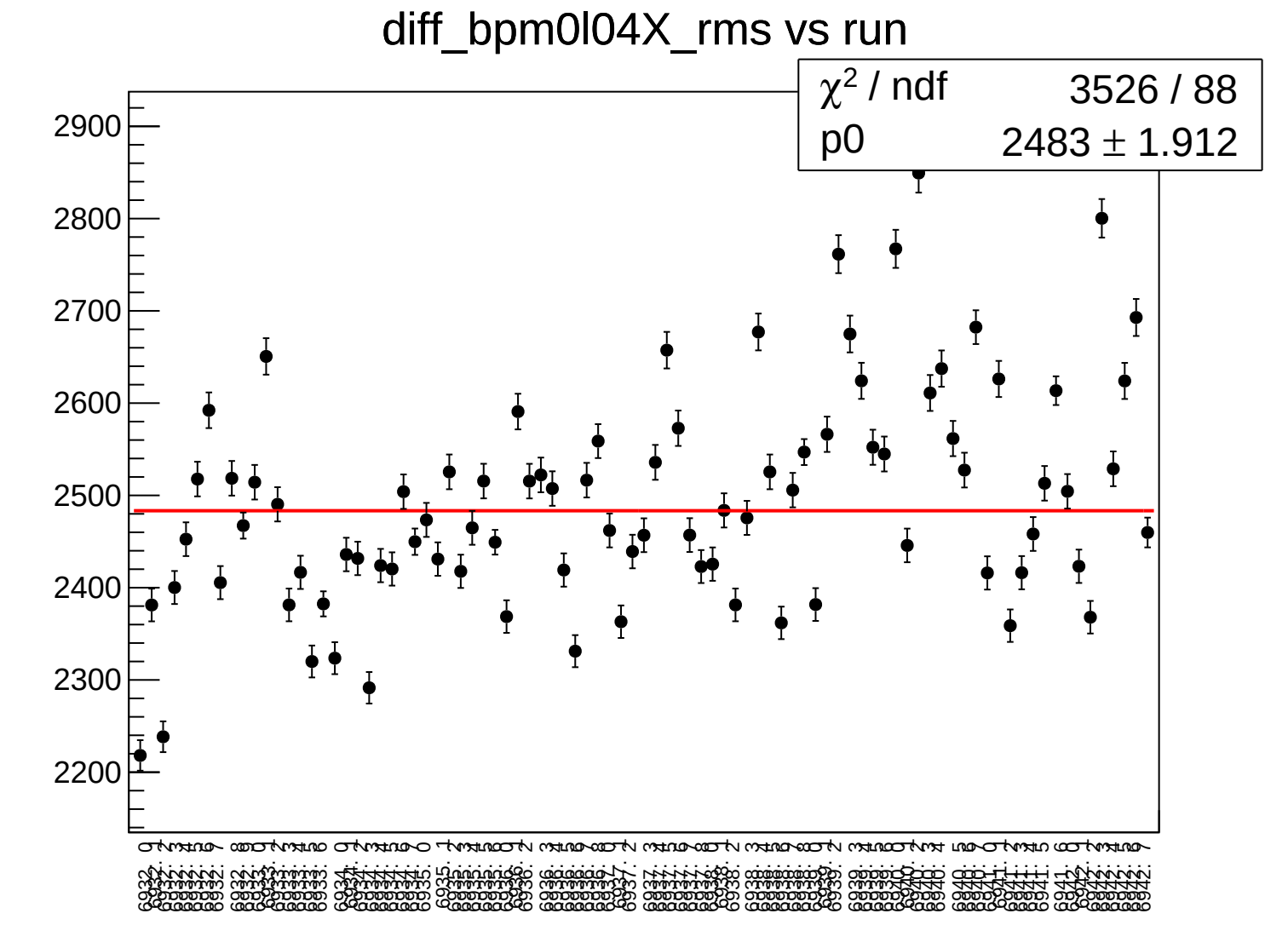

diff_bpm0l03X_rms vs run
χ² / ndf 1.058e+05 / 88
p0 3.896e+04 ± 30.96
80000
70000
60000
50000
40000
30000
20000

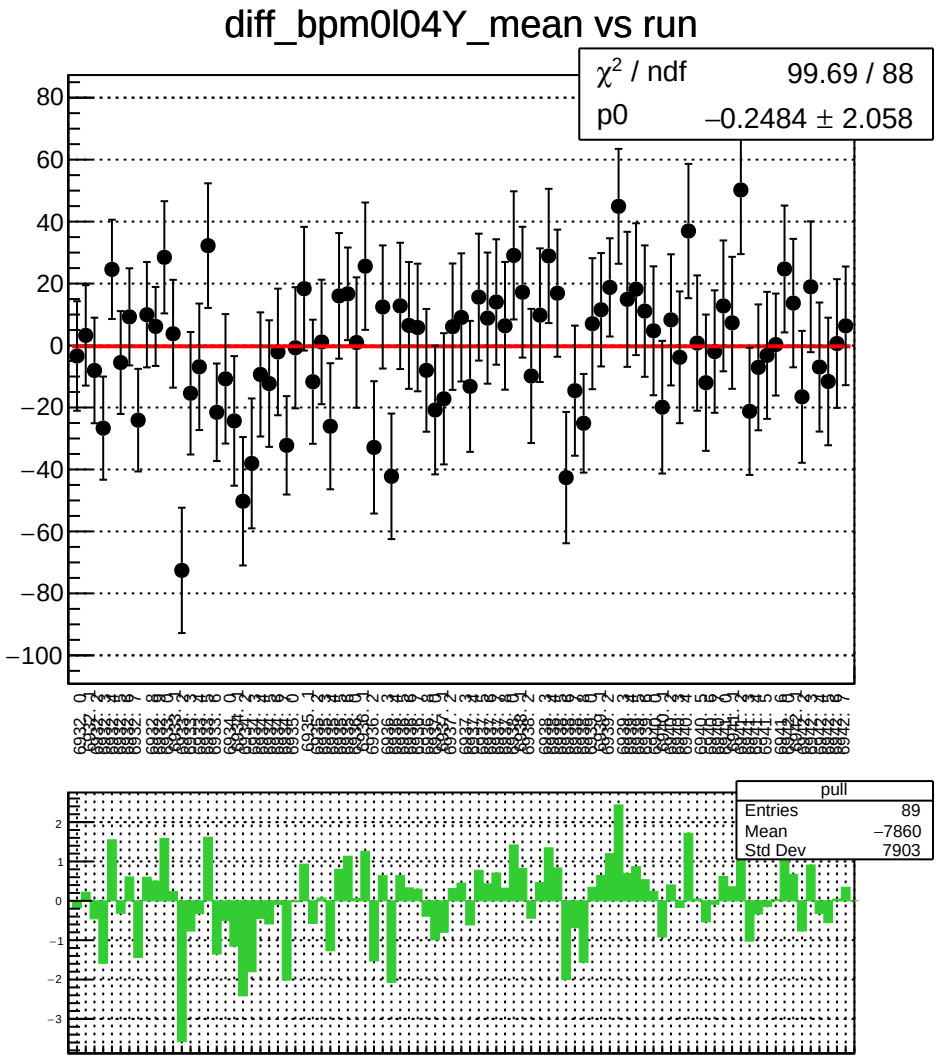

diff_bpm0l03Y_mean vs run
χ² / ndf 83.63 / 88
p0 −14.7 ± 43.74
pull
Entries 89
Mean −1006
Std Dev 1038
pull1D
Entries 89
Mean −0.002558
Std Dev 0.9693

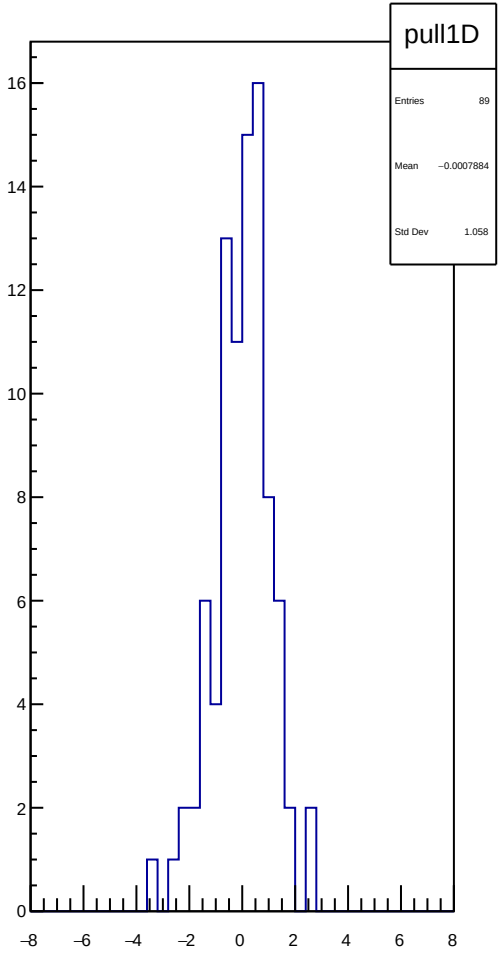

diff_bpm0l03Y_rms vs run
χ² / ndf 1.062e+05 / 88
p0 3.892e+04 ± 30.93
80000
70000
60000
50000
40000
30000
20000

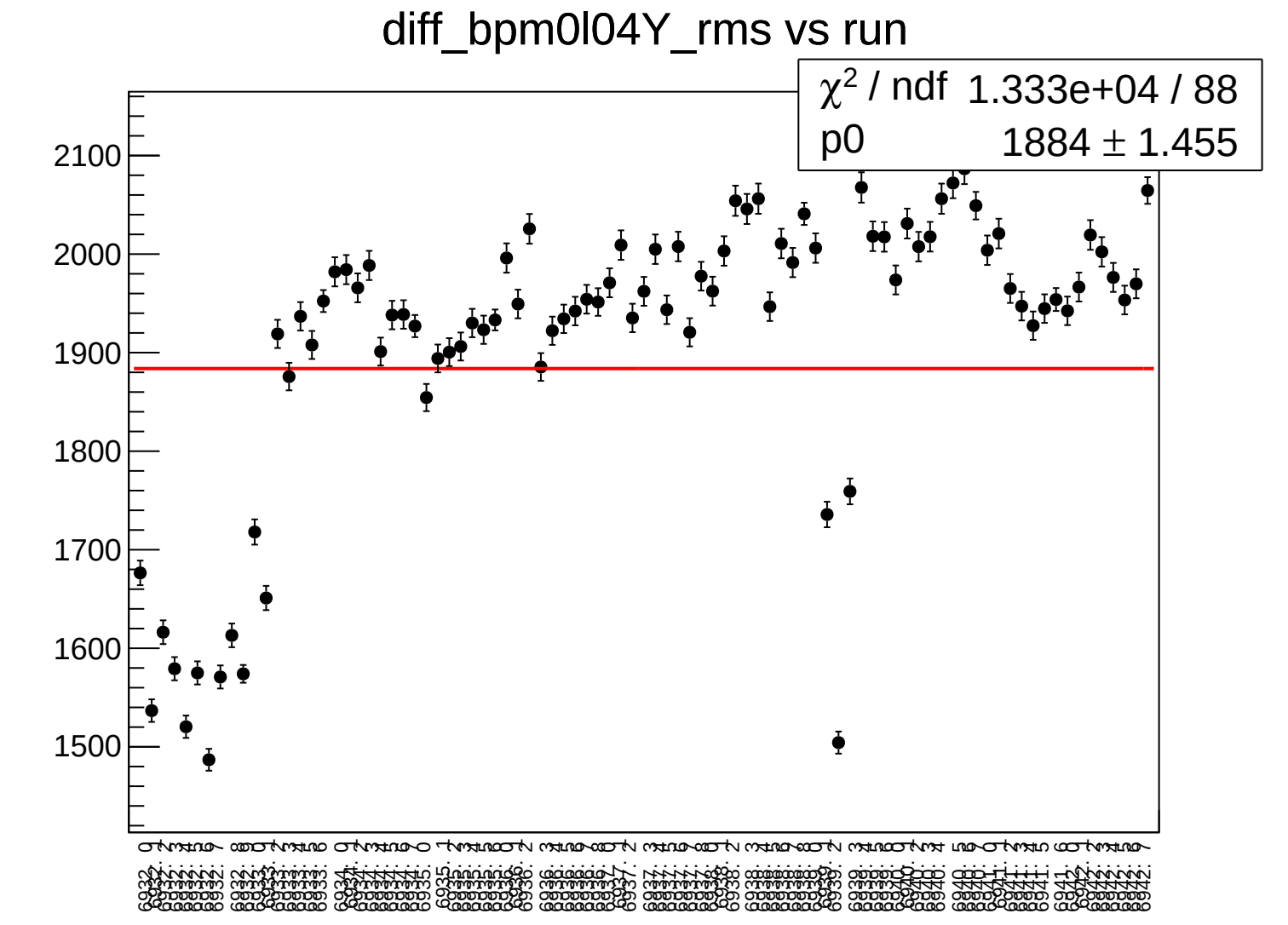

diff_bpm0l04X_mean vs run
χ^2 / ndf 95.21 / 88
p0 2.608 ± 2.704
100
50
0
−50
−100
pull
Entries 89
Mean 733.1
Std Dev 686.5
3
2
1
0
−1
−2

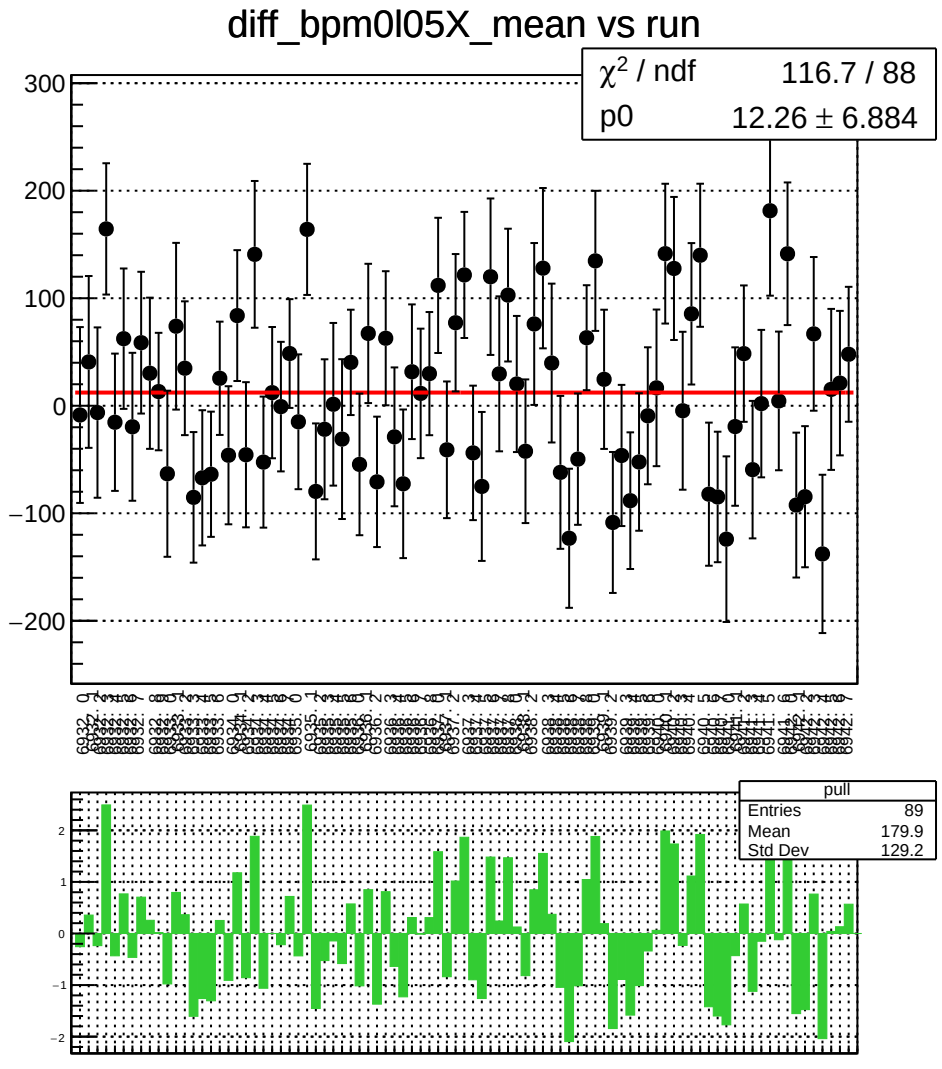

pull1D
Entries 89
Mean 0.007122
Std Dev 1.034
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

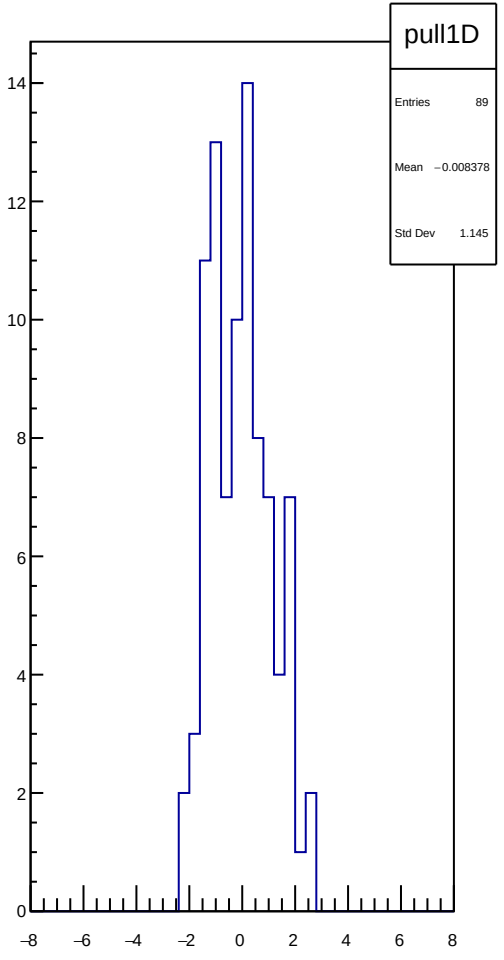

diff_bpm0l04X_rms vs run
χ² / ndf 3526 / 88
p0 2483 ± 1.912
2900
2800
2700
2600
2500
2400
2300
2200

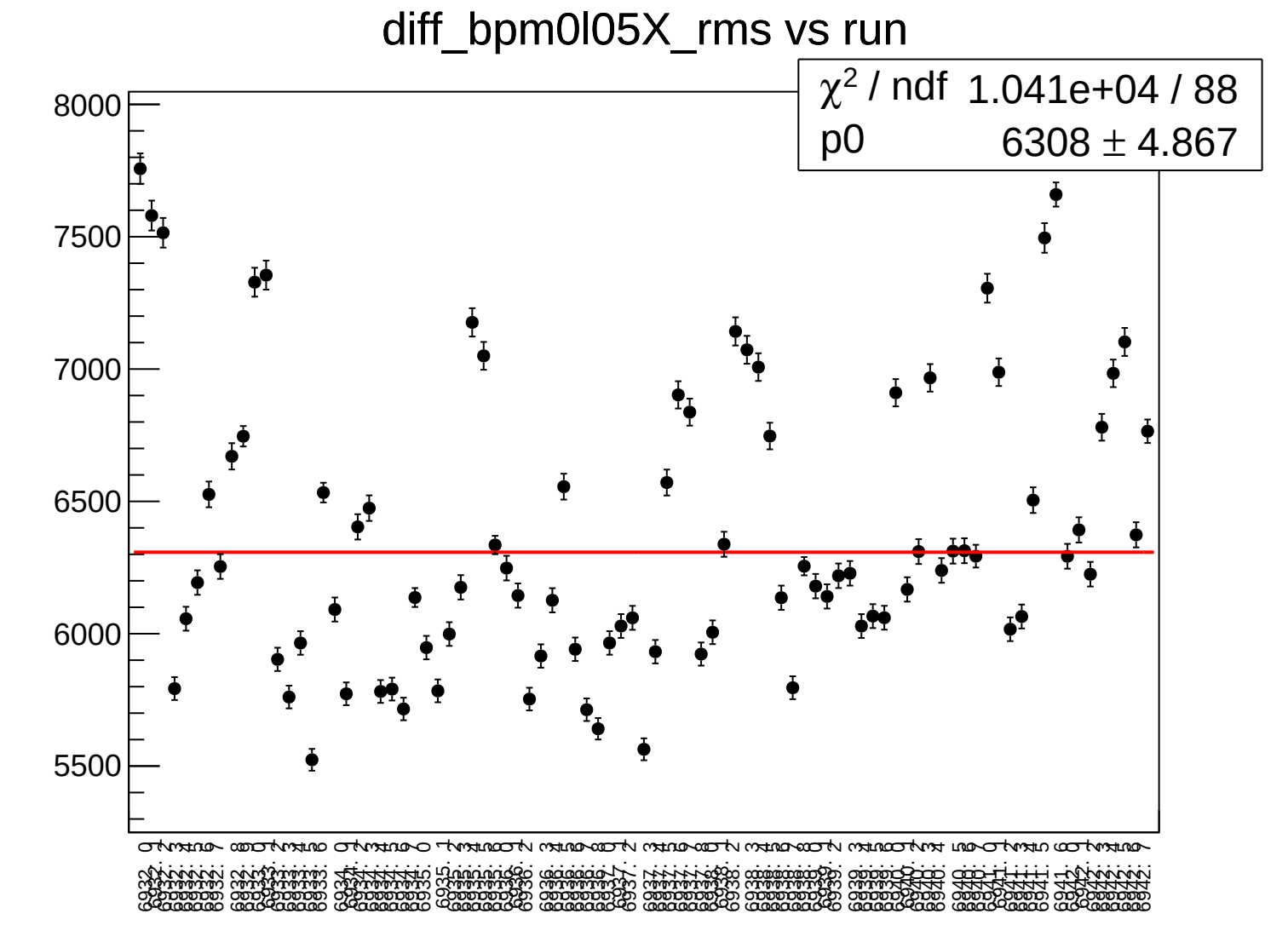

diff_bpm0l04Y_mean vs run
χ² / ndf 99.69 / 88
p0 −0.2484 ± 2.058
pull
Entries 89
Mean −7860
Std Dev 7903

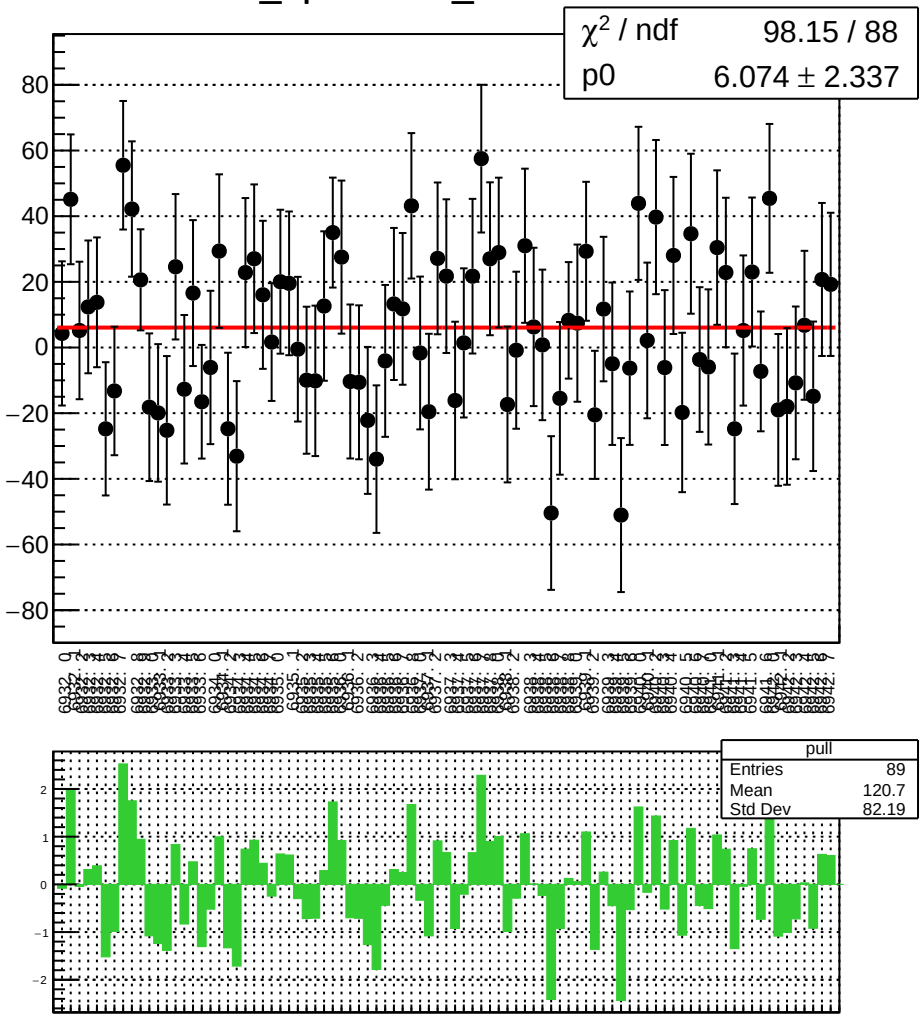

pull1D
Entries 89
Mean −0.0007884
Std Dev 1.058

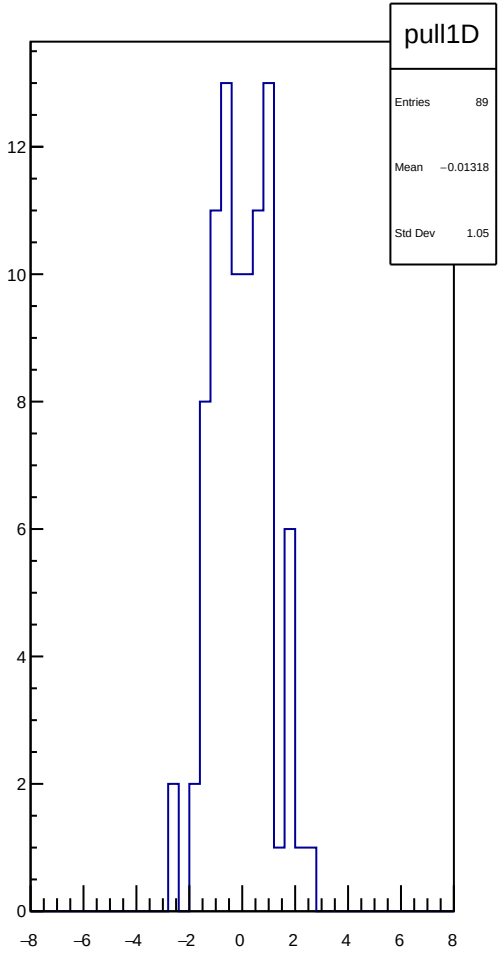

diff_bpm0l04Y_rms vs run
χ² / ndf 1.333e+04 / 88
p0 1884 ± 1.455
2100
2000
1900
1800
1700
1600
1500

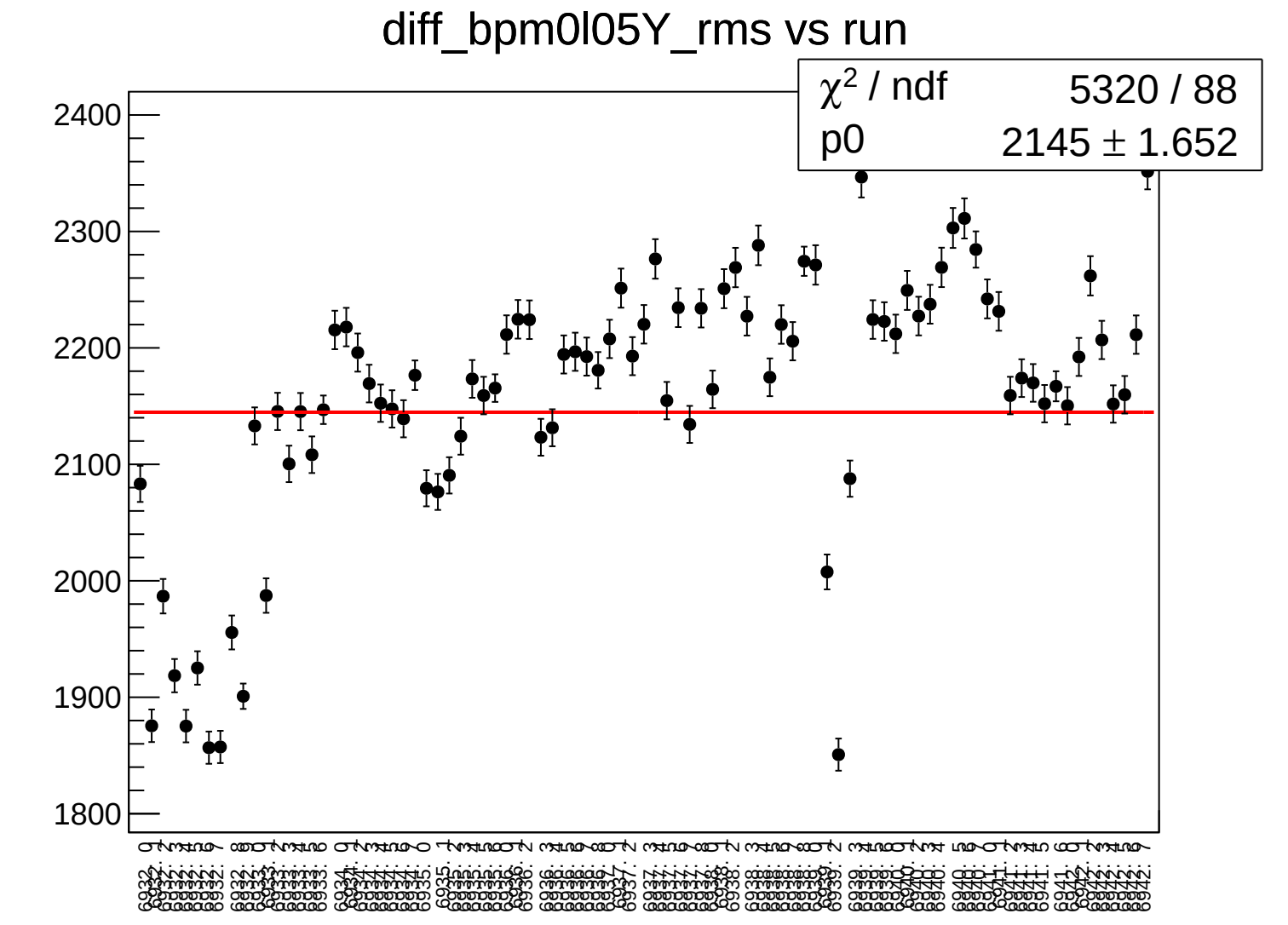

diff_bpm0l05X_mean vs run
χ^2 / ndf 116.7 / 88
p0 12.26 ± 6.884
pull
Entries 89
Mean 179.9
Std Dev 129.2

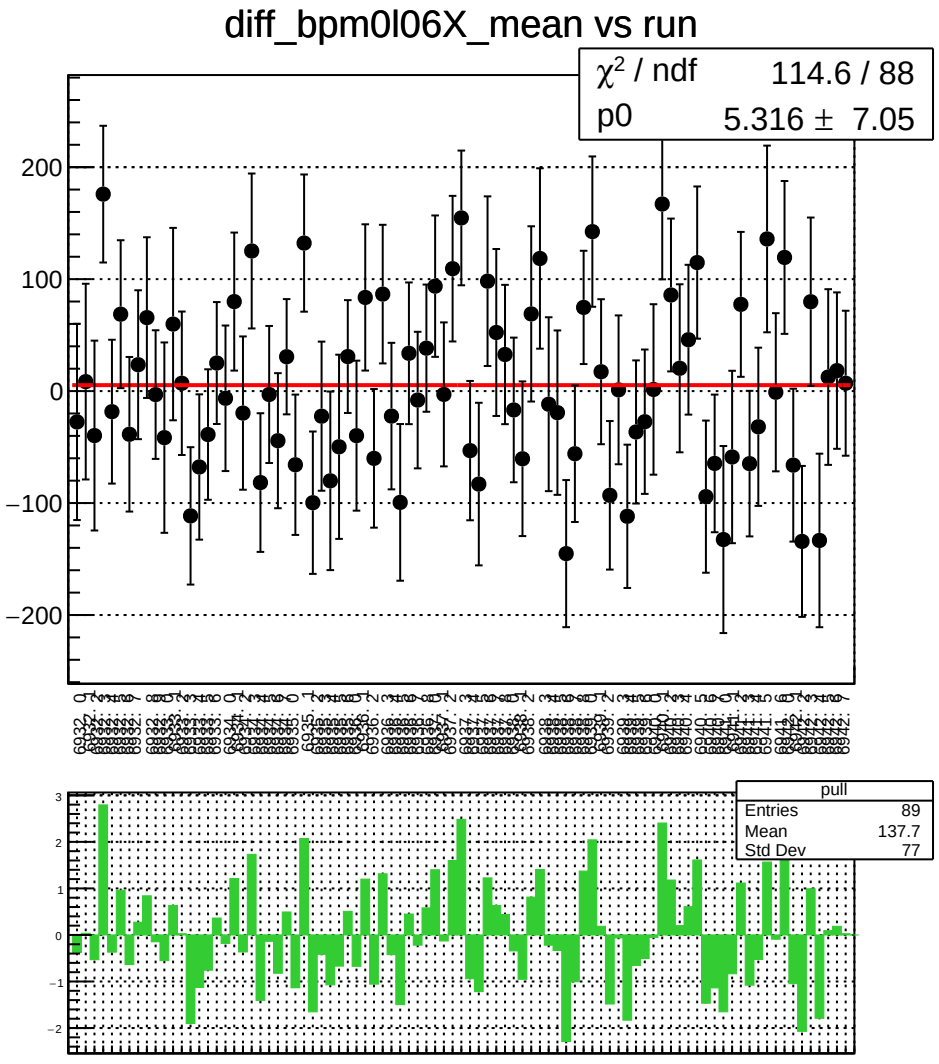

pull1D
Entries 89
Mean −0.008378
Std Dev 1.145

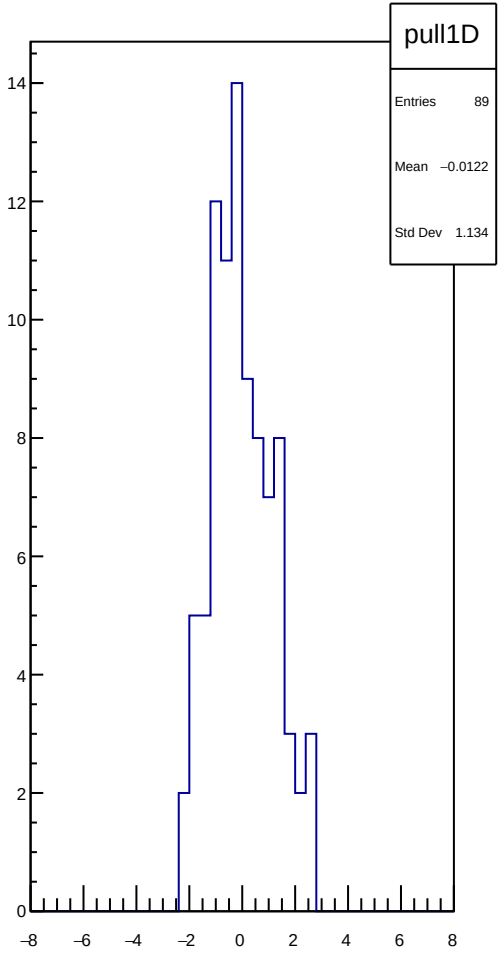

diff_bpm0l05X_rms vs run
χ² / ndf 1.041e+04 / 88
p0 6308 ± 4.867
8000
7500
7000
6500
6000
5500

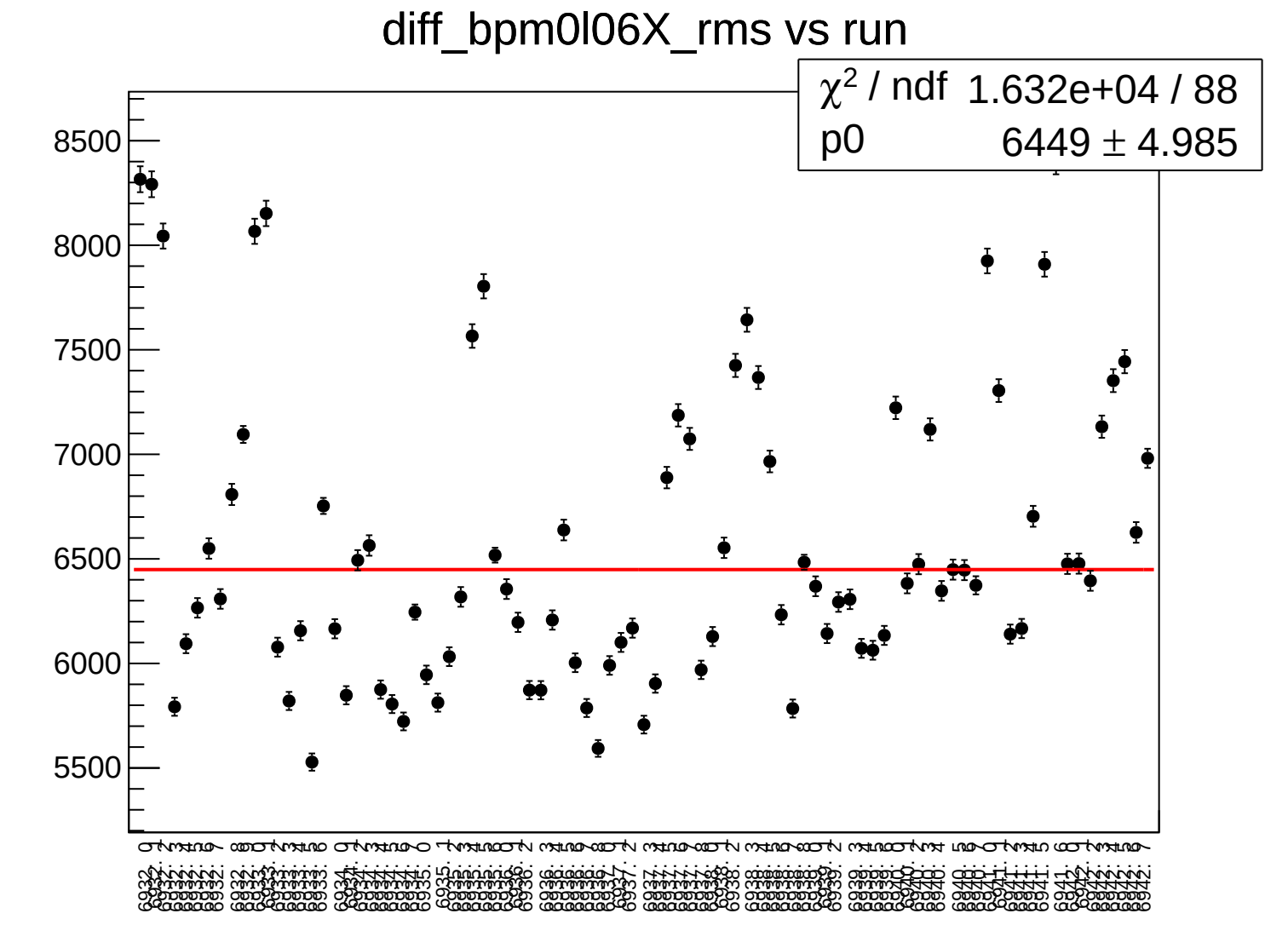

diff_bpm0l05Y_mean vs run
χ² / ndf 98.15 / 88
p0 6.074 ± 2.337
pull
Entries 89
Mean 120.7
Std Dev 82.19

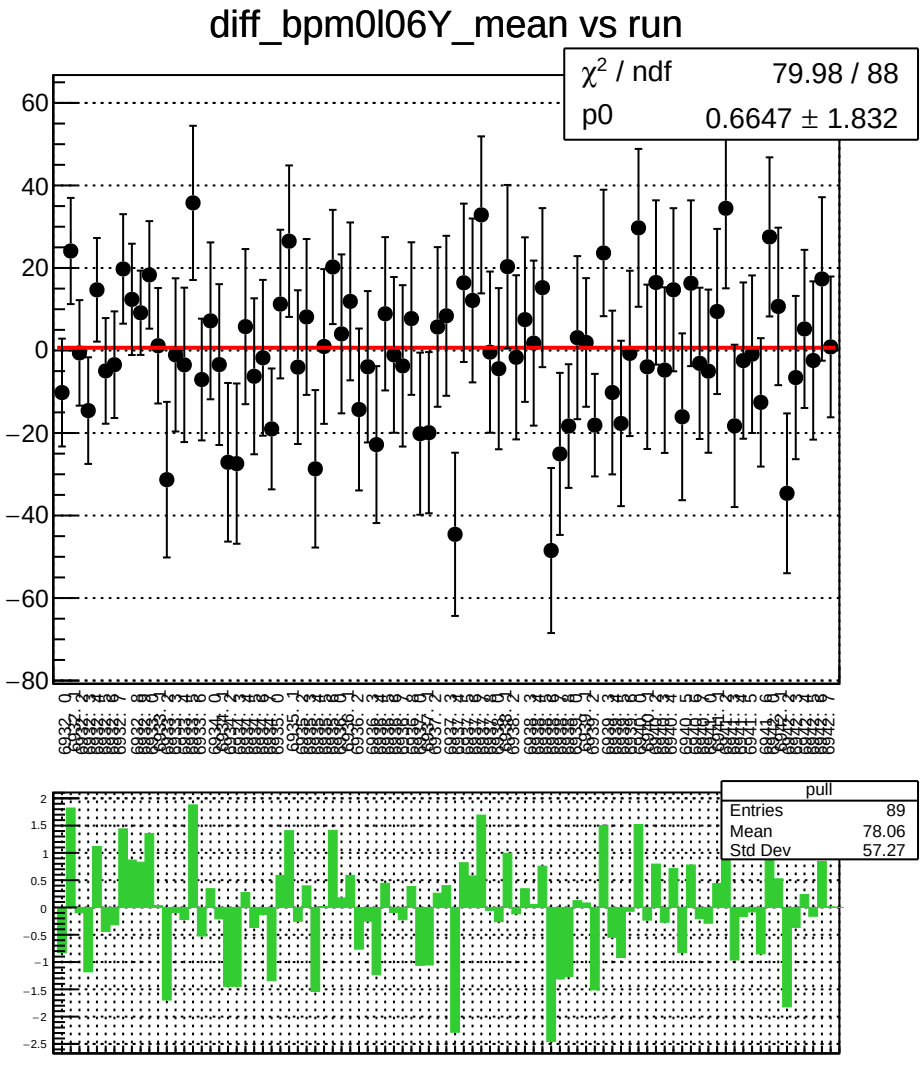

pull1D
Entries 89
Mean −0.01318
Std Dev 1.05

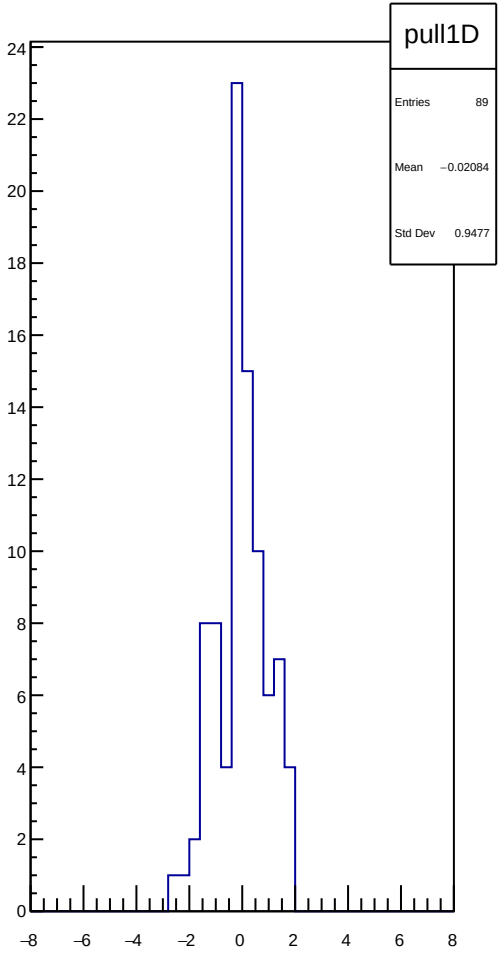

diff_bpm0l05Y_rms vs run
χ² / ndf 5320 / 88
p0 2145 ± 1.652
2400
2300
2200
2100
2000
1900
1800

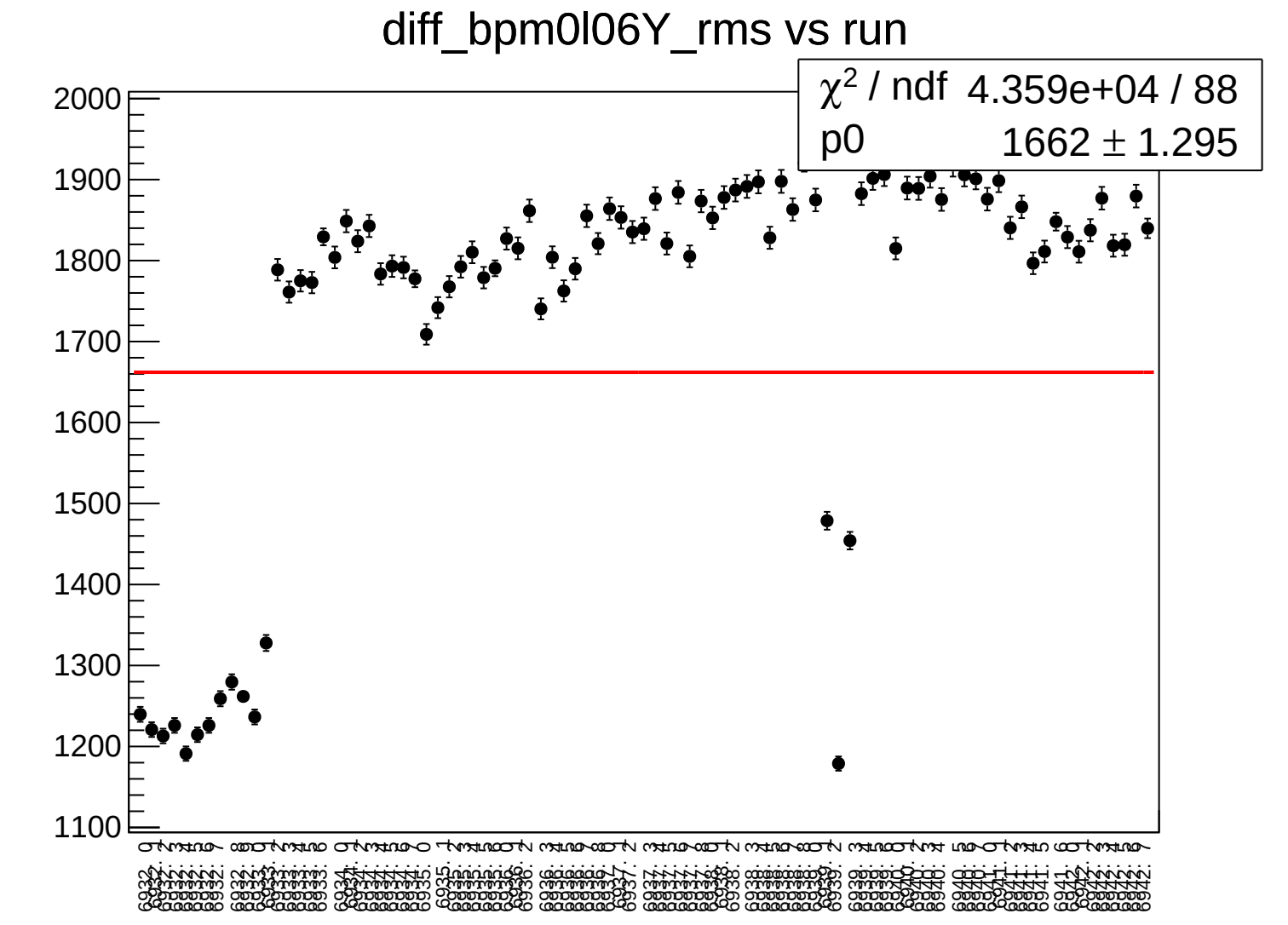

diff_bpm0l06X_mean vs run
χ² / ndf 114.6 / 88
p0 5.316 ± 7.05
200
100
0
−100
−200
pull
Entries 89
Mean 137.7
Std Dev 77
3
2
1
0
−1
−2

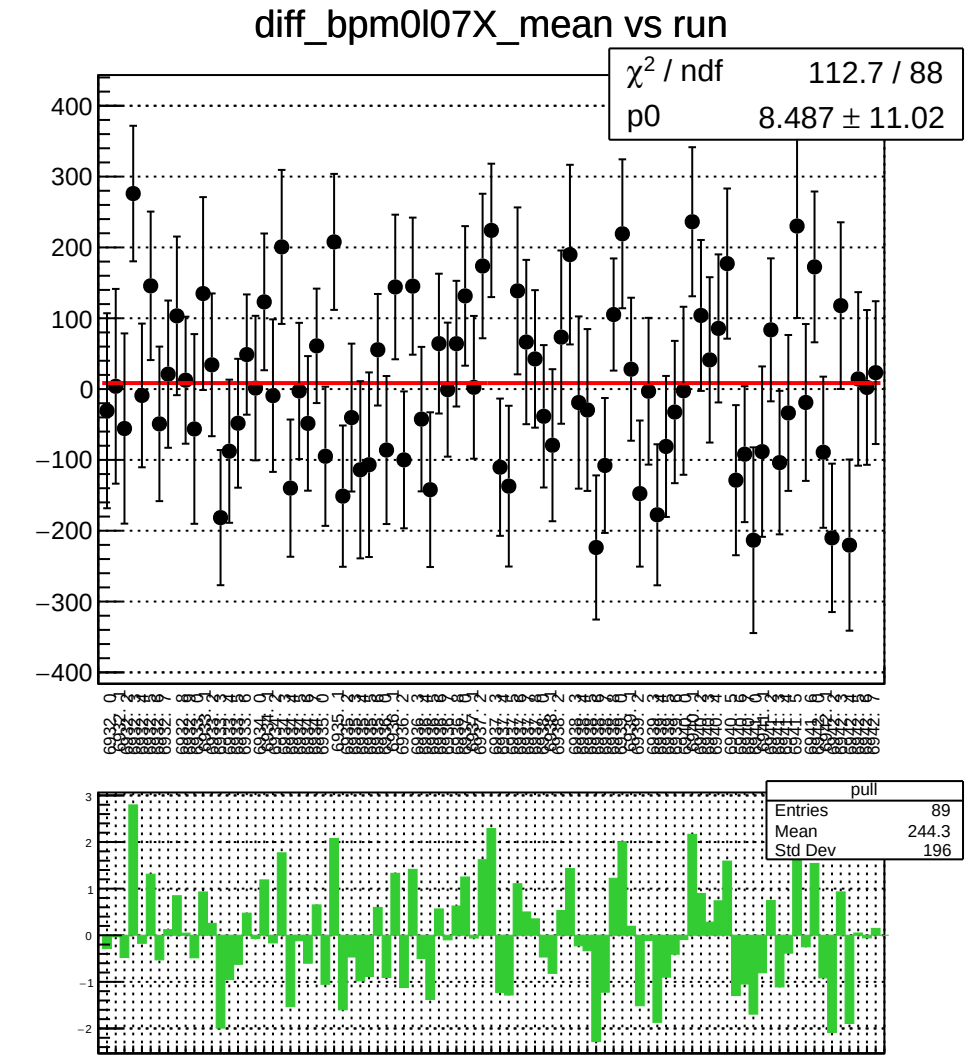

pull1D
Entries 89
Mean −0.0122
Std Dev 1.134
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

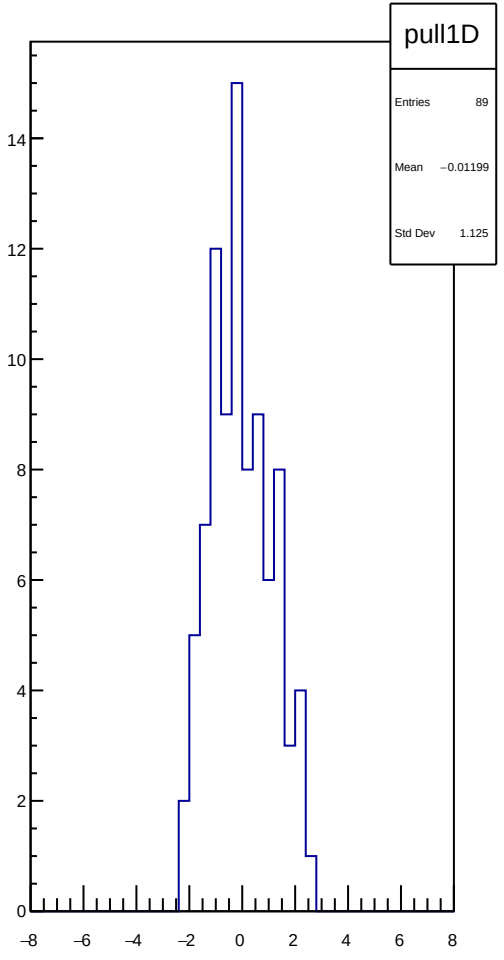

diff_bpm0l06X_rms vs run
χ² / ndf 1.632e+04 / 88
p0 6449 ± 4.985
8500
8000
7500
7000
6500
6000
5500

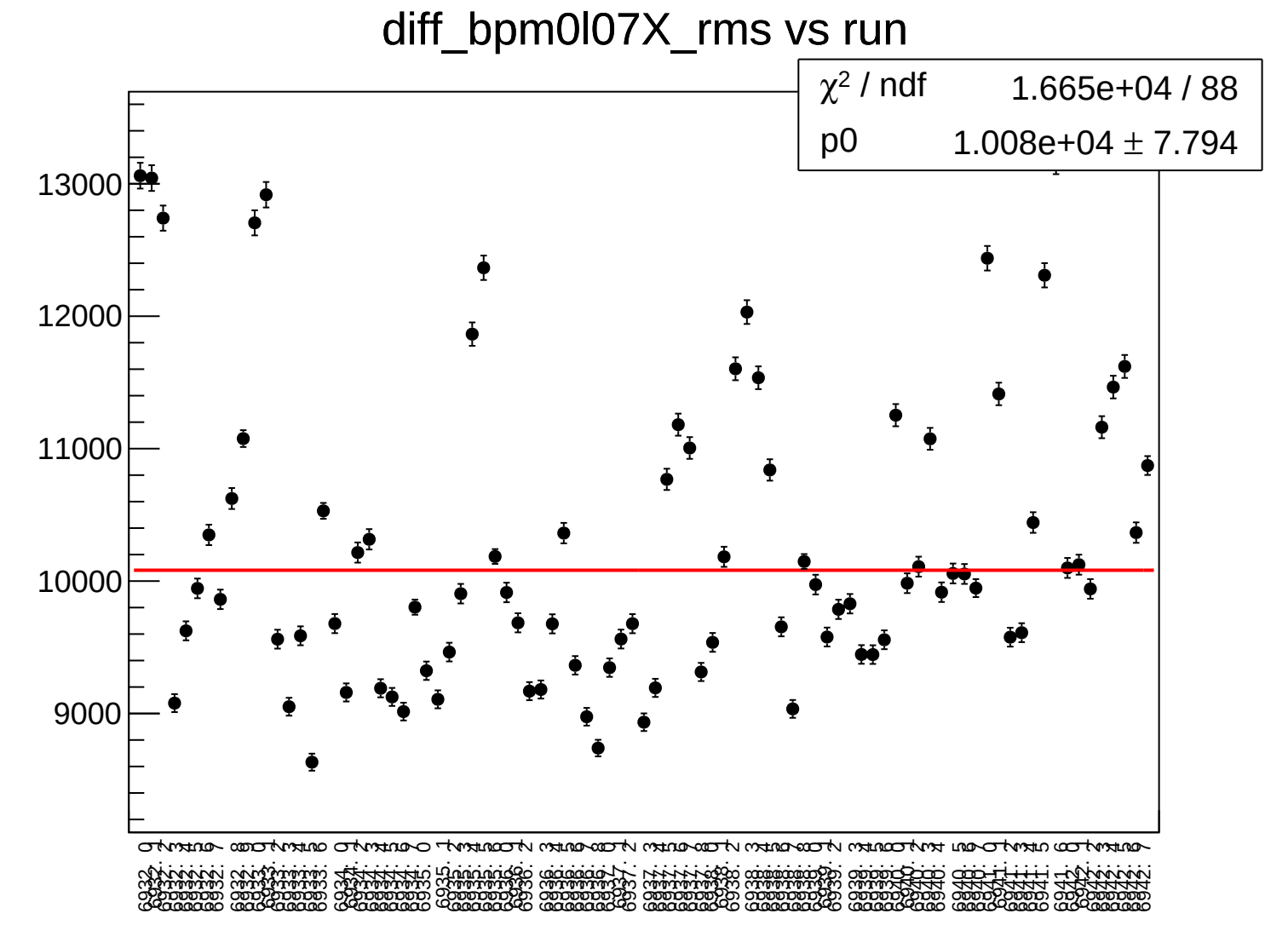

diff_bpm0l06Y_mean vs run
χ² / ndf 79.98 / 88
p0 0.6647 ± 1.832
pull
Entries 89
Mean 78.06
Std Dev 57.27

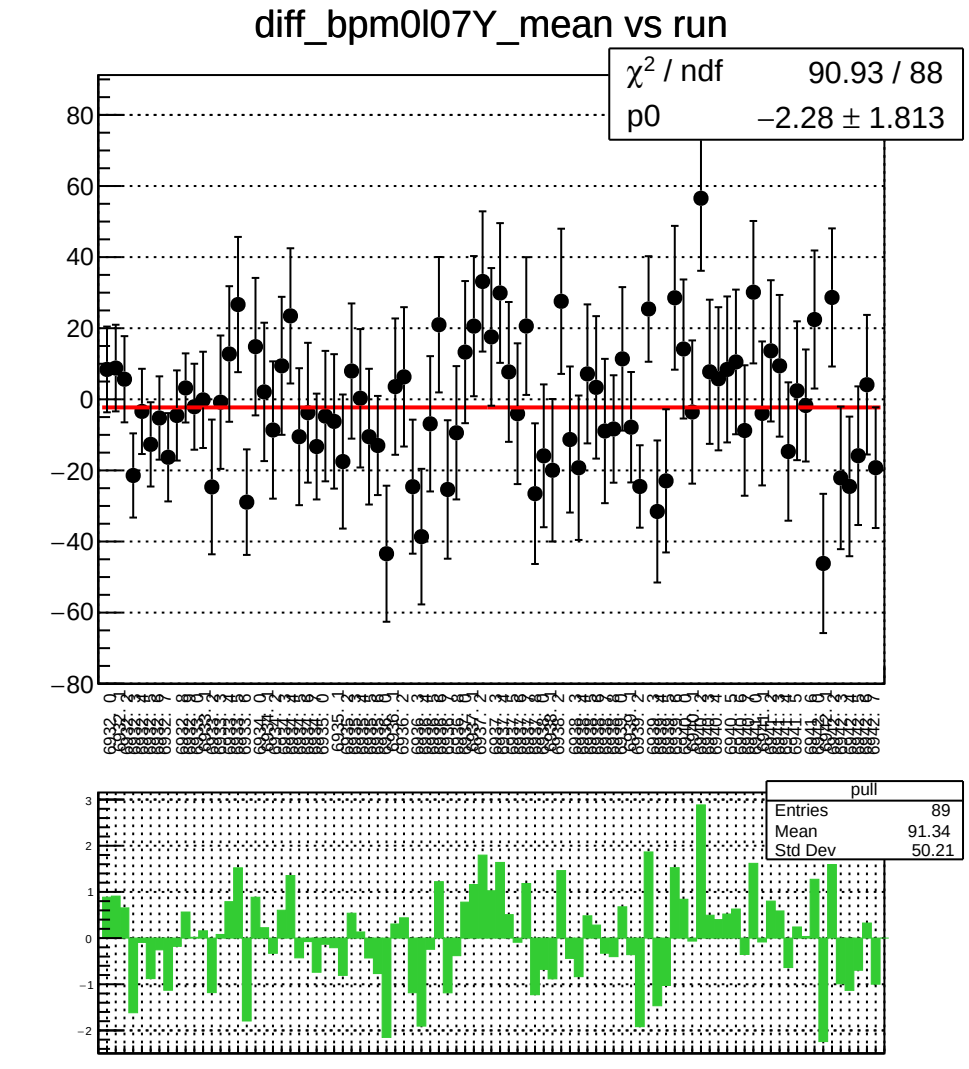

pull1D
Entries 89
Mean −0.02084
Std Dev 0.9477

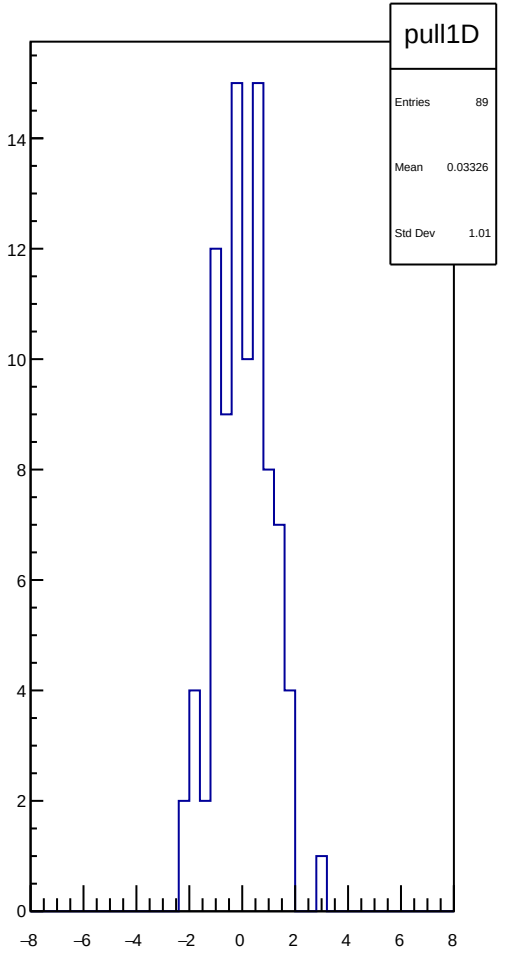

diff_bpm0l06Y_rms vs run
χ² / ndf 4.359e+04 / 88
p0 1662 ± 1.295
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100

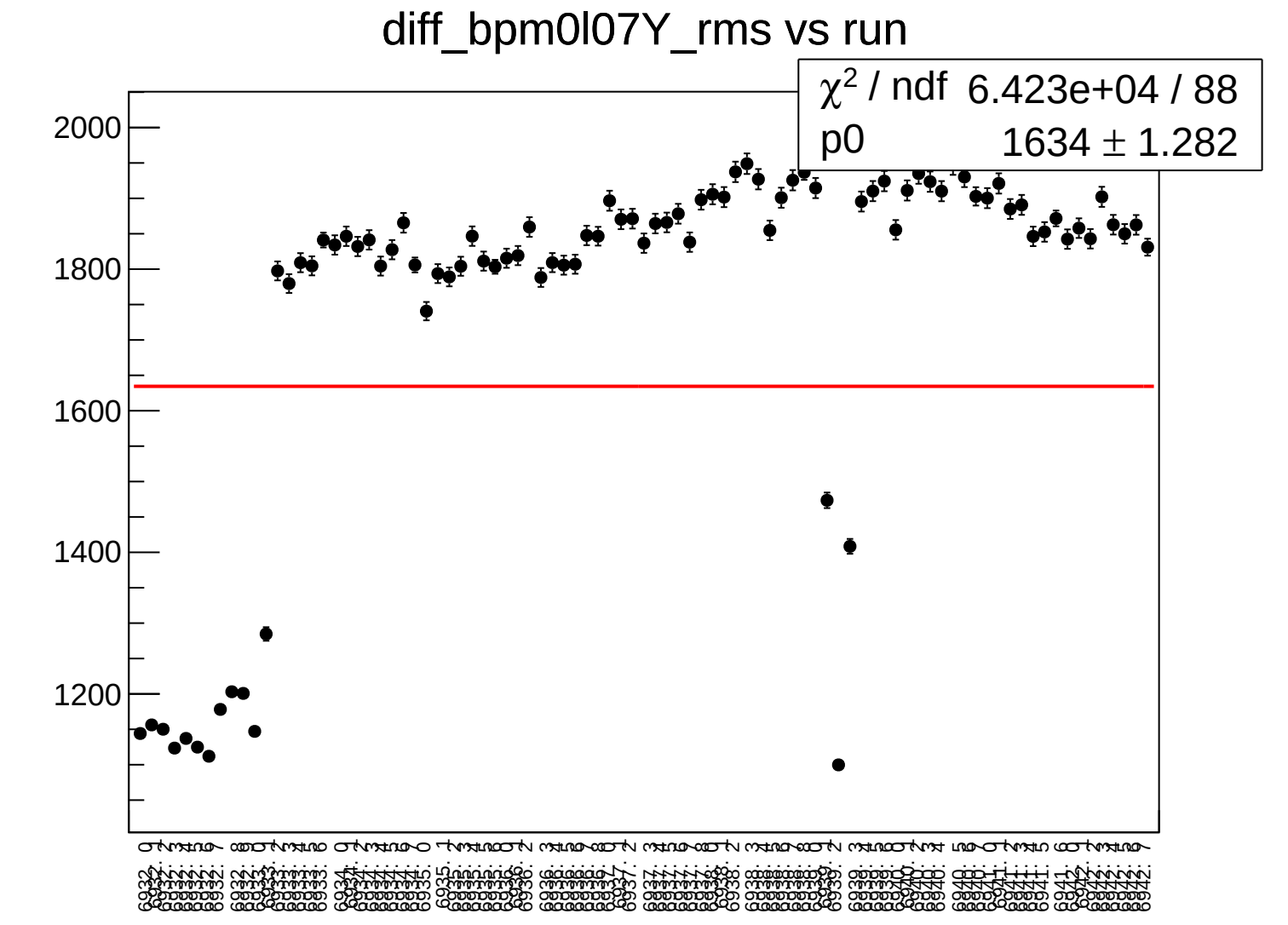

diff_bpm0l07X_mean vs run
χ^2 / ndf 112.7 / 88
p0 8.487 ± 11.02
pull
Entries 89
Mean 244.3
Std Dev 196

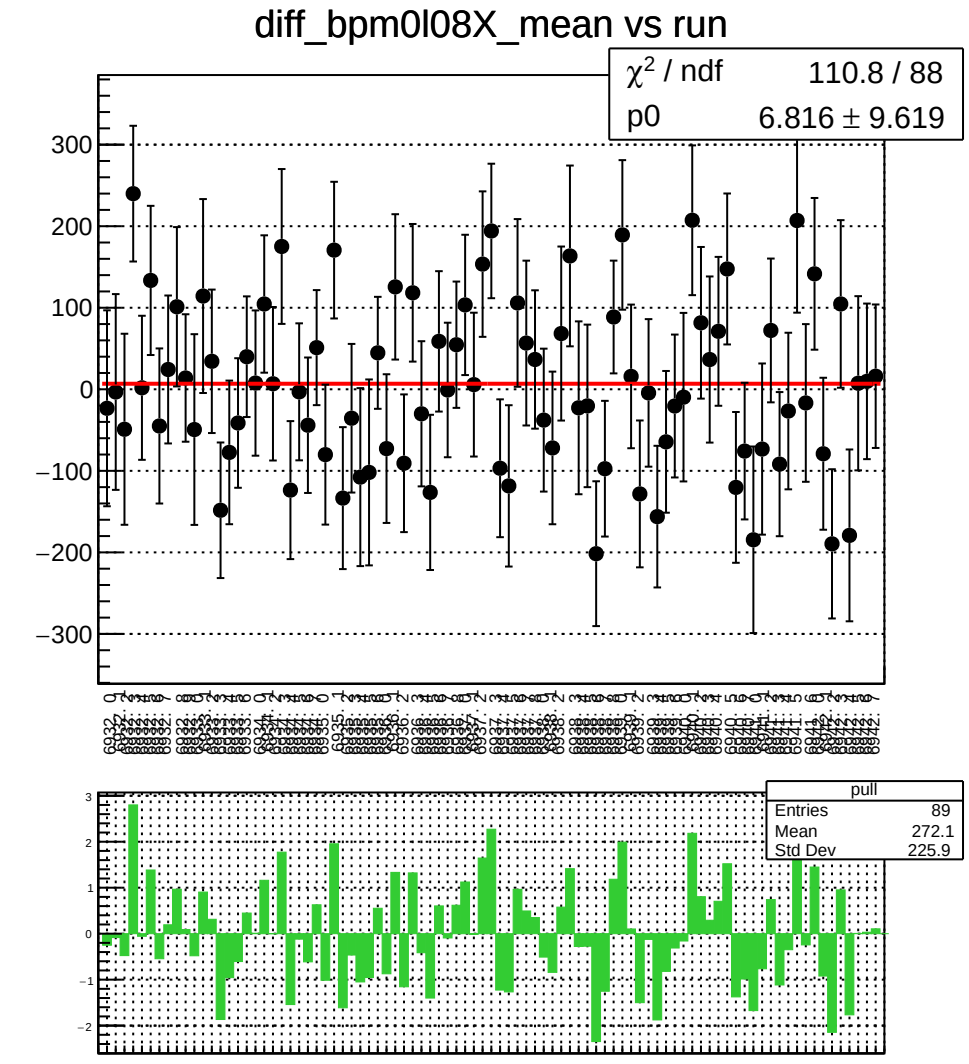

pull1D
Entries 89
Mean −0.01199
Std Dev 1.125

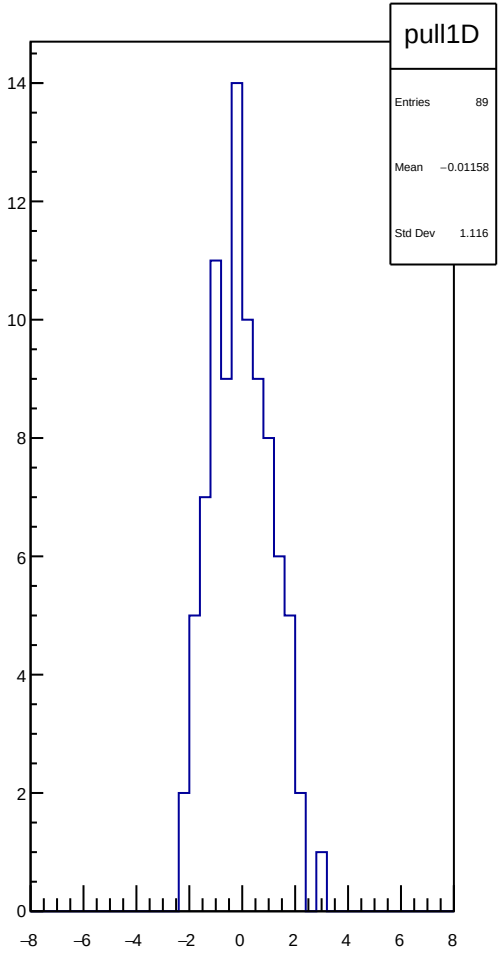

diff_bpm0l07X_rms vs run
χ² / ndf 1.665e+04 / 88
p0 1.008e+04 ± 7.794
13000
12000
11000
10000
9000

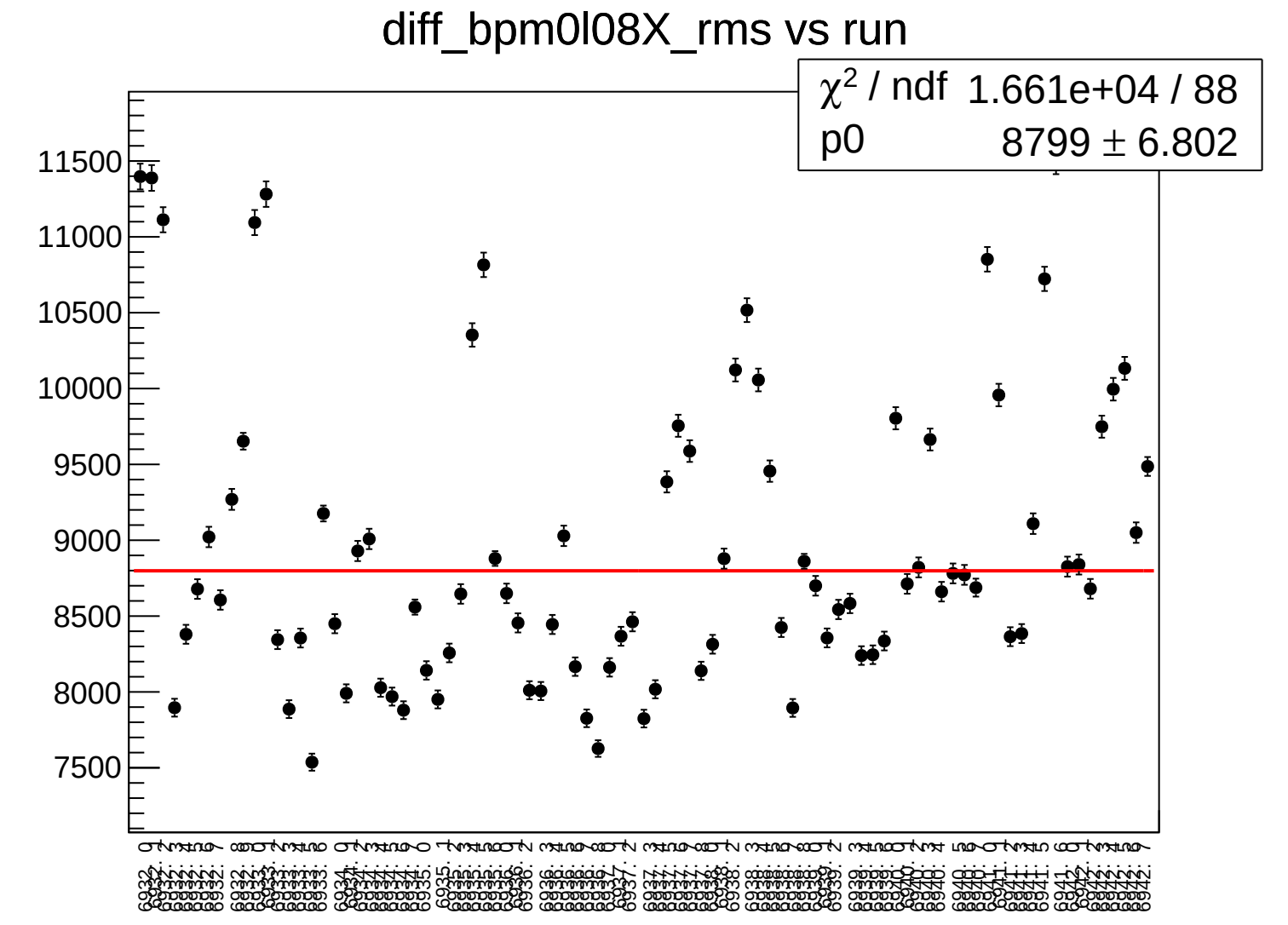

diff_bpm0l07Y_mean vs run
χ² / ndf 90.93 / 88
p0 −2.28 ± 1.813
pull
Entries 89
Mean 91.34
Std Dev 50.21

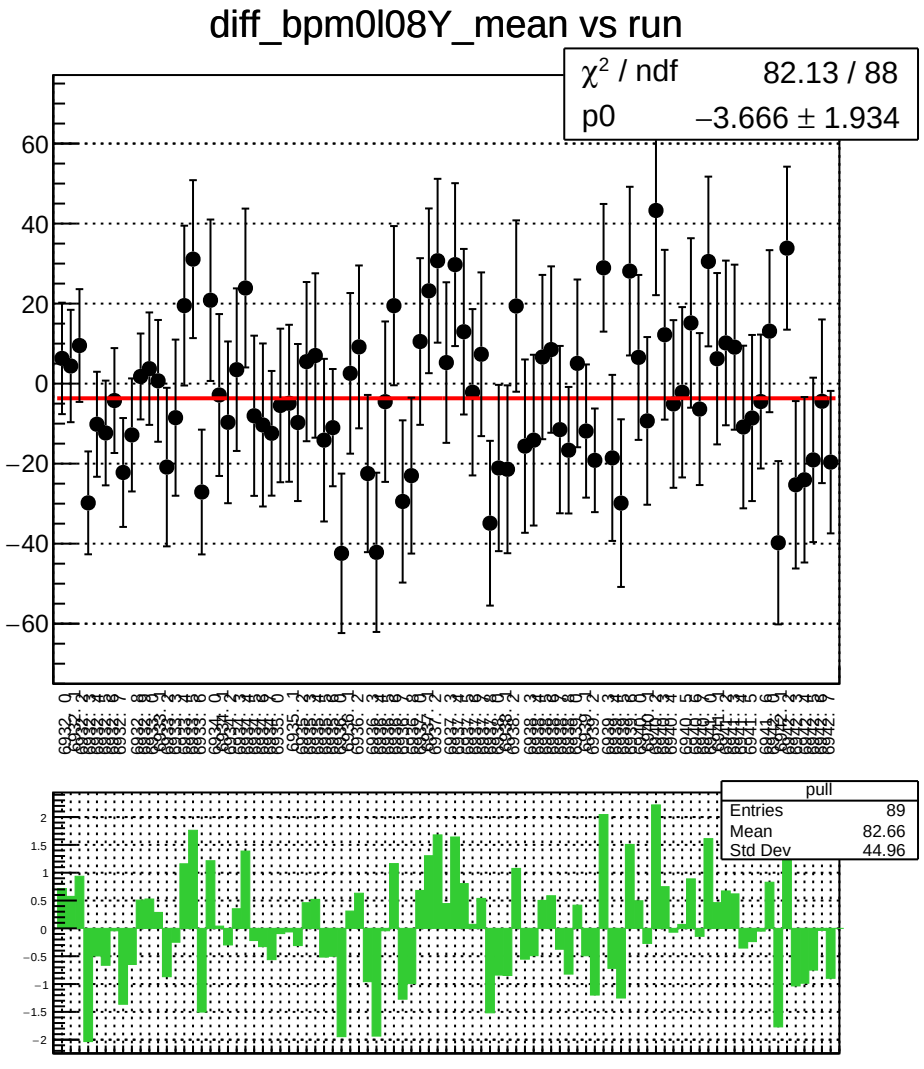

pull1D
Entries 89
Mean 0.03326
Std Dev 1.01

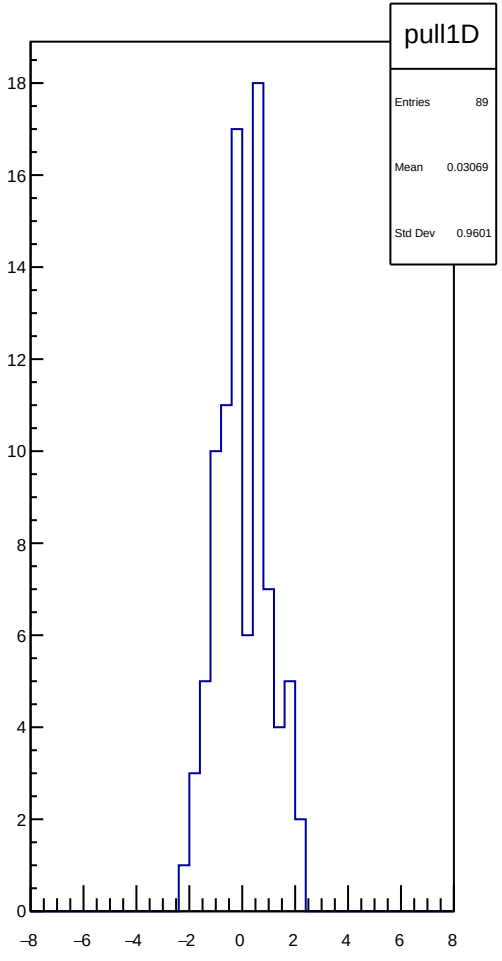

diff_bpm0l07Y_rms vs run
χ² / ndf 6.423e+04 / 88
p0 1634 ± 1.282
2000
1800
1600
1400
1200

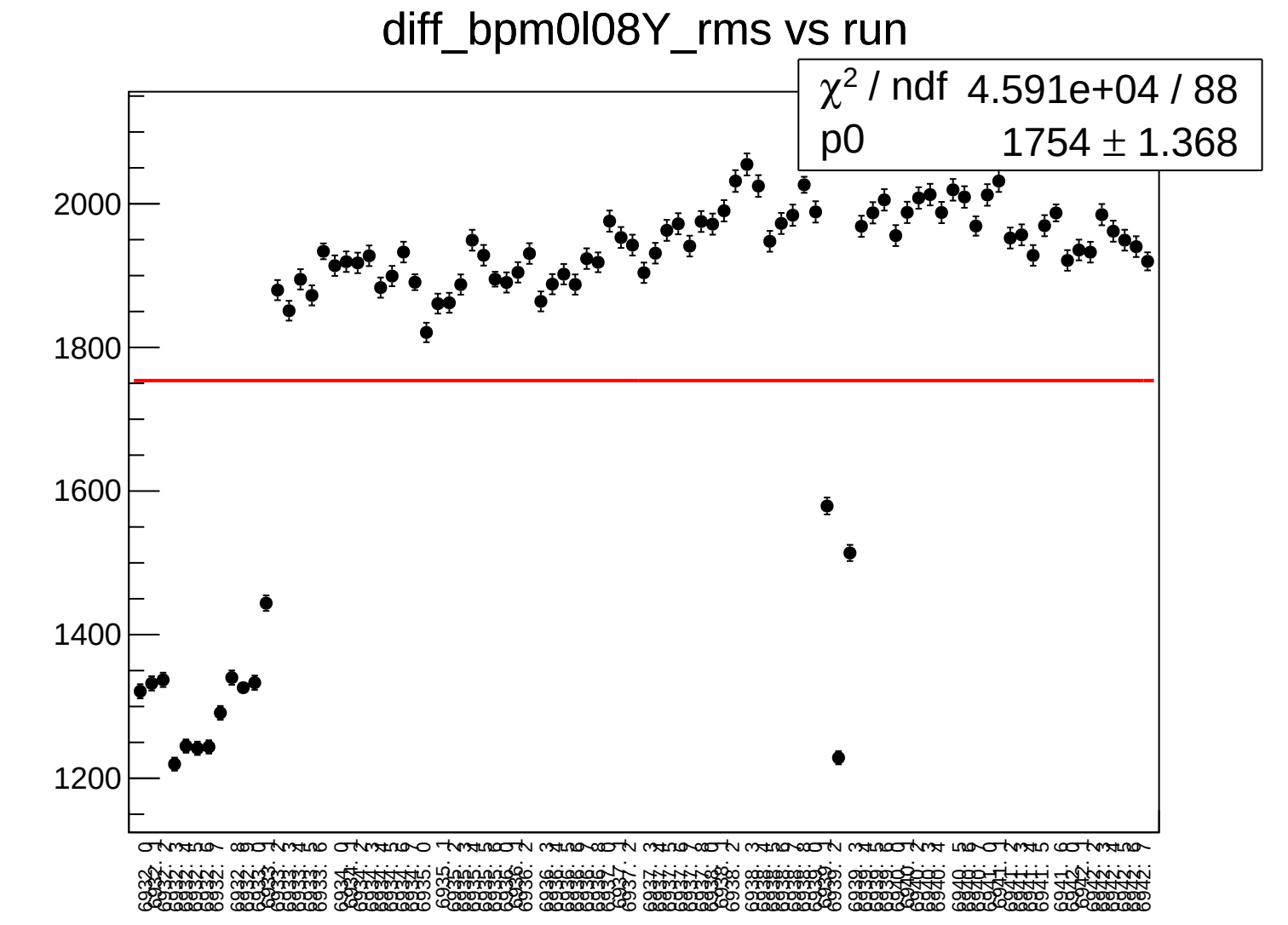

diff_bpm0l08X_mean vs run
χ² / ndf 110.8 / 88
p0 6.816 ± 9.619
pull
Entries 89
Mean 272.1
Std Dev 225.9

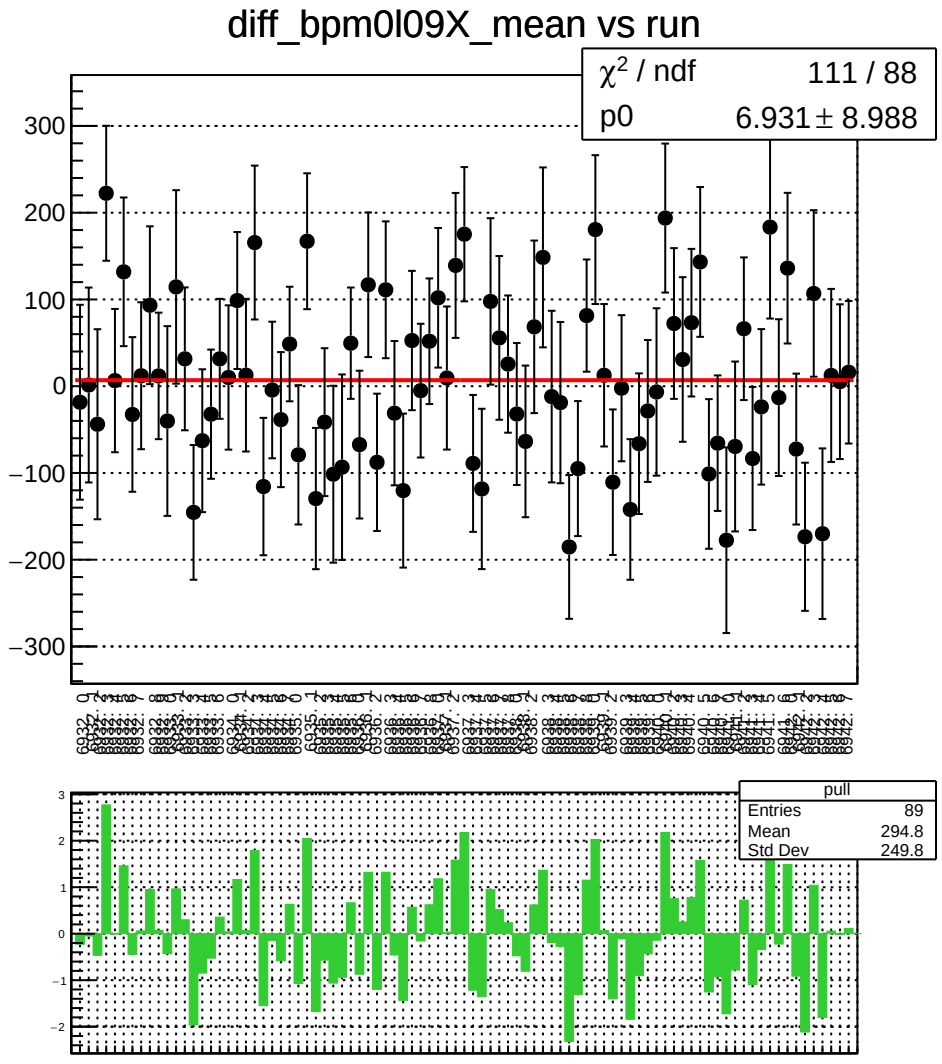

pull1D
Entries 89
Mean −0.01158
Std Dev 1.116

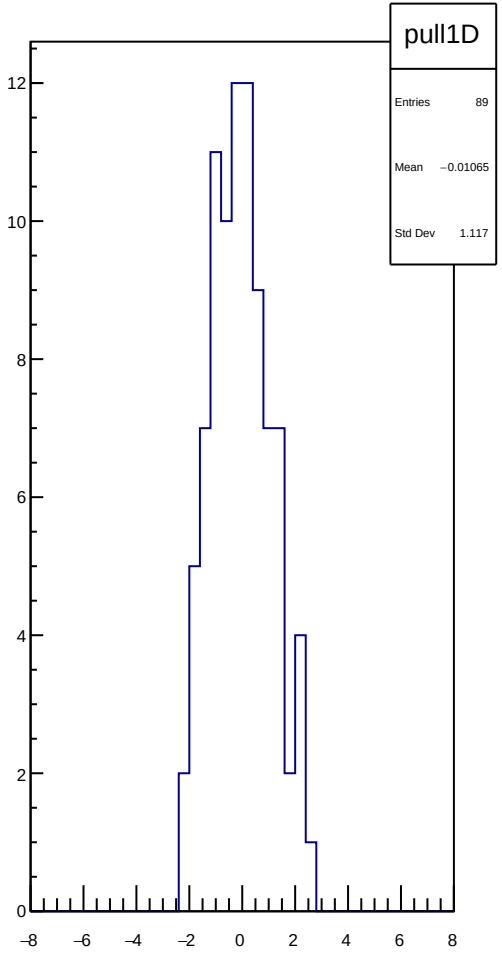

diff_bpm0l08X_rms vs run
χ² / ndf 1.661e+04 / 88
p0 8799 ± 6.802
11500
11000
10500
10000
9500
9000
8500
8000
7500

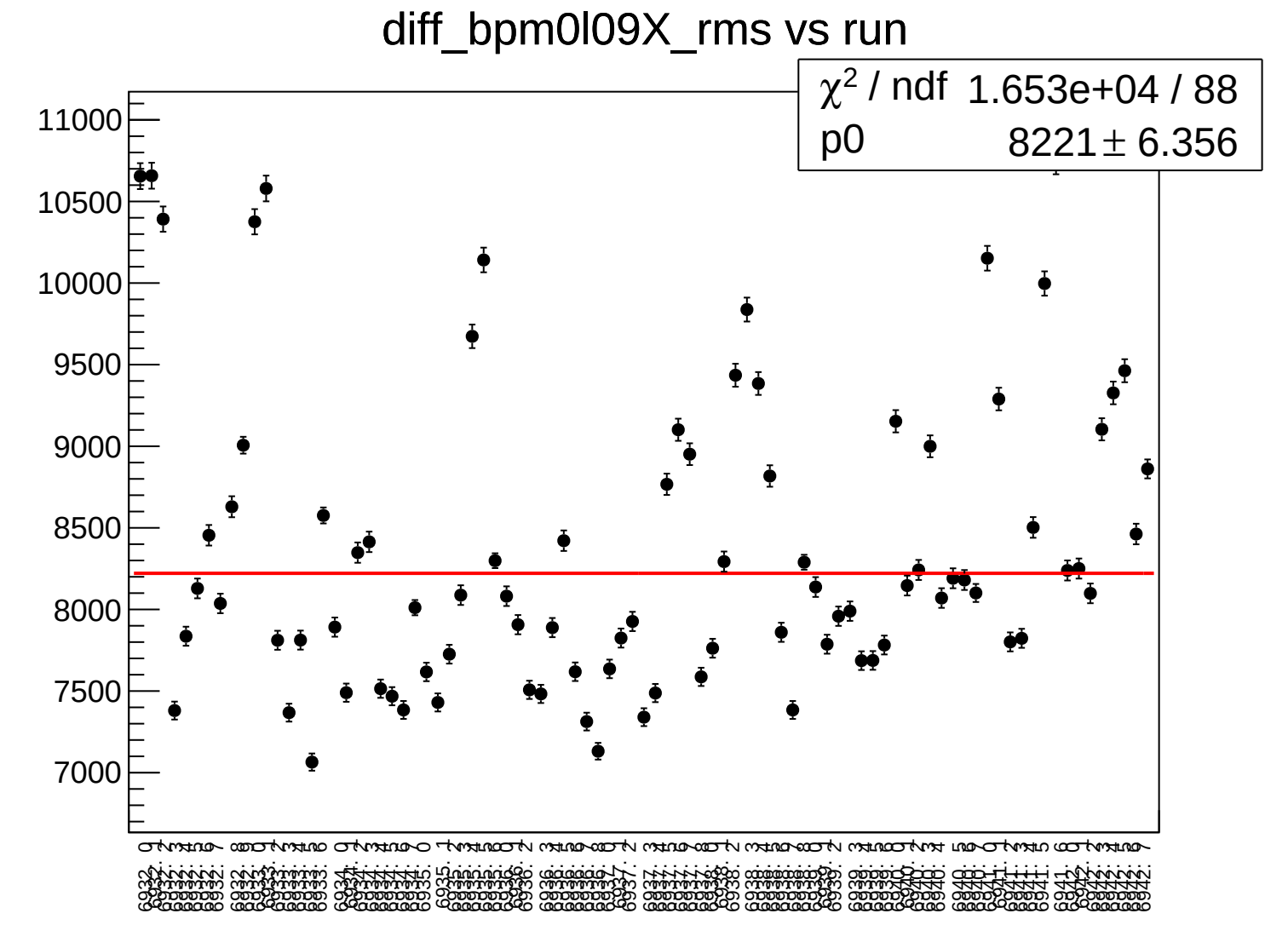

diff_bpm0l08Y_mean vs run
χ² / ndf 82.13 / 88
p0 −3.666 ± 1.934
pull
Entries 89
Mean 82.66
Std Dev 44.96

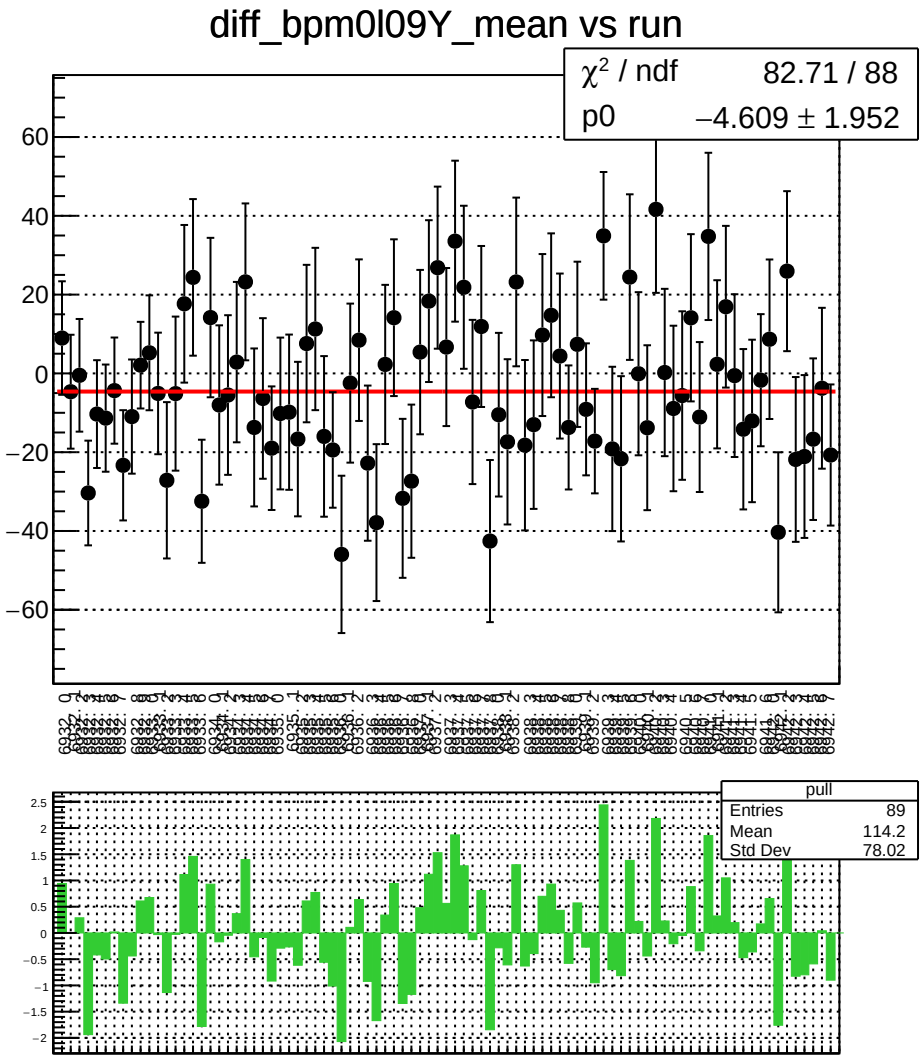

pull1D
Entries 89
Mean 0.03069
Std Dev 0.9601

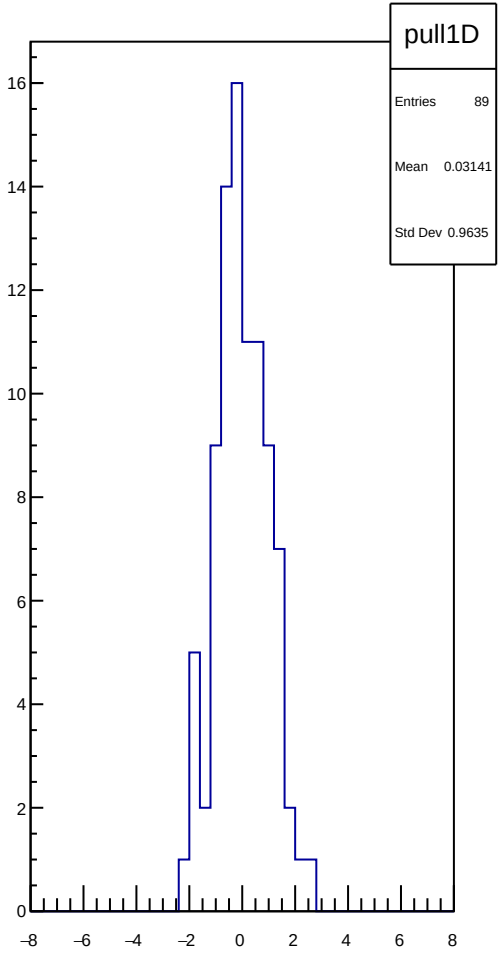

diff_bpm0l08Y_rms vs run
χ² / ndf 4.591e+04 / 88
p0 1754 ± 1.368
2000
1800
1600
1400
1200

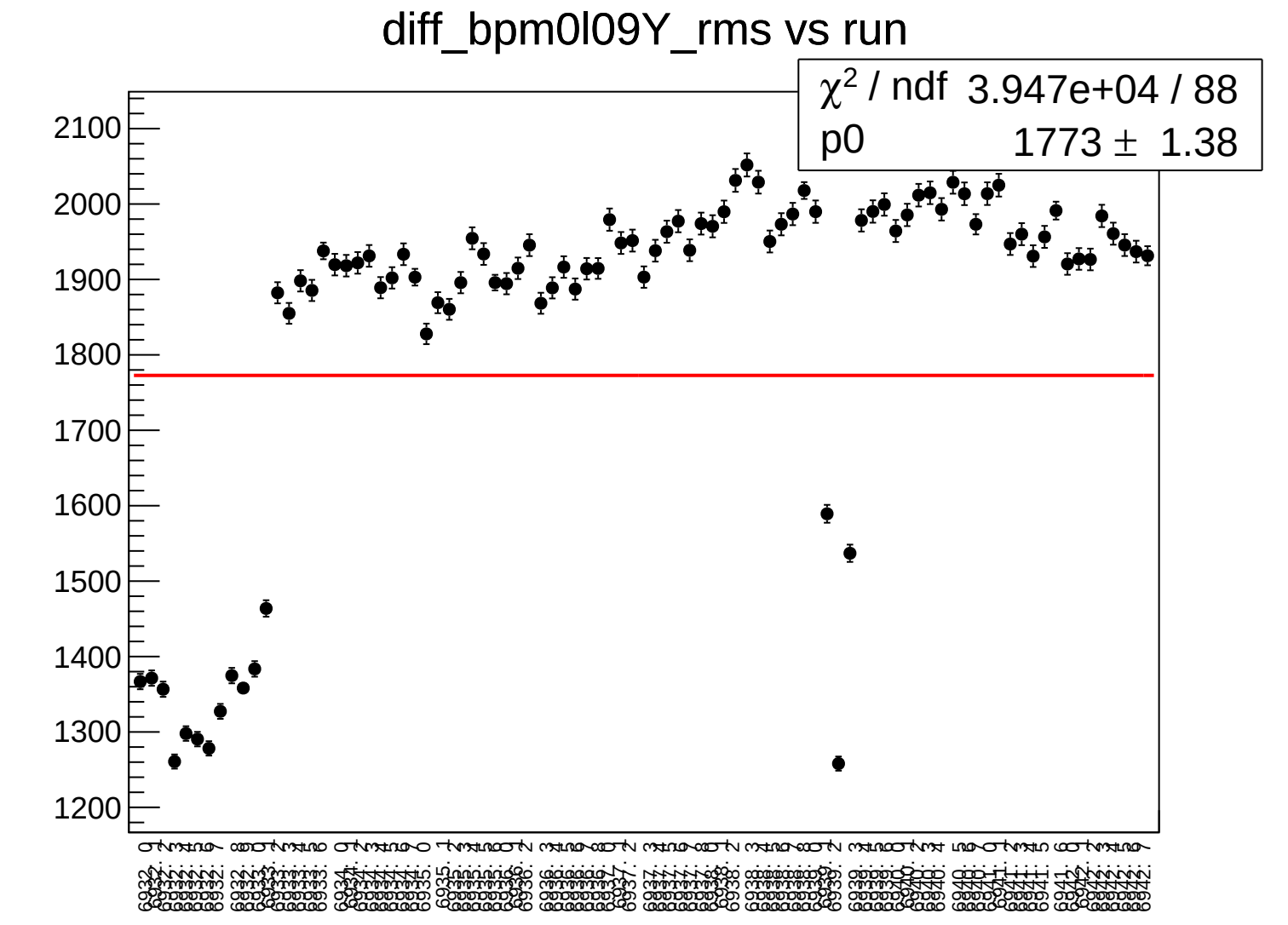

diff_bpm0l09X_mean vs run
χ² / ndf 111 / 88
p0 6.931 ± 8.988
300
200
100
0
−100
−200
−300
pull
Entries 89
Mean 294.8
Std Dev 249.8
3
2
1
0
−1
−2

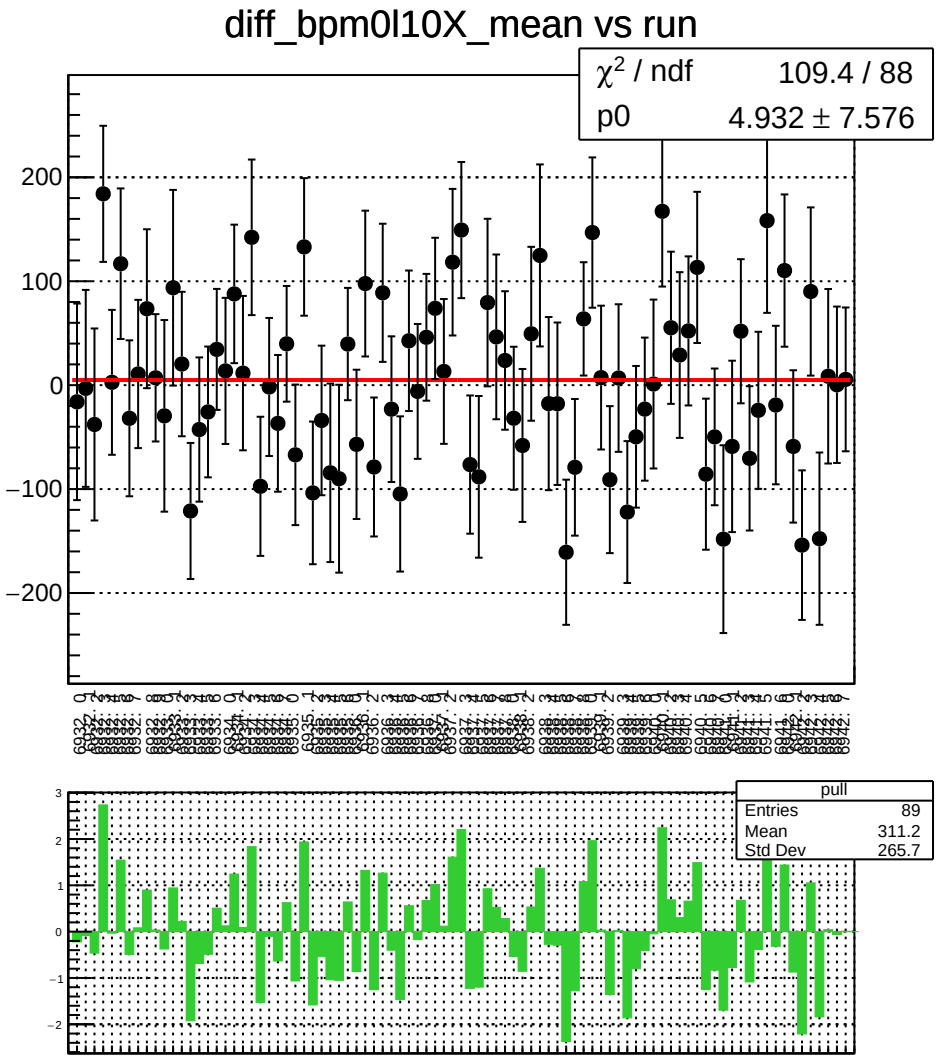

pull1D
Entries 89
Mean −0.01065
Std Dev 1.117
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

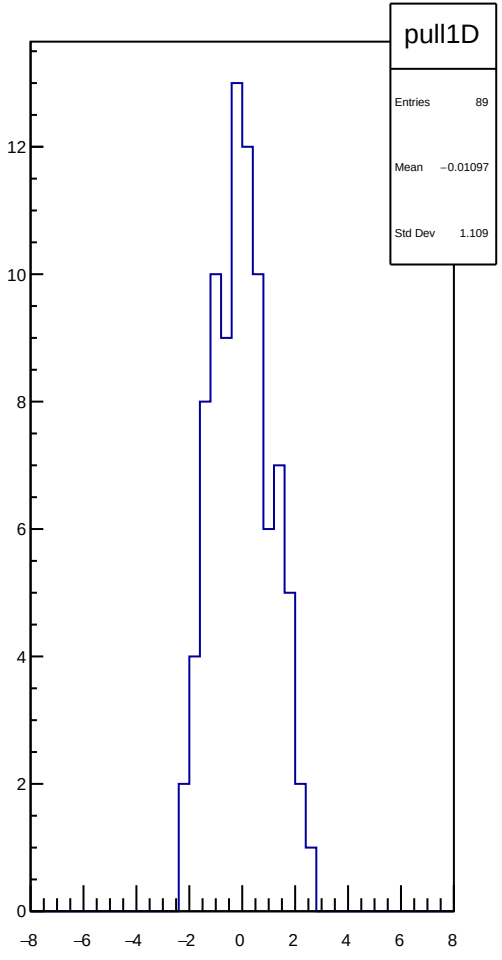

diff_bpm0l09X_rms vs run
χ² / ndf 1.653e+04 / 88
p0 8221 ± 6.356
11000
10500
10000
9500
9000
8500
8000
7500
7000

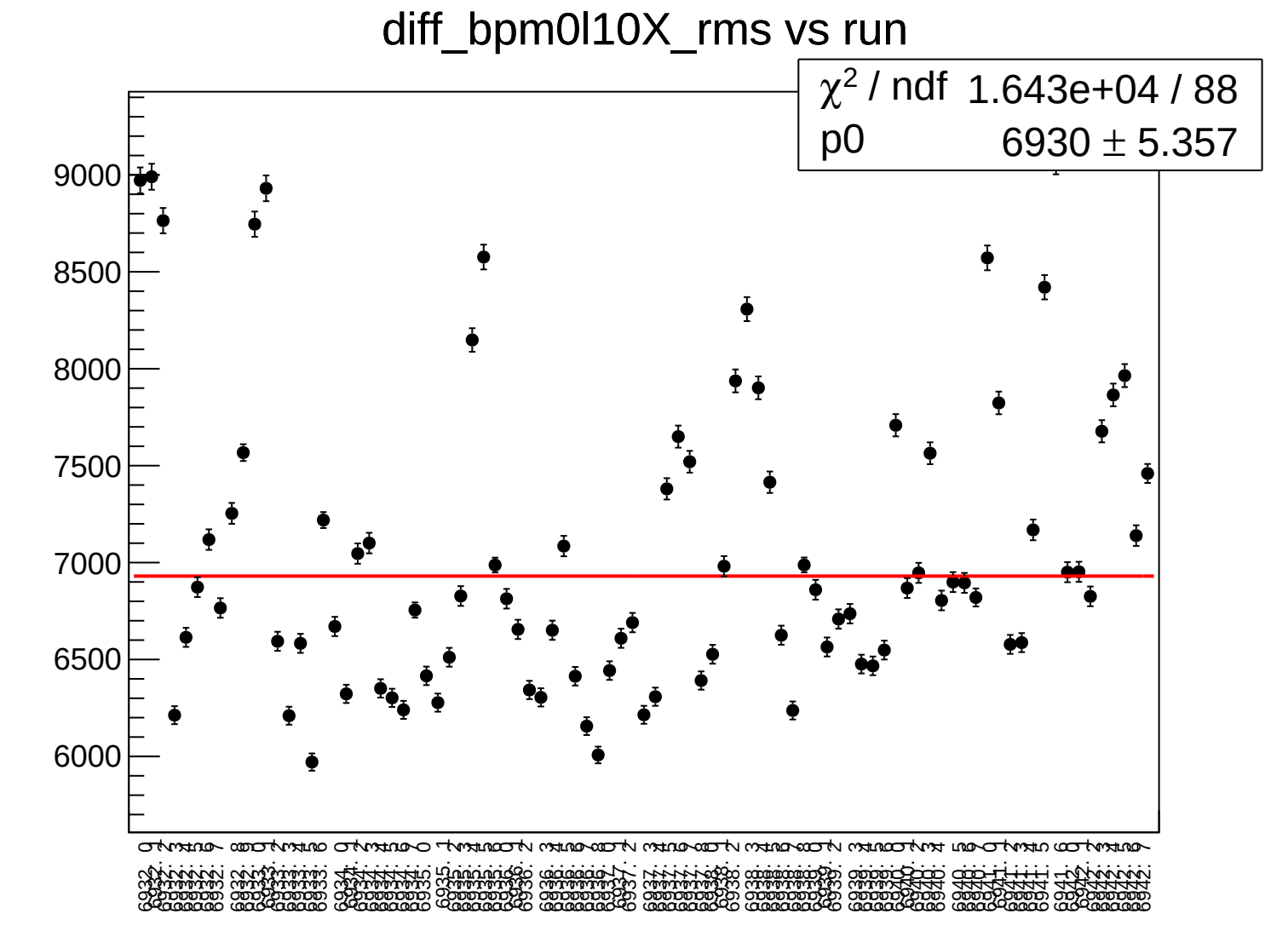

diff_bpm0l09Y_mean vs run
χ² / ndf 82.71 / 88
p0 −4.609 ± 1.952
pull
Entries 89
Mean 114.2
Std Dev 78.02

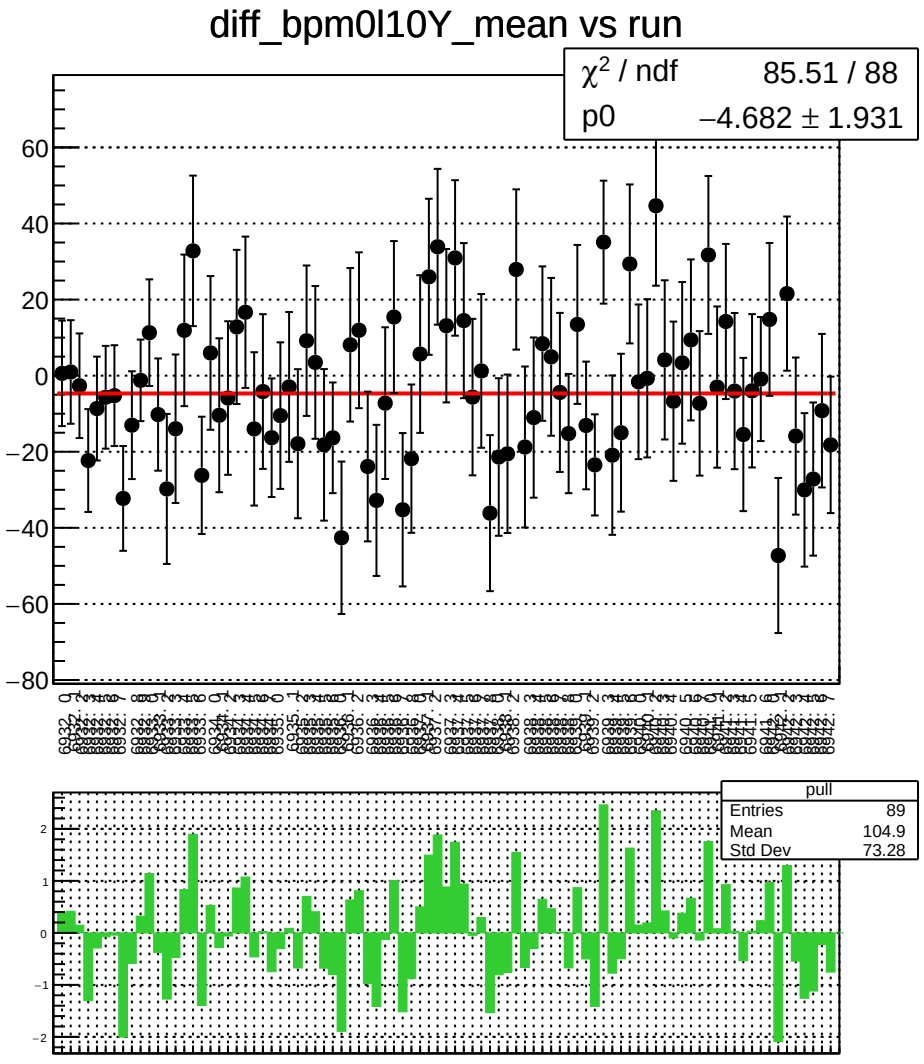

pull1D
Entries 89
Mean 0.03141
Std Dev 0.9635

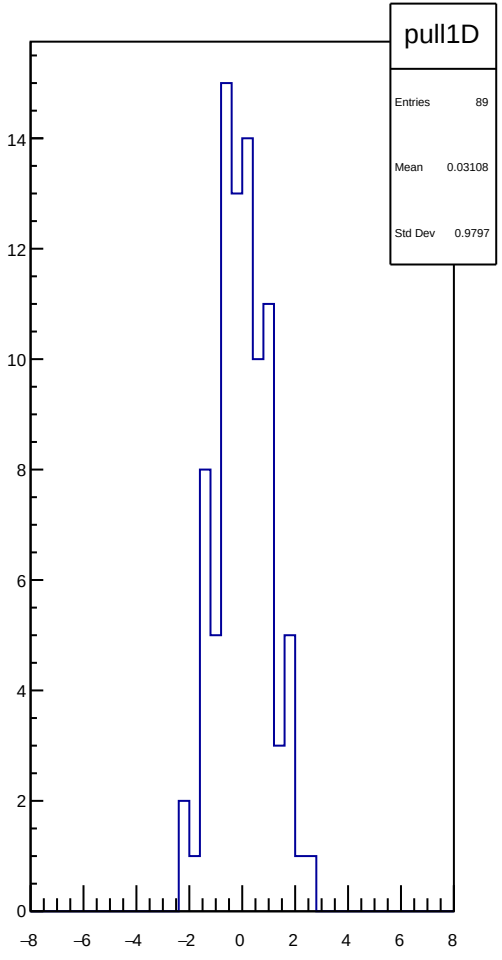

diff_bpm0l09Y_rms vs run
χ² / ndf 3.947e+04 / 88
p0 1773 ± 1.38
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200

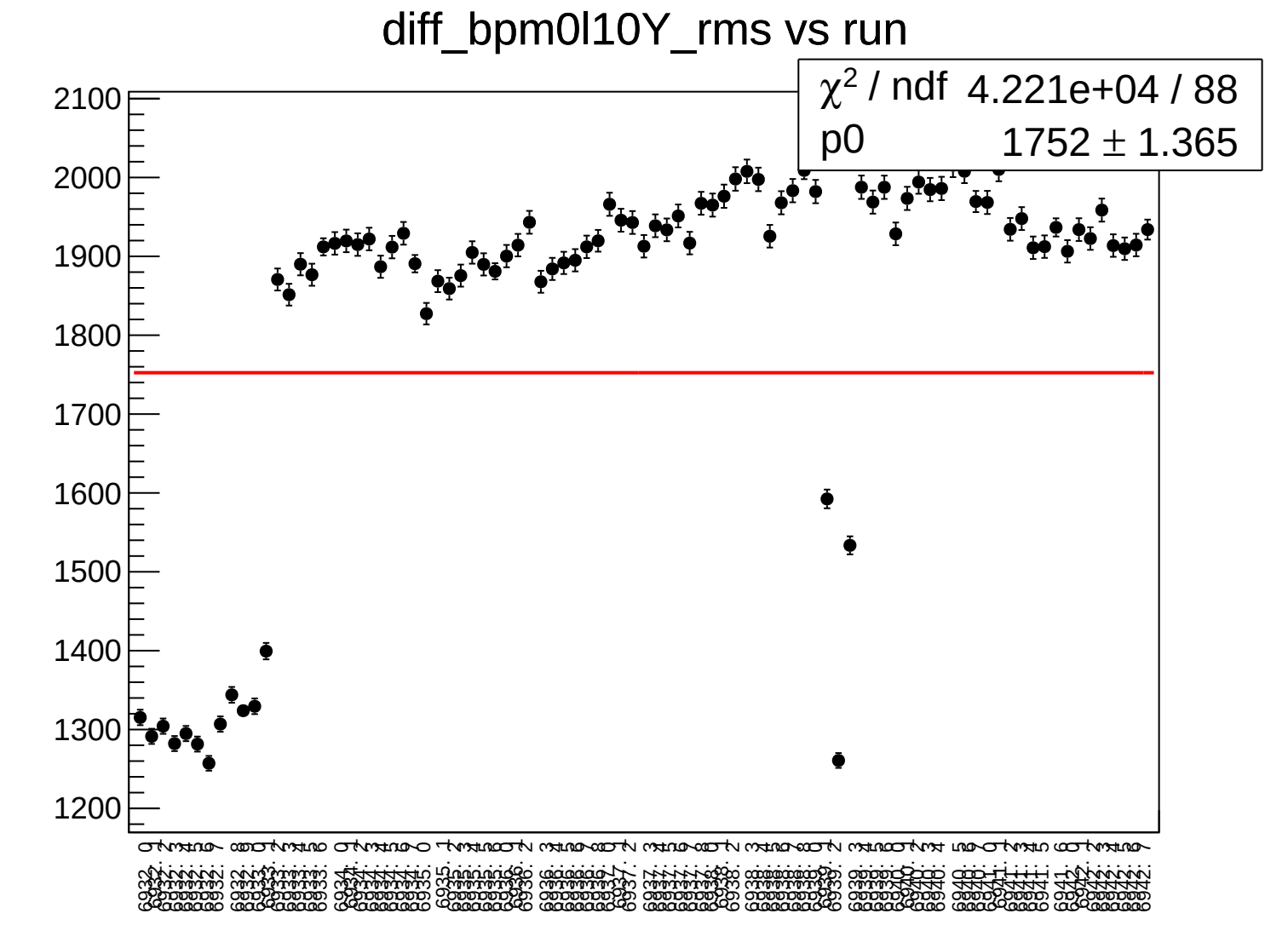

diff_bpm0l10X_mean vs run
χ^2 / ndf 109.4 / 88
p0 4.932 ± 7.576
200
100
0
−100
−200
pull
Entries 89
Mean 311.2
Std Dev 265.7
3
2
1
0
−1
−2

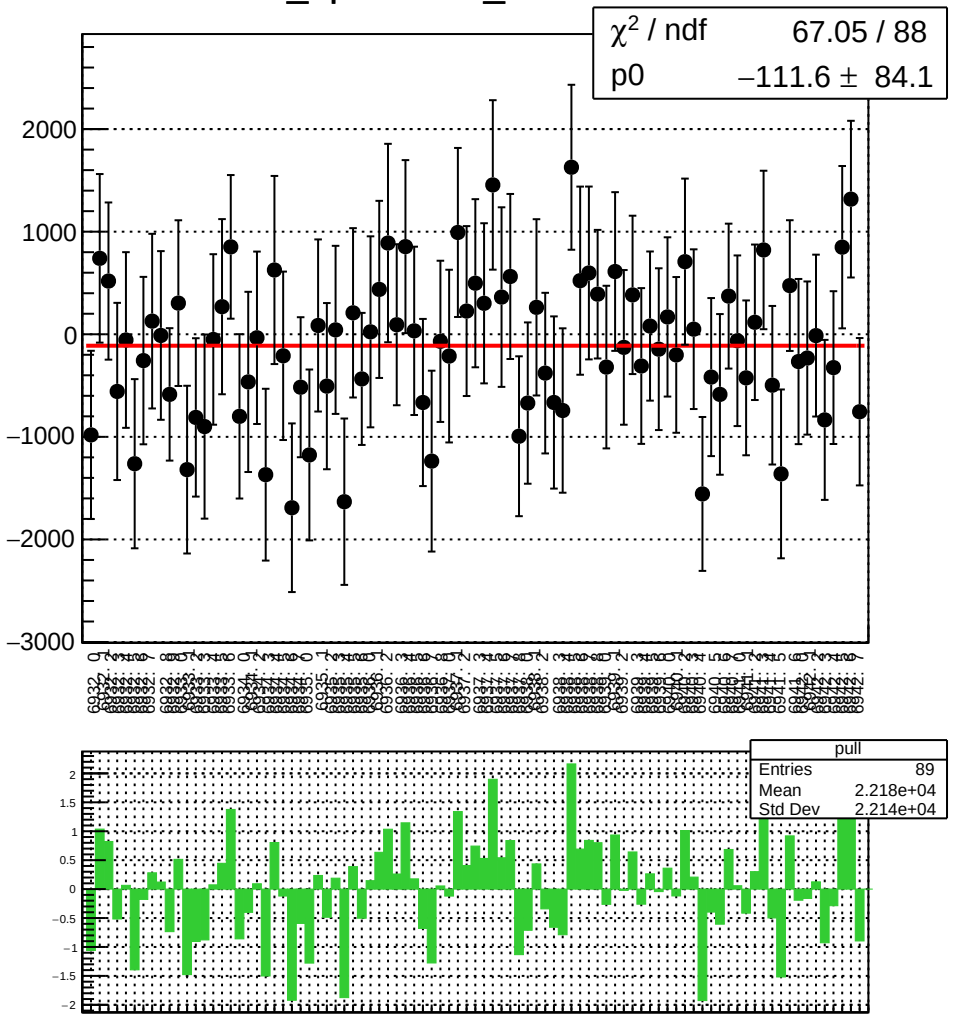

pull1D
Entries 89
Mean −0.01097
Std Dev 1.109
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

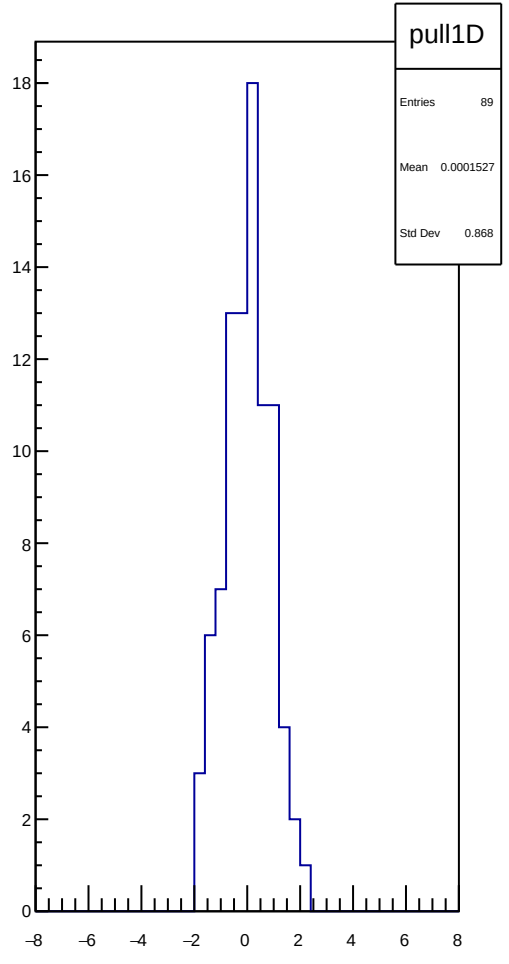

diff_bpm0l10X_rms vs run
χ² / ndf 1.643e+04 / 88
p0 6930 ± 5.357
9000
8500
8000
7500
7000
6500
6000

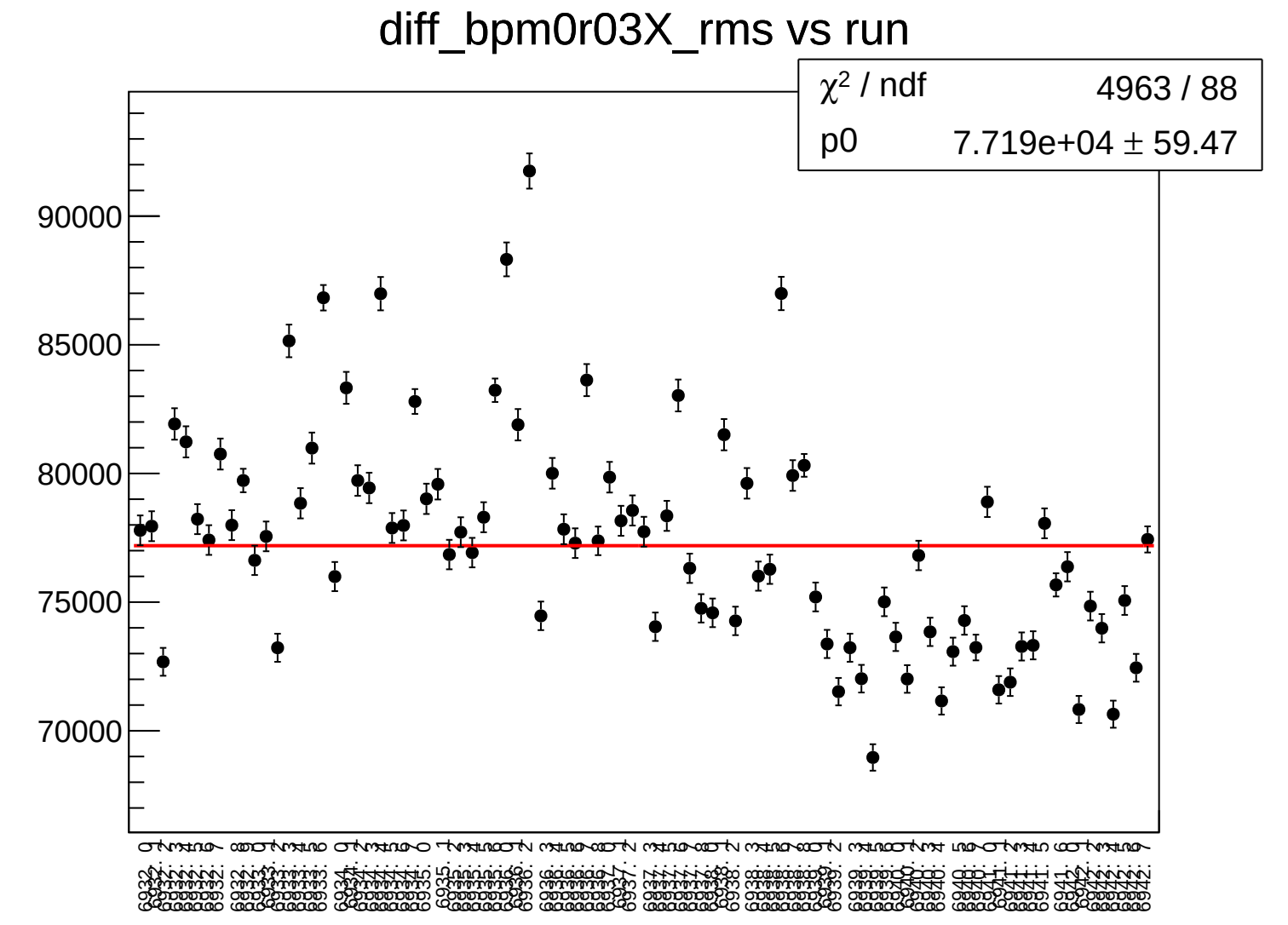

diff_bpm0l10Y_mean vs run
χ² / ndf 85.51 / 88
p0 −4.682 ± 1.931
pull
Entries 89
Mean 104.9
Std Dev 73.28

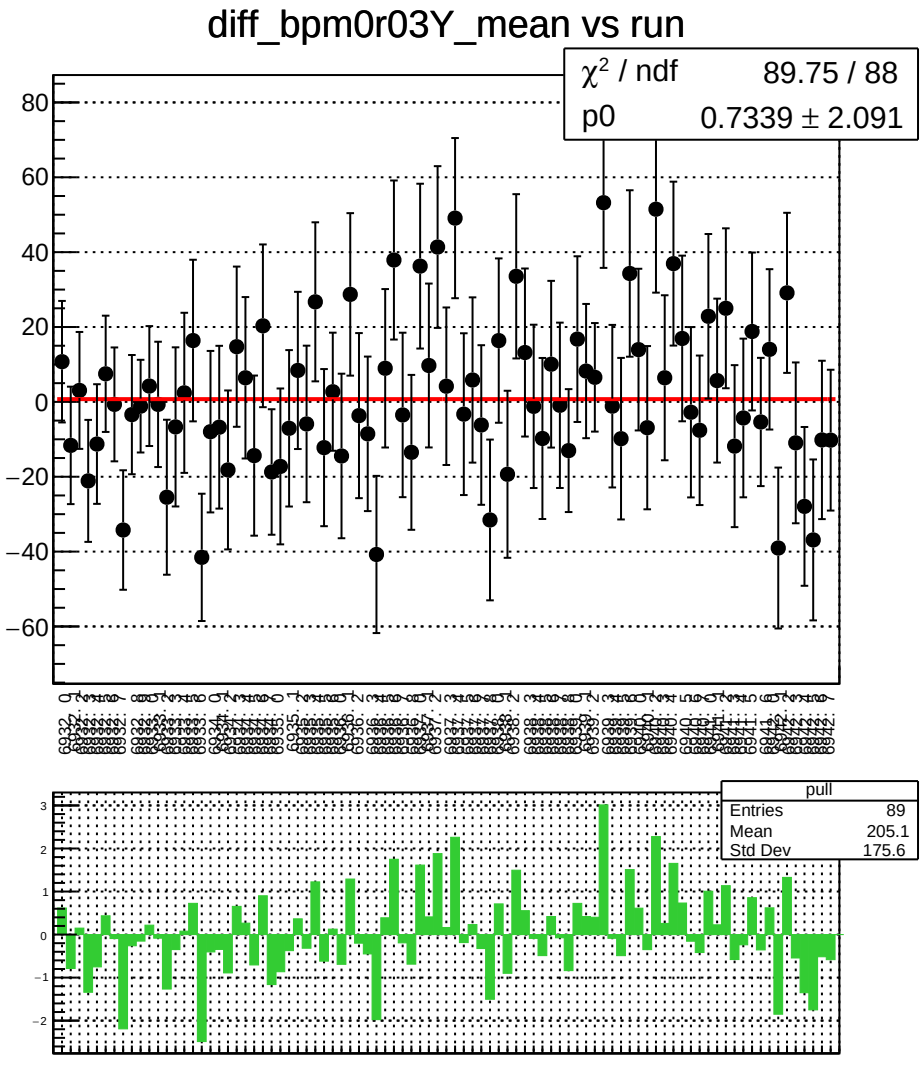

pull1D
Entries 89
Mean 0.03108
Std Dev 0.9797

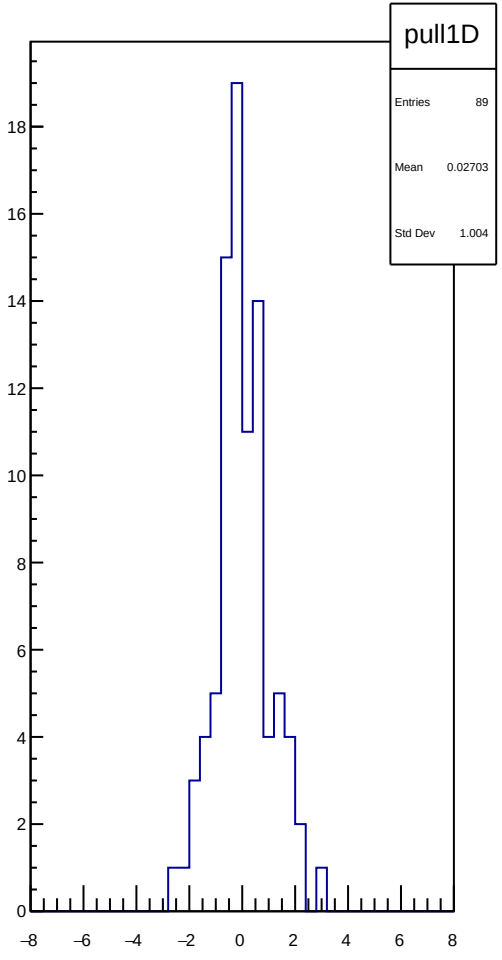

diff_bpm0l10Y_rms vs run
χ² / ndf 4.221e+04 / 88
p0 1752 ± 1.365
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200

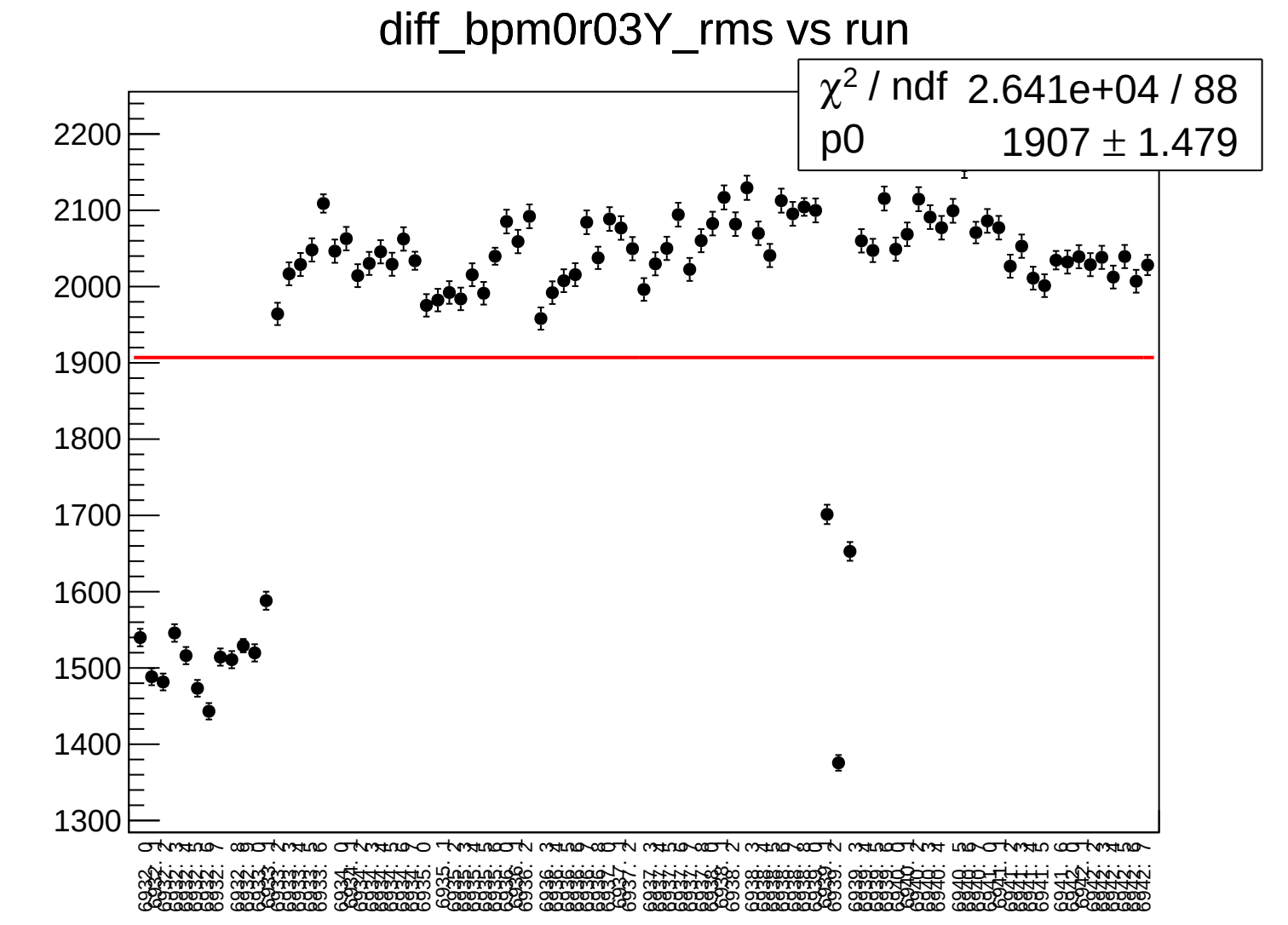

diff_bpm0r03X_mean vs run
χ^2 / ndf 67.05 / 88
p0 −111.6 ± 84.1
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean 2.218e+04
Std Dev 2.214e+04
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

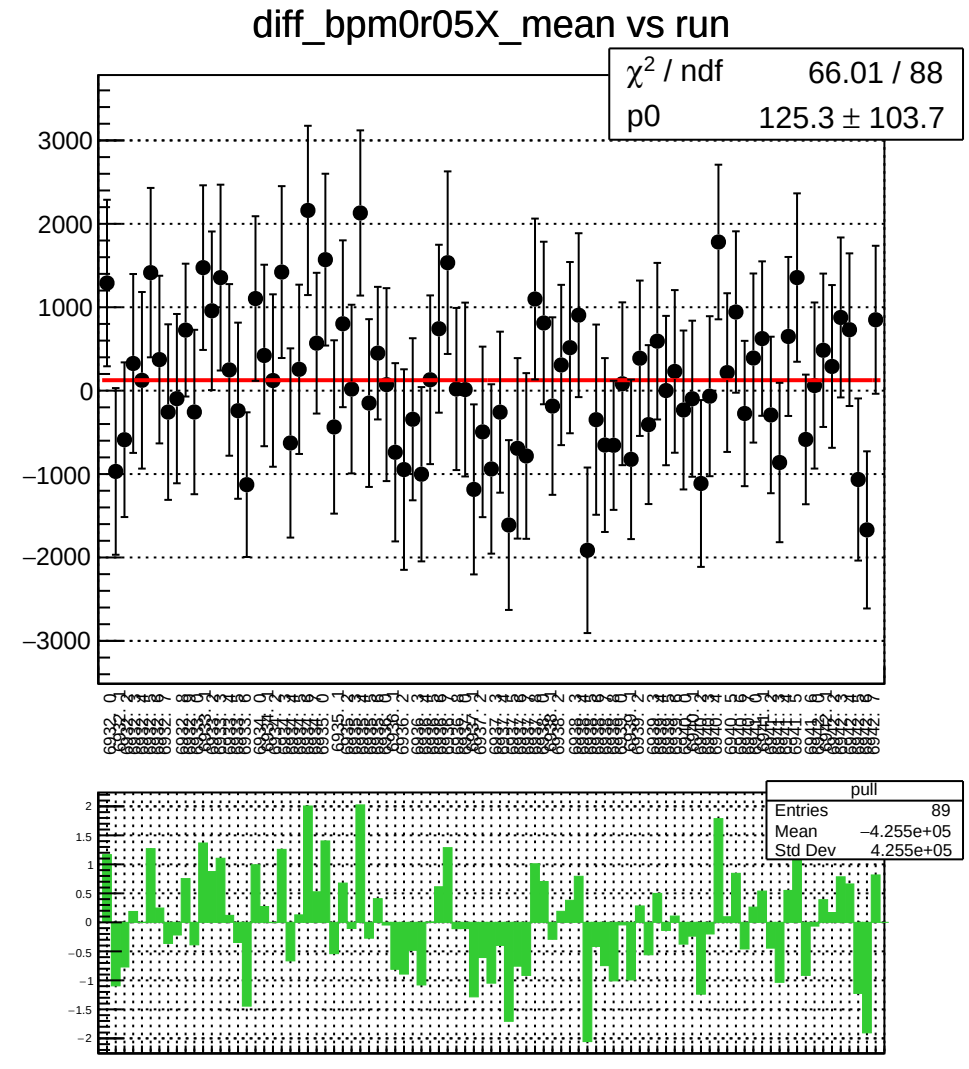

pull1D
Entries 89
Mean 0.0001527
Std Dev 0.868
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

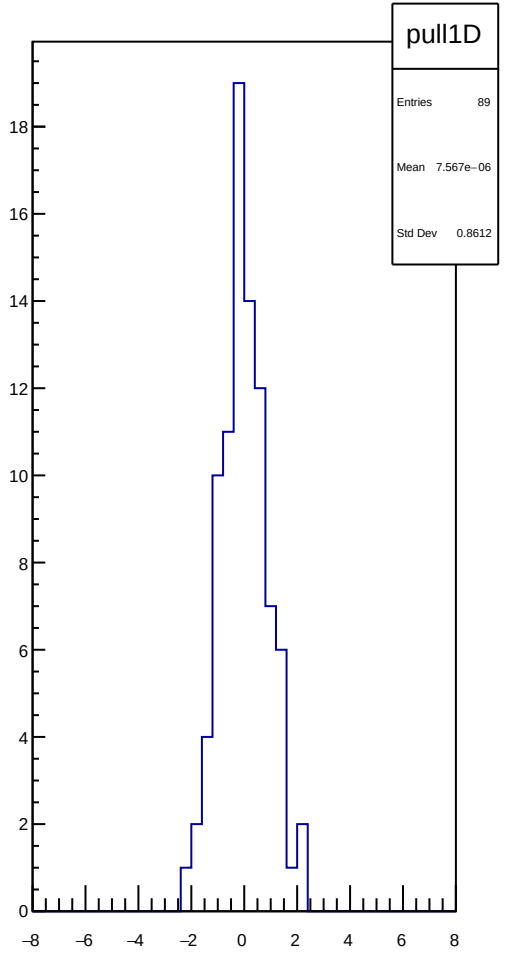

diff_bpm0r03X_rms vs run
χ² / ndf 4963 / 88
p0 7.719e+04 ± 59.47
90000
85000
80000
75000
70000

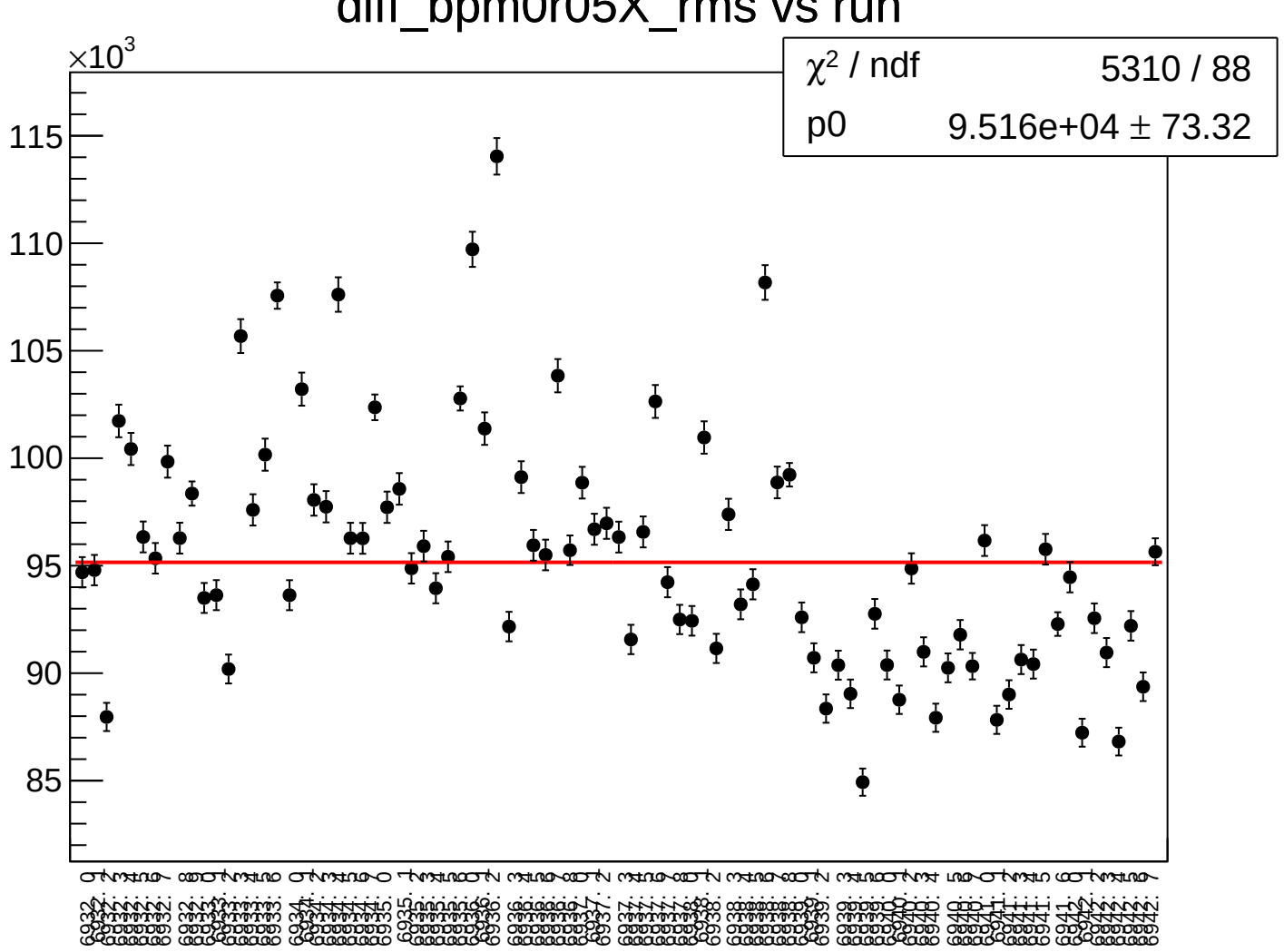

diff_bpm0r03Y_mean vs run
χ² / ndf 89.75 / 88
p0 0.7339 ± 2.091
pull
Entries 89
Mean 205.1
Std Dev 175.6

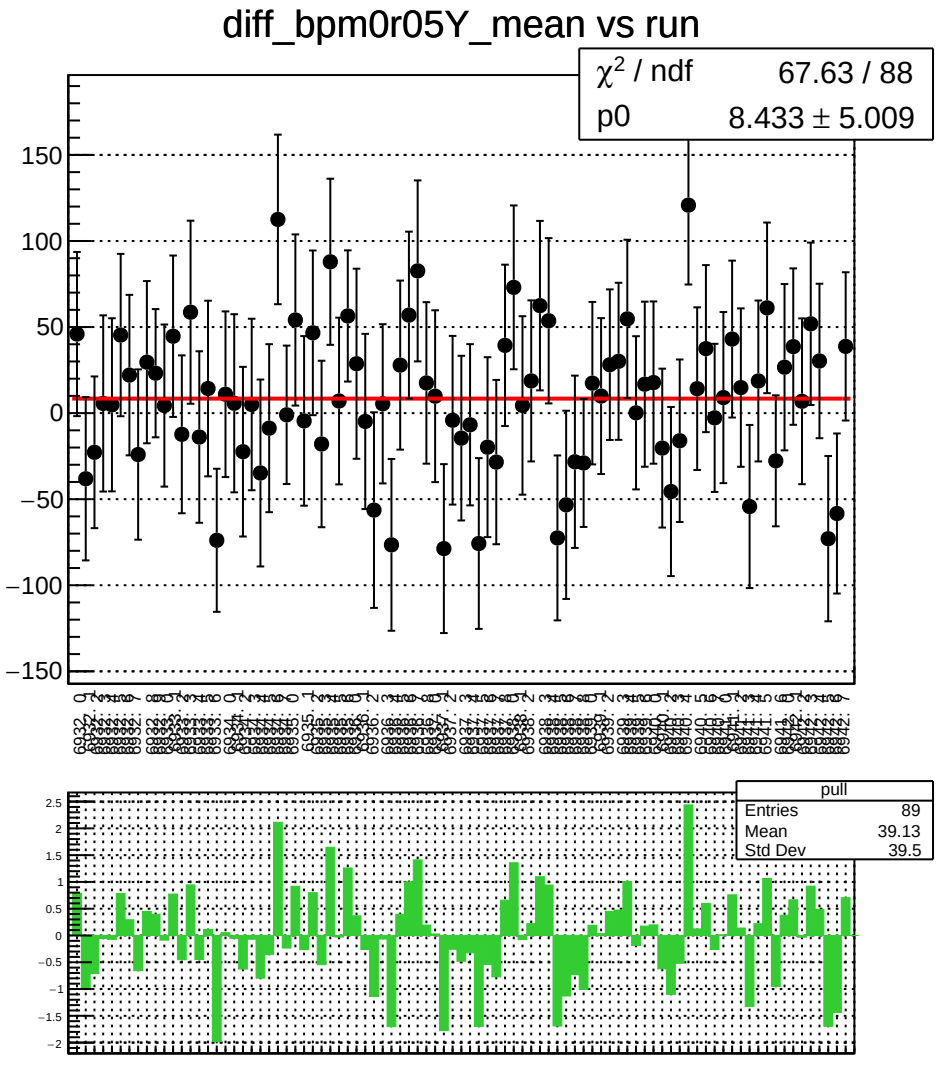

pull1D
Entries 89
Mean 0.02703
Std Dev 1.004

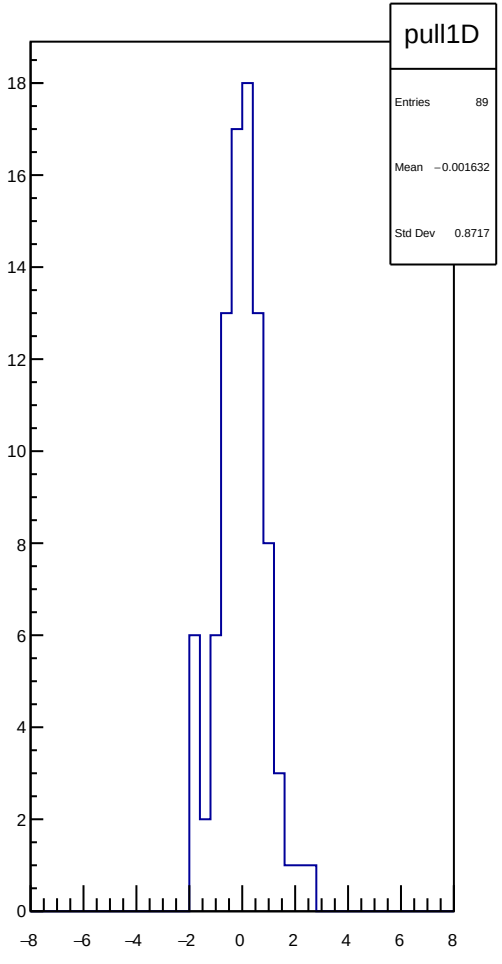

diff_bpm0r03Y_rms vs run
χ² / ndf 2.641e+04 / 88
p0 1907 ± 1.479
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300

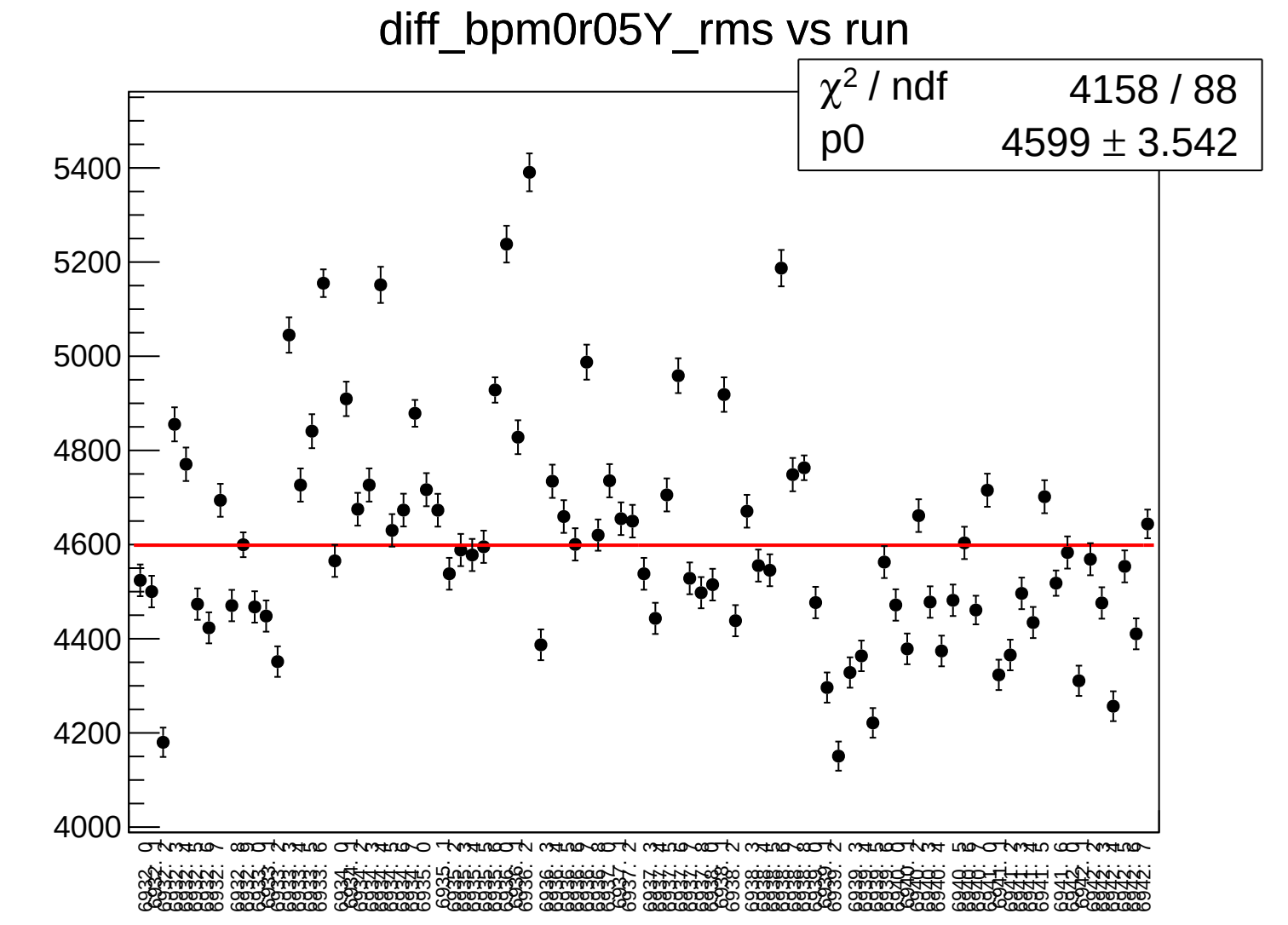

diff_bpm0r05X_mean vs run
χ^2 / ndf 66.01 / 88
p0 125.3 ± 103.7
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 89
Mean −4.255e+05
Std Dev 4.255e+05
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

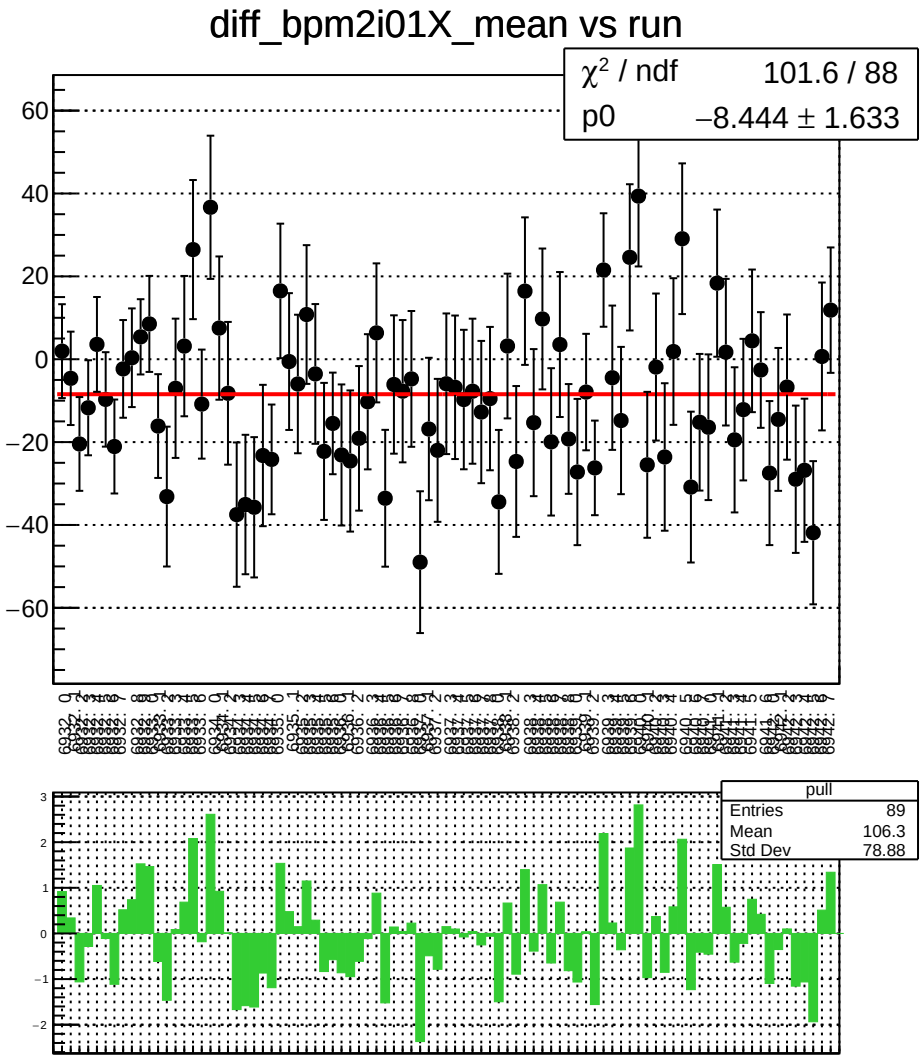

pull1D
Entries 89
Mean 7.567e−06
Std Dev 0.8612
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

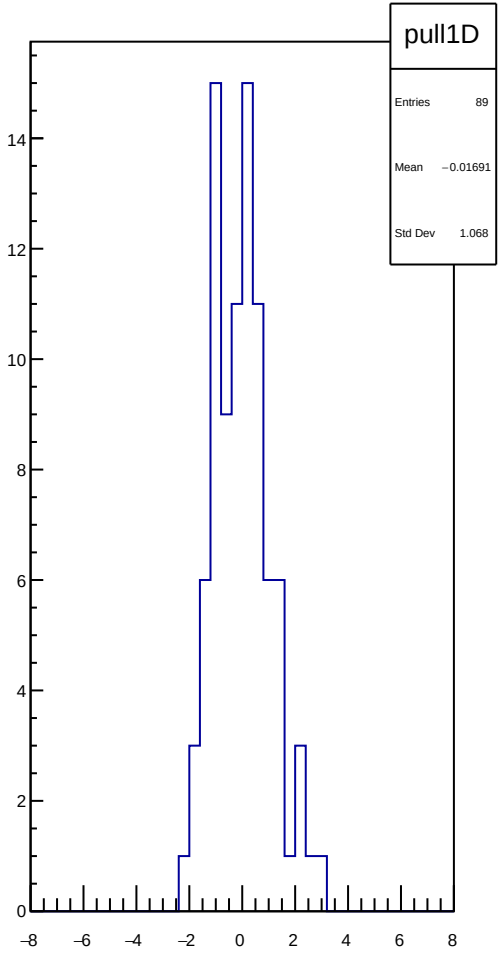

diff_bpm0r05X_rms vs run
×10^3
χ² / ndf 5310 / 88
p0 9.516e+04 ± 73.32
115
110
105
100
95
90
85

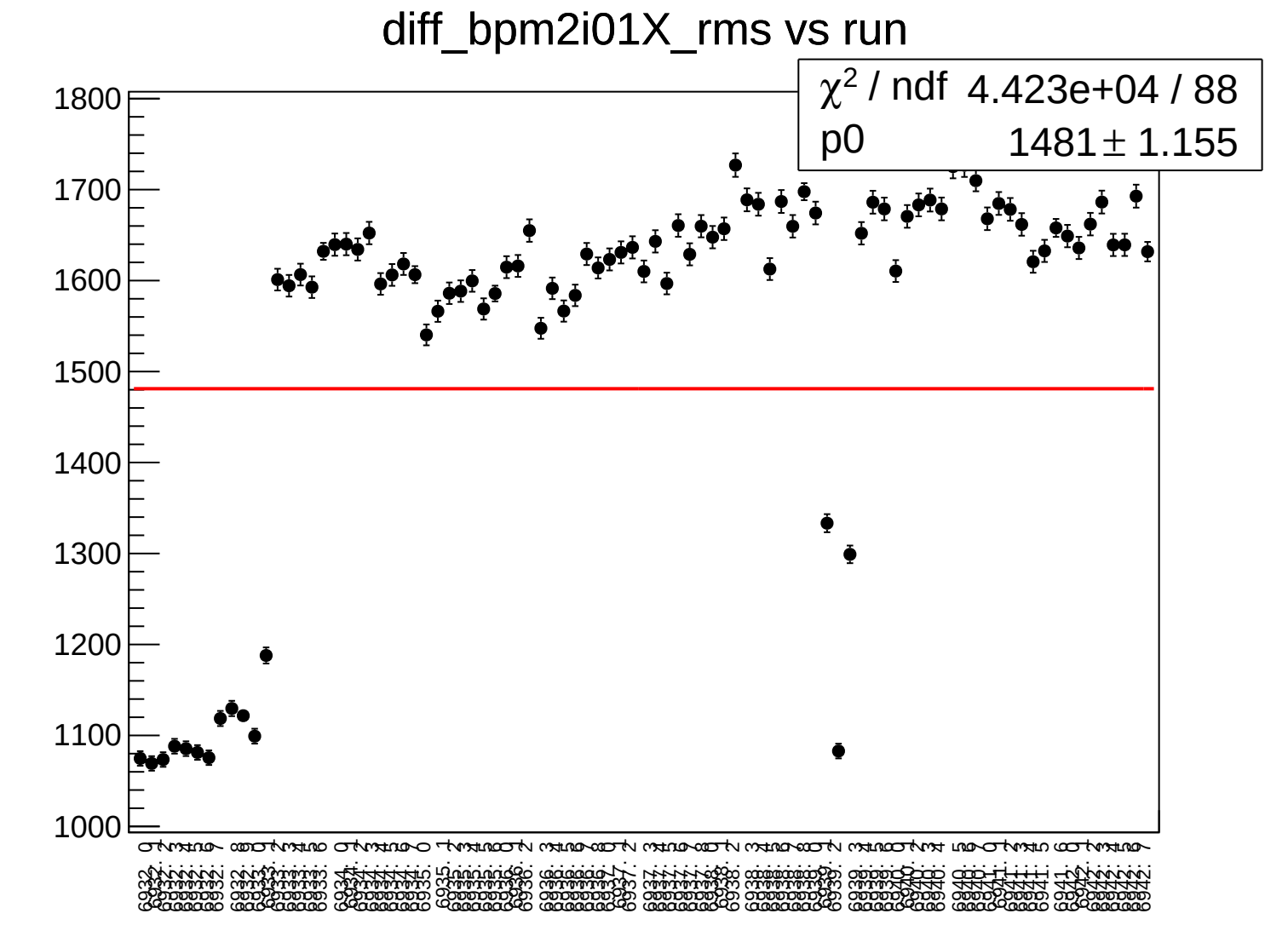

diff_bpm0r05Y_mean vs run
χ^2 / ndf 67.63 / 88
p0 8.433 ± 5.009
pull
Entries 89
Mean 39.13
Std Dev 39.5

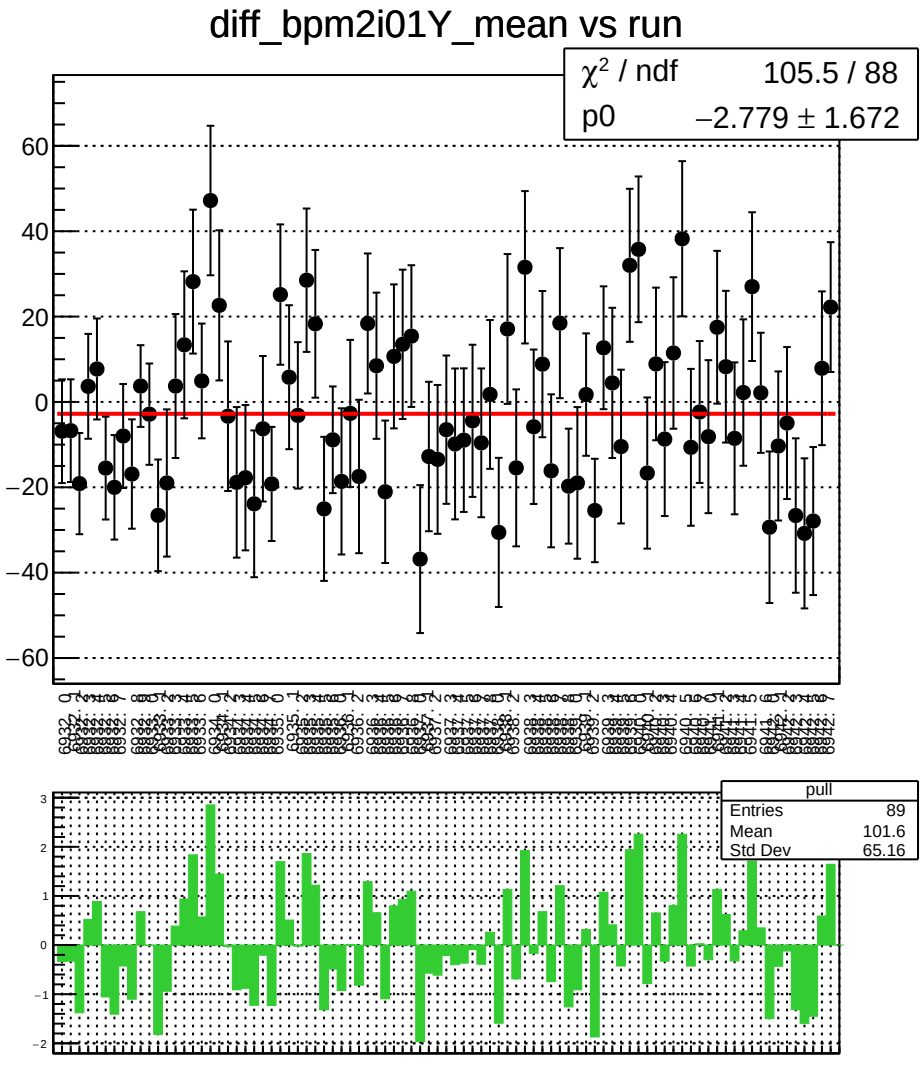

pull1D
Entries 89
Mean −0.001632
Std Dev 0.8717

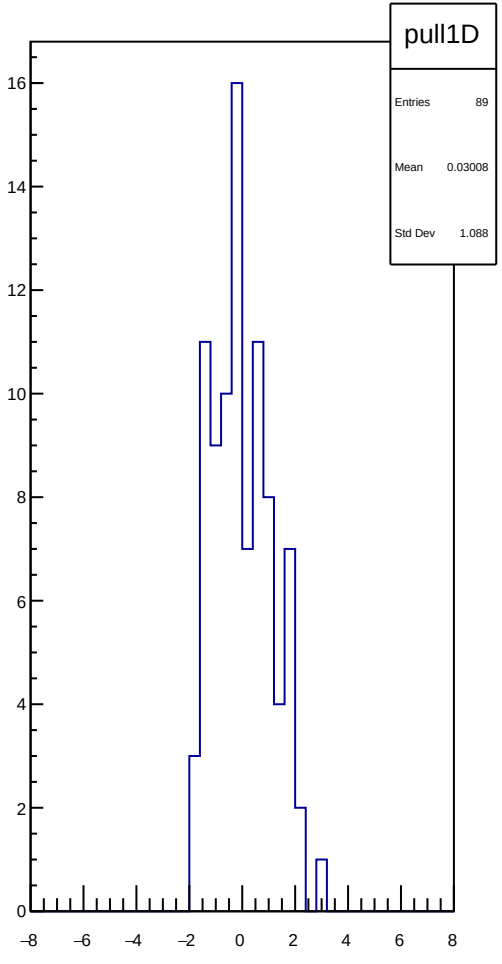

diff_bpm0r05Y_rms vs run
χ² / ndf 4158 / 88
p0 4599 ± 3.542
5400
5200
5000
4800
4600
4400
4200
4000

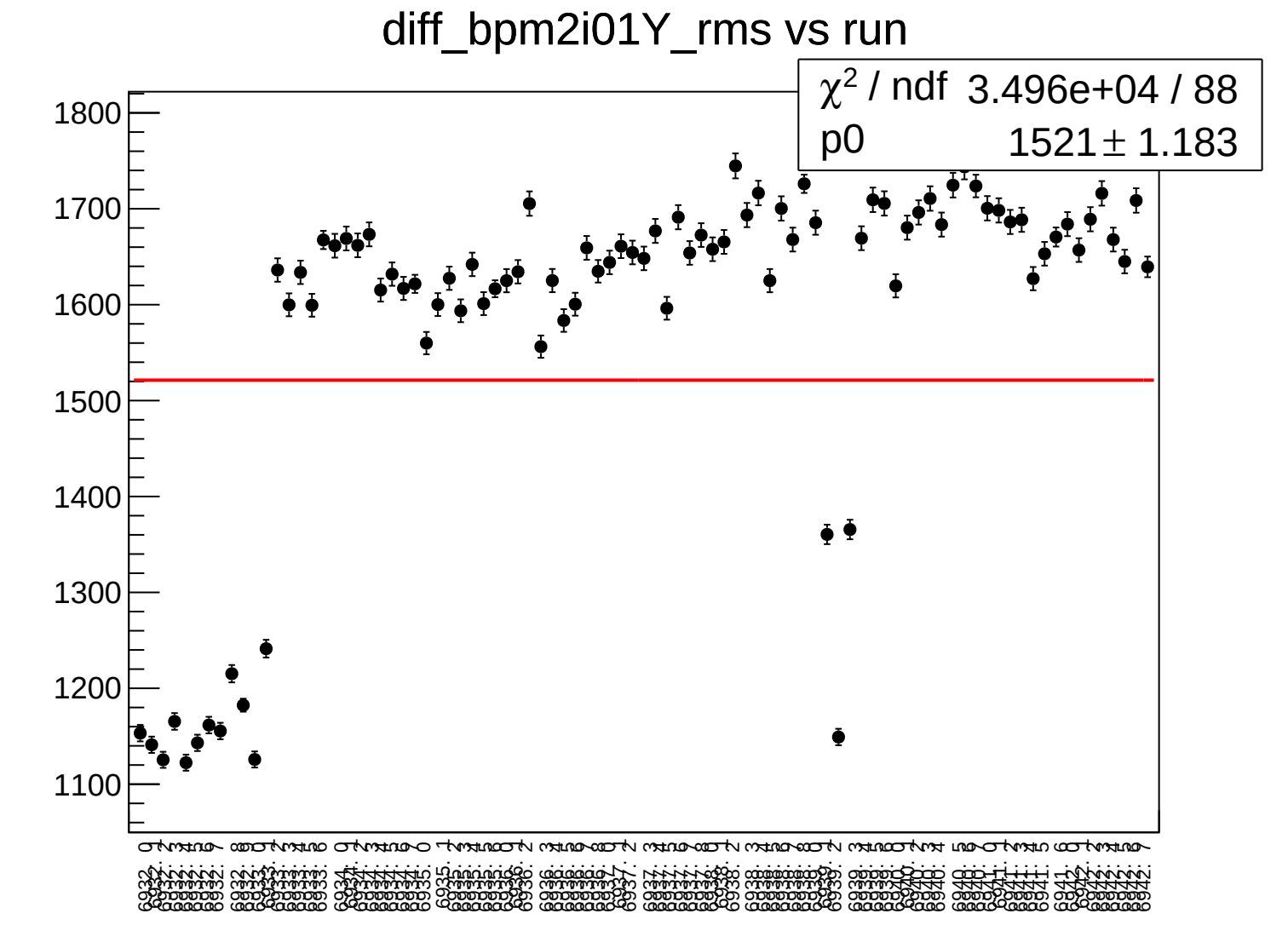

diff_bpm2i01X_mean vs run
χ² / ndf 101.6 / 88
p0 −8.444 ± 1.633
pull
Entries 89
Mean 106.3
Std Dev 78.88

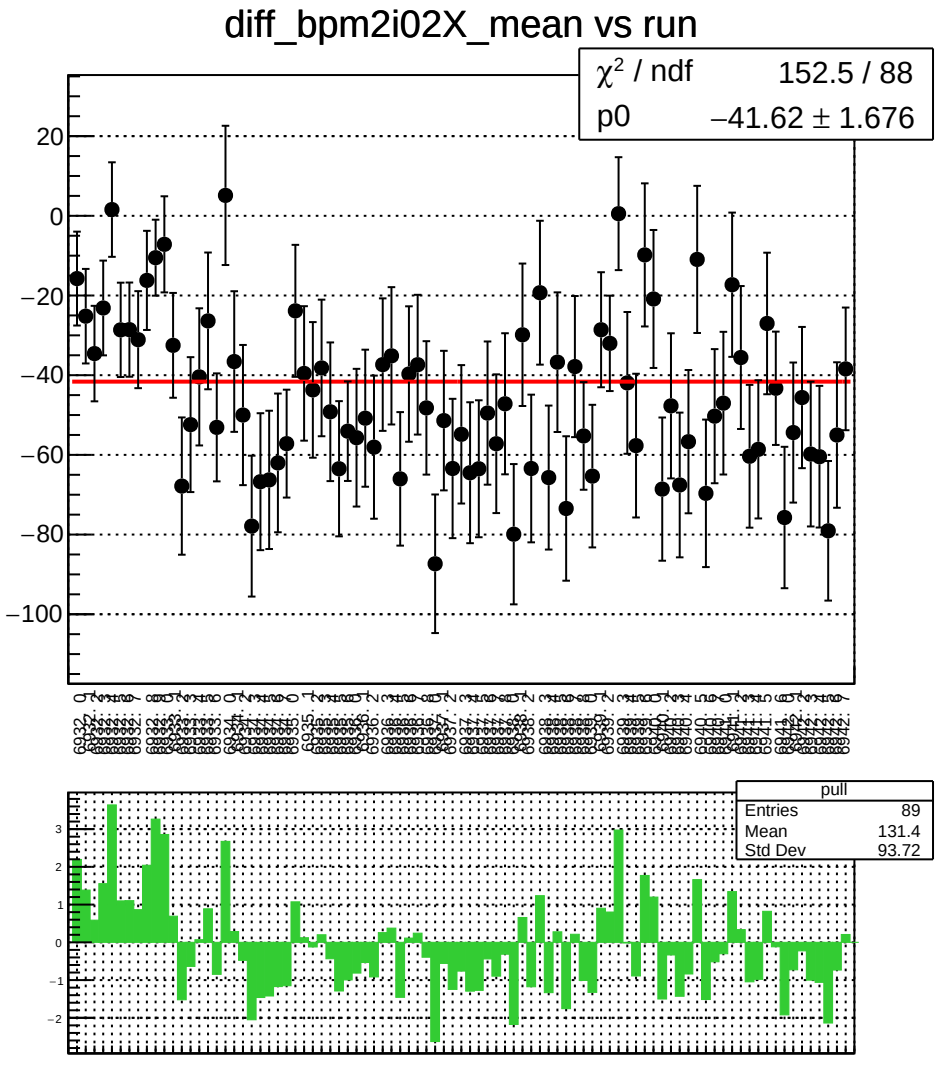

pull1D
Entries 89
Mean −0.01691
Std Dev 1.068

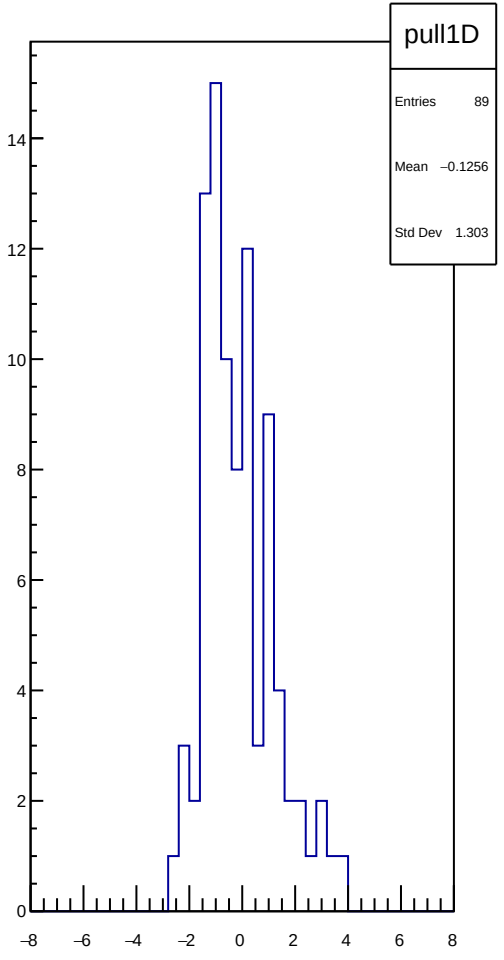

diff_bpm2i01X_rms vs run
χ² / ndf 4.423e+04 / 88
p0 1481 ± 1.155
1800
1700
1600
1500
1400
1300
1200
1100
1000

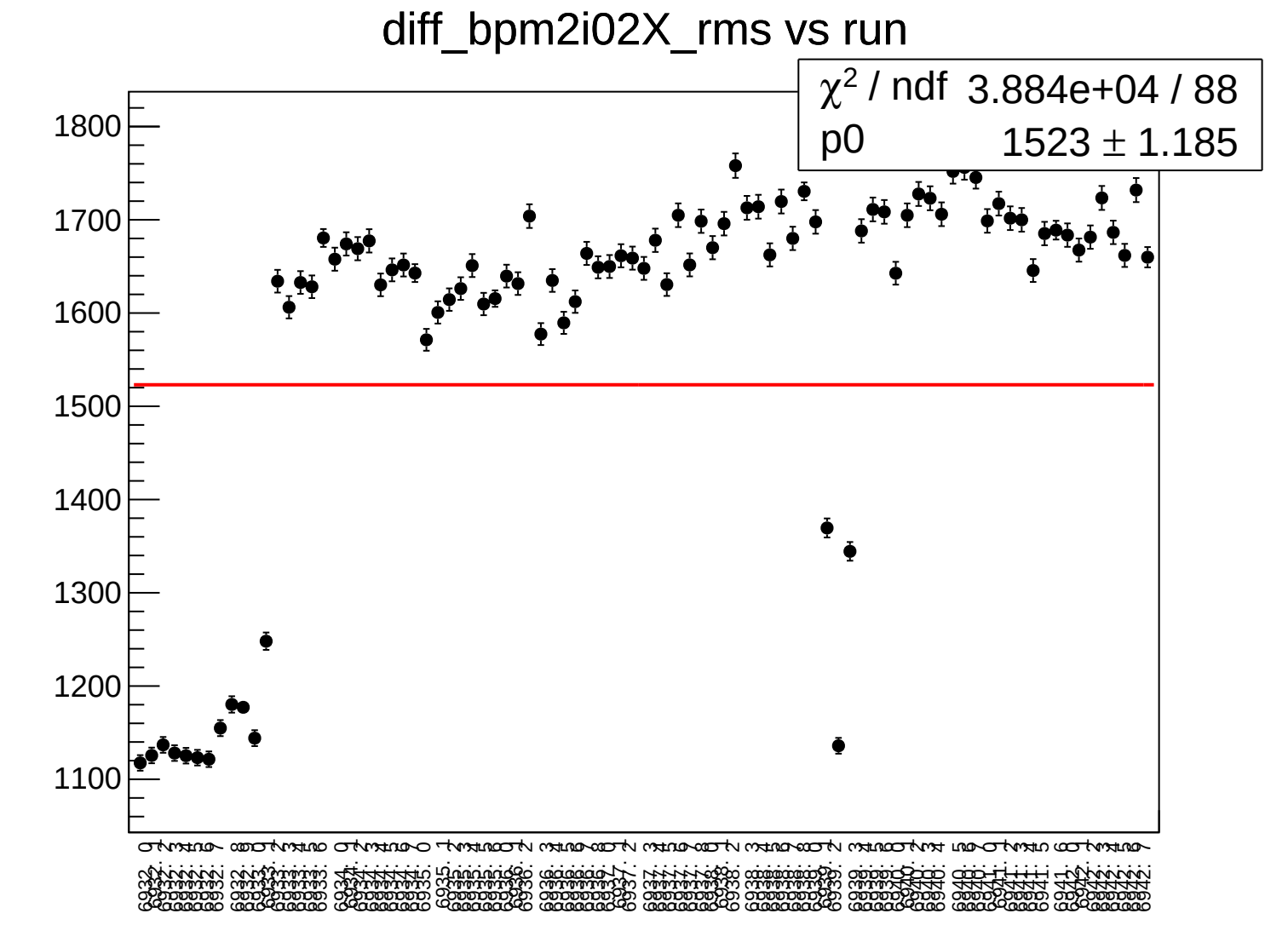

diff_bpm2i01Y_mean vs run
χ² / ndf 105.5 / 88
p0 −2.779 ± 1.672
pull
Entries 89
Mean 101.6
Std Dev 65.16

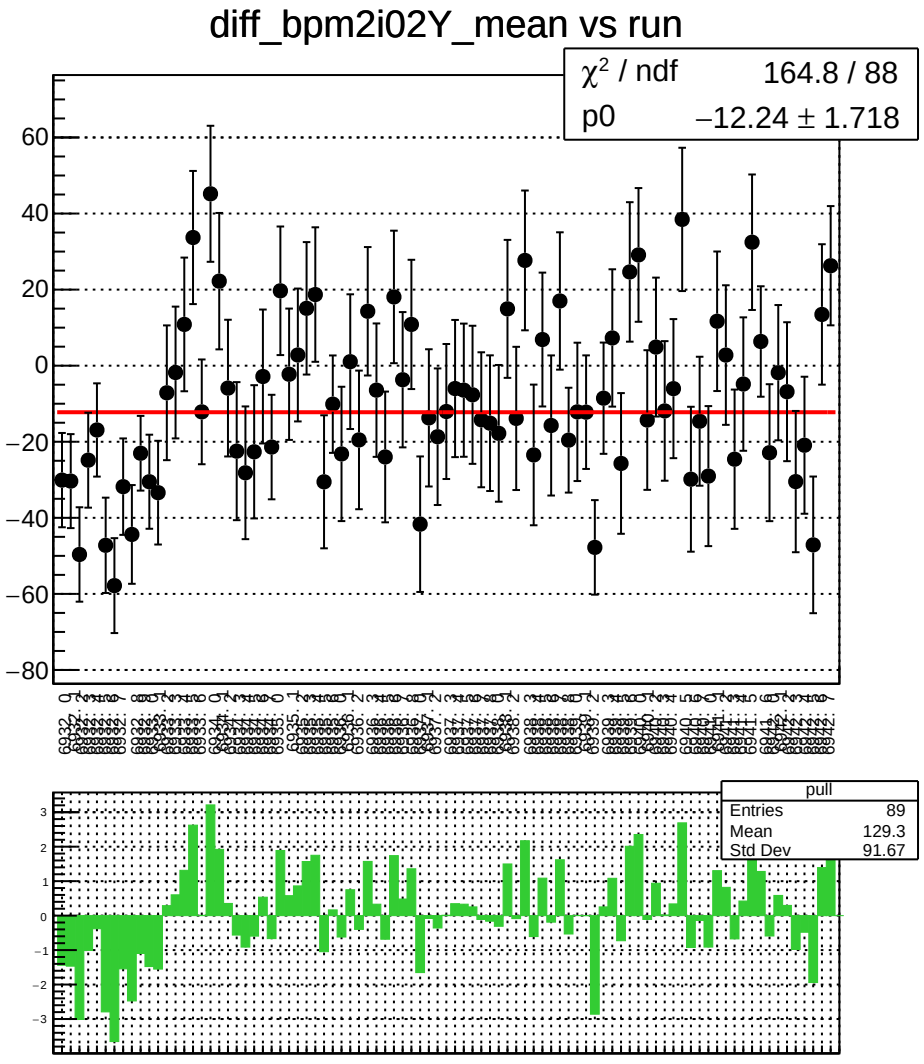

pull1D
Entries 89
Mean 0.03008
Std Dev 1.088

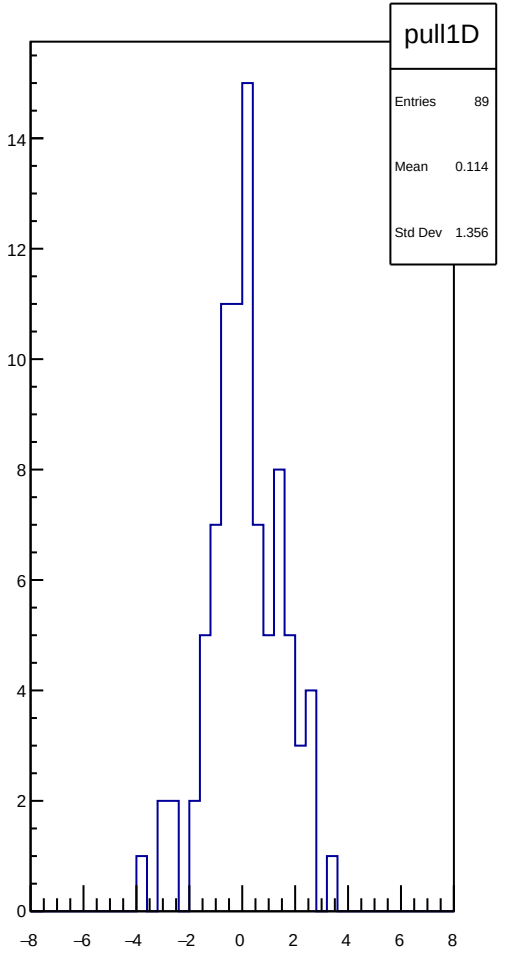

diff_bpm2i01Y_rms vs run
χ² / ndf 3.496e+04 / 88
p0 1521 ± 1.183
1800
1700
1600
1500
1400
1300
1200
1100

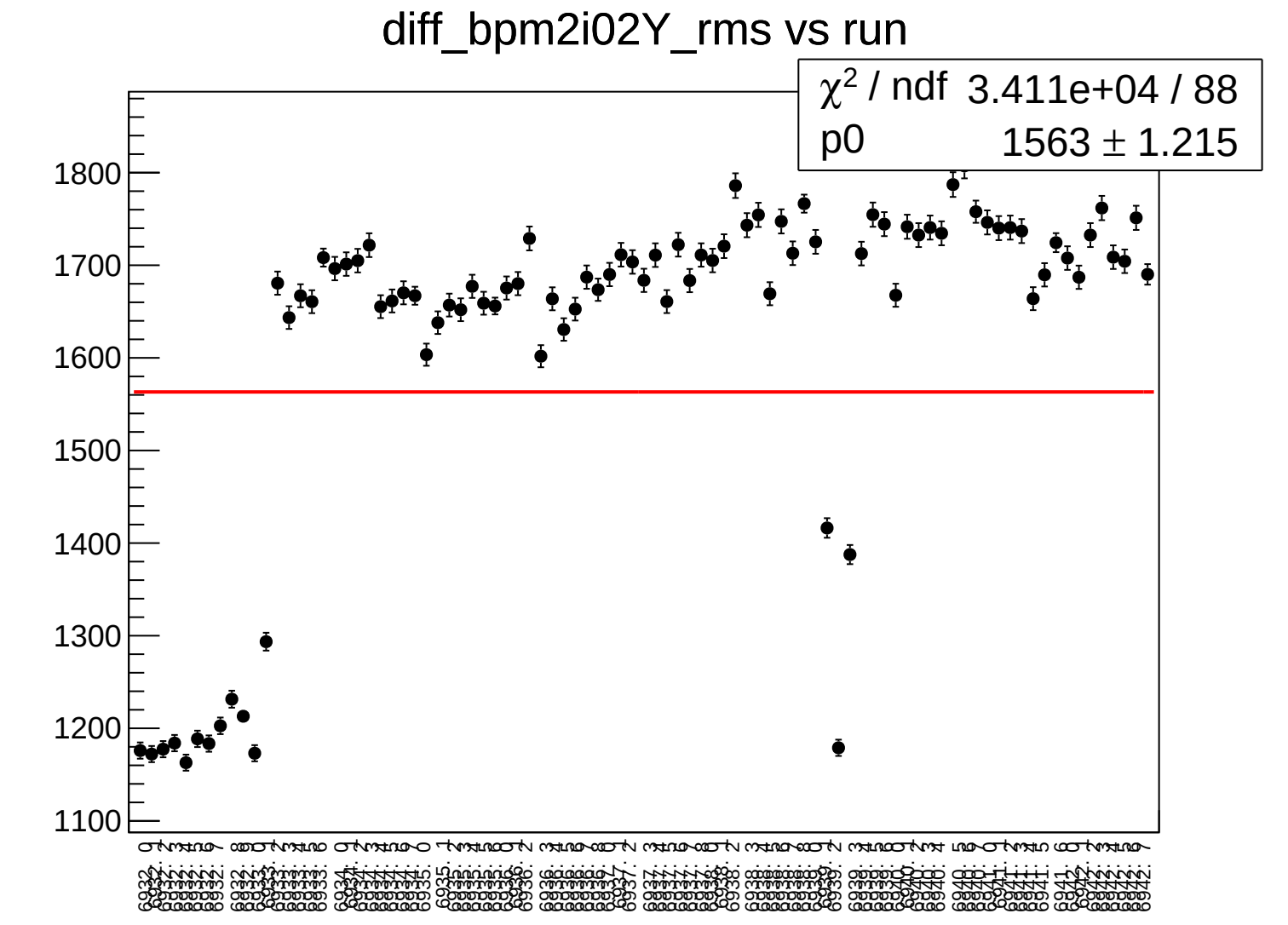

diff_bpm2i02X_mean vs run
χ² / ndf 152.5 / 88
p0 −41.62 ± 1.676
pull
Entries 89
Mean 131.4
Std Dev 93.72

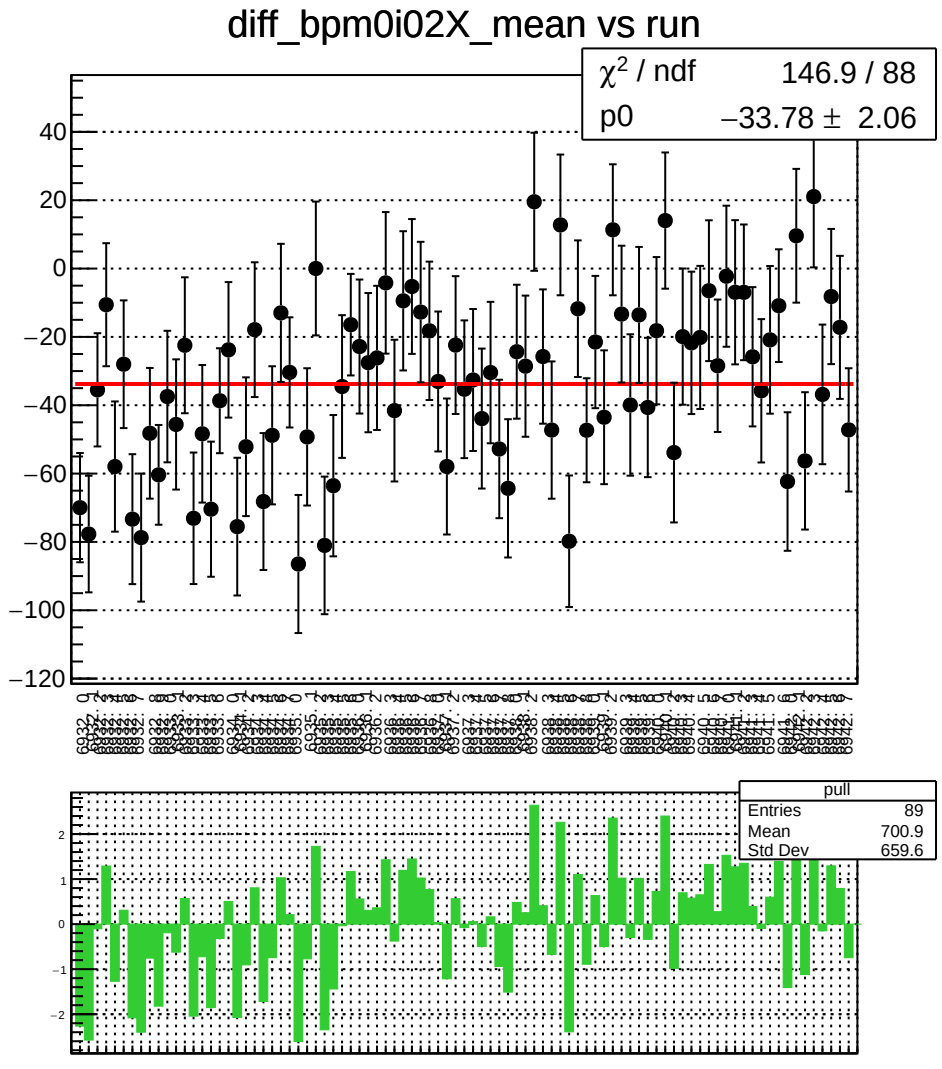

pull1D
Entries 89
Mean −0.1256
Std Dev 1.303

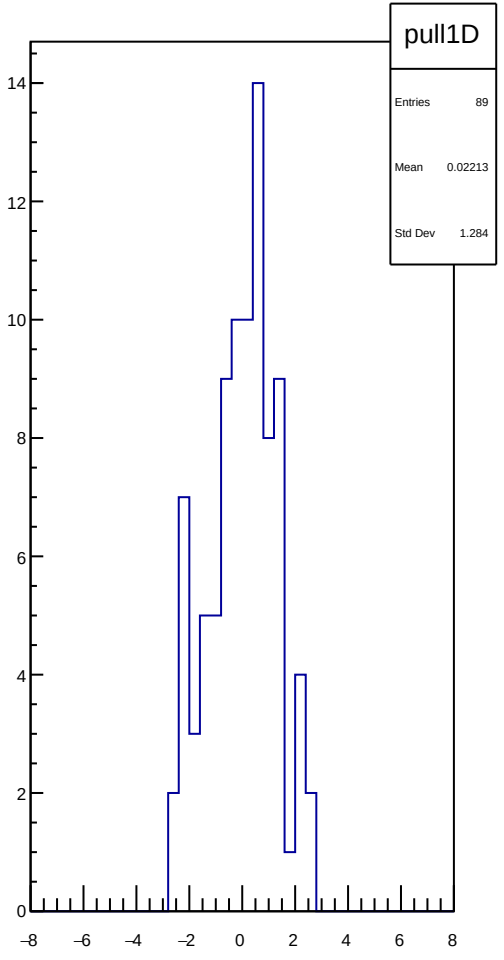

diff_bpm2i02X_rms vs run
χ² / ndf 3.884e+04 / 88
p0 1523 ± 1.185
1800
1700
1600
1500
1400
1300
1200
1100

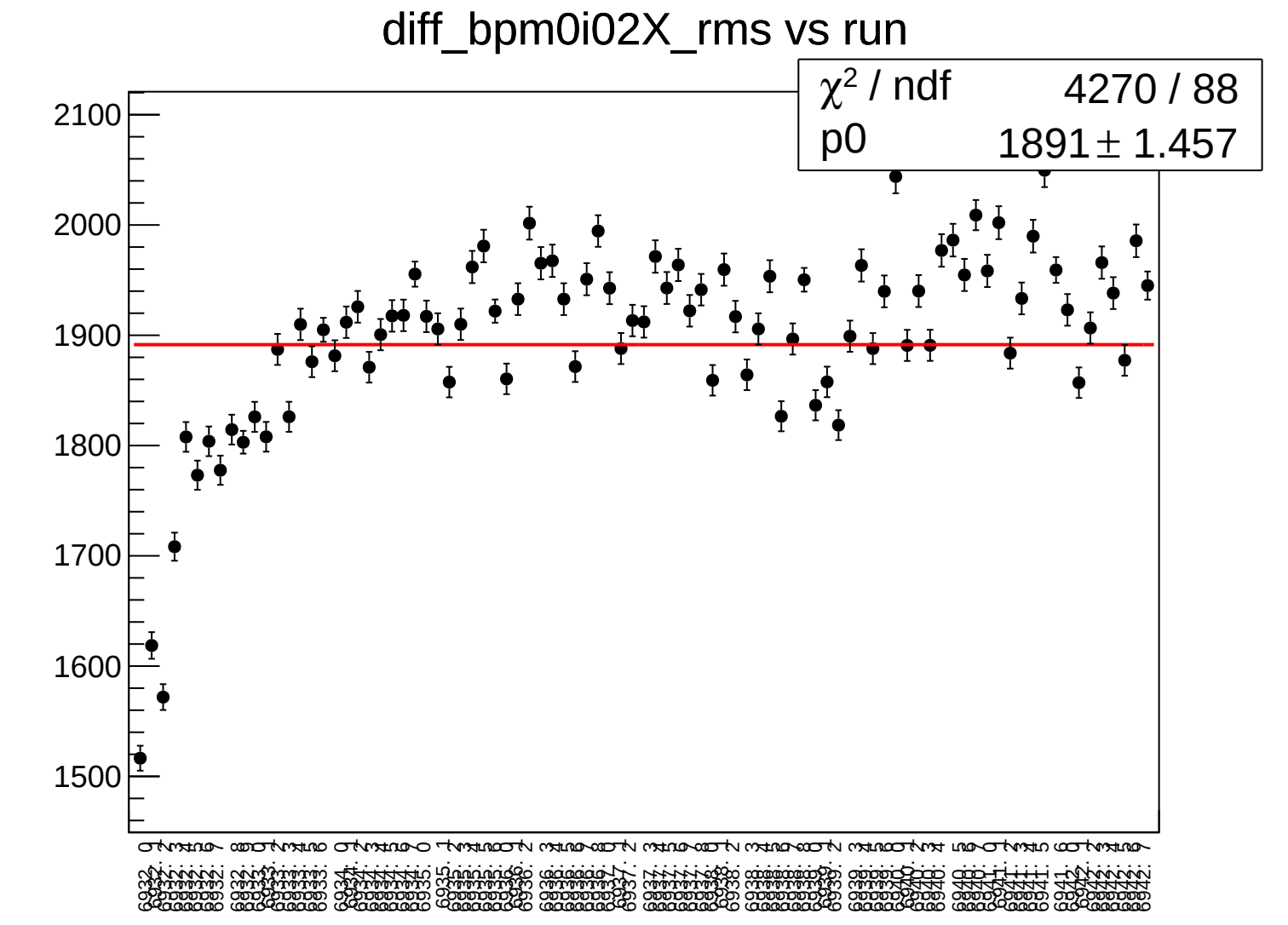

diff_bpm2i02Y_mean vs run
χ² / ndf 164.8 / 88
p0 −12.24 ± 1.718
pull
Entries 89
Mean 129.3
Std Dev 91.67

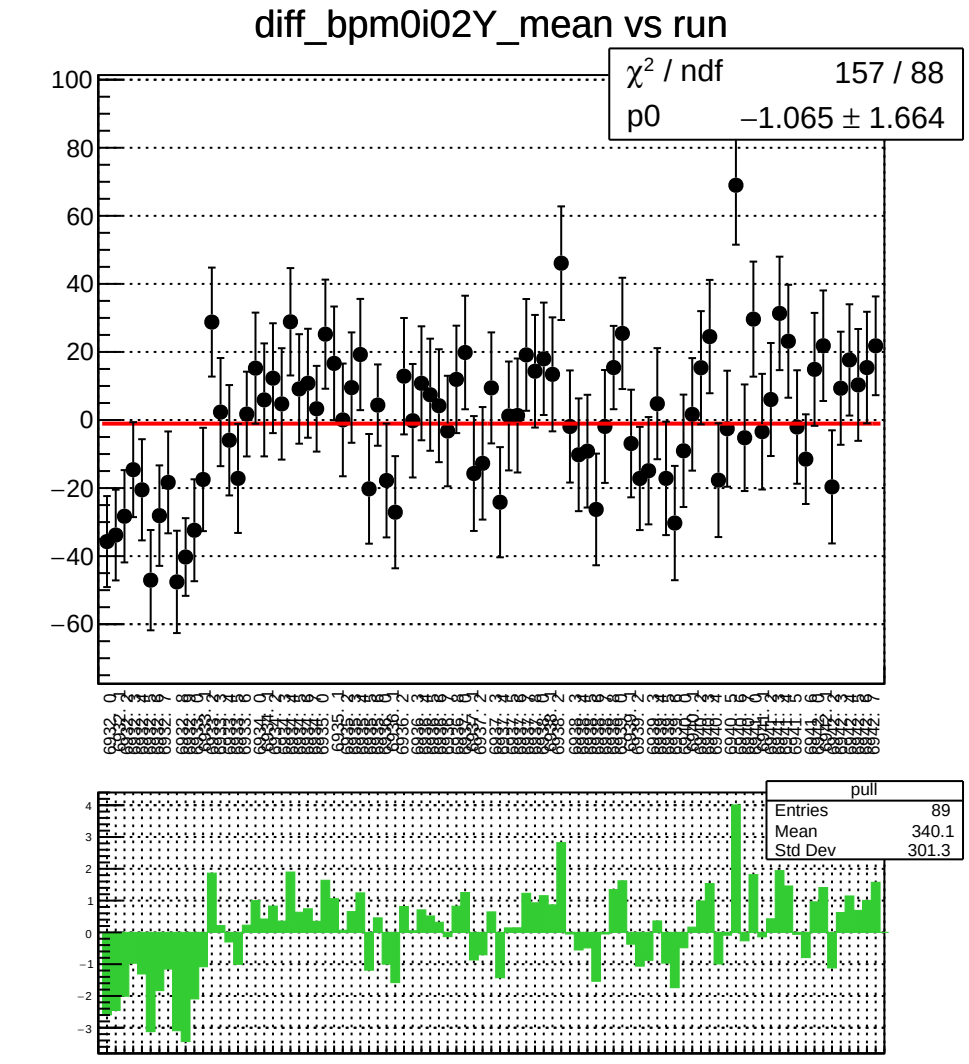

pull1D
Entries 89
Mean 0.114
Std Dev 1.356

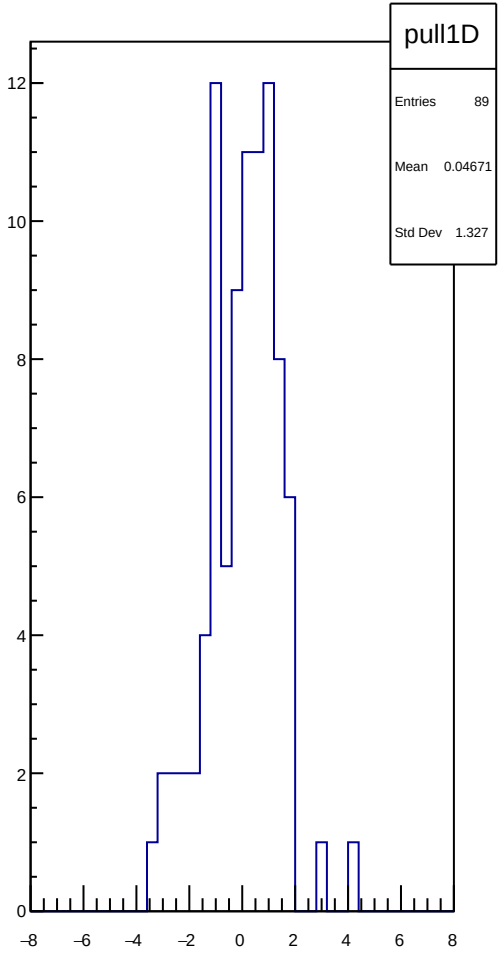

diff_bpm2i02Y_rms vs run
χ² / ndf 3.411e+04 / 88
p0 1563 ± 1.215
1800
1700
1600
1500
1400
1300
1200
1100

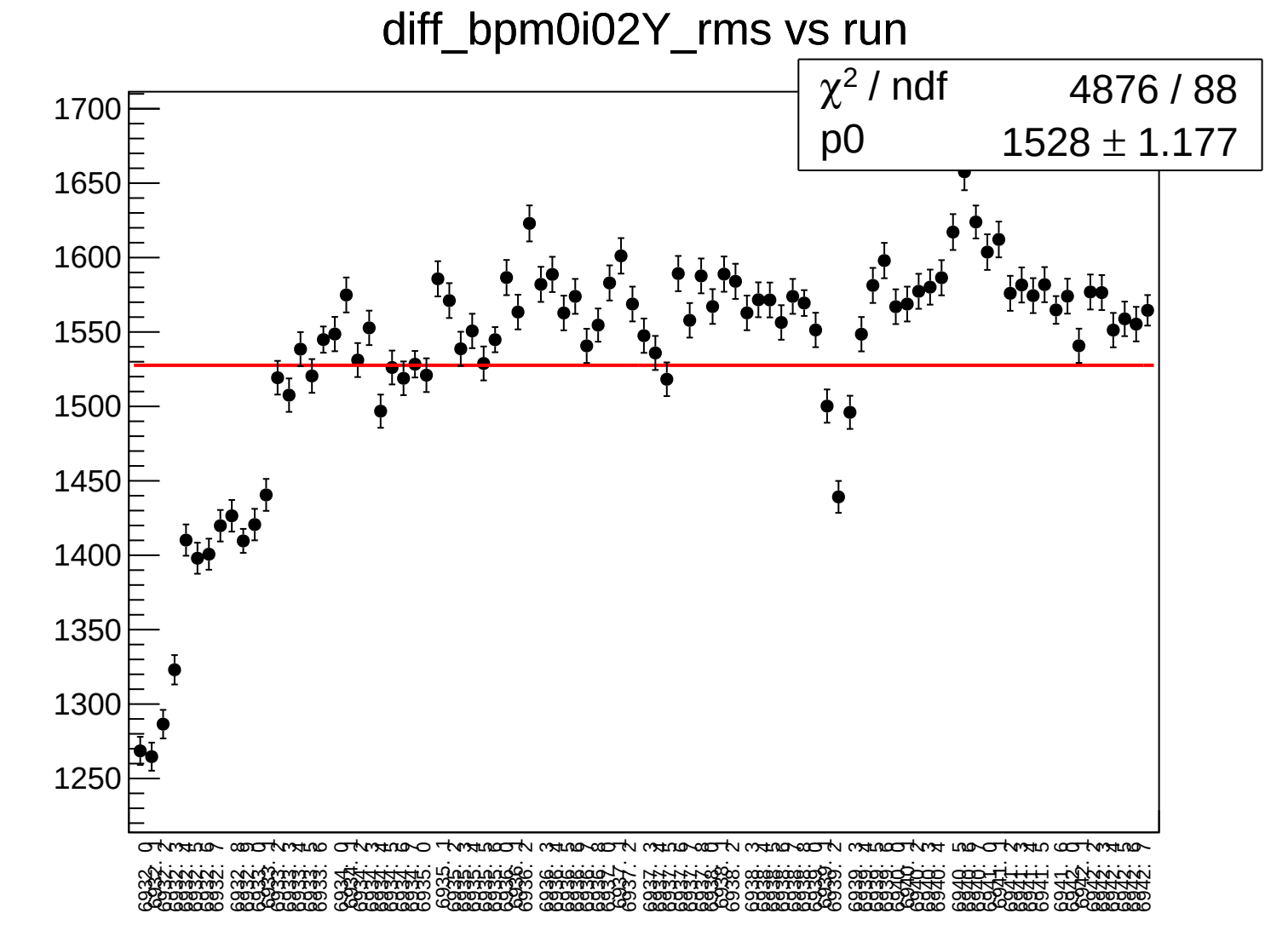

diff_bpm0i02X_mean vs run
χ² / ndf 146.9 / 88
p0 −33.78 ± 2.06
pull
Entries 89
Mean 700.9
Std Dev 659.6

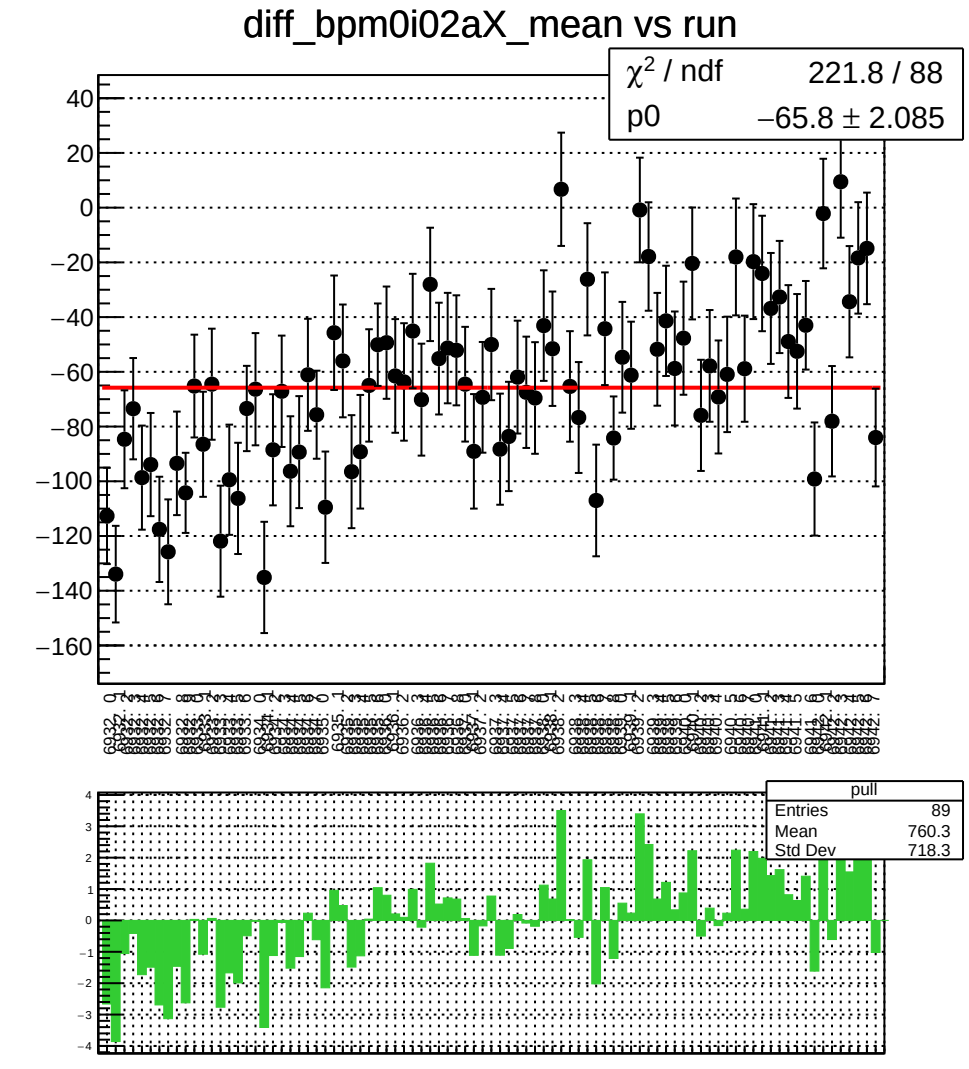

pull1D
Entries 89
Mean 0.02213
Std Dev 1.284

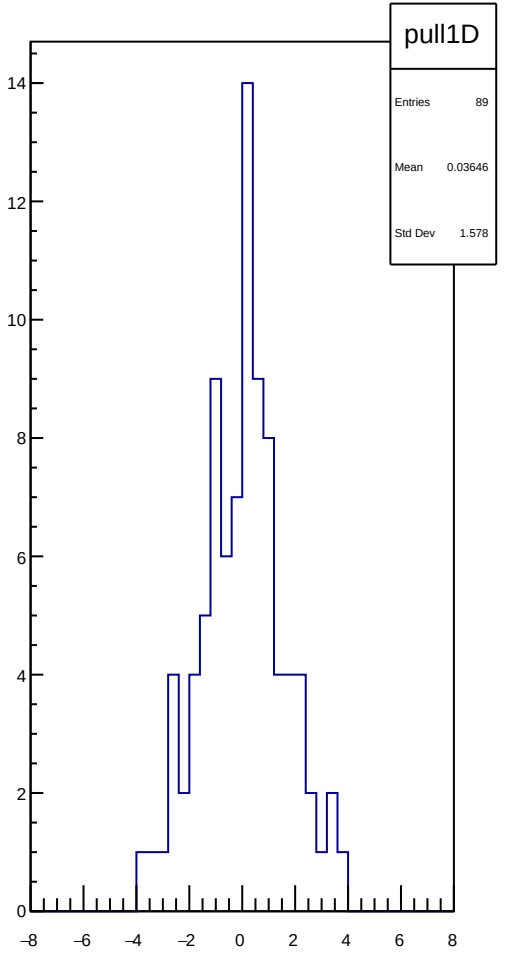

diff_bpm0i02X_rms vs run
χ² / ndf 4270 / 88
p0 1891 ± 1.457
2100
2000
1900
1800
1700
1600
1500

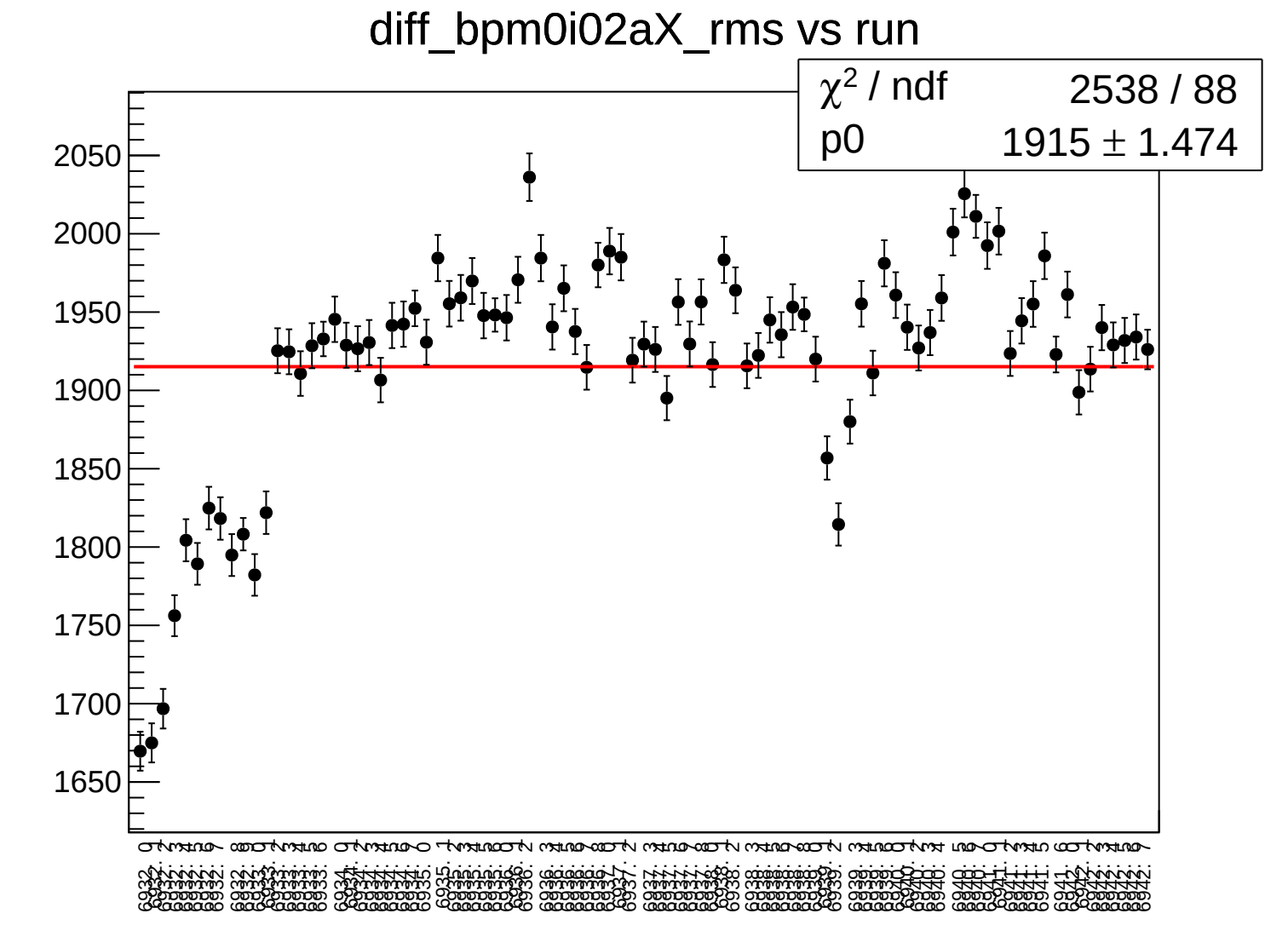

diff_bpm0i02Y_mean vs run
χ² / ndf 157 / 88
p0 −1.065 ± 1.664
pull
Entries 89
Mean 340.1
Std Dev 301.3

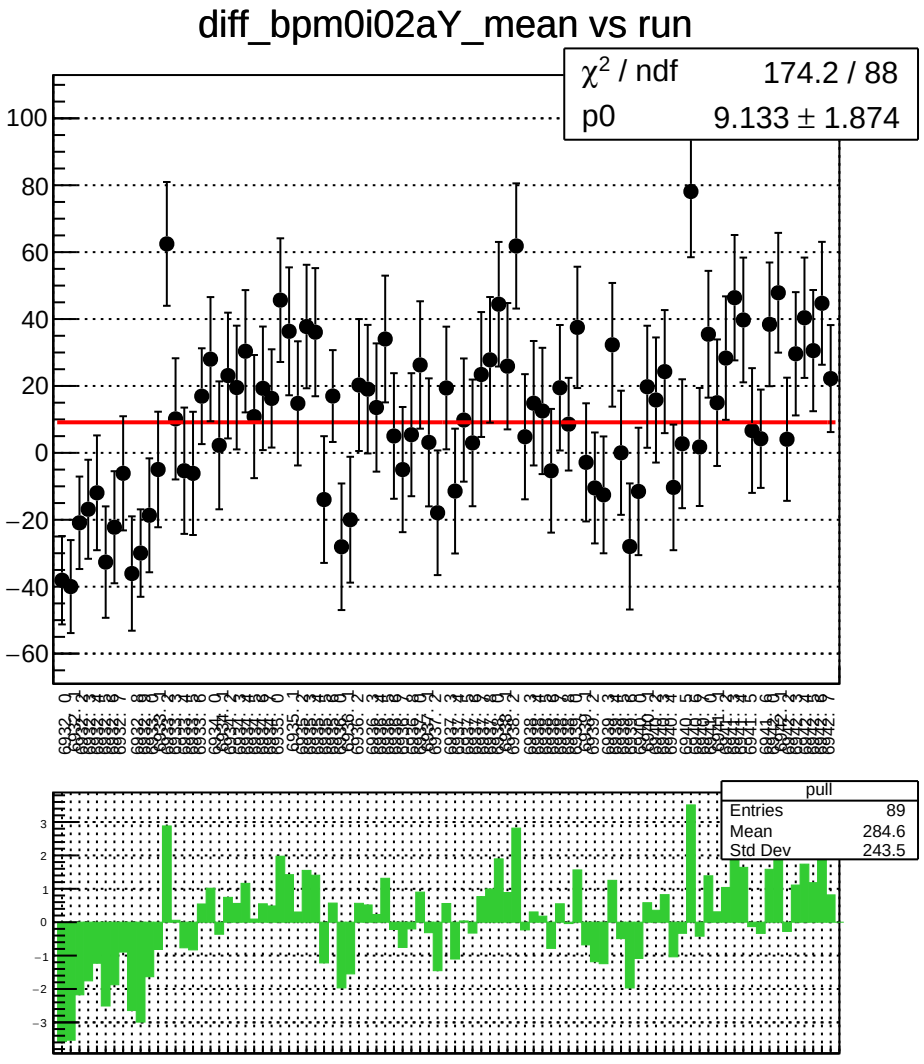

pull1D
Entries 89
Mean 0.04671
Std Dev 1.327

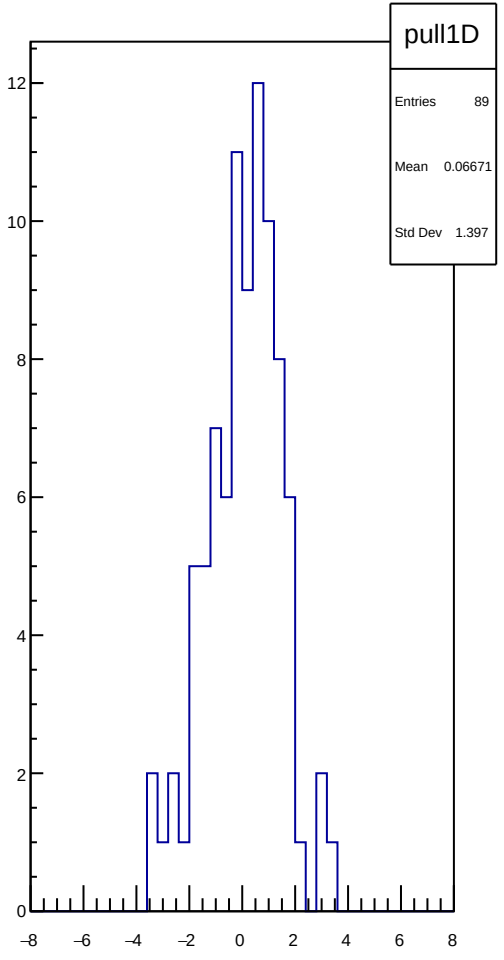

diff_bpm0i02Y_rms vs run
χ² / ndf 4876 / 88
p0 1528 ± 1.177
1700
1650
1600
1550
1500
1450
1400
1350
1300
1250

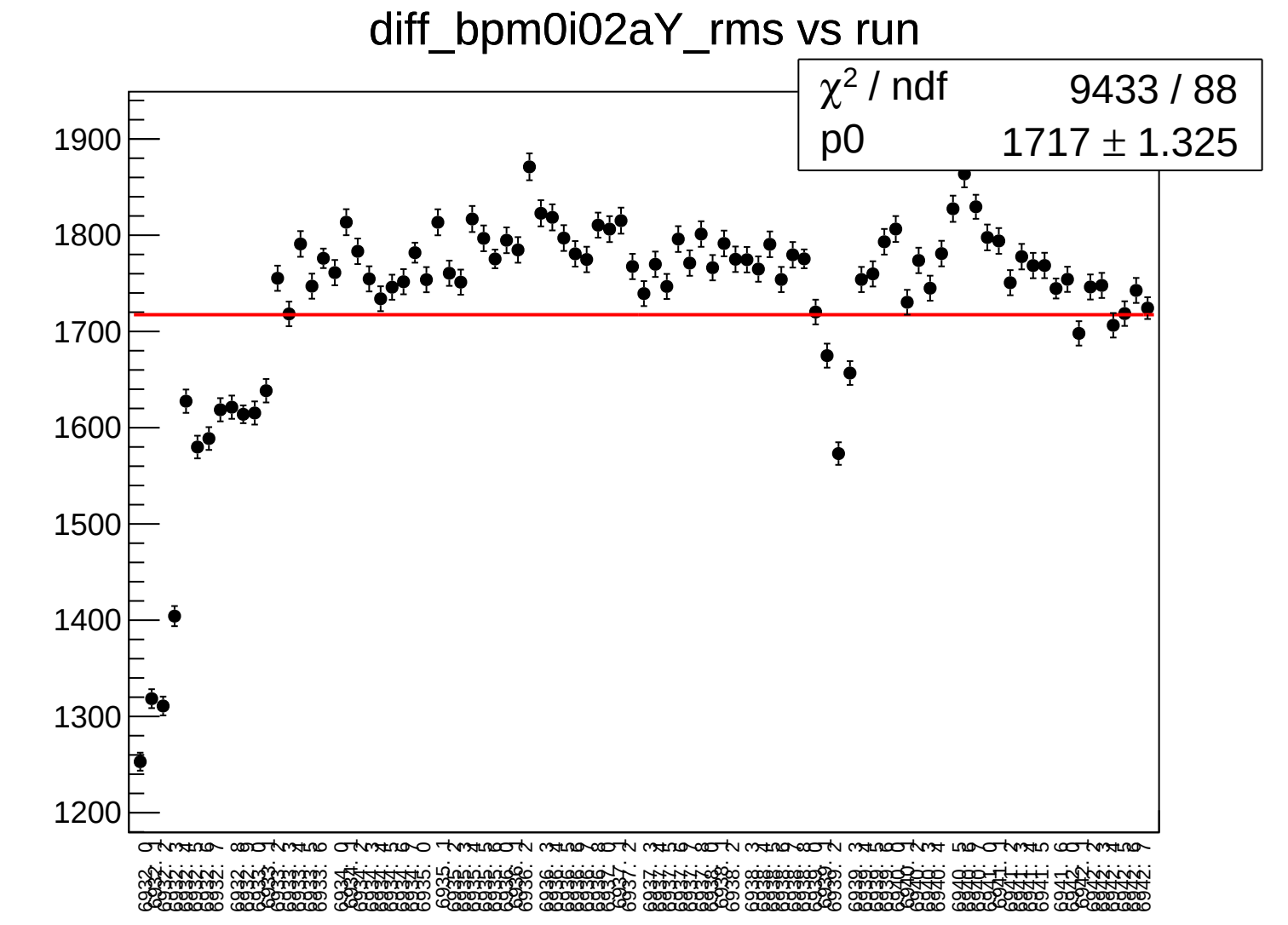

diff_bpm0i02aX_mean vs run
χ² / ndf 221.8 / 88
p0 −65.8 ± 2.085
pull
Entries 89
Mean 760.3
Std Dev 718.3

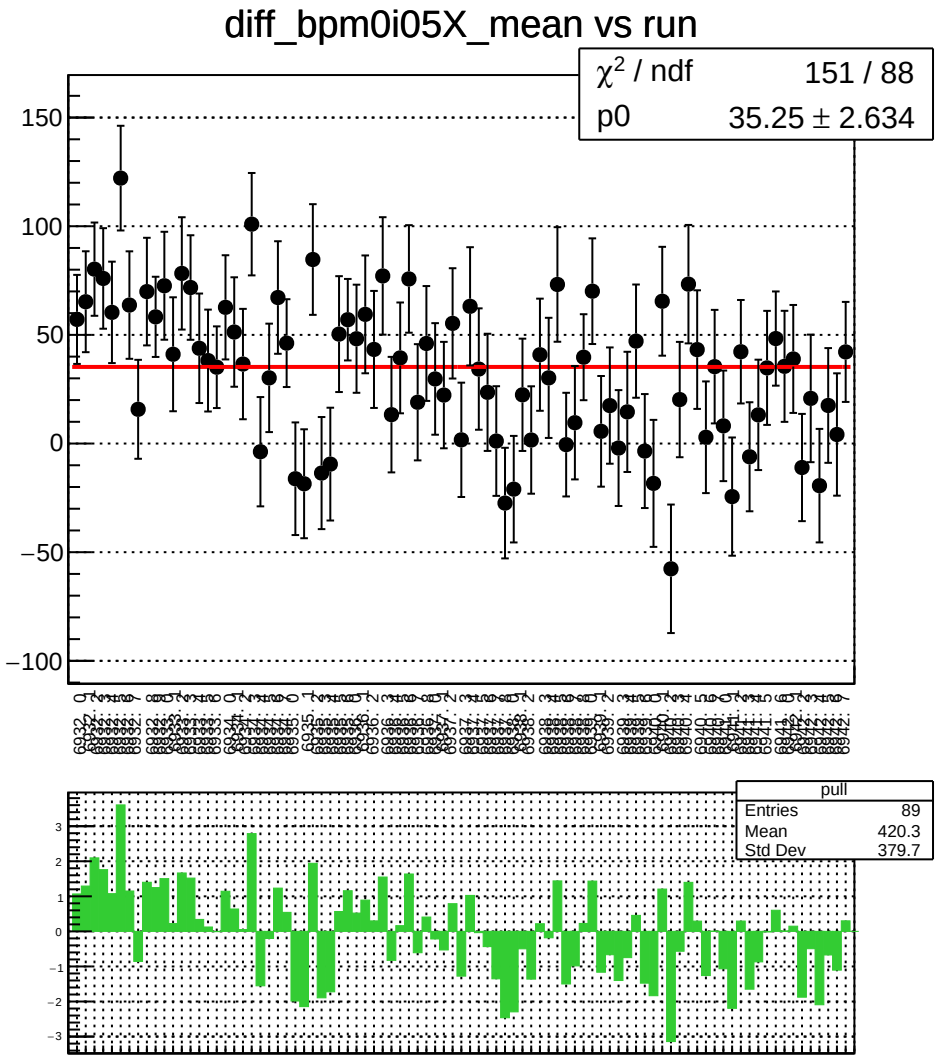

pull1D
Entries 89
Mean 0.03646
Std Dev 1.578

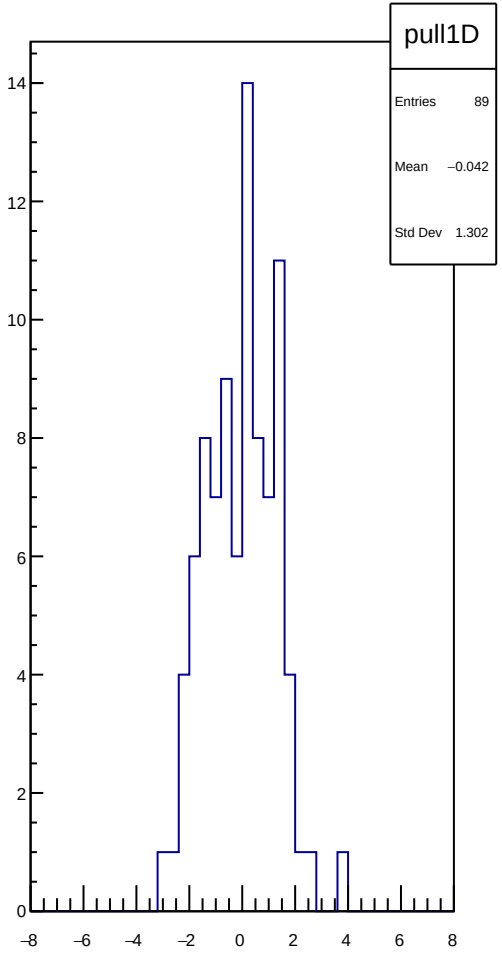

diff_bpm0i02aX_rms vs run
χ² / ndf 2538 / 88
p0 1915 ± 1.474
2050
2000
1950
1900
1850
1800
1750
1700
1650

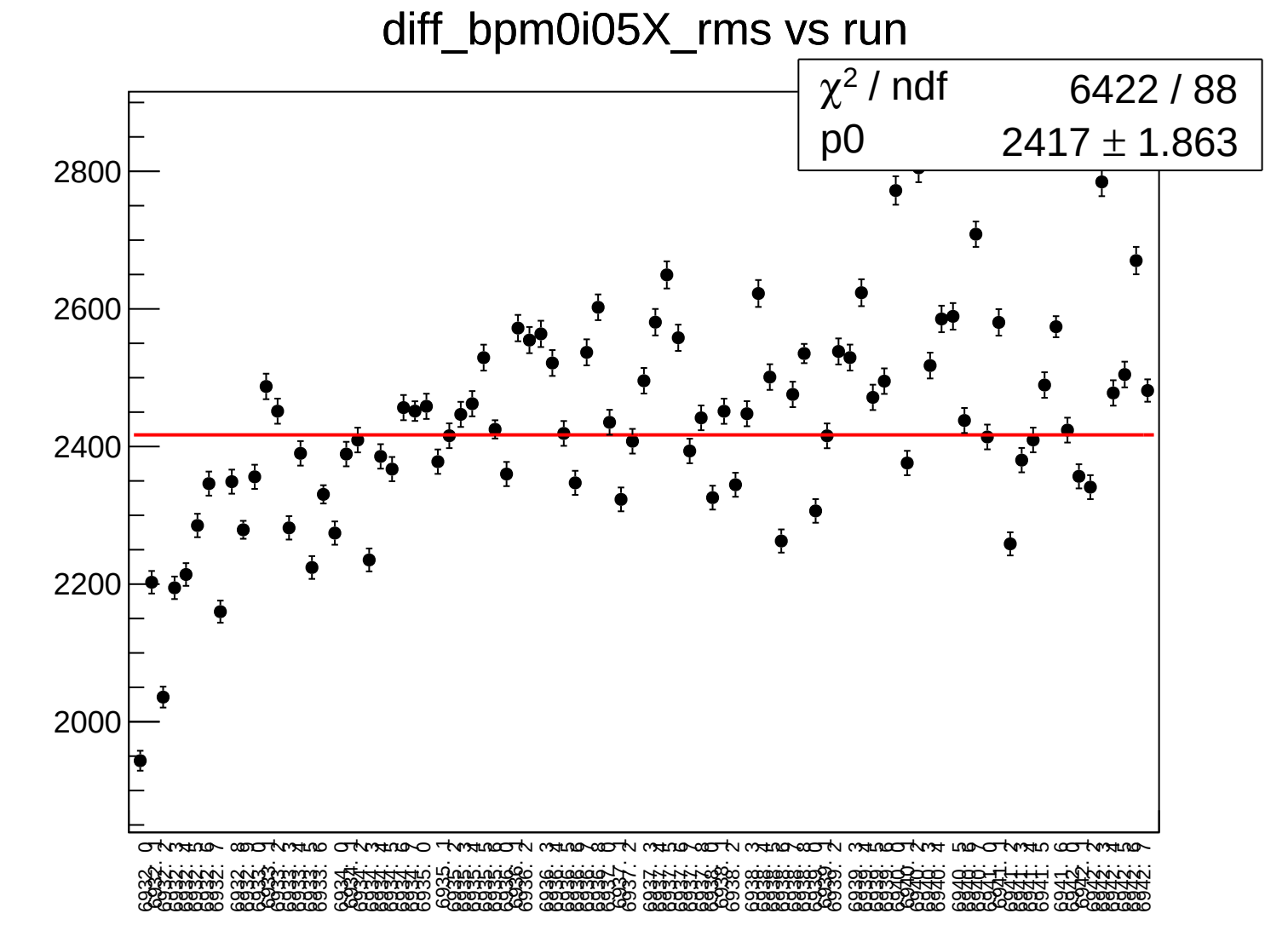

diff_bpm0i02aY_mean vs run
χ^2 / ndf 174.2 / 88
p0 9.133 ± 1.874
pull
Entries 89
Mean 284.6
Std Dev 243.5

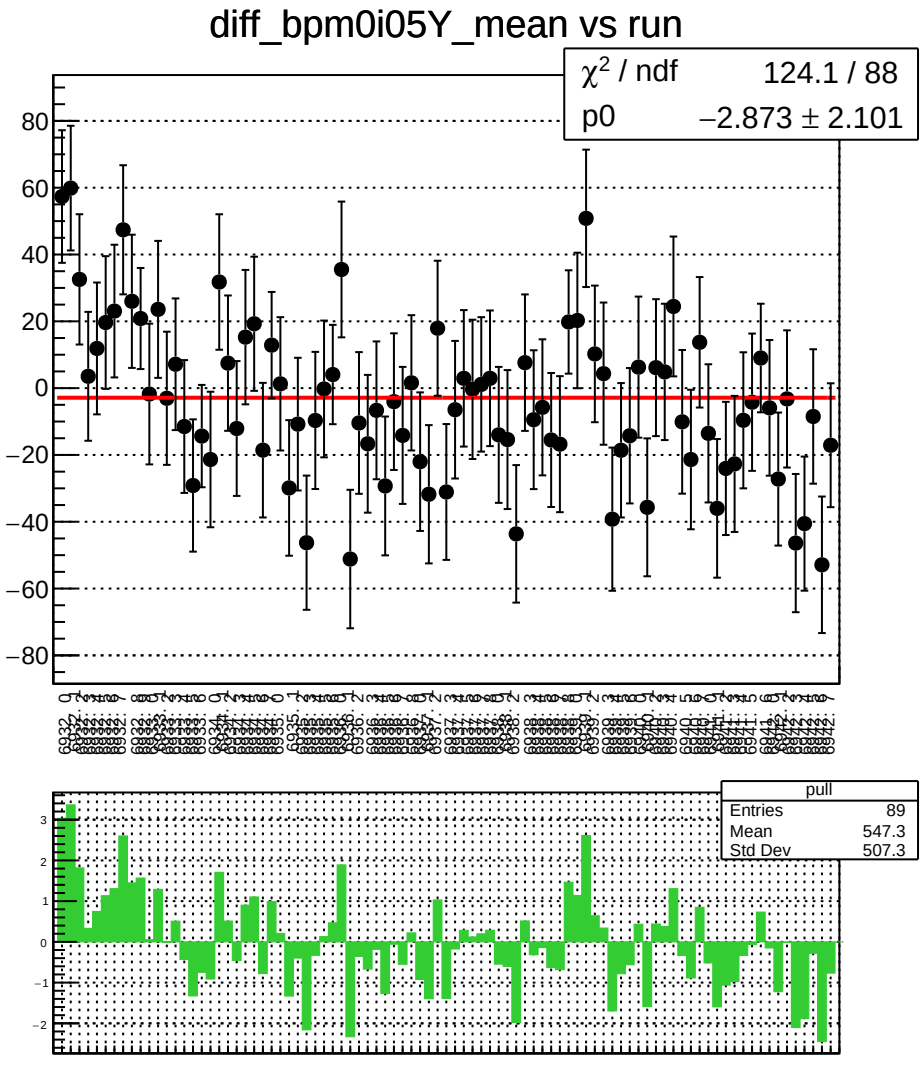

pull1D
Entries 89
Mean 0.06671
Std Dev 1.397

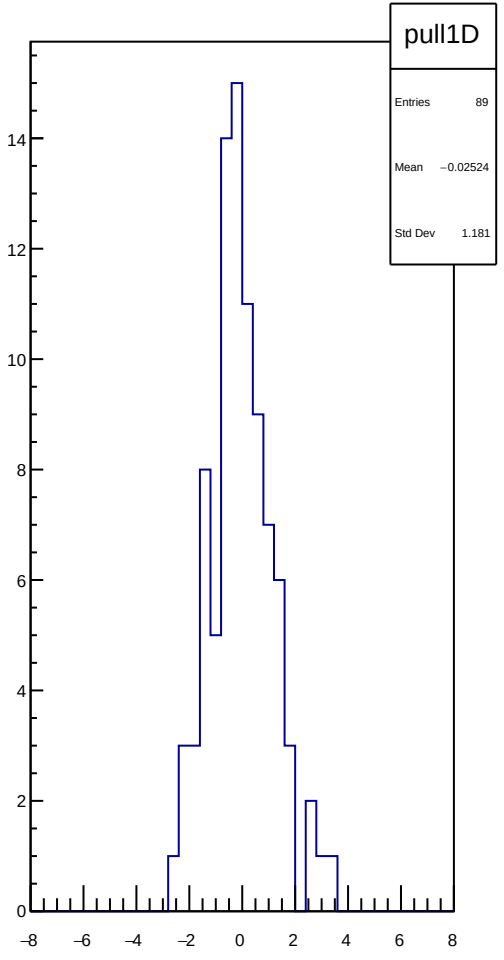

diff_bpm0i02aY_rms vs run
χ² / ndf 9433 / 88
p0 1717 ± 1.325
1900
1800
1700
1600
1500
1400
1300
1200

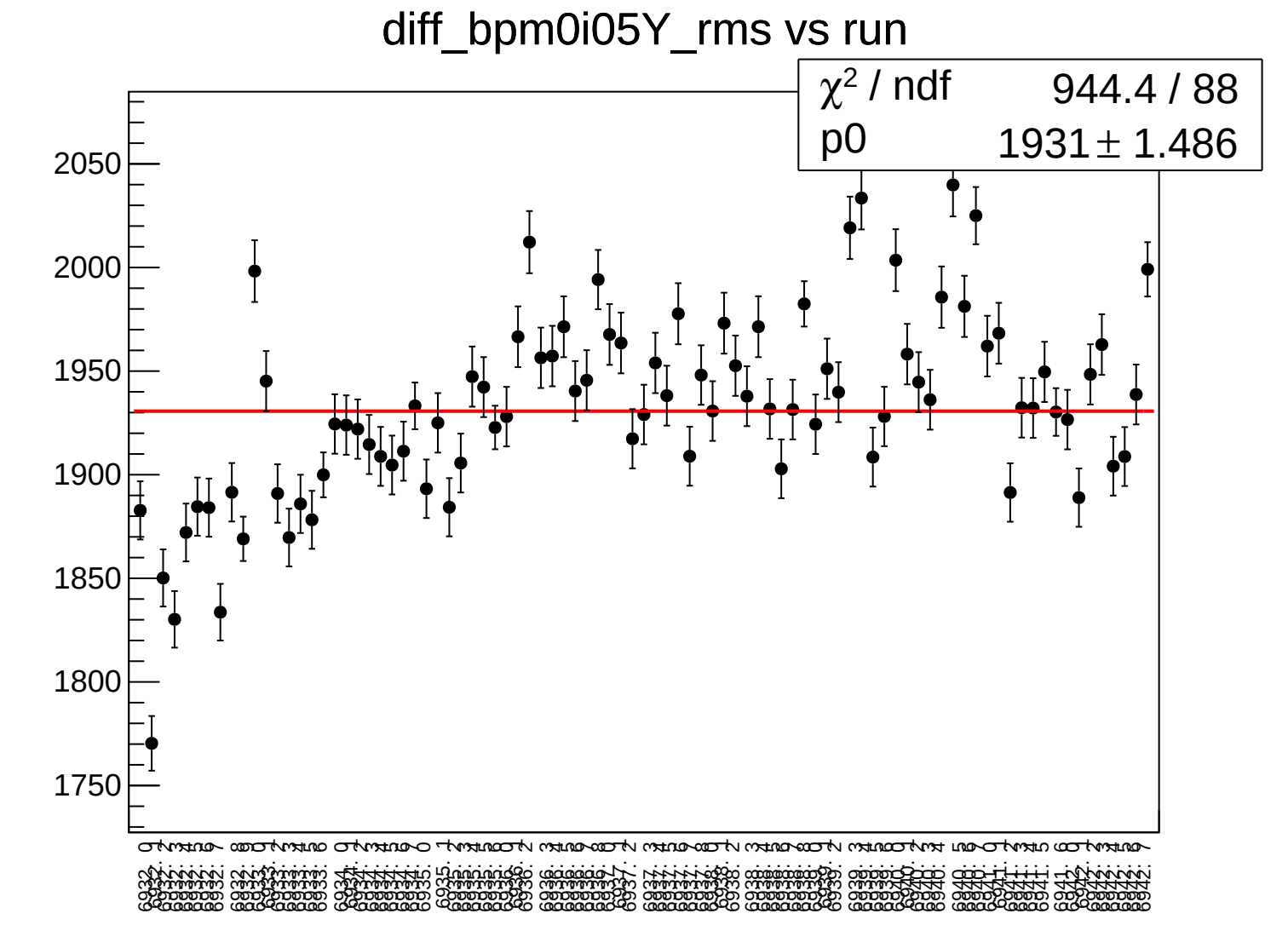

diff_bpm0i05X_mean vs run
χ² / ndf 151 / 88
p0 35.25 ± 2.634
150
100
50
0
−50
−100
pull
Entries 89
Mean 420.3
Std Dev 379.7
3
2
1
0
−1
−2
−3

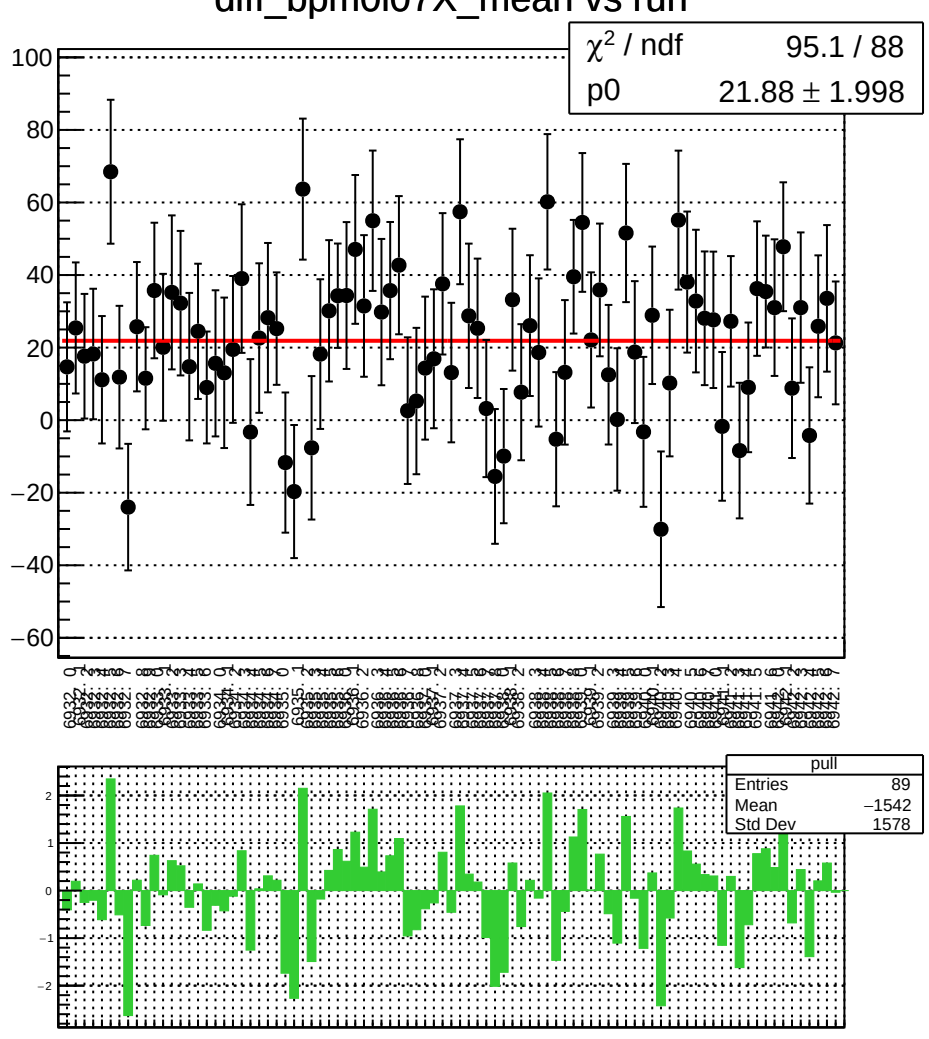

pull1D
Entries 89
Mean −0.042
Std Dev 1.302
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

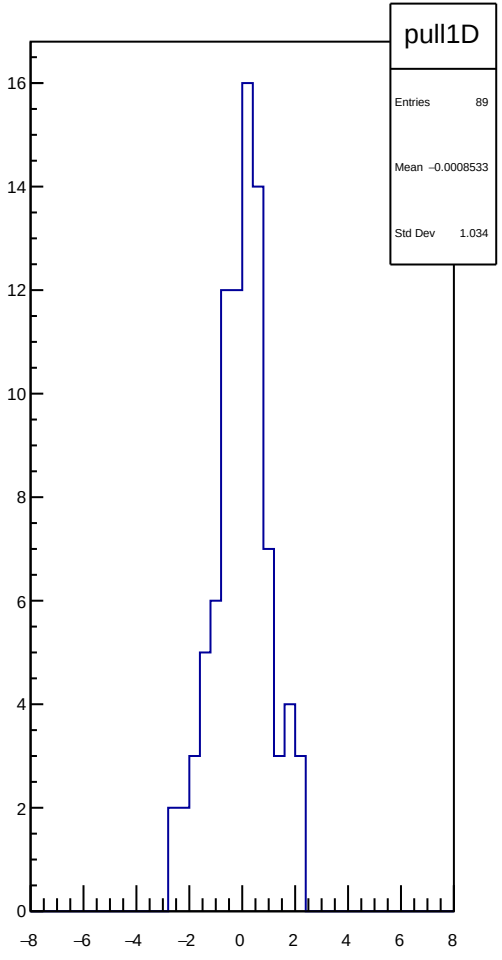

diff_bpm0i05X_rms vs run
χ² / ndf 6422 / 88
p0 2417 ± 1.863
2800
2600
2400
2200
2000

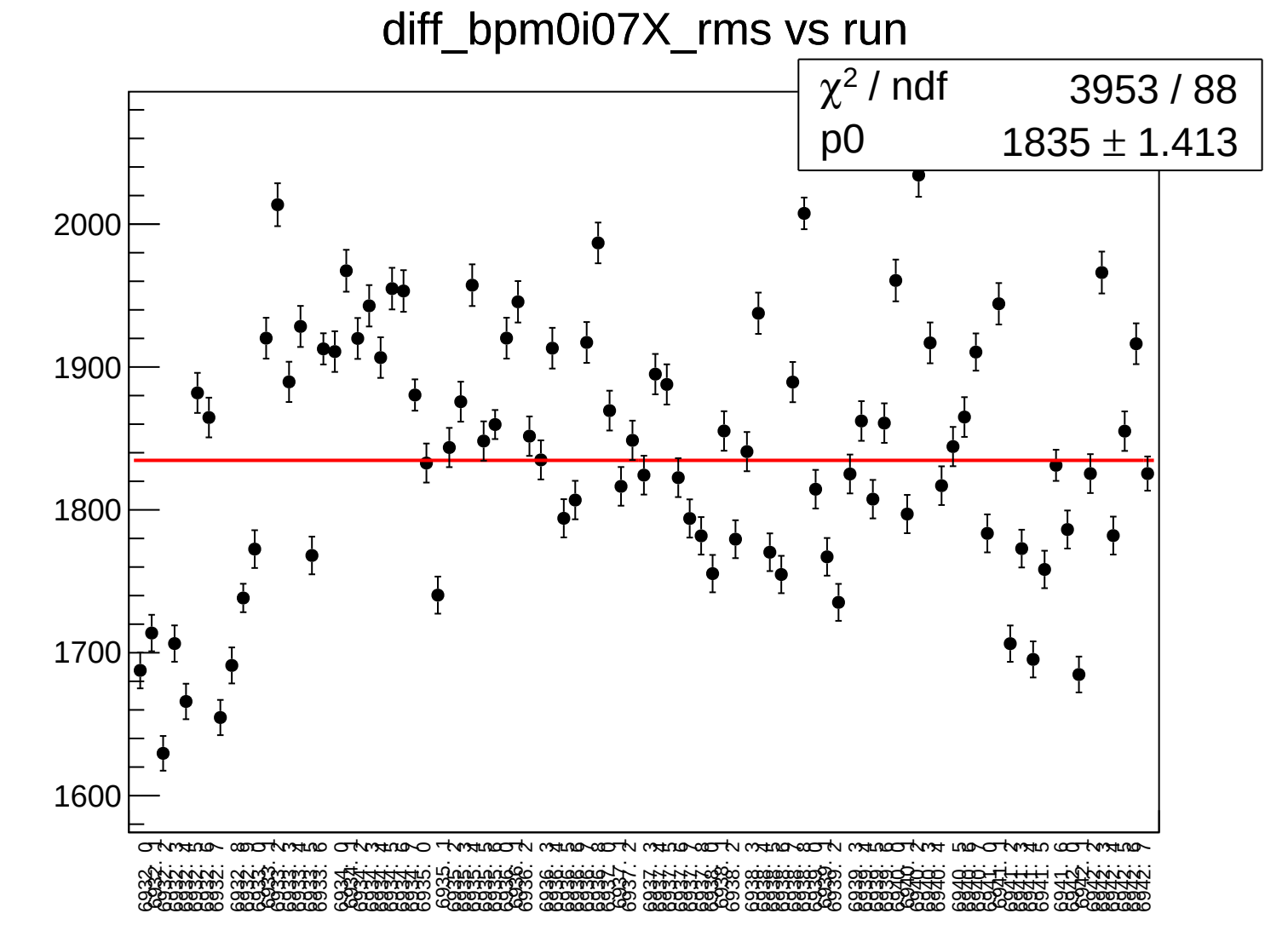

diff_bpm0i05Y_mean vs run
χ² / ndf 124.1 / 88
p0 −2.873 ± 2.101
pull
Entries 89
Mean 547.3
Std Dev 507.3

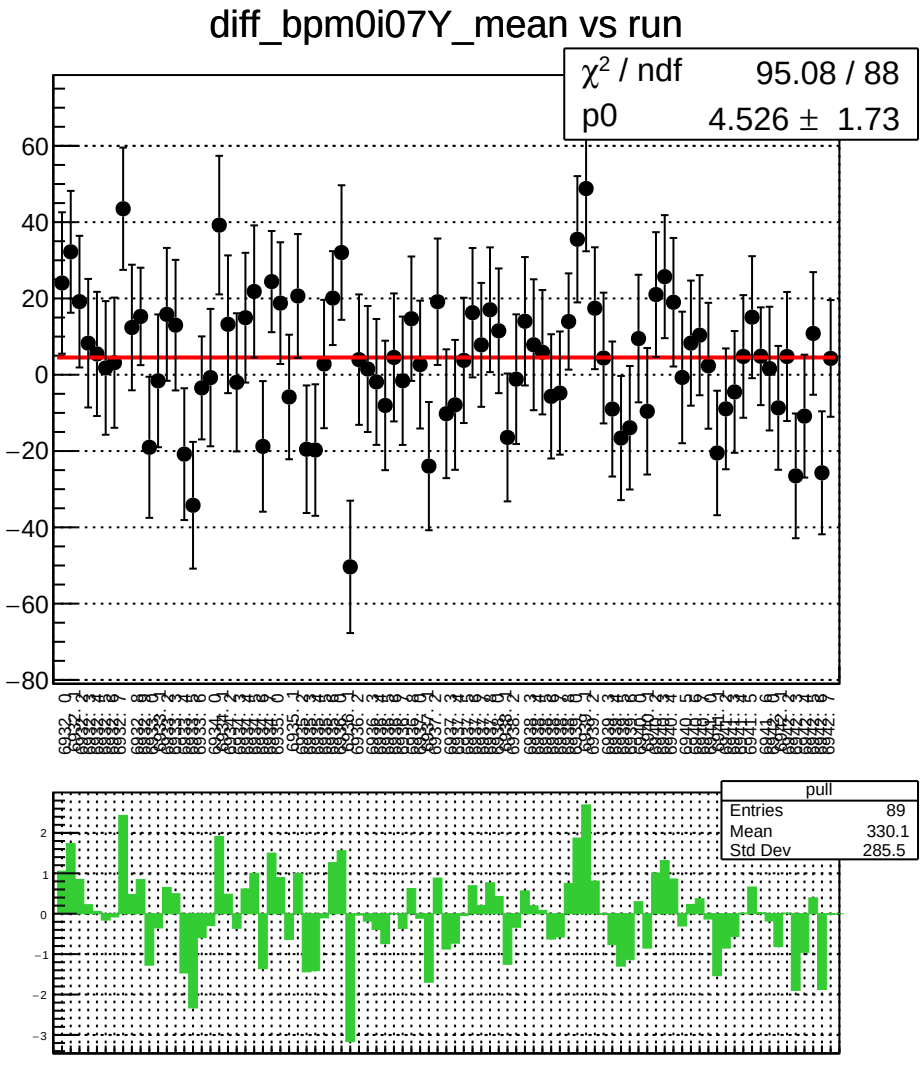

pull1D
Entries 89
Mean −0.02524
Std Dev 1.181

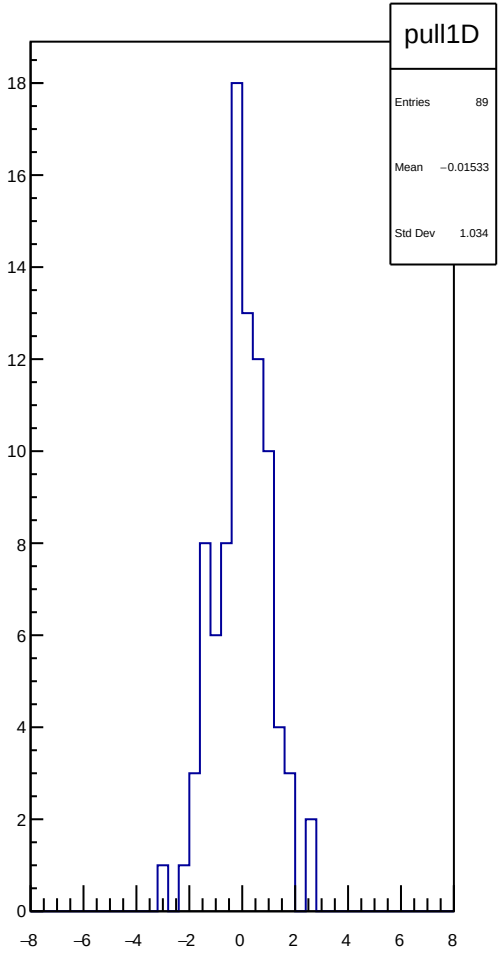

diff_bpm0i05Y_rms vs run
χ² / ndf 944.4 / 88
p0 1931 ± 1.486
2050
2000
1950
1900
1850
1800
1750

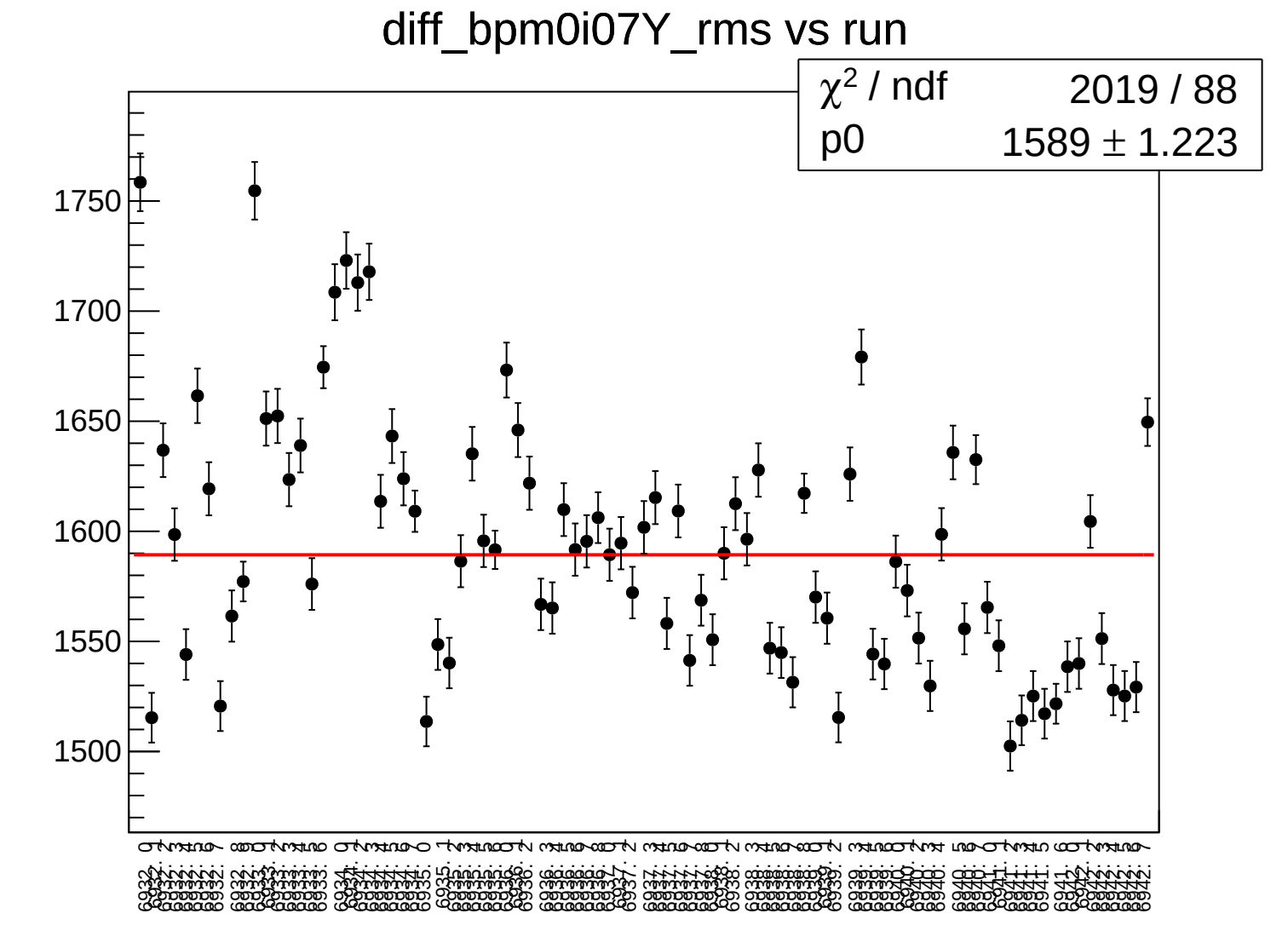

diff_bpm0i07X_mean vs run
χ^2 / ndf 95.1 / 88
p0 21.88 ± 1.998
pull
Entries 89
Mean −1542
Std Dev 1578

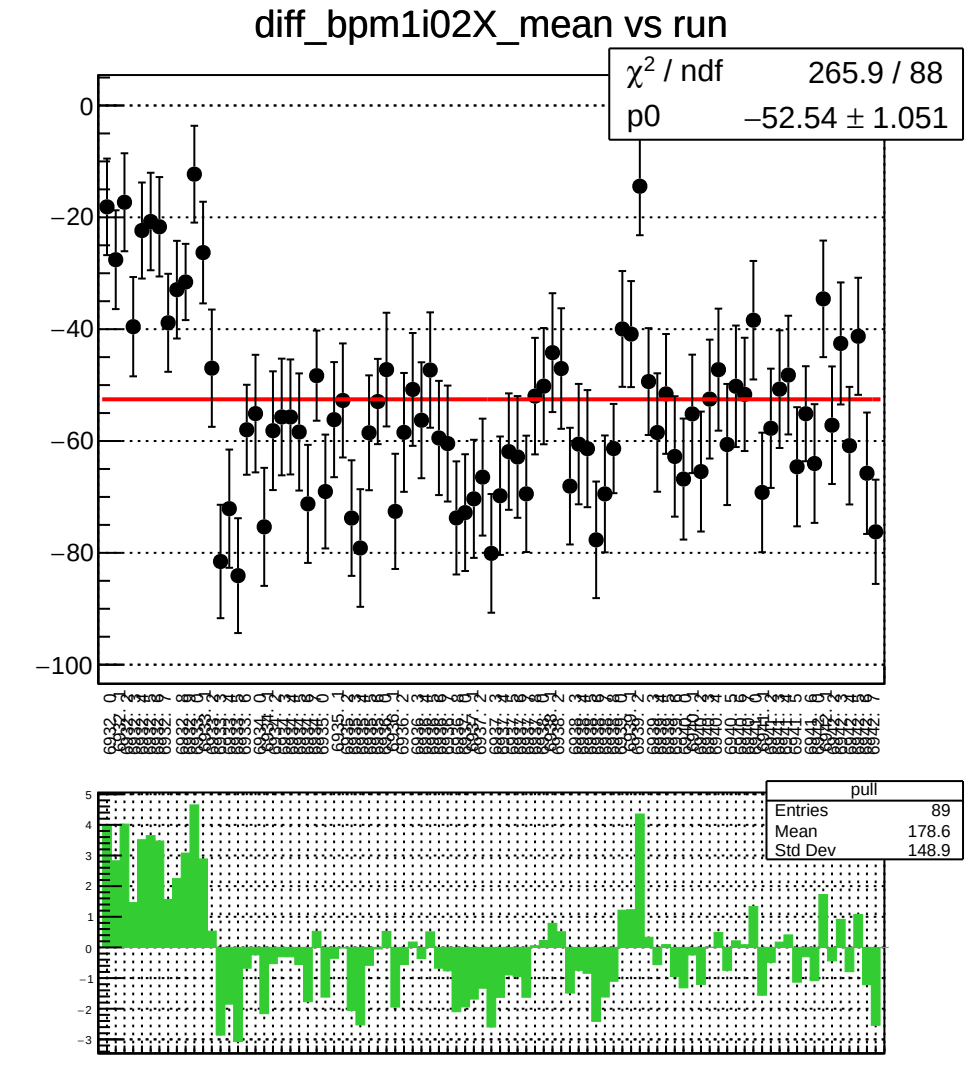

pull1D
Entries 89
Mean −0.0008533
Std Dev 1.034

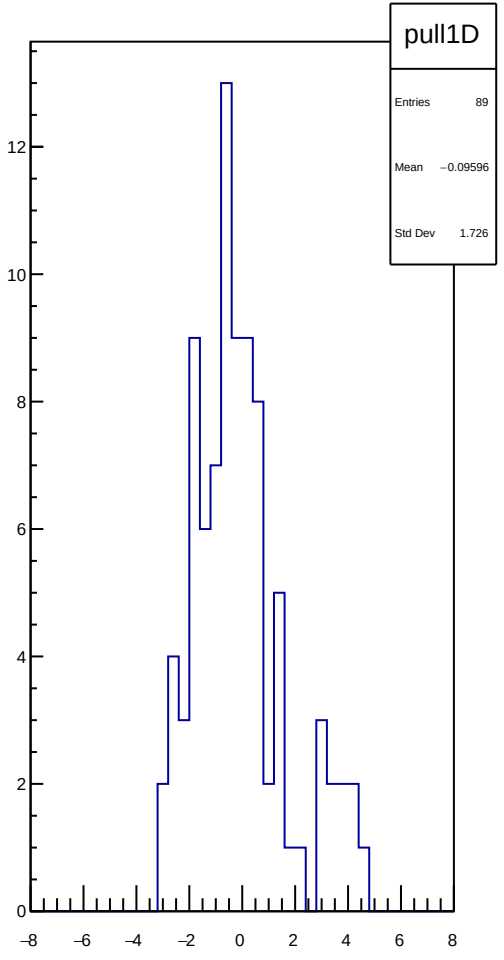

diff_bpm0i07X_rms vs run
χ² / ndf 3953 / 88
p0 1835 ± 1.413
2000
1900
1800
1700
1600

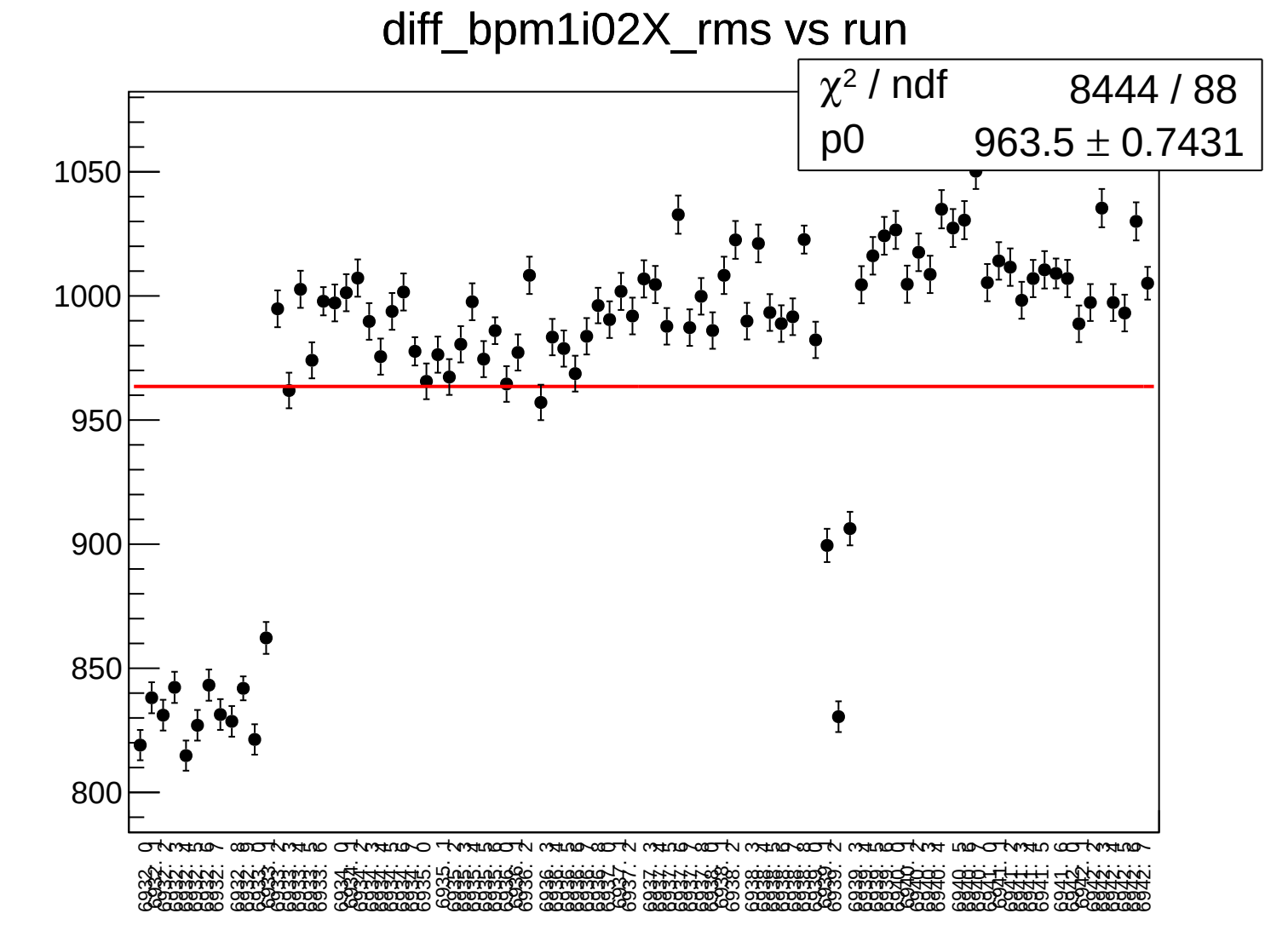

diff_bpm0i07Y_mean vs run
χ² / ndf 95.08 / 88
p0 4.526 ± 1.73
pull
Entries 89
Mean 330.1
Std Dev 285.5

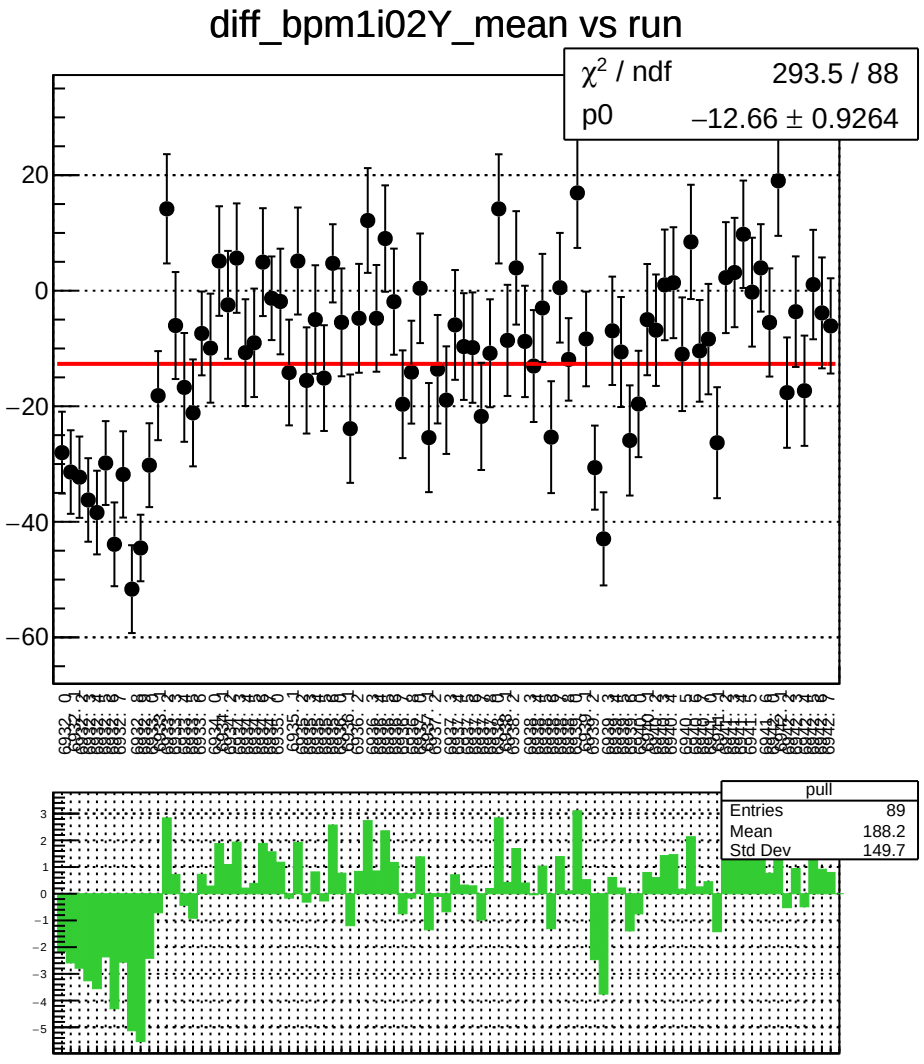

pull1D
Entries 89
Mean −0.01533
Std Dev 1.034

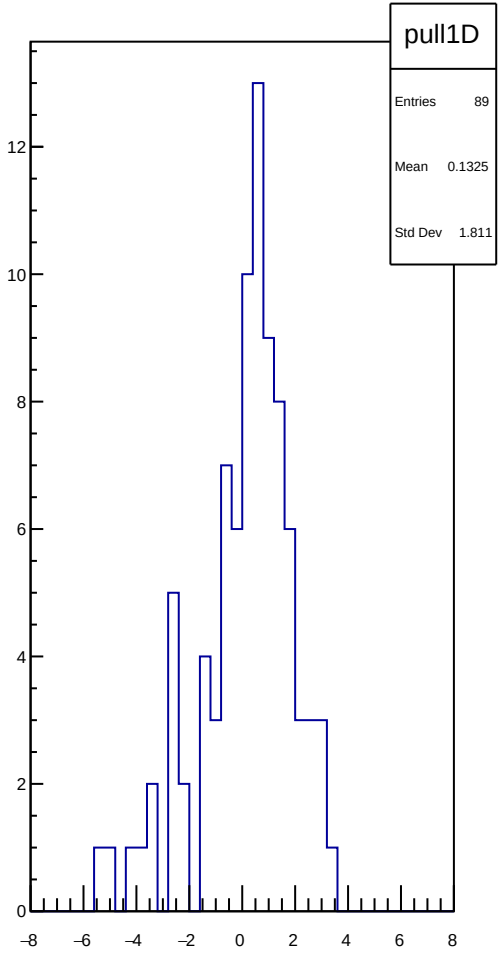

diff_bpm0i07Y_rms vs run
χ² / ndf 2019 / 88
p0 1589 ± 1.223
1750
1700
1650
1600
1550
1500

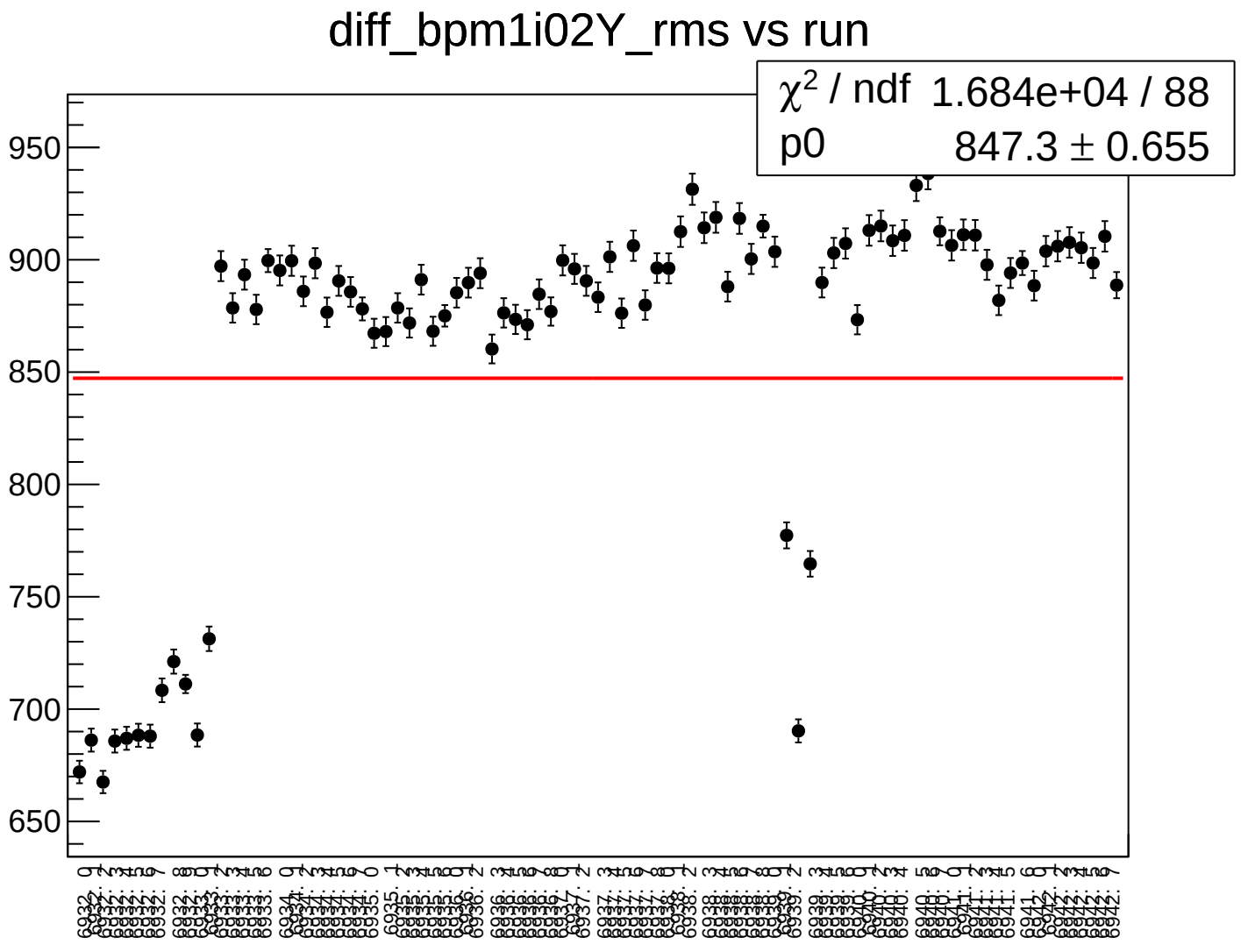

diff_bpm1i02X_mean vs run
χ² / ndf 265.9 / 88
p0 −52.54 ± 1.051
0
−20
−40
−60
−80
−100
pull
Entries 89
Mean 178.6
Std Dev 148.9
5
4
3
2
1
0
−1
−2
−3

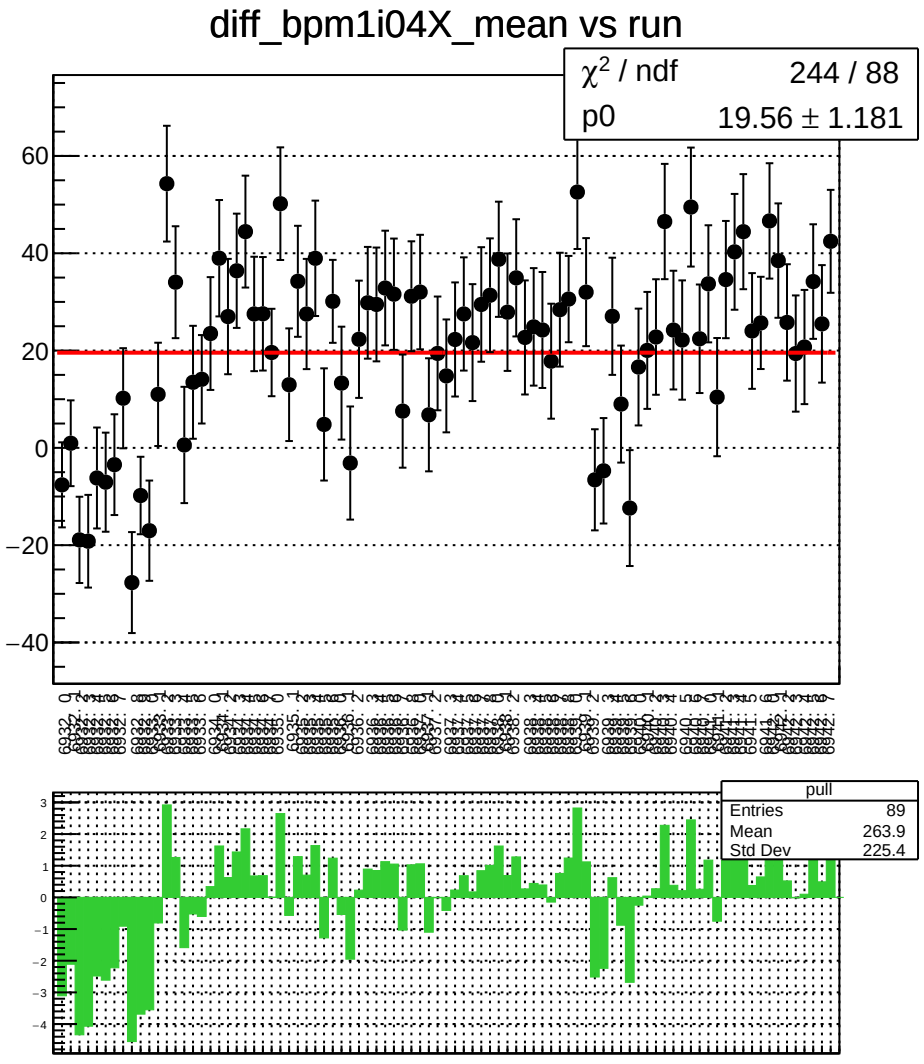

pull1D
Entries 89
Mean −0.09596
Std Dev 1.726
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

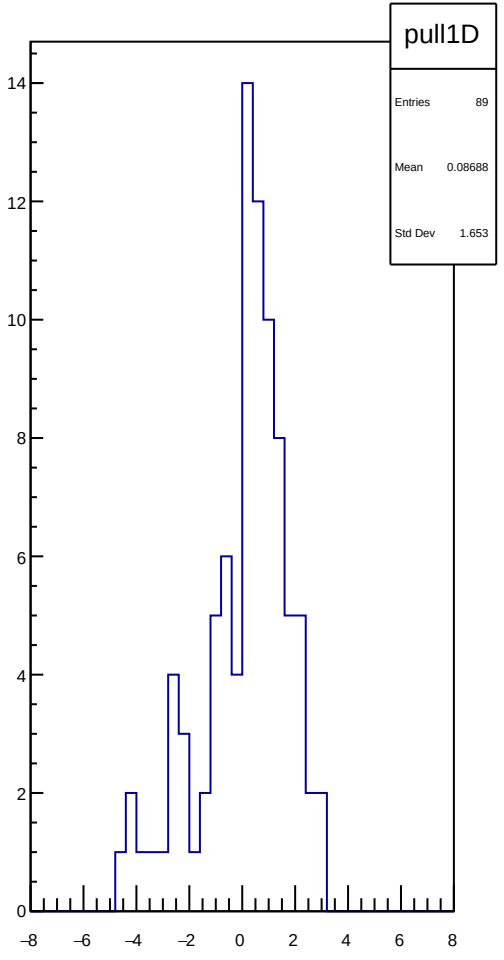

diff_bpm1i02X_rms vs run
χ² / ndf 8444 / 88
p0 963.5 ± 0.7431
1050
1000
950
900
850
800

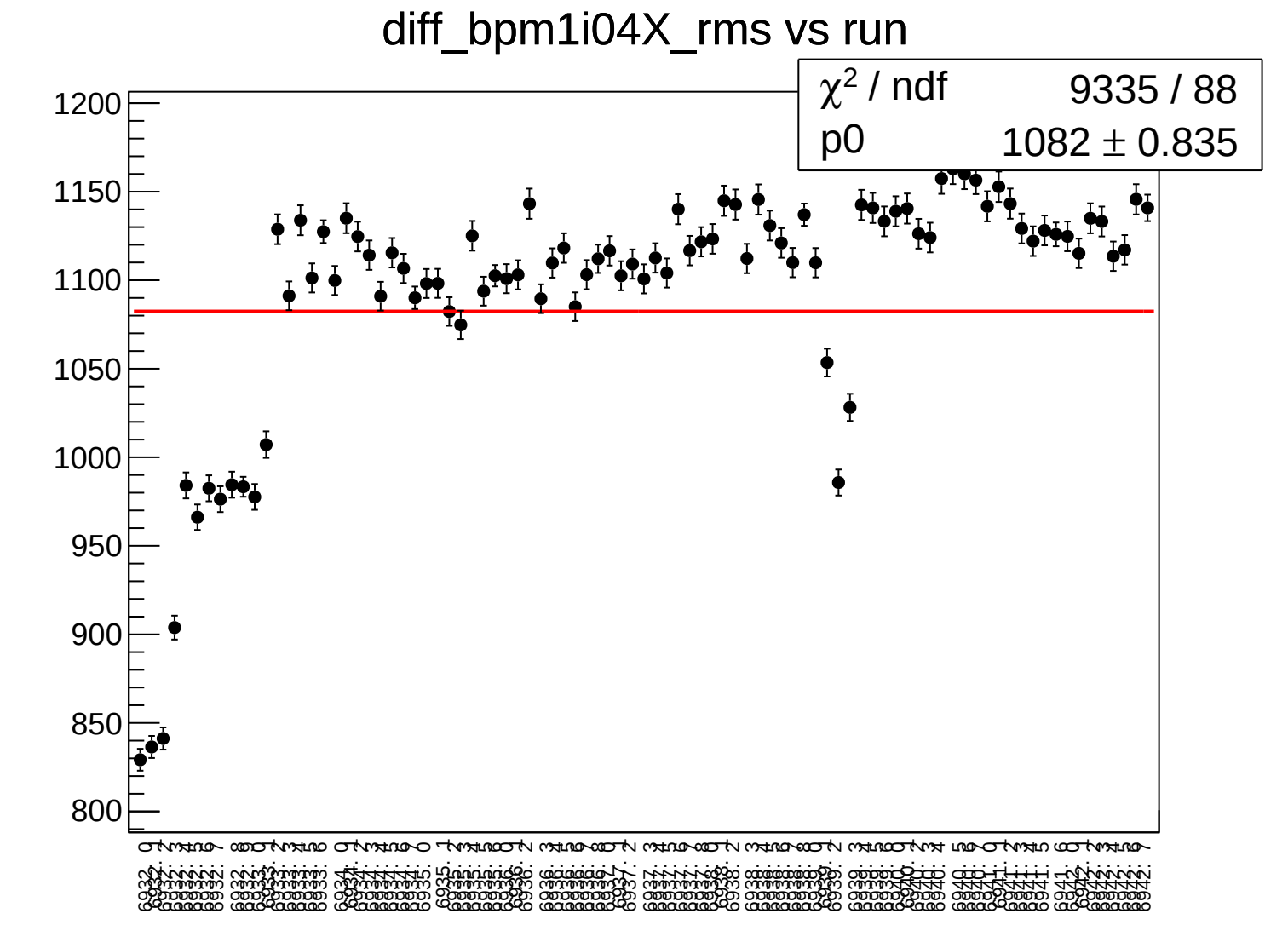

diff_bpm1i02Y_mean vs run
χ² / ndf 293.5 / 88
p0 −12.66 ± 0.9264
pull
Entries 89
Mean 188.2
Std Dev 149.7

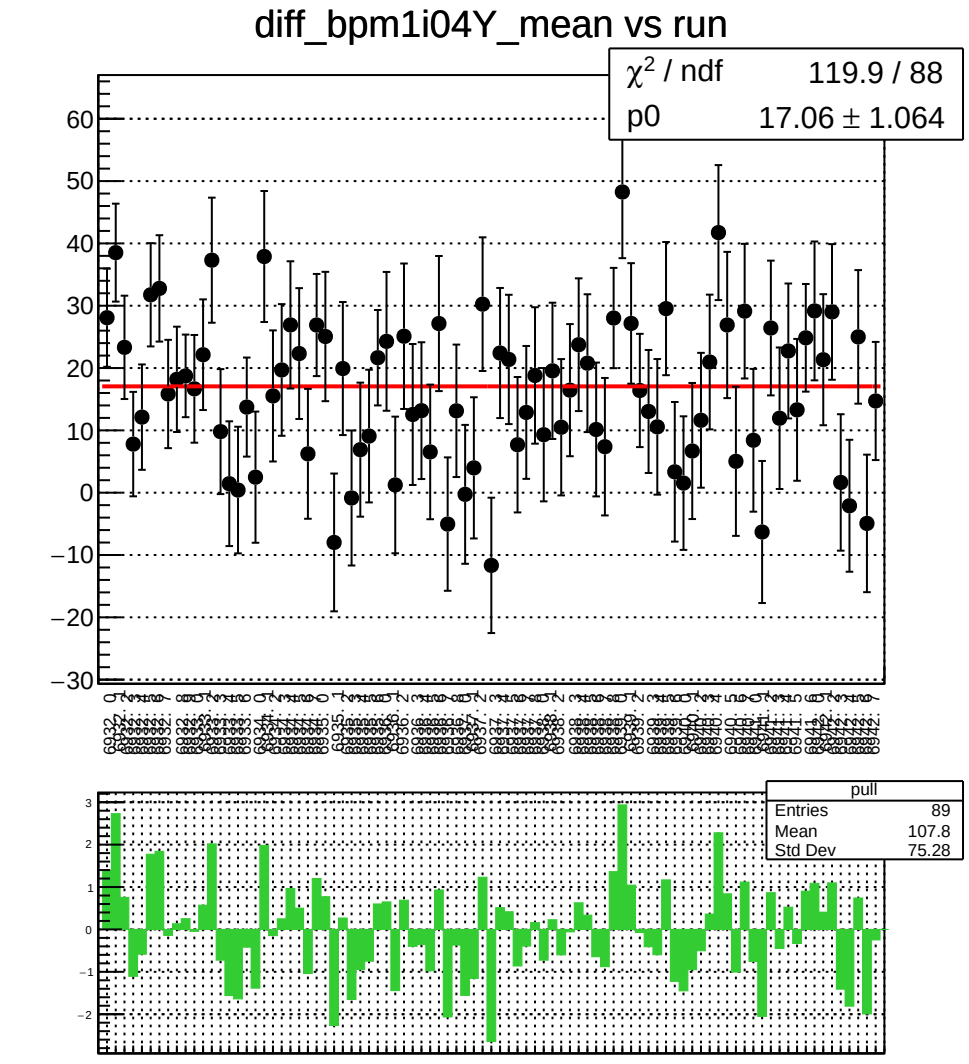

pull1D
Entries 89
Mean 0.1325
Std Dev 1.811

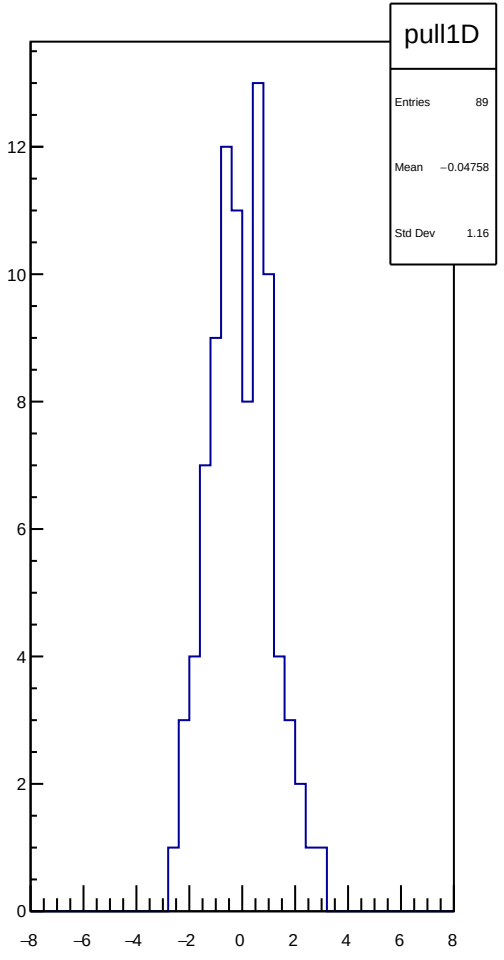

diff_bpm1i02Y_rms vs run
χ² / ndf 1.684e+04 / 88
p0 847.3 ± 0.655
950
900
850
800
750
700
650

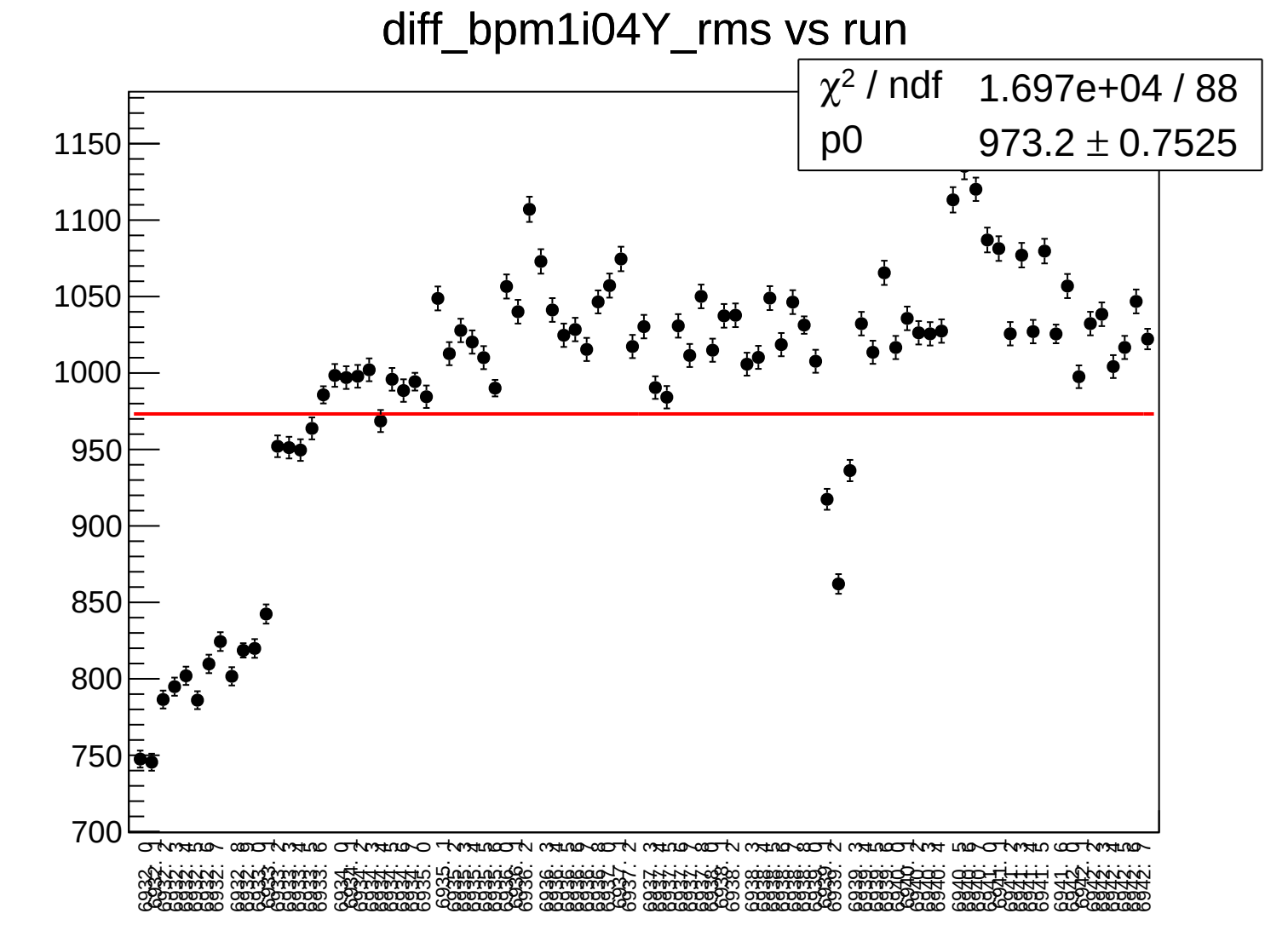

diff_bpm1i04X_mean vs run
χ² / ndf 244 / 88
p0 19.56 ± 1.181
pull
Entries 89
Mean 263.9
Std Dev 225.4

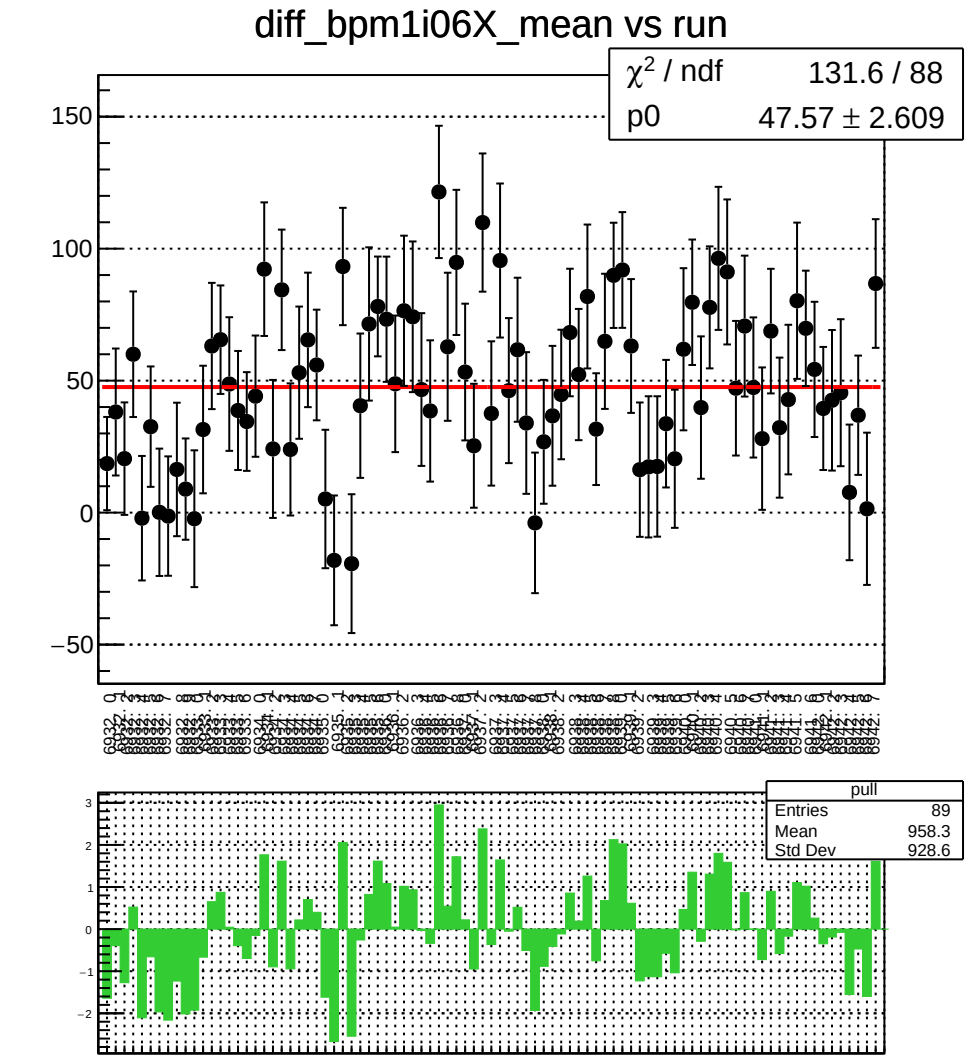

pull1D
Entries 89
Mean 0.08688
Std Dev 1.653

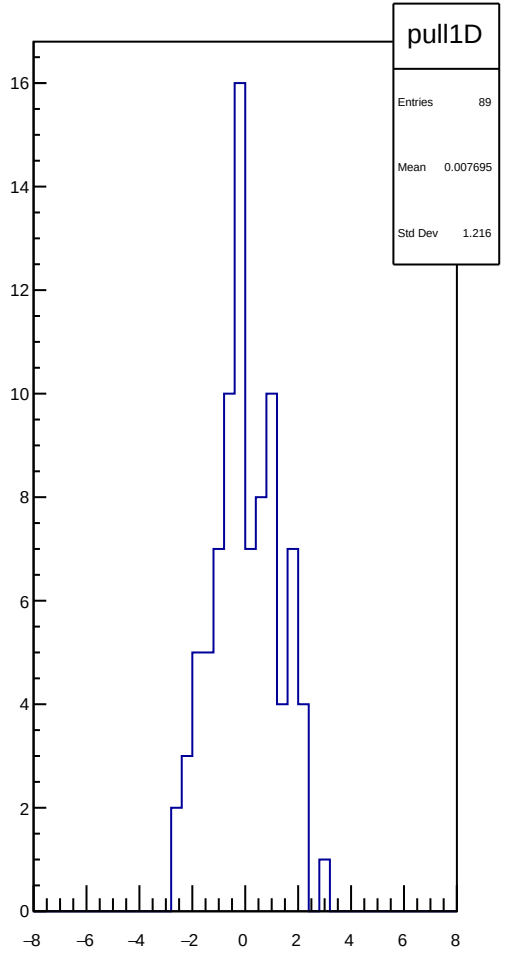

diff_bpm1i04X_rms vs run
χ² / ndf 9335 / 88
p0 1082 ± 0.835
1200
1150
1100
1050
1000
950
900
850
800

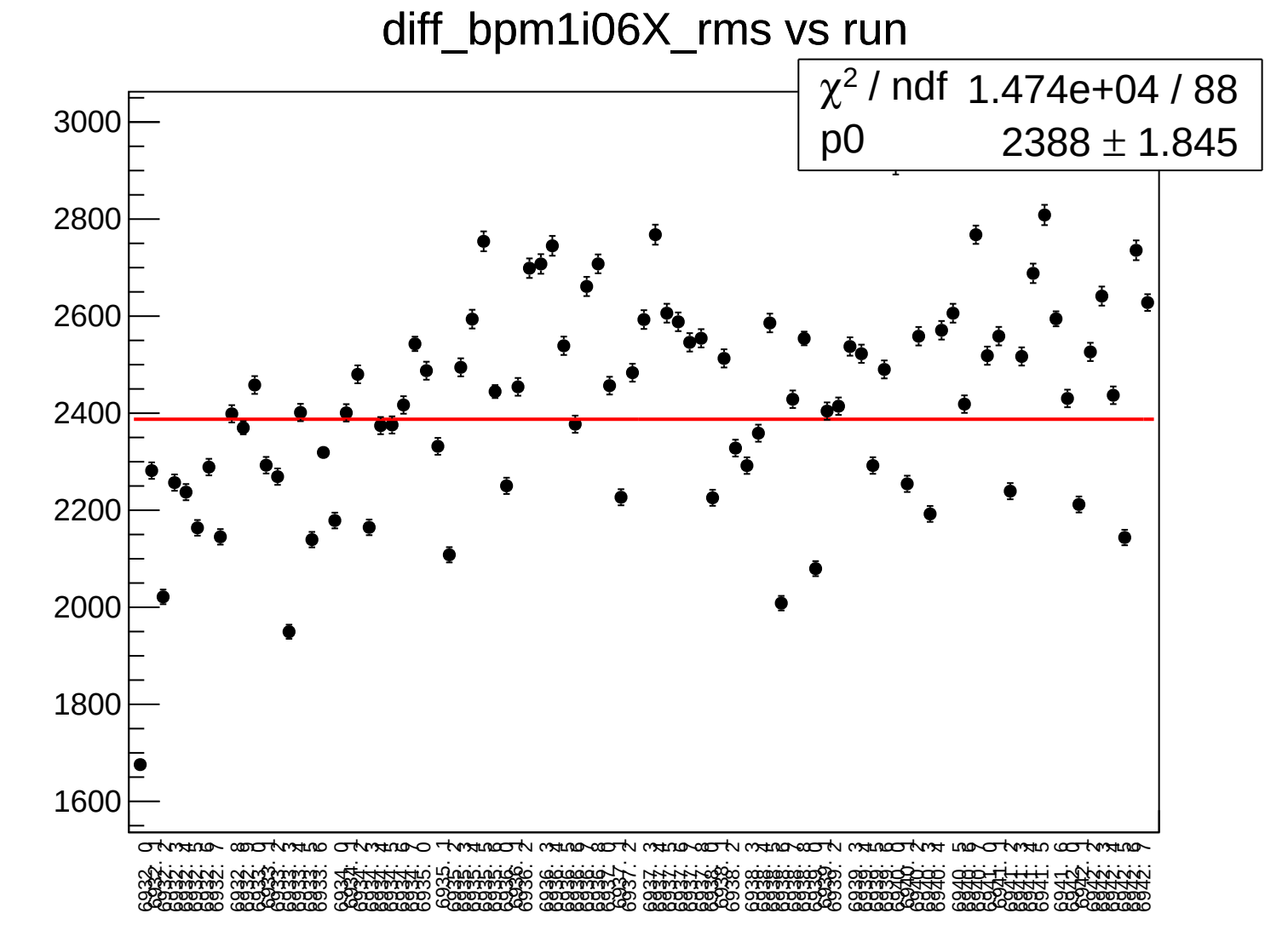

diff_bpm1i04Y_mean vs run
χ² / ndf 119.9 / 88
p0 17.06 ± 1.064
pull
Entries 89
Mean 107.8
Std Dev 75.28

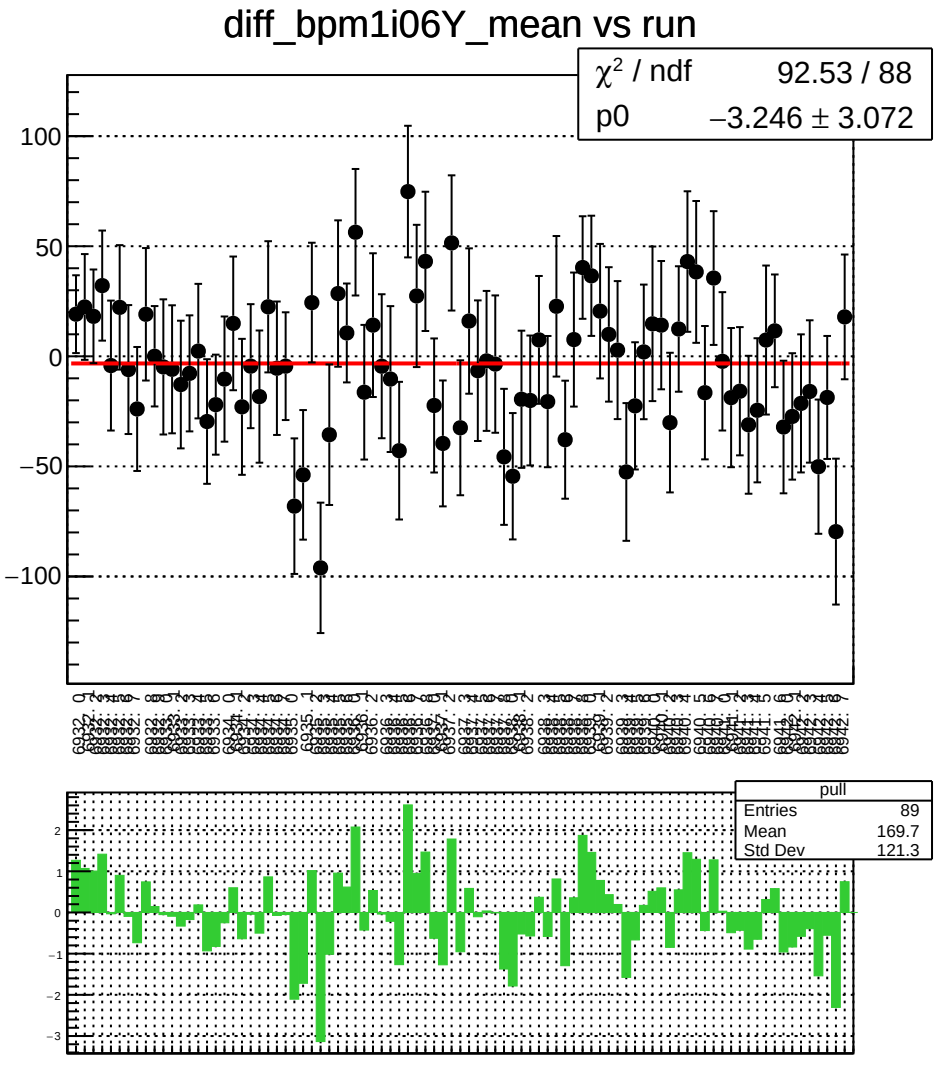

pull1D
Entries 89
Mean −0.04758
Std Dev 1.16

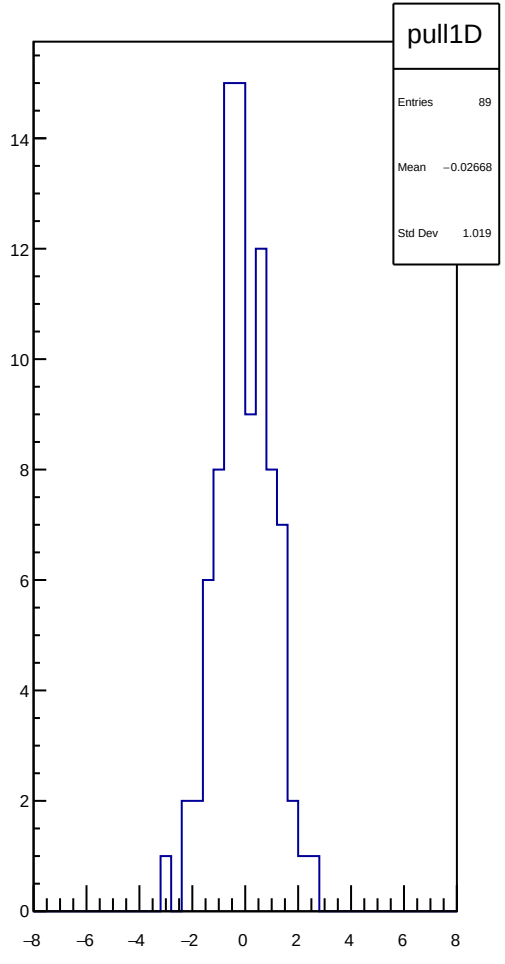

diff_bpm1i04Y_rms vs run
χ² / ndf 1.697e+04 / 88
p0 973.2 ± 0.7525
1150
1100
1050
1000
950
900
850
800
750
700

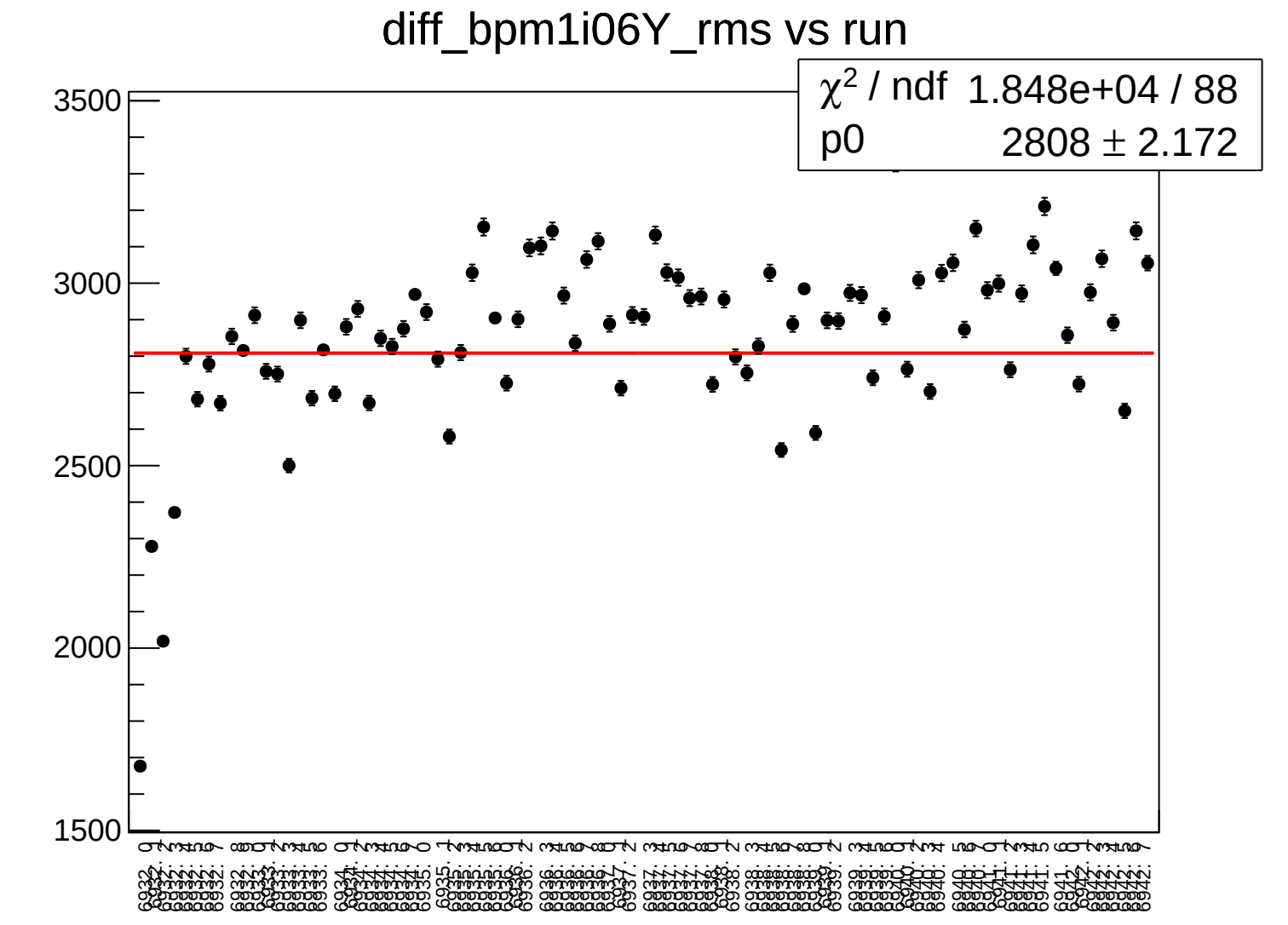

diff_bpm1i06X_mean vs run
χ^2 / ndf 131.6 / 88
p0 47.57 ± 2.609
150
100
50
0
−50
pull
Entries 89
Mean 958.3
Std Dev 928.6
3
2
1
0
−1
−2

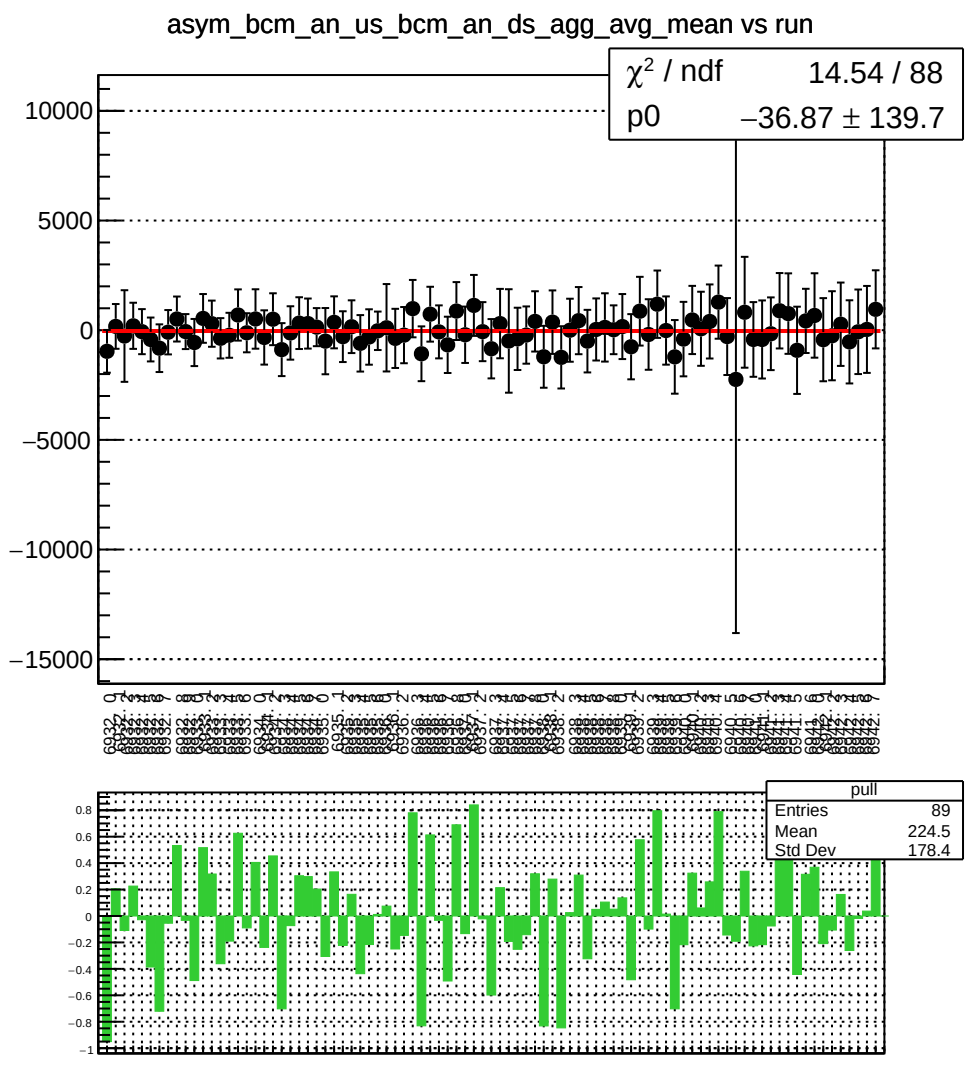

pull1D
Entries 89
Mean 0.007695
Std Dev 1.216
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

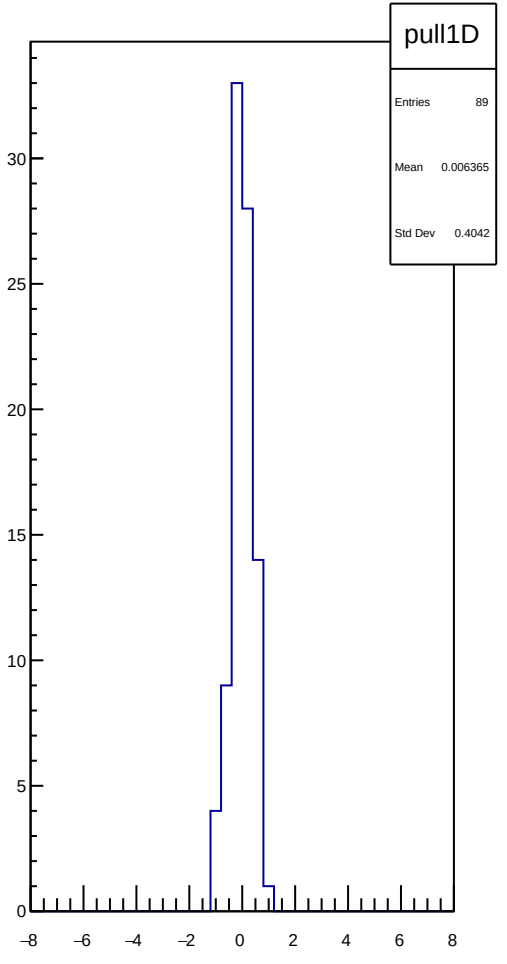

diff_bpm1i06X_rms vs run
χ² / ndf 1.474e+04 / 88
p0 2388 ± 1.845
3000
2800
2600
2400
2200
2000
1800
1600

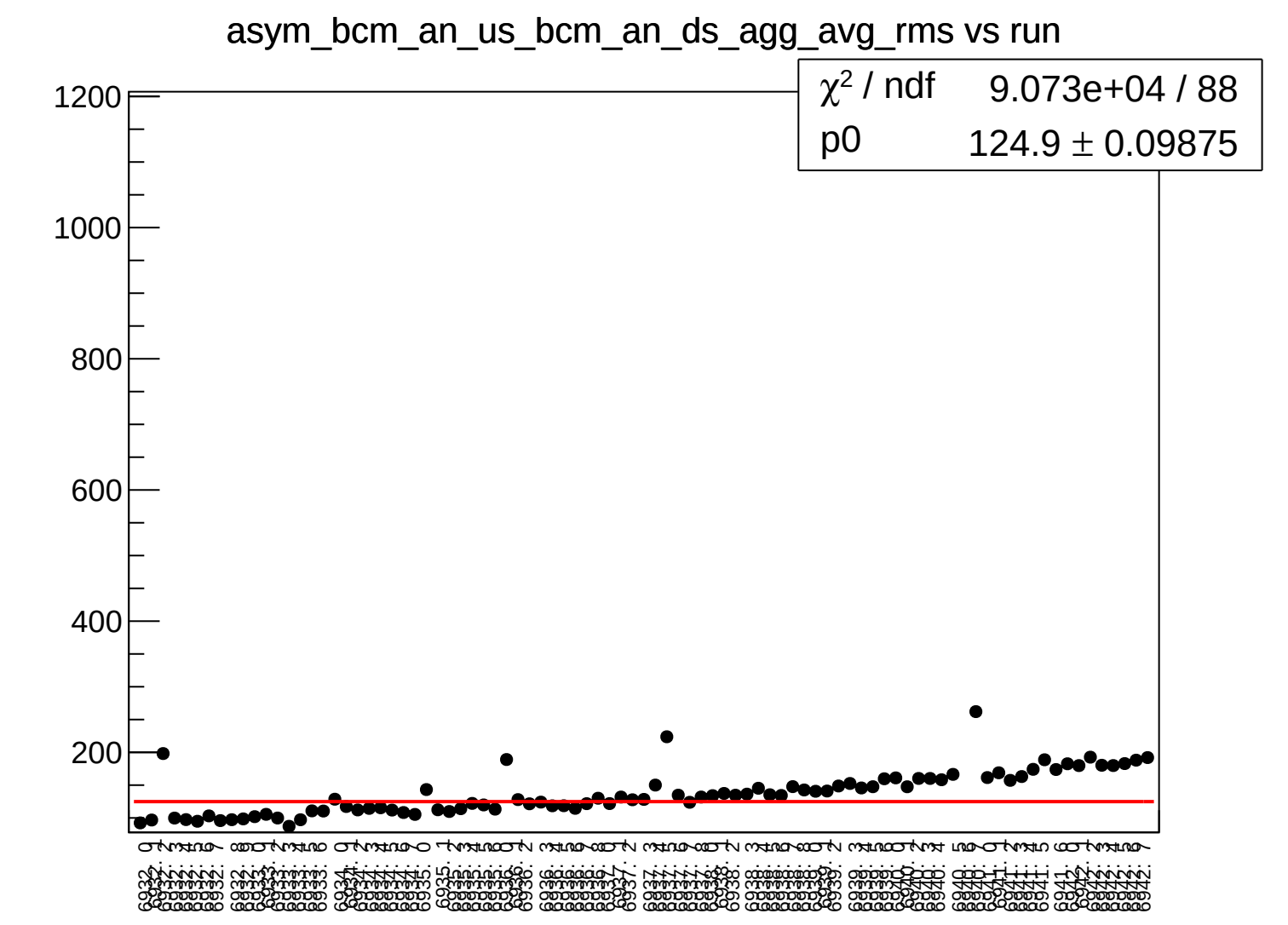

diff_bpm1i06Y_mean vs run
χ² / ndf 92.53 / 88
p0 −3.246 ± 3.072
100
50
0
−50
−100
pull
Entries 89
Mean 169.7
Std Dev 121.3
2
1
0
−1
−2
−3

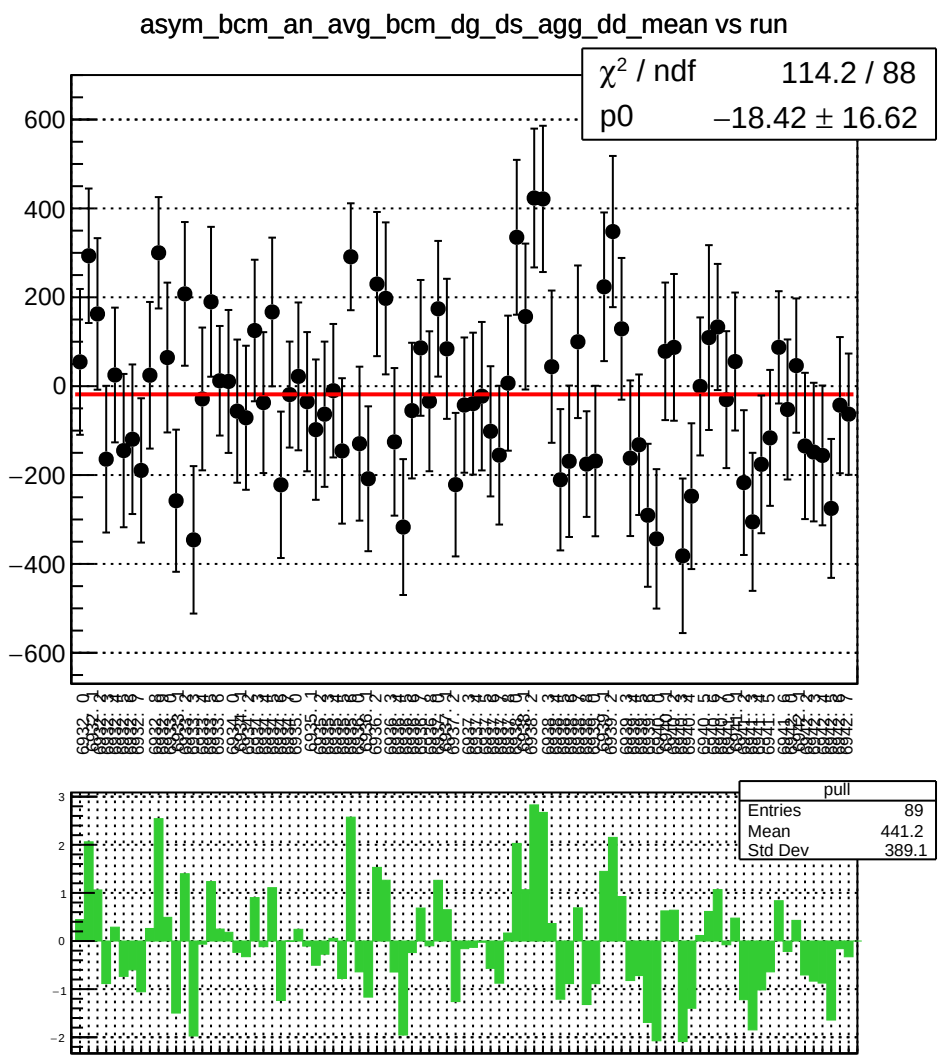

pull1D
Entries 89
Mean −0.02668
Std Dev 1.019
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

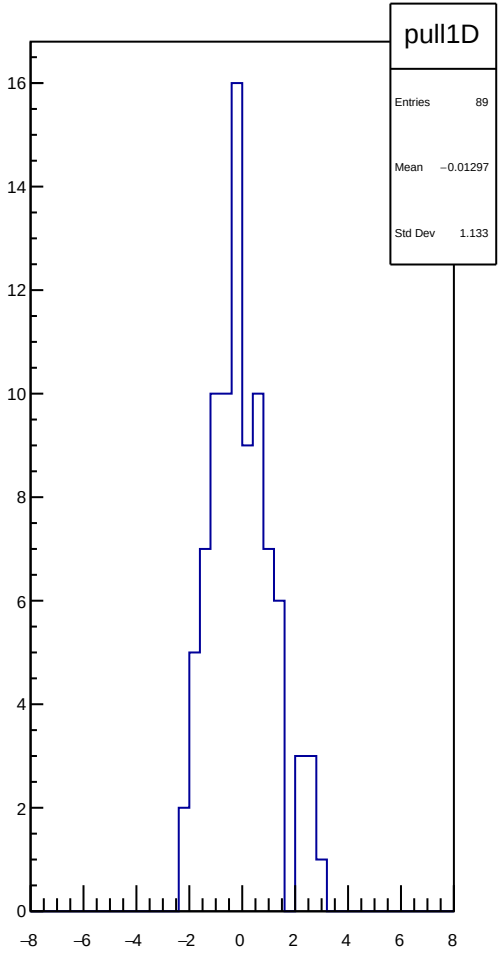

diff_bpm1i06Y_rms vs run
χ² / ndf 1.848e+04 / 88
p0 2808 ± 2.172
3500
3000
2500
2000
1500

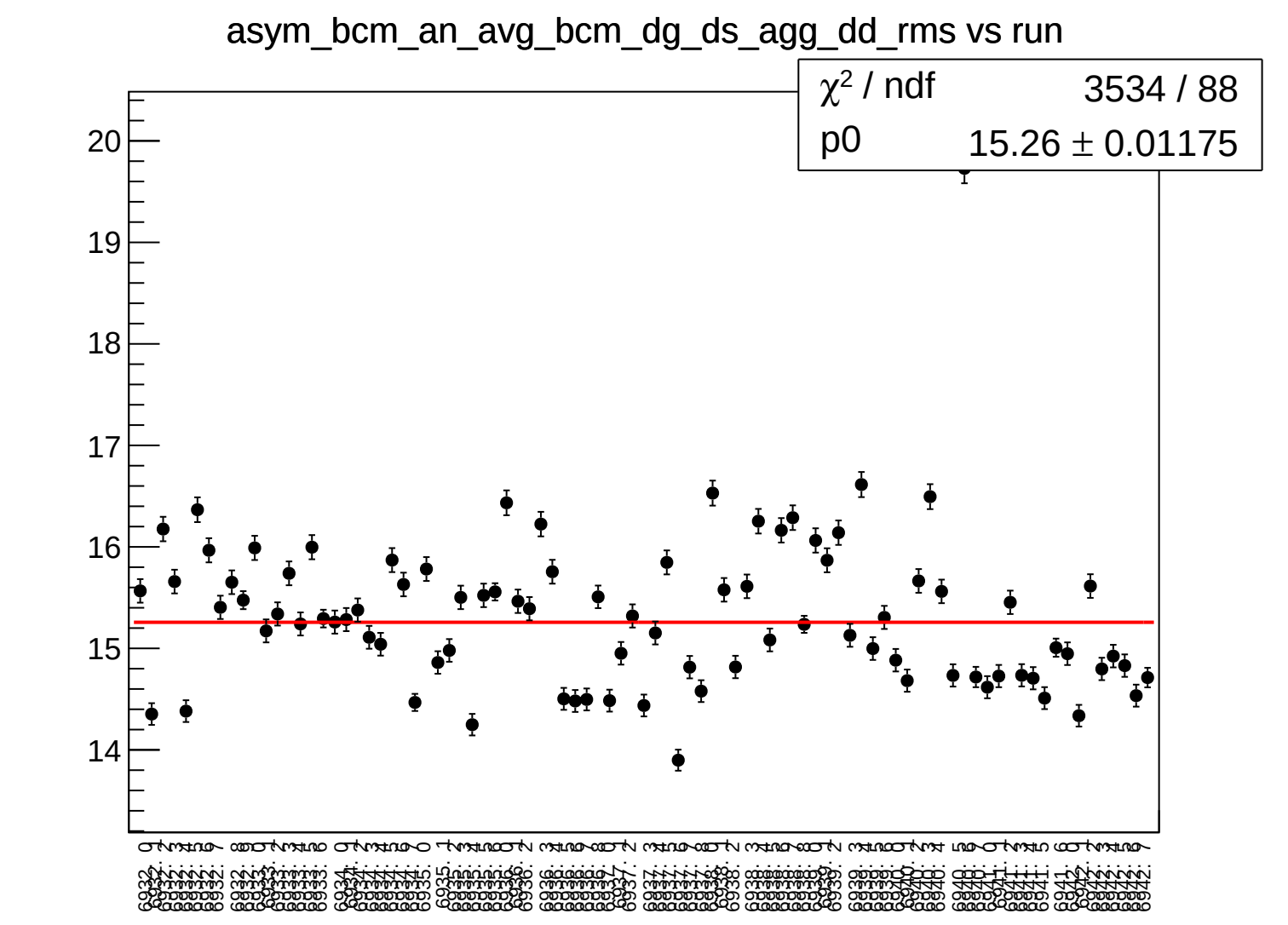

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 14.54 / 88
p0 −36.87 ± 139.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 224.5
Std Dev 178.4
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

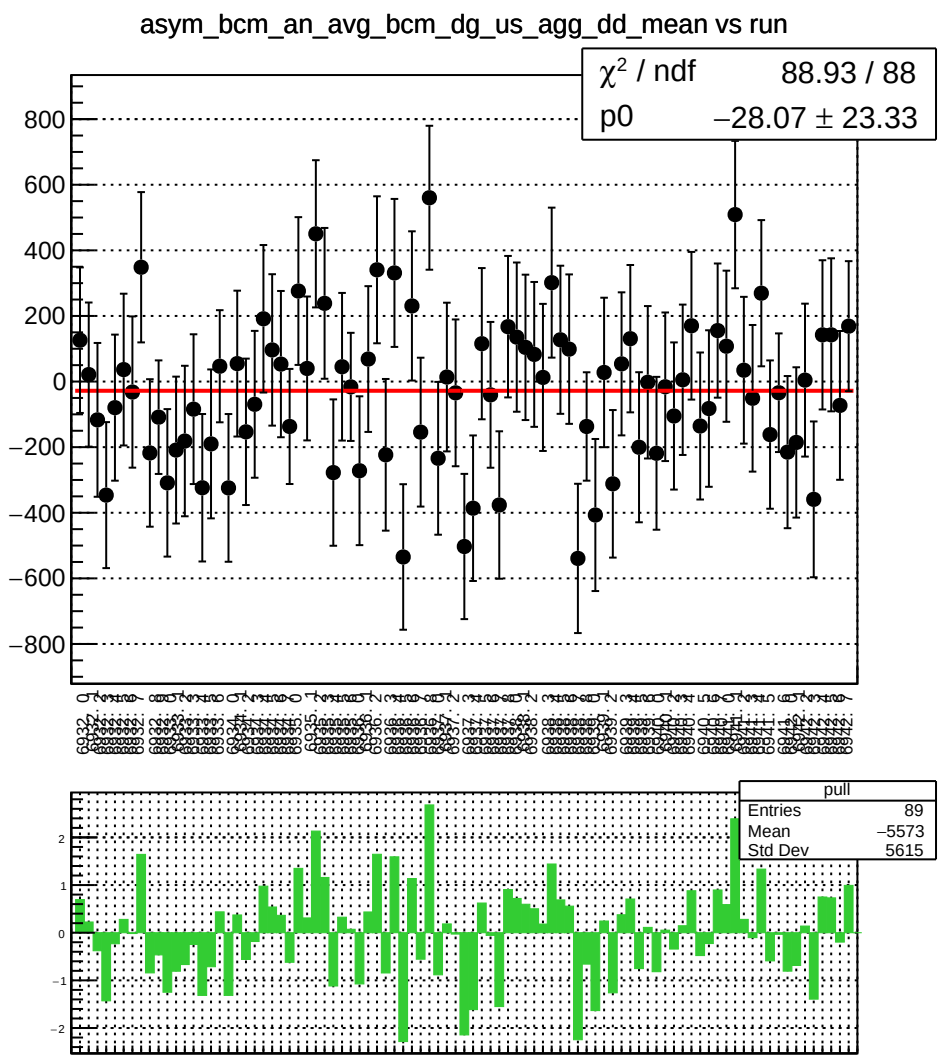

pull1D
Entries 89
Mean 0.006365
Std Dev 0.4042
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

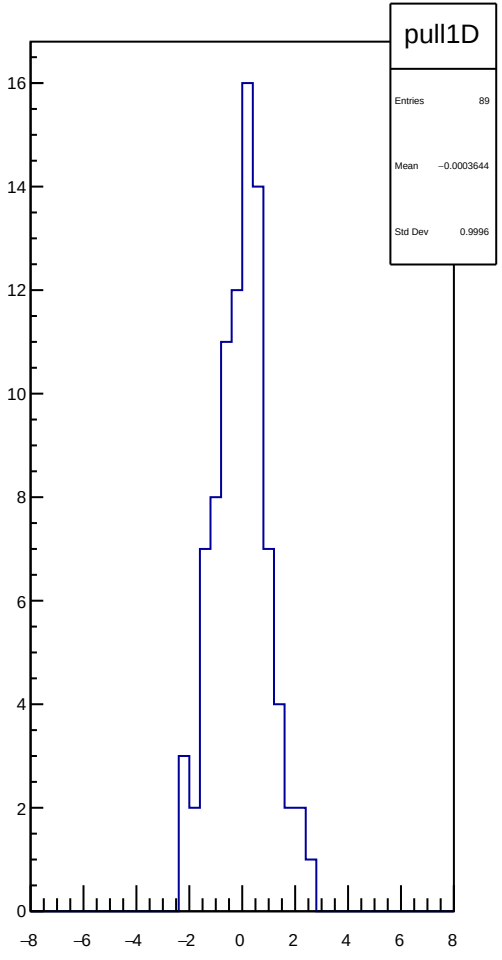

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 9.073e+04 / 88
p0 124.9 ± 0.09875
1200
1000
800
600
400
200

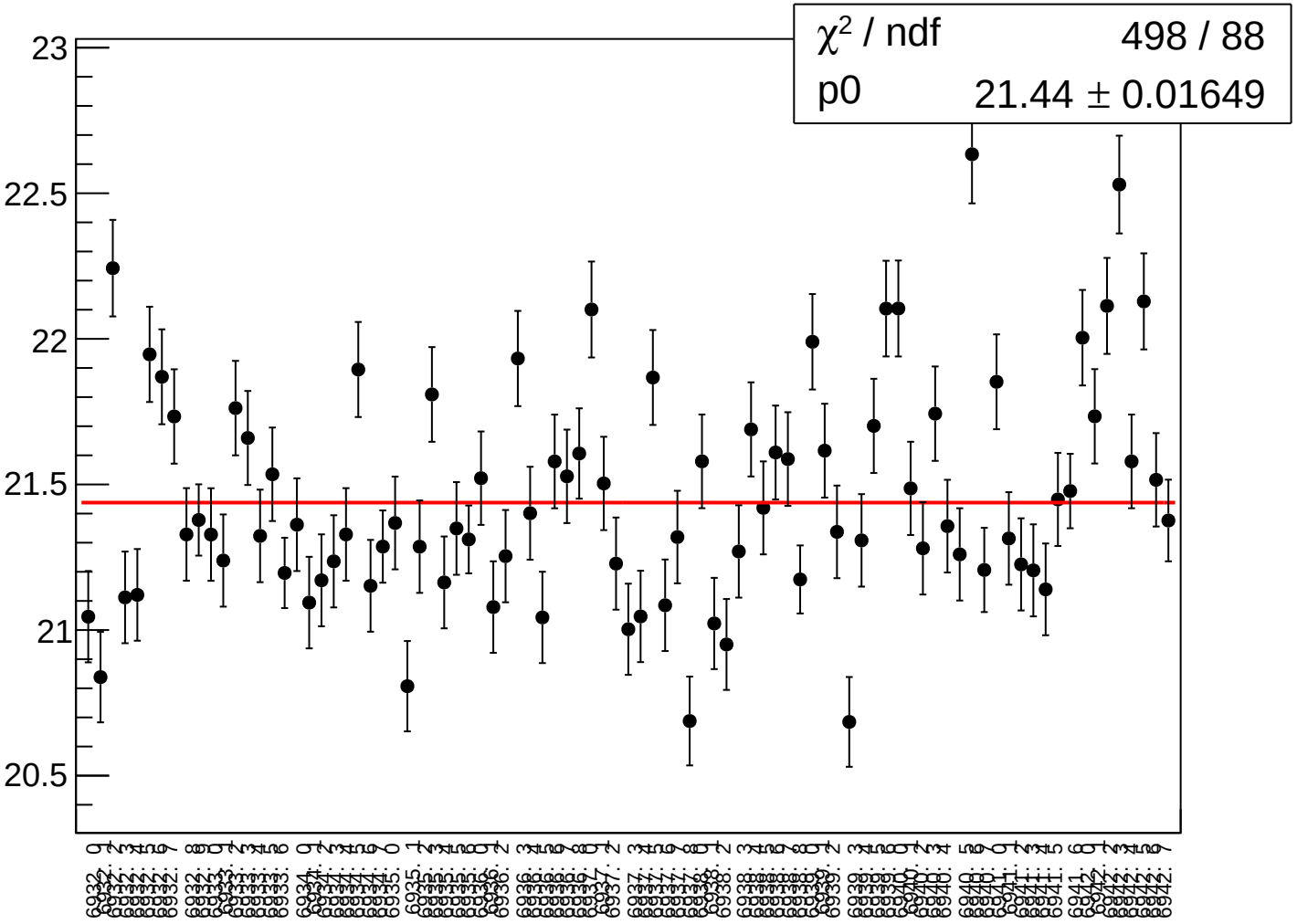

asym_bcm_an_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 114.2 / 88
p0 −18.42 ± 16.62
600
400
200
0
−200
−400
−600
pull
Entries 89
Mean 441.2
Std Dev 389.1
3
2
1
0
−1
−2

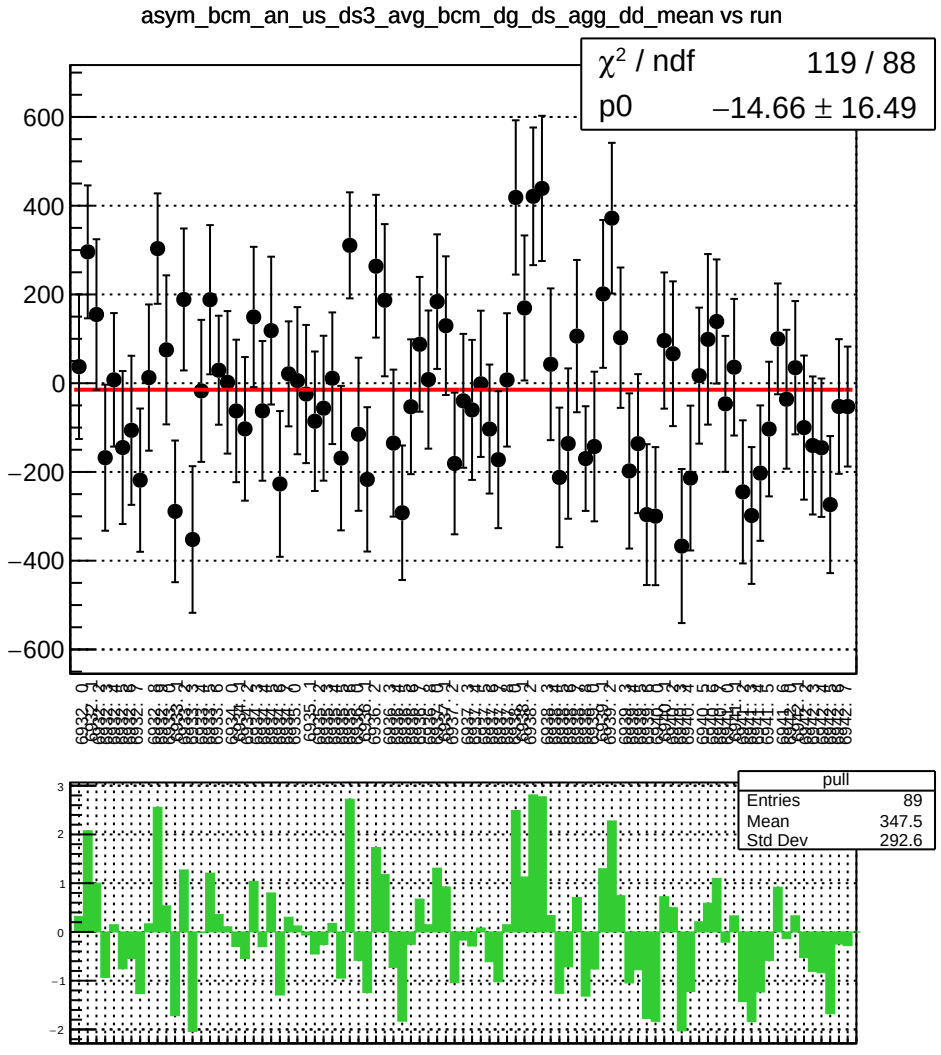

pull1D
Entries 89
Mean −0.01297
Std Dev 1.133
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

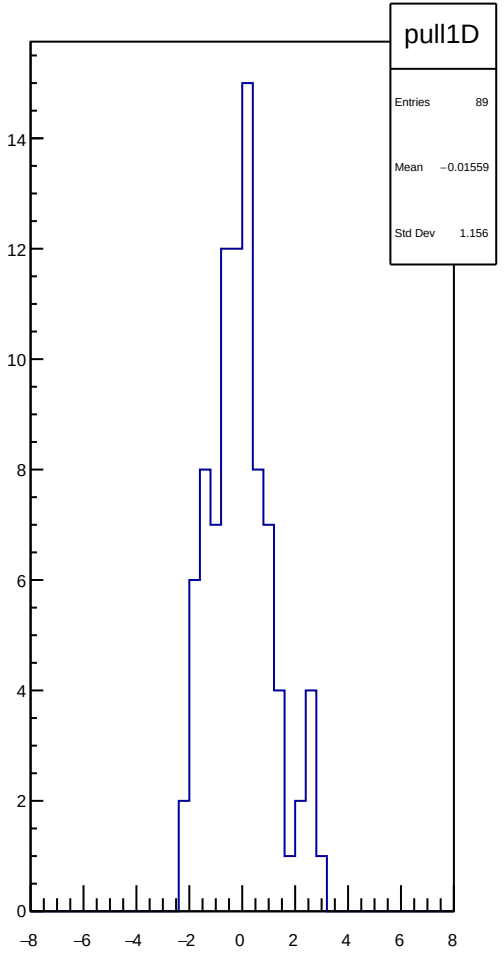

asym_bcm_an_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3534 / 88
p0 15.26 ± 0.01175
20
19
18
17
16
15
14

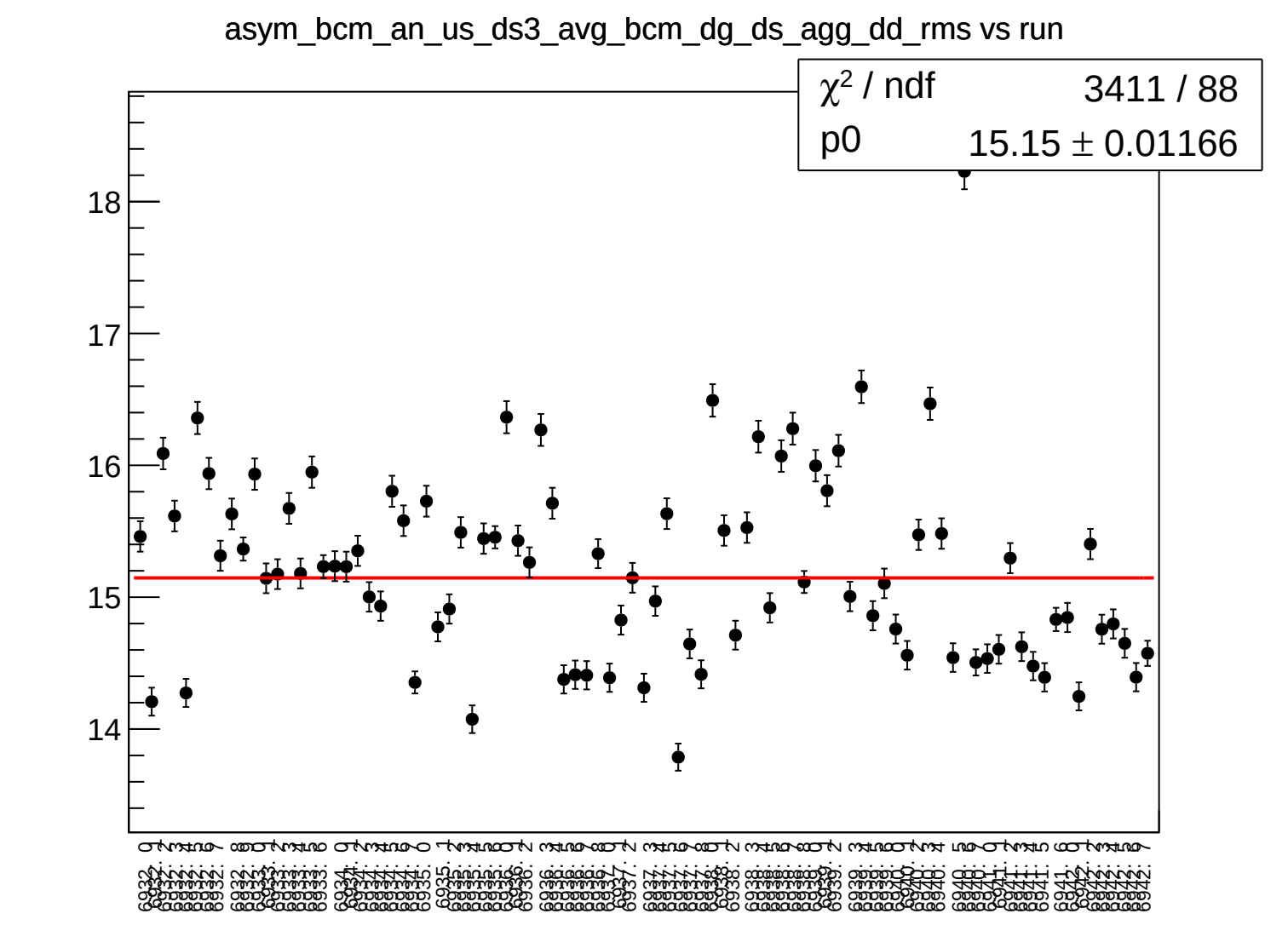

asym_bcm_an_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 88.93 / 88
p0 −28.07 ± 23.33
pull
Entries 89
Mean −5573
Std Dev 5615

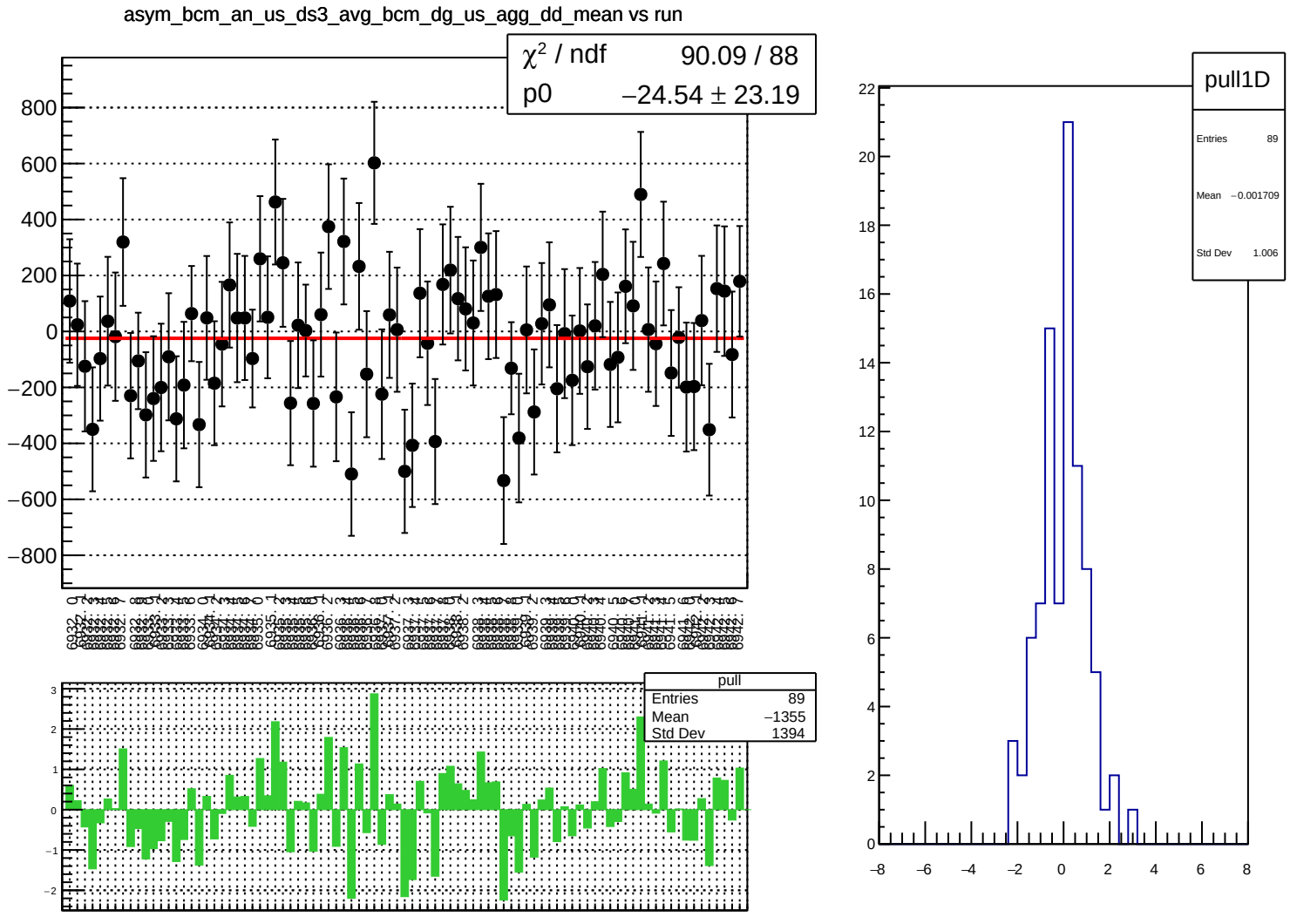

pull1D
Entries 89
Mean −0.0003644
Std Dev 0.9996

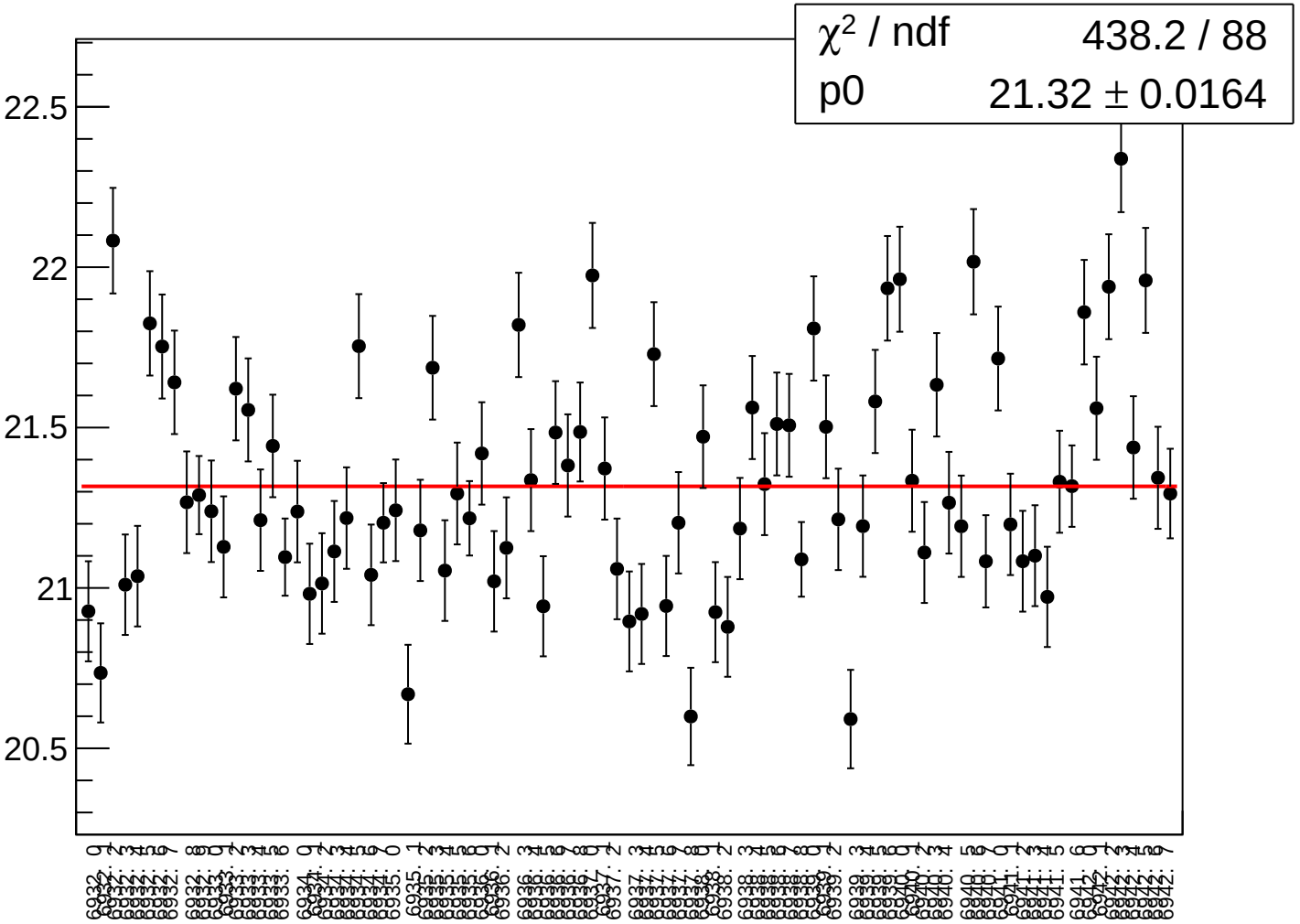

asym_bcm_an_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 498 / 88
p0 21.44 ± 0.01649
23
22.5
22
21.5
21
20.5

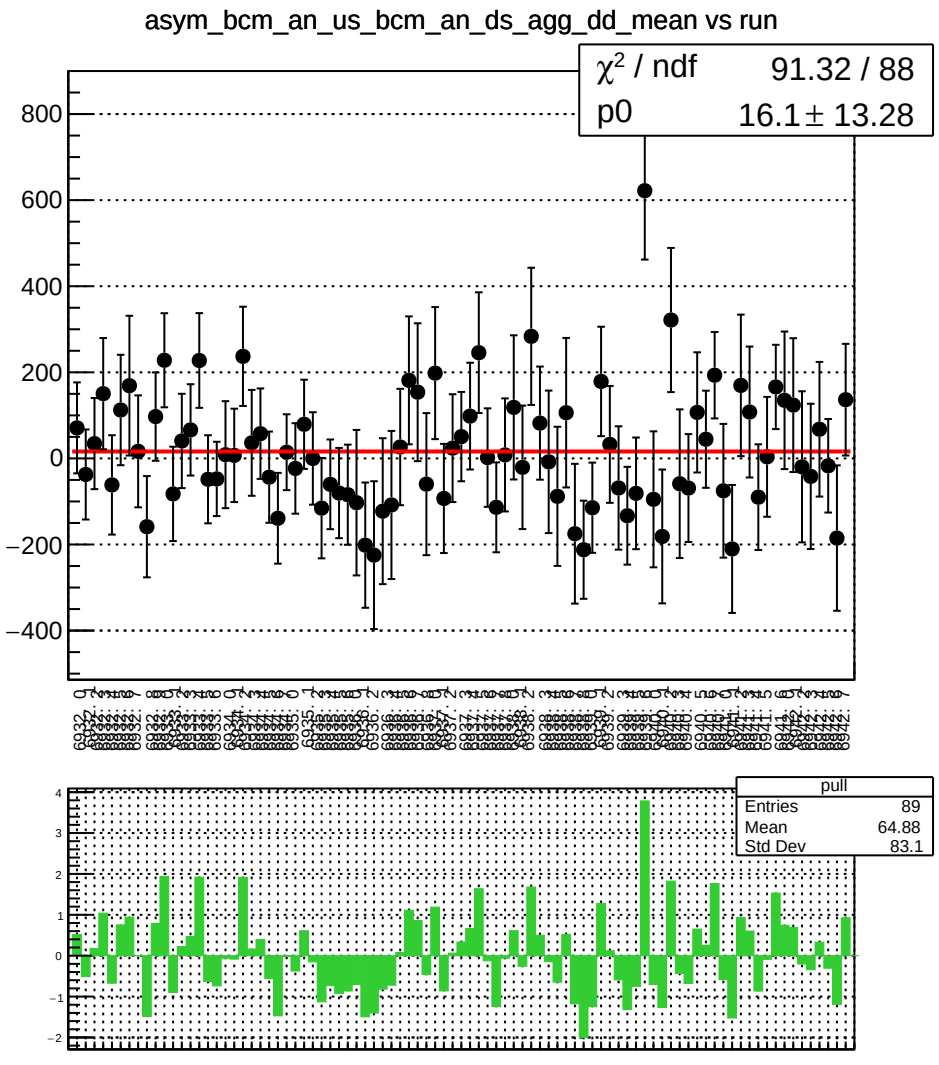

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 119 / 88
p0 −14.66 ± 16.49
600
400
200
0
−200
−400
−600
pull
Entries 89
Mean 347.5
Std Dev 292.6
3
2
1
0
−1
−2

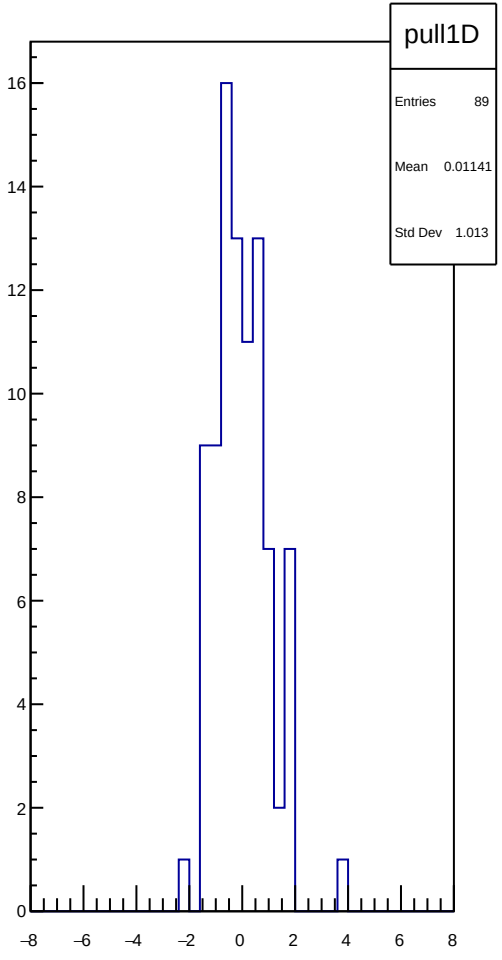

pull1D
Entries 89
Mean −0.01559
Std Dev 1.156
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

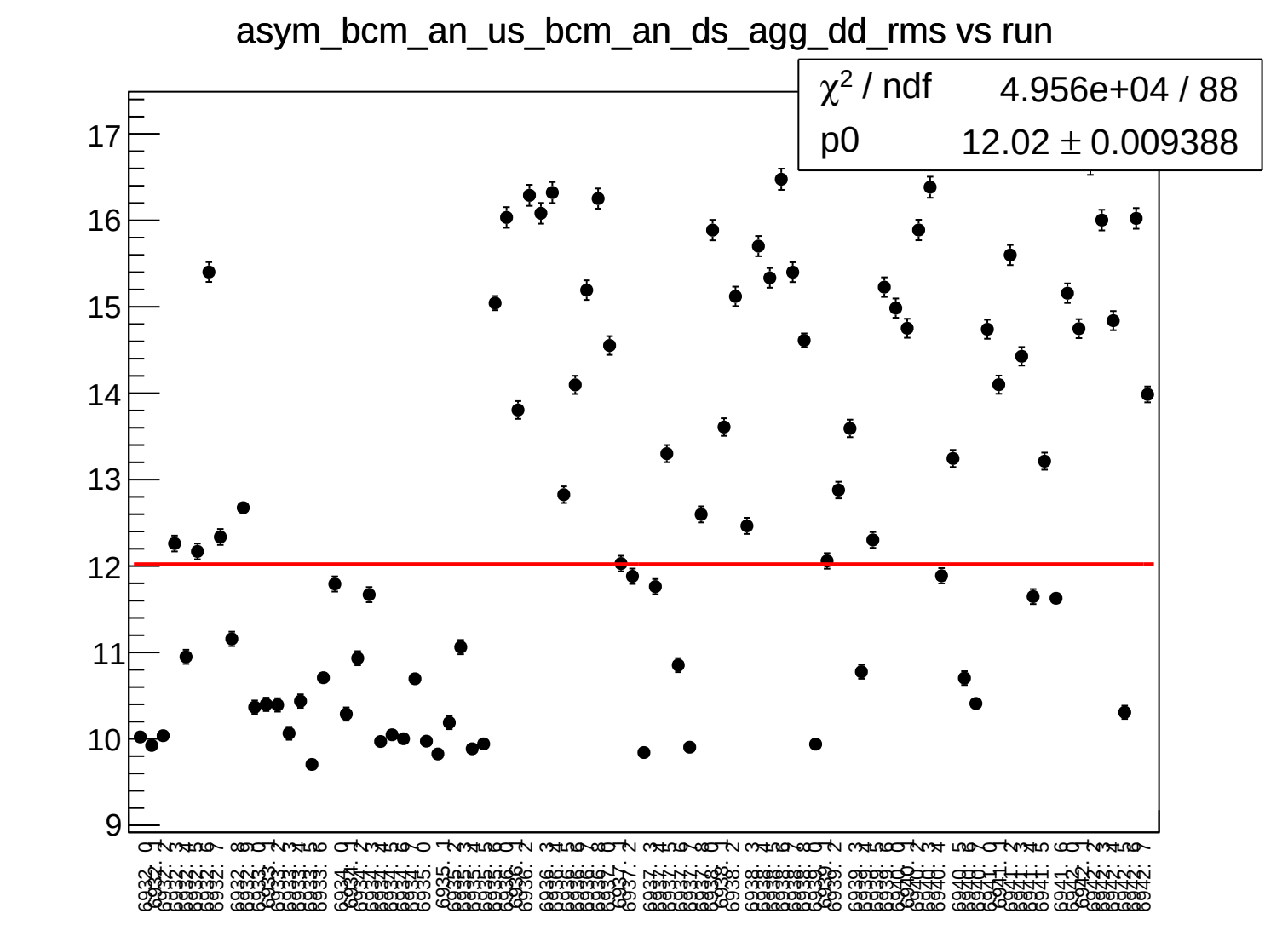

asym_bcm_an_us_ds3_avg_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3411 / 88
p0 15.15 ± 0.01166
18
17
16
15
14

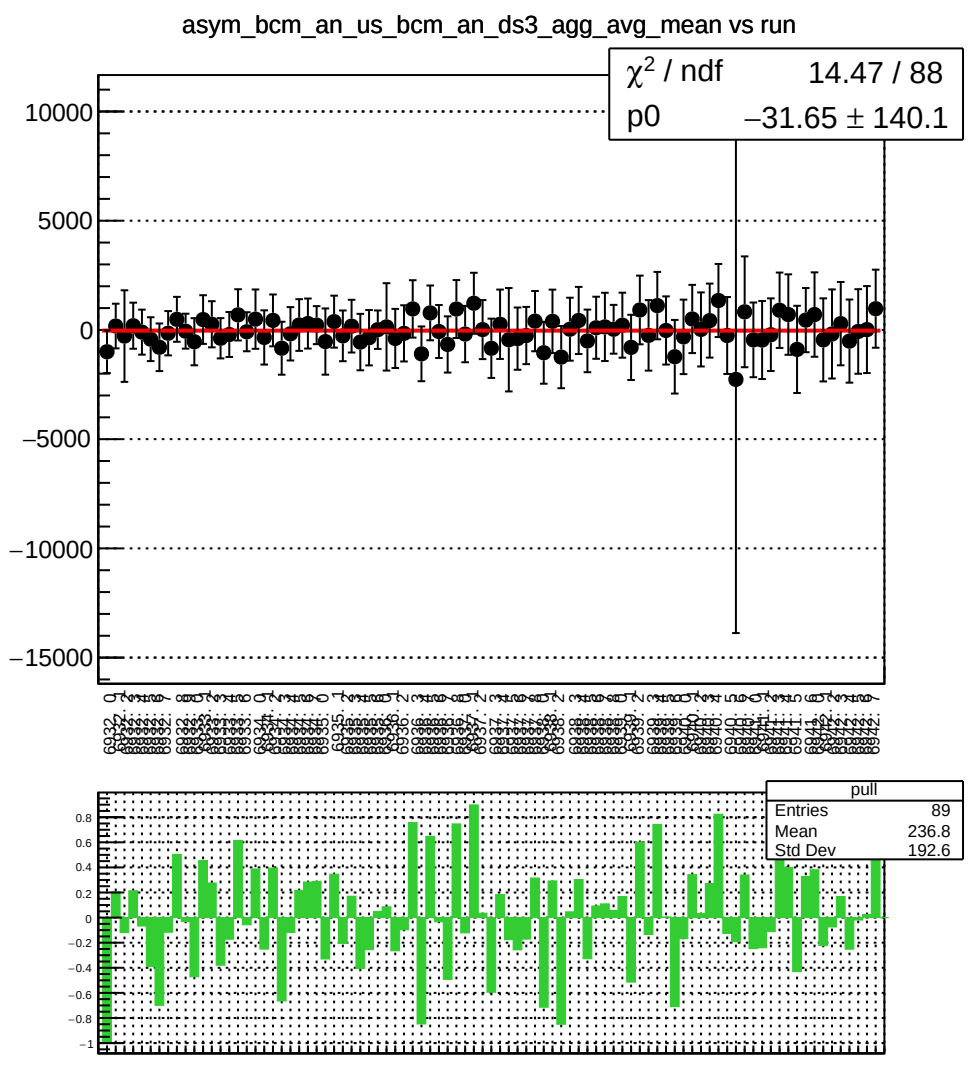

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 90.09 / 88
p0 −24.54 ± 23.19
800
600
400
200
0
−200
−400
−600
−800
pull
Entries 89
Mean −1355
Std Dev 1394
3
2
1
0
−1
−2
pull1D
Entries 89
Mean −0.001709
Std Dev 1.006
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

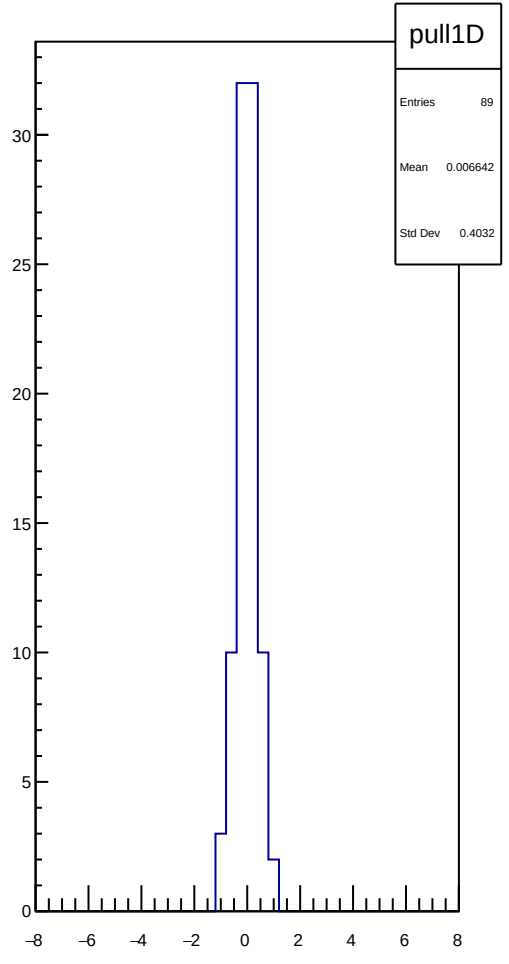

asym_bcm_an_us_ds3_avg_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 438.2 / 88
p0 21.32 ± 0.0164
22.5
22
21.5
21
20.5

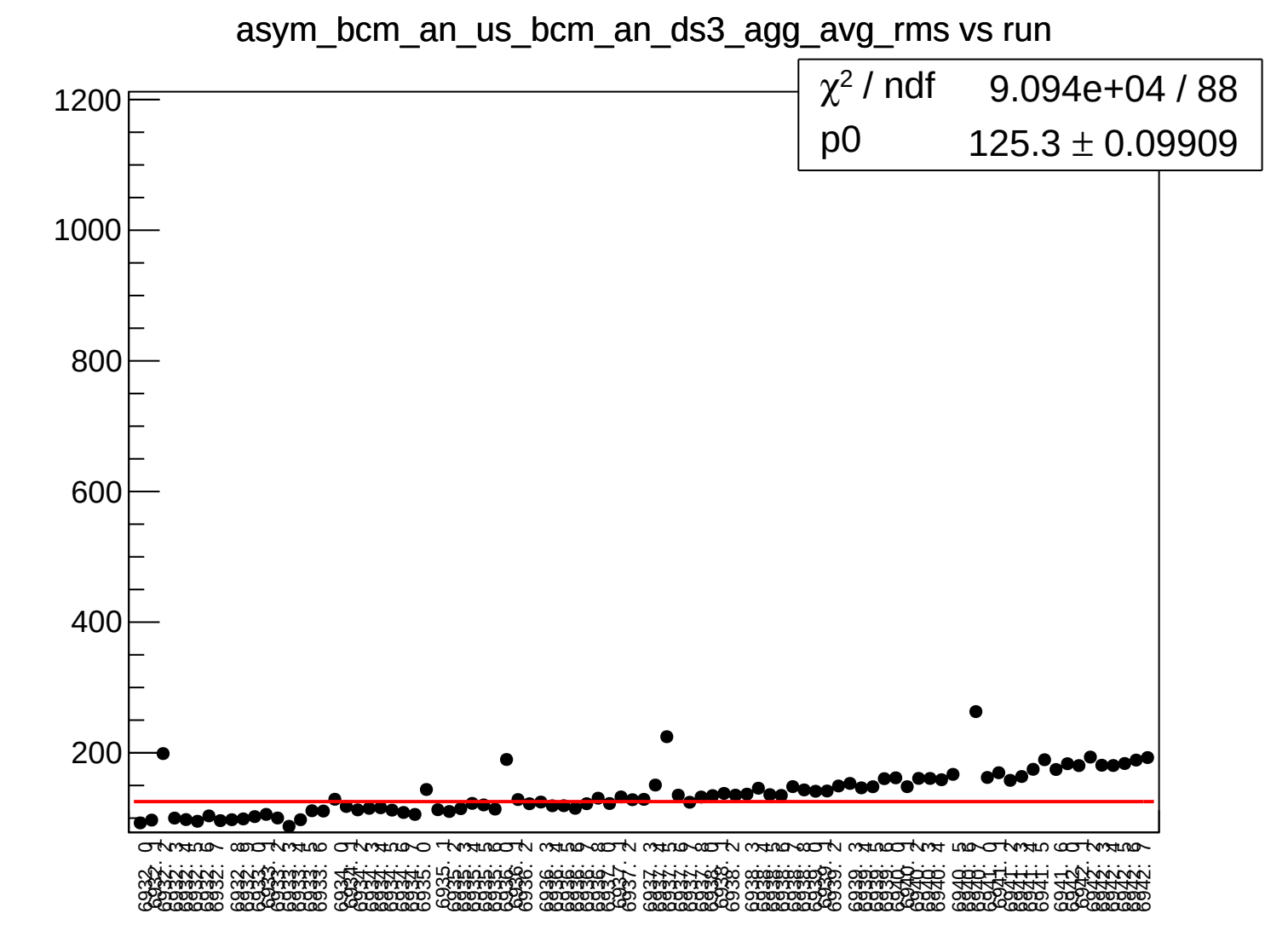

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 91.32 / 88
p0 16.1 ± 13.28
pull
Entries 89
Mean 64.88
Std Dev 83.1

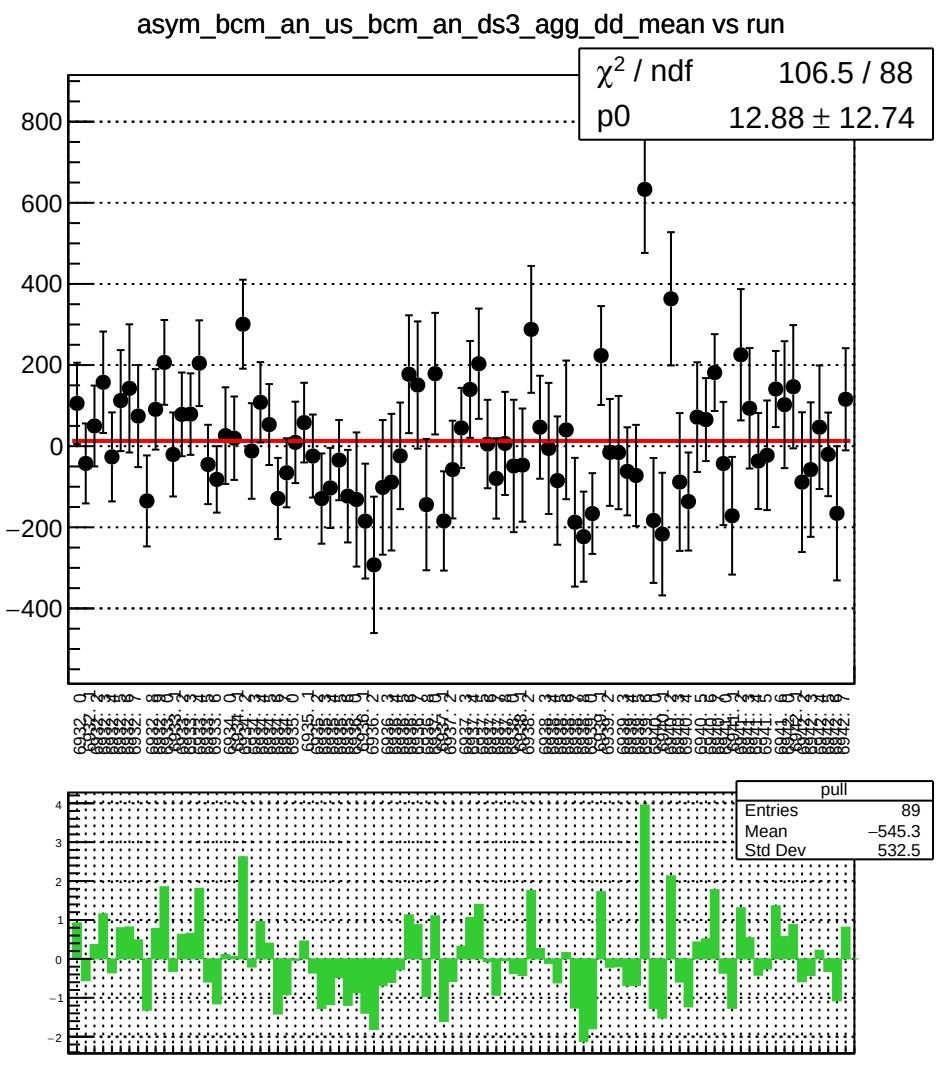

pull1D
Entries 89
Mean 0.01141
Std Dev 1.013

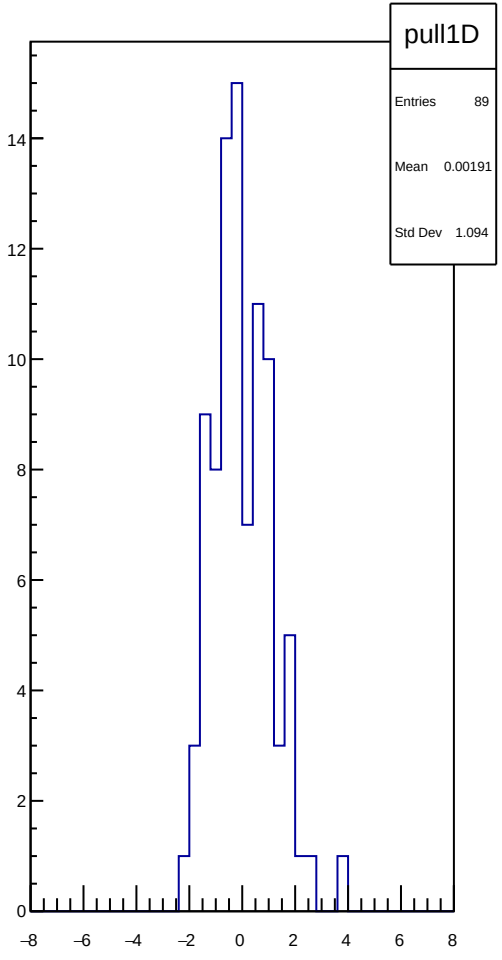

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 4.956e+04 / 88
p0 12.02 ± 0.009388
17
16
15
14
13
12
11
10
9

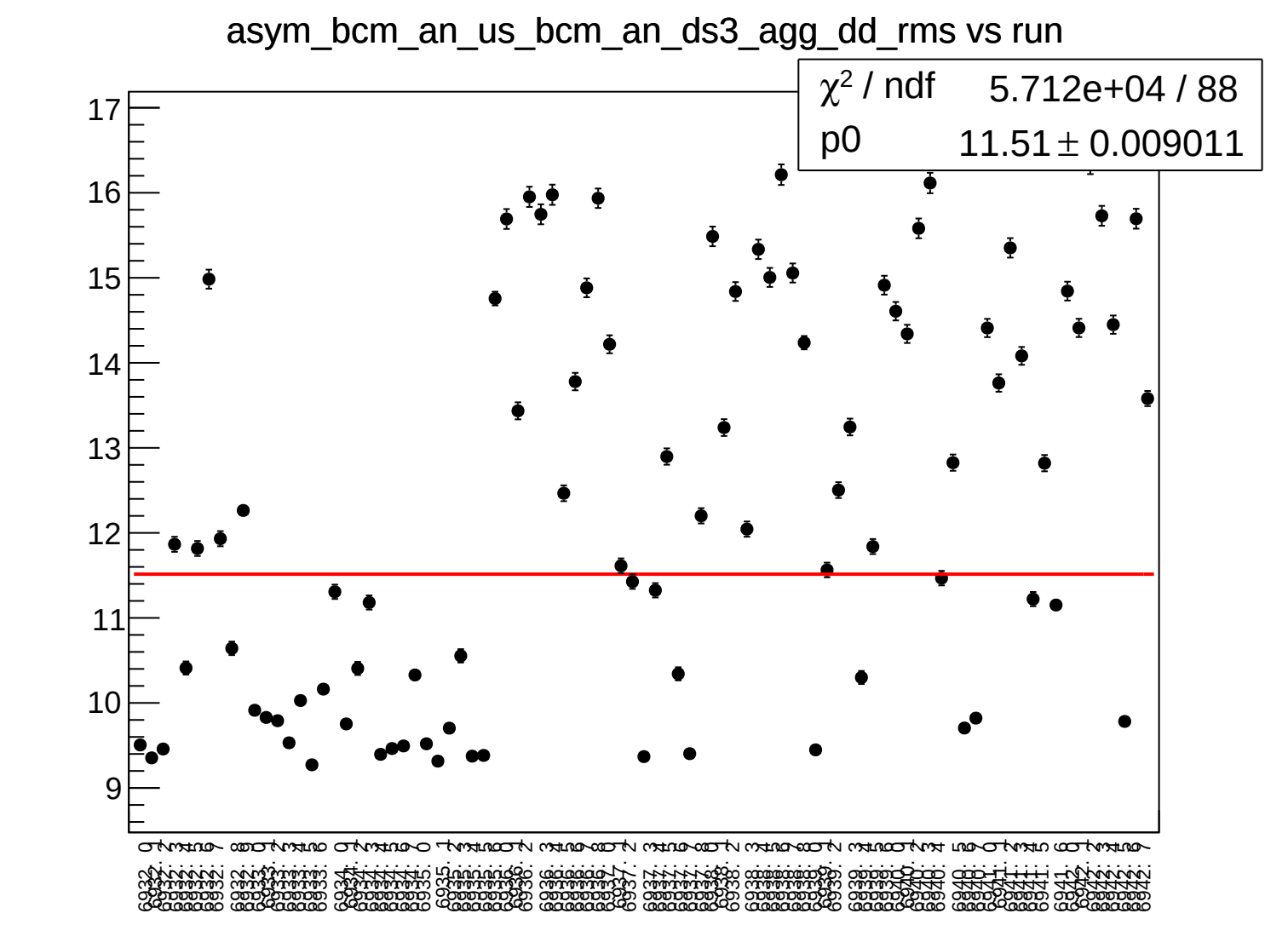

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 14.47 / 88
p0 −31.65 ± 140.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 236.8
Std Dev 192.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

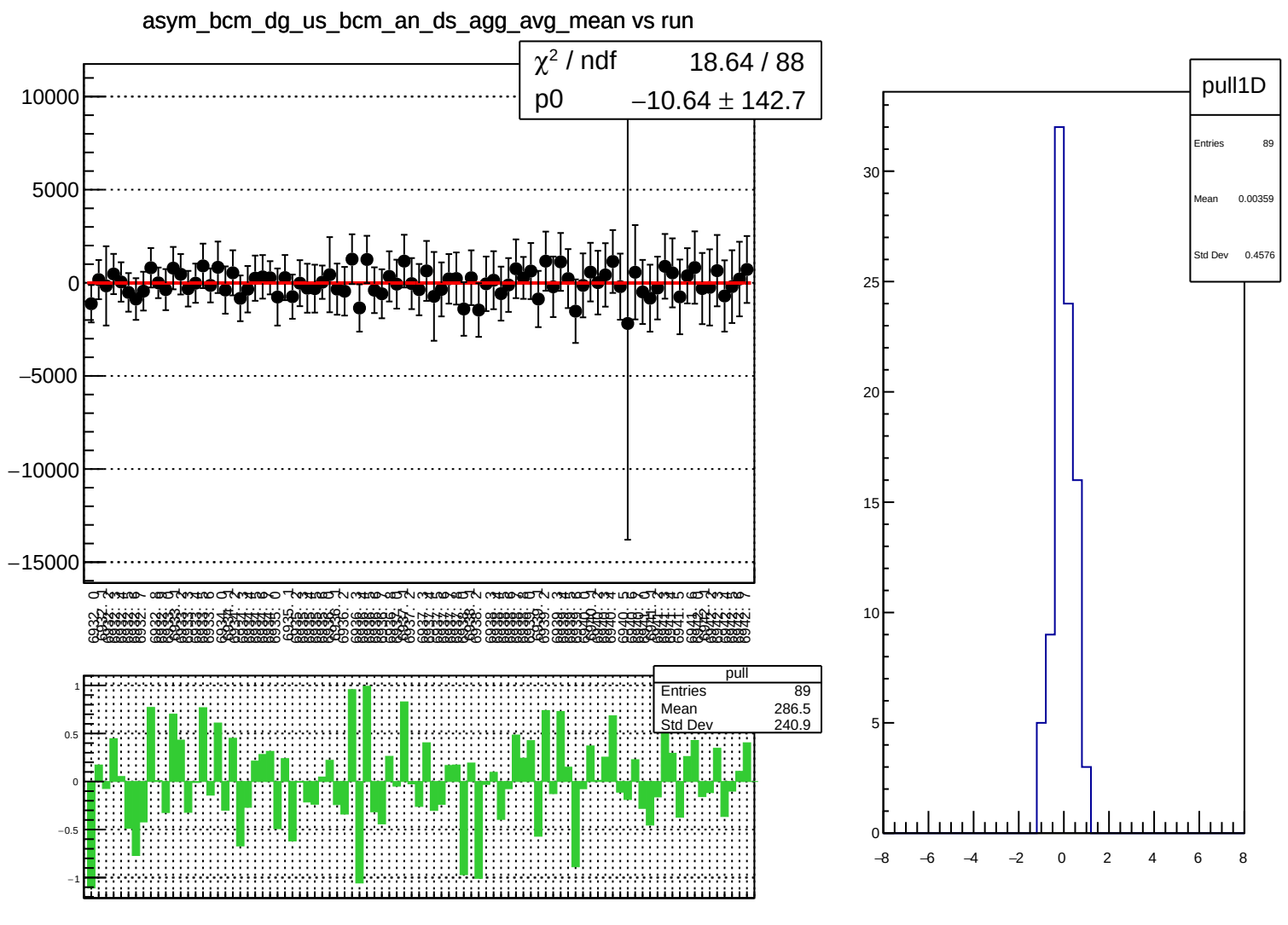

pull1D
Entries 89
Mean 0.006642
Std Dev 0.4032
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

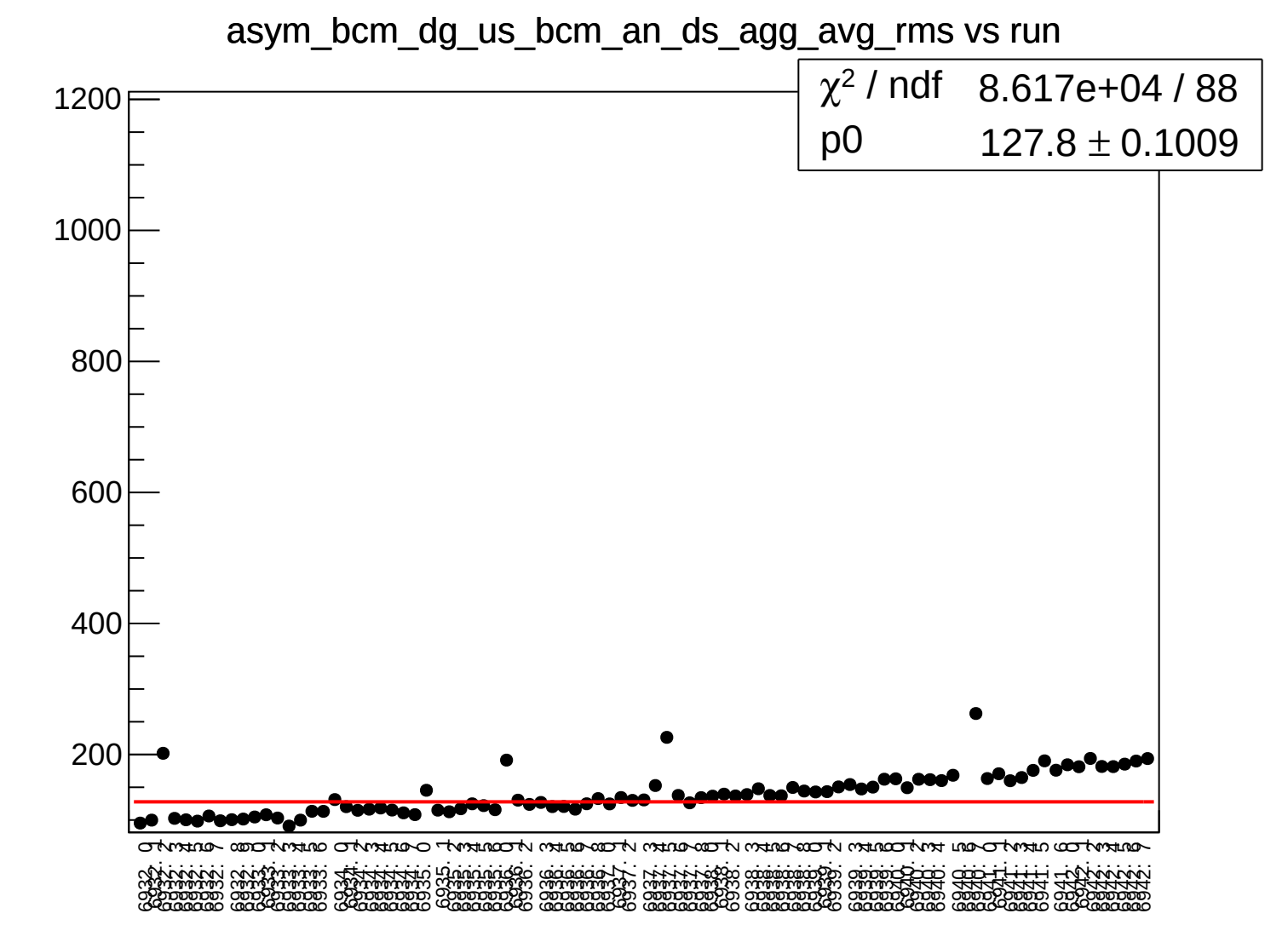

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 9.094e+04 / 88
p0 125.3 ± 0.09909
1200
1000
800
600
400
200

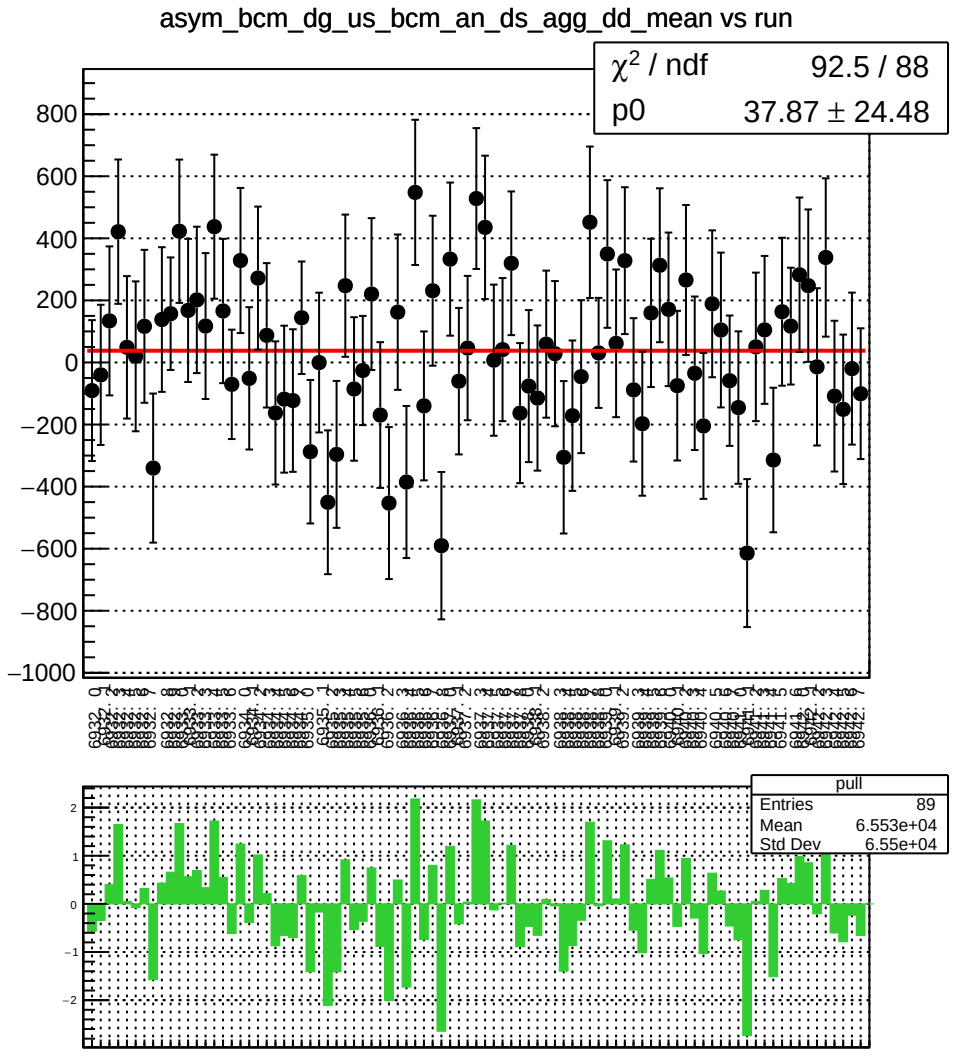

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 106.5 / 88
p0 12.88 ± 12.74
800
600
400
200
0
−200
−400
pull
Entries 89
Mean −545.3
Std Dev 532.5
4
3
2
1
0
−1
−2

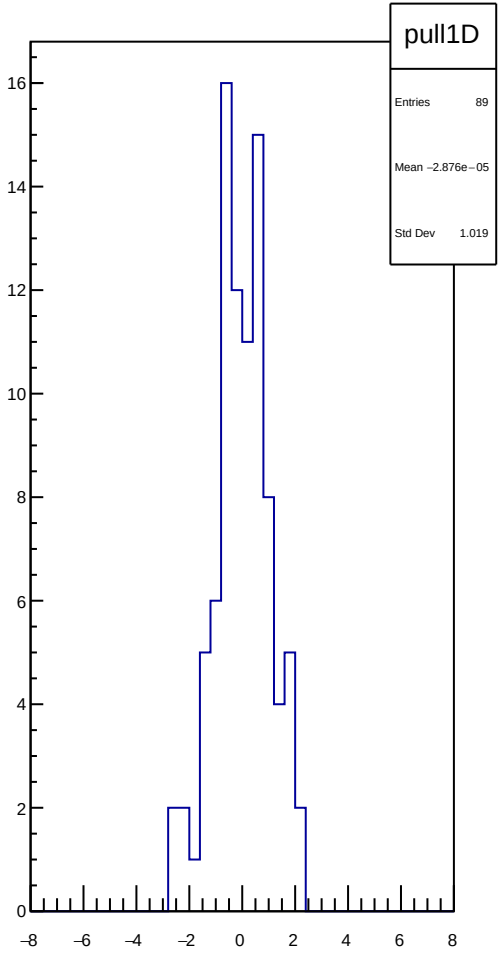

pull1D
Entries 89
Mean 0.00191
Std Dev 1.094
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

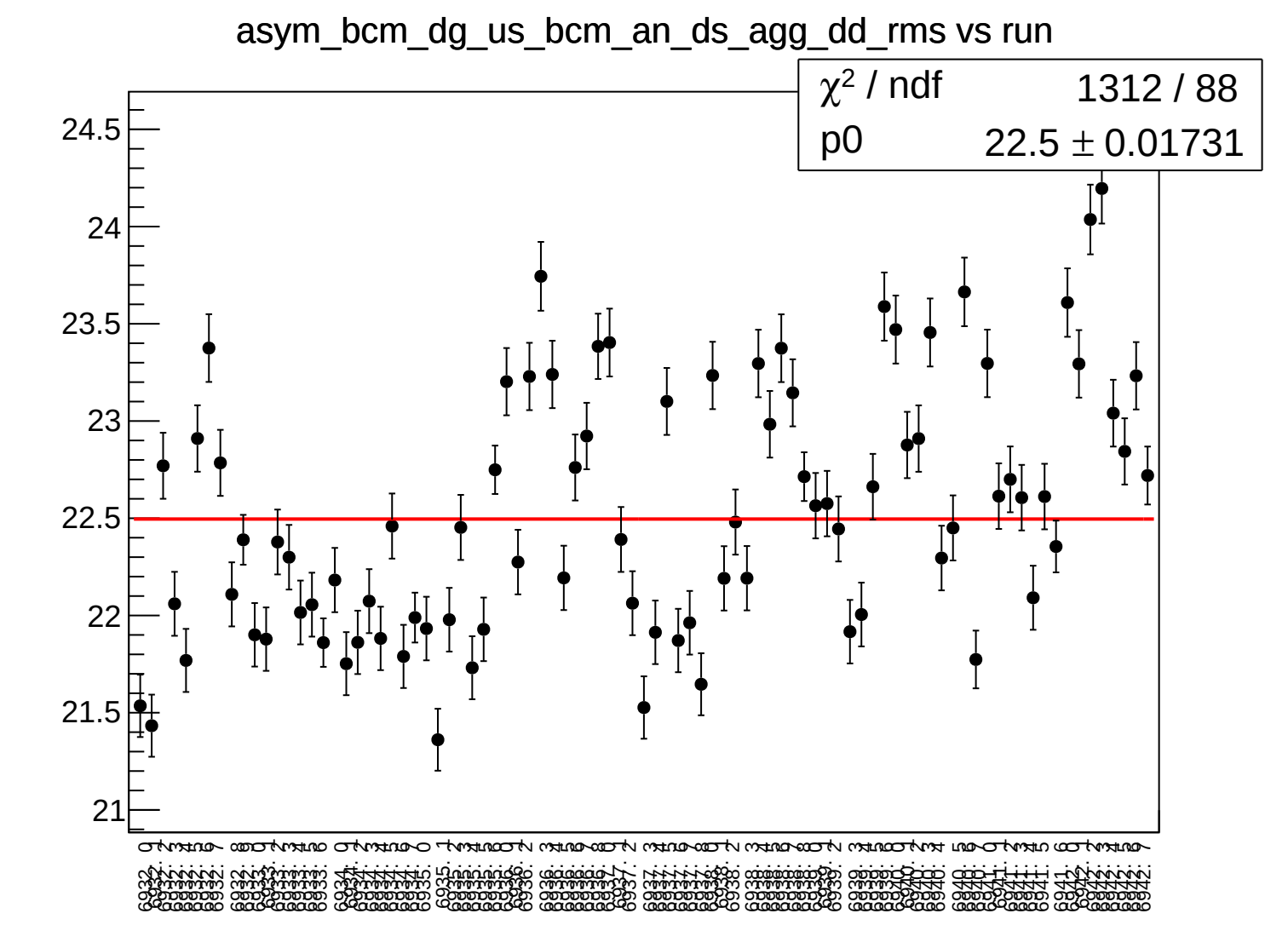

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 5.712e+04 / 88
p0 11.51 ± 0.009011
17
16
15
14
13
12
11
10
9

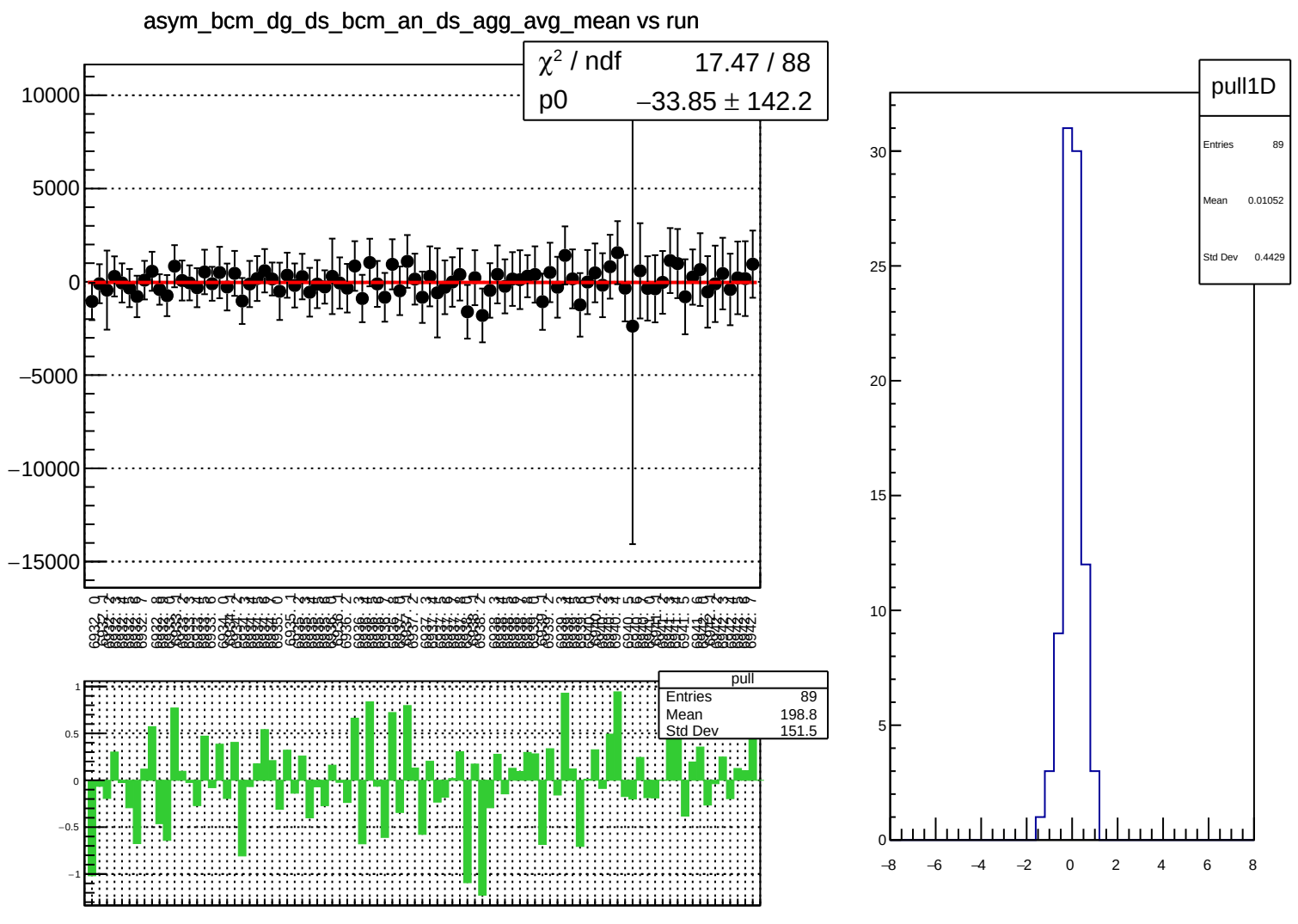

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.64 / 88
p0 −10.64 ± 142.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 286.5
Std Dev 240.9
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.00359
Std Dev 0.4576
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

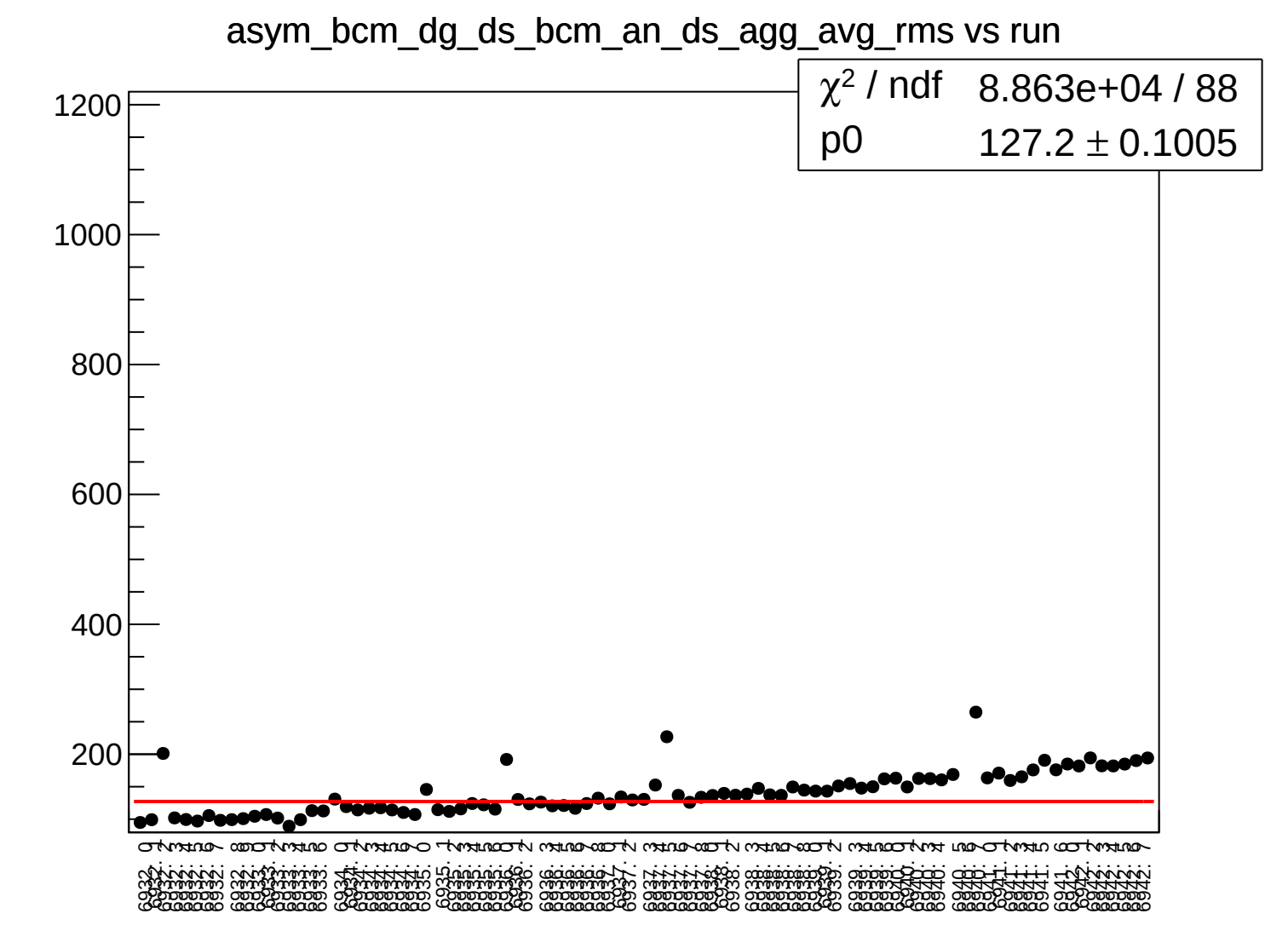

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 8.617e+04 / 88
p0 127.8 ± 0.1009
1200
1000
800
600
400
200

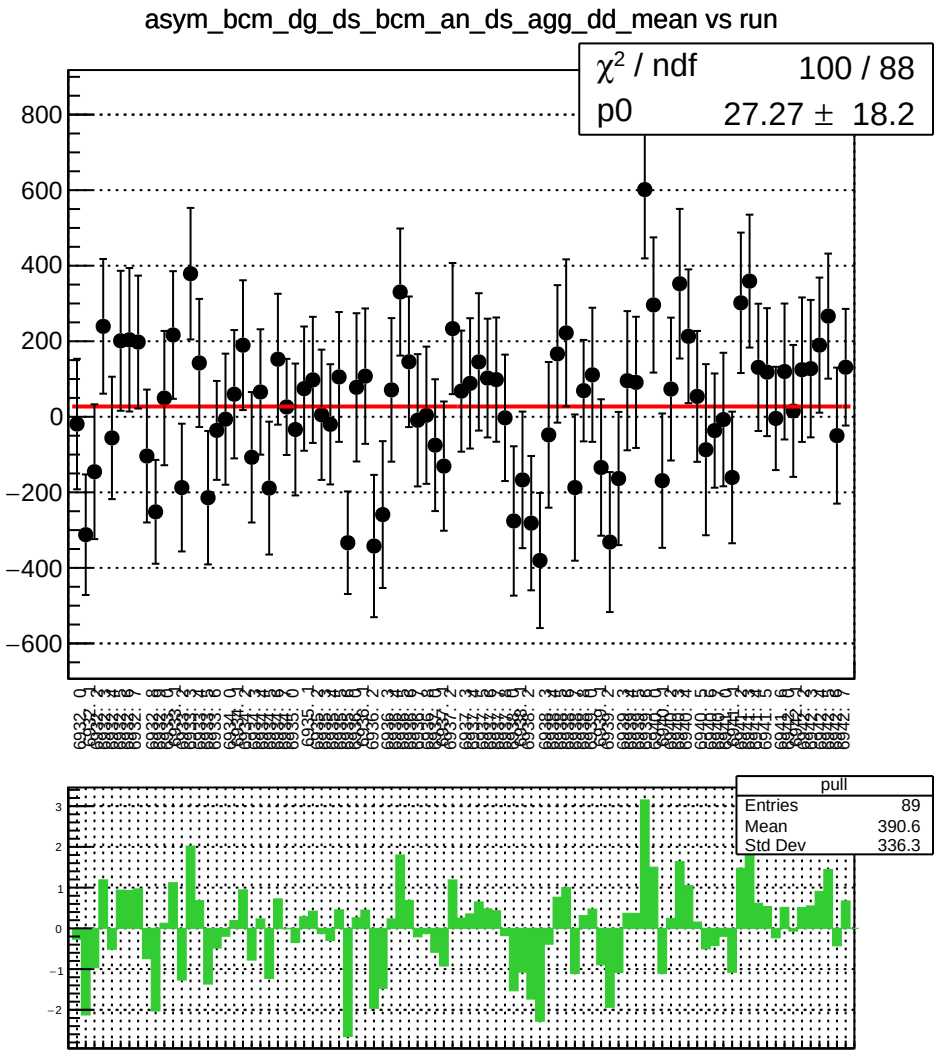

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 92.5 / 88
p0 37.87 ± 24.48
pull
Entries 89
Mean 6.553e+04
Std Dev 6.55e+04

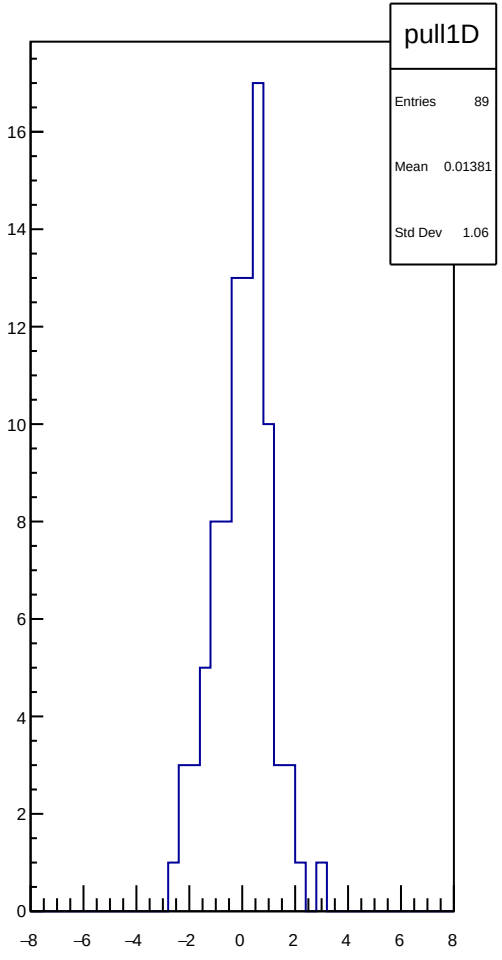

pull1D
Entries 89
Mean −2.876e−05
Std Dev 1.019

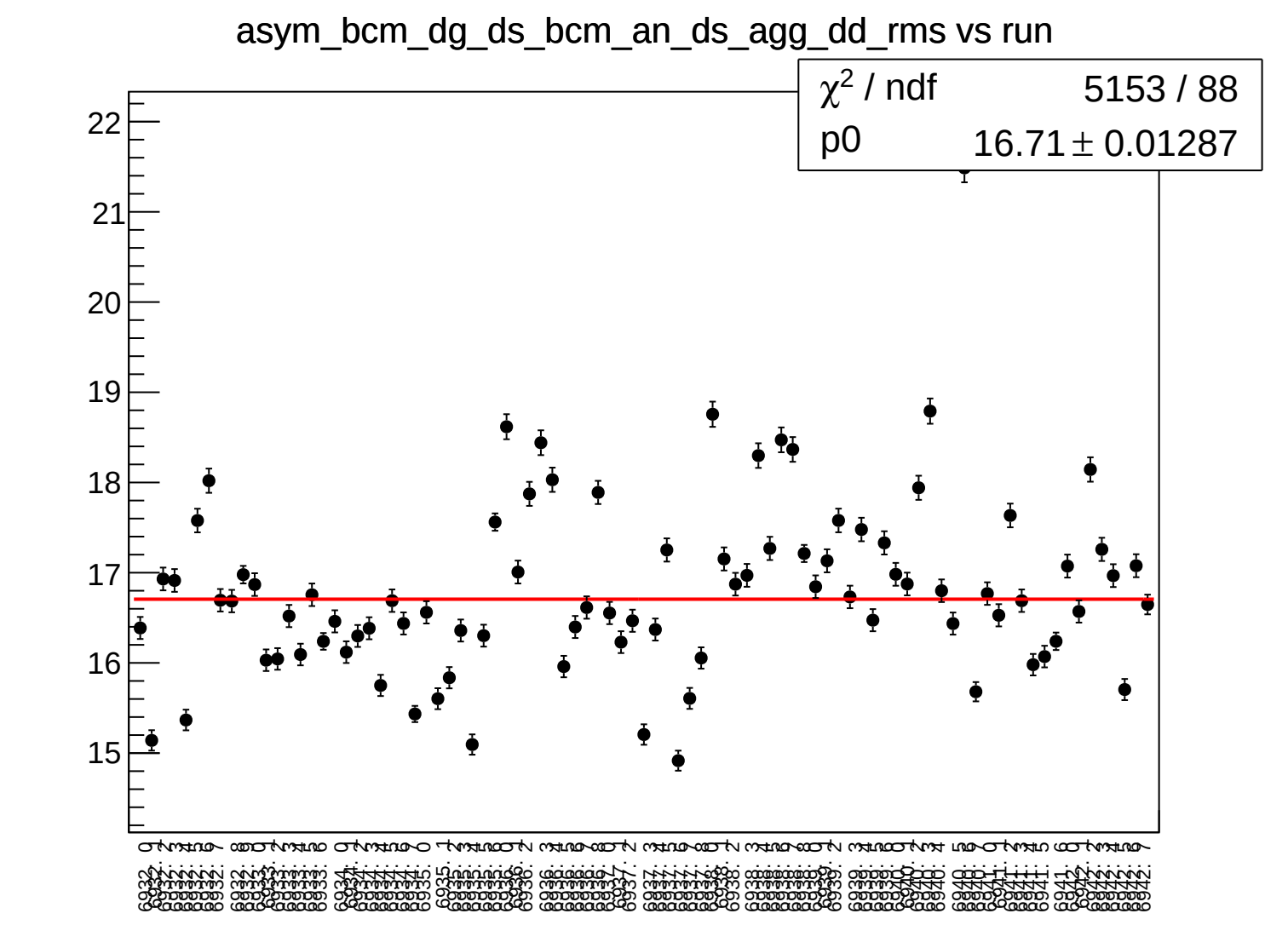

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1312 / 88
p0 22.5 ± 0.01731
24.5
24
23.5
23
22.5
22
21.5
21

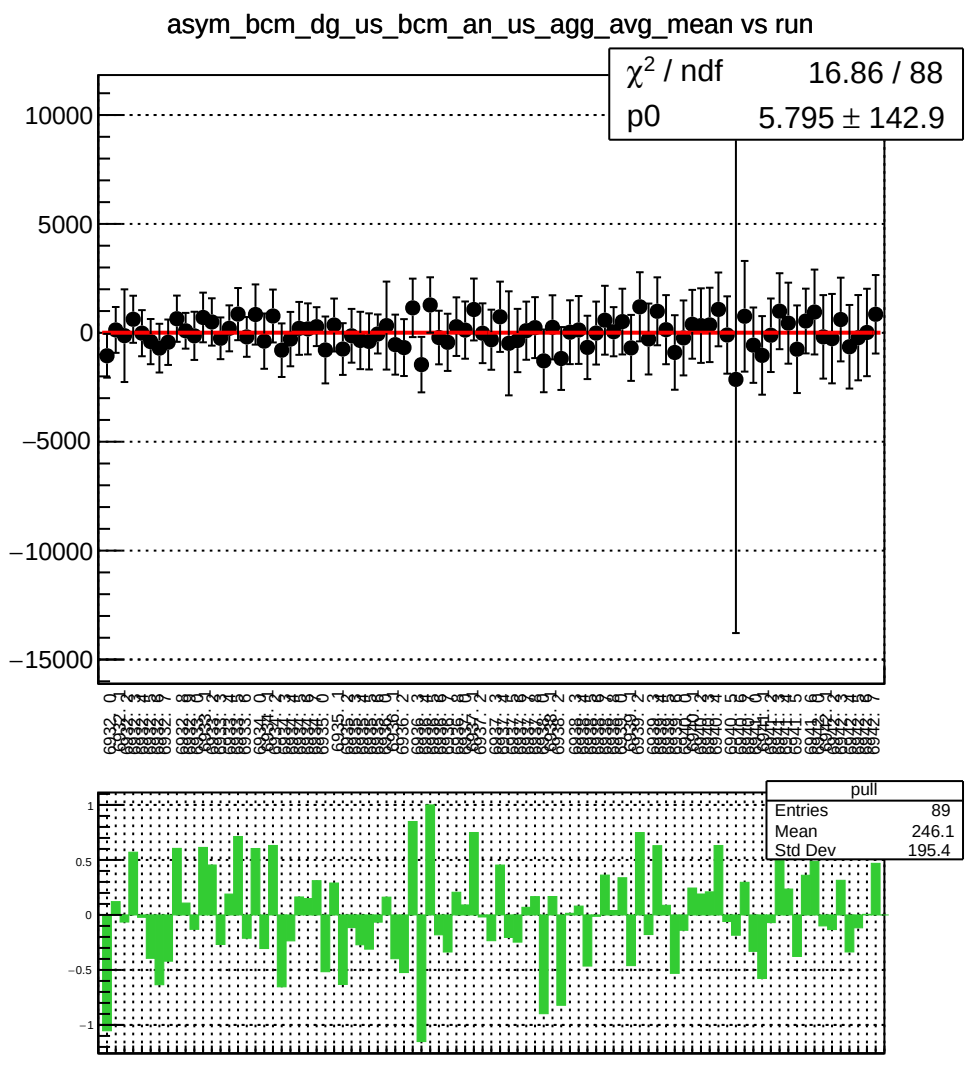

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.47 / 88
p0 −33.85 ± 142.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 198.8
Std Dev 151.5
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.01052
Std Dev 0.4429
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

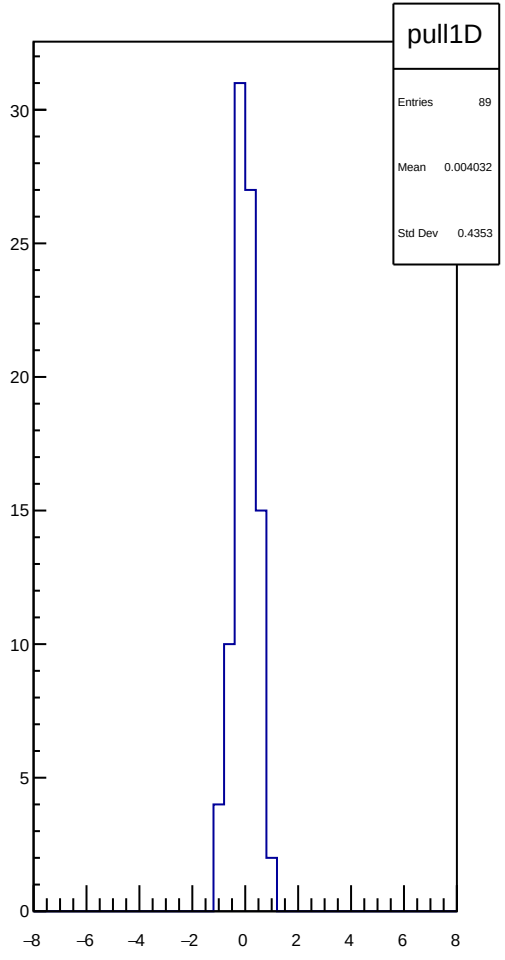

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 8.863e+04 / 88
p0 127.2 ± 0.1005
1200
1000
800
600
400
200

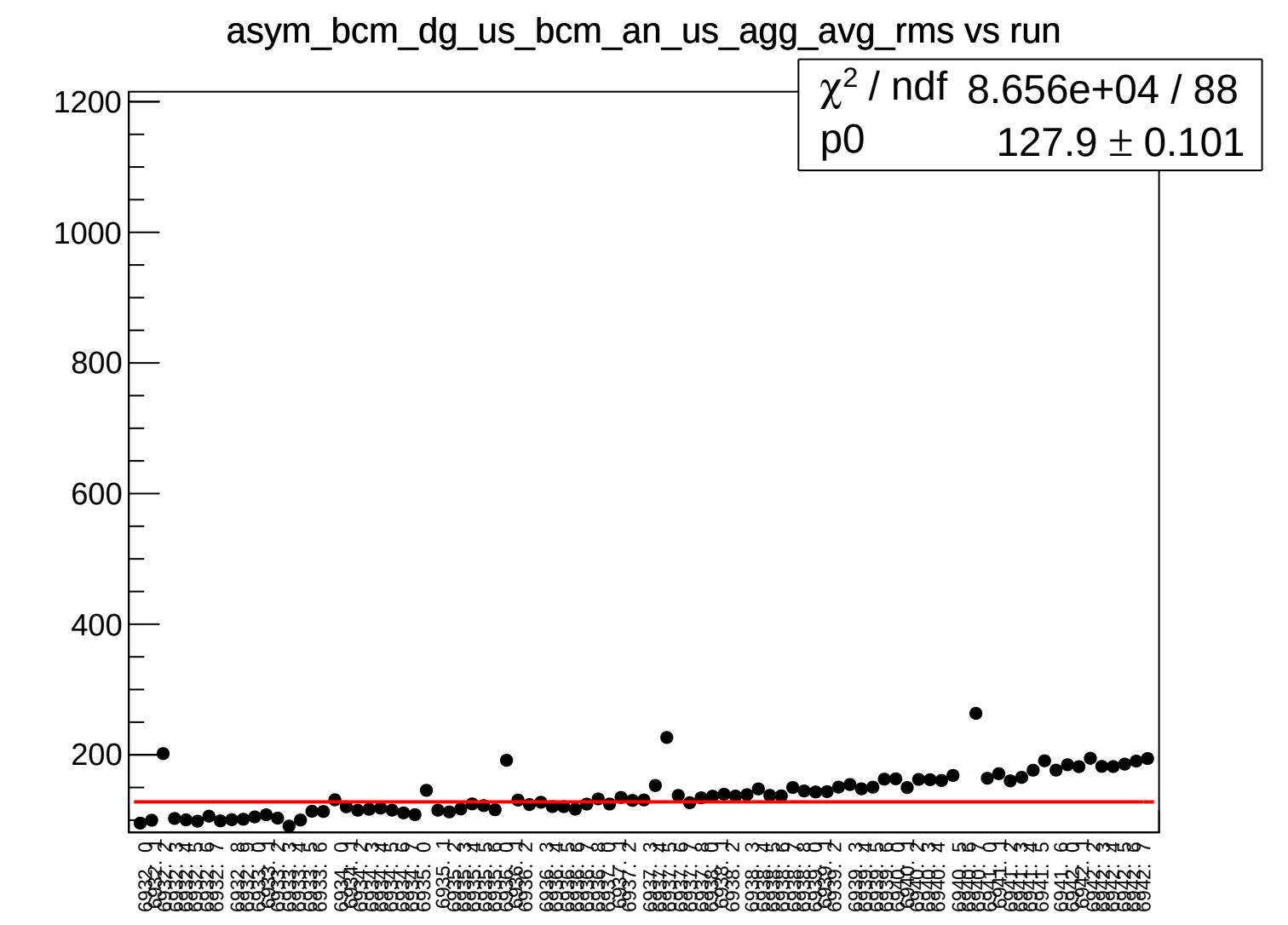

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 100 / 88
p0 27.27 ± 18.2
pull
Entries 89
Mean 390.6
Std Dev 336.3

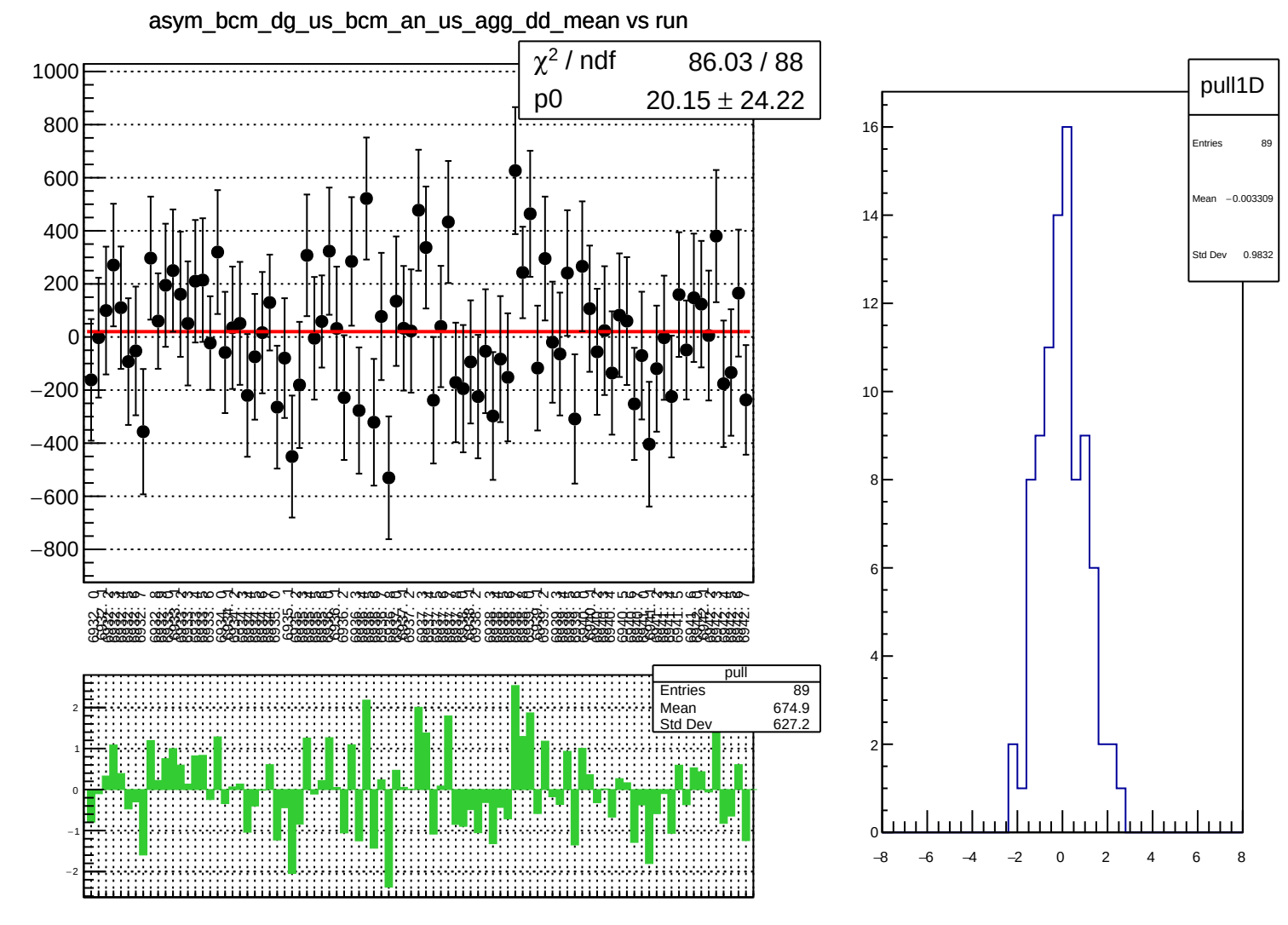

pull1D
Entries 89
Mean 0.01381
Std Dev 1.06

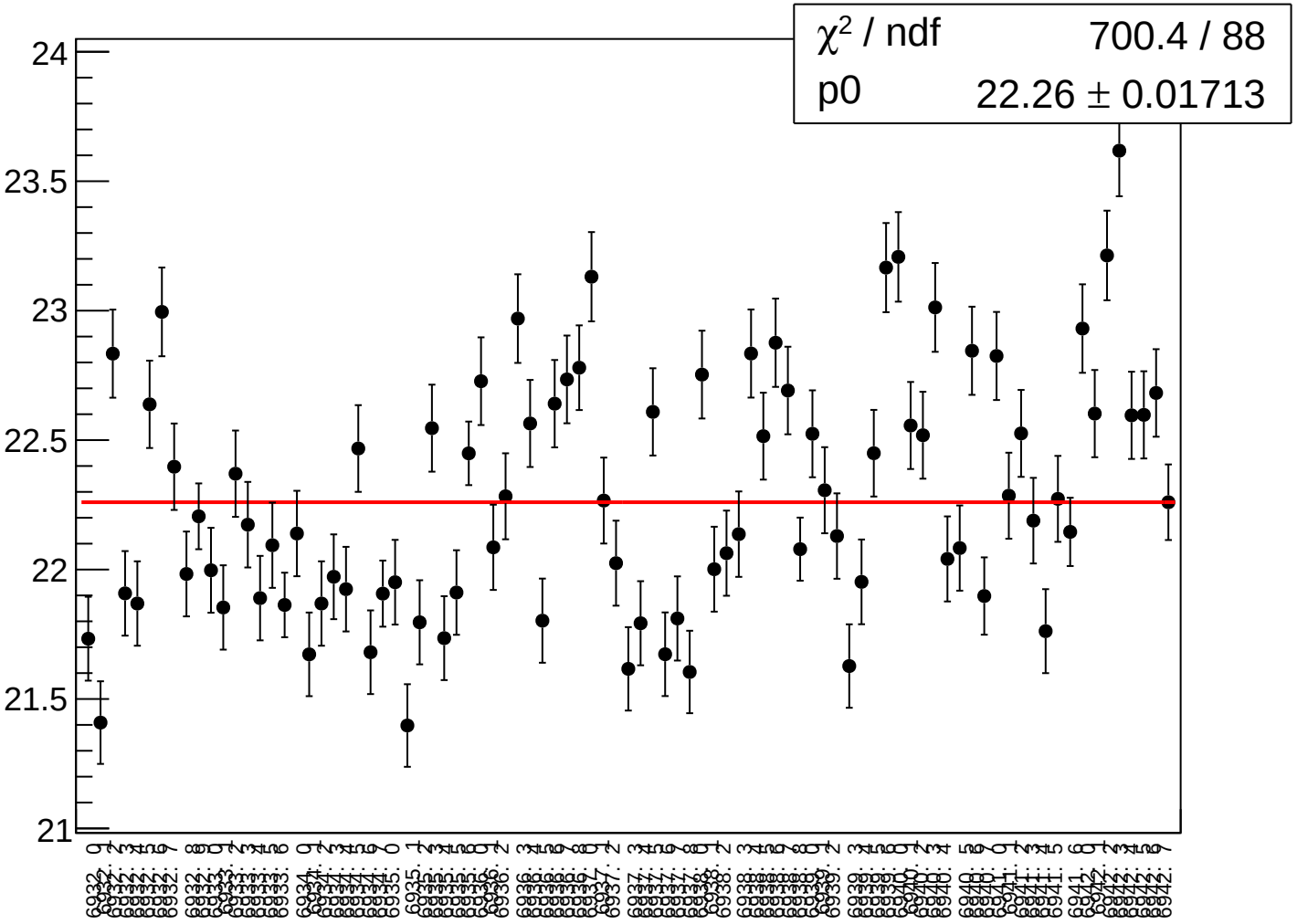

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 5153 / 88
p0 16.71 ± 0.01287
22
21
20
19
18
17
16
15

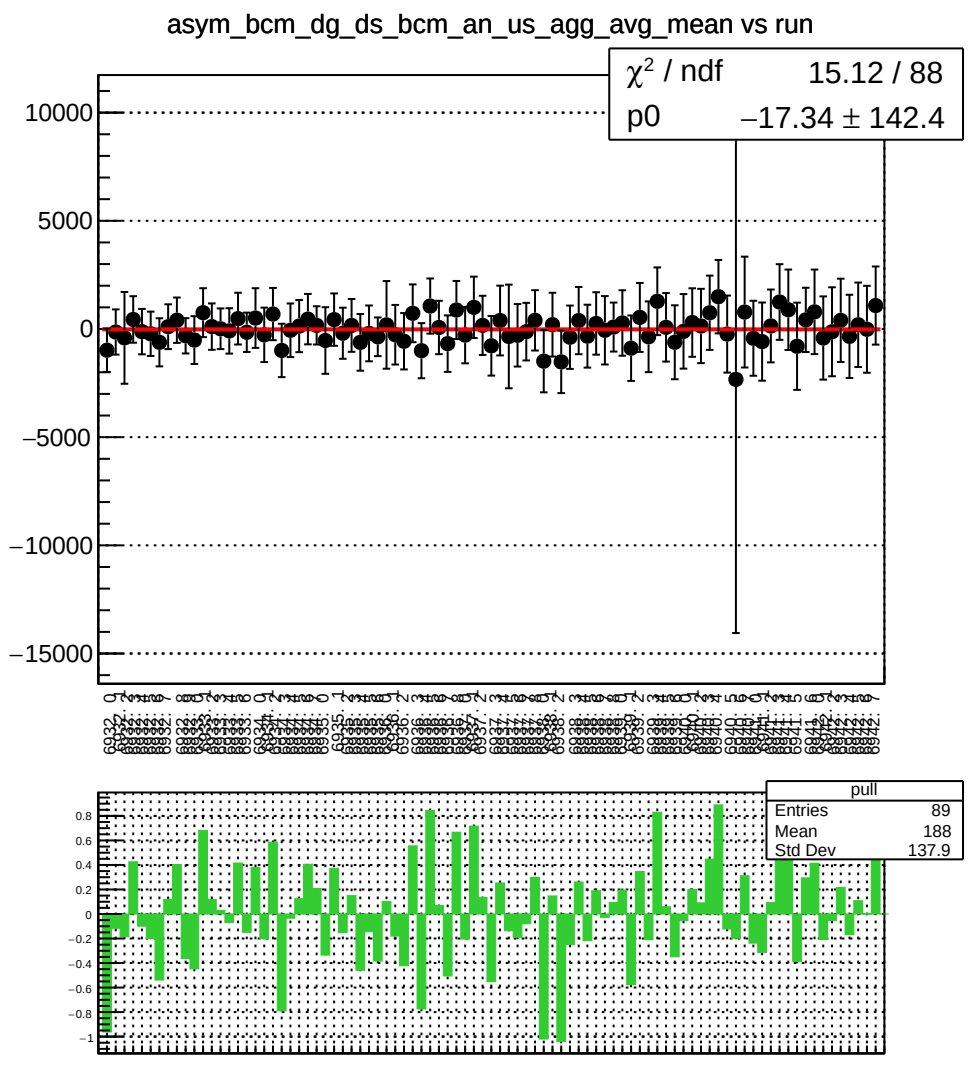

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.86 / 88
p0 5.795 ± 142.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 246.1
Std Dev 195.4
1
0.5
0
−0.5
−1

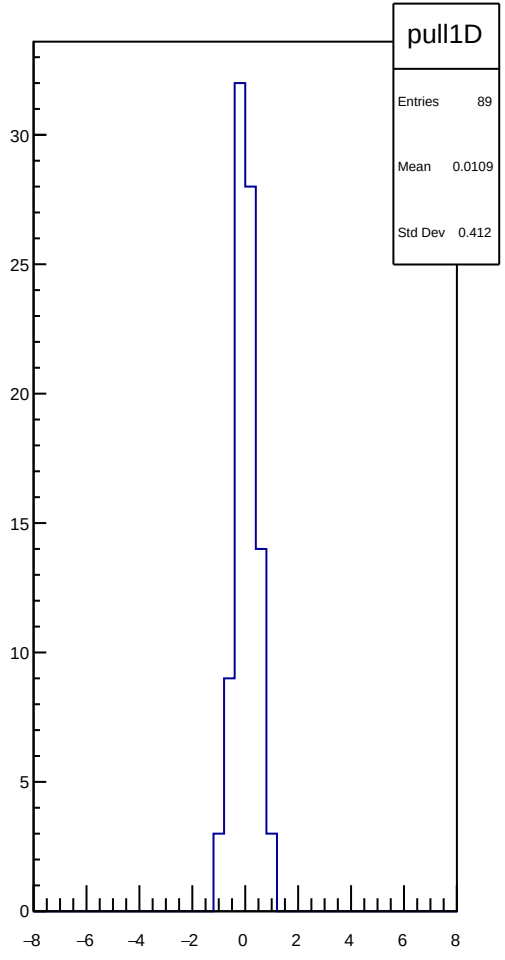

pull1D
Entries 89
Mean 0.004032
Std Dev 0.4353
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

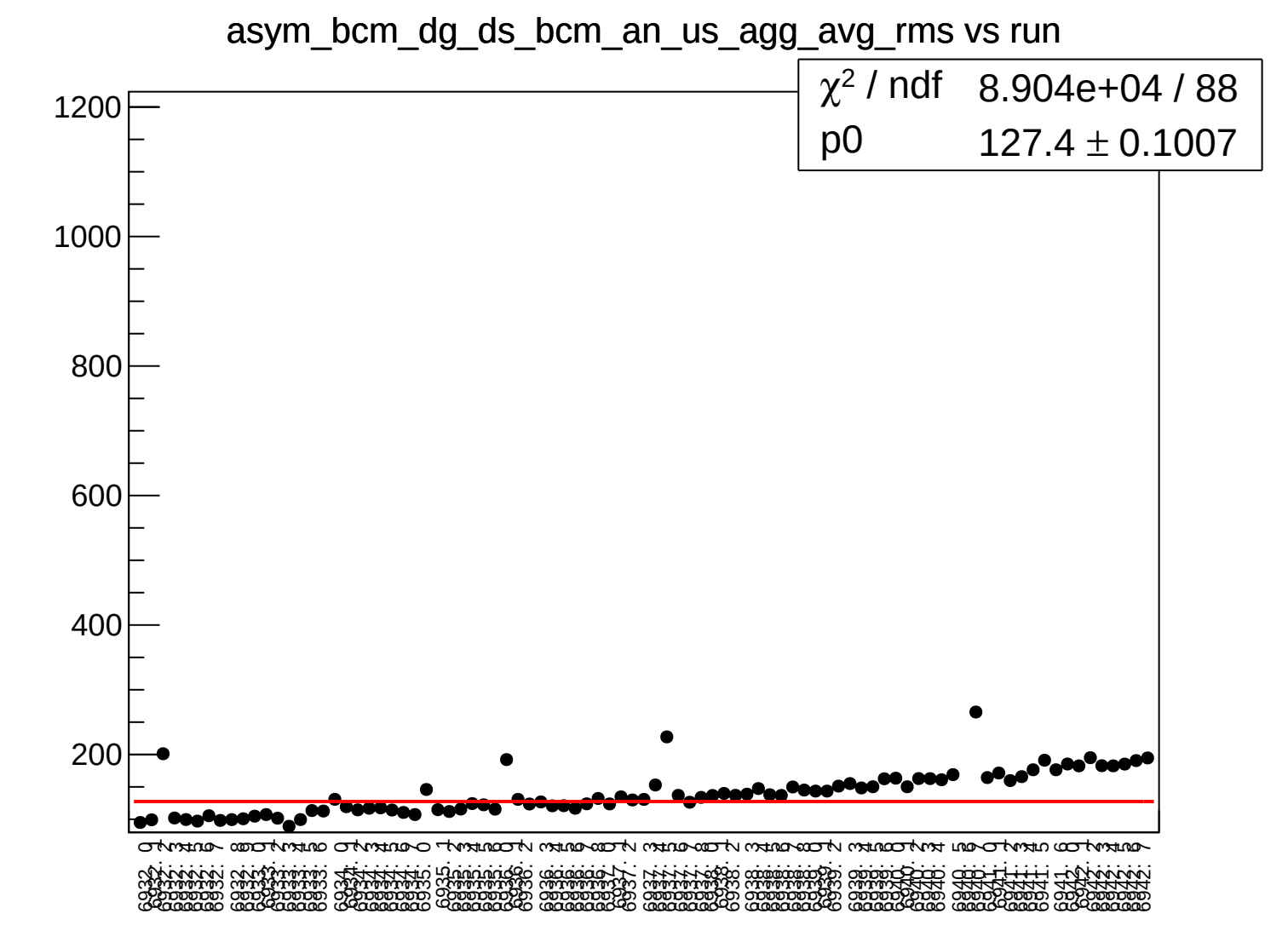

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 8.656e+04 / 88
p0 127.9 ± 0.101
1200
1000
800
600
400
200

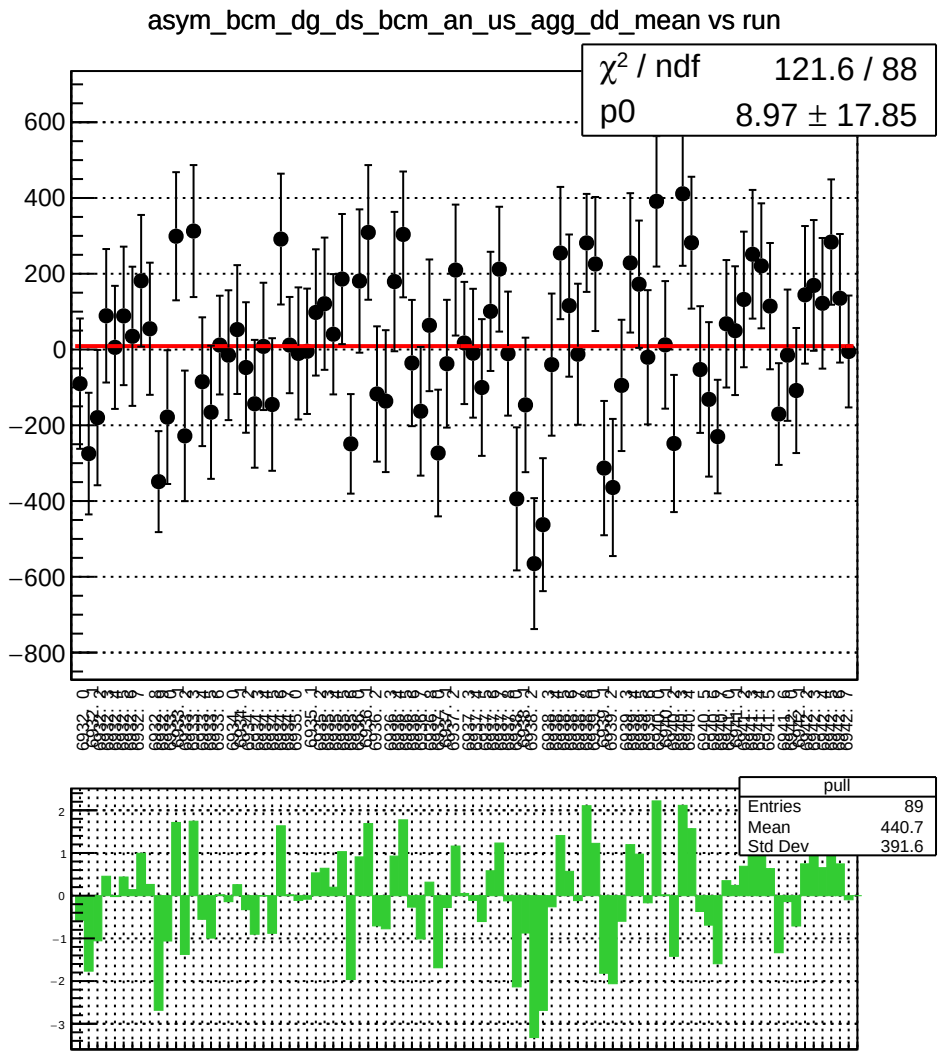

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 86.03 / 88
p0 20.15 ± 24.22
pull
Entries 89
Mean 674.9
Std Dev 627.2
pull1D
Entries 89
Mean −0.003309
Std Dev 0.9832

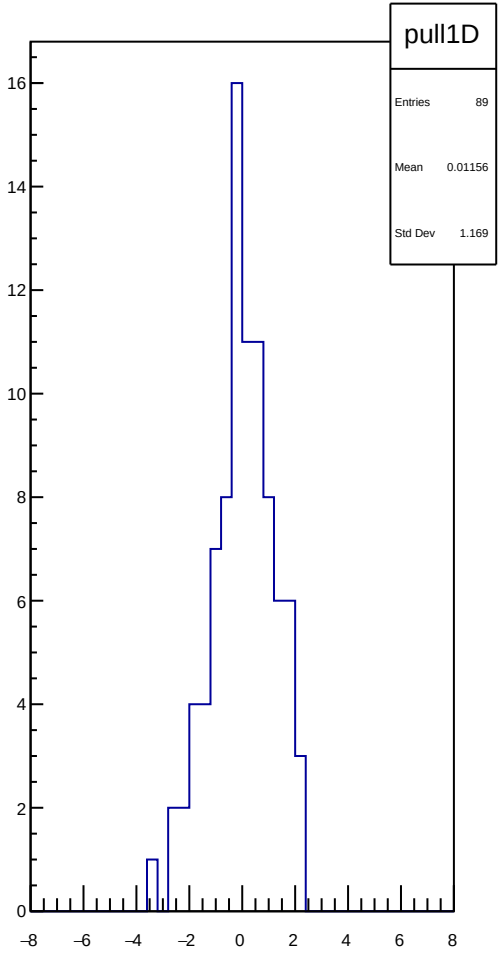

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 700.4 / 88
p0 22.26 ± 0.01713
24
23.5
23
22.5
22
21.5
21

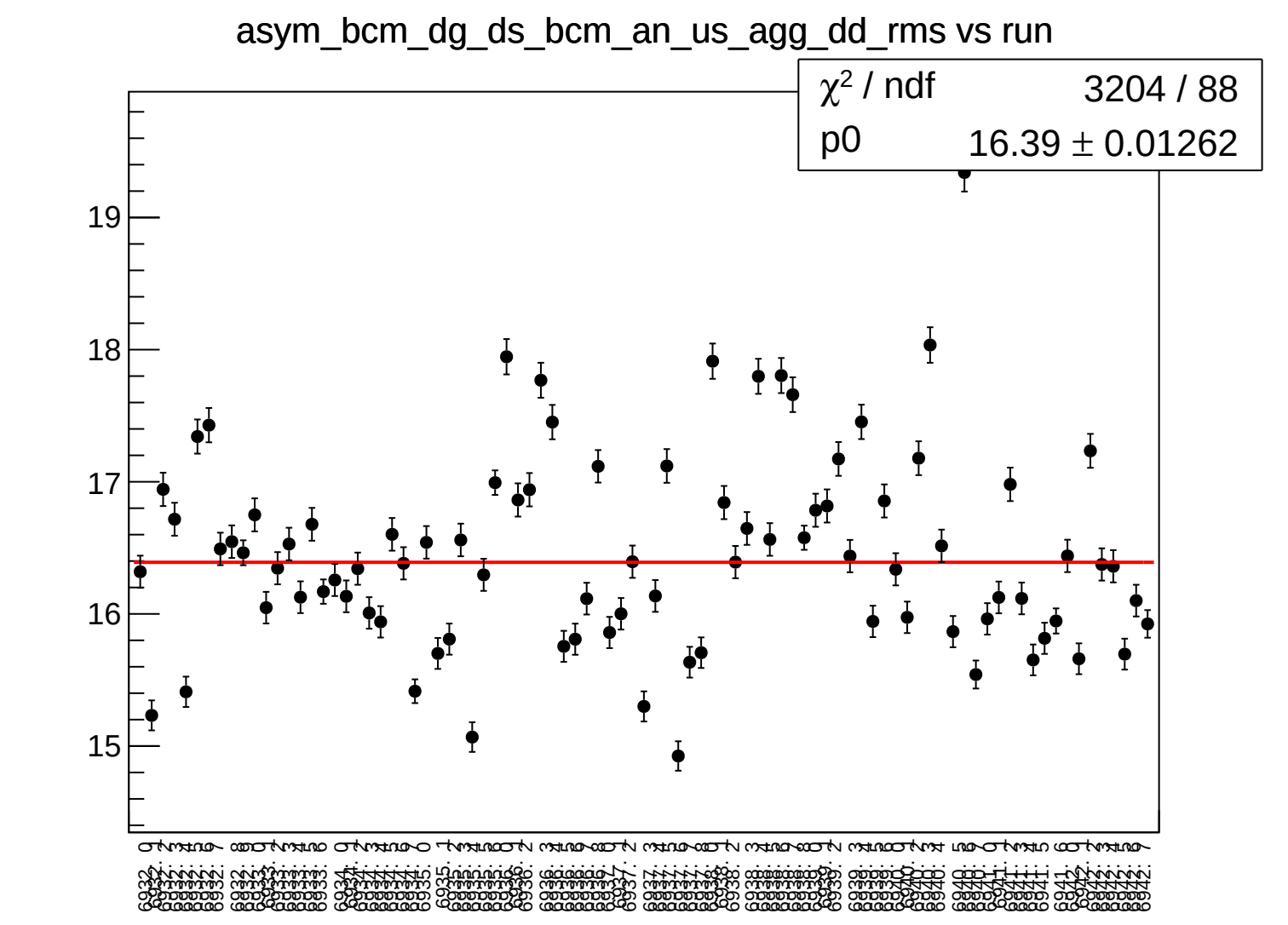

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 15.12 / 88
p0 −17.34 ± 142.4
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 188
Std Dev 137.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

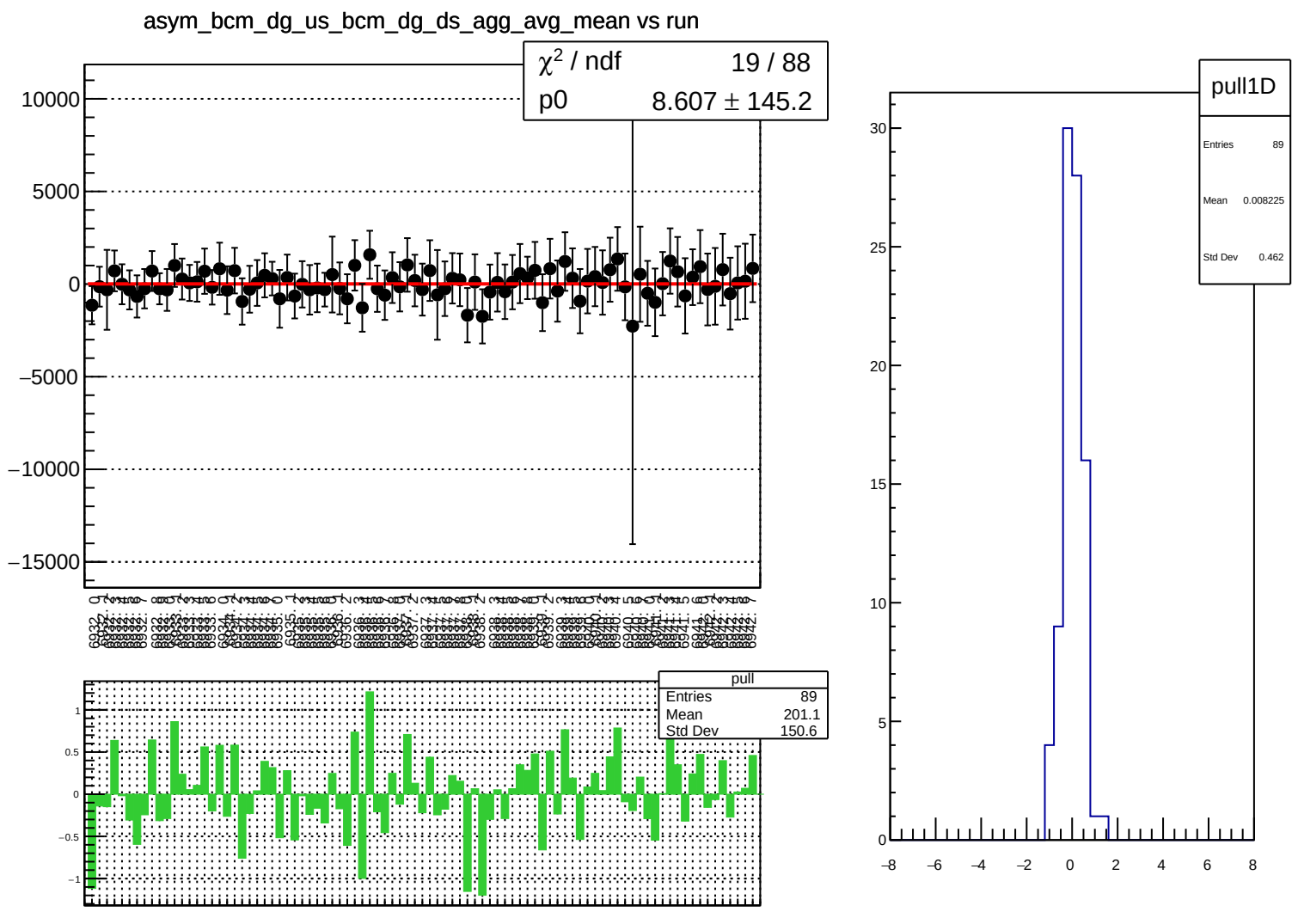

pull1D
Entries 89
Mean 0.0109
Std Dev 0.412
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

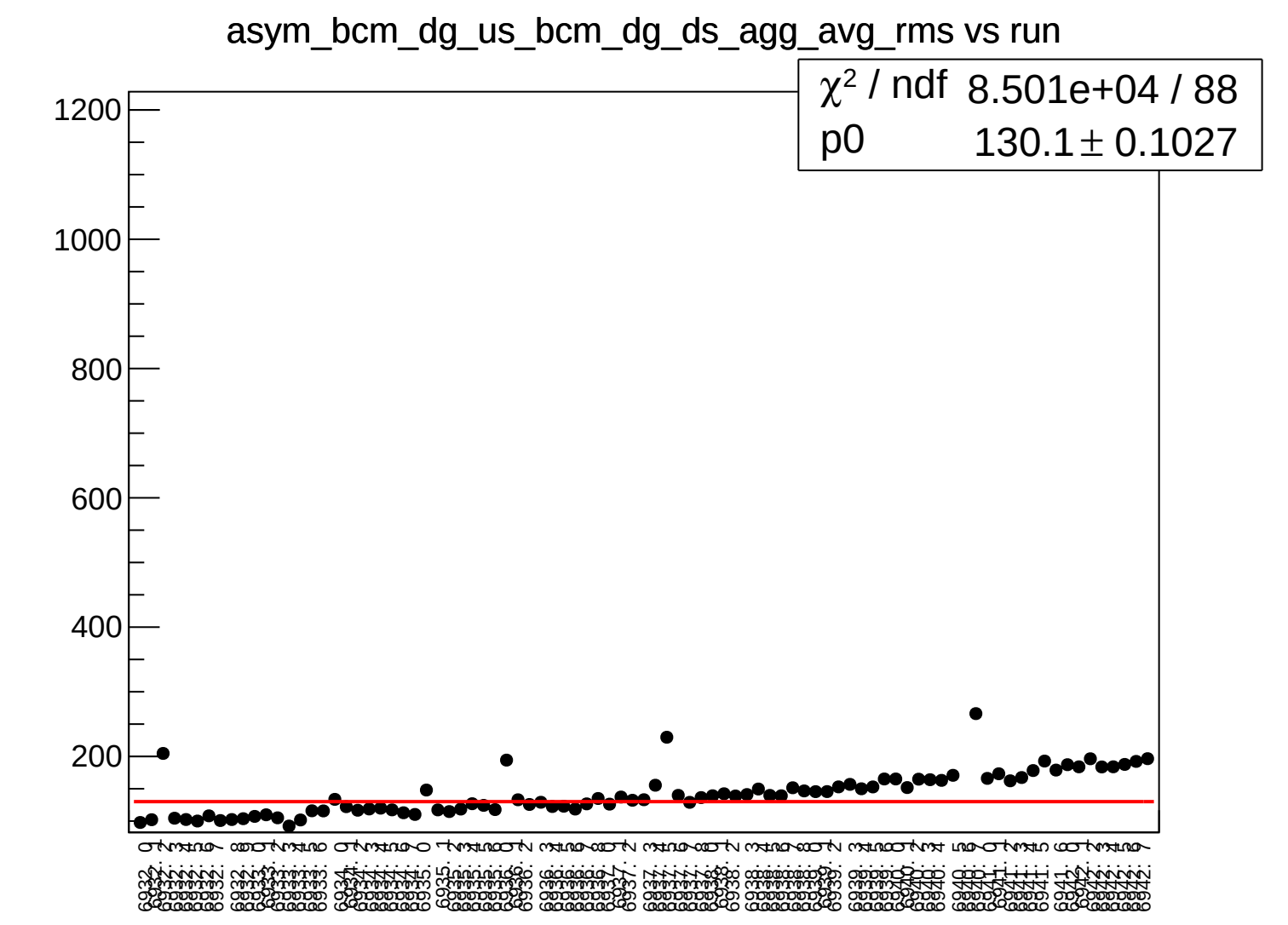

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 8.904e+04 / 88
p0 127.4 ± 0.1007
1200
1000
800
600
400
200

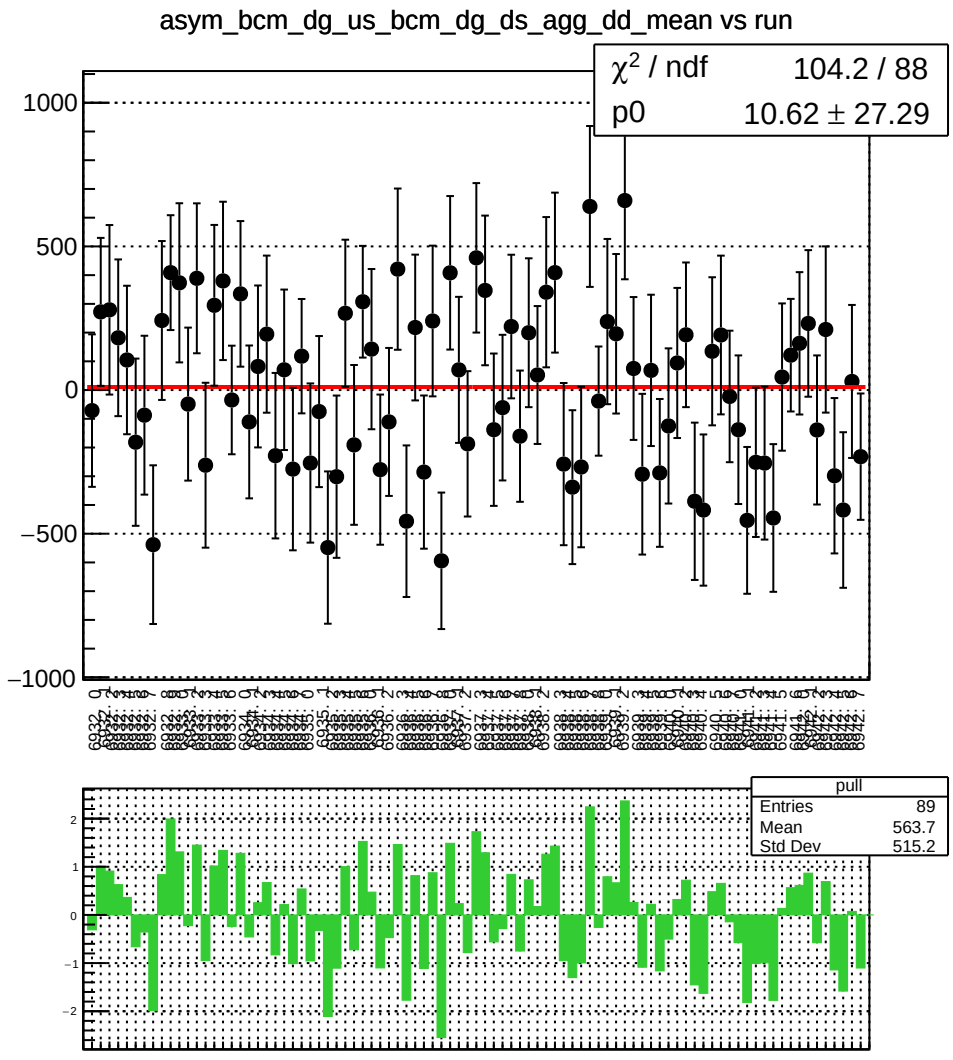

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 121.6 / 88
p0 8.97 ± 17.85
pull
Entries 89
Mean 440.7
Std Dev 391.6

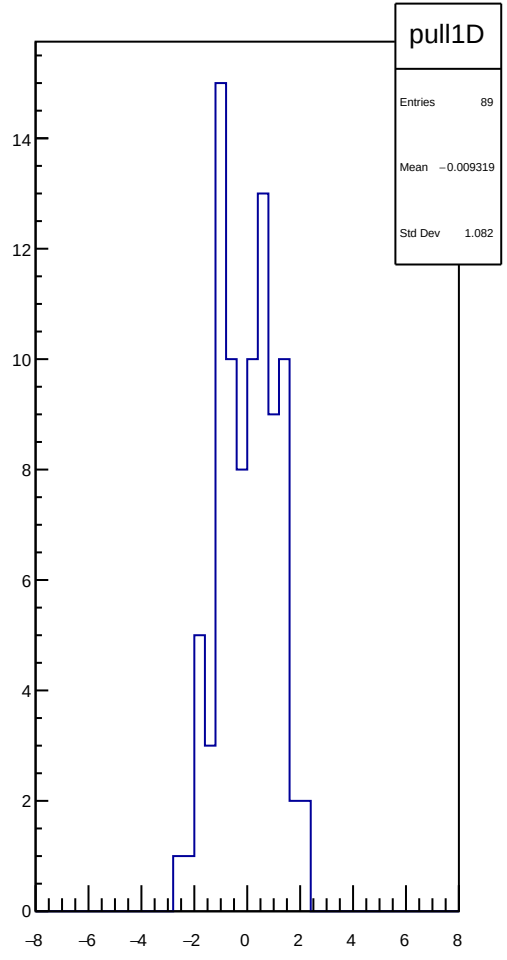

pull1D
Entries 89
Mean 0.01156
Std Dev 1.169

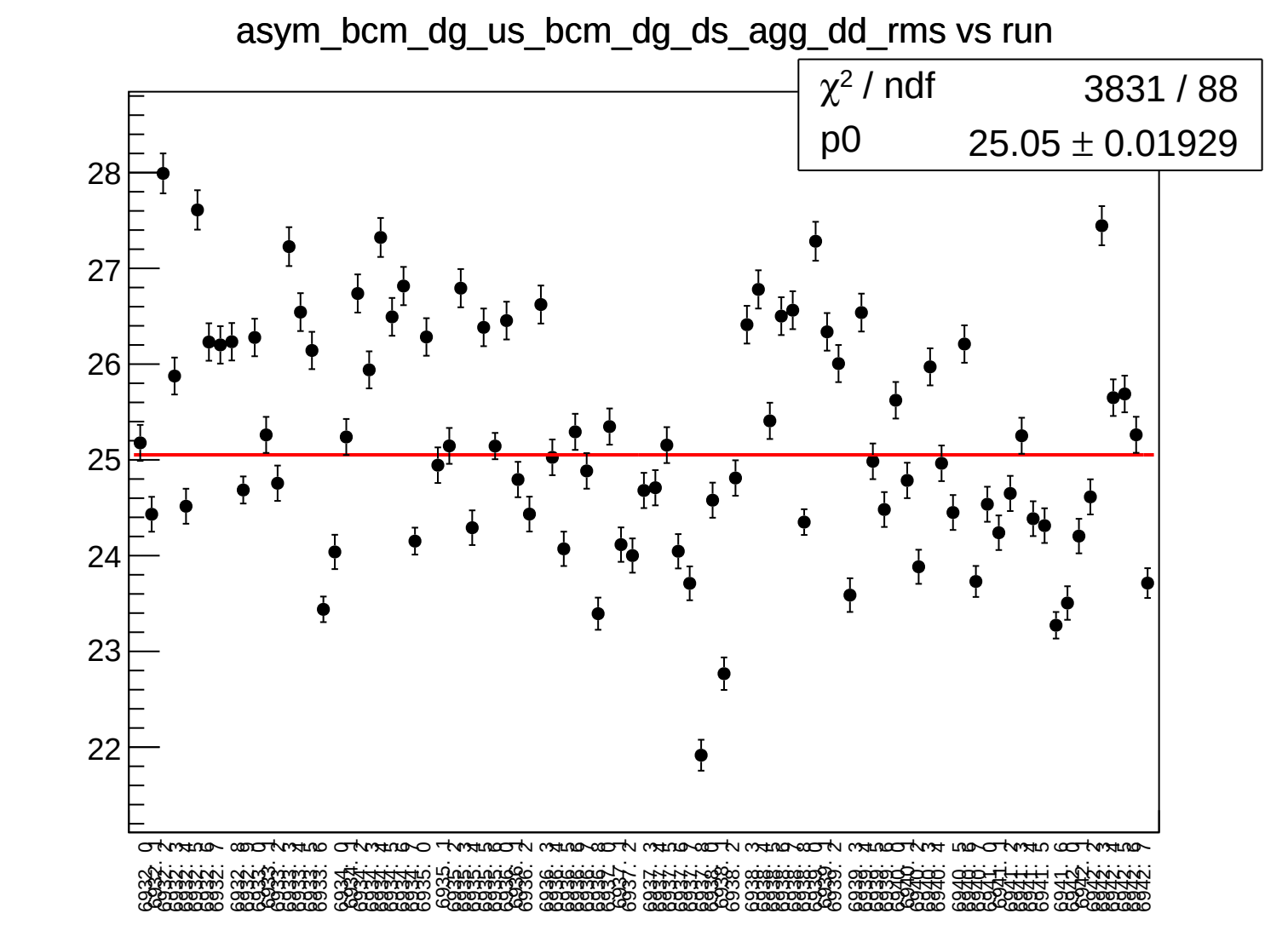

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3204 / 88
p0 16.39 ± 0.01262
19
18
17
16
15

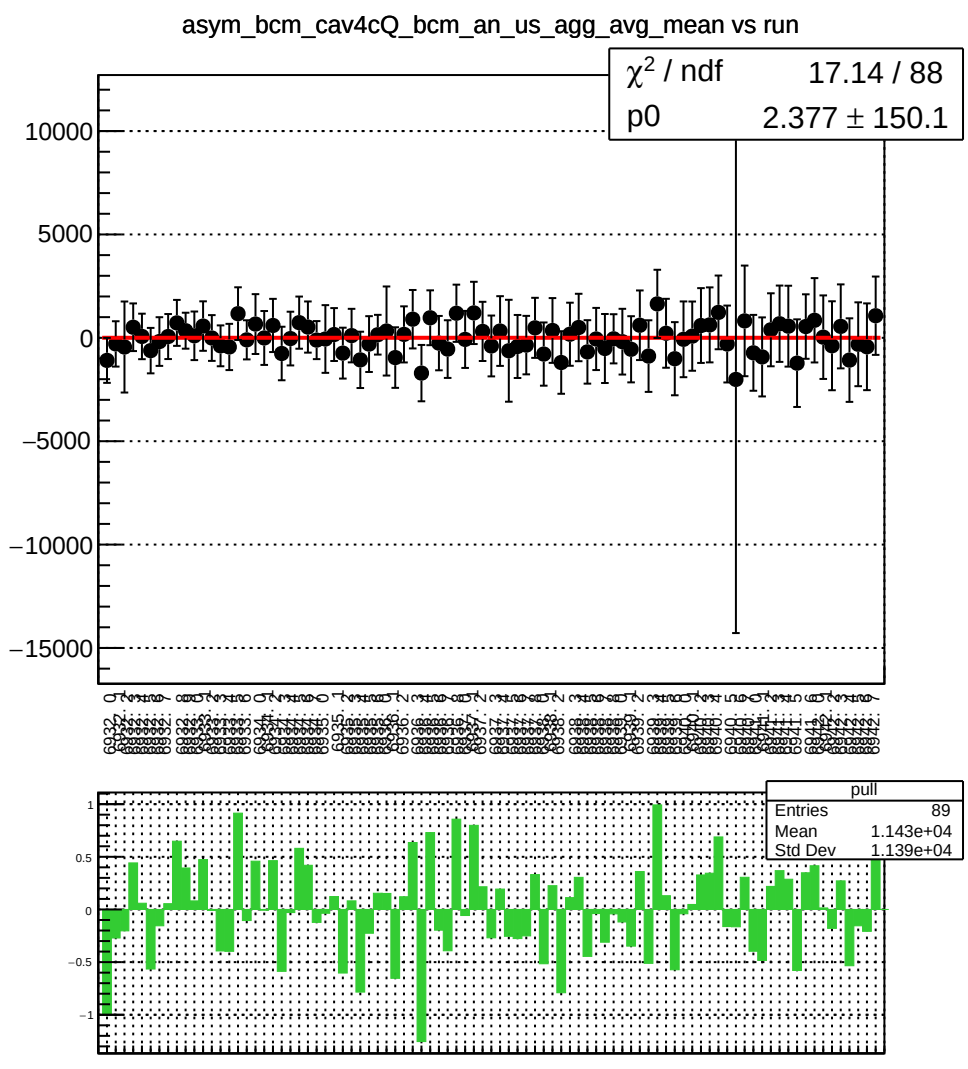

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 19 / 88
p0 8.607 ± 145.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 201.1
Std Dev 150.6
1
0.5
0
−0.5
−1
pull1D
Entries 89
Mean 0.008225
Std Dev 0.462
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

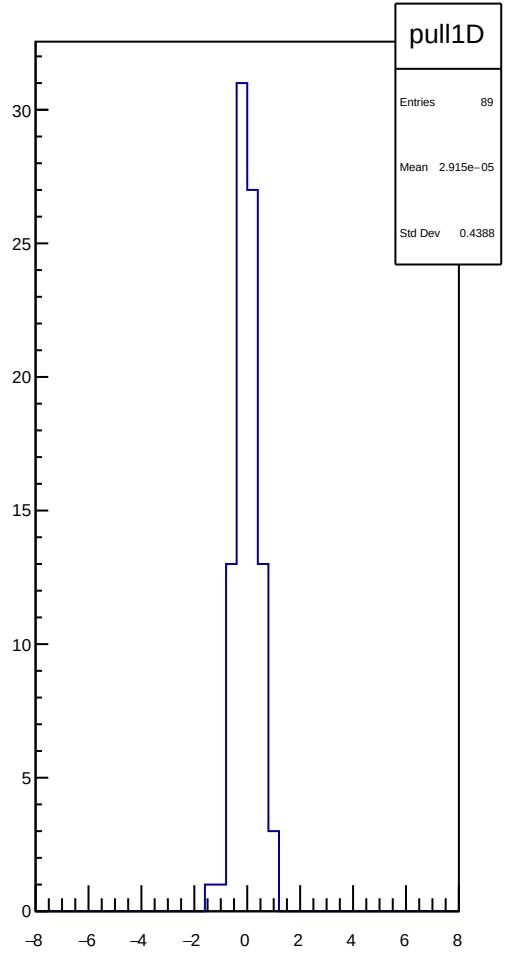

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 8.501e+04 / 88
p0 130.1 ± 0.1027
1200
1000
800
600
400
200

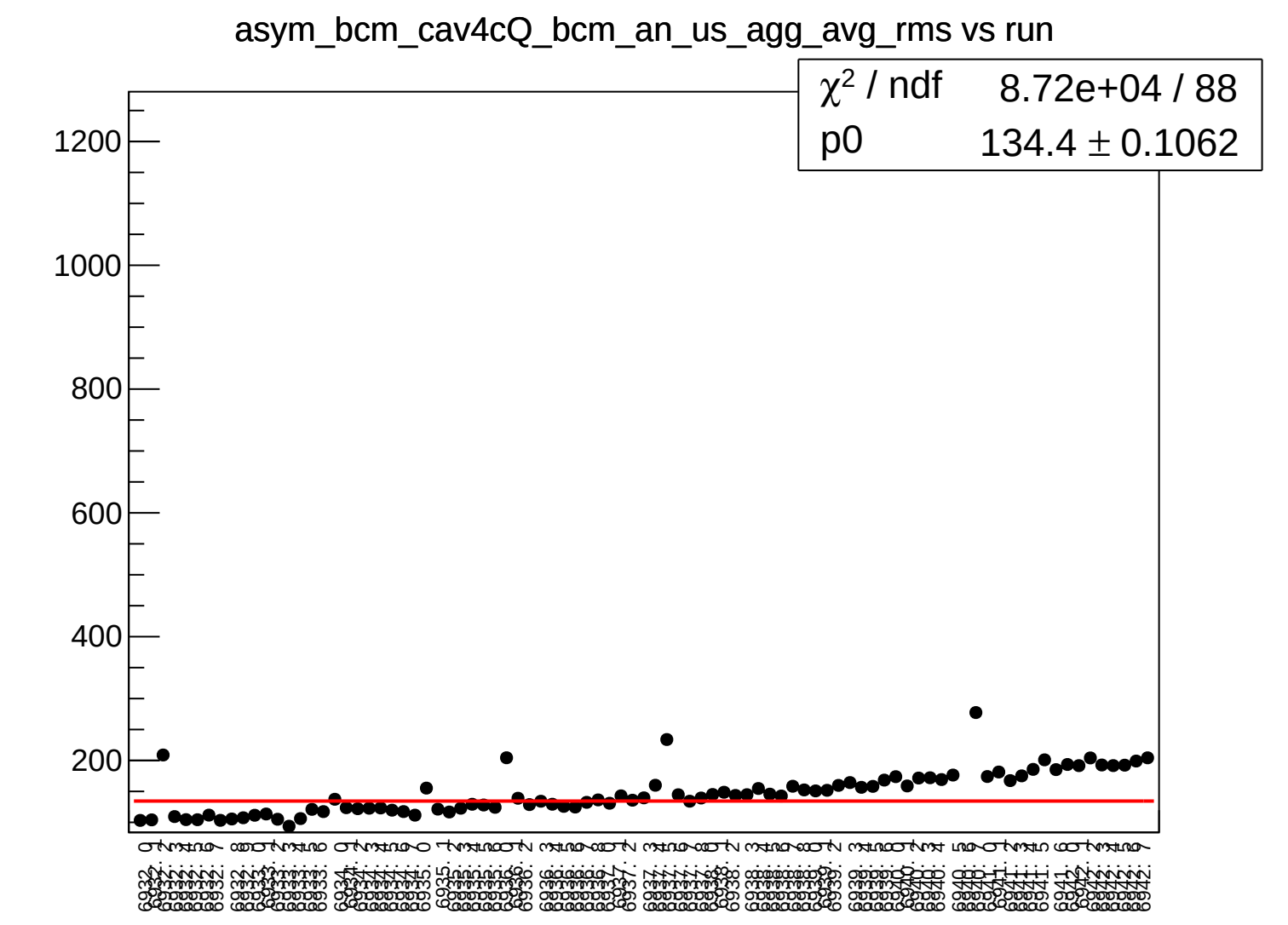

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 104.2 / 88
p0 10.62 ± 27.29
1000
500
0
−500
−1000
pull
Entries 89
Mean 563.7
Std Dev 515.2
2
1
0
−1
−2

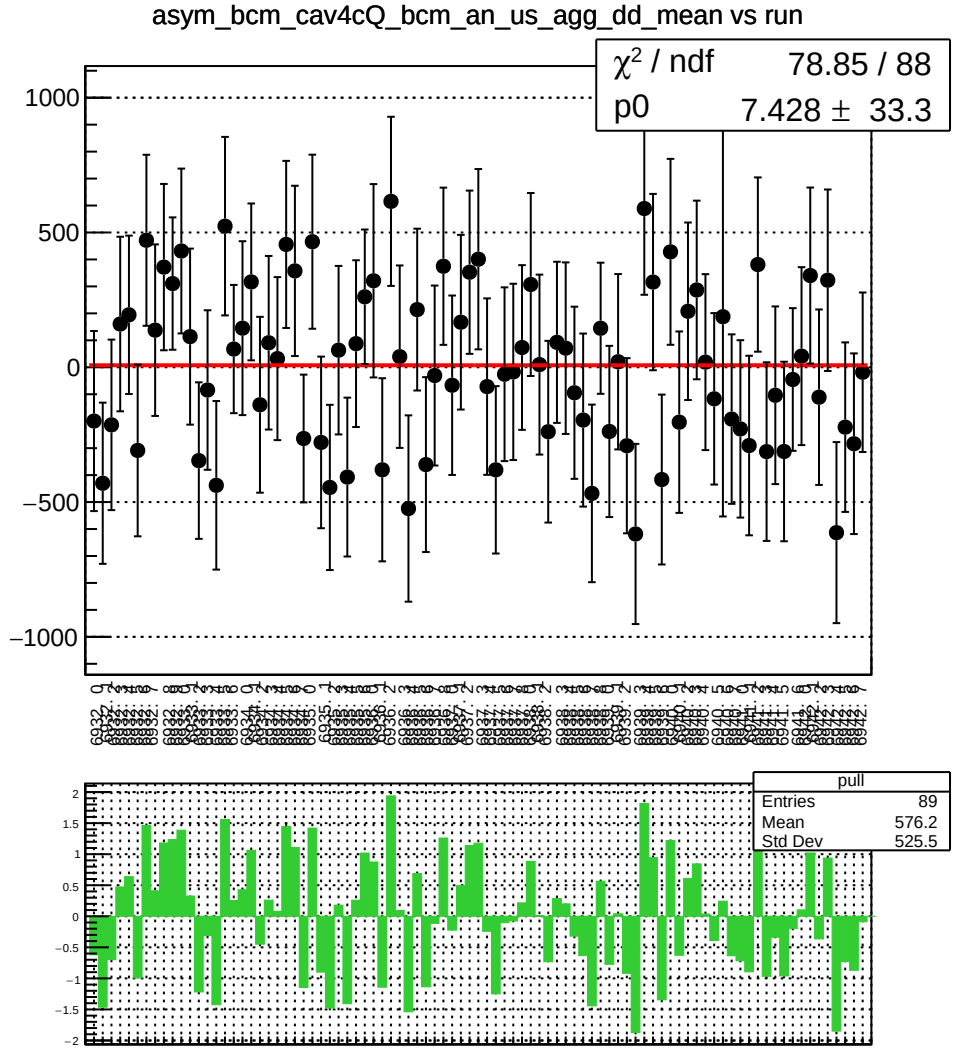

pull1D
Entries 89
Mean −0.009319
Std Dev 1.082
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

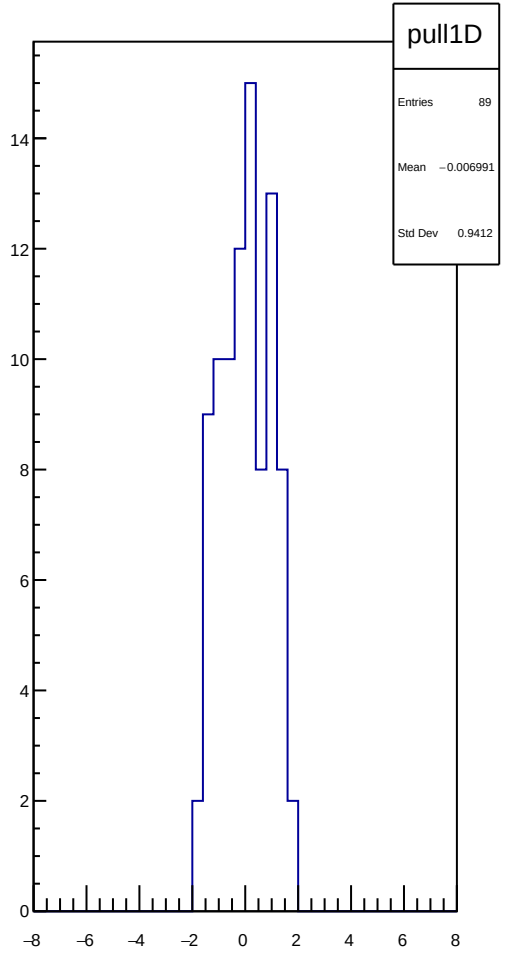

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3831 / 88
p0 25.05 ± 0.01929
28
27
26
25
24
23
22

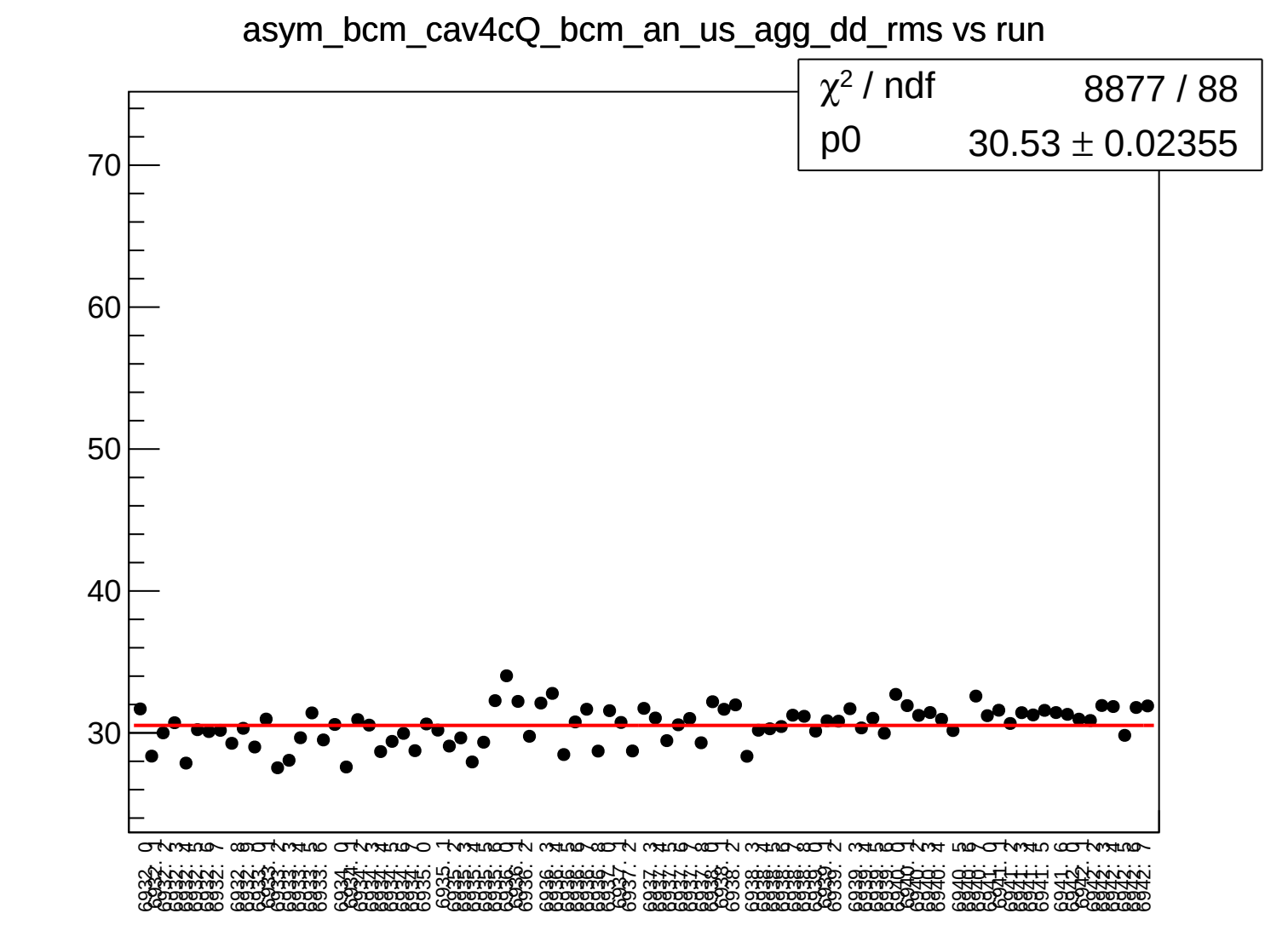

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 17.14 / 88
p0 2.377 ± 150.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 1.143e+04
Std Dev 1.139e+04
1
0.5
0
−0.5
−1

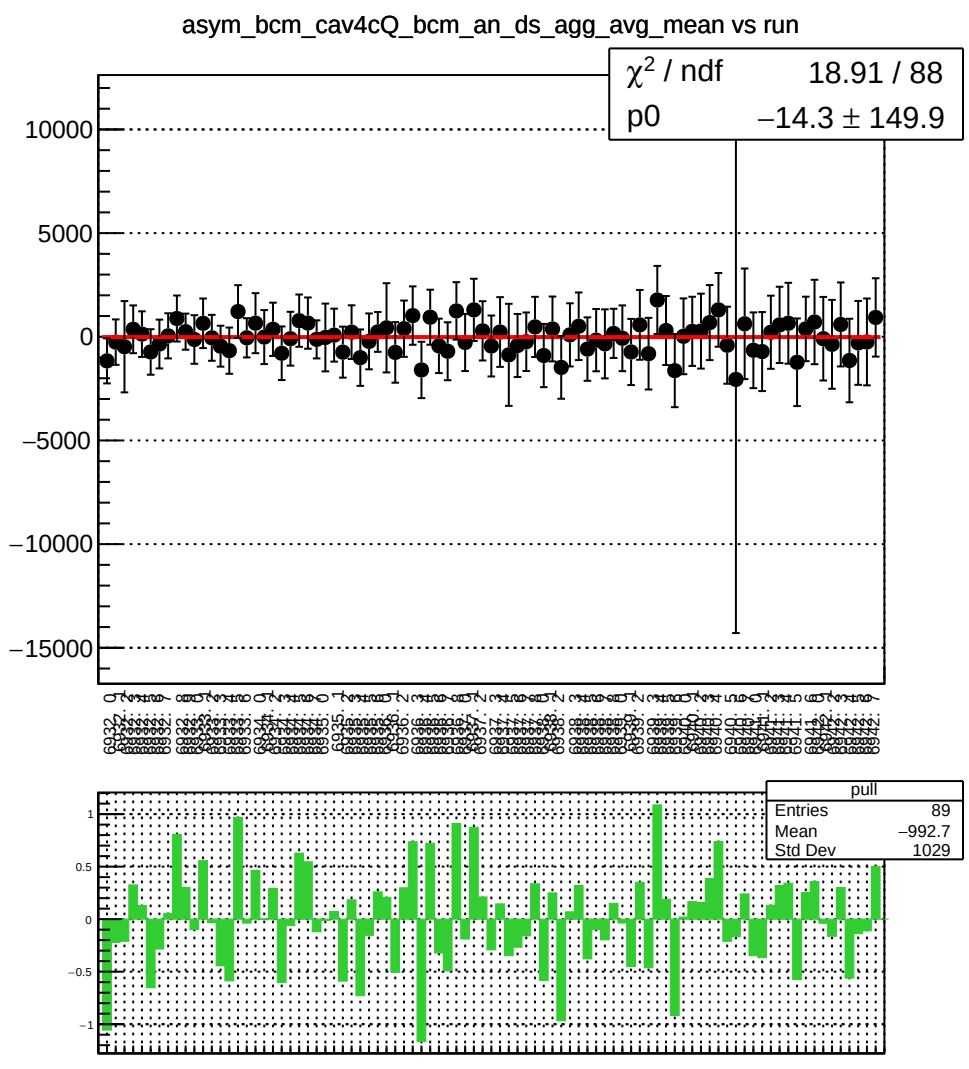

pull1D
Entries 89
Mean 2.915e−05
Std Dev 0.4388
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

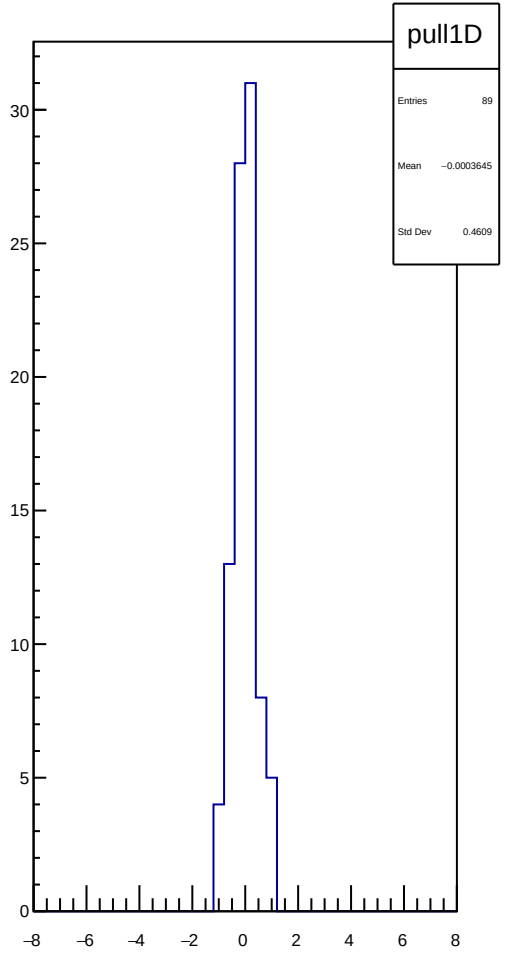

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 8.72e+04 / 88
p0 134.4 ± 0.1062
1200
1000
800
600
400
200

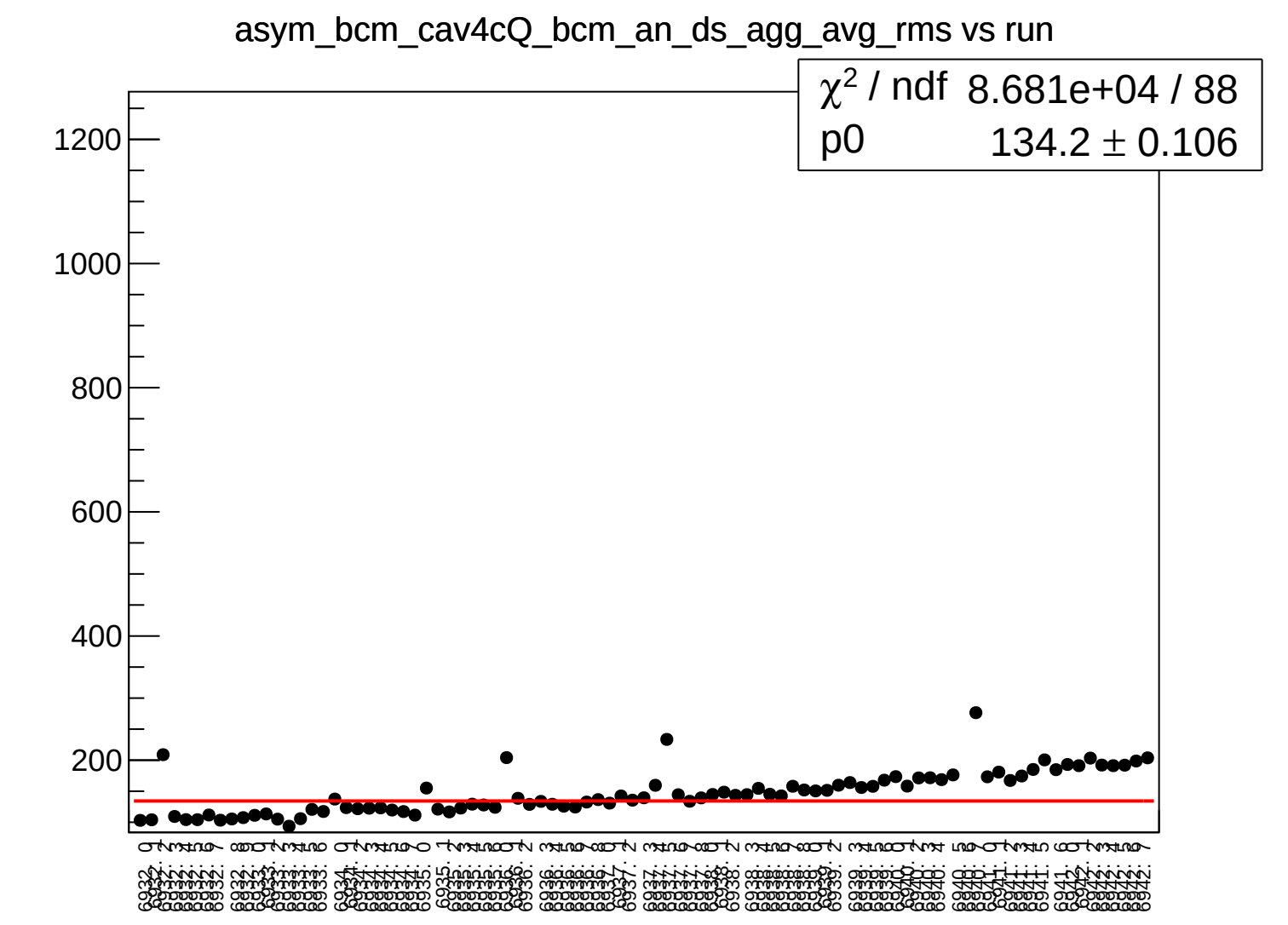

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 78.85 / 88
p0 7.428 ± 33.3
1000
500
0
−500
−1000
pull
Entries 89
Mean 576.2
Std Dev 525.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

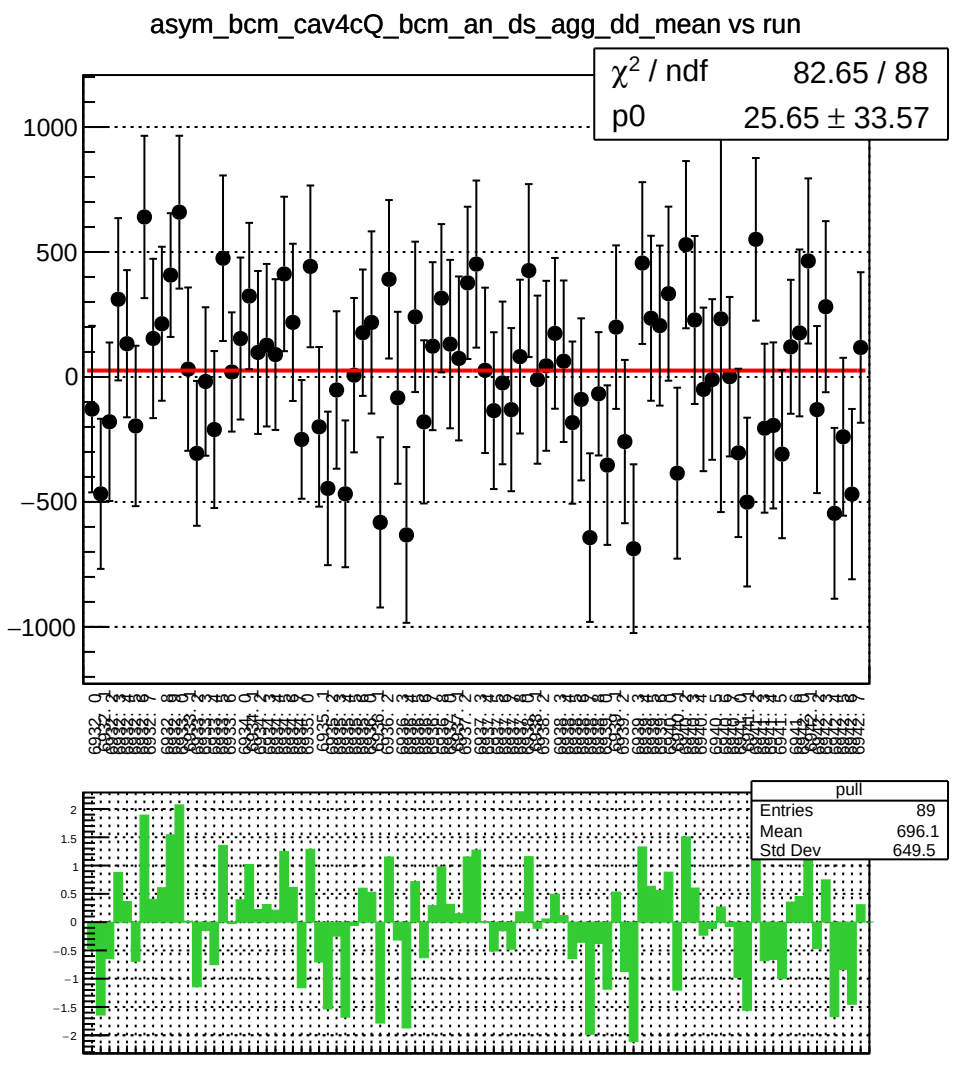

pull1D
Entries 89
Mean −0.006991
Std Dev 0.9412
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

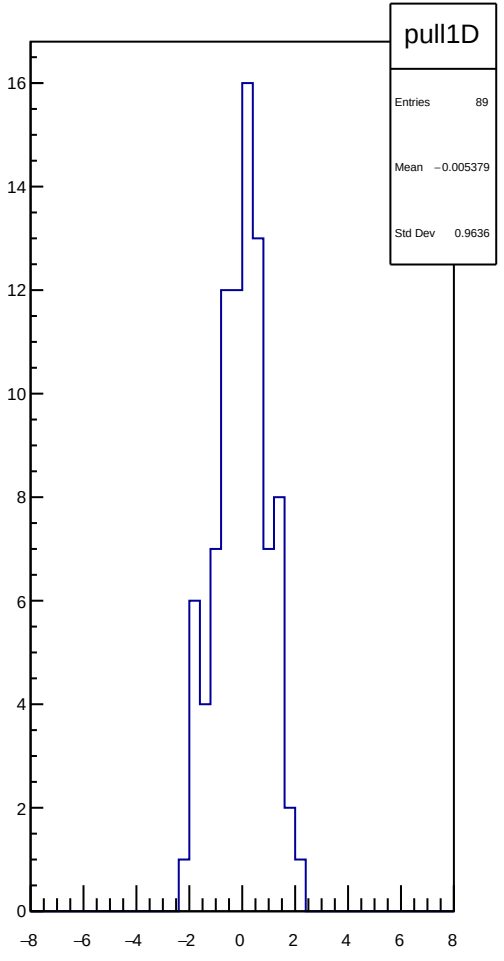

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 8877 / 88
p0 30.53 ± 0.02355
70
60
50
40
30

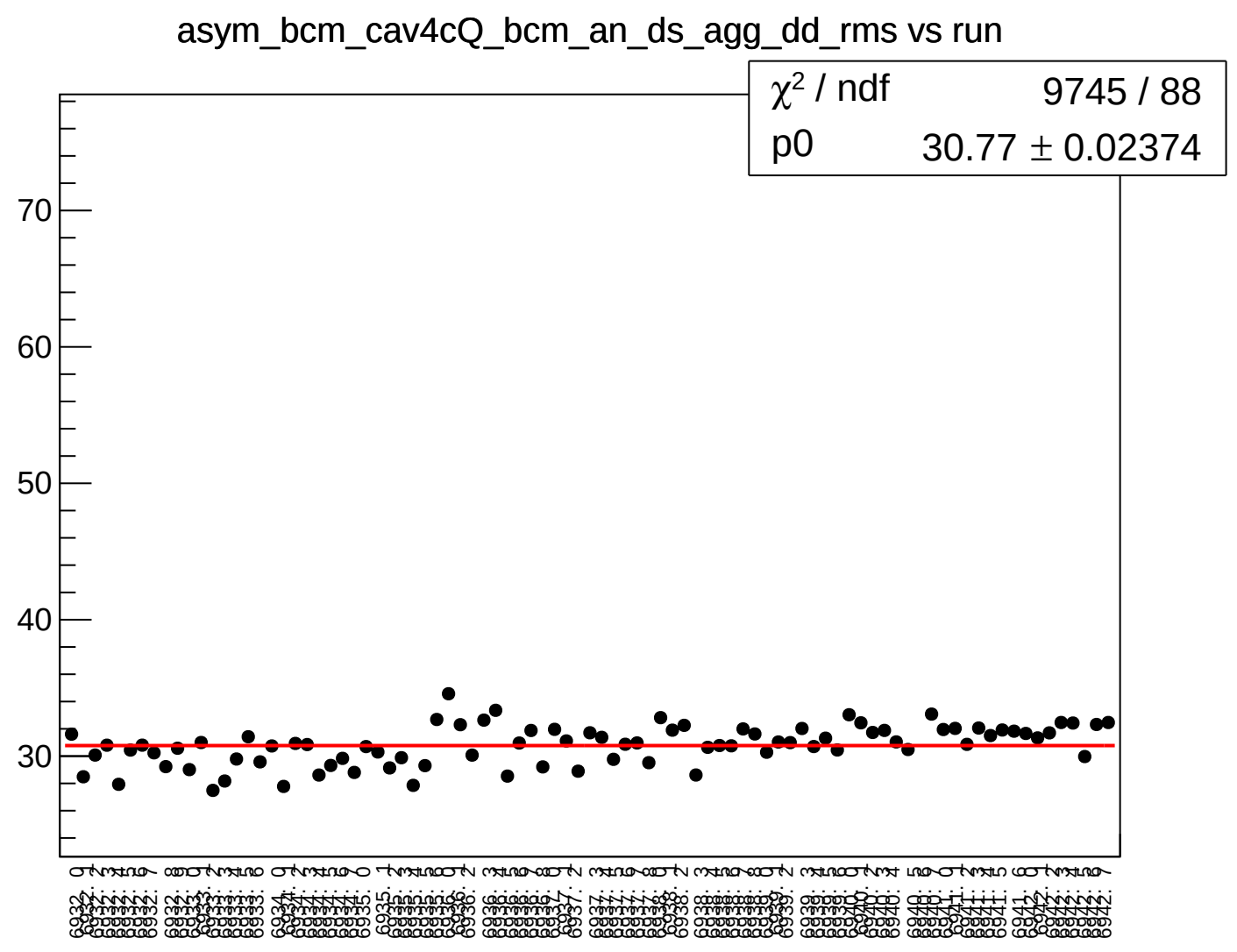

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 18.91 / 88
p0 −14.3 ± 149.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −992.7
Std Dev 1029
1
0.5
0
−0.5
−1

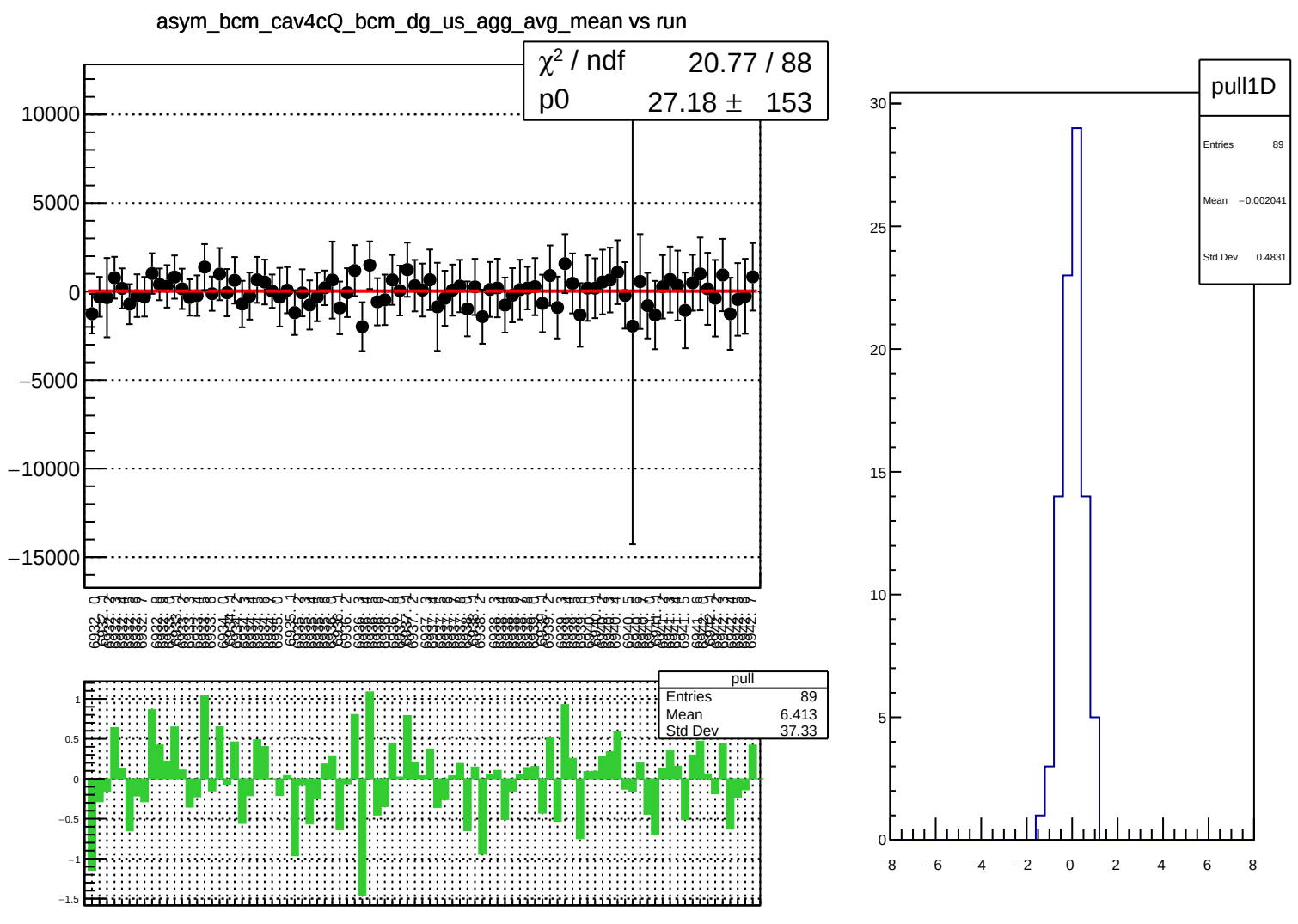

pull1D
Entries 89
Mean −0.0003645
Std Dev 0.4609
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

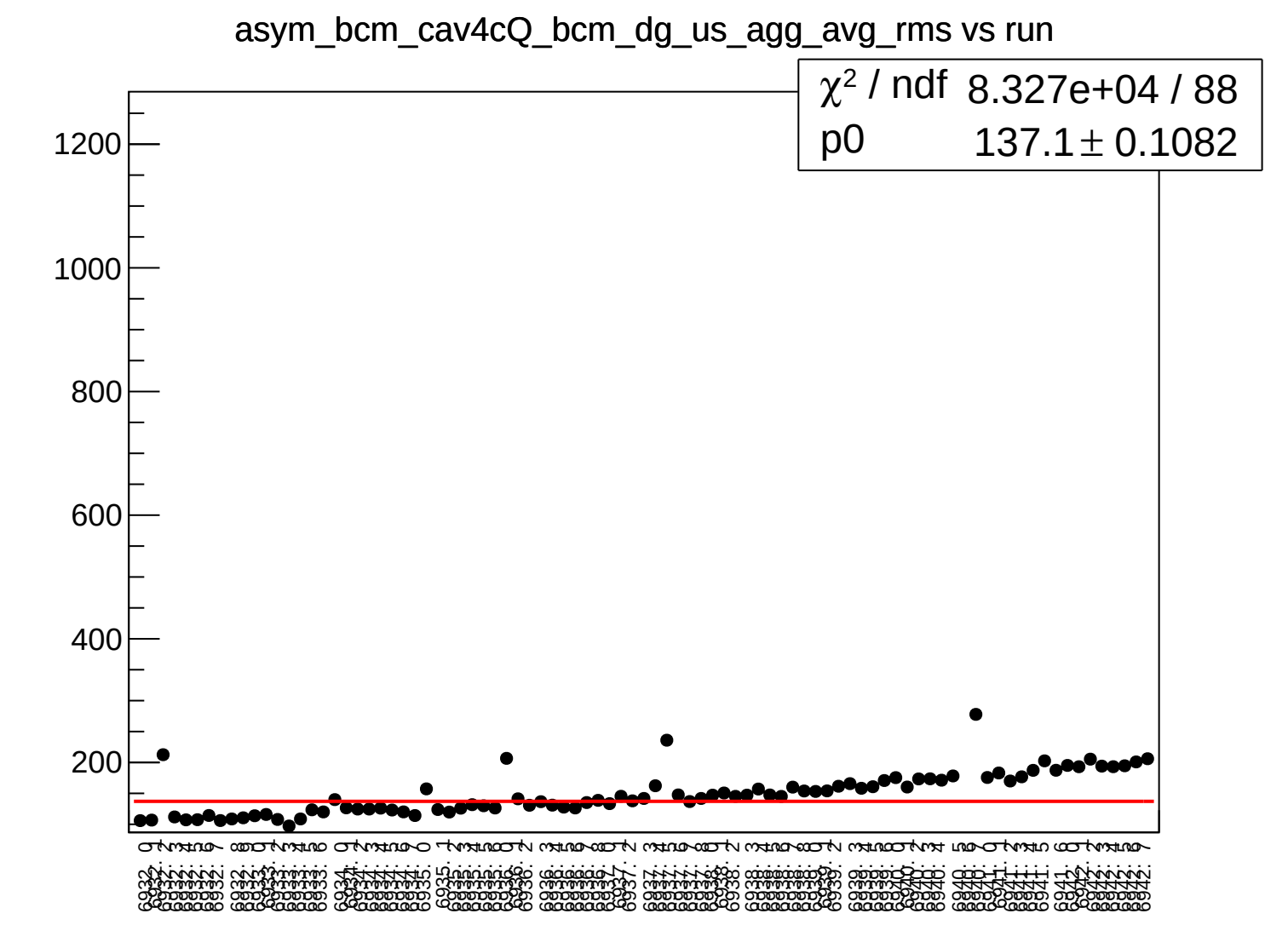

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 8.681e+04 / 88
p0 134.2 ± 0.106
1200
1000
800
600
400
200

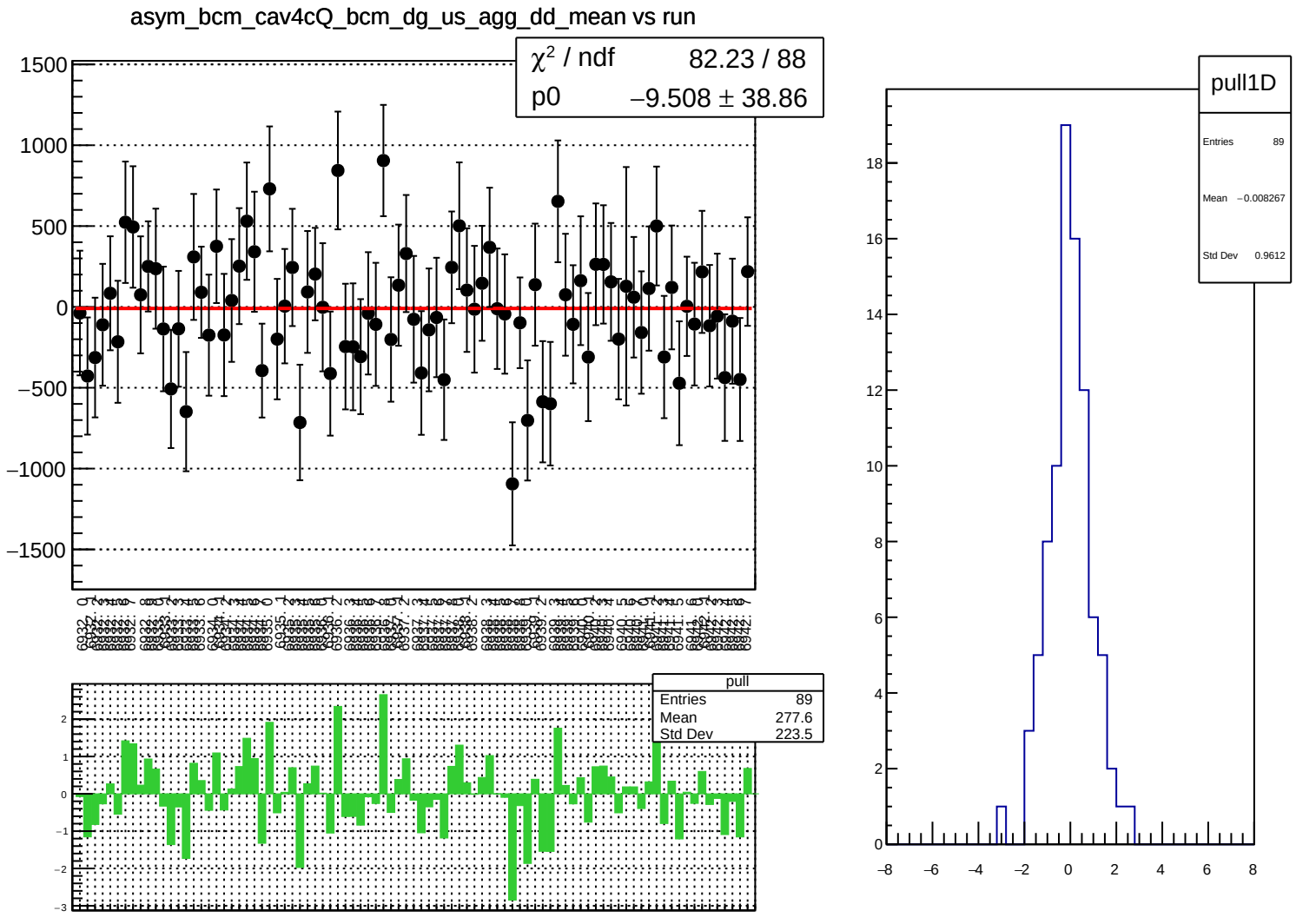

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.65 / 88
p0 25.65 ± 33.57
1000
500
0
−500
−1000
pull
Entries 89
Mean 696.1
Std Dev 649.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

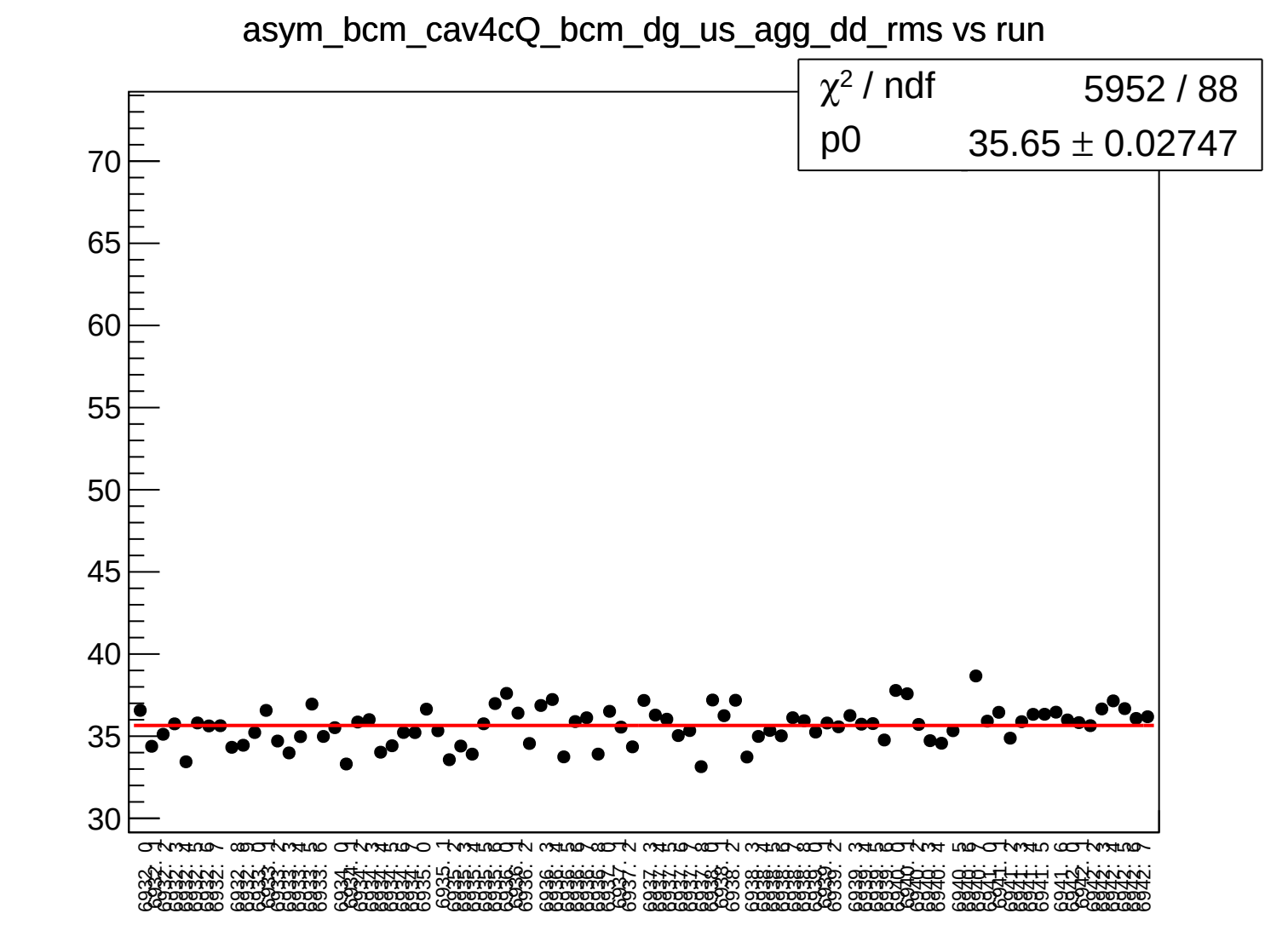

pull1D
Entries 89
Mean −0.005379
Std Dev 0.9636
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

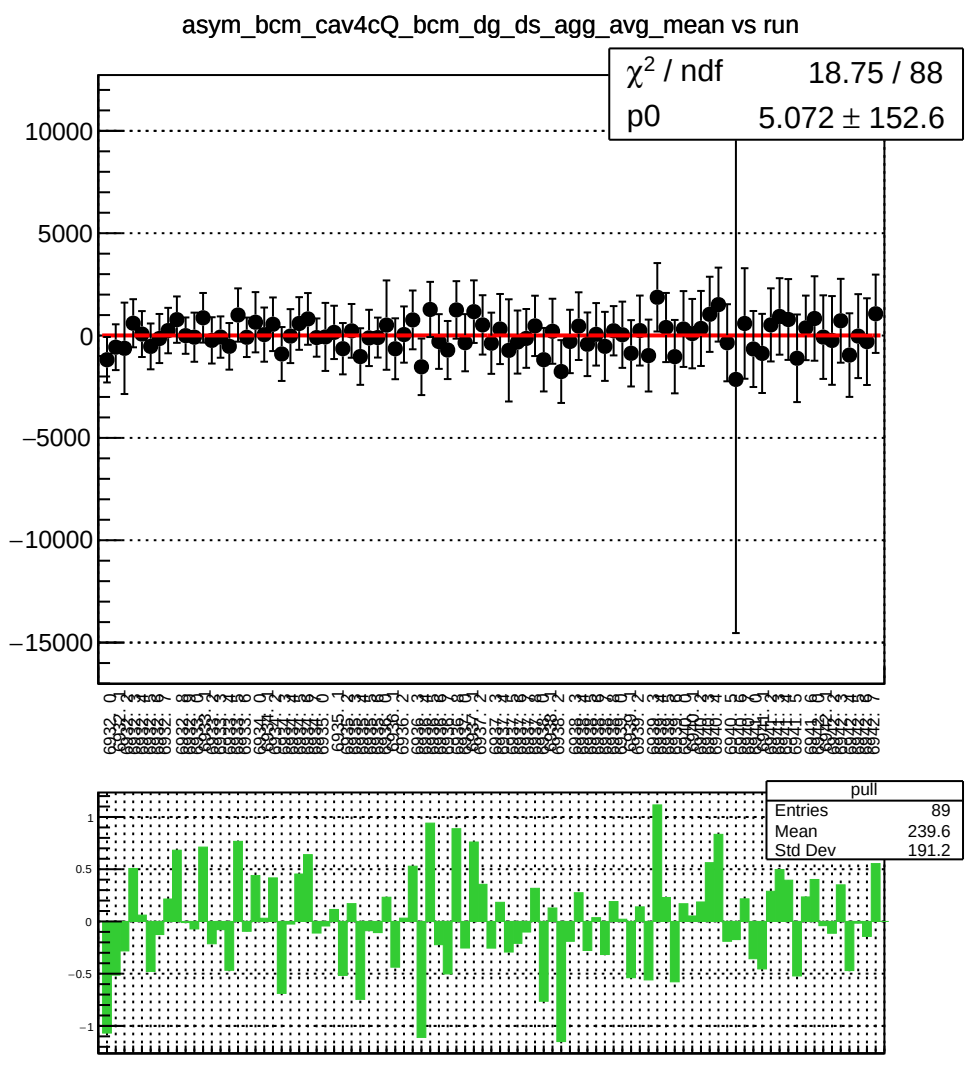

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 9745 / 88
p0 30.77 ± 0.02374
70
60
50
40
30

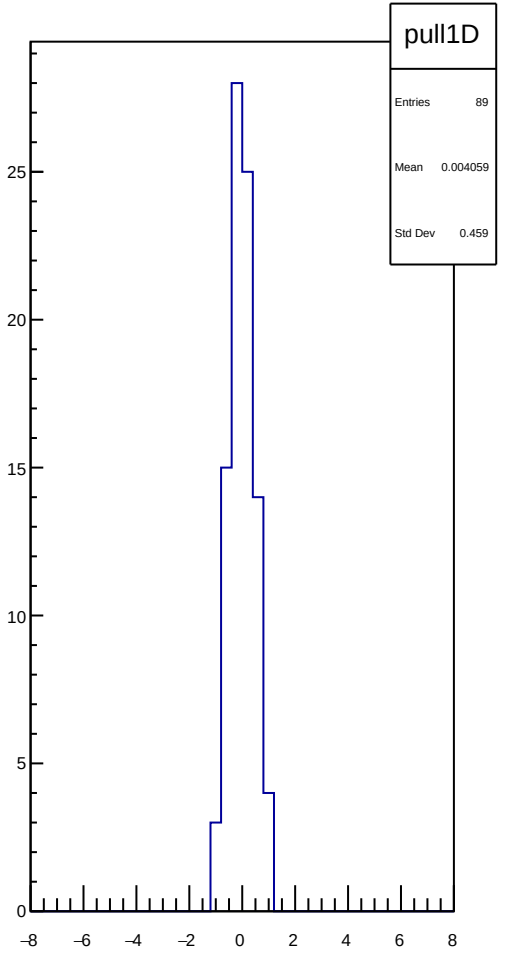

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 20.77 / 88
p0 27.18 ± 153
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 6.413
Std Dev 37.33
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean −0.002041
Std Dev 0.4831
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

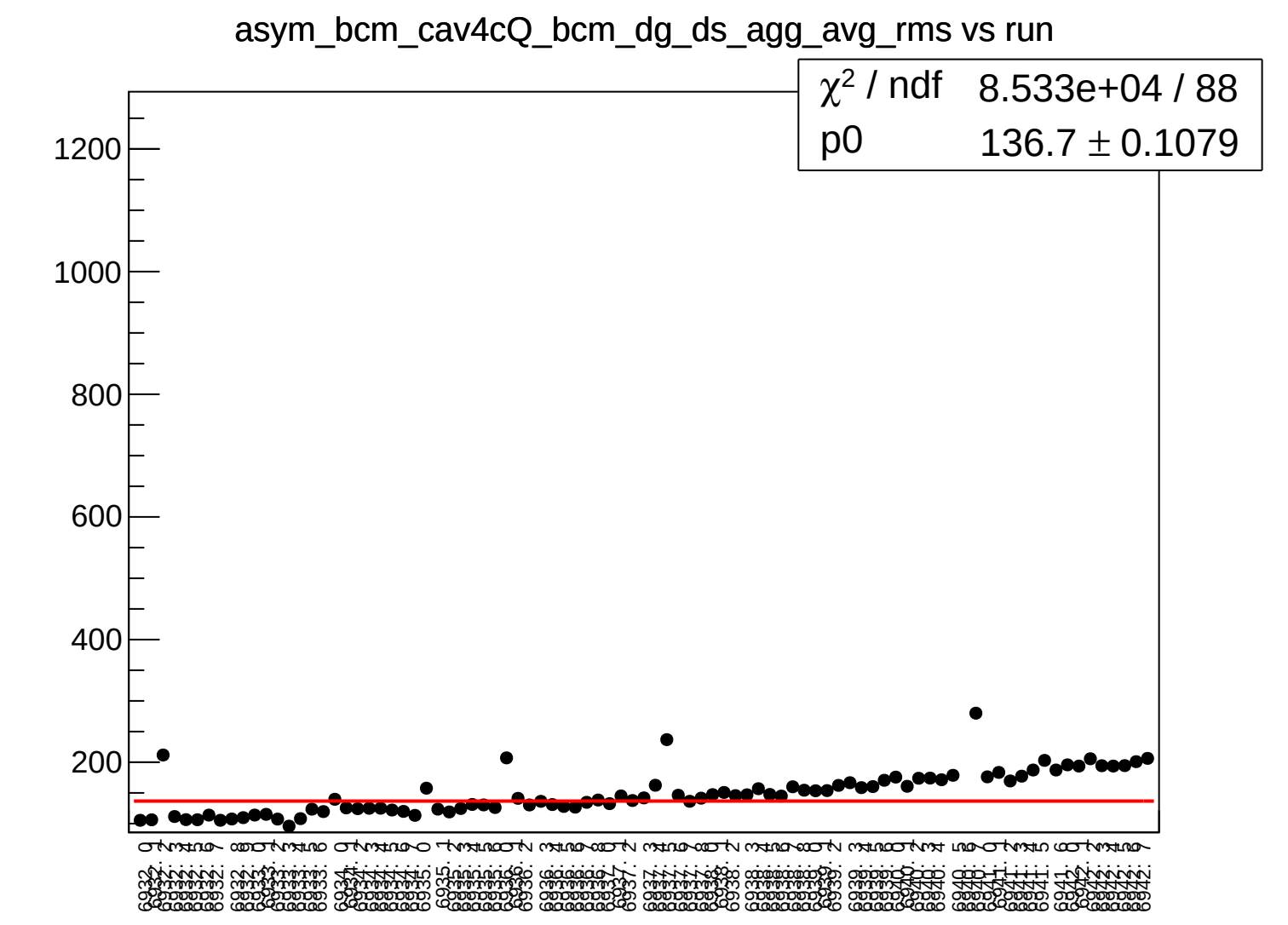

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 8.327e+04 / 88
p0 137.1 ± 0.1082
1200
1000
800
600
400
200

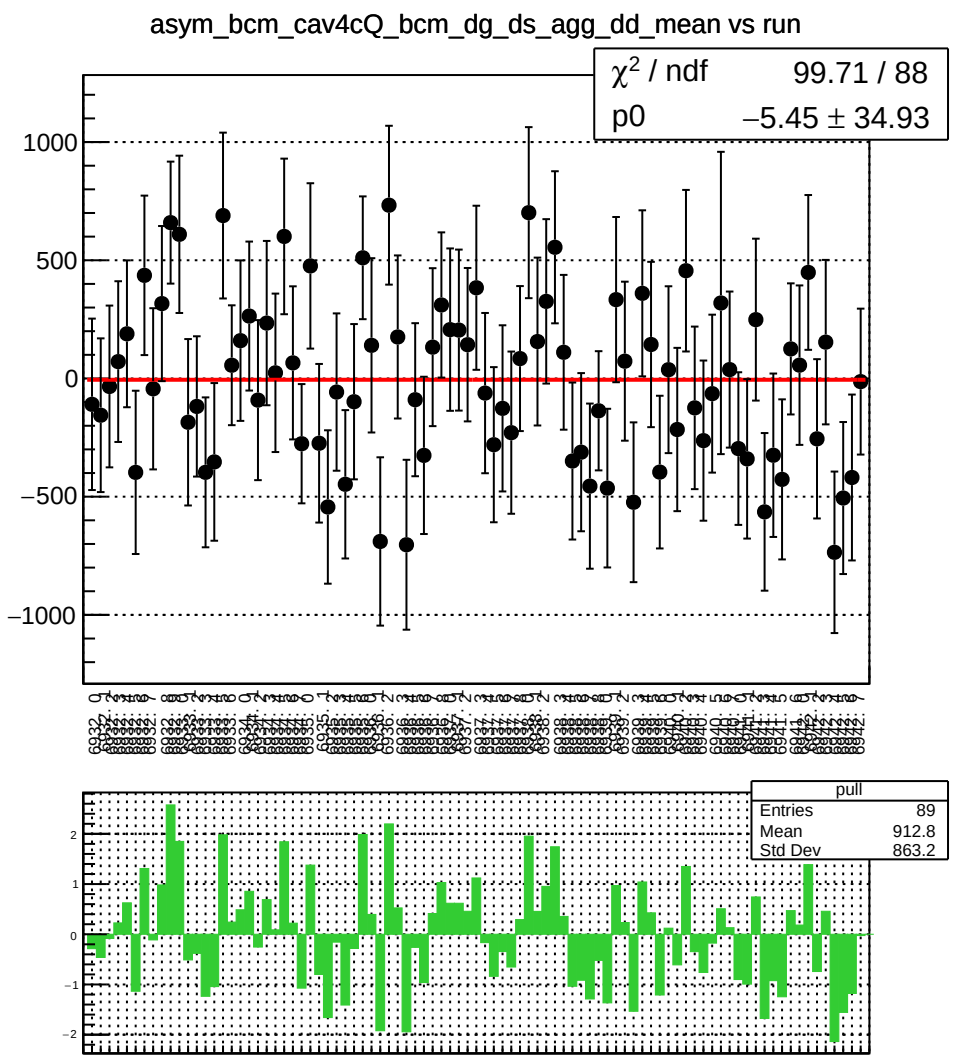

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 82.23 / 88
p0 −9.508 ± 38.86
pull
Entries 89
Mean 277.6
Std Dev 223.5
pull1D
Entries 89
Mean −0.008267
Std Dev 0.9612

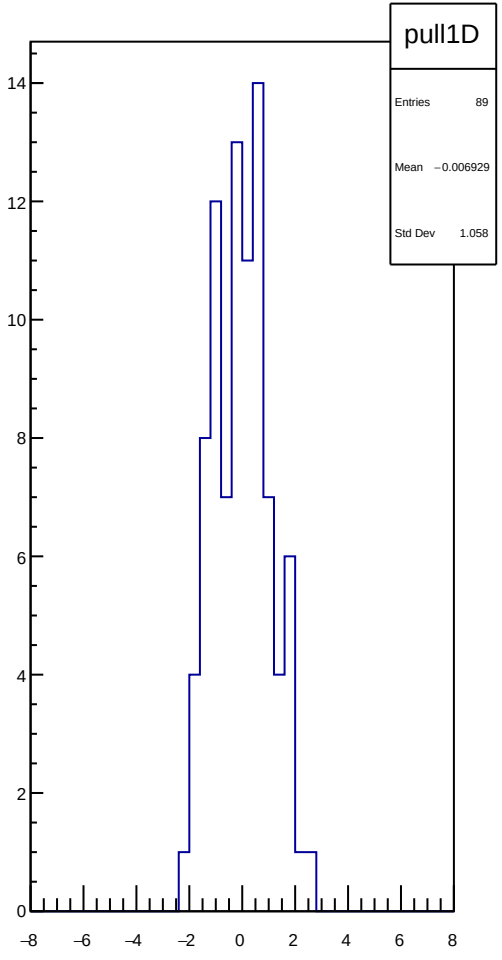

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 5952 / 88
p0 35.65 ± 0.02747
70
65
60
55
50
45
40
35
30

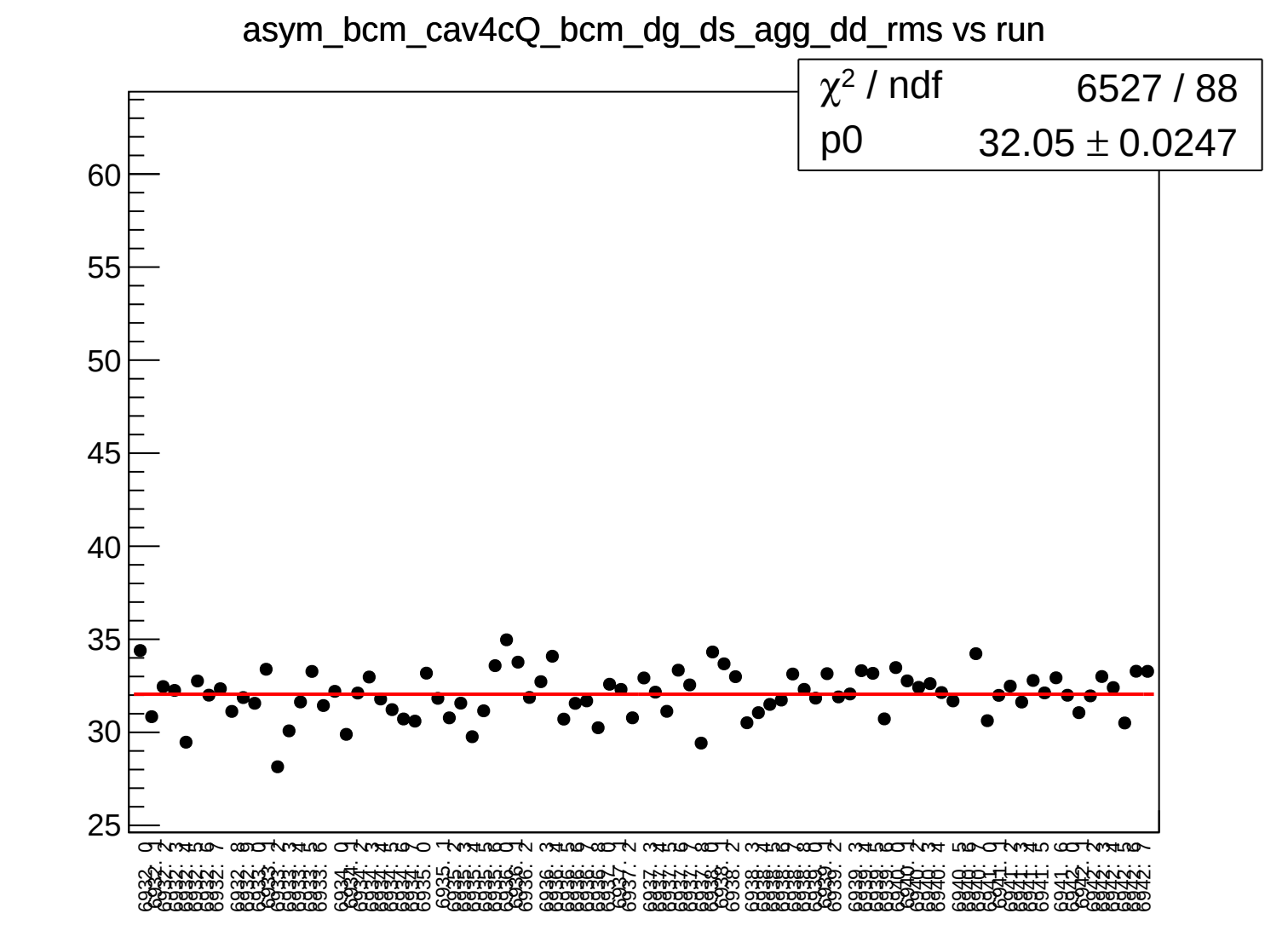

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 18.75 / 88
p0 5.072 ± 152.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 239.6
Std Dev 191.2
1
0.5
0
−0.5
−1

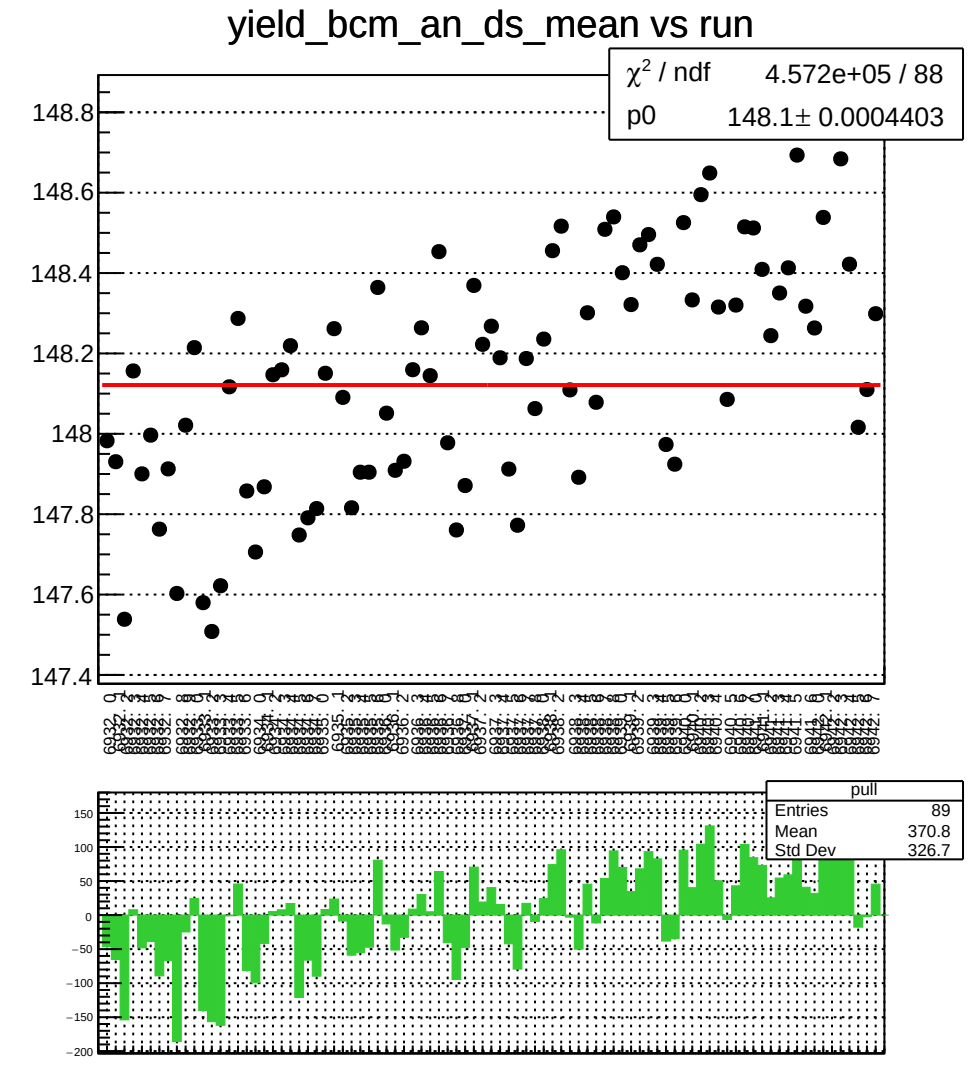

pull1D
Entries 89
Mean 0.004059
Std Dev 0.459
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

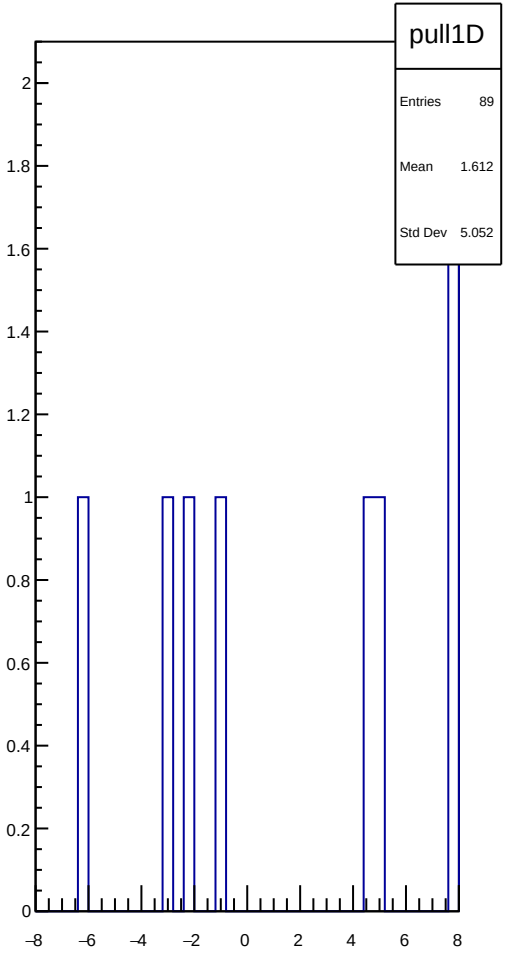

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 8.533e+04 / 88
p0 136.7 ± 0.1079
1200
1000
800
600
400
200

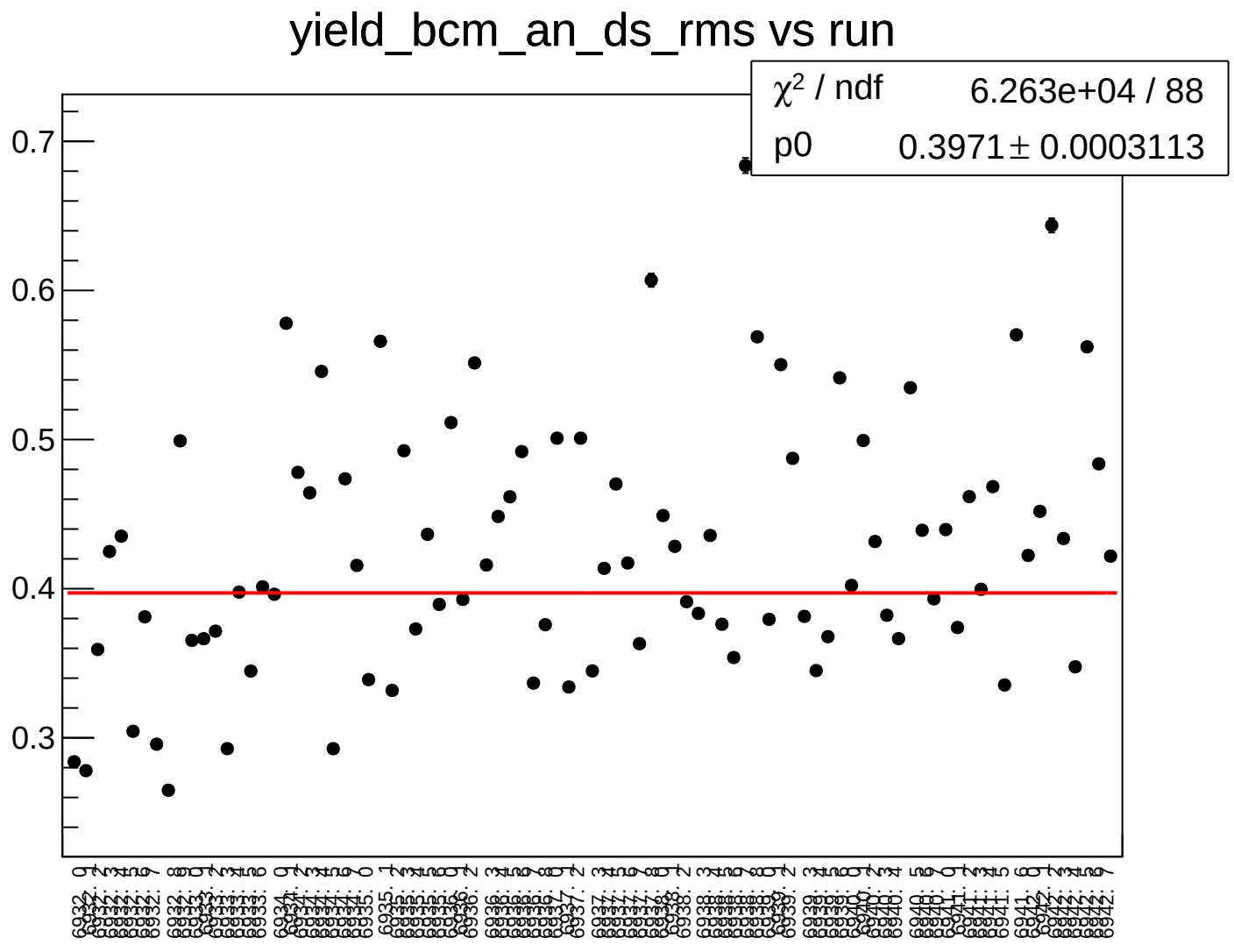

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 99.71 / 88
p0 −5.45 ± 34.93
1000
500
0
−500
−1000
pull
Entries 89
Mean 912.8
Std Dev 863.2
2
1
0
−1
−2

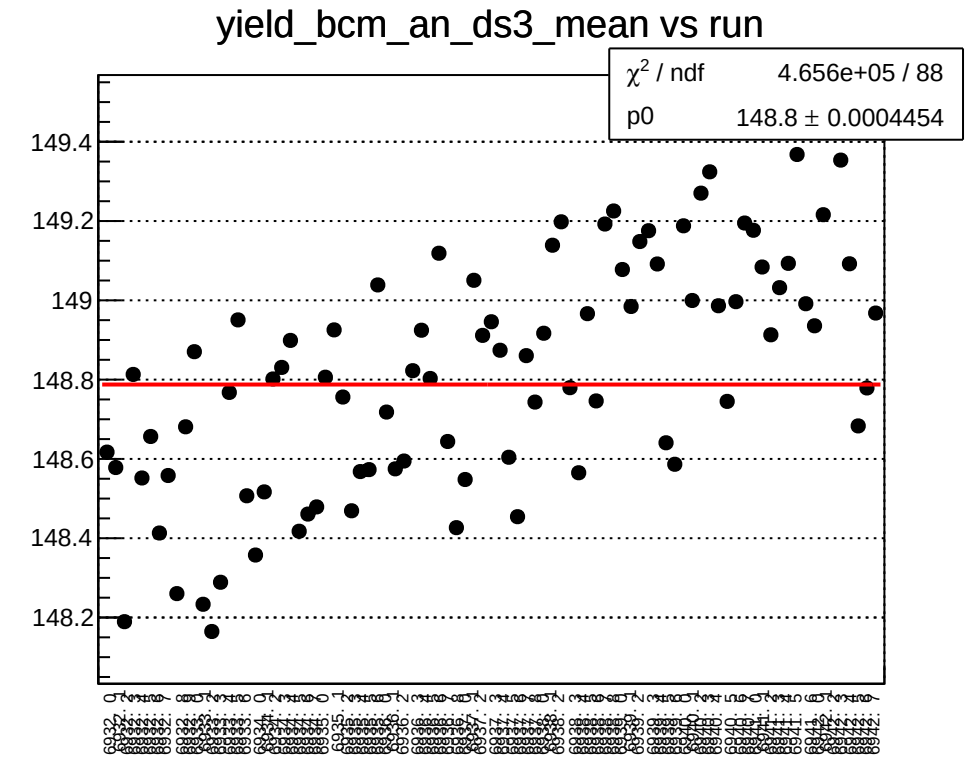

pull1D
Entries 89
Mean −0.006929
Std Dev 1.058
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

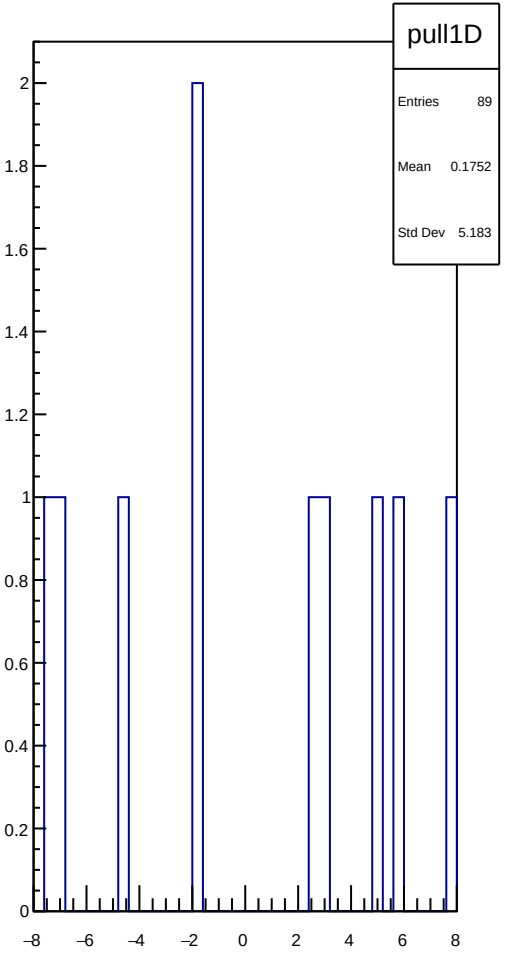

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 6527 / 88
p0 32.05 ± 0.0247
60
55
50
45
40
35
30
25

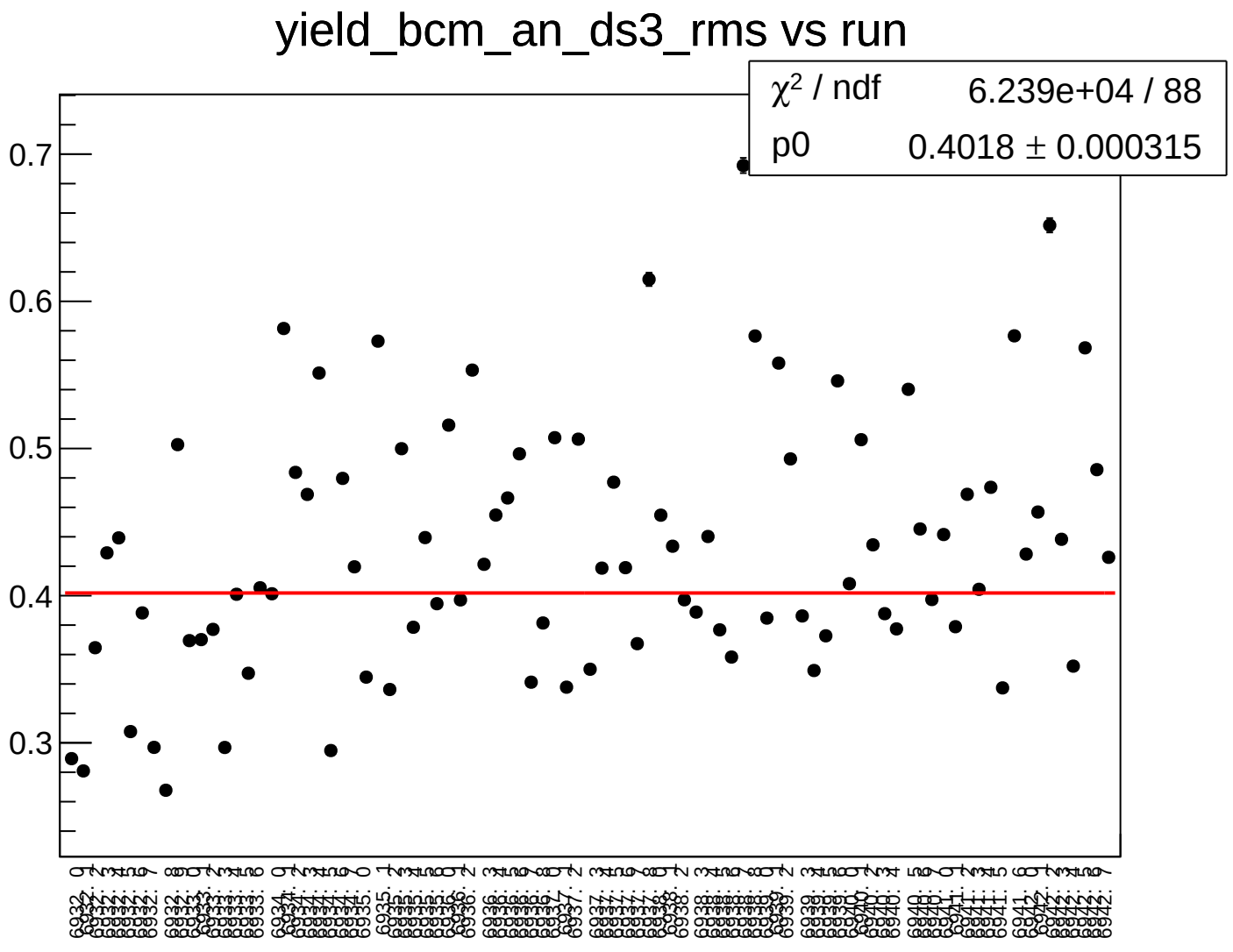

yield_bcm_an_ds_mean vs run
χ² / ndf 4.572e+05 / 88
p0 148.1± 0.0004403
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
pull
Entries 89
Mean 370.8
Std Dev 326.7
150
100
50
0
−50
−100
−150
−200

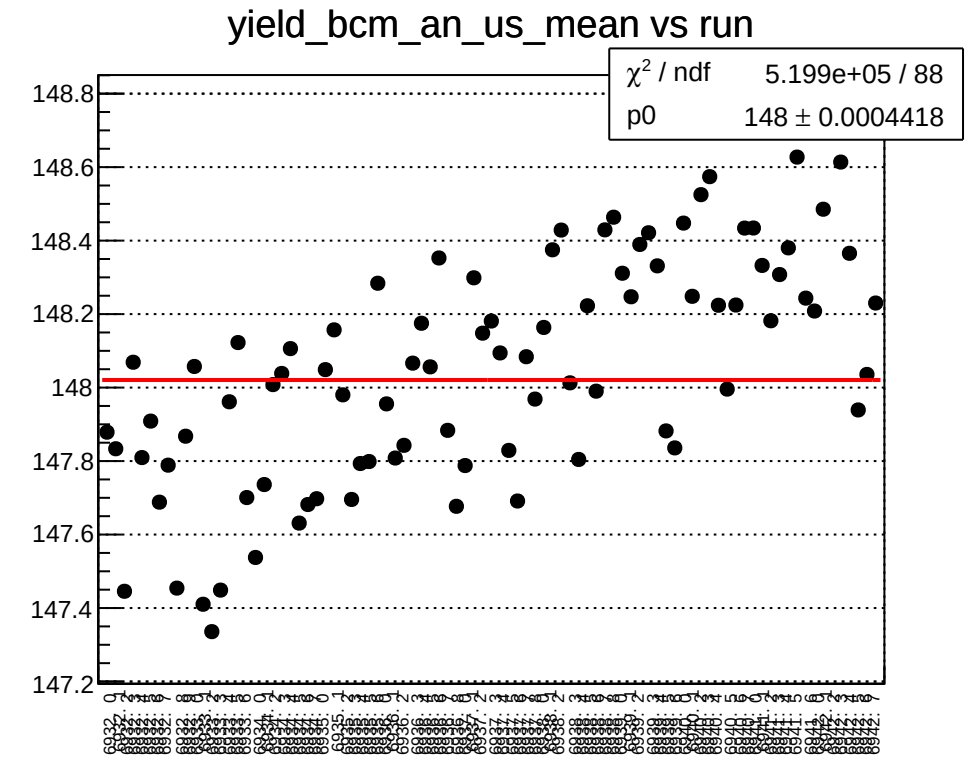

pull1D
Entries 89
Mean 1.612
Std Dev 5.052
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

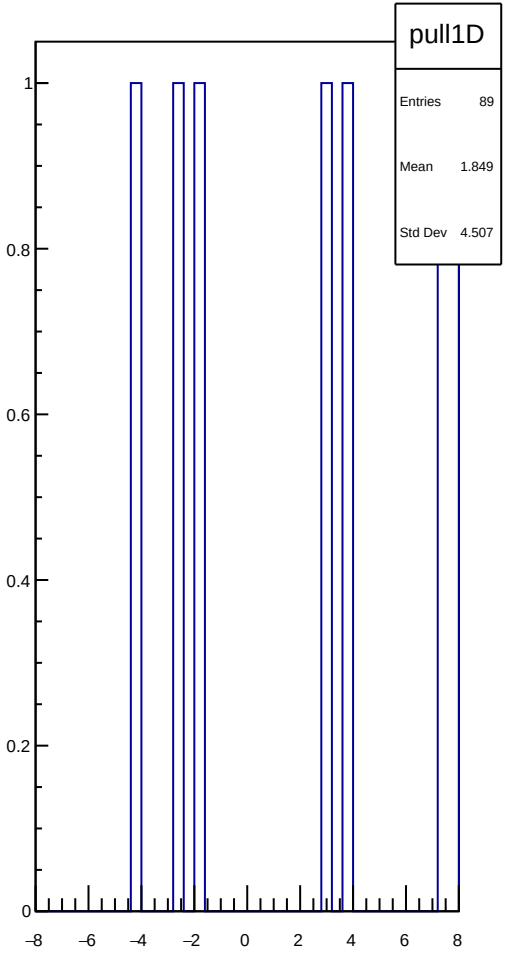

yield_bcm_an_ds_rms vs run
χ² / ndf 6.263e+04 / 88
p0 0.3971 ± 0.0003113
0.7
0.6
0.5
0.4
0.3

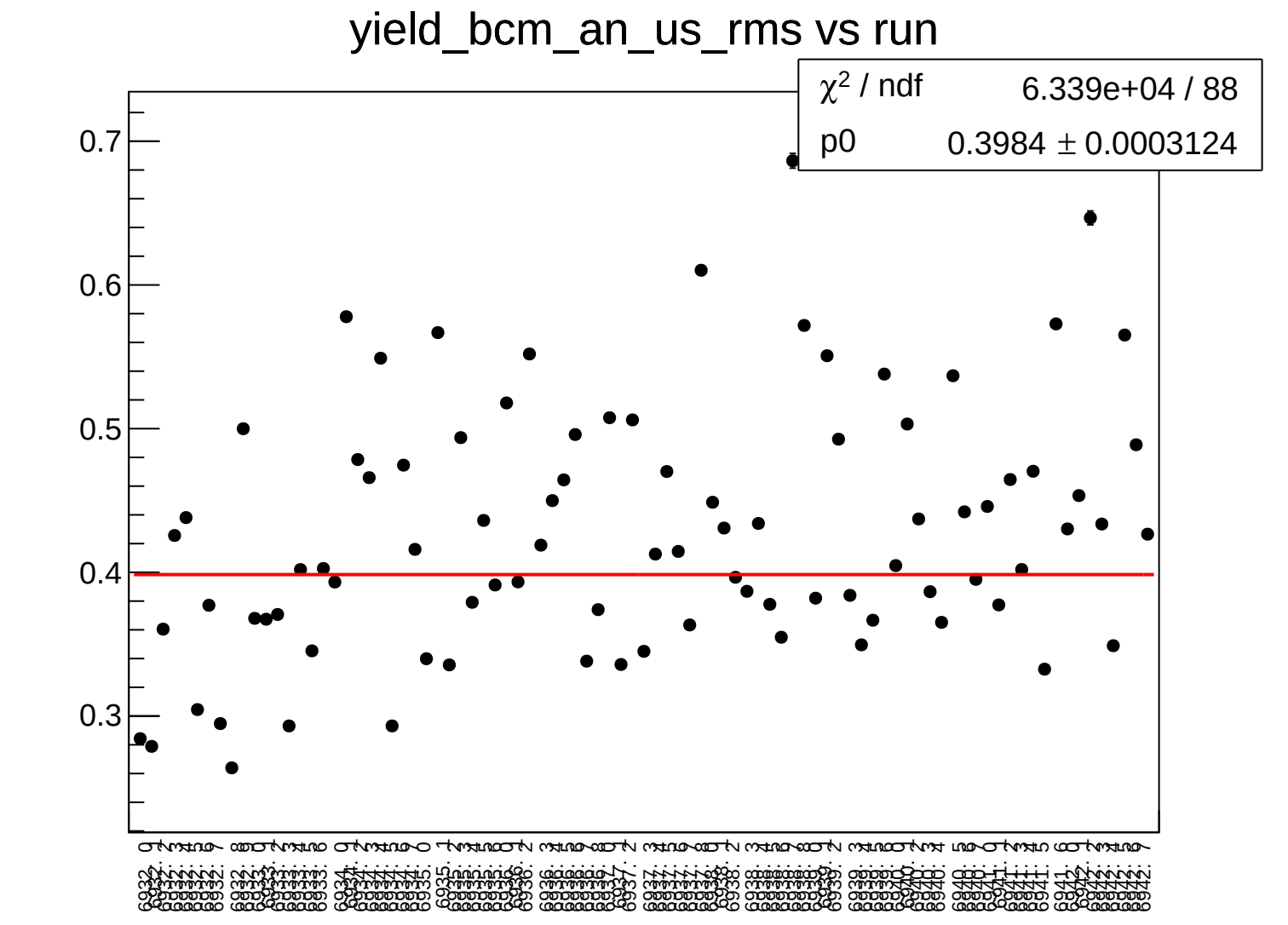

yield_bcm_an_ds3_mean vs run
χ² / ndf 4.656e+05 / 88
p0 148.8 ± 0.0004454
149.4
149.2
149
148.8
148.6
148.4
148.2
pull
Entries 89
Mean 367.6
Std Dev 323.7
150
100
50
0
−50
−100
−150
−200

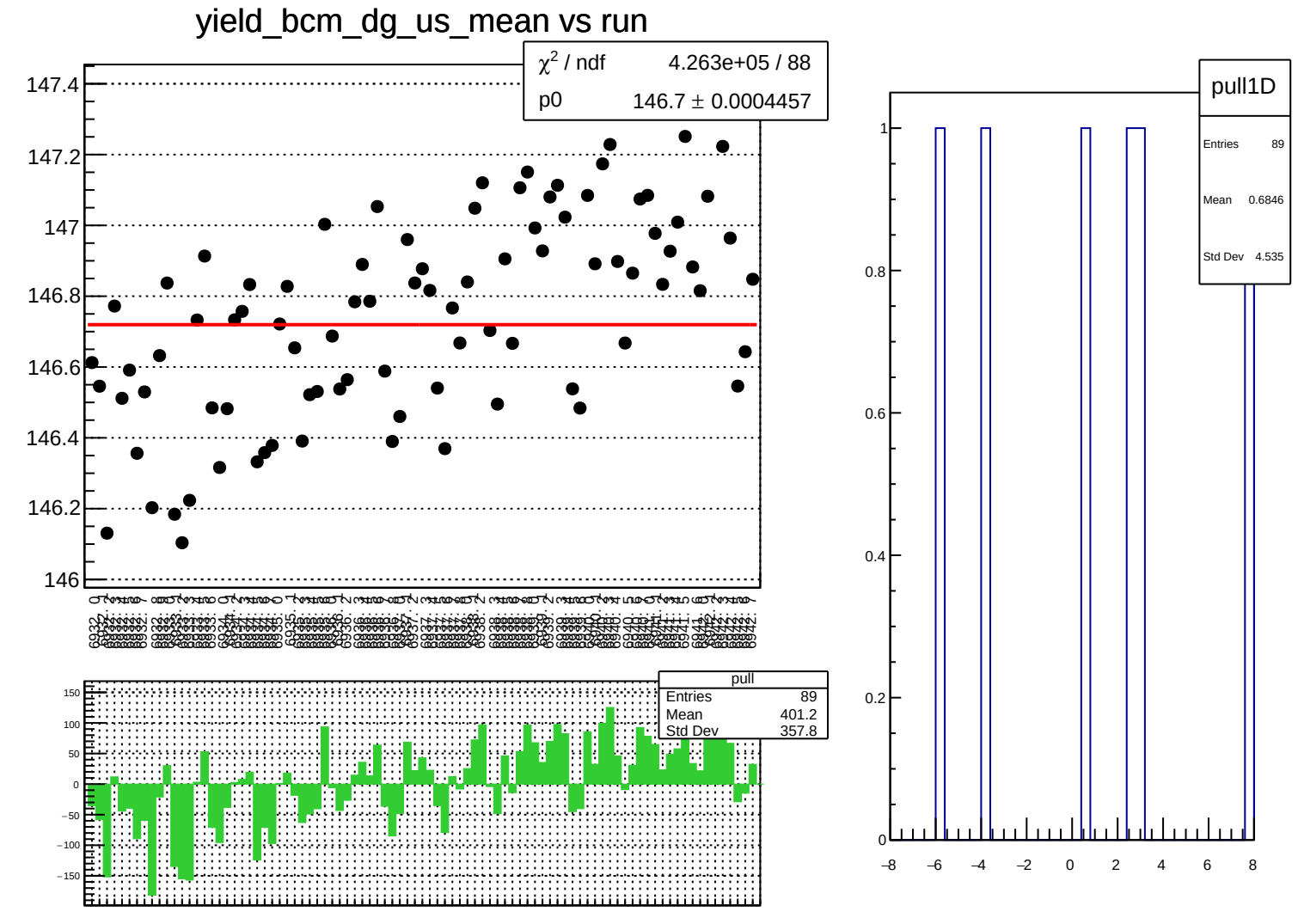

pull1D
Entries 89
Mean 0.1752
Std Dev 5.183
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

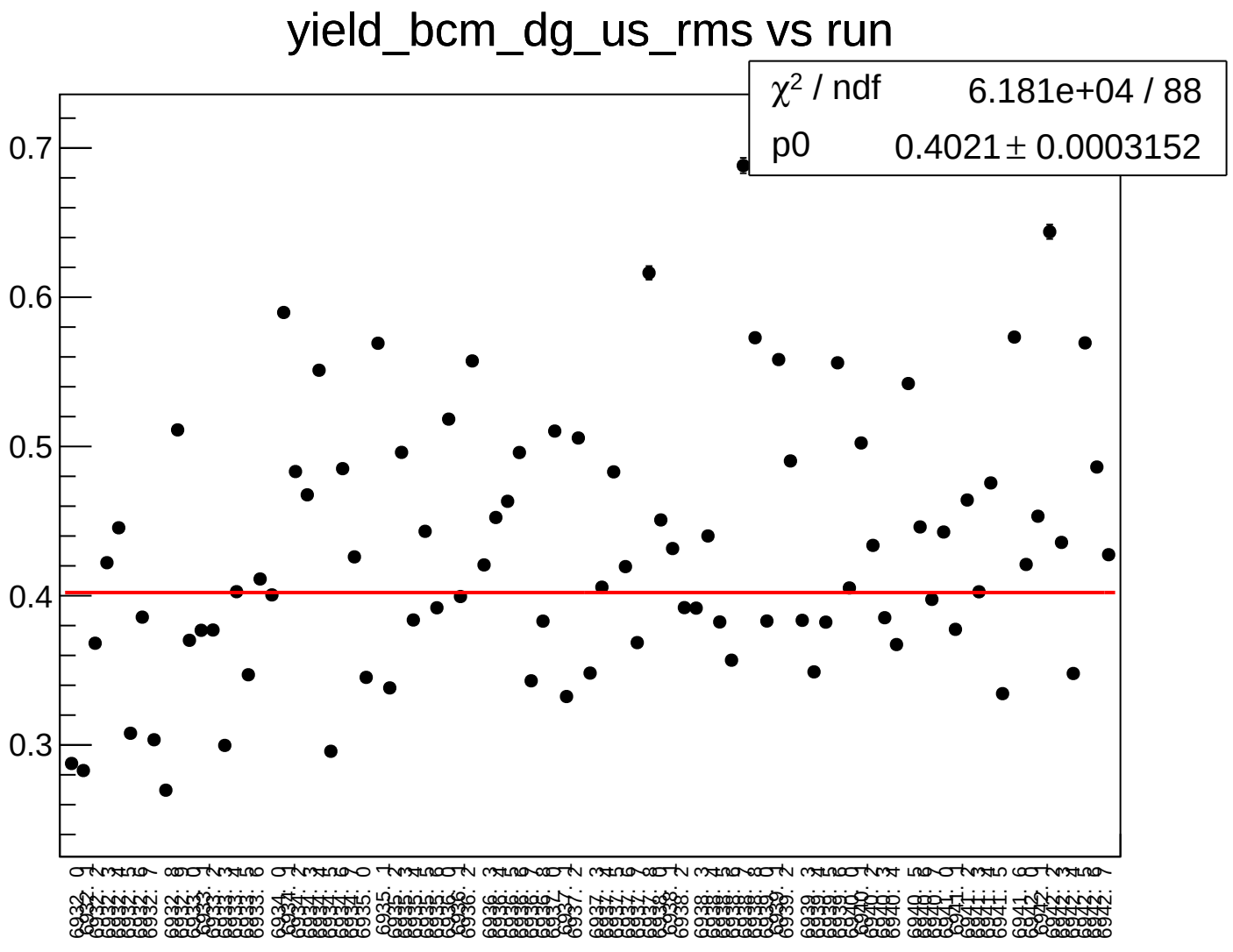

yield_bcm_an_ds3_rms vs run
χ² / ndf 6.239e+04 / 88
p0 0.4018 ± 0.000315
0.7
0.6
0.5
0.4
0.3

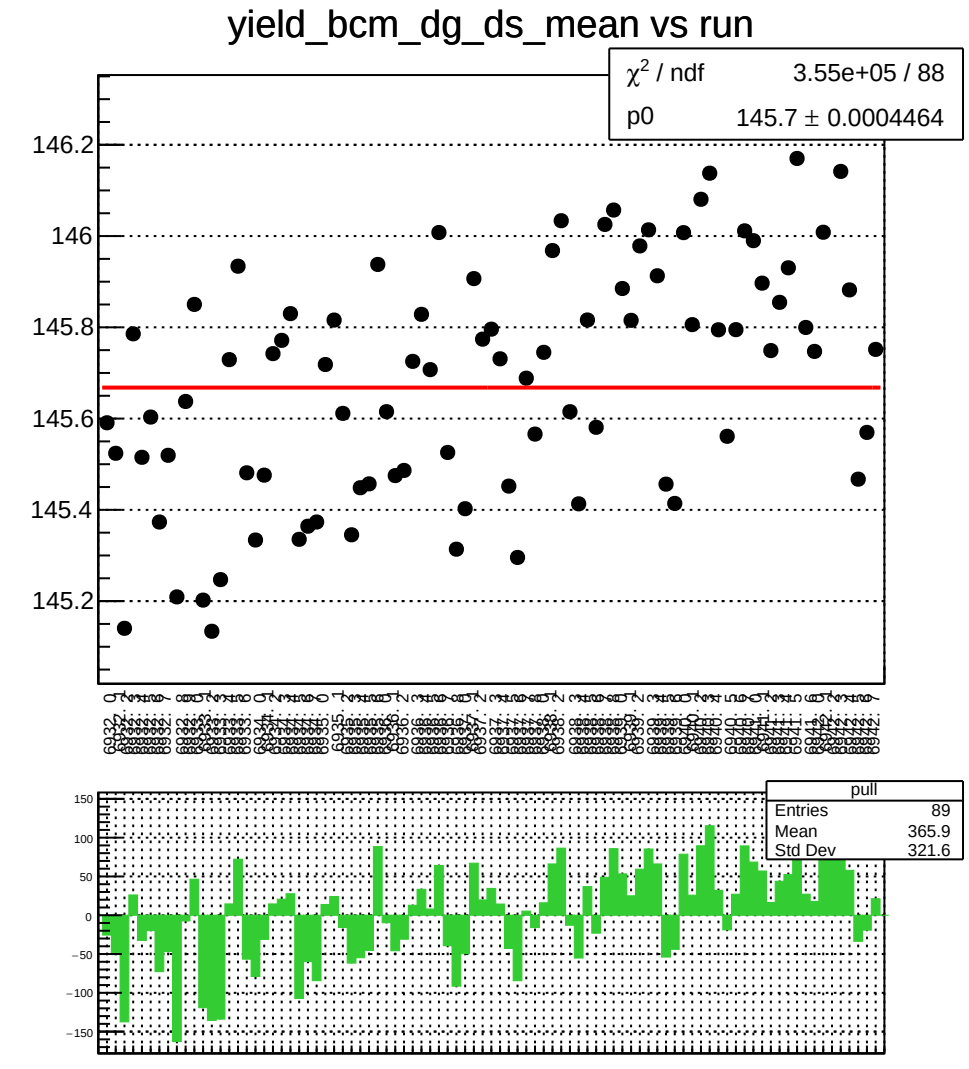

yield_bcm_an_us_mean vs run
χ² / ndf 5.199e+05 / 88
p0 148 ± 0.0004418
148.8
148.6
148.4
148.2
148
147.8
147.6
147.4
147.2
pull
Entries 89
Mean 355.2
Std Dev 310.9
150
100
50
0
−50
−100
−150
−200

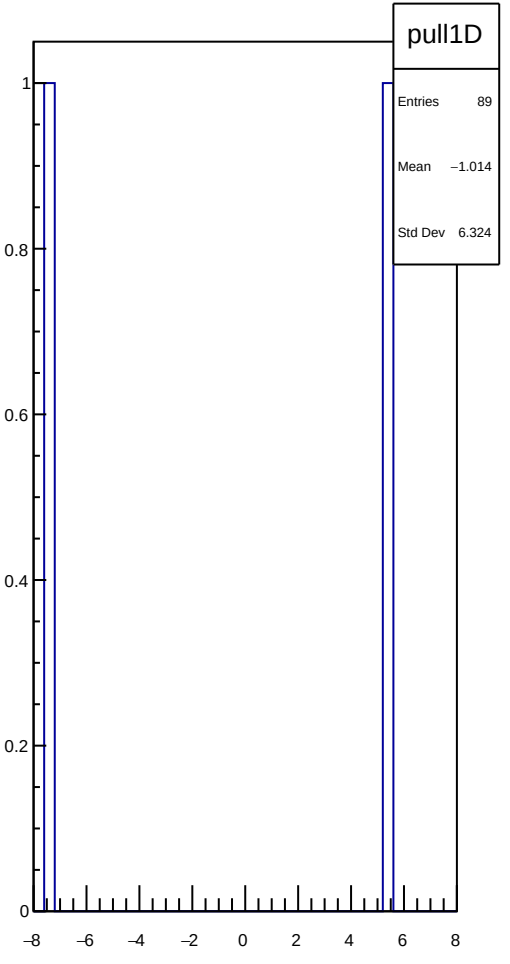

pull1D
Entries 89
Mean 1.849
Std Dev 4.507
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

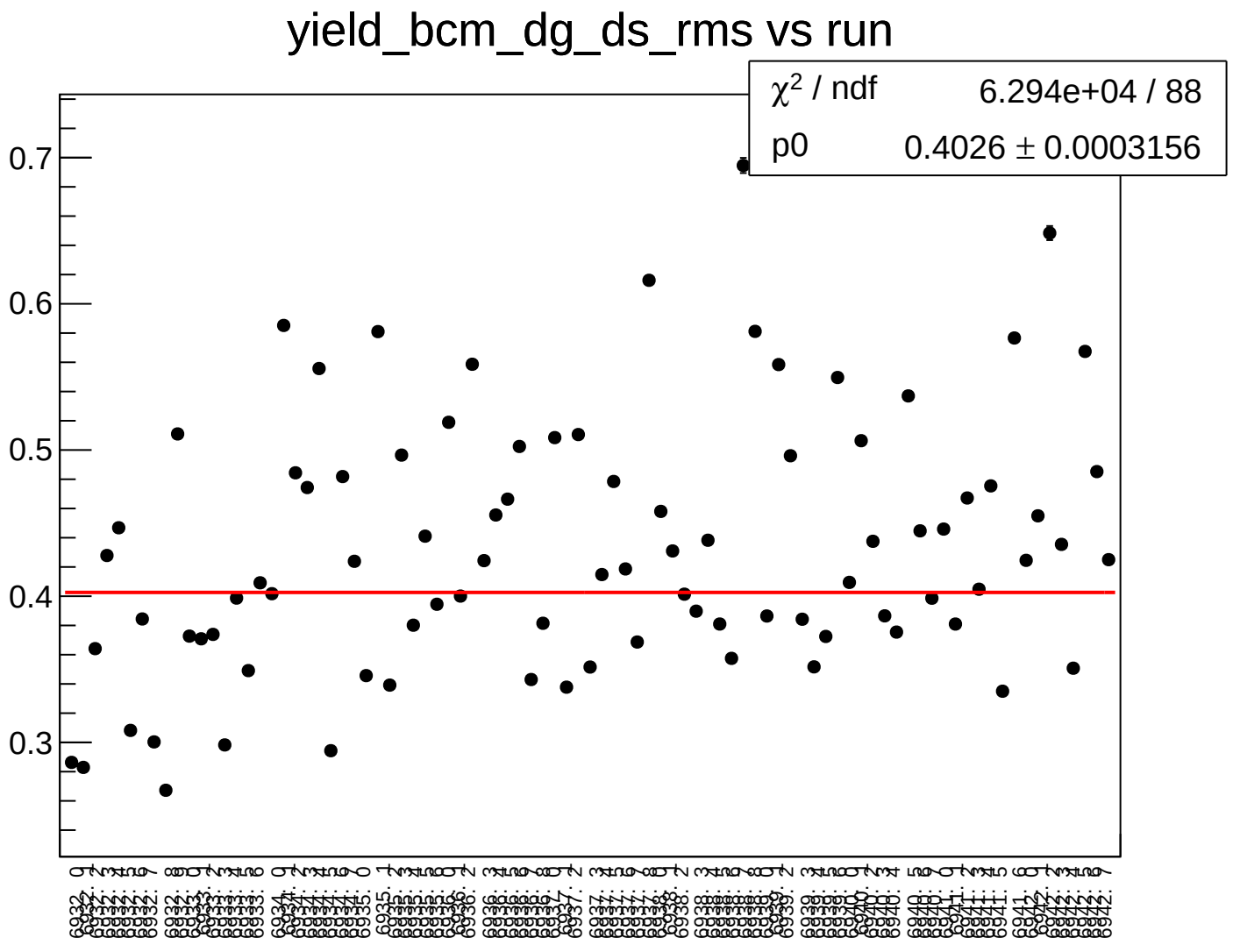

yield_bcm_an_us_rms vs run
χ² / ndf 6.339e+04 / 88
p0 0.3984 ± 0.0003124
0.7
0.6
0.5
0.4
0.3

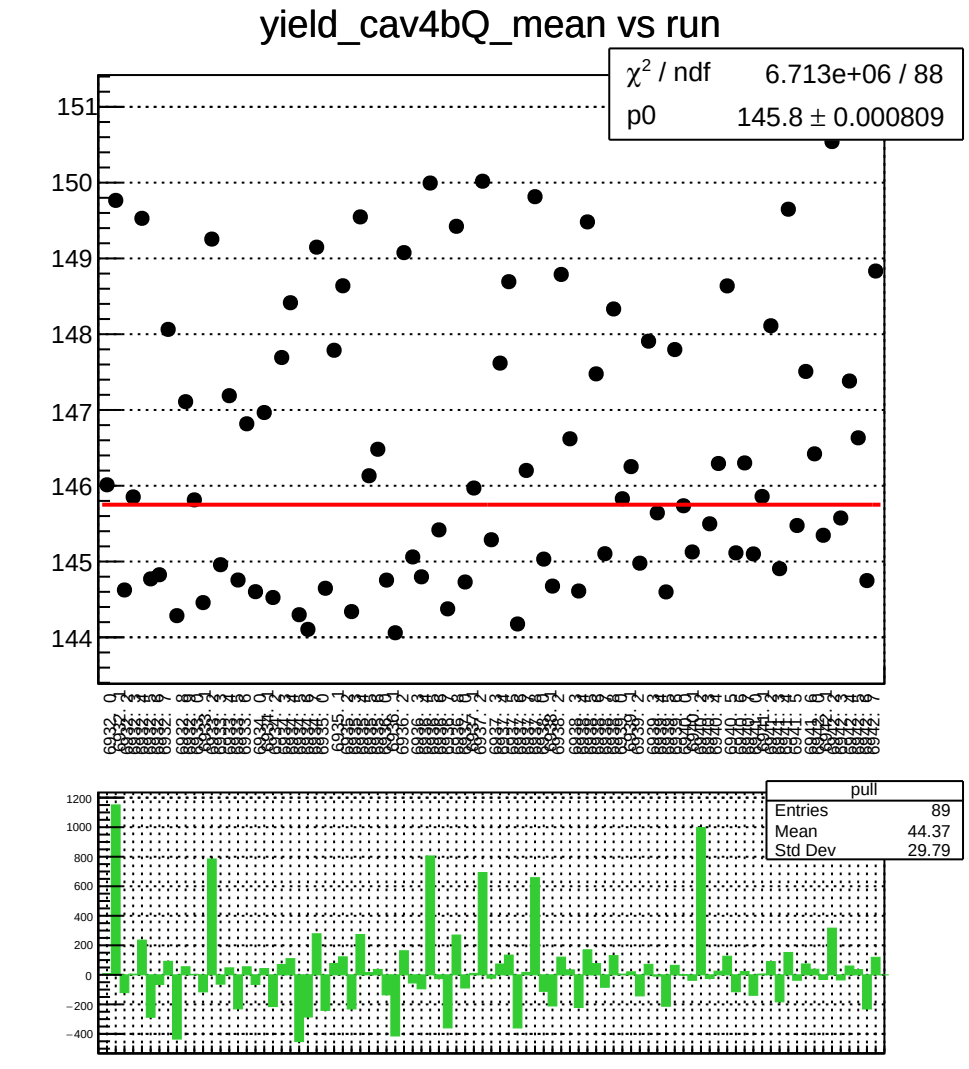

yield_bcm_dg_us_mean vs run
χ² / ndf 4.263e+05 / 88
p0 146.7 ± 0.0004457
147.4
147.2
147
146.8
146.6
146.4
146.2
146
pull
Entries 89
Mean 401.2
Std Dev 357.8
150
100
50
0
−50
−100
−150
pull1D
Entries 89
Mean 0.6846
Std Dev 4.535
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

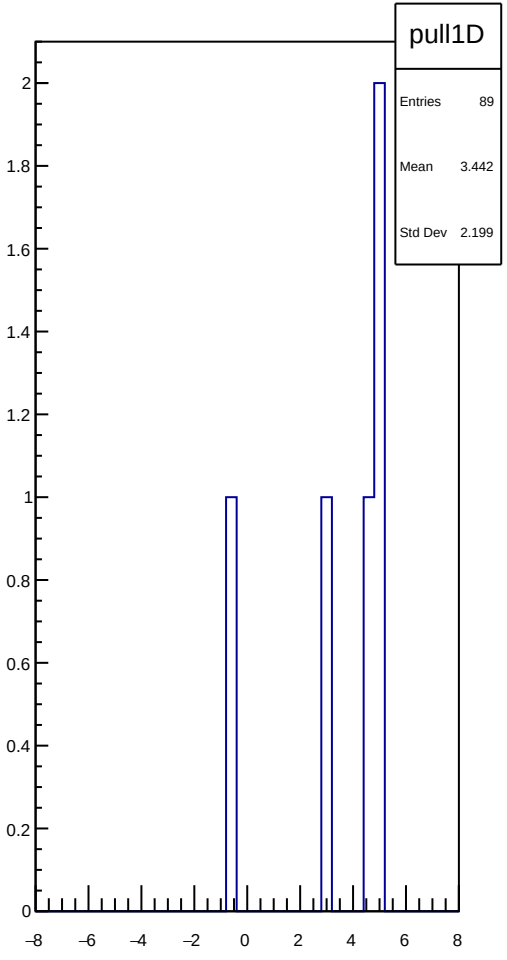

yield_bcm_dg_us_rms vs run
χ² / ndf 6.181e+04 / 88
p0 0.4021 ± 0.0003152
0.7
0.6
0.5
0.4
0.3

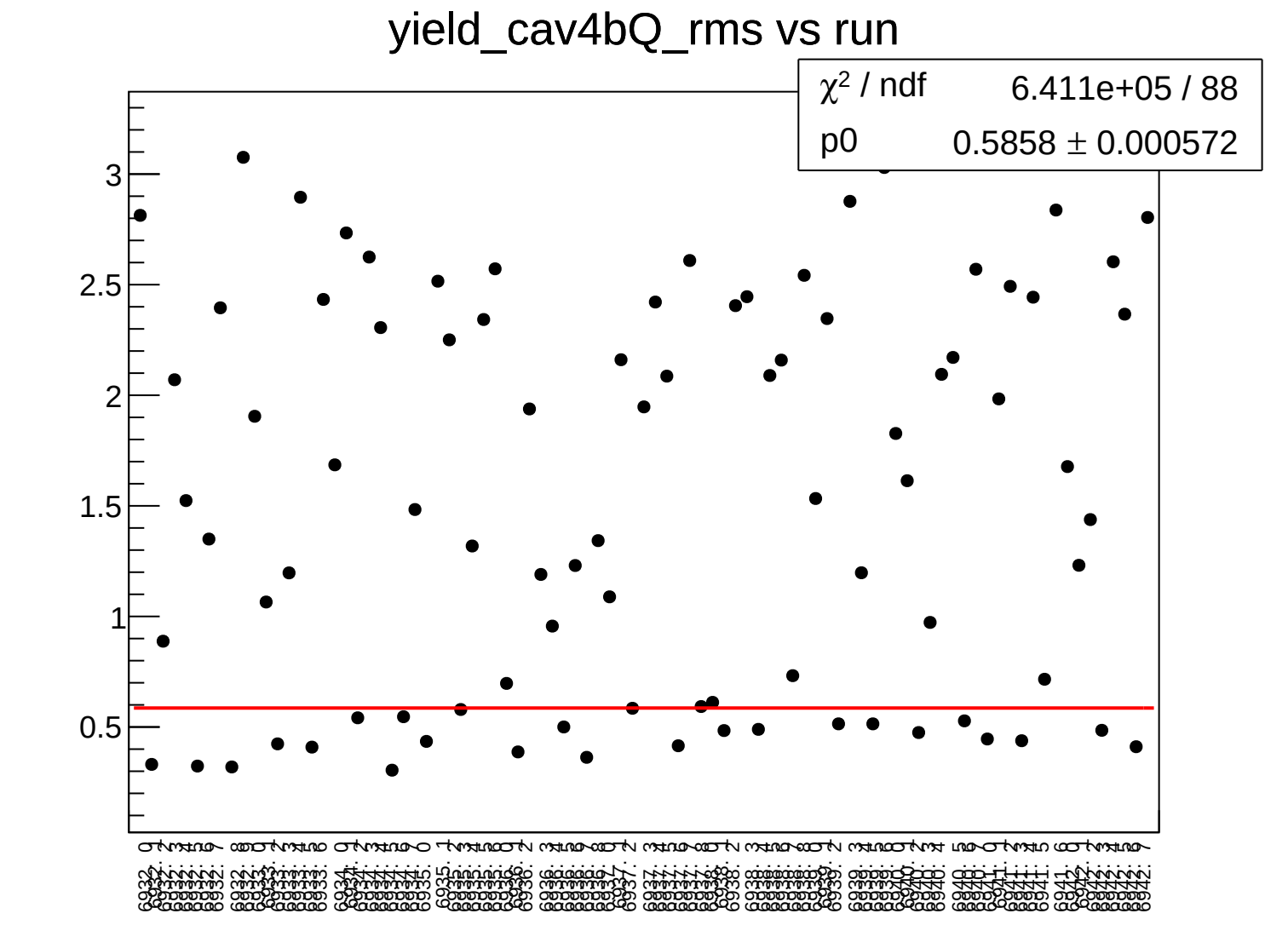

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.55e+05 / 88
p0 145.7 ± 0.0004464
146.2
146
145.8
145.6
145.4
145.2
pull
Entries 89
Mean 365.9
Std Dev 321.6
150
100
50
0
−50
−100
−150

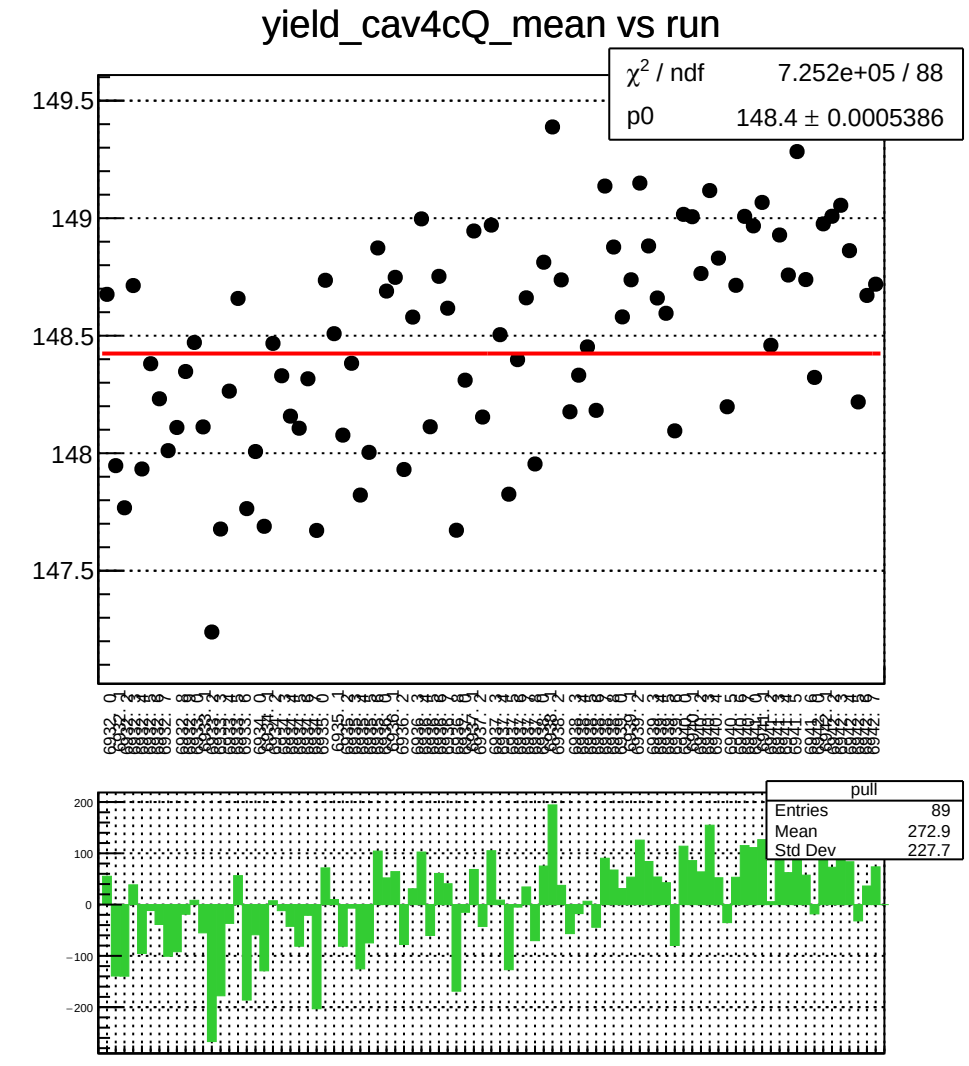

pull1D
Entries 89
Mean −1.014
Std Dev 6.324
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

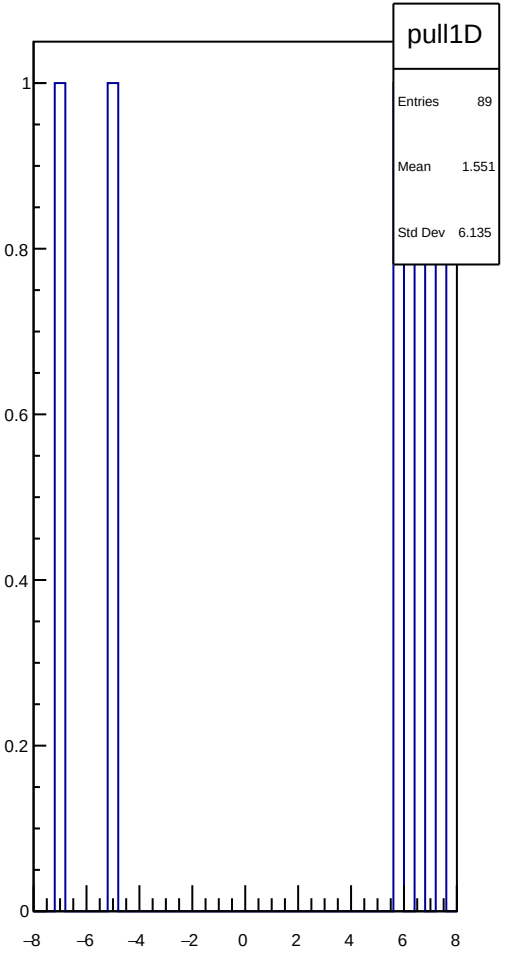

yield_bcm_dg_ds_rms vs run
χ² / ndf 6.294e+04 / 88
p0 0.4026 ± 0.0003156
0.7
0.6
0.5
0.4
0.3

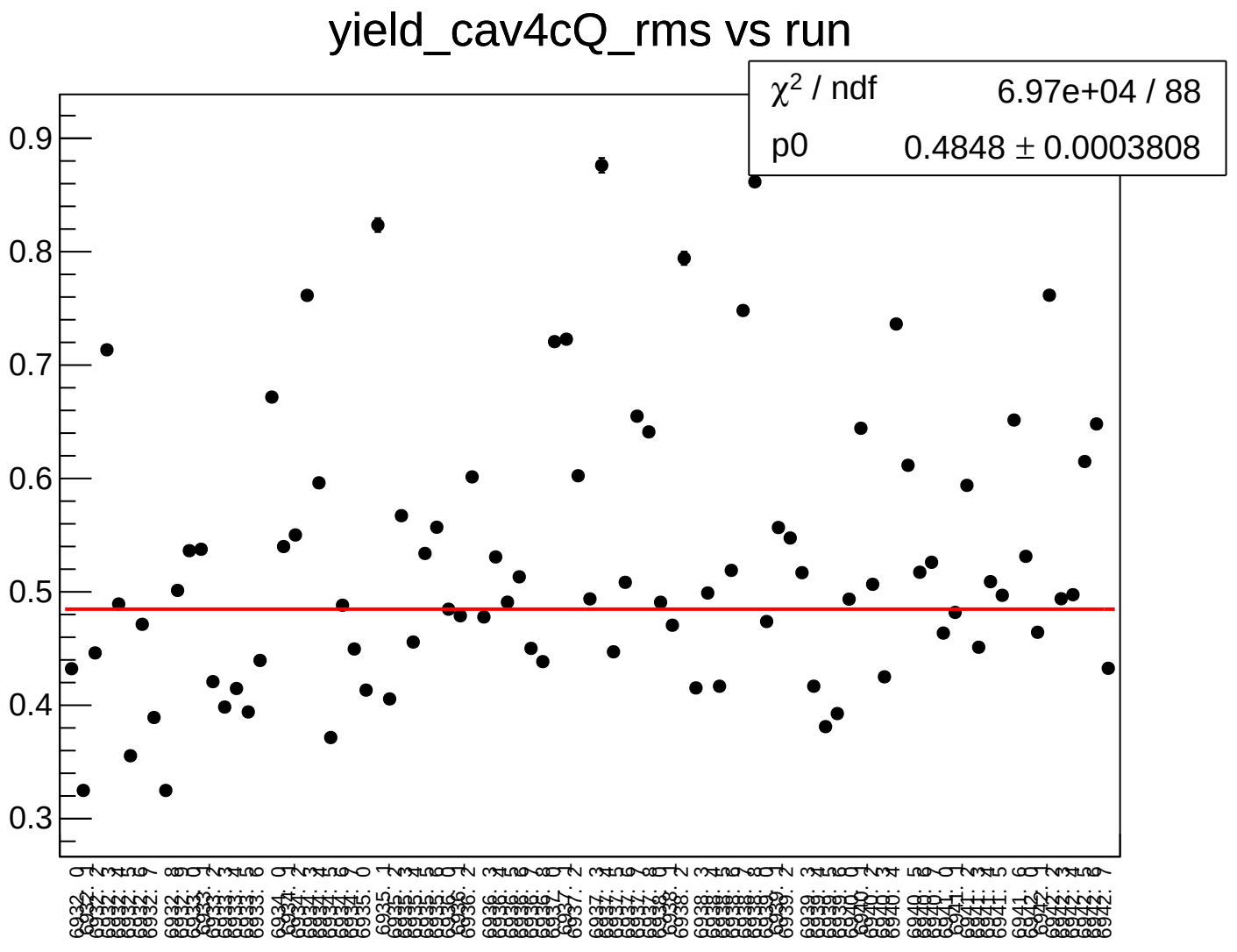

yield_cav4bQ_mean vs run
χ² / ndf 6.713e+06 / 88
p0 145.8 ± 0.000809
151
150
149
148
147
146
145
144
pull
Entries 89
Mean 44.37
Std Dev 29.79
1200
1000
800
600
400
200
0
−200
−400

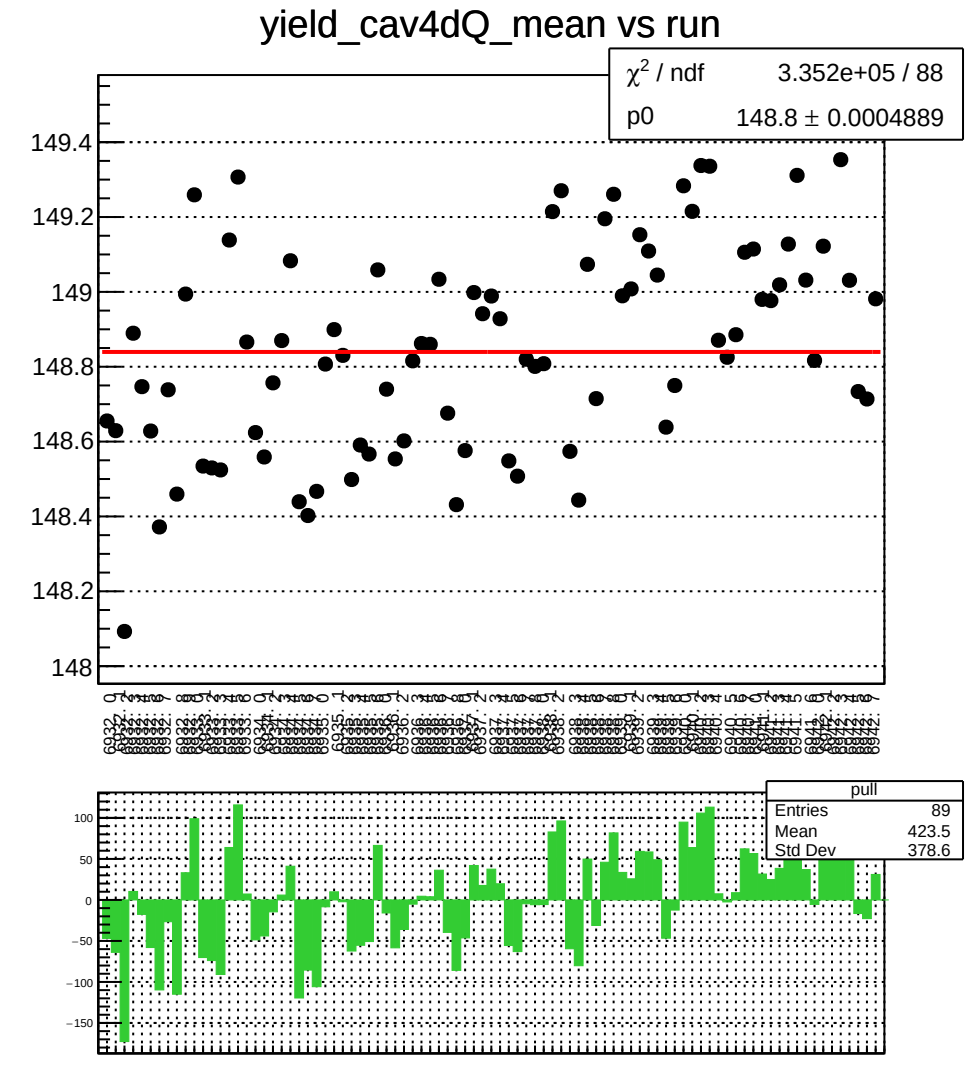

pull1D
Entries 89
Mean 3.442
Std Dev 2.199
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

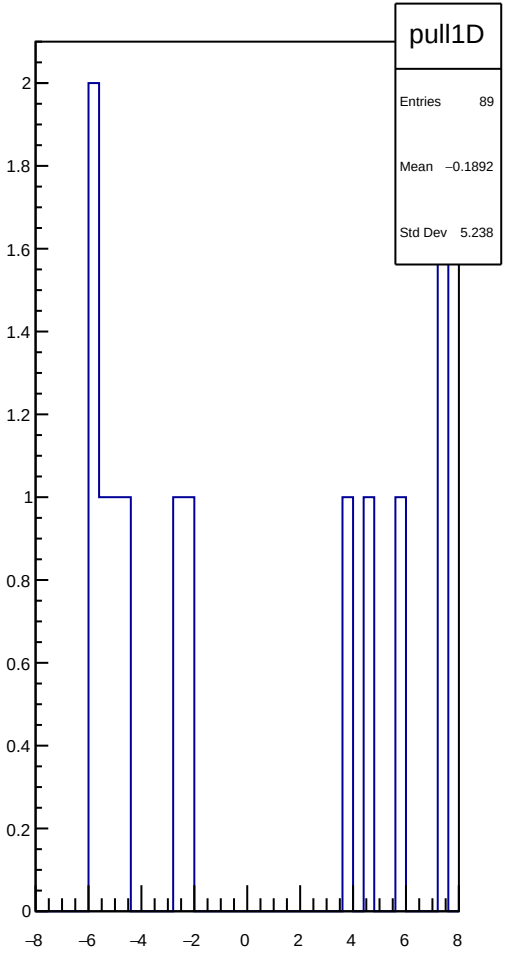

yield_cav4bQ_rms vs run
χ² / ndf 6.411e+05 / 88
p0 0.5858 ± 0.000572
3
2.5
2
1.5
1
0.5

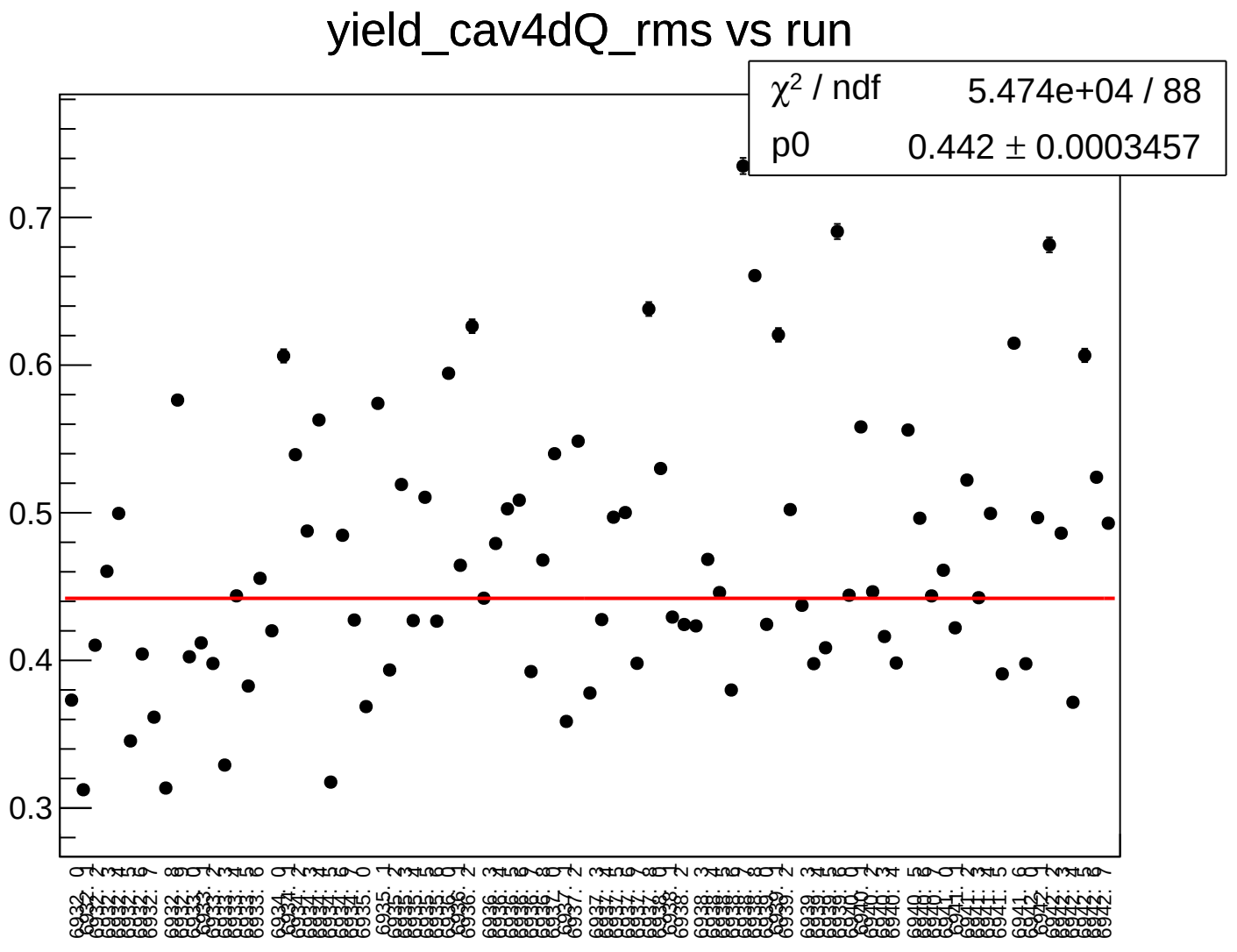

yield_cav4cQ_mean vs run
χ² / ndf 7.252e+05 / 88
p0 148.4 ± 0.0005386
149.5
149
148.5
148
147.5
pull
Entries 89
Mean 272.9
Std Dev 227.7
200
100
0
−100
−200

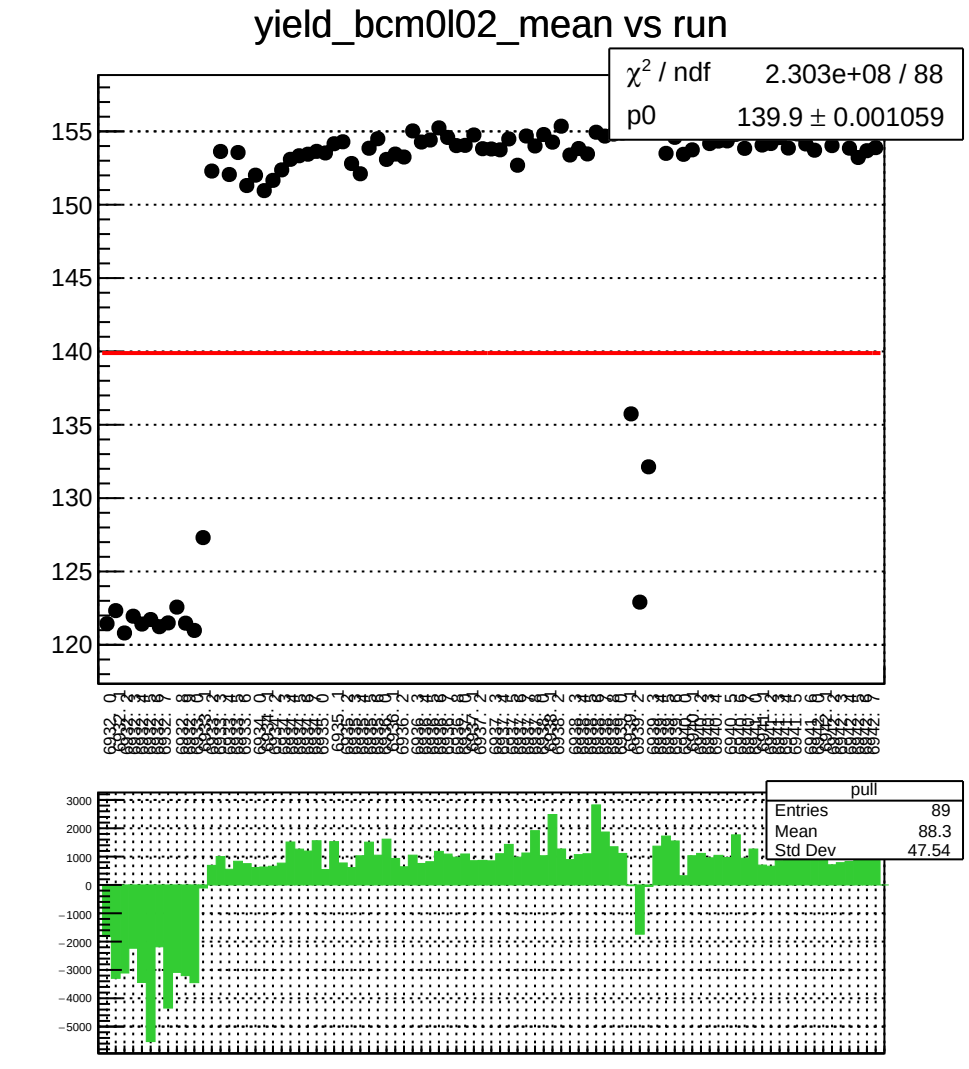

pull1D
Entries 89
Mean 1.551
Std Dev 6.135
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

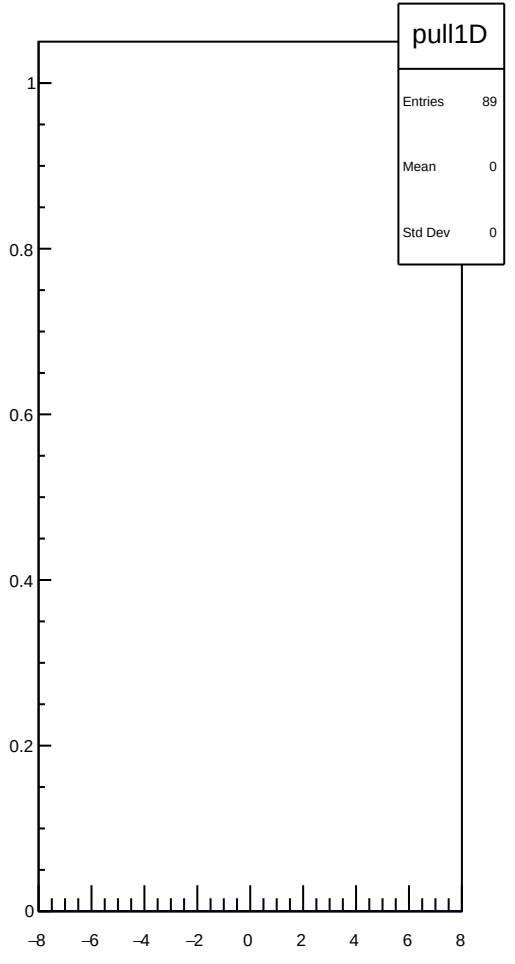

yield_cav4cQ_rms vs run
χ² / ndf 6.97e+04 / 88
p0 0.4848 ± 0.0003808
0.9
0.8
0.7
0.6
0.5
0.4
0.3

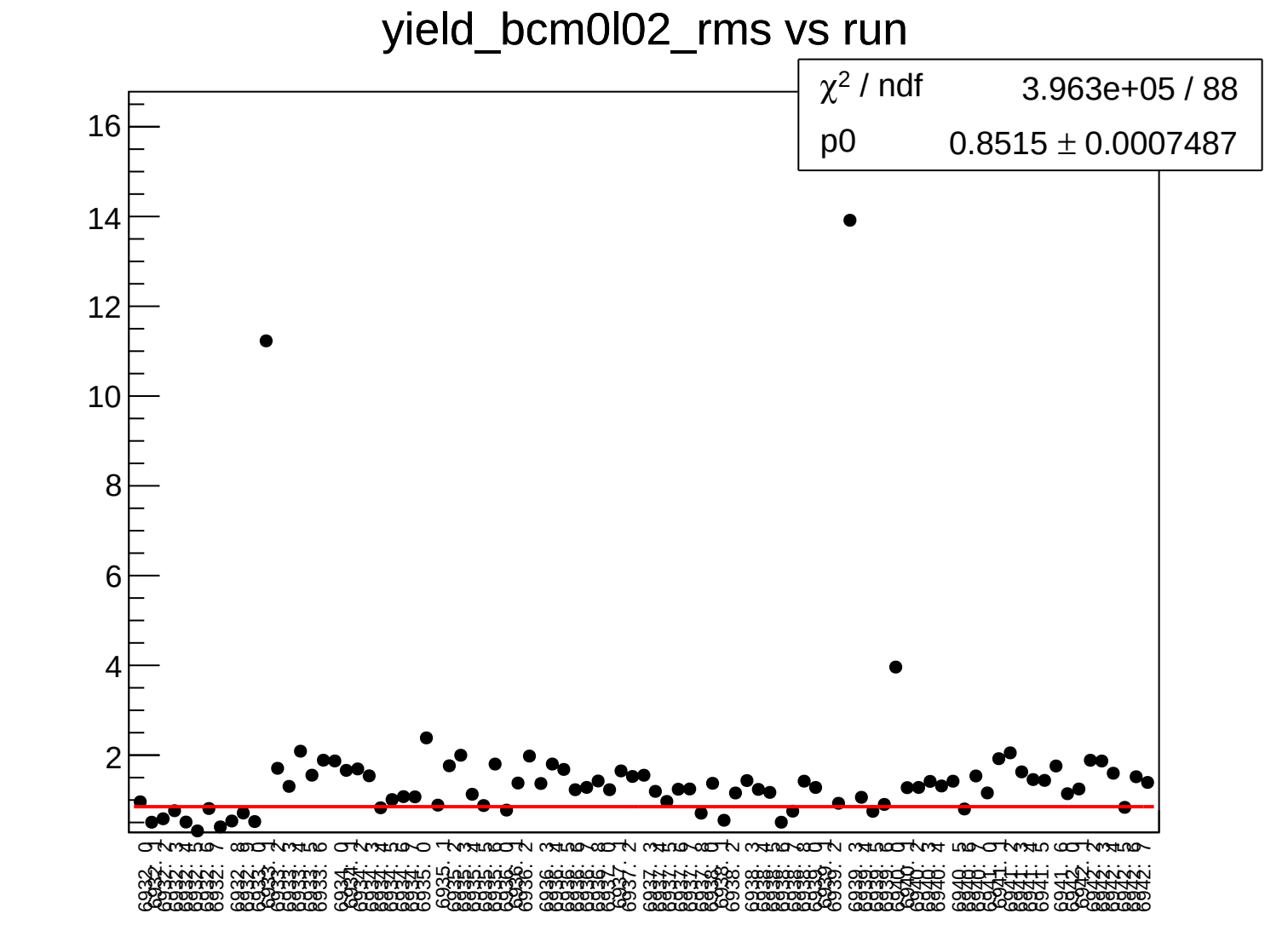

yield_cav4dQ_mean vs run
χ² / ndf 3.352e+05 / 88
p0 148.8 ± 0.0004889
149.4
149.2
149
148.8
148.6
148.4
148.2
148
pull
Entries 89
Mean 423.5
Std Dev 378.6
100
50
0
−50
−100
−150

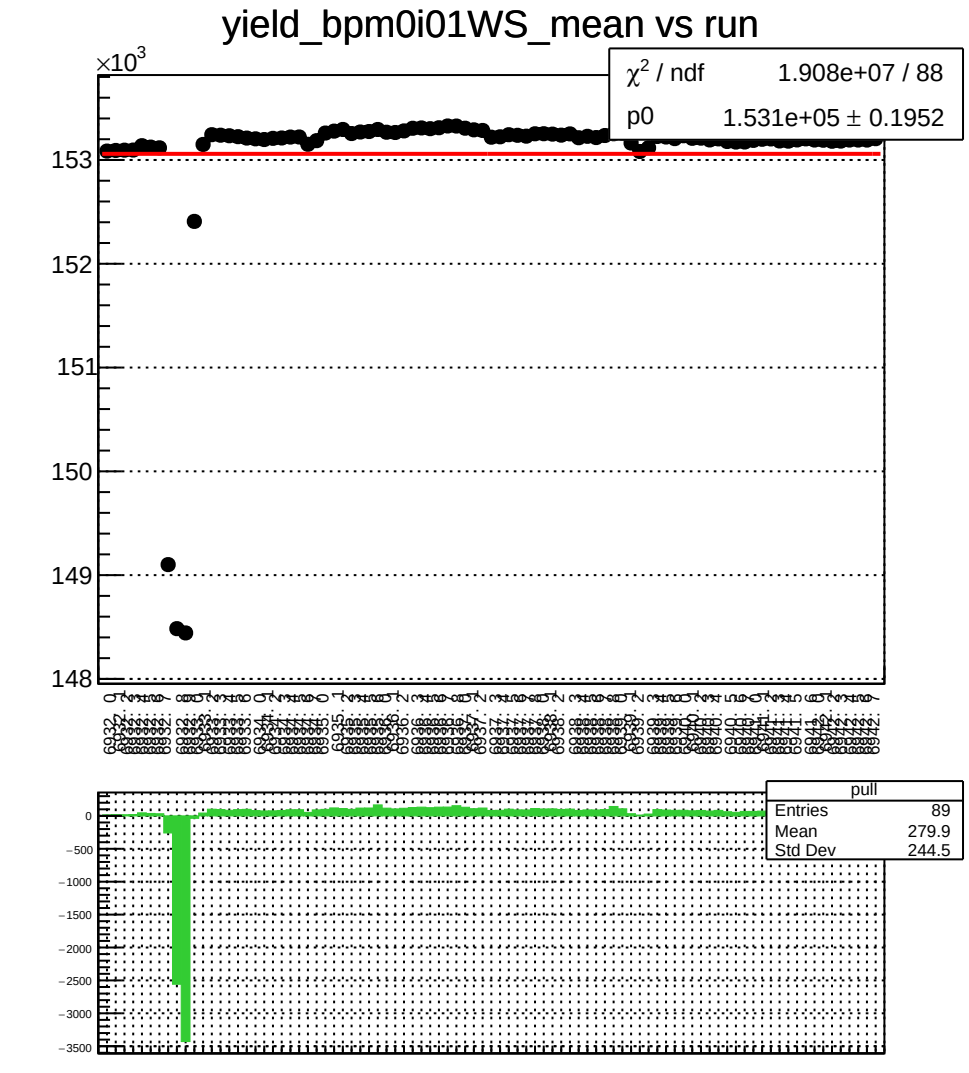

pull1D
Entries 89
Mean −0.1892
Std Dev 5.238
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

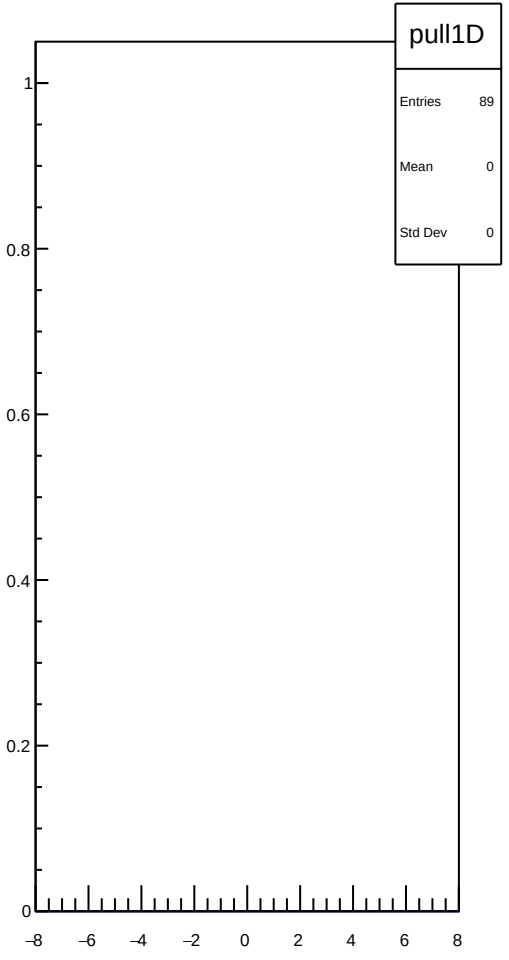

yield_cav4dQ_rms vs run
χ² / ndf 5.474e+04 / 88
p0 0.442 ± 0.0003457
0.7
0.6
0.5
0.4
0.3

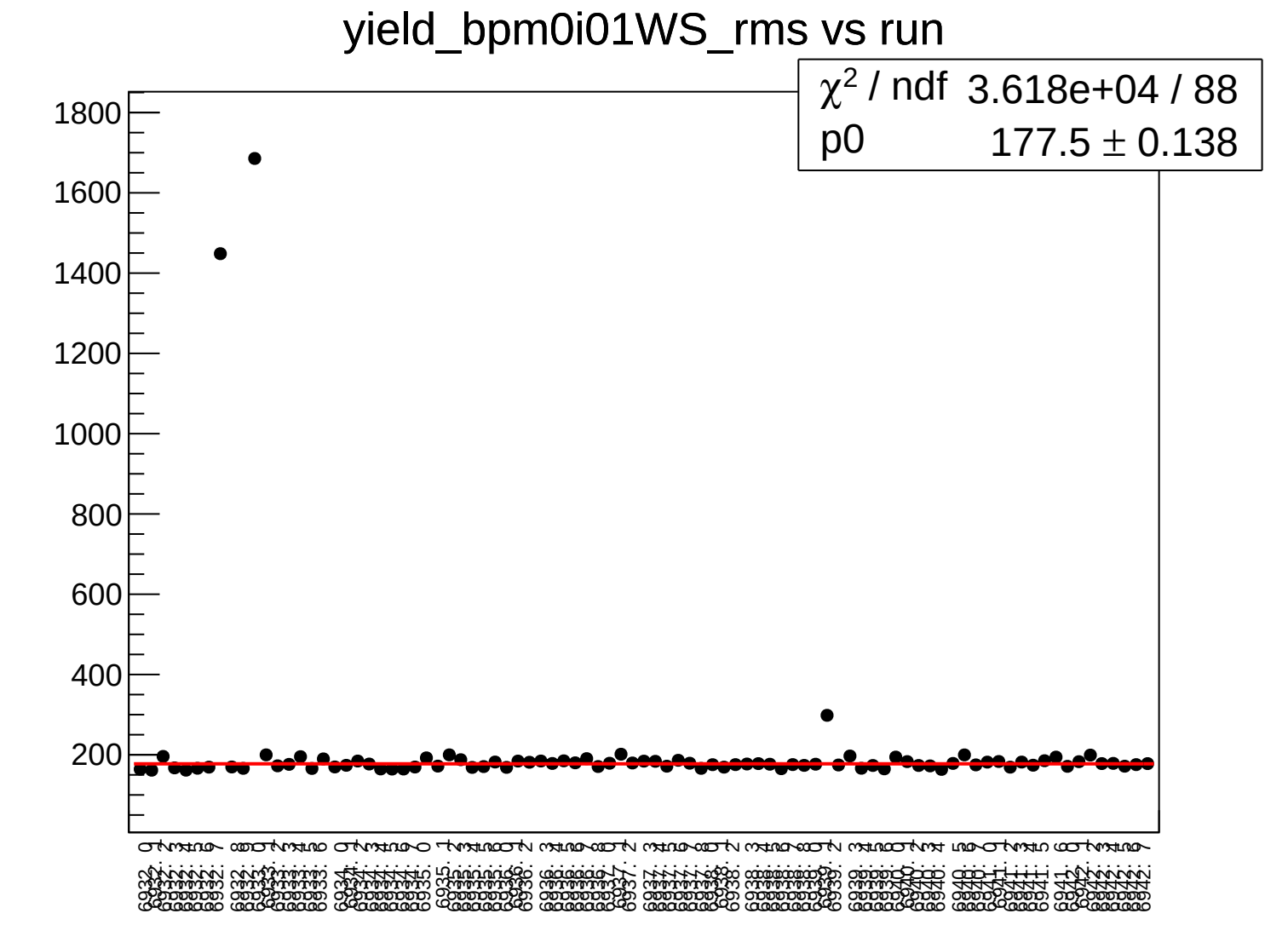

yield_bcm0l02_mean vs run
χ² / ndf 2.303e+08 / 88
p0 139.9 ± 0.001059
155
150
145
140
135
130
125
120
pull
Entries 89
Mean 88.3
Std Dev 47.54
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000

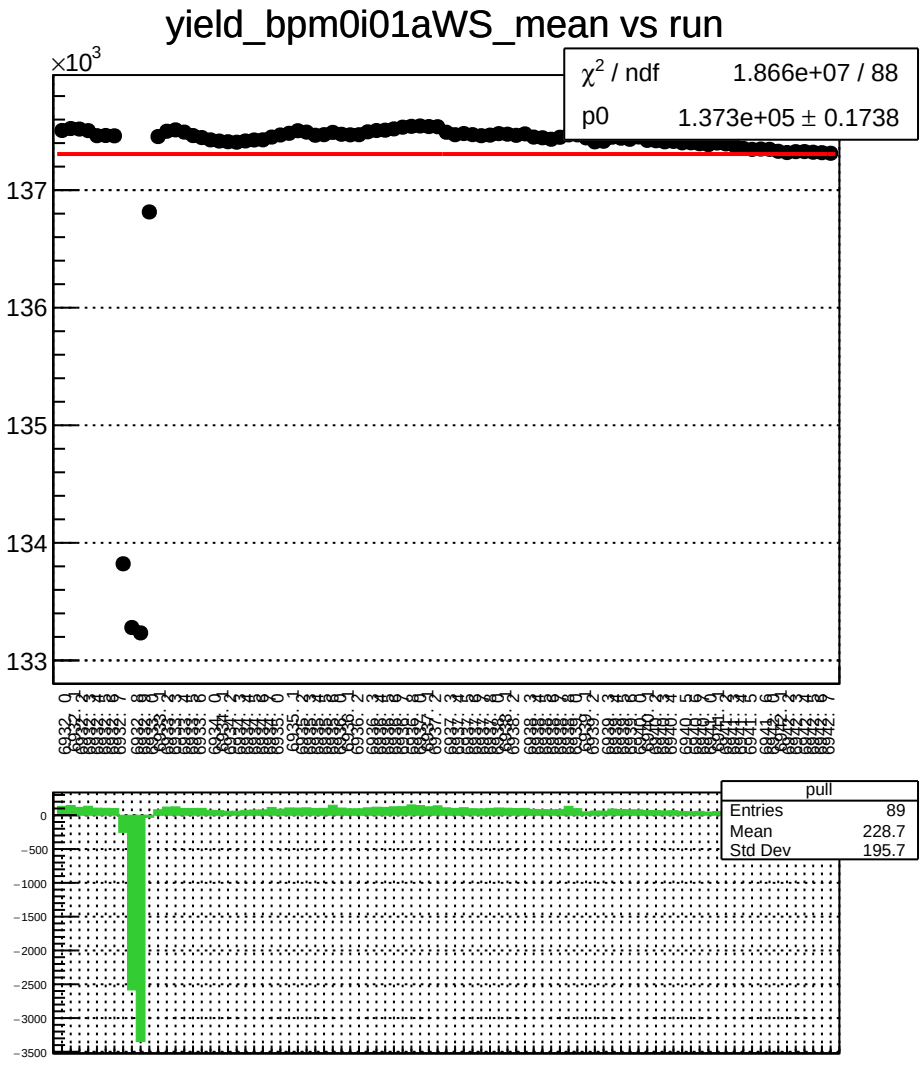

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

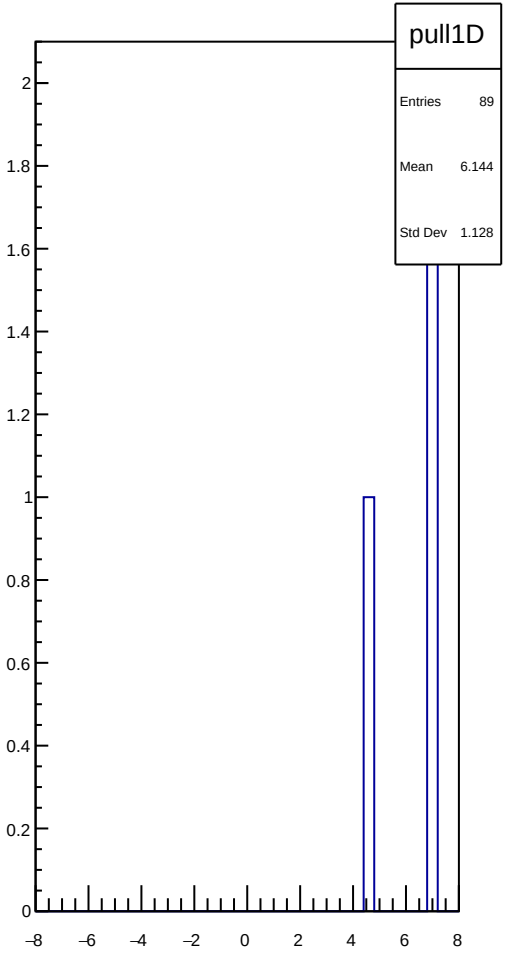

yield_bcm0l02_rms vs run
χ² / ndf 3.963e+05 / 88
p0 0.8515 ± 0.0007487
16
14
12
10
8
6
4
2

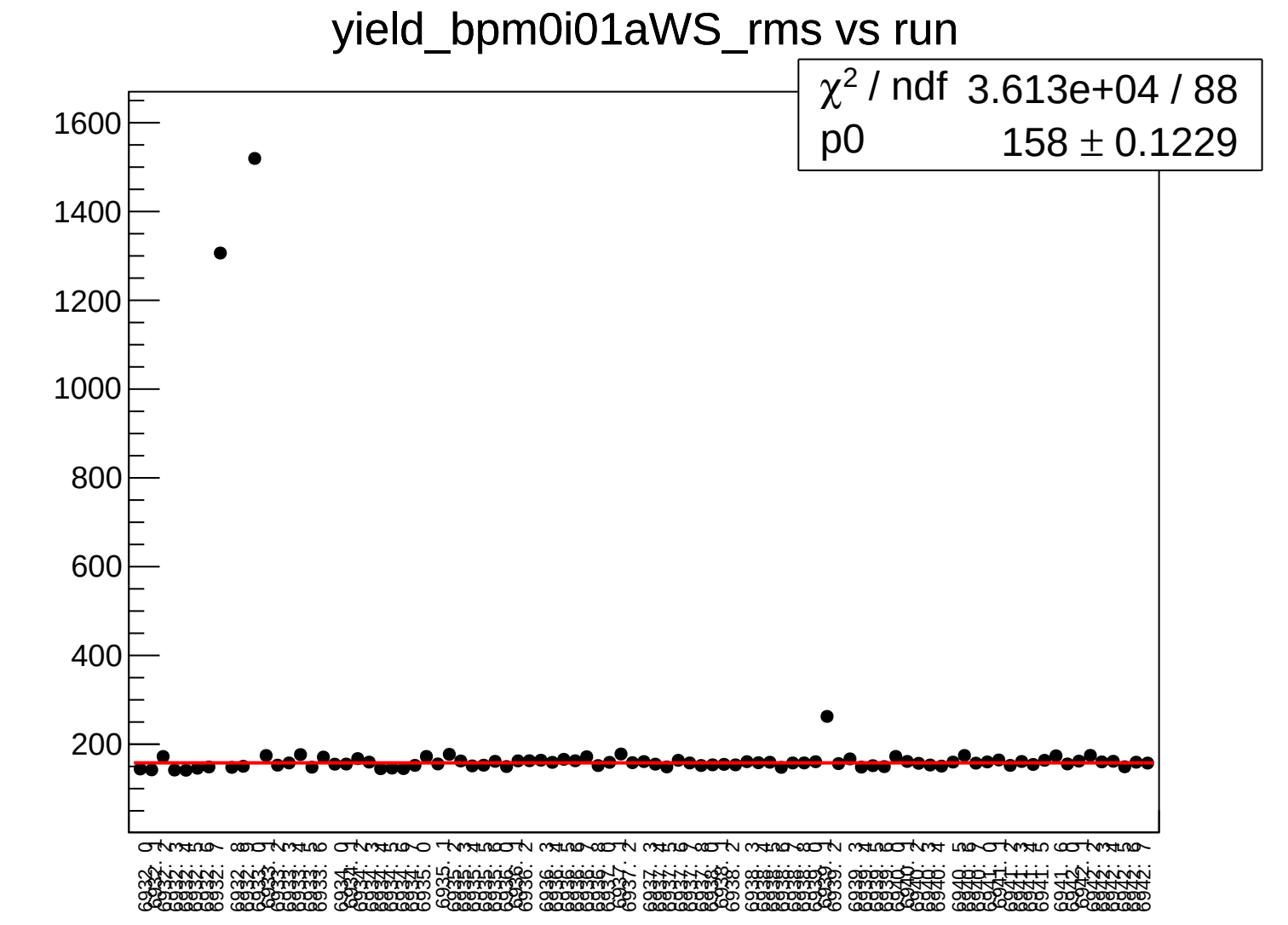

yield_bpm0i01WS_mean vs run
×10^3
χ^2 / ndf 1.908e+07 / 88
p0 1.531e+05 ± 0.1952
153
152
151
150
149
148
pull
Entries 89
Mean 279.9
Std Dev 244.5
0
−500
−1000
−1500
−2000
−2500
−3000
−3500

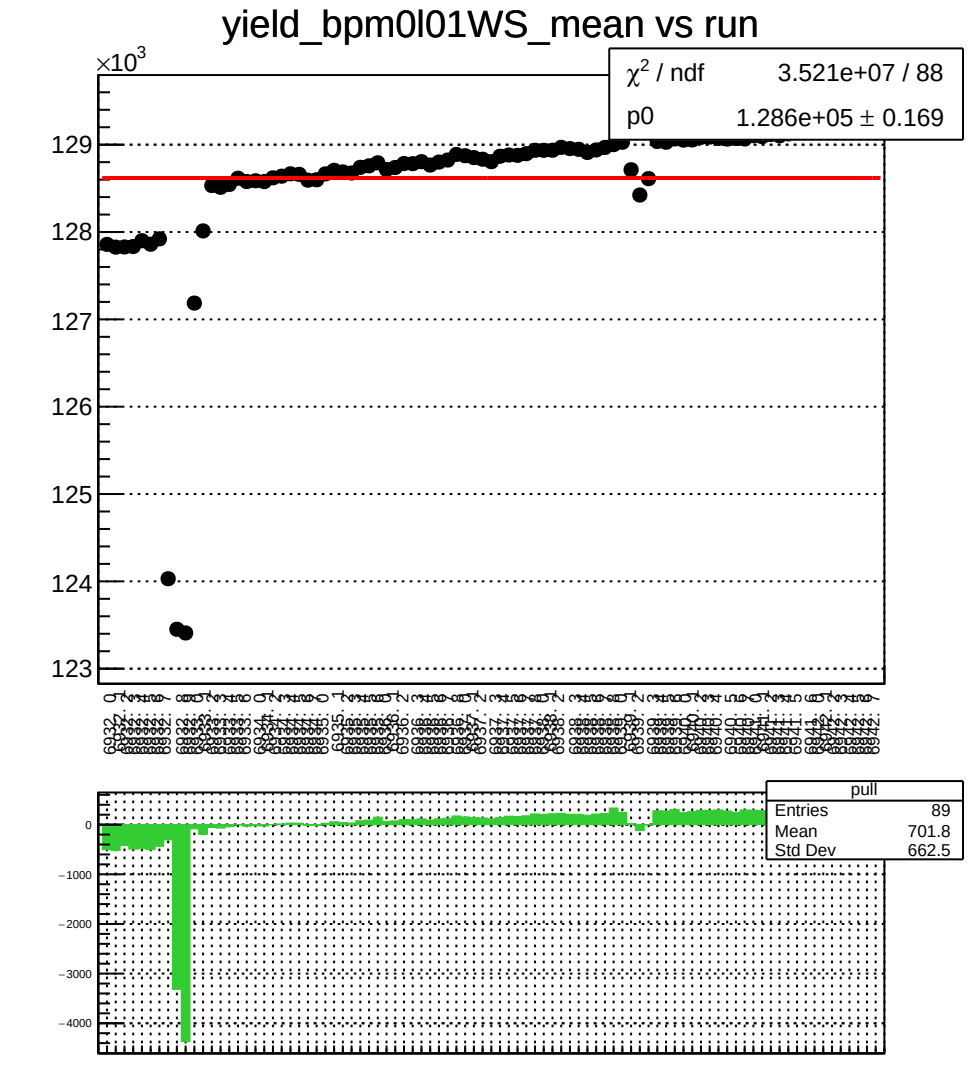

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

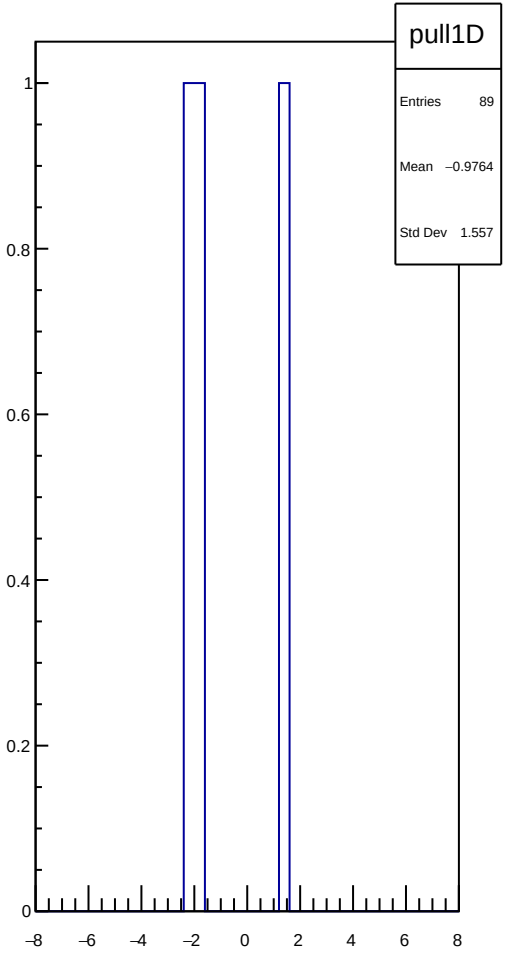

yield_bpm0i01WS_rms vs run
χ^2 / ndf 3.618e+04 / 88
p0 177.5 ± 0.138
1800
1600
1400
1200
1000
800
600
400
200

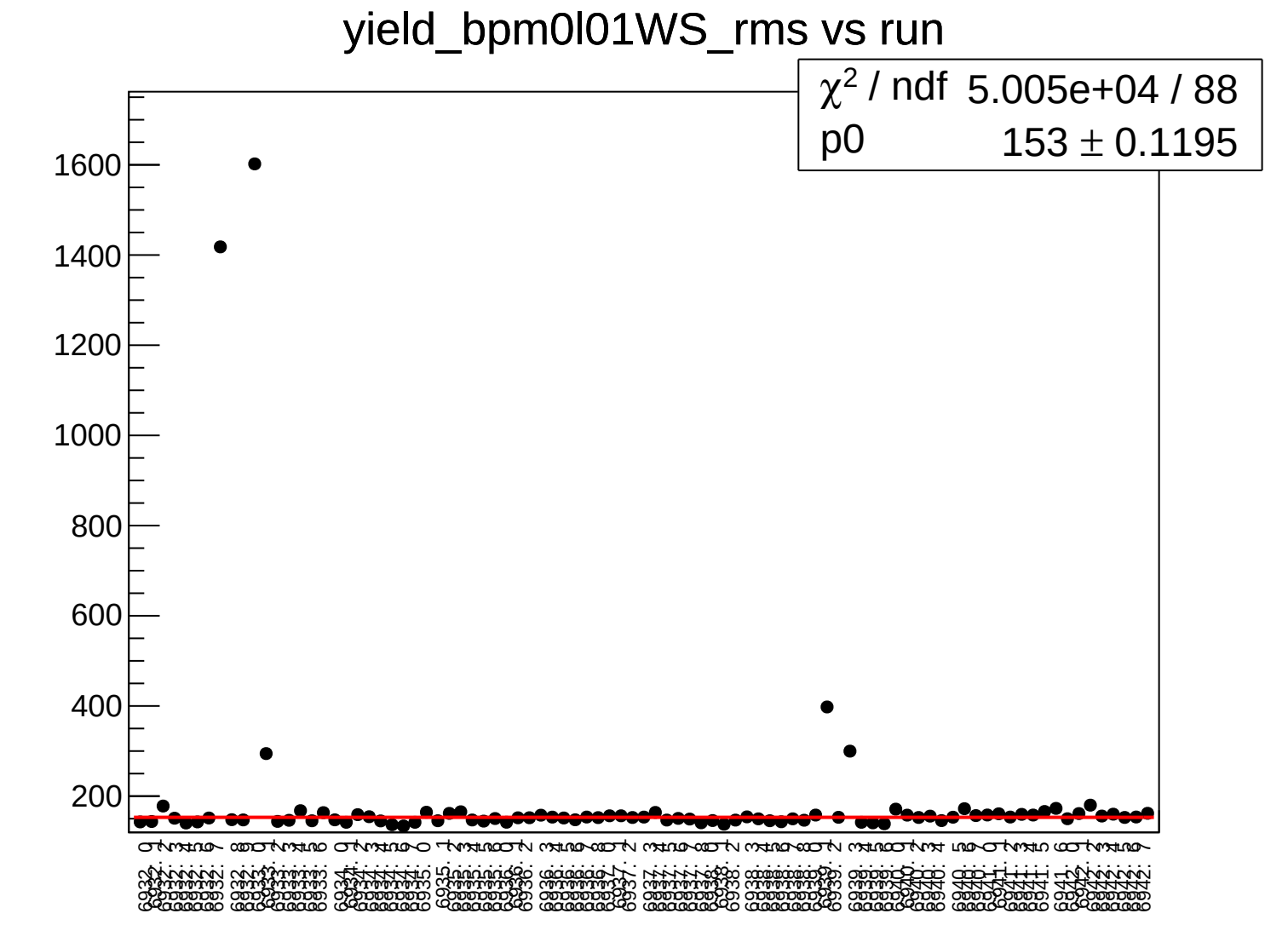

yield_bpm0i01aWS_mean vs run
×10^3
χ^2 / ndf 1.866e+07 / 88
p0 1.373e+05 ± 0.1738
137
136
135
134
133
pull
Entries 89
Mean 228.7
Std Dev 195.7
0
−500
−1000
−1500
−2000
−2500
−3000
−3500

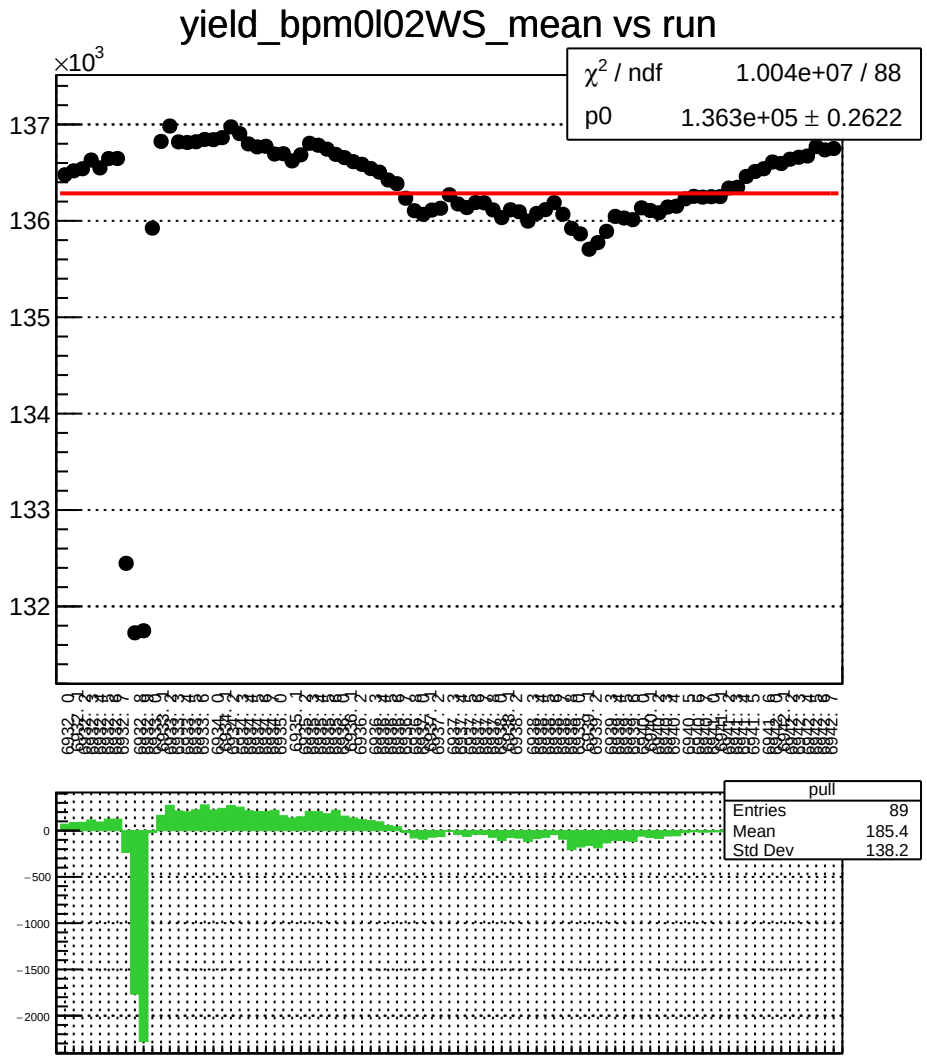

pull1D
Entries 89
Mean 6.144
Std Dev 1.128
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

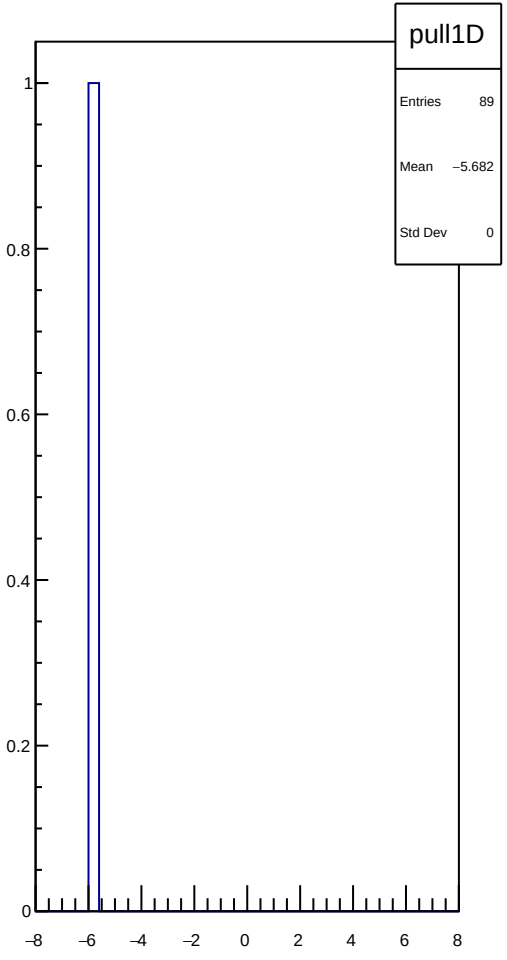

yield_bpm0i01aWS_rms vs run
χ^2 / ndf 3.613e+04 / 88
p0 158 ± 0.1229
1600
1400
1200
1000
800
600
400
200

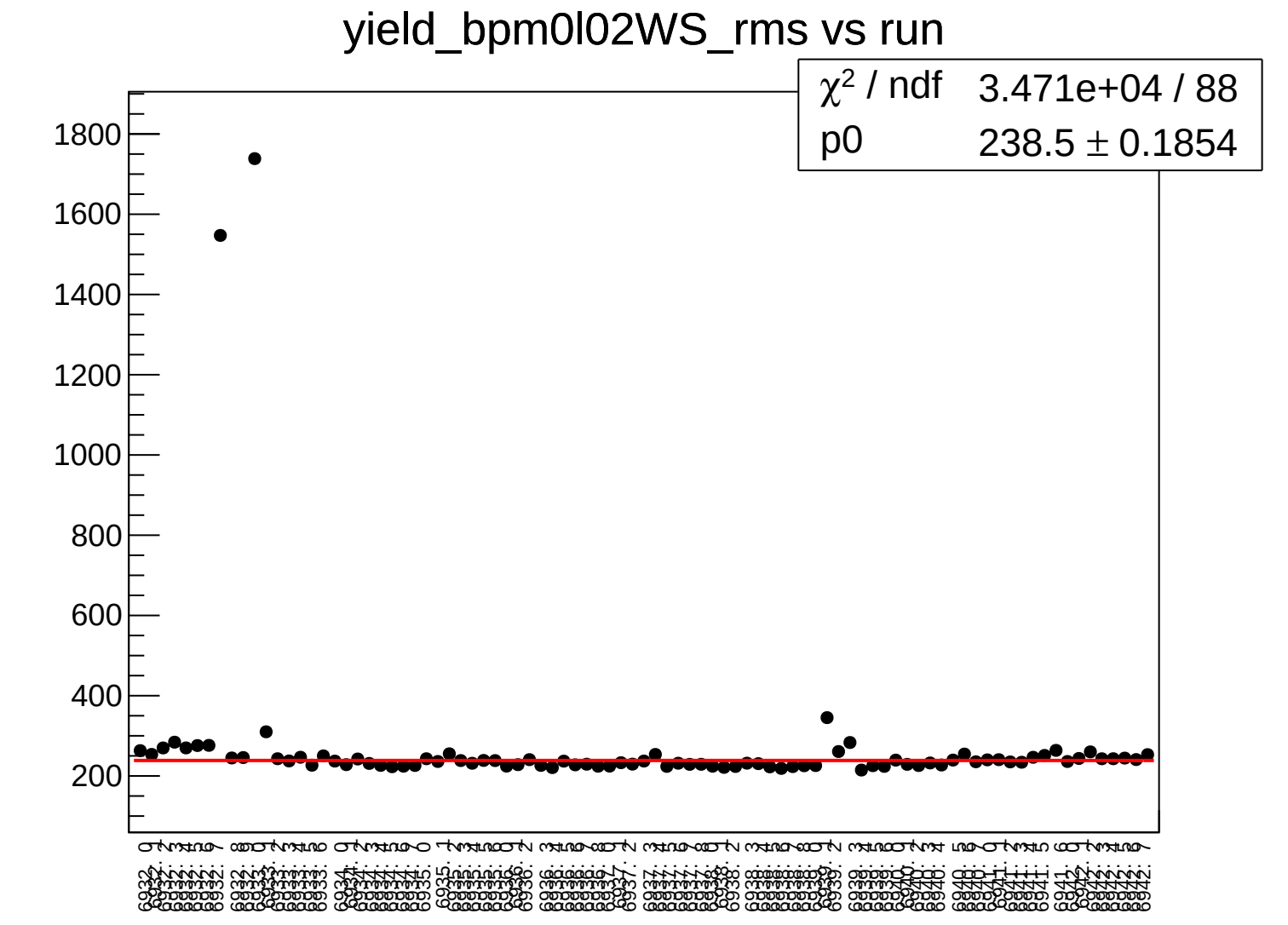

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 3.521e+07 / 88
p0 1.286e+05 ± 0.169
129
128
127
126
125
124
123
pull
Entries 89
Mean 701.8
Std Dev 662.5
0
−1000
−2000
−3000
−4000

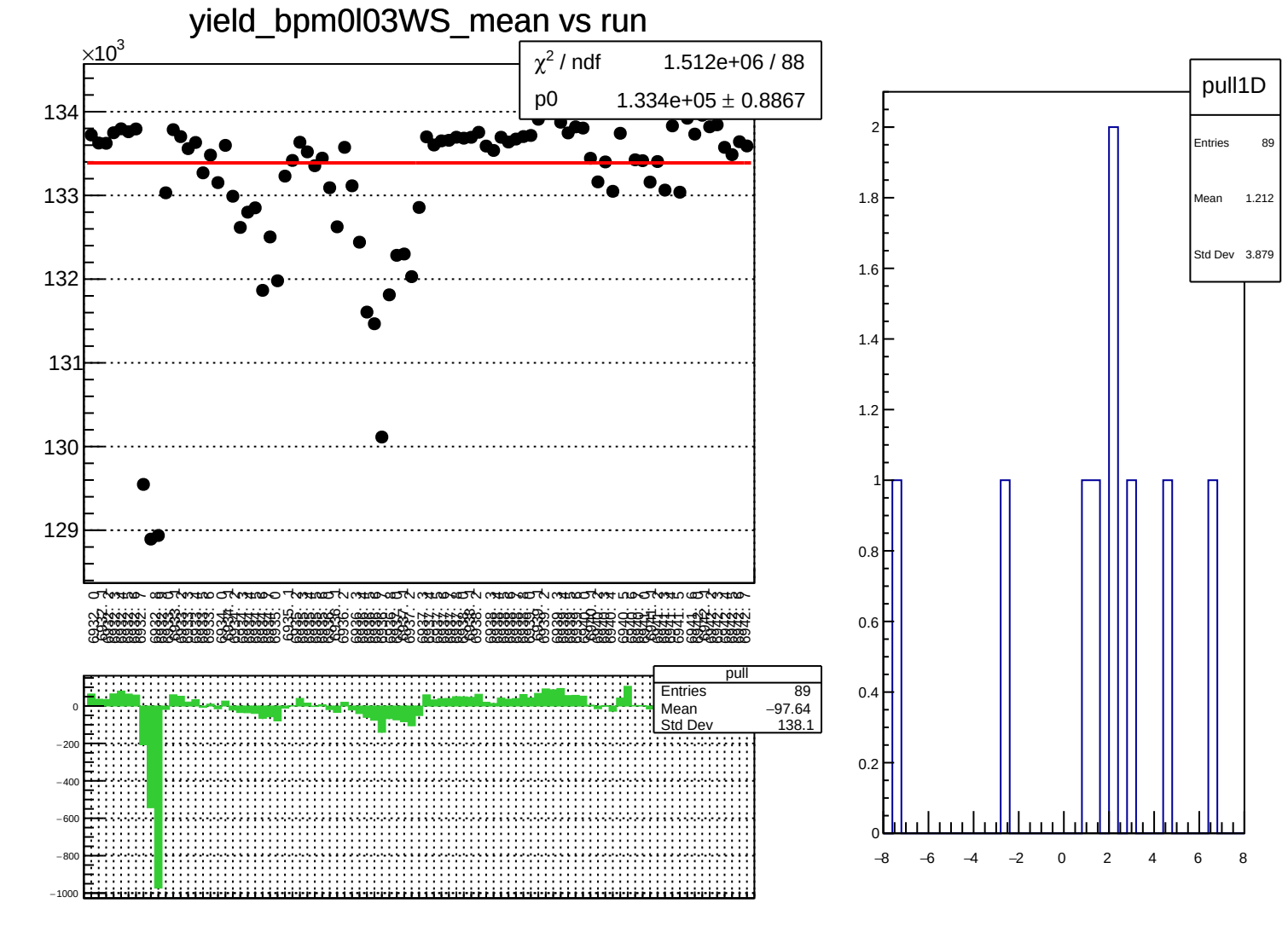

pull1D
Entries 89
Mean −0.9764
Std Dev 1.557
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

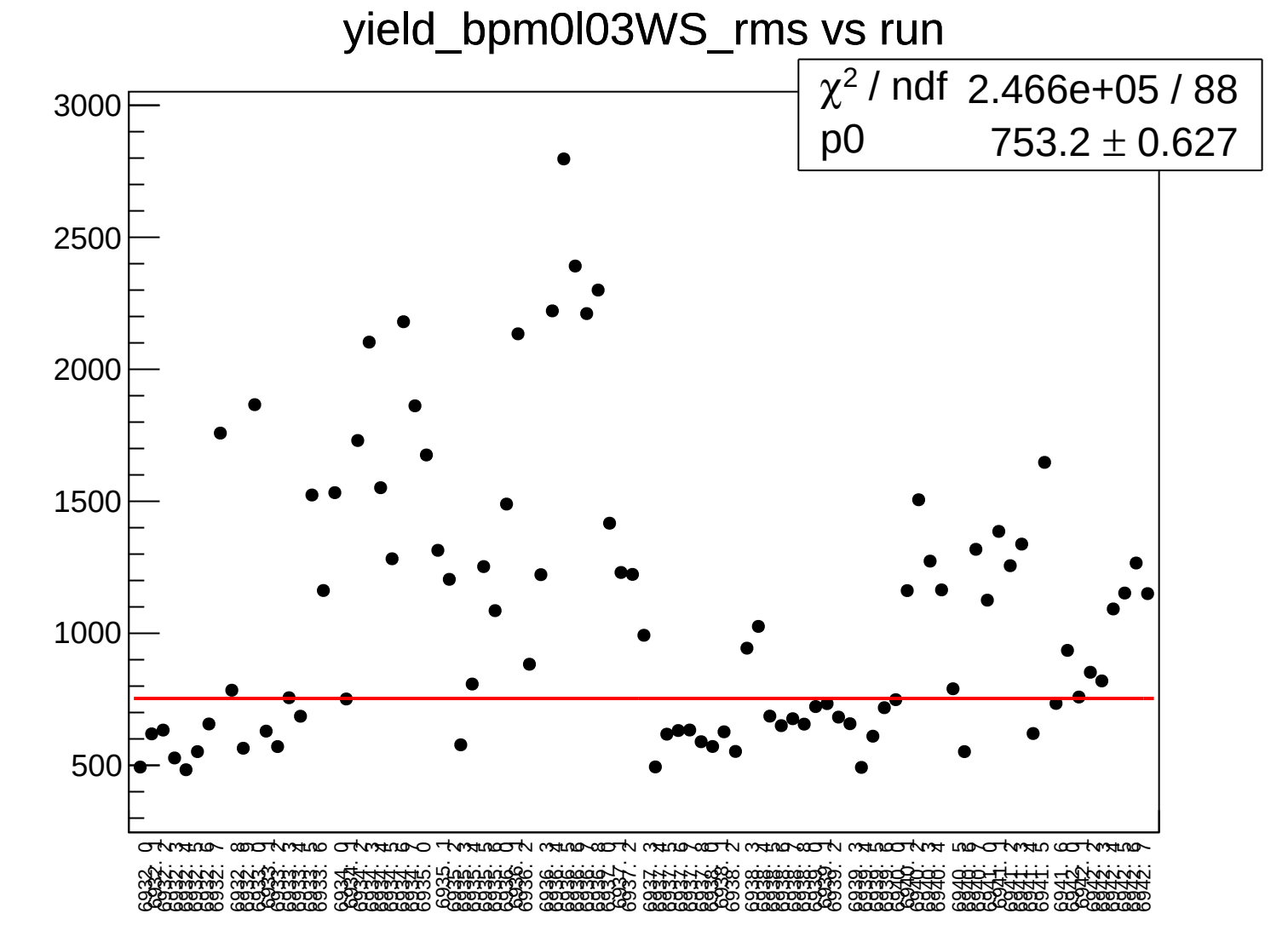

yield_bpm0l01WS_rms vs run
χ² / ndf 5.005e+04 / 88
p0 153 ± 0.1195
1600
1400
1200
1000
800
600
400
200

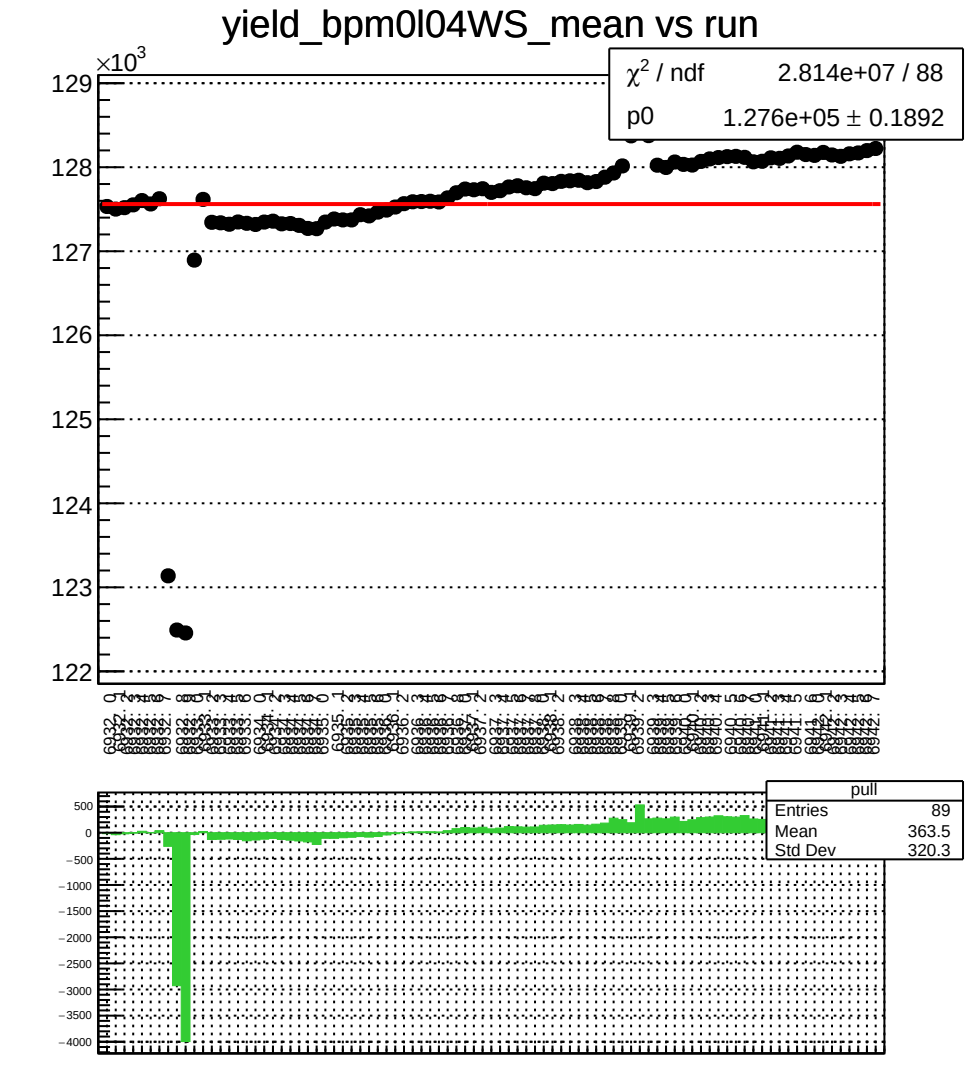

yield_bpm0l02WS_mean vs run
×10^3
χ² / ndf 1.004e+07 / 88
p0 1.363e+05 ± 0.2622
137
136
135
134
133
132
pull
Entries 89
Mean 185.4
Std Dev 138.2
0
−500
−1000
−1500
−2000

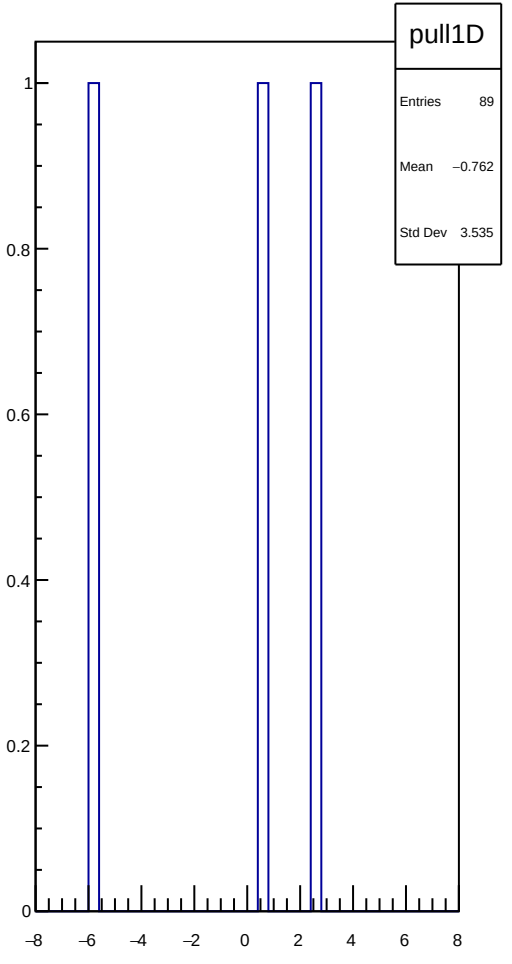

pull1D
Entries 89
Mean −5.682
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

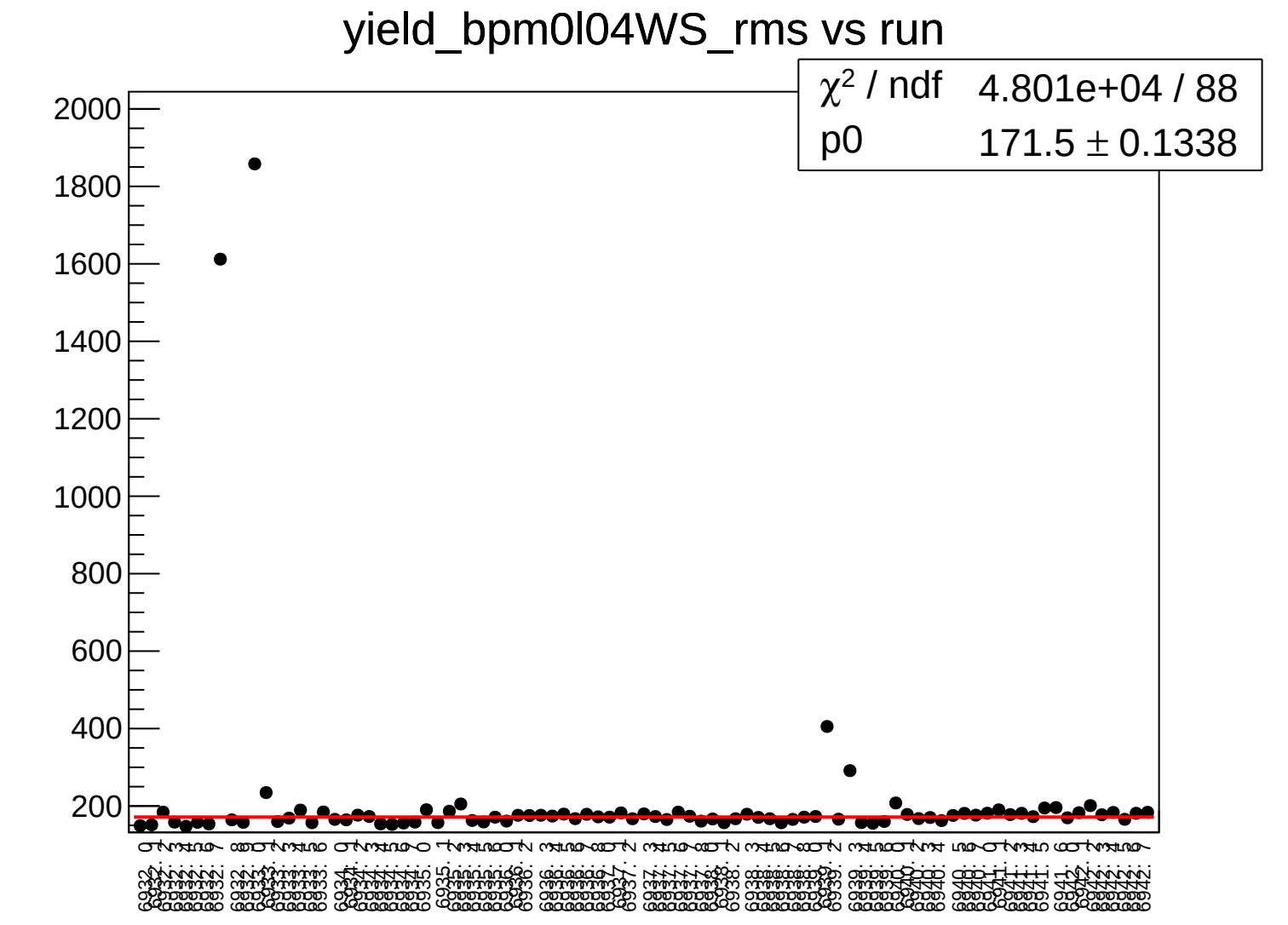

yield_bpm0l02WS_rms vs run
χ² / ndf 3.471e+04 / 88
p0 238.5 ± 0.1854
1800
1600
1400
1200
1000
800
600
400
200

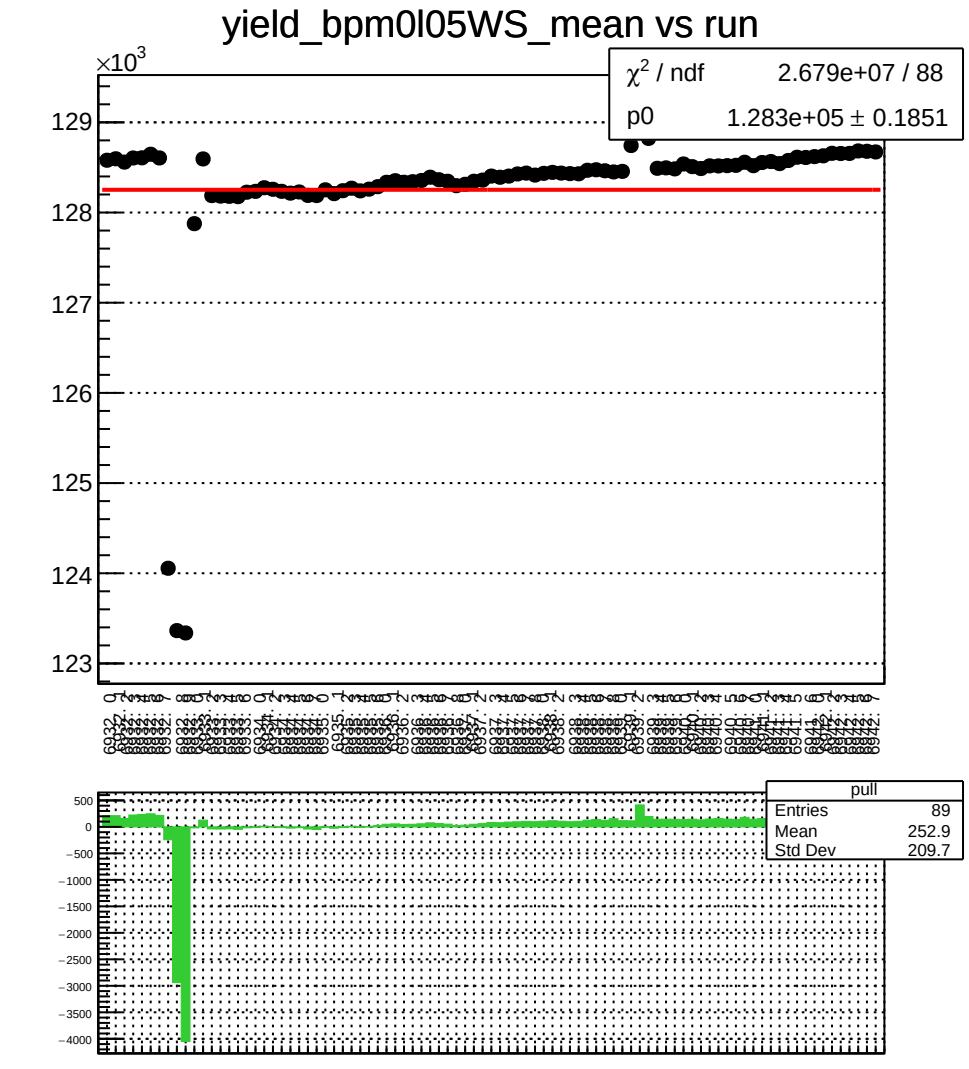

yield_bpm0l03WS_mean vs run
×10^3
χ^2 / ndf 1.512e+06 / 88
p0 1.334e+05 ± 0.8867
134
133
132
131
130
129
pull
Entries 89
Mean −97.64
Std Dev 138.1
0
−200
−400
−600
−800
−1000
pull1D
Entries 89
Mean 1.212
Std Dev 3.879
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

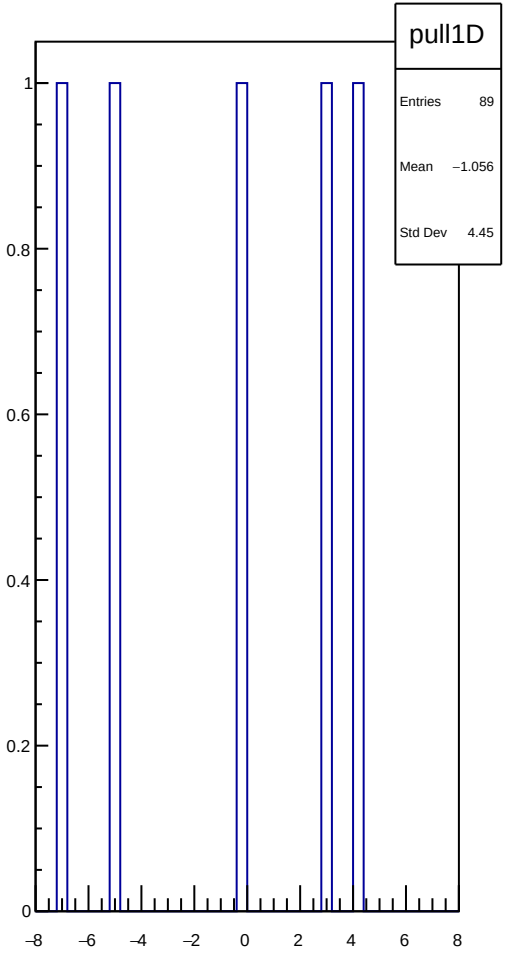

yield_bpm0l03WS_rms vs run
χ² / ndf 2.466e+05 / 88
p0 753.2 ± 0.627
3000
2500
2000
1500
1000
500

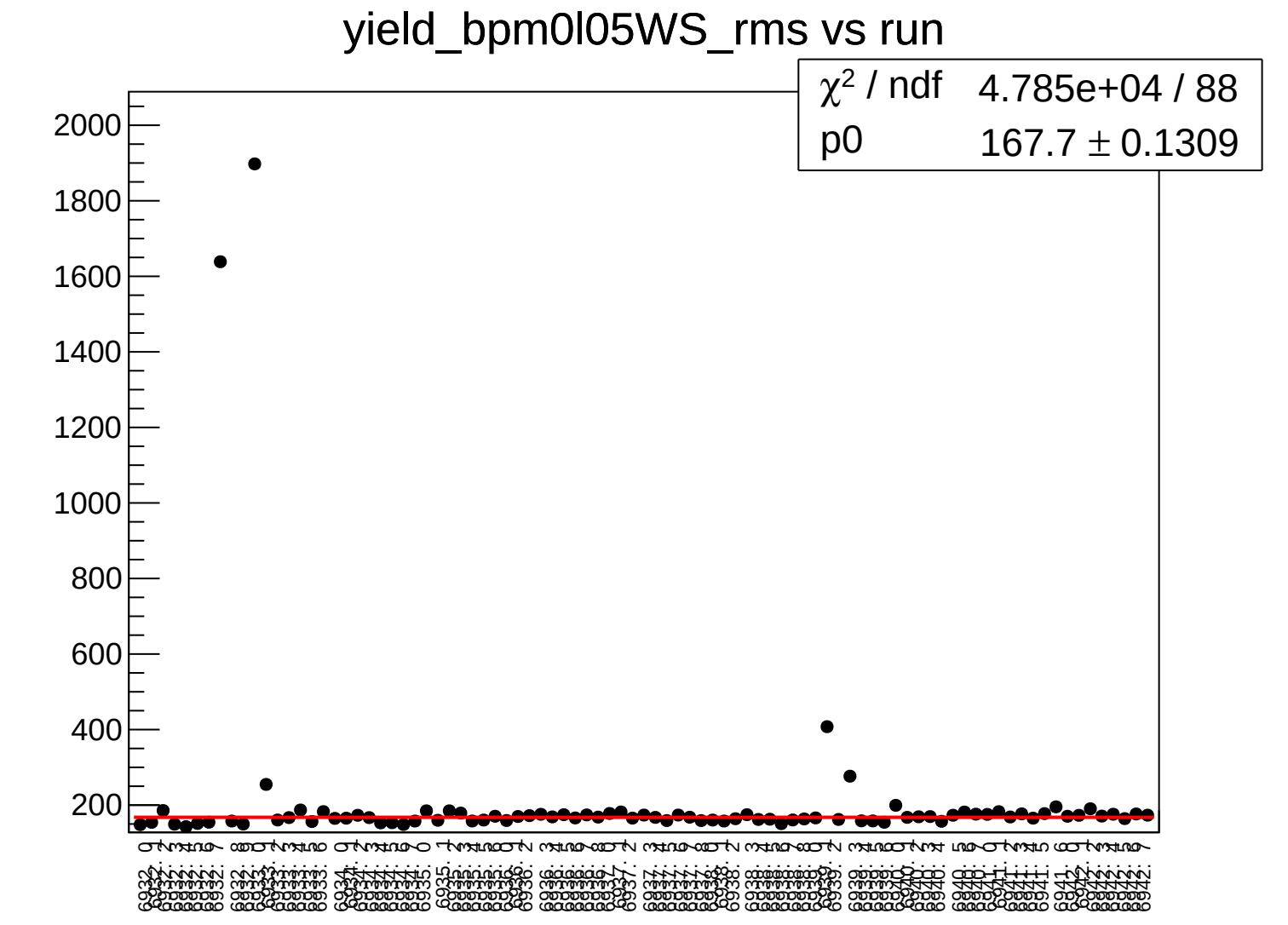

yield_bpm0l04WS_mean vs run
×10^3
χ² / ndf 2.814e+07 / 88
p0 1.276e+05 ± 0.1892
129
128
127
126
125
124
123
122
pull
Entries 89
Mean 363.5
Std Dev 320.3
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000

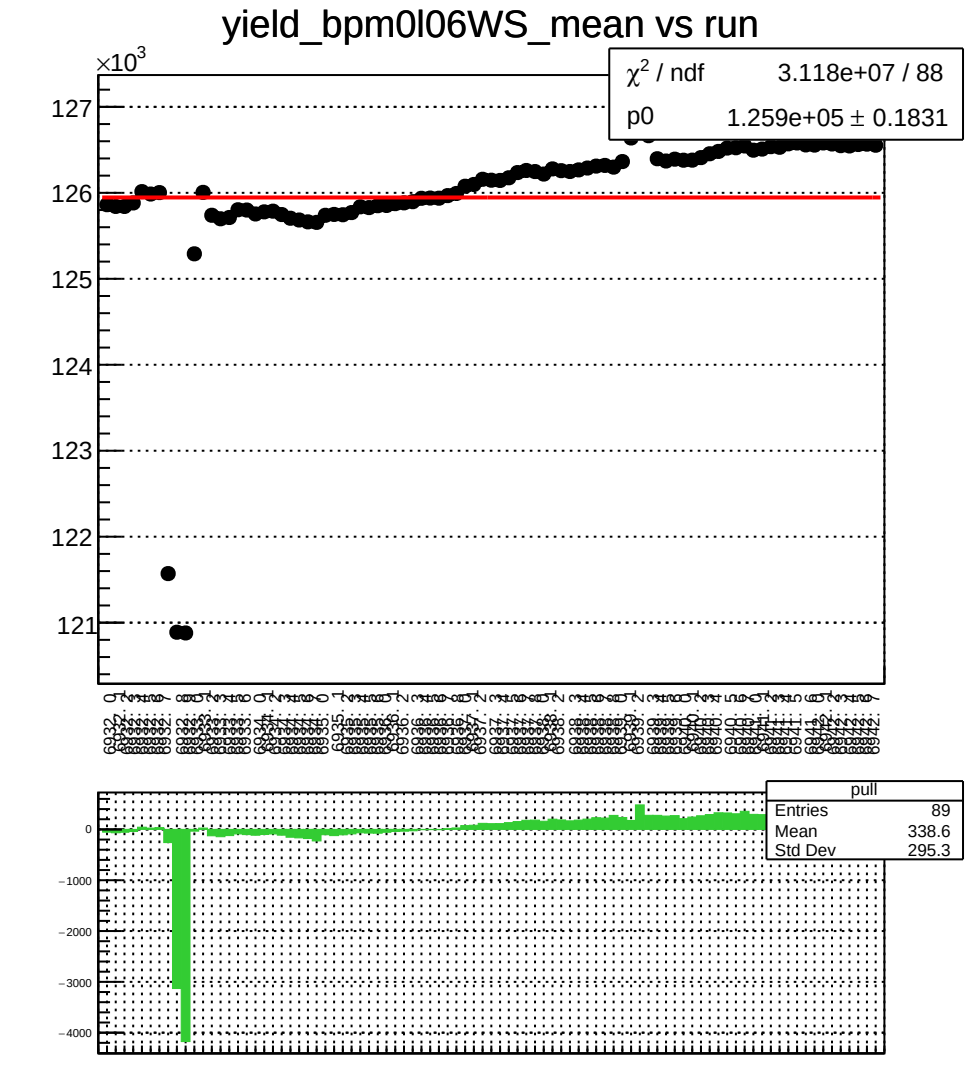

pull1D
Entries 89
Mean −0.762
Std Dev 3.535
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

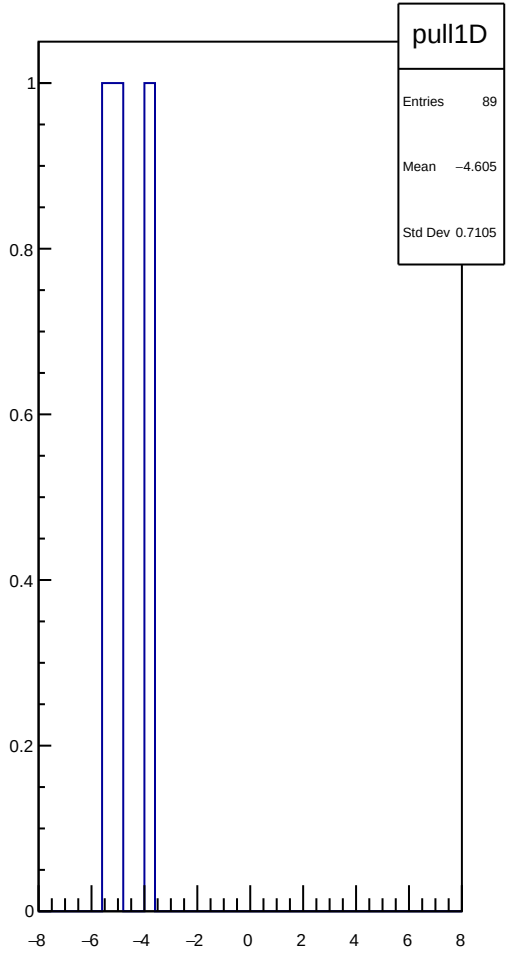

yield_bpm0l04WS_rms vs run
χ² / ndf 4.801e+04 / 88
p0 171.5 ± 0.1338
2000
1800
1600
1400
1200
1000
800
600
400
200

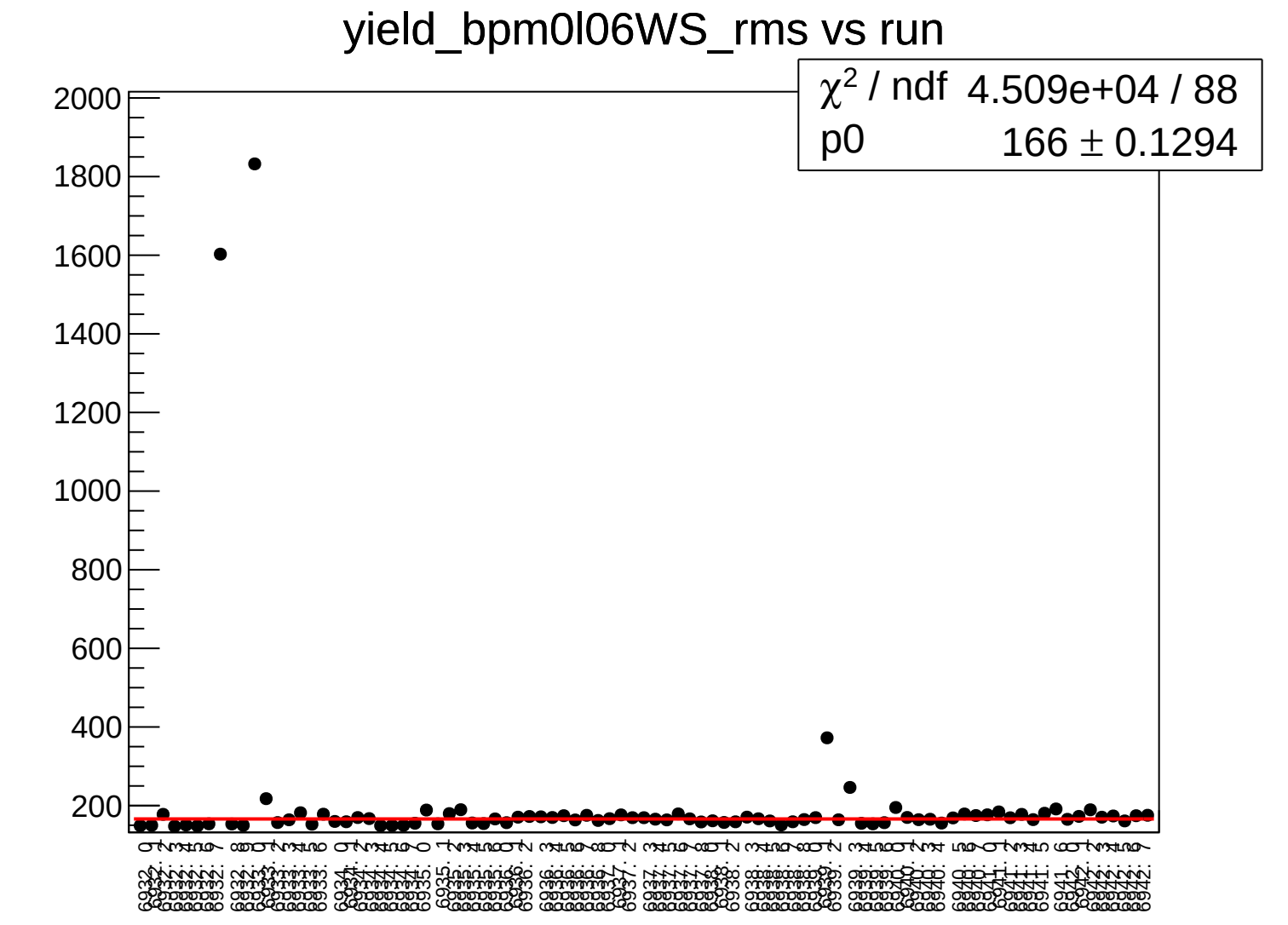

yield_bpm0l05WS_mean vs run
×10^3
χ² / ndf 2.679e+07 / 88
p0 1.283e+05 ± 0.1851
129
128
127
126
125
124
123
pull
Entries 89
Mean 252.9
Std Dev 209.7
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000

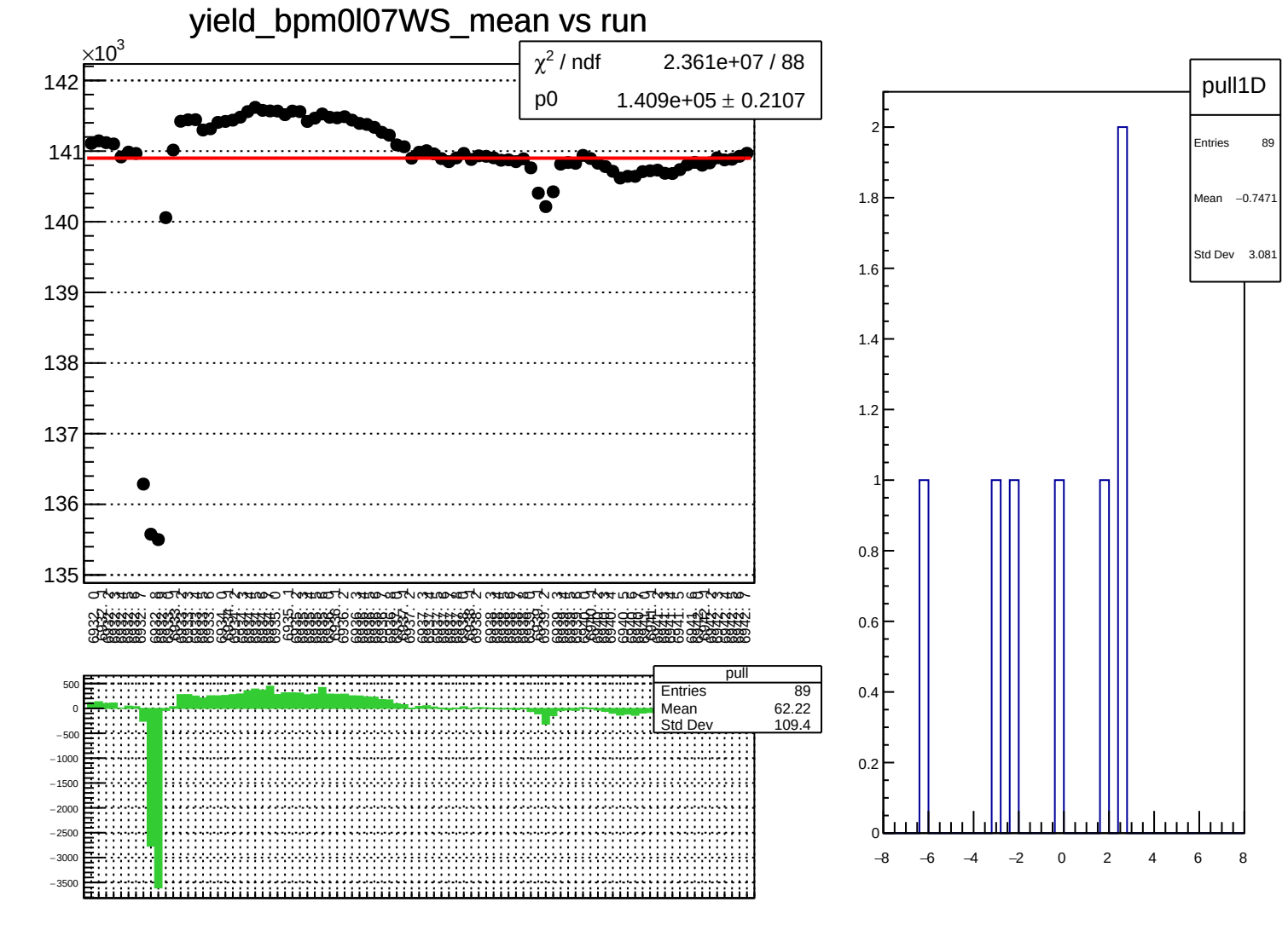

pull1D
Entries 89
Mean −1.056
Std Dev 4.45
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

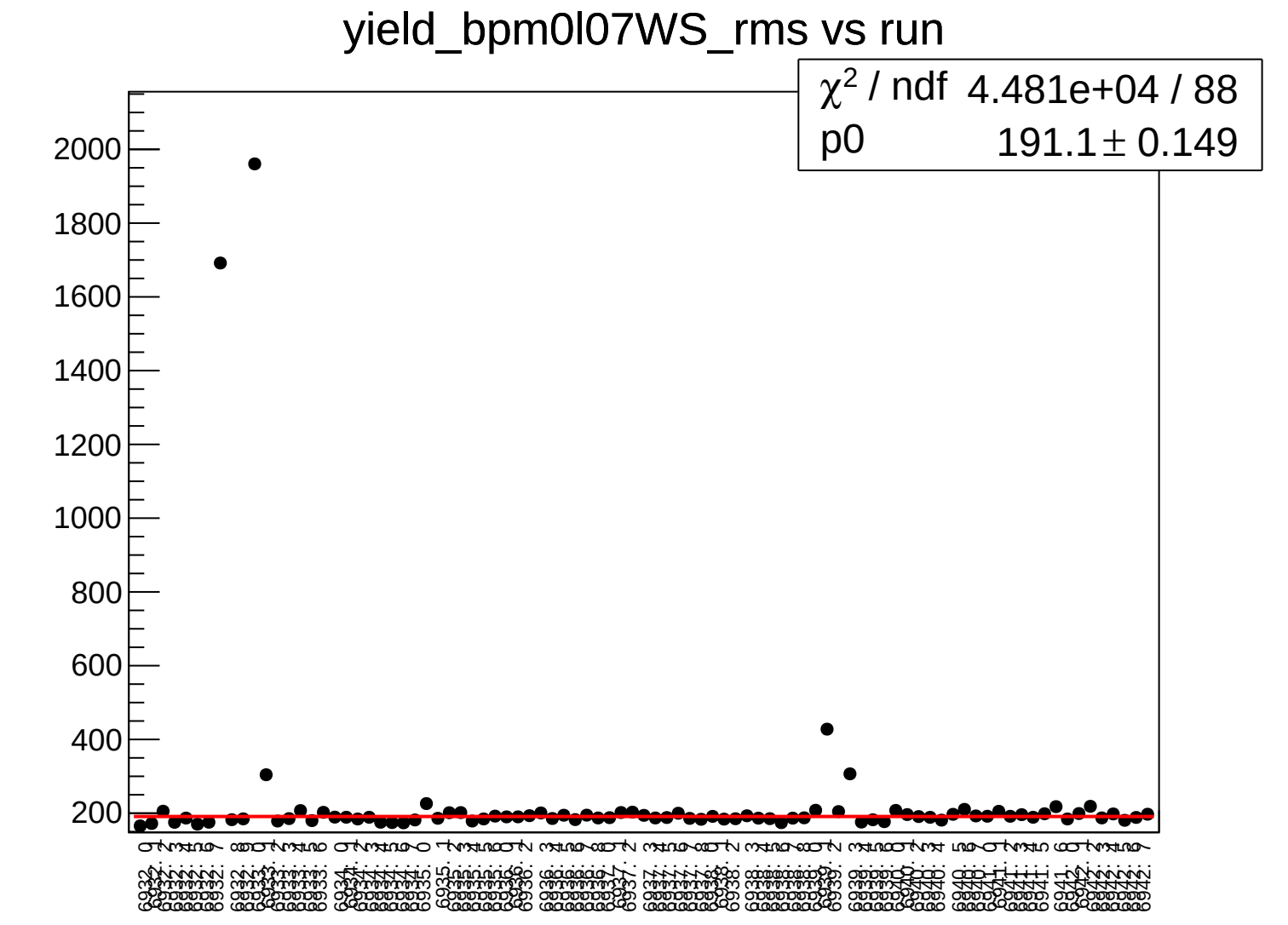

yield_bpm0l05WS_rms vs run
χ² / ndf 4.785e+04 / 88
p0 167.7 ± 0.1309
2000
1800
1600
1400
1200
1000
800
600
400
200

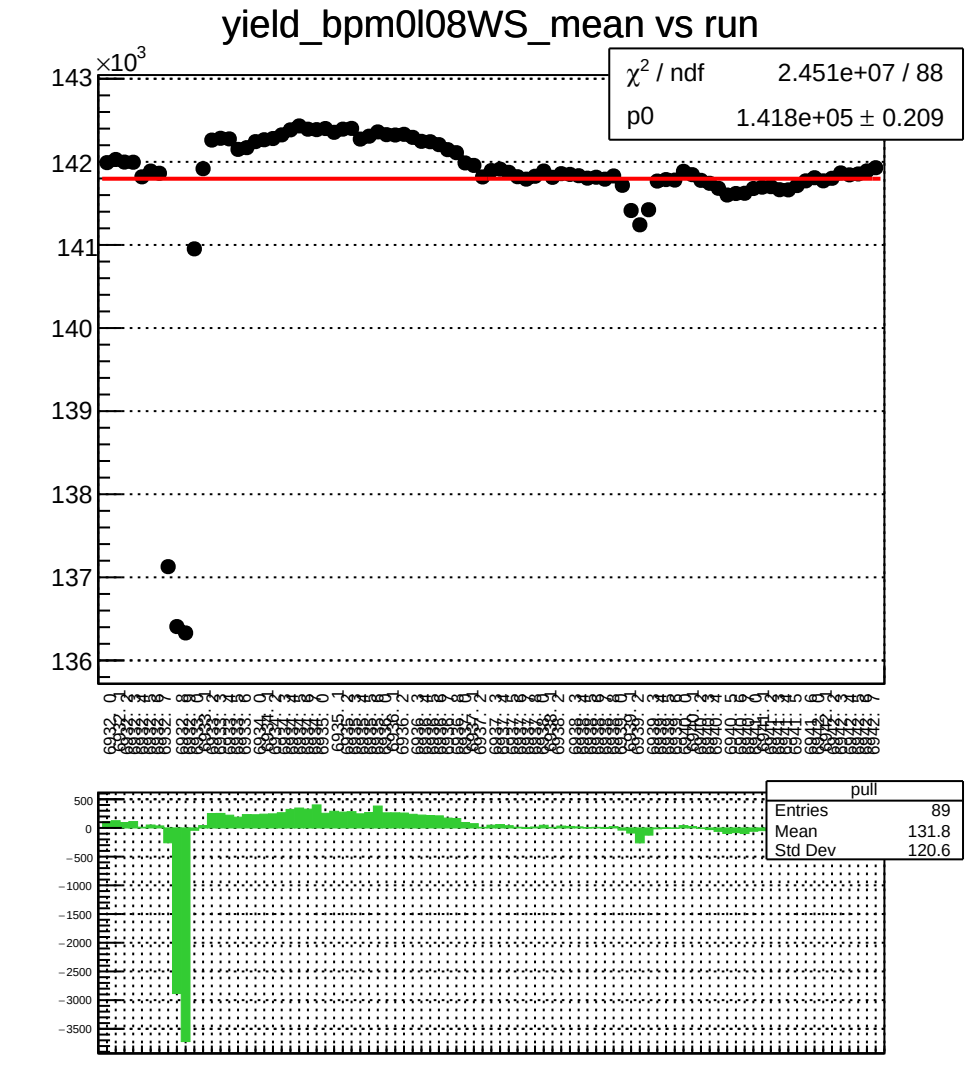

yield_bpm0l06WS_mean vs run
×10^3
χ² / ndf 3.118e+07 / 88
p0 1.259e+05 ± 0.1831
127
126
125
124
123
122
121
pull
Entries 89
Mean 338.6
Std Dev 295.3
0
−1000
−2000
−3000
−4000

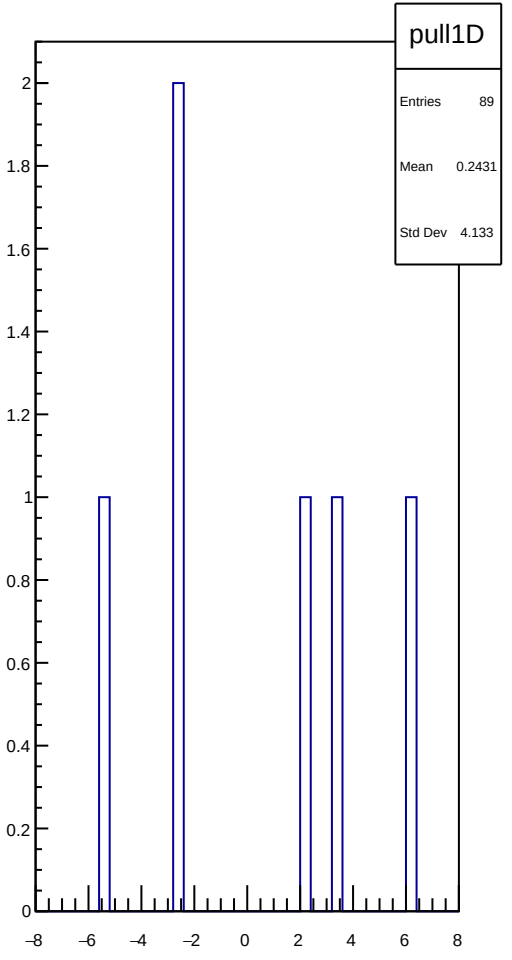

pull1D
Entries 89
Mean −4.605
Std Dev 0.7105
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

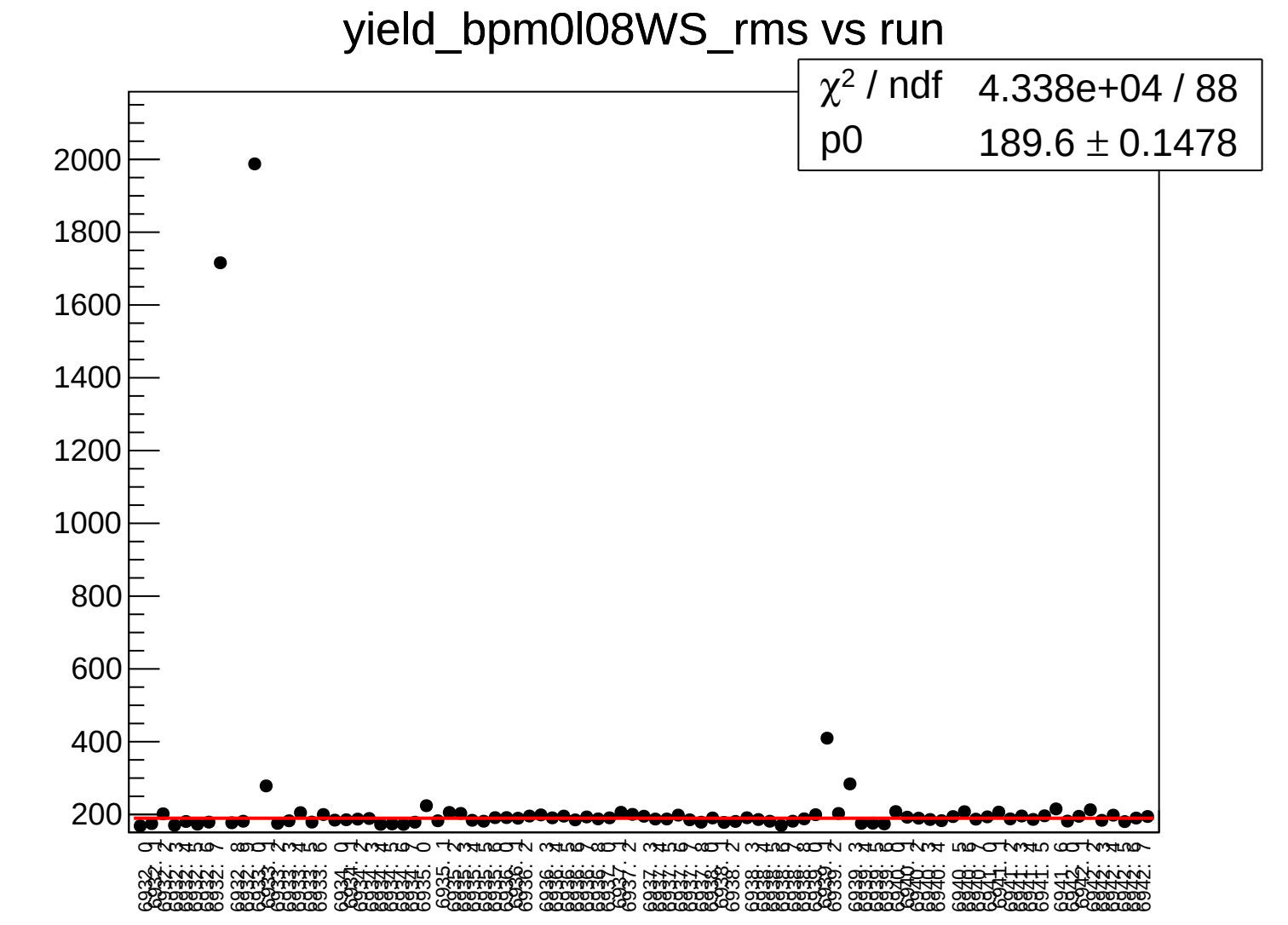

yield_bpm0l06WS_rms vs run
χ² / ndf 4.509e+04 / 88
p0 166 ± 0.1294
2000
1800
1600
1400
1200
1000
800
600
400
200

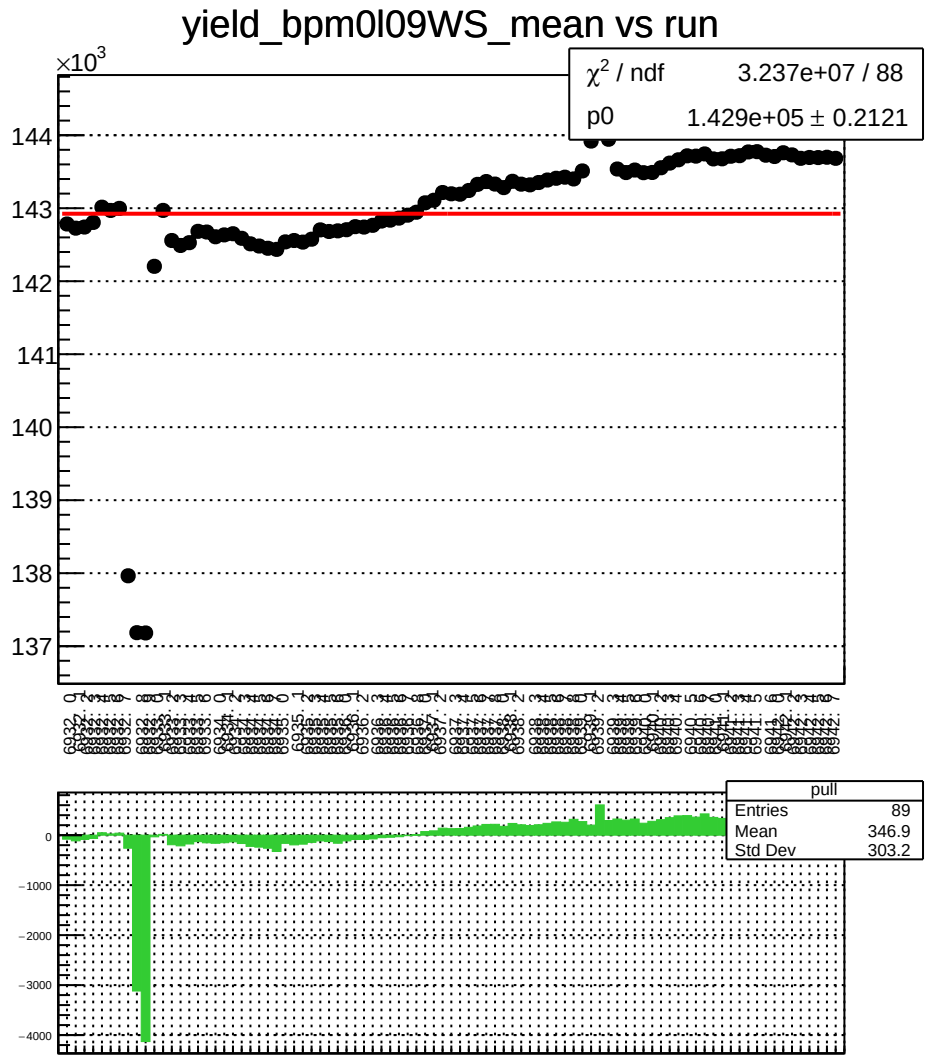

yield_bpm0l07WS_mean vs run
×10^3
χ² / ndf 2.361e+07 / 88
p0 1.409e+05 ± 0.2107
142
141
140
139
138
137
136
135
pull
Entries 89
Mean 62.22
Std Dev 109.4
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
pull1D
Entries 89
Mean −0.7471
Std Dev 3.081
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

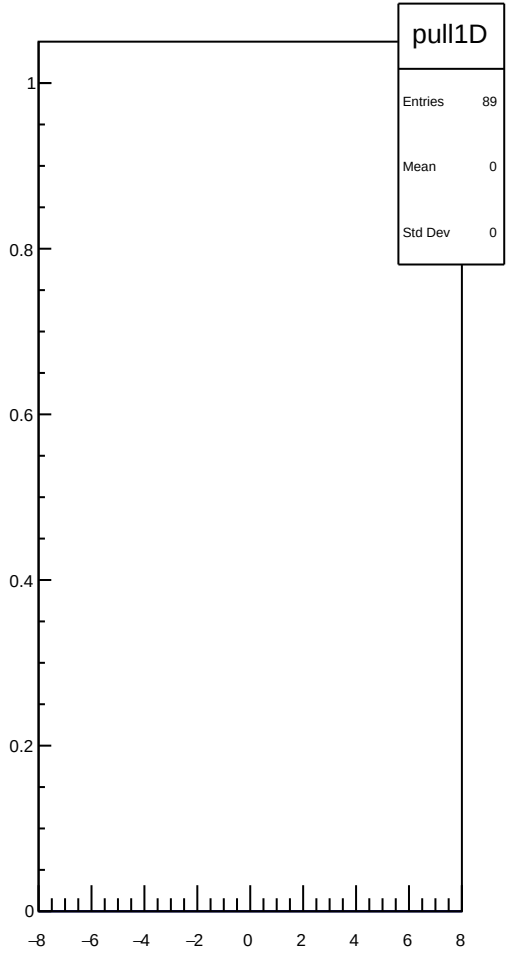

yield_bpm0l07WS_rms vs run
χ² / ndf 4.481e+04 / 88
p0 191.1 ± 0.149
2000
1800
1600
1400
1200
1000
800
600
400
200

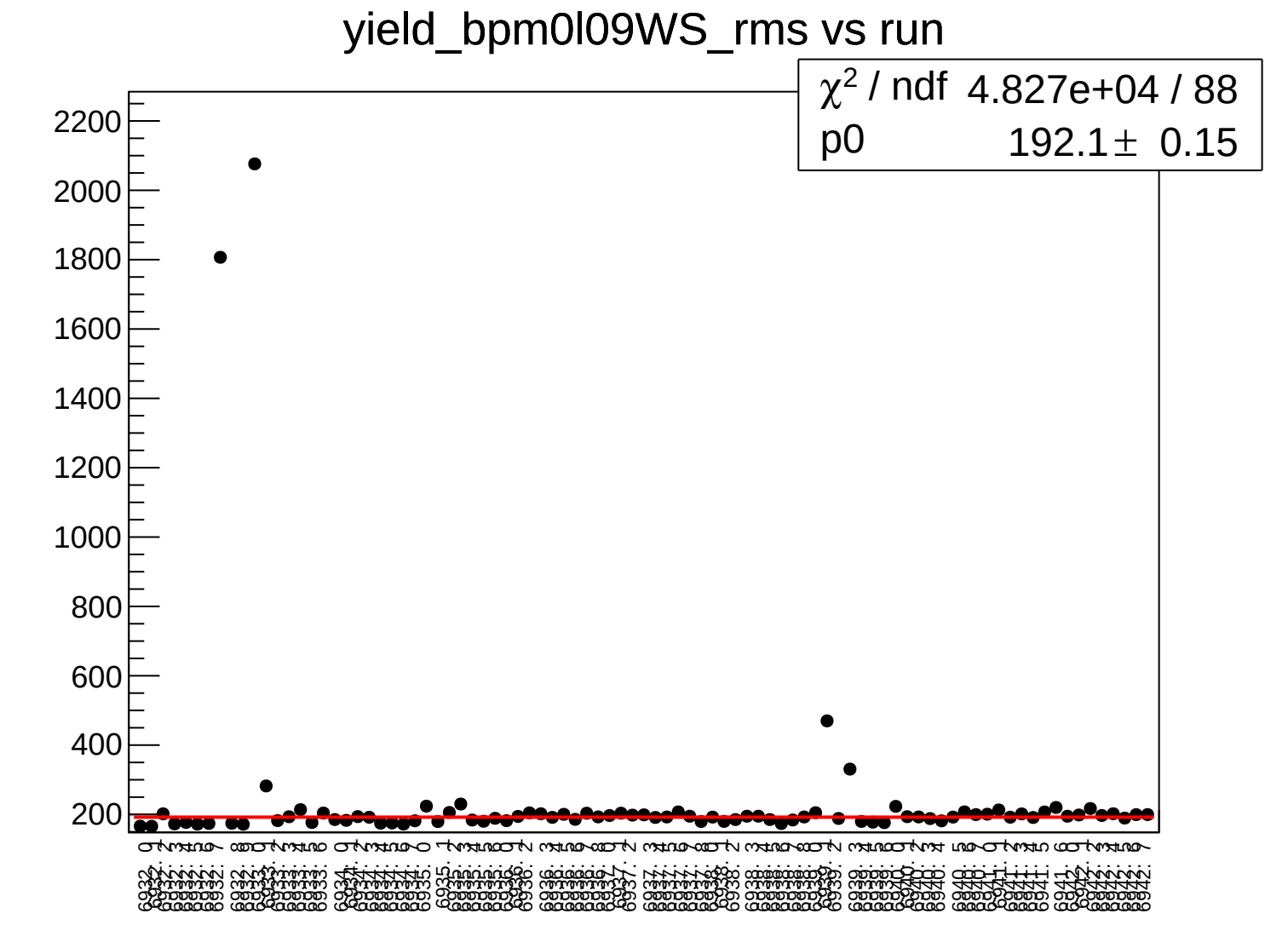

yield_bpm0l08WS_mean vs run
×10^3
χ² / ndf 2.451e+07 / 88
p0 1.418e+05 ± 0.209
143
142
141
140
139
138
137
136
pull
Entries 89
Mean 131.8
Std Dev 120.6
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500

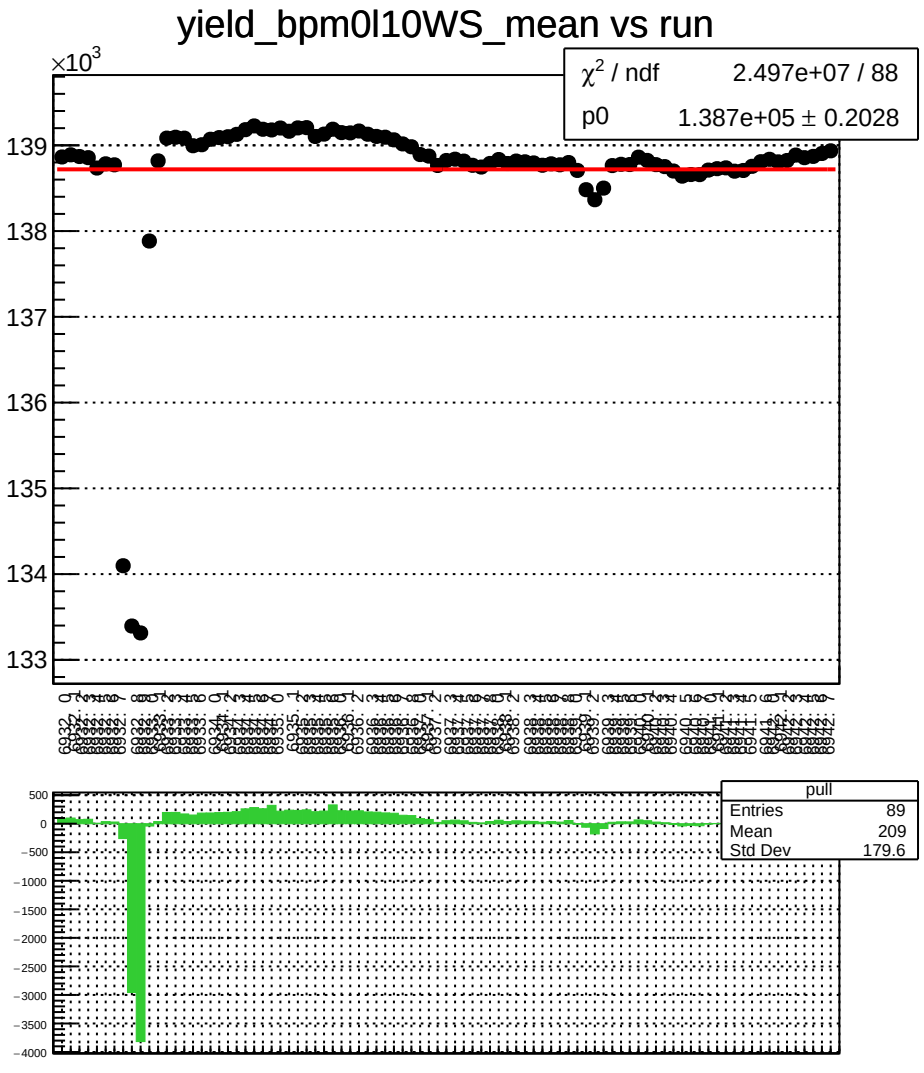

pull1D
Entries 89
Mean 0.2431
Std Dev 4.133
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

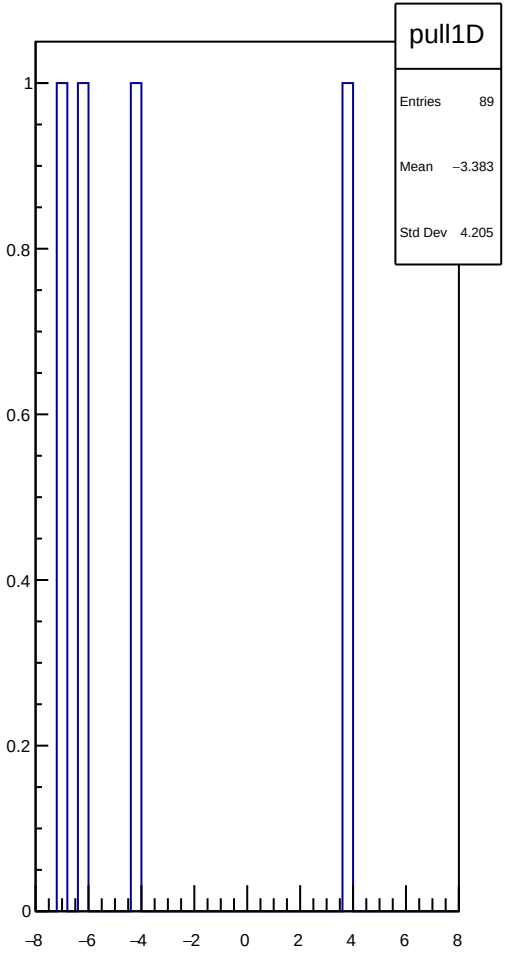

yield_bpm0l08WS_rms vs run
χ² / ndf 4.338e+04 / 88
p0 189.6 ± 0.1478
2000
1800
1600
1400
1200
1000
800
600
400
200

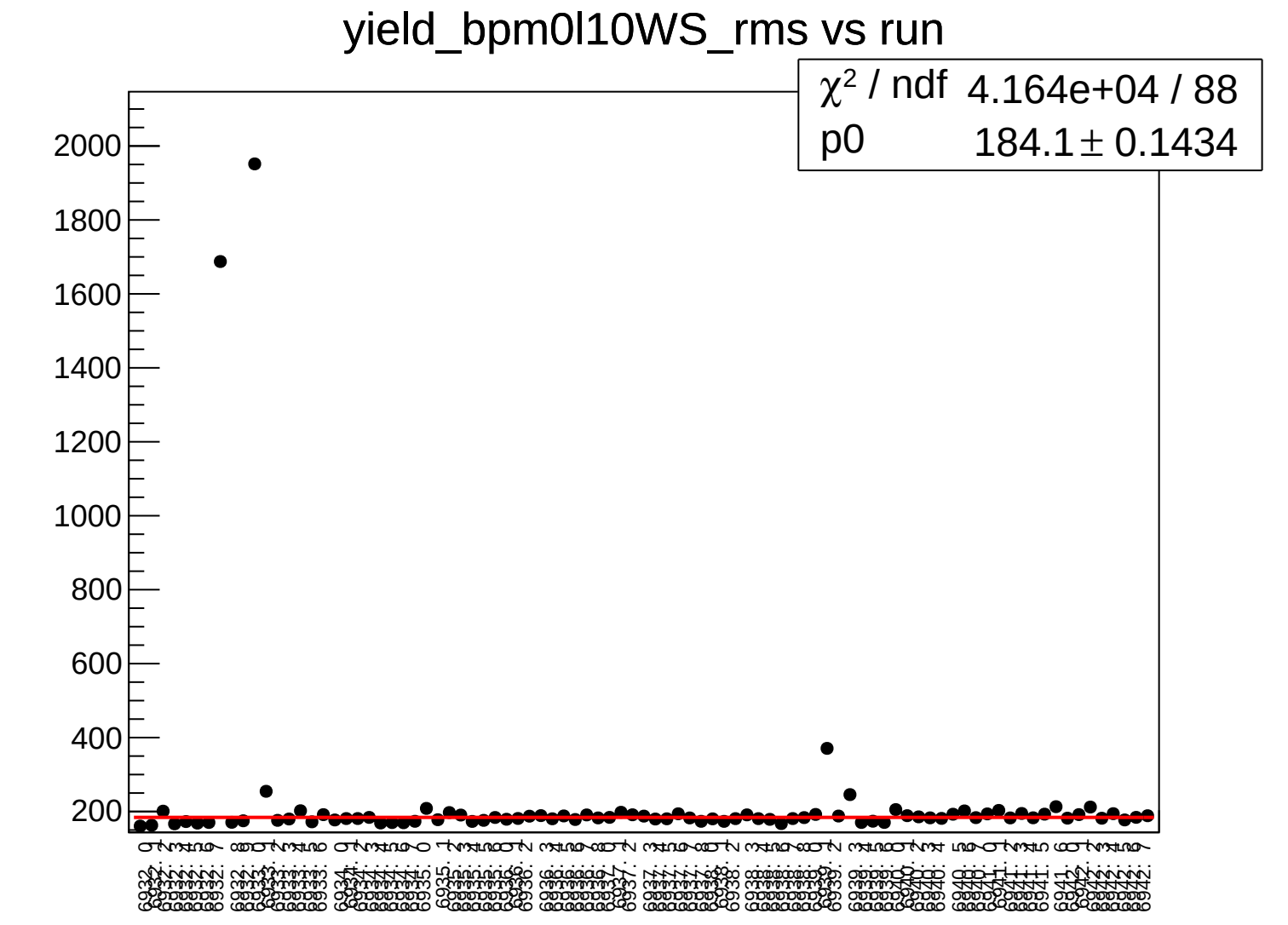

yield_bpm0l09WS_mean vs run
×10^3
χ² / ndf 3.237e+07 / 88
p0 1.429e+05 ± 0.2121
144
143
142
141
140
139
138
137
pull
Entries 89
Mean 346.9
Std Dev 303.2
0
−1000
−2000
−3000
−4000

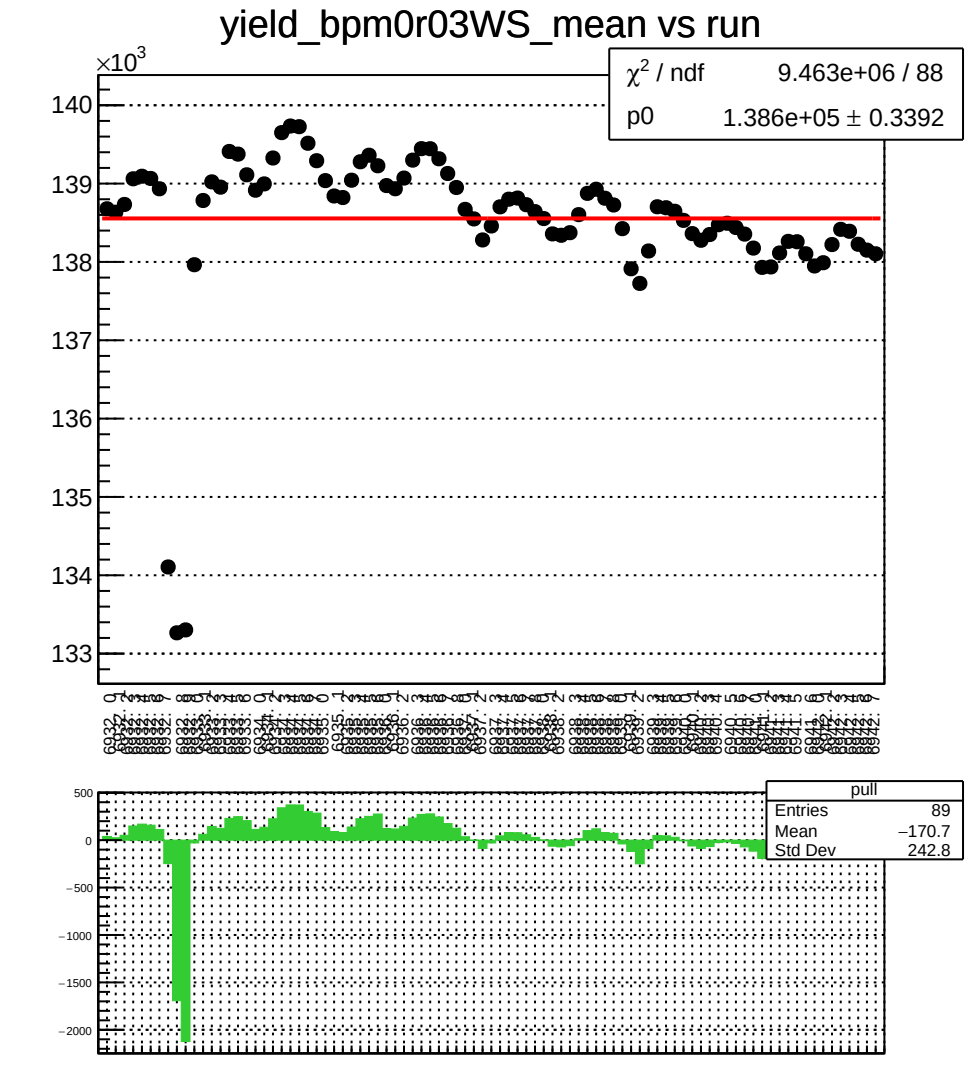

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

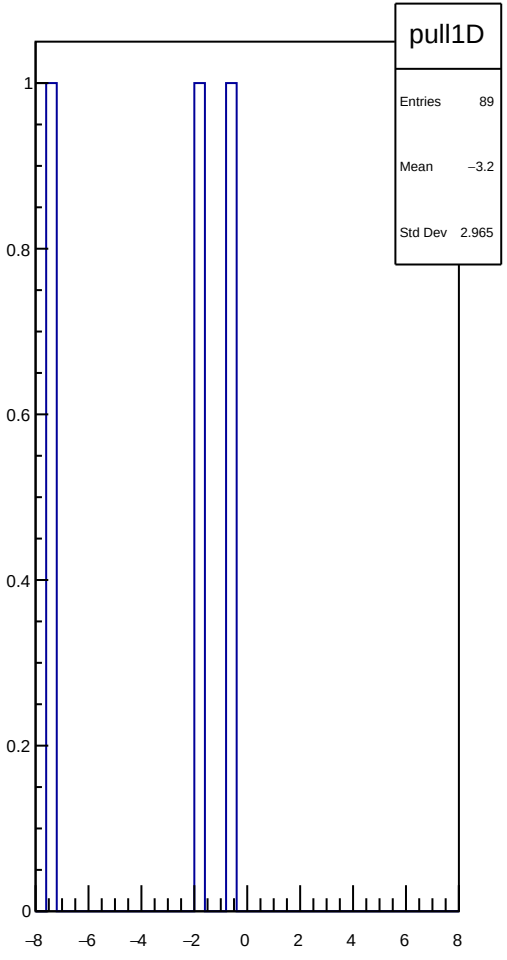

yield_bpm0l09WS_rms vs run
χ² / ndf 4.827e+04 / 88
p0 192.1 ± 0.15
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

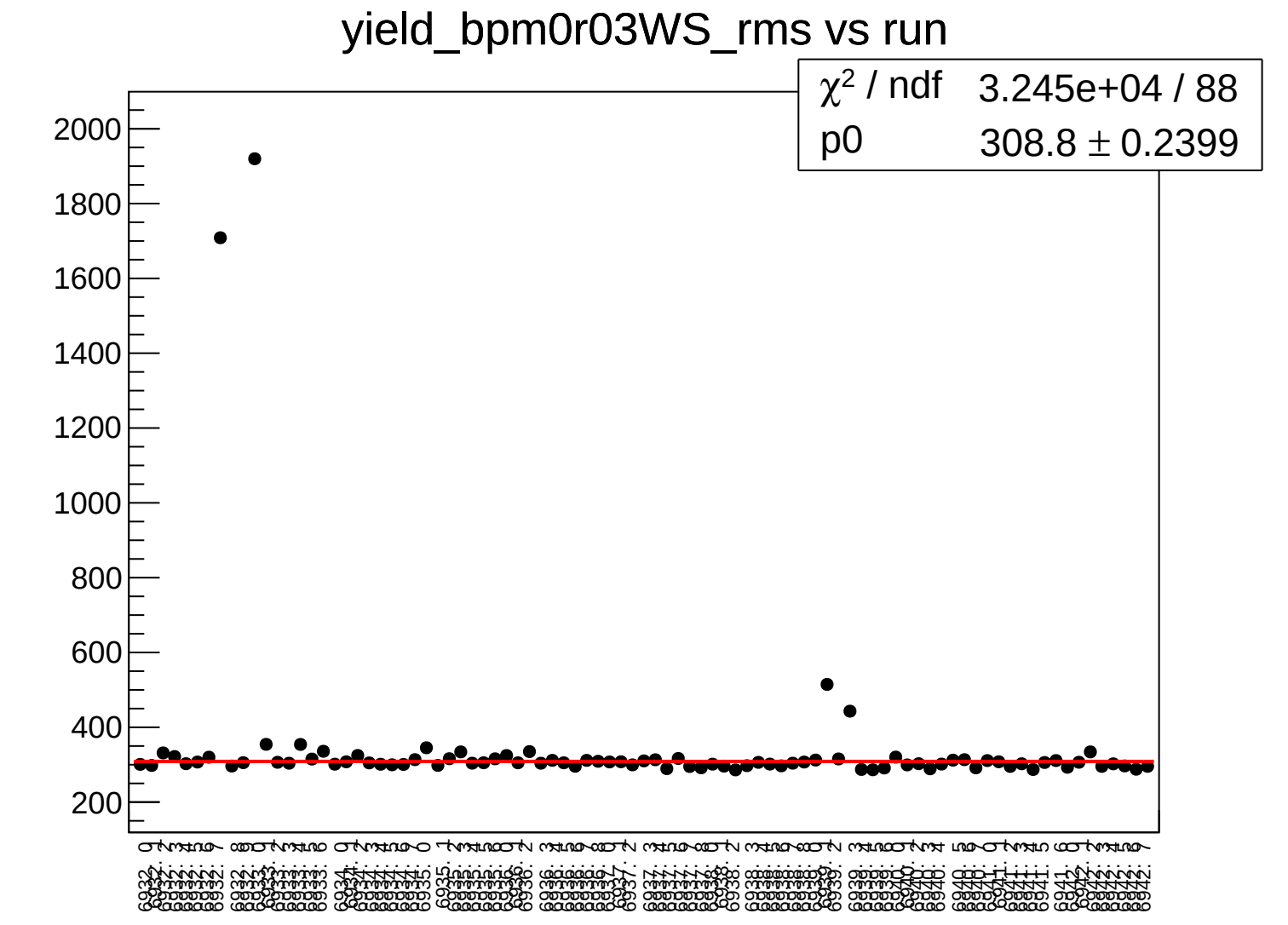

yield_bpm0l10WS_mean vs run
×10^3
χ² / ndf 2.497e+07 / 88
p0 1.387e+05 ± 0.2028
139
138
137
136
135
134
133
pull
Entries 89
Mean 209
Std Dev 179.6
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000

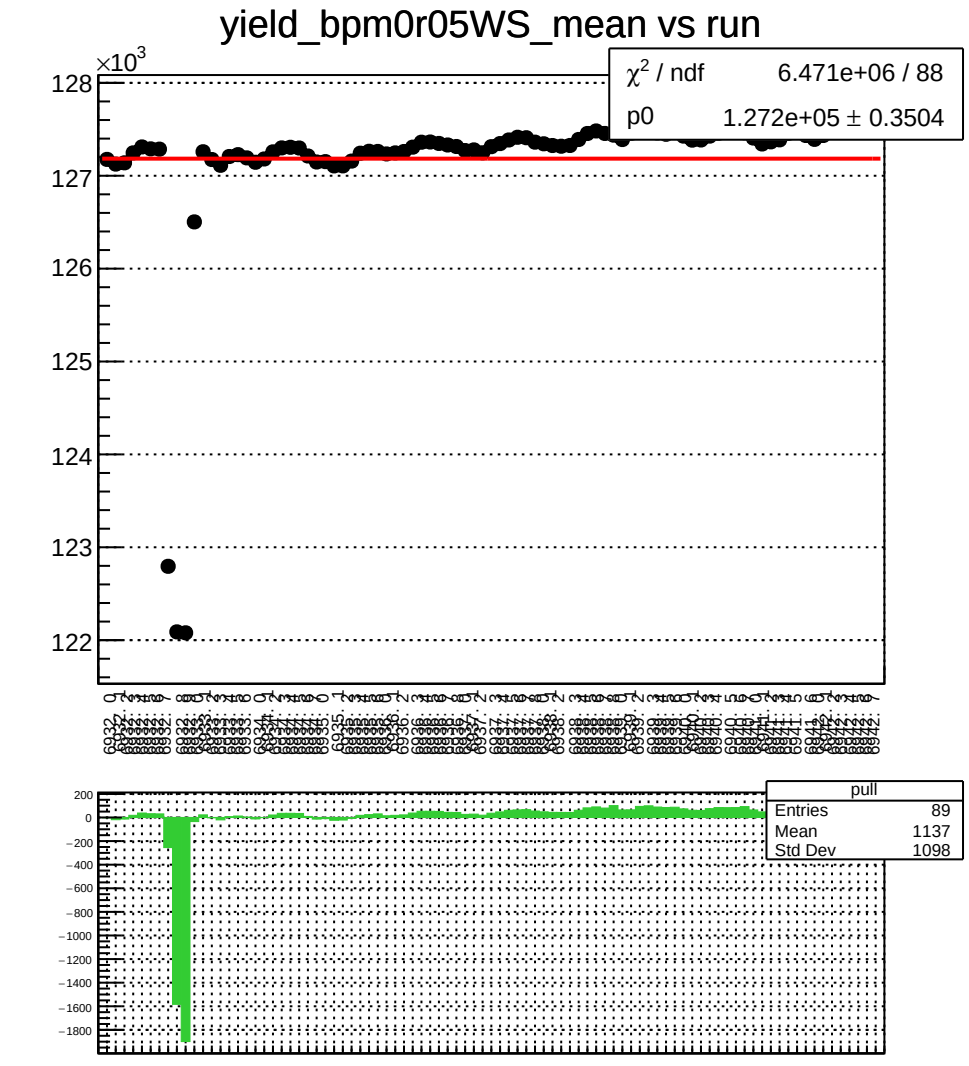

pull1D
Entries 89
Mean −3.383
Std Dev 4.205
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

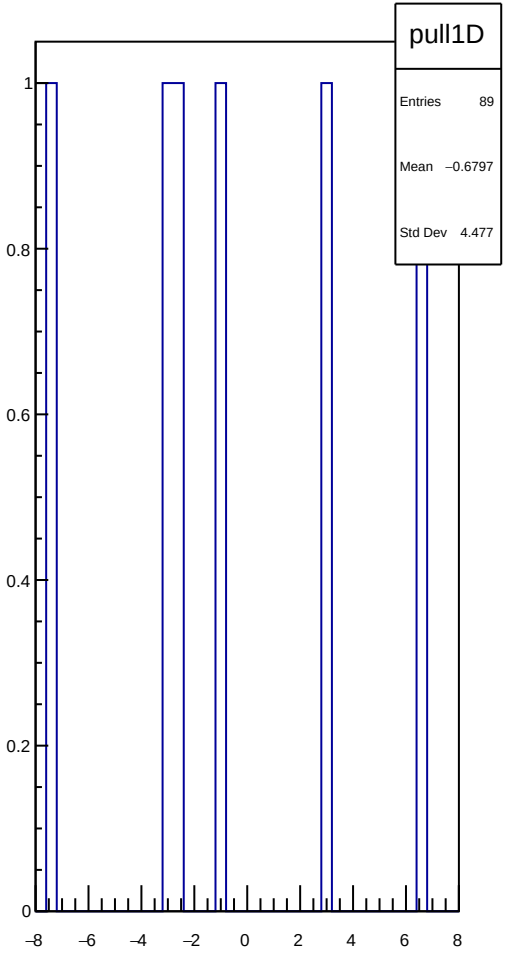

yield_bpm0l10WS_rms vs run
χ² / ndf 4.164e+04 / 88
p0 184.1 ± 0.1434
2000
1800
1600
1400
1200
1000
800
600
400
200

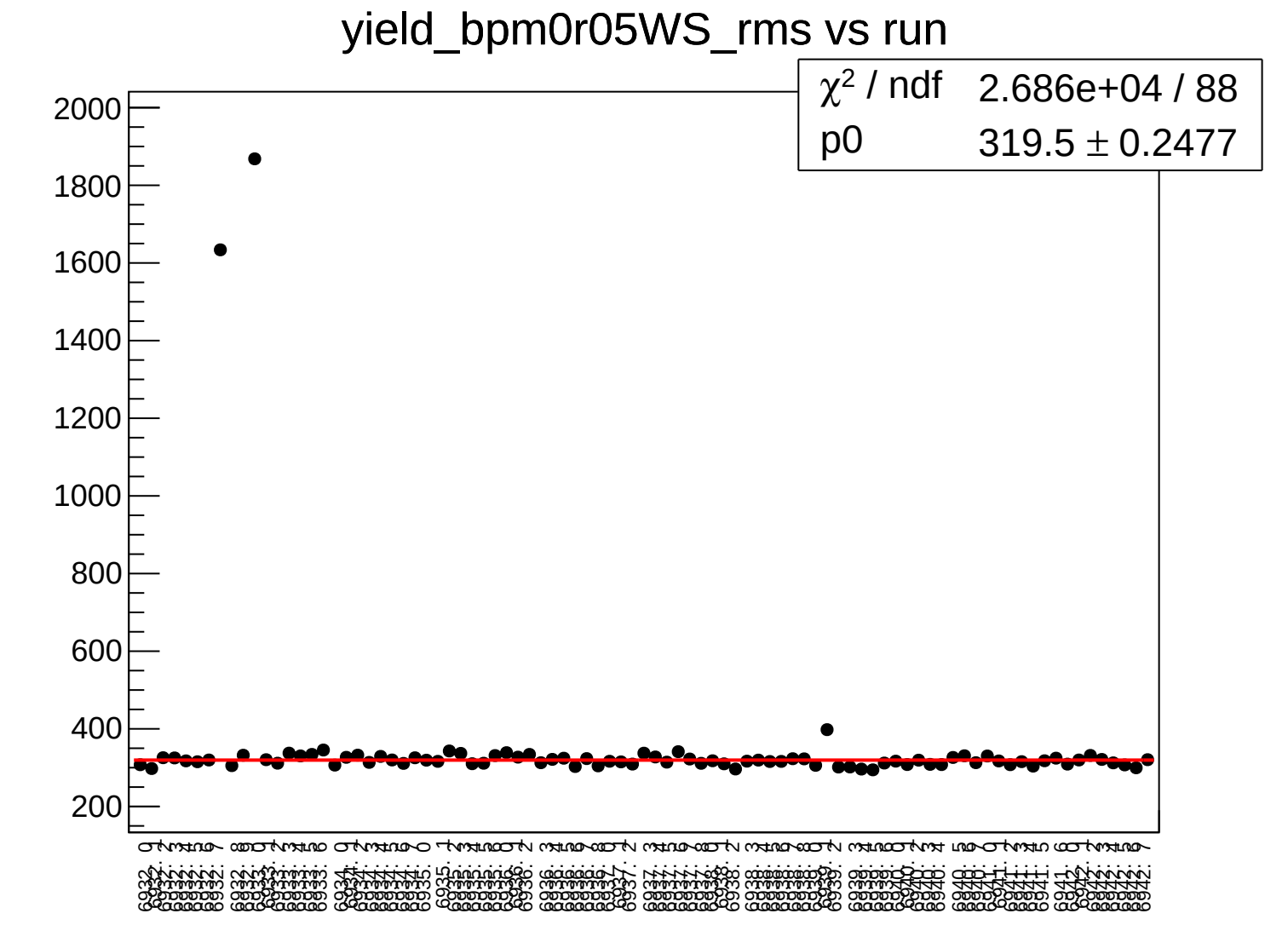

yield_bpm0r03WS_mean vs run
×10^3
χ² / ndf 9.463e+06 / 88
p0 1.386e+05 ± 0.3392
140
139
138
137
136
135
134
133
pull
Entries 89
Mean −170.7
Std Dev 242.8
500
0
−500
−1000
−1500
−2000

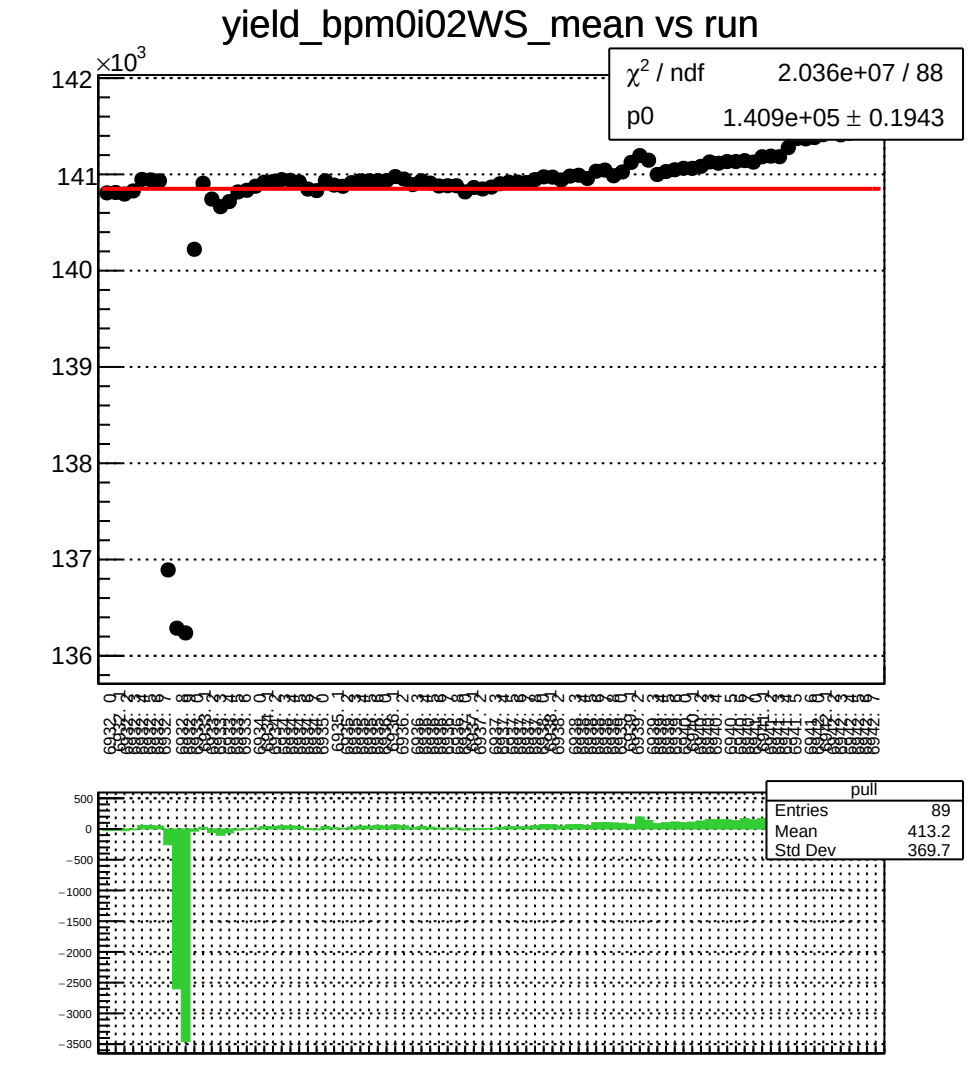

pull1D
Entries 89
Mean −3.2
Std Dev 2.965
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

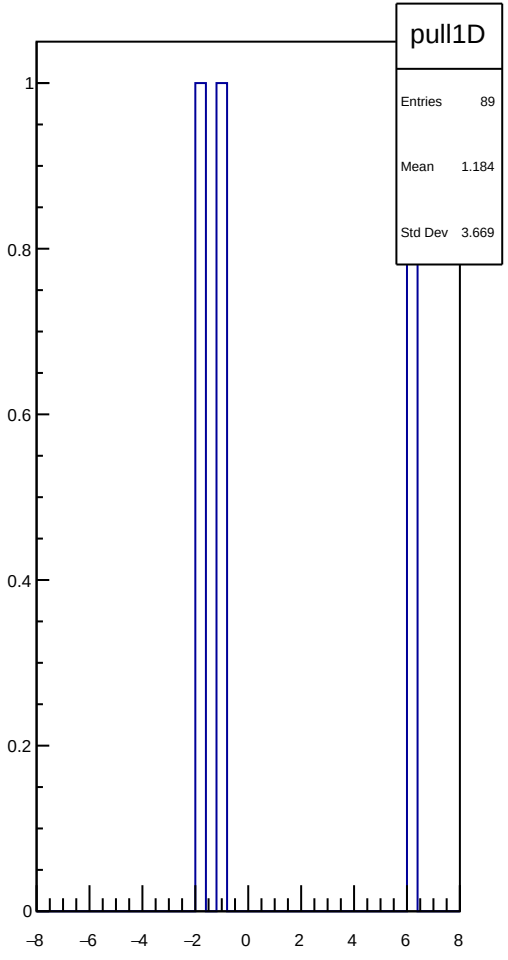

yield_bpm0r03WS_rms vs run
χ² / ndf 3.245e+04 / 88
p0 308.8 ± 0.2399
2000
1800
1600
1400
1200
1000
800
600
400
200

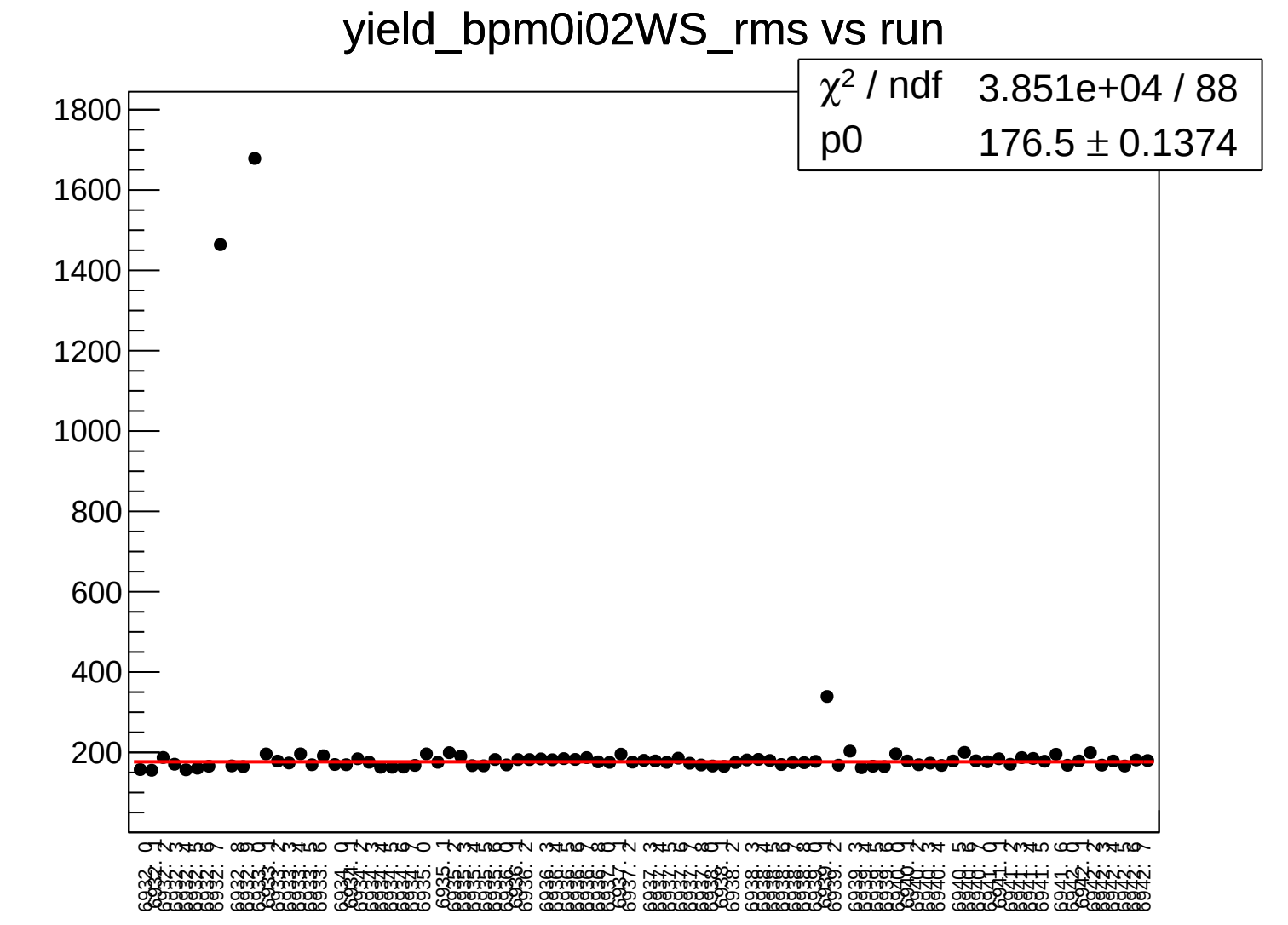

yield_bpm0r05WS_mean vs run
×10^3
χ² / ndf 6.471e+06 / 88
p0 1.272e+05 ± 0.3504
128
127
126
125
124
123
122
pull
Entries 89
Mean 1137
Std Dev 1098
200
0
−200
−400
−600
−800
−1000
−1200
−1400
−1600
−1800

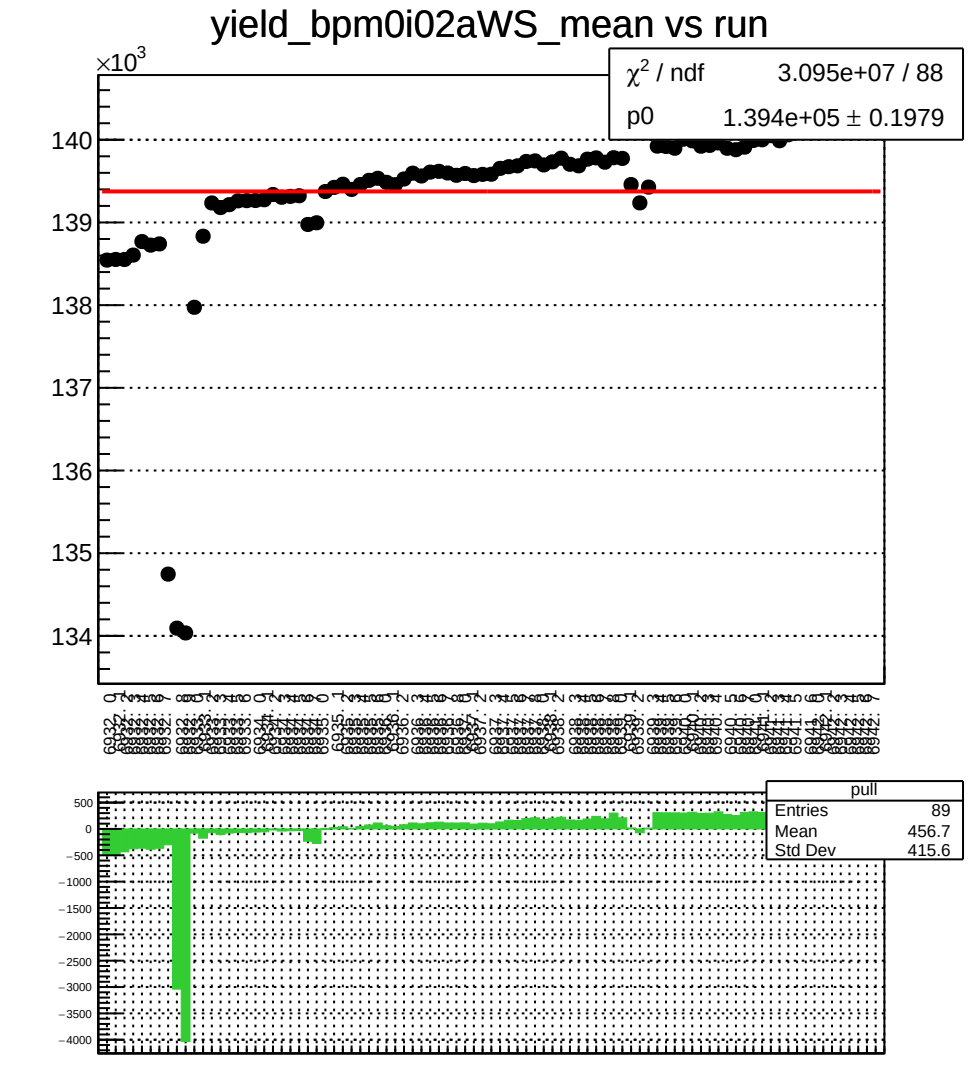

pull1D
Entries 89
Mean −0.6797
Std Dev 4.477
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

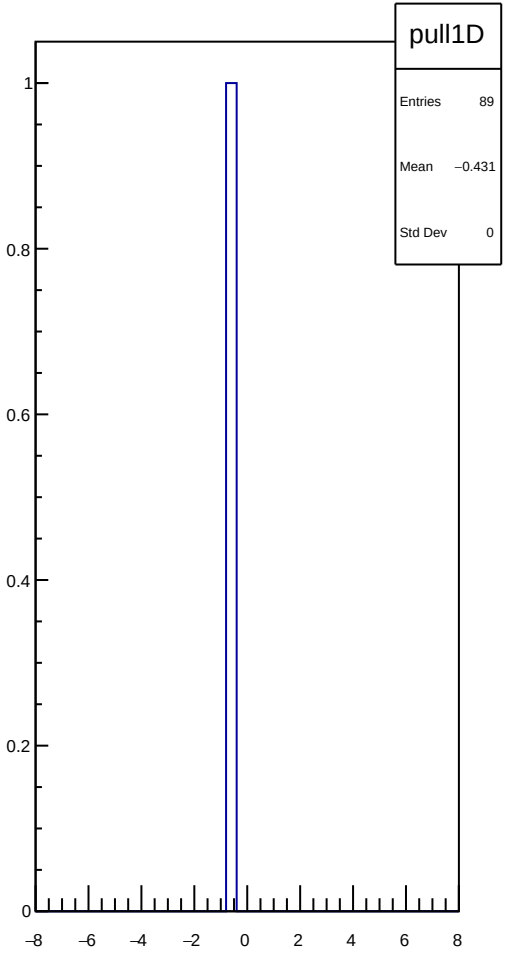

yield_bpm0r05WS_rms vs run
χ² / ndf 2.686e+04 / 88
p0 319.5 ± 0.2477
2000
1800
1600
1400
1200
1000
800
600
400
200

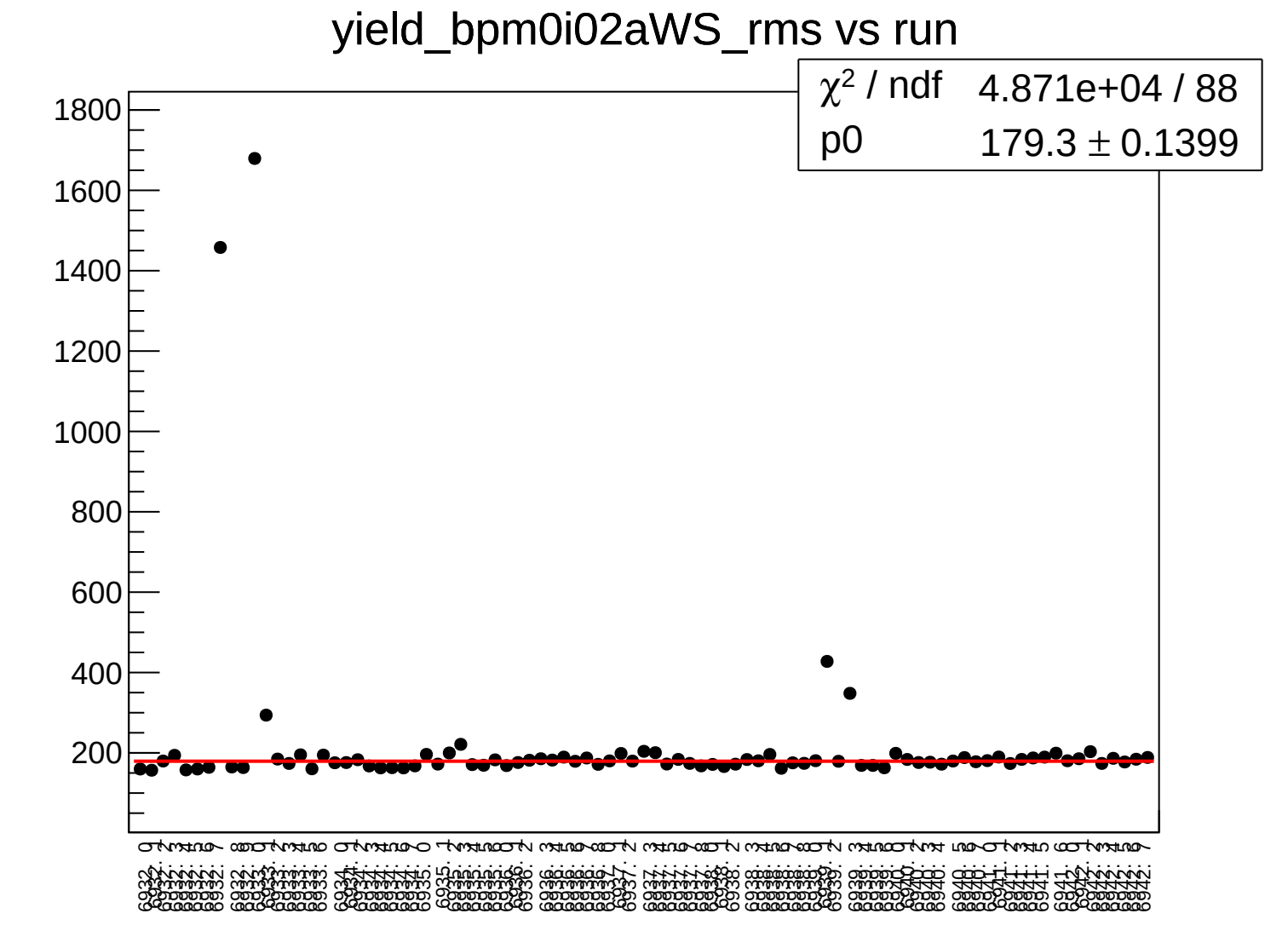

yield_bpm0i02WS_mean vs run
×10^3
142
141
140
139
138
137
136
χ² / ndf 2.036e+07 / 88
p0 1.409e+05 ± 0.1943
pull
Entries 89
Mean 413.2
Std Dev 369.7
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500

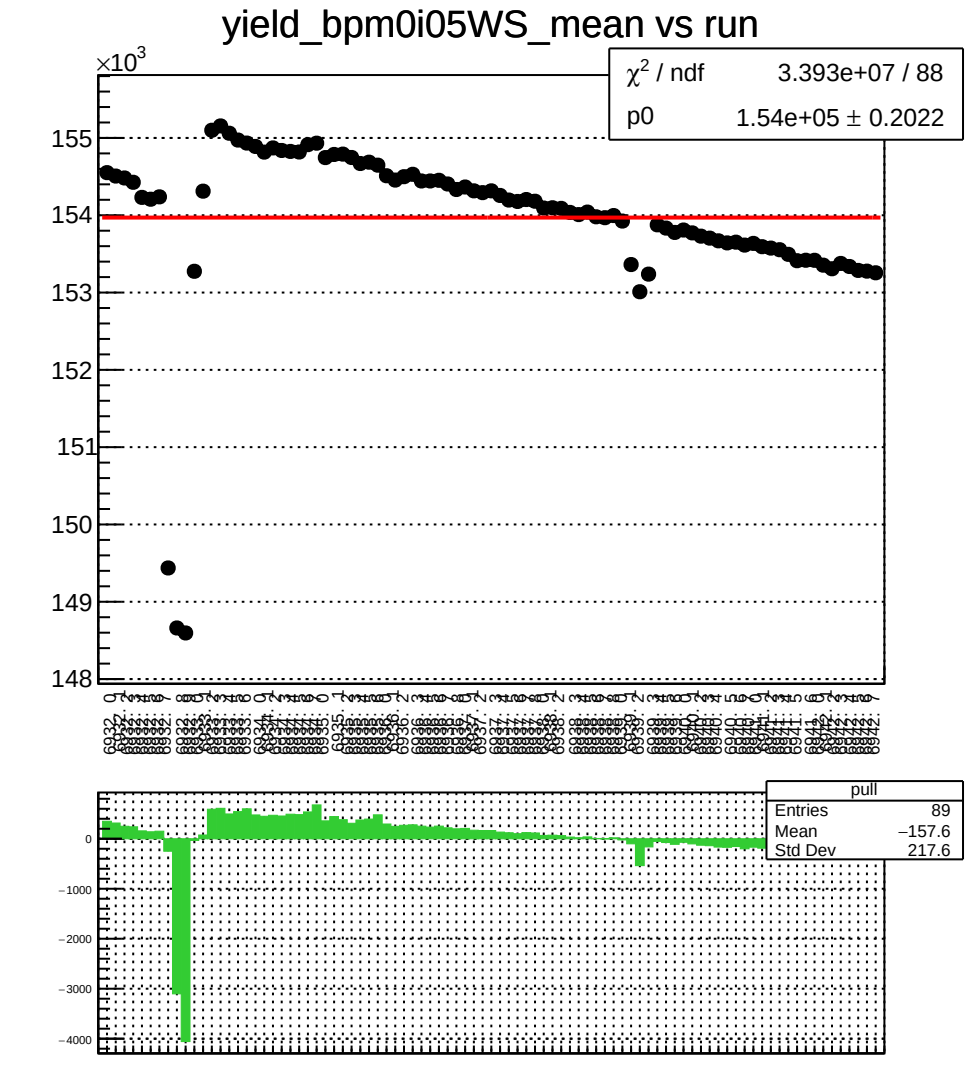

pull1D
Entries 89
Mean 1.184
Std Dev 3.669
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

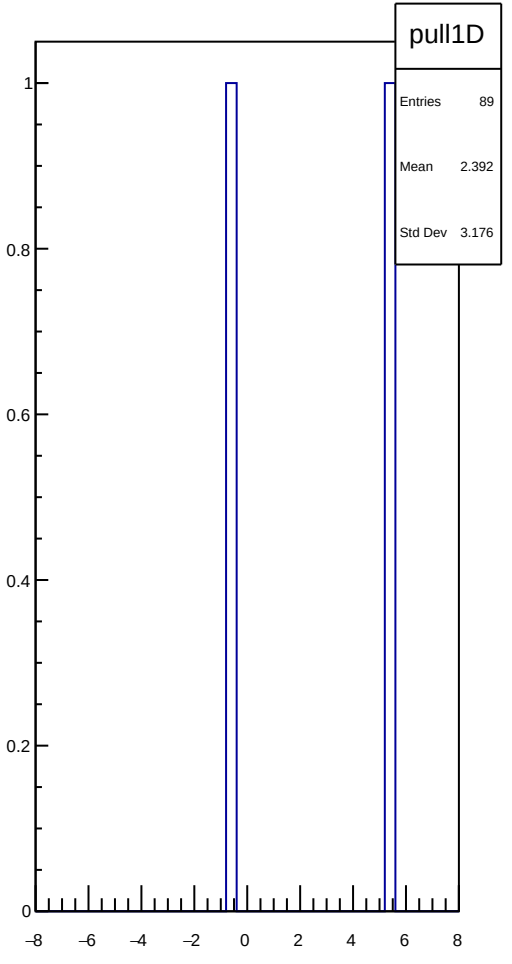

yield_bpm0i02WS_rms vs run
χ² / ndf 3.851e+04 / 88
p0 176.5 ± 0.1374
1800
1600
1400
1200
1000
800
600
400
200

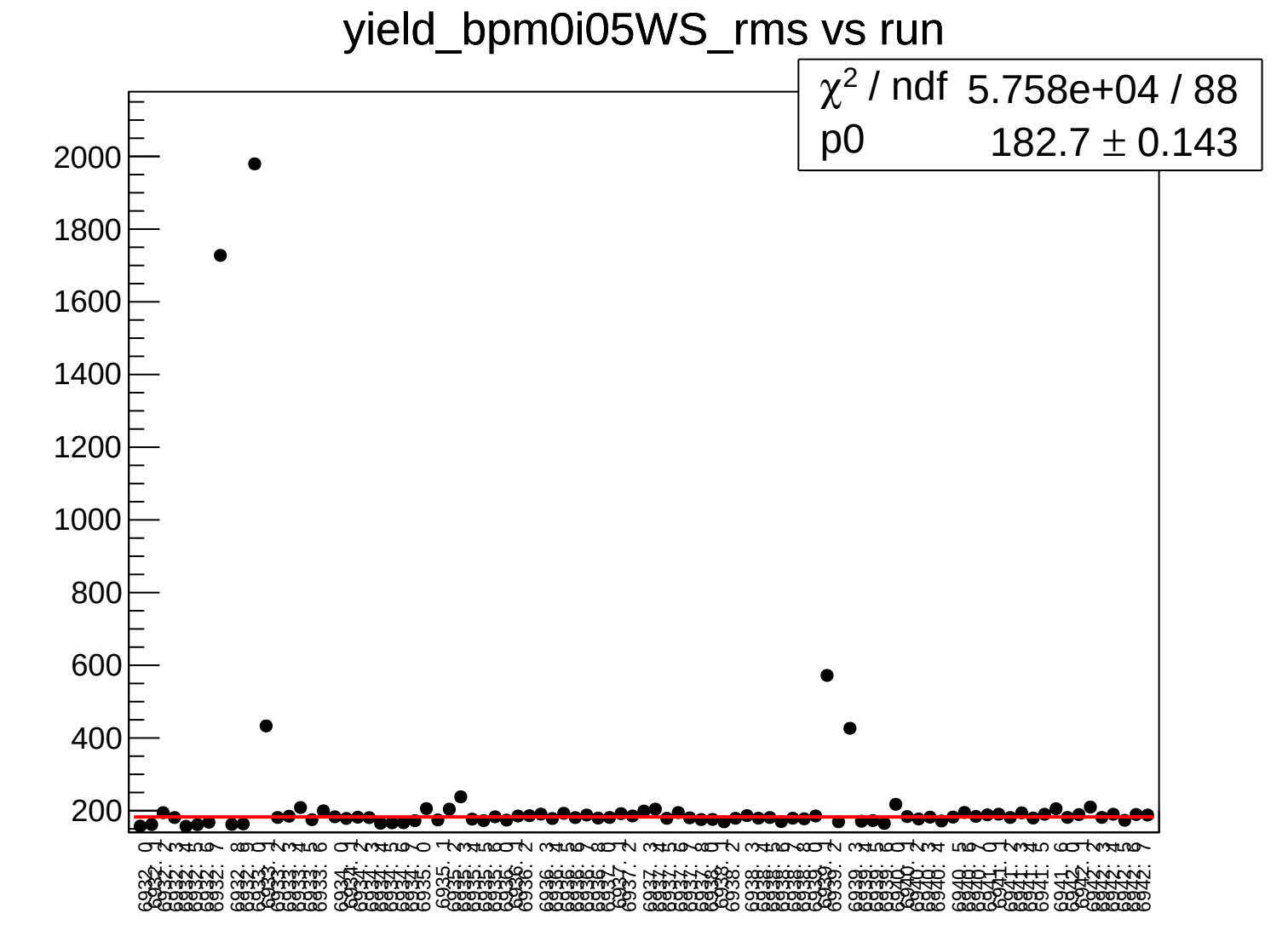

yield_bpm0i02aWS_mean vs run
×10^3
χ^2 / ndf 3.095e+07 / 88
p0 1.394e+05 ± 0.1979
140
139
138
137
136
135
134
pull
Entries 89
Mean 456.7
Std Dev 415.6
500
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000

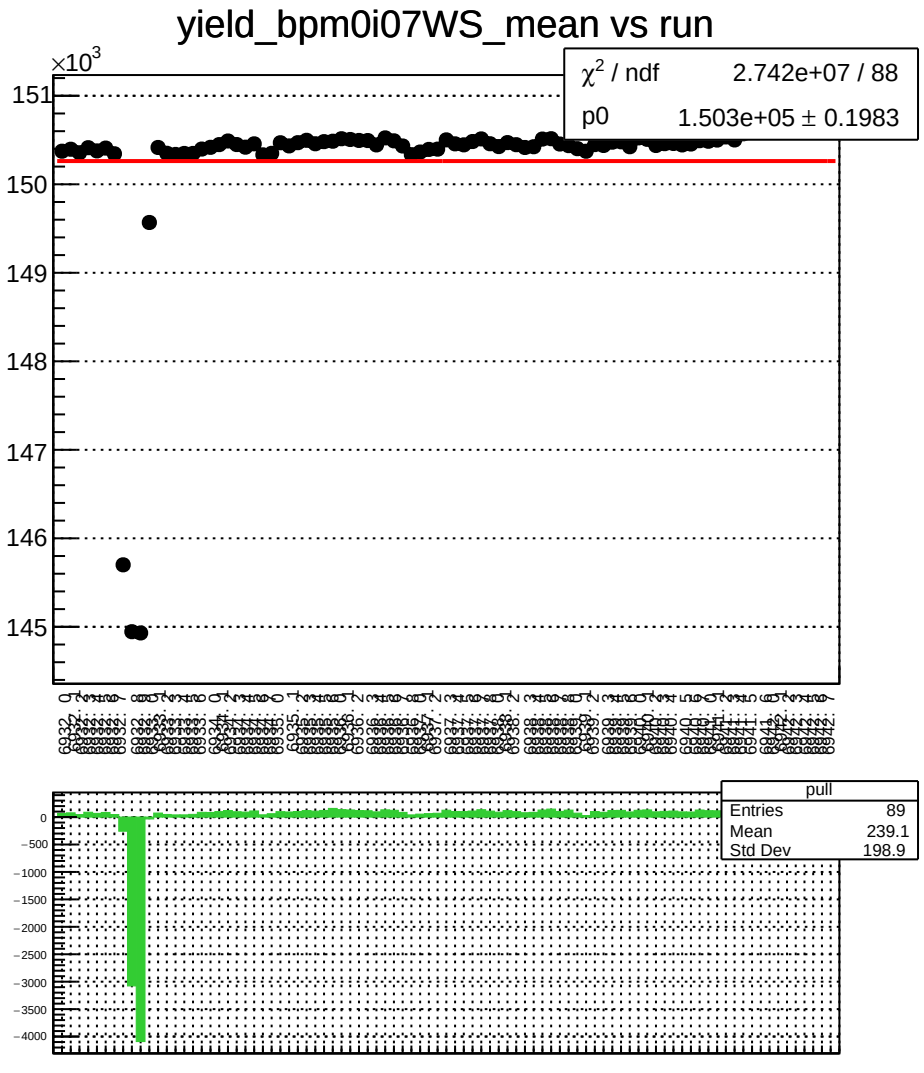

pull1D
Entries 89
Mean −0.431
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

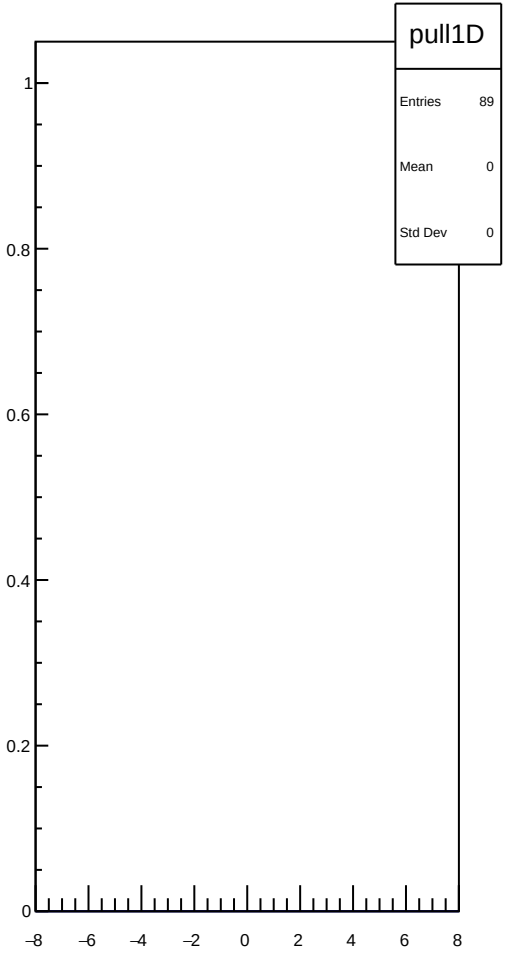

yield_bpm0i02aWS_rms vs run
χ² / ndf 4.871e+04 / 88
p0 179.3 ± 0.1399
1800
1600
1400
1200
1000
800
600
400
200

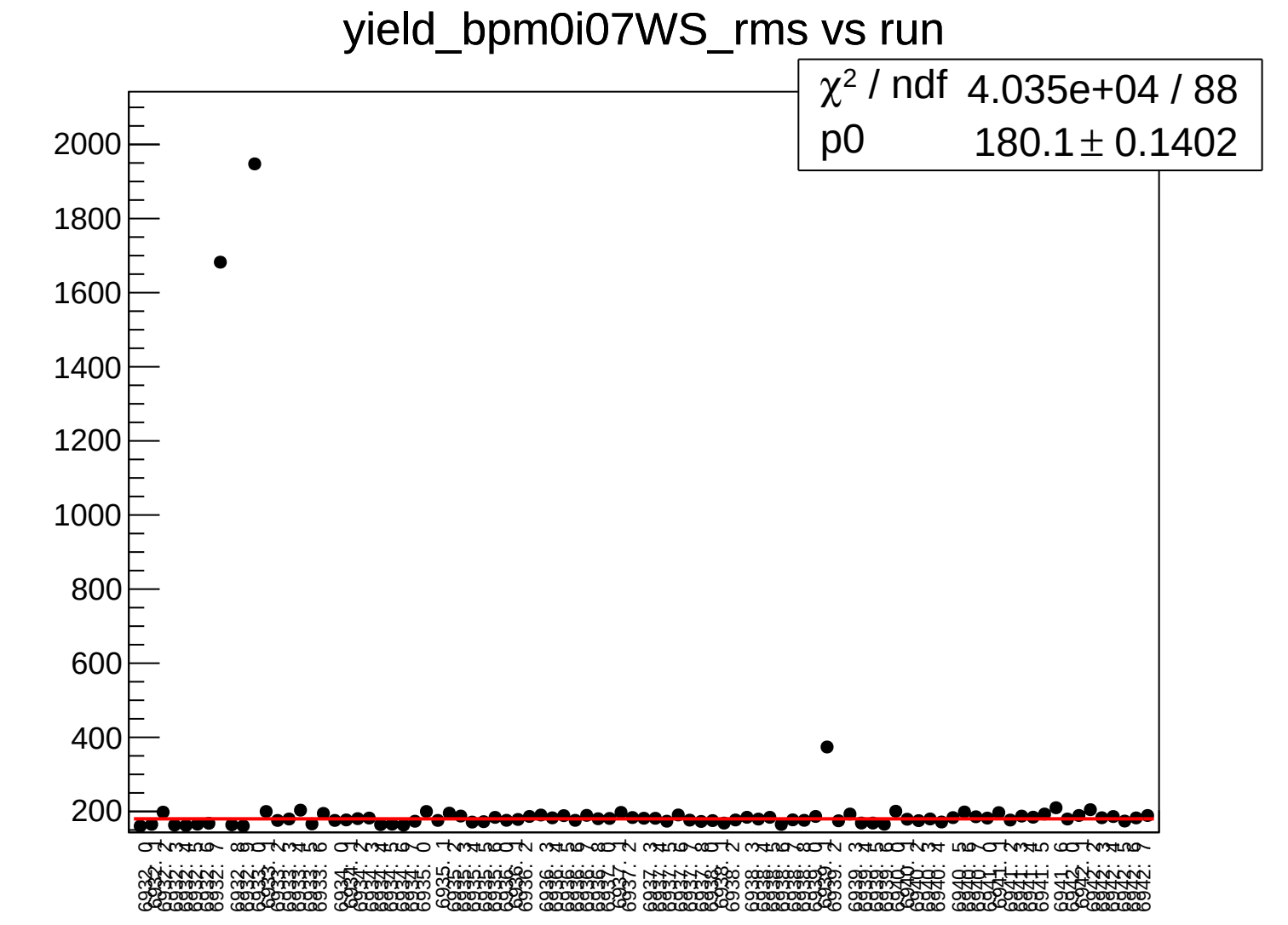

yield_bpm0i05WS_mean vs run
×10^3
χ^2 / ndf 3.393e+07 / 88
p0 1.54e+05 ± 0.2022
155
154
153
152
151
150
149
148
pull
Entries 89
Mean −157.6
Std Dev 217.6
0
−1000
−2000
−3000
−4000

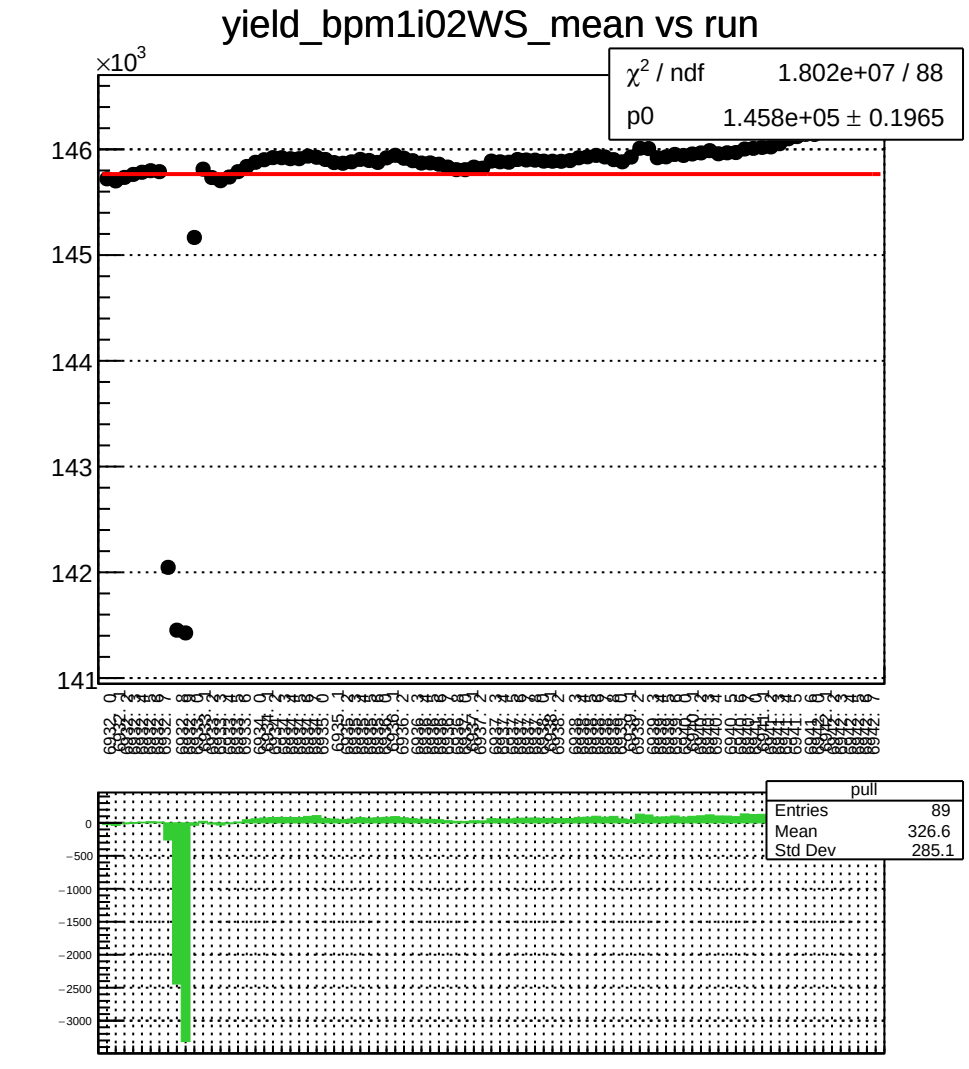

pull1D
Entries 89
Mean 2.392
Std Dev 3.176
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

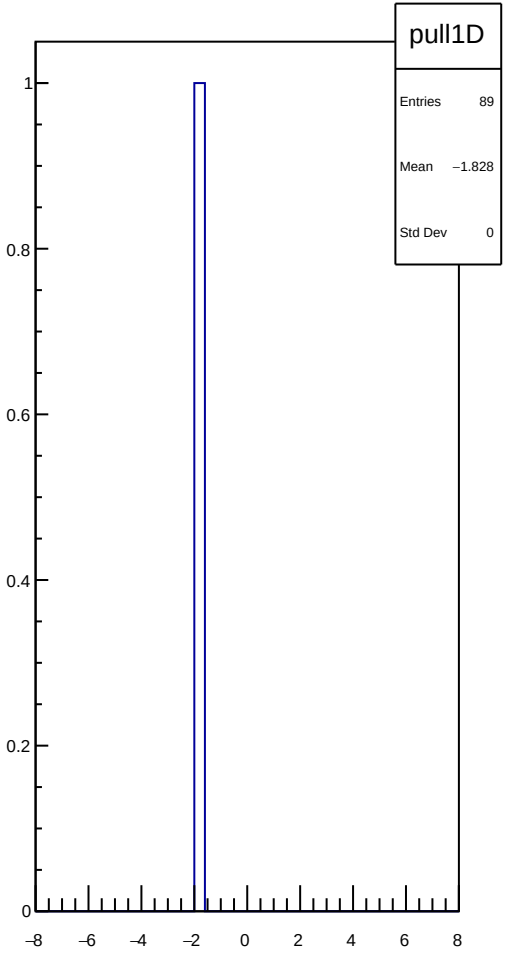

yield_bpm0i05WS_rms vs run
χ² / ndf 5.758e+04 / 88
p0 182.7 ± 0.143
2000
1800
1600
1400
1200
1000
800
600
400
200

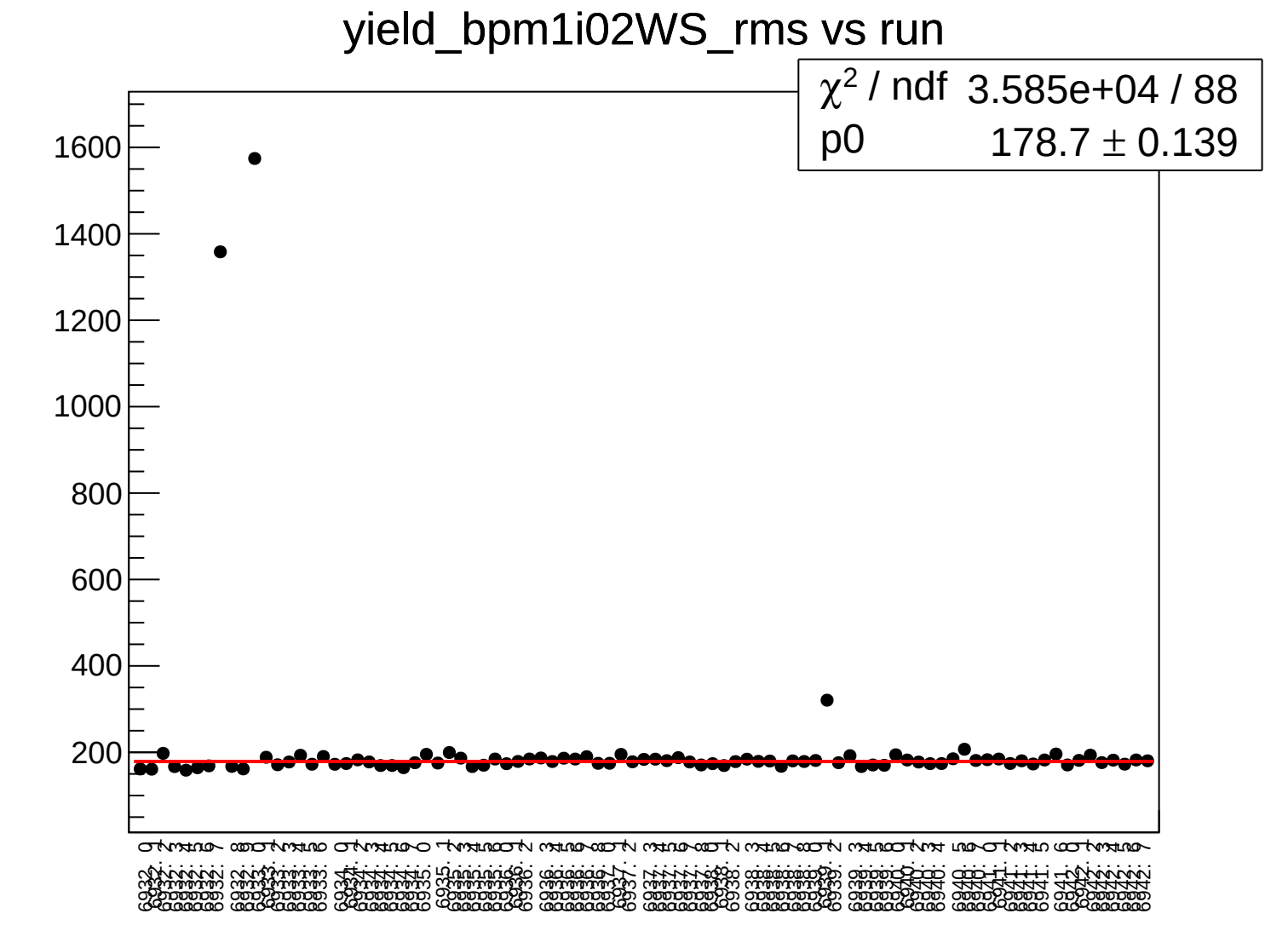

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 2.742e+07 / 88
p0 1.503e+05 ± 0.1983
151
150
149
148
147
146
145
pull
Entries 89
Mean 239.1
Std Dev 198.9
0
−500
−1000
−1500
−2000
−2500
−3000
−3500
−4000

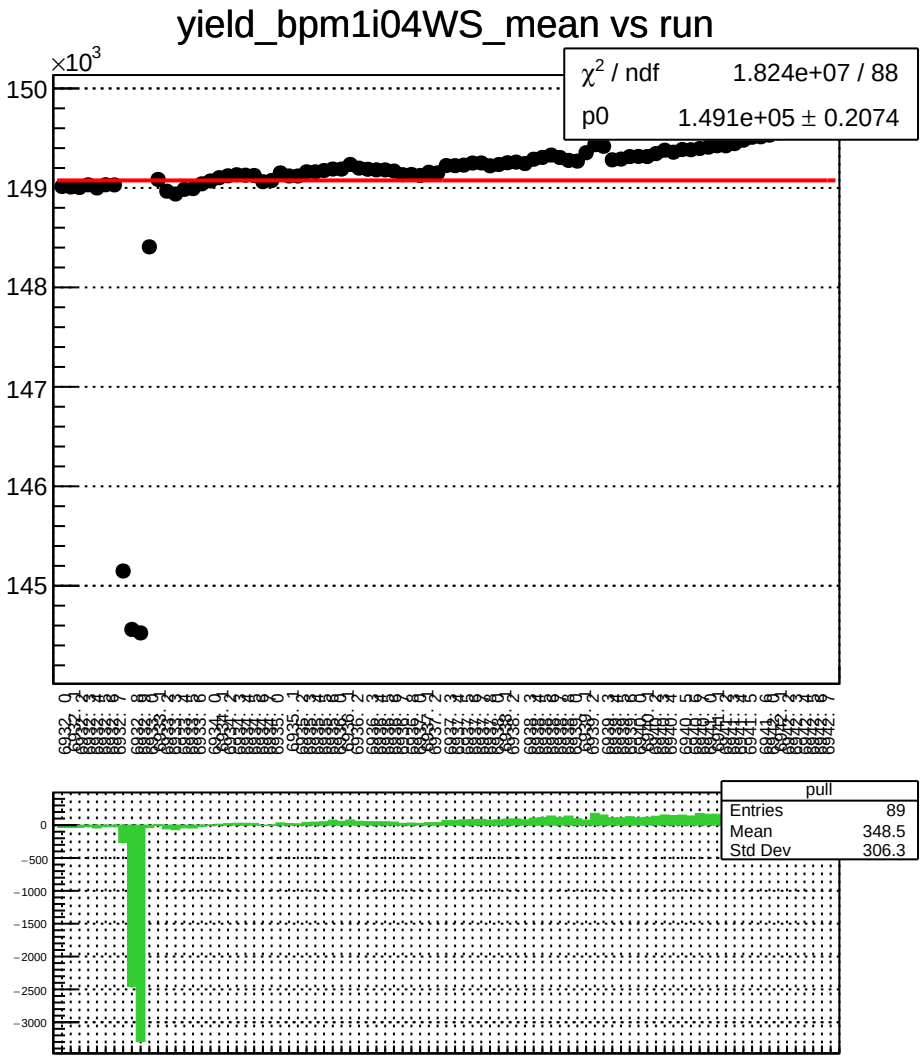

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

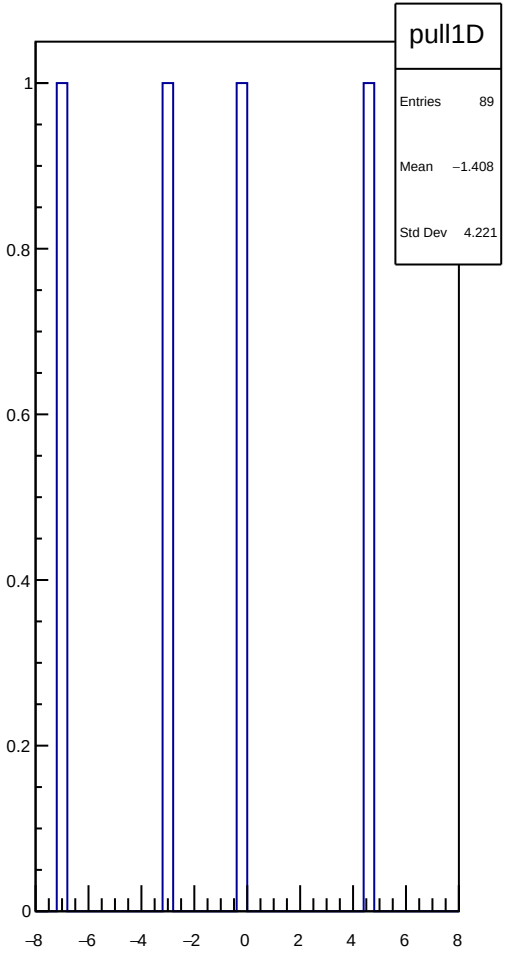

yield_bpm0i07WS_rms vs run
χ² / ndf 4.035e+04 / 88
p0 180.1 ± 0.1402
2000
1800
1600
1400
1200
1000
800
600
400
200

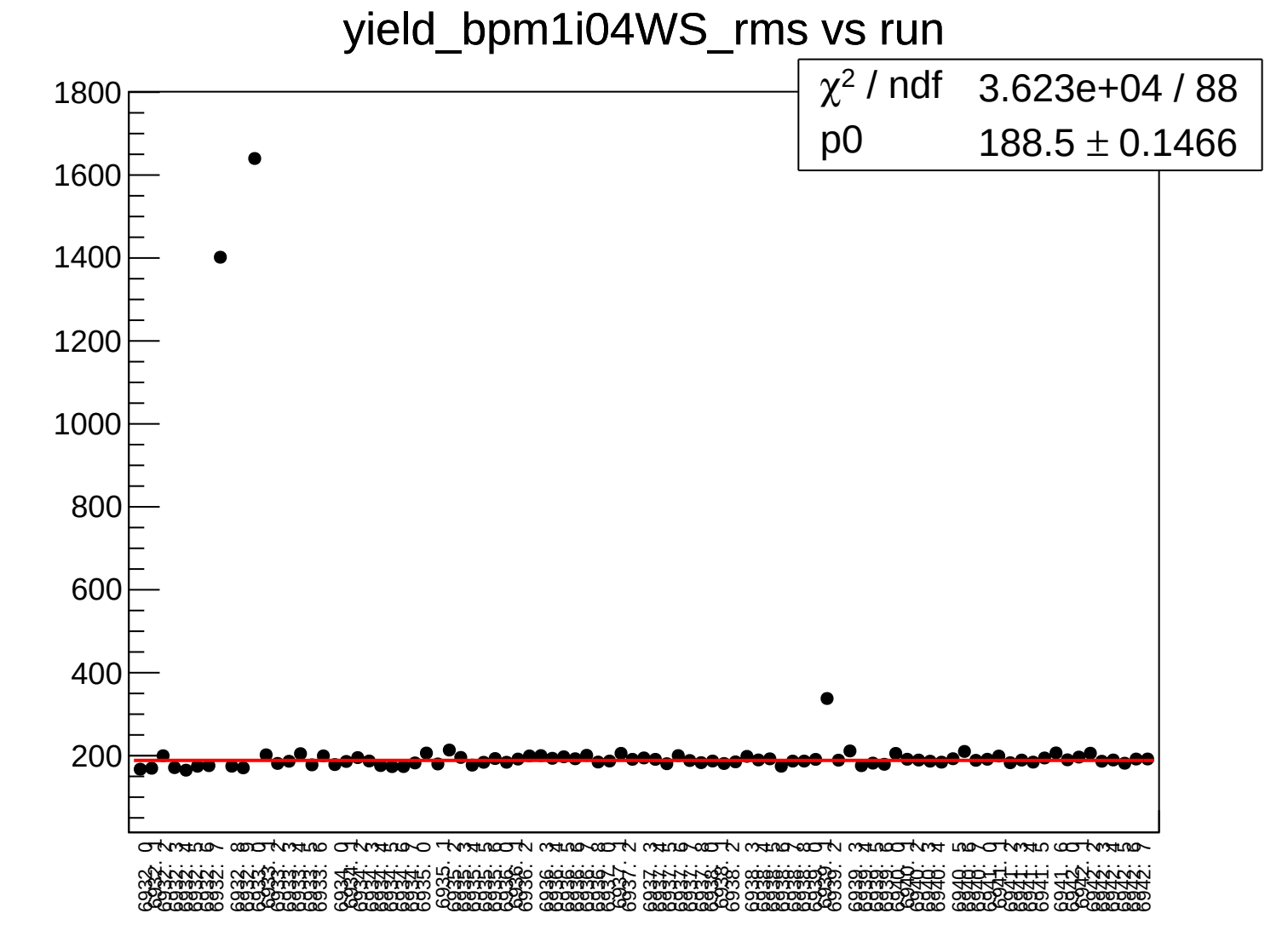

yield_bpm1i02WS_mean vs run
×10^3
χ^2 / ndf 1.802e+07 / 88
p0 1.458e+05 ± 0.1965
146
145
144
143
142
141
pull
Entries 89
Mean 326.6
Std Dev 285.1
0
−500
−1000
−1500
−2000
−2500
−3000

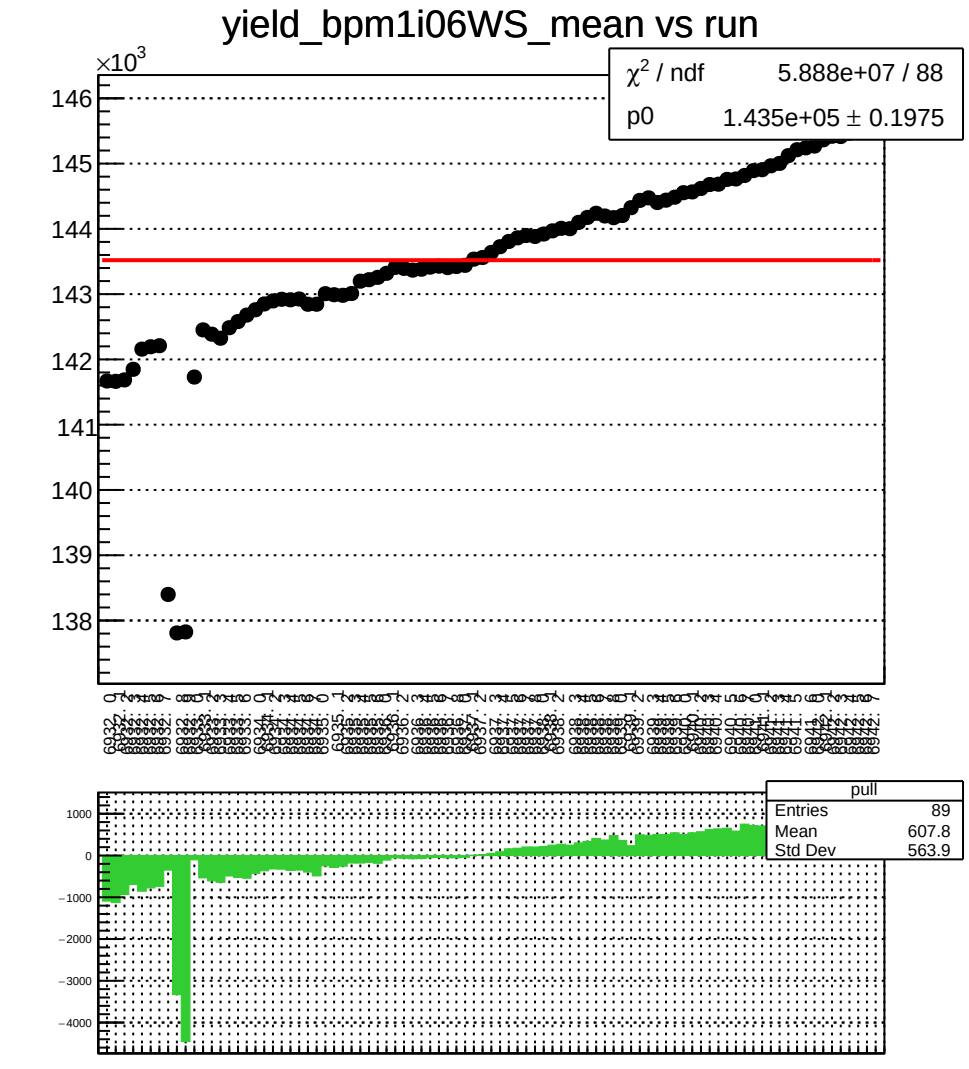

pull1D
Entries 89
Mean −1.828
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

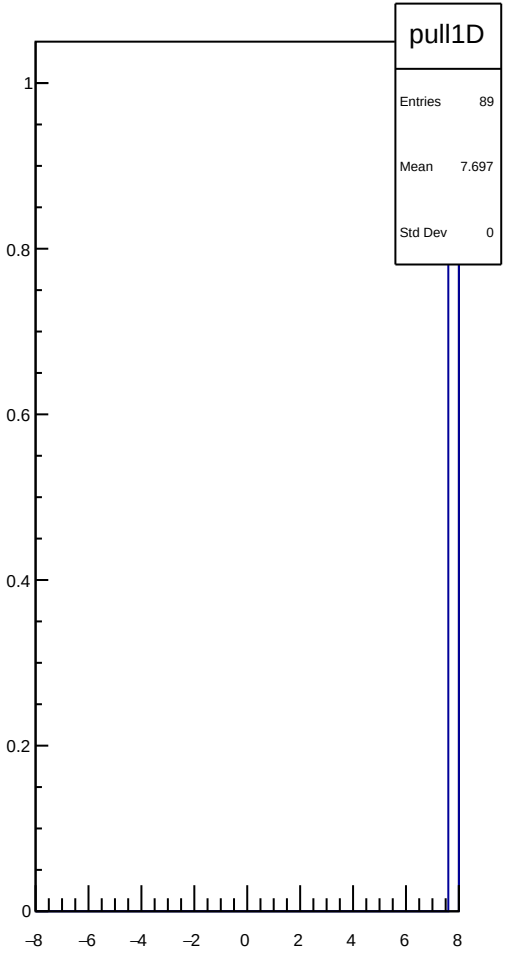

yield_bpm1i02WS_rms vs run
χ² / ndf 3.585e+04 / 88
p0 178.7 ± 0.139
1600
1400
1200
1000
800
600
400
200

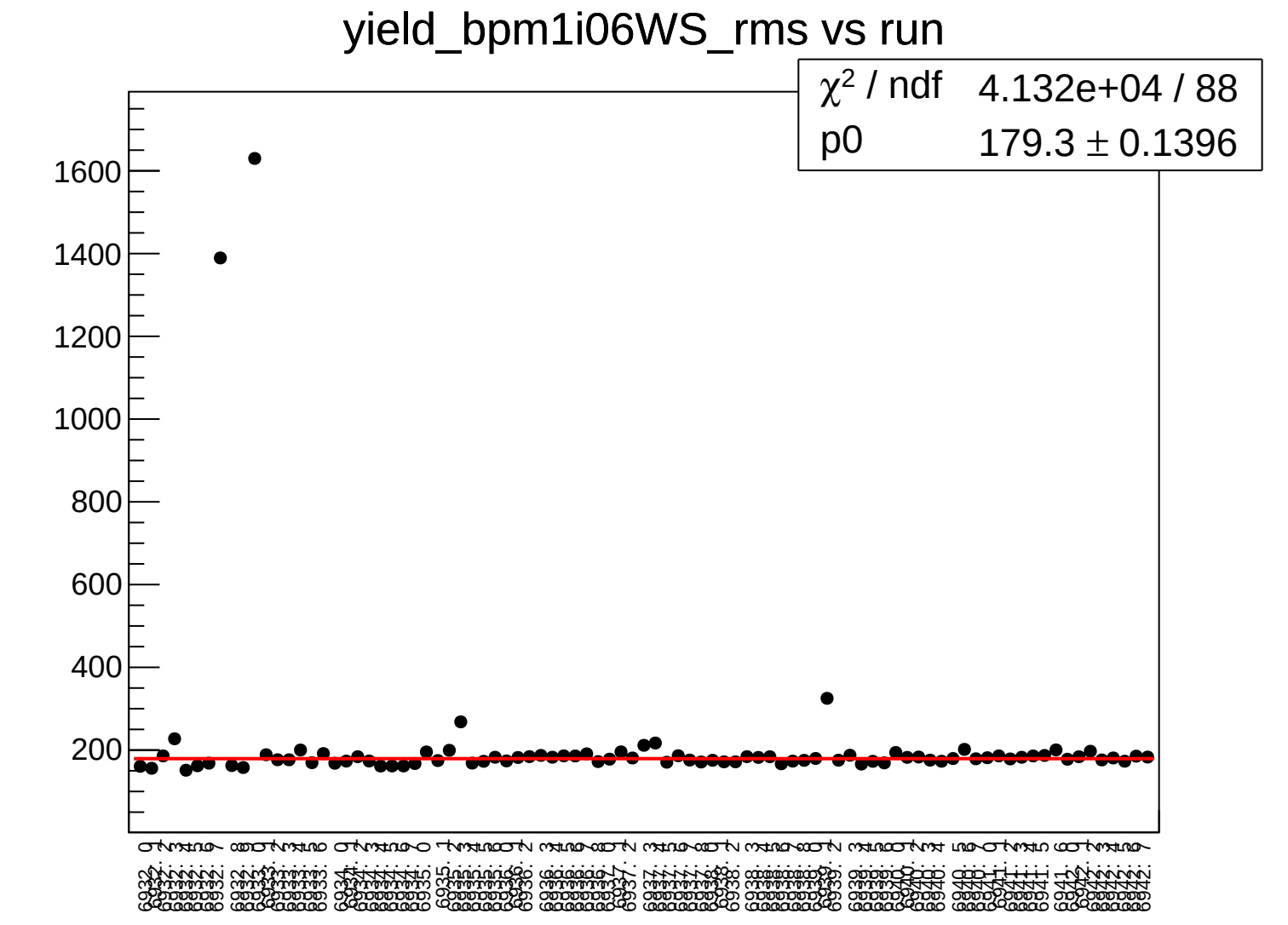

yield_bpm1i04WS_mean vs run
×10^3
150
149
148
147
146
145
χ² / ndf 1.824e+07 / 88
p0 1.491e+05 ± 0.2074
pull
Entries 89
Mean 348.5
Std Dev 306.3
0
−500
−1000
−1500
−2000
−2500
−3000

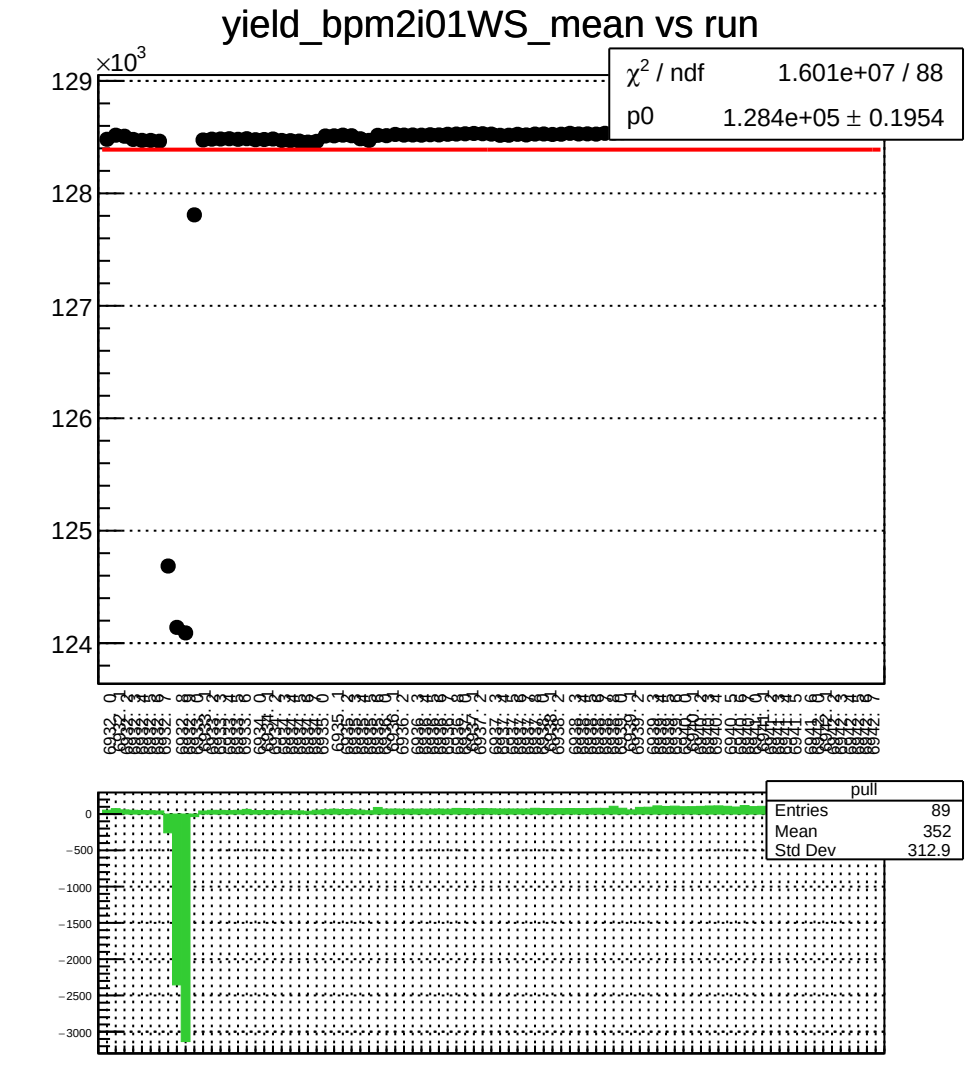

pull1D
Entries 89
Mean −1.408
Std Dev 4.221
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

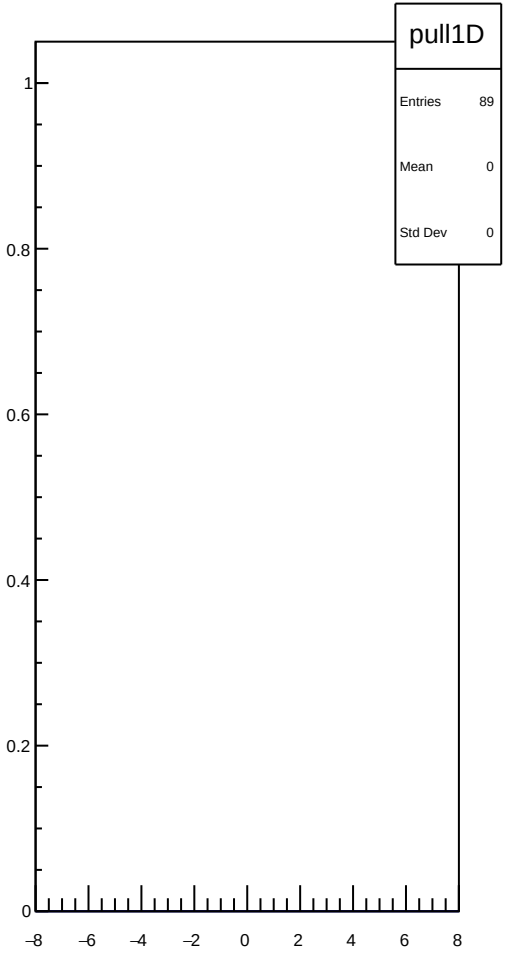

yield_bpm1i04WS_rms vs run
χ² / ndf 3.623e+04 / 88
p0 188.5 ± 0.1466
1800
1600
1400
1200
1000
800
600
400
200

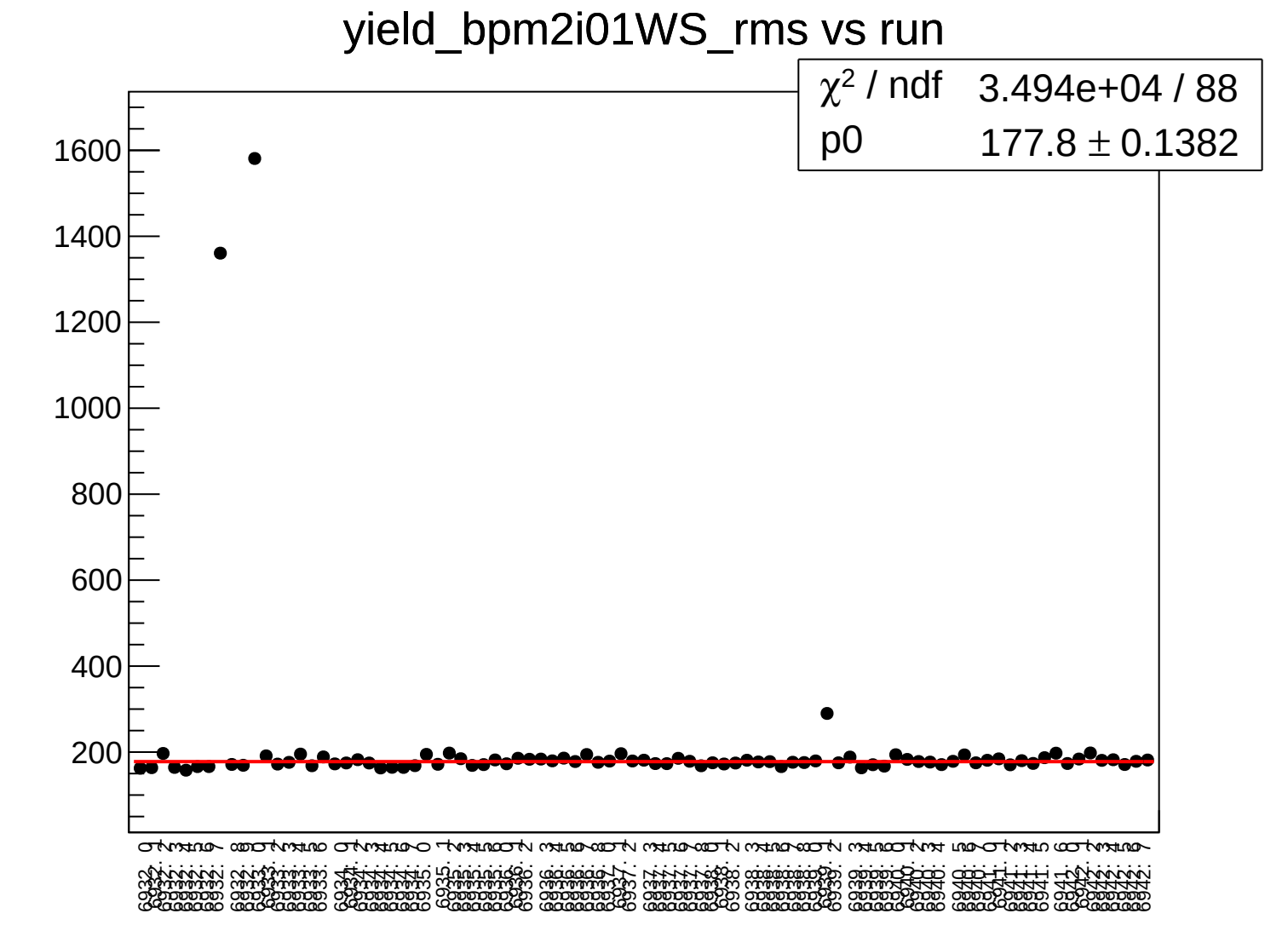

yield_bpm1i06WS_mean vs run
×10^3
χ² / ndf 5.888e+07 / 88
p0 1.435e+05 ± 0.1975
146
145
144
143
142
141
140
139
138
pull
Entries 89
Mean 607.8
Std Dev 563.9
1000
0
−1000
−2000
−3000
−4000

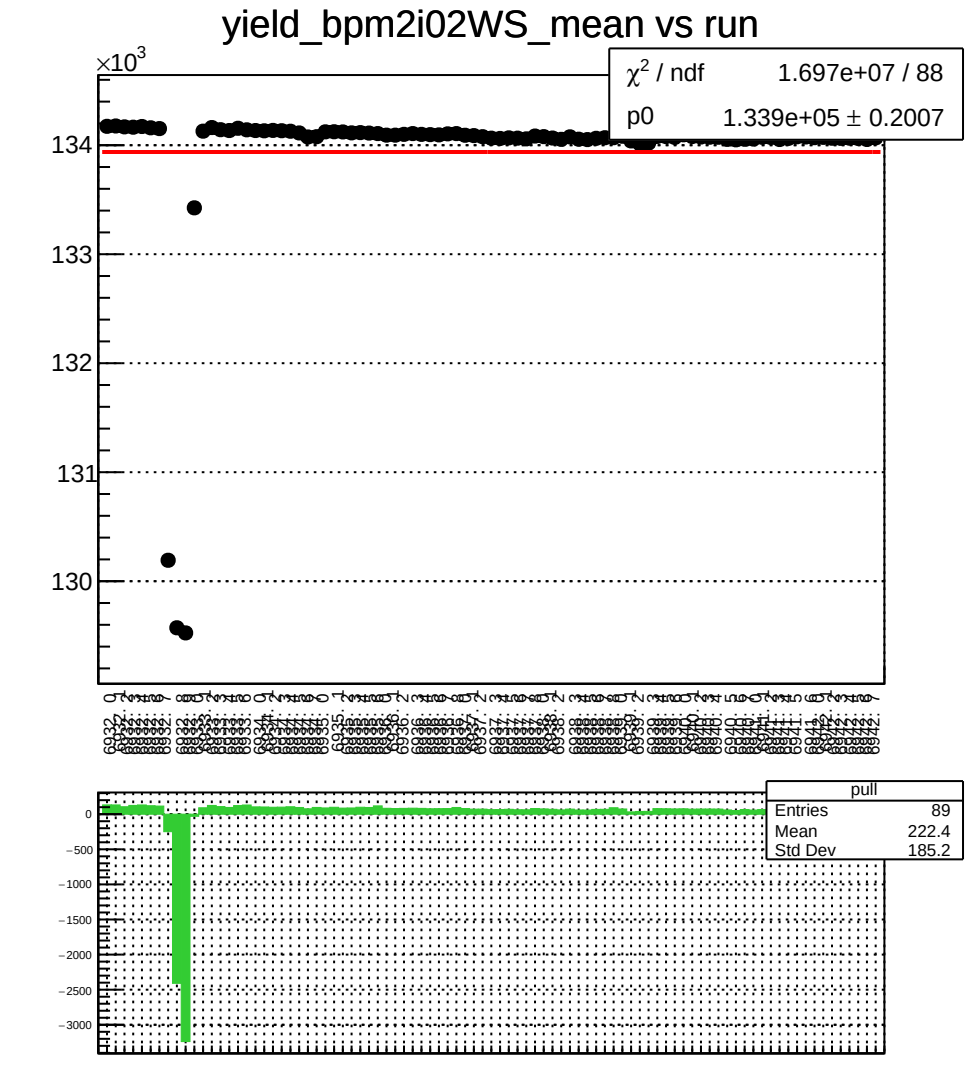

pull1D
Entries 89
Mean 7.697
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

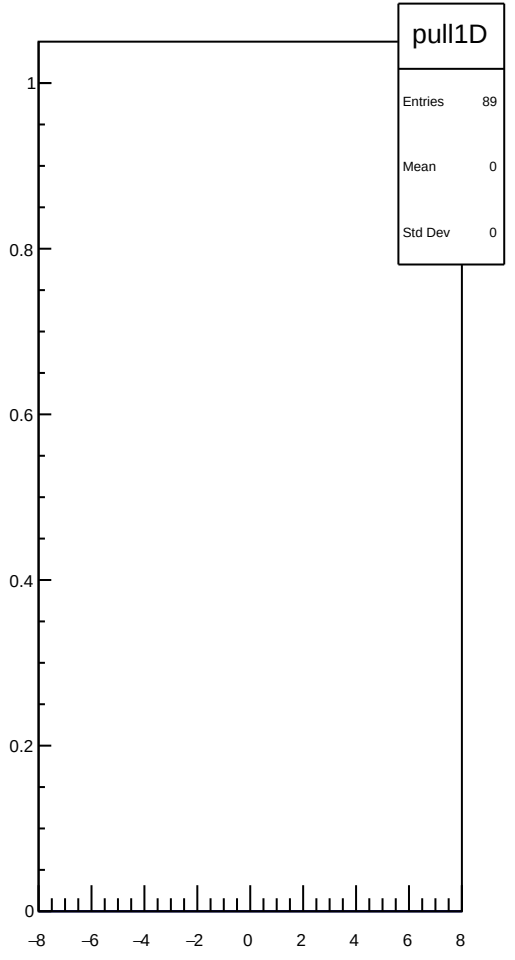

yield_bpm1i06WS_rms vs run
χ² / ndf 4.132e+04 / 88
p0 179.3 ± 0.1396
1600
1400
1200
1000
800
600
400
200

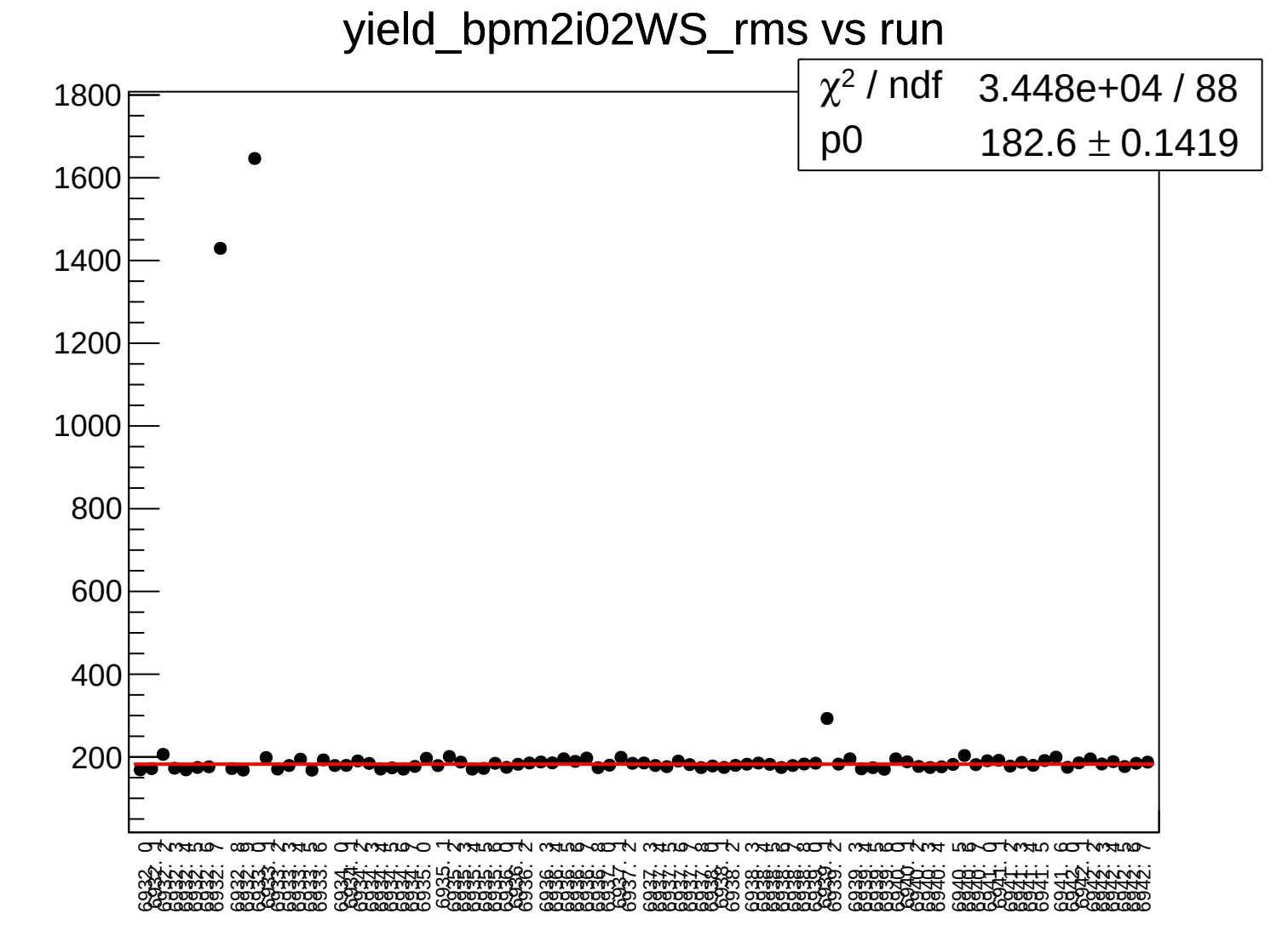

yield_bpm2i01WS_mean vs run
×10^3
129
128
127
126
125
124
χ² / ndf 1.601e+07 / 88
p0 1.284e+05 ± 0.1954
pull
Entries 89
Mean 352
Std Dev 312.9
0
−500
−1000
−1500
−2000
−2500
−3000

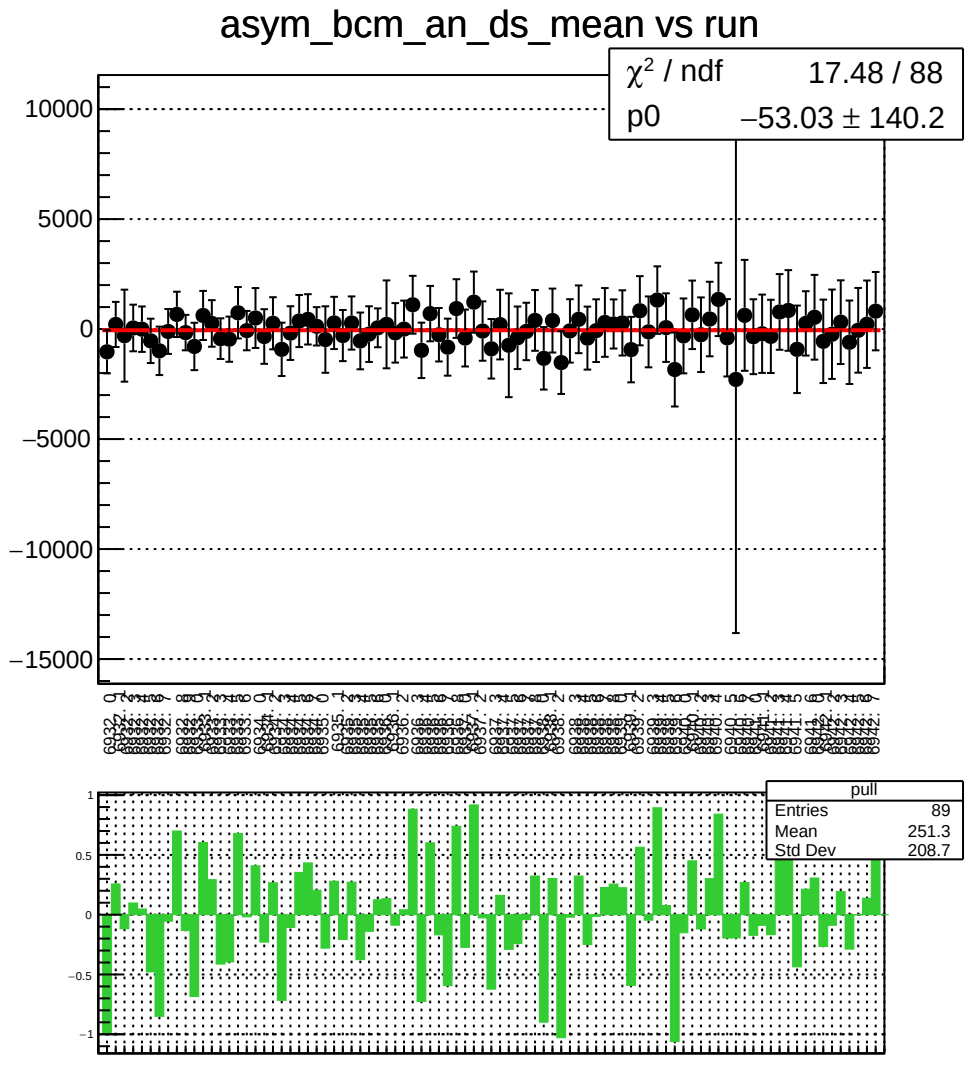

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

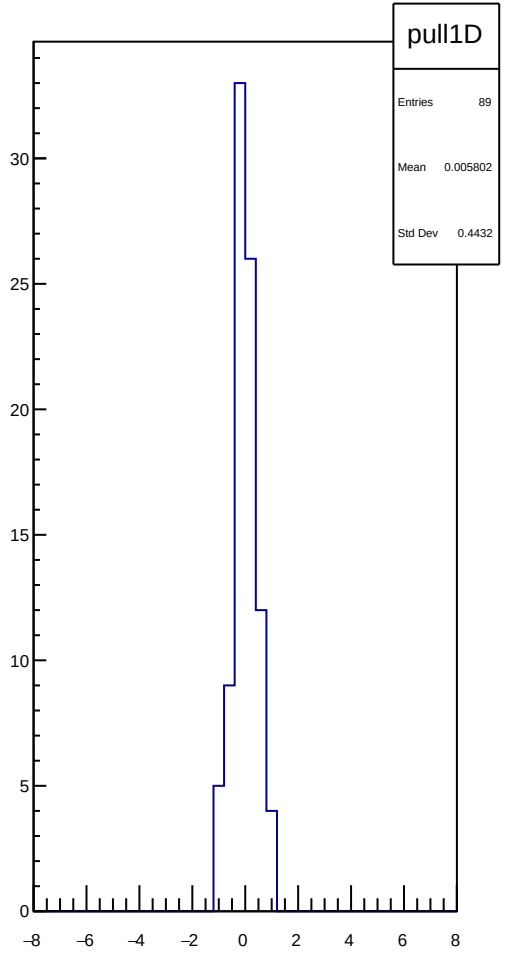

yield_bpm2i01WS_rms vs run
χ² / ndf 3.494e+04 / 88
p0 177.8 ± 0.1382
1600
1400
1200
1000
800
600
400
200

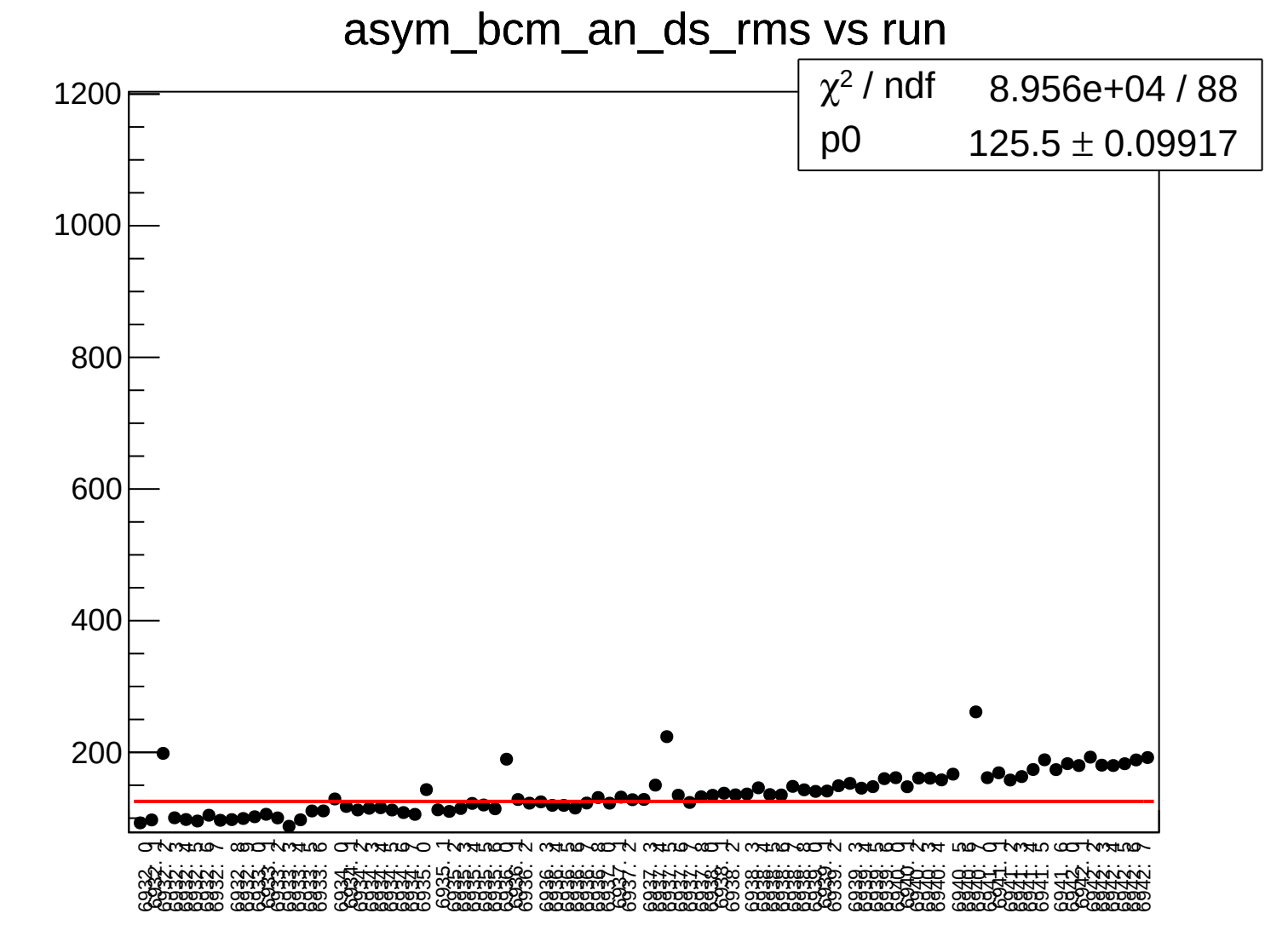

yield_bpm2i02WS_mean vs run
×10^3
χ² / ndf 1.697e+07 / 88
p0 1.339e+05 ± 0.2007
134
133
132
131
130
pull
Entries 89
Mean 222.4
Std Dev 185.2
0
−500
−1000
−1500
−2000
−2500
−3000

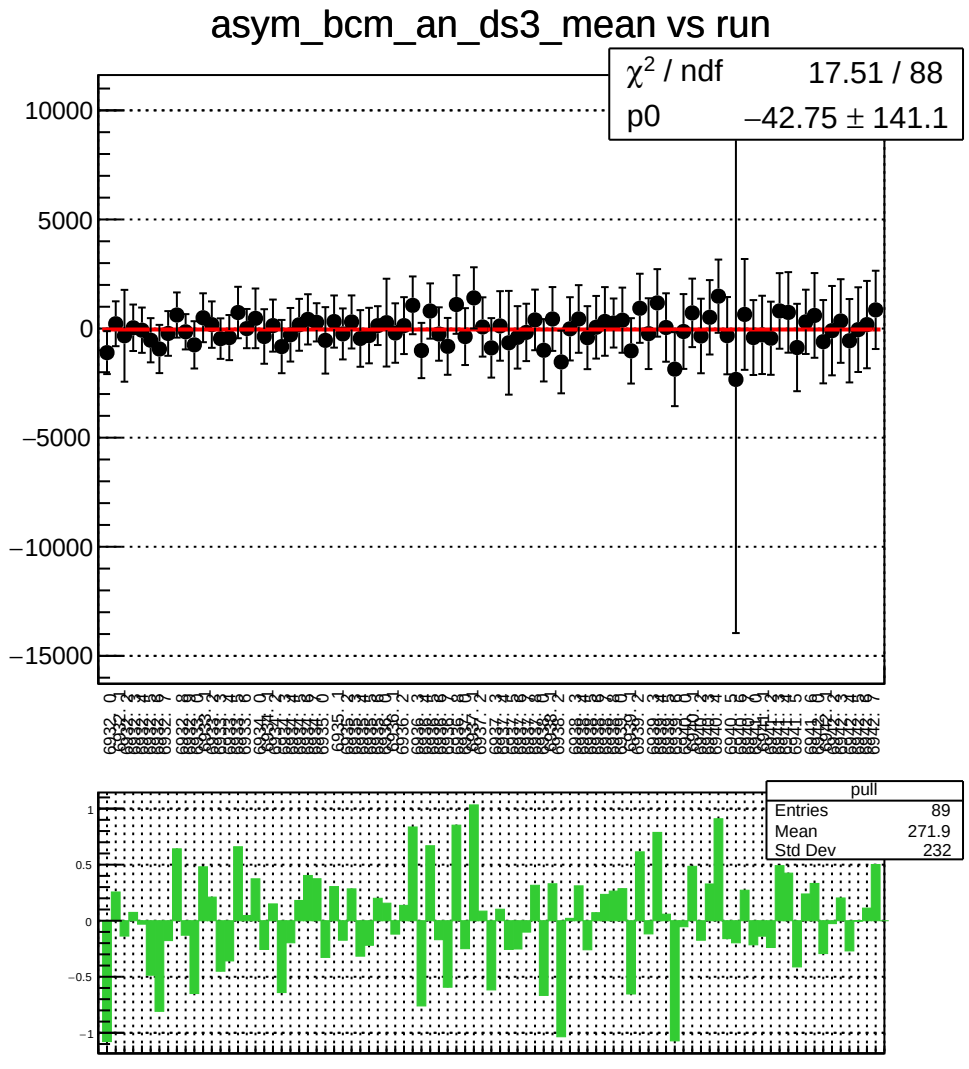

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

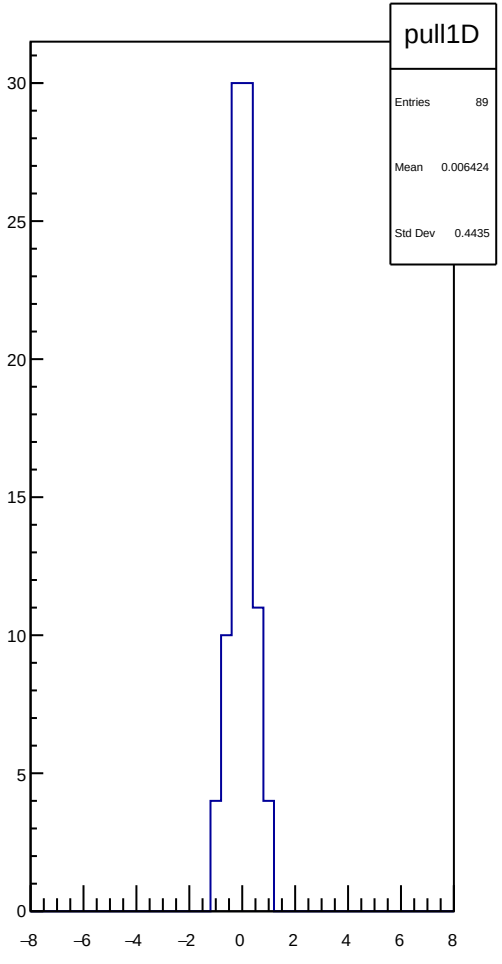

yield_bpm2i02WS_rms vs run
χ² / ndf 3.448e+04 / 88
p0 182.6 ± 0.1419
1800
1600
1400
1200
1000
800
600
400
200

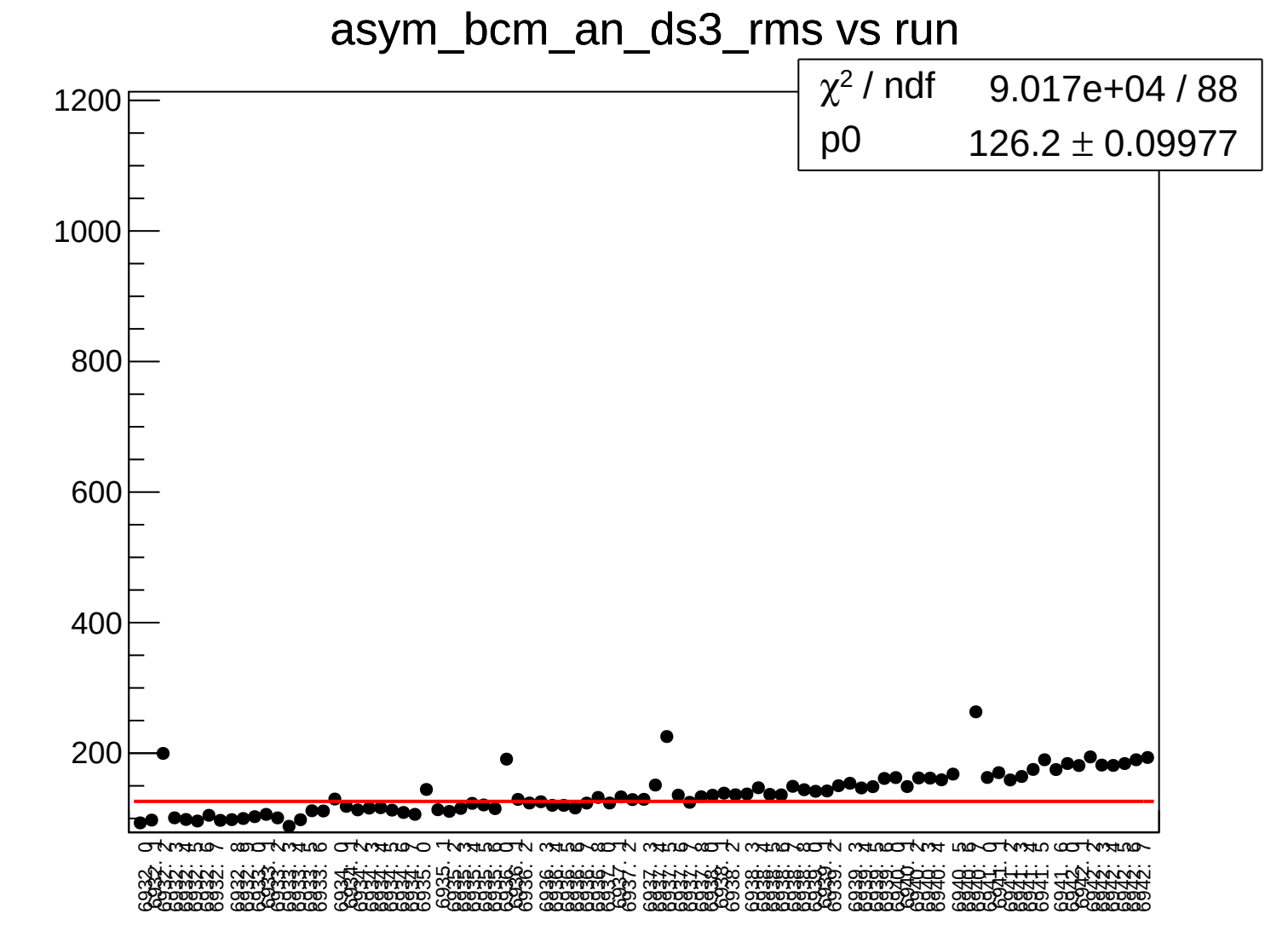

asym_bcm_an_ds_mean vs run
χ² / ndf 17.48 / 88
p0 −53.03 ± 140.2
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 251.3
Std Dev 208.7
1
0.5
0
−0.5
−1

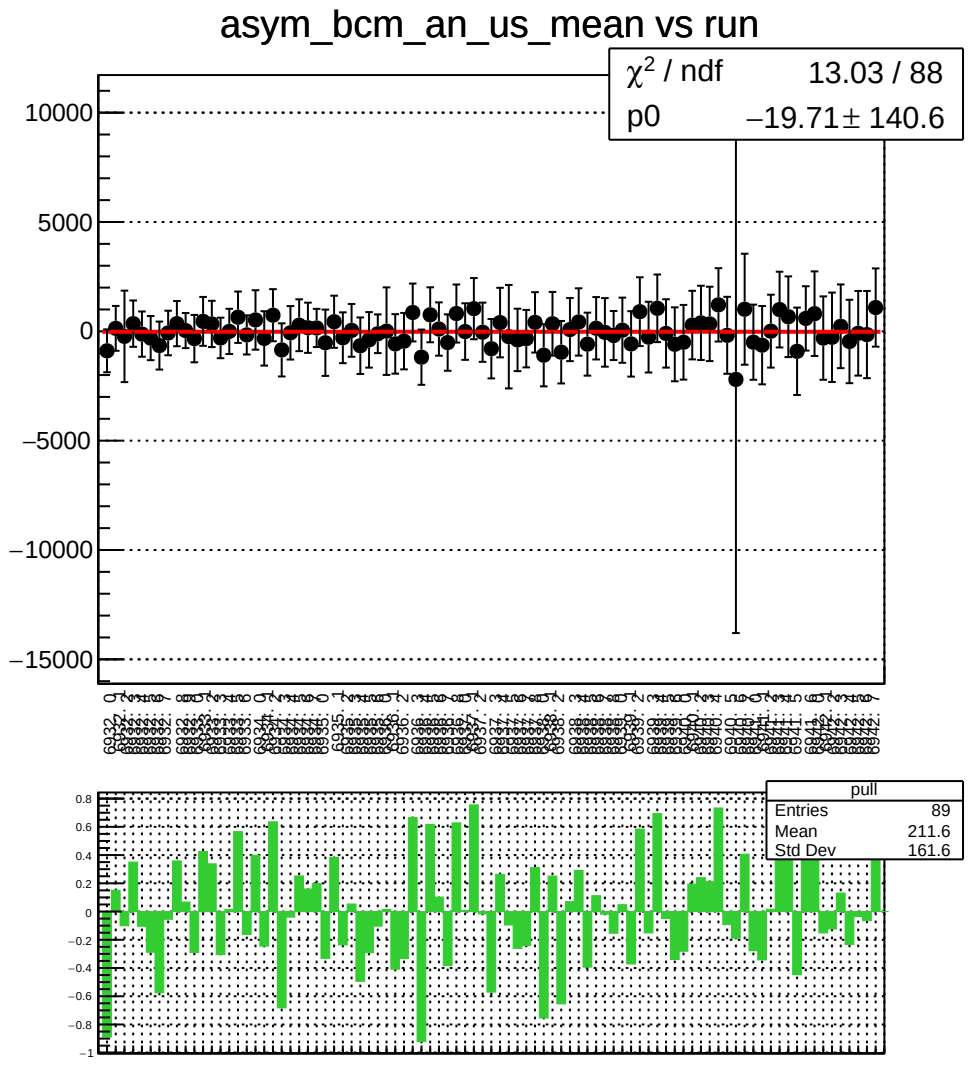

pull1D
Entries 89
Mean 0.005802
Std Dev 0.4432
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

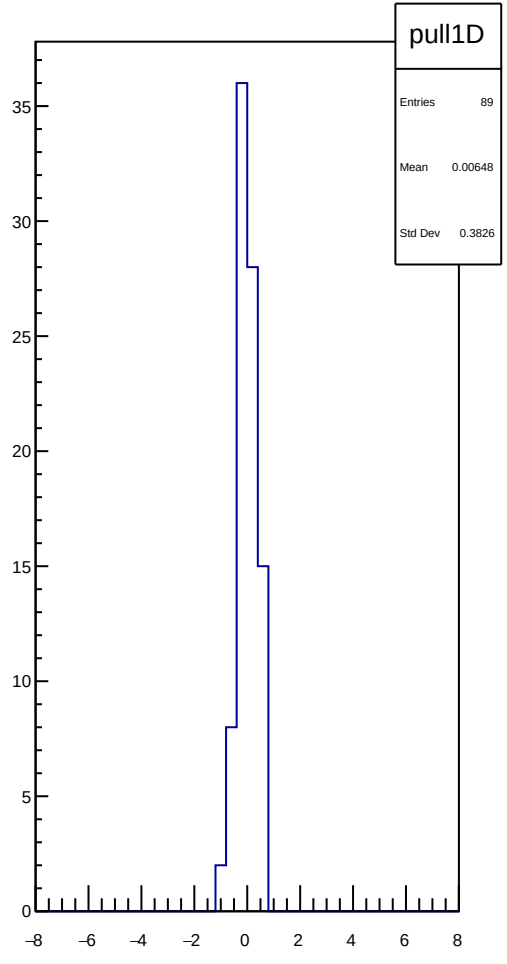

asym_bcm_an_ds_rms vs run
χ² / ndf 8.956e+04 / 88
p0 125.5 ± 0.09917
1200
1000
800
600
400
200

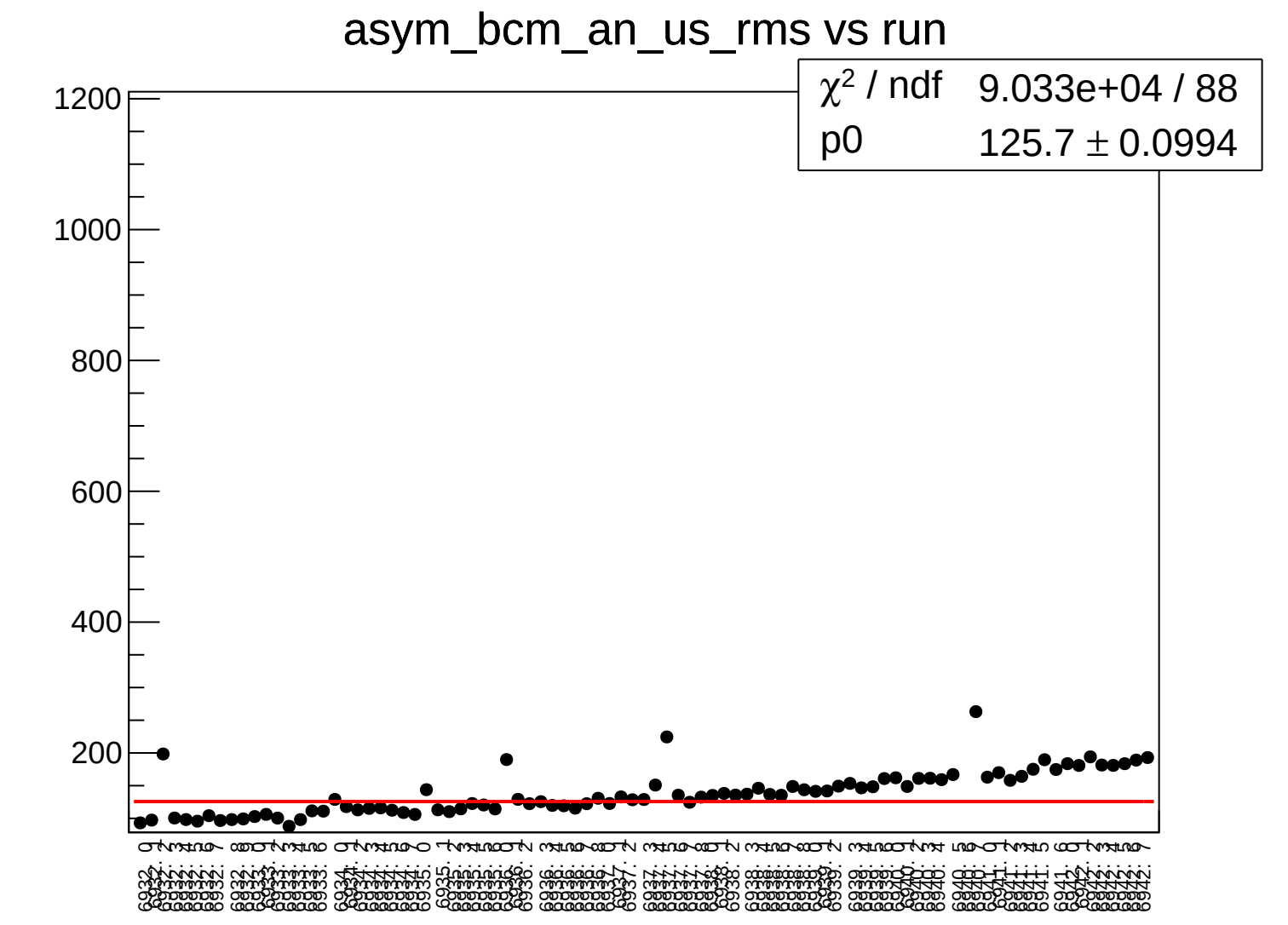

asym_bcm_an_ds3_mean vs run
χ² / ndf 17.51 / 88
p0 −42.75 ± 141.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 271.9
Std Dev 232
1
0.5
0
−0.5
−1

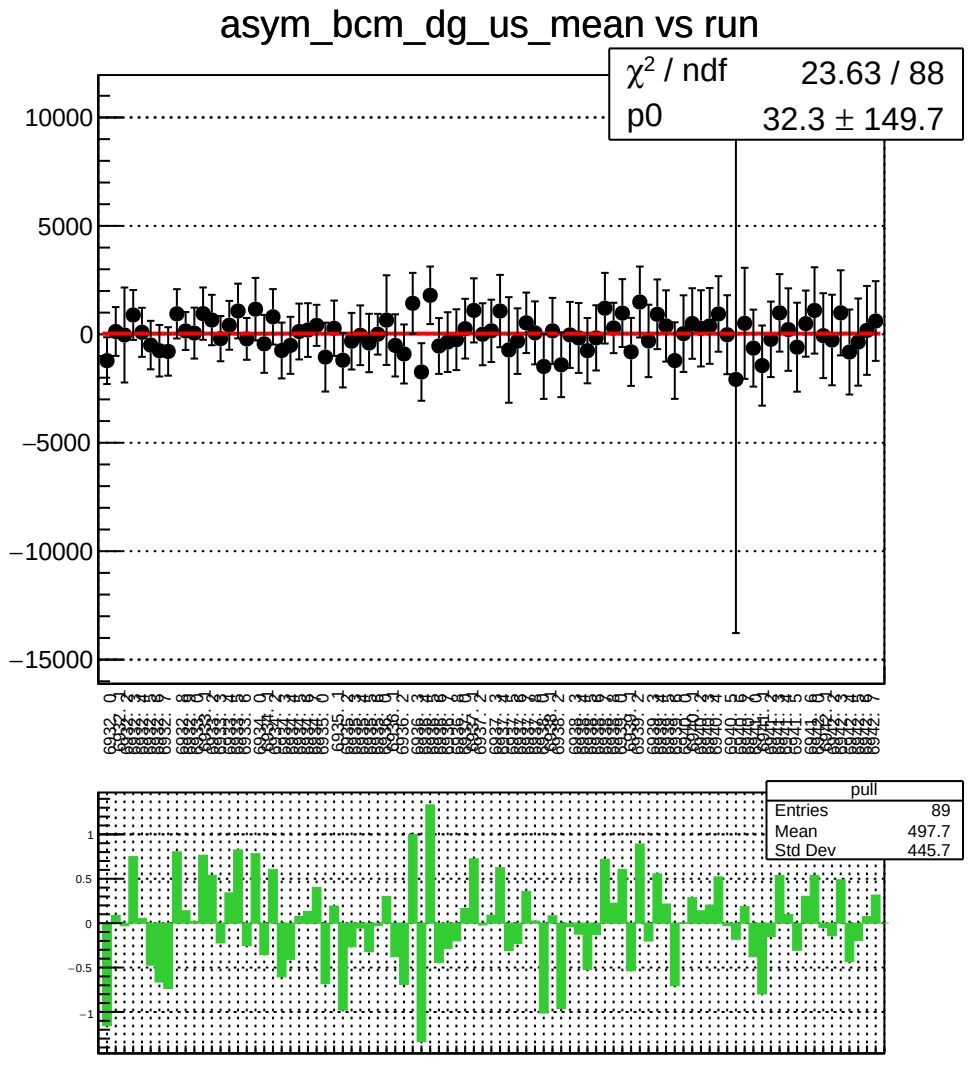

pull1D
Entries 89
Mean 0.006424
Std Dev 0.4435
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

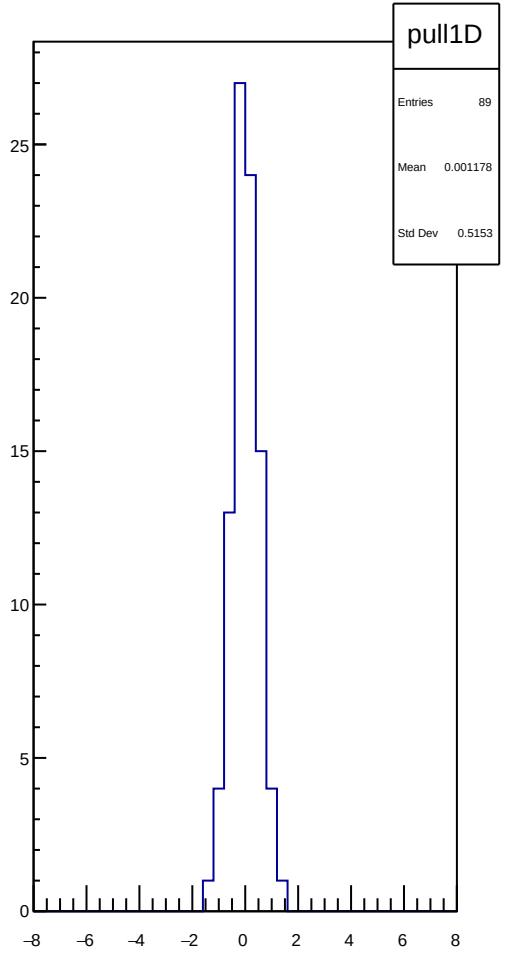

asym_bcm_an_ds3_rms vs run
χ^2 / ndf 9.017e+04 / 88
p0 126.2 ± 0.09977
1200
1000
800
600
400
200


asym_bcm_an_us_mean vs run
χ² / ndf 13.03 / 88
p0 −19.71 ± 140.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 211.6
Std Dev 161.6
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

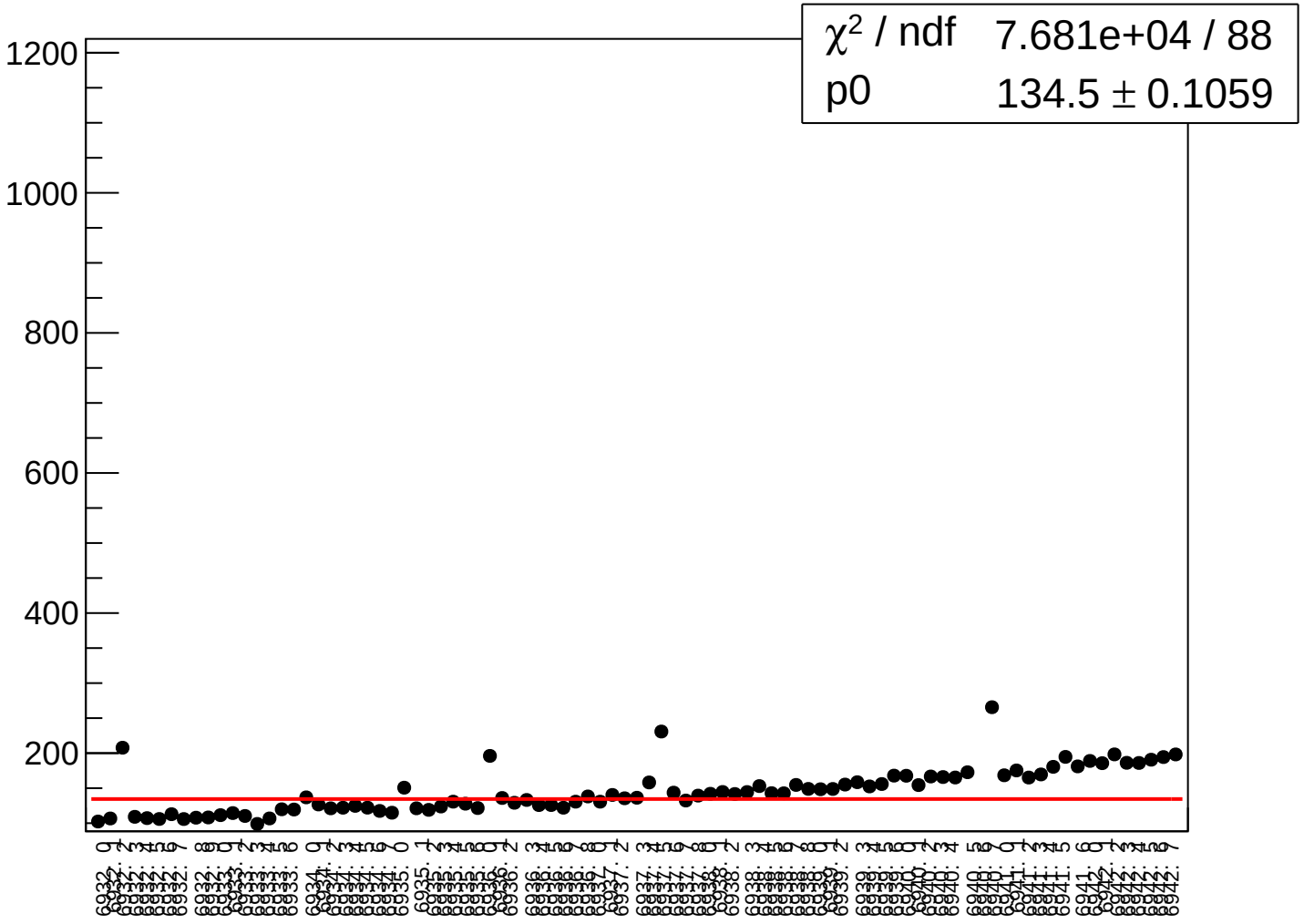

pull1D
Entries 89
Mean 0.00648
Std Dev 0.3826
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

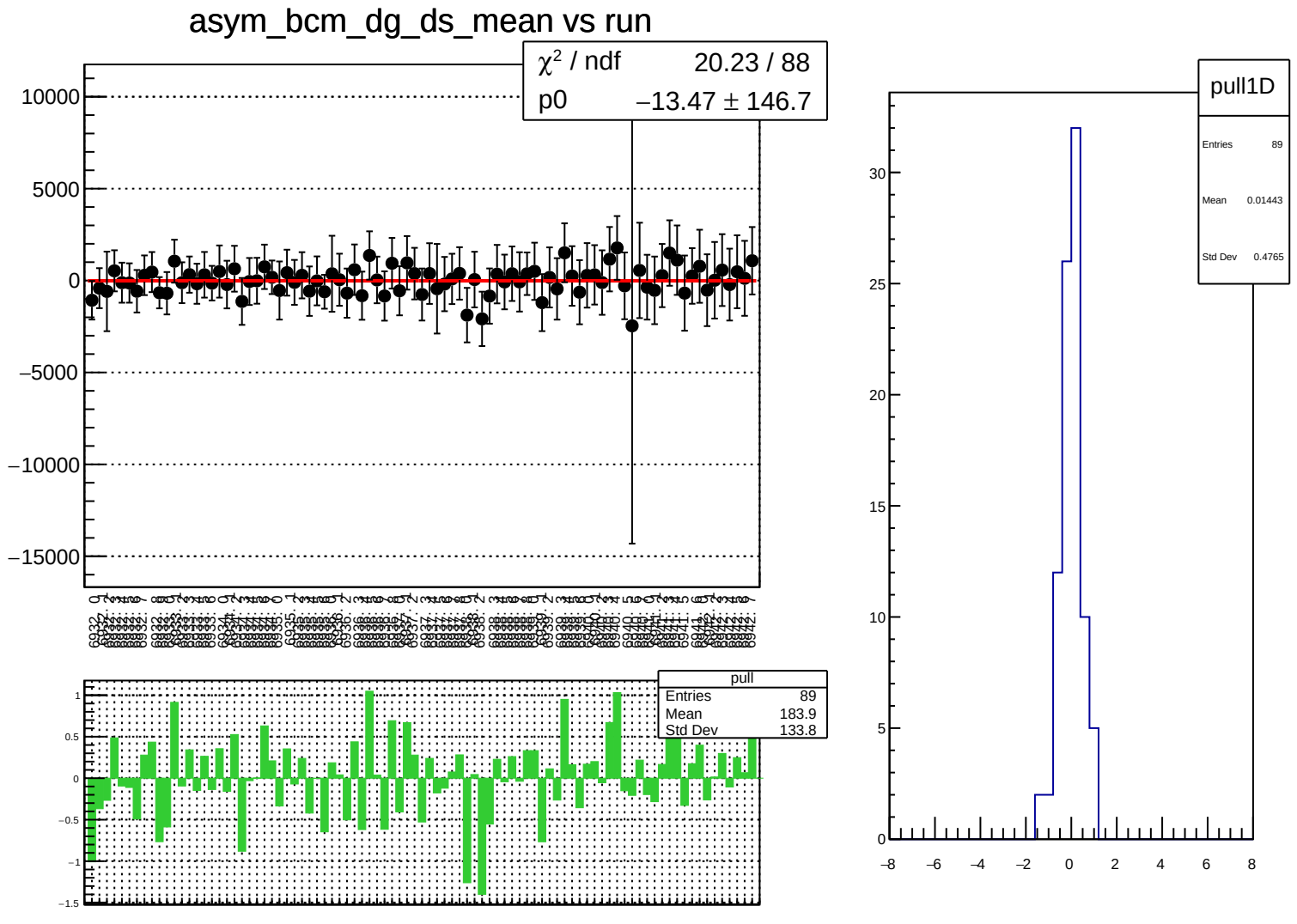

asym_bcm_an_us_rms vs run
χ^2 / ndf 9.033e+04 / 88
p0 125.7 ± 0.0994
1200
1000
800
600
400
200

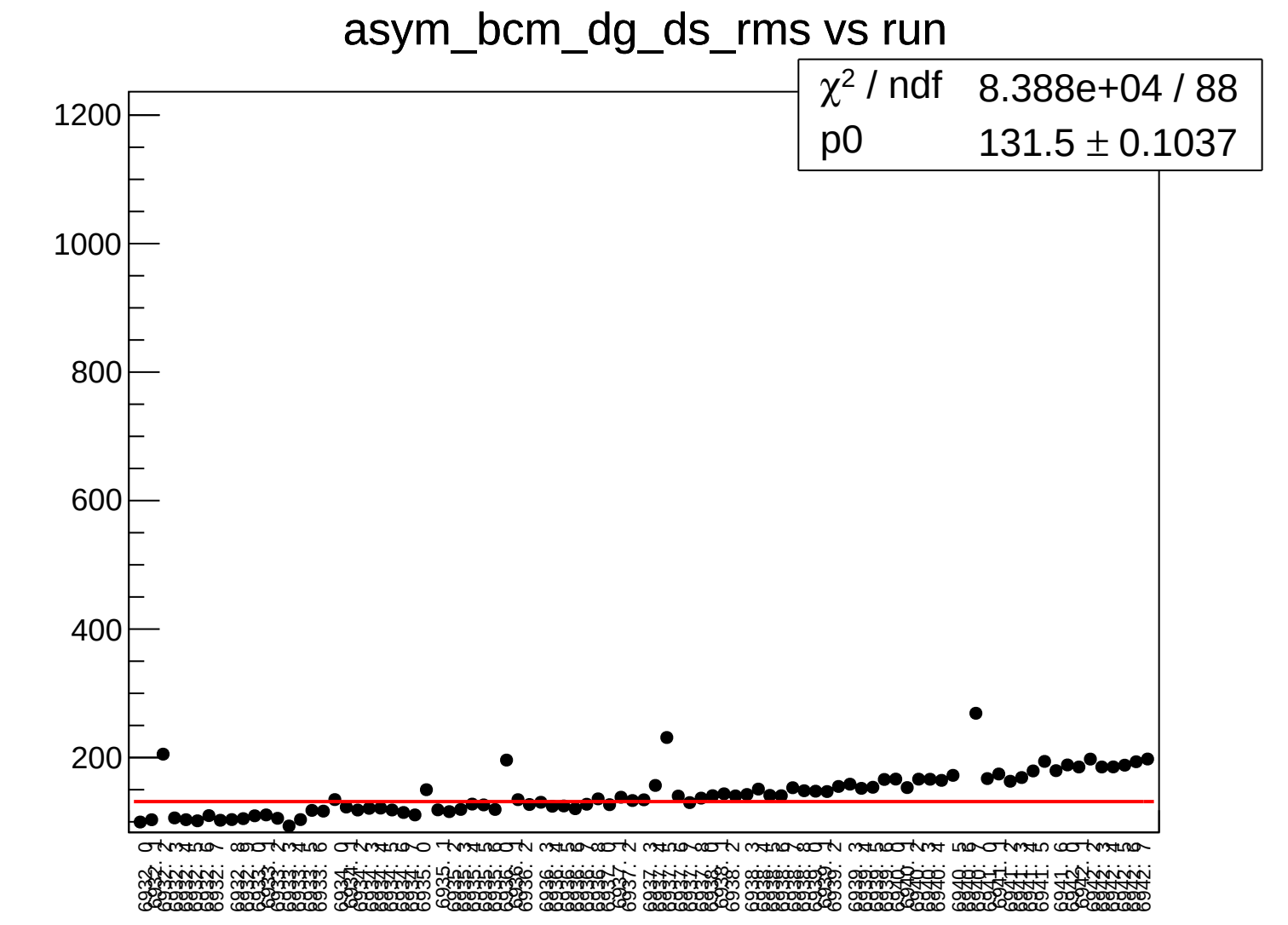

asym_bcm_dg_us_mean vs run
χ² / ndf 23.63 / 88
p0 32.3 ± 149.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 497.7
Std Dev 445.7
1
0.5
0
−0.5
−1

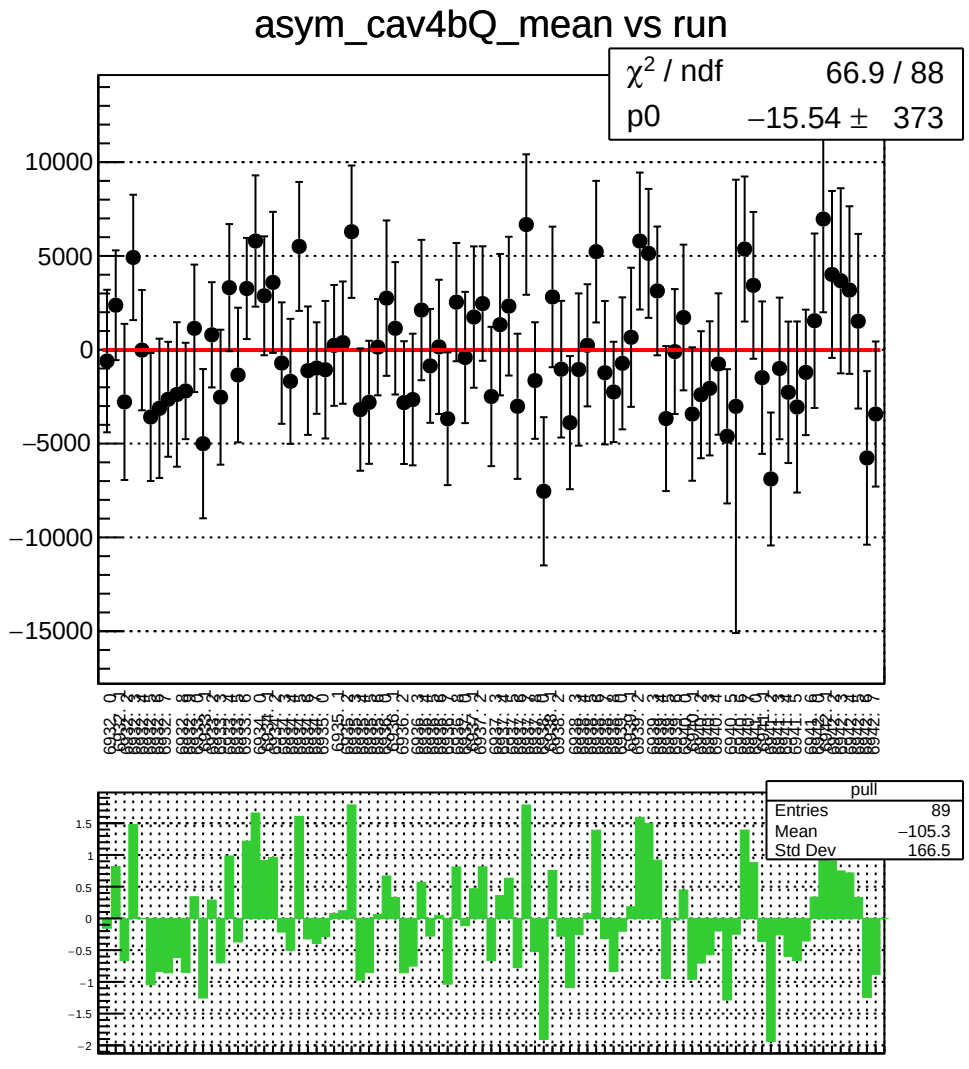

pull1D
Entries 89
Mean 0.001178
Std Dev 0.5153
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

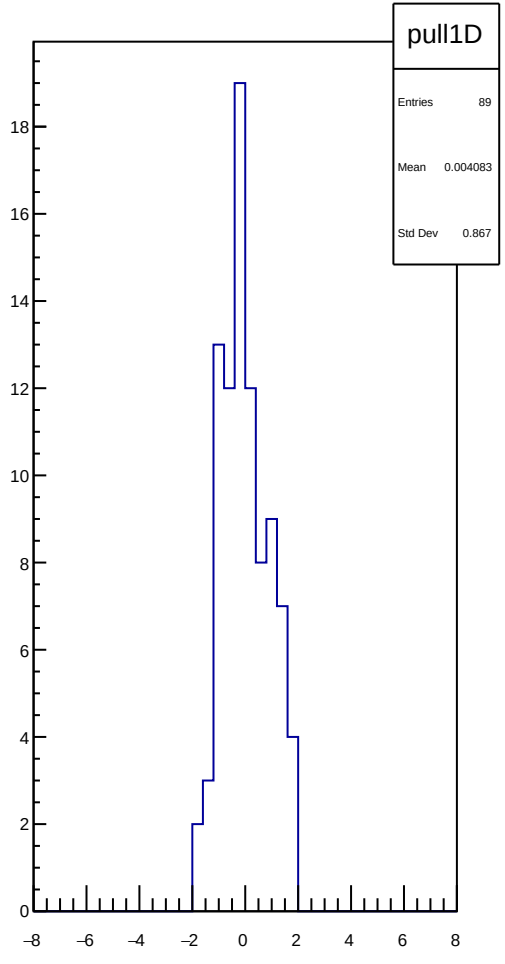
asym_bcm_dg_us_rms vs run

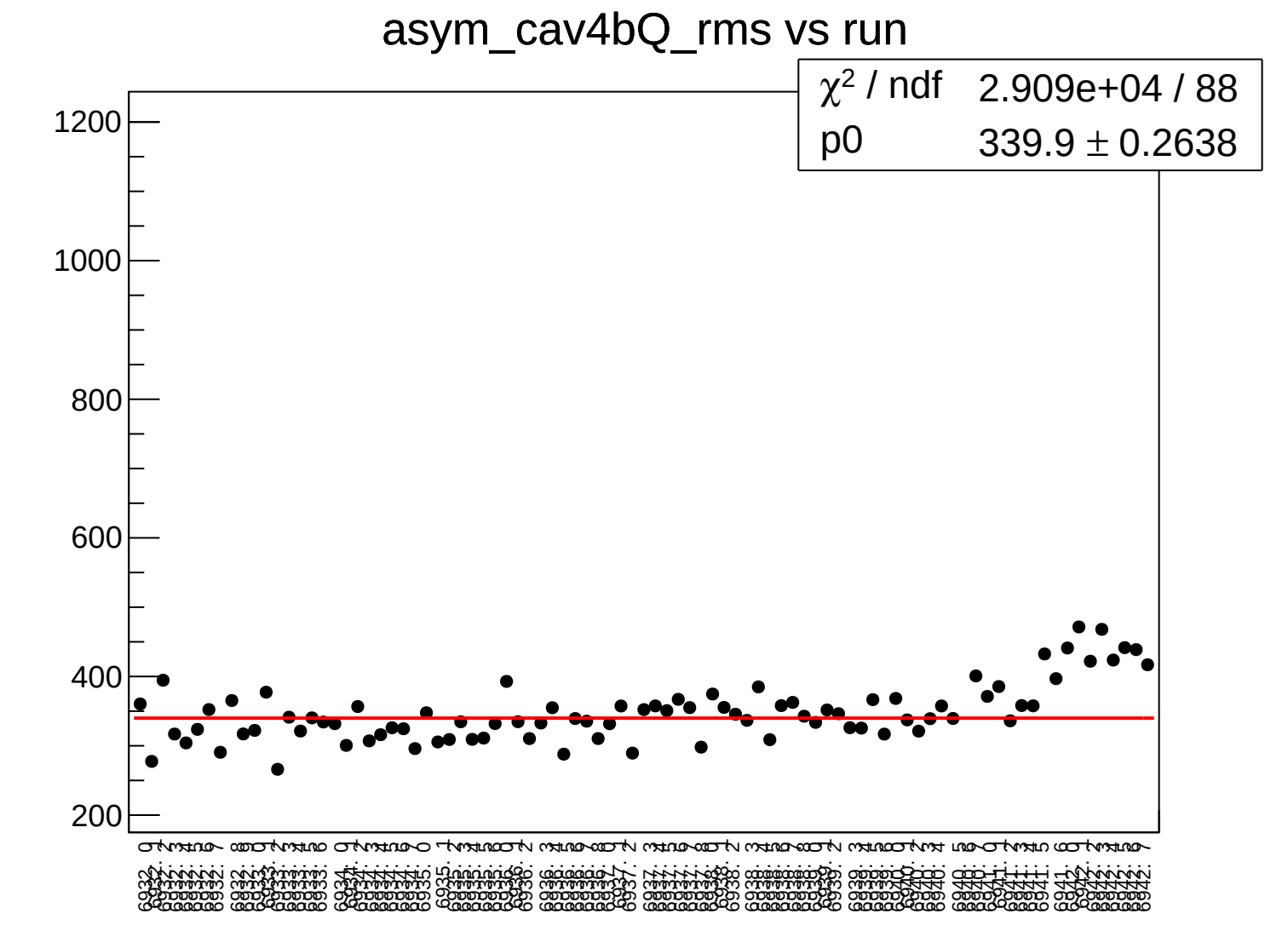


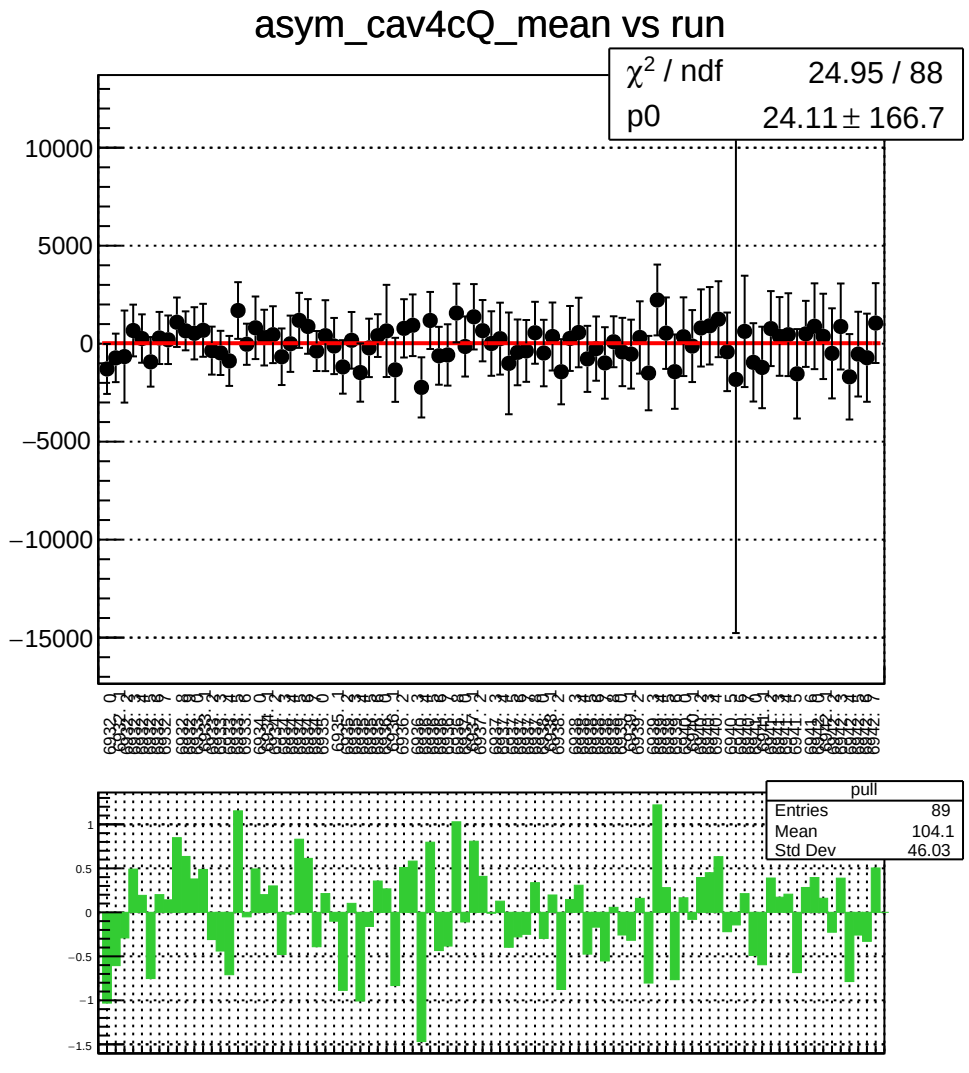

asym_bcm_dg_ds_mean vs run
χ² / ndf 20.23 / 88
p0 −13.47 ± 146.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 183.9
Std Dev 133.8
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 89
Mean 0.01443
Std Dev 0.4765
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

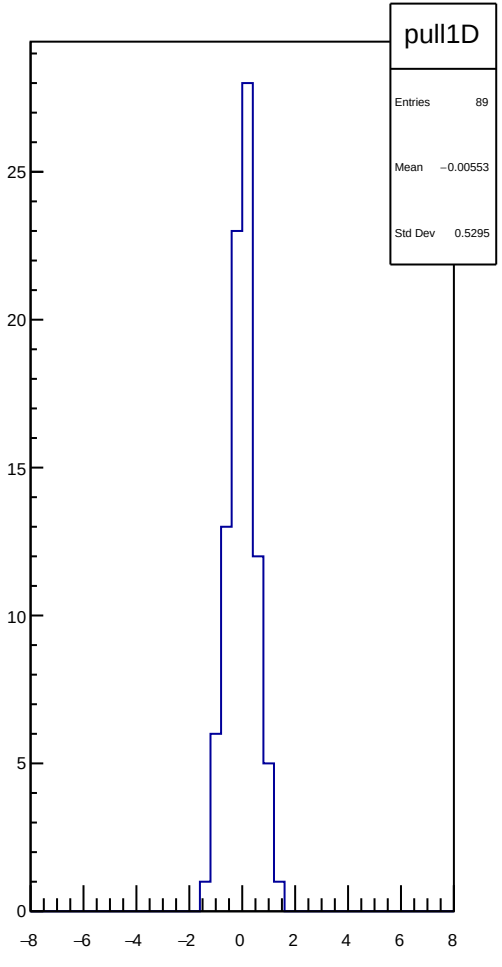

asym_bcm_dg_ds_rms vs run
χ² / ndf 8.388e+04 / 88
p0 131.5 ± 0.1037
1200
1000
800
600
400
200

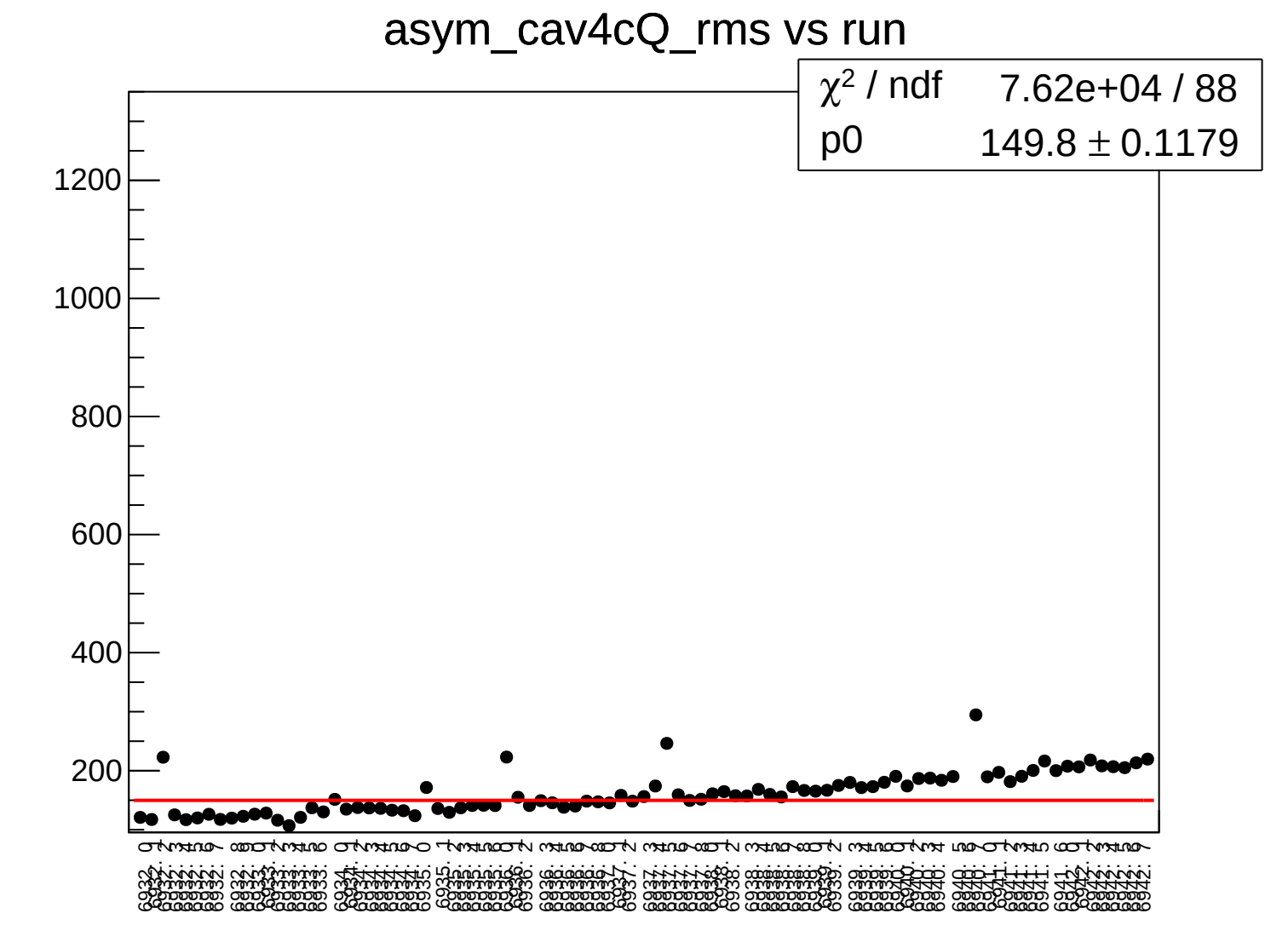

asym_cav4bQ_mean vs run
χ² / ndf 66.9 / 88
p0 −15.54 ± 373
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean −105.3
Std Dev 166.5
1.5
1
0.5
0
−0.5
−1
−1.5
−2

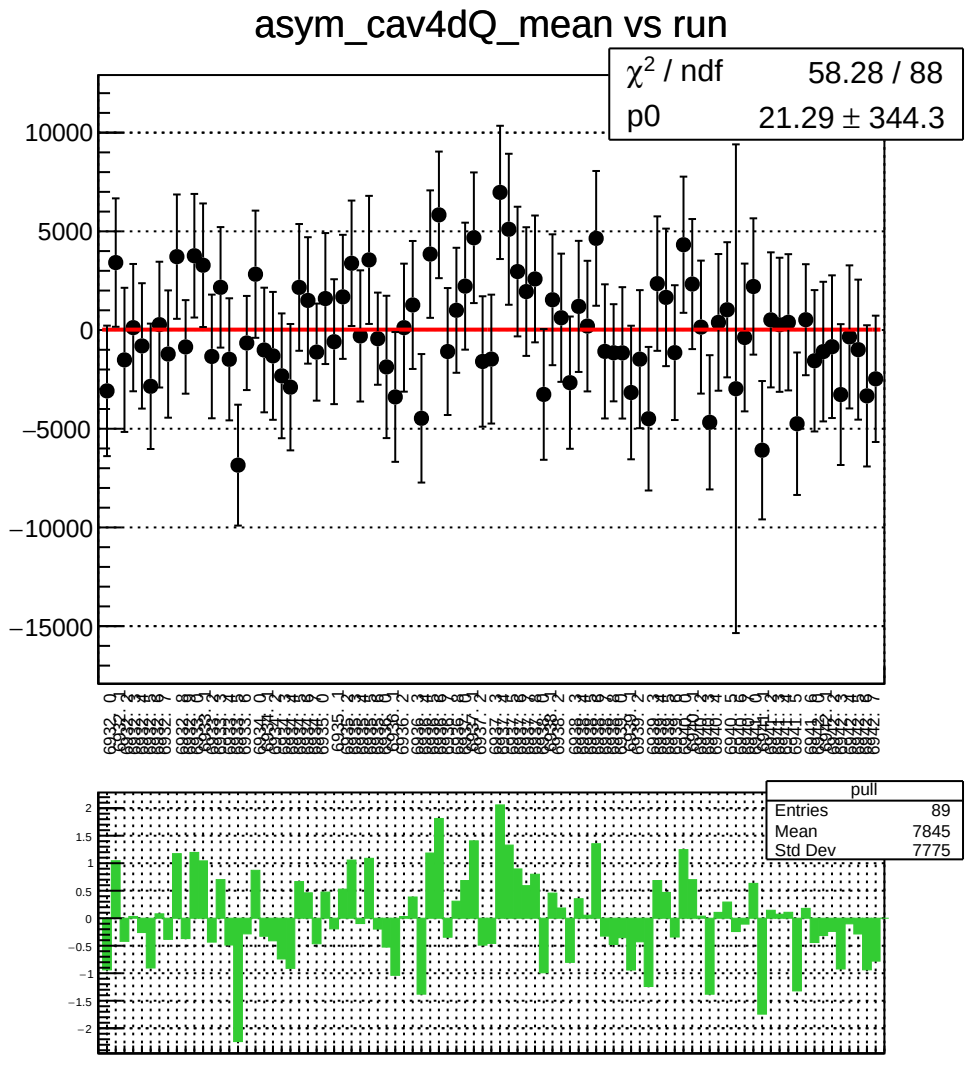

pull1D
Entries 89
Mean 0.004083
Std Dev 0.867
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

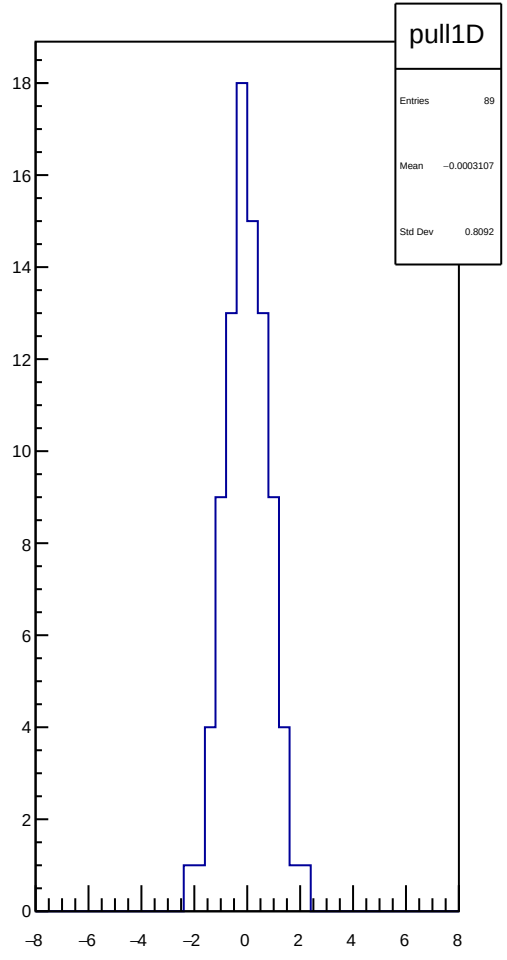

asym_cav4bQ_rms vs run
χ² / ndf 2.909e+04 / 88
p0 339.9 ± 0.2638
1200
1000
800
600
400
200

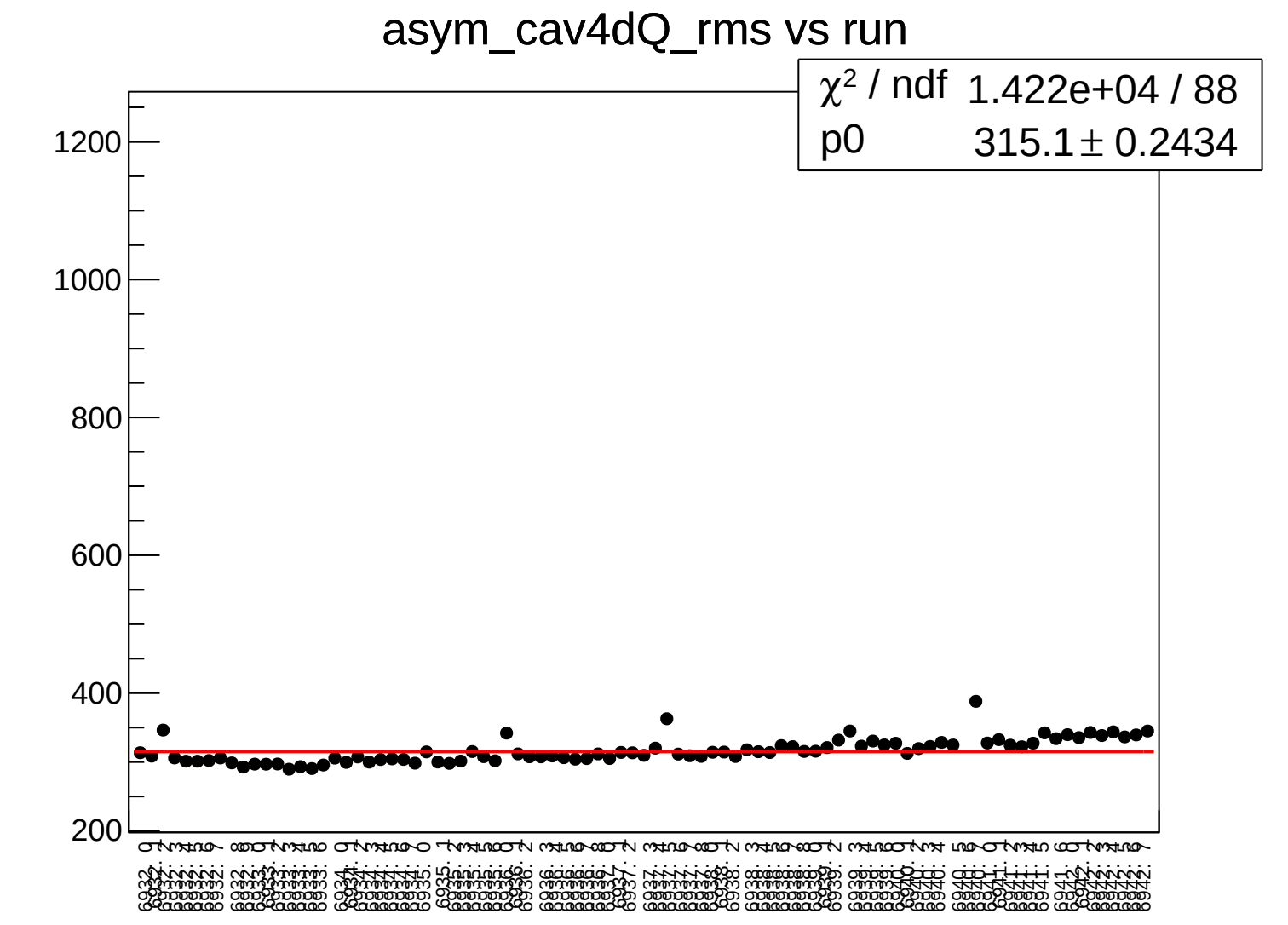

asym_cav4cQ_mean vs run
χ² / ndf 24.95 / 88
p0 24.11 ± 166.7
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 104.1
Std Dev 46.03
1
0.5
0
−0.5
−1
−1.5

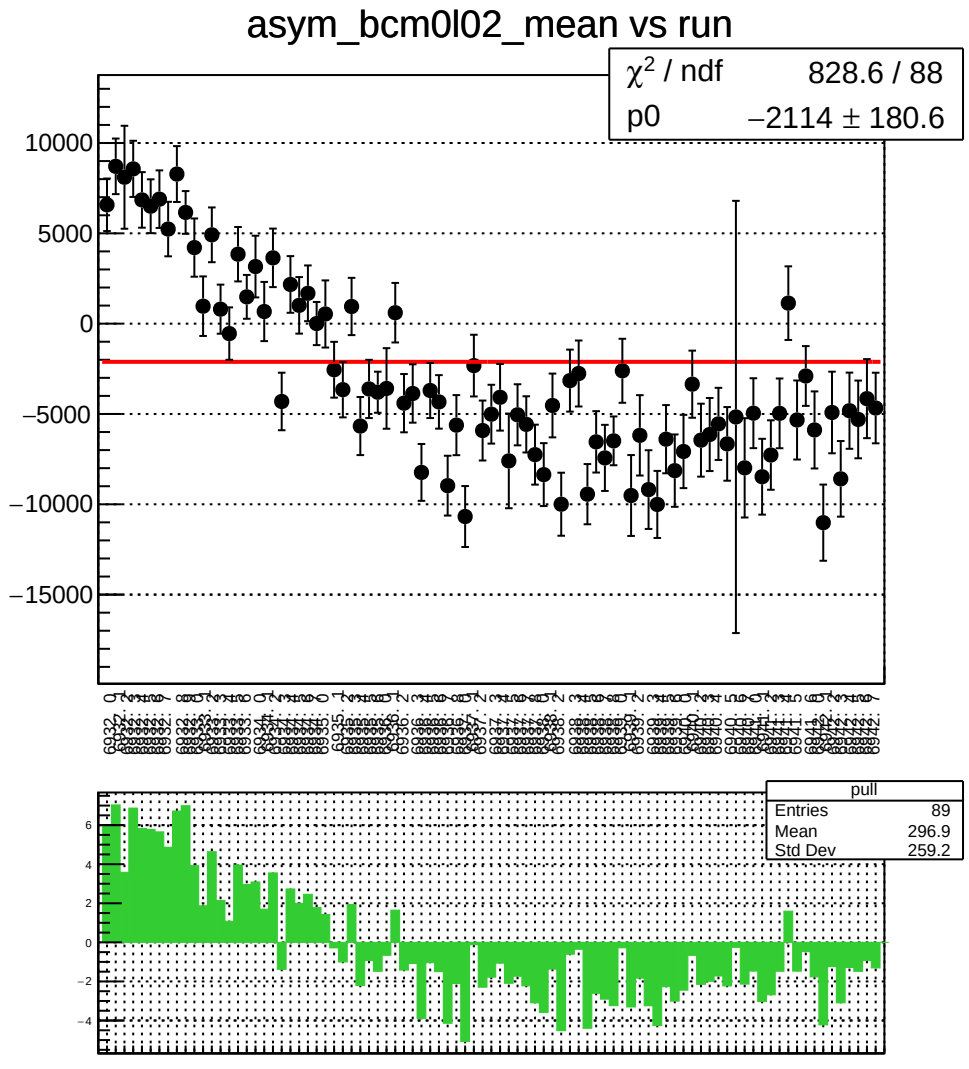

pull1D
Entries 89
Mean −0.00553
Std Dev 0.5295
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

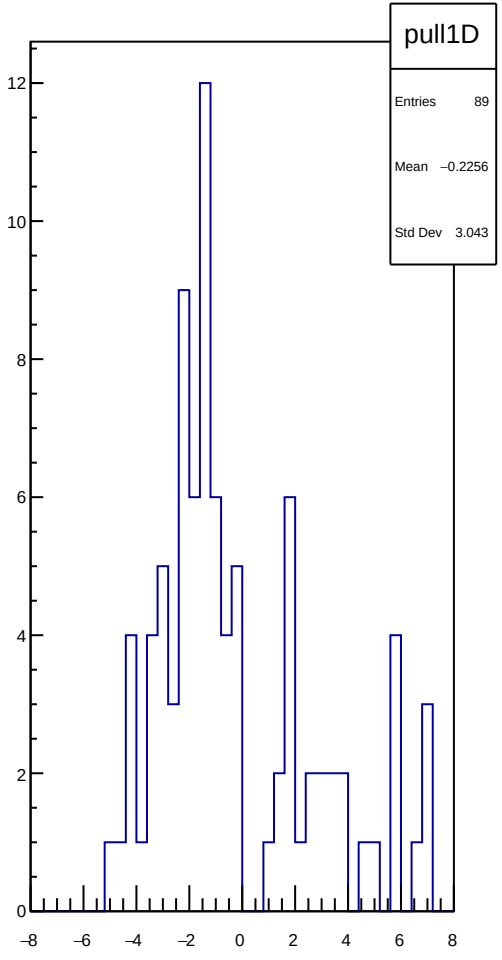

asym_cav4cQ_rms vs run
χ² / ndf 7.62e+04 / 88
p0 149.8 ± 0.1179
1200
1000
800
600
400
200

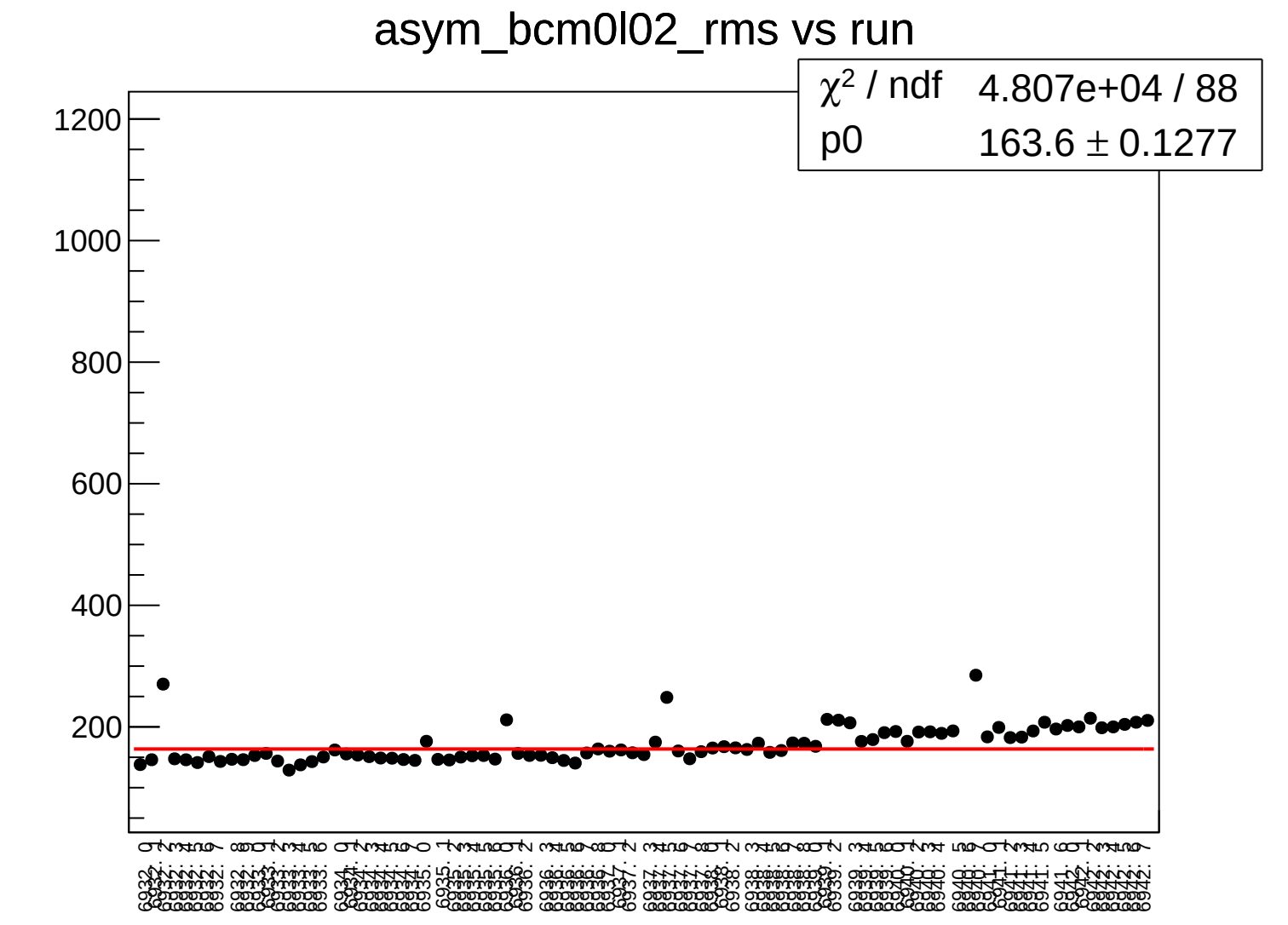

asym_cav4dQ_mean vs run
χ² / ndf 58.28 / 88
p0 21.29 ± 344.3
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 7845
Std Dev 7775
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

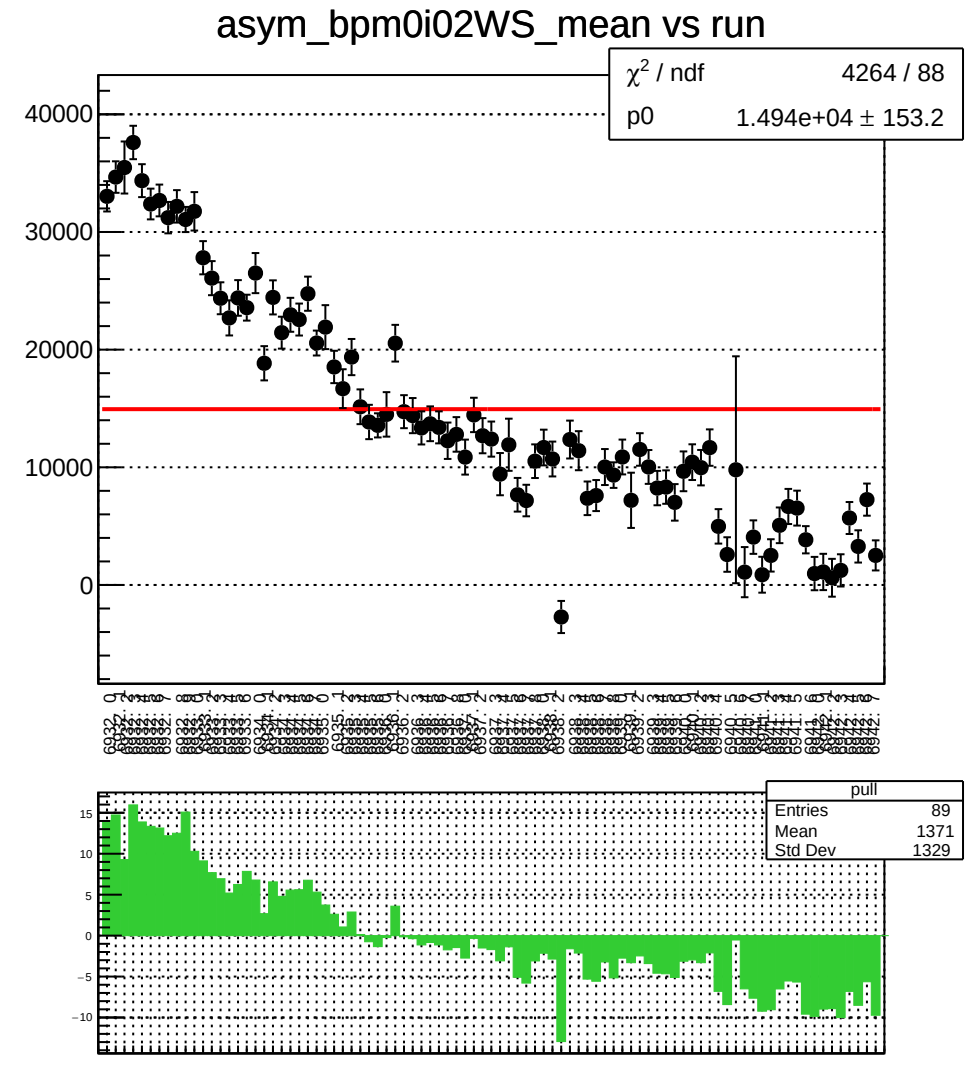

pull1D
Entries 89
Mean −0.0003107
Std Dev 0.8092
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

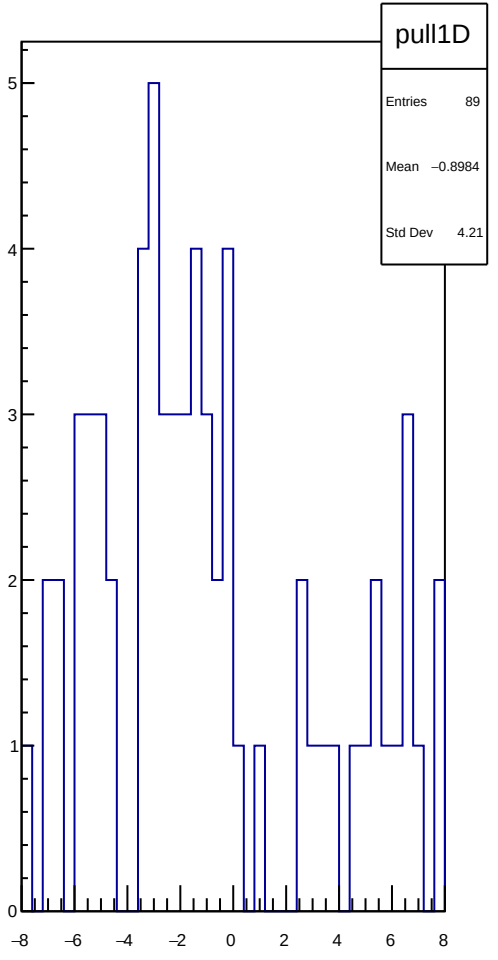

asym_cav4dQ_rms vs run
χ² / ndf 1.422e+04 / 88
p0 315.1 ± 0.2434
1200
1000
800
600
400
200

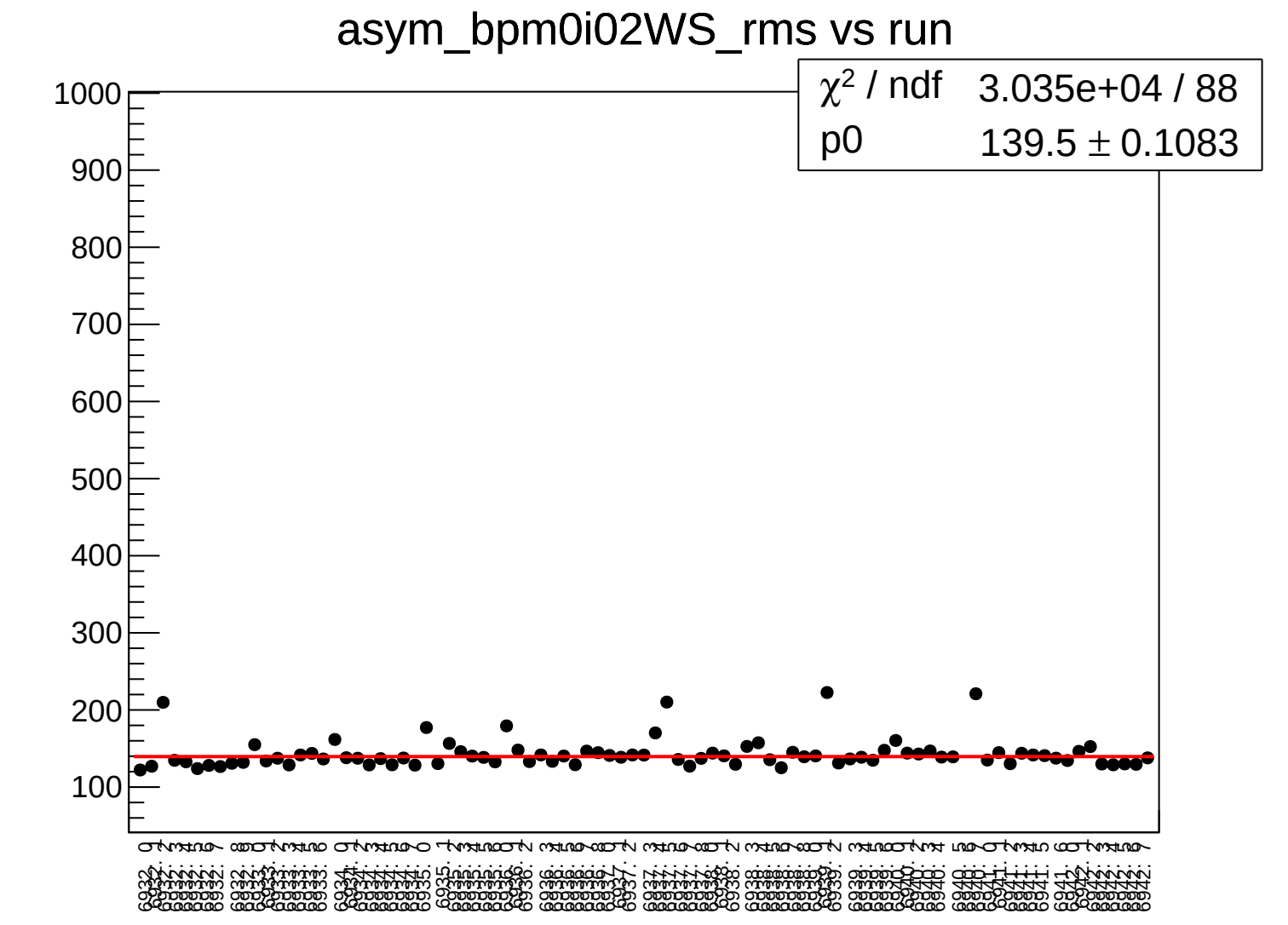

asym_bcm0l02_mean vs run
χ² / ndf 828.6 / 88
p0 −2114 ± 180.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 296.9
Std Dev 259.2
6
4
2
0
−2
−4

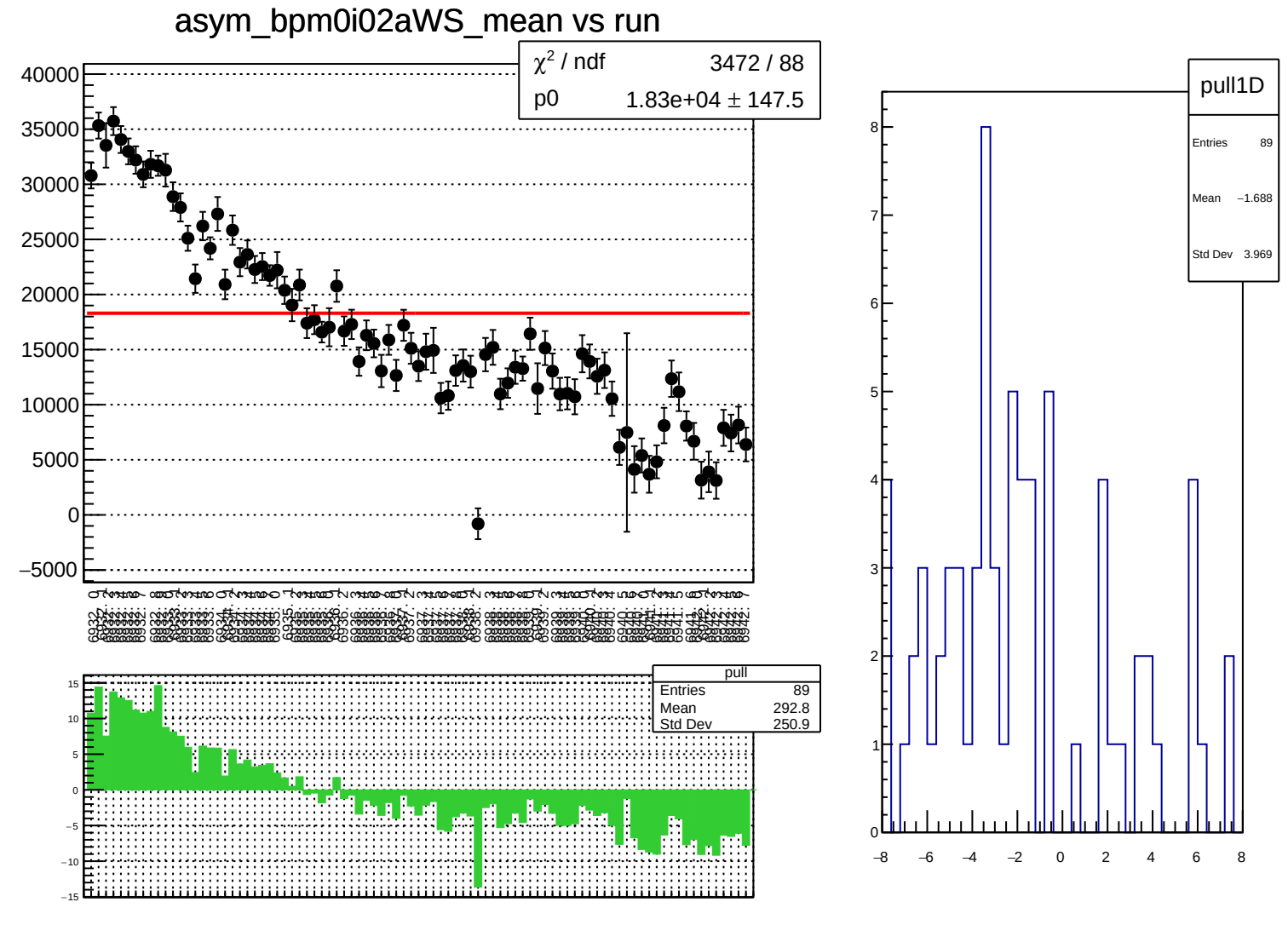

pull1D
Entries 89
Mean −0.2256
Std Dev 3.043
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

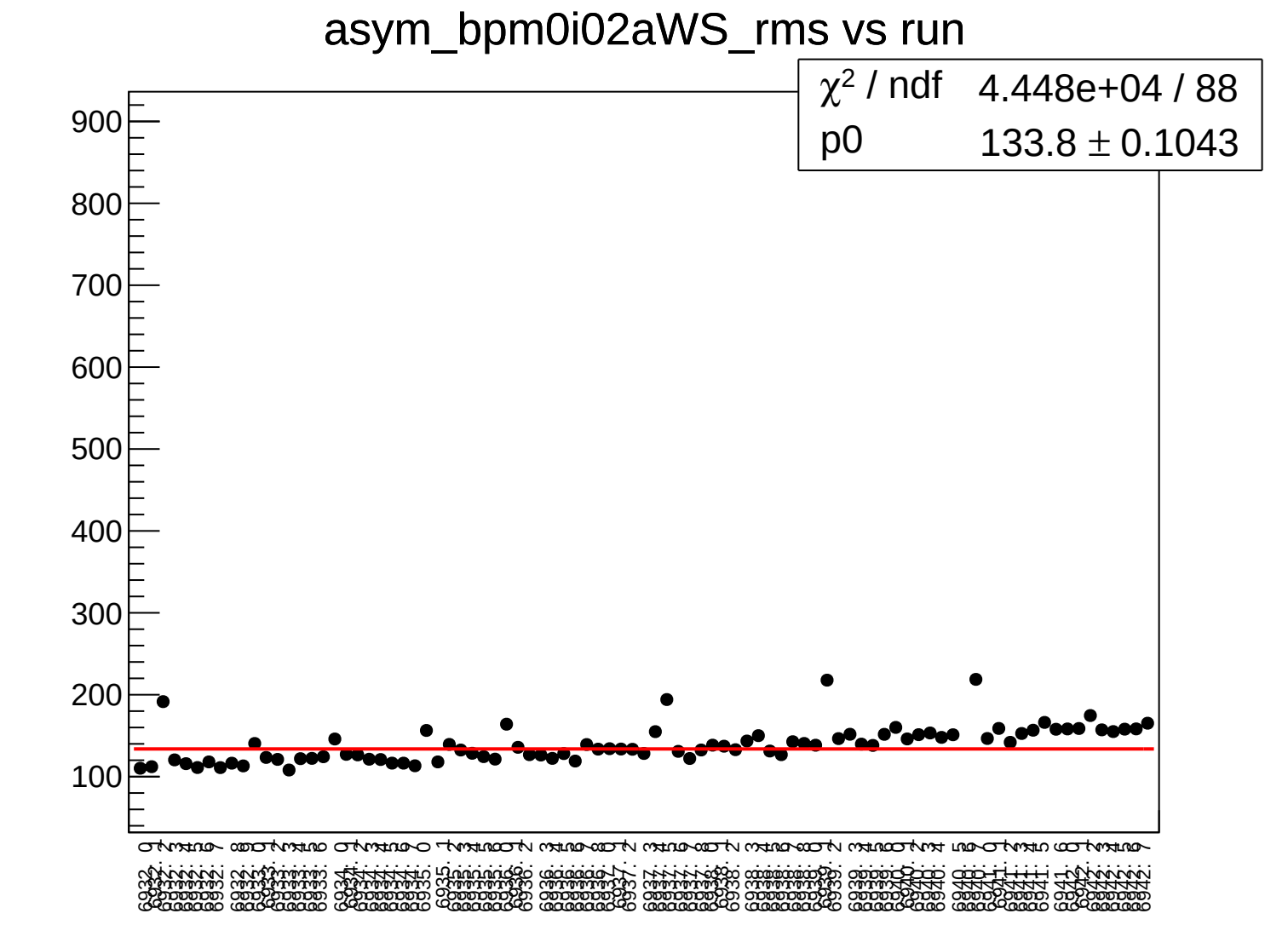

asym_bcm0l02_rms vs run
χ² / ndf 4.807e+04 / 88
p0 163.6 ± 0.1277
1200
1000
800
600
400
200

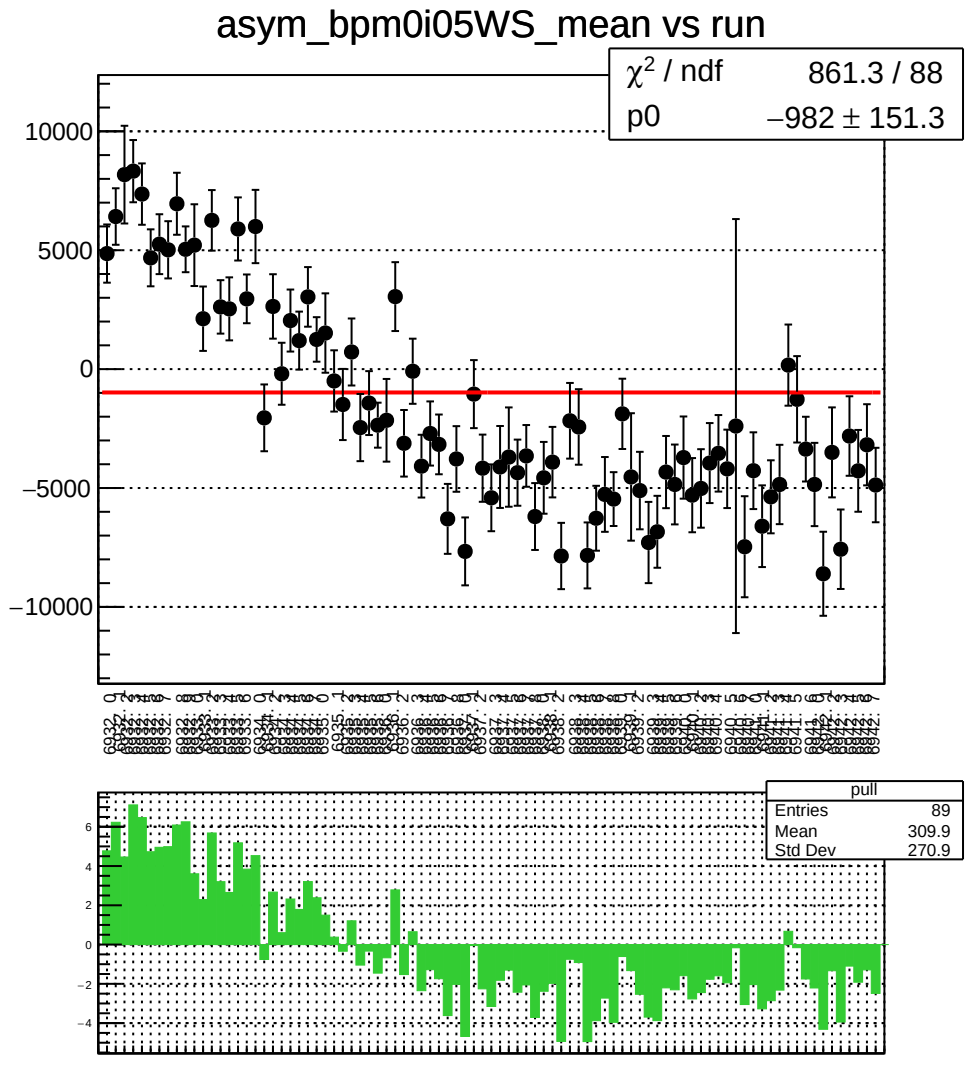

asym_bpm0i02WS_mean vs run
χ² / ndf 4264 / 88
p0 1.494e+04 ± 153.2
40000
30000
20000
10000
0
pull
Entries 89
Mean 1371
Std Dev 1329
15
10
5
0
−5
−10

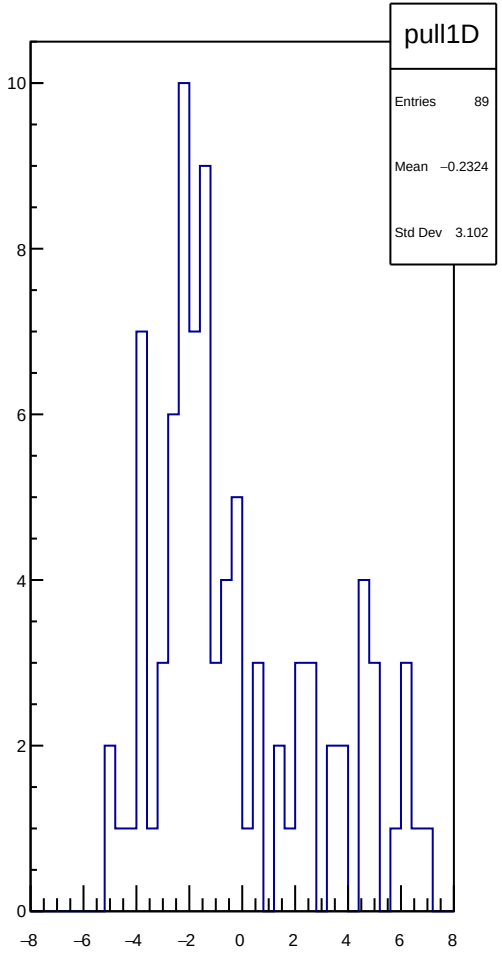

pull1D
Entries 89
Mean −0.8984
Std Dev 4.21
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

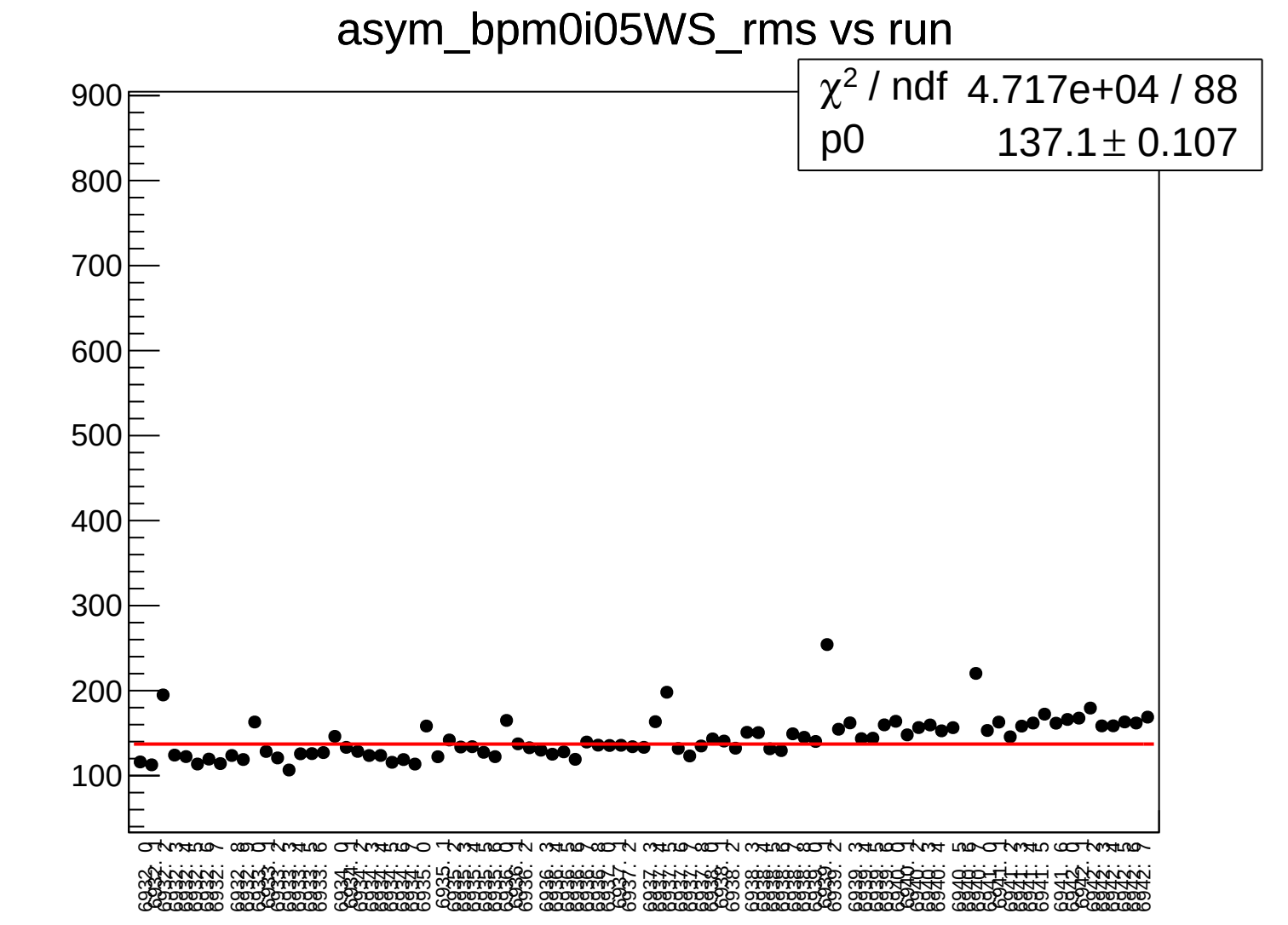

asym_bpm0i02WS_rms vs run
χ^2 / ndf 3.035e+04 / 88
p0 139.5 ± 0.1083
1000
900
800
700
600
500
400
300
200
100

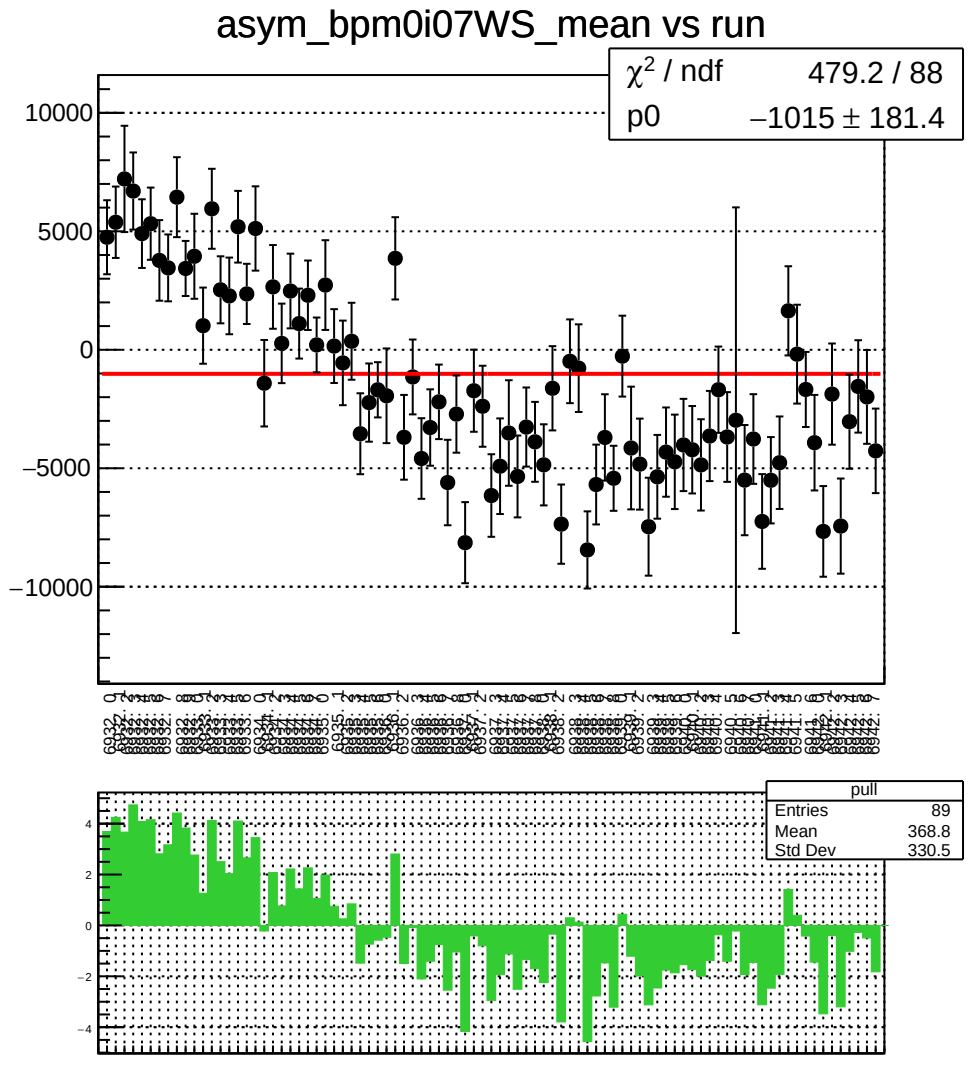

asym_bpm0i02aWS_mean vs run
χ² / ndf 3472 / 88
p0 1.83e+04 ± 147.5
pull
Entries 89
Mean 292.8
Std Dev 250.9
pull1D
Entries 89
Mean −1.688
Std Dev 3.969

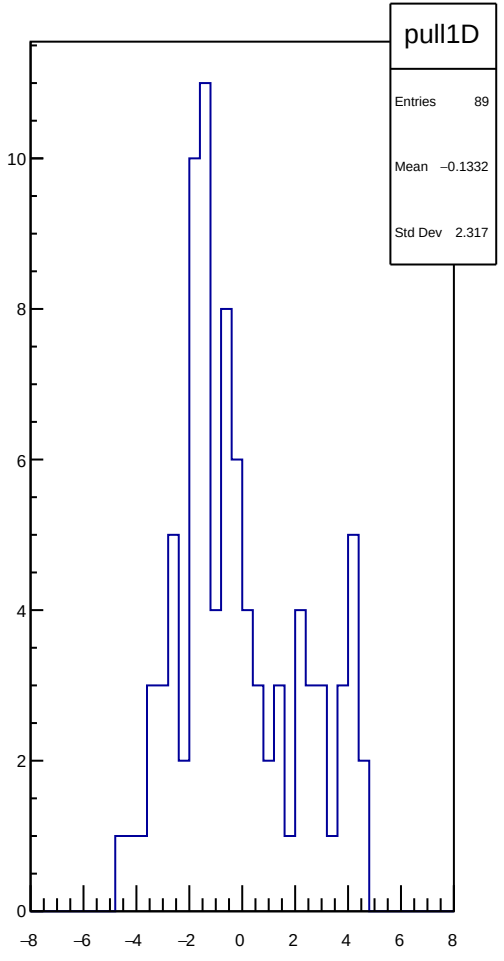

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 4.448e+04 / 88
p0 133.8 ± 0.1043
900
800
700
600
500
400
300
200
100

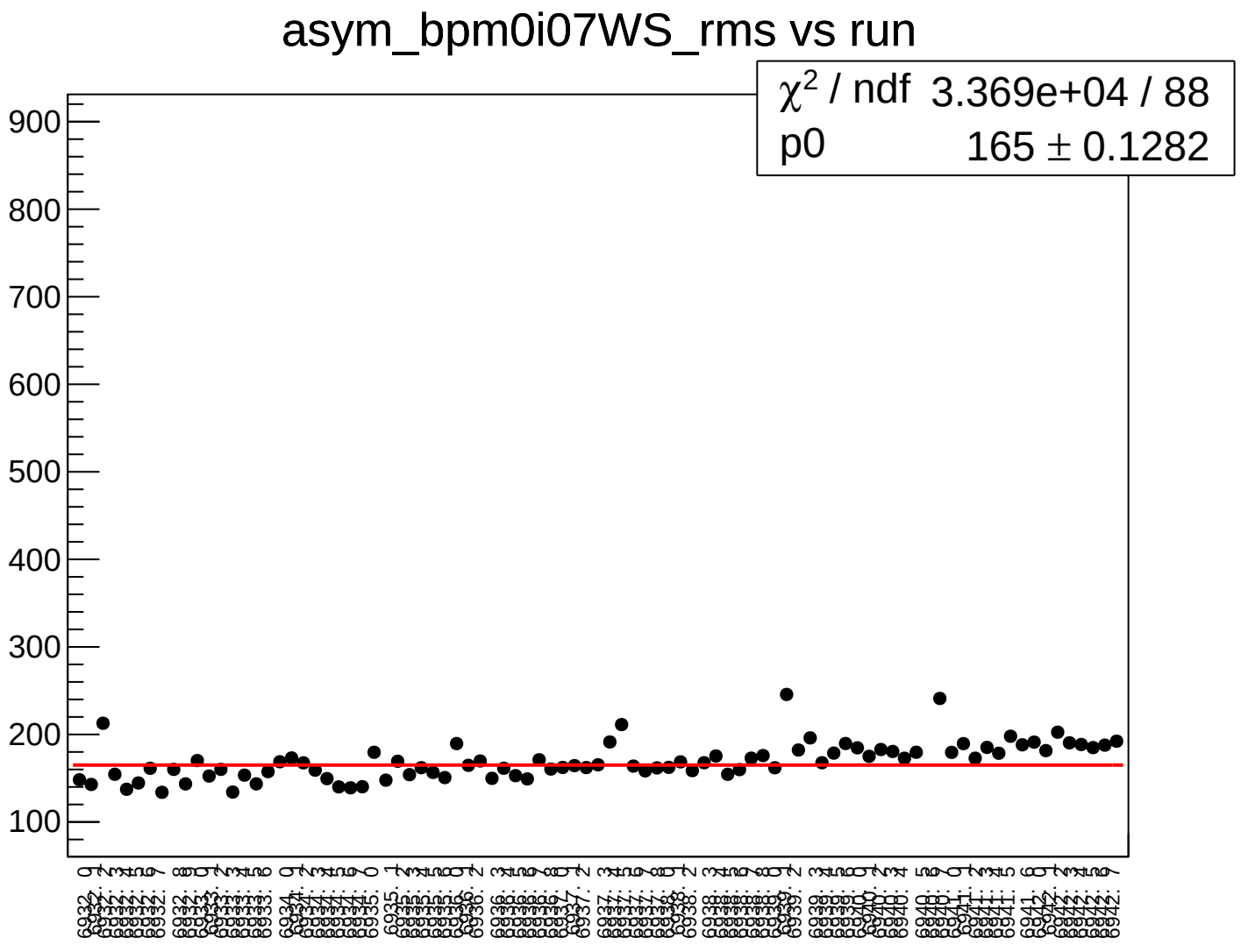

asym_bpm0i05WS_mean vs run
χ² / ndf 861.3 / 88
p0 −982 ± 151.3
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 309.9
Std Dev 270.9
6
4
2
0
−2
−4

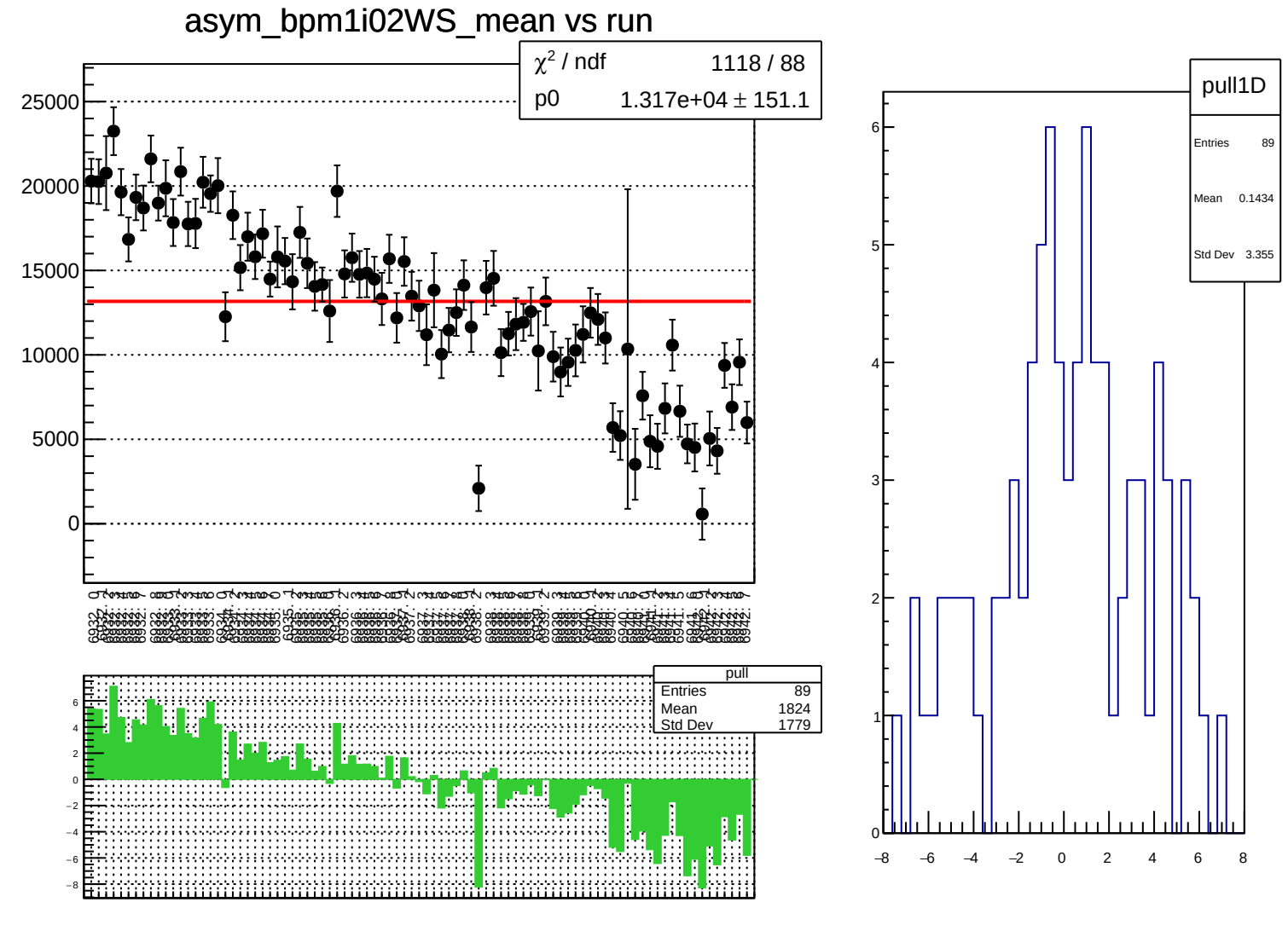

pull1D
Entries 89
Mean −0.2324
Std Dev 3.102
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

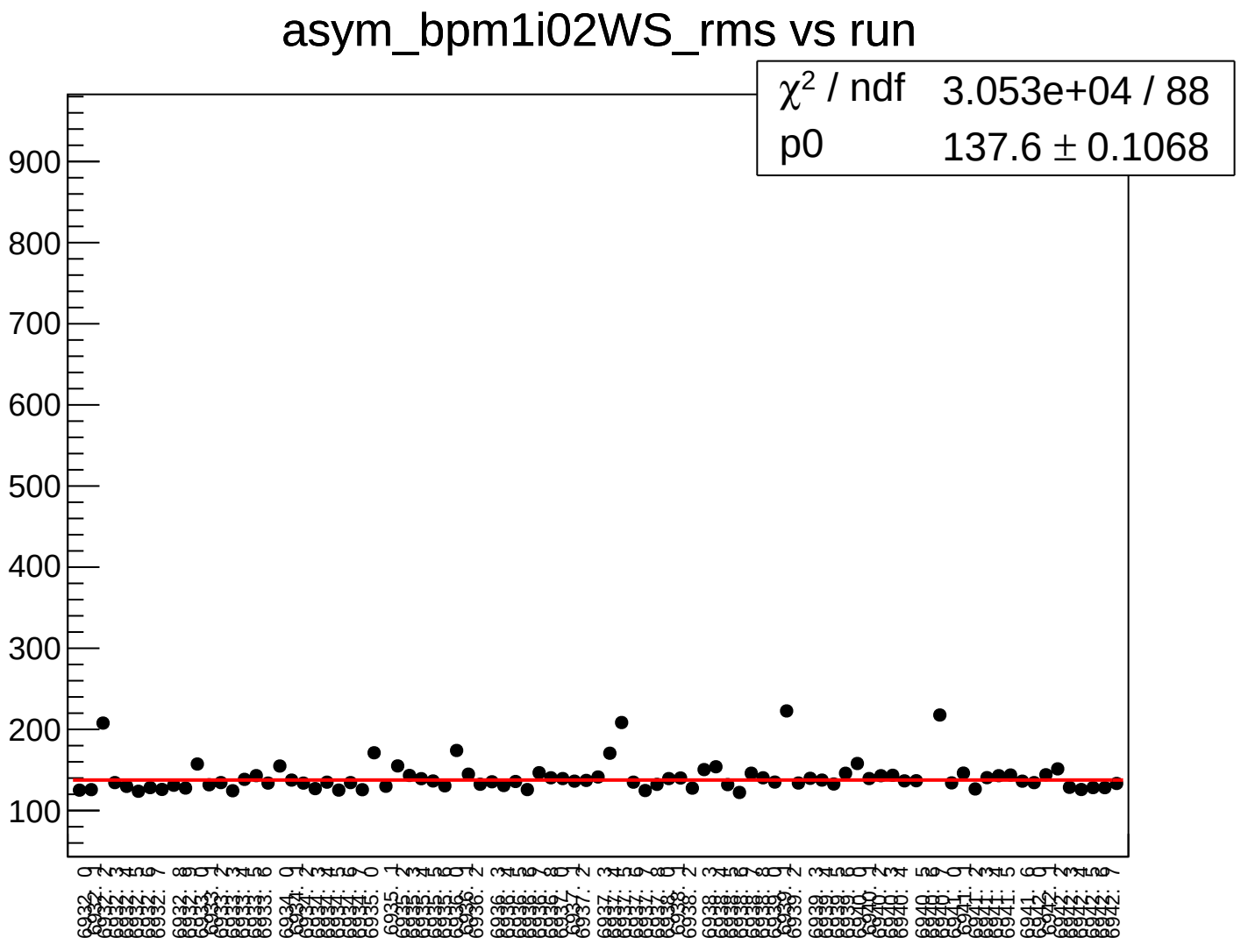

asym_bpm0i05WS_rms vs run
χ^2 / ndf 4.717e+04 / 88
p0 137.1 ± 0.107
900
800
700
600
500
400
300
200
100

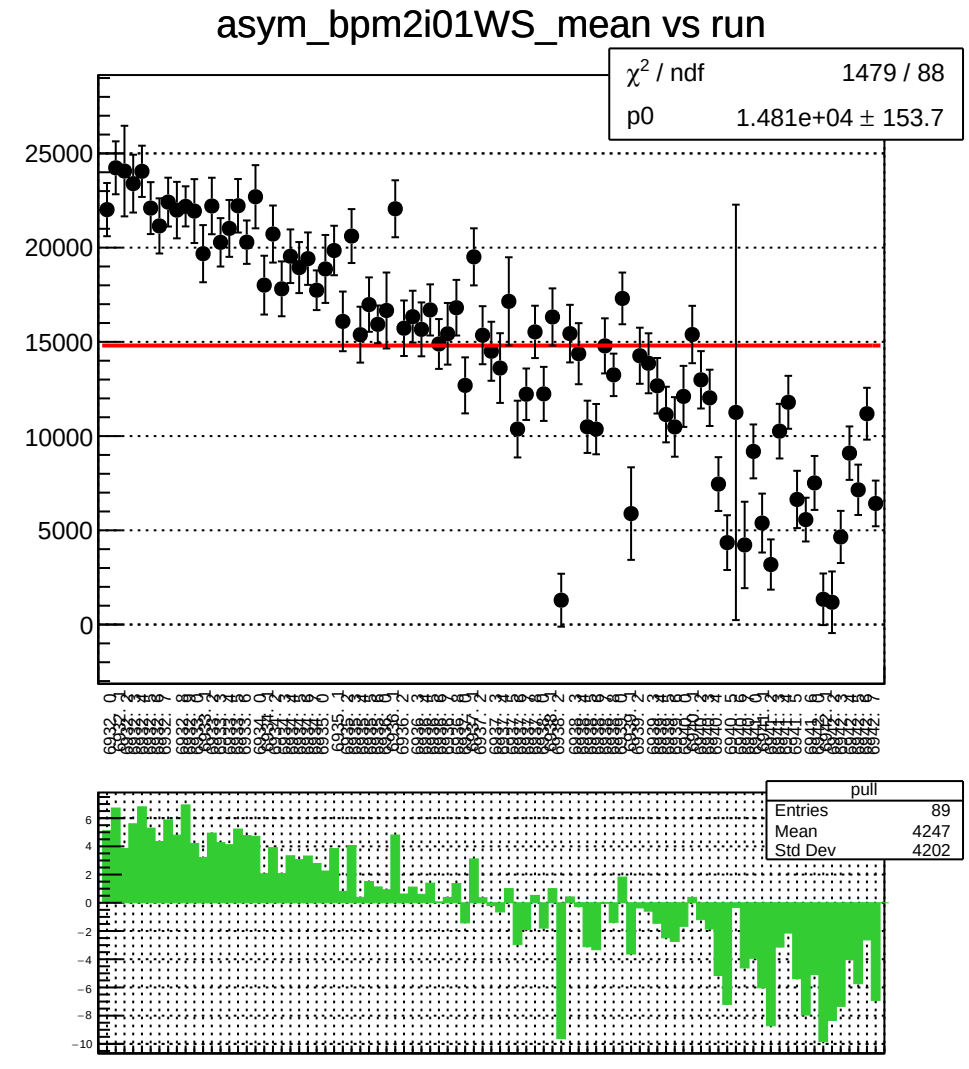

asym_bpm0i07WS_mean vs run
χ² / ndf 479.2 / 88
p0 −1015 ± 181.4
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 368.8
Std Dev 330.5
4
2
0
−2
−4

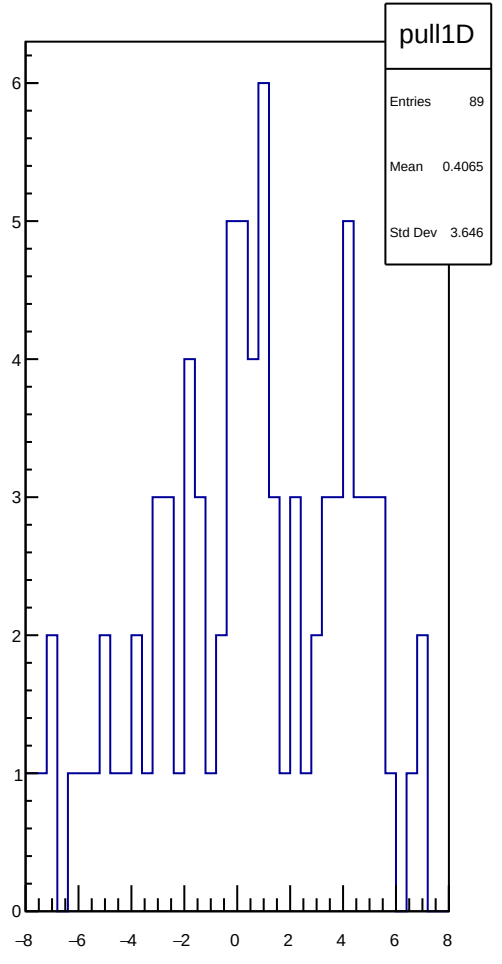

pull1D
Entries 89
Mean −0.1332
Std Dev 2.317
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

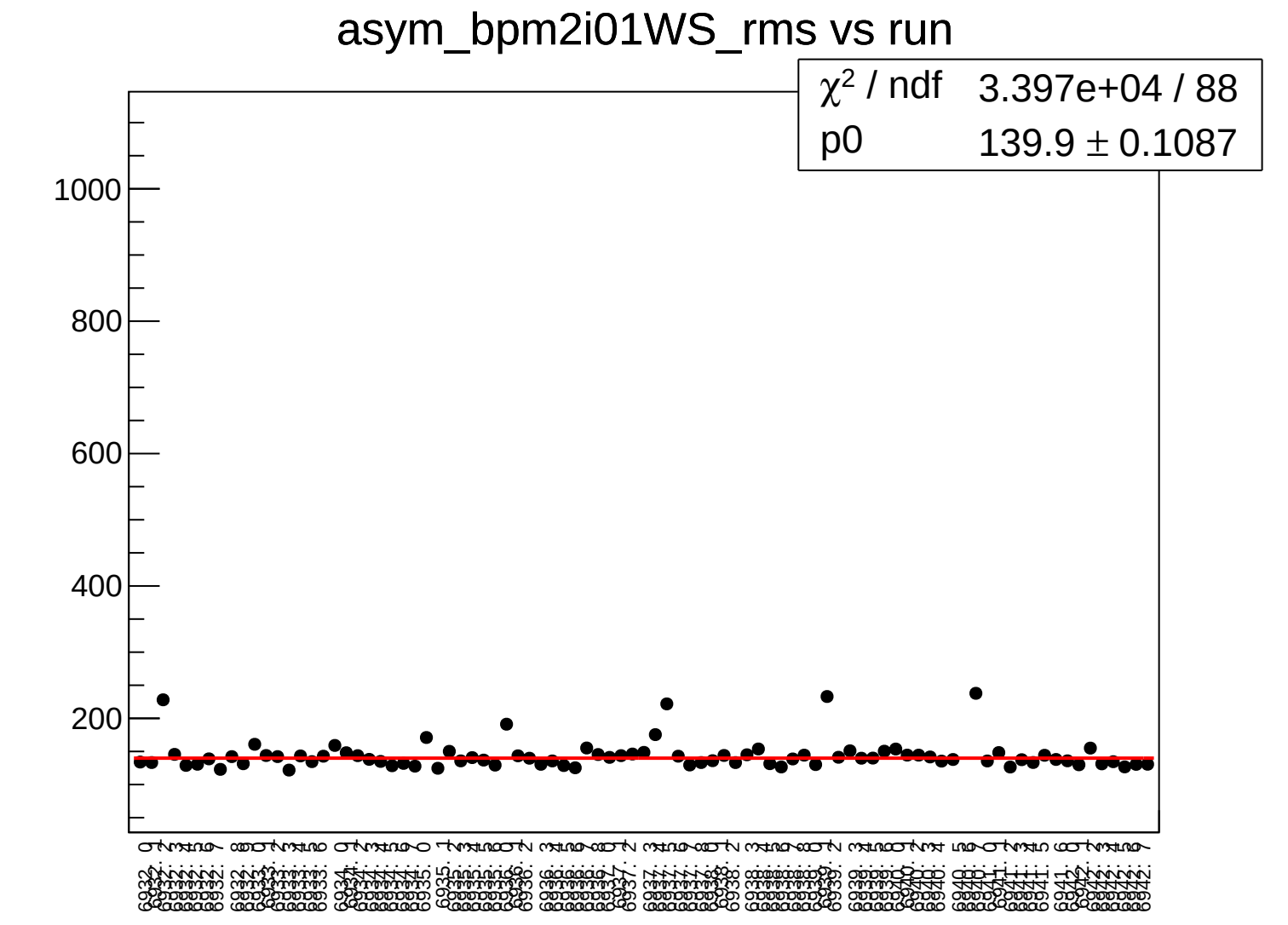

asym_bpm0i07WS_rms vs run
χ^2 / ndf 3.369e+04 / 88
p0 165 ± 0.1282
900
800
700
600
500
400
300
200
100

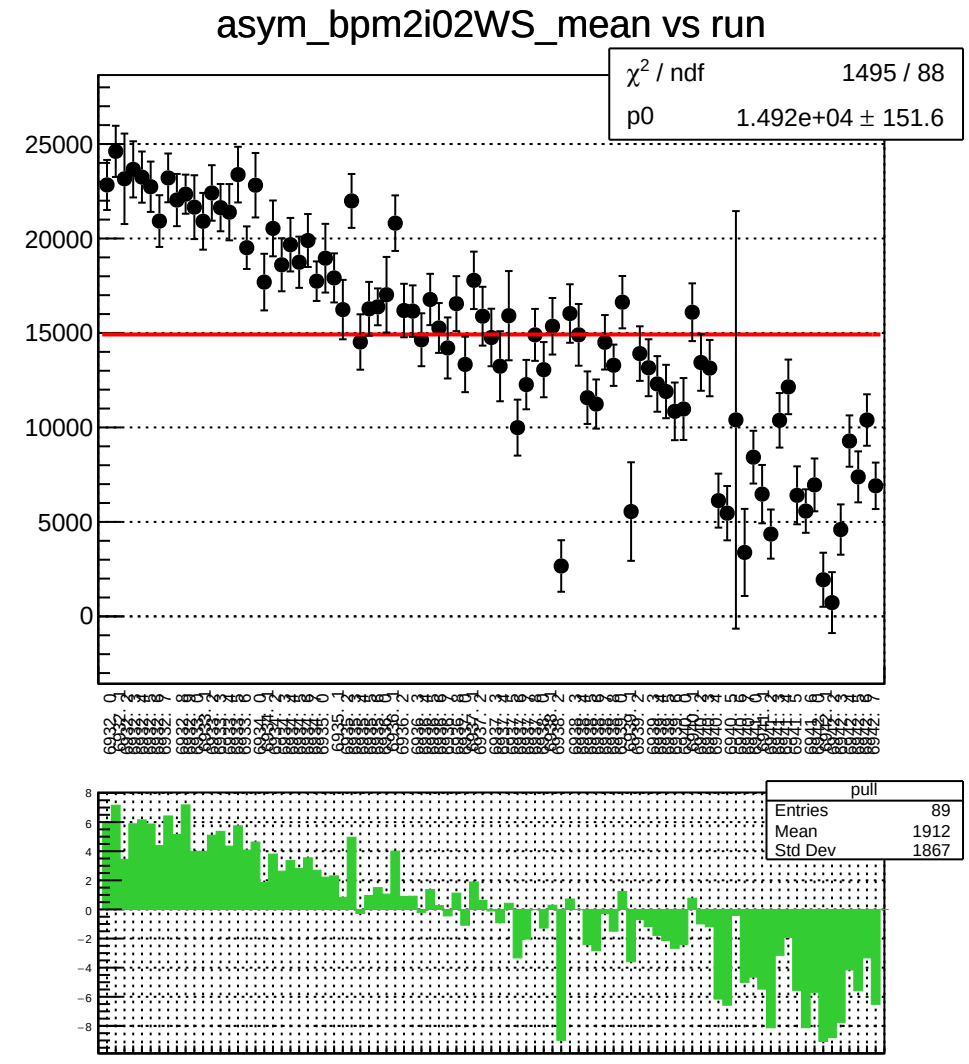

asym_bpm1i02WS_mean vs run
χ² / ndf 1118 / 88
p0 1.317e+04 ± 151.1
25000
20000
15000
10000
5000
0
pull
Entries 89
Mean 1824
Std Dev 1779
pull1D
Entries 89
Mean 0.1434
Std Dev 3.355

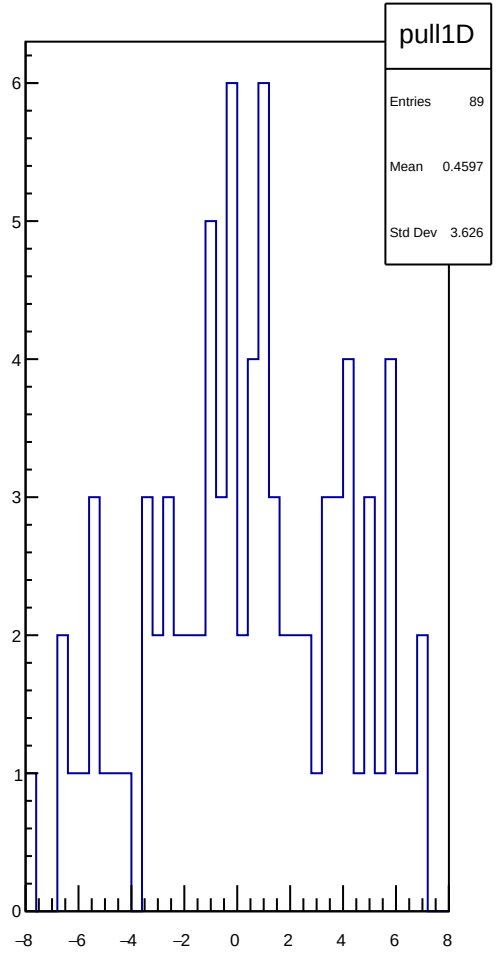

asym_bpm1i02WS_rms vs run
χ^2 / ndf 3.053e+04 / 88
p0 137.6 ± 0.1068
900
800
700
600
500
400
300
200
100

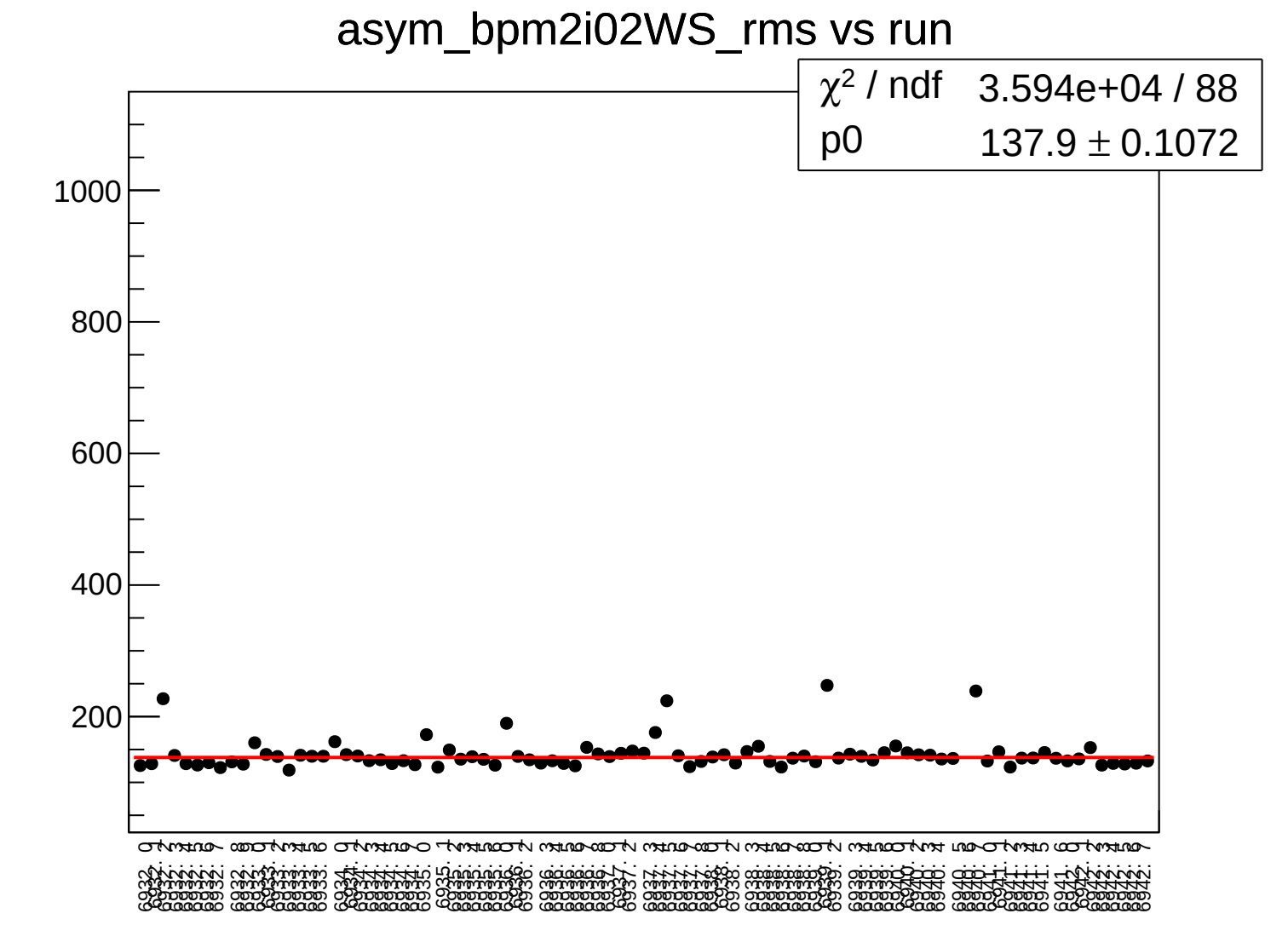

asym_bpm2i01WS_mean vs run
χ² / ndf 1479 / 88
p0 1.481e+04 ± 153.7
pull
Entries 89
Mean 4247
Std Dev 4202

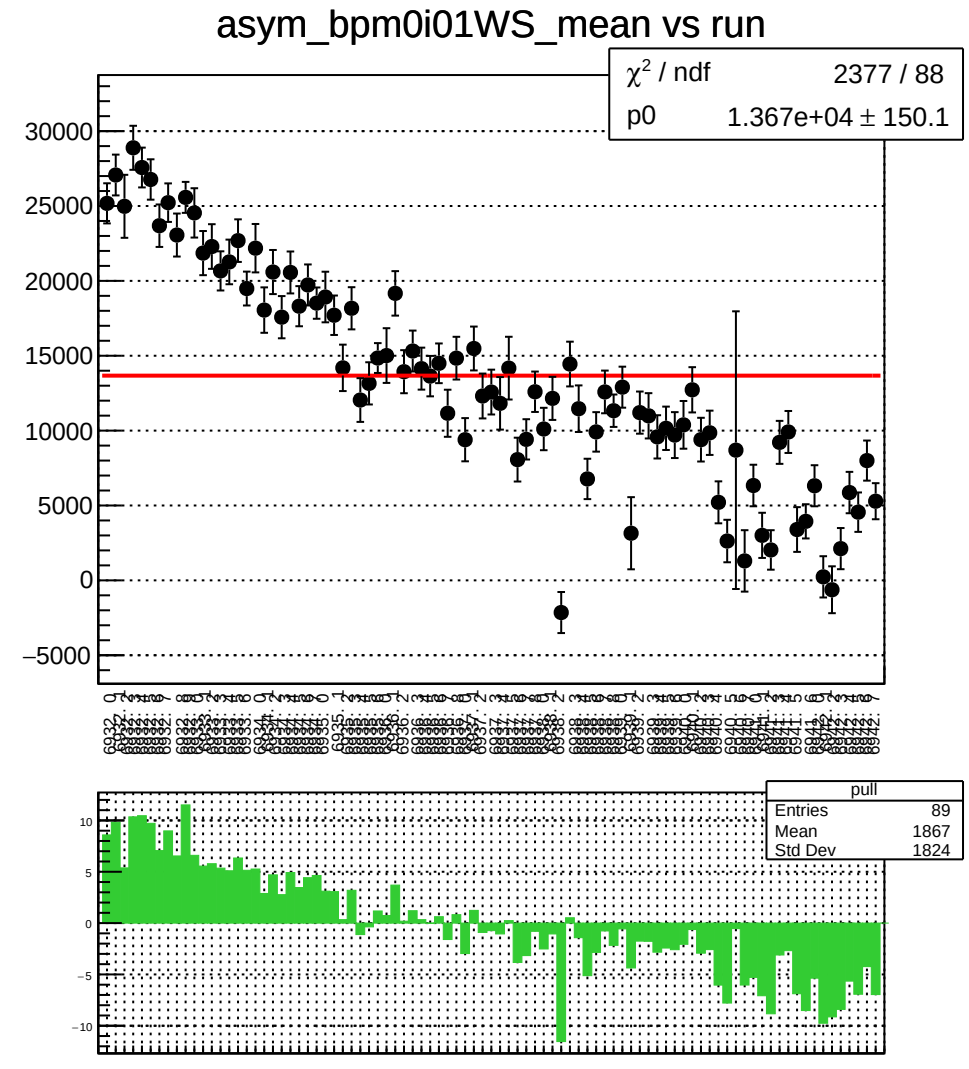

pull1D
Entries 89
Mean 0.4065
Std Dev 3.646

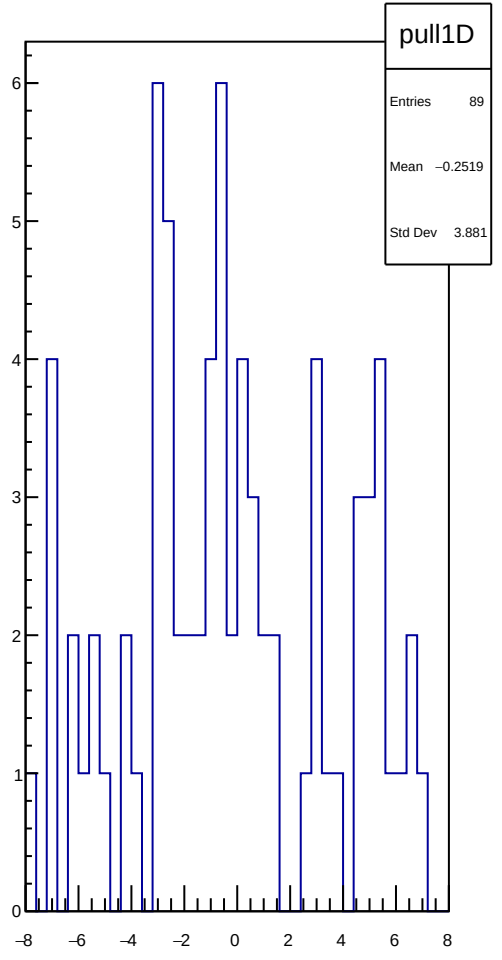

asym_bpm2i01WS_rms vs run
χ^2 / ndf 3.397e+04 / 88
p0 139.9 ± 0.1087
1000
800
600
400
200

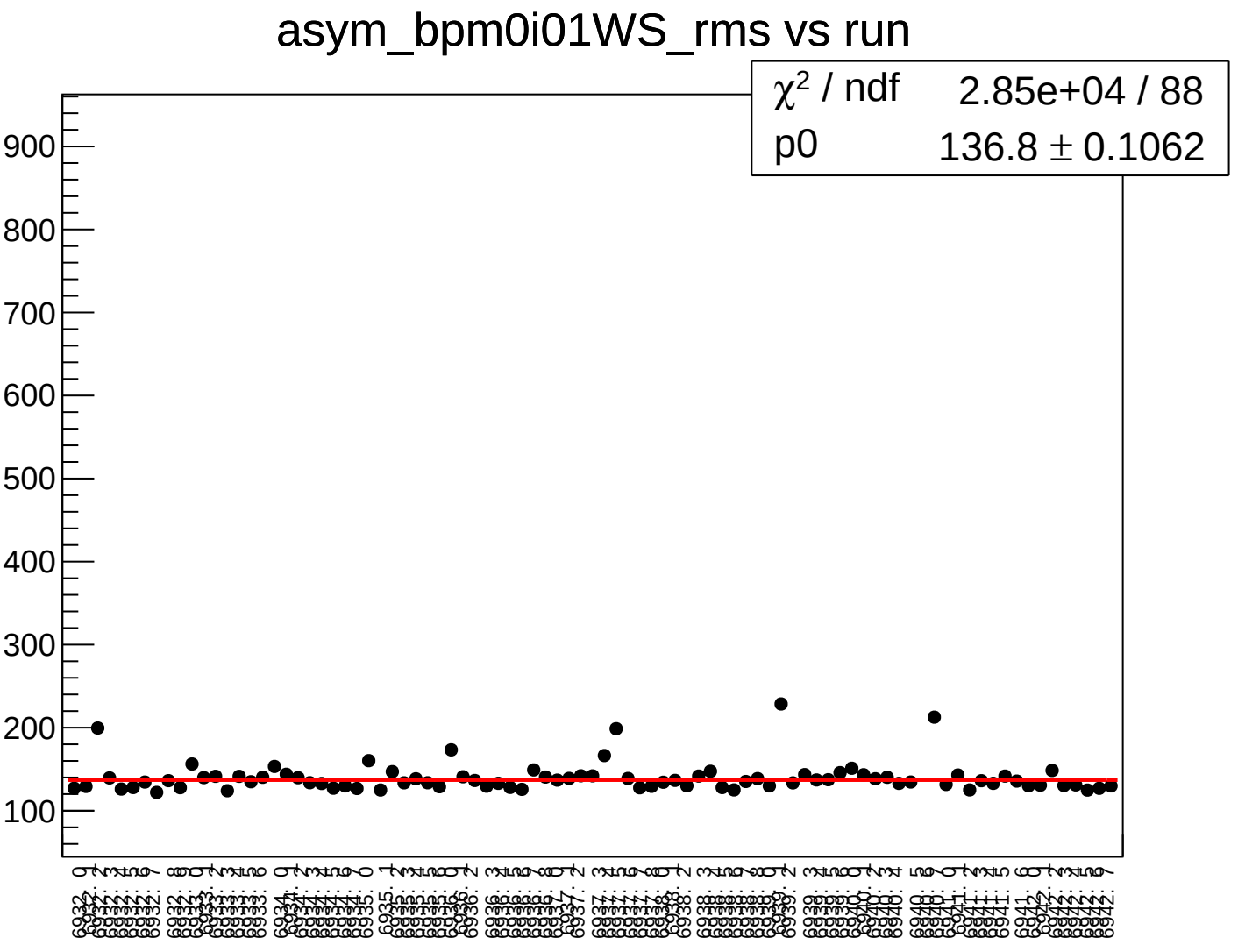

asym_bpm2i02WS_mean vs run
χ² / ndf 1495 / 88
p0 1.492e+04 ± 151.6
25000
20000
15000
10000
5000
0
pull
Entries 89
Mean 1912
Std Dev 1867
8
6
4
2
0
−2
−4
−6
−8

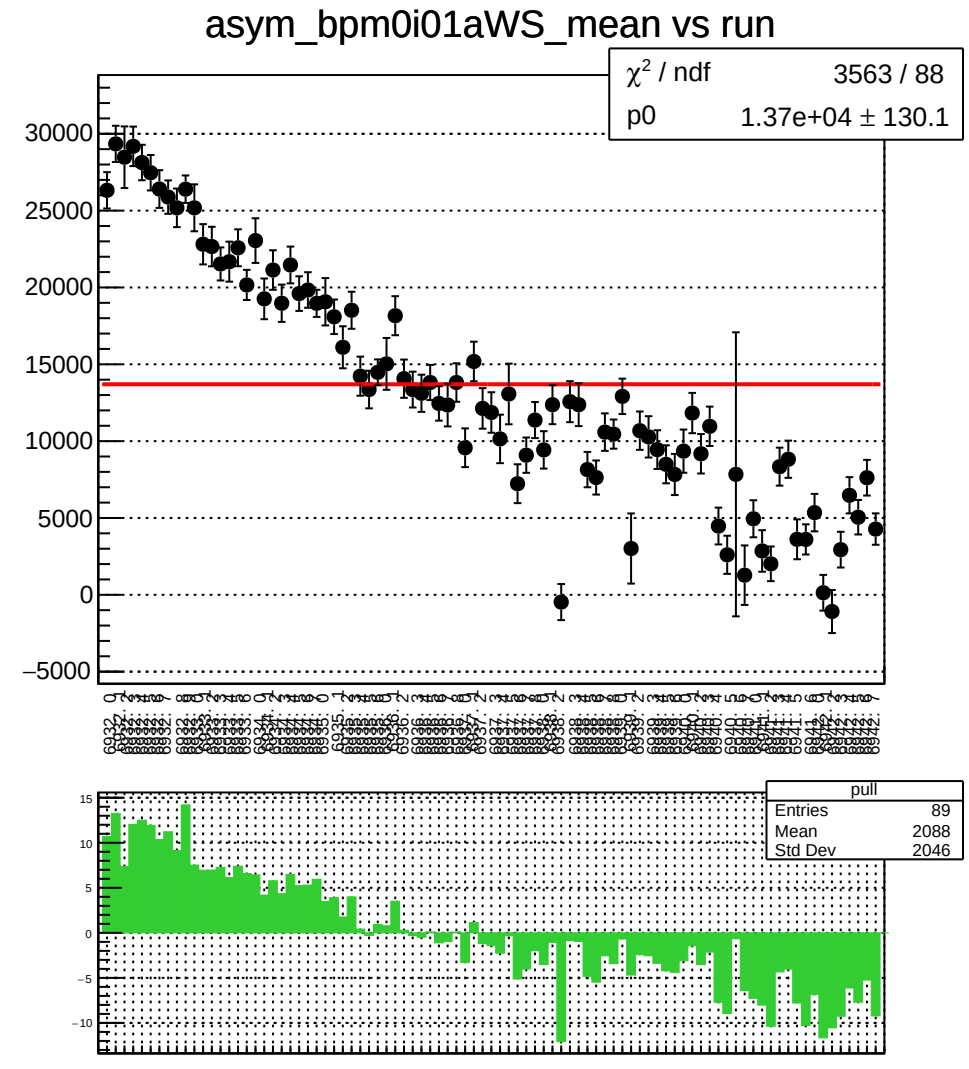

pull1D
Entries 89
Mean 0.4597
Std Dev 3.626
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

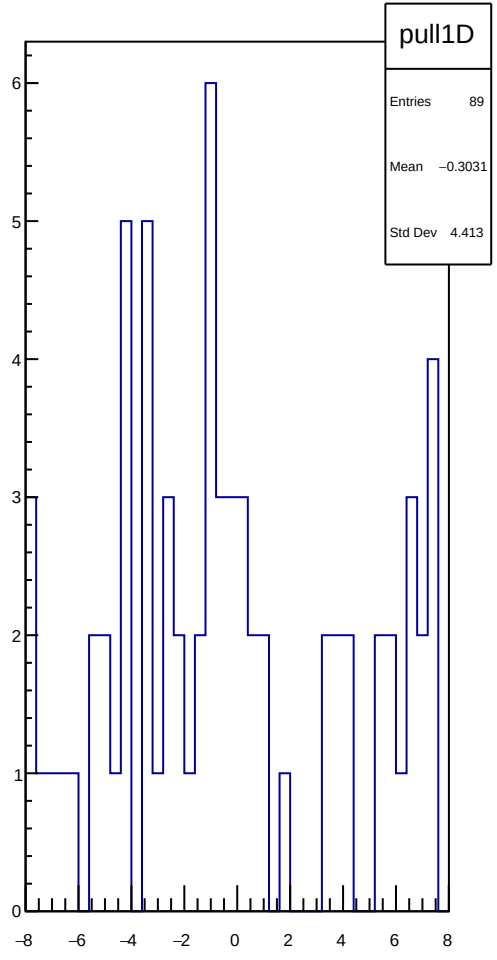

asym_bpm2i02WS_rms vs run
χ² / ndf 3.594e+04 / 88
p0 137.9 ± 0.1072
1000
800
600
400
200

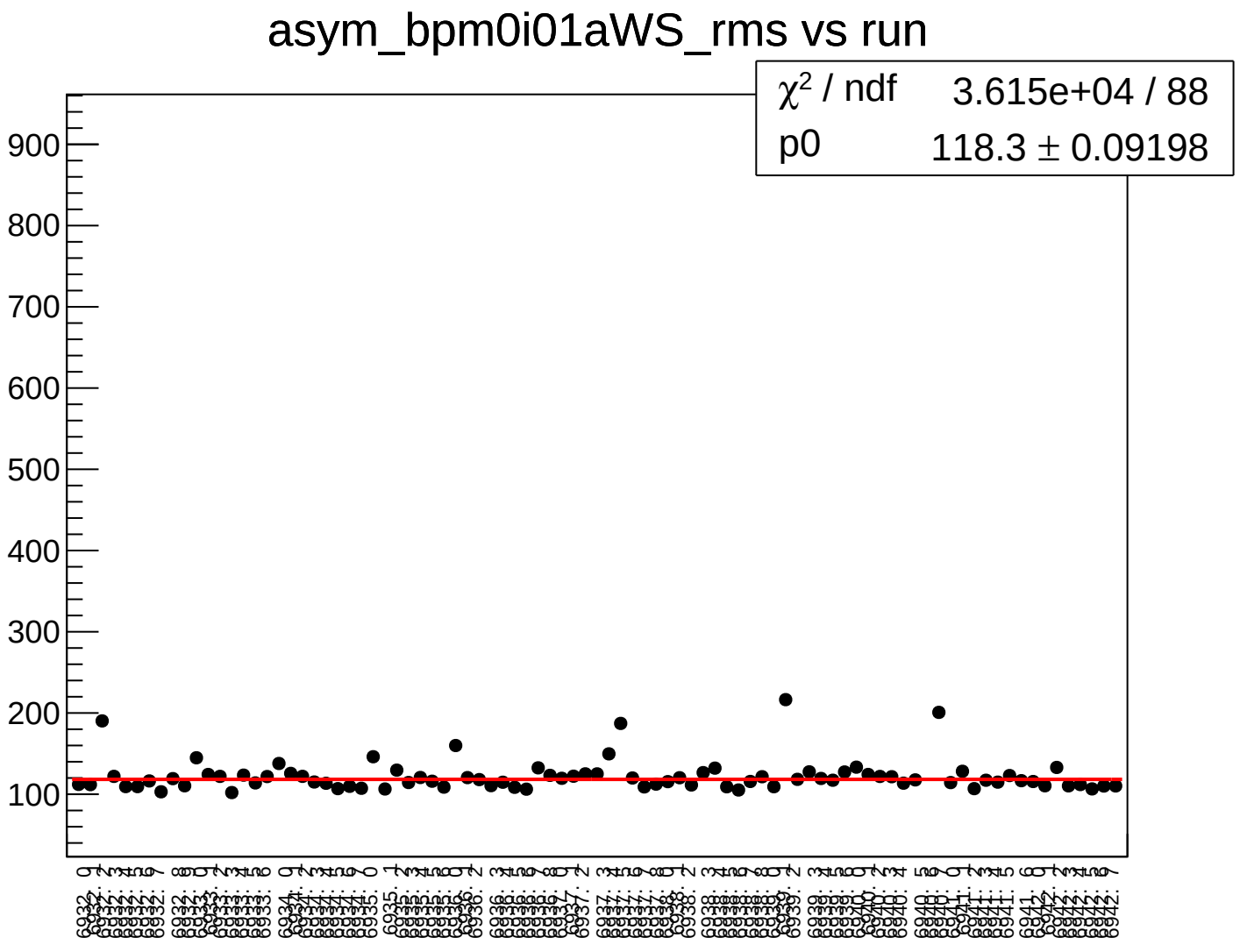

asym_bpm0i01WS_mean vs run
χ² / ndf 2377 / 88
p0 1.367e+04 ± 150.1
30000
25000
20000
15000
10000
5000
0
−5000
pull
Entries 89
Mean 1867
Std Dev 1824
10
5
0
−5
−10

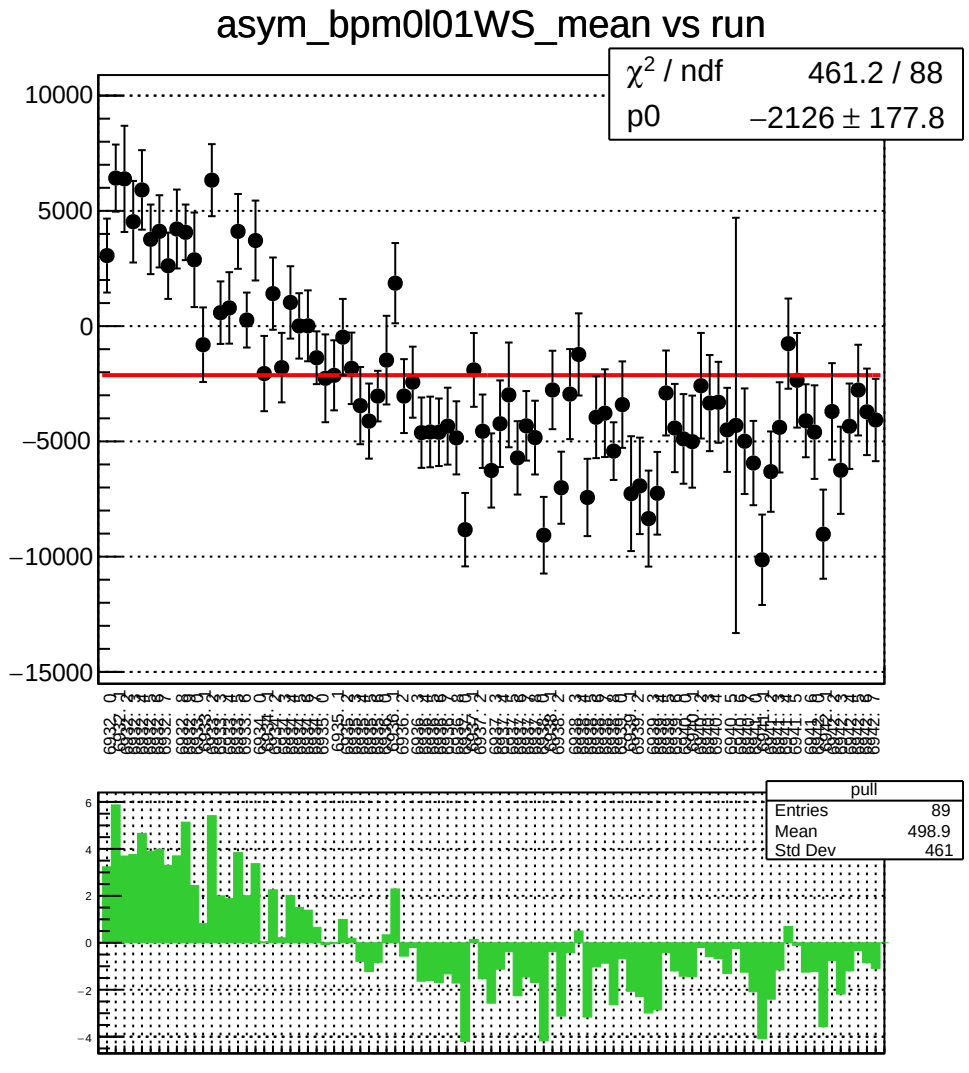

pull1D
Entries 89
Mean −0.2519
Std Dev 3.881
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

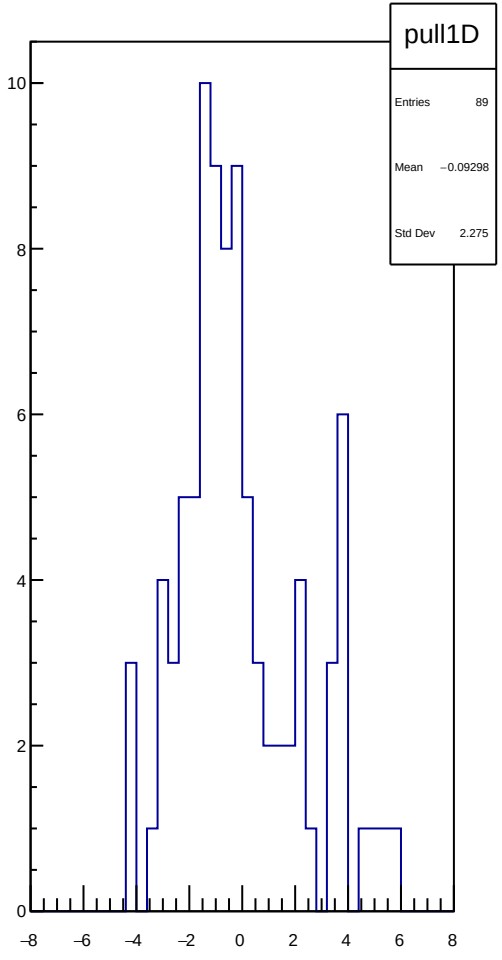

asym_bpm0i01WS_rms vs run
χ² / ndf 2.85e+04 / 88
p0 136.8 ± 0.1062
900
800
700
600
500
400
300
200
100

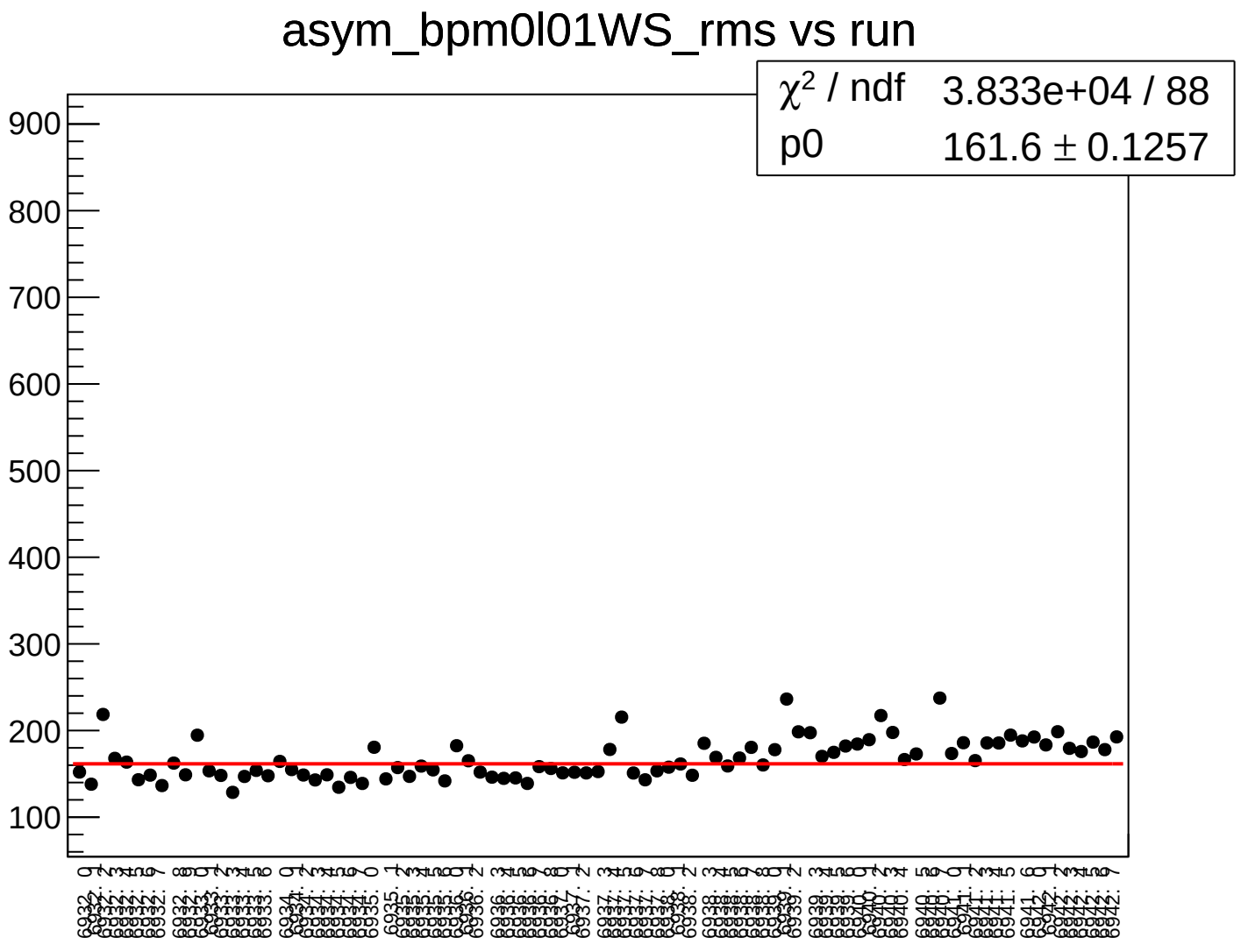

asym_bpm0i01aWS_mean vs run
χ² / ndf 3563 / 88
p0 1.37e+04 ± 130.1
pull
Entries 89
Mean 2088
Std Dev 2046

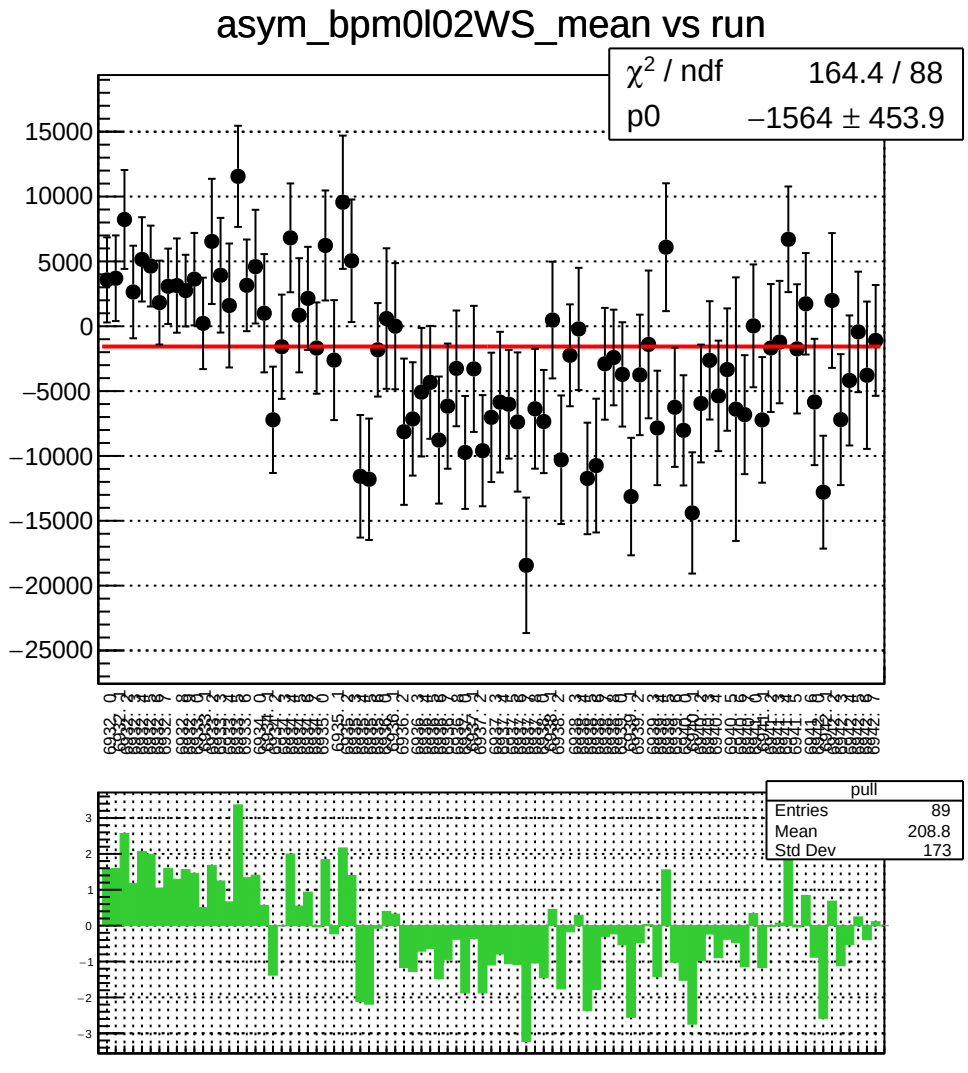

pull1D
Entries 89
Mean −0.3031
Std Dev 4.413

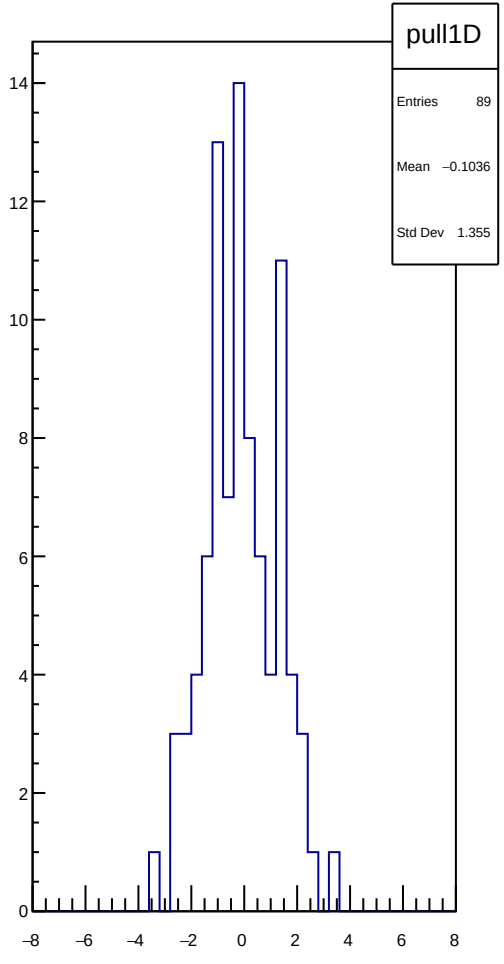

asym_bpm0i01aWS_rms vs run
χ^2 / ndf 3.615e+04 / 88
p0 118.3 ± 0.09198
900
800
700
600
500
400
300
200
100

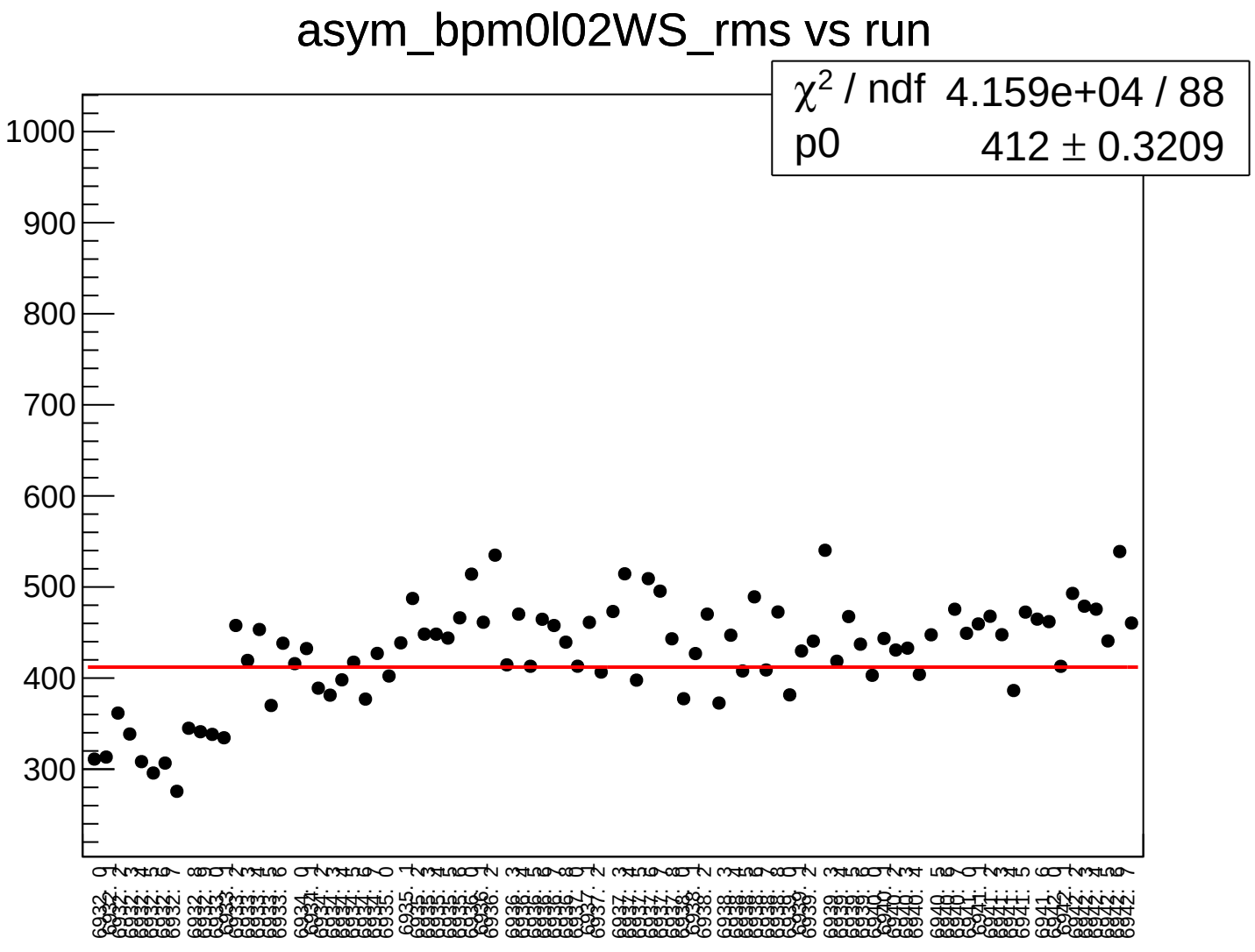

asym_bpm0l01WS_mean vs run
χ² / ndf 461.2 / 88
p0 −2126 ± 177.8
pull
Entries 89
Mean 498.9
Std Dev 461

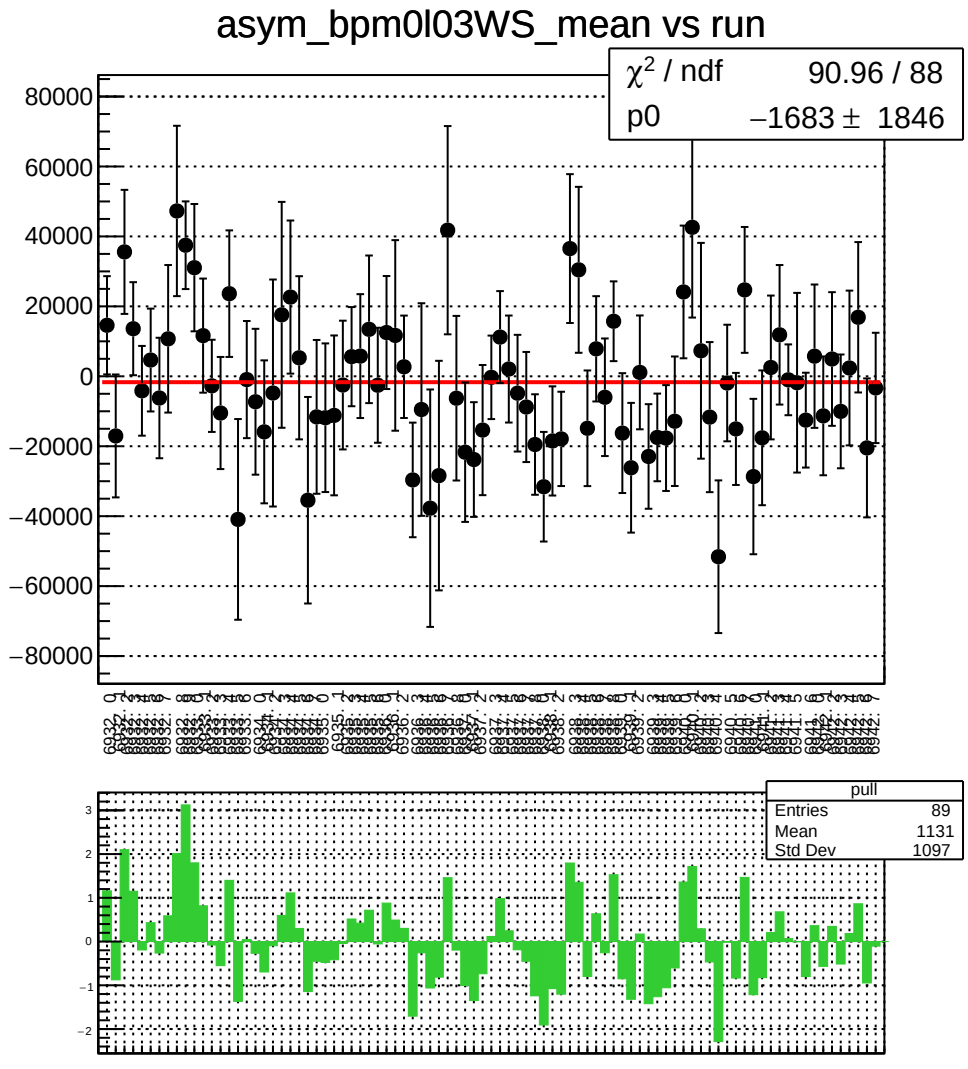

pull1D
Entries 89
Mean −0.09298
Std Dev 2.275

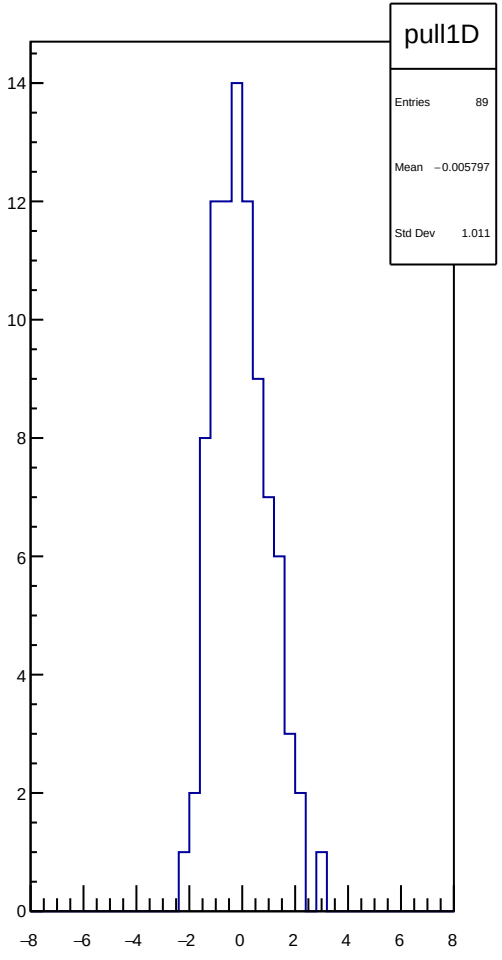

asym_bpm0l01WS_rms vs run
χ² / ndf 3.833e+04 / 88
p0 161.6 ± 0.1257
900
800
700
600
500
400
300
200
100

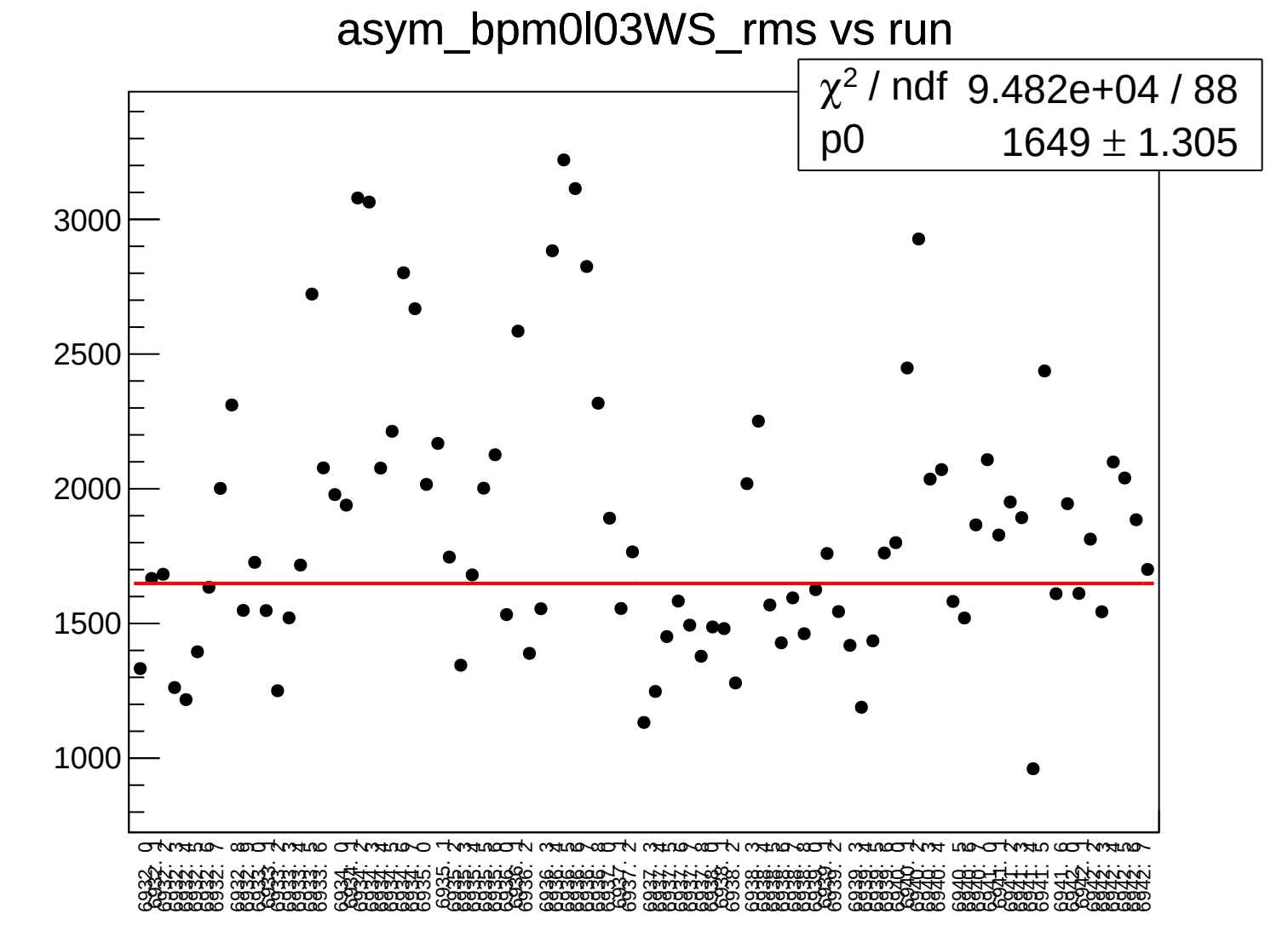

asym_bpm0l02WS_mean vs run
χ² / ndf 164.4 / 88
p0 −1564 ± 453.9
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 89
Mean 208.8
Std Dev 173
3
2
1
0
−1
−2
−3

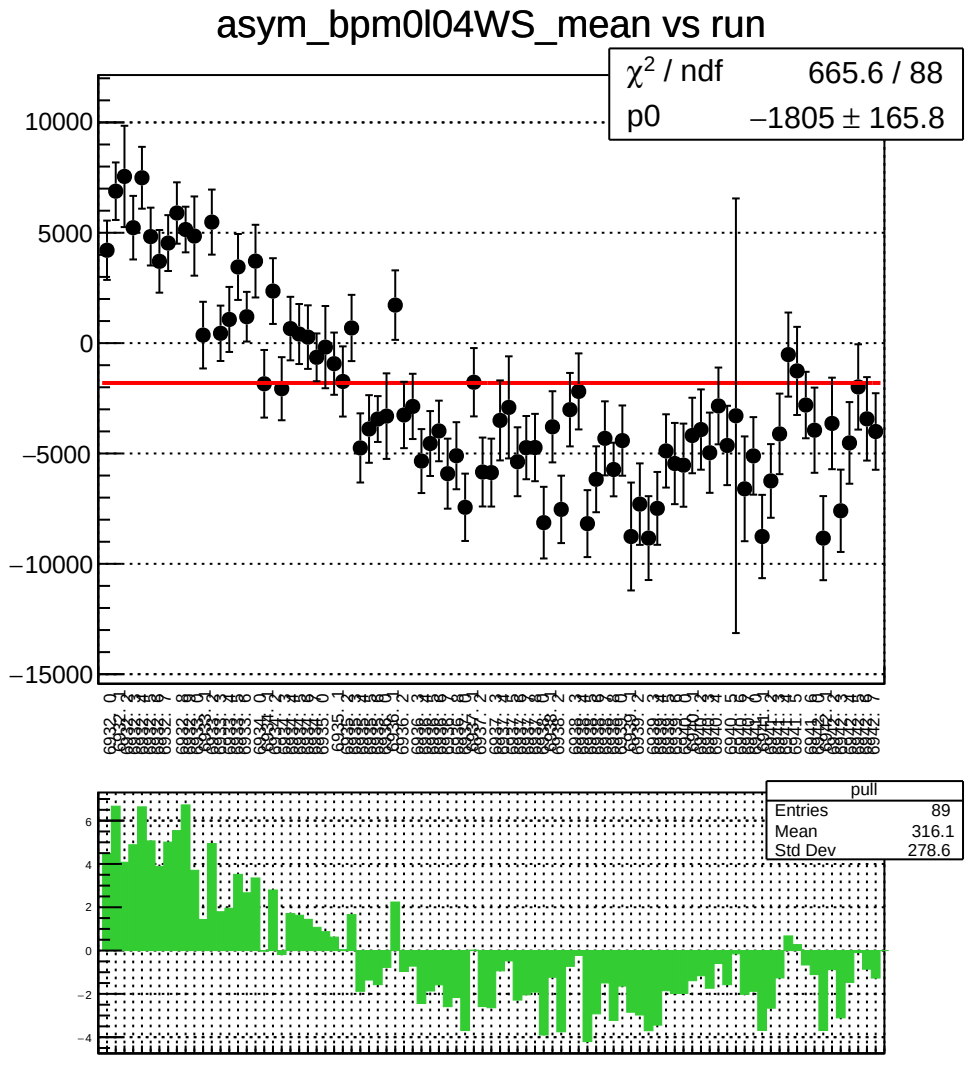

pull1D
Entries 89
Mean −0.1036
Std Dev 1.355
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

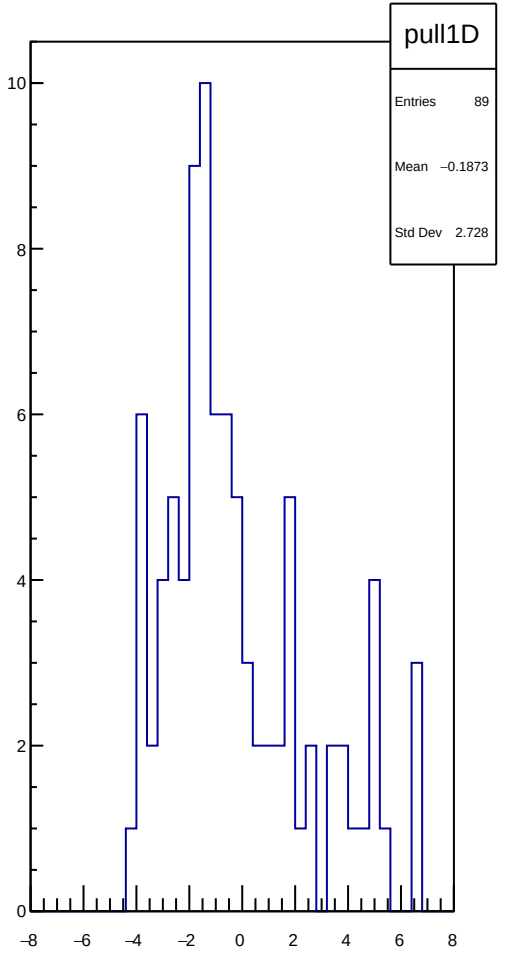

asym_bpm0l02WS_rms vs run
χ² / ndf 4.159e+04 / 88
p0 412 ± 0.3209
1000
900
800
700
600
500
400
300

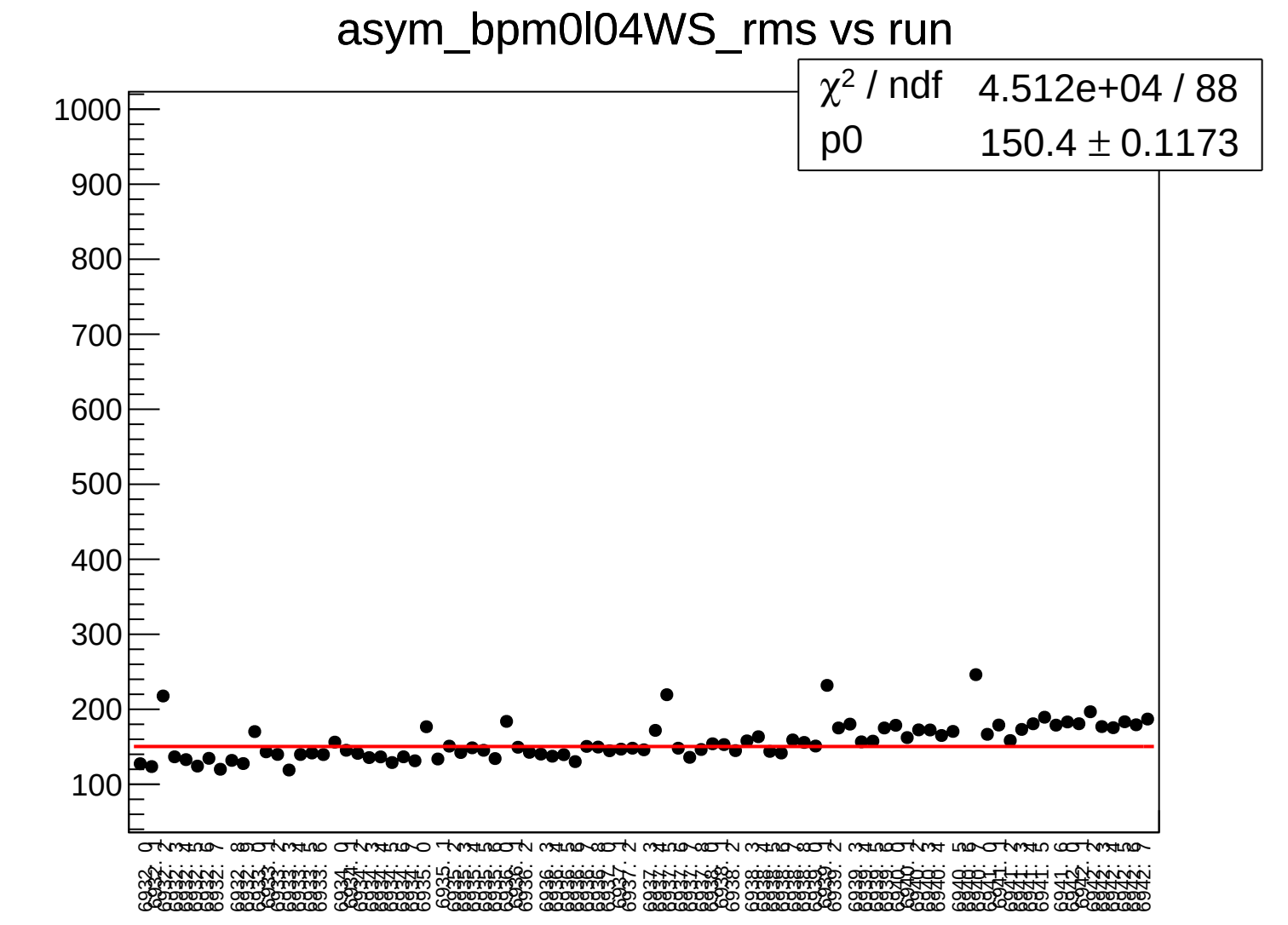

asym_bpm0l03WS_mean vs run
χ² / ndf 90.96 / 88
p0 −1683 ± 1846
pull
Entries 89
Mean 1131
Std Dev 1097

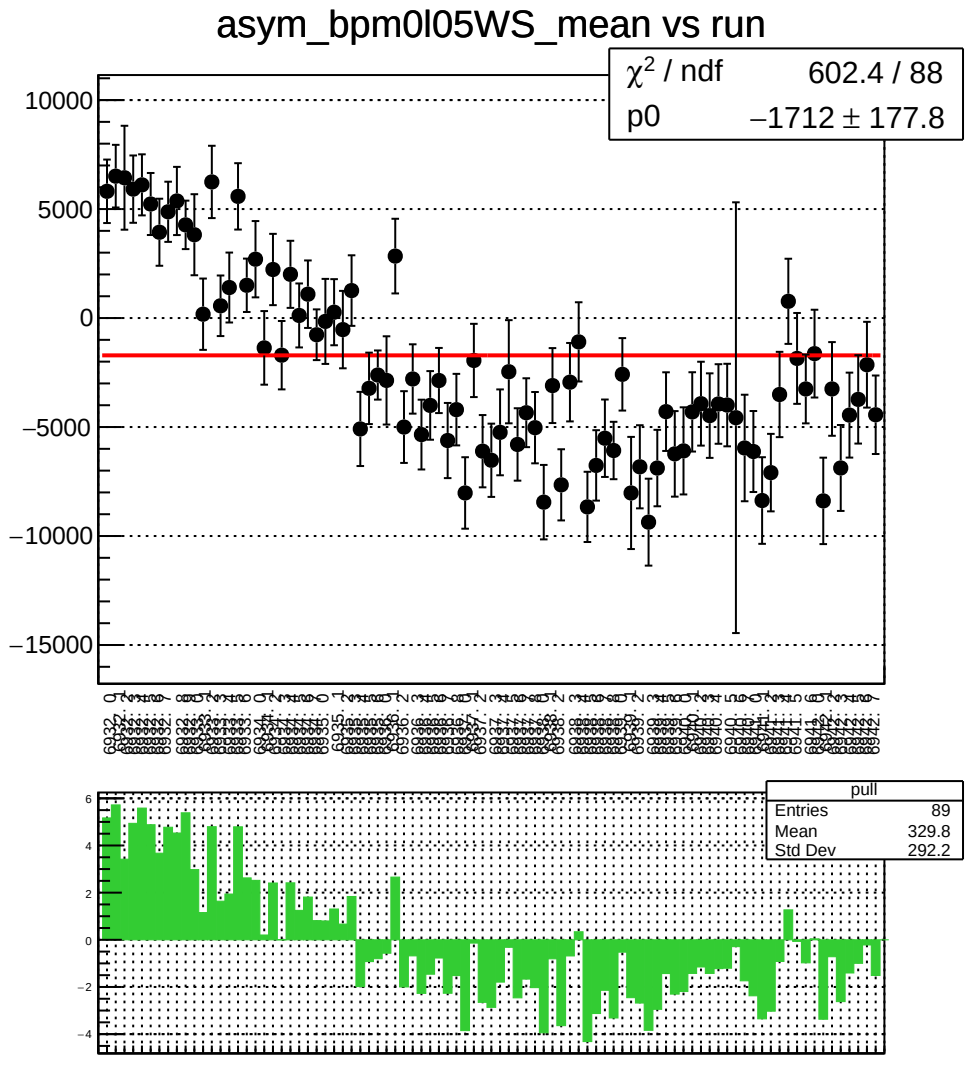

pull1D
Entries 89
Mean −0.005797
Std Dev 1.011

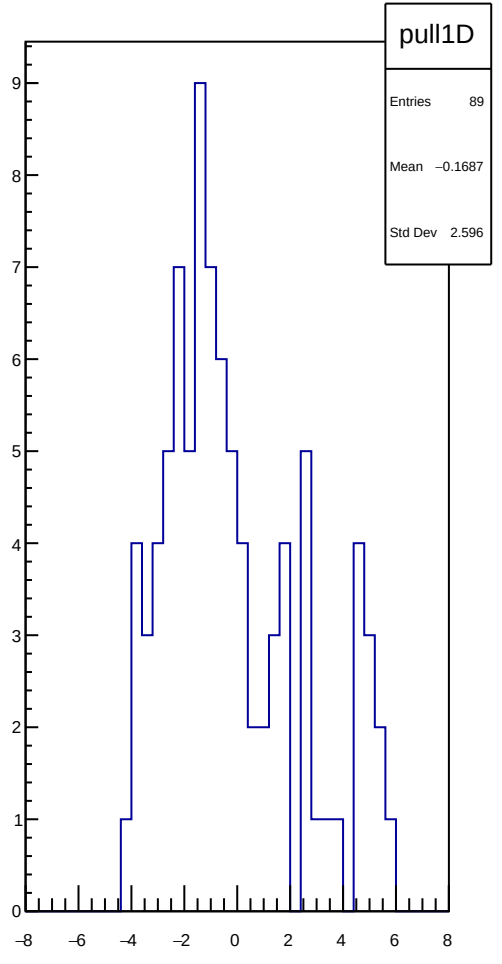

asym_bpm0l03WS_rms vs run
χ^2 / ndf 9.482e+04 / 88
p0 1649 ± 1.305
3000
2500
2000
1500
1000

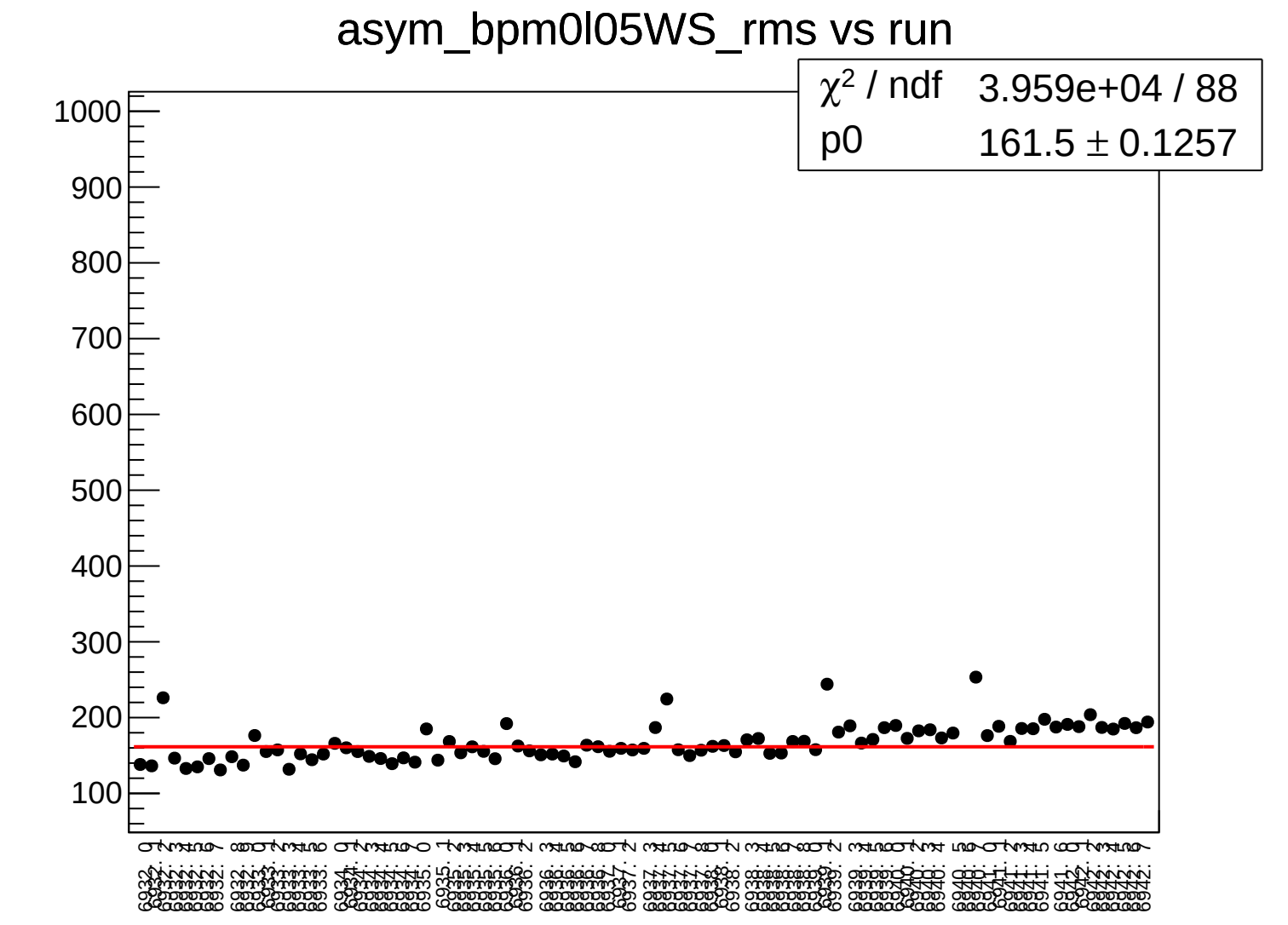

asym_bpm0l04WS_mean vs run
χ² / ndf 665.6 / 88
p0 −1805 ± 165.8
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 316.1
Std Dev 278.6
6
4
2
0
−2
−4

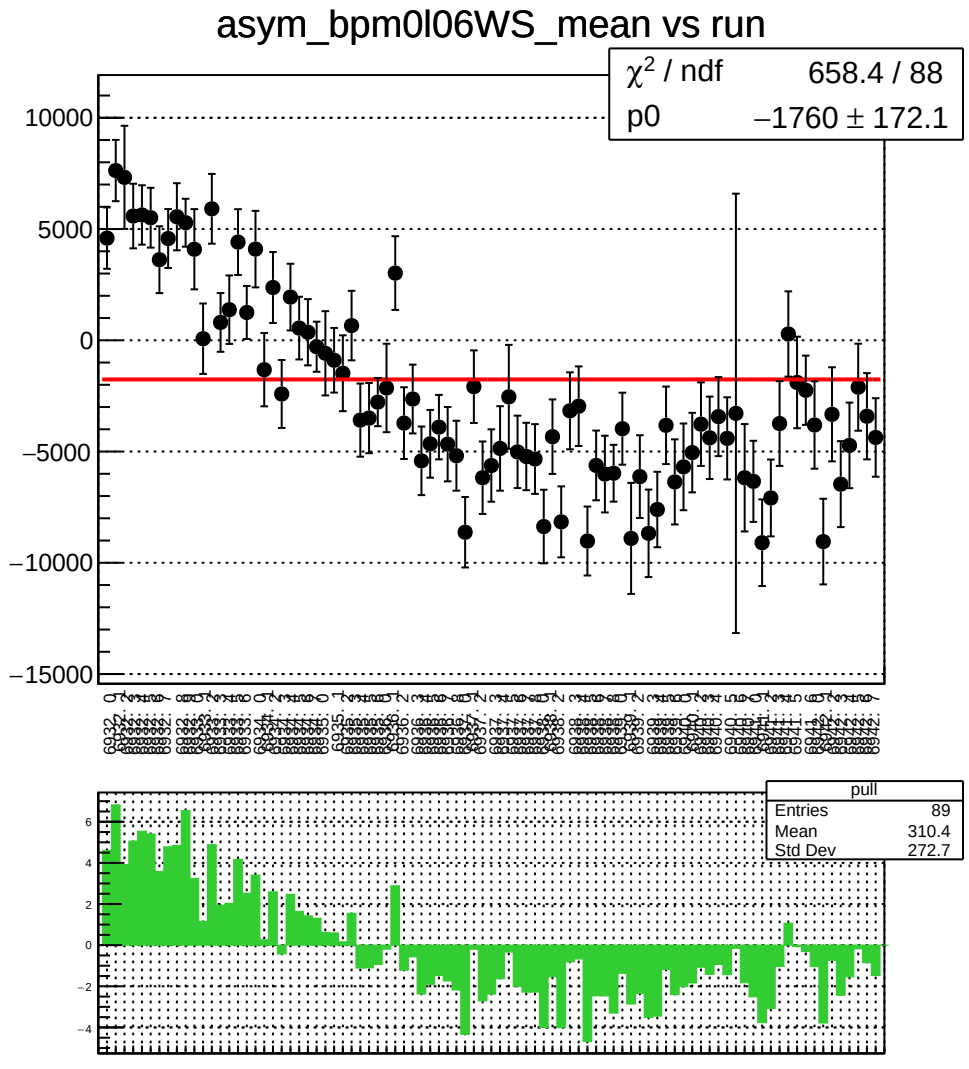

pull1D
Entries 89
Mean −0.1873
Std Dev 2.728
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

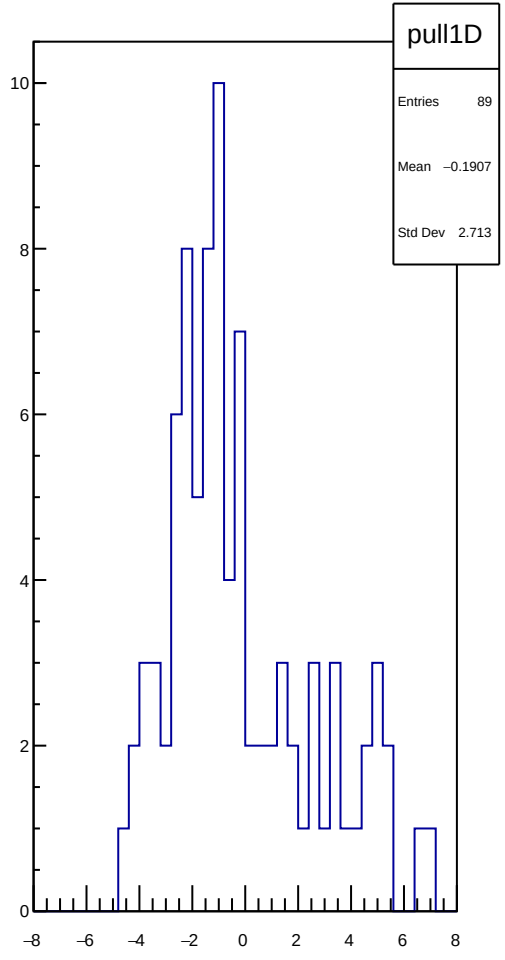

asym_bpm0l04WS_rms vs run
χ² / ndf 4.512e+04 / 88
p0 150.4 ± 0.1173
1000
900
800
700
600
500
400
300
200
100

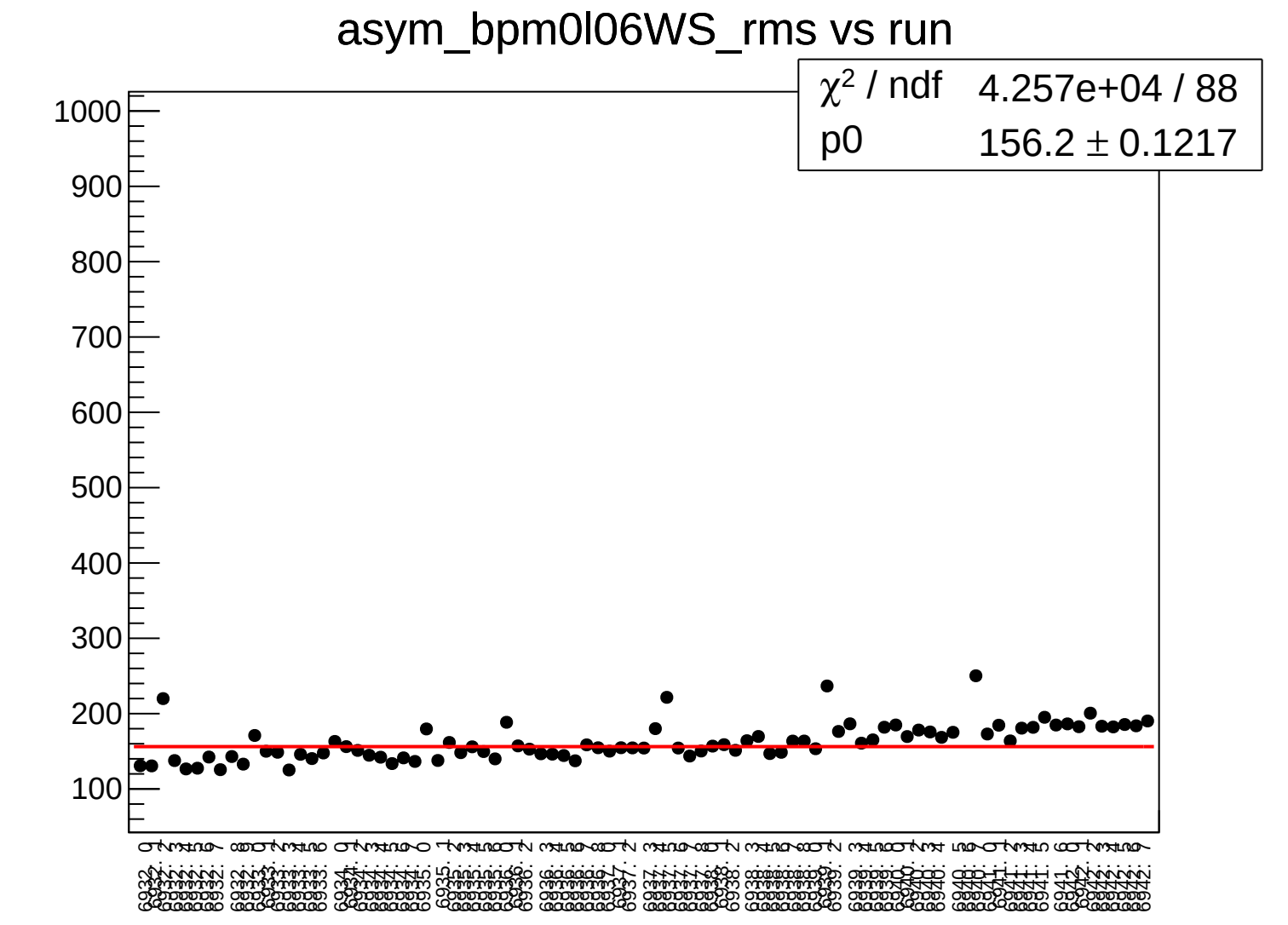

asym_bpm0l05WS_mean vs run
χ² / ndf 602.4 / 88
p0 −1712 ± 177.8
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 329.8
Std Dev 292.2
6
4
2
0
−2
−4

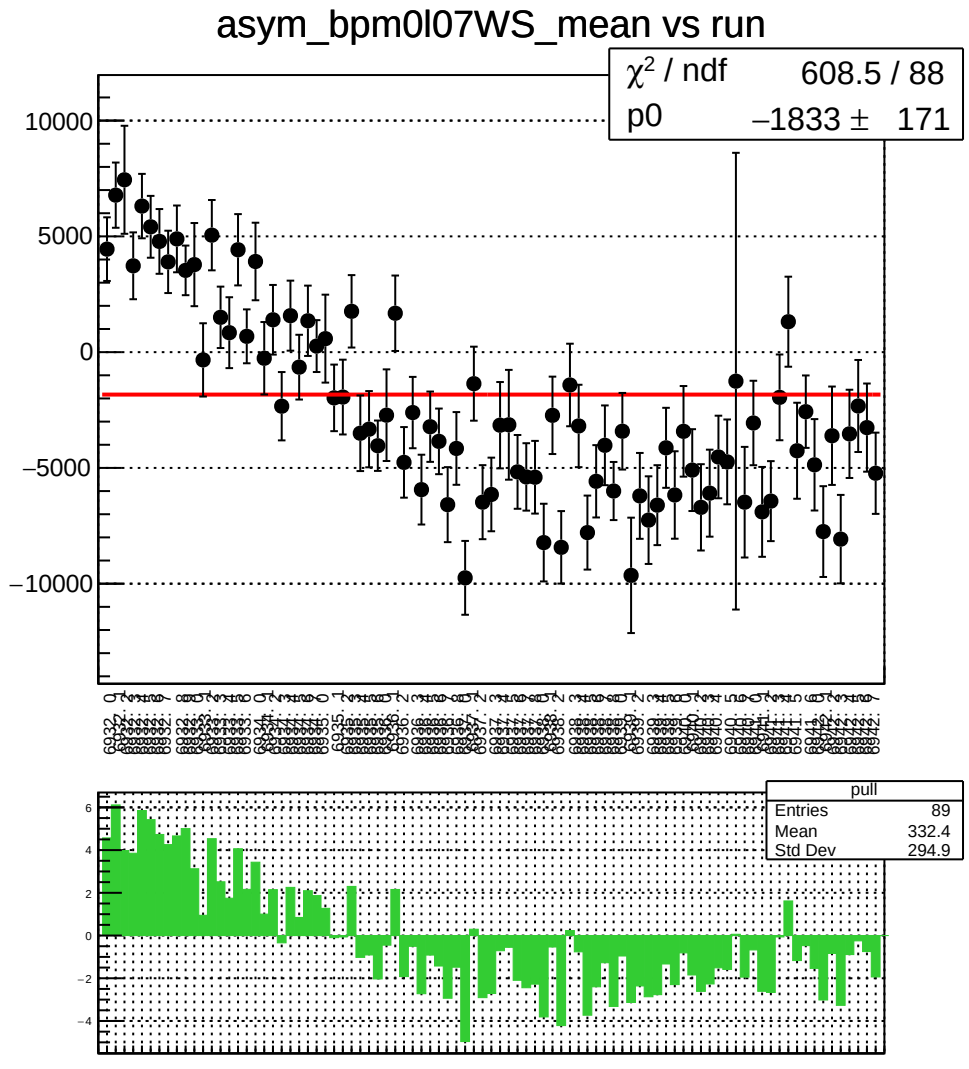

pull1D
Entries 89
Mean −0.1687
Std Dev 2.596
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

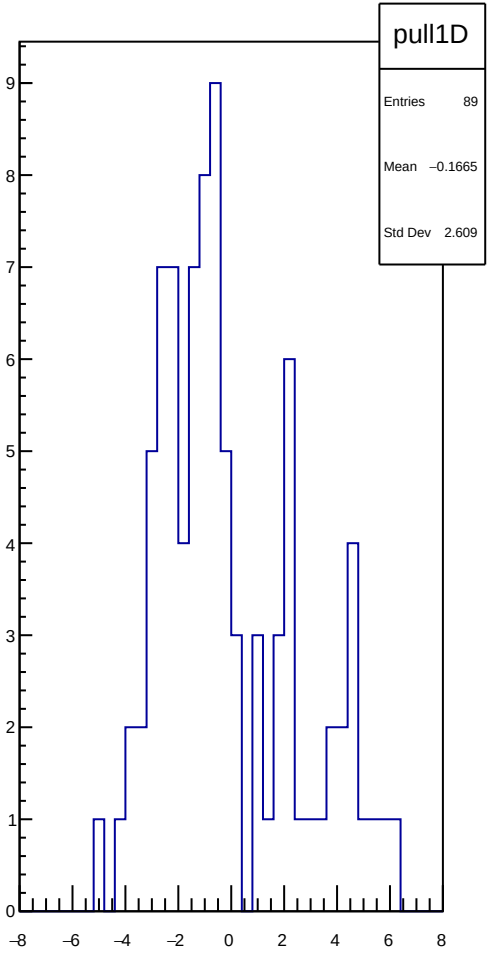

asym_bpm0l05WS_rms vs run
χ² / ndf 3.959e+04 / 88
p0 161.5 ± 0.1257
1000
900
800
700
600
500
400
300
200
100

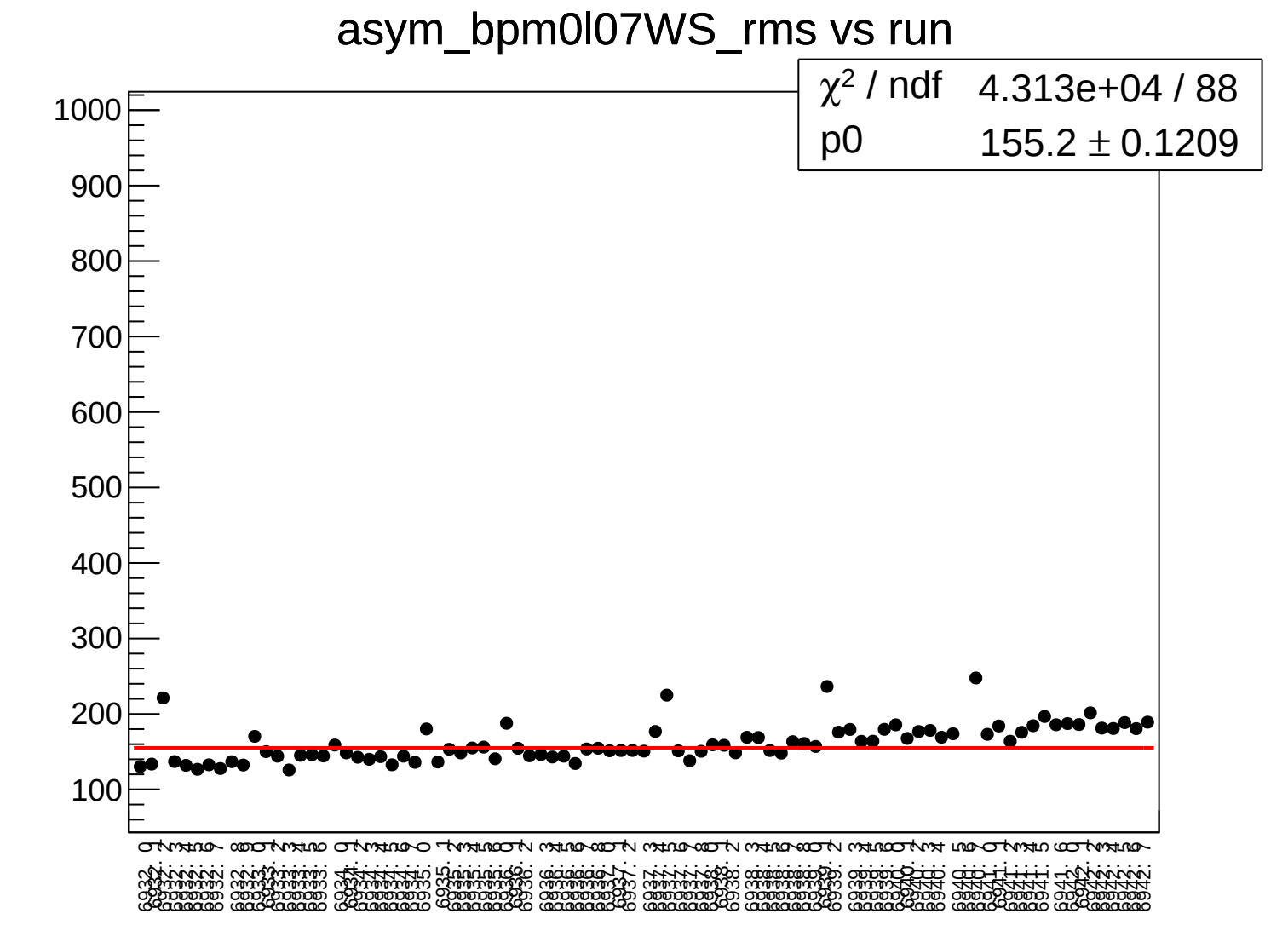

asym_bpm0l06WS_mean vs run
χ² / ndf 658.4 / 88
p0 −1760 ± 172.1
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 310.4
Std Dev 272.7
6
4
2
0
−2
−4

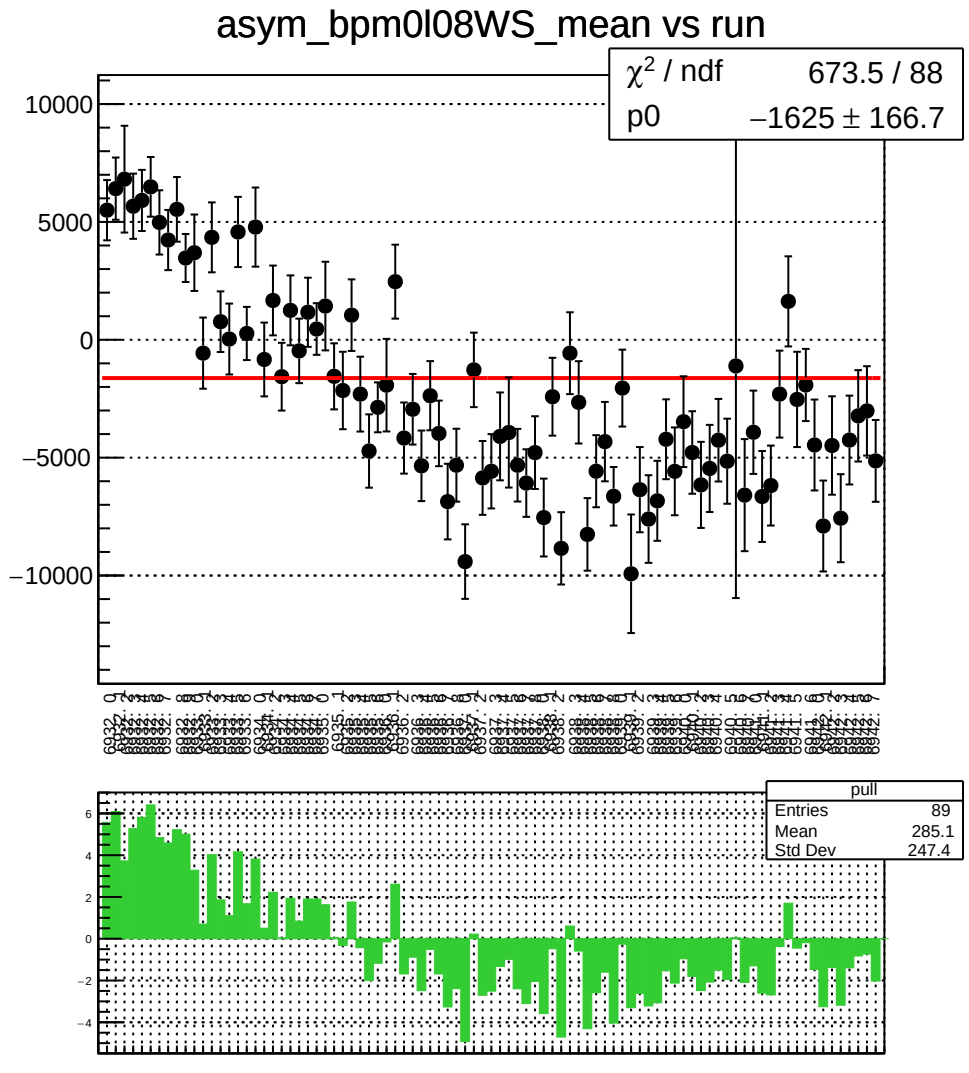

pull1D
Entries 89
Mean −0.1907
Std Dev 2.713
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

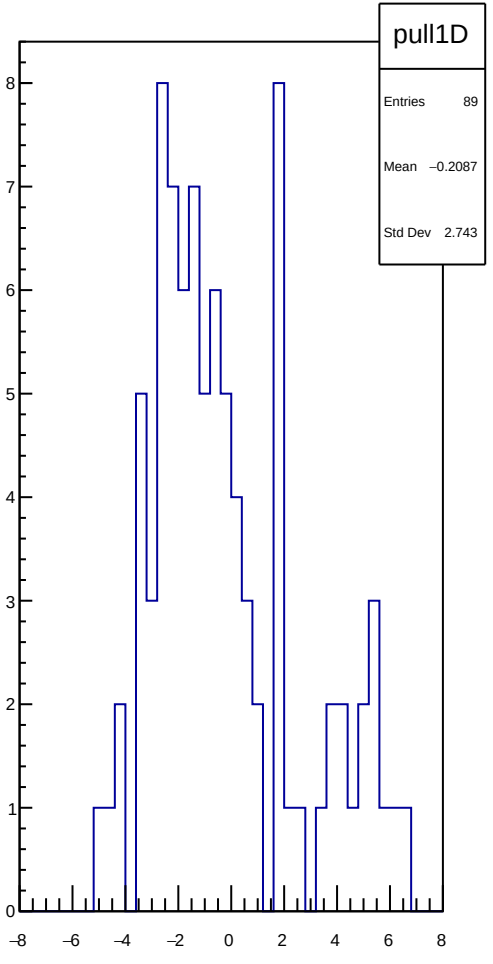

asym_bpm0l06WS_rms vs run
χ² / ndf 4.257e+04 / 88
p0 156.2 ± 0.1217
1000
900
800
700
600
500
400
300
200
100

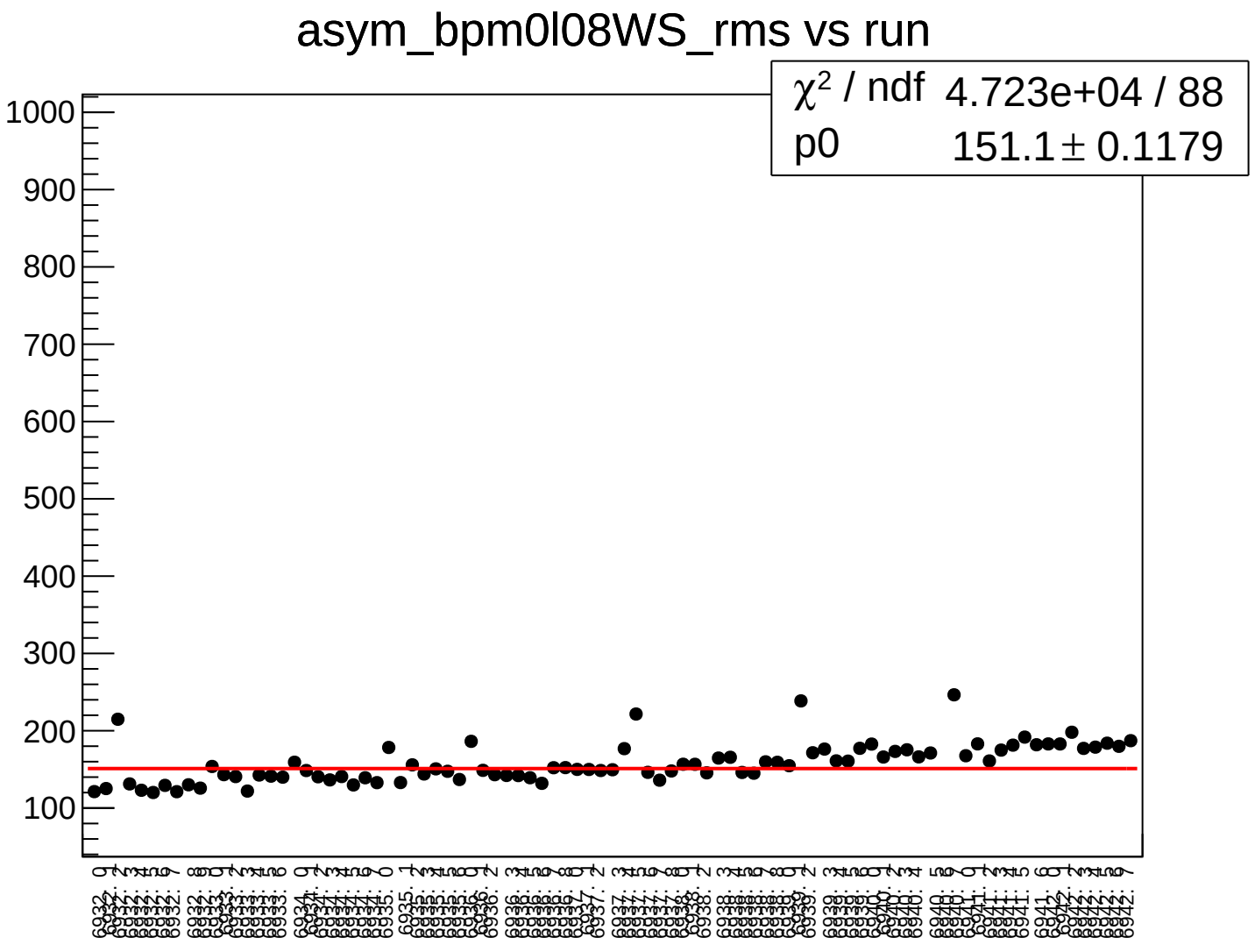

asym_bpm0l07WS_mean vs run
χ² / ndf 608.5 / 88
p0 −1833 ± 171
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 332.4
Std Dev 294.9
6
4
2
0
−2
−4

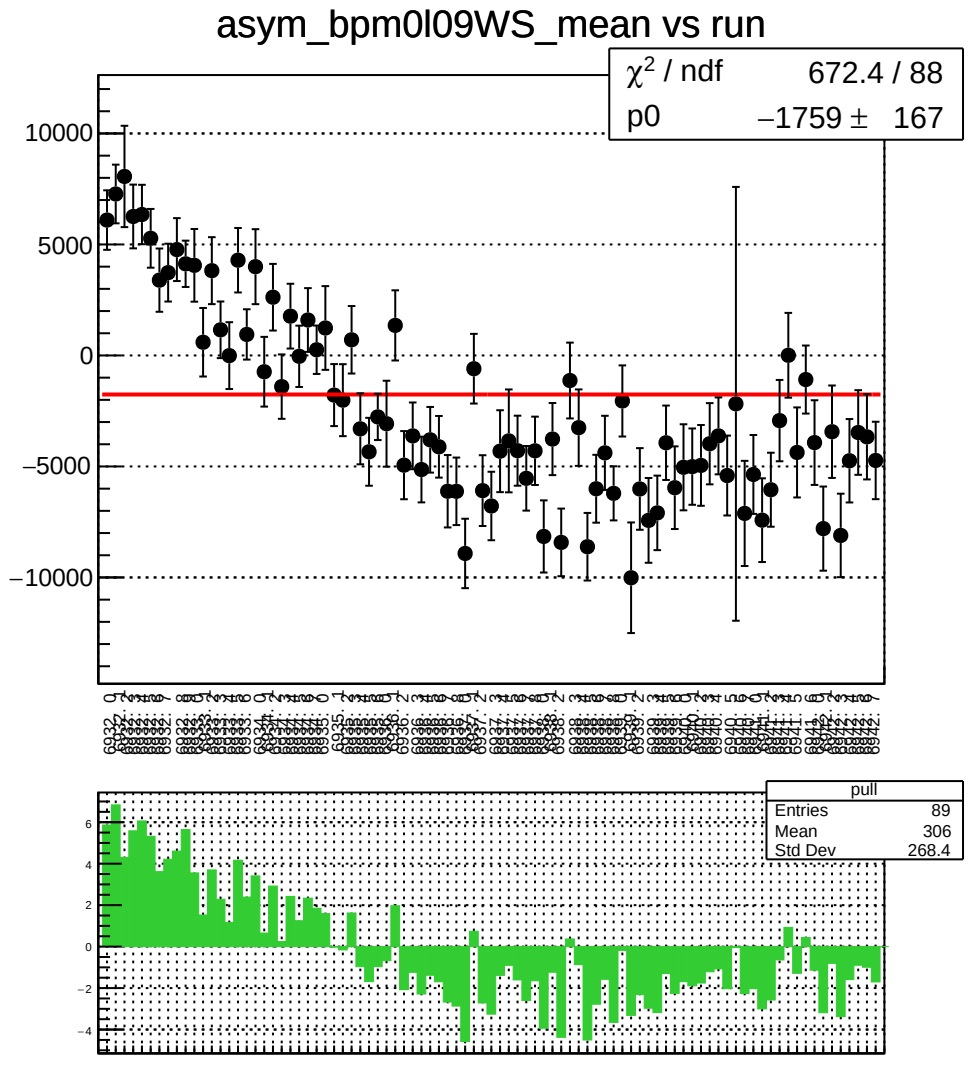

pull1D
Entries 89
Mean −0.1665
Std Dev 2.609
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

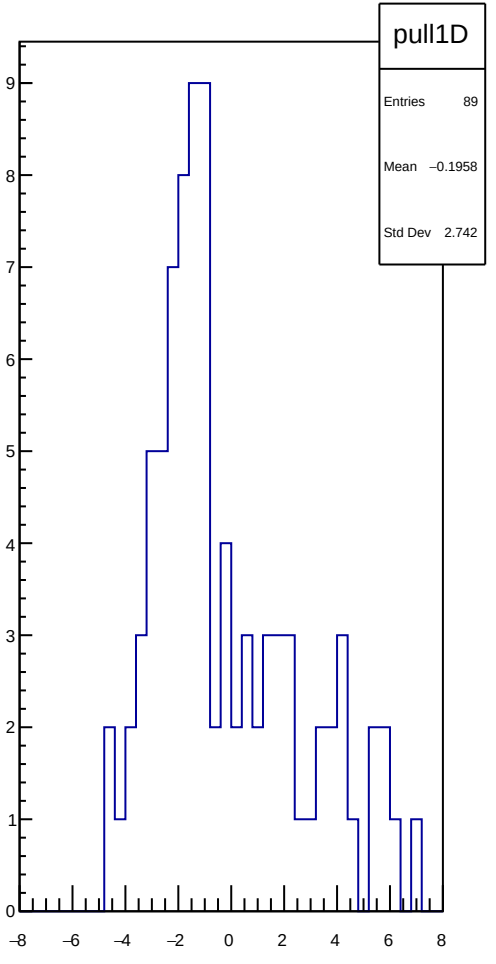

asym_bpm0l07WS_rms vs run
χ² / ndf 4.313e+04 / 88
p0 155.2 ± 0.1209
1000
900
800
700
600
500
400
300
200
100

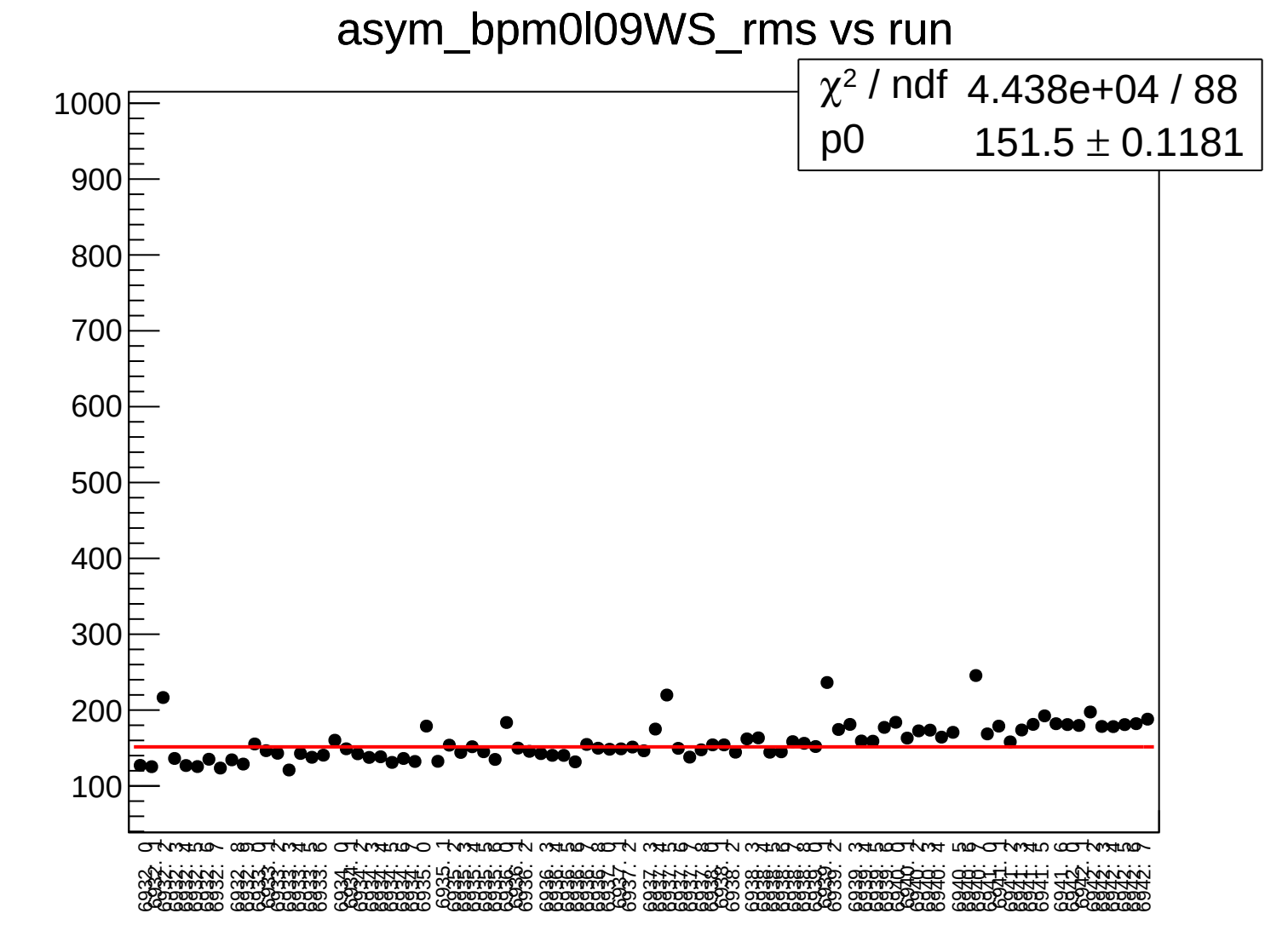

asym_bpm0l08WS_mean vs run
χ² / ndf 673.5 / 88
p0 −1625 ± 166.7
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 285.1
Std Dev 247.4
6
4
2
0
−2
−4

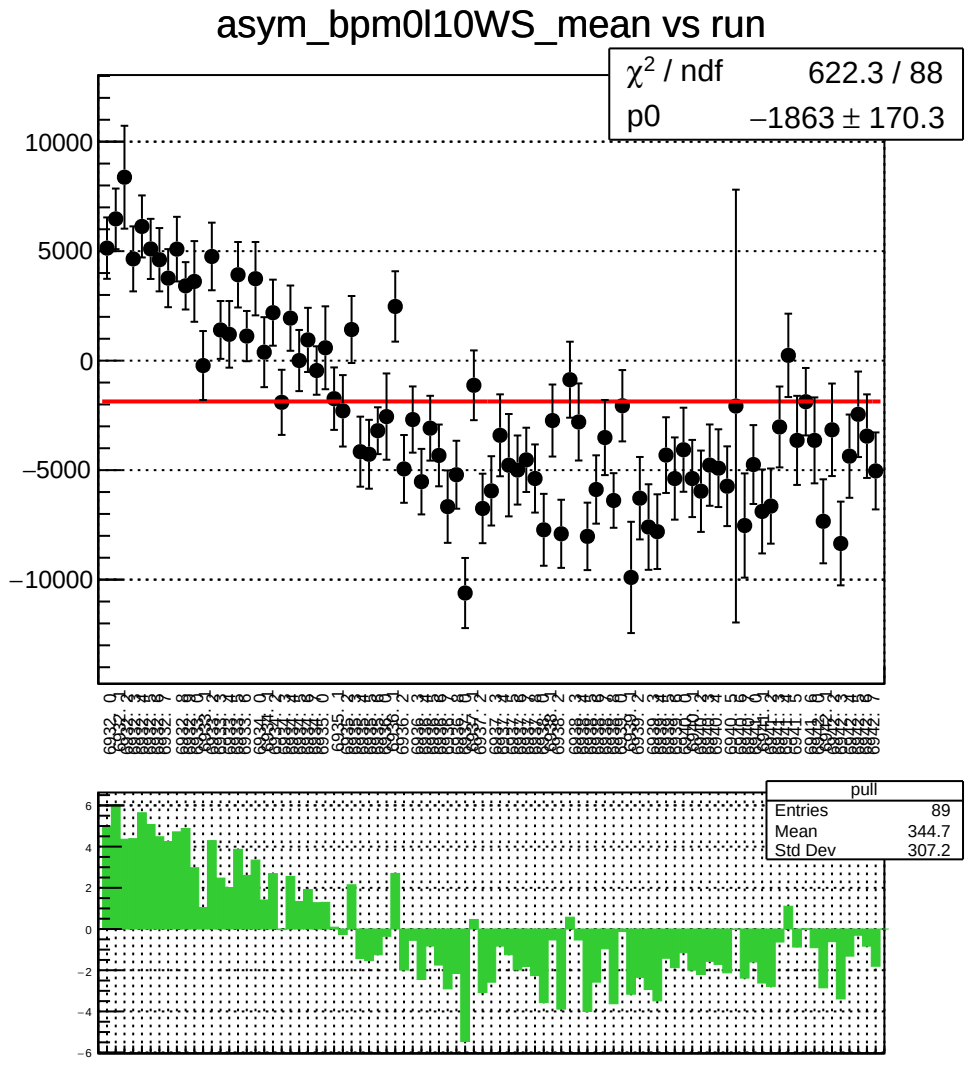

pull1D
Entries 89
Mean −0.2087
Std Dev 2.743
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

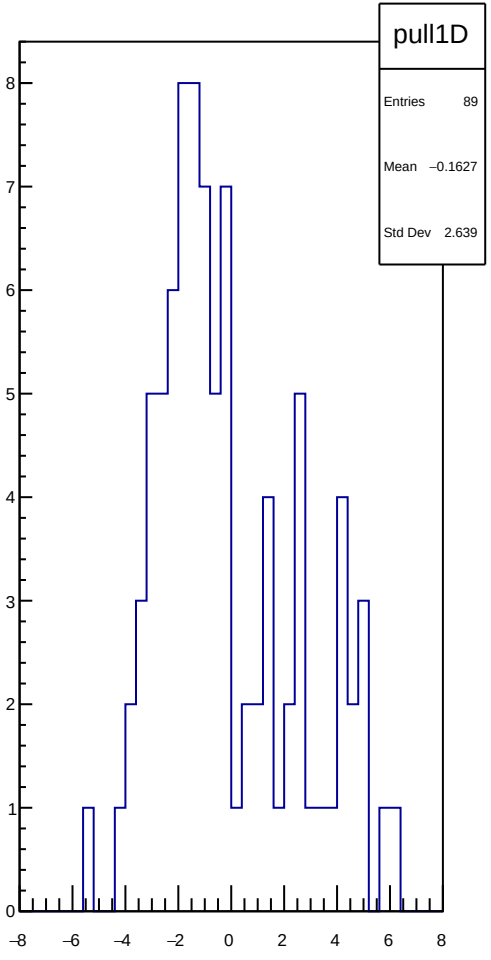

asym_bpm0l08WS_rms vs run
χ² / ndf 4.723e+04 / 88
p0 151.1 ± 0.1179
1000
900
800
700
600
500
400
300
200
100

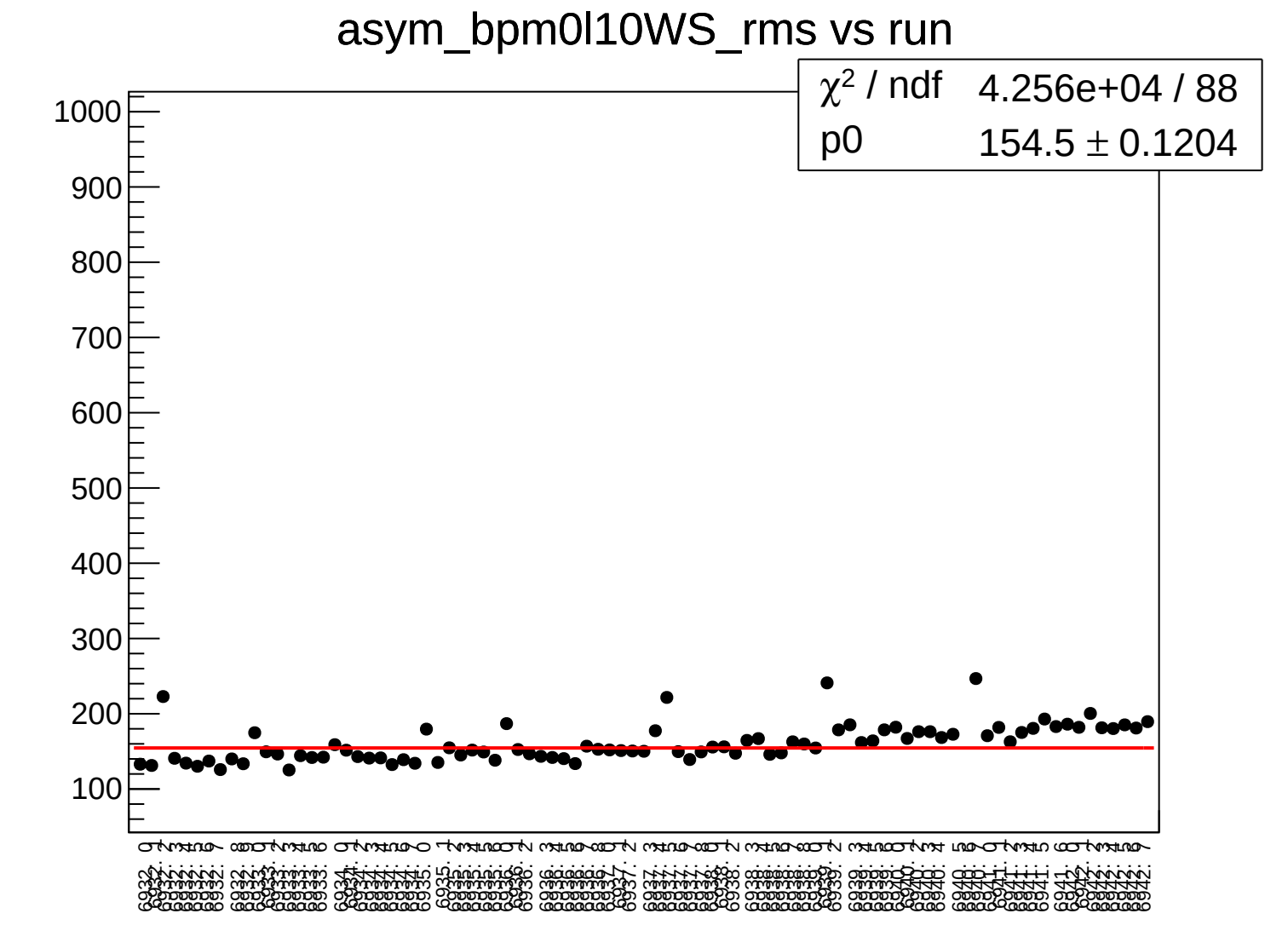

asym_bpm0l09WS_mean vs run
χ² / ndf 672.4 / 88
p0 −1759 ± 167
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 306
Std Dev 268.4
6
4
2
0
−2
−4

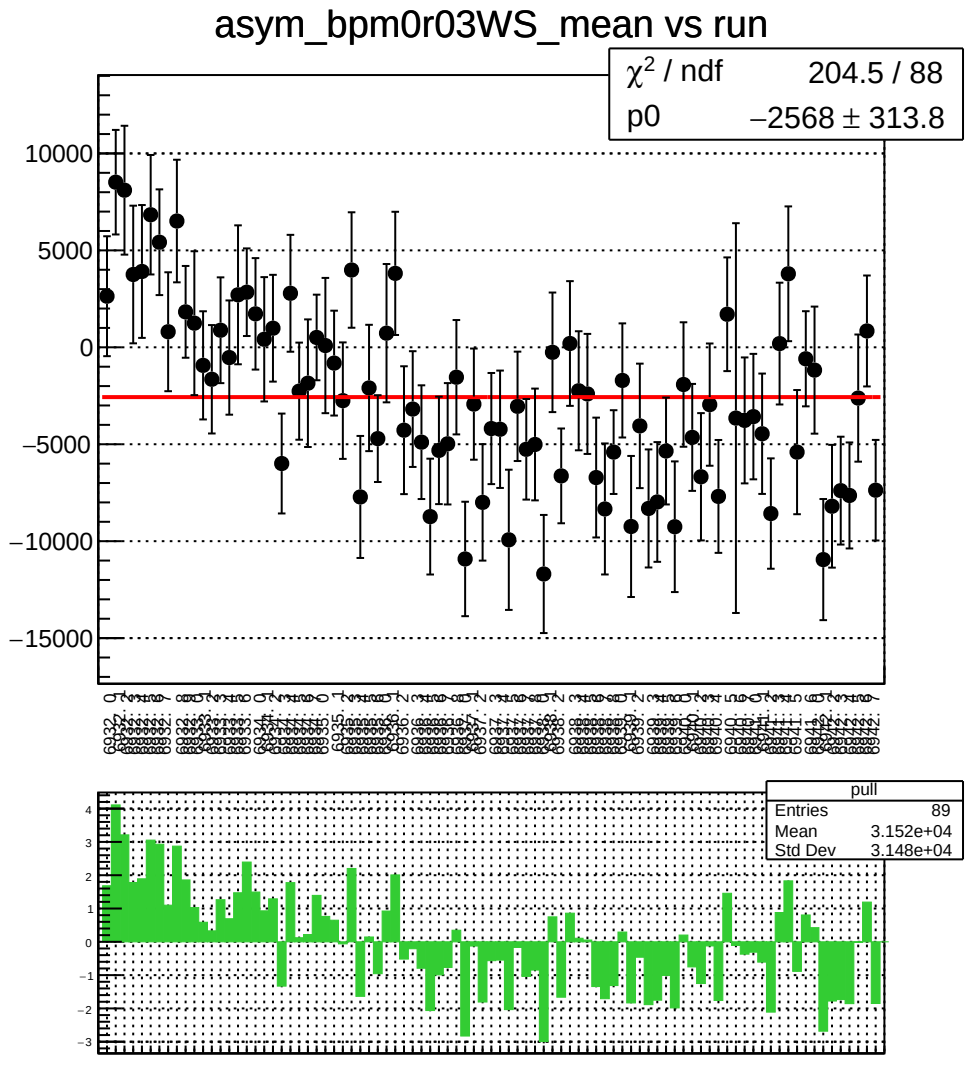

pull1D
Entries 89
Mean −0.1958
Std Dev 2.742
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

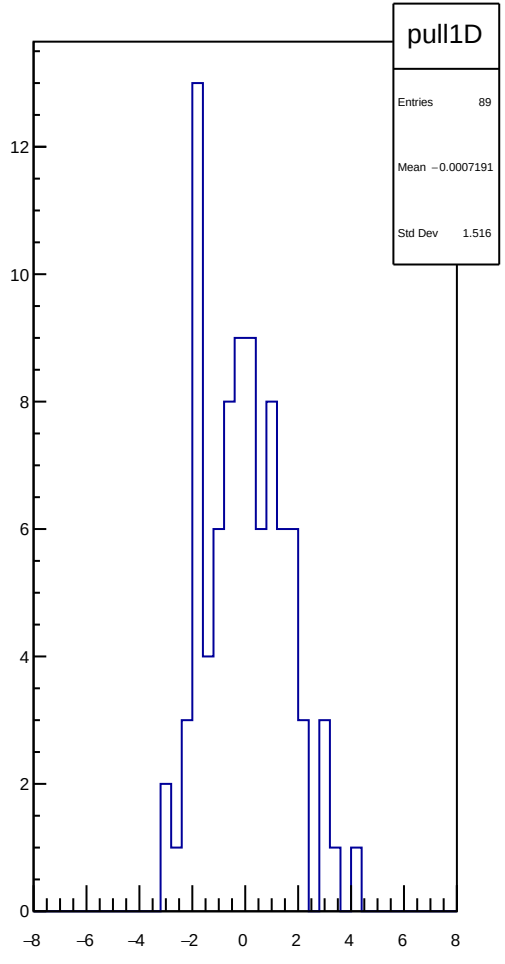

asym_bpm0l09WS_rms vs run
χ² / ndf 4.438e+04 / 88
p0 151.5 ± 0.1181
1000
900
800
700
600
500
400
300
200
100

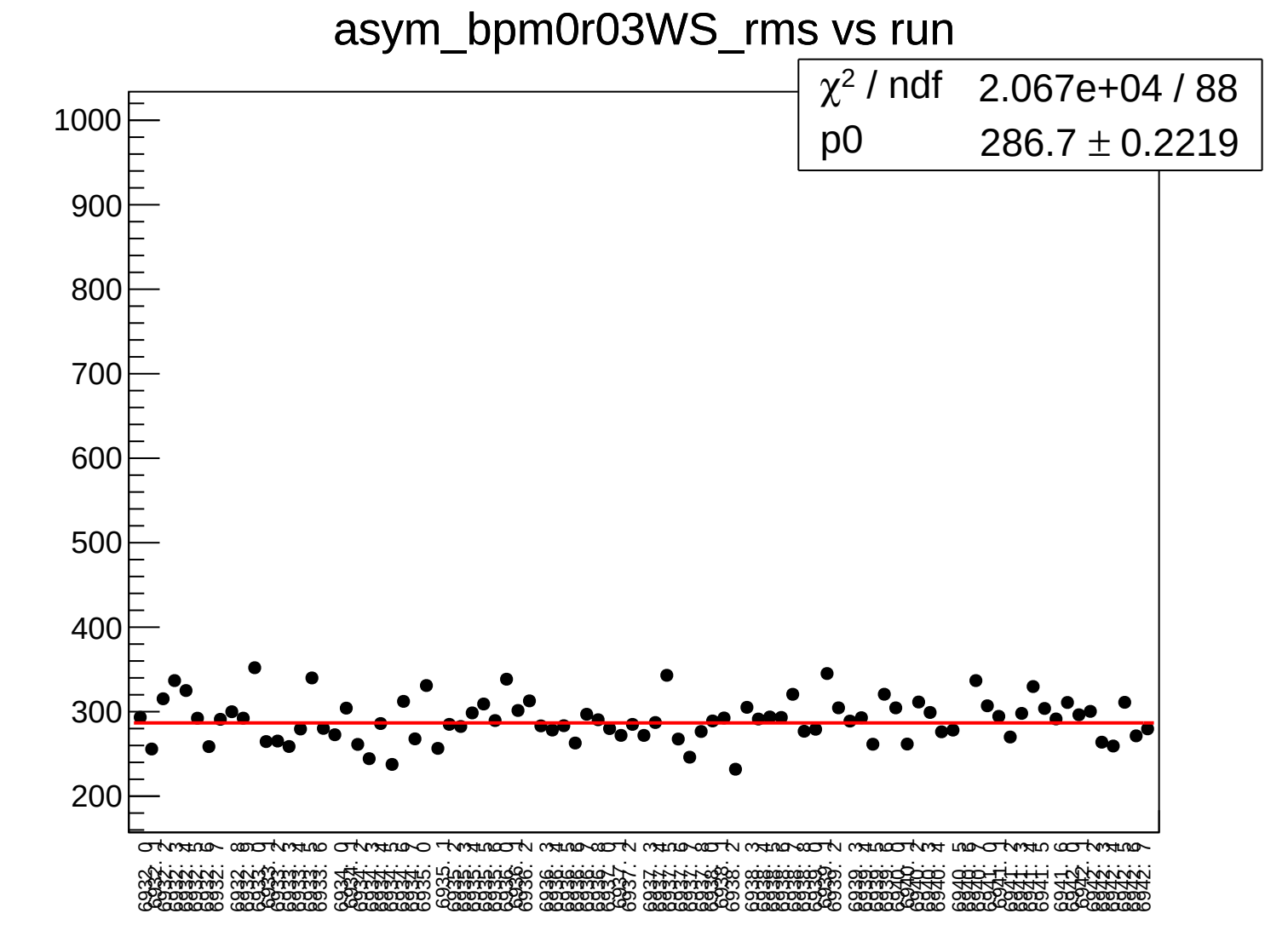

asym_bpm0l10WS_mean vs run
χ² / ndf 622.3 / 88
p0 −1863 ± 170.3
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 344.7
Std Dev 307.2
6
4
2
0
−2
−4
−6

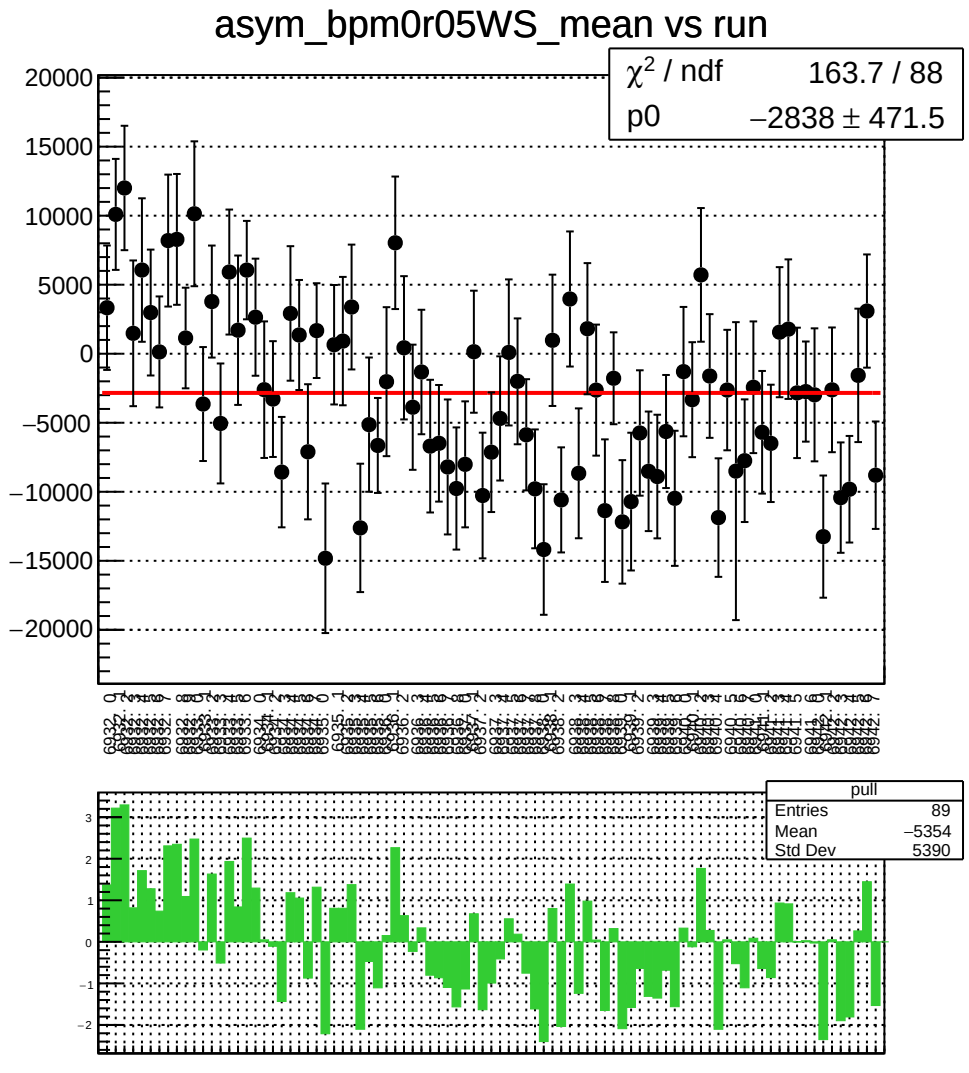

pull1D
Entries 89
Mean −0.1627
Std Dev 2.639
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

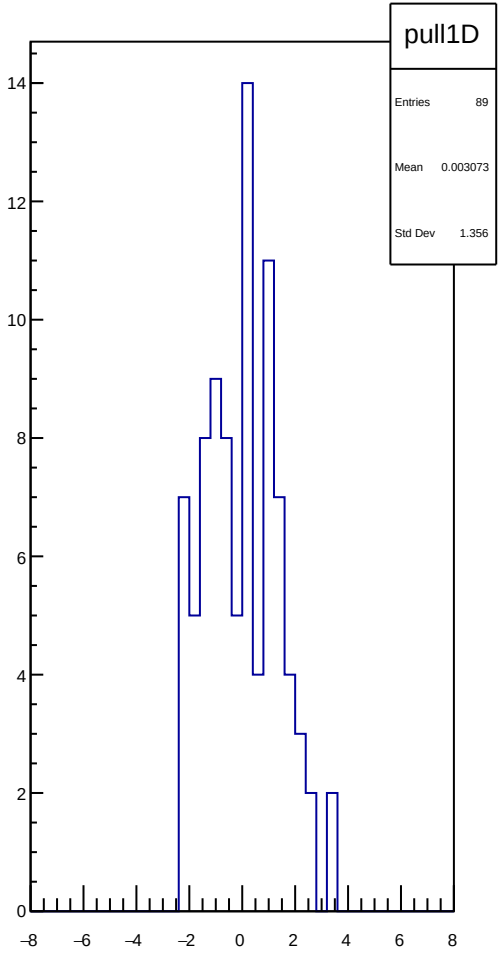

asym_bpm0l10WS_rms vs run
χ² / ndf 4.256e+04 / 88
p0 154.5 ± 0.1204
1000
900
800
700
600
500
400
300
200
100

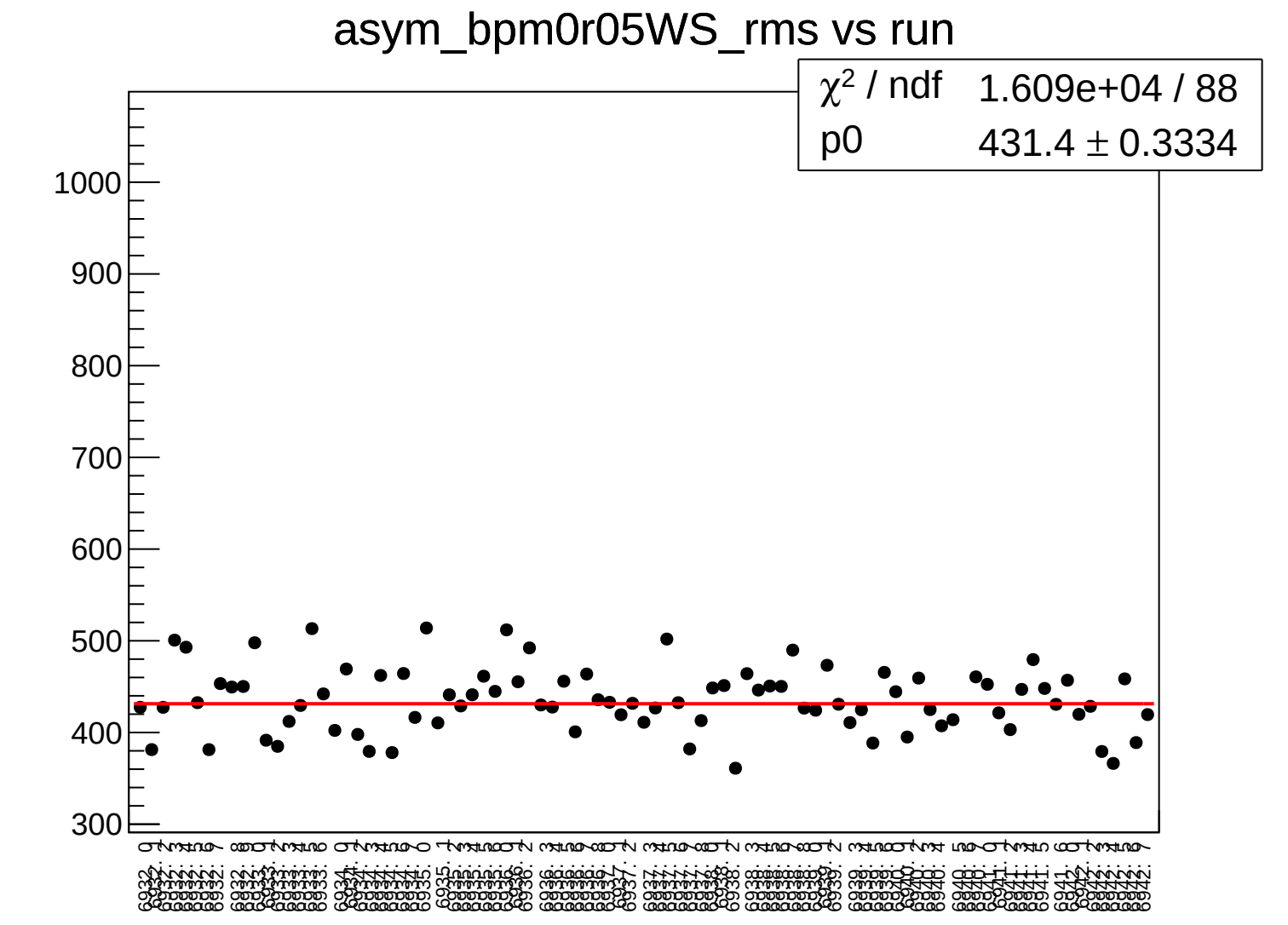

asym_bpm0r03WS_mean vs run
χ² / ndf 204.5 / 88
p0 −2568 ± 313.8
10000
5000
0
−5000
−10000
−15000
pull
Entries 89
Mean 3.152e+04
Std Dev 3.148e+04
4
3
2
1
0
−1
−2
−3

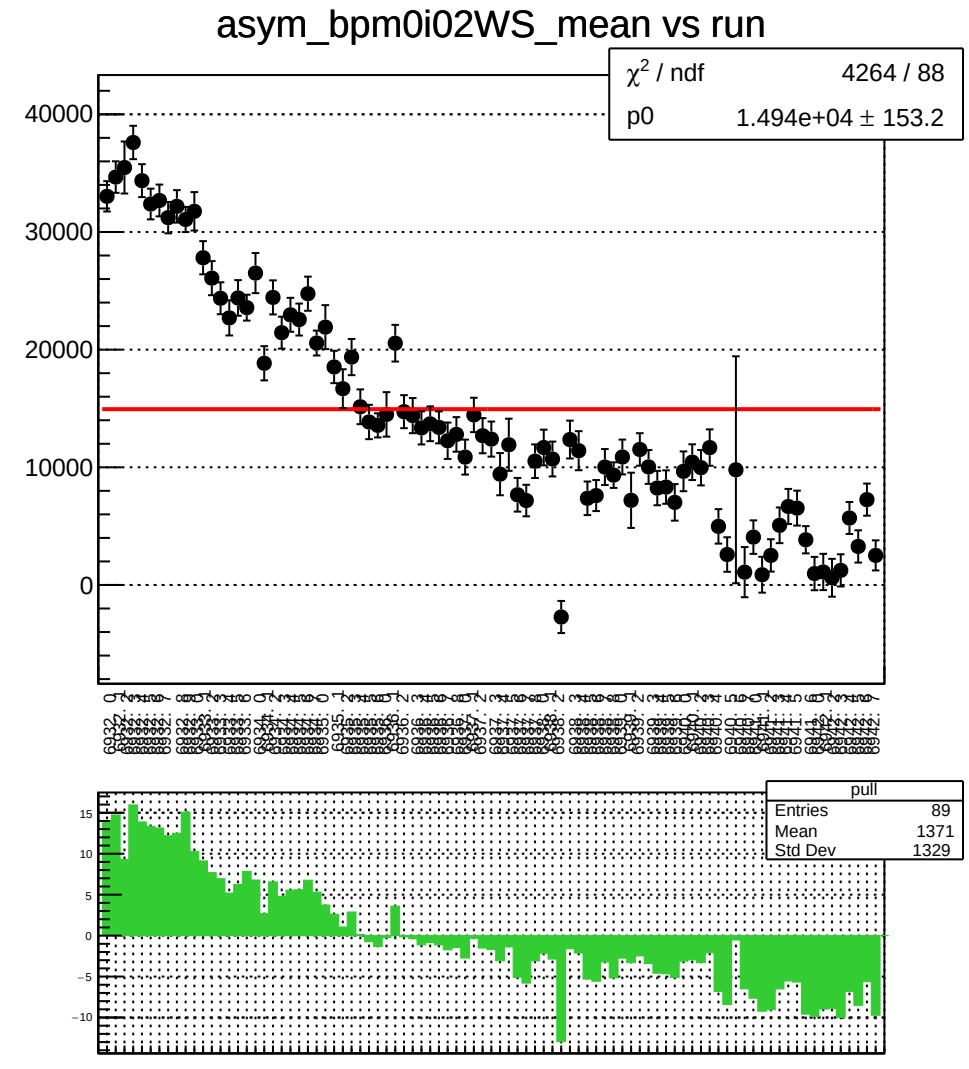

pull1D
Entries 89
Mean −0.0007191
Std Dev 1.516
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

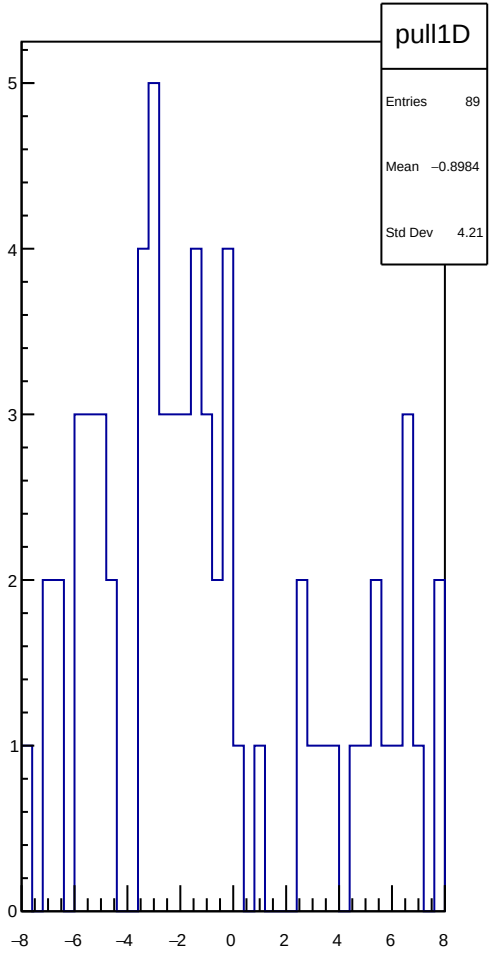

asym_bpm0r03WS_rms vs run
χ^2 / ndf 2.067e+04 / 88
p0 286.7 ± 0.2219
1000
900
800
700
600
500
400
300
200

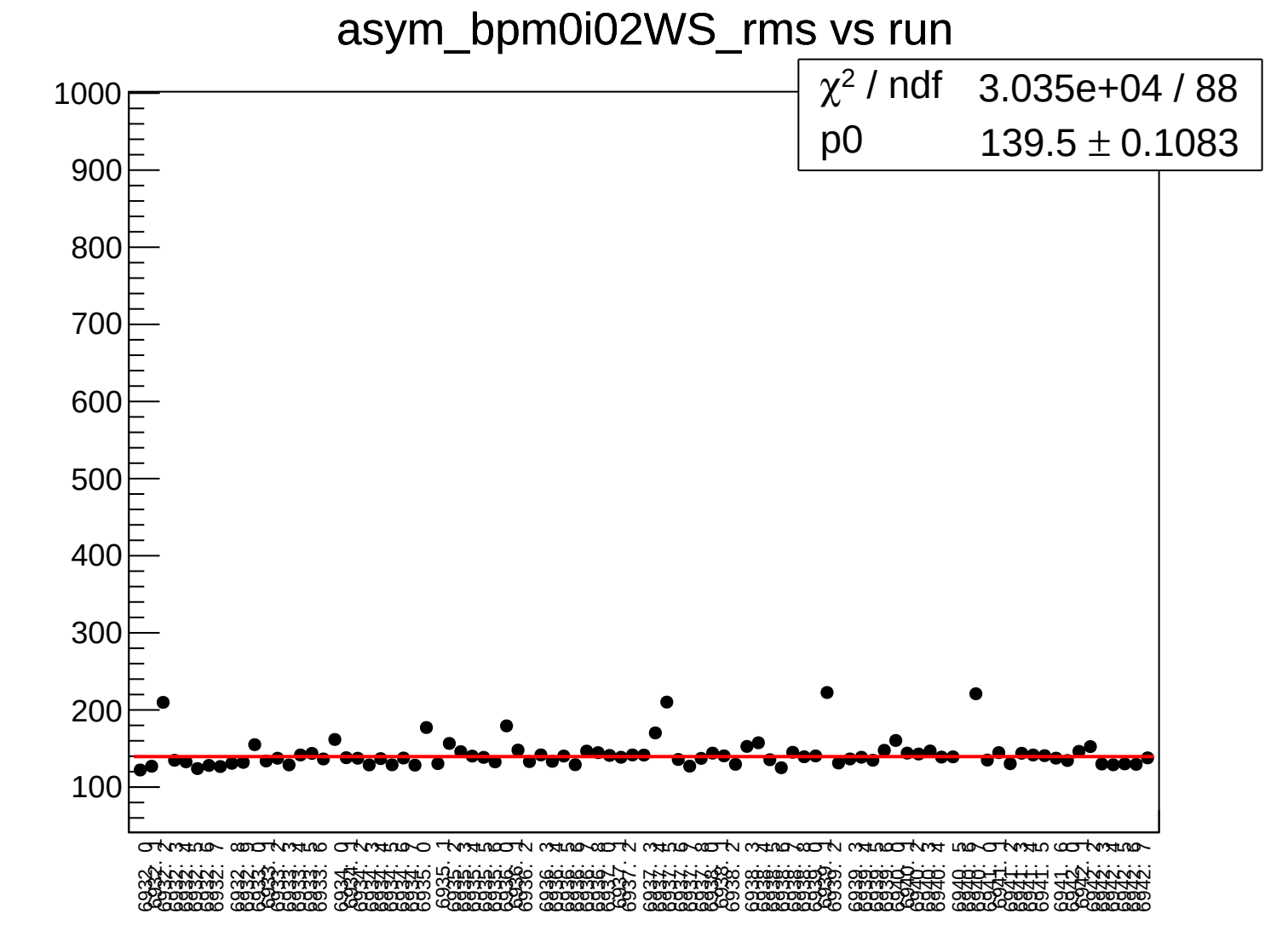

asym_bpm0r05WS_mean vs run
χ² / ndf 163.7 / 88
p0 −2838 ± 471.5
pull
Entries 89
Mean −5354
Std Dev 5390

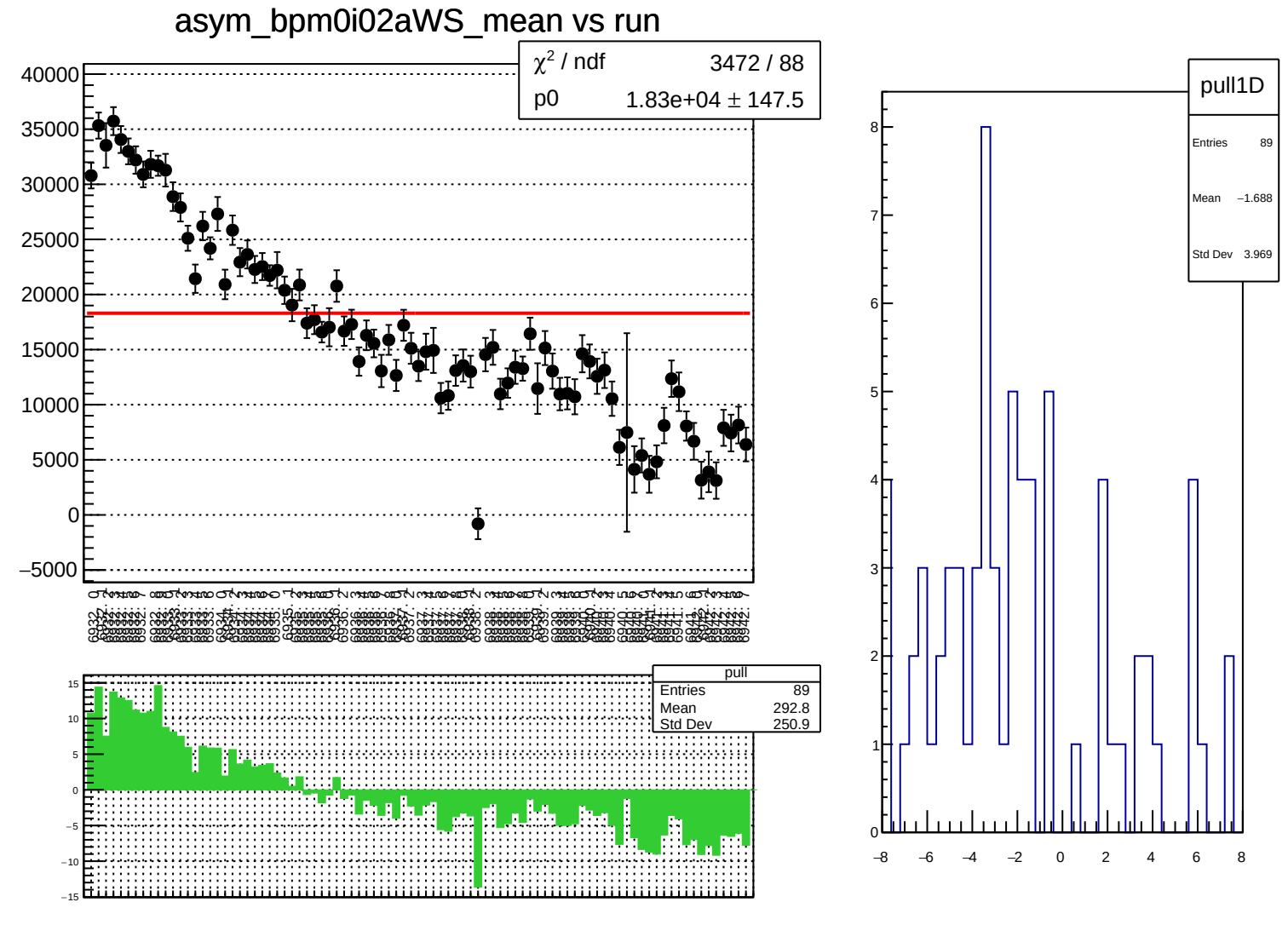

pull1D
Entries 89
Mean 0.003073
Std Dev 1.356

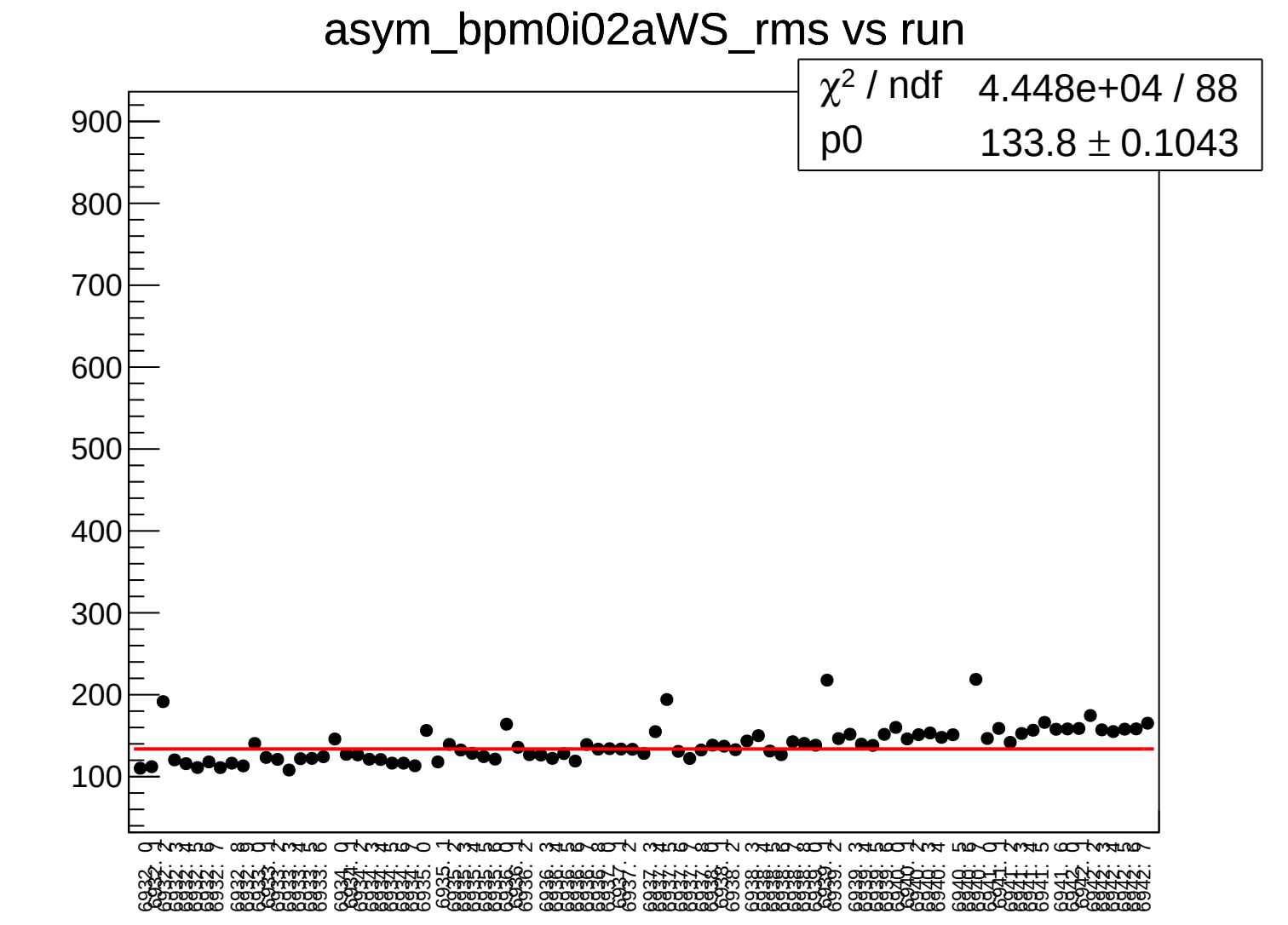

asym_bpm0r05WS_rms vs run
χ² / ndf 1.609e+04 / 88
p0 431.4 ± 0.3334
1000
900
800
700
600
500
400
300

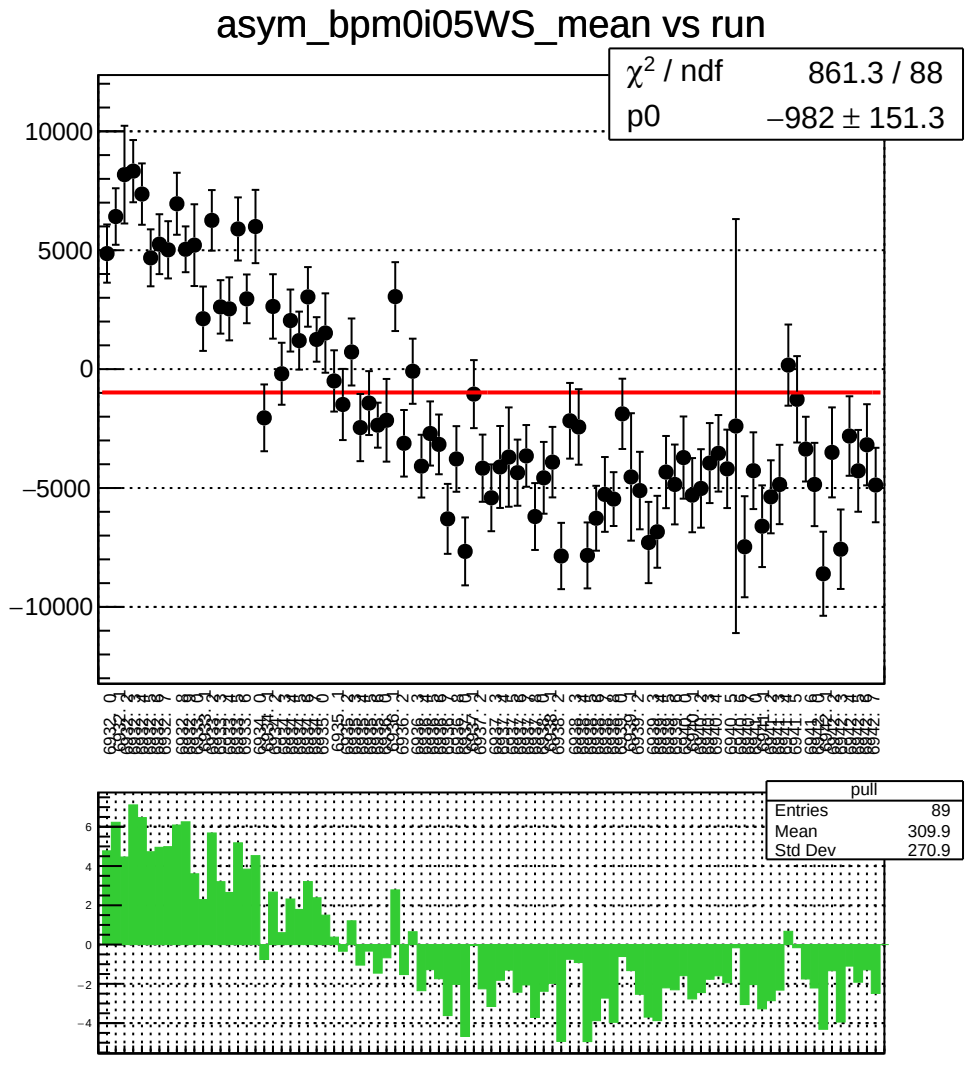

asym_bpm0i02WS_mean vs run
χ² / ndf 4264 / 88
p0 1.494e+04 ± 153.2
40000
30000
20000
10000
0
pull
Entries 89
Mean 1371
Std Dev 1329
15
10
5
0
−5
−10

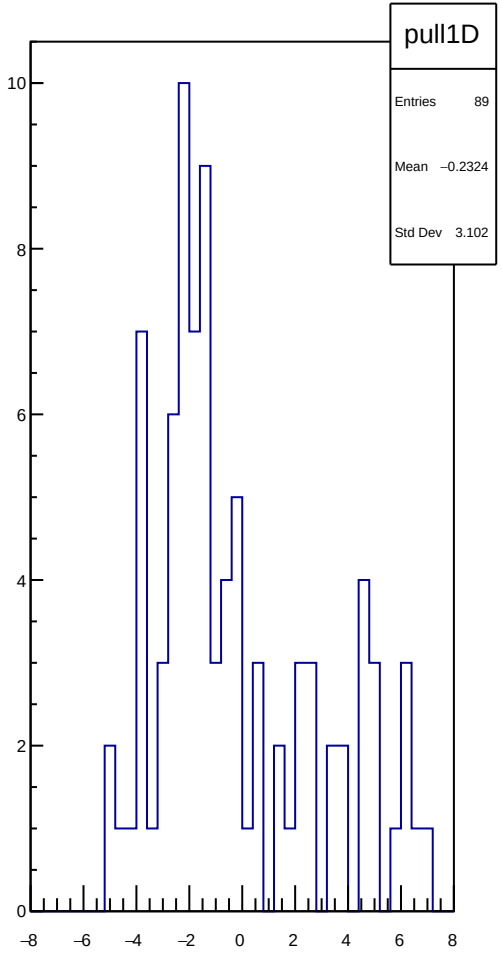

pull1D
Entries 89
Mean −0.8984
Std Dev 4.21
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

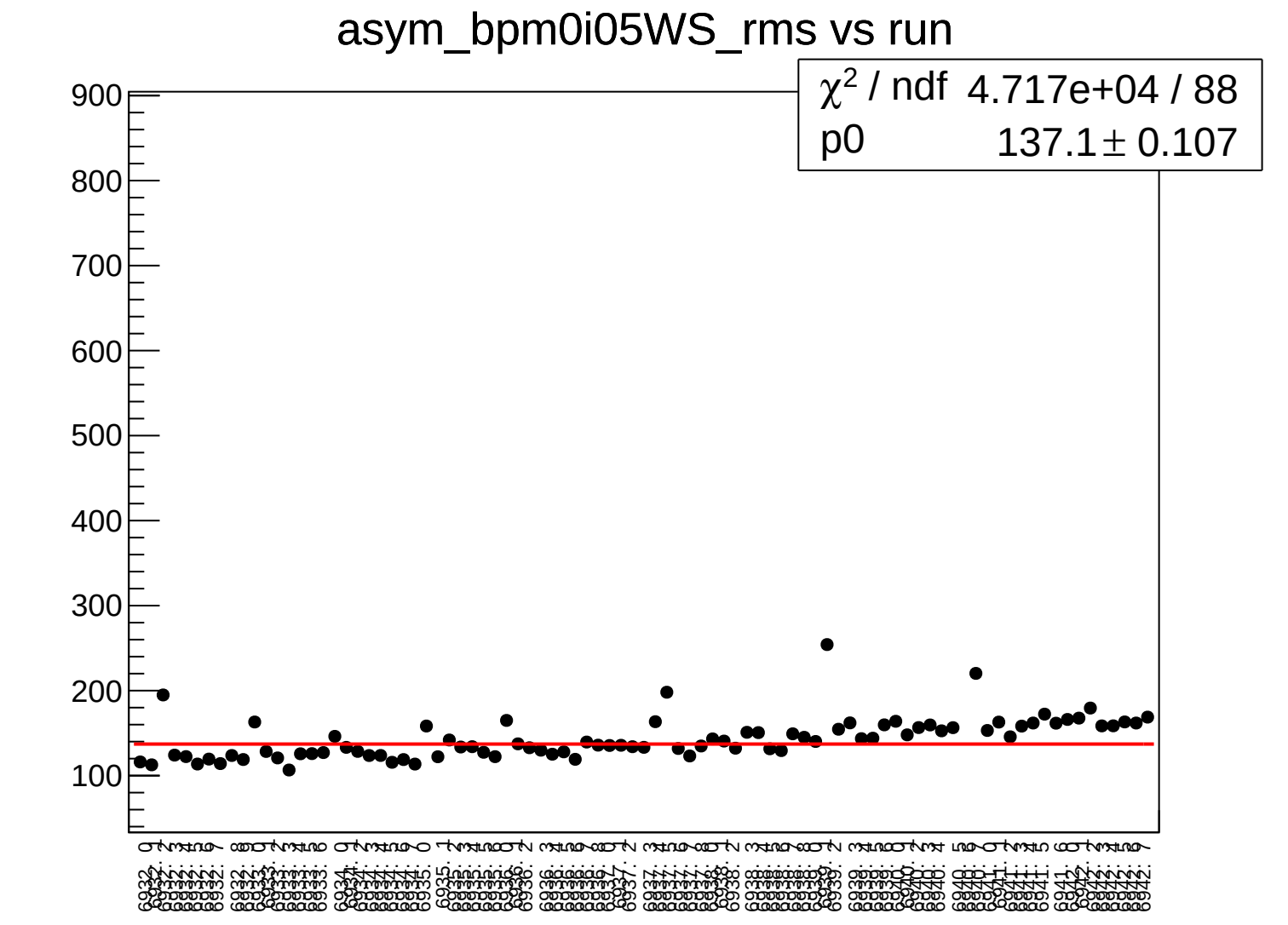

asym_bpm0i02WS_rms vs run
χ^2 / ndf 3.035e+04 / 88
p0 139.5 ± 0.1083
1000
900
800
700
600
500
400
300
200
100

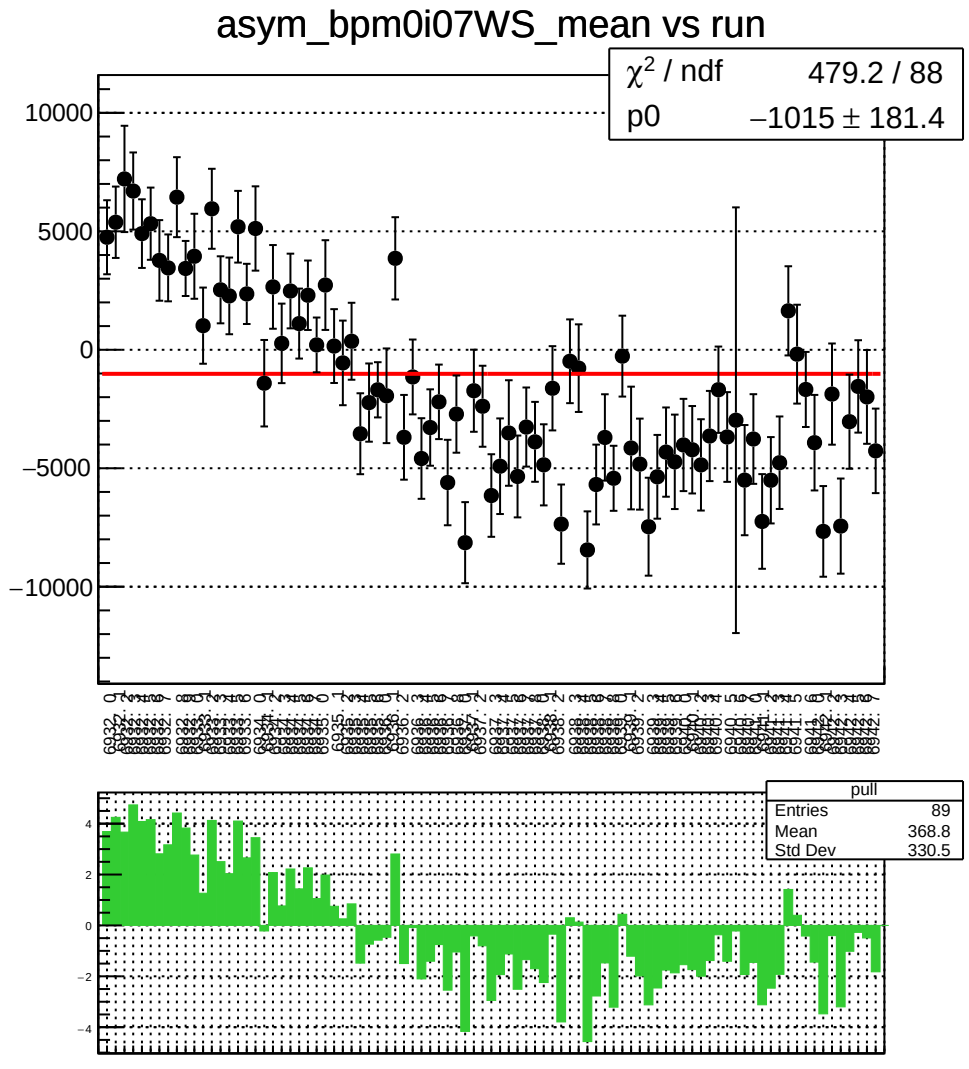

asym_bpm0i02aWS_mean vs run
χ² / ndf 3472 / 88
p0 1.83e+04 ± 147.5
pull
Entries 89
Mean 292.8
Std Dev 250.9
pull1D
Entries 89
Mean −1.688
Std Dev 3.969

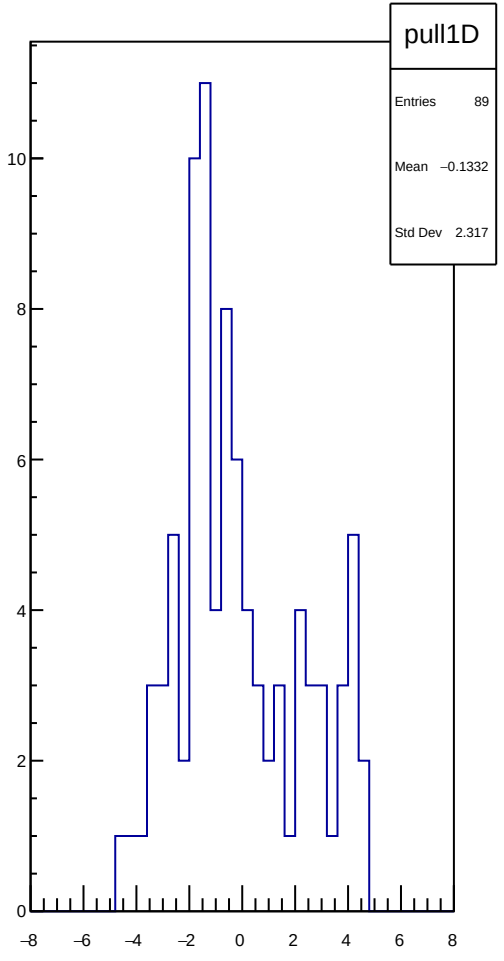

asym_bpm0i02aWS_rms vs run
χ^2 / ndf 4.448e+04 / 88
p0 133.8 ± 0.1043
900
800
700
600
500
400
300
200
100

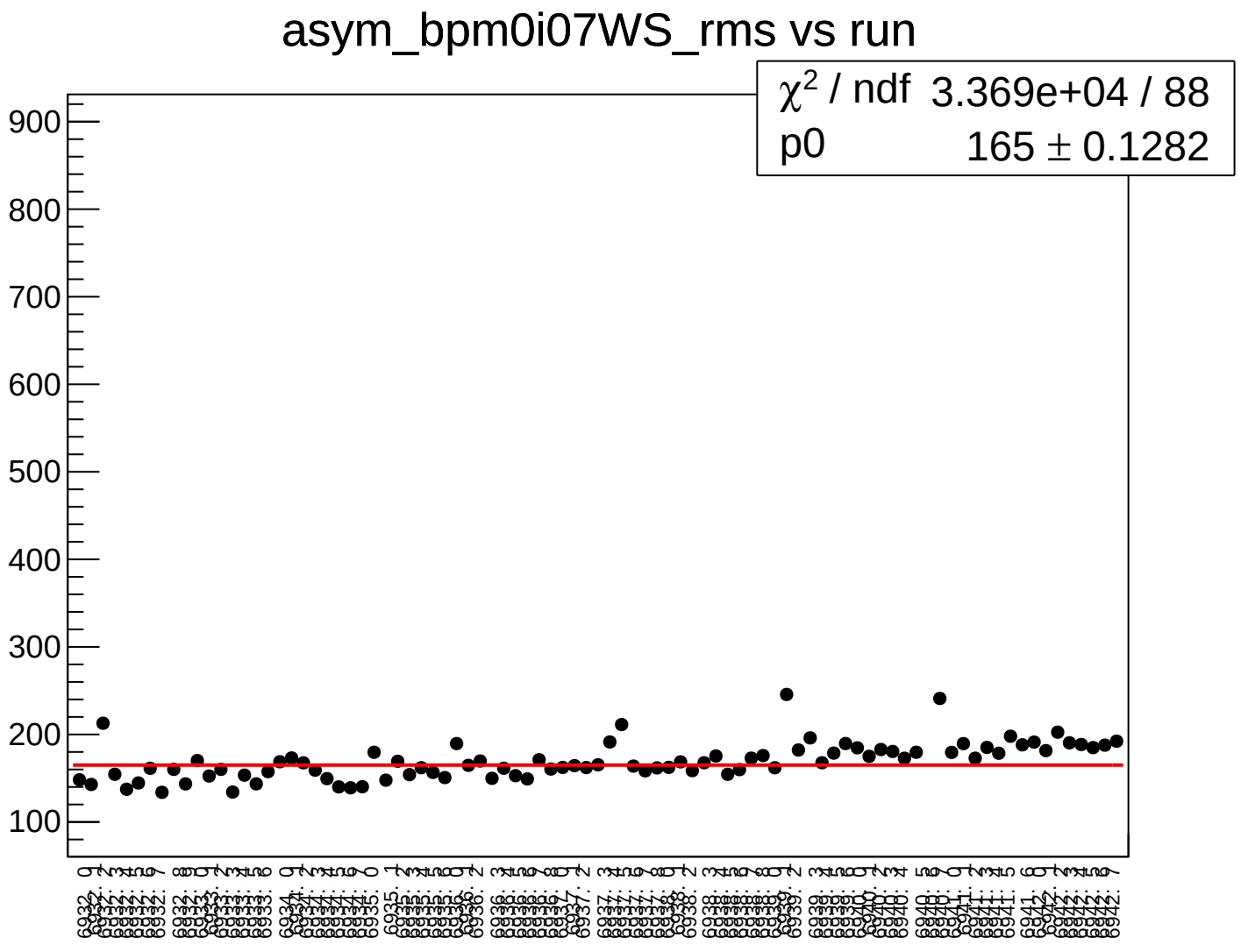

asym_bpm0i05WS_mean vs run
χ² / ndf 861.3 / 88
p0 −982 ± 151.3
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 309.9
Std Dev 270.9
6
4
2
0
−2
−4

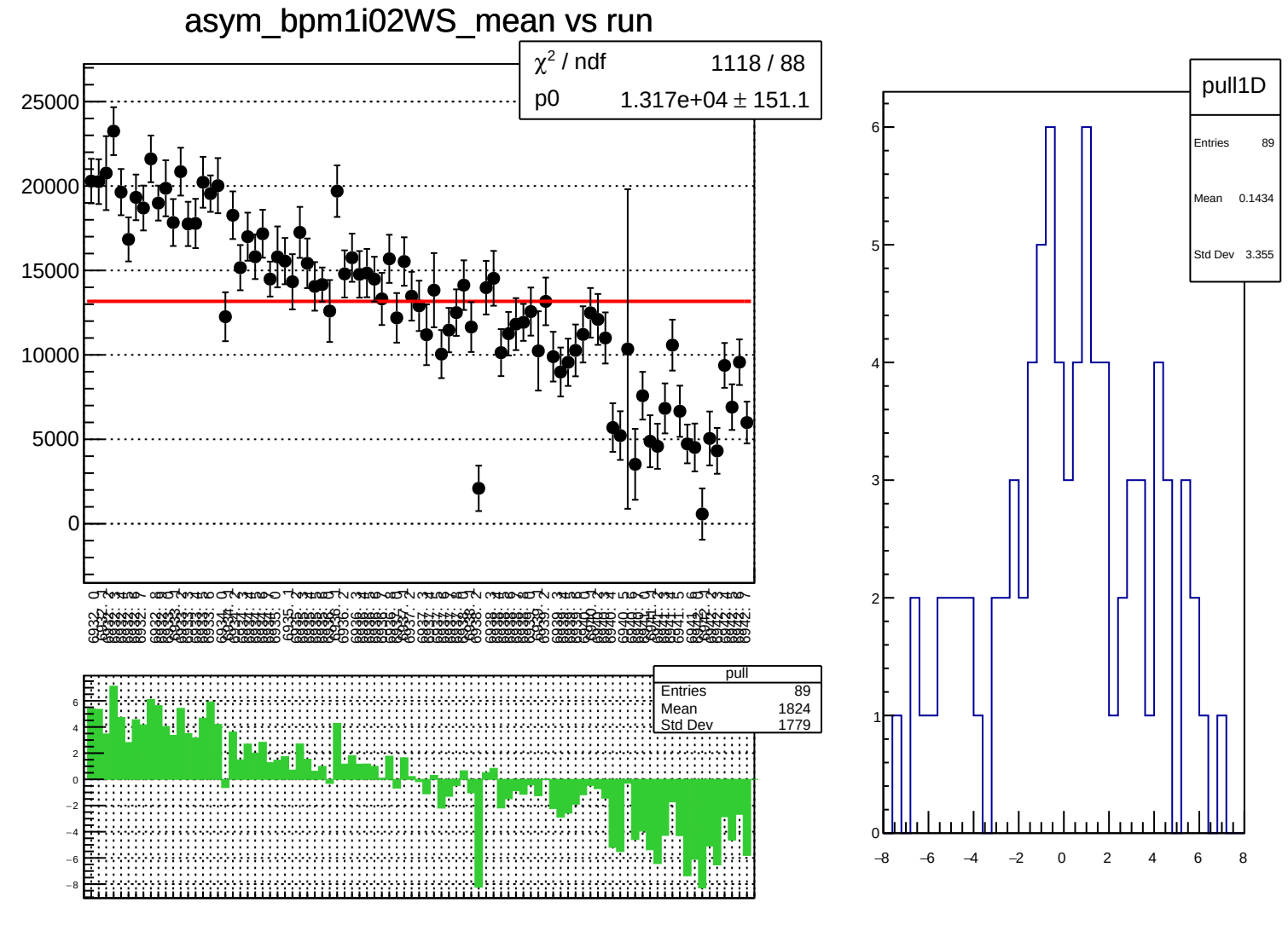

pull1D
Entries 89
Mean −0.2324
Std Dev 3.102
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

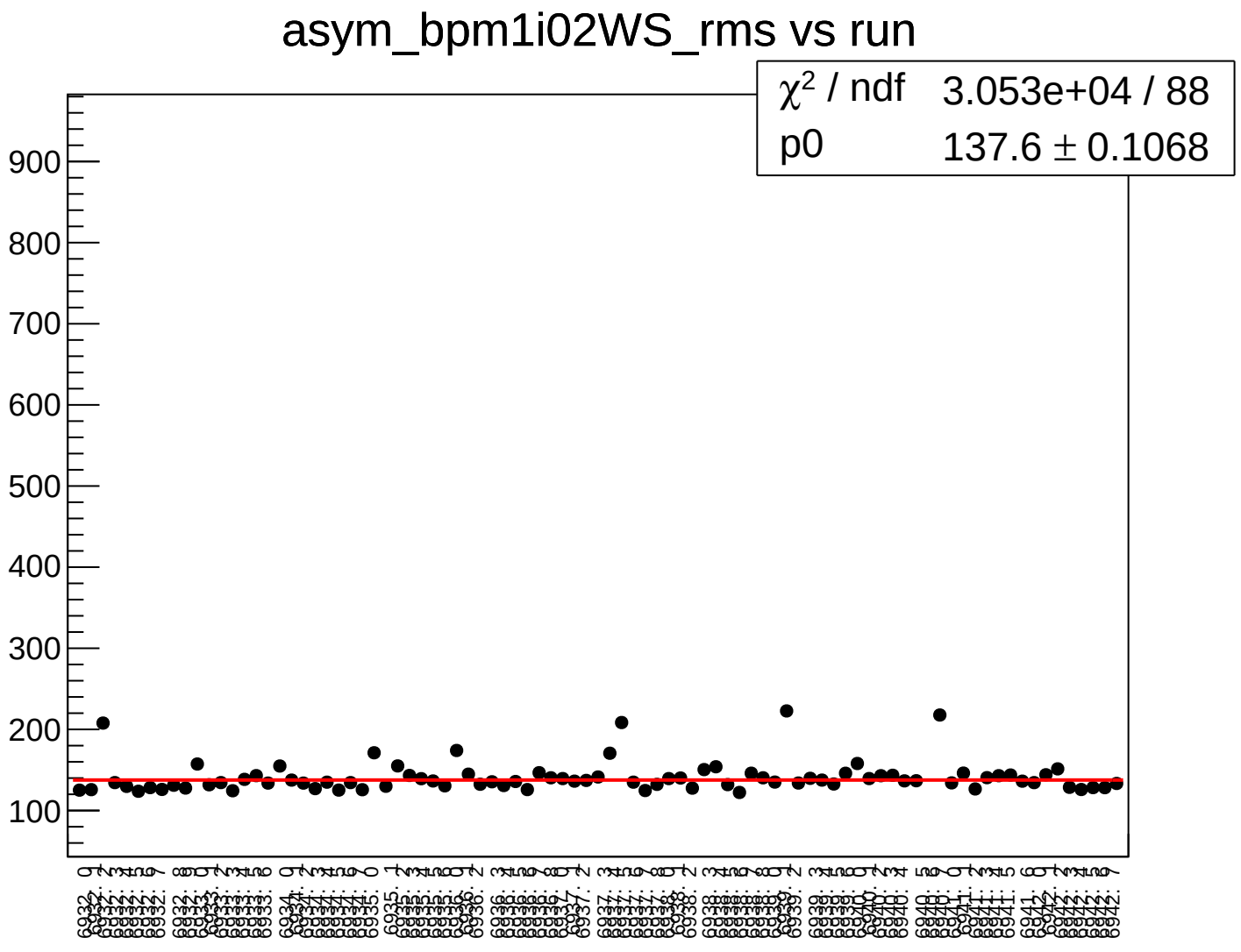

asym_bpm0i05WS_rms vs run
χ^2 / ndf 4.717e+04 / 88
p0 137.1 ± 0.107
900
800
700
600
500
400
300
200
100

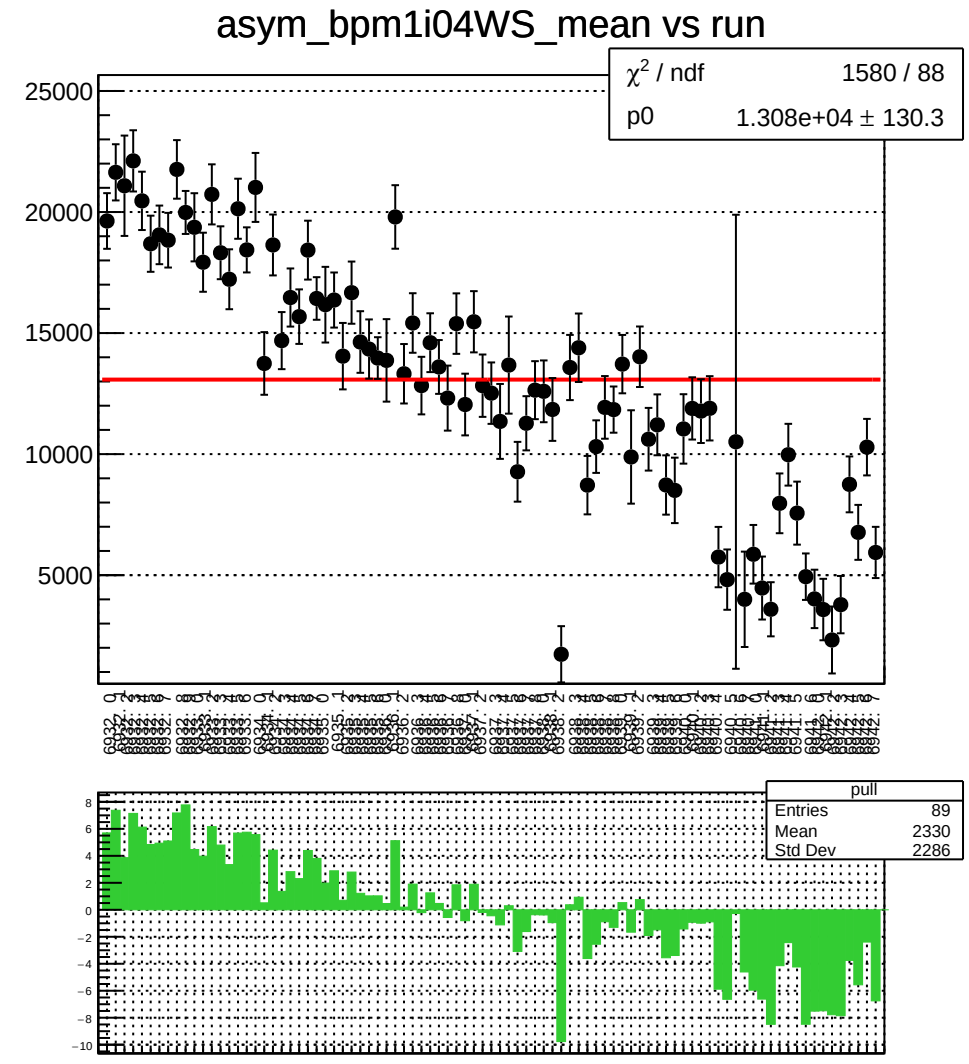

asym_bpm0i07WS_mean vs run
χ² / ndf 479.2 / 88
p0 −1015 ± 181.4
10000
5000
0
−5000
−10000
pull
Entries 89
Mean 368.8
Std Dev 330.5
4
2
0
−2
−4

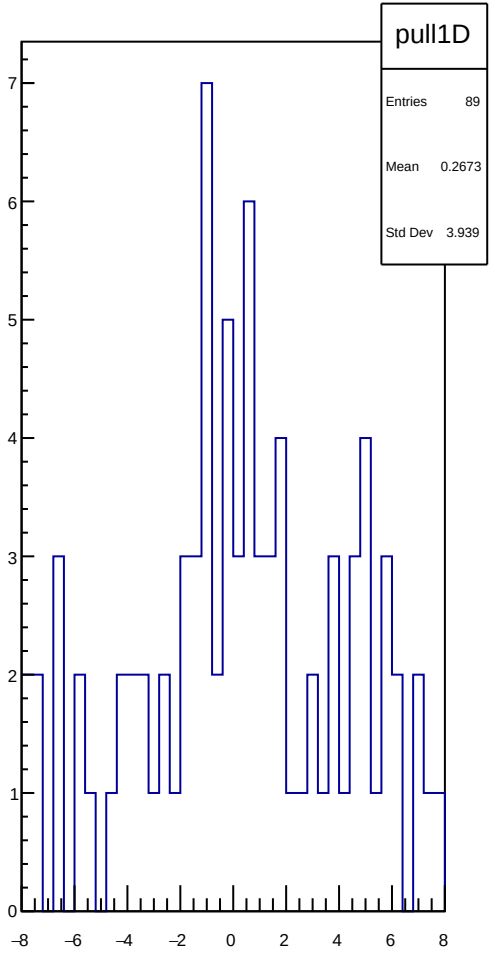

pull1D
Entries 89
Mean −0.1332
Std Dev 2.317
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

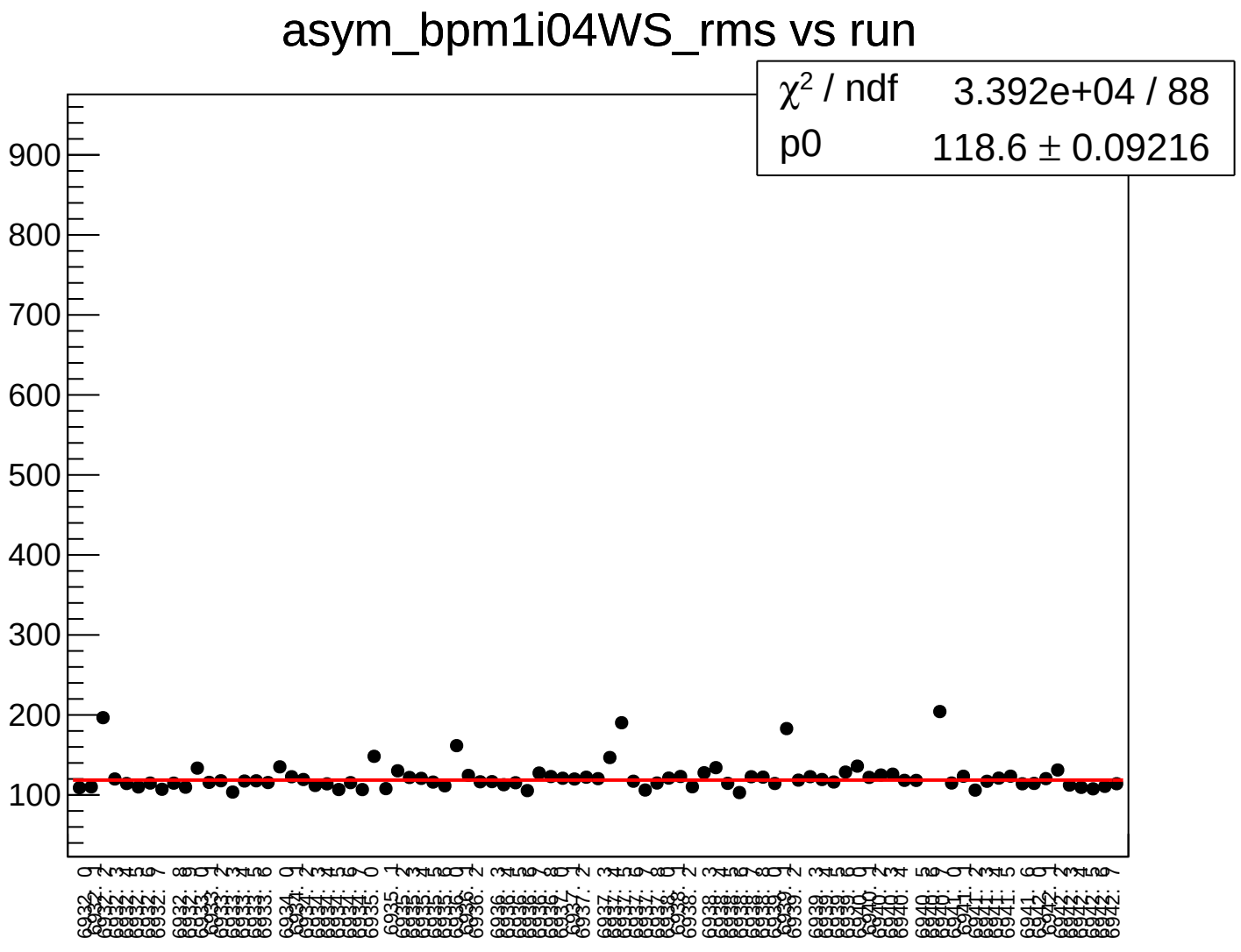

asym_bpm0i07WS_rms vs run
χ^2 / ndf 3.369e+04 / 88
p0 165 ± 0.1282
900
800
700
600
500
400
300
200
100

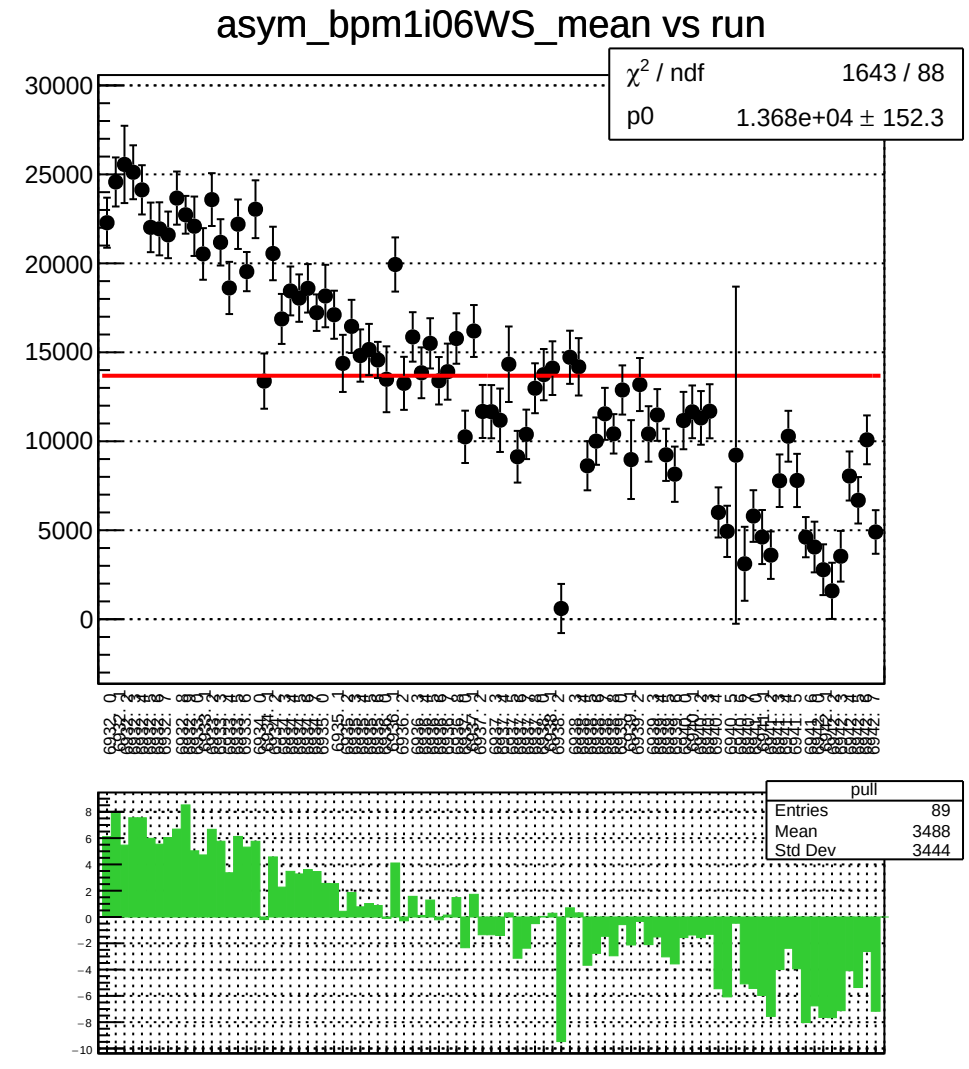

asym_bpm1i02WS_mean vs run
χ² / ndf 1118 / 88
p0 1.317e+04 ± 151.1
25000
20000
15000
10000
5000
0
pull
Entries 89
Mean 1824
Std Dev 1779
pull1D
Entries 89
Mean 0.1434
Std Dev 3.355

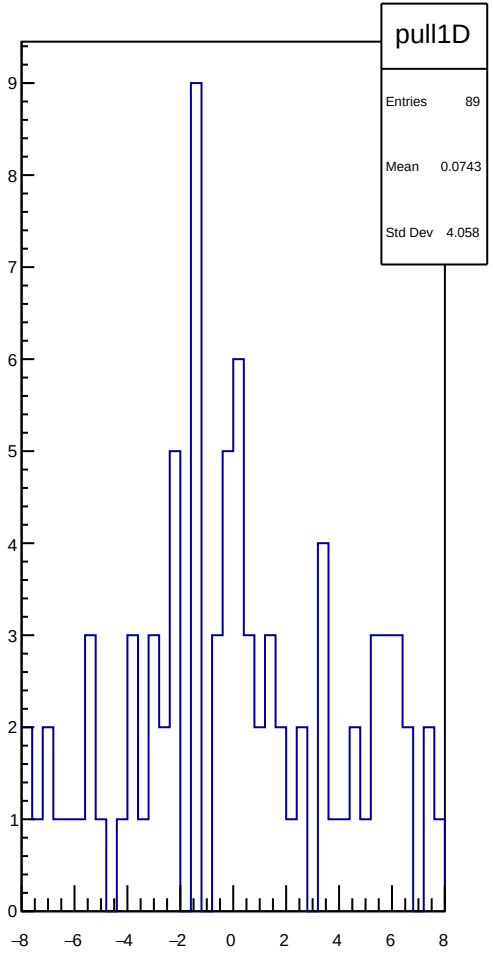

asym_bpm1i02WS_rms vs run
χ^2 / ndf 3.053e+04 / 88
p0 137.6 ± 0.1068
900
800
700
600
500
400
300
200
100

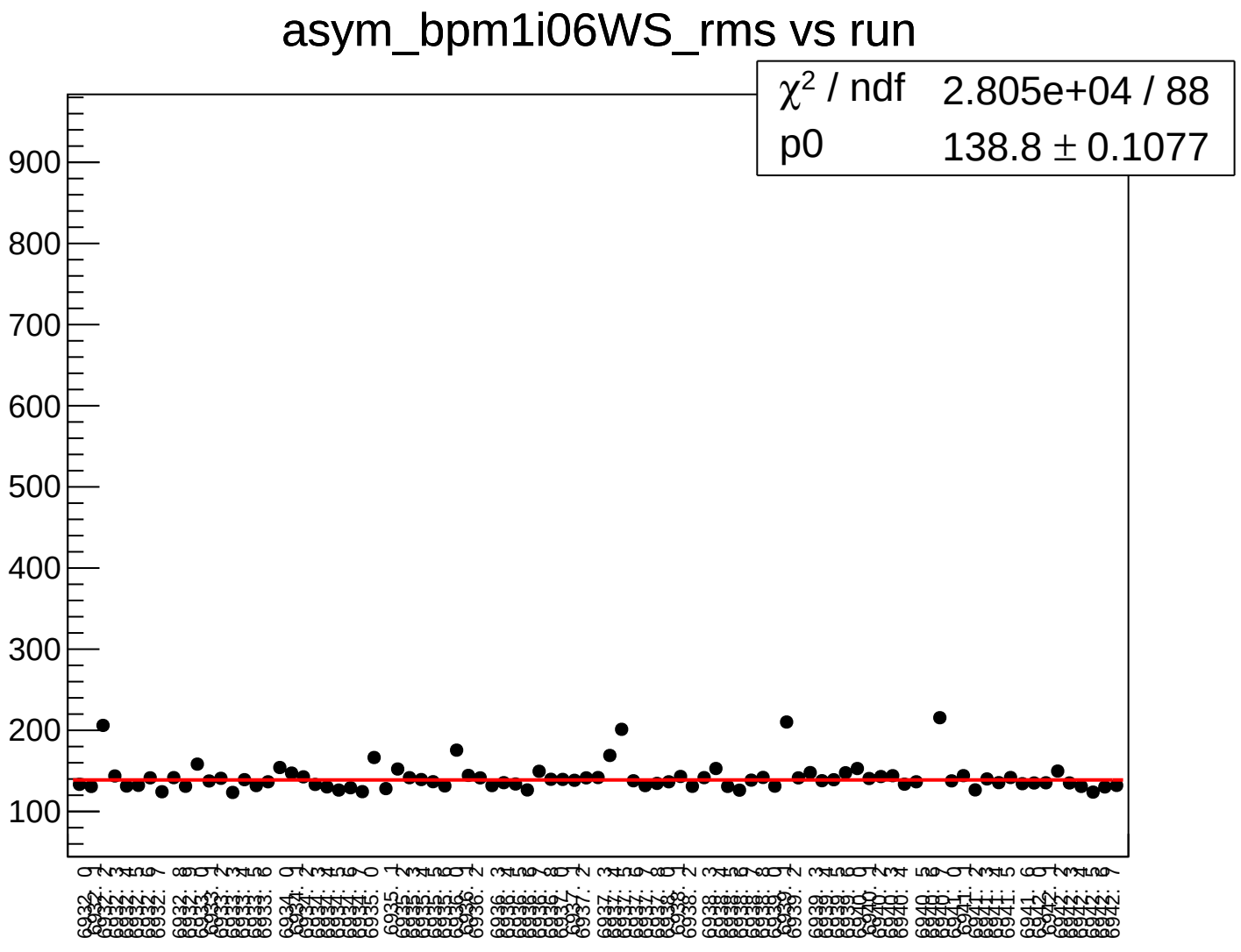

asym_bpm1i04WS_mean vs run
χ² / ndf 1580 / 88
p0 1.308e+04 ± 130.3
pull
Entries 89
Mean 2330
Std Dev 2286

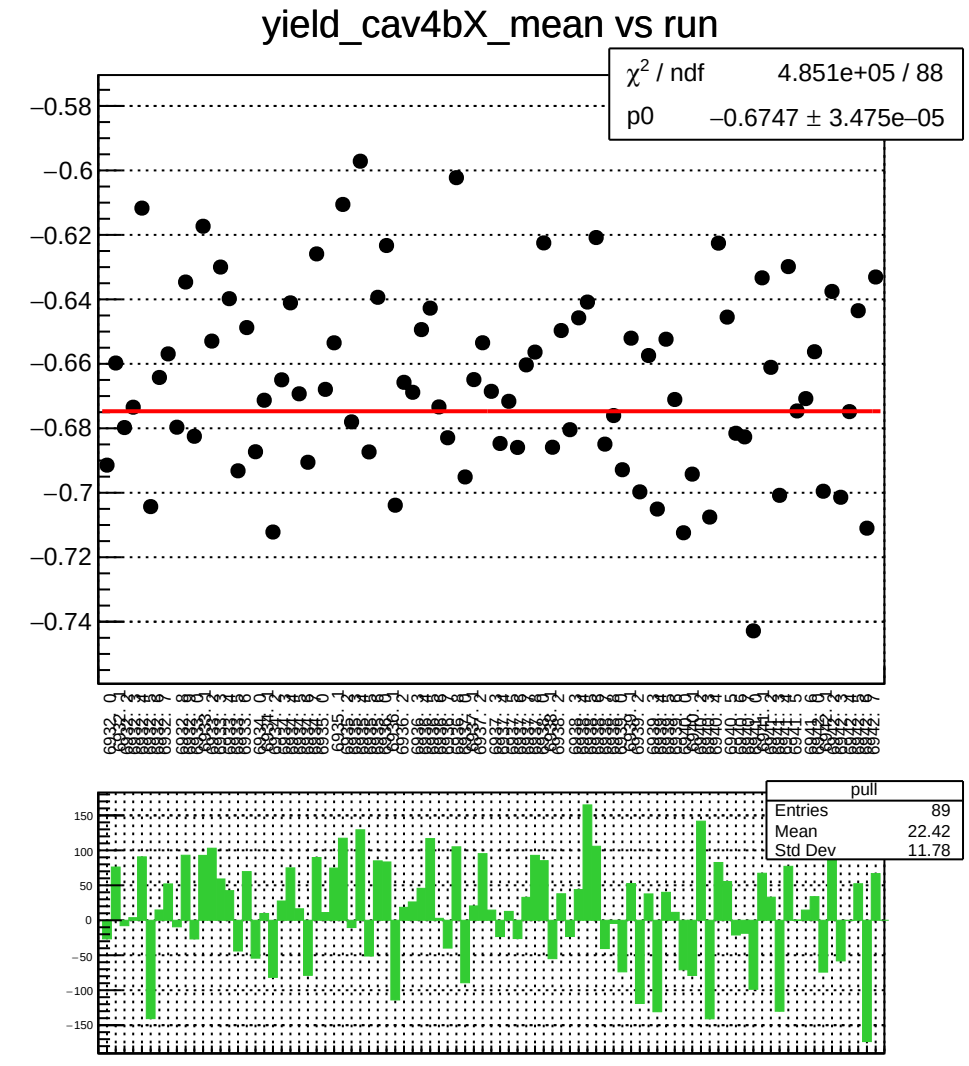

pull1D
Entries 89
Mean 0.2673
Std Dev 3.939

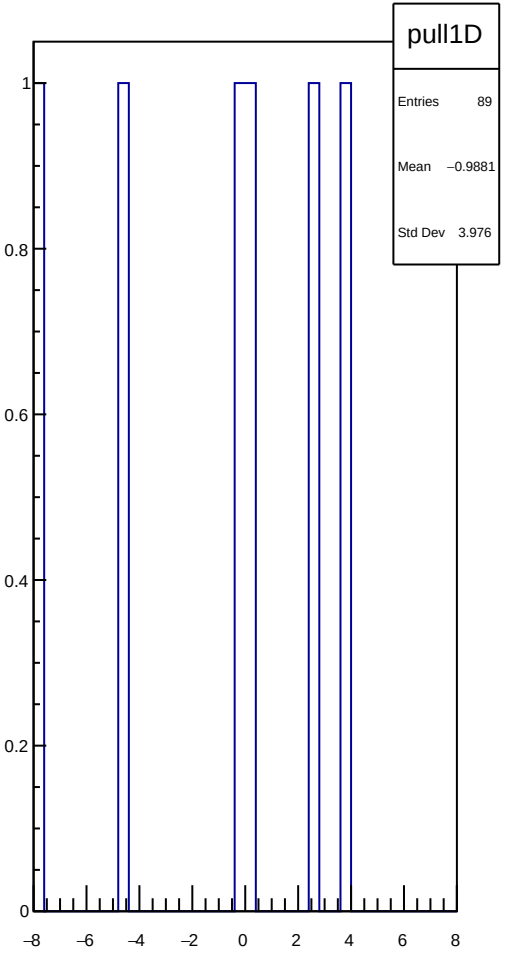

asym_bpm1i04WS_rms vs run
χ² / ndf 3.392e+04 / 88
p0 118.6 ± 0.09216
900
800
700
600
500
400
300
200
100

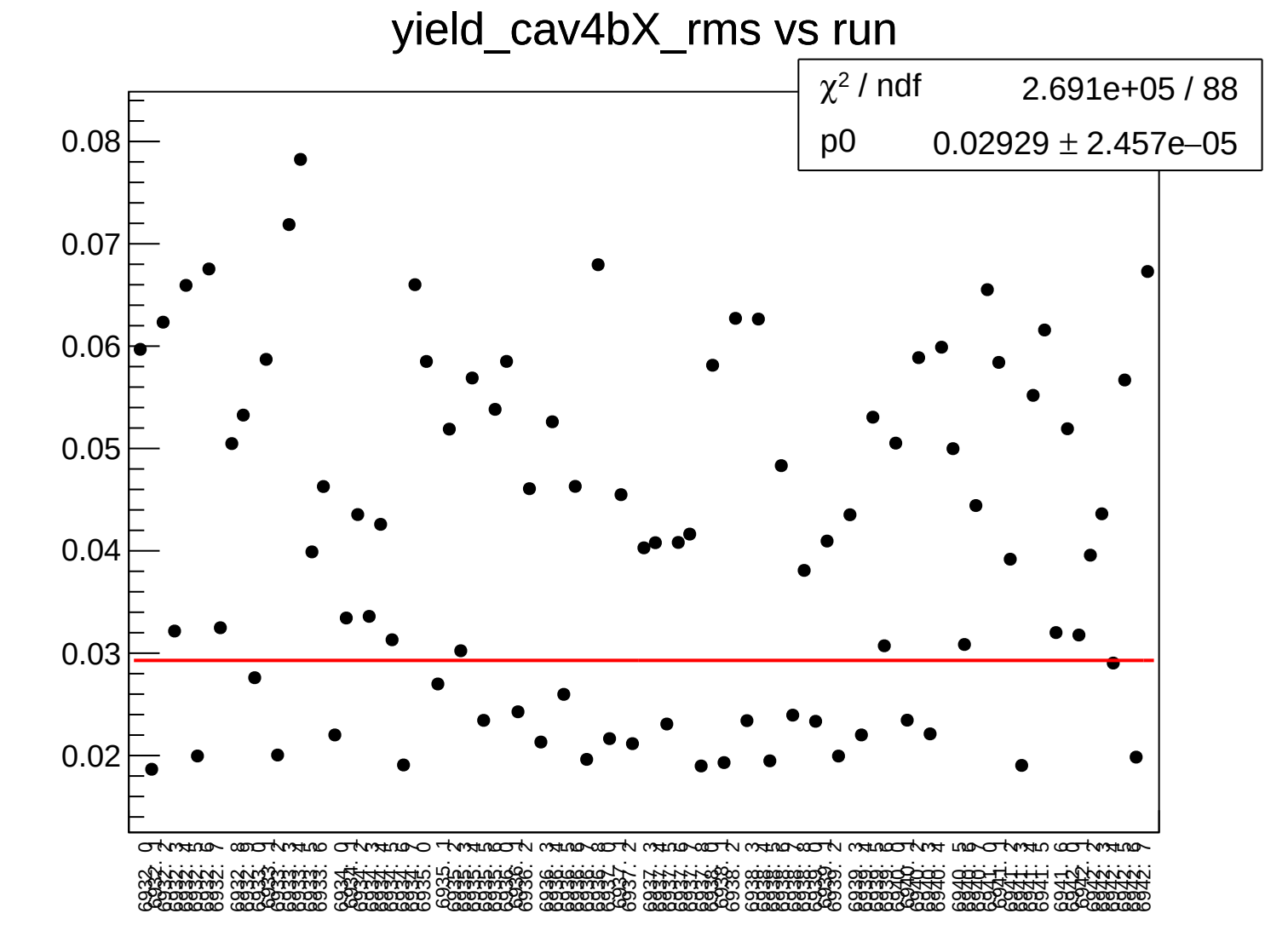

asym_bpm1i06WS_mean vs run
χ² / ndf 1643 / 88
p0 1.368e+04 ± 152.3
pull
Entries 89
Mean 3488
Std Dev 3444

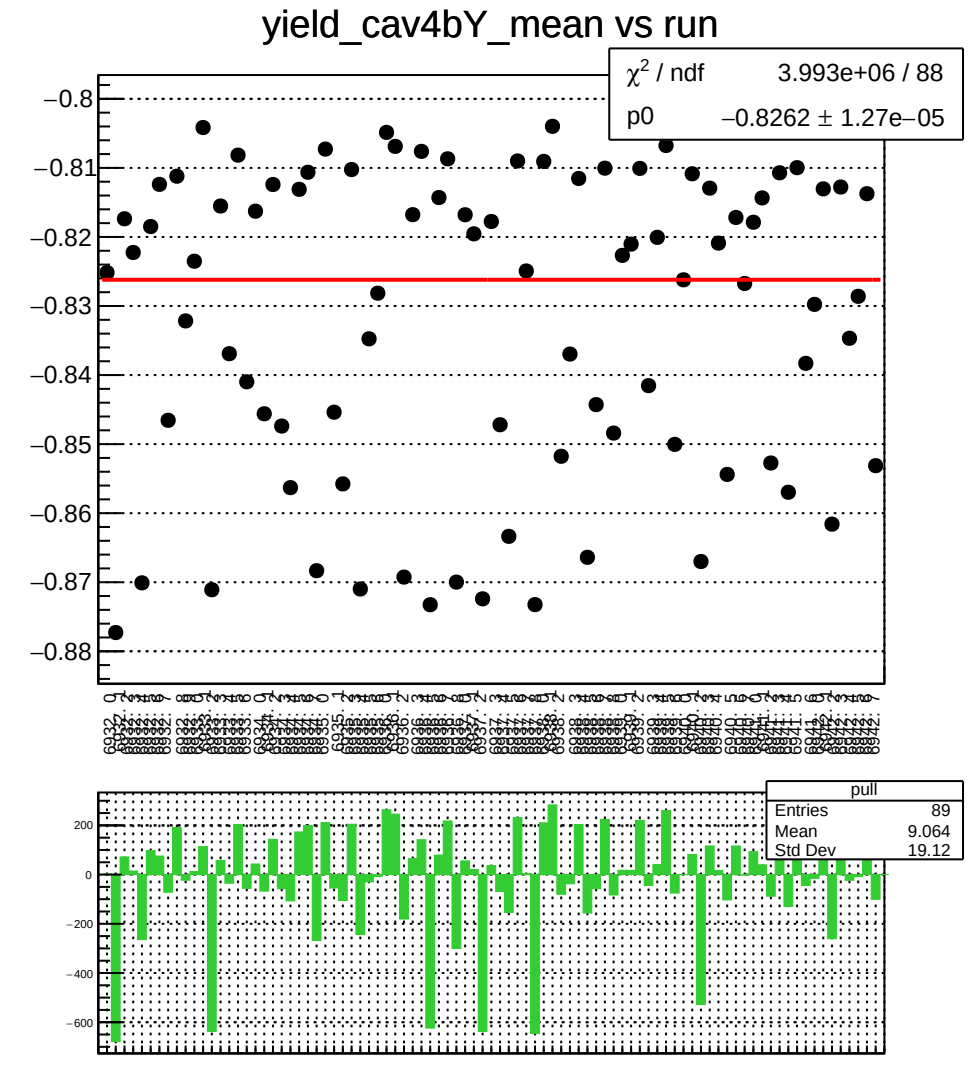

pull1D
Entries 89
Mean 0.0743
Std Dev 4.058

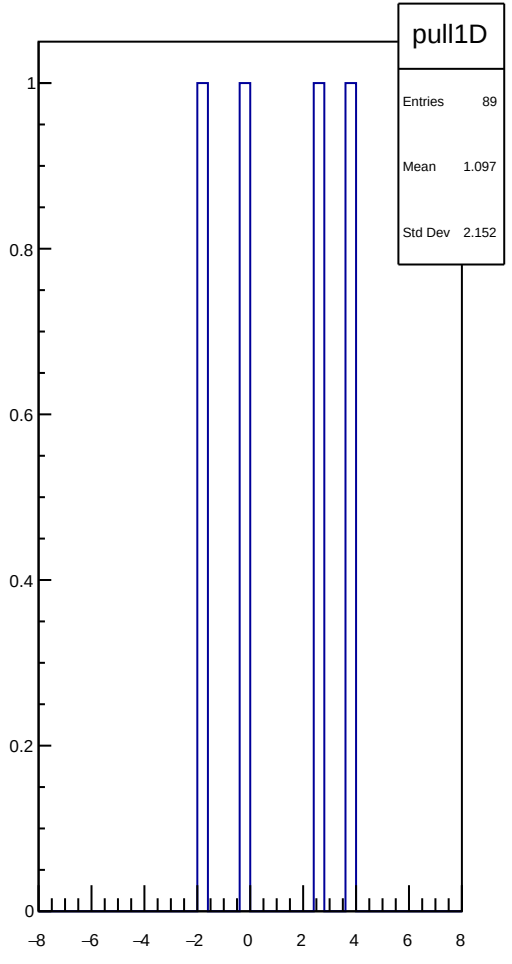

asym_bpm1i06WS_rms vs run
χ^2 / ndf 2.805e+04 / 88
p0 138.8 ± 0.1077
900
800
700
600
500
400
300
200
100

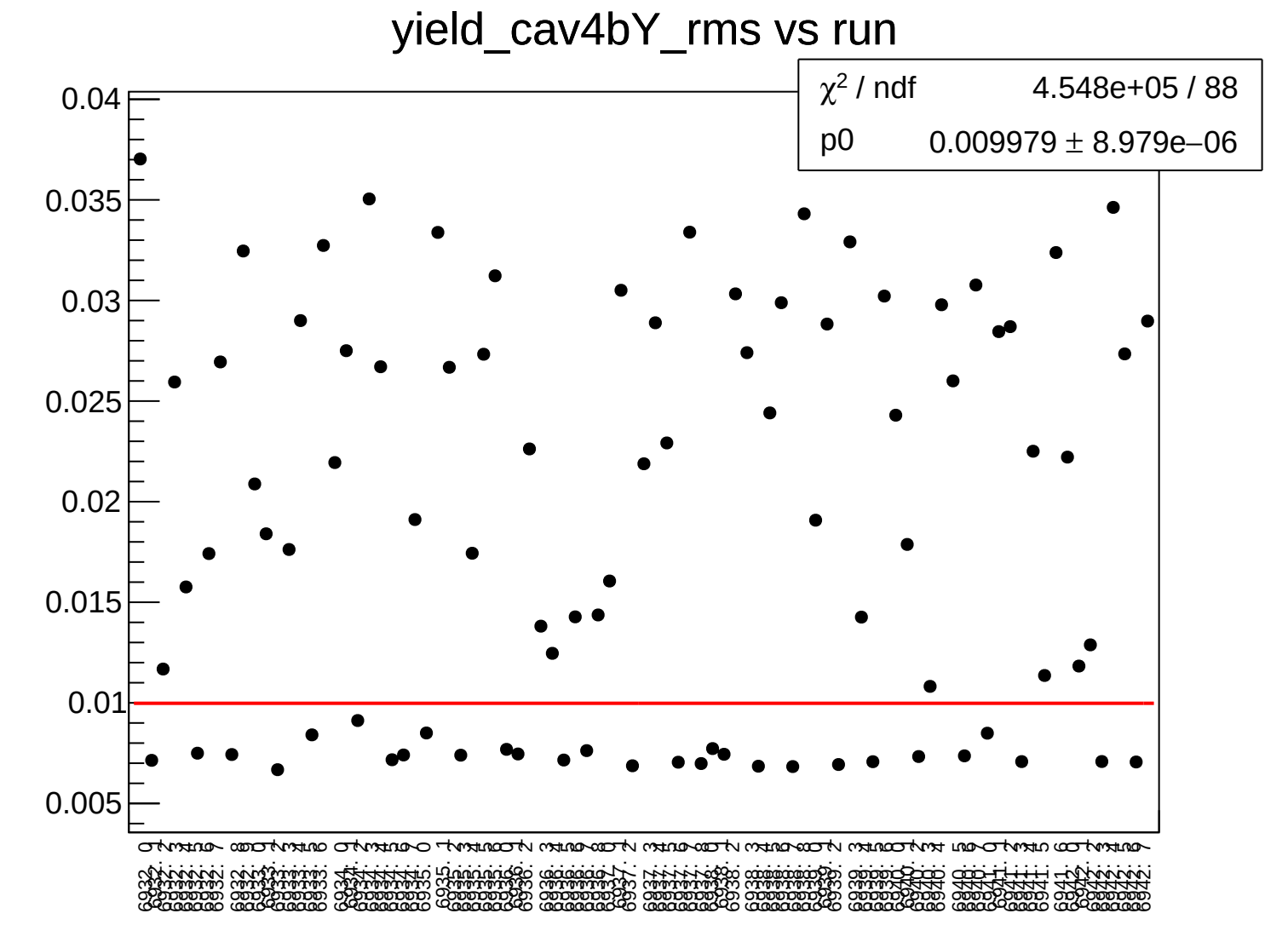

yield_cav4bX_mean vs run
χ² / ndf 4.851e+05 / 88
p0 −0.6747 ± 3.475e−05
−0.58
−0.6
−0.62
−0.64
−0.66
−0.68
−0.7
−0.72
−0.74
pull
Entries 89
Mean 22.42
Std Dev 11.78
150
100
50
0
−50
−100
−150

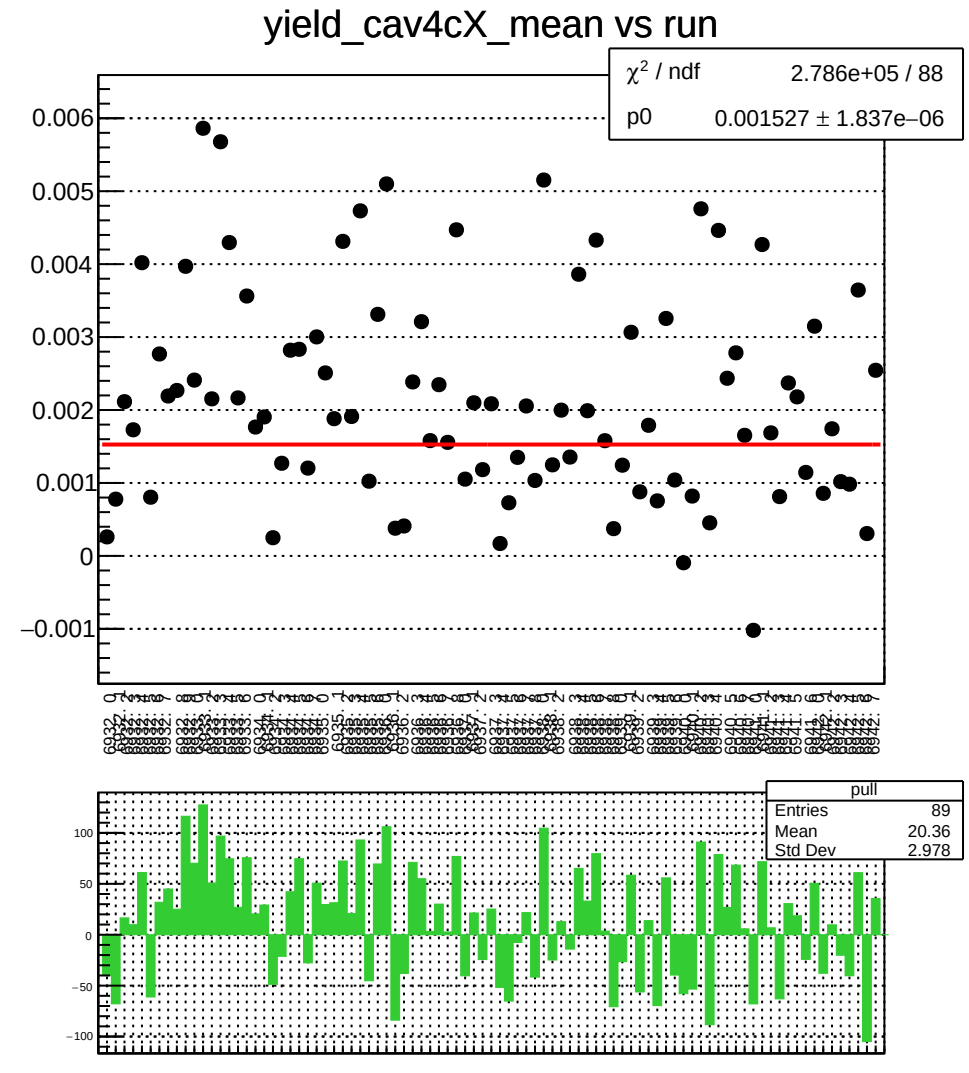

pull1D
Entries 89
Mean −0.9881
Std Dev 3.976
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

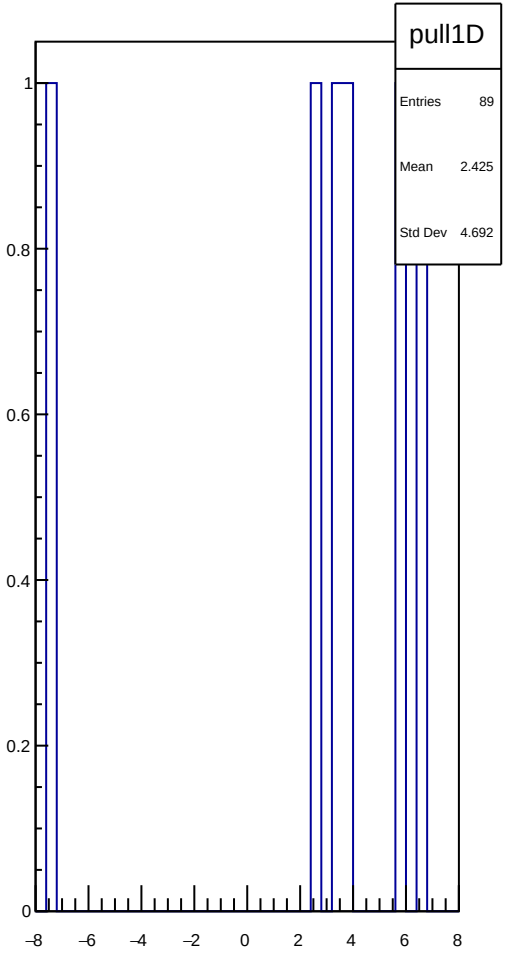

yield_cav4bX_rms vs run
χ² / ndf 2.691e+05 / 88
p0 0.02929 ± 2.457e–05
0.08
0.07
0.06
0.05
0.04
0.03
0.02

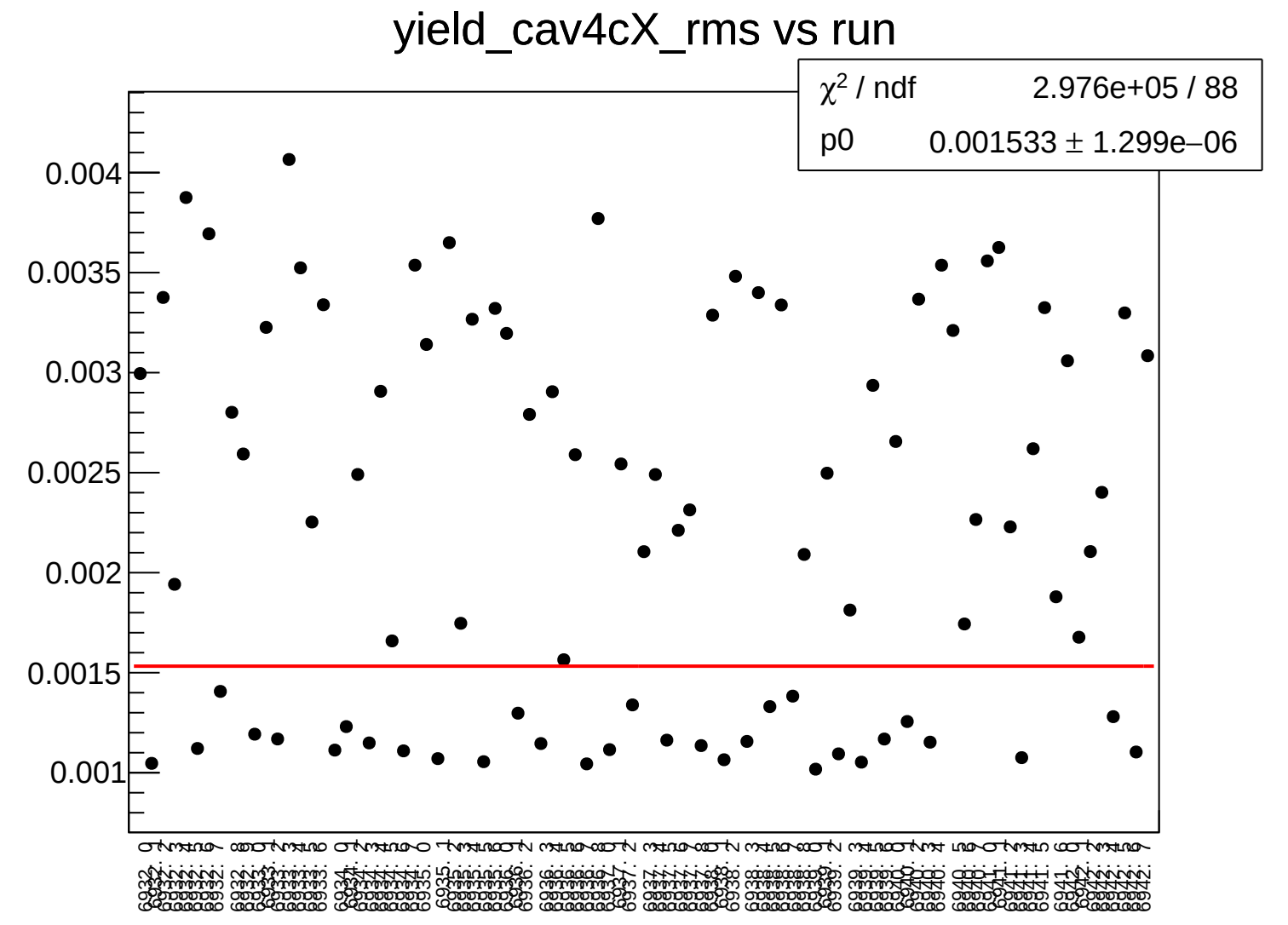

yield_cav4bY_mean vs run
χ² / ndf 3.993e+06 / 88
p0 −0.8262 ± 1.27e−05
−0.8
−0.81
−0.82
−0.83
−0.84
−0.85
−0.86
−0.87
−0.88
pull
Entries 89
Mean 9.064
Std Dev 19.12
200
0
−200
−400
−600

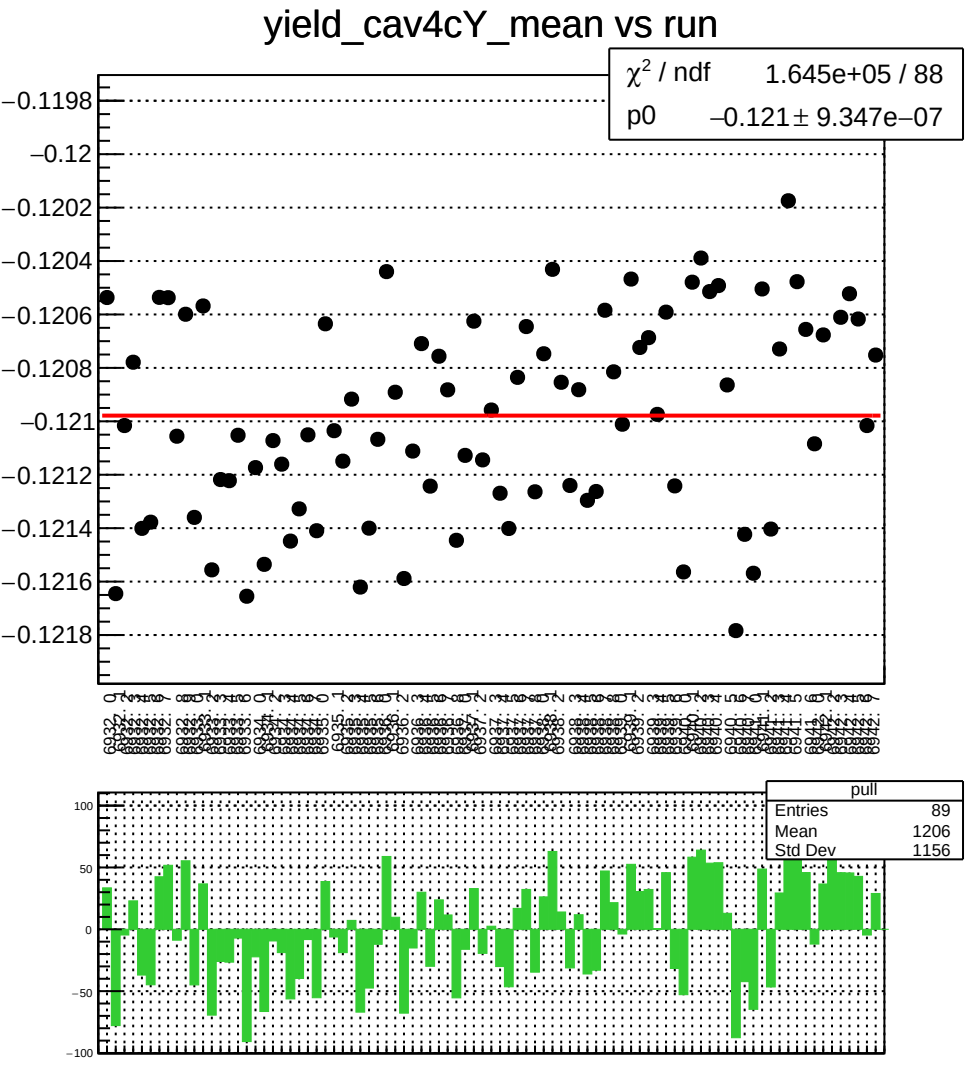

pull1D
Entries 89
Mean 1.097
Std Dev 2.152
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

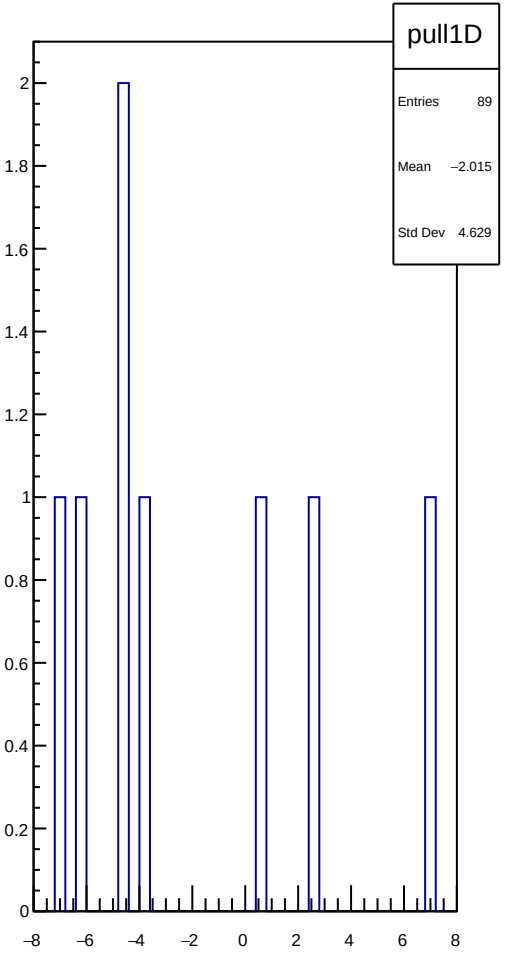

yield_cav4bY_rms vs run
χ² / ndf 4.548e+05 / 88
p0 0.009979 ± 8.979e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

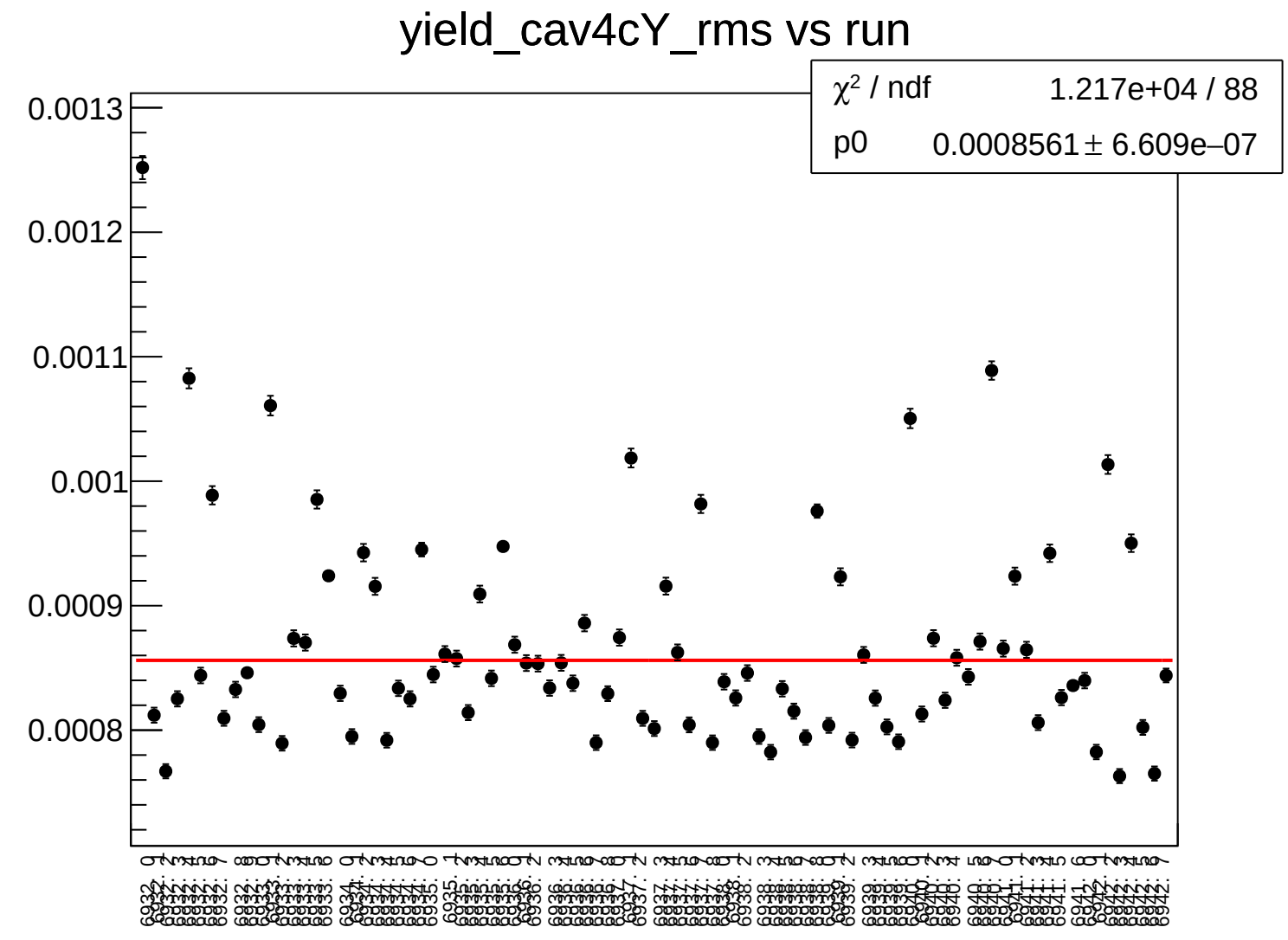

yield_cav4cX_mean vs run
χ² / ndf 2.786e+05 / 88
p0 0.001527 ± 1.837e−06
0.006
0.005
0.004
0.003
0.002
0.001
0
−0.001
pull
Entries 89
Mean 20.36
Std Dev 2.978
100
50
0
−50
−100

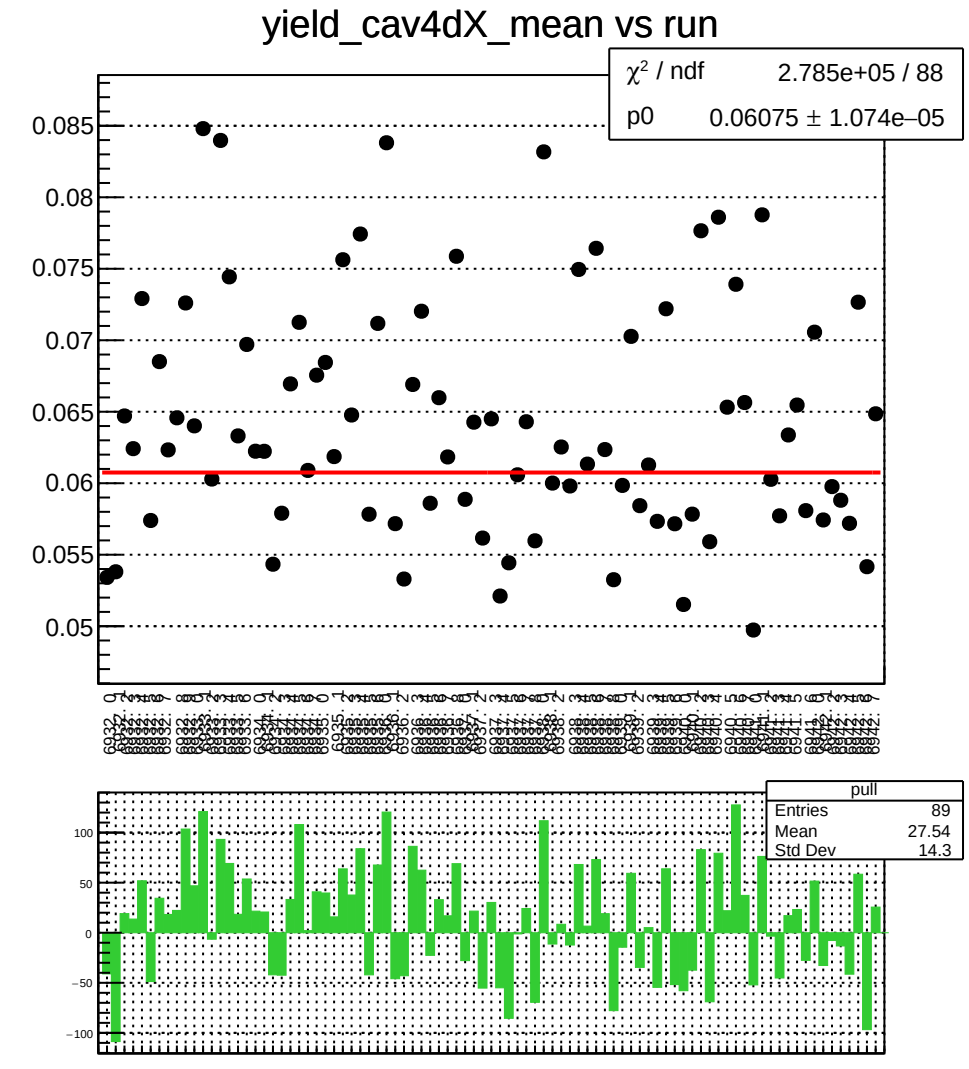

pull1D
Entries 89
Mean 2.425
Std Dev 4.692
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

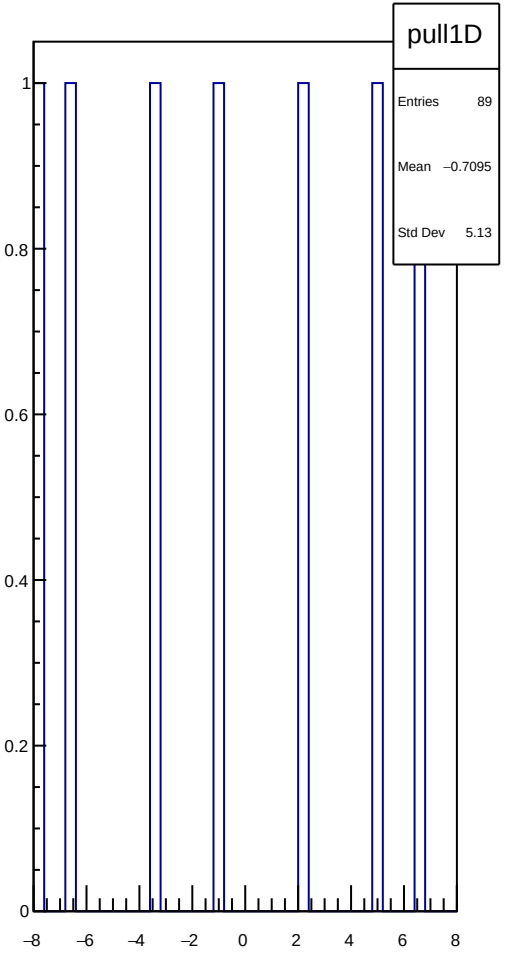

yield_cav4cX_rms vs run
χ² / ndf 2.976e+05 / 88
p0 0.001533 ± 1.299e−06
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001

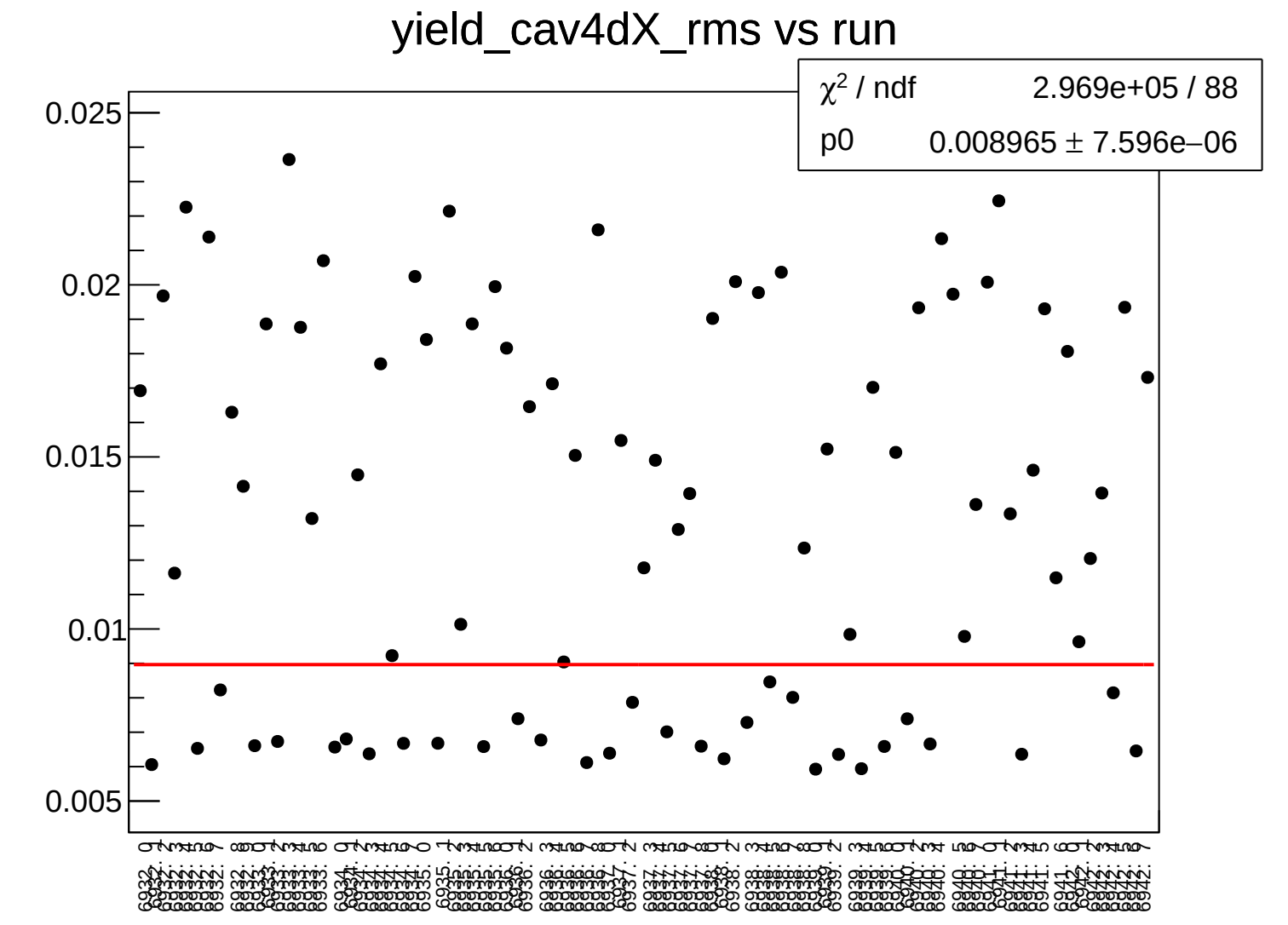

yield_cav4cY_mean vs run
χ² / ndf 1.645e+05 / 88
p0 −0.121 ± 9.347e−07
−0.1198
−0.12
−0.1202
−0.1204
−0.1206
−0.1208
−0.121
−0.1212
−0.1214
−0.1216
−0.1218
pull
Entries 89
Mean 1206
Std Dev 1156
100
50
0
−50
−100

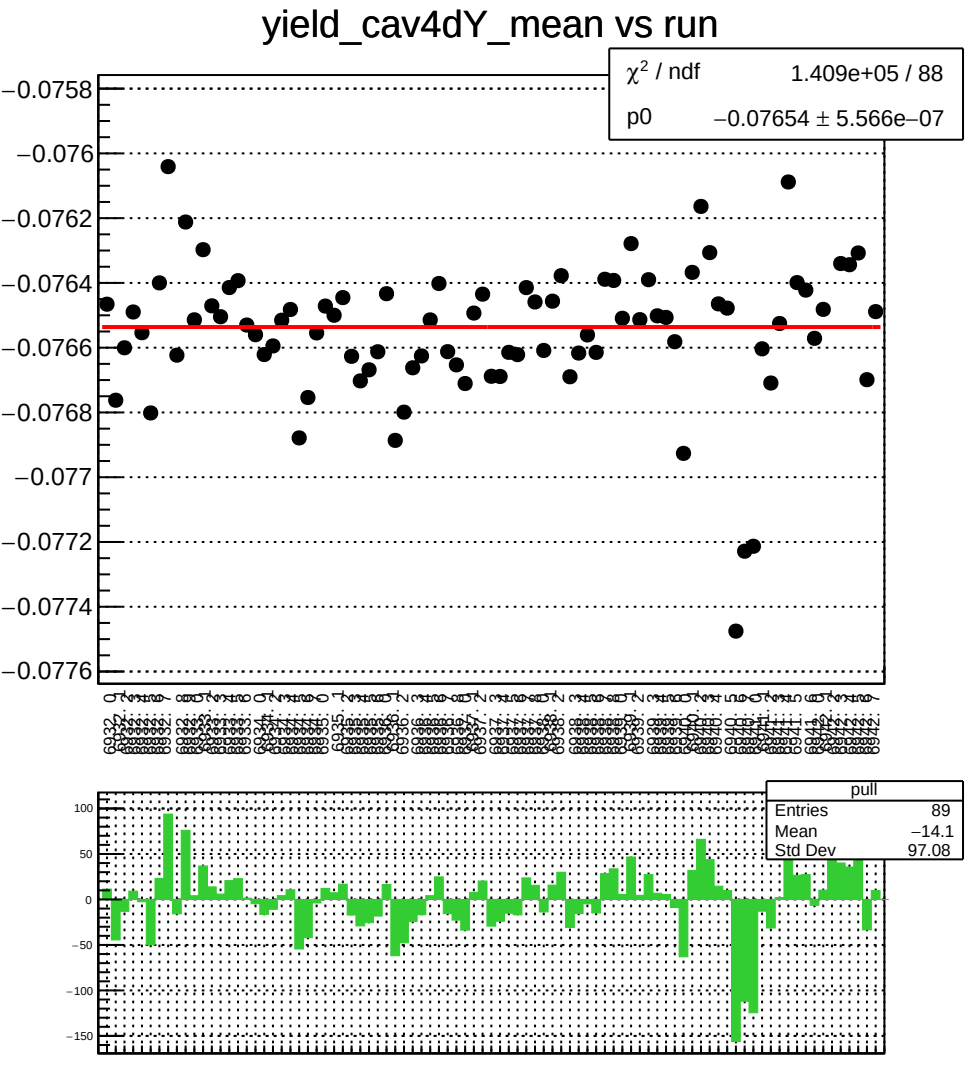

pull1D
Entries 89
Mean −2.015
Std Dev 4.629
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

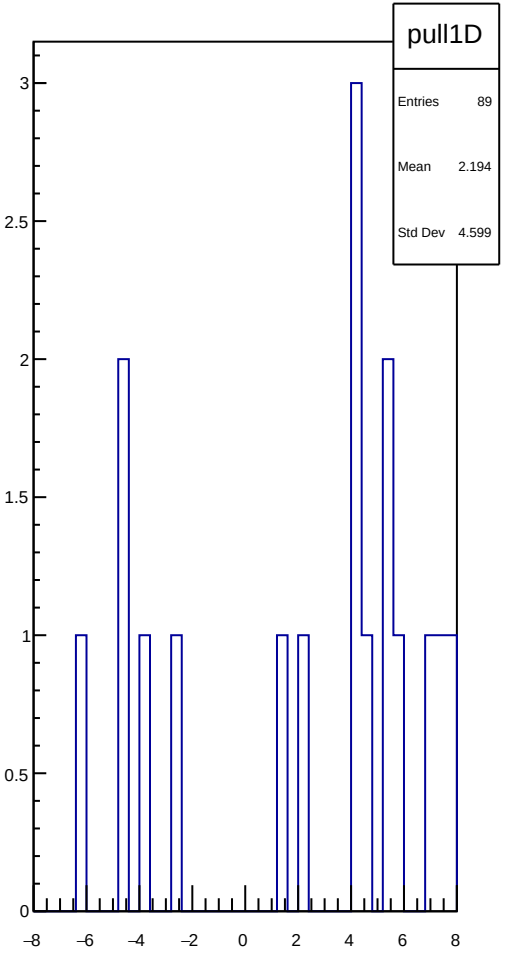

yield_cav4cY_rms vs run
χ² / ndf 1.217e+04 / 88
p0 0.0008561 ± 6.609e−07
0.0013
0.0012
0.0011
0.001
0.0009
0.0008

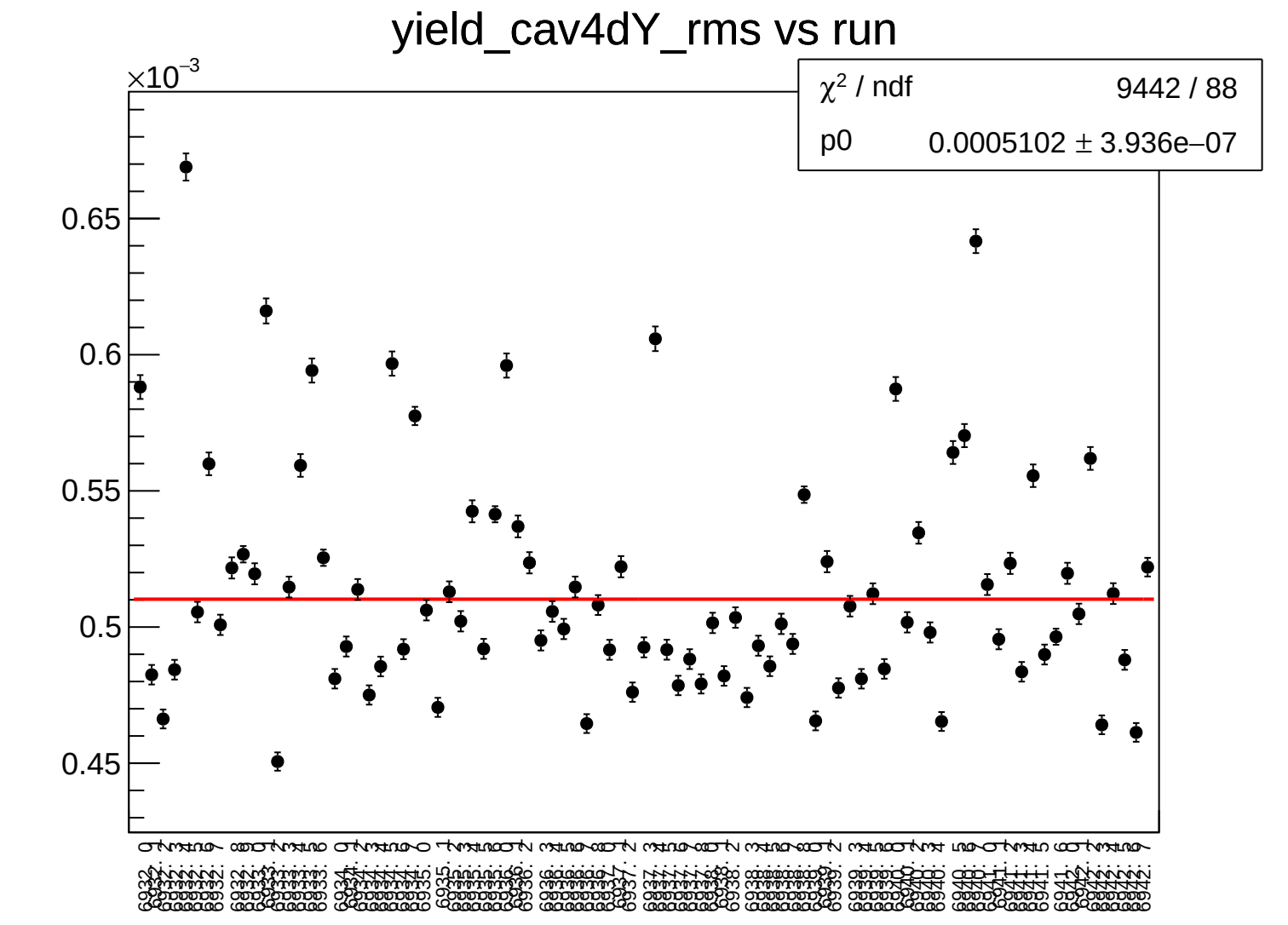

yield_cav4dX_mean vs run
χ² / ndf 2.785e+05 / 88
p0 0.06075 ± 1.074e−05
0.085
0.08
0.075
0.07
0.065
0.06
0.055
0.05
pull
Entries 89
Mean 27.54
Std Dev 14.3
100
50
0
−50
−100

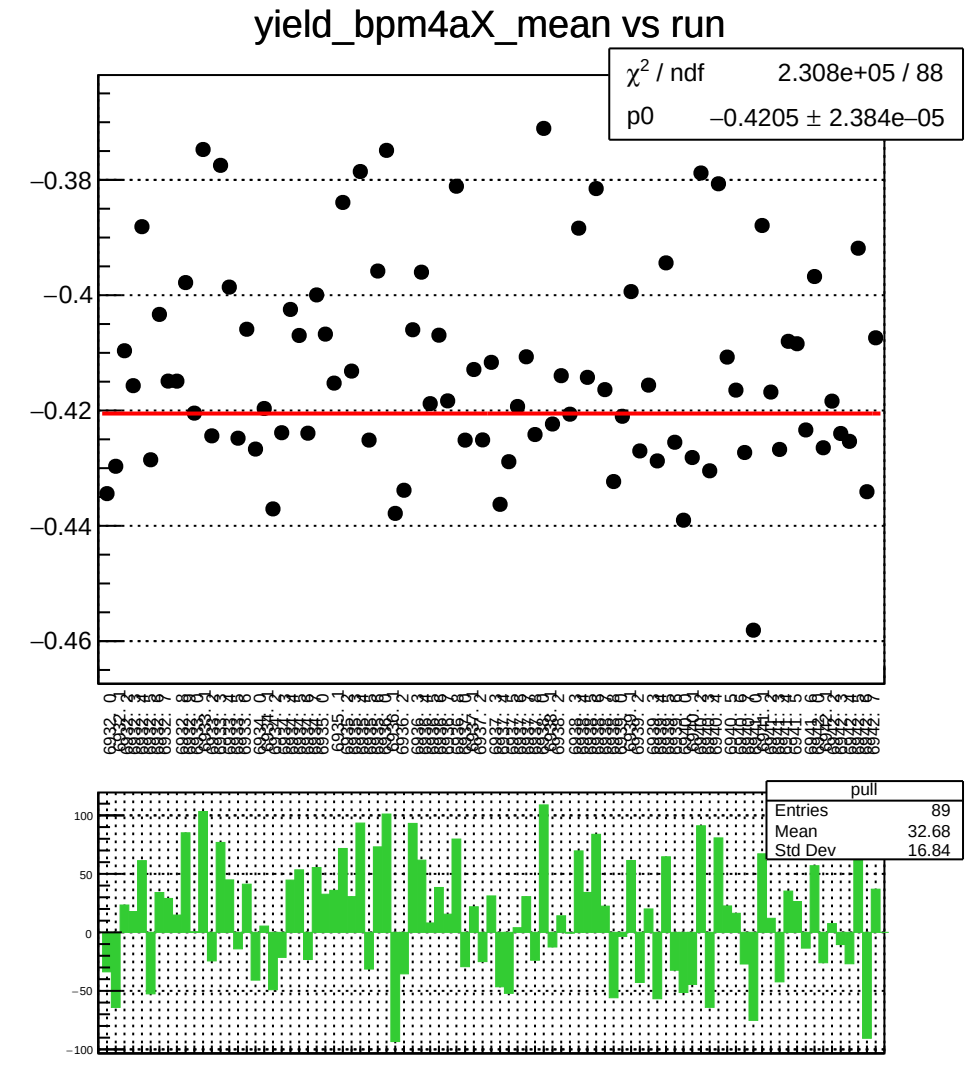

pull1D
Entries 89
Mean −0.7095
Std Dev 5.13
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

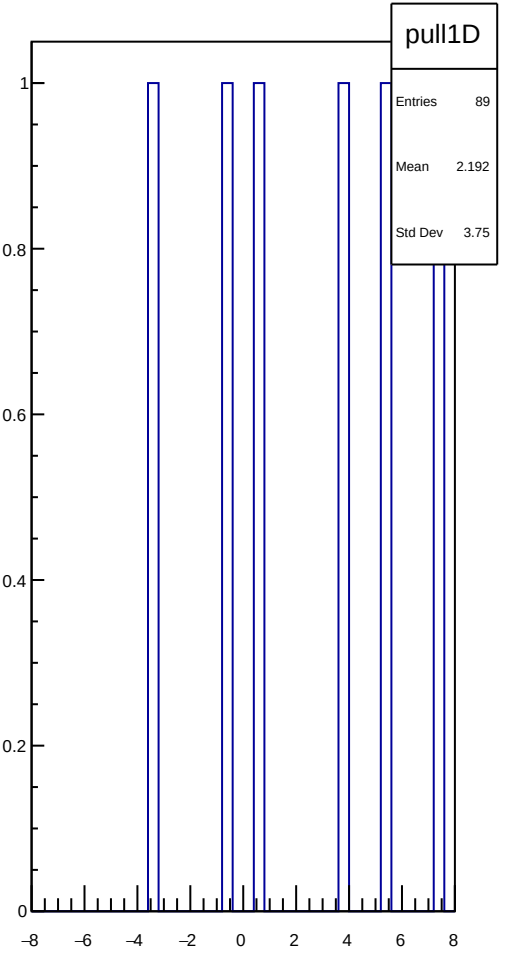

yield_cav4dX_rms vs run
χ² / ndf 2.969e+05 / 88
p0 0.008965 ± 7.596e−06
0.025
0.02
0.015
0.01
0.005

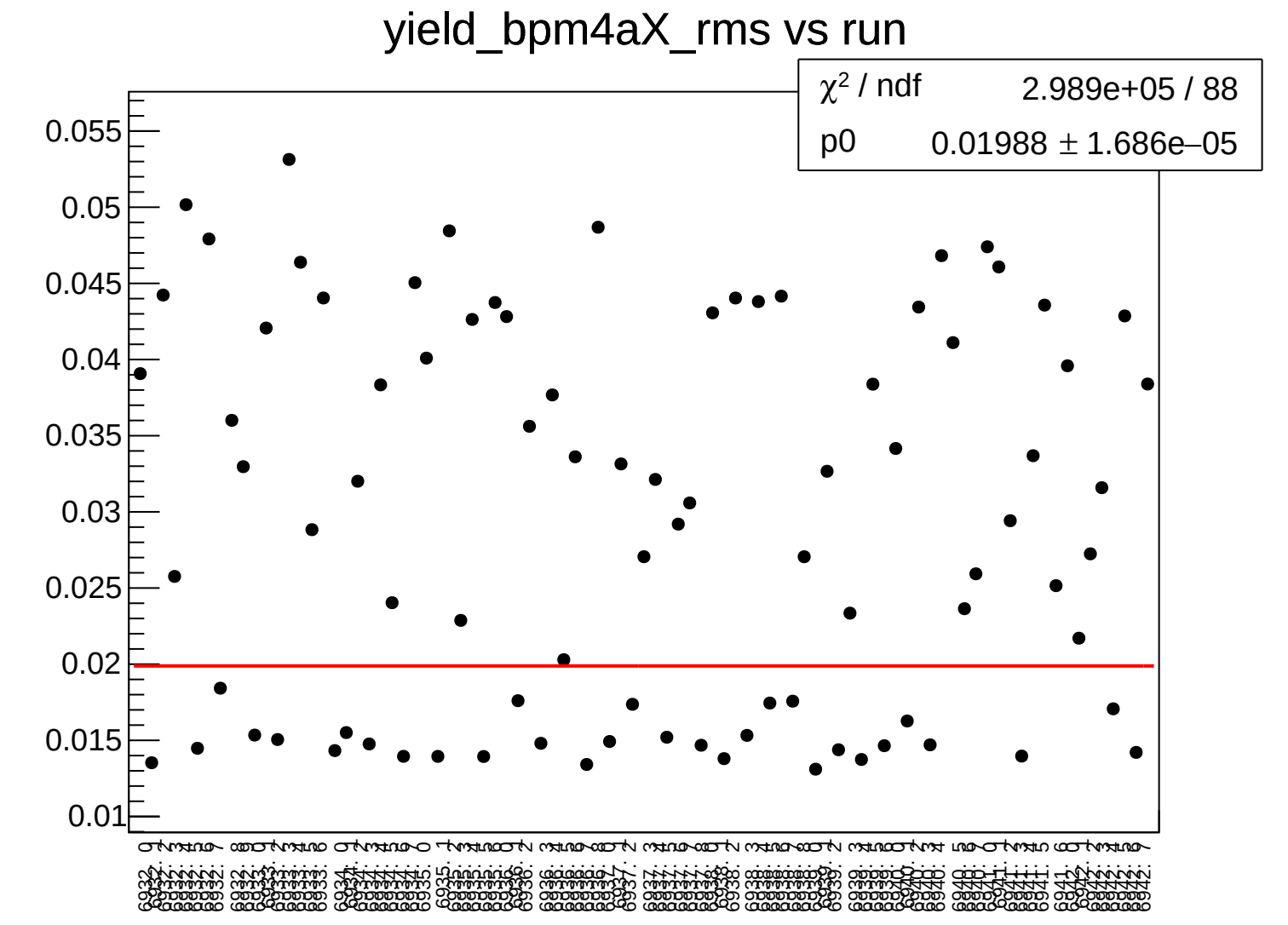

yield_cav4dY_mean vs run
χ² / ndf 1.409e+05 / 88
p0 −0.07654 ± 5.566e−07
−0.0758
−0.076
−0.0762
−0.0764
−0.0766
−0.0768
−0.077
−0.0772
−0.0774
−0.0776
pull
Entries 89
Mean −14.1
Std Dev 97.08
100
50
0
−50
−100
−150

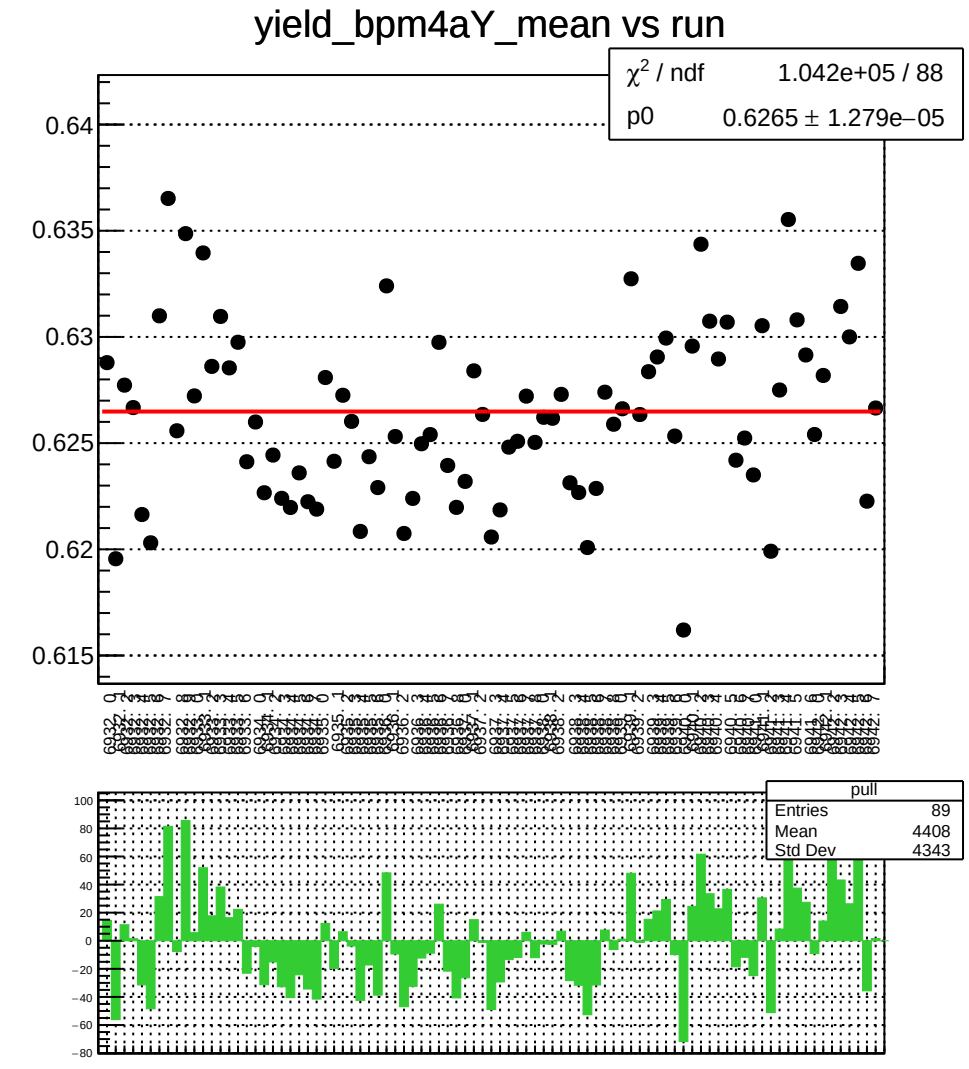

pull1D
Entries 89
Mean 2.194
Std Dev 4.599
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

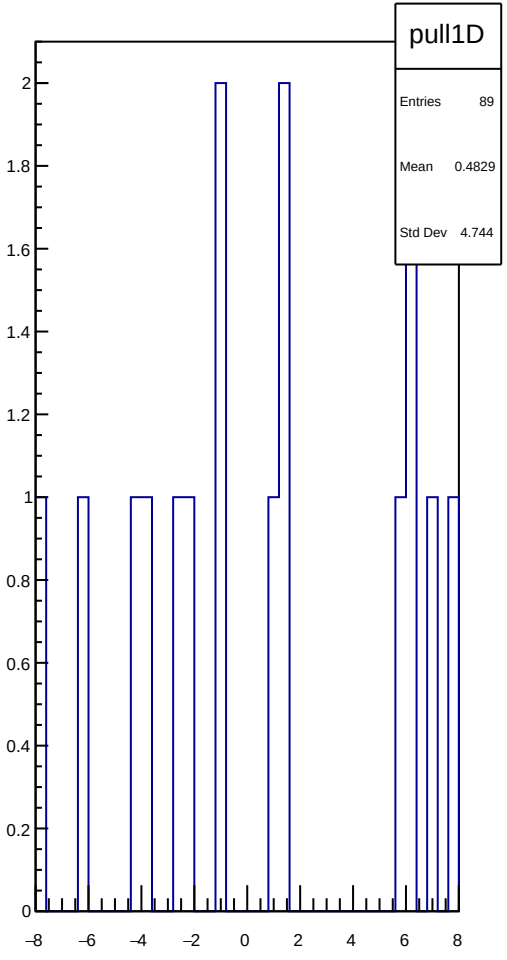

yield_cav4dY_rms vs run
×10⁻³
χ² / ndf 9442 / 88
p0 0.0005102 ± 3.936e−07
0.65
0.6
0.55
0.5
0.45

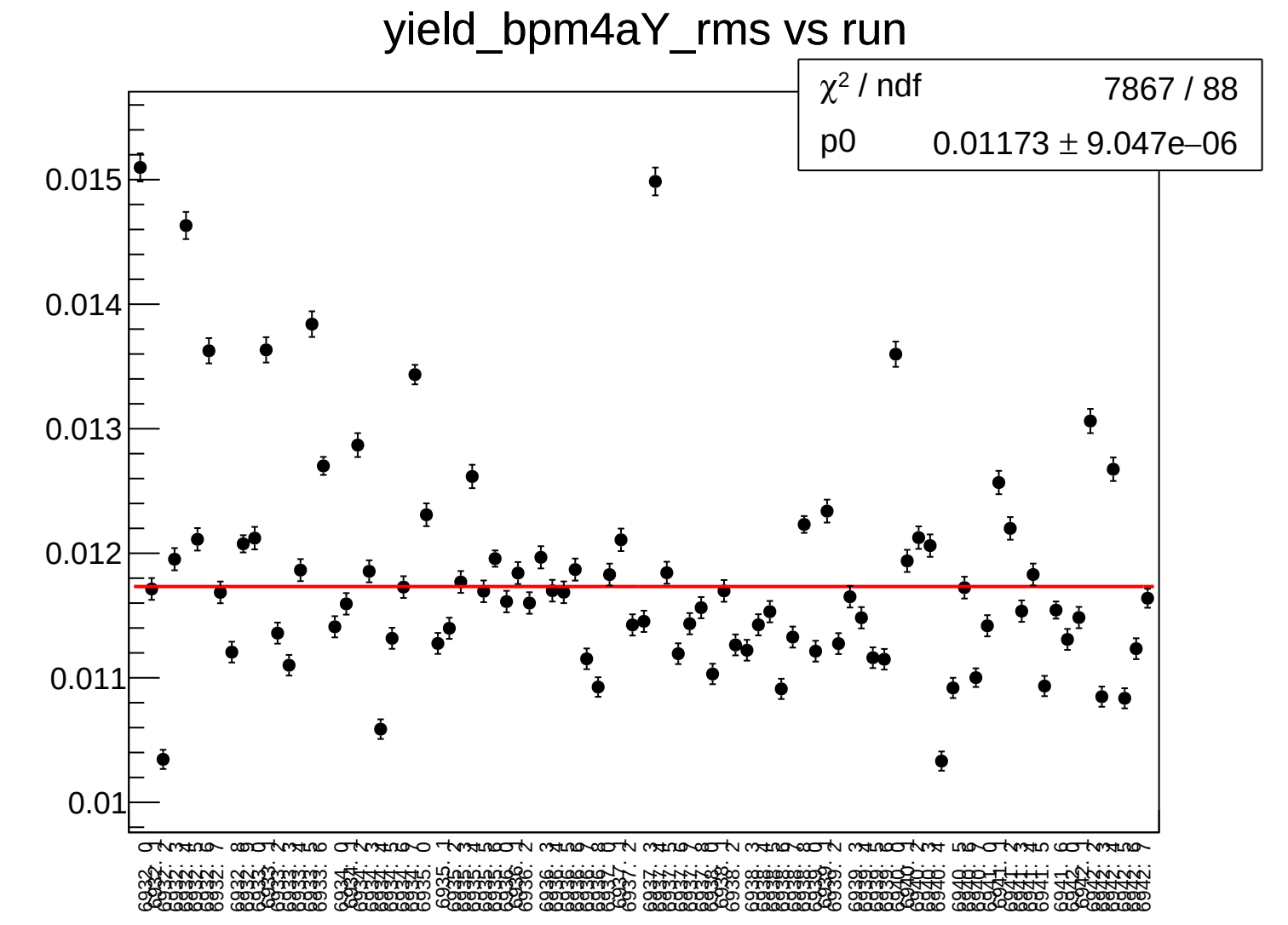

yield_bpm4aX_mean vs run
χ² / ndf 2.308e+05 / 88
p0 −0.4205 ± 2.384e−05
−0.38
−0.4
−0.42
−0.44
−0.46
pull
Entries 89
Mean 32.68
Std Dev 16.84
100
50
0
−50
−100

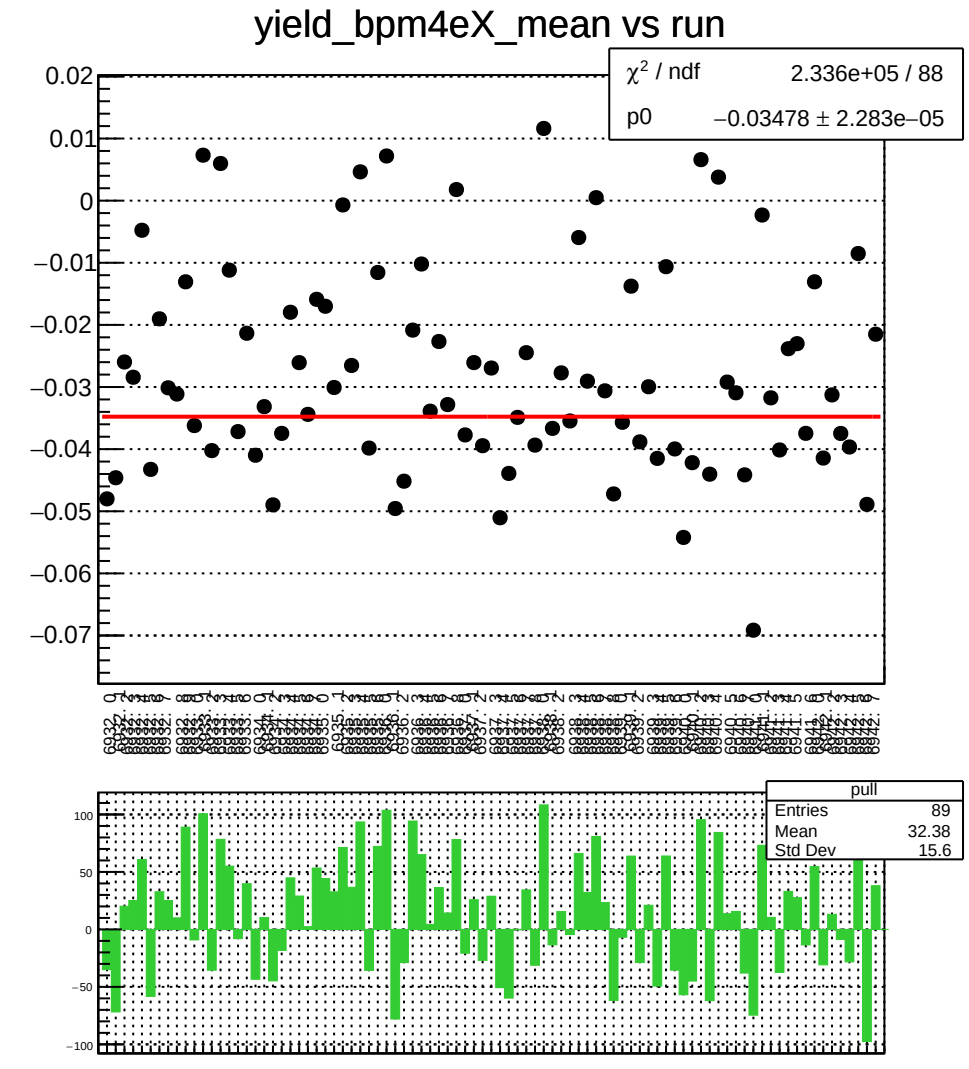

pull1D
Entries 89
Mean 2.192
Std Dev 3.75
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

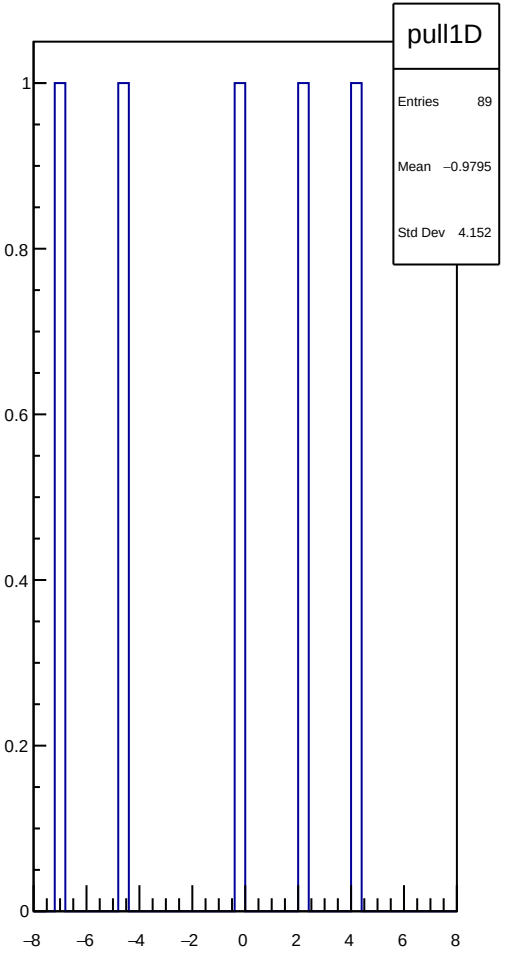

yield_bpm4aX_rms vs run
χ² / ndf 2.989e+05 / 88
p0 0.01988 ± 1.686e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

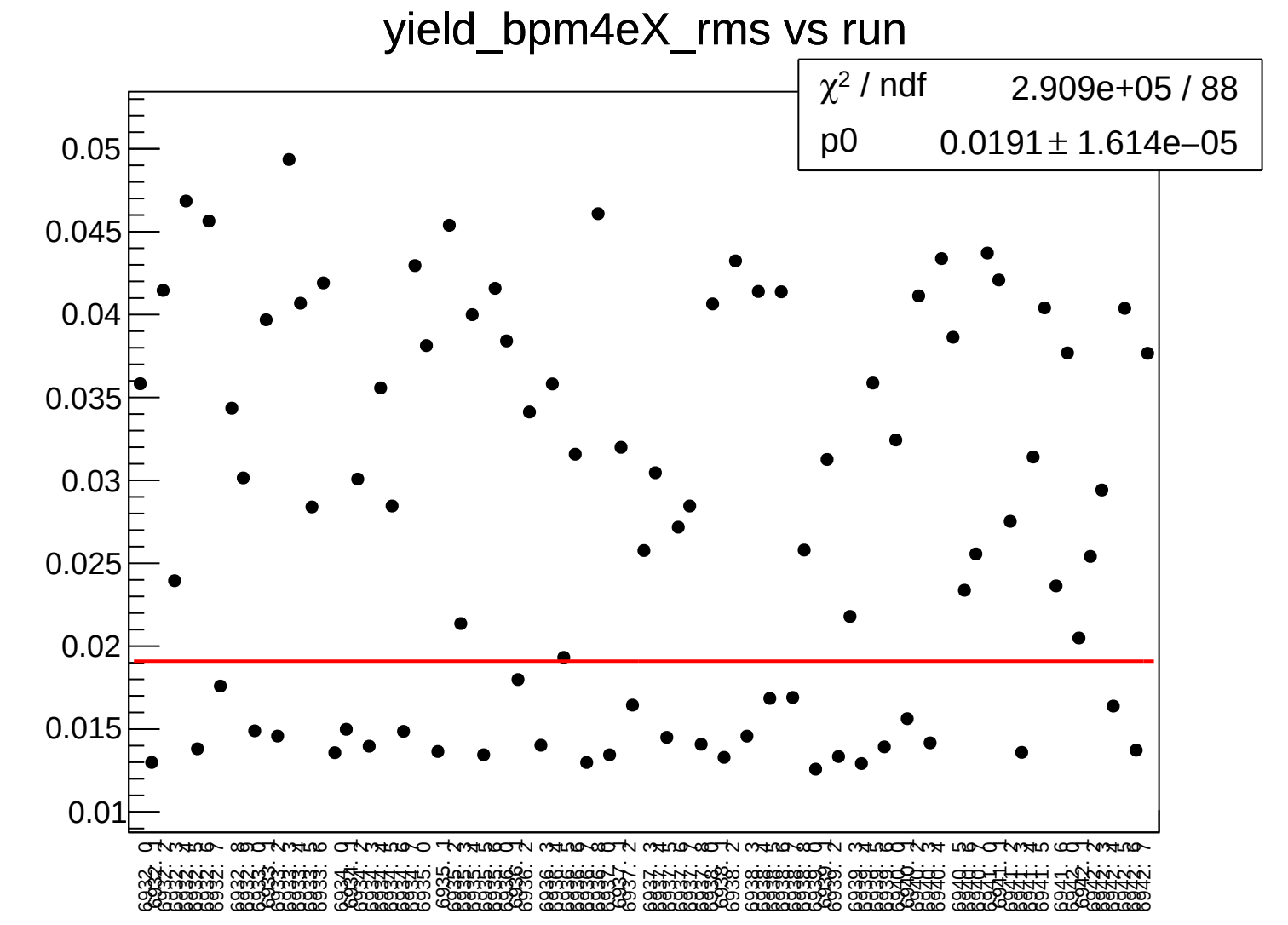

yield_bpm4aY_mean vs run
χ² / ndf 1.042e+05 / 88
p0 0.6265 ± 1.279e−05
0.64
0.635
0.63
0.625
0.62
0.615
pull
Entries 89
Mean 4408
Std Dev 4343
100
80
60
40
20
0
−20
−40
−60
−80

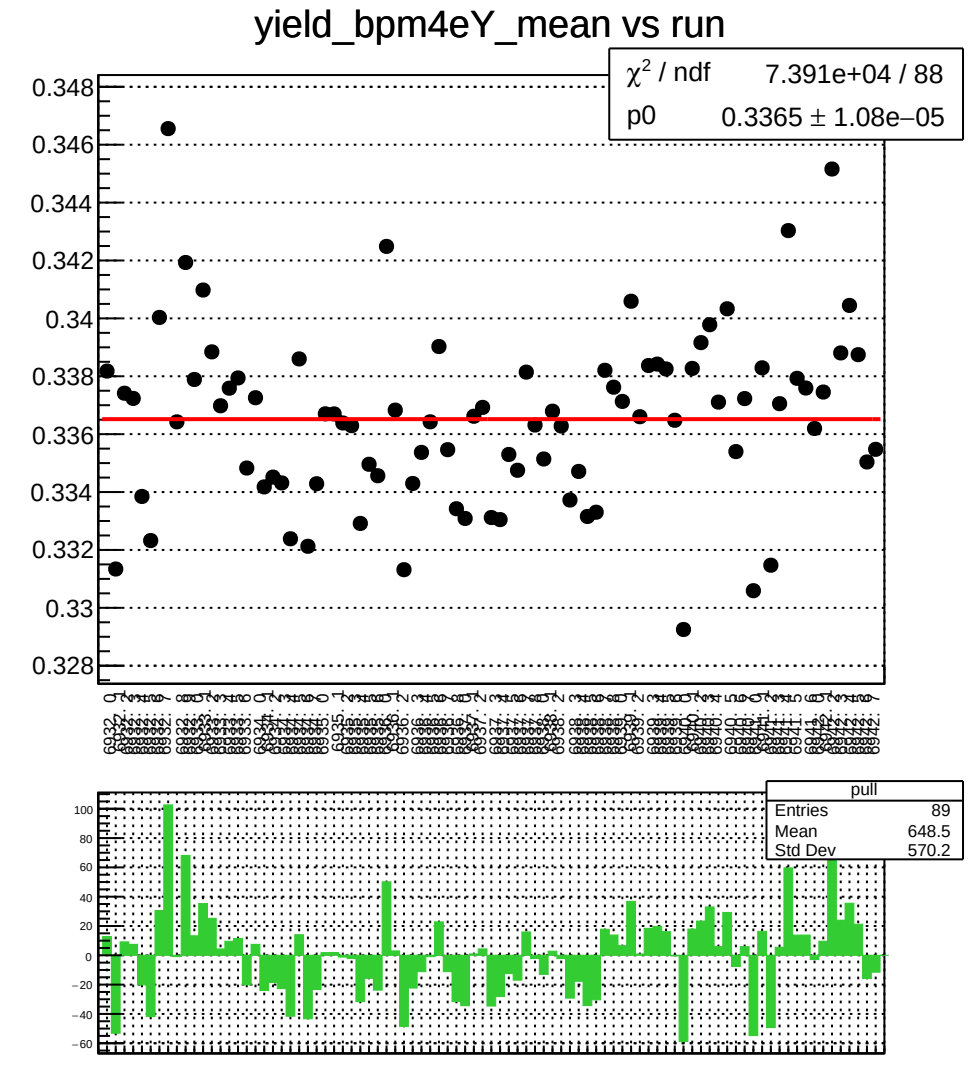

pull1D
Entries 89
Mean 0.4829
Std Dev 4.744
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

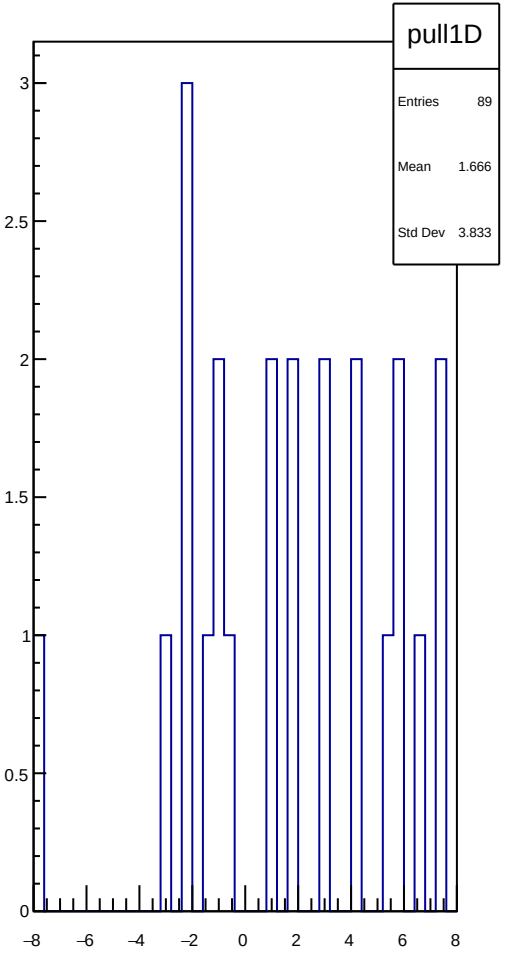

yield_bpm4aY_rms vs run
χ² / ndf 7867 / 88
p0 0.01173 ± 9.047e−06
0.015
0.014
0.013
0.012
0.011
0.01

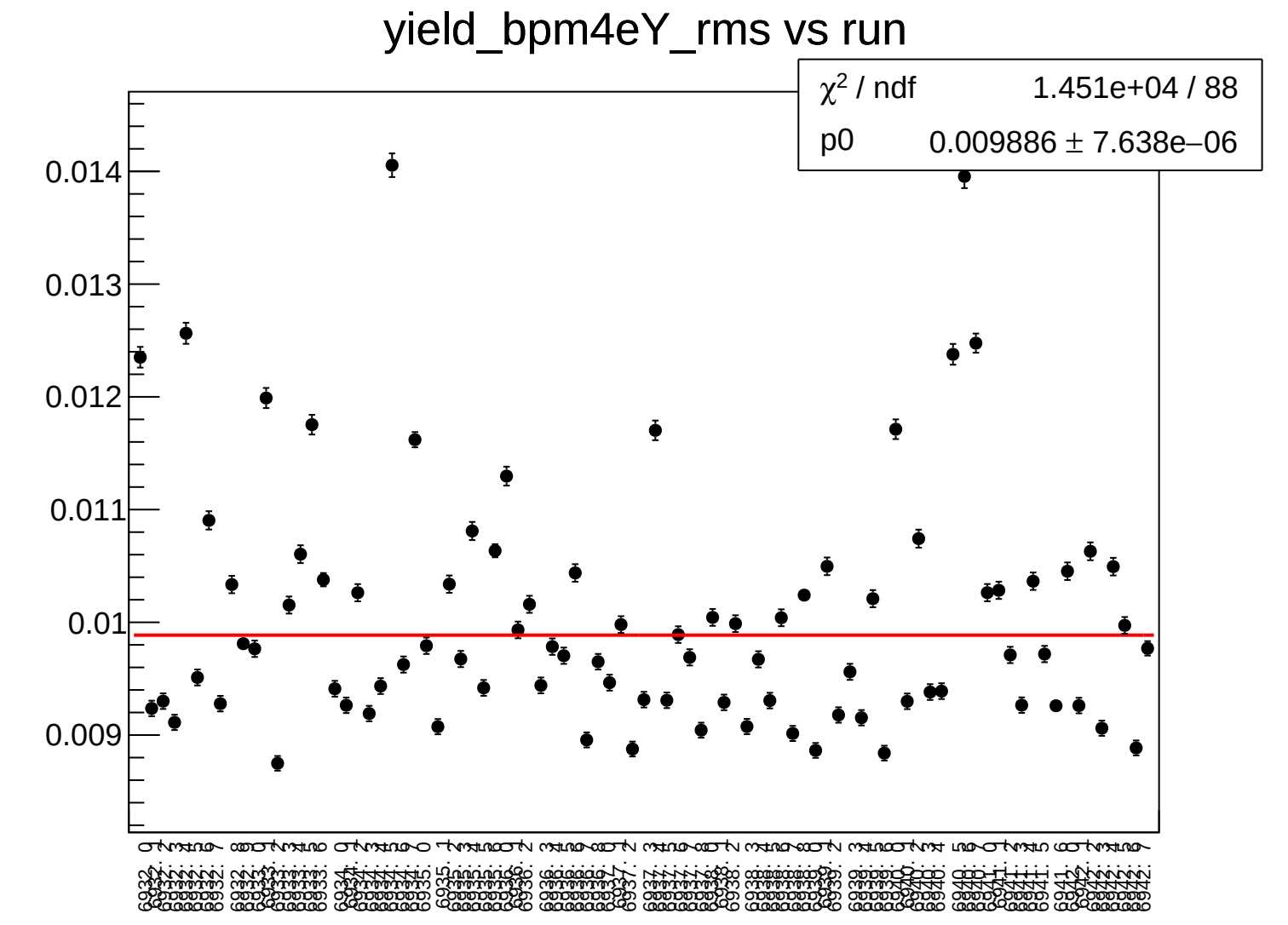

yield_bpm4eX_mean vs run
χ² / ndf 2.336e+05 / 88
p0 −0.03478 ± 2.283e−05
pull
Entries 89
Mean 32.38
Std Dev 15.6

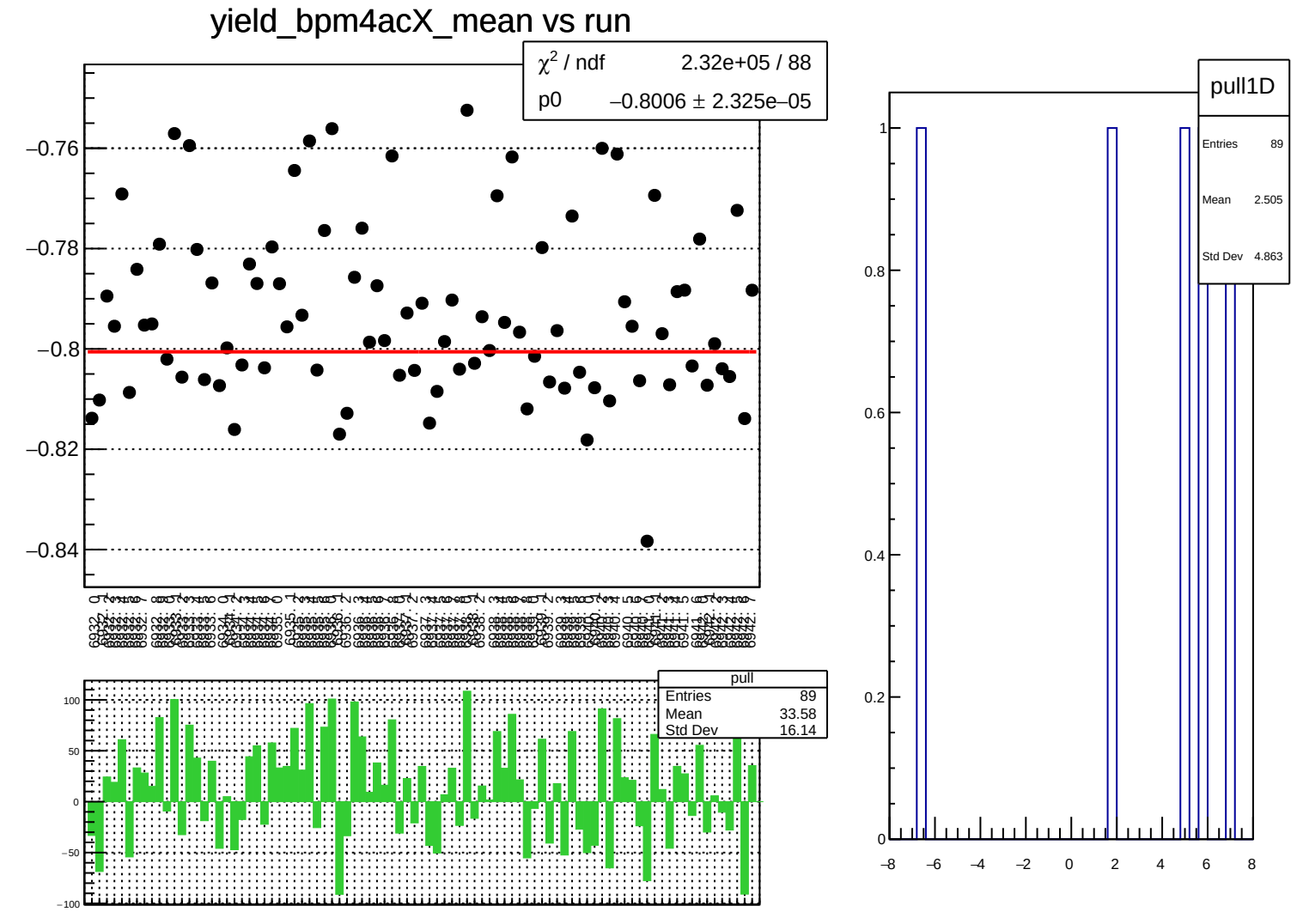

pull1D
Entries 89
Mean −0.9795
Std Dev 4.152

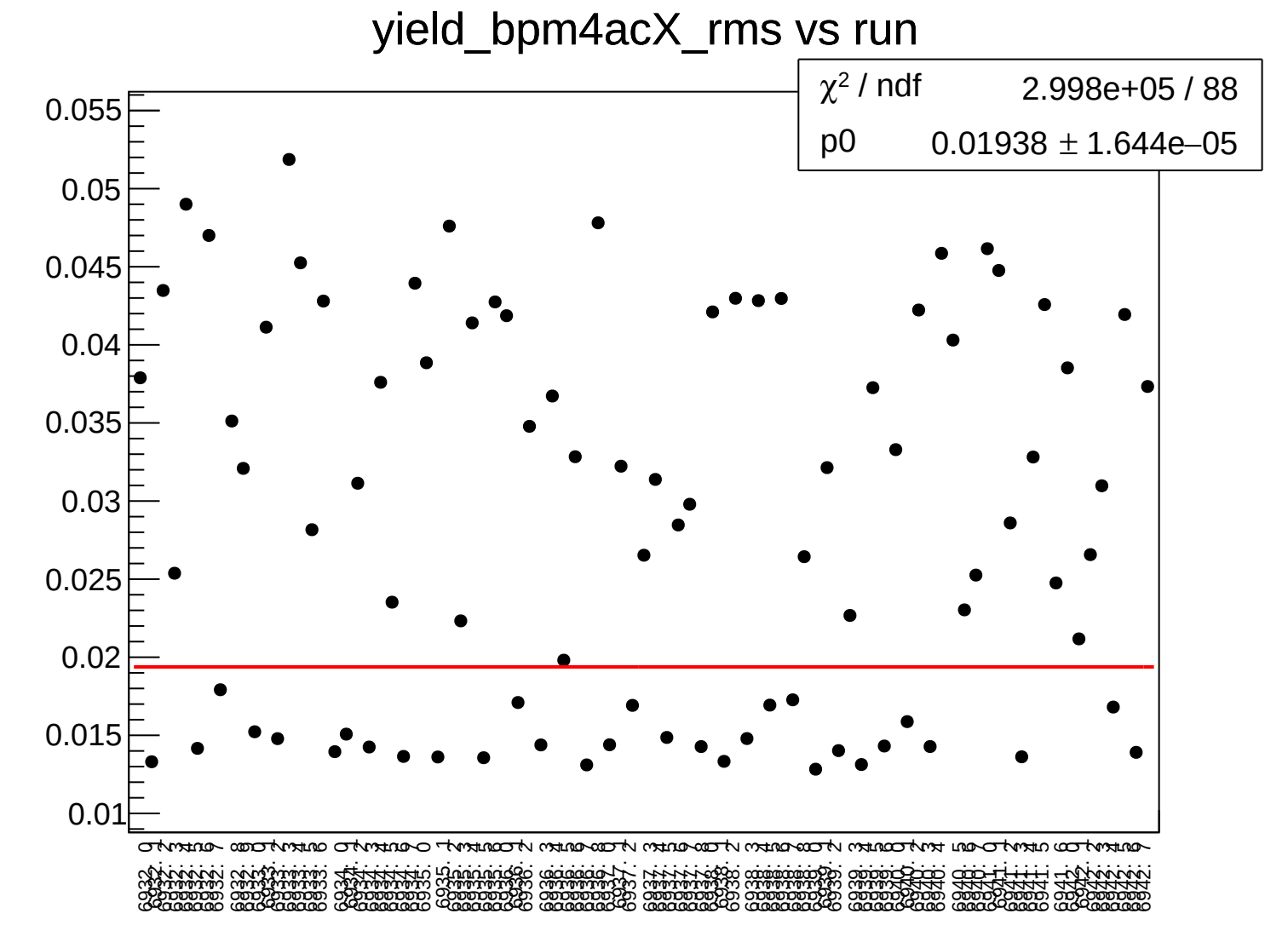

yield_bpm4eX_rms vs run
χ² / ndf 2.909e+05 / 88
p0 0.0191 ± 1.614e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

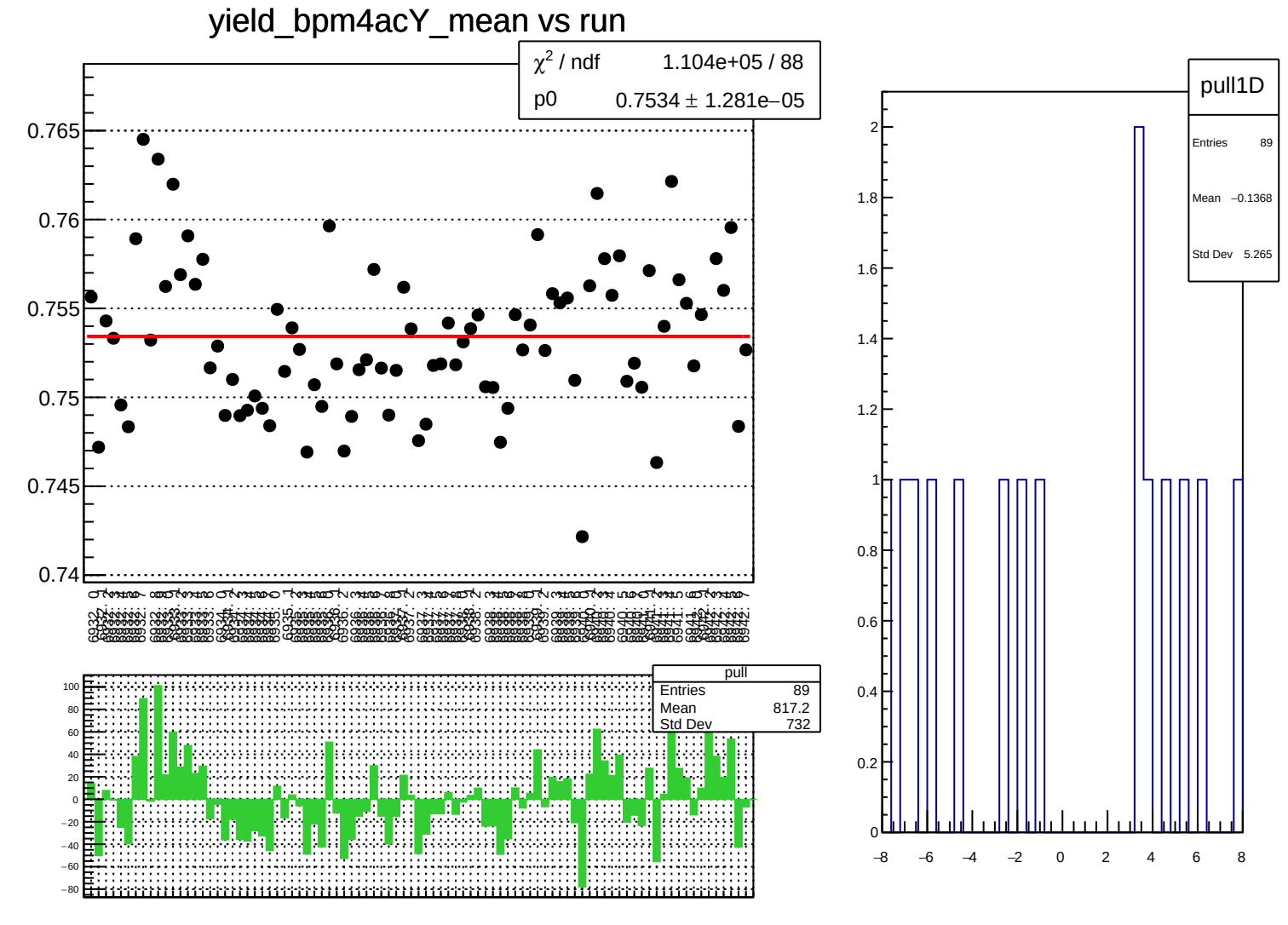

yield_bpm4eY_mean vs run
χ² / ndf 7.391e+04 / 88
p0 0.3365 ± 1.08e−05
0.348
0.346
0.344
0.342
0.34
0.338
0.336
0.334
0.332
0.33
0.328
pull
Entries 89
Mean 648.5
Std Dev 570.2
100
80
60
40
20
0
−20
−40
−60

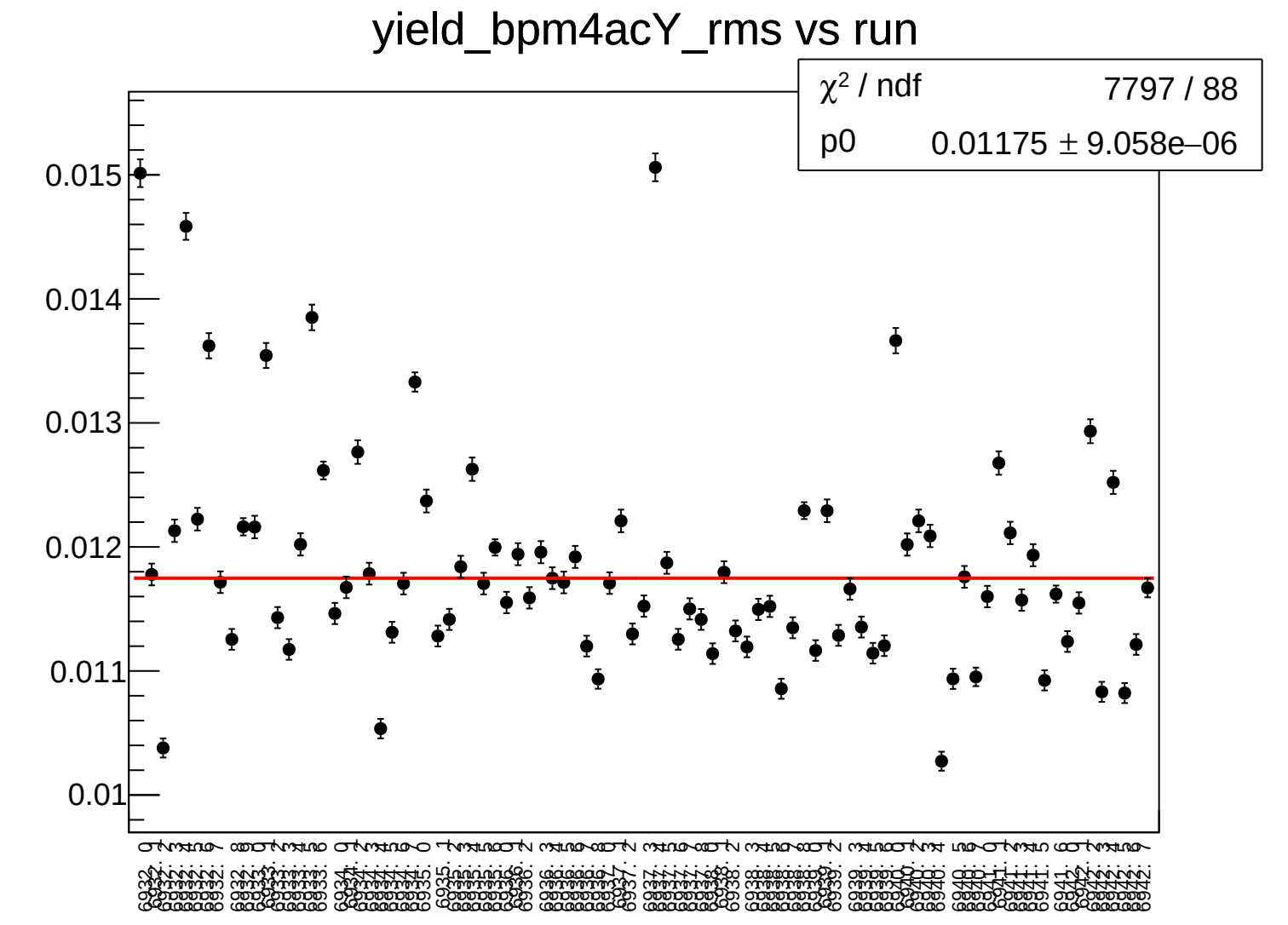

pull1D
Entries 89
Mean 1.666
Std Dev 3.833
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

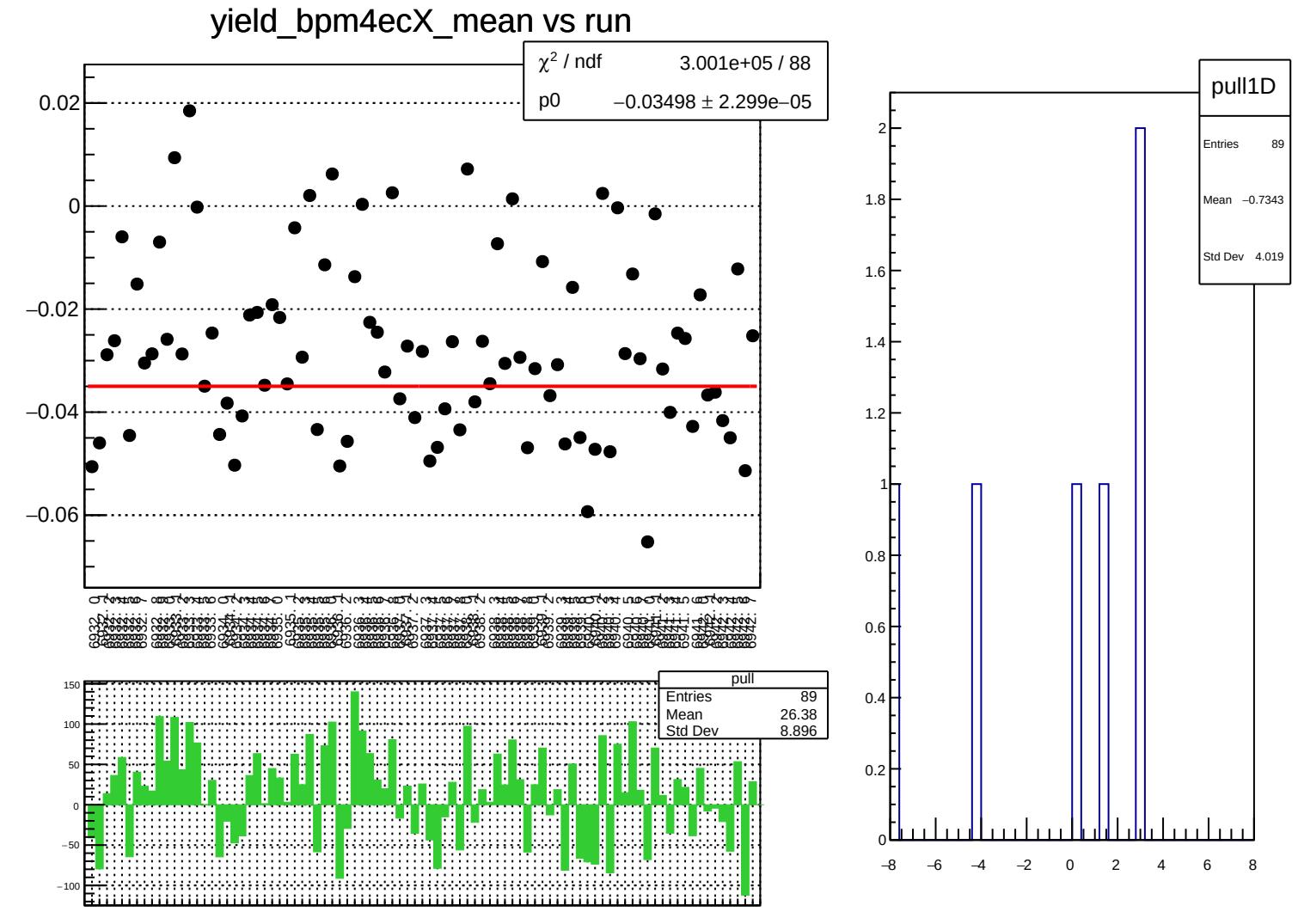

yield_bpm4eY_rms vs run
χ² / ndf 1.451e+04 / 88
p0 0.009886 ± 7.638e−06
0.014
0.013
0.012
0.011
0.01
0.009

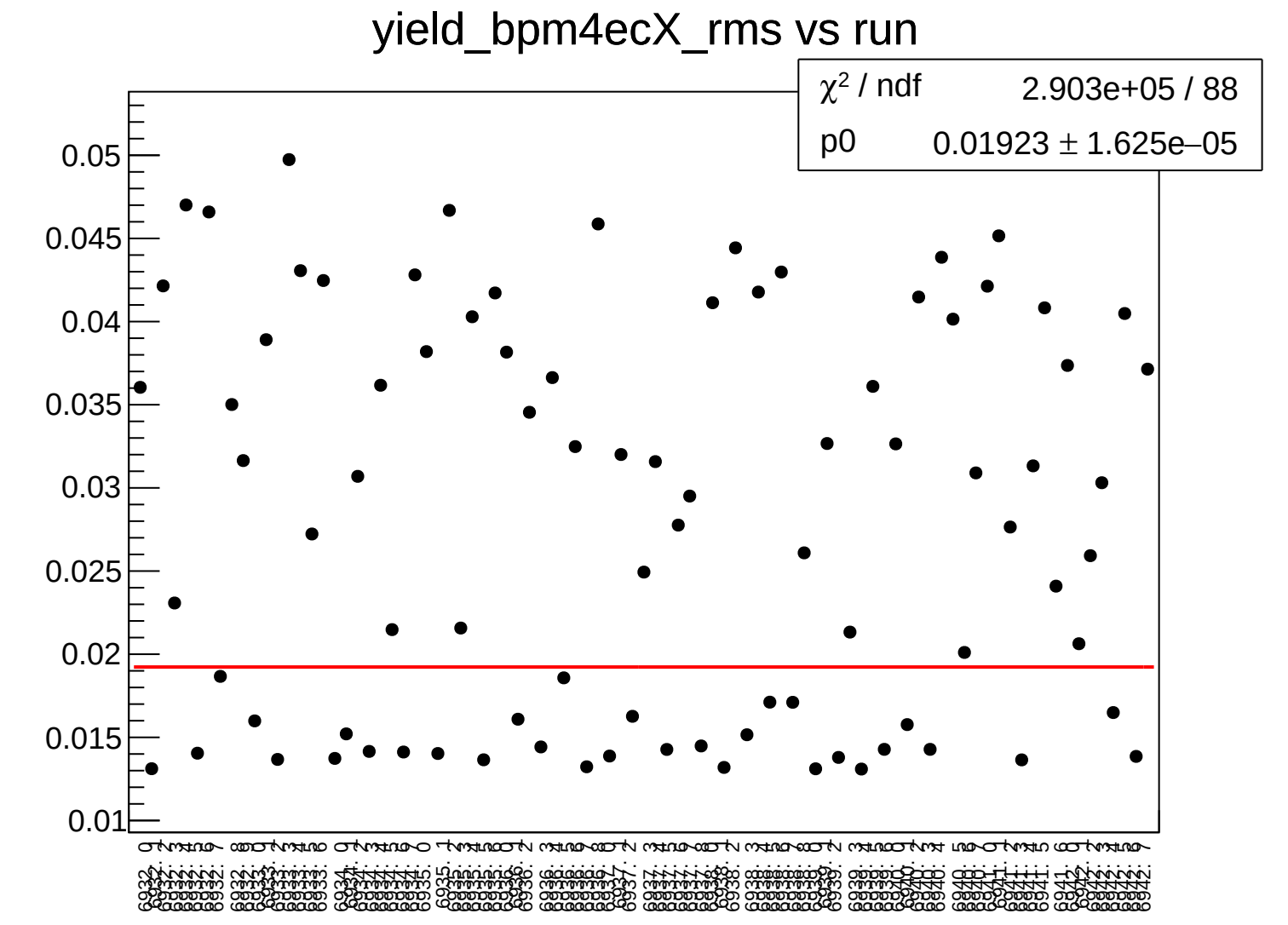

yield_bpm4acX_mean vs run
χ² / ndf 2.32e+05 / 88
p0 −0.8006 ± 2.325e−05
−0.76
−0.78
−0.8
−0.82
−0.84
pull
Entries 89
Mean 33.58
Std Dev 16.14
100
50
0
−50
−100
pull1D
Entries 89
Mean 2.505
Std Dev 4.863
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

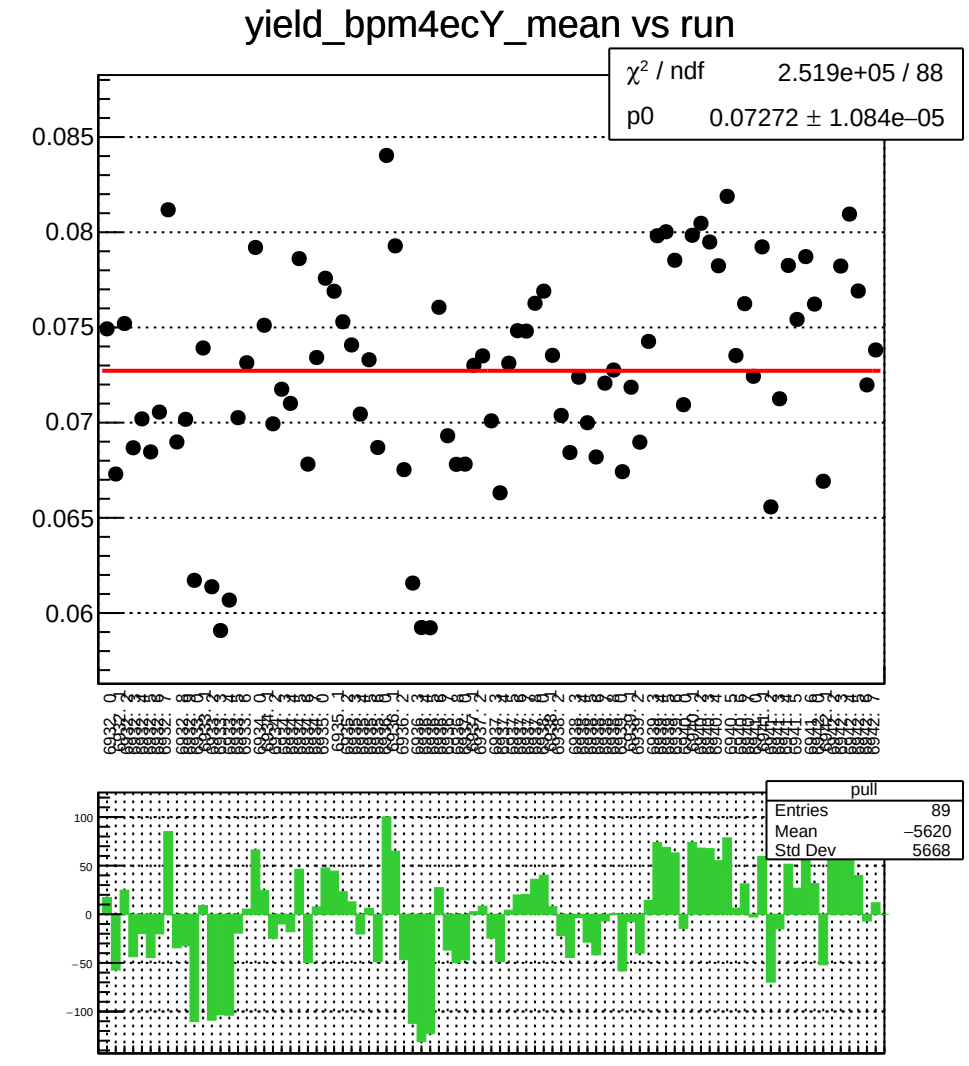

yield_bpm4acX_rms vs run
χ² / ndf 2.998e+05 / 88
p0 0.01938 ± 1.644e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

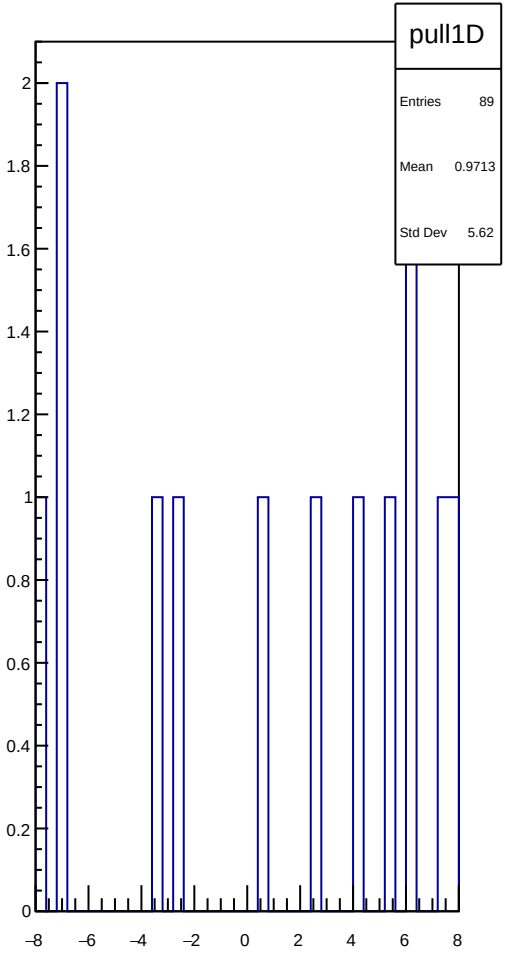

yield_bpm4acY_mean vs run
χ² / ndf 1.104e+05 / 88
p0 0.7534 ± 1.281e−05
0.765
0.76
0.755
0.75
0.745
0.74
pull
Entries 89
Mean 817.2
Std Dev 732
100
80
60
40
20
0
−20
−40
−60
−80
pull1D
Entries 89
Mean −0.1368
Std Dev 5.265
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

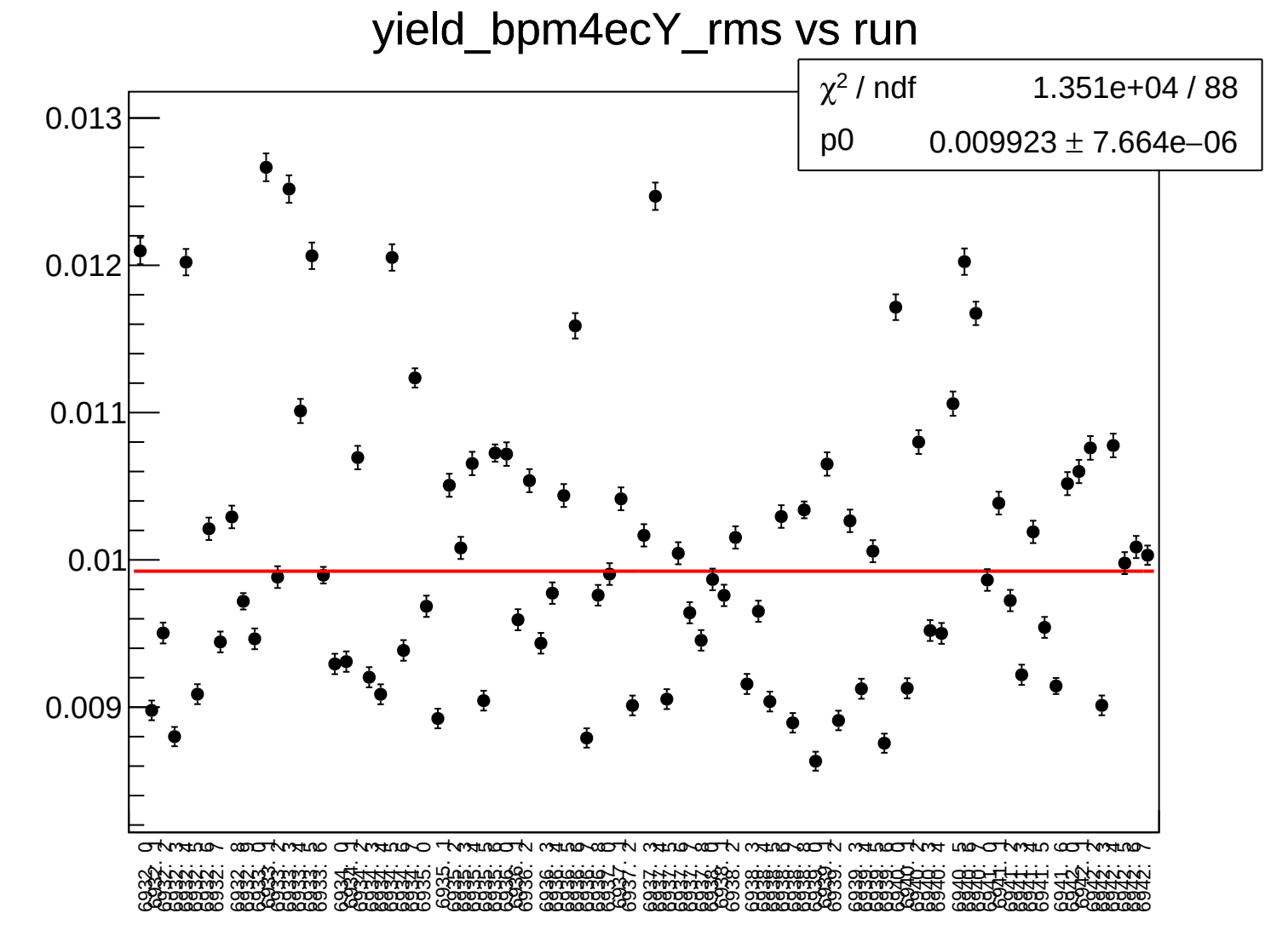

yield_bpm4acY_rms vs run
χ² / ndf 7797 / 88
p0 0.01175 ± 9.058e–06
0.015
0.014
0.013
0.012
0.011
0.01

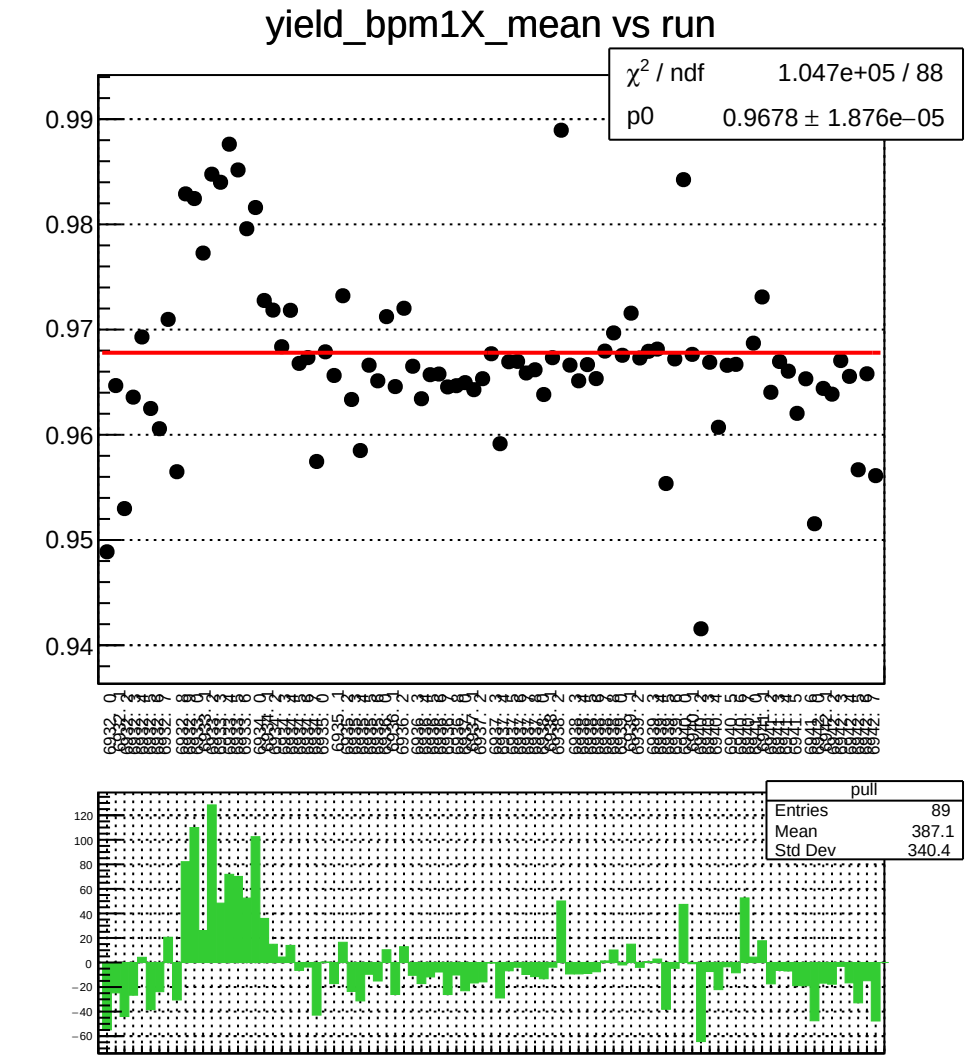

yield_bpm4ecX_mean vs run
χ² / ndf 3.001e+05 / 88
p0 −0.03498 ± 2.299e−05
0.02
0
−0.02
−0.04
−0.06
pull
Entries 89
Mean 26.38
Std Dev 8.896
150
100
50
0
−50
−100
pull1D
Entries 89
Mean −0.7343
Std Dev 4.019
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

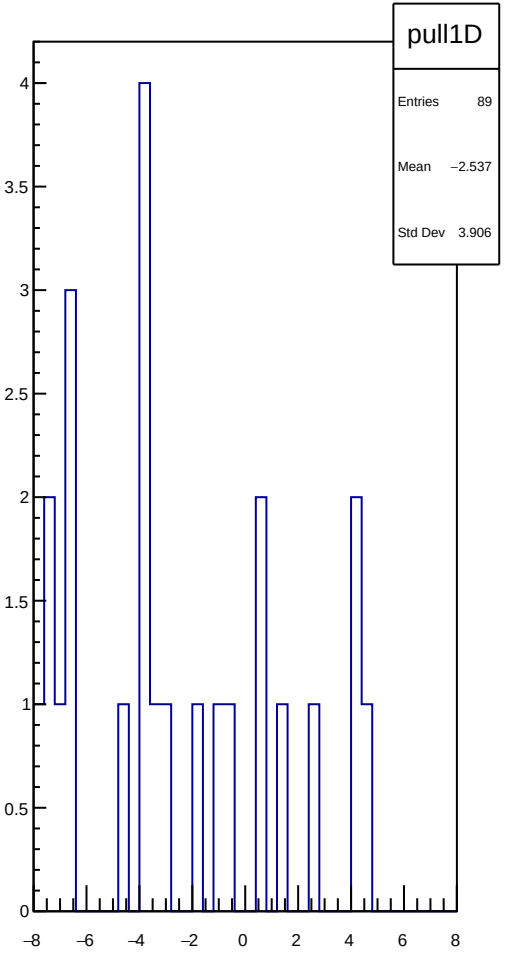

yield_bpm4ecX_rms vs run
χ² / ndf 2.903e+05 / 88
p0 0.01923 ± 1.625e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

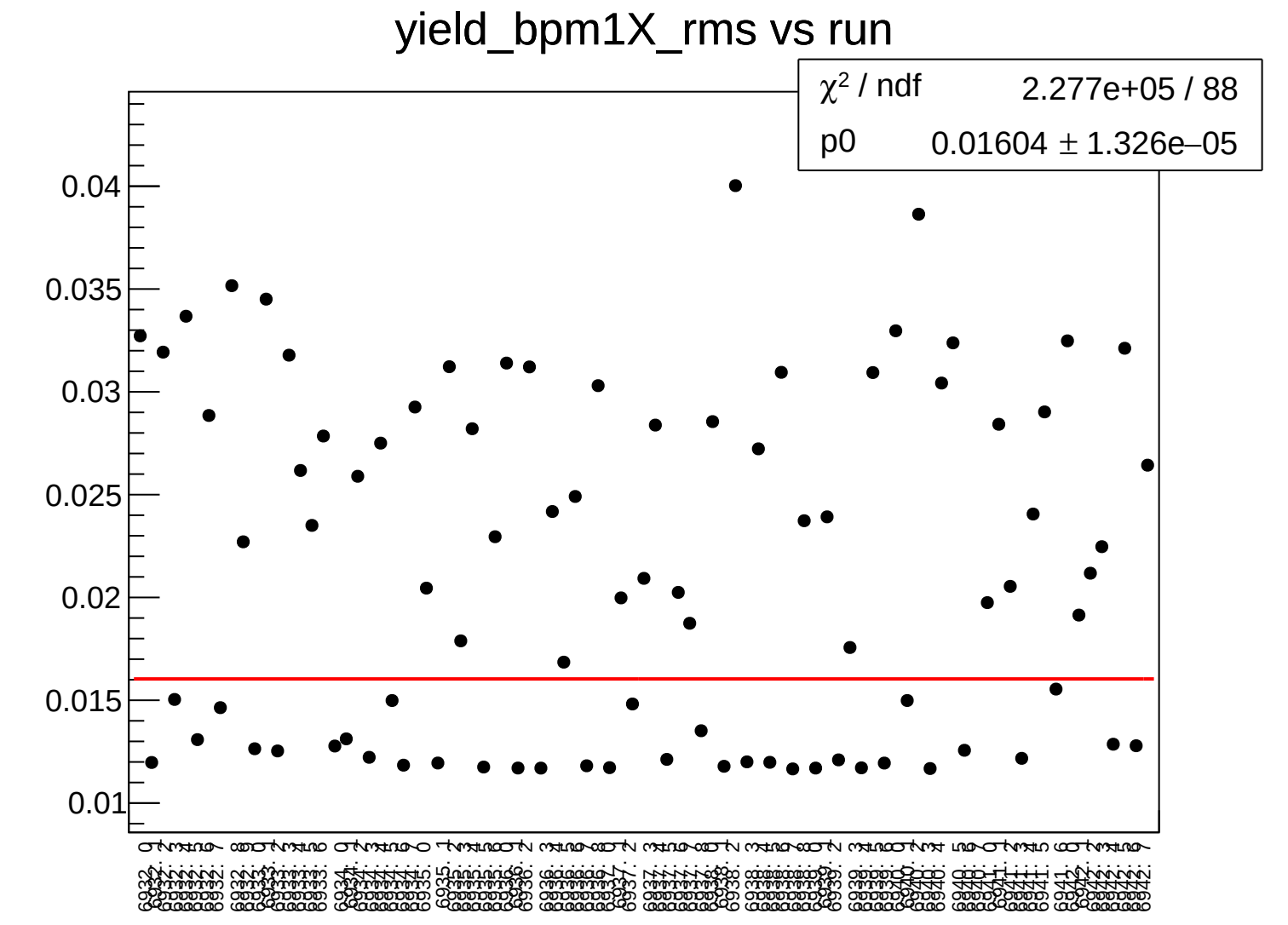

yield_bpm4ecY_mean vs run
χ² / ndf 2.519e+05 / 88
p0 0.07272 ± 1.084e−05
0.085
0.08
0.075
0.07
0.065
0.06
pull
Entries 89
Mean −5620
Std Dev 5668
100
50
0
−50
−100

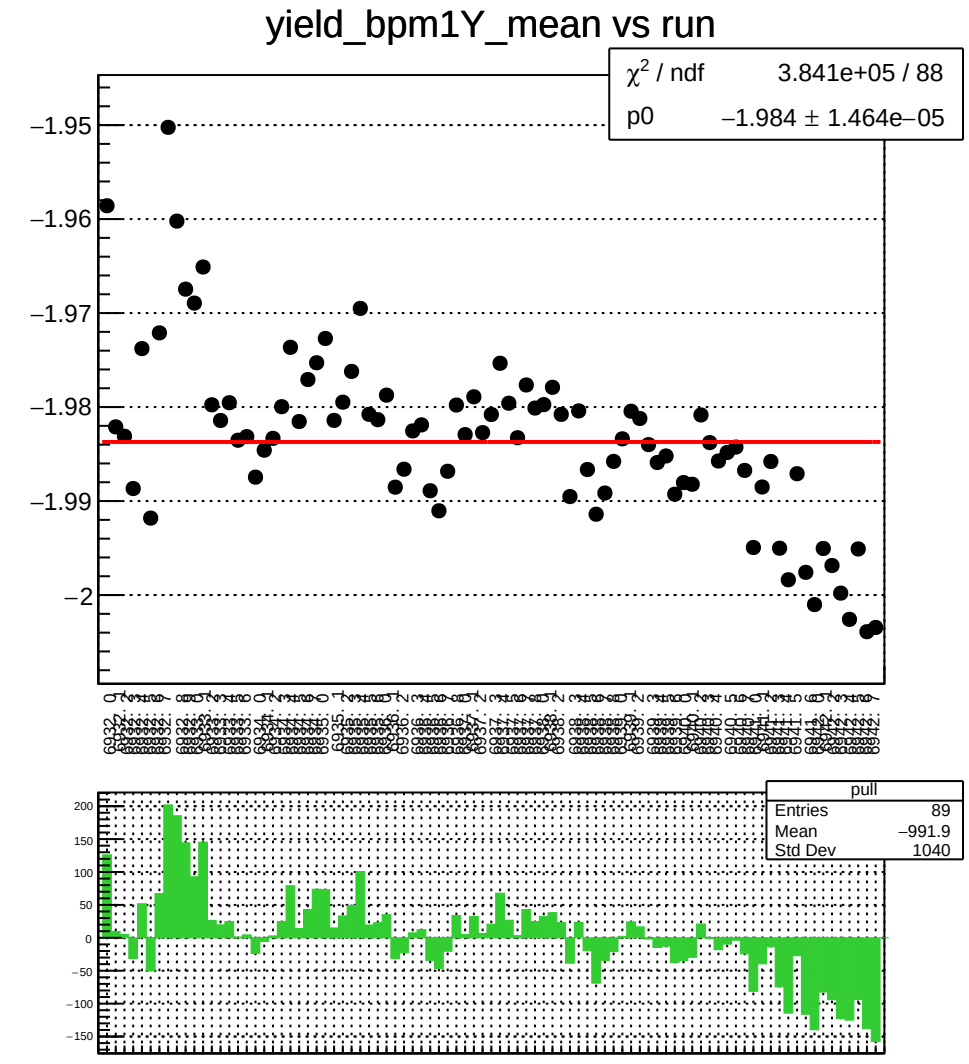

pull1D
Entries 89
Mean 0.9713
Std Dev 5.62
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

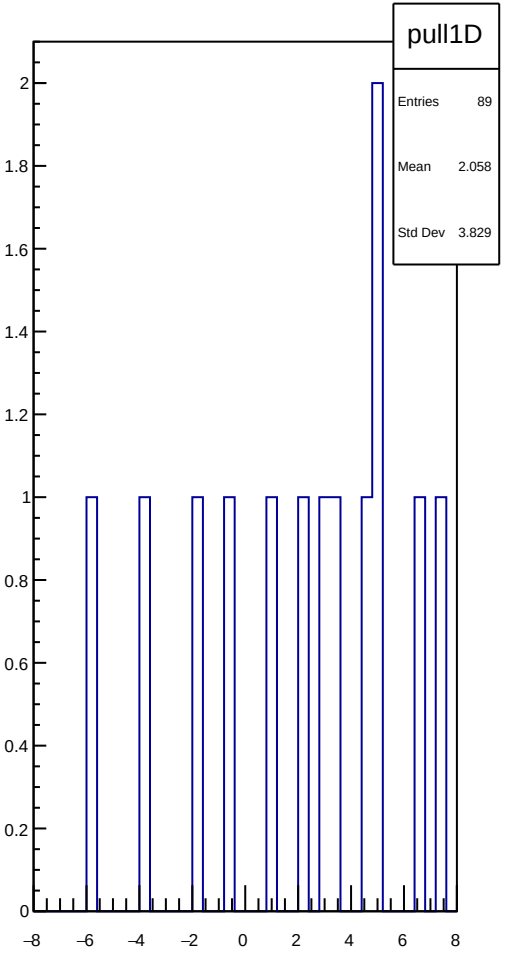

yield_bpm4ecY_rms vs run
χ² / ndf 1.351e+04 / 88
p0 0.009923 ± 7.664e−06
0.013
0.012
0.011
0.01
0.009

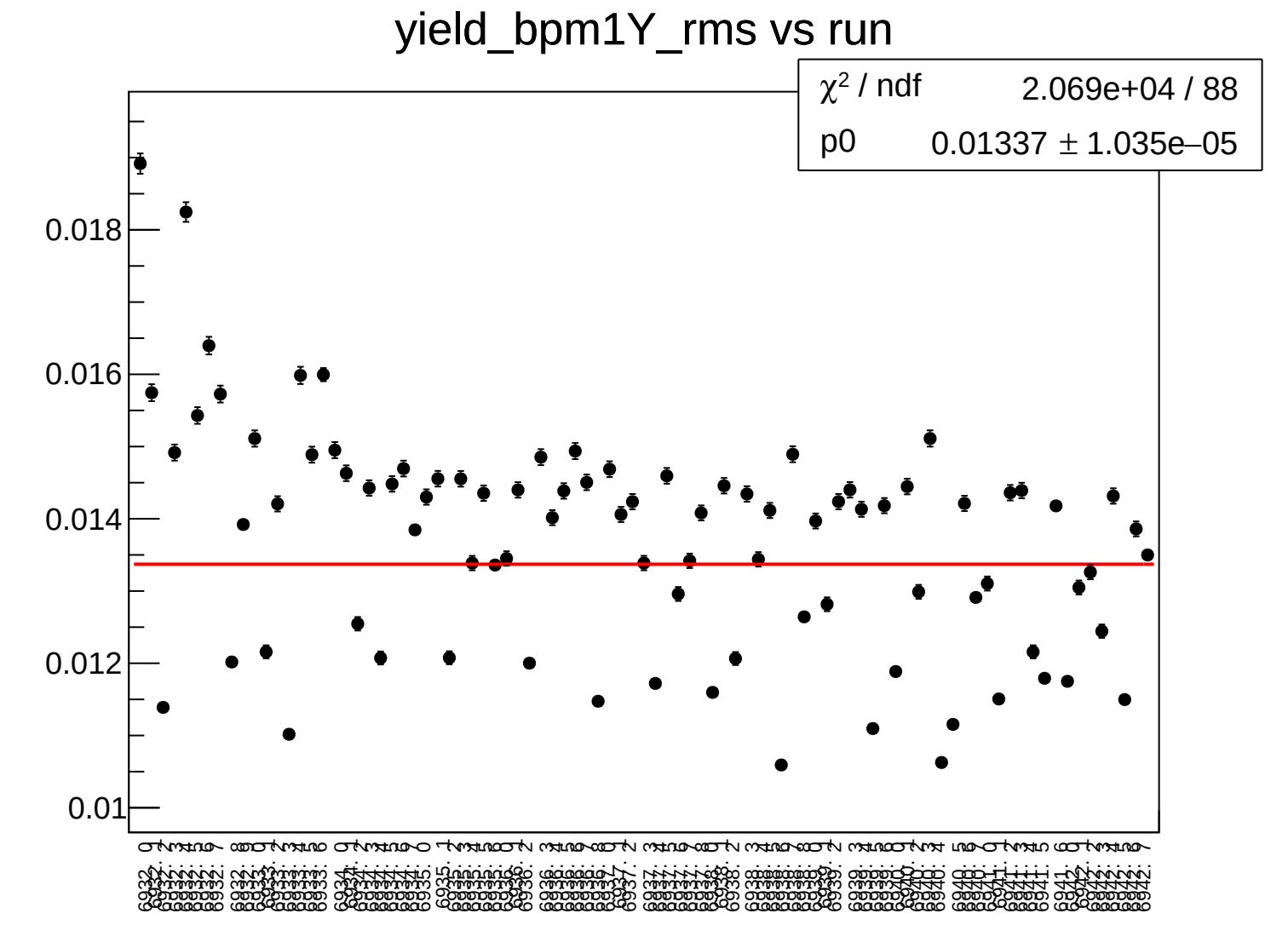

yield_bpm1X_mean vs run
χ² / ndf 1.047e+05 / 88
p0 0.9678 ± 1.876e−05
0.99
0.98
0.97
0.96
0.95
0.94
pull
Entries 89
Mean 387.1
Std Dev 340.4
120
100
80
60
40
20
0
−20
−40
−60

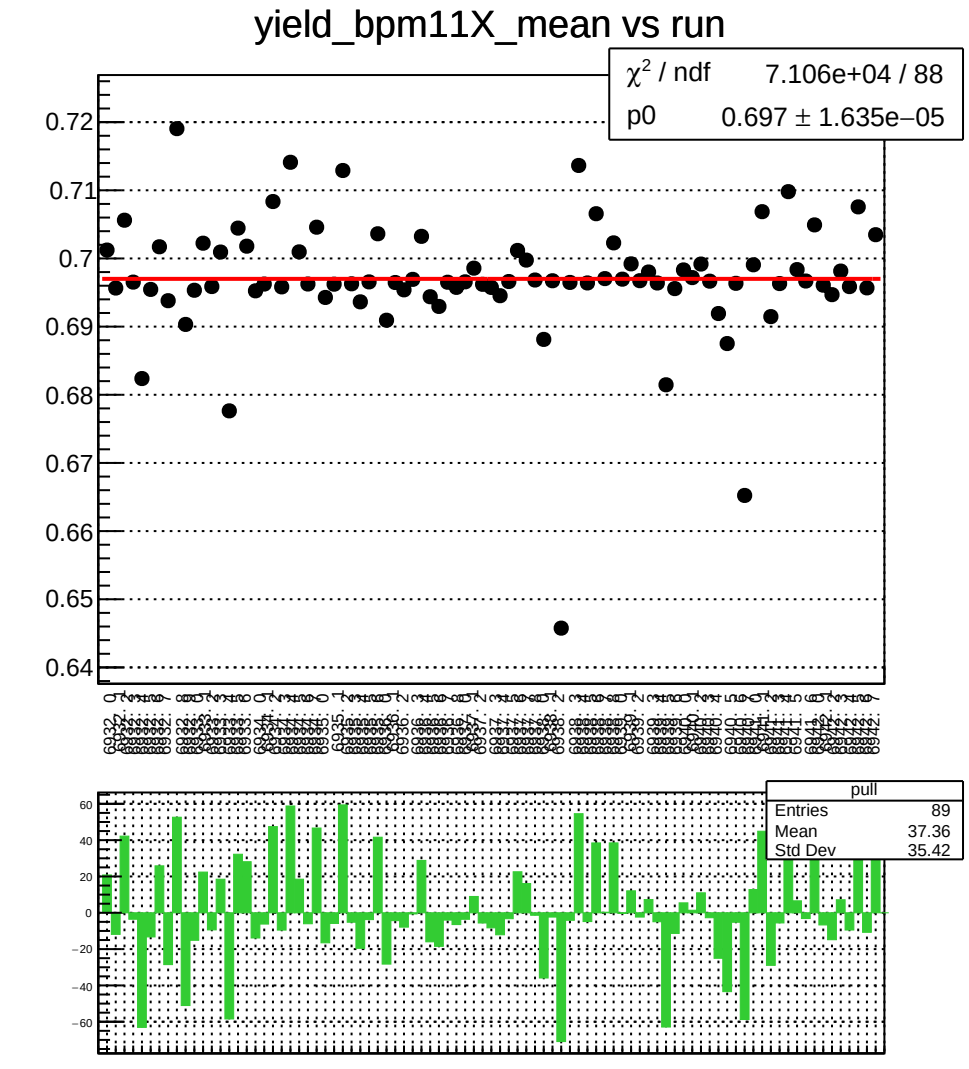

pull1D
Entries 89
Mean −2.537
Std Dev 3.906
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

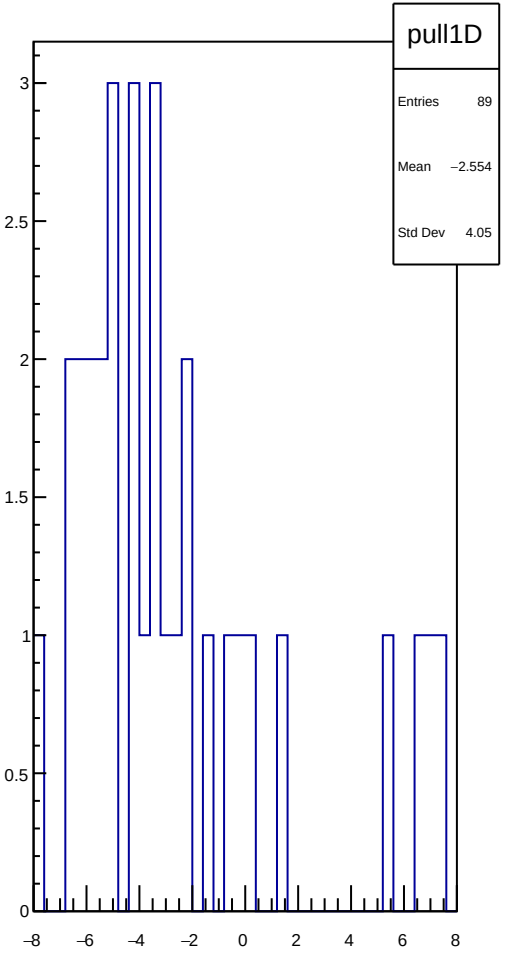

yield_bpm1X_rms vs run
χ² / ndf 2.277e+05 / 88
p0 0.01604 ± 1.326e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

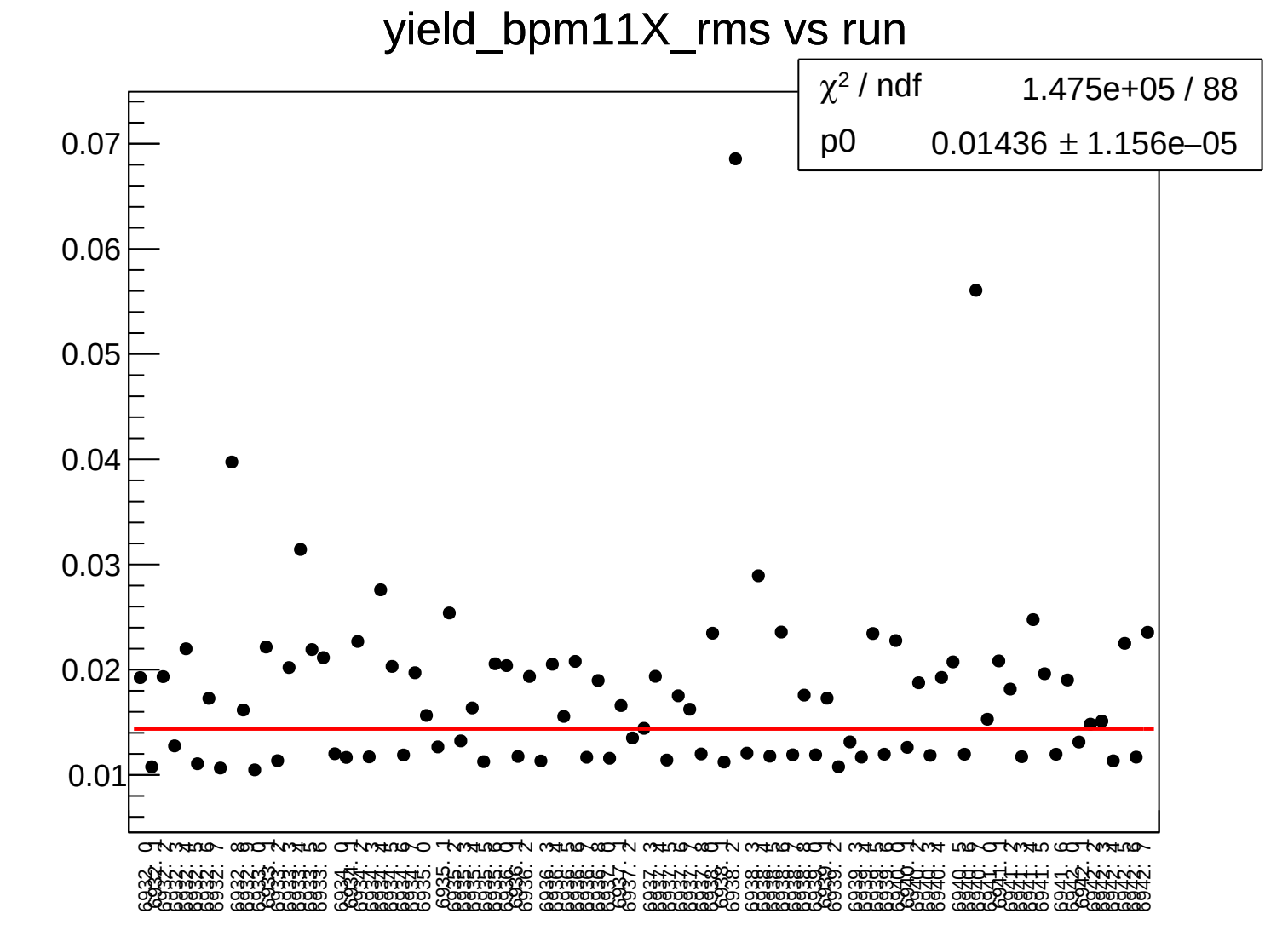

yield_bpm1Y_mean vs run
χ² / ndf 3.841e+05 / 88
p0 −1.984 ± 1.464e−05
−1.95
−1.96
−1.97
−1.98
−1.99
−2
pull
Entries 89
Mean −991.9
Std Dev 1040
200
150
100
50
0
−50
−100
−150

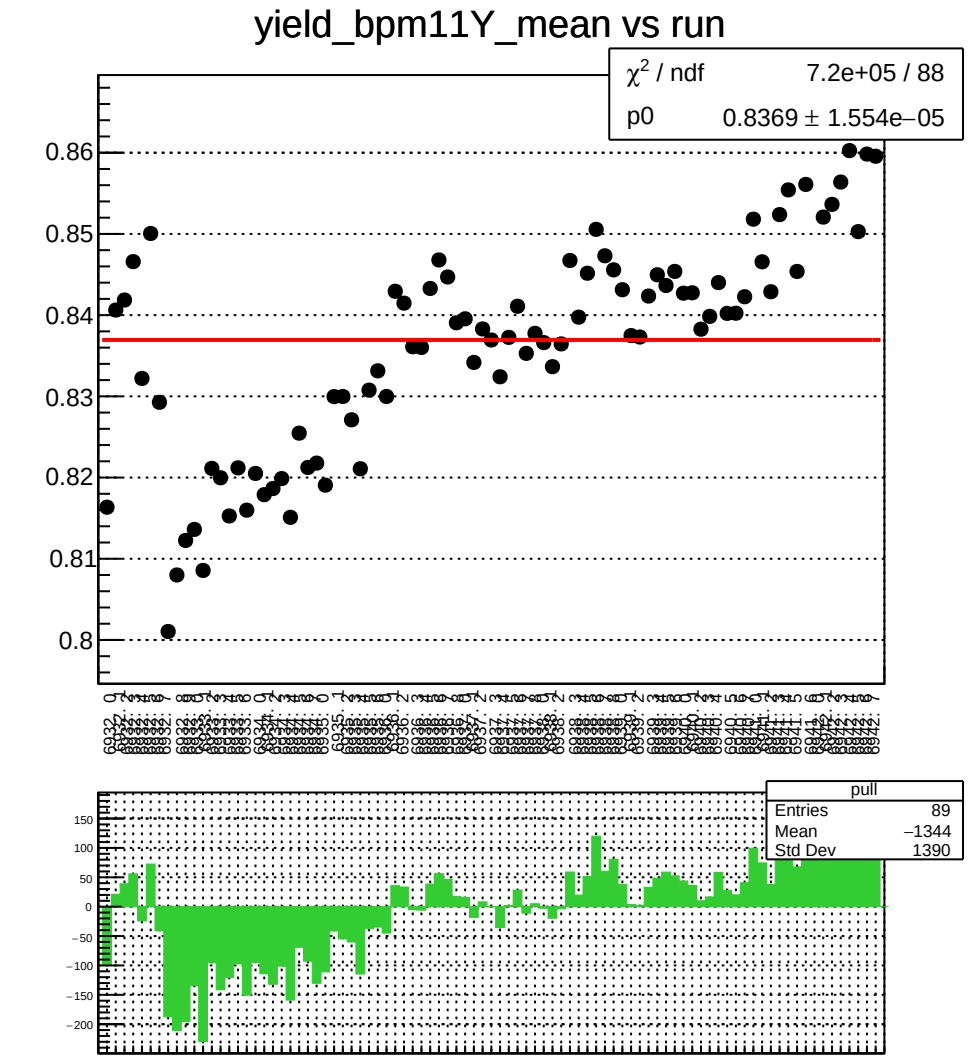

pull1D
Entries 89
Mean 2.058
Std Dev 3.829
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

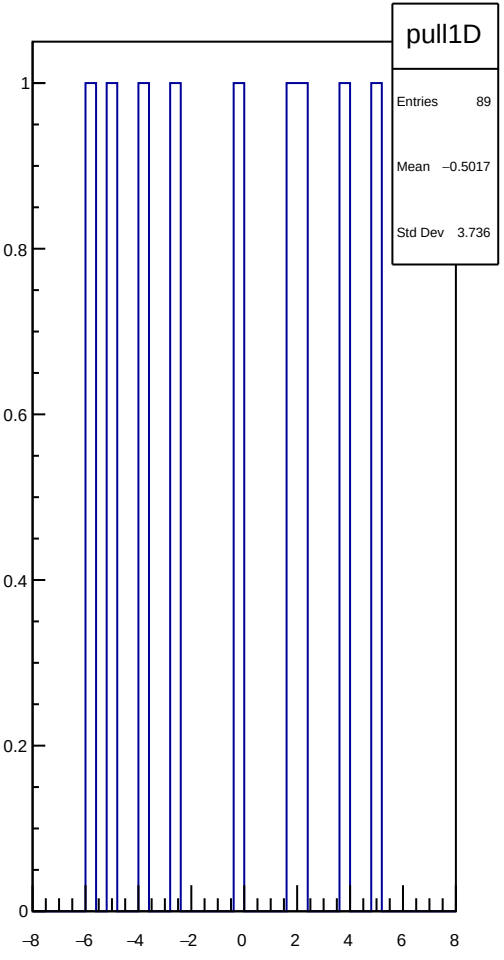

yield_bpm1Y_rms vs run
χ² / ndf 2.069e+04 / 88
p0 0.01337 ± 1.035e–05
0.018
0.016
0.014
0.012
0.01

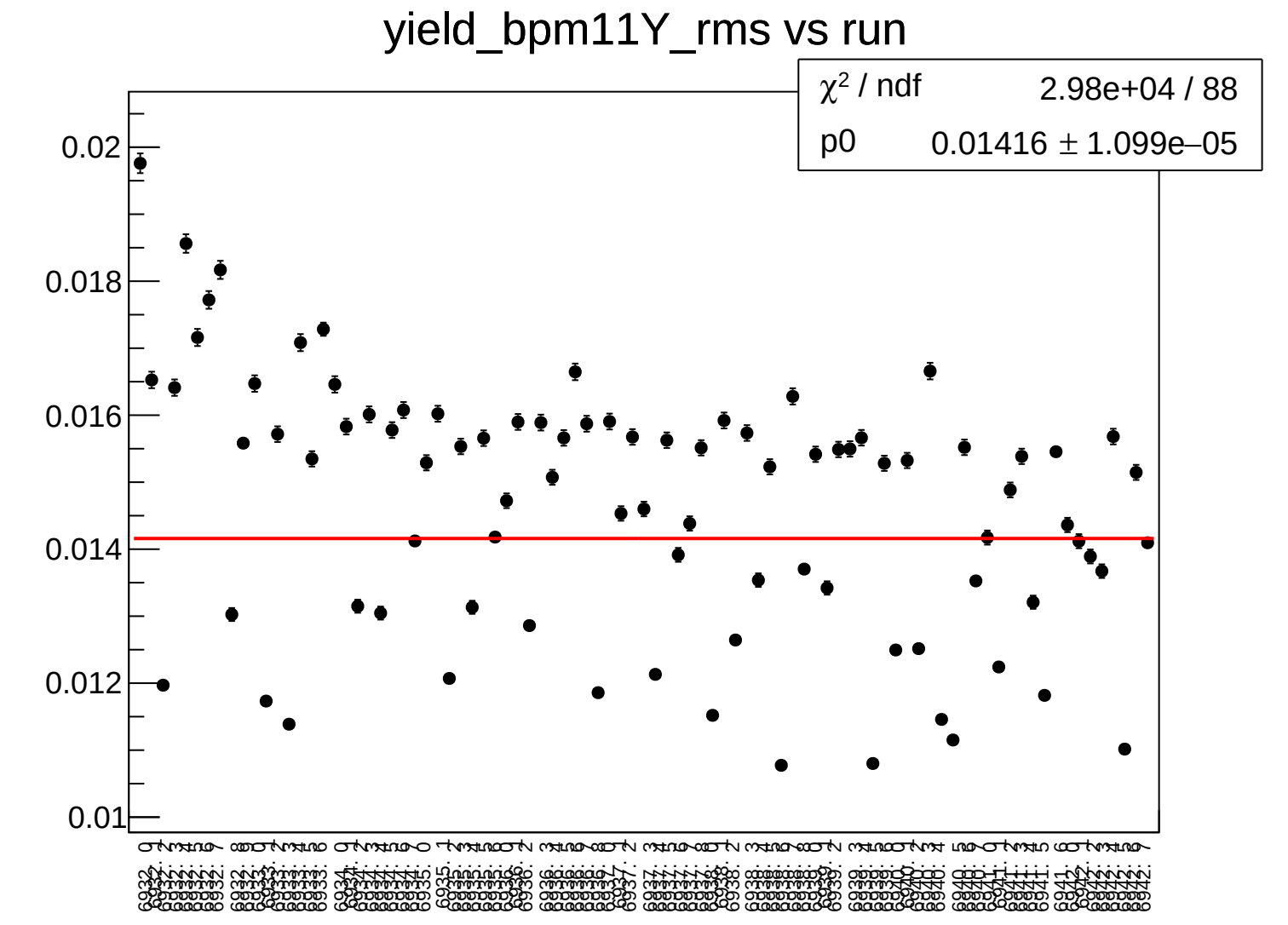

yield_bpm11X_mean vs run
χ² / ndf 7.106e+04 / 88
p0 0.697 ± 1.635e−05
0.72
0.71
0.7
0.69
0.68
0.67
0.66
0.65
0.64
pull
Entries 89
Mean 37.36
Std Dev 35.42
60
40
20
0
−20
−40
−60

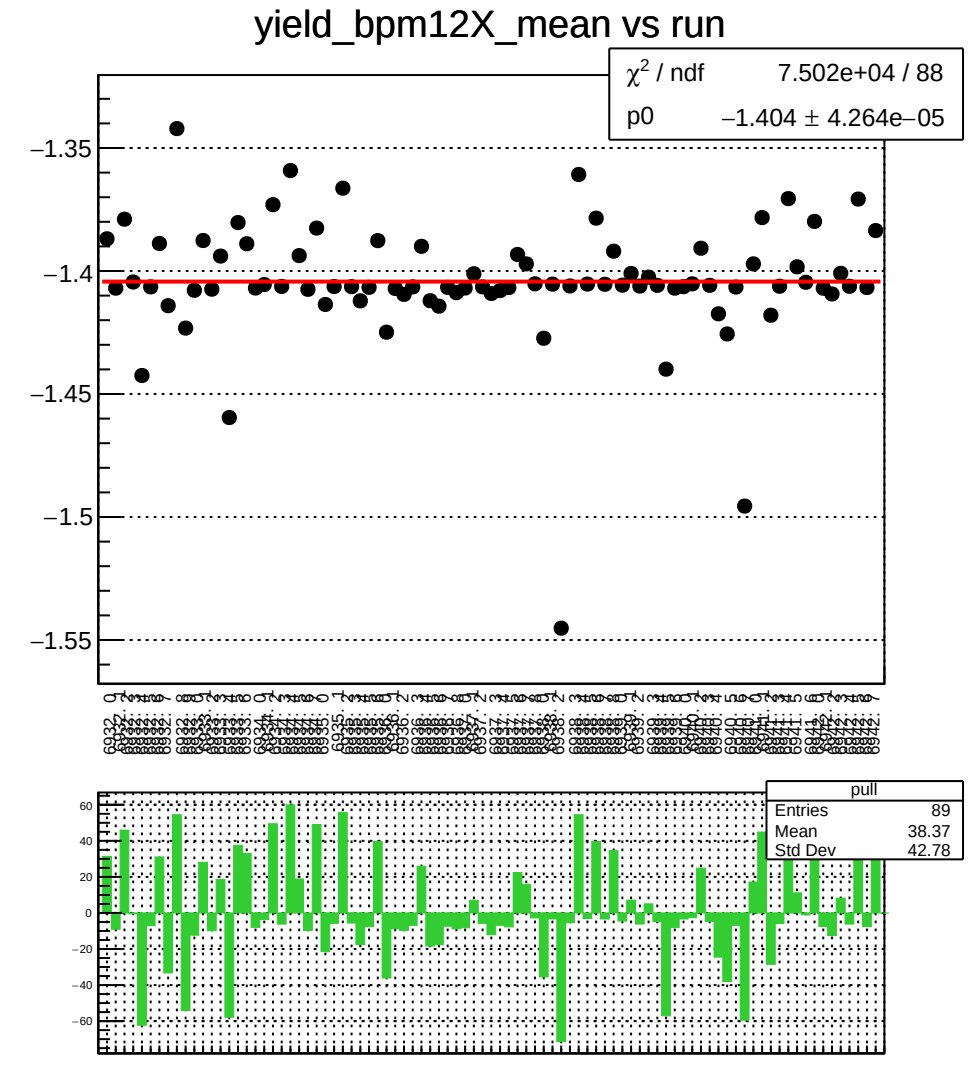

pull1D
Entries 89
Mean −2.554
Std Dev 4.05
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

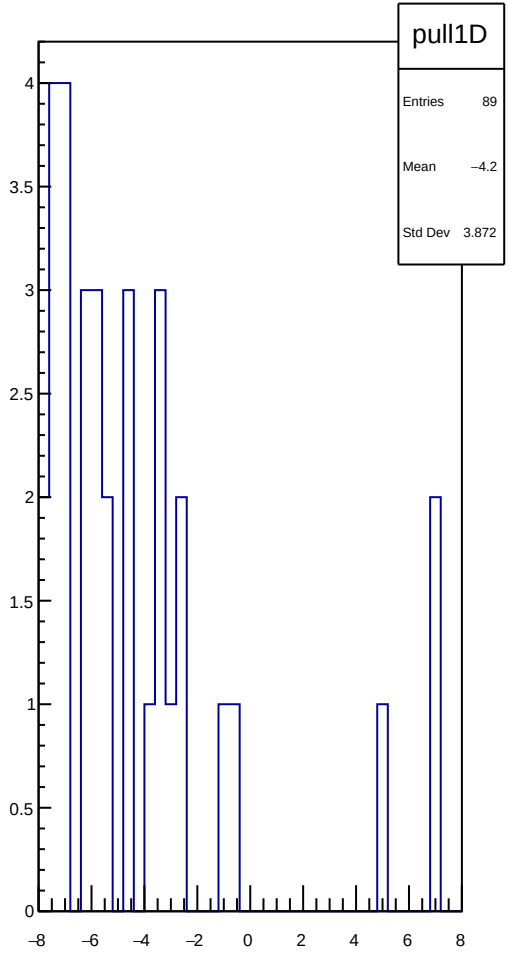

yield_bpm11X_rms vs run
χ² / ndf 1.475e+05 / 88
p0 0.01436 ± 1.156e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

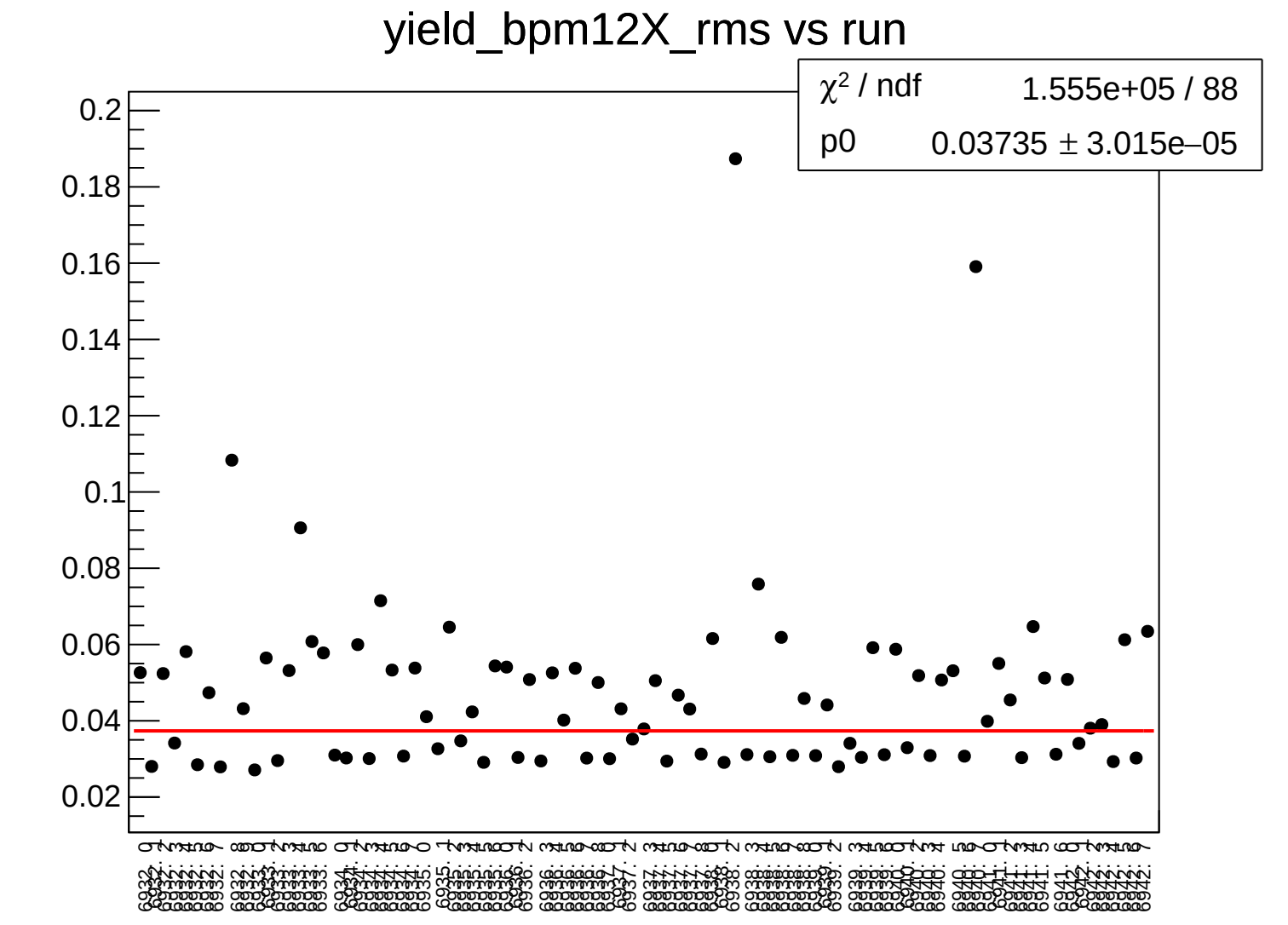

yield_bpm11Y_mean vs run
χ² / ndf 7.2e+05 / 88
p0 0.8369 ± 1.554e−05
0.86
0.85
0.84
0.83
0.82
0.81
0.8
pull
Entries 89
Mean −1344
Std Dev 1390
150
100
50
0
−50
−100
−150
−200

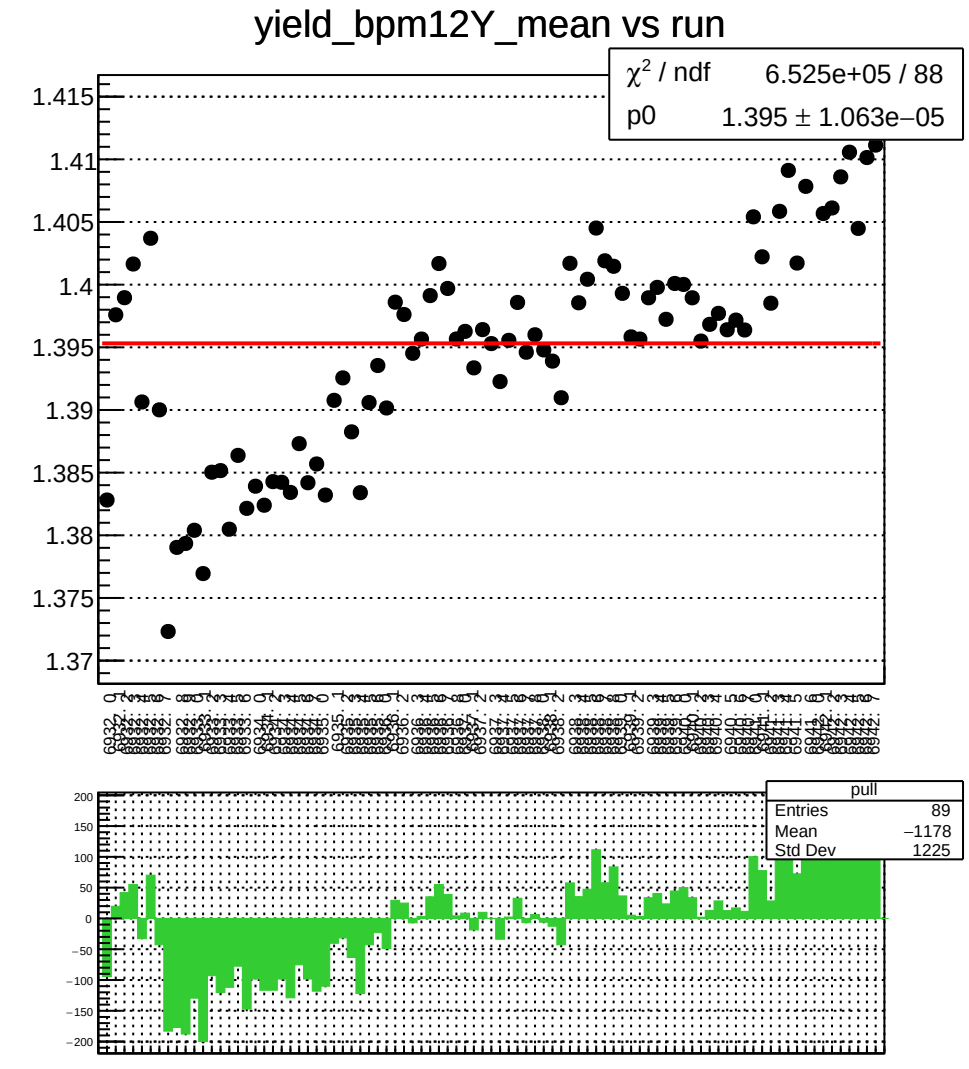

pull1D
Entries 89
Mean −0.5017
Std Dev 3.736
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

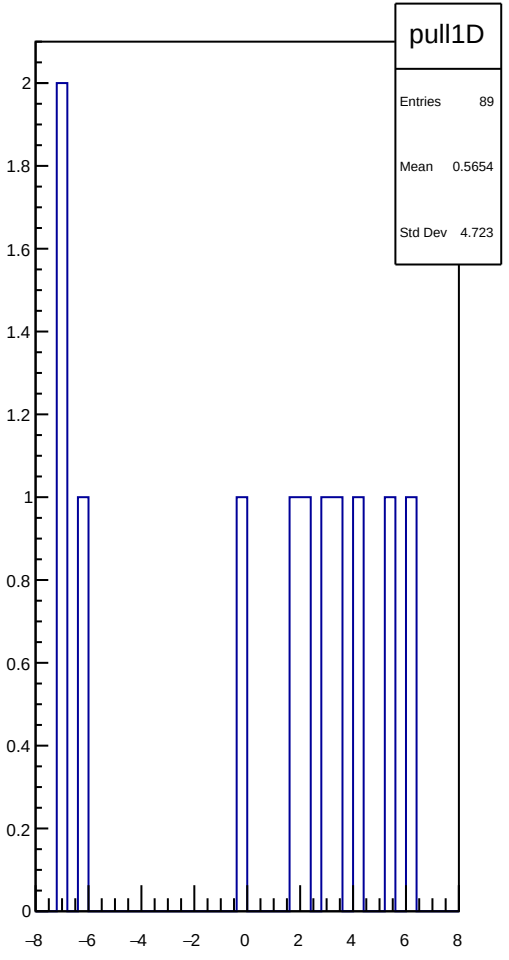

yield_bpm11Y_rms vs run
χ² / ndf 2.98e+04 / 88
p0 0.01416 ± 1.099e−05
0.02
0.018
0.016
0.014
0.012
0.01

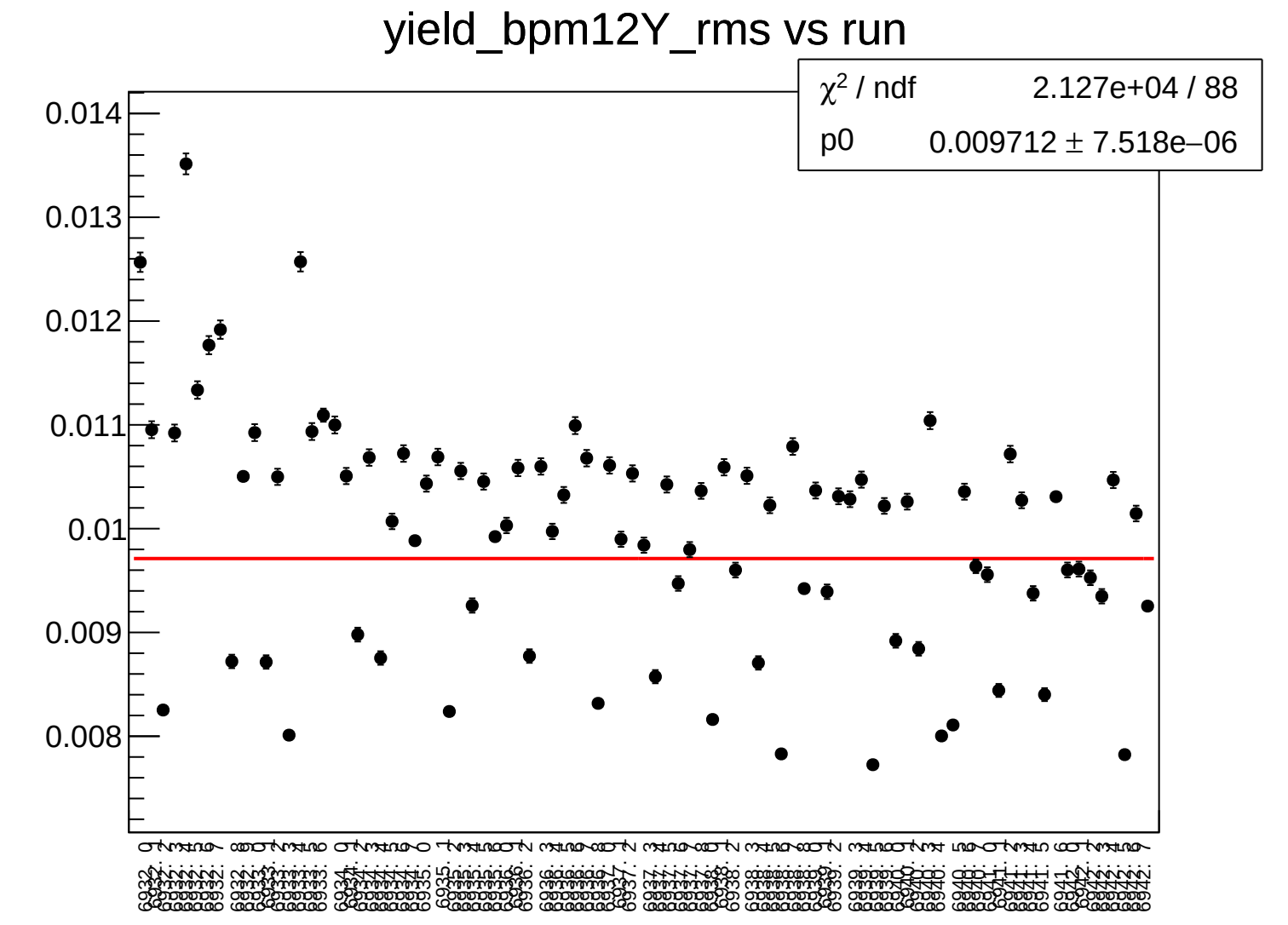

yield_bpm12X_mean vs run
χ² / ndf 7.502e+04 / 88
p0 −1.404 ± 4.264e−05
−1.35
−1.4
−1.45
−1.5
−1.55
pull
Entries 89
Mean 38.37
Std Dev 42.78
60
40
20
0
−20
−40
−60

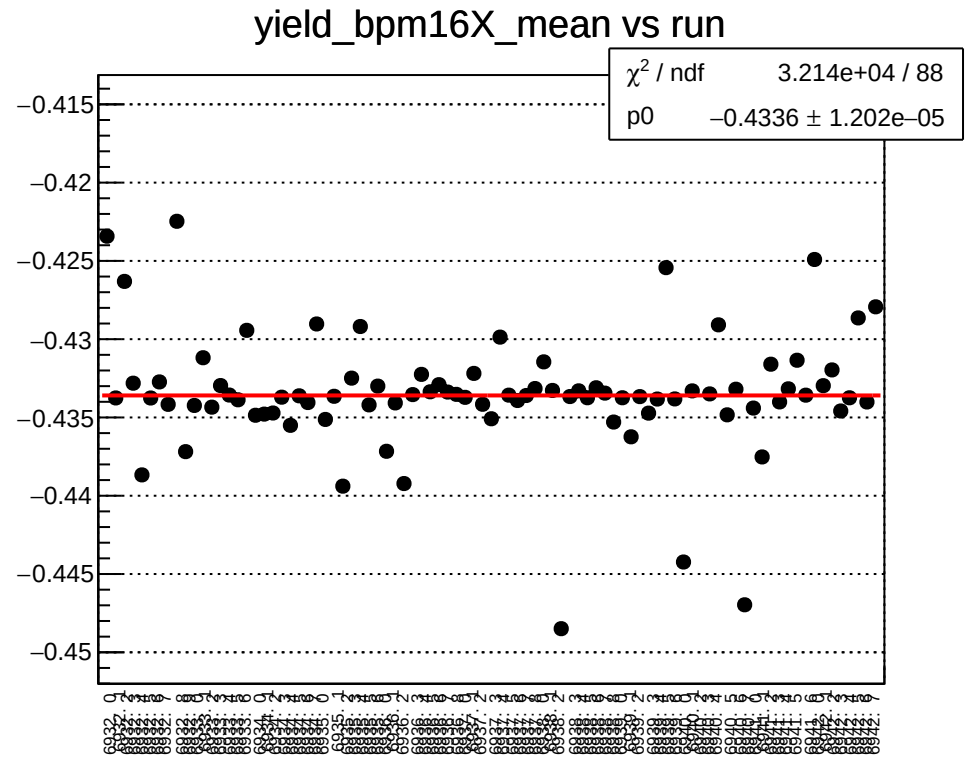

pull1D
Entries 89
Mean −4.2
Std Dev 3.872
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

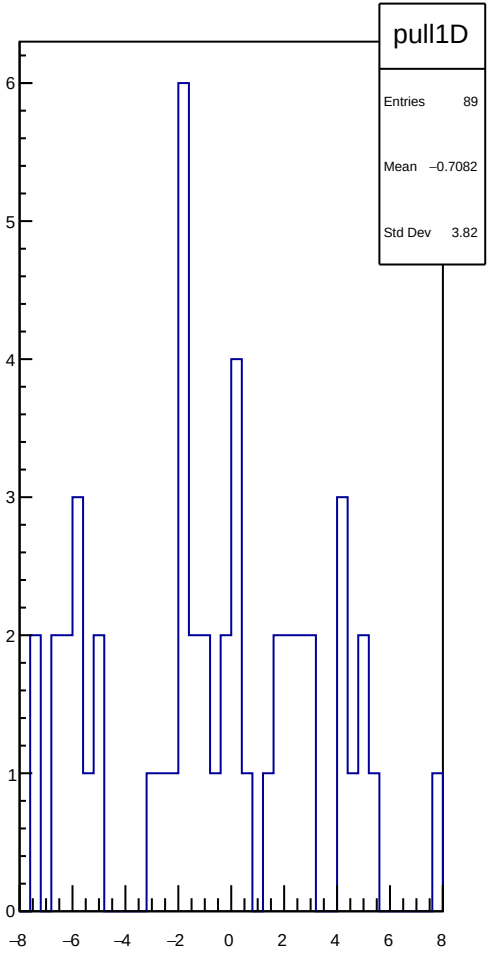

yield_bpm12X_rms vs run
χ² / ndf 1.555e+05 / 88
p0 0.03735 ± 3.015e–05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

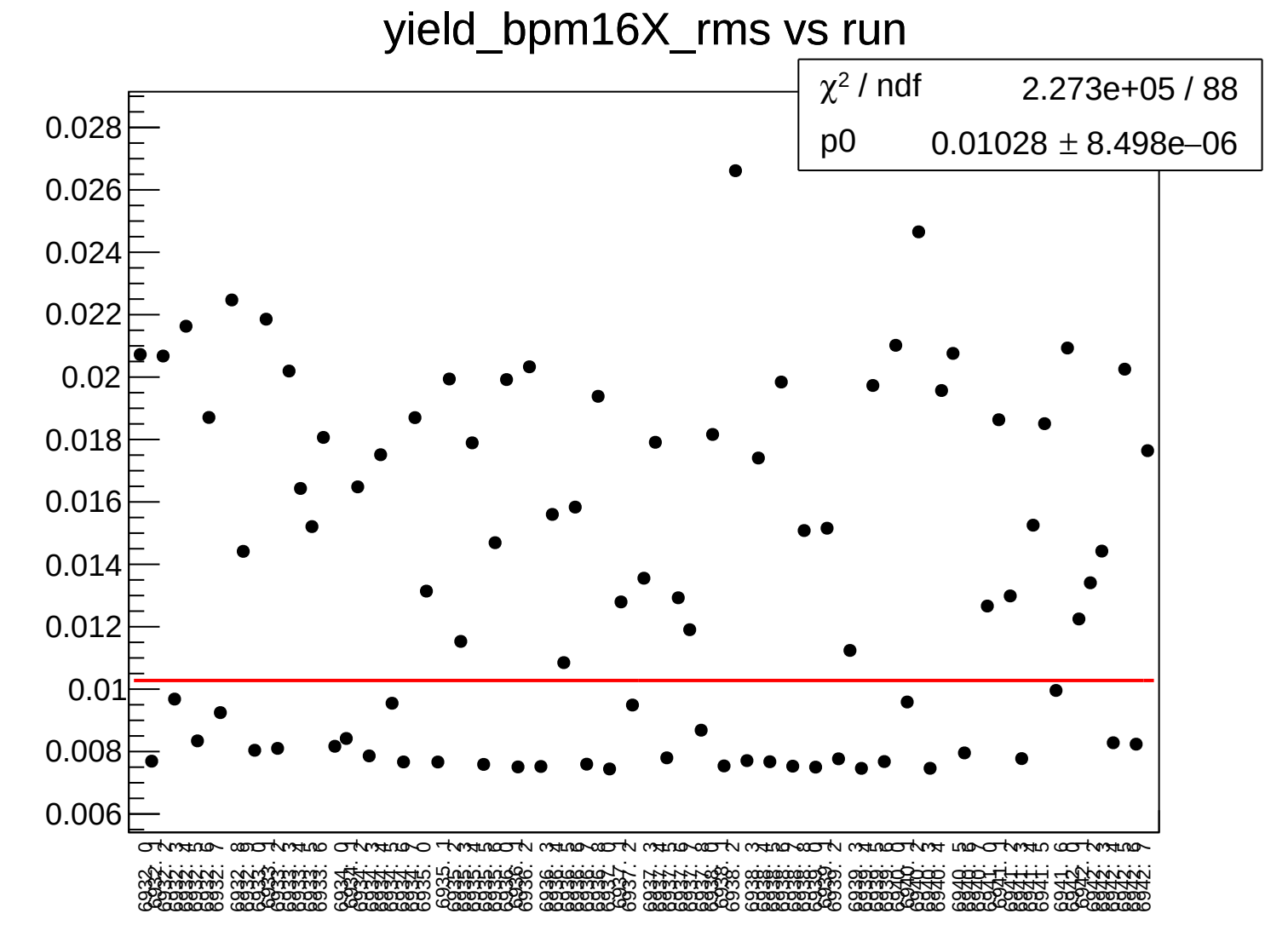

yield_bpm12Y_mean vs run
χ² / ndf 6.525e+05 / 88
p0 1.395 ± 1.063e−05
1.415
1.41
1.405
1.4
1.395
1.39
1.385
1.38
1.375
1.37
pull
Entries 89
Mean −1178
Std Dev 1225
200
150
100
50
0
−50
−100
−150
−200

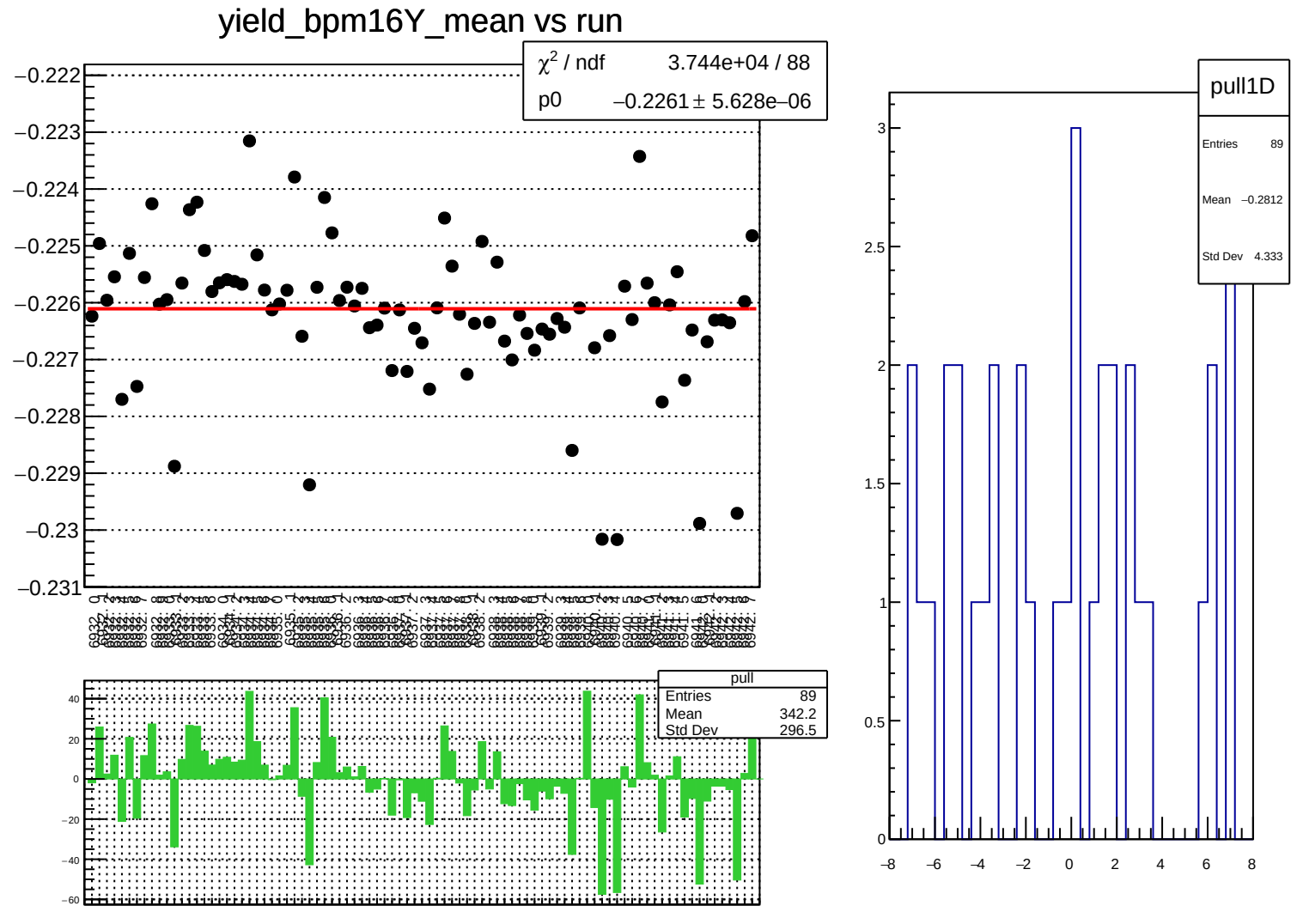

pull1D
Entries 89
Mean 0.5654
Std Dev 4.723
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

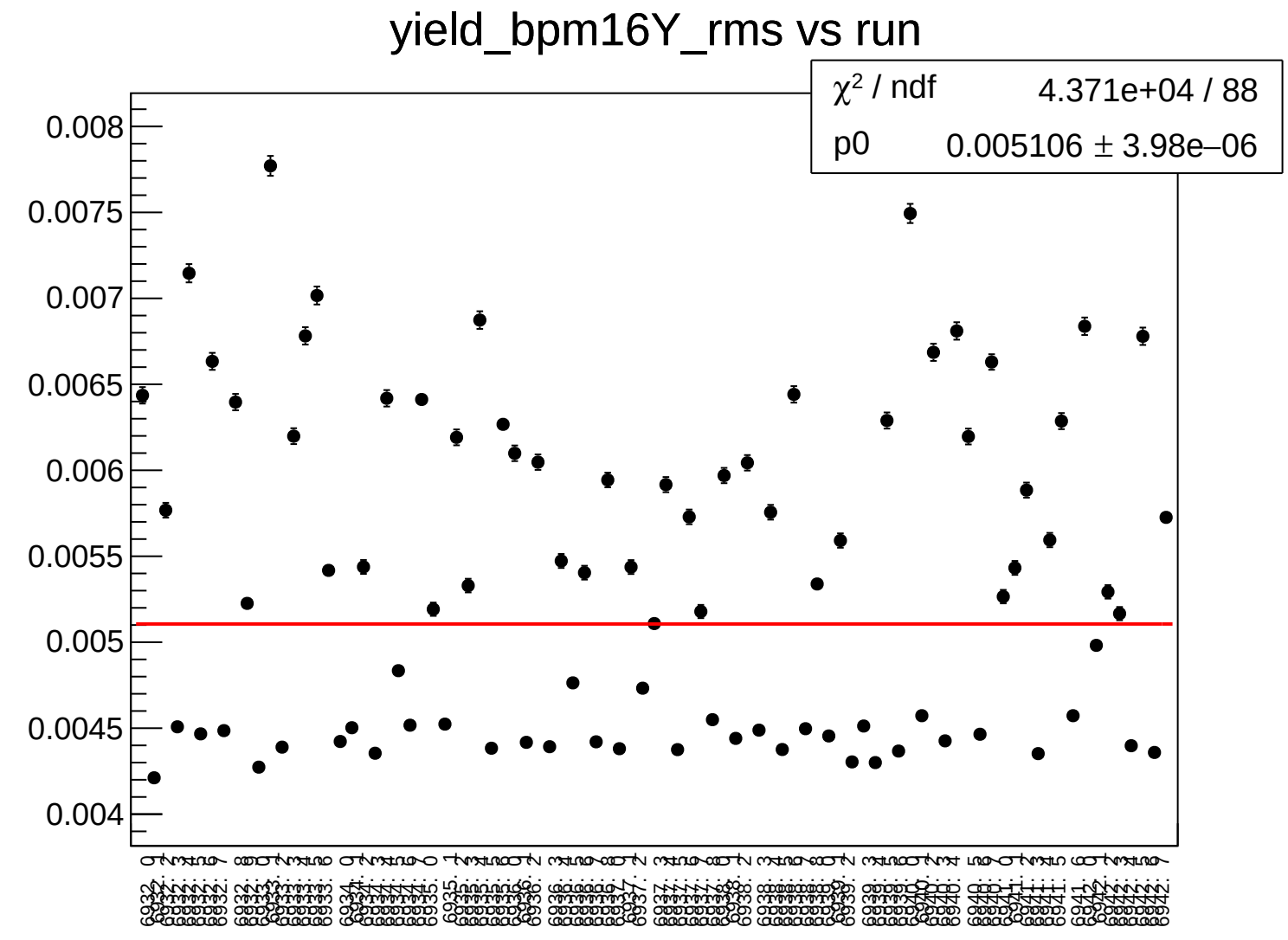

yield_bpm12Y_rms vs run
χ² / ndf 2.127e+04 / 88
p0 0.009712 ± 7.518e−06
0.014
0.013
0.012
0.011
0.01
0.009
0.008

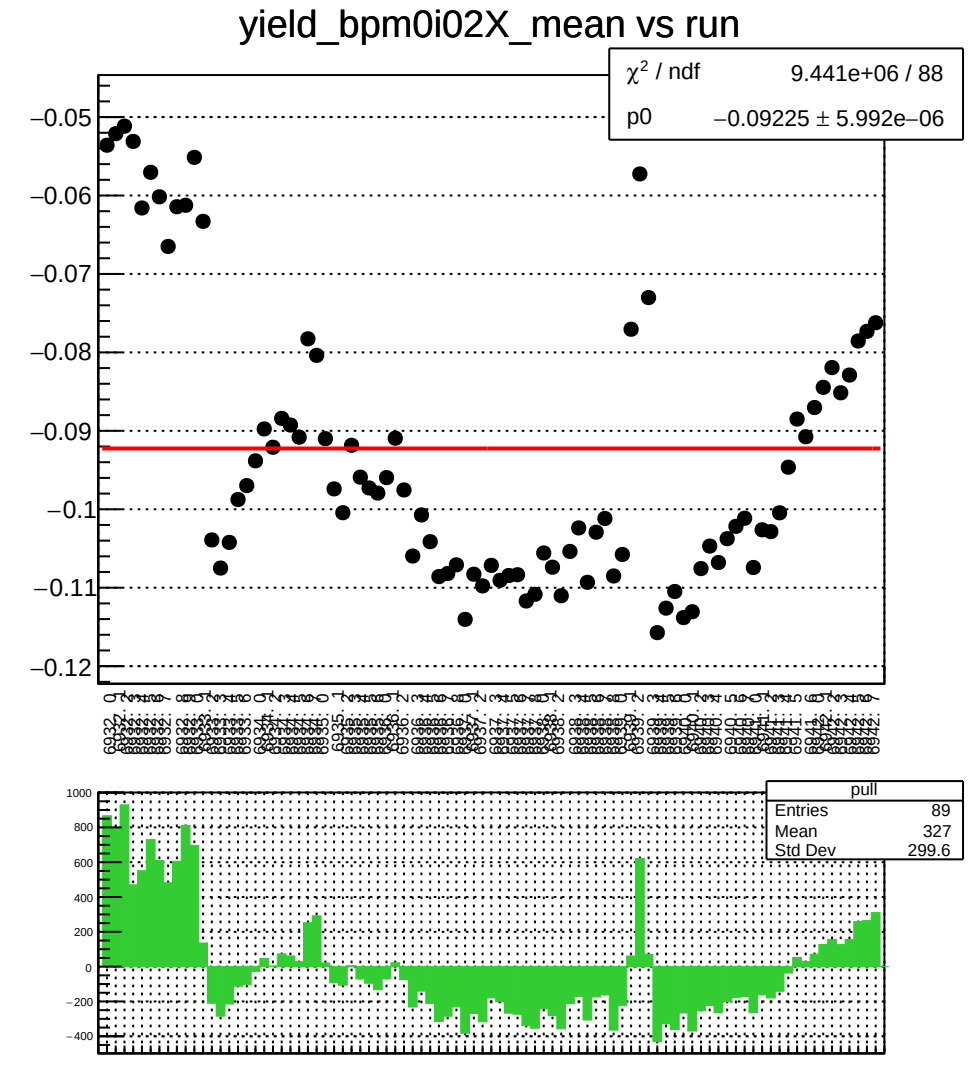

yield_bpm16X_mean vs run
χ² / ndf 3.214e+04 / 88
p0 −0.4336 ± 1.202e−05
−0.415
−0.42
−0.425
−0.43
−0.435
−0.44
−0.445
−0.45
pull
Entries 89
Mean 53.19
Std Dev 53.06
60
40
20
0
−20
−40

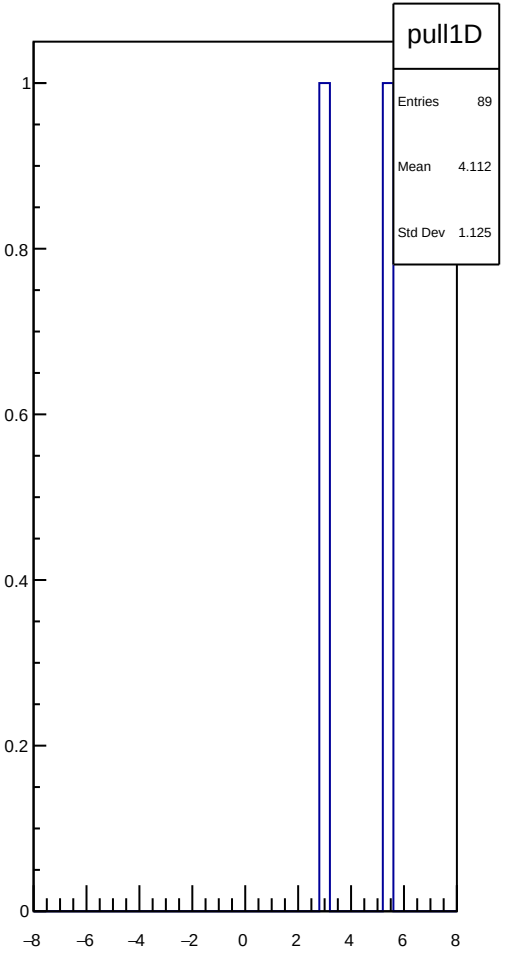

pull1D
Entries 89
Mean −0.7082
Std Dev 3.82
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

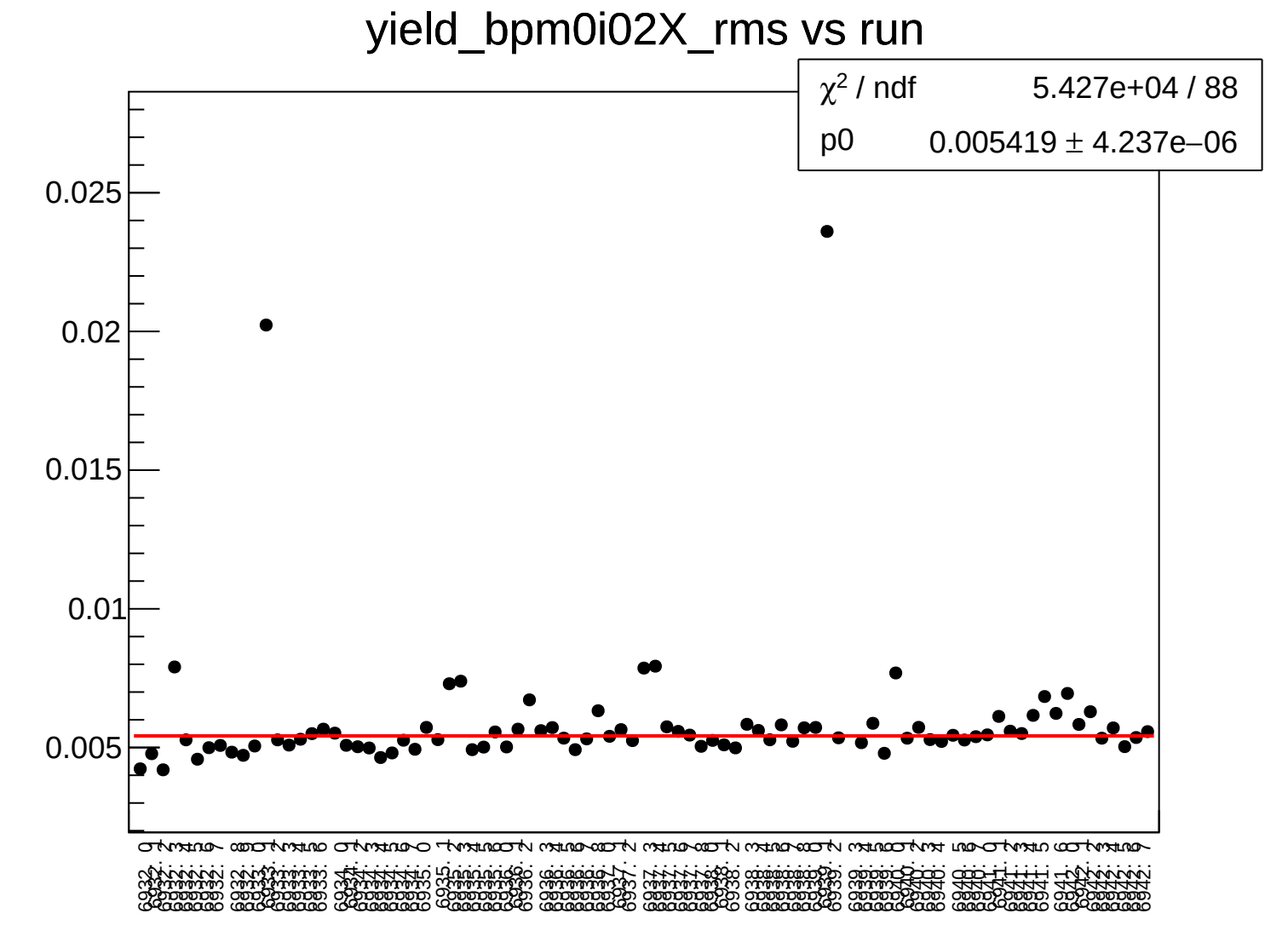

yield_bpm16X_rms vs run
χ² / ndf 2.273e+05 / 88
p0 0.01028 ± 8.498e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

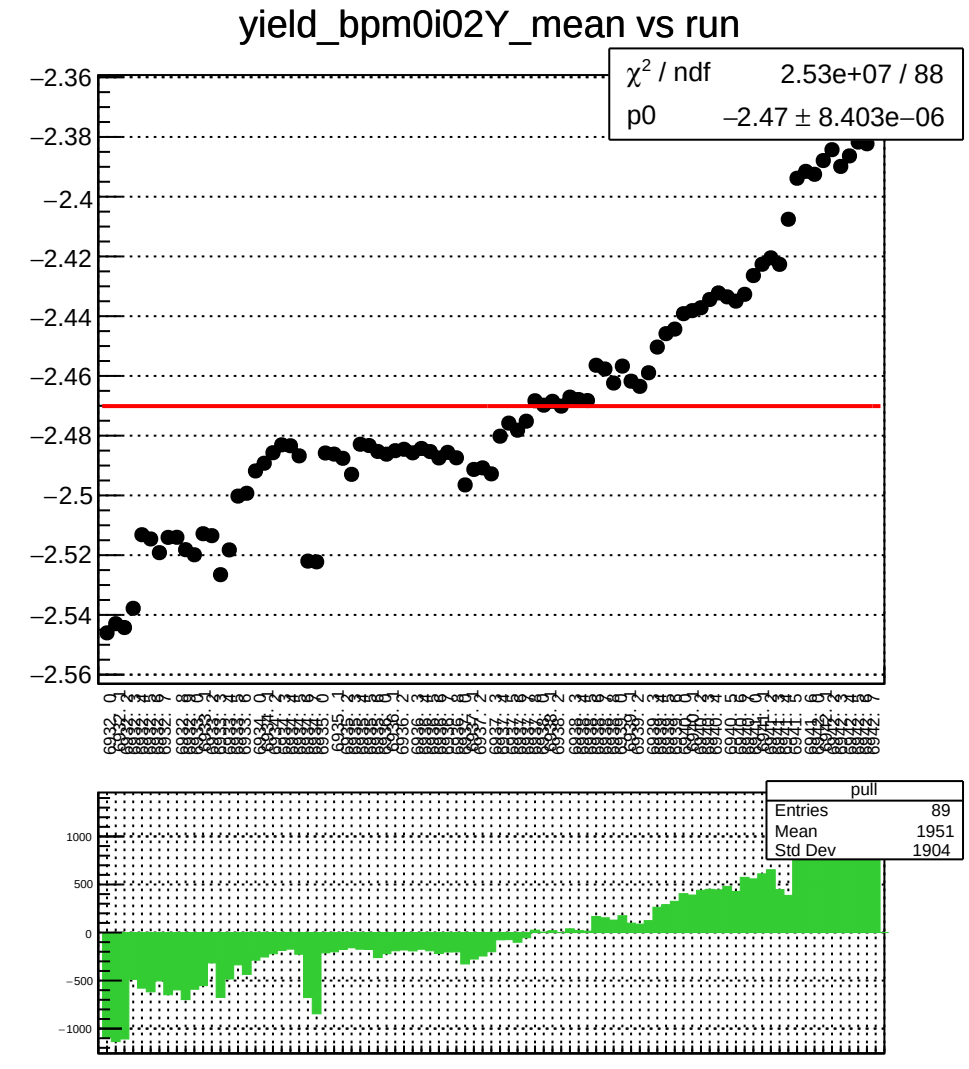

yield_bpm16Y_mean vs run
χ² / ndf 3.744e+04 / 88
p0 −0.2261 ± 5.628e−06
−0.222
−0.223
−0.224
−0.225
−0.226
−0.227
−0.228
−0.229
−0.23
−0.231
pull
Entries 89
Mean 342.2
Std Dev 296.5
40
20
0
−20
−40
−60
pull1D
Entries 89
Mean −0.2812
Std Dev 4.333
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

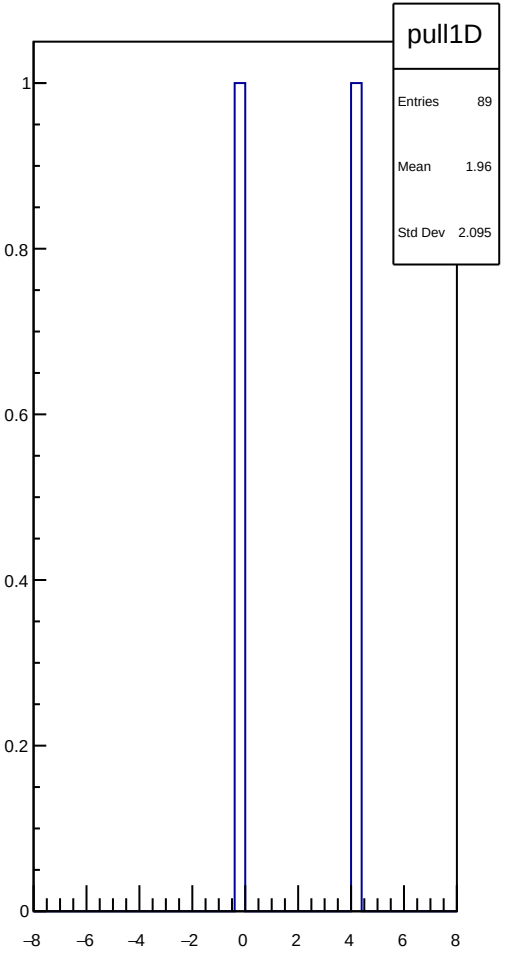

yield_bpm16Y_rms vs run
χ² / ndf 4.371e+04 / 88
p0 0.005106 ± 3.98e−06
0.008
0.0075
0.007
0.0065
0.006
0.0055
0.005
0.0045
0.004

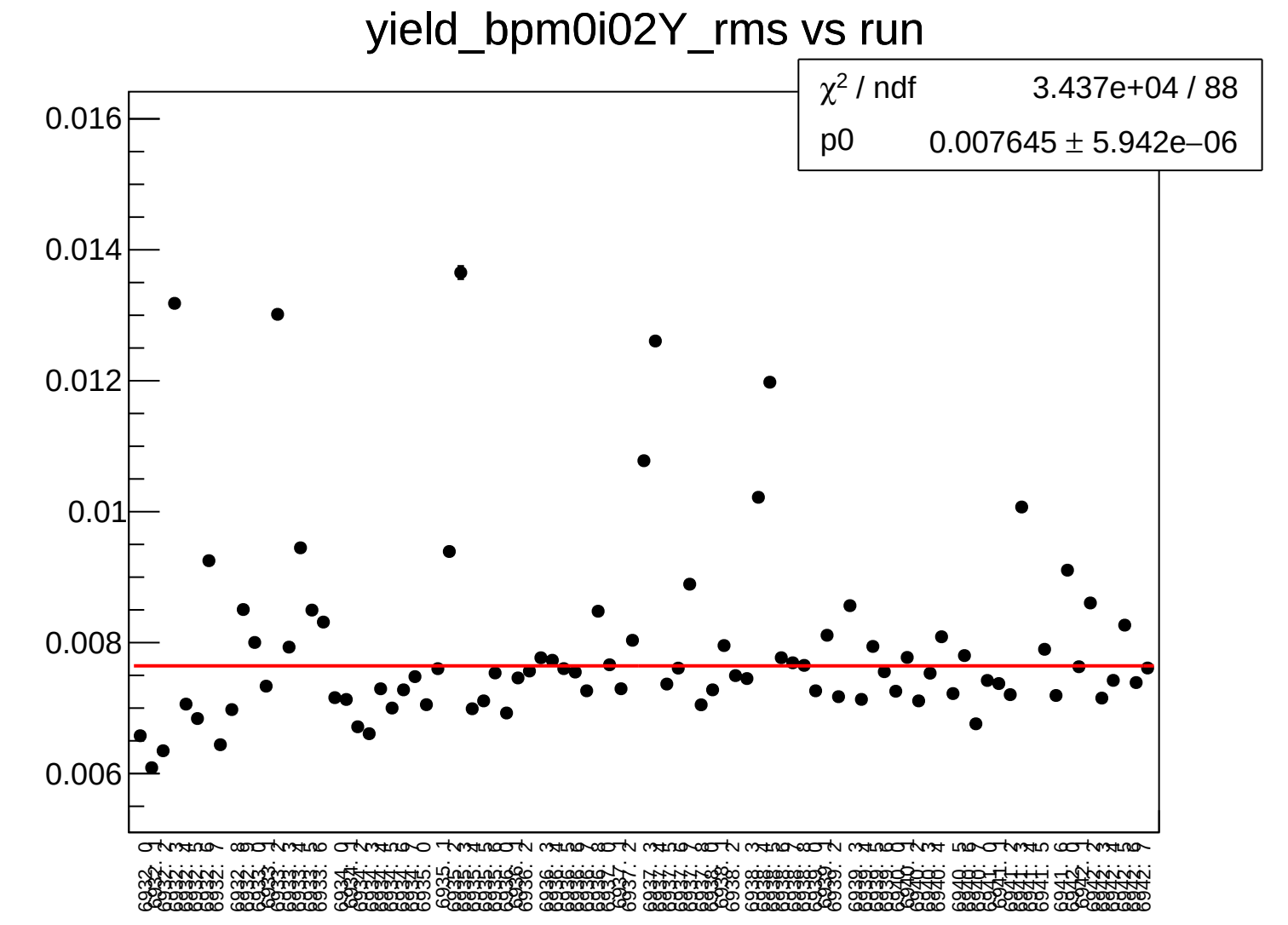

yield_bpm0i02X_mean vs run
χ² / ndf 9.441e+06 / 88
p0 −0.09225 ± 5.992e−06
−0.05
−0.06
−0.07
−0.08
−0.09
−0.1
−0.11
−0.12
pull
Entries 89
Mean 327
Std Dev 299.6
1000
800
600
400
200
0
−200
−400

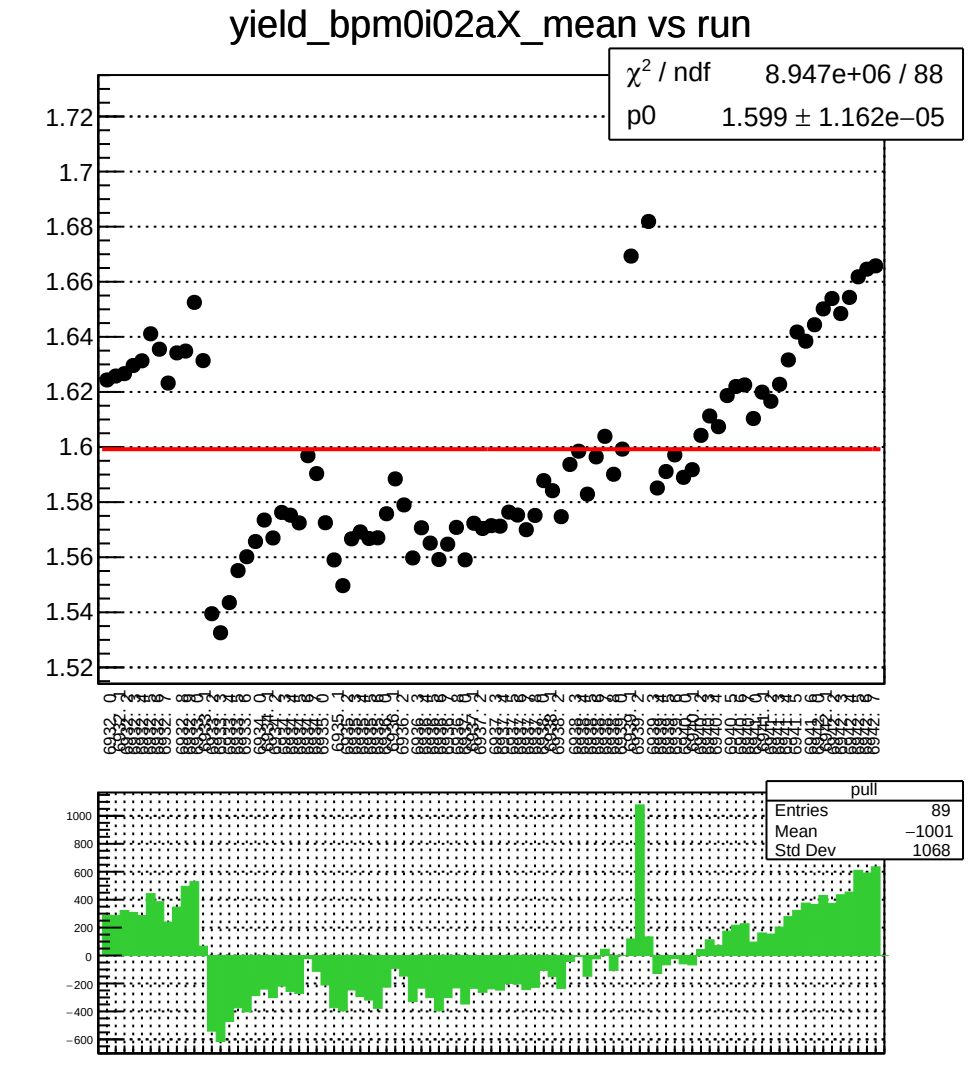

pull1D
Entries 89
Mean 4.112
Std Dev 1.125
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

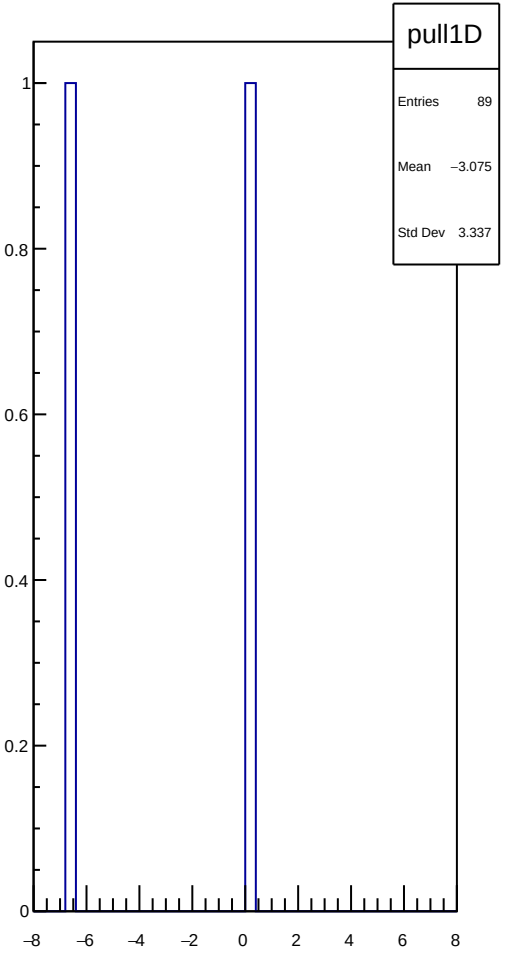

yield_bpm0i02X_rms vs run
χ² / ndf 5.427e+04 / 88
p0 0.005419 ± 4.237e−06
0.025
0.02
0.015
0.01
0.005

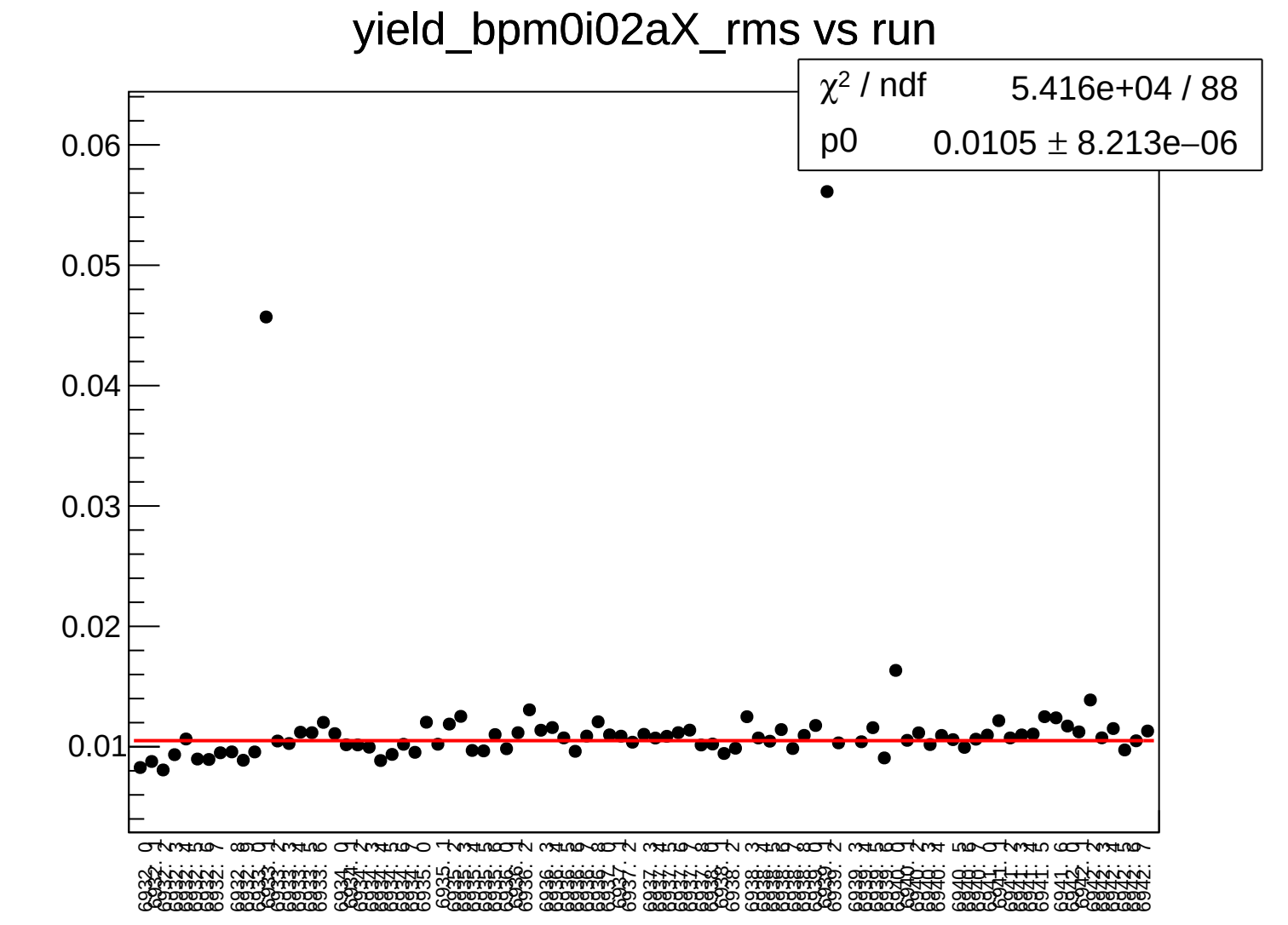

yield_bpm0i02Y_mean vs run
χ² / ndf 2.53e+07 / 88
p0 −2.47 ± 8.403e−06
−2.36
−2.38
−2.4
−2.42
−2.44
−2.46
−2.48
−2.5
−2.52
−2.54
−2.56
pull
Entries 89
Mean 1951
Std Dev 1904
1000
500
0
−500
−1000

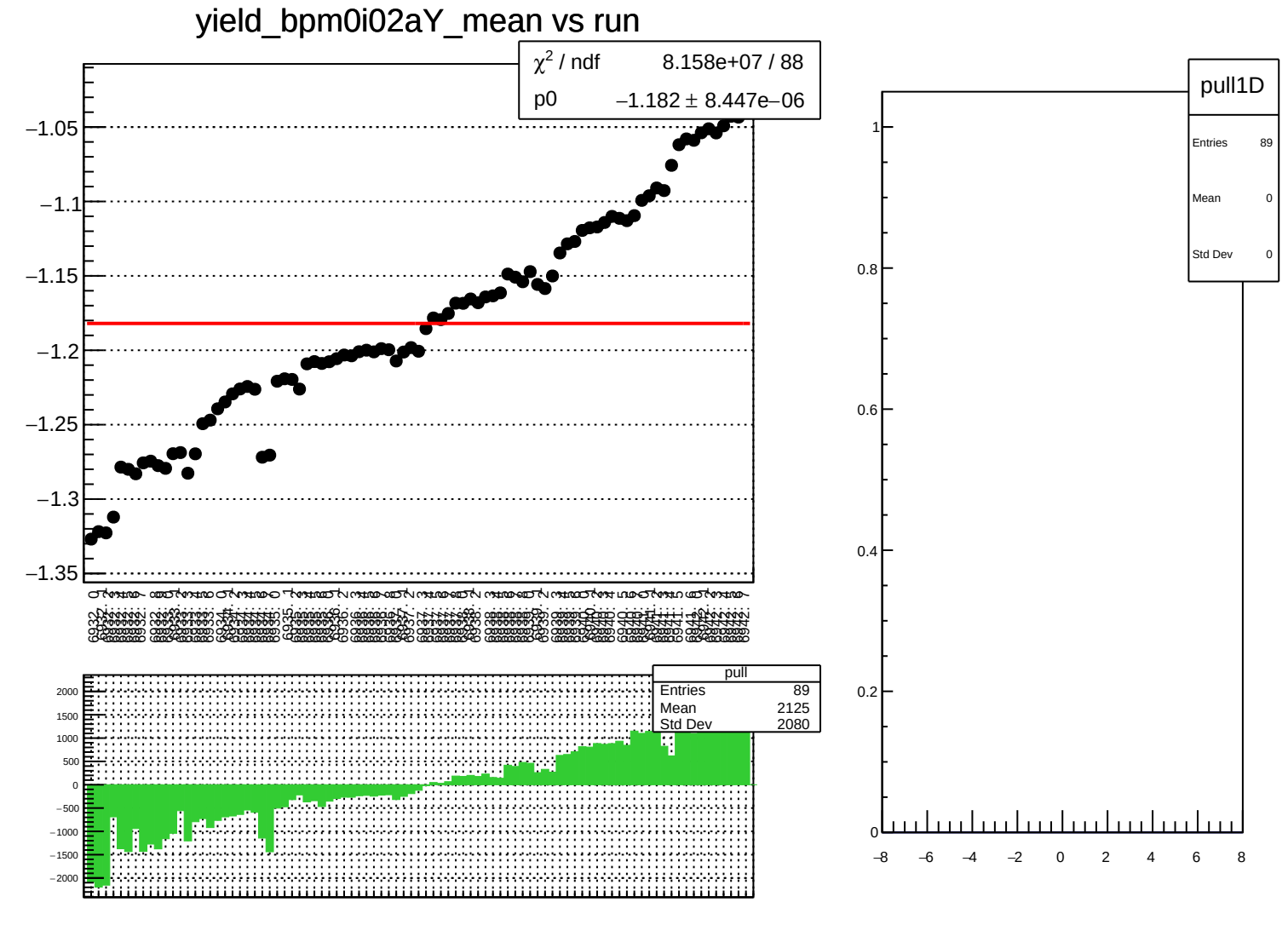

pull1D
Entries 89
Mean 1.96
Std Dev 2.095
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

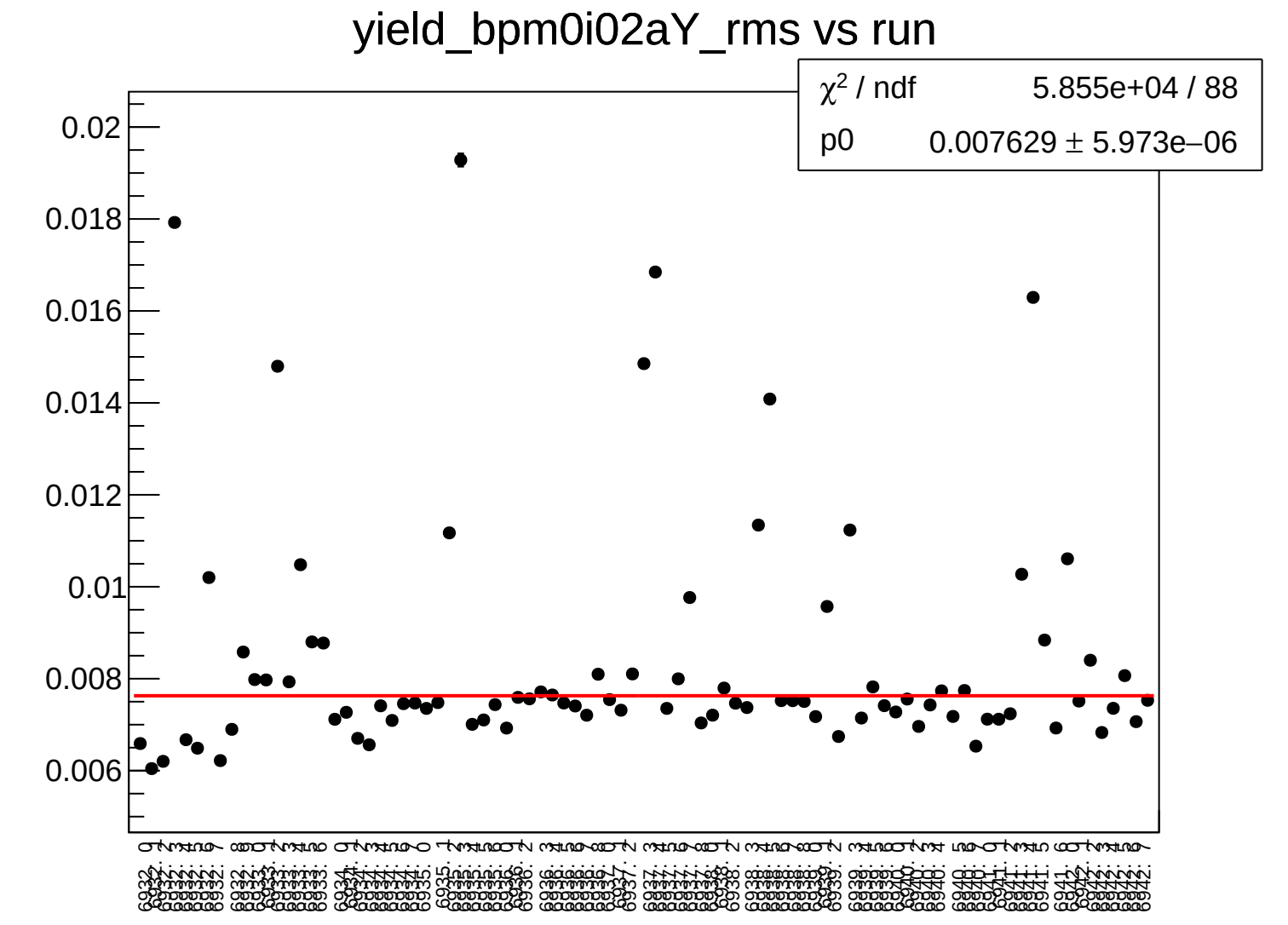

yield_bpm0i02Y_rms vs run
χ² / ndf 3.437e+04 / 88
p0 0.007645 ± 5.942e−06
0.016
0.014
0.012
0.01
0.008
0.006

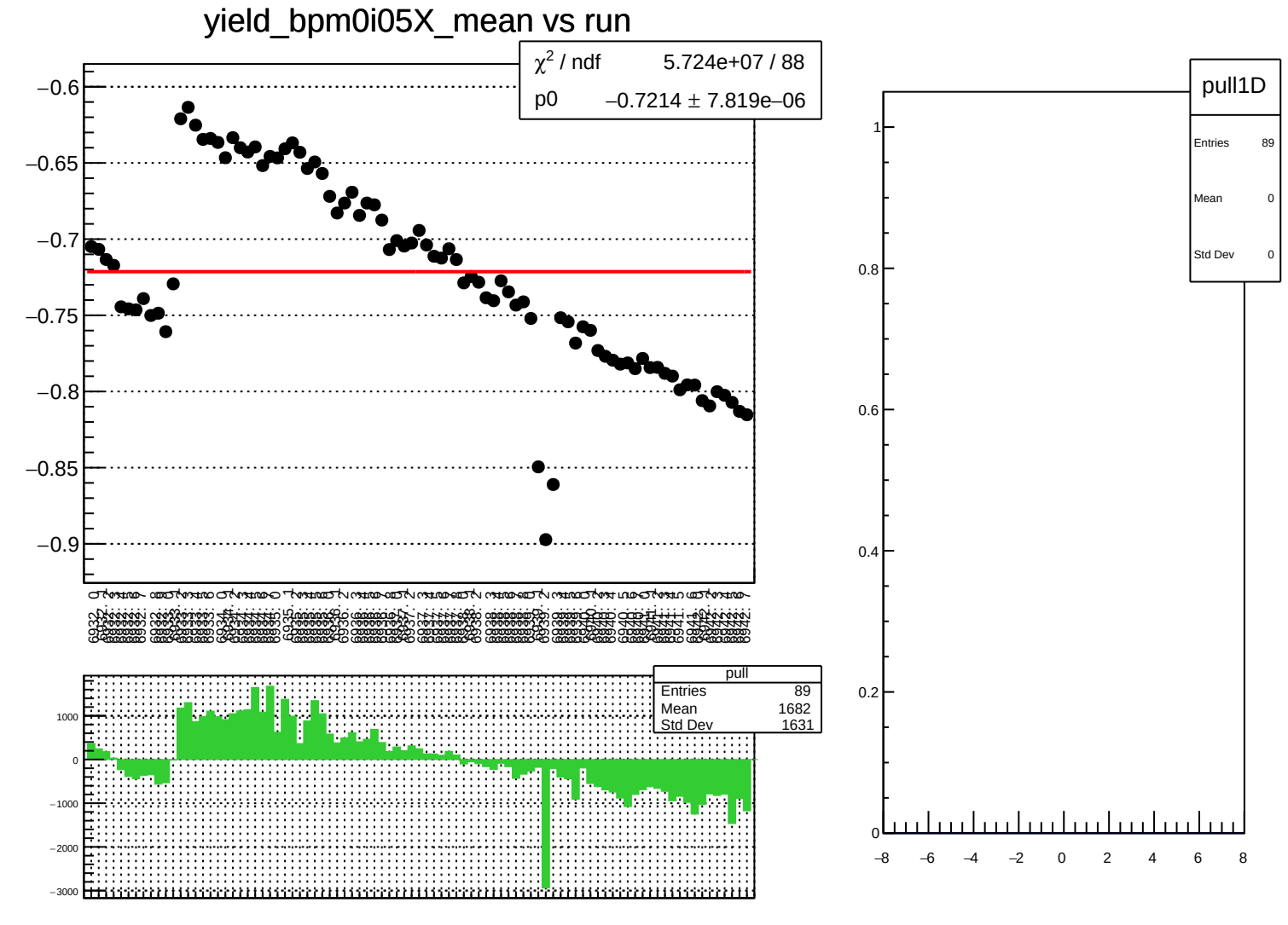

yield_bpm0i02aX_mean vs run
χ² / ndf 8.947e+06 / 88
p0 1.599 ± 1.162e−05
pull
Entries 89
Mean −1001
Std Dev 1068

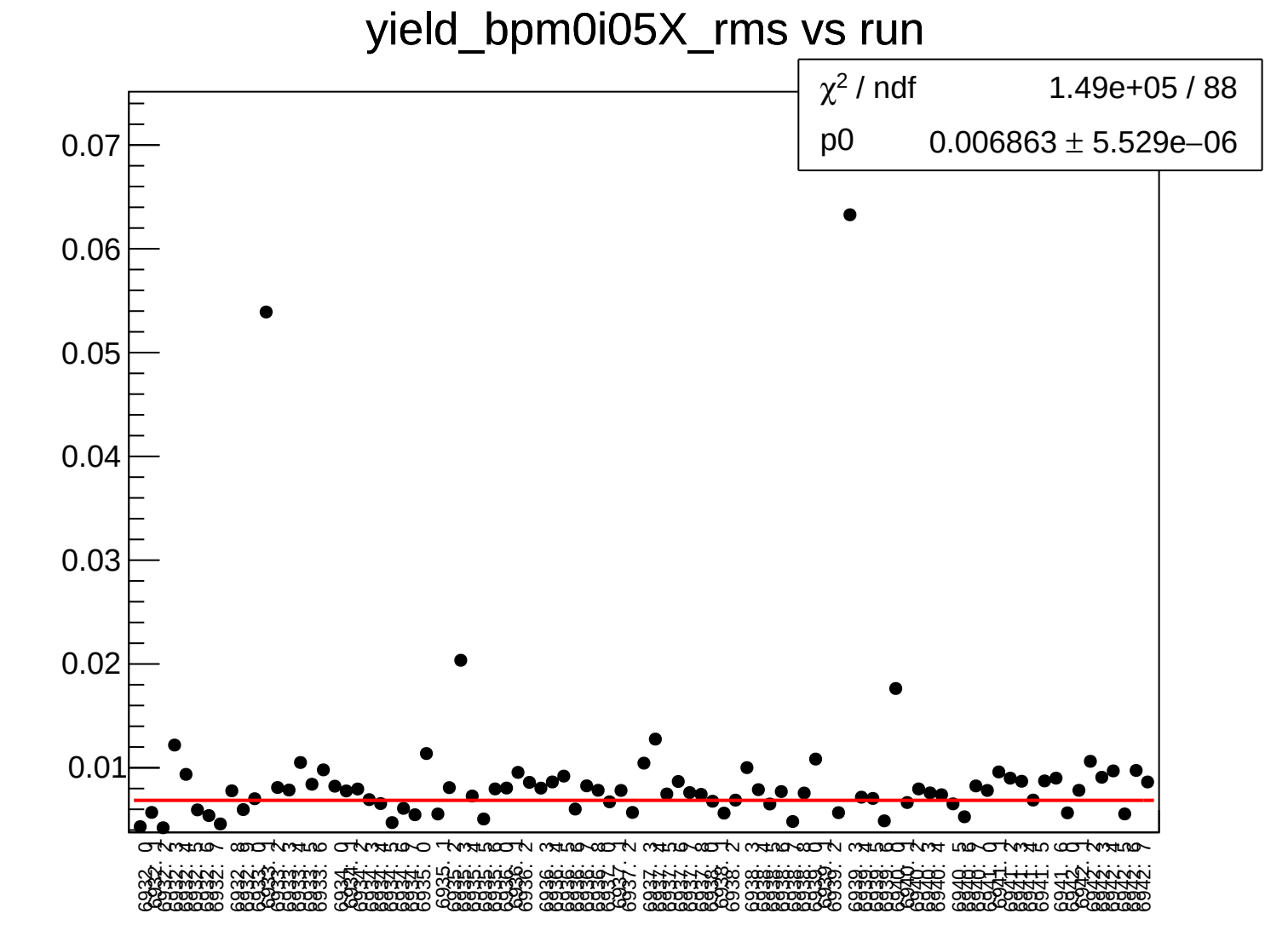

pull1D
Entries 89
Mean −3.075
Std Dev 3.337

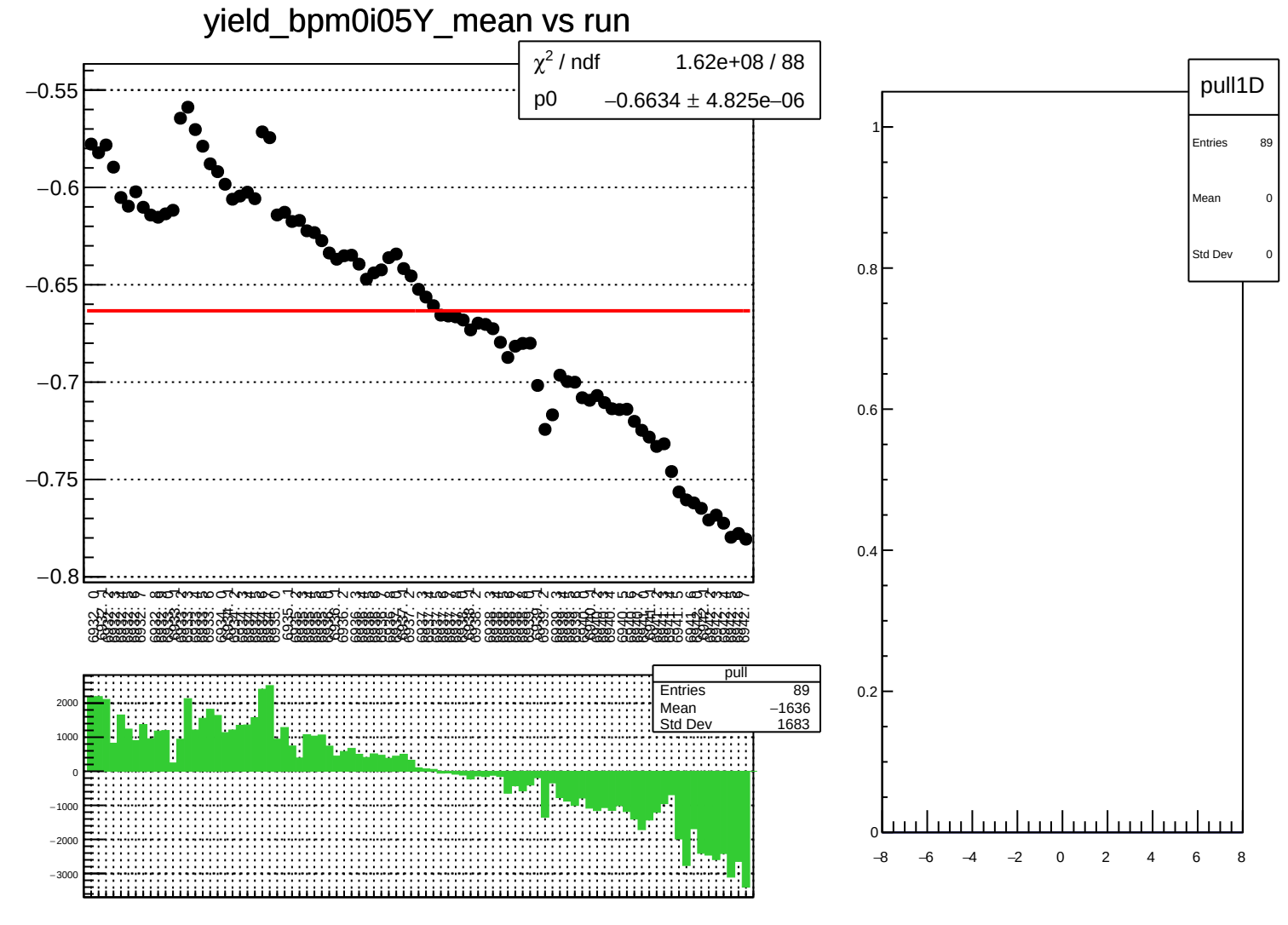

yield_bpm0i02aX_rms vs run
χ² / ndf 5.416e+04 / 88
p0 0.0105 ± 8.213e−06
0.06
0.05
0.04
0.03
0.02
0.01

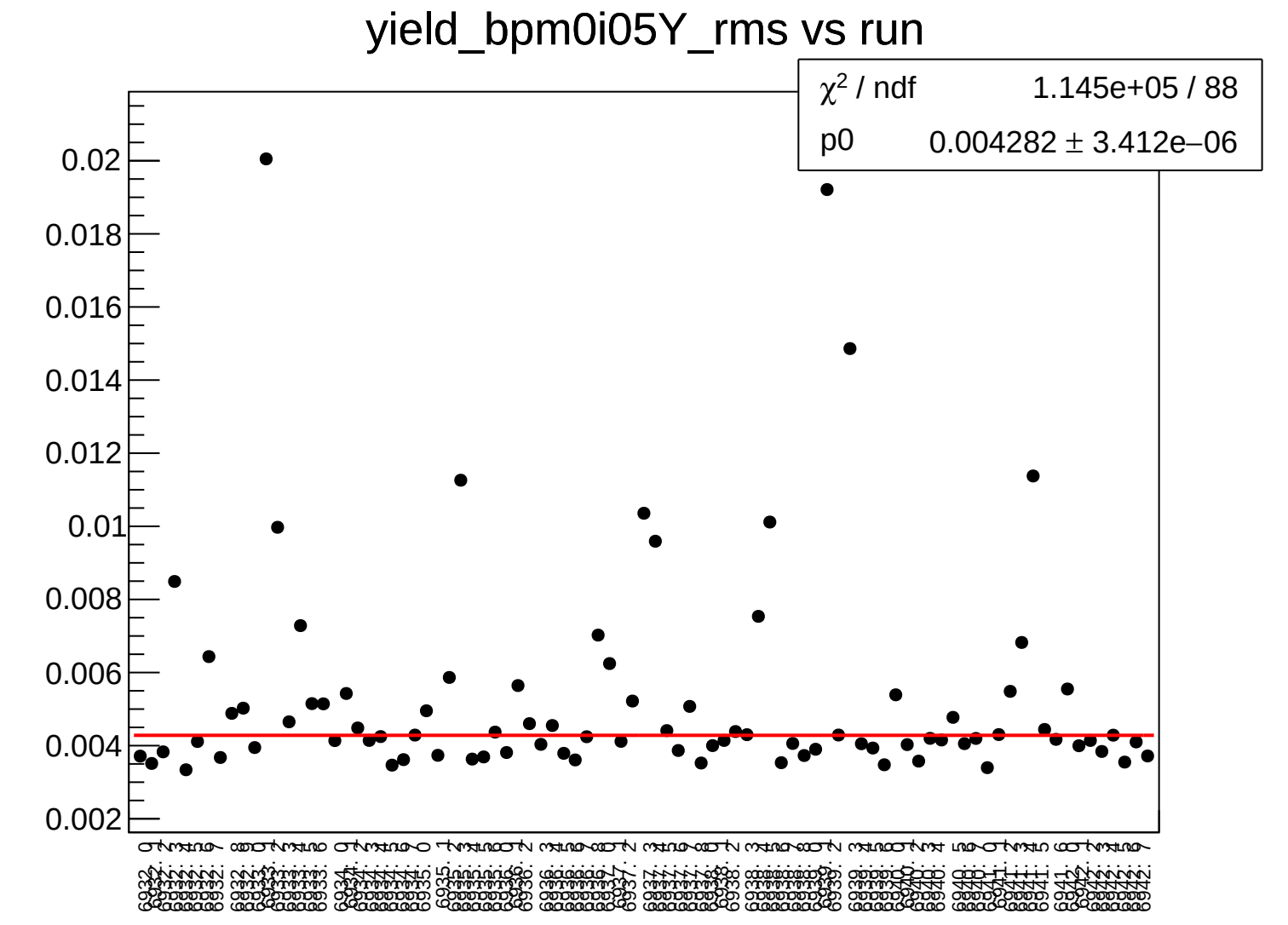

yield_bpm0i02aY_mean vs run
χ² / ndf 8.158e+07 / 88
p0 −1.182 ± 8.447e−06
−1.05
−1.1
−1.15
−1.2
−1.25
−1.3
−1.35
pull
Entries 89
Mean 2125
Std Dev 2080
2000
1500
1000
500
0
−500
−1000
−1500
−2000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

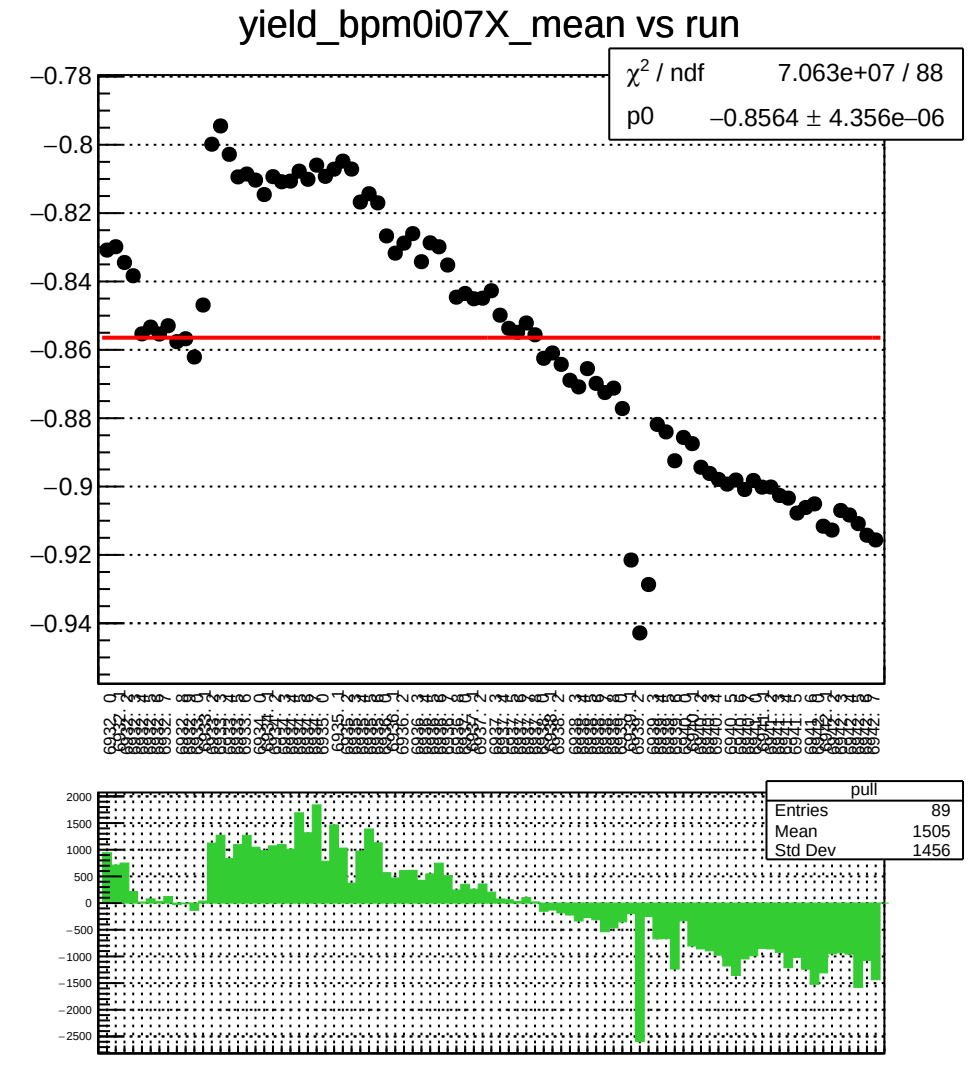

yield_bpm0i02aY_rms vs run
χ² / ndf 5.855e+04 / 88
p0 0.007629 ± 5.973e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006

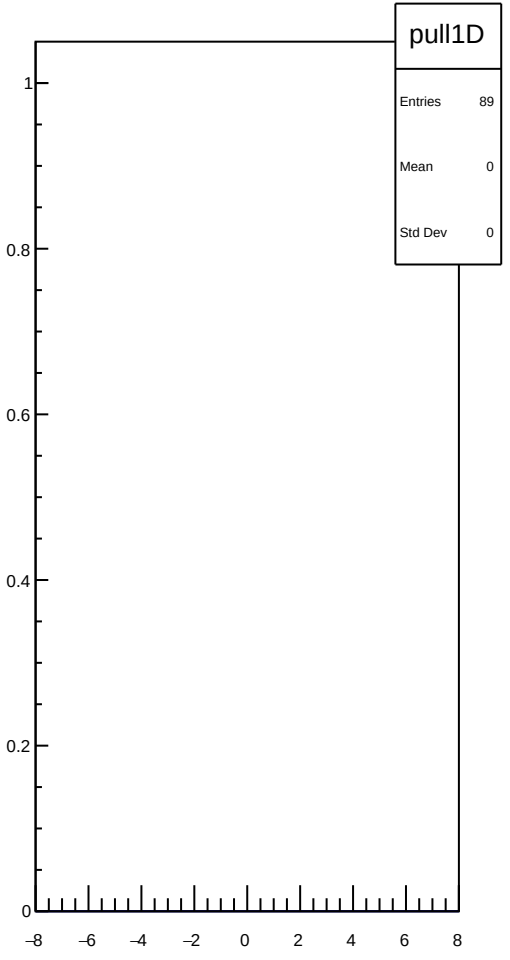

yield_bpm0i05X_mean vs run
χ² / ndf 5.724e+07 / 88
p0 −0.7214 ± 7.819e−06
−0.6
−0.65
−0.7
−0.75
−0.8
−0.85
−0.9
pull
Entries 89
Mean 1682
Std Dev 1631
1000
0
−1000
−2000
−3000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

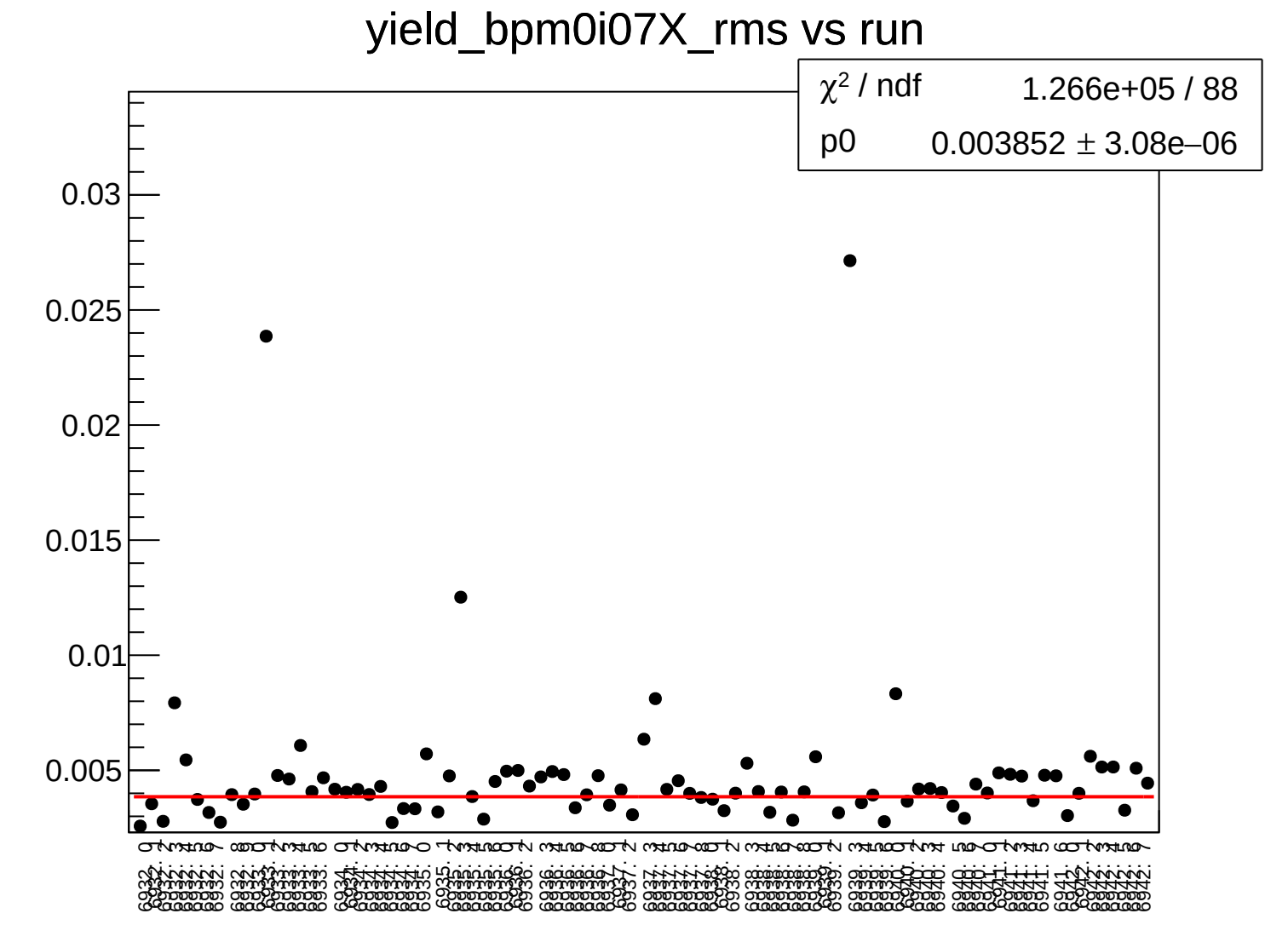

yield_bpm0i05X_rms vs run
χ² / ndf 1.49e+05 / 88
p0 0.006863 ± 5.529e−06
0.07
0.06
0.05
0.04
0.03
0.02
0.01

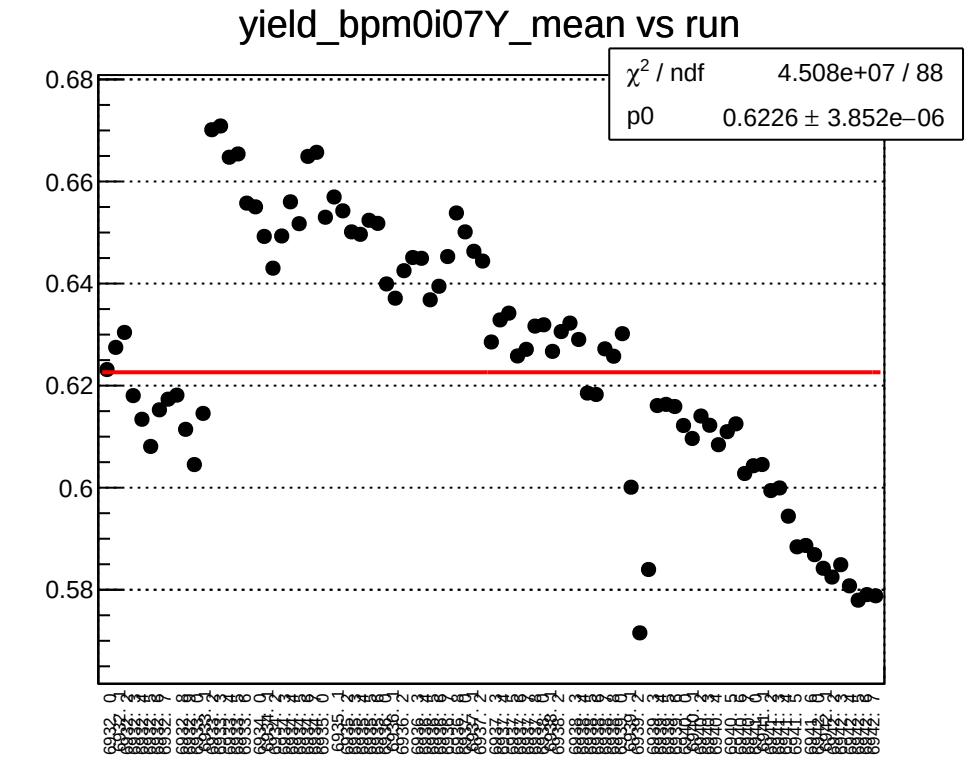

yield_bpm0i05Y_mean vs run
χ² / ndf 1.62e+08 / 88
p0 −0.6634 ± 4.825e−06
−0.55
−0.6
−0.65
−0.7
−0.75
−0.8
pull
Entries 89
Mean −1636
Std Dev 1683
2000
1000
0
−1000
−2000
−3000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

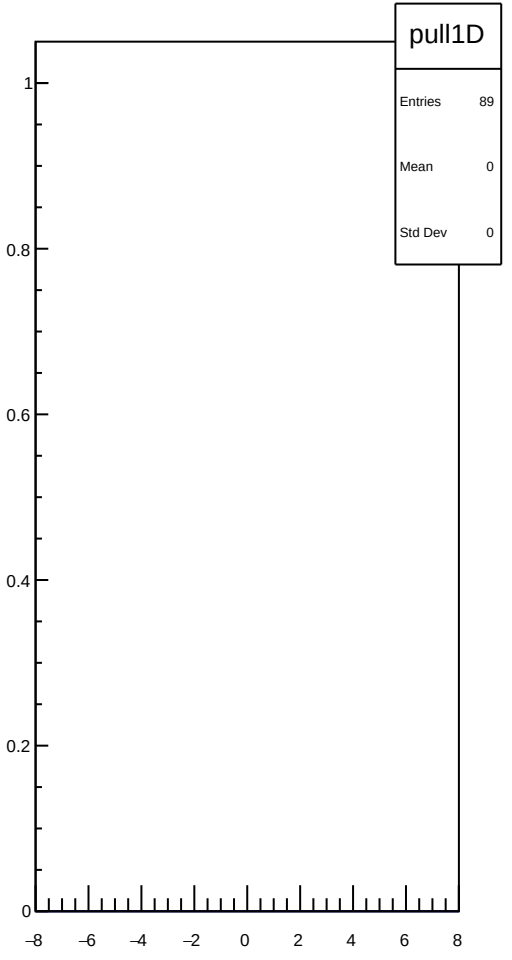

yield_bpm0i05Y_rms vs run
χ² / ndf 1.145e+05 / 88
p0 0.004282 ± 3.412e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

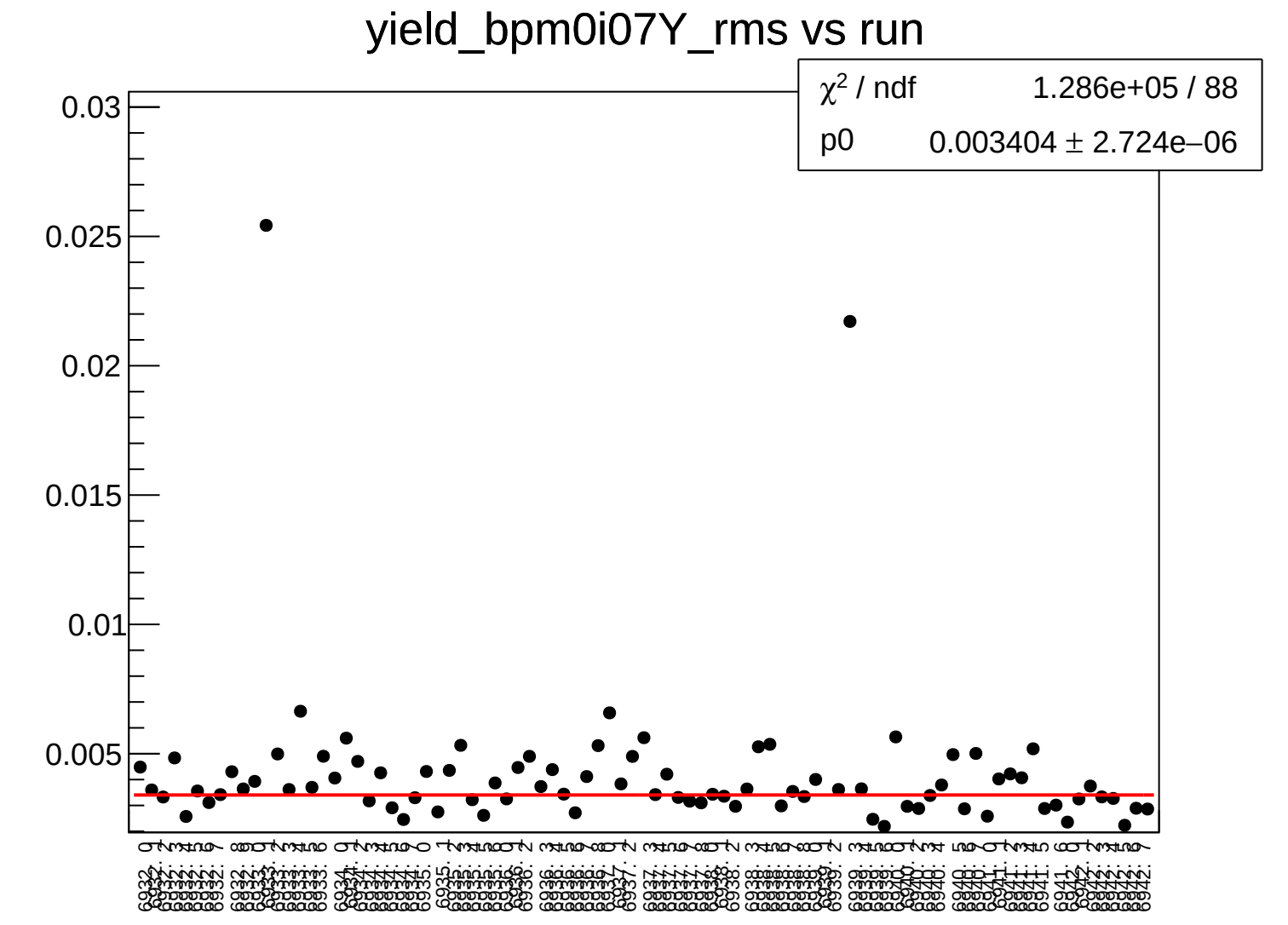

yield_bpm0i07X_mean vs run
χ² / ndf 7.063e+07 / 88
p0 −0.8564 ± 4.356e−06
−0.78
−0.8
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
pull
Entries 89
Mean 1505
Std Dev 1456
2000
1500
1000
500
0
−500
−1000
−1500
−2000
−2500

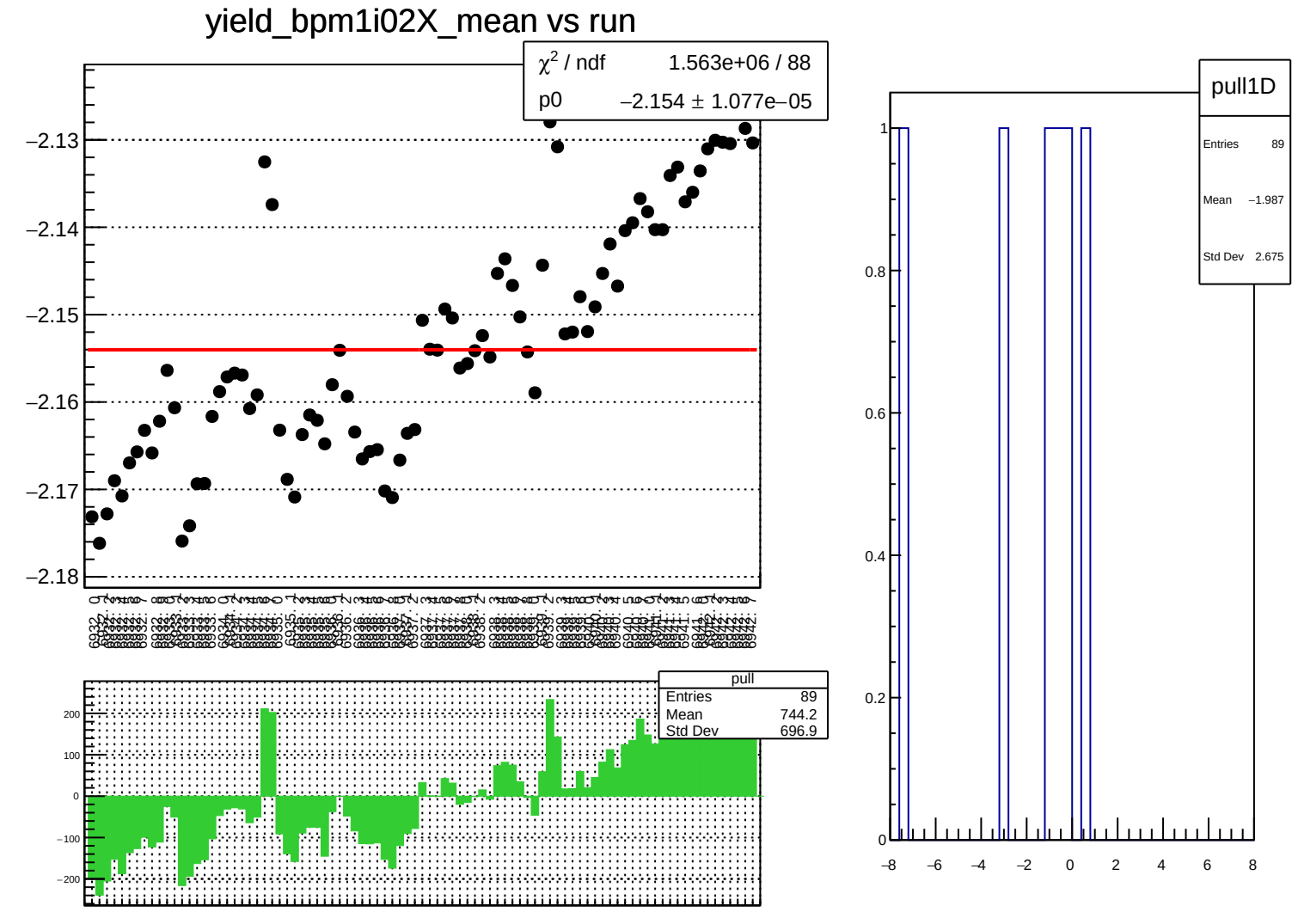

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

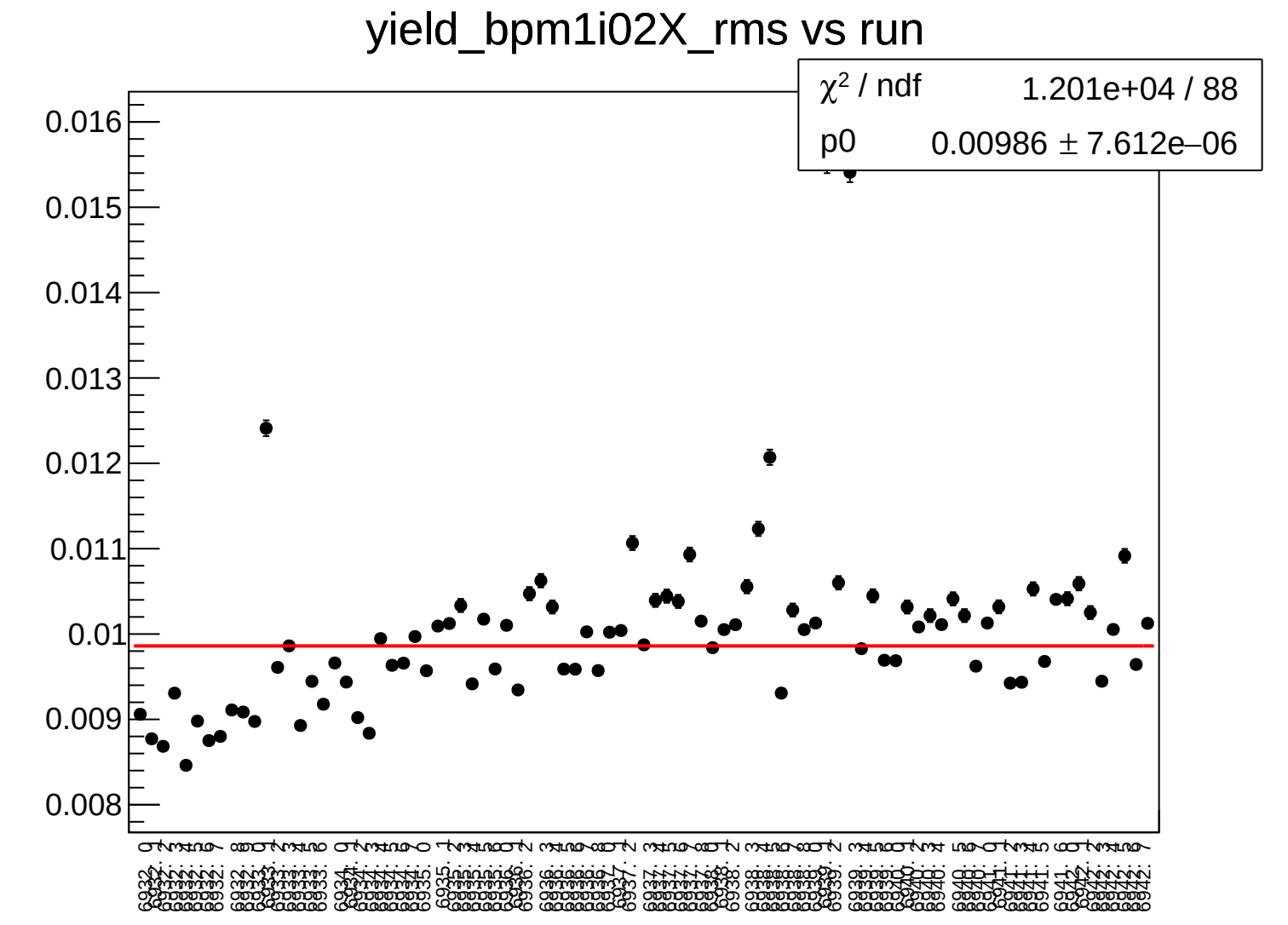

yield_bpm0i07X_rms vs run
χ² / ndf 1.266e+05 / 88
p0 0.003852 ± 3.08e–06
0.03
0.025
0.02
0.015
0.01
0.005

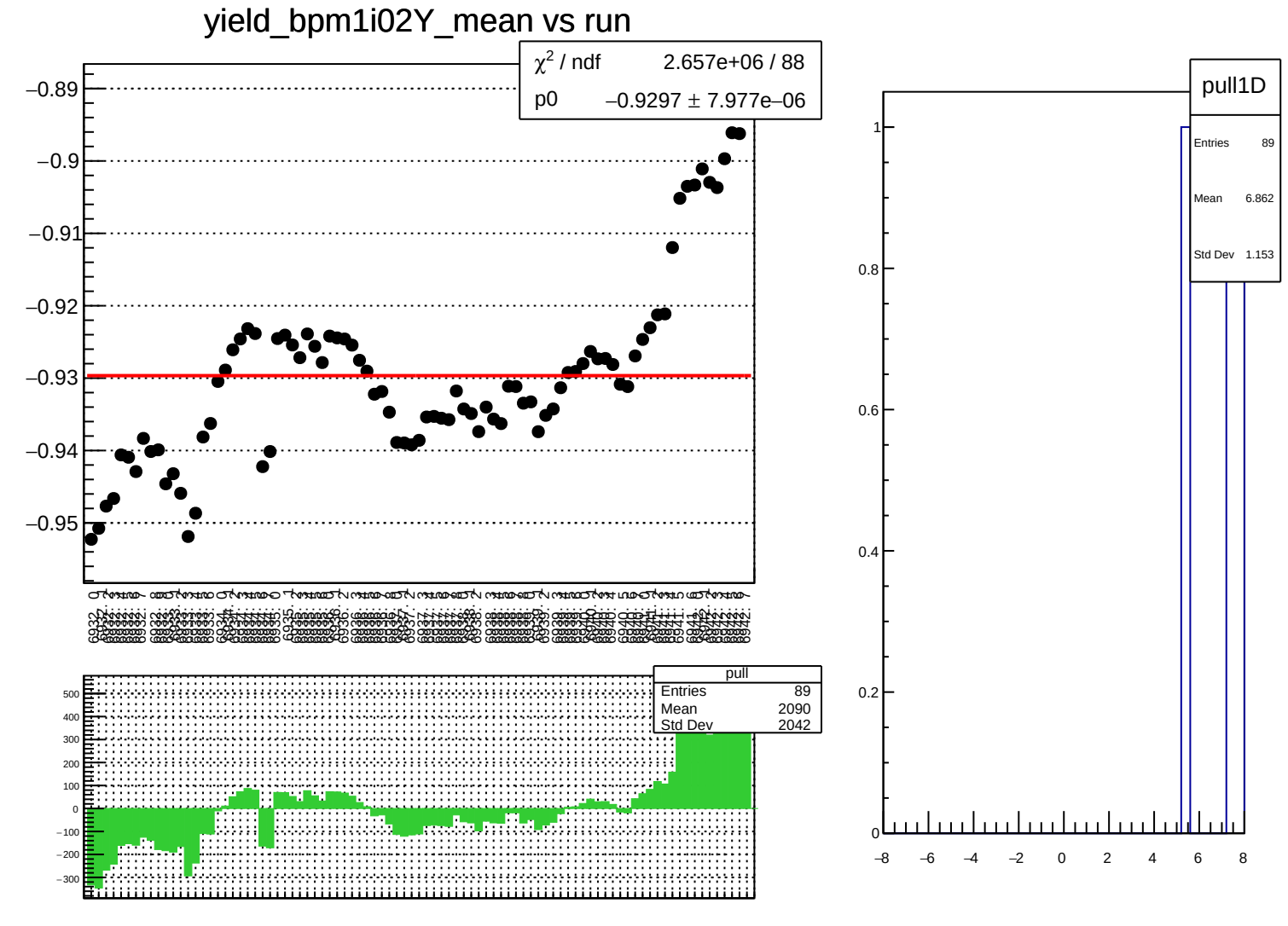

yield_bpm0i07Y_mean vs run
χ² / ndf 4.508e+07 / 88
p0 0.6226 ± 3.852e−06
0.68
0.66
0.64
0.62
0.6
0.58
pull
Entries 89
Mean −262.9
Std Dev 315.9
1500
1000
500
0
−500
−1000
−1500
−2000

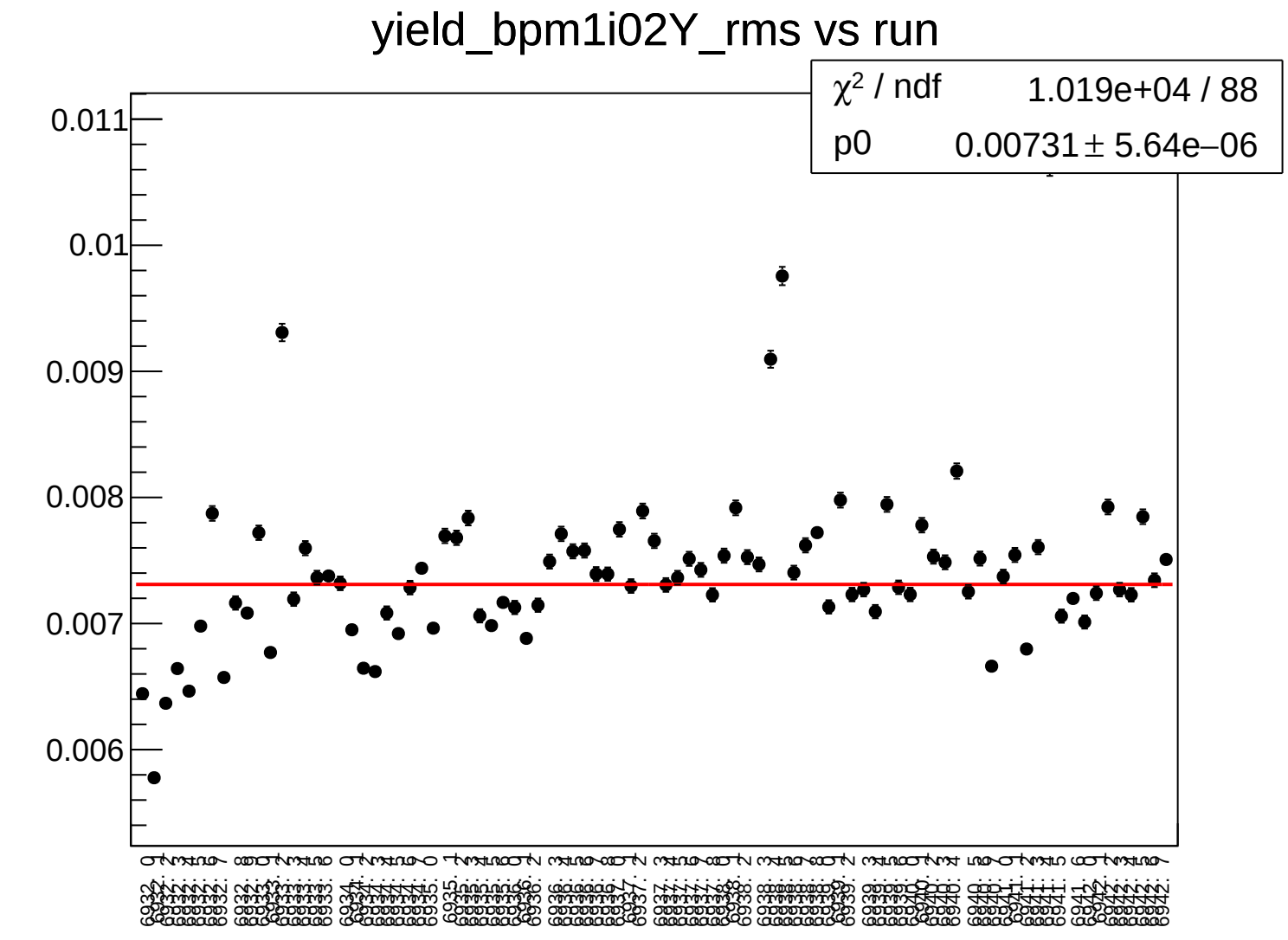

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

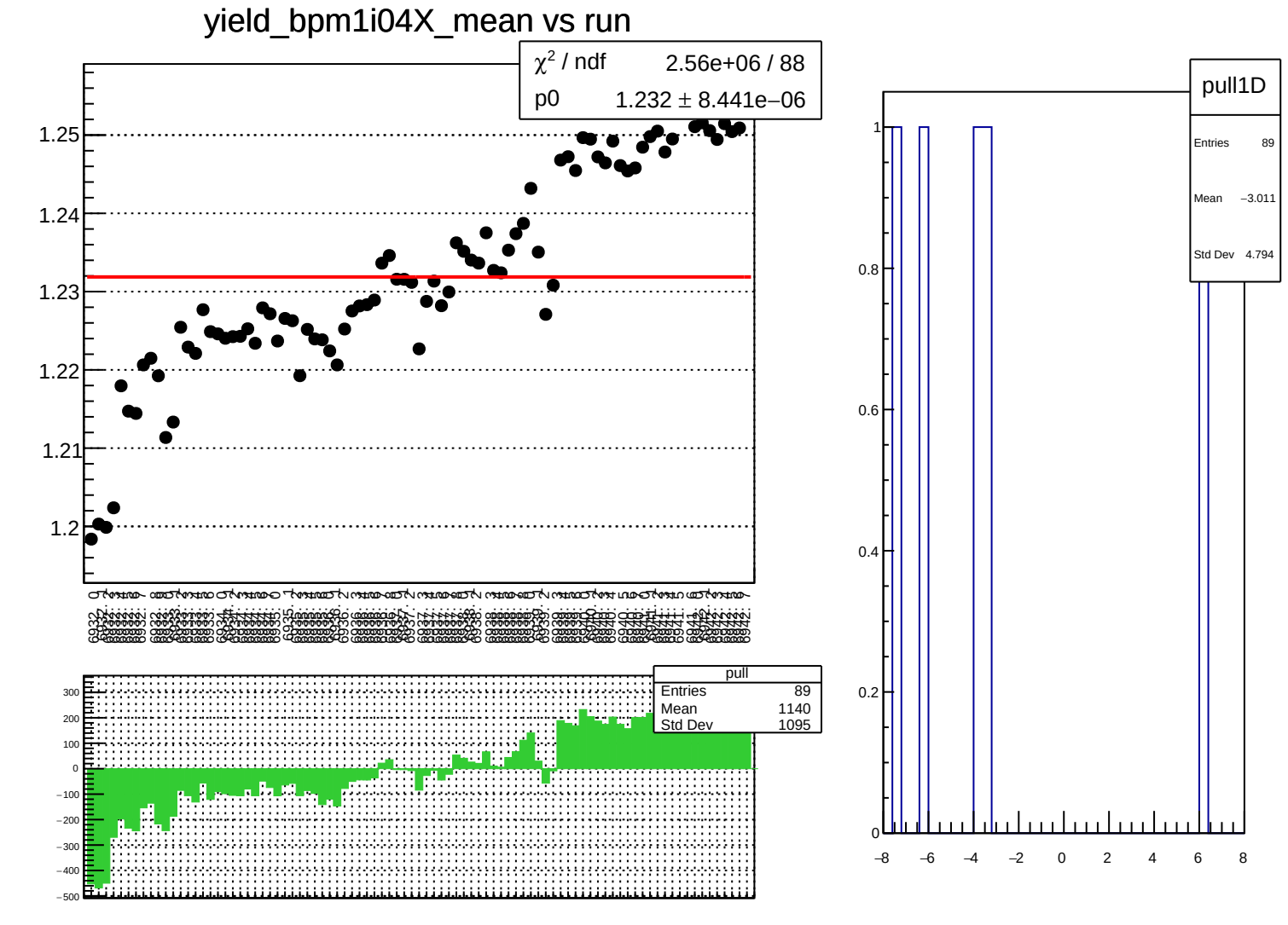

yield_bpm0i07Y_rms vs run
χ² / ndf 1.286e+05 / 88
p0 0.003404 ± 2.724e−06
0.03
0.025
0.02
0.015
0.01
0.005

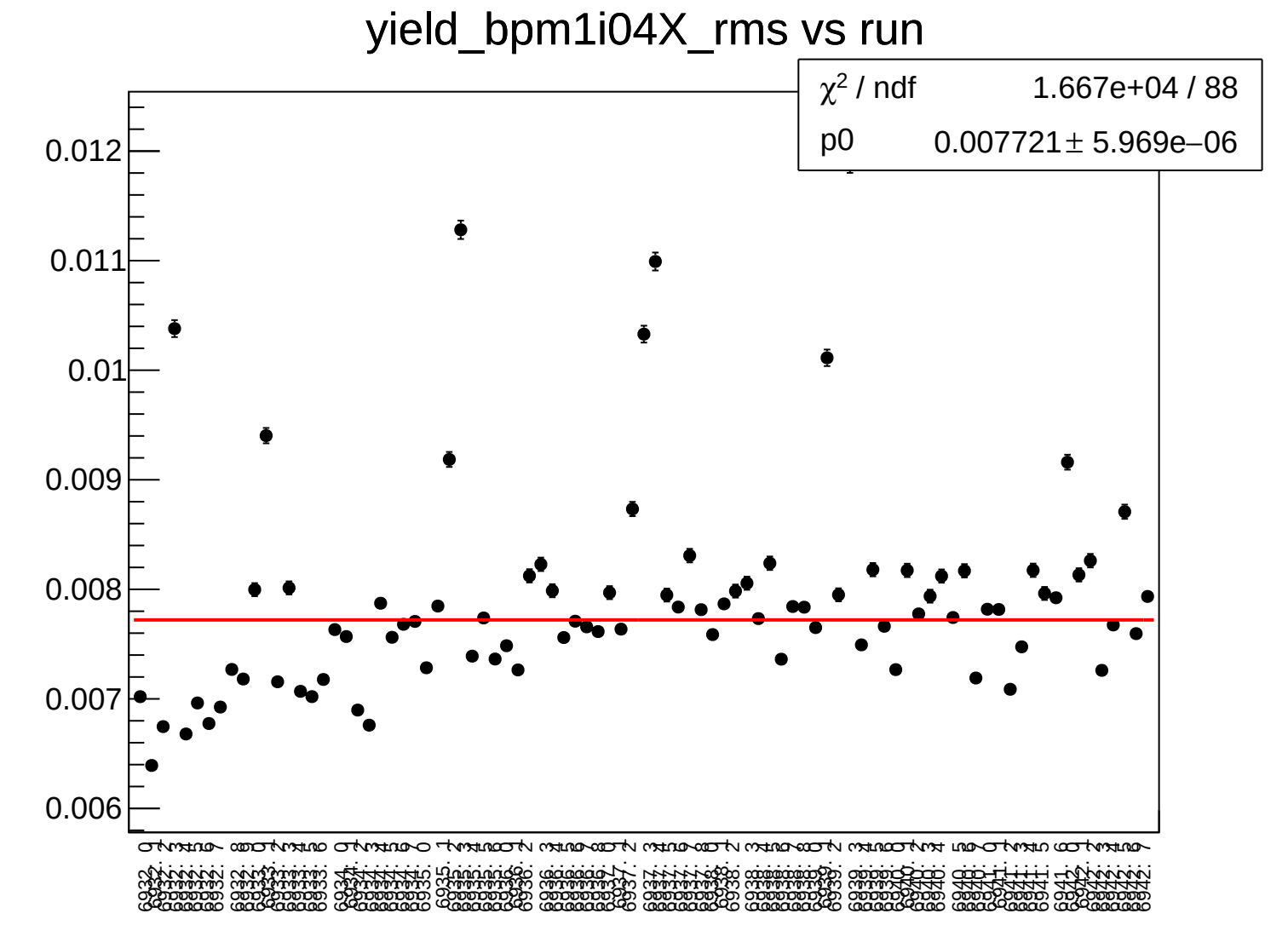

yield_bpm1i02X_mean vs run
χ² / ndf 1.563e+06 / 88
p0 −2.154 ± 1.077e−05
−2.13
−2.14
−2.15
−2.16
−2.17
−2.18
pull
Entries 89
Mean 744.2
Std Dev 696.9
200
100
0
−100
−200
pull1D
Entries 89
Mean −1.987
Std Dev 2.675
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

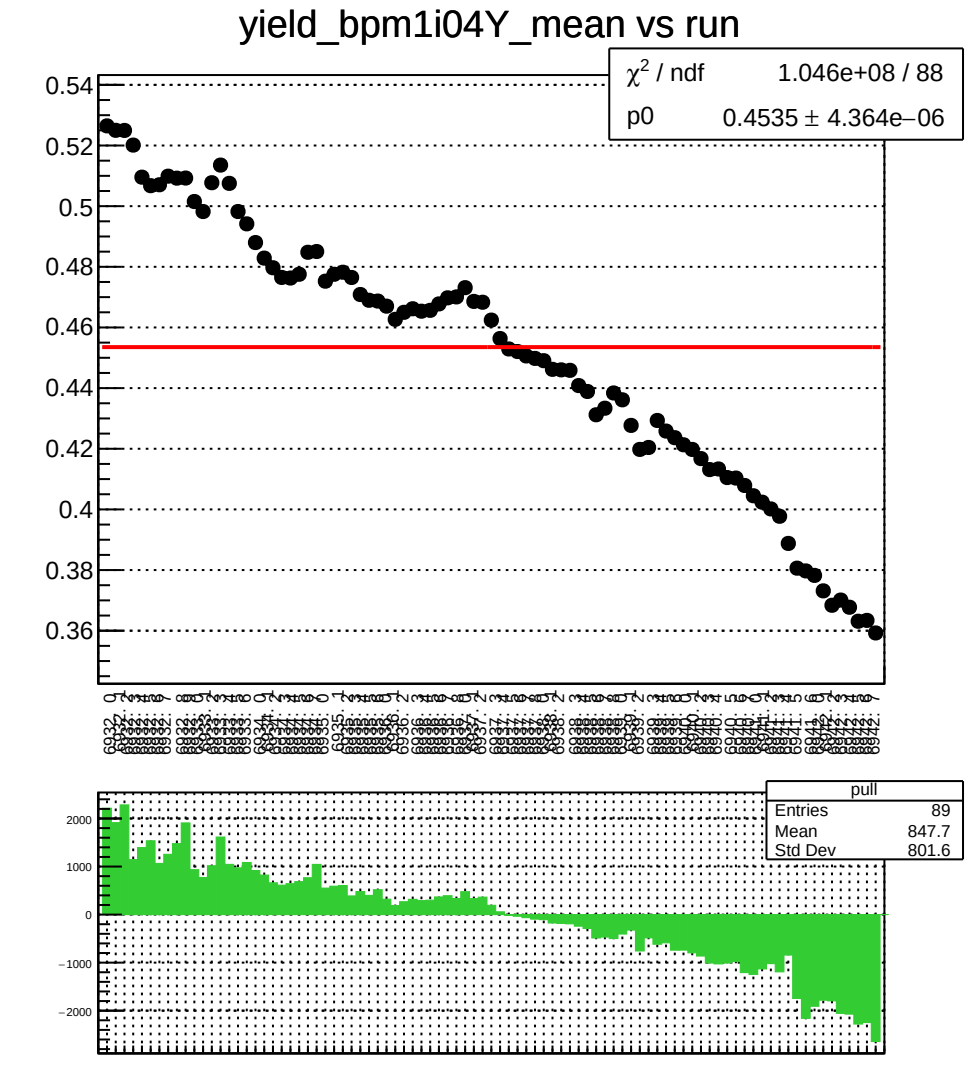

yield_bpm1i02X_rms vs run
χ² / ndf 1.201e+04 / 88
p0 0.00986 ± 7.612e–06
0.016
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008

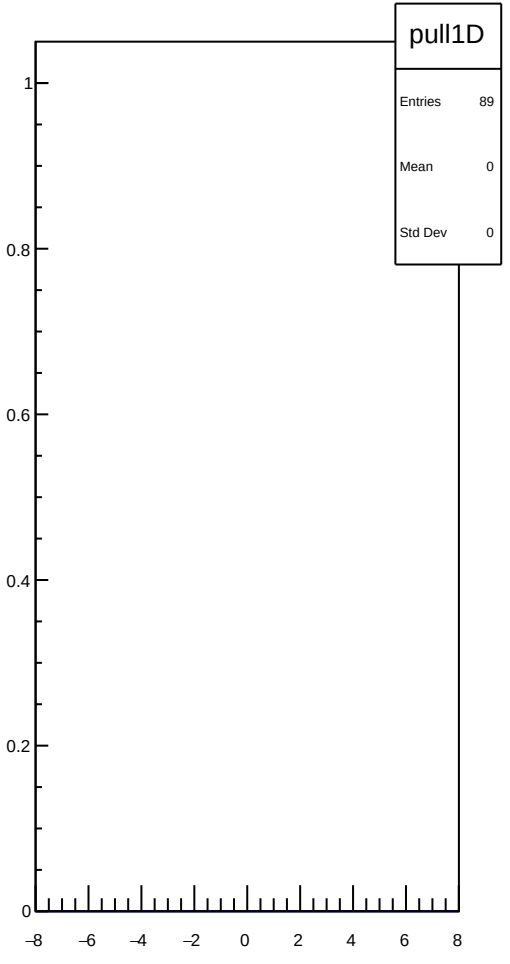

yield_bpm1i02Y_mean vs run
χ² / ndf 2.657e+06 / 88
p0 −0.9297 ± 7.977e−06
−0.89
−0.9
−0.91
−0.92
−0.93
−0.94
−0.95
pull
Entries 89
Mean 2090
Std Dev 2042
500
400
300
200
100
0
−100
−200
−300
pull1D
Entries 89
Mean 6.862
Std Dev 1.153
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

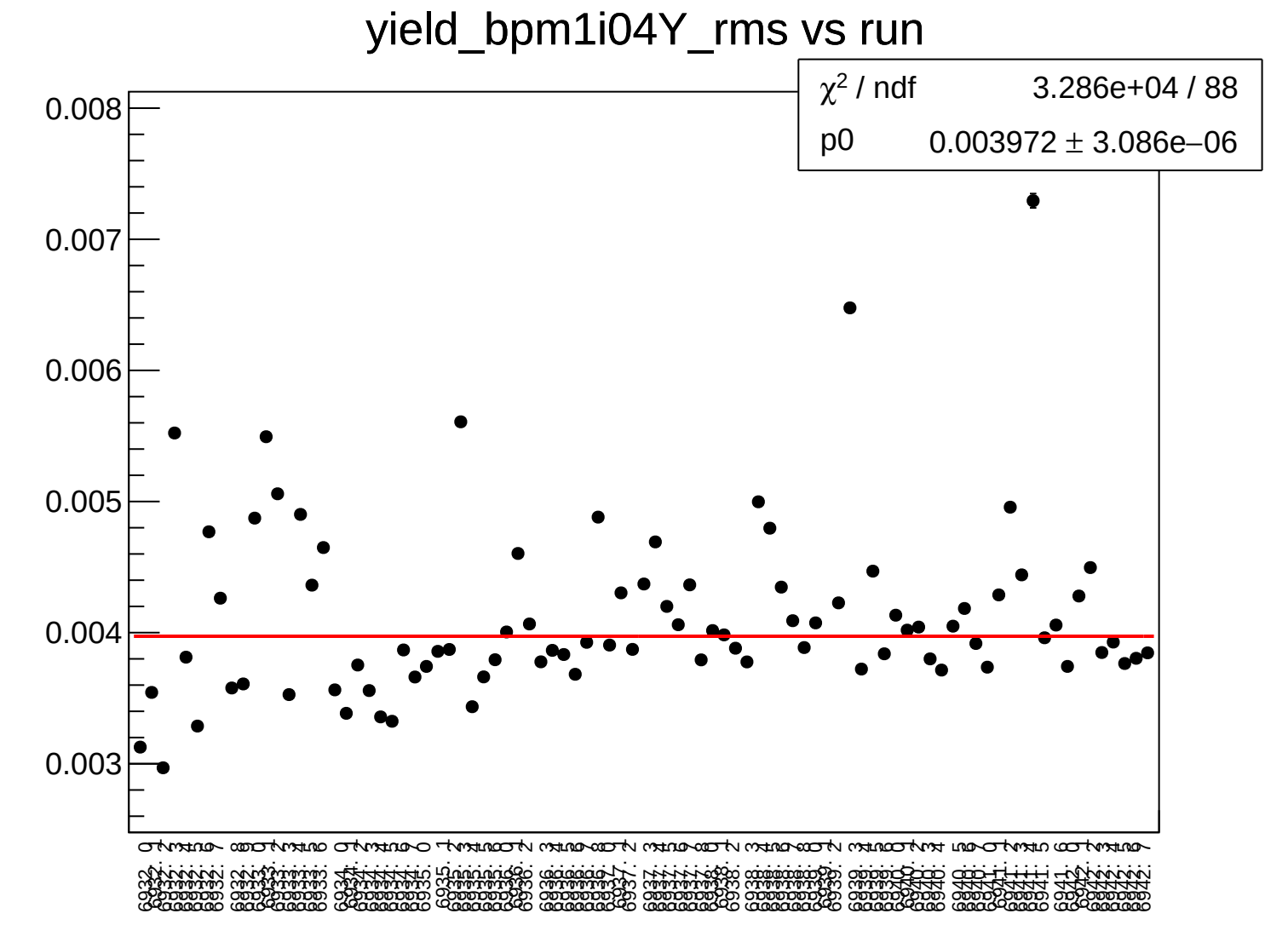

yield_bpm1i02Y_rms vs run
χ² / ndf 1.019e+04 / 88
p0 0.00731 ± 5.64e–06
0.011
0.01
0.009
0.008
0.007
0.006

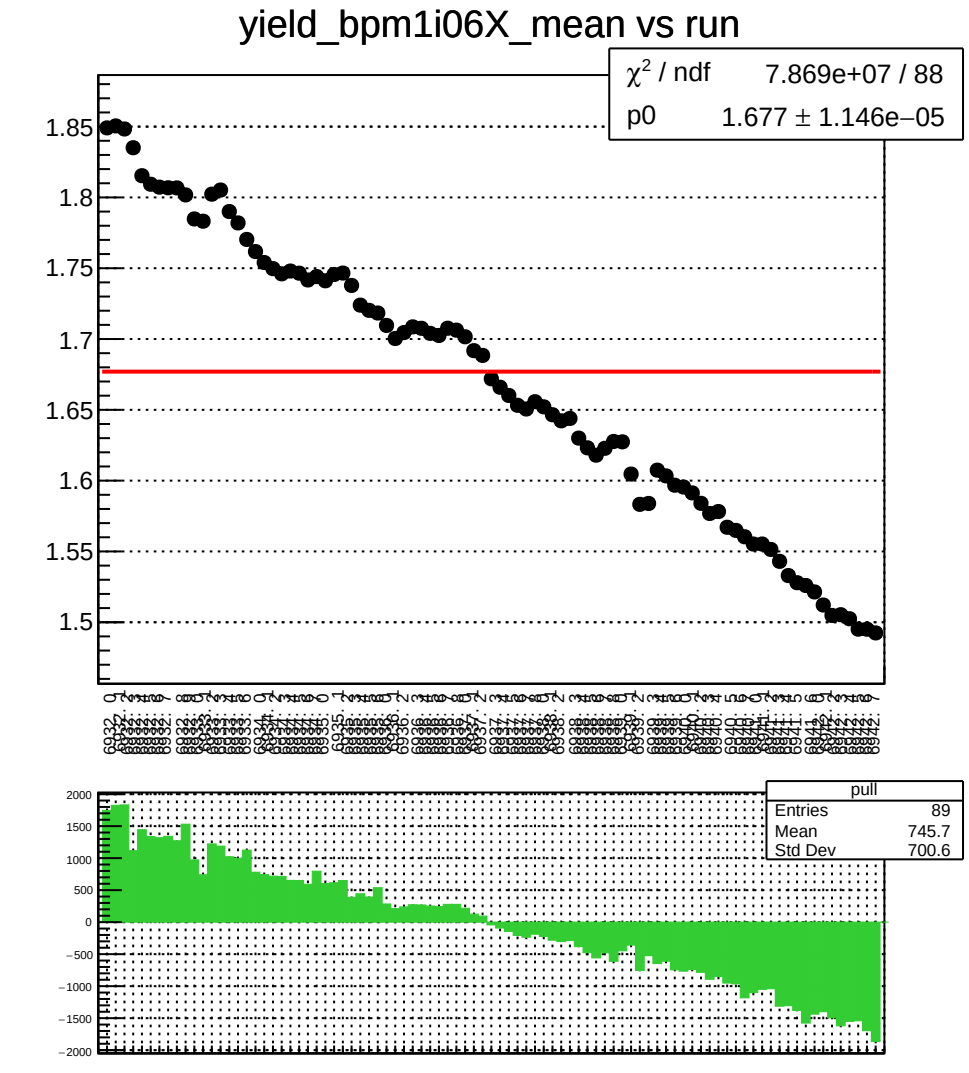

yield_bpm1i04X_mean vs run
χ² / ndf 2.56e+06 / 88
p0 1.232 ± 8.441e−06
1.25
1.24
1.23
1.22
1.21
1.2
pull
Entries 89
Mean 1140
Std Dev 1095
300
200
100
0
−100
−200
−300
−400
−500
pull1D
Entries 89
Mean −3.011
Std Dev 4.794
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

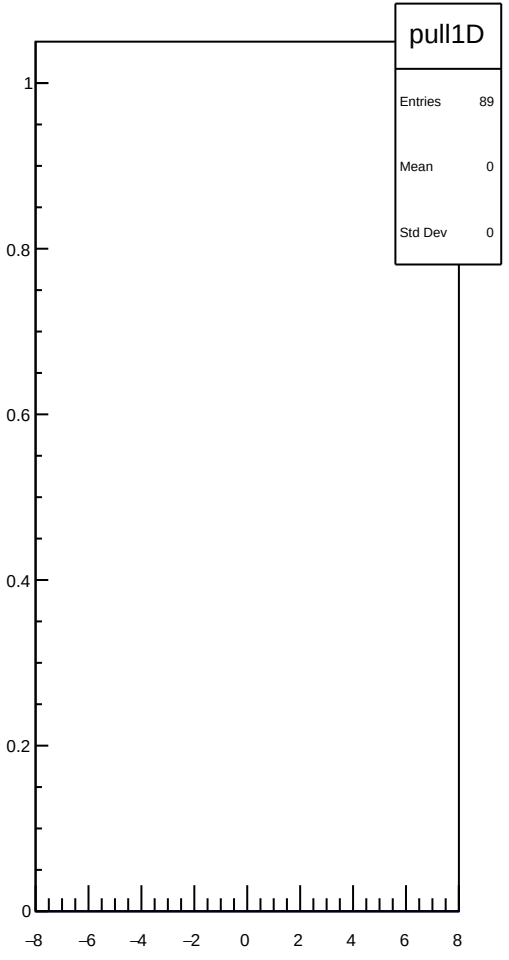

yield_bpm1i04X_rms vs run
χ^2 / ndf 1.667e+04 / 88
p0 0.007721 ± 5.969e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006

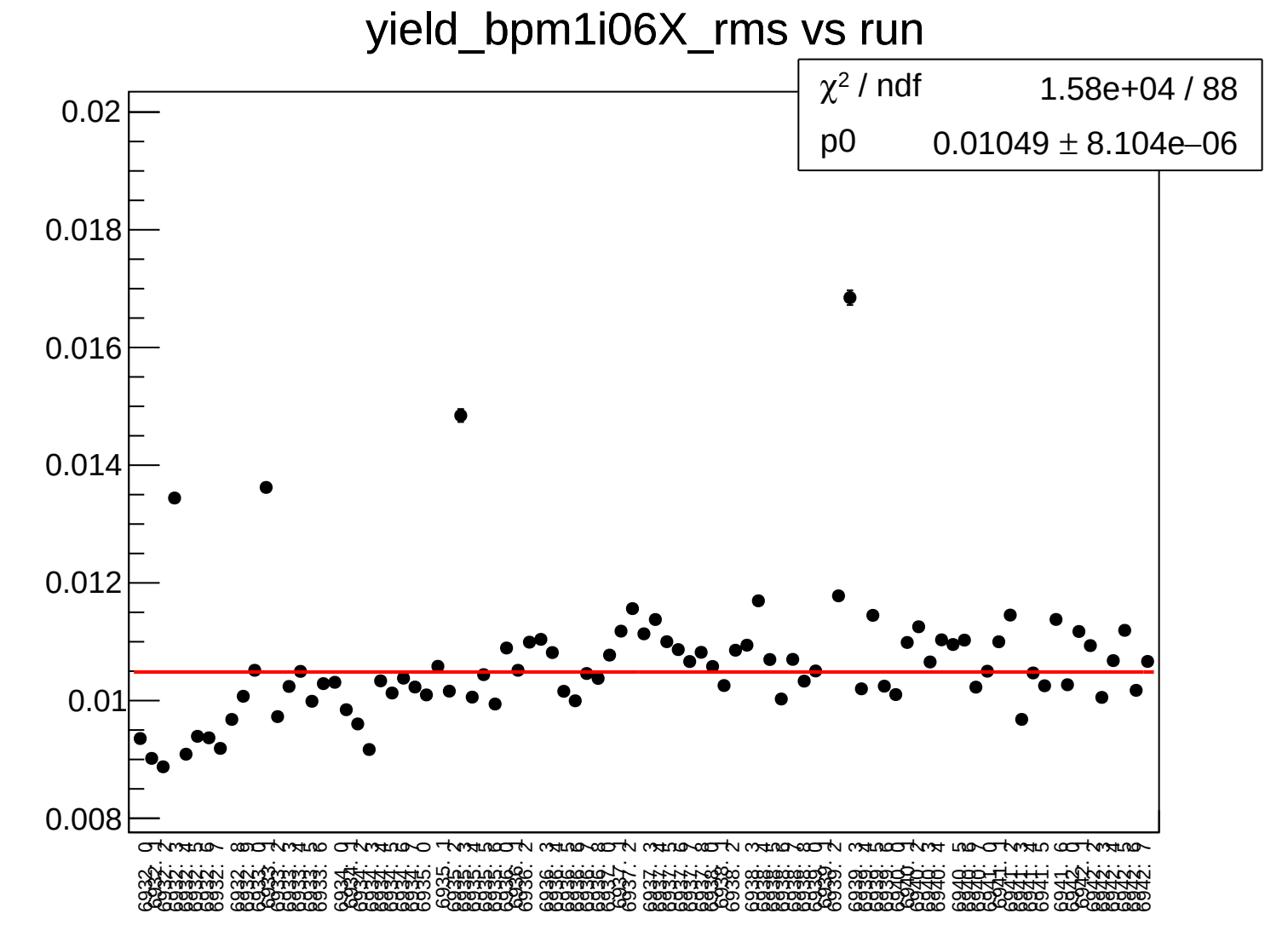

yield_bpm1i04Y_mean vs run
χ² / ndf 1.046e+08 / 88
p0 0.4535 ± 4.364e−06
0.54
0.52
0.5
0.48
0.46
0.44
0.42
0.4
0.38
0.36
pull
Entries 89
Mean 847.7
Std Dev 801.6
2000
1000
0
−1000
−2000

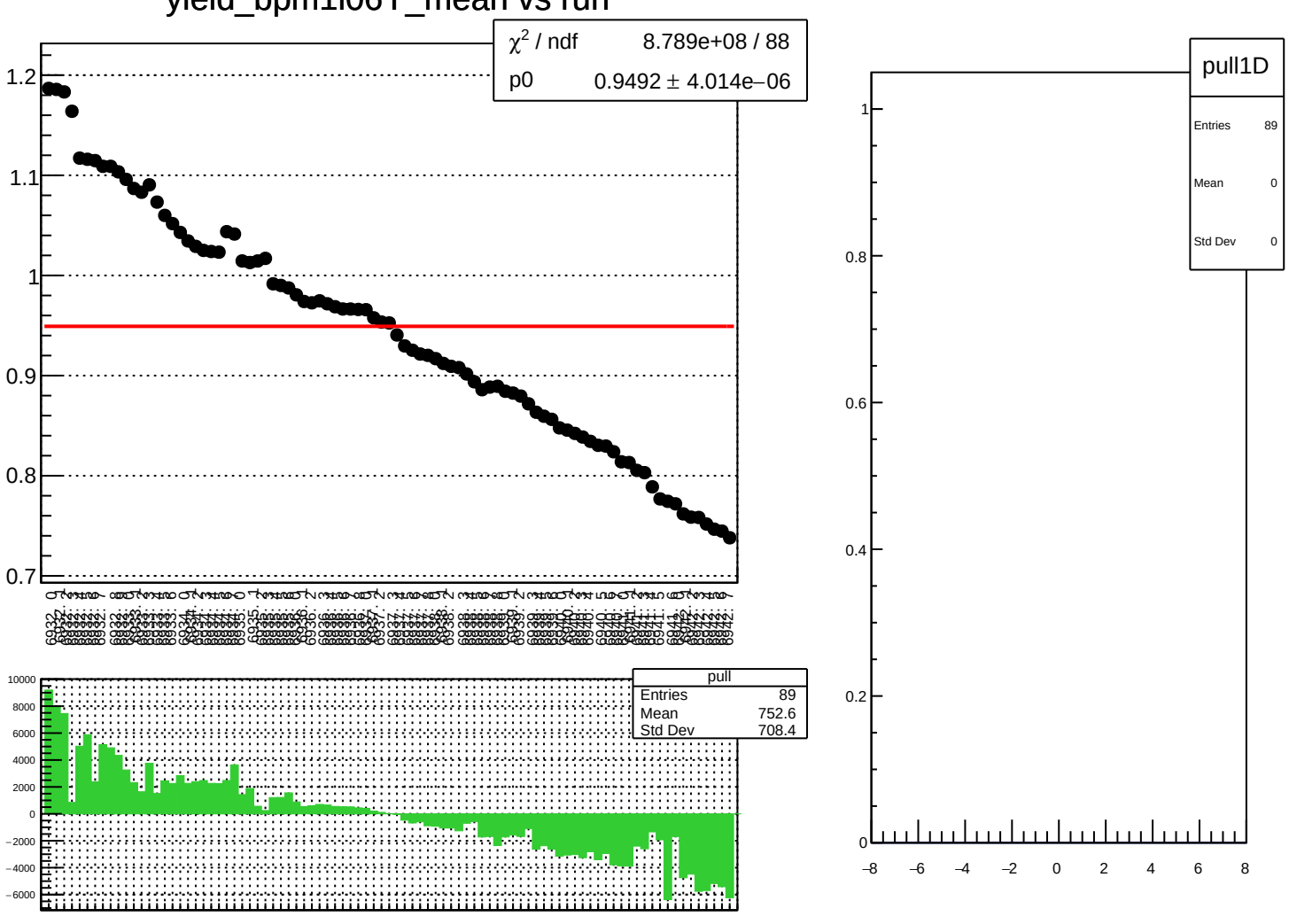

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

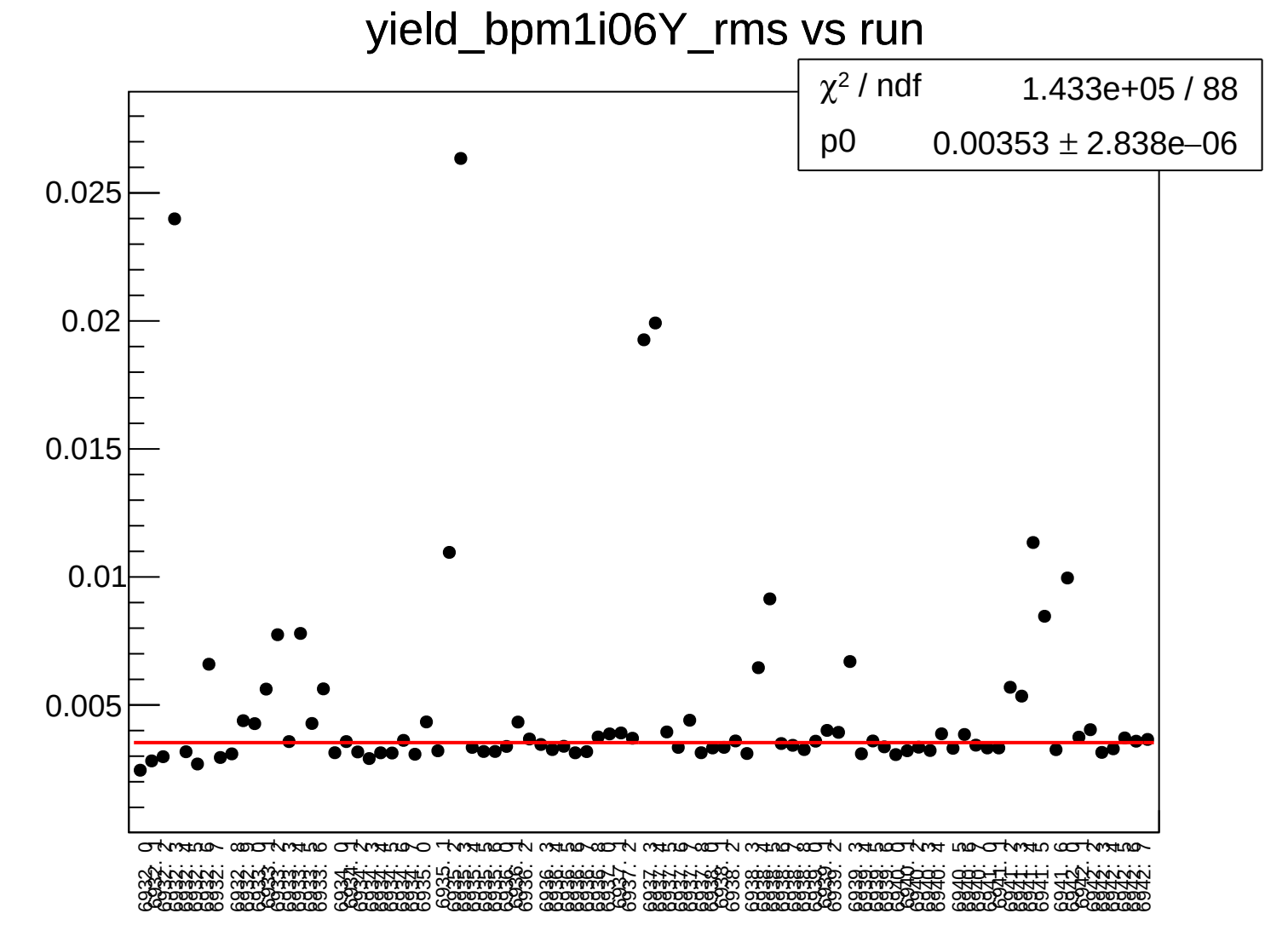

yield_bpm1i04Y_rms vs run
χ² / ndf 3.286e+04 / 88
p0 0.003972 ± 3.086e−06
0.008
0.007
0.006
0.005
0.004
0.003

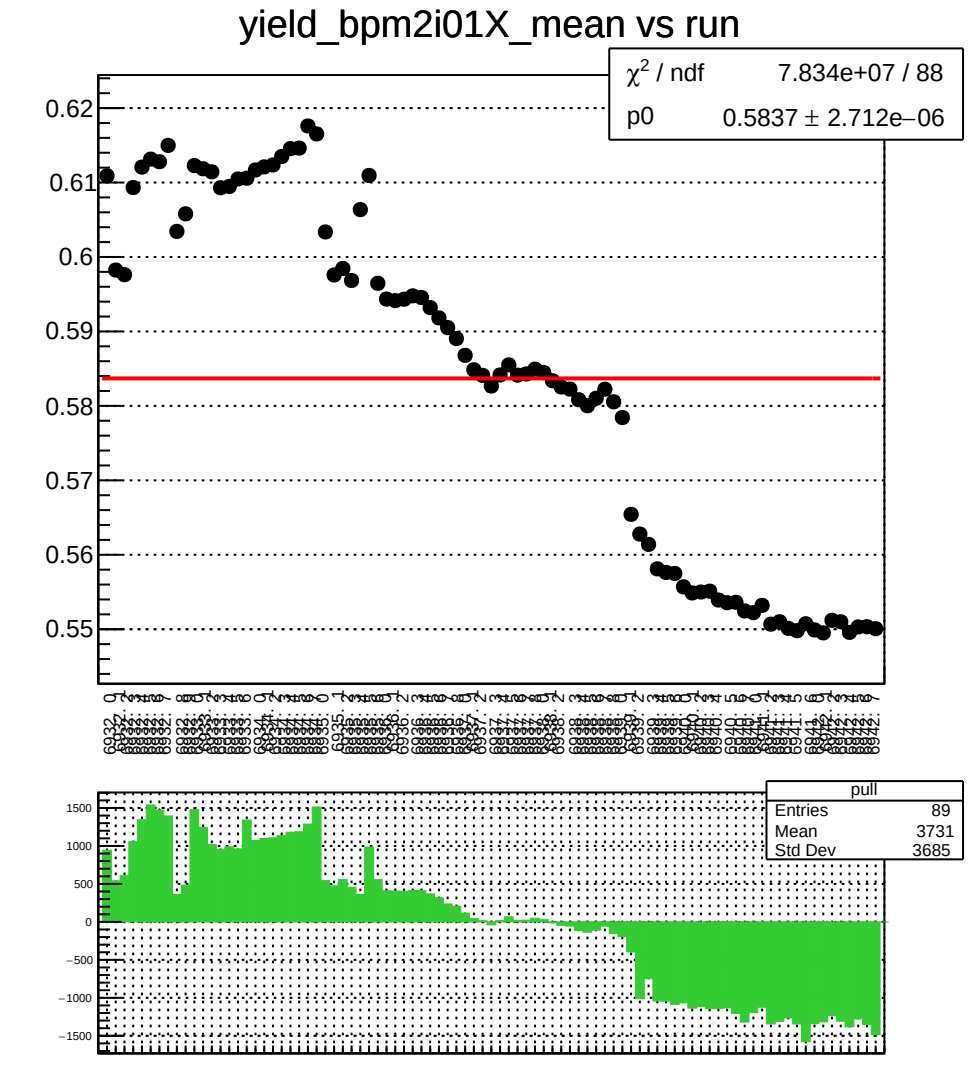

yield_bpm1i06X_mean vs run
χ² / ndf 7.869e+07 / 88
p0 1.677 ± 1.146e−05
1.85
1.8
1.75
1.7
1.65
1.6
1.55
1.5
pull
Entries 89
Mean 745.7
Std Dev 700.6
2000
1500
1000
500
0
−500
−1000
−1500
−2000

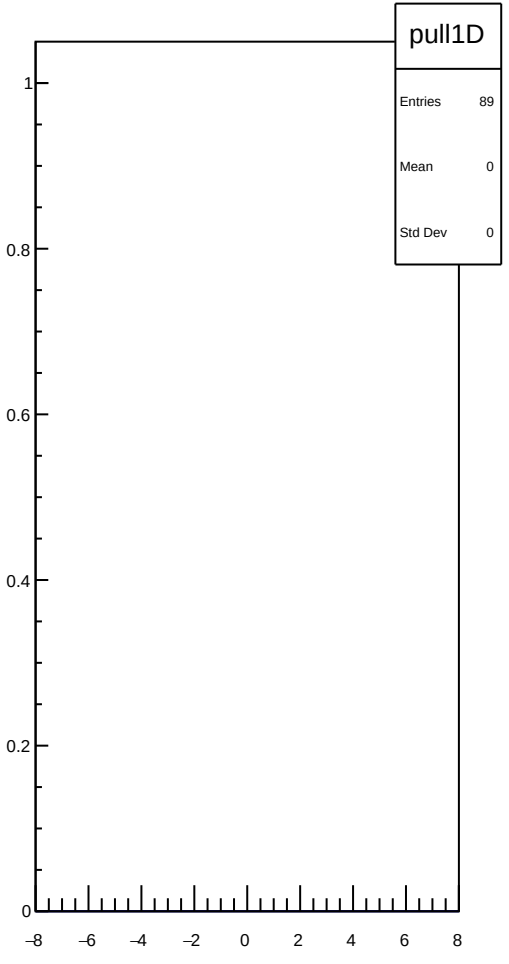

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

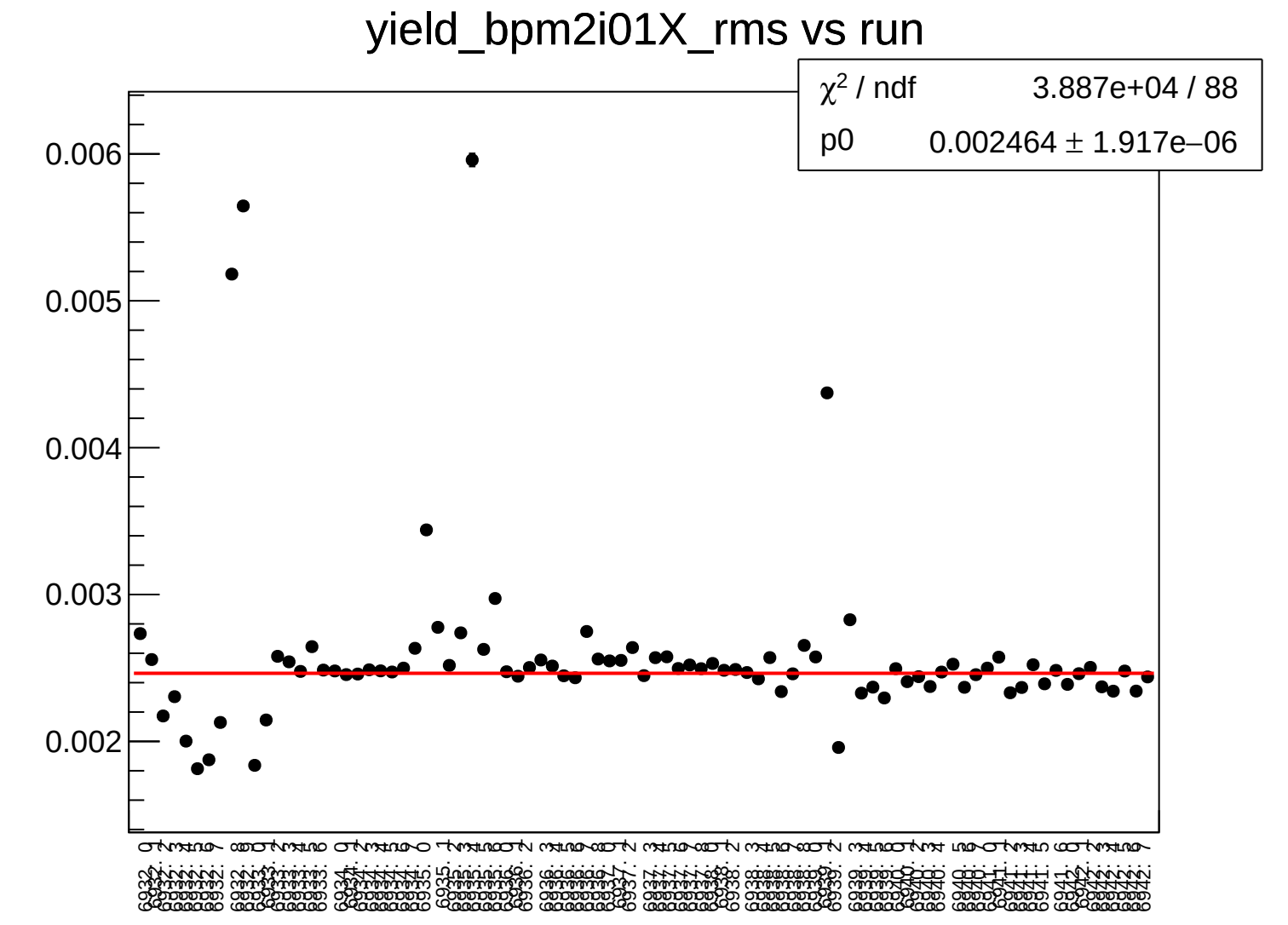

yield_bpm1i06X_rms vs run
χ² / ndf 1.58e+04 / 88
p0 0.01049 ± 8.104e–06
0.02
0.018
0.016
0.014
0.012
0.01
0.008

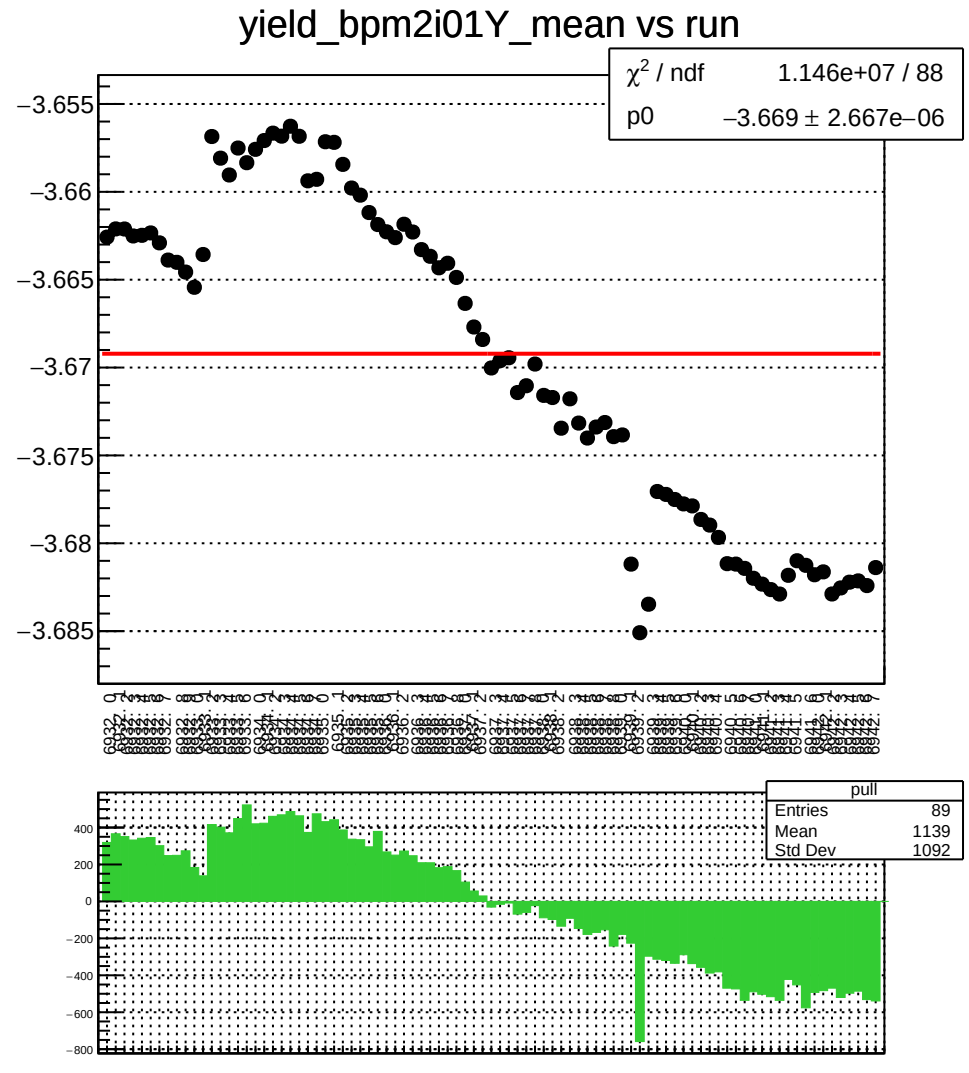

yield_bpm1i06Y_mean vs run
χ² / ndf 8.789e+08 / 88
p0 0.9492 ± 4.014e−06
1.2
1.1
1
0.9
0.8
0.7
pull
Entries 89
Mean 752.6
Std Dev 708.4
10000
8000
6000
4000
2000
0
−2000
−4000
−6000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

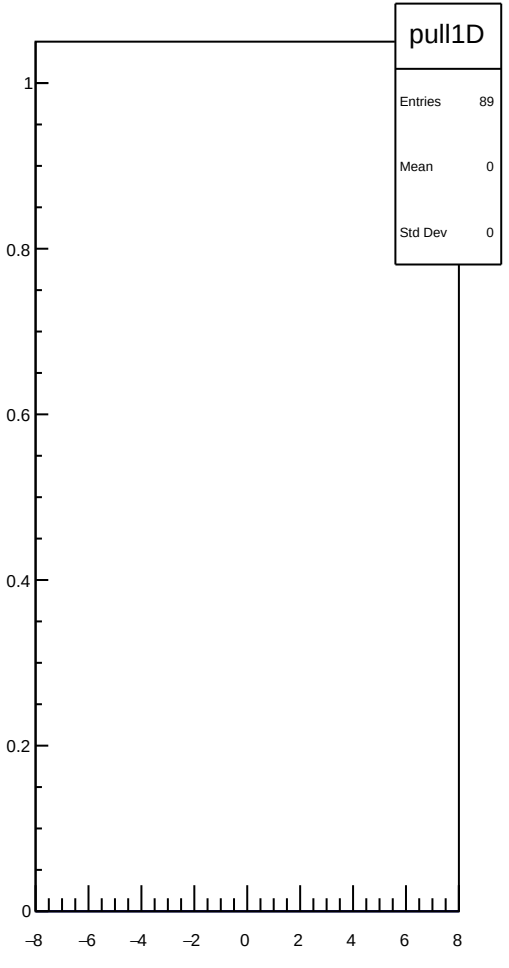

yield_bpm1i06Y_rms vs run
χ² / ndf 1.433e+05 / 88
p0 0.00353 ± 2.838e–06
0.025
0.02
0.015
0.01
0.005

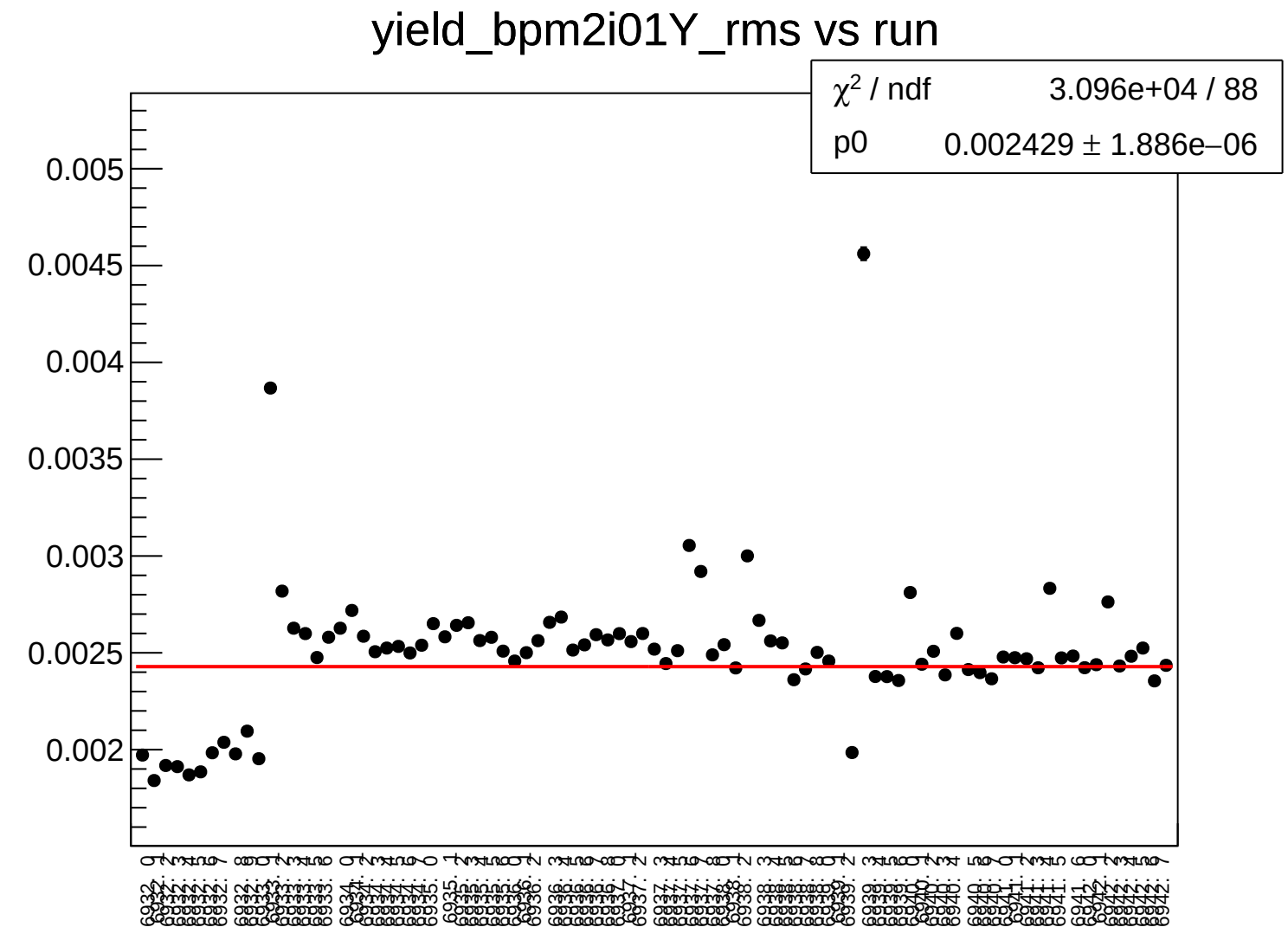

yield_bpm2i01X_mean vs run
χ² / ndf 7.834e+07 / 88
p0 0.5837 ± 2.712e−06
0.62
0.61
0.6
0.59
0.58
0.57
0.56
0.55
pull
Entries 89
Mean 3731
Std Dev 3685
1500
1000
500
0
−500
−1000
−1500

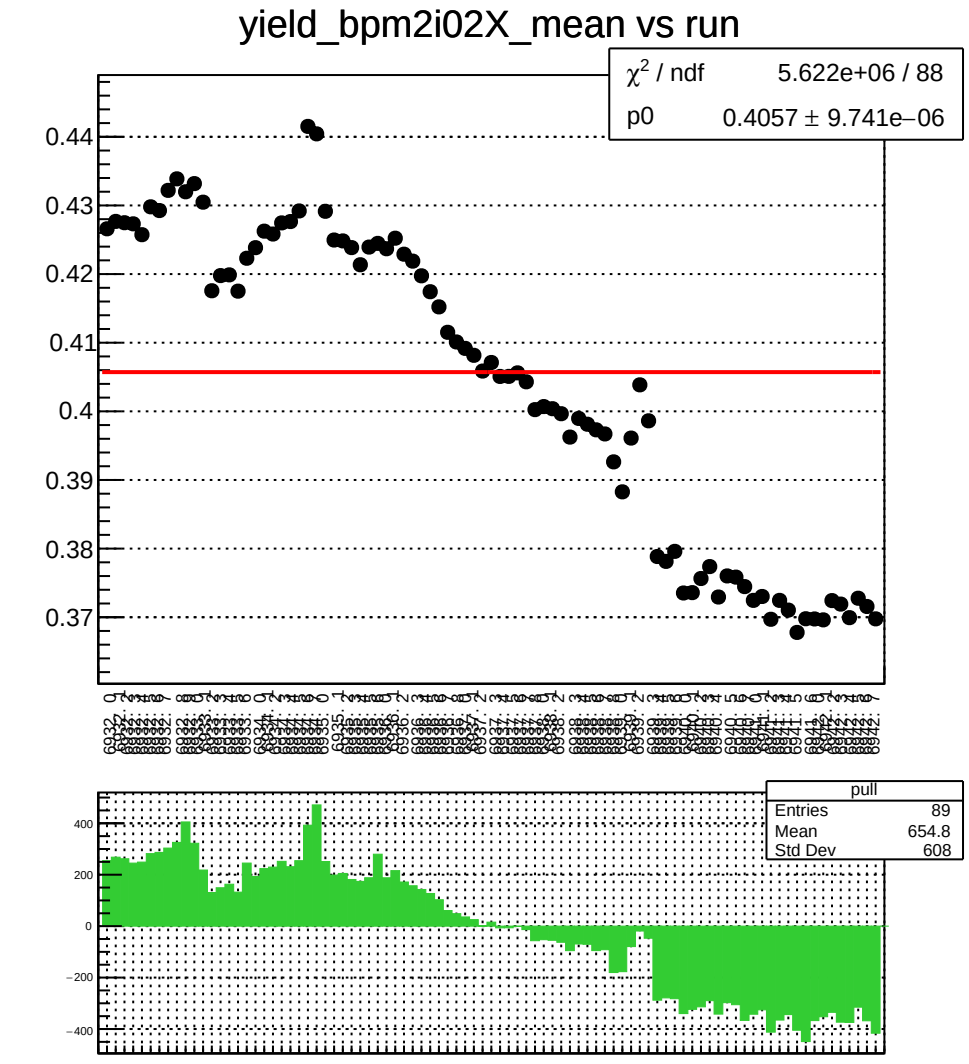

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

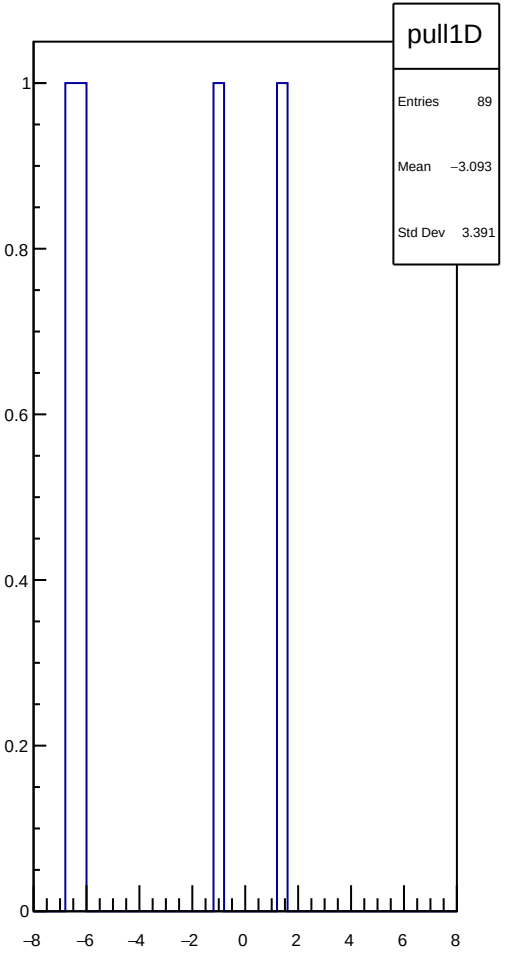

yield_bpm2i01X_rms vs run
χ² / ndf 3.887e+04 / 88
p0 0.002464 ± 1.917e−06
0.006
0.005
0.004
0.003
0.002

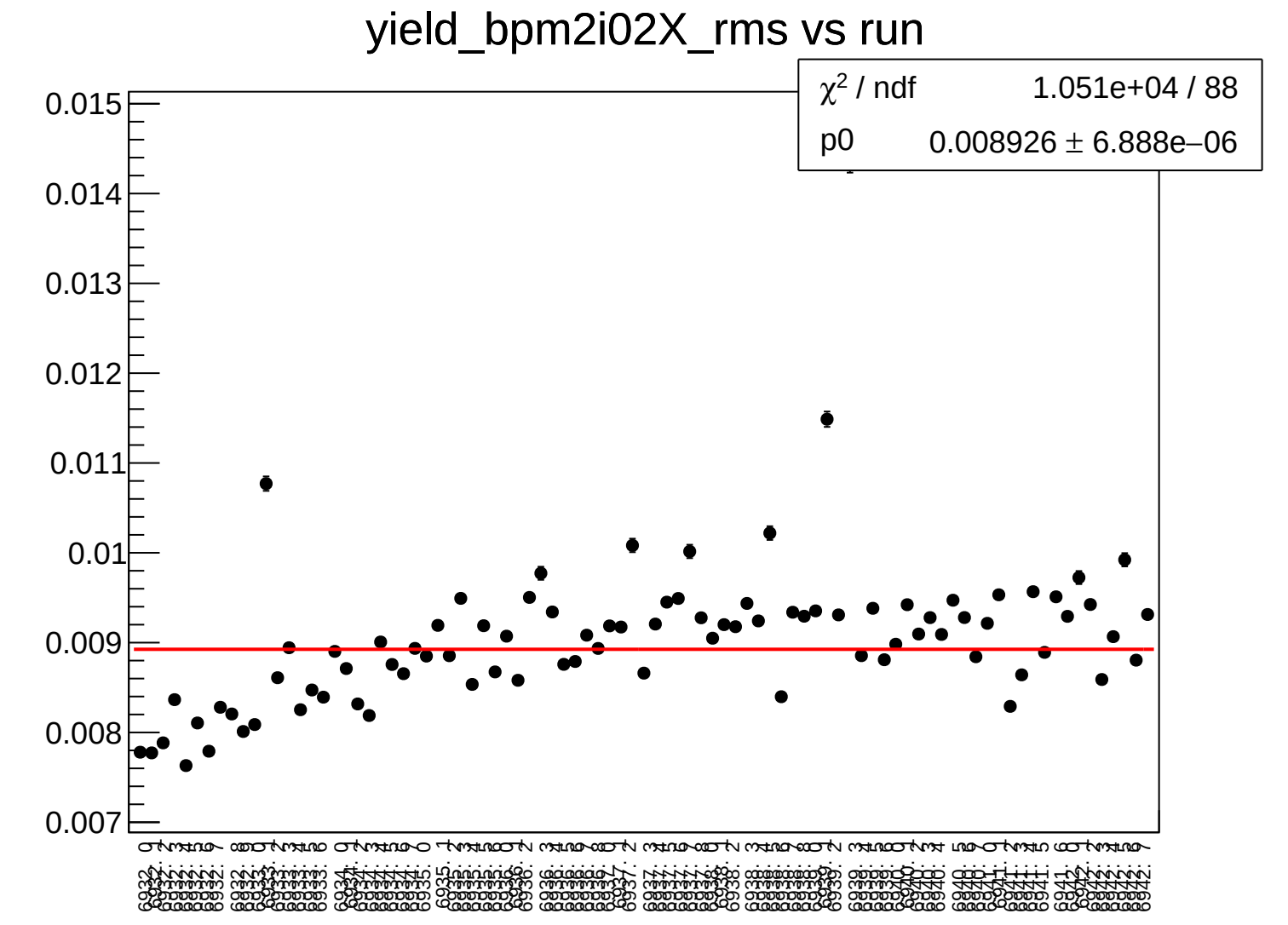

yield_bpm2i01Y_mean vs run
χ² / ndf 1.146e+07 / 88
p0 −3.669 ± 2.667e−06
−3.655
−3.66
−3.665
−3.67
−3.675
−3.68
−3.685
pull
Entries 89
Mean 1139
Std Dev 1092
400
200
0
−200
−400
−600
−800

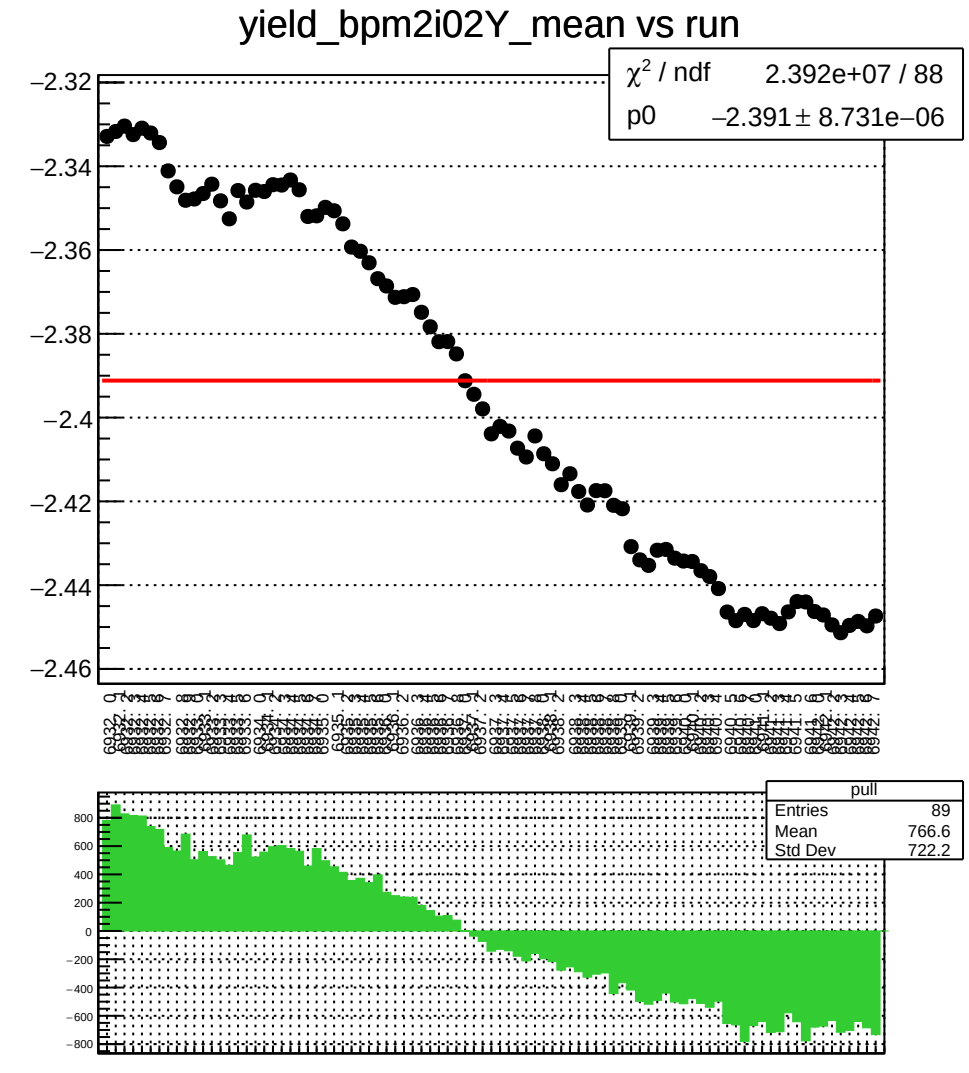

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

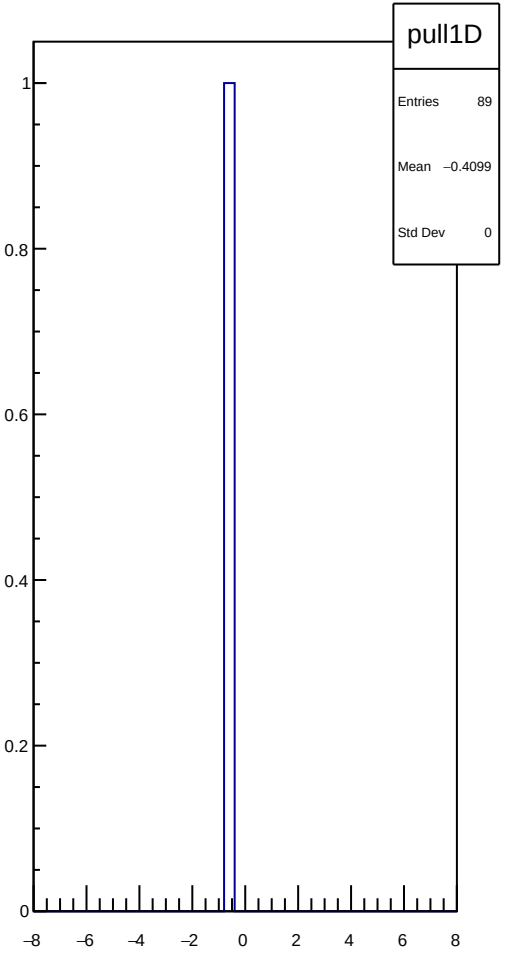

yield_bpm2i01Y_rms vs run
χ² / ndf 3.096e+04 / 88
p0 0.002429 ± 1.886e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002

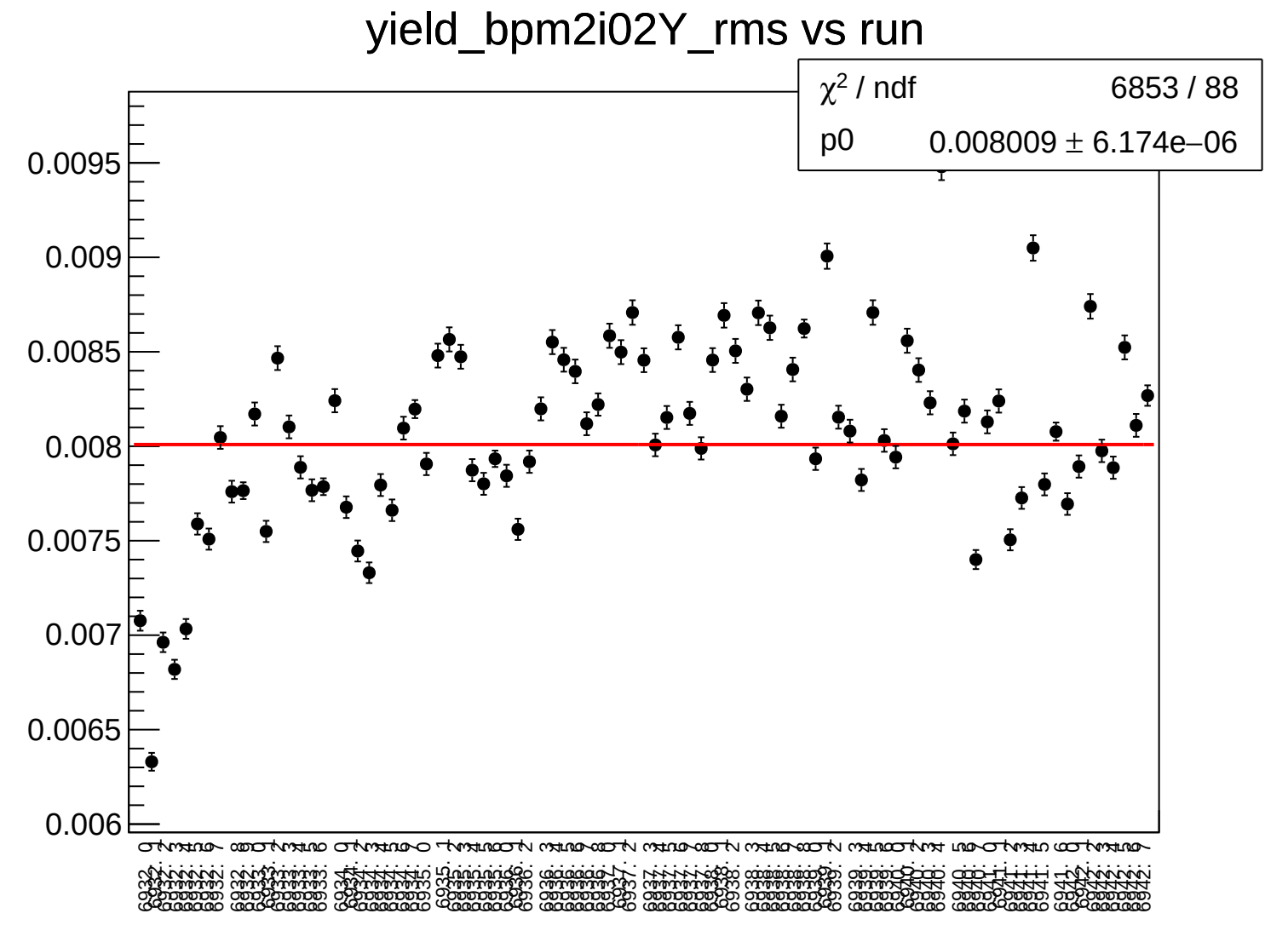

yield_bpm2i02X_mean vs run
χ² / ndf 5.622e+06 / 88
p0 0.4057 ± 9.741e−06
0.44
0.43
0.42
0.41
0.4
0.39
0.38
0.37
pull
Entries 89
Mean 654.8
Std Dev 608
400
200
0
−200
−400

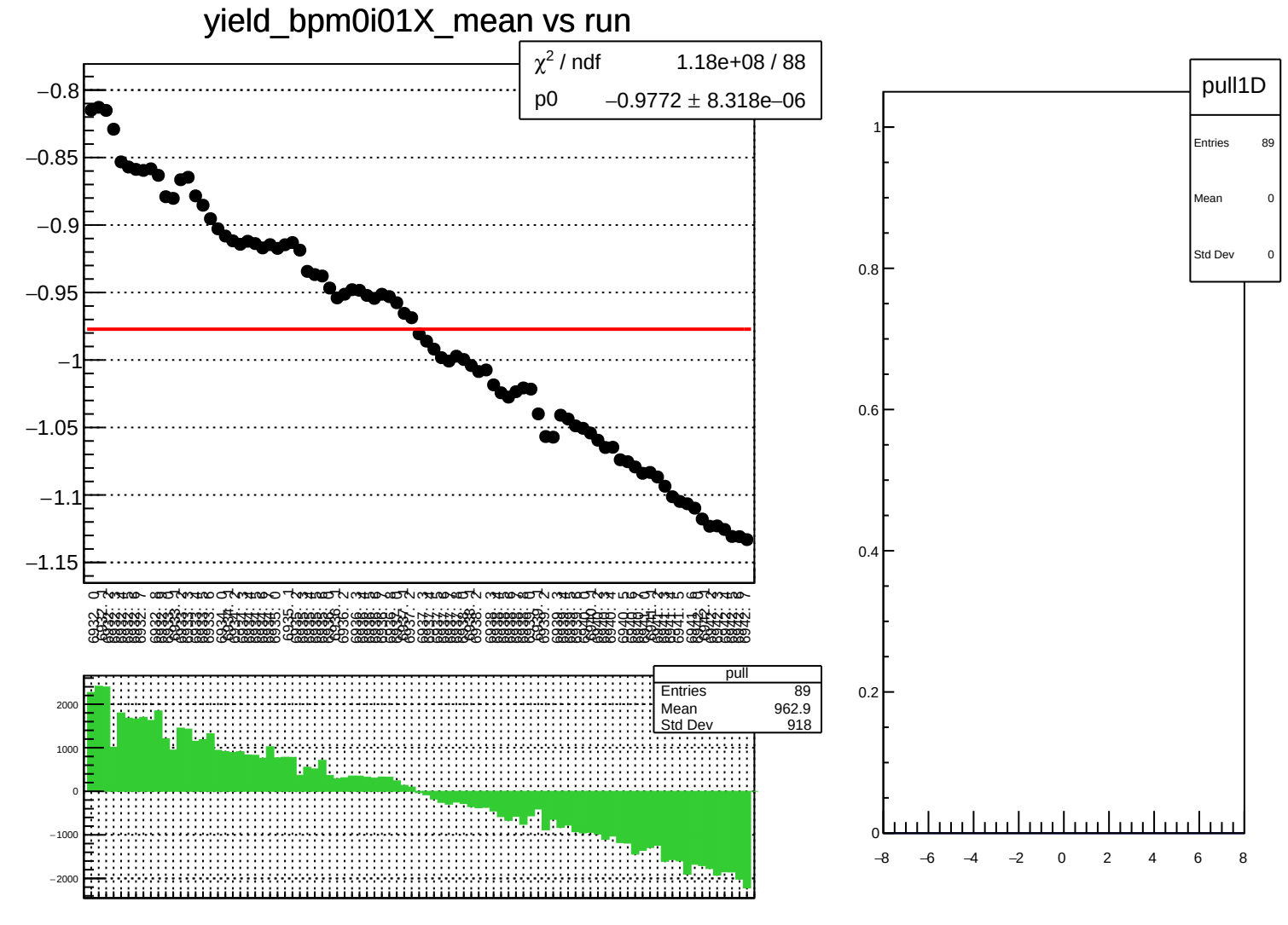

pull1D
Entries 89
Mean −3.093
Std Dev 3.391
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

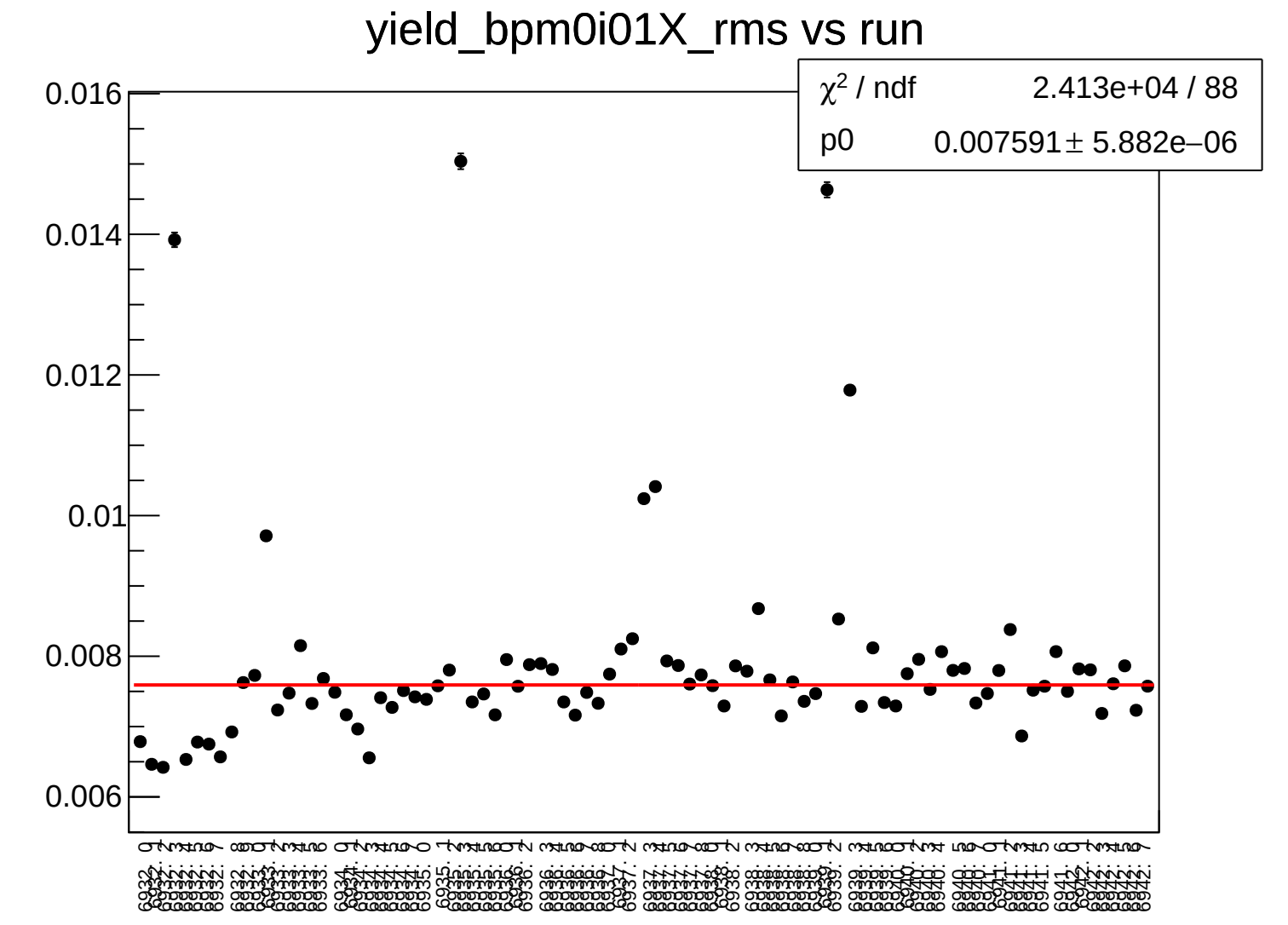

yield_bpm2i02X_rms vs run
χ² / ndf 1.051e+04 / 88
p0 0.008926 ± 6.888e−06
0.015
0.014
0.013
0.012
0.011
0.01
0.009
0.008
0.007

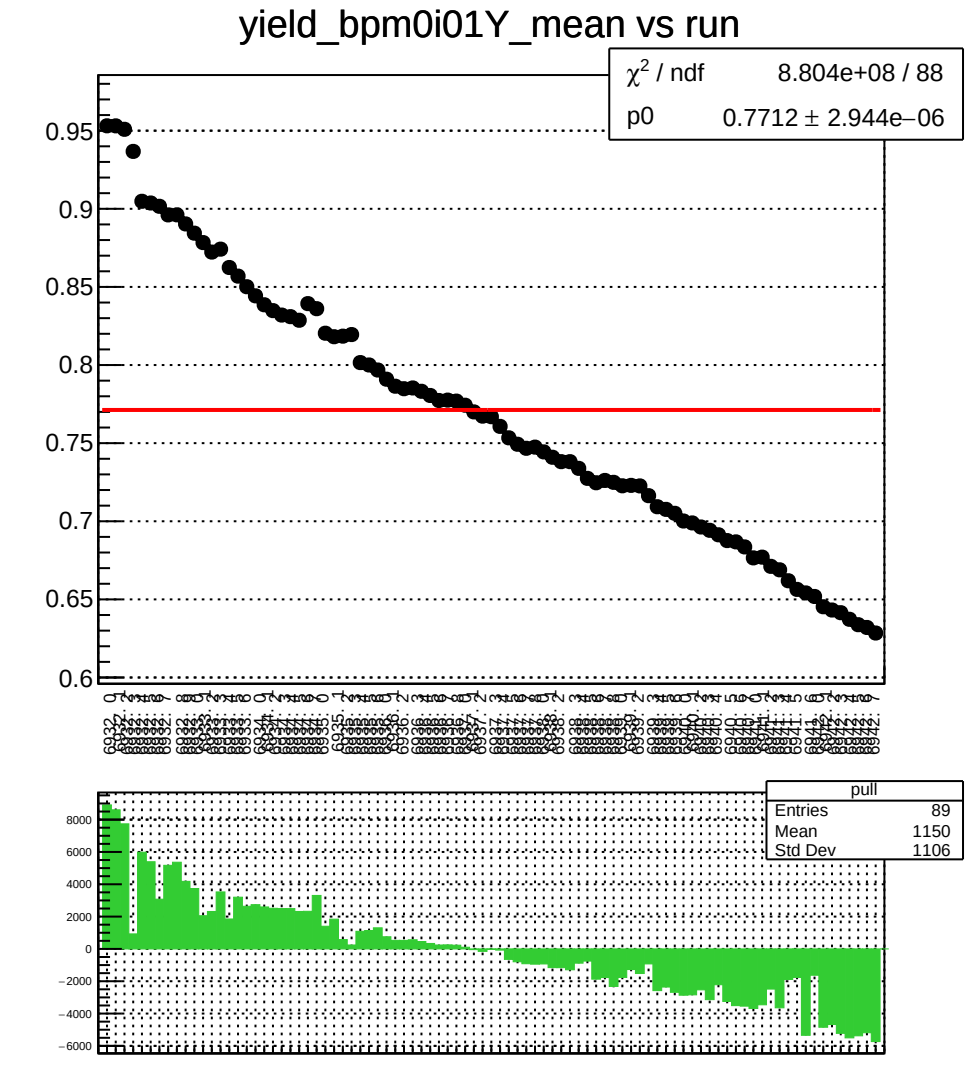

yield_bpm2i02Y_mean vs run
χ² / ndf 2.392e+07 / 88
p0 −2.391 ± 8.731e−06
−2.32
−2.34
−2.36
−2.38
−2.4
−2.42
−2.44
−2.46
pull
Entries 89
Mean 766.6
Std Dev 722.2
800
600
400
200
0
−200
−400
−600
−800

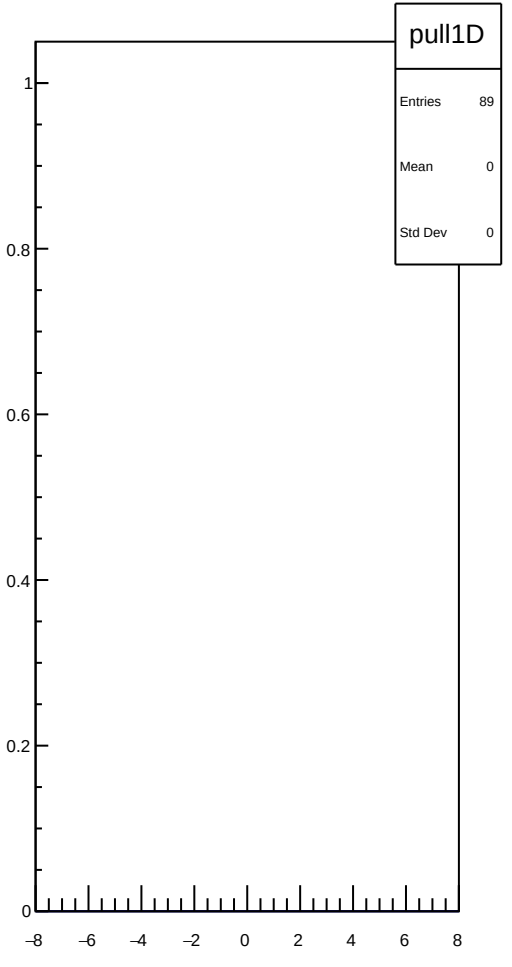

pull1D
Entries 89
Mean −0.4099
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

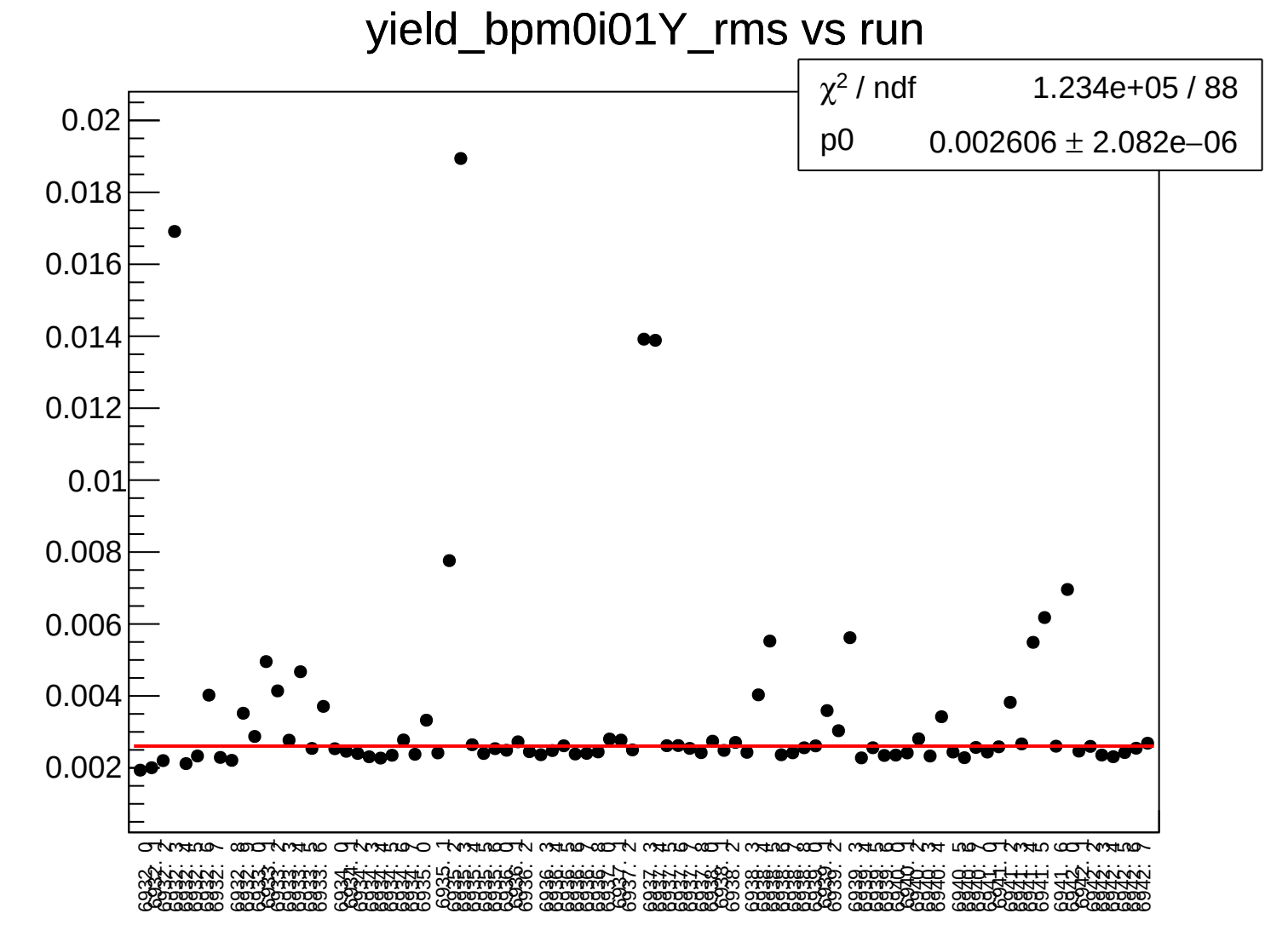

yield_bpm2i02Y_rms vs run
χ² / ndf 6853 / 88
p0 0.008009 ± 6.174e−06
0.0095
0.009
0.0085
0.008
0.0075
0.007
0.0065
0.006

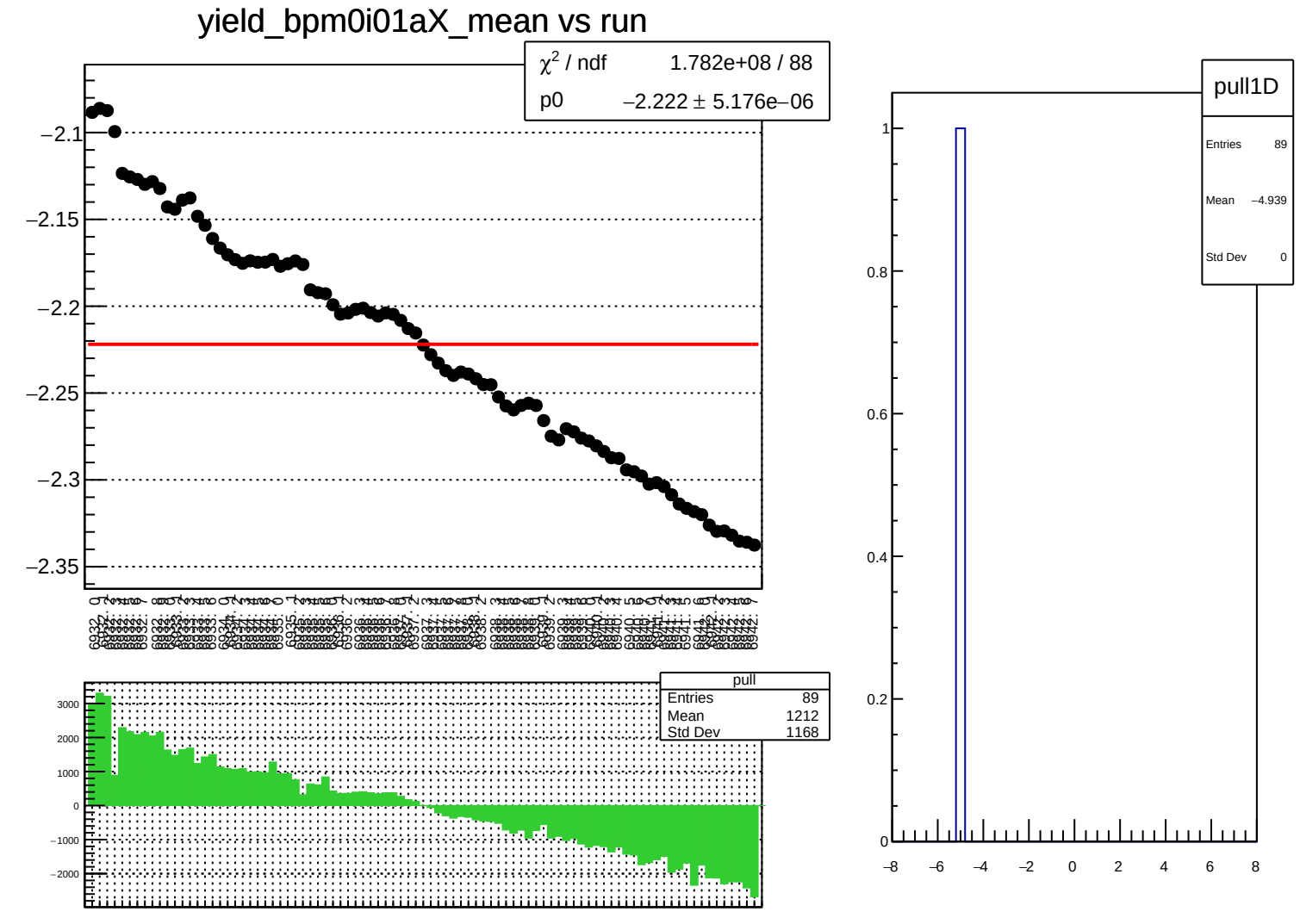

yield_bpm0i01X_mean vs run
χ² / ndf 1.18e+08 / 88
p0 −0.9772 ± 8.318e−06
−0.8
−0.85
−0.9
−0.95
−1
−1.05
−1.1
−1.15
pull
Entries 89
Mean 962.9
Std Dev 918
2000
1000
0
−1000
−2000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

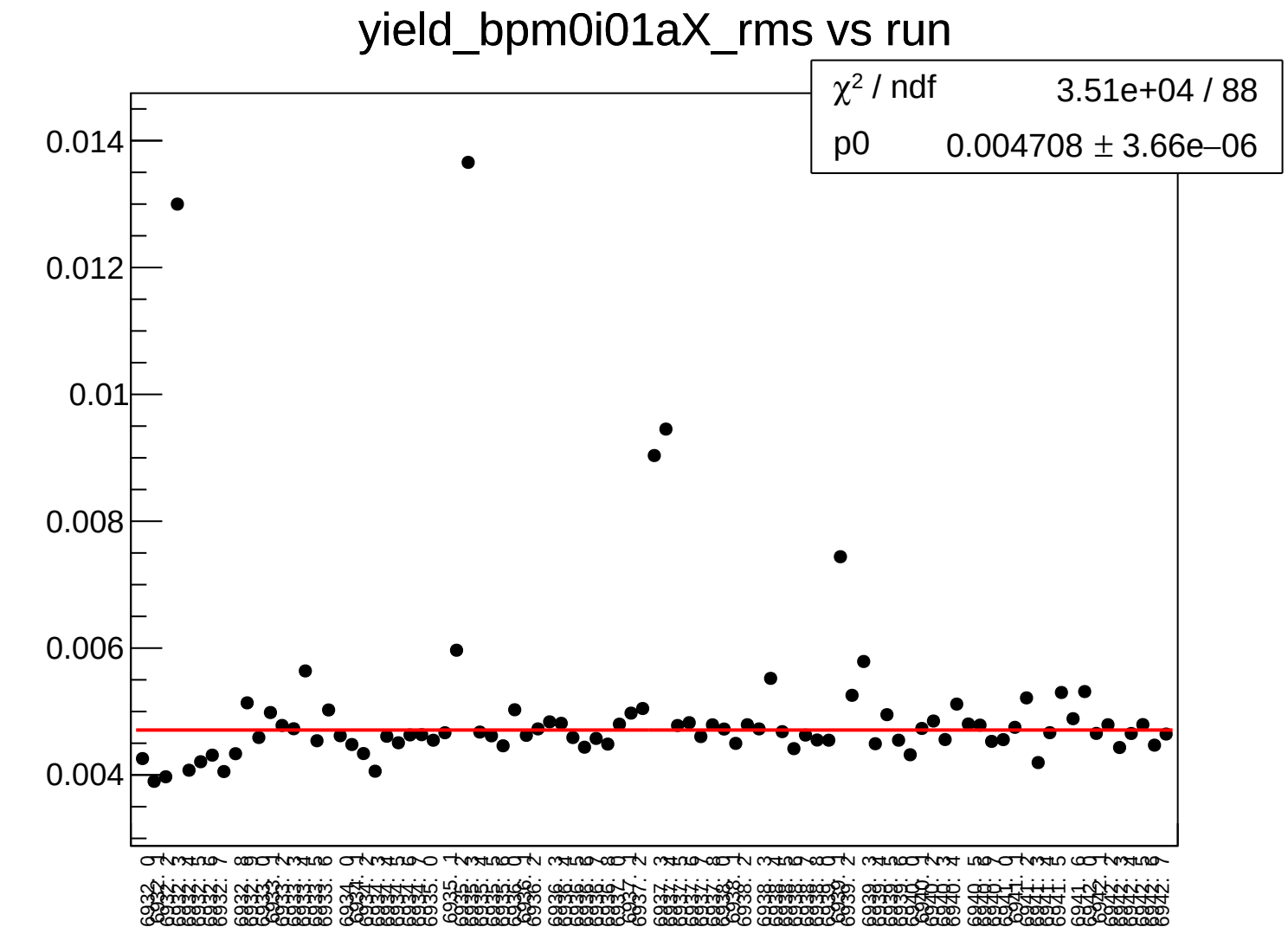

yield_bpm0i01X_rms vs run
χ² / ndf 2.413e+04 / 88
p0 0.007591 ± 5.882e−06
0.016
0.014
0.012
0.01
0.008
0.006

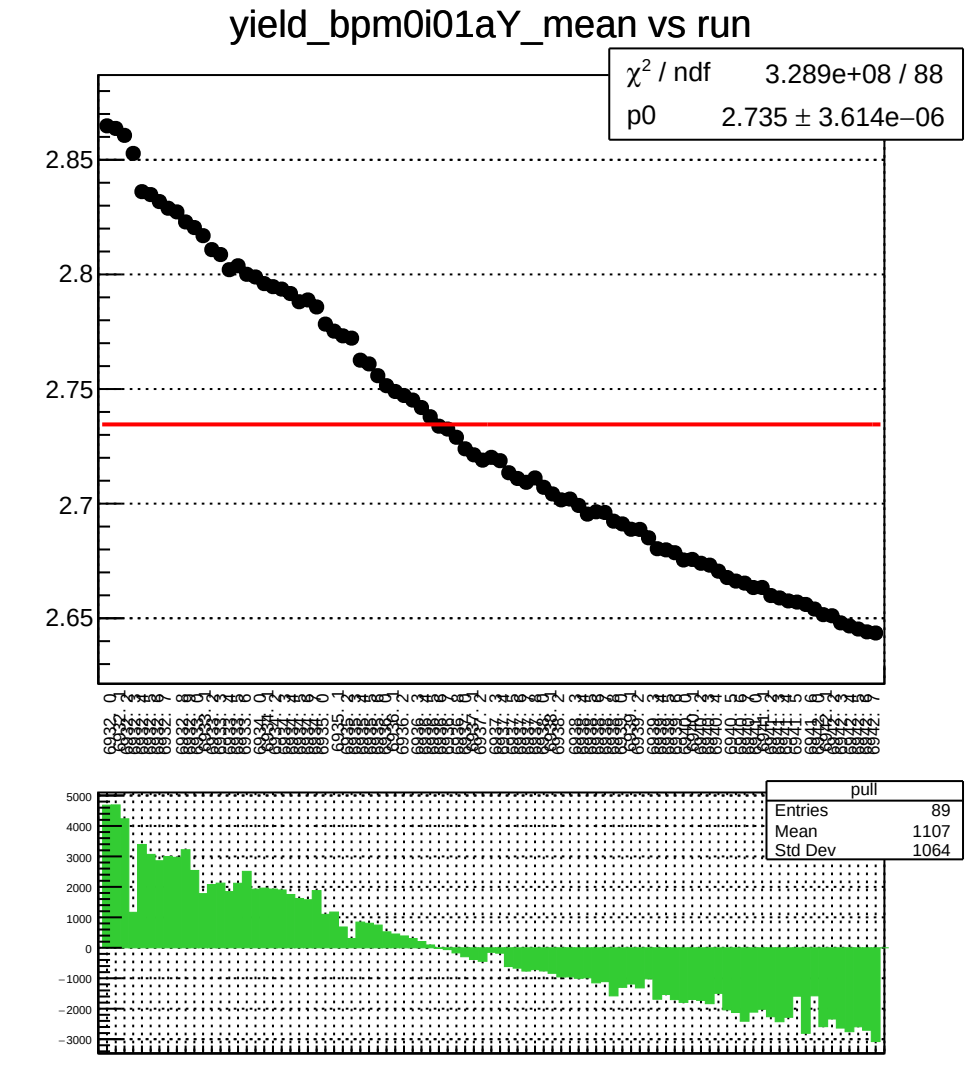

yield_bpm0i01Y_mean vs run
χ² / ndf 8.804e+08 / 88
p0 0.7712 ± 2.944e−06
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
pull
Entries 89
Mean 1150
Std Dev 1106
8000
6000
4000
2000
0
−2000
−4000
−6000

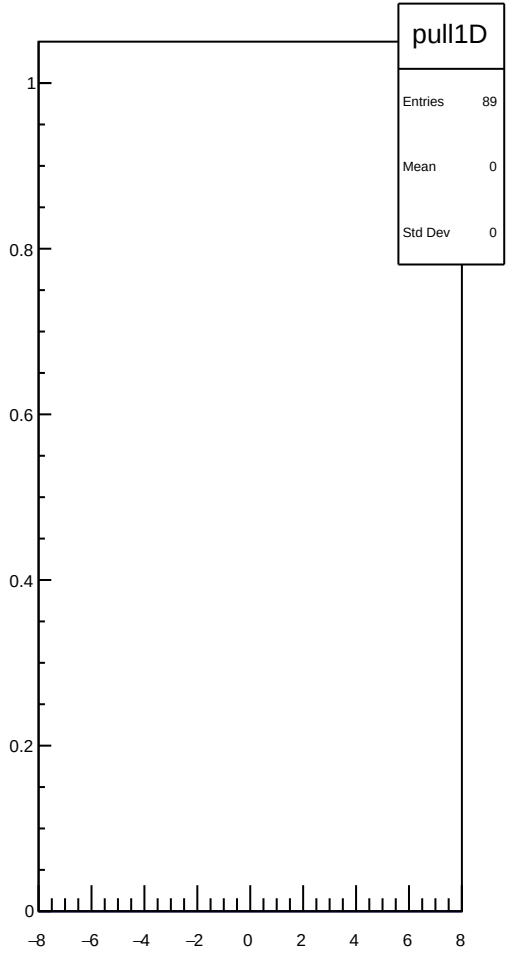

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

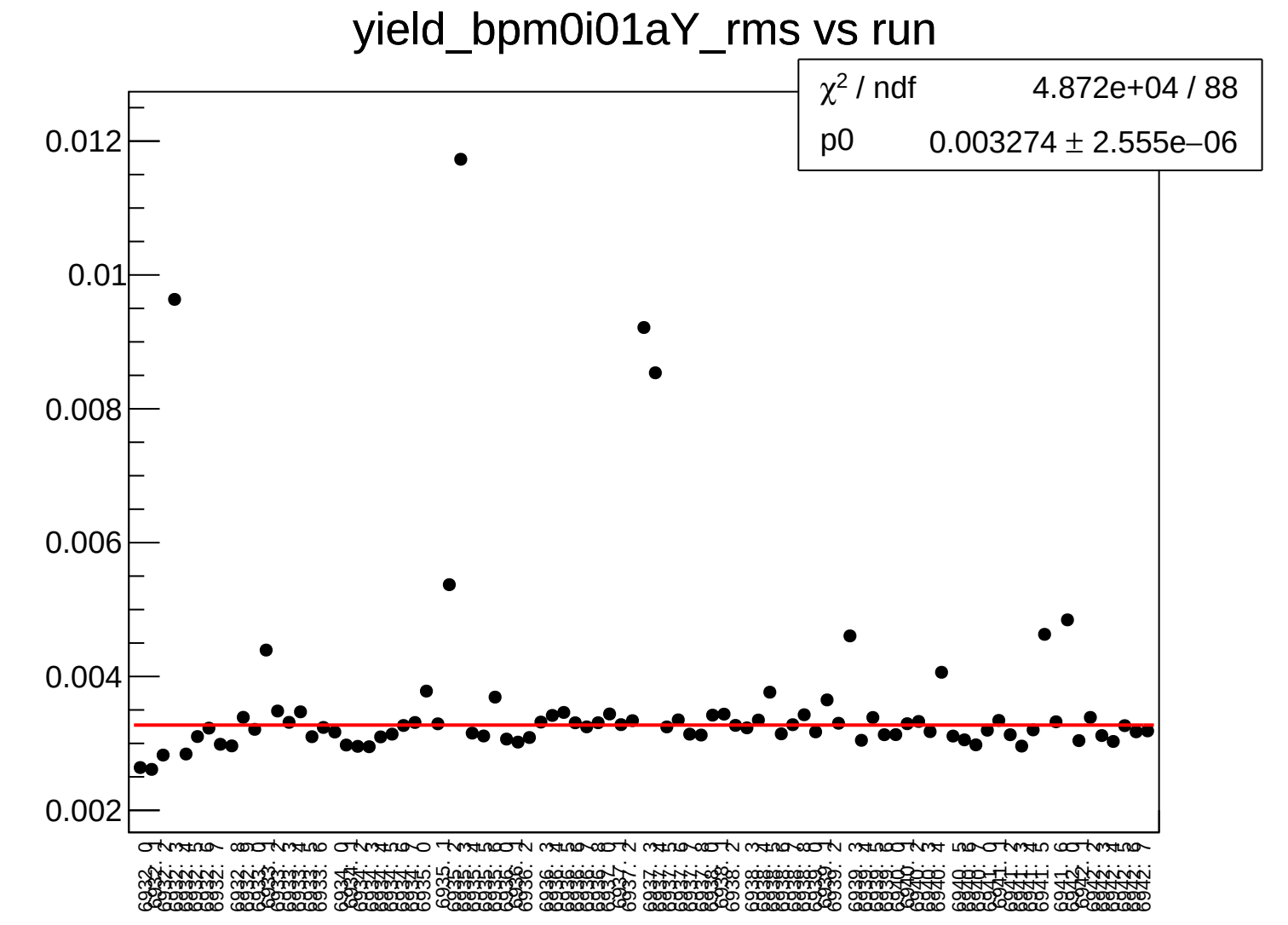

yield_bpm0i01Y_rms vs run
χ² / ndf 1.234e+05 / 88
p0 0.002606 ± 2.082e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

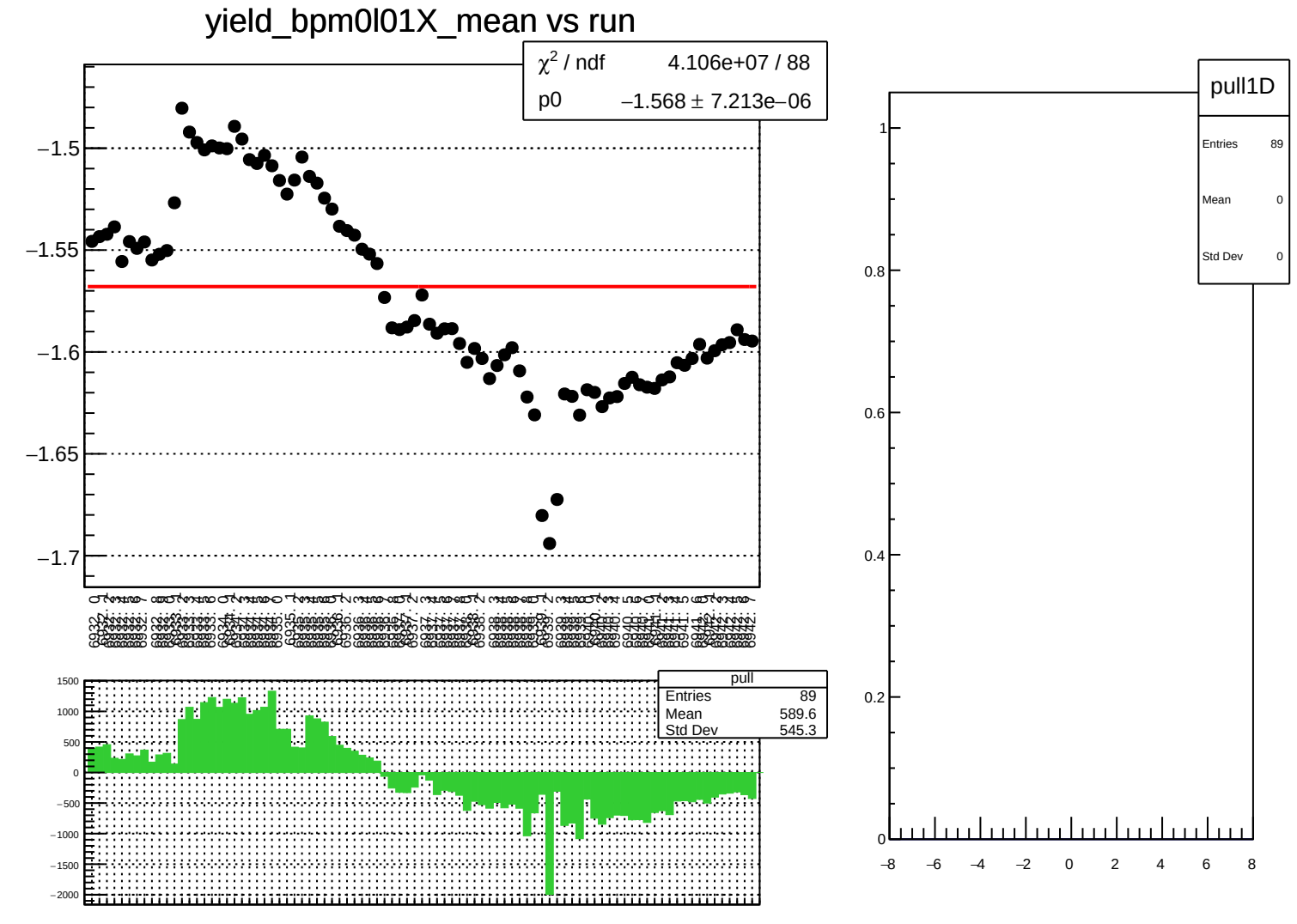

yield_bpm0i01aX_mean vs run
χ² / ndf 1.782e+08 / 88
p0 −2.222 ± 5.176e−06
−2.1
−2.15
−2.2
−2.25
−2.3
−2.35
pull
Entries 89
Mean 1212
Std Dev 1168
3000
2000
1000
0
−1000
−2000
pull1D
Entries 89
Mean −4.939
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

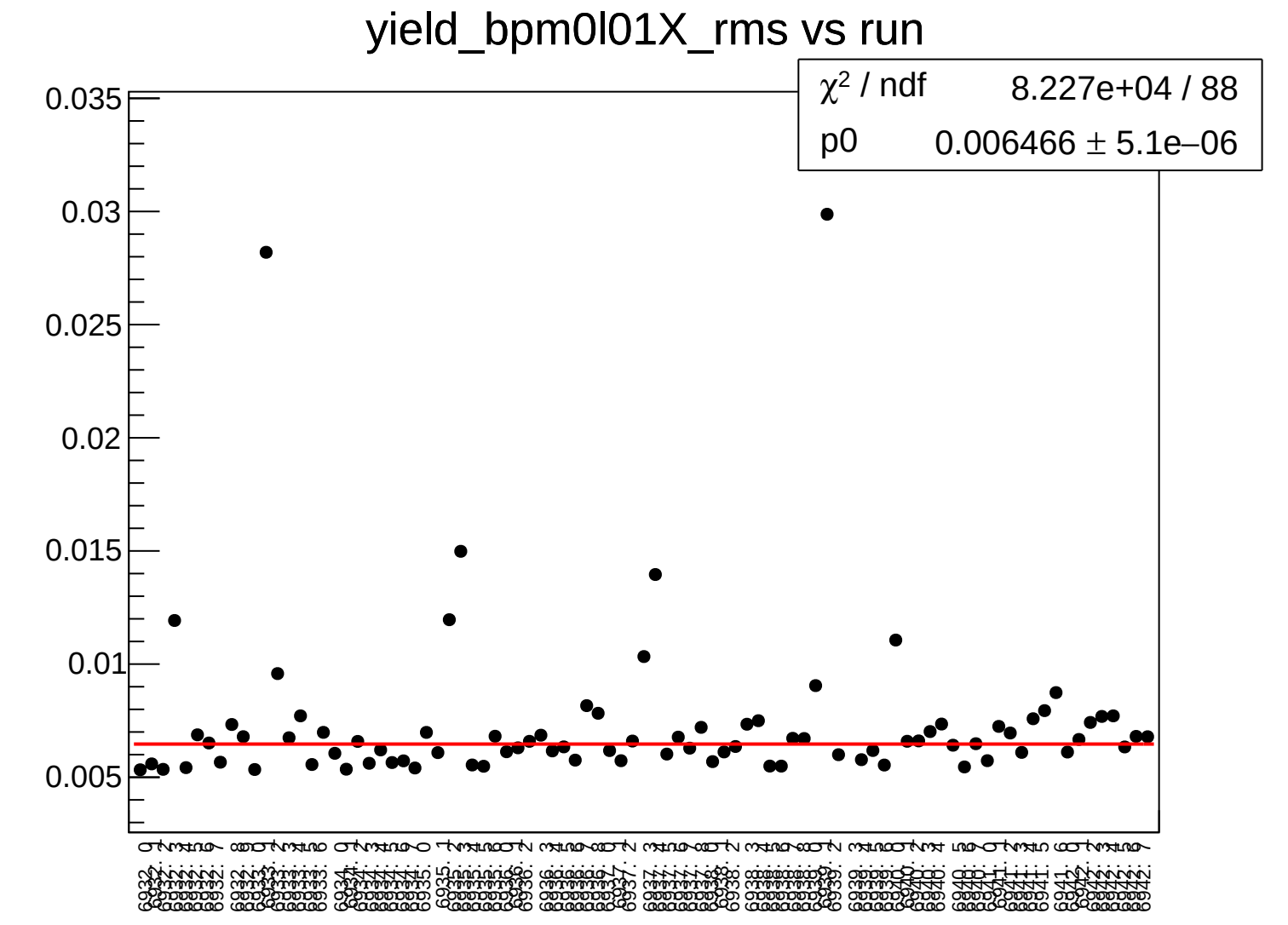

yield_bpm0i01aX_rms vs run
χ² / ndf 3.51e+04 / 88
p0 0.004708 ± 3.66e–06
0.014
0.012
0.01
0.008
0.006
0.004

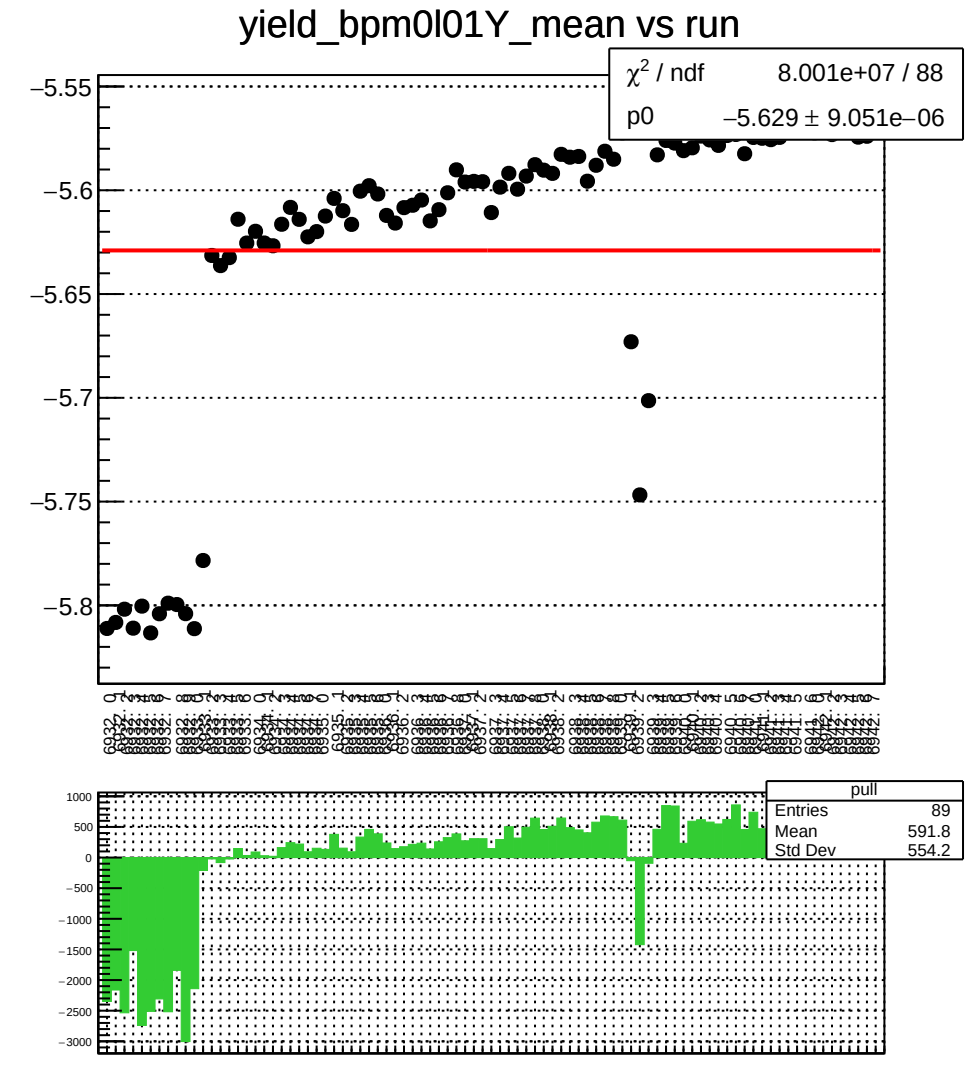

yield_bpm0i01aY_mean vs run
χ² / ndf 3.289e+08 / 88
p0 2.735 ± 3.614e−06
2.85
2.8
2.75
2.7
2.65
pull
Entries 89
Mean 1107
Std Dev 1064
5000
4000
3000
2000
1000
0
−1000
−2000
−3000

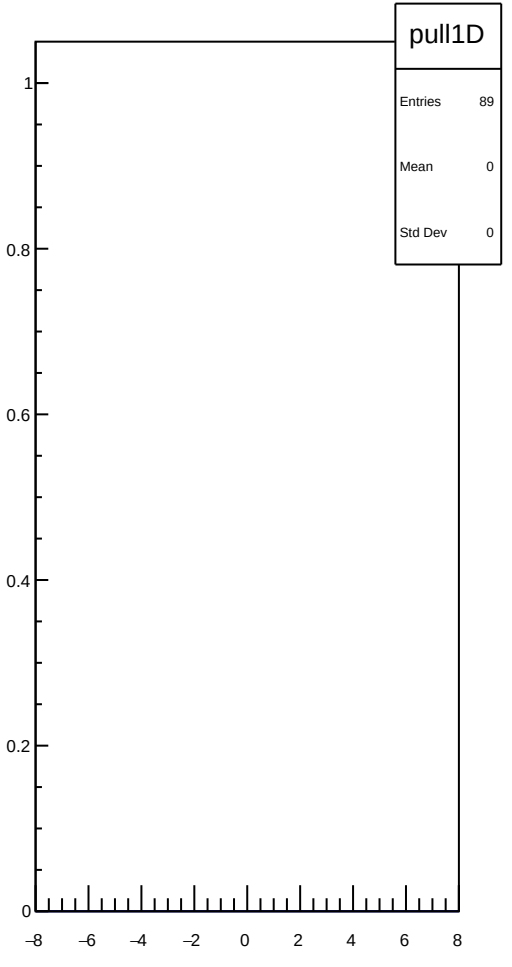

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

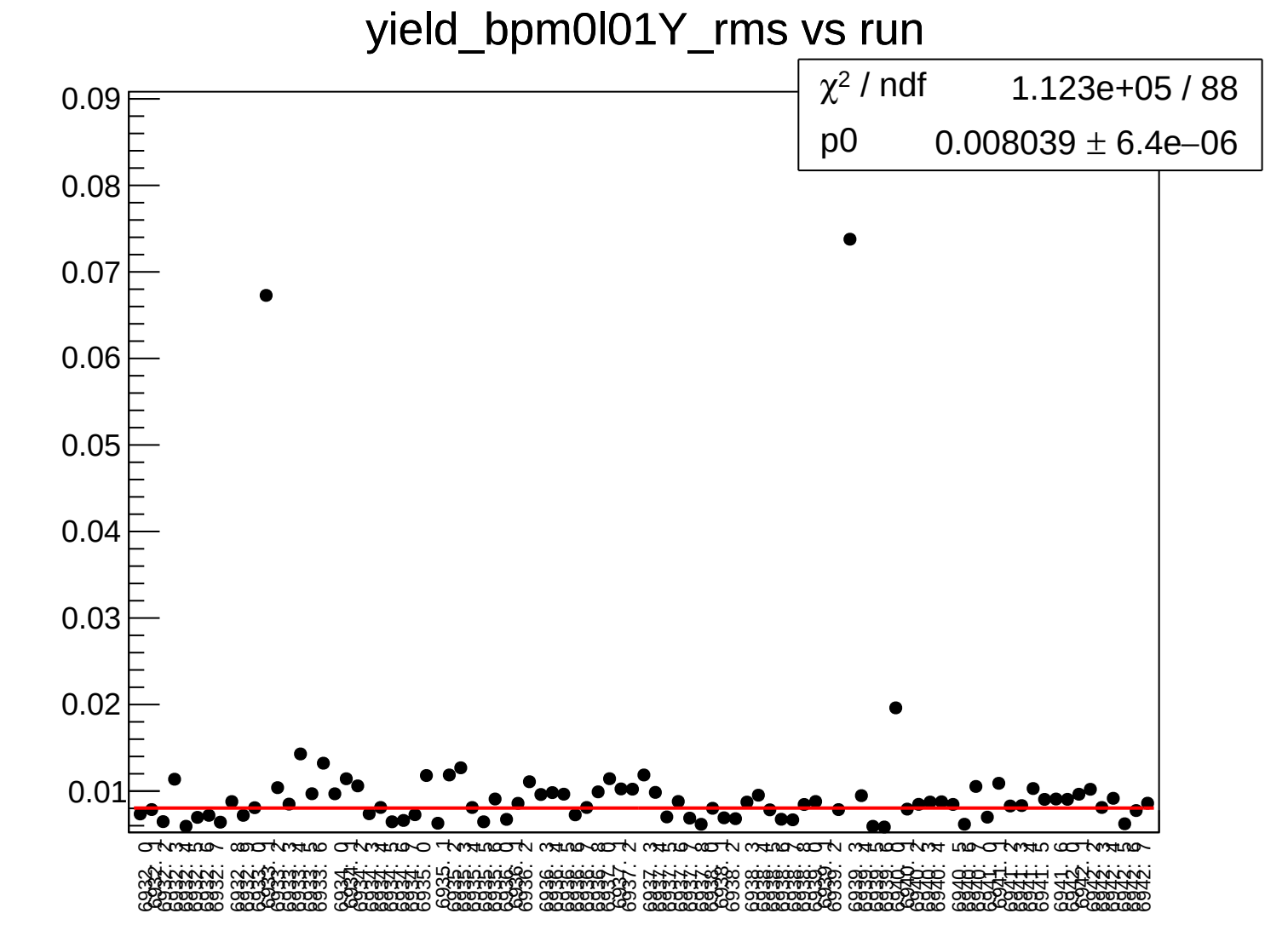

yield_bpm0i01aY_rms vs run
χ² / ndf 4.872e+04 / 88
p0 0.003274 ± 2.555e−06
0.012
0.01
0.008
0.006
0.004
0.002

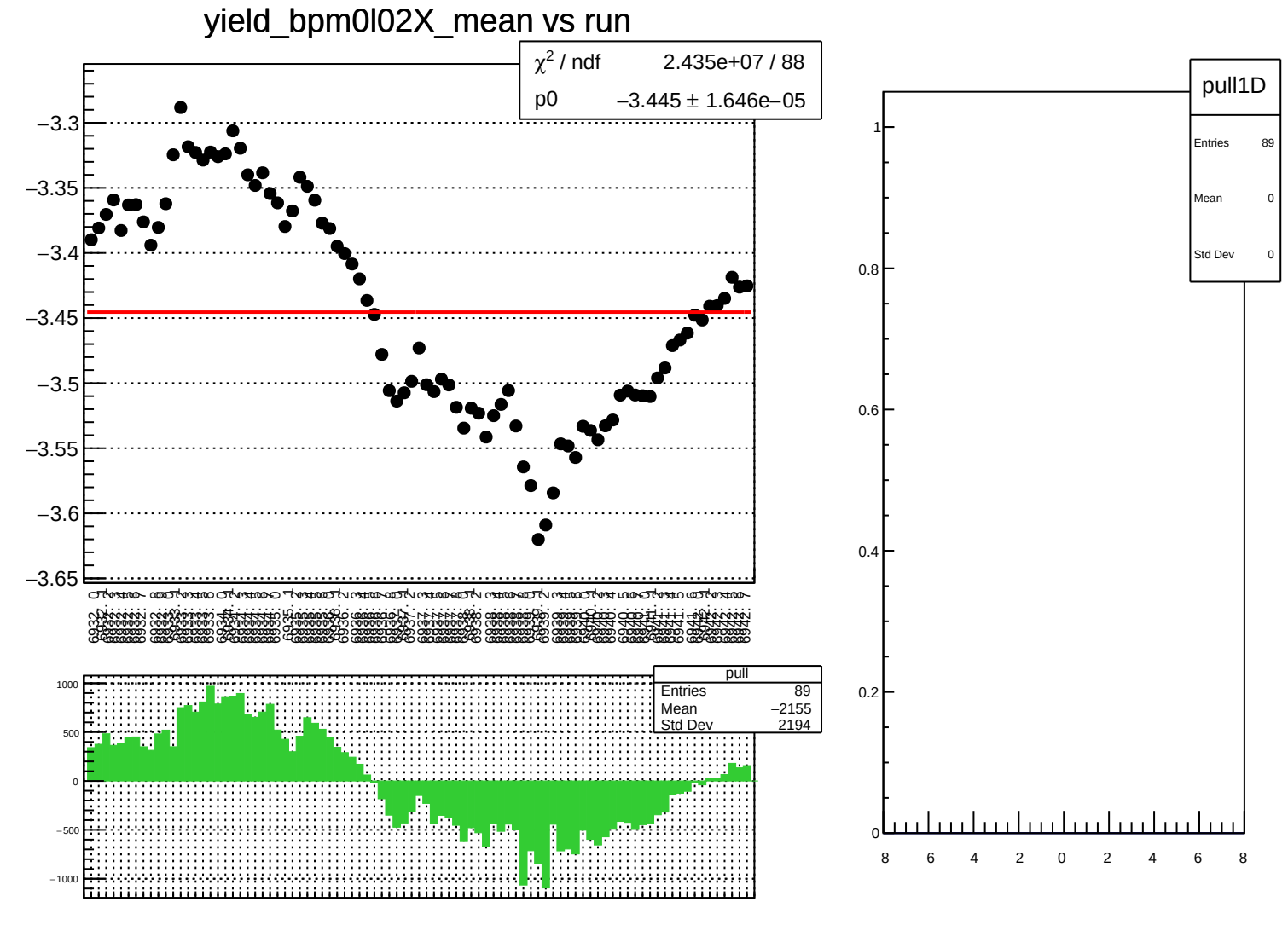

yield_bpm0l01X_mean vs run
χ² / ndf 4.106e+07 / 88
p0 −1.568 ± 7.213e−06
−1.5
−1.55
−1.6
−1.65
−1.7
pull
Entries 89
Mean 589.6
Std Dev 545.3
1500
1000
500
0
−500
−1000
−1500
−2000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

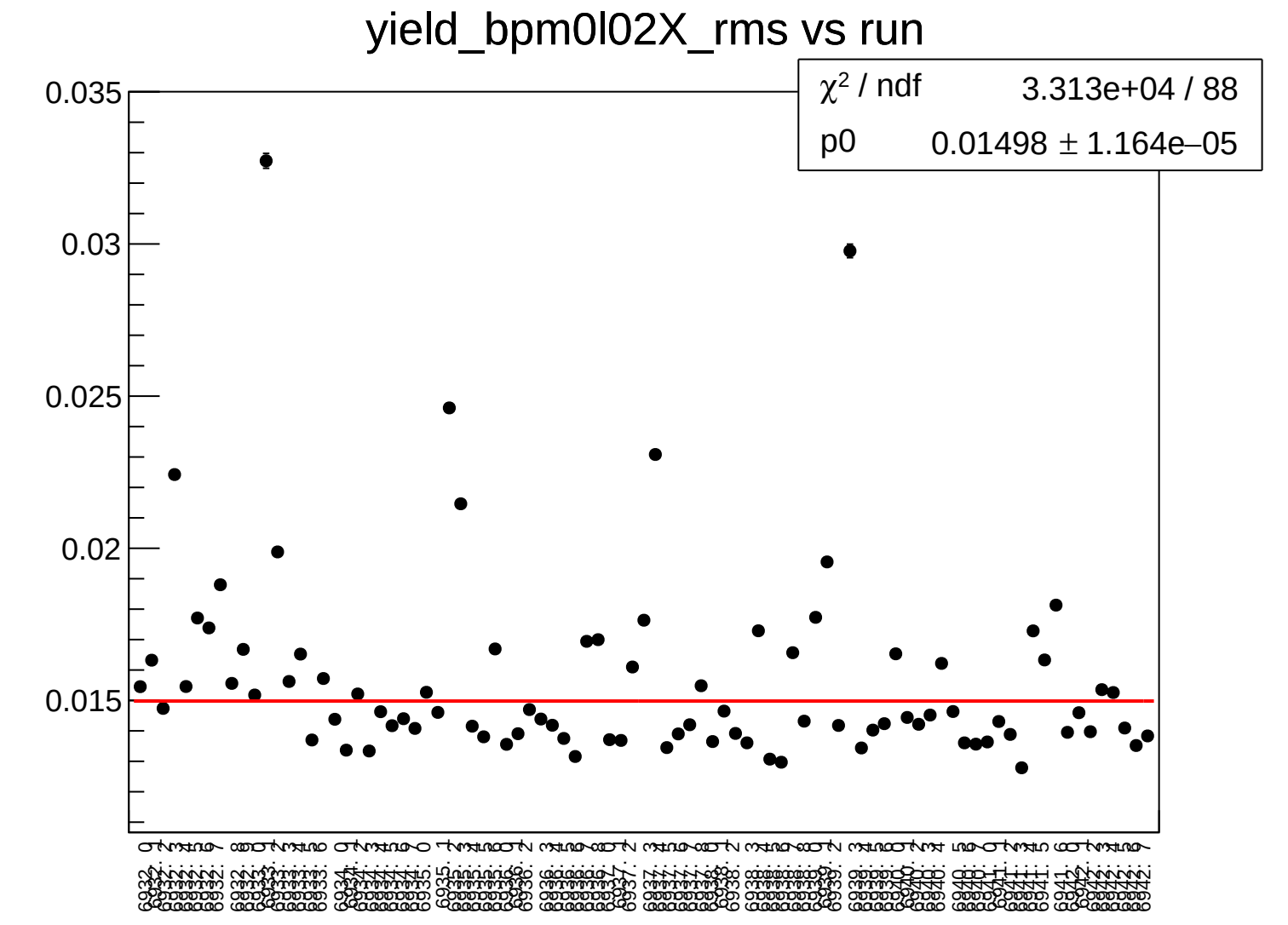

yield_bpm0l01X_rms vs run
χ² / ndf 8.227e+04 / 88
p0 0.006466 ± 5.1e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

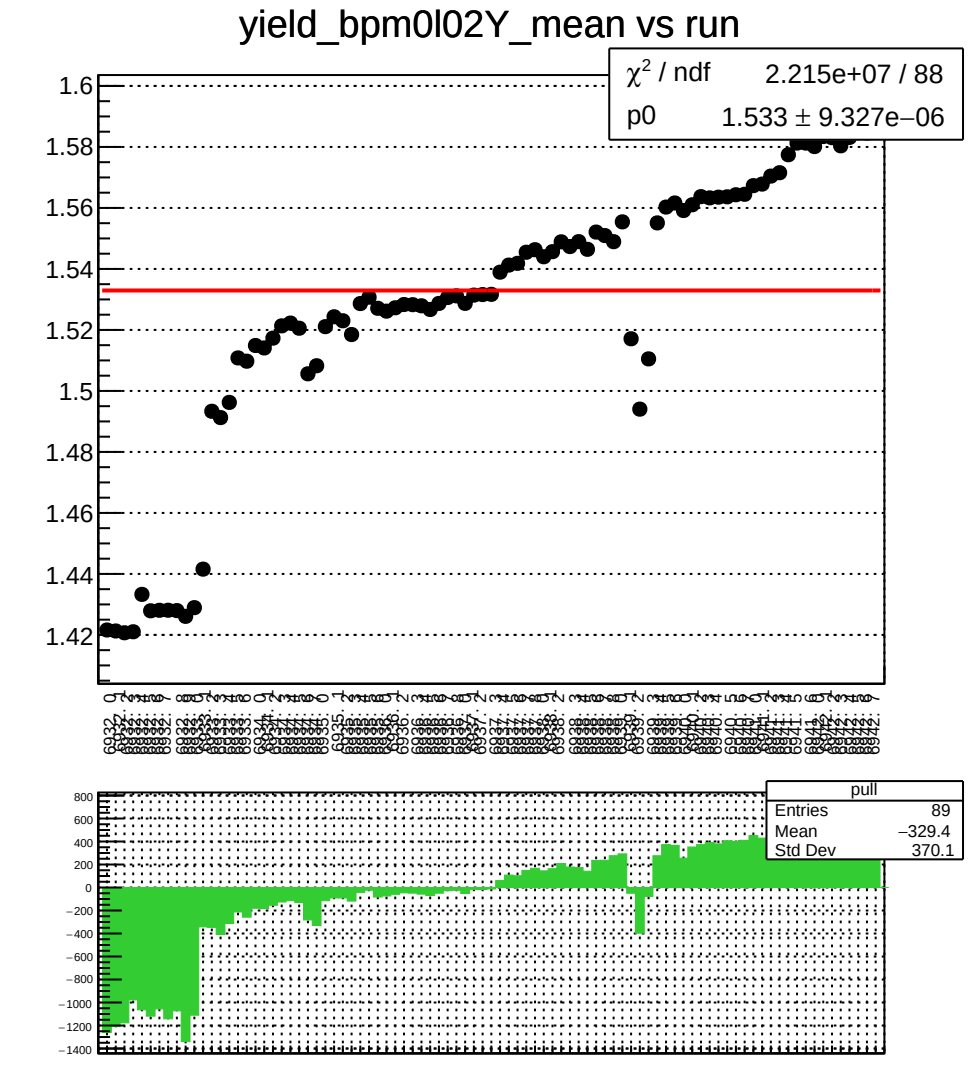

yield_bpm0l01Y_mean vs run
χ² / ndf 8.001e+07 / 88
p0 −5.629 ± 9.051e−06
−5.55
−5.6
−5.65
−5.7
−5.75
−5.8
pull
Entries 89
Mean 591.8
Std Dev 554.2
1000
500
0
−500
−1000
−1500
−2000
−2500
−3000

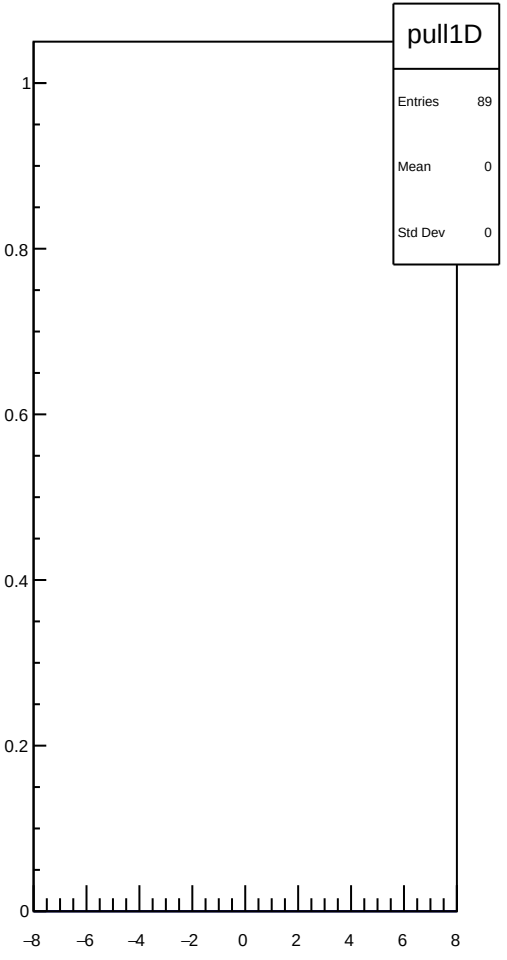

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

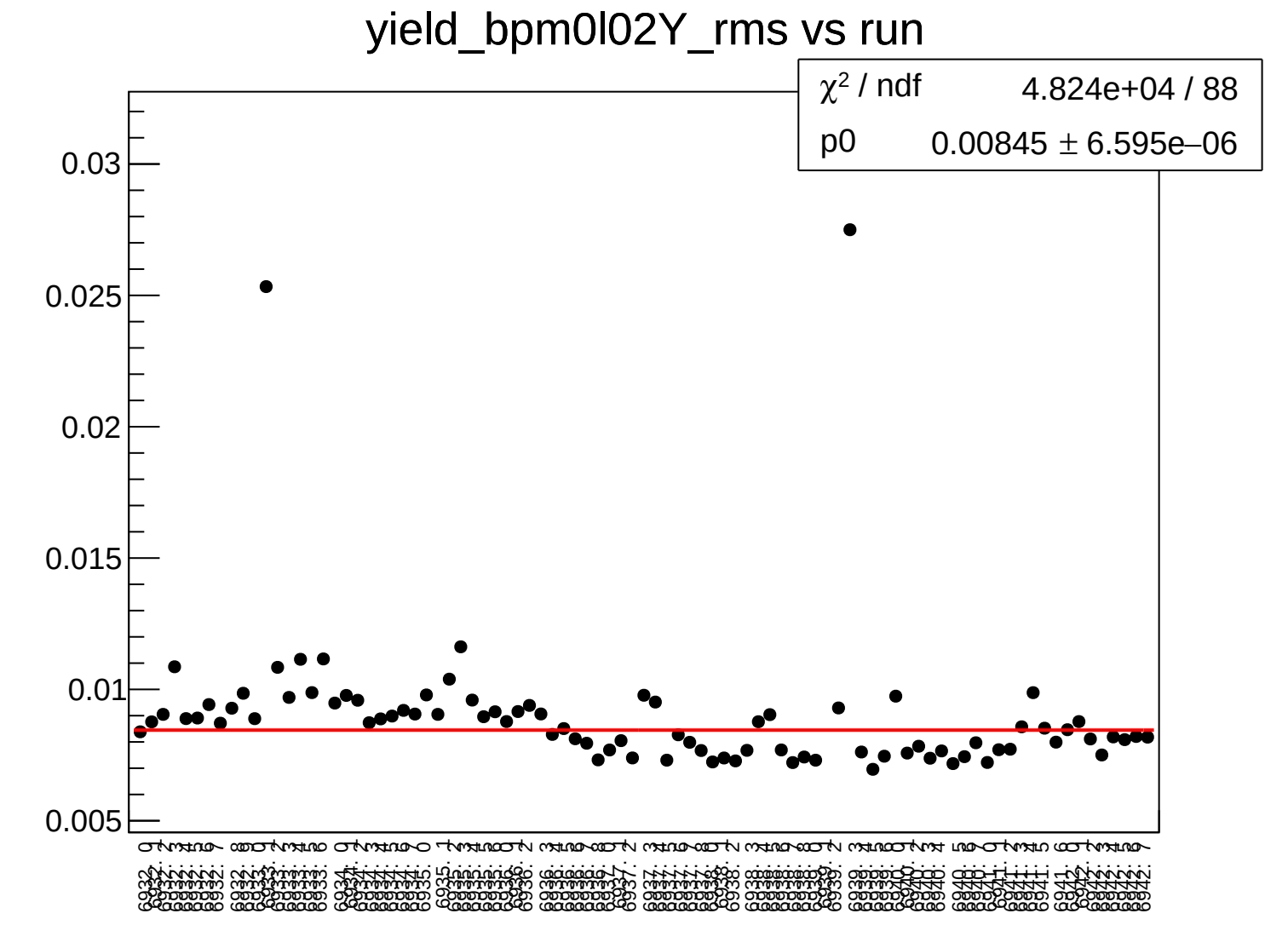

yield_bpm0l01Y_rms vs run
χ² / ndf 1.123e+05 / 88
p0 0.008039 ± 6.4e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

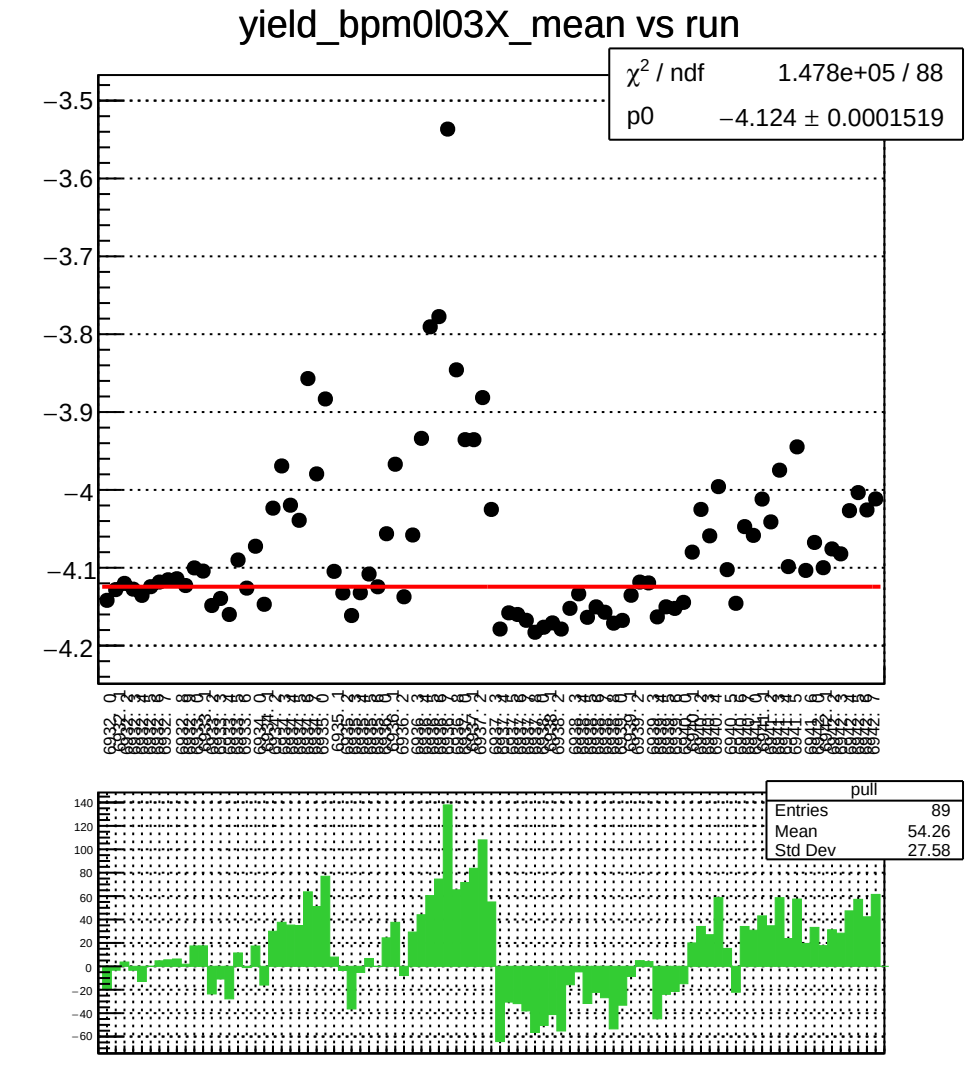

yield_bpm0l02X_mean vs run
χ² / ndf 2.435e+07 / 88
p0 −3.445 ± 1.646e−05
−3.3
−3.35
−3.4
−3.45
−3.5
−3.55
−3.6
−3.65
pull
Entries 89
Mean −2155
Std Dev 2194
1000
500
0
−500
−1000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

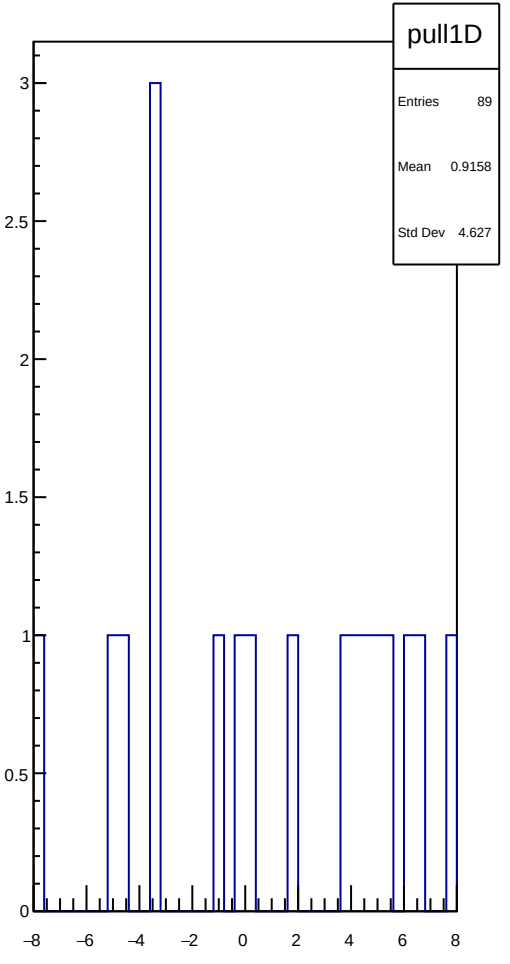

yield_bpm0l02X_rms vs run
χ² / ndf 3.313e+04 / 88
p0 0.01498 ± 1.164e–05
0.035
0.03
0.025
0.02
0.015

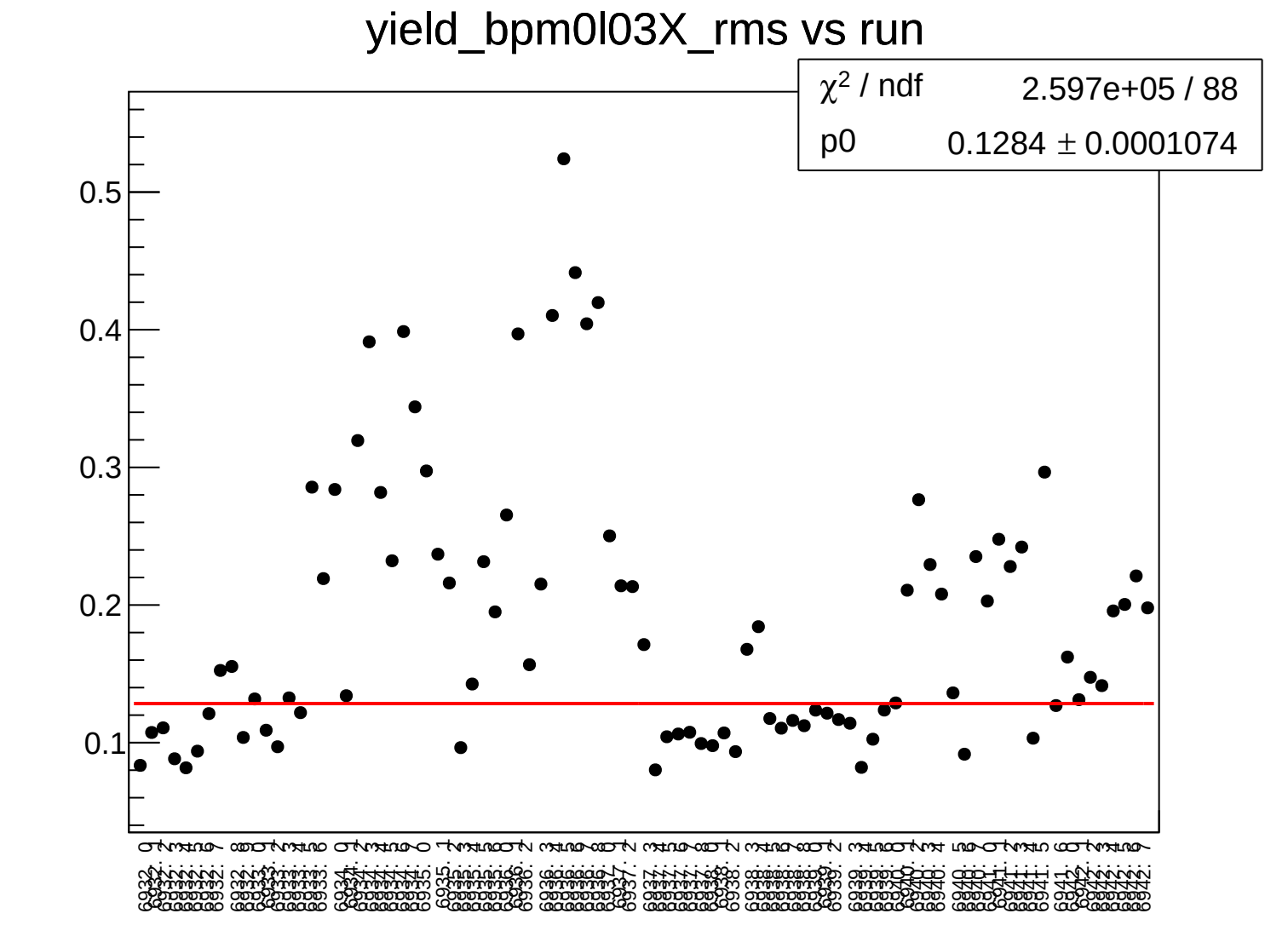

yield_bpm0l02Y_mean vs run
χ² / ndf 2.215e+07 / 88
p0 1.533 ± 9.327e−06
pull
Entries 89
Mean −329.4
Std Dev 370.1

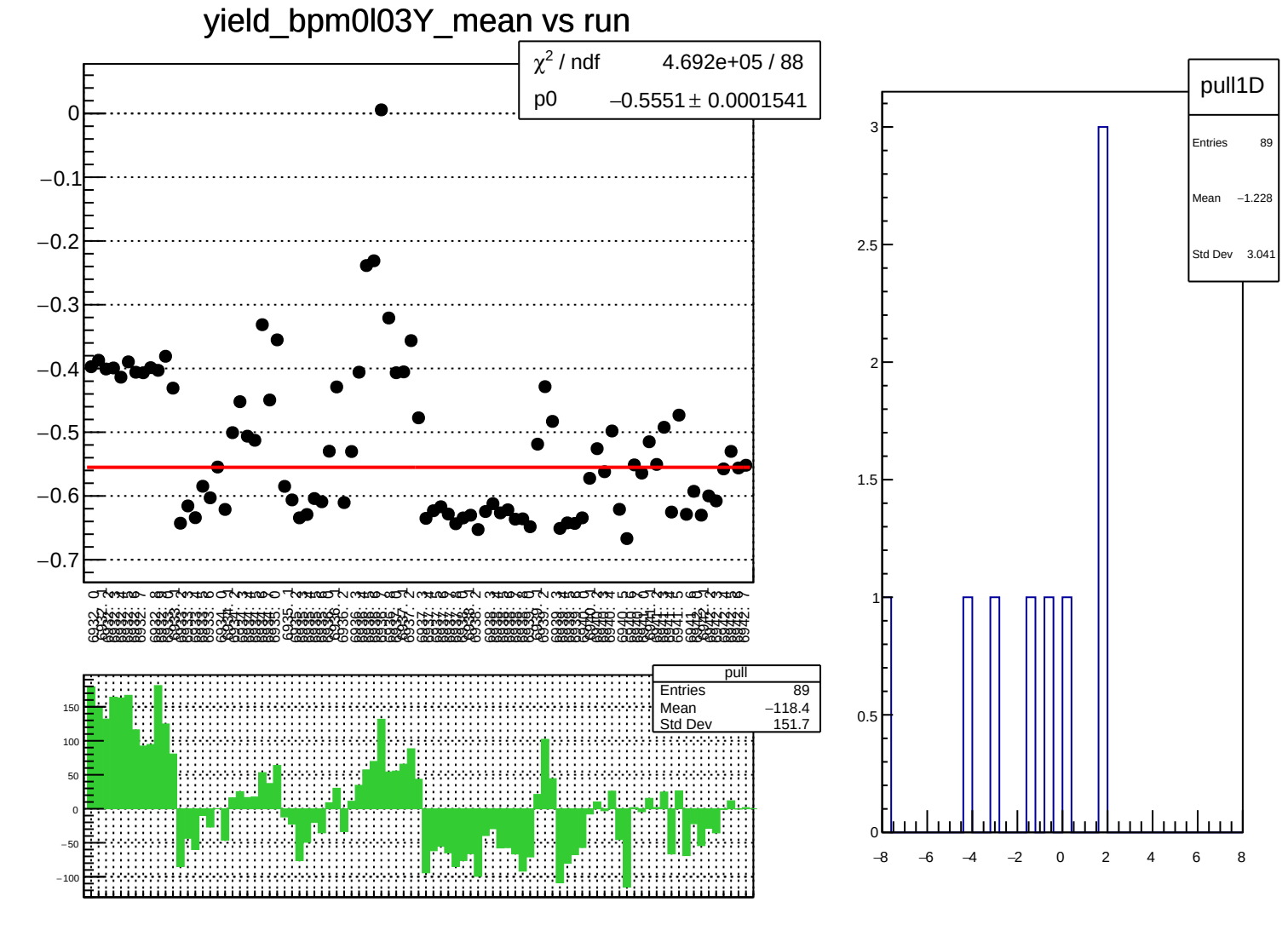

pull1D
Entries 89
Mean 0
Std Dev 0

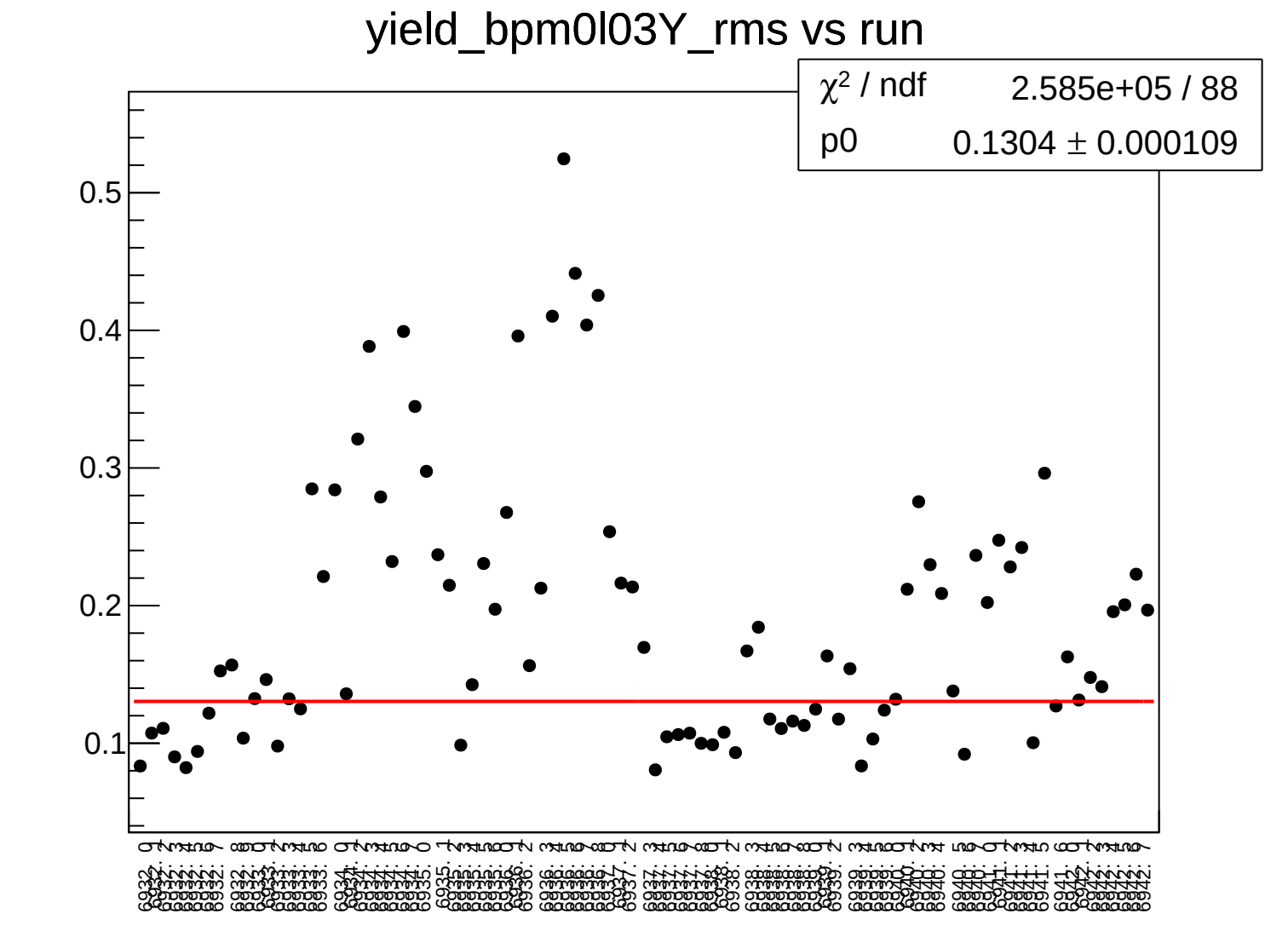

yield_bpm0l02Y_rms vs run
χ² / ndf 4.824e+04 / 88
p0 0.00845 ± 6.595e−06
0.03
0.025
0.02
0.015
0.01
0.005

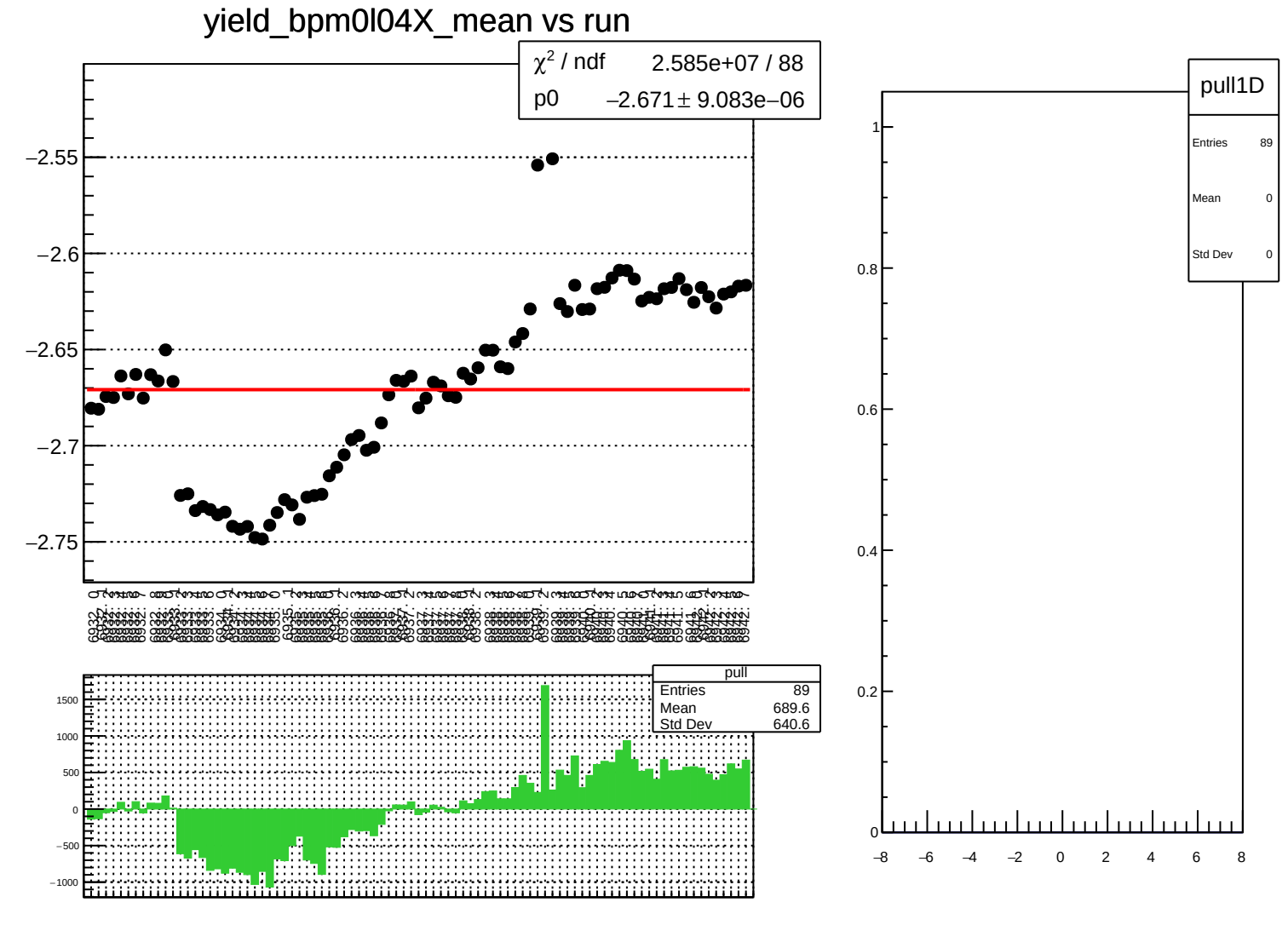

yield_bpm0l03X_mean vs run
χ² / ndf 1.478e+05 / 88
p0 −4.124 ± 0.0001519
−3.5
−3.6
−3.7
−3.8
−3.9
−4
−4.1
−4.2
pull
Entries 89
Mean 54.26
Std Dev 27.58
140
120
100
80
60
40
20
0
−20
−40
−60

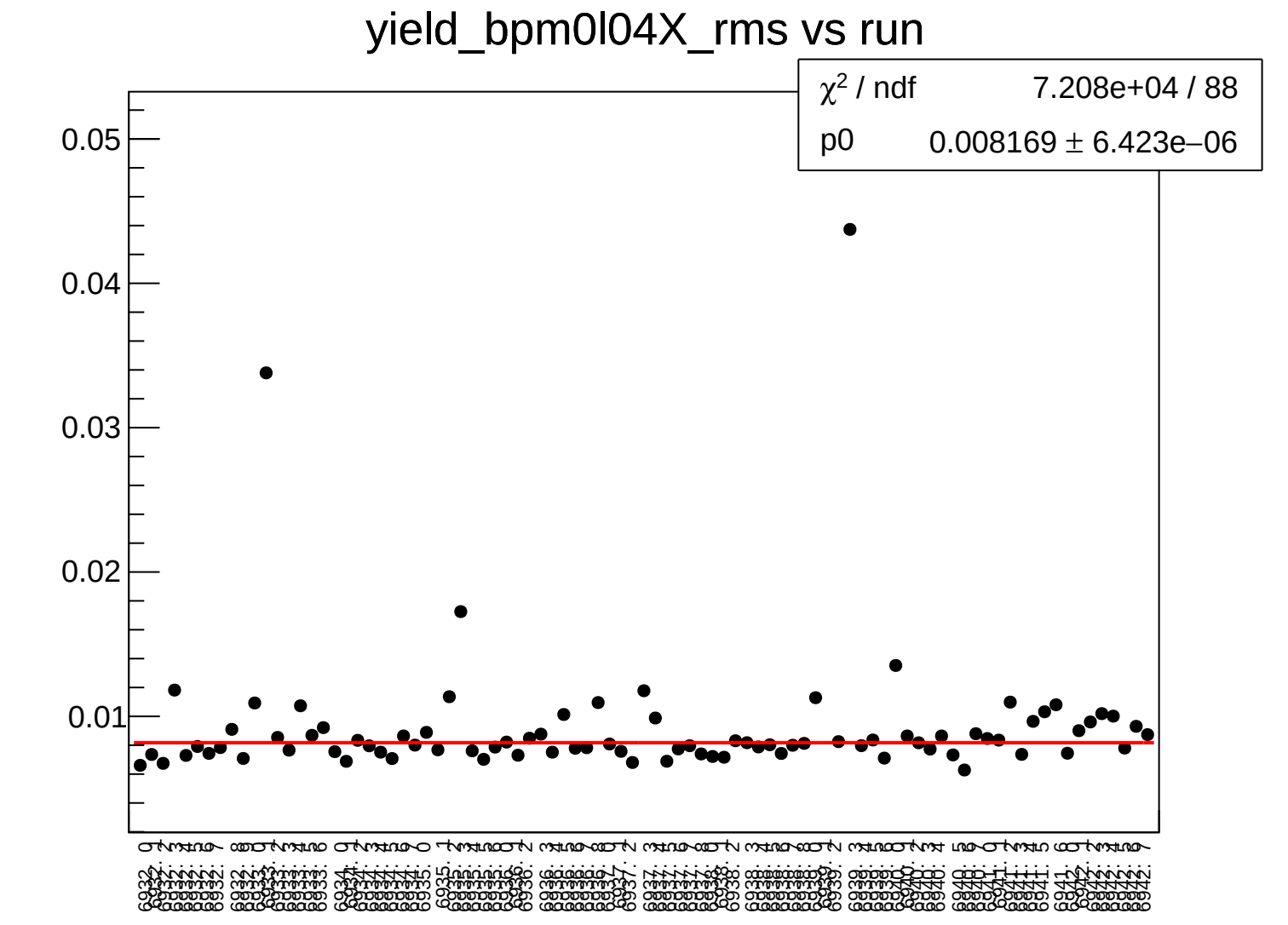

pull1D
Entries 89
Mean 0.9158
Std Dev 4.627
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

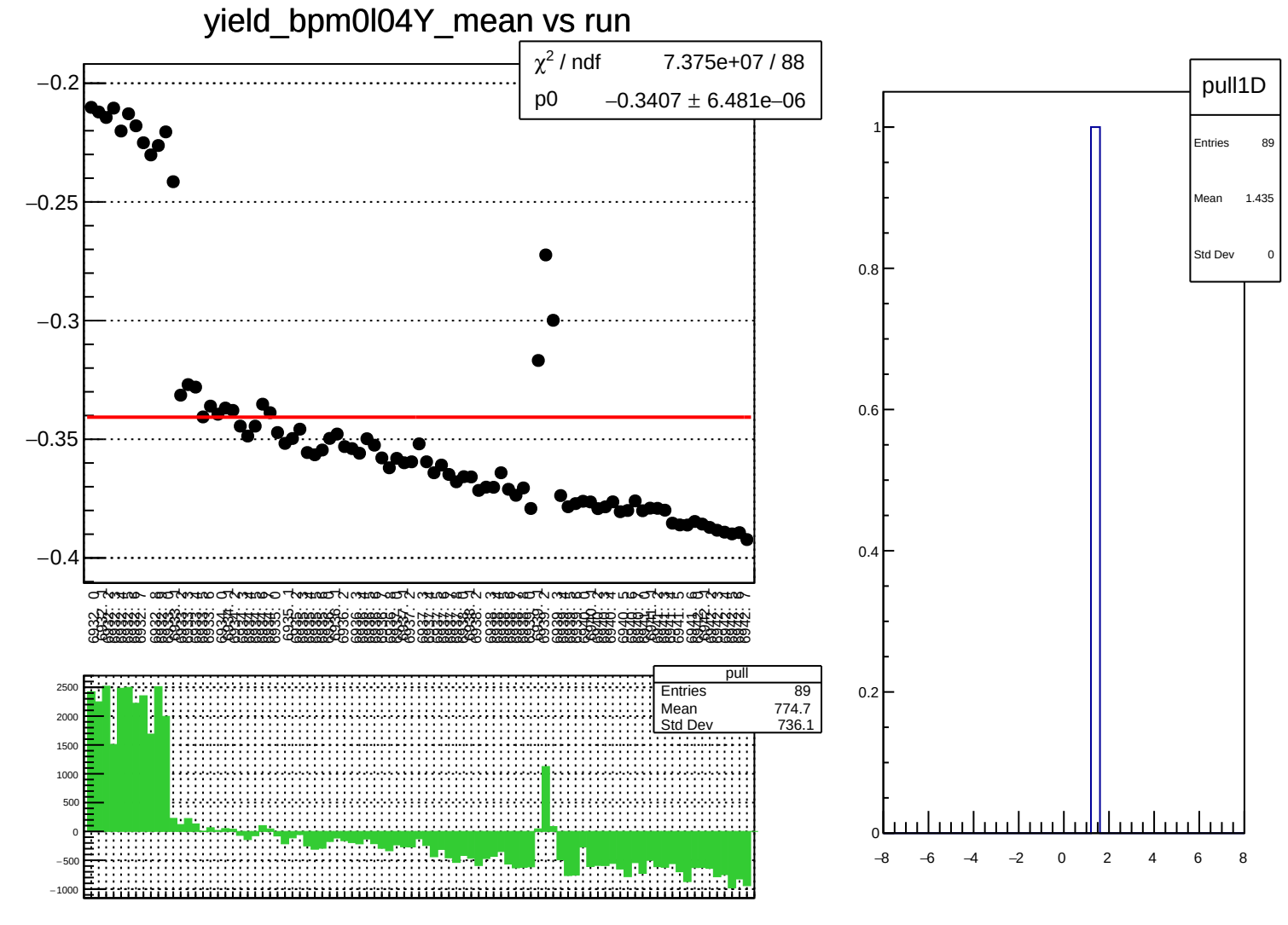

yield_bpm0l03X_rms vs run
χ² / ndf 2.597e+05 / 88
p0 0.1284 ± 0.0001074
0.5
0.4
0.3
0.2
0.1

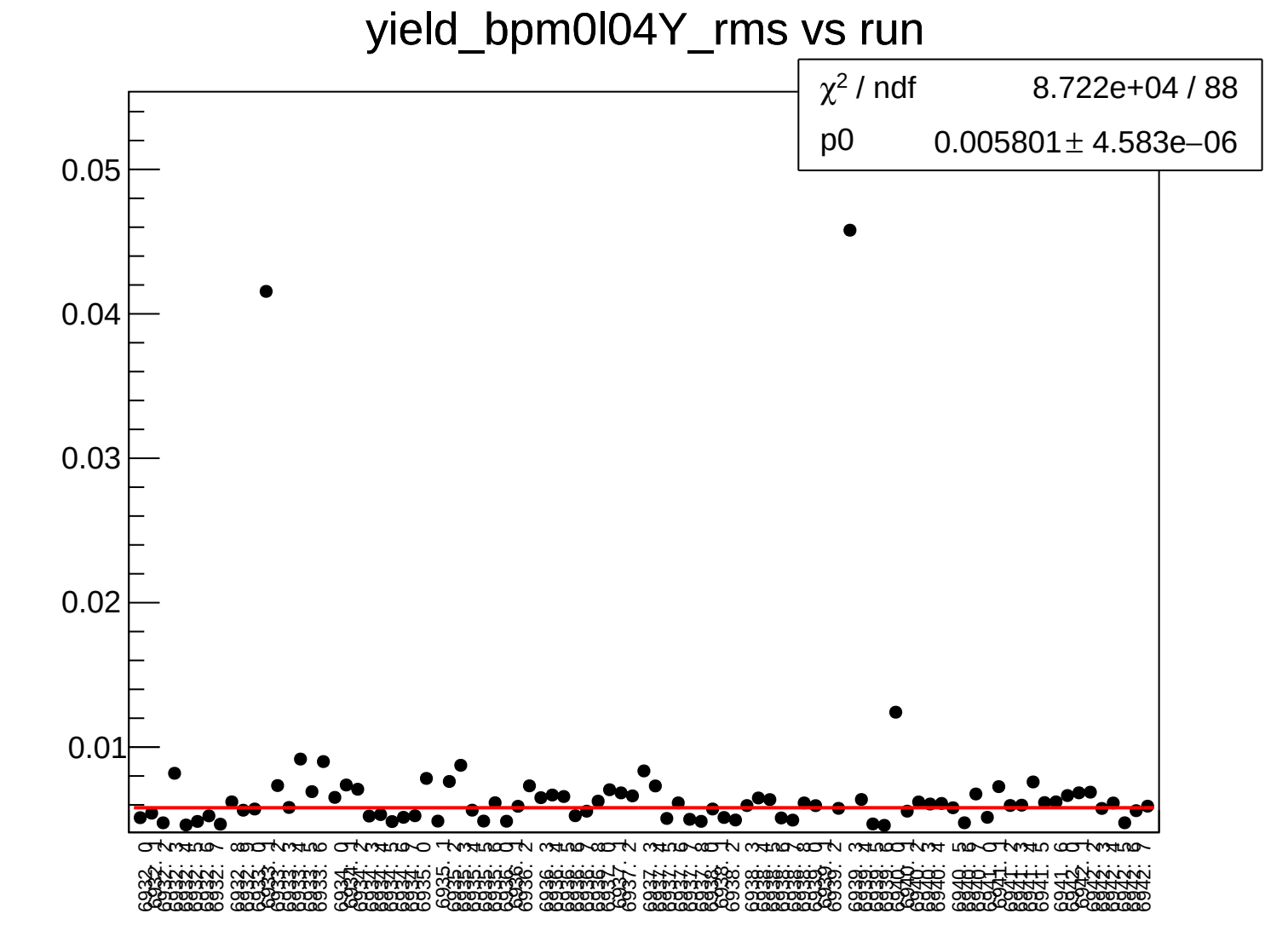

yield_bpm0l03Y_mean vs run
χ² / ndf 4.692e+05 / 88
p0 −0.5551 ± 0.0001541
pull
Entries 89
Mean −118.4
Std Dev 151.7
pull1D
Entries 89
Mean −1.228
Std Dev 3.041

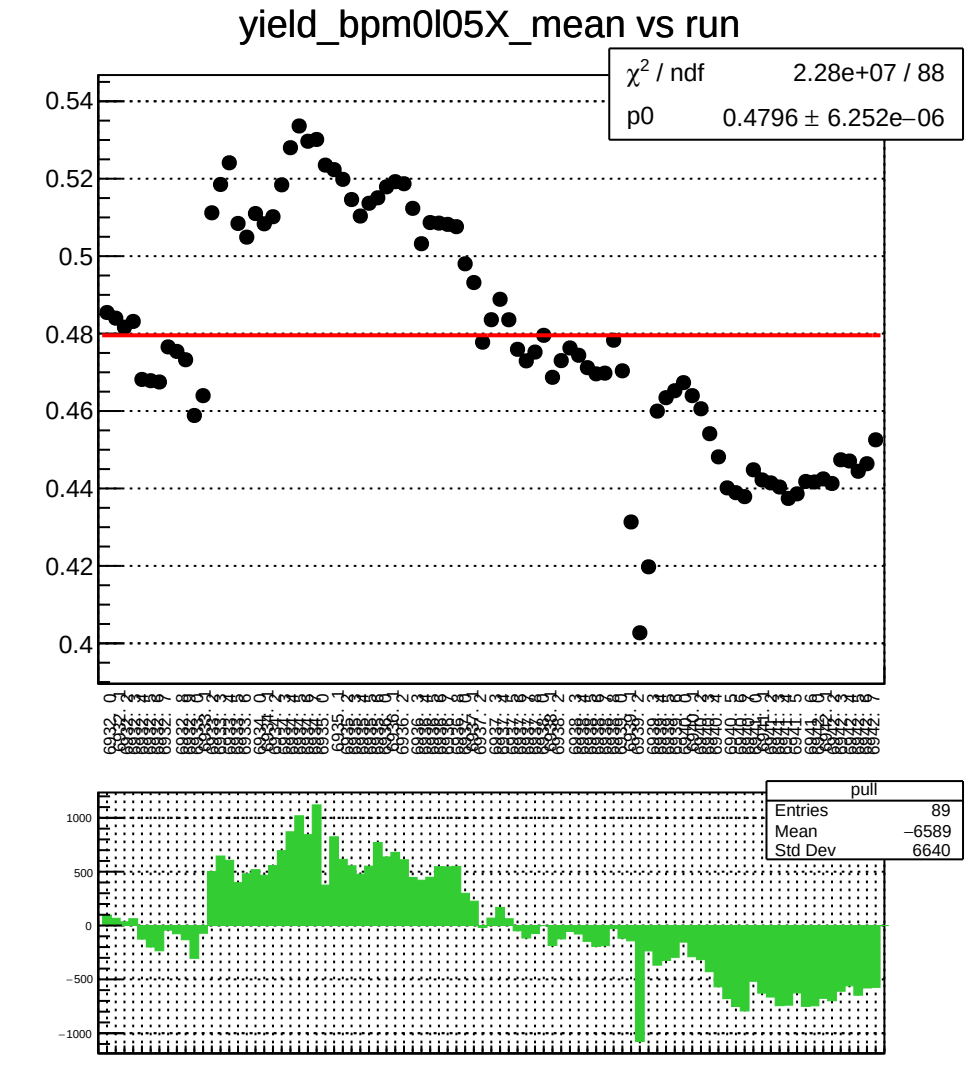

yield_bpm0l03Y_rms vs run
χ² / ndf 2.585e+05 / 88
p0 0.1304 ± 0.000109
0.5
0.4
0.3
0.2
0.1

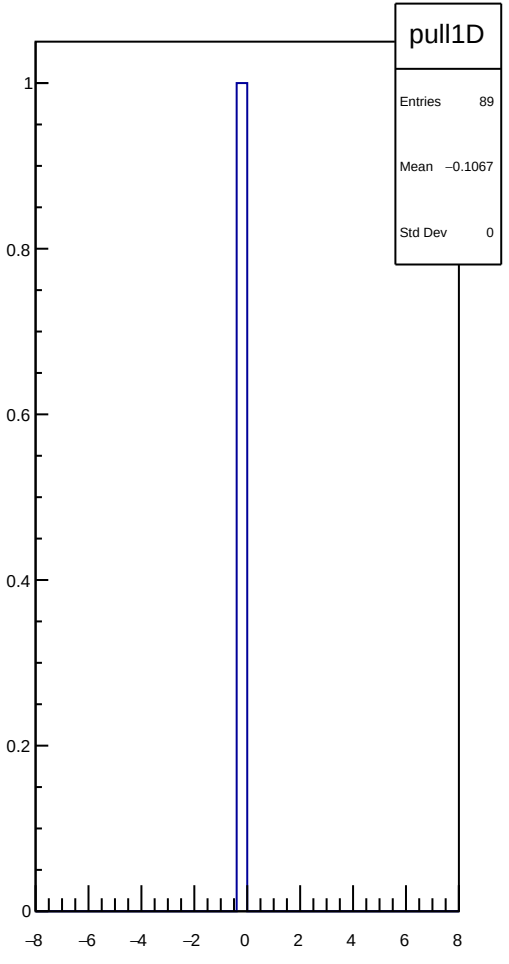

yield_bpm0l04X_mean vs run
χ² / ndf 2.585e+07 / 88
p0 −2.671 ± 9.083e−06
−2.55
−2.6
−2.65
−2.7
−2.75
pull
Entries 89
Mean 689.6
Std Dev 640.6
1500
1000
500
0
−500
−1000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

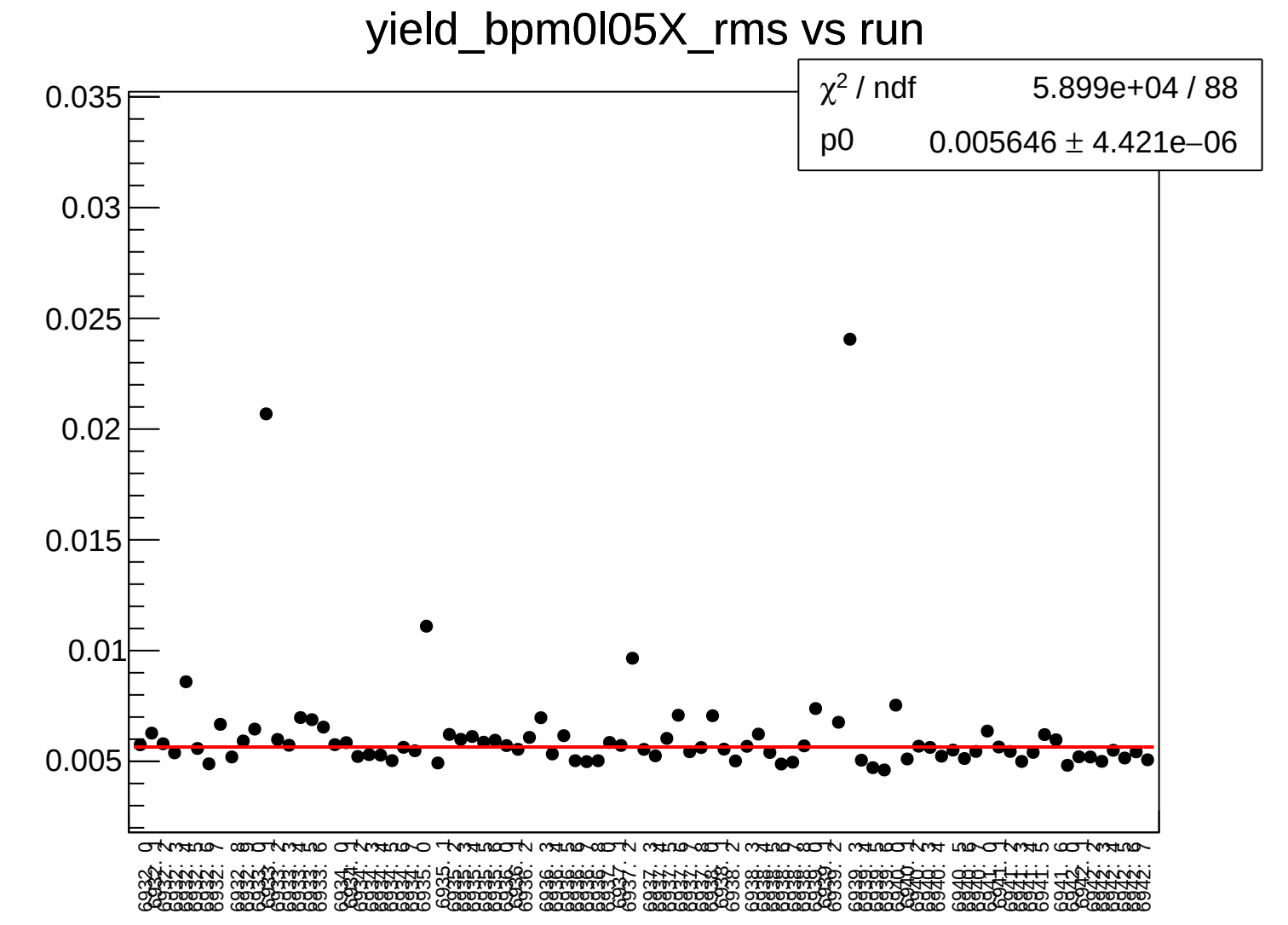

yield_bpm0l04X_rms vs run
χ² / ndf 7.208e+04 / 88
p0 0.008169 ± 6.423e−06
0.05
0.04
0.03
0.02
0.01

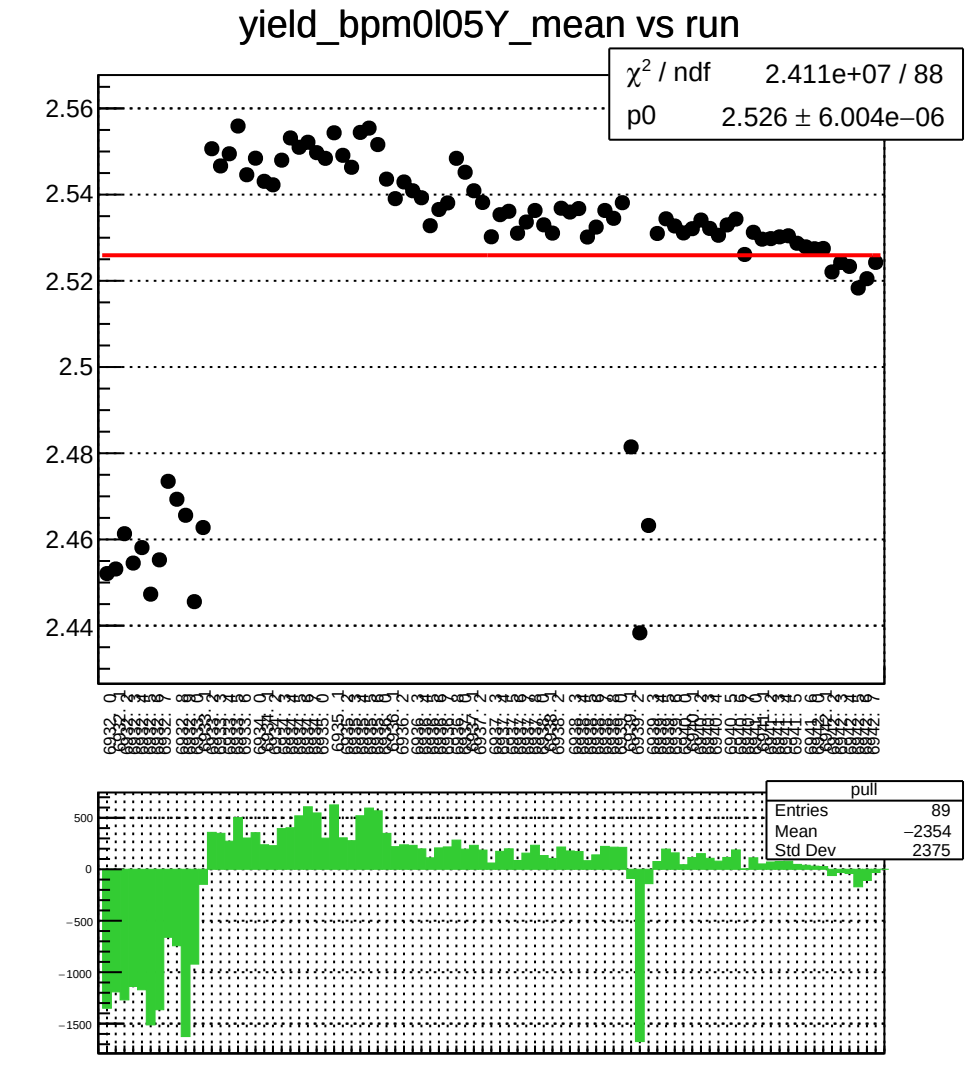

yield_bpm0l04Y_mean vs run
χ² / ndf 7.375e+07 / 88
p0 −0.3407 ± 6.481e−06
−0.2
−0.25
−0.3
−0.35
−0.4
pull
Entries 89
Mean 774.7
Std Dev 736.1
2500
2000
1500
1000
500
0
−500
−1000
pull1D
Entries 89
Mean 1.435
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

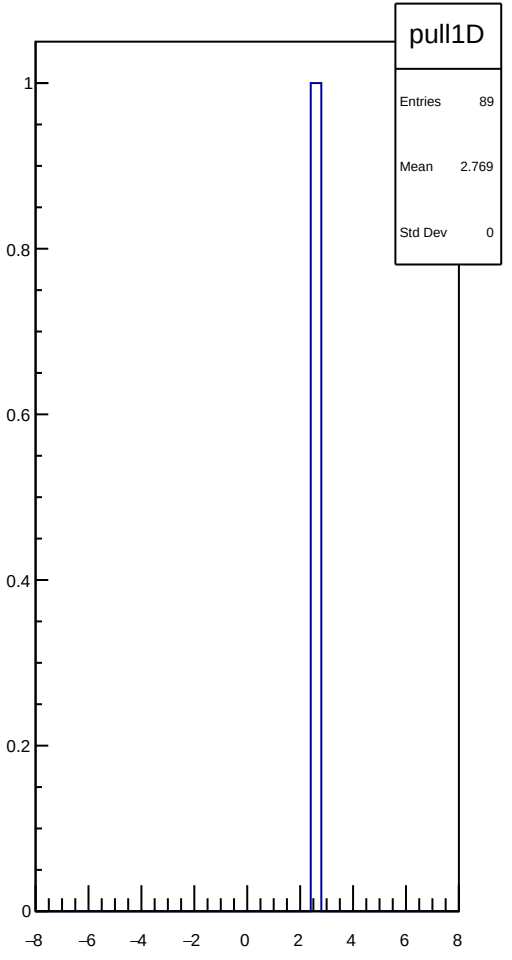

yield_bpm0l04Y_rms vs run
χ² / ndf 8.722e+04 / 88
p0 0.005801 ± 4.583e−06
0.05
0.04
0.03
0.02
0.01

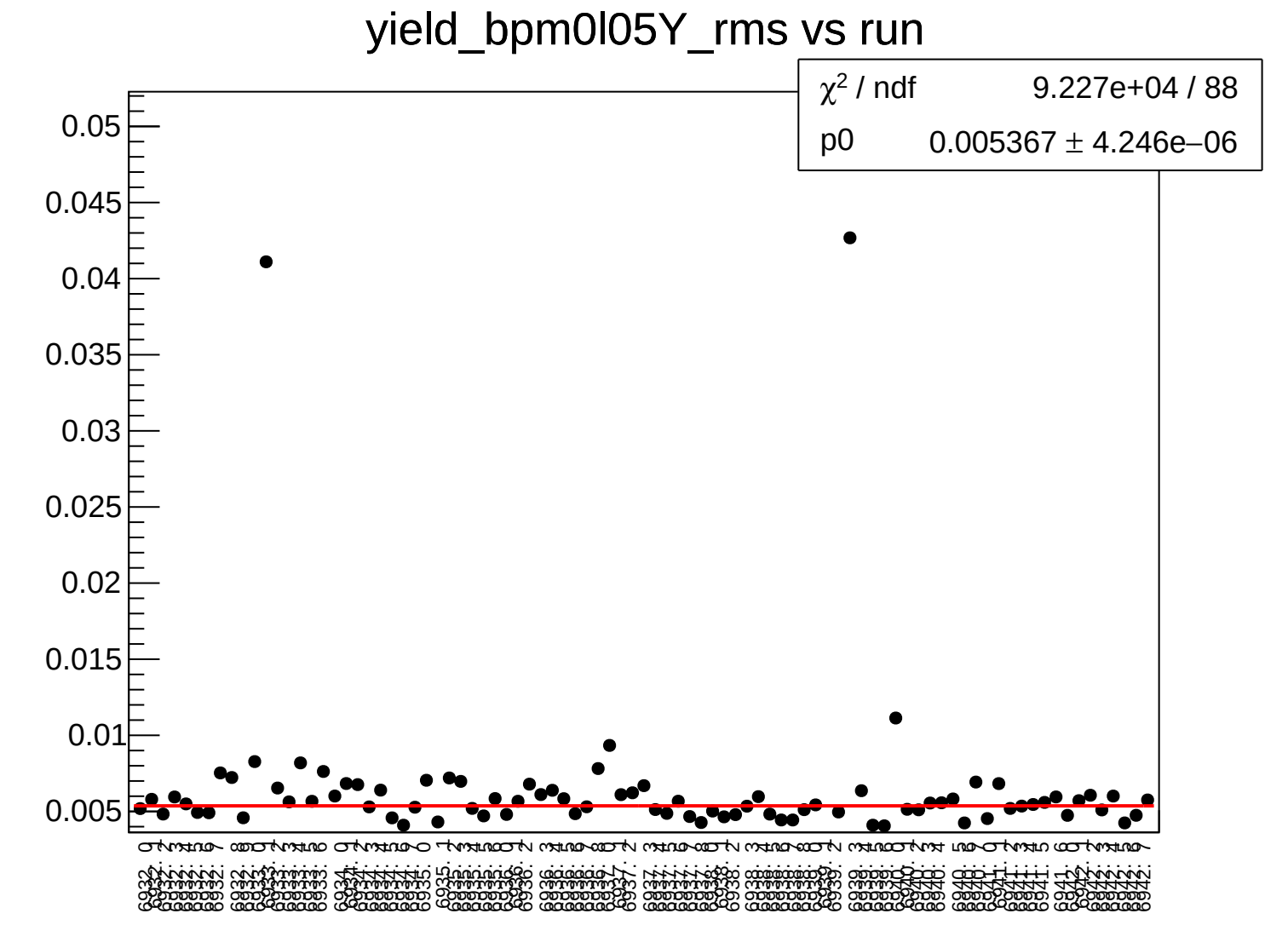

yield_bpm0l05X_mean vs run
χ² / ndf 2.28e+07 / 88
p0 0.4796 ± 6.252e−06
0.54
0.52
0.5
0.48
0.46
0.44
0.42
0.4
pull
Entries 89
Mean −6589
Std Dev 6640
1000
500
0
−500
−1000

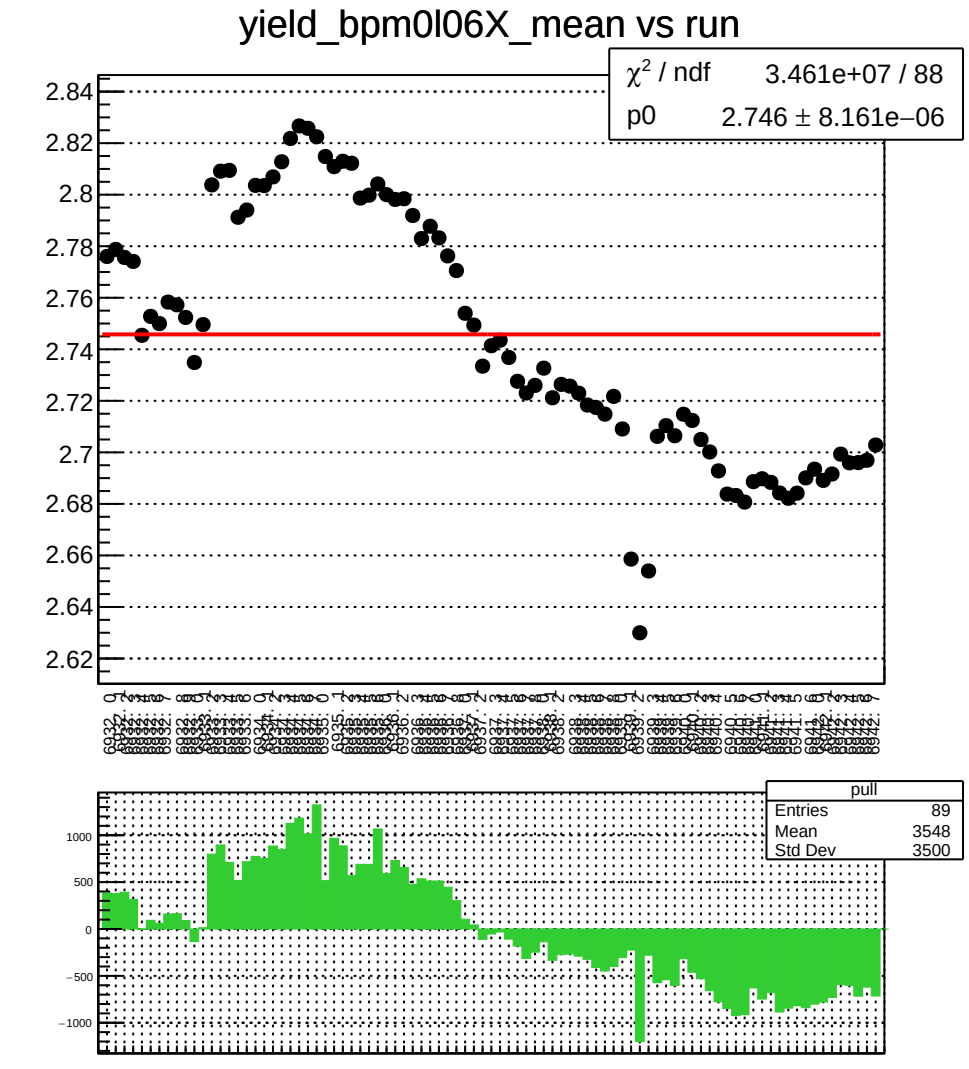

pull1D
Entries 89
Mean −0.1067
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

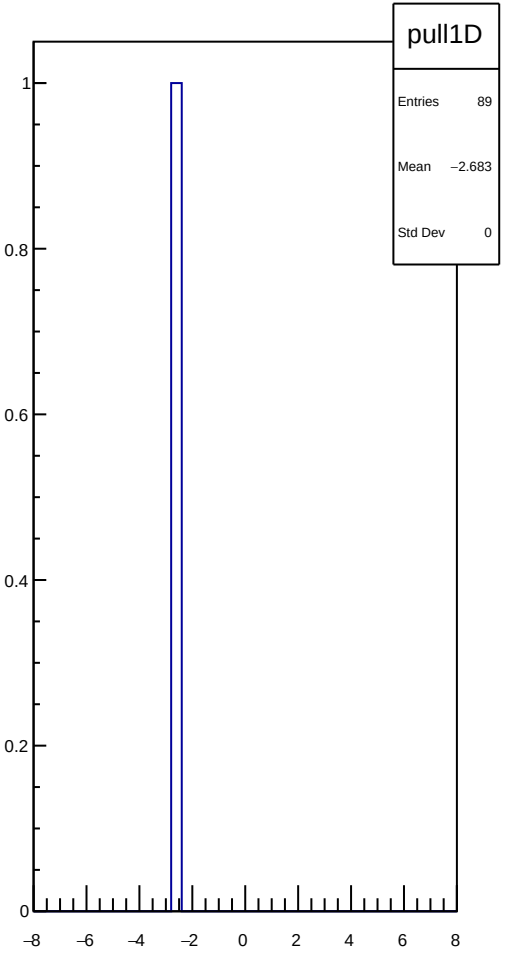

yield_bpm0l05X_rms vs run
χ² / ndf 5.899e+04 / 88
p0 0.005646 ± 4.421e−06
0.035
0.03
0.025
0.02
0.015
0.01
0.005

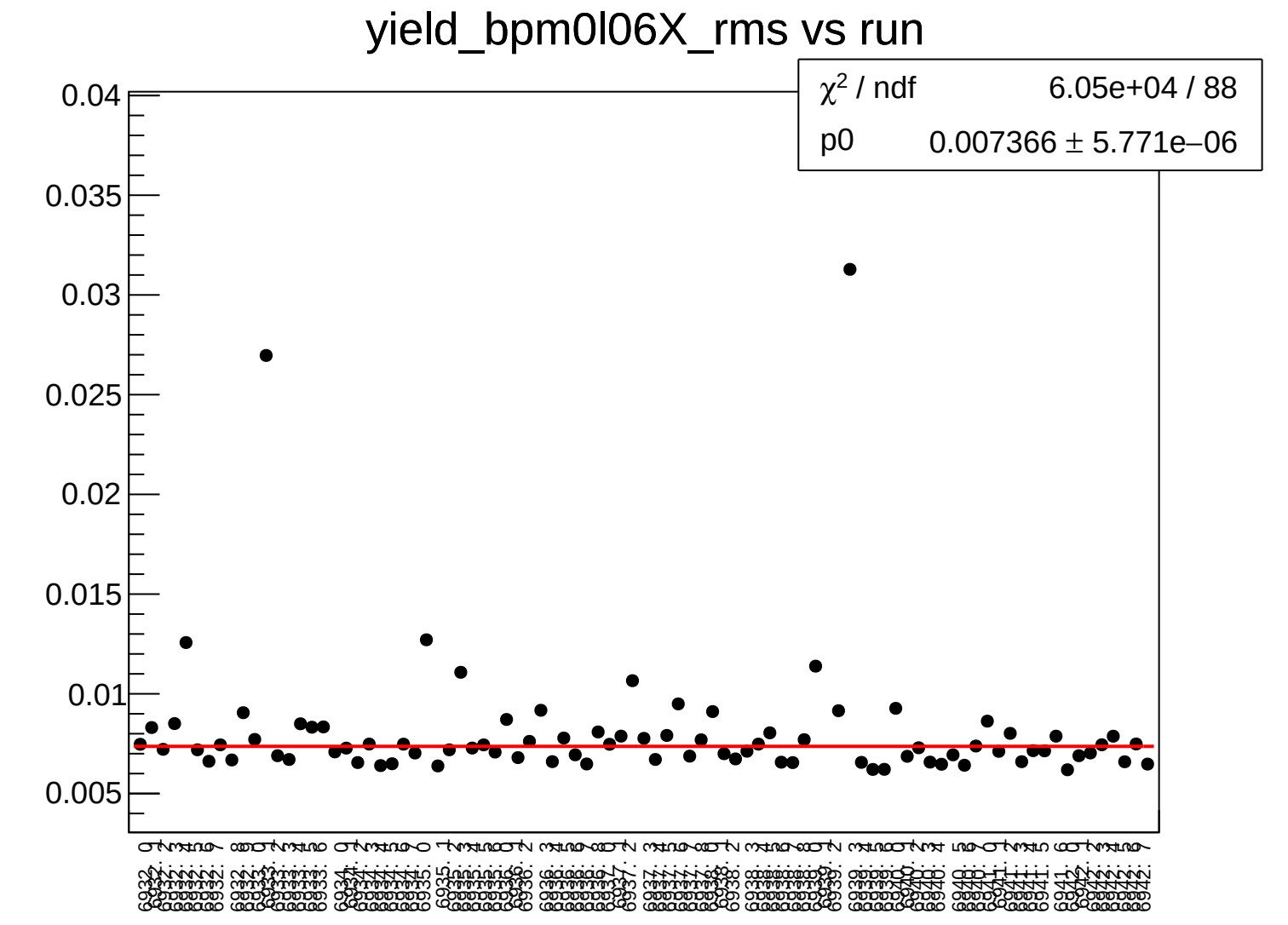

yield_bpm0l05Y_mean vs run
χ² / ndf 2.411e+07 / 88
p0 2.526 ± 6.004e−06
2.56
2.54
2.52
2.5
2.48
2.46
2.44
pull
Entries 89
Mean −2354
Std Dev 2375
500
0
−500
−1000
−1500

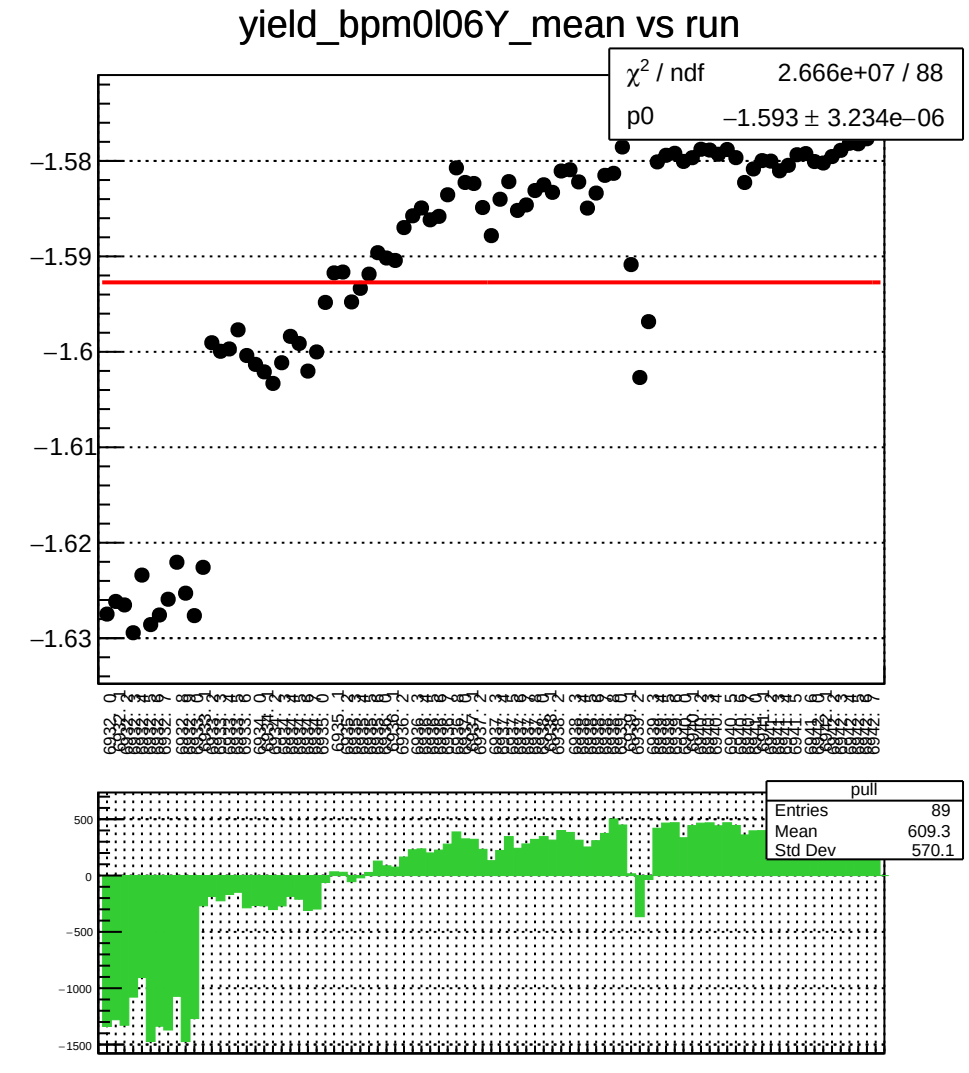

pull1D
Entries 89
Mean 2.769
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

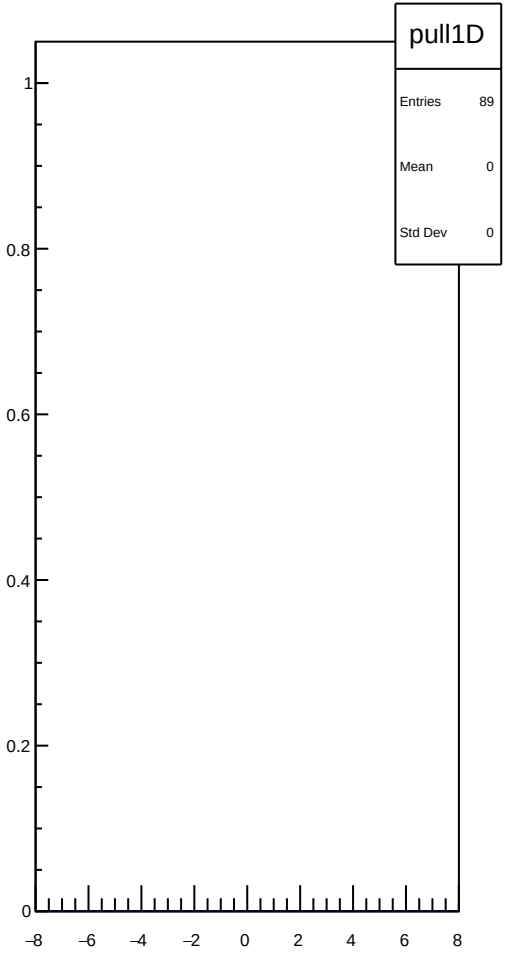

yield_bpm0l05Y_rms vs run
χ² / ndf 9.227e+04 / 88
p0 0.005367 ± 4.246e−06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

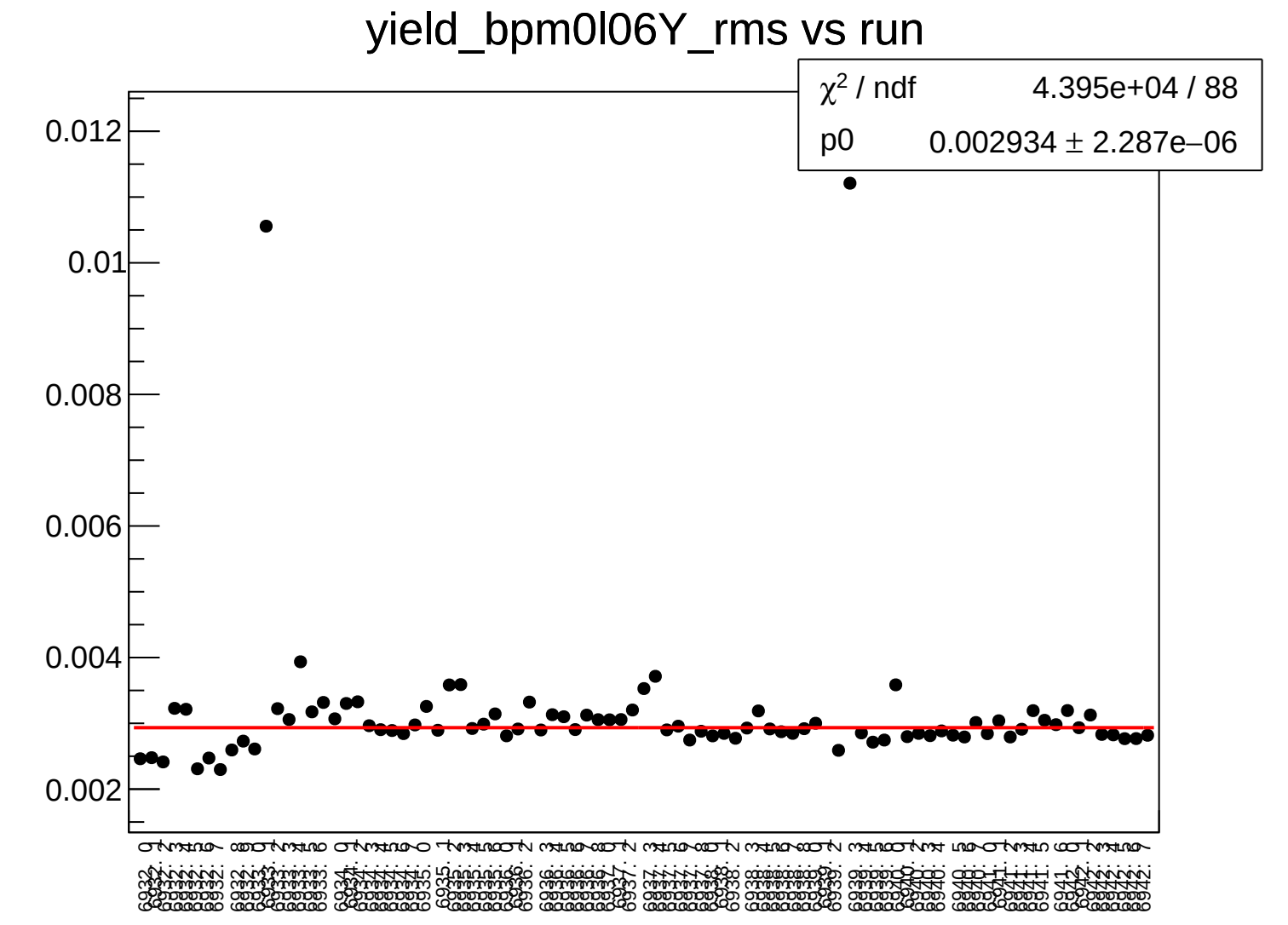

yield_bpm0l06X_mean vs run
χ² / ndf 3.461e+07 / 88
p0 2.746 ± 8.161e−06
2.84
2.82
2.8
2.78
2.76
2.74
2.72
2.7
2.68
2.66
2.64
2.62
pull
Entries 89
Mean 3548
Std Dev 3500
1000
500
0
−500
−1000

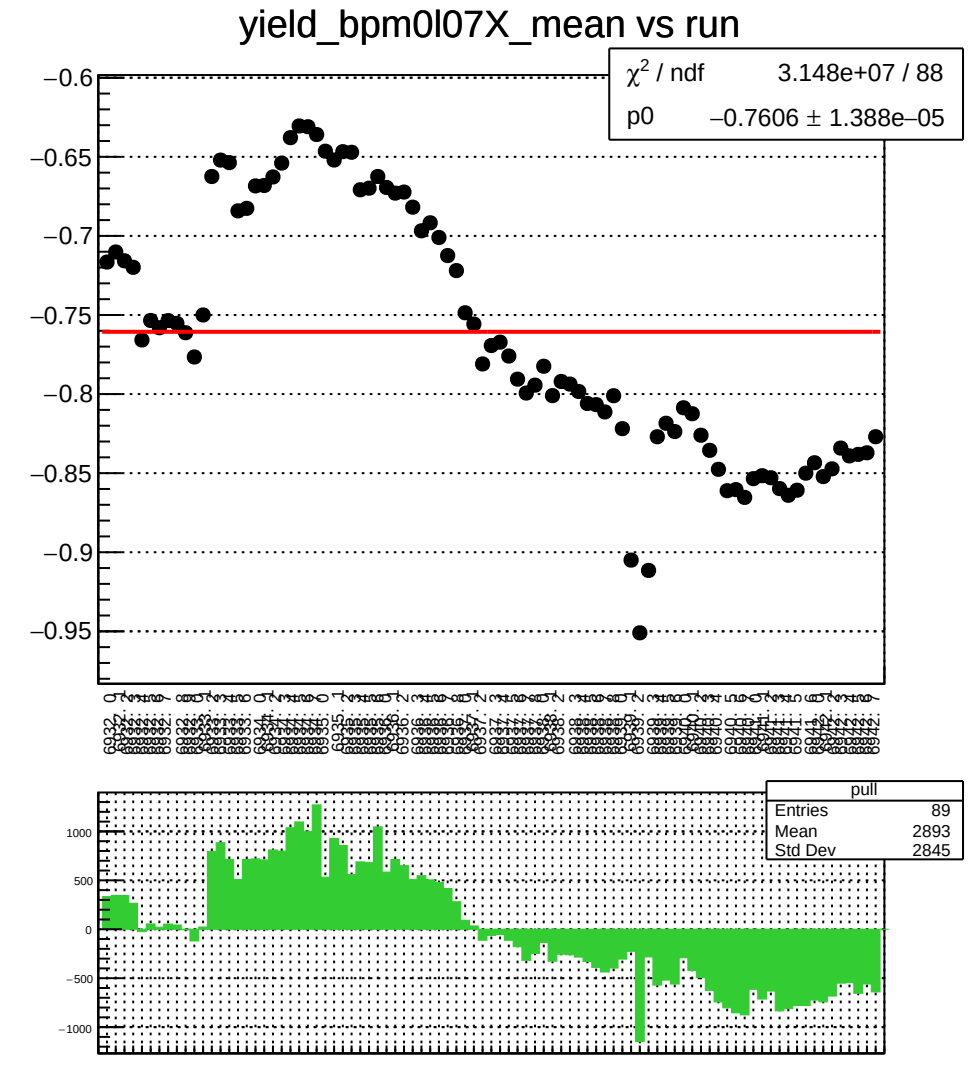

pull1D
Entries 89
Mean −2.683
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

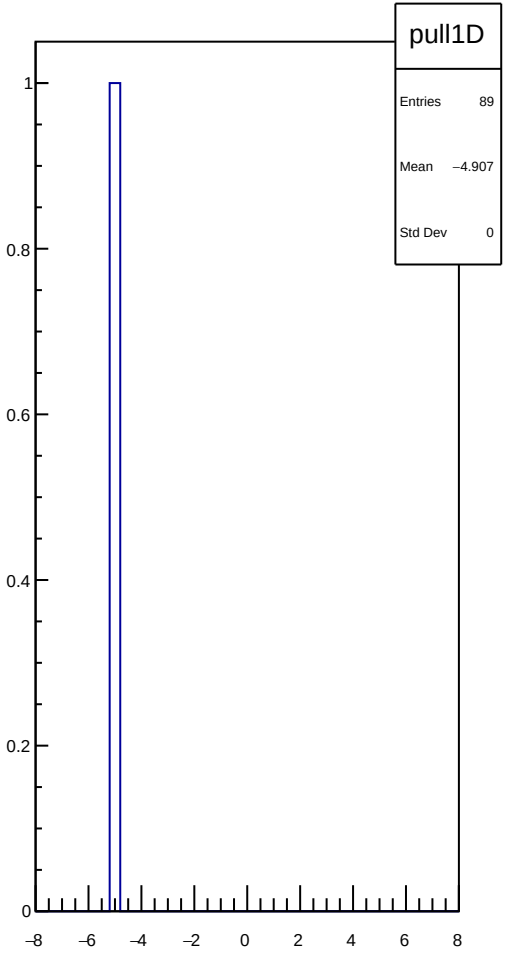

yield_bpm0l06X_rms vs run
χ^2 / ndf 6.05e+04 / 88
p0 0.007366 ± 5.771e−06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

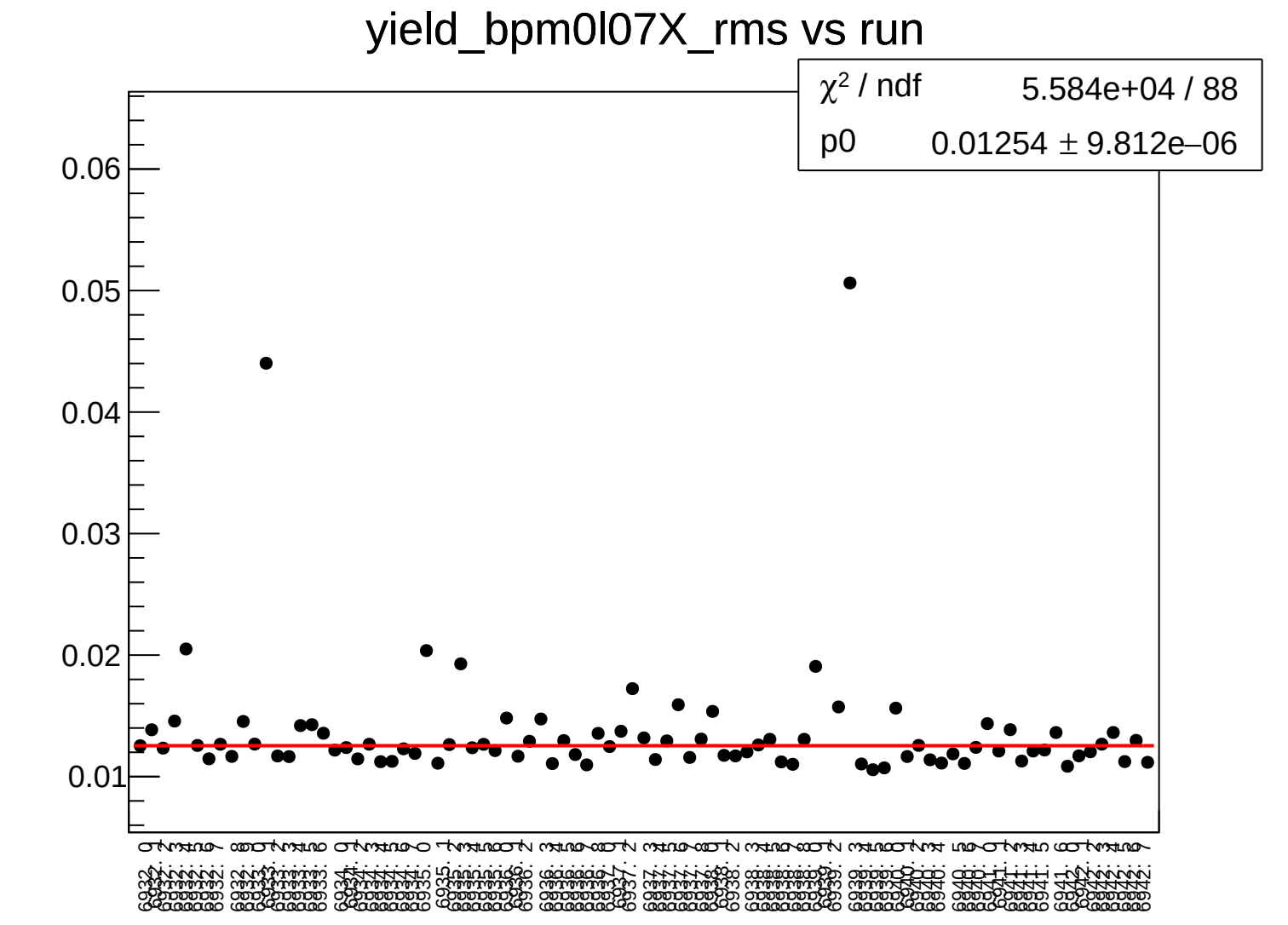

yield_bpm0l06Y_mean vs run
χ² / ndf 2.666e+07 / 88
p0 −1.593 ± 3.234e−06
−1.58
−1.59
−1.6
−1.61
−1.62
−1.63
pull
Entries 89
Mean 609.3
Std Dev 570.1
500
0
−500
−1000
−1500

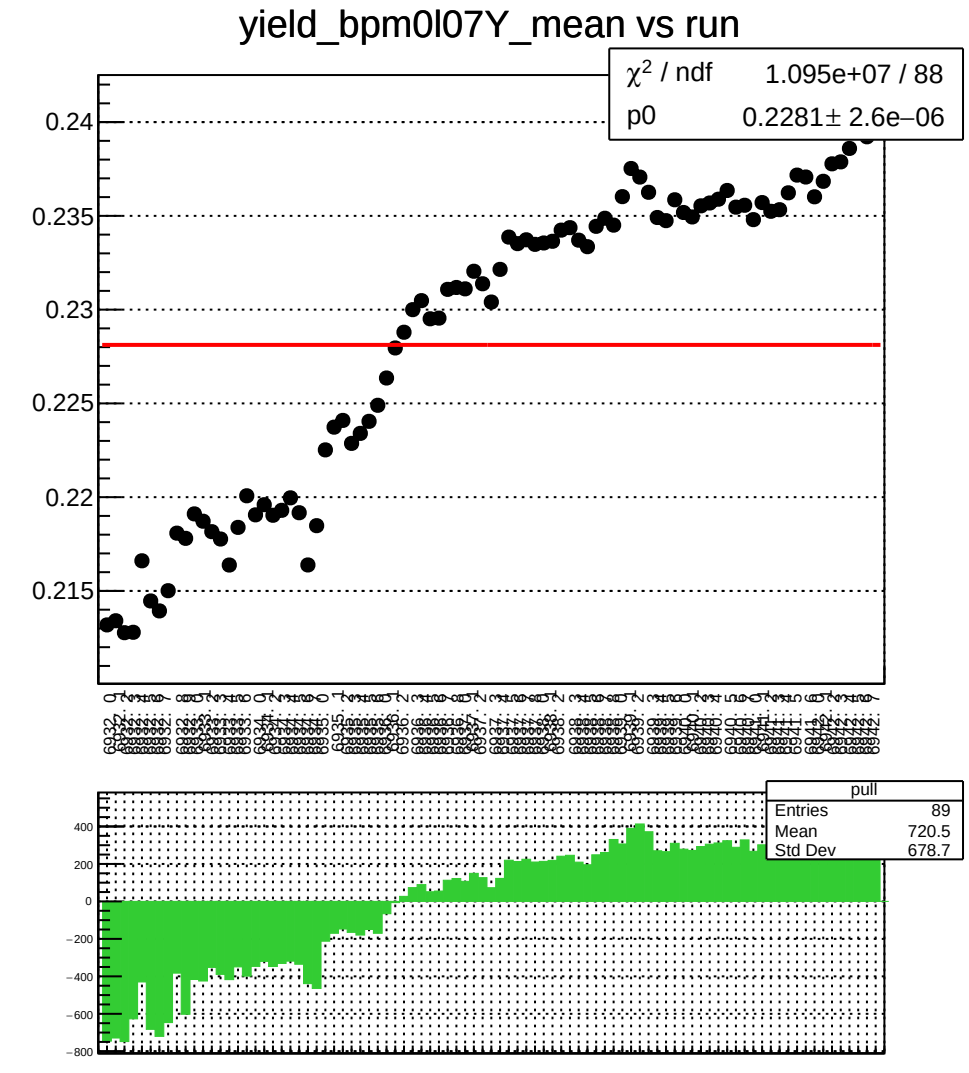

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

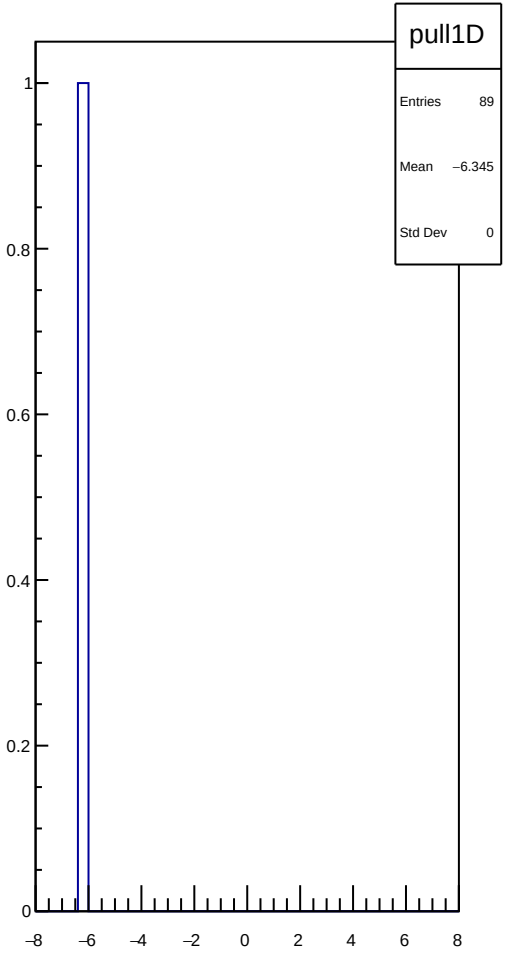

yield_bpm0l06Y_rms vs run
χ² / ndf 4.395e+04 / 88
p0 0.002934 ± 2.287e−06
0.012
0.01
0.008
0.006
0.004
0.002

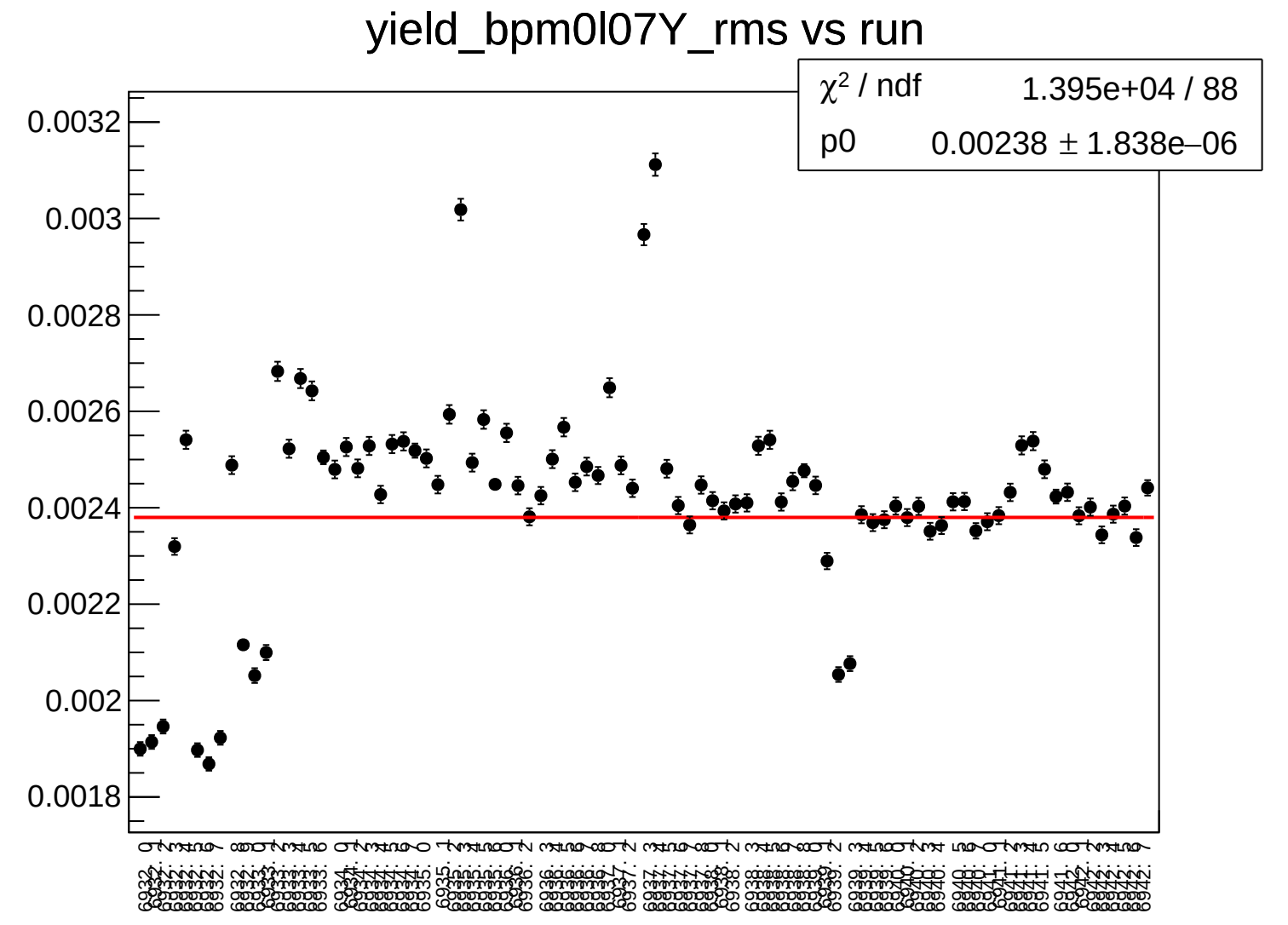

yield_bpm0l07X_mean vs run
χ² / ndf 3.148e+07 / 88
p0 −0.7606 ± 1.388e−05
−0.6
−0.65
−0.7
−0.75
−0.8
−0.85
−0.9
−0.95
pull
Entries 89
Mean 2893
Std Dev 2845
1000
500
0
−500
−1000

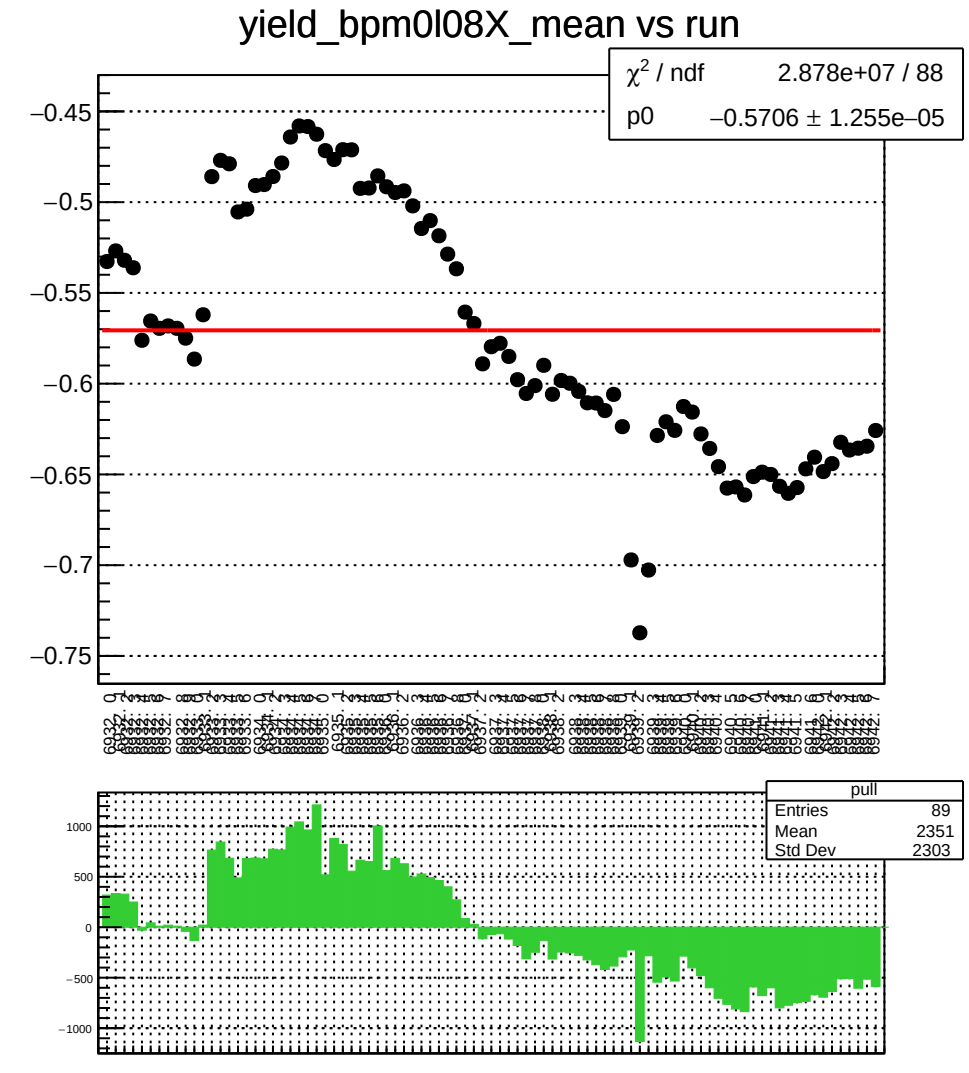

pull1D
Entries 89
Mean −4.907
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

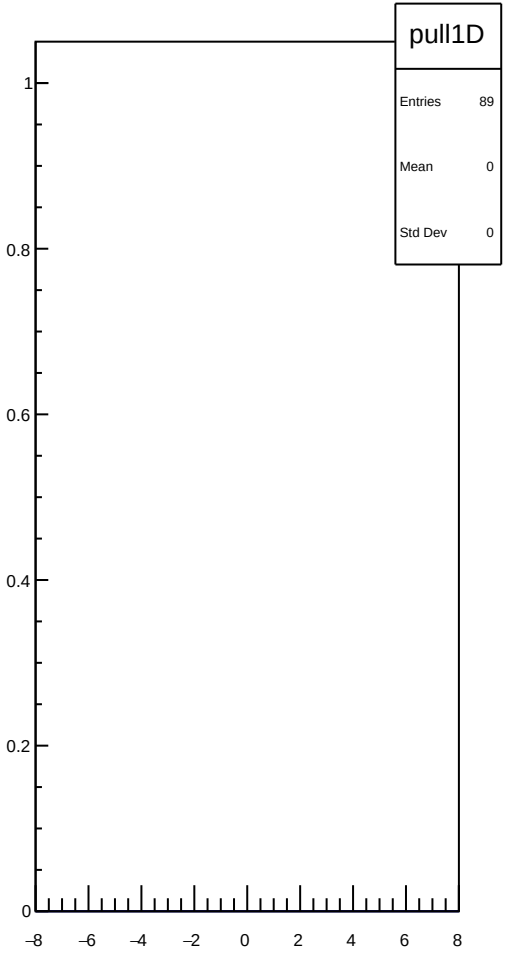

yield_bpm0l07X_rms vs run
χ² / ndf 5.584e+04 / 88
p0 0.01254 ± 9.812e–06
0.06
0.05
0.04
0.03
0.02
0.01

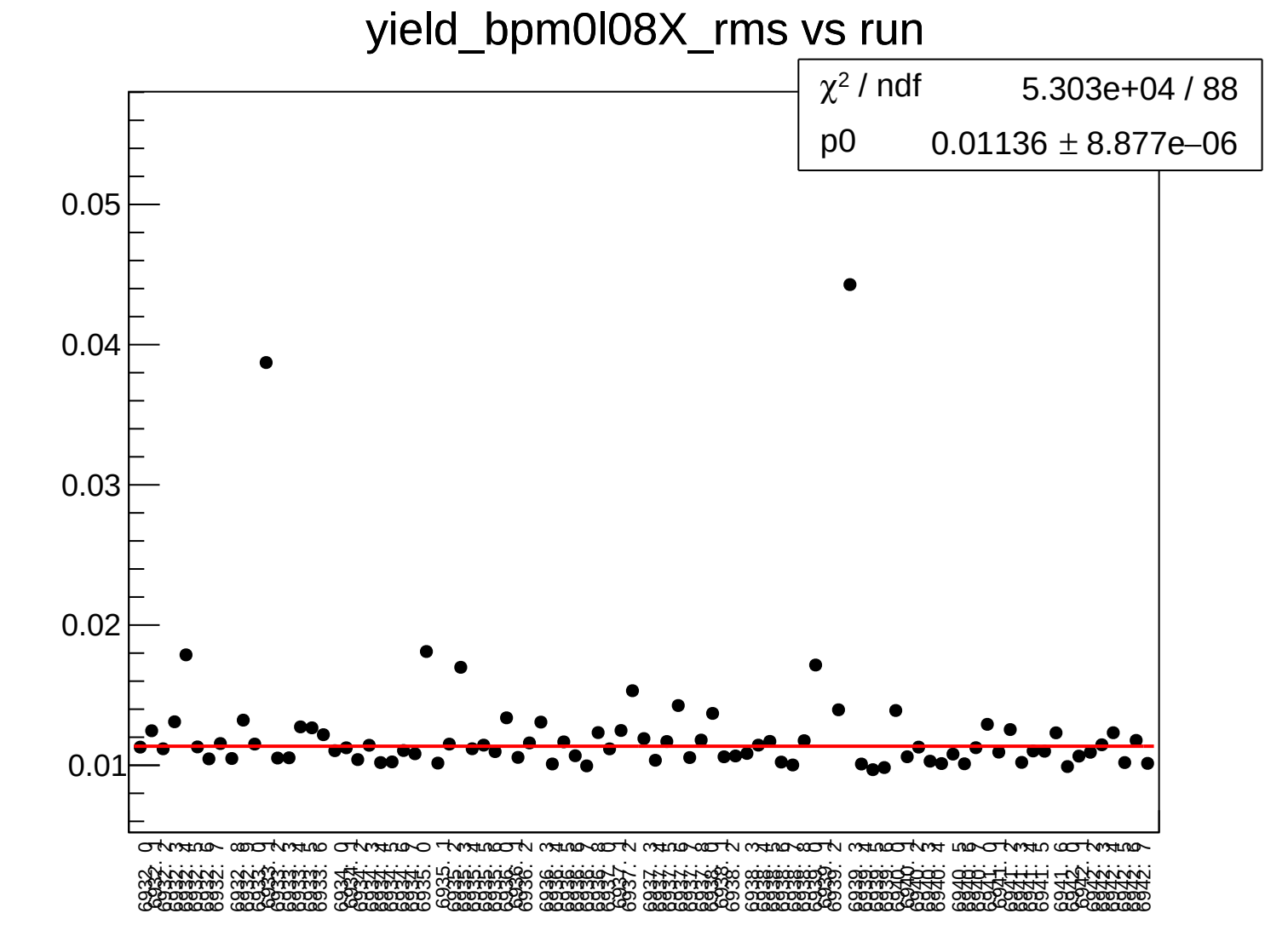

yield_bpm0l07Y_mean vs run
χ² / ndf 1.095e+07 / 88
p0 0.2281± 2.6e−06
0.24
0.235
0.23
0.225
0.22
0.215
pull
Entries 89
Mean 720.5
Std Dev 678.7
400
200
0
−200
−400
−600
−800

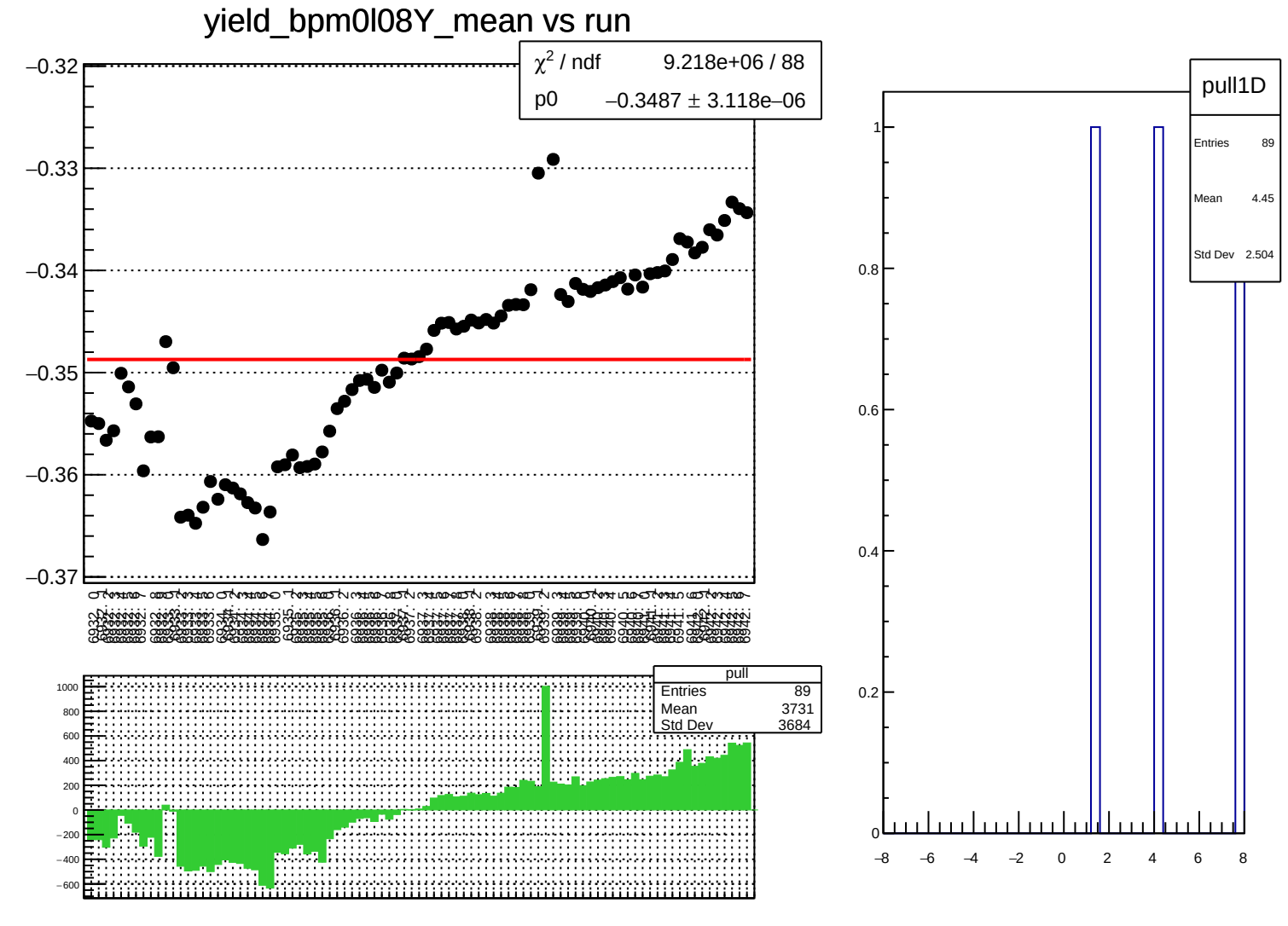

pull1D
Entries 89
Mean −6.345
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

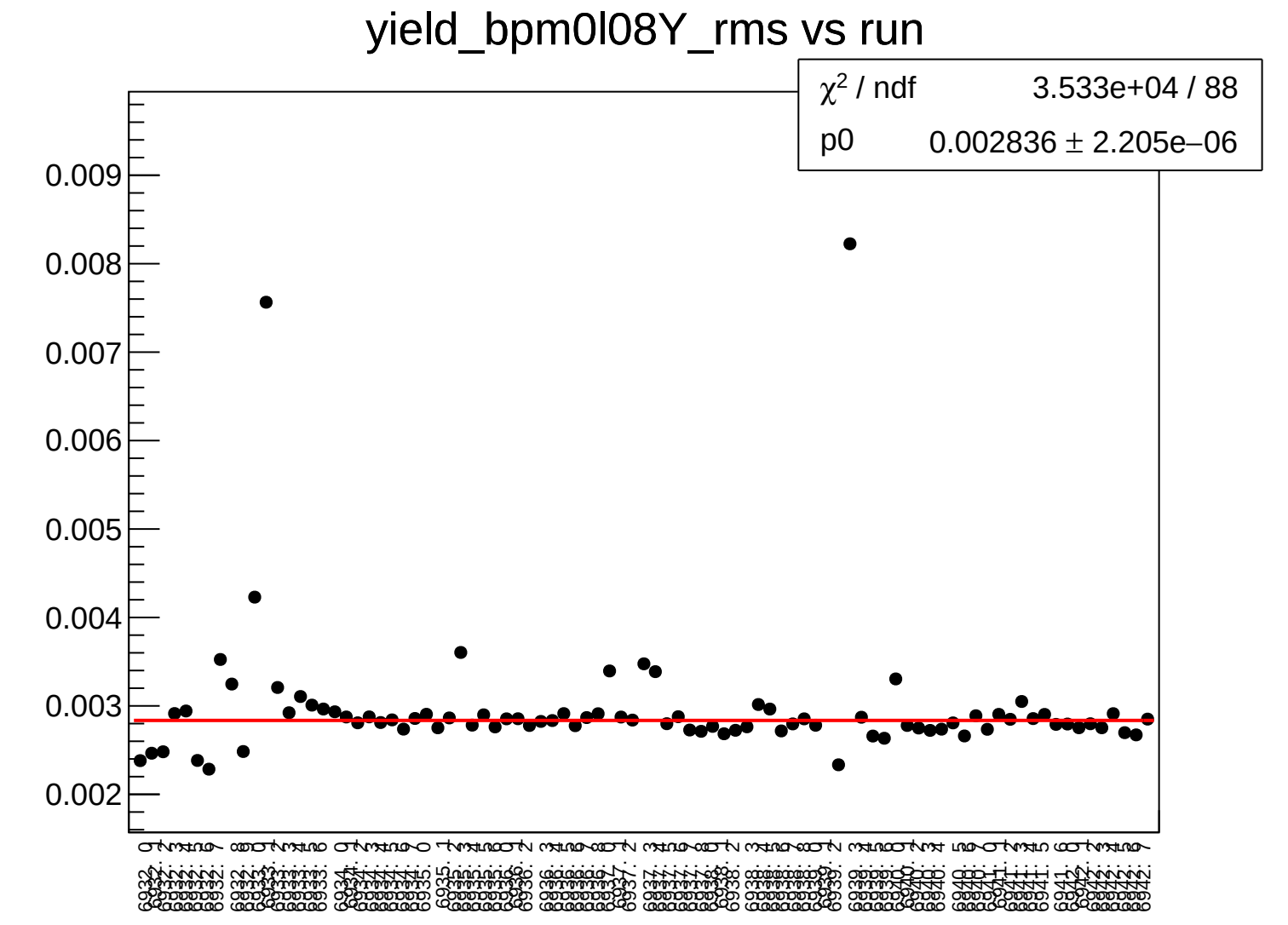

yield_bpm0l07Y_rms vs run
χ² / ndf 1.395e+04 / 88
p0 0.00238 ± 1.838e−06
0.0032
0.003
0.0028
0.0026
0.0024
0.0022
0.002
0.0018

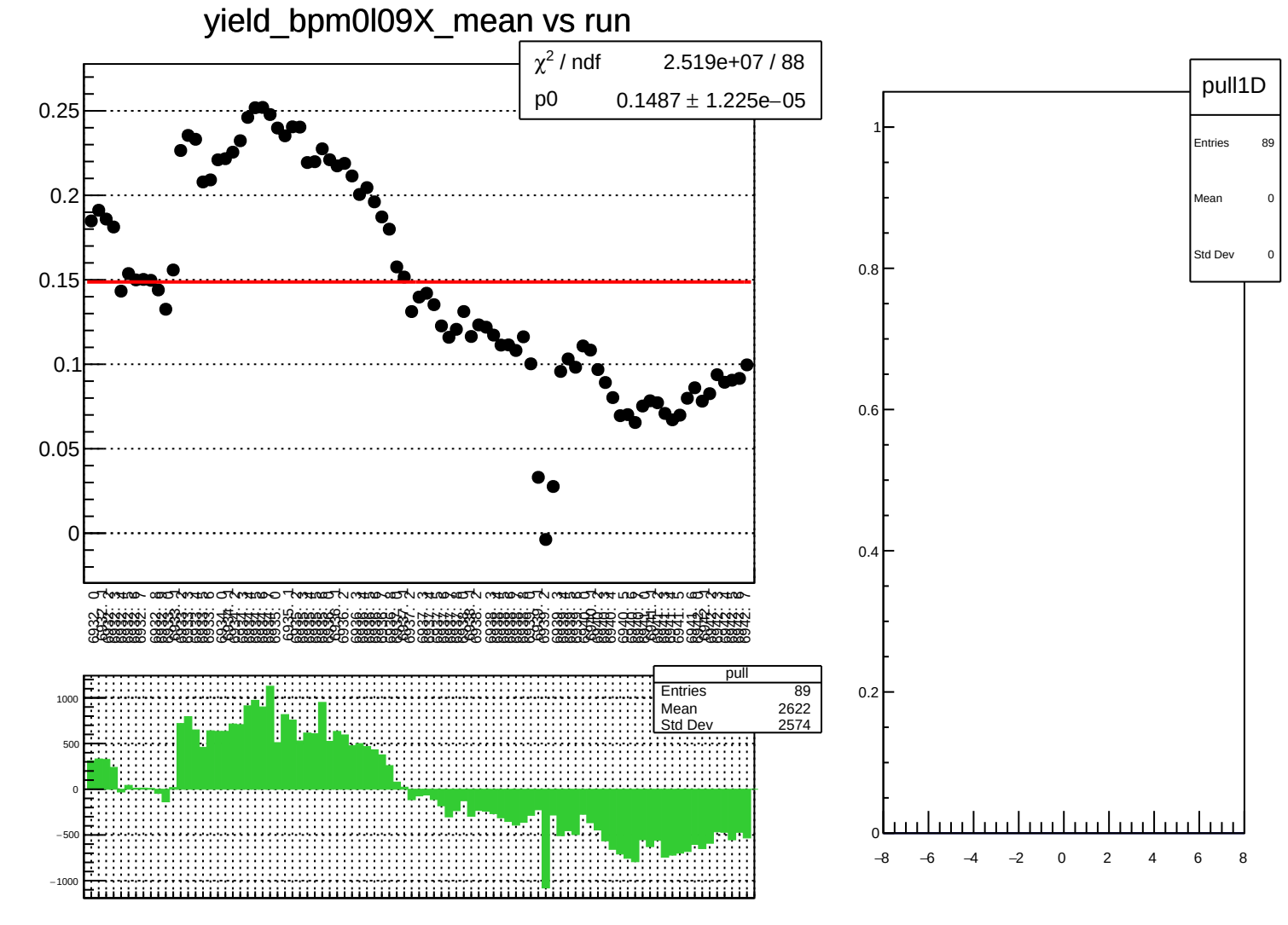

yield_bpm0l08X_mean vs run
χ² / ndf 2.878e+07 / 88
p0 −0.5706 ± 1.255e−05
−0.45
−0.5
−0.55
−0.6
−0.65
−0.7
−0.75
pull
Entries 89
Mean 2351
Std Dev 2303
1000
500
0
−500
−1000

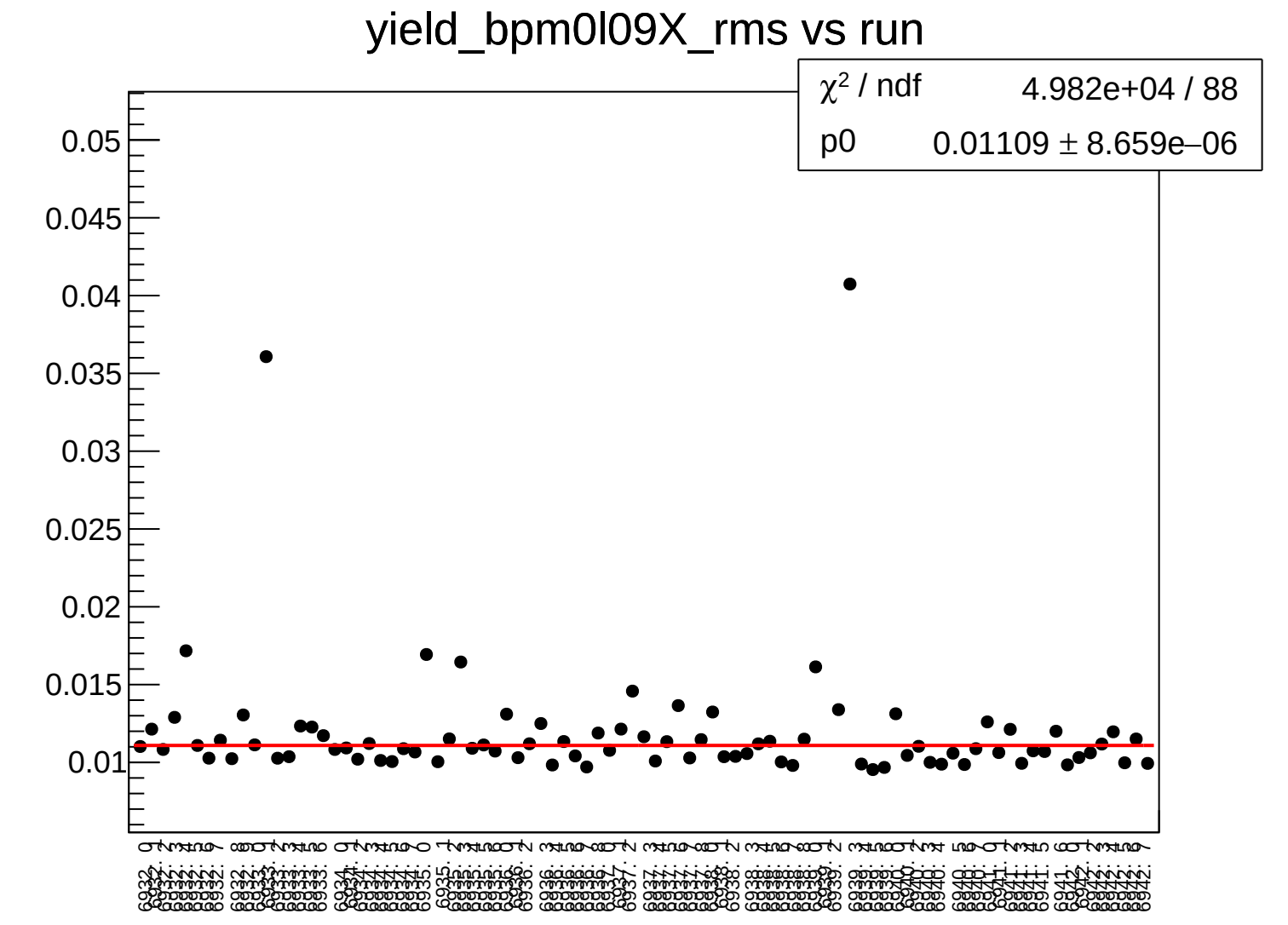

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

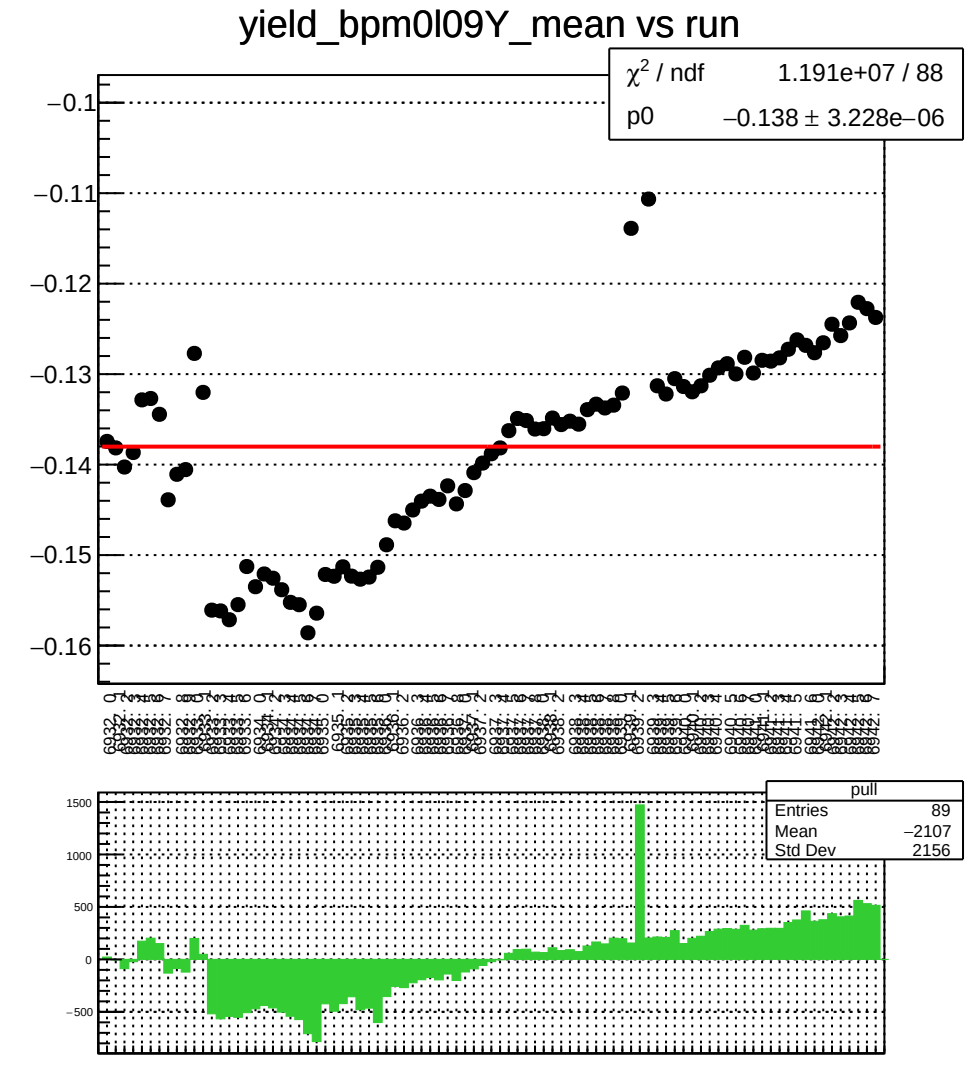

yield_bpm0l08X_rms vs run
χ² / ndf 5.303e+04 / 88
p0 0.01136 ± 8.877e–06
0.05
0.04
0.03
0.02
0.01

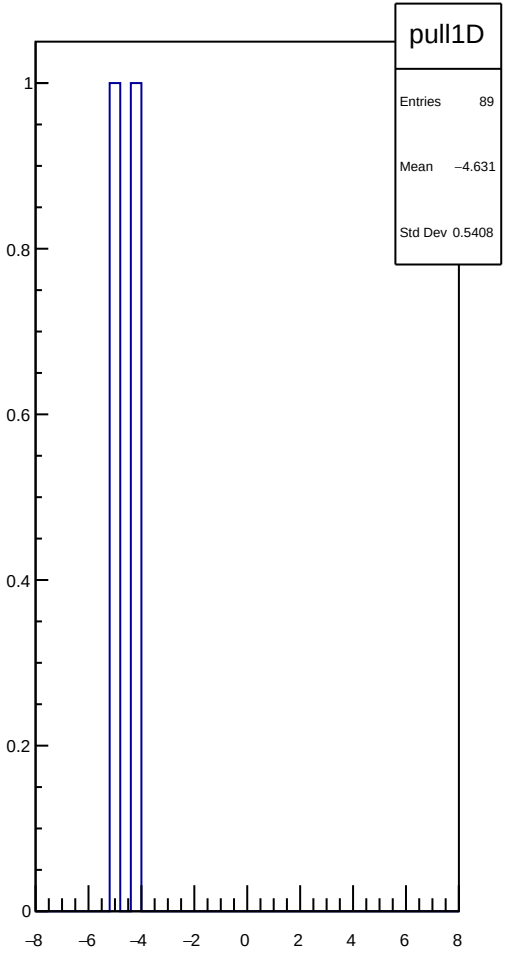

yield_bpm0l08Y_mean vs run
χ² / ndf 9.218e+06 / 88
p0 −0.3487 ± 3.118e−06
−0.32
−0.33
−0.34
−0.35
−0.36
−0.37
pull
Entries 89
Mean 3731
Std Dev 3684
1000
800
600
400
200
0
−200
−400
−600
pull1D
Entries 89
Mean 4.45
Std Dev 2.504
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

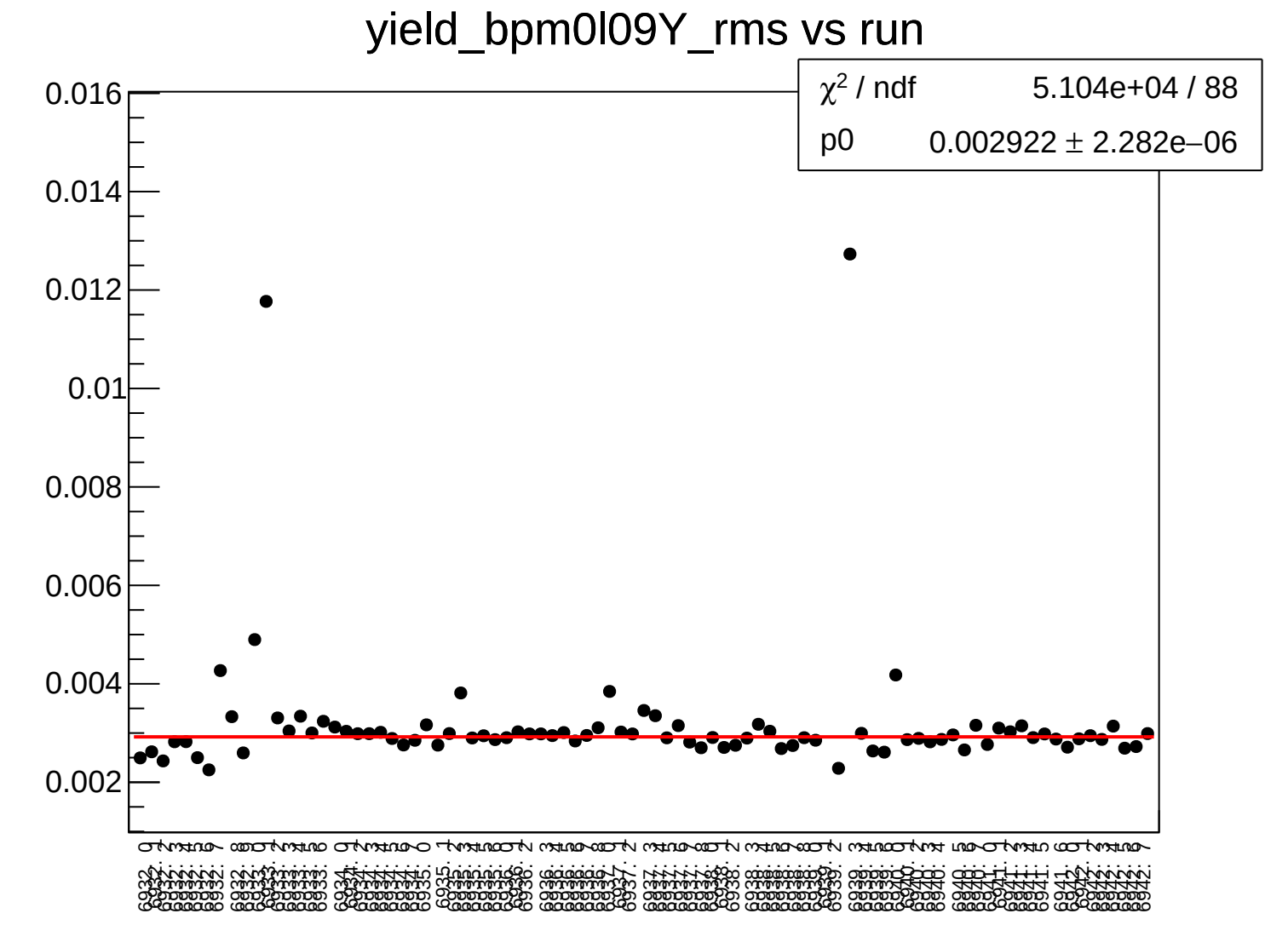

yield_bpm0l08Y_rms vs run
χ² / ndf 3.533e+04 / 88
p0 0.002836 ± 2.205e−06
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002

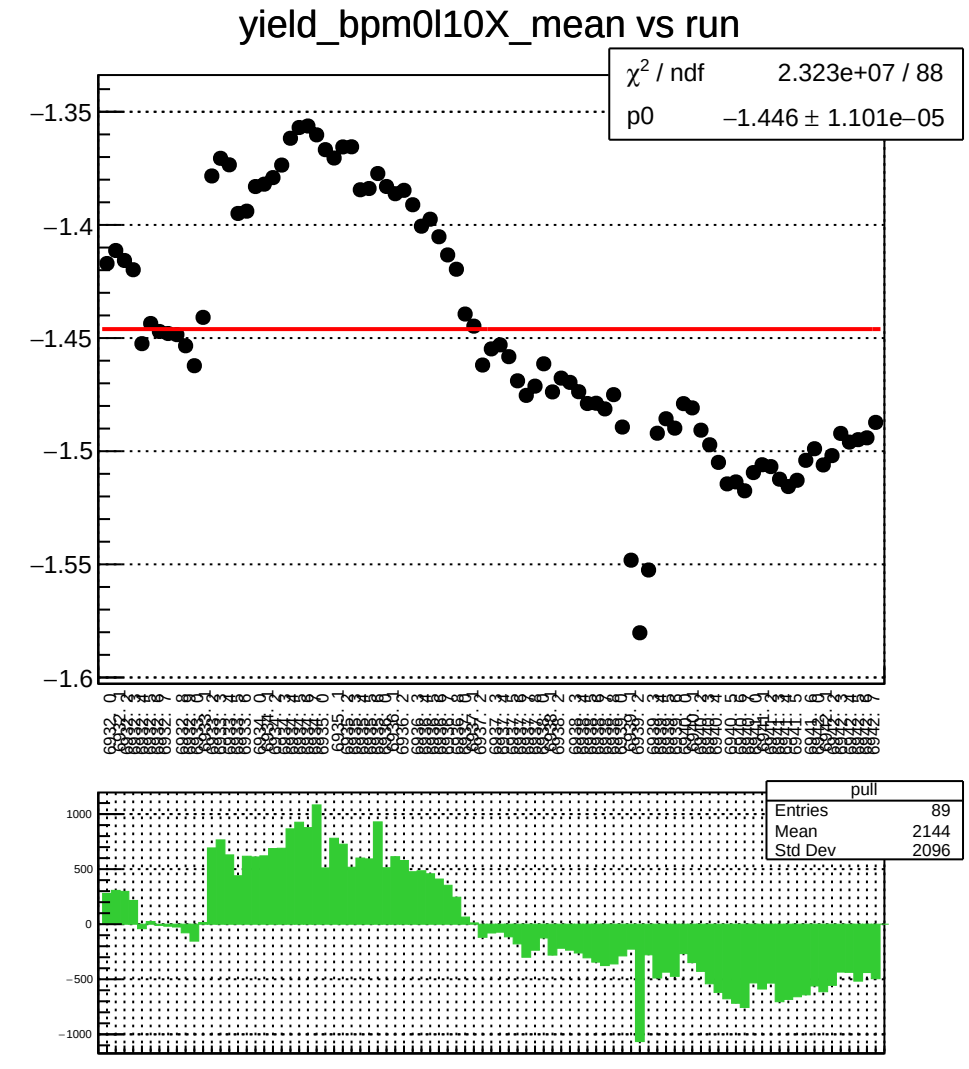

yield_bpm0l09X_mean vs run
χ² / ndf 2.519e+07 / 88
p0 0.1487 ± 1.225e−05
0.25
0.2
0.15
0.1
0.05
0
pull
Entries 89
Mean 2622
Std Dev 2574
1000
500
0
−500
−1000
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

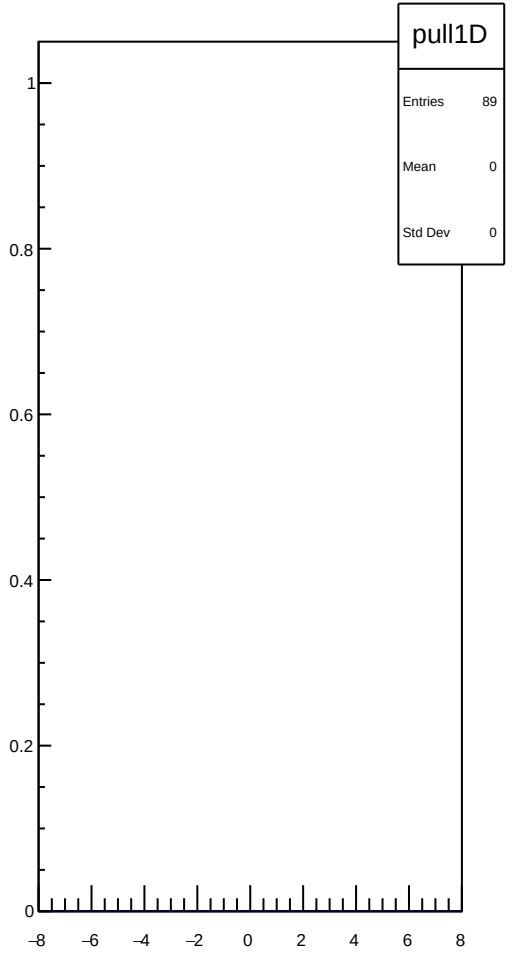

yield_bpm0l09X_rms vs run
χ² / ndf 4.982e+04 / 88
p0 0.01109 ± 8.659e–06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

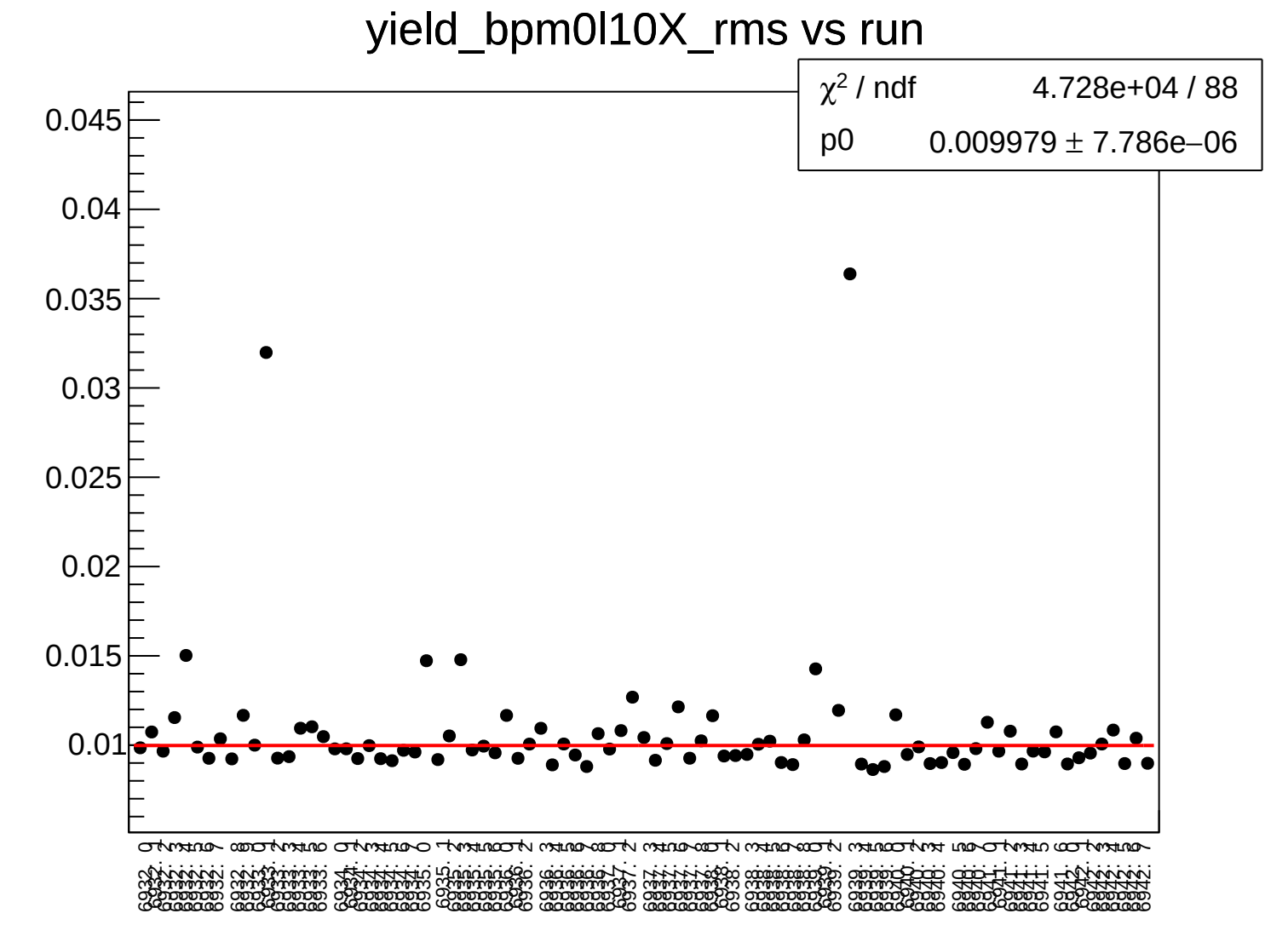

yield_bpm0l09Y_mean vs run
χ² / ndf 1.191e+07 / 88
p0 −0.138 ± 3.228e−06
−0.1
−0.11
−0.12
−0.13
−0.14
−0.15
−0.16
pull
Entries 89
Mean −2107
Std Dev 2156
1500
1000
500
0
−500

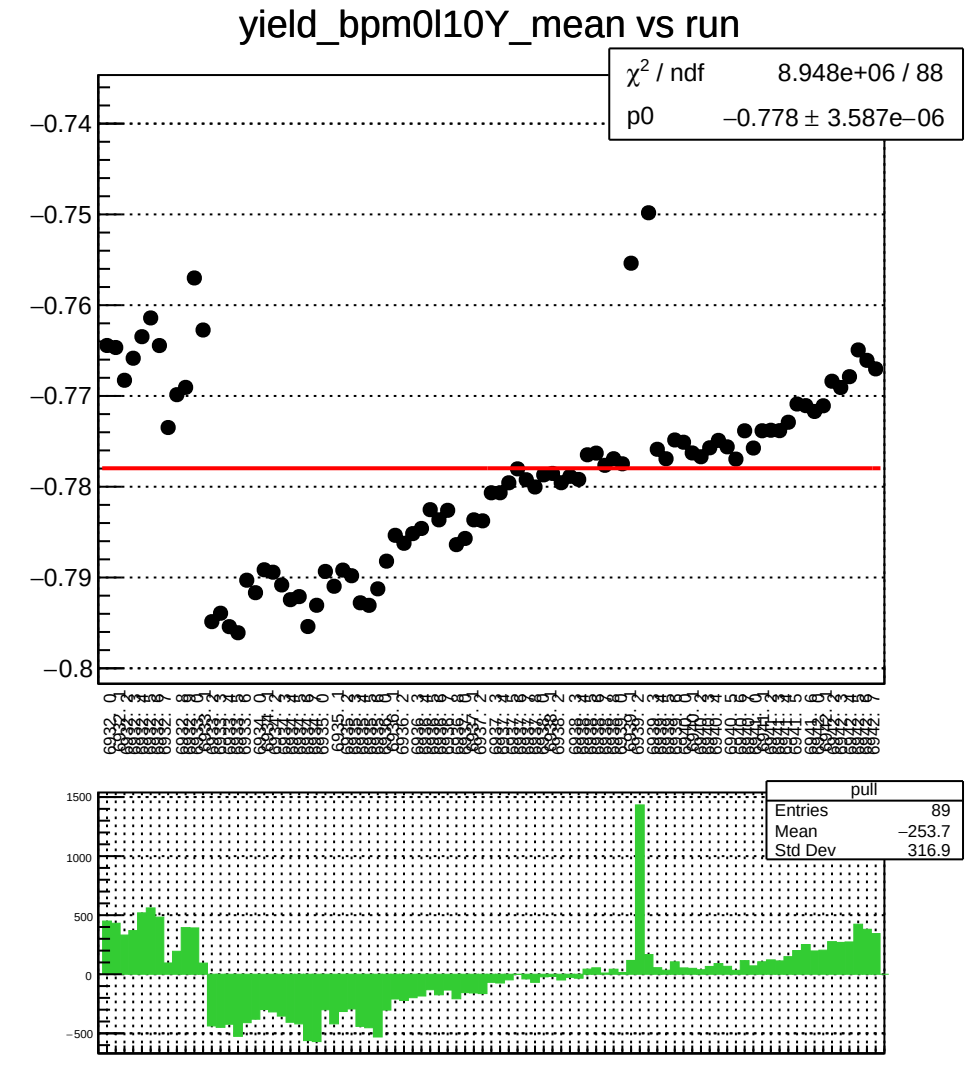

pull1D
Entries 89
Mean −4.631
Std Dev 0.5408
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

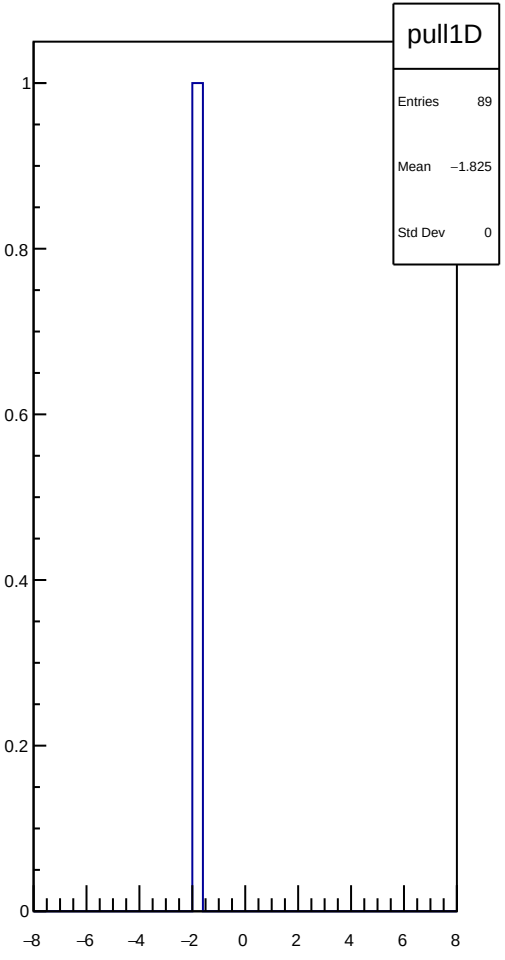

yield_bpm0l09Y_rms vs run
χ² / ndf 5.104e+04 / 88
p0 0.002922 ± 2.282e−06
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

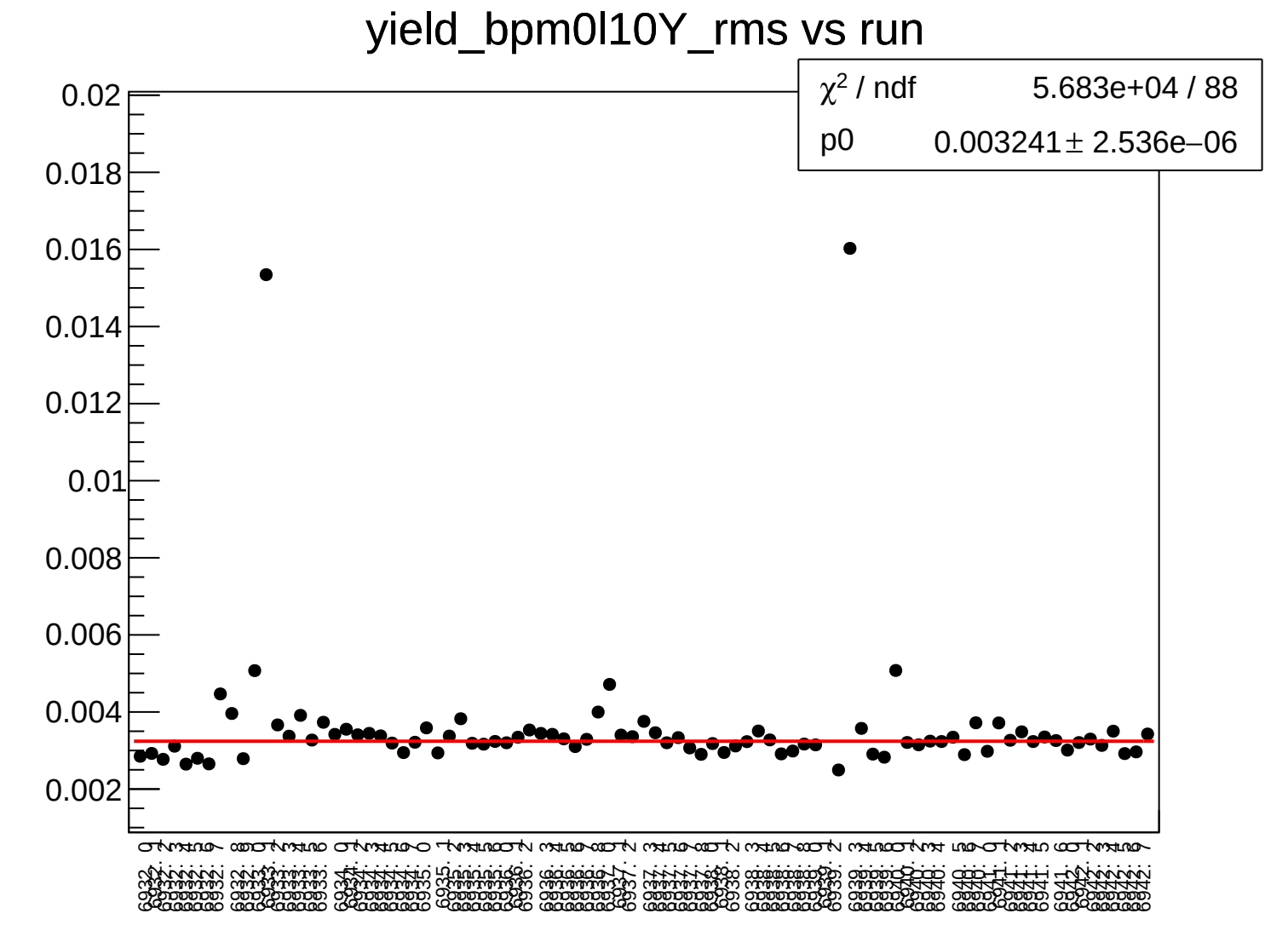

yield_bpm0l10X_mean vs run
χ² / ndf 2.323e+07 / 88
p0 −1.446 ± 1.101e−05
−1.35
−1.4
−1.45
−1.5
−1.55
−1.6
pull
Entries 89
Mean 2144
Std Dev 2096
1000
500
0
−500
−1000

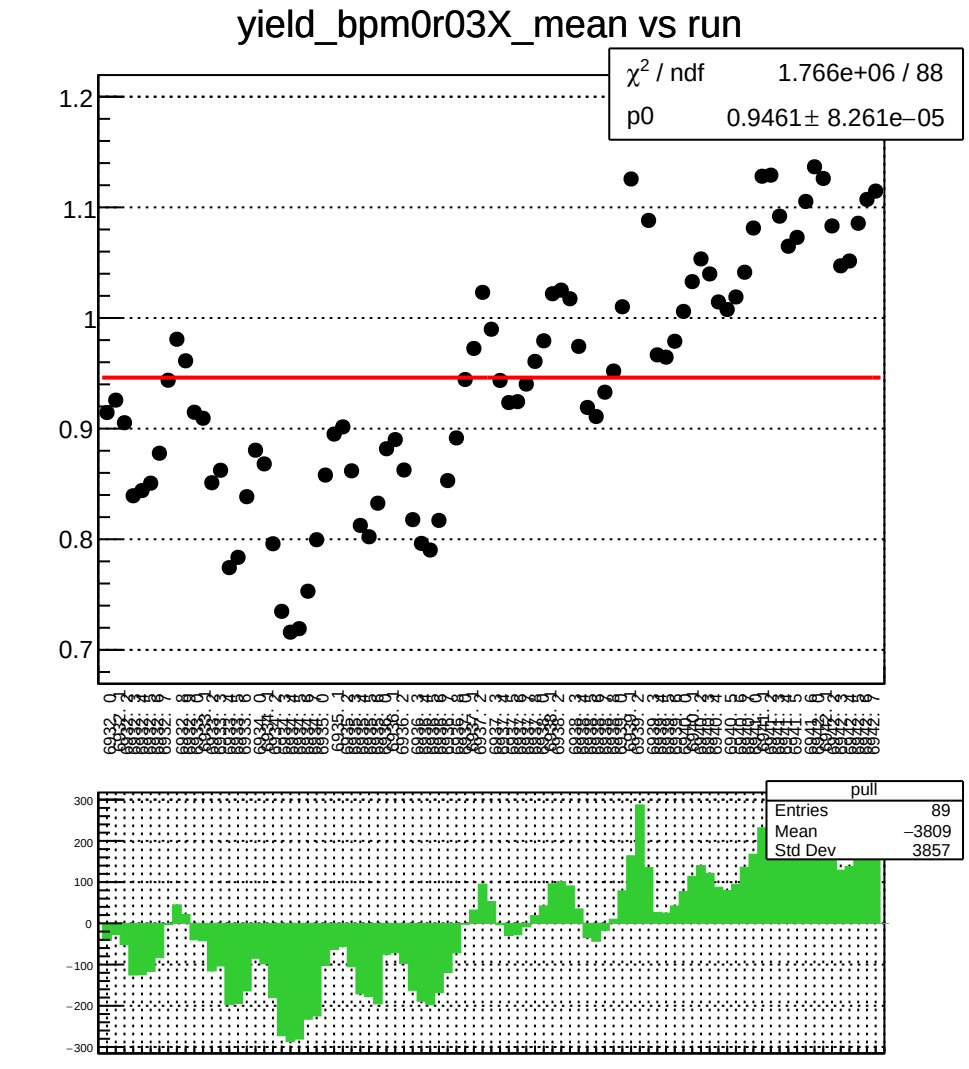

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

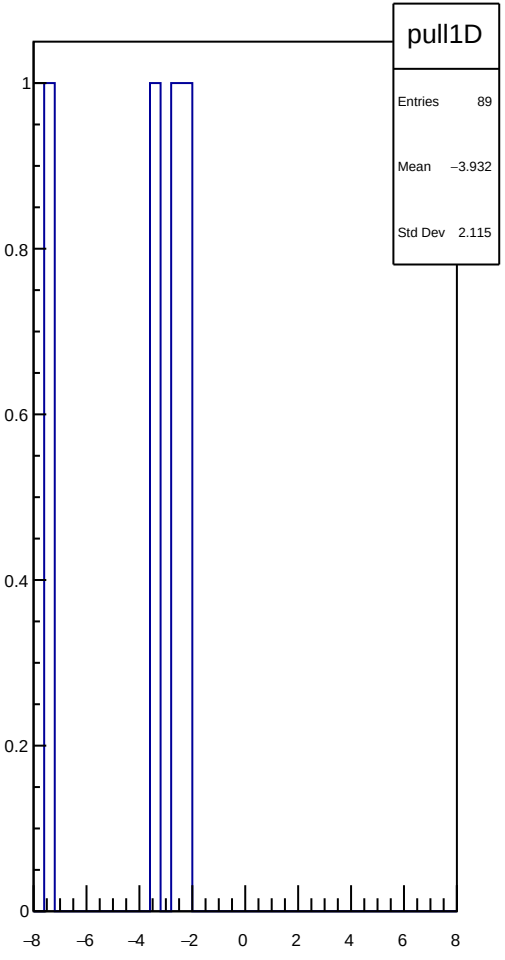

yield_bpm0l10X_rms vs run
χ² / ndf 4.728e+04 / 88
p0 0.009979 ± 7.786e−06
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

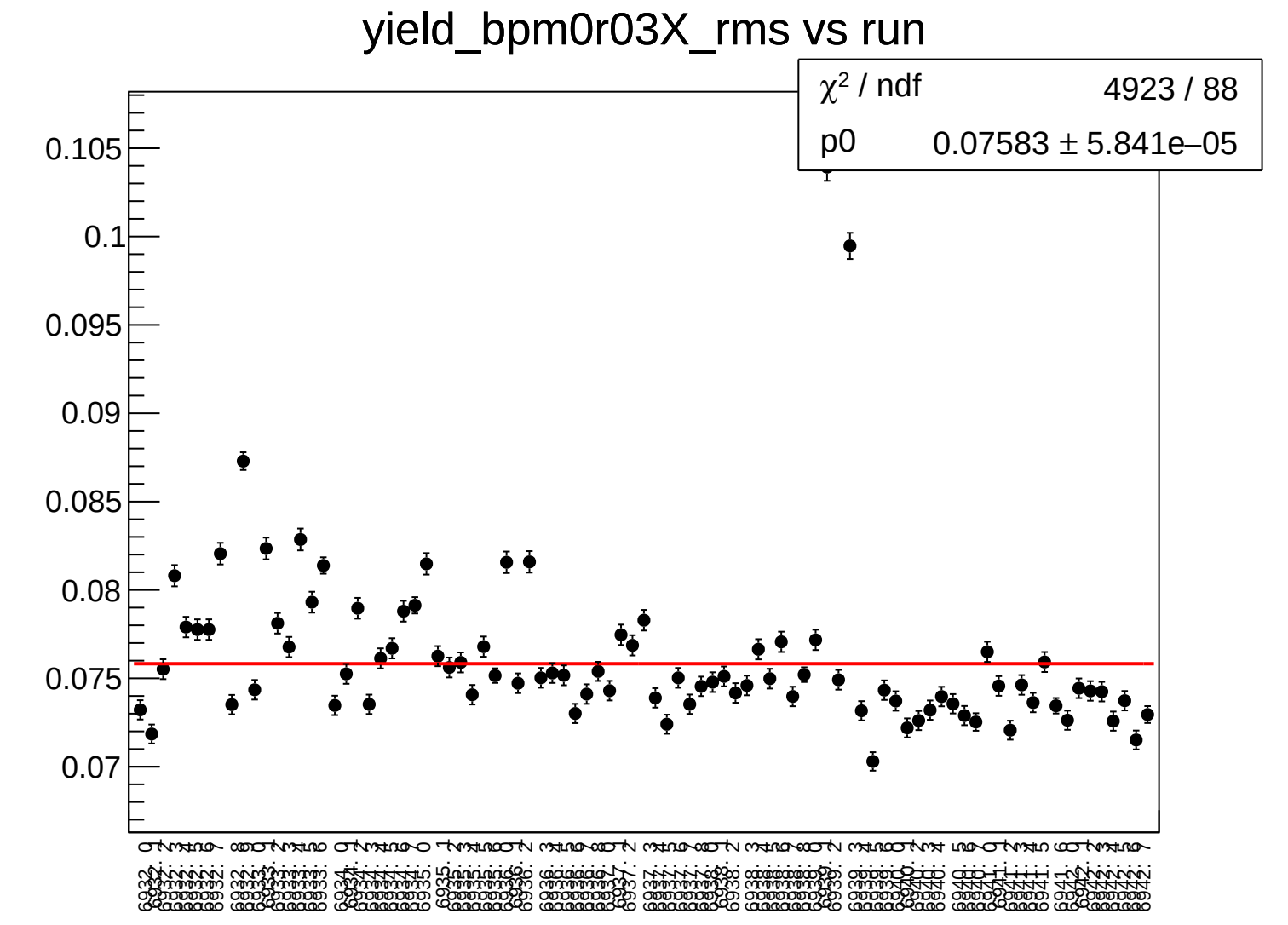

yield_bpm0l10Y_mean vs run
χ² / ndf 8.948e+06 / 88
p0 −0.778 ± 3.587e−06
−0.74
−0.75
−0.76
−0.77
−0.78
−0.79
−0.8
pull
Entries 89
Mean −253.7
Std Dev 316.9
1500
1000
500
0
−500

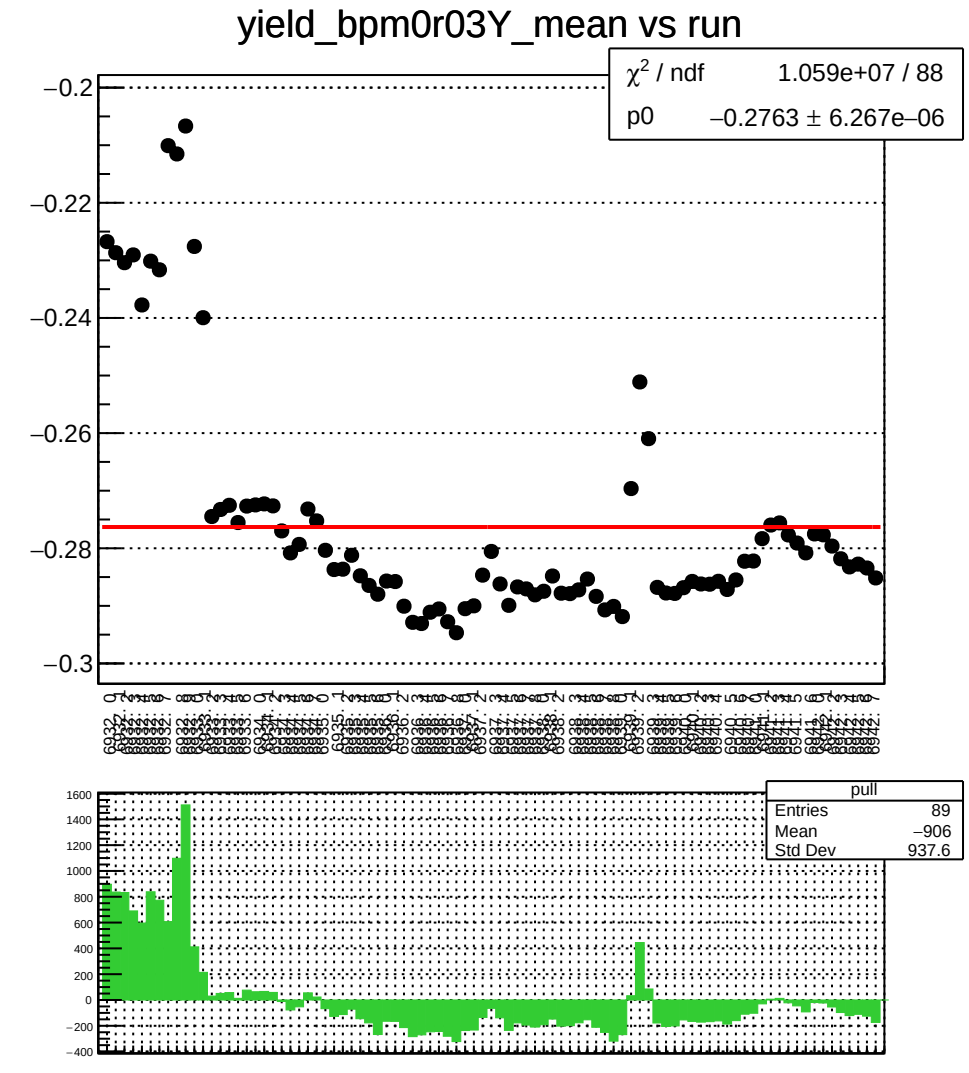

pull1D
Entries 89
Mean −1.825
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

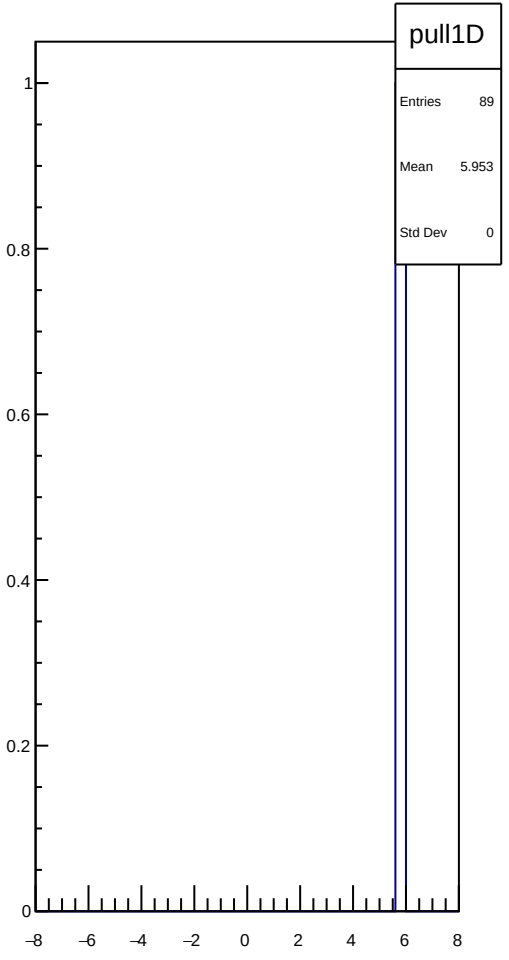

yield_bpm0l10Y_rms vs run
χ² / ndf 5.683e+04 / 88
p0 0.003241 ± 2.536e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002

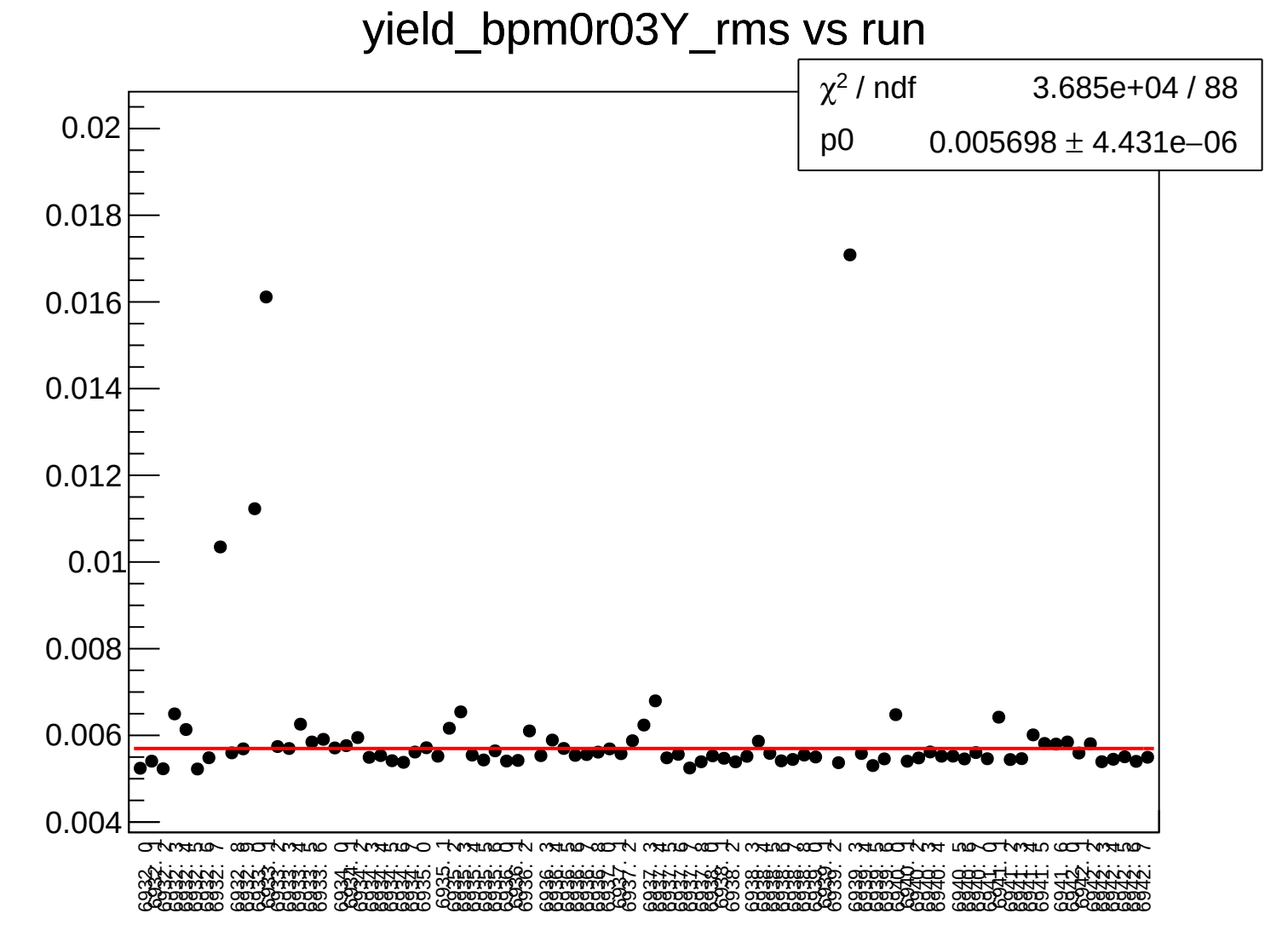

yield_bpm0r03X_mean vs run
χ² / ndf 1.766e+06 / 88
p0 0.9461 ± 8.261e−05
pull
Entries 89
Mean −3809
Std Dev 3857

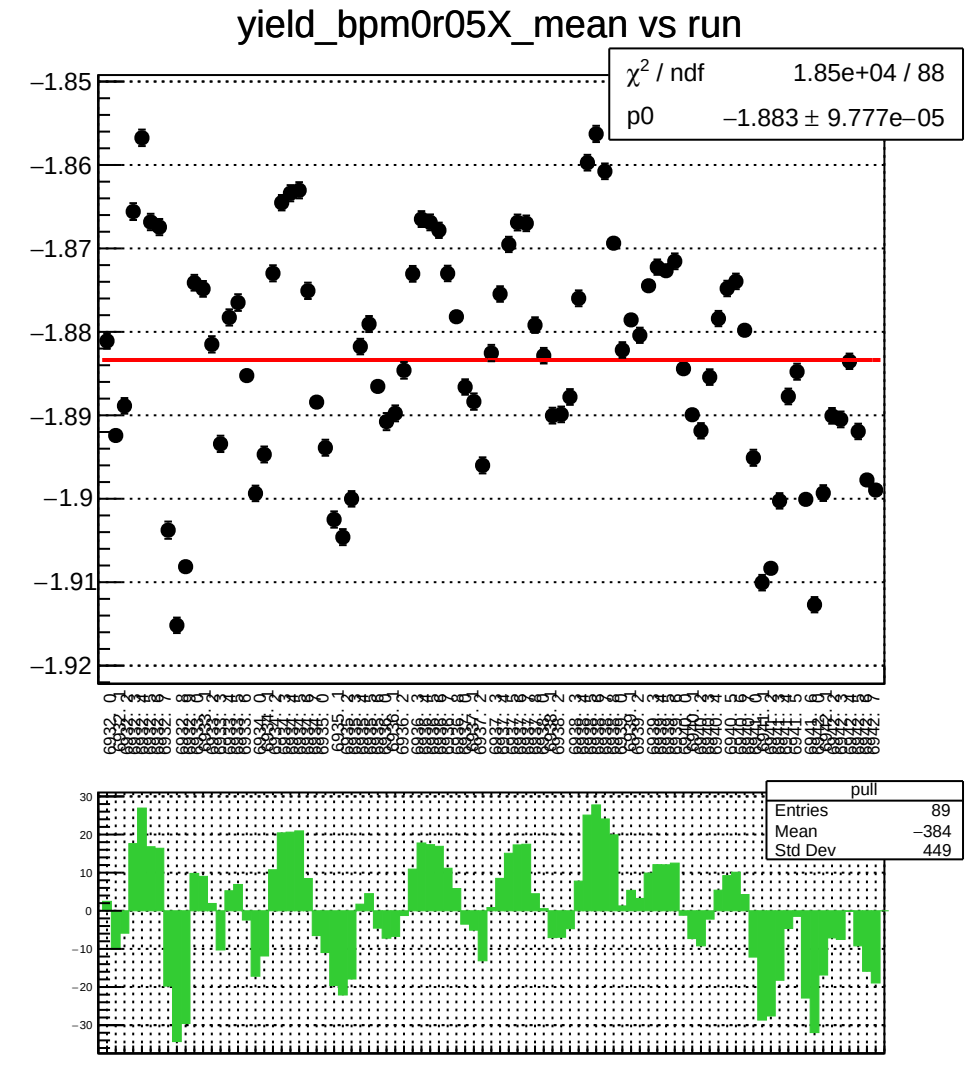

pull1D
Entries 89
Mean −3.932
Std Dev 2.115

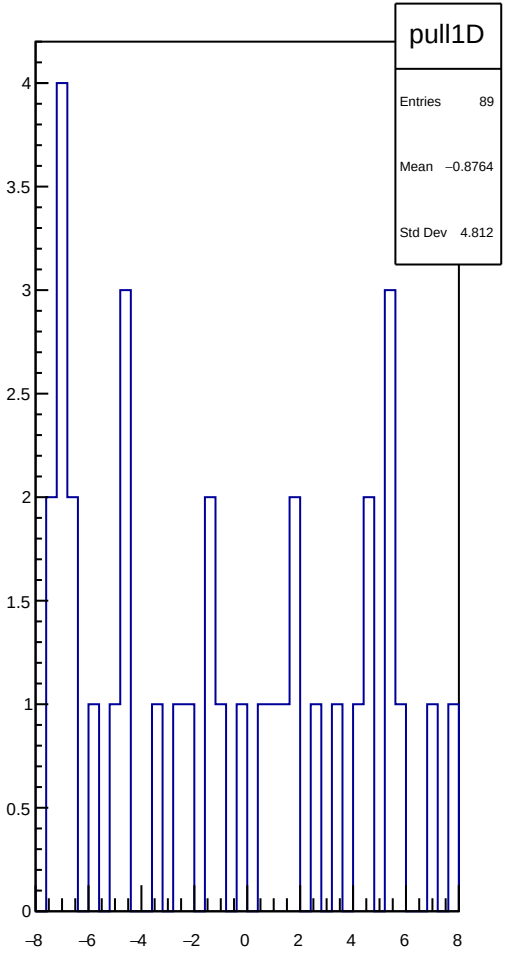

yield_bpm0r03X_rms vs run
χ² / ndf 4923 / 88
p0 0.07583 ± 5.841e–05
0.105
0.1
0.095
0.09
0.085
0.08
0.075
0.07

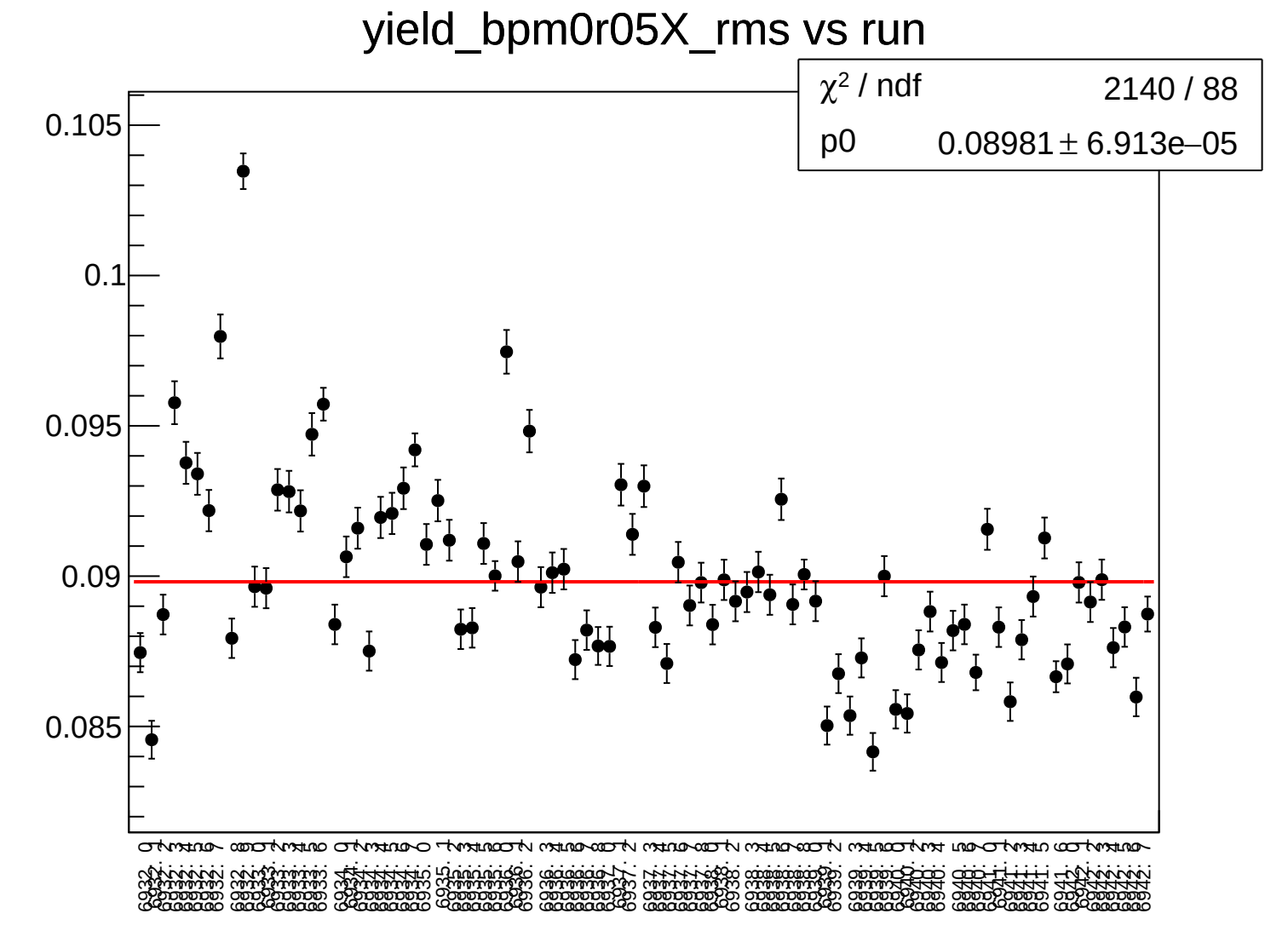

yield_bpm0r03Y_mean vs run
χ² / ndf 1.059e+07 / 88
p0 −0.2763 ± 6.267e−06
−0.2
−0.22
−0.24
−0.26
−0.28
−0.3
pull
Entries 89
Mean −906
Std Dev 937.6
1600
1400
1200
1000
800
600
400
200
0
−200
−400

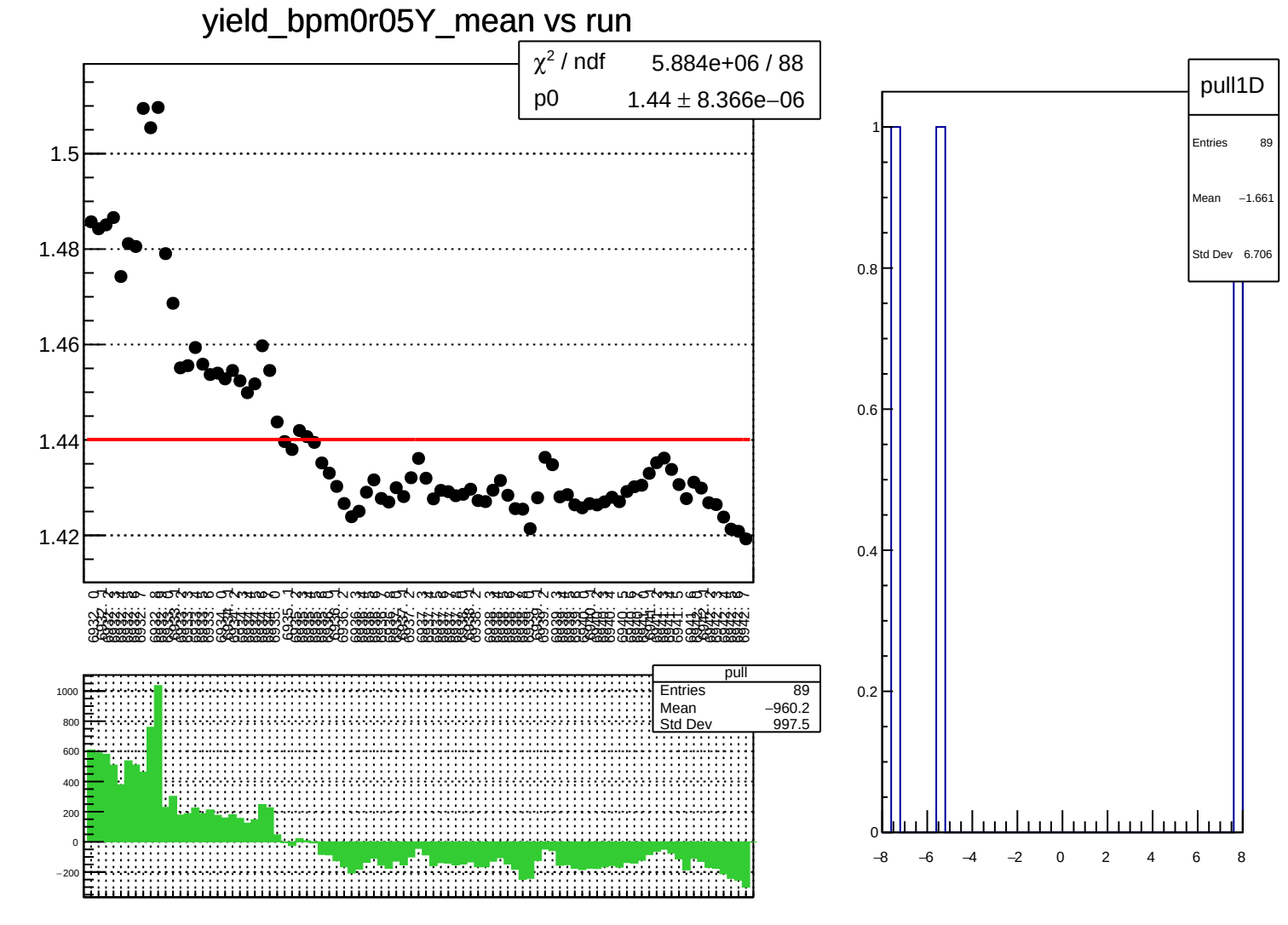

pull1D
Entries 89
Mean 5.953
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

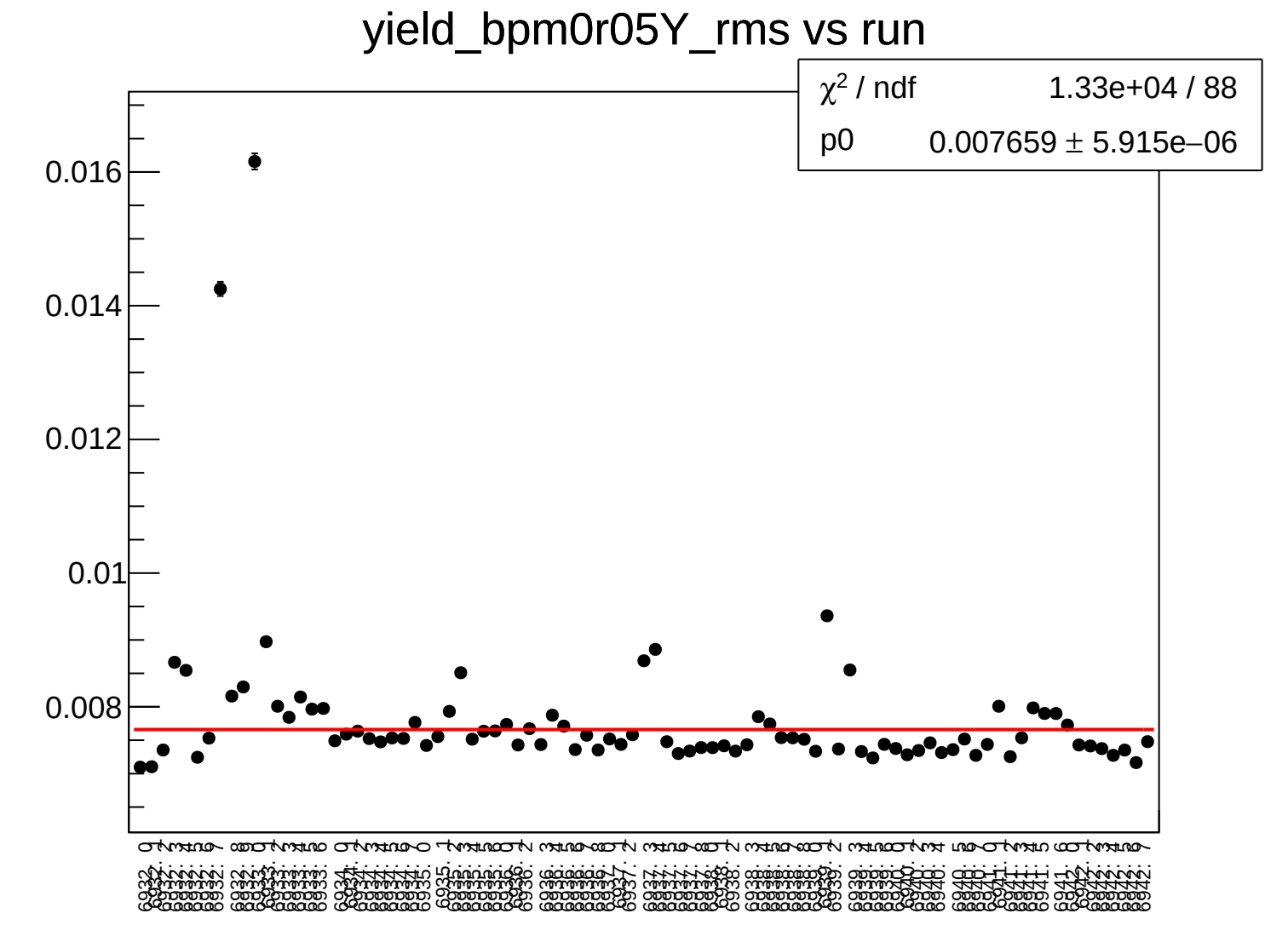

yield_bpm0r03Y_rms vs run
χ² / ndf 3.685e+04 / 88
p0 0.005698 ± 4.431e−06
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

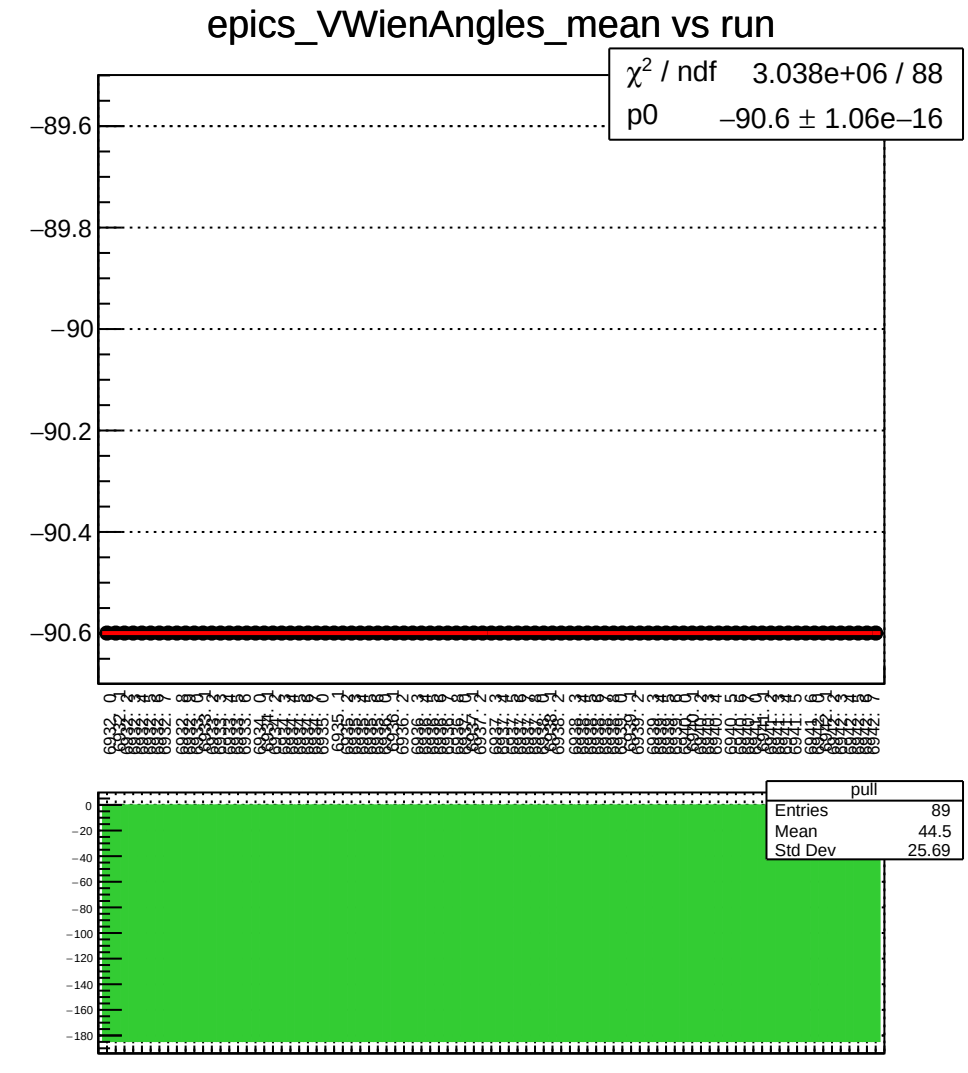

yield_bpm0r05X_mean vs run
χ² / ndf 1.85e+04 / 88
p0 −1.883 ± 9.777e−05
−1.85
−1.86
−1.87
−1.88
−1.89
−1.9
−1.91
−1.92
pull
Entries 89
Mean −384
Std Dev 449
30
20
10
0
−10
−20
−30

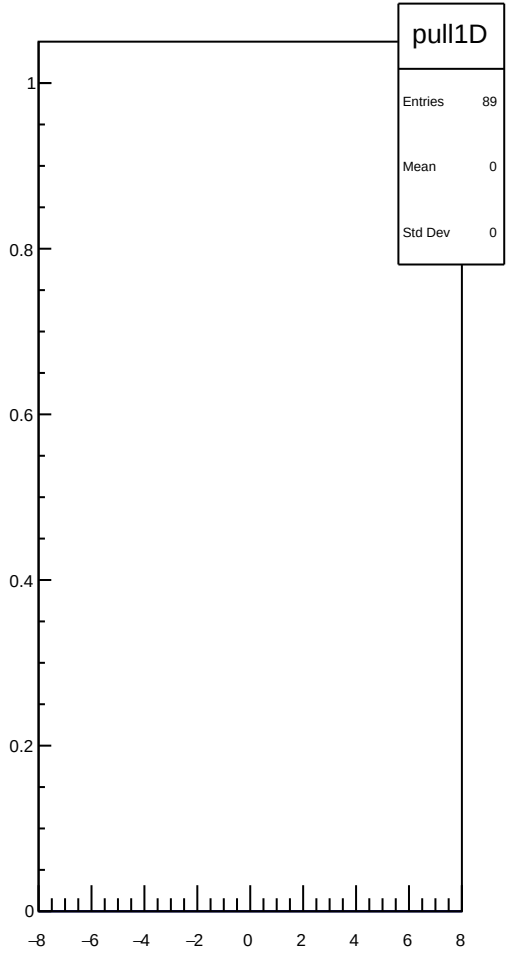

pull1D
Entries 89
Mean −0.8764
Std Dev 4.812
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

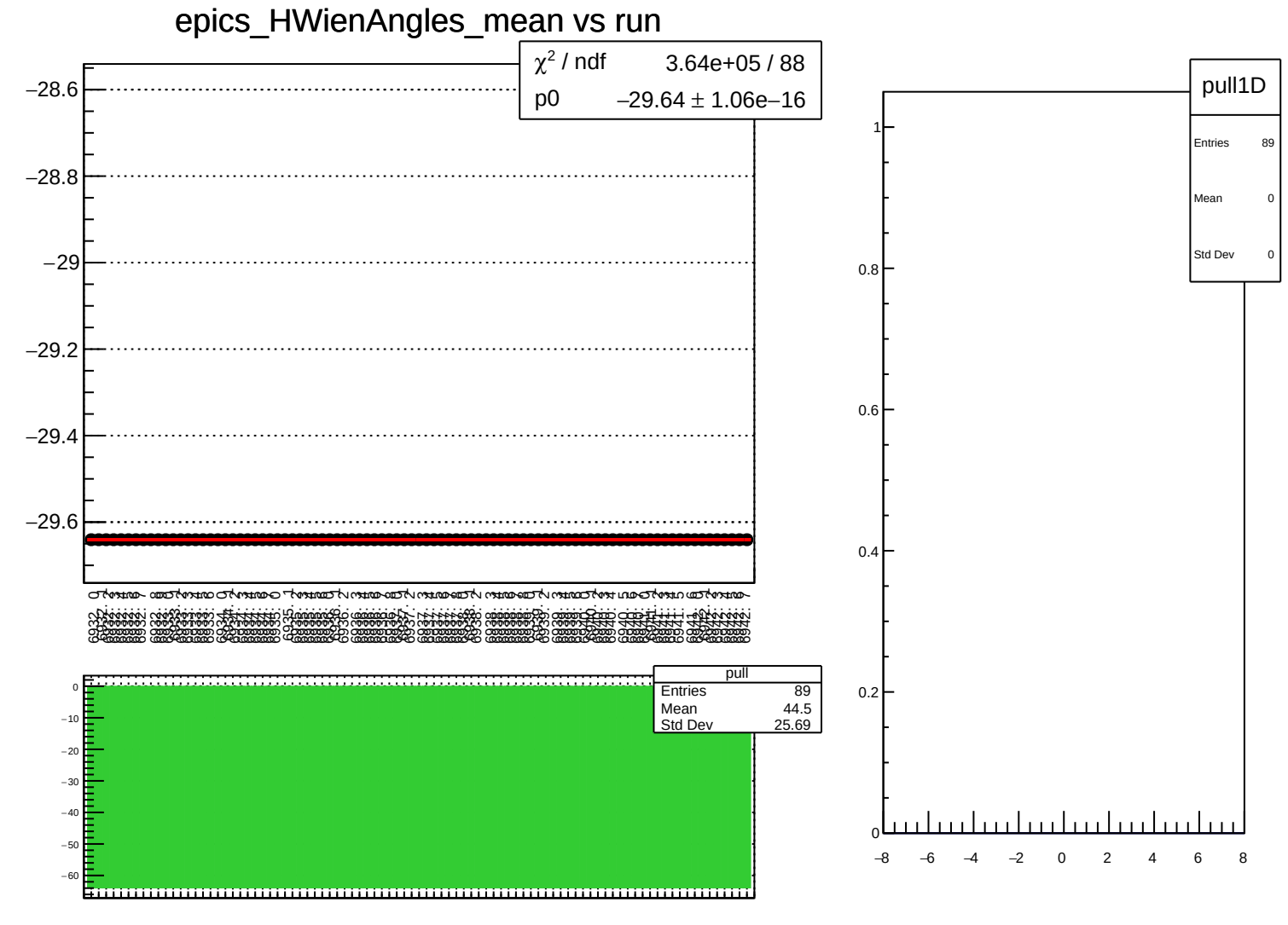

yield_bpm0r05X_rms vs run
χ² / ndf 2140 / 88
p0 0.08981 ± 6.913e–05
0.105
0.1
0.095
0.09
0.085

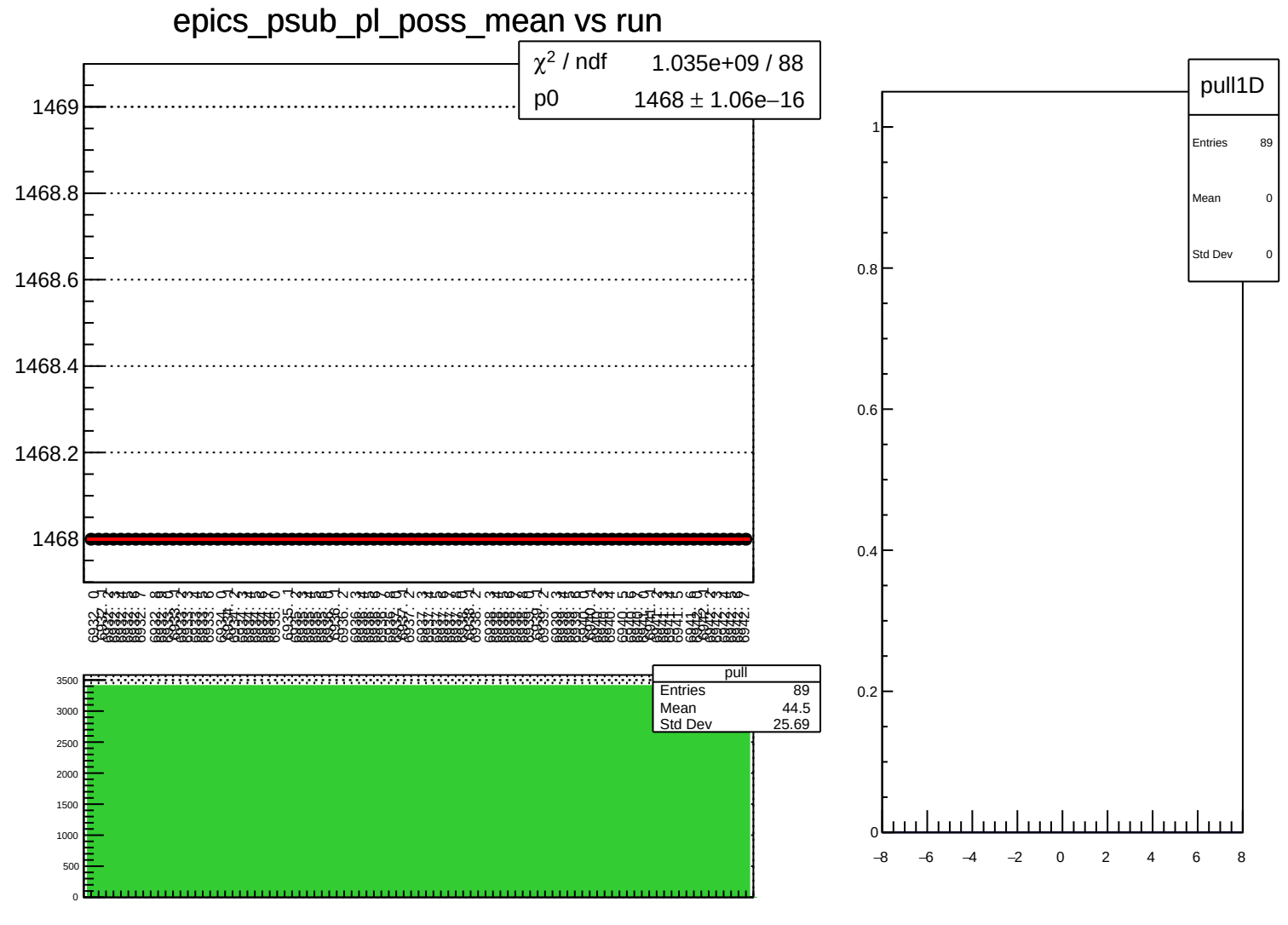

yield_bpm0r05Y_mean vs run
χ² / ndf 5.884e+06 / 88
p0 1.44 ± 8.366e−06
1.5
1.48
1.46
1.44
1.42
pull
Entries 89
Mean −960.2
Std Dev 997.5
1000
800
600
400
200
0
−200
pull1D
Entries 89
Mean −1.661
Std Dev 6.706
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

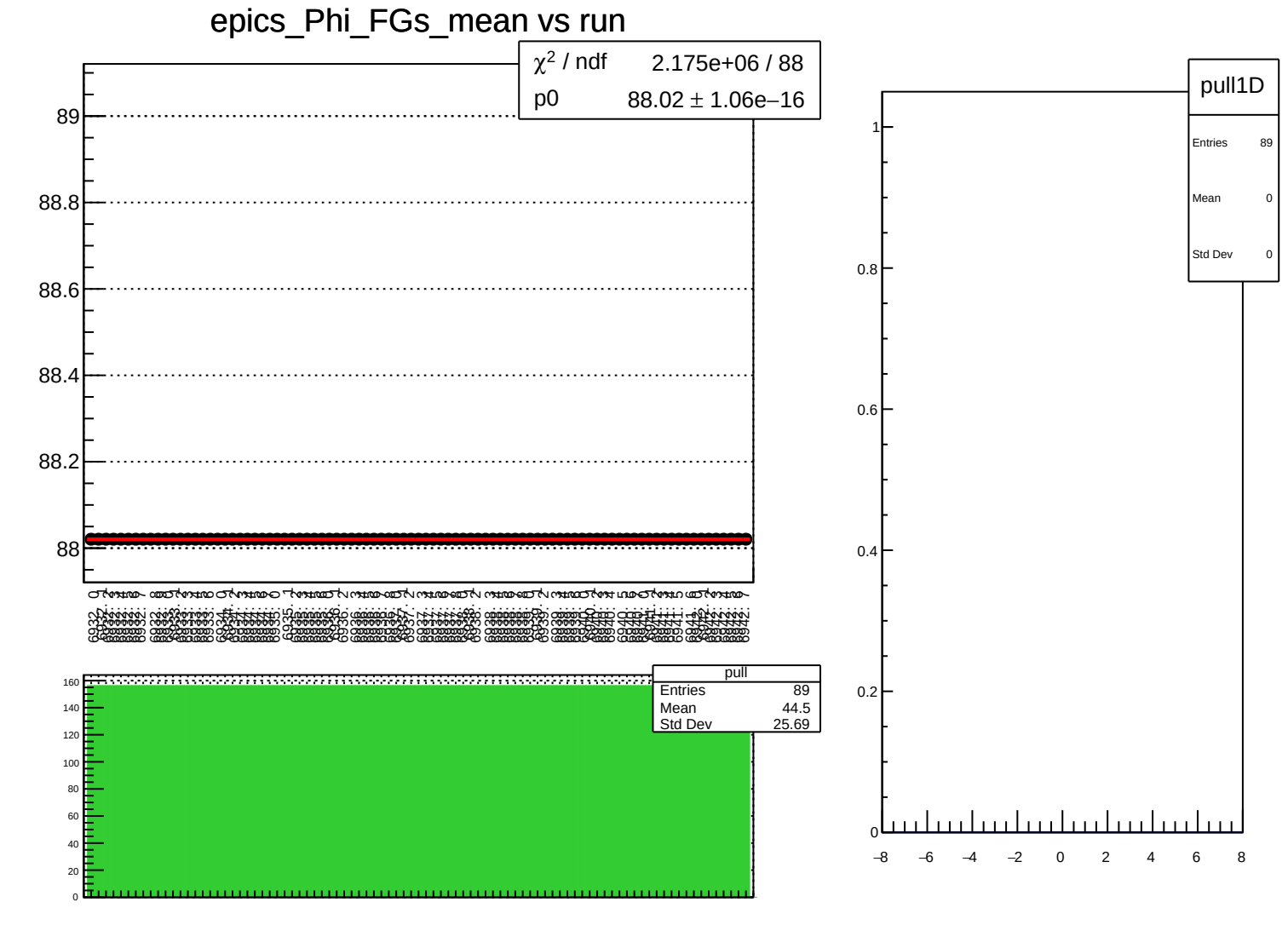

yield_bpm0r05Y_rms vs run
χ² / ndf 1.33e+04 / 88
p0 0.007659 ± 5.915e−06
0.016
0.014
0.012
0.01
0.008

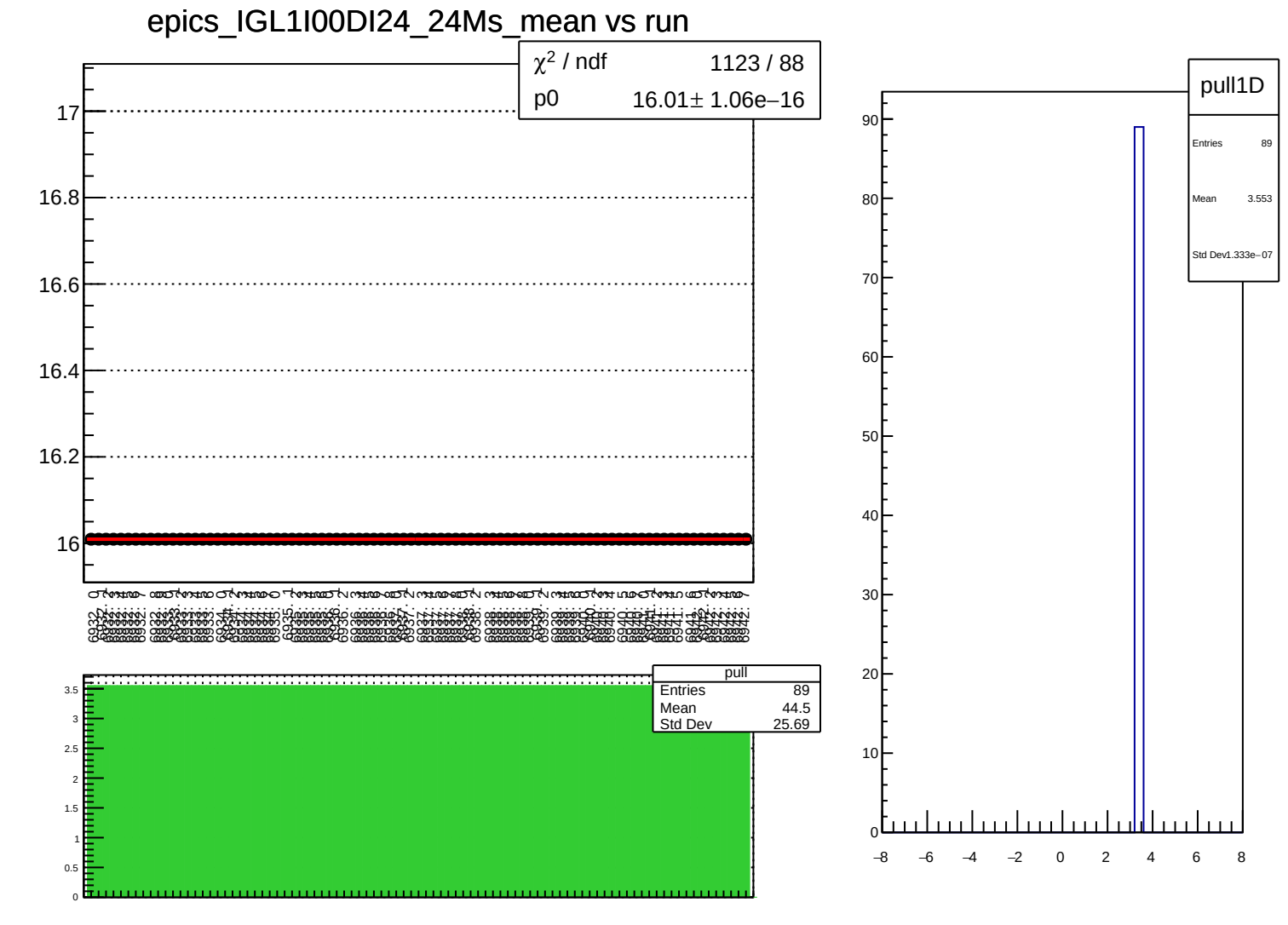

epics_VWienAngles_mean vs run
χ² / ndf 3.038e+06 / 88
p0 −90.6 ± 1.06e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 89
Mean 44.5
Std Dev 25.69
0
−20
−40
−60
−80
−100
−120
−140
−160
−180

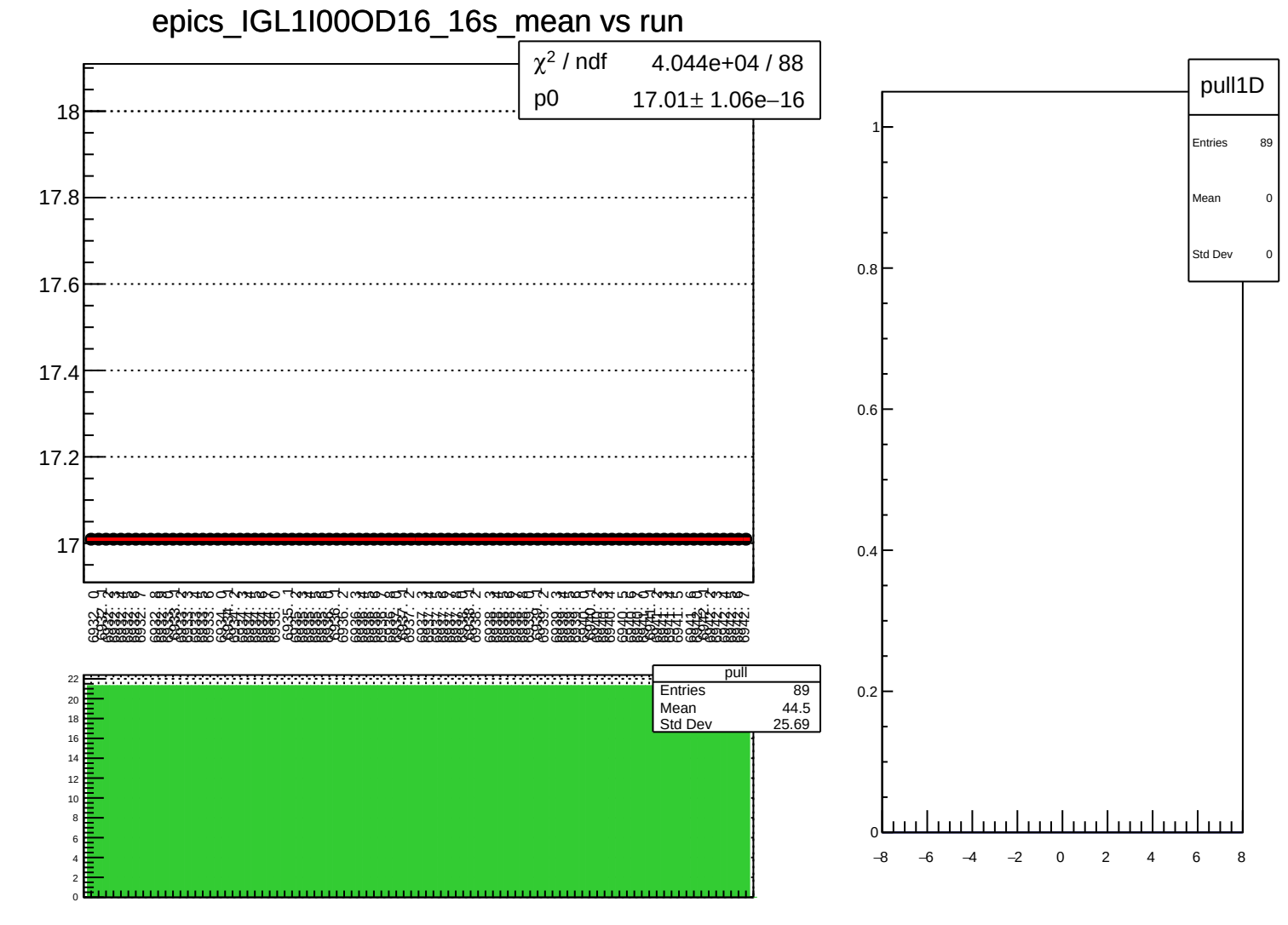

pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

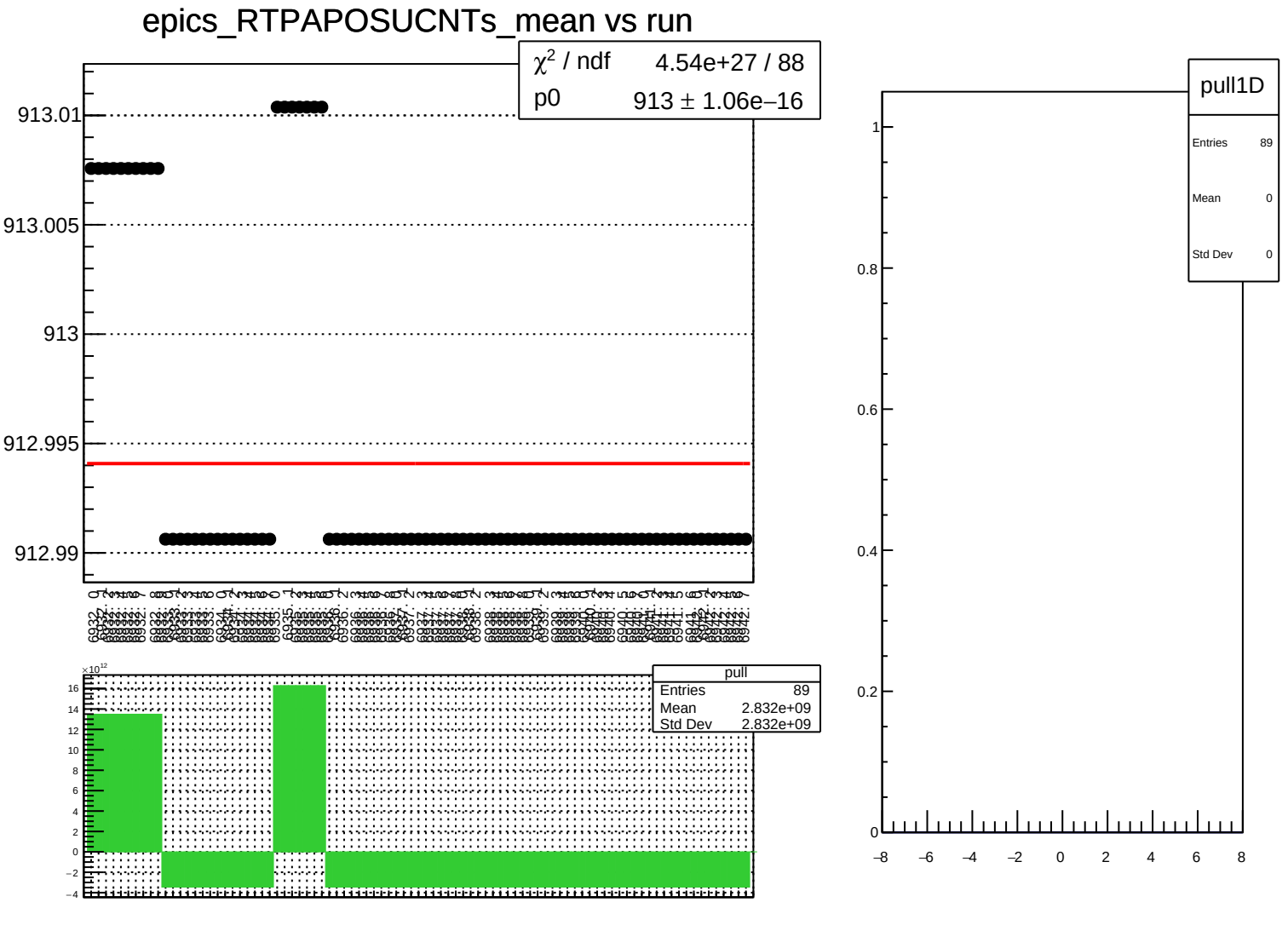

epics_HWienAngles_mean vs run
χ² / ndf 3.64e+05 / 88
p0 −29.64 ± 1.06e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 89
Mean 44.5
Std Dev 25.69
0
−10
−20
−30
−40
−50
−60
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

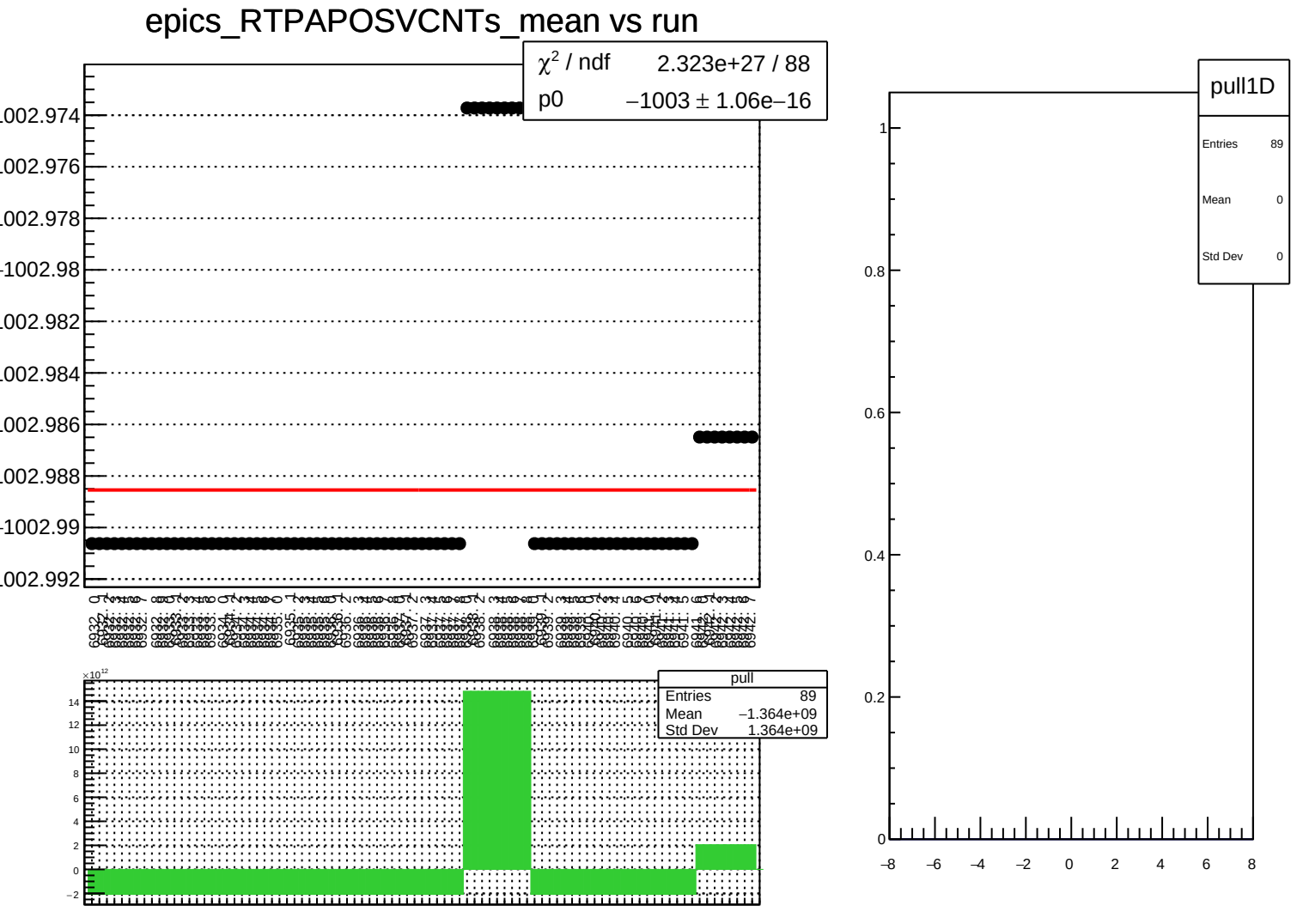

epics_psub_pl_poss_mean vs run
χ² / ndf 1.035e+09 / 88
p0 1468 ± 1.06e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 89
Mean 44.5
Std Dev 25.69
3500
3000
2500
2000
1500
1000
500
0
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


epics_Phi_FGs_mean vs run
χ² / ndf 2.175e+06 / 88
p0 88.02 ± 1.06e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 89
Mean 44.5
Std Dev 25.69
160
140
120
100
80
60
40
20
0
pull1D
Entries 89
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 1123 / 88
p0 16.01± 1.06e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 89
Mean 44.5
Std Dev 25.69
3.5
3
2.5
2
1.5
1
0.5
0
pull1D
Entries 89
Mean 3.553
Std Dev1.333e−07
90
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


epics_IGL1I00OD16_16s_mean vs run
χ² / ndf 4.044e+04 / 88
p0 17.01± 1.06e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 89
Mean 44.5
Std Dev 25.69
22
20
18
16
14
12
10
8
6
4
2
0
pull1D
Entries 89
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 4.54e+27 / 88
p0 913 ± 1.06e−16
913.01
913.005
913
912.995
912.99
pull
Entries 89
Mean 2.832e+09
Std Dev 2.832e+09
pull1D
Entries 89
Mean 0
Std Dev 0


epics_RTPAPOSVCNTs_mean vs run
χ² / ndf 2.323e+27 / 88
p0 −1003 ± 1.06e−16
−1002.974
−1002.976
−1002.978
−1002.98
−1002.982
−1002.984
−1002.986
−1002.988
−1002.99
−1002.992
pull
Entries 89
Mean −1.364e+09
Std Dev 1.364e+09
×10¹²
14
12
10
8
6
4
2
0
−2
pull1D
Entries 89
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8