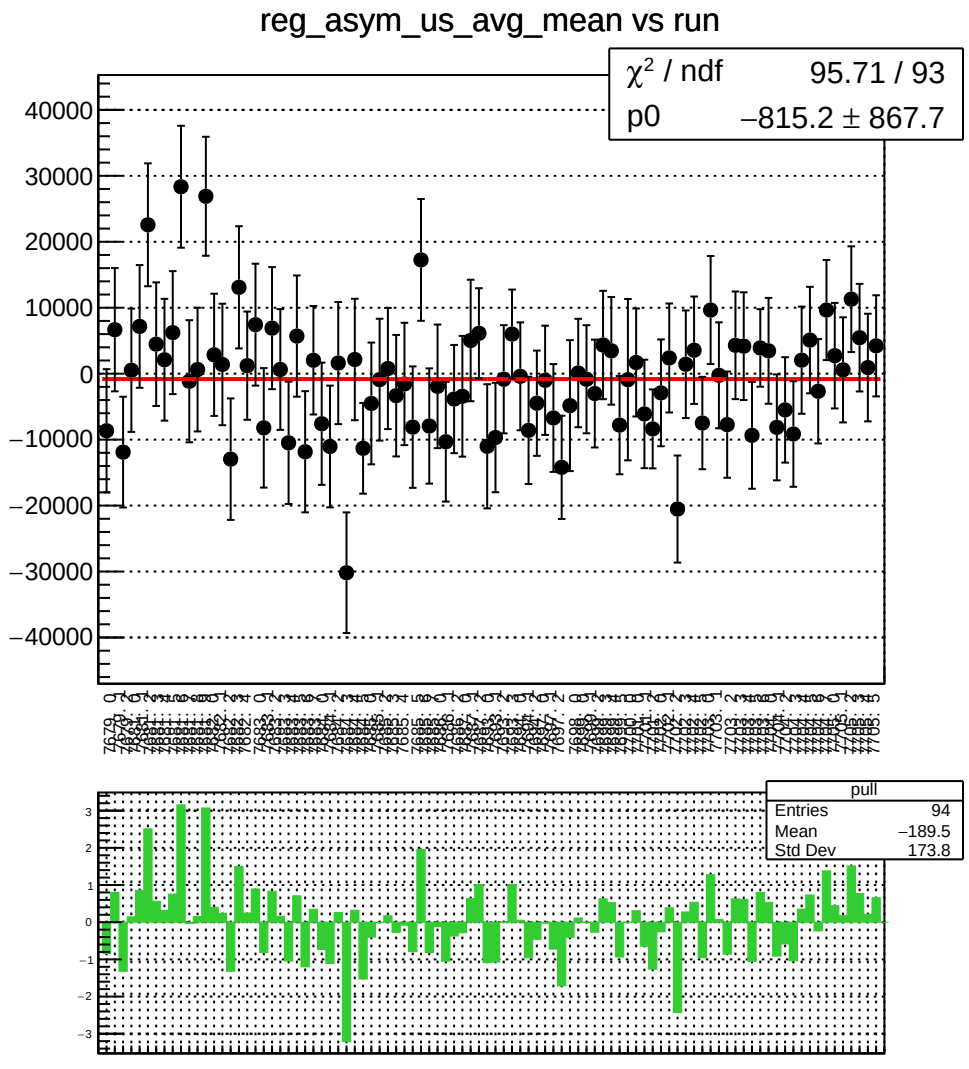
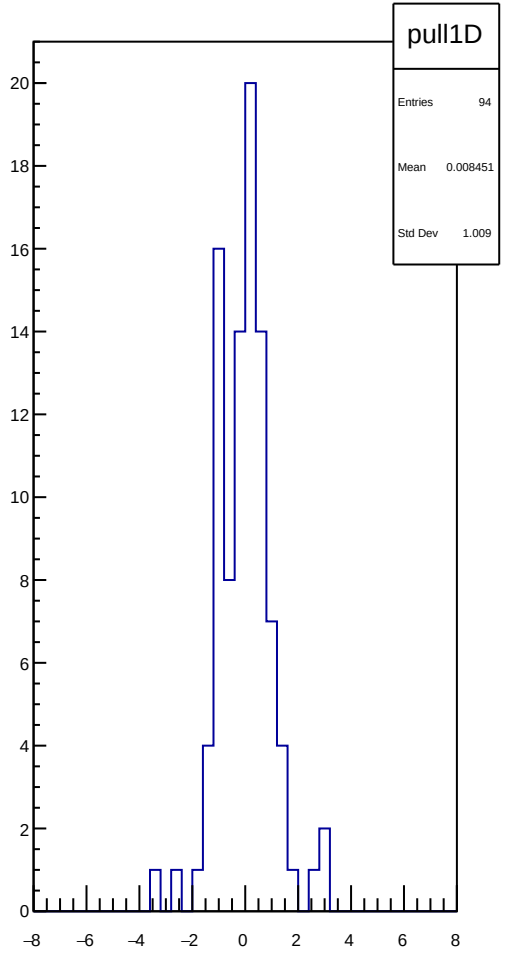
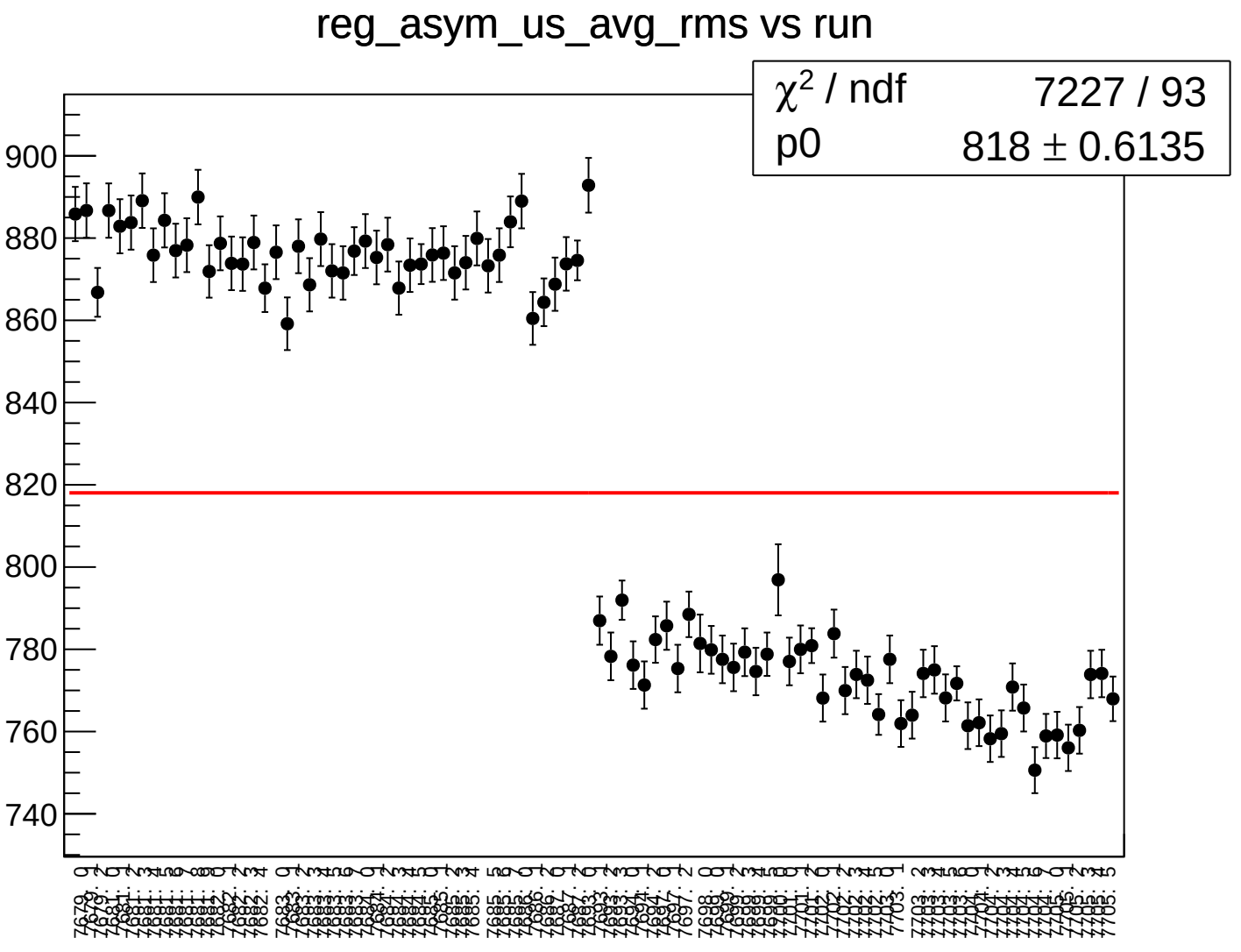
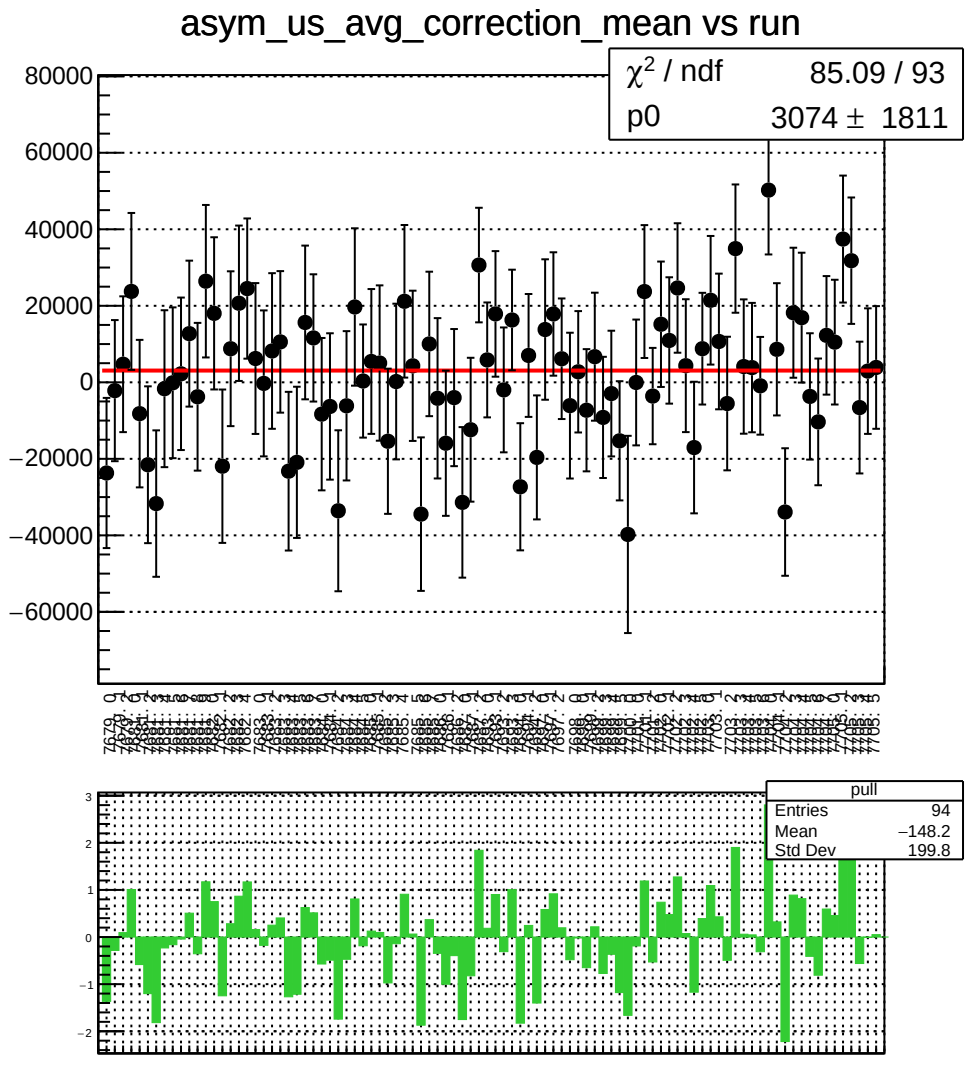
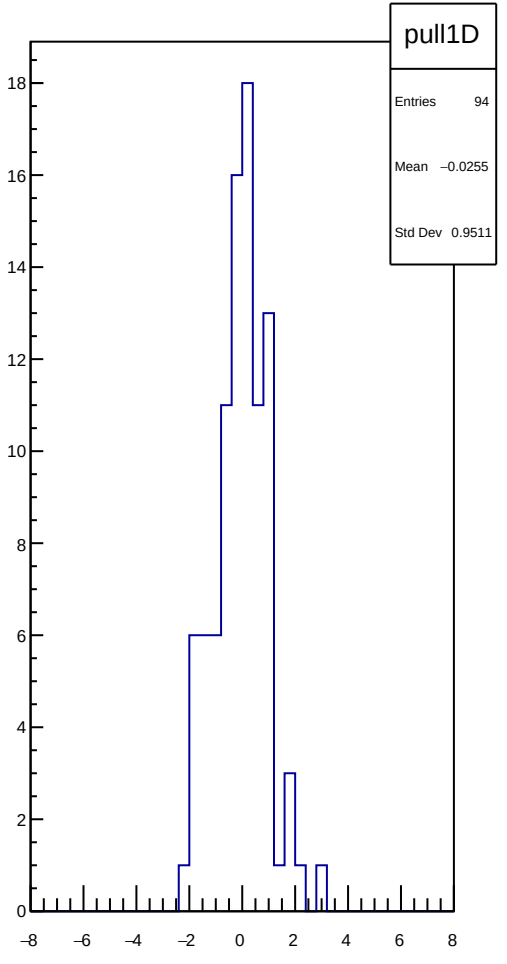
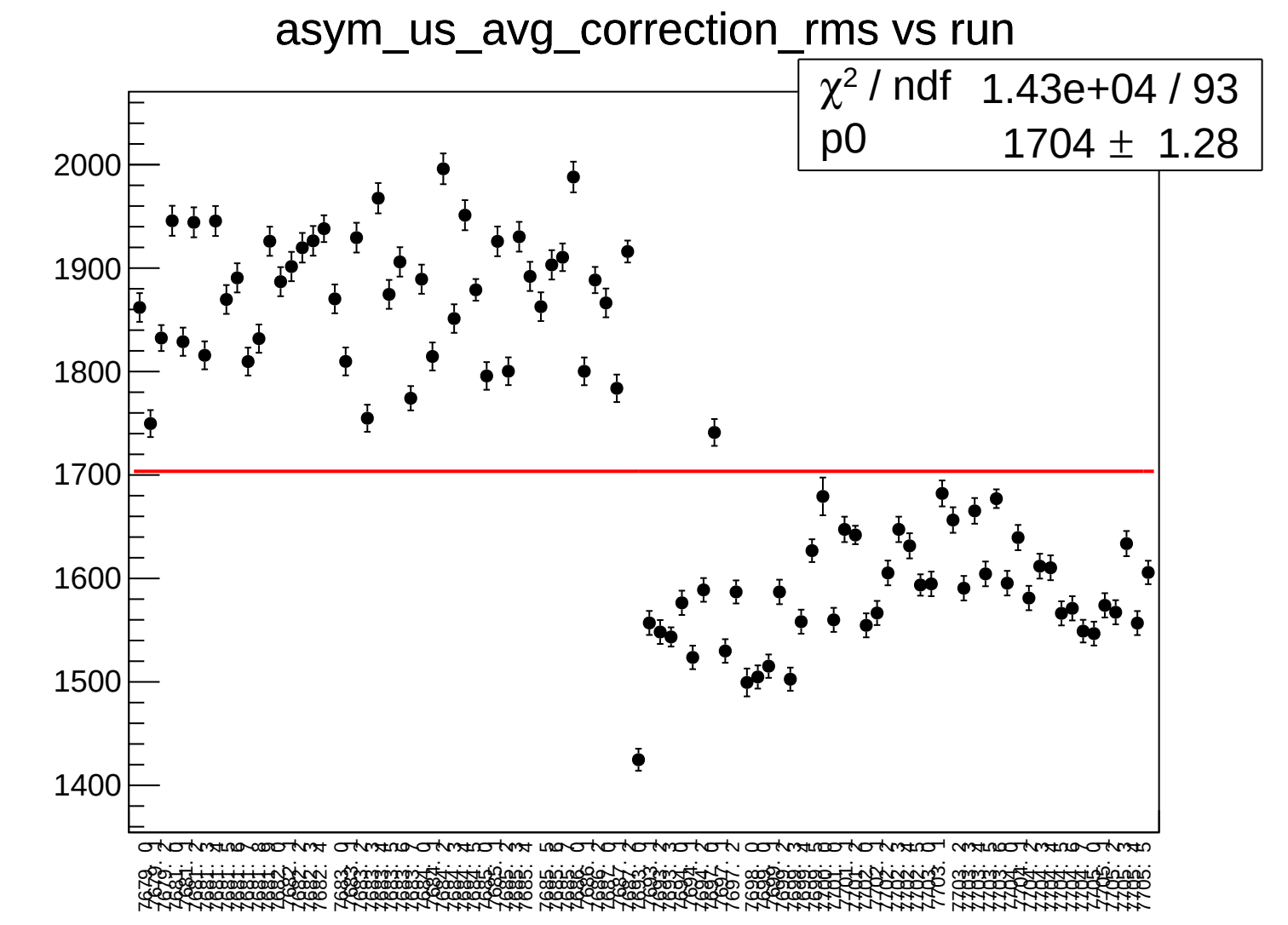

reg_asym_us_avg_mean vs run
χ² / ndf 95.71 / 93
p0 −815.2 ± 867.7
pull
Entries 94
Mean −189.5
Std Dev 173.8

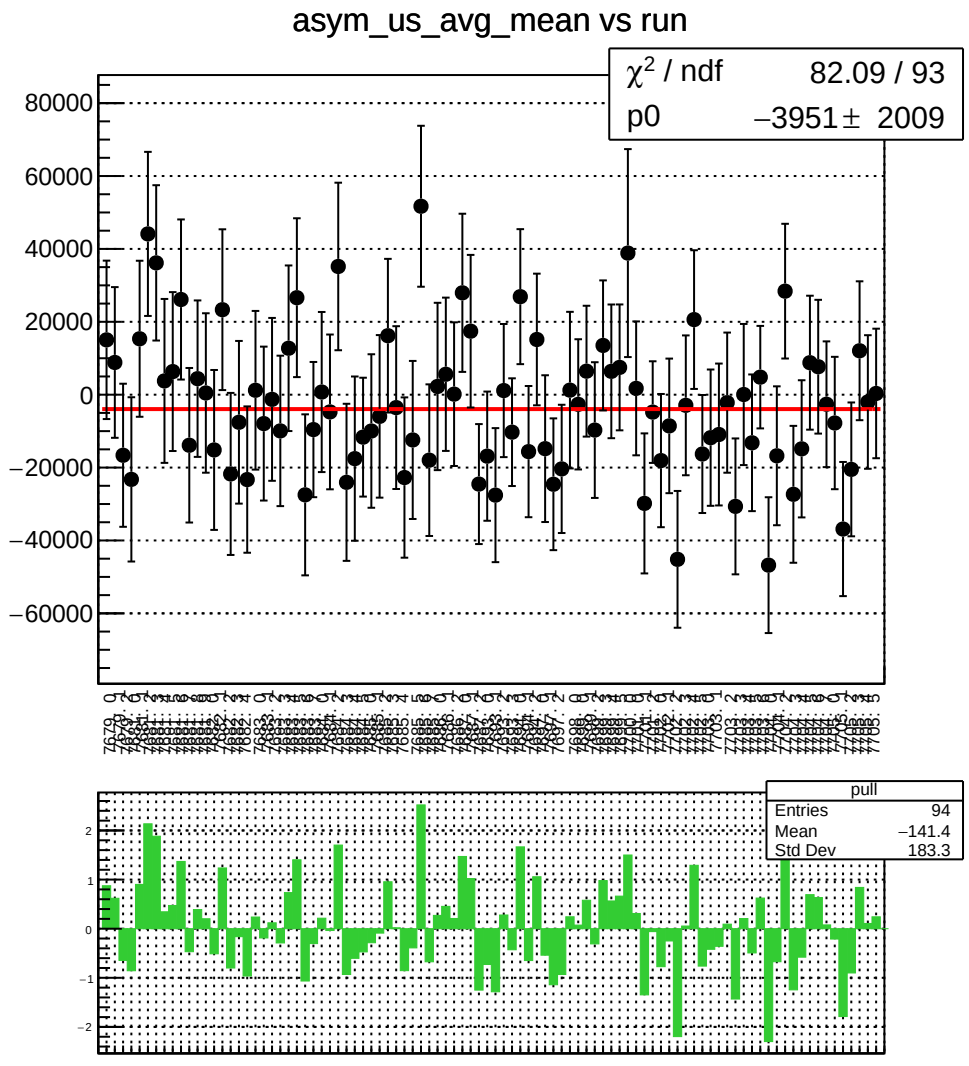

pull1D
Entries 94
Mean 0.008451
Std Dev 1.009

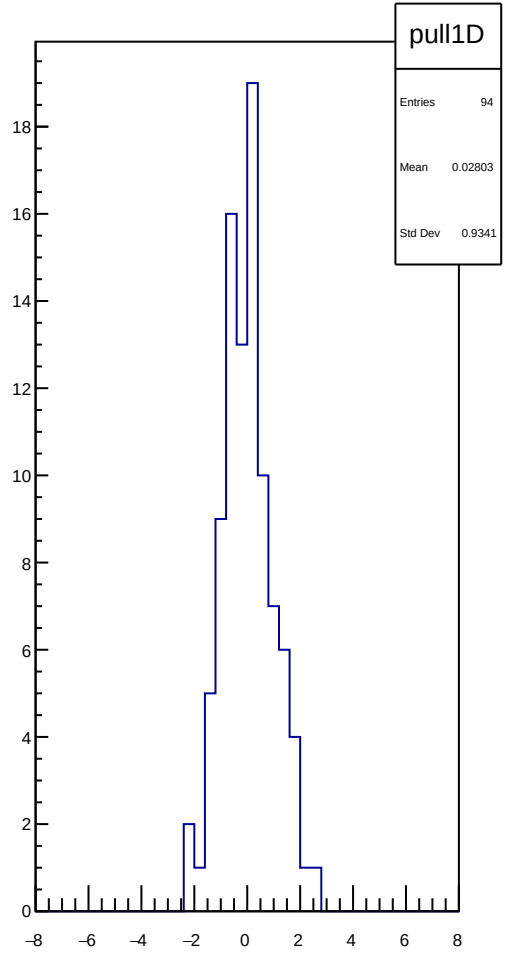

reg_asym_us_avg_rms vs run
χ^2 / ndf 7227 / 93
p0 818 ± 0.6135
900
880
860
840
820
800
780
760
740

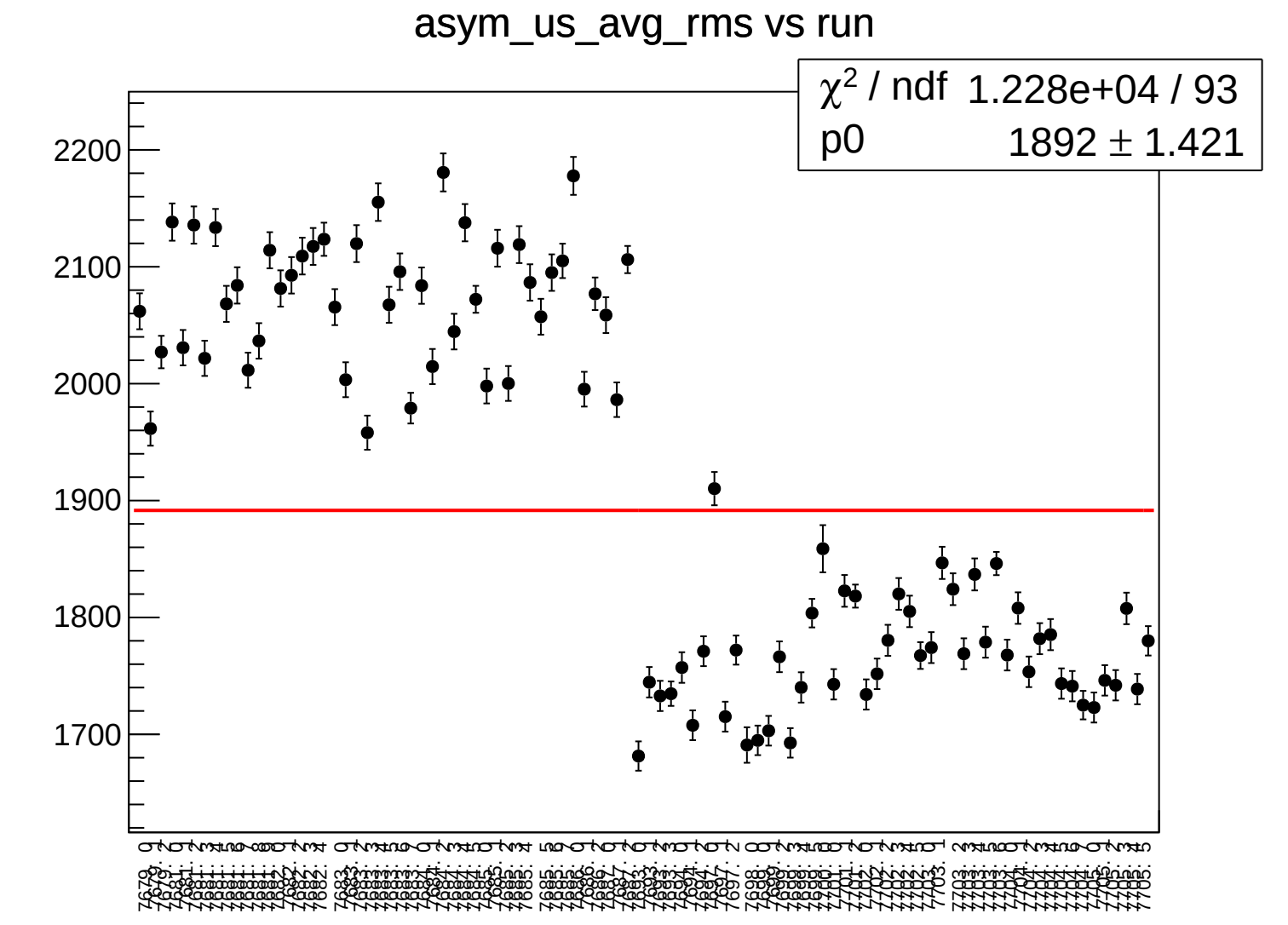

asym_us_avg_correction_mean vs run
χ² / ndf 85.09 / 93
p0 3074 ± 1811
pull
Entries 94
Mean −148.2
Std Dev 199.8

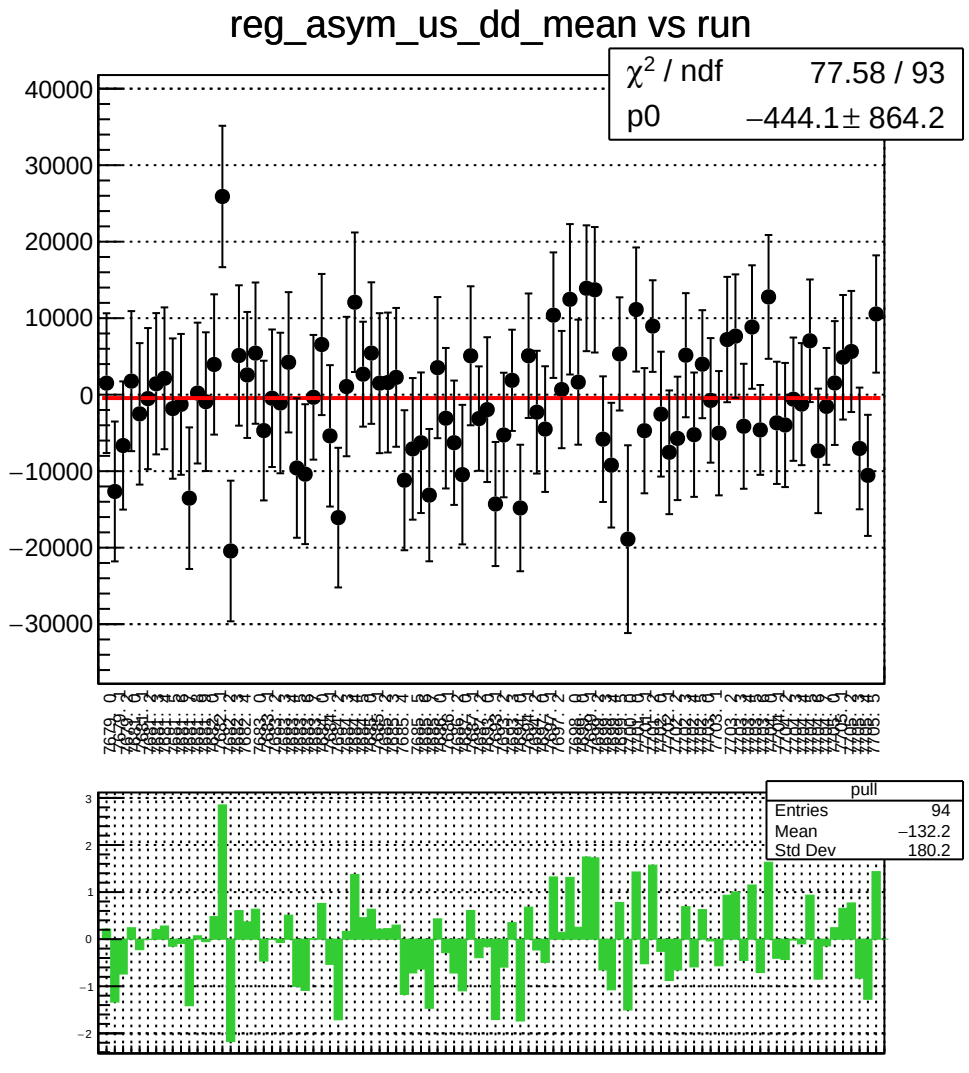

pull1D
Entries 94
Mean −0.0255
Std Dev 0.9511

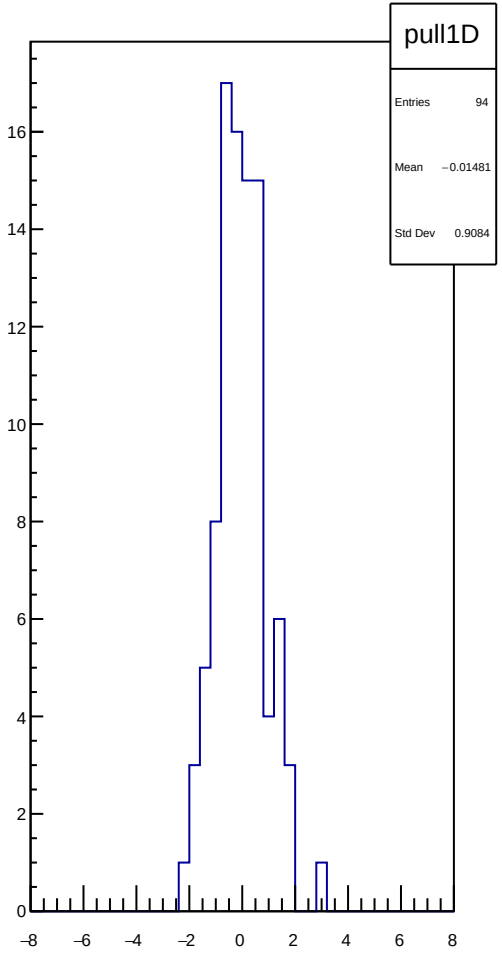

asym_us_avg_correction_rms vs run
χ² / ndf 1.43e+04 / 93
p0 1704 ± 1.28
2000
1900
1800
1700
1600
1500
1400

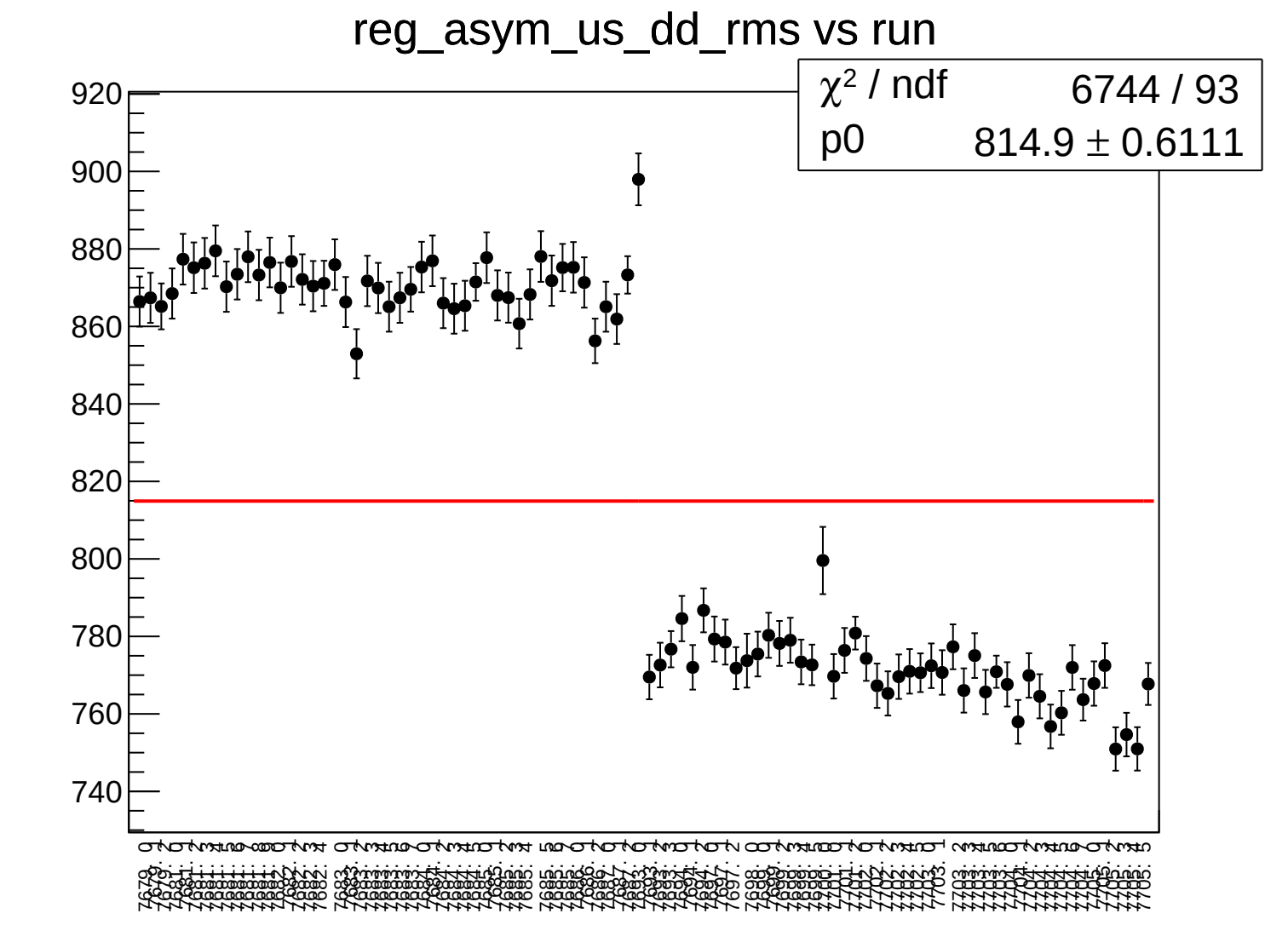

asym_us_avg_mean vs run
χ² / ndf 82.09 / 93
p0 −3951 ± 2009
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −141.4
Std Dev 183.3
2
1
0
−1
−2

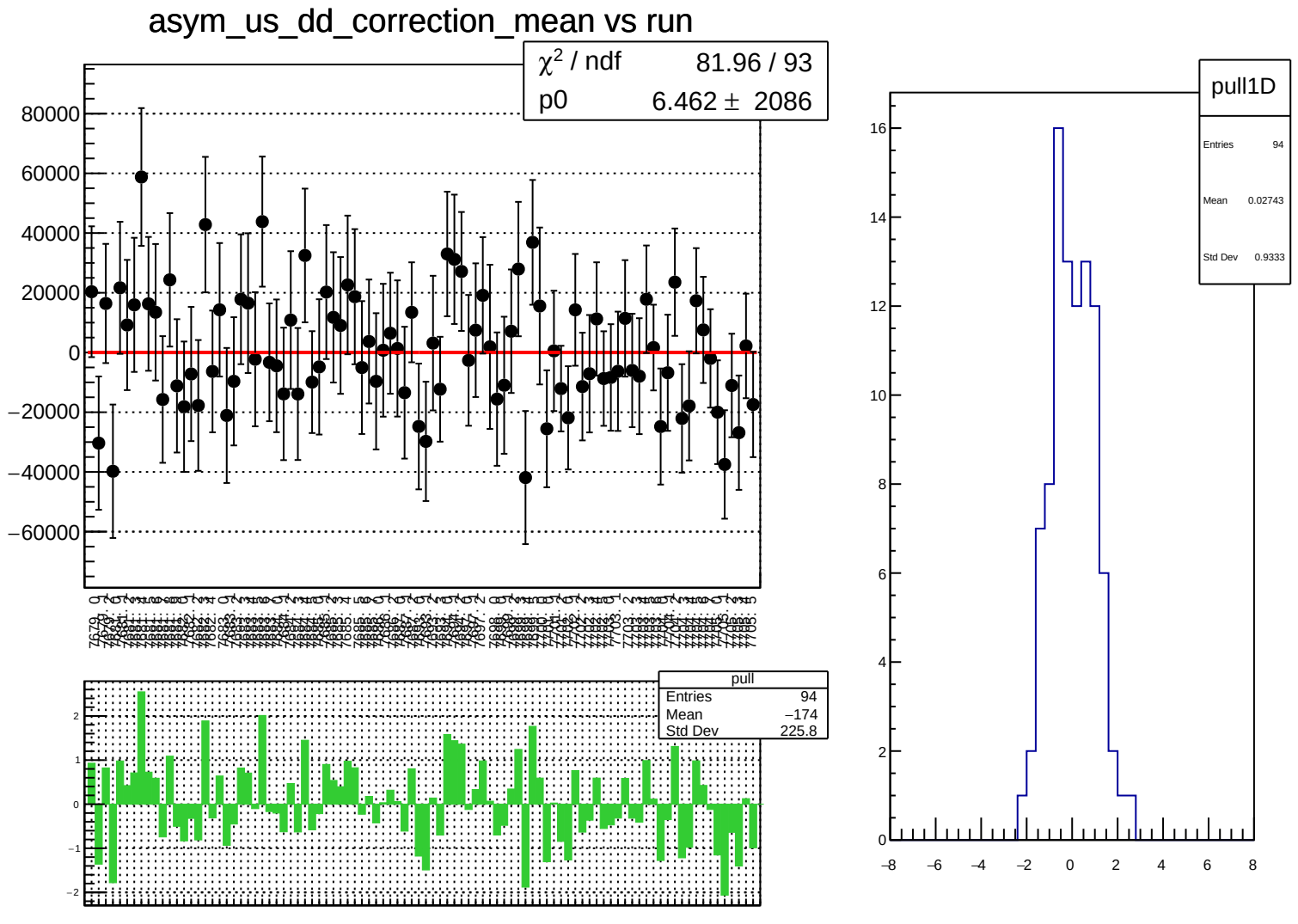

pull1D
Entries 94
Mean 0.02803
Std Dev 0.9341
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

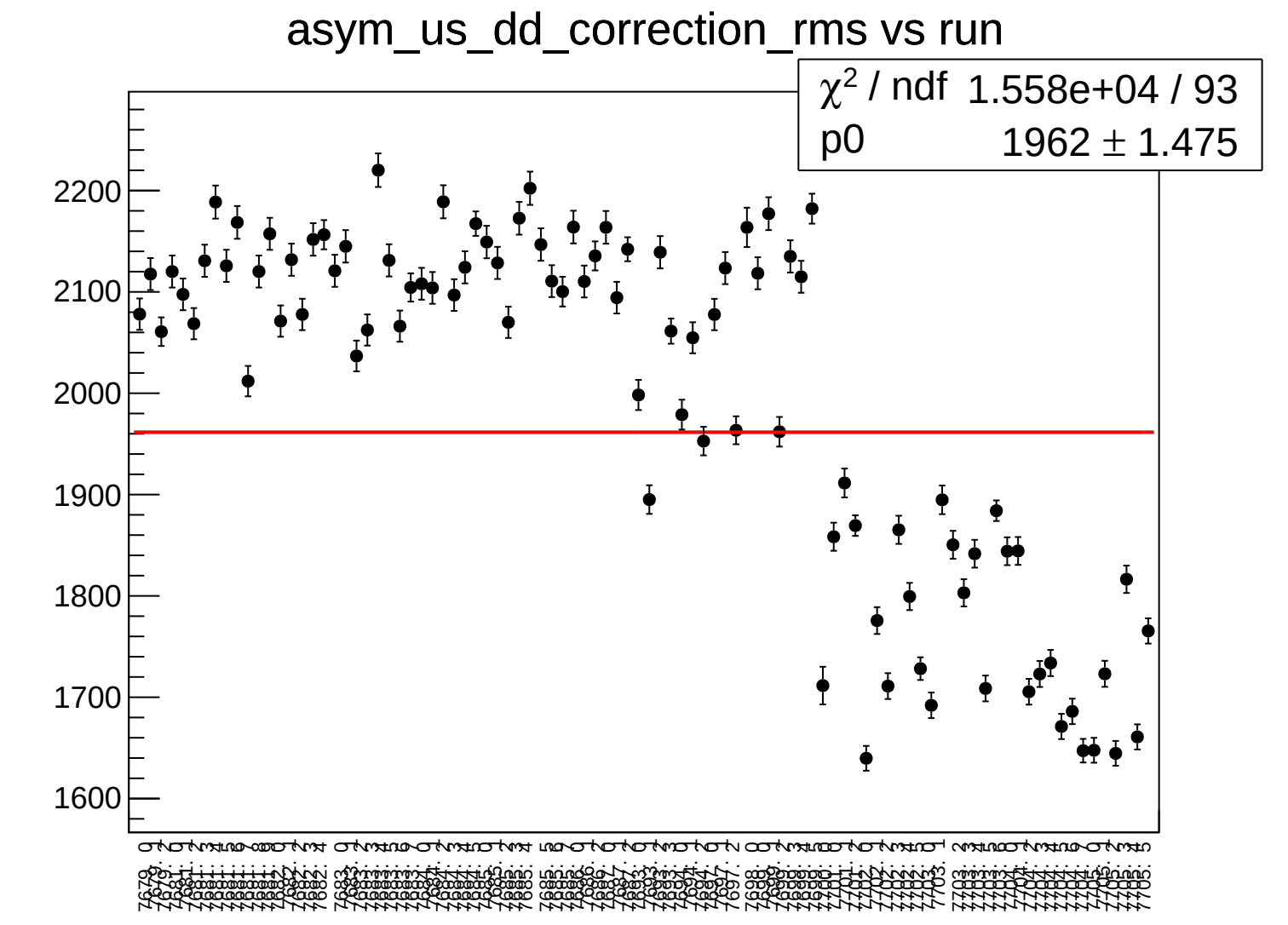

asym_us_avg_rms vs run
χ^2 / ndf 1.228e+04 / 93
p0 1892 ± 1.421
2200
2100
2000
1900
1800
1700

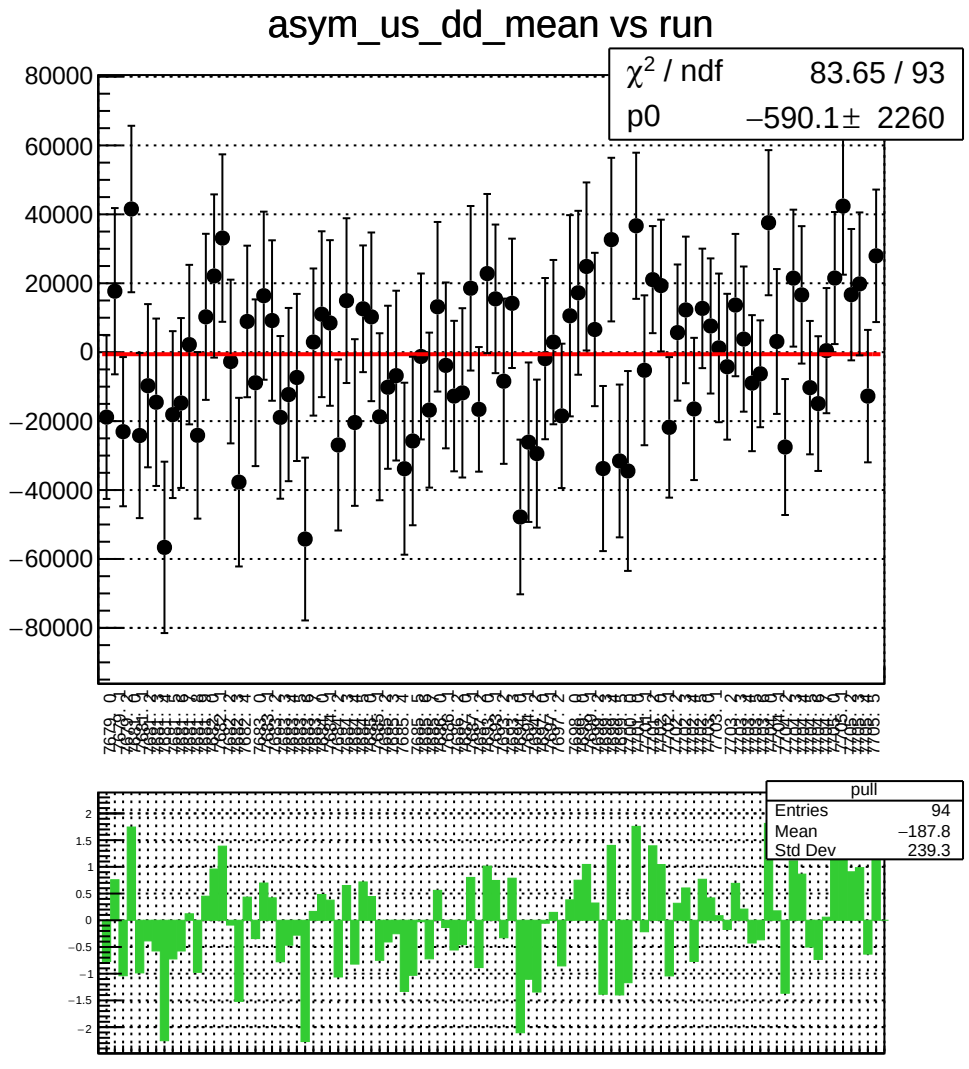

reg_asym_us_dd_mean vs run
χ² / ndf 77.58 / 93
p0 −444.1± 864.2
pull
Entries 94
Mean −132.2
Std Dev 180.2

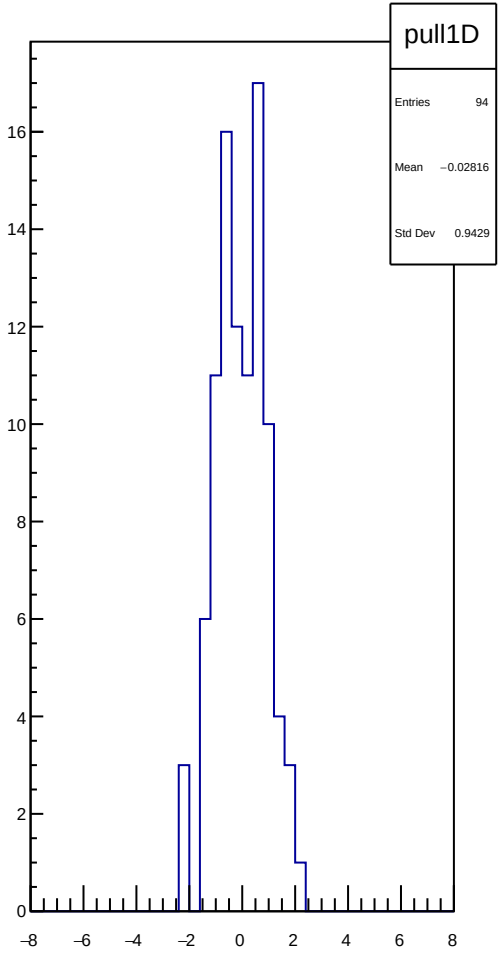

pull1D
Entries 94
Mean −0.01481
Std Dev 0.9084

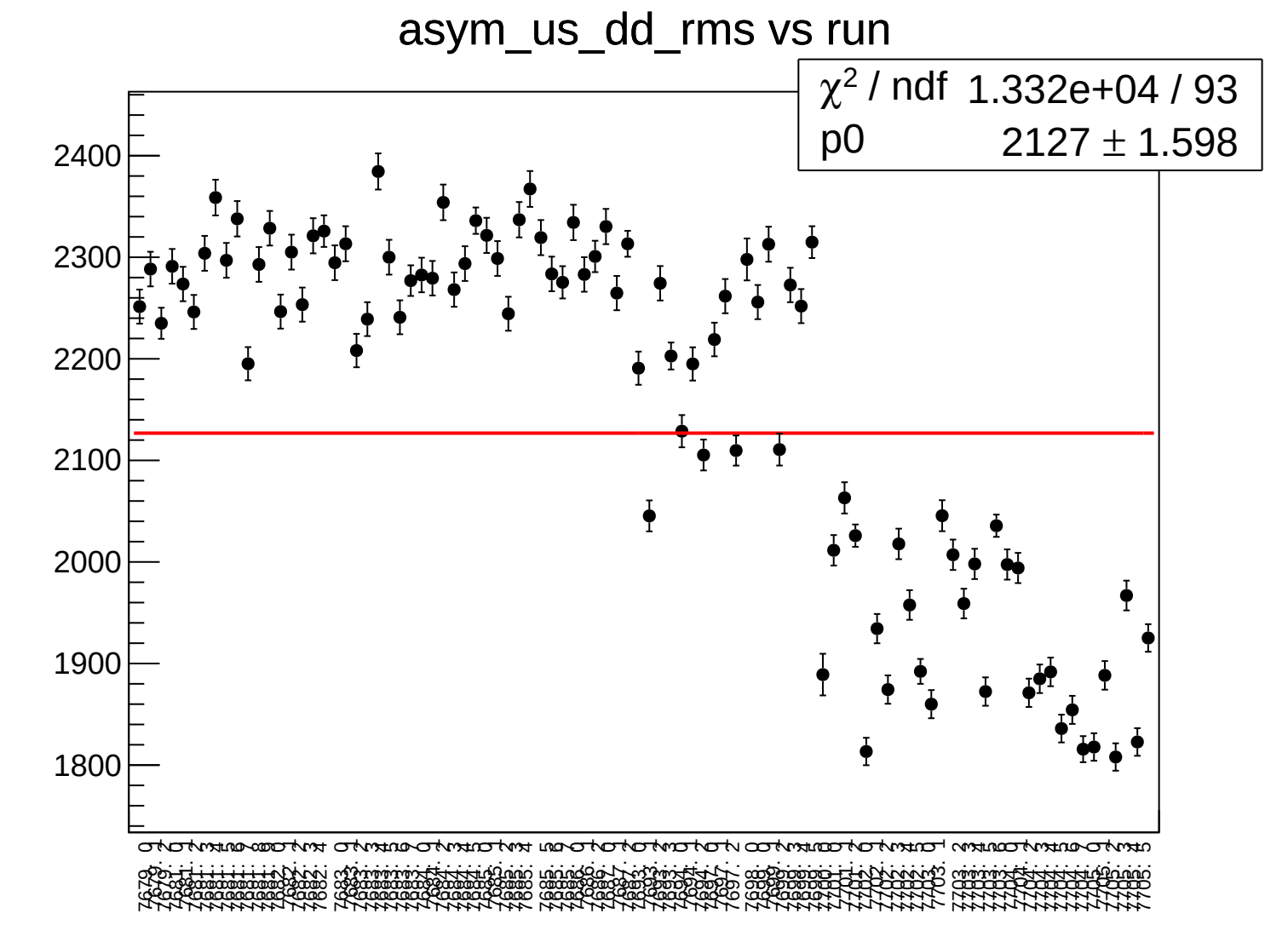

reg_asym_us_dd_rms vs run
χ² / ndf 6744 / 93
p0 814.9 ± 0.6111
920
900
880
860
840
820
800
780
760
740

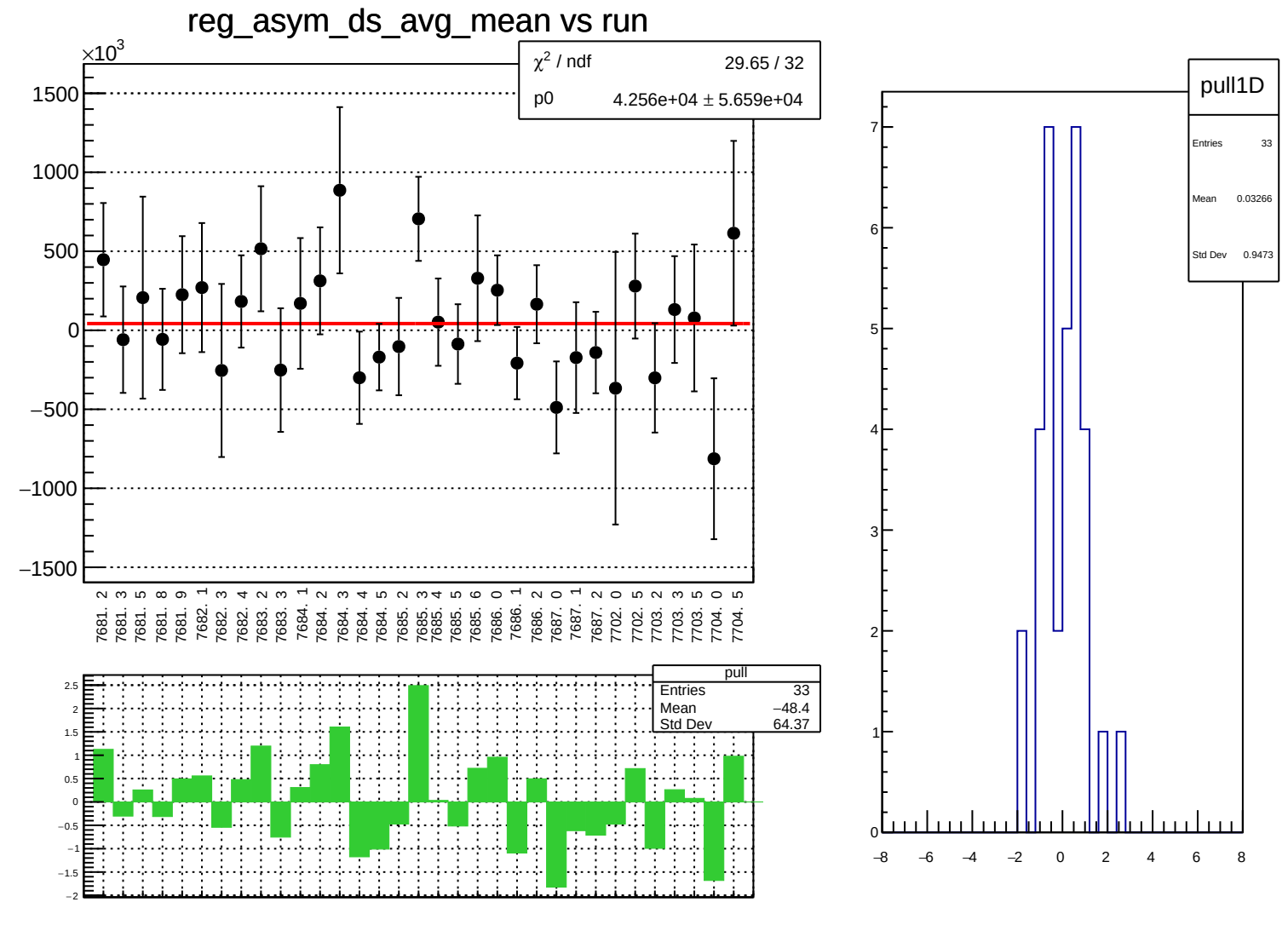

asym_us_dd_correction_mean vs run
χ² / ndf 81.96 / 93
p0 6.462 ± 2086
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −174
Std Dev 225.8
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.02743
Std Dev 0.9333
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

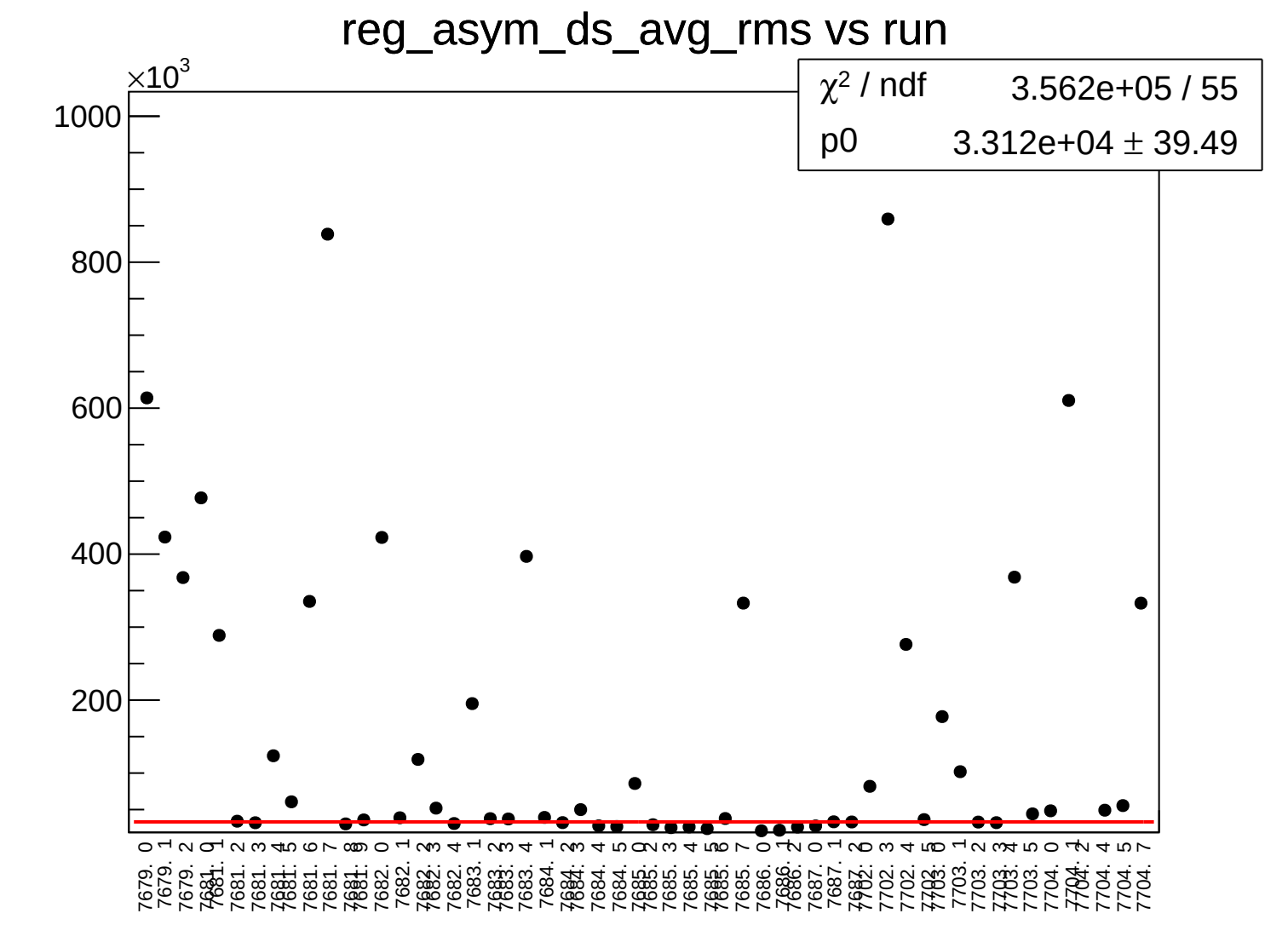

asym_us_dd_correction_rms vs run
χ² / ndf 1.558e+04 / 93
p0 1962 ± 1.475
2200
2100
2000
1900
1800
1700
1600

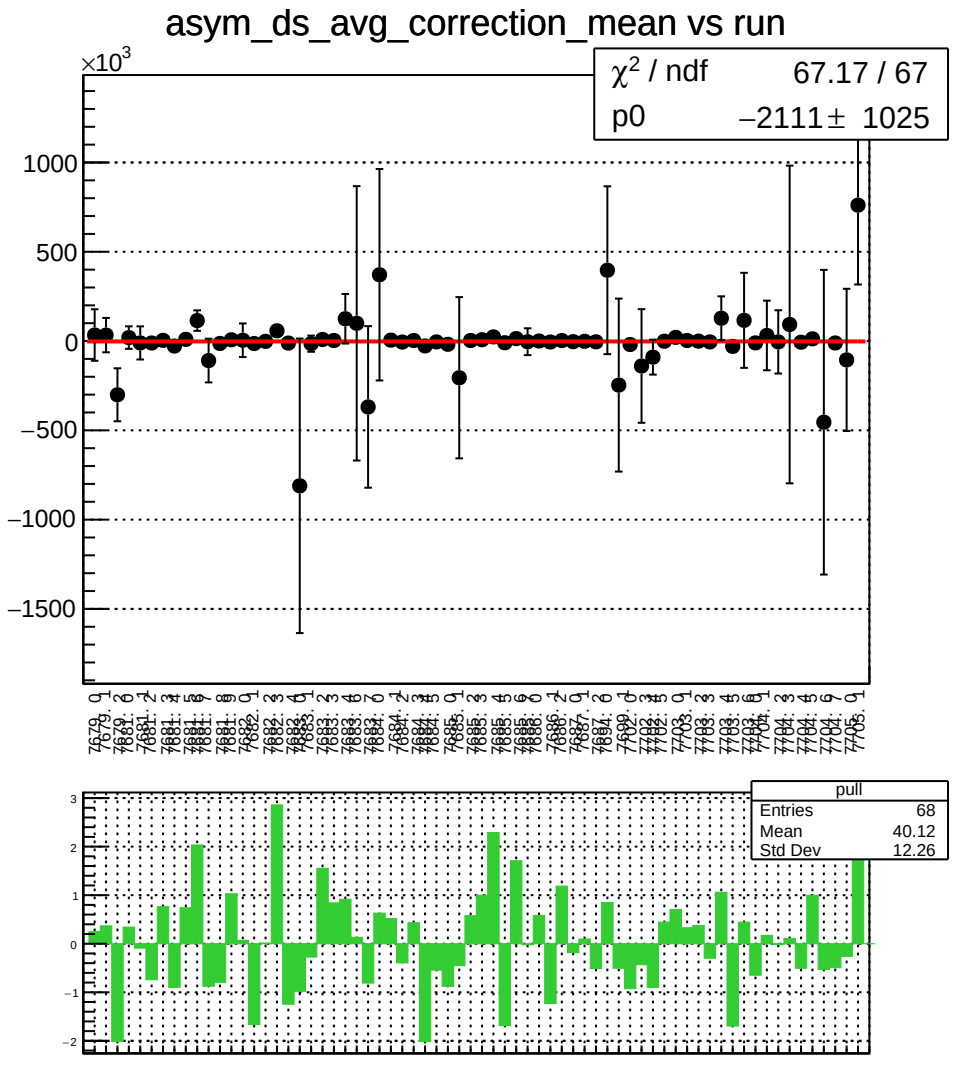

asym_us_dd_mean vs run
χ^2 / ndf 83.65 / 93
p0 −590.1± 2260
pull
Entries 94
Mean −187.8
Std Dev 239.3

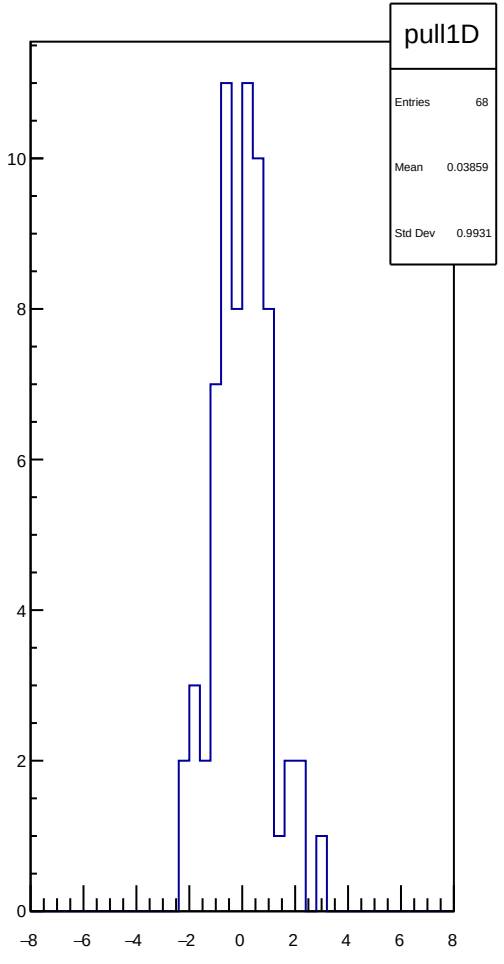

pull1D
Entries 94
Mean −0.02816
Std Dev 0.9429

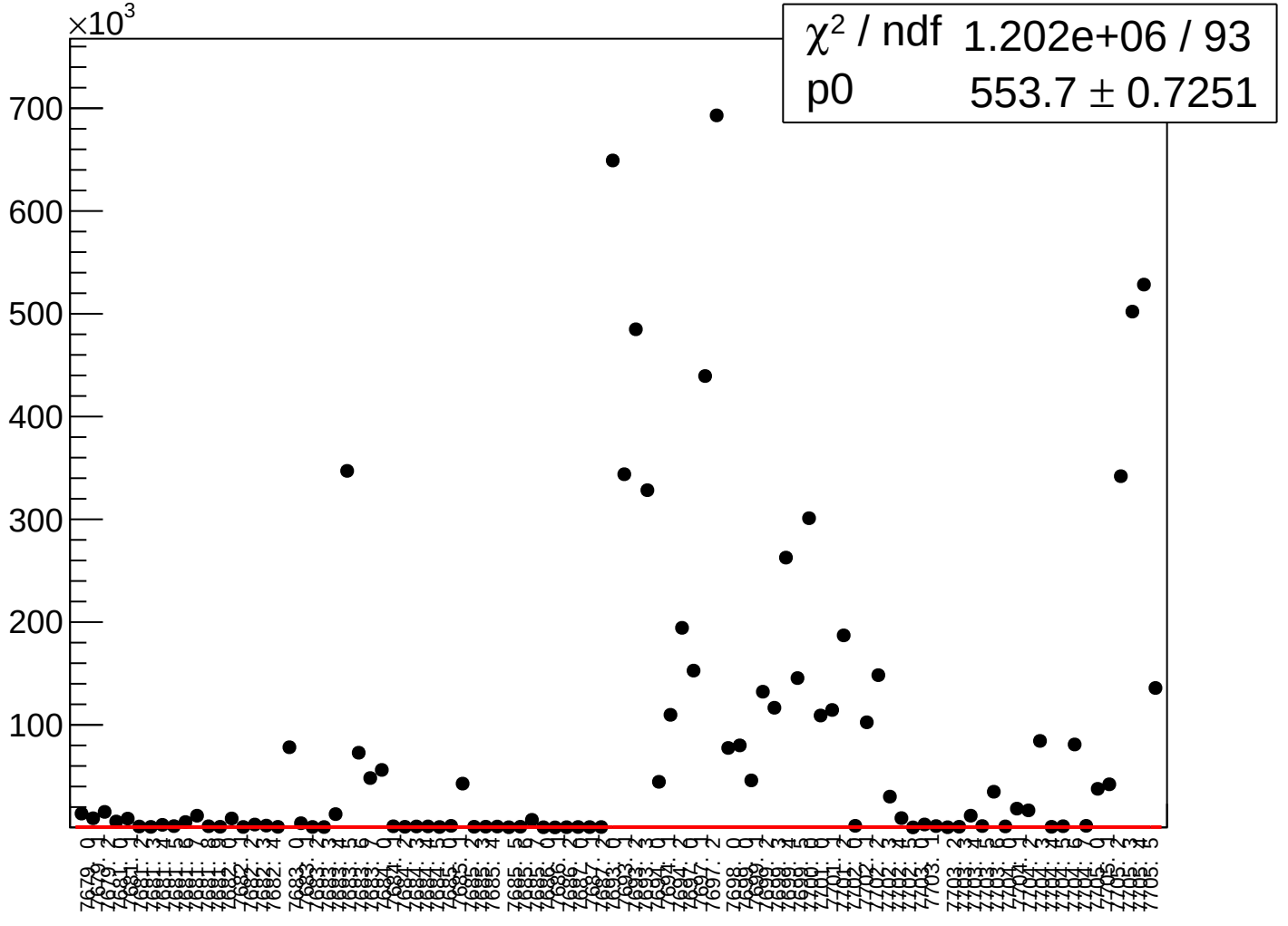

asym_us_dd_rms vs run
χ^2 / ndf 1.332e+04 / 93
p0 2127 ± 1.598
2400
2300
2200
2100
2000
1900
1800

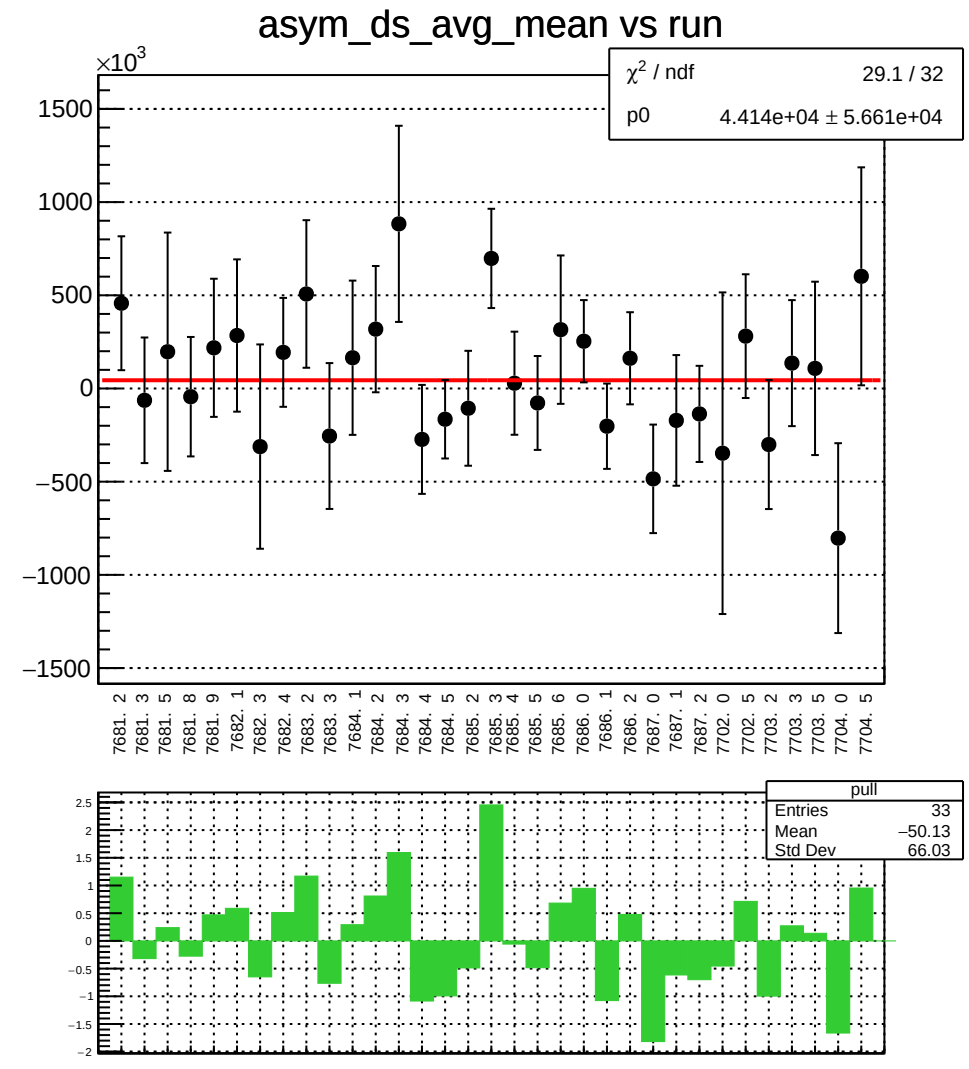

reg_asym_ds_avg_mean vs run
×10^3
χ² / ndf 29.65 / 32
p0 4.256e+04 ± 5.659e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −48.4
Std Dev 64.37
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 33
Mean 0.03266
Std Dev 0.9473
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

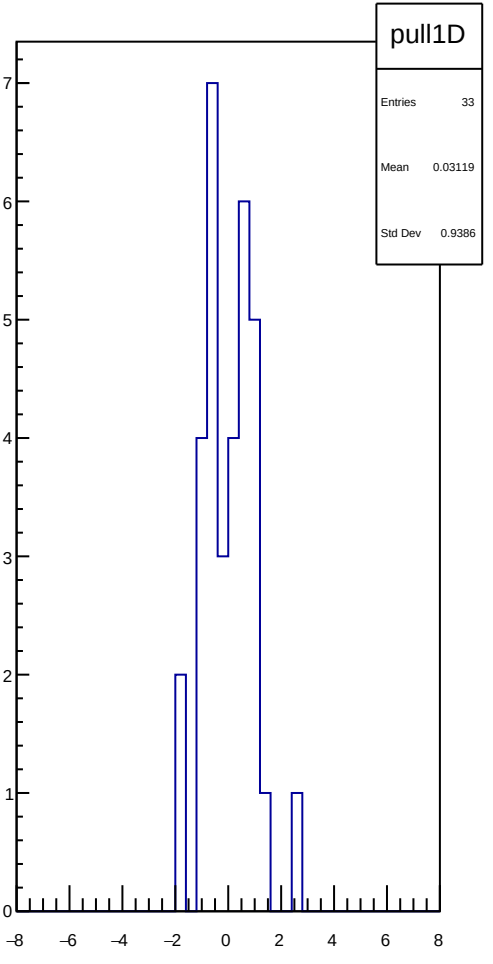

reg_asym_ds_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.562e+05 / 55
p0 3.312e+04 ± 39.49

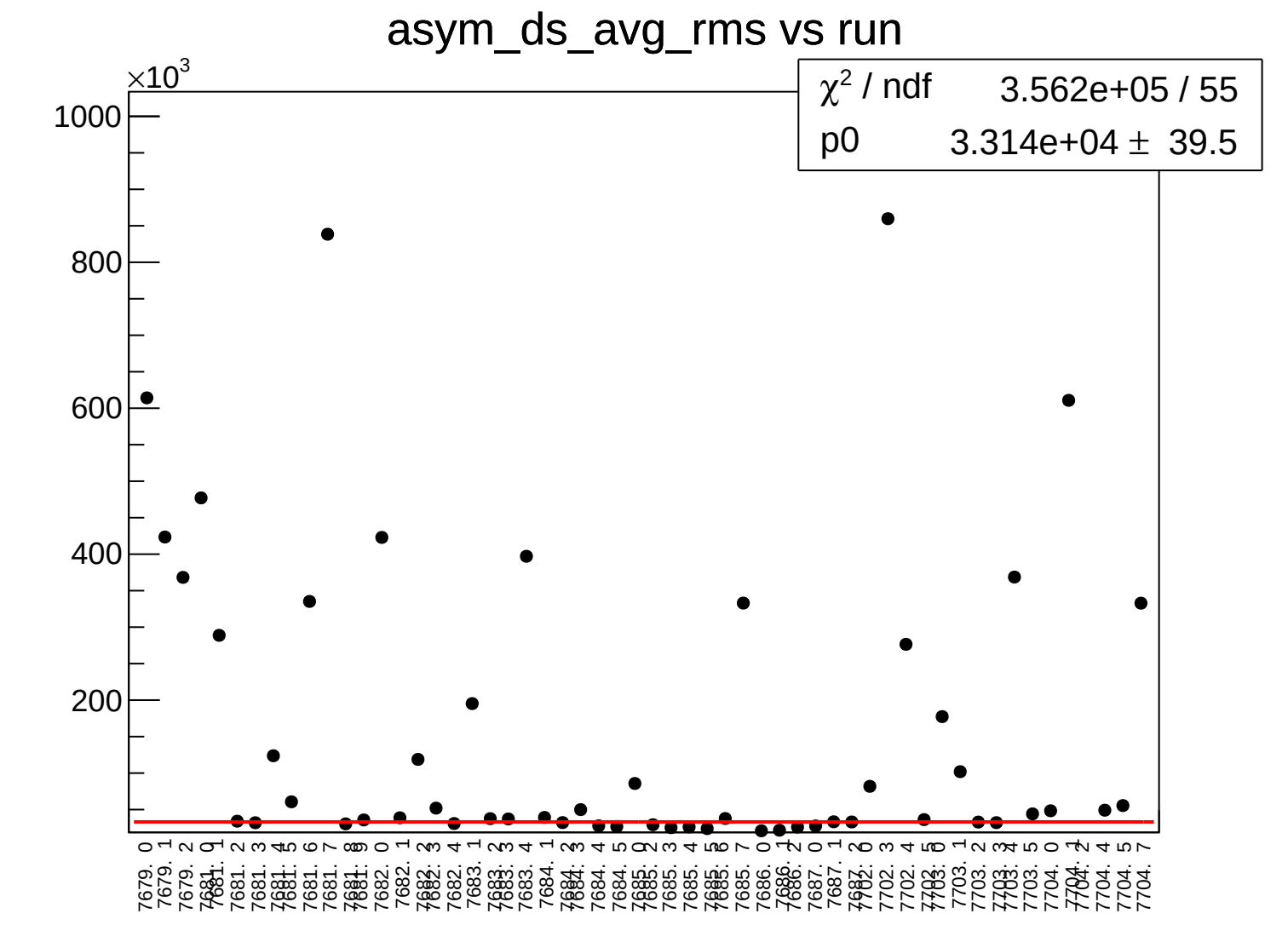

asym_ds_avg_correction_mean vs run
×10^3
χ² / ndf 67.17 / 67
p0 −2111 ± 1025
1000
500
0
−500
−1000
−1500
pull
Entries 68
Mean 40.12
Std Dev 12.26
3
2
1
0
−1
−2

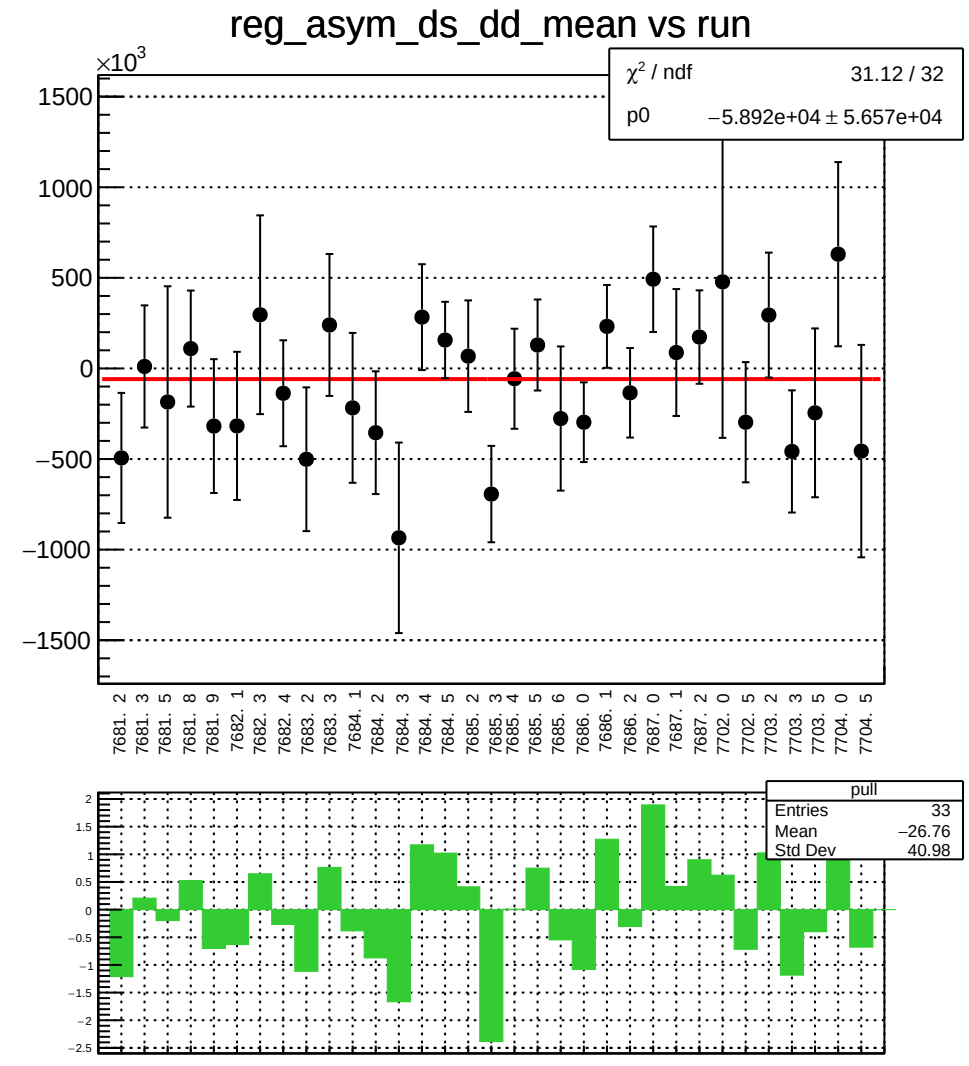

pull1D
Entries 68
Mean 0.03859
Std Dev 0.9931
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

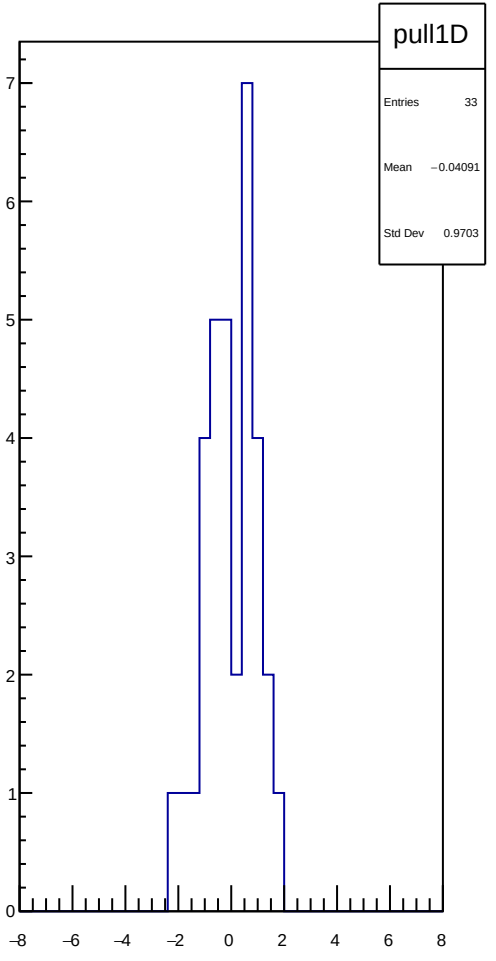

asym_ds_avg_correction_rms vs run
×10^3
χ² / ndf 1.202e+06 / 93
p0 553.7 ± 0.7251
700
600
500
400
300
200
100

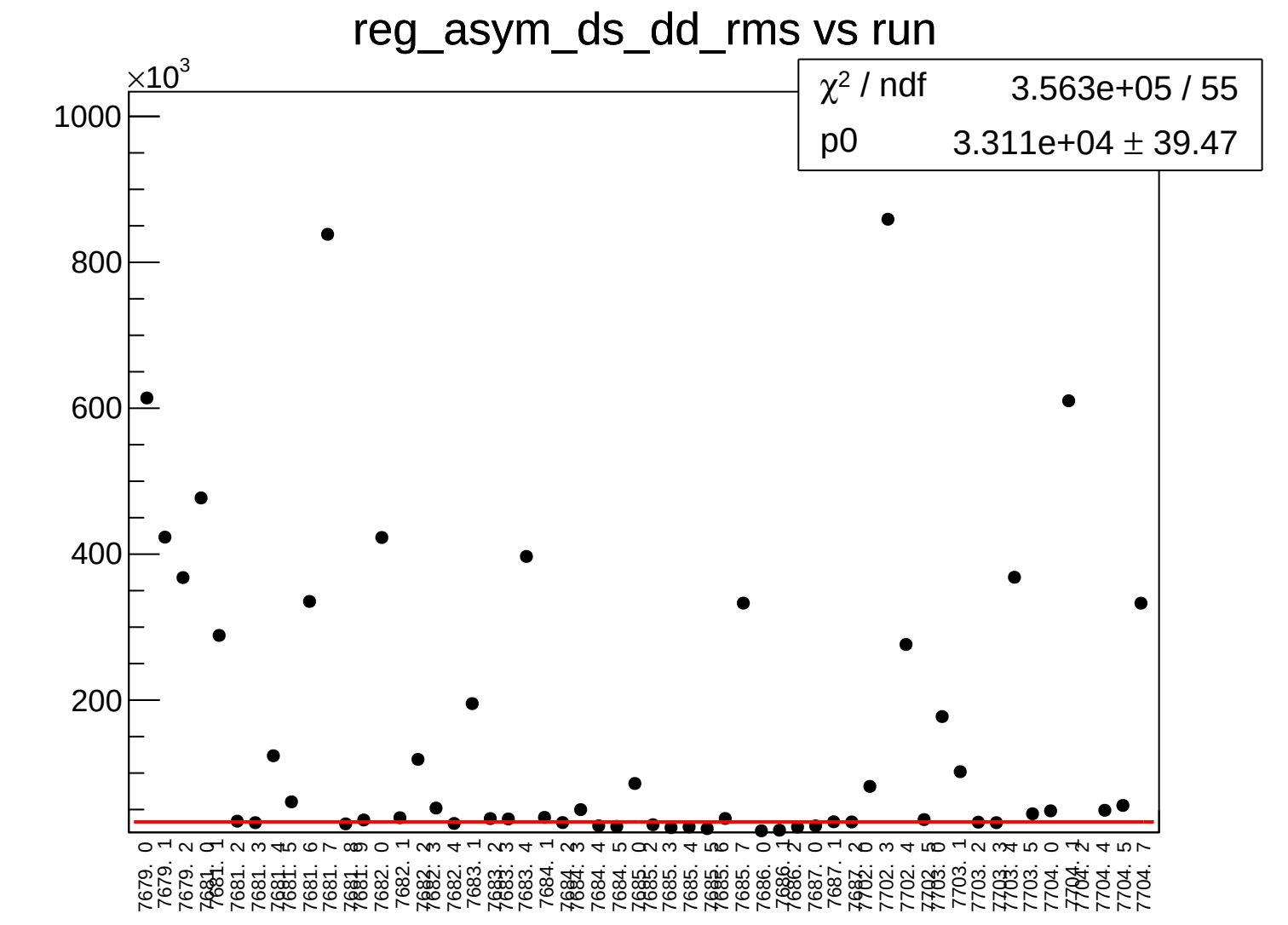

asym_ds_avg_mean vs run
×10^3
χ² / ndf 29.1 / 32
p0 4.414e+04 ± 5.661e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −50.13
Std Dev 66.03
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

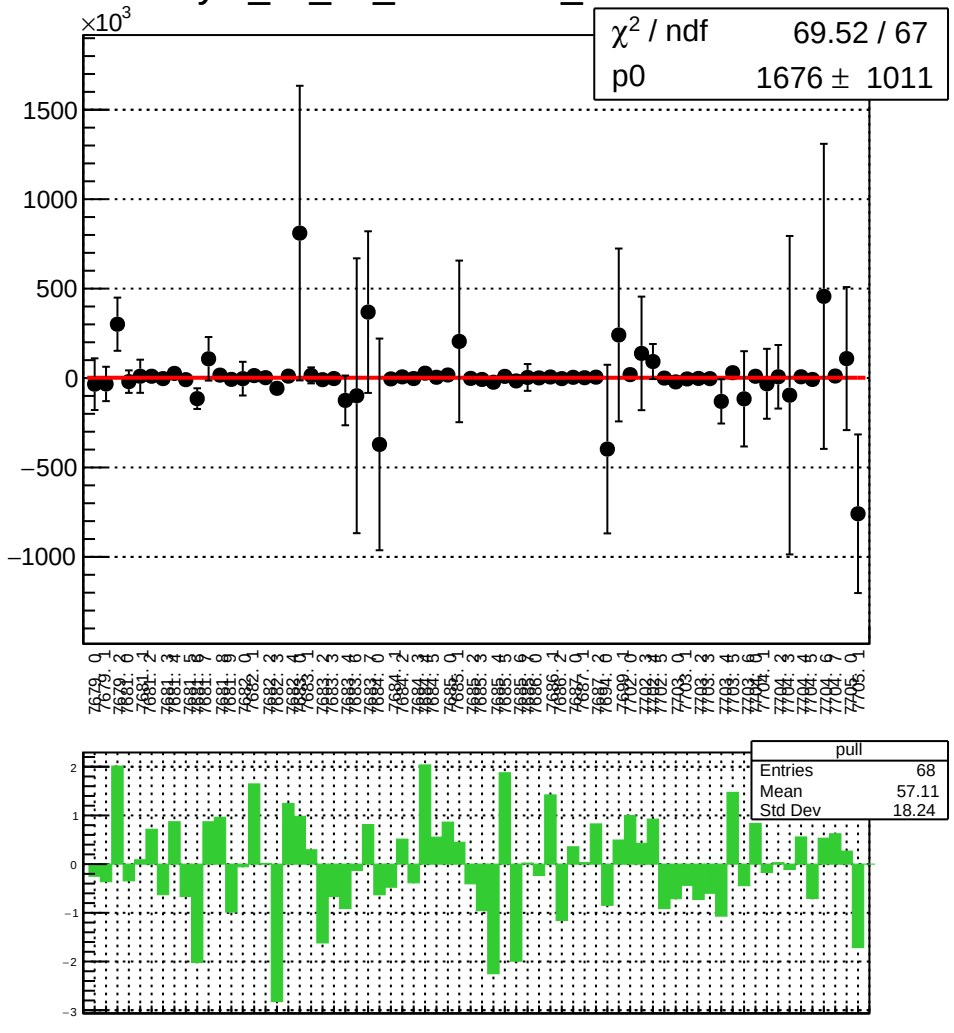

pull1D
Entries 33
Mean 0.03119
Std Dev 0.9386
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

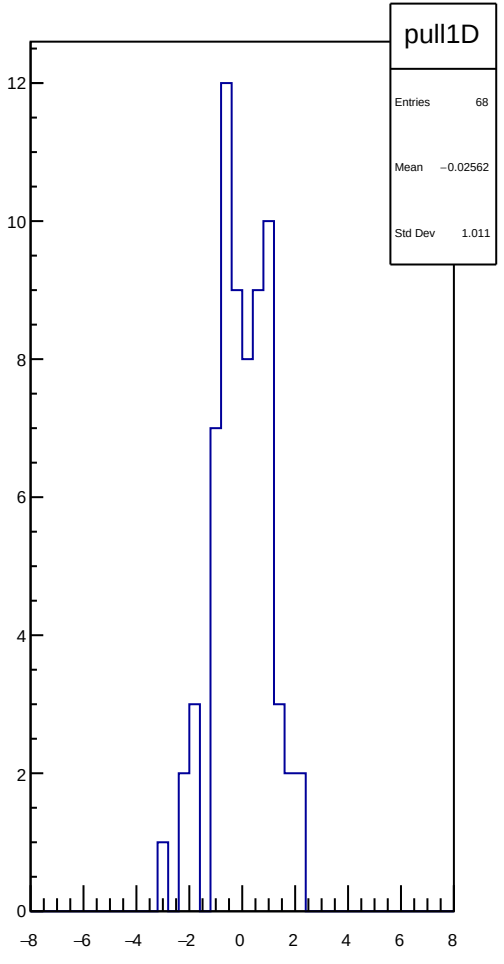

asym_ds_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.562e+05 / 55
p0 3.314e+04 ± 39.5
7679. 0
7679. 1
7679. 2
7681. 1
7681. 2
7681. 3
7681. 4
7681. 5
7681. 6
7681. 7
7682. 0
7682. 1
7683. 1
7683. 4
7684. 1
7684. 4
7684. 5
7685. 3
7685. 4
7686. 0
7687. 0
7687. 1
7702. 3
7702. 4
7703. 1
7703. 2
7703. 5
7704. 0
7704. 4
7704. 5
7704. 7

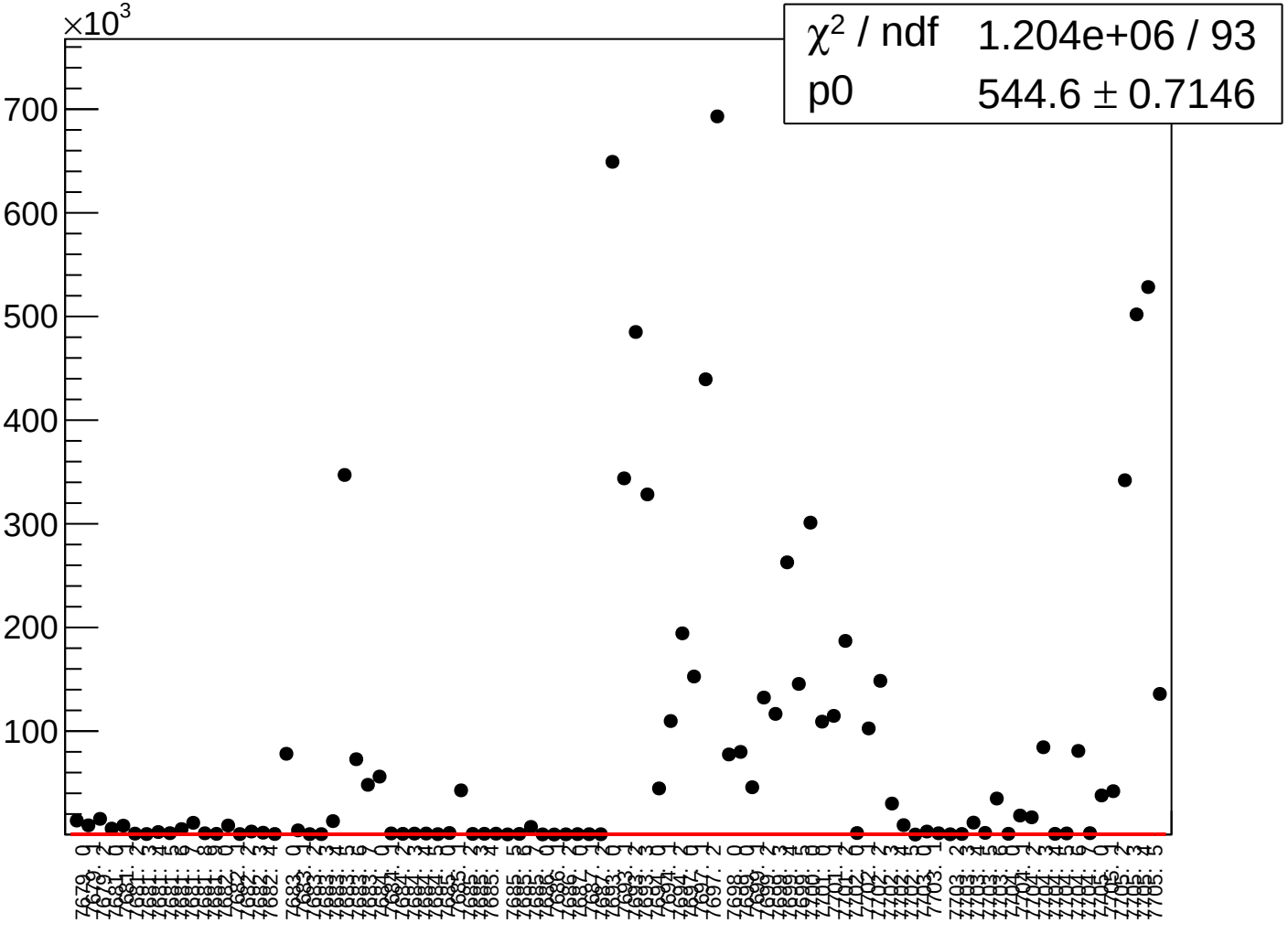

reg_asym_ds_dd_mean vs run
×10^3
χ² / ndf 31.12 / 32
p0 −5.892e+04 ± 5.657e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −26.76
Std Dev 40.98
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

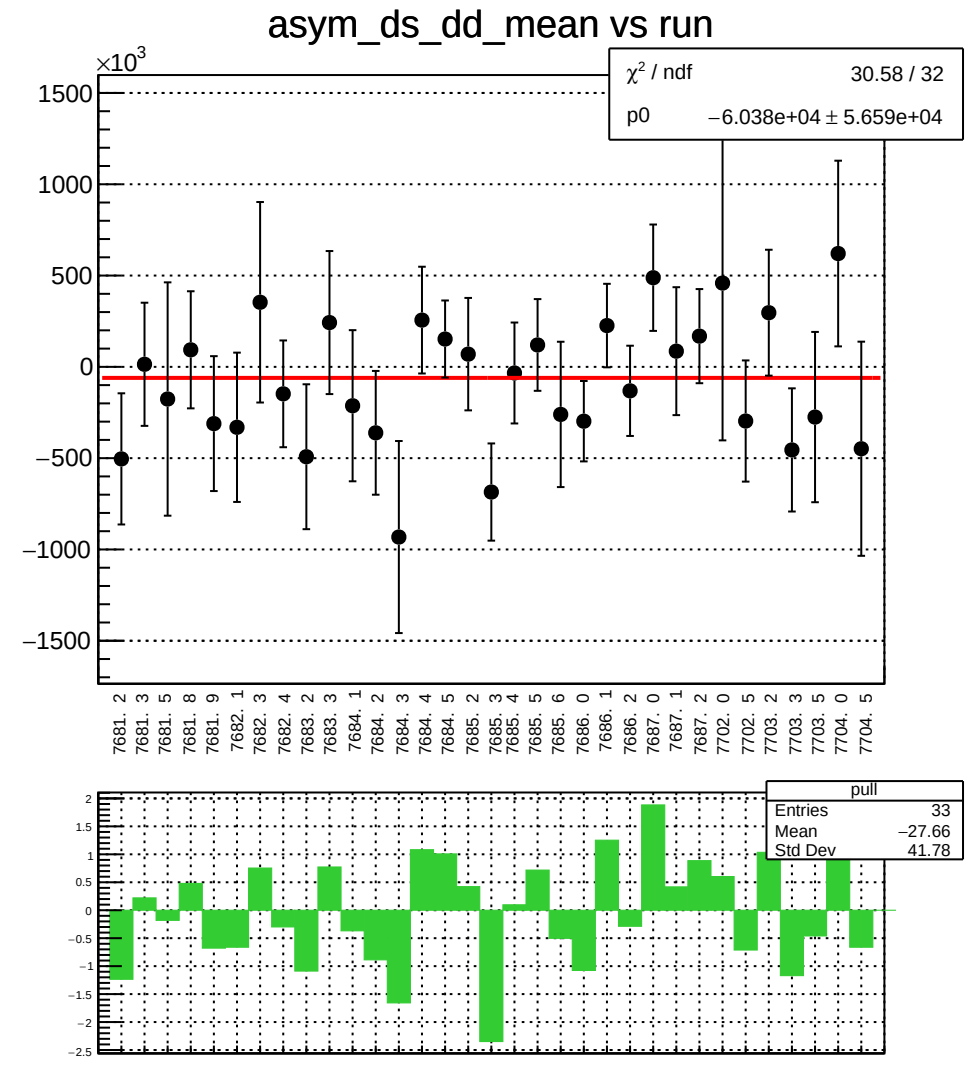

pull1D
Entries 33
Mean −0.04091
Std Dev 0.9703
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

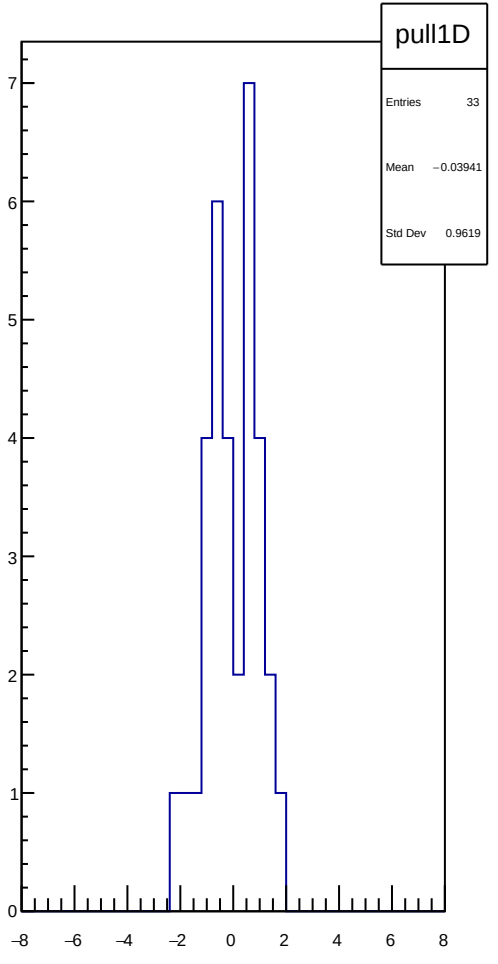

reg_asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.563e+05 / 55
p0 3.311e+04 ± 39.47

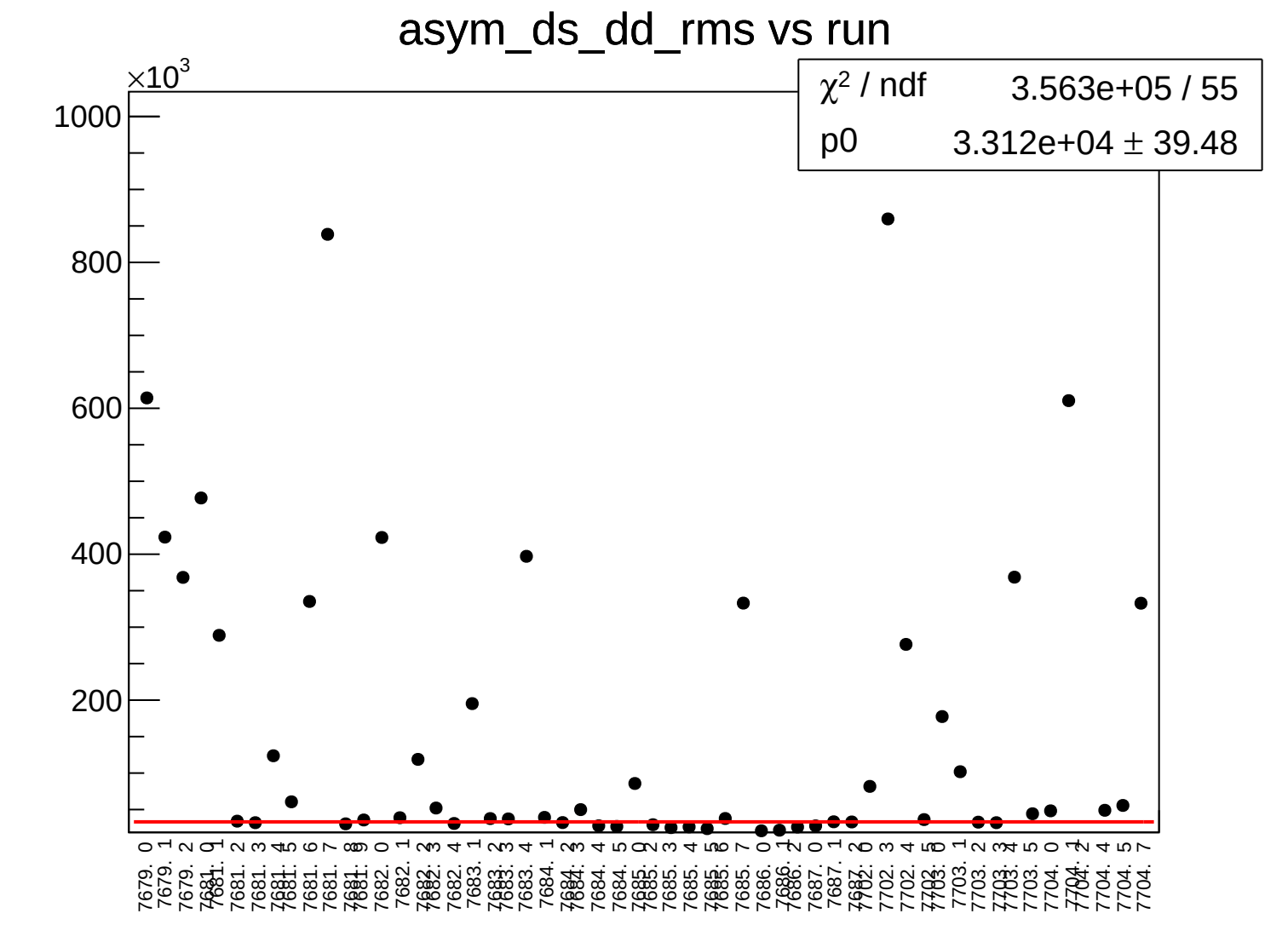

asym_ds_dd_correction_mean vs run
χ² / ndf 69.52 / 67
p0 1676 ± 1011
×10³
1500
1000
500
0
−500
−1000
pull
Entries 68
Mean 57.11
Std Dev 18.24
2
1
0
−1
−2
−3

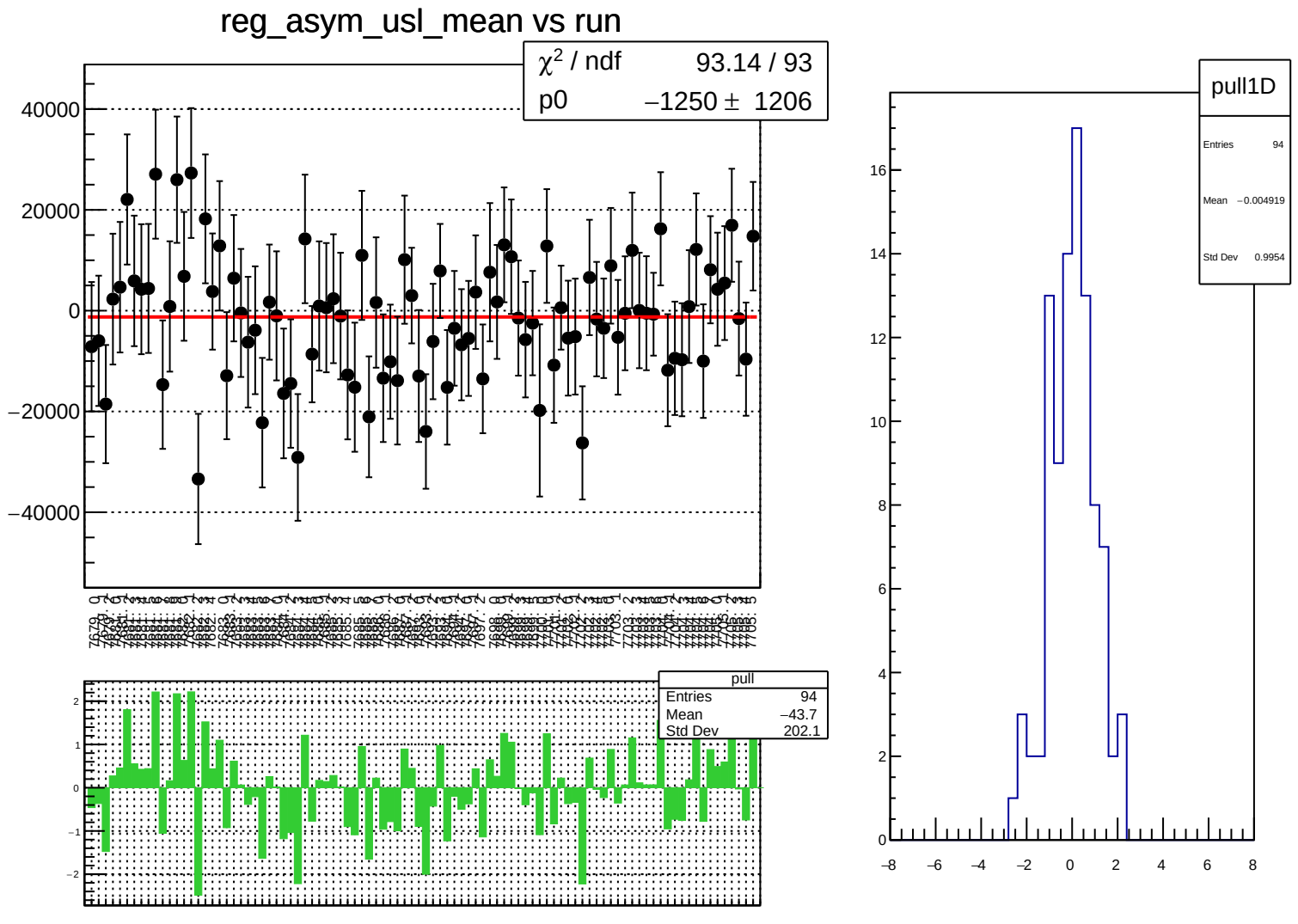

pull1D
Entries 68
Mean −0.02562
Std Dev 1.011
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

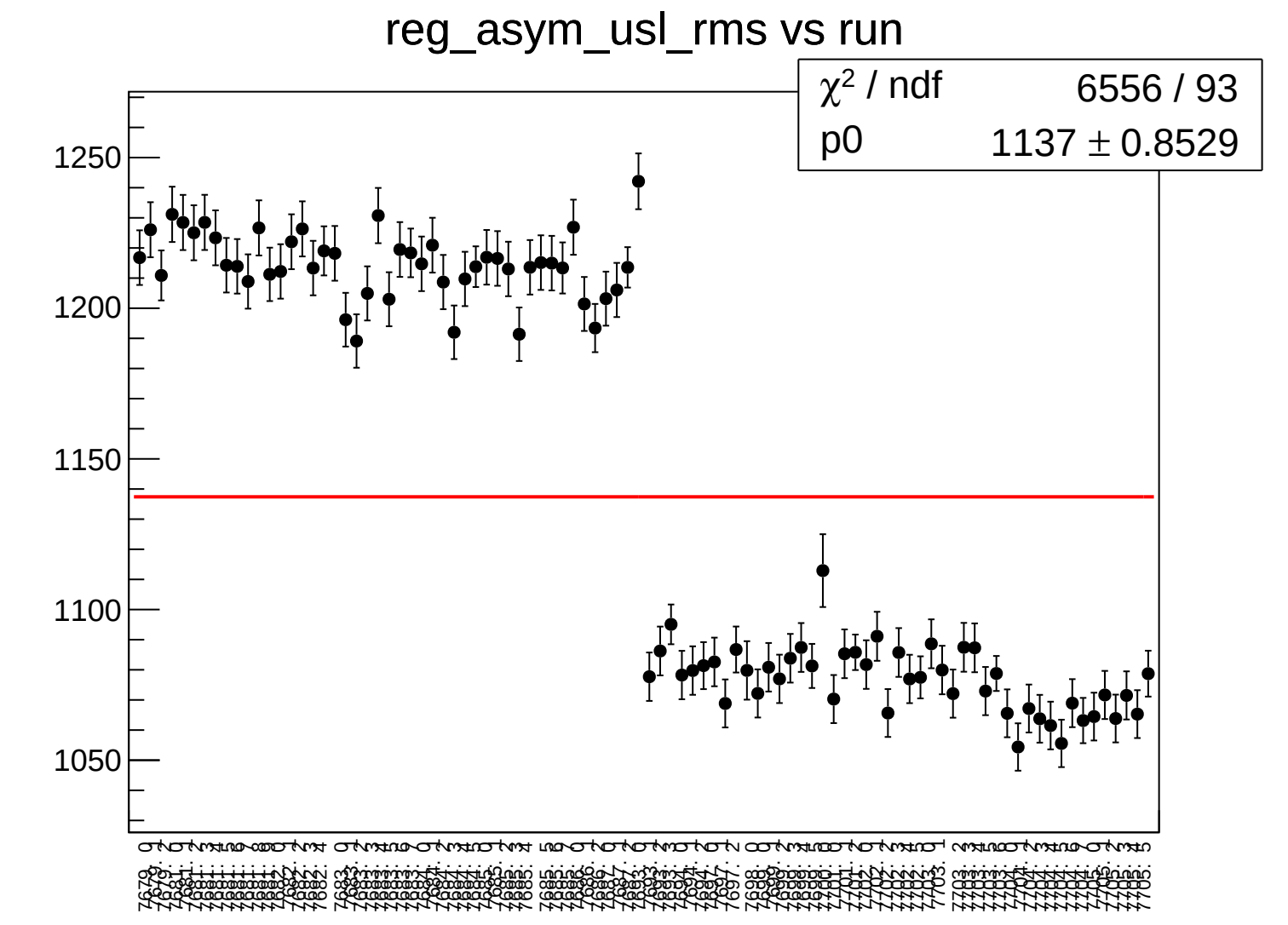

asym_ds_dd_correction_rms vs run
×10^3
χ² / ndf 1.204e+06 / 93
p0 544.6 ± 0.7146
700
600
500
400
300
200
100

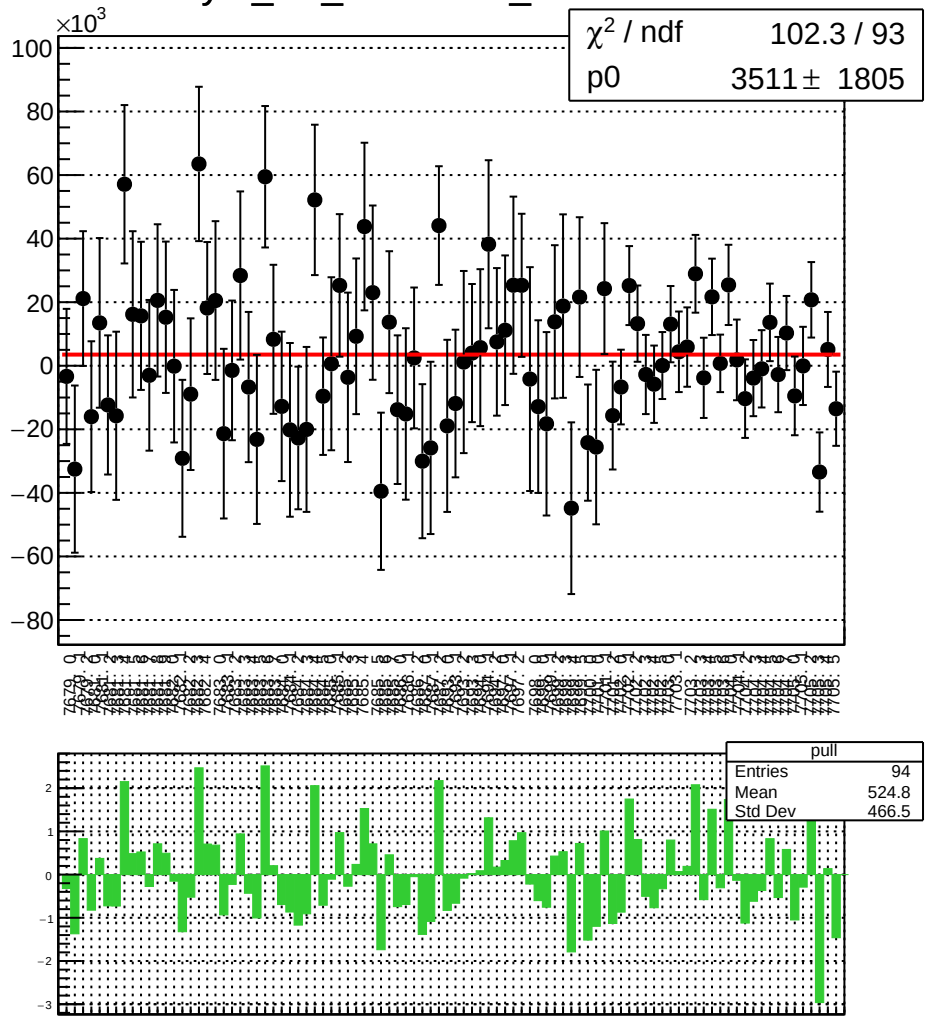

asym_ds_dd_mean vs run
×10^3
χ² / ndf 30.58 / 32
p0 −6.038e+04 ± 5.659e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −27.66
Std Dev 41.78
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

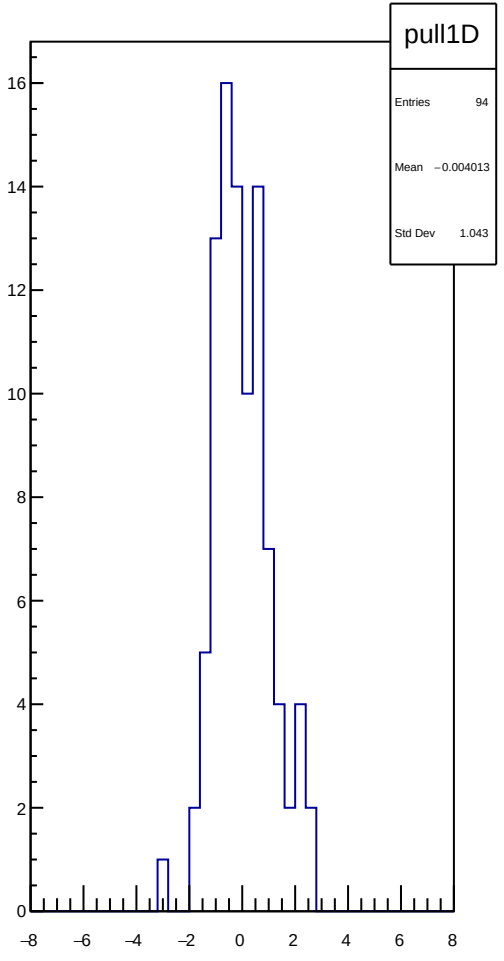

pull1D
Entries 33
Mean −0.03941
Std Dev 0.9619
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

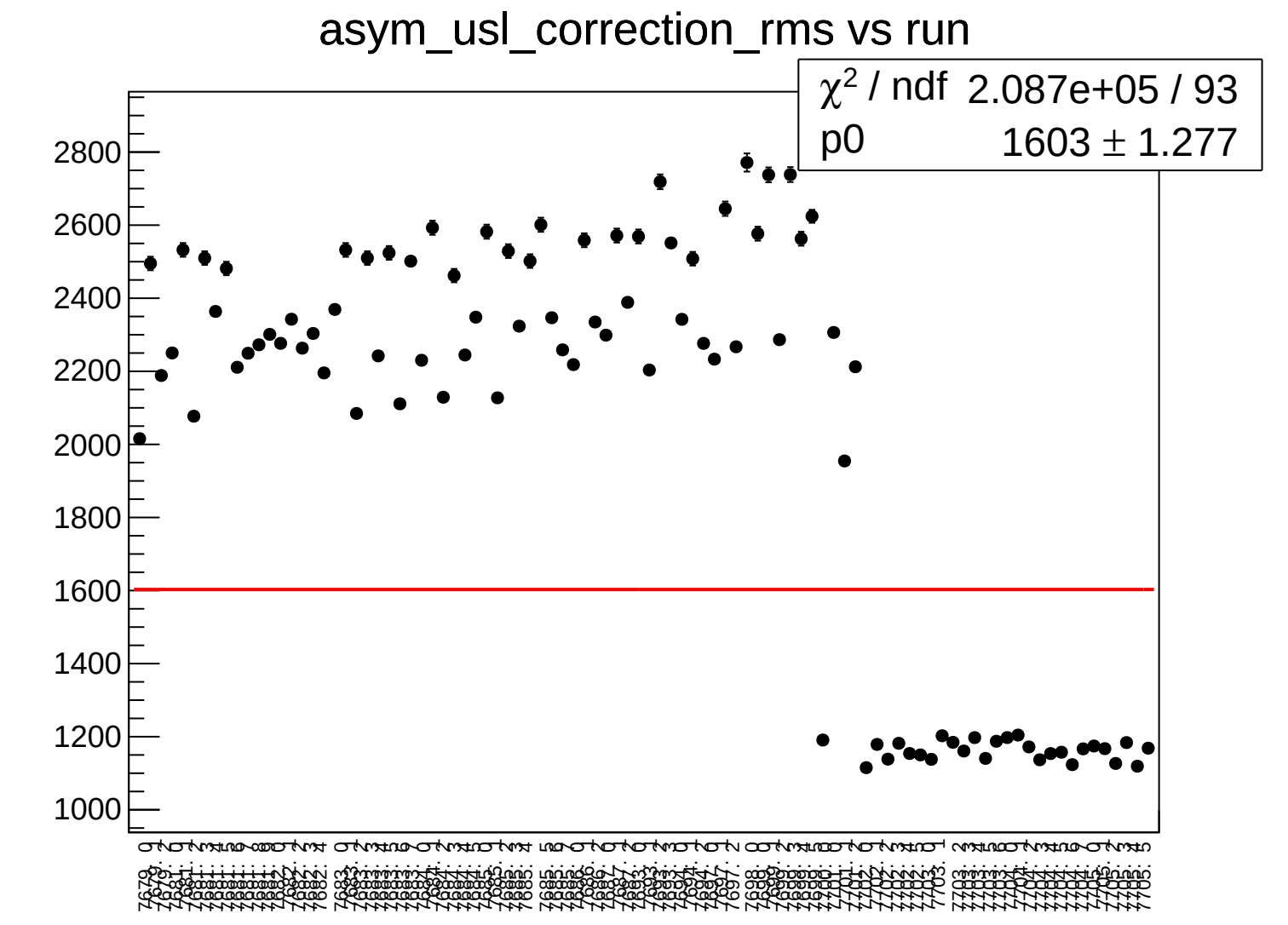

asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.563e+05 / 55
p0 3.312e+04 ± 39.48

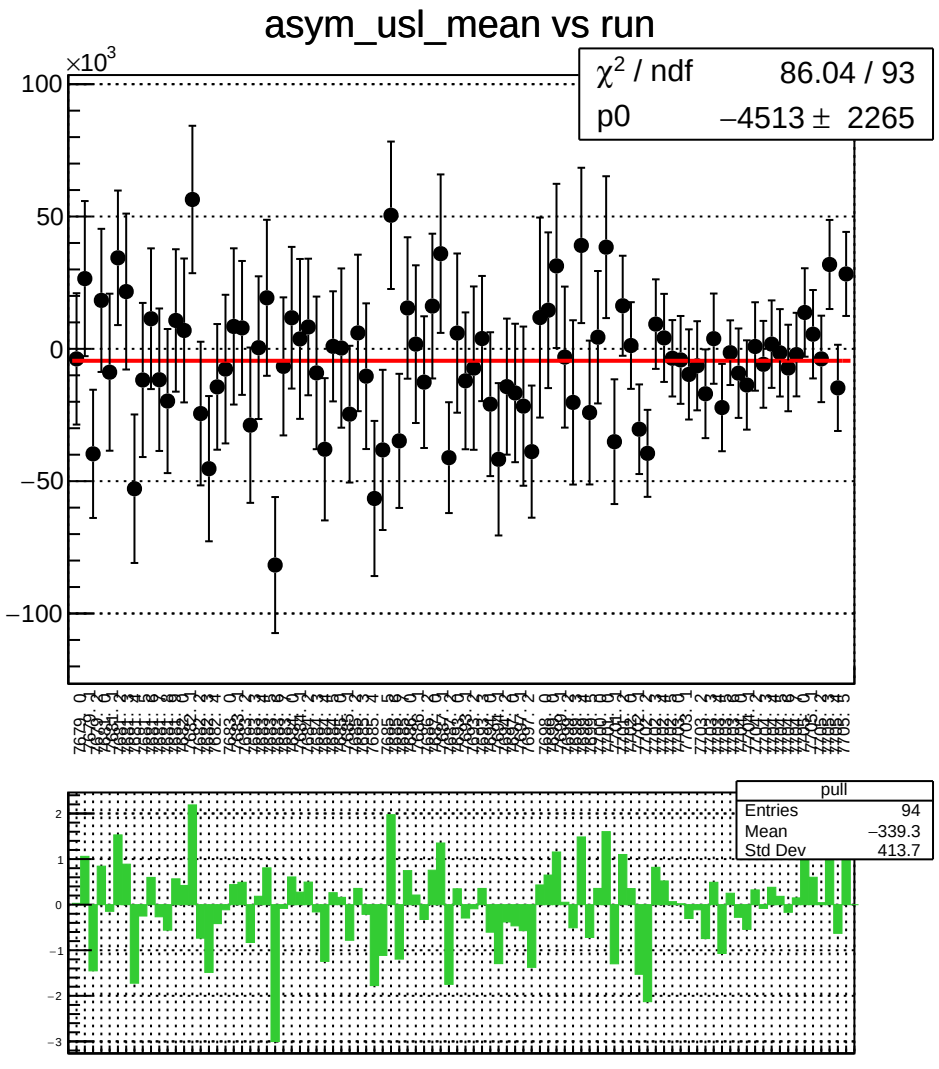

reg_asym_usl_mean vs run
χ² / ndf 93.14 / 93
p0 −1250 ± 1206
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −43.7
Std Dev 202.1
2
1
0
−1
−2
pull1D
Entries 94
Mean −0.004919
Std Dev 0.9954
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

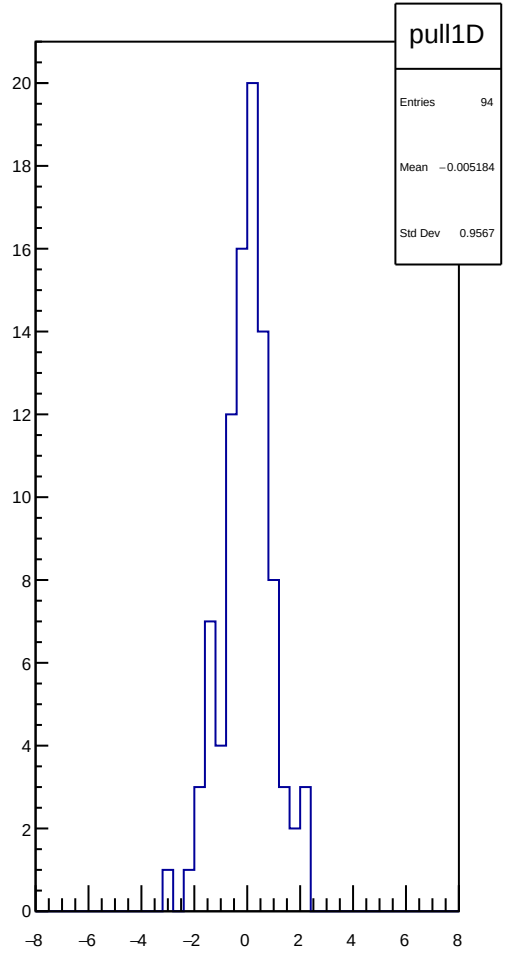

reg_asym_usl_rms vs run
χ² / ndf 6556 / 93
p0 1137 ± 0.8529
1250
1200
1150
1100
1050

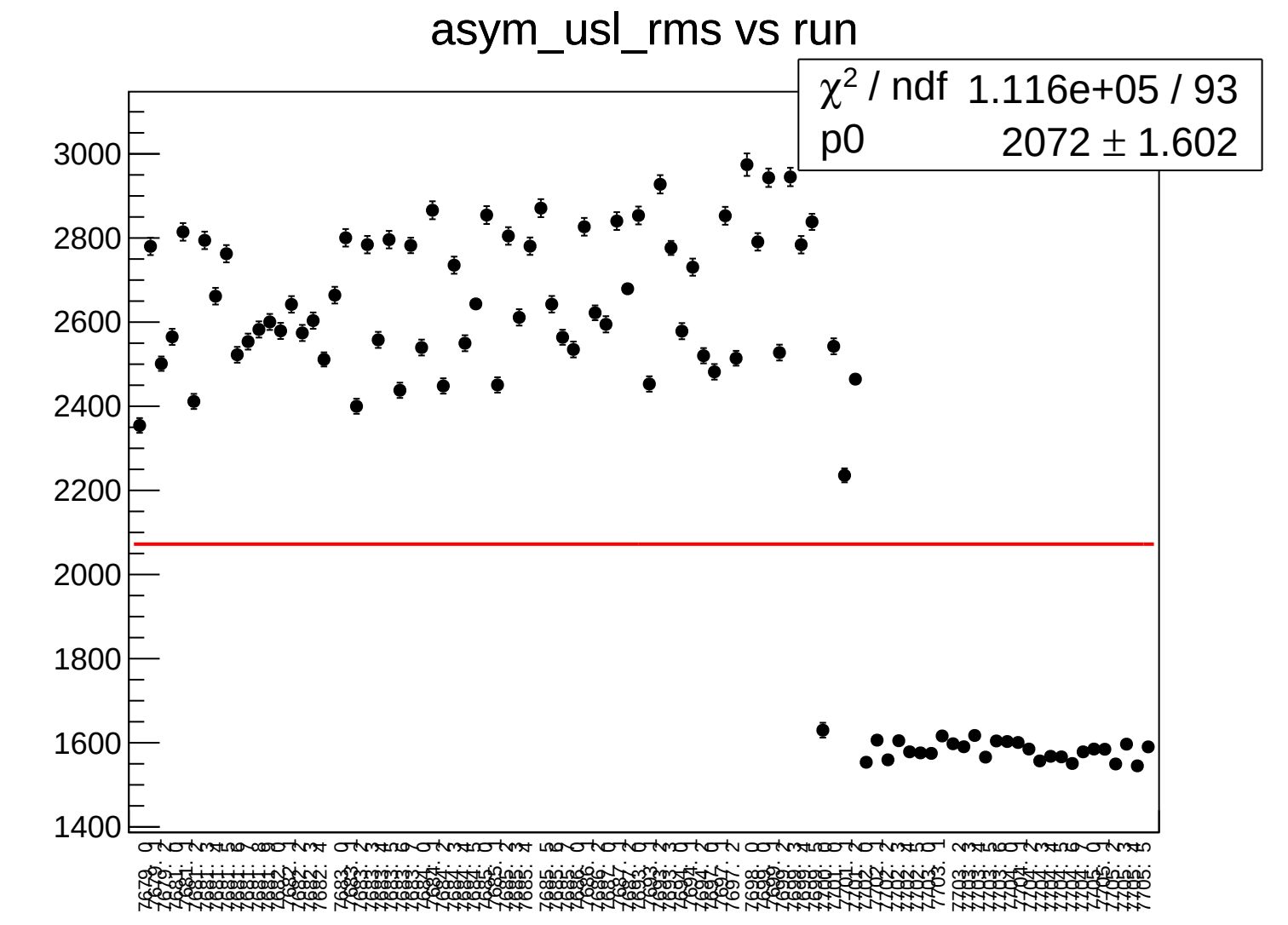

asym_usl_correction_mean vs run
×10^3
χ² / ndf 102.3 / 93
p0 3511 ± 1805
pull
Entries 94
Mean 524.8
Std Dev 466.5

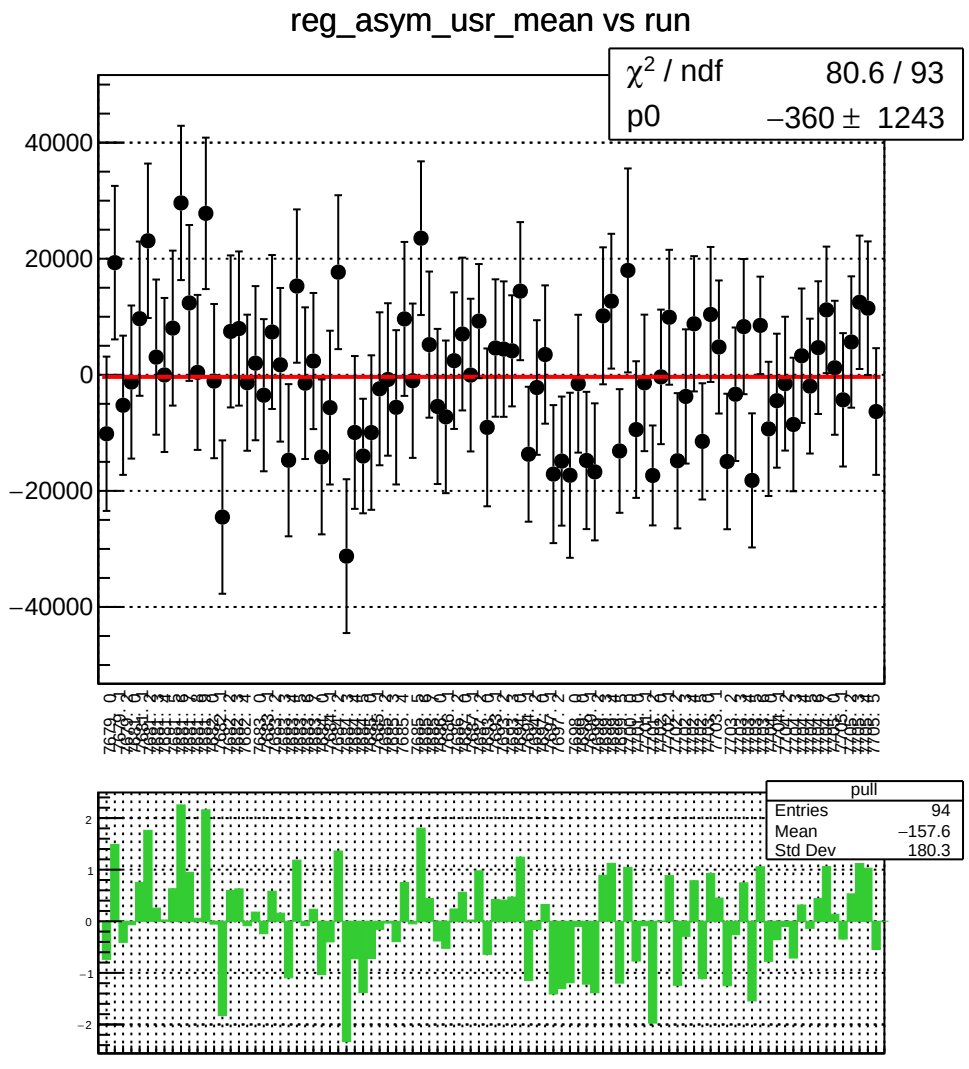

pull1D
Entries 94
Mean −0.004013
Std Dev 1.043

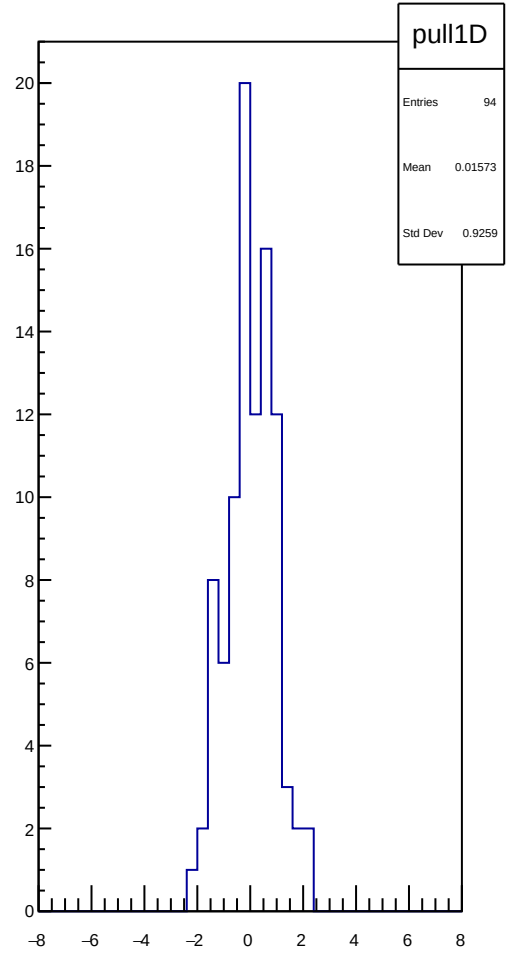

asym_usl_correction_rms vs run
χ² / ndf 2.087e+05 / 93
p0 1603 ± 1.277
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000

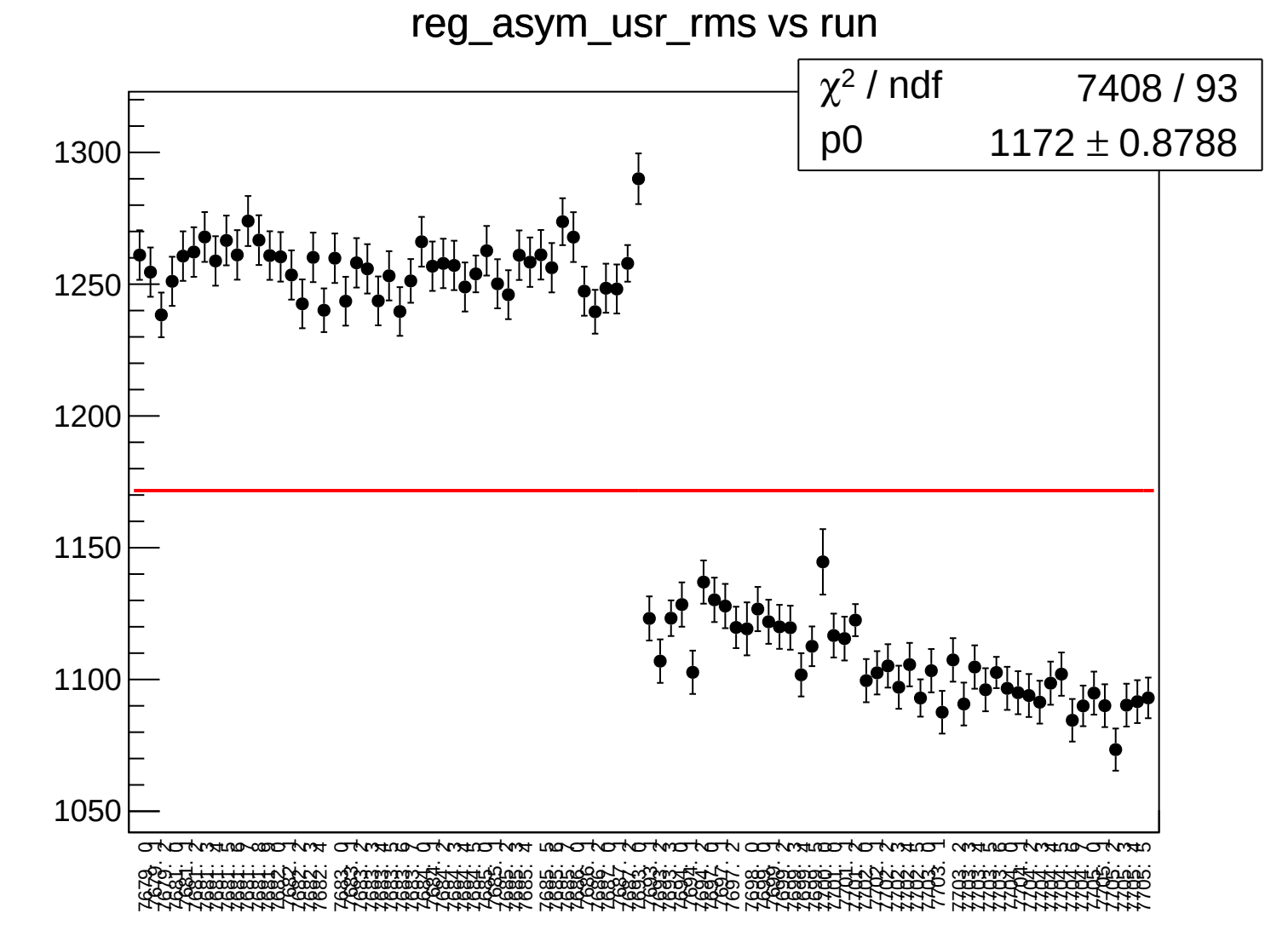

asym_usl_mean vs run
×10^3
χ² / ndf 86.04 / 93
p0 −4513 ± 2265
pull
Entries 94
Mean −339.3
Std Dev 413.7

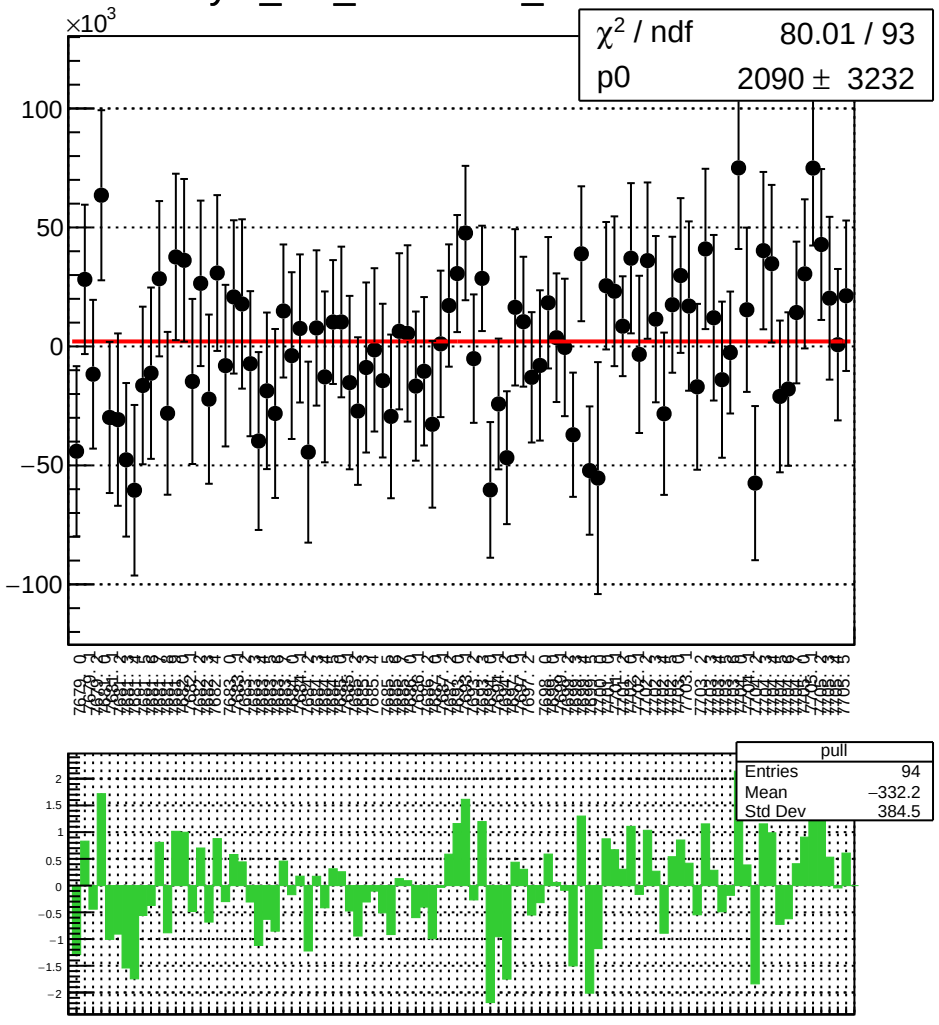

pull1D
Entries 94
Mean −0.005184
Std Dev 0.9567

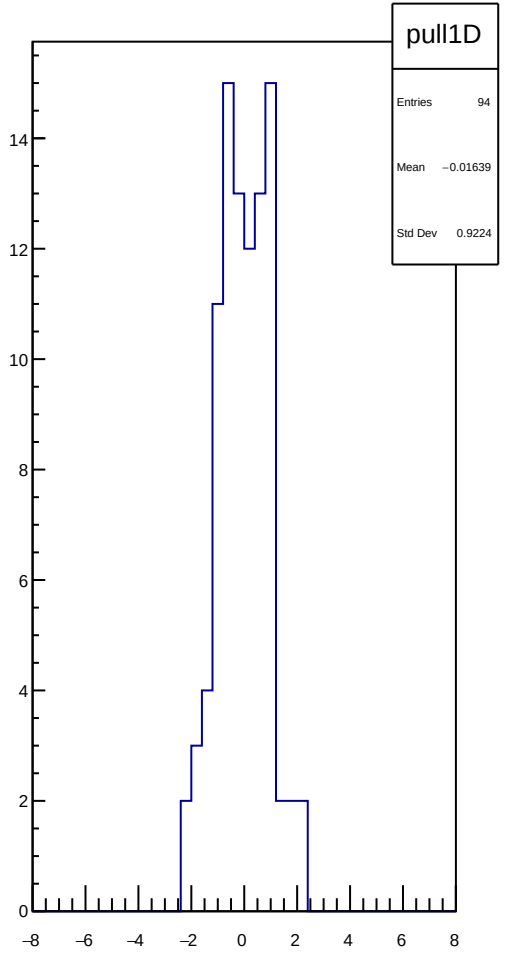

asym_usl_rms vs run
χ^2 / ndf 1.116e+05 / 93
p0 2072 ± 1.602
3000
2800
2600
2400
2200
2000
1800
1600
1400

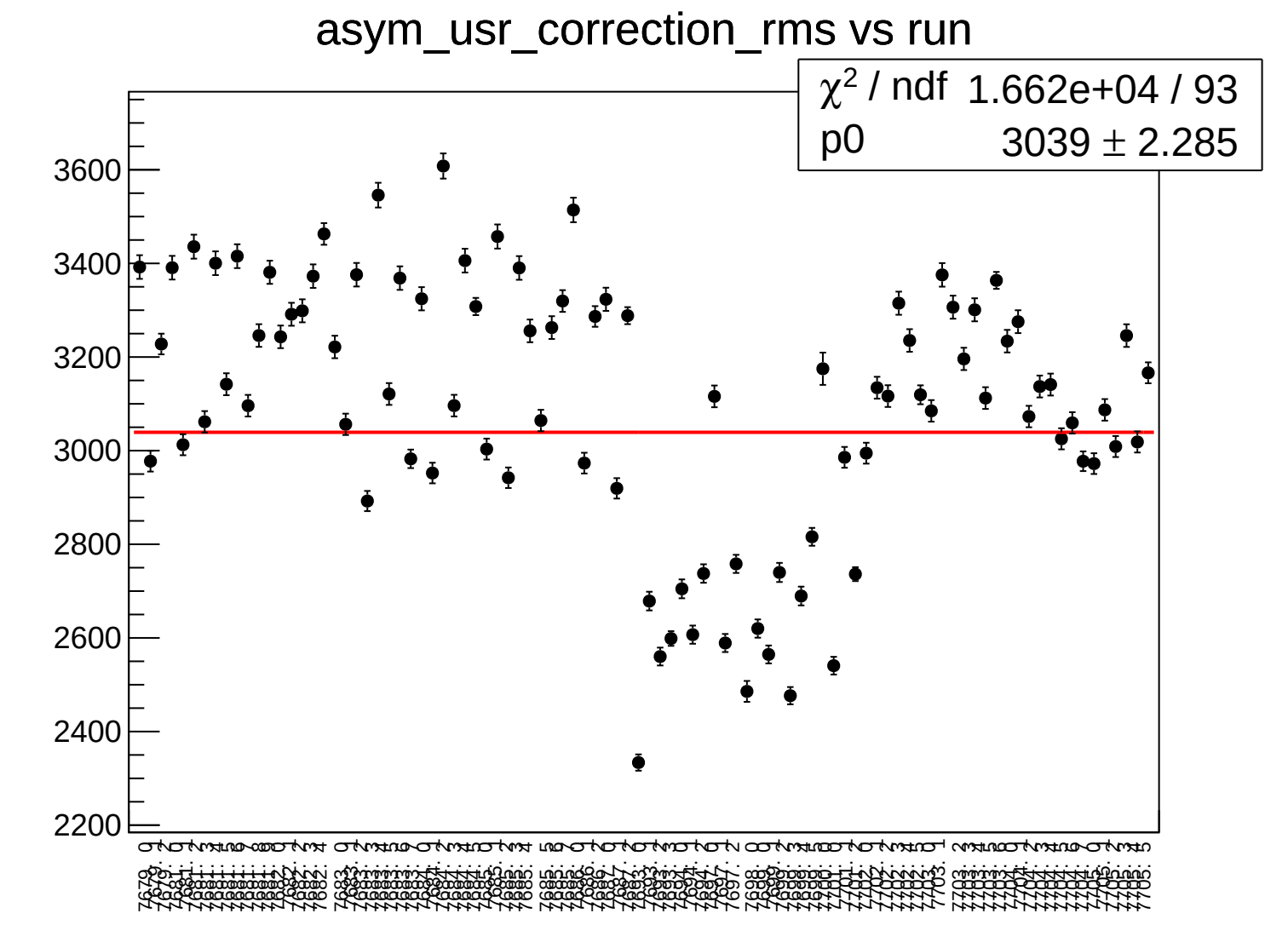

reg_asym_usr_mean vs run
χ² / ndf 80.6 / 93
p0 −360 ± 1243
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −157.6
Std Dev 180.3
2
1
0
−1
−2

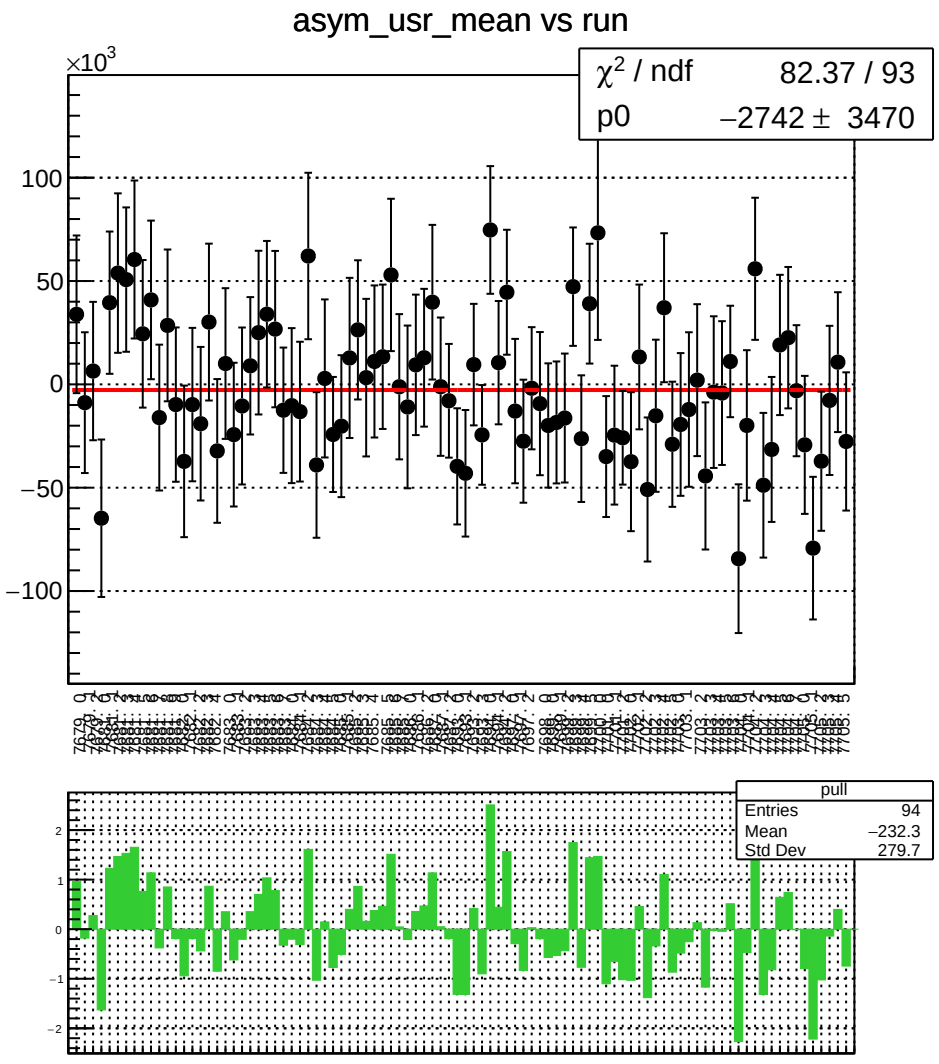

pull1D
Entries 94
Mean 0.01573
Std Dev 0.9259
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

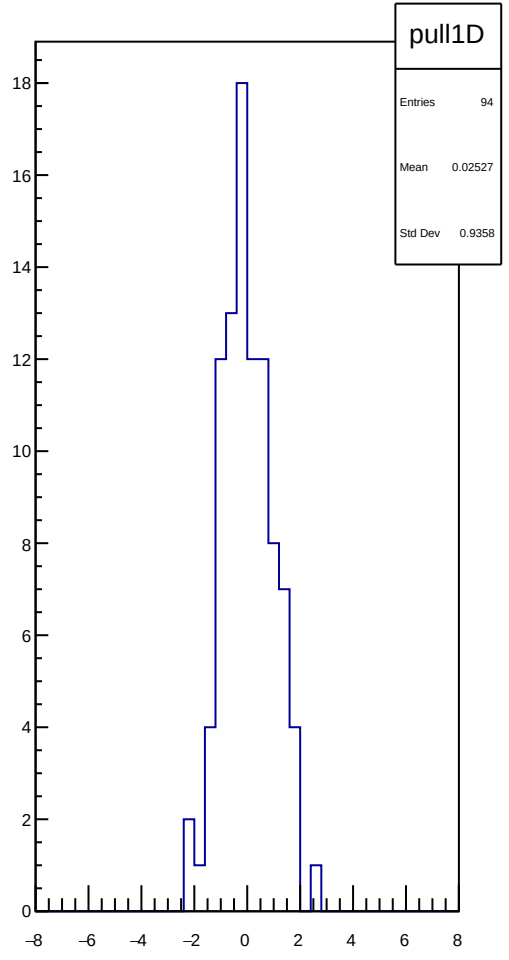

reg_asym_usr_rms vs run
χ² / ndf 7408 / 93
p0 1172 ± 0.8788
1300
1250
1200
1150
1100
1050

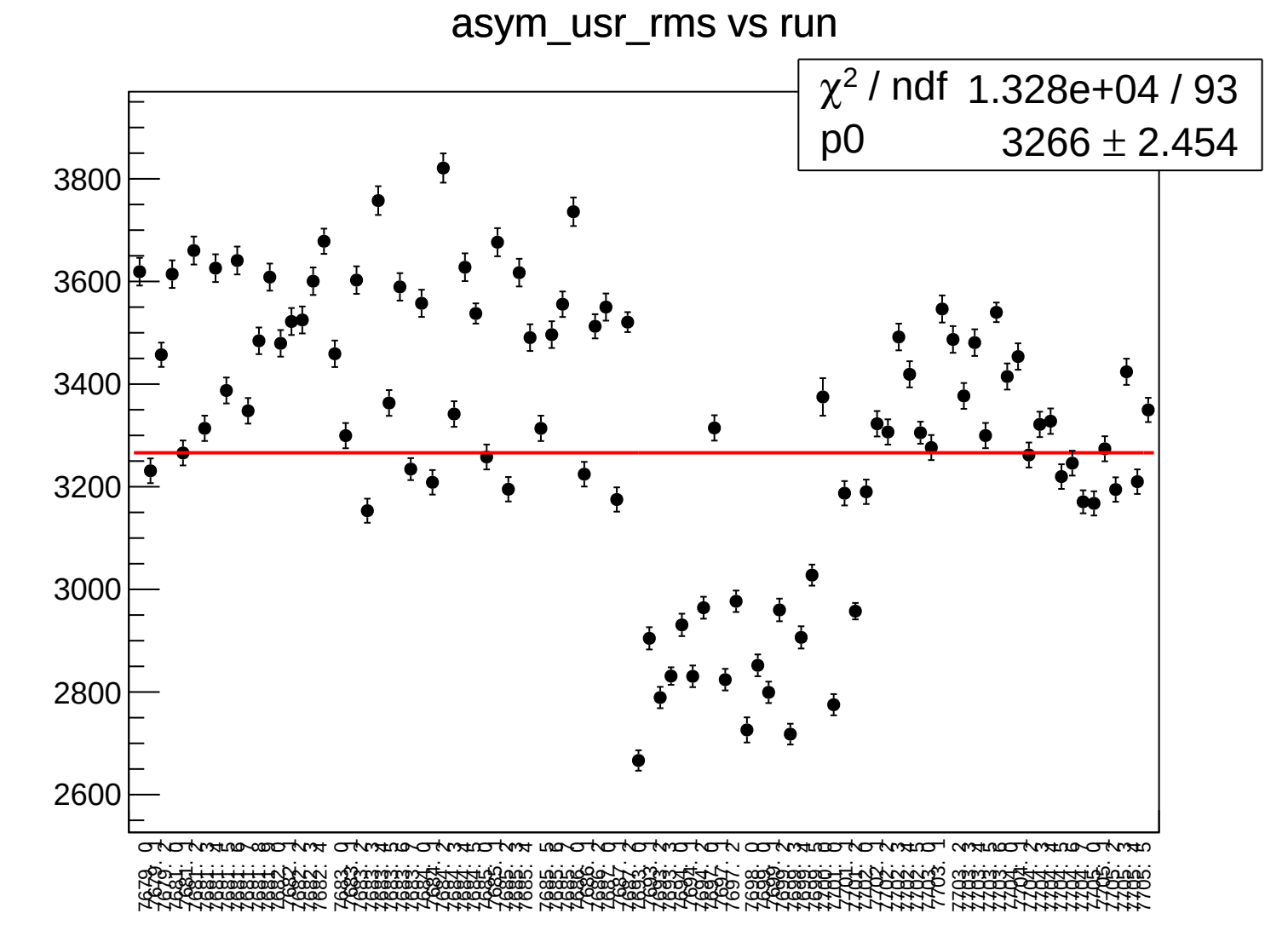

asym_usr_correction_mean vs run
χ² / ndf 80.01 / 93
p0 2090 ± 3232
×10³
100
50
0
−50
−100
pull
Entries 94
Mean −332.2
Std Dev 384.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

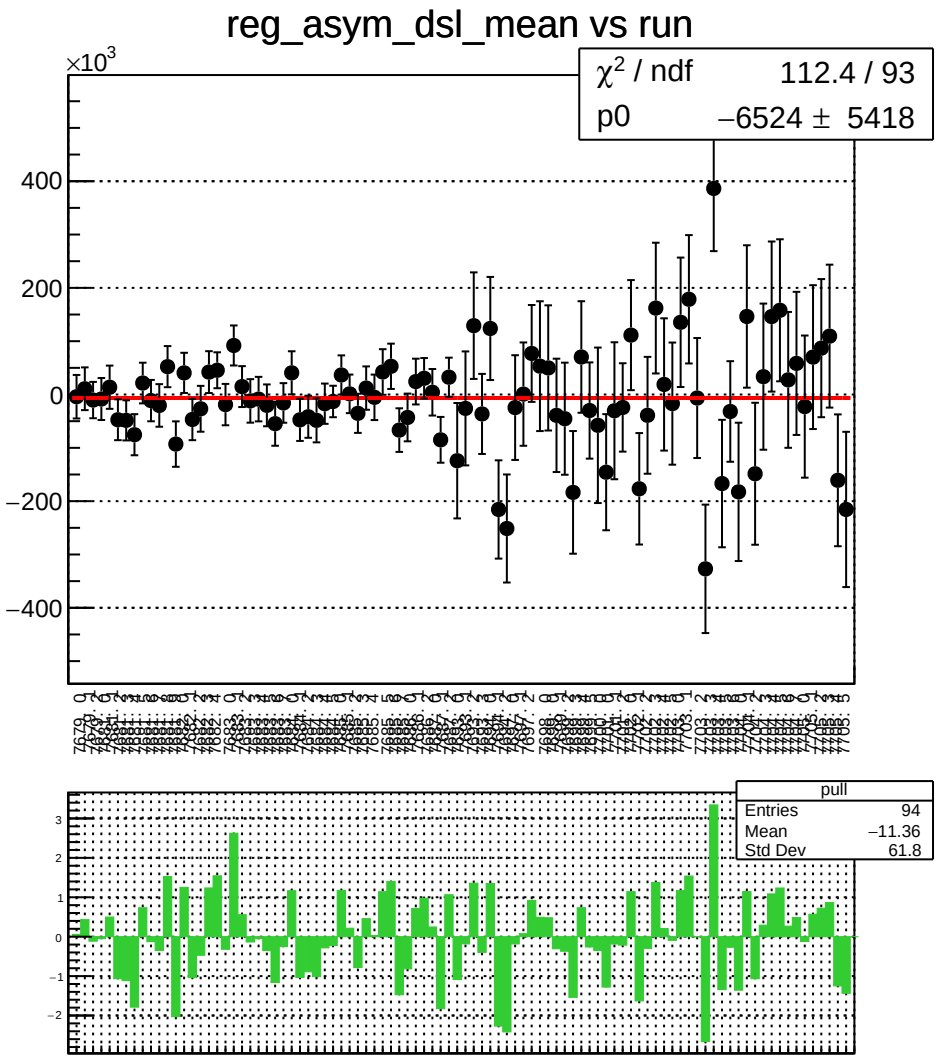

pull1D
Entries 94
Mean −0.01639
Std Dev 0.9224
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

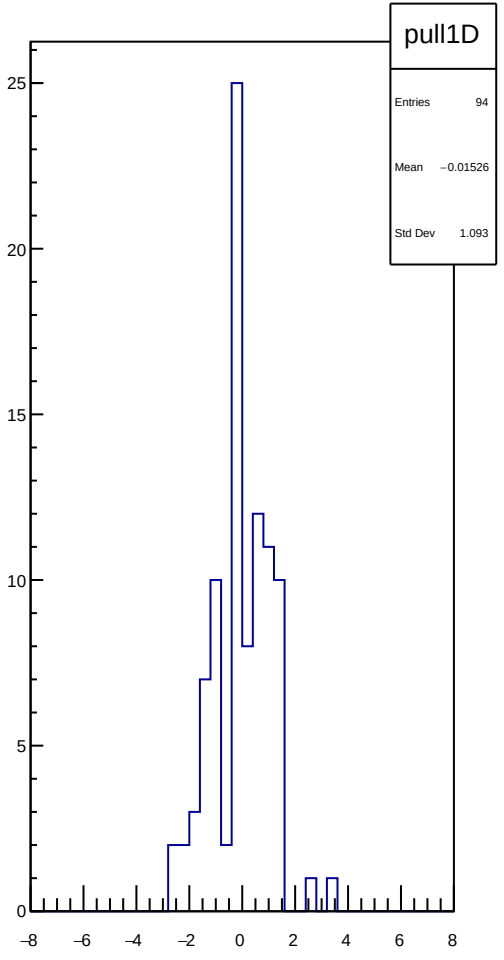

asym_usr_correction_rms vs run
χ² / ndf 1.662e+04 / 93
p0 3039 ± 2.285
3600
3400
3200
3000
2800
2600
2400
2200

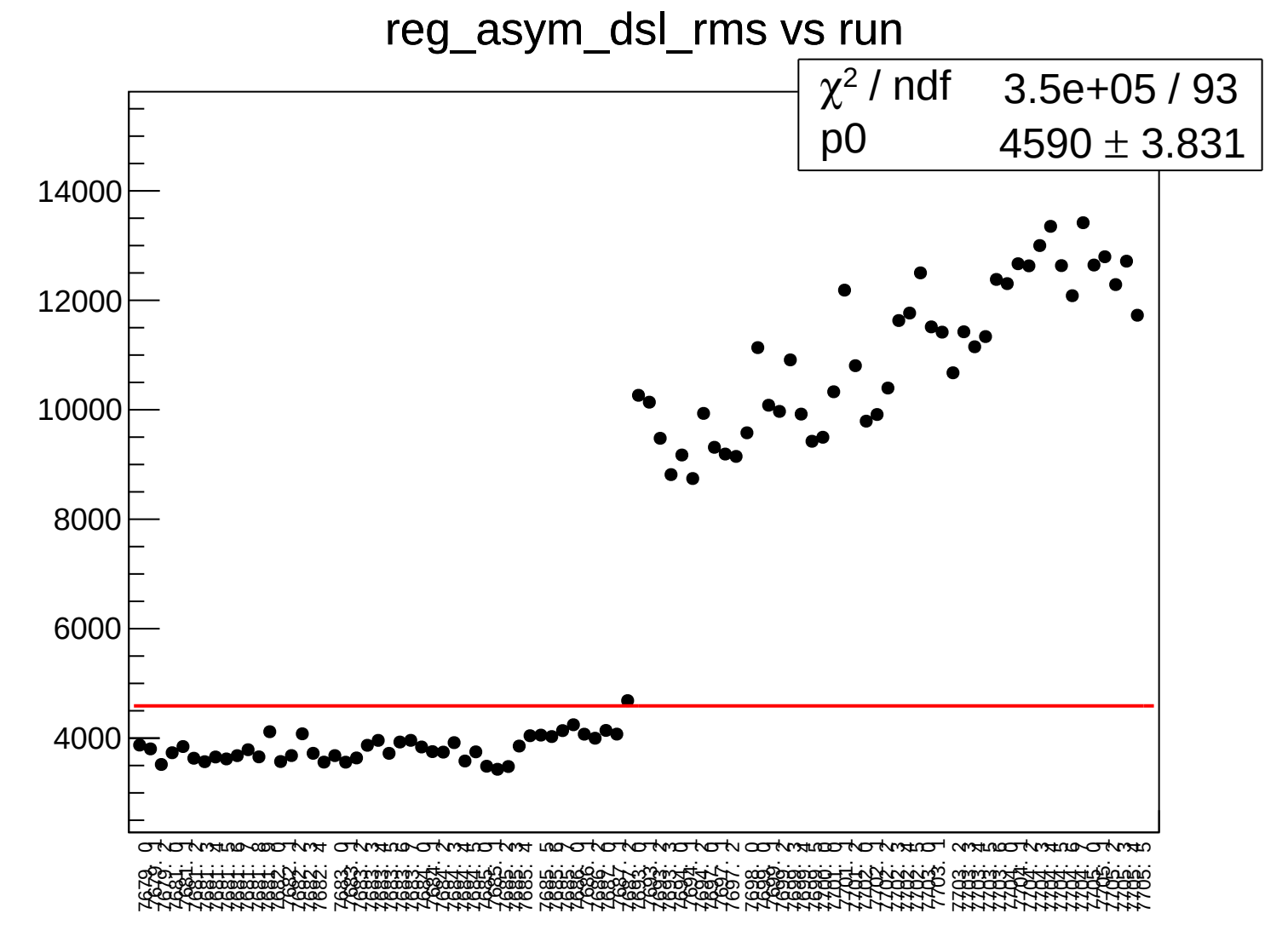

asym_usr_mean vs run
×10^3
χ² / ndf 82.37 / 93
p0 −2742 ± 3470
100
50
0
−50
−100
pull
Entries 94
Mean −232.3
Std Dev 279.7
2
1
0
−1
−2

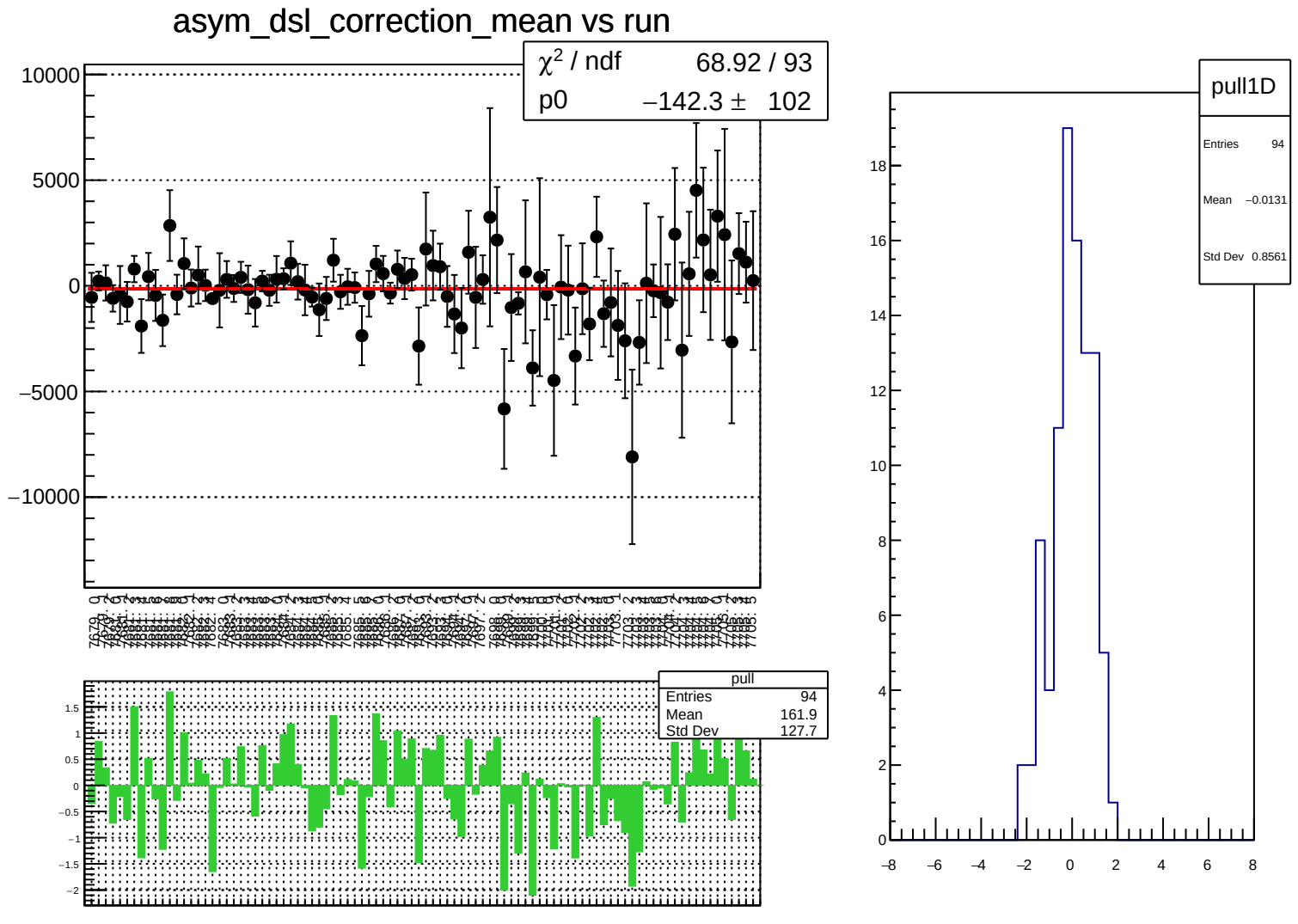

pull1D
Entries 94
Mean 0.02527
Std Dev 0.9358
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

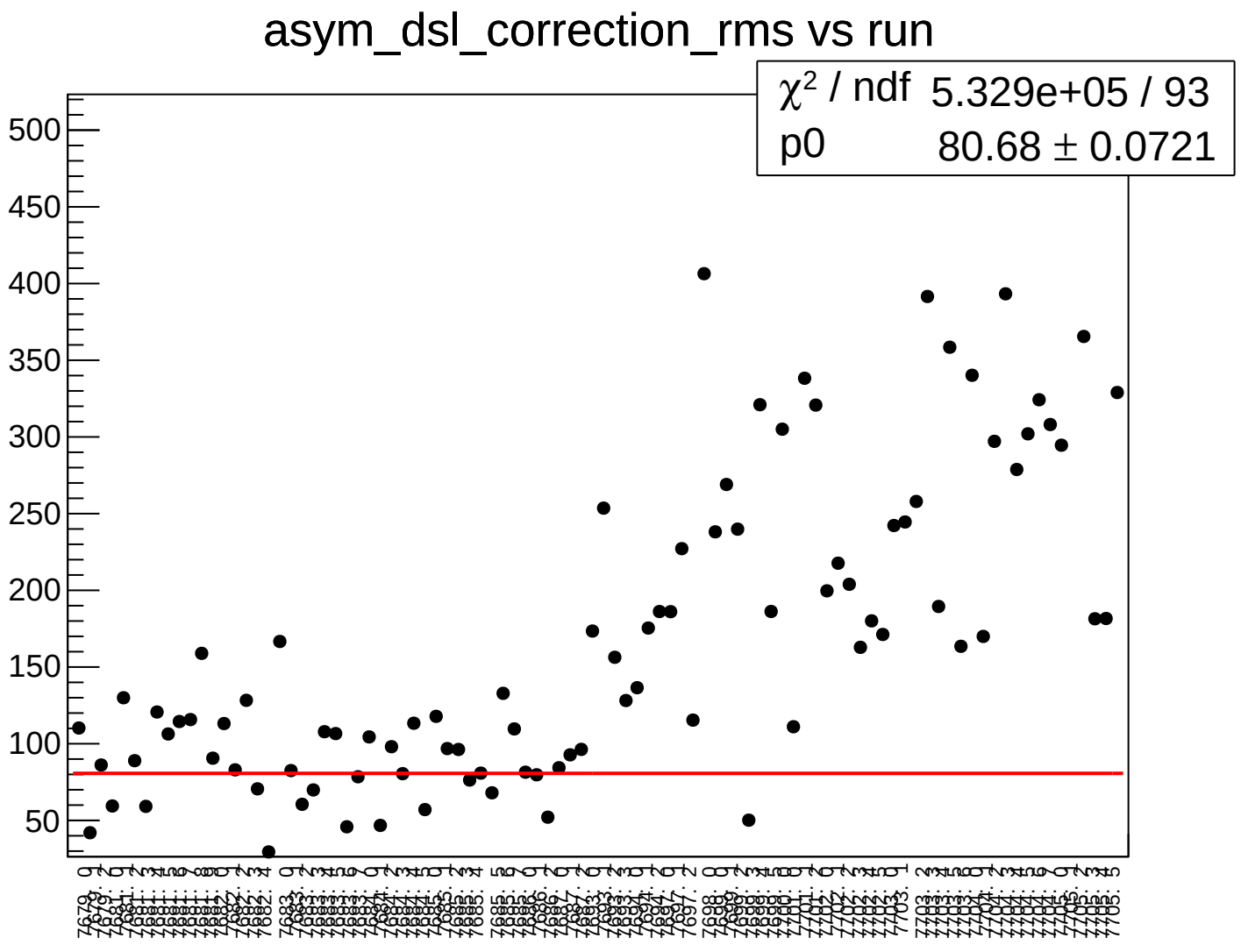

asym_usr_rms vs run
χ² / ndf 1.328e+04 / 93
p0 3266 ± 2.454
3800
3600
3400
3200
3000
2800
2600

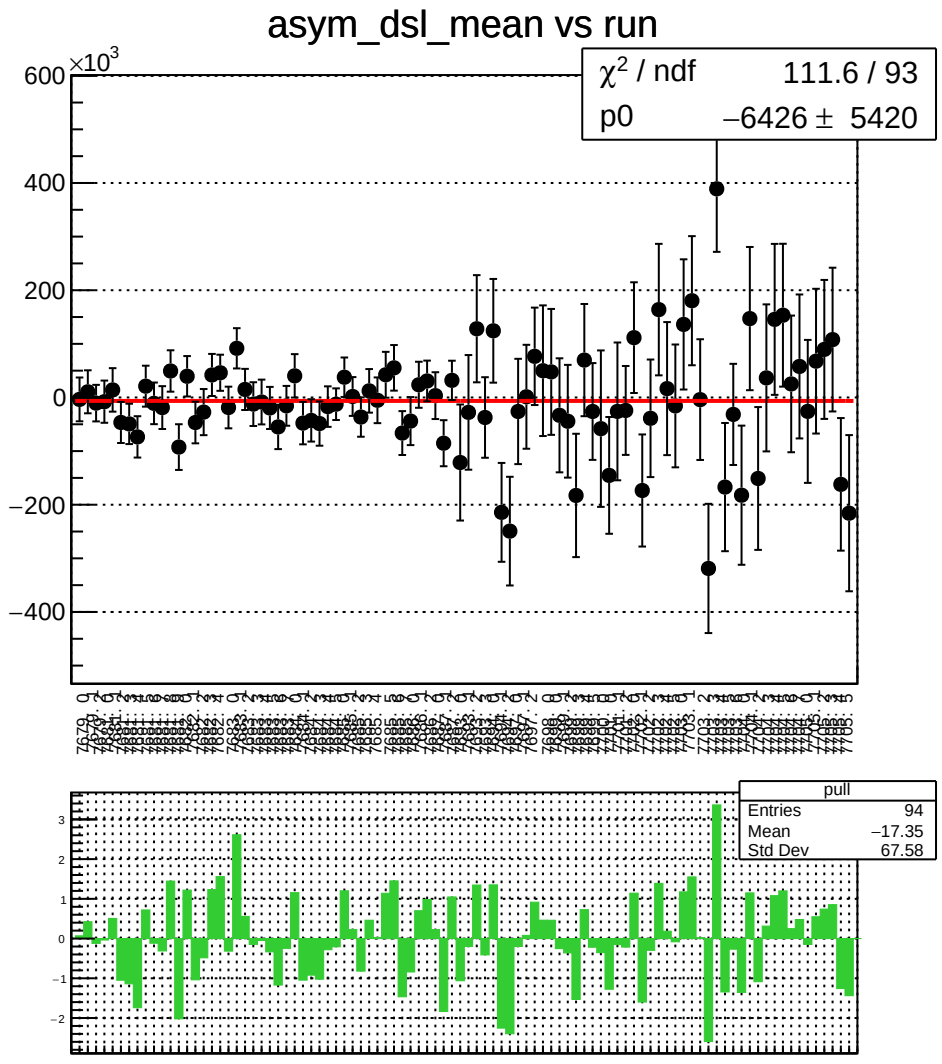

reg_asym_dsl_mean vs run
×10^3
χ^2 / ndf 112.4 / 93
p0 −6524 ± 5418
400
200
0
−200
−400
pull
Entries 94
Mean −11.36
Std Dev 61.8
3
2
1
0
−1
−2

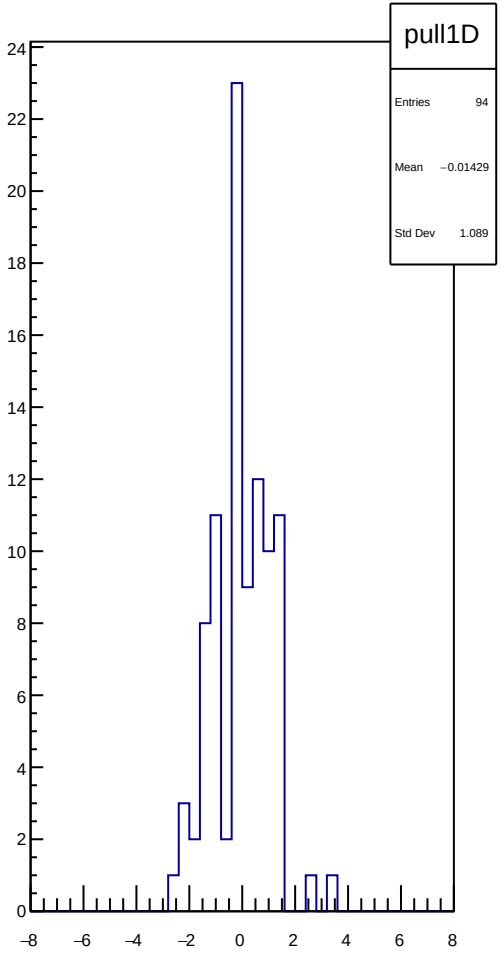

pull1D
Entries 94
Mean −0.01526
Std Dev 1.093
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

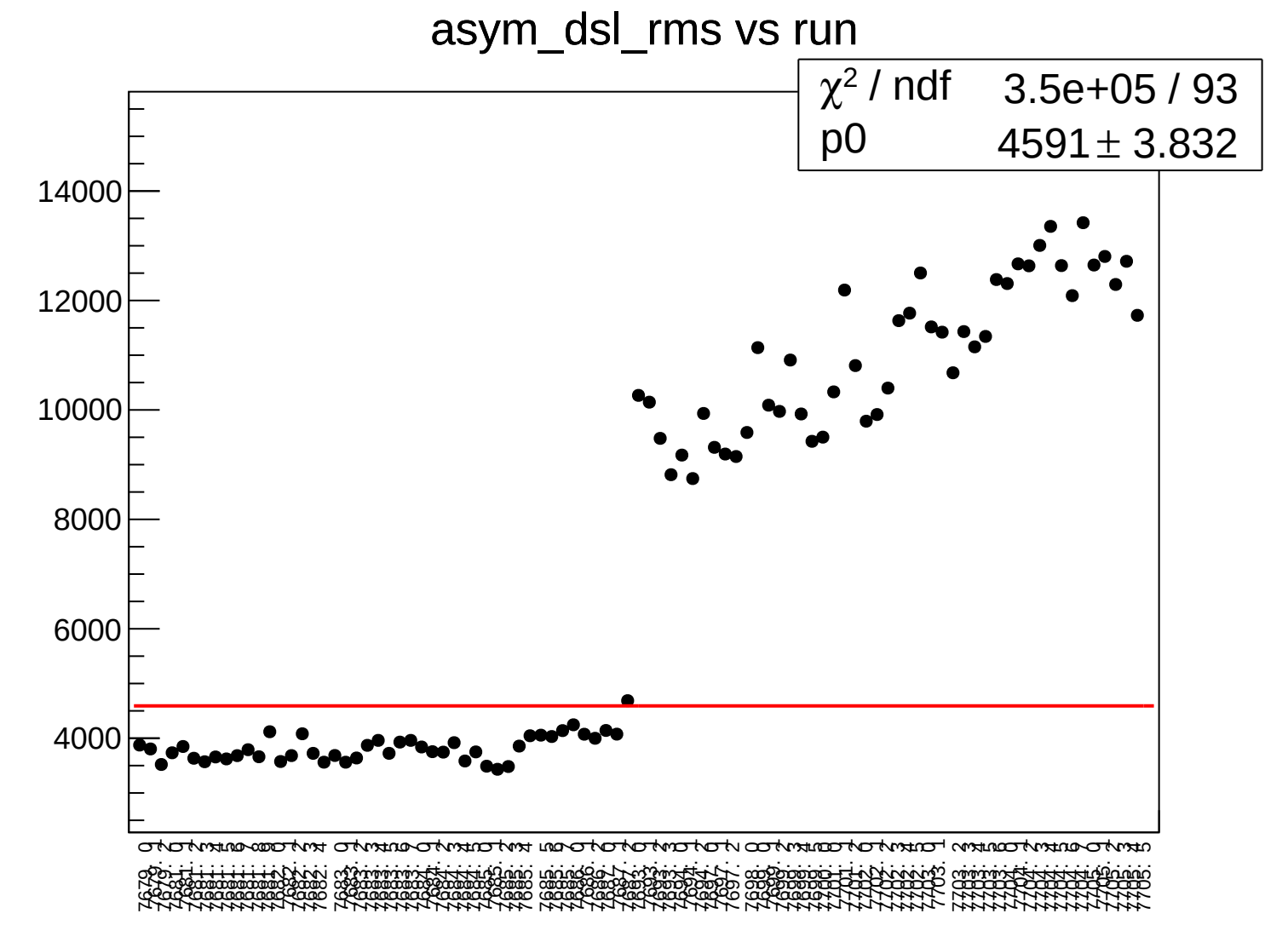

reg_asym_dsl_rms vs run
χ² / ndf 3.5e+05 / 93
p0 4590 ± 3.831
14000
12000
10000
8000
6000
4000

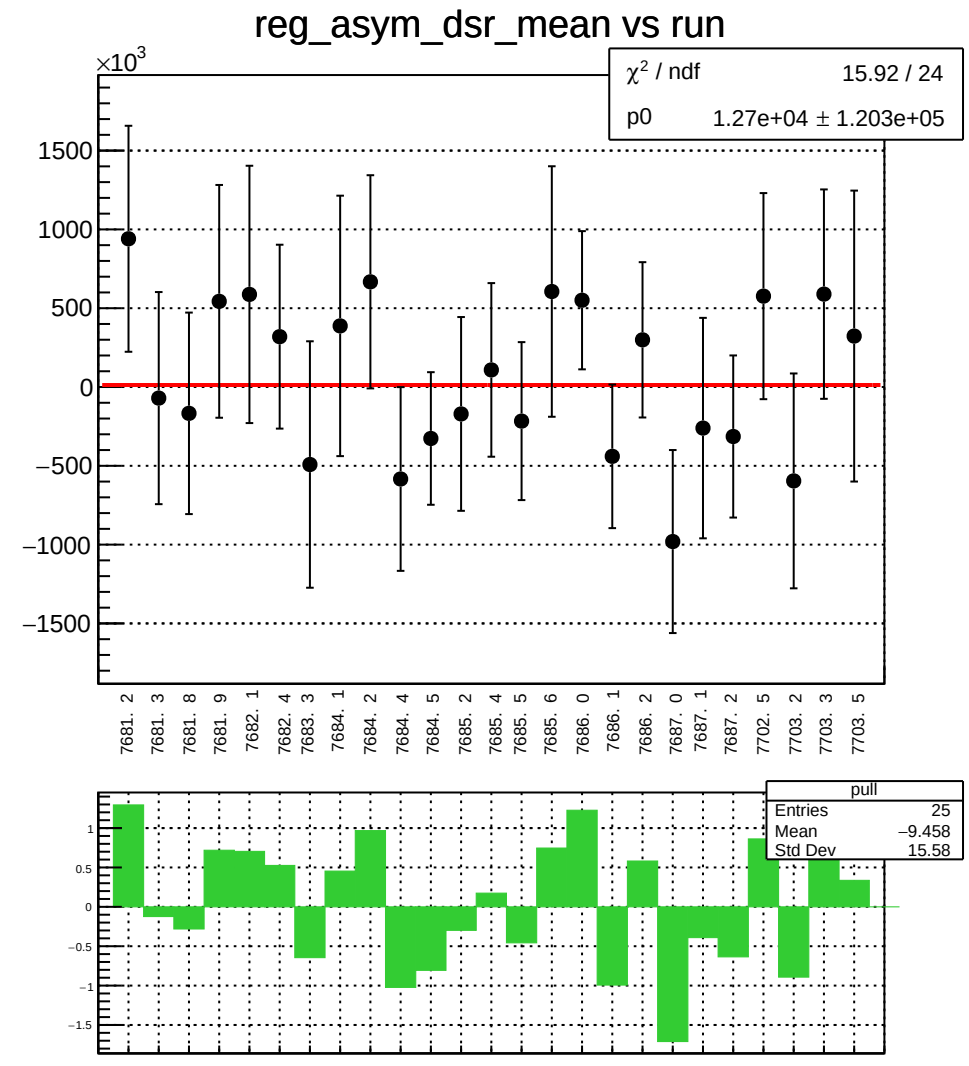

asym_dsl_correction_mean vs run
χ² / ndf 68.92 / 93
p0 −142.3 ± 102
10000
5000
0
−5000
−10000
pull
Entries 94
Mean 161.9
Std Dev 127.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 94
Mean −0.0131
Std Dev 0.8561
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

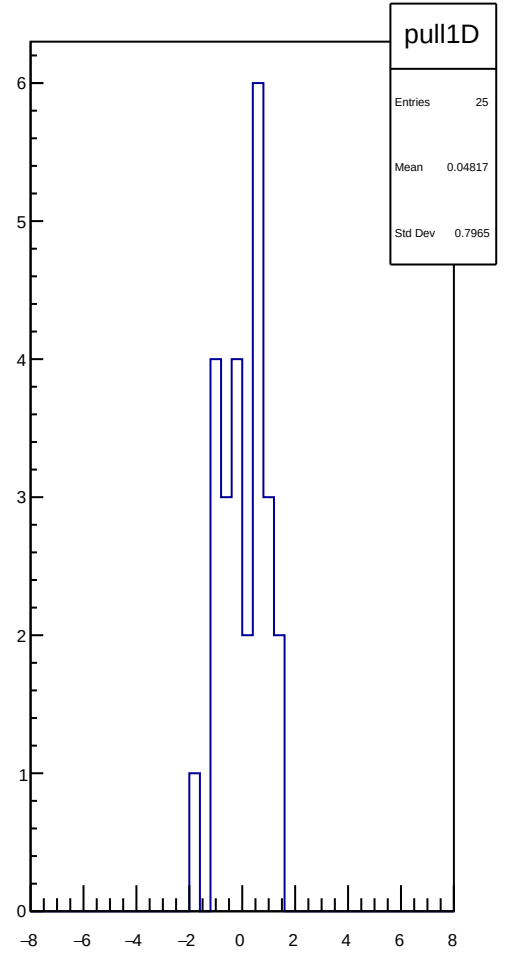

asym_dsl_correction_rms vs run
χ² / ndf 5.329e+05 / 93
p0 80.68 ± 0.0721
500
450
400
350
300
250
200
150
100
50

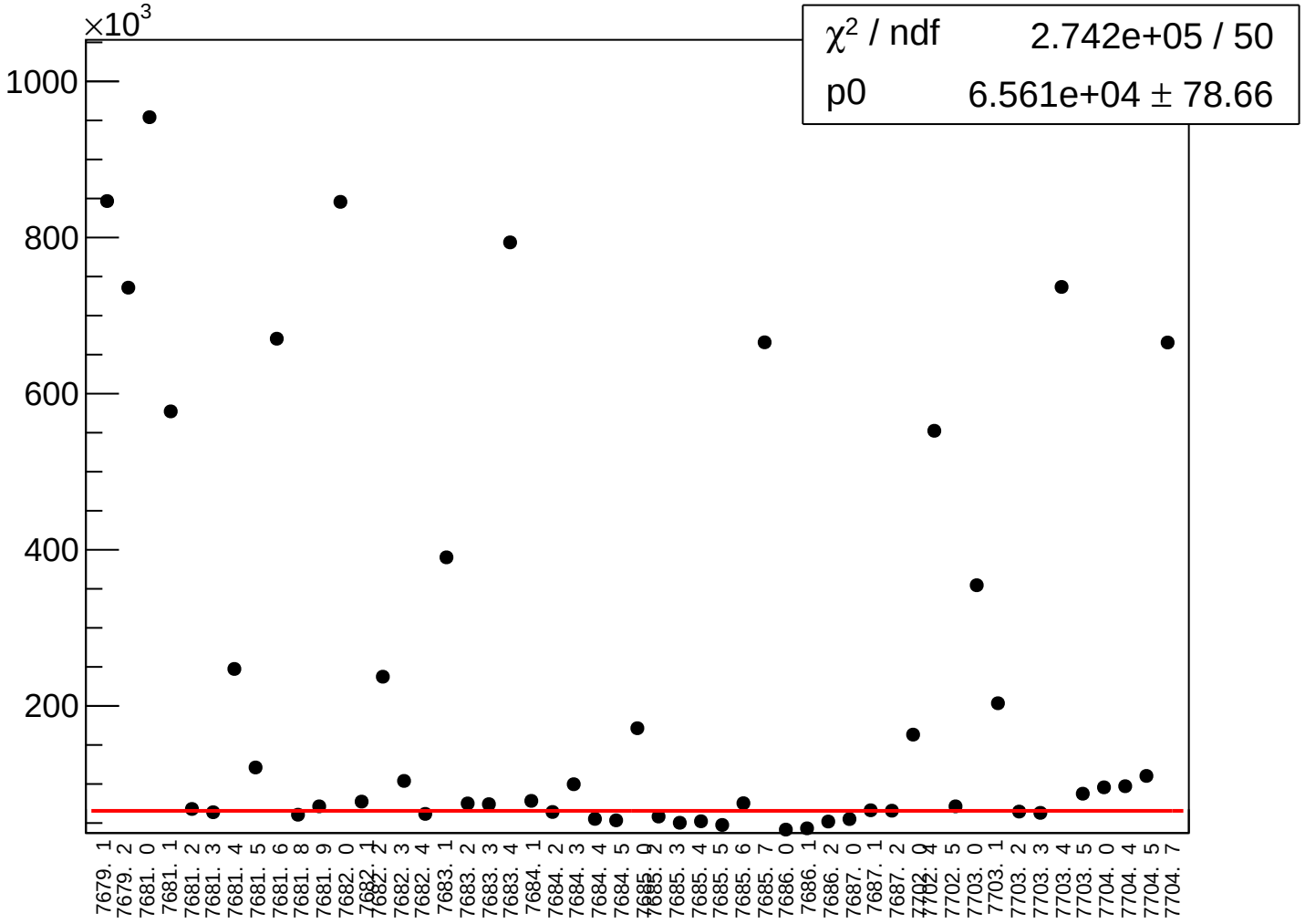

asym_dsl_mean vs run
χ^2 / ndf 111.6 / 93
p0 −6426 ± 5420
×10^3
600
400
200
0
−200
−400
pull
Entries 94
Mean −17.35
Std Dev 67.58
3
2
1
0
−1
−2

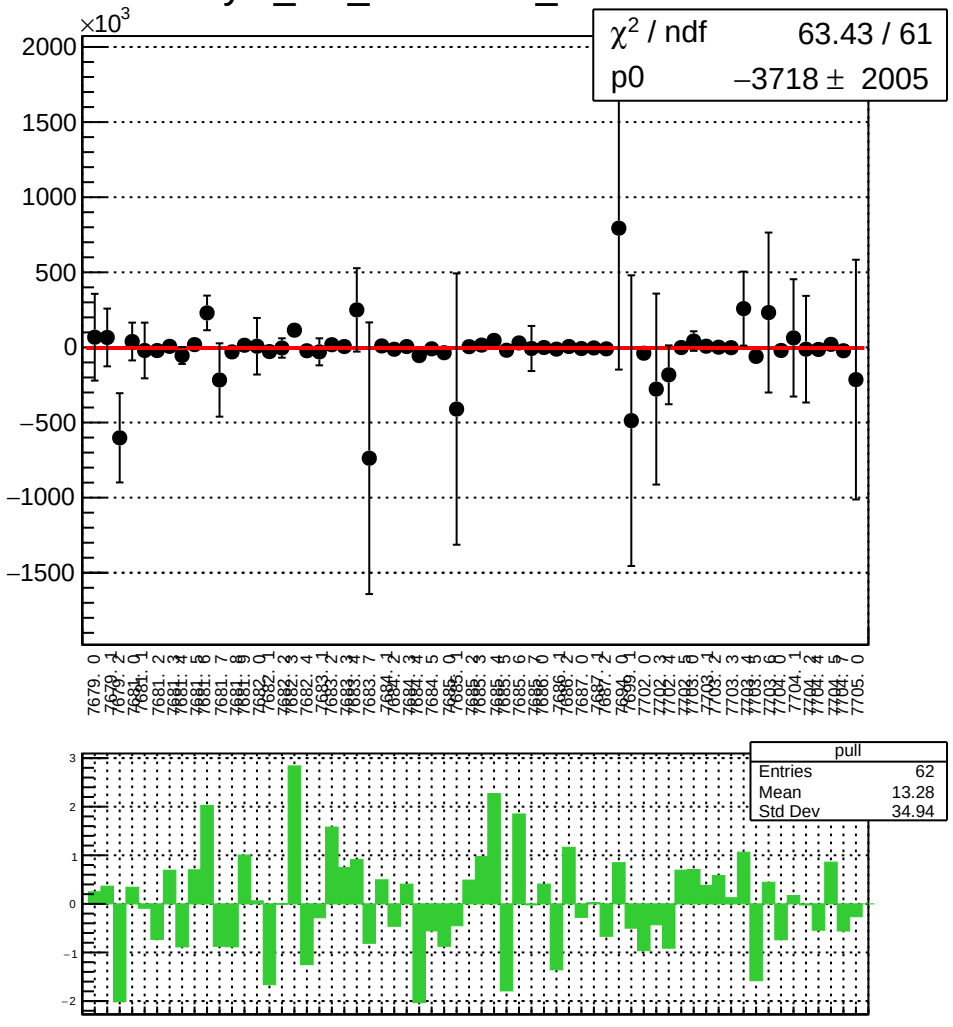

pull1D
Entries 94
Mean −0.01429
Std Dev 1.089
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

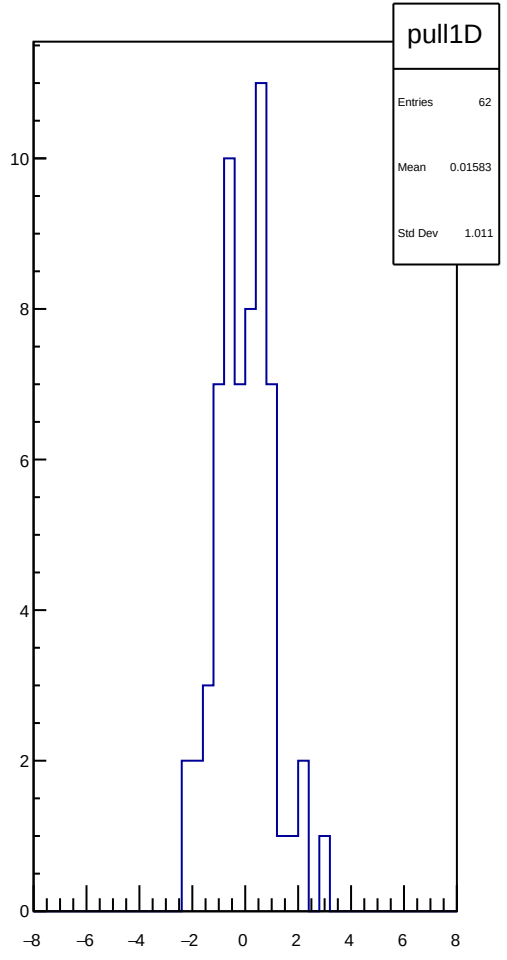

asym_dsl_rms vs run
χ² / ndf 3.5e+05 / 93
p0 4591 ± 3.832
14000
12000
10000
8000
6000
4000

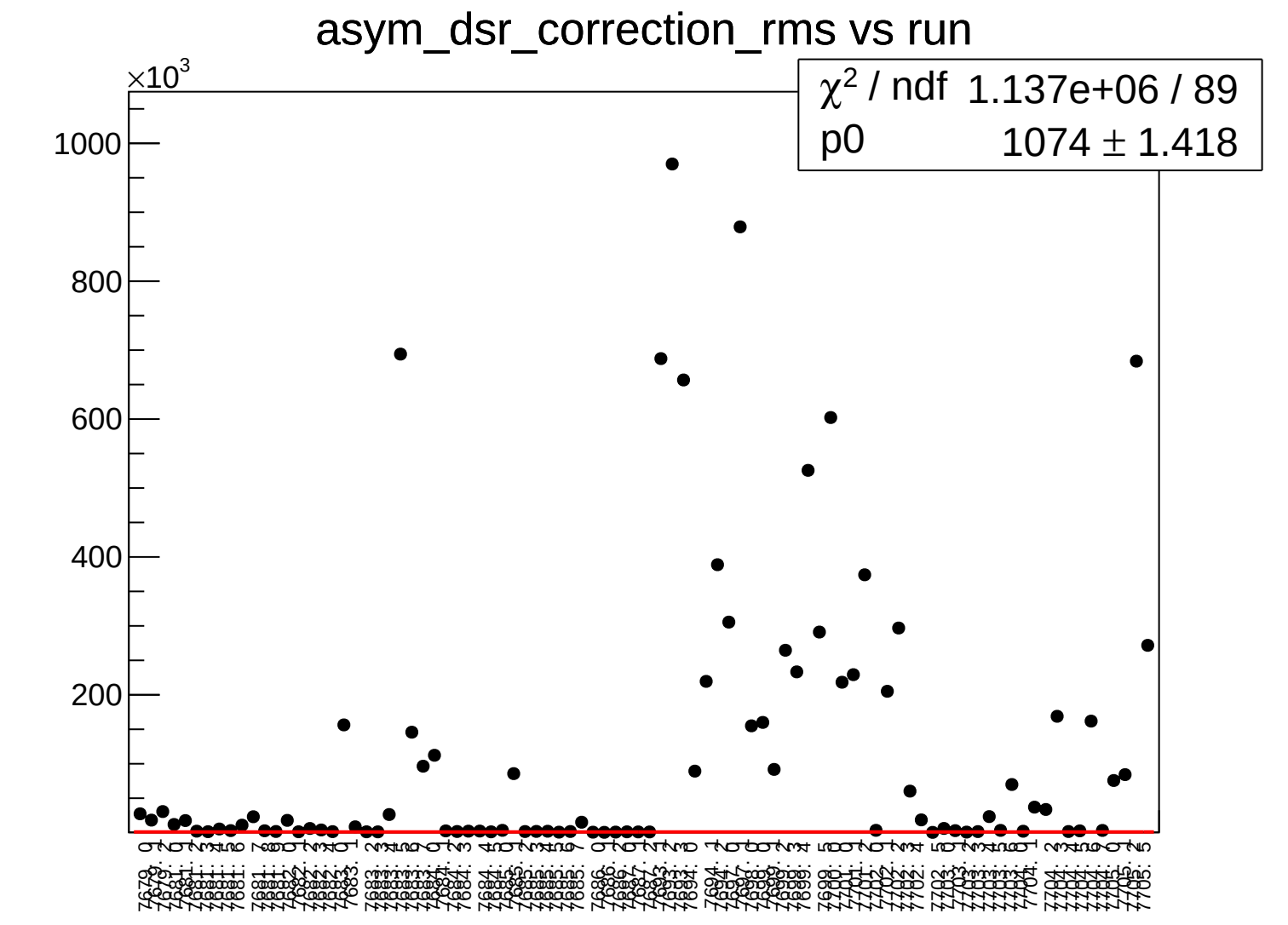

reg_asym_dsr_mean vs run
×10^3
χ² / ndf 15.92 / 24
p0 1.27e+04 ± 1.203e+05
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 8
7681. 9
7682. 1
7682. 4
7683. 3
7684. 1
7684. 2
7684. 4
7684. 5
7685. 2
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 5
7703. 2
7703. 3
7703. 5
pull
Entries 25
Mean −9.458
Std Dev 15.58
1
0.5
0
−0.5
−1
−1.5

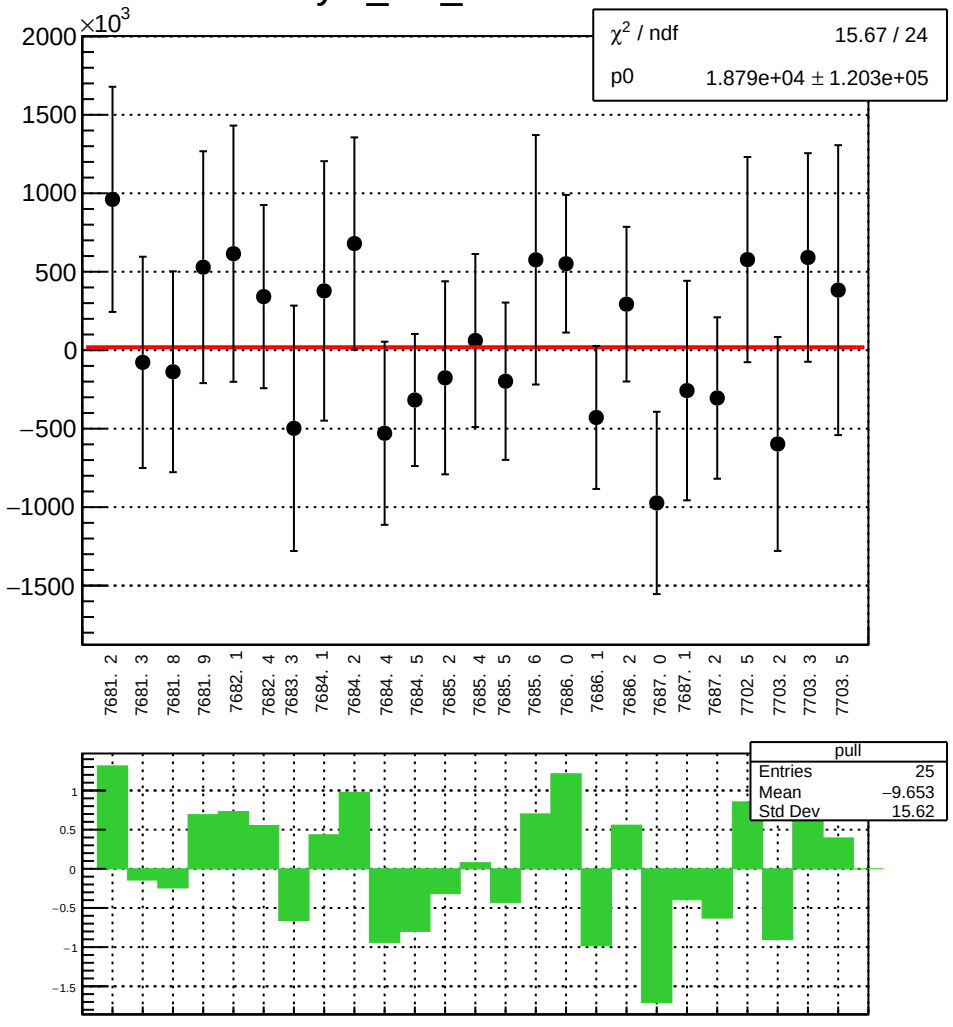

pull1D
Entries 25
Mean 0.04817
Std Dev 0.7965
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

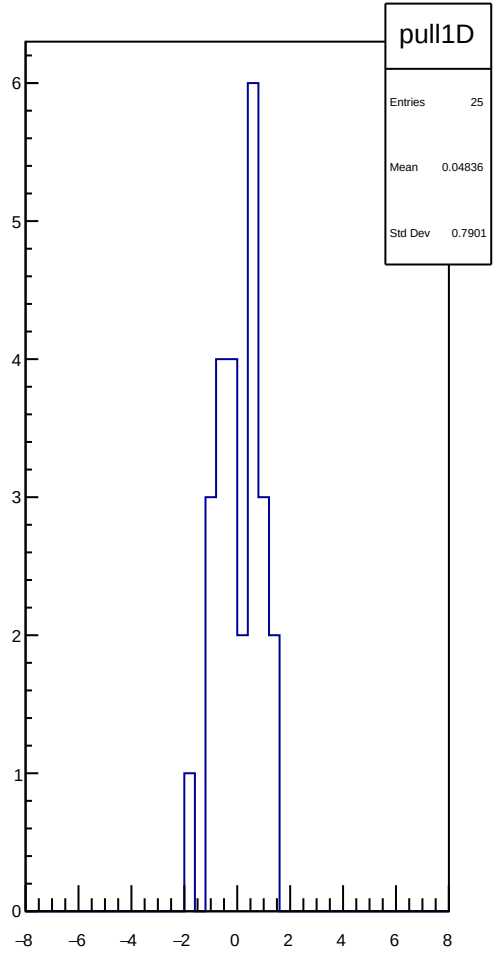

reg_asym_dsr_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.742e+05 / 50
p0 6.561e+04 ± 78.66
7679. 1
7679. 2
7681. 0
7681. 1
7681. 2
7681. 3
7681. 4
7681. 5
7681. 6
7681. 8
7681. 9
7682. 0
7682. 3
7682. 4
7683. 1
7683. 2
7683. 3
7683. 4
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 3
7685. 4
7685. 5
7685. 6
7685. 7
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 5
7703. 0
7703. 1
7703. 2
7703. 3
7703. 4
7703. 5
7704. 0
7704. 4
7704. 5
7704. 7

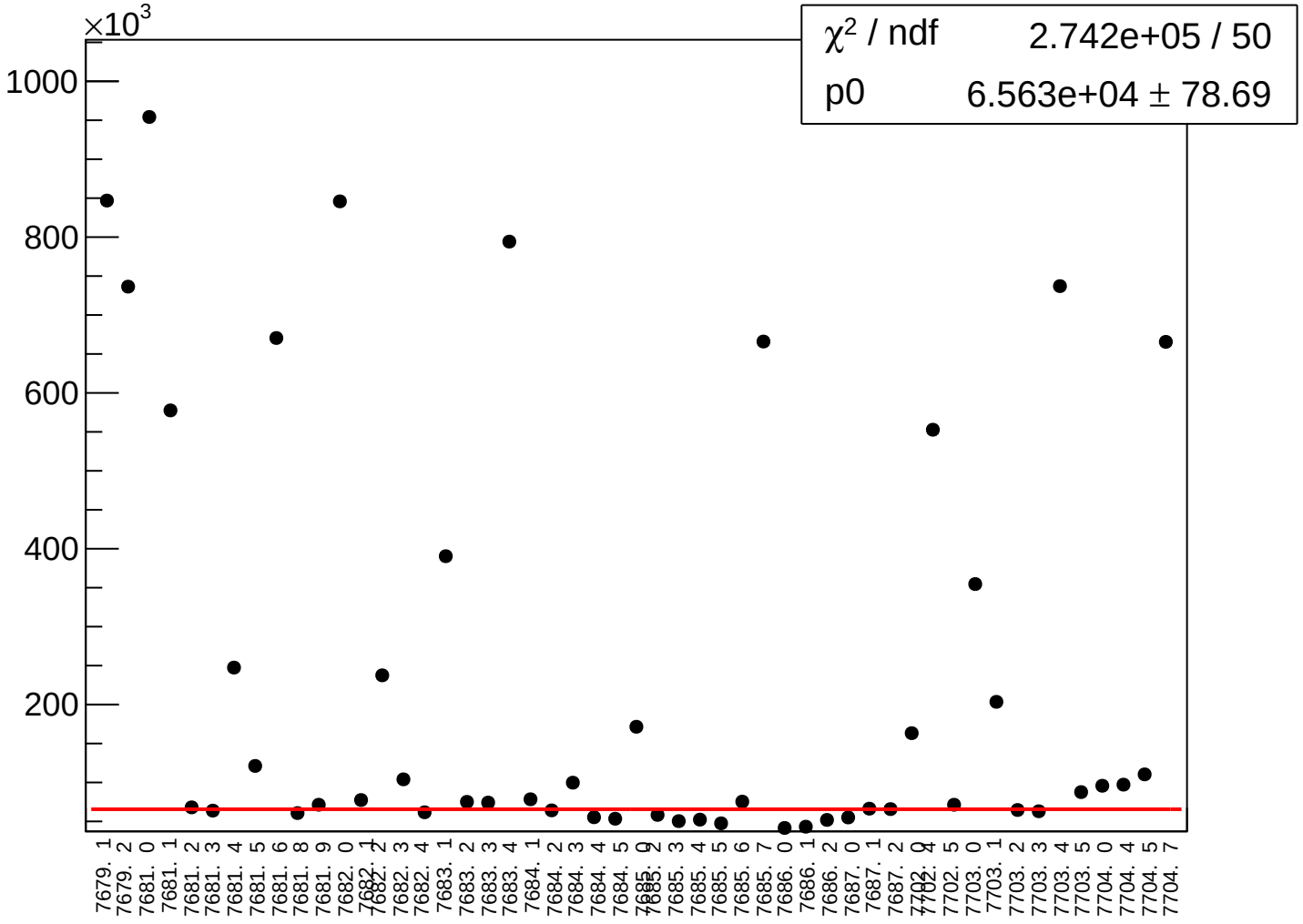

asym_dsr_correction_mean vs run
×10^3
χ² / ndf 63.43 / 61
p0 −3718 ± 2005
pull
Entries 62
Mean 13.28
Std Dev 34.94

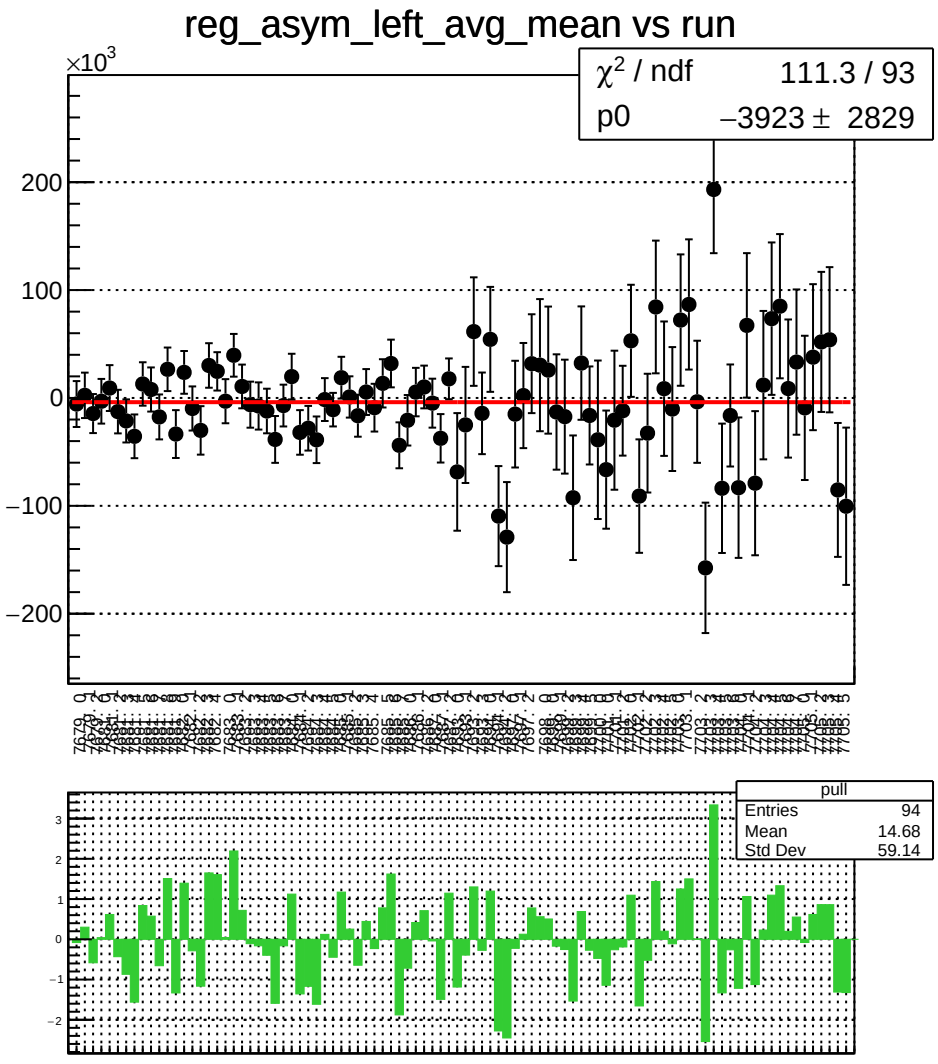

pull1D
Entries 62
Mean 0.01583
Std Dev 1.011

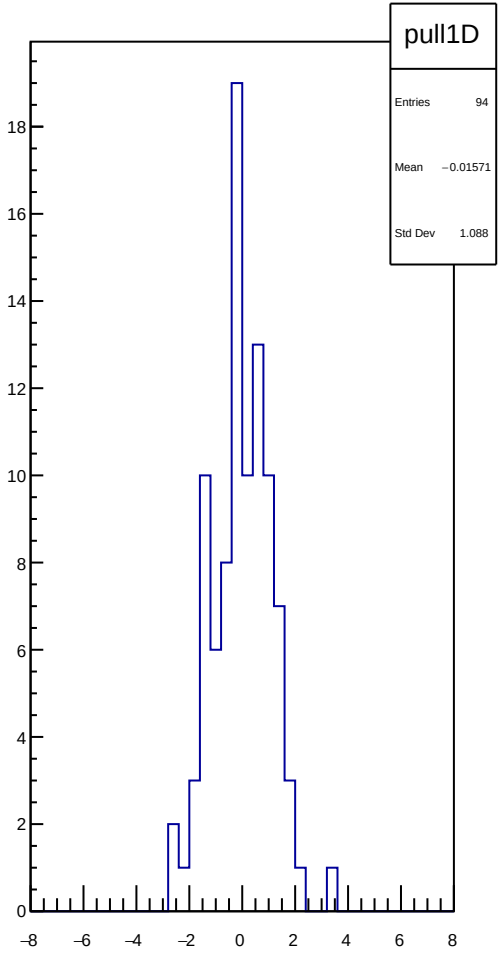

asym_dsr_correction_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.137e+06 / 89
p0 1074 ± 1.418

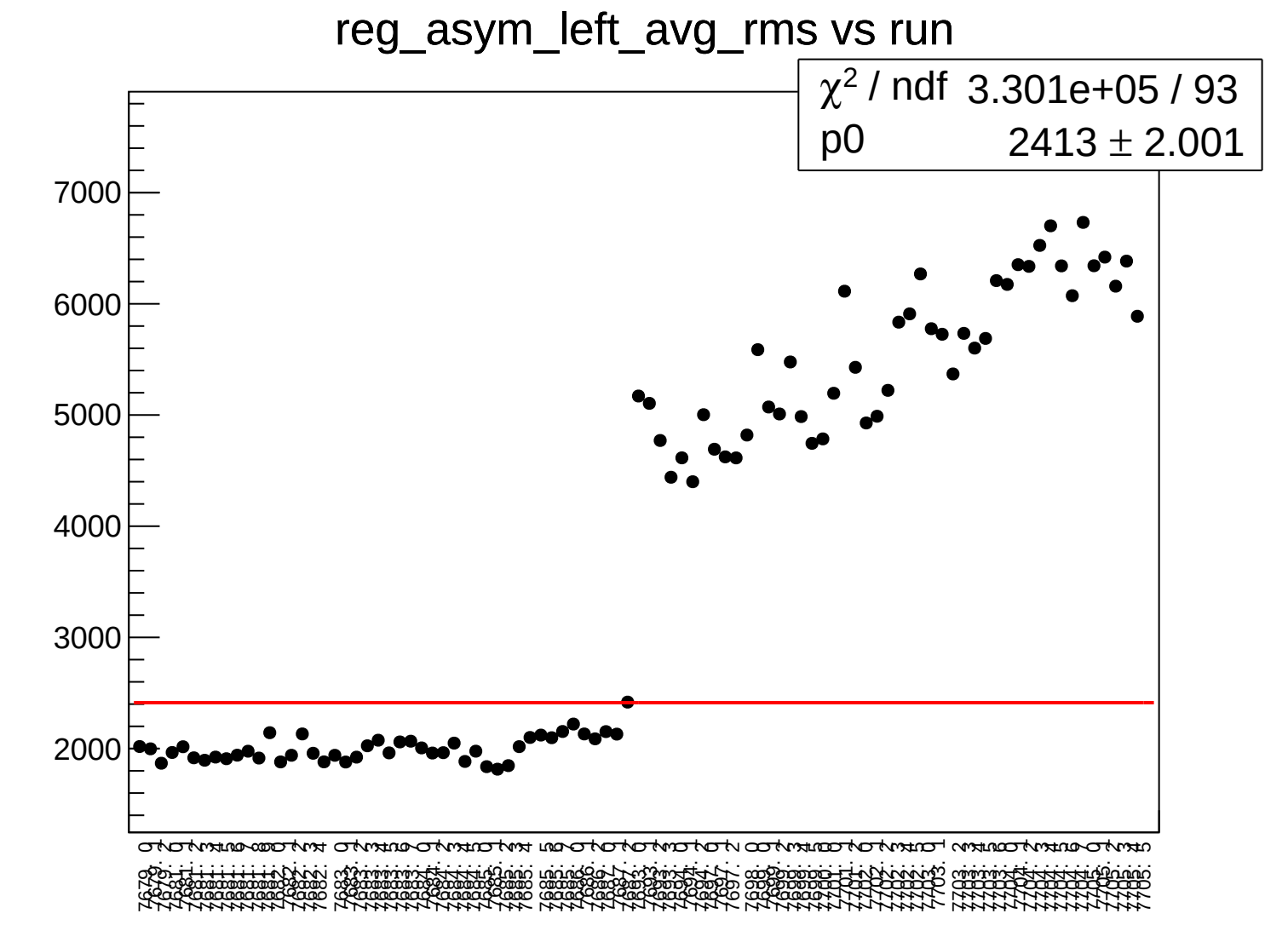

asym_dsr_mean vs run
×10^3
χ² / ndf 15.67 / 24
p0 1.879e+04 ± 1.203e+05
2000
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 8
7681. 9
7682. 1
7682. 4
7683. 3
7684. 1
7684. 2
7684. 4
7684. 5
7685. 2
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 5
7703. 2
7703. 3
7703. 5
pull
Entries 25
Mean −9.653
Std Dev 15.62
1
0.5
0
−0.5
−1
−1.5

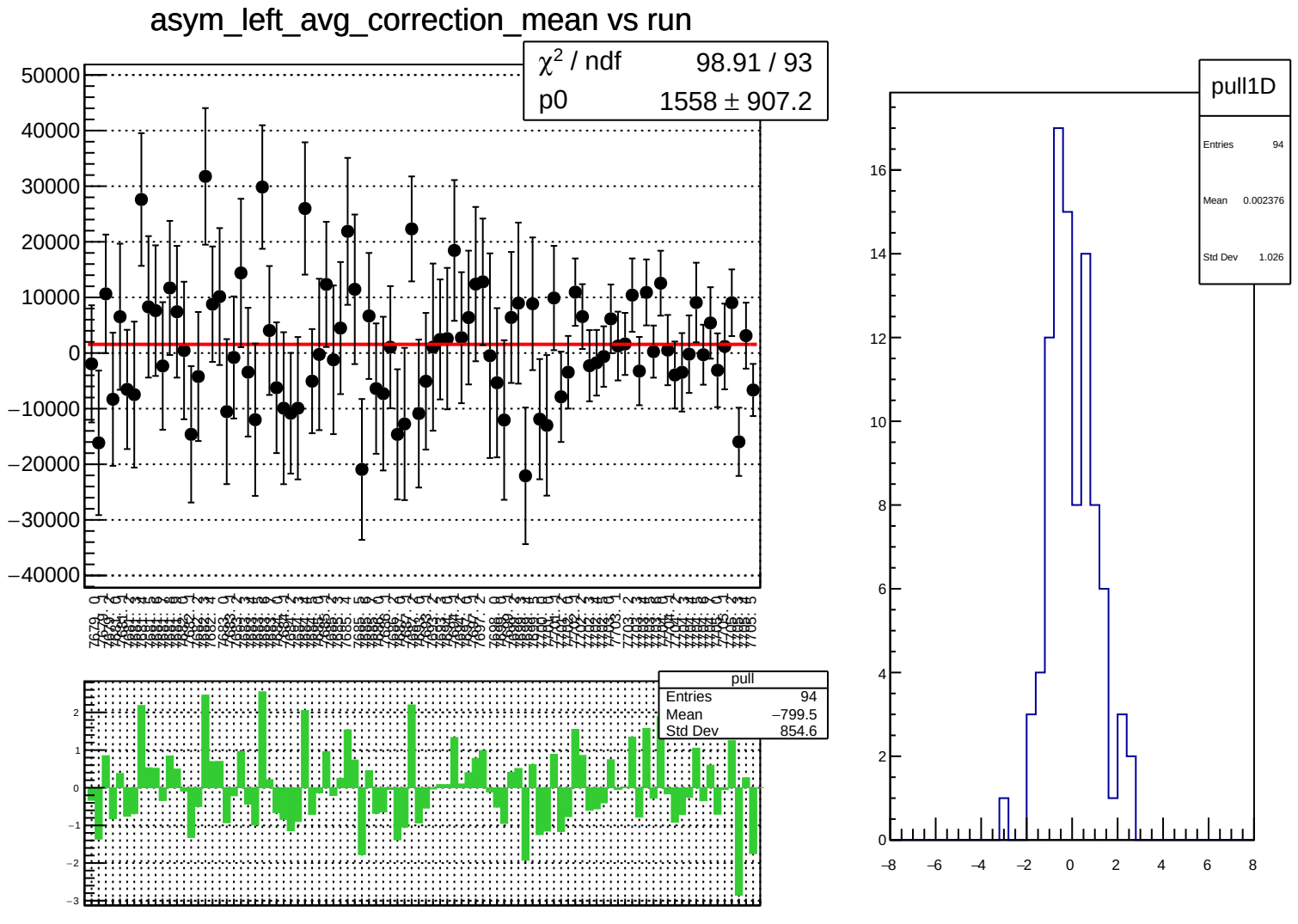

pull1D
Entries 25
Mean 0.04836
Std Dev 0.7901
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

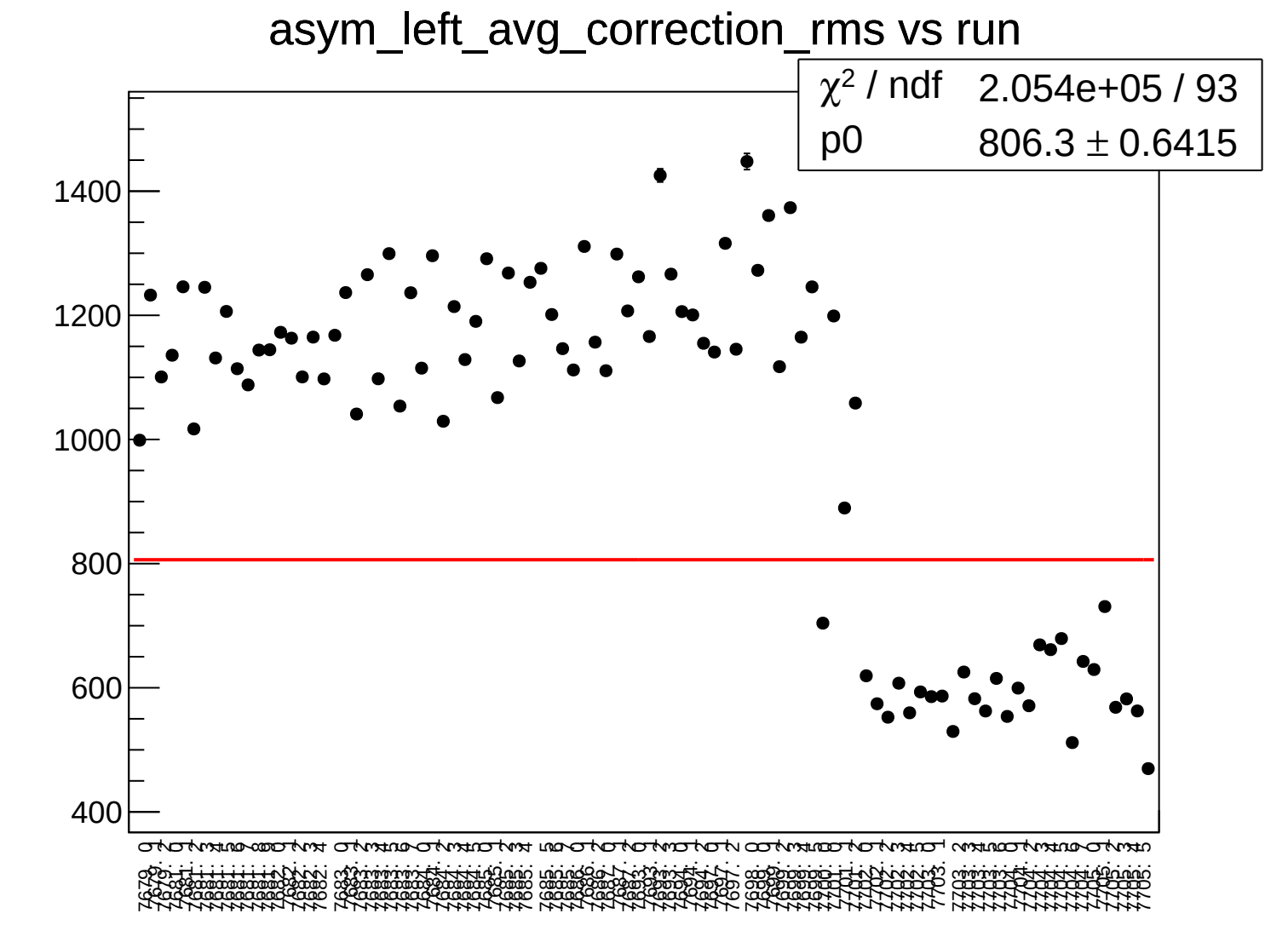

asym_dsr_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.742e+05 / 50
p0 6.563e+04 ± 78.69
7679. 1
7679. 2
7681. 0
7681. 1
7681. 2
7681. 3
7681. 4
7681. 5
7681. 6
7681. 8
7681. 9
7682. 0
7682. 3
7682. 4
7683. 1
7683. 2
7683. 3
7683. 4
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 3
7685. 4
7685. 5
7685. 6
7685. 7
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 5
7703. 0
7703. 1
7703. 2
7703. 3
7703. 4
7703. 5
7704. 0
7704. 4
7704. 5
7704. 7

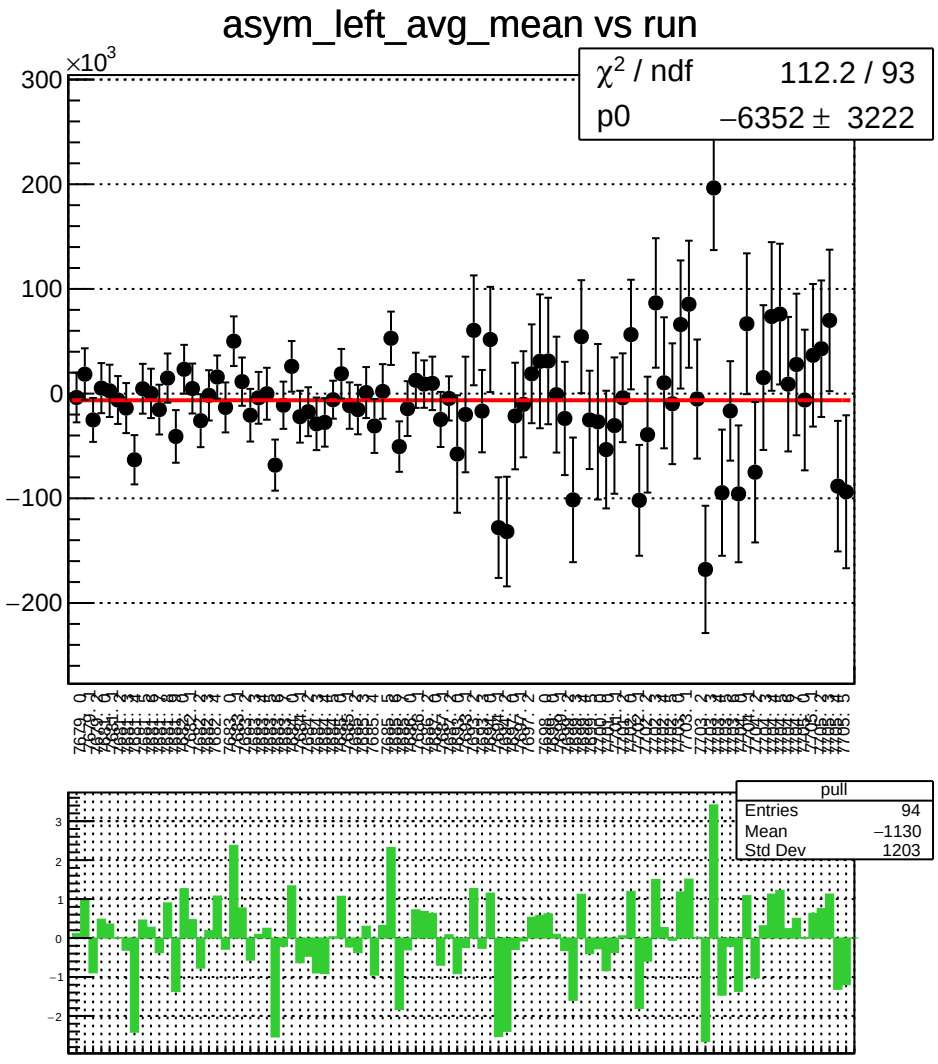

reg_asym_left_avg_mean vs run
×10^3
χ^2 / ndf 111.3 / 93
p0 −3923 ± 2829
200
100
0
−100
−200
pull
Entries 94
Mean 14.68
Std Dev 59.14
3
2
1
0
−1
−2

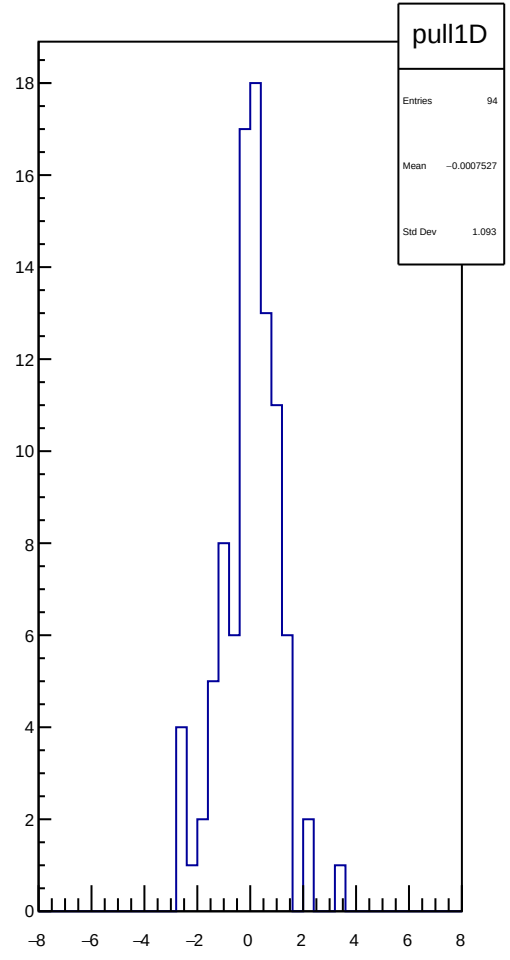

pull1D
Entries 94
Mean −0.01571
Std Dev 1.088
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

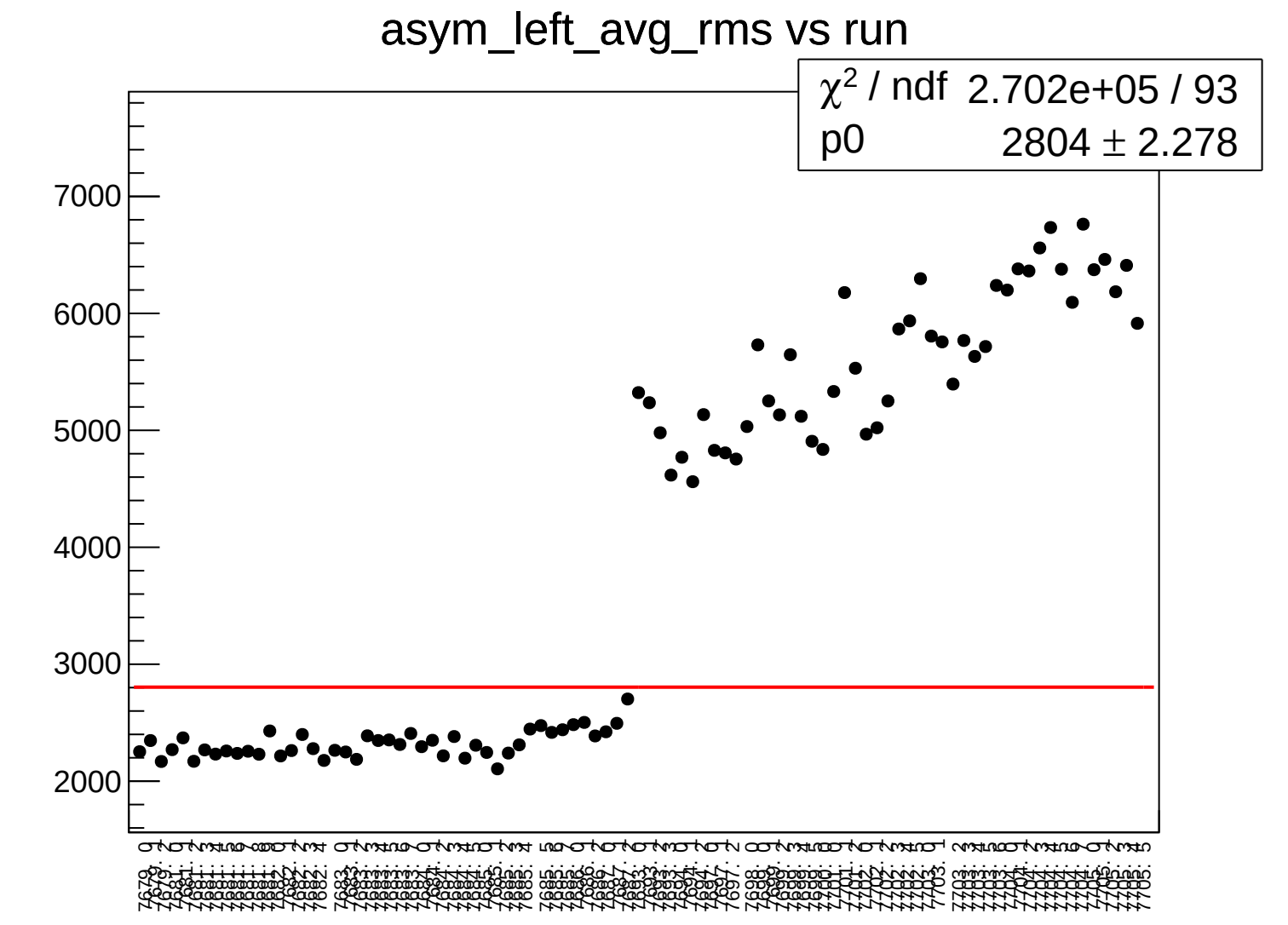

reg_asym_left_avg_rms vs run
χ^2 / ndf 3.301e+05 / 93
p0 2413 ± 2.001
7000
6000
5000
4000
3000
2000

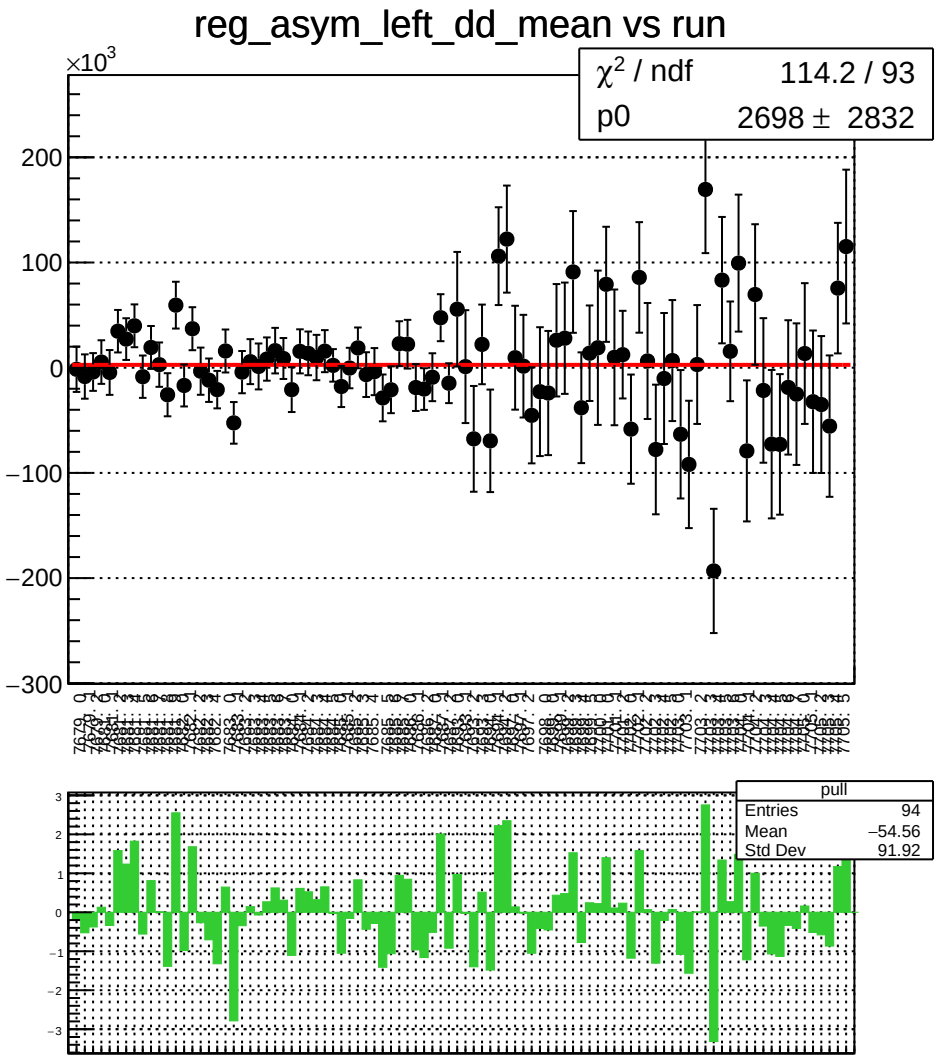

asym_left_avg_correction_mean vs run
χ² / ndf 98.91 / 93
p0 1558 ± 907.2
pull
Entries 94
Mean −799.5
Std Dev 854.6
pull1D
Entries 94
Mean 0.002376
Std Dev 1.026

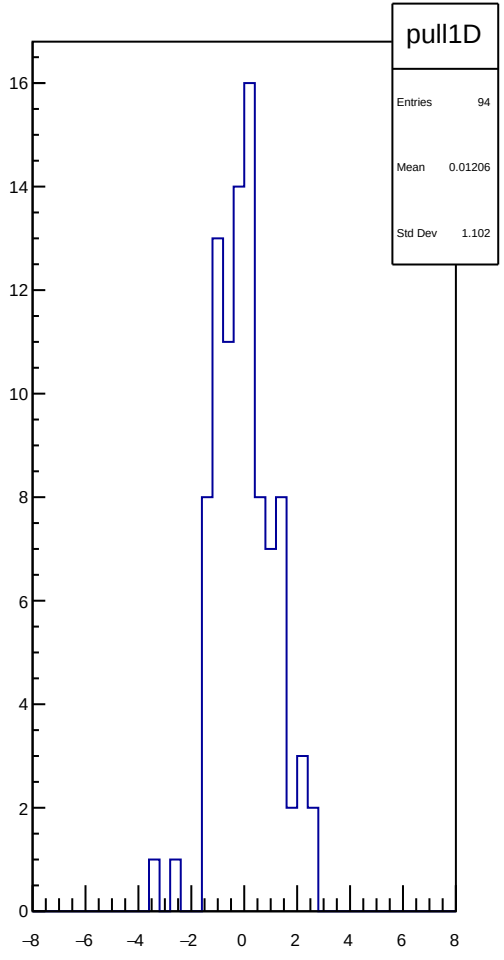

asym_left_avg_correction_rms vs run
χ² / ndf 2.054e+05 / 93
p0 806.3 ± 0.6415
1400
1200
1000
800
600
400

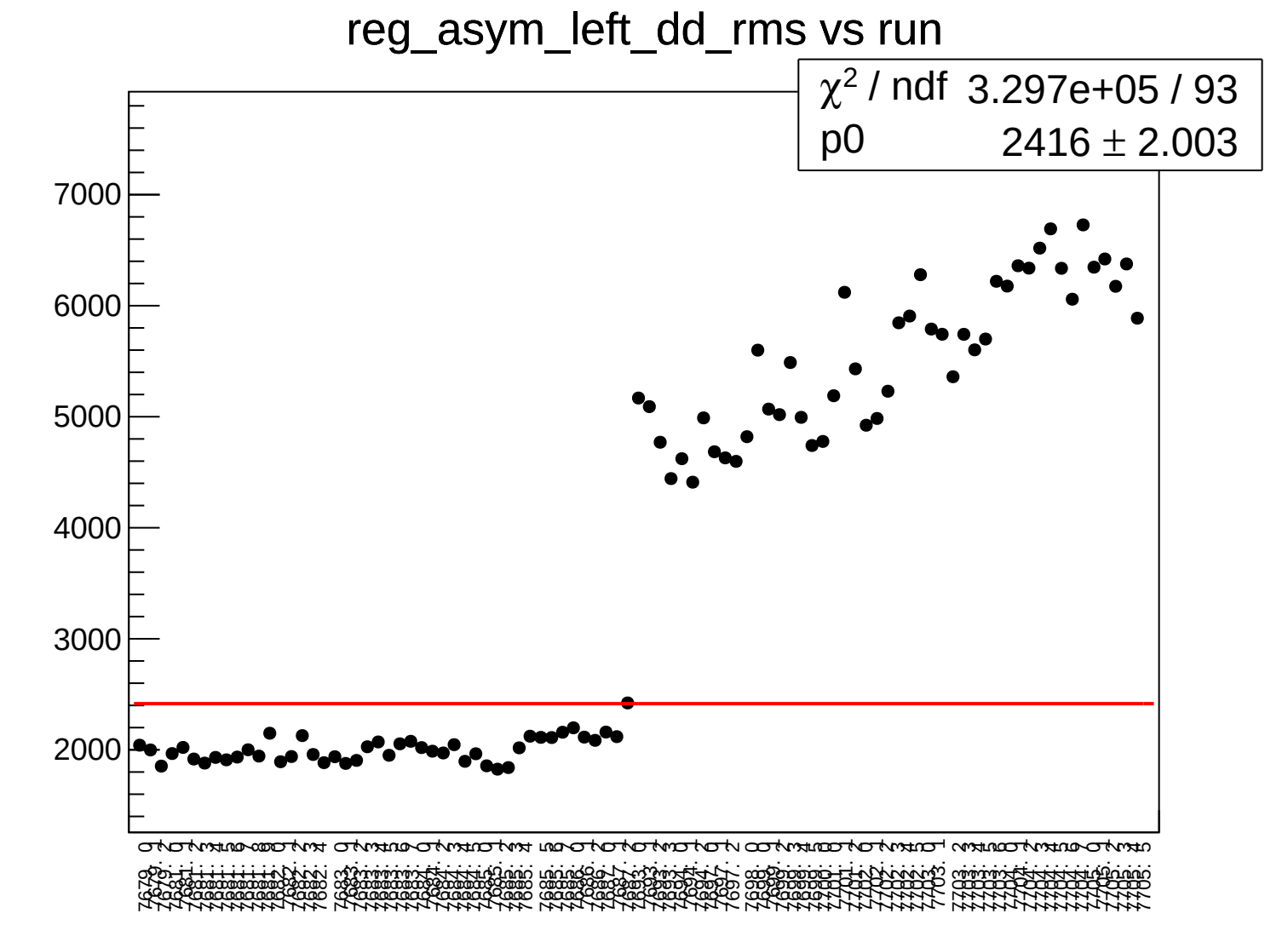

asym_left_avg_mean vs run
×10^3
χ² / ndf 112.2 / 93
p0 −6352 ± 3222
pull
Entries 94
Mean −1130
Std Dev 1203

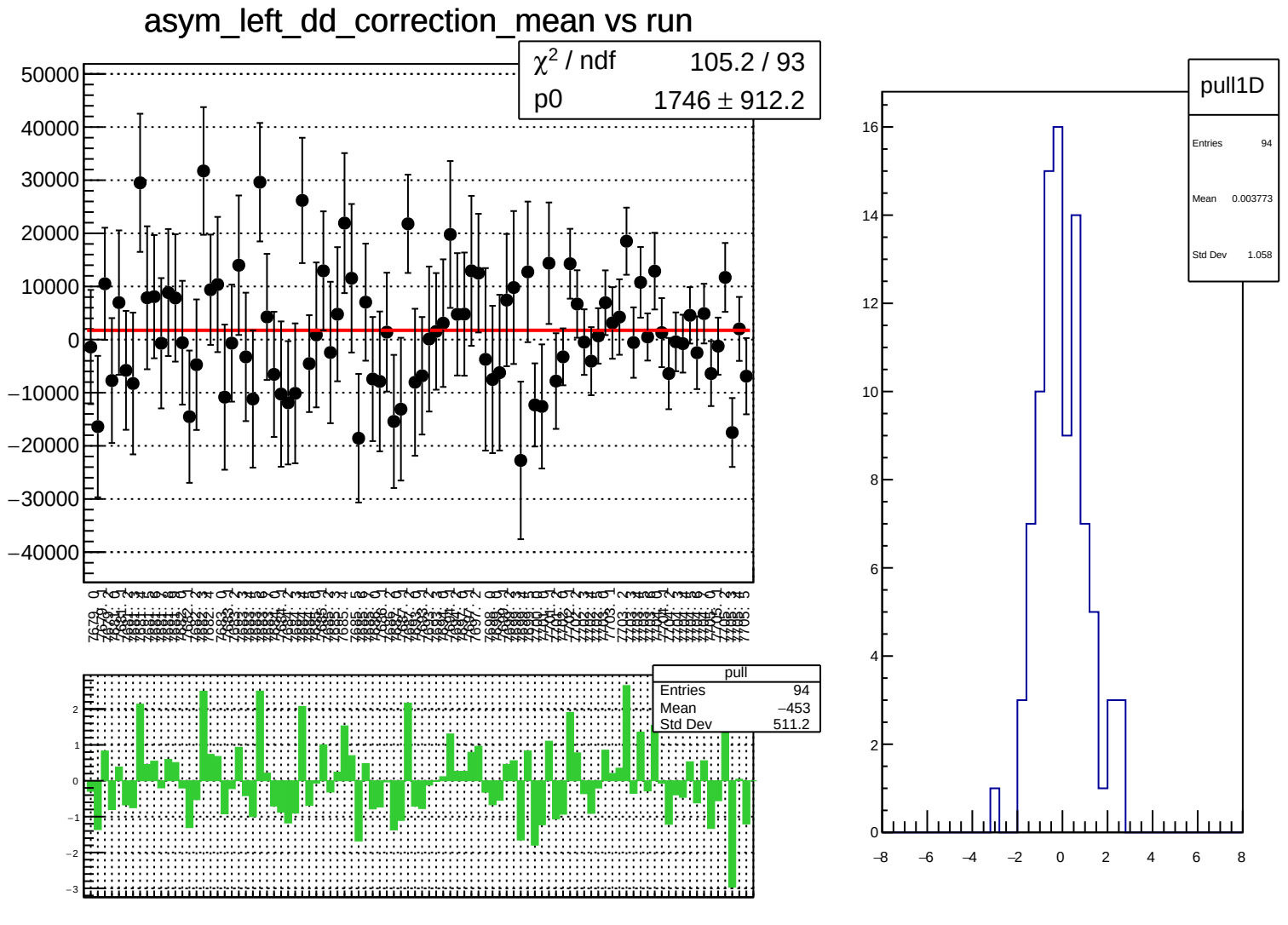

pull1D
Entries 94
Mean −0.0007527
Std Dev 1.093

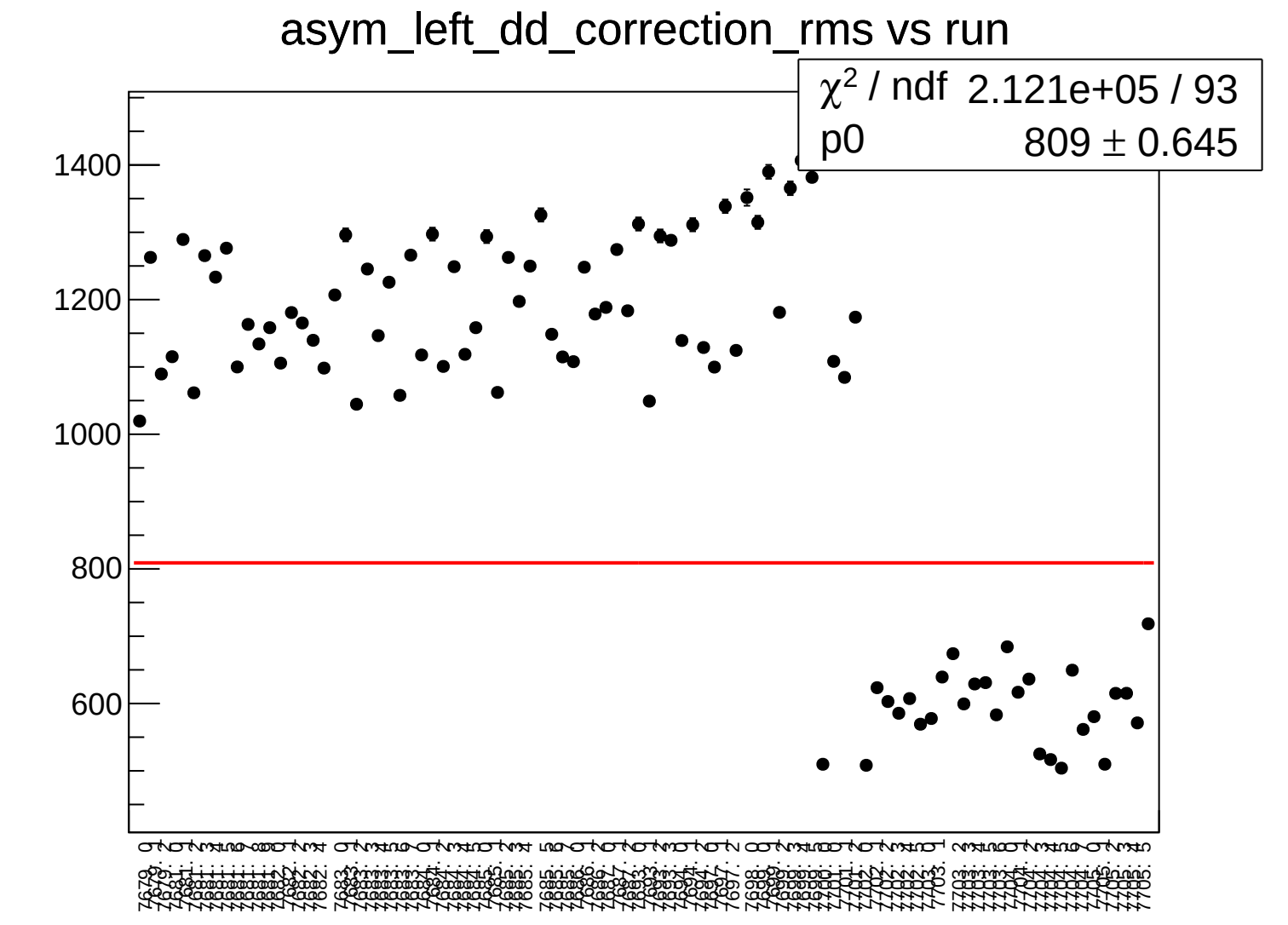

asym_left_avg_rms vs run
χ^2 / ndf 2.702e+05 / 93
p0 2804 ± 2.278
7000
6000
5000
4000
3000
2000

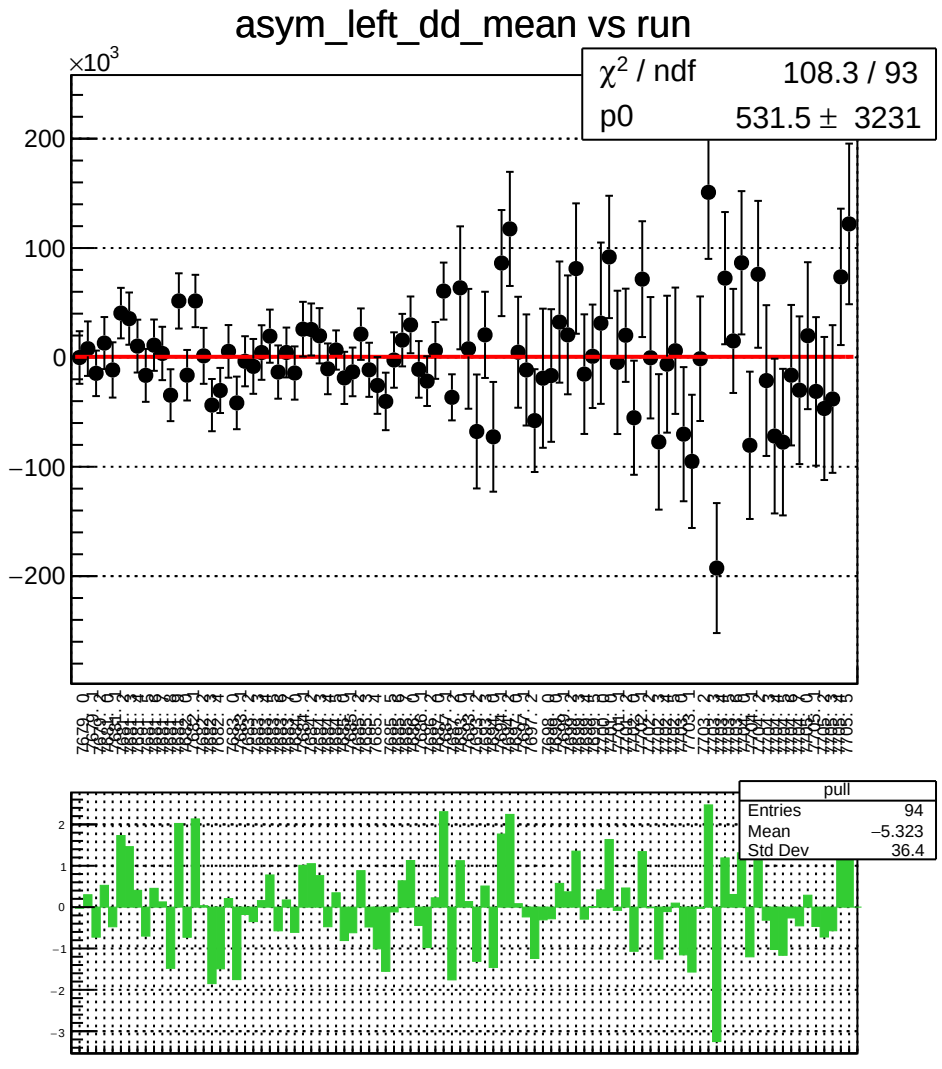

reg_asym_left_dd_mean vs run
×10^3
χ² / ndf 114.2 / 93
p0 2698 ± 2832
200
100
0
−100
−200
−300
pull
Entries 94
Mean −54.56
Std Dev 91.92
3
2
1
0
−1
−2
−3

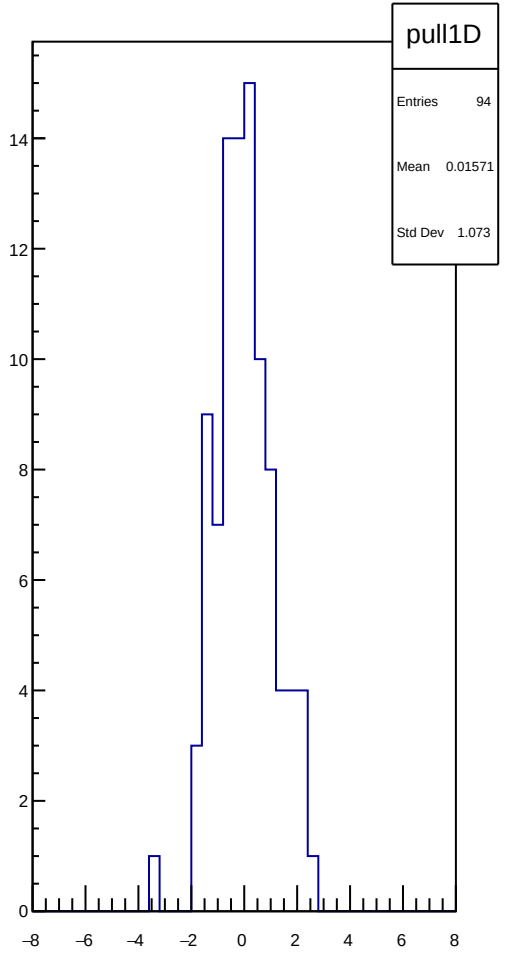

pull1D
Entries 94
Mean 0.01206
Std Dev 1.102
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

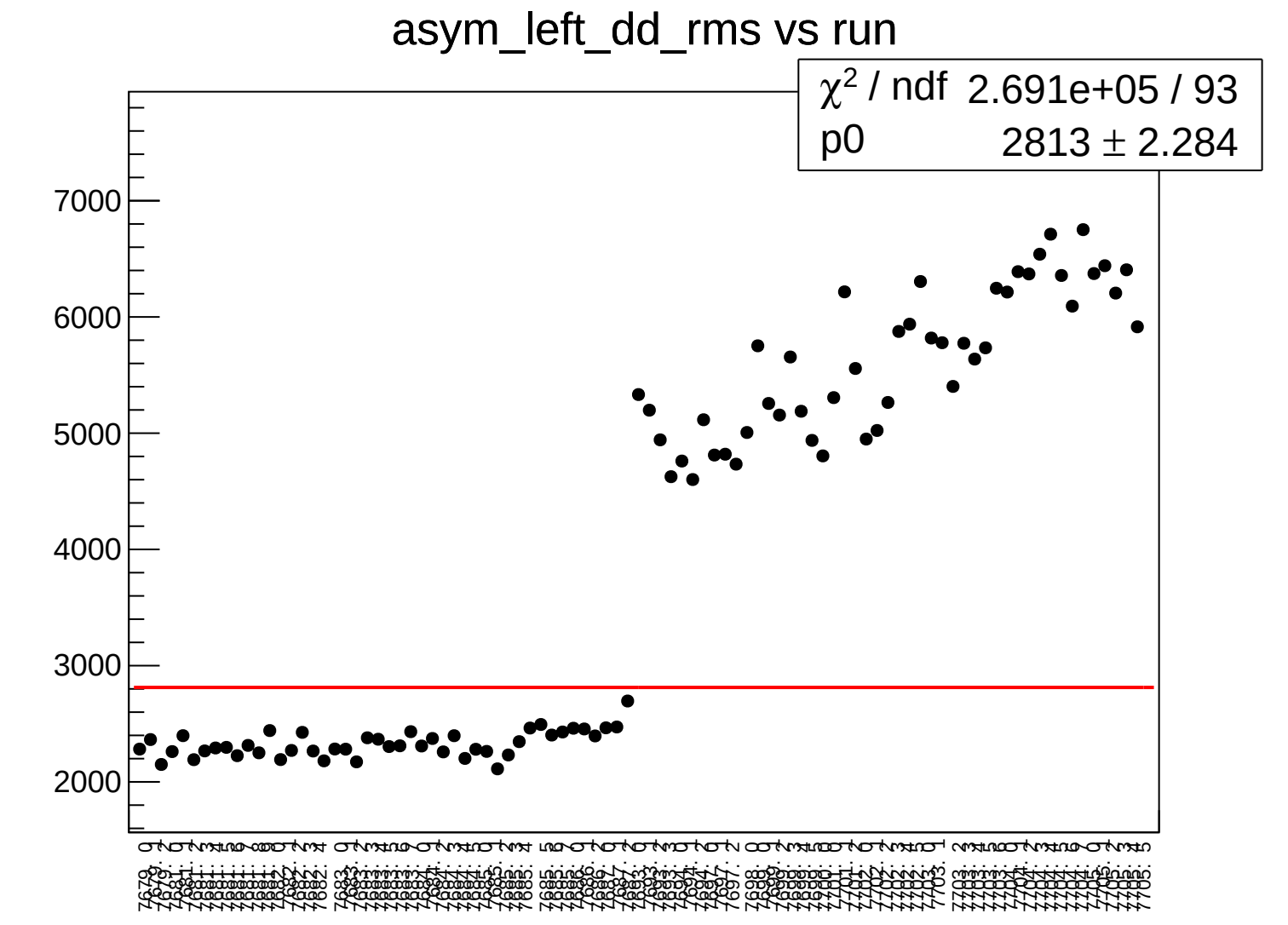

reg_asym_left_dd_rms vs run
χ^2 / ndf 3.297e+05 / 93
p0 2416 ± 2.003
7000
6000
5000
4000
3000
2000

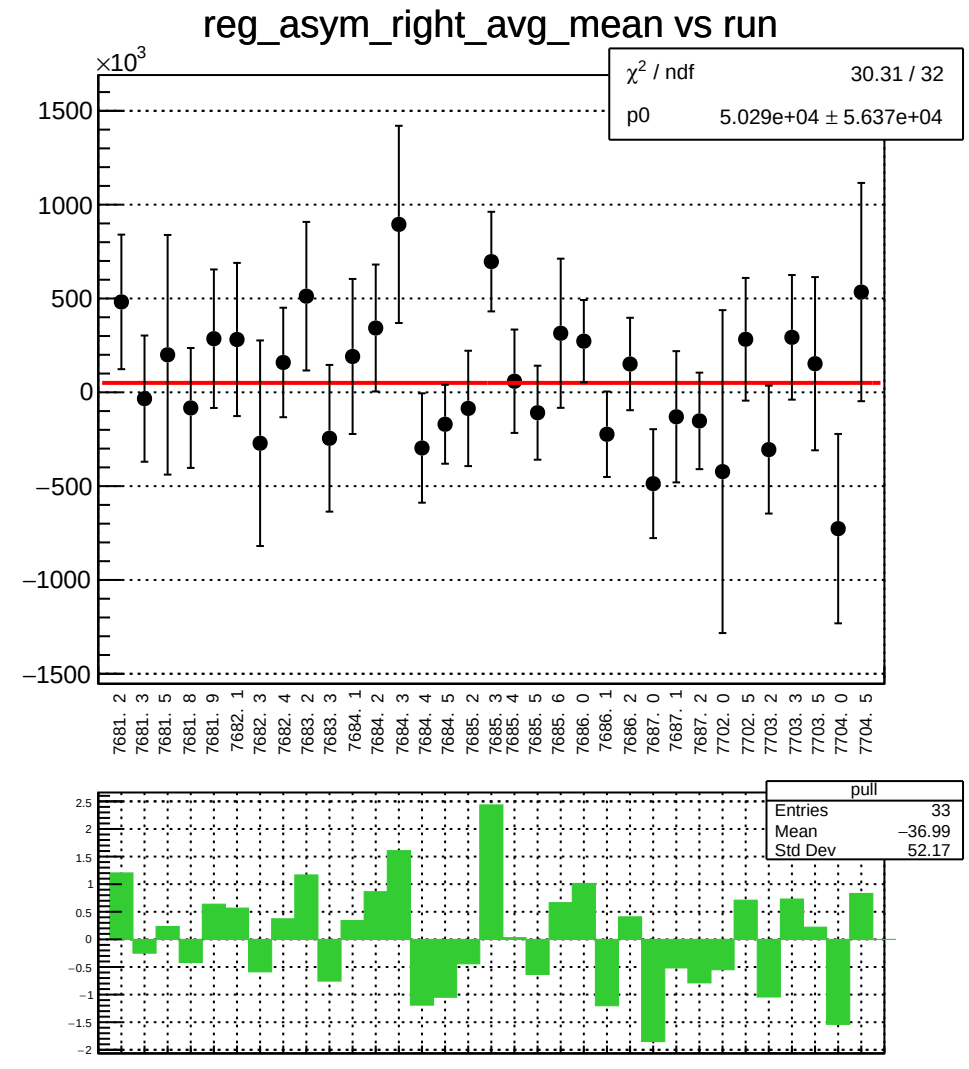

asym_left_dd_correction_mean vs run
χ² / ndf 105.2 / 93
p0 1746 ± 912.2
pull
Entries 94
Mean −453
Std Dev 511.2
pull1D
Entries 94
Mean 0.003773
Std Dev 1.058

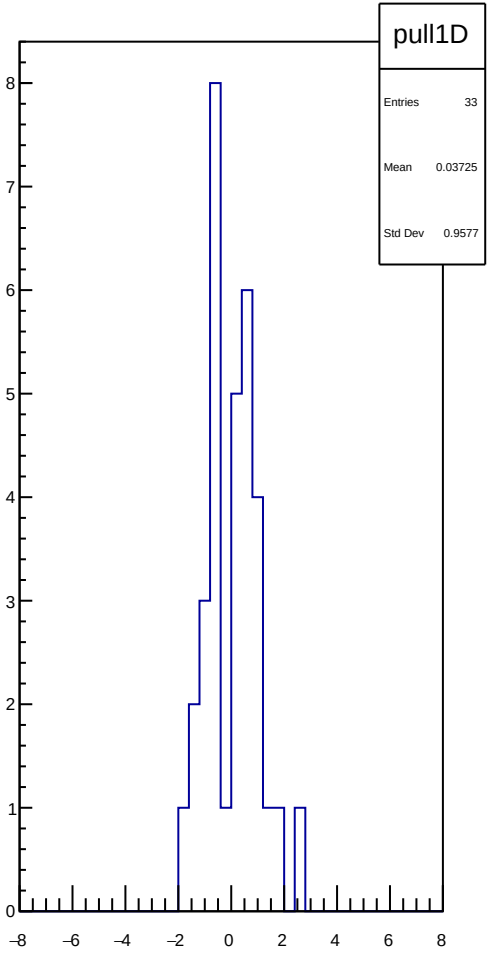

asym_left_dd_correction_rms vs run
χ^2 / ndf 2.121e+05 / 93
p0 809 ± 0.645
1400
1200
1000
800
600

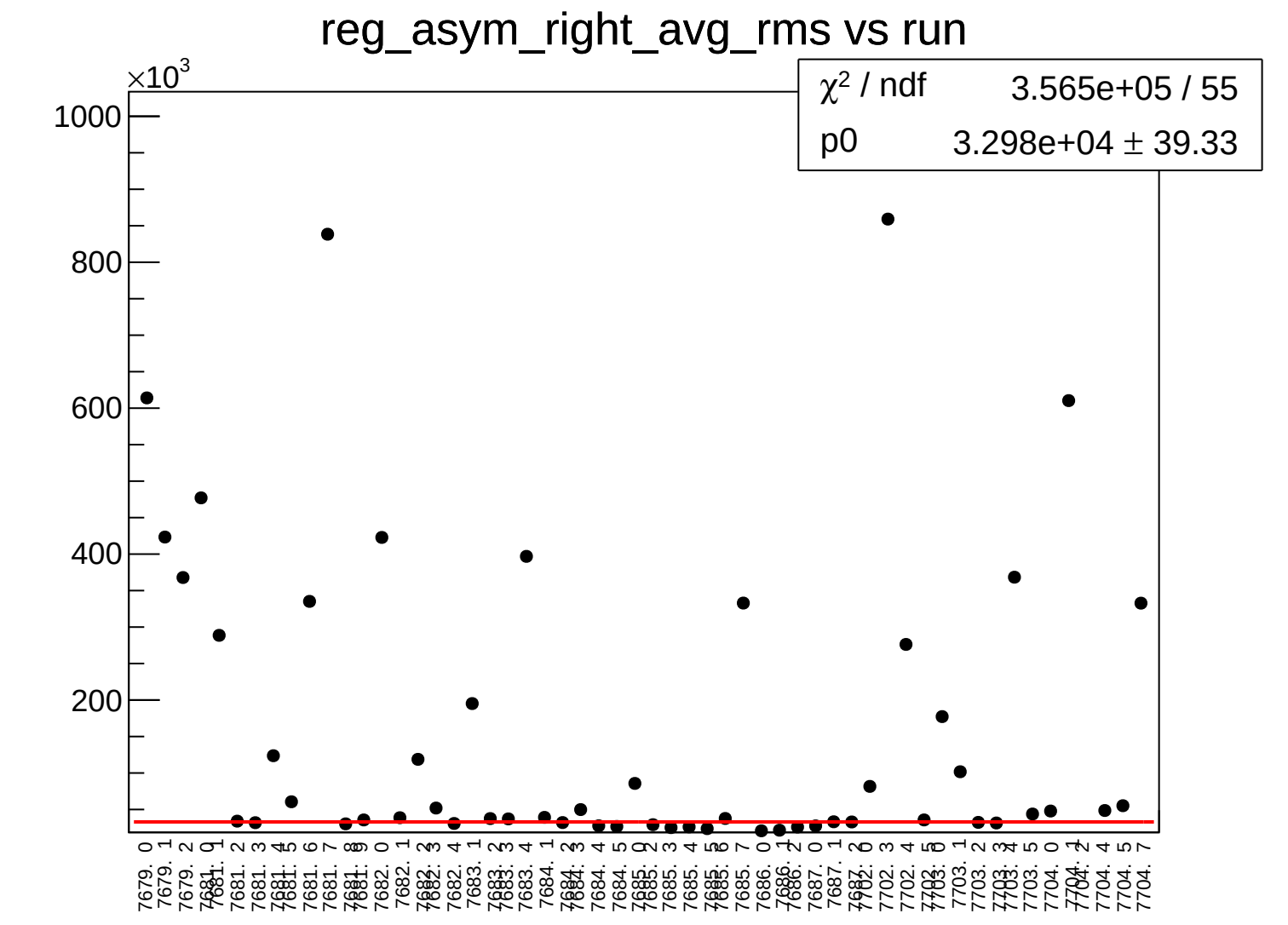

asym_left_dd_mean vs run
×10^3
χ^2 / ndf 108.3 / 93
p0 531.5 ± 3231
200
100
0
−100
−200
pull
Entries 94
Mean −5.323
Std Dev 36.4
2
1
0
−1
−2
−3

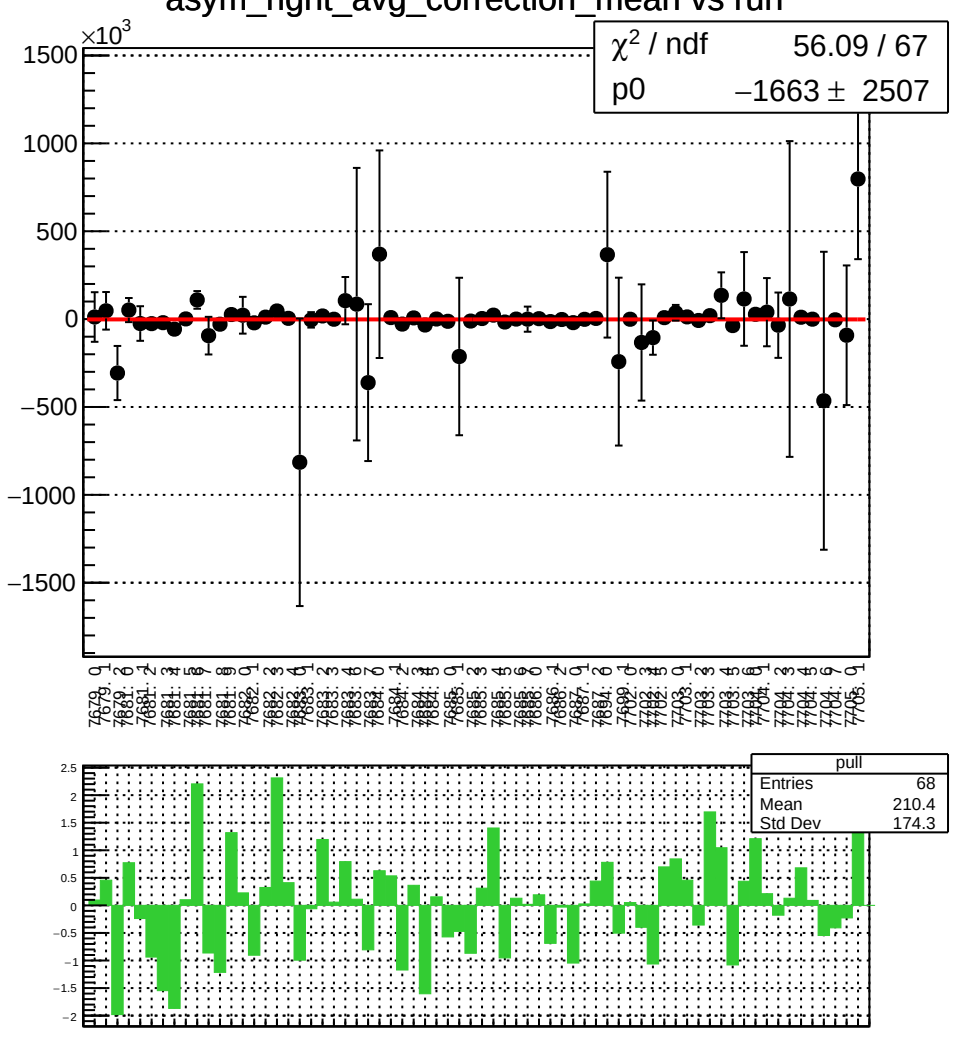

pull1D
Entries 94
Mean 0.01571
Std Dev 1.073
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

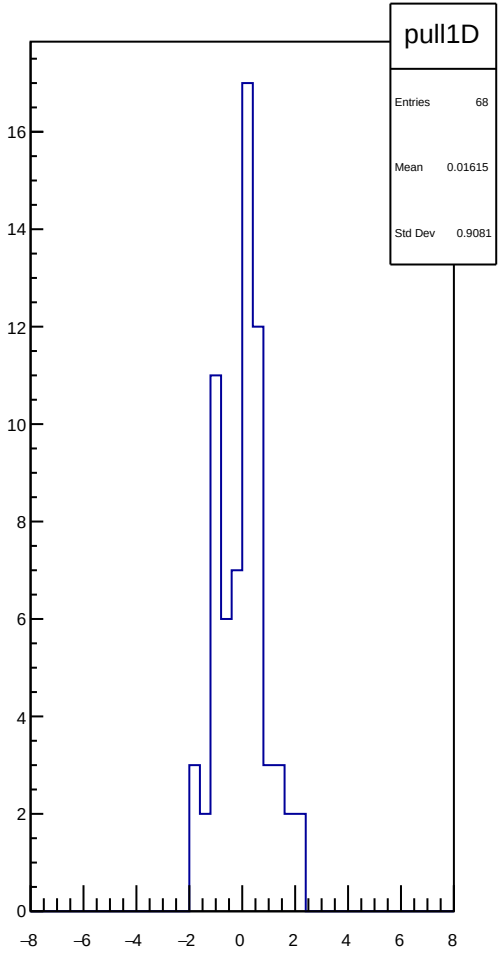

asym_left_dd_rms vs run
χ^2 / ndf 2.691e+05 / 93
p0 2813 ± 2.284
7000
6000
5000
4000
3000
2000

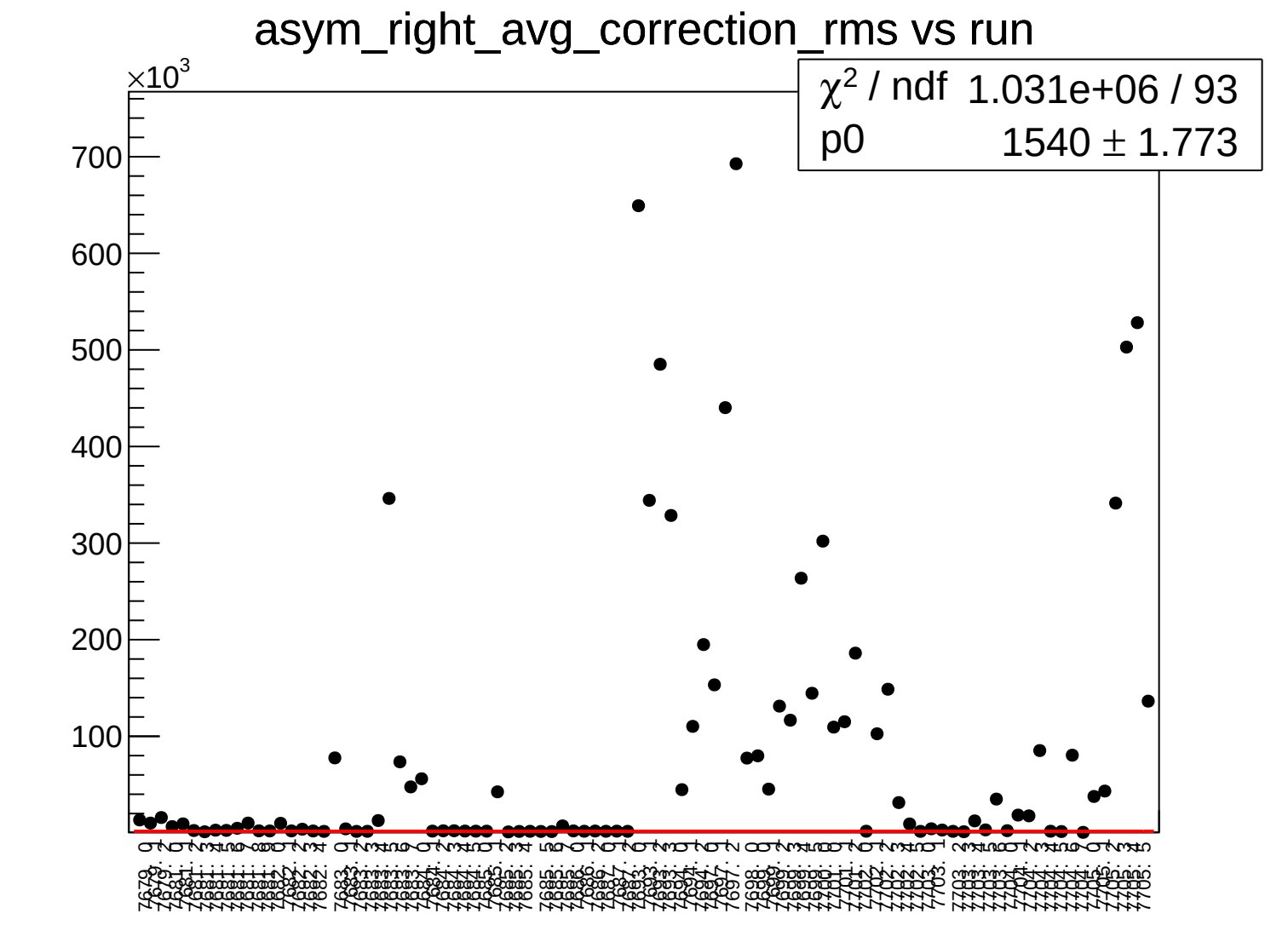

reg_asym_right_avg_mean vs run
×10^3
χ² / ndf 30.31 / 32
p0 5.029e+04 ± 5.637e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −36.99
Std Dev 52.17
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

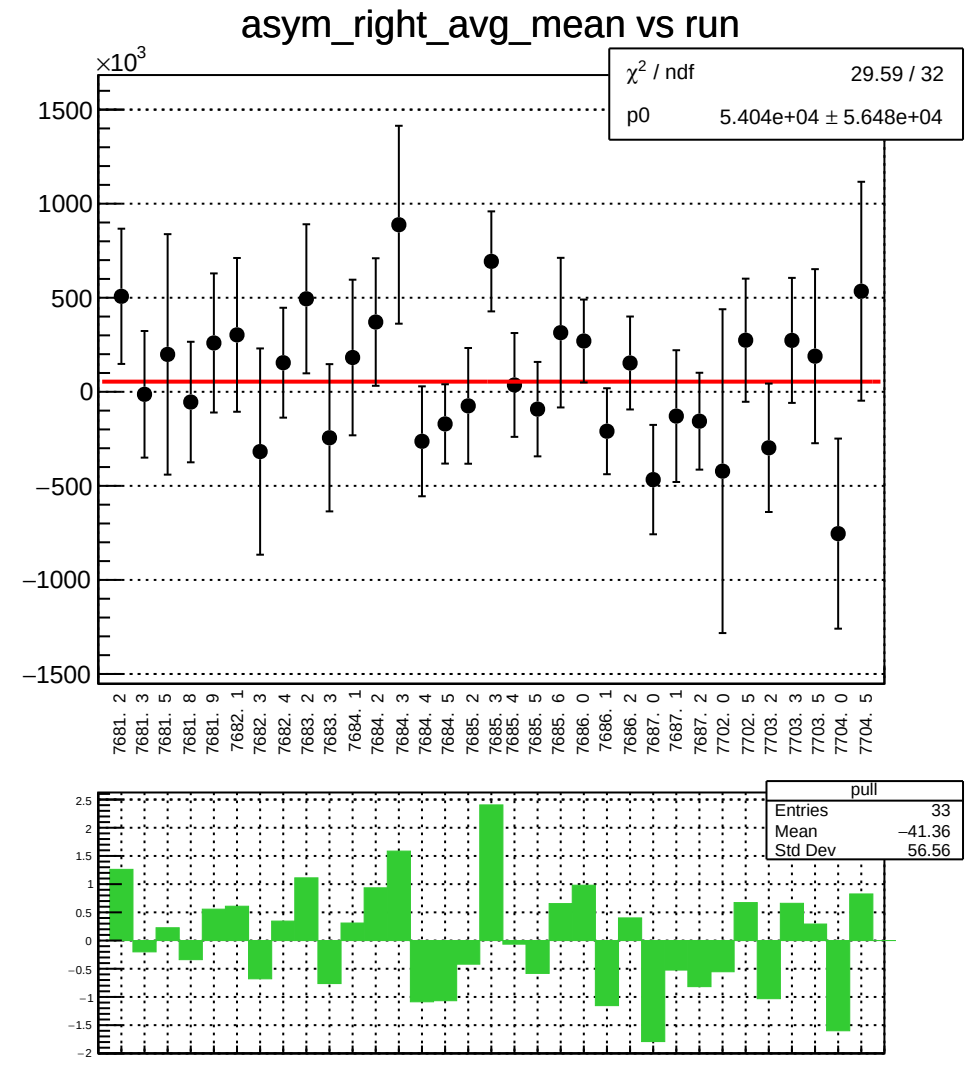

pull1D
Entries 33
Mean 0.03725
Std Dev 0.9577
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

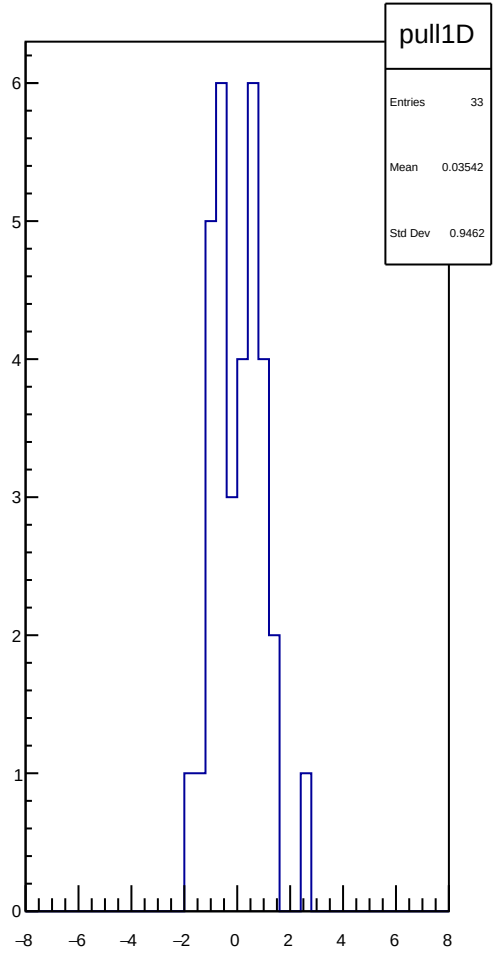

reg_asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.565e+05 / 55
p0 3.298e+04 ± 39.33

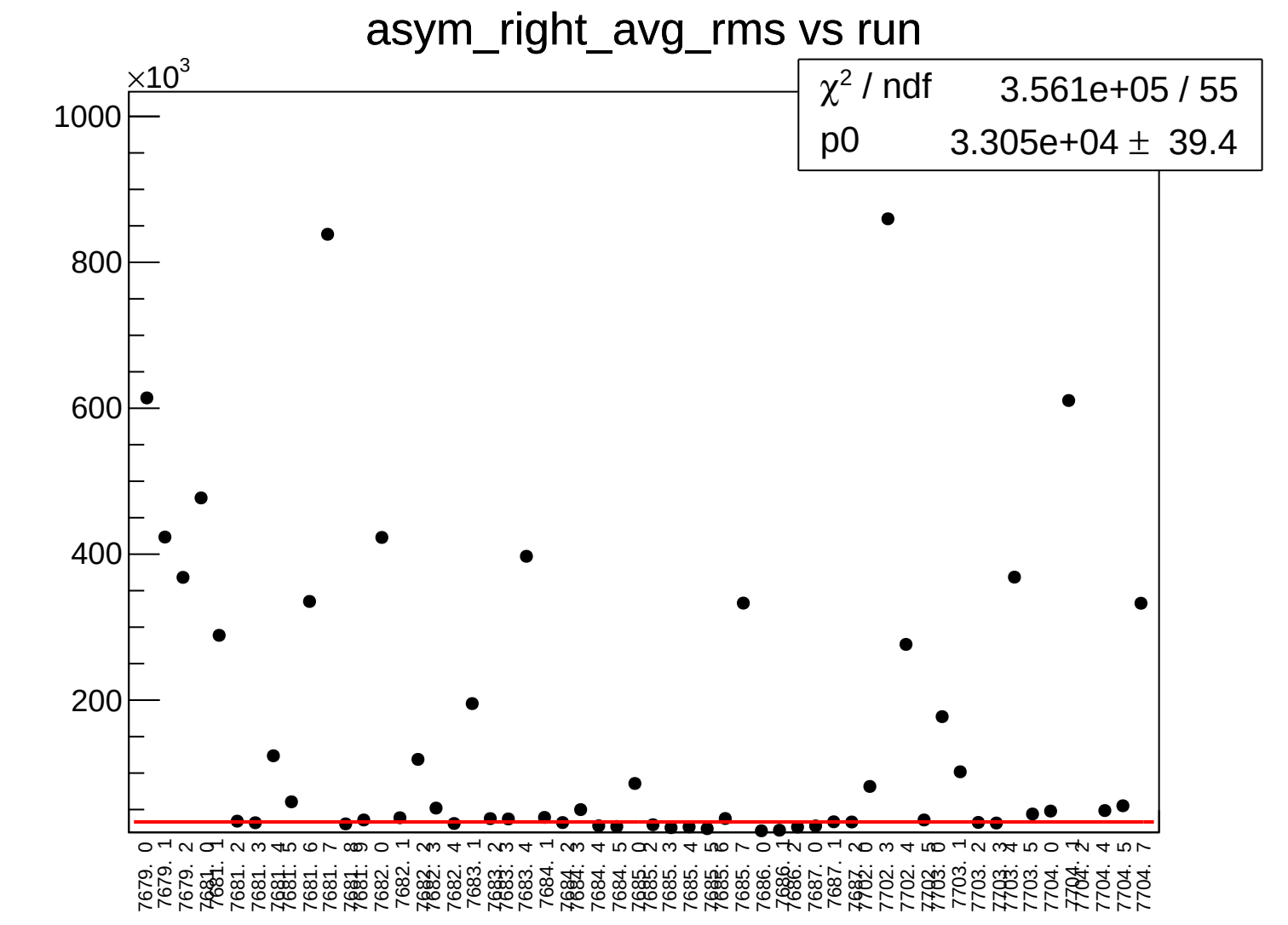

asym_right_avg_correction_mean vs run
χ² / ndf 56.09 / 67
p0 −1663 ± 2507
pull
Entries 68
Mean 210.4
Std Dev 174.3

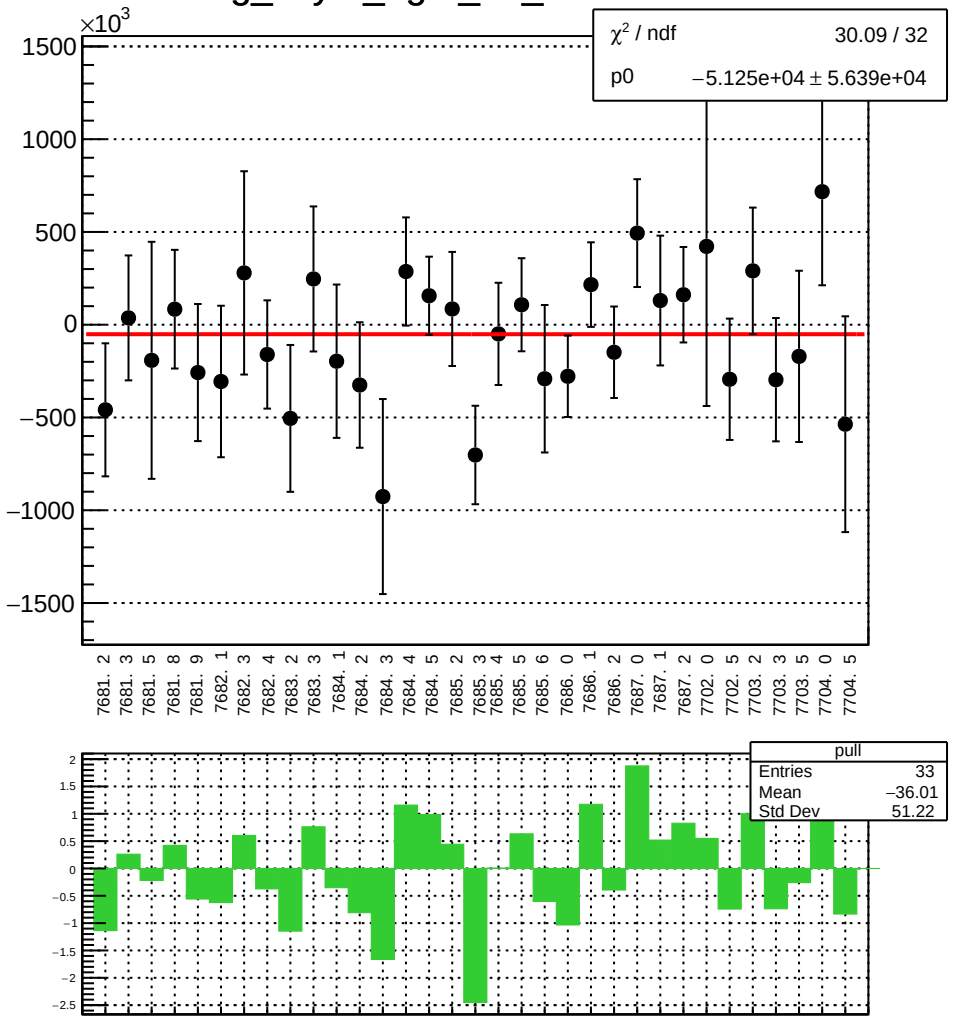

pull1D
Entries 68
Mean 0.01615
Std Dev 0.9081

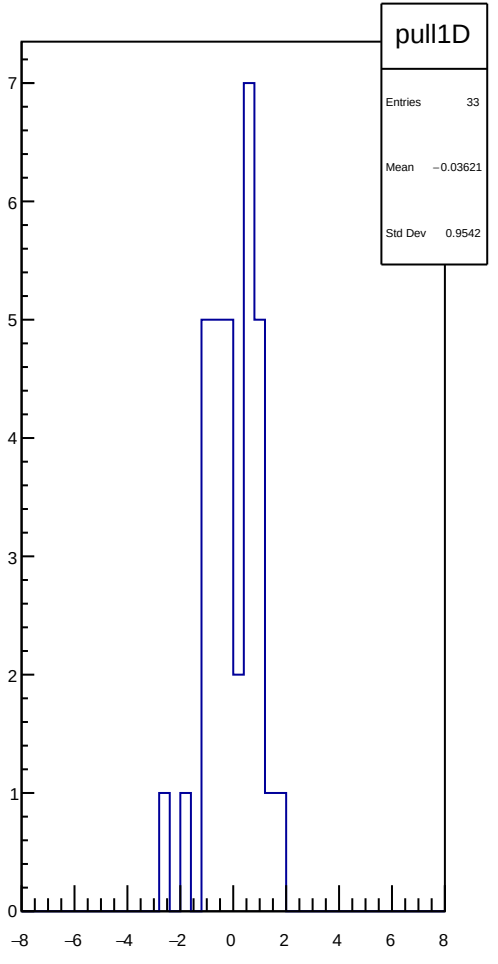

asym_right_avg_correction_rms vs run
×10^3
χ^2 / ndf 1.031e+06 / 93
p0 1540 ± 1.773
700
600
500
400
300
200
100

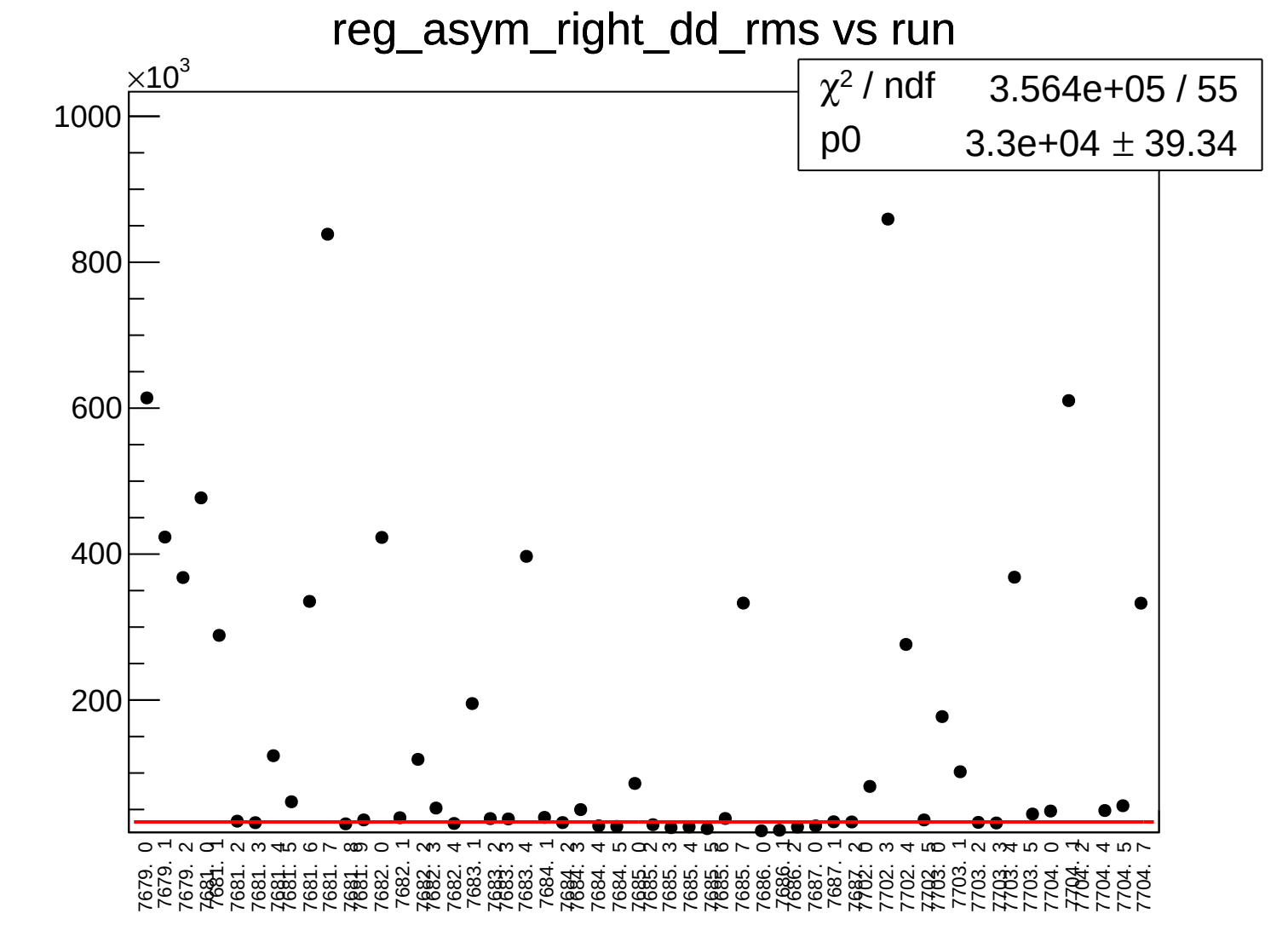

asym_right_avg_mean vs run
×10^3
χ² / ndf 29.59 / 32
p0 5.404e+04 ± 5.648e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −41.36
Std Dev 56.56
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

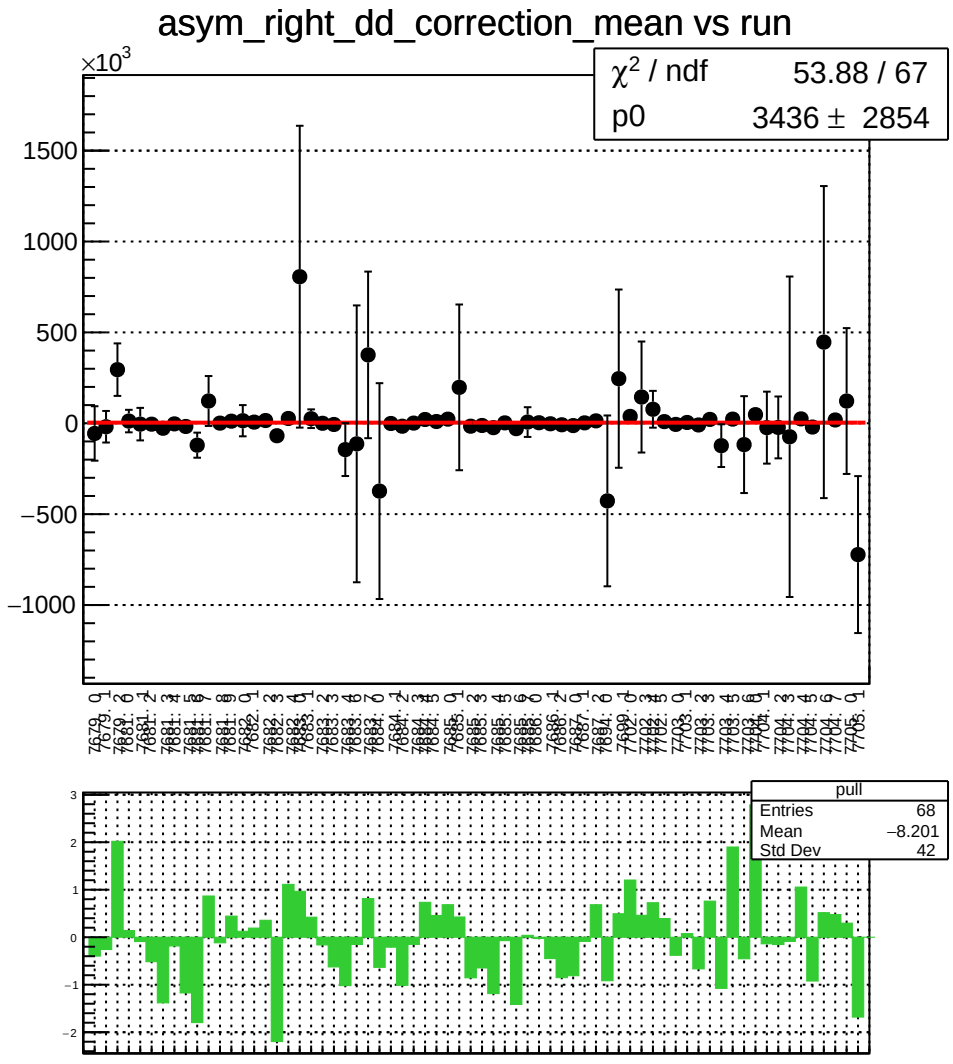

pull1D
Entries 33
Mean 0.03542
Std Dev 0.9462
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

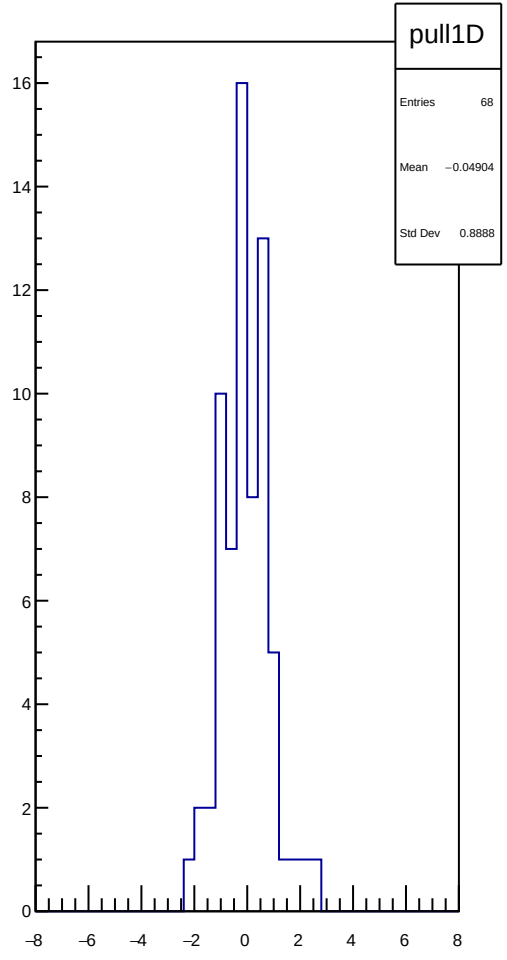

asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.561e+05 / 55
p0 3.305e+04 ± 39.4

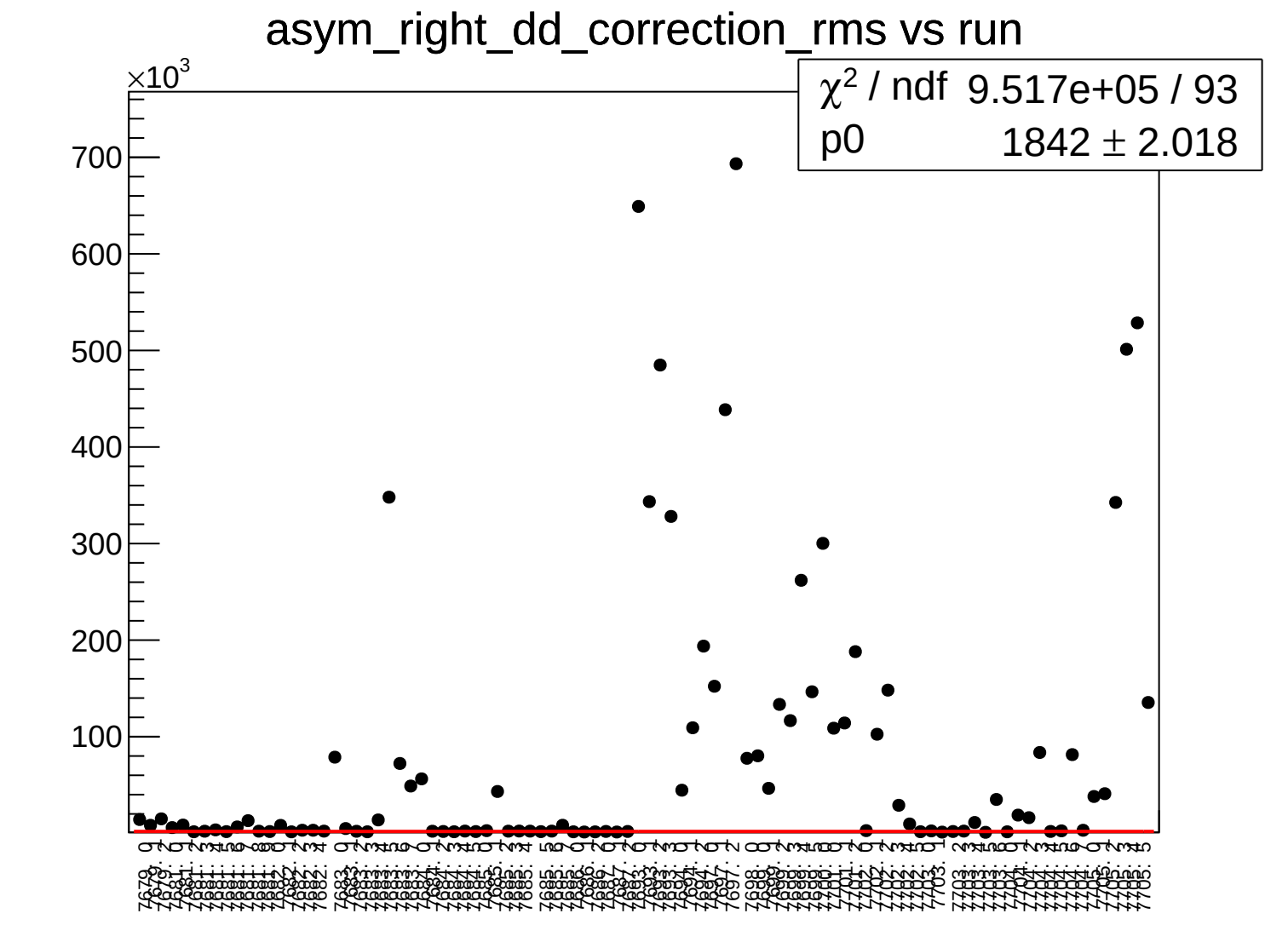

reg_asym_right_dd_mean vs run
×10^3
χ² / ndf 30.09 / 32
p0 −5.125e+04 ± 5.639e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −36.01
Std Dev 51.22
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

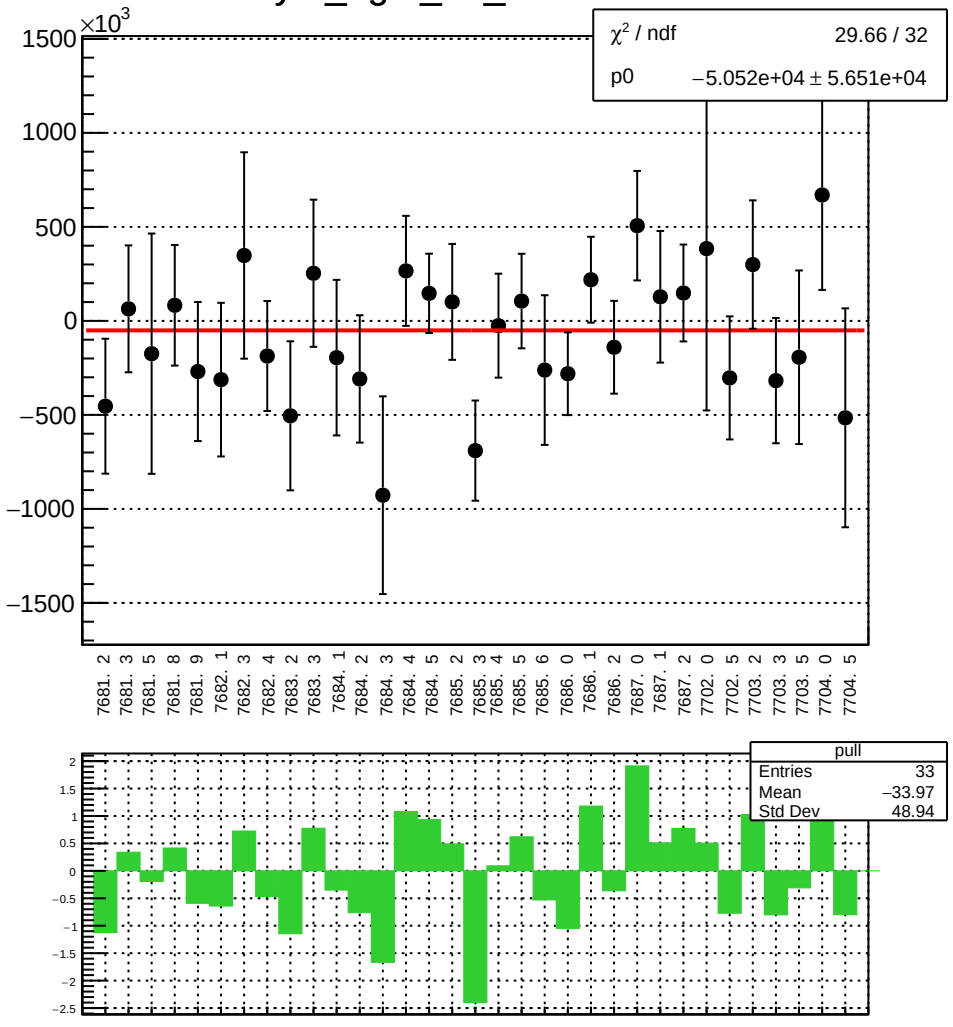

pull1D
Entries 33
Mean −0.03621
Std Dev 0.9542
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

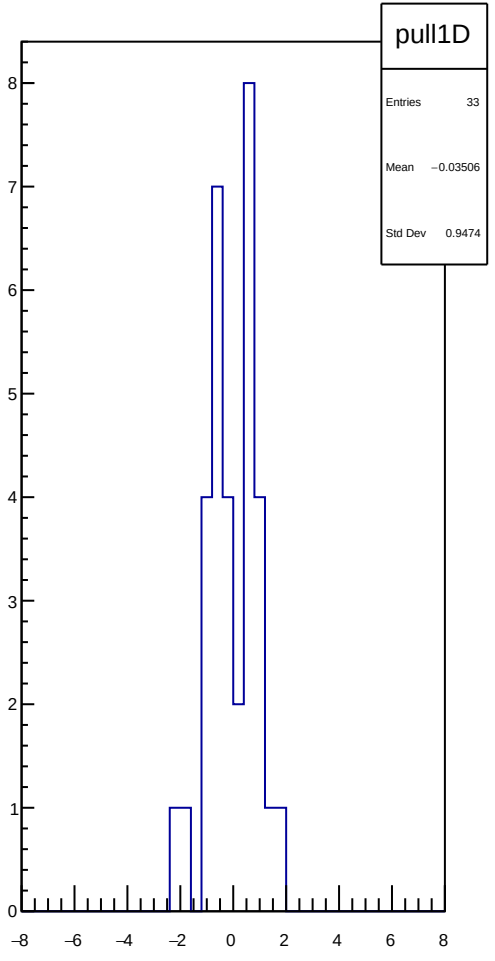

reg_asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.564e+05 / 55
p0 3.3e+04 ± 39.34

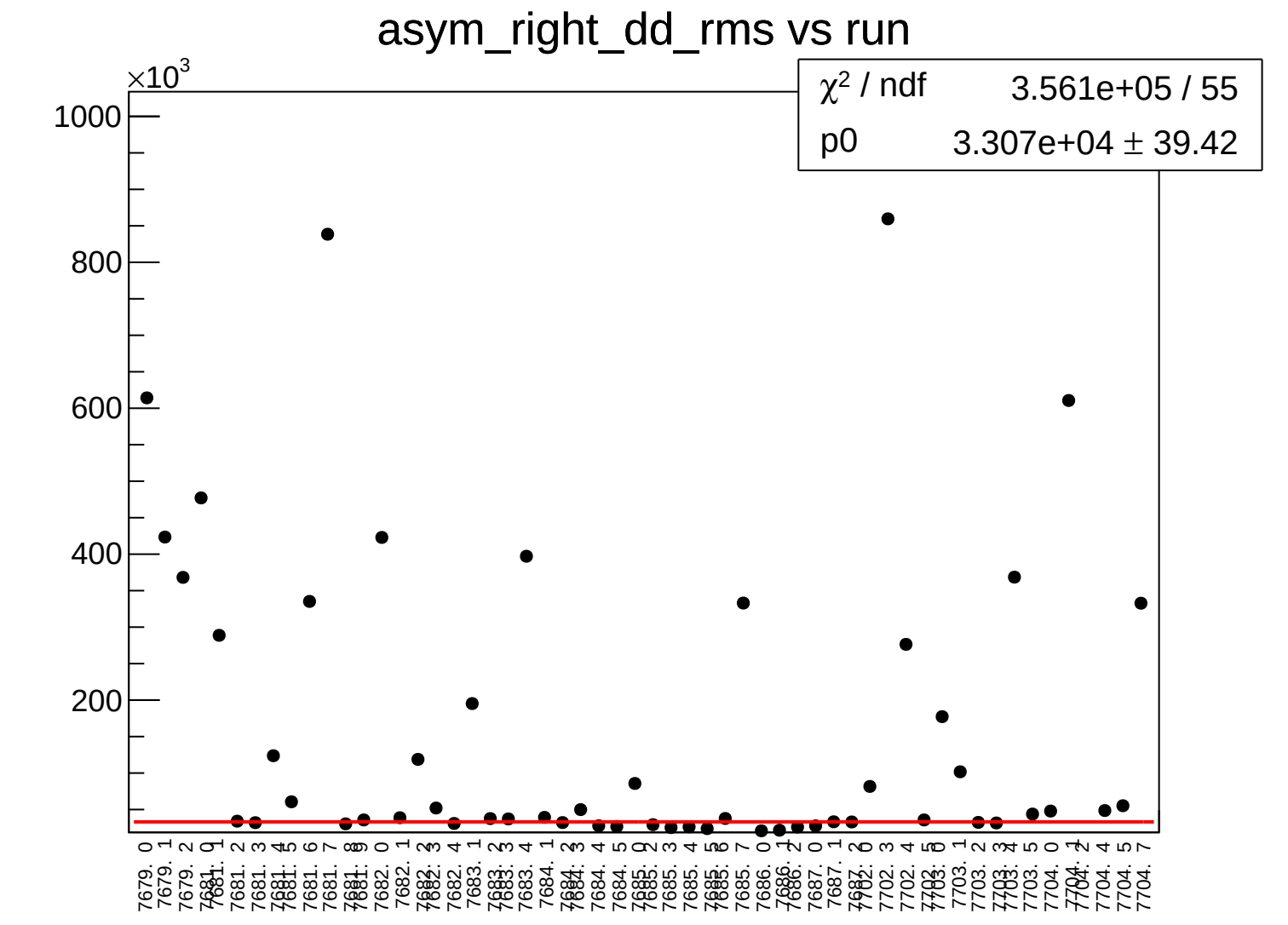

asym_right_dd_correction_mean vs run
χ² / ndf 53.88 / 67
p0 3436 ± 2854
×10³
1500
1000
500
0
−500
−1000
pull
Entries 68
Mean −8.201
Std Dev 42
3
2
1
0
−1
−2

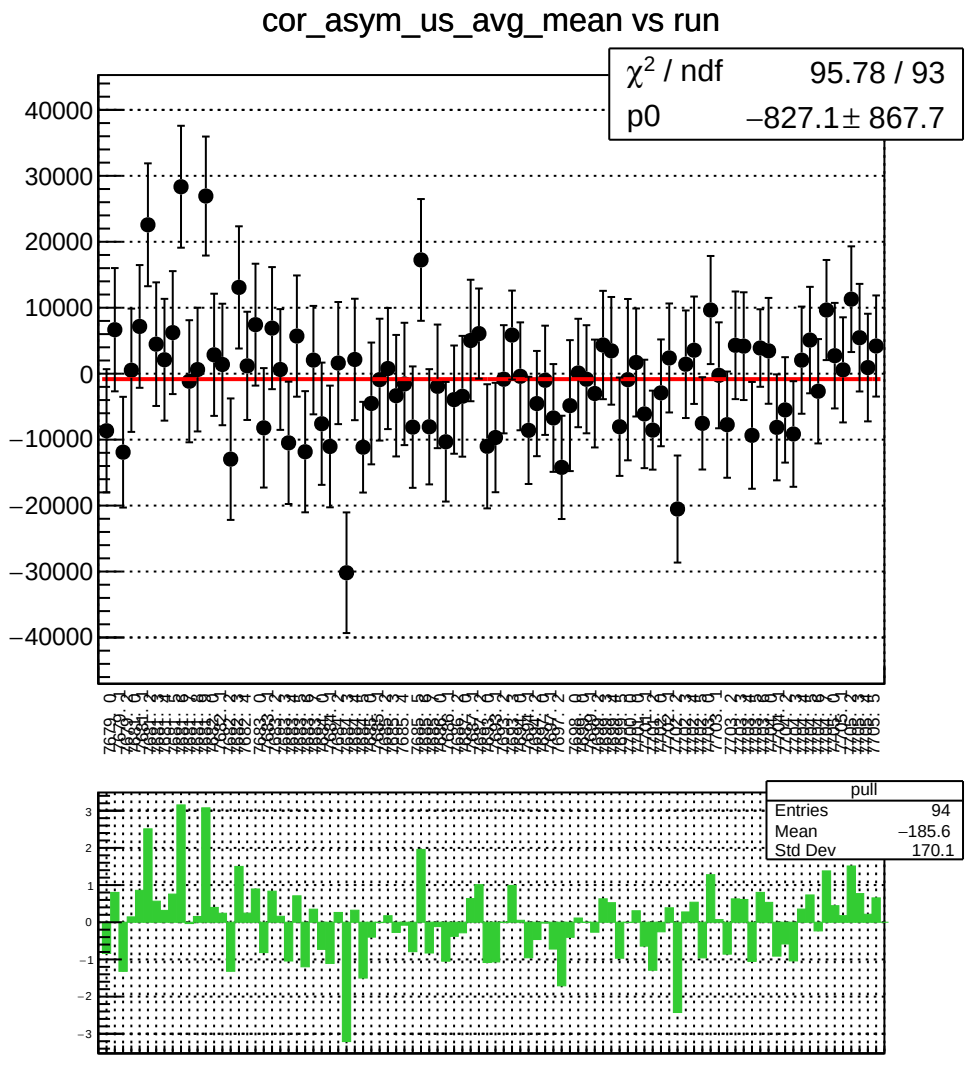

pull1D
Entries 68
Mean −0.04904
Std Dev 0.8888
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

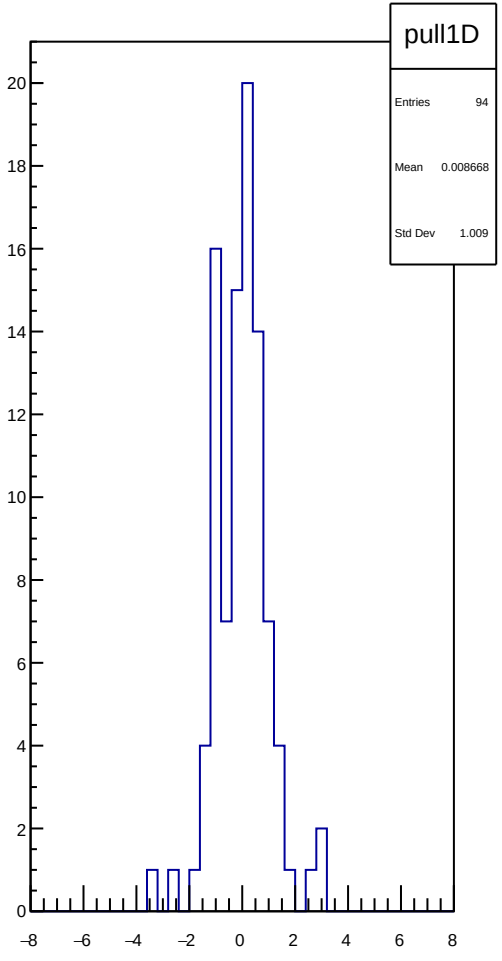

asym_right_dd_correction_rms vs run
×10^3
700
600
500
400
300
200
100
χ² / ndf 9.517e+05 / 93
p0 1842 ± 2.018

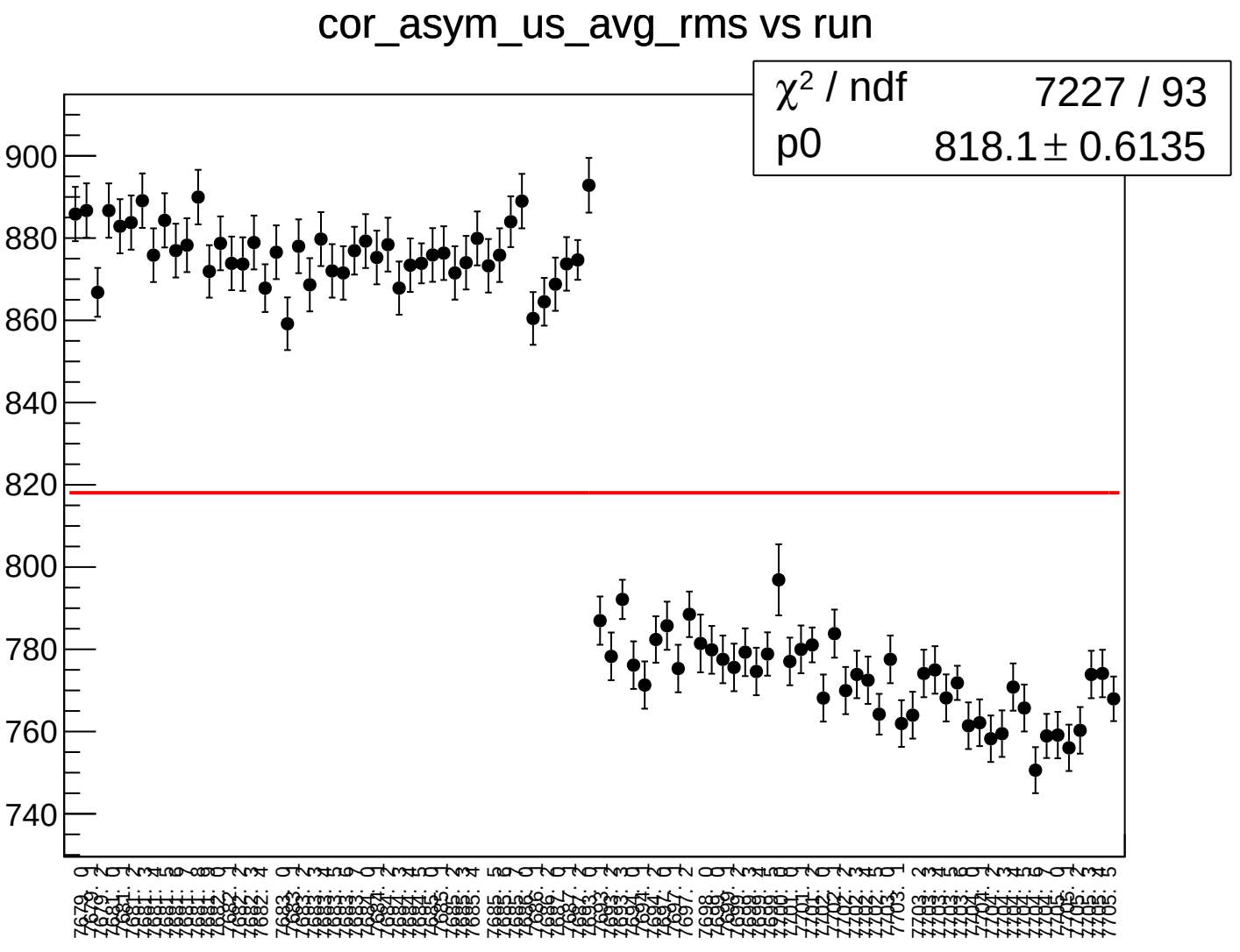

asym_right_dd_mean vs run
×10^3
χ² / ndf 29.66 / 32
p0 −5.052e+04 ± 5.651e+04
1500
1000
500
0
−500
−1000
−1500
7681. 2
7681. 3
7681. 5
7681. 8
7681. 9
7682. 1
7682. 3
7682. 4
7683. 2
7683. 3
7684. 1
7684. 2
7684. 3
7684. 4
7684. 5
7685. 2
7685. 3
7685. 4
7685. 5
7685. 6
7686. 0
7686. 1
7686. 2
7687. 0
7687. 1
7687. 2
7702. 0
7702. 5
7703. 2
7703. 3
7703. 5
7704. 0
7704. 5
pull
Entries 33
Mean −33.97
Std Dev 48.94
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

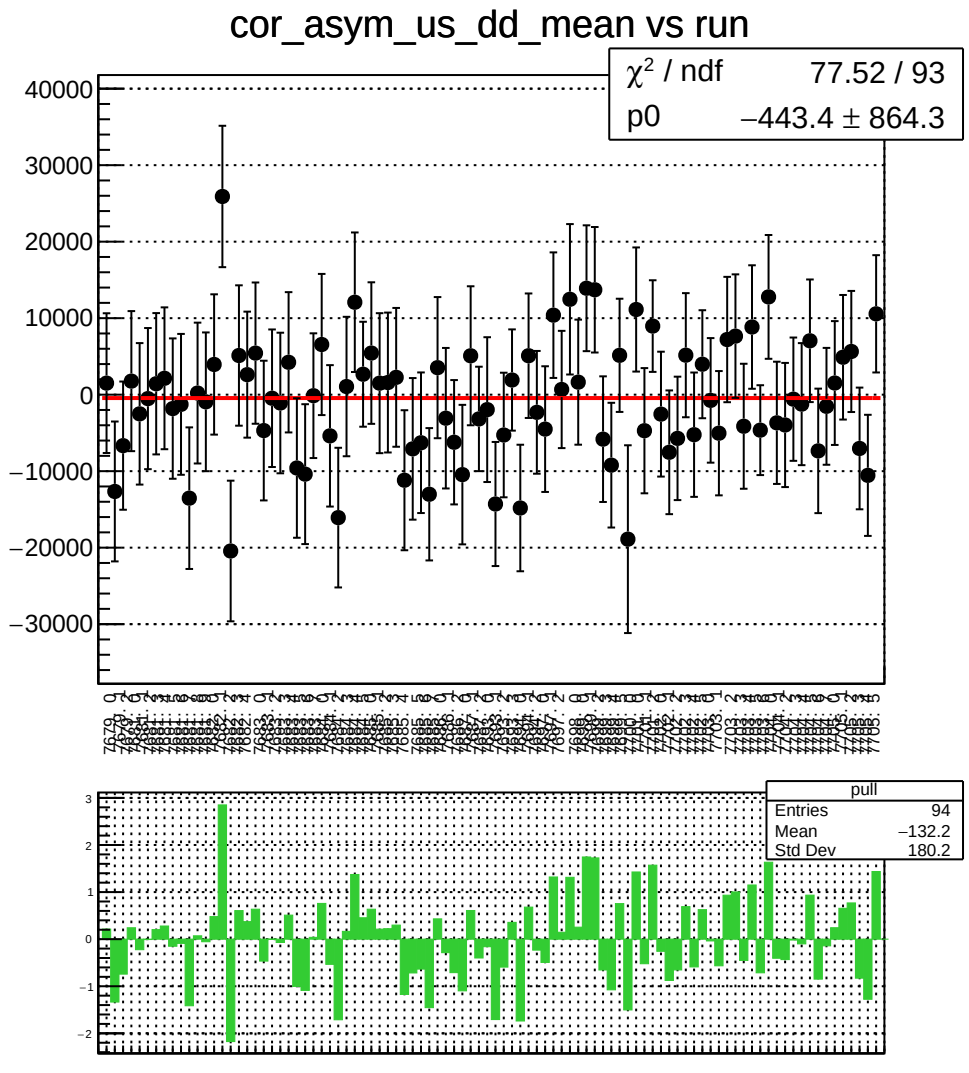

pull1D
Entries 33
Mean −0.03506
Std Dev 0.9474
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

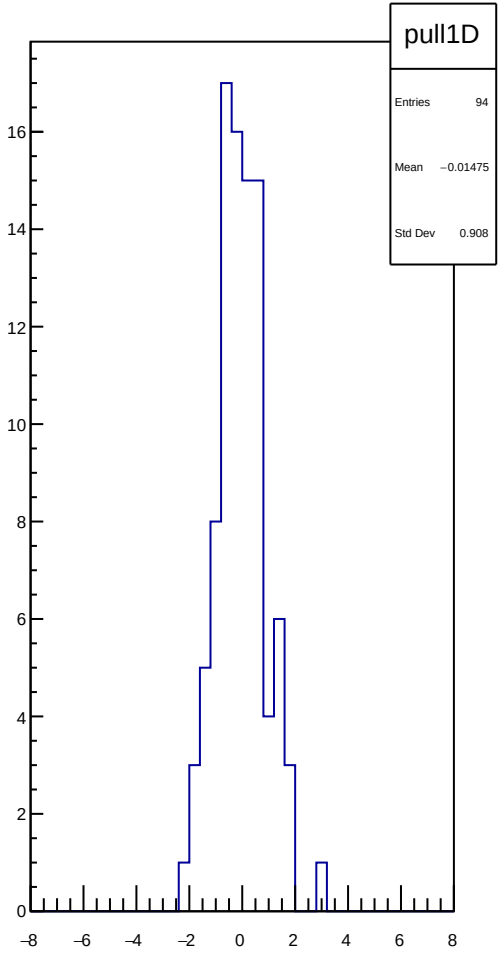

asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 3.561e+05 / 55
p0 3.307e+04 ± 39.42

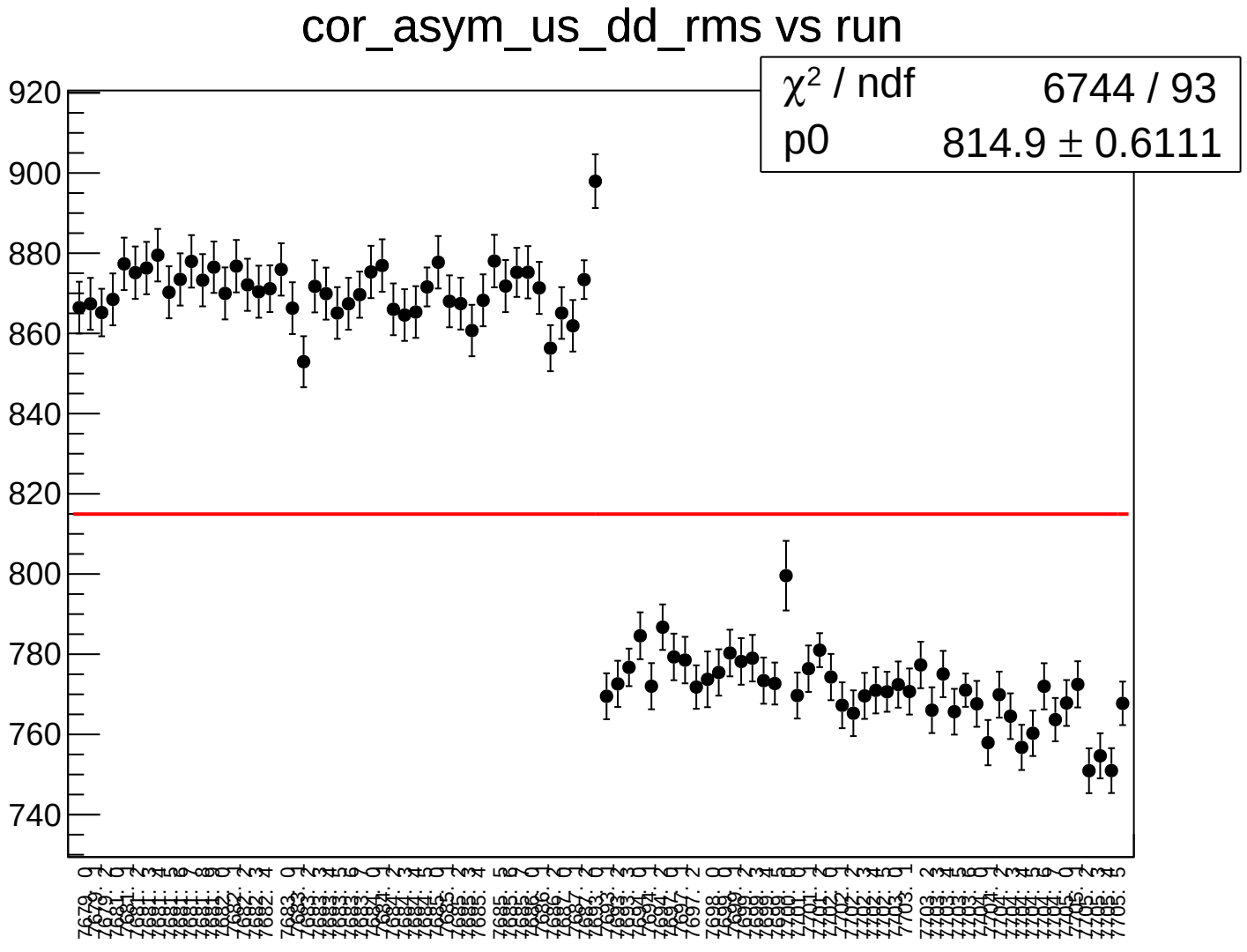

cor_asym_us_avg_mean vs run
χ² / ndf 95.78 / 93
p0 –827.1± 867.7
pull
Entries 94
Mean –185.6
Std Dev 170.1

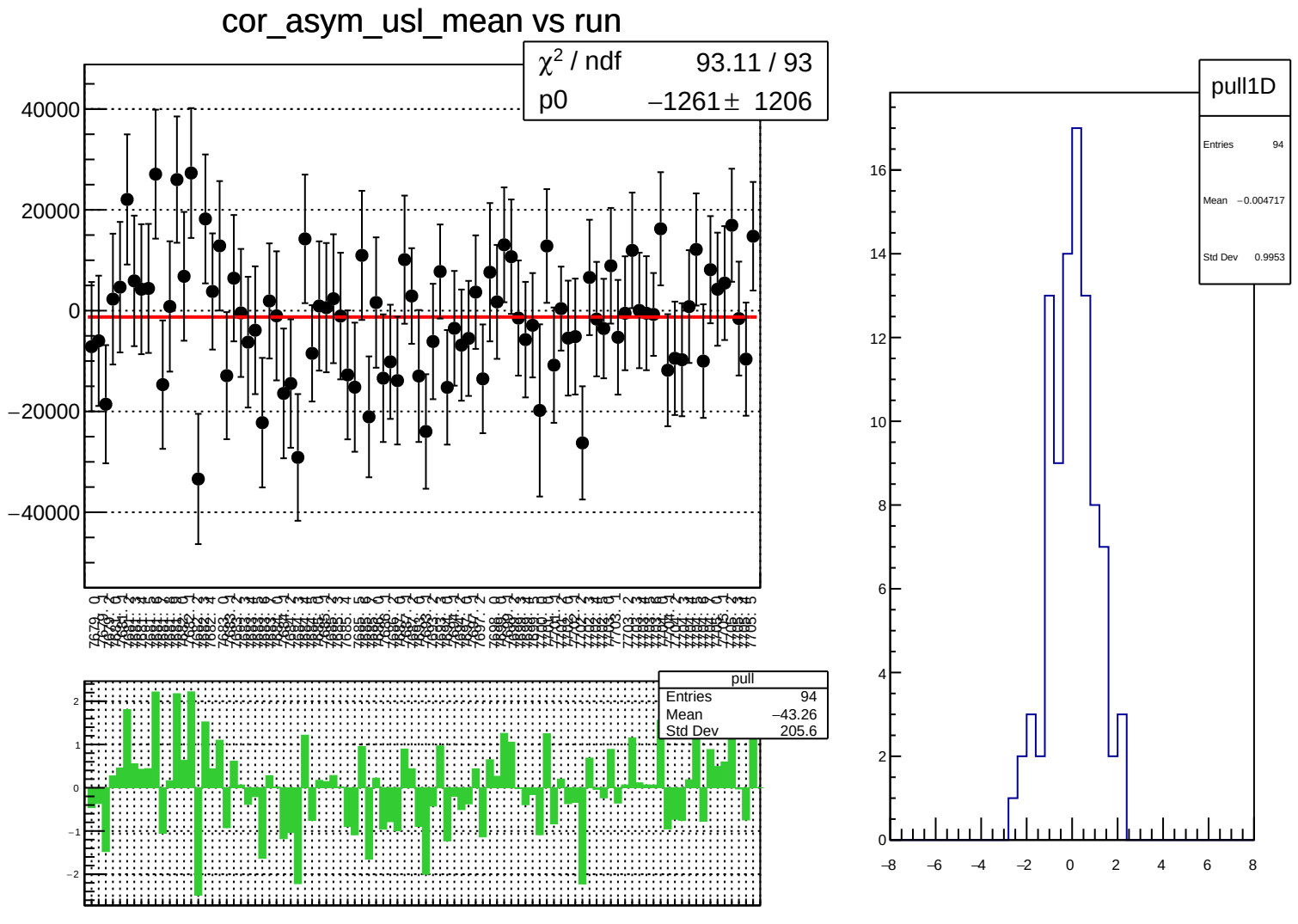

pull1D
Entries 94
Mean 0.008668
Std Dev 1.009

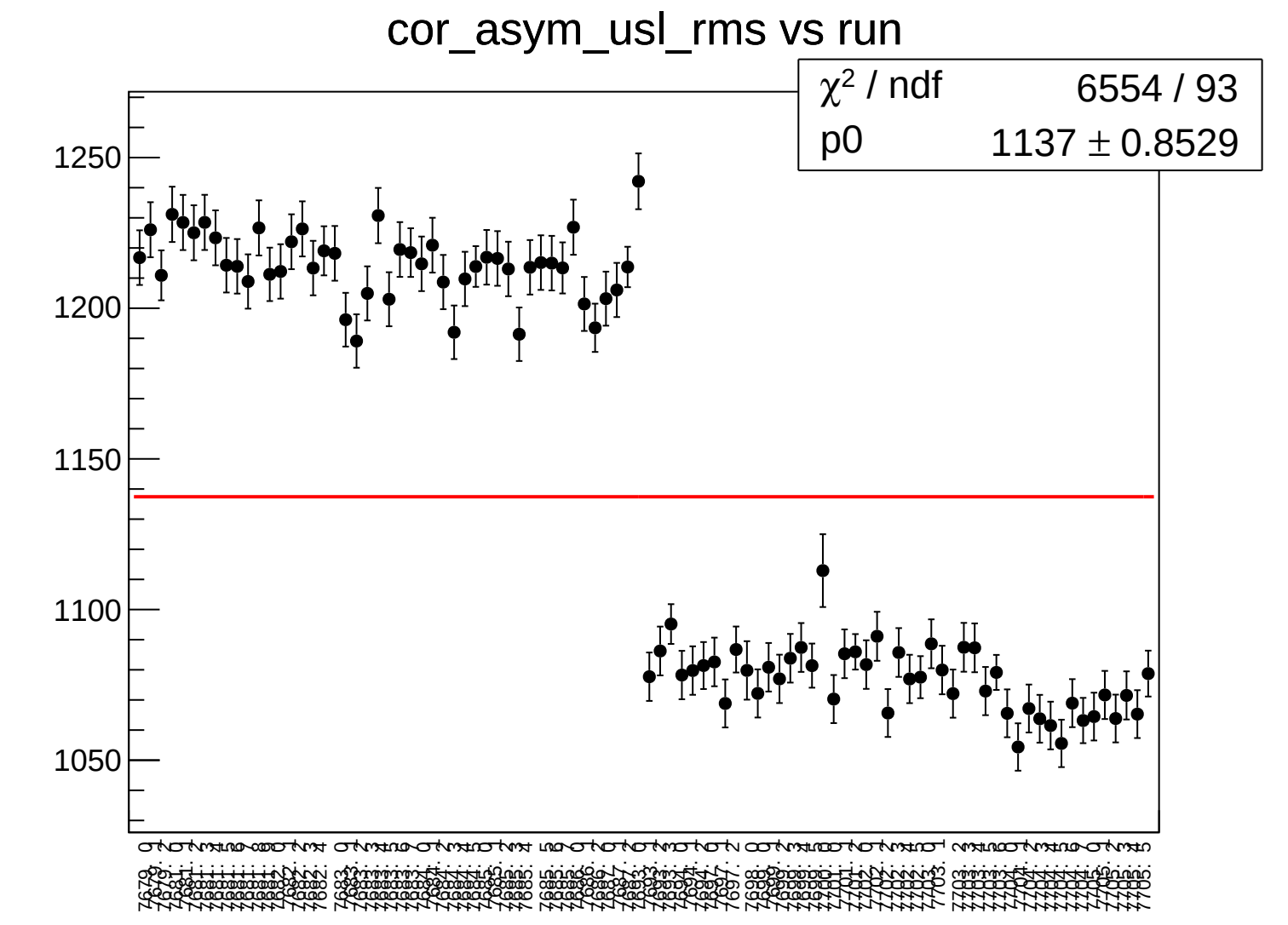

cor_asym_us_avg_rms vs run
χ^2 / ndf 7227 / 93
p0 818.1 ± 0.6135
900
880
860
840
820
800
780
760
740

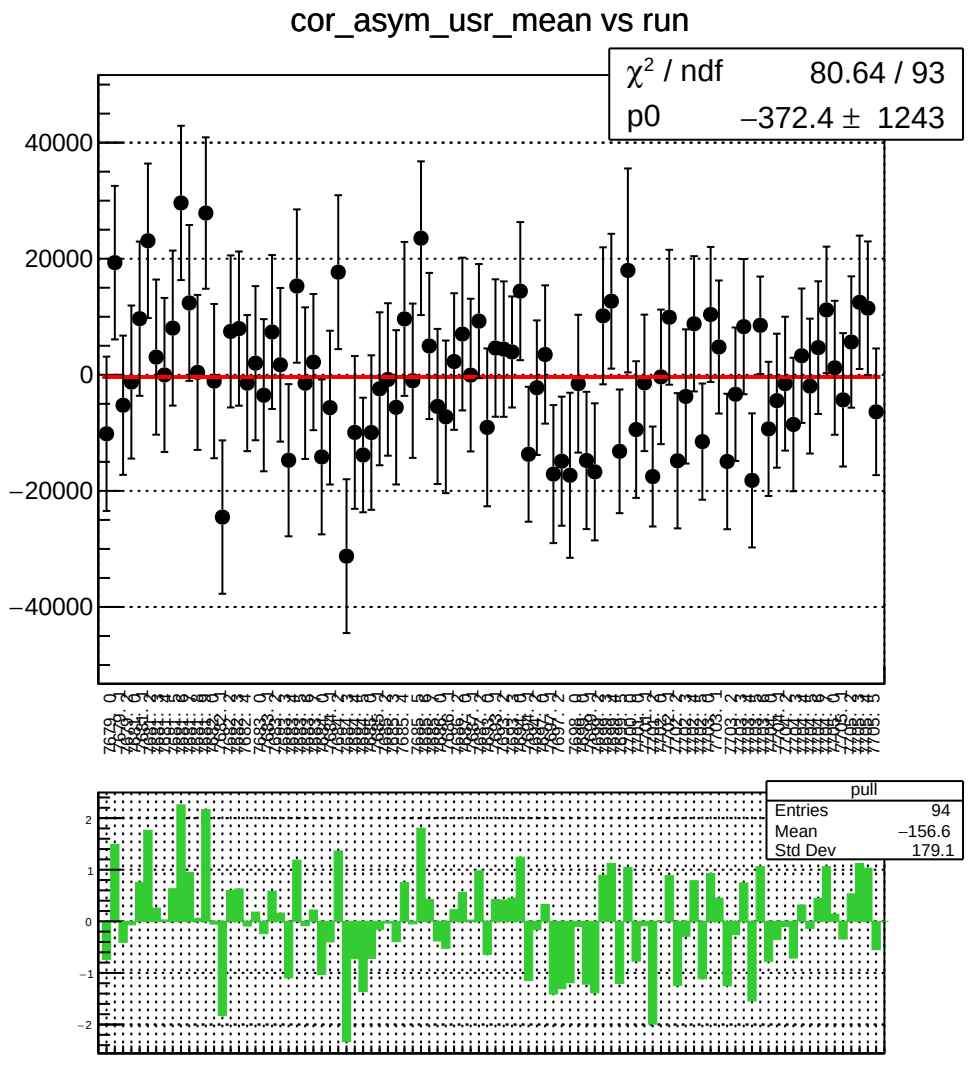

cor_asym_us_dd_mean vs run
χ² / ndf 77.52 / 93
p0 −443.4 ± 864.3
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −132.2
Std Dev 180.2
3
2
1
0
−1
−2

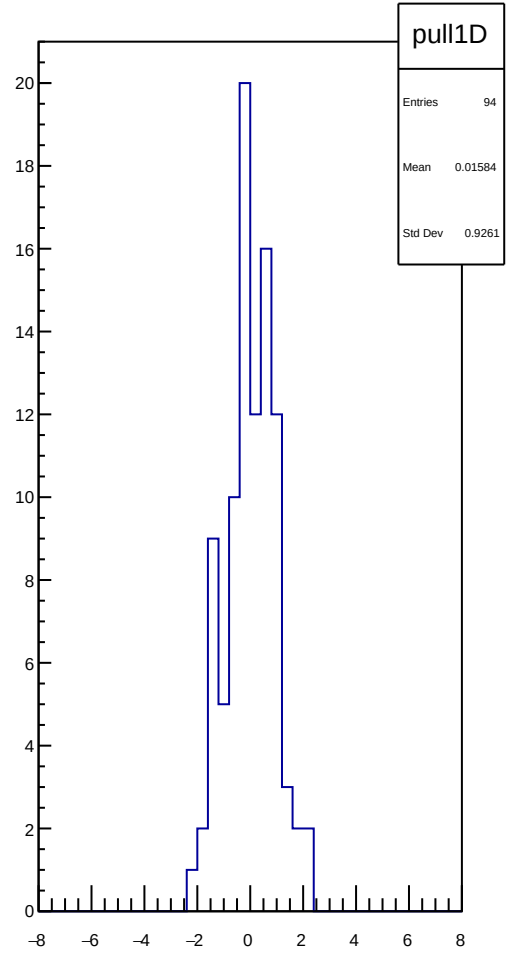

pull1D
Entries 94
Mean −0.01475
Std Dev 0.908
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

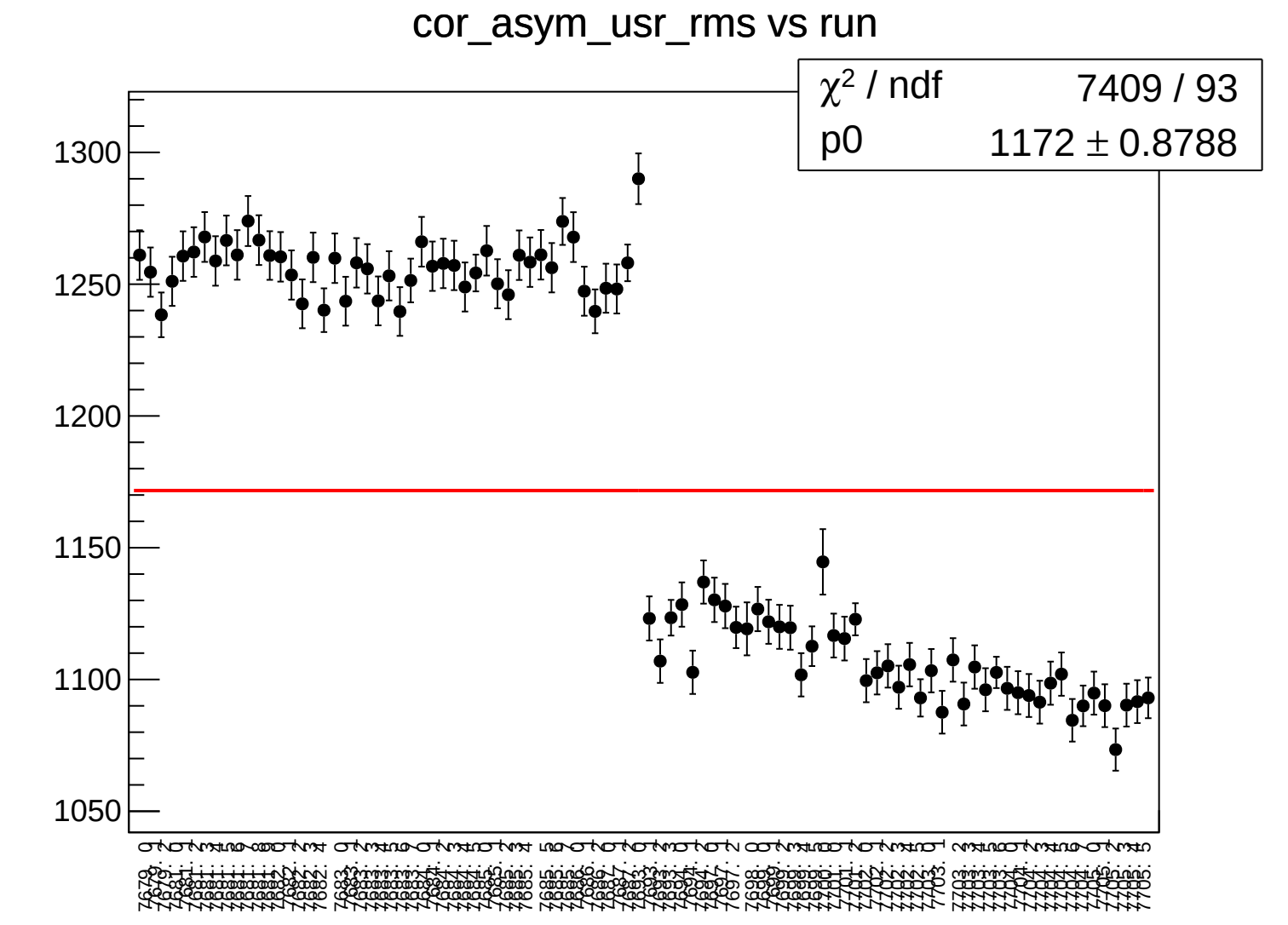

cor_asym_us_dd_rms vs run
χ² / ndf 6744 / 93
p0 814.9 ± 0.6111
920
900
880
860
840
820
800
780
760
740

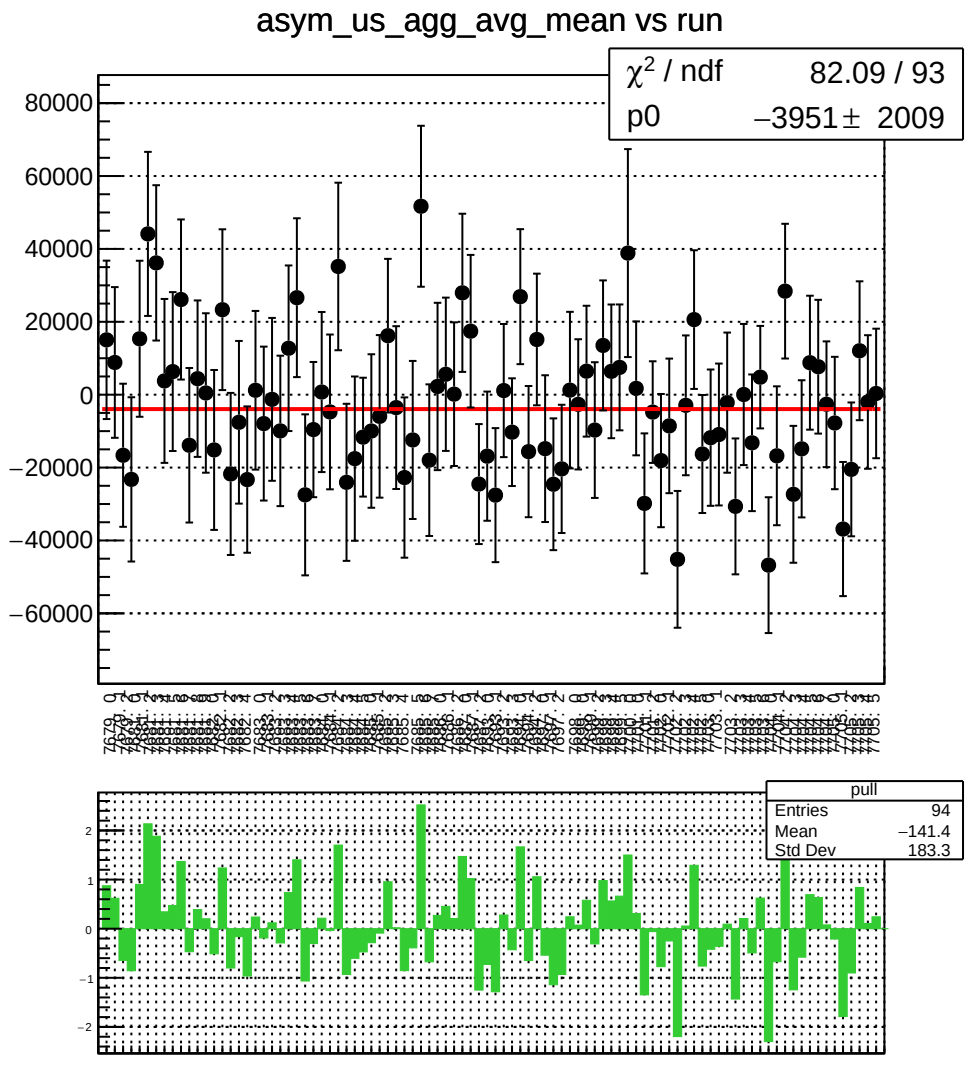

cor_asym_usl_mean vs run
χ² / ndf 93.11 / 93
p0 −1261 ± 1206
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −43.26
Std Dev 205.6
2
1
0
−1
−2
pull1D
Entries 94
Mean −0.004717
Std Dev 0.9953
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

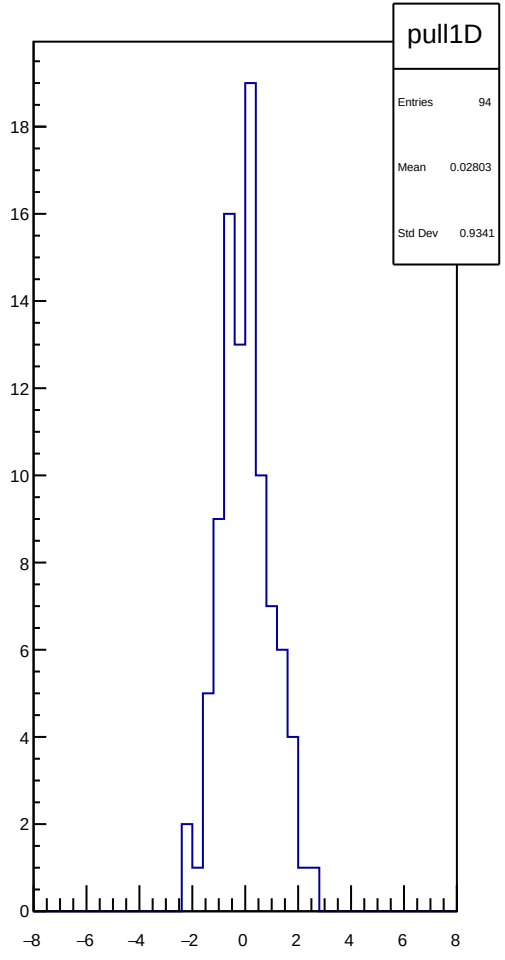

cor_asym_usl_rms vs run
χ² / ndf 6554 / 93
p0 1137 ± 0.8529
1250
1200
1150
1100
1050

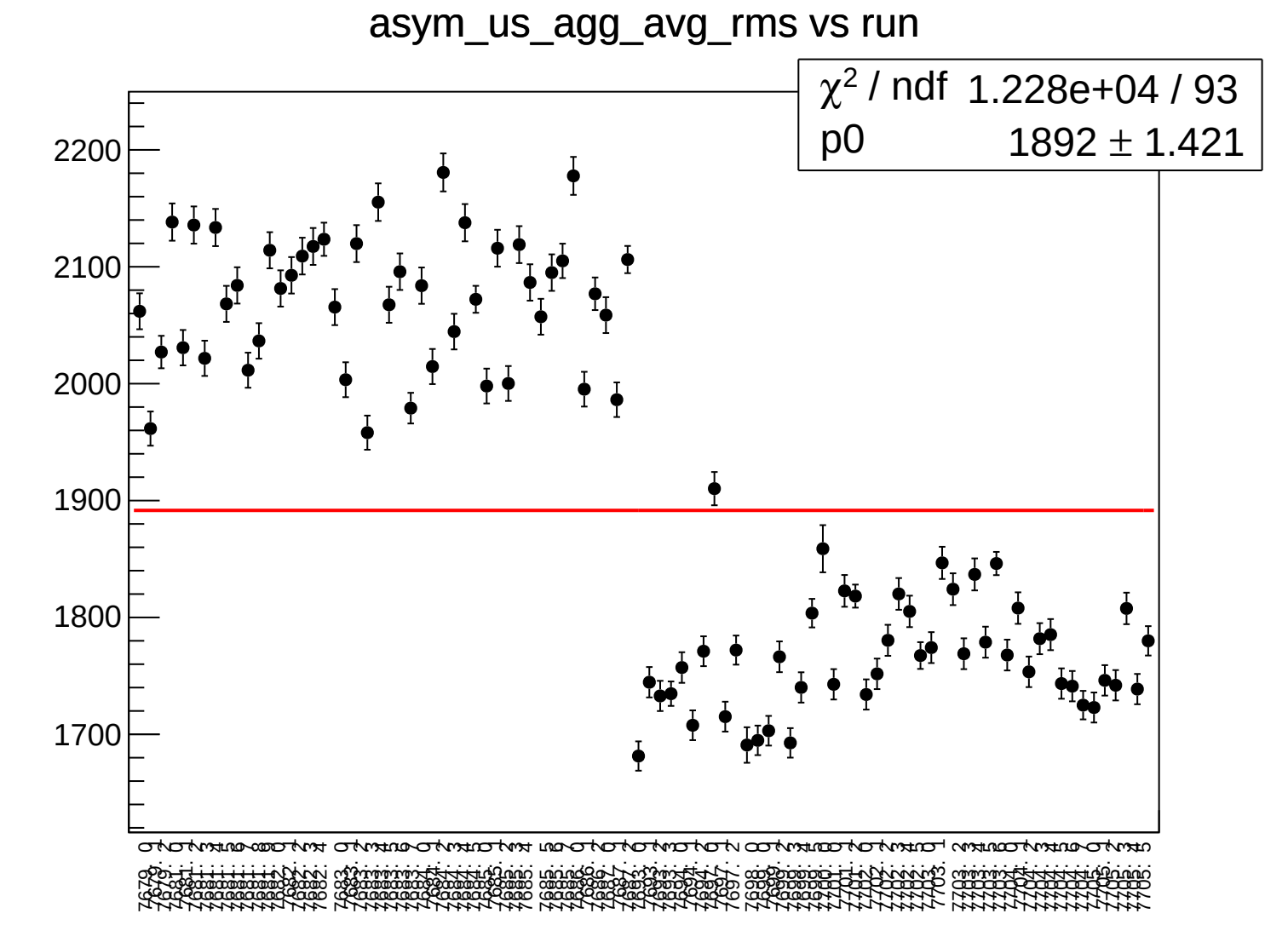

cor_asym_usr_mean vs run
χ² / ndf 80.64 / 93
p0 −372.4 ± 1243
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −156.6
Std Dev 179.1
2
1
0
−1
−2

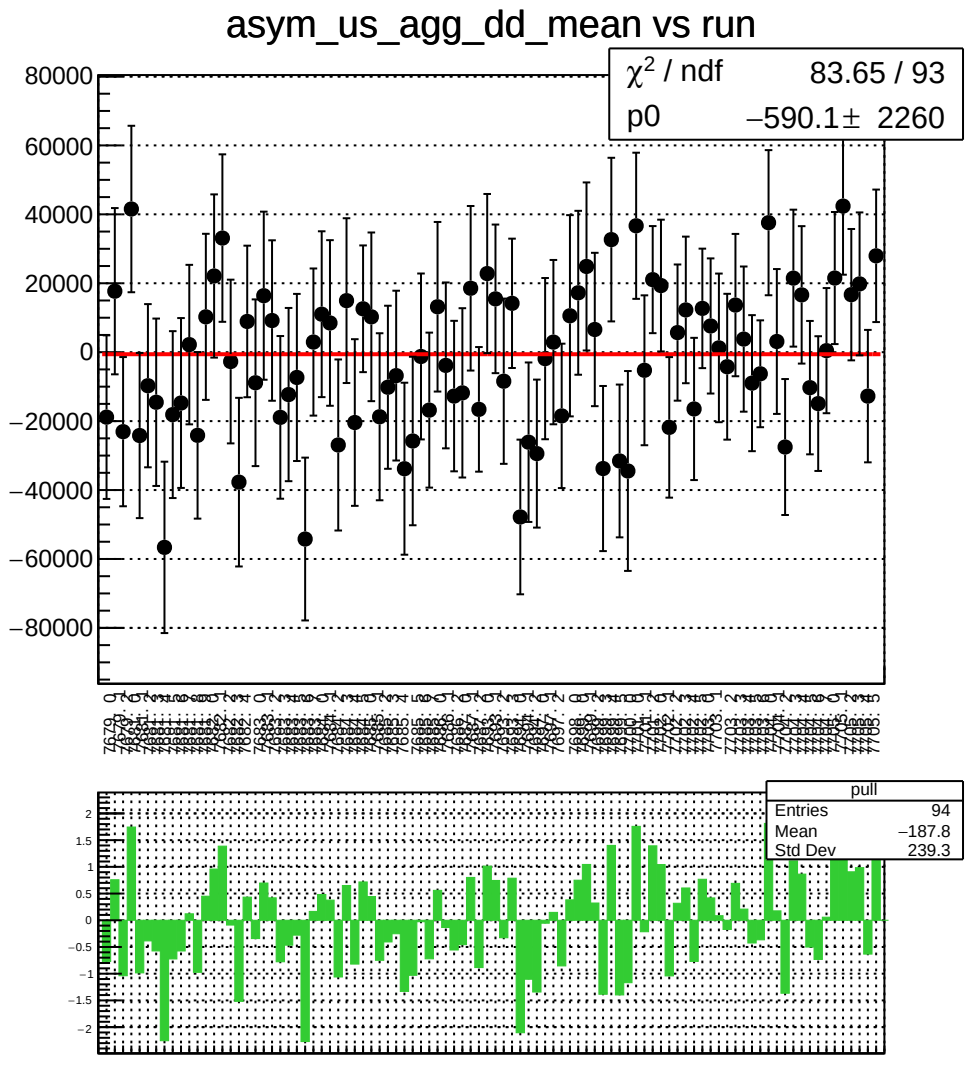

pull1D
Entries 94
Mean 0.01584
Std Dev 0.9261
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

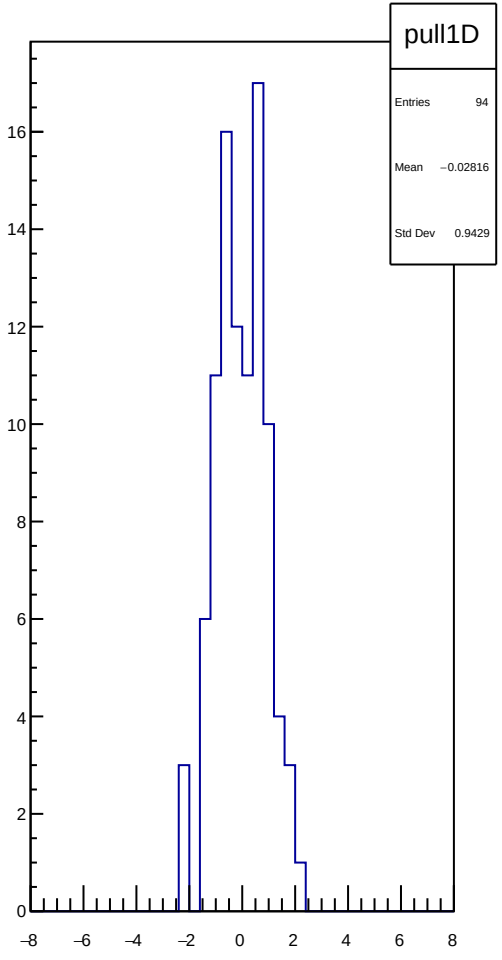

cor_asym_usr_rms vs run
χ² / ndf 7409 / 93
p0 1172 ± 0.8788
1300
1250
1200
1150
1100
1050

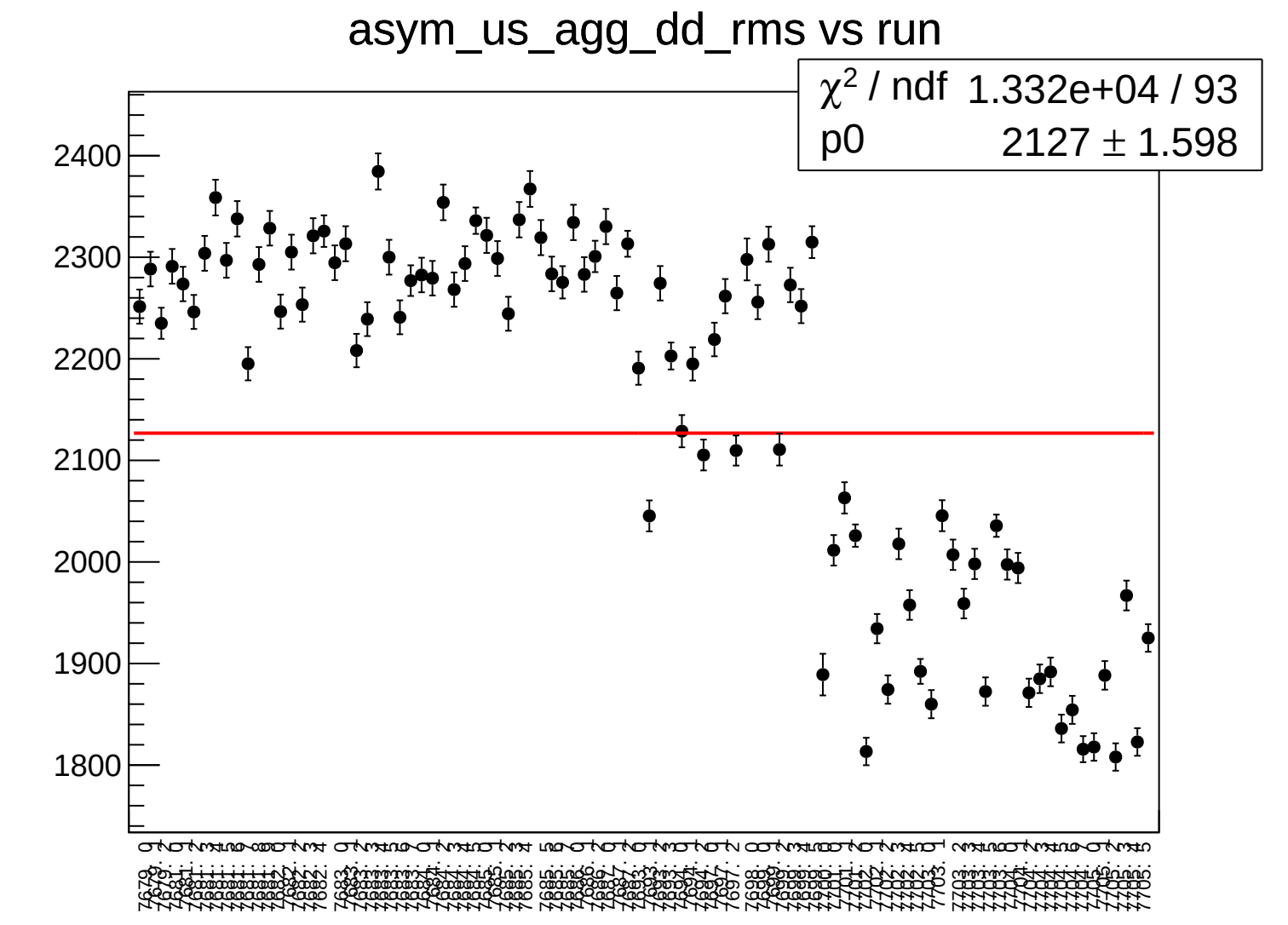

asym_us_agg_avg_mean vs run
χ² / ndf 82.09 / 93
p0 −3951 ± 2009
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −141.4
Std Dev 183.3
2
1
0
−1
−2

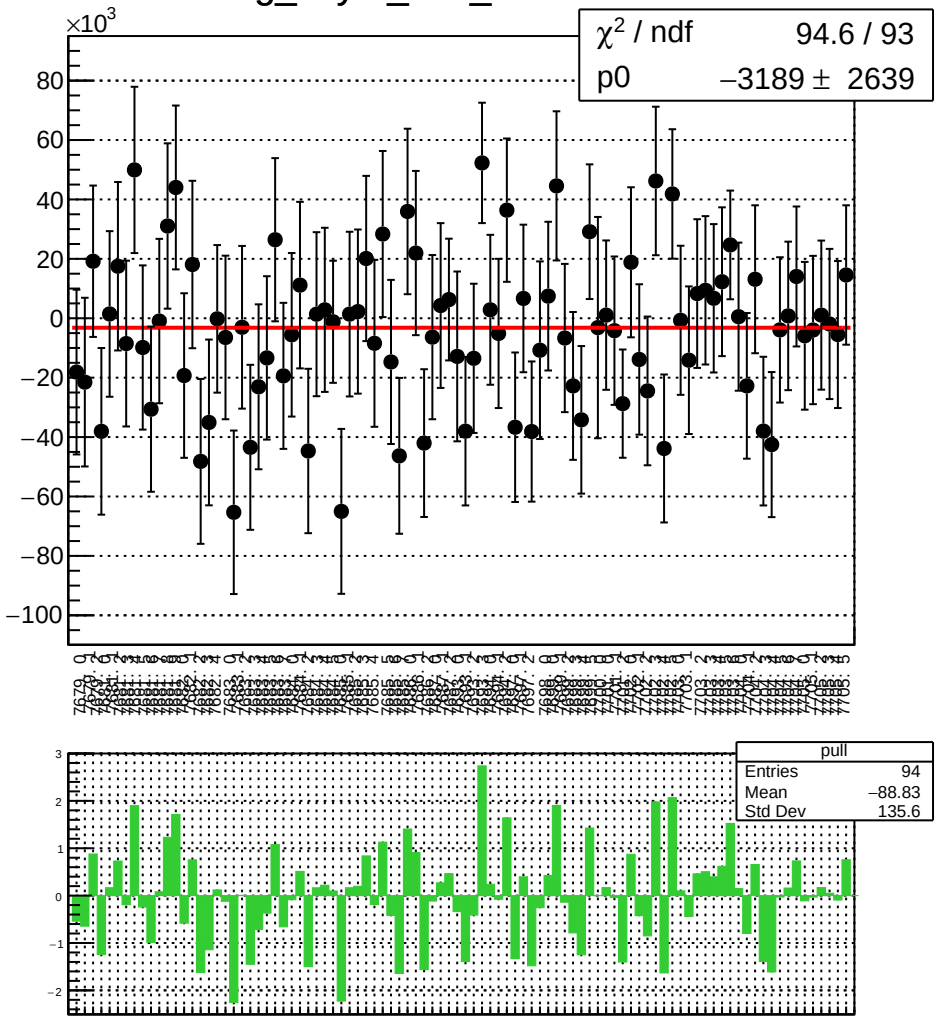

pull1D
Entries 94
Mean 0.02803
Std Dev 0.9341
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

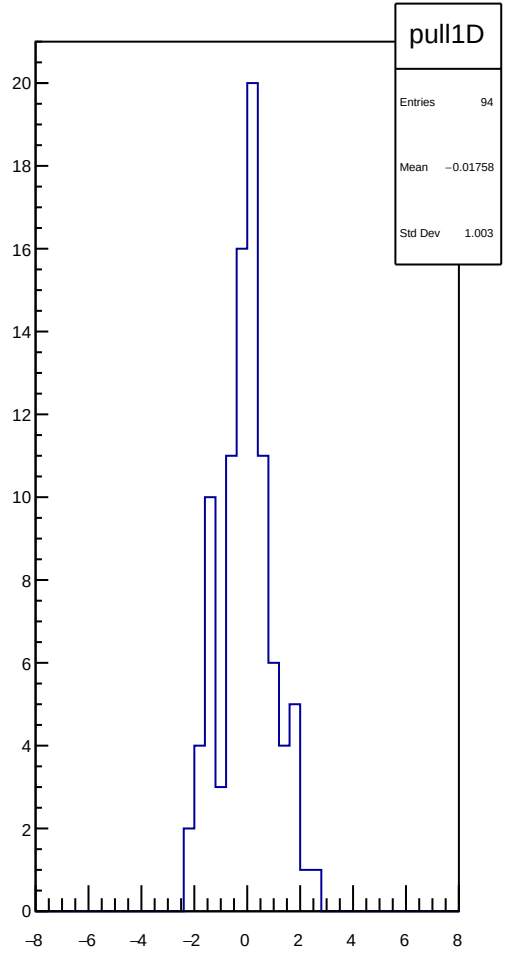

asym_us_agg_avg_rms vs run
χ² / ndf 1.228e+04 / 93
p0 1892 ± 1.421
2200
2100
2000
1900
1800
1700

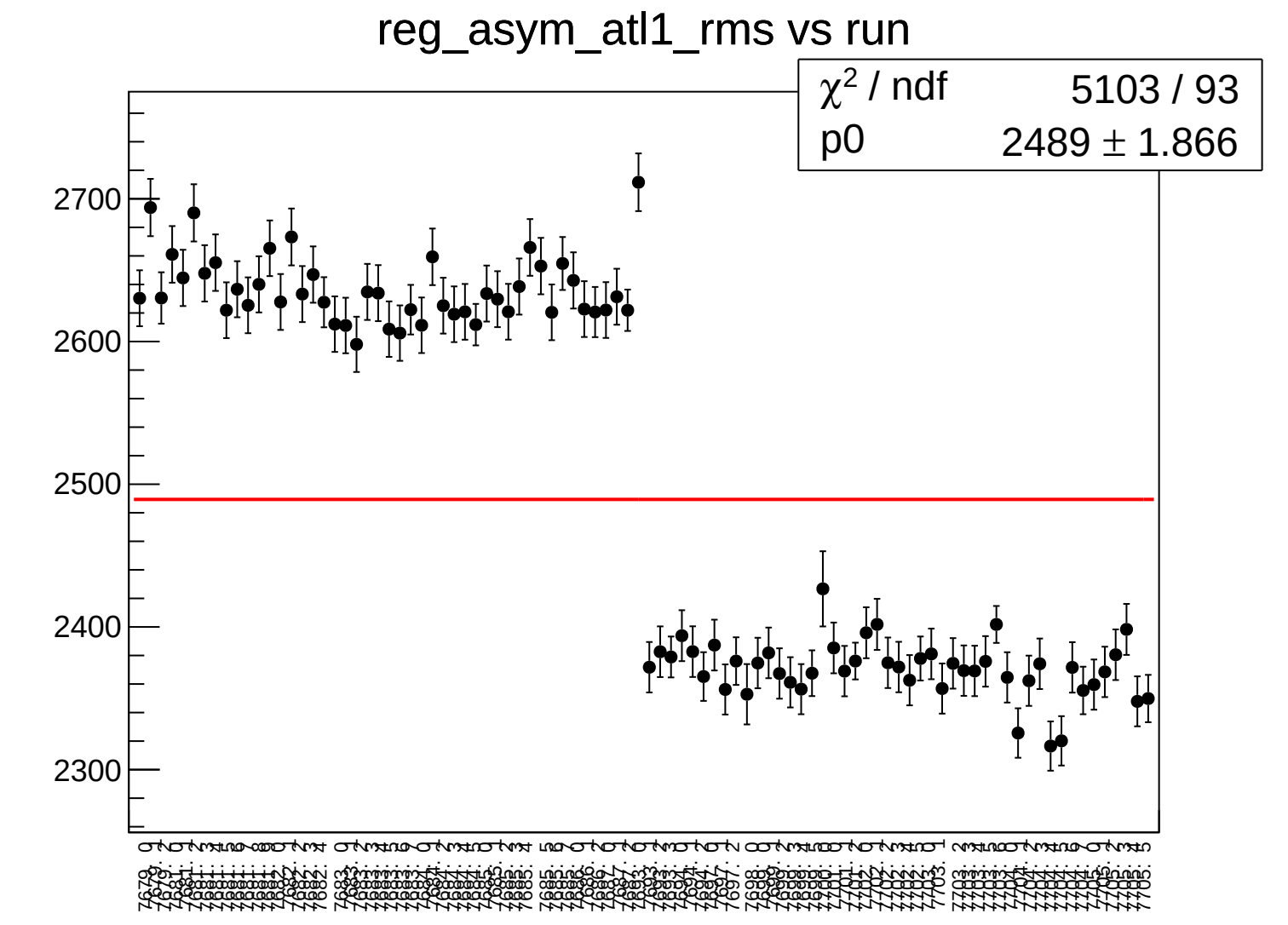

asym_us_agg_dd_mean vs run
χ² / ndf 83.65 / 93
p0 −590.1± 2260
pull
Entries 94
Mean −187.8
Std Dev 239.3

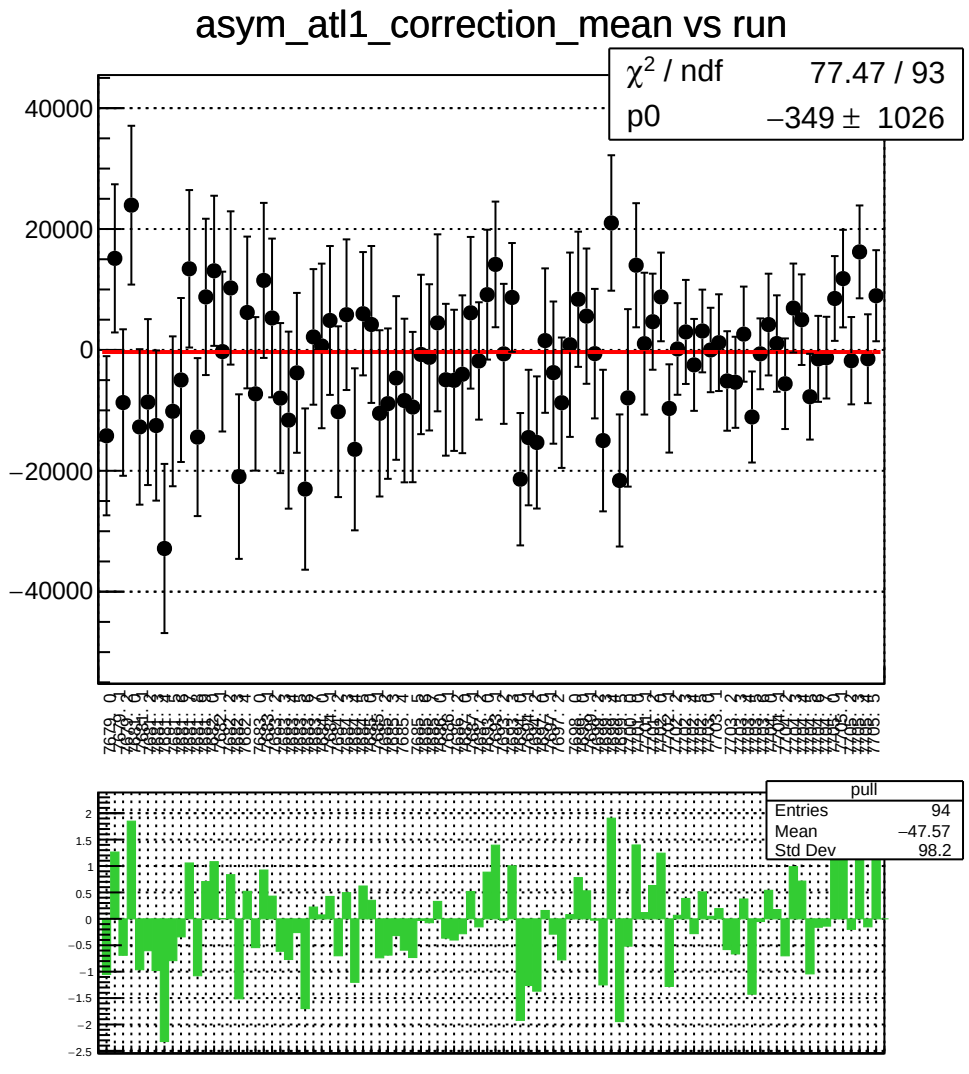

pull1D
Entries 94
Mean −0.02816
Std Dev 0.9429

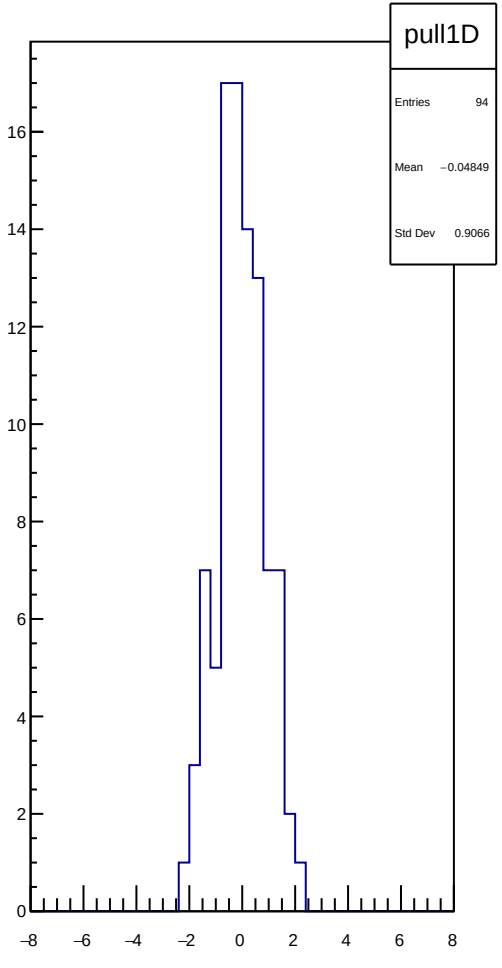

asym_us_agg_dd_rms vs run
χ² / ndf 1.332e+04 / 93
p0 2127 ± 1.598
2400
2300
2200
2100
2000
1900
1800

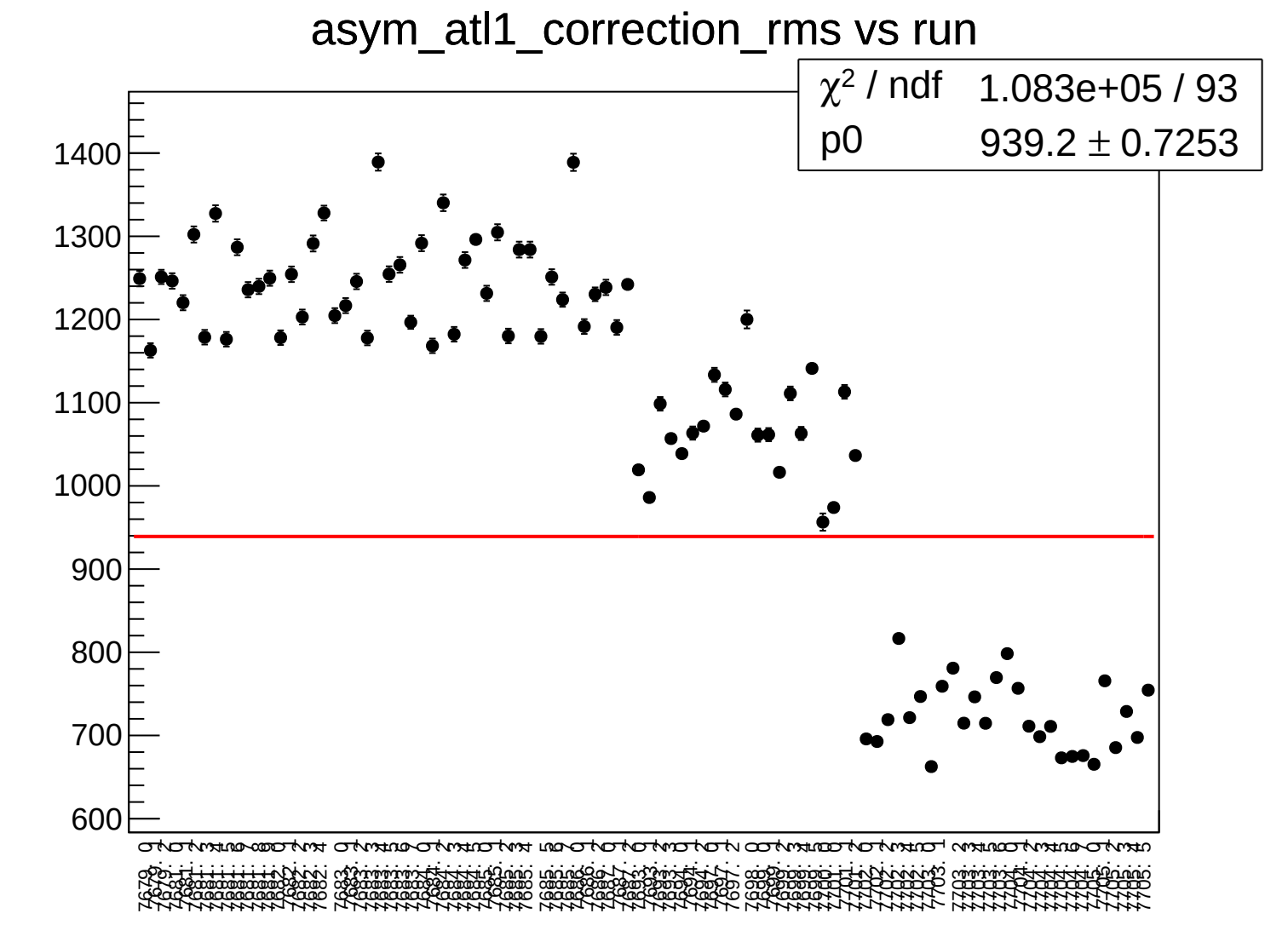

reg_asym_atl1_mean vs run
×10^3
χ² / ndf 94.6 / 93
p0 −3189 ± 2639
pull
Entries 94
Mean −88.83
Std Dev 135.6

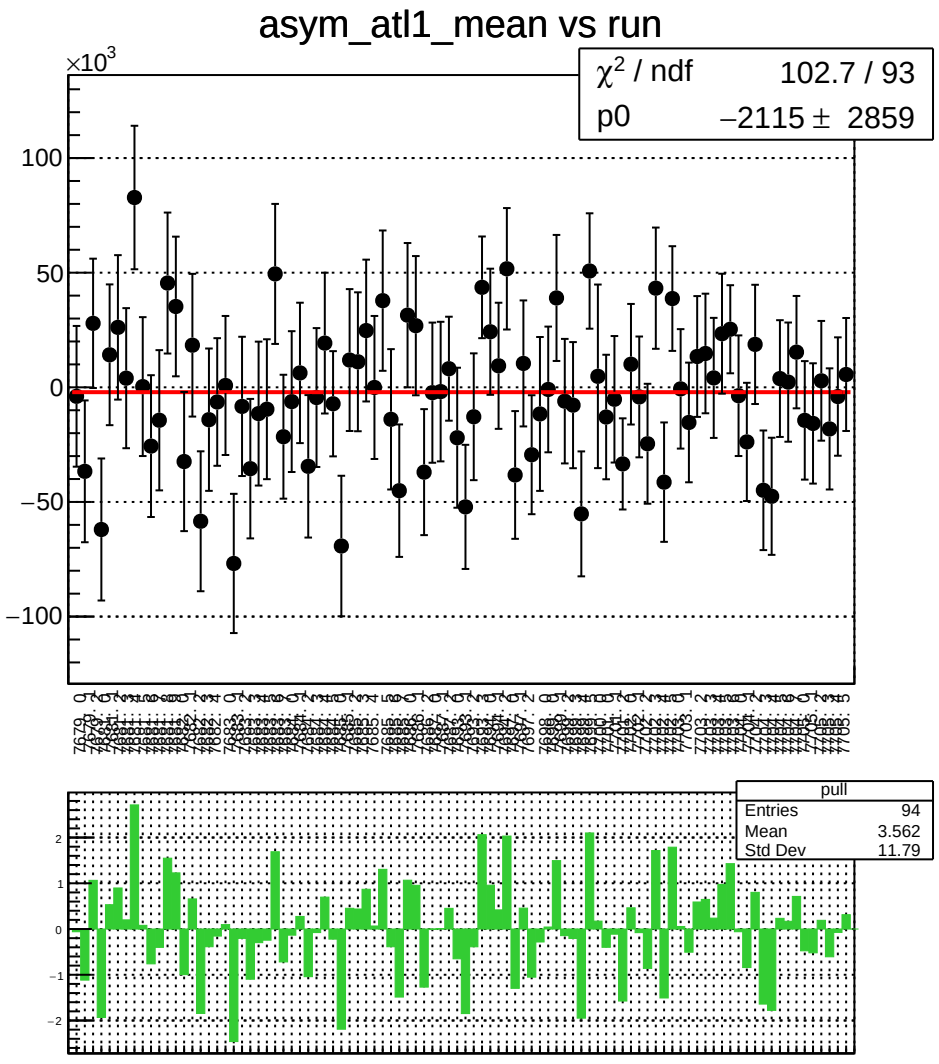

pull1D
Entries 94
Mean −0.01758
Std Dev 1.003

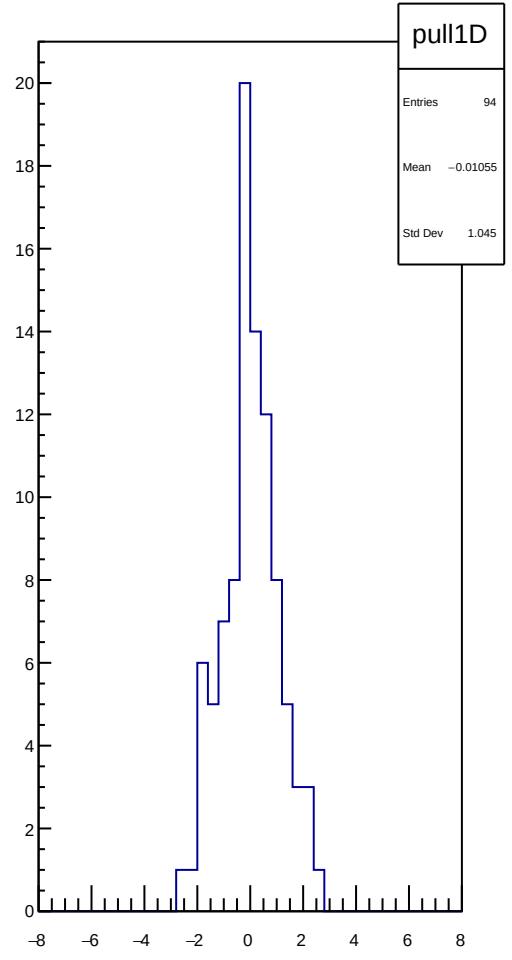

reg_asym_atl1_rms vs run
χ^2 / ndf 5103 / 93
p0 2489 ± 1.866
2700
2600
2500
2400
2300

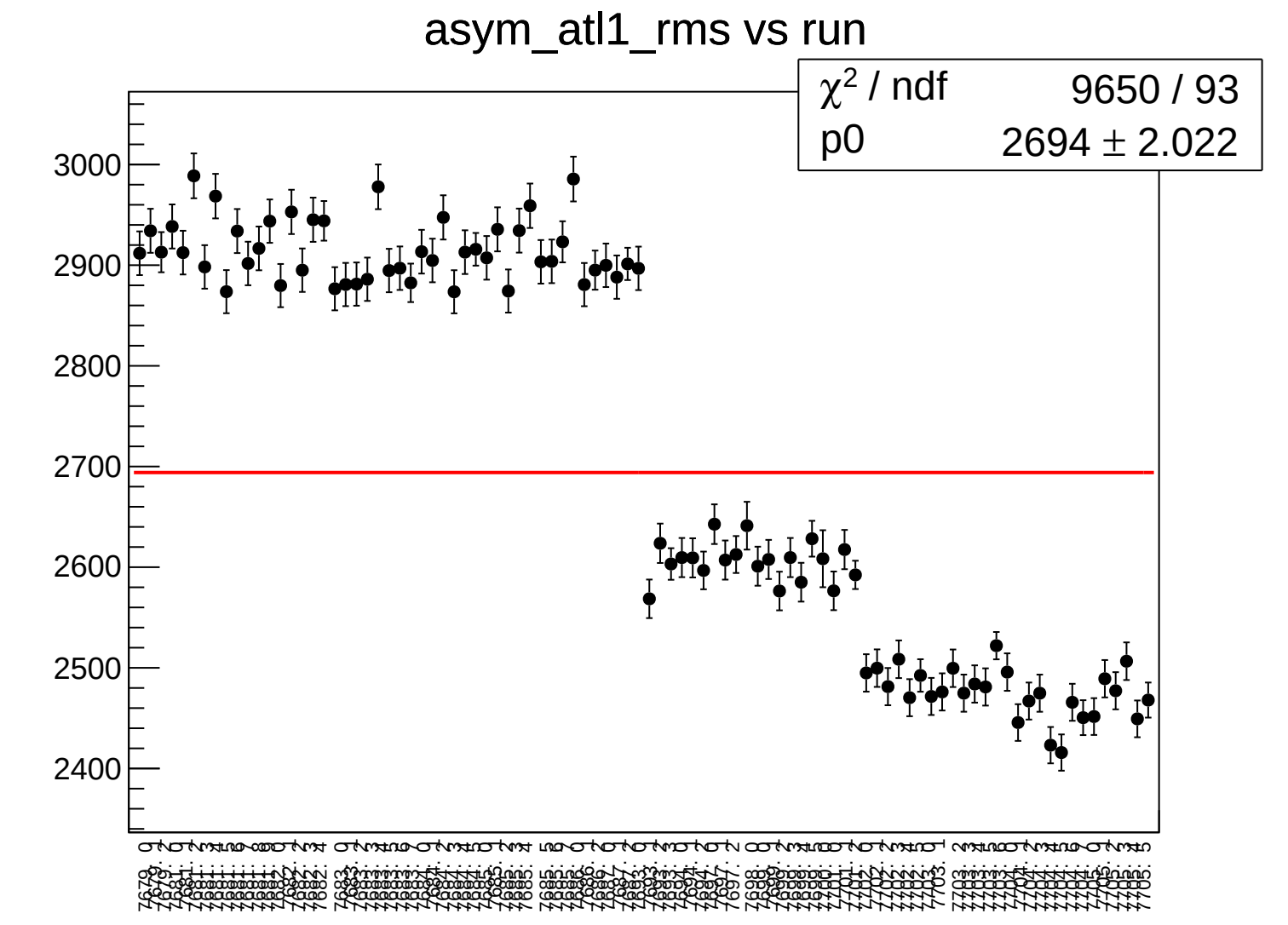

asym_atl1_correction_mean vs run
χ² / ndf 77.47 / 93
p0 −349 ± 1026
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −47.57
Std Dev 98.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

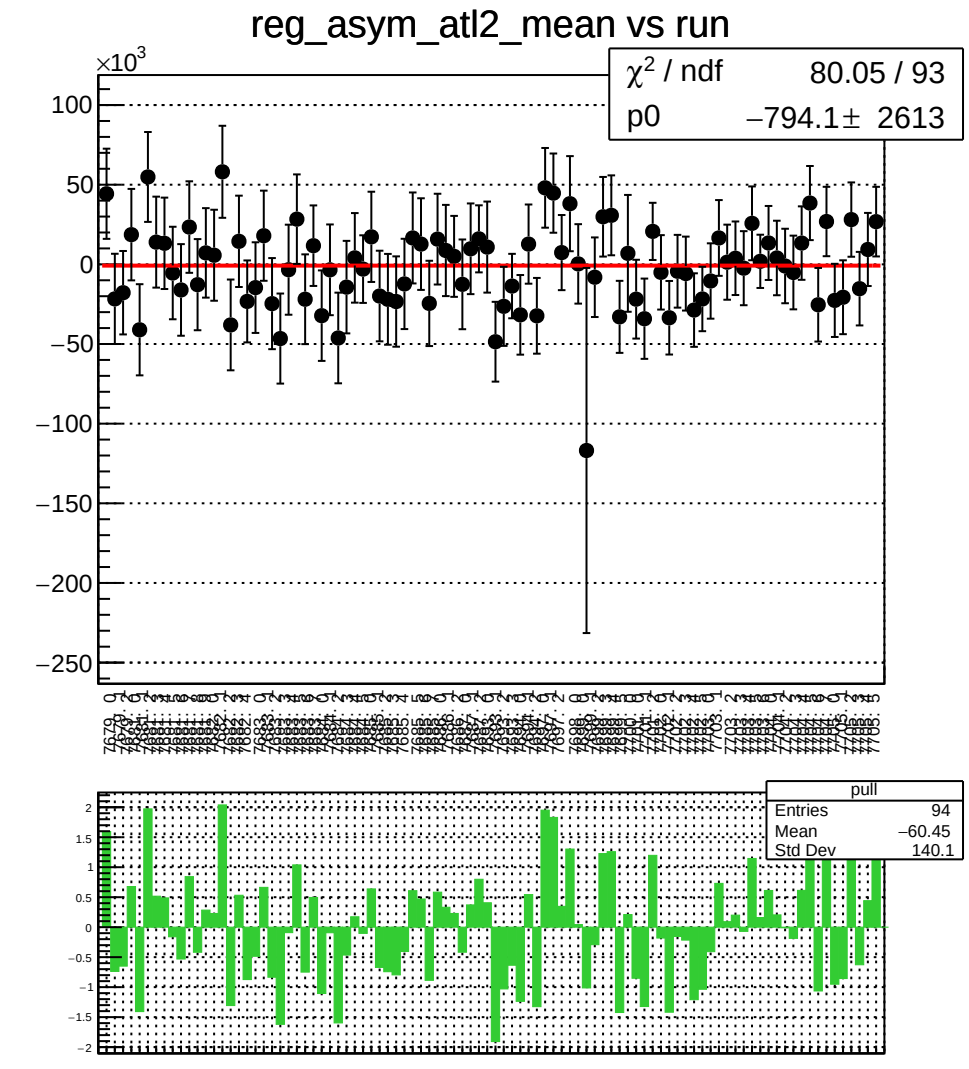

pull1D
Entries 94
Mean −0.04849
Std Dev 0.9066
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

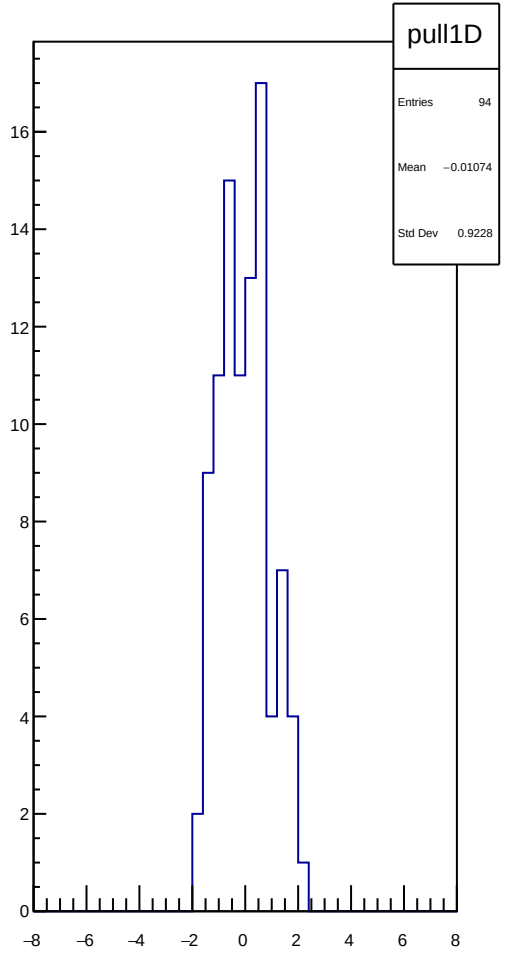

asym_atl1_correction_rms vs run
χ^2 / ndf 1.083e+05 / 93
p0 939.2 ± 0.7253
1400
1300
1200
1100
1000
900
800
700
600

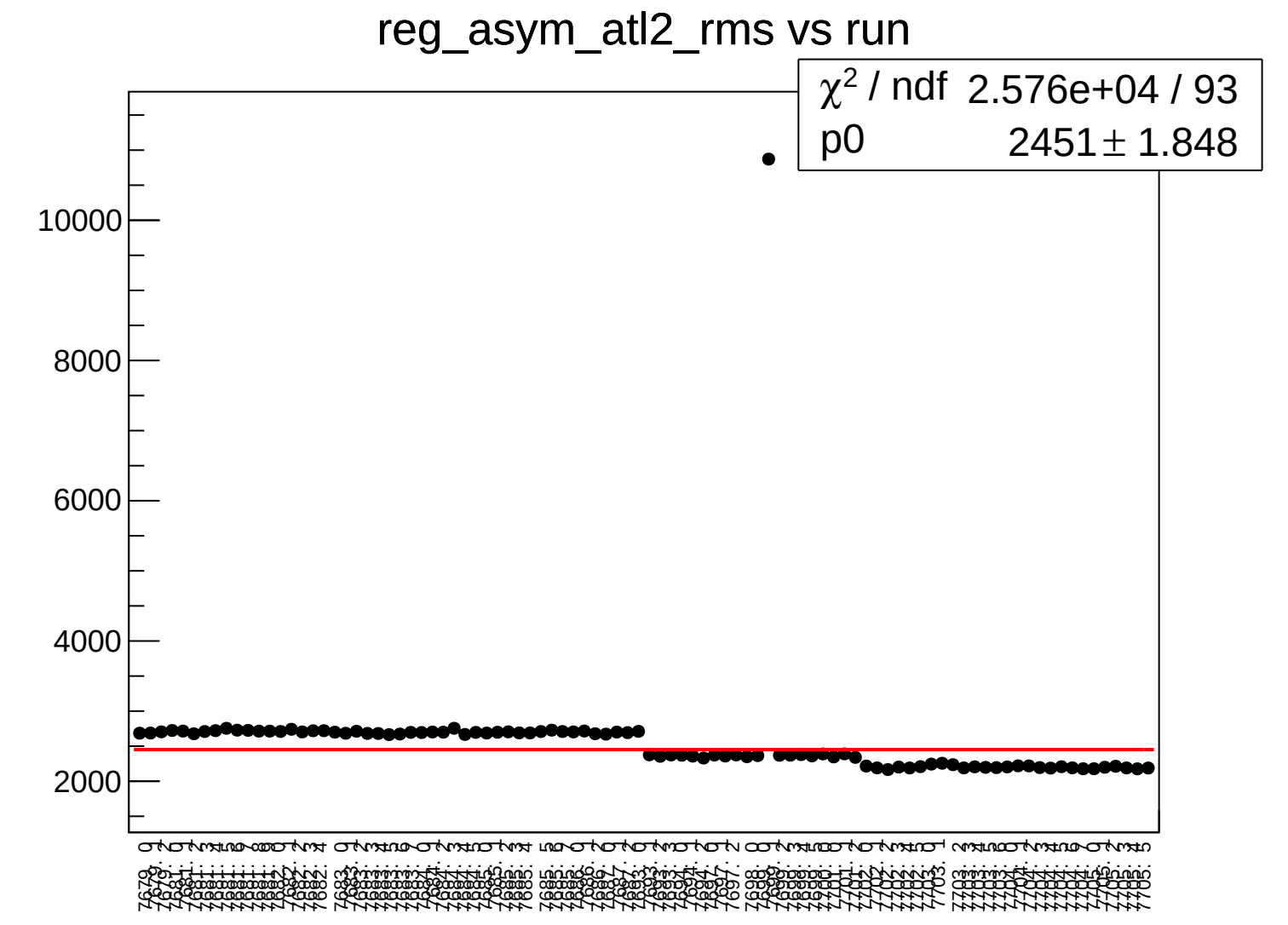

asym_atl1_mean vs run
χ² / ndf 102.7 / 93
p0 −2115 ± 2859
×10³
100
50
0
−50
−100
pull
Entries 94
Mean 3.562
Std Dev 11.79
2
1
0
−1
−2

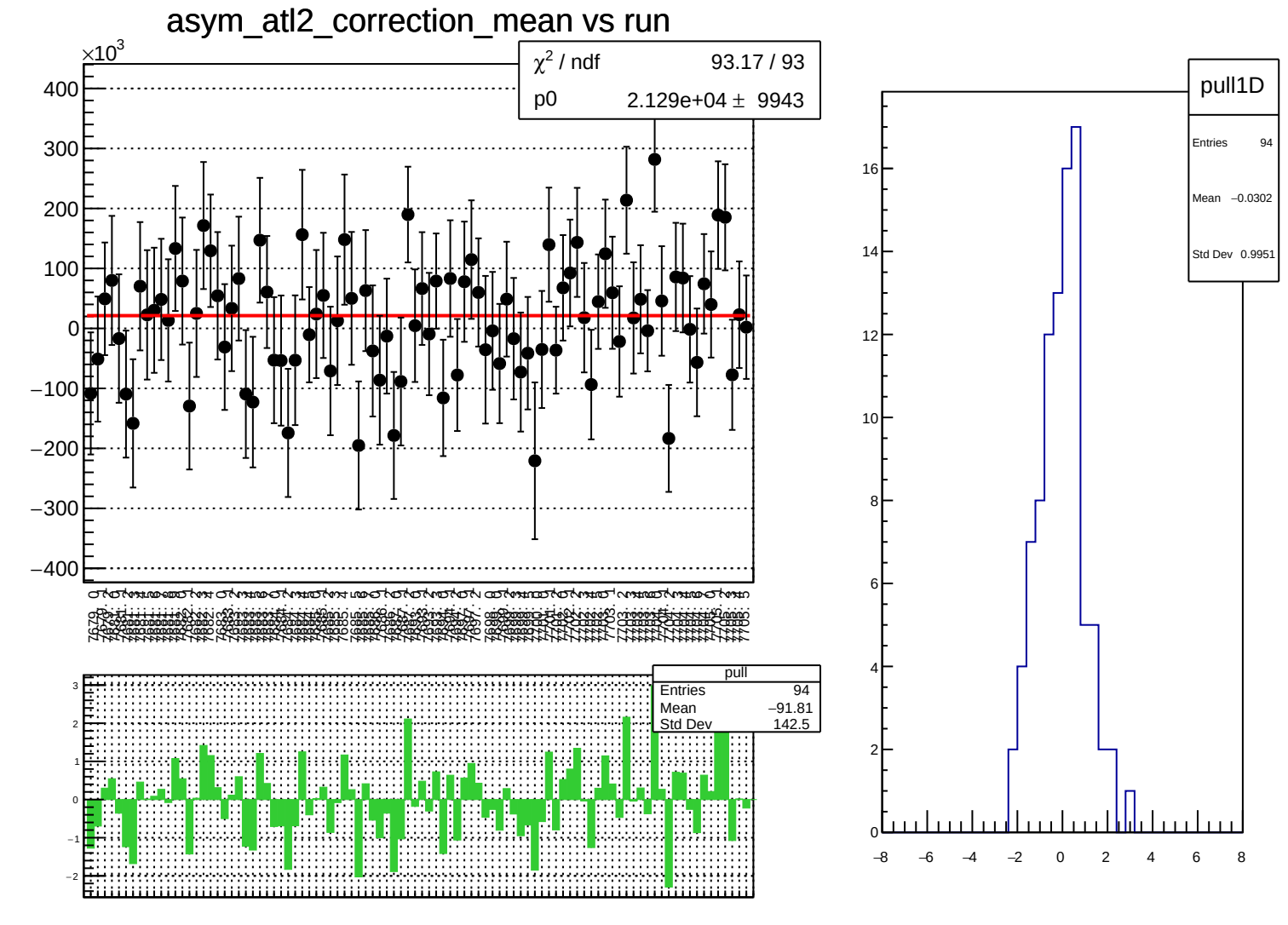

pull1D
Entries 94
Mean −0.01055
Std Dev 1.045
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

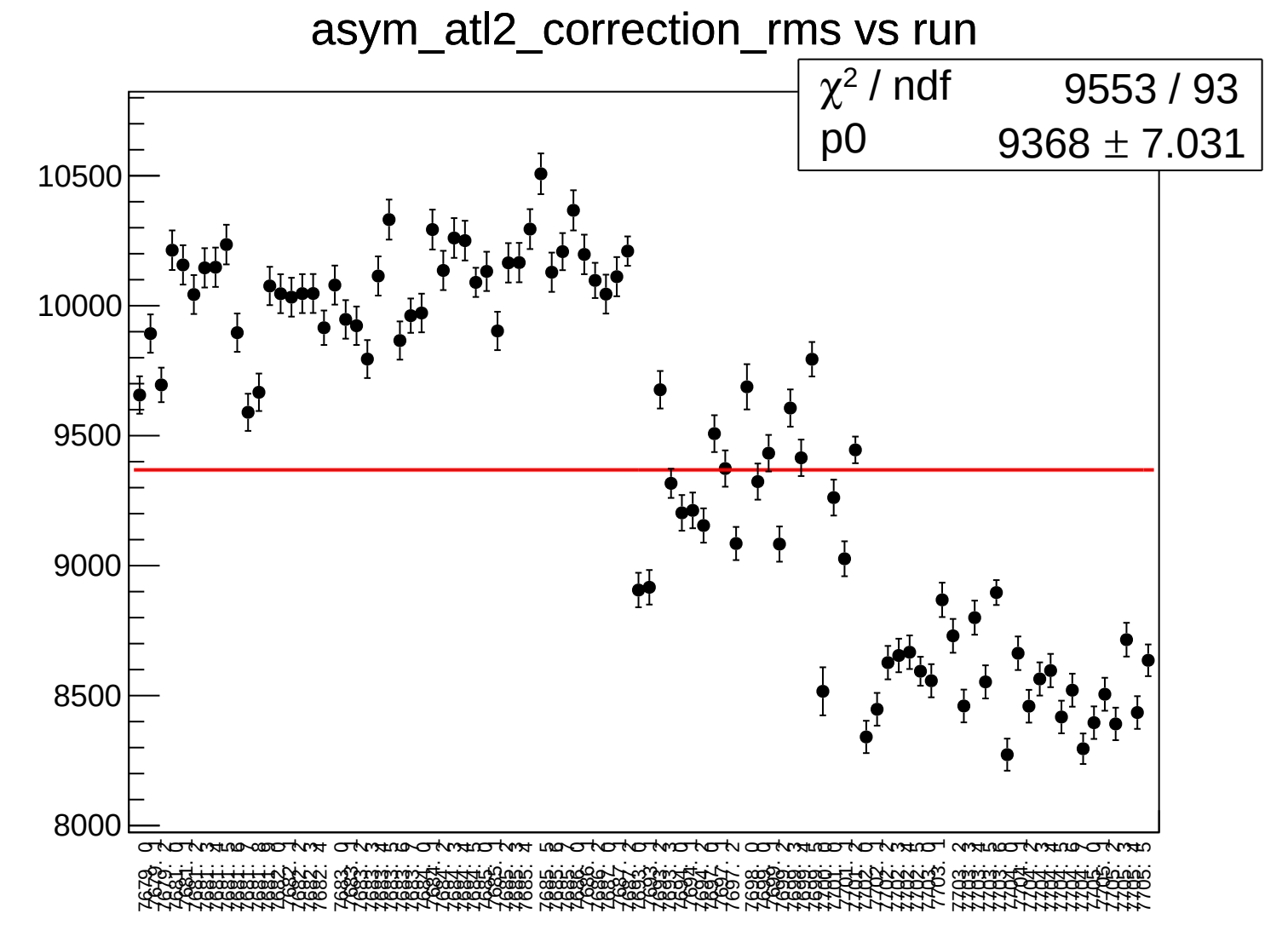

asym_atl1_rms vs run
χ^2 / ndf 9650 / 93
p0 2694 ± 2.022
3000
2900
2800
2700
2600
2500
2400

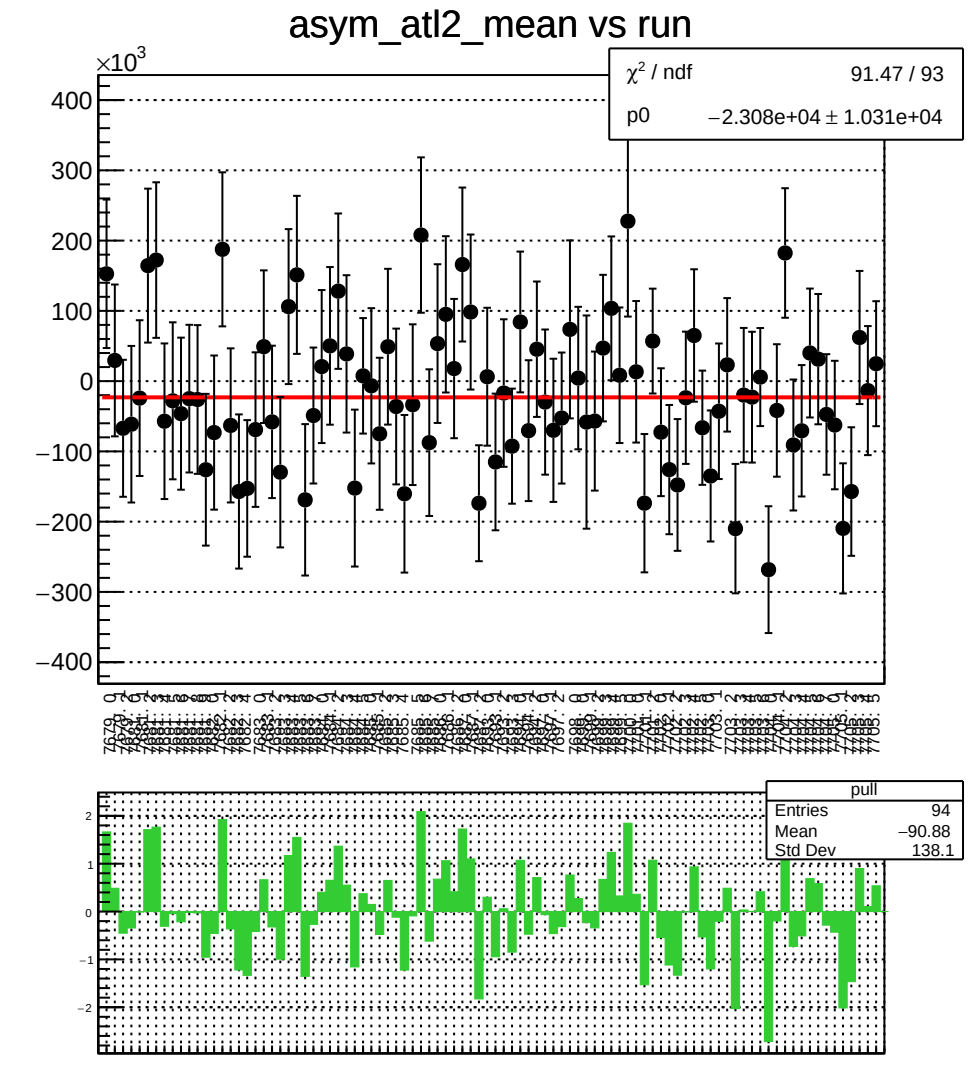

reg_asym_atl2_mean vs run
×10^3
χ^2 / ndf 80.05 / 93
p0 −794.1± 2613
pull
Entries 94
Mean −60.45
Std Dev 140.1

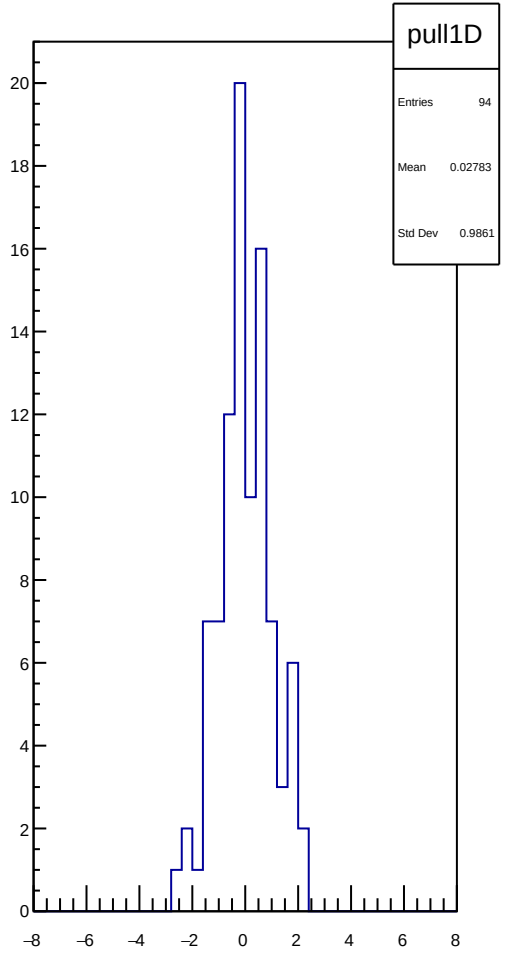

pull1D
Entries 94
Mean −0.01074
Std Dev 0.9228

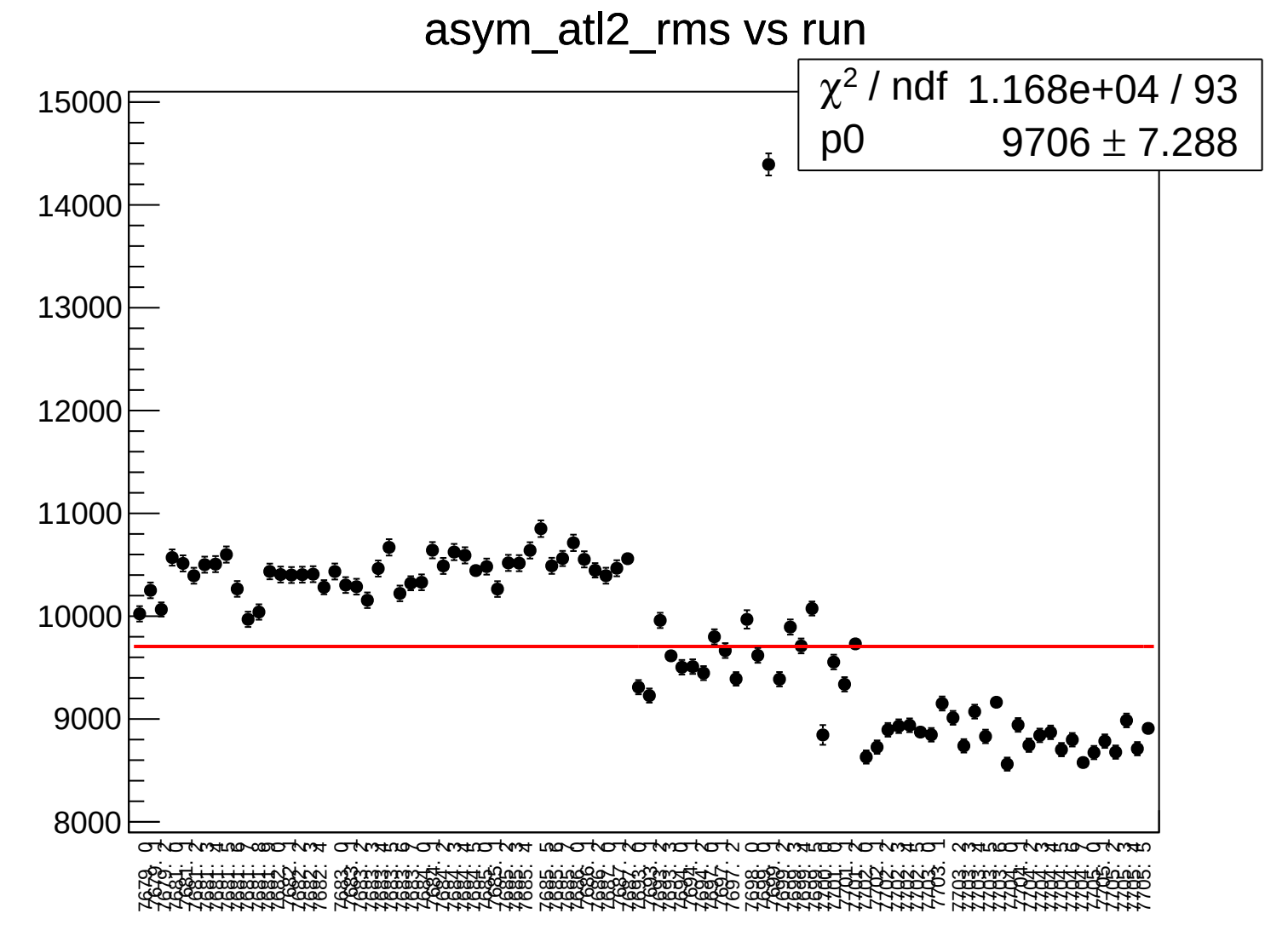

reg_asym_atl2_rms vs run
χ^2 / ndf 2.576e+04 / 93
p0 2451 ± 1.848
10000
8000
6000
4000
2000

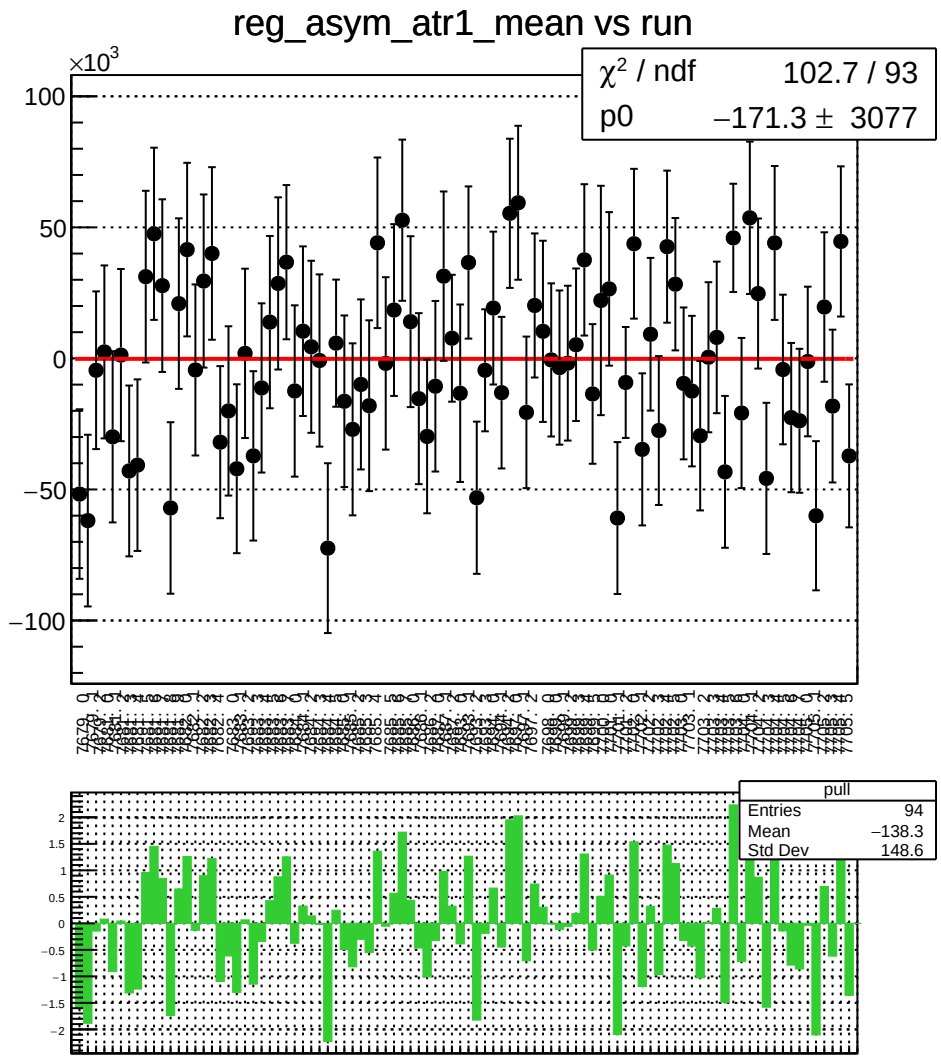

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 93.17 / 93
p0 2.129e+04 ± 9943
pull
Entries 94
Mean −91.81
Std Dev 142.5
pull1D
Entries 94
Mean −0.0302
Std Dev 0.9951

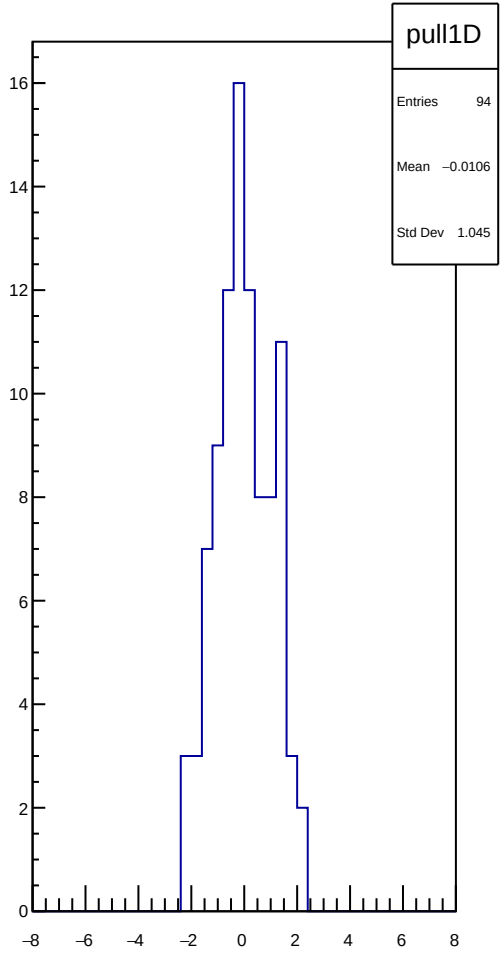

asym_atl2_correction_rms vs run
χ² / ndf 9553 / 93
p0 9368 ± 7.031
10500
10000
9500
9000
8500
8000

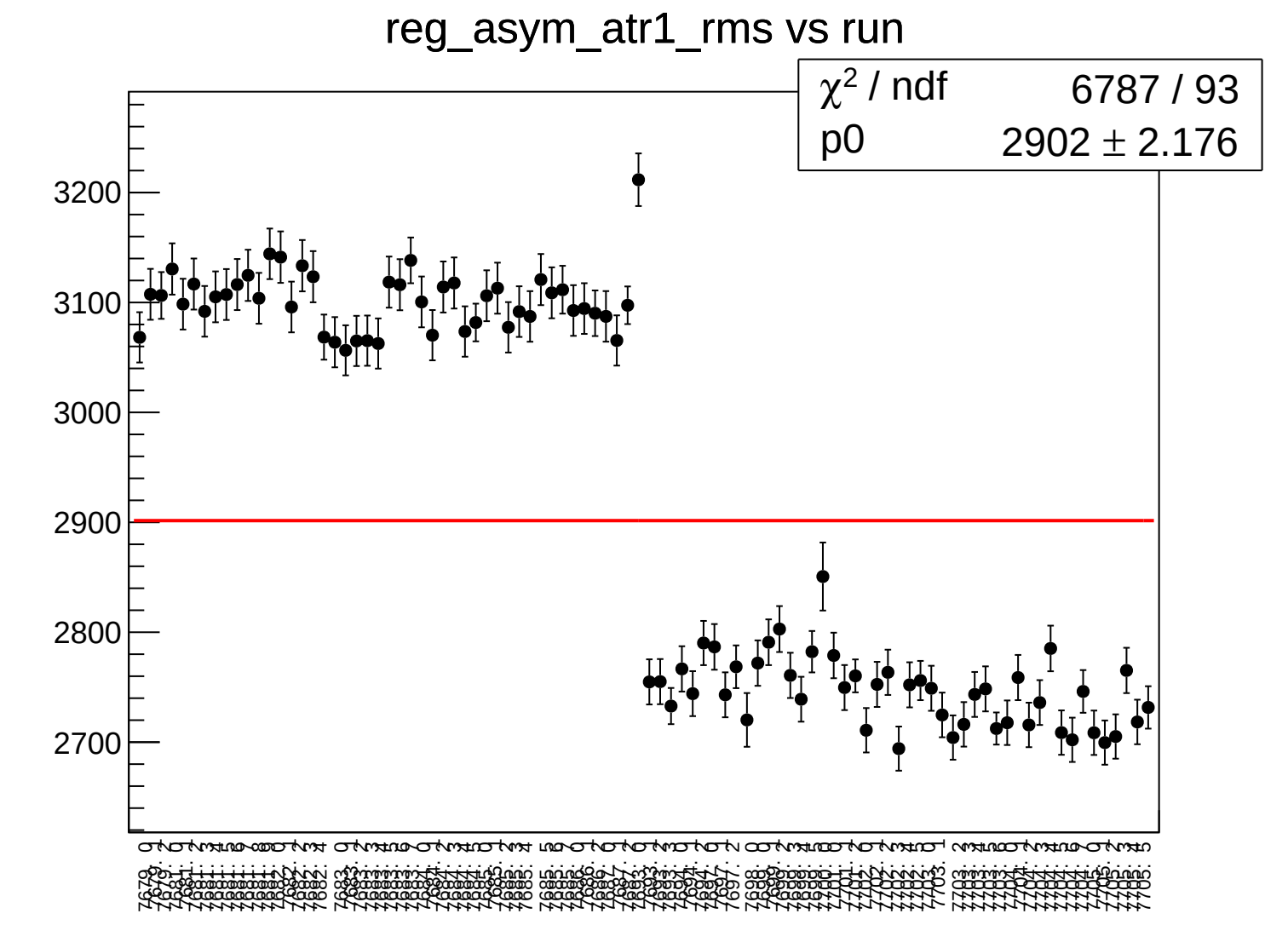

asym_atl2_mean vs run
×10^3
χ² / ndf 91.47 / 93
p0 −2.308e+04 ± 1.031e+04
pull
Entries 94
Mean −90.88
Std Dev 138.1

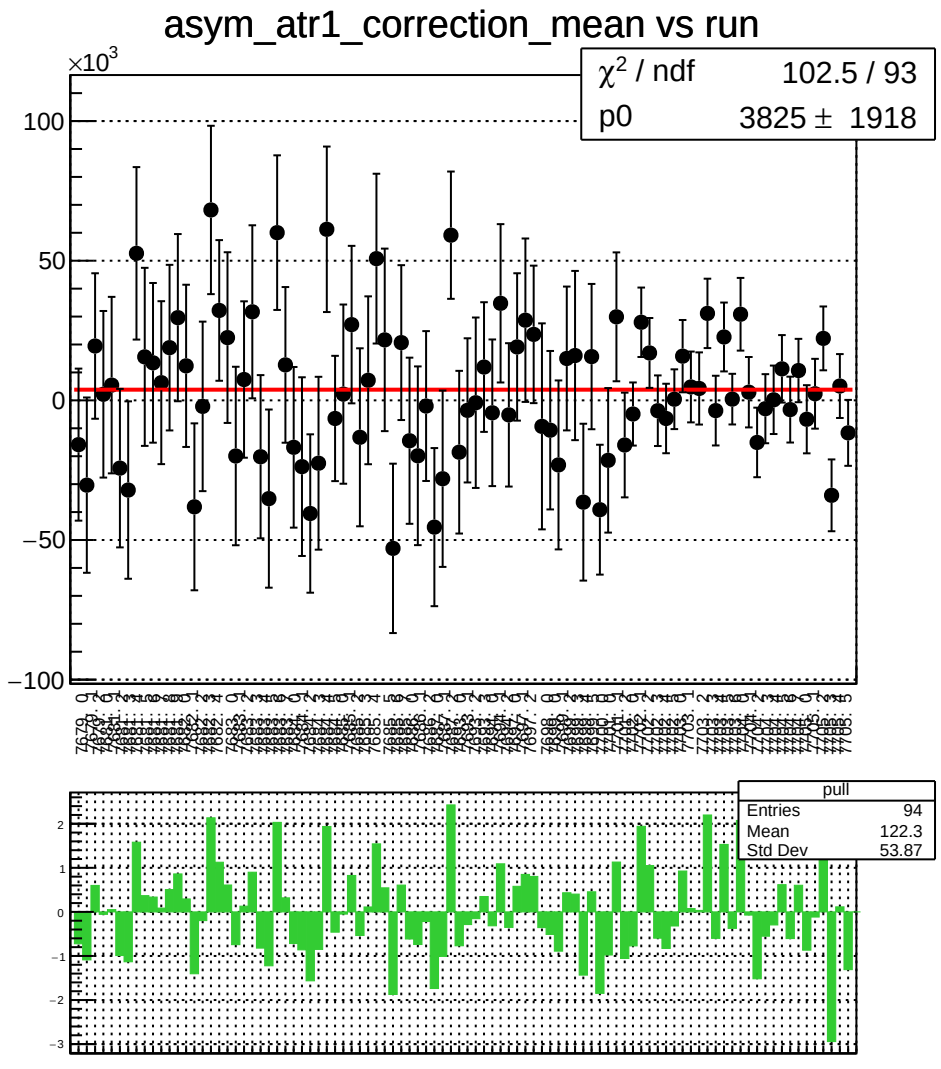

pull1D
Entries 94
Mean 0.02783
Std Dev 0.9861

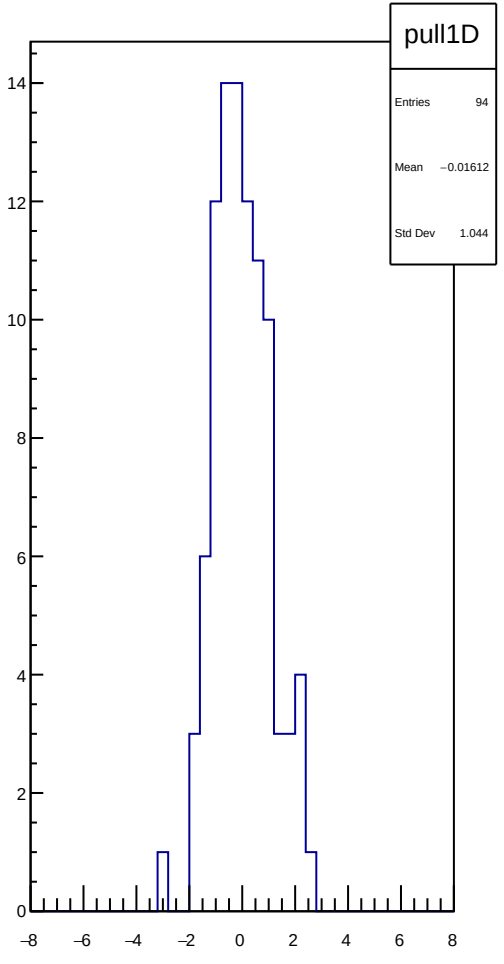

asym_atl2_rms vs run
χ² / ndf 1.168e+04 / 93
p0 9706 ± 7.288
15000
14000
13000
12000
11000
10000
9000
8000

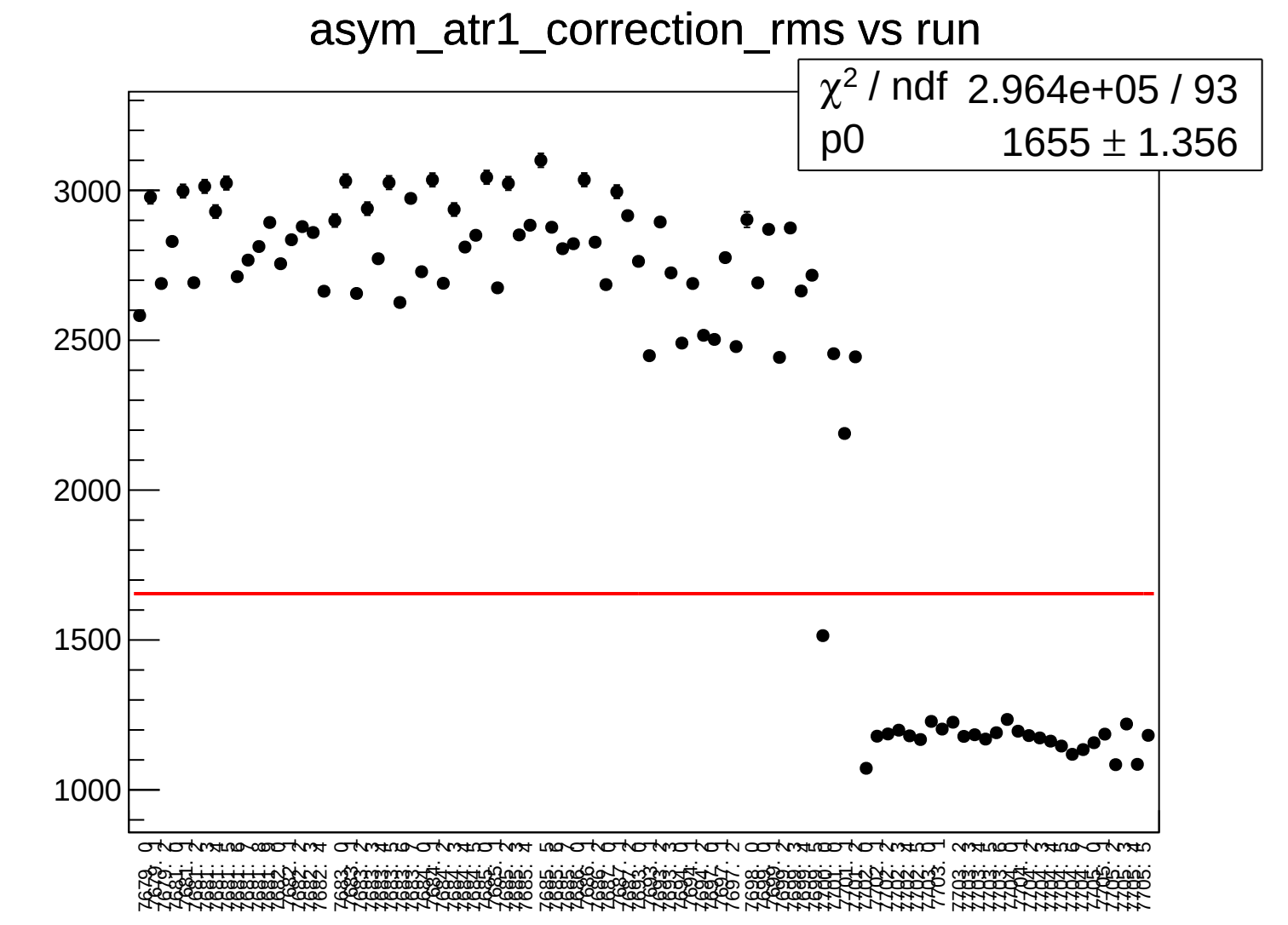

reg_asym_atr1_mean vs run
×10^3
χ² / ndf 102.7 / 93
p0 −171.3 ± 3077
100
50
0
−50
−100
pull
Entries 94
Mean −138.3
Std Dev 148.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

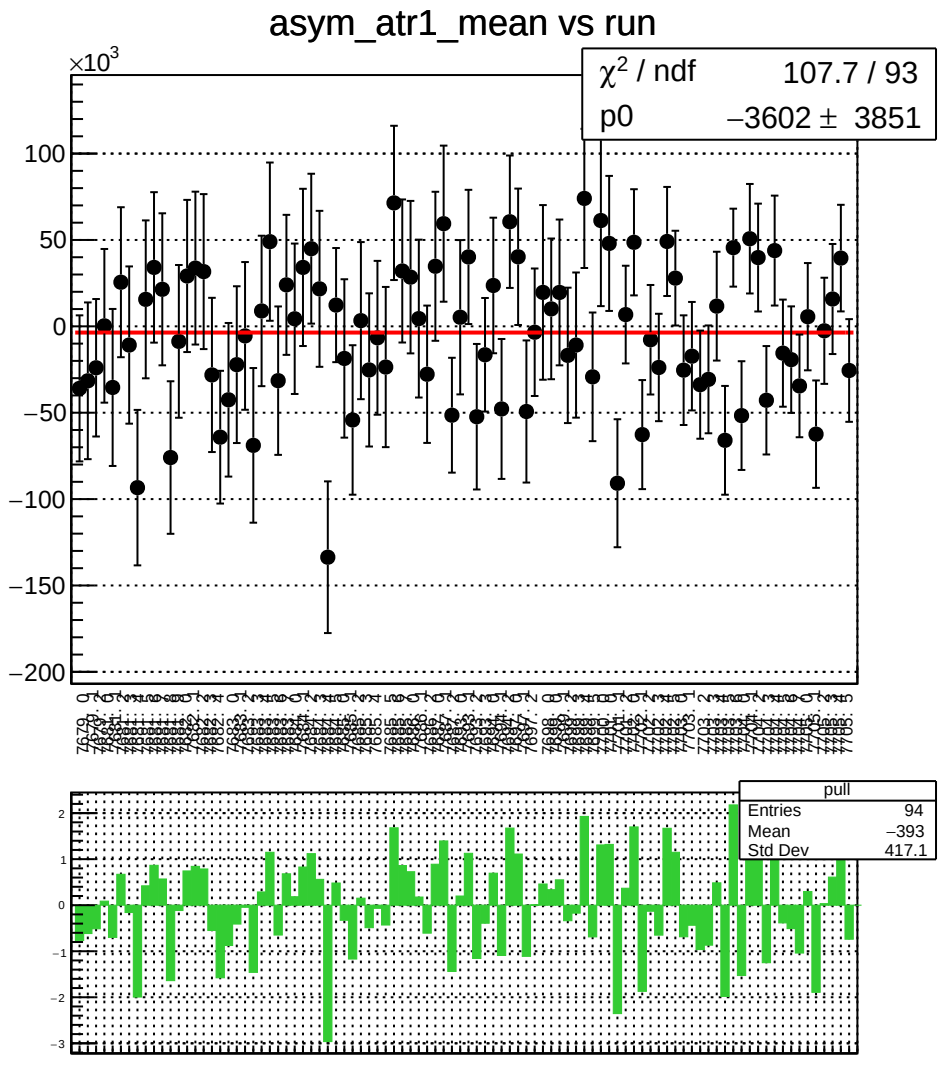

pull1D
Entries 94
Mean −0.0106
Std Dev 1.045
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

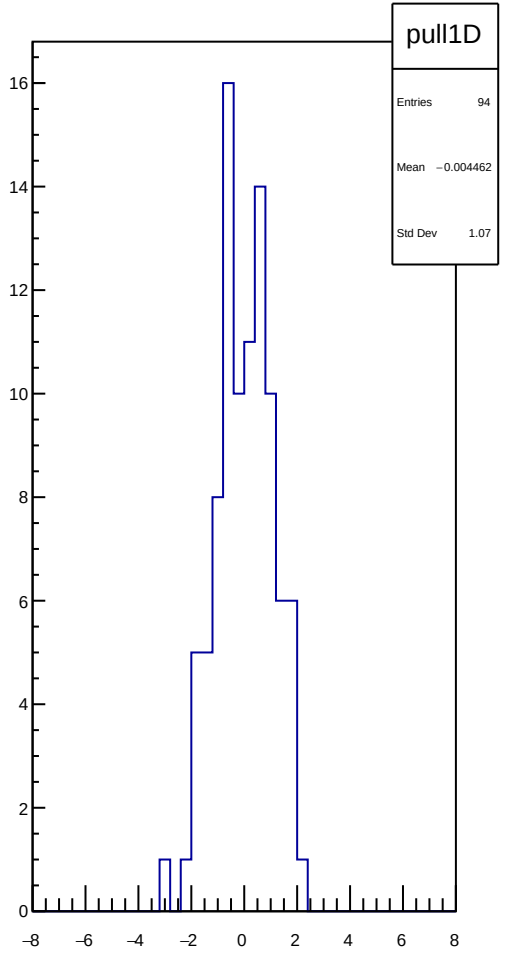

reg_asym_atr1_rms vs run
χ^2 / ndf 6787 / 93
p0 2902 ± 2.176
3200
3100
3000
2900
2800
2700

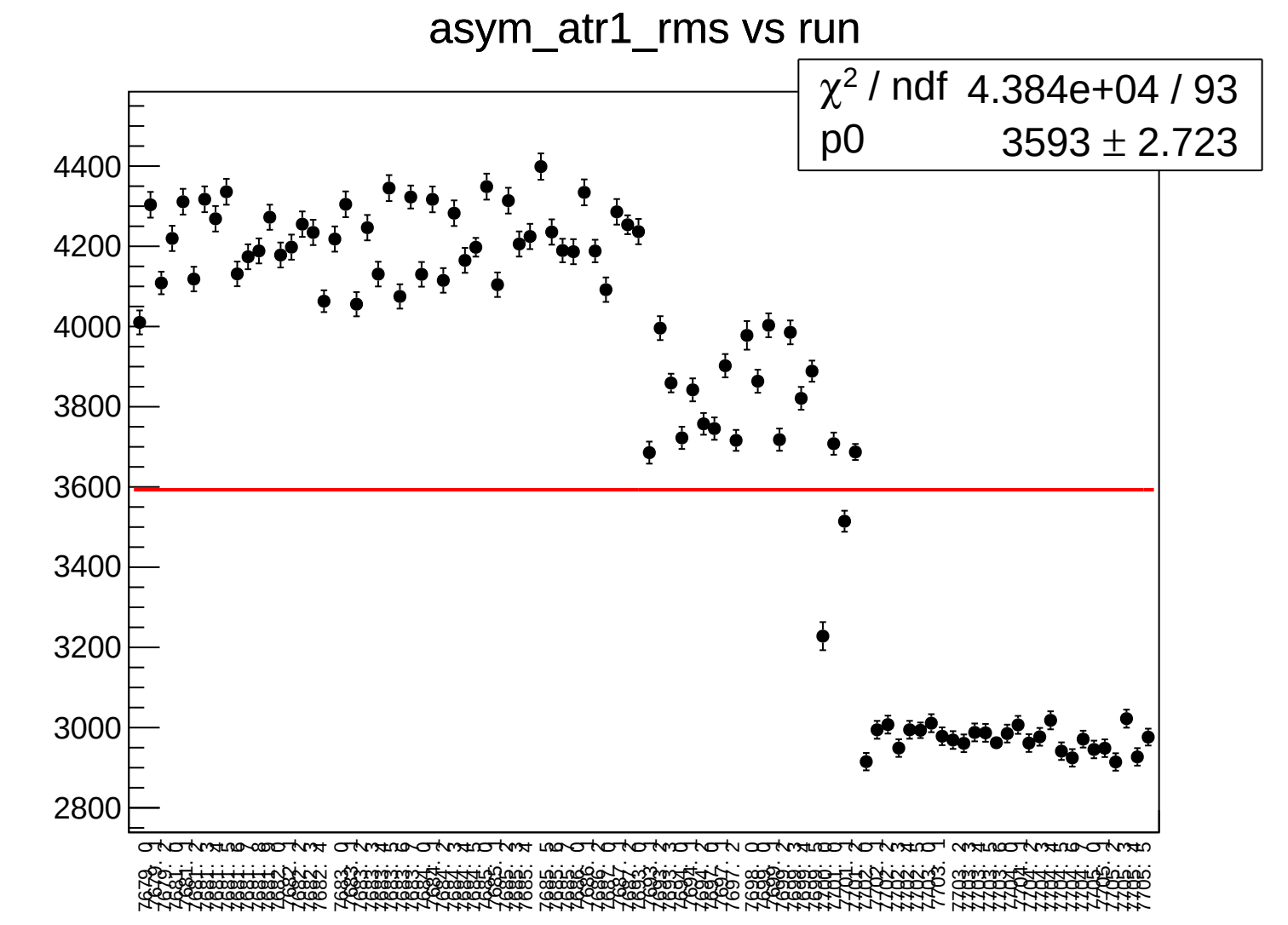

asym_atr1_correction_mean vs run
×10^3
χ^2 / ndf 102.5 / 93
p0 3825 ± 1918
100
50
0
−50
−100
pull
Entries 94
Mean 122.3
Std Dev 53.87
2
1
0
−1
−2
−3

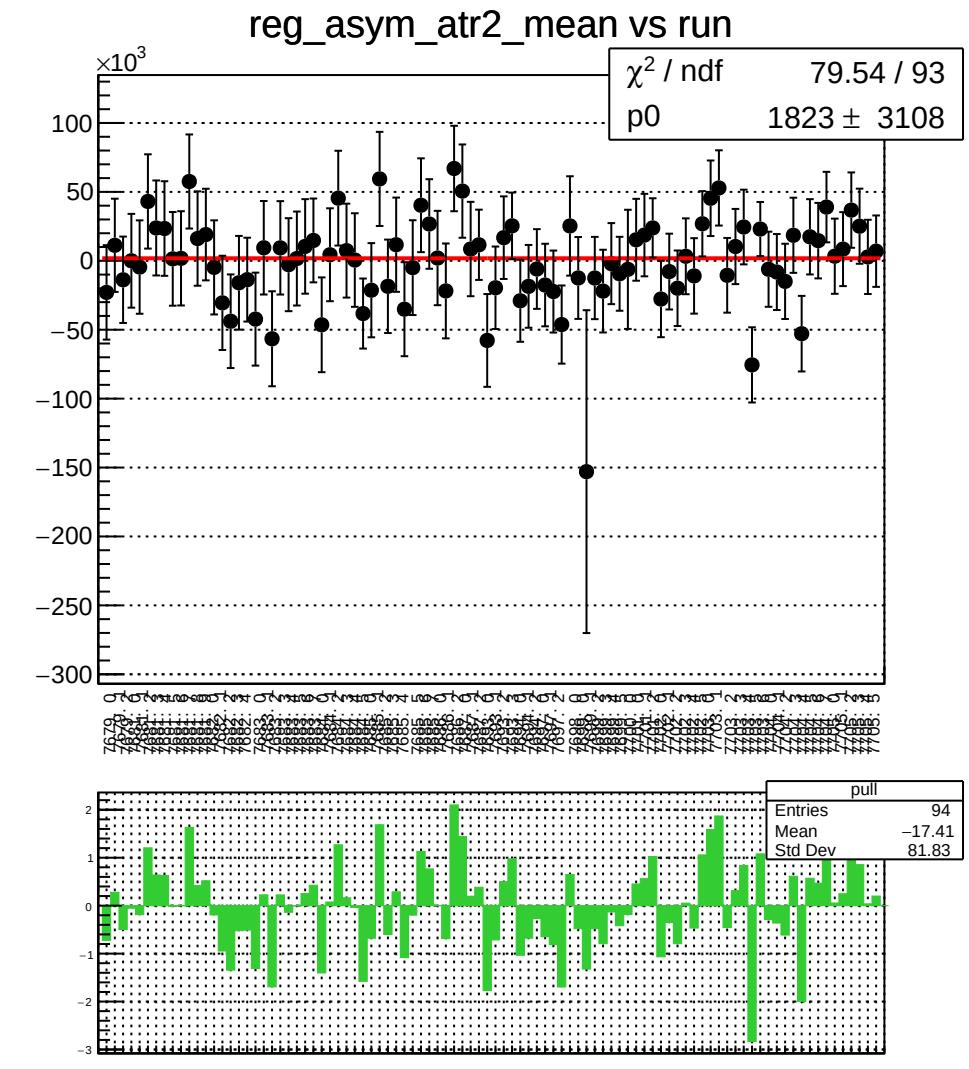

pull1D
Entries 94
Mean −0.01612
Std Dev 1.044
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

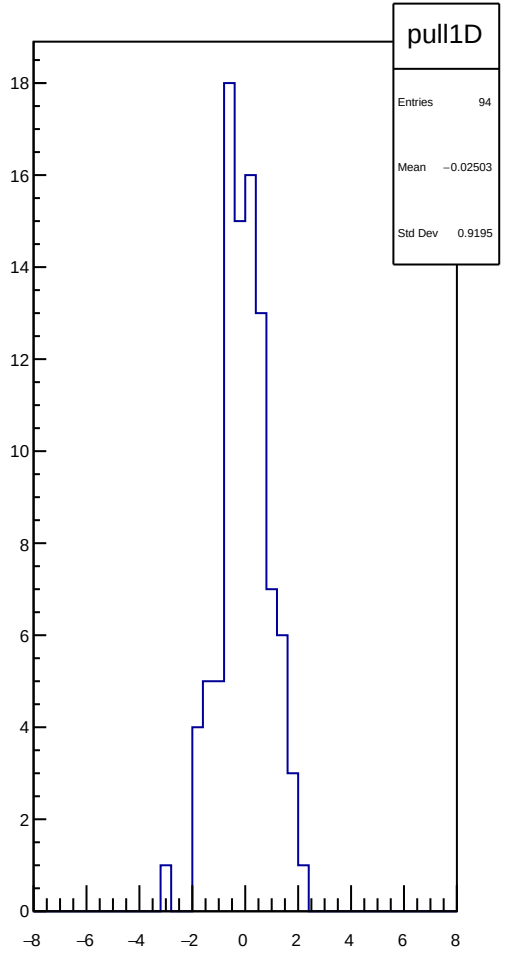

asym_atr1_correction_rms vs run
χ² / ndf 2.964e+05 / 93
p0 1655 ± 1.356
3000
2500
2000
1500
1000

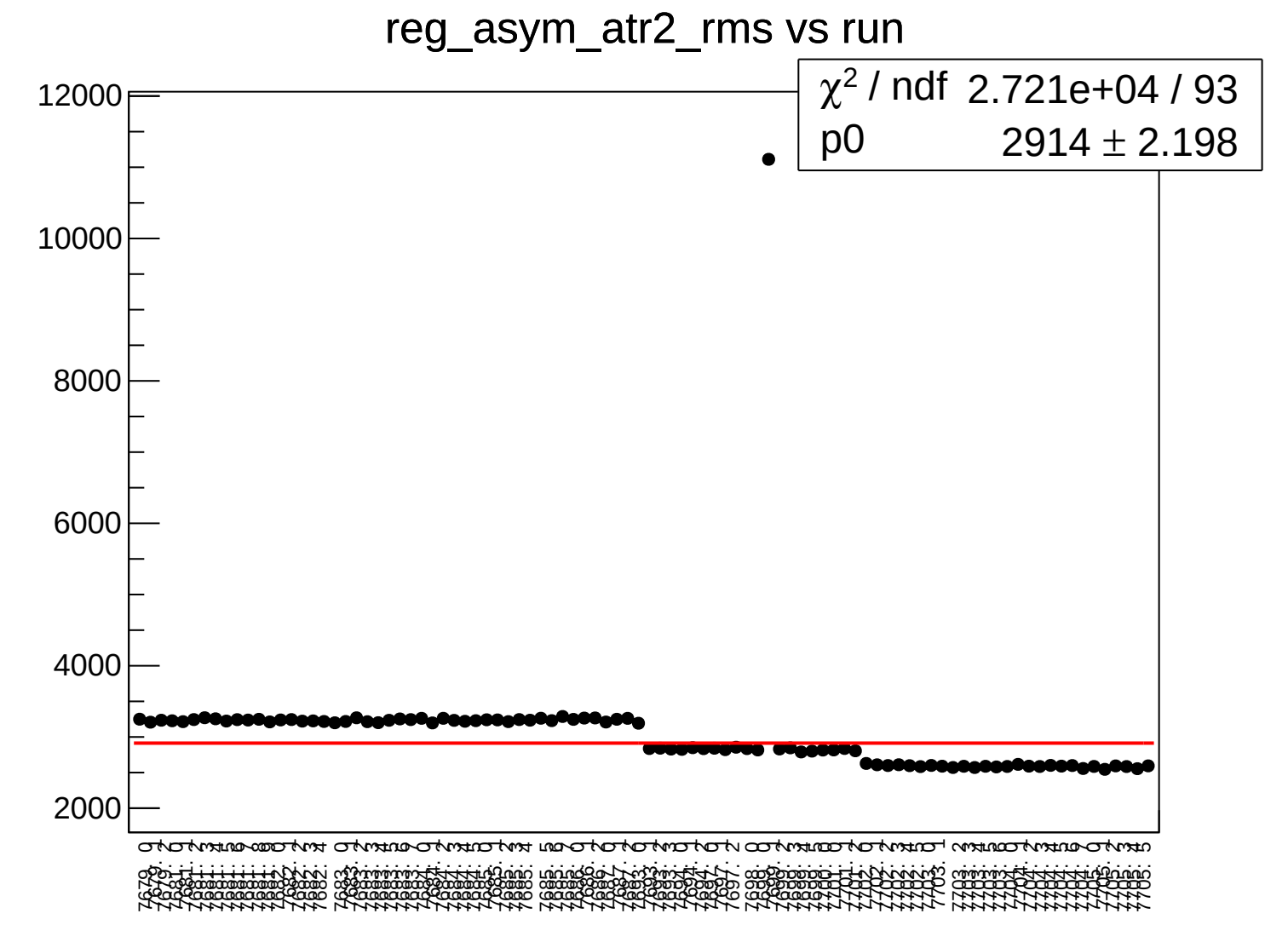

asym_atr1_mean vs run
×10^3
χ² / ndf 107.7 / 93
p0 −3602 ± 3851
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean −393
Std Dev 417.1
2
1
0
−1
−2
−3

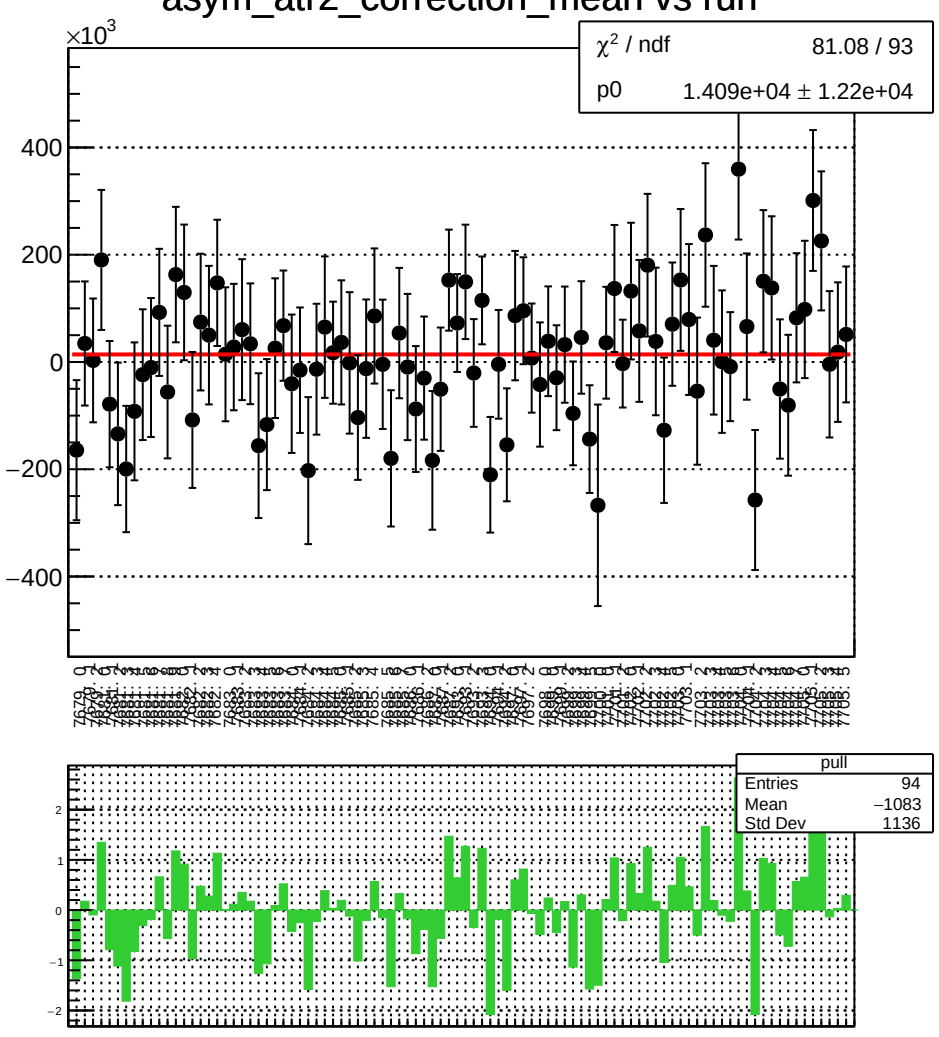

pull1D
Entries 94
Mean −0.004462
Std Dev 1.07
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

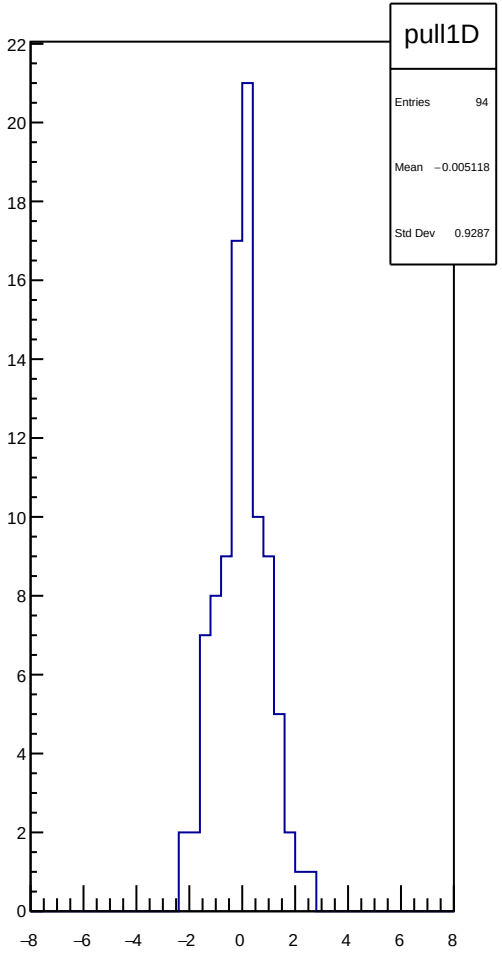

asym_atr1_rms vs run
χ^2 / ndf 4.384e+04 / 93
p0 3593 ± 2.723
4400
4200
4000
3800
3600
3400
3200
3000
2800

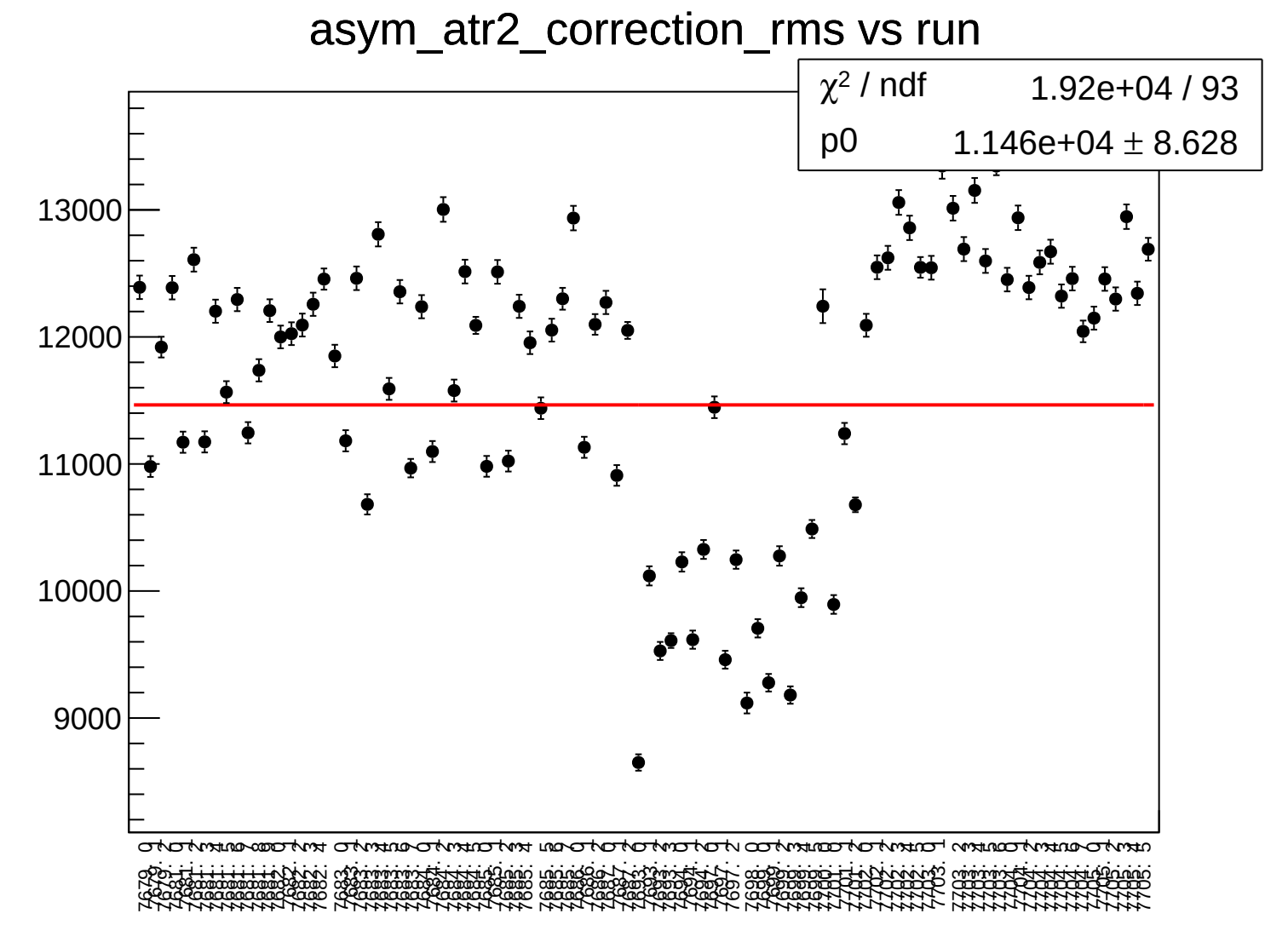

reg_asym_atr2_mean vs run
×10^3
χ^2 / ndf 79.54 / 93
p0 1823 ± 3108
pull
Entries 94
Mean −17.41
Std Dev 81.83

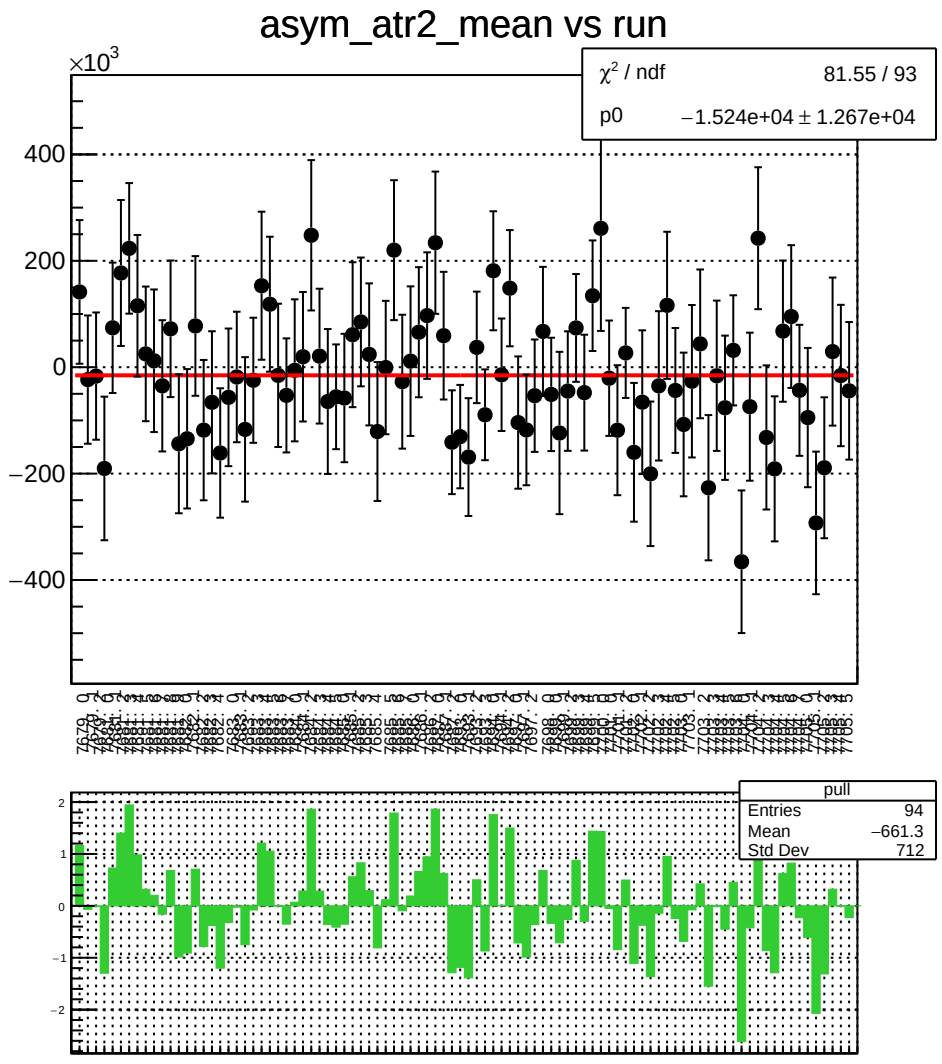

pull1D
Entries 94
Mean −0.02503
Std Dev 0.9195

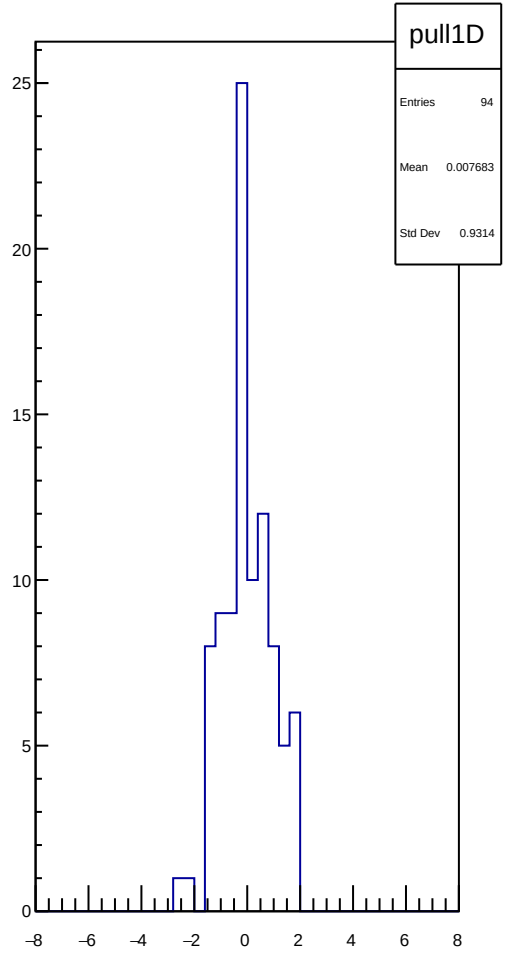

reg_asym_atr2_rms vs run
χ² / ndf 2.721e+04 / 93
p0 2914 ± 2.198
12000
10000
8000
6000
4000
2000

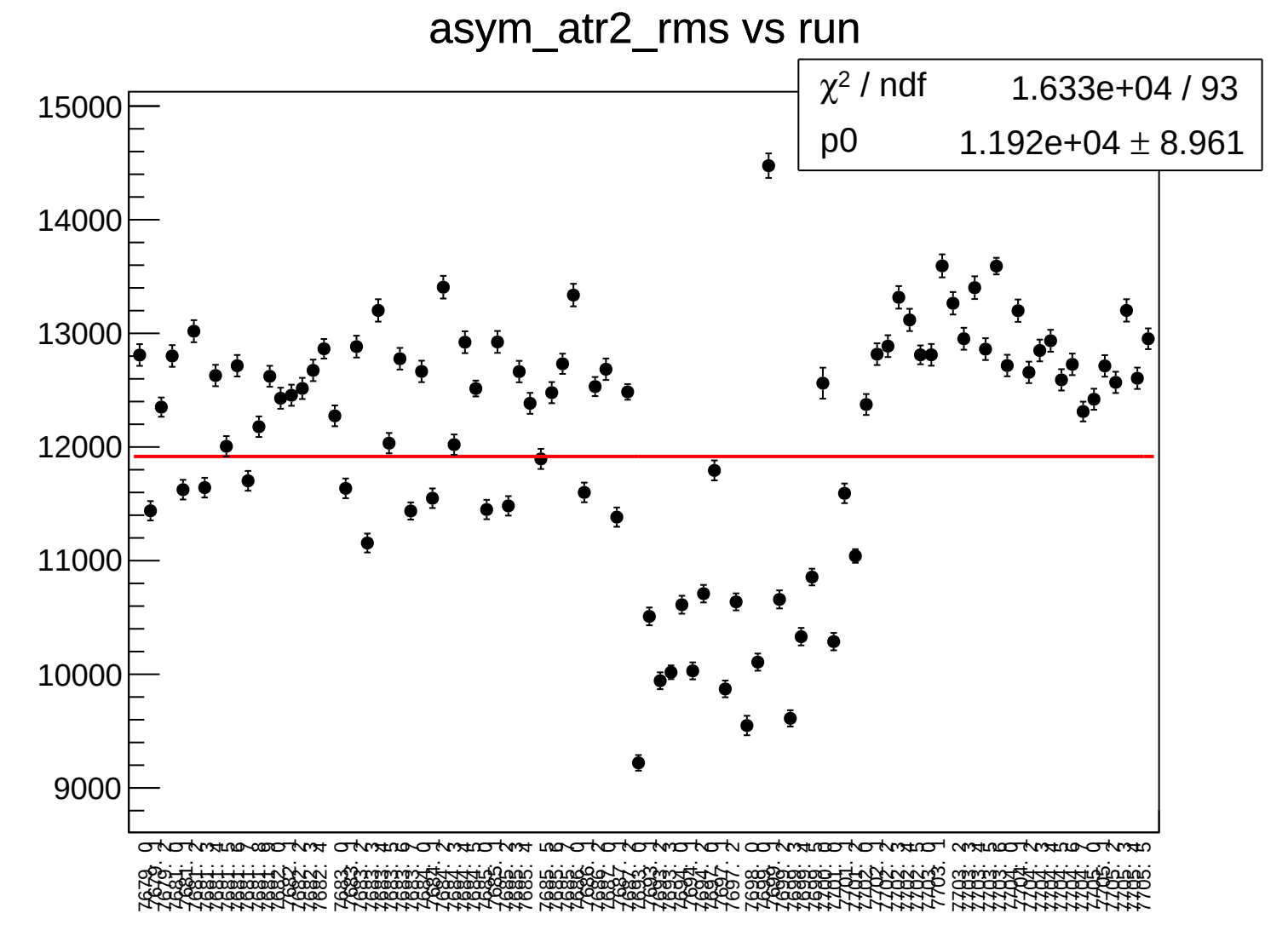

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 81.08 / 93
p0 1.409e+04 ± 1.22e+04
400
200
0
−200
−400
pull
Entries 94
Mean −1083
Std Dev 1136
2
1
0
−1
−2

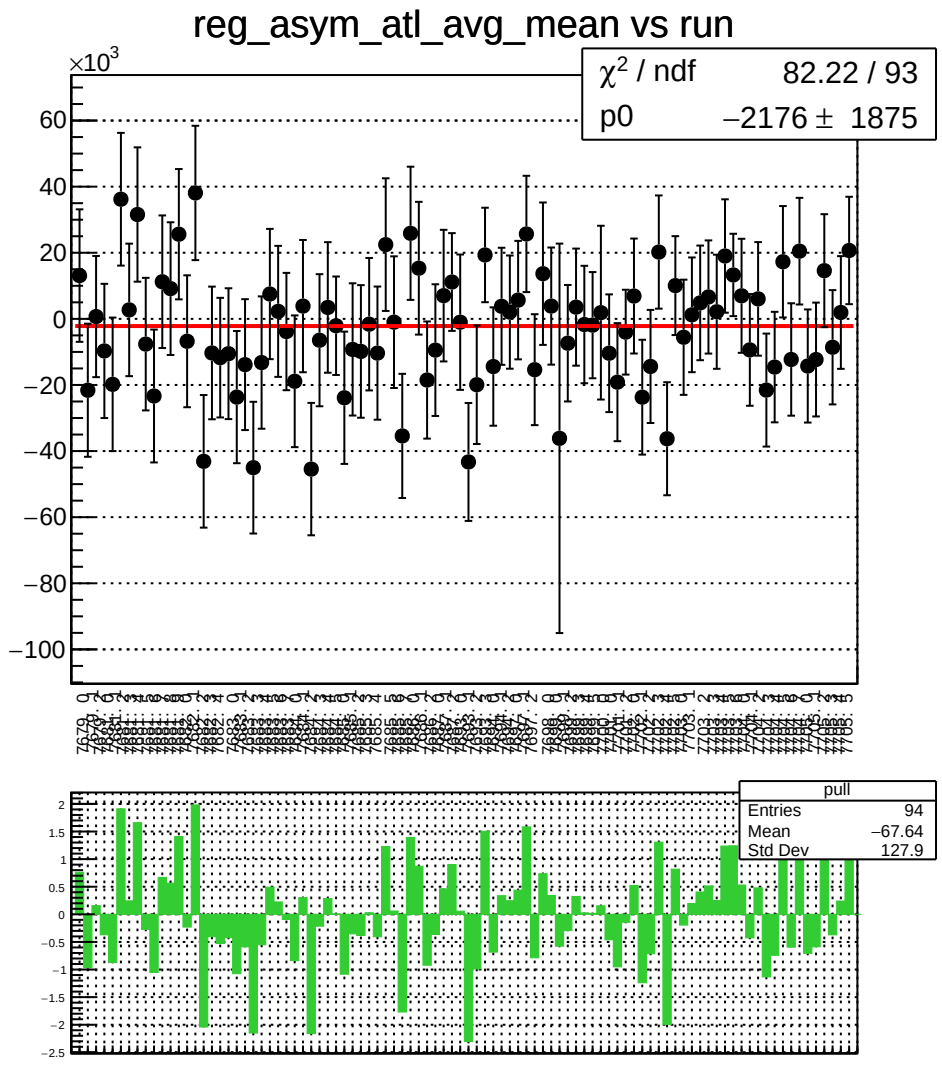

pull1D
Entries 94
Mean −0.005118
Std Dev 0.9287
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

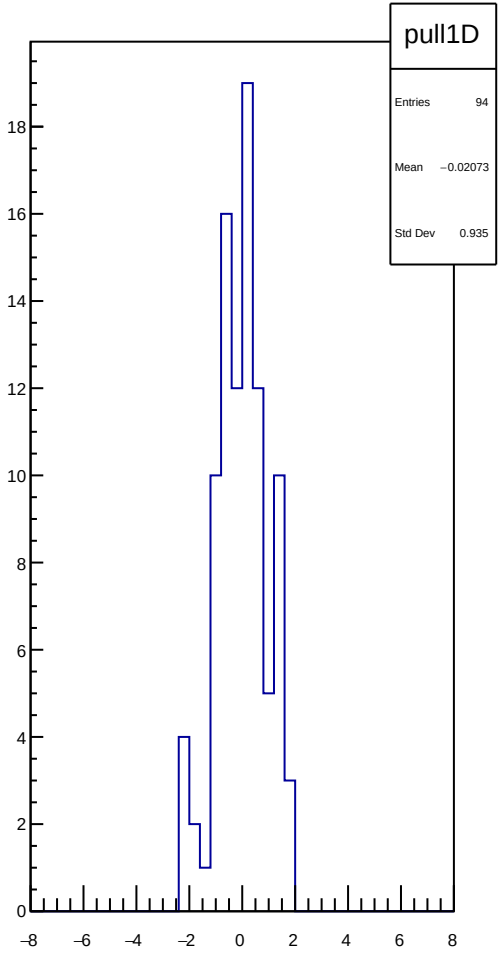

asym_atr2_correction_rms vs run
χ² / ndf 1.92e+04 / 93
p0 1.146e+04 ± 8.628
13000
12000
11000
10000
9000

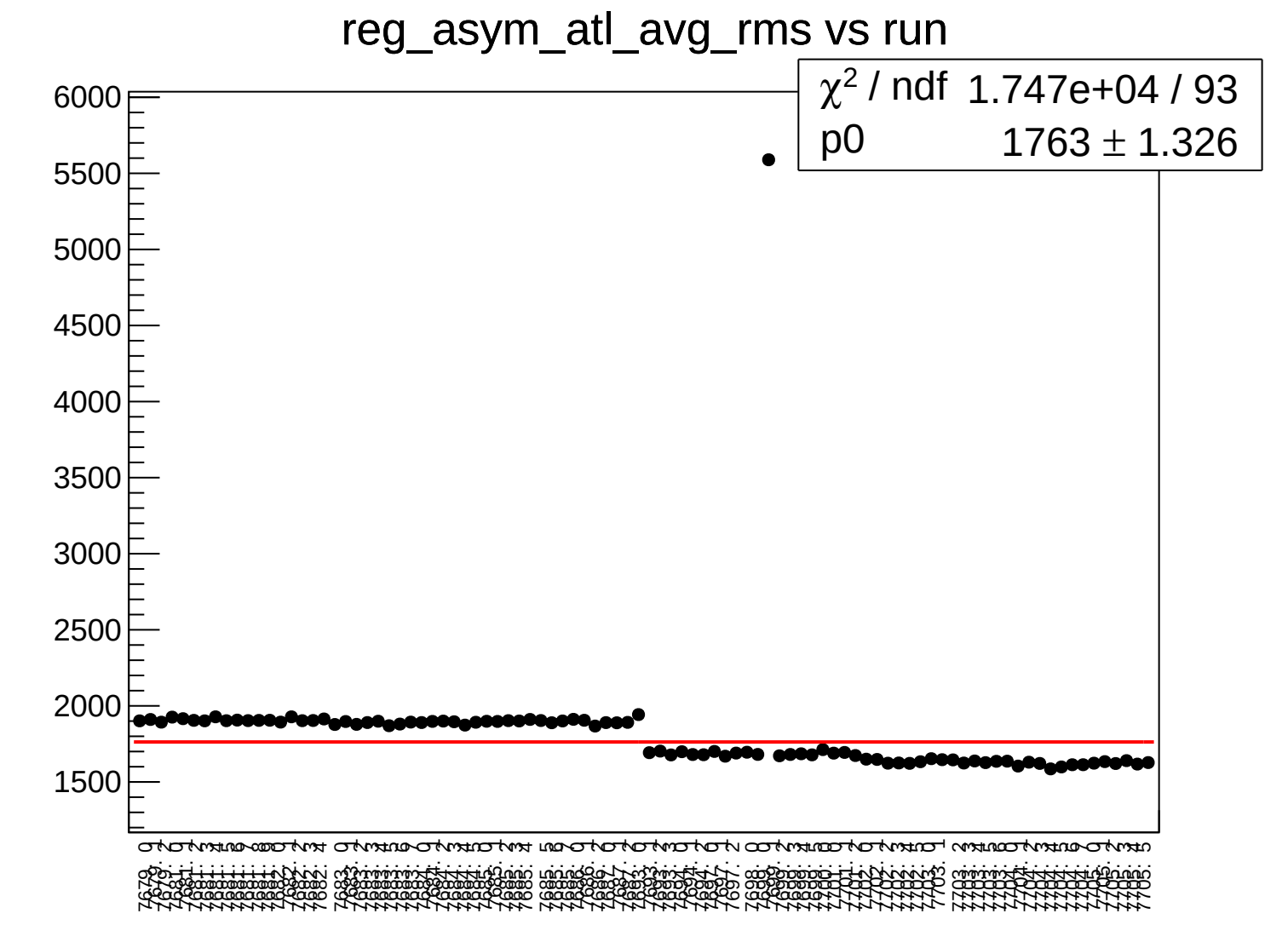

asym_atr2_mean vs run
×10^3
χ² / ndf 81.55 / 93
p0 −1.524e+04 ± 1.267e+04
400
200
0
−200
−400
pull
Entries 94
Mean −661.3
Std Dev 712
2
1
0
−1
−2

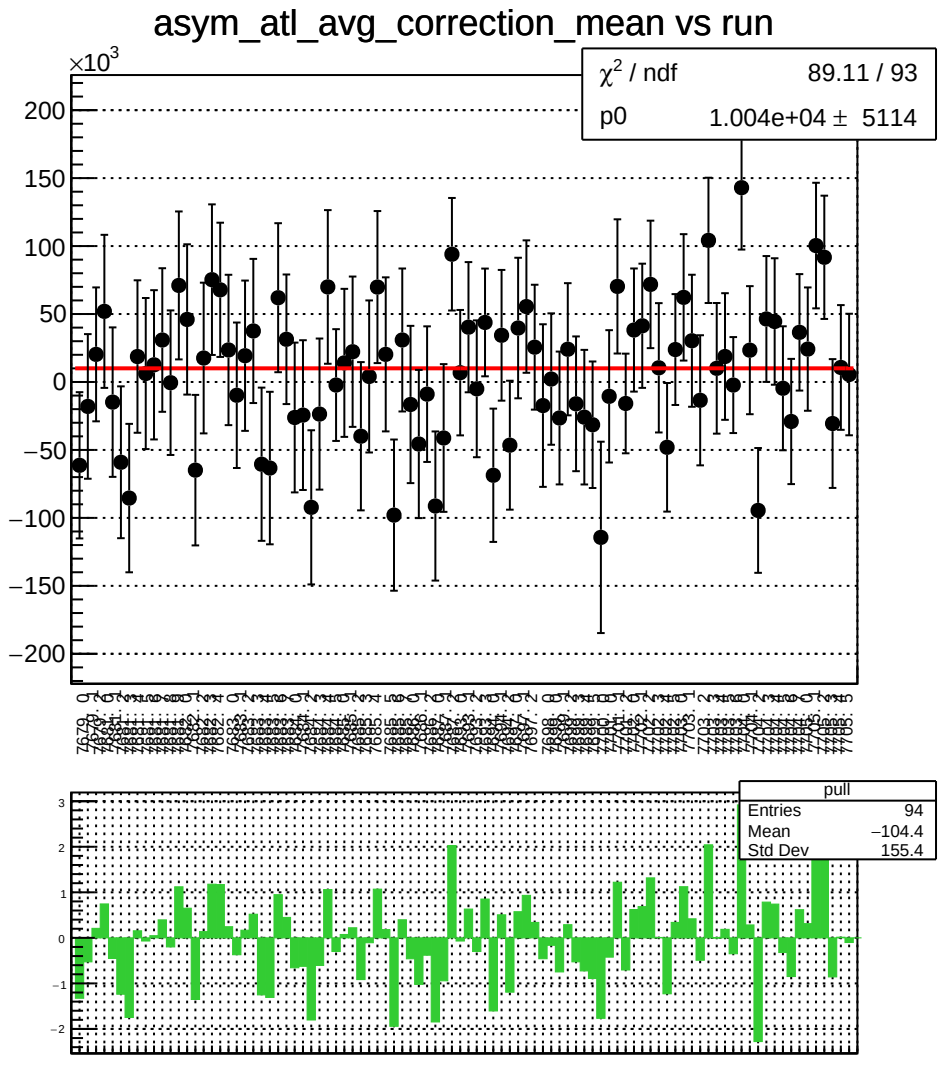

pull1D
Entries 94
Mean 0.007683
Std Dev 0.9314
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

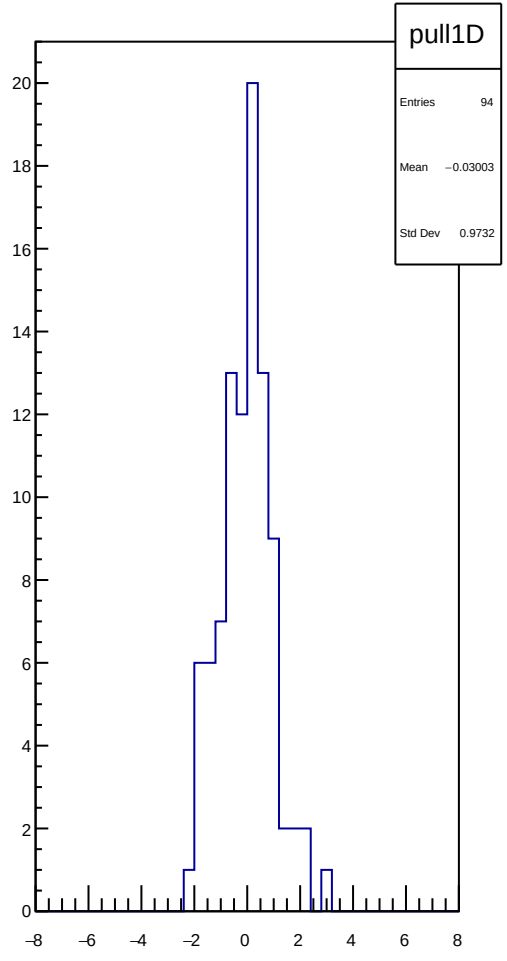

asym_atr2_rms vs run
χ² / ndf 1.633e+04 / 93
p0 1.192e+04 ± 8.961
15000
14000
13000
12000
11000
10000
9000

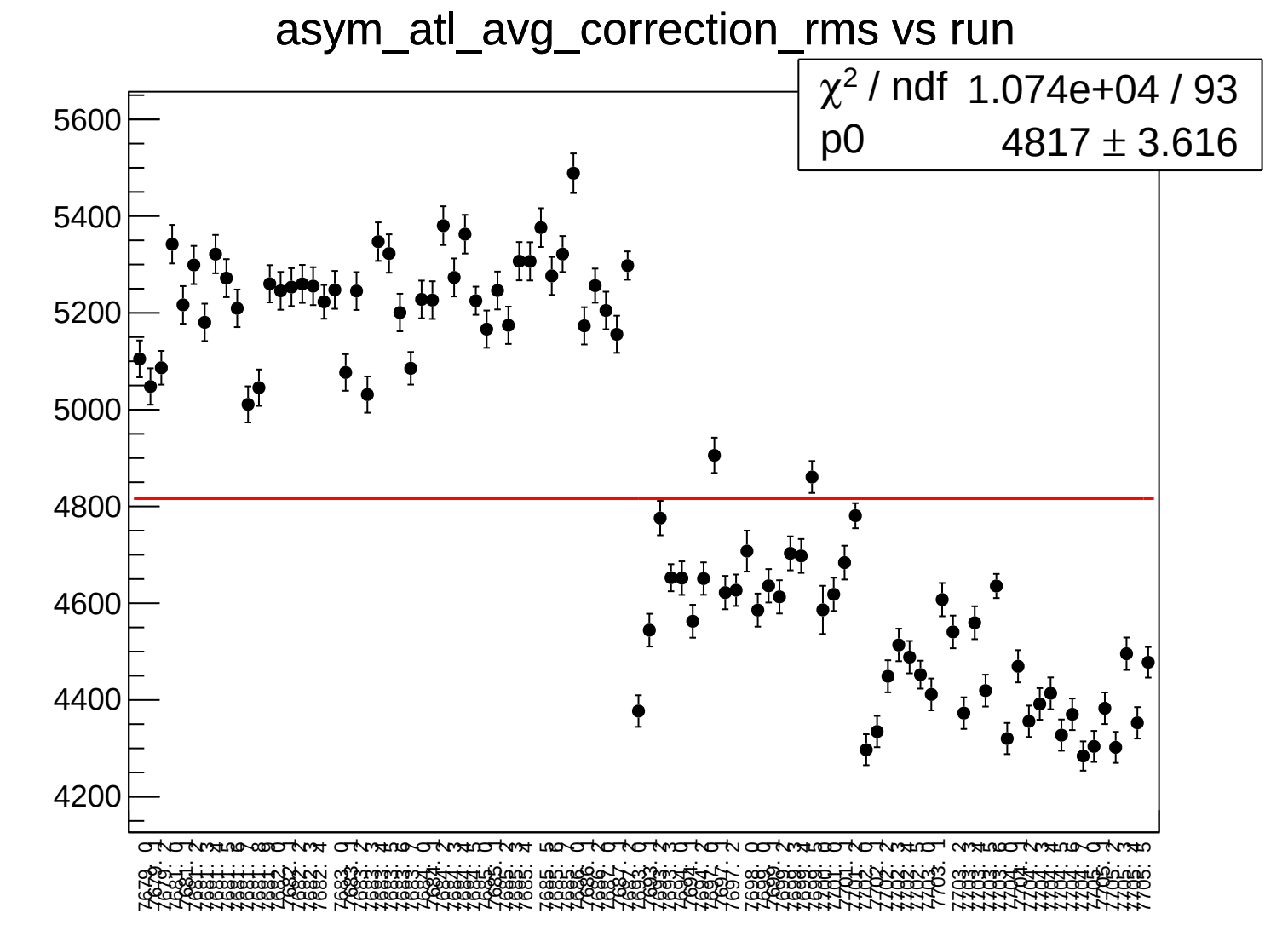

reg_asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 82.22 / 93
p0 −2176 ± 1875
pull
Entries 94
Mean −67.64
Std Dev 127.9

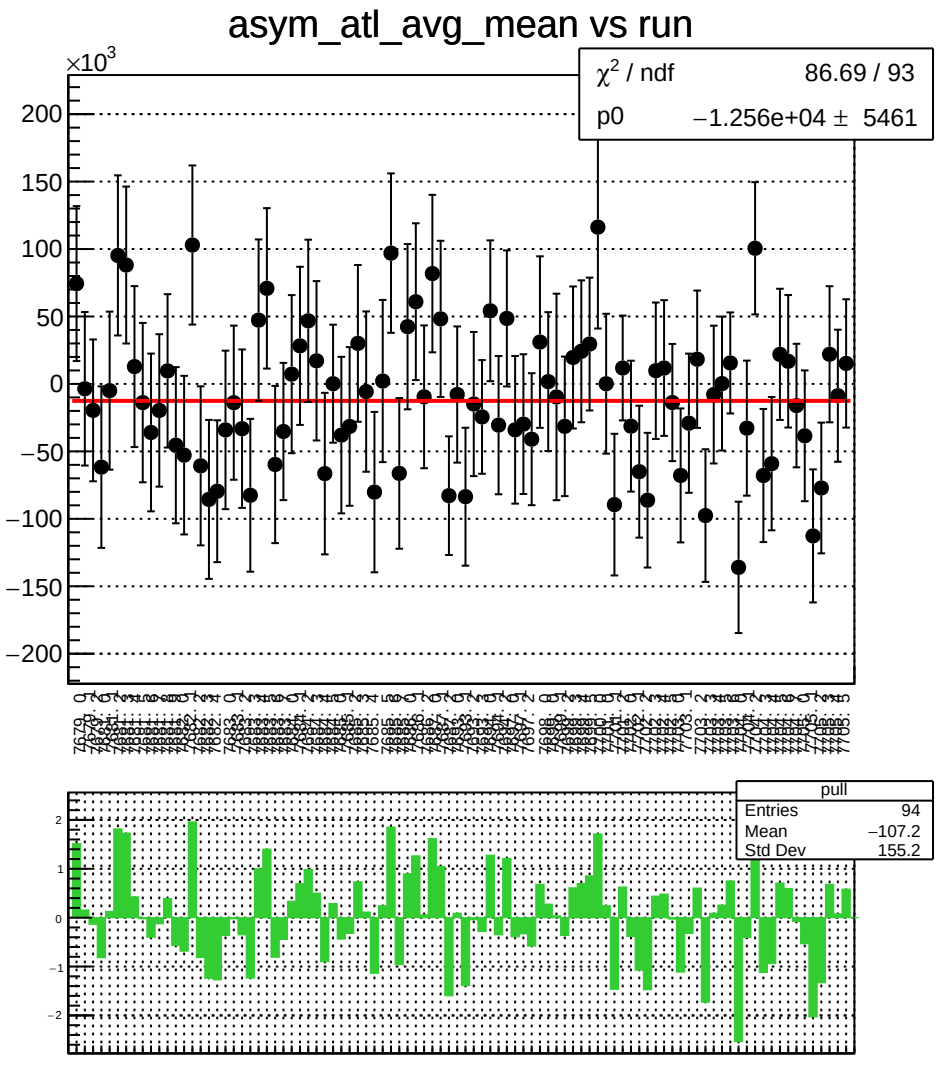

pull1D
Entries 94
Mean −0.02073
Std Dev 0.935

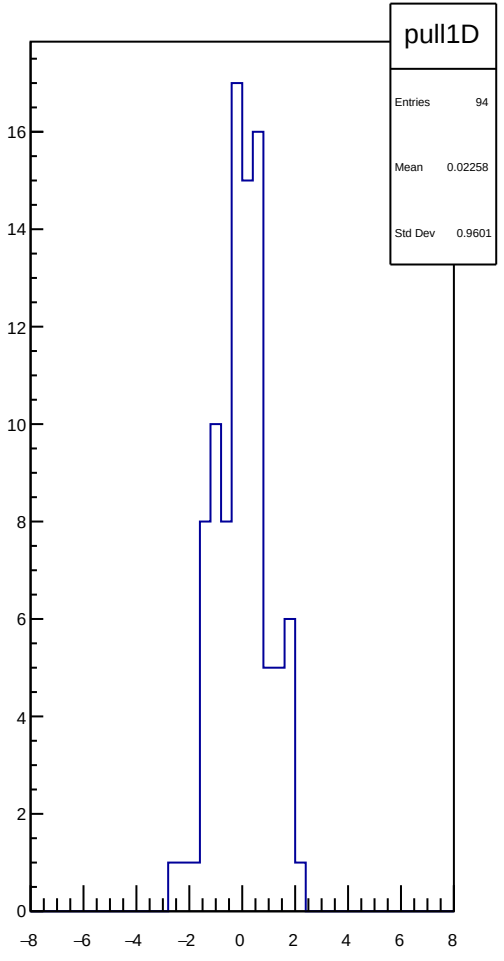

reg_asym_atl_avg_rms vs run
χ^2 / ndf 1.747e+04 / 93
p0 1763 ± 1.326
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

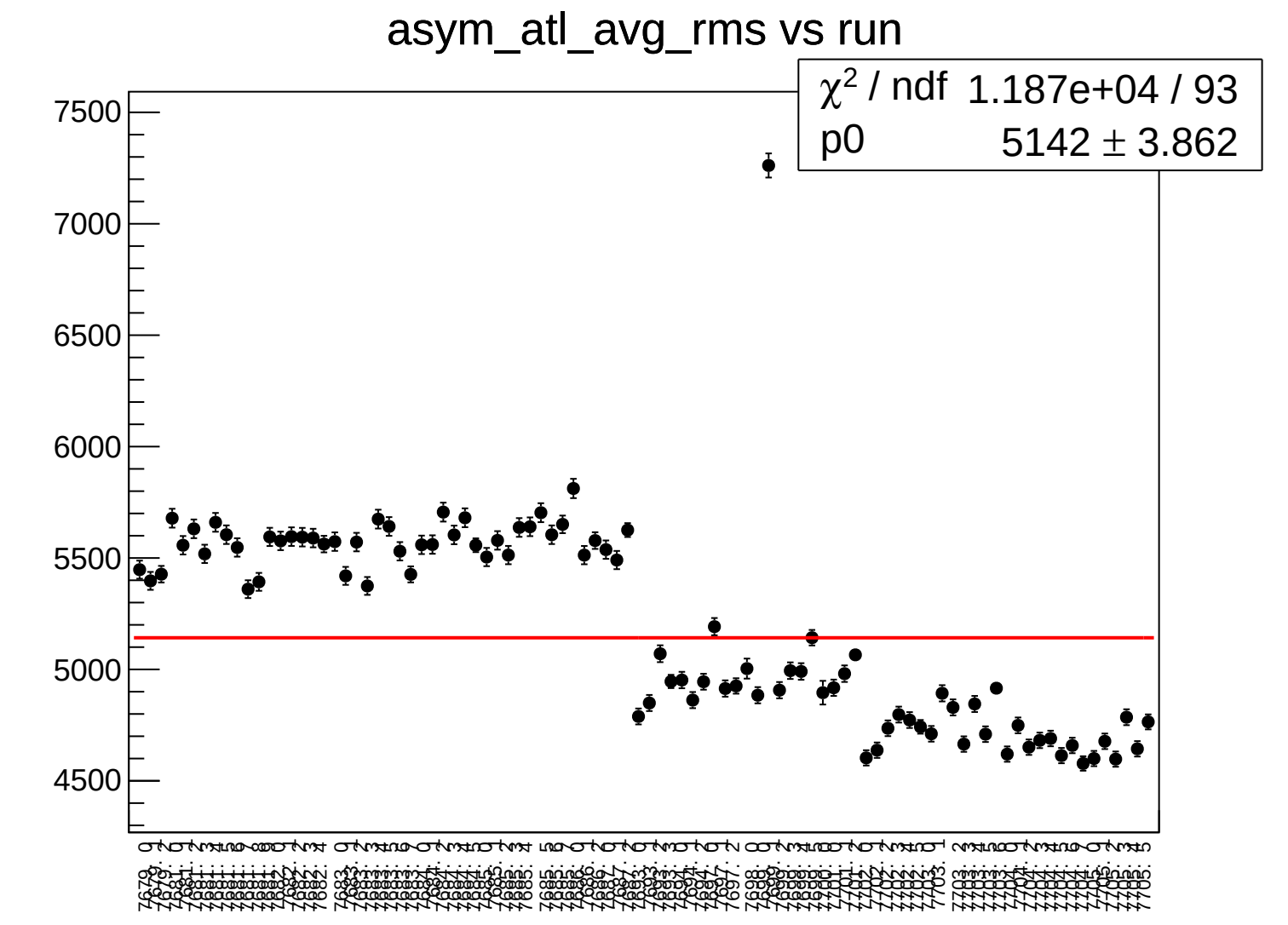

asym_atl_avg_correction_mean vs run
×10^3
χ² / ndf 89.11 / 93
p0 1.004e+04 ± 5114
pull
Entries 94
Mean −104.4
Std Dev 155.4

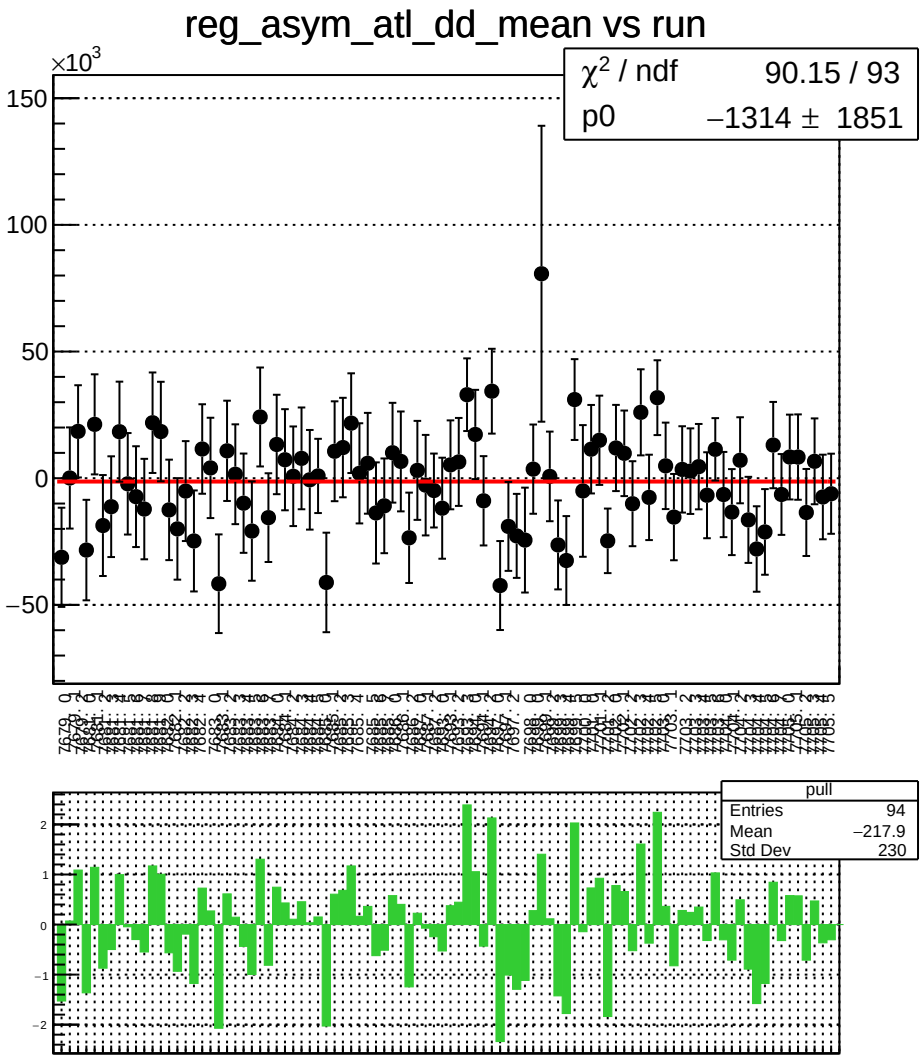

pull1D
Entries 94
Mean −0.03003
Std Dev 0.9732

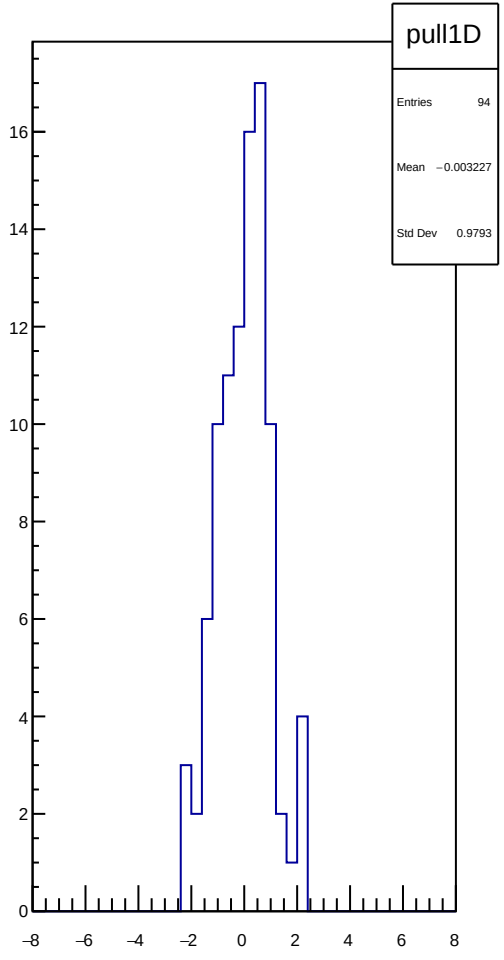

asym_atl_avg_correction_rms vs run
χ² / ndf 1.074e+04 / 93
p0 4817 ± 3.616
5600
5400
5200
5000
4800
4600
4400
4200

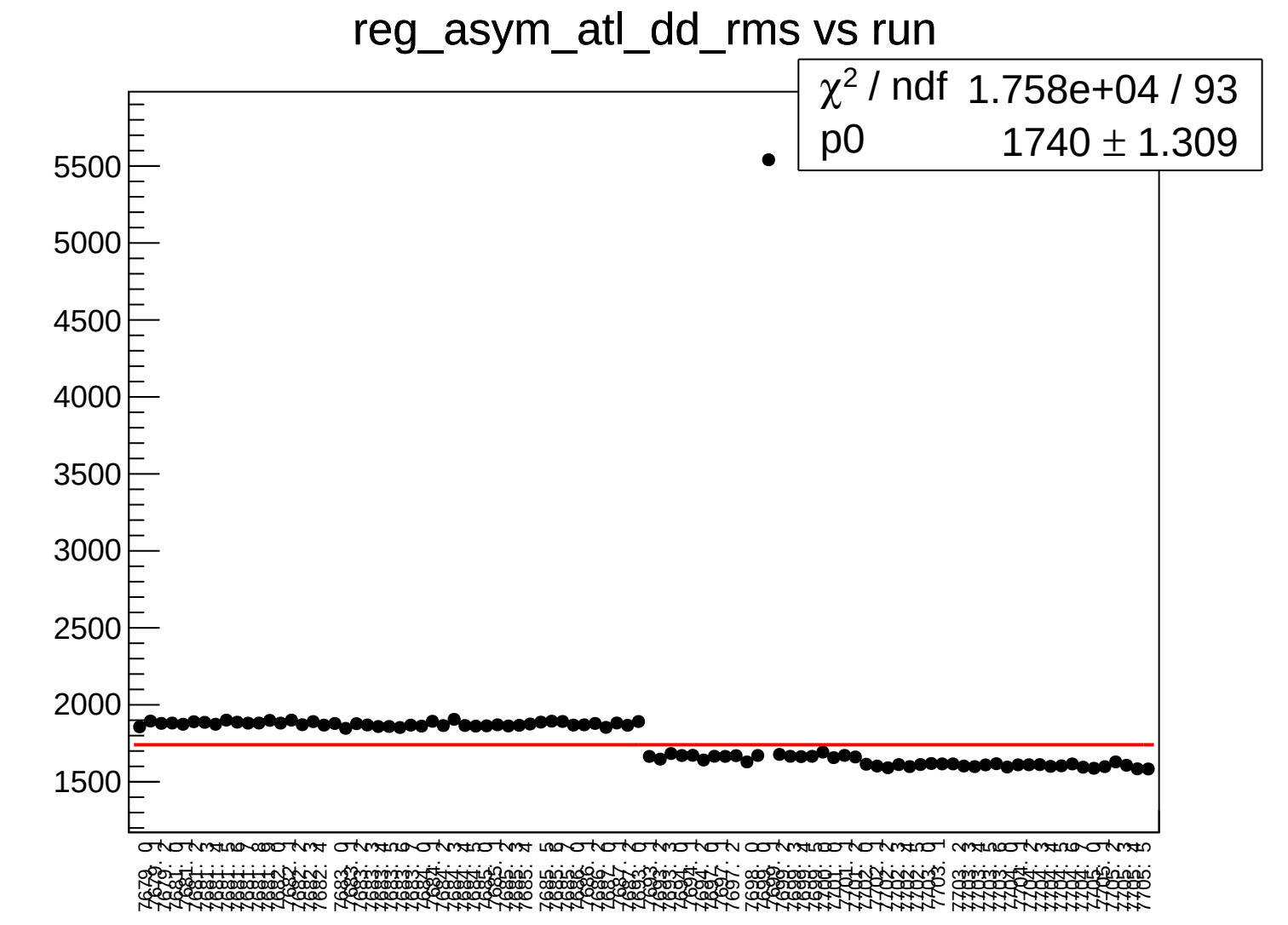

asym_atl_avg_mean vs run
×10^3
χ² / ndf 86.69 / 93
p0 −1.256e+04 ± 5461
pull
Entries 94
Mean −107.2
Std Dev 155.2

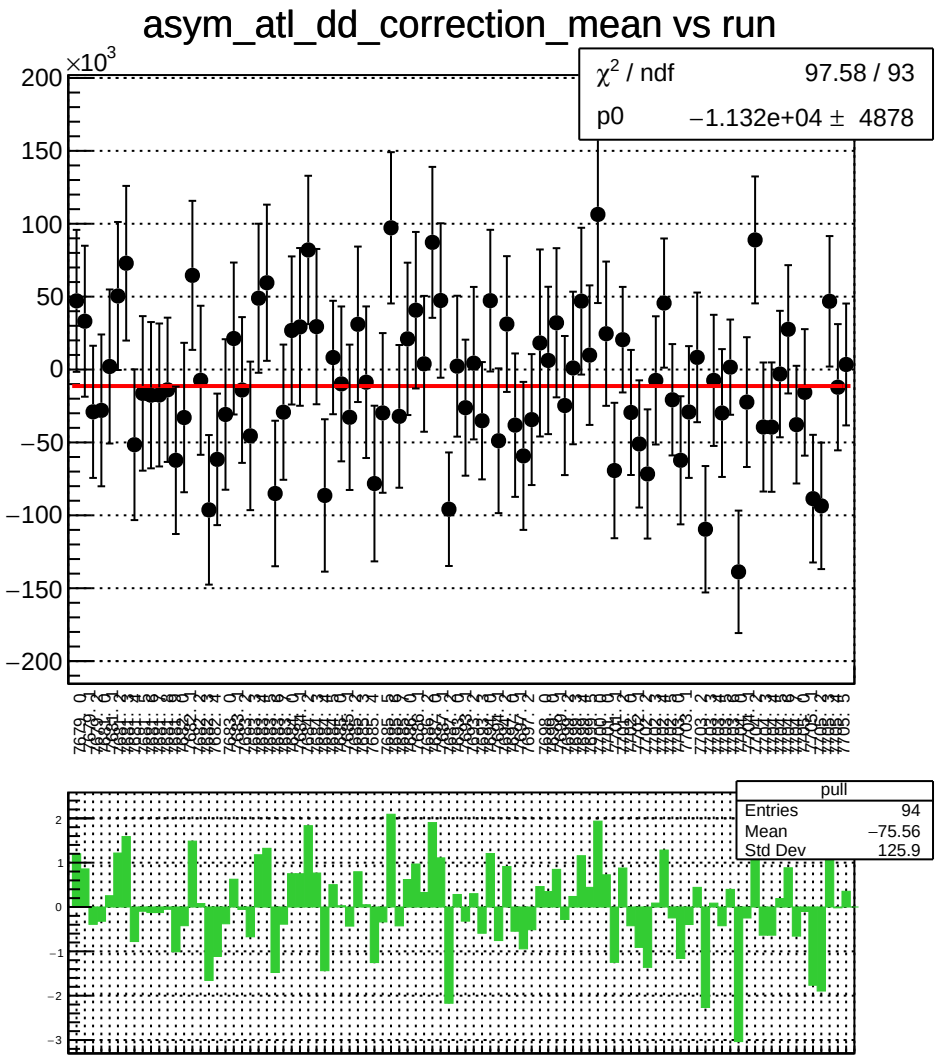

pull1D
Entries 94
Mean 0.02258
Std Dev 0.9601

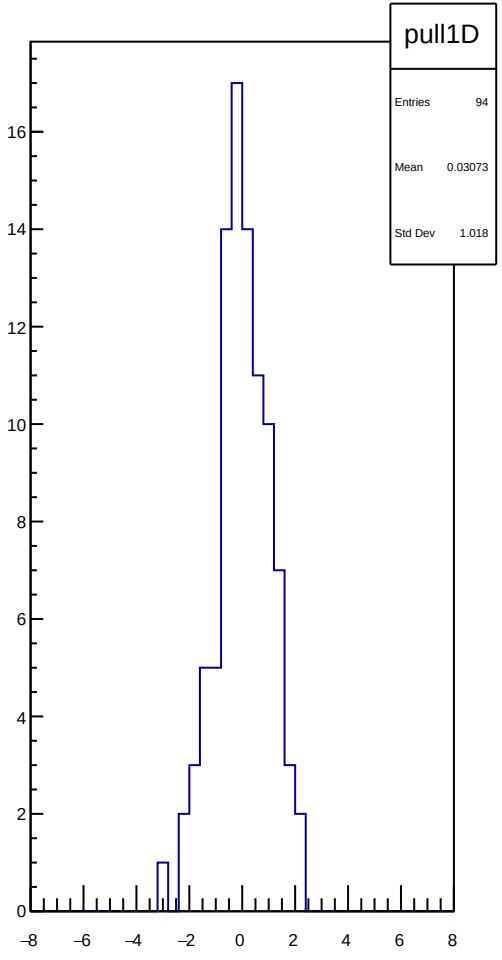

asym_atl_avg_rms vs run
χ^2 / ndf 1.187e+04 / 93
p0 5142 ± 3.862
7500
7000
6500
6000
5500
5000
4500

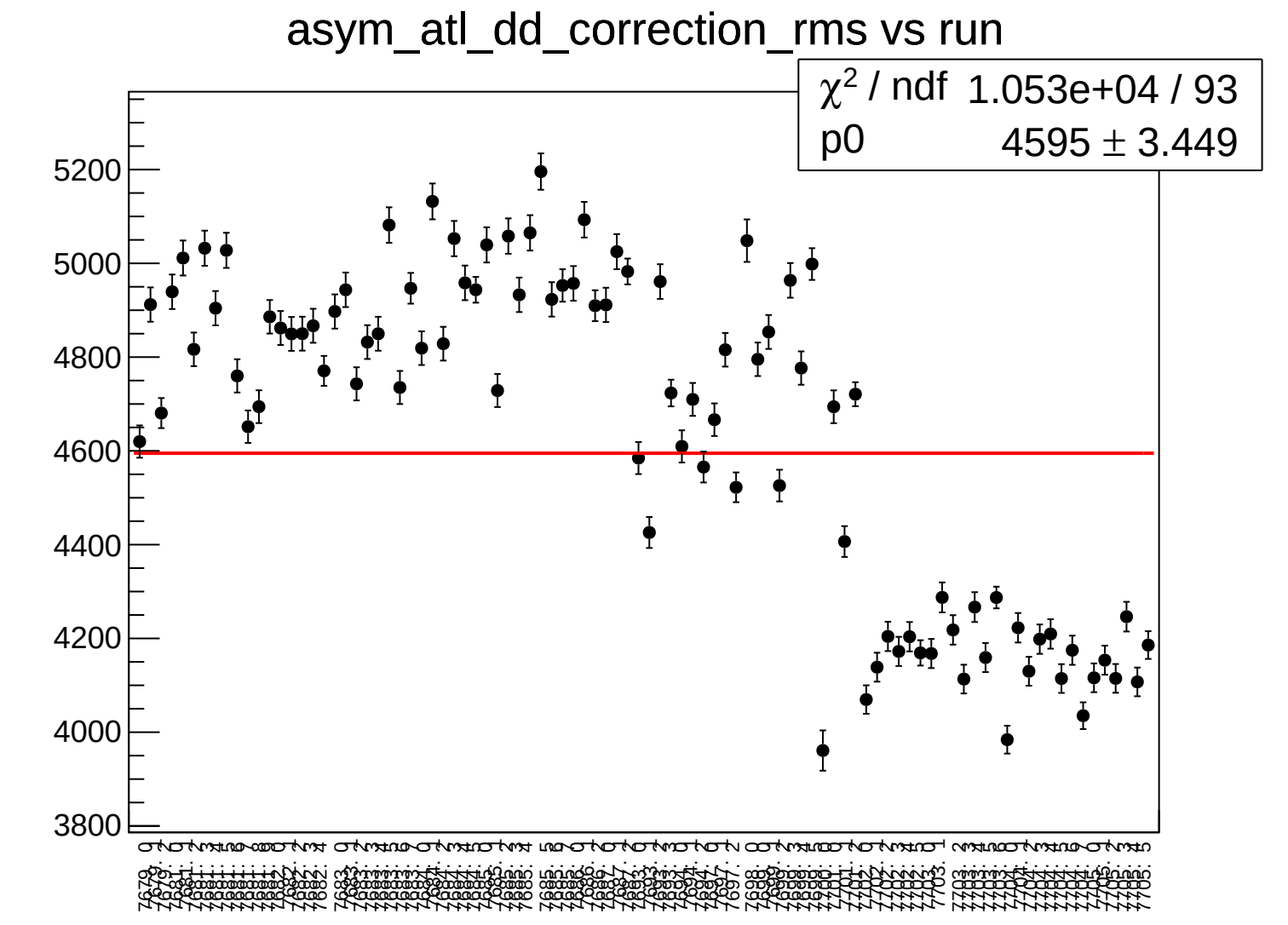

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 90.15 / 93
p0 −1314 ± 1851
150
100
50
0
−50
pull
Entries 94
Mean −217.9
Std Dev 230
2
1
0
−1
−2

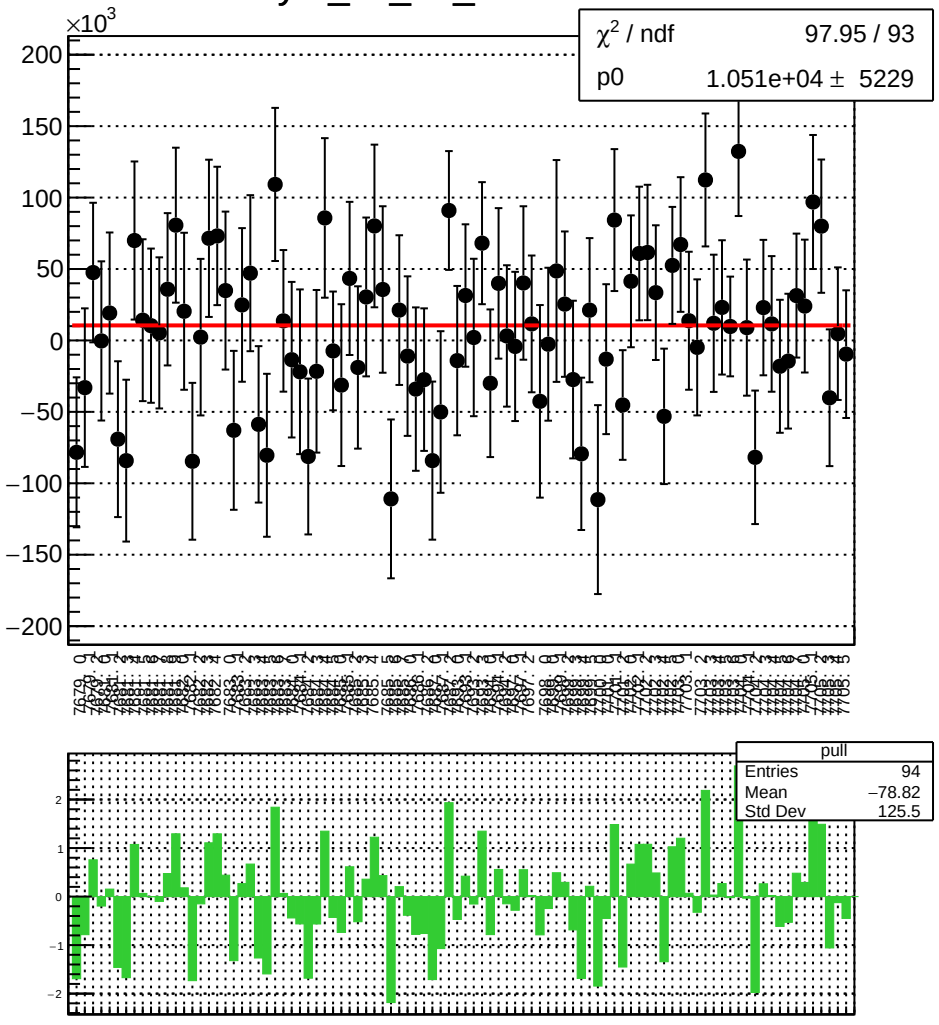

pull1D
Entries 94
Mean −0.003227
Std Dev 0.9793
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

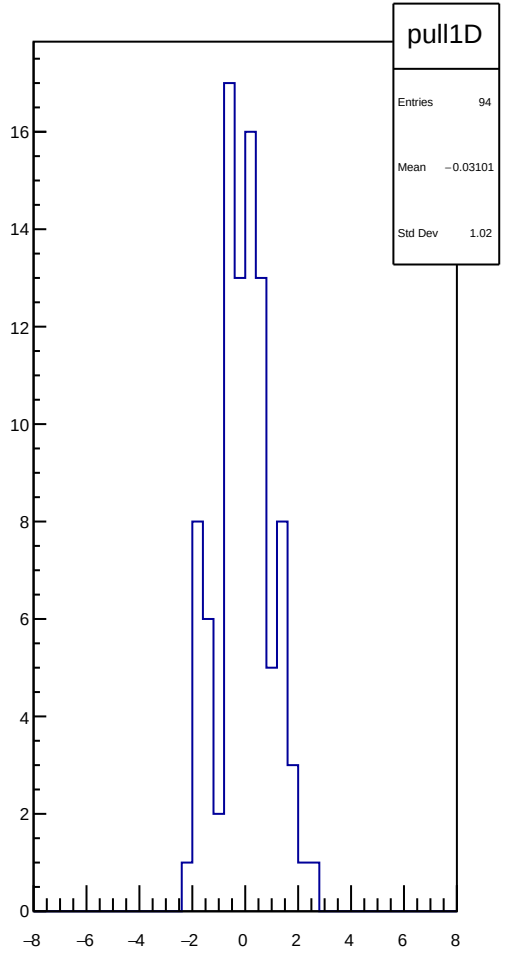

reg_asym_atl_dd_rms vs run
χ² / ndf 1.758e+04 / 93
p0 1740 ± 1.309
5500
5000
4500
4000
3500
3000
2500
2000
1500

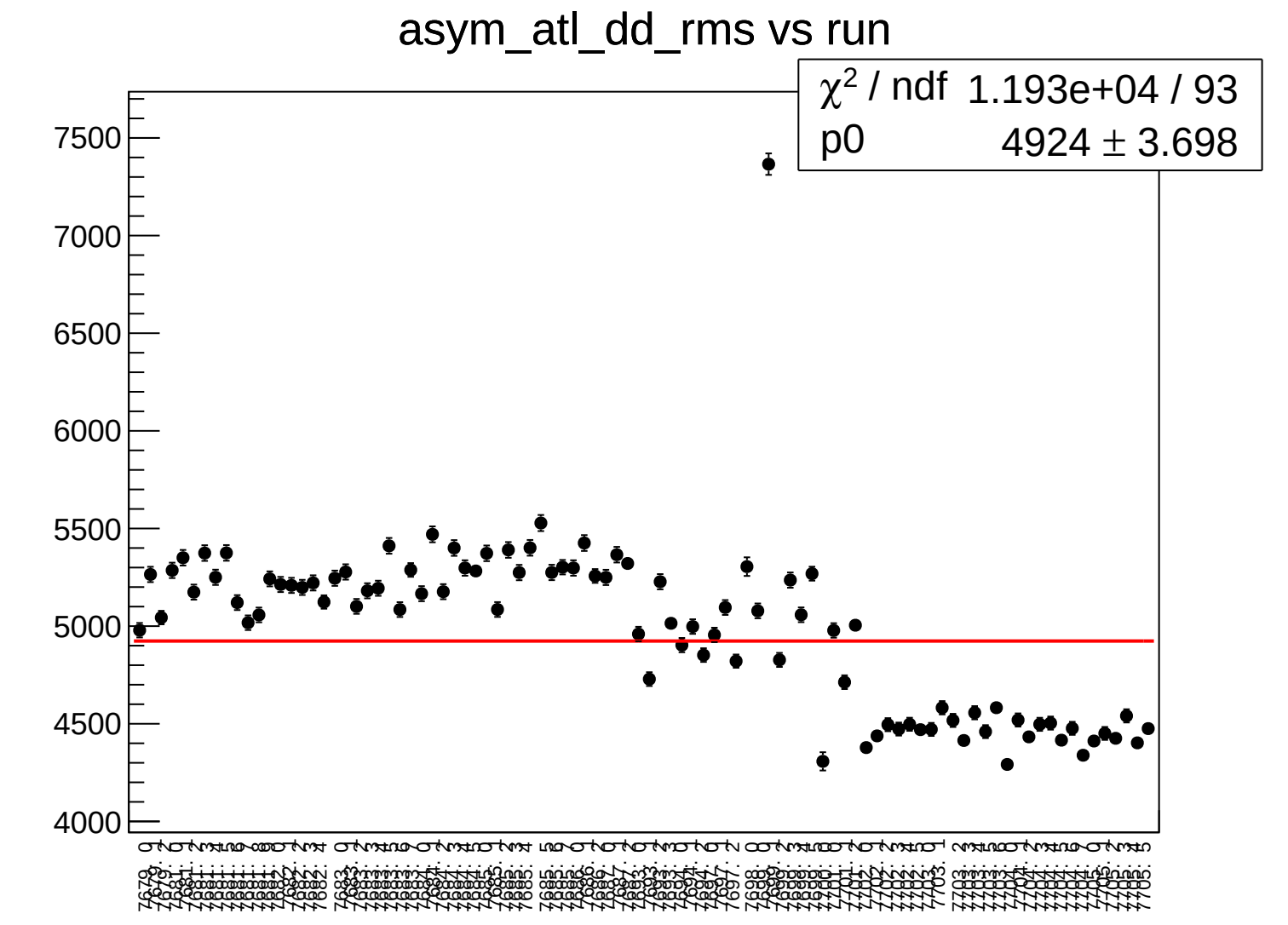

asym_atl_dd_correction_mean vs run
χ² / ndf 97.58 / 93
p0 −1.132e+04 ± 4878
pull
Entries 94
Mean −75.56
Std Dev 125.9

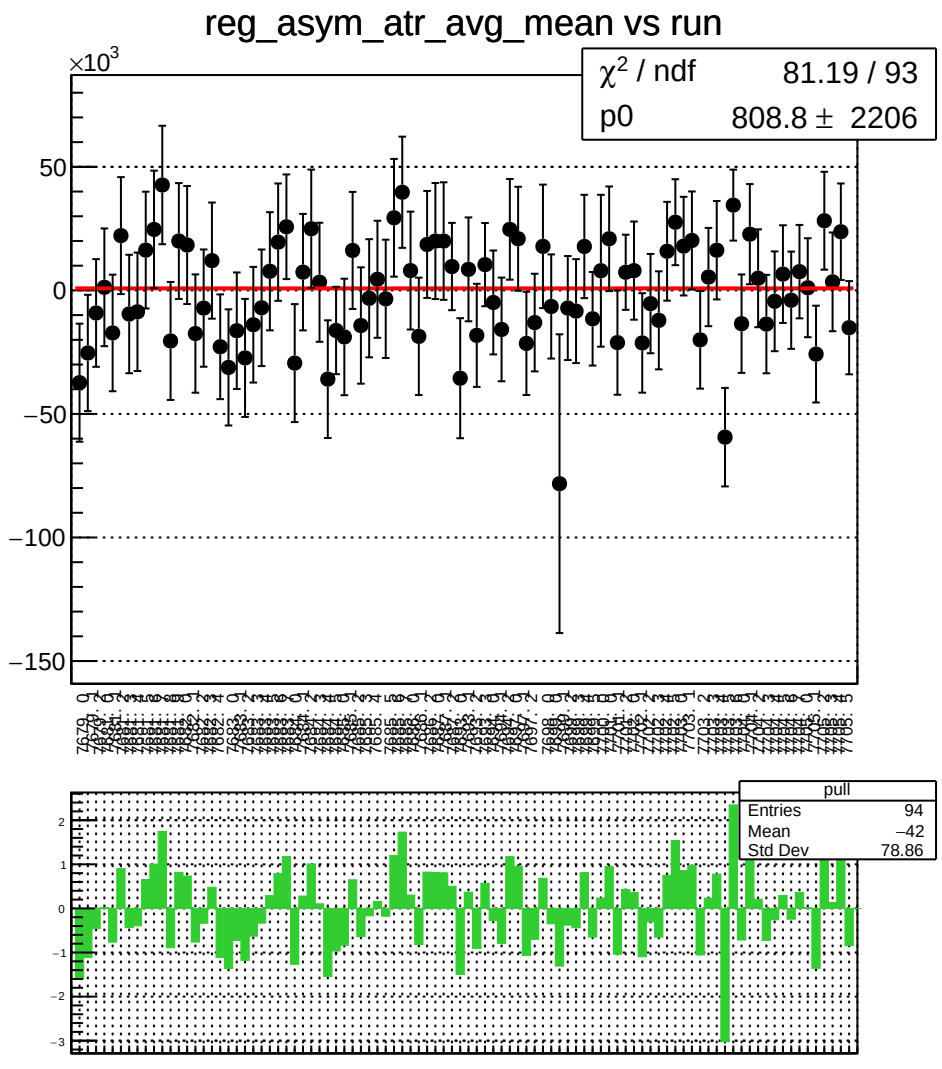

pull1D
Entries 94
Mean 0.03073
Std Dev 1.018

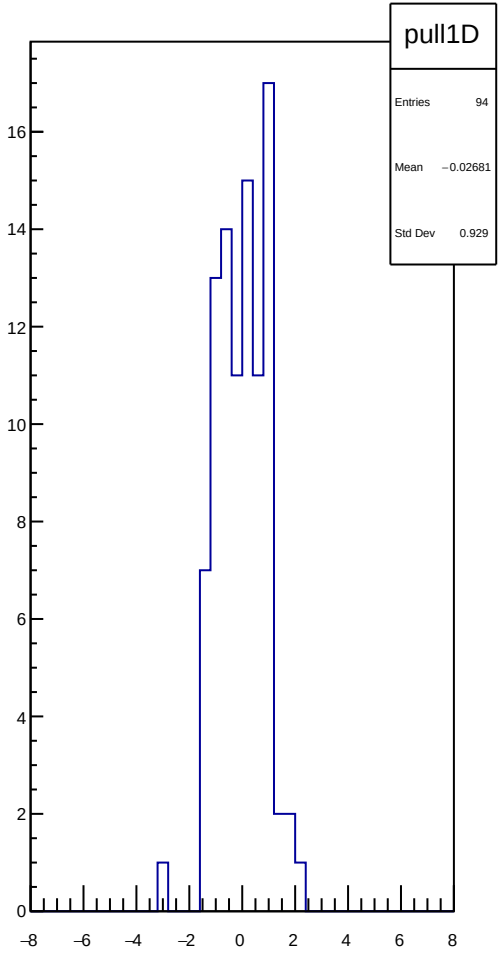

asym_atl_dd_correction_rms vs run
χ^2 / ndf 1.053e+04 / 93
p0 4595 ± 3.449
5200
5000
4800
4600
4400
4200
4000
3800

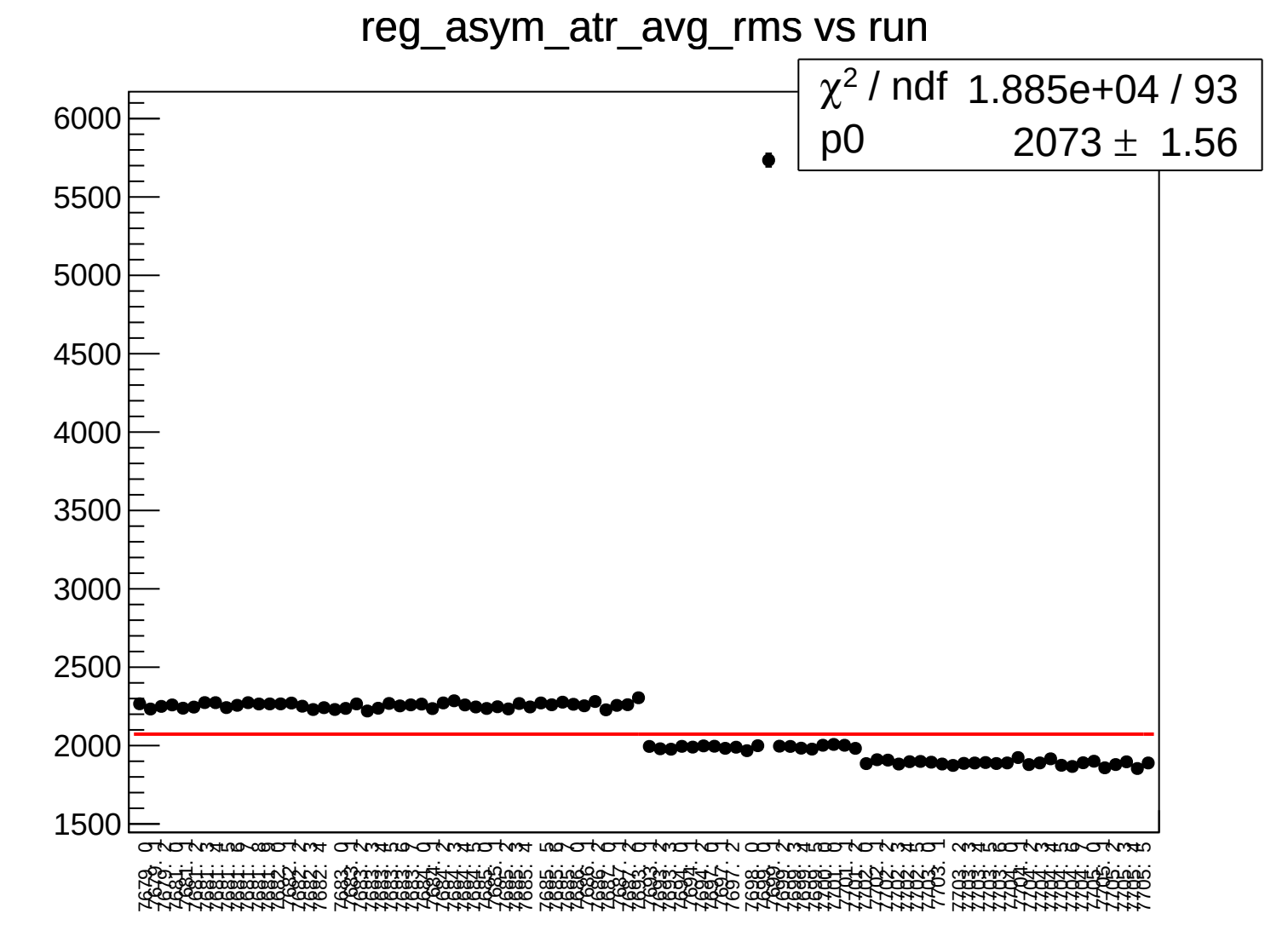

asym_atl_dd_mean vs run
×10^3
χ² / ndf 97.95 / 93
p0 1.051e+04 ± 5229
pull
Entries 94
Mean −78.82
Std Dev 125.5

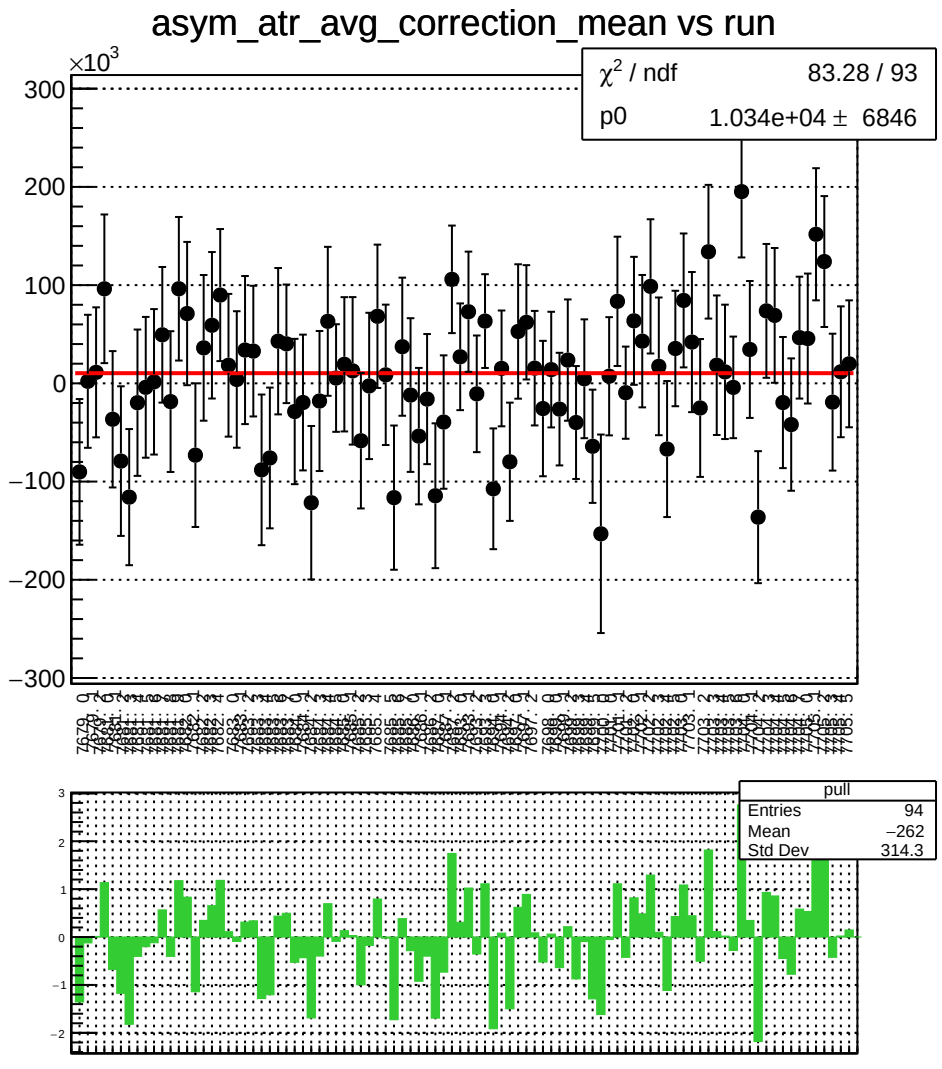

pull1D
Entries 94
Mean −0.03101
Std Dev 1.02

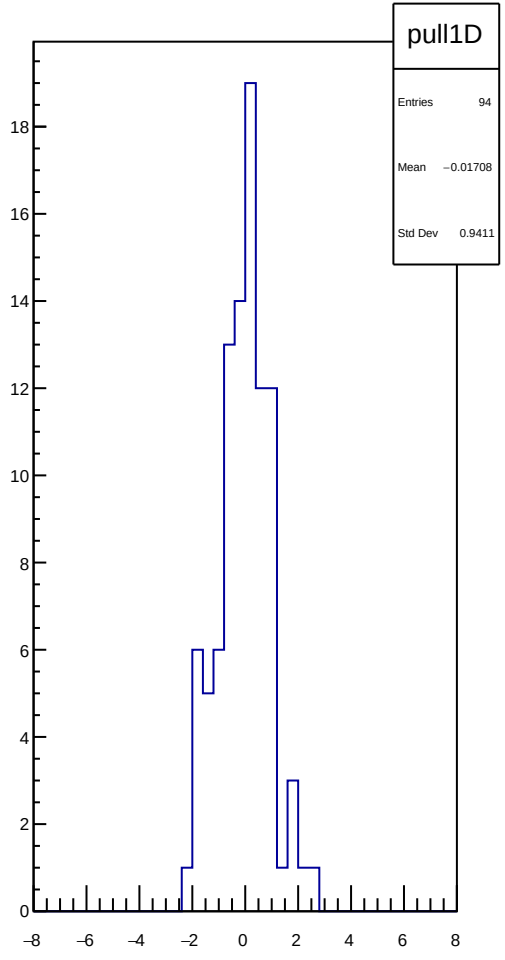

asym_atl_dd_rms vs run
χ^2 / ndf 1.193e+04 / 93
p0 4924 ± 3.698
7500
7000
6500
6000
5500
5000
4500
4000

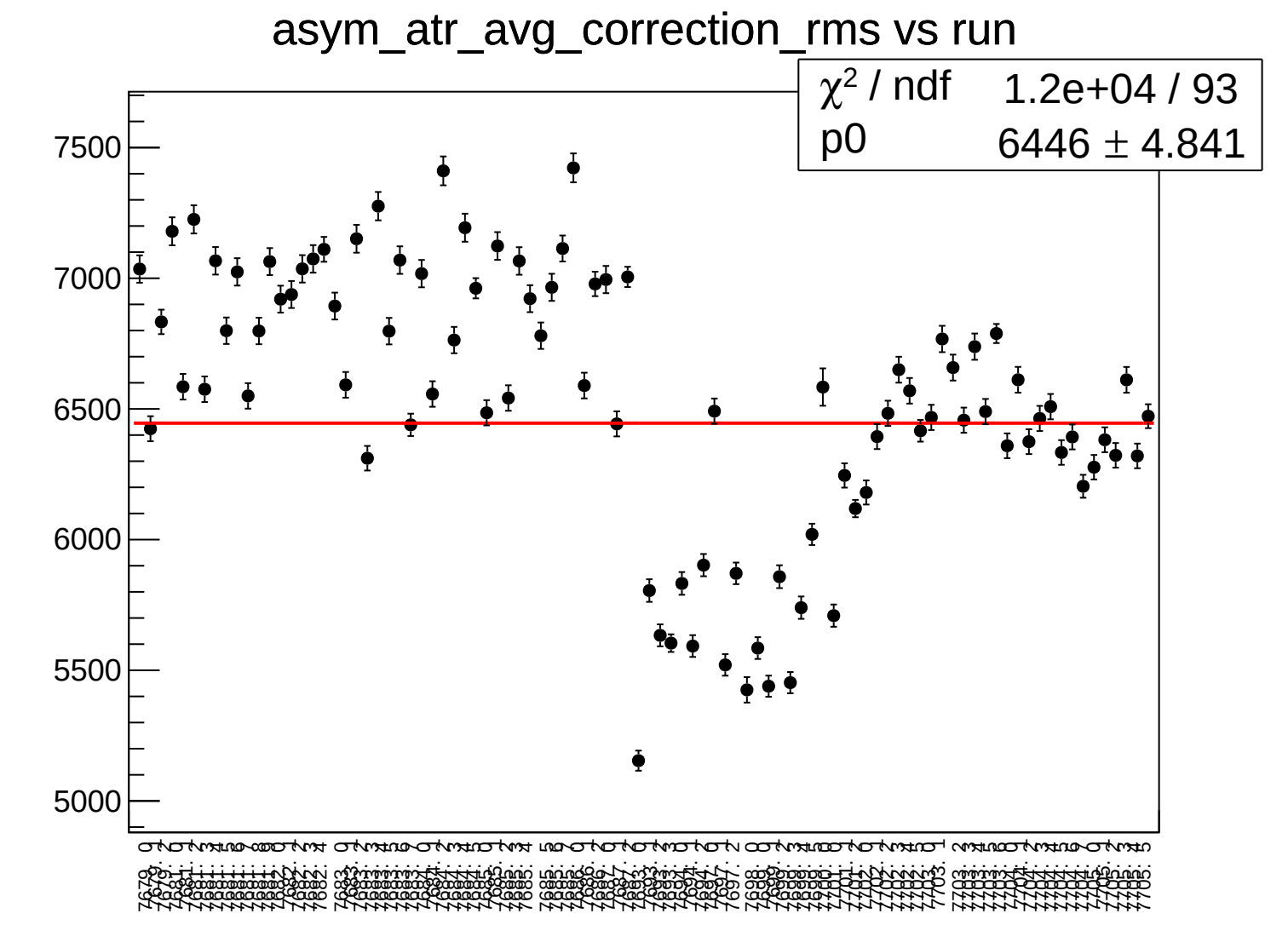

reg_asym_atr_avg_mean vs run
×10^3
χ^2 / ndf 81.19 / 93
p0 808.8 ± 2206
50
0
−50
−100
−150
pull
Entries 94
Mean −42
Std Dev 78.86
2
1
0
−1
−2
−3

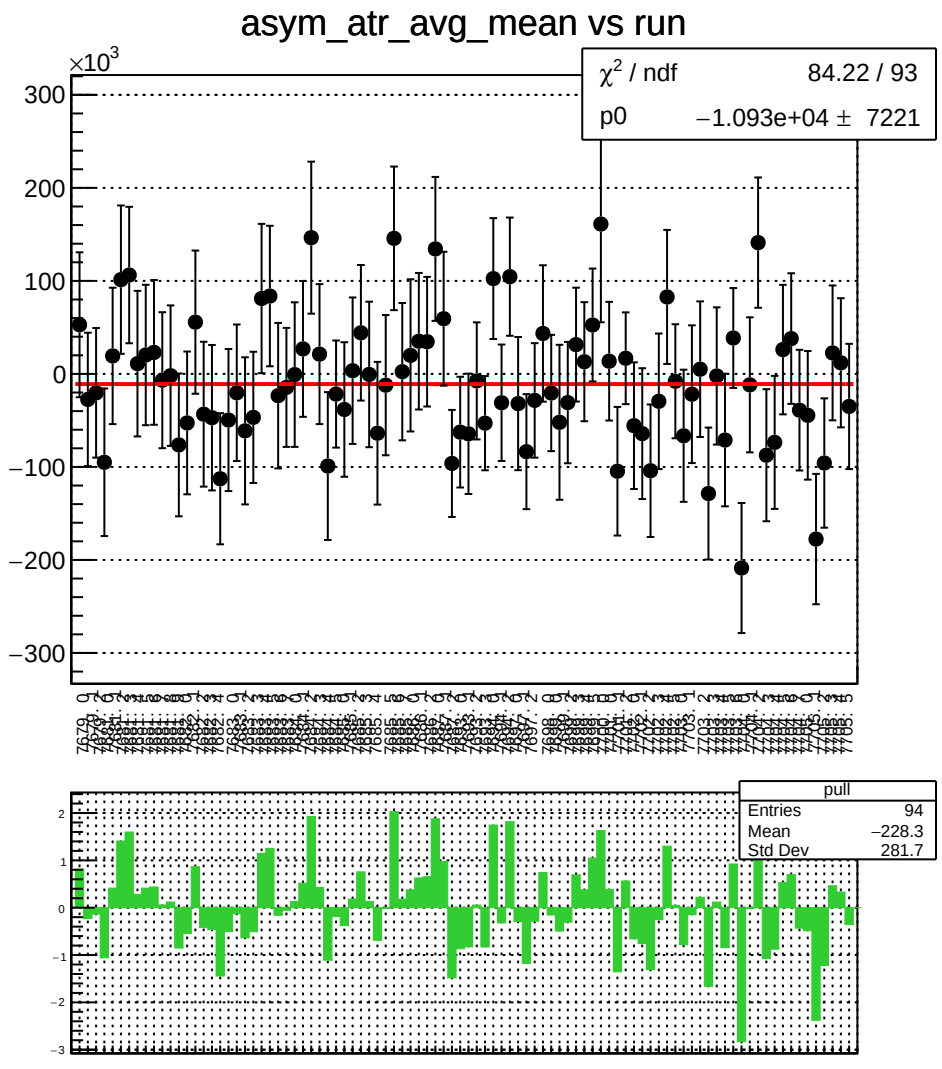

pull1D
Entries 94
Mean −0.02681
Std Dev 0.929
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

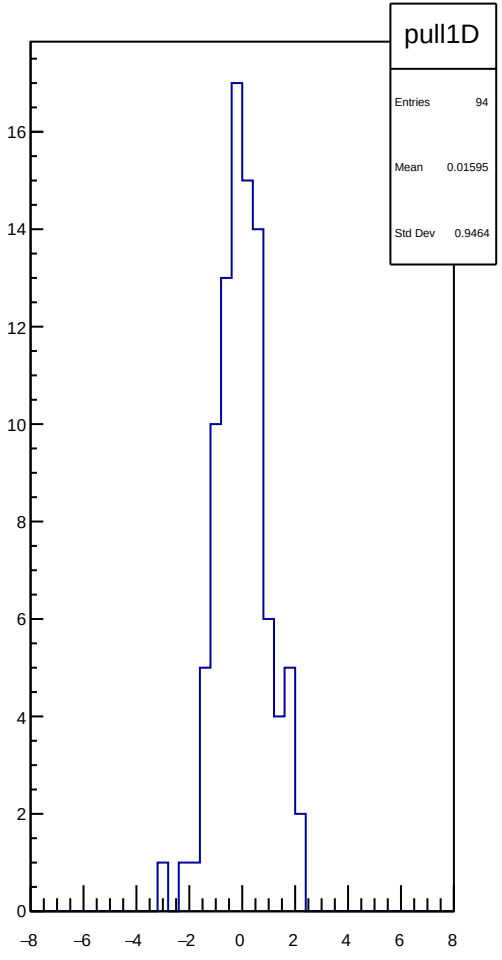

reg_asym_atr_avg_rms vs run
χ^2 / ndf 1.885e+04 / 93
p0 2073 ± 1.56
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

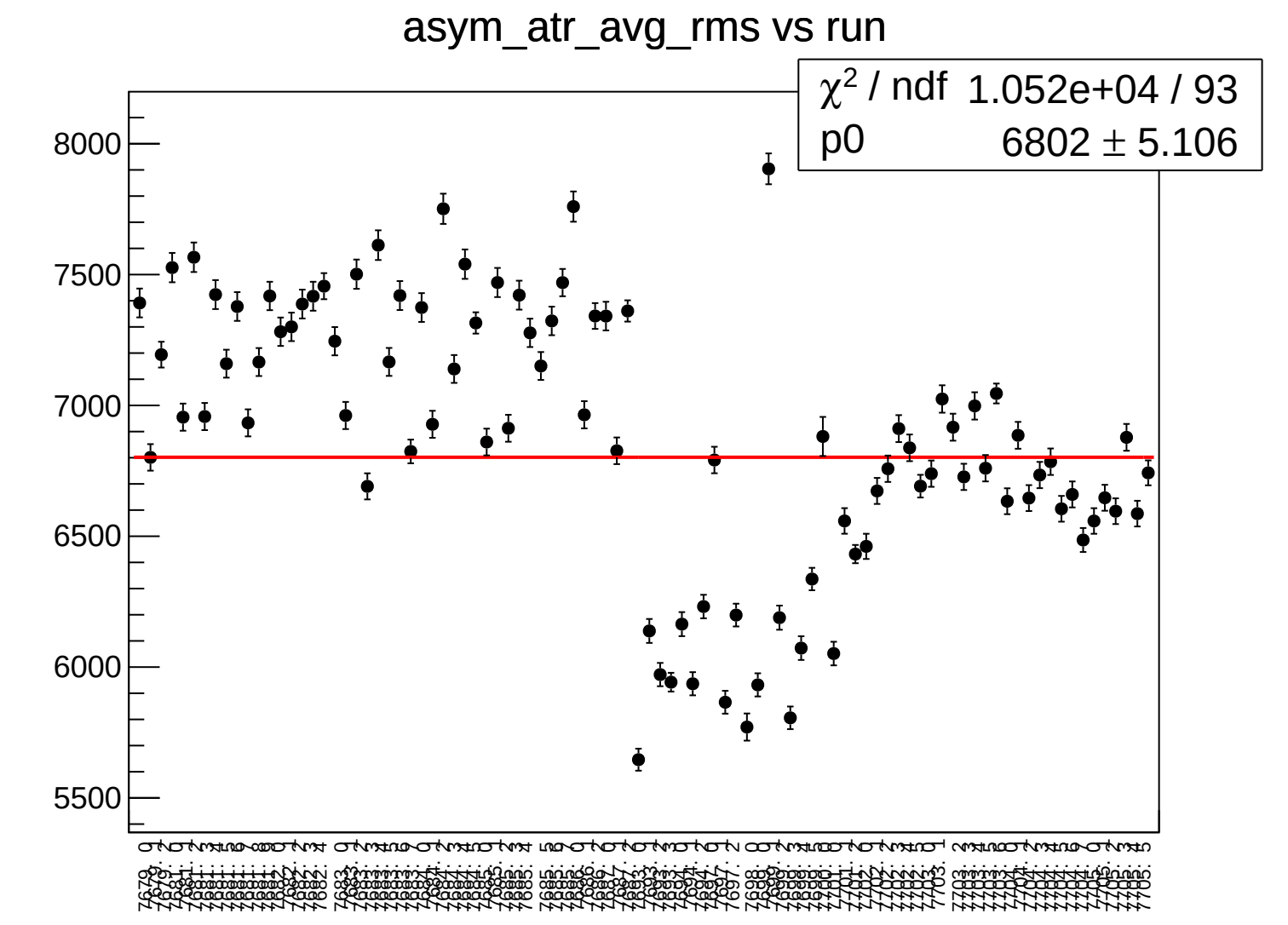

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 83.28 / 93
p0 1.034e+04 ± 6846
pull
Entries 94
Mean −262
Std Dev 314.3

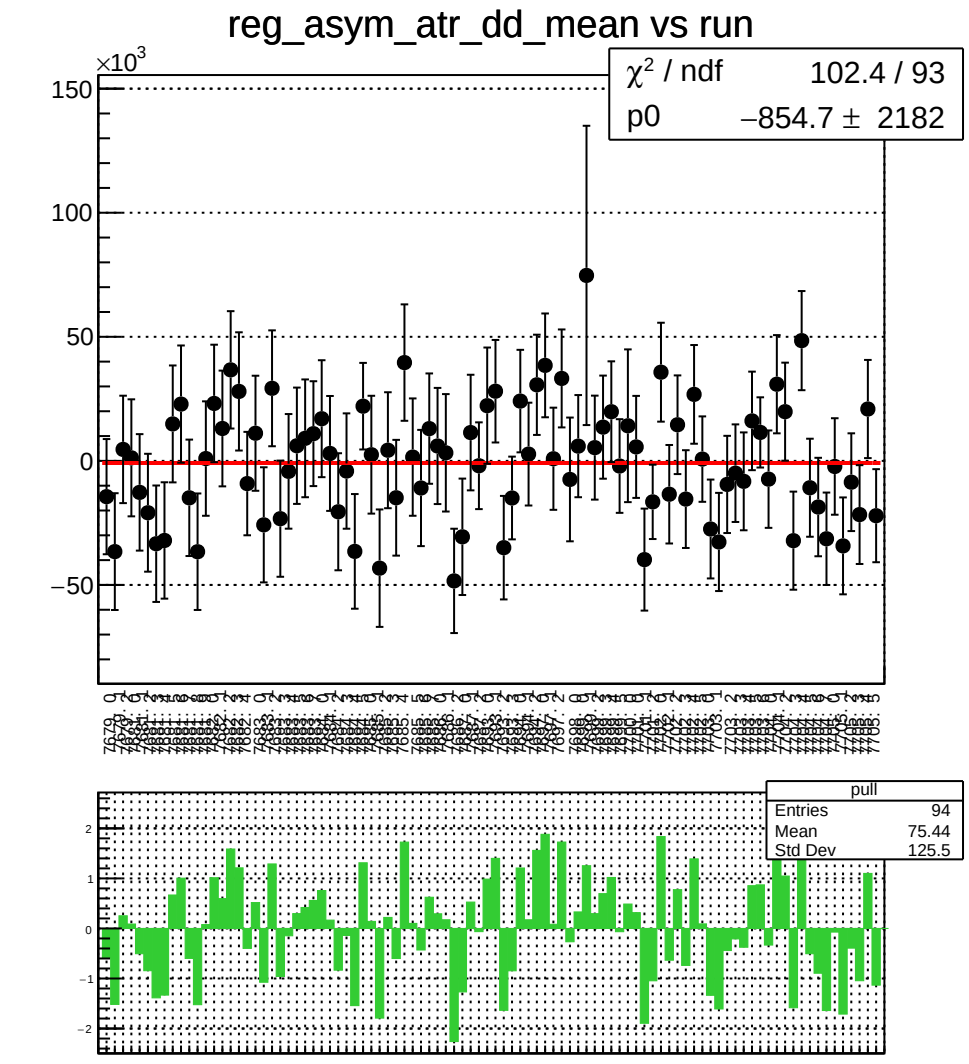

pull1D
Entries 94
Mean −0.01708
Std Dev 0.9411

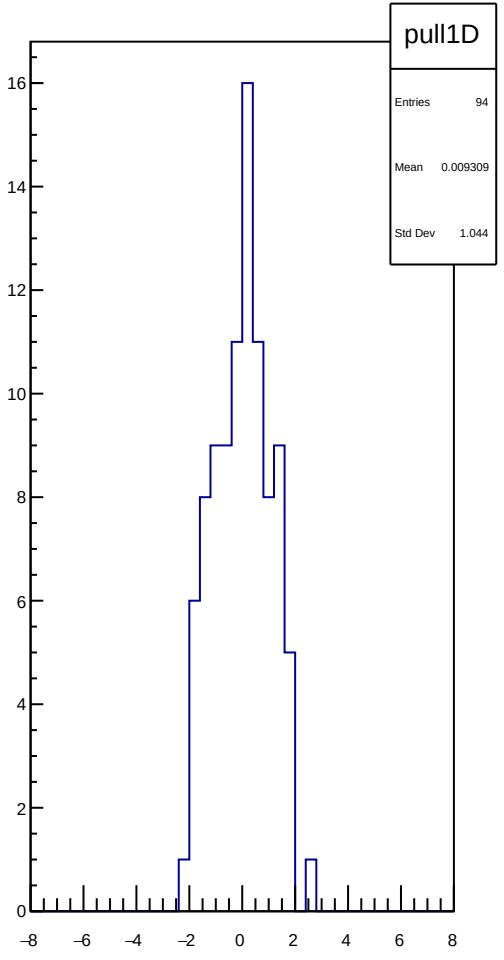

asym_atr_avg_correction_rms vs run
χ² / ndf 1.2e+04 / 93
p0 6446 ± 4.841
7500
7000
6500
6000
5500
5000

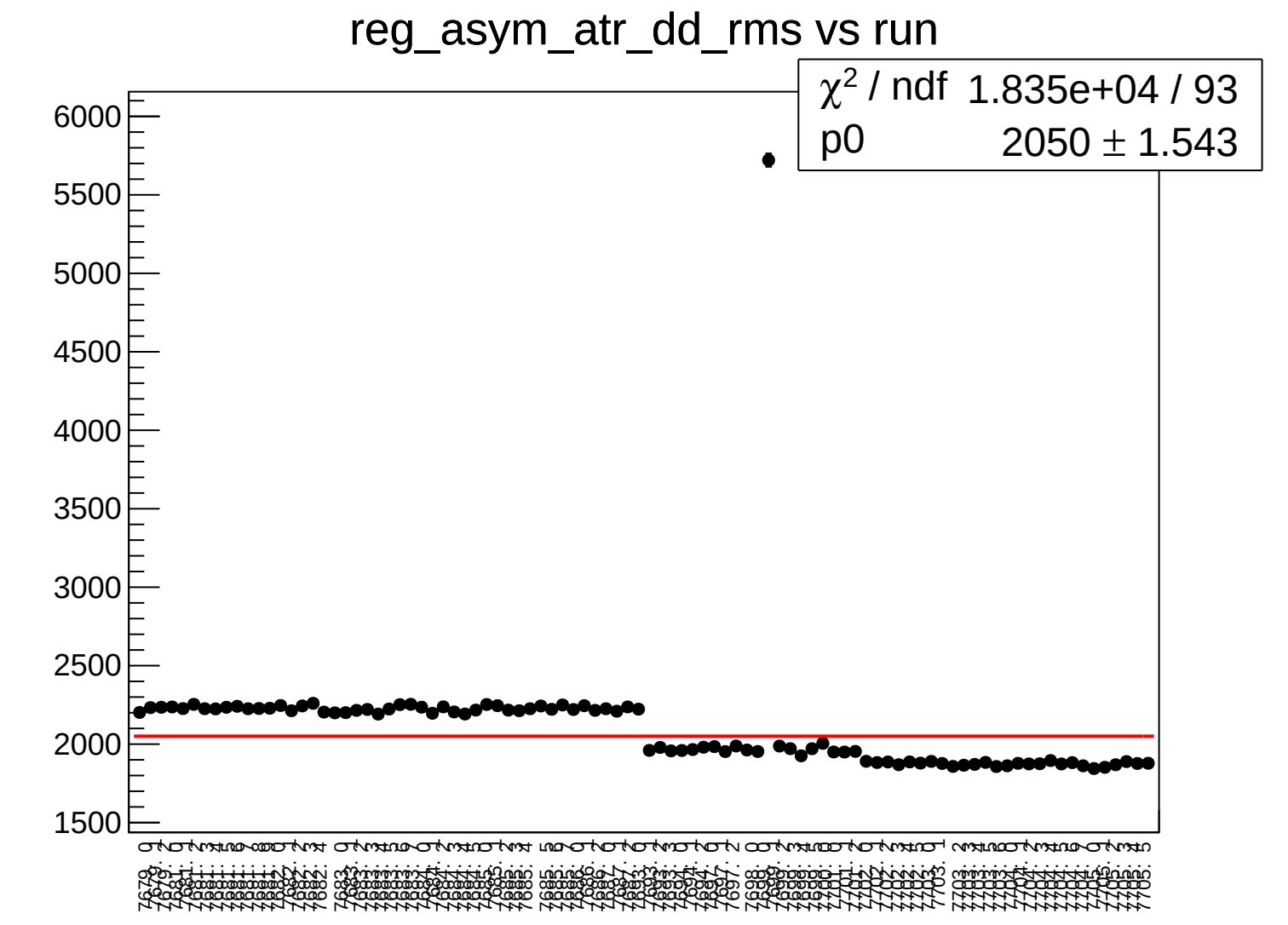

asym_atr_avg_mean vs run
×10^3
χ² / ndf 84.22 / 93
p0 −1.093e+04 ± 7221
pull
Entries 94
Mean −228.3
Std Dev 281.7

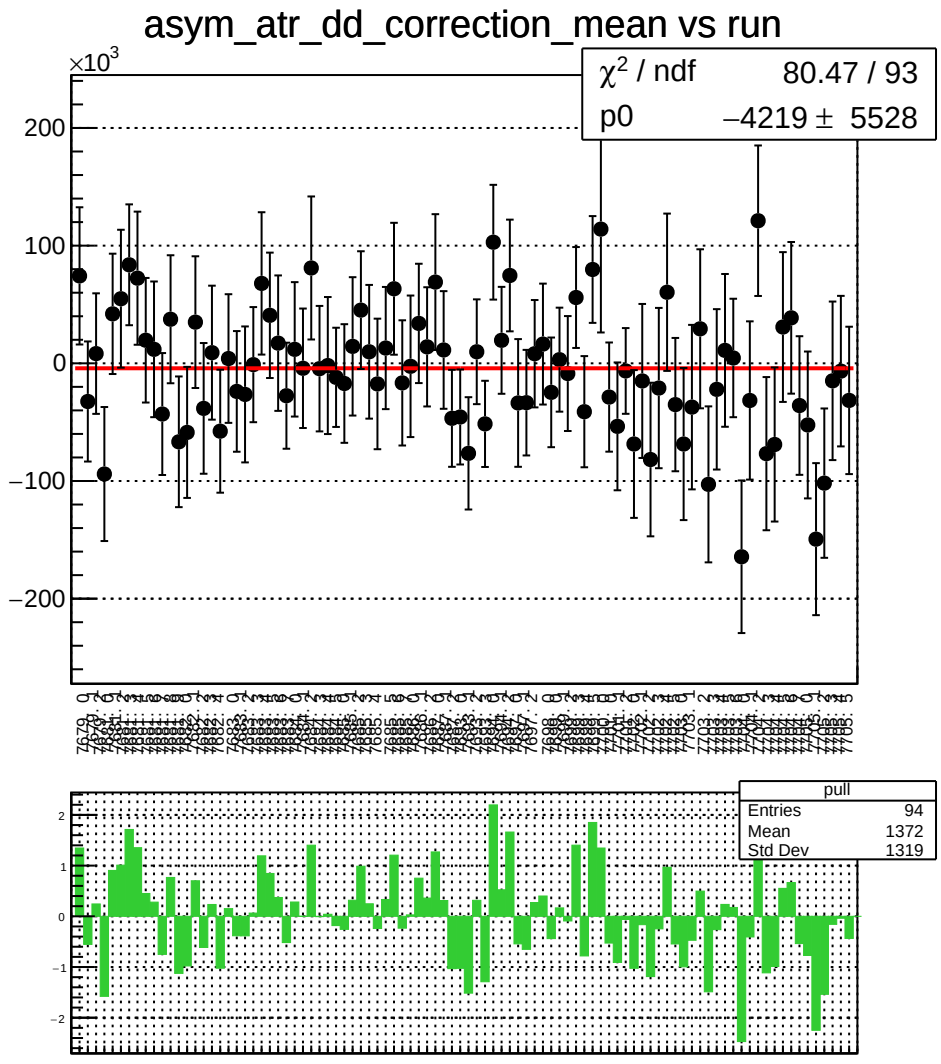

pull1D
Entries 94
Mean 0.01595
Std Dev 0.9464

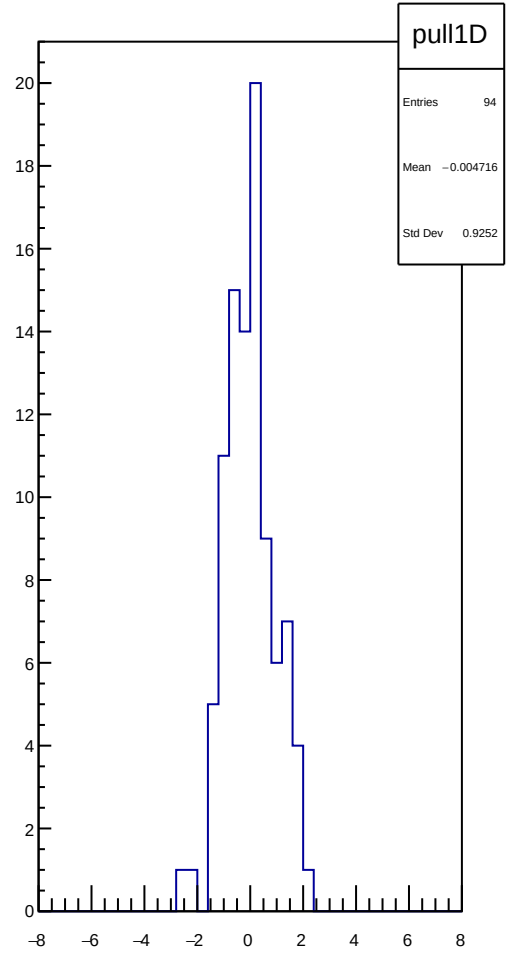

asym_atr_avg_rms vs run
χ² / ndf 1.052e+04 / 93
p0 6802 ± 5.106
8000
7500
7000
6500
6000
5500

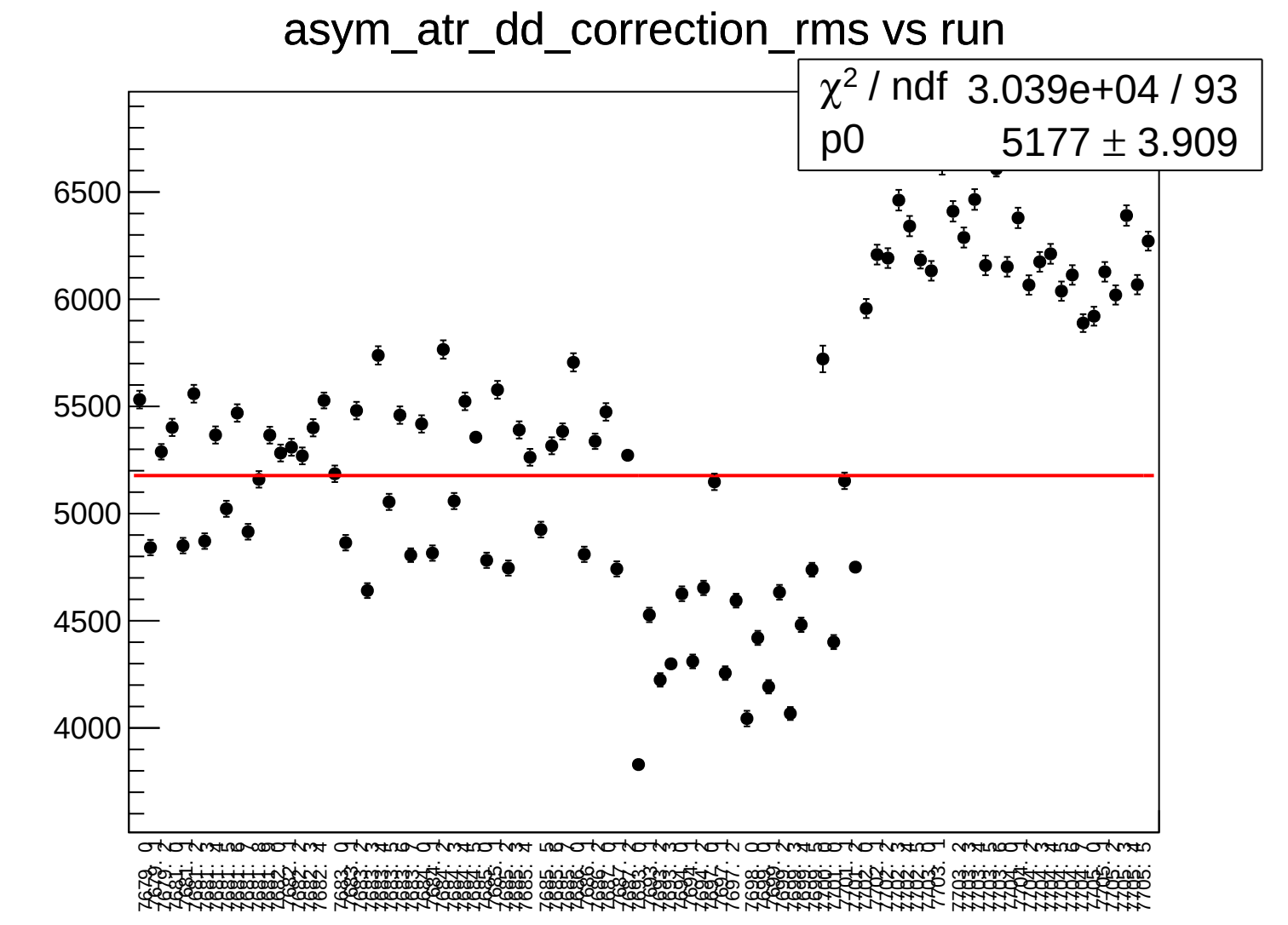

reg_asym_atr_dd_mean vs run
×10^3
χ² / ndf 102.4 / 93
p0 −854.7 ± 2182
150
100
50
0
−50
pull
Entries 94
Mean 75.44
Std Dev 125.5
2
1
0
−1
−2

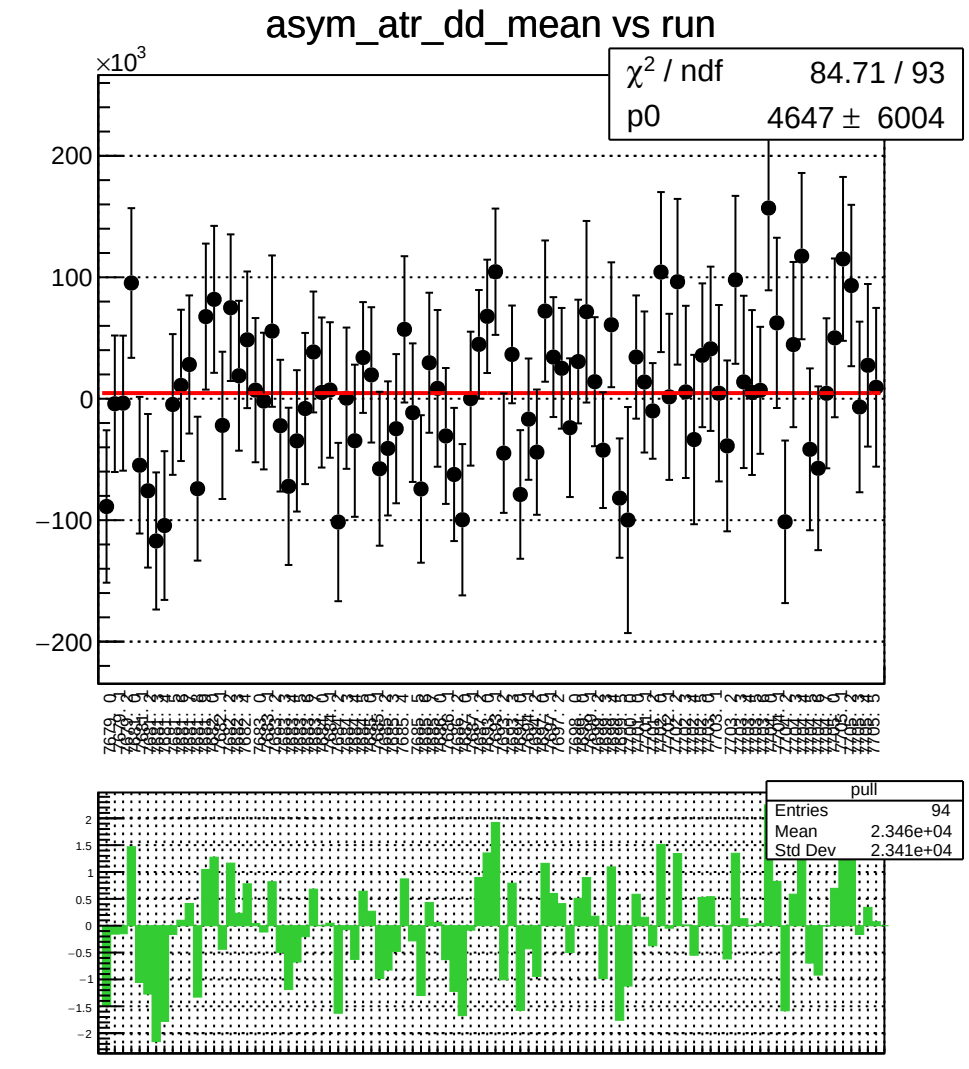

pull1D
Entries 94
Mean 0.009309
Std Dev 1.044
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

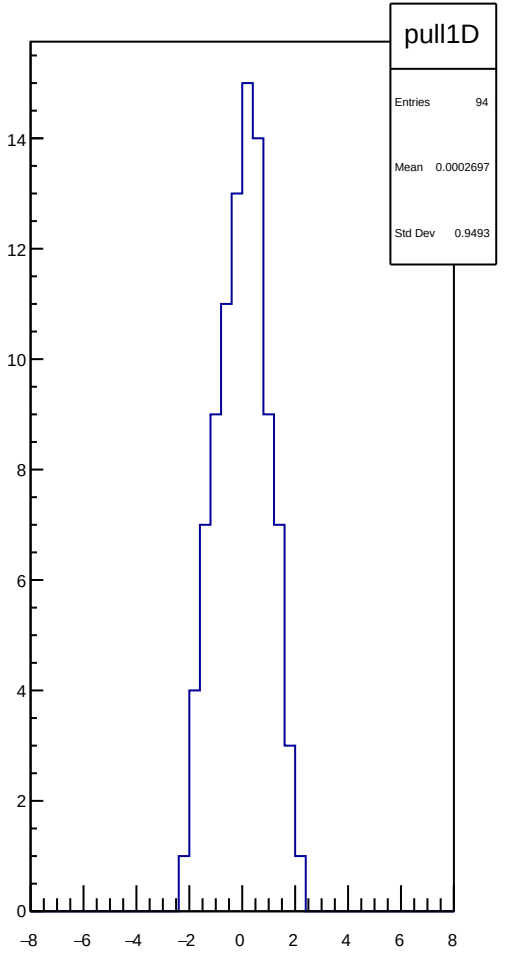

reg_asym_atr_dd_rms vs run
χ² / ndf 1.835e+04 / 93
p0 2050 ± 1.543
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

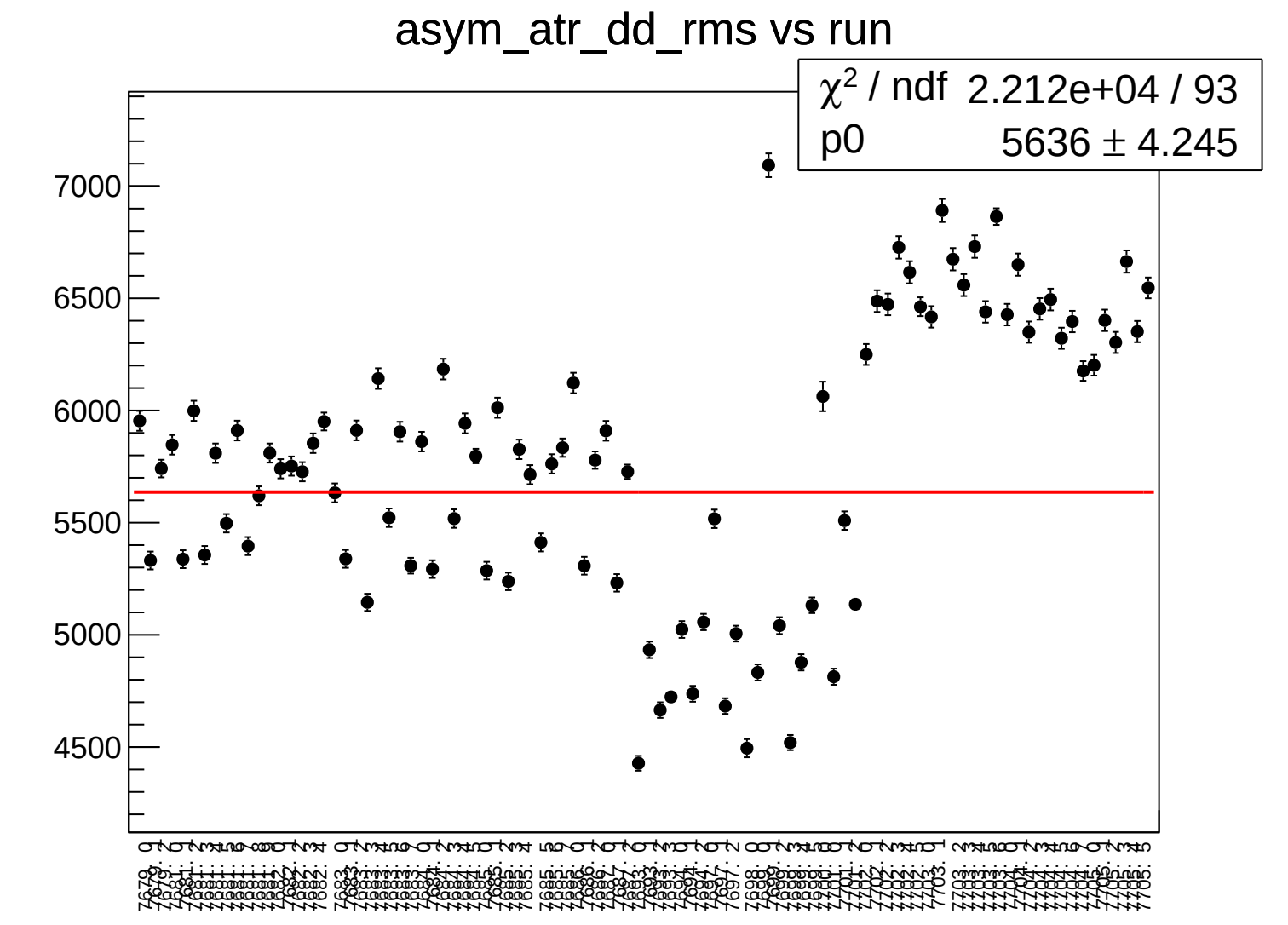

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 80.47 / 93
p0 −4219 ± 5528
200
100
0
−100
−200
pull
Entries 94
Mean 1372
Std Dev 1319
2
1
0
−1
−2

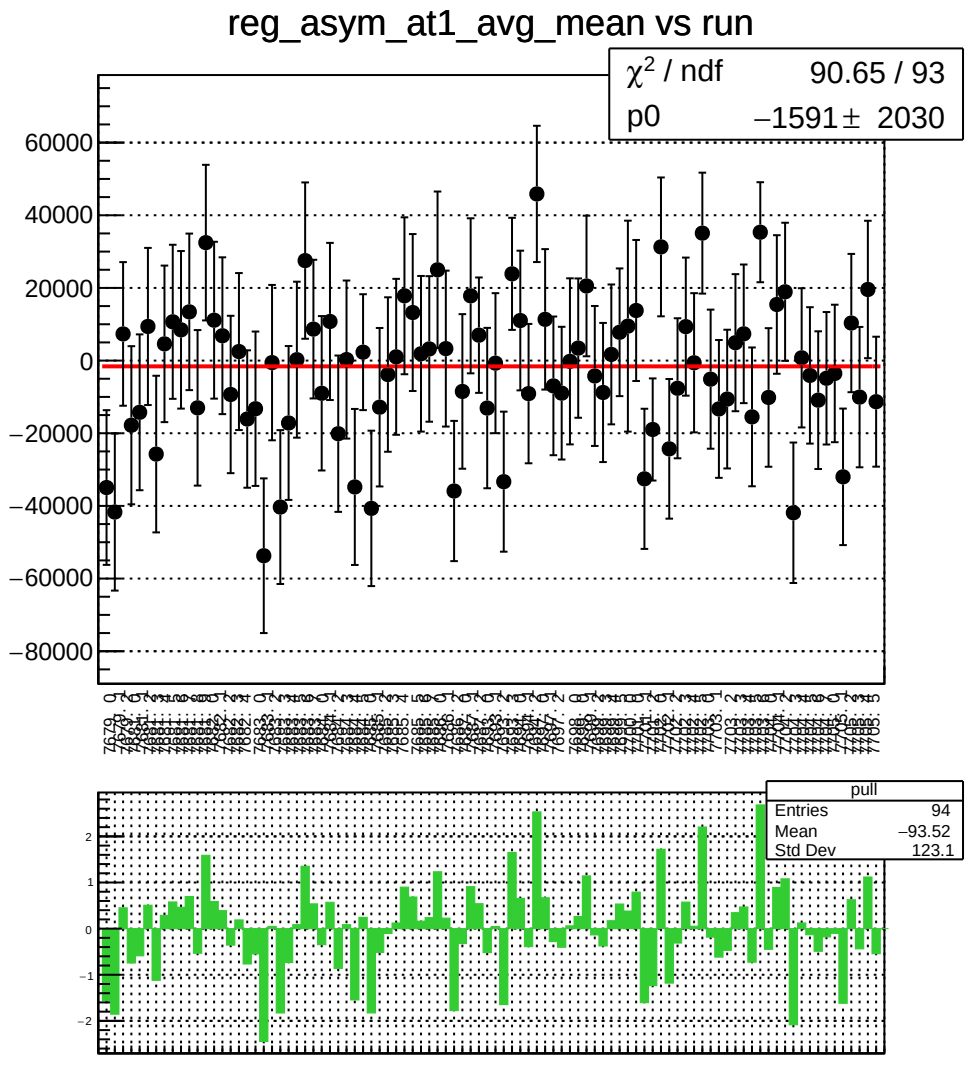

pull1D
Entries 94
Mean −0.004716
Std Dev 0.9252
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

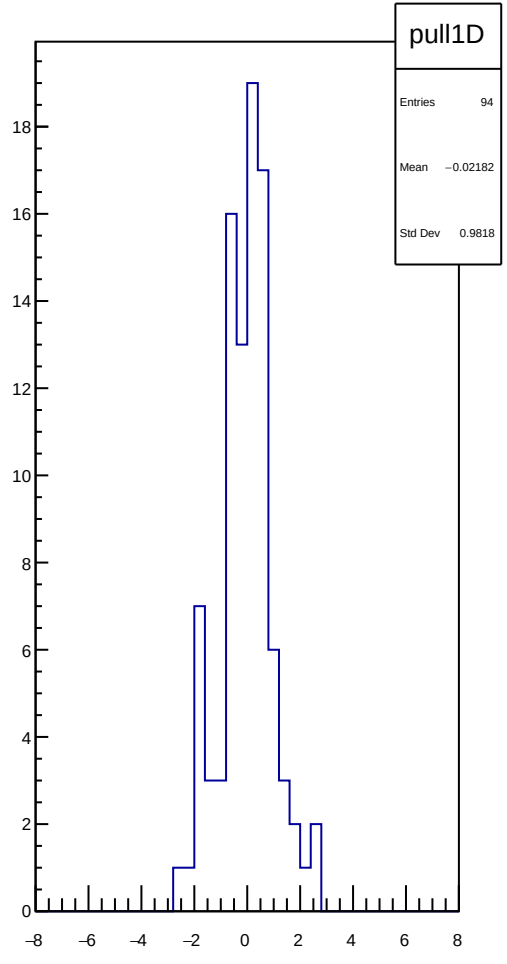

asym_atr_dd_correction_rms vs run
χ² / ndf 3.039e+04 / 93
p0 5177 ± 3.909
6500
6000
5500
5000
4500
4000

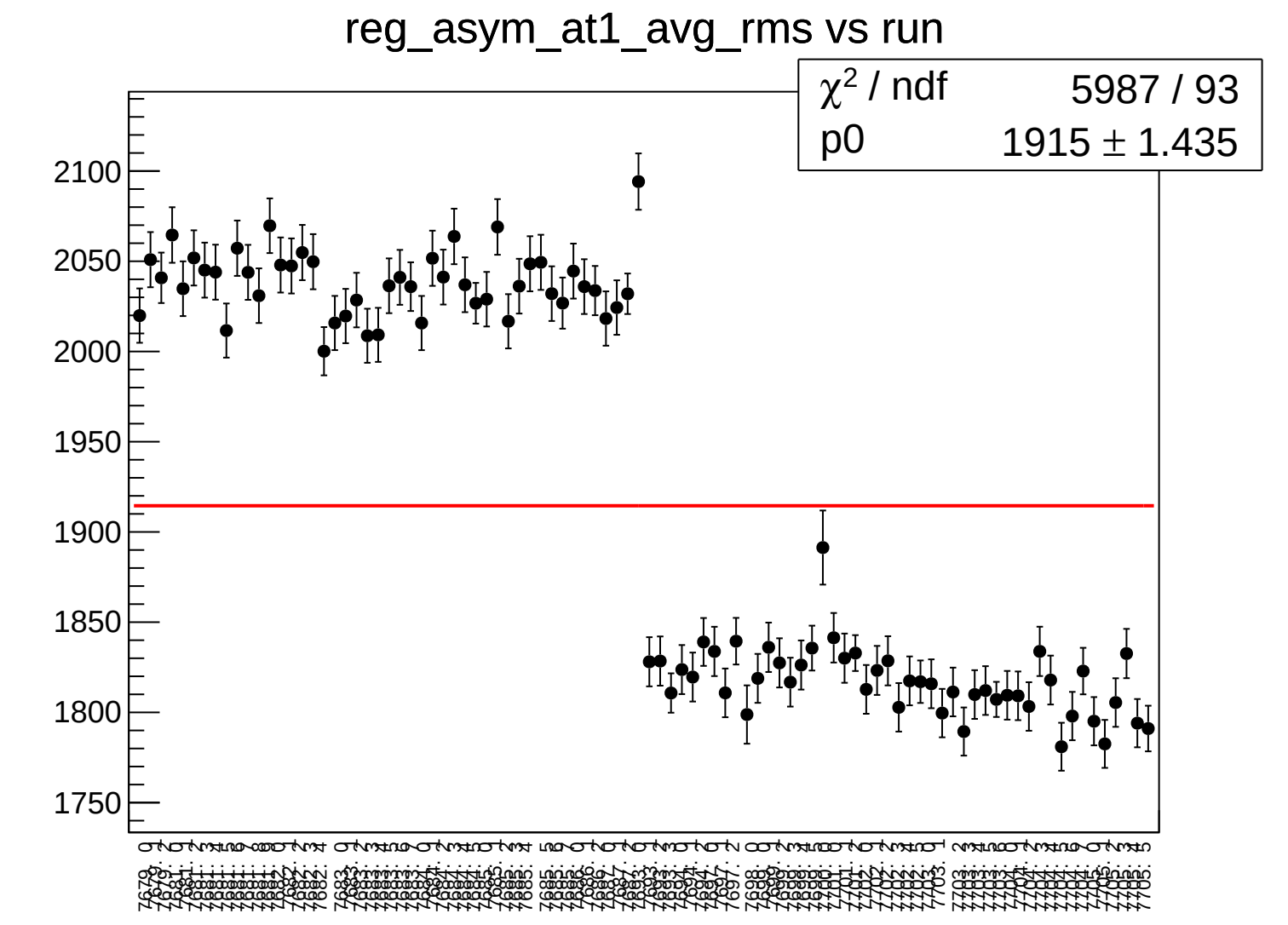

asym_atr_dd_mean vs run
×10^3
χ^2 / ndf 84.71 / 93
p0 4647 ± 6004
200
100
0
−100
−200
pull
Entries 94
Mean 2.346e+04
Std Dev 2.341e+04
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

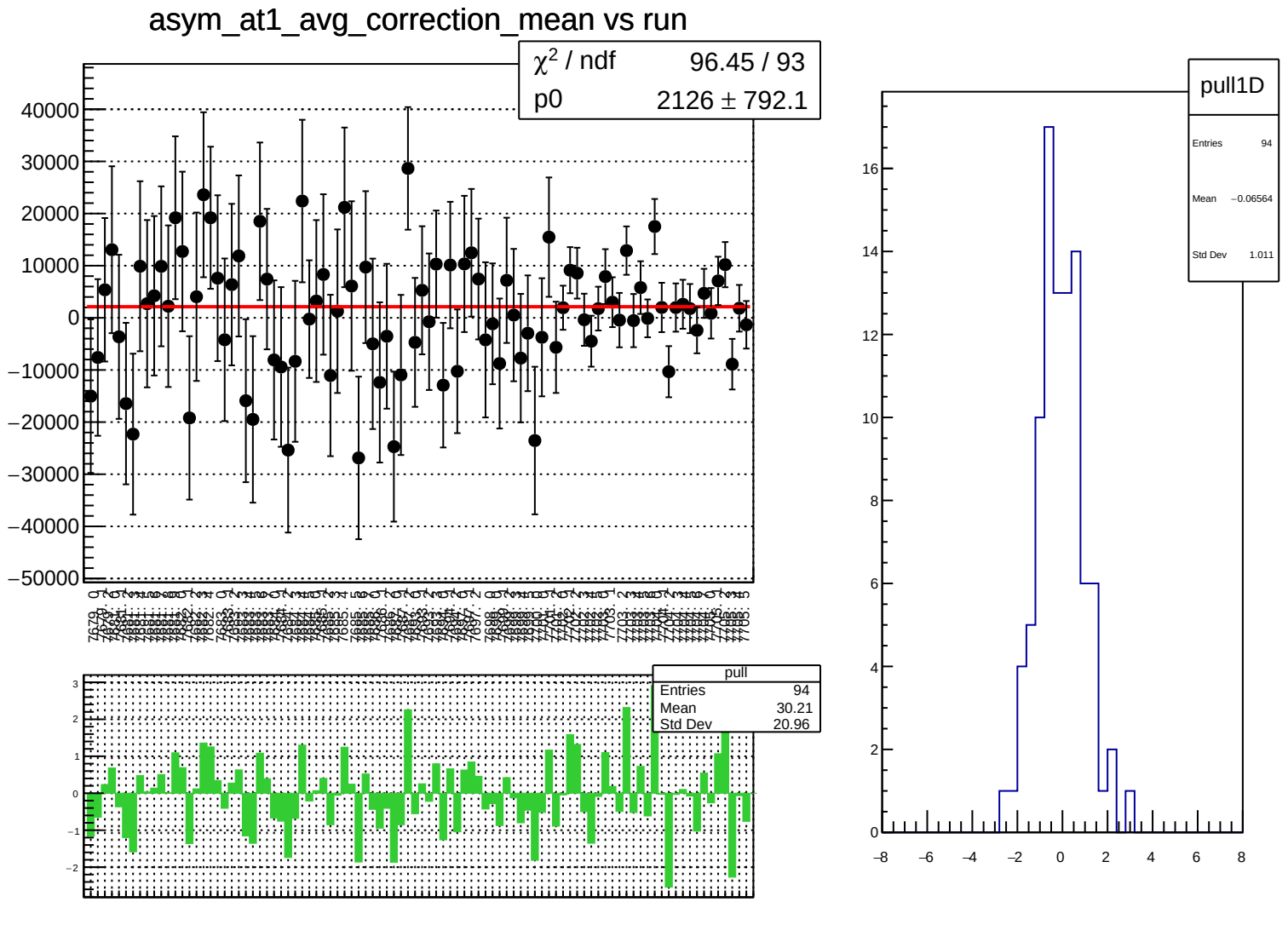

pull1D
Entries 94
Mean 0.0002697
Std Dev 0.9493
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

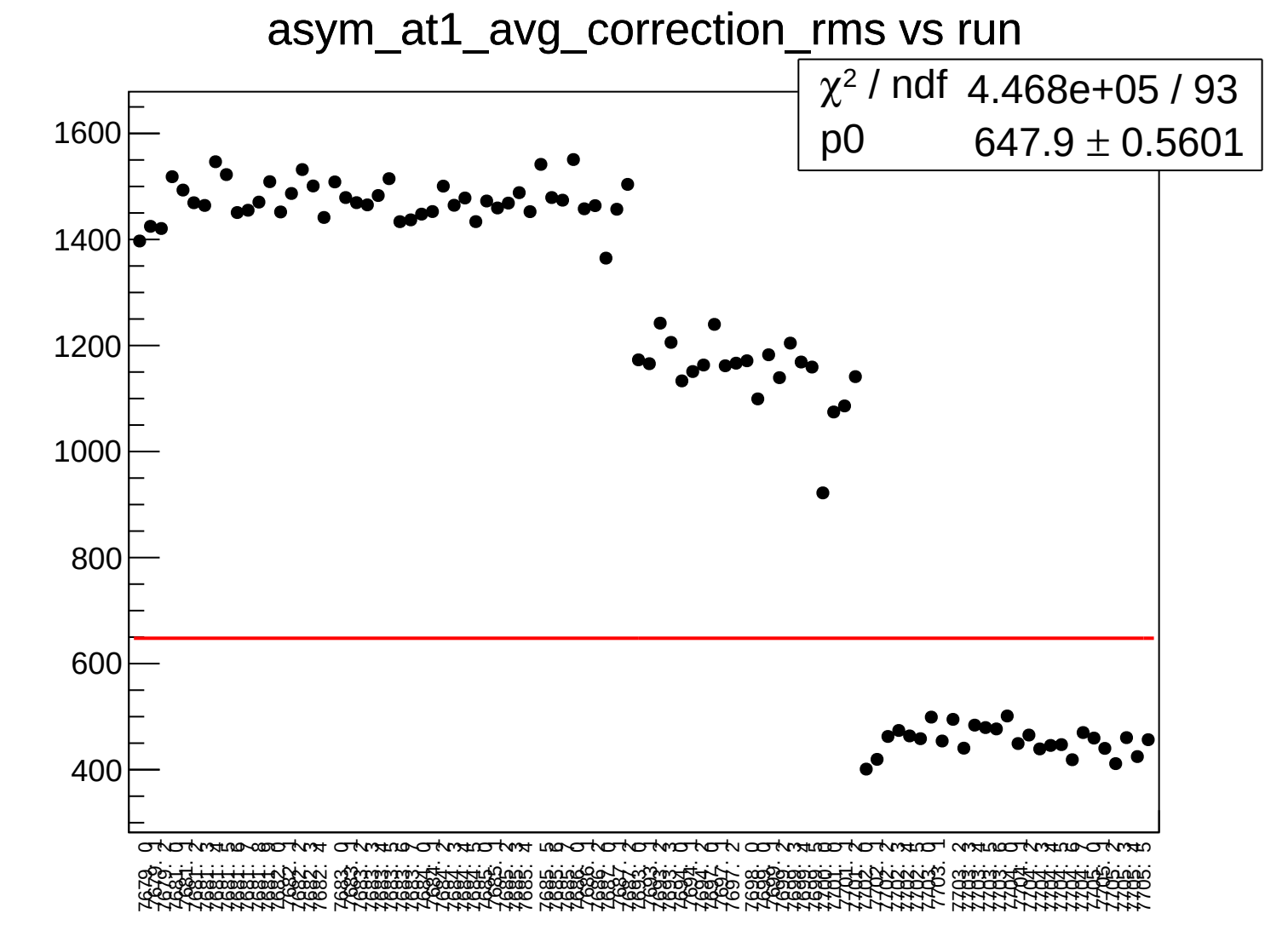

asym_atr_dd_rms vs run
χ^2 / ndf 2.212e+04 / 93
p0 5636 ± 4.245
7000
6500
6000
5500
5000
4500

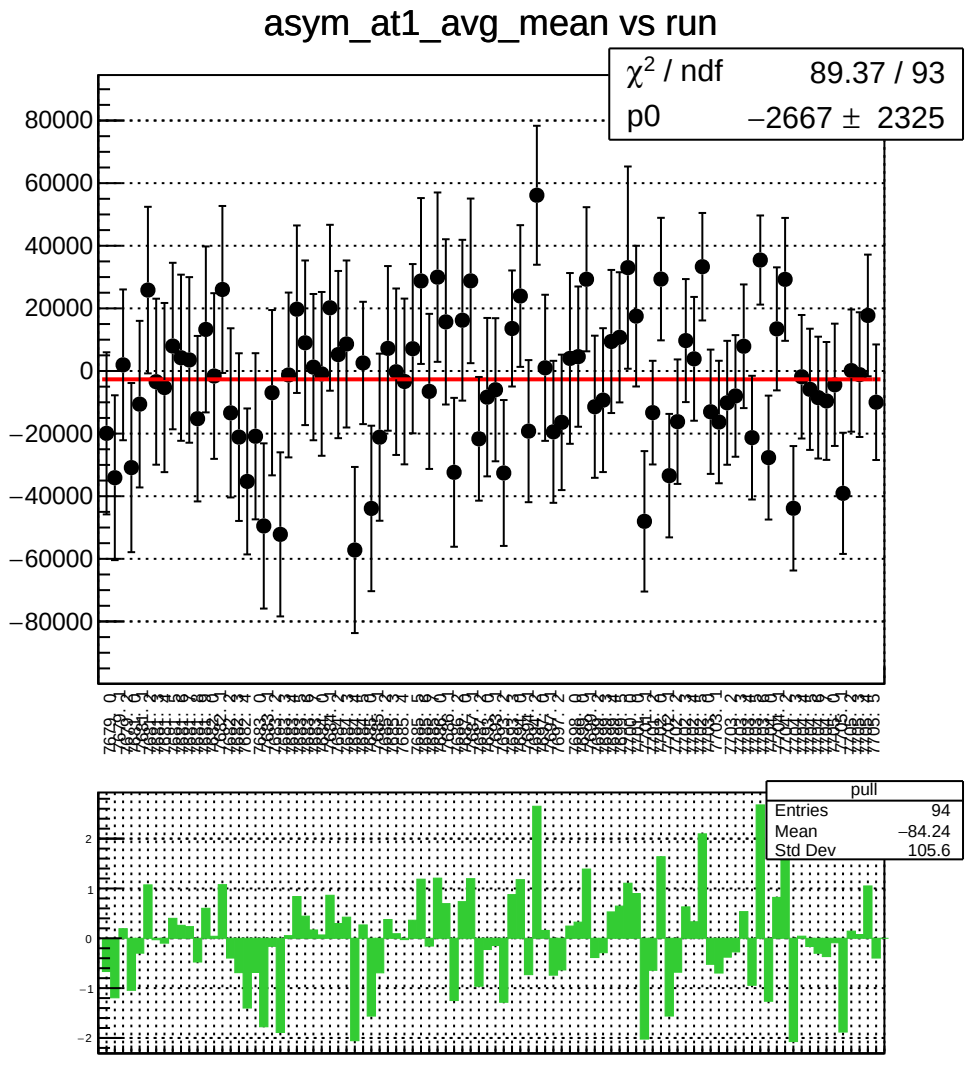

reg_asym_at1_avg_mean vs run
χ² / ndf 90.65 / 93
p0 −1591 ± 2030
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 94
Mean −93.52
Std Dev 123.1
2
1
0
−1
−2

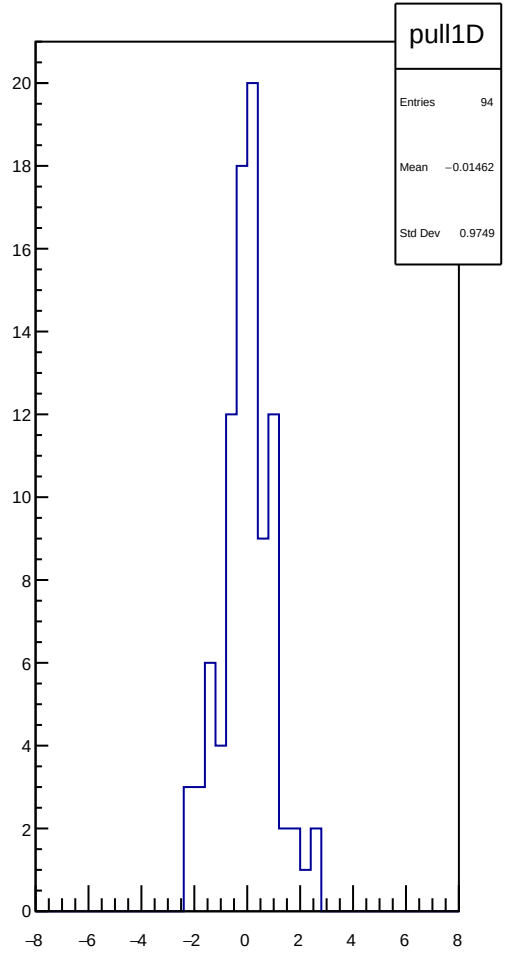

pull1D
Entries 94
Mean −0.02182
Std Dev 0.9818
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

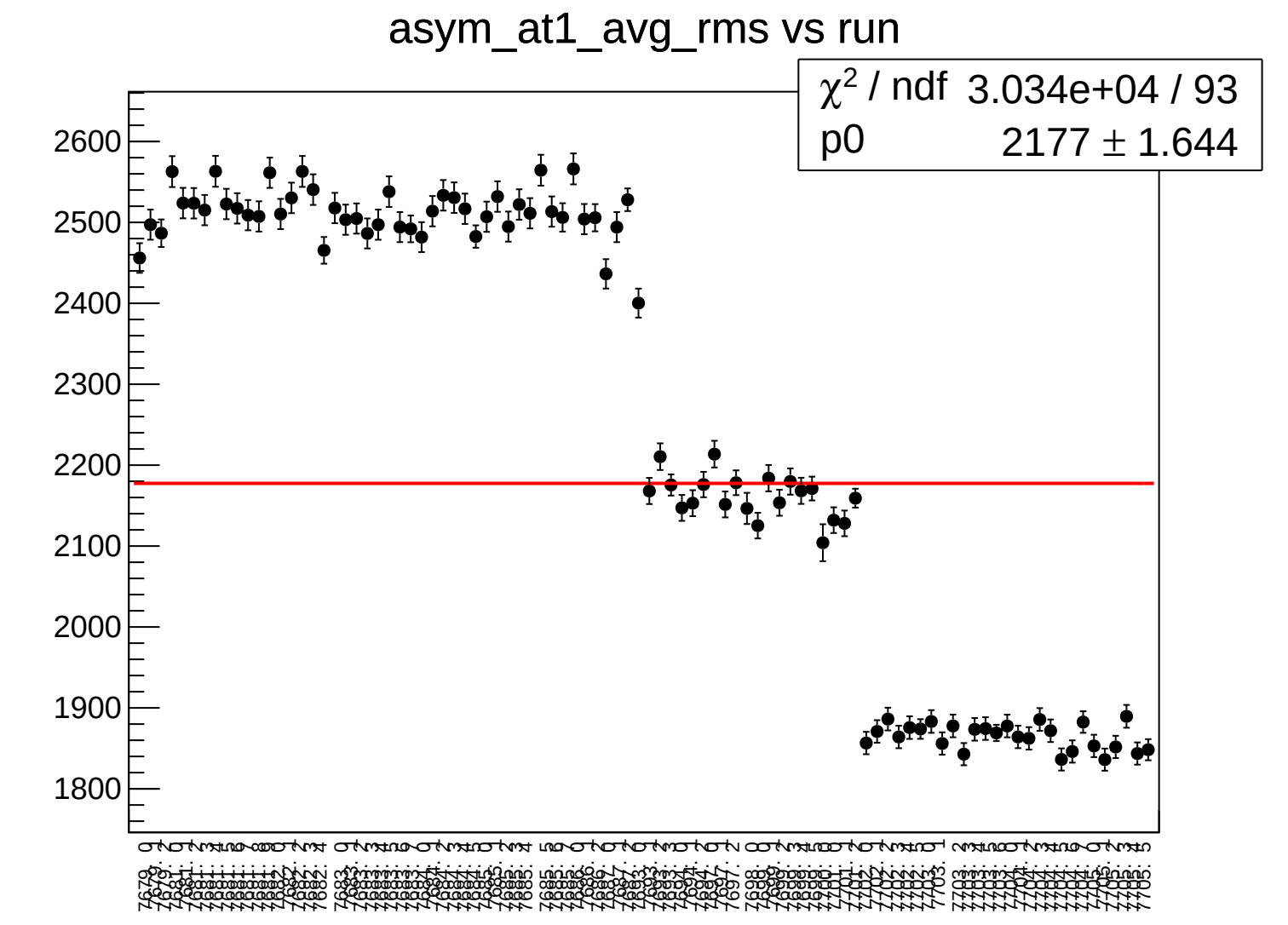

reg_asym_at1_avg_rms vs run
χ^2 / ndf 5987 / 93
p0 1915 ± 1.435
2100
2050
2000
1950
1900
1850
1800
1750

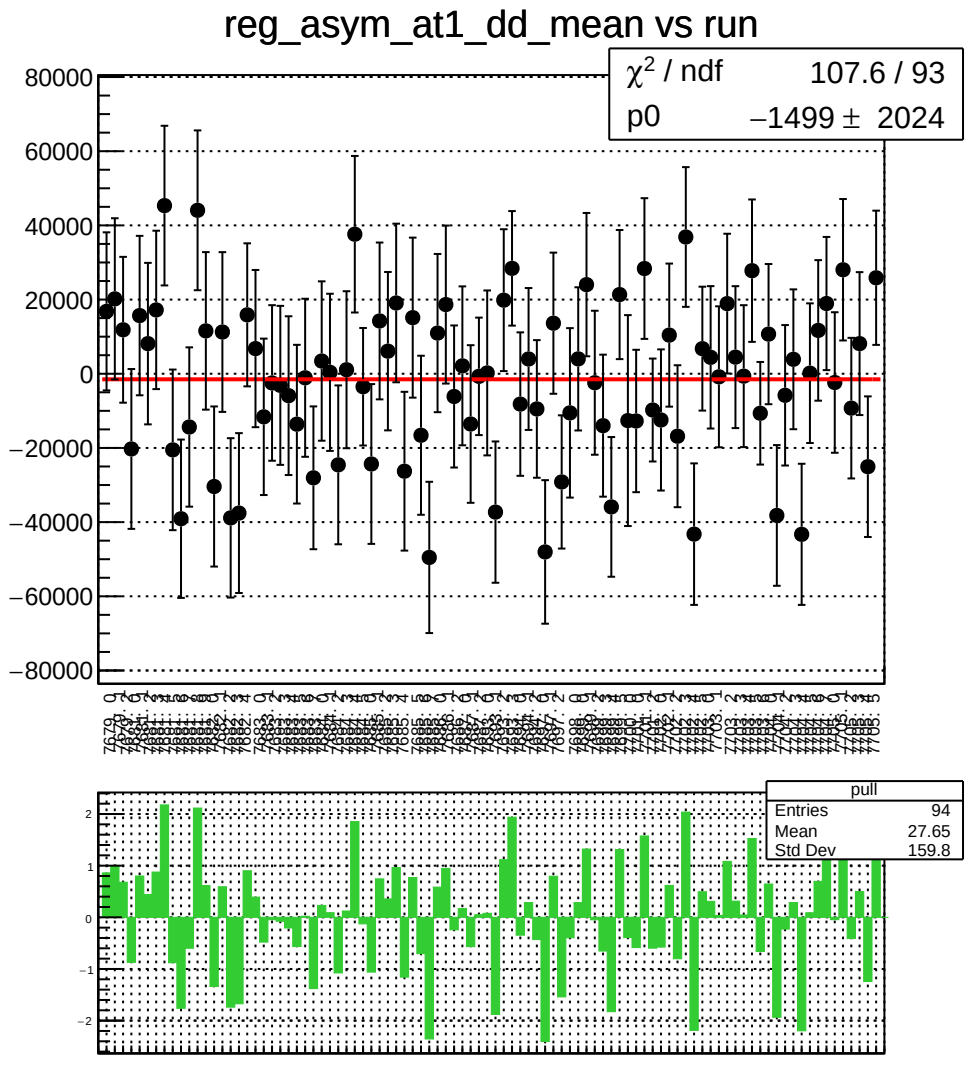

asym_at1_avg_correction_mean vs run
χ² / ndf 96.45 / 93
p0 2126 ± 792.1
pull
Entries 94
Mean 30.21
Std Dev 20.96
pull1D
Entries 94
Mean −0.06564
Std Dev 1.011

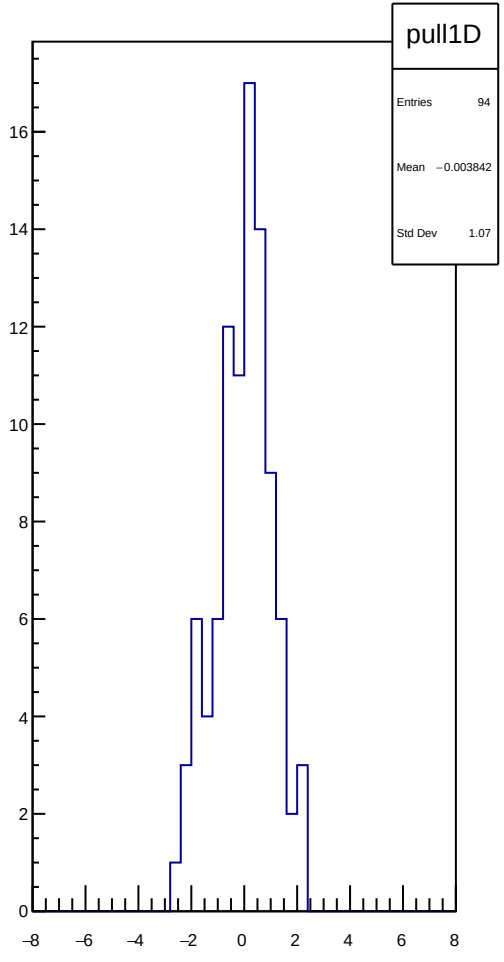

asym_at1_avg_correction_rms vs run
χ² / ndf 4.468e+05 / 93
p0 647.9 ± 0.5601
1600
1400
1200
1000
800
600
400

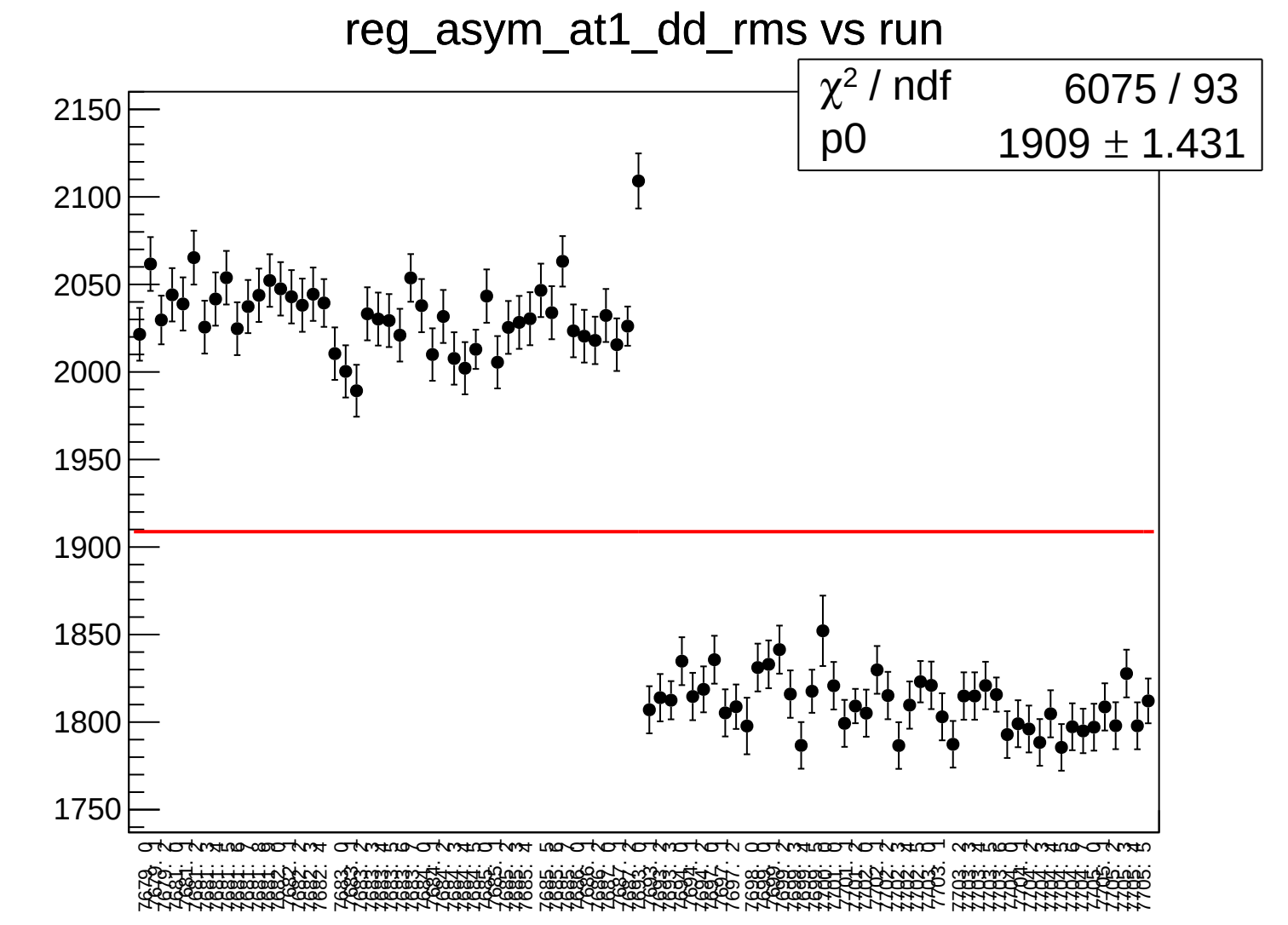

asym_at1_avg_mean vs run
χ² / ndf 89.37 / 93
p0 −2667 ± 2325
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 94
Mean −84.24
Std Dev 105.6
2
1
0
−1
−2

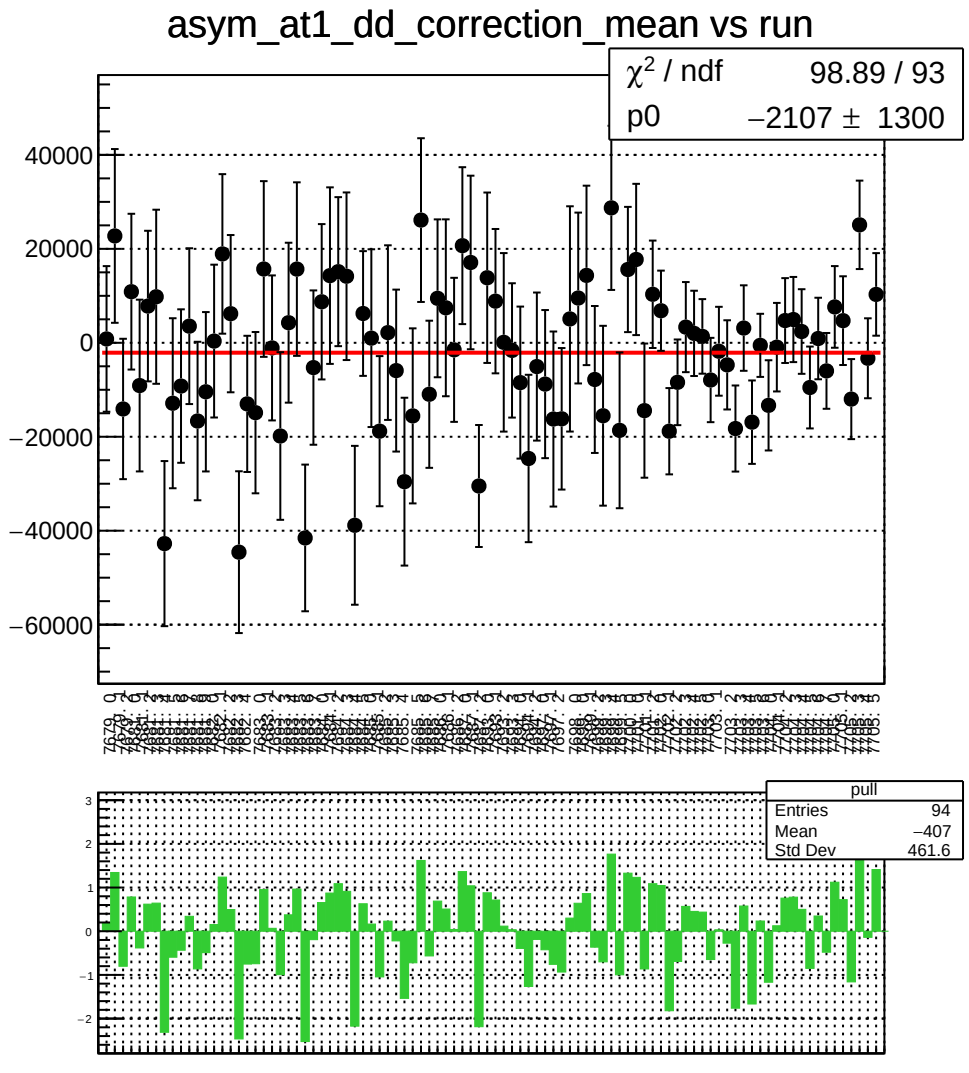

pull1D
Entries 94
Mean −0.01462
Std Dev 0.9749
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

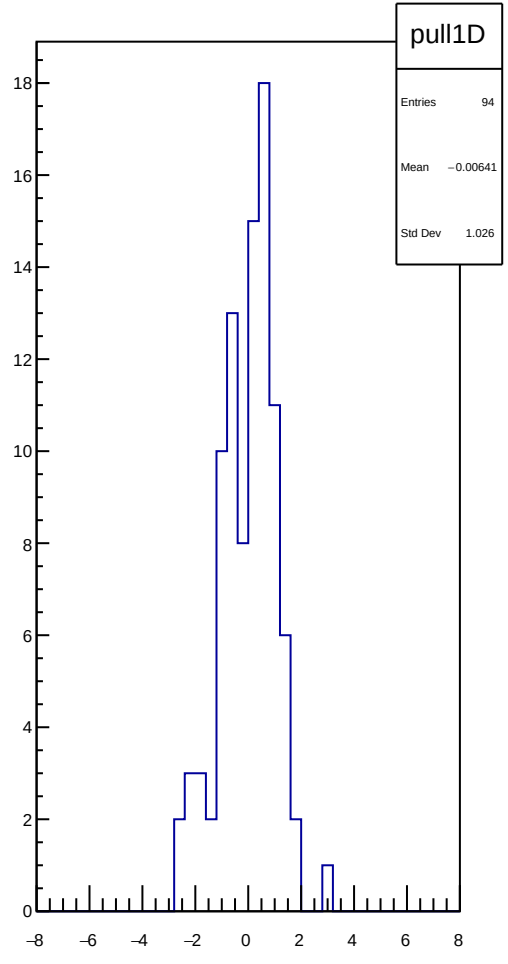

asym_at1_avg_rms vs run
χ^2 / ndf 3.034e+04 / 93
p0 2177 ± 1.644
2600
2500
2400
2300
2200
2100
2000
1900
1800

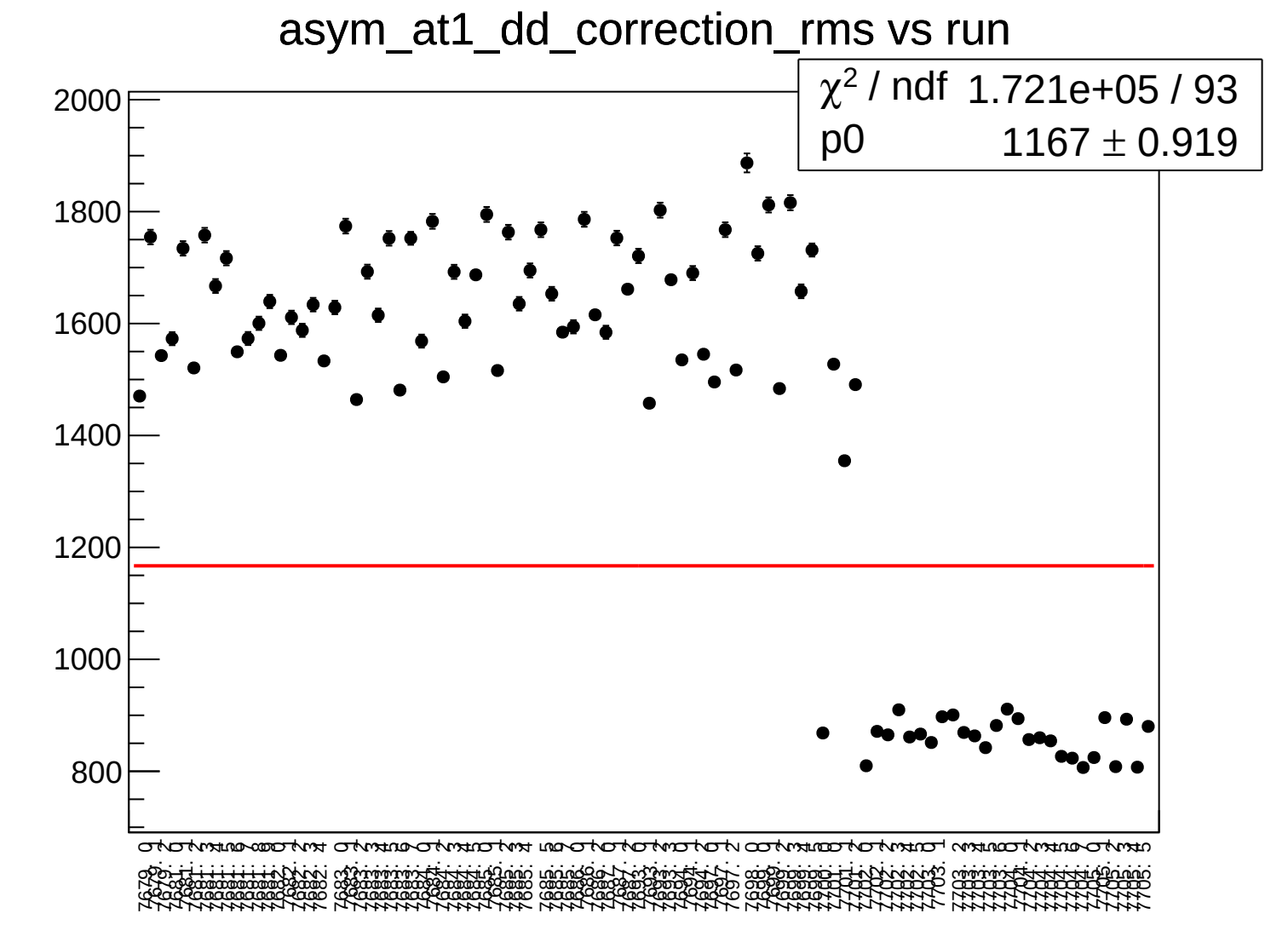

reg_asym_at1_dd_mean vs run
χ² / ndf 107.6 / 93
p0 −1499 ± 2024
pull
Entries 94
Mean 27.65
Std Dev 159.8

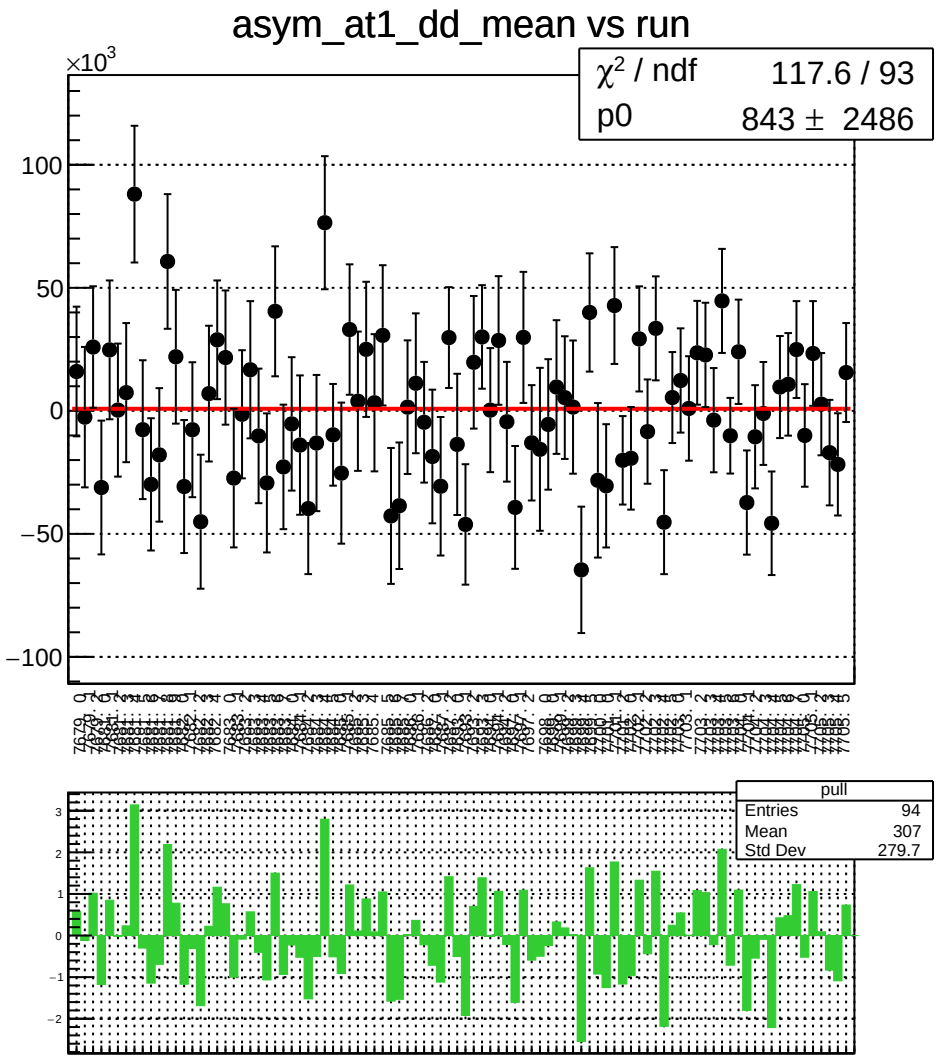

pull1D
Entries 94
Mean −0.003842
Std Dev 1.07

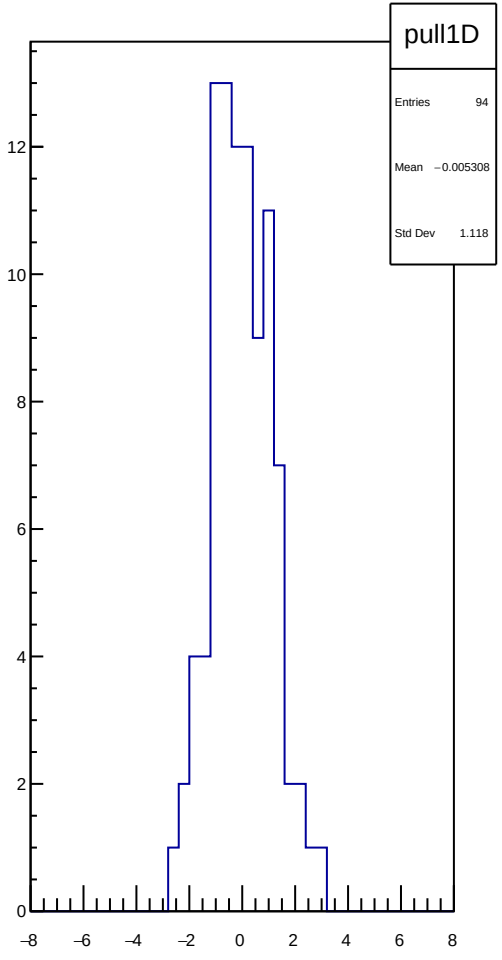

reg_asym_at1_dd_rms vs run
χ² / ndf 6075 / 93
p0 1909 ± 1.431
2150
2100
2050
2000
1950
1900
1850
1800
1750

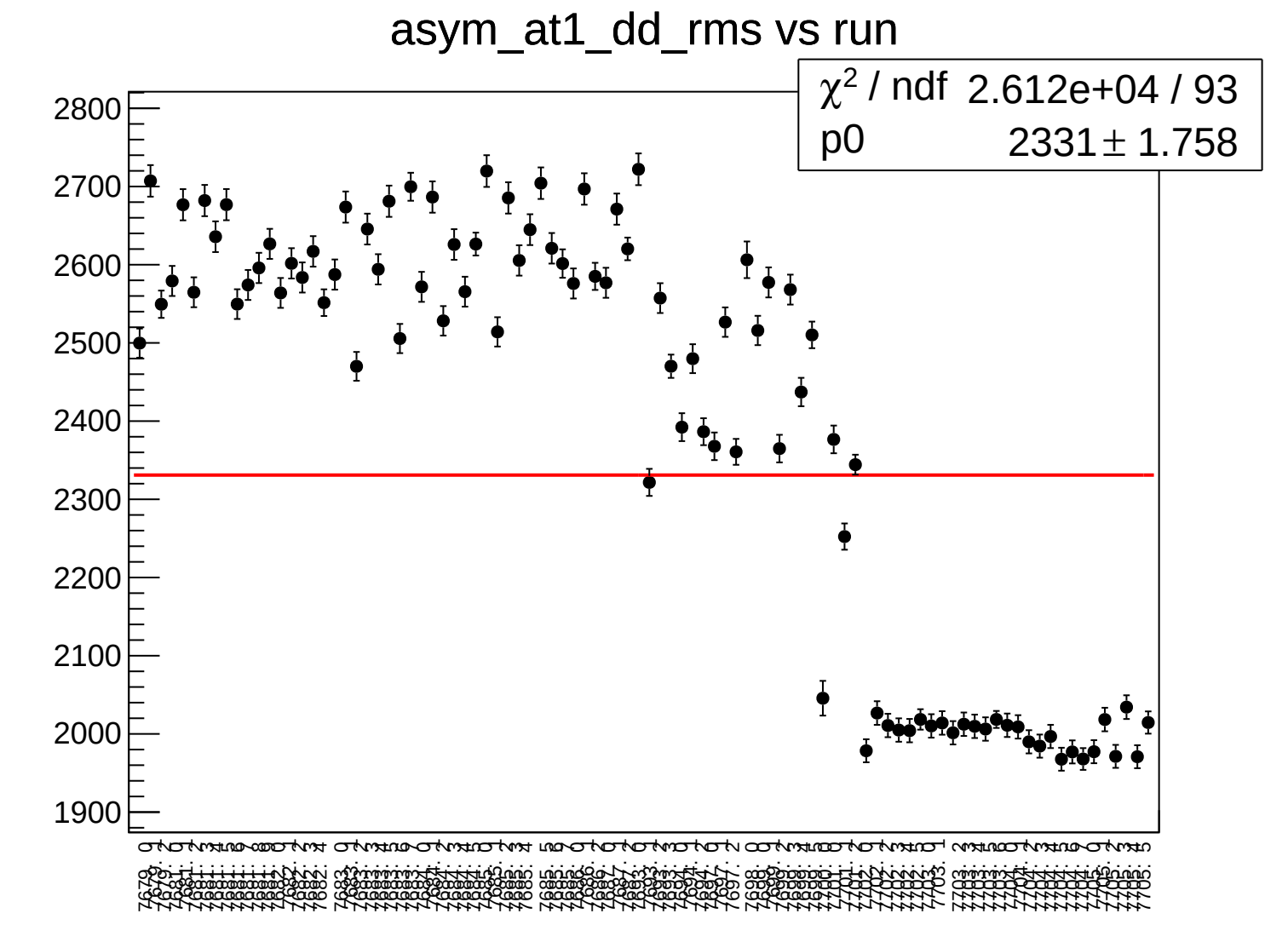

asym_at1_dd_correction_mean vs run
χ² / ndf 98.89 / 93
p0 −2107 ± 1300
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −407
Std Dev 461.6
3
2
1
0
−1
−2

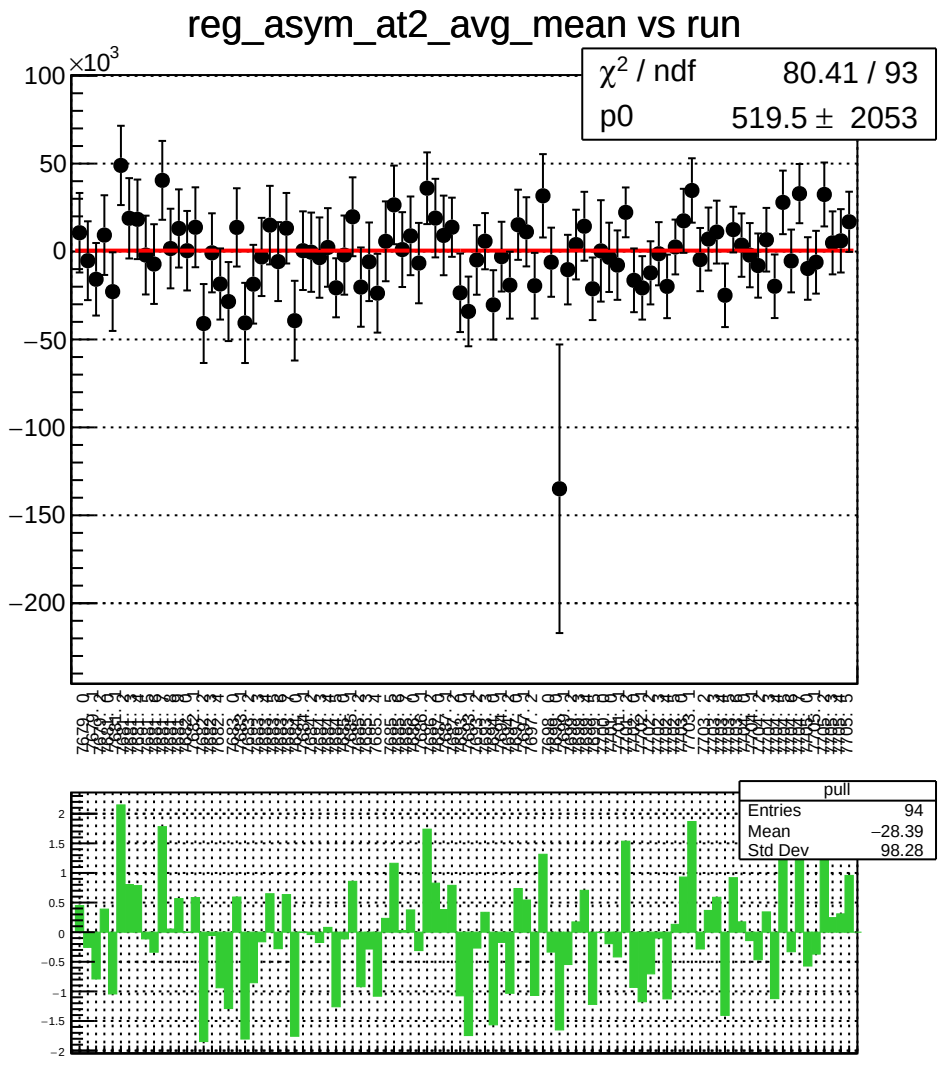

pull1D
Entries 94
Mean −0.00641
Std Dev 1.026
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

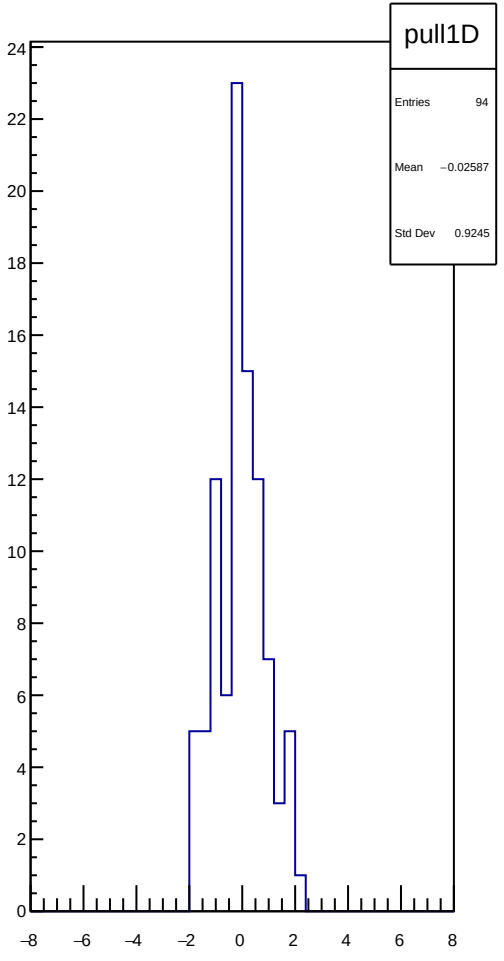

asym_at1_dd_correction_rms vs run
χ² / ndf 1.721e+05 / 93
p0 1167 ± 0.919
2000
1800
1600
1400
1200
1000
800

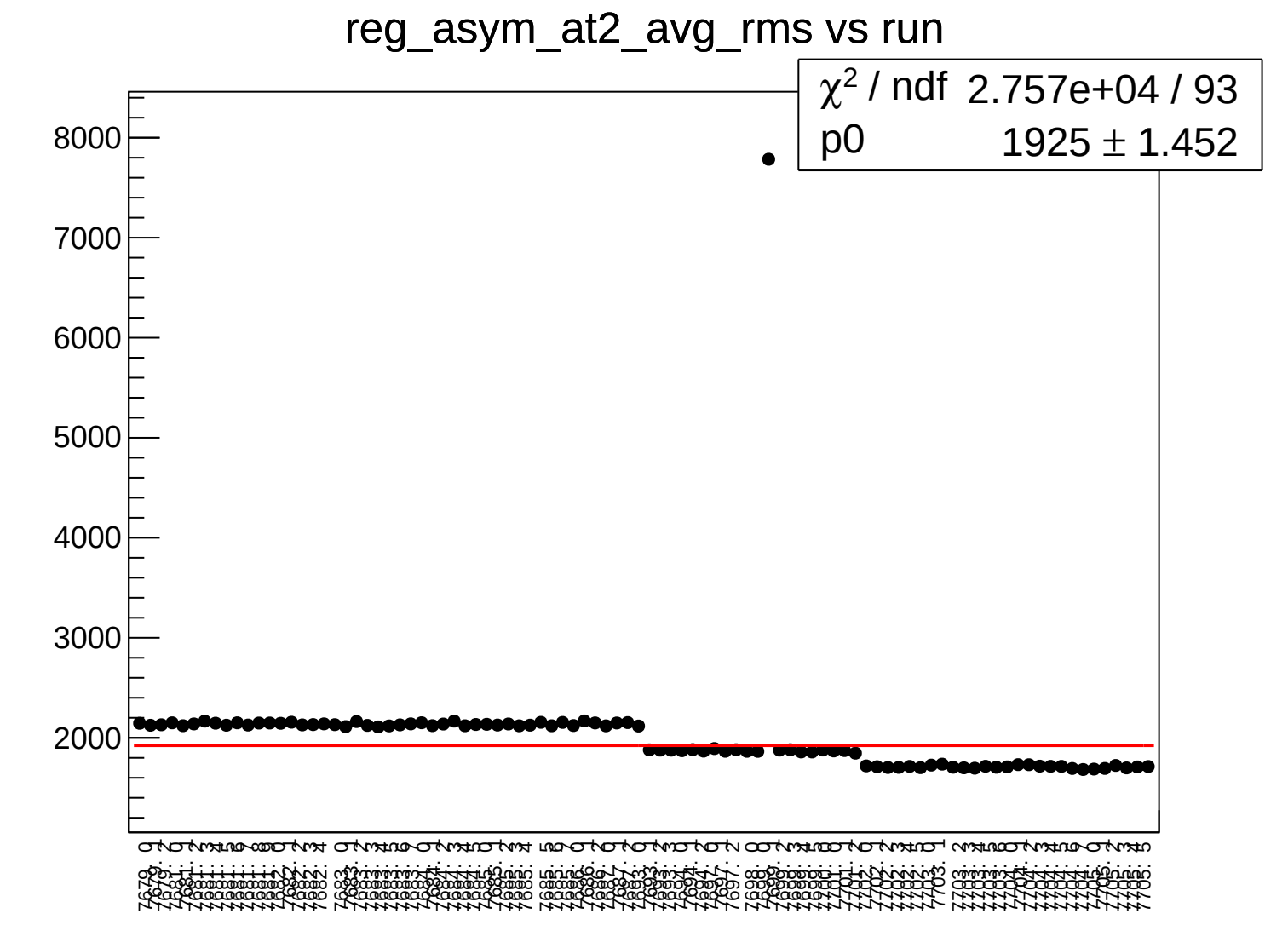

asym_at1_dd_mean vs run
×10^3
χ² / ndf 117.6 / 93
p0 843 ± 2486
100
50
0
−50
−100
pull
Entries 94
Mean 307
Std Dev 279.7
3
2
1
0
−1
−2

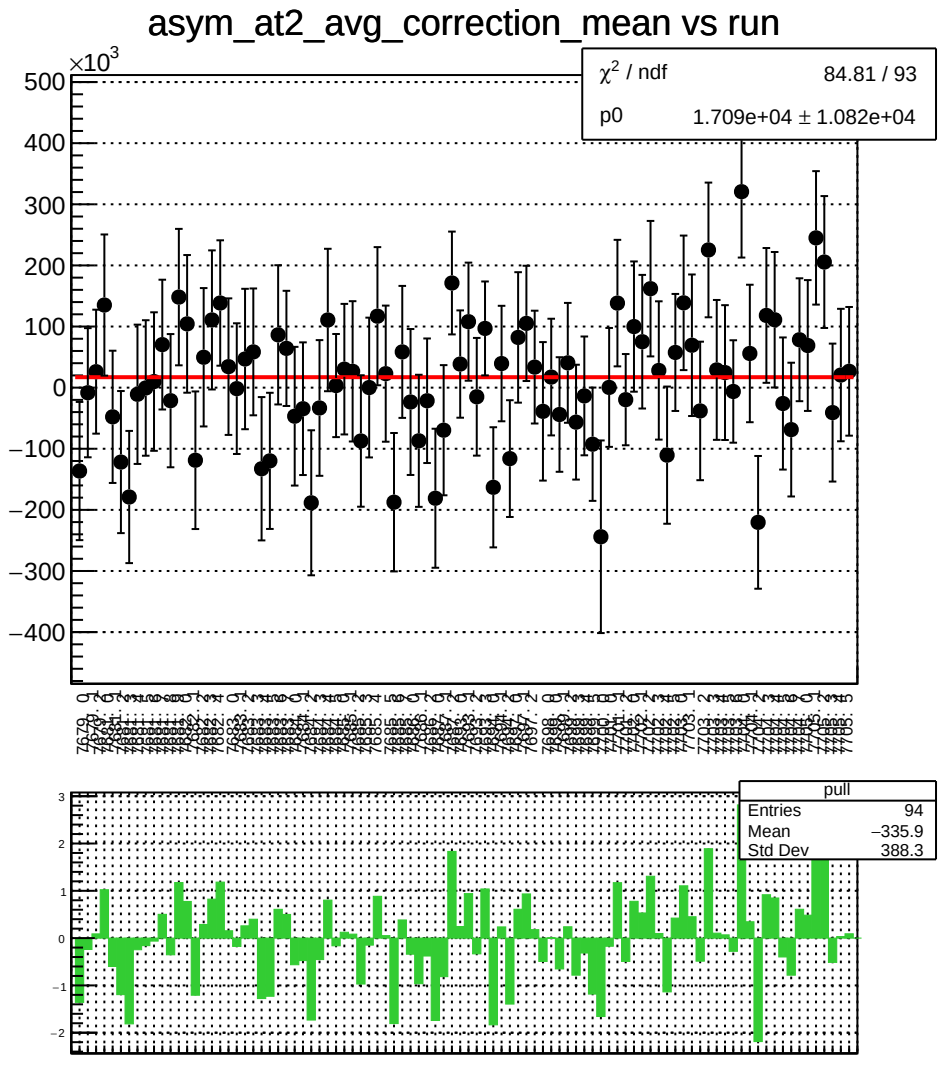

pull1D
Entries 94
Mean −0.005308
Std Dev 1.118
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

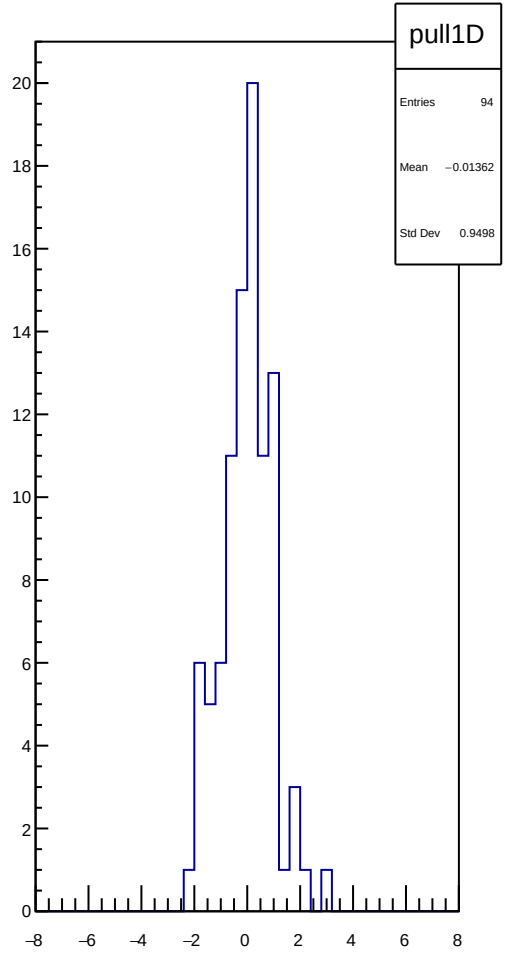

asym_at1_dd_rms vs run
χ^2 / ndf 2.612e+04 / 93
p0 2331 ± 1.758
2800
2700
2600
2500
2400
2300
2200
2100
2000
1900

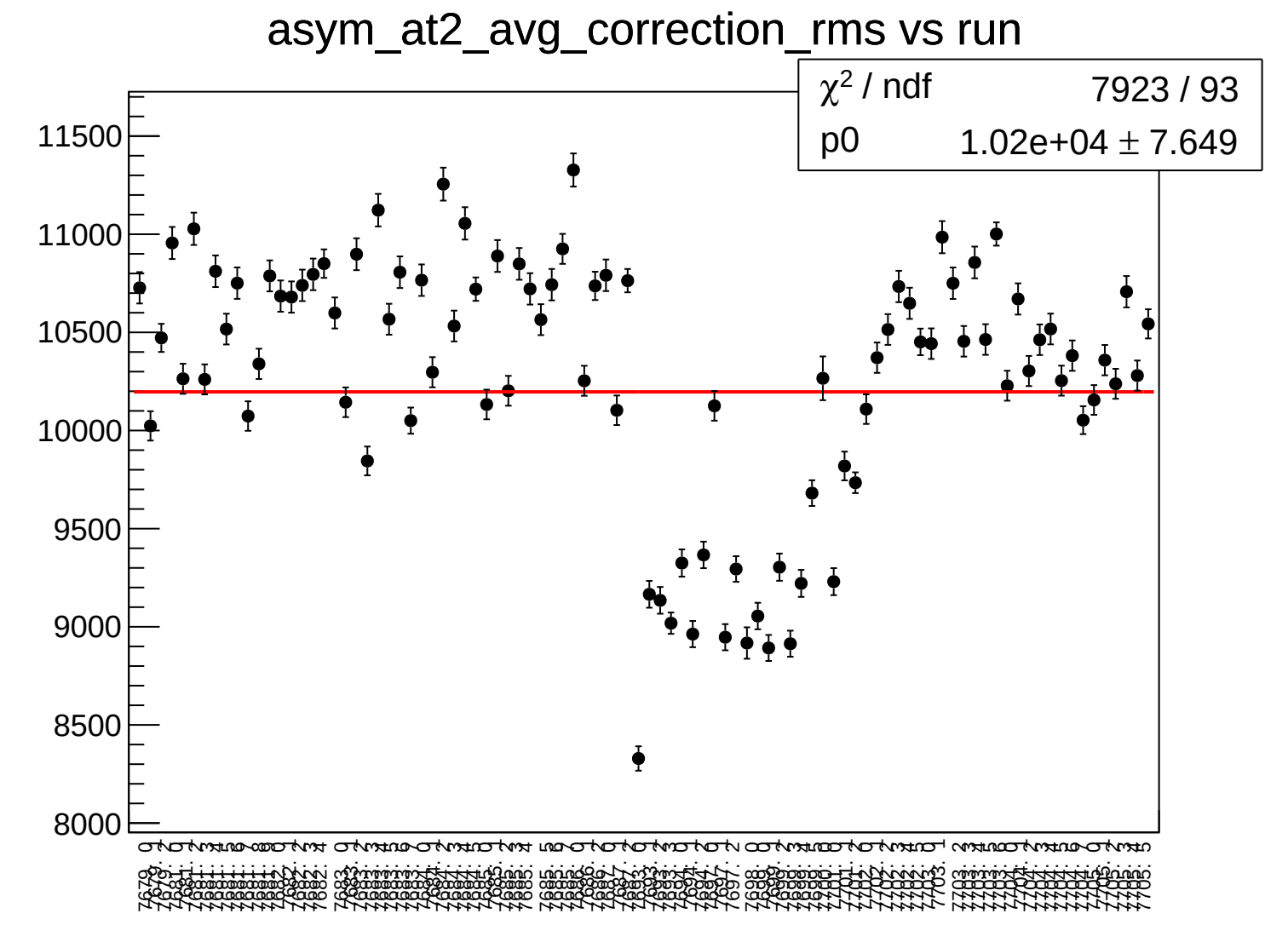

reg_asym_at2_avg_mean vs run
χ² / ndf 80.41 / 93
p0 519.5 ± 2053
×10³
pull
Entries 94
Mean −28.39
Std Dev 98.28

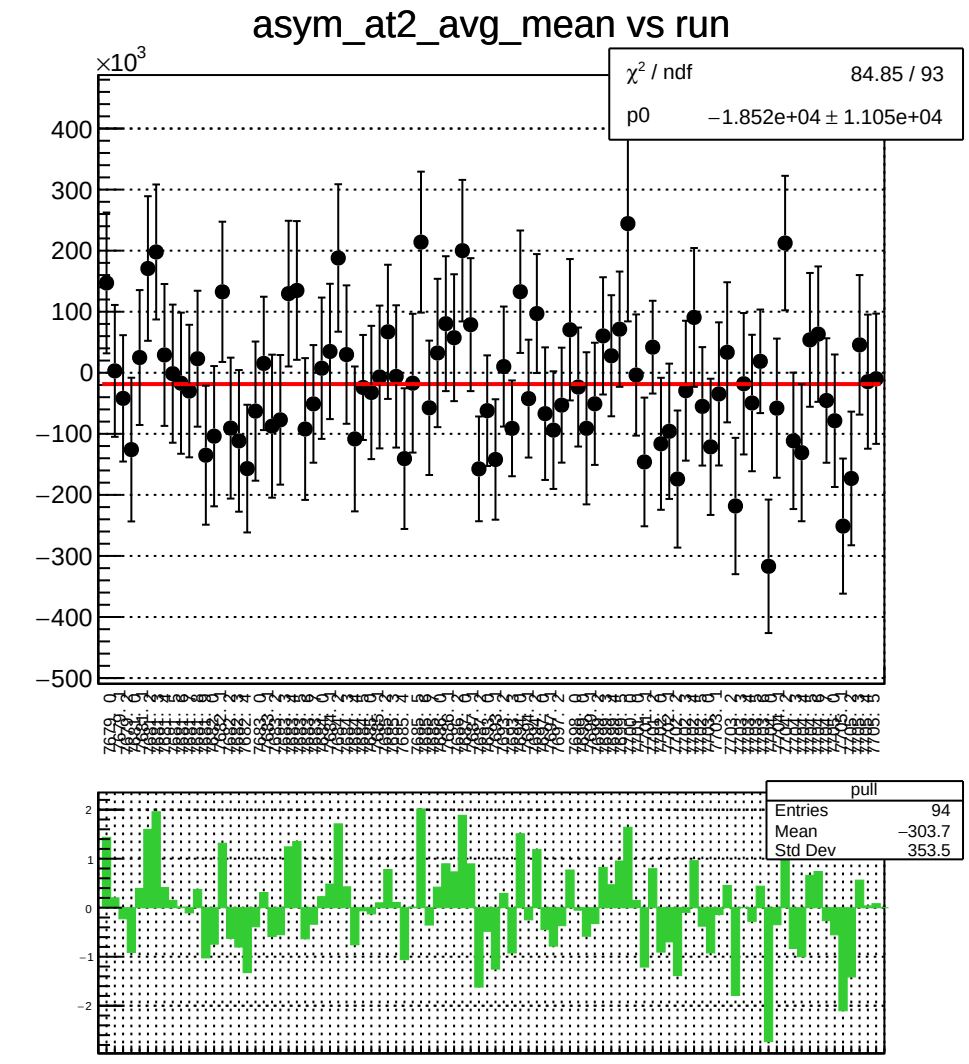

pull1D
Entries 94
Mean −0.02587
Std Dev 0.9245

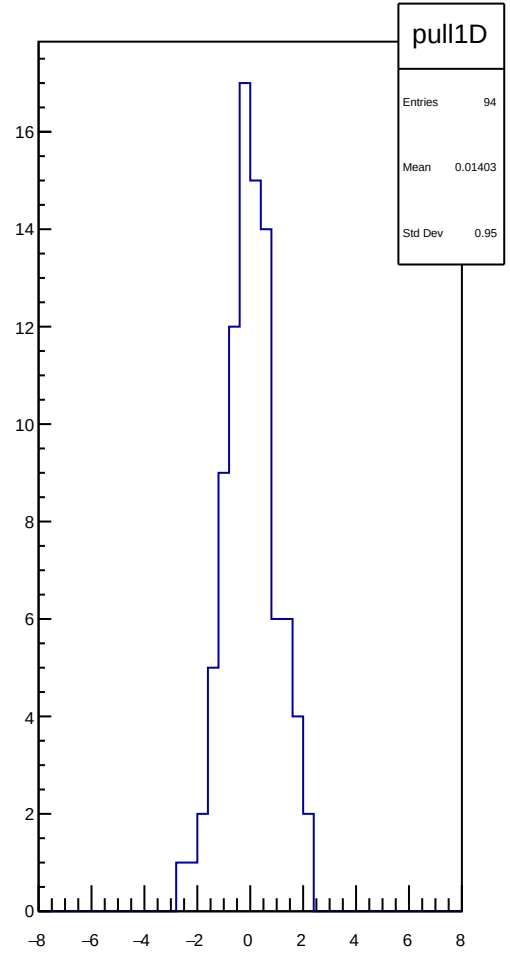

reg_asym_at2_avg_rms vs run
χ² / ndf 2.757e+04 / 93
p0 1925 ± 1.452
8000
7000
6000
5000
4000
3000
2000

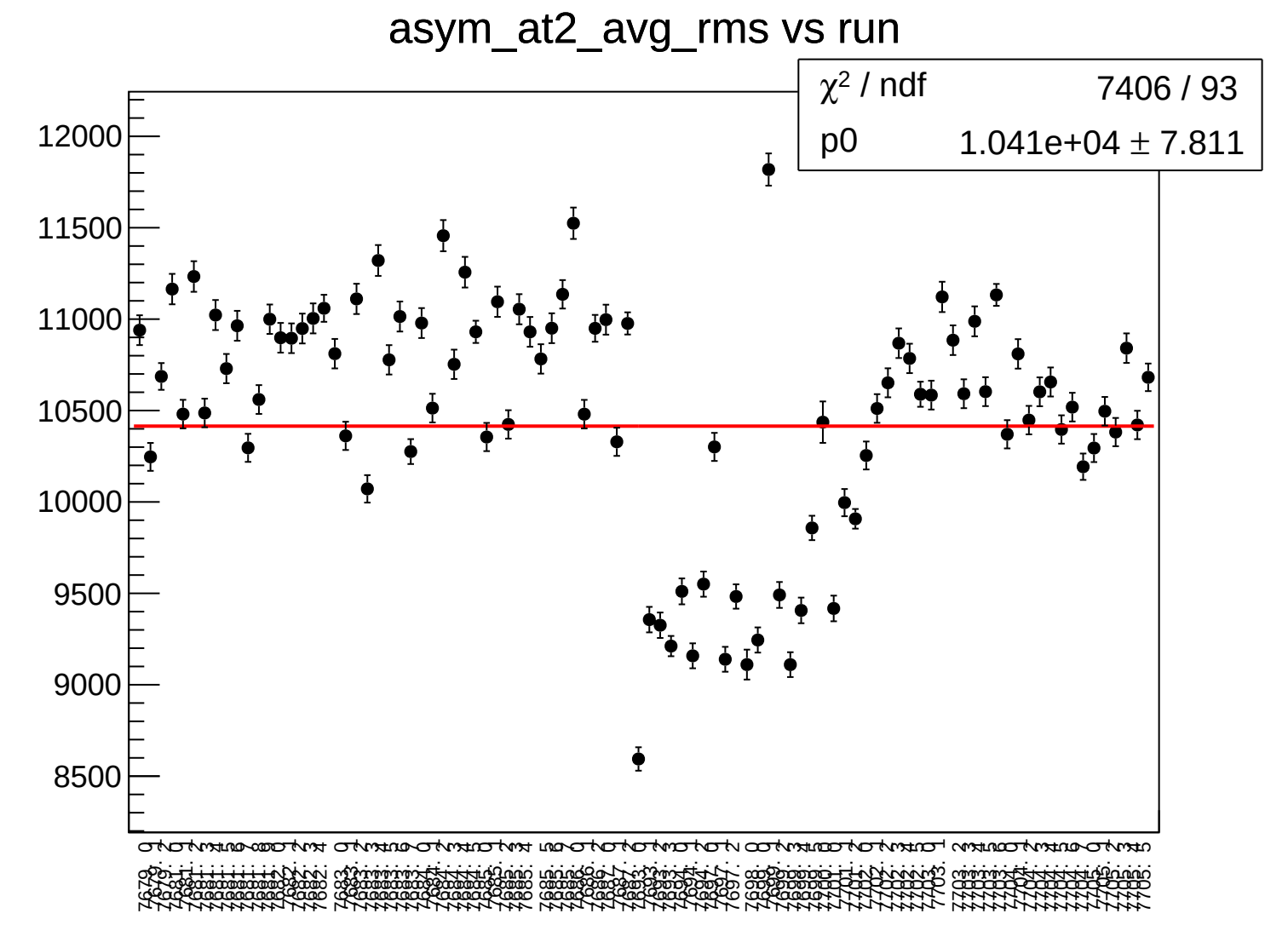

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 84.81 / 93
p0 1.709e+04 ± 1.082e+04
pull
Entries 94
Mean −335.9
Std Dev 388.3

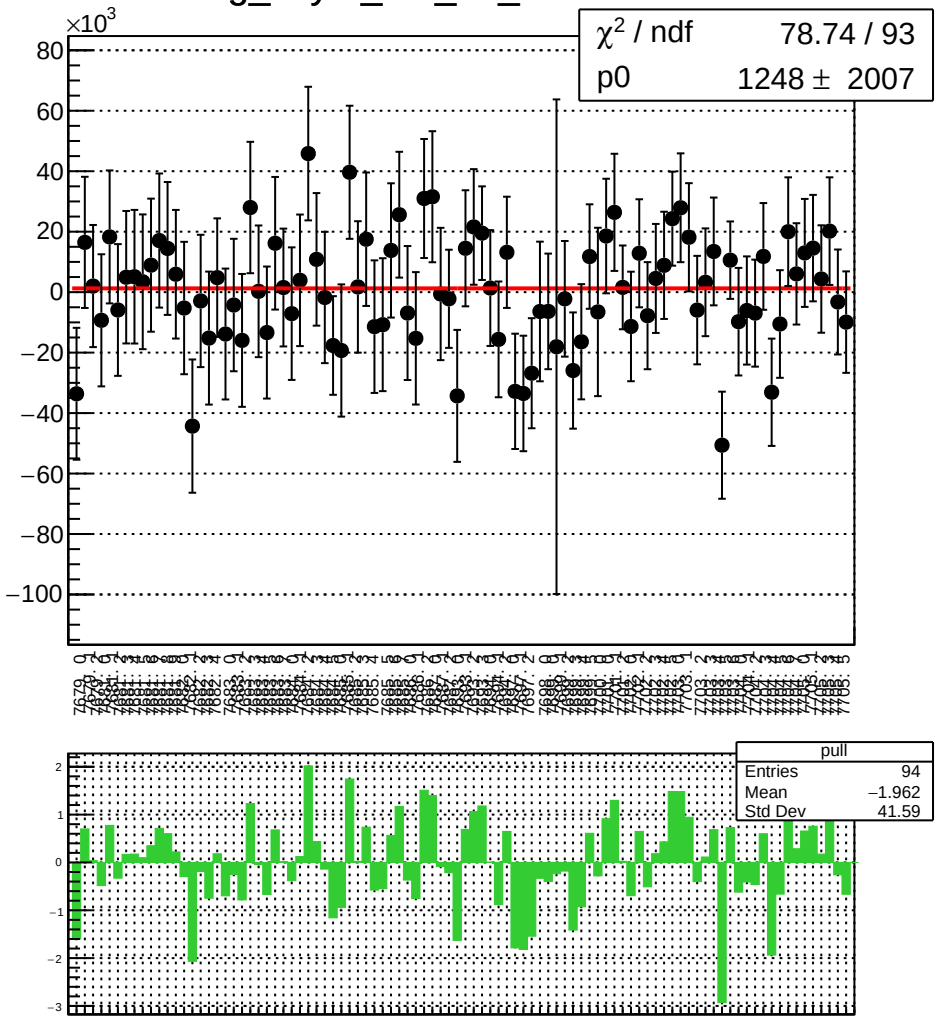

pull1D
Entries 94
Mean −0.01362
Std Dev 0.9498

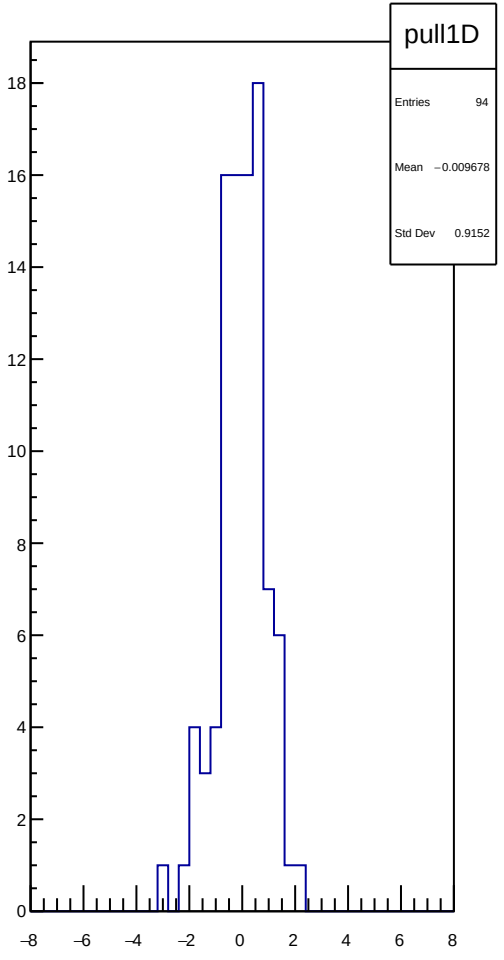

asym_at2_avg_correction_rms vs run
χ² / ndf 7923 / 93
p0 1.02e+04 ± 7.649
11500
11000
10500
10000
9500
9000
8500
8000

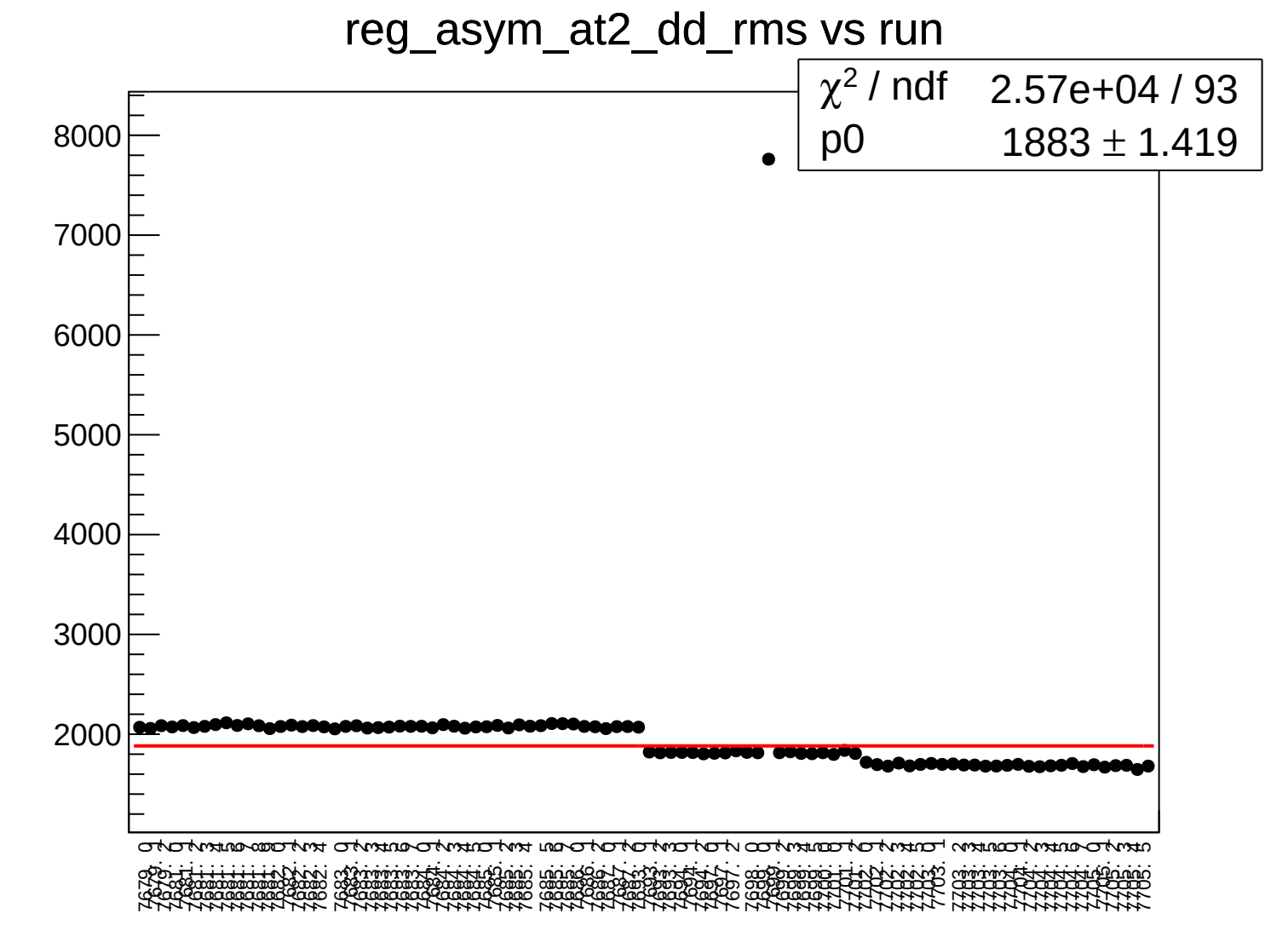

asym_at2_avg_mean vs run
×10^3
χ² / ndf 84.85 / 93
p0 −1.852e+04 ± 1.105e+04
pull
Entries 94
Mean −303.7
Std Dev 353.5

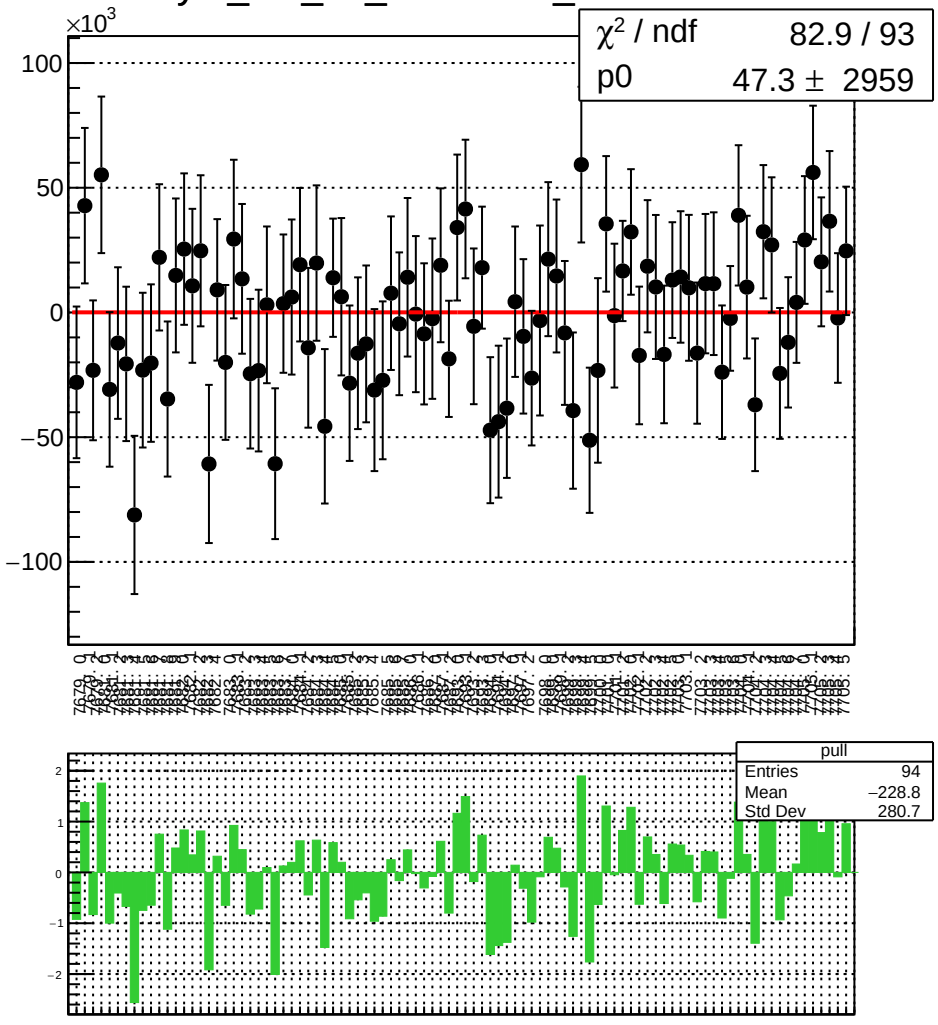

pull1D
Entries 94
Mean 0.01403
Std Dev 0.95

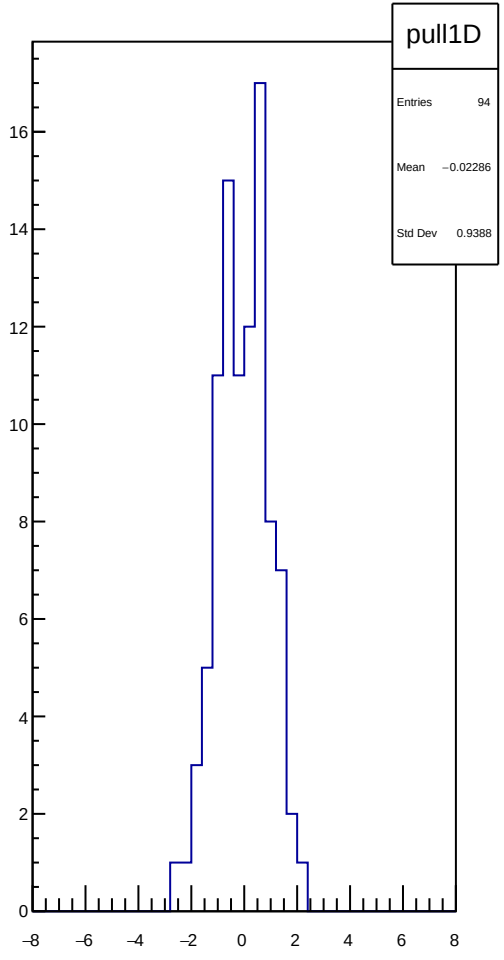

asym_at2_avg_rms vs run
χ² / ndf 7406 / 93
p0 1.041e+04 ± 7.811
12000
11500
11000
10500
10000
9500
9000
8500

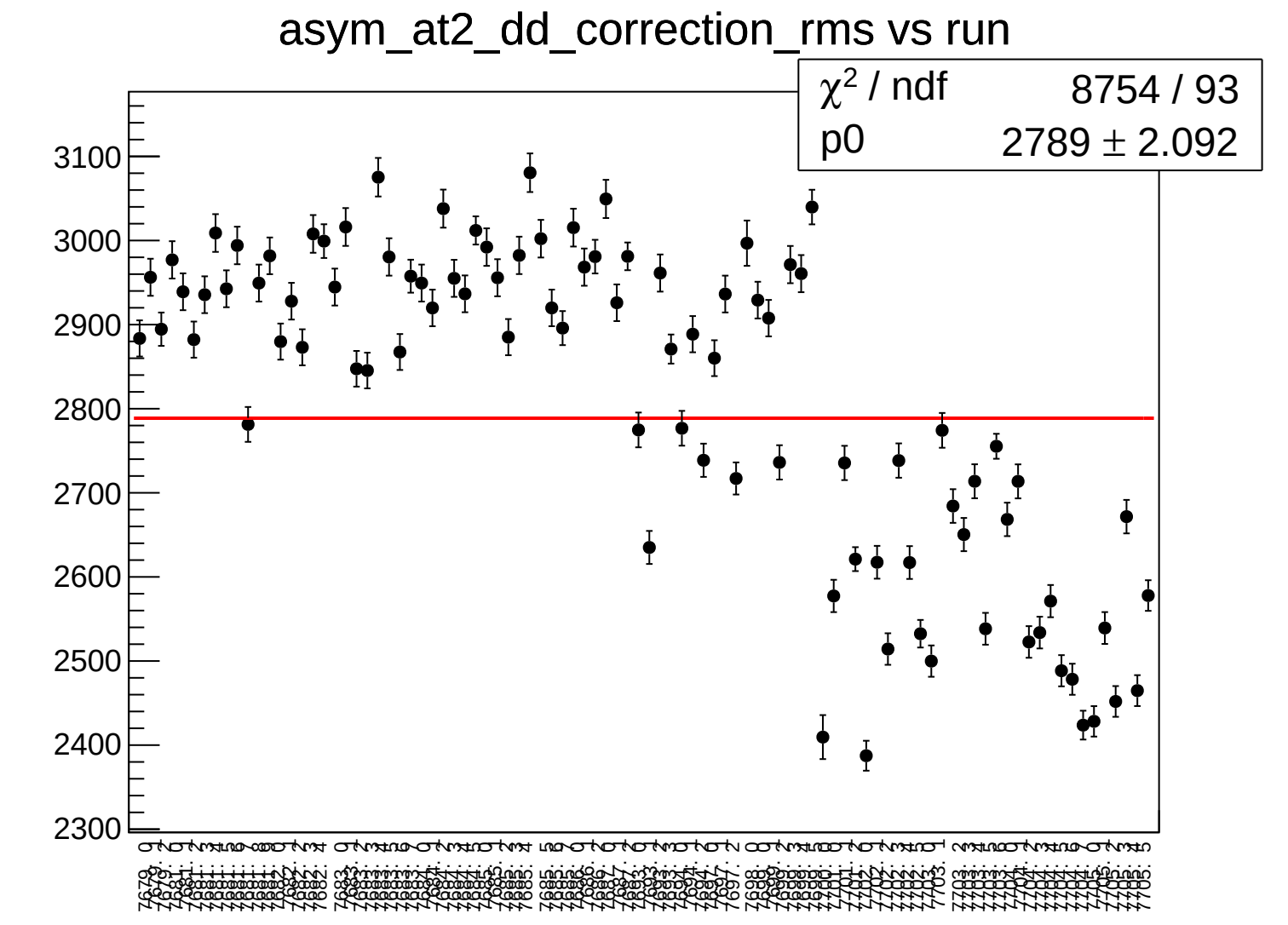

reg_asym_at2_dd_mean vs run
×10^3
χ^2 / ndf 78.74 / 93
p0 1248 ± 2007
pull
Entries 94
Mean −1.962
Std Dev 41.59

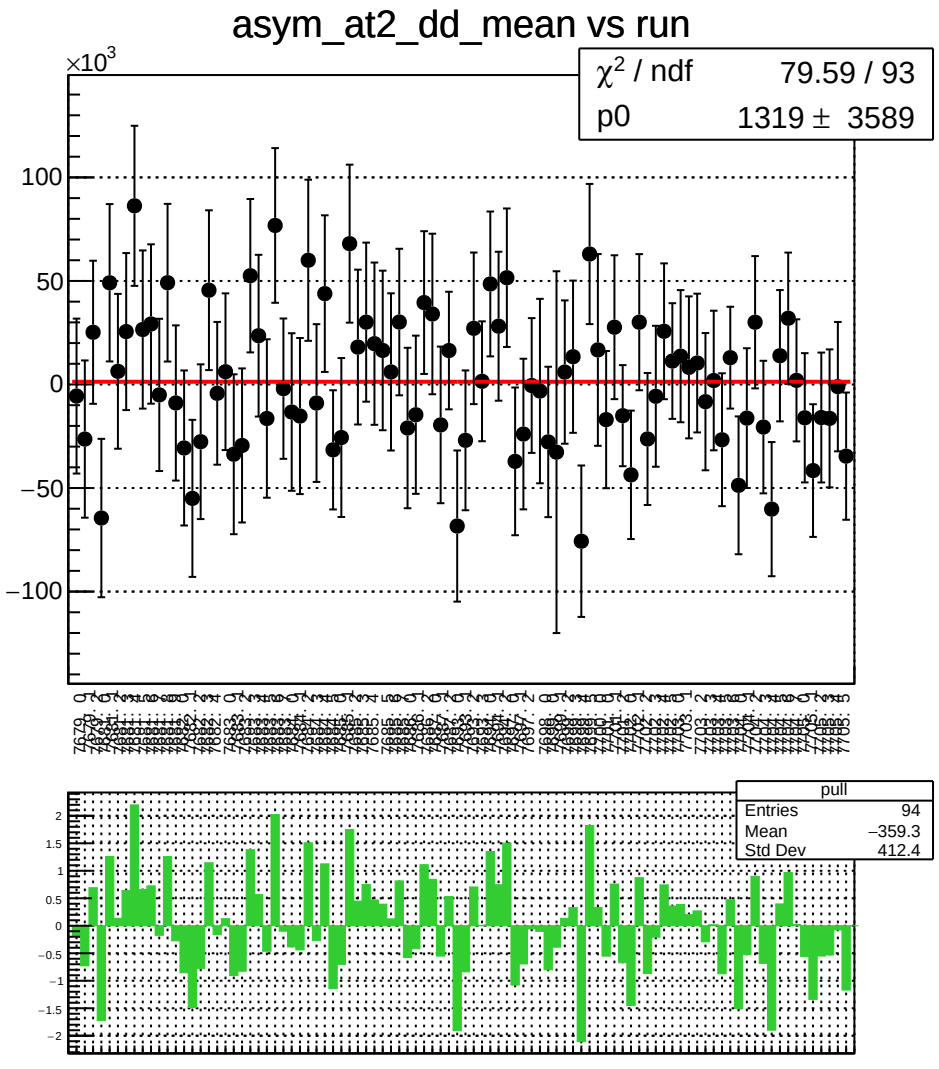

pull1D
Entries 94
Mean −0.009678
Std Dev 0.9152

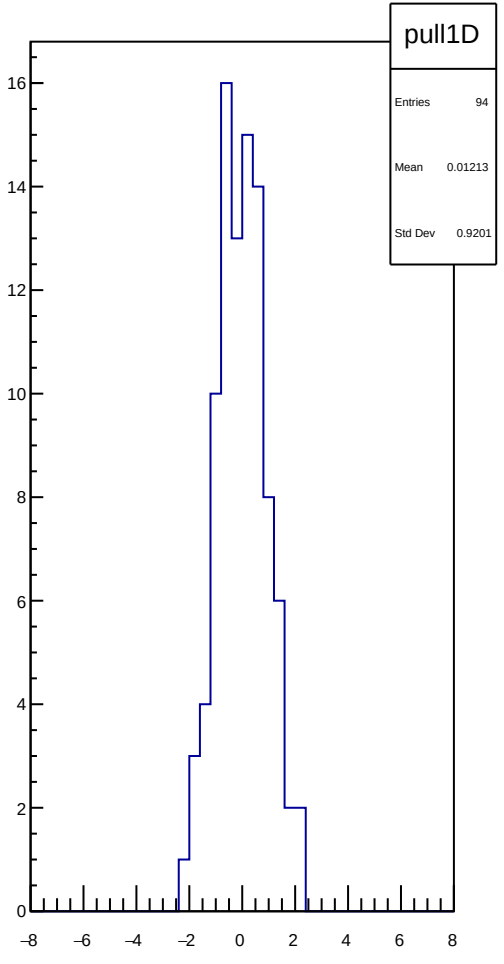

reg_asym_at2_dd_rms vs run
χ^2 / ndf 2.57e+04 / 93
p0 1883 ± 1.419
8000
7000
6000
5000
4000
3000
2000

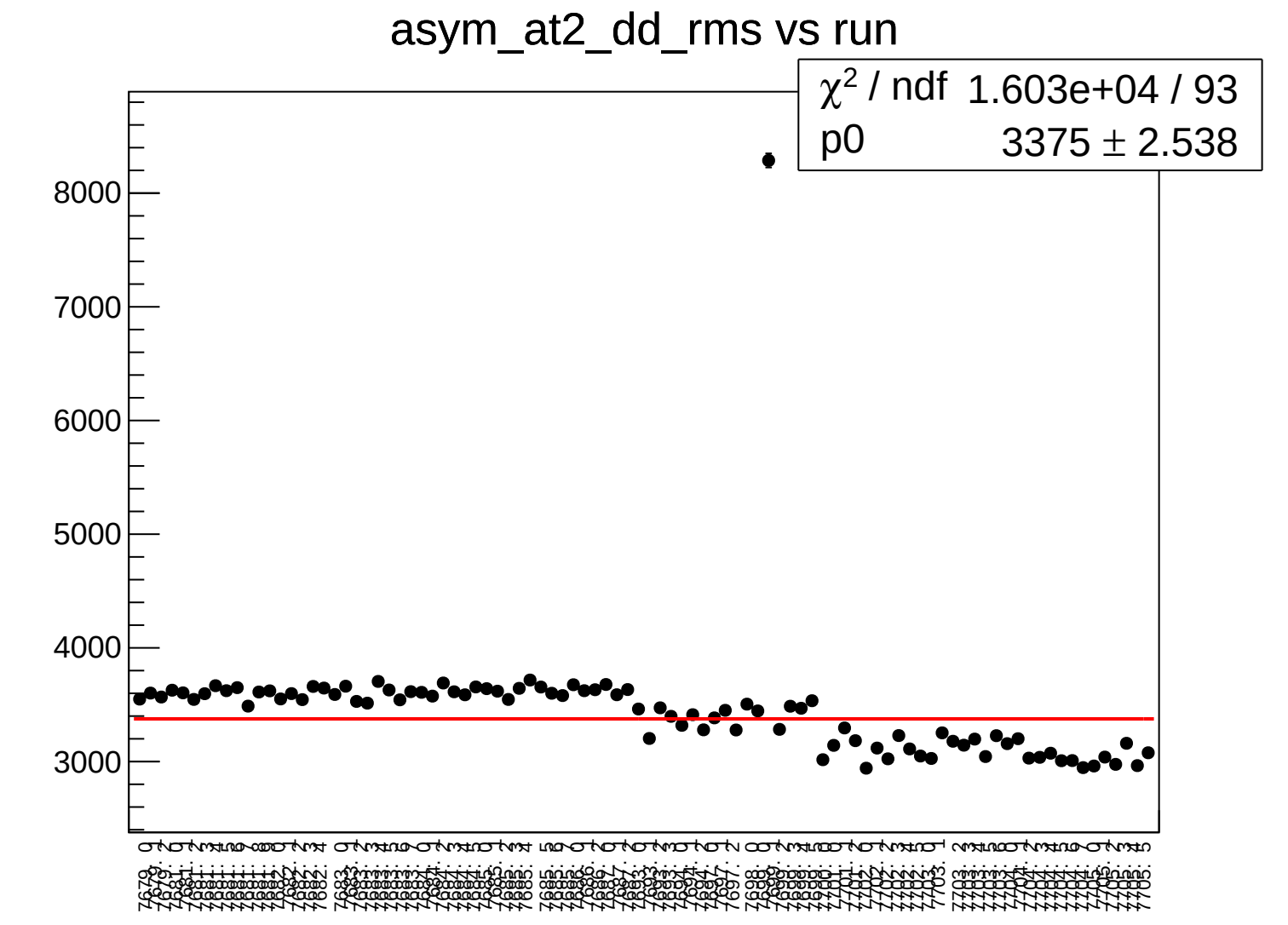

asym_at2_dd_correction_mean vs run
×10^3
χ² / ndf 82.9 / 93
p0 47.3 ± 2959
100
50
0
−50
−100
pull
Entries 94
Mean −228.8
Std Dev 280.7
2
1
0
−1
−2

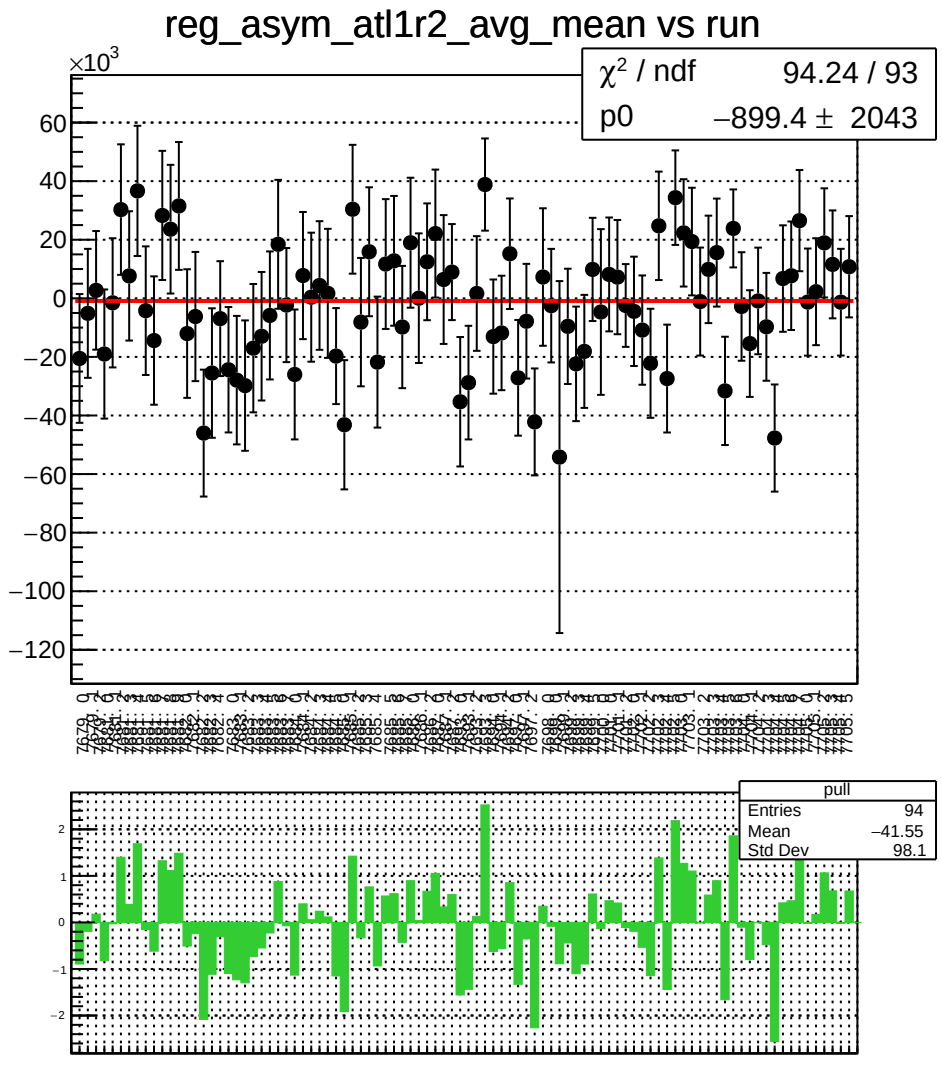

pull1D
Entries 94
Mean −0.02286
Std Dev 0.9388
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

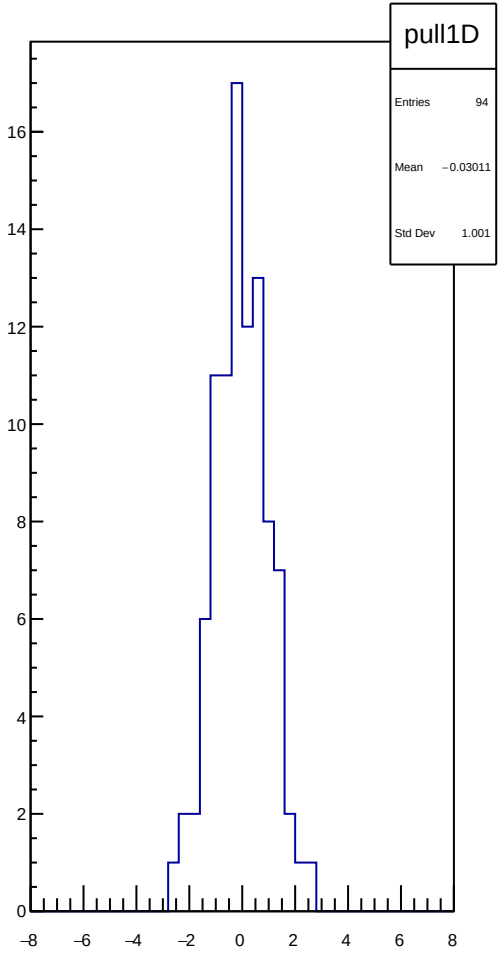

asym_at2_dd_correction_rms vs run
χ² / ndf 8754 / 93
p0 2789 ± 2.092
3100
3000
2900
2800
2700
2600
2500
2400
2300

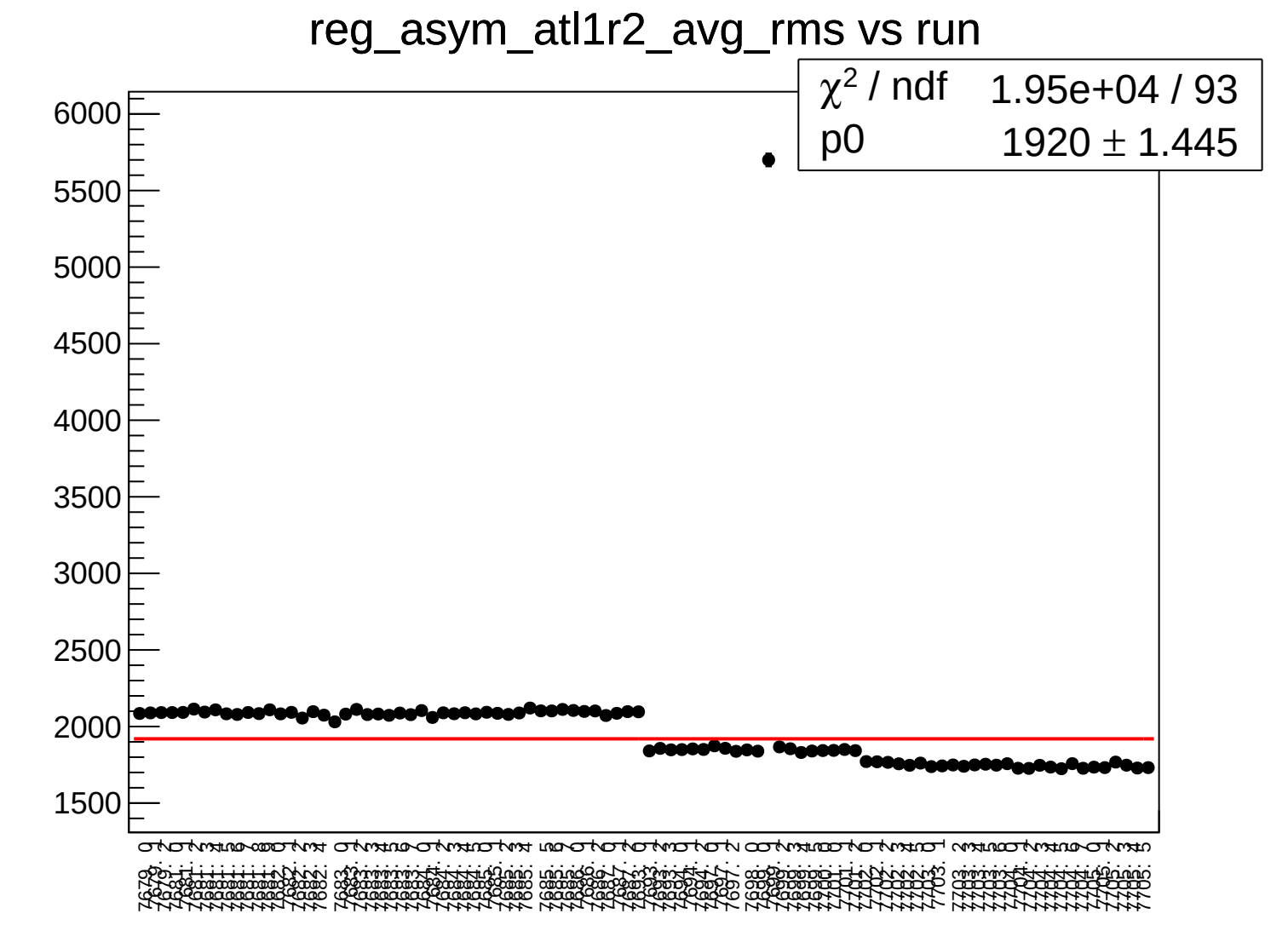

asym_at2_dd_mean vs run
×10^3
χ² / ndf 79.59 / 93
p0 1319 ± 3589
100
50
0
−50
−100
pull
Entries 94
Mean −359.3
Std Dev 412.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

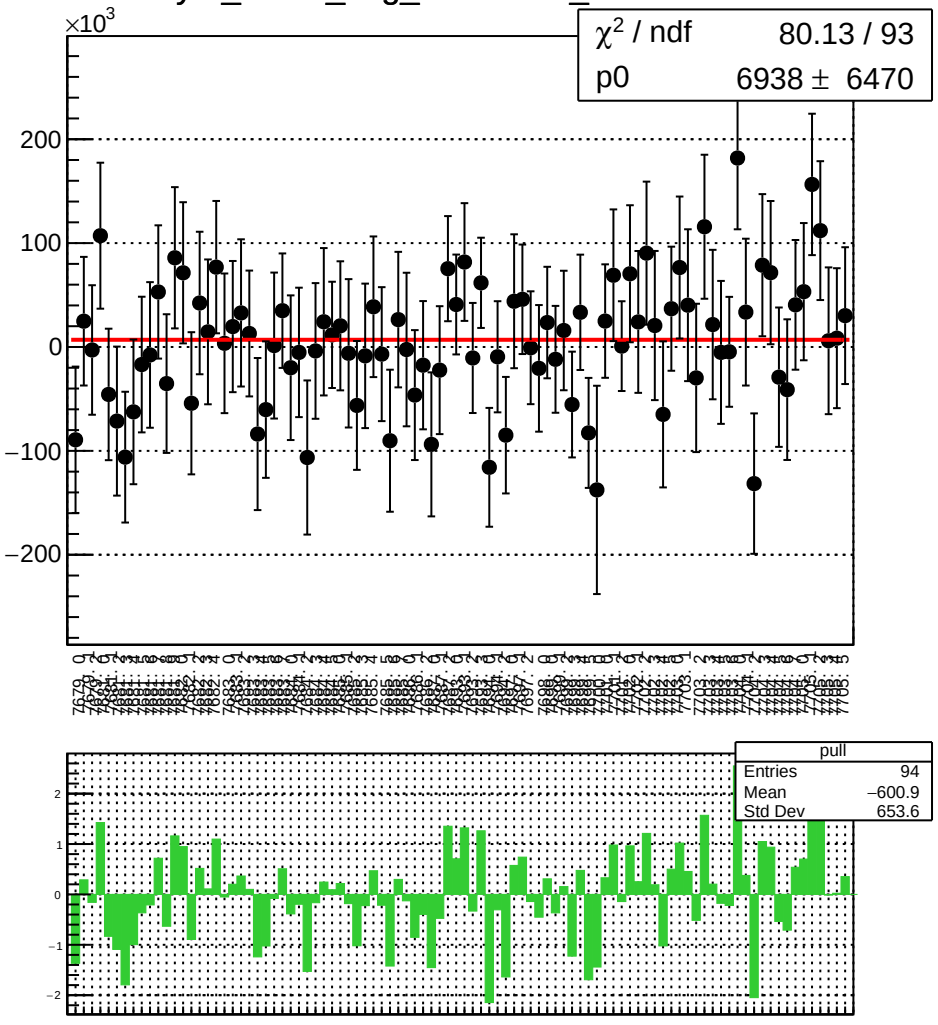

pull1D
Entries 94
Mean 0.01213
Std Dev 0.9201
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

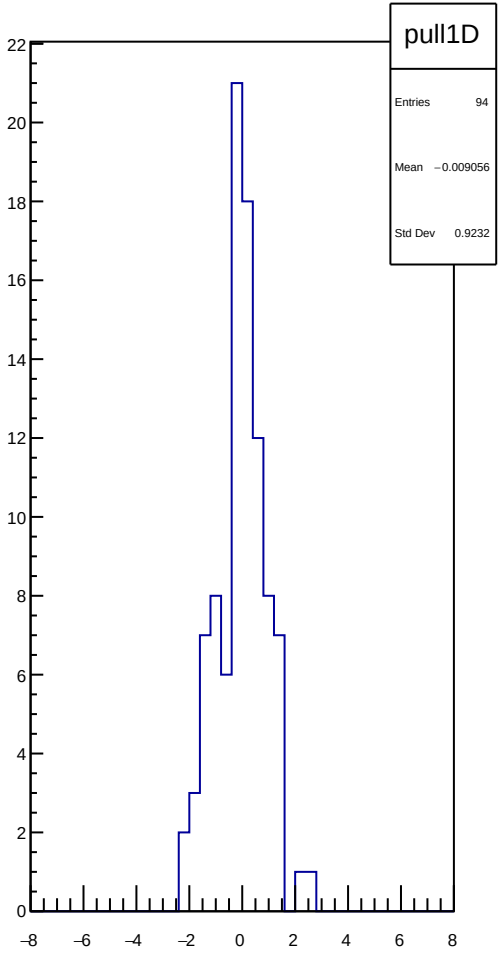

asym_at2_dd_rms vs run
χ^2 / ndf 1.603e+04 / 93
p0 3375 ± 2.538
8000
7000
6000
5000
4000
3000

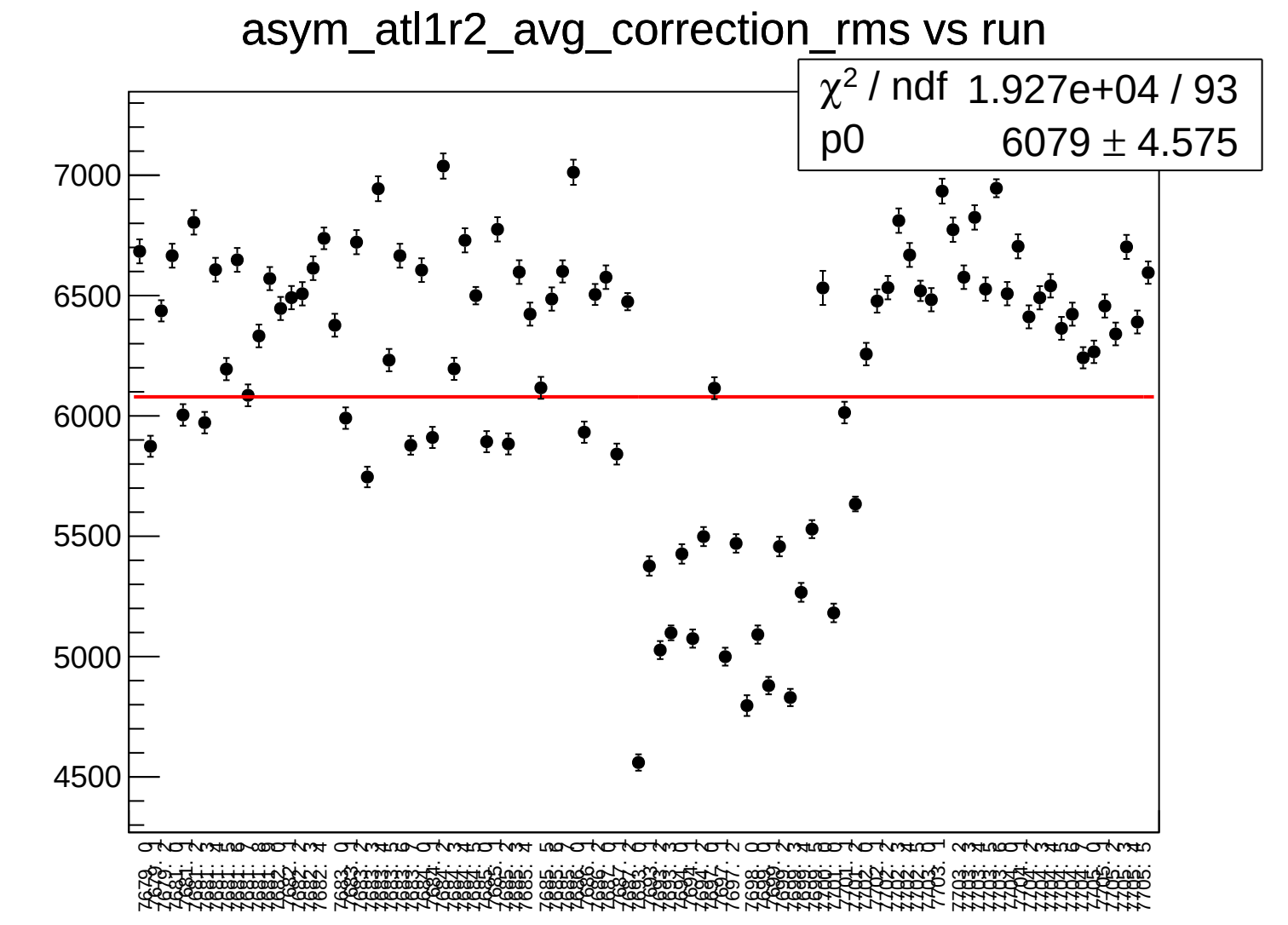

reg_asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 94.24 / 93
p0 −899.4 ± 2043
pull
Entries 94
Mean −41.55
Std Dev 98.1

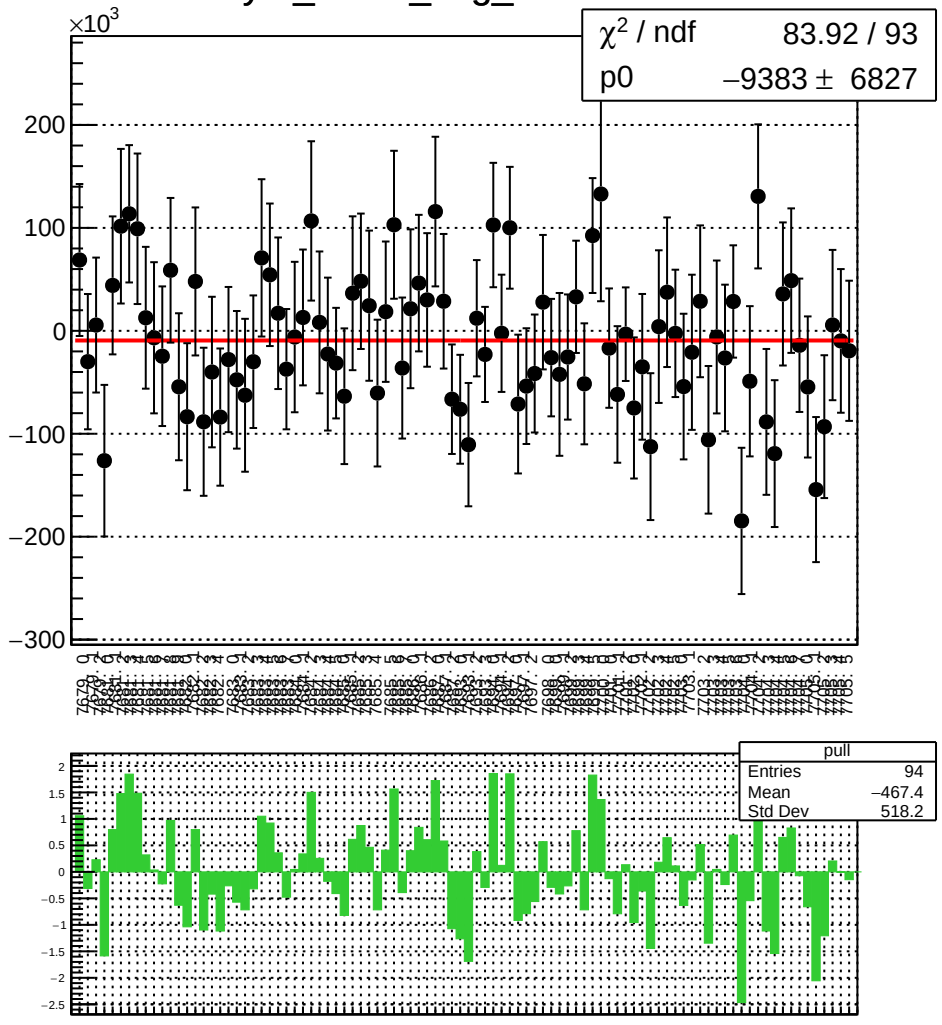

pull1D
Entries 94
Mean −0.03011
Std Dev 1.001

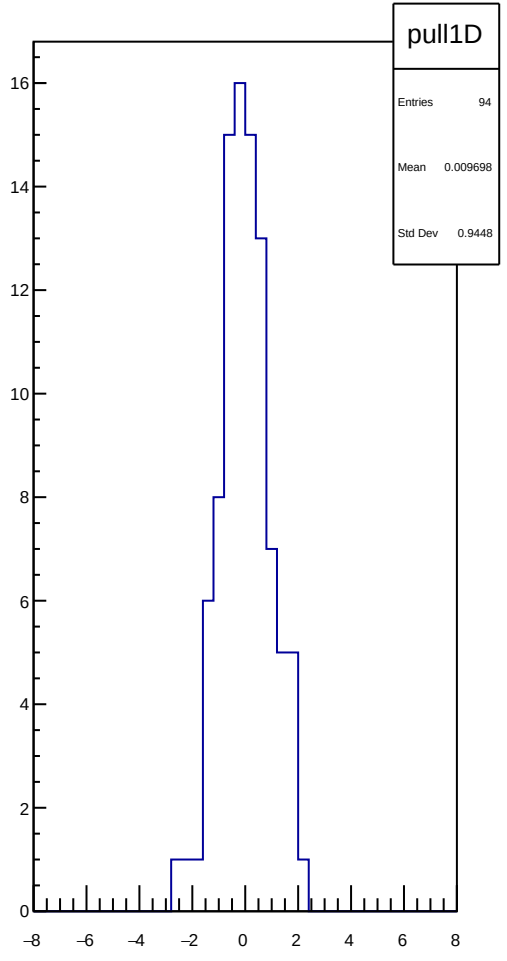

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 1.95e+04 / 93
p0 1920 ± 1.445
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

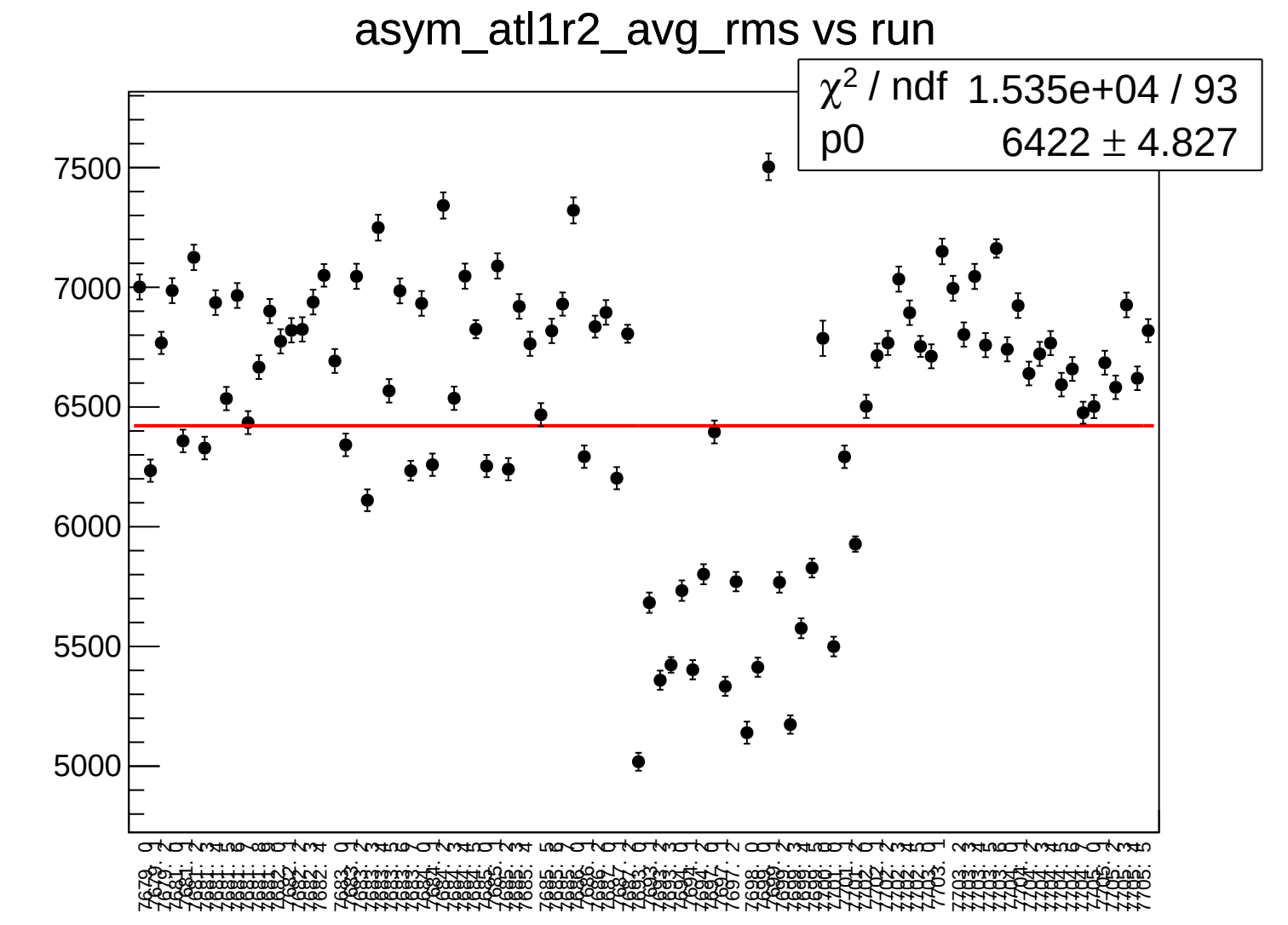

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 80.13 / 93
p0 6938 ± 6470
200
100
0
−100
−200
pull
Entries 94
Mean −600.9
Std Dev 653.6
2
1
0
−1
−2

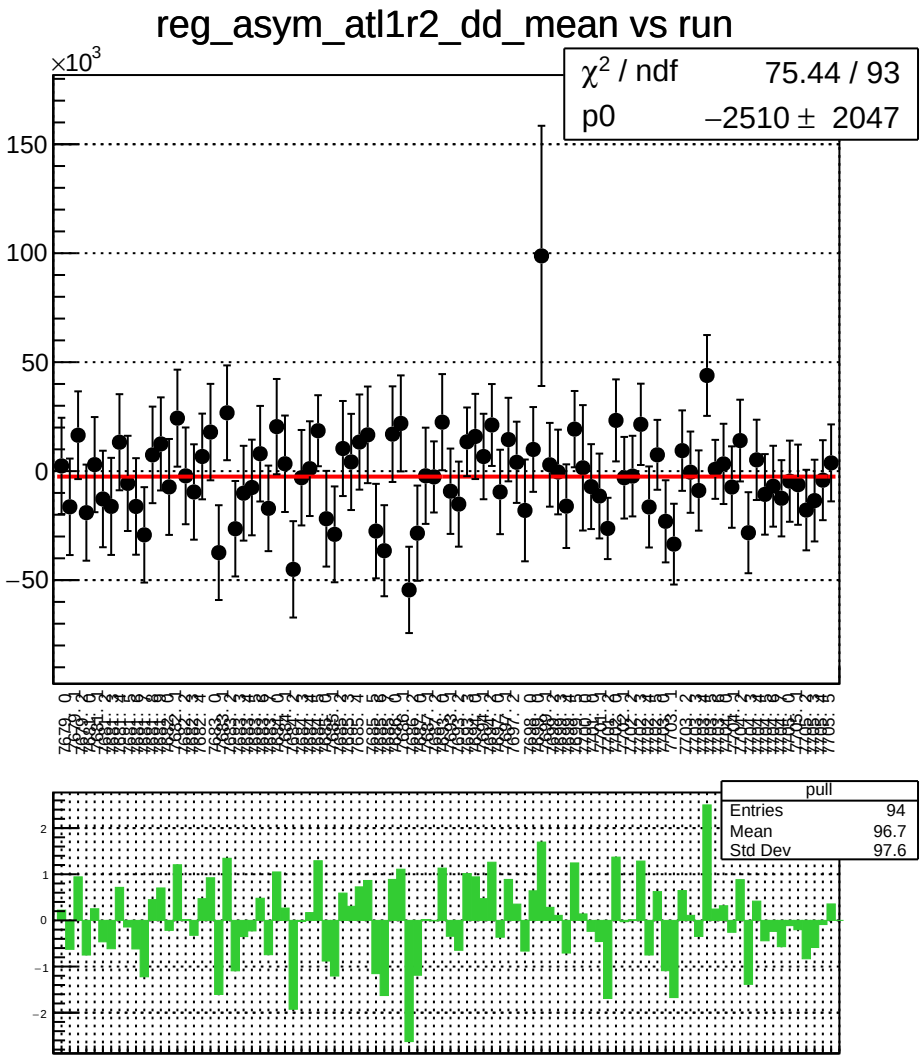

pull1D
Entries 94
Mean −0.009056
Std Dev 0.9232
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

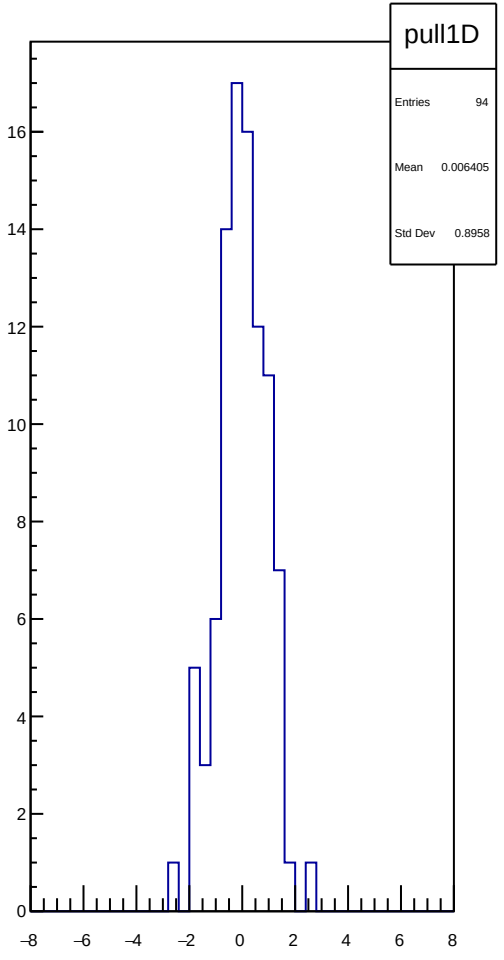

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 1.927e+04 / 93
p0 6079 ± 4.575
7000
6500
6000
5500
5000
4500

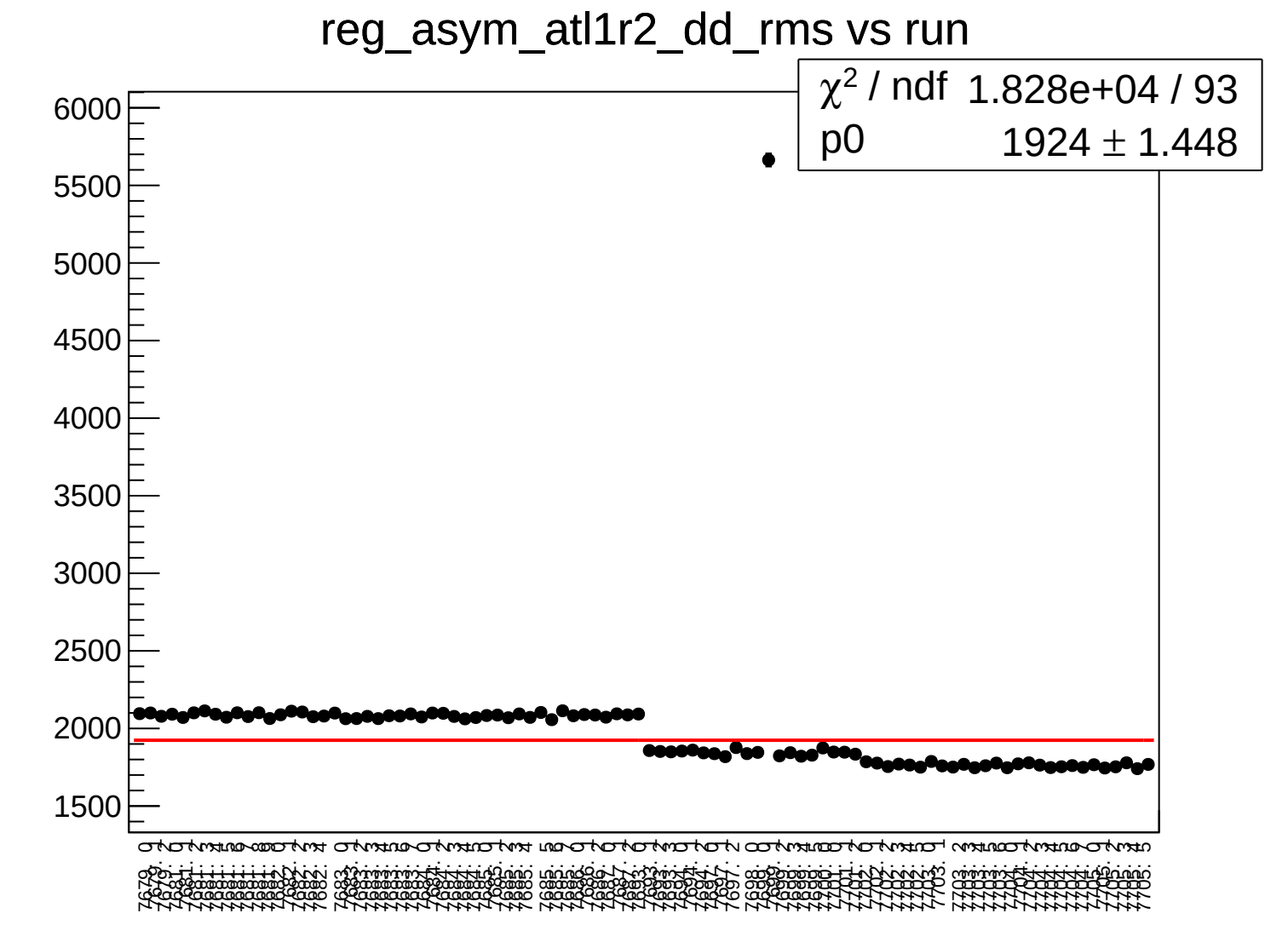

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 83.92 / 93
p0 −9383 ± 6827
200
100
0
−100
−200
−300
pull
Entries 94
Mean −467.4
Std Dev 518.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

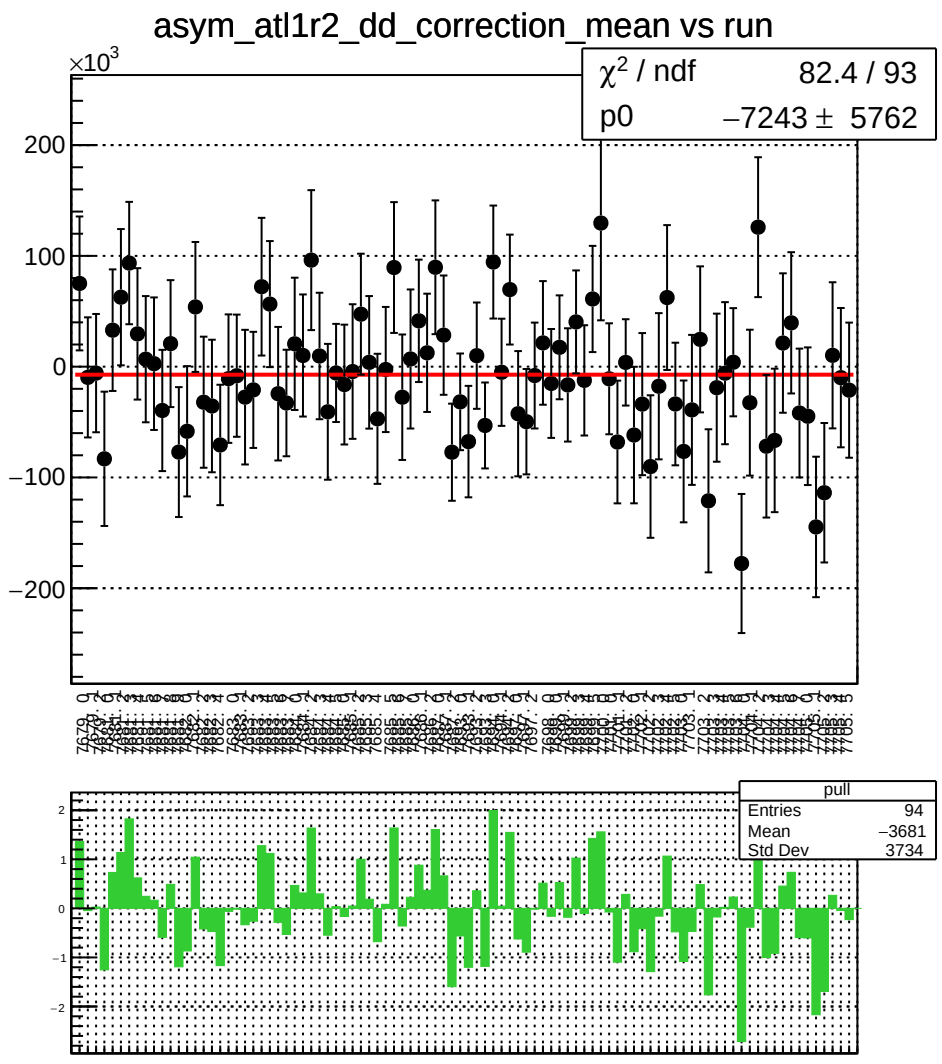

pull1D
Entries 94
Mean 0.009698
Std Dev 0.9448
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

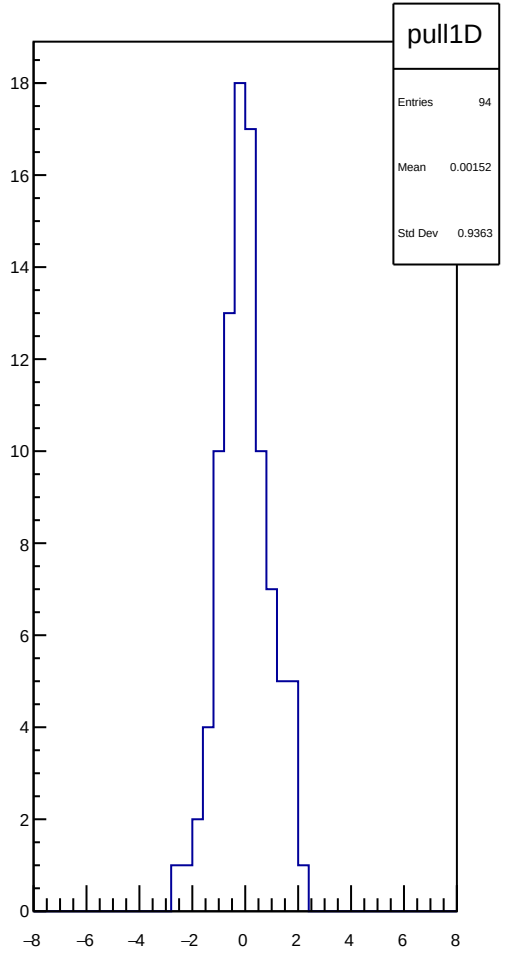

asym_atl1r2_avg_rms vs run
χ² / ndf 1.535e+04 / 93
p0 6422 ± 4.827
7500
7000
6500
6000
5500
5000

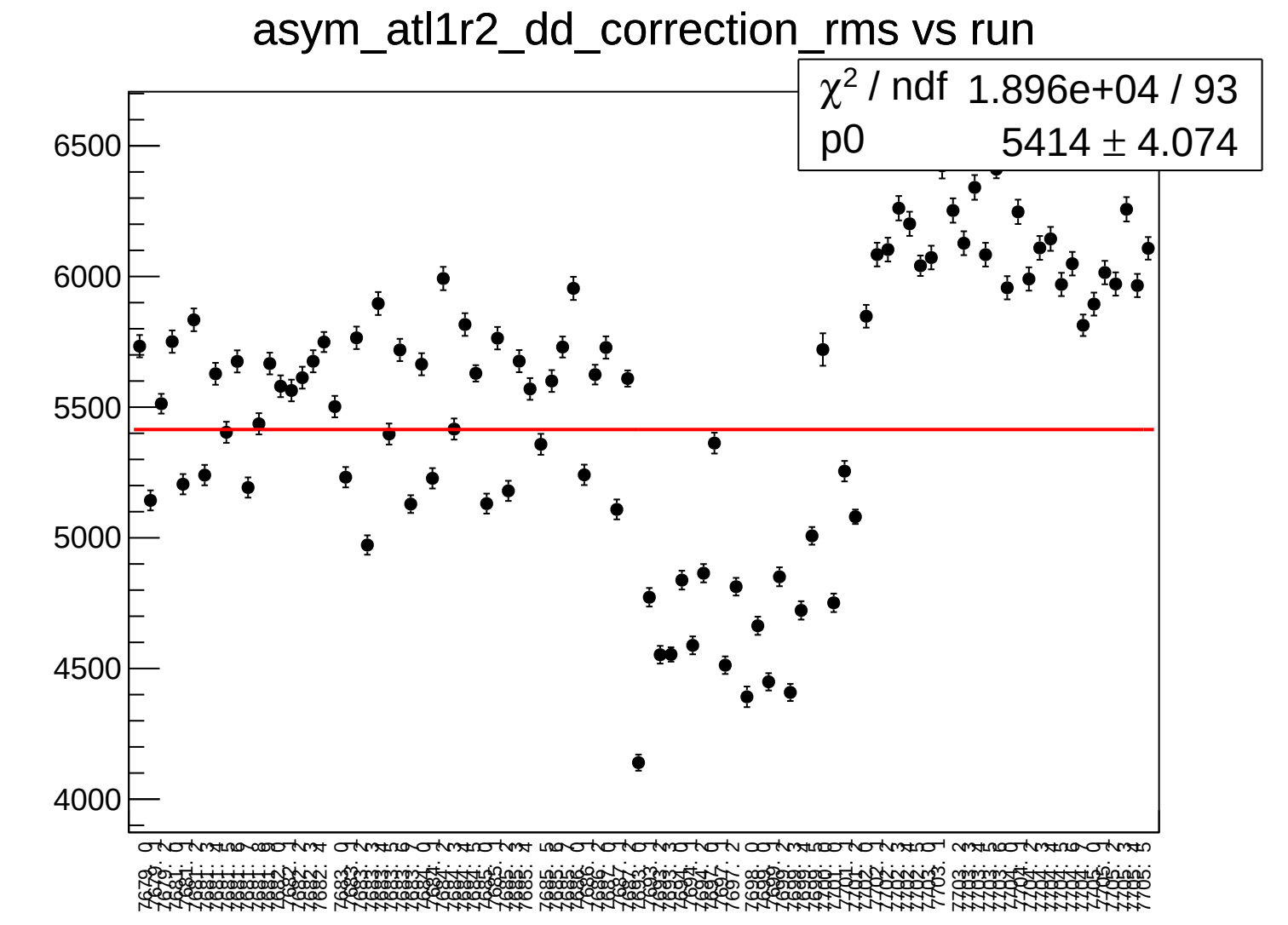

reg_asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 75.44 / 93
p0 −2510 ± 2047
150
100
50
0
−50
pull
Entries 94
Mean 96.7
Std Dev 97.6
2
1
0
−1
−2

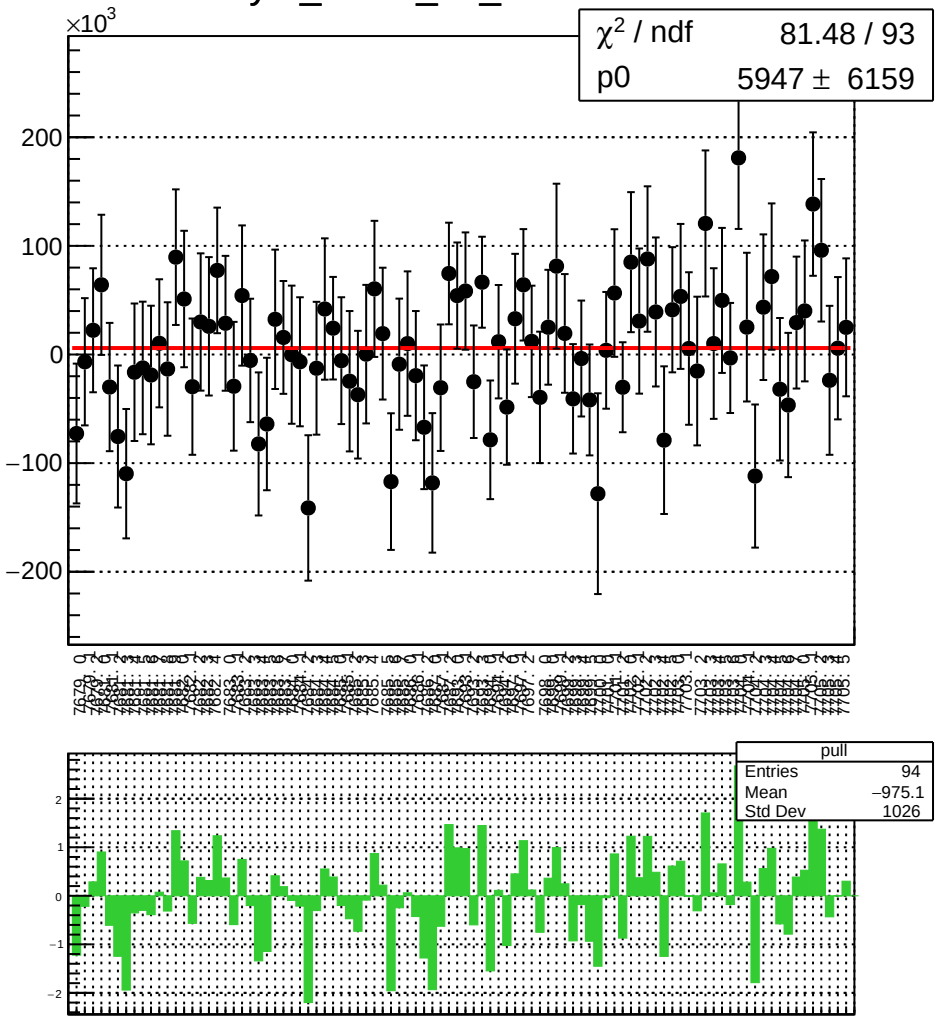

pull1D
Entries 94
Mean 0.006405
Std Dev 0.8958
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

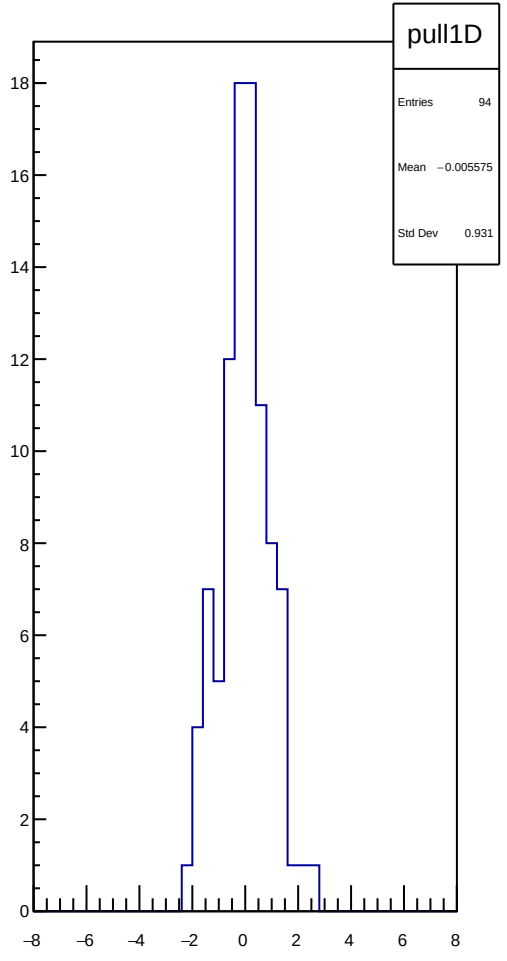

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 1.828e+04 / 93
p0 1924 ± 1.448
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

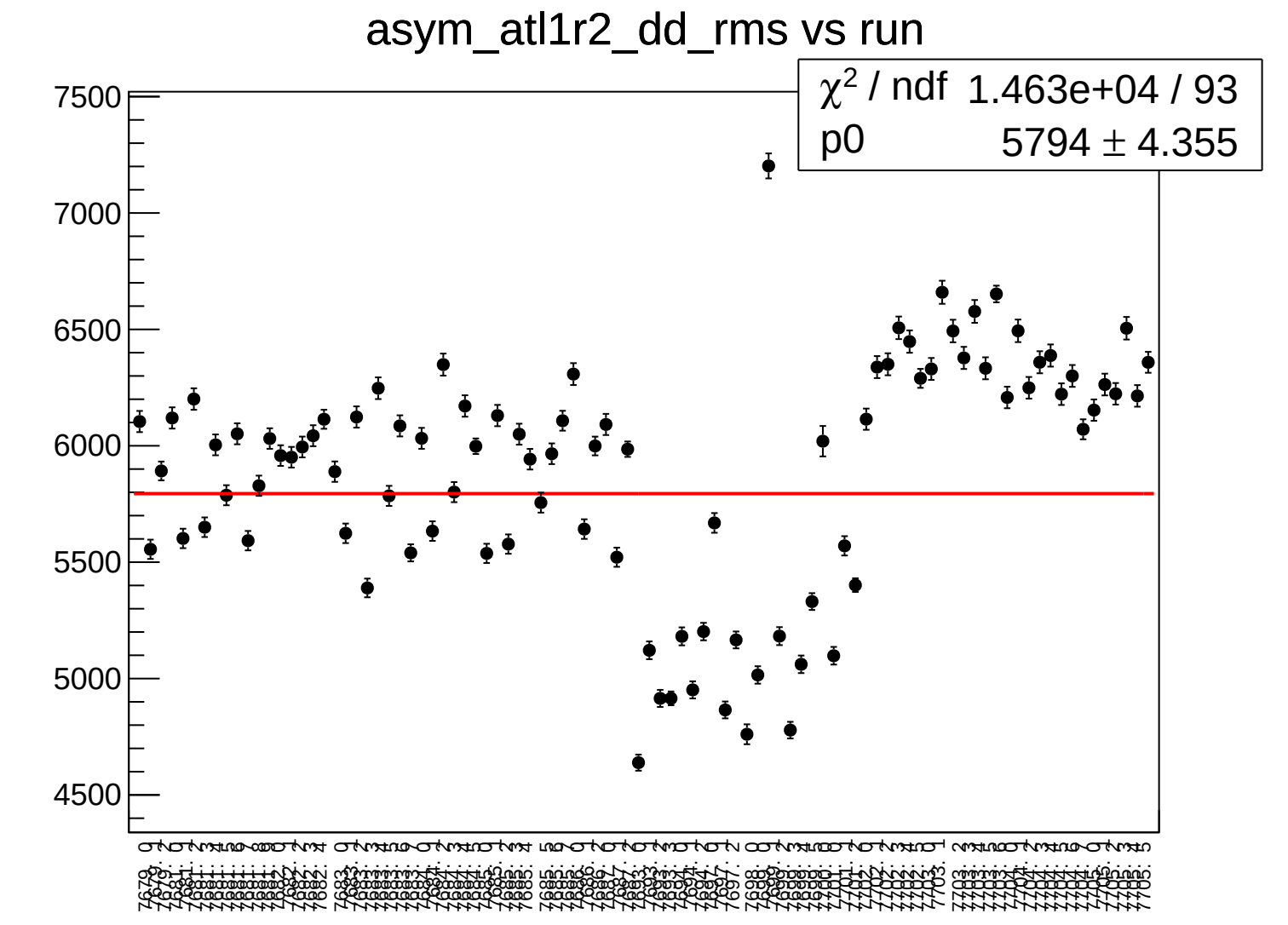

asym_atl1r2_dd_correction_mean vs run
χ² / ndf 82.4 / 93
p0 −7243 ± 5762
×10³
200
100
0
−100
−200
pull
Entries 94
Mean −3681
Std Dev 3734
2
1
0
−1
−2

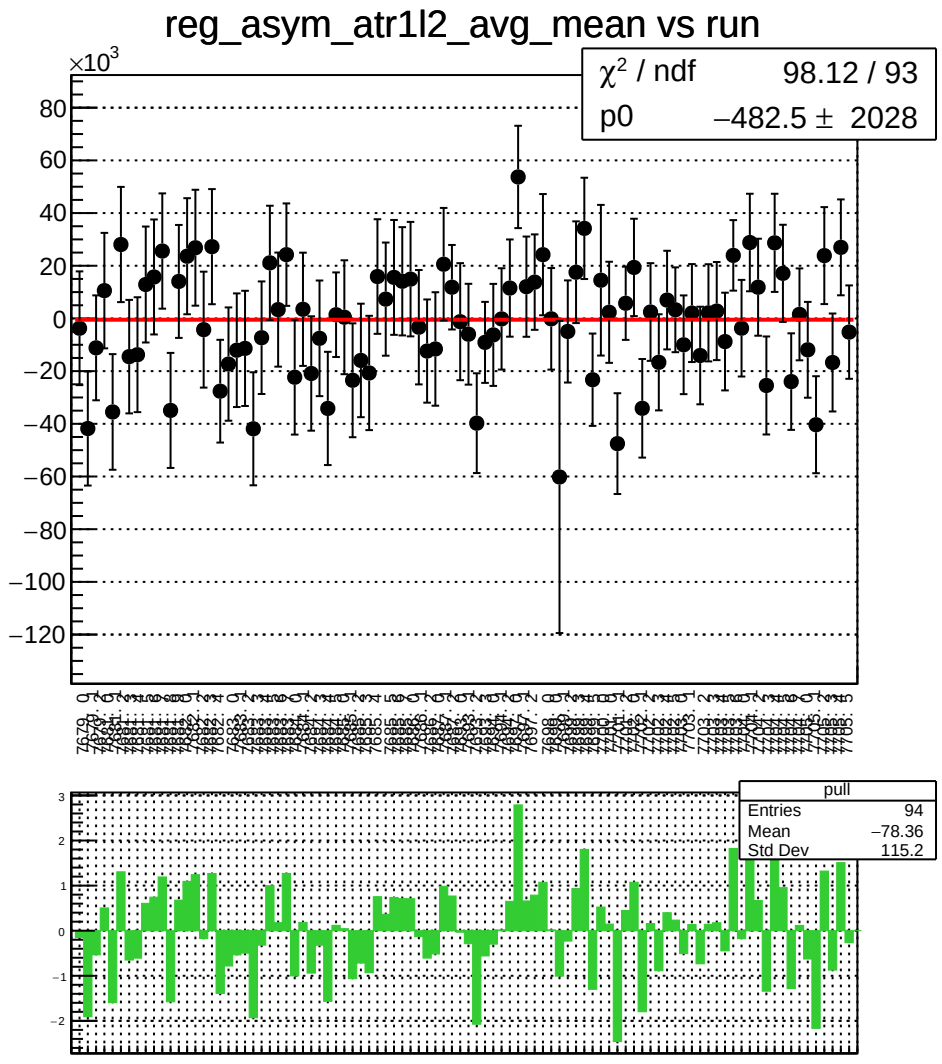

pull1D
Entries 94
Mean 0.00152
Std Dev 0.9363
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

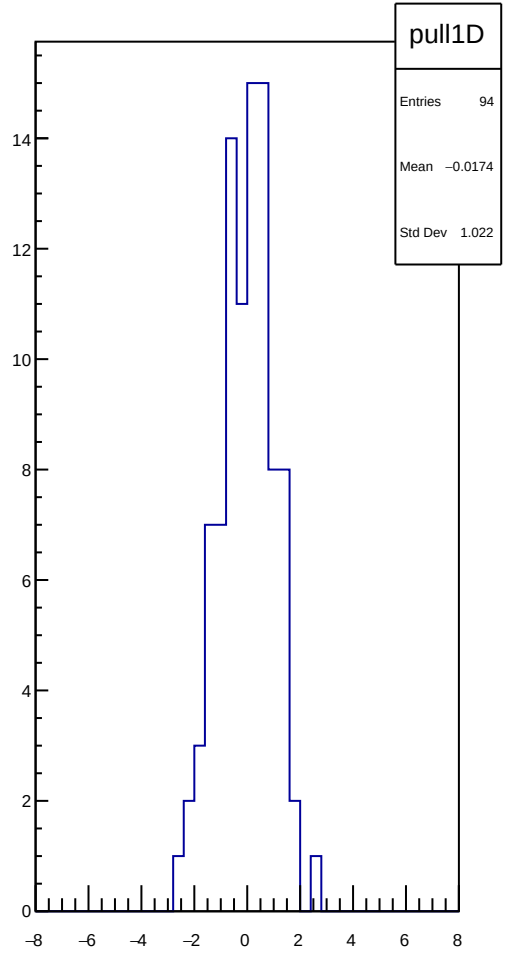

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 1.896e+04 / 93
p0 5414 ± 4.074
6500
6000
5500
5000
4500
4000

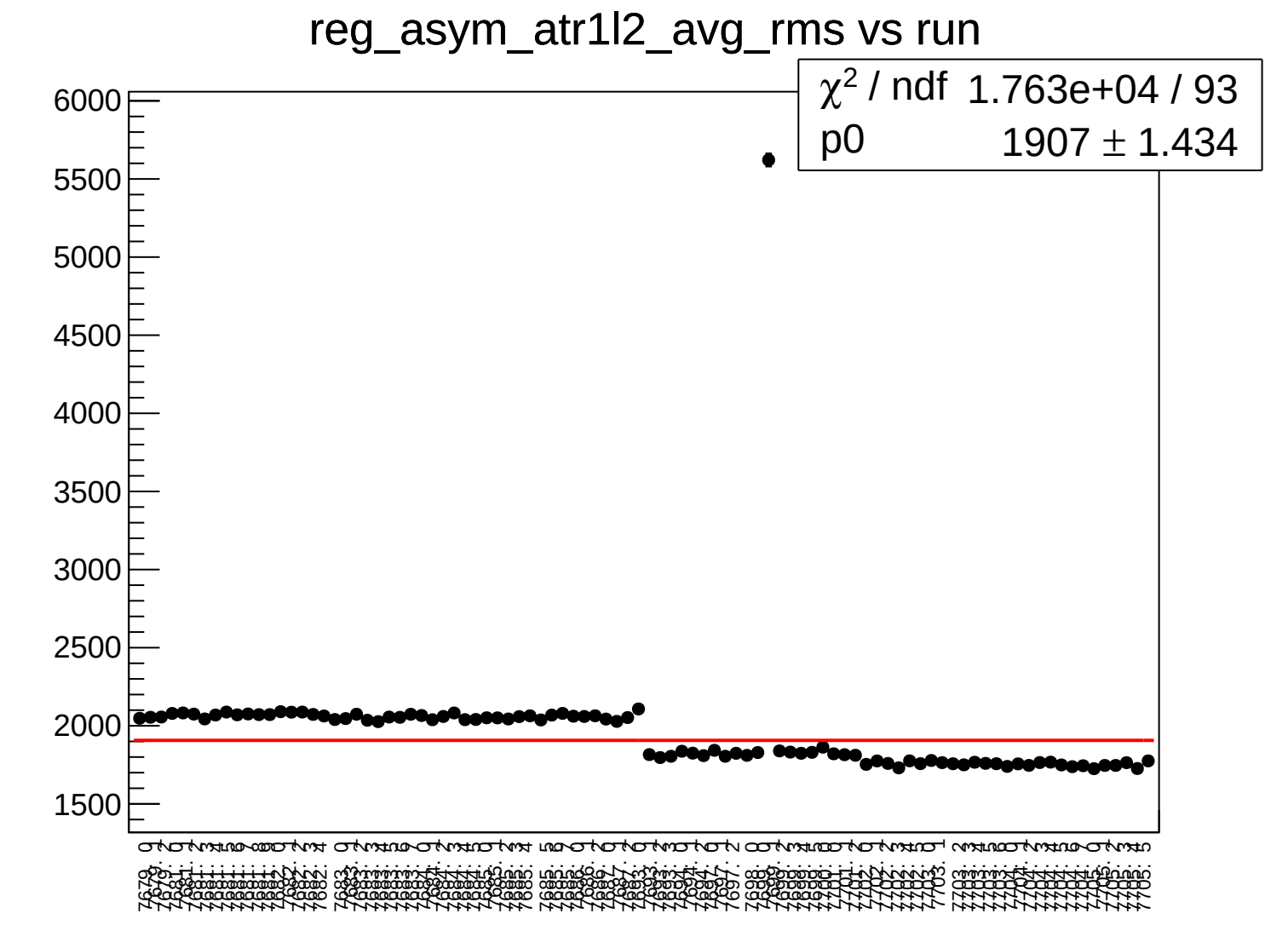

asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 81.48 / 93
p0 5947 ± 6159
200
100
0
−100
−200
pull
Entries 94
Mean −975.1
Std Dev 1026
2
1
0
−1
−2

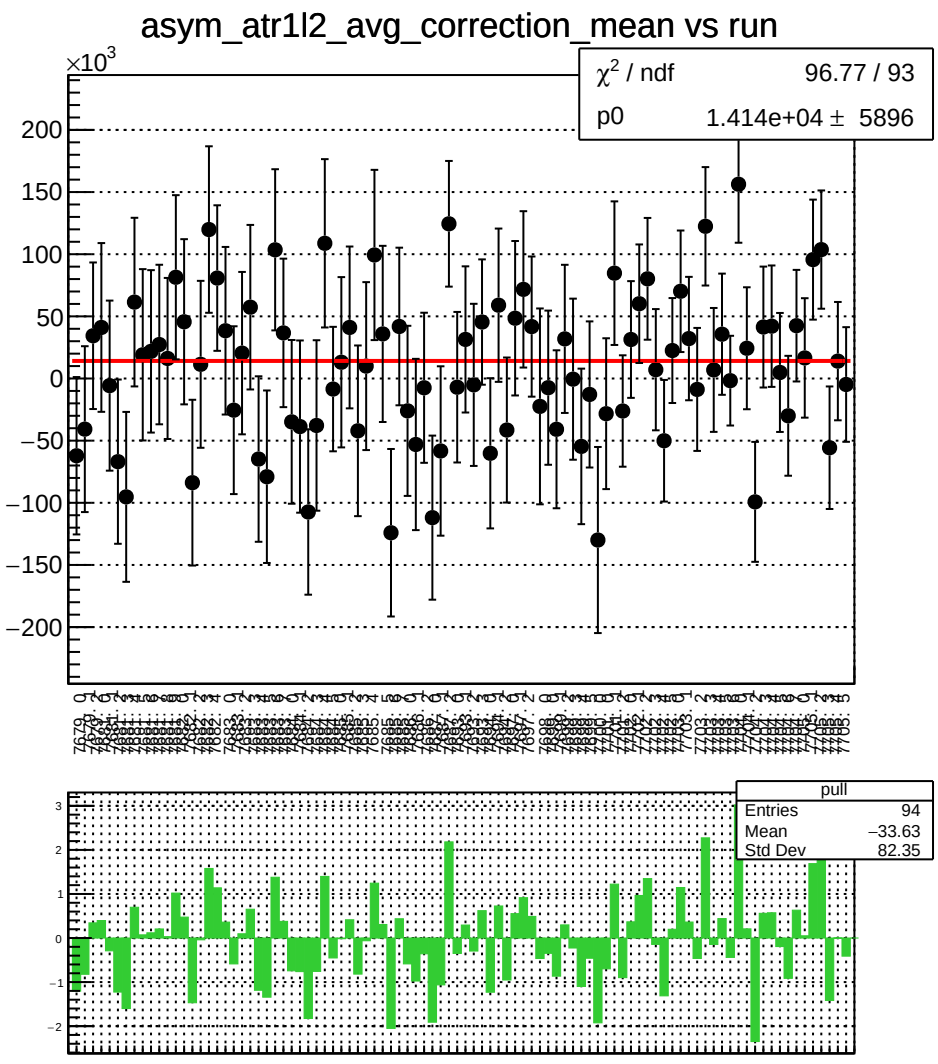

pull1D
Entries 94
Mean −0.005575
Std Dev 0.931
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

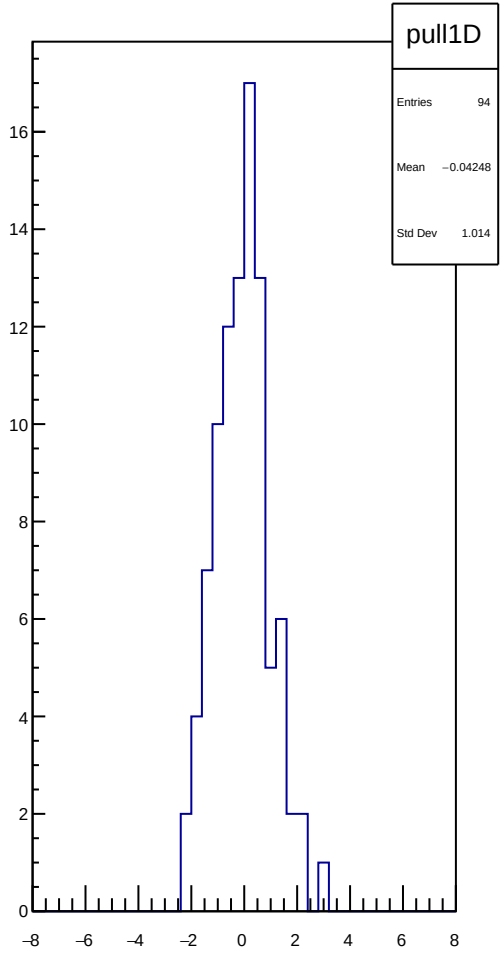

asym_atl1r2_dd_rms vs run
χ^2 / ndf 1.463e+04 / 93
p0 5794 ± 4.355
7500
7000
6500
6000
5500
5000
4500

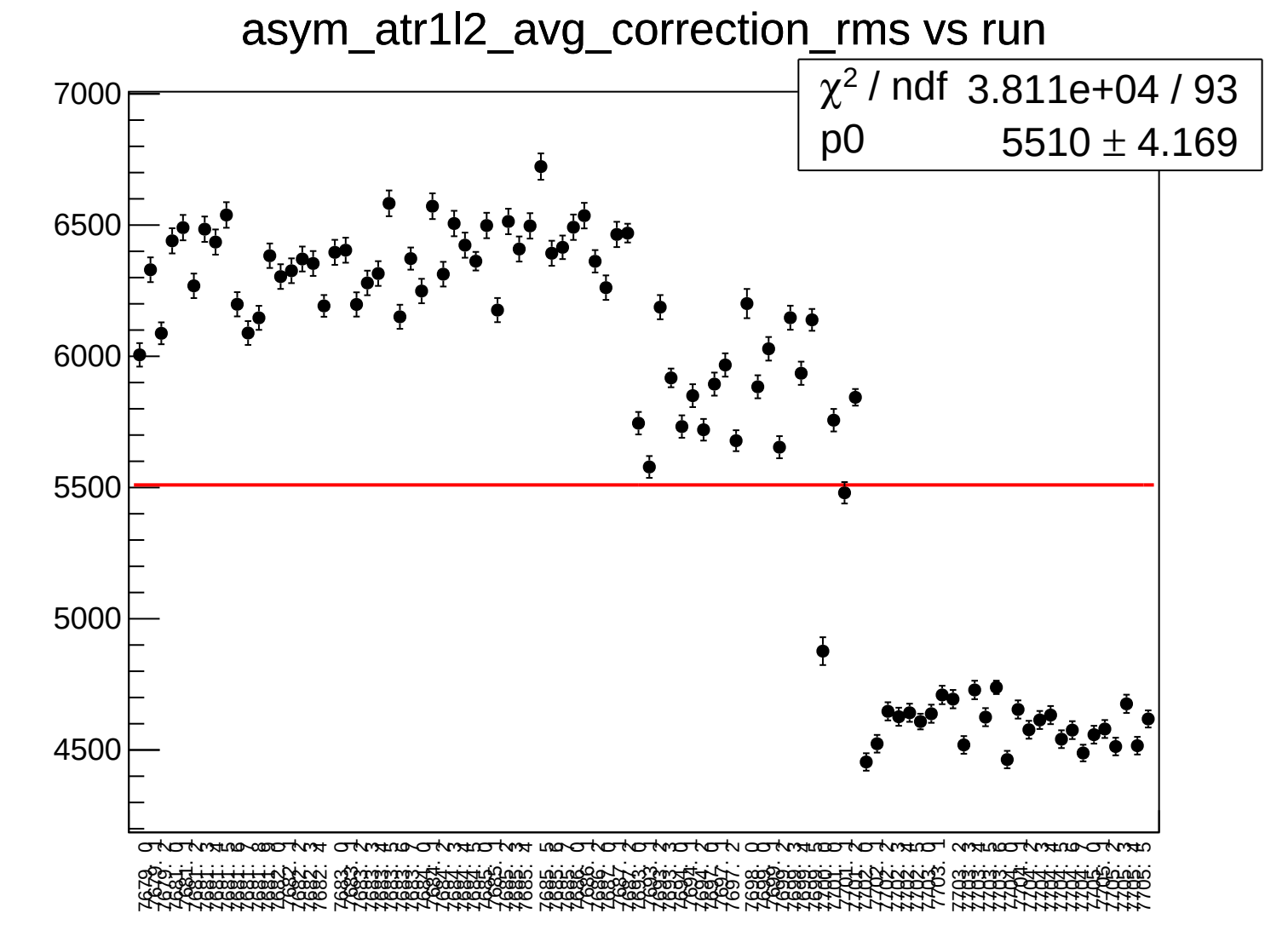

reg_asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 98.12 / 93
p0 −482.5 ± 2028
pull
Entries 94
Mean −78.36
Std Dev 115.2

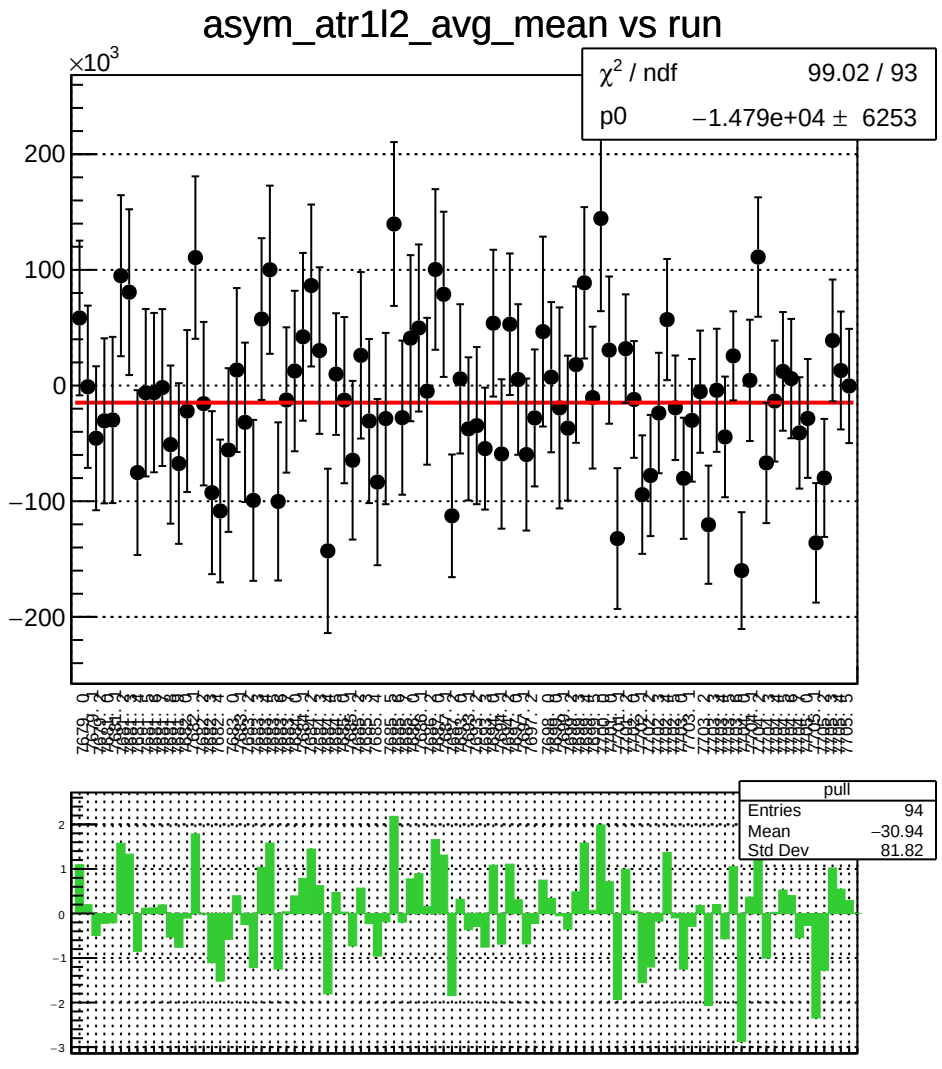

pull1D
Entries 94
Mean −0.0174
Std Dev 1.022

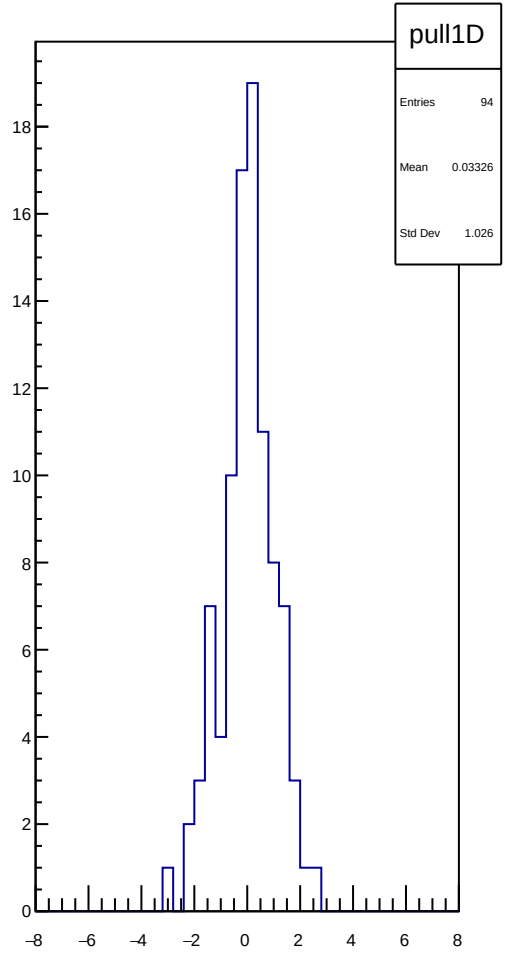

reg_asym_atr1l2_avg_rms vs run
χ^2 / ndf 1.763e+04 / 93
p0 1907 ± 1.434
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

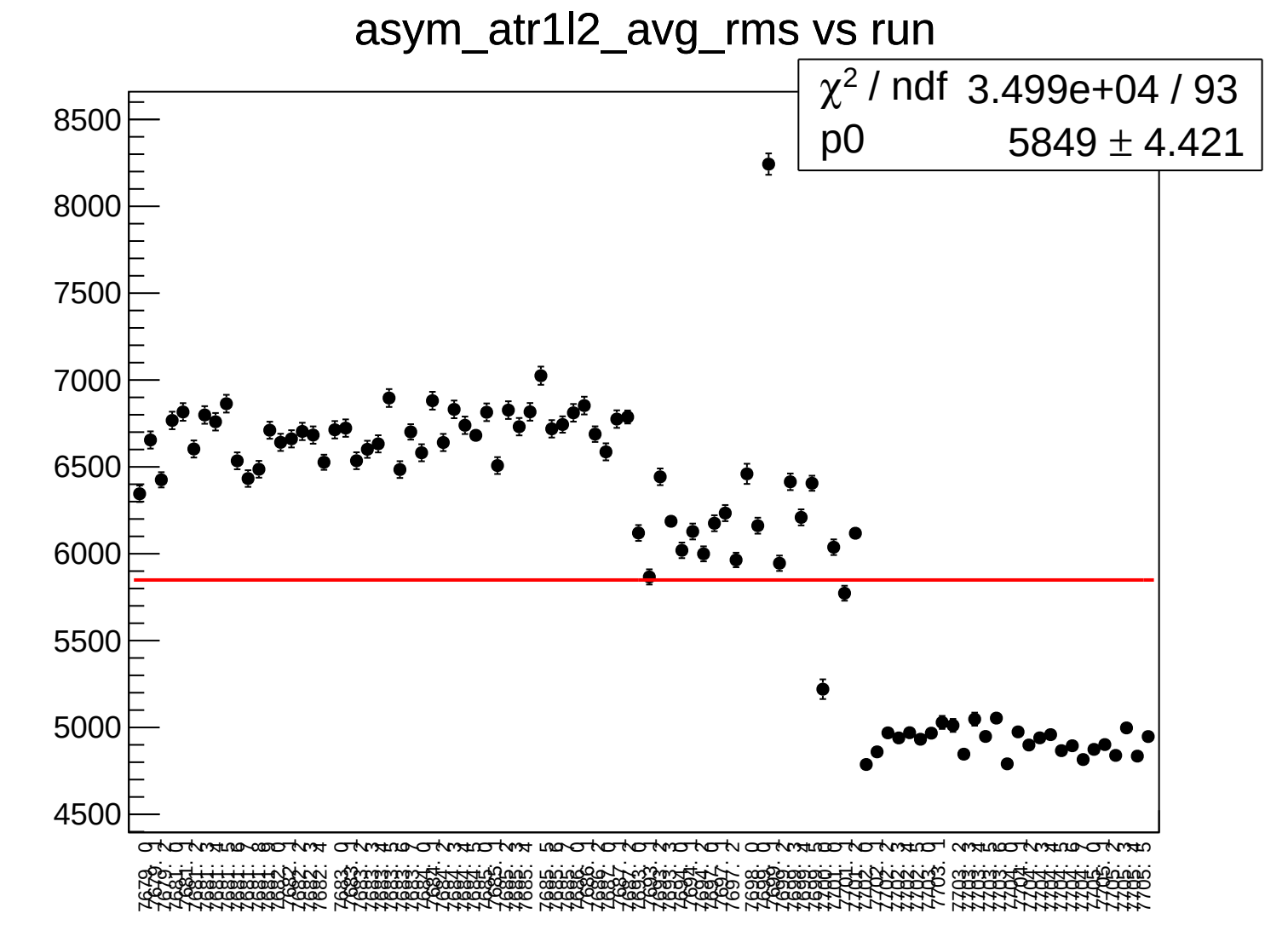

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 96.77 / 93
p0 1.414e+04 ± 5896
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean −33.63
Std Dev 82.35
3
2
1
0
−1
−2

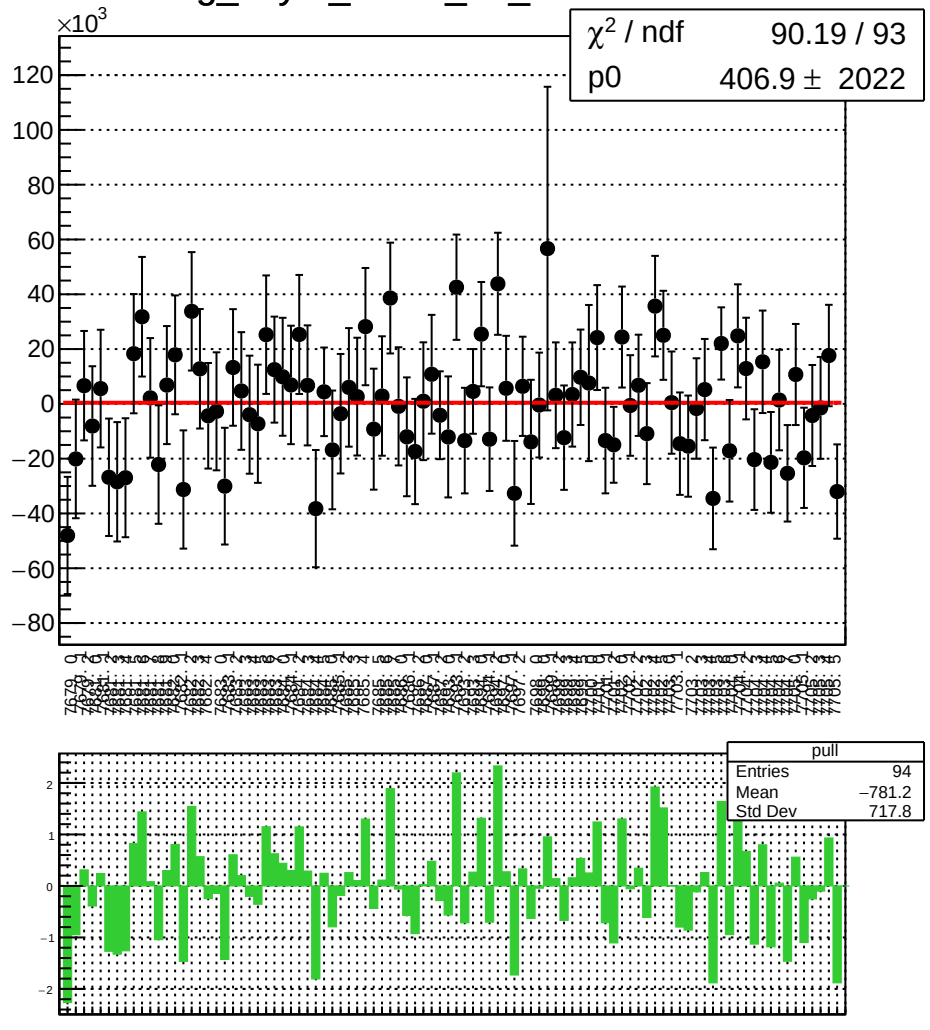

pull1D
Entries 94
Mean −0.04248
Std Dev 1.014
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

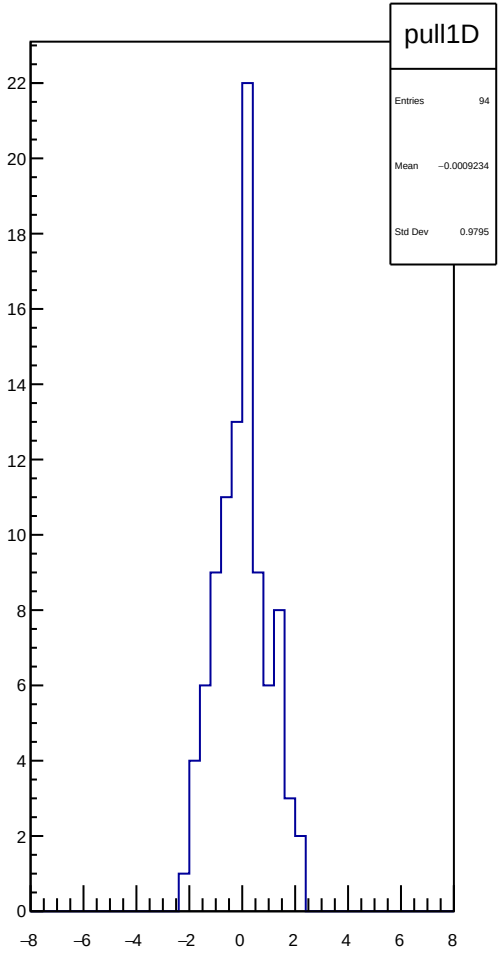

asym_atr1l2_avg_correction_rms vs run
χ^2 / ndf 3.811e+04 / 93
p0 5510 ± 4.169
7000
6500
6000
5500
5000
4500

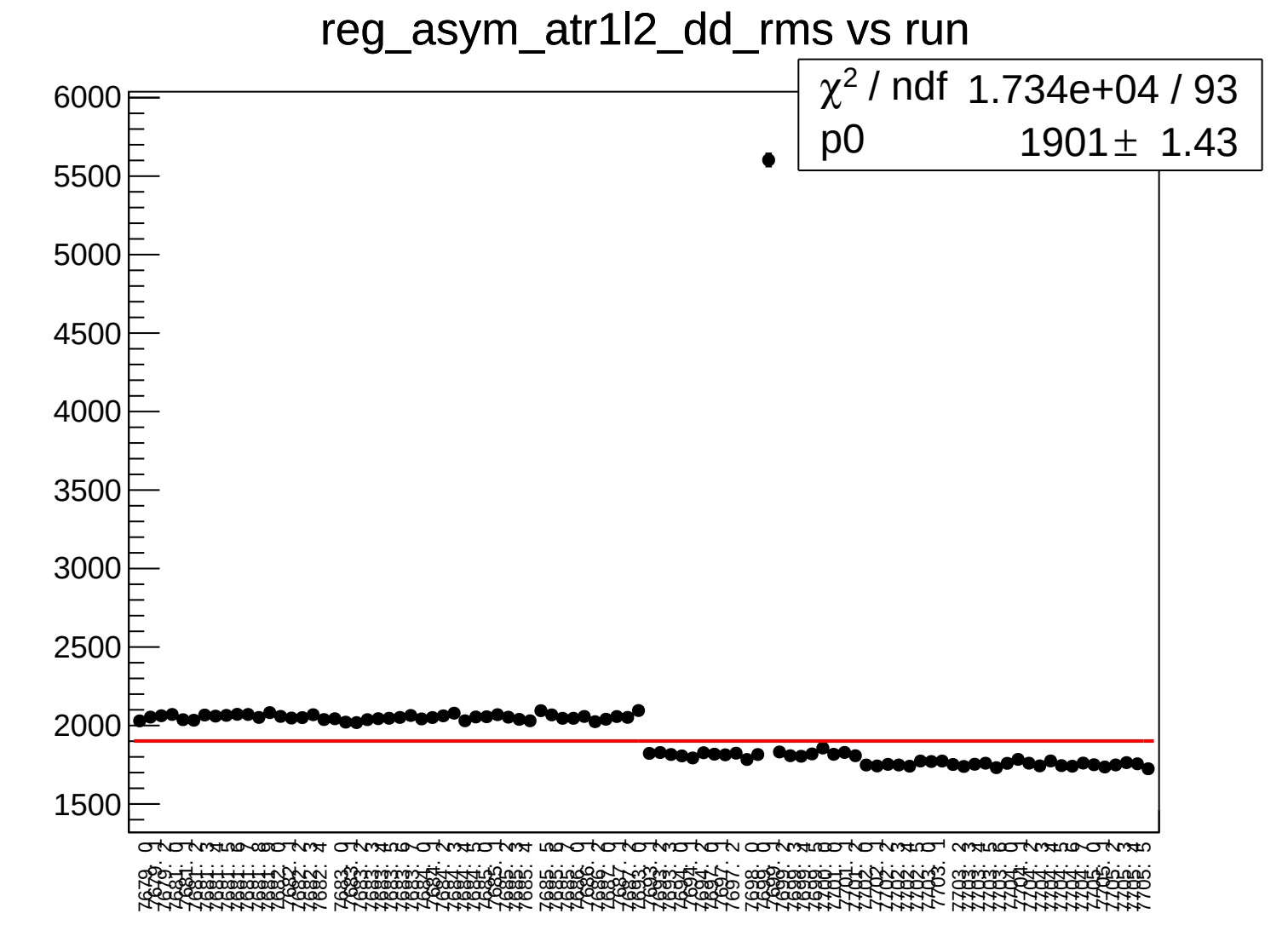

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 99.02 / 93
p0 −1.479e+04 ± 6253
200
100
0
−100
−200
pull
Entries 94
Mean −30.94
Std Dev 81.82
2
1
0
−1
−2
−3

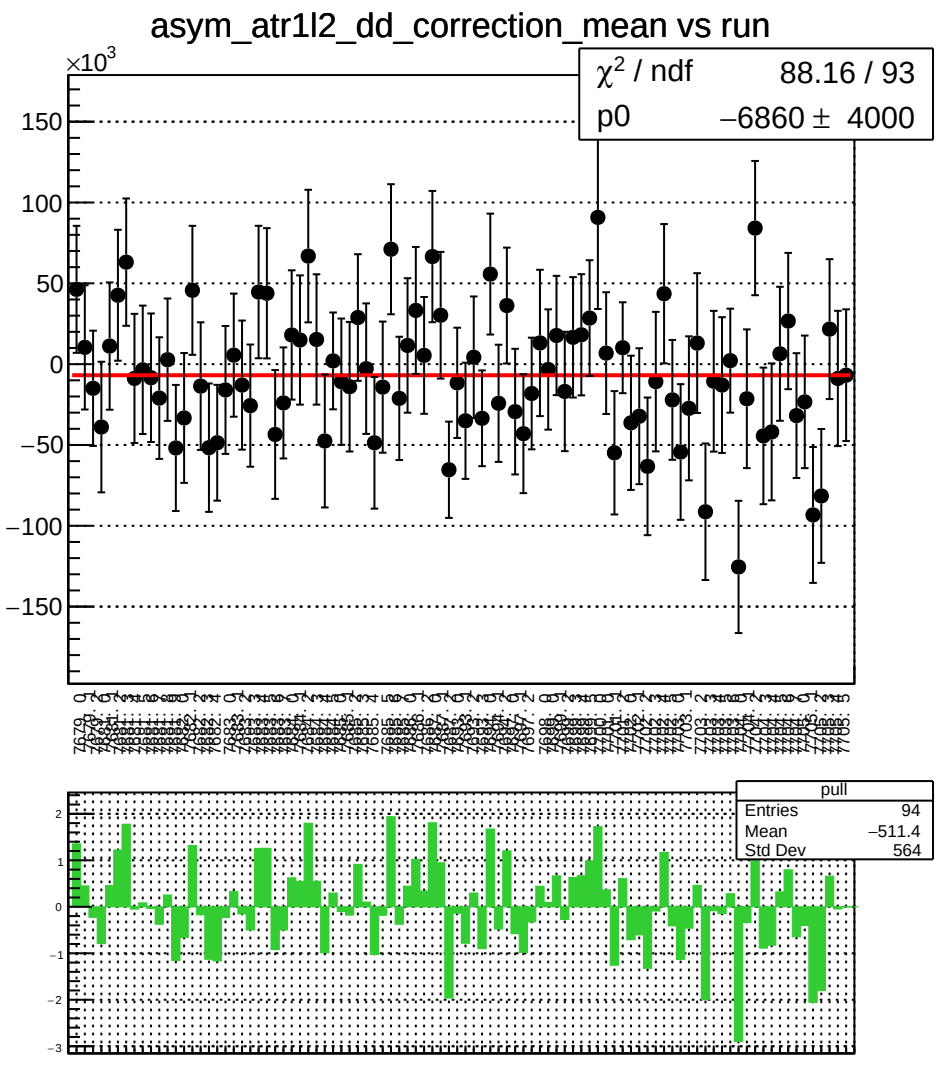

pull1D
Entries 94
Mean 0.03326
Std Dev 1.026
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

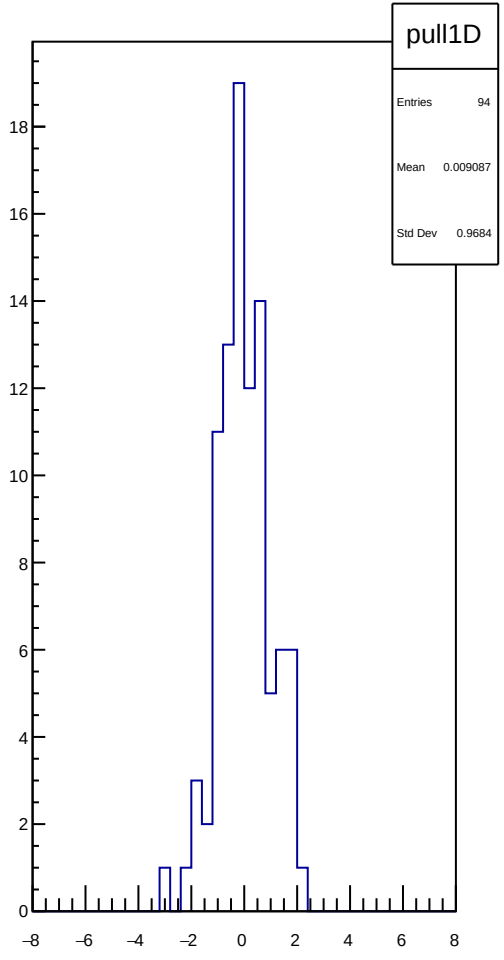

asym_atr1l2_avg_rms vs run
χ² / ndf 3.499e+04 / 93
p0 5849 ± 4.421
8500
8000
7500
7000
6500
6000
5500
5000
4500

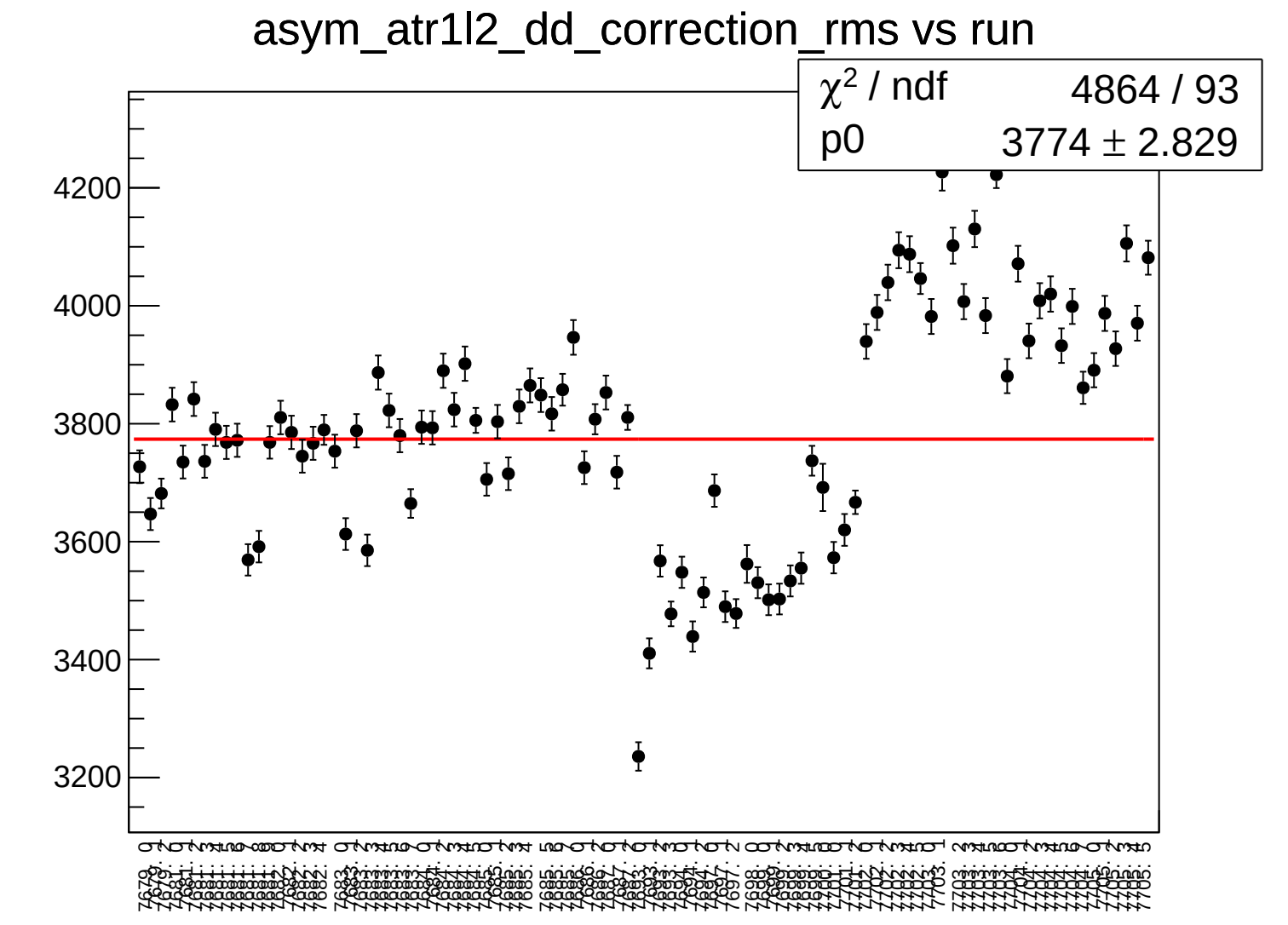

reg_asym_atr1l2_dd_mean vs run
×10^3
χ^2 / ndf 90.19 / 93
p0 406.9 ± 2022
pull
Entries 94
Mean −781.2
Std Dev 717.8

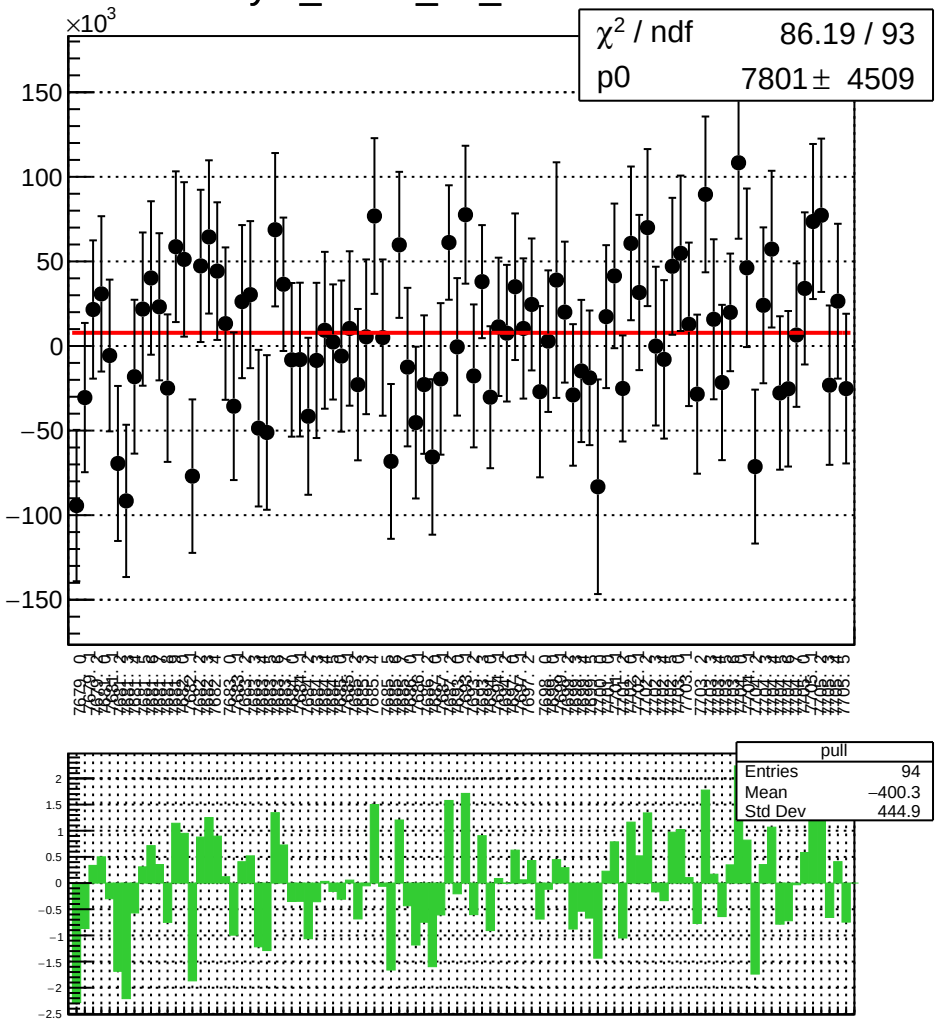

pull1D
Entries 94
Mean −0.0009234
Std Dev 0.9795

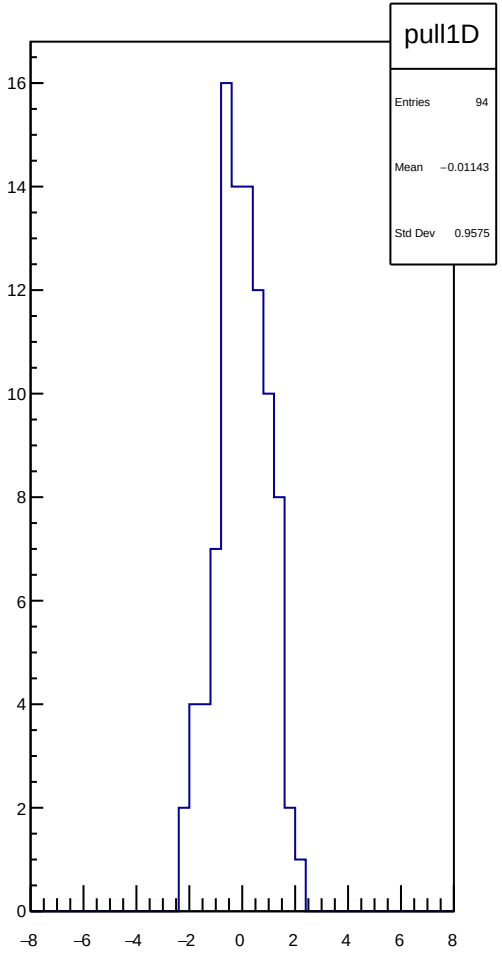

reg_asym_atr1l2_dd_rms vs run
χ^2 / ndf 1.734e+04 / 93
p0 1901 ± 1.43
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

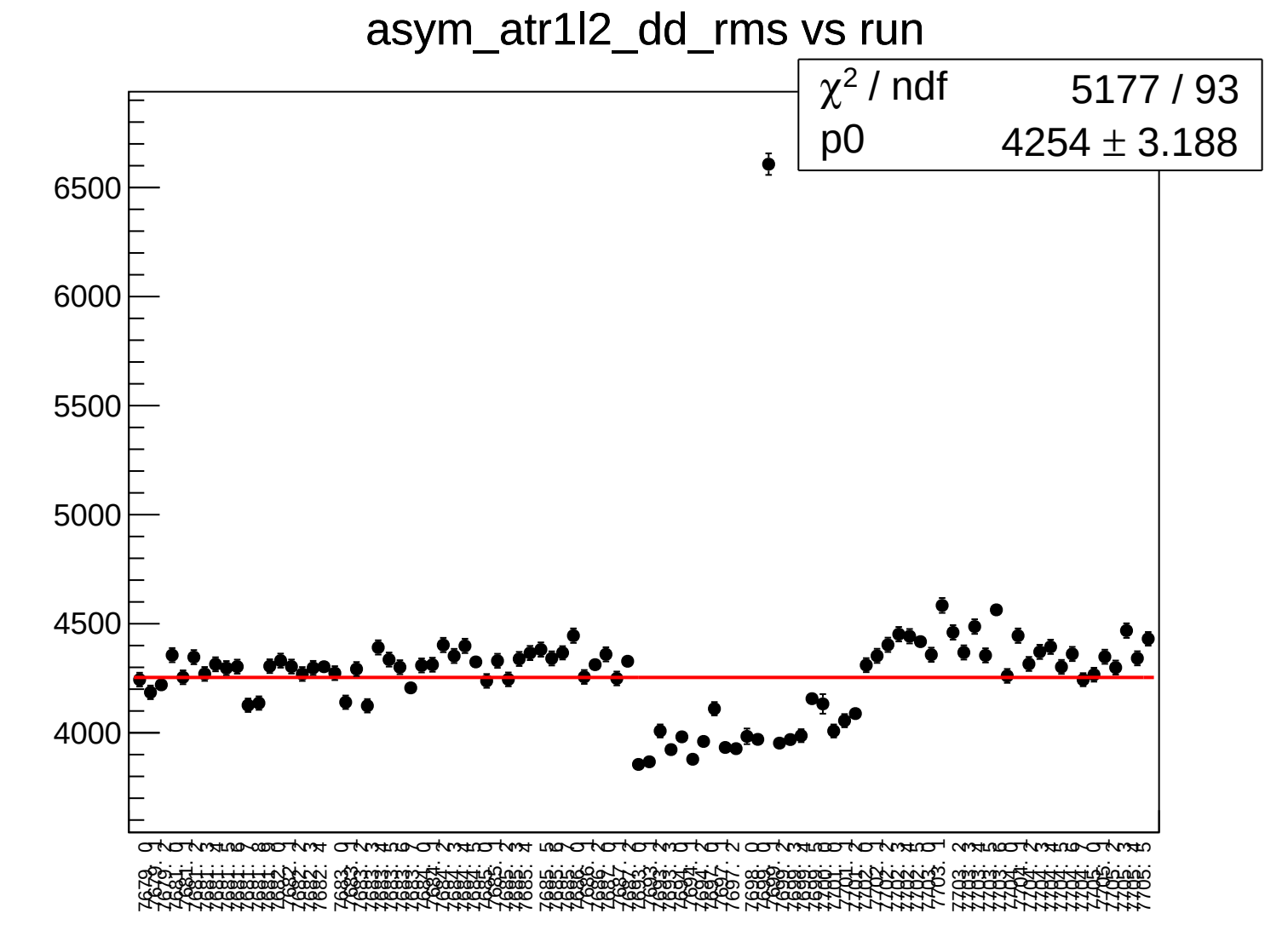

asym_atr1l2_dd_correction_mean vs run
×10^3
χ² / ndf 88.16 / 93
p0 −6860 ± 4000
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean −511.4
Std Dev 564
2
1
0
−1
−2
−3

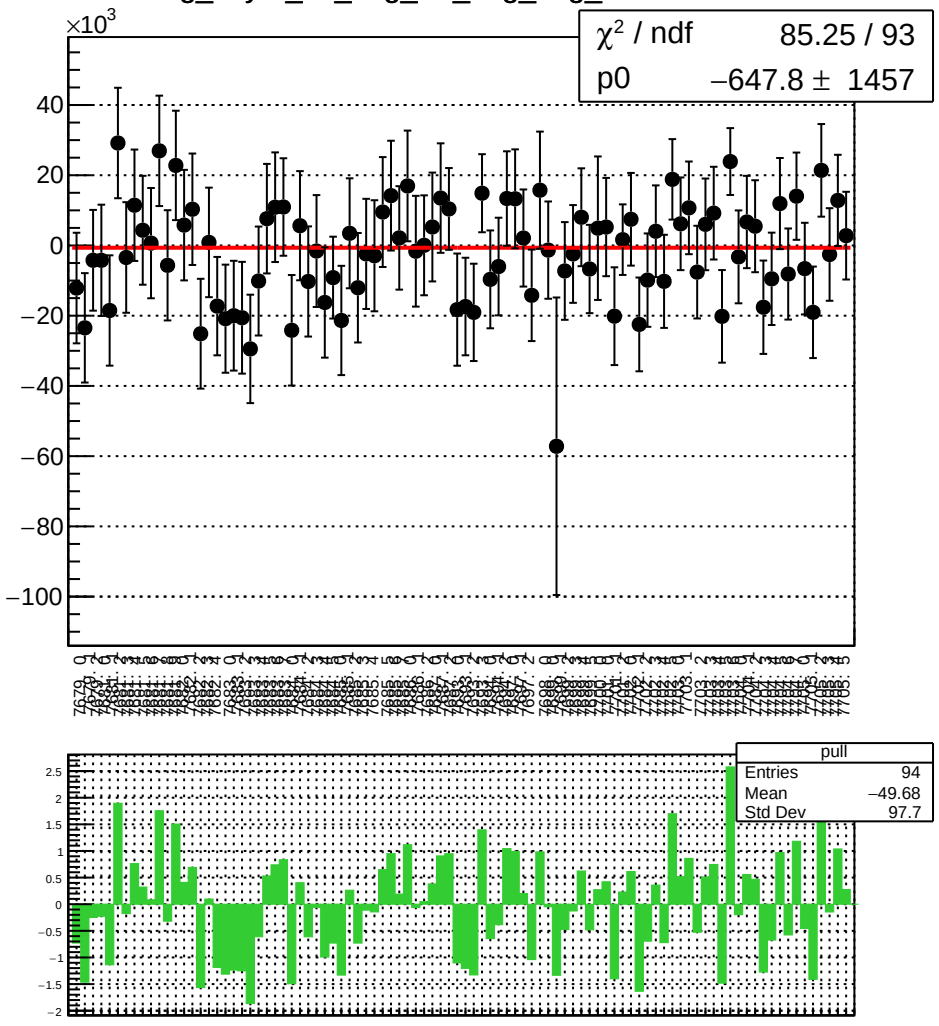

pull1D
Entries 94
Mean 0.009087
Std Dev 0.9684
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

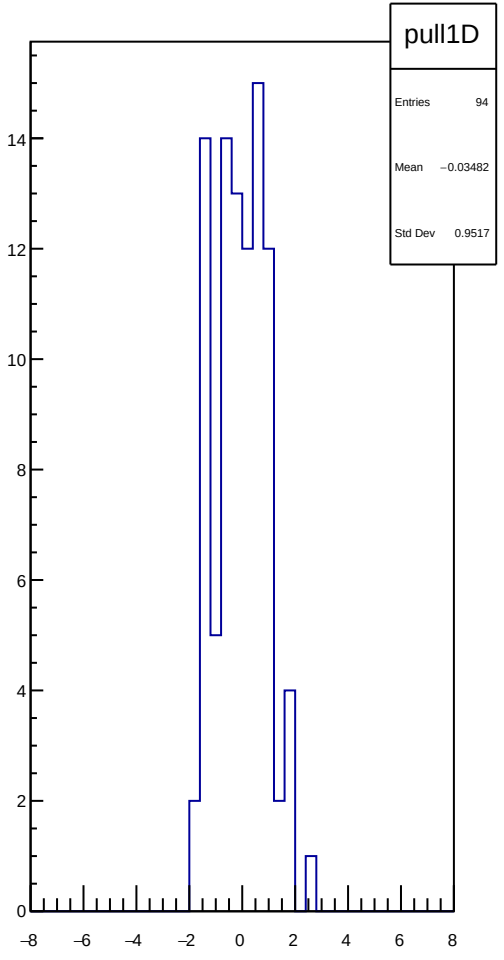

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 4864 / 93
p0 3774 ± 2.829
4200
4000
3800
3600
3400
3200

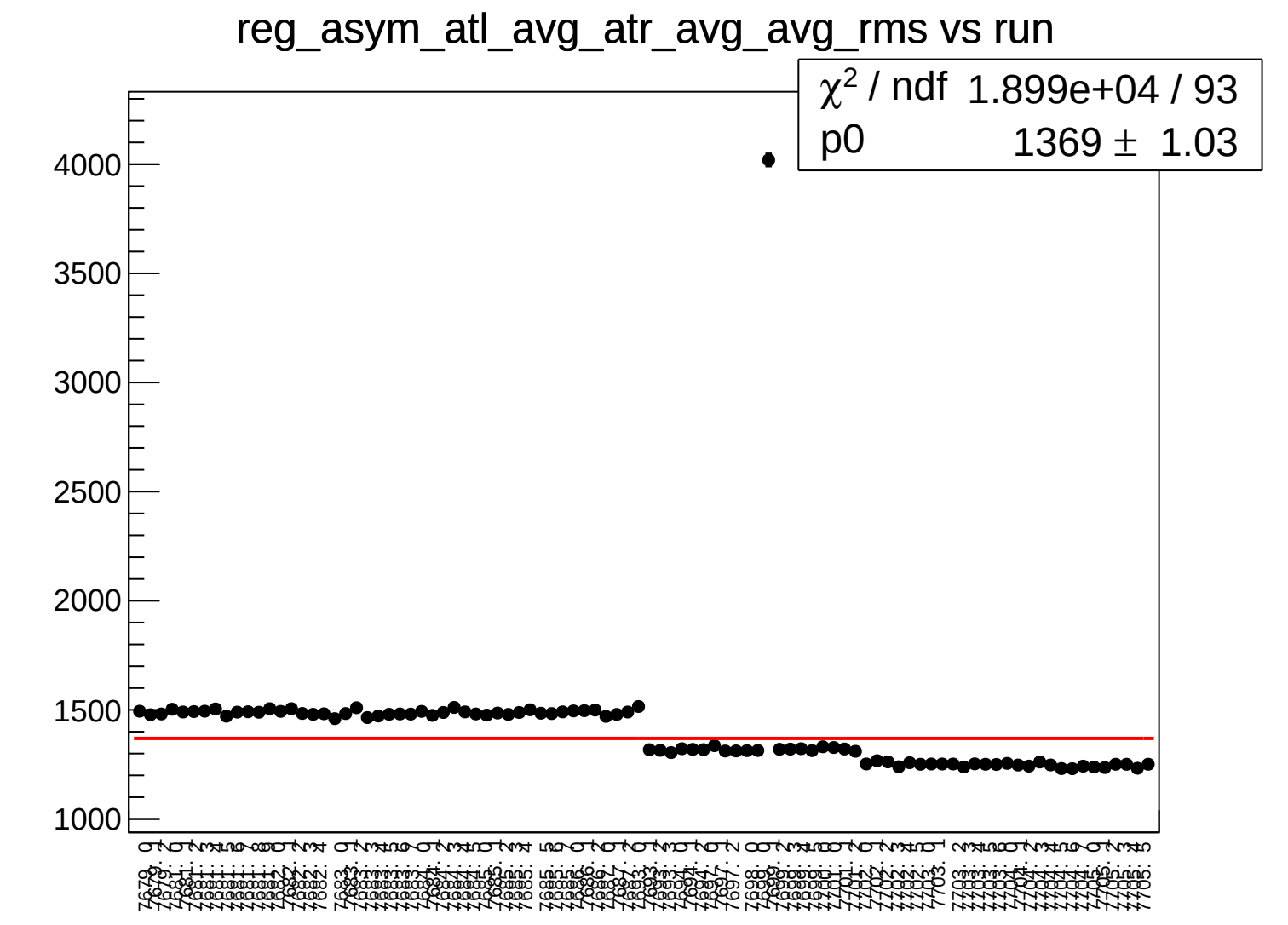

asym_atr1l2_dd_mean vs run
χ² / ndf 86.19 / 93
p0 7801 ± 4509
×10³
pull
Entries 94
Mean −400.3
Std Dev 444.9

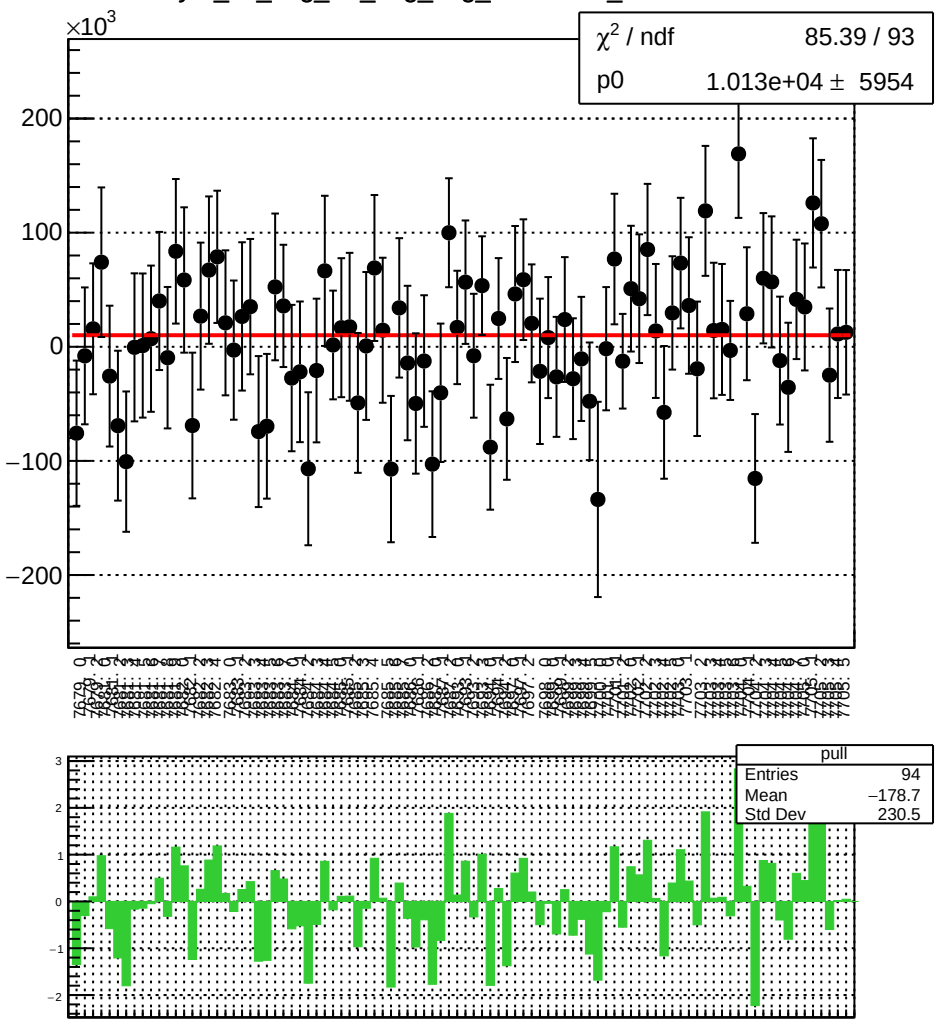

pull1D
Entries 94
Mean −0.01143
Std Dev 0.9575

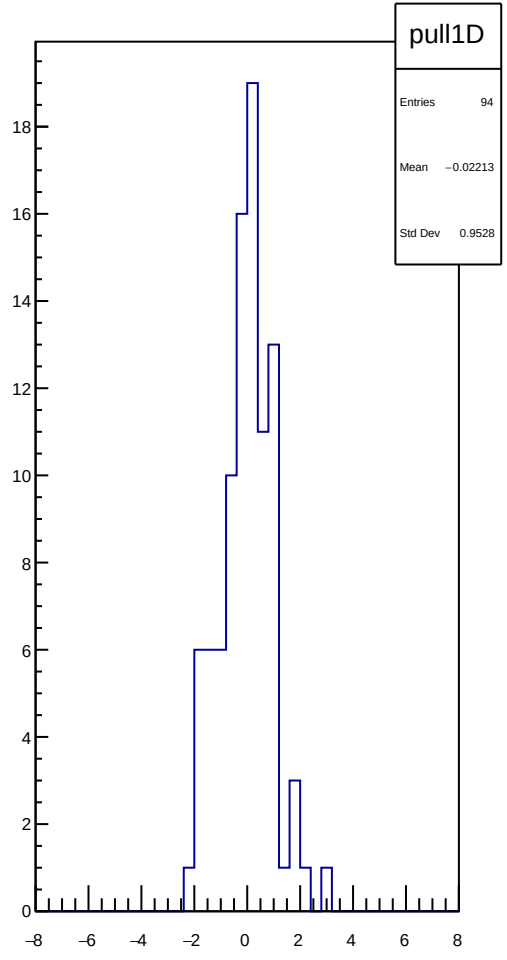

asym_atr1l2_dd_rms vs run
χ^2 / ndf 5177 / 93
p0 4254 ± 3.188
6500
6000
5500
5000
4500
4000

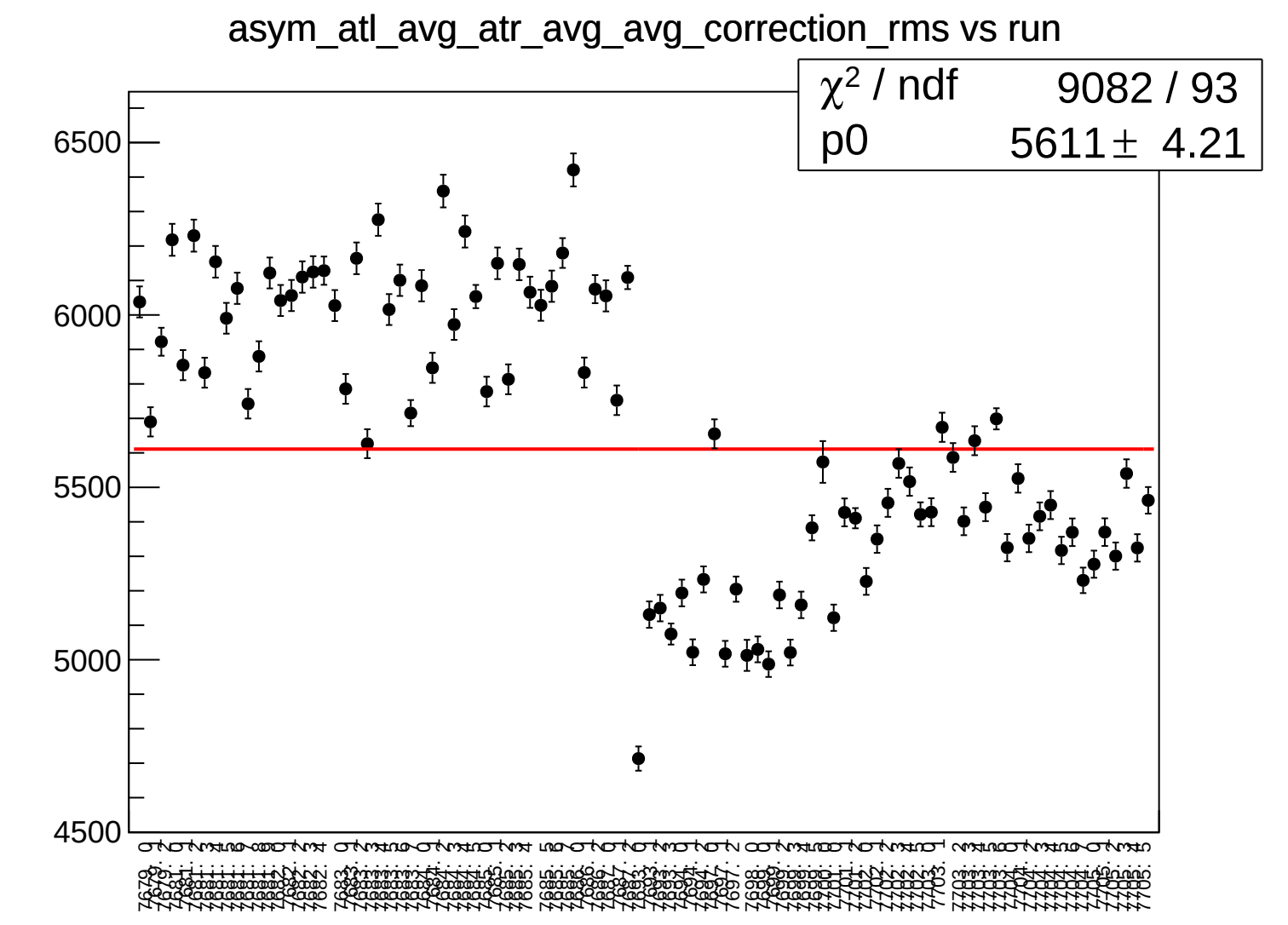

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 85.25 / 93
p0 −647.8 ± 1457
pull
Entries 94
Mean −49.68
Std Dev 97.7

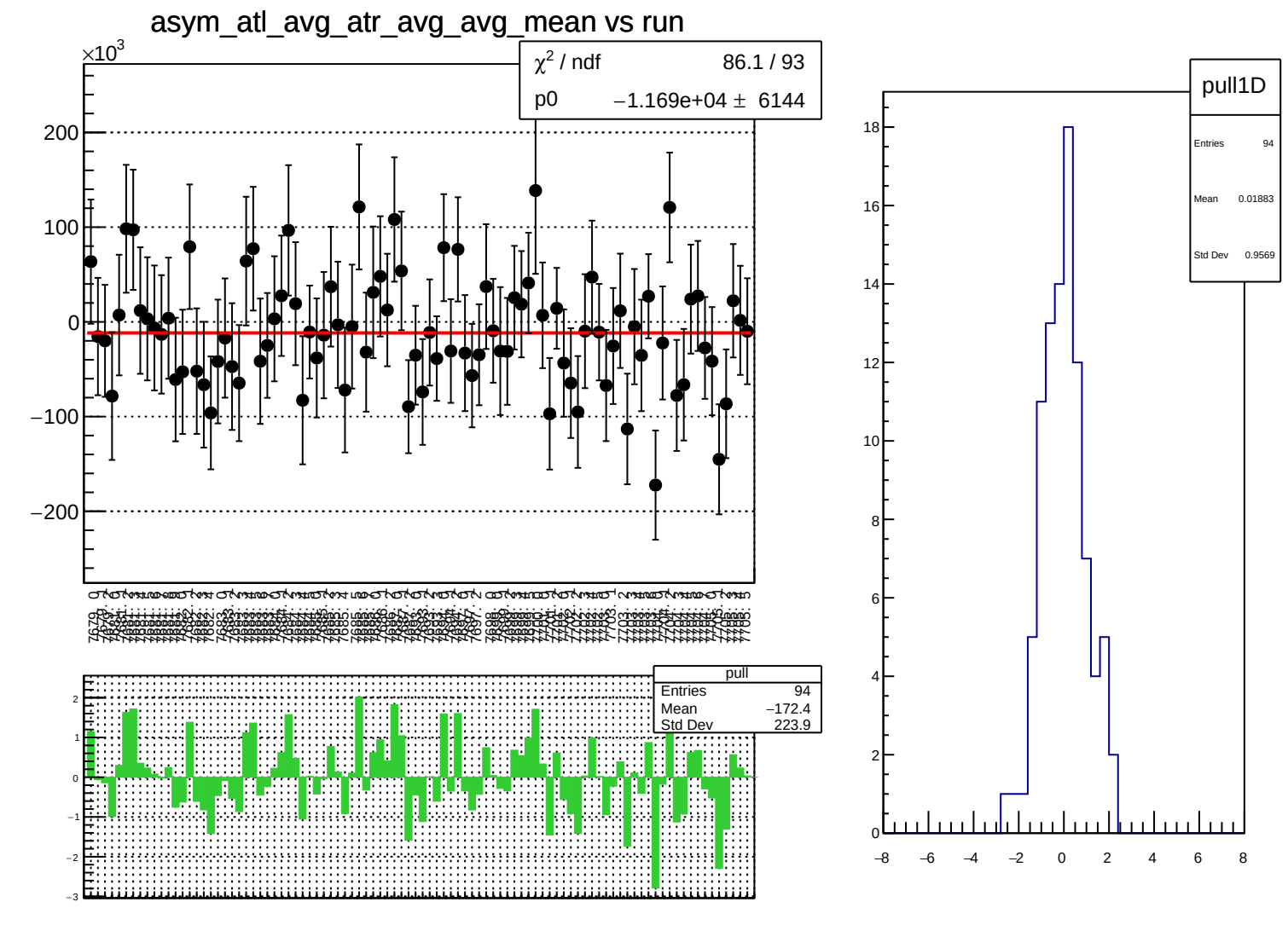

pull1D
Entries 94
Mean −0.03482
Std Dev 0.9517

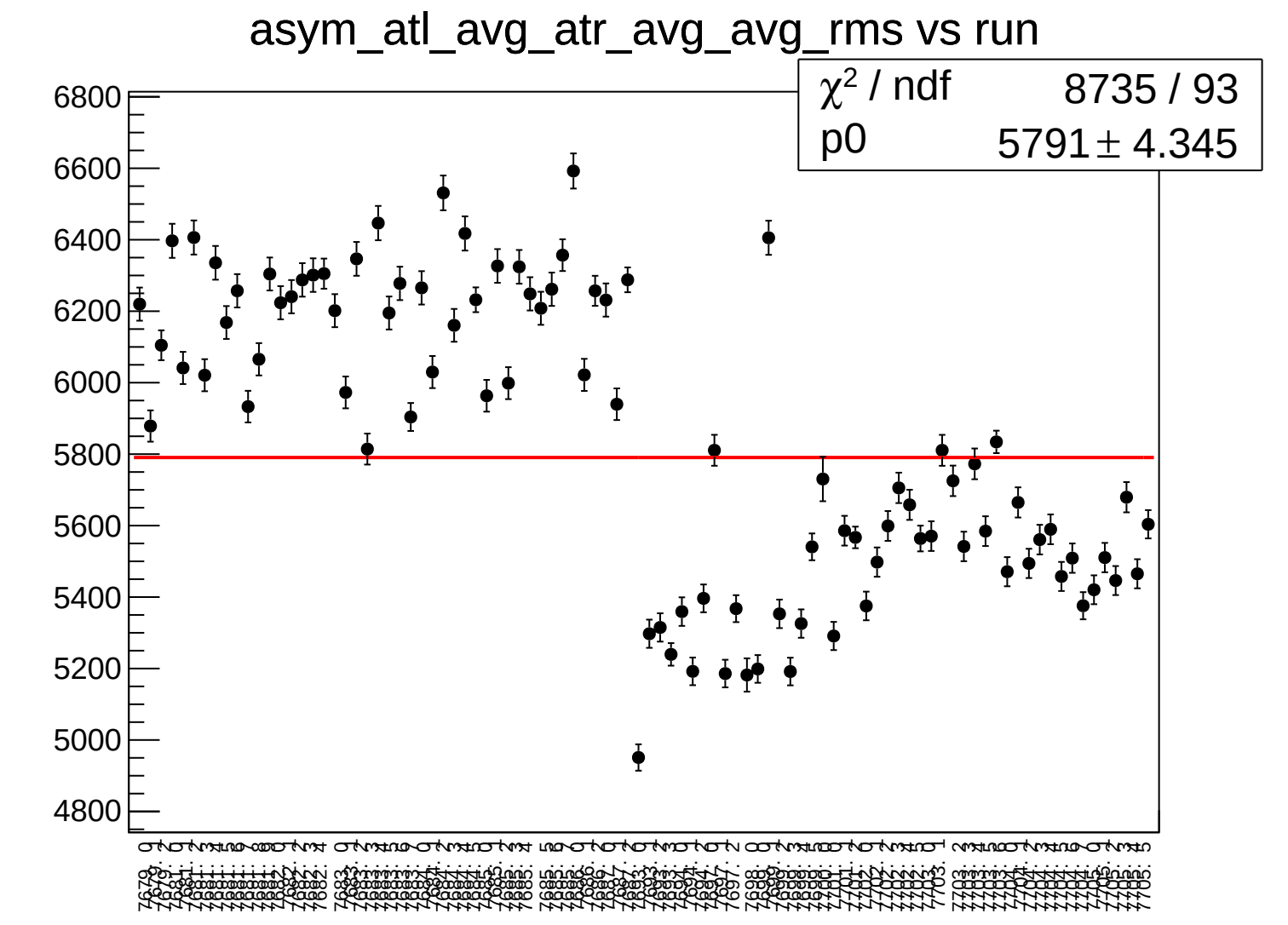

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.899e+04 / 93
p0 1369 ± 1.03
4000
3500
3000
2500
2000
1500
1000

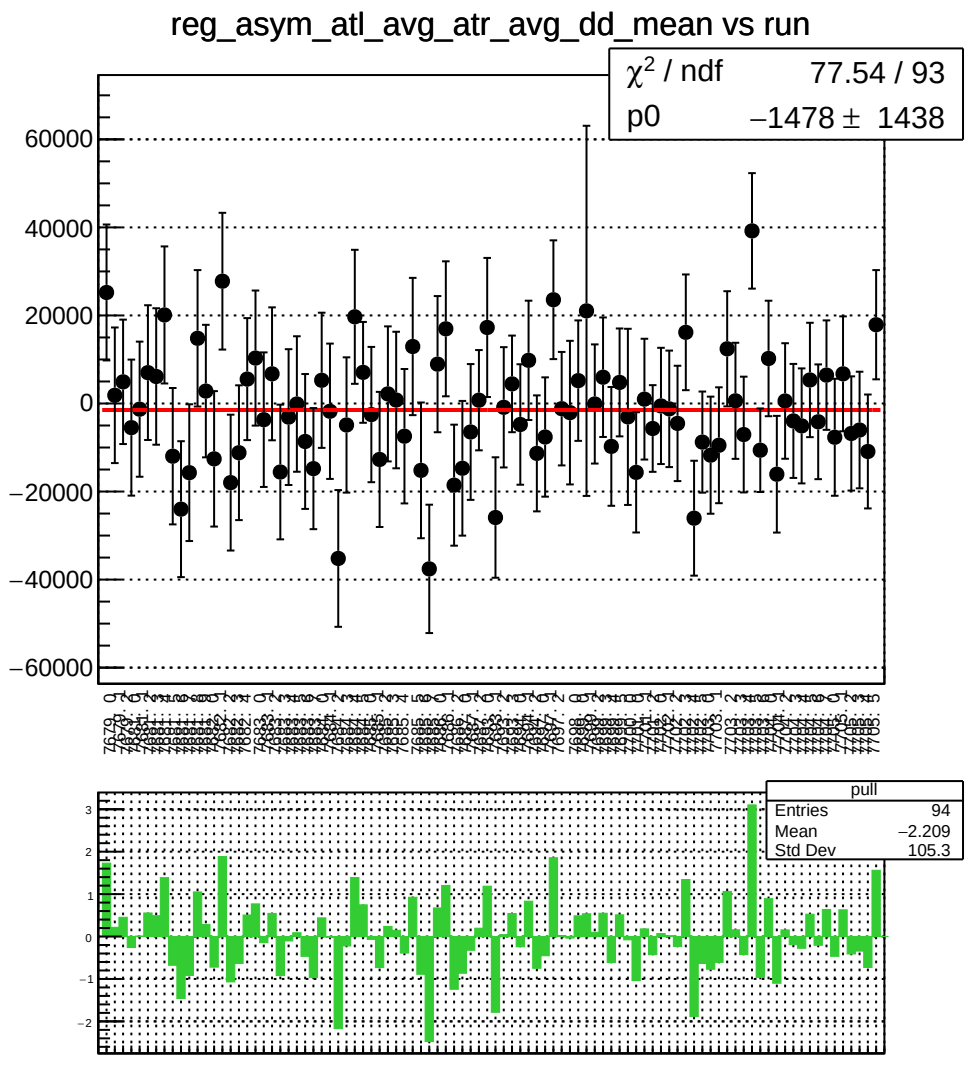

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 85.39 / 93
p0 1.013e+04 ± 5954
×10³
200
100
0
−100
−200
pull
Entries 94
Mean −178.7
Std Dev 230.5
3
2
1
0
−1
−2

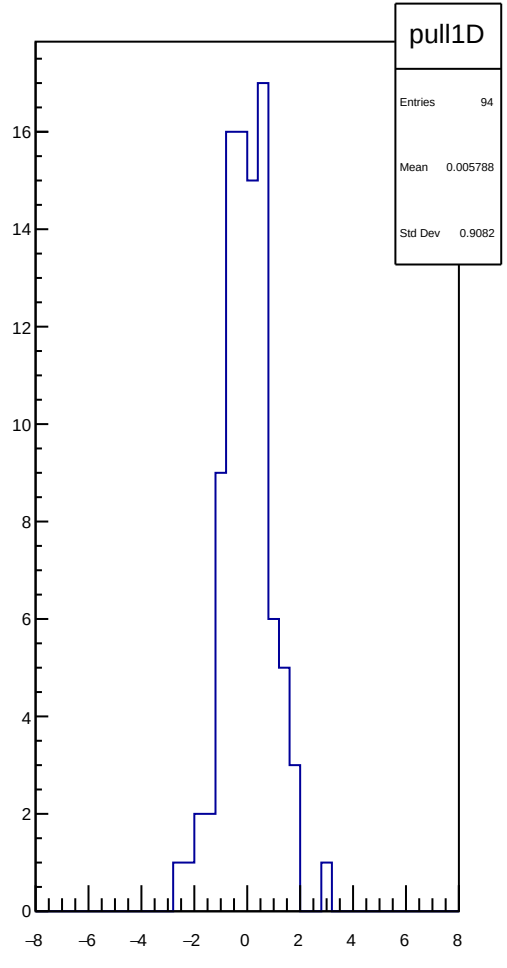

pull1D
Entries 94
Mean −0.02213
Std Dev 0.9528
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

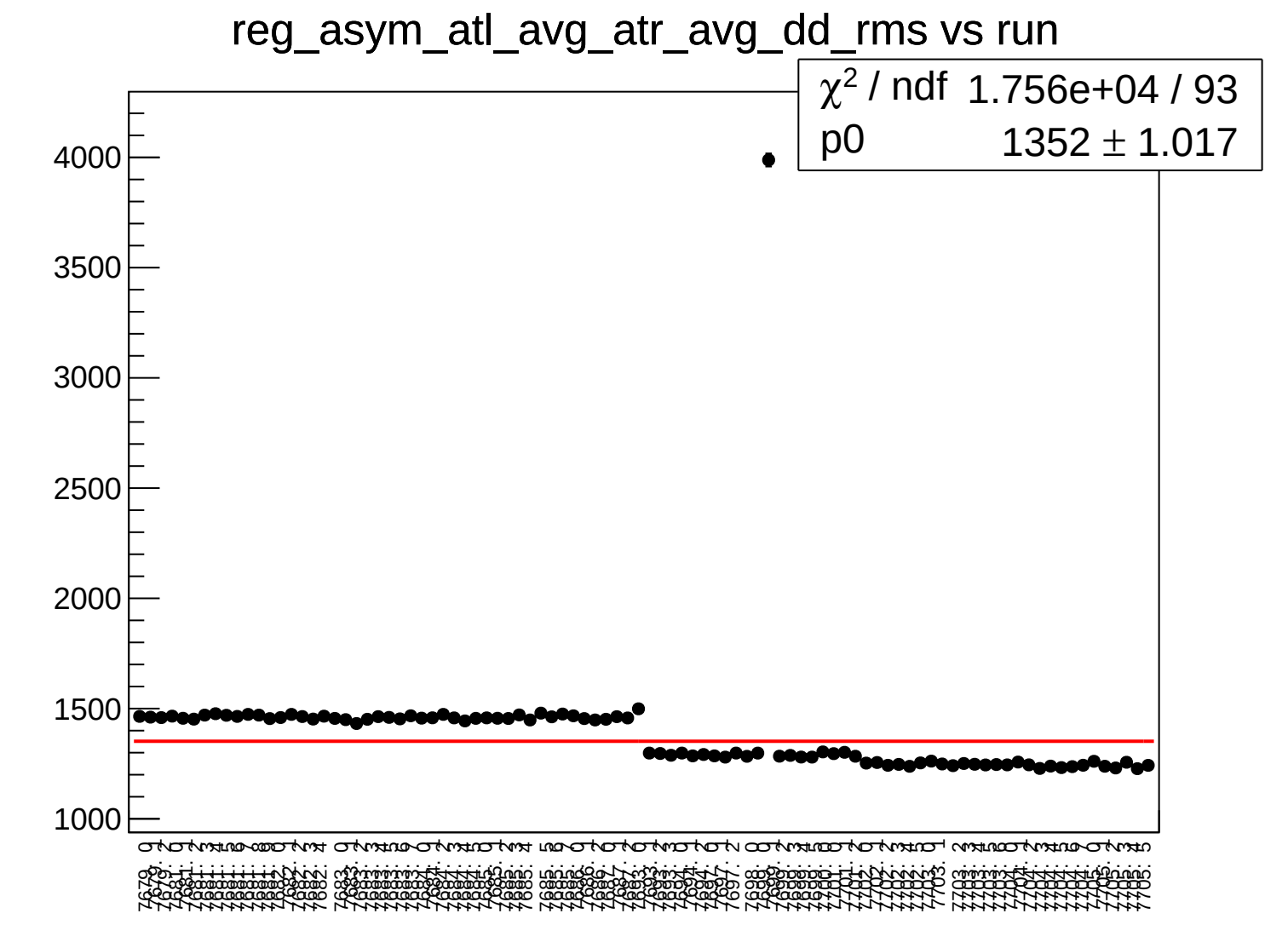

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 9082 / 93
p0 5611 ± 4.21
6500
6000
5500
5000
4500

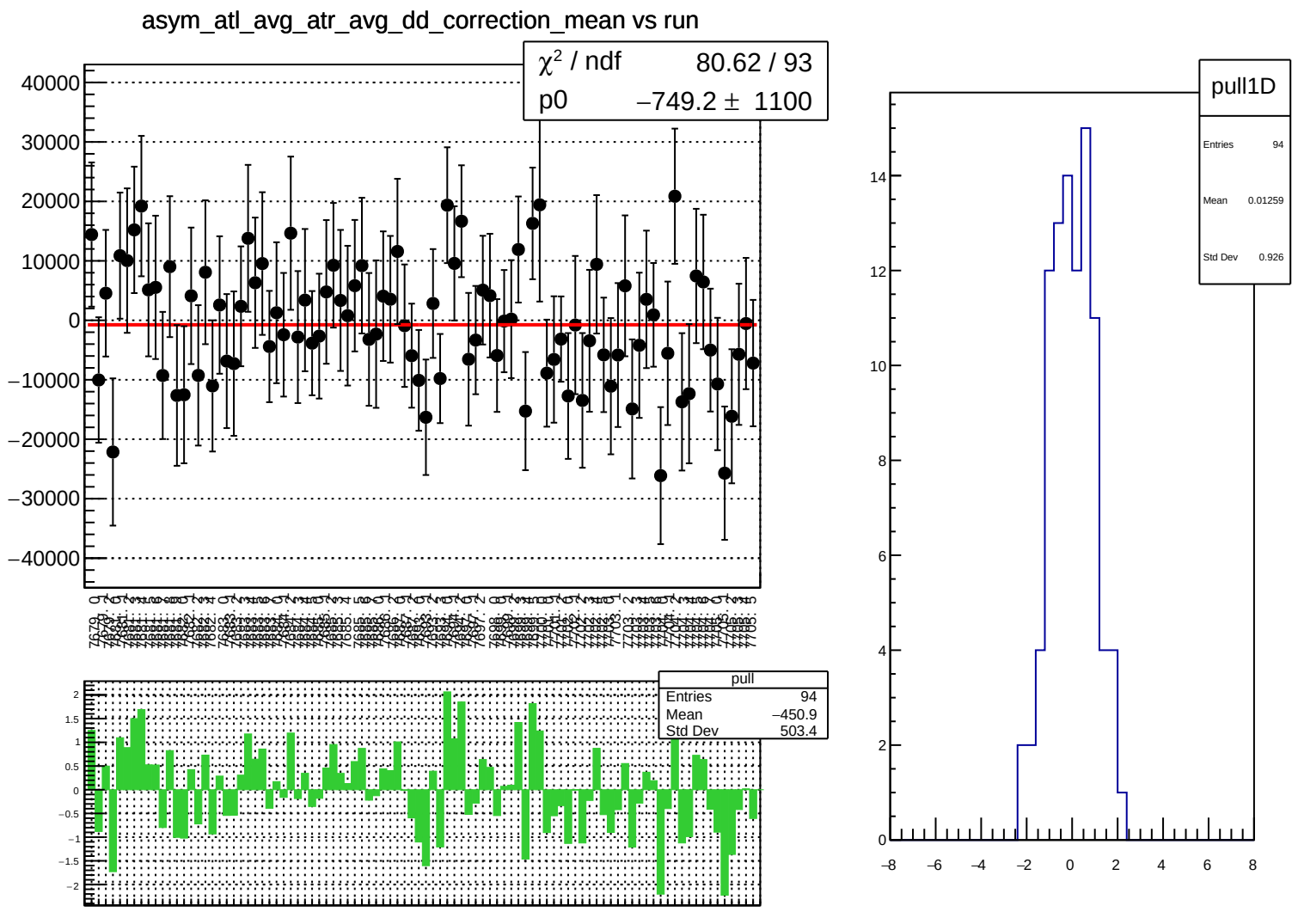

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 86.1 / 93
p0 −1.169e+04 ± 6144
200
100
0
−100
−200
pull
Entries 94
Mean −172.4
Std Dev 223.9
2
1
0
−1
−2
−3
pull1D
Entries 94
Mean 0.01883
Std Dev 0.9569
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

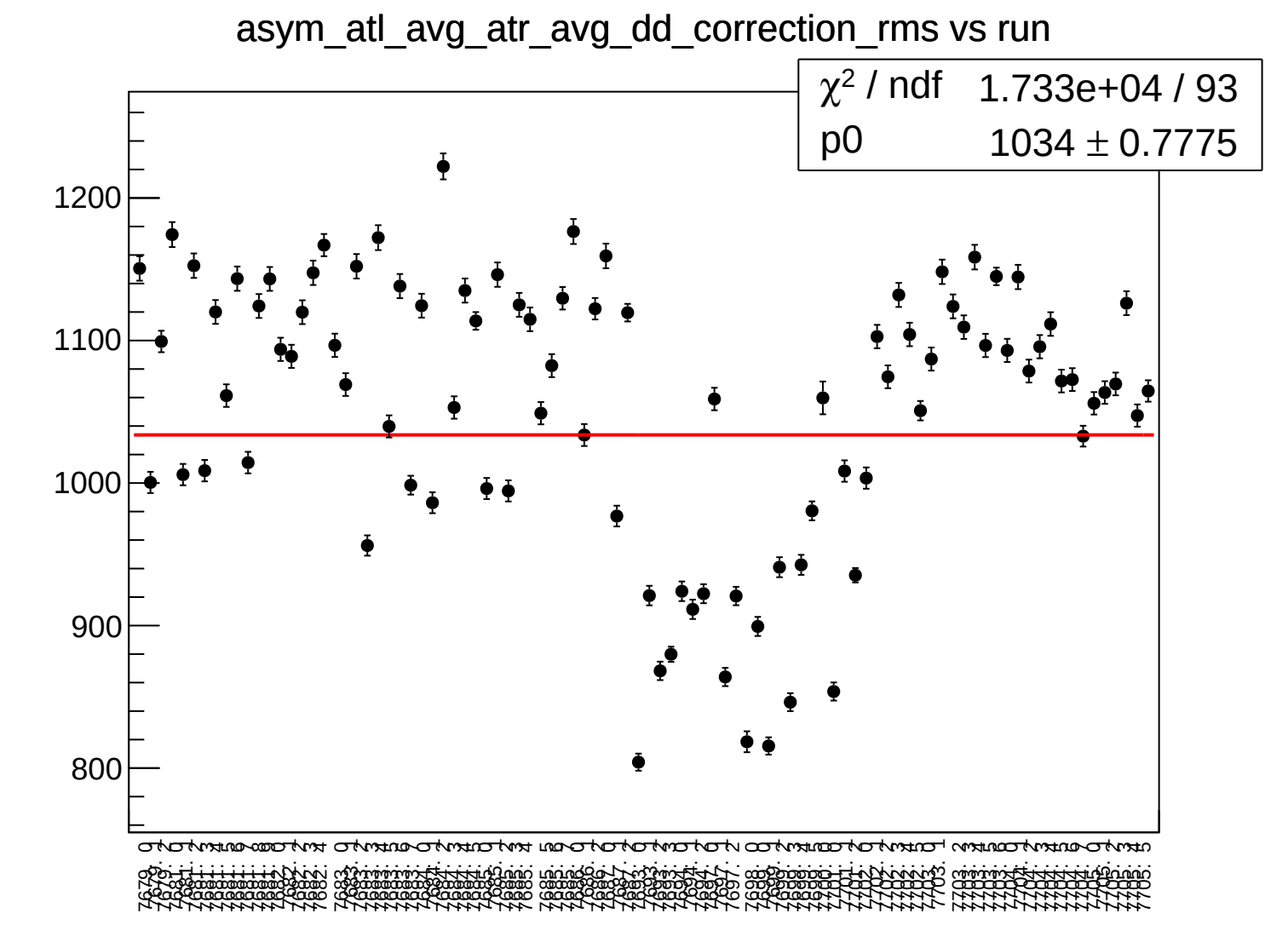

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 8735 / 93
p0 5791 ± 4.345
6800
6600
6400
6200
6000
5800
5600
5400
5200
5000
4800

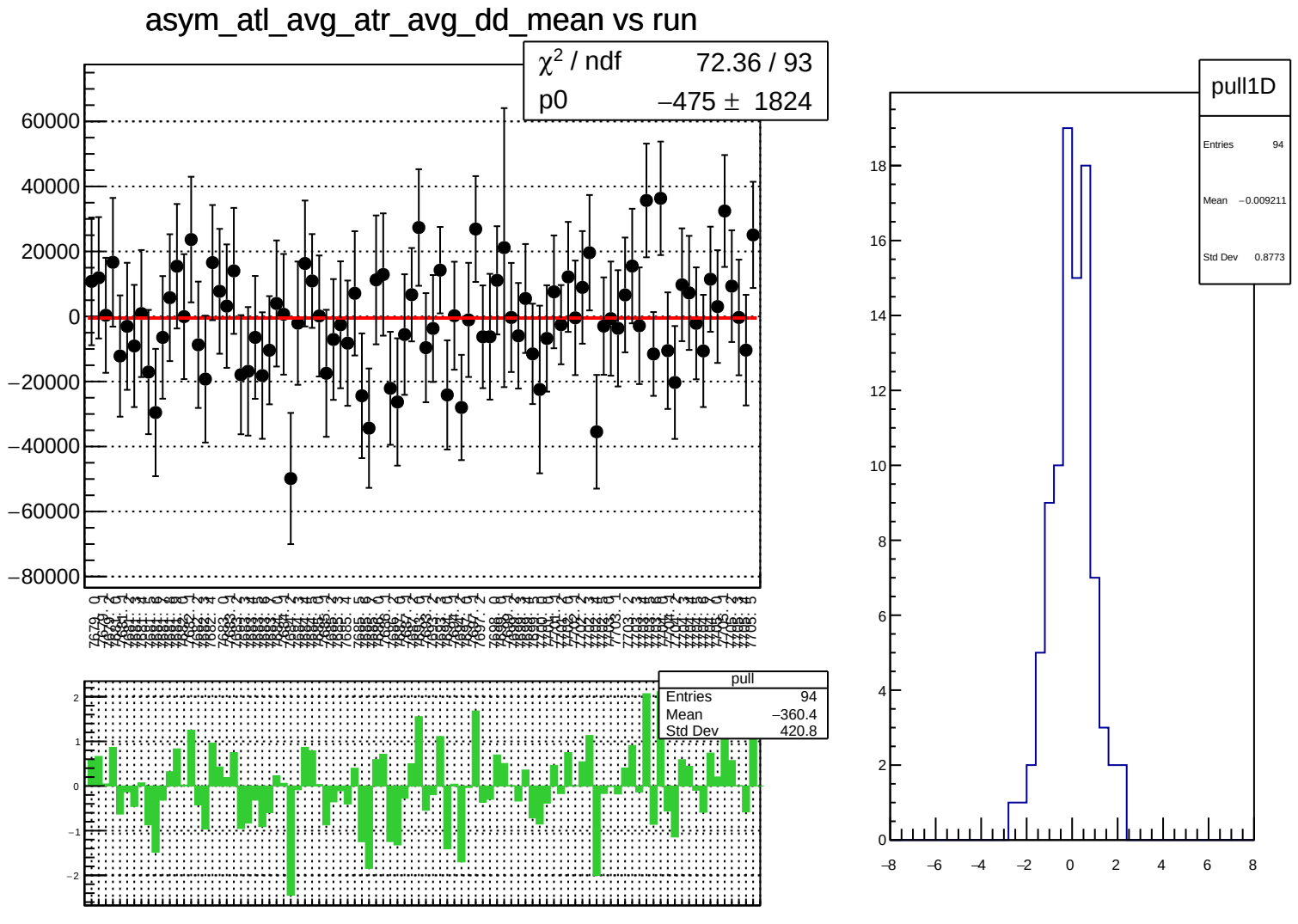

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 77.54 / 93
p0 −1478 ± 1438
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −2.209
Std Dev 105.3
3
2
1
0
−1
−2

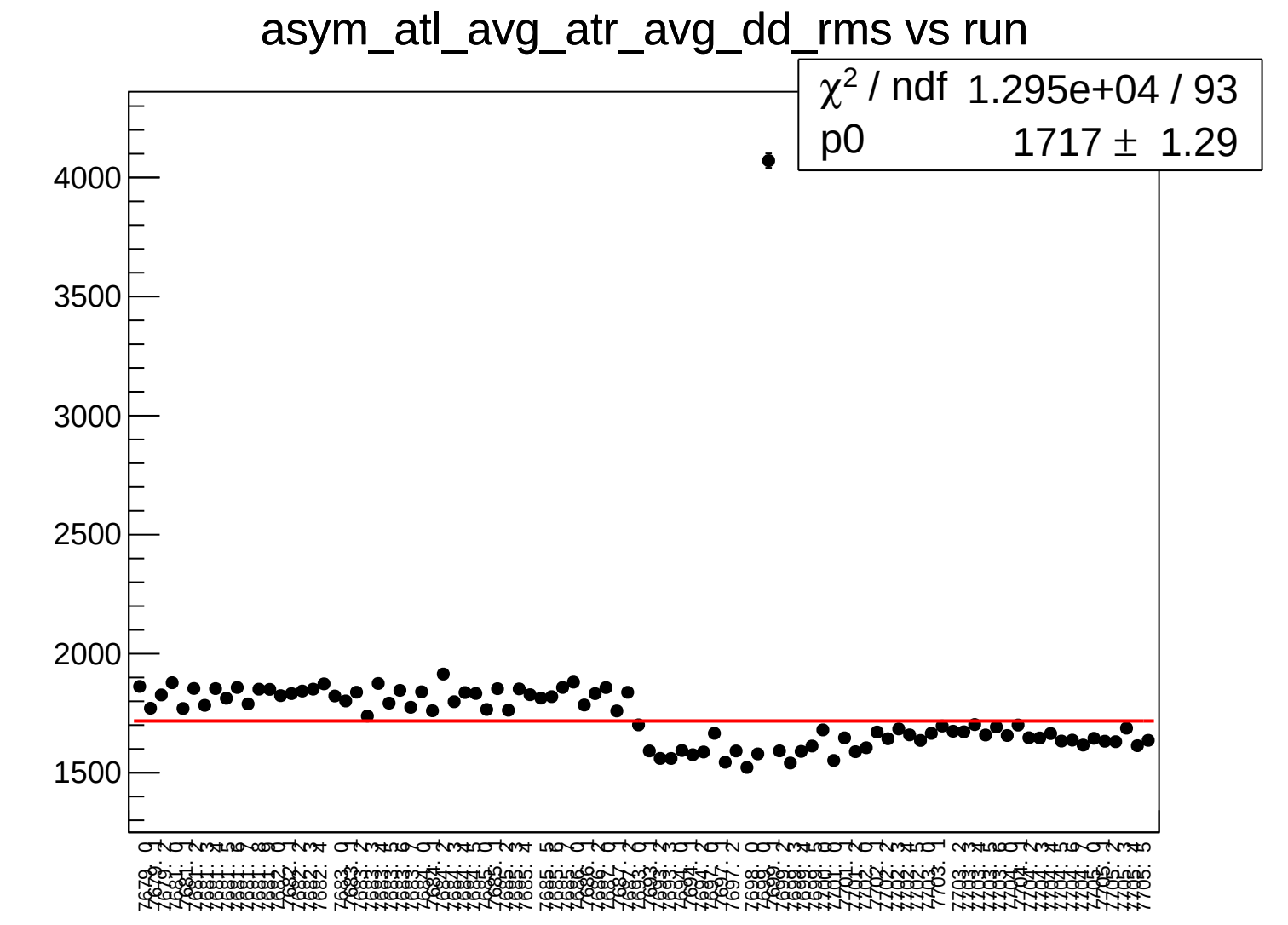

pull1D
Entries 94
Mean 0.005788
Std Dev 0.9082
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

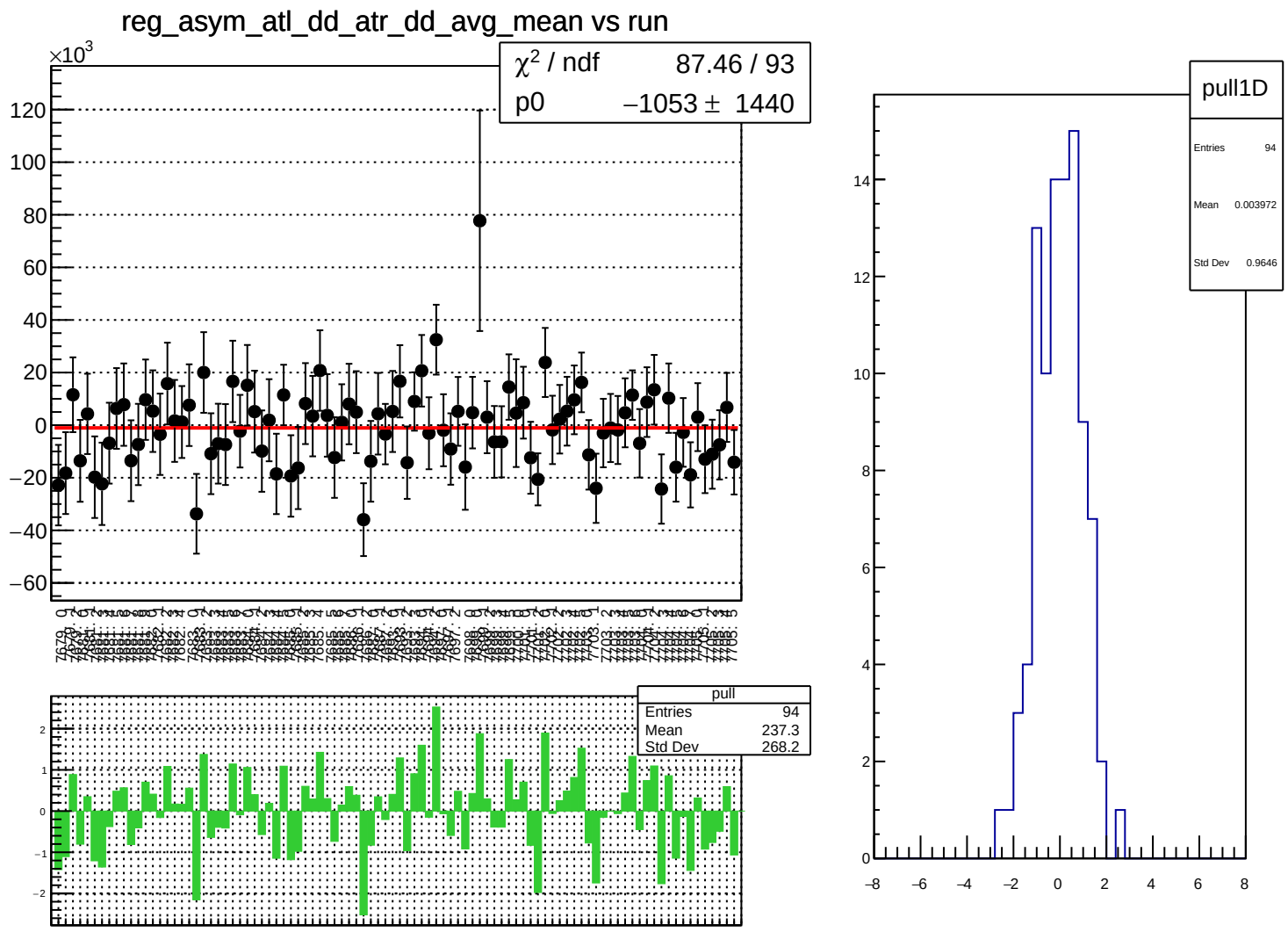

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 1.756e+04 / 93
p0 1352 ± 1.017
4000
3500
3000
2500
2000
1500
1000

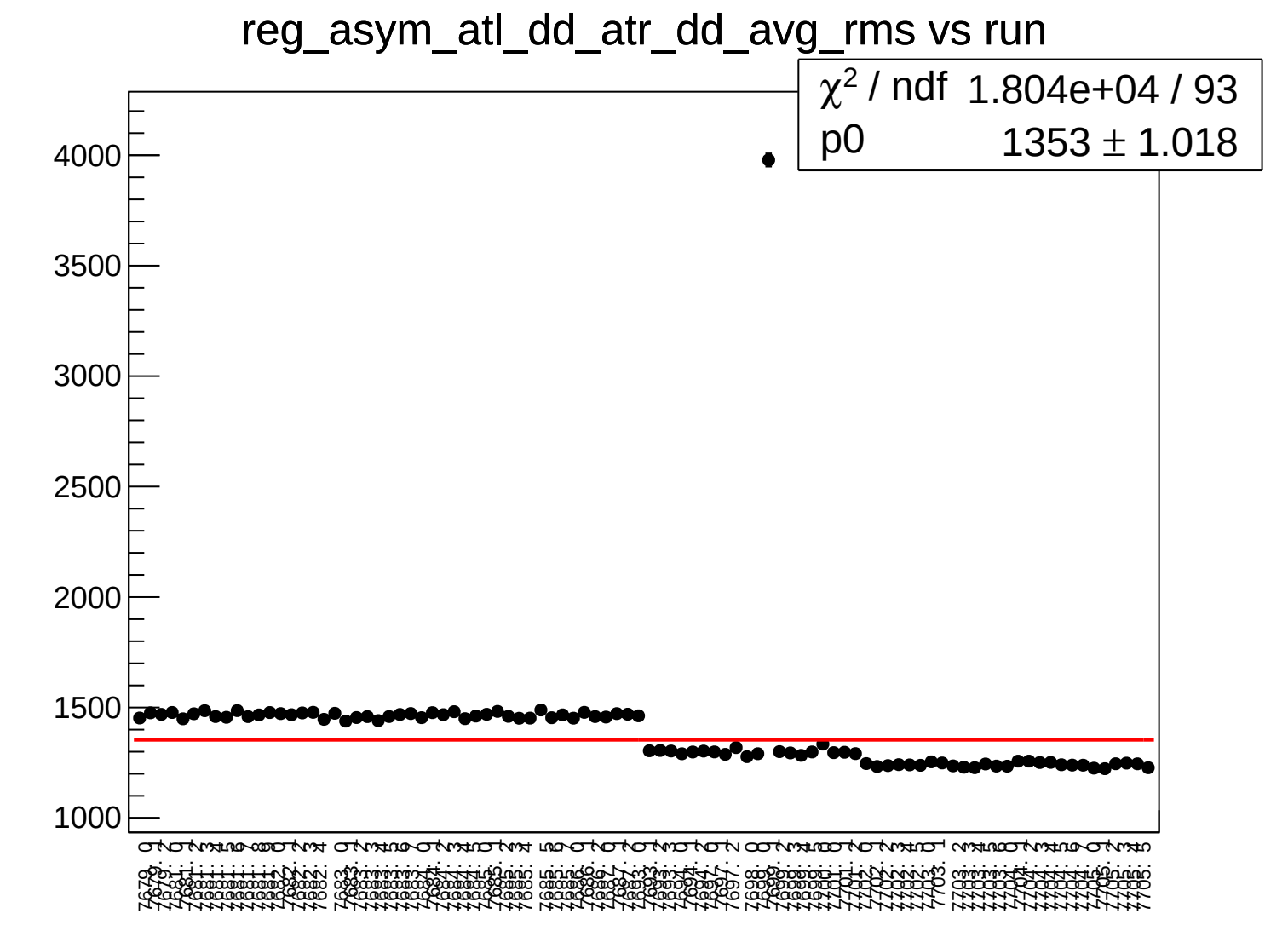

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 80.62 / 93
p0 −749.2 ± 1100
pull
Entries 94
Mean −450.9
Std Dev 503.4
pull1D
Entries 94
Mean 0.01259
Std Dev 0.926

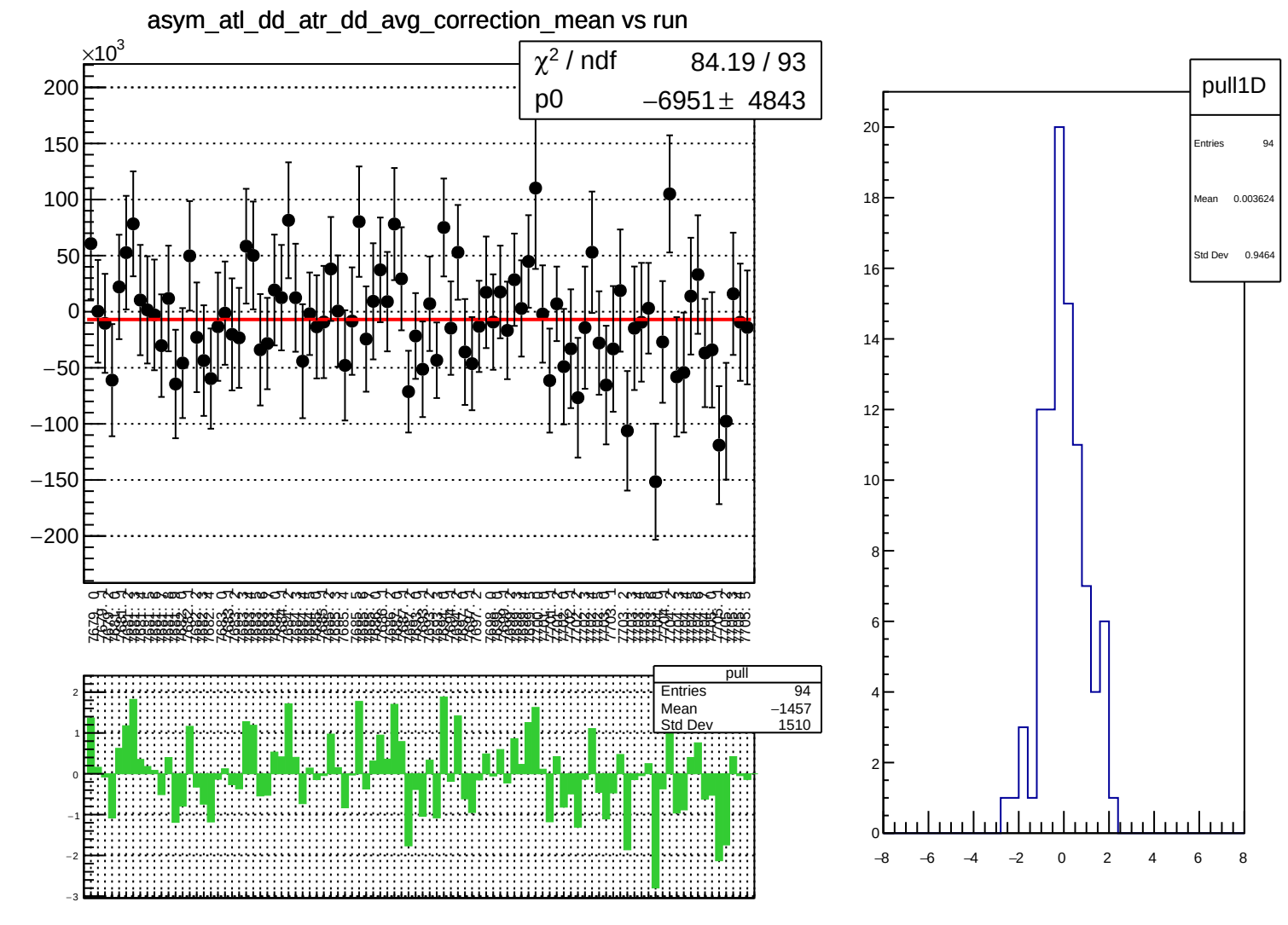

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 1.733e+04 / 93
p0 1034 ± 0.7775
1200
1100
1000
900
800

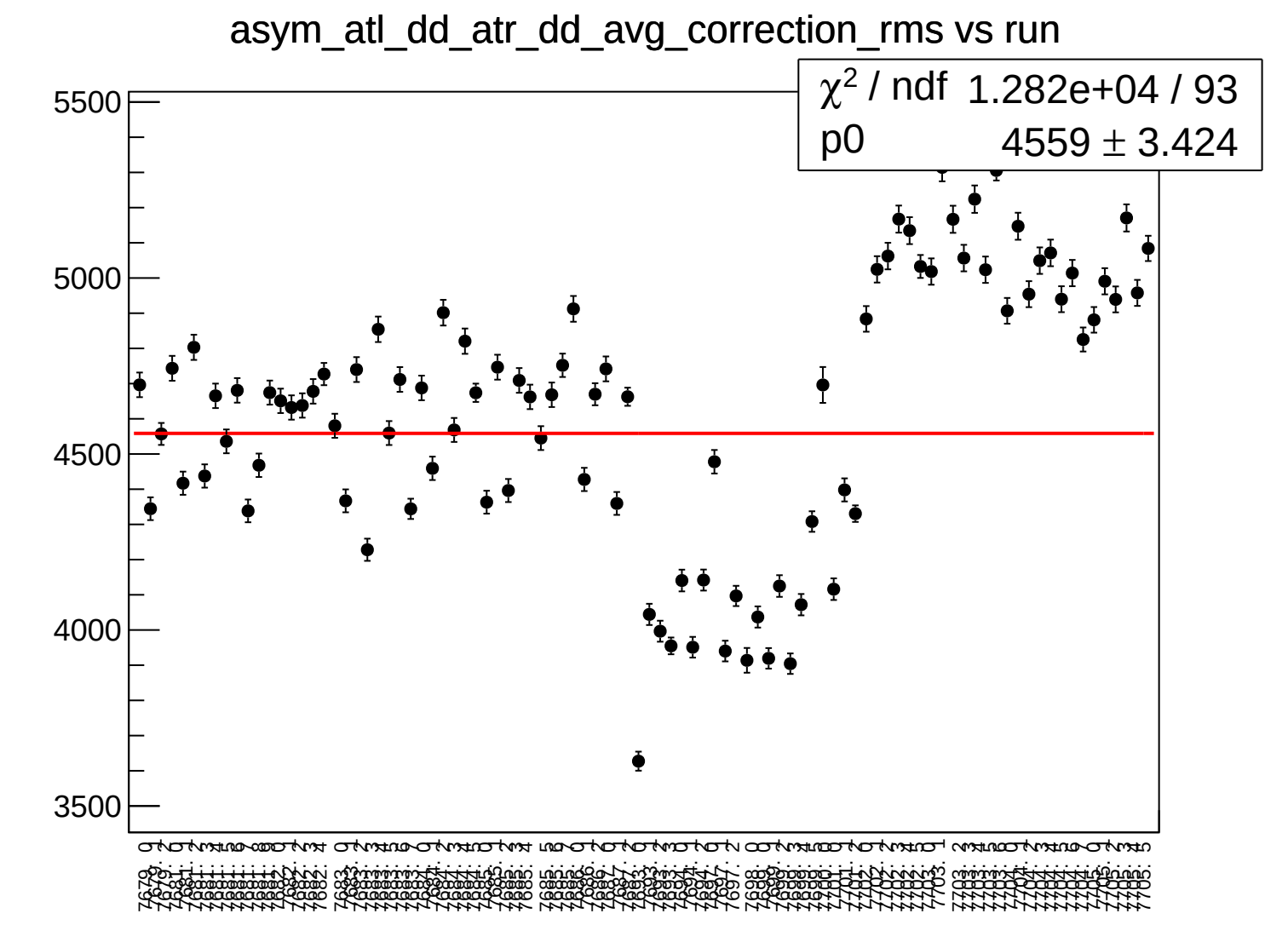

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 72.36 / 93
p0 −475 ± 1824
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 94
Mean −360.4
Std Dev 420.8
2
1
0
−1
−2
pull1D
Entries 94
Mean −0.009211
Std Dev 0.8773
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

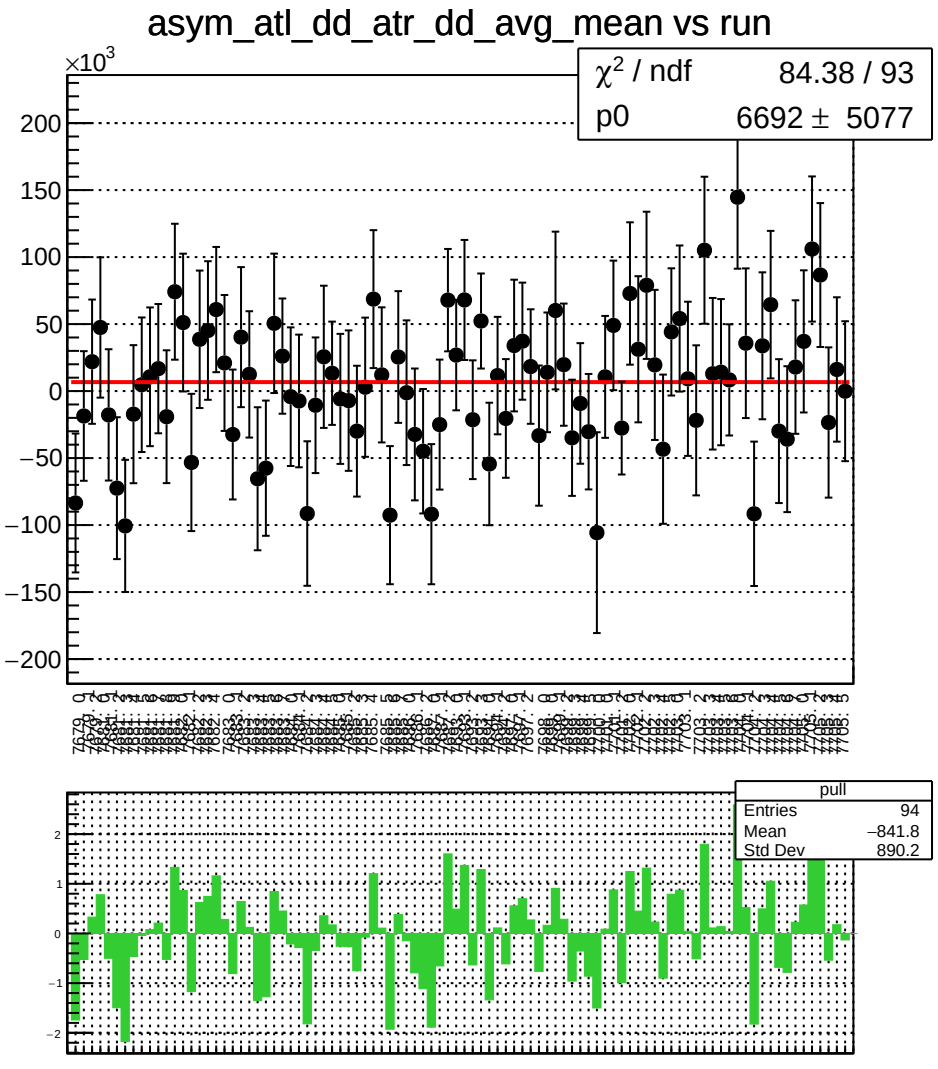

asym_atl_avg_atr_avg_dd_rms vs run
χ^2 / ndf 1.295e+04 / 93
p0 1717 ± 1.29
4000
3500
3000
2500
2000
1500

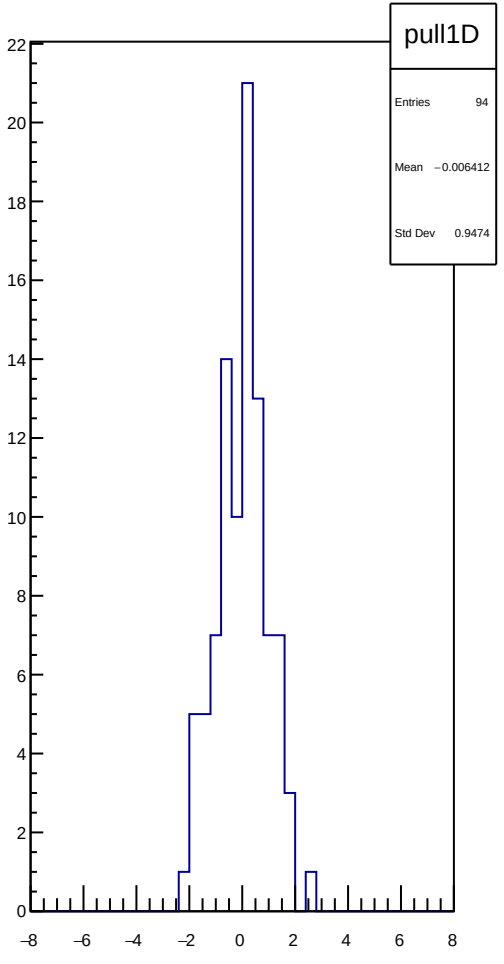

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 87.46 / 93
p0 −1053 ± 1440
120
100
80
60
40
20
0
−20
−40
−60
pull
Entries 94
Mean 237.3
Std Dev 268.2
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.003972
Std Dev 0.9646
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

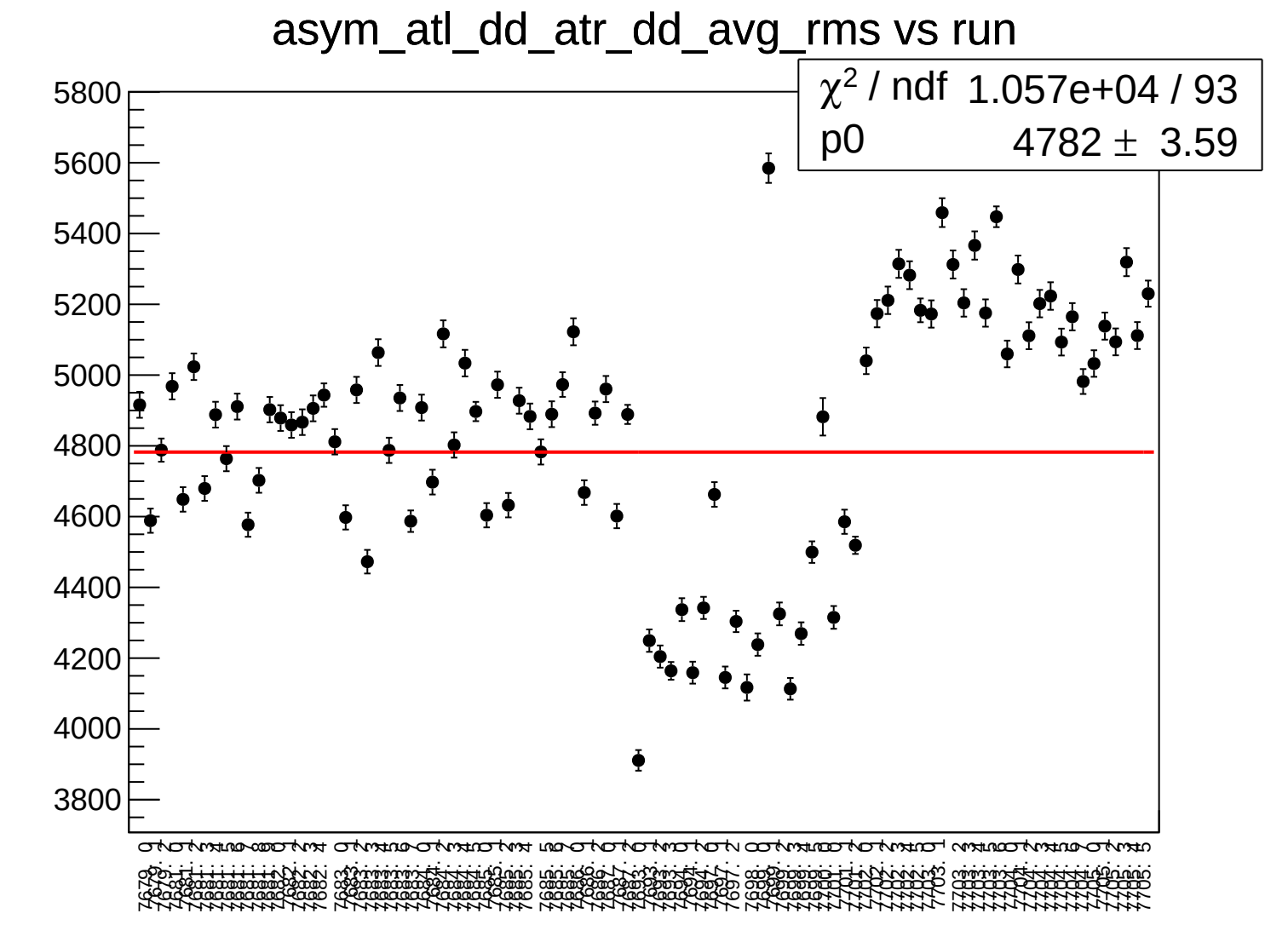

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ^2 / ndf 1.804e+04 / 93
p0 1353 ± 1.018
4000
3500
3000
2500
2000
1500
1000

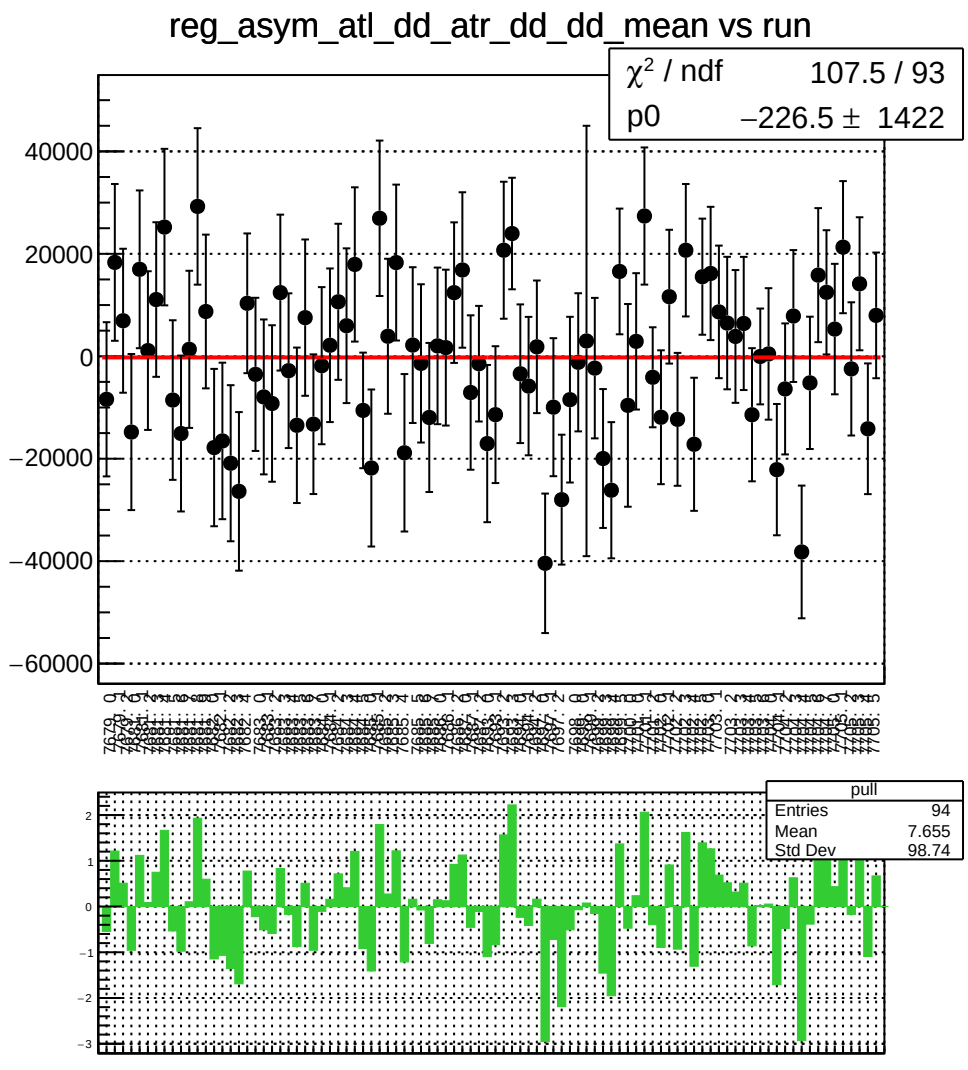

asym_atl_dd_atr_dd_avg_correction_mean vs run
×10^3
χ² / ndf 84.19 / 93
p0 −6951 ± 4843
pull
Entries 94
Mean −1457
Std Dev 1510
pull1D
Entries 94
Mean 0.003624
Std Dev 0.9464

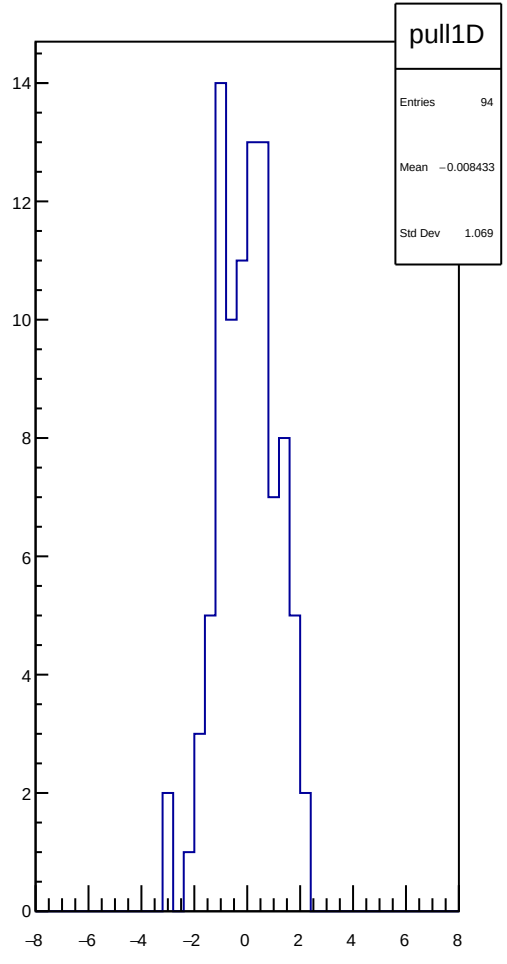

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 1.282e+04 / 93
p0 4559 ± 3.424
5500
5000
4500
4000
3500

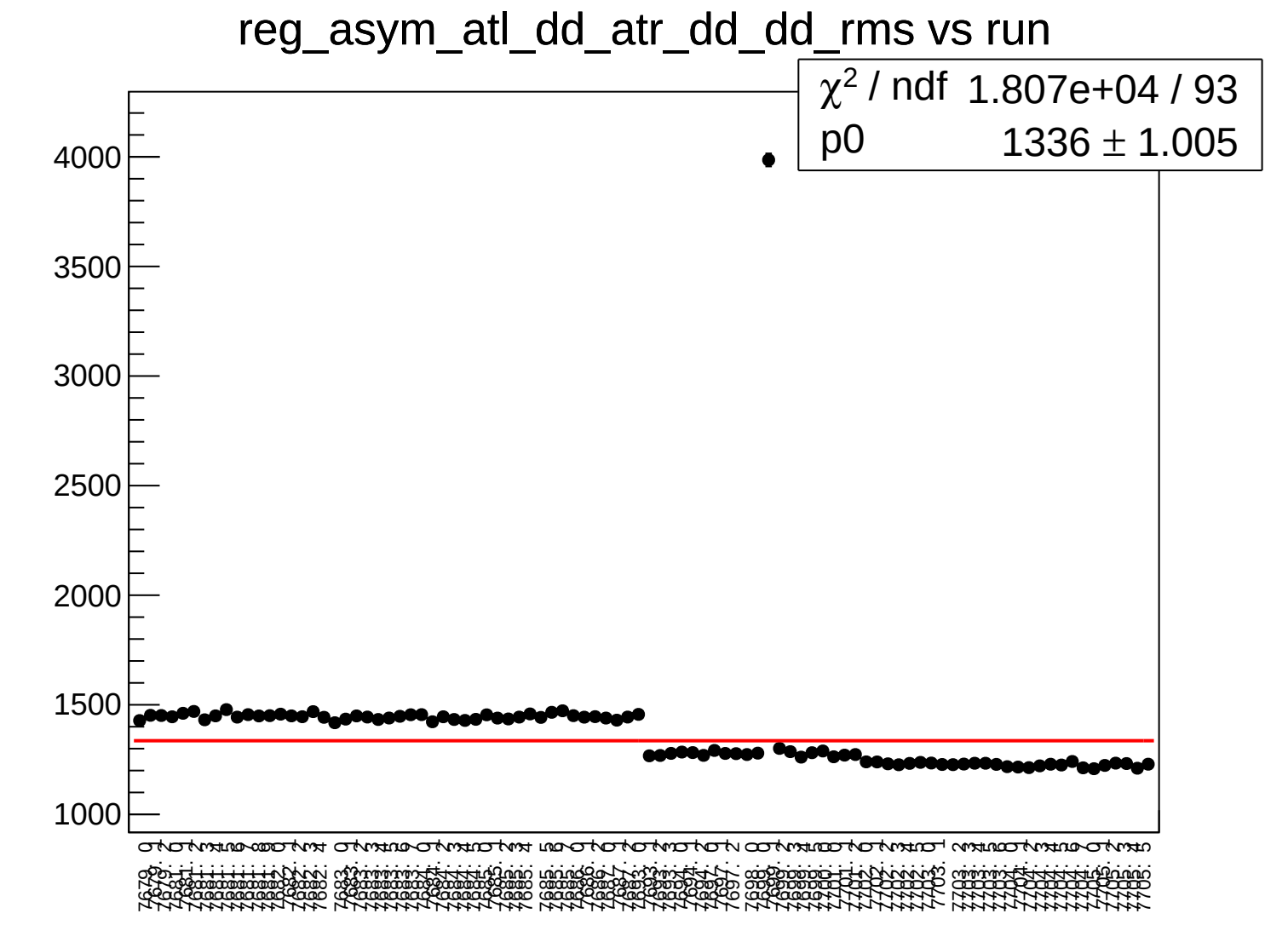

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 84.38 / 93
p0 6692 ± 5077
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean −841.8
Std Dev 890.2
2
1
0
−1
−2

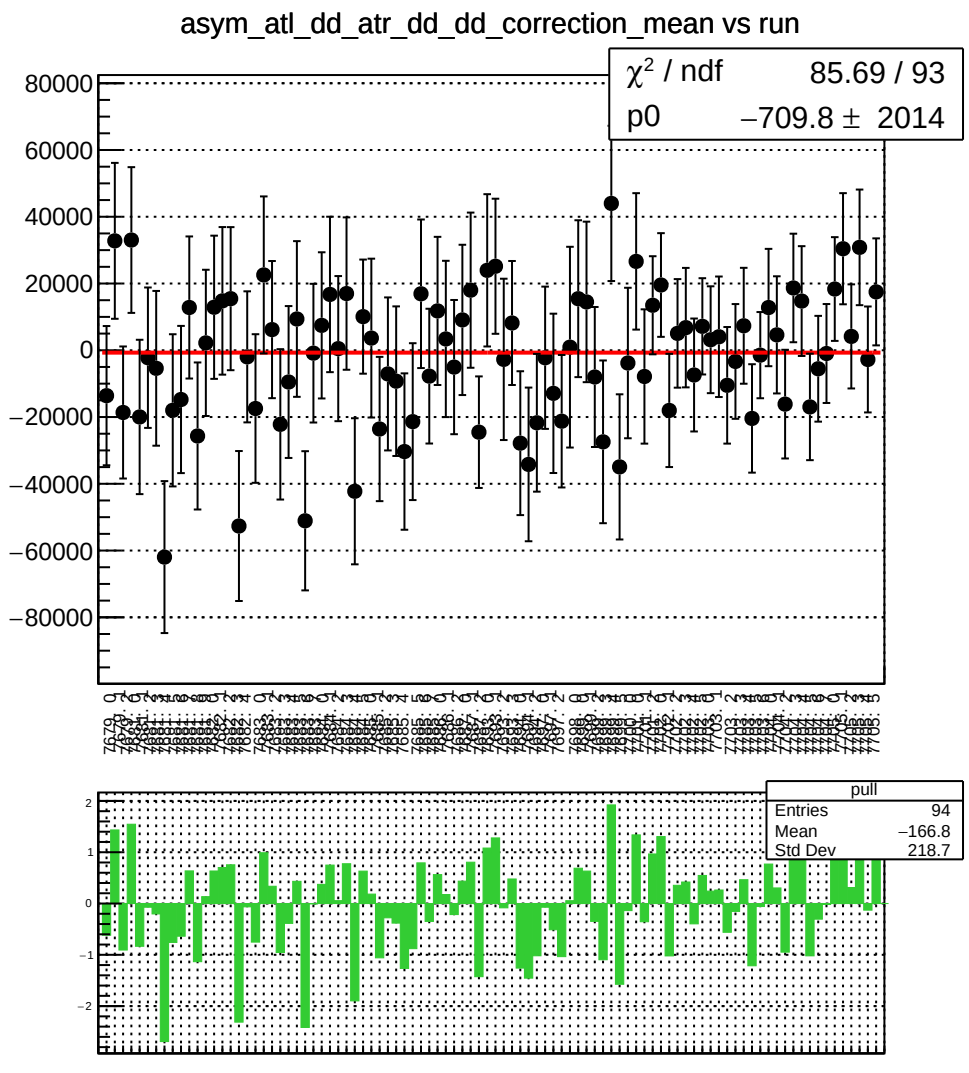

pull1D
Entries 94
Mean −0.006412
Std Dev 0.9474
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

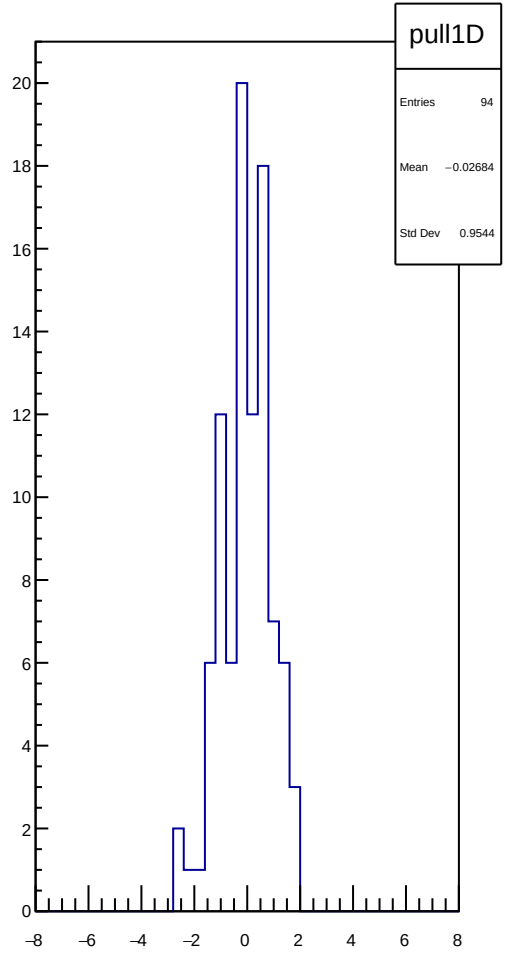

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 1.057e+04 / 93
p0 4782 ± 3.59
5800
5600
5400
5200
5000
4800
4600
4400
4200
4000
3800

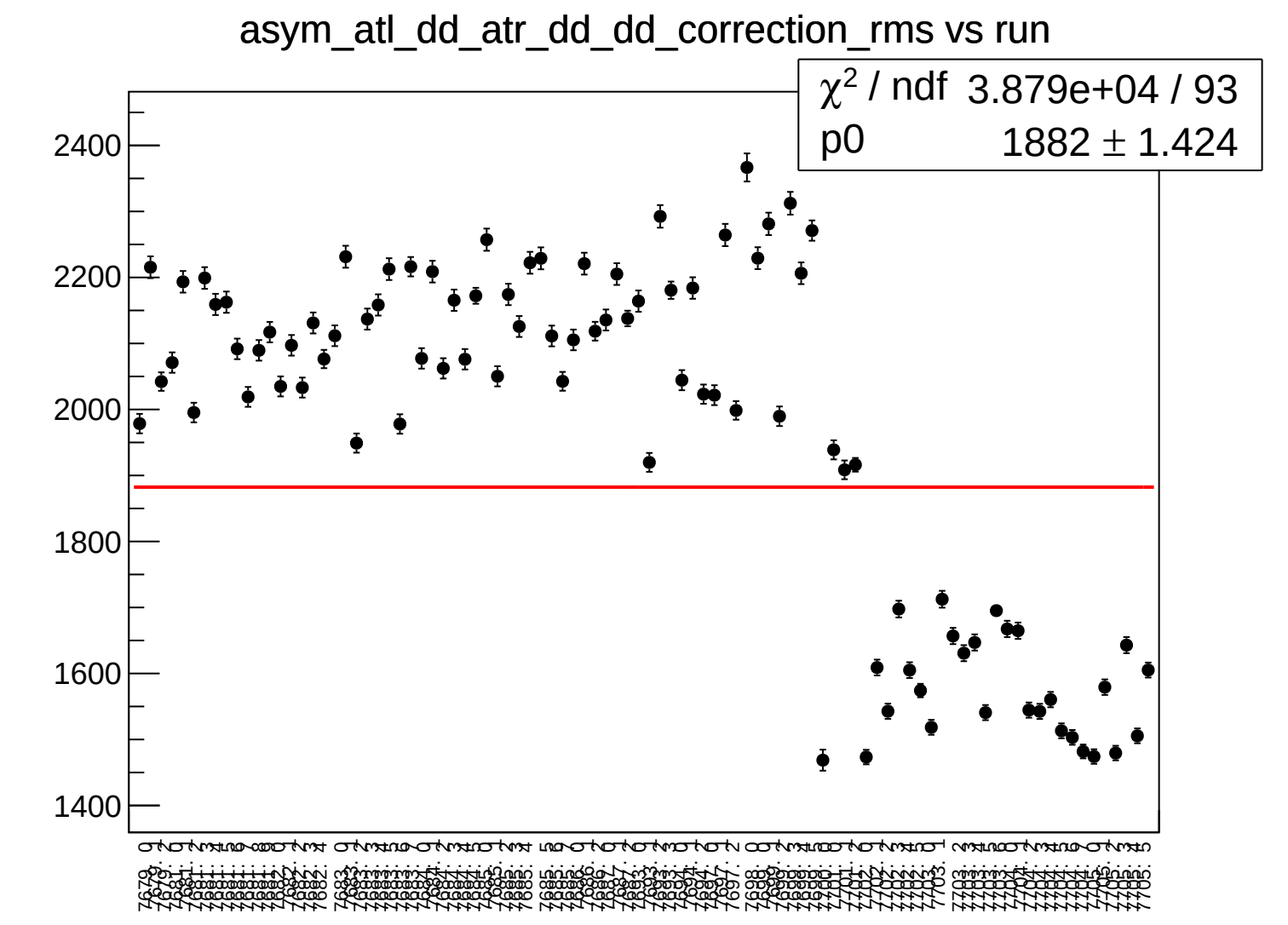

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 107.5 / 93
p0 −226.5 ± 1422
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean 7.655
Std Dev 98.74
2
1
0
−1
−2
−3

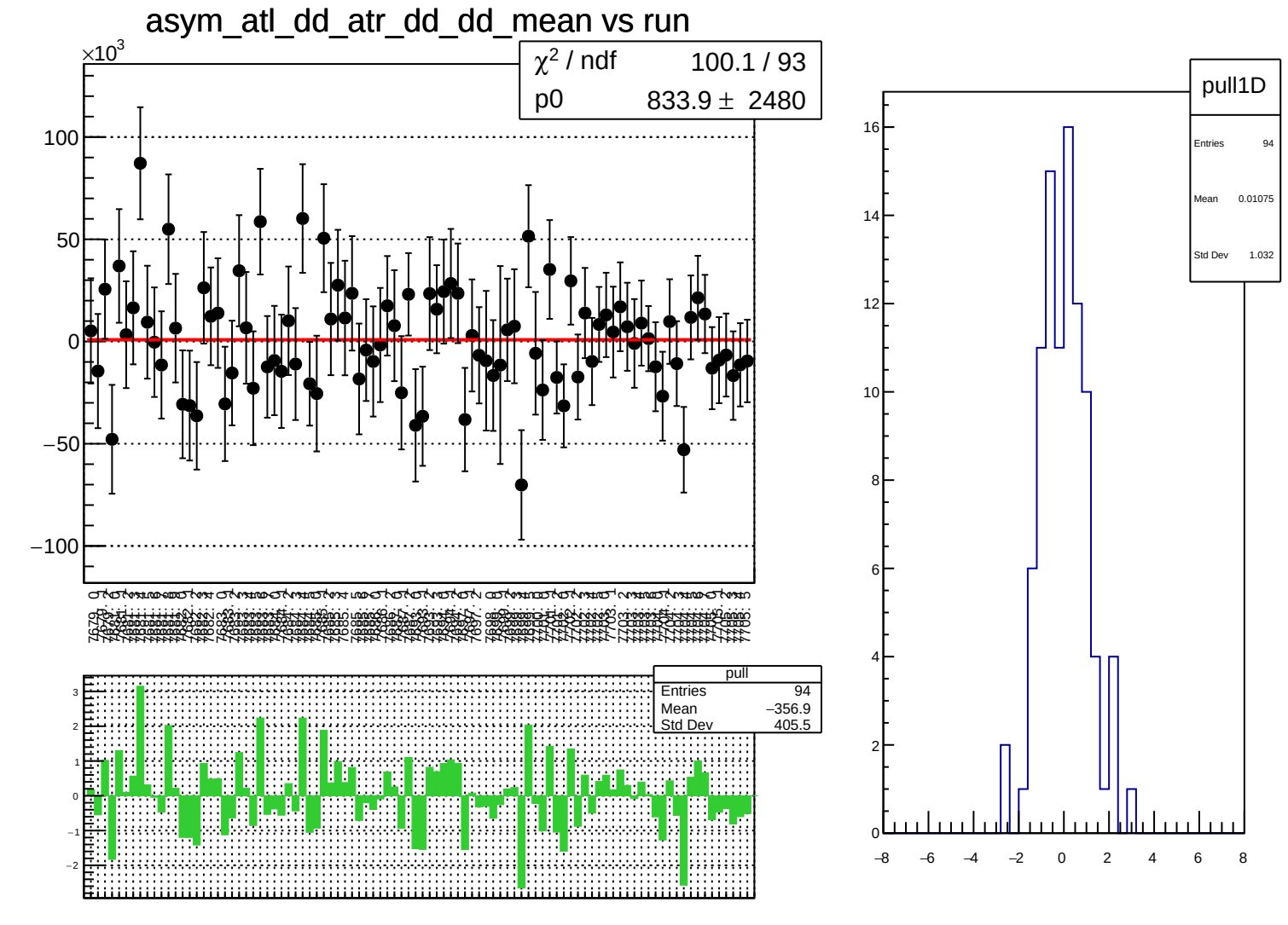

pull1D
Entries 94
Mean −0.008433
Std Dev 1.069
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

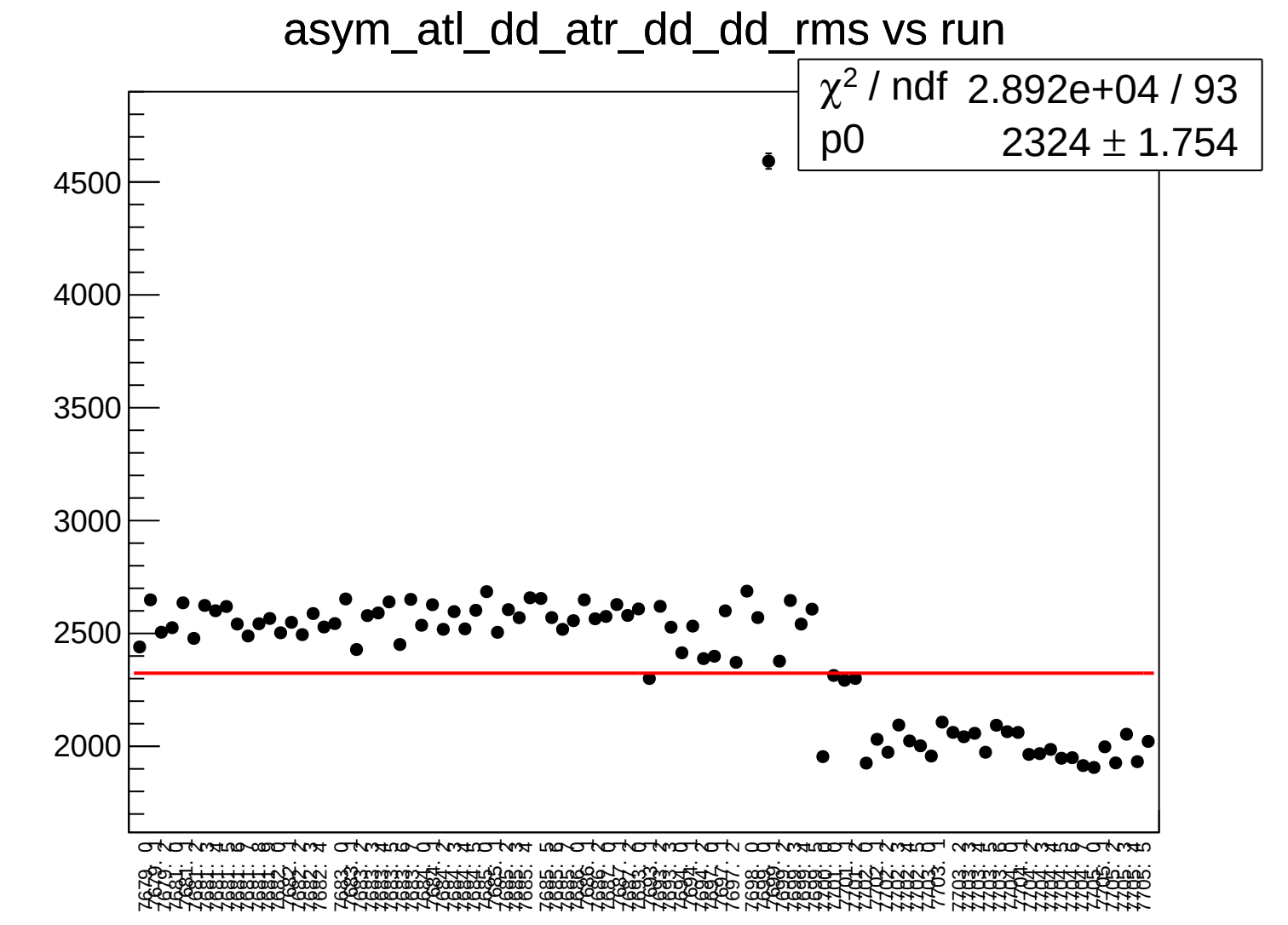

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 1.807e+04 / 93
p0 1336 ± 1.005
4000
3500
3000
2500
2000
1500
1000

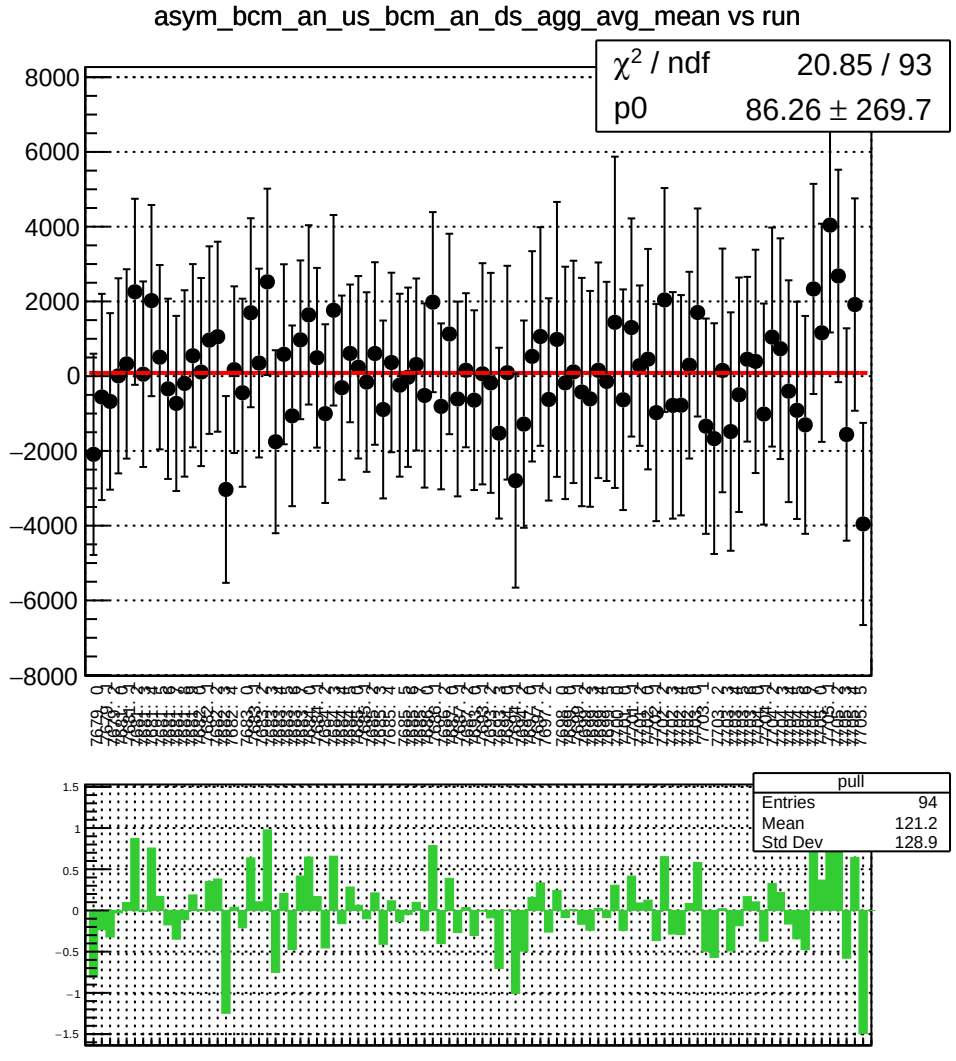

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 85.69 / 93
p0 −709.8 ± 2014
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 94
Mean −166.8
Std Dev 218.7
2
1
0
−1
−2

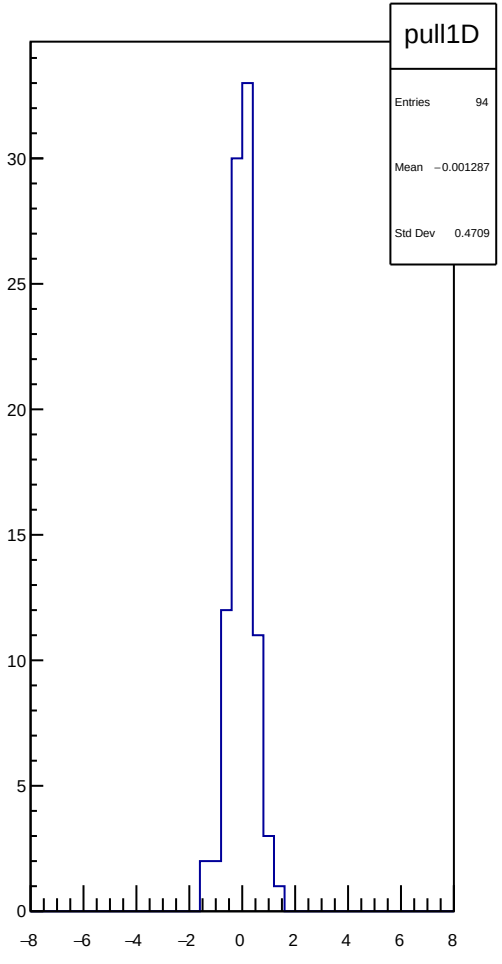

pull1D
Entries 94
Mean −0.02684
Std Dev 0.9544
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

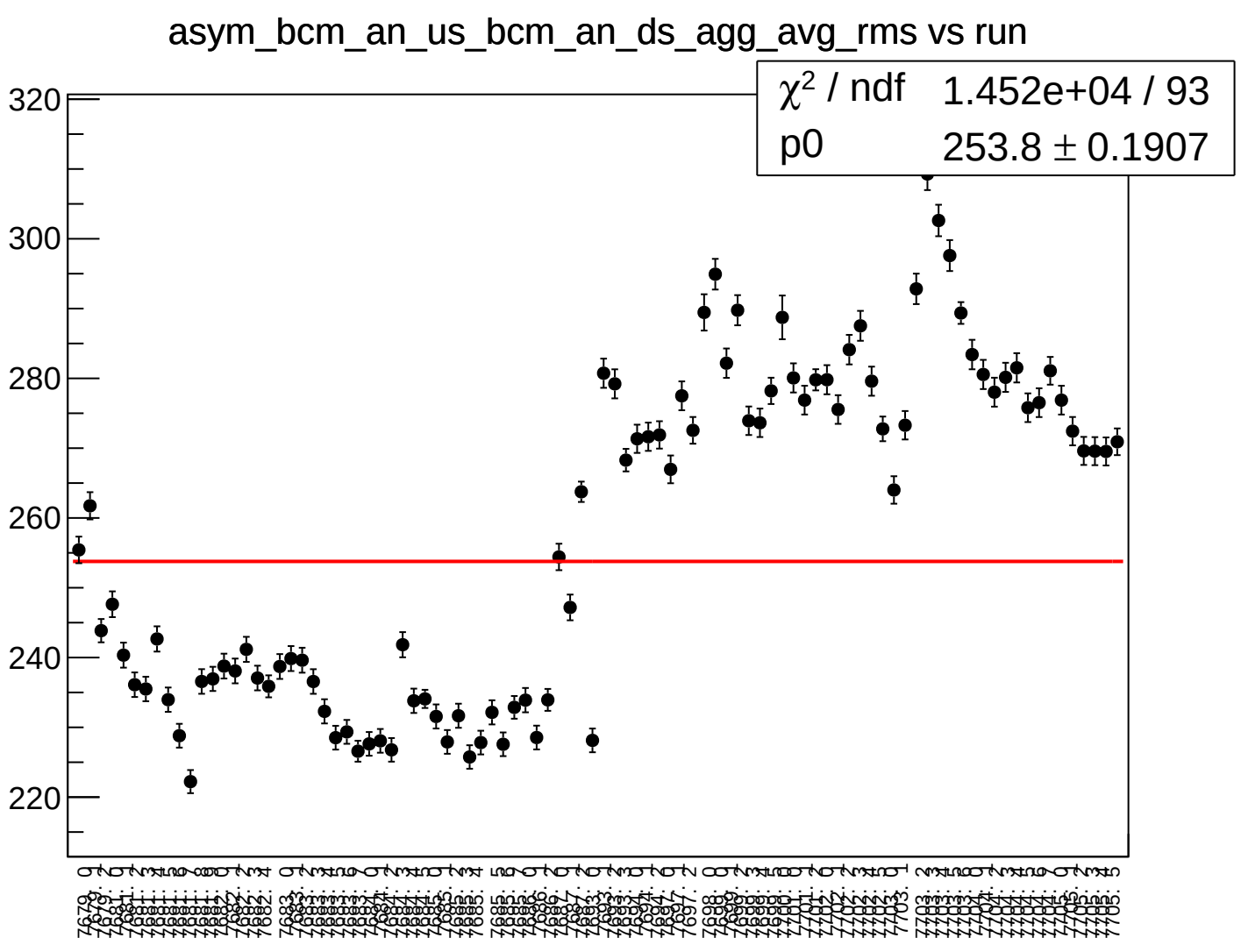

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 3.879e+04 / 93
p0 1882 ± 1.424
2400
2200
2000
1800
1600
1400

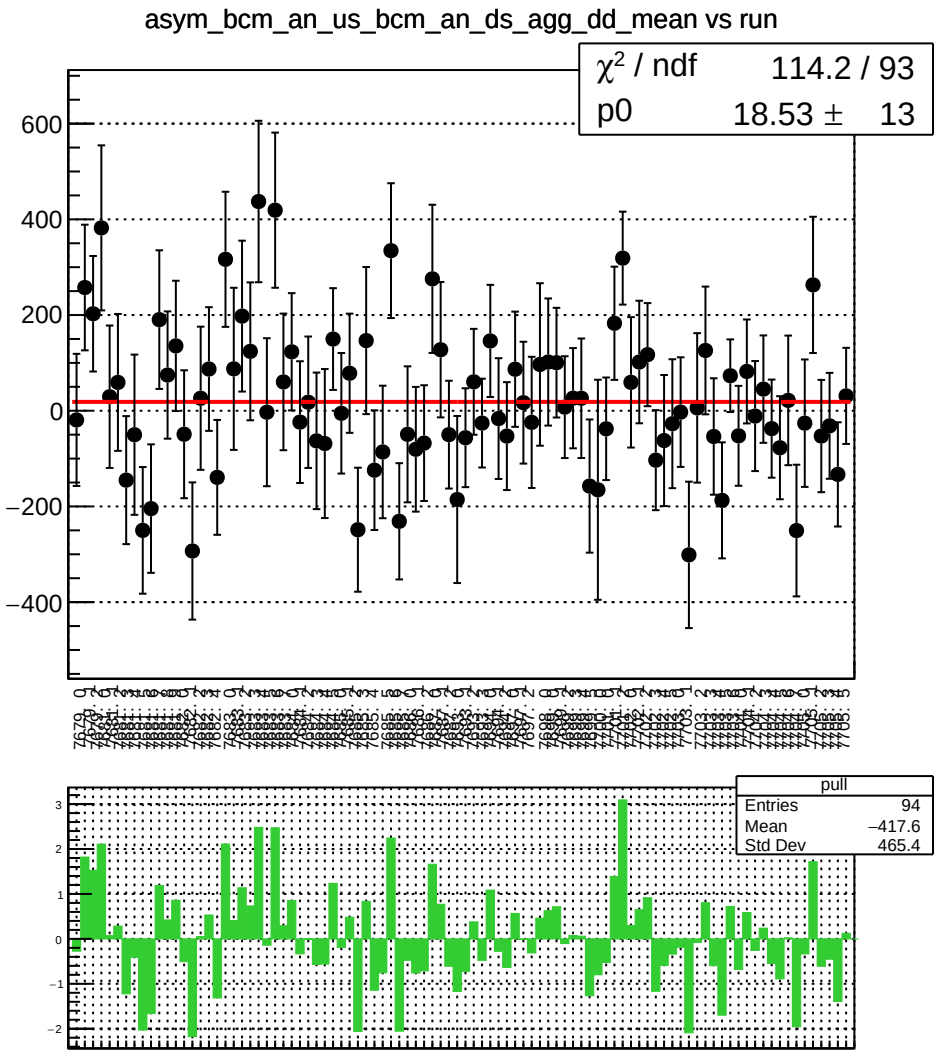

asym_atl_dd_atr_dd_dd_mean vs run
×10^3
χ^2 / ndf 100.1 / 93
p0 833.9 ± 2480
100
50
0
−50
−100
pull
Entries 94
Mean −356.9
Std Dev 405.5
3
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.01075
Std Dev 1.032
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

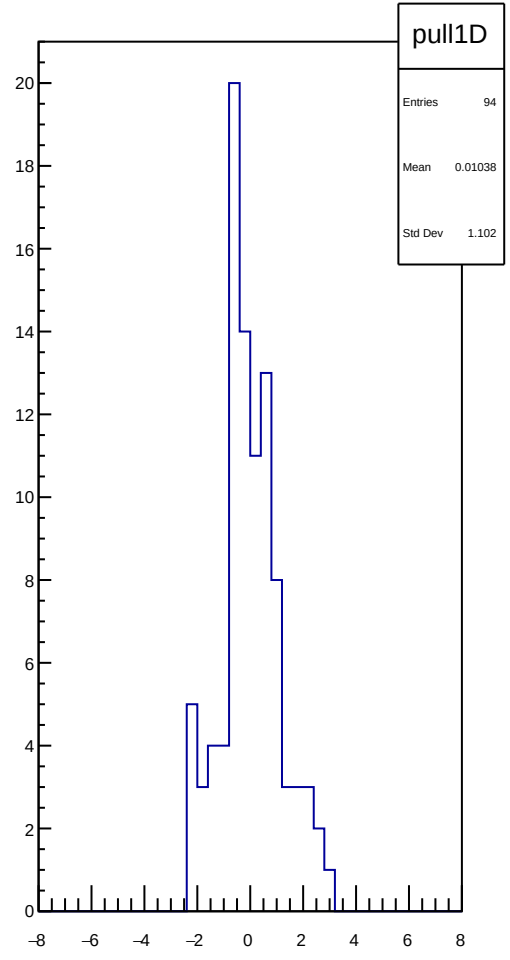

asym_atl_dd_atr_dd_dd_rms vs run
χ^2 / ndf 2.892e+04 / 93
p0 2324 ± 1.754
4500
4000
3500
3000
2500
2000

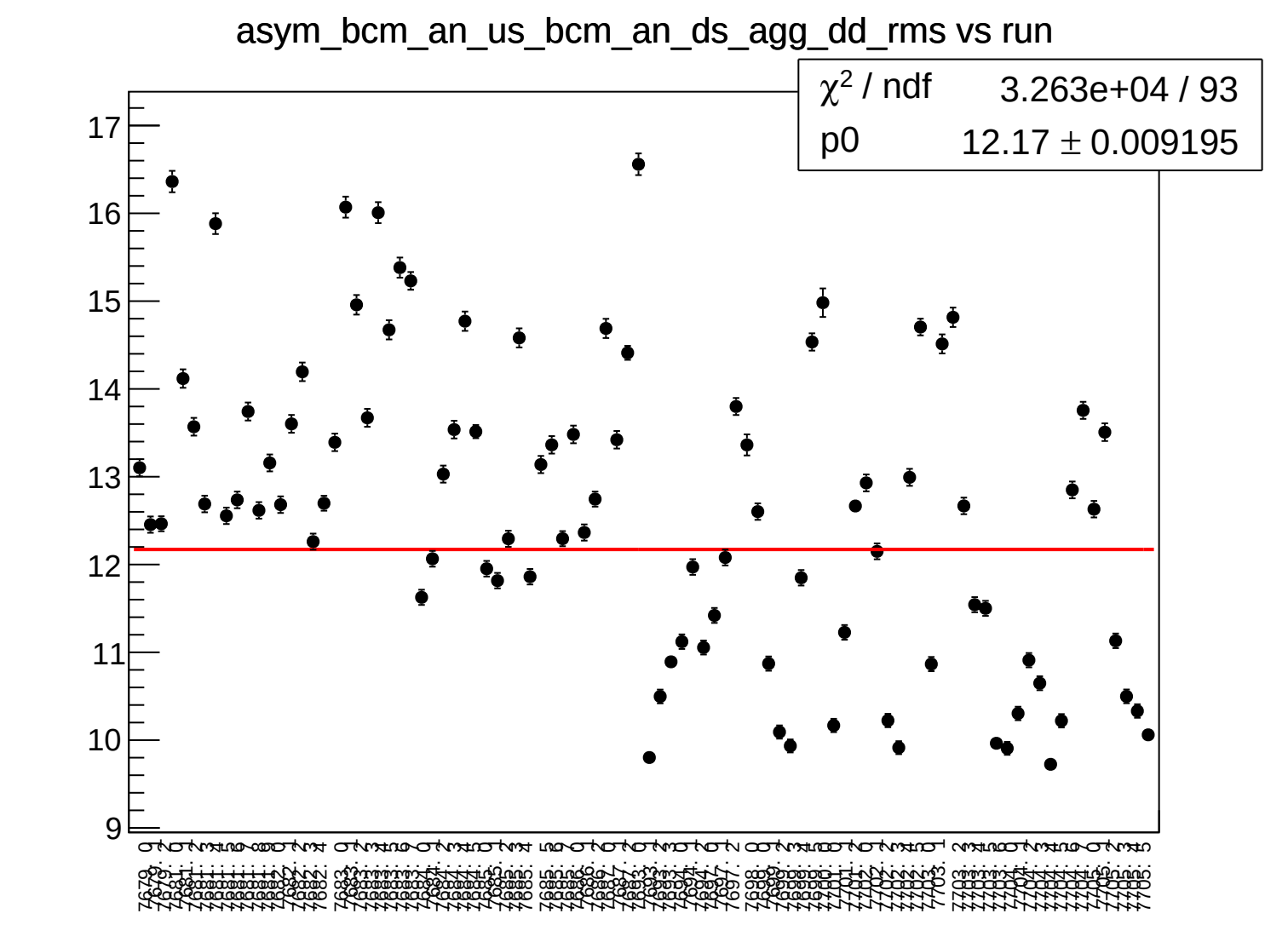

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 20.85 / 93
p0 86.26 ± 269.7
pull
Entries 94
Mean 121.2
Std Dev 128.9

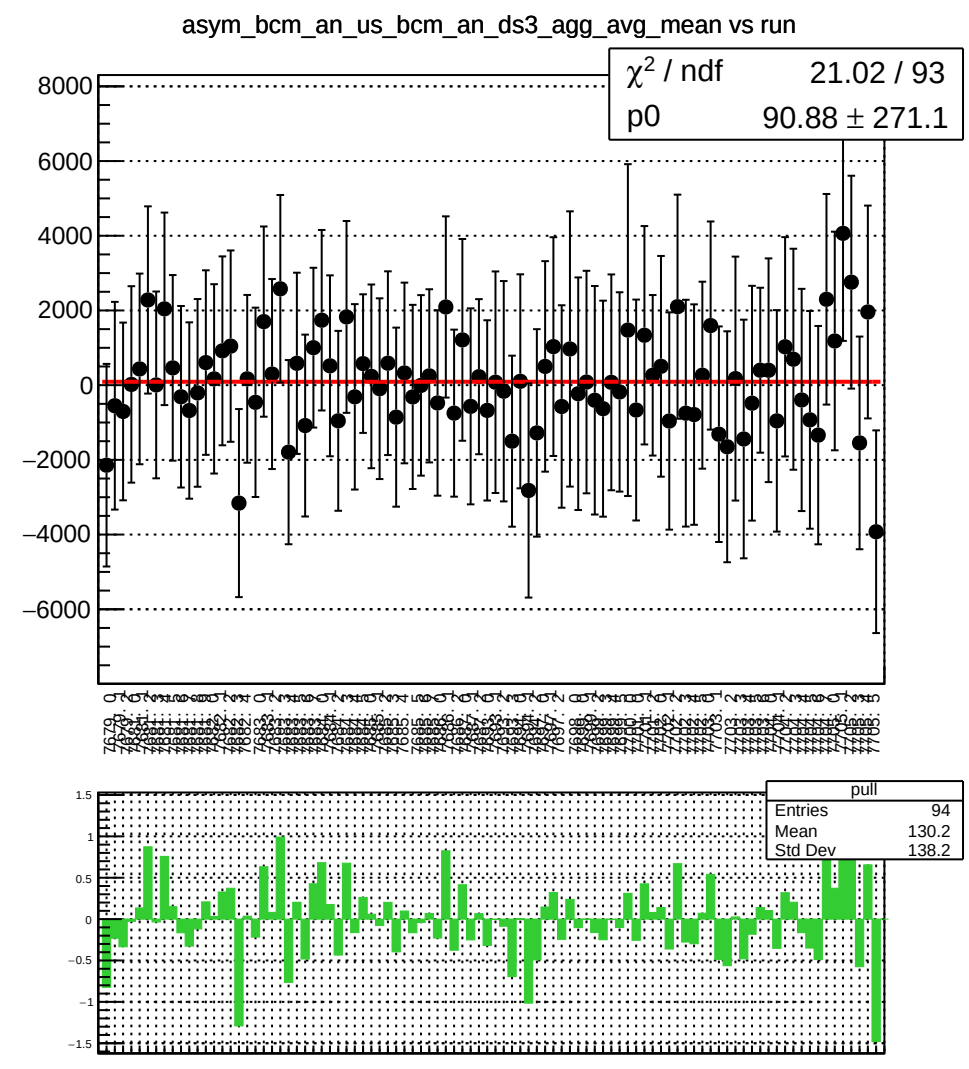

pull1D
Entries 94
Mean −0.001287
Std Dev 0.4709

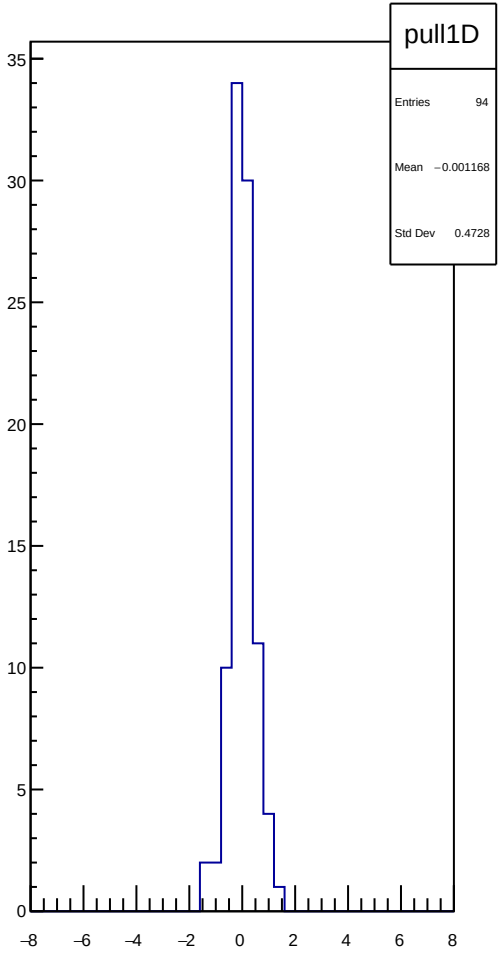

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.452e+04 / 93
p0 253.8 ± 0.1907
320
300
280
260
240
220

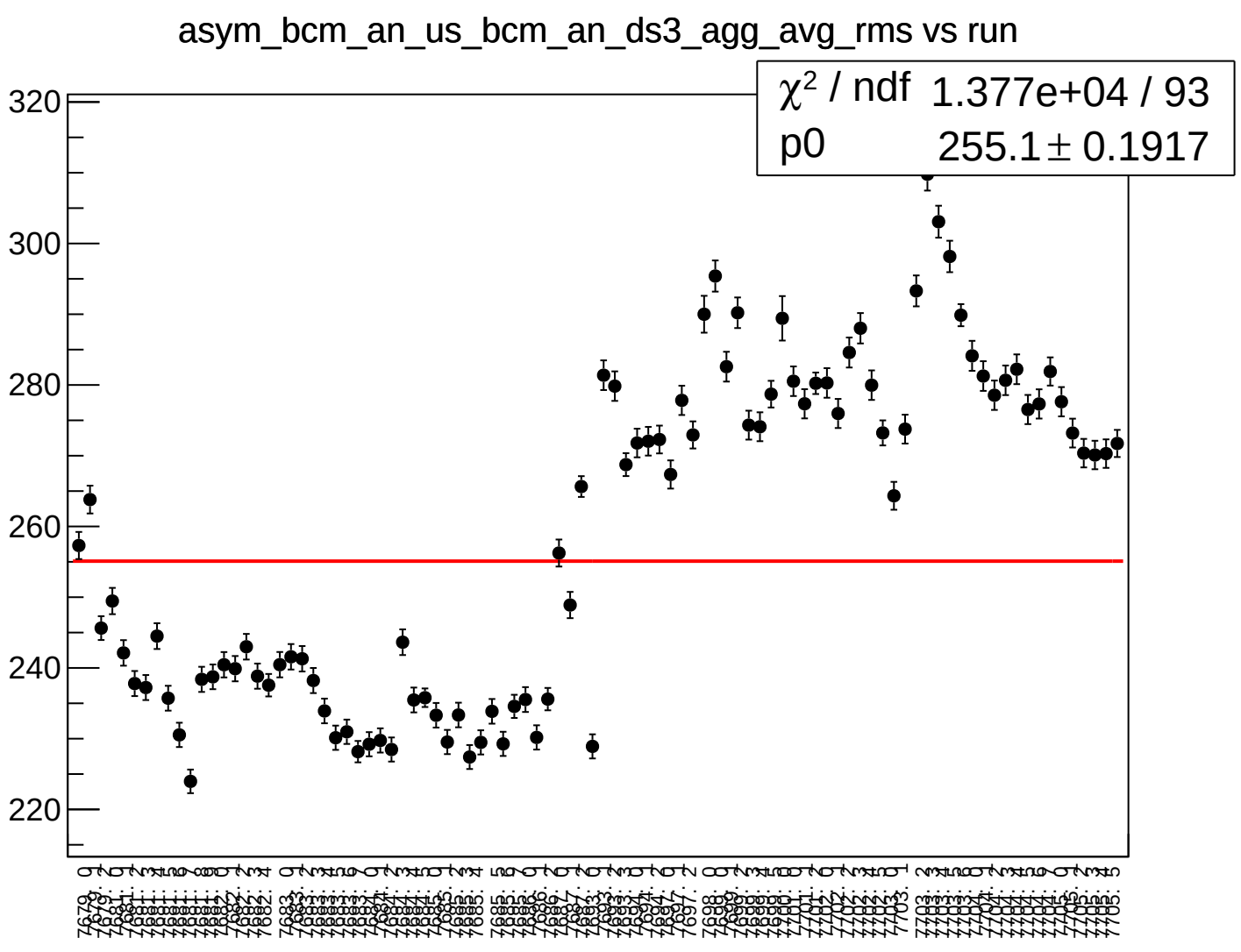

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 114.2 / 93
p0 18.53 ± 13
pull
Entries 94
Mean −417.6
Std Dev 465.4

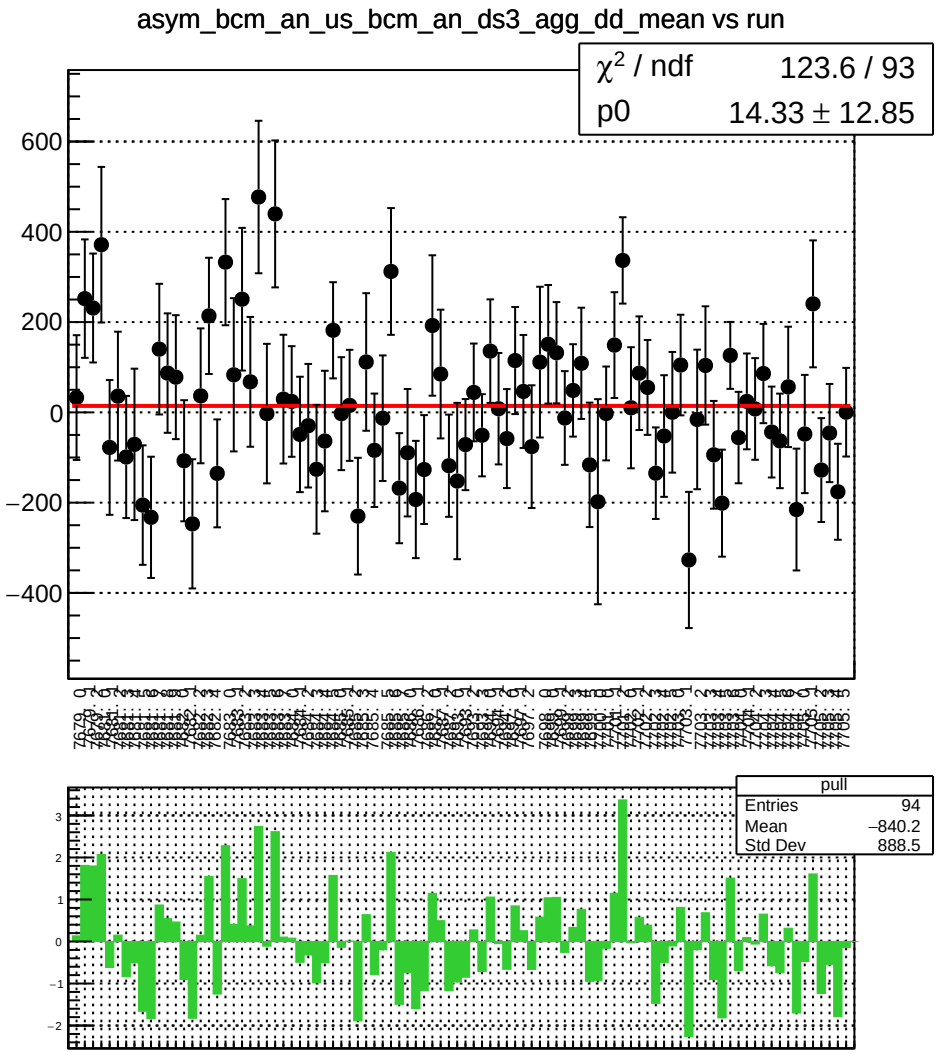

pull1D
Entries 94
Mean 0.01038
Std Dev 1.102

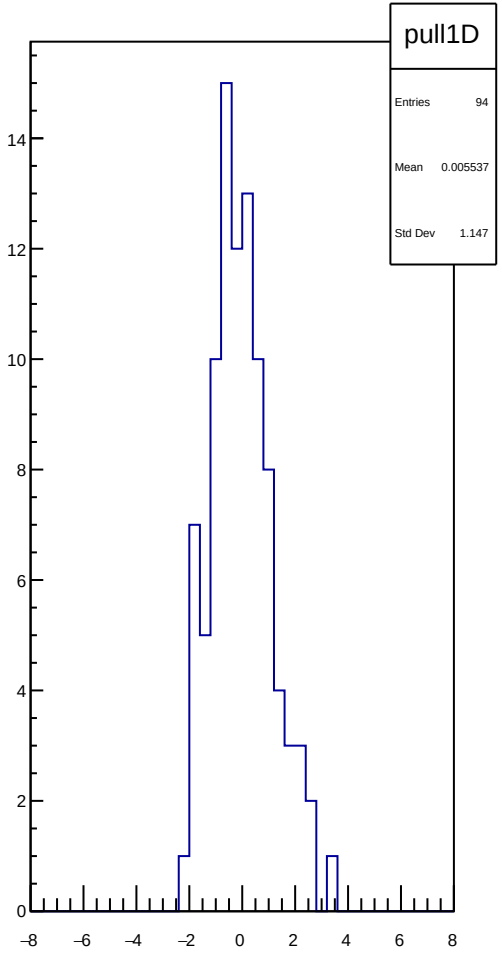

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3.263e+04 / 93
p0 12.17 ± 0.009195
17
16
15
14
13
12
11
10
9

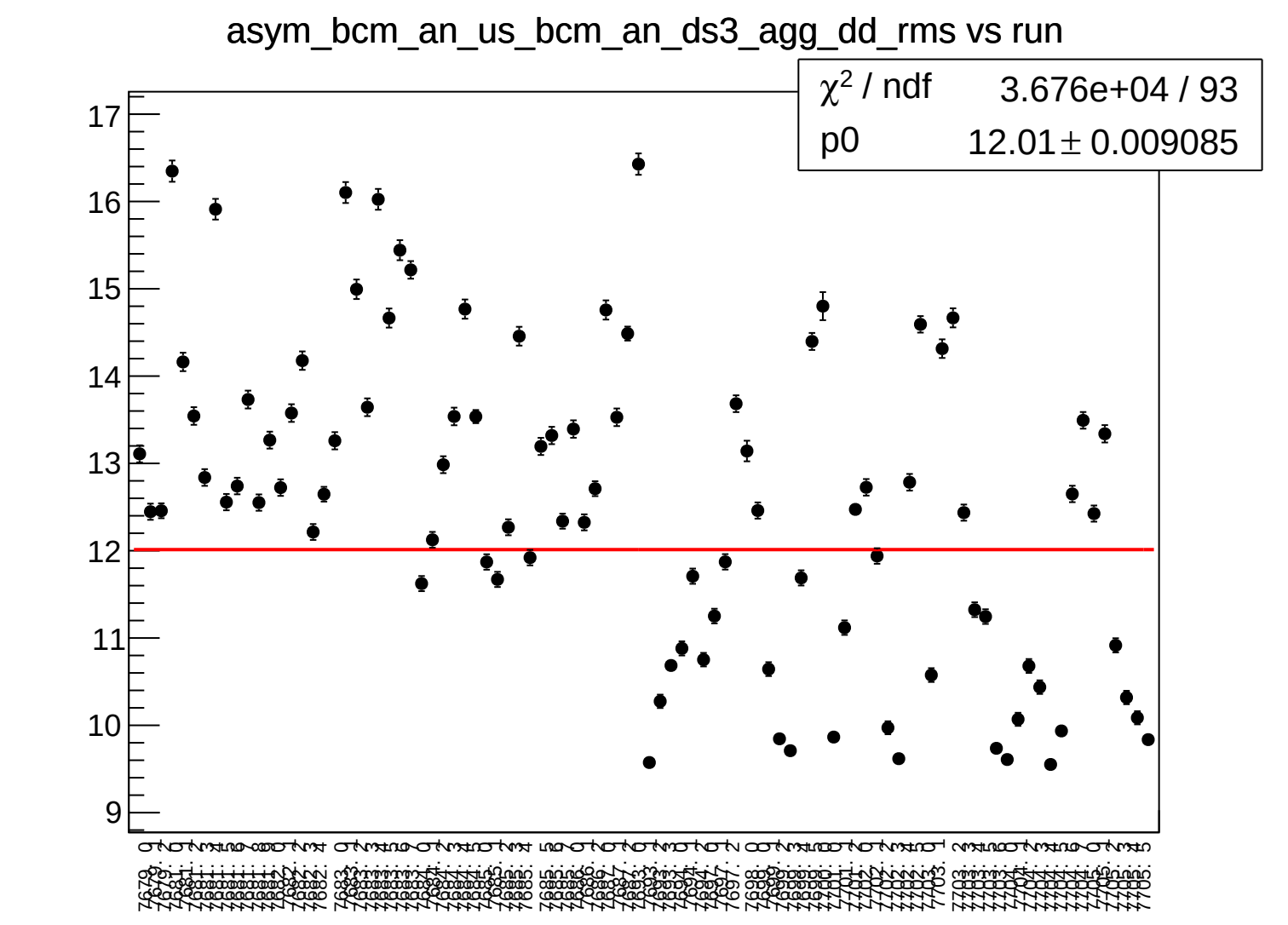

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 21.02 / 93
p0 90.88 ± 271.1
pull
Entries 94
Mean 130.2
Std Dev 138.2

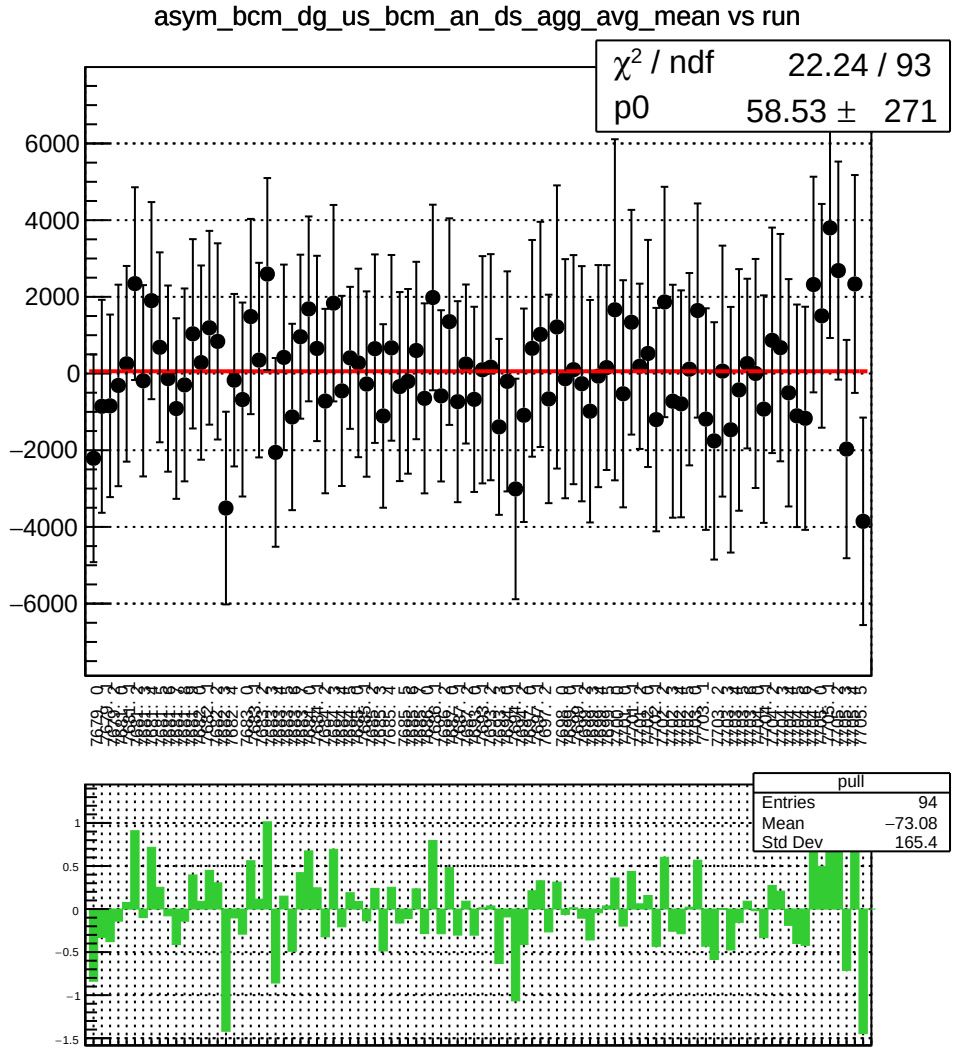

pull1D
Entries 94
Mean −0.001168
Std Dev 0.4728

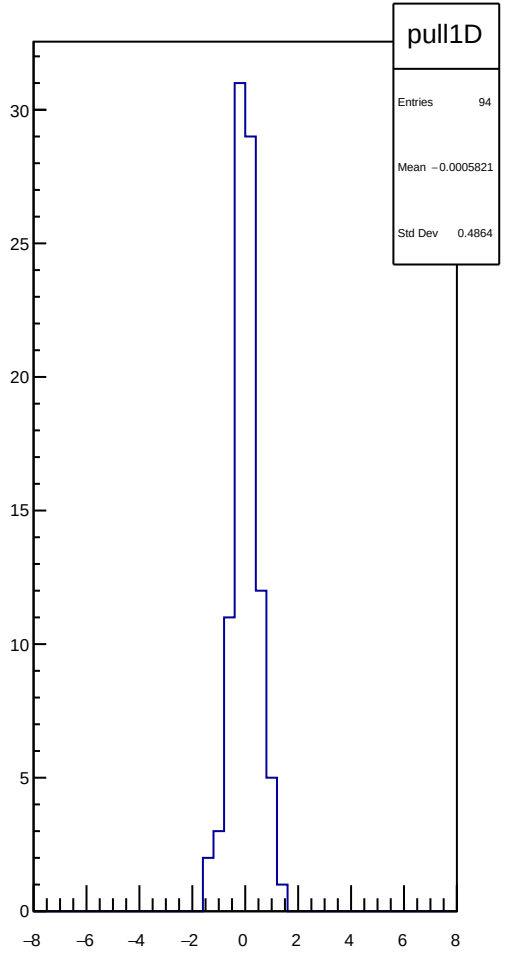

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 1.377e+04 / 93
p0 255.1 ± 0.1917
320
300
280
260
240
220

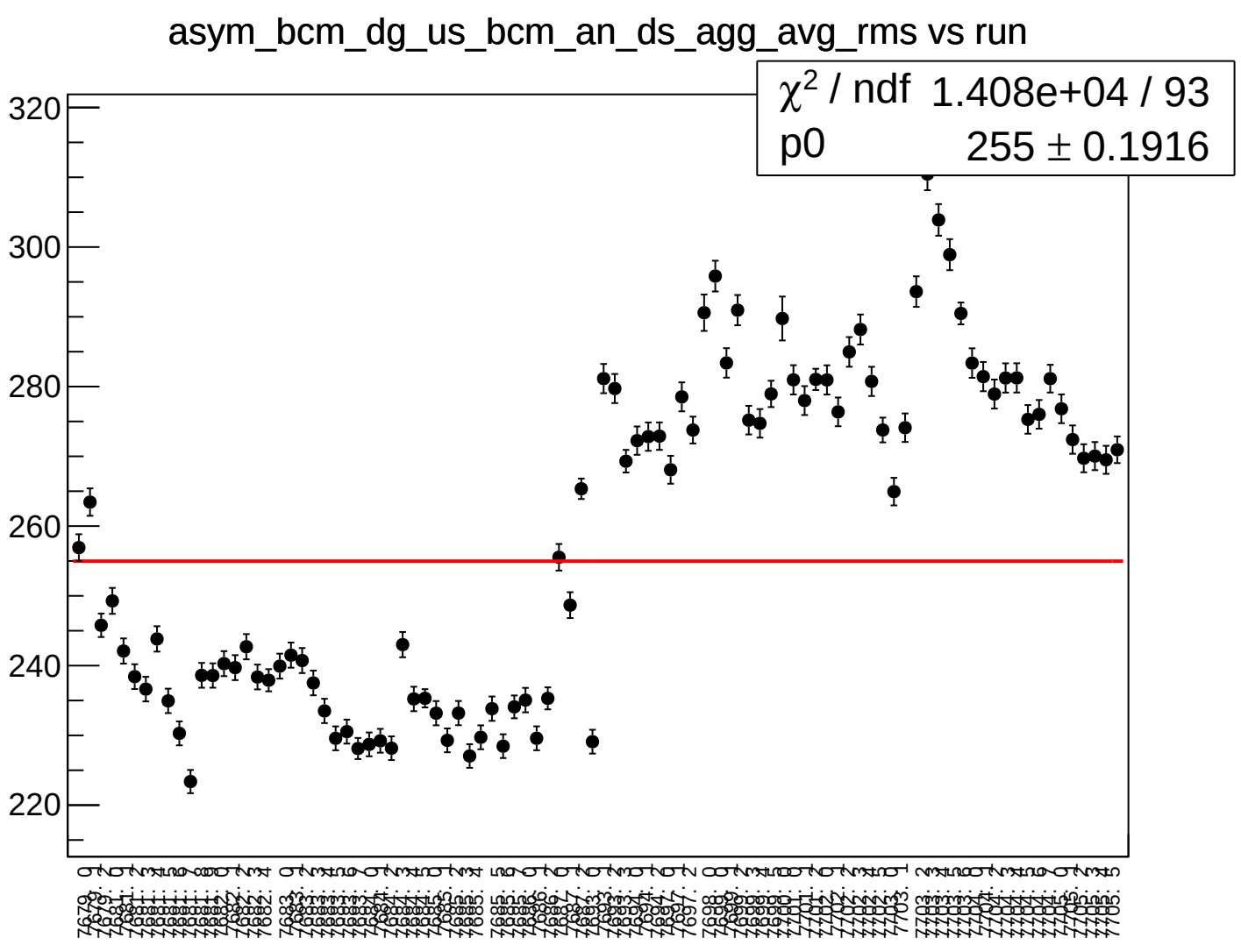

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 123.6 / 93
p0 14.33 ± 12.85
pull
Entries 94
Mean −840.2
Std Dev 888.5

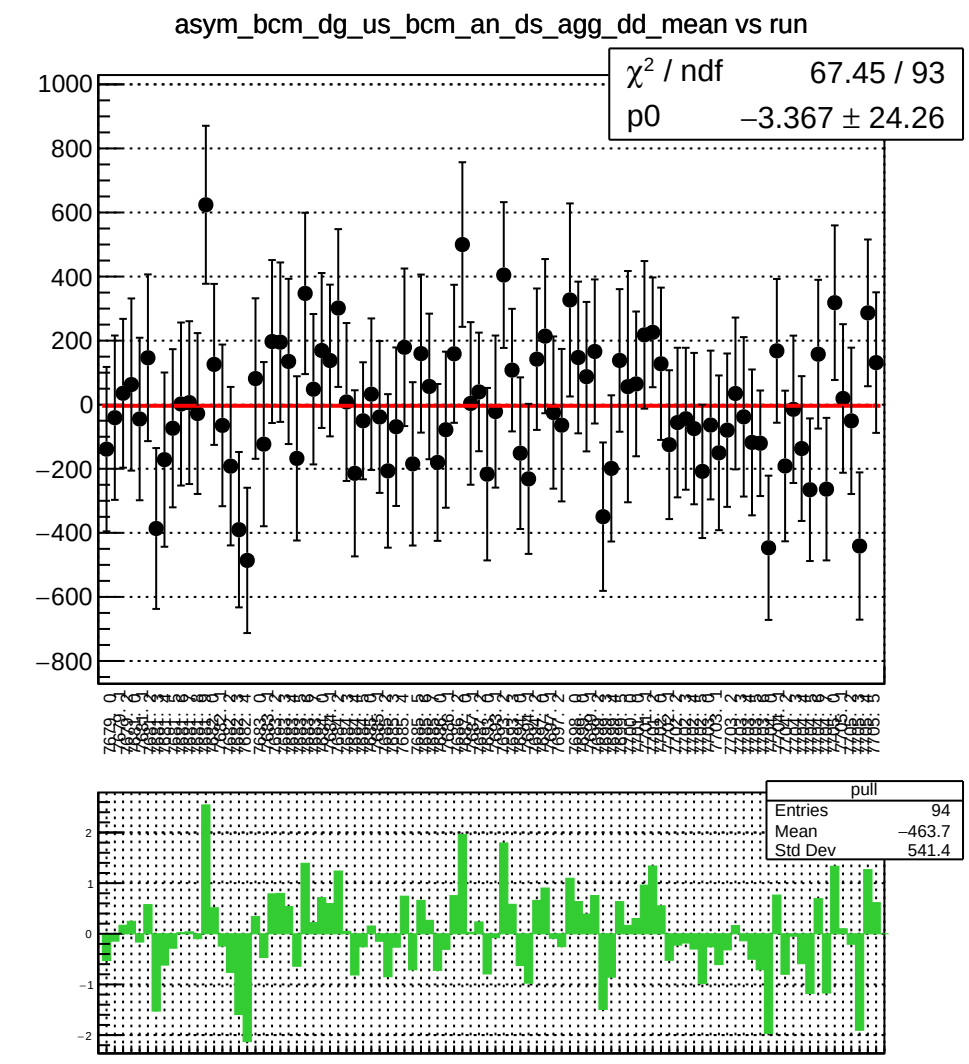

pull1D
Entries 94
Mean 0.005537
Std Dev 1.147

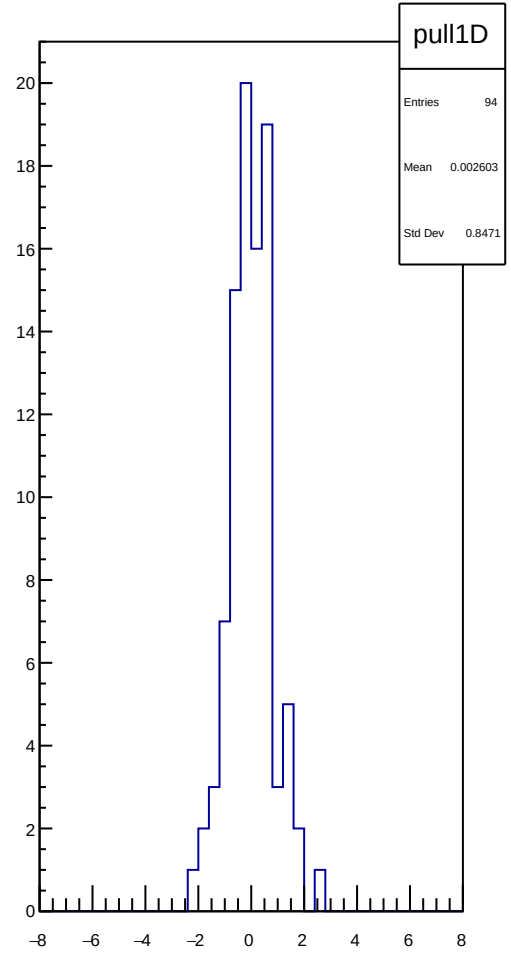

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 3.676e+04 / 93
p0 12.01 ± 0.009085
17
16
15
14
13
12
11
10
9

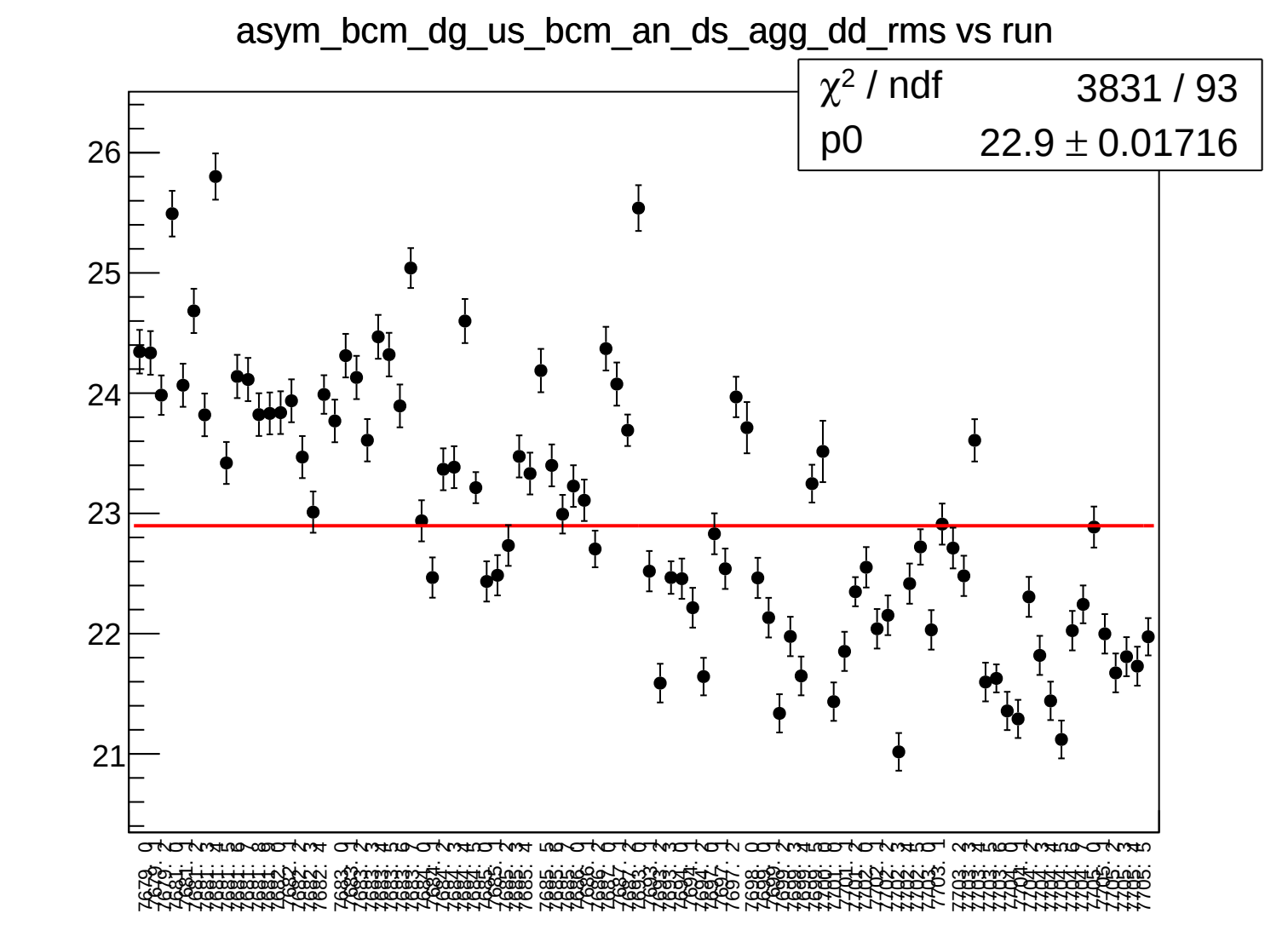

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 22.24 / 93
p0 58.53 ± 271
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean −73.08
Std Dev 165.4
1
0.5
0
−0.5
−1
−1.5

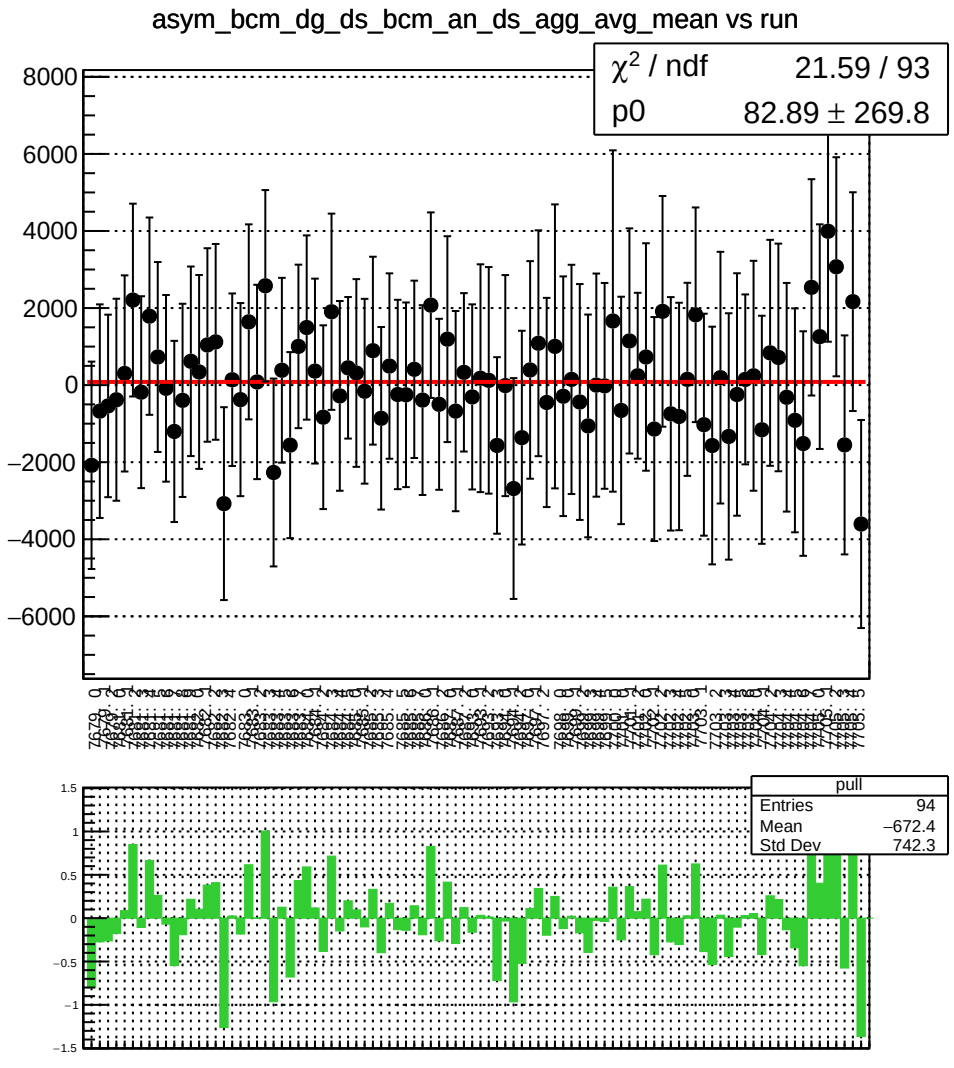

pull1D
Entries 94
Mean −0.0005821
Std Dev 0.4864
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

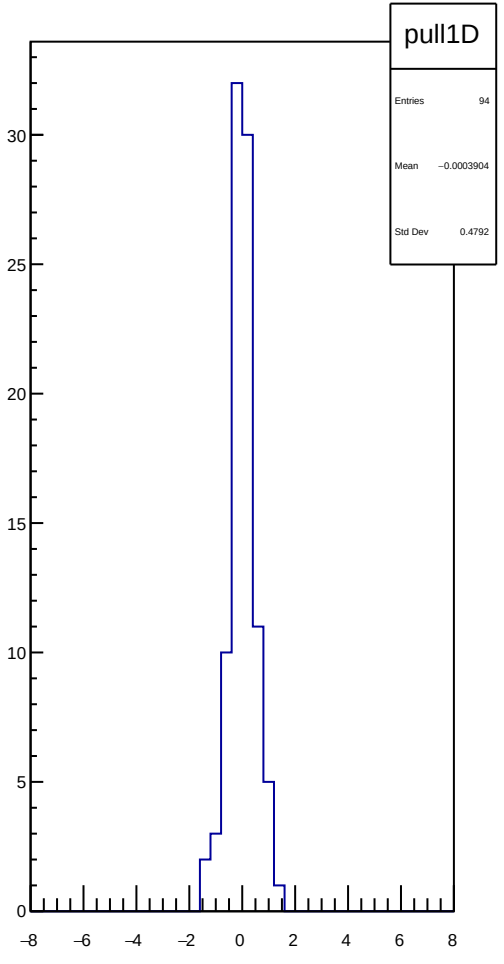

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.408e+04 / 93
p0 255 ± 0.1916
320
300
280
260
240
220

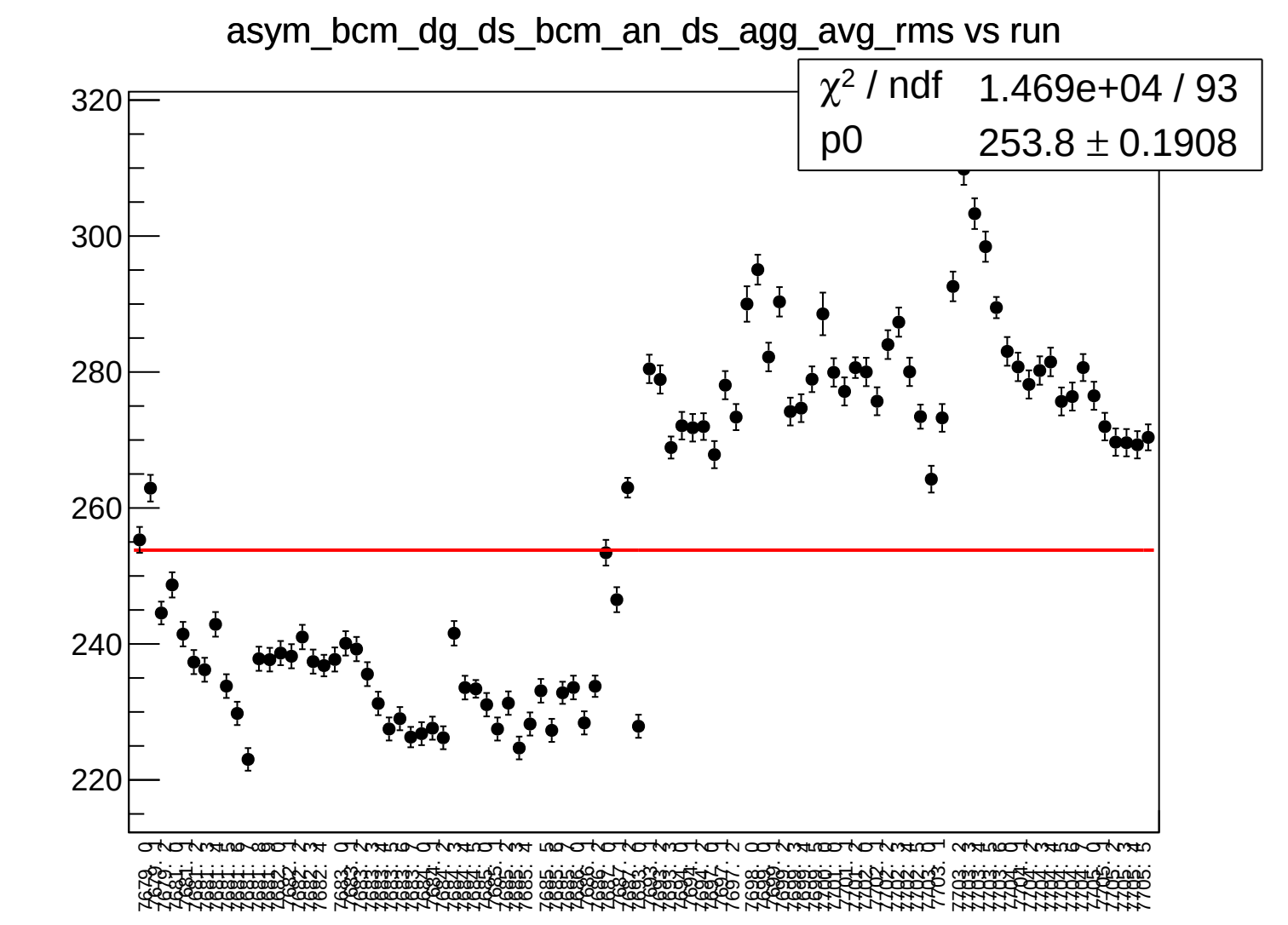

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 67.45 / 93
p0 −3.367 ± 24.26
pull
Entries 94
Mean −463.7
Std Dev 541.4

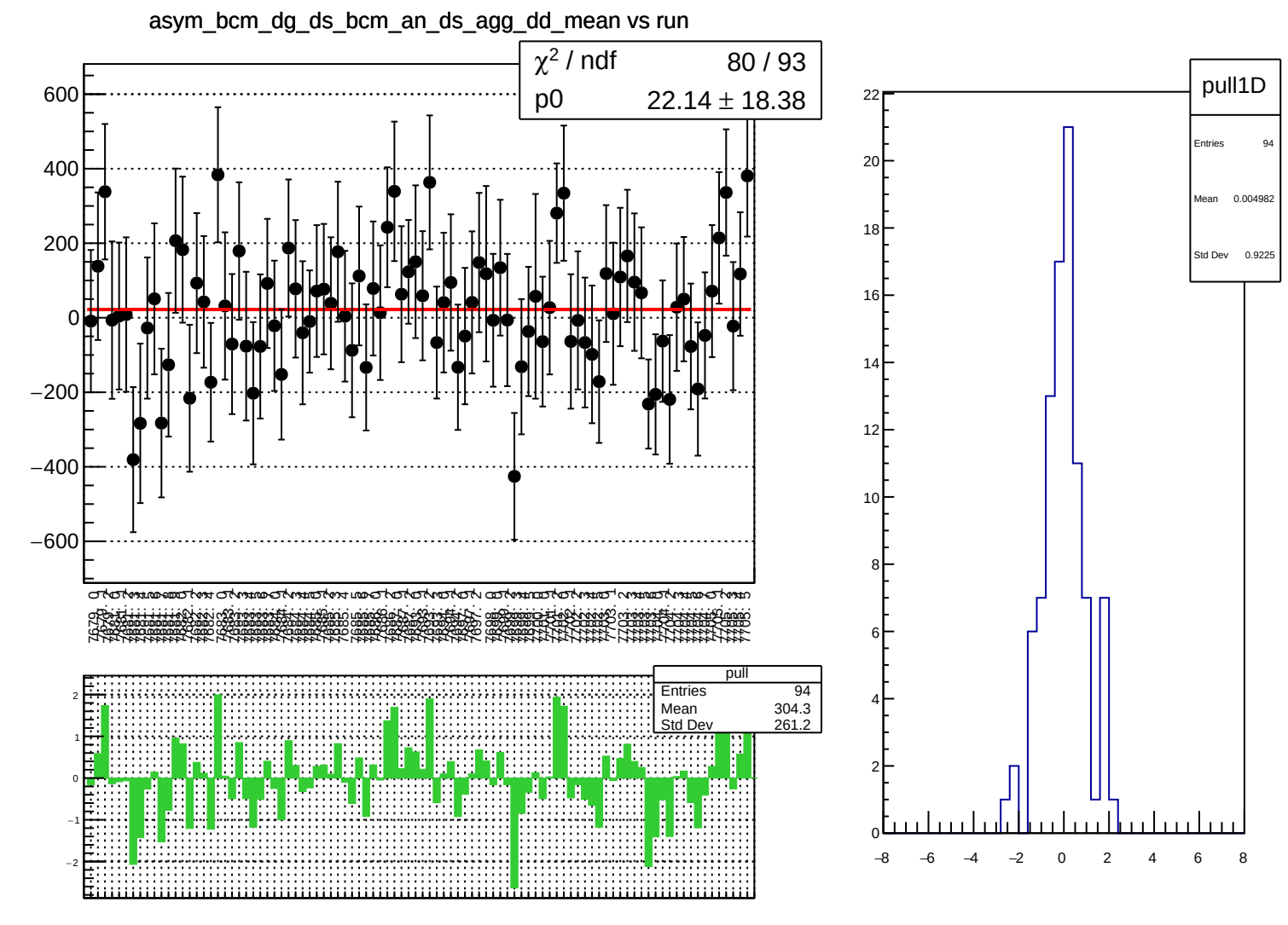

pull1D
Entries 94
Mean 0.002603
Std Dev 0.8471

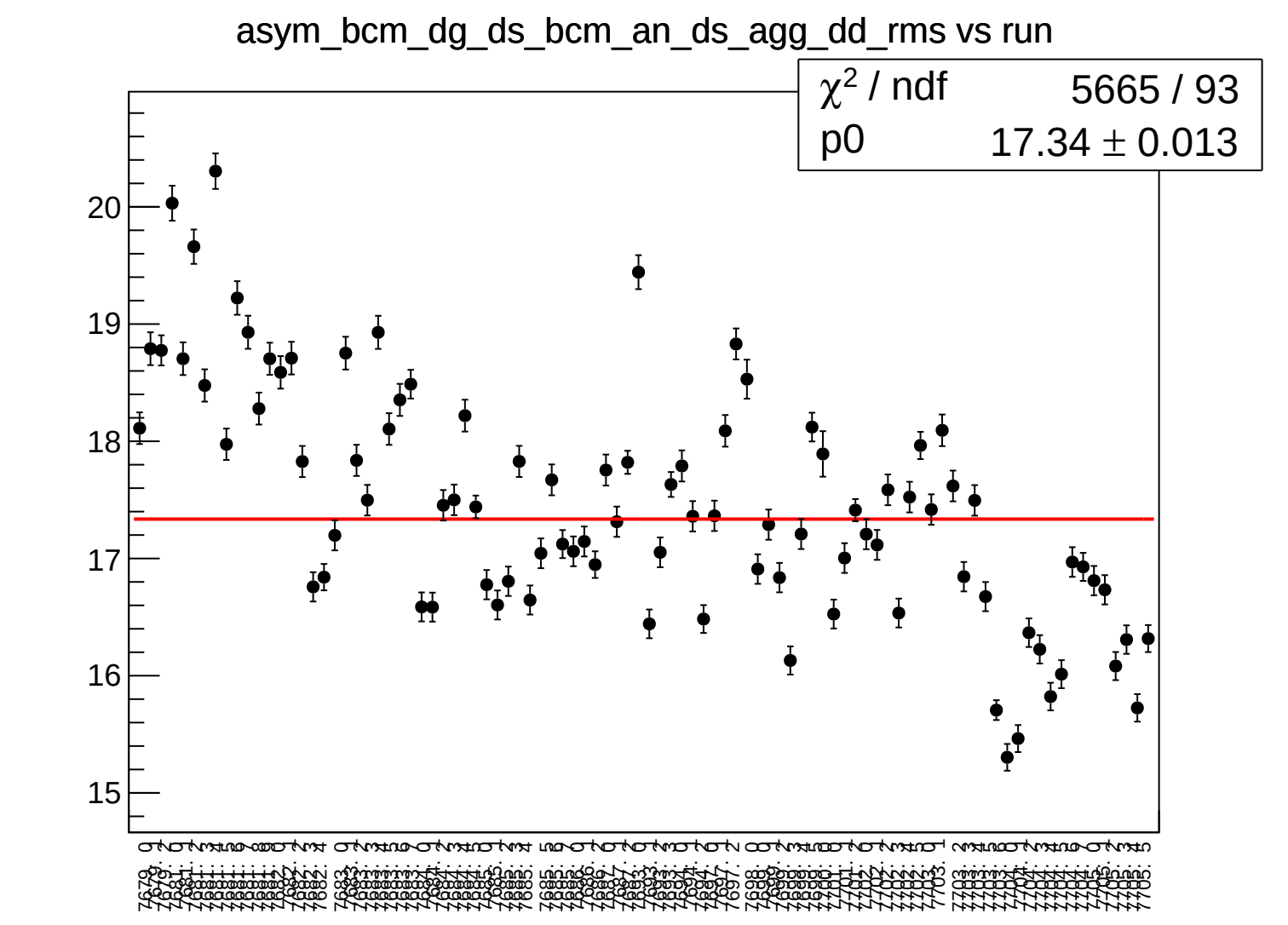

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3831 / 93
p0 22.9 ± 0.01716
26
25
24
23
22
21

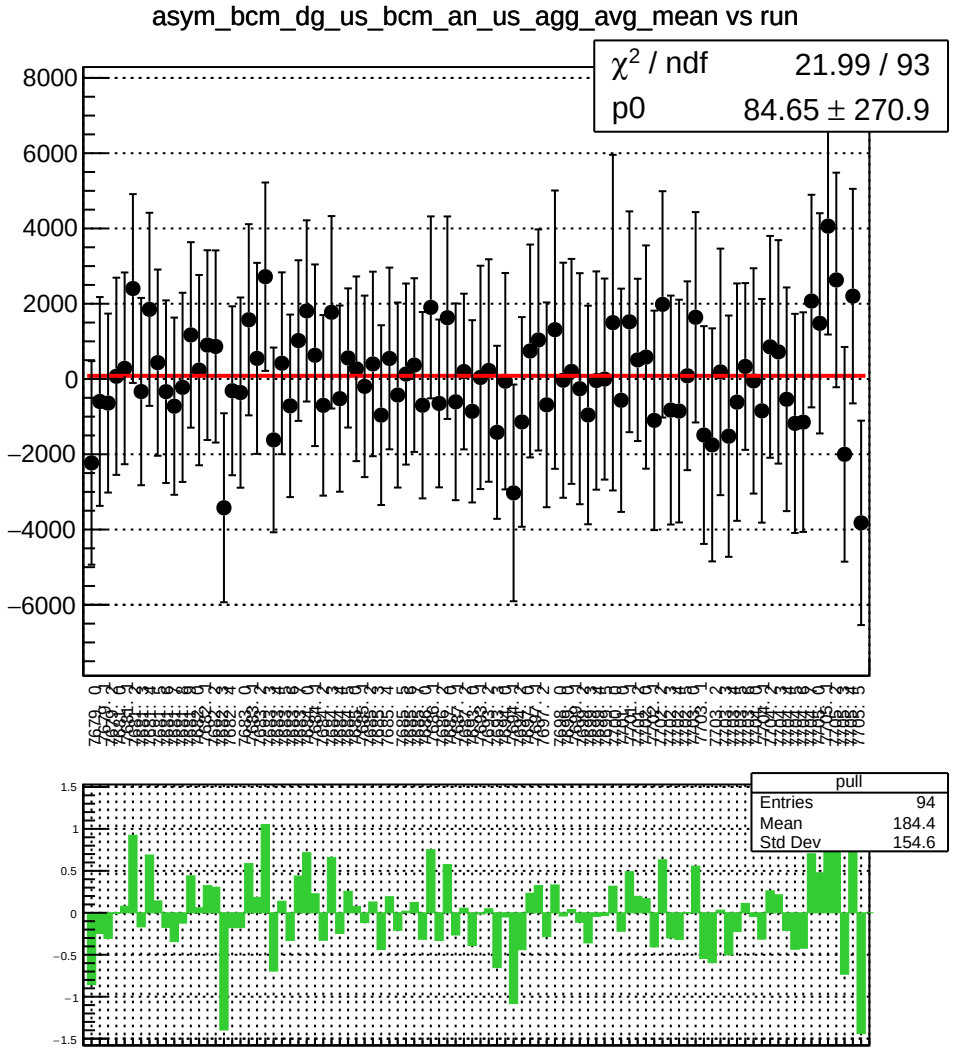

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 21.59 / 93
p0 82.89 ± 269.8
pull
Entries 94
Mean −672.4
Std Dev 742.3

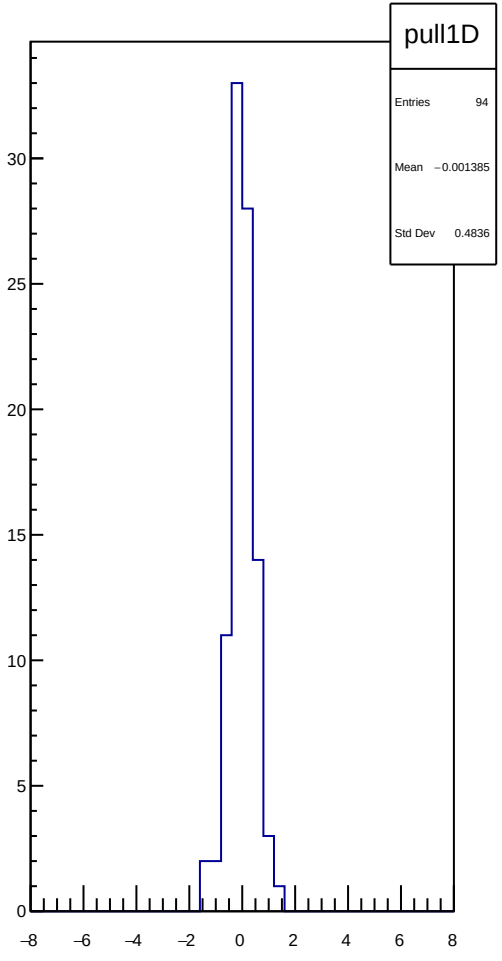

pull1D
Entries 94
Mean −0.0003904
Std Dev 0.4792

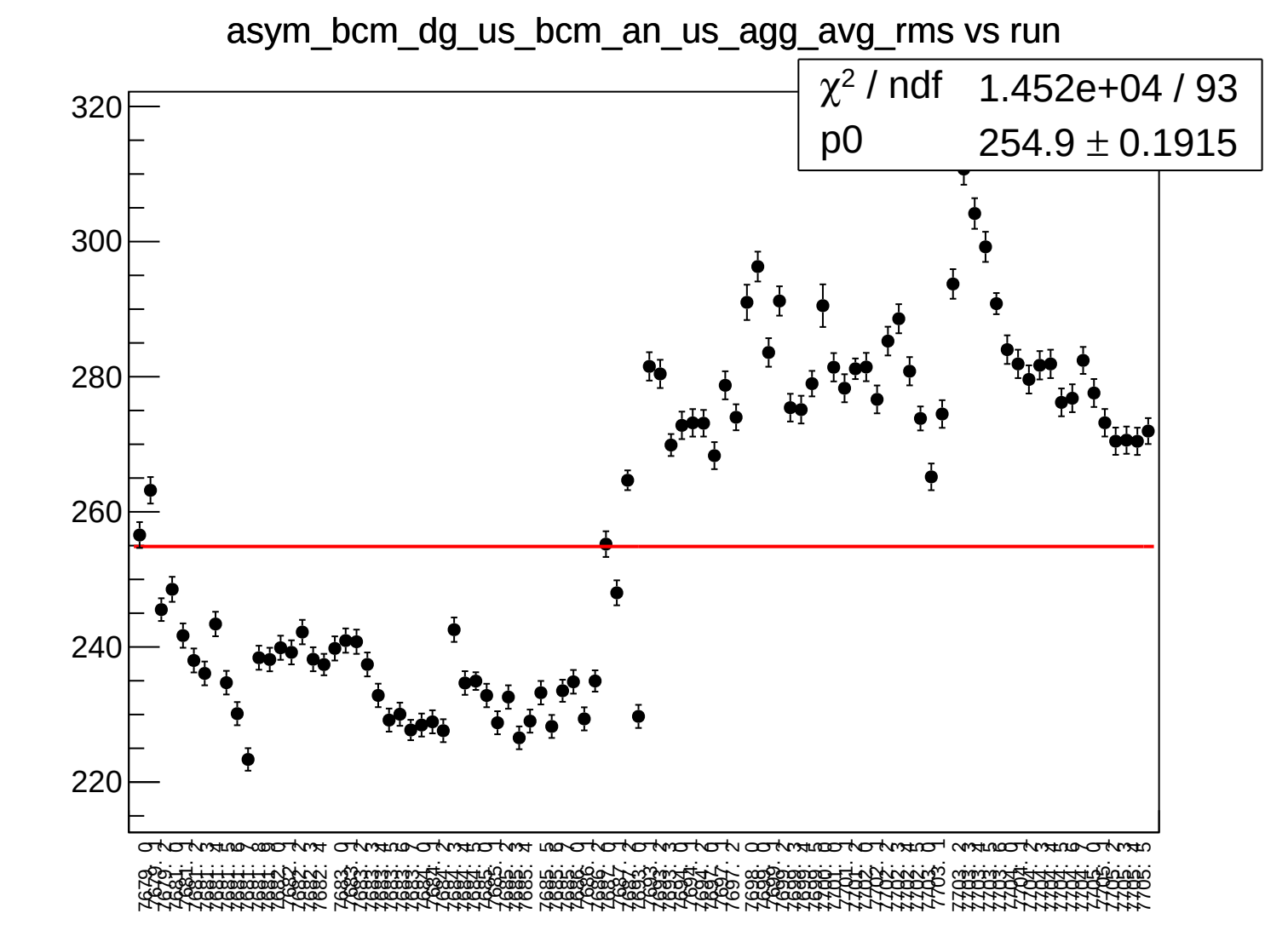

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.469e+04 / 93
p0 253.8 ± 0.1908
320
300
280
260
240
220


asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 80 / 93
p0 22.14 ± 18.38
pull
Entries 94
Mean 304.3
Std Dev 261.2
pull1D
Entries 94
Mean 0.004982
Std Dev 0.9225

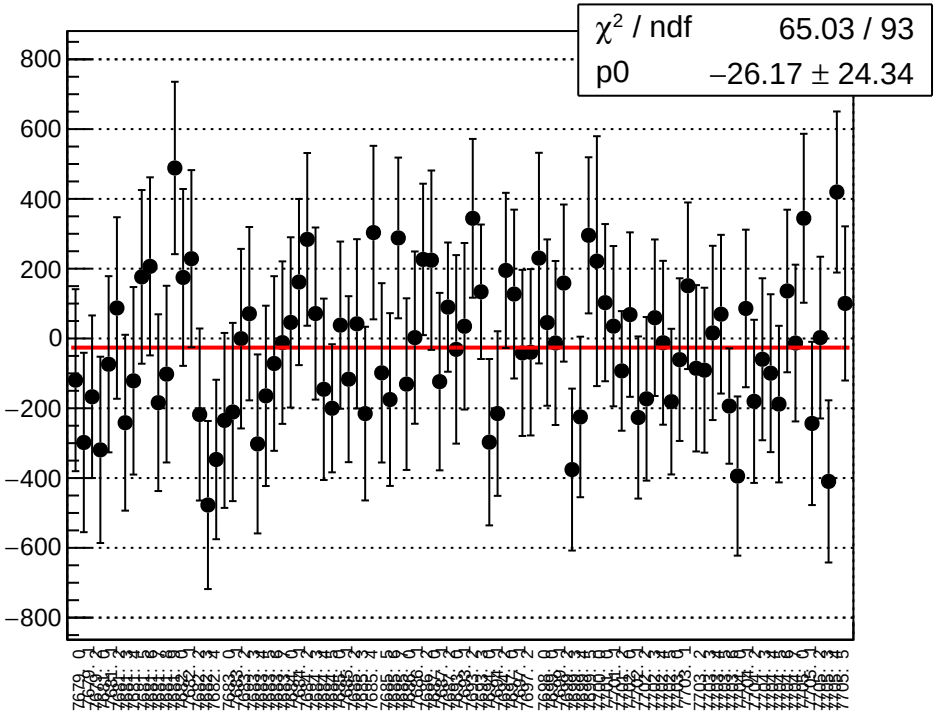

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 5665 / 93
p0 17.34 ± 0.013
20
19
18
17
16
15

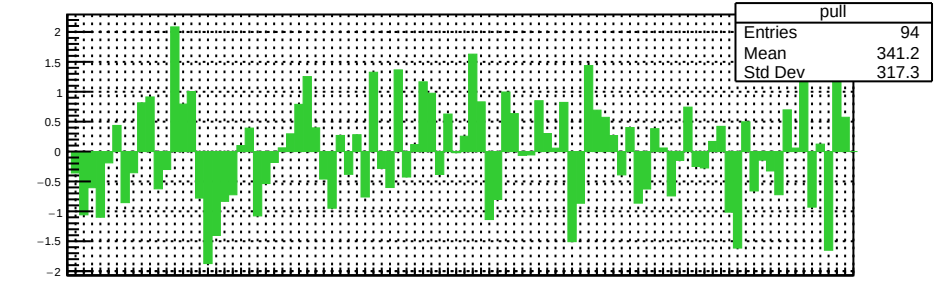

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 21.99 / 93
p0 84.65 ± 270.9
pull
Entries 94
Mean 184.4
Std Dev 154.6

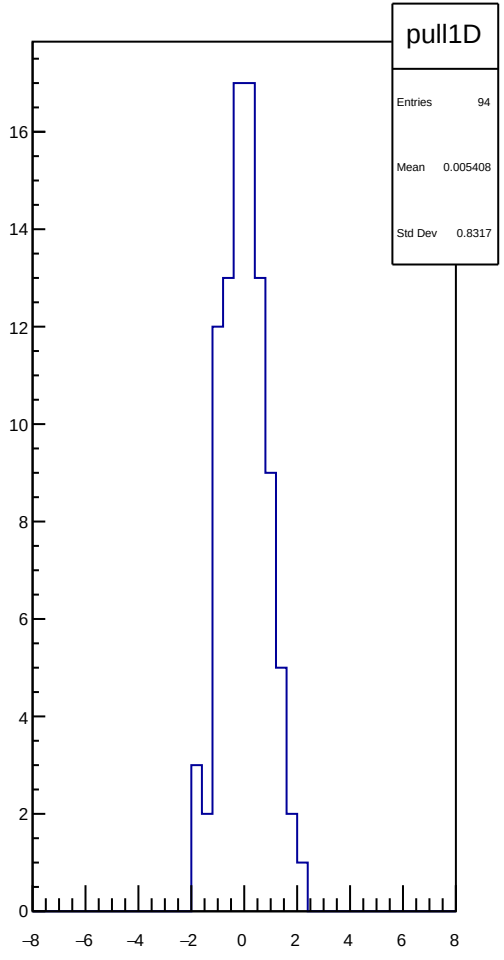

pull1D
Entries 94
Mean −0.001385
Std Dev 0.4836

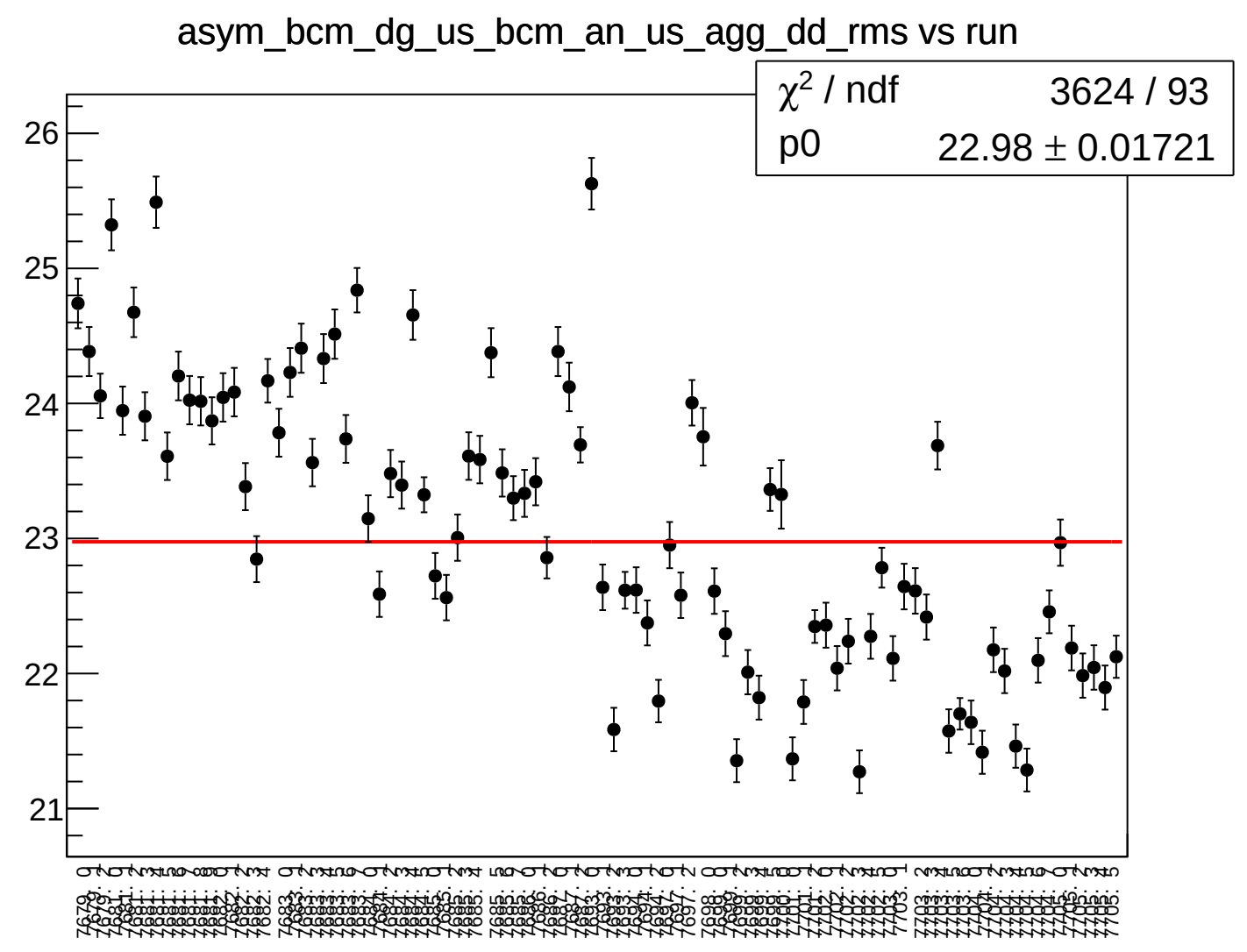

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.452e+04 / 93
p0 254.9 ± 0.1915
320
300
280
260
240
220

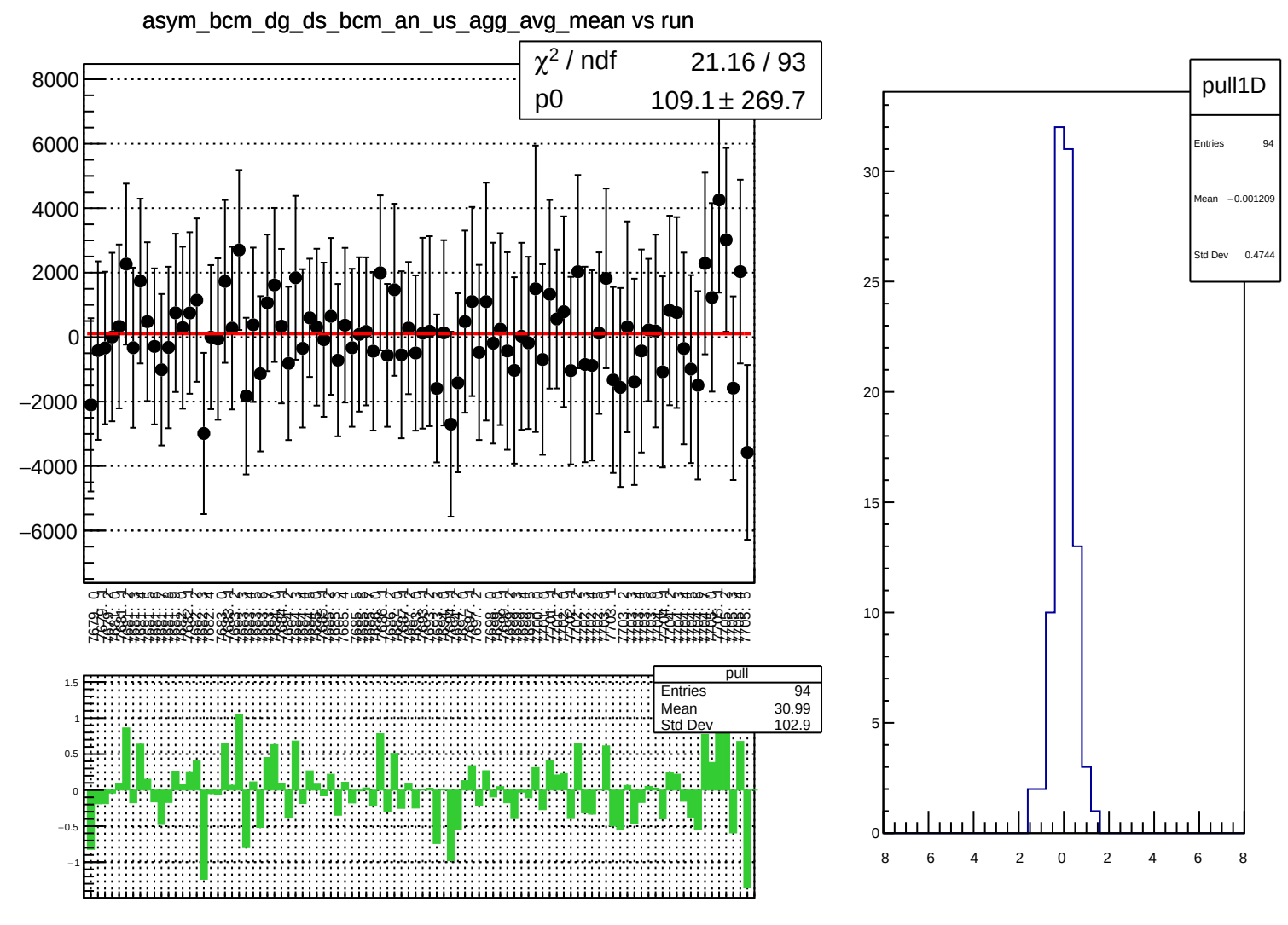
asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run

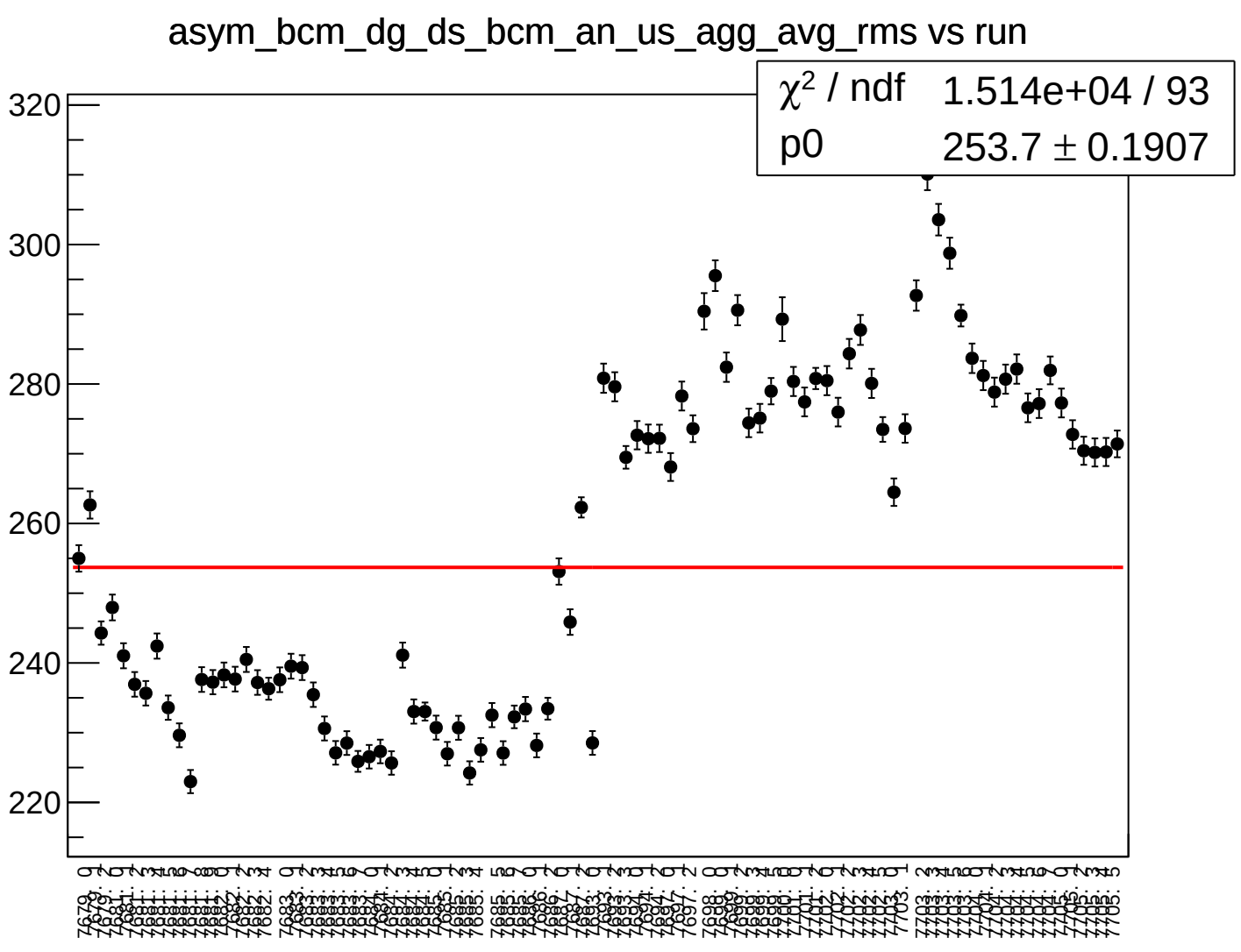


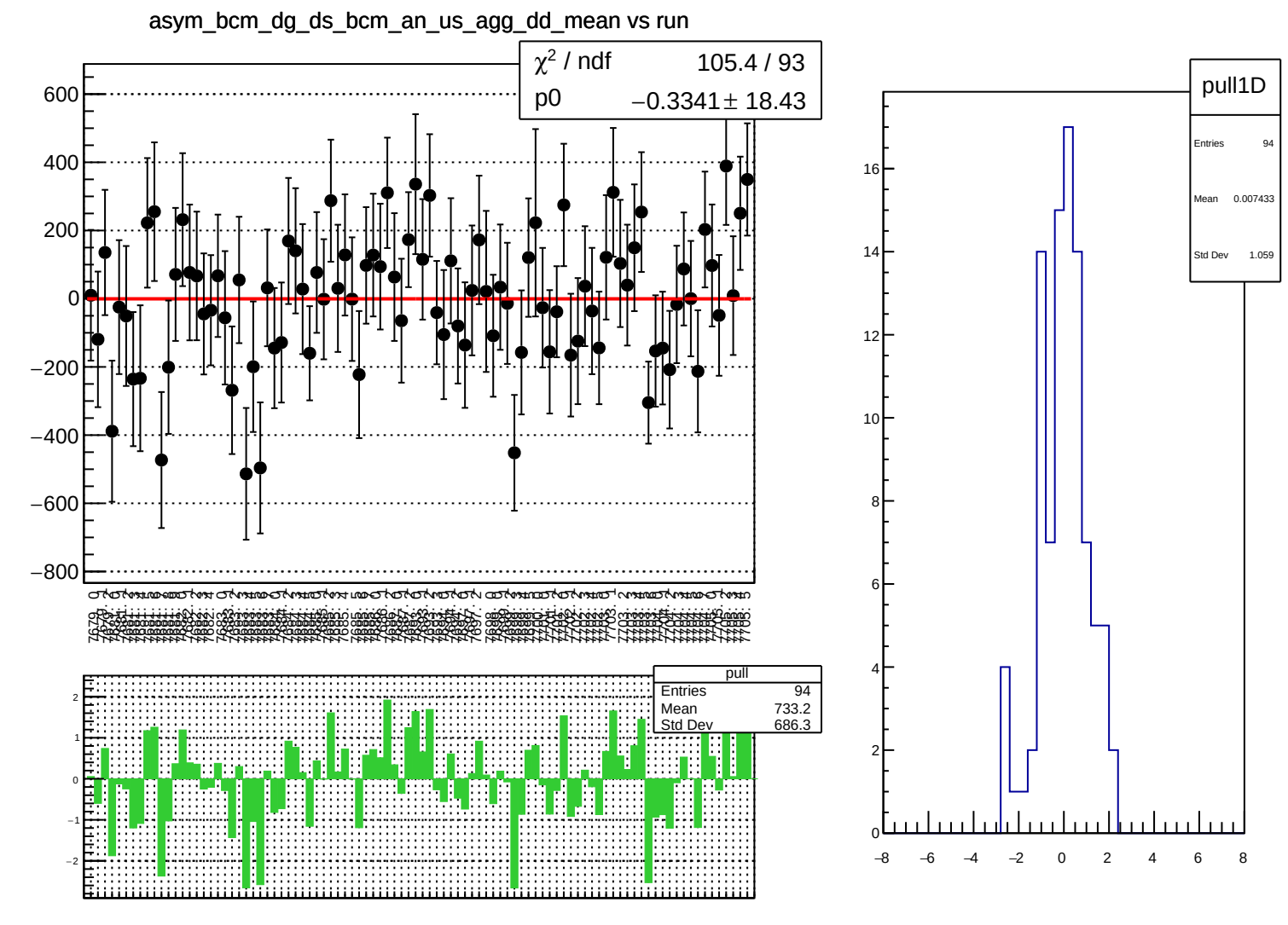


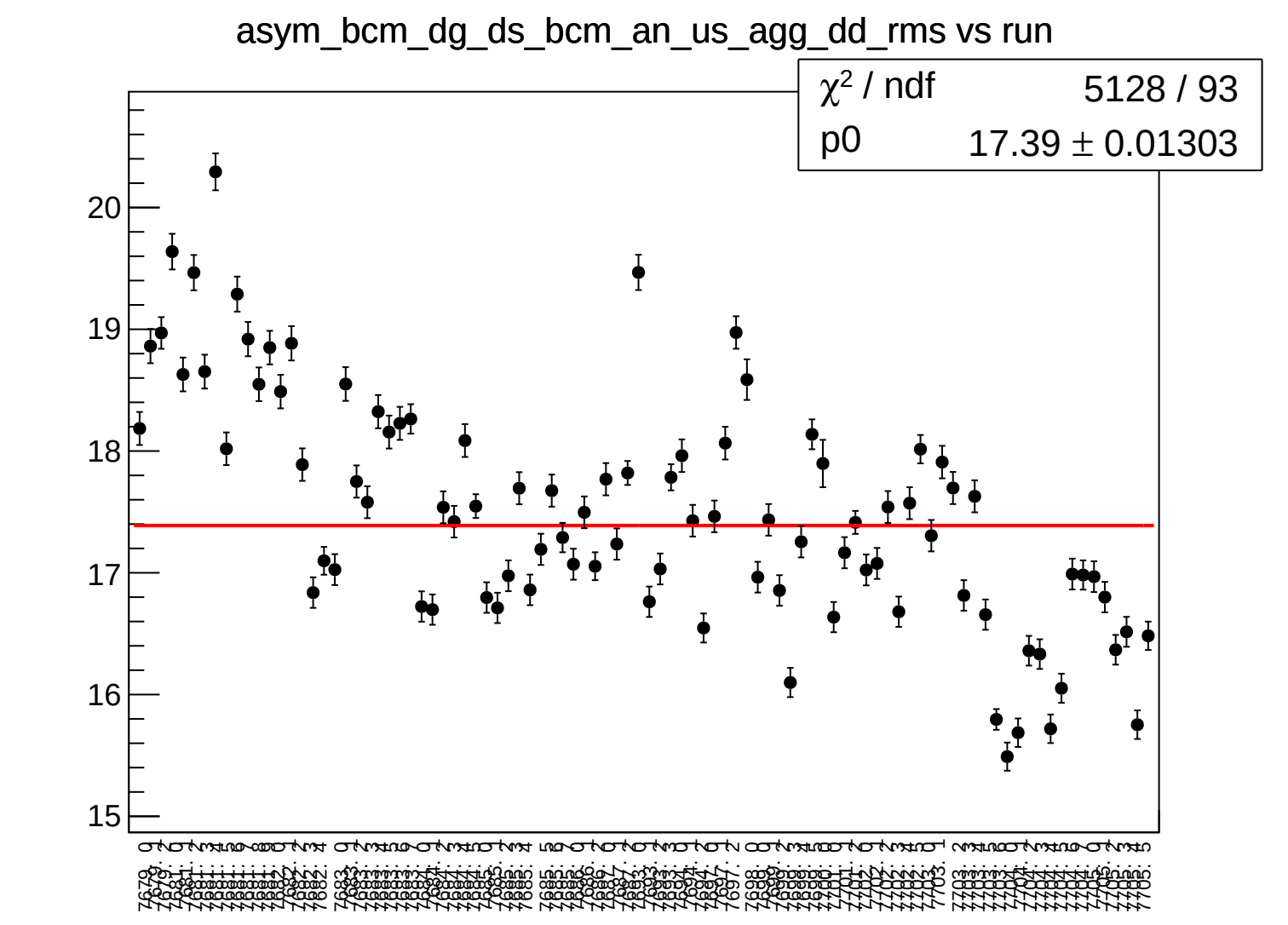


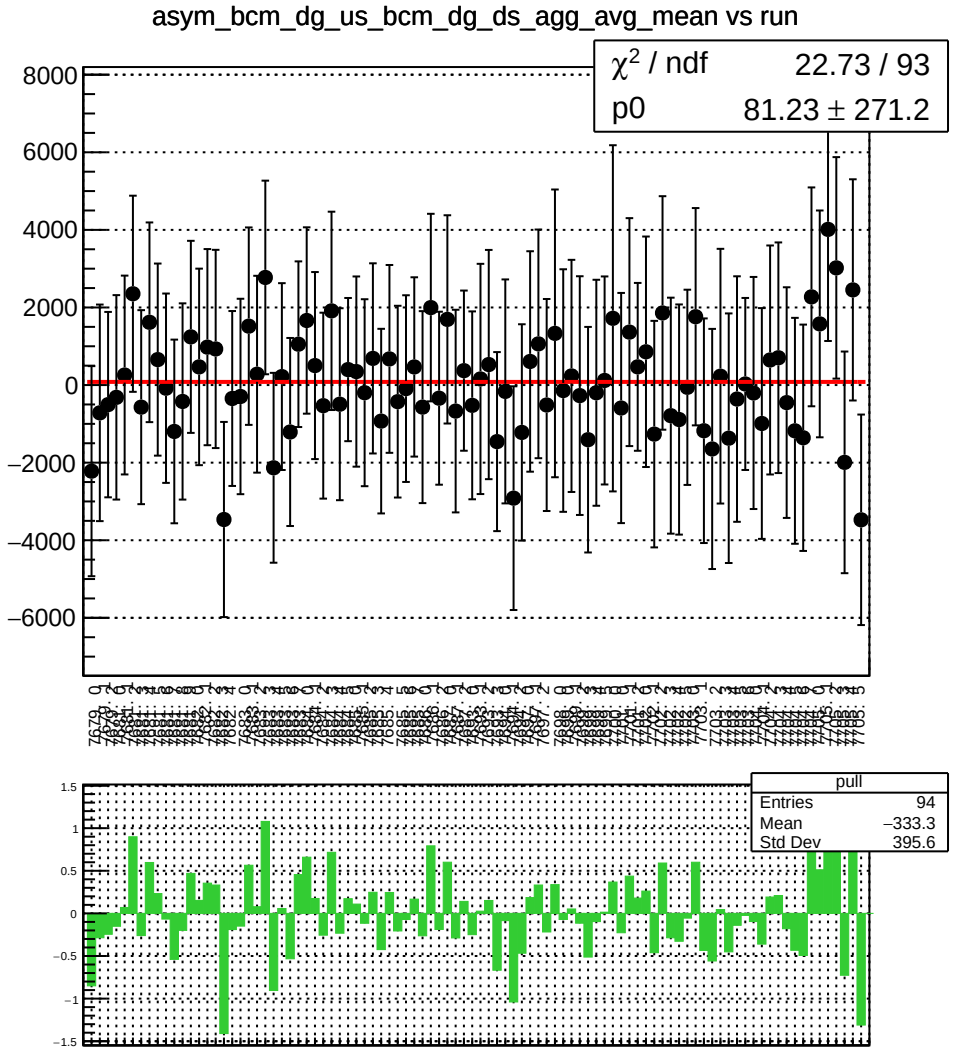

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 3624 / 93
p0 22.98 ± 0.01721
26
25
24
23
22
21

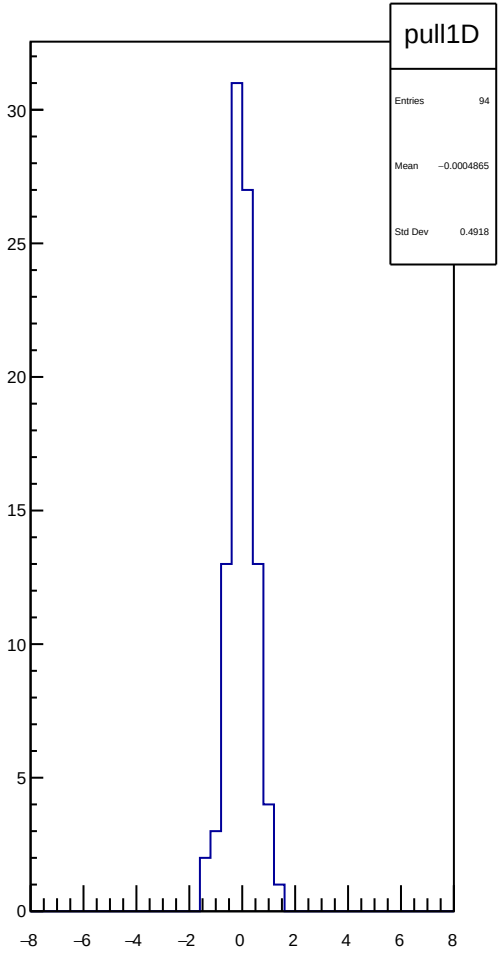

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 21.16 / 93
p0 109.1 ± 269.7
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 30.99
Std Dev 102.9
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean −0.001209
Std Dev 0.4744
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

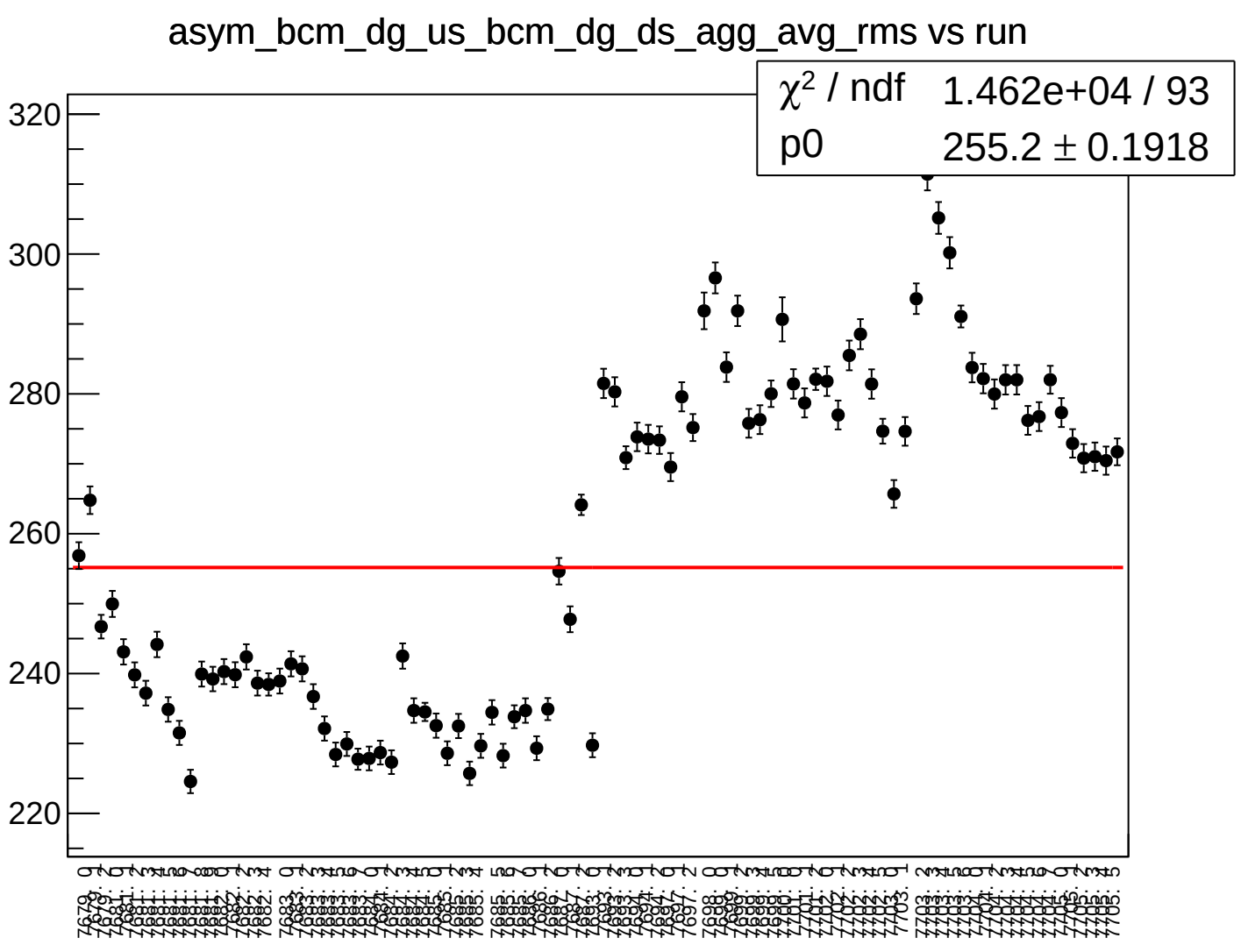

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.514e+04 / 93
p0 253.7 ± 0.1907
320
300
280
260
240
220

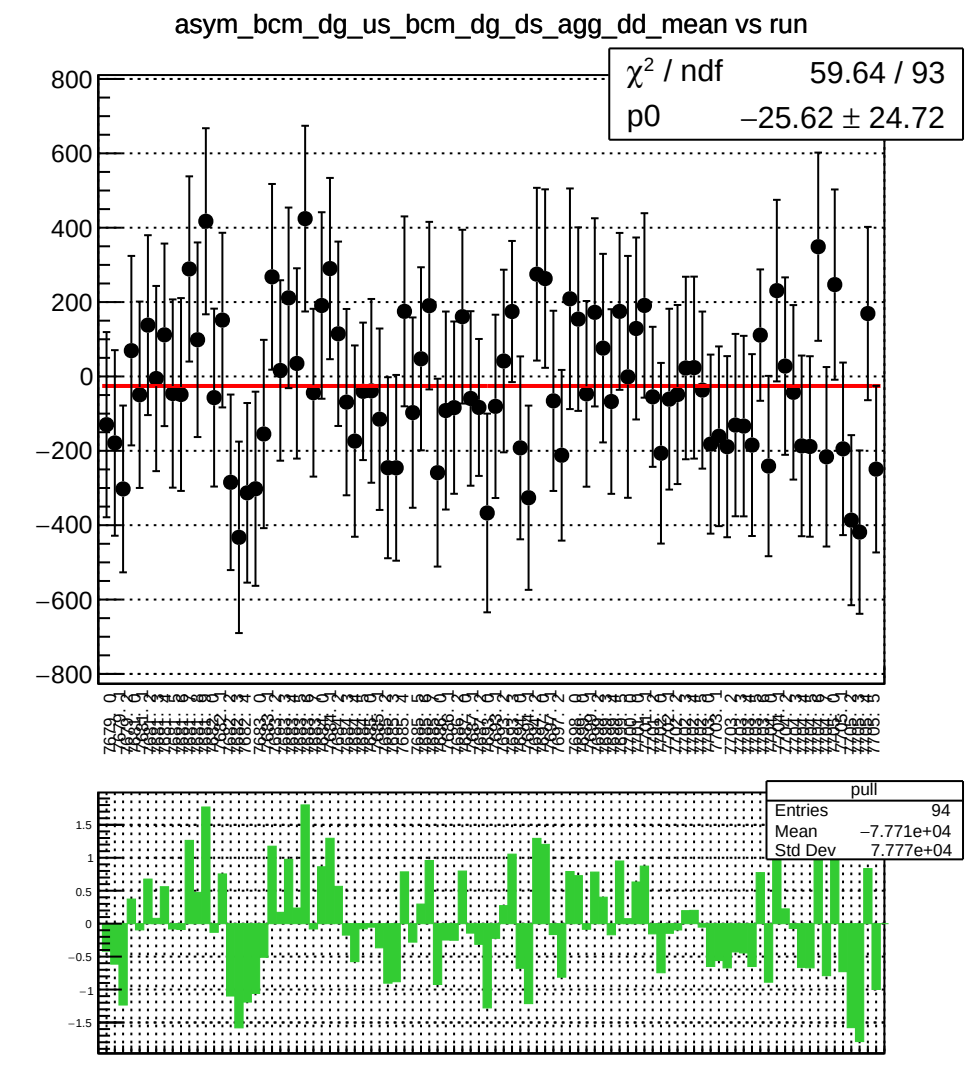

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 105.4 / 93
p0 −0.3341 ± 18.43
pull
Entries 94
Mean 733.2
Std Dev 686.3
pull1D
Entries 94
Mean 0.007433
Std Dev 1.059

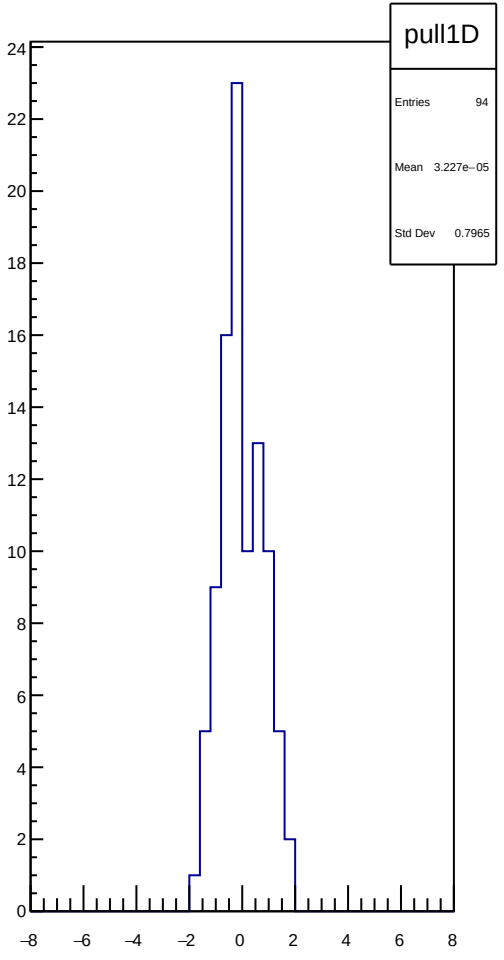

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5128 / 93
p0 17.39 ± 0.01303
20
19
18
17
16
15

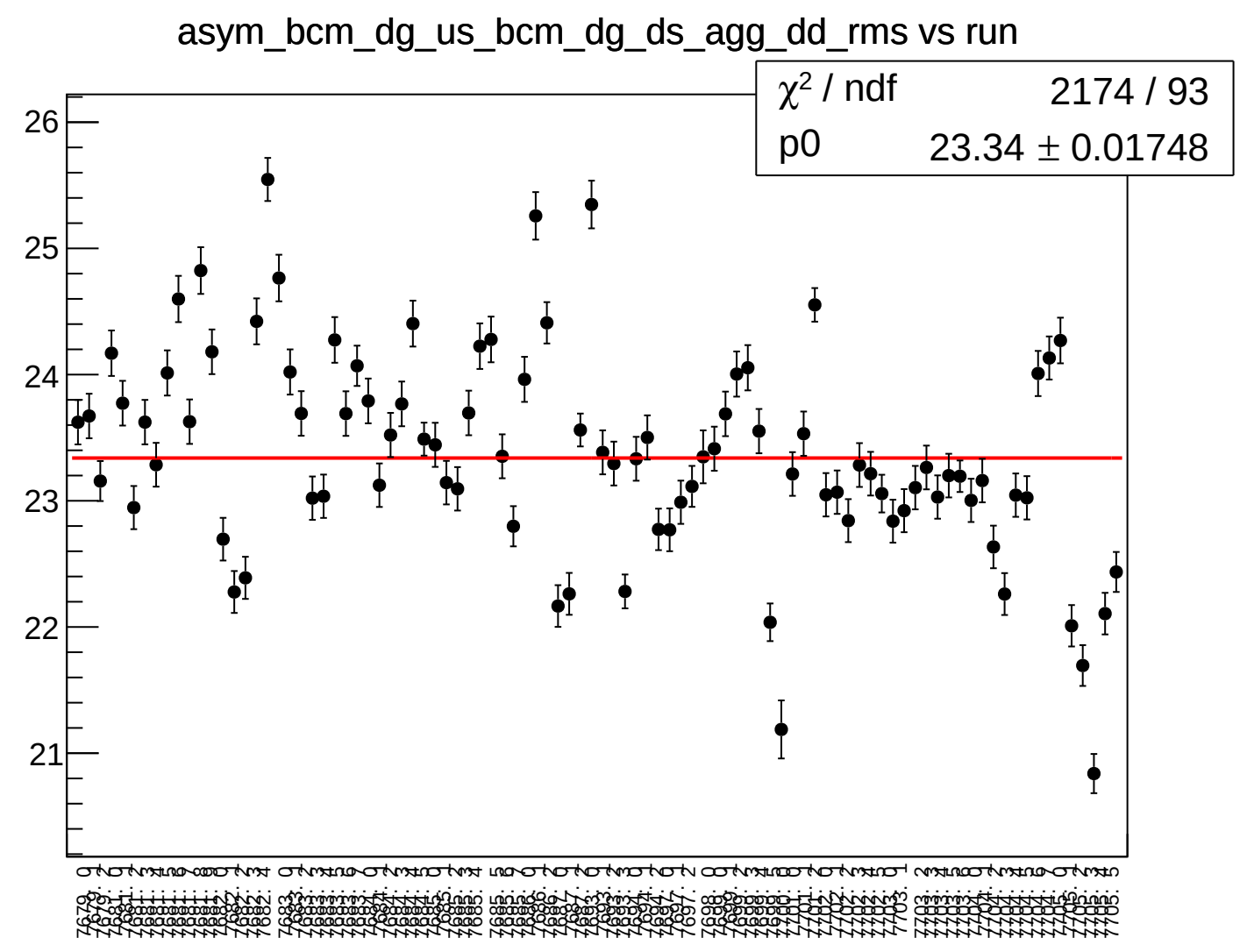

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 22.73 / 93
p0 81.23 ± 271.2
pull
Entries 94
Mean −333.3
Std Dev 395.6

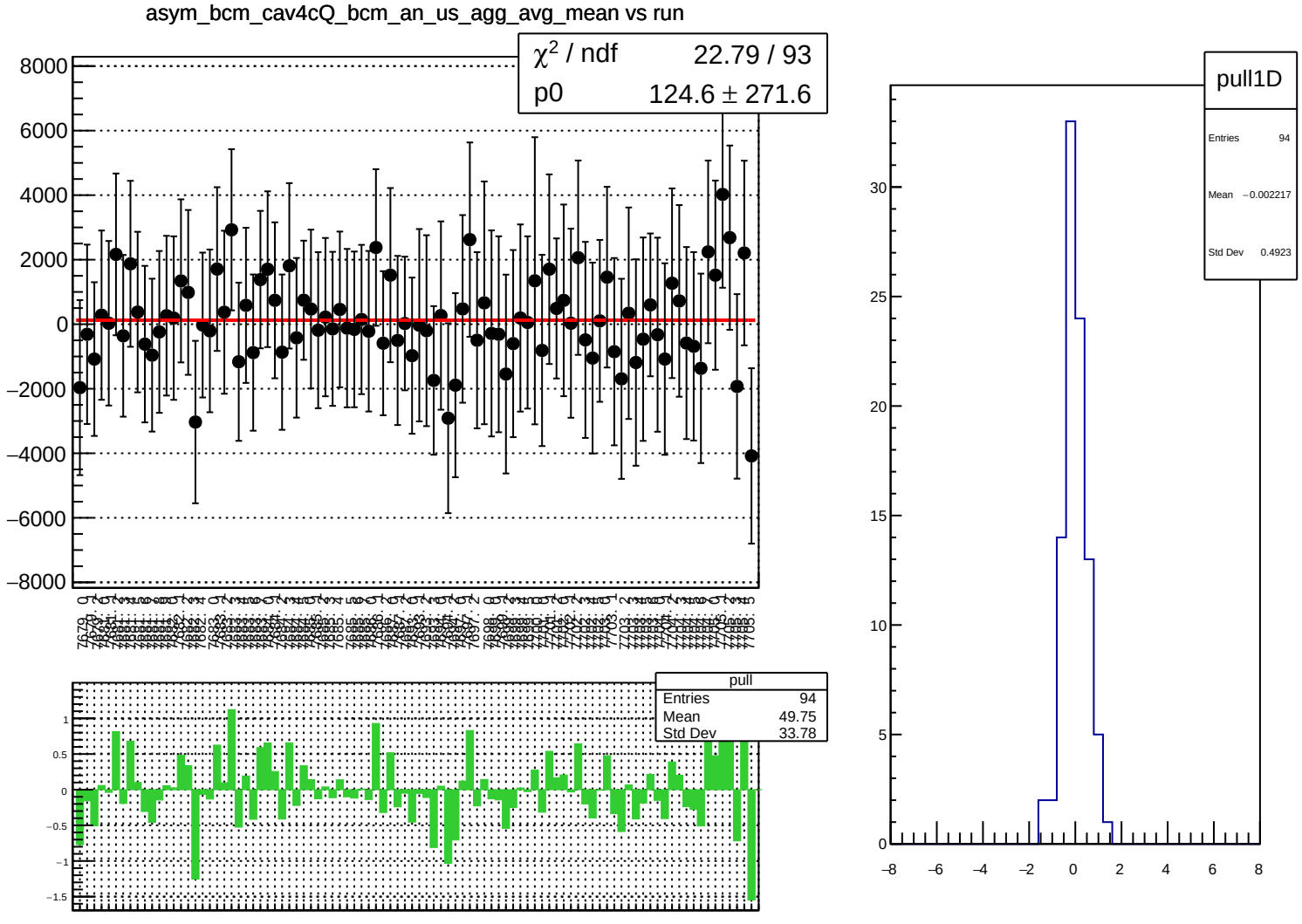

pull1D
Entries 94
Mean −0.0004865
Std Dev 0.4918

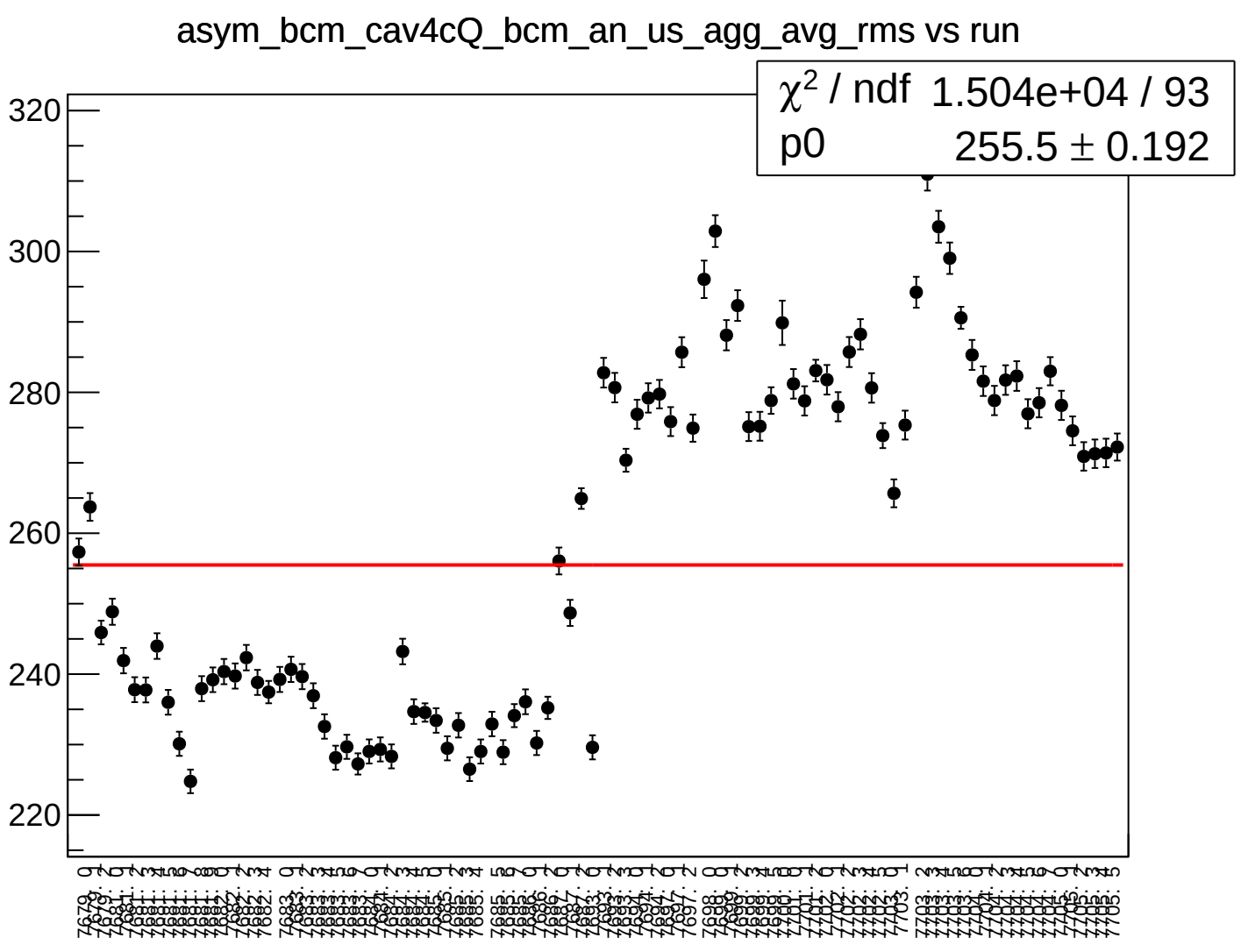

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.462e+04 / 93
p0 255.2 ± 0.1918
320
300
280
260
240
220

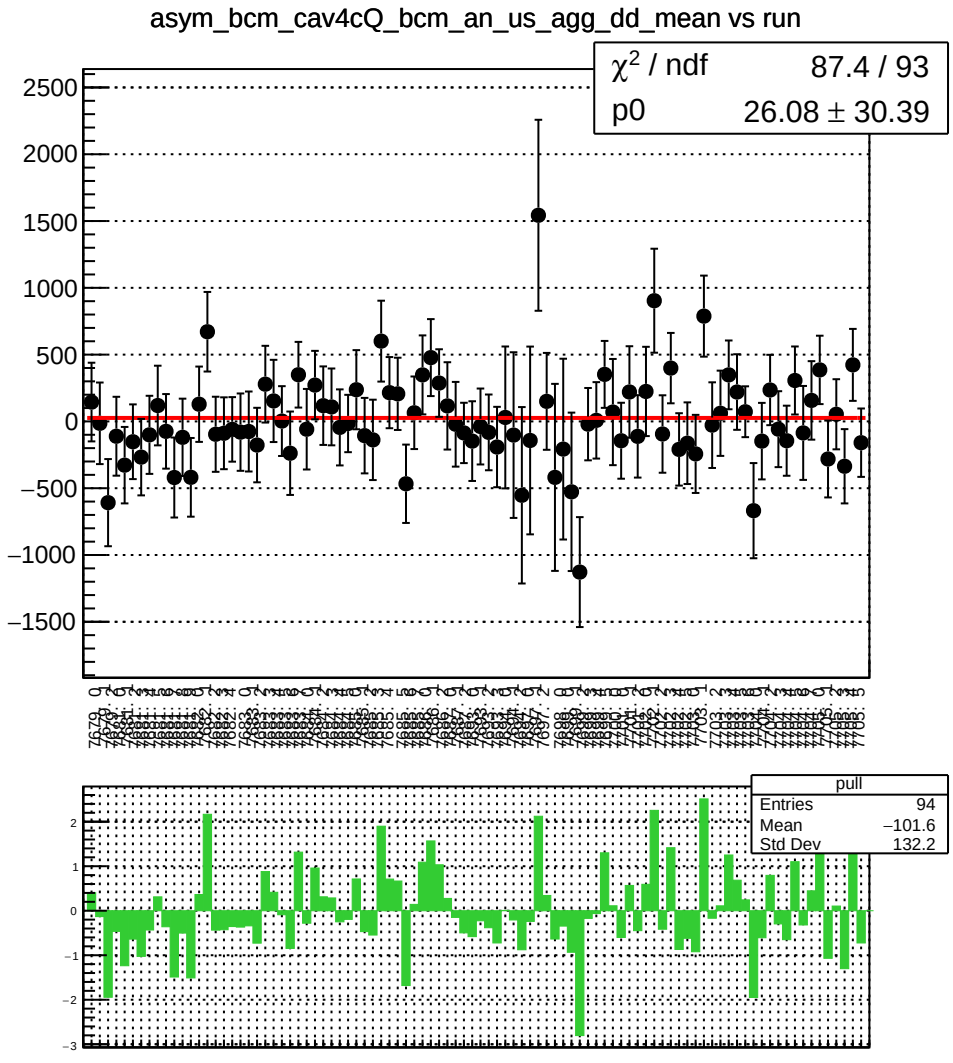

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 59.64 / 93
p0 −25.62 ± 24.72
pull
Entries 94
Mean −7.771e+04
Std Dev 7.777e+04

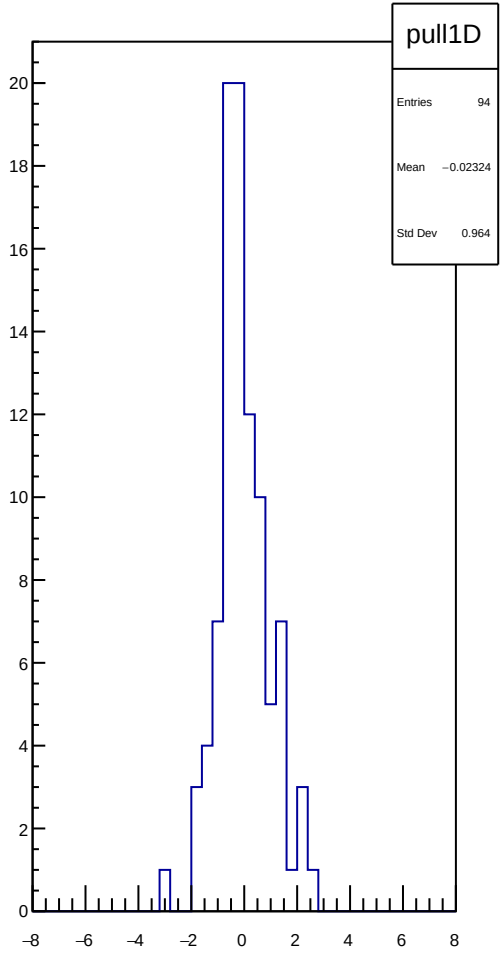

pull1D
Entries 94
Mean 3.227e−05
Std Dev 0.7965

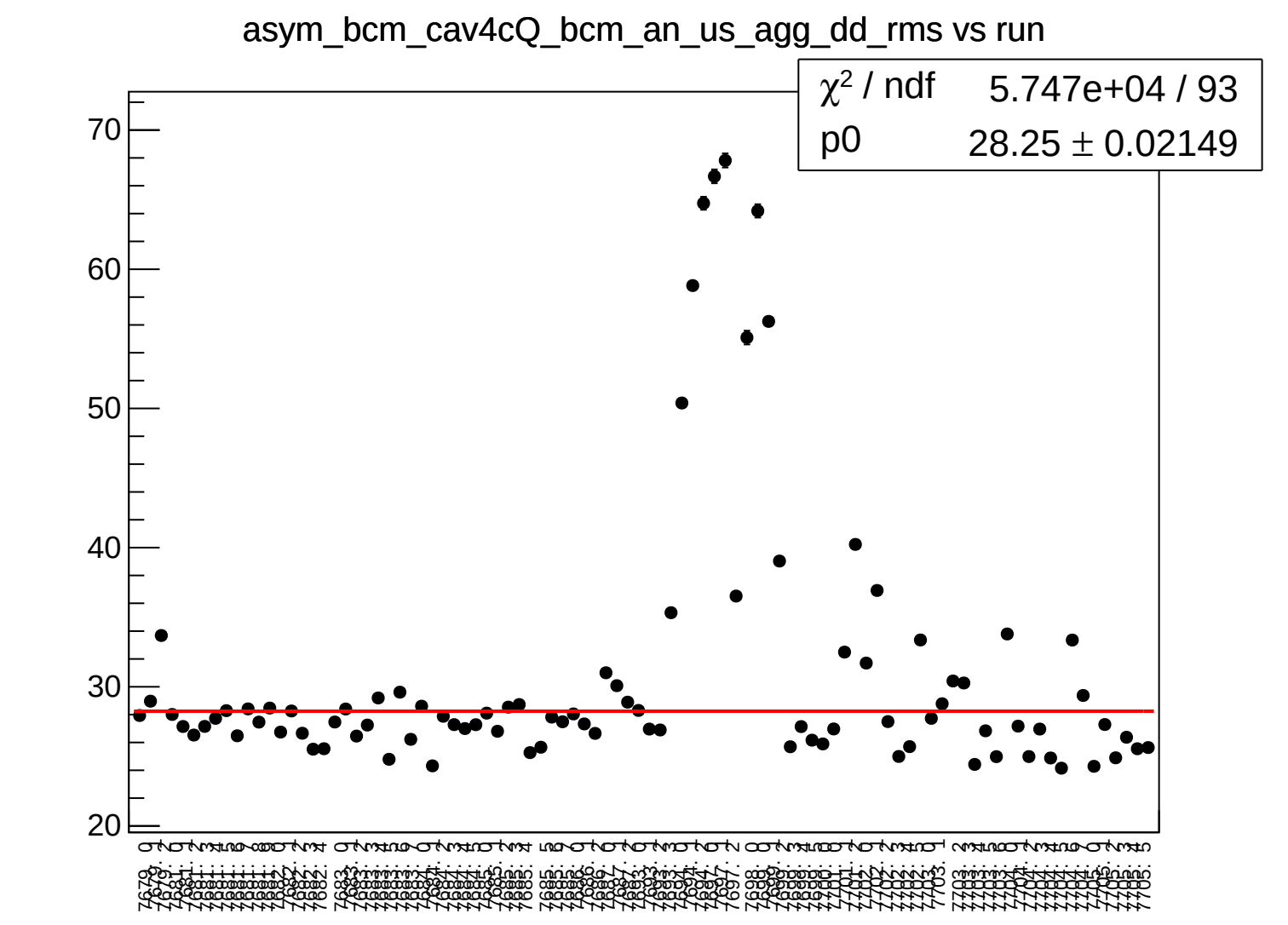

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2174 / 93
p0 23.34 ± 0.01748
26
25
24
23
22
21

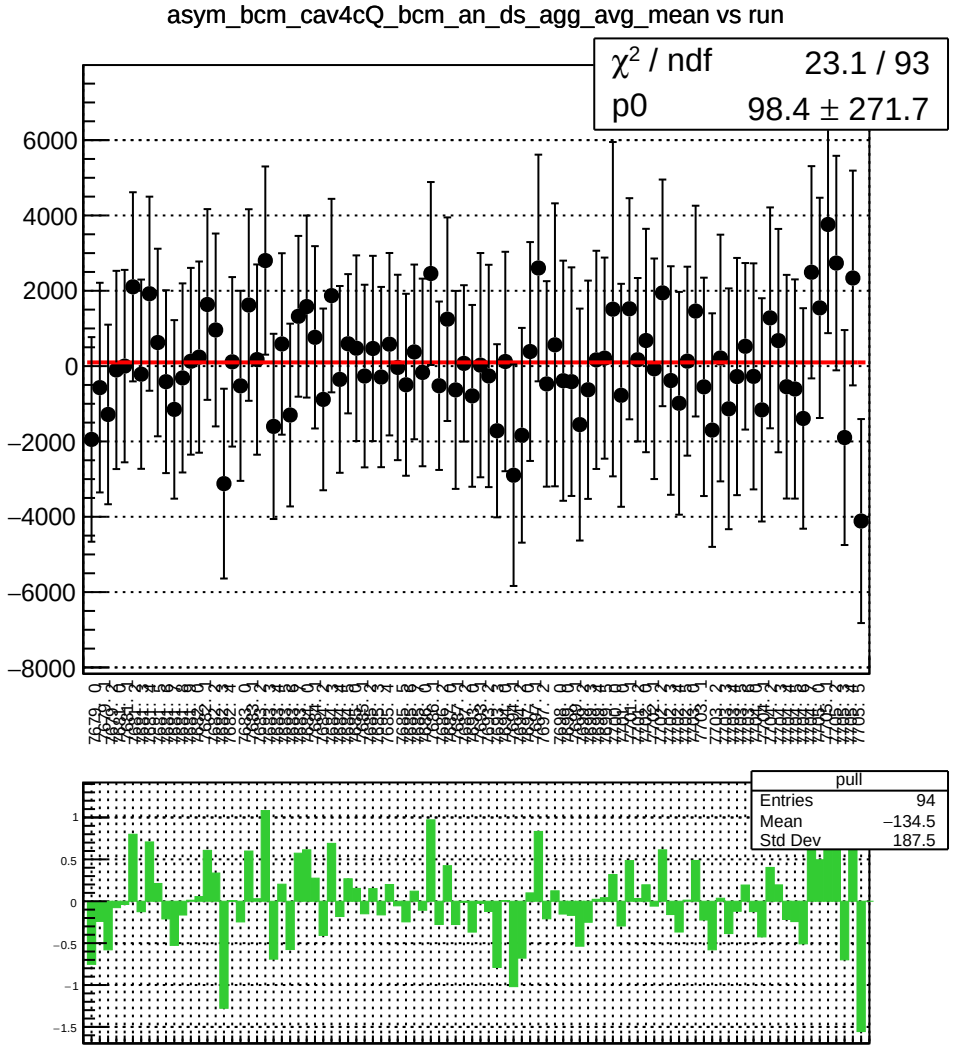

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 22.79 / 93
p0 124.6 ± 271.6
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 94
Mean 49.75
Std Dev 33.78
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.002217
Std Dev 0.4923
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

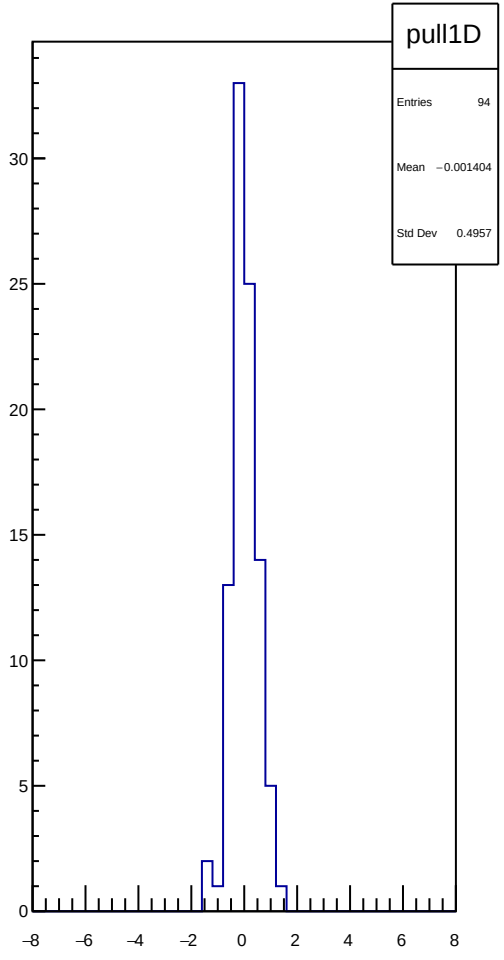

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 1.504e+04 / 93
p0 255.5 ± 0.192
320
300
280
260
240
220

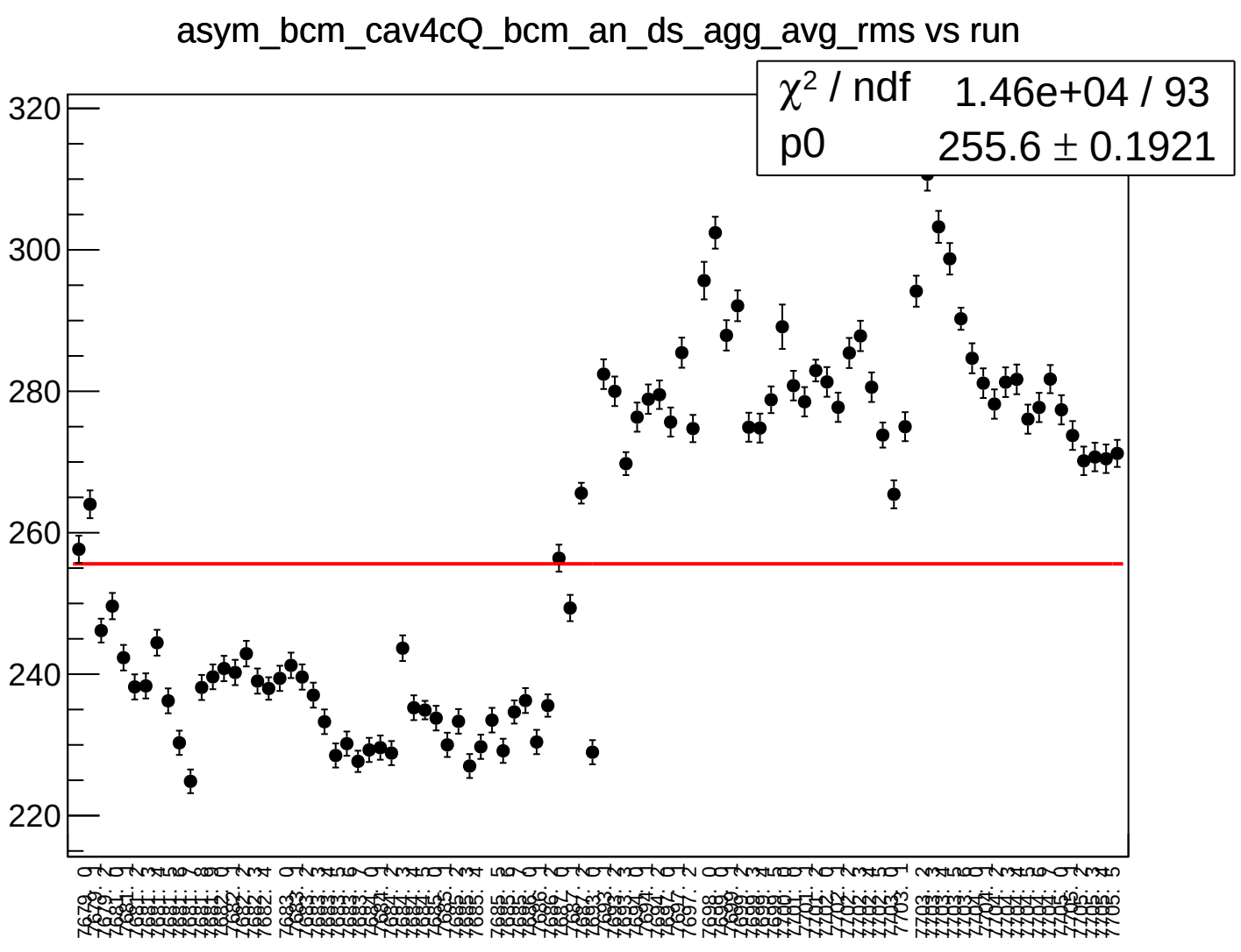

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 87.4 / 93
p0 26.08 ± 30.39
pull
Entries 94
Mean −101.6
Std Dev 132.2

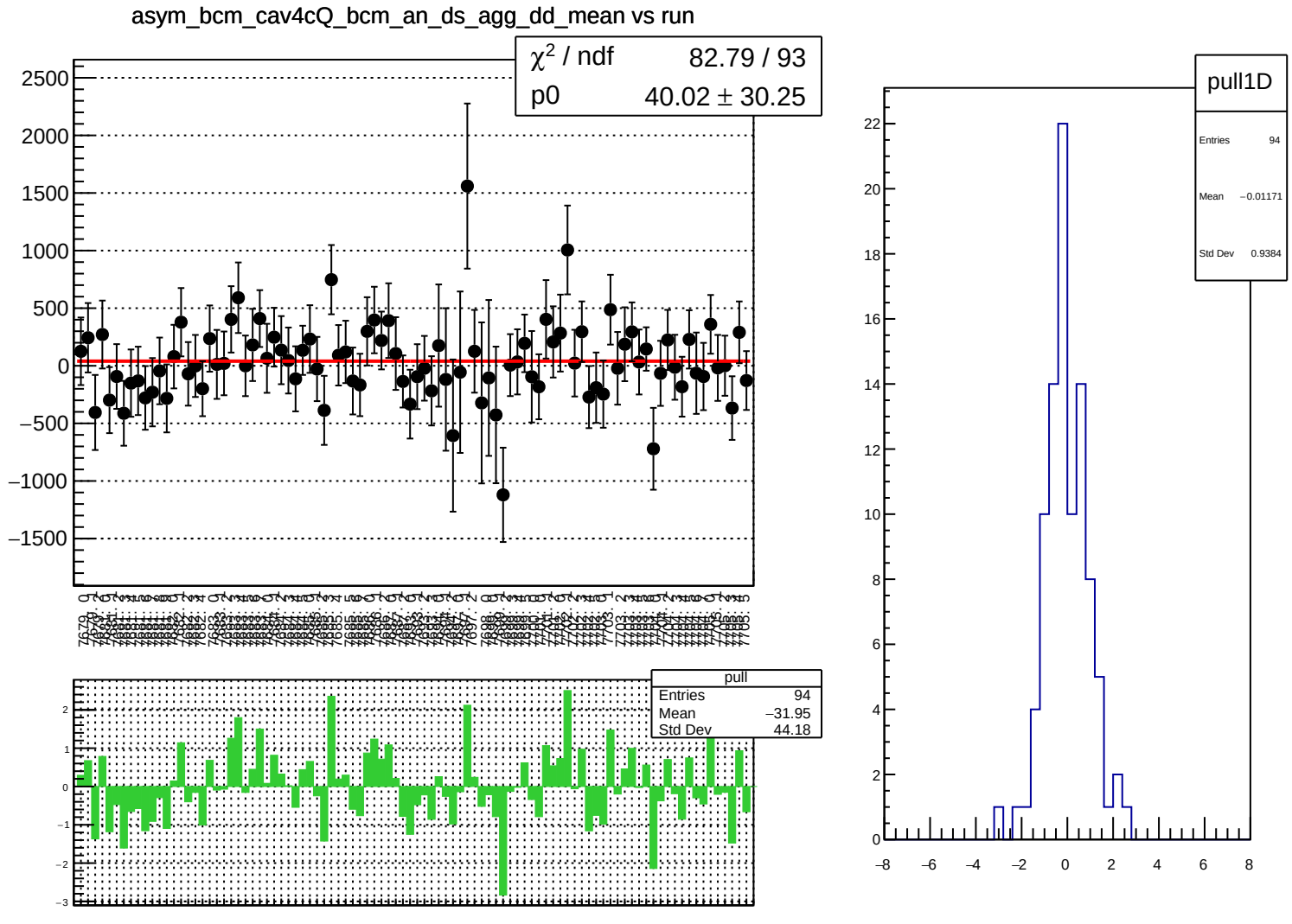

pull1D
Entries 94
Mean −0.02324
Std Dev 0.964

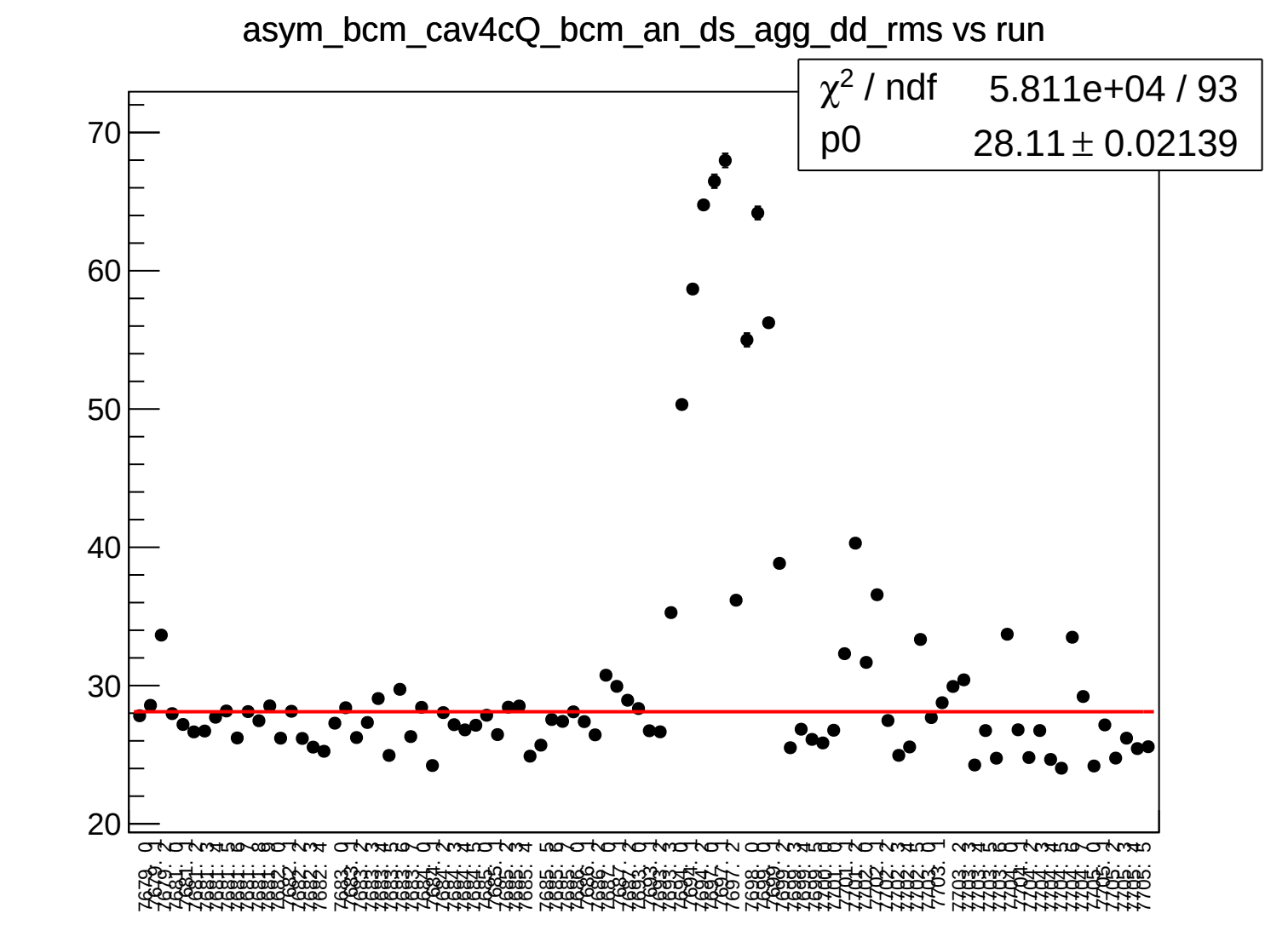

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 5.747e+04 / 93
p0 28.25 ± 0.02149
70
60
50
40
30
20

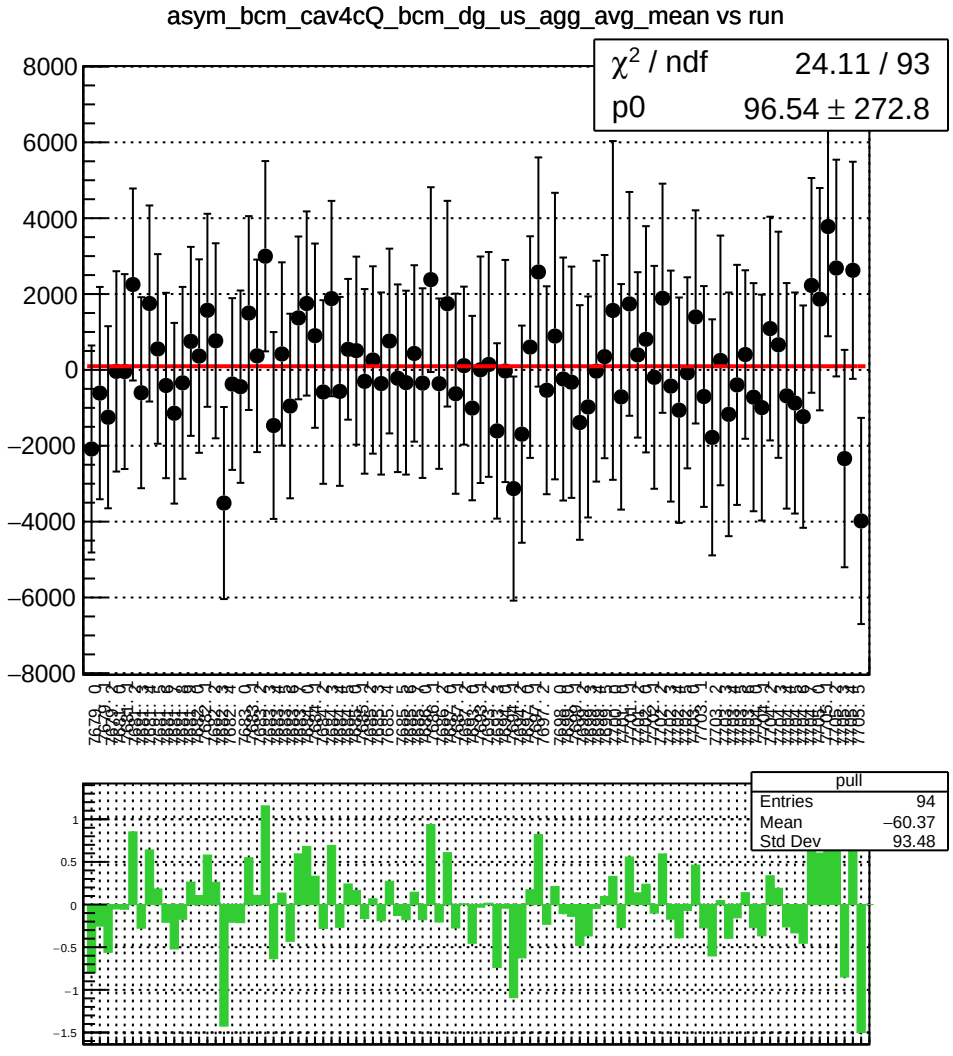

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 23.1 / 93
p0 98.4 ± 271.7
6000
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 94
Mean −134.5
Std Dev 187.5
1
0.5
0
−0.5
−1
−1.5

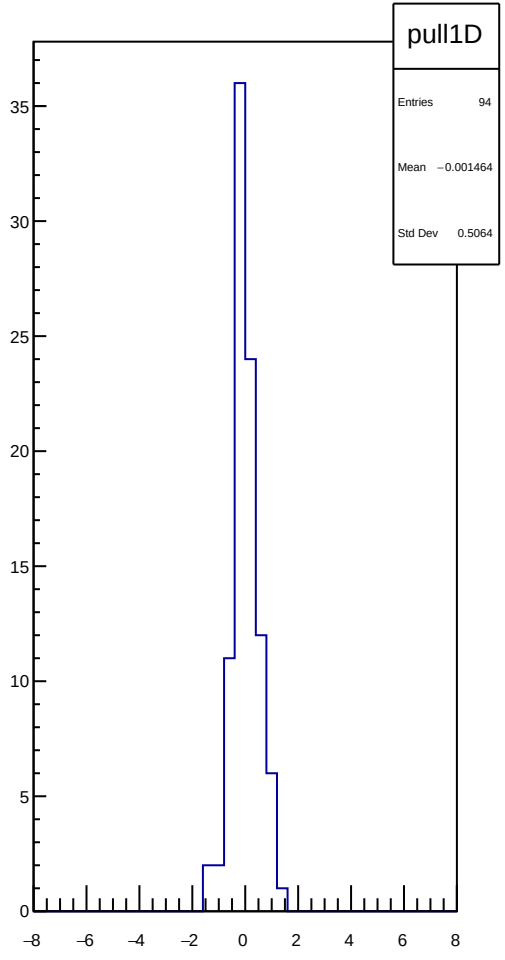

pull1D
Entries 94
Mean −0.001404
Std Dev 0.4957
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

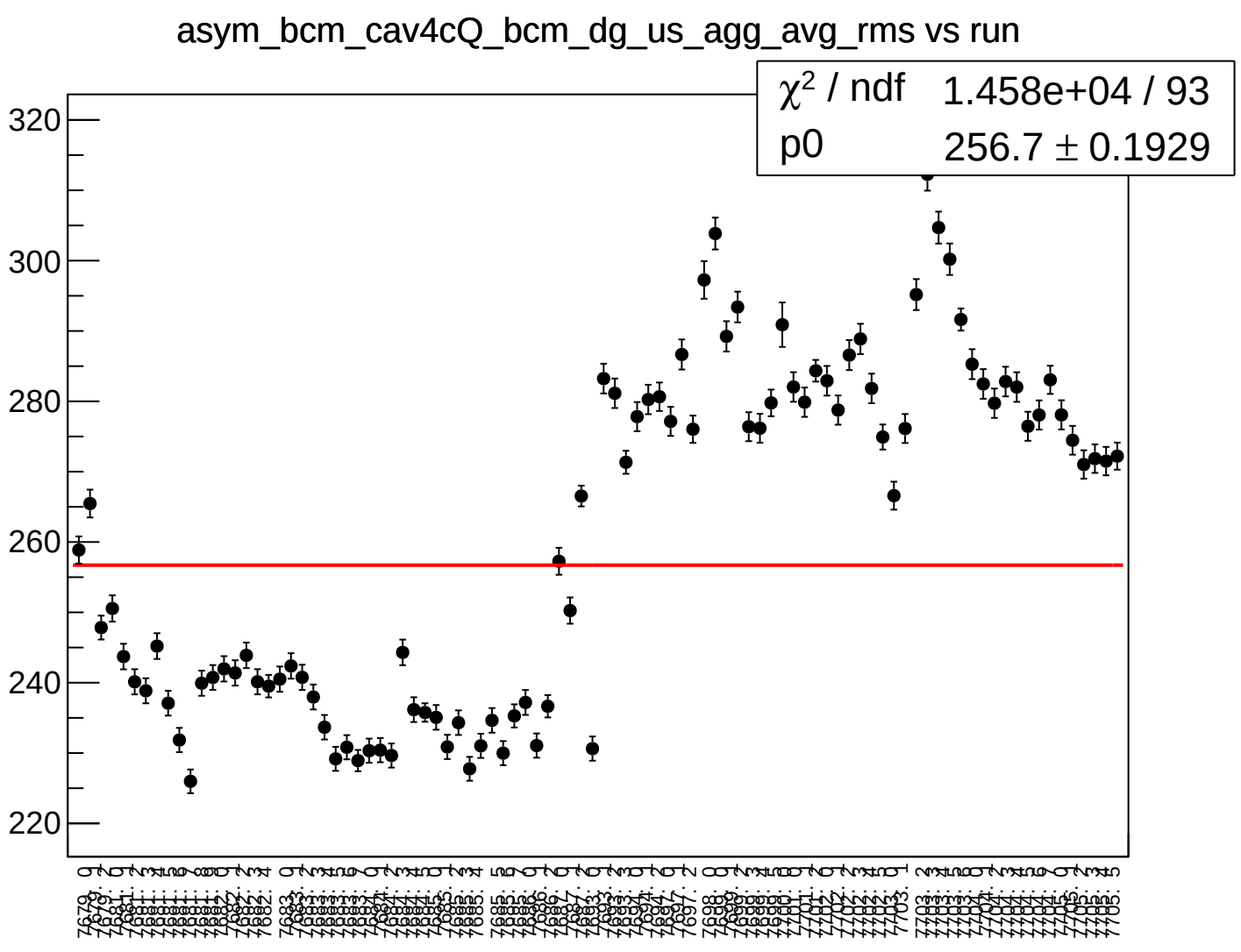

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 1.46e+04 / 93
p0 255.6 ± 0.1921
320
300
280
260
240
220

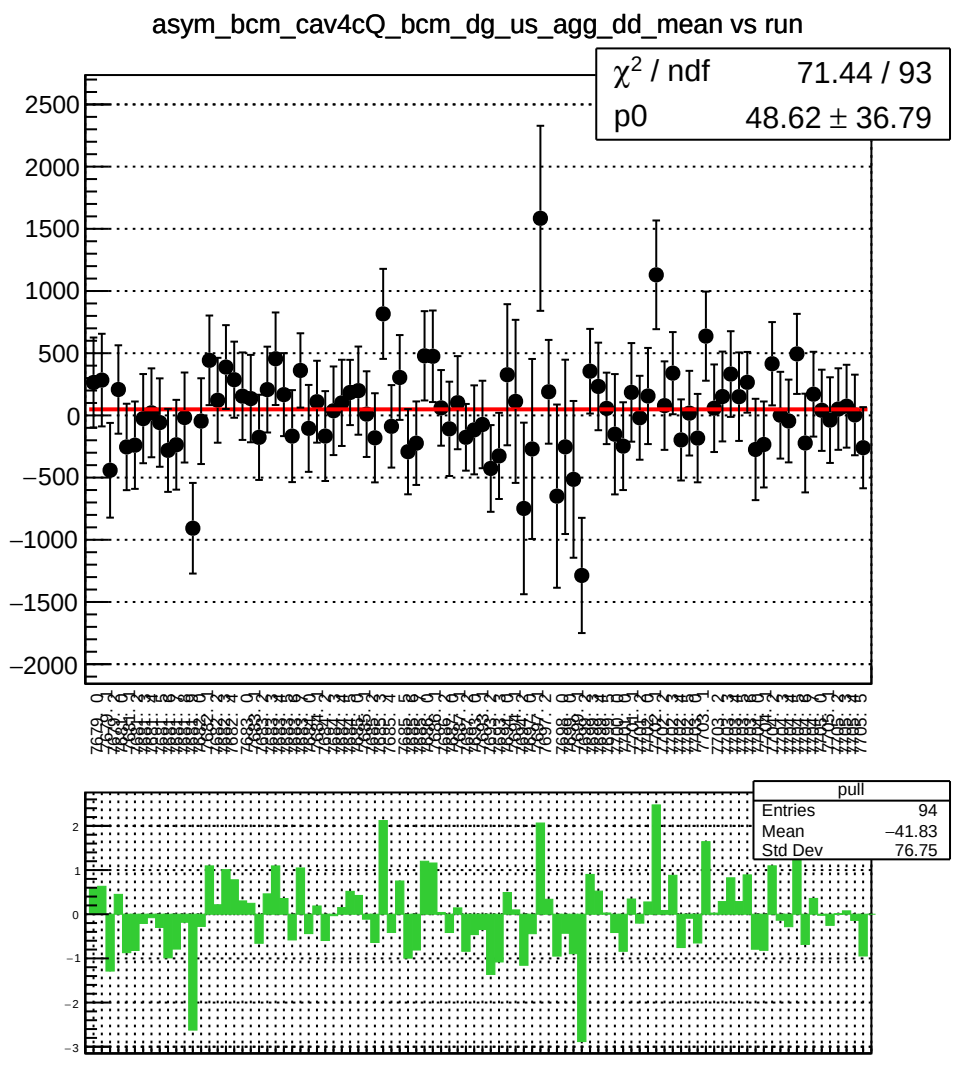

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 82.79 / 93
p0 40.02 ± 30.25
pull
Entries 94
Mean −31.95
Std Dev 44.18
pull1D
Entries 94
Mean −0.01171
Std Dev 0.9384

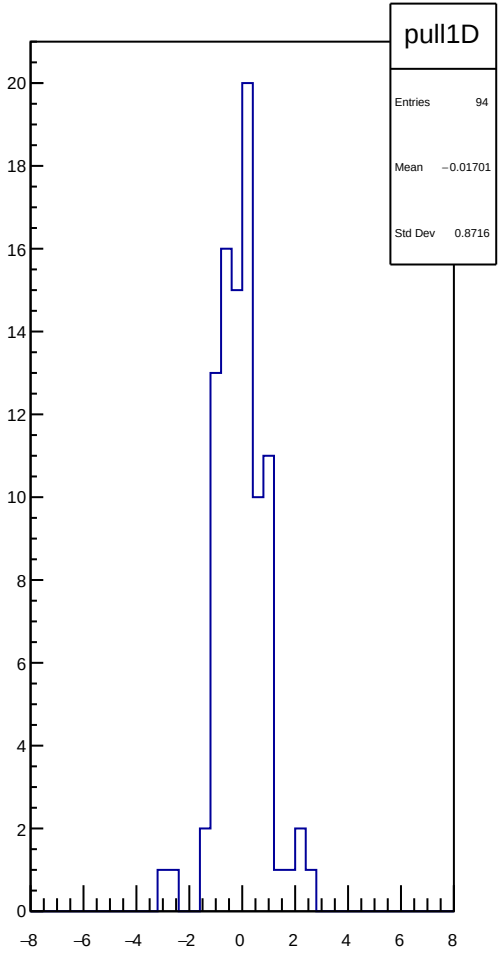

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ^2 / ndf 5.811e+04 / 93
p0 28.11 ± 0.02139
70
60
50
40
30
20

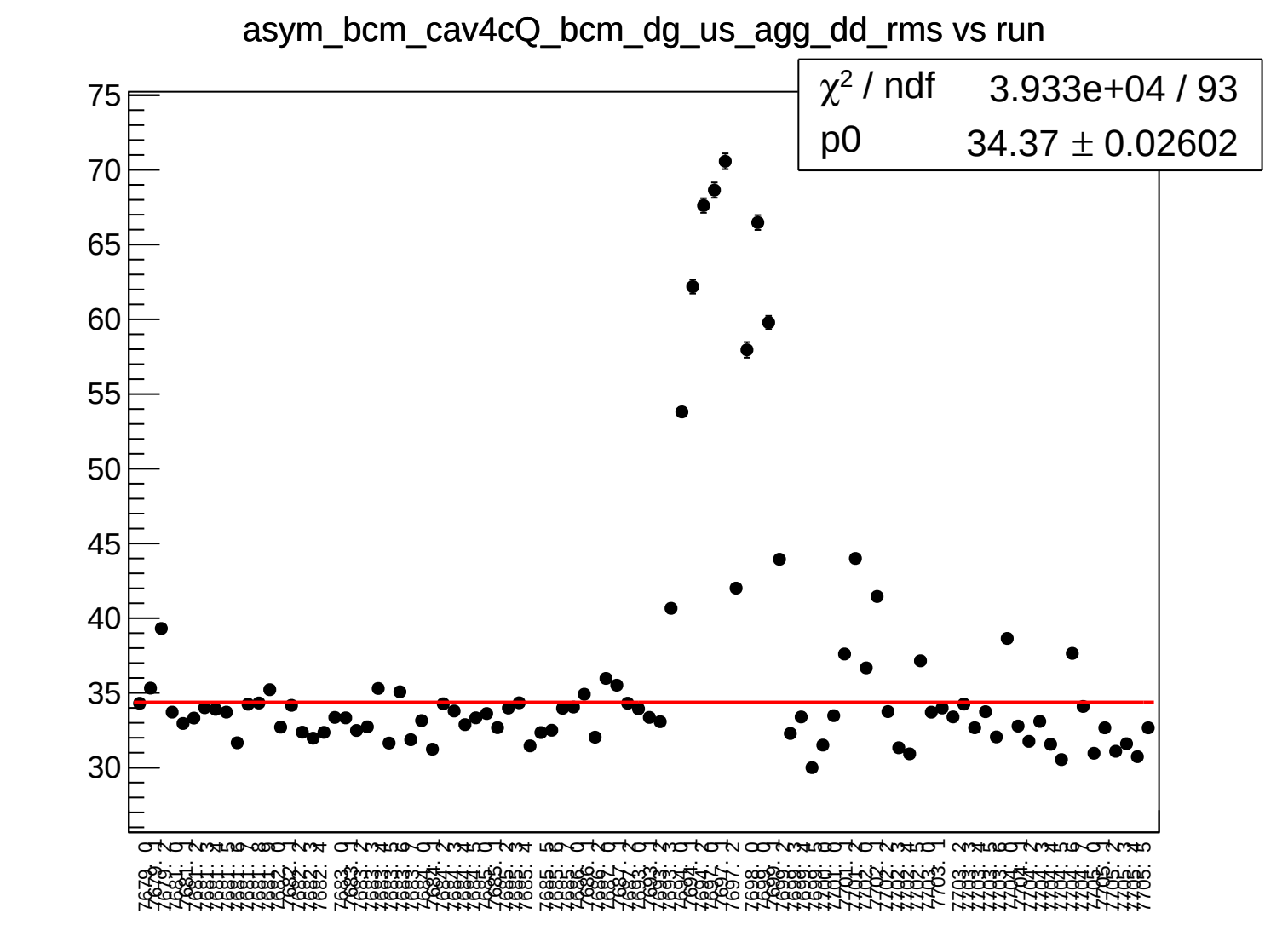

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 24.11 / 93
p0 96.54 ± 272.8
pull
Entries 94
Mean −60.37
Std Dev 93.48

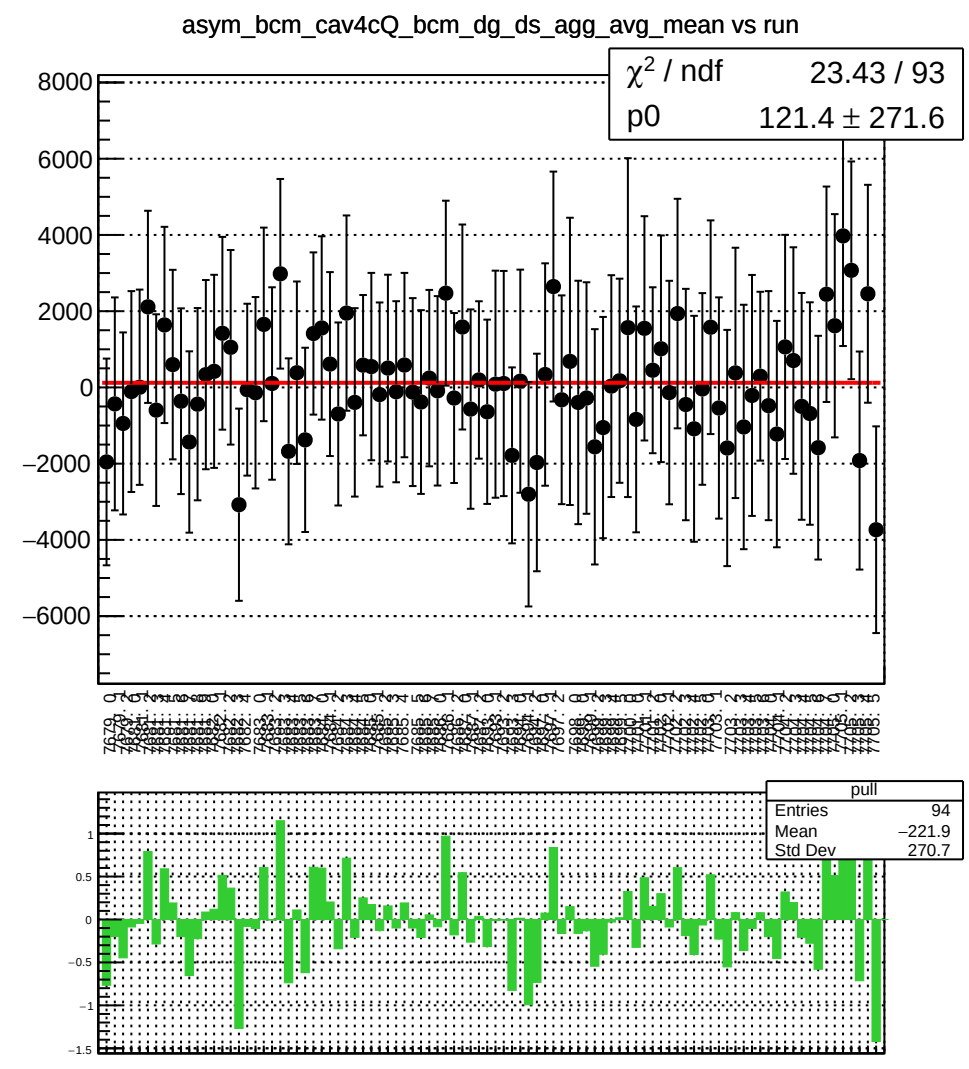

pull1D
Entries 94
Mean −0.001464
Std Dev 0.5064

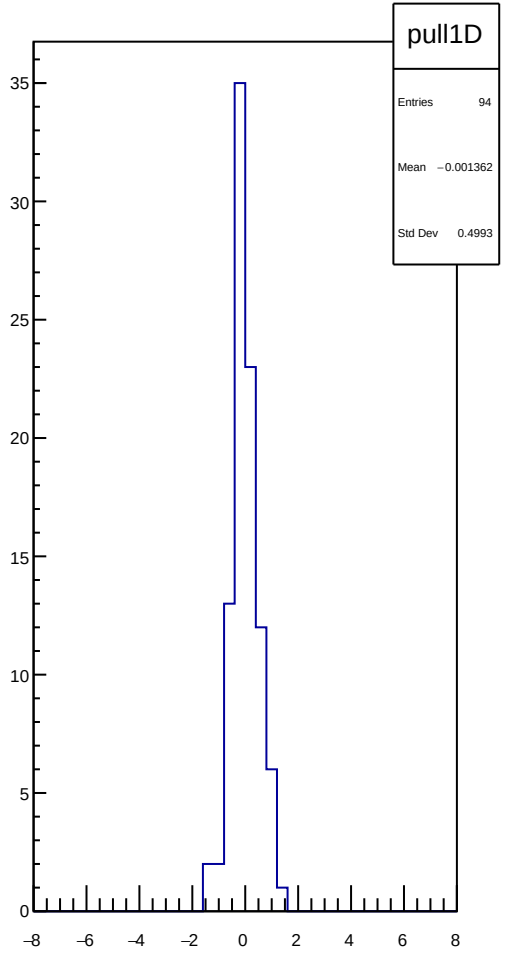

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 1.458e+04 / 93
p0 256.7 ± 0.1929
320
300
280
260
240
220

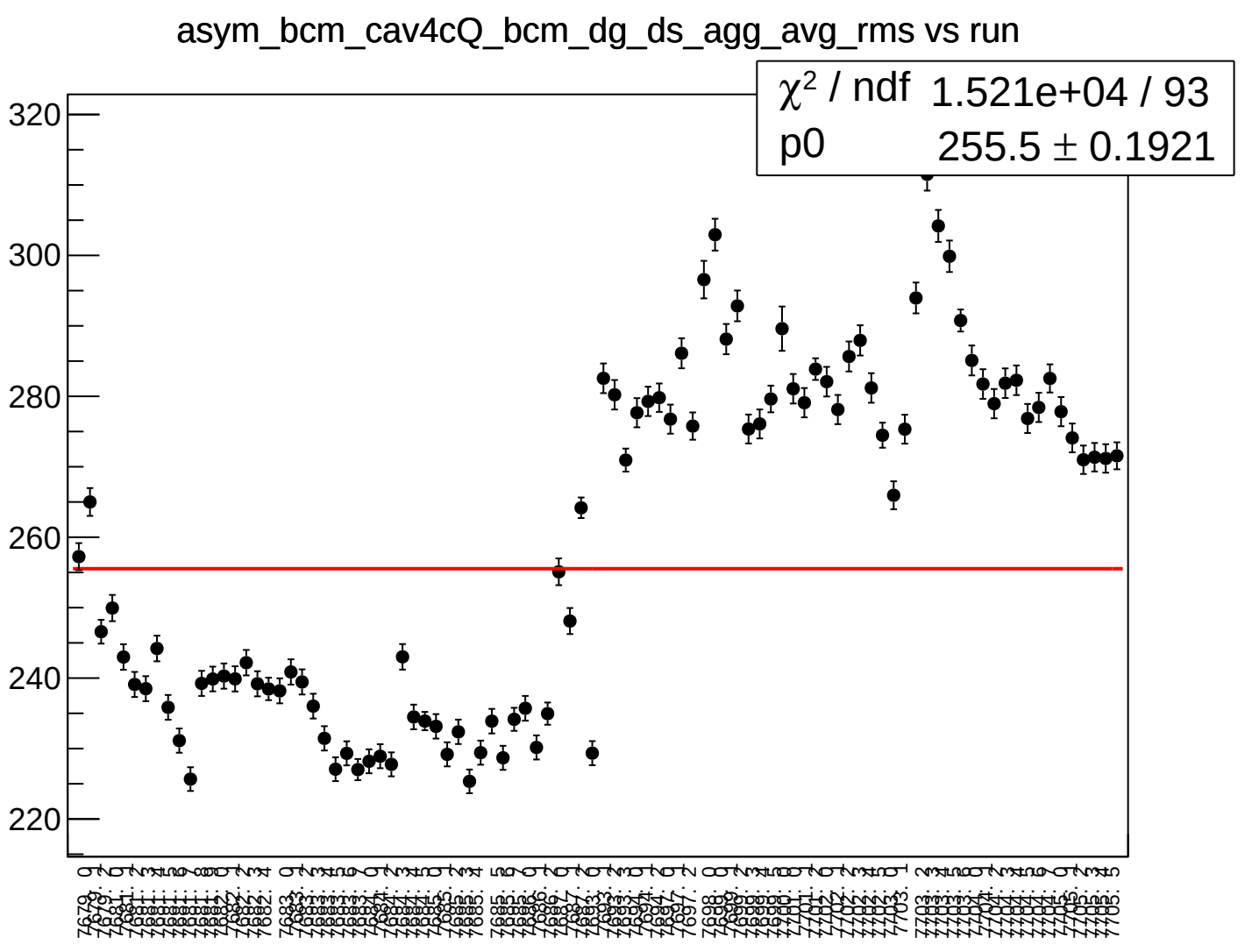

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 71.44 / 93
p0 48.62 ± 36.79
pull
Entries 94
Mean −41.83
Std Dev 76.75

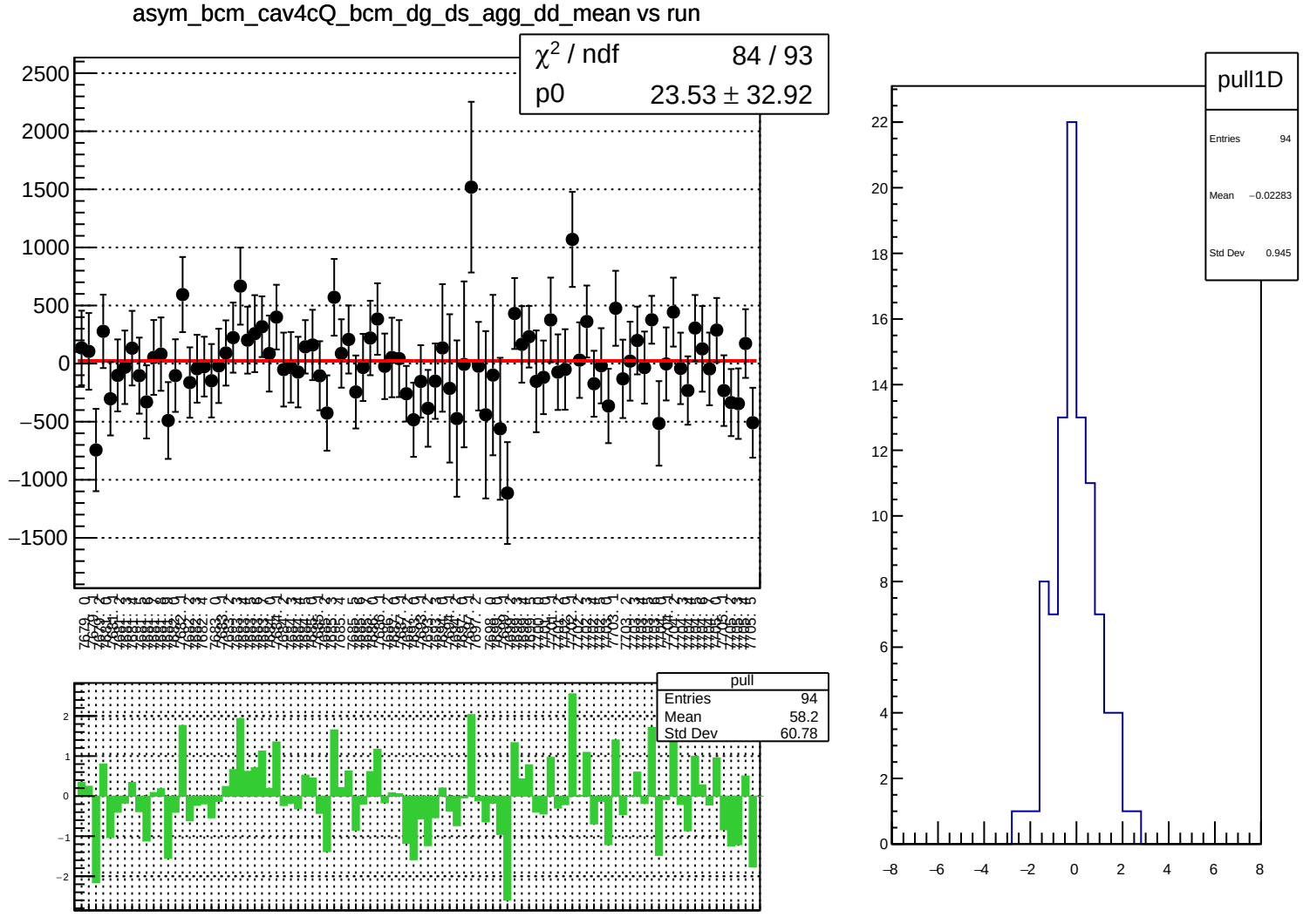

pull1D
Entries 94
Mean −0.01701
Std Dev 0.8716

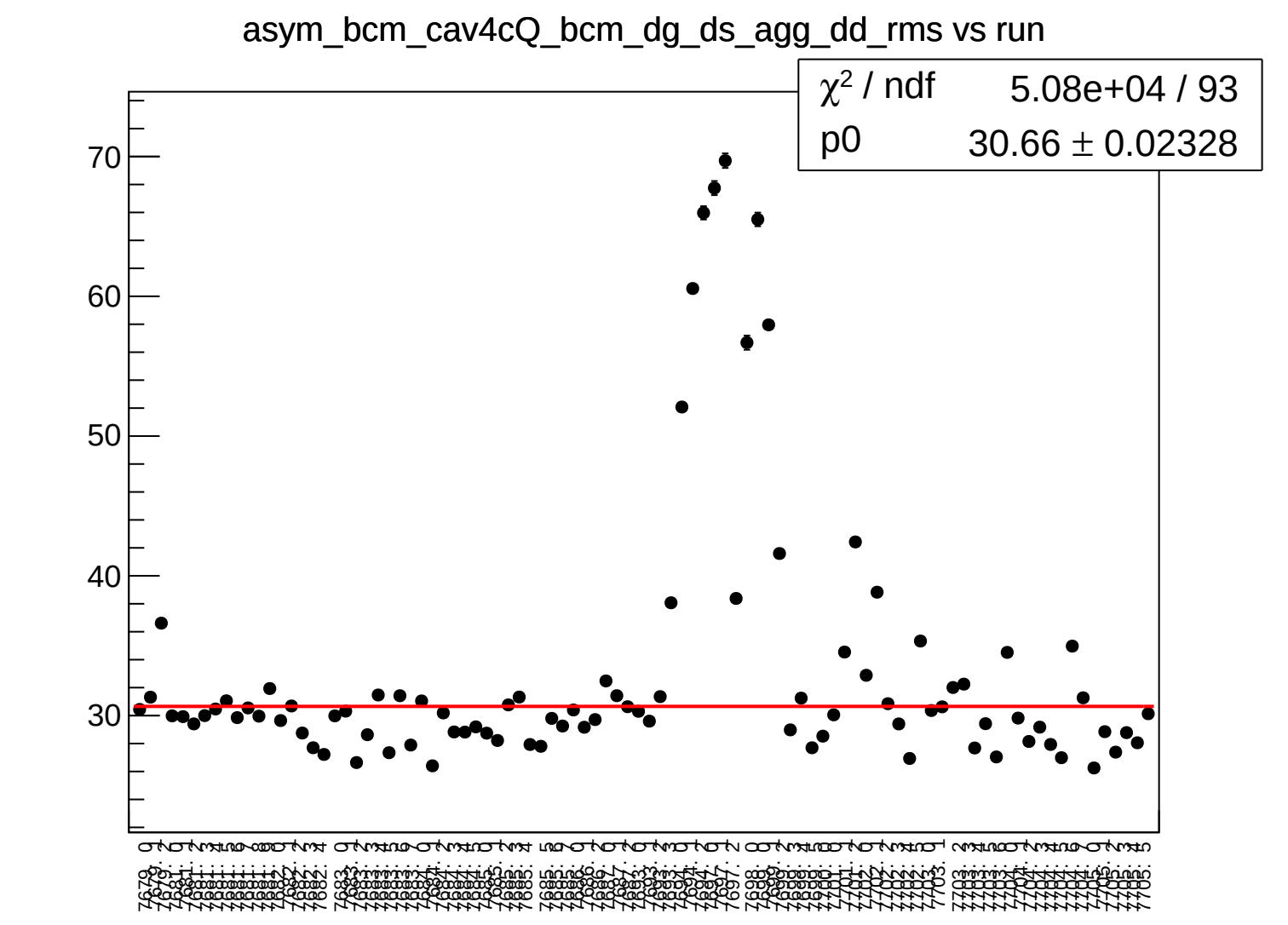

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 3.933e+04 / 93
p0 34.37 ± 0.02602
75
70
65
60
55
50
45
40
35
30

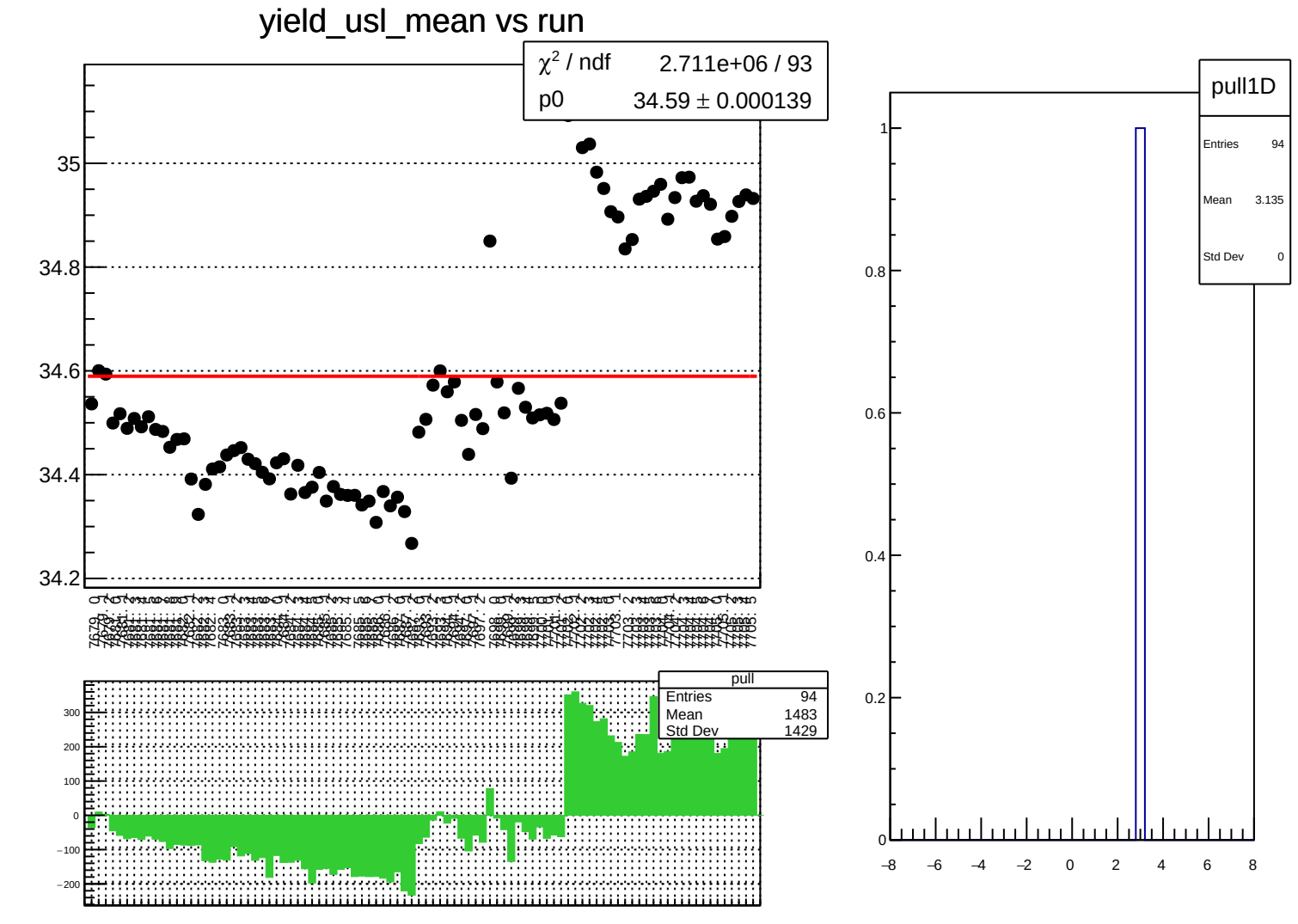

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 23.43 / 93
p0 121.4 ± 271.6
pull
Entries 94
Mean −221.9
Std Dev 270.7

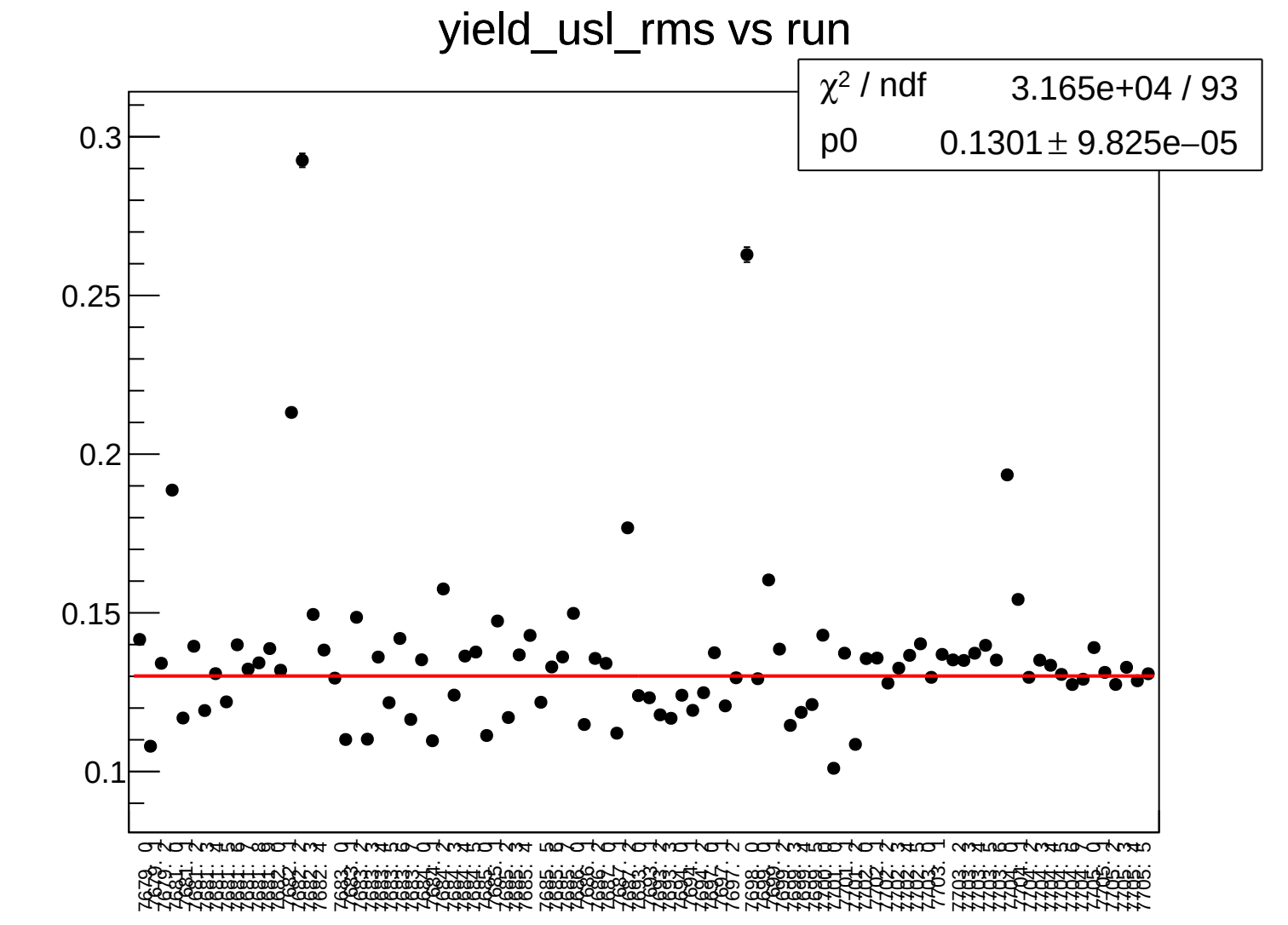

pull1D
Entries 94
Mean −0.001362
Std Dev 0.4993

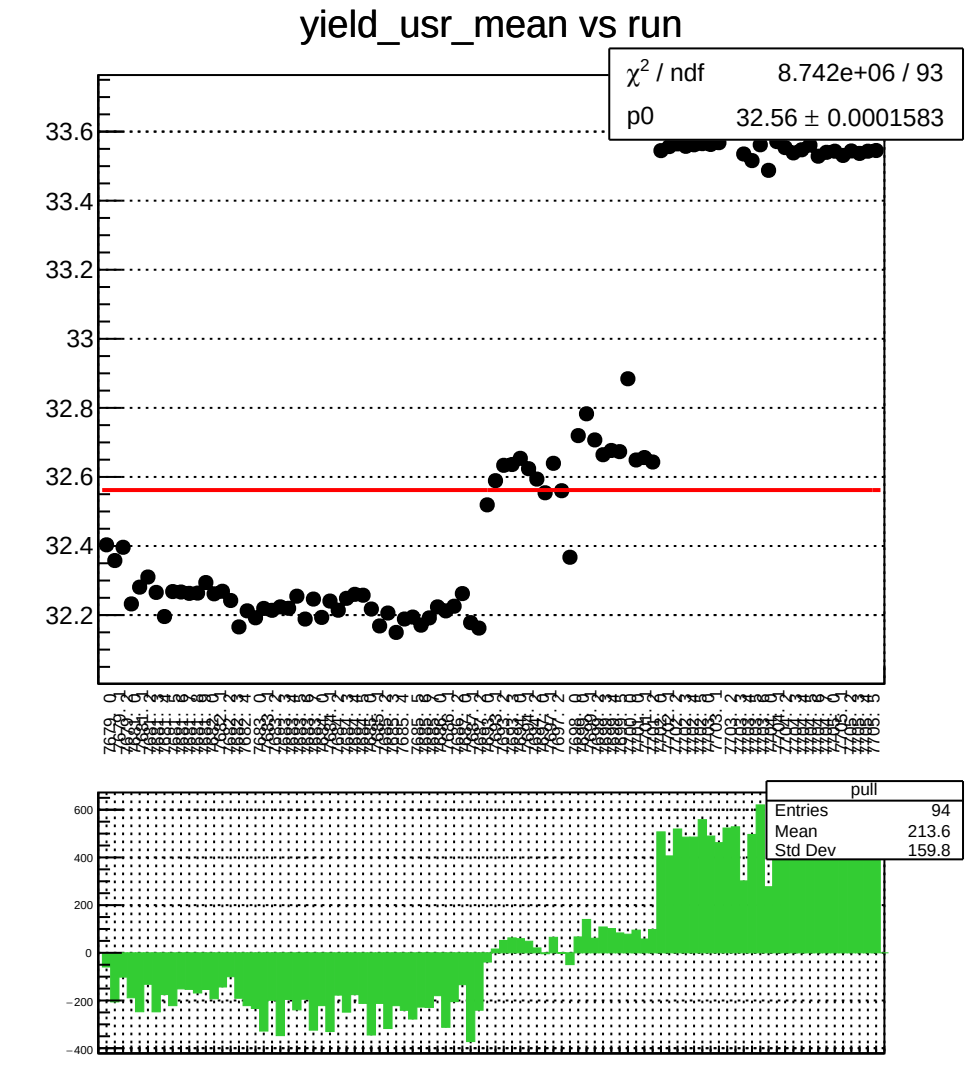

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 1.521e+04 / 93
p0 255.5 ± 0.1921
320
300
280
260
240
220

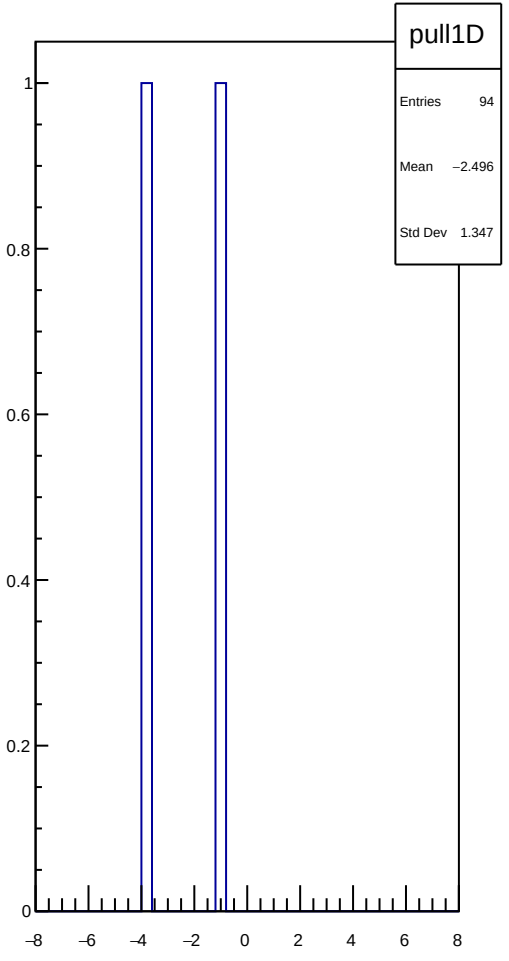

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 84 / 93
p0 23.53 ± 32.92
pull
Entries 94
Mean 58.2
Std Dev 60.78
pull1D
Entries 94
Mean −0.02283
Std Dev 0.945

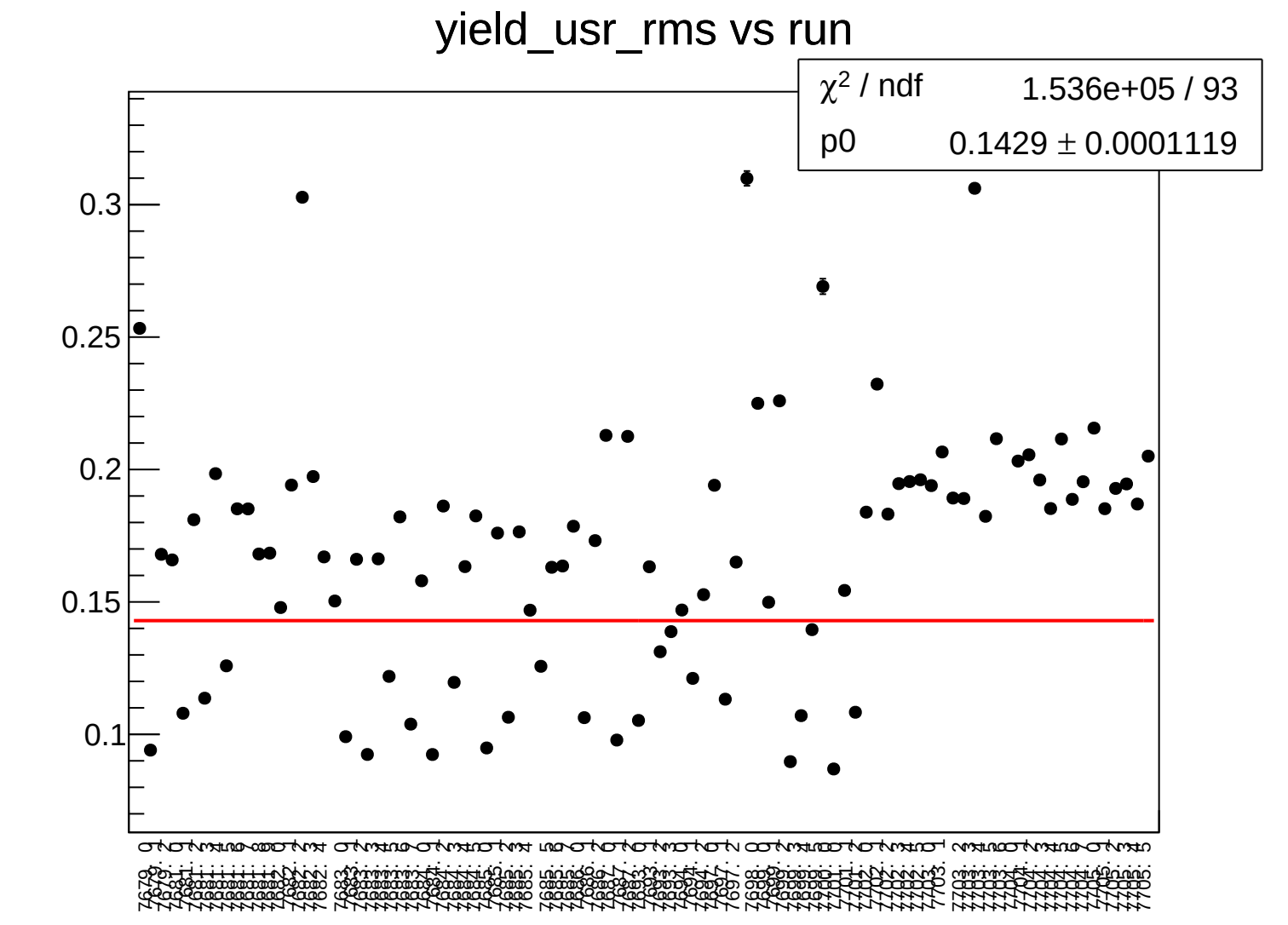

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ^2 / ndf 5.08e+04 / 93
p0 30.66 ± 0.02328
70
60
50
40
30

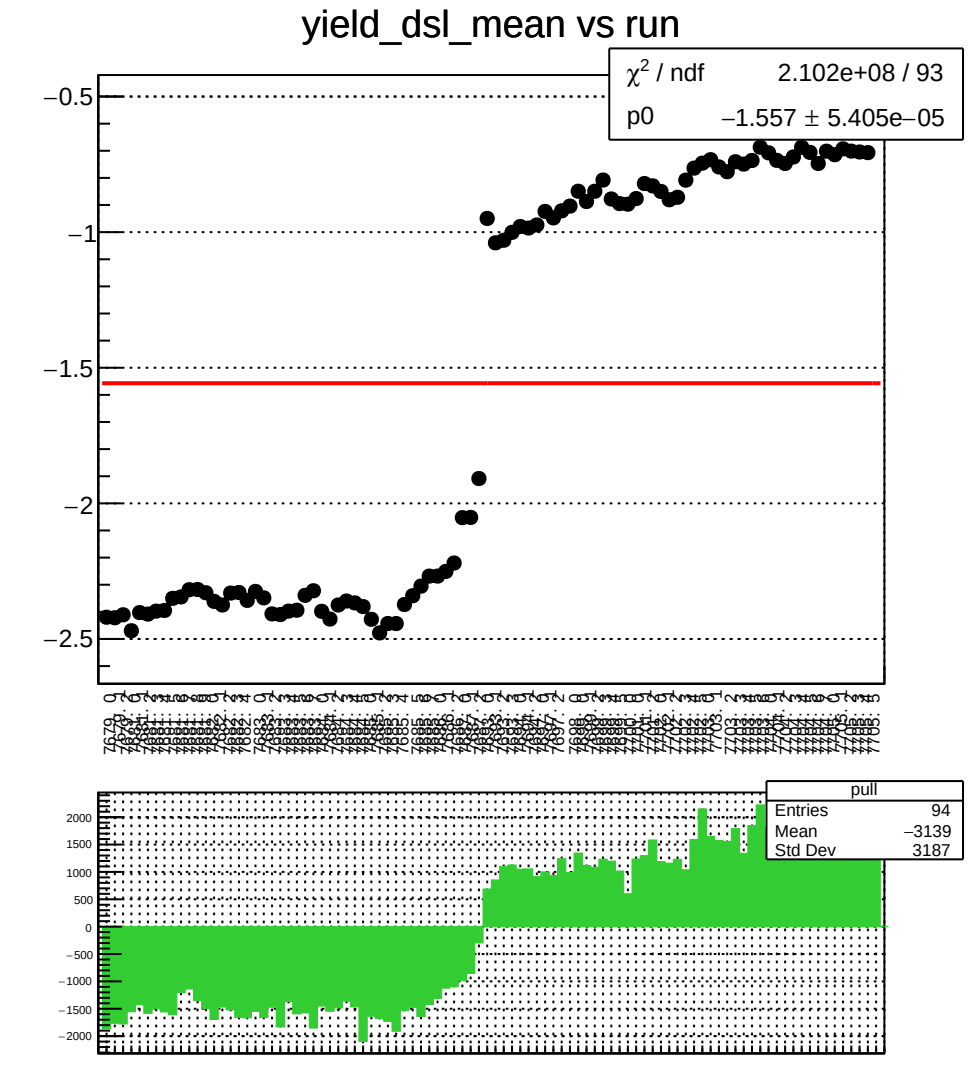

yield_usl_mean vs run
χ² / ndf 2.711e+06 / 93
p0 34.59 ± 0.000139
35
34.8
34.6
34.4
34.2
pull
Entries 94
Mean 1483
Std Dev 1429
300
200
100
0
−100
−200
pull1D
Entries 94
Mean 3.135
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

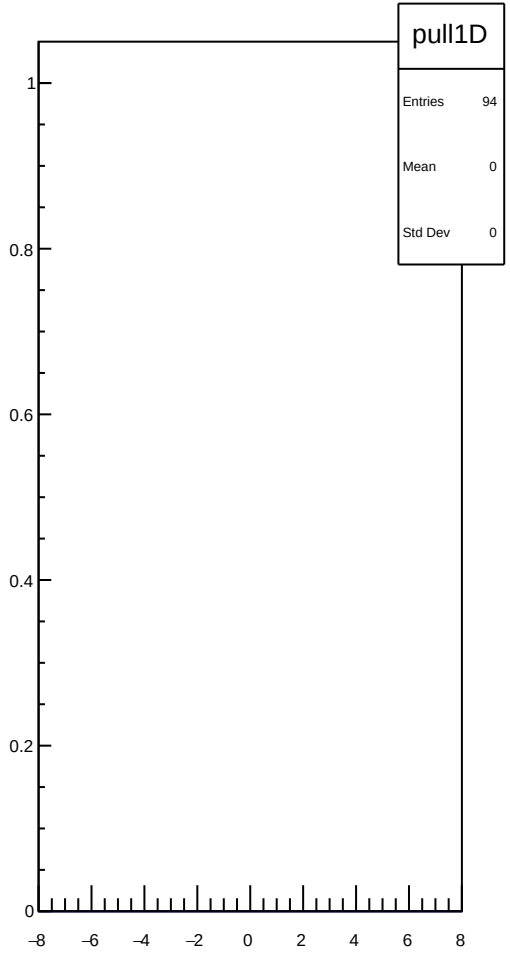

yield_usl_rms vs run
χ² / ndf 3.165e+04 / 93
p0 0.1301 ± 9.825e−05
0.3
0.25
0.2
0.15
0.1

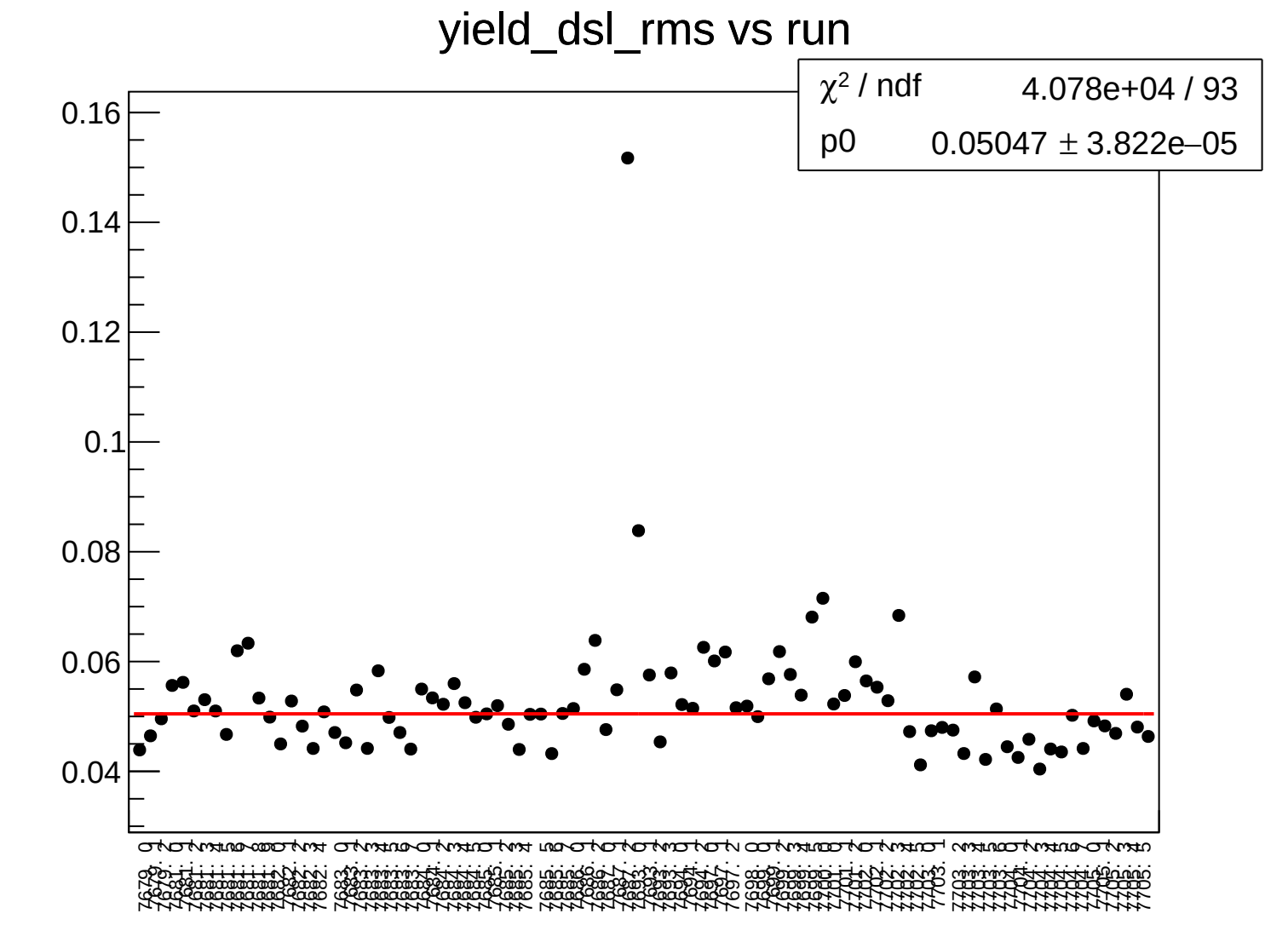

yield_usr_mean vs run
χ² / ndf 8.742e+06 / 93
p0 32.56 ± 0.0001583
33.6
33.4
33.2
33
32.8
32.6
32.4
32.2
pull
Entries 94
Mean 213.6
Std Dev 159.8
600
400
200
0
−200
−400

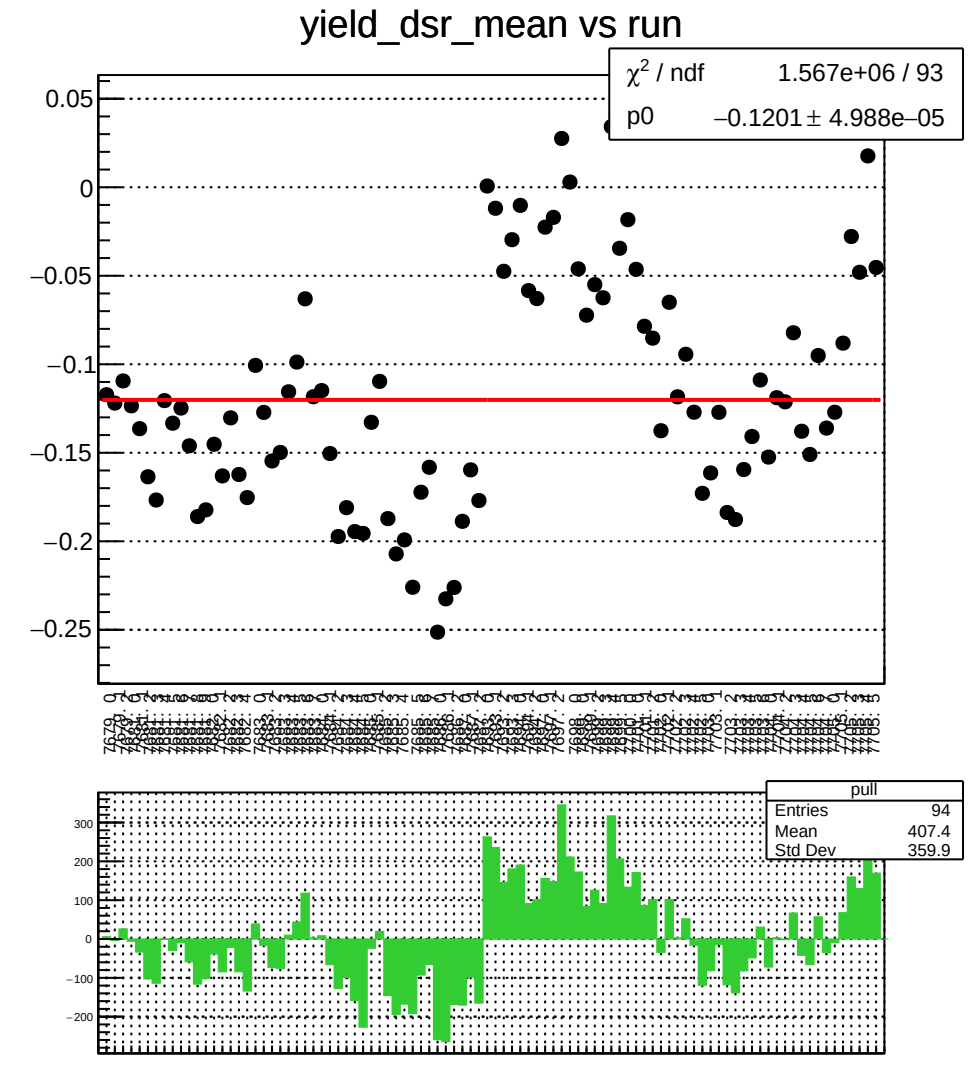

pull1D
Entries 94
Mean −2.496
Std Dev 1.347
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

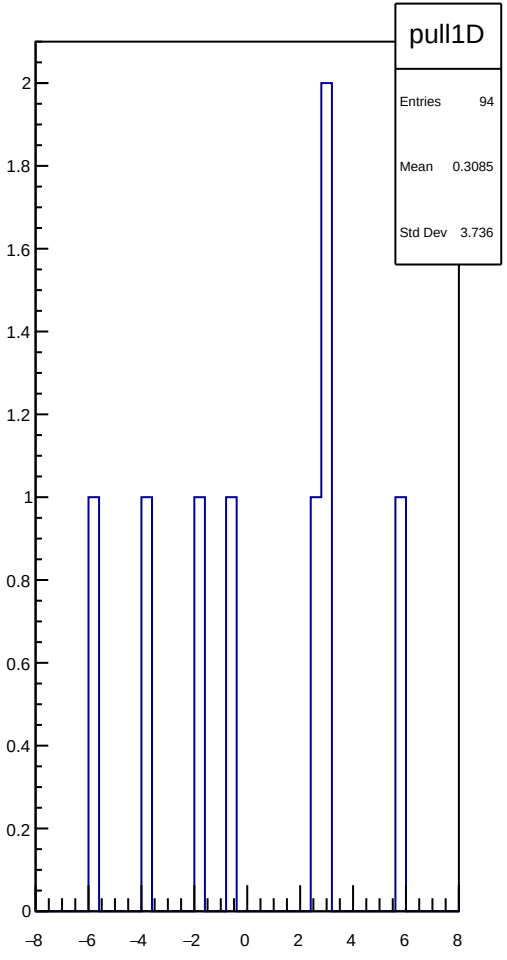

yield_usr_rms vs run
χ² / ndf 1.536e+05 / 93
p0 0.1429 ± 0.0001119
0.3
0.25
0.2
0.15
0.1

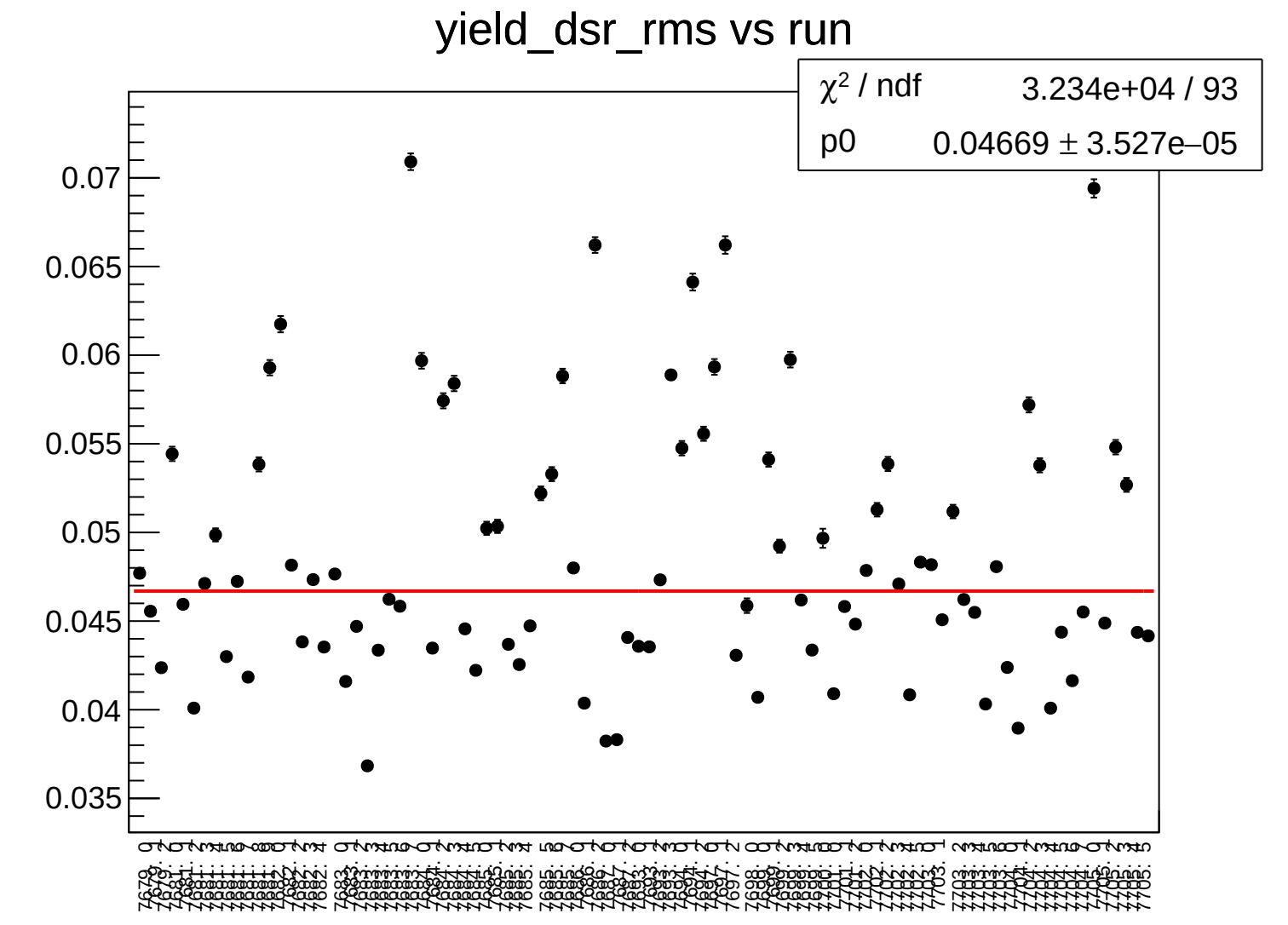

yield_dsl_mean vs run
χ² / ndf 2.102e+08 / 93
p0 −1.557 ± 5.405e−05
−0.5
−1
−1.5
−2
−2.5
pull
Entries 94
Mean −3139
Std Dev 3187
2000
1500
1000
500
0
−500
−1000
−1500
−2000

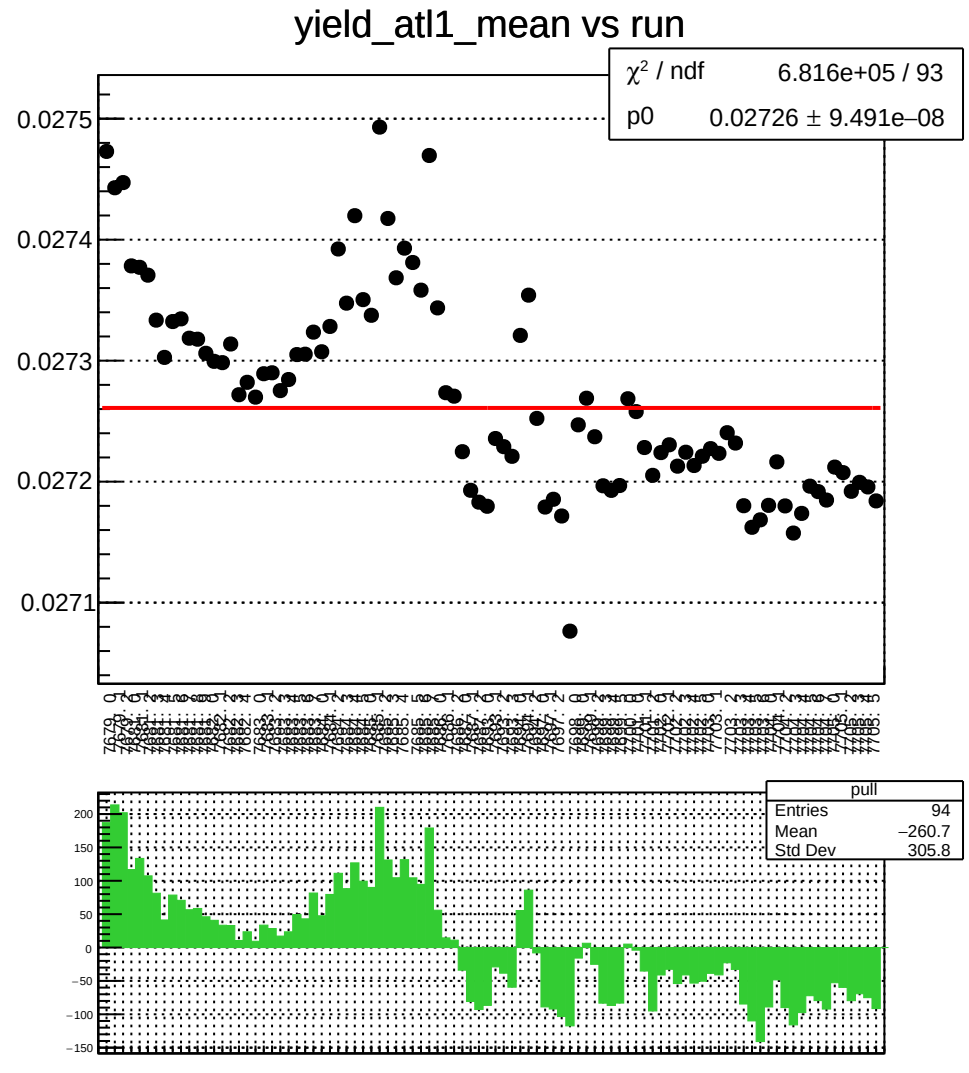

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

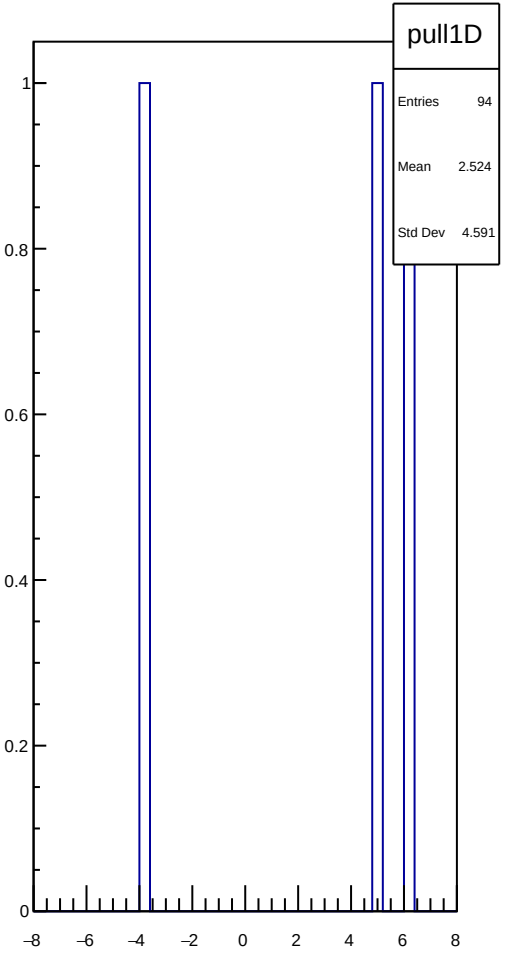

yield_dsl_rms vs run
χ² / ndf 4.078e+04 / 93
p0 0.05047 ± 3.822e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04

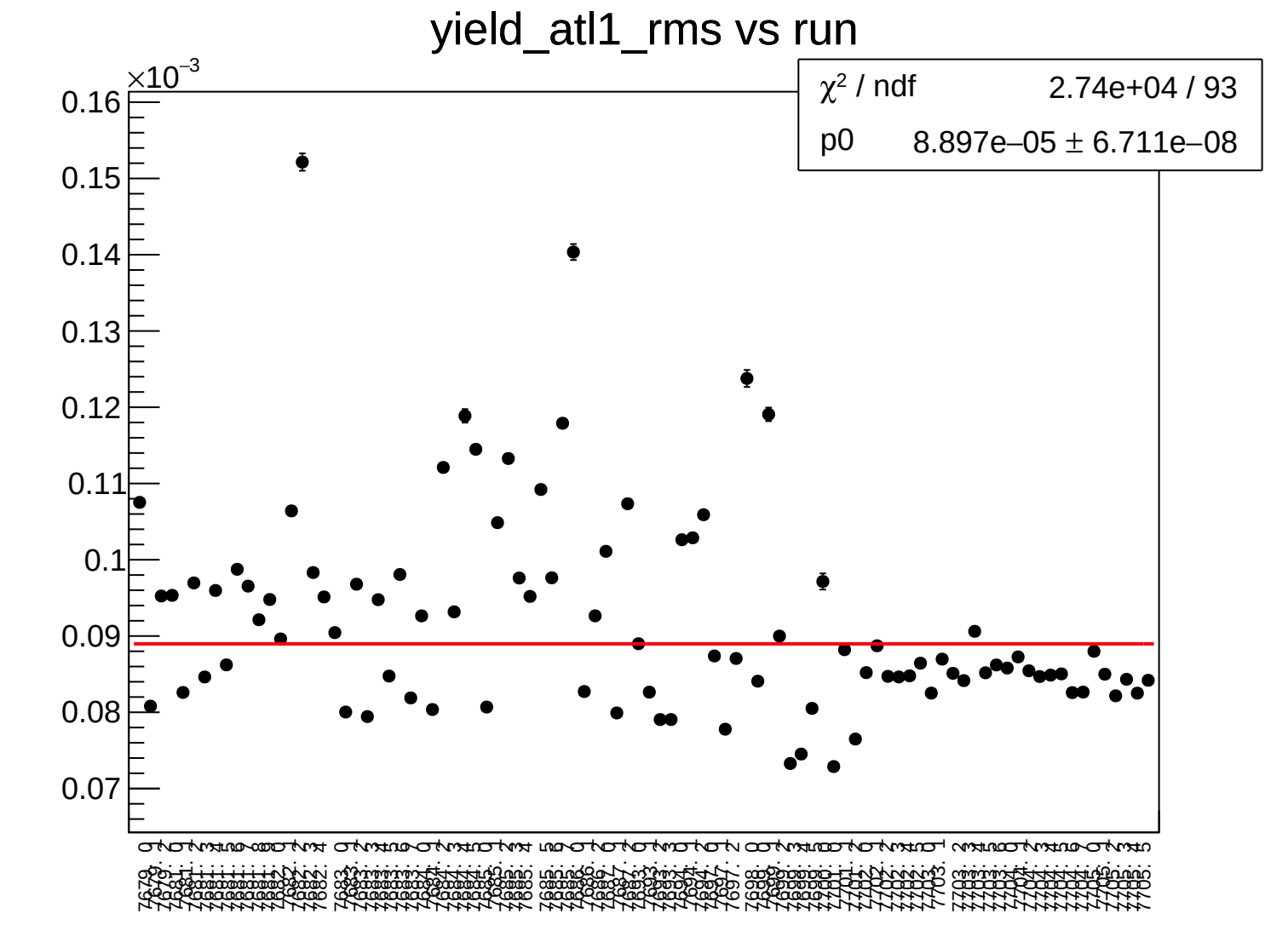

yield_dsr_mean vs run
χ² / ndf 1.567e+06 / 93
p0 −0.1201 ± 4.988e−05
pull
Entries 94
Mean 407.4
Std Dev 359.9

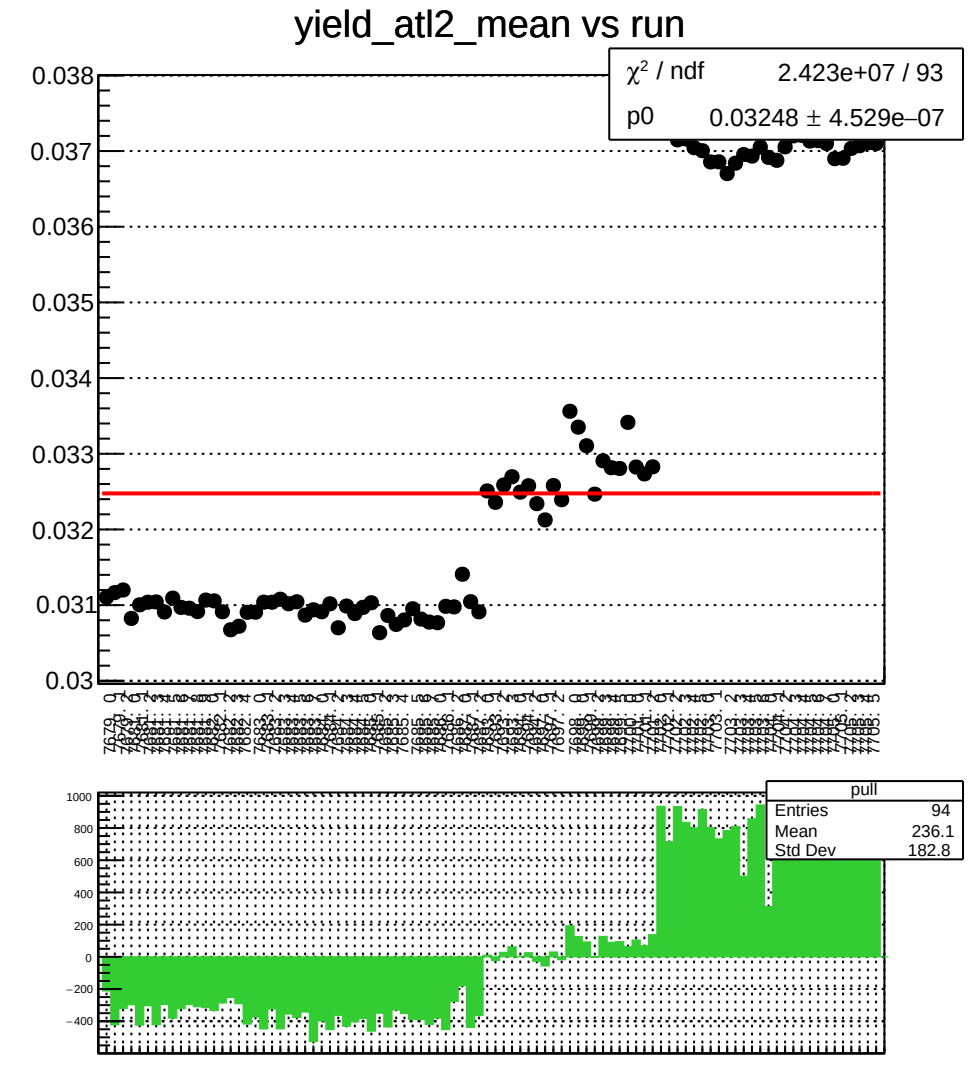

pull1D
Entries 94
Mean 0.3085
Std Dev 3.736

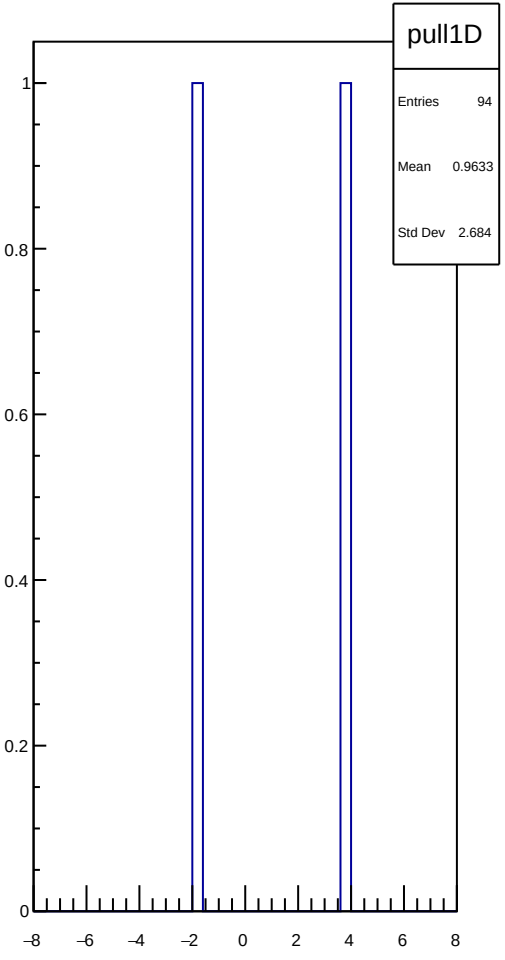

yield_dsr_rms vs run
χ² / ndf 3.234e+04 / 93
p0 0.04669 ± 3.527e–05
0.07
0.065
0.06
0.055
0.05
0.045
0.04
0.035

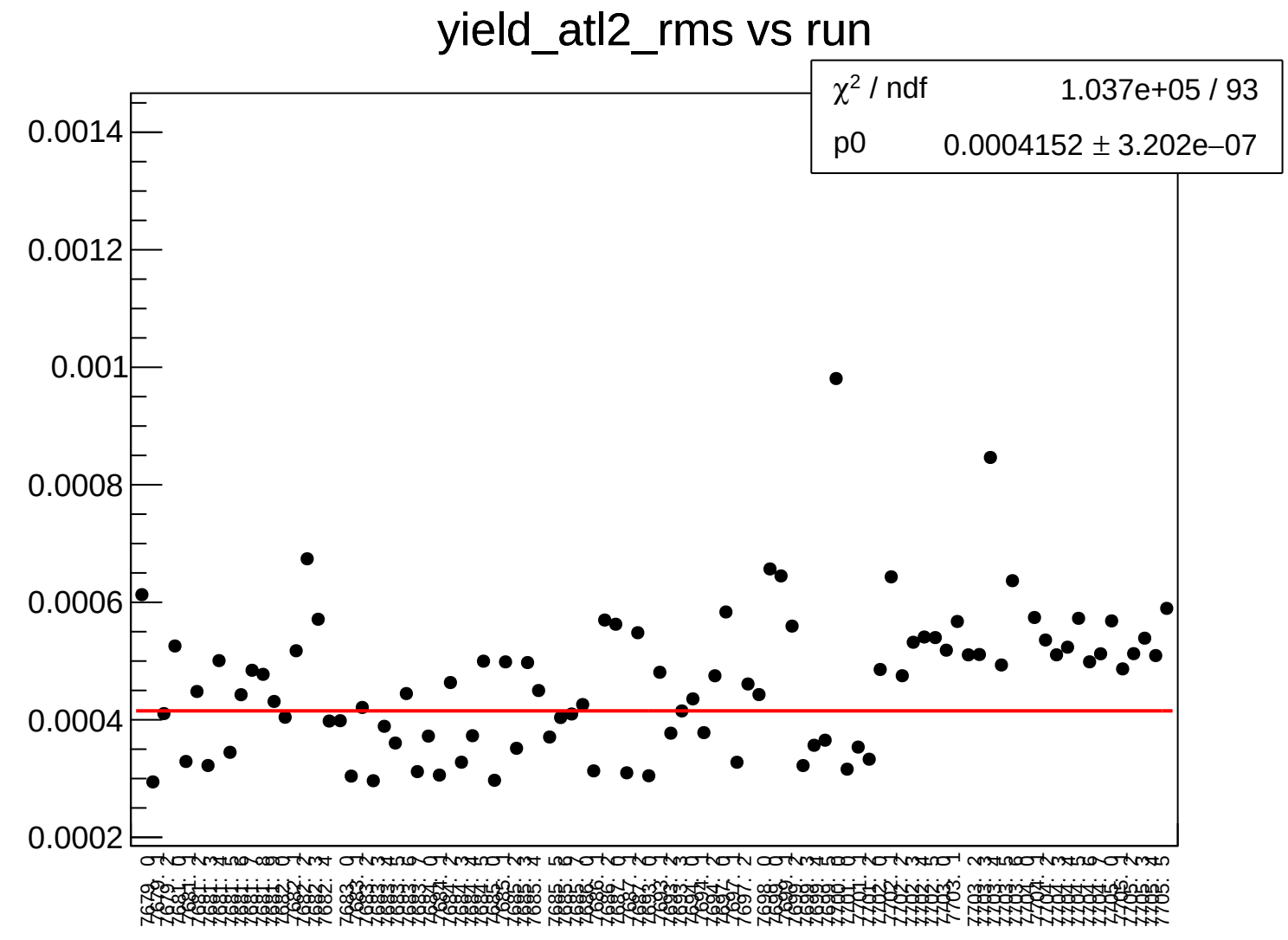

yield_atl1_mean vs run
χ² / ndf 6.816e+05 / 93
p0 0.02726 ± 9.491e−08
0.0275
0.0274
0.0273
0.0272
0.0271
pull
Entries 94
Mean −260.7
Std Dev 305.8
200
150
100
50
0
−50
−100
−150

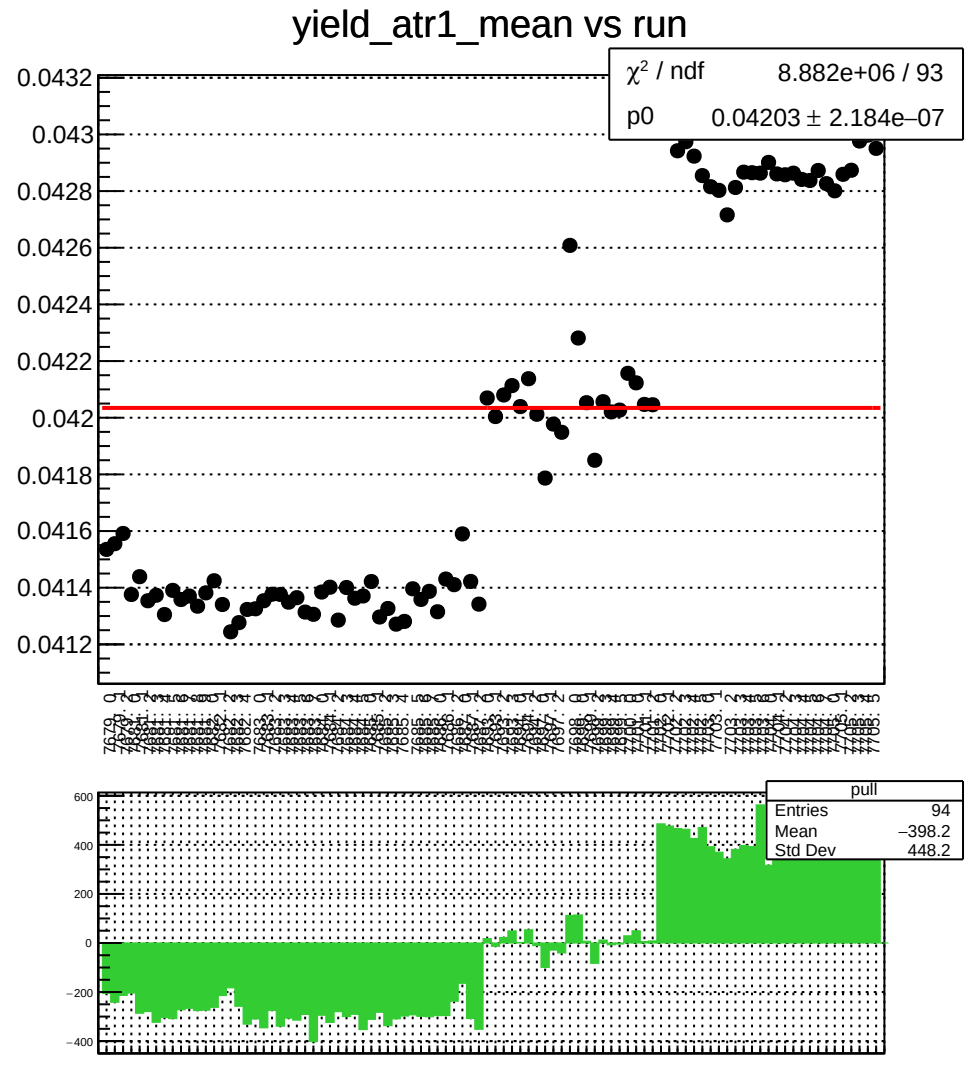

pull1D
Entries 94
Mean 2.524
Std Dev 4.591
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

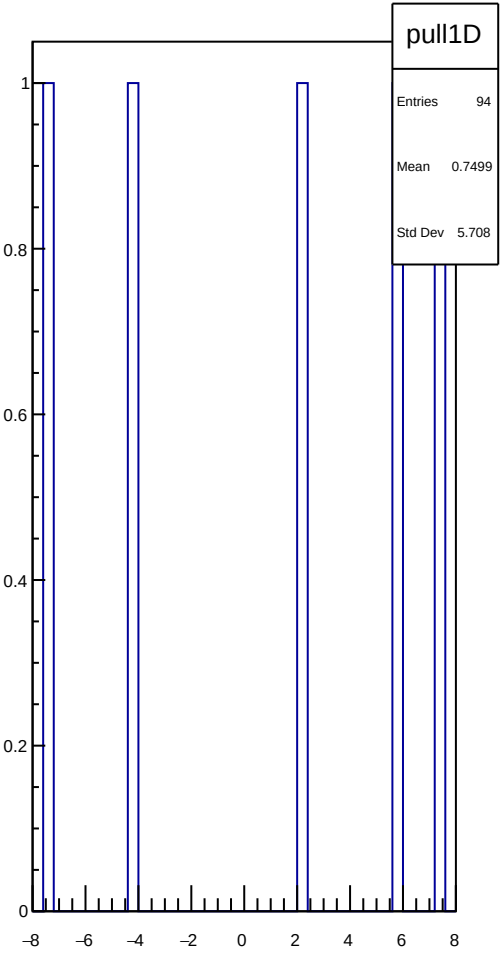

yield_atl1_rms vs run
×10⁻³
χ² / ndf 2.74e+04 / 93
p0 8.897e−05 ± 6.711e−08
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07

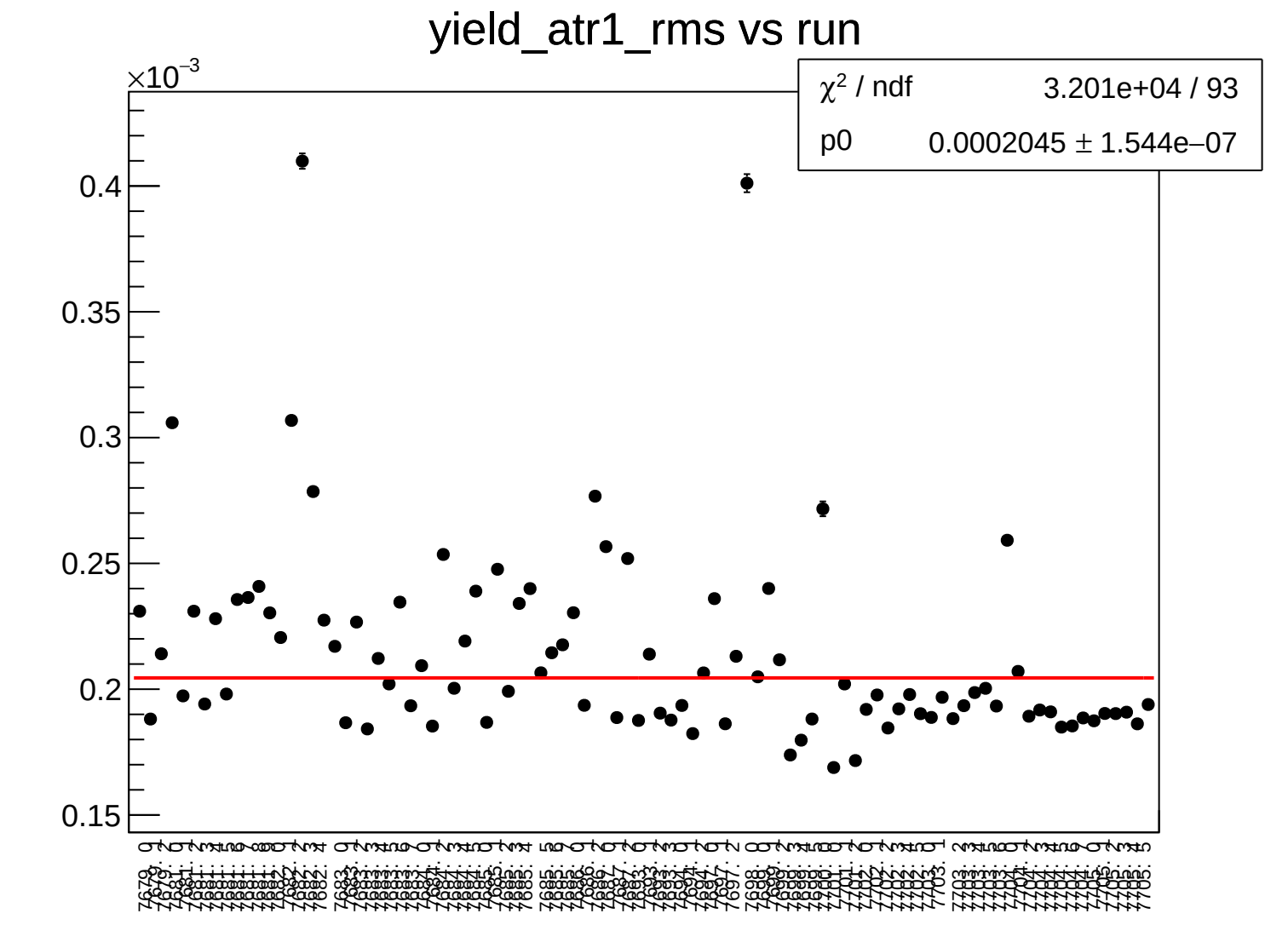

yield_atl2_mean vs run
χ² / ndf 2.423e+07 / 93
p0 0.03248 ± 4.529e−07
0.038
0.037
0.036
0.035
0.034
0.033
0.032
0.031
0.03
pull
Entries 94
Mean 236.1
Std Dev 182.8
1000
800
600
400
200
0
−200
−400

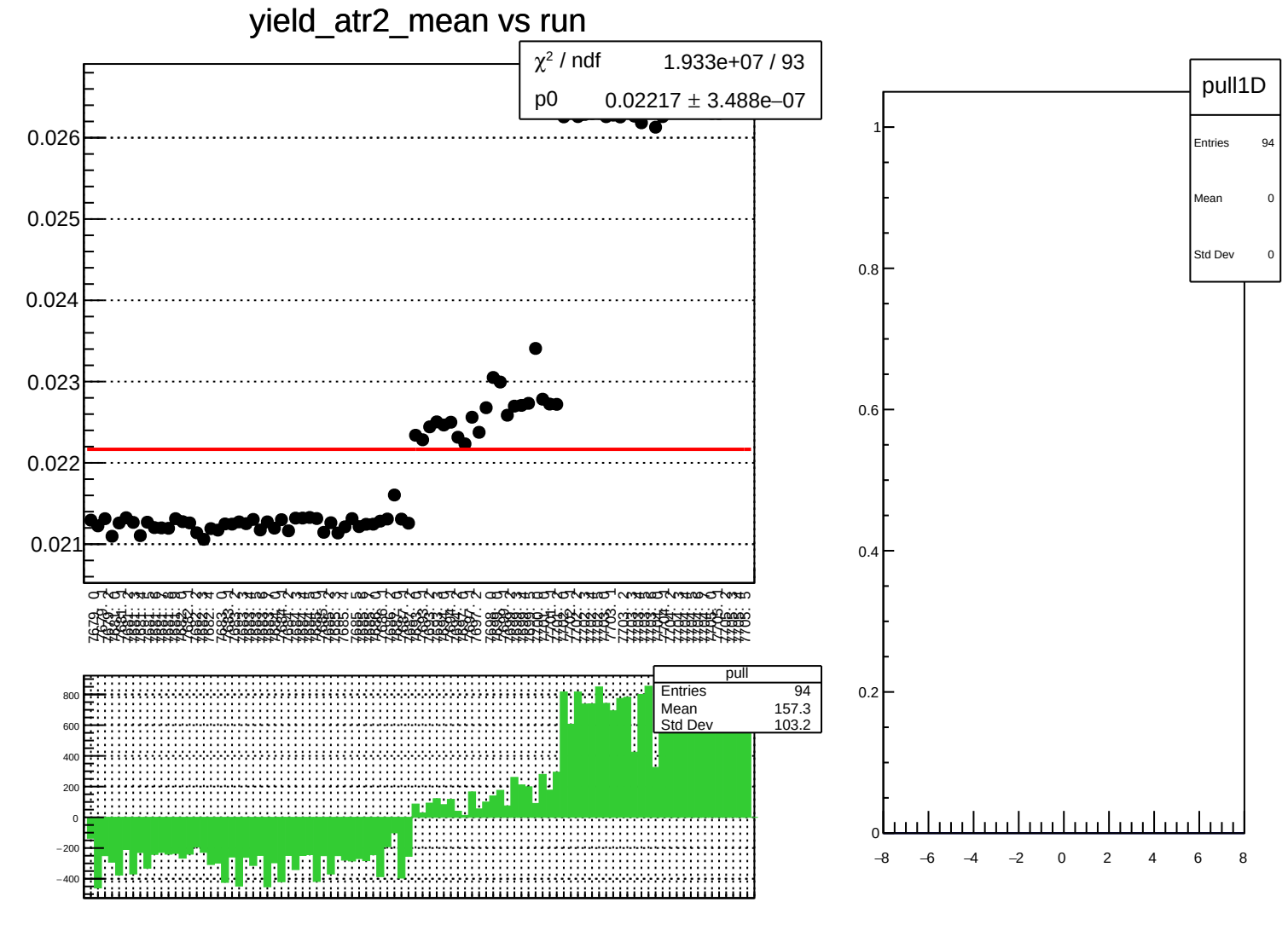

pull1D
Entries 94
Mean 0.9633
Std Dev 2.684
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

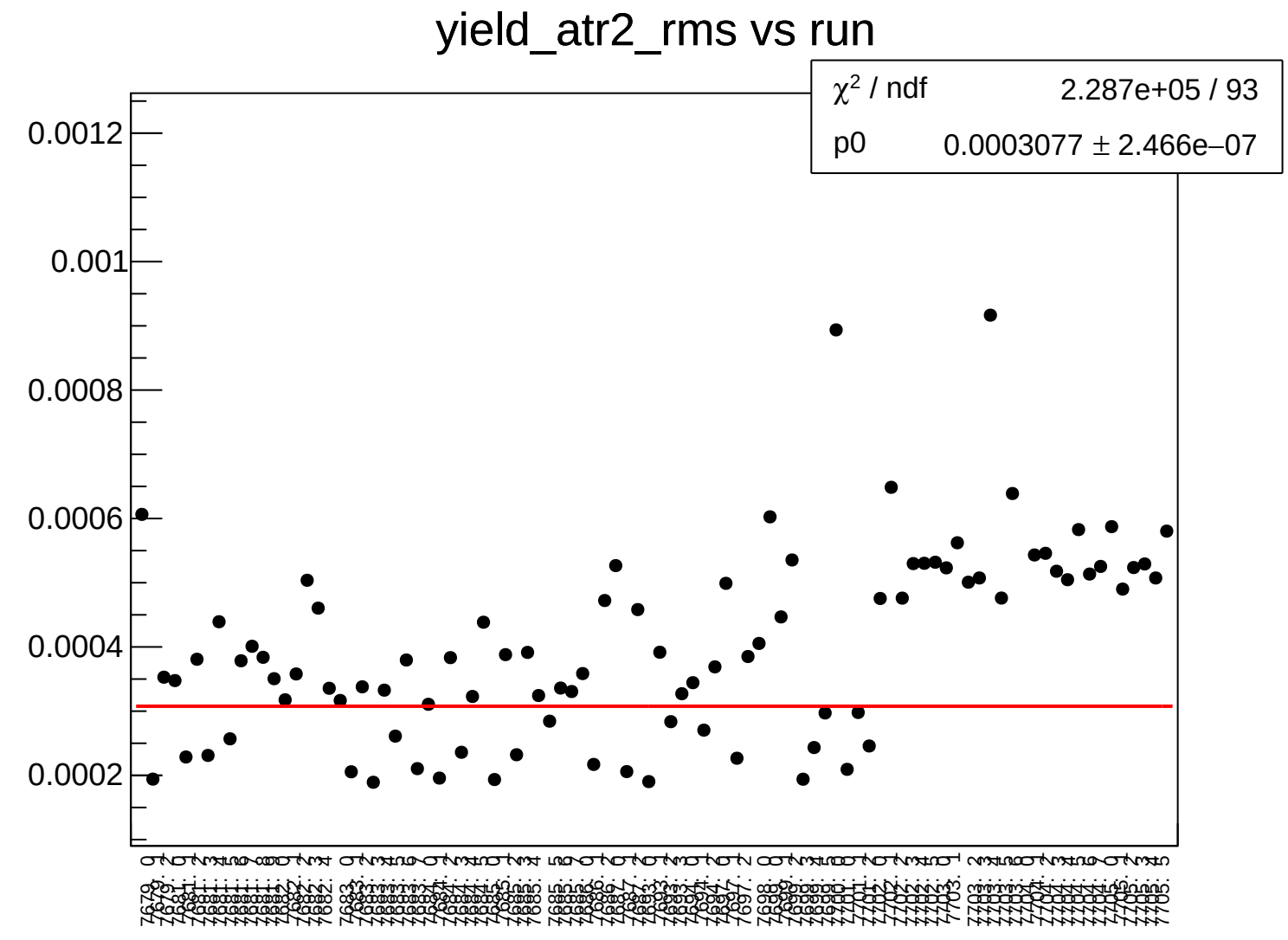

yield_atl2_rms vs run
χ² / ndf 1.037e+05 / 93
p0 0.0004152 ± 3.202e−07
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002

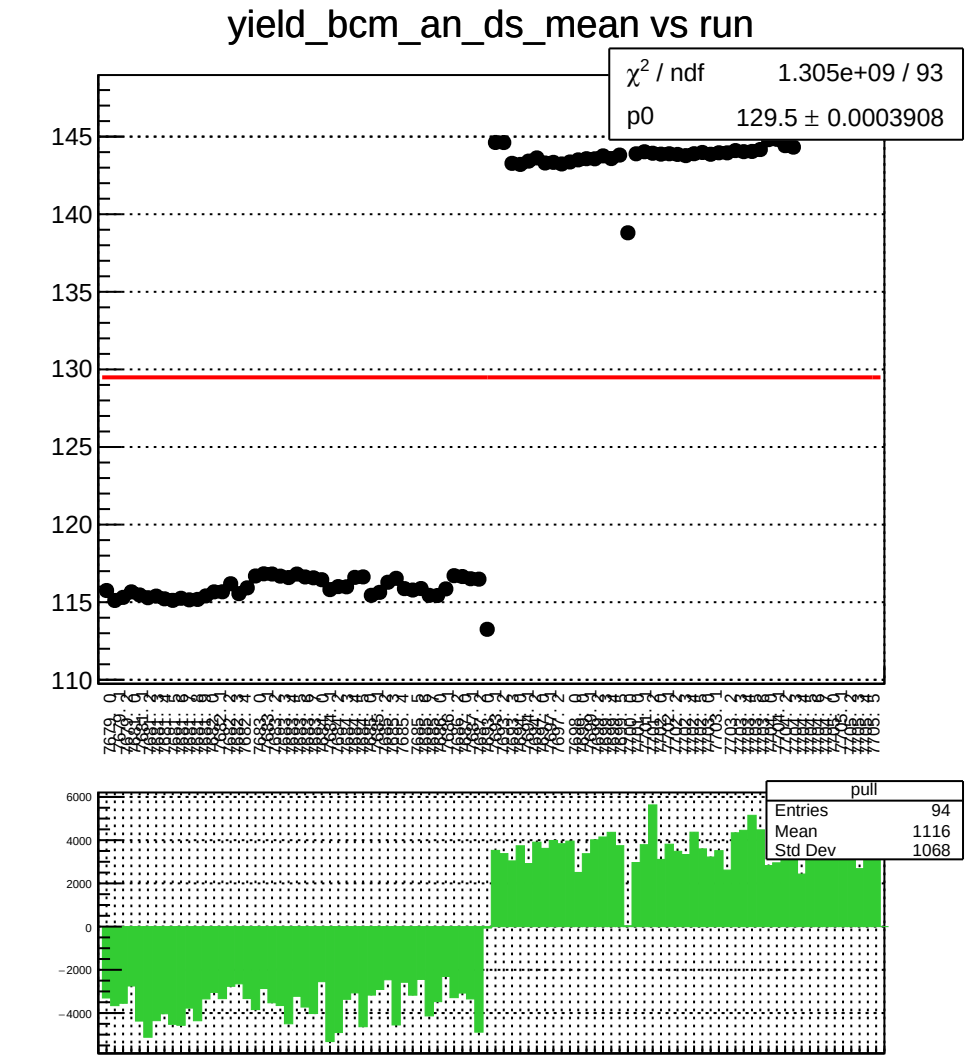

yield_atr1_mean vs run
χ² / ndf 8.882e+06 / 93
p0 0.04203 ± 2.184e−07
0.0432
0.043
0.0428
0.0426
0.0424
0.0422
0.042
0.0418
0.0416
0.0414
0.0412
pull
Entries 94
Mean −398.2
Std Dev 448.2
600
400
200
0
−200
−400

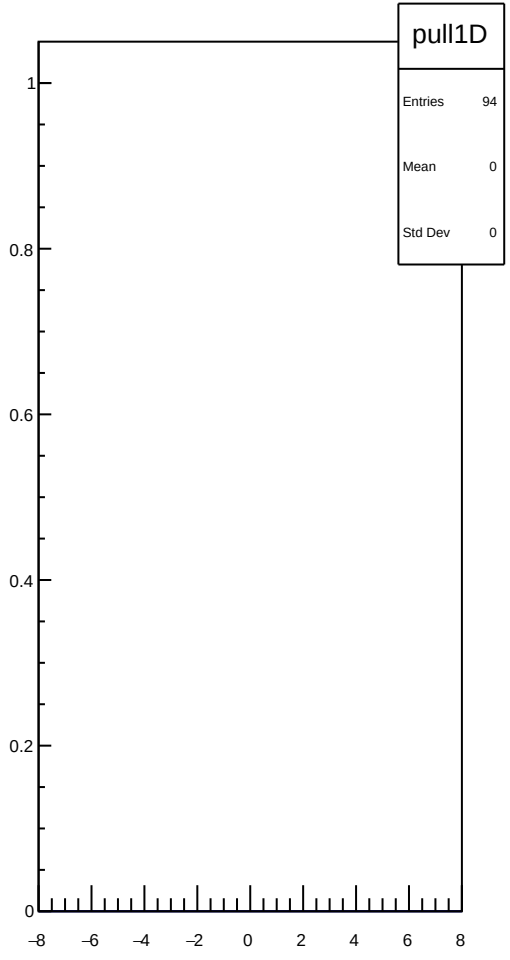

pull1D
Entries 94
Mean 0.7499
Std Dev 5.708
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

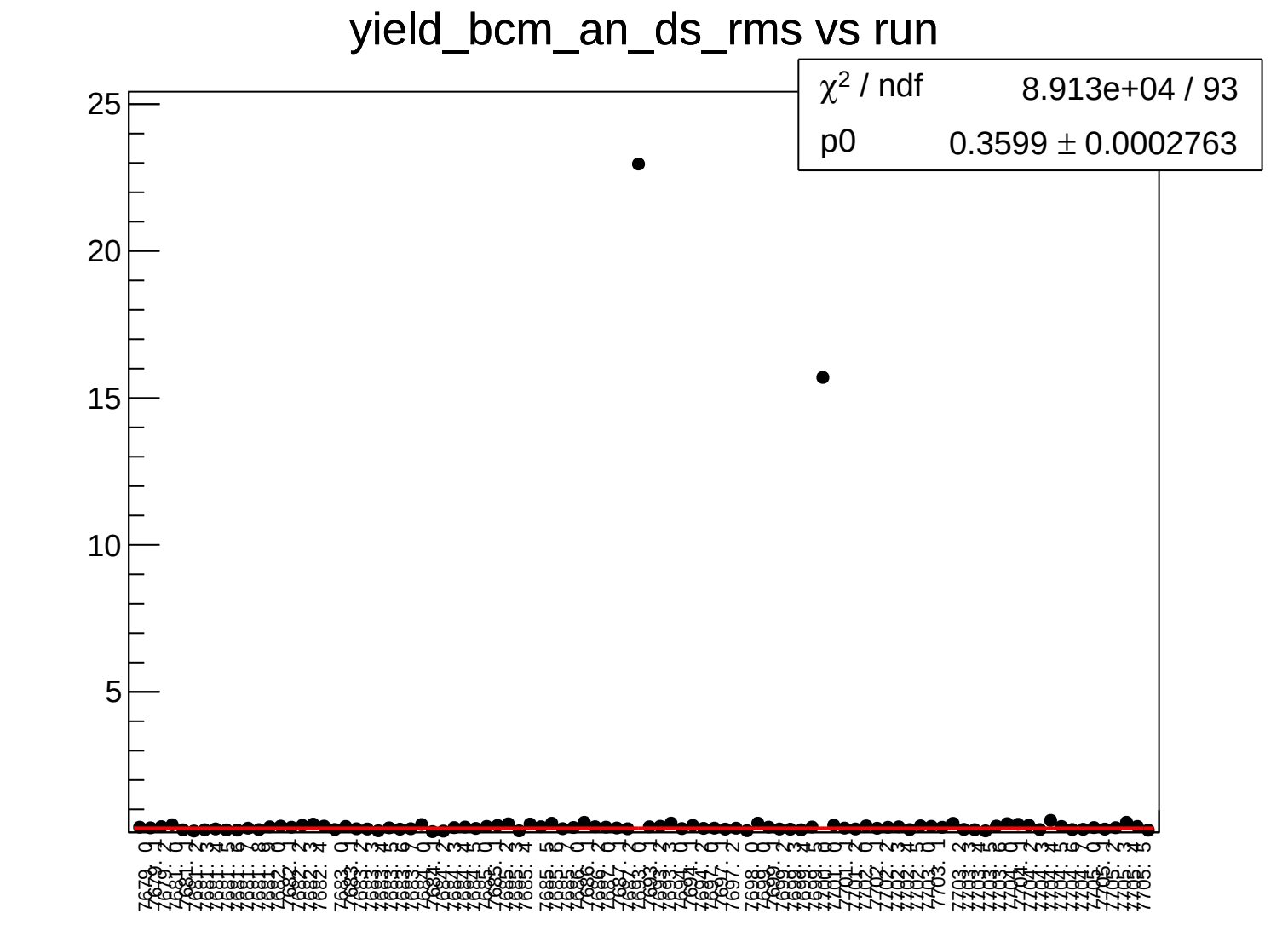

yield_atr1_rms vs run
×10⁻³
χ² / ndf 3.201e+04 / 93
p0 0.0002045 ± 1.544e−07
0.4
0.35
0.3
0.25
0.2
0.15

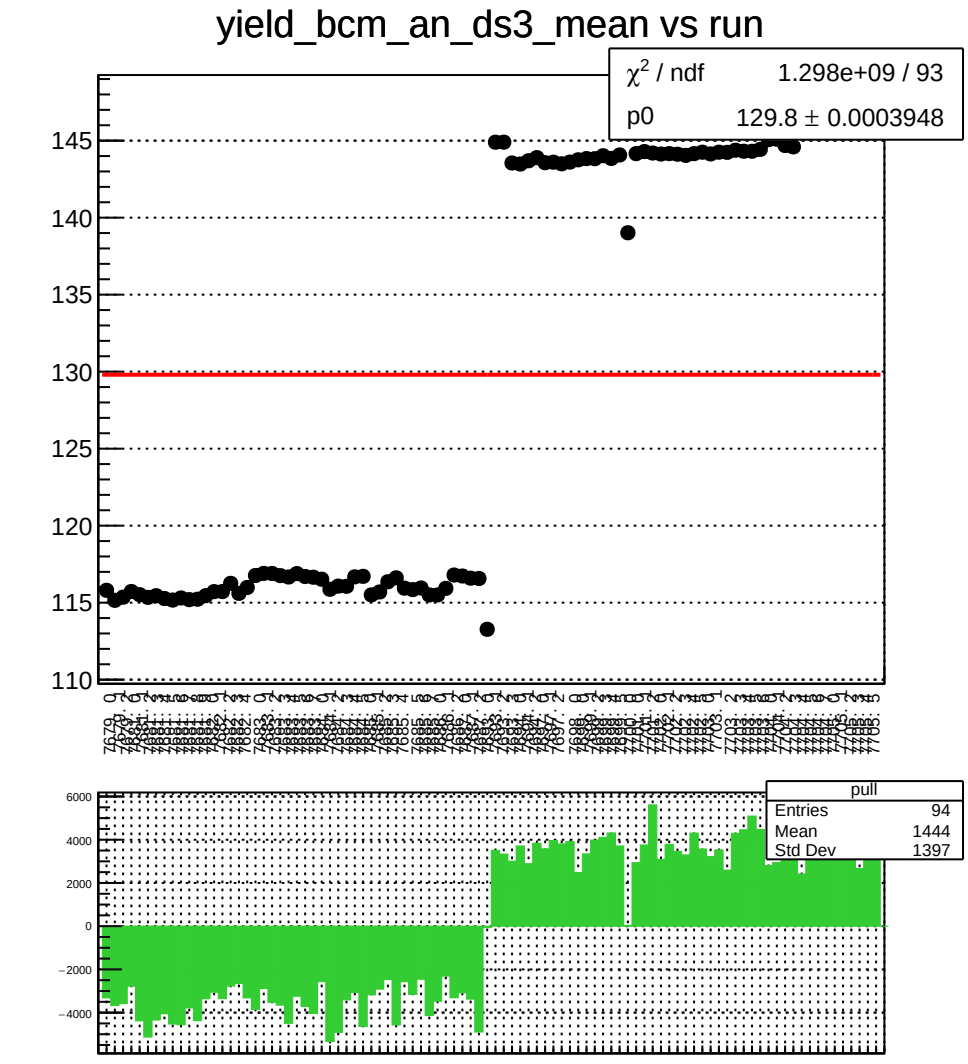

yield_atr2_mean vs run
χ² / ndf 1.933e+07 / 93
p0 0.02217 ± 3.488e–07
0.026
0.025
0.024
0.023
0.022
0.021
pull
Entries 94
Mean 157.3
Std Dev 103.2
800
600
400
200
0
–200
–400
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

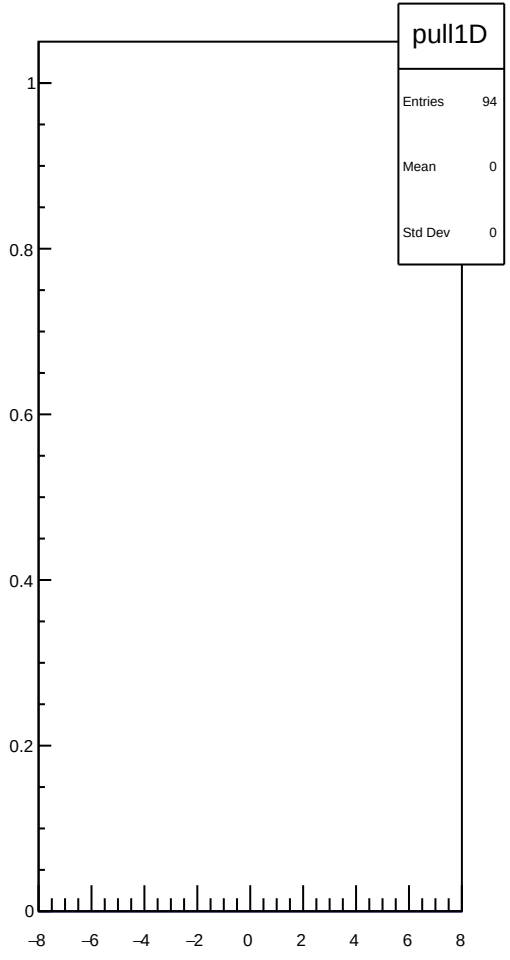

yield_atr2_rms vs run
χ² / ndf 2.287e+05 / 93
p0 0.0003077 ± 2.466e−07
0.0012
0.001
0.0008
0.0006
0.0004
0.0002

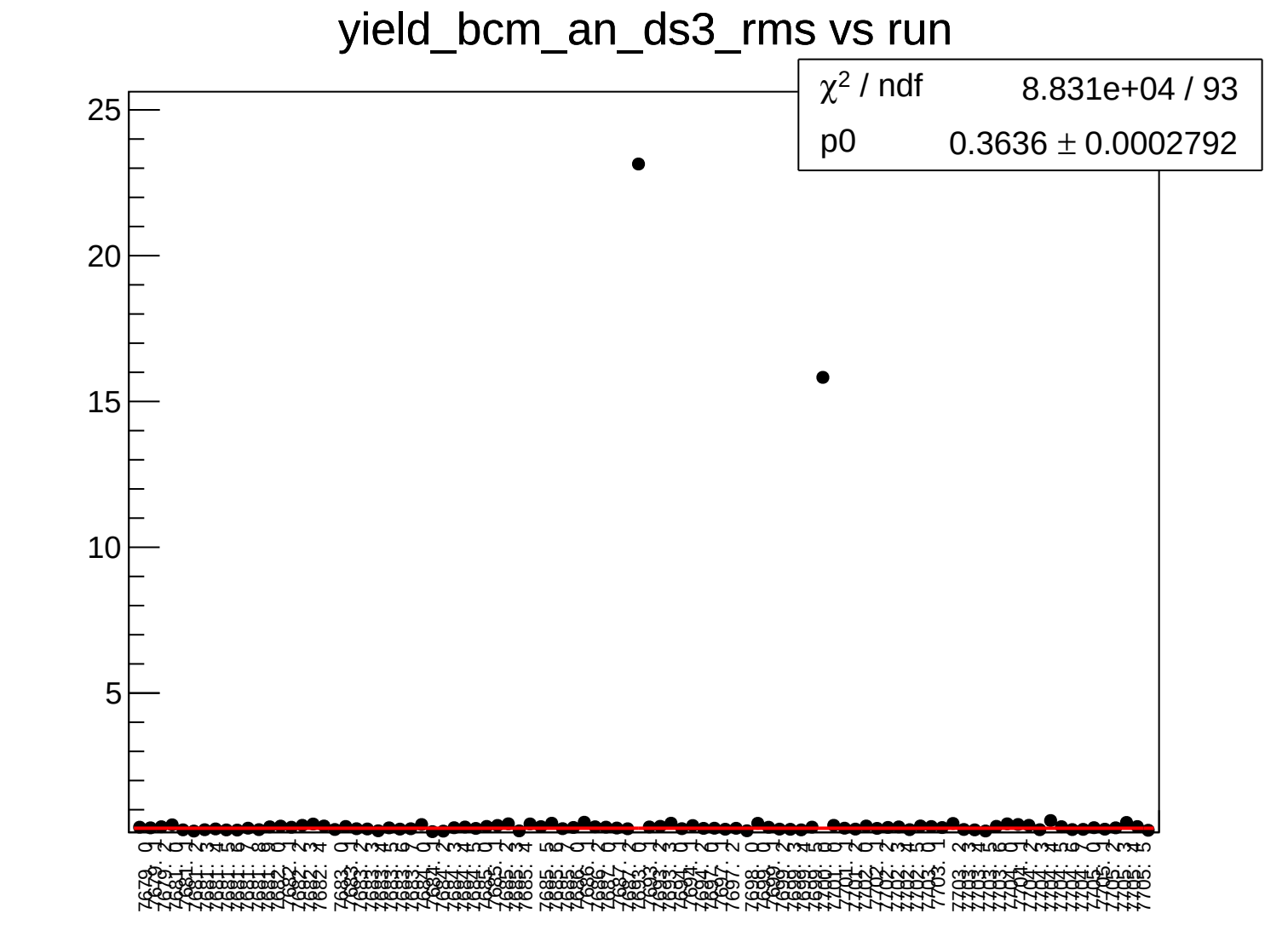

yield_bcm_an_ds_mean vs run
χ² / ndf 1.305e+09 / 93
p0 129.5 ± 0.0003908
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 1116
Std Dev 1068
6000
4000
2000
0
−2000
−4000

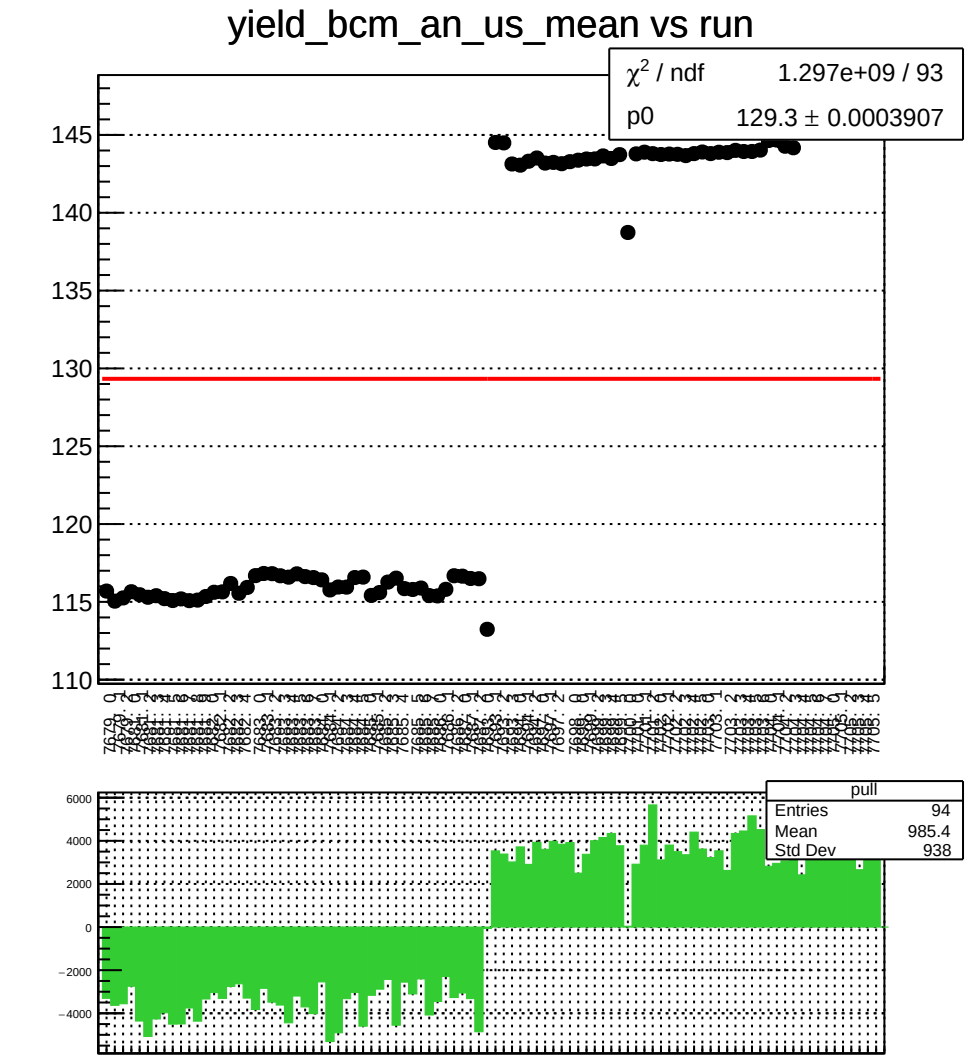

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

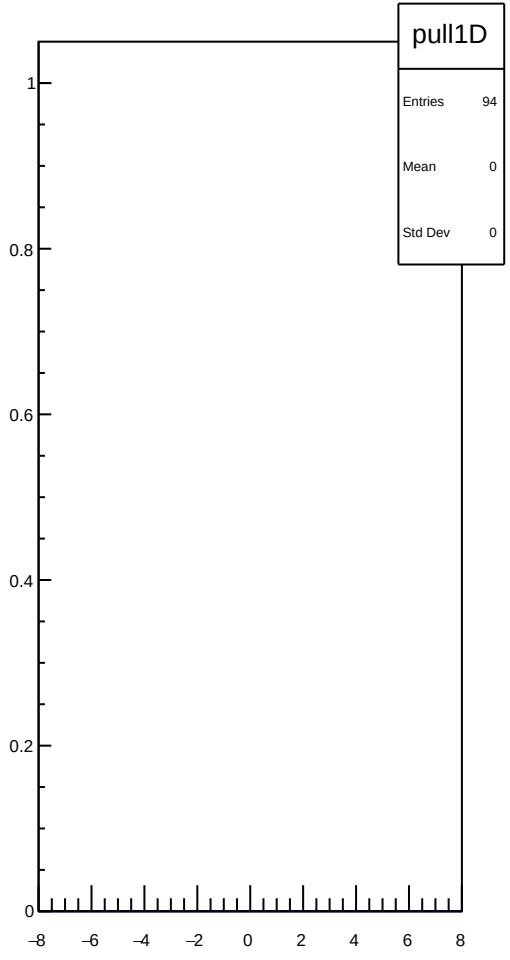

yield_bcm_an_ds_rms vs run
χ² / ndf 8.913e+04 / 93
p0 0.3599 ± 0.0002763
25
20
15
10
5

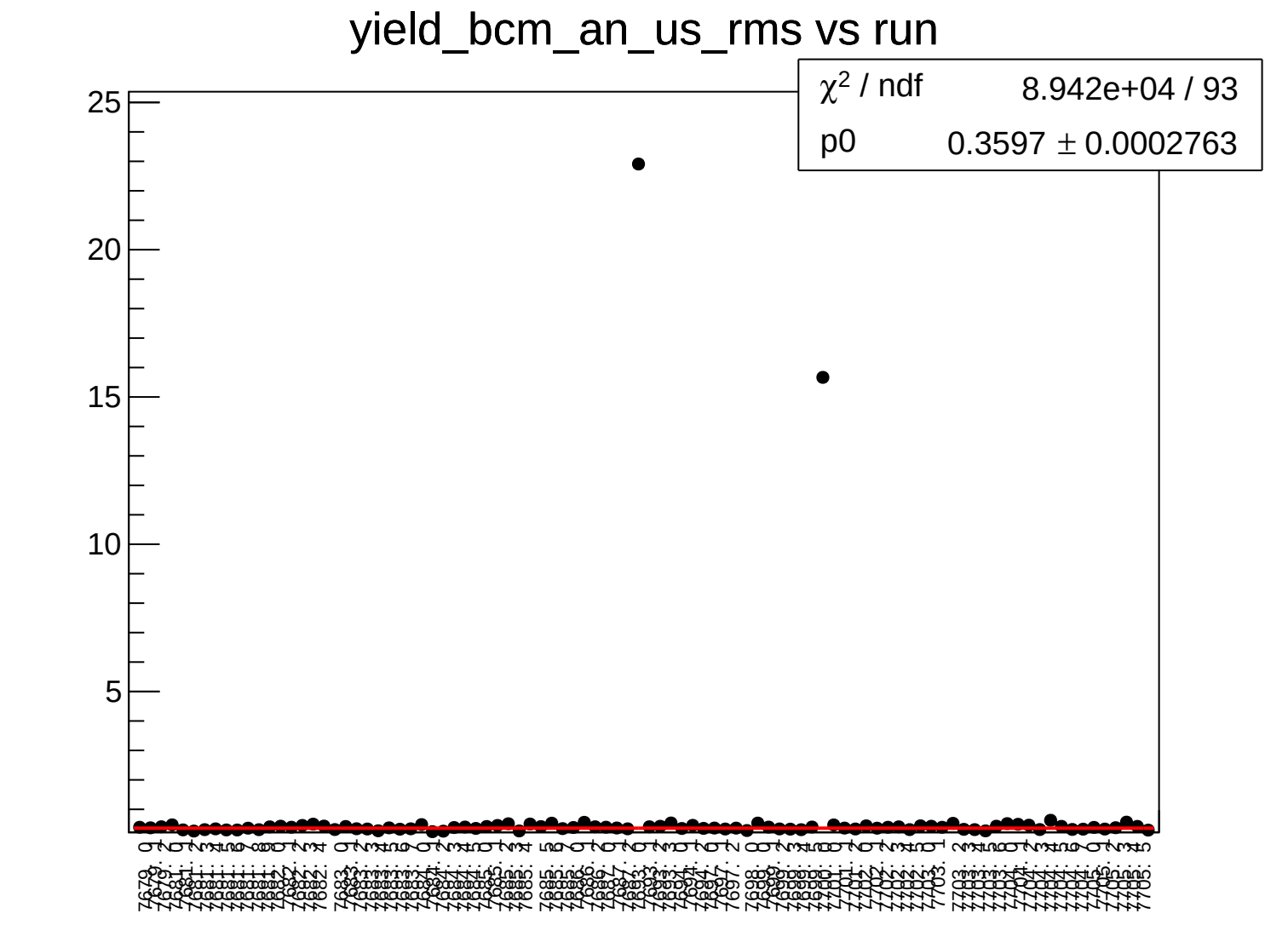

yield_bcm_an_ds3_mean vs run
χ² / ndf 1.298e+09 / 93
p0 129.8 ± 0.0003948
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 1444
Std Dev 1397
6000
4000
2000
0
−2000
−4000

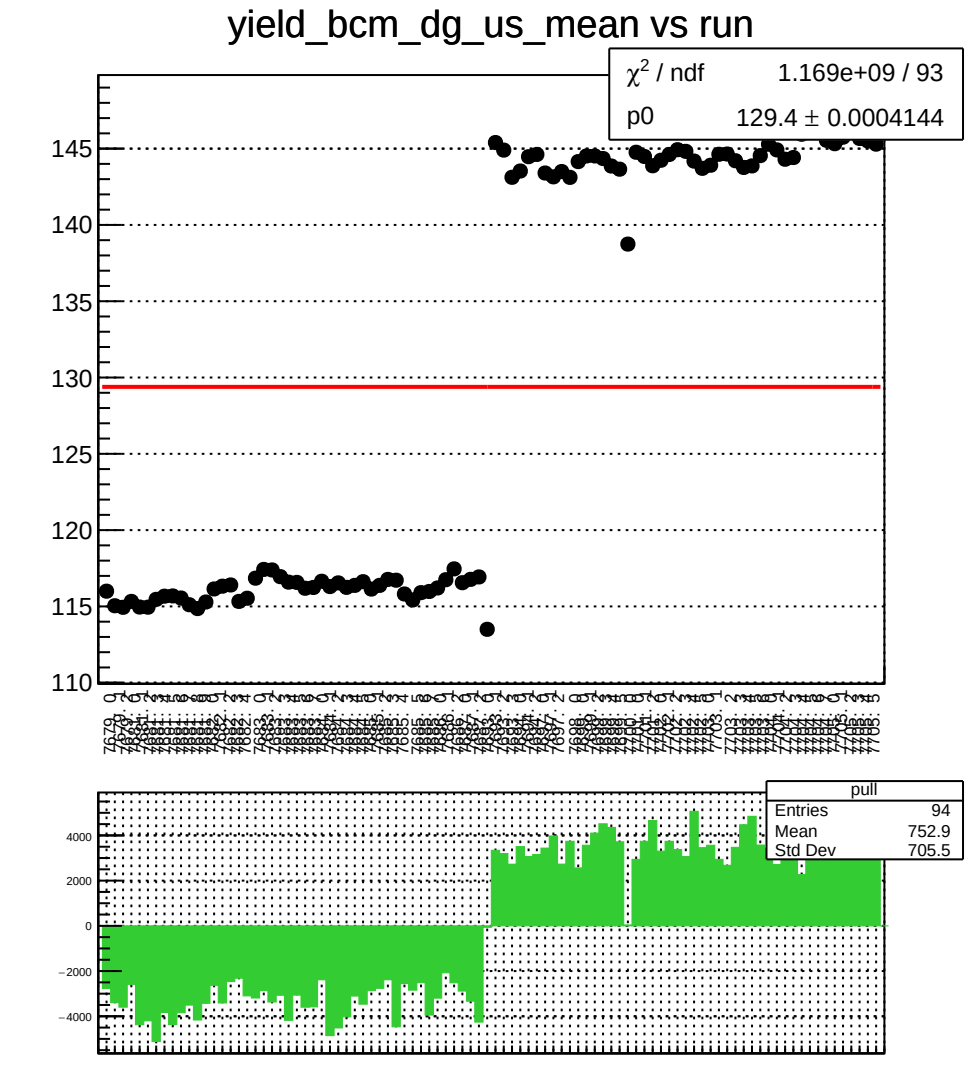

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

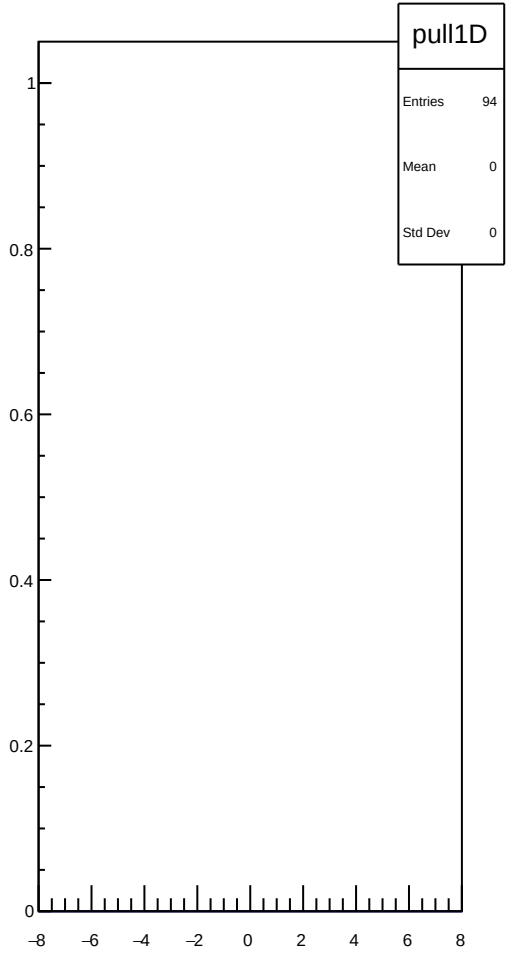

yield_bcm_an_ds3_rms vs run
χ² / ndf 8.831e+04 / 93
p0 0.3636 ± 0.0002792
25
20
15
10
5

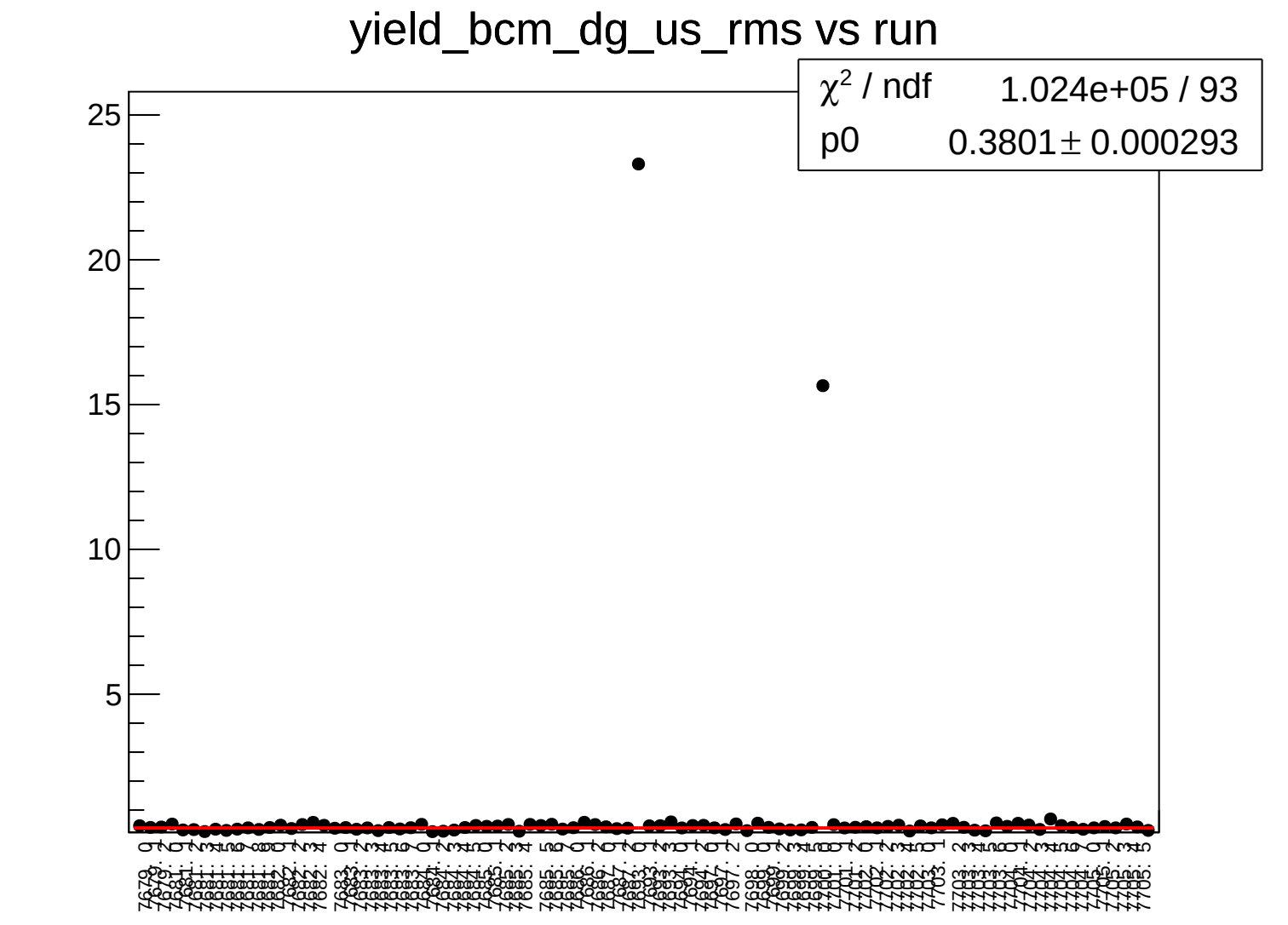

yield_bcm_an_us_mean vs run
χ² / ndf 1.297e+09 / 93
p0 129.3 ± 0.0003907
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 985.4
Std Dev 938
6000
4000
2000
0
−2000
−4000

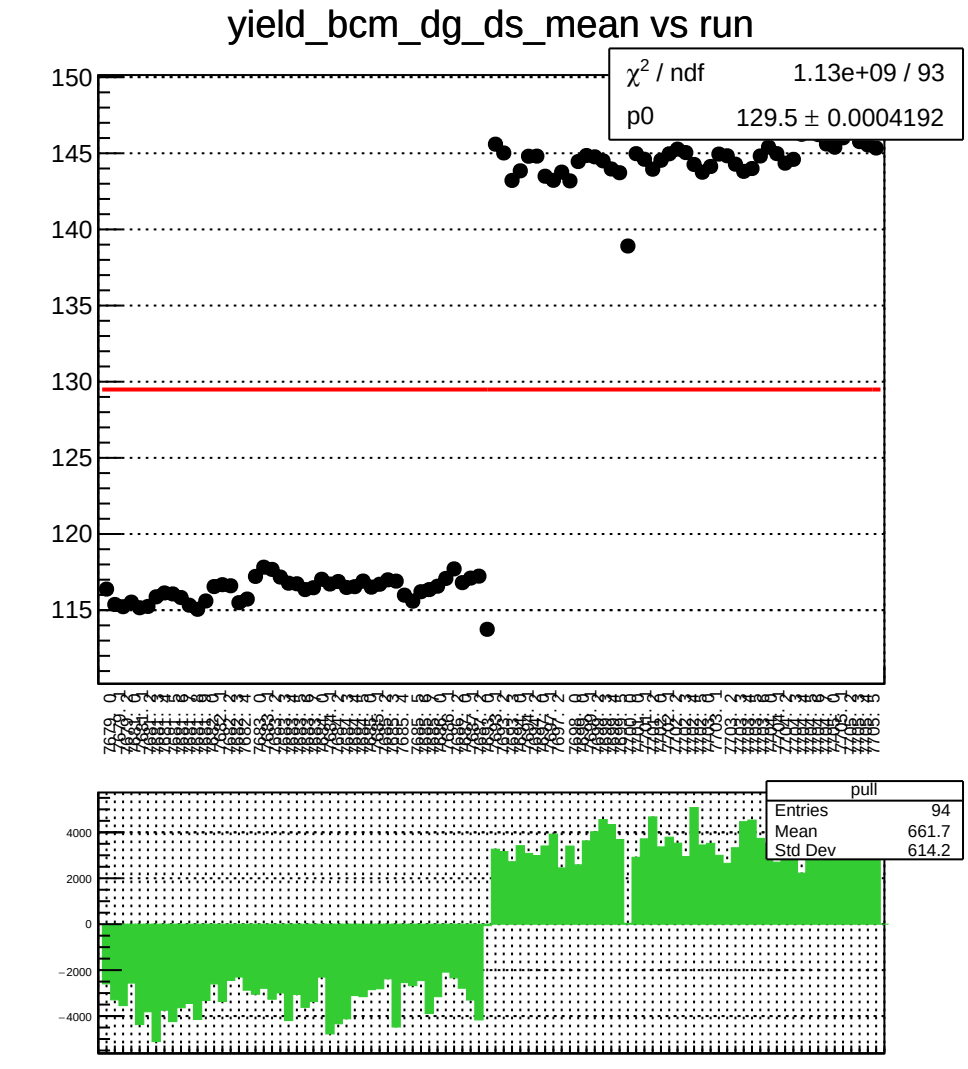

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

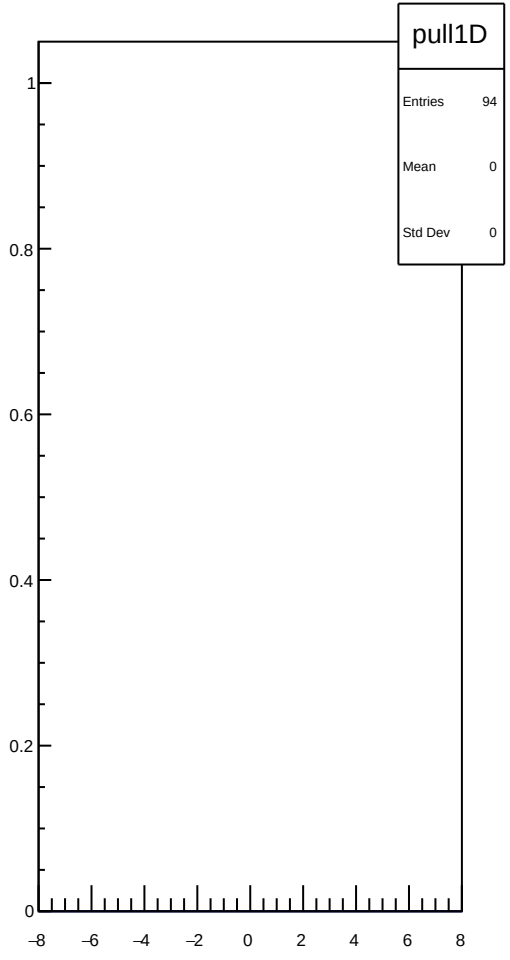

yield_bcm_an_us_rms vs run
χ² / ndf 8.942e+04 / 93
p0 0.3597 ± 0.0002763
25
20
15
10
5

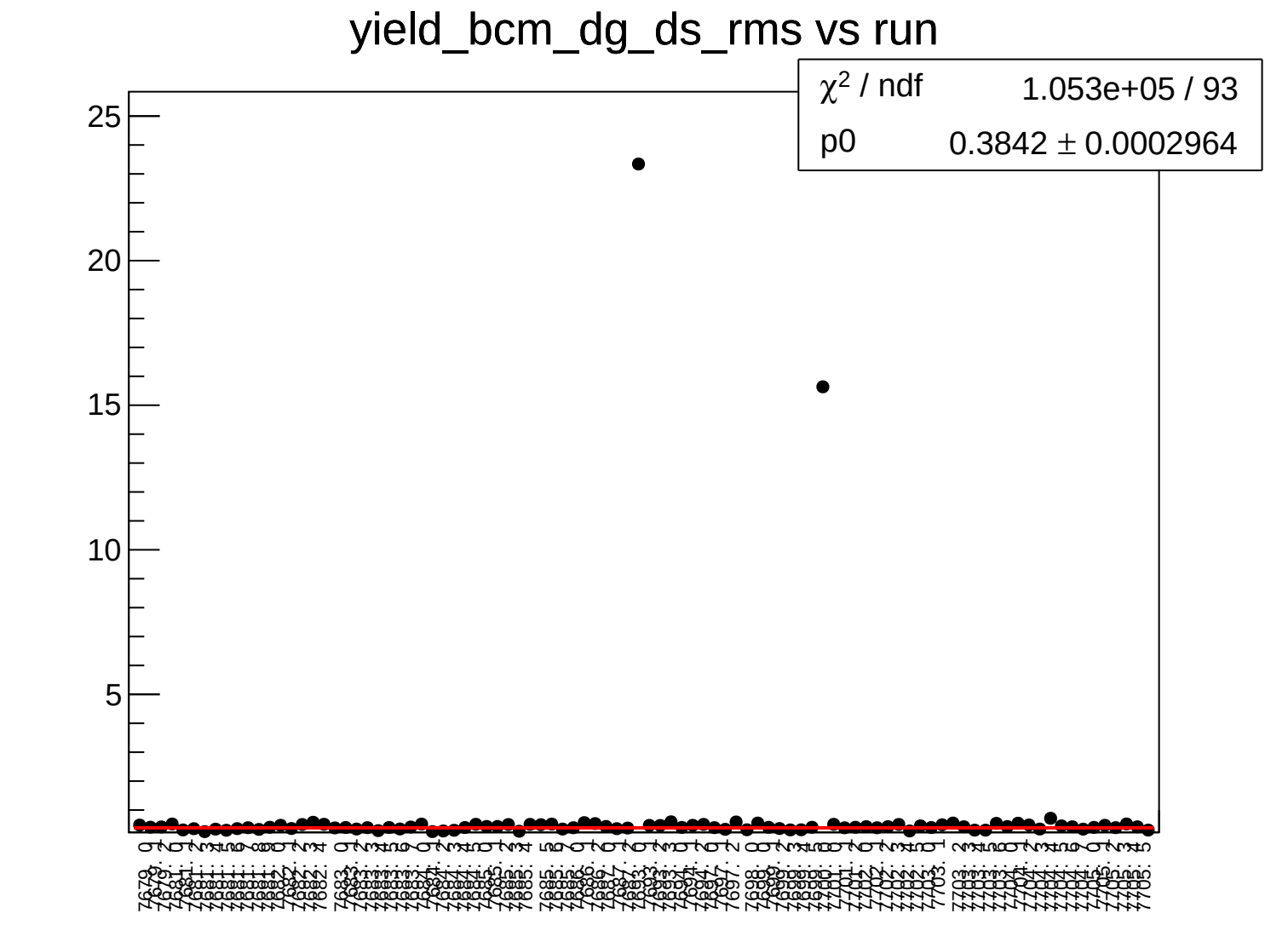

yield_bcm_dg_us_mean vs run
χ² / ndf 1.169e+09 / 93
p0 129.4 ± 0.0004144
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 752.9
Std Dev 705.5
4000
2000
0
−2000
−4000

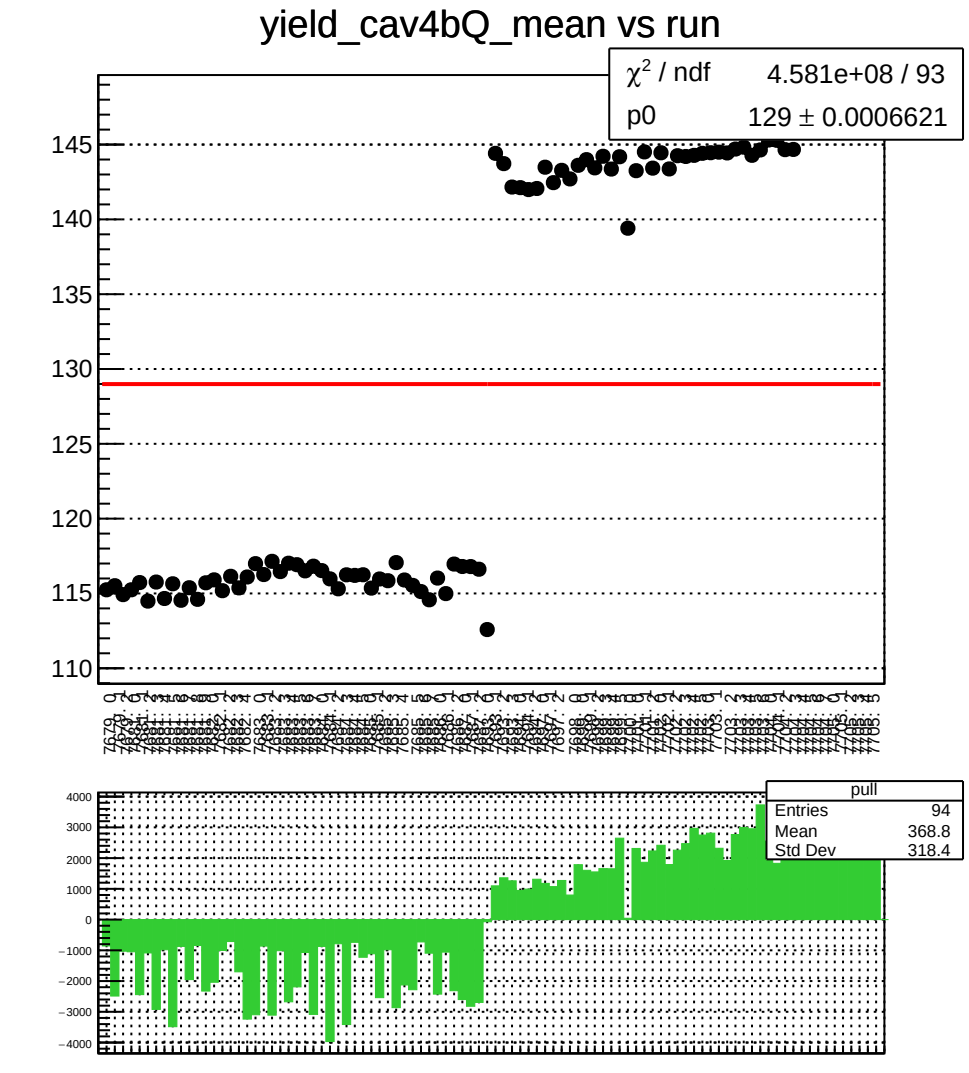

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

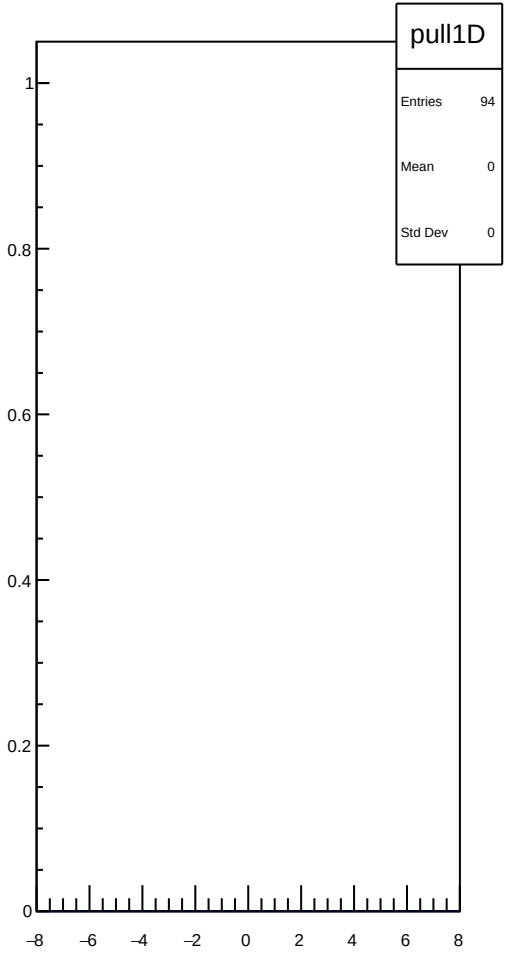

yield_bcm_dg_us_rms vs run
χ² / ndf 1.024e+05 / 93
p0 0.3801 ± 0.000293
25
20
15
10
5

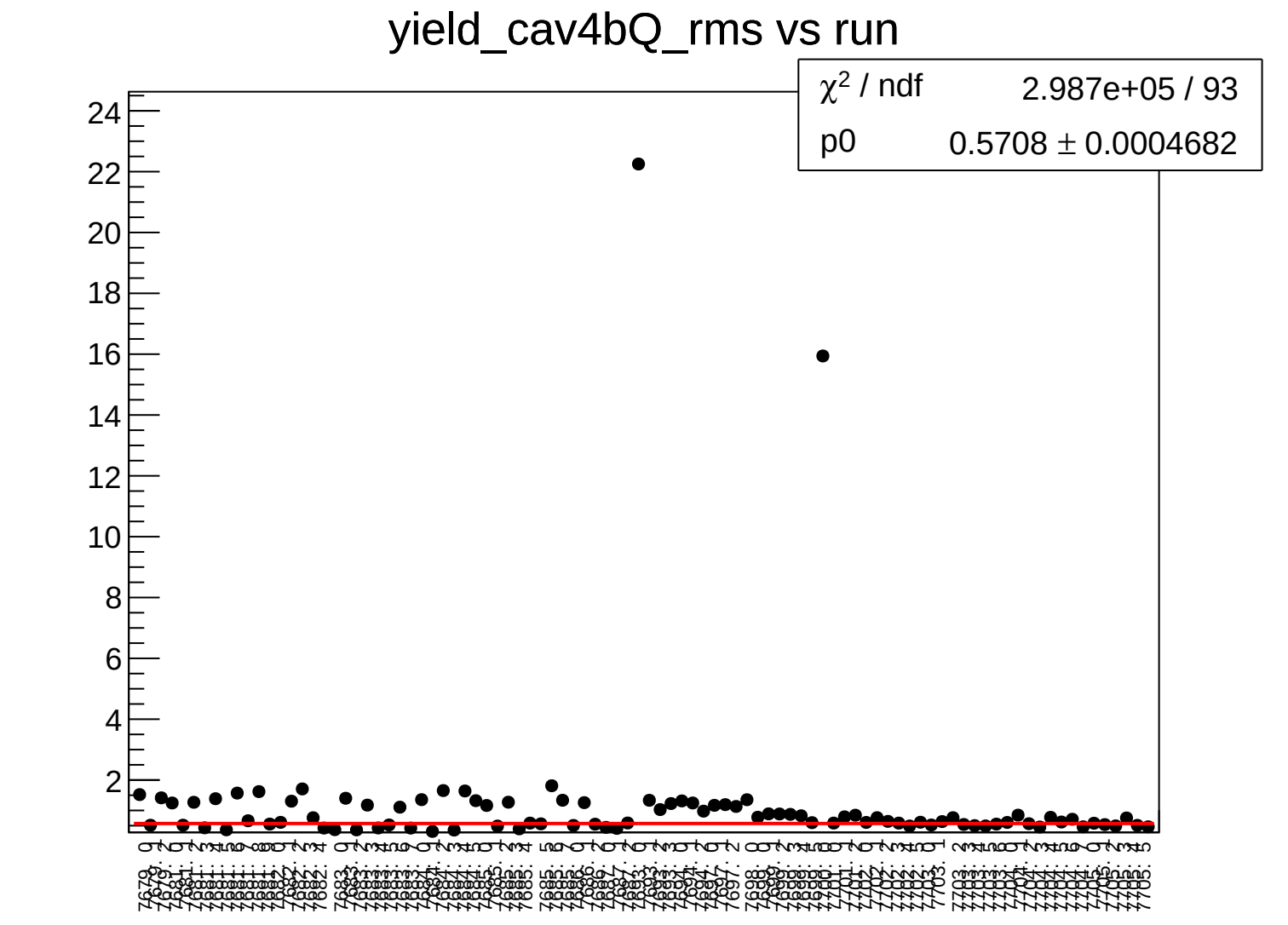

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.13e+09 / 93
p0 129.5 ± 0.0004192
150
145
140
135
130
125
120
115
pull
Entries 94
Mean 661.7
Std Dev 614.2
4000
2000
0
−2000
−4000

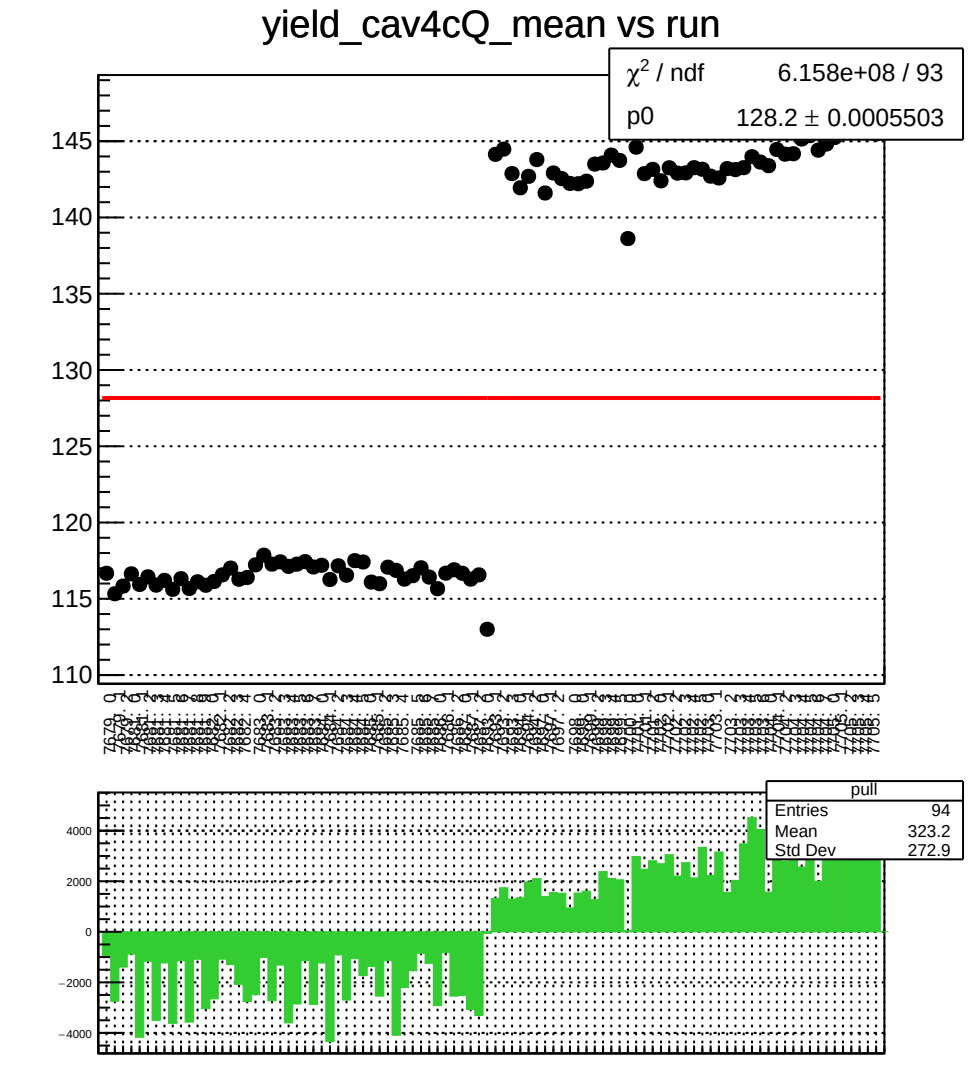

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

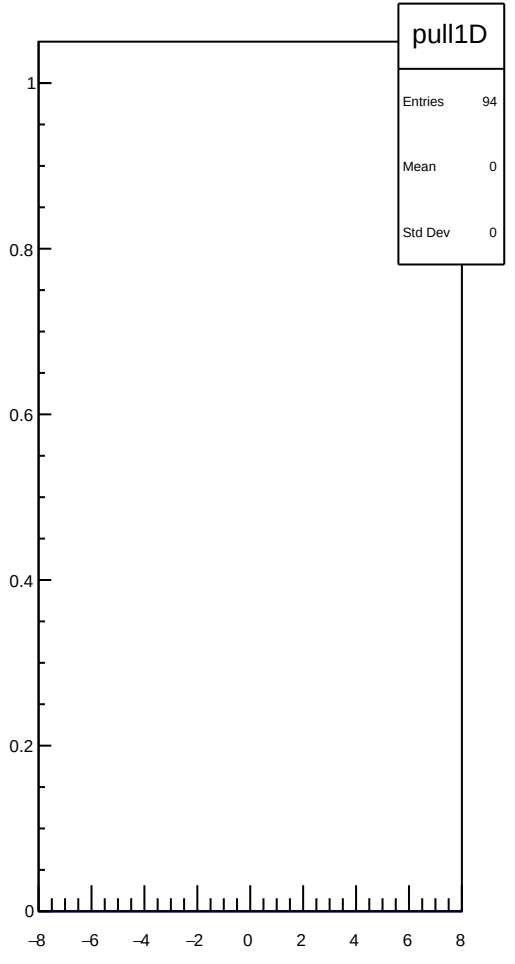

yield_bcm_dg_ds_rms vs run
χ² / ndf 1.053e+05 / 93
p0 0.3842 ± 0.0002964
25
20
15
10
5

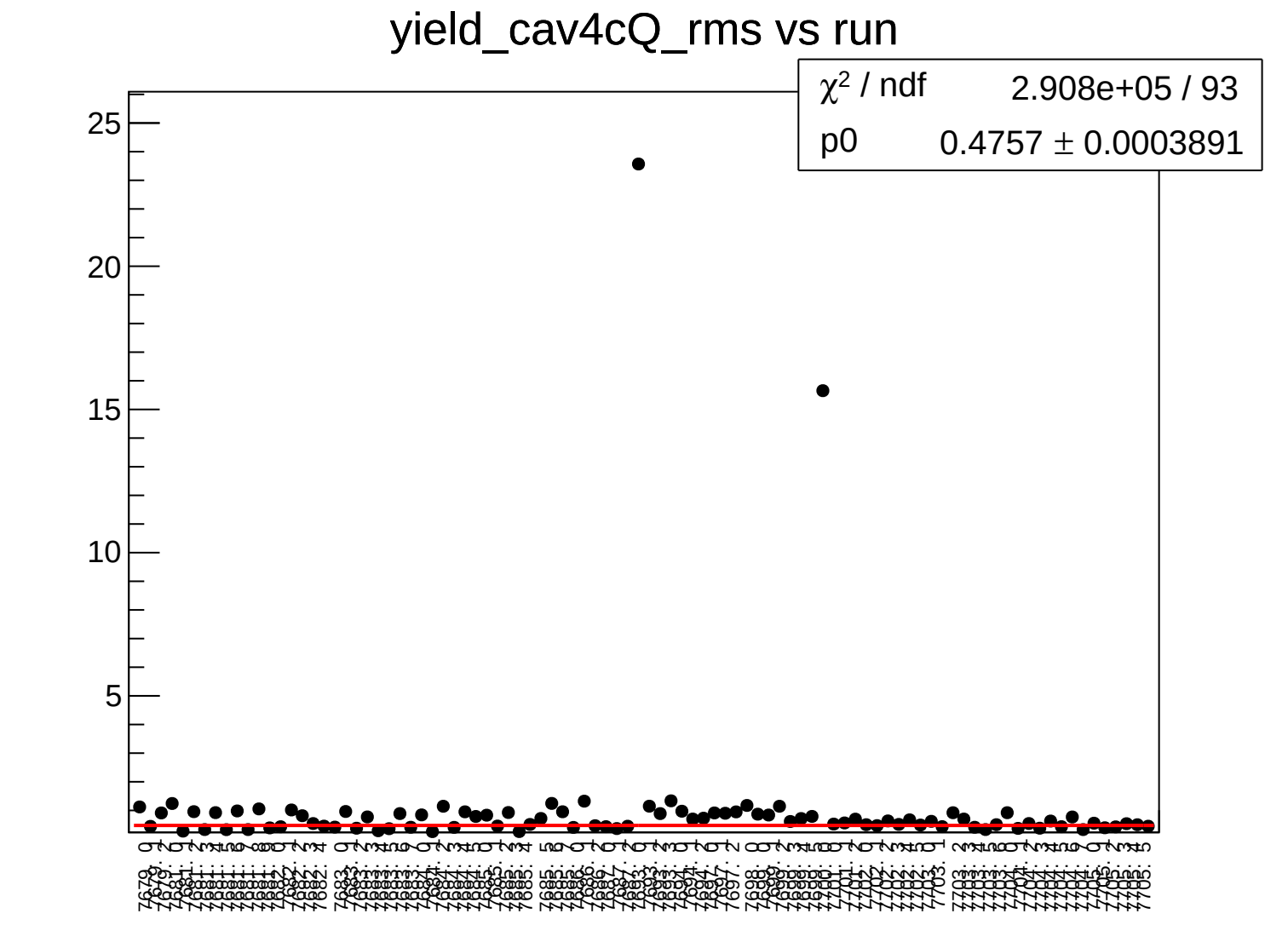

yield_cav4bQ_mean vs run
χ² / ndf 4.581e+08 / 93
p0 129 ± 0.0006621
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 368.8
Std Dev 318.4
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000

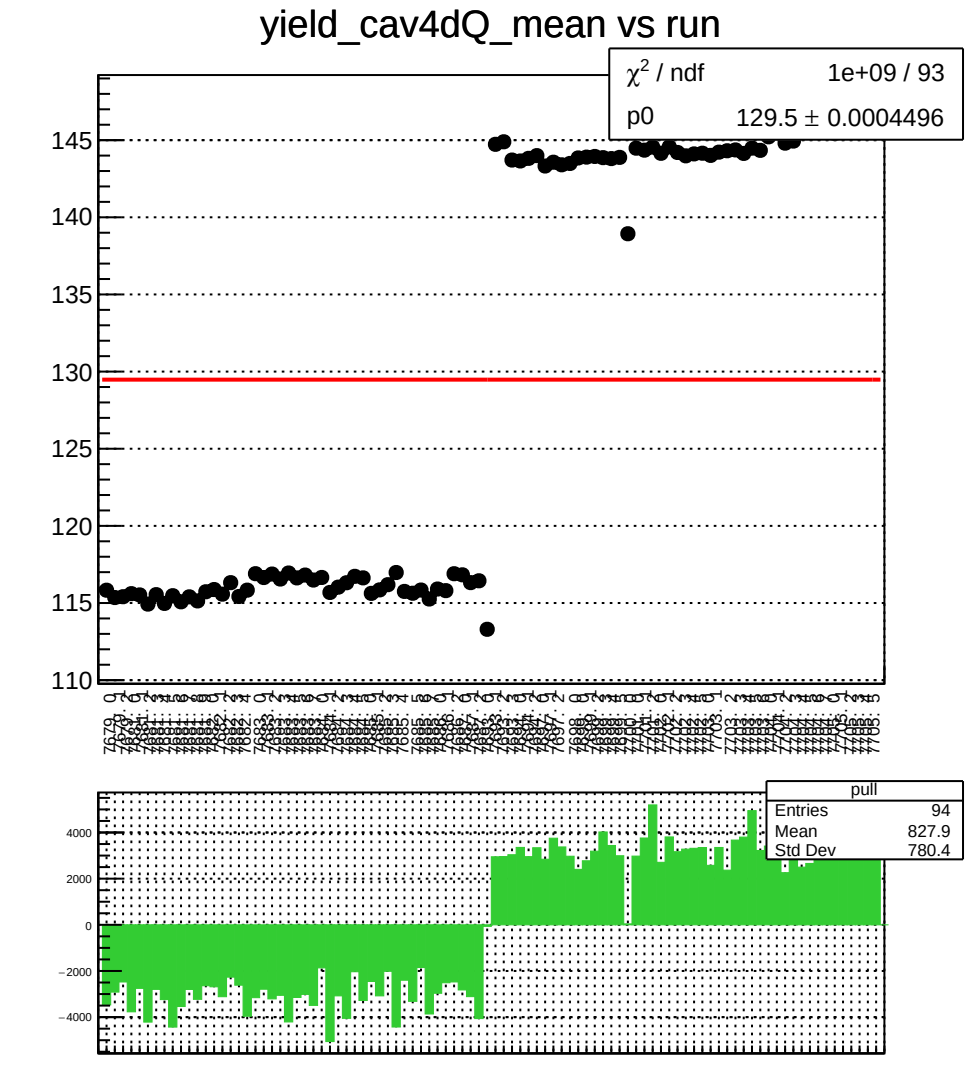

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

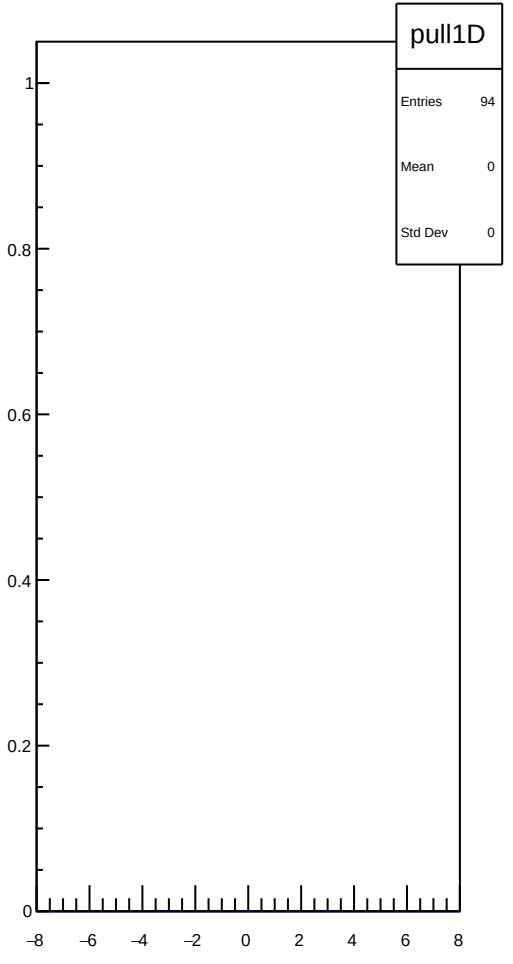

yield_cav4bQ_rms vs run
χ^2 / ndf 2.987e+05 / 93
p0 0.5708 ± 0.0004682
24
22
20
18
16
14
12
10
8
6
4
2

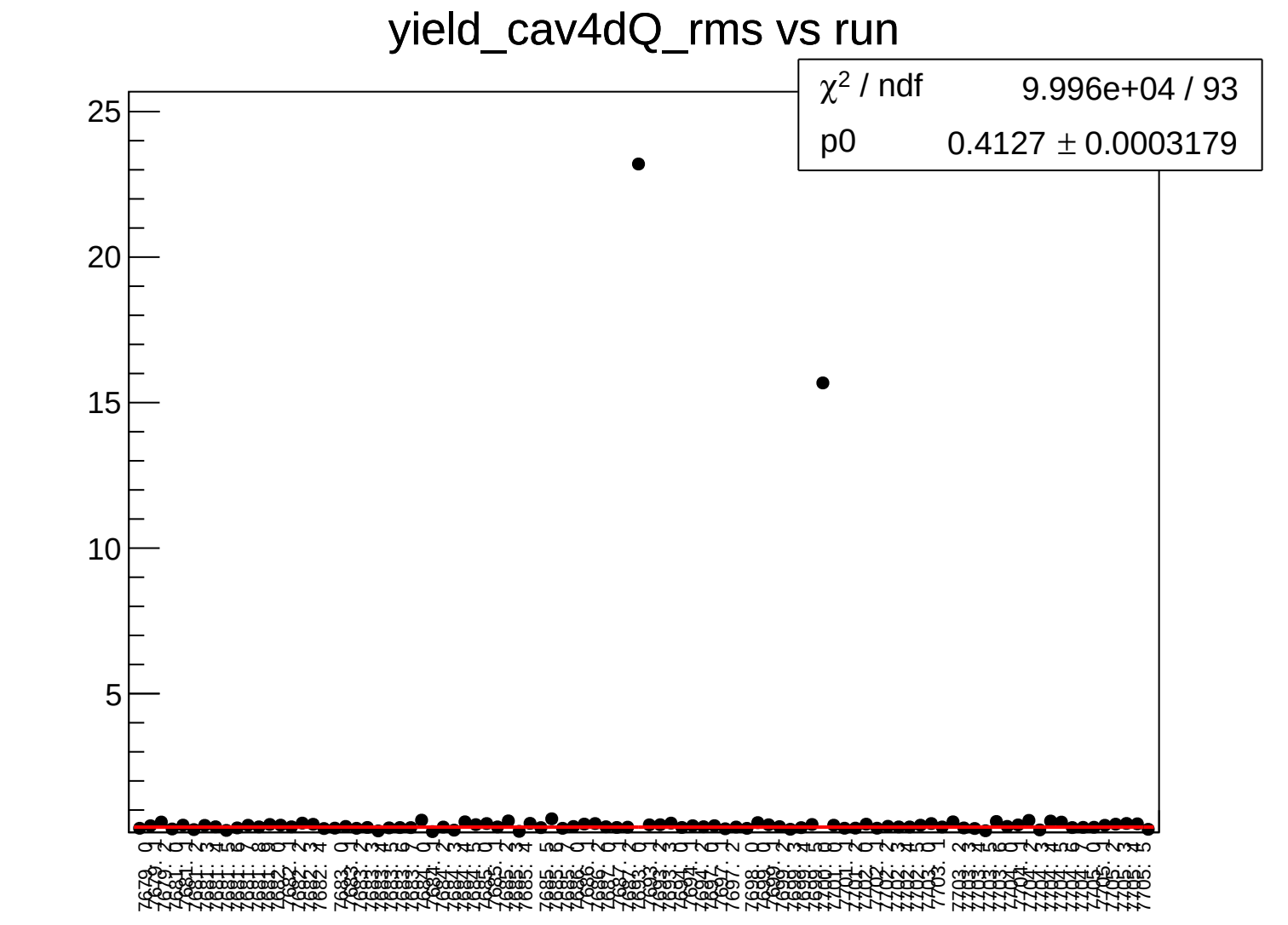

yield_cav4cQ_mean vs run
χ² / ndf 6.158e+08 / 93
p0 128.2 ± 0.0005503
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 323.2
Std Dev 272.9
4000
2000
0
−2000
−4000

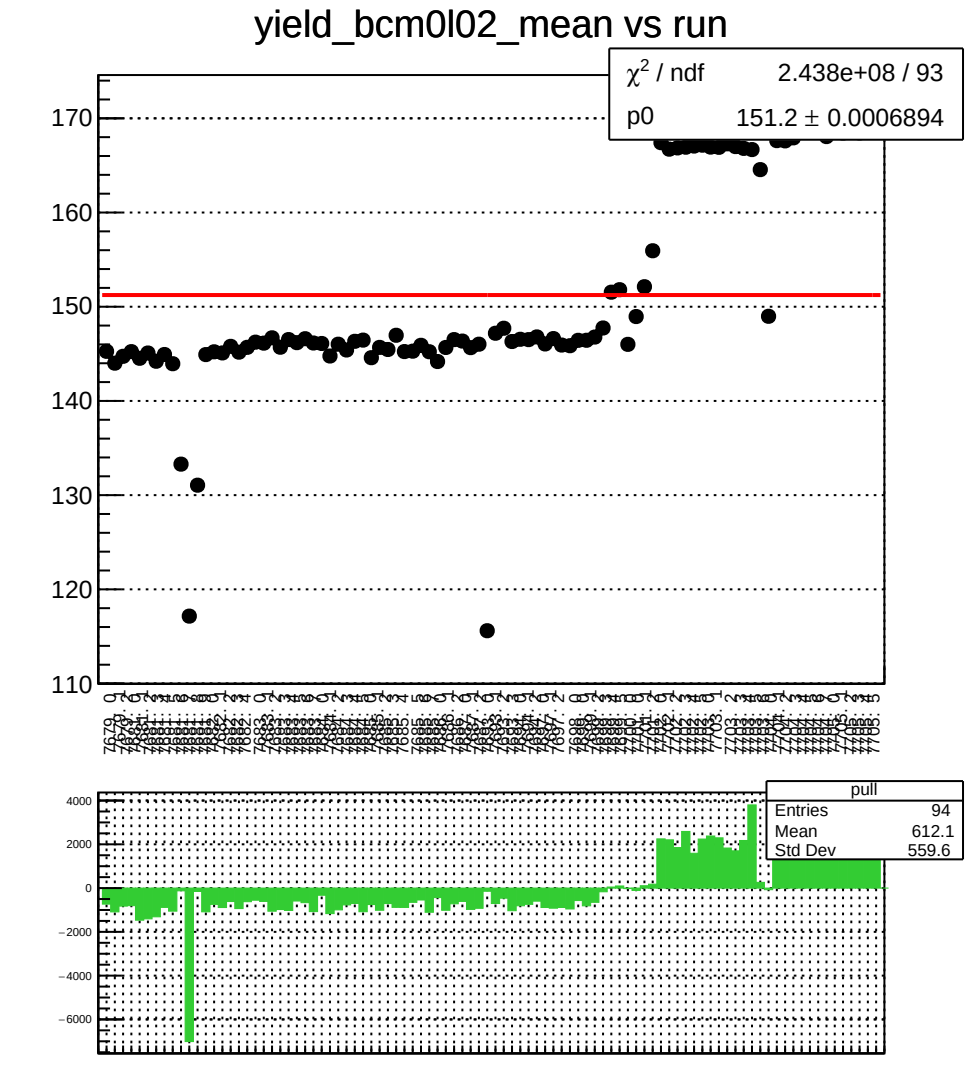

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

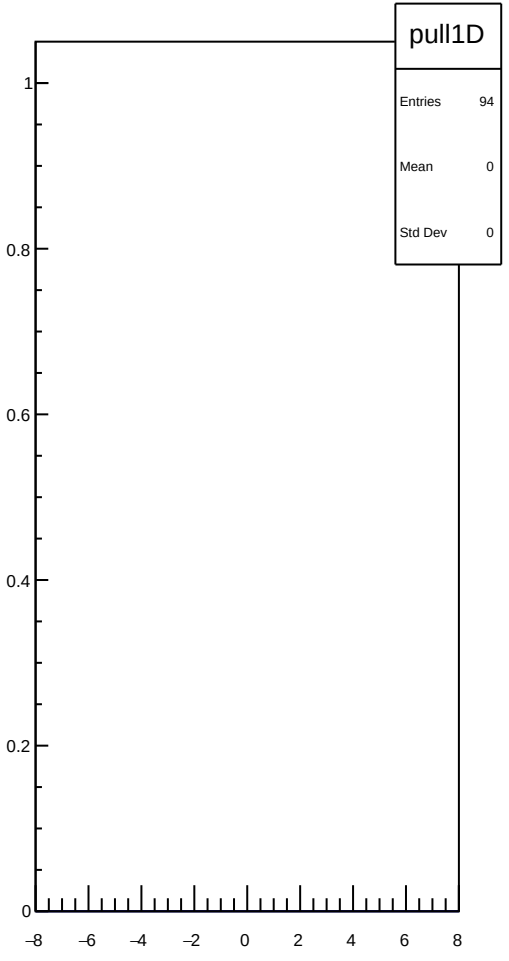

yield_cav4cQ_rms vs run
χ² / ndf 2.908e+05 / 93
p0 0.4757 ± 0.0003891
25
20
15
10
5

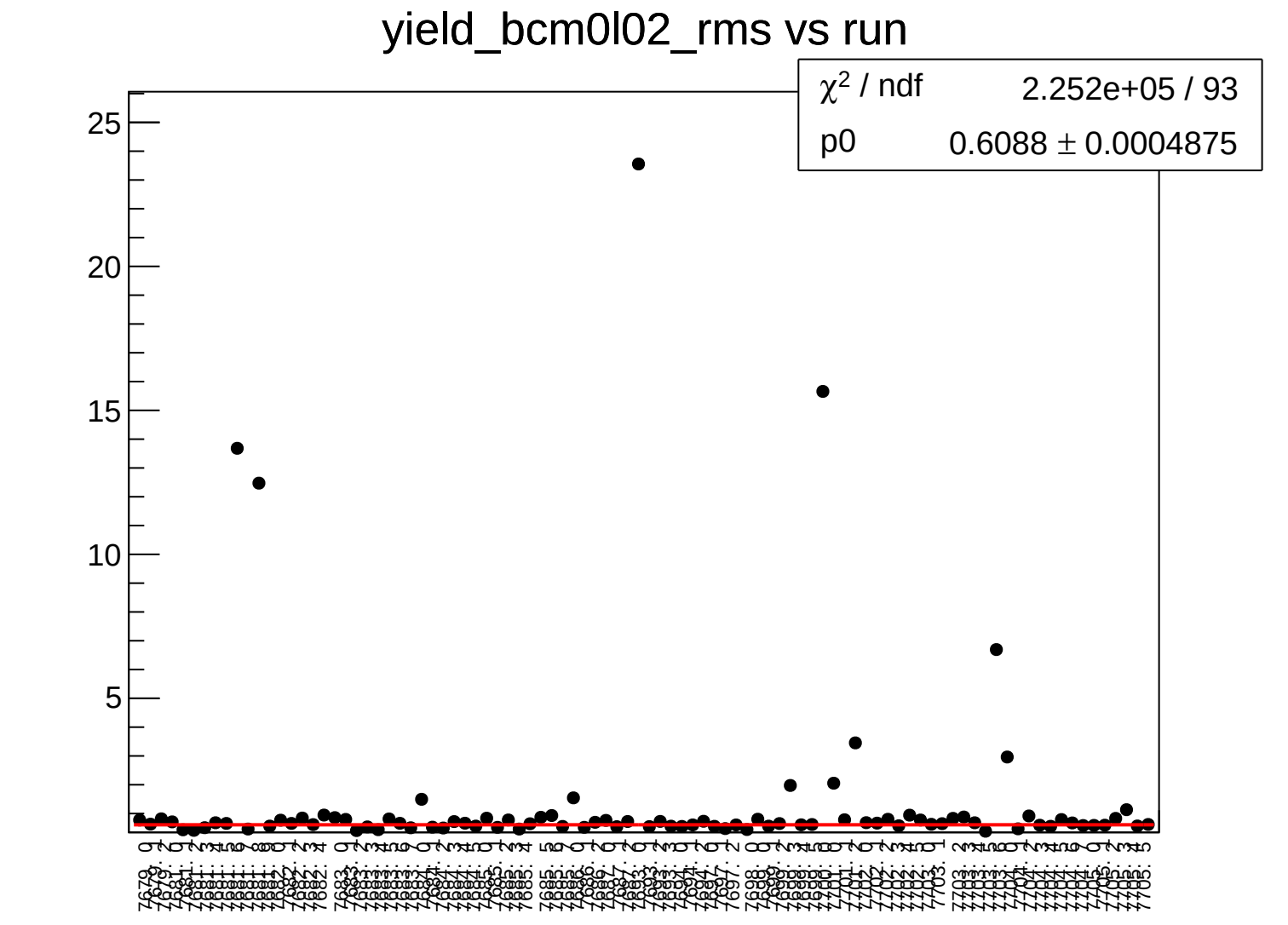

yield_cav4dQ_mean vs run
χ² / ndf 1e+09 / 93
p0 129.5 ± 0.0004496
145
140
135
130
125
120
115
110
pull
Entries 94
Mean 827.9
Std Dev 780.4
4000
2000
0
−2000
−4000

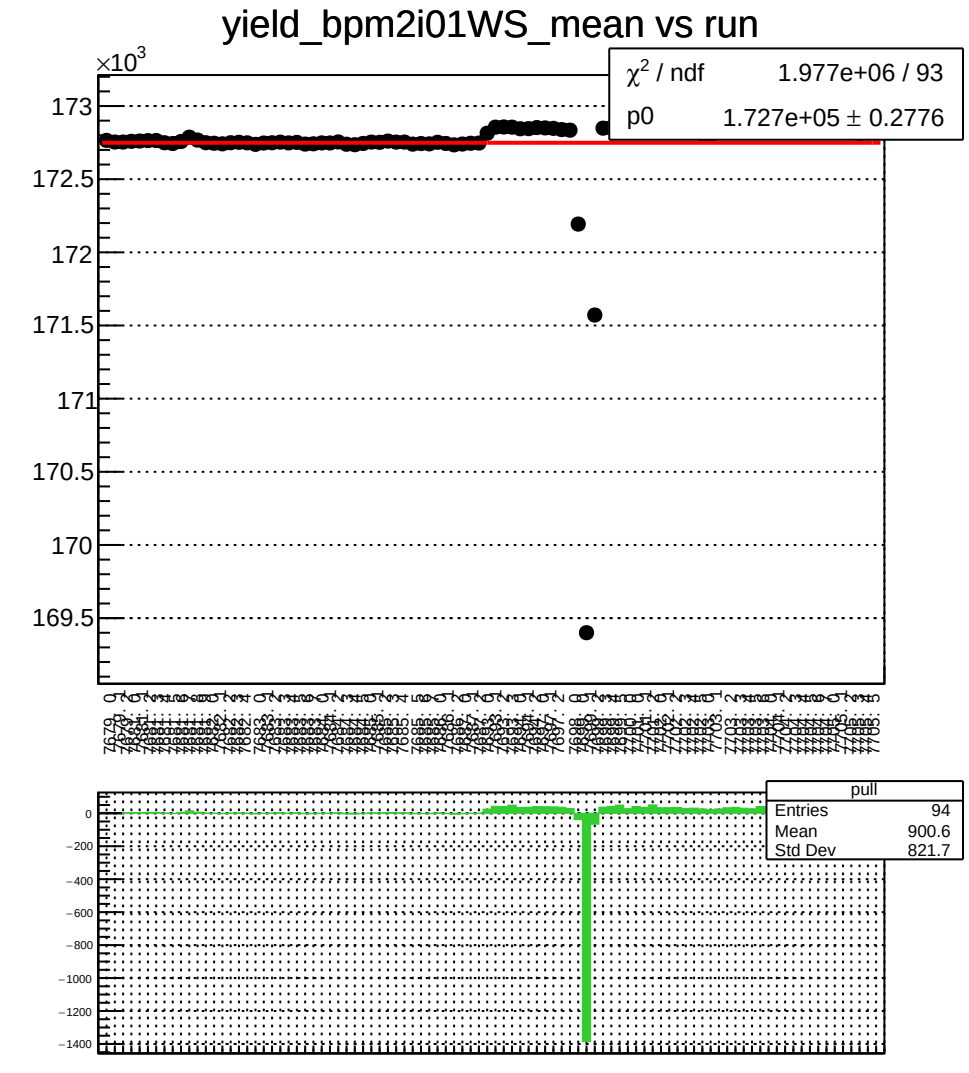

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

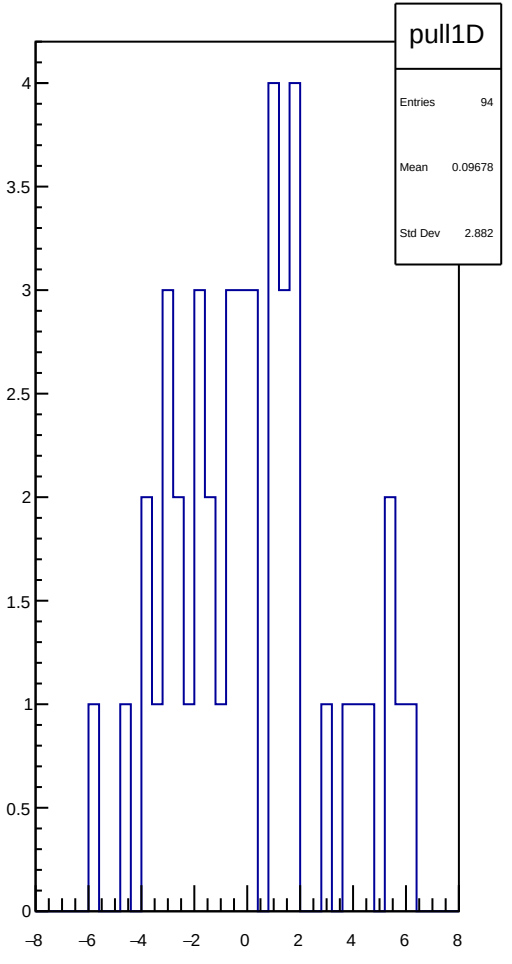

yield_cav4dQ_rms vs run
χ^2 / ndf 9.996e+04 / 93
p0 0.4127 ± 0.0003179
25
20
15
10
5

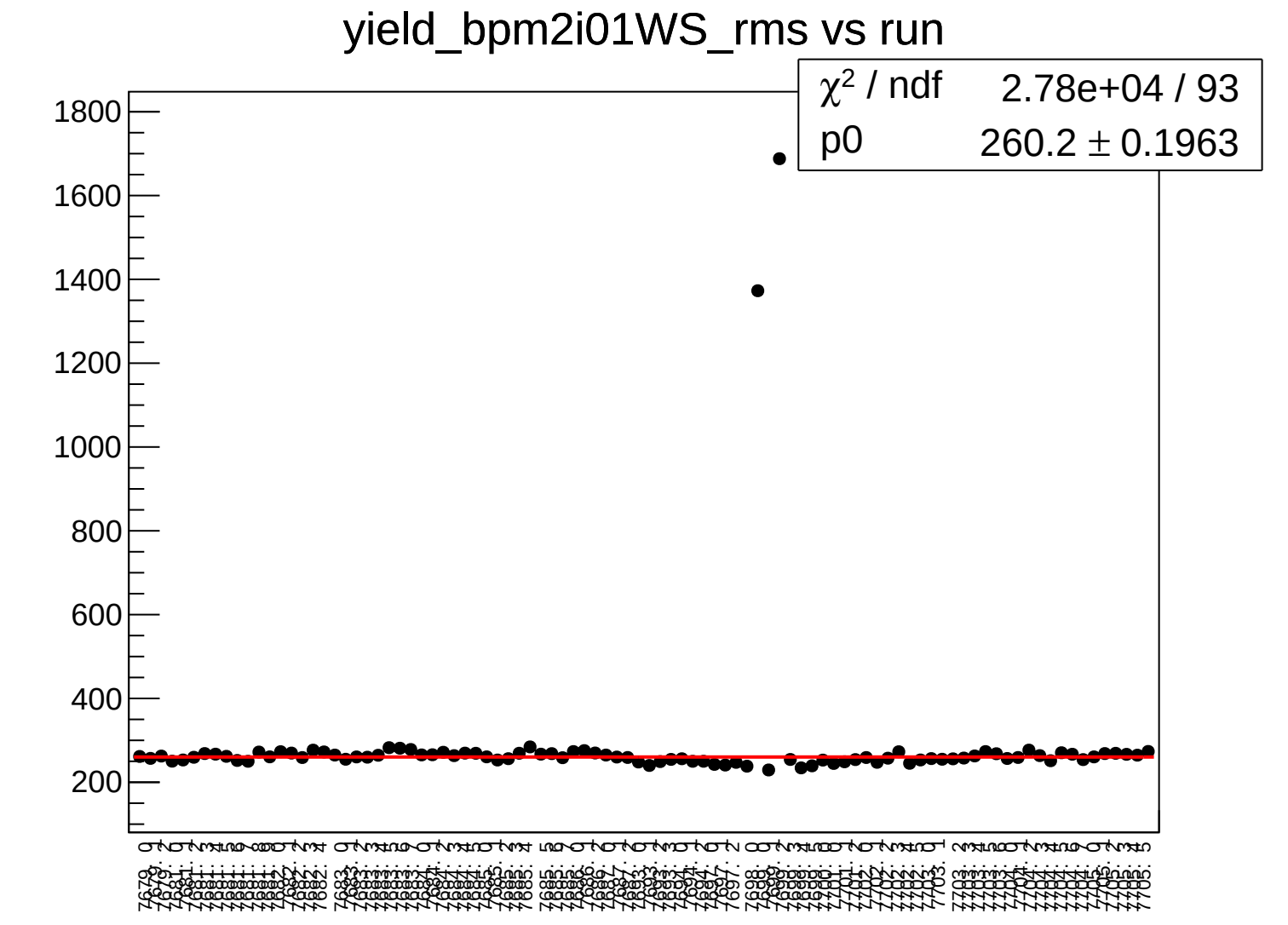

yield_bcm0l02_mean vs run
χ² / ndf 2.438e+08 / 93
p0 151.2 ± 0.0006894
170
160
150
140
130
120
110
pull
Entries 94
Mean 612.1
Std Dev 559.6
4000
2000
0
−2000
−4000
−6000

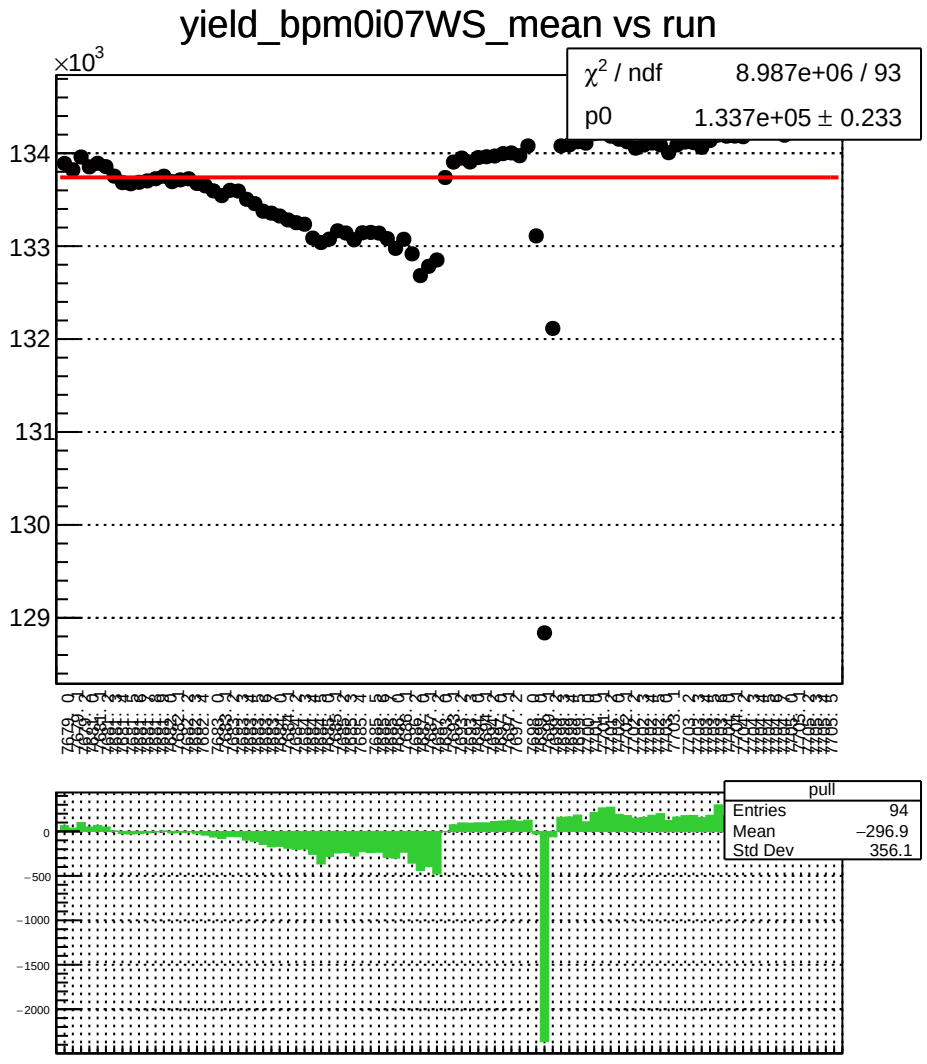

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

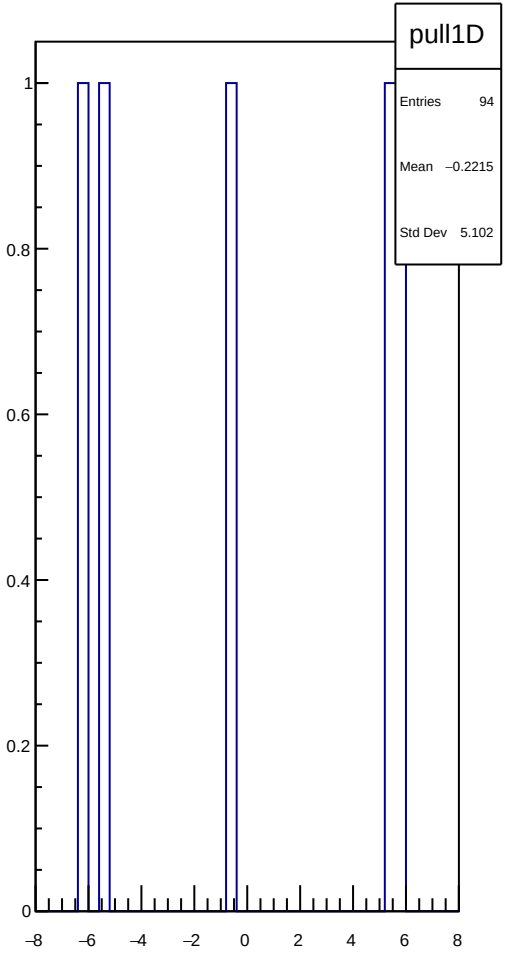

yield_bcm0l02_rms vs run
χ² / ndf 2.252e+05 / 93
p0 0.6088 ± 0.0004875
25
20
15
10
5

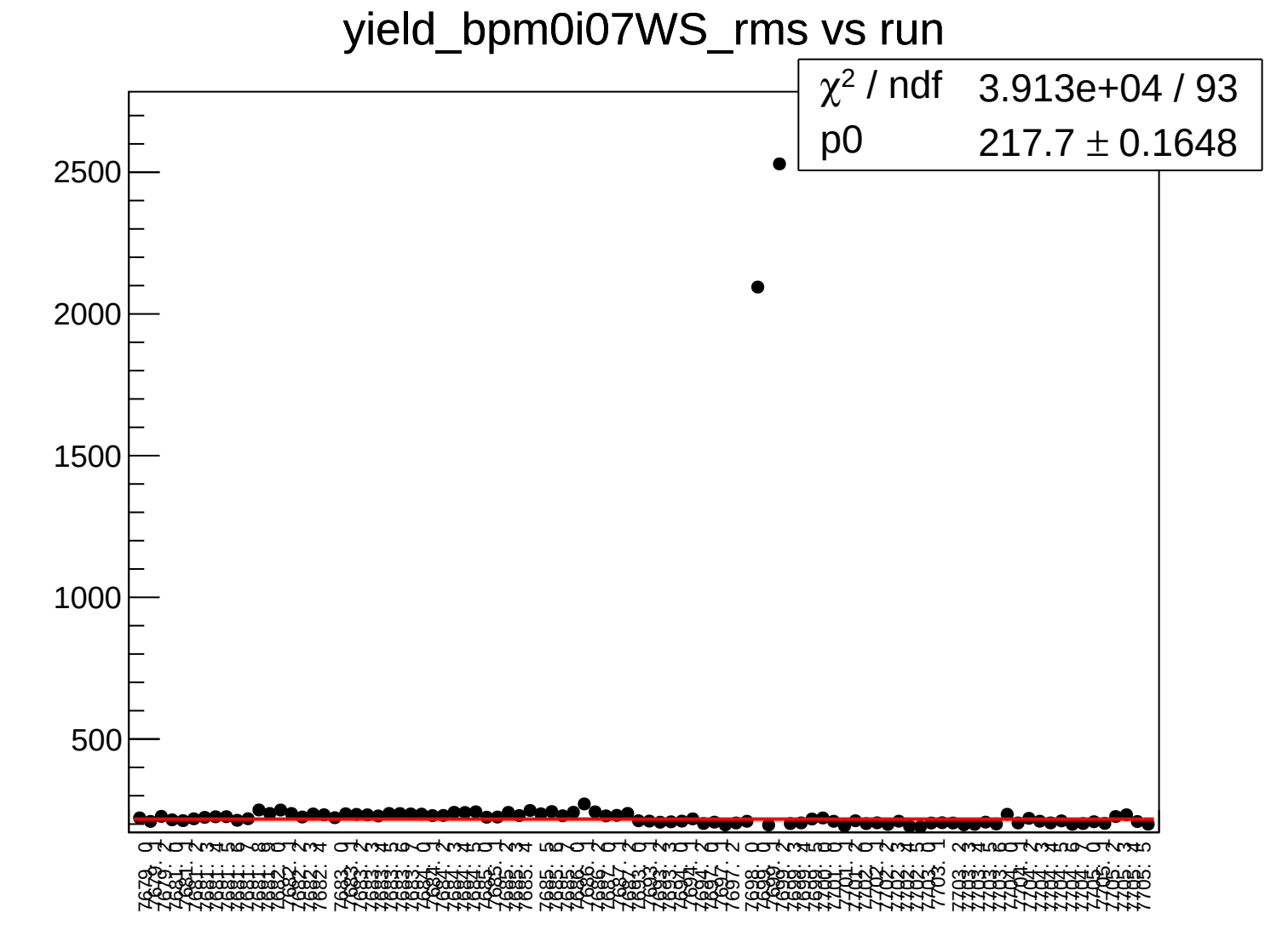

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 1.977e+06 / 93
p0 1.727e+05 ± 0.2776
173
172.5
172
171.5
171
170.5
170
169.5
pull
Entries 94
Mean 900.6
Std Dev 821.7
0
−200
−400
−600
−800
−1000
−1200
−1400

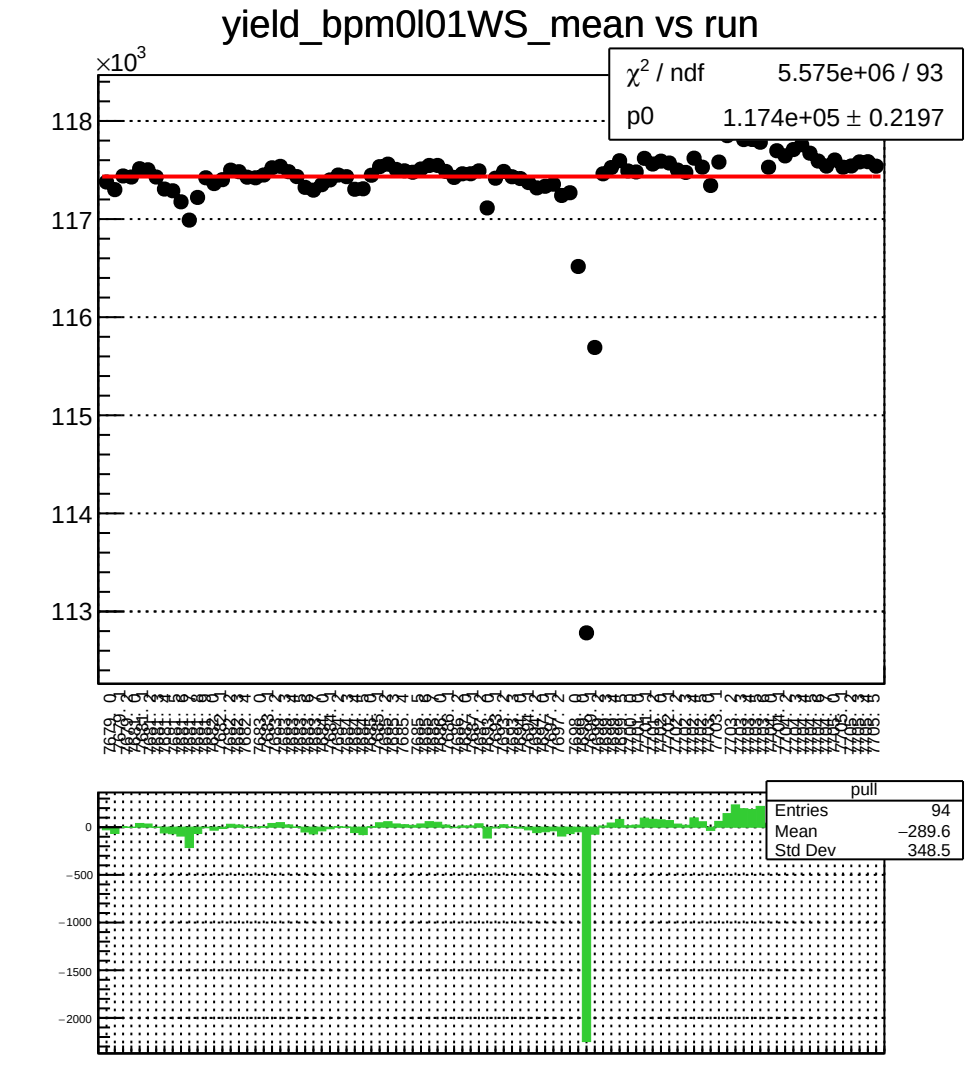

pull1D
Entries 94
Mean 0.09678
Std Dev 2.882
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

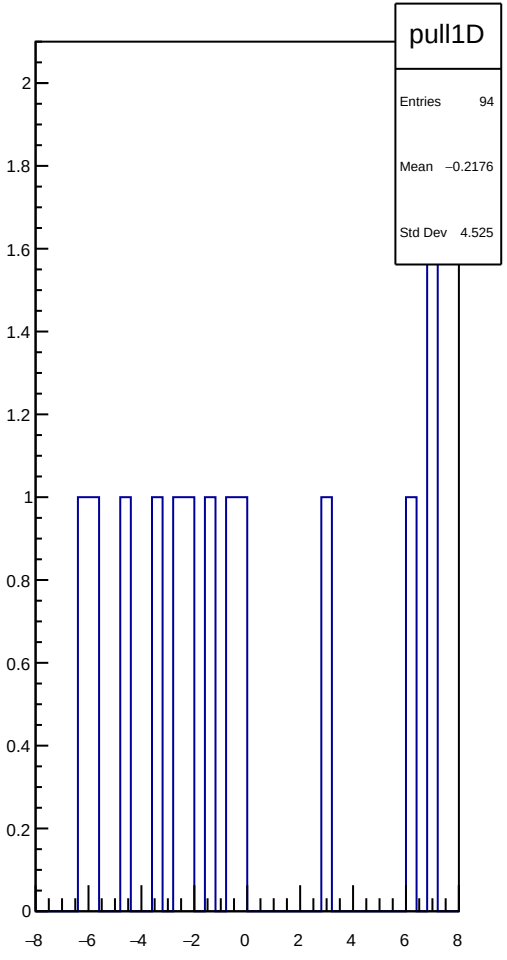

yield_bpm2i01WS_rms vs run
χ^2 / ndf 2.78e+04 / 93
p0 260.2 ± 0.1963
1800
1600
1400
1200
1000
800
600
400
200

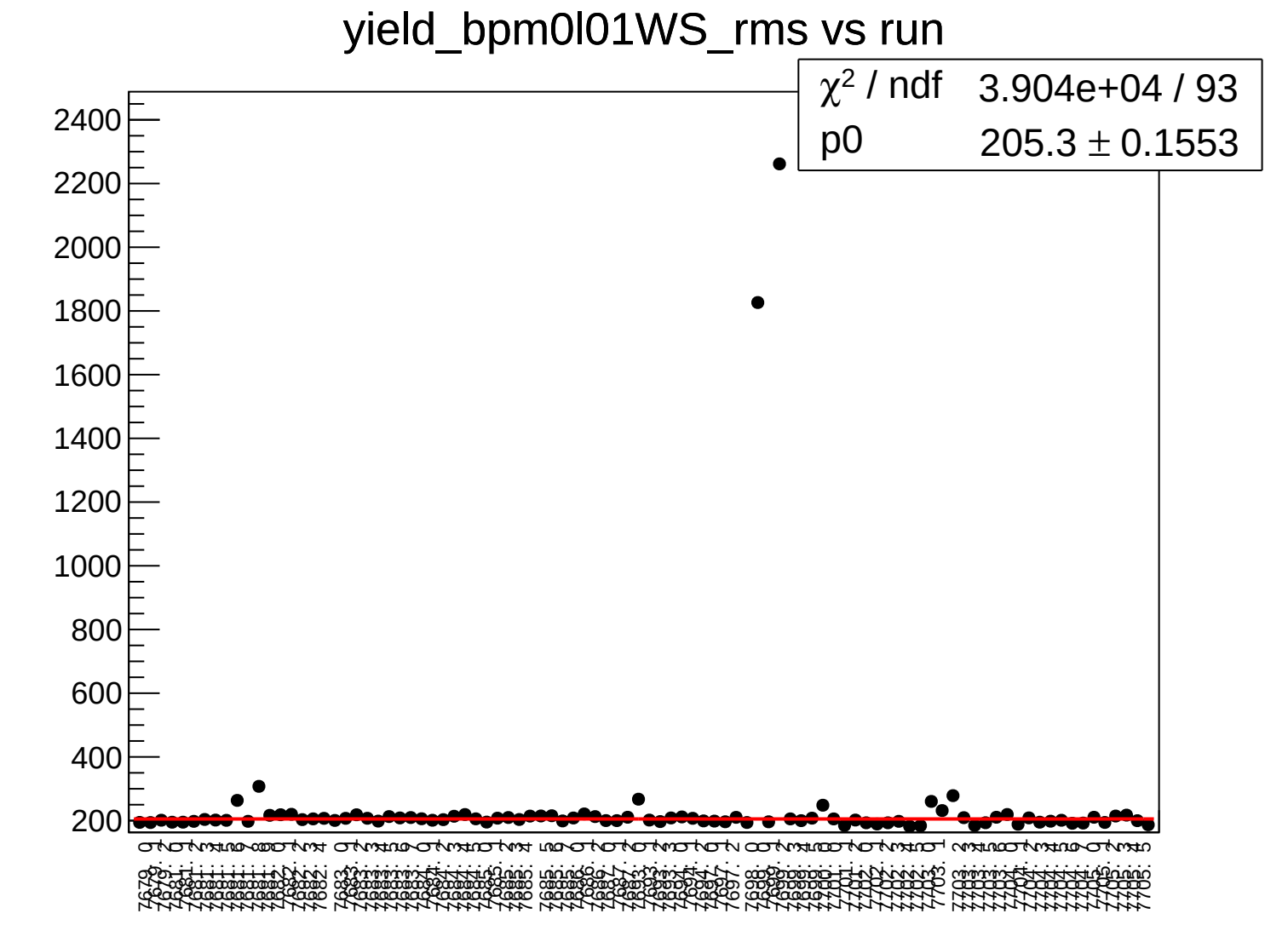

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 8.987e+06 / 93
p0 1.337e+05 ± 0.233
134
133
132
131
130
129
pull
Entries 94
Mean −296.9
Std Dev 356.1
0
−500
−1000
−1500
−2000

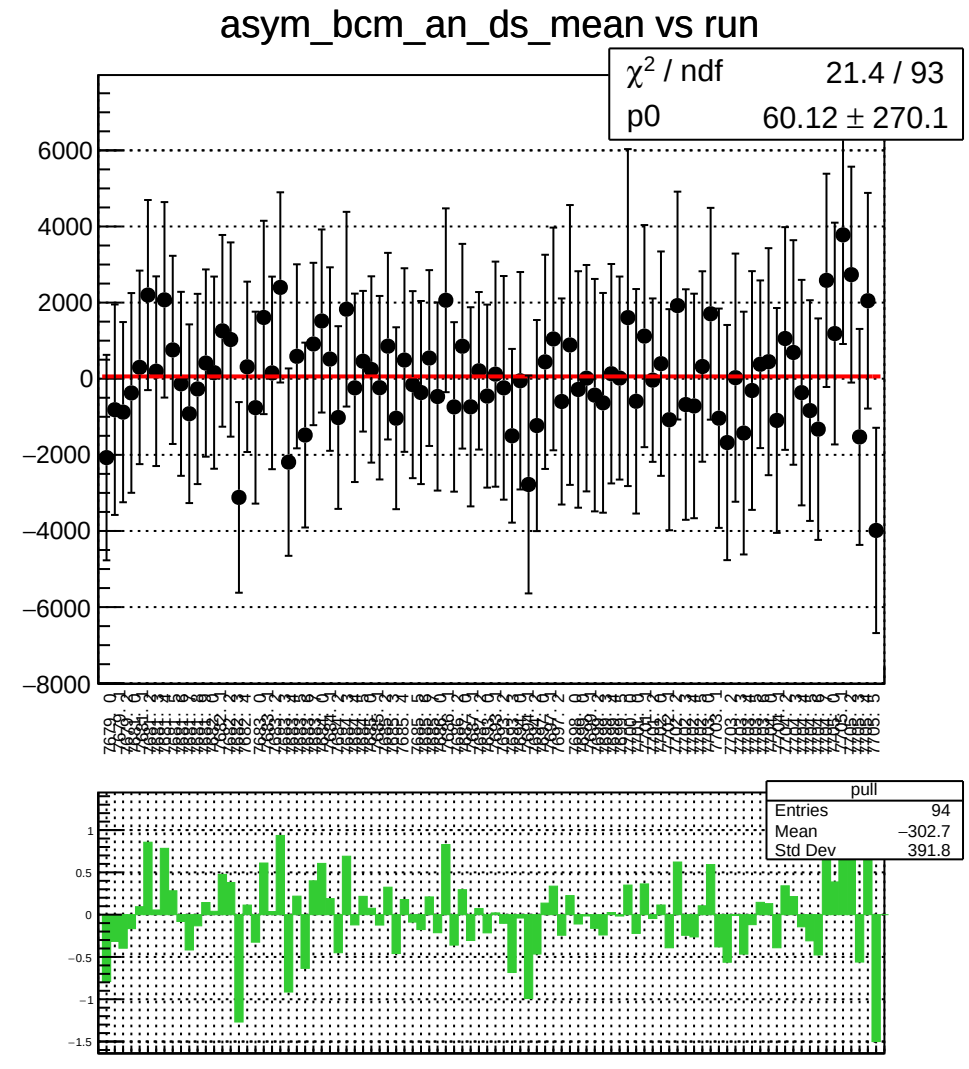

pull1D
Entries 94
Mean −0.2215
Std Dev 5.102
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

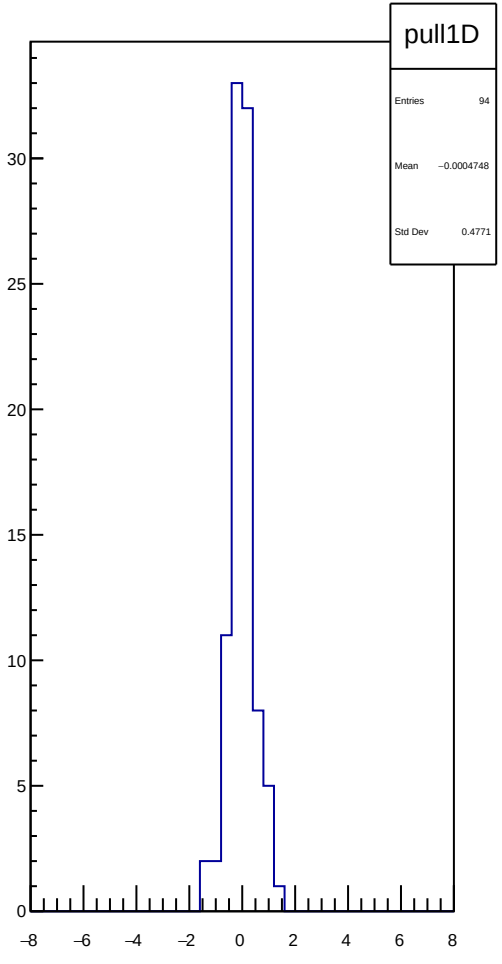

yield_bpm0i07WS_rms vs run
χ² / ndf 3.913e+04 / 93
p0 217.7 ± 0.1648
2500
2000
1500
1000
500

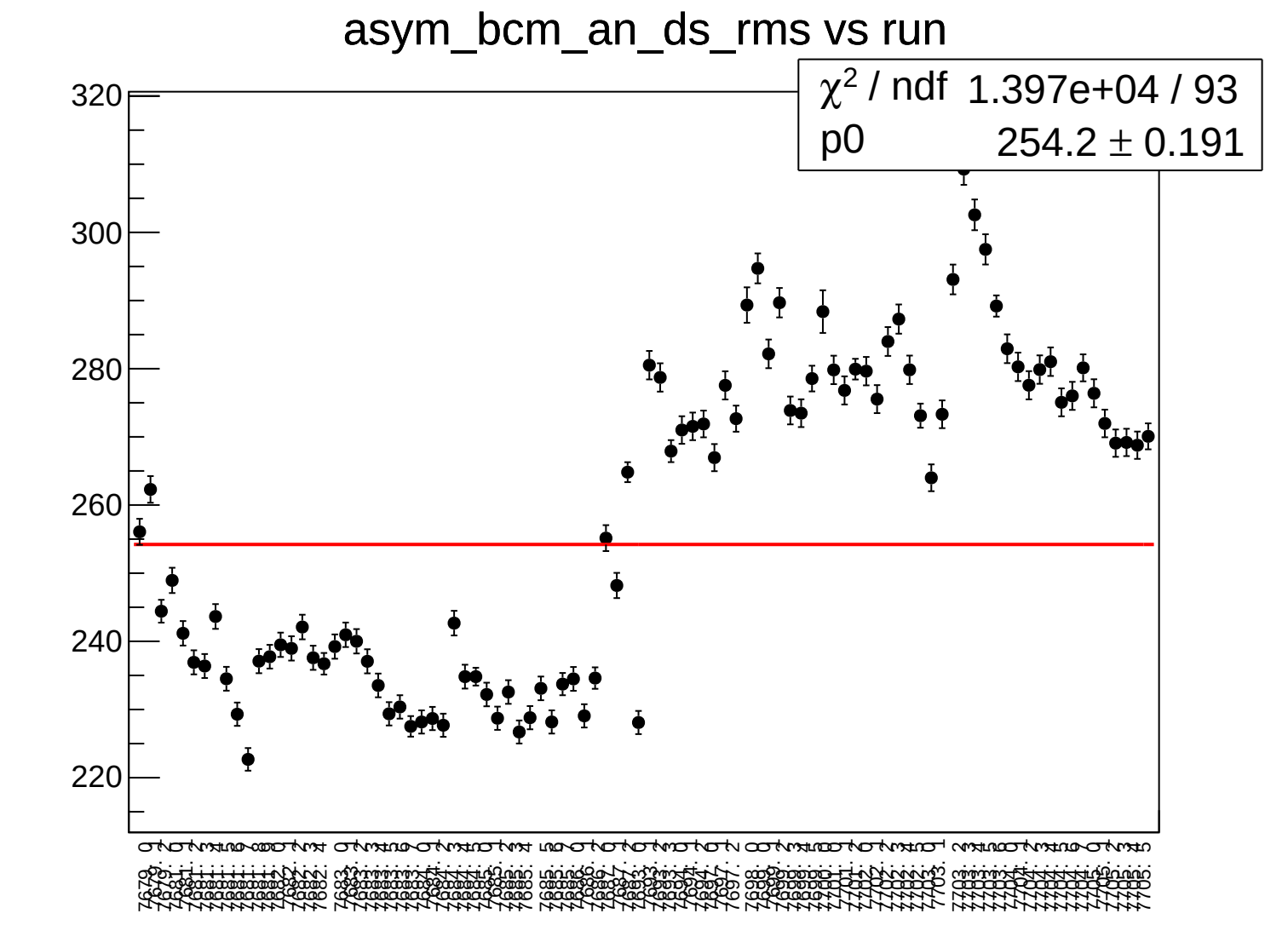

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 5.575e+06 / 93
p0 1.174e+05 ± 0.2197
118
117
116
115
114
113
pull
Entries 94
Mean −289.6
Std Dev 348.5
0
−500
−1000
−1500
−2000

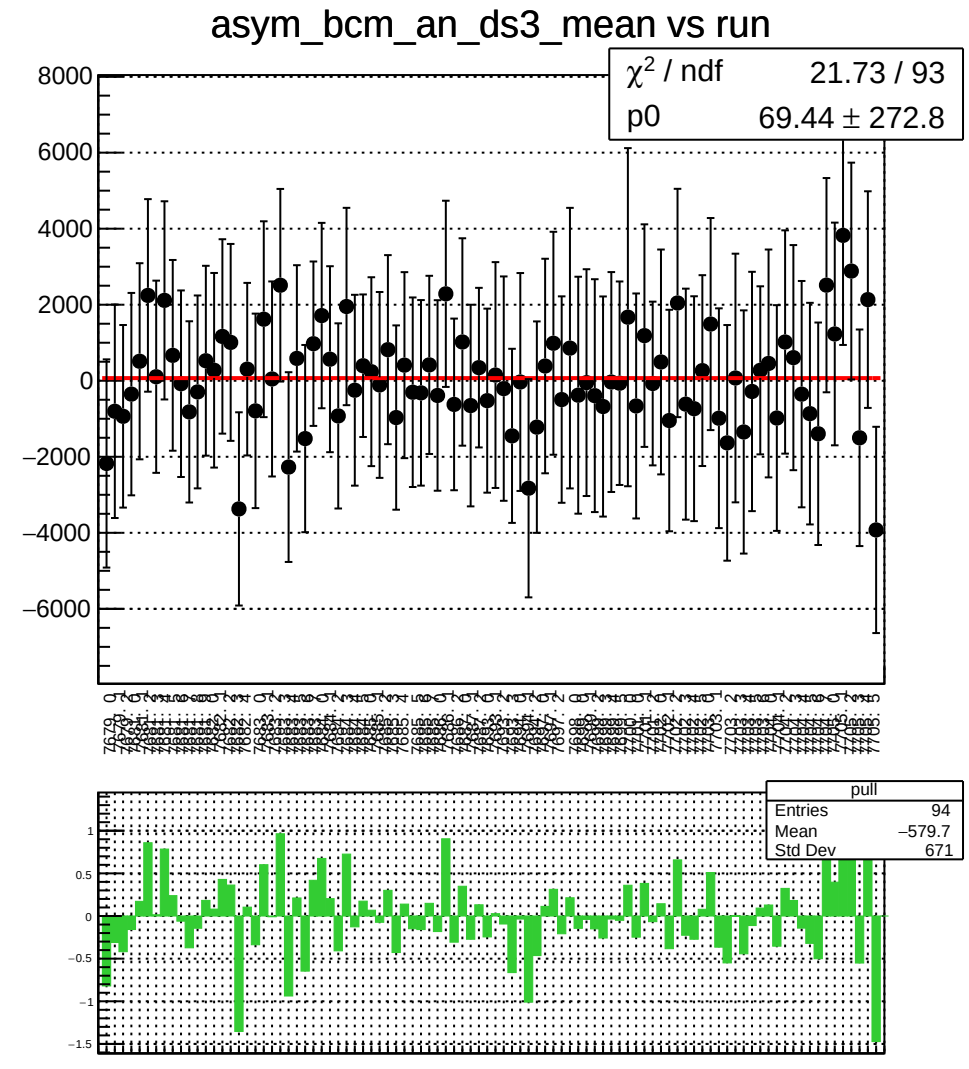

pull1D
Entries 94
Mean −0.2176
Std Dev 4.525
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

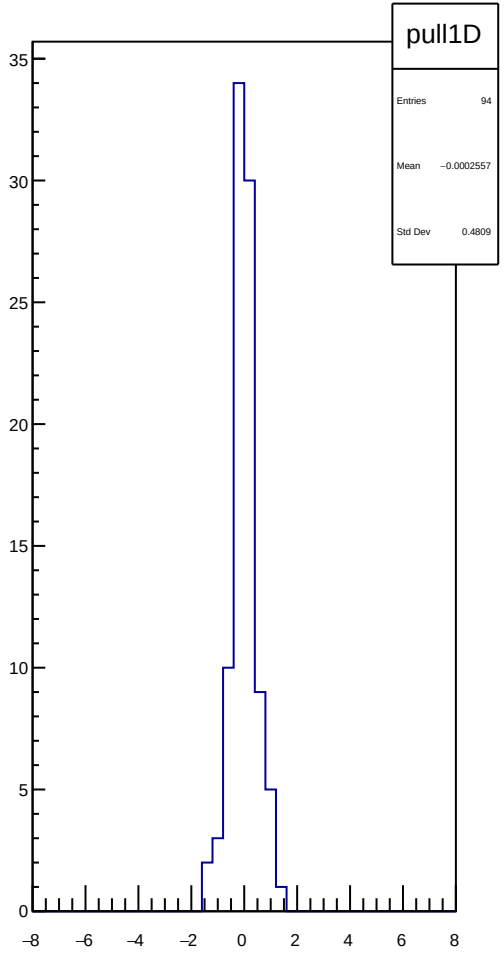

yield_bpm0l01WS_rms vs run
χ² / ndf 3.904e+04 / 93
p0 205.3 ± 0.1553
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

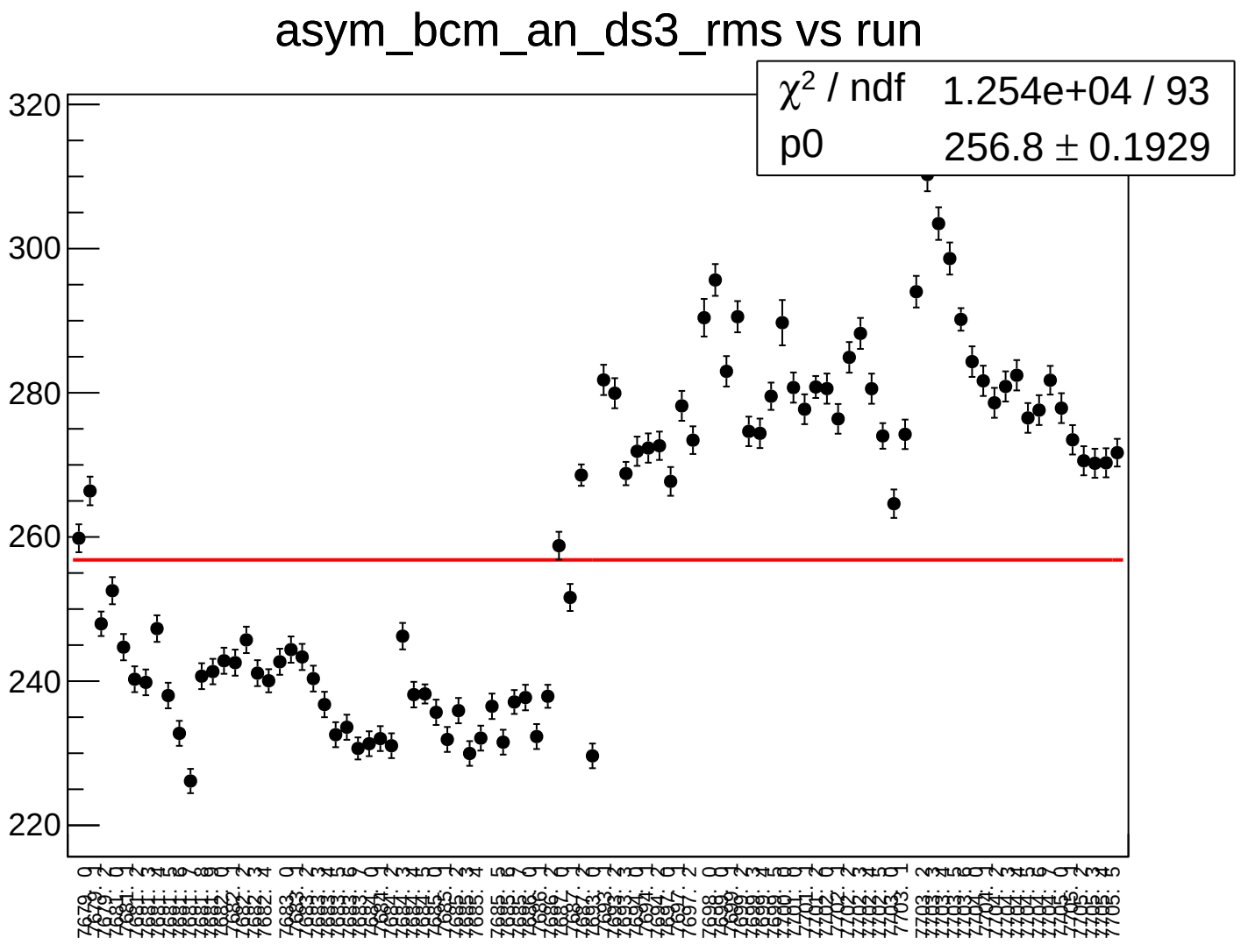

asym_bcm_an_ds_mean vs run
χ² / ndf 21.4 / 93
p0 60.12 ± 270.1
pull
Entries 94
Mean −302.7
Std Dev 391.8

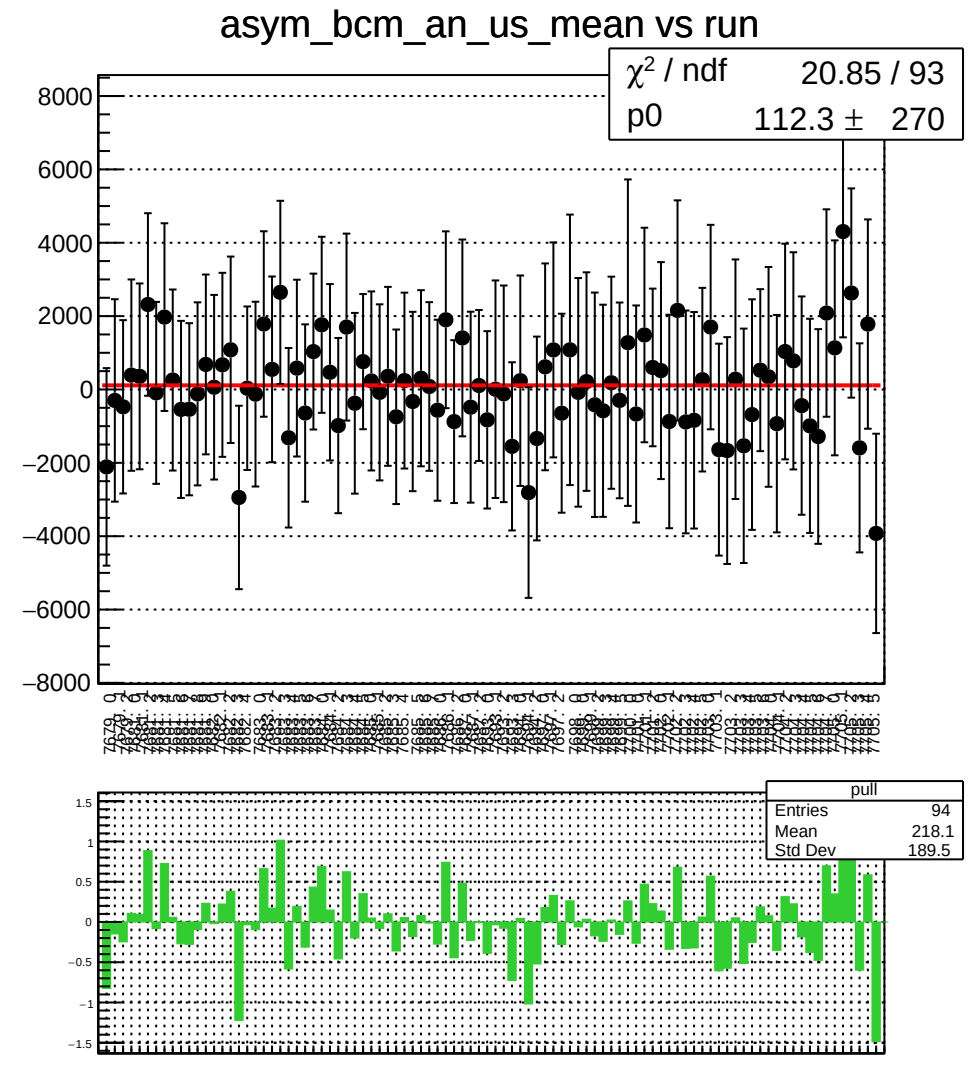

pull1D
Entries 94
Mean −0.0004748
Std Dev 0.4771

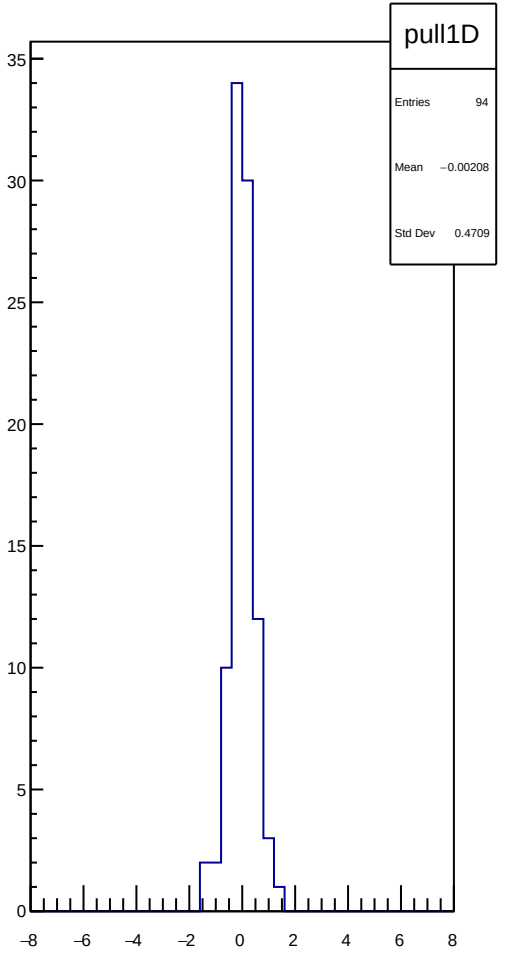

asym_bcm_an_ds_rms vs run
χ² / ndf 1.397e+04 / 93
p0 254.2 ± 0.191
320
300
280
260
240
220

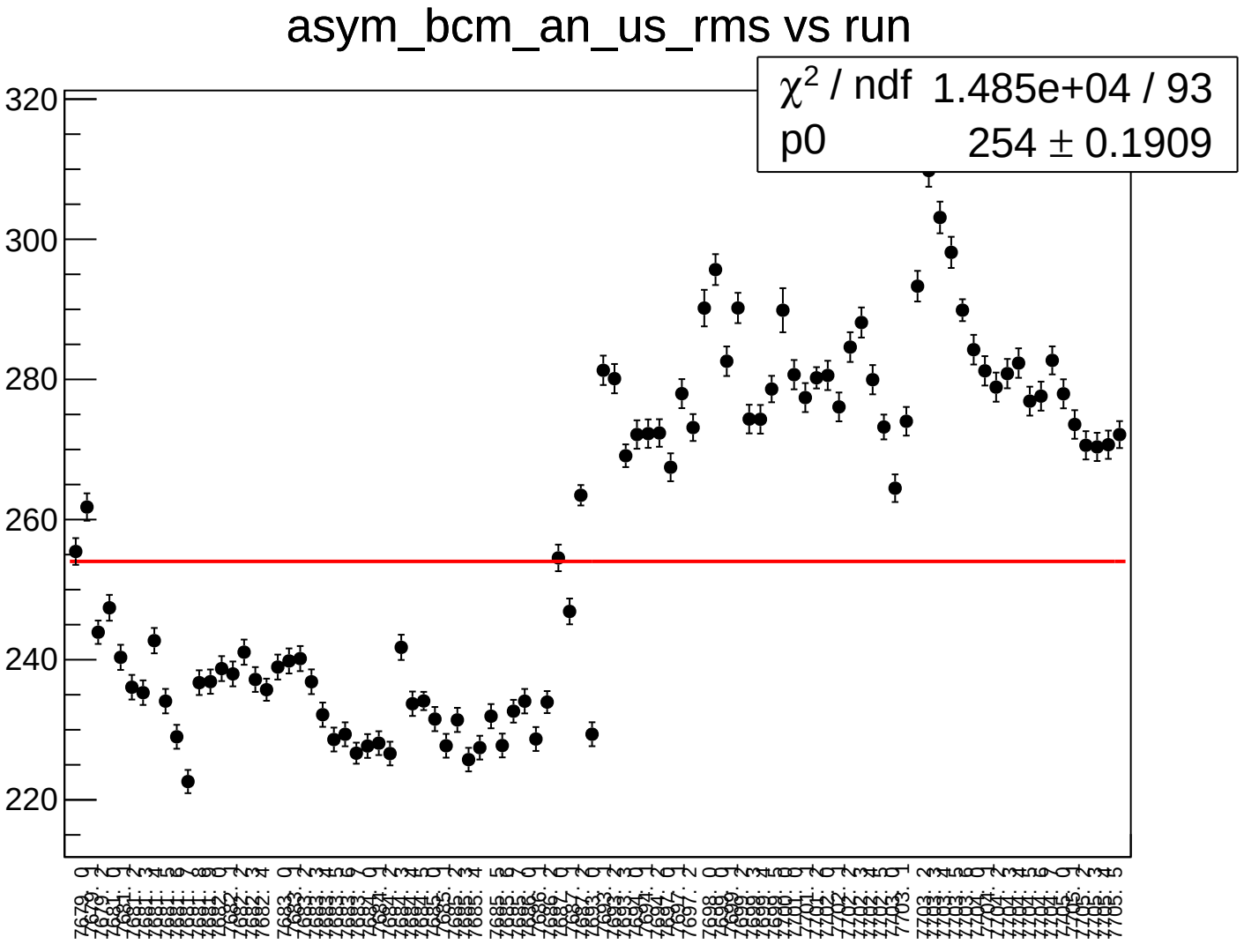

asym_bcm_an_ds3_mean vs run
χ² / ndf 21.73 / 93
p0 69.44 ± 272.8
pull
Entries 94
Mean −579.7
Std Dev 671

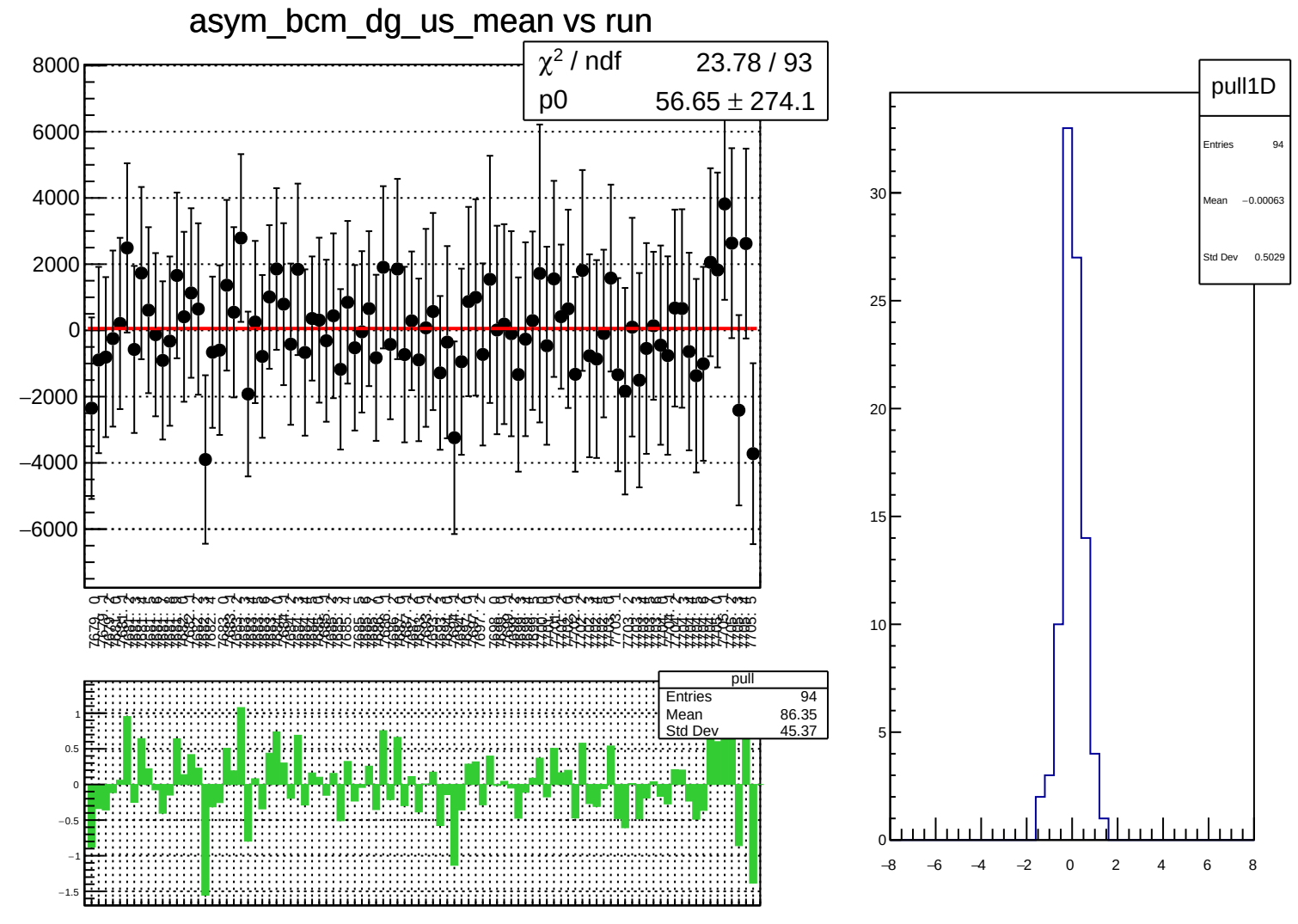

pull1D
Entries 94
Mean −0.0002557
Std Dev 0.4809

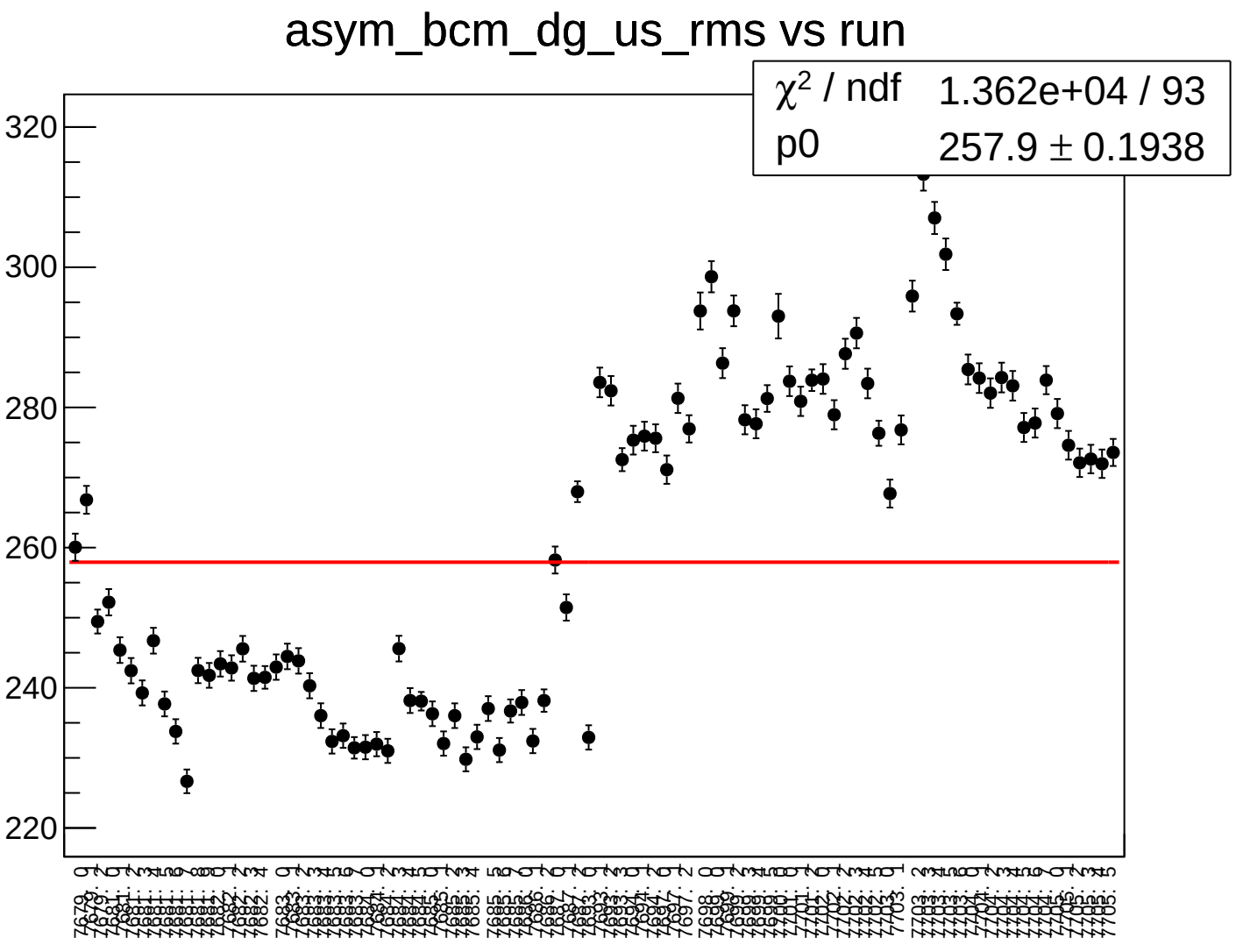

asym_bcm_an_ds3_rms vs run
χ² / ndf 1.254e+04 / 93
p0 256.8 ± 0.1929
320
300
280
260
240
220

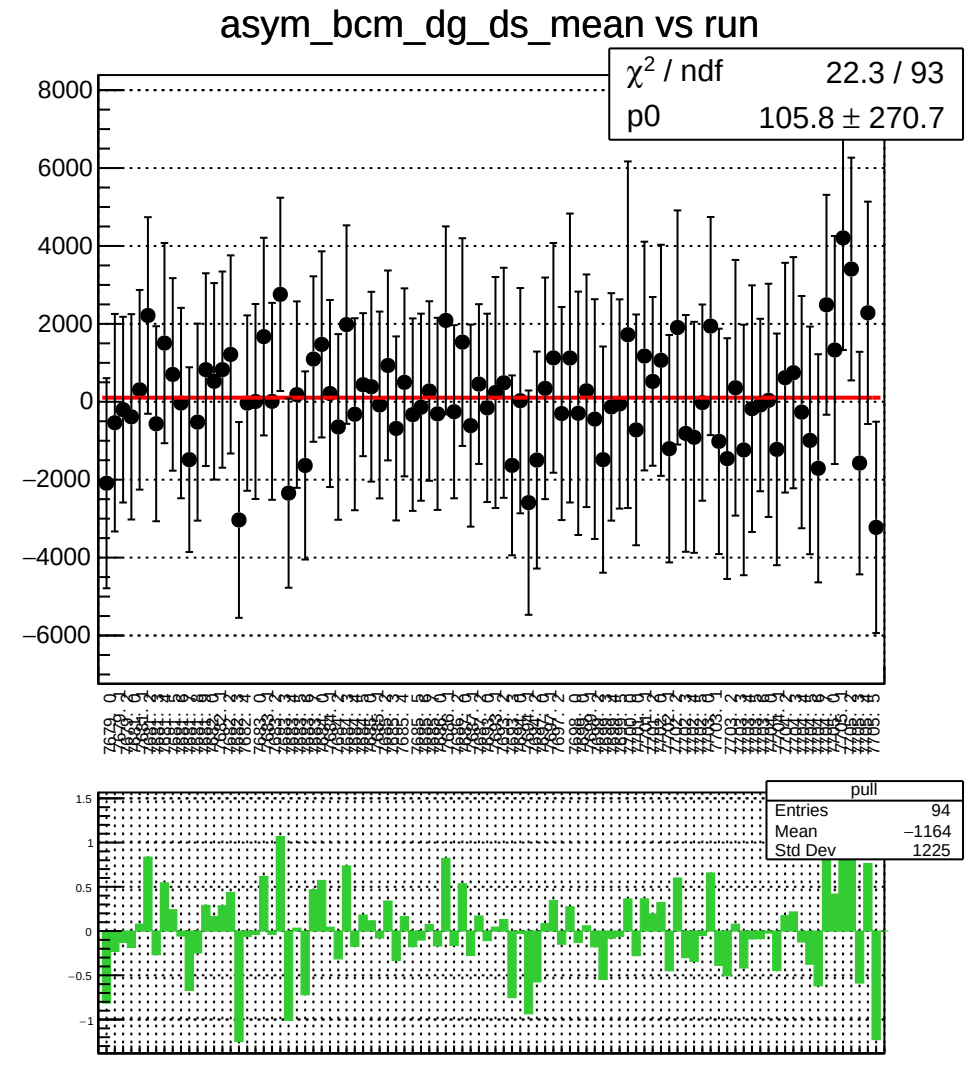

asym_bcm_an_us_mean vs run
χ² / ndf 20.85 / 93
p0 112.3 ± 270
pull
Entries 94
Mean 218.1
Std Dev 189.5

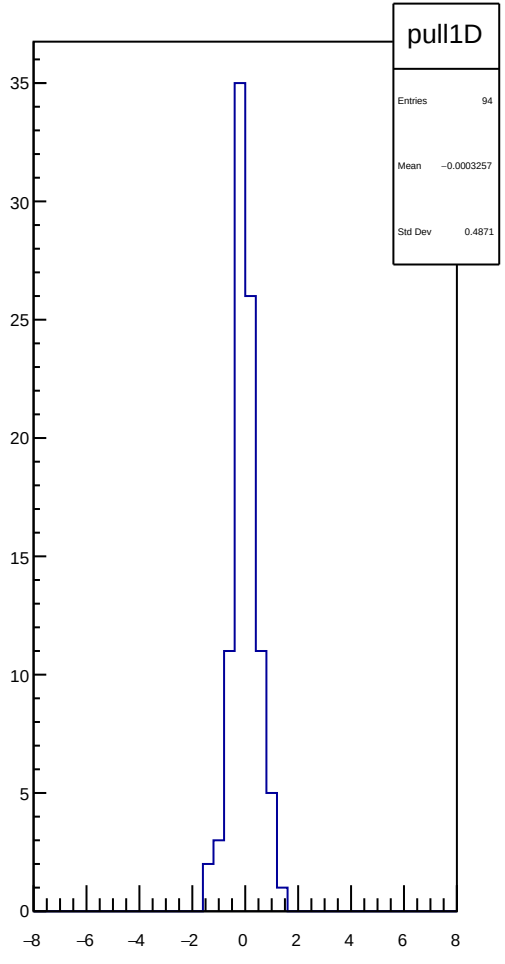

pull1D
Entries 94
Mean −0.00208
Std Dev 0.4709

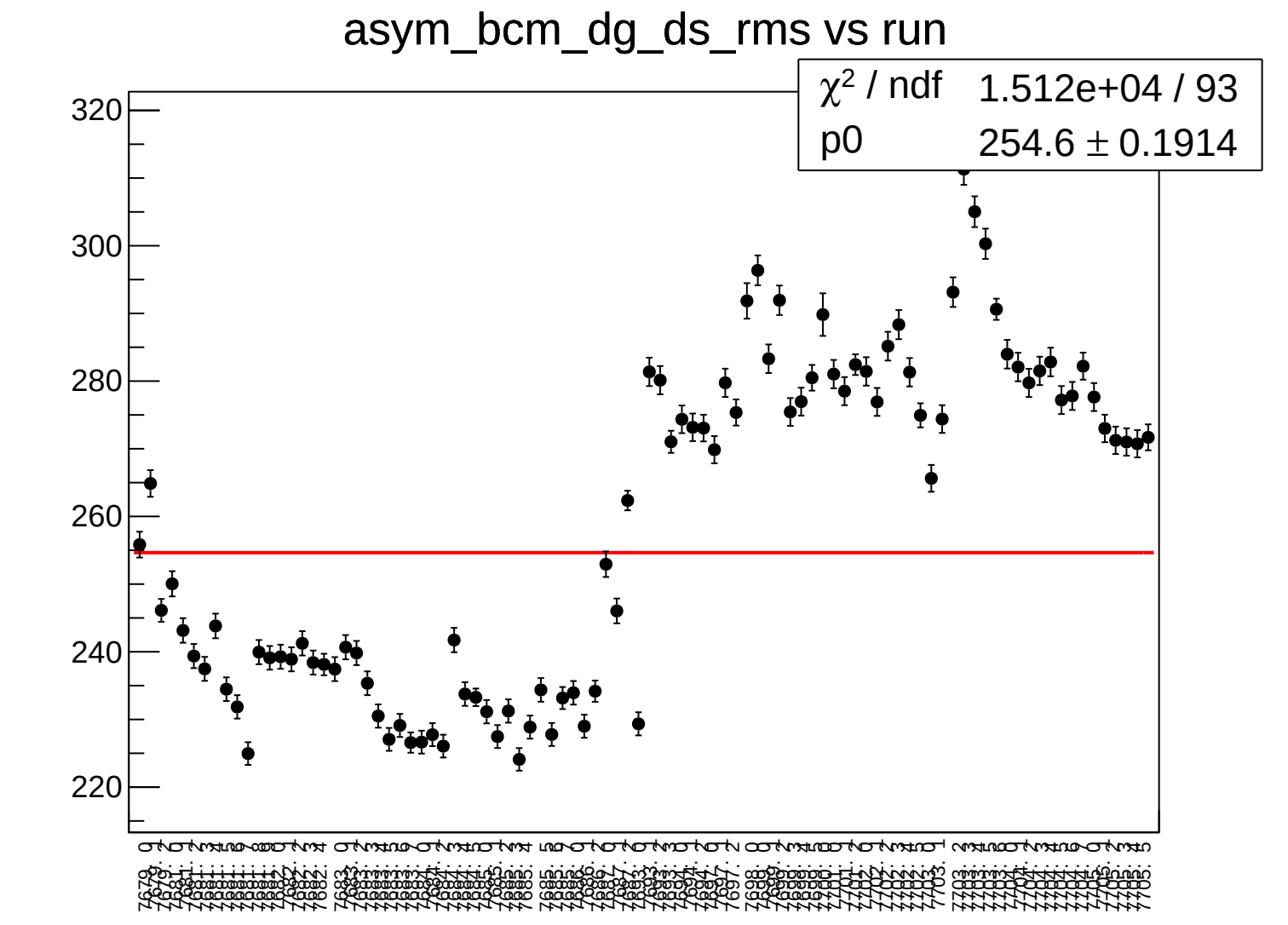

asym_bcm_an_us_rms vs run
χ² / ndf 1.485e+04 / 93
p0 254 ± 0.1909
320
300
280
260
240
220

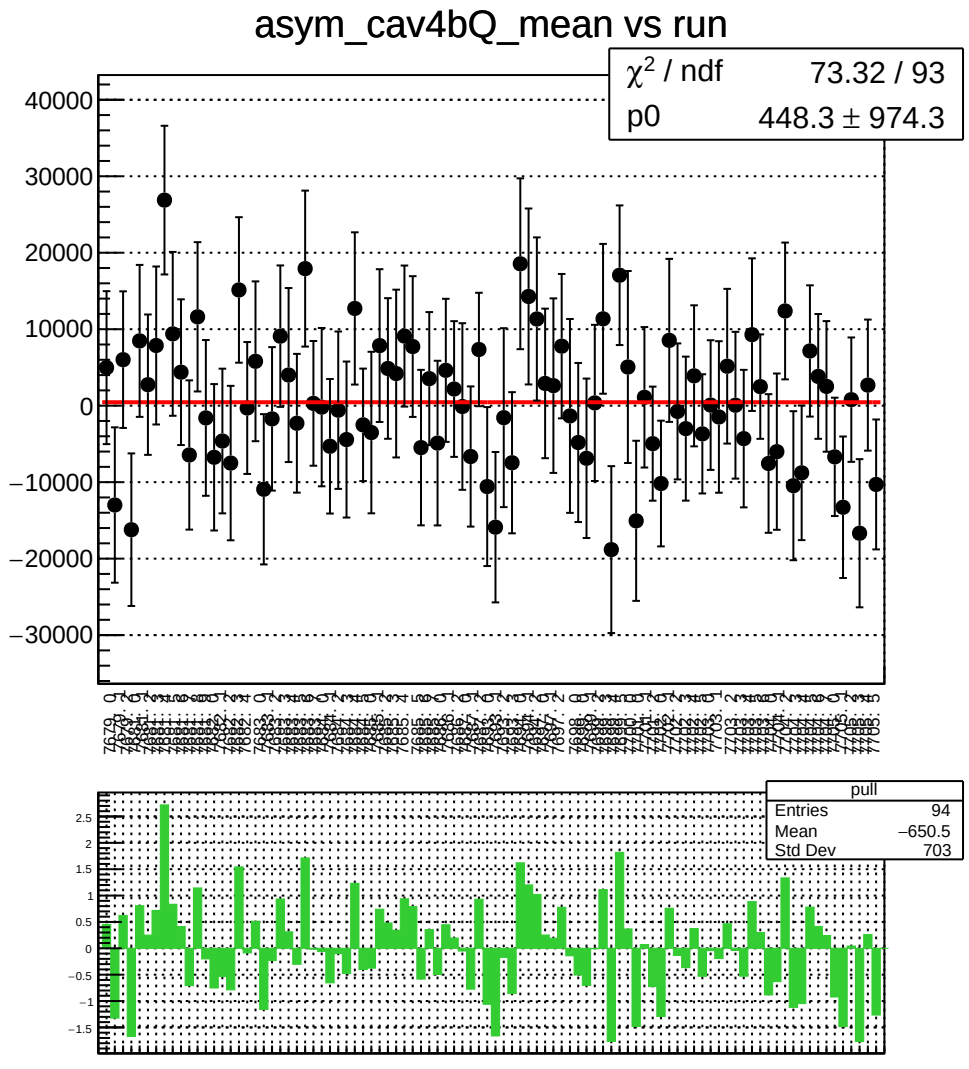

asym_bcm_dg_us_mean vs run
χ² / ndf 23.78 / 93
p0 56.65 ± 274.1
8000
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 86.35
Std Dev 45.37
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.00063
Std Dev 0.5029
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

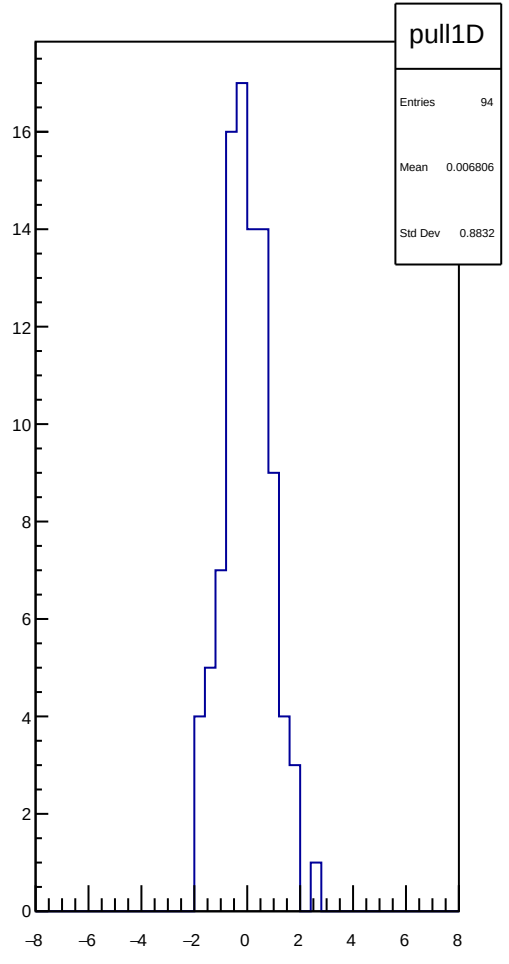

asym_bcm_dg_us_rms vs run
χ² / ndf 1.362e+04 / 93
p0 257.9 ± 0.1938
320
300
280
260
240
220

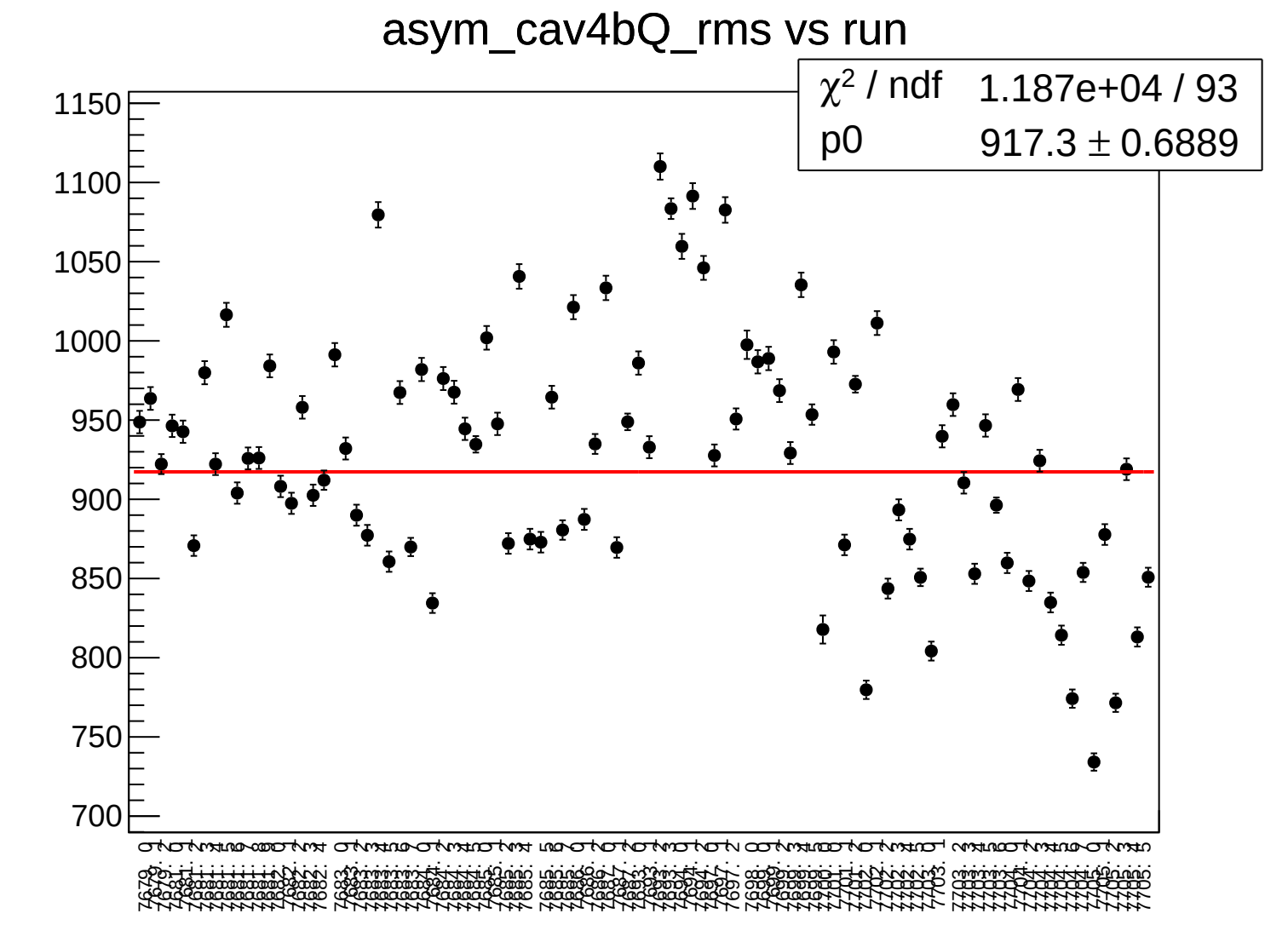

asym_bcm_dg_ds_mean vs run
χ² / ndf 22.3 / 93
p0 105.8 ± 270.7
pull
Entries 94
Mean −1164
Std Dev 1225

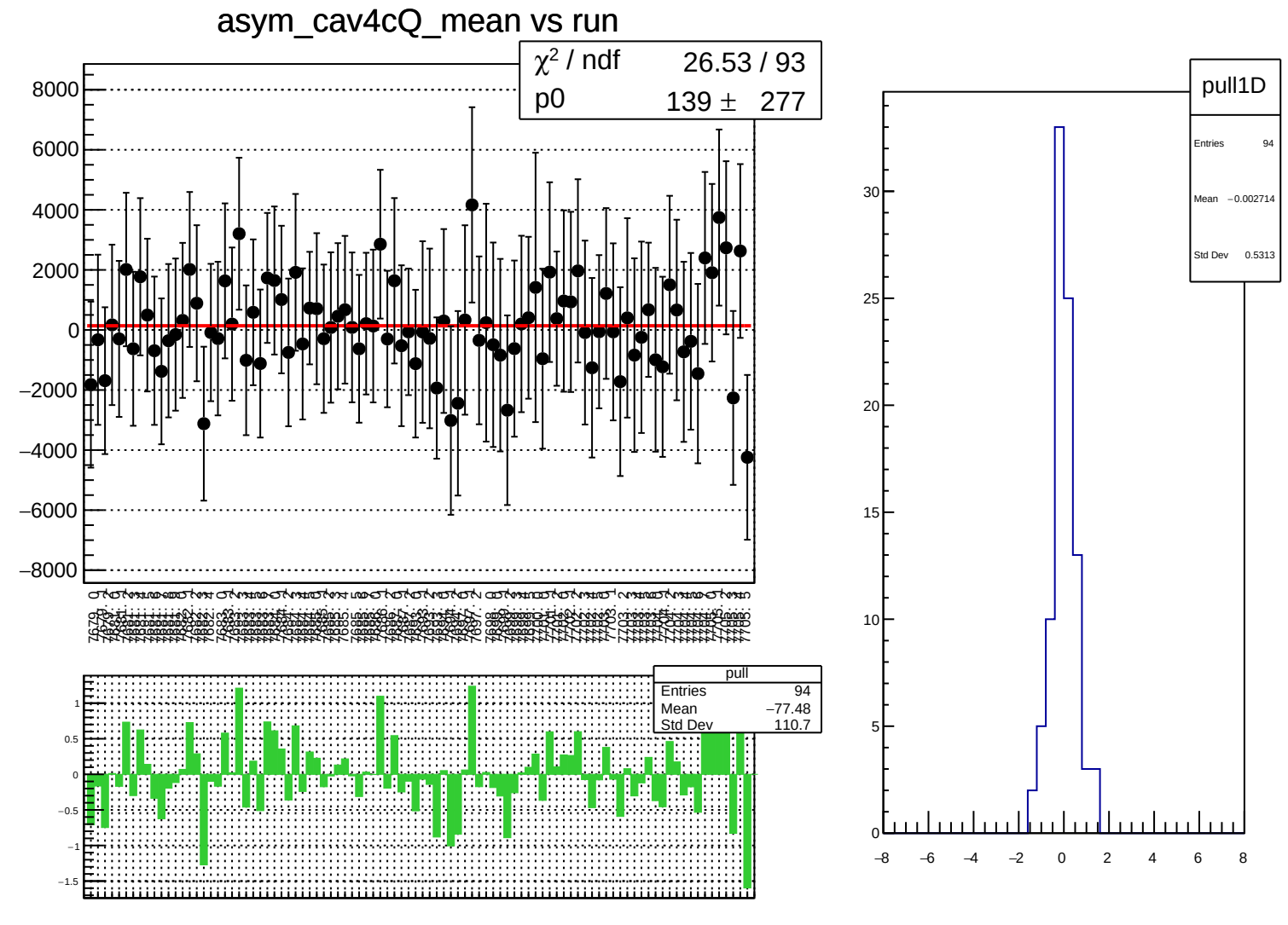

pull1D
Entries 94
Mean −0.0003257
Std Dev 0.4871

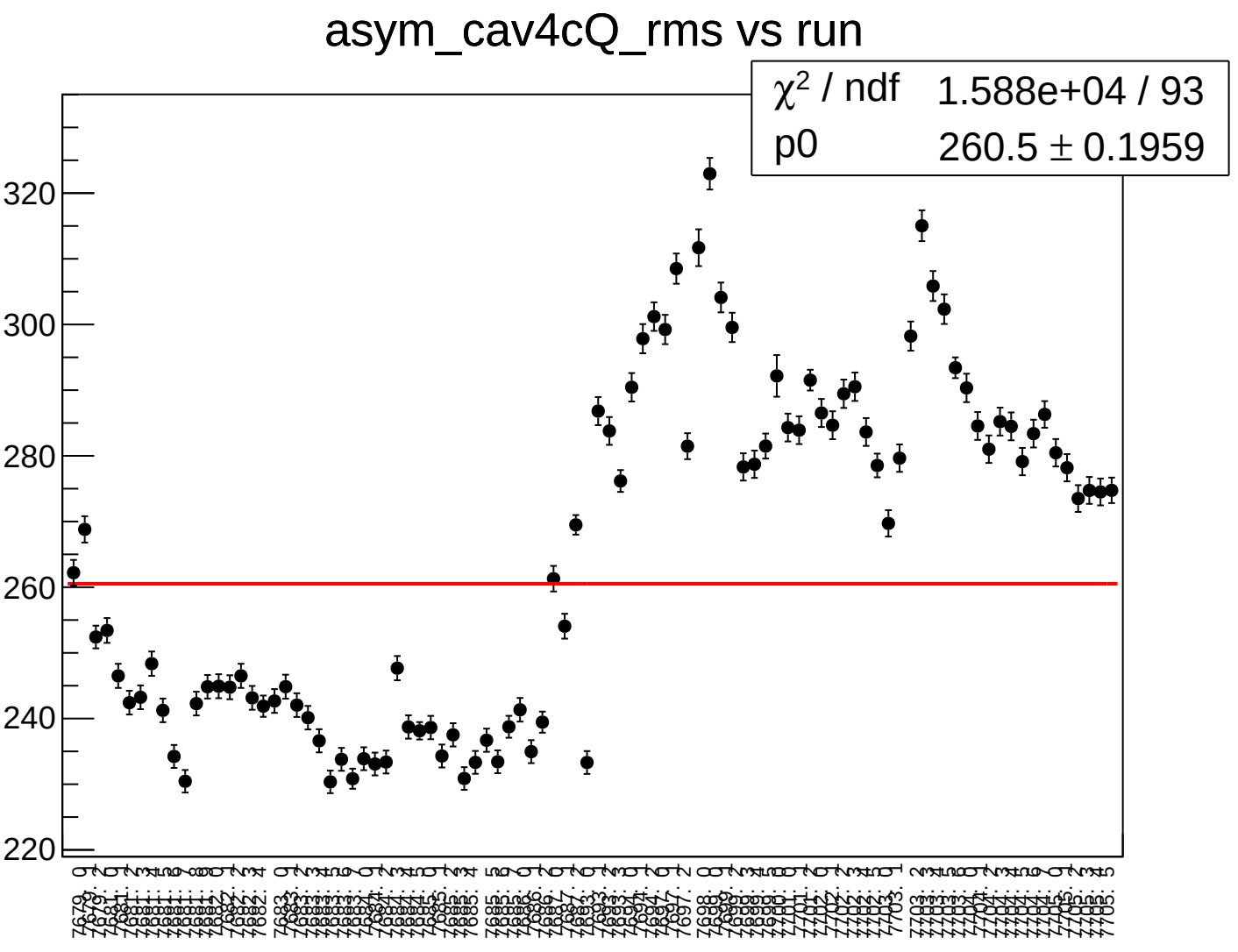

asym_bcm_dg_ds_rms vs run
χ² / ndf 1.512e+04 / 93
p0 254.6 ± 0.1914
320
300
280
260
240
220

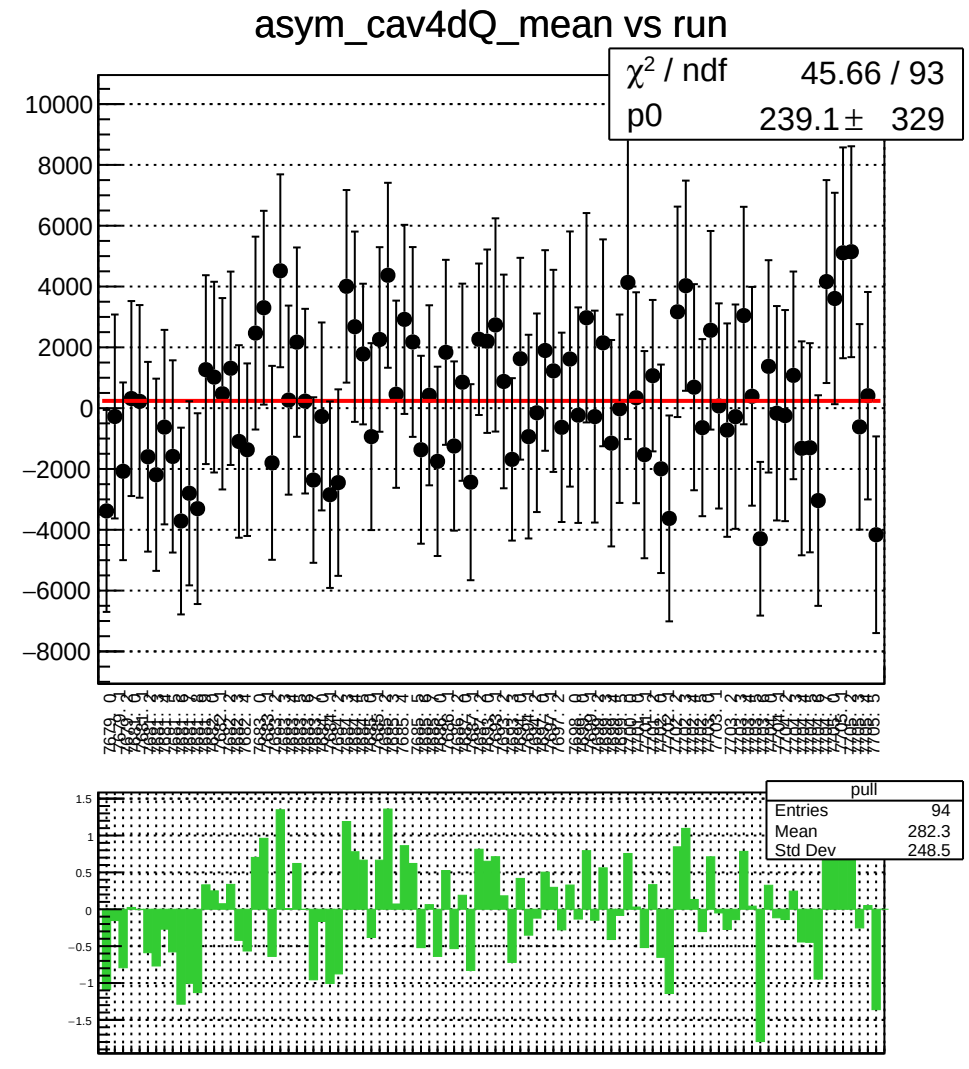

asym_cav4bQ_mean vs run
χ² / ndf 73.32 / 93
p0 448.3 ± 974.3
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −650.5
Std Dev 703
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

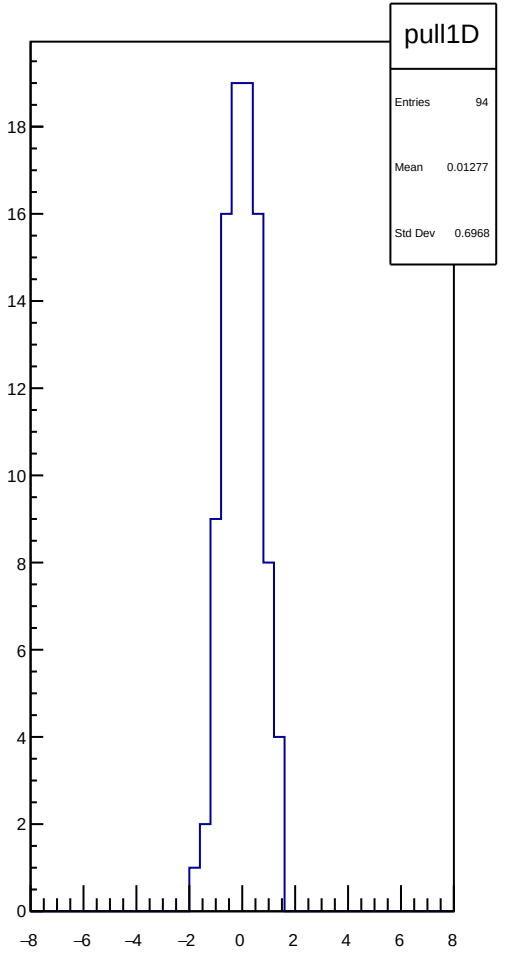

pull1D
Entries 94
Mean 0.006806
Std Dev 0.8832
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

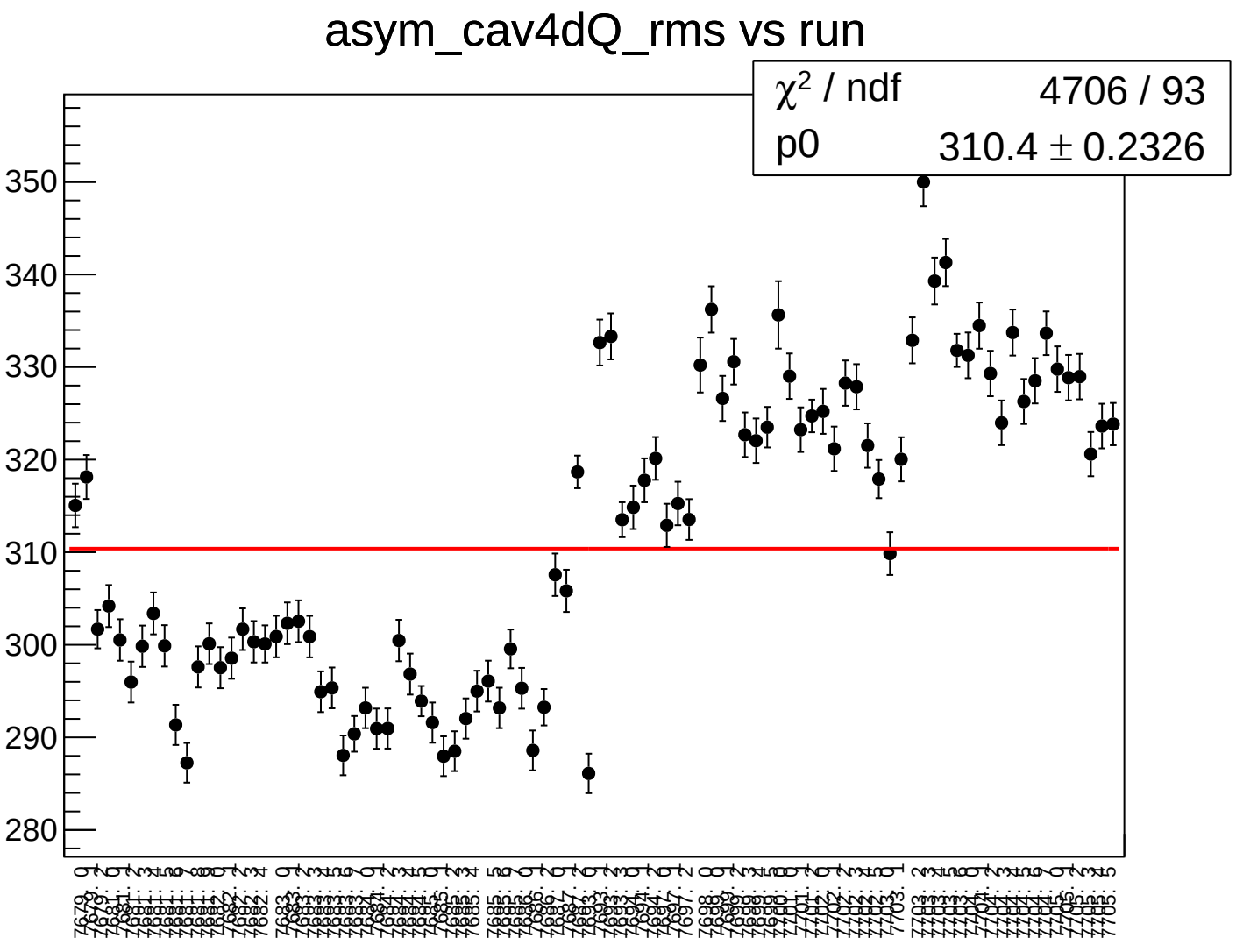

asym_cav4bQ_rms vs run
χ² / ndf 1.187e+04 / 93
p0 917.3 ± 0.6889
1150
1100
1050
1000
950
900
850
800
750
700

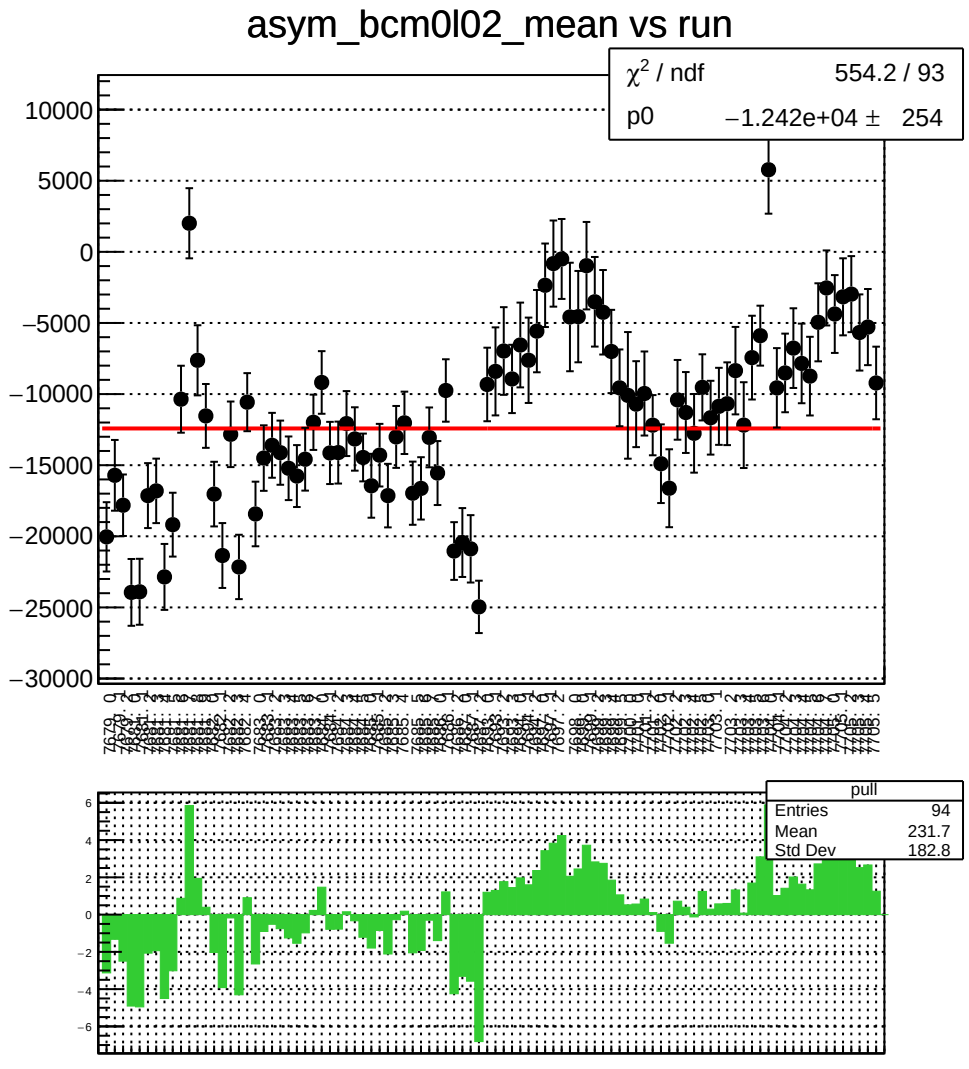

asym_cav4cQ_mean vs run
χ² / ndf 26.53 / 93
p0 139 ± 277
pull
Entries 94
Mean −77.48
Std Dev 110.7
pull1D
Entries 94
Mean −0.002714
Std Dev 0.5313

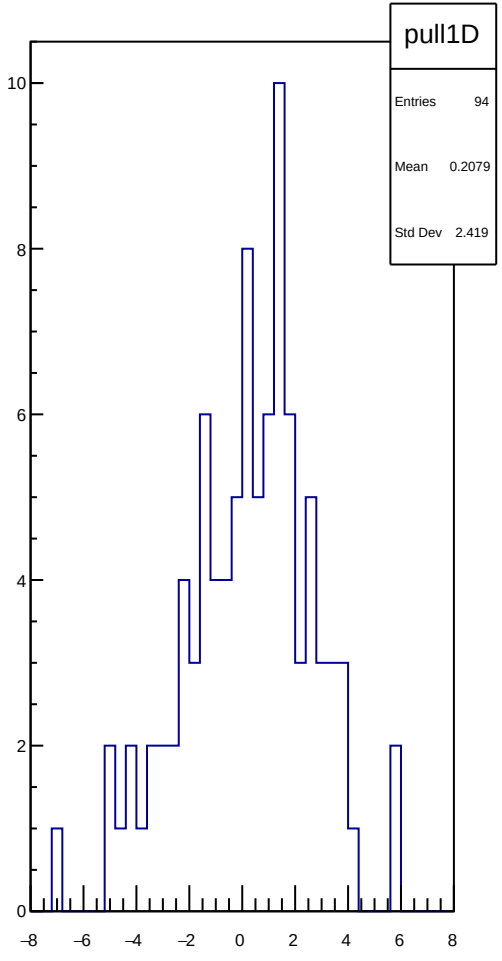

asym_cav4cQ_rms vs run
χ² / ndf 1.588e+04 / 93
p0 260.5 ± 0.1959
320
300
280
260
240
220

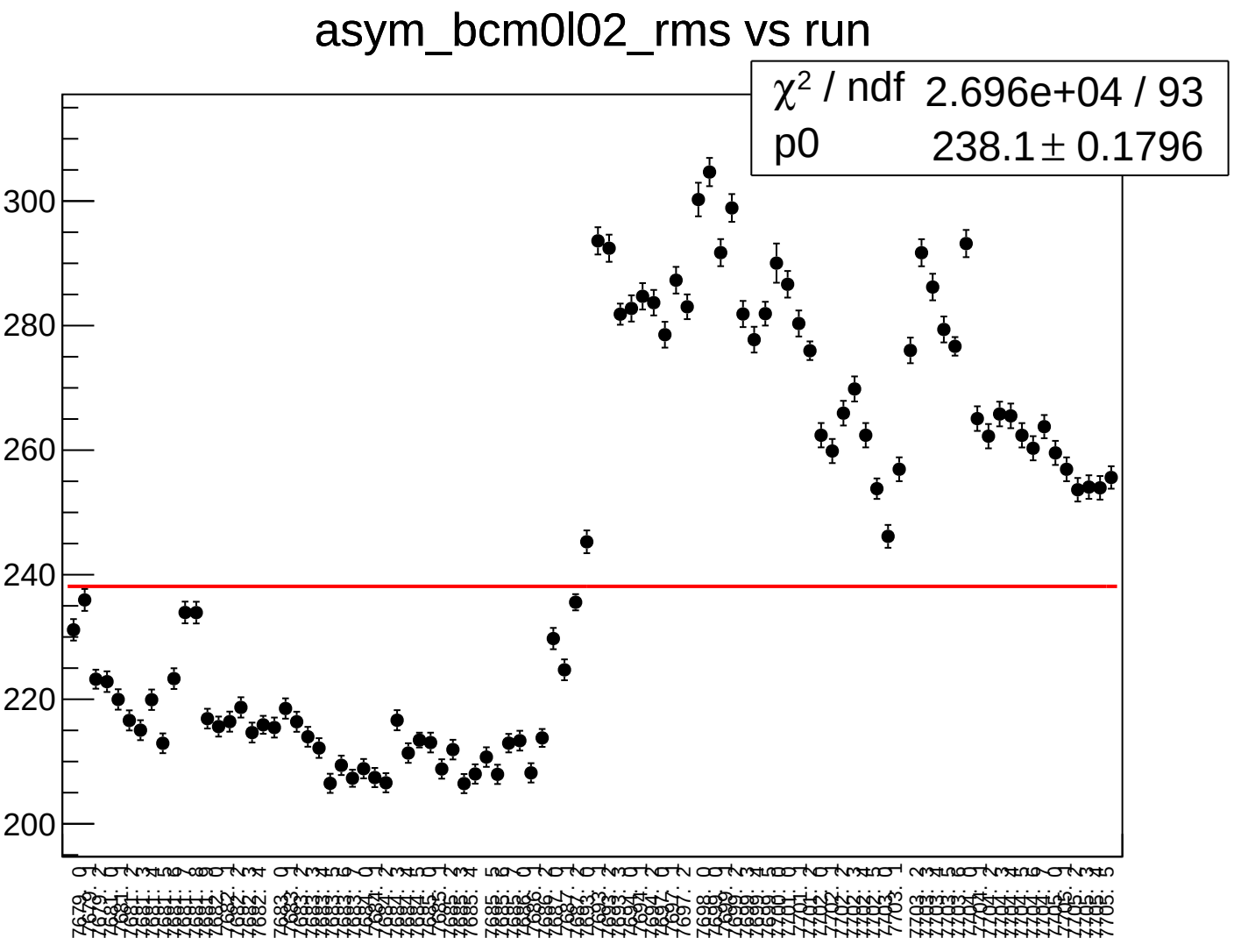

asym_cav4dQ_mean vs run
χ² / ndf 45.66 / 93
p0 239.1 ± 329
pull
Entries 94
Mean 282.3
Std Dev 248.5

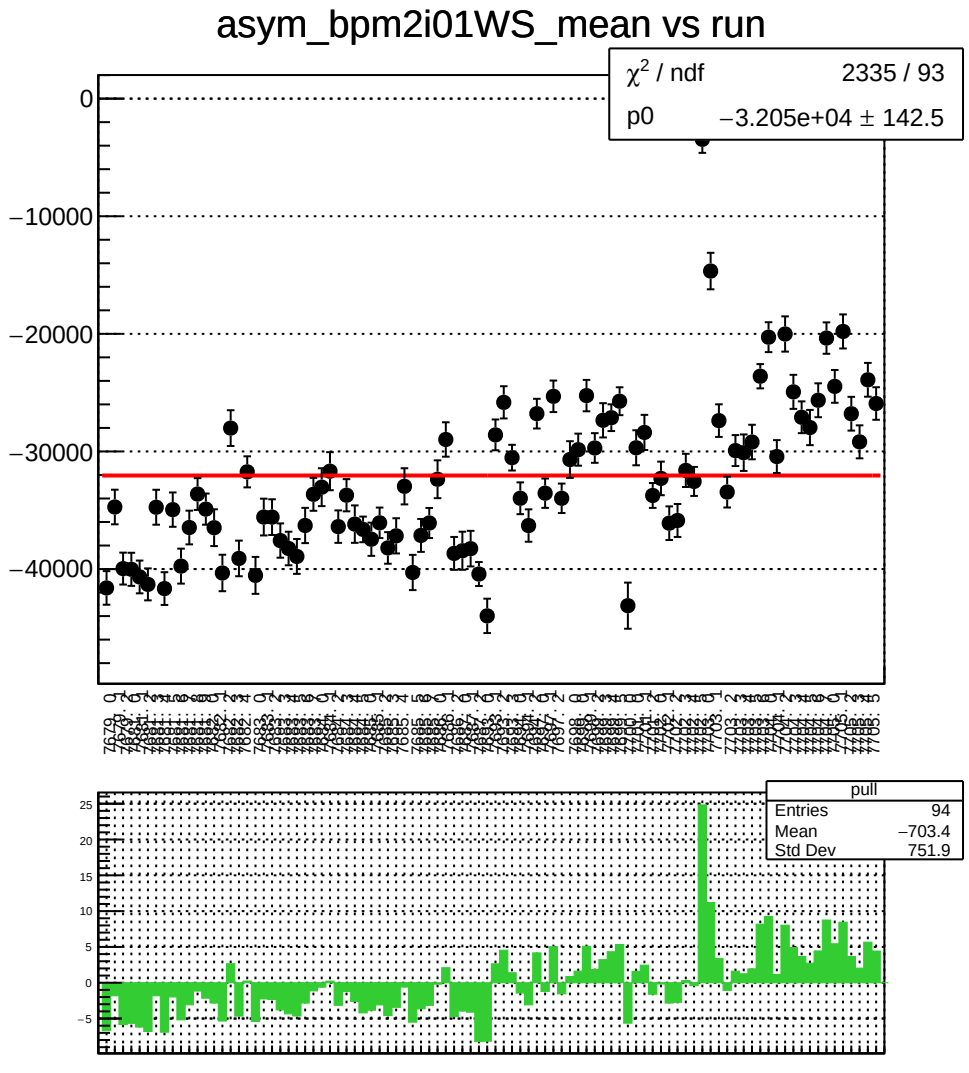

pull1D
Entries 94
Mean 0.01277
Std Dev 0.6968

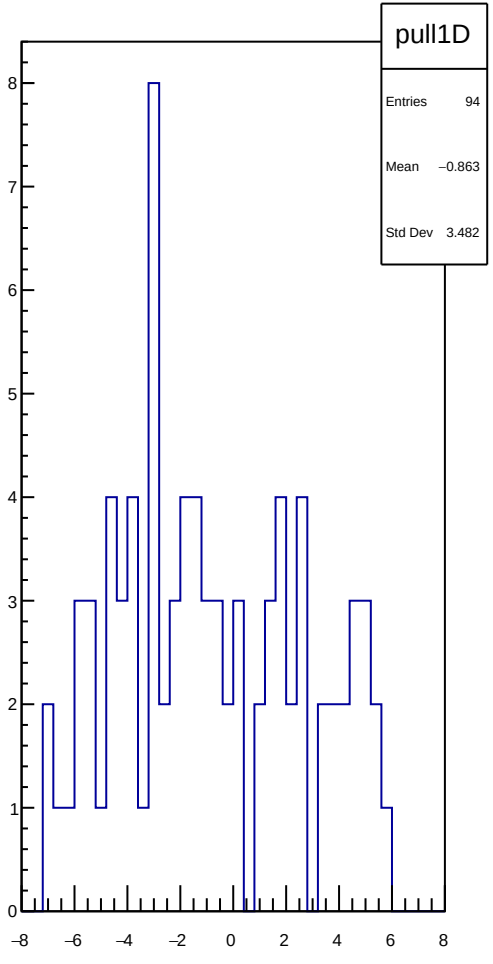

asym_cav4dQ_rms vs run
χ^2 / ndf 4706 / 93
p0 310.4 ± 0.2326
350
340
330
320
310
300
290
280

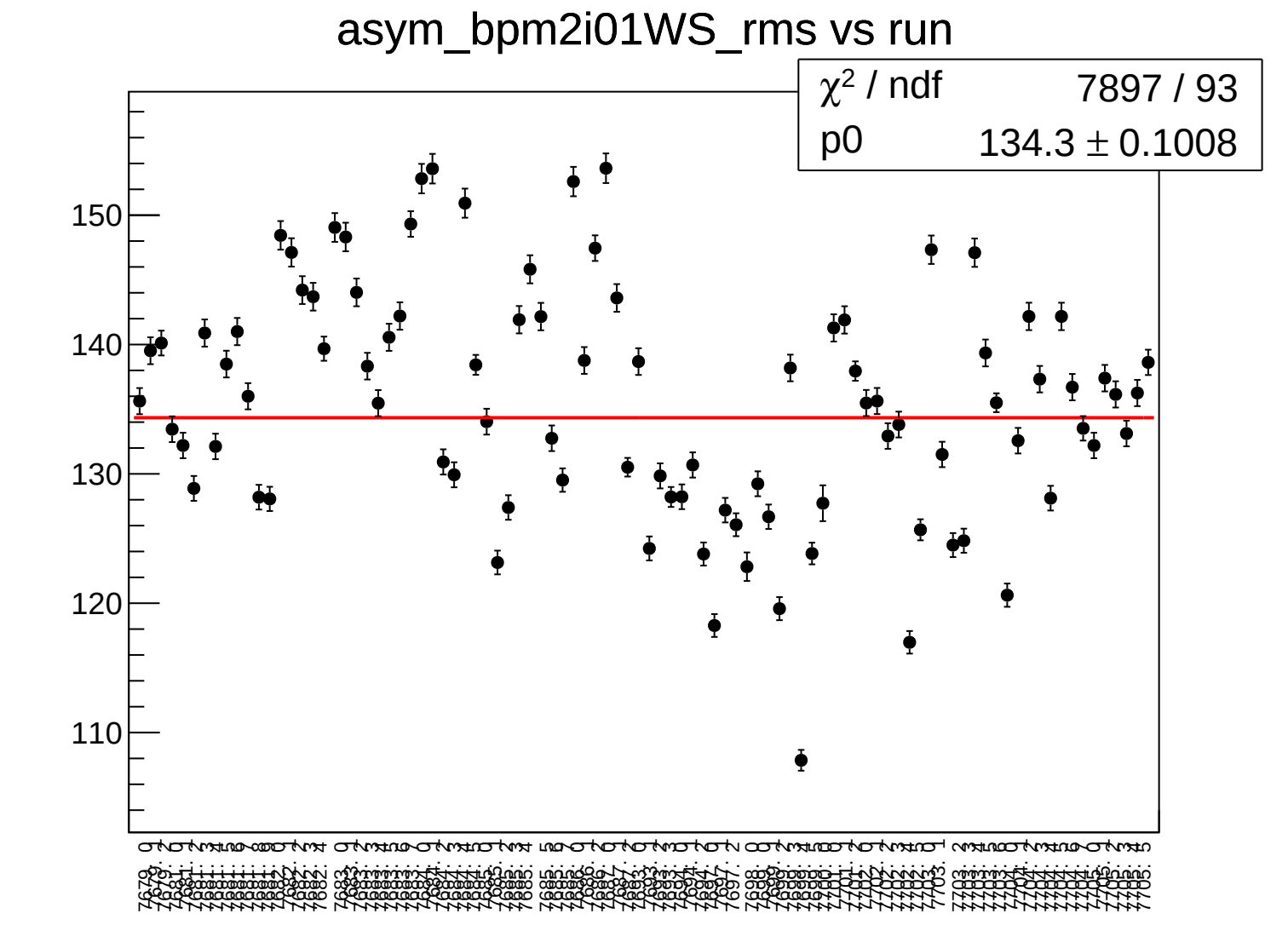

asym_bcm0l02_mean vs run
χ² / ndf 554.2 / 93
p0 −1.242e+04 ± 254
pull
Entries 94
Mean 231.7
Std Dev 182.8

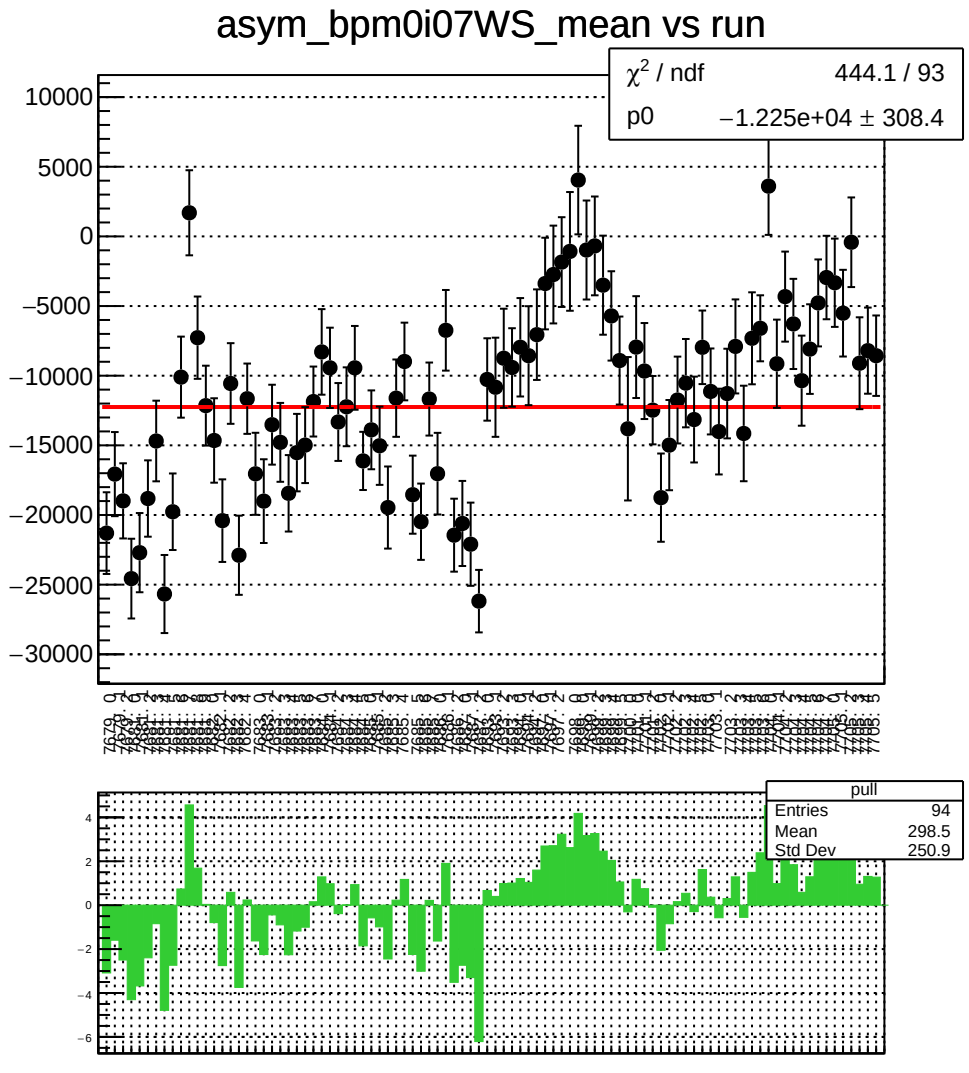

pull1D
Entries 94
Mean 0.2079
Std Dev 2.419

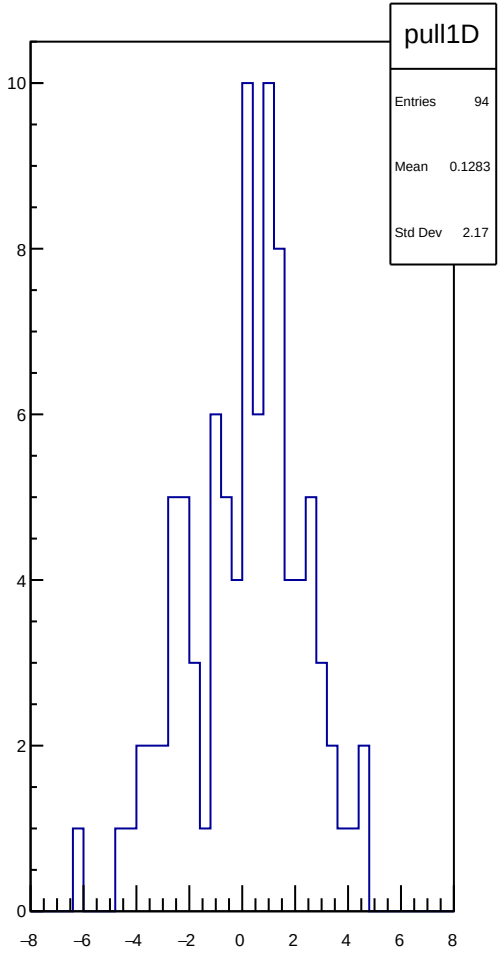

asym_bcm0l02_rms vs run
χ² / ndf 2.696e+04 / 93
p0 238.1 ± 0.1796
300
280
260
240
220
200

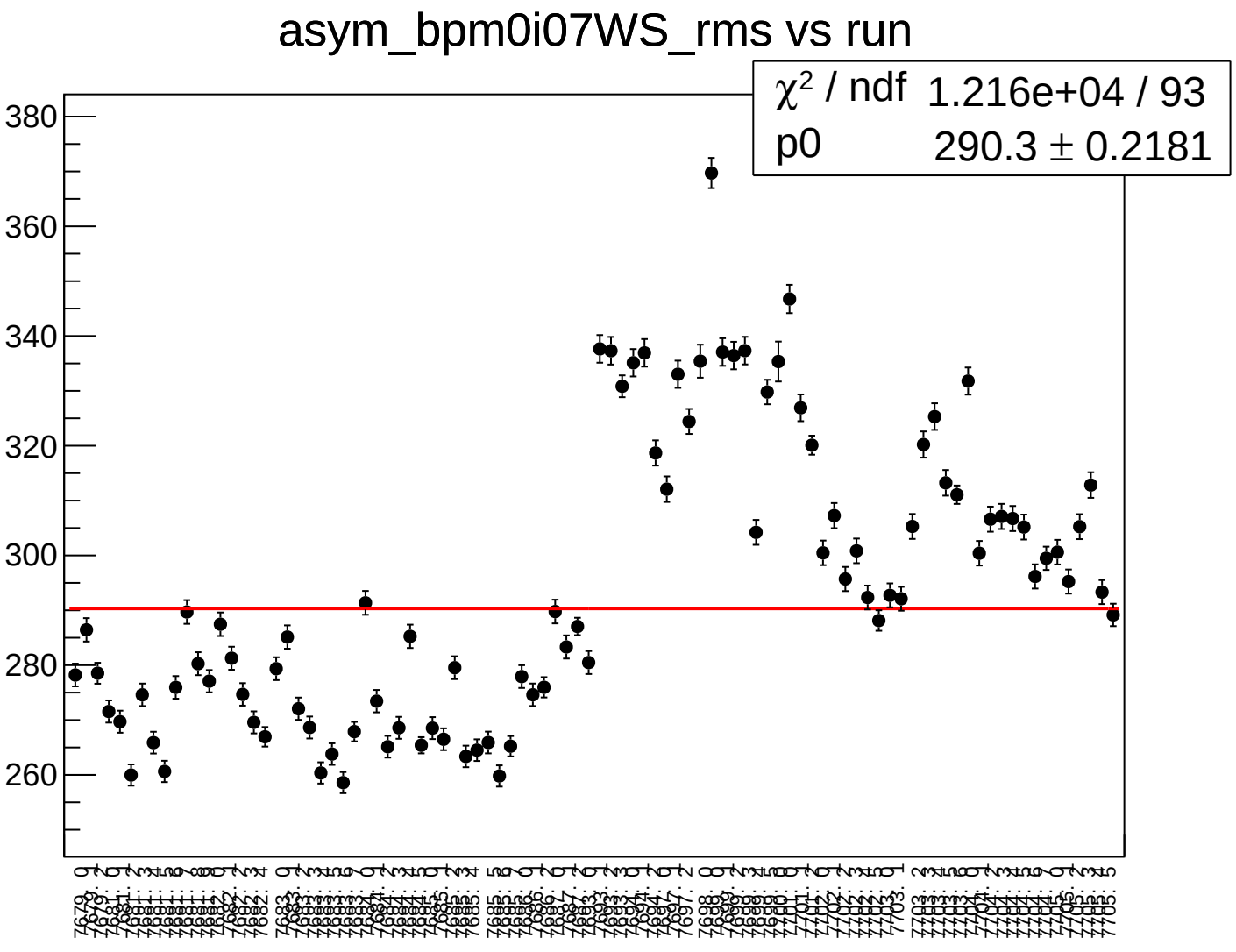

asym_bpm2i01WS_mean vs run
χ² / ndf 2335 / 93
p0 −3.205e+04 ± 142.5
0
−10000
−20000
−30000
−40000
pull
Entries 94
Mean −703.4
Std Dev 751.9
25
20
15
10
5
0
−5

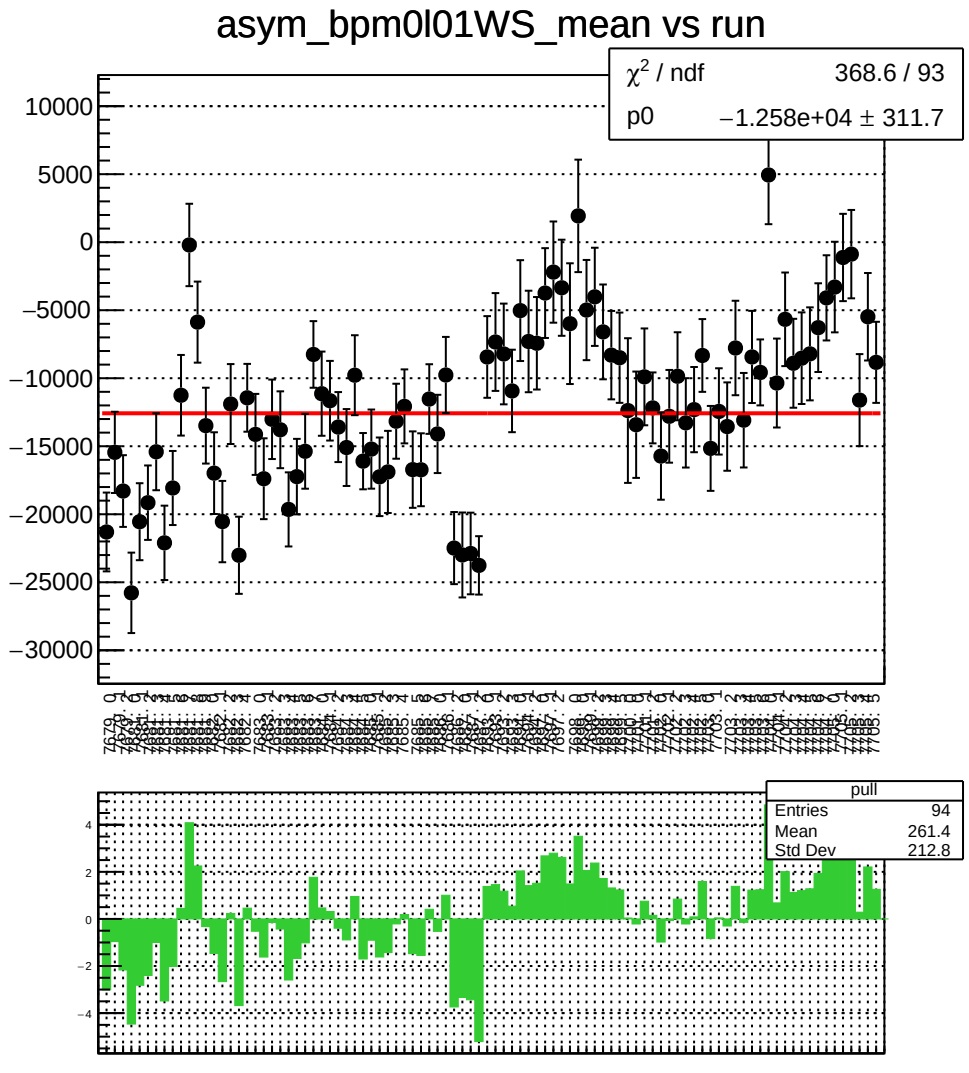

pull1D
Entries 94
Mean −0.863
Std Dev 3.482
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

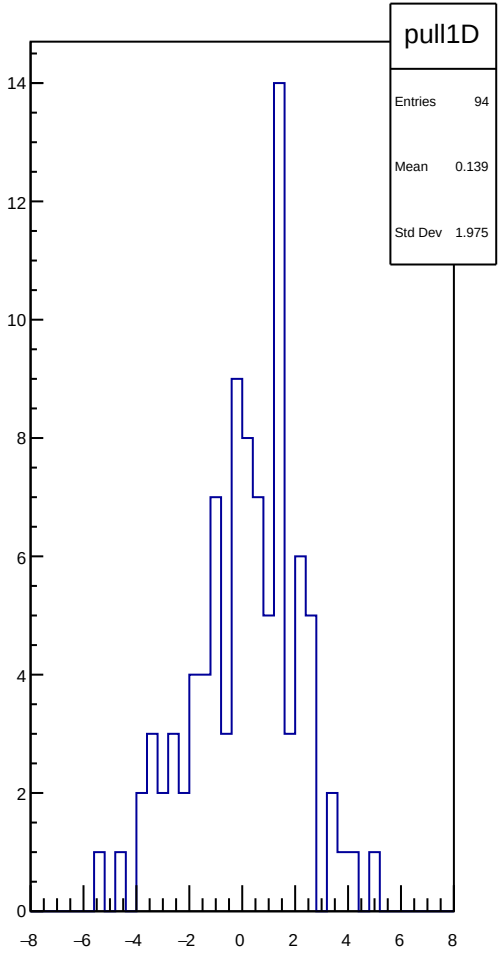

asym_bpm2i01WS_rms vs run
χ² / ndf 7897 / 93
p0 134.3 ± 0.1008
150
140
130
120
110

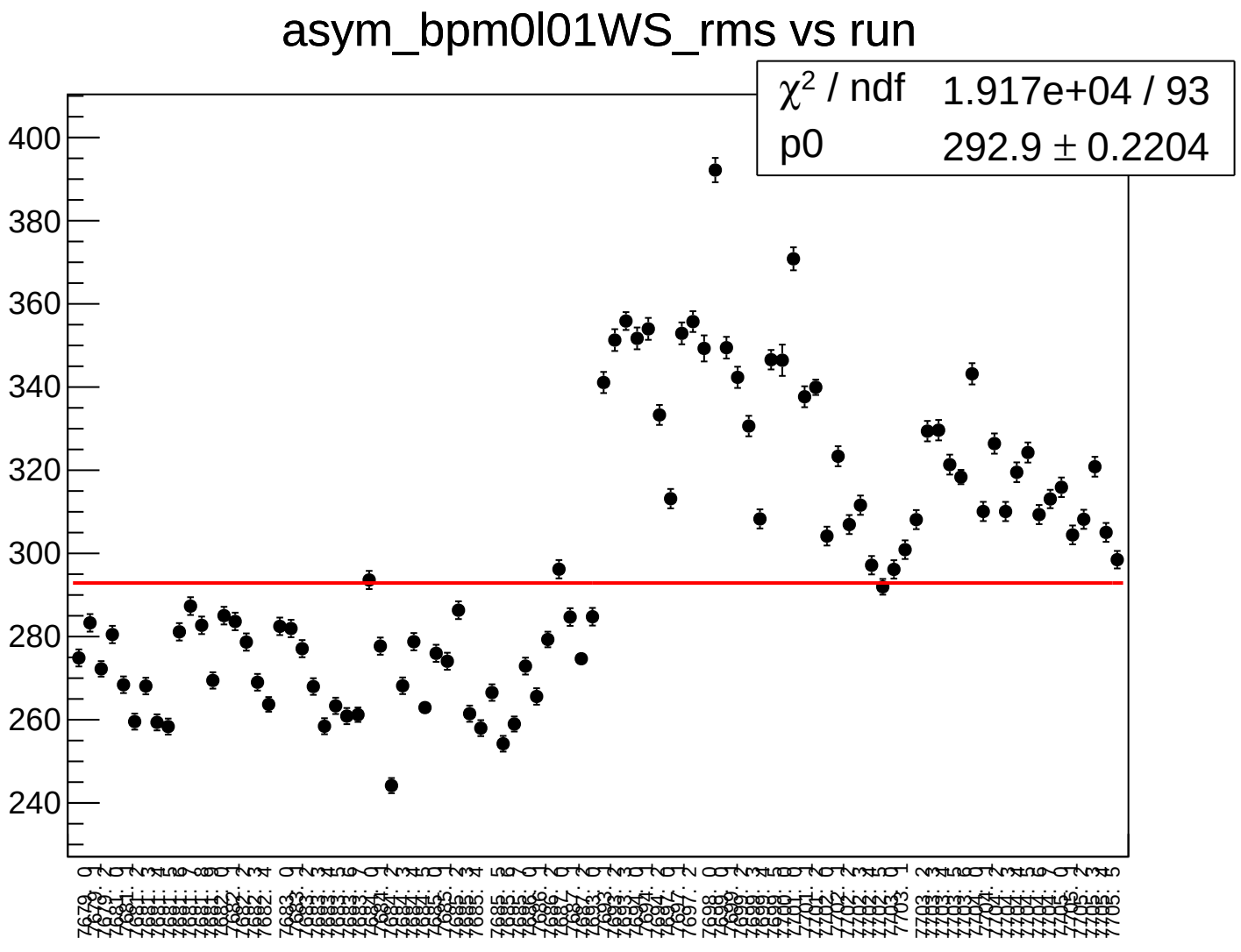

asym_bpm0i07WS_mean vs run
χ² / ndf 444.1 / 93
p0 −1.225e+04 ± 308.4
pull
Entries 94
Mean 298.5
Std Dev 250.9

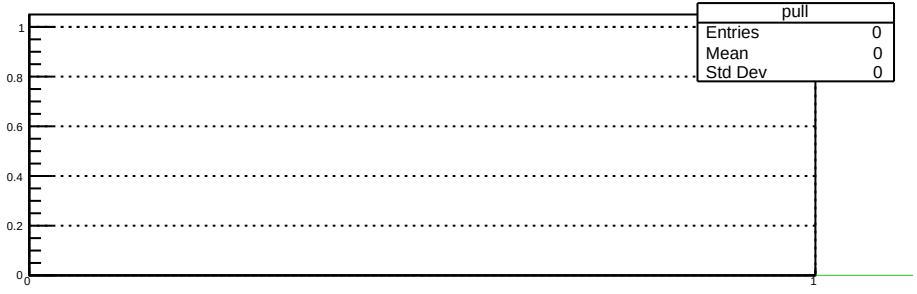

pull1D
Entries 94
Mean 0.1283
Std Dev 2.17

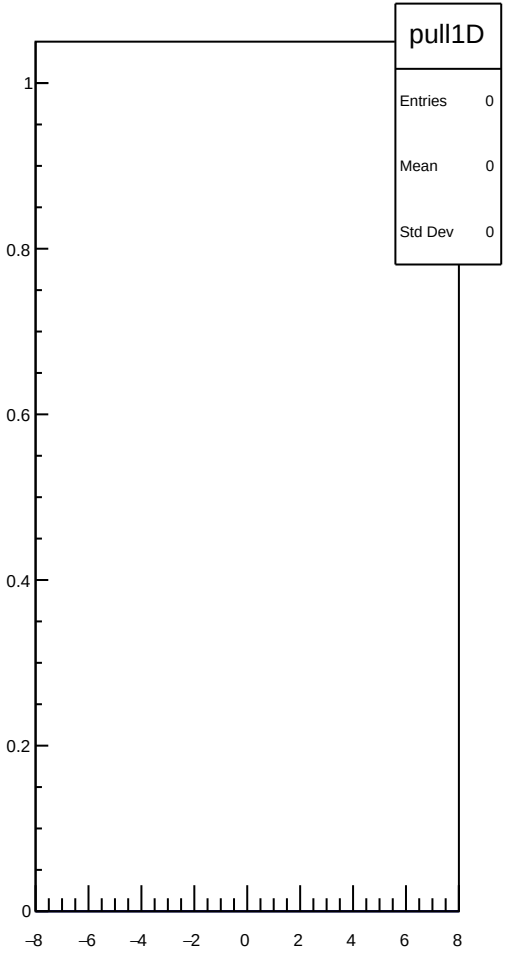

asym_bpm0i07WS_rms vs run
χ² / ndf 1.216e+04 / 93
p0 290.3 ± 0.2181
380
360
340
320
300
280
260

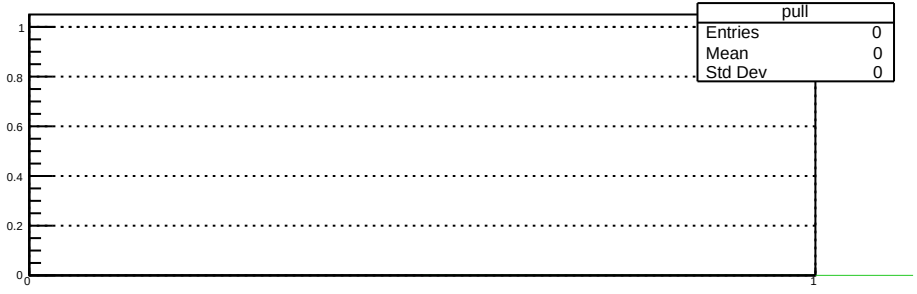

asym_bpm0l01WS_mean vs run
χ² / ndf 368.6 / 93
p0 −1.258e+04 ± 311.7
pull
Entries 94
Mean 261.4
Std Dev 212.8

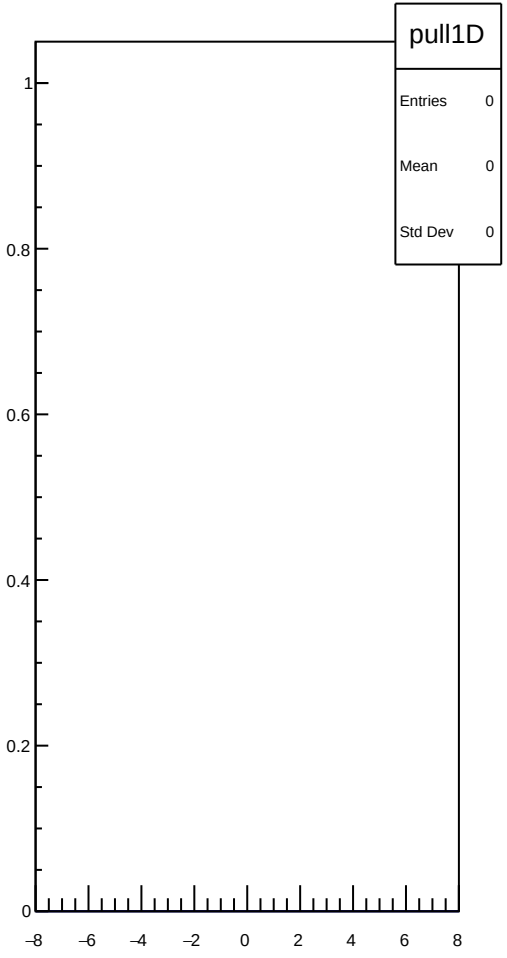

pull1D
Entries 94
Mean 0.139
Std Dev 1.975

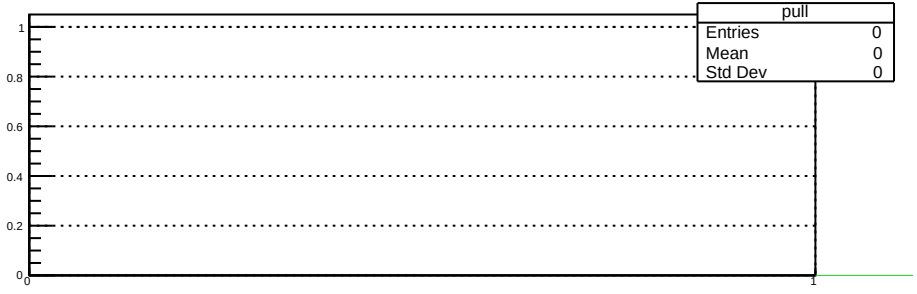

asym_bpm0l01WS_rms vs run
χ² / ndf 1.917e+04 / 93
p0 292.9 ± 0.2204
400
380
360
340
320
300
280
260
240

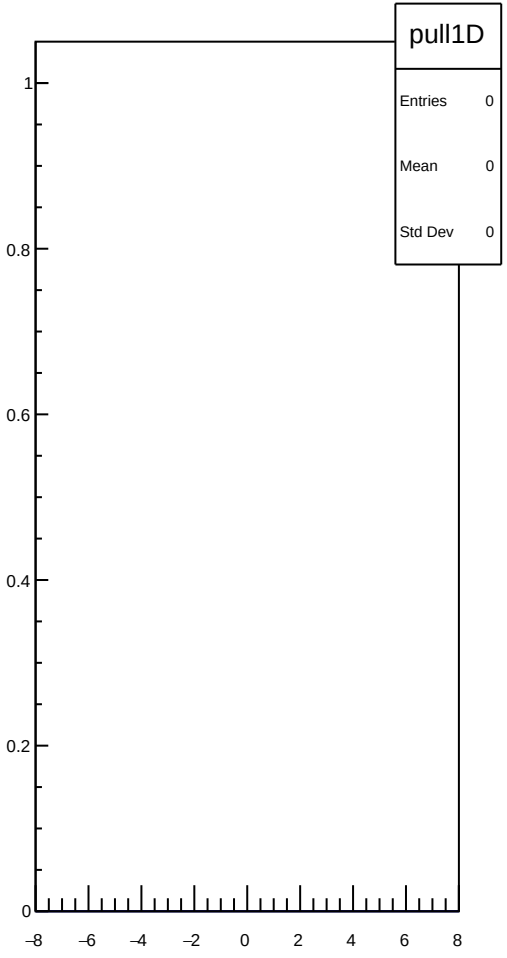

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

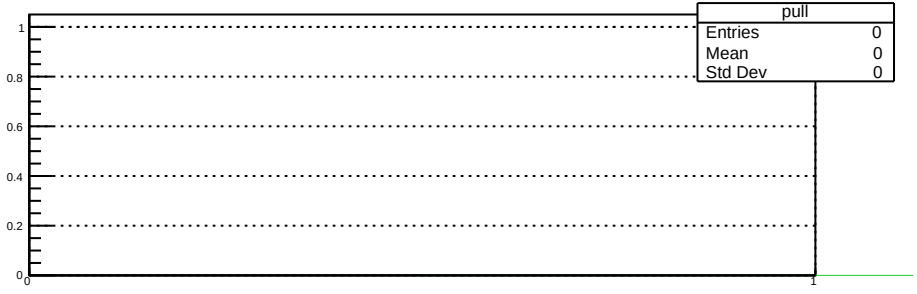

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

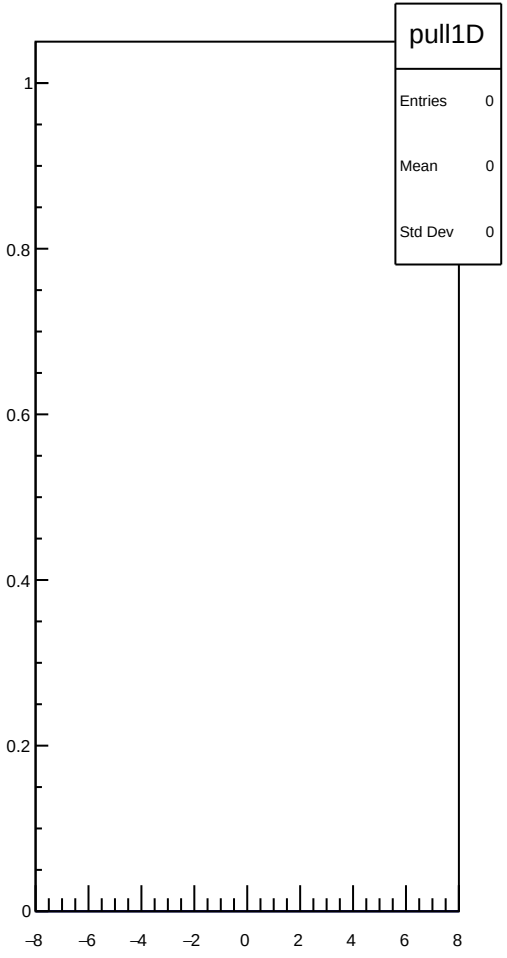

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

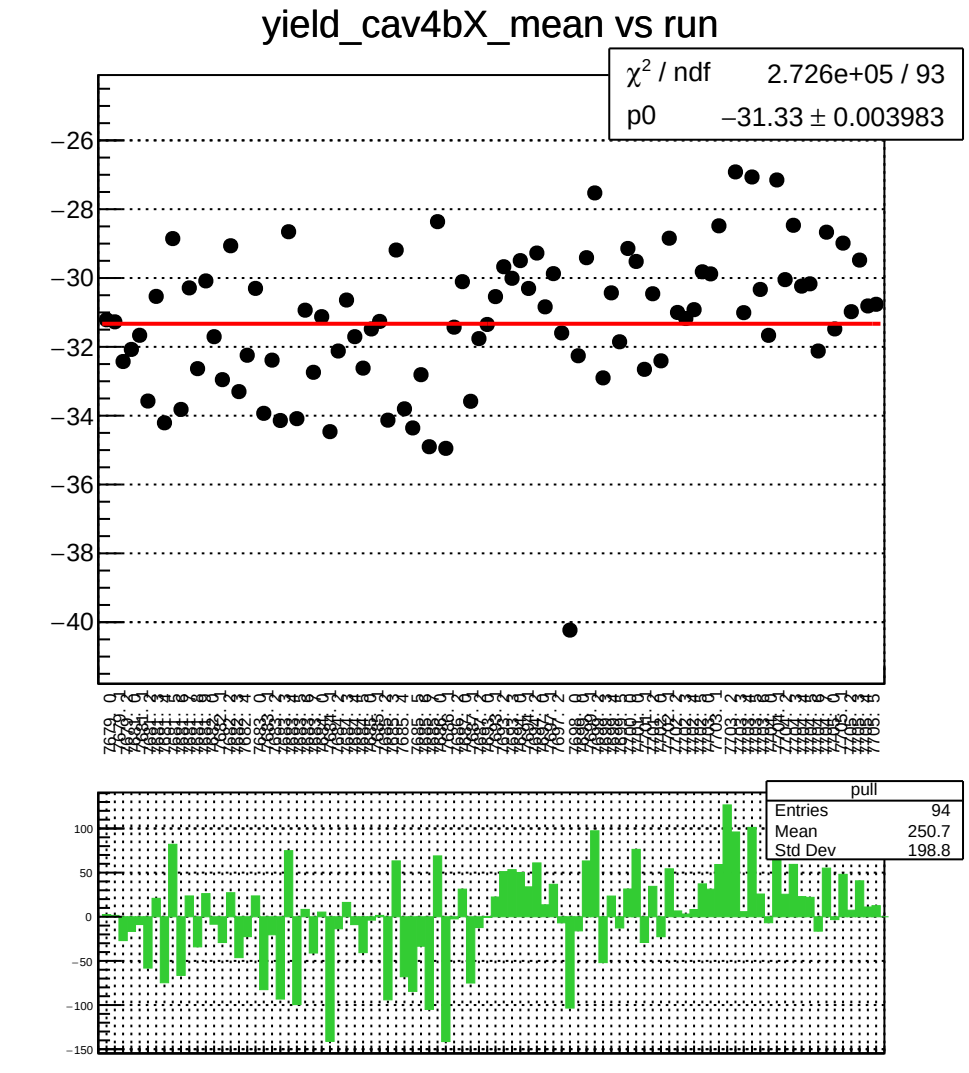

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

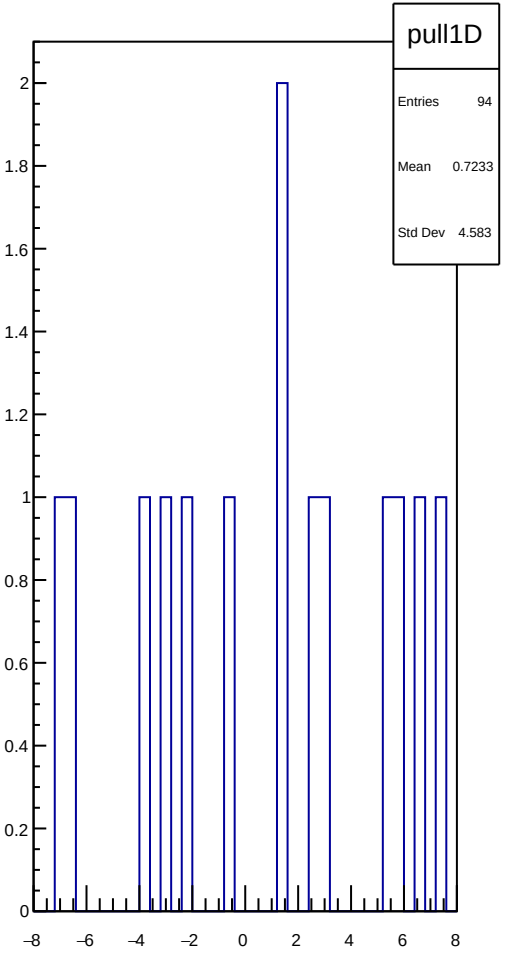

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

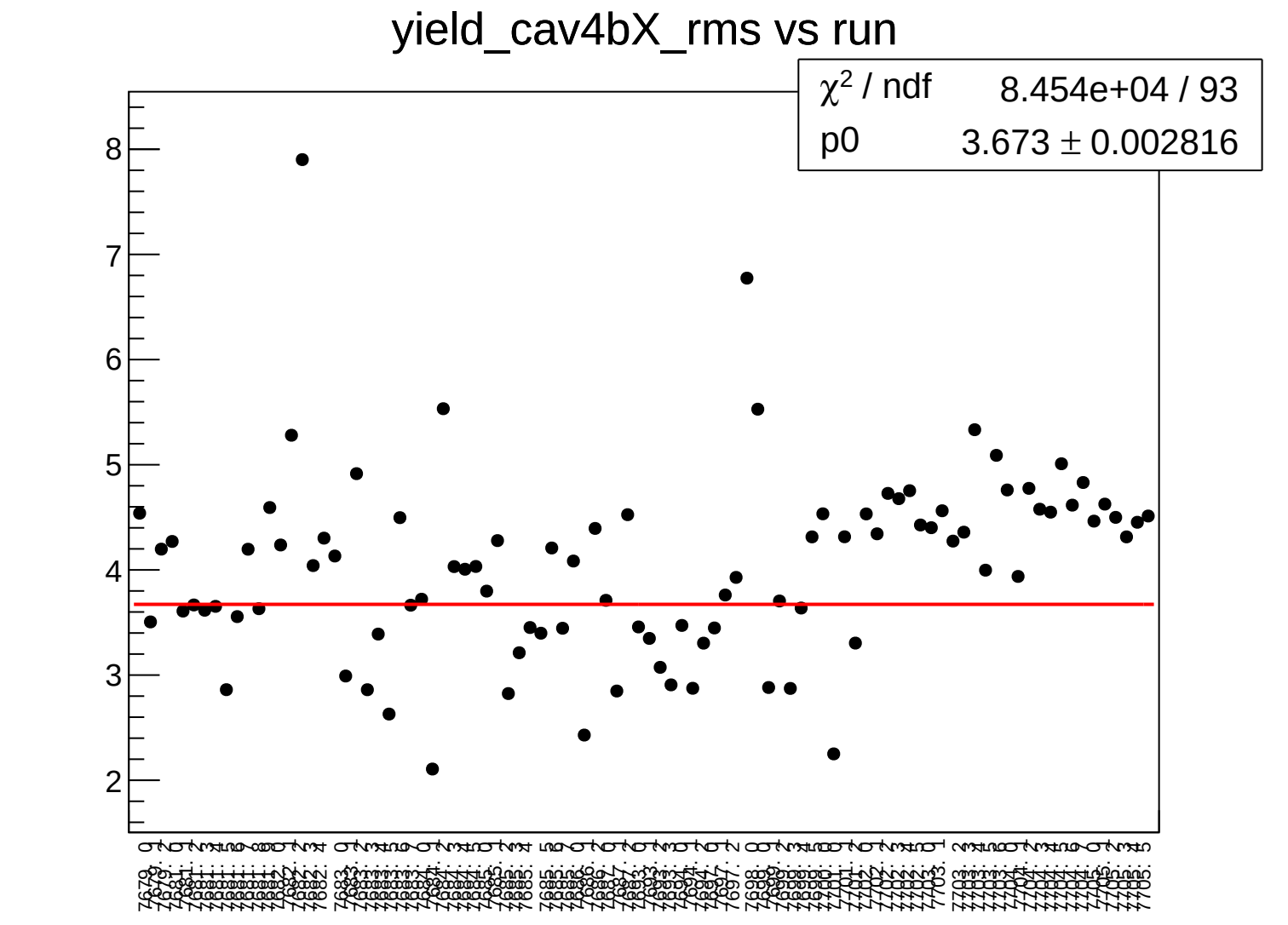

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

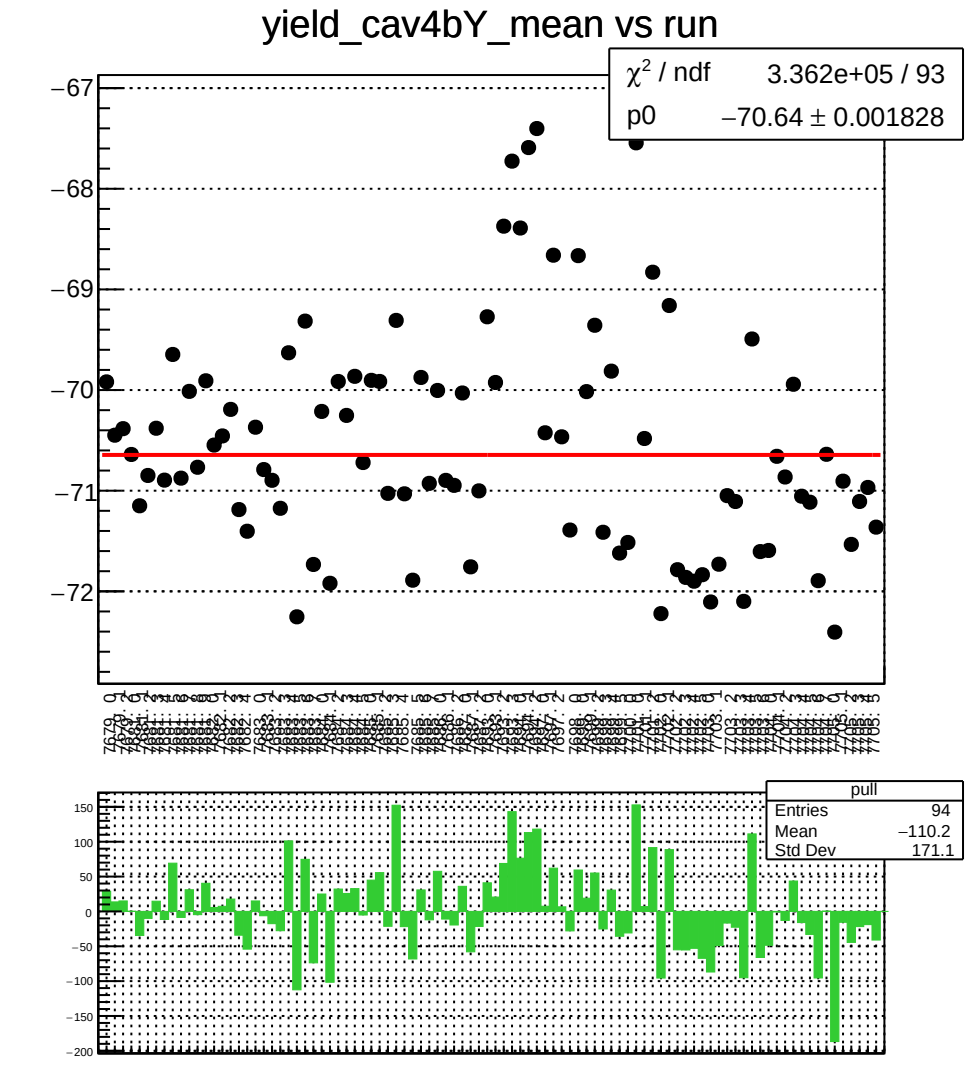

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

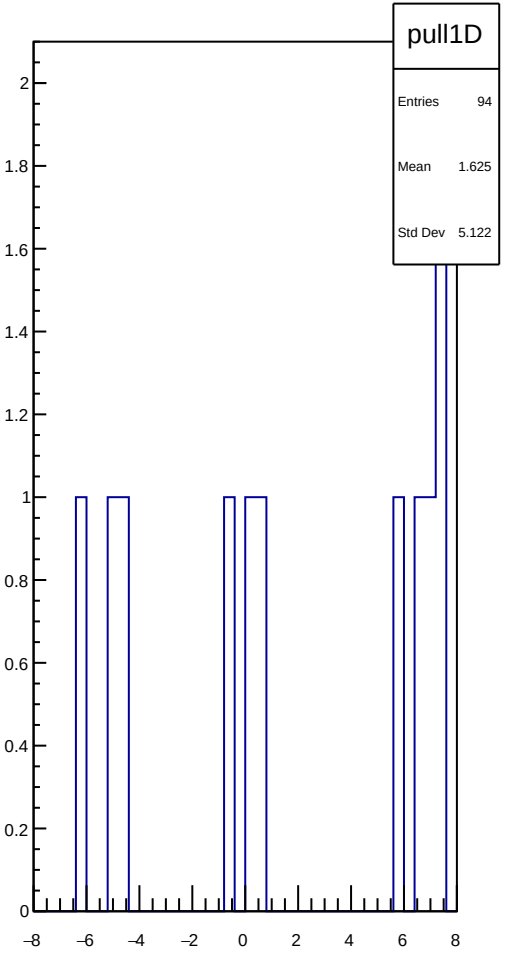

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

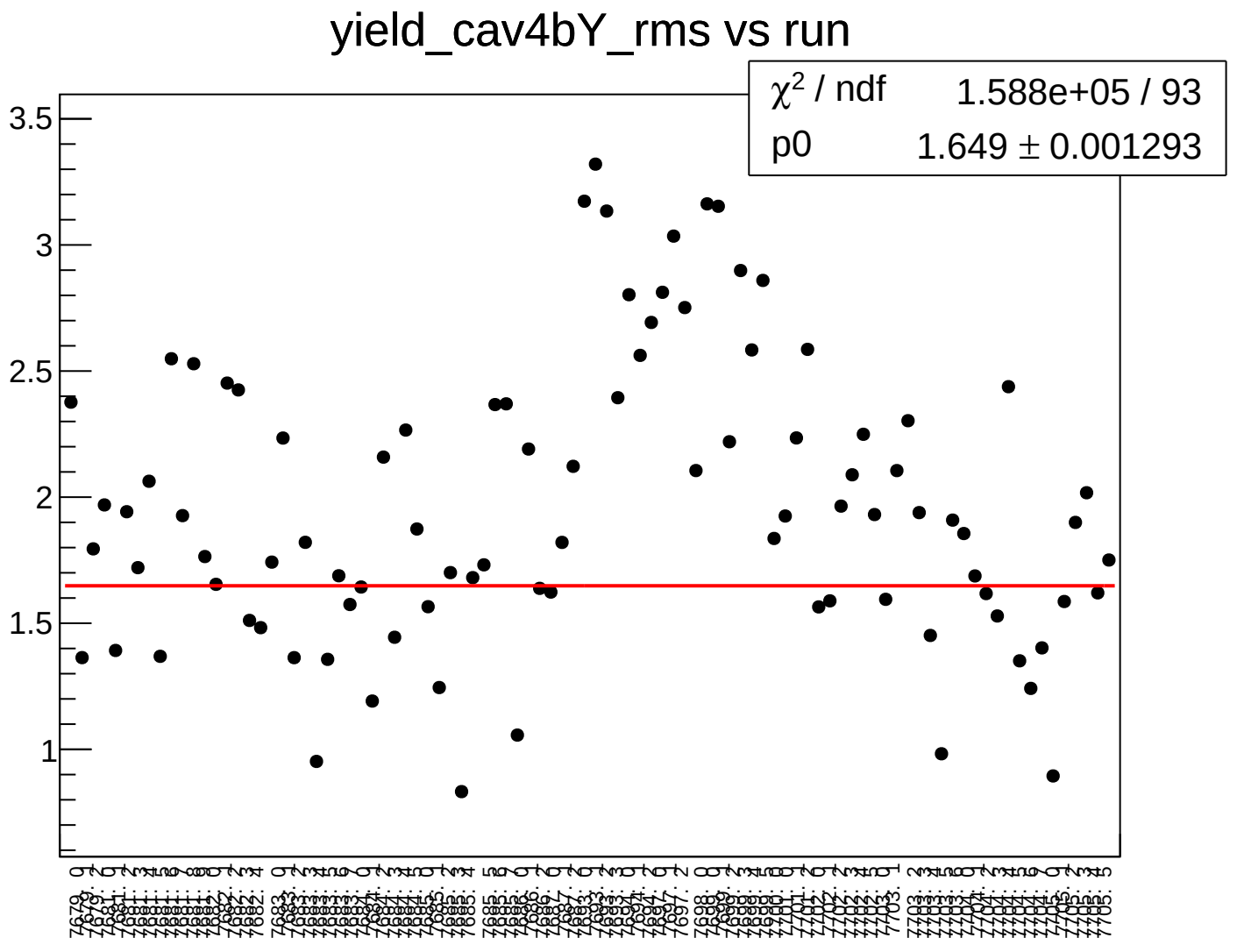

yield_cav4bX_mean vs run
χ² / ndf 2.726e+05 / 93
p0 −31.33 ± 0.003983
pull
Entries 94
Mean 250.7
Std Dev 198.8

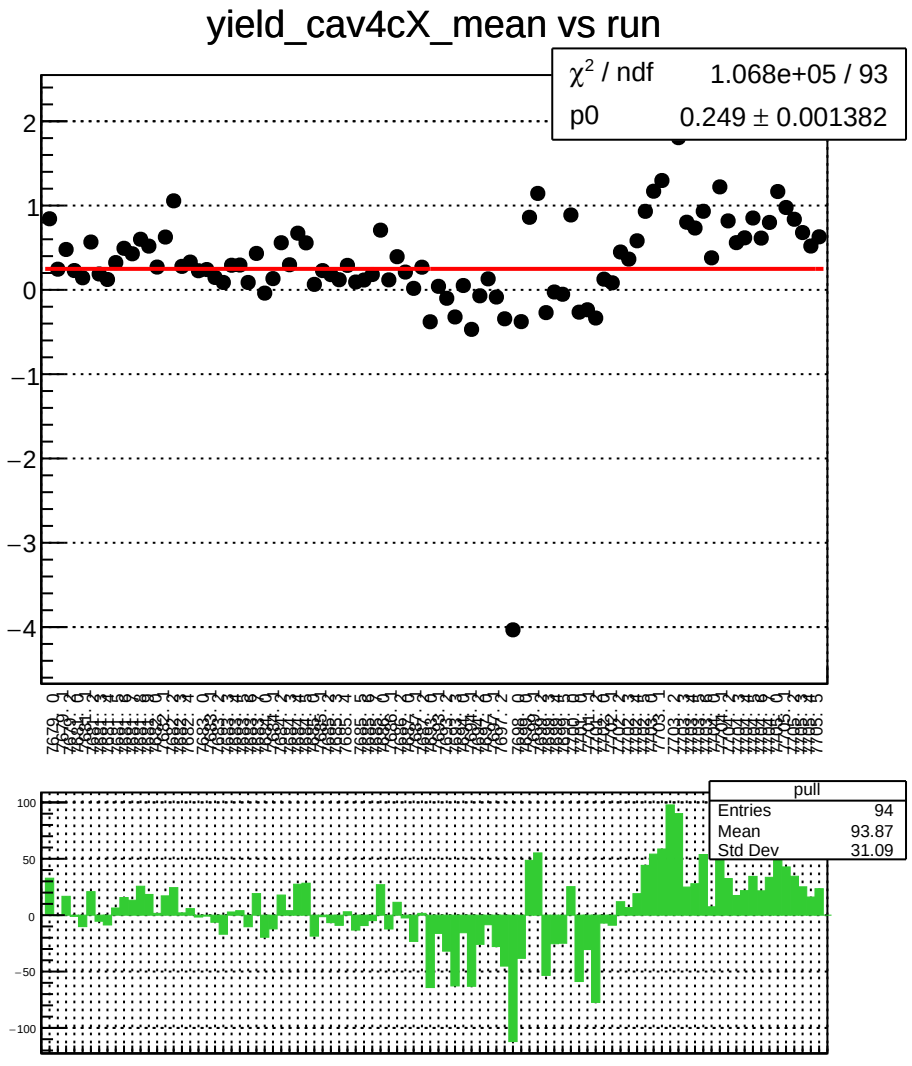

pull1D
Entries 94
Mean 0.7233
Std Dev 4.583

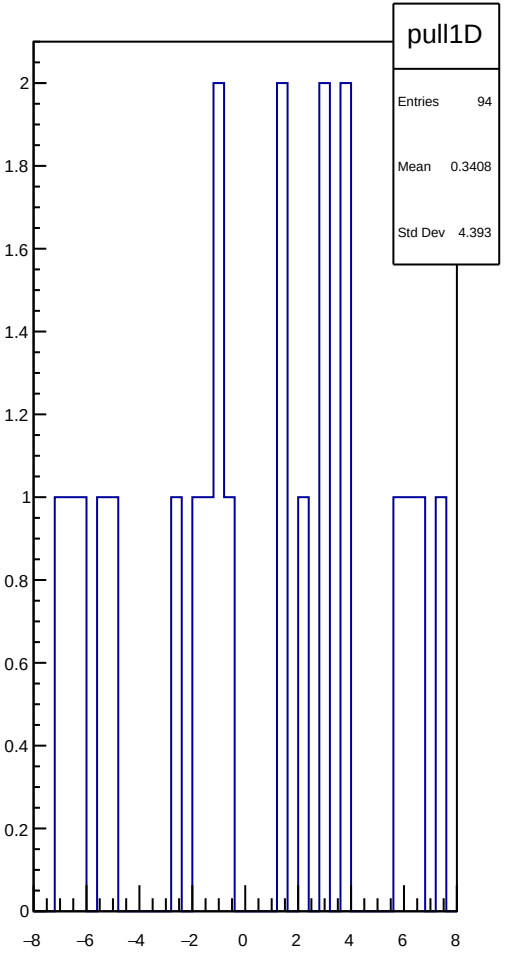

yield_cav4bX_rms vs run
χ^2 / ndf 8.454e+04 / 93
p0 3.673 ± 0.002816
8
7
6
5
4
3
2

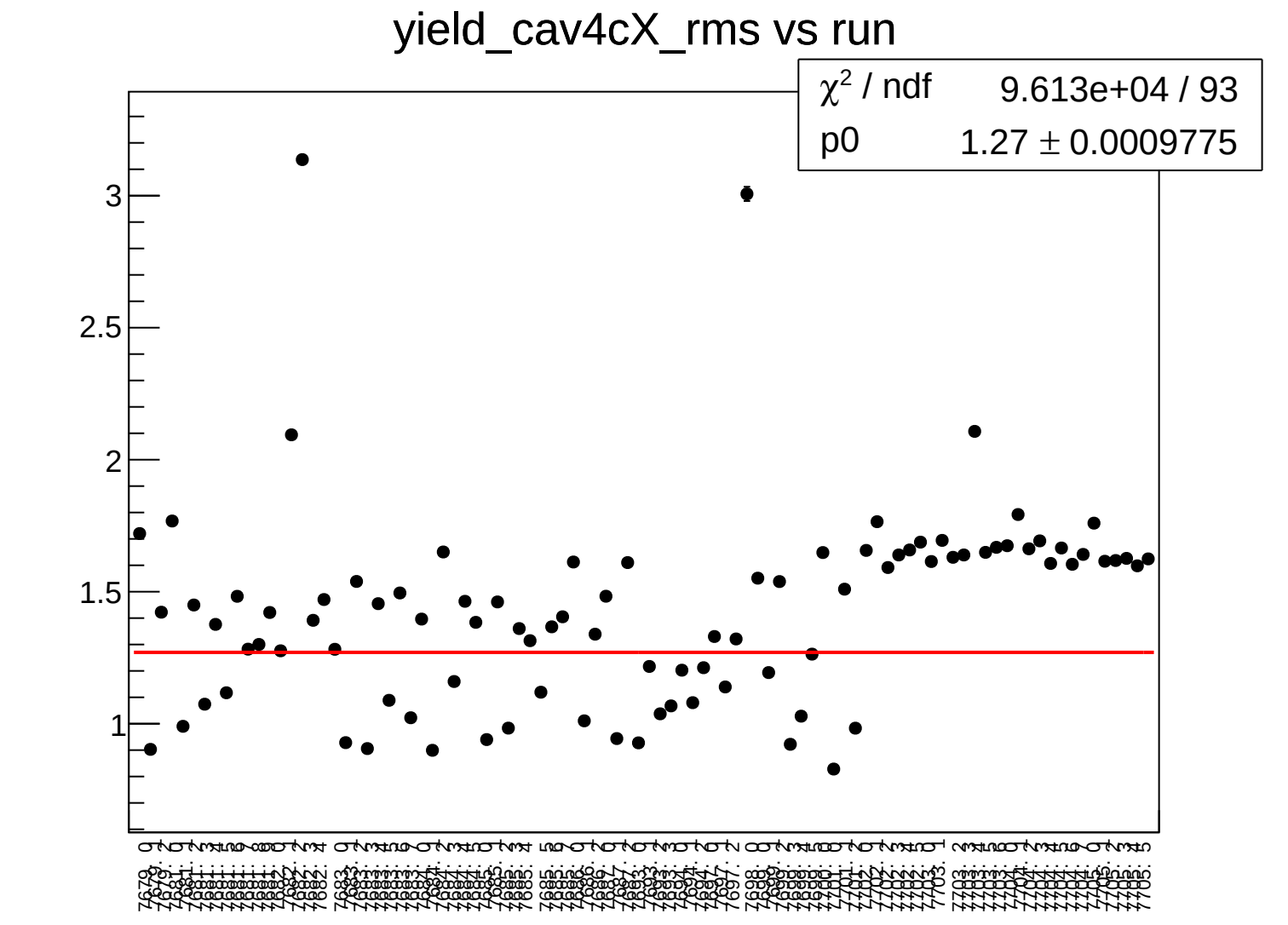

yield_cav4bY_mean vs run
χ² / ndf 3.362e+05 / 93
p0 −70.64 ± 0.001828
−67
−68
−69
−70
−71
−72
pull
Entries 94
Mean −110.2
Std Dev 171.1
150
100
50
0
−50
−100
−150
−200

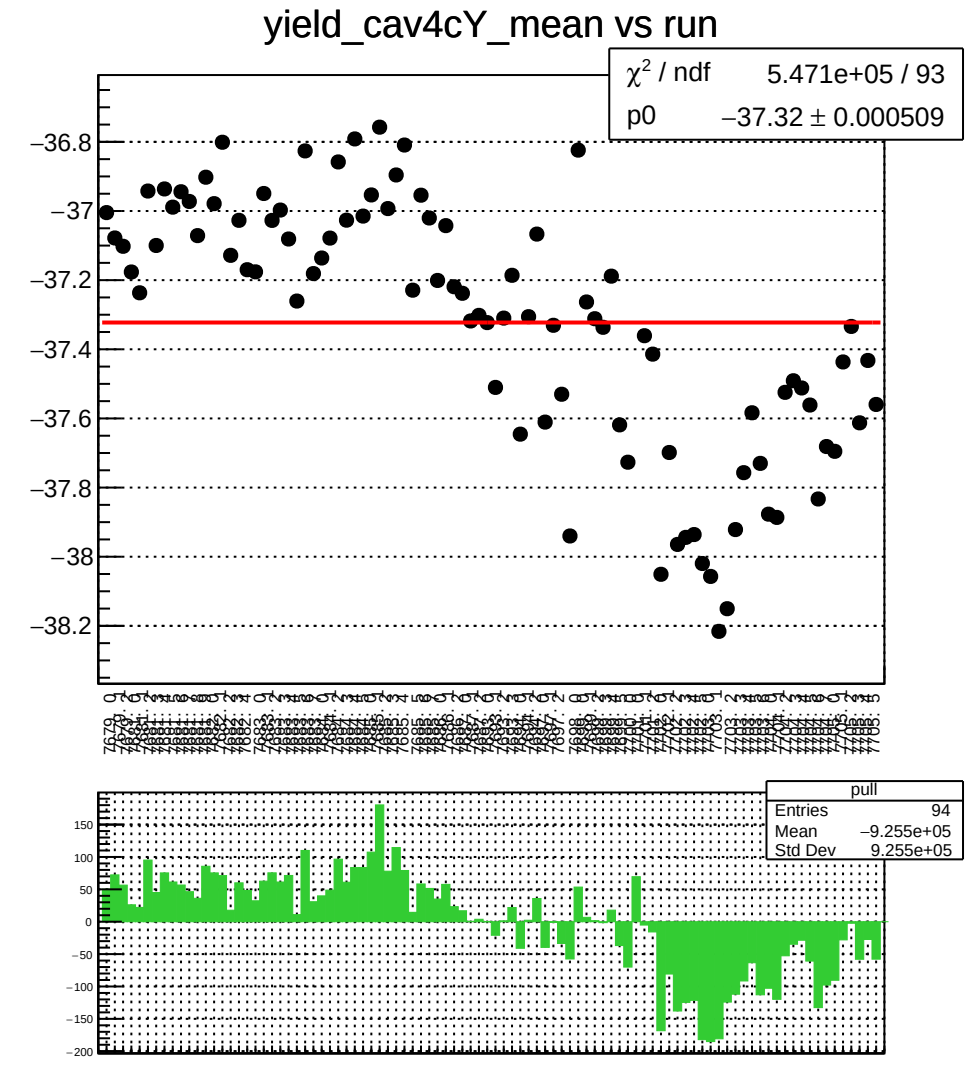

pull1D
Entries 94
Mean 1.625
Std Dev 5.122
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

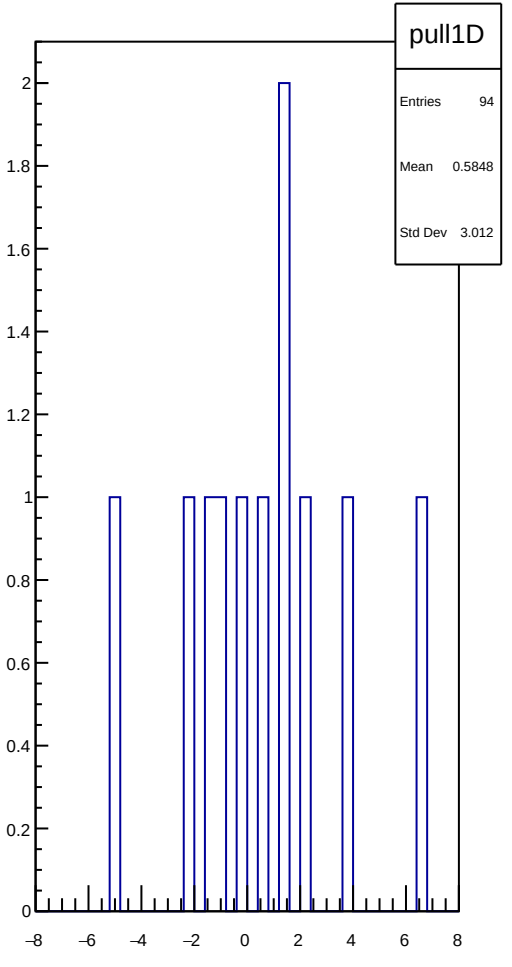

yield_cav4bY_rms vs run
χ² / ndf 1.588e+05 / 93
p0 1.649 ± 0.001293
3.5
3
2.5
2
1.5
1

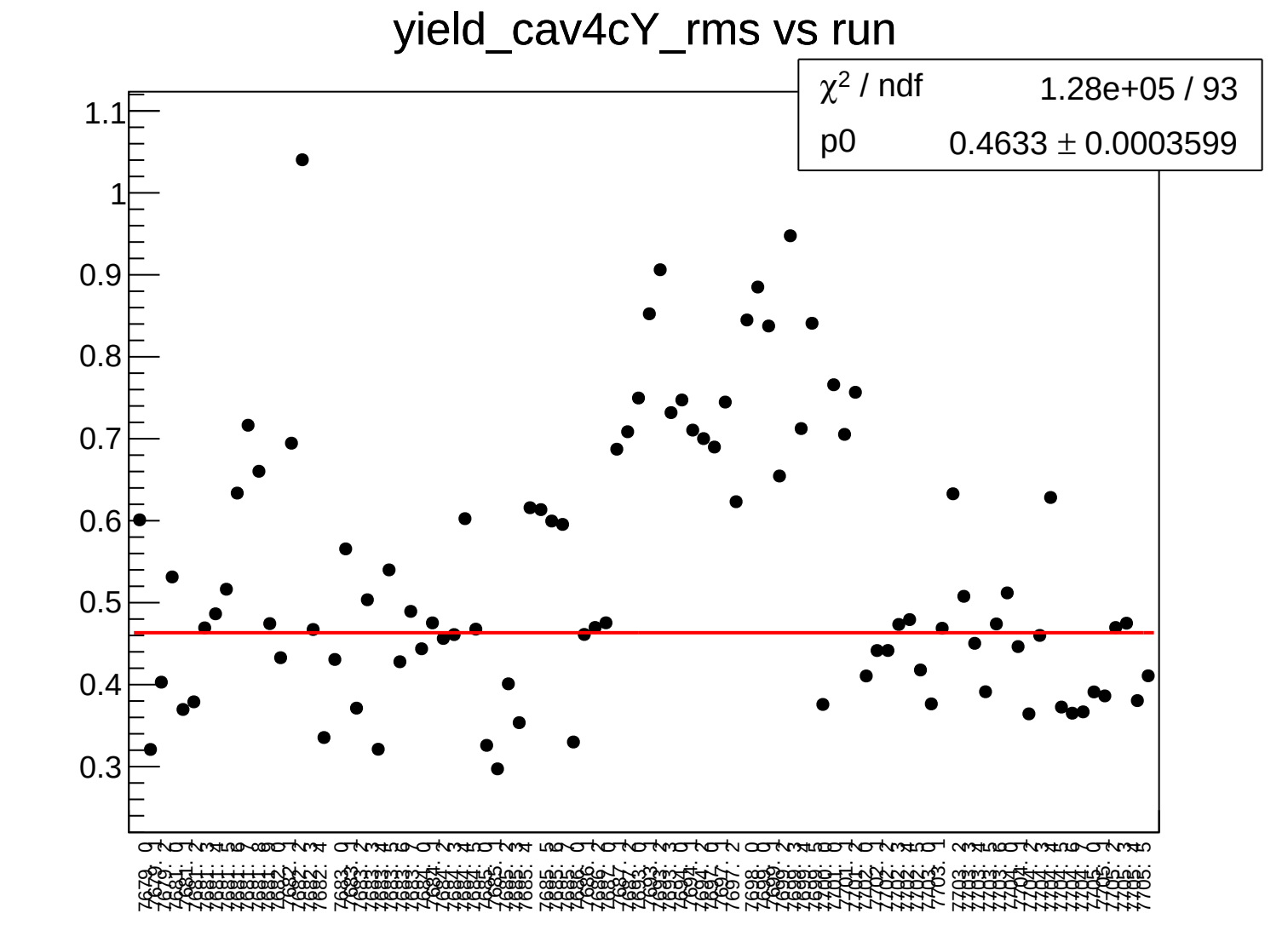

yield_cav4cX_mean vs run
χ² / ndf 1.068e+05 / 93
p0 0.249 ± 0.001382
pull
Entries 94
Mean 93.87
Std Dev 31.09

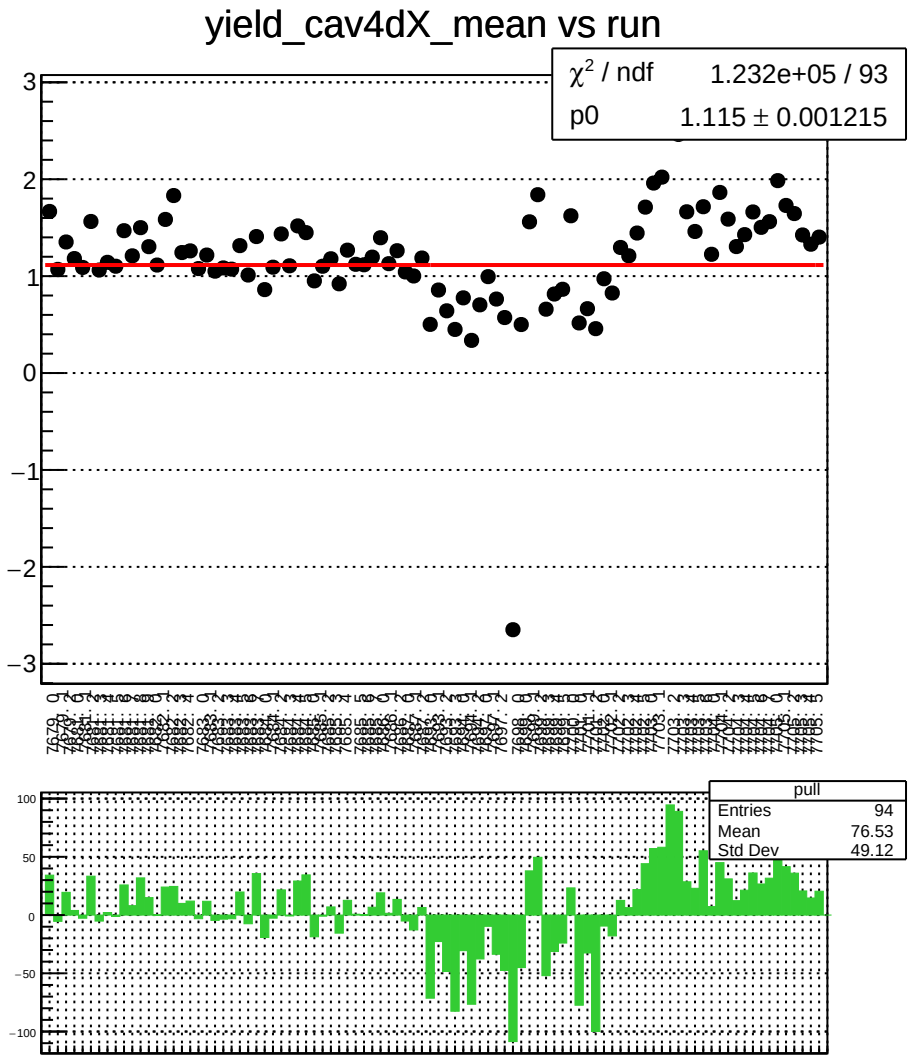

pull1D
Entries 94
Mean 0.3408
Std Dev 4.393

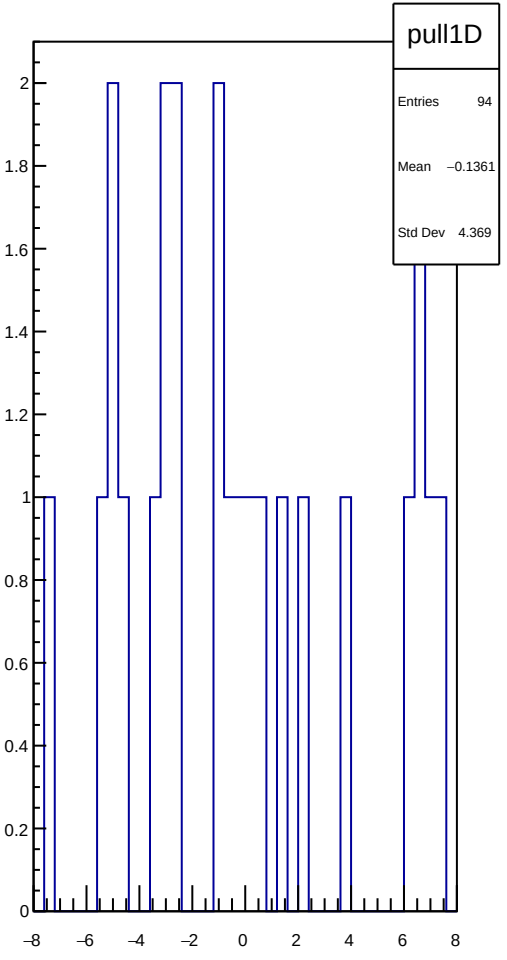

yield_cav4cX_rms vs run
χ^2 / ndf 9.613e+04 / 93
p0 1.27 ± 0.0009775
3
2.5
2
1.5
1

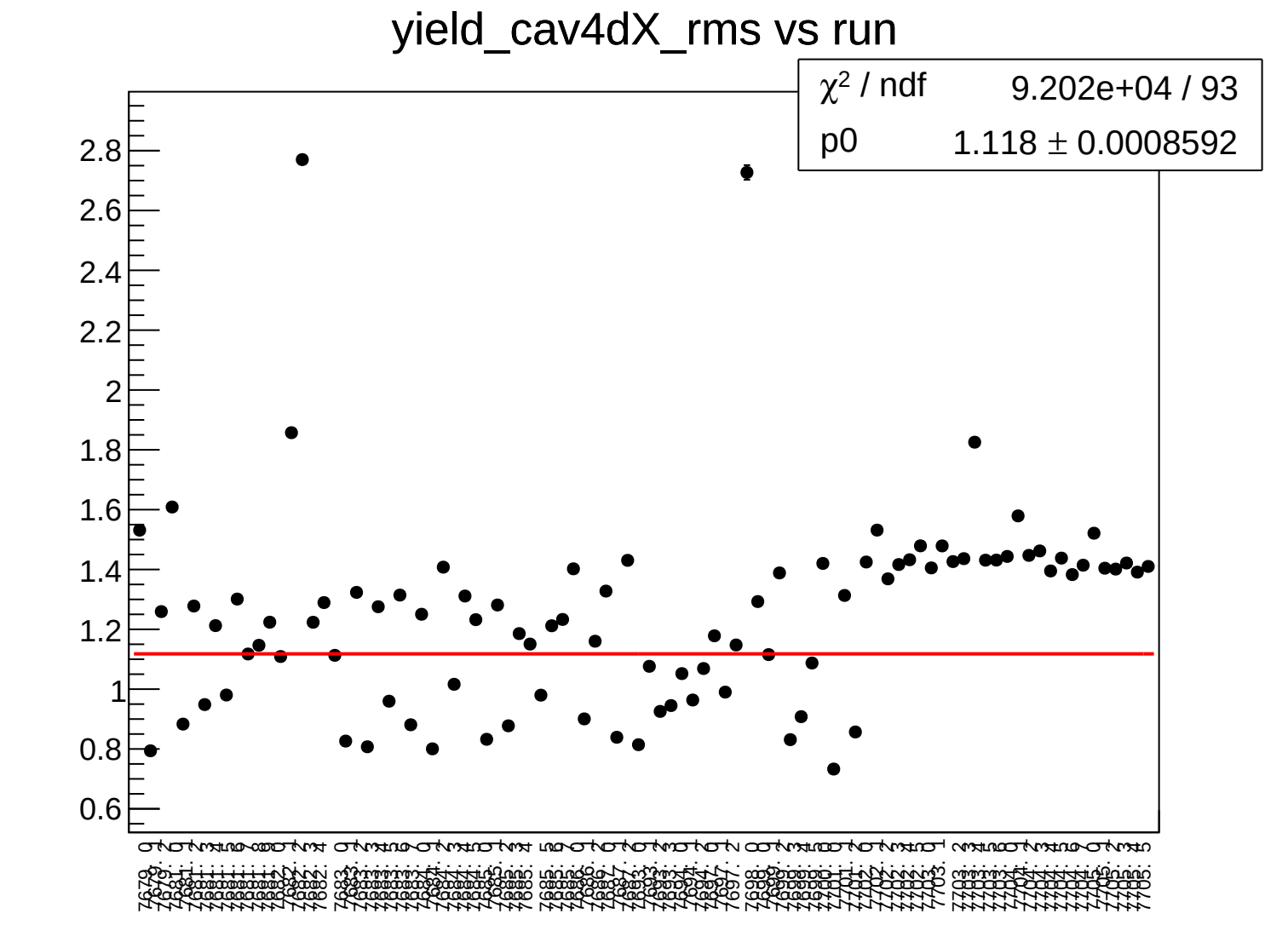

yield_cav4cY_mean vs run
χ² / ndf 5.471e+05 / 93
p0 −37.32 ± 0.000509
−36.8
−37
−37.2
−37.4
−37.6
−37.8
−38
−38.2
pull
Entries 94
Mean −9.255e+05
Std Dev 9.255e+05
150
100
50
0
−50
−100
−150
−200

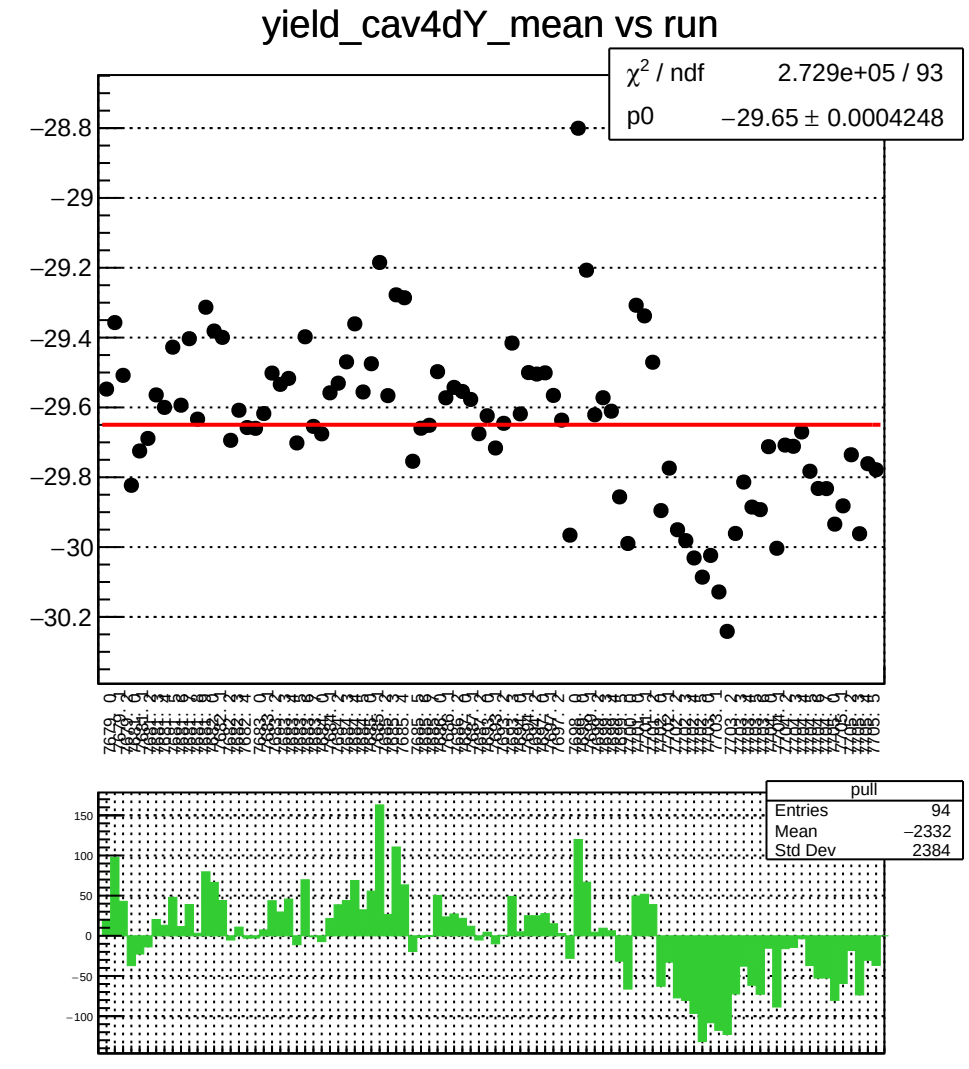

pull1D
Entries 94
Mean 0.5848
Std Dev 3.012
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

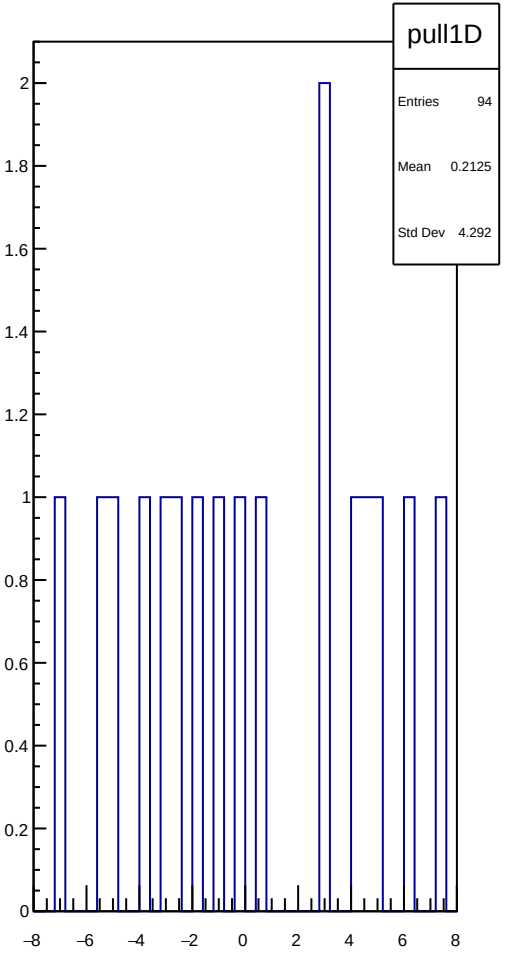

yield_cav4cY_rms vs run
χ² / ndf 1.28e+05 / 93
p0 0.4633 ± 0.0003599
1.1
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3

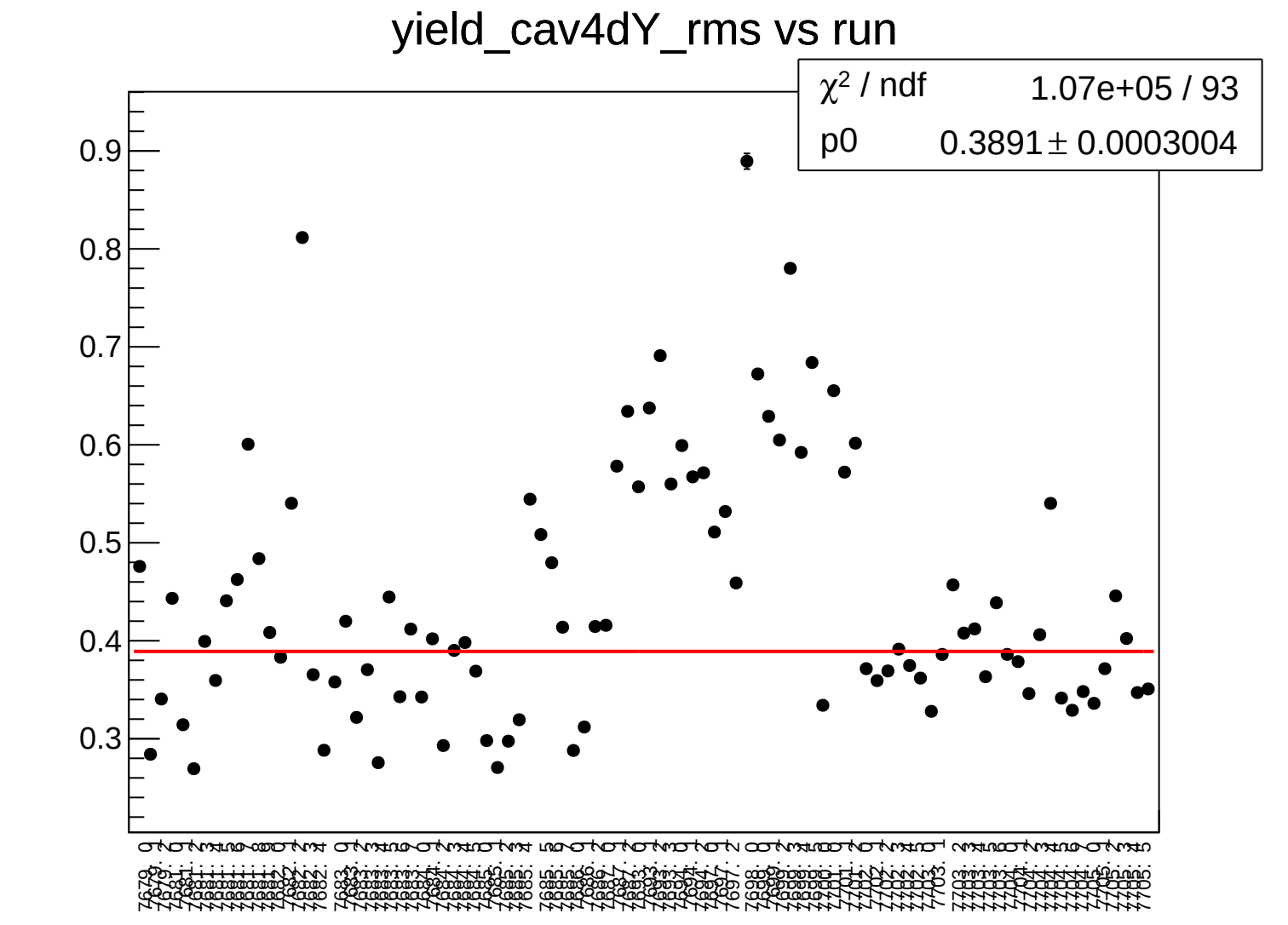

yield_cav4dX_mean vs run
χ² / ndf 1.232e+05 / 93
p0 1.115 ± 0.001215
pull
Entries 94
Mean 76.53
Std Dev 49.12

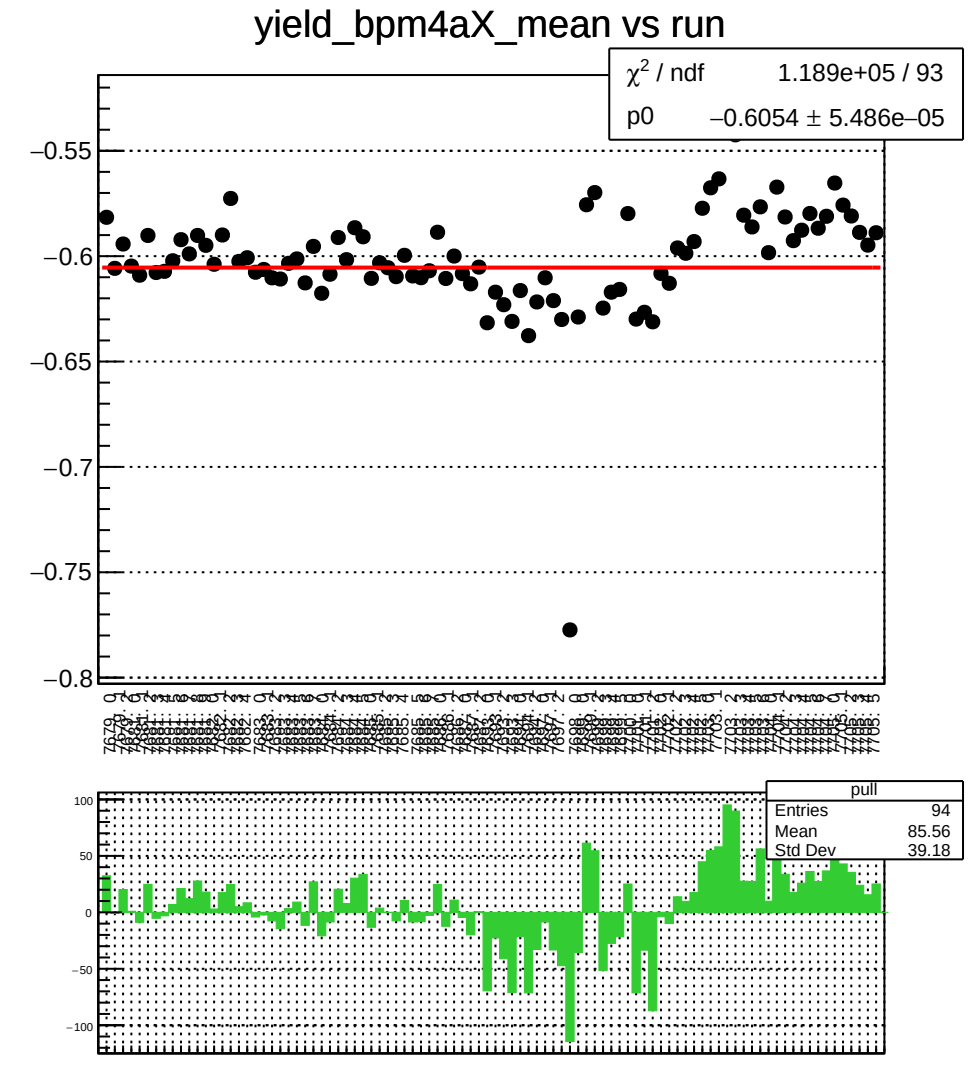

pull1D
Entries 94
Mean −0.1361
Std Dev 4.369

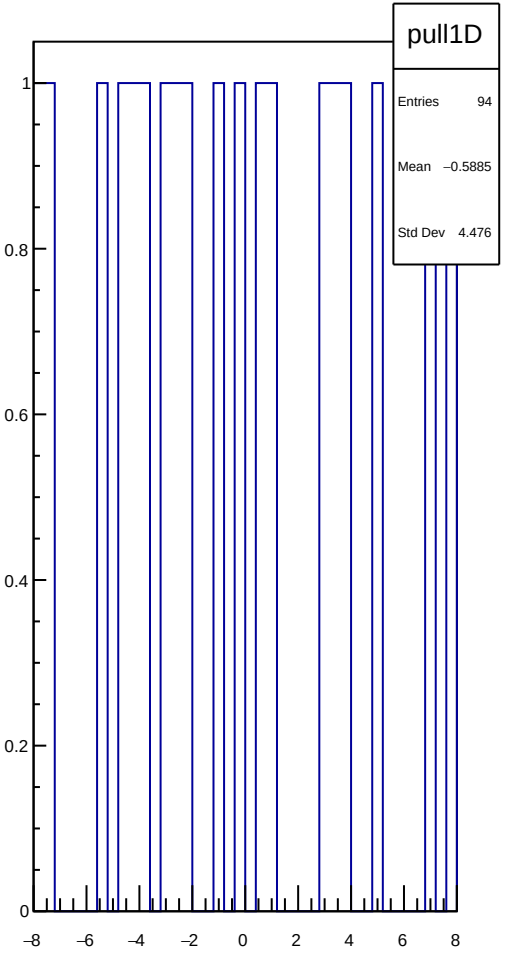

yield_cav4dX_rms vs run
χ² / ndf 9.202e+04 / 93
p0 1.118 ± 0.0008592
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6

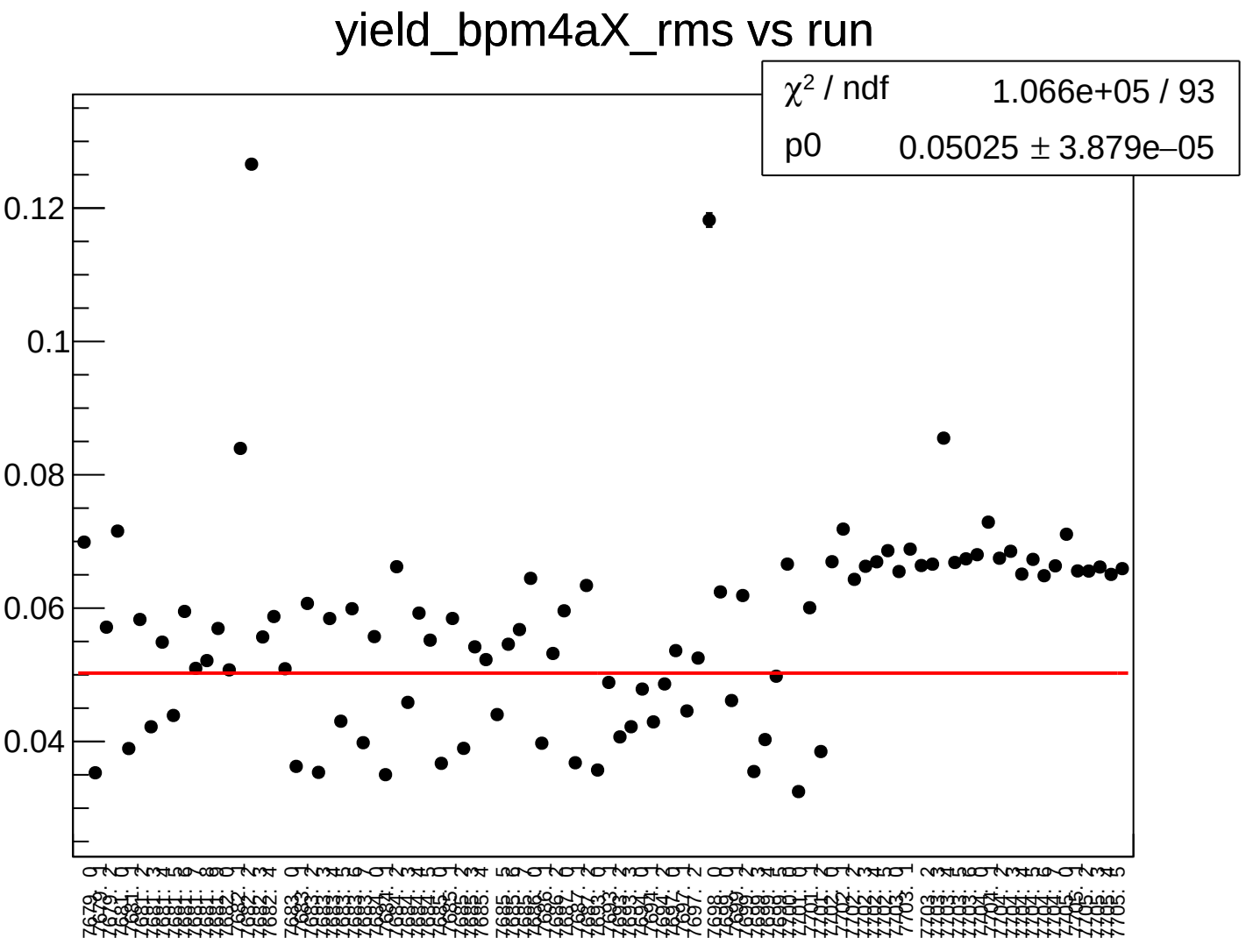

yield_cav4dY_mean vs run
χ² / ndf 2.729e+05 / 93
p0 −29.65 ± 0.0004248
−28.8
−29
−29.2
−29.4
−29.6
−29.8
−30
−30.2
pull
Entries 94
Mean −2332
Std Dev 2384
150
100
50
0
−50
−100

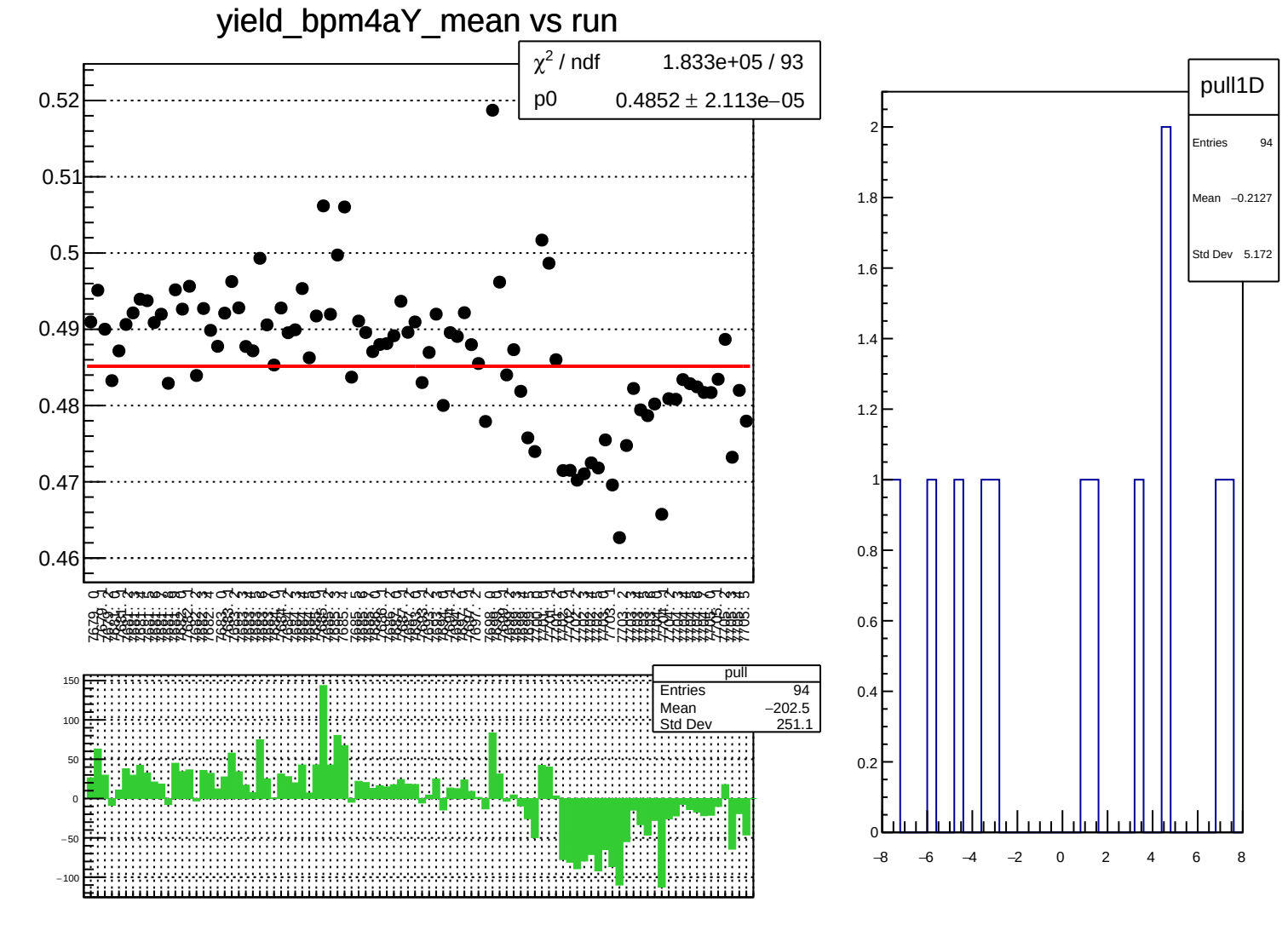

pull1D
Entries 94
Mean 0.2125
Std Dev 4.292
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

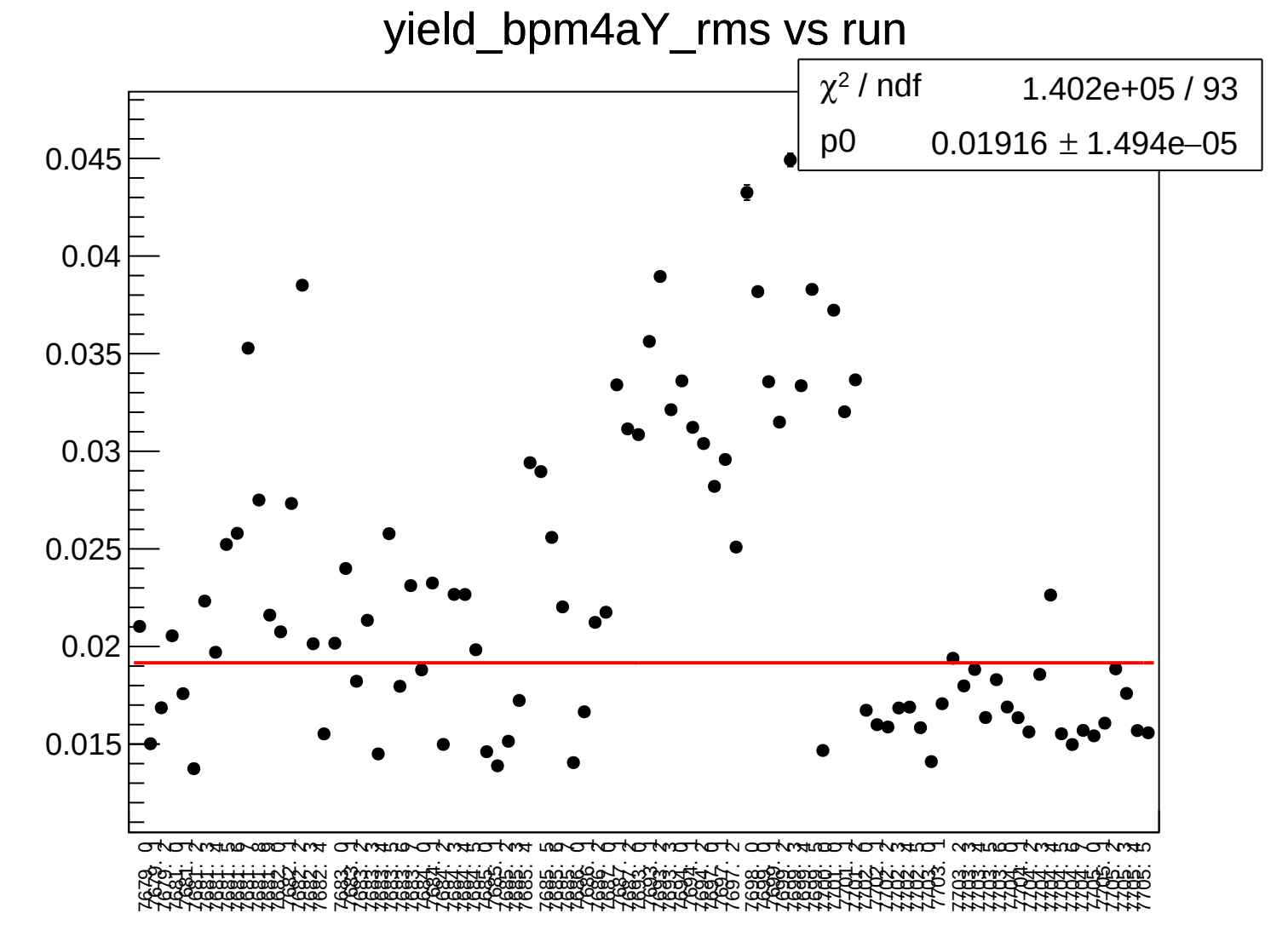

yield_cav4dY_rms vs run
χ² / ndf 1.07e+05 / 93
p0 0.3891 ± 0.0003004
0.9
0.8
0.7
0.6
0.5
0.4
0.3

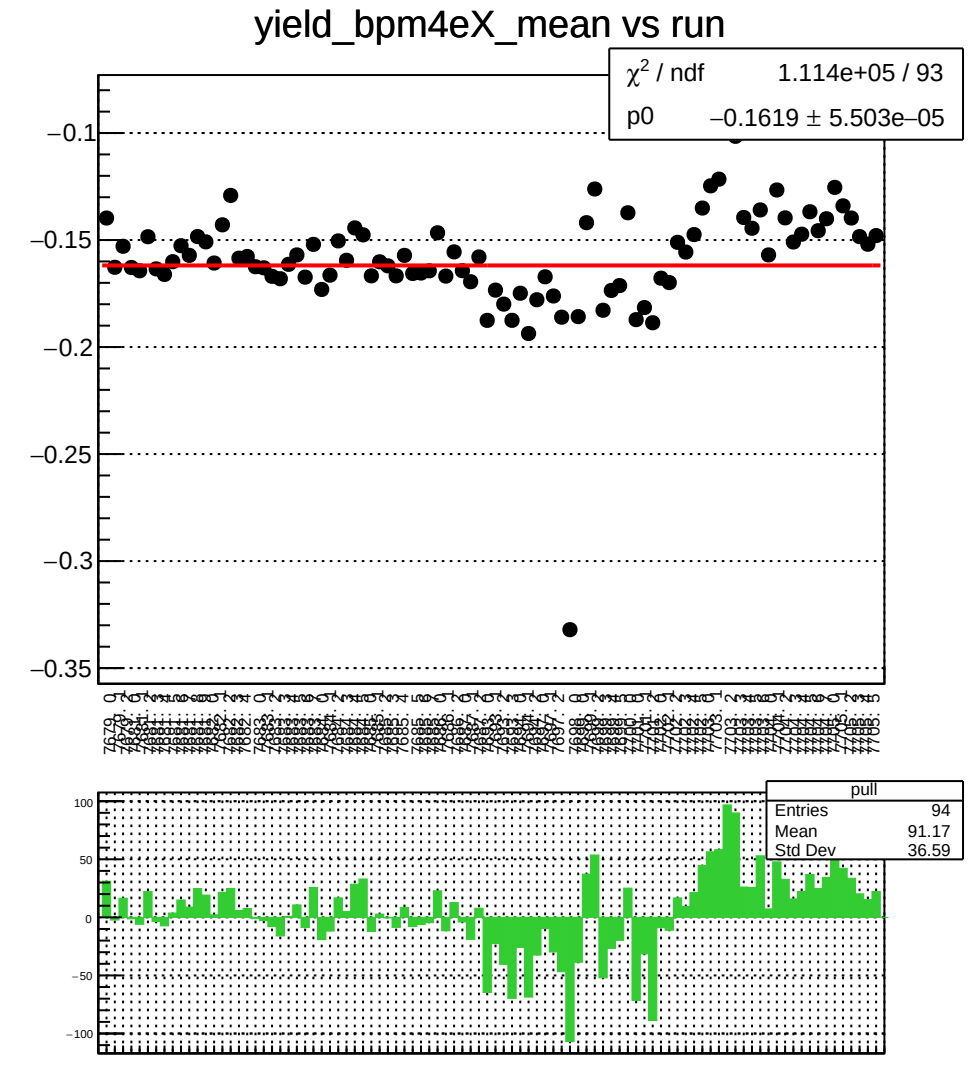

yield_bpm4aX_mean vs run
χ² / ndf 1.189e+05 / 93
p0 −0.6054 ± 5.486e−05
−0.55
−0.6
−0.65
−0.7
−0.75
−0.8
pull
Entries 94
Mean 85.56
Std Dev 39.18
100
50
0
−50
−100

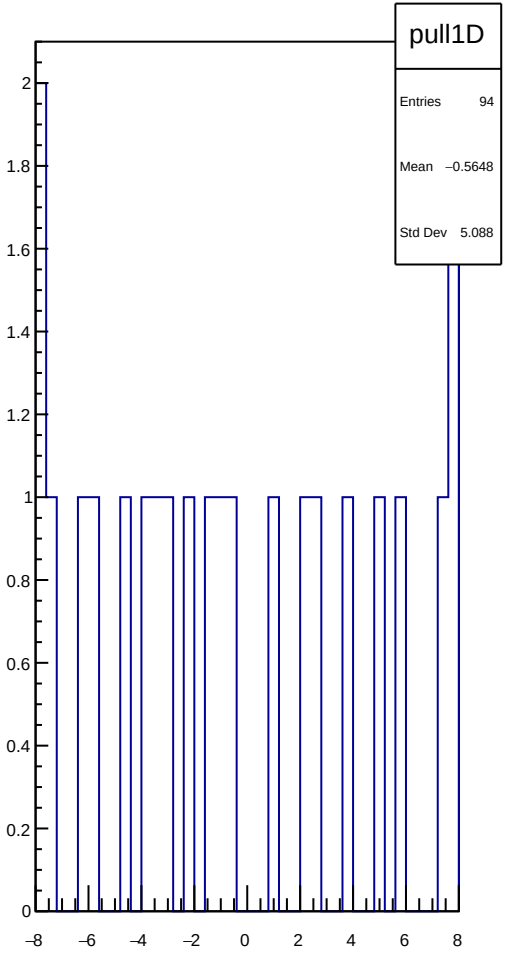

pull1D
Entries 94
Mean −0.5885
Std Dev 4.476
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

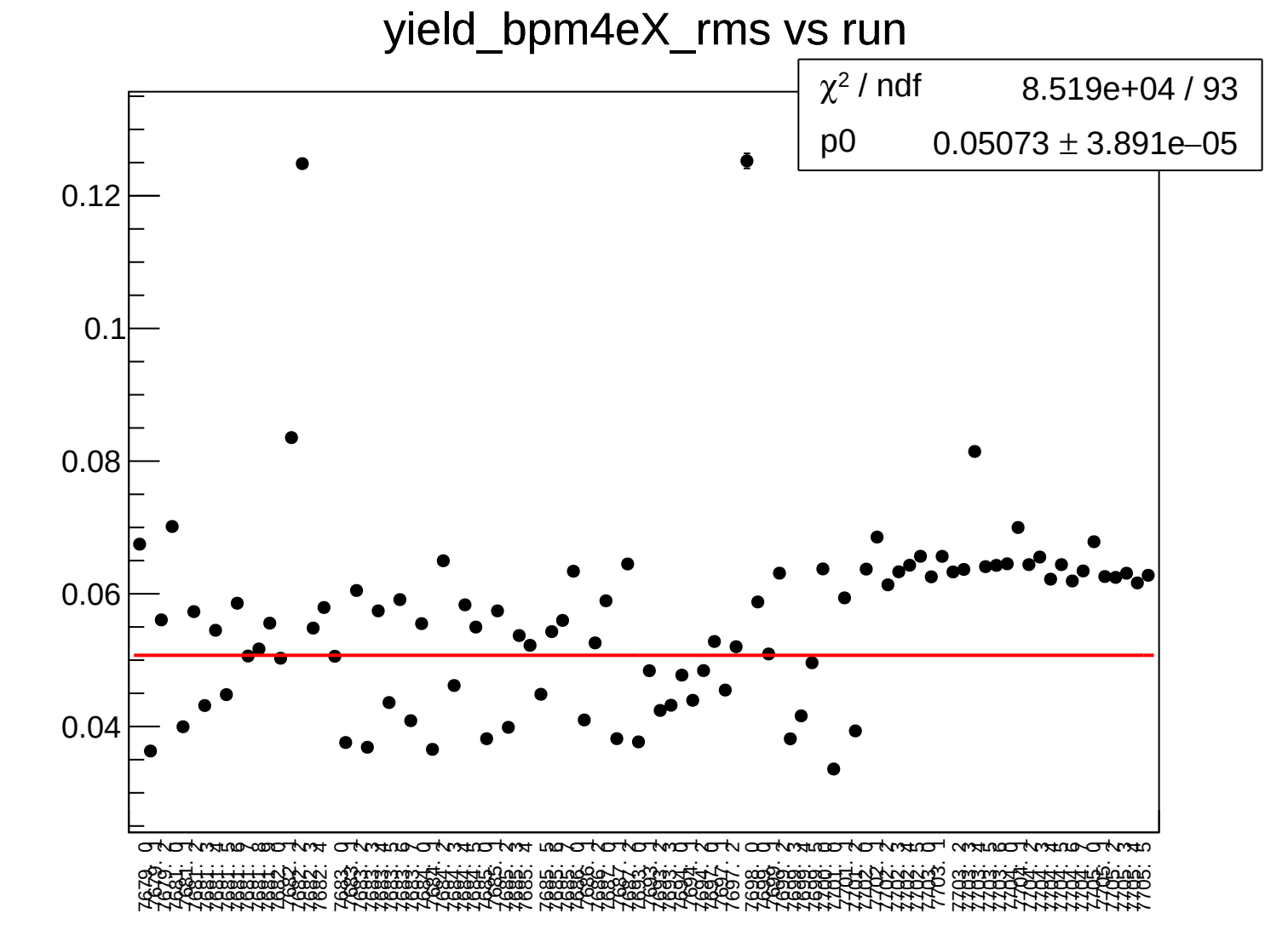

yield_bpm4aX_rms vs run
χ² / ndf 1.066e+05 / 93
p0 0.05025 ± 3.879e–05
0.12
0.1
0.08
0.06
0.04

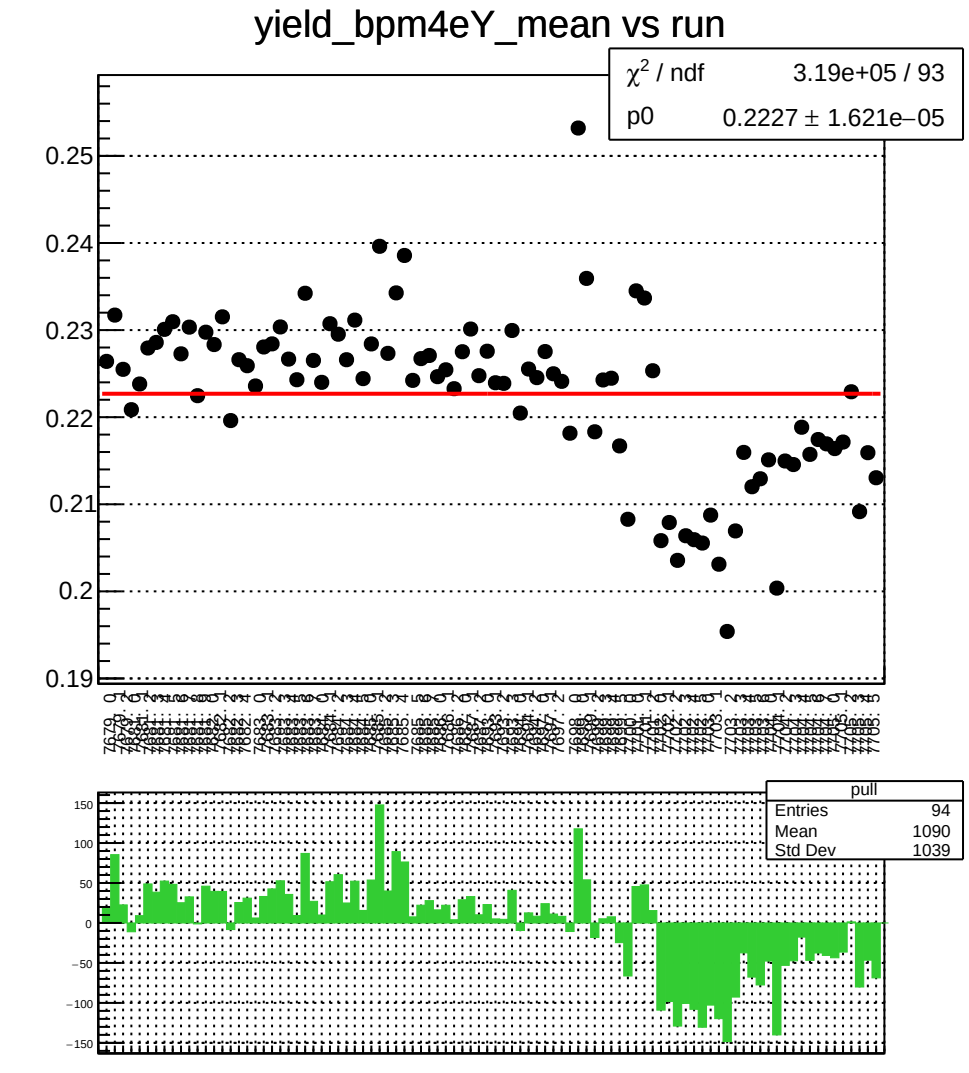

yield_bpm4aY_mean vs run
χ² / ndf 1.833e+05 / 93
p0 0.4852 ± 2.113e−05
0.52
0.51
0.5
0.49
0.48
0.47
0.46
pull
Entries 94
Mean −202.5
Std Dev 251.1
150
100
50
0
−50
−100
pull1D
Entries 94
Mean −0.2127
Std Dev 5.172
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

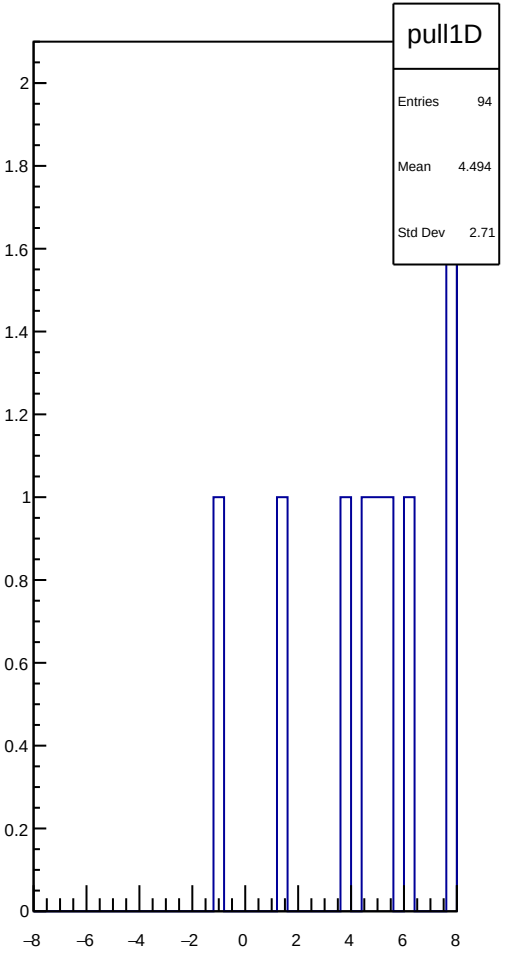

yield_bpm4aY_rms vs run
χ² / ndf 1.402e+05 / 93
p0 0.01916 ± 1.494e−05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

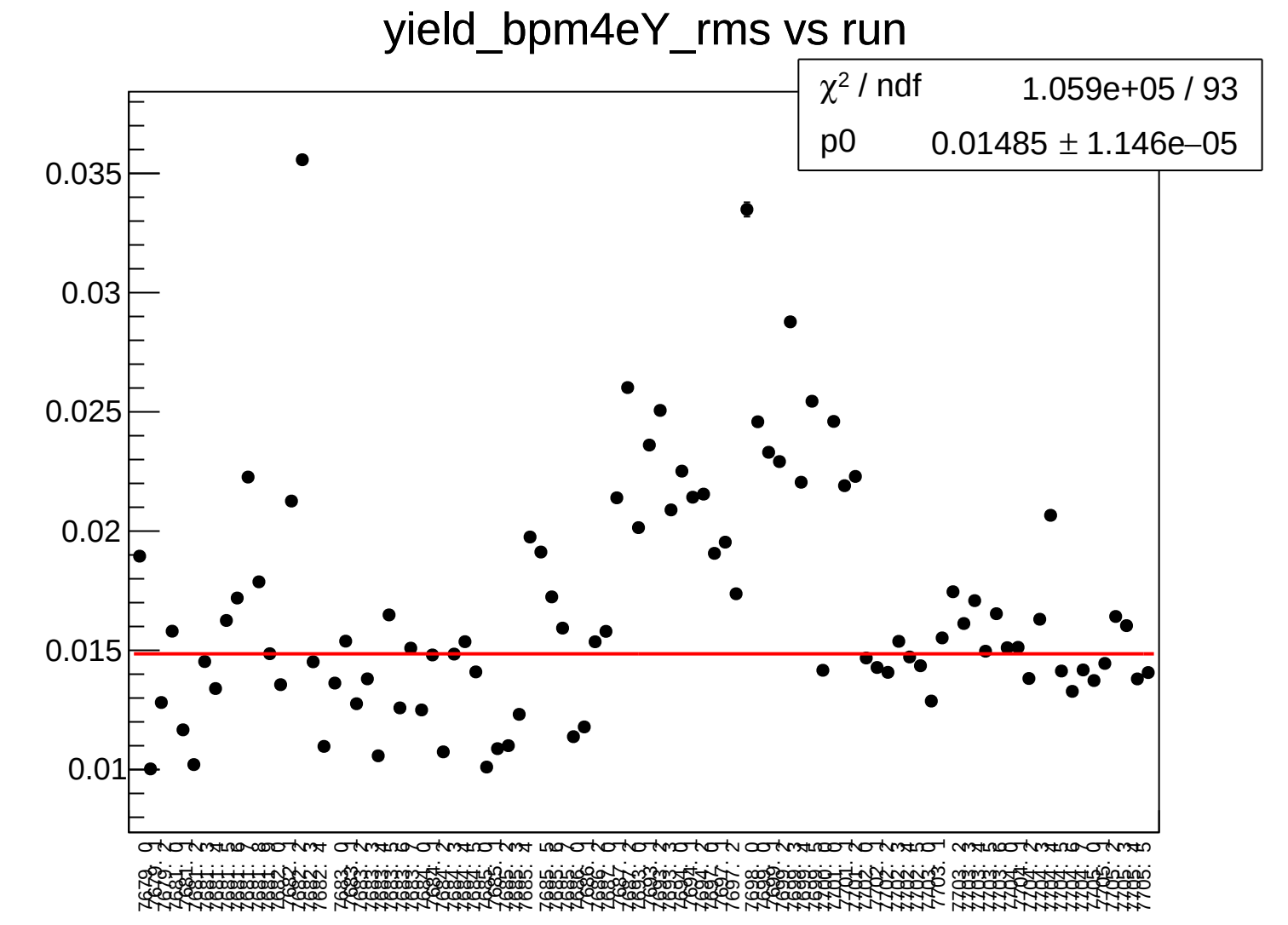

yield_bpm4eX_mean vs run
χ² / ndf 1.114e+05 / 93
p0 −0.1619 ± 5.503e−05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
pull
Entries 94
Mean 91.17
Std Dev 36.59
100
50
0
−50
−100

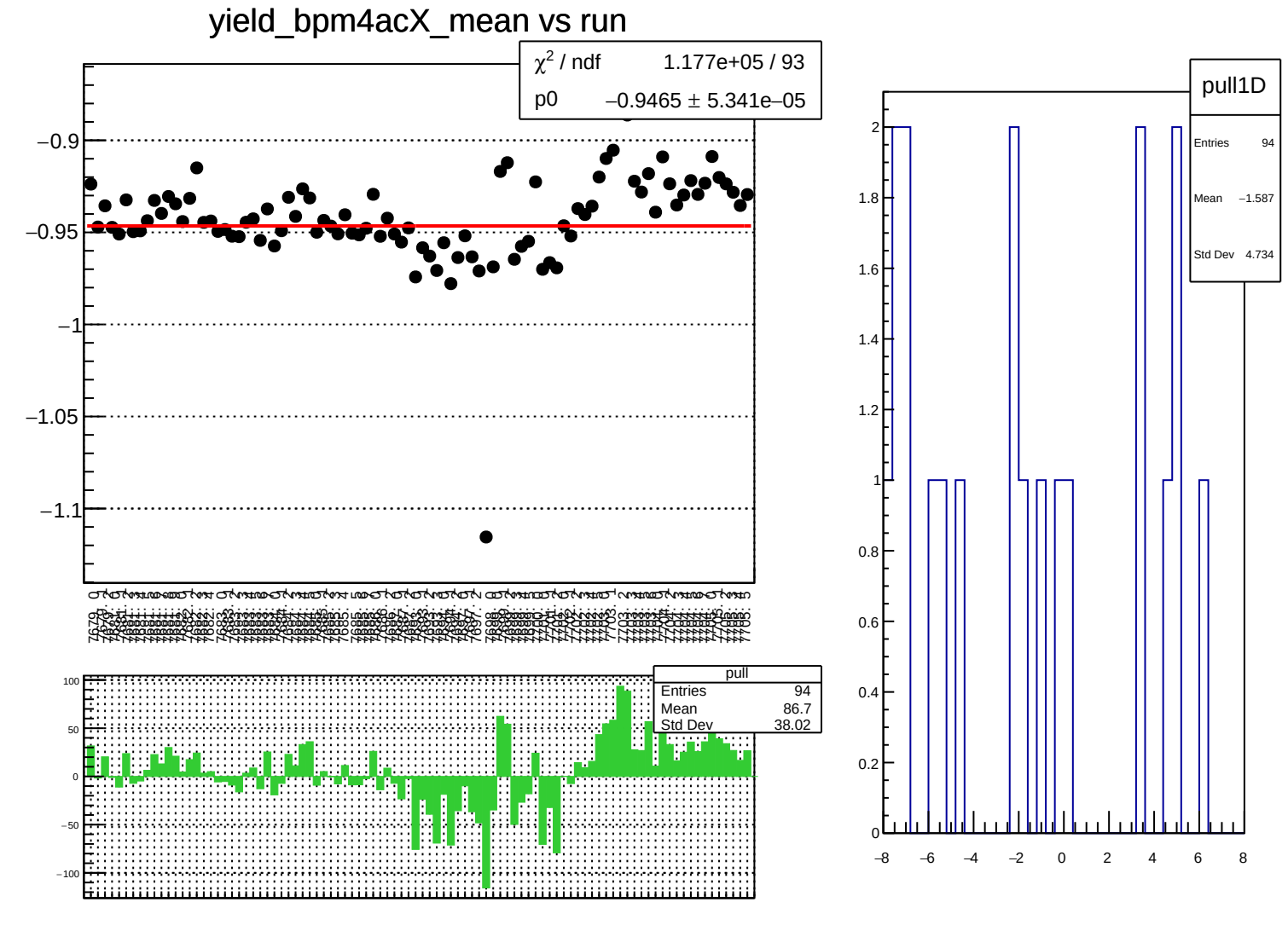

pull1D
Entries 94
Mean −0.5648
Std Dev 5.088
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

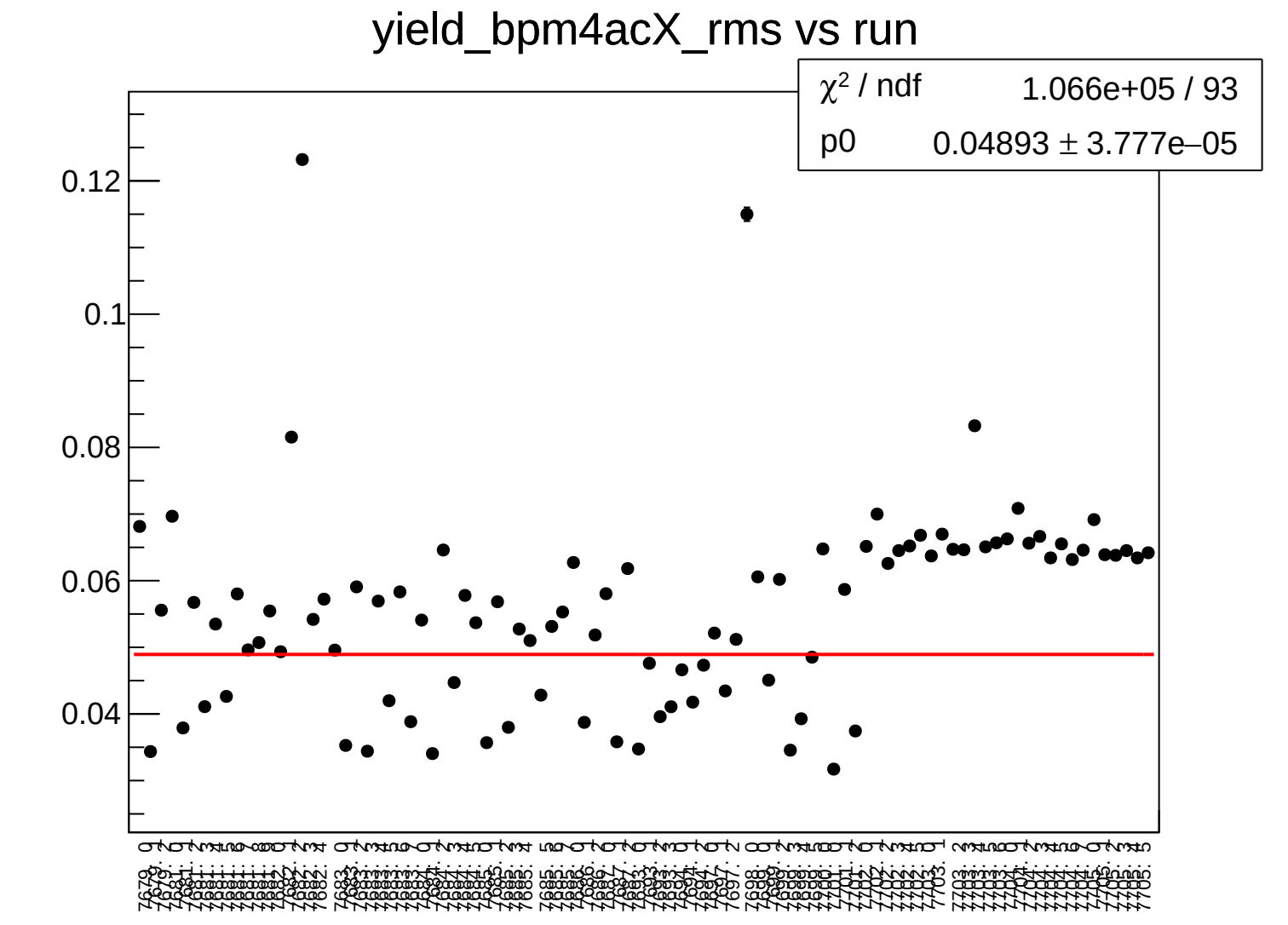

yield_bpm4eX_rms vs run
χ² / ndf 8.519e+04 / 93
p0 0.05073 ± 3.891e–05
0.12
0.1
0.08
0.06
0.04

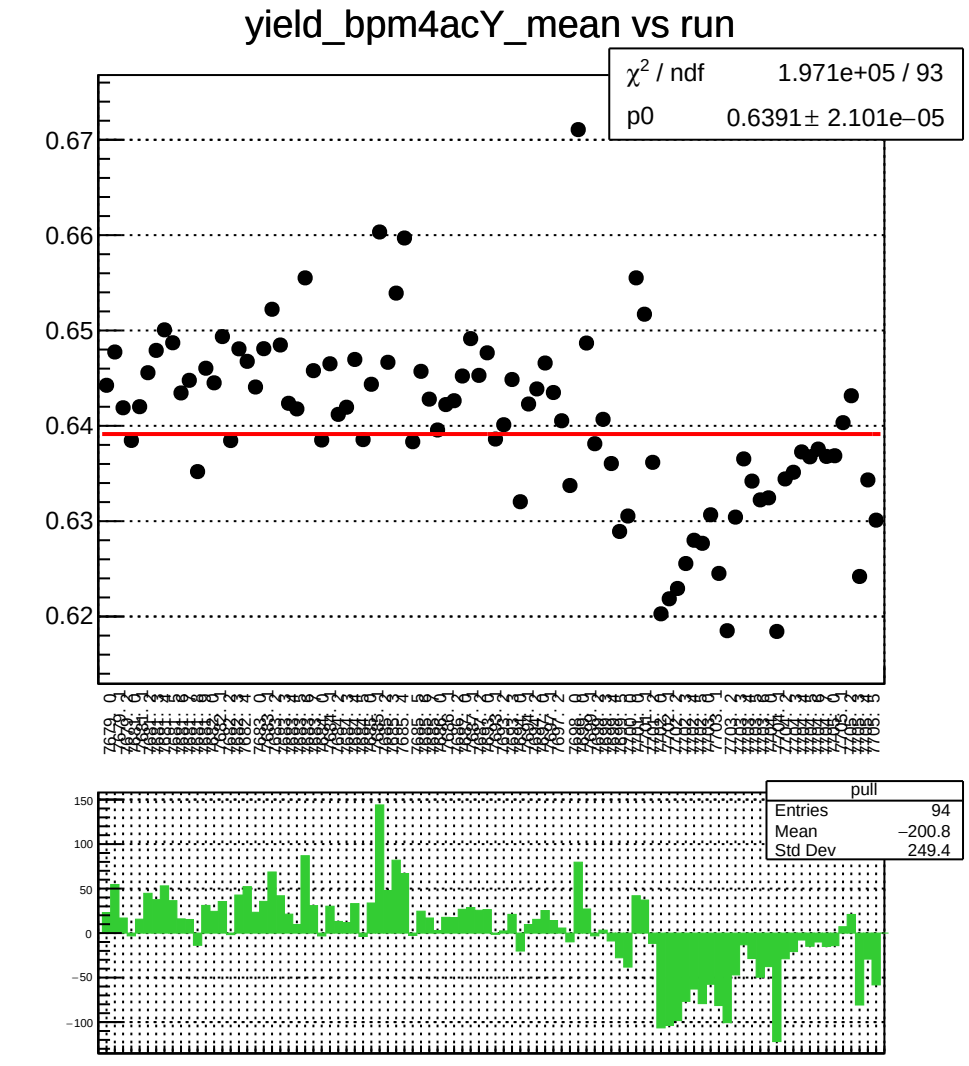

yield_bpm4eY_mean vs run
χ² / ndf 3.19e+05 / 93
p0 0.2227 ± 1.621e−05
0.25
0.24
0.23
0.22
0.21
0.2
0.19
pull
Entries 94
Mean 1090
Std Dev 1039
150
100
50
0
−50
−100
−150

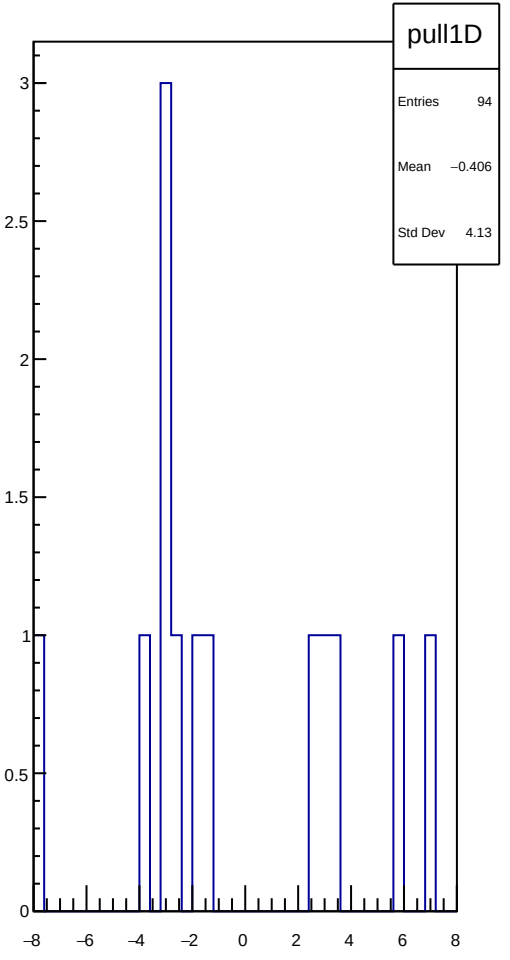

pull1D
Entries 94
Mean 4.494
Std Dev 2.71
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

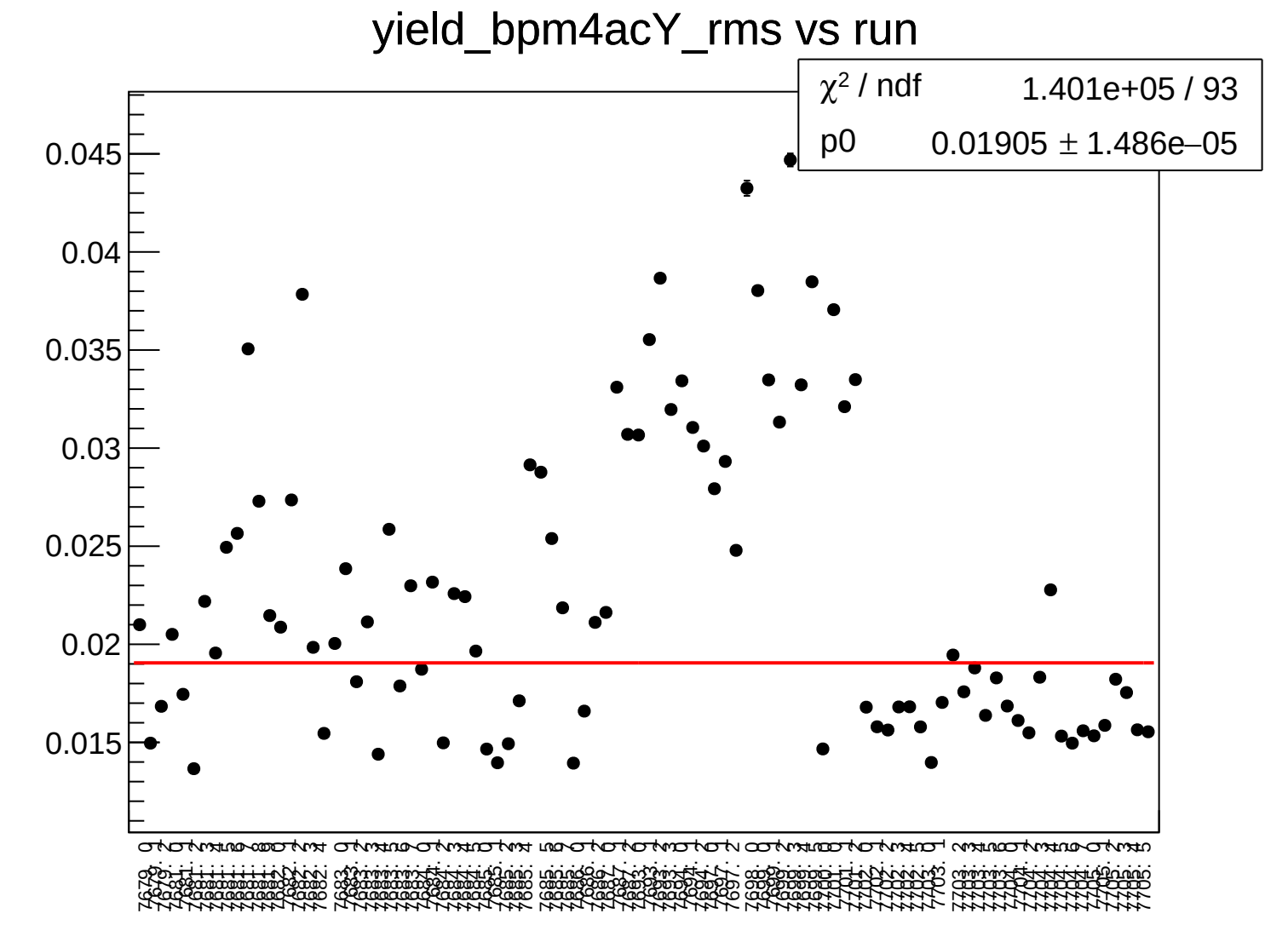

yield_bpm4eY_rms vs run
χ² / ndf 1.059e+05 / 93
p0 0.01485 ± 1.146e−05
0.035
0.03
0.025
0.02
0.015
0.01

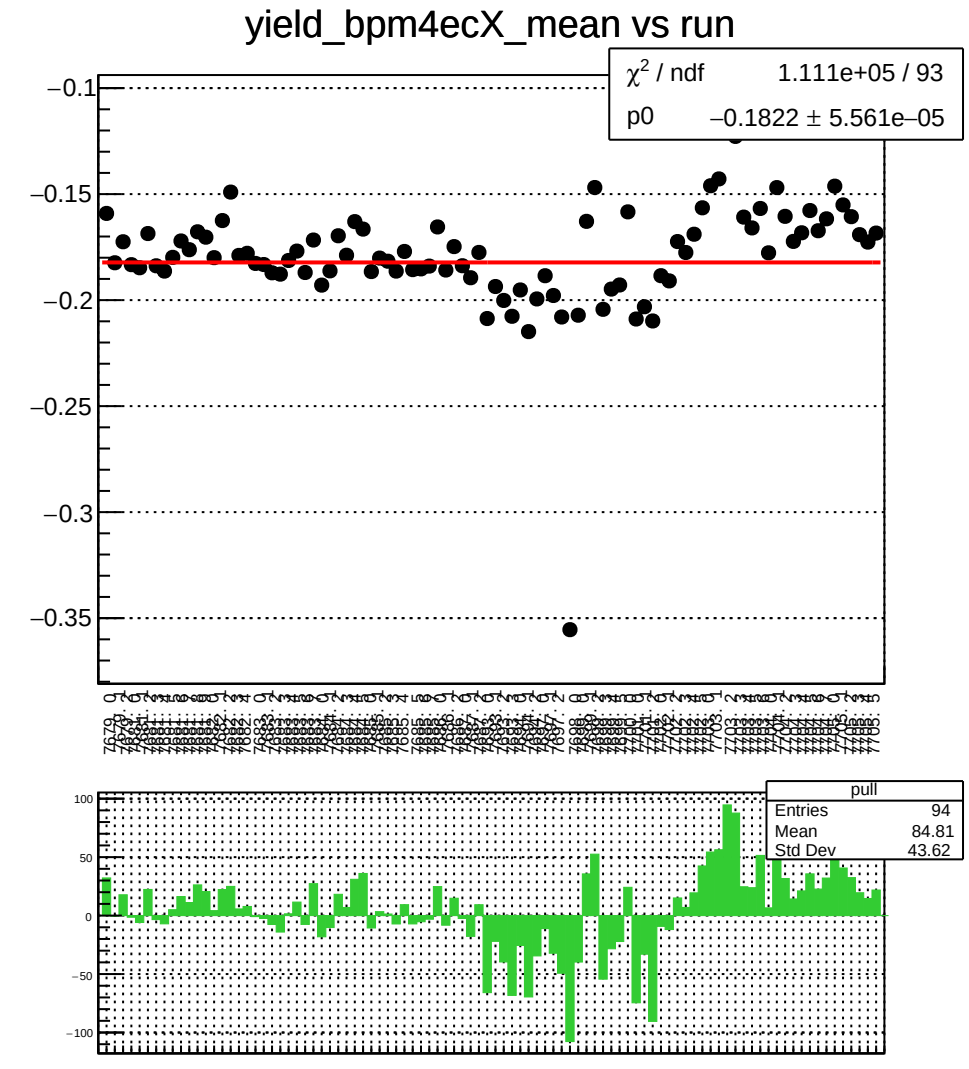

yield_bpm4acX_mean vs run
χ² / ndf 1.177e+05 / 93
p0 −0.9465 ± 5.341e−05
−0.9
−0.95
−1
−1.05
−1.1
pull
Entries 94
Mean 86.7
Std Dev 38.02
100
50
0
−50
−100
pull1D
Entries 94
Mean −1.587
Std Dev 4.734
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

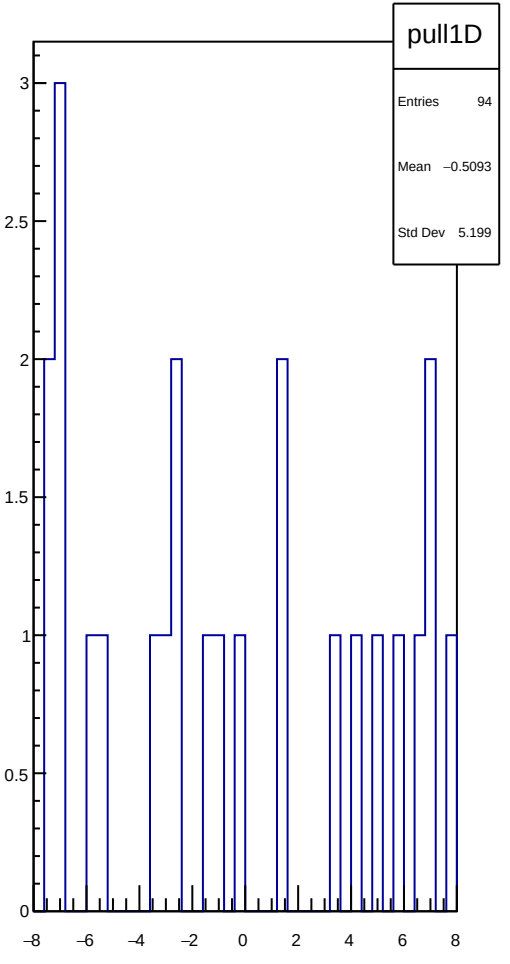

yield_bpm4acX_rms vs run
χ² / ndf 1.066e+05 / 93
p0 0.04893 ± 3.777e–05
0.12
0.1
0.08
0.06
0.04

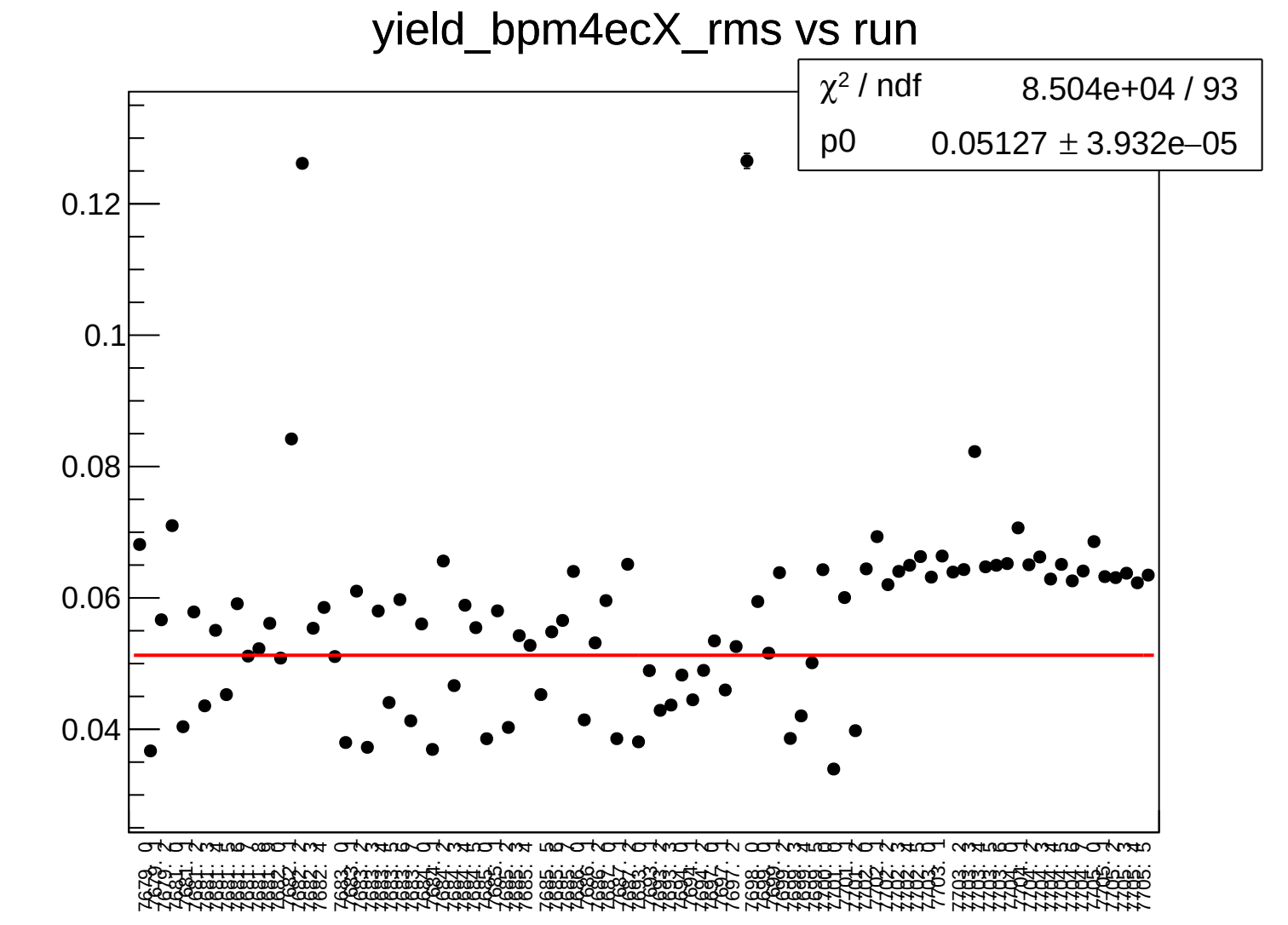

yield_bpm4acY_mean vs run
χ² / ndf 1.971e+05 / 93
p0 0.6391 ± 2.101e−05
0.67
0.66
0.65
0.64
0.63
0.62
pull
Entries 94
Mean −200.8
Std Dev 249.4
150
100
50
0
−50
−100

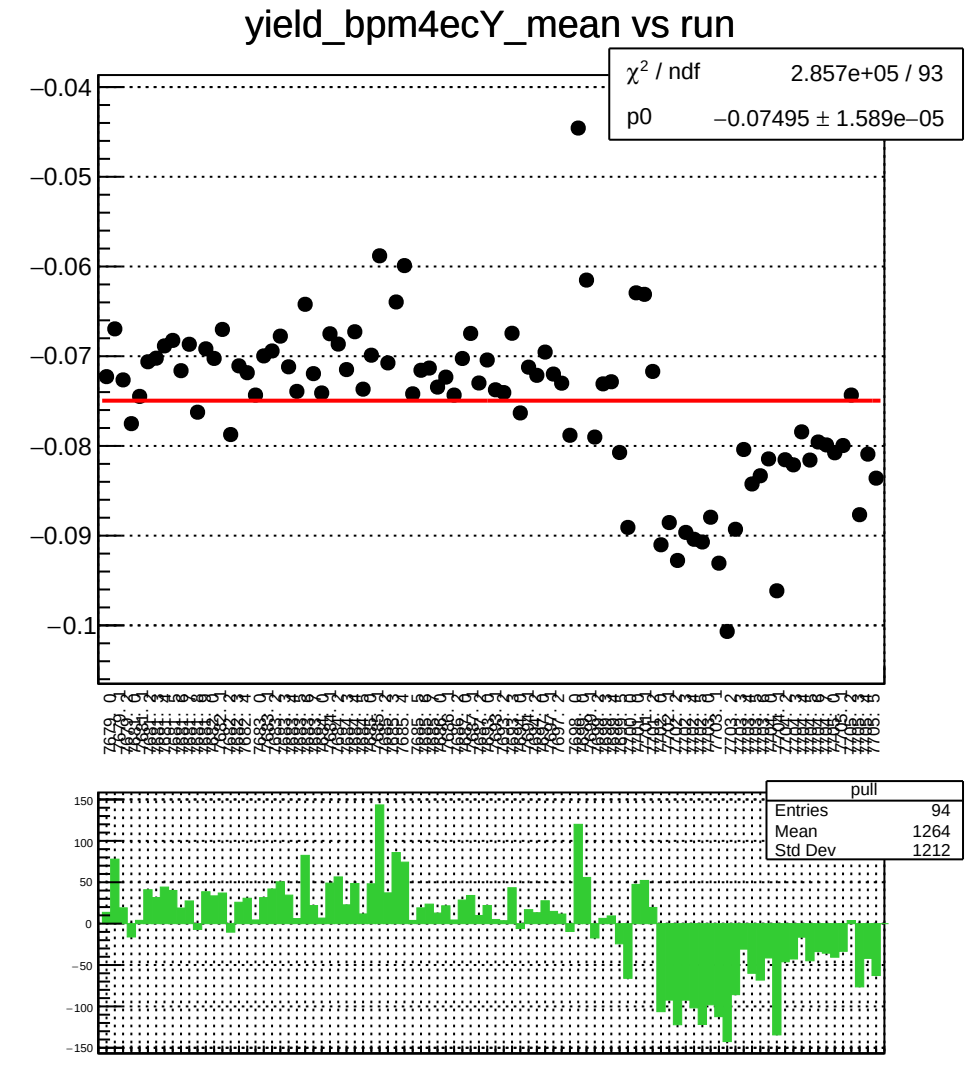

pull1D
Entries 94
Mean −0.406
Std Dev 4.13
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

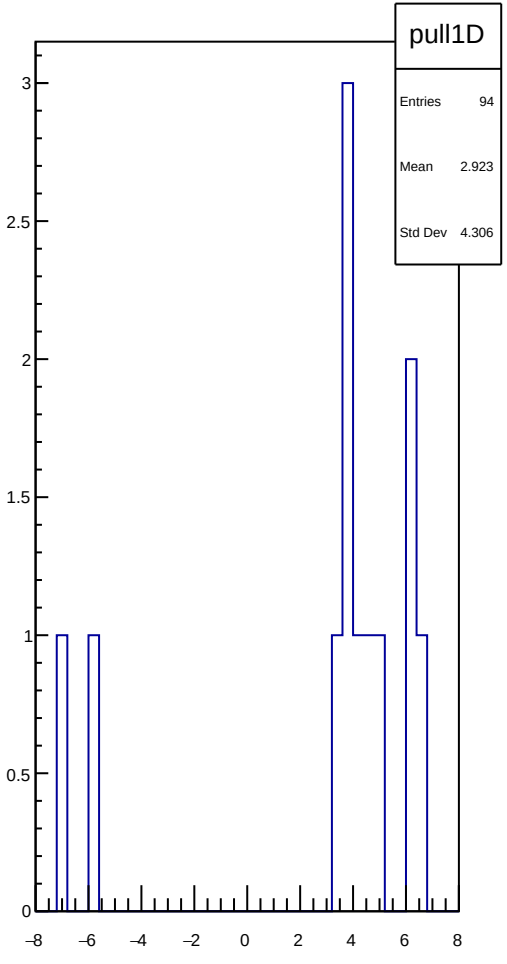

yield_bpm4acY_rms vs run
χ² / ndf 1.401e+05 / 93
p0 0.01905 ± 1.486e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

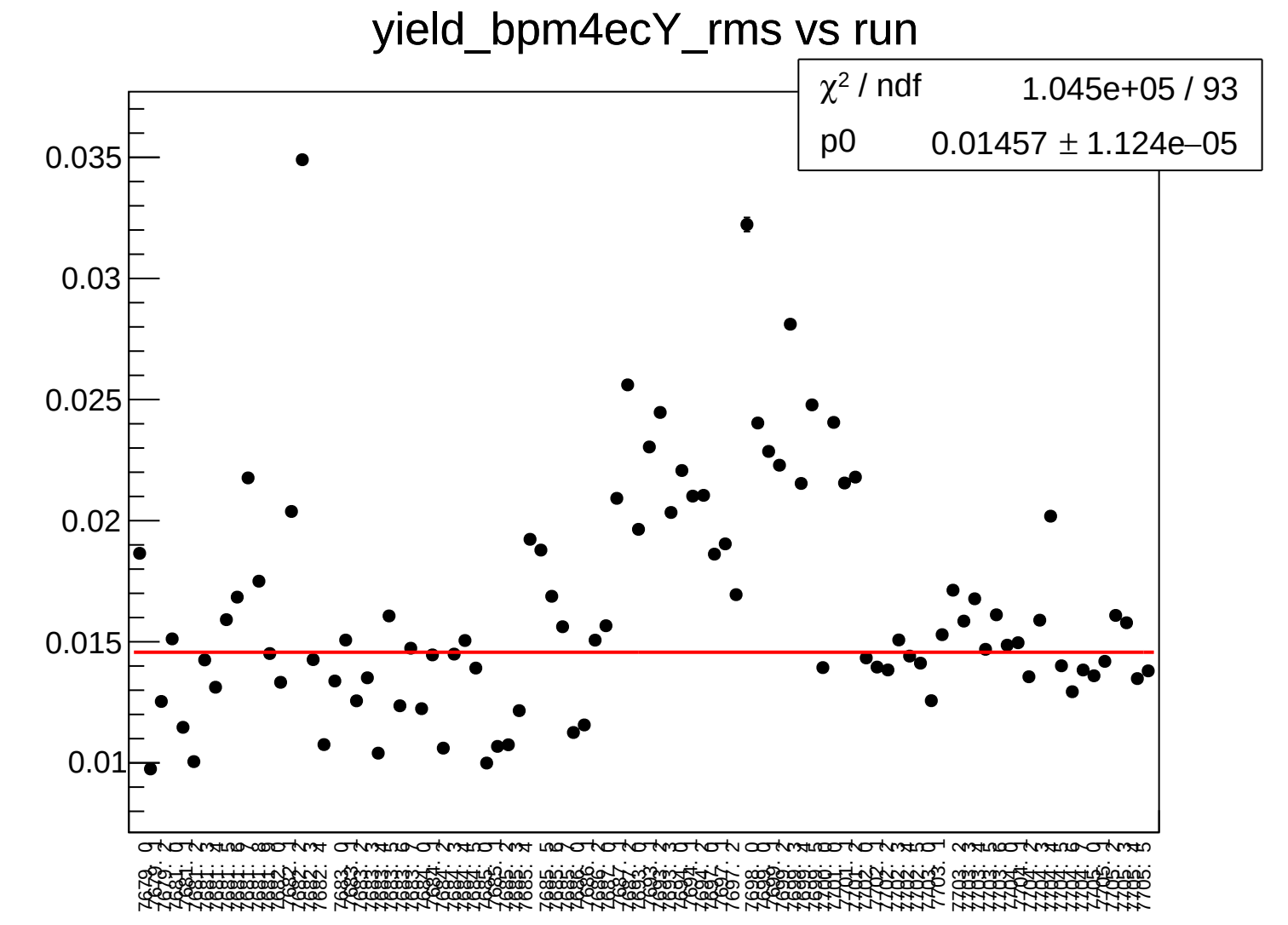

yield_bpm4ecX_mean vs run
χ² / ndf 1.111e+05 / 93
p0 −0.1822 ± 5.561e−05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
pull
Entries 94
Mean 84.81
Std Dev 43.62
100
50
0
−50
−100

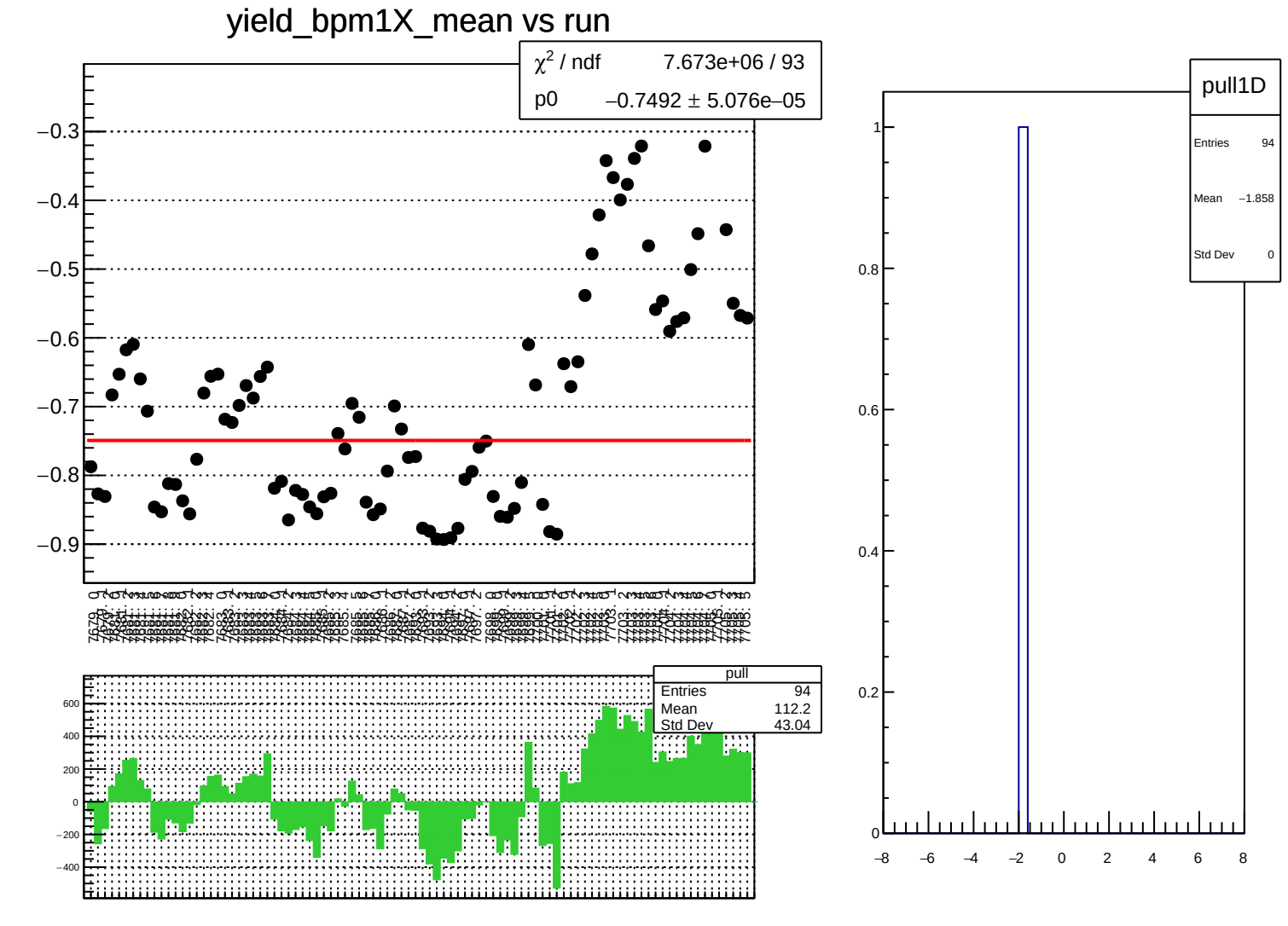

pull1D
Entries 94
Mean −0.5093
Std Dev 5.199
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

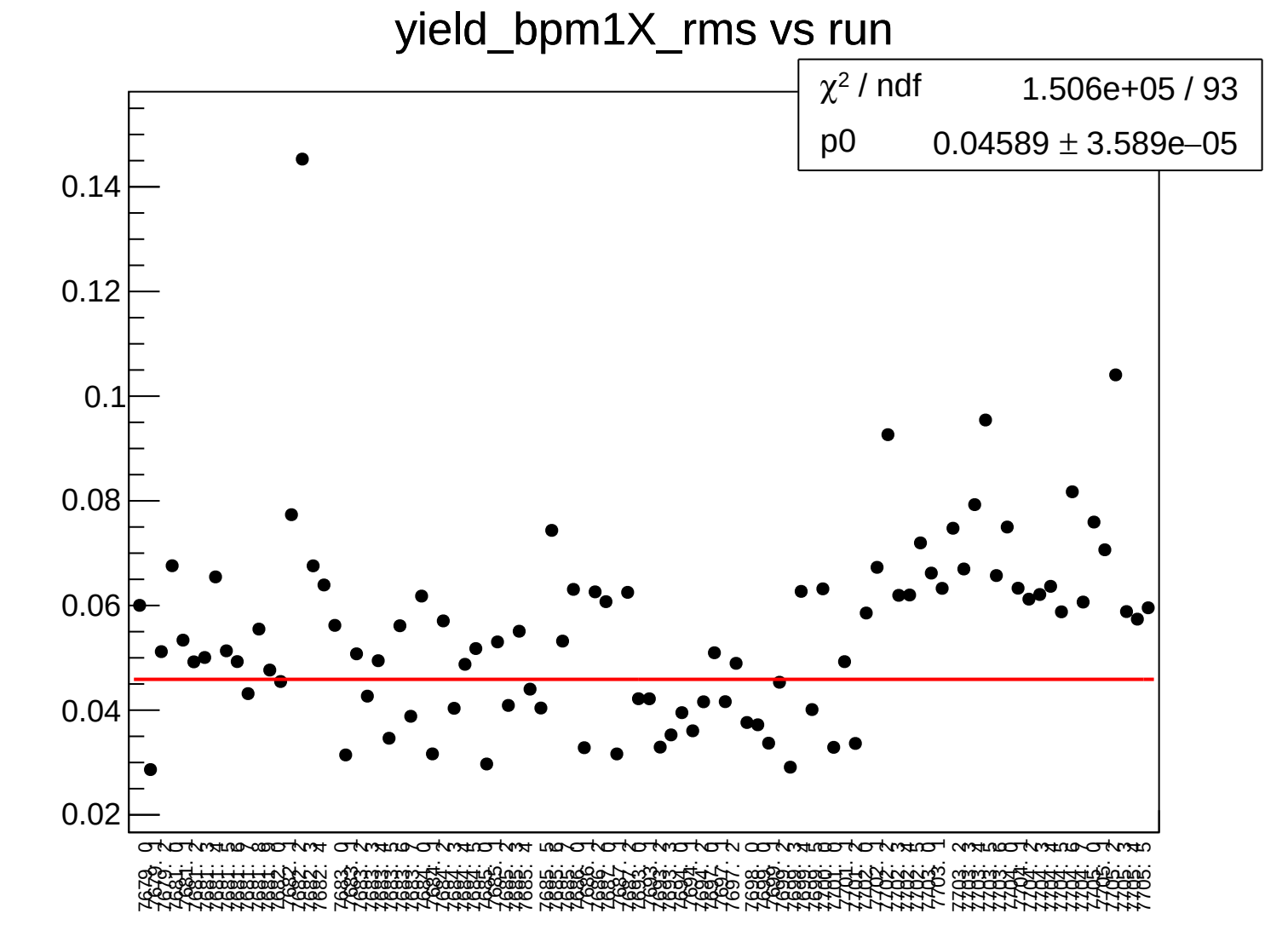

yield_bpm4ecX_rms vs run
χ² / ndf 8.504e+04 / 93
p0 0.05127 ± 3.932e–05
0.12
0.1
0.08
0.06
0.04

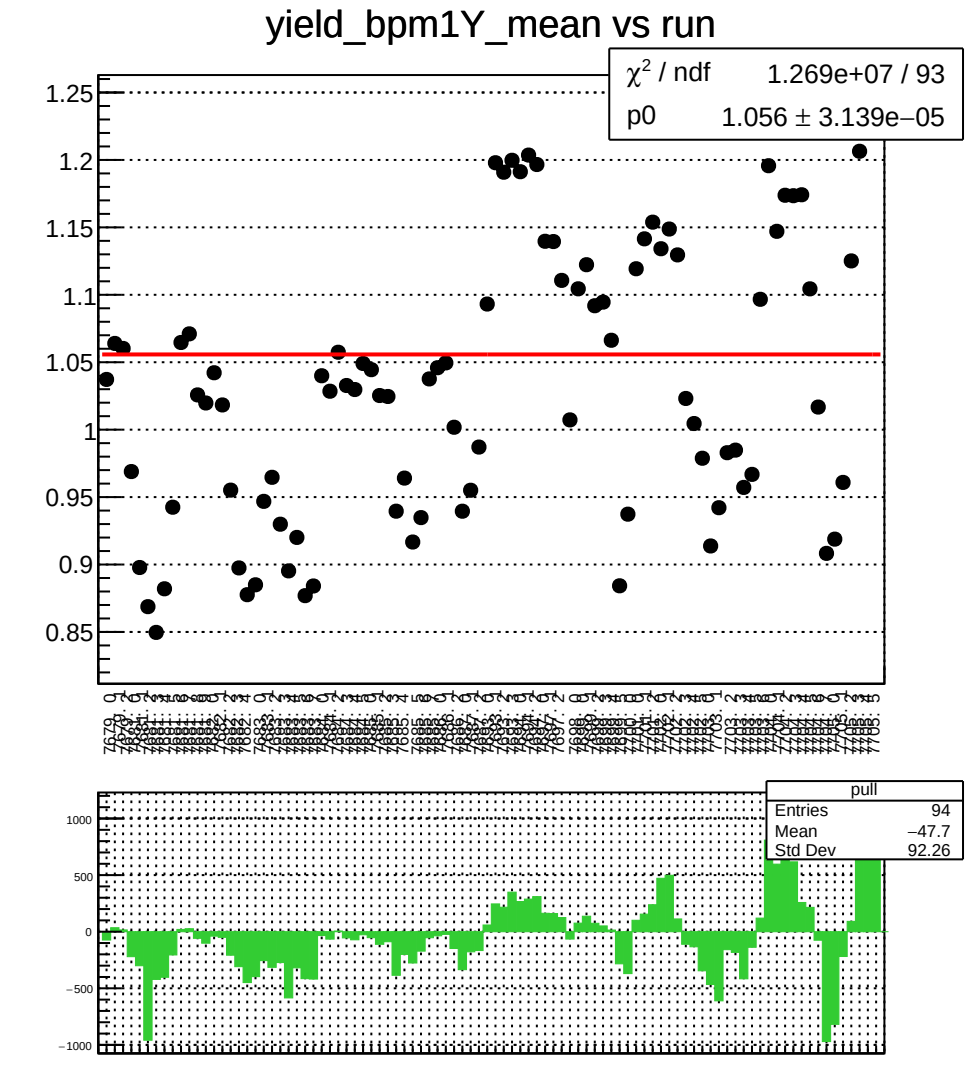

yield_bpm4ecY_mean vs run
χ² / ndf 2.857e+05 / 93
p0 −0.07495 ± 1.589e−05
−0.04
−0.05
−0.06
−0.07
−0.08
−0.09
−0.1
pull
Entries 94
Mean 1264
Std Dev 1212
150
100
50
0
−50
−100
−150

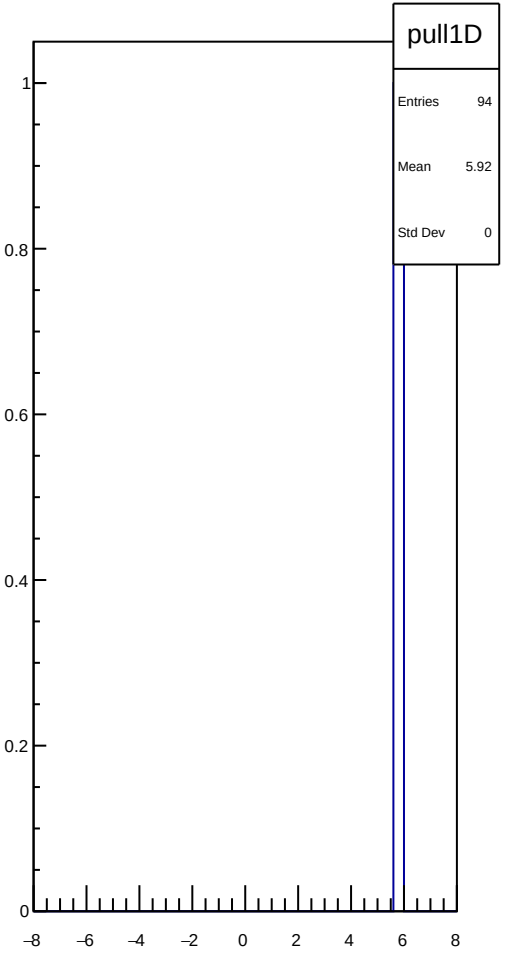

pull1D
Entries 94
Mean 2.923
Std Dev 4.306
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

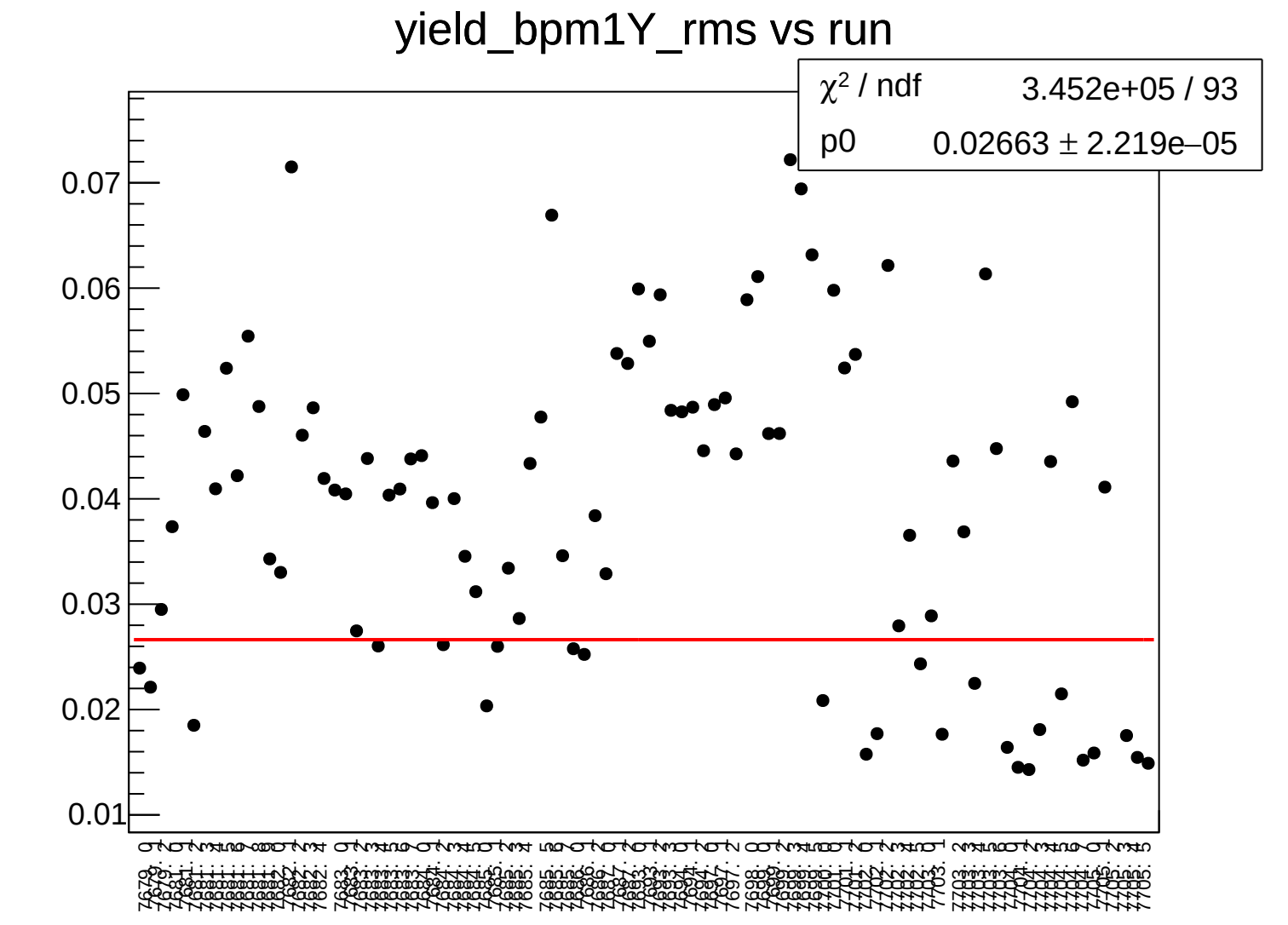

yield_bpm4ecY_rms vs run
χ² / ndf 1.045e+05 / 93
p0 0.01457 ± 1.124e−05
0.035
0.03
0.025
0.02
0.015
0.01

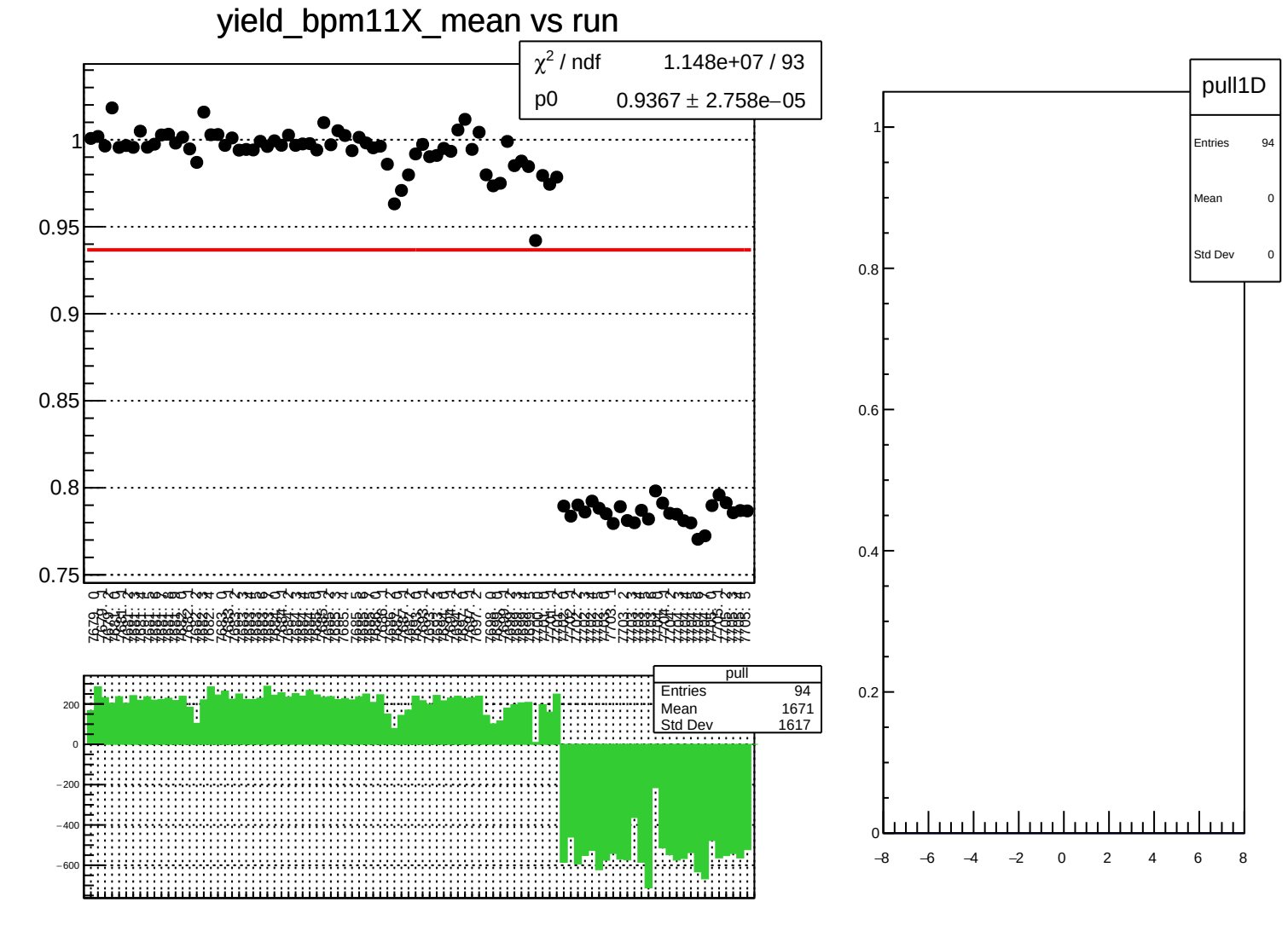

yield_bpm1X_mean vs run
χ² / ndf 7.673e+06 / 93
p0 −0.7492 ± 5.076e−05
pull
Entries 94
Mean 112.2
Std Dev 43.04
pull1D
Entries 94
Mean −1.858
Std Dev 0

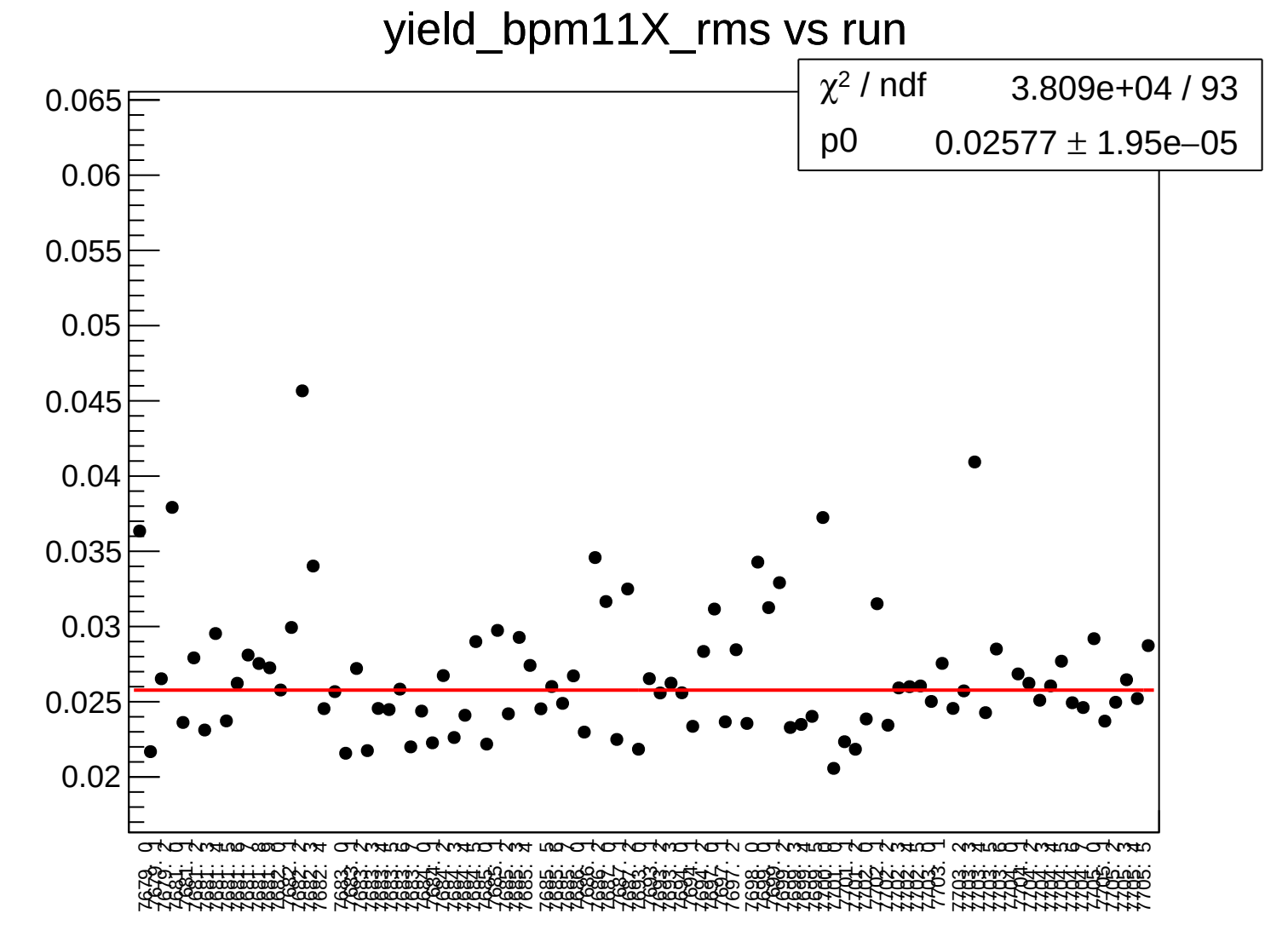

yield_bpm1X_rms vs run
χ² / ndf 1.506e+05 / 93
p0 0.04589 ± 3.589e–05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

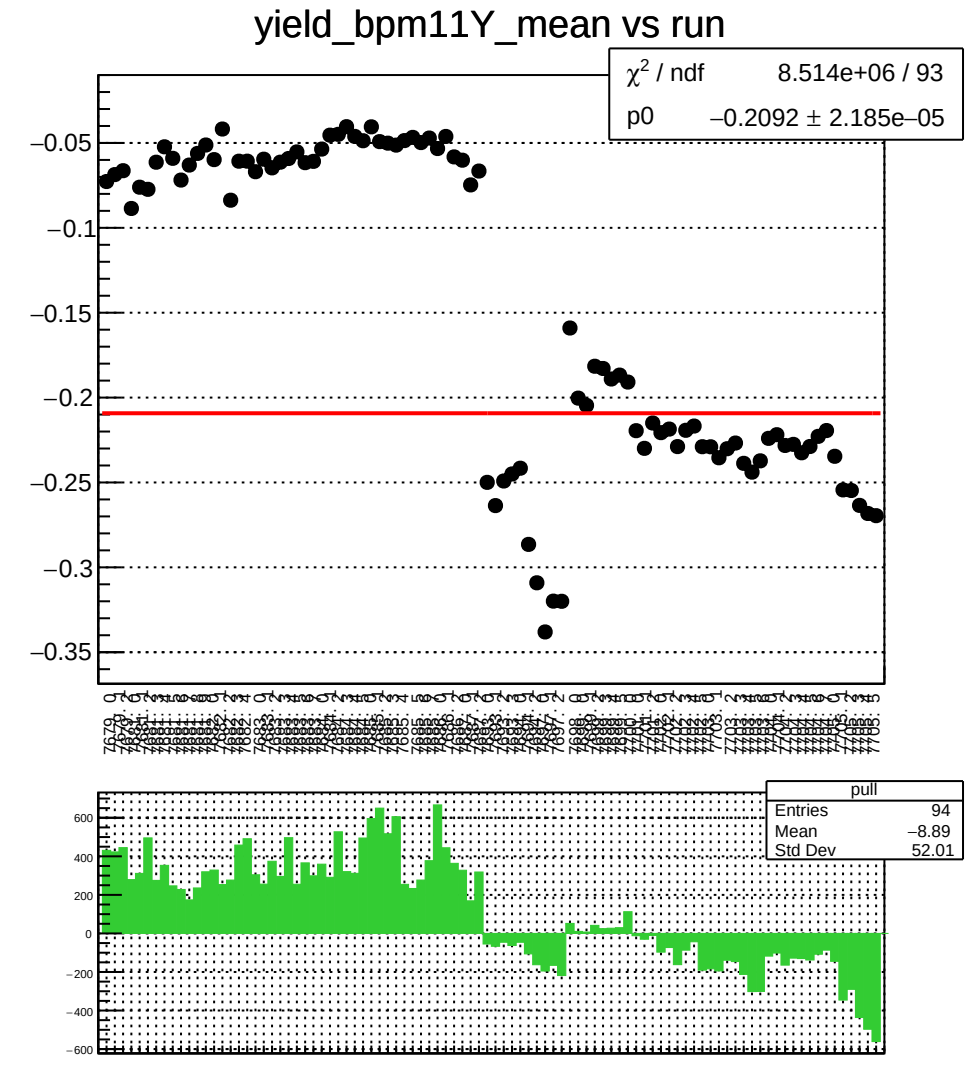

yield_bpm1Y_mean vs run
χ² / ndf 1.269e+07 / 93
p0 1.056 ± 3.139e−05
1.25
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
pull
Entries 94
Mean −47.7
Std Dev 92.26
1000
500
0
−500
−1000

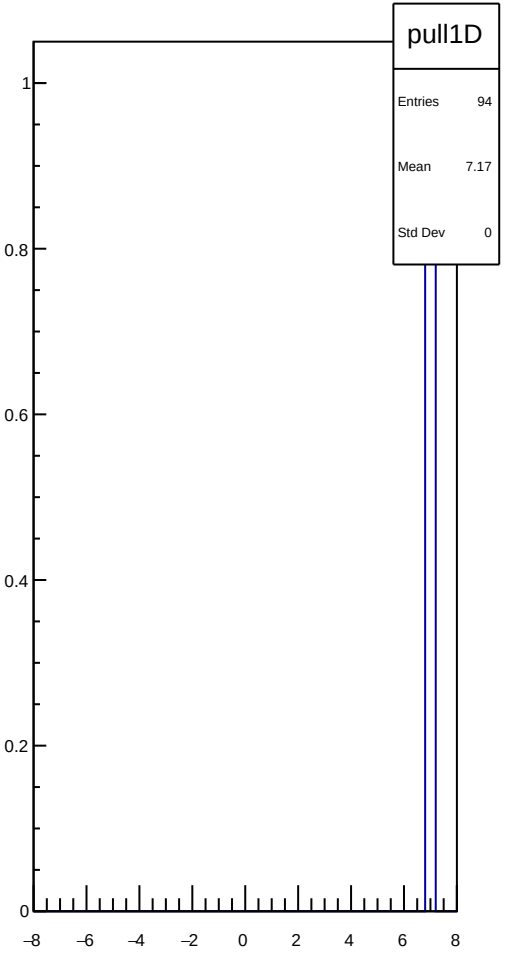

pull1D
Entries 94
Mean 5.92
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

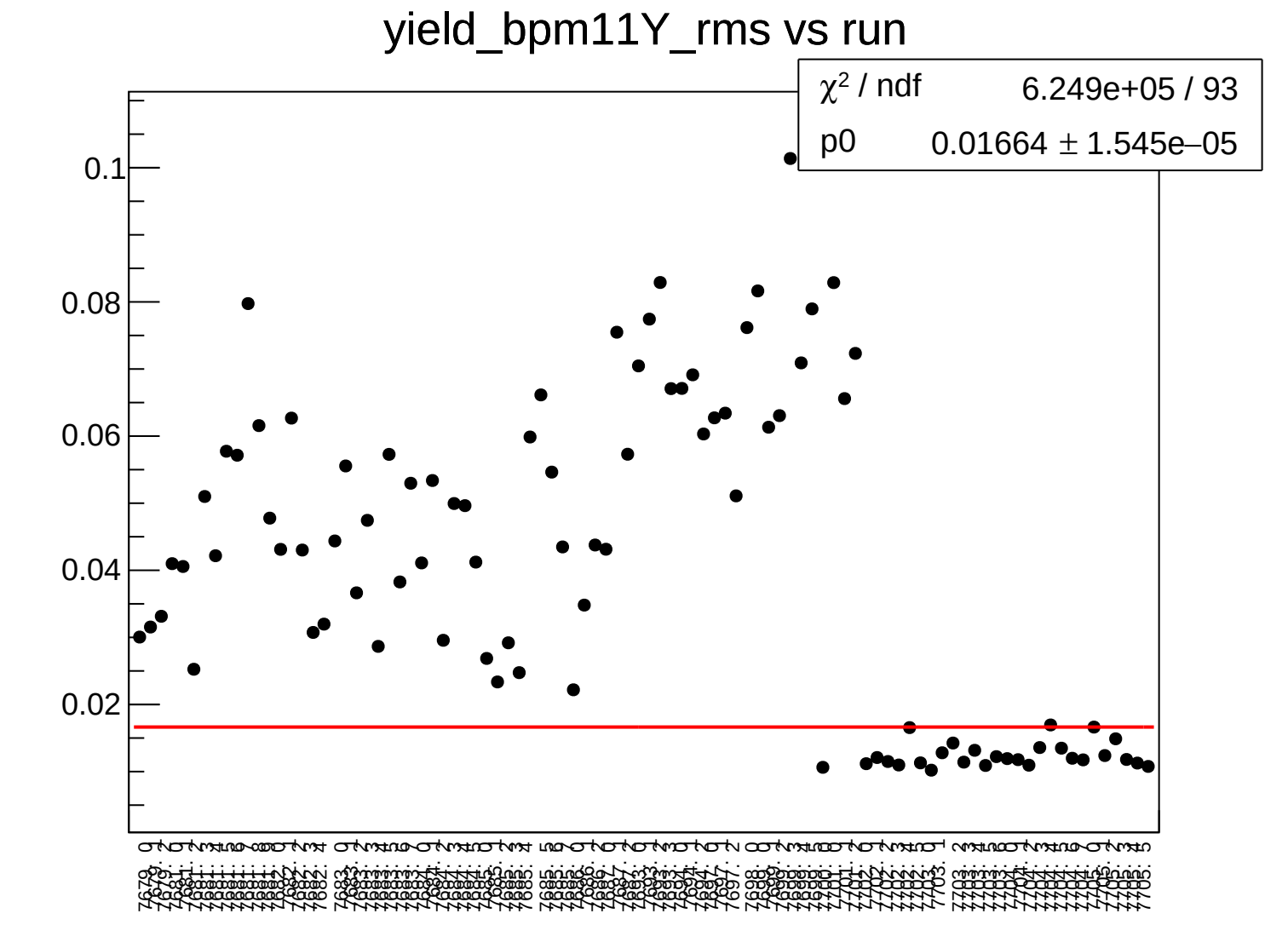

yield_bpm1Y_rms vs run
χ² / ndf 3.452e+05 / 93
p0 0.02663 ± 2.219e−05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

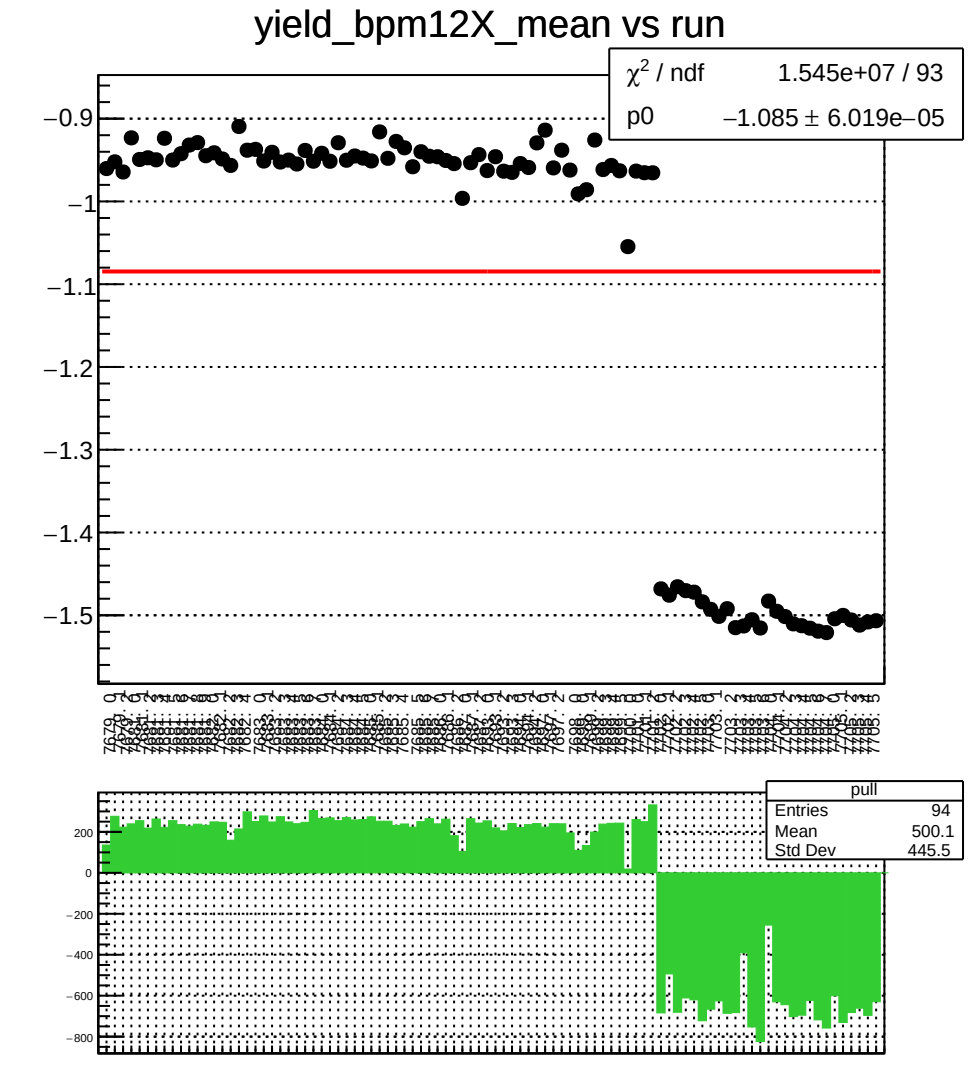

yield_bpm11X_mean vs run
χ² / ndf 1.148e+07 / 93
p0 0.9367 ± 2.758e−05
pull
Entries 94
Mean 1671
Std Dev 1617
pull1D
Entries 94
Mean 0
Std Dev 0

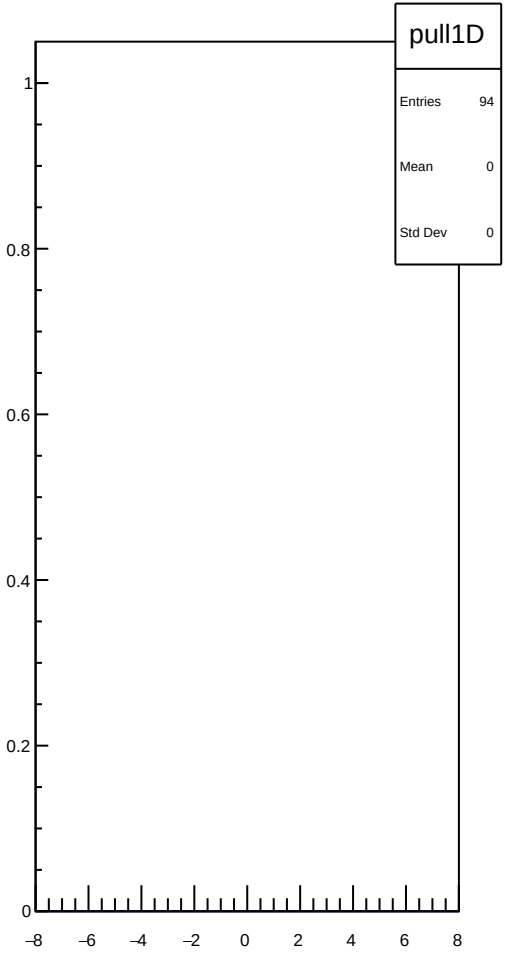

yield_bpm11X_rms vs run
χ² / ndf 3.809e+04 / 93
p0 0.02577 ± 1.95e−05
0.065
0.06
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02

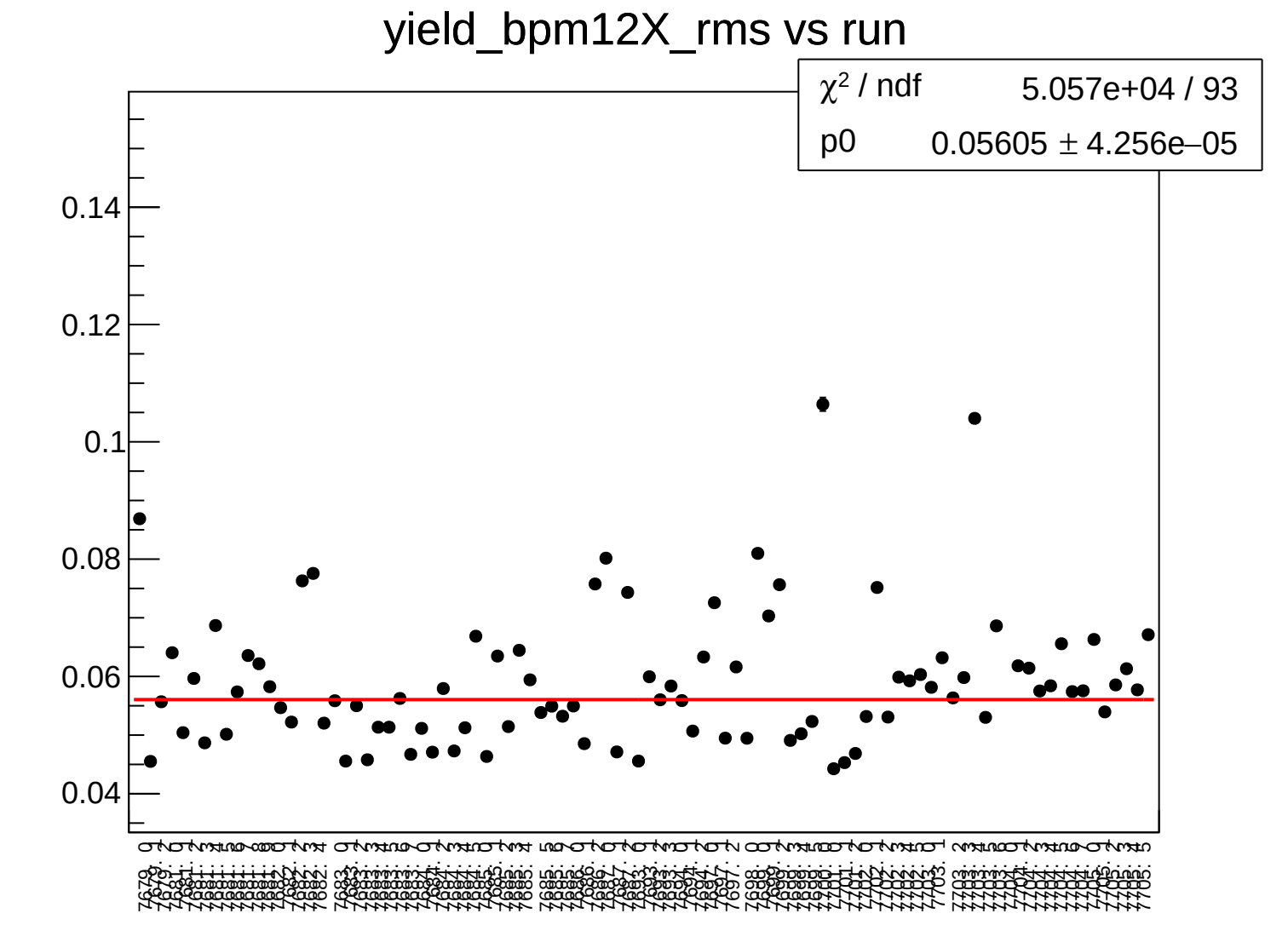

yield_bpm11Y_mean vs run
χ² / ndf 8.514e+06 / 93
p0 −0.2092 ± 2.185e−05
−0.05
−0.1
−0.15
−0.2
−0.25
−0.3
−0.35
pull
Entries 94
Mean −8.89
Std Dev 52.01
600
400
200
0
−200
−400
−600

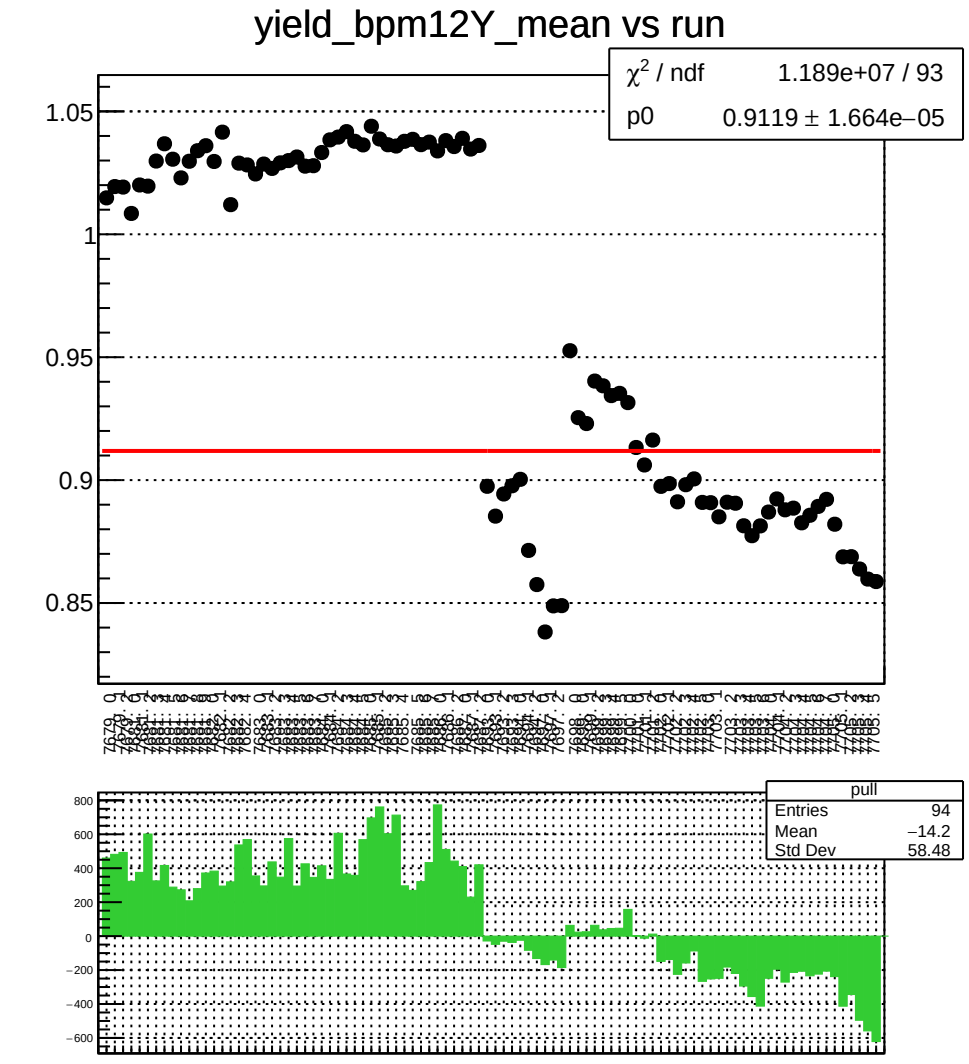

pull1D
Entries 94
Mean 7.17
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

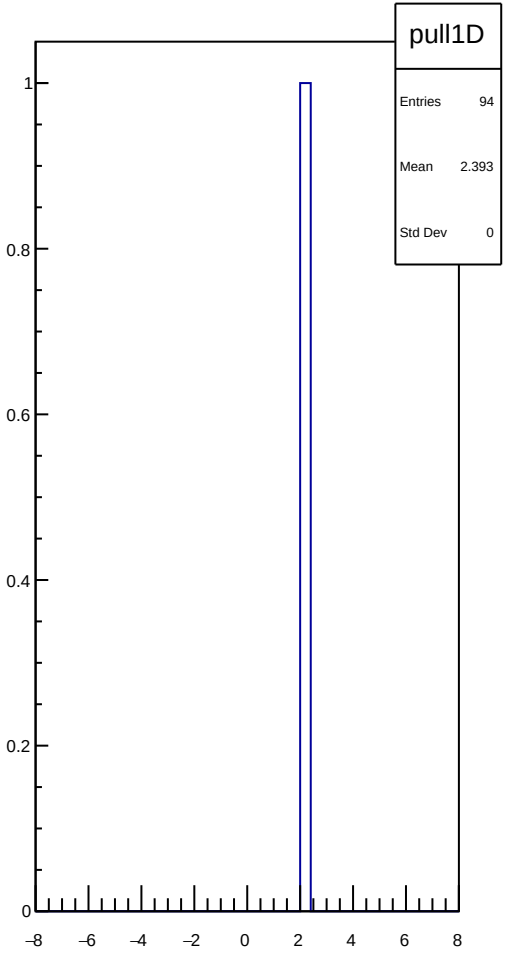

yield_bpm11Y_rms vs run
χ² / ndf 6.249e+05 / 93
p0 0.01664 ± 1.545e−05
0.1
0.08
0.06
0.04
0.02

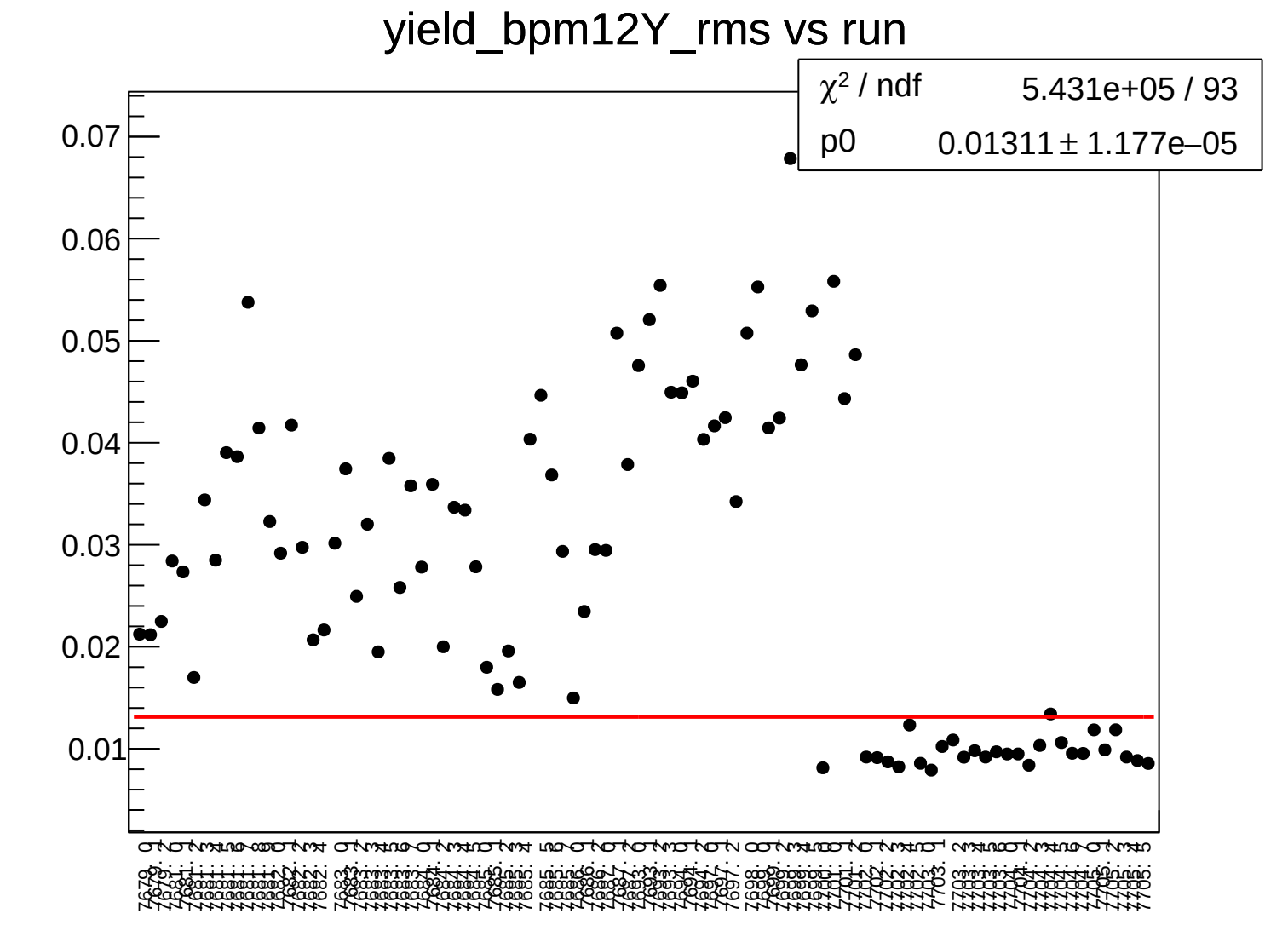

yield_bpm12X_mean vs run
χ² / ndf 1.545e+07 / 93
p0 −1.085 ± 6.019e−05
−0.9
−1
−1.1
−1.2
−1.3
−1.4
−1.5
pull
Entries 94
Mean 500.1
Std Dev 445.5
200
0
−200
−400
−600
−800

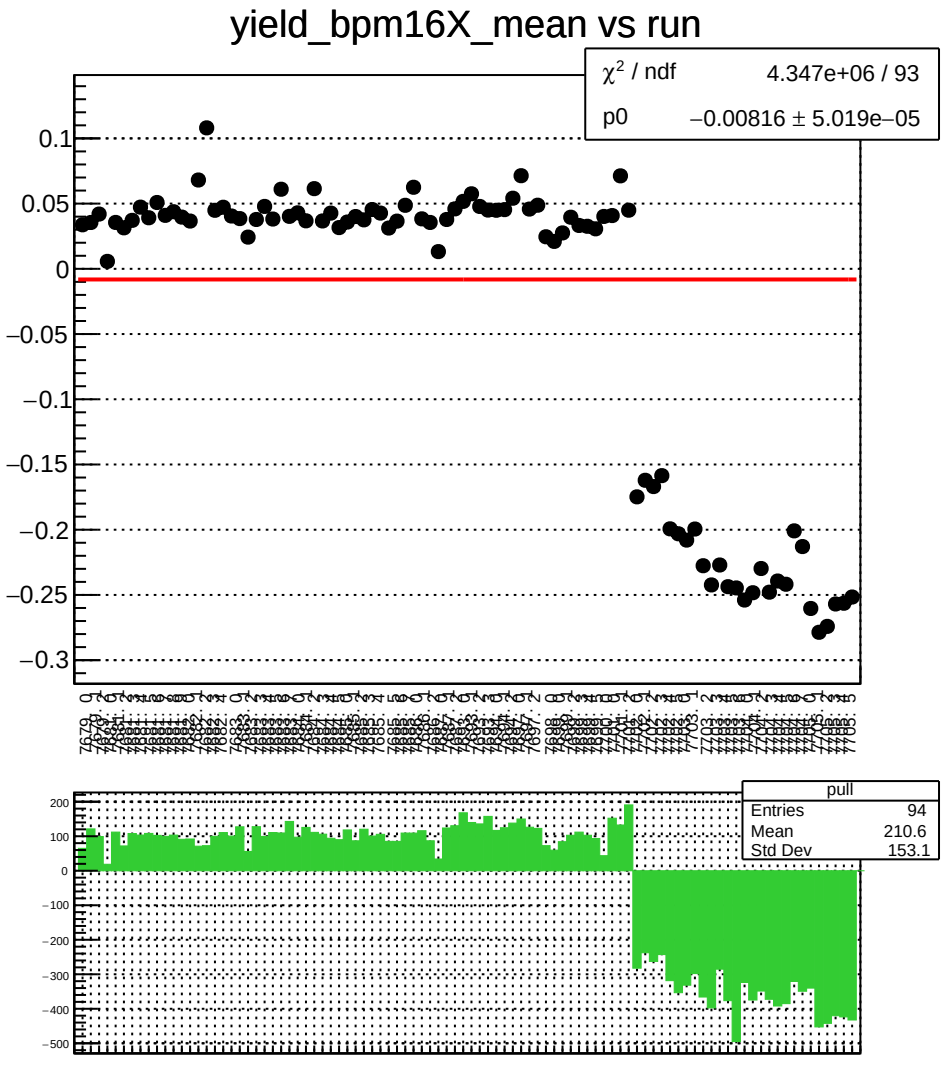

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

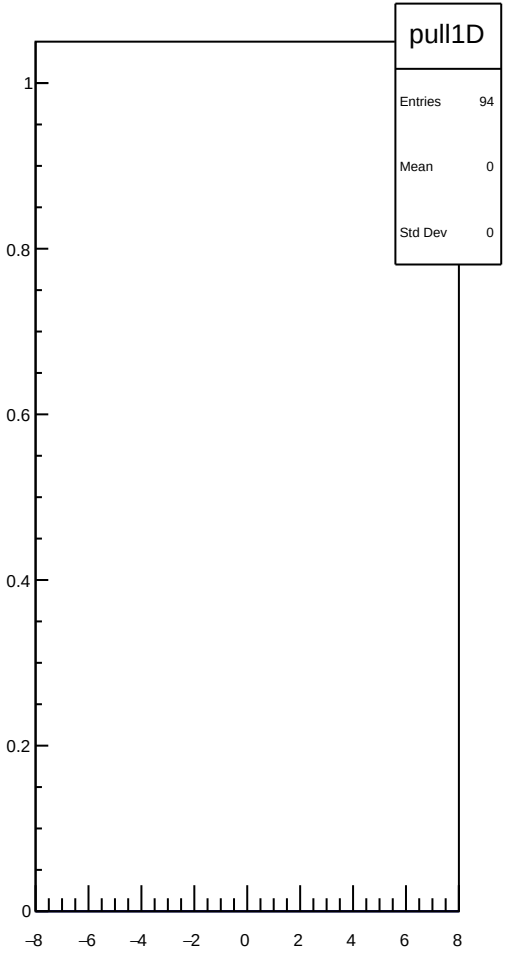

yield_bpm12X_rms vs run
χ² / ndf 5.057e+04 / 93
p0 0.05605 ± 4.256e–05
0.14
0.12
0.1
0.08
0.06
0.04

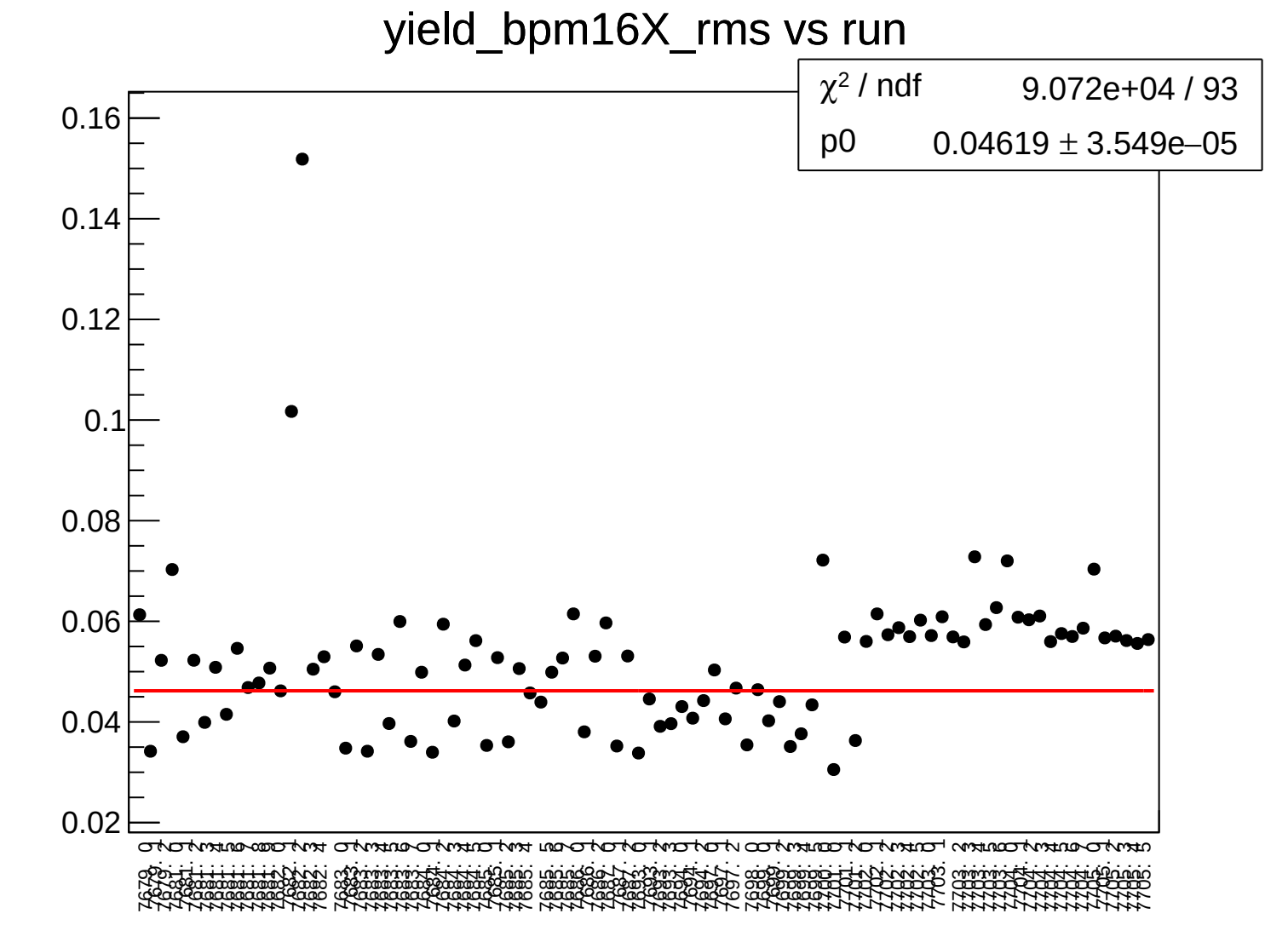

yield_bpm12Y_mean vs run
χ² / ndf 1.189e+07 / 93
p0 0.9119 ± 1.664e−05
1.05
1
0.95
0.9
0.85
pull
Entries 94
Mean −14.2
Std Dev 58.48
800
600
400
200
0
−200
−400
−600

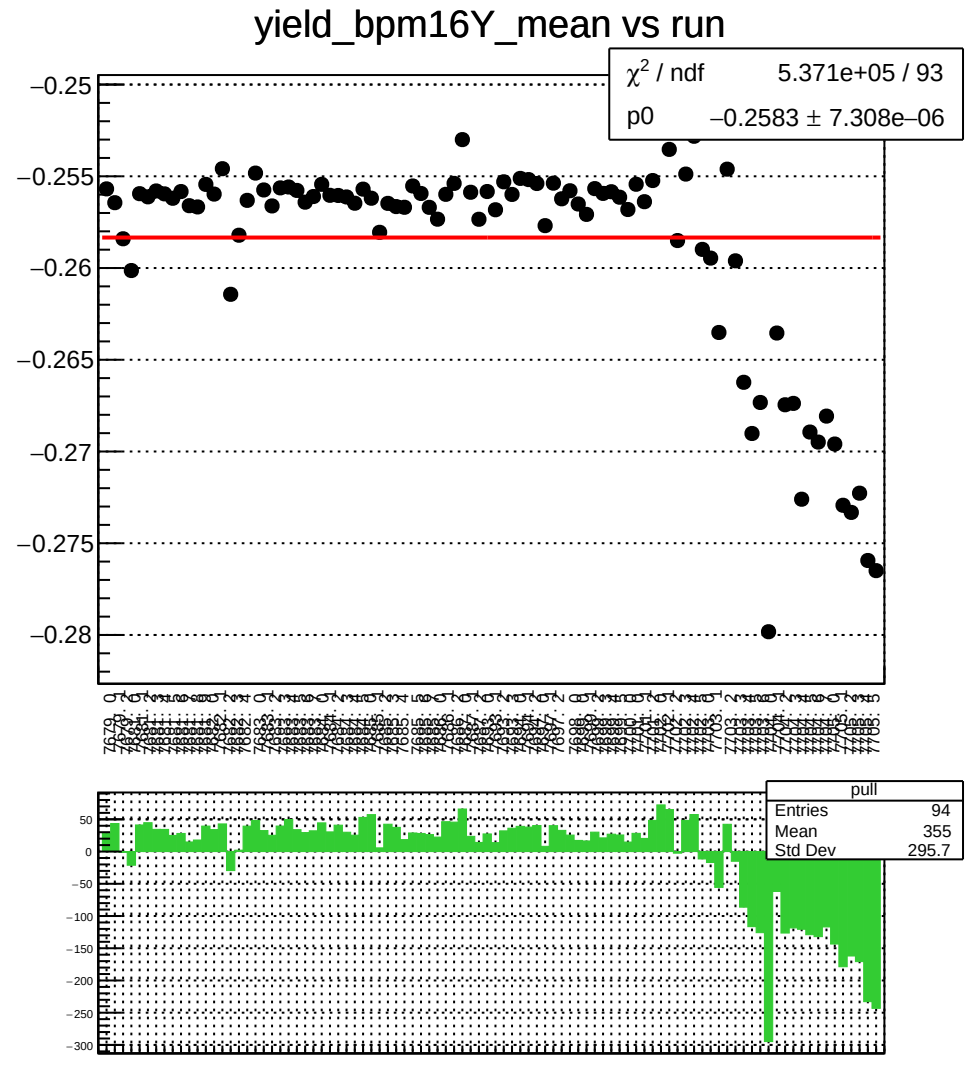

pull1D
Entries 94
Mean 2.393
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

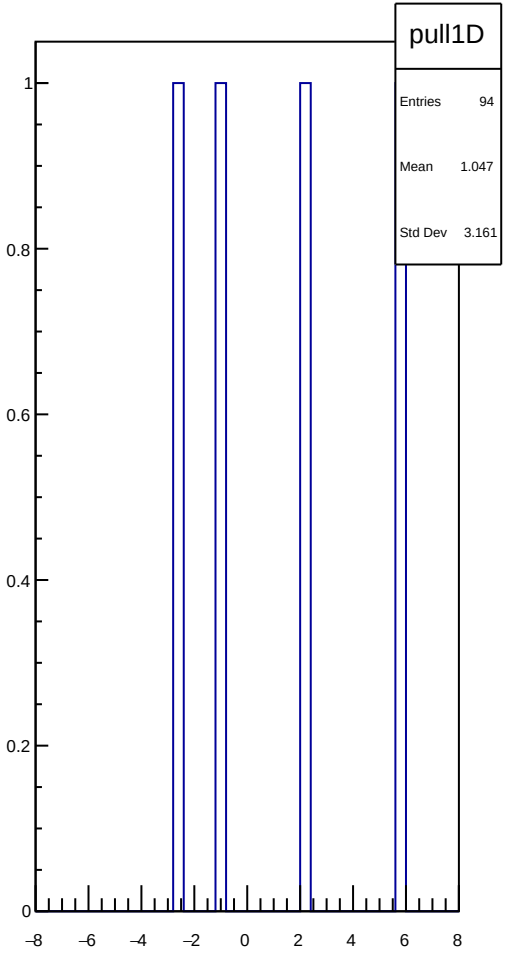

yield_bpm12Y_rms vs run
χ² / ndf 5.431e+05 / 93
p0 0.01311 ± 1.177e–05
0.07
0.06
0.05
0.04
0.03
0.02
0.01

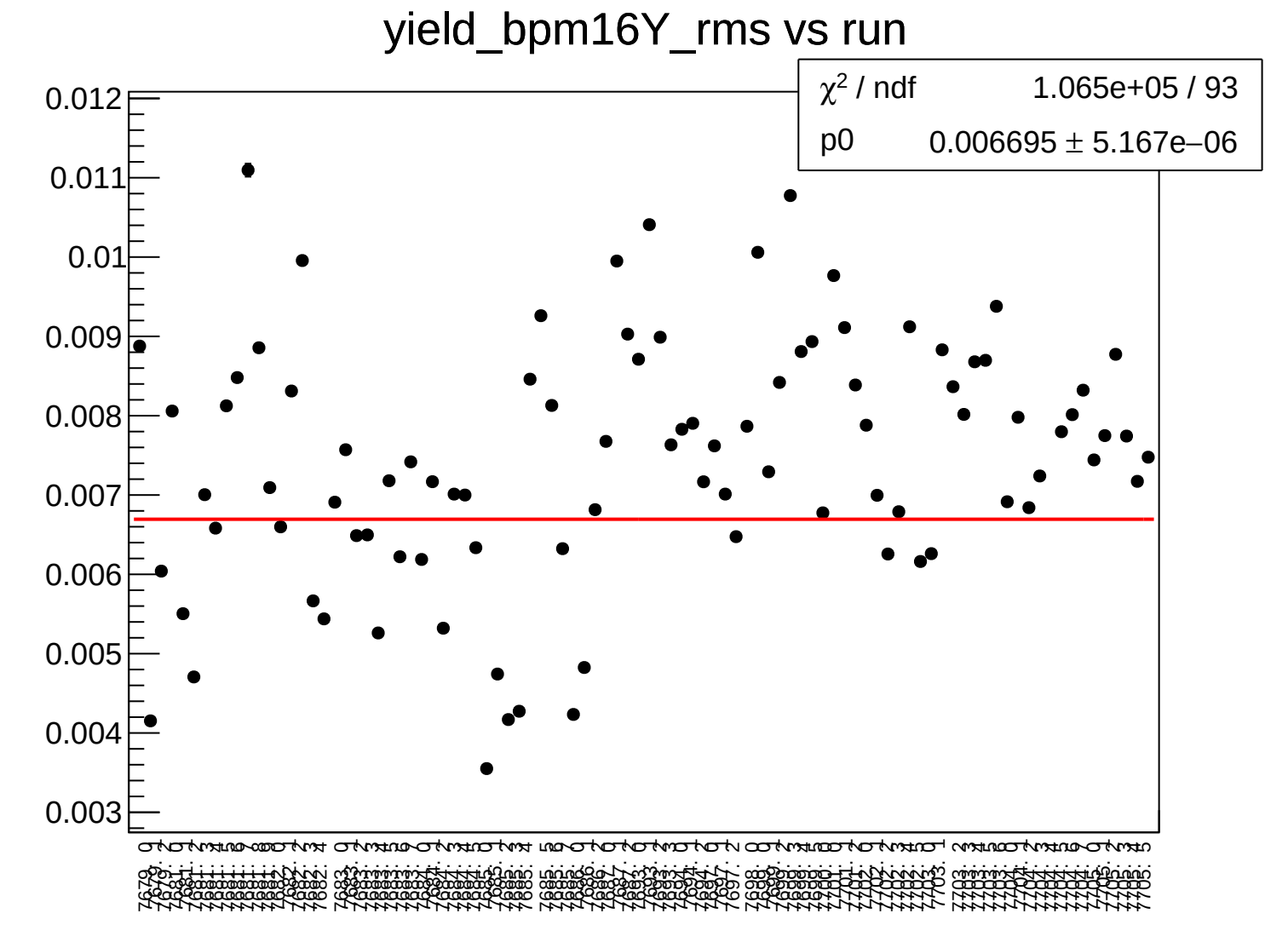

yield_bpm16X_mean vs run
χ² / ndf 4.347e+06 / 93
p0 −0.00816 ± 5.019e−05
pull
Entries 94
Mean 210.6
Std Dev 153.1

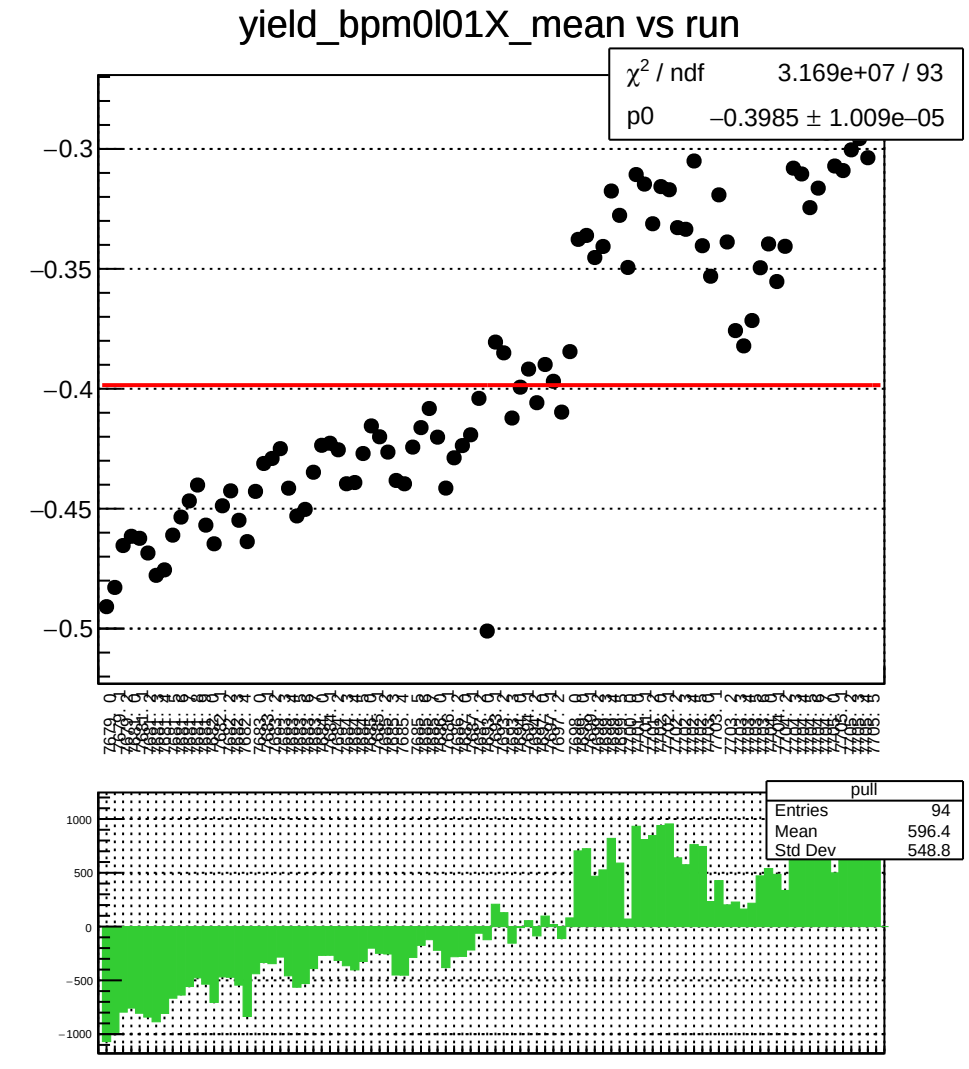

pull1D
Entries 94
Mean 0
Std Dev 0

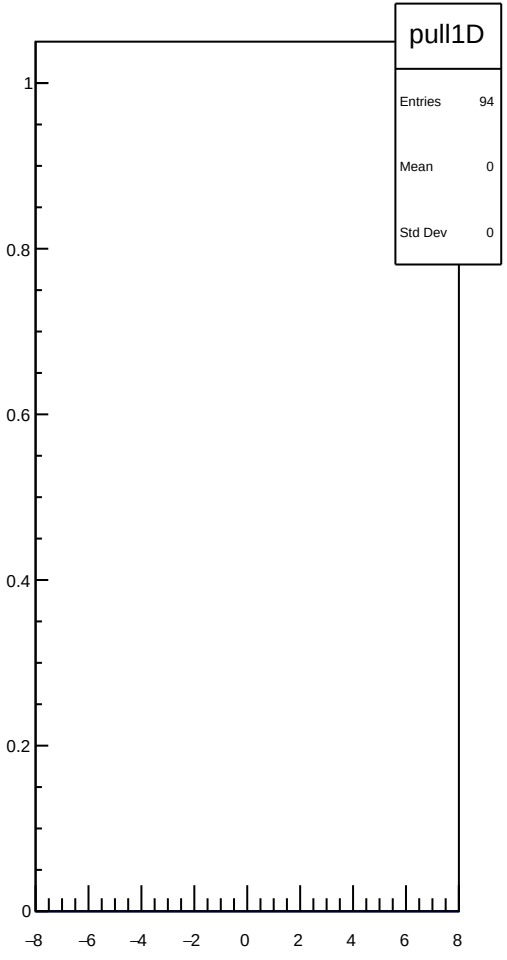

yield_bpm16X_rms vs run
χ² / ndf 9.072e+04 / 93
p0 0.04619 ± 3.549e–05
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

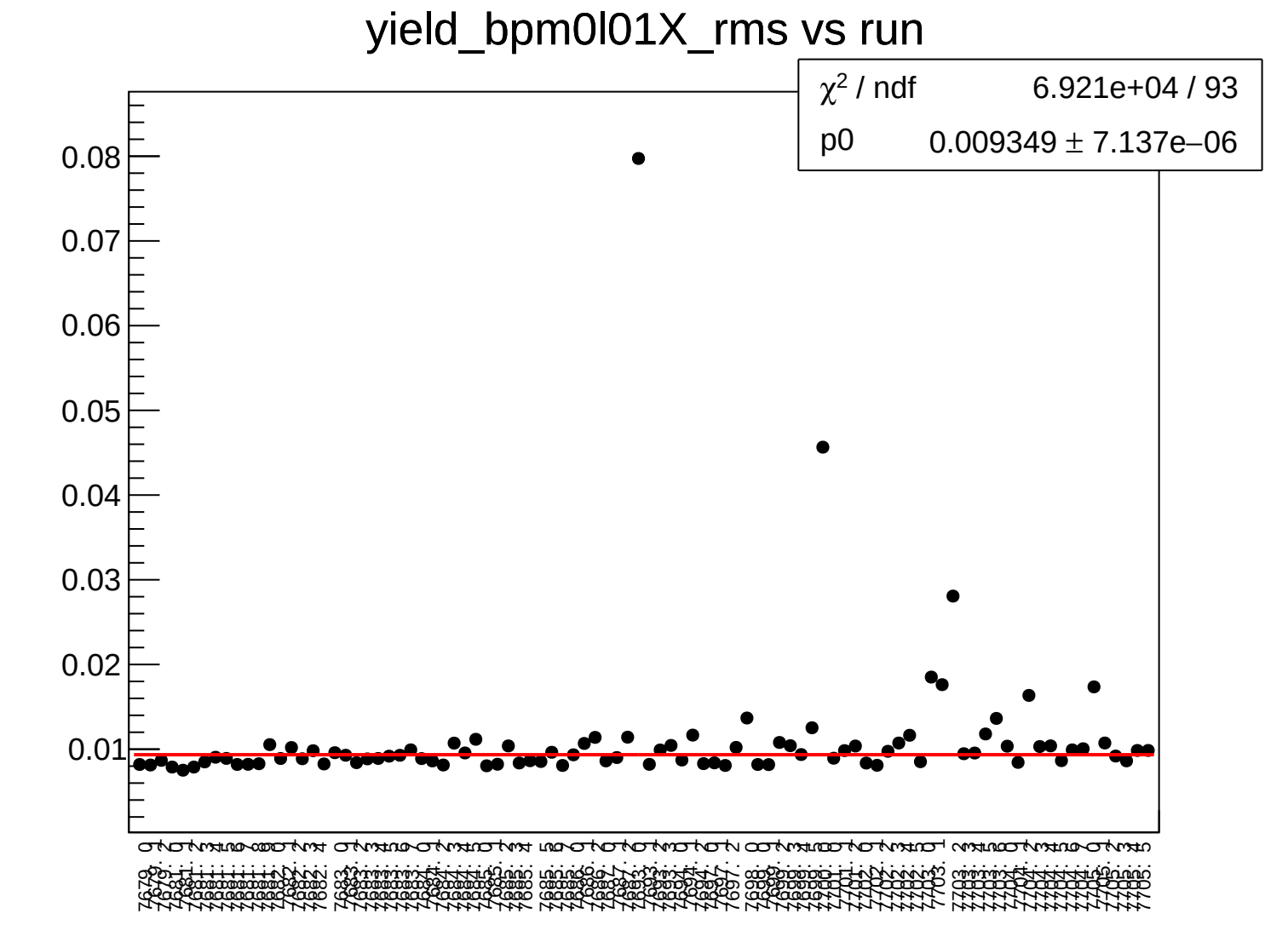

yield_bpm16Y_mean vs run
χ² / ndf 5.371e+05 / 93
p0 −0.2583 ± 7.308e−06
−0.25
−0.255
−0.26
−0.265
−0.27
−0.275
−0.28
pull
Entries 94
Mean 355
Std Dev 295.7
50
0
−50
−100
−150
−200
−250
−300

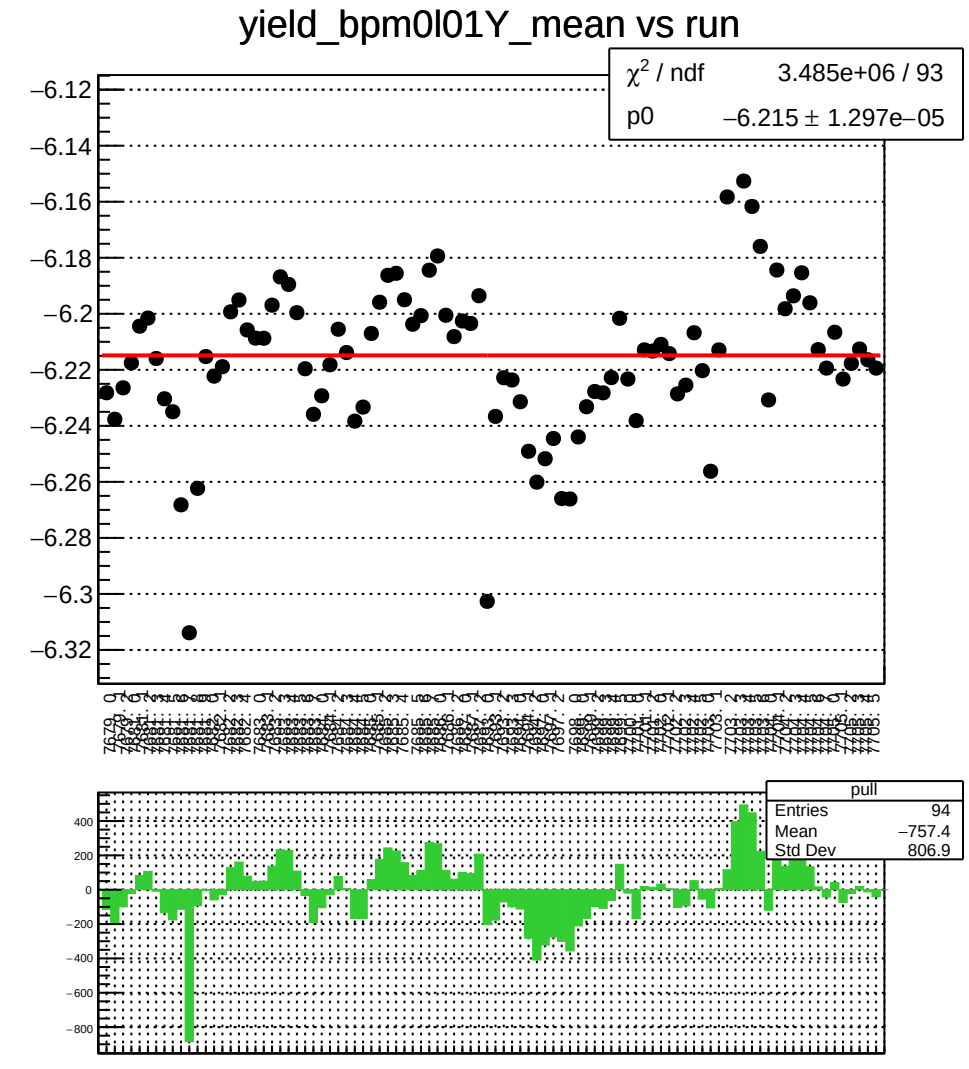

pull1D
Entries 94
Mean 1.047
Std Dev 3.161
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

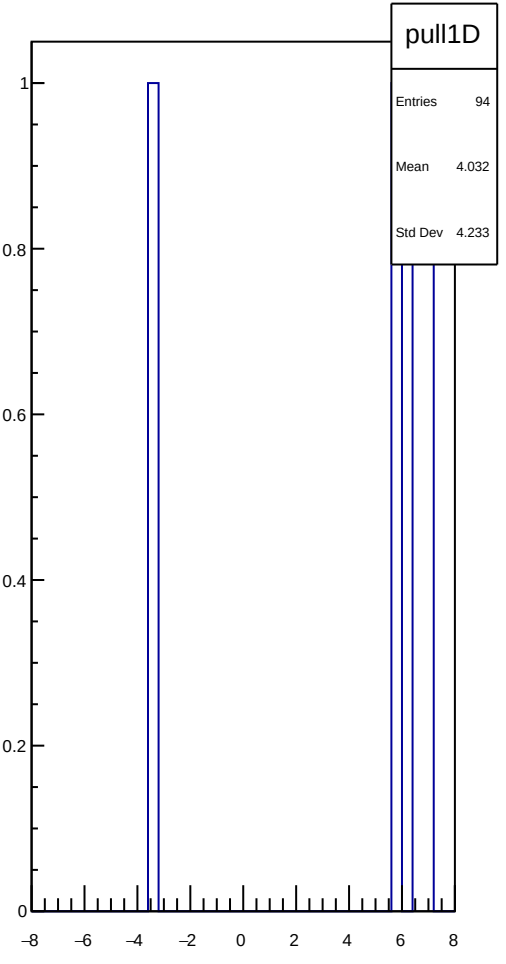

yield_bpm16Y_rms vs run
χ² / ndf 1.065e+05 / 93
p0 0.006695 ± 5.167e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003

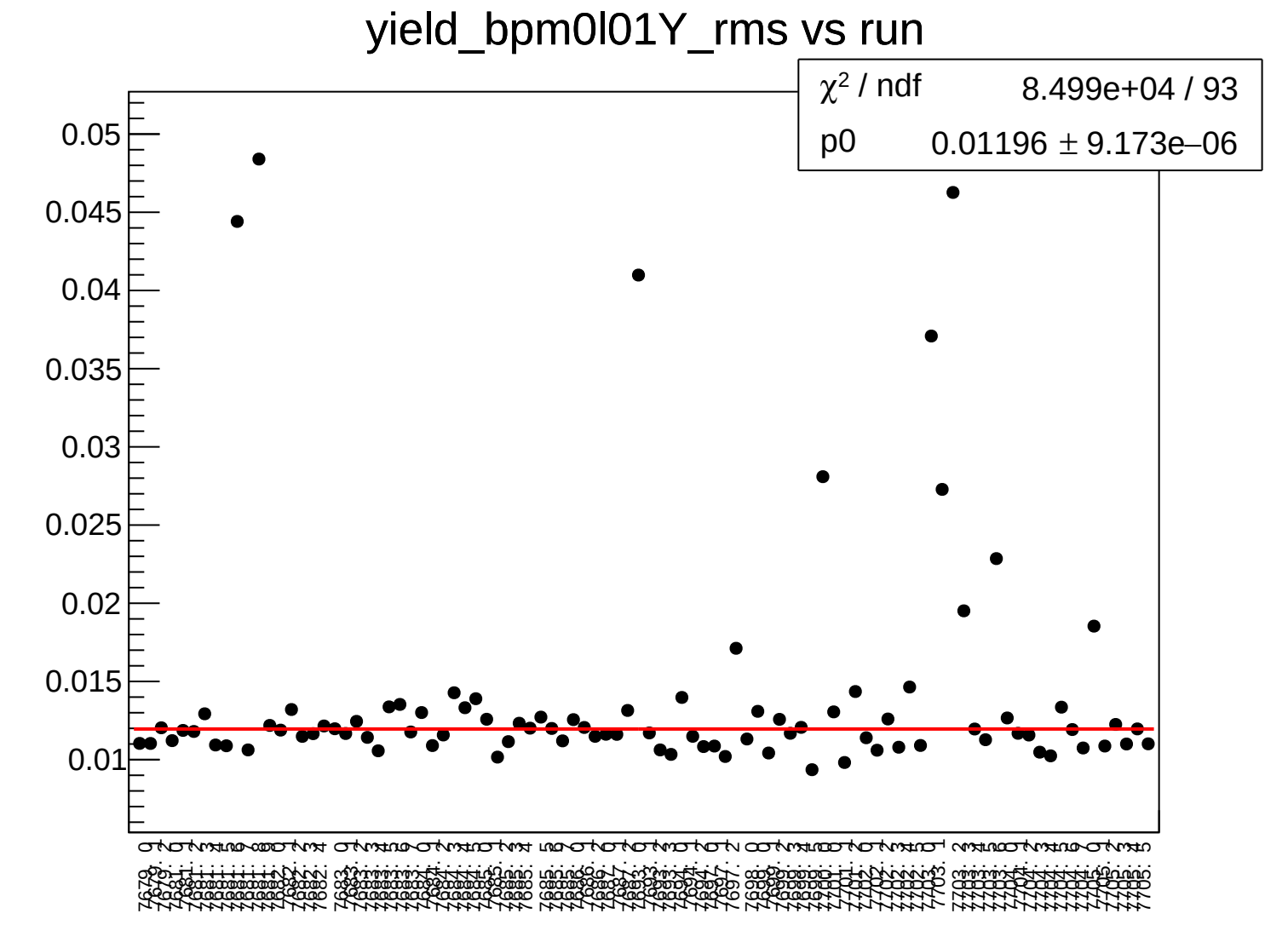

yield_bpm0l01X_mean vs run
χ² / ndf 3.169e+07 / 93
p0 −0.3985 ± 1.009e−05
−0.3
−0.35
−0.4
−0.45
−0.5
pull
Entries 94
Mean 596.4
Std Dev 548.8
1000
500
0
−500
−1000

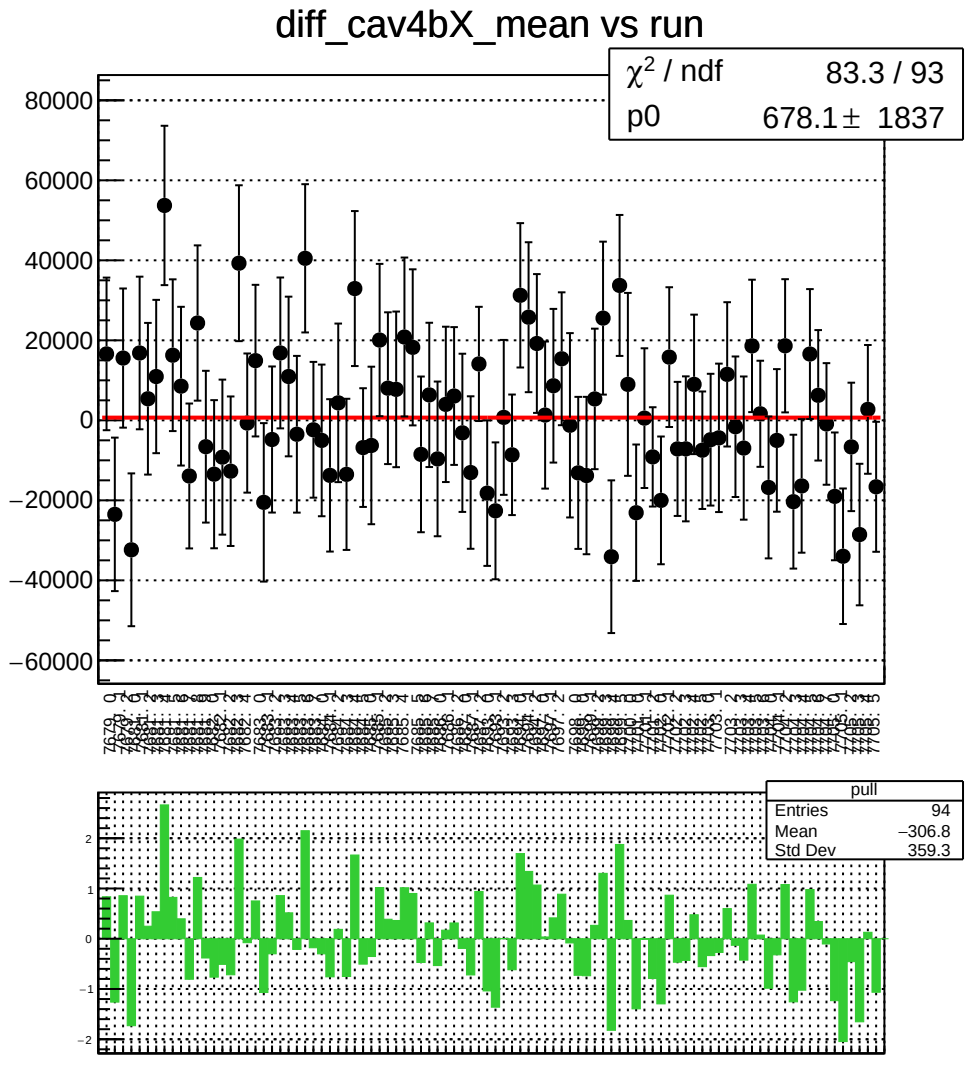

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

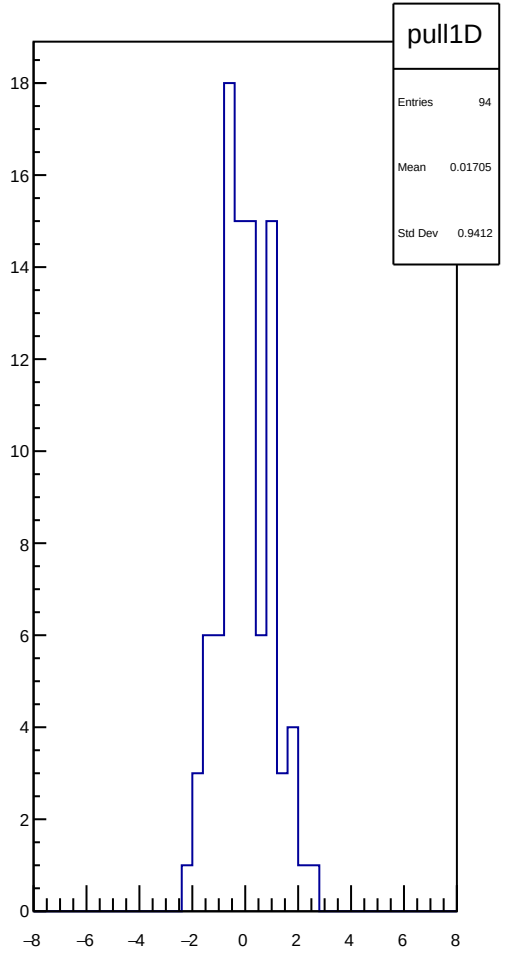

yield_bpm0l01X_rms vs run
χ² / ndf 6.921e+04 / 93
p0 0.009349 ± 7.137e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

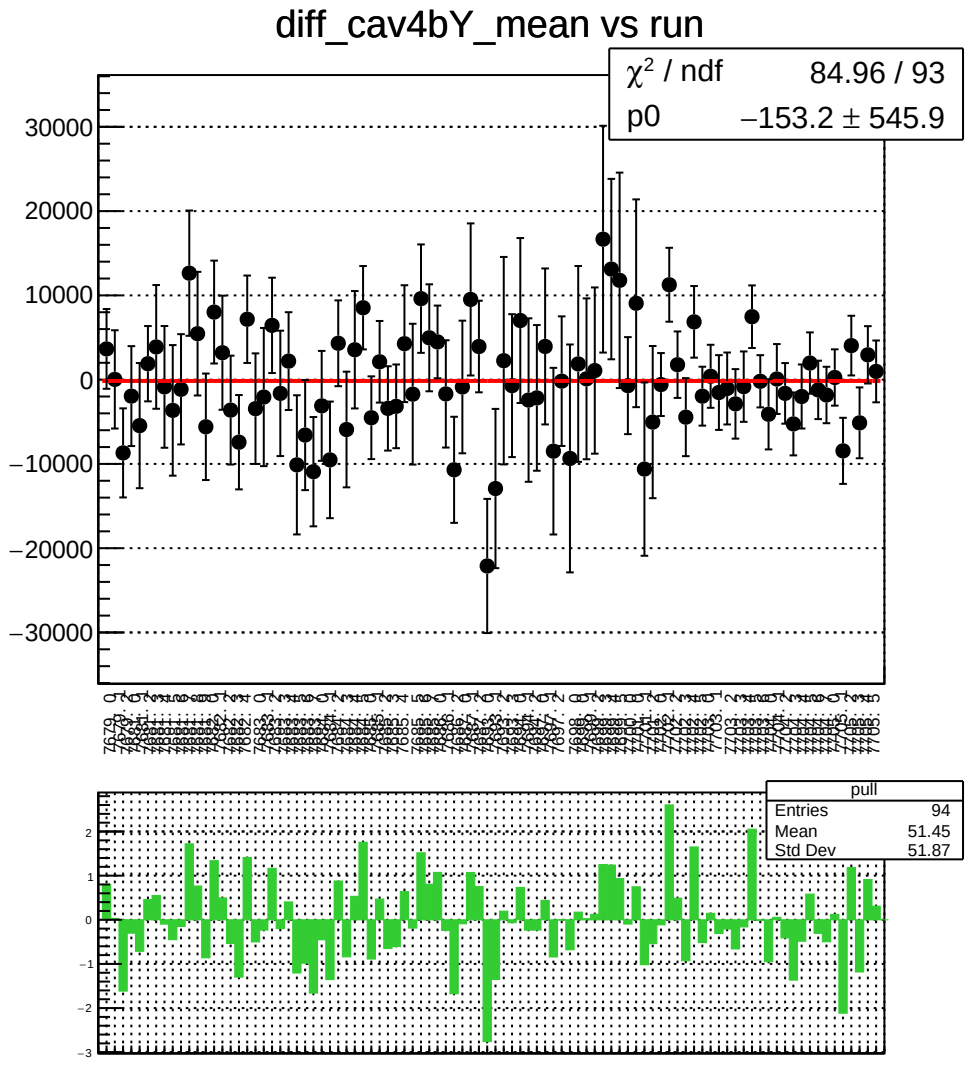

yield_bpm0l01Y_mean vs run
χ² / ndf 3.485e+06 / 93
p0 −6.215 ± 1.297e−05
−6.12
−6.14
−6.16
−6.18
−6.2
−6.22
−6.24
−6.26
−6.28
−6.3
−6.32
pull
Entries 94
Mean −757.4
Std Dev 806.9
400
200
0
−200
−400
−600
−800

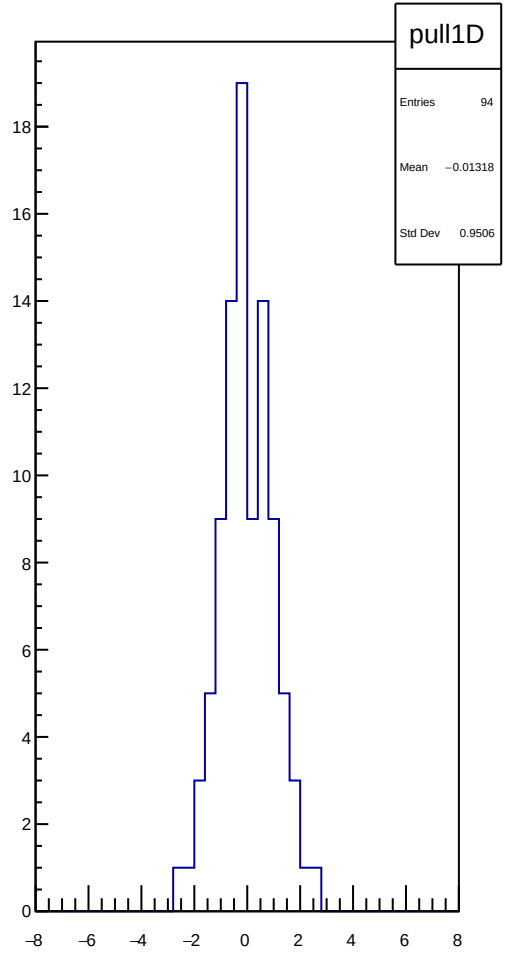

pull1D
Entries 94
Mean 4.032
Std Dev 4.233
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

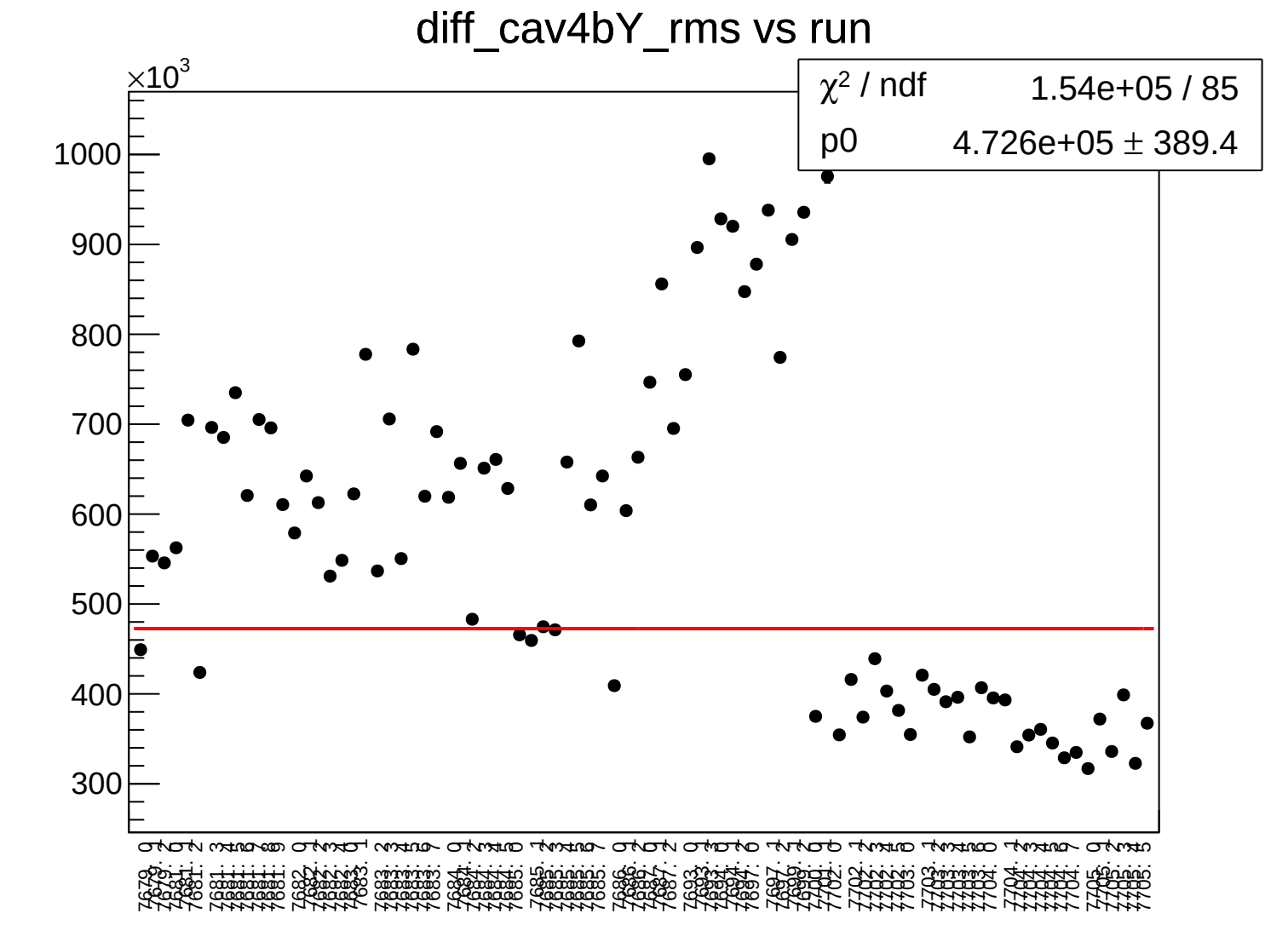

yield_bpm0l01Y_rms vs run
χ² / ndf 8.499e+04 / 93
p0 0.01196 ± 9.173e–06
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01

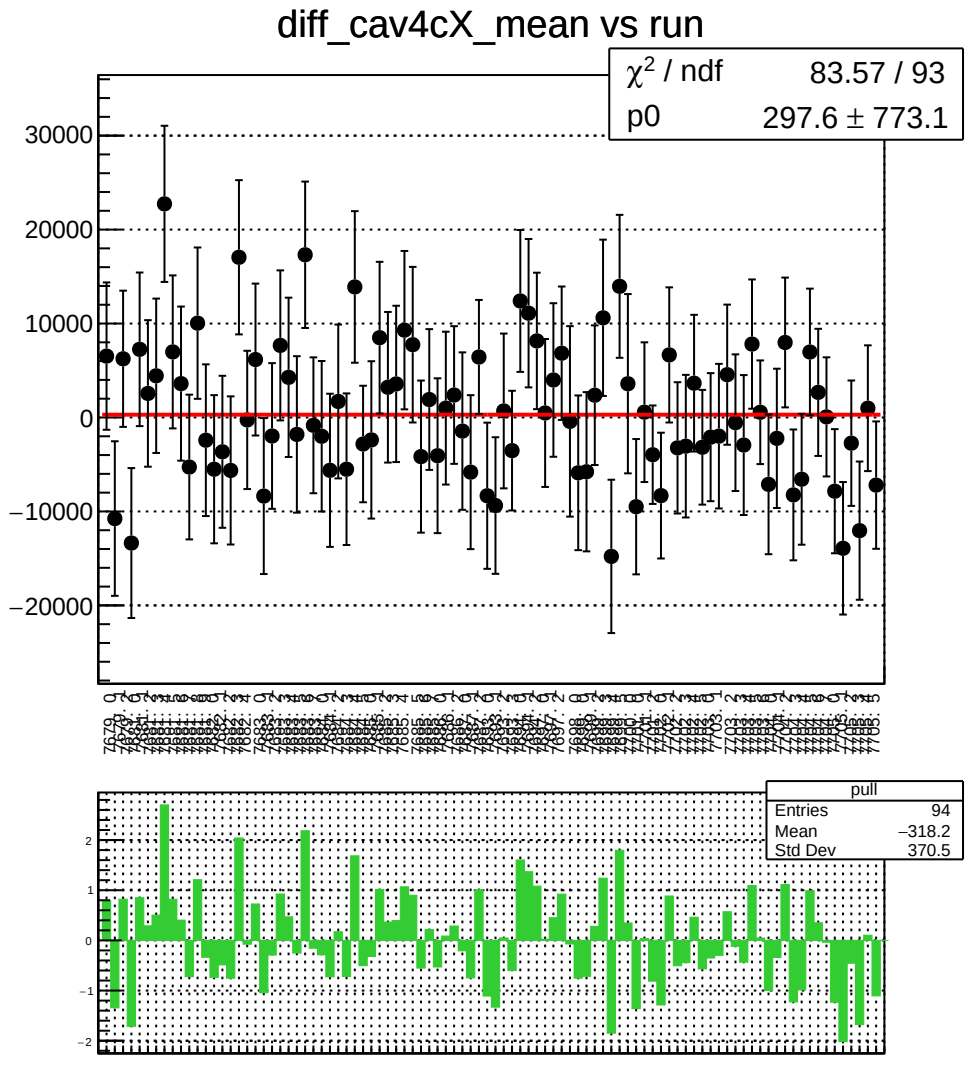

diff_cav4bX_mean vs run
χ² / ndf 83.3 / 93
p0 678.1 ± 1837
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −306.8
Std Dev 359.3
2
1
0
−1
−2

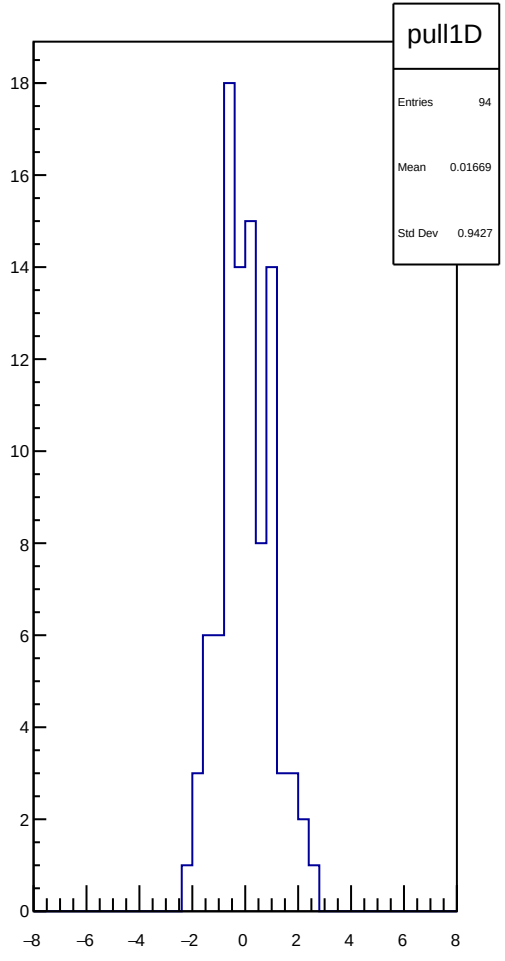

pull1D
Entries 94
Mean 0.01705
Std Dev 0.9412
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

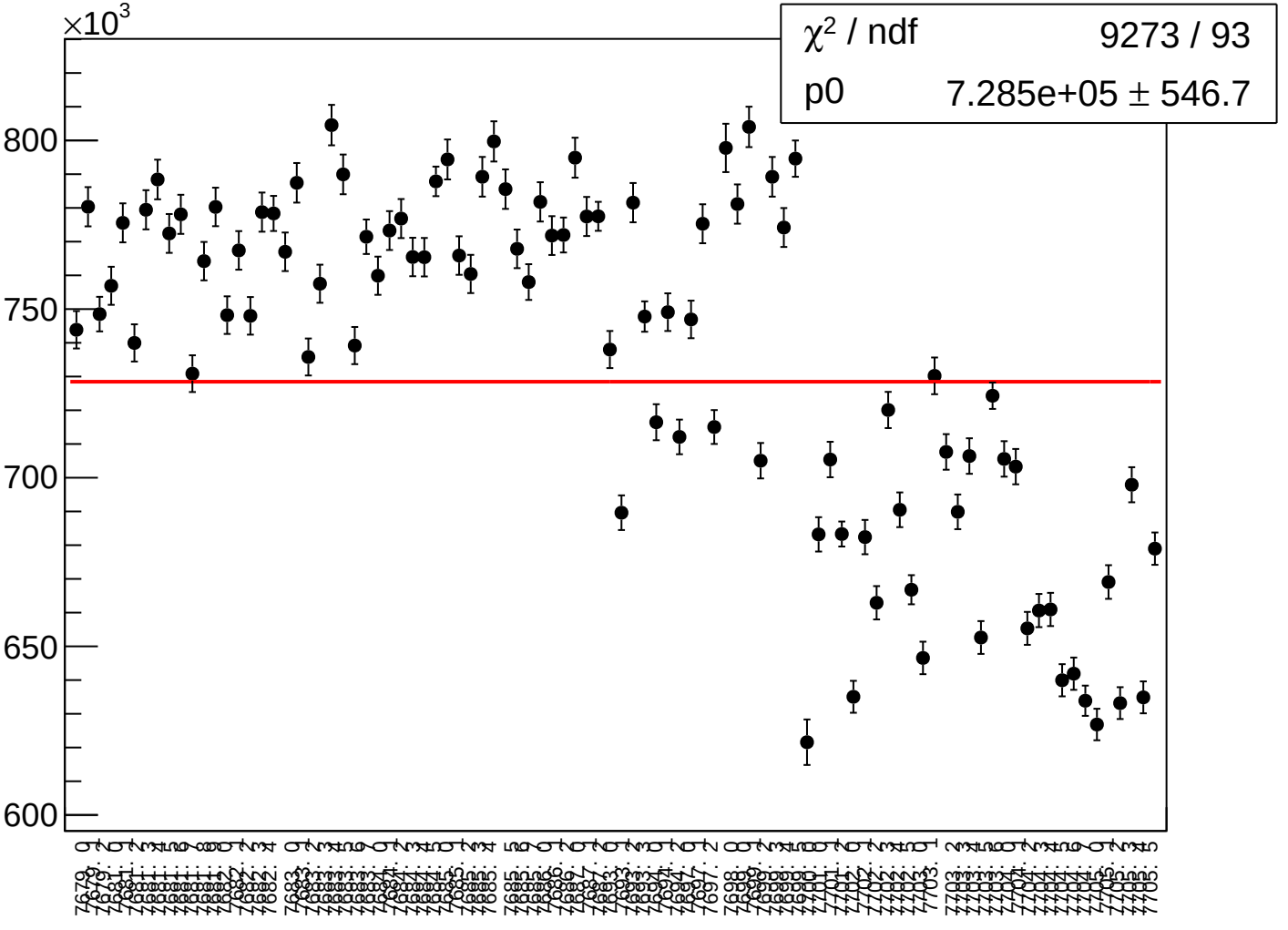

diff_cav4bY_mean vs run
χ² / ndf 84.96 / 93
p0 −153.2 ± 545.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean 51.45
Std Dev 51.87
2
1
0
−1
−2
−3

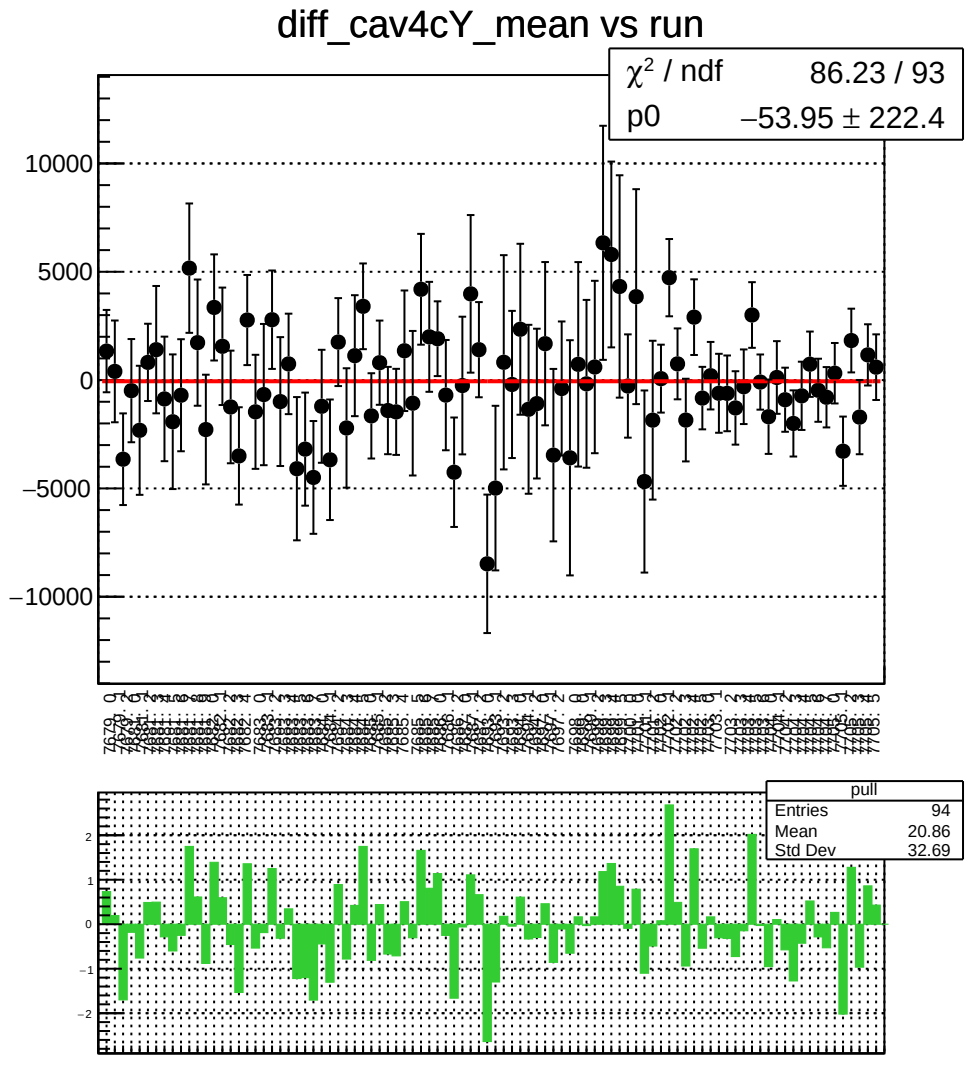

pull1D
Entries 94
Mean −0.01318
Std Dev 0.9506
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

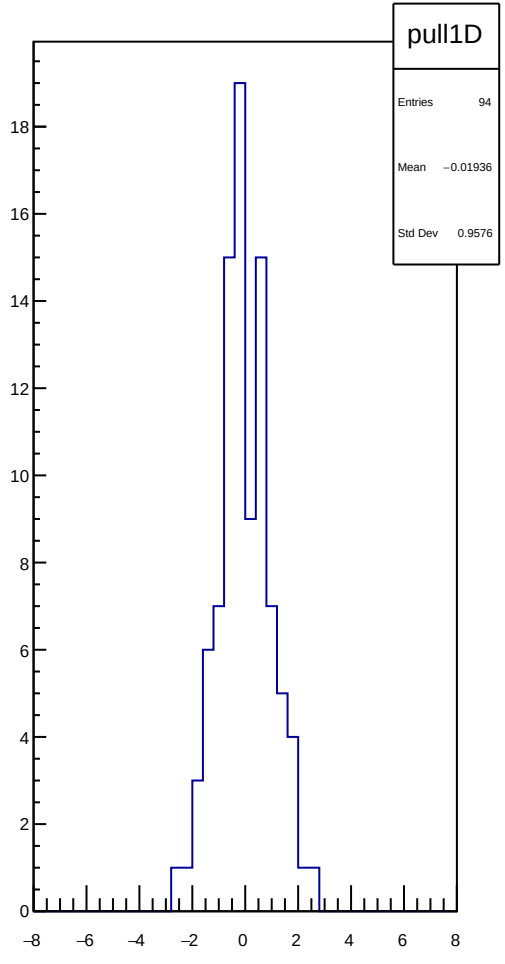

diff_cav4bY_rms vs run
×10^3
χ² / ndf 1.54e+05 / 85
p0 4.726e+05 ± 389.4
1000
900
800
700
600
500
400
300

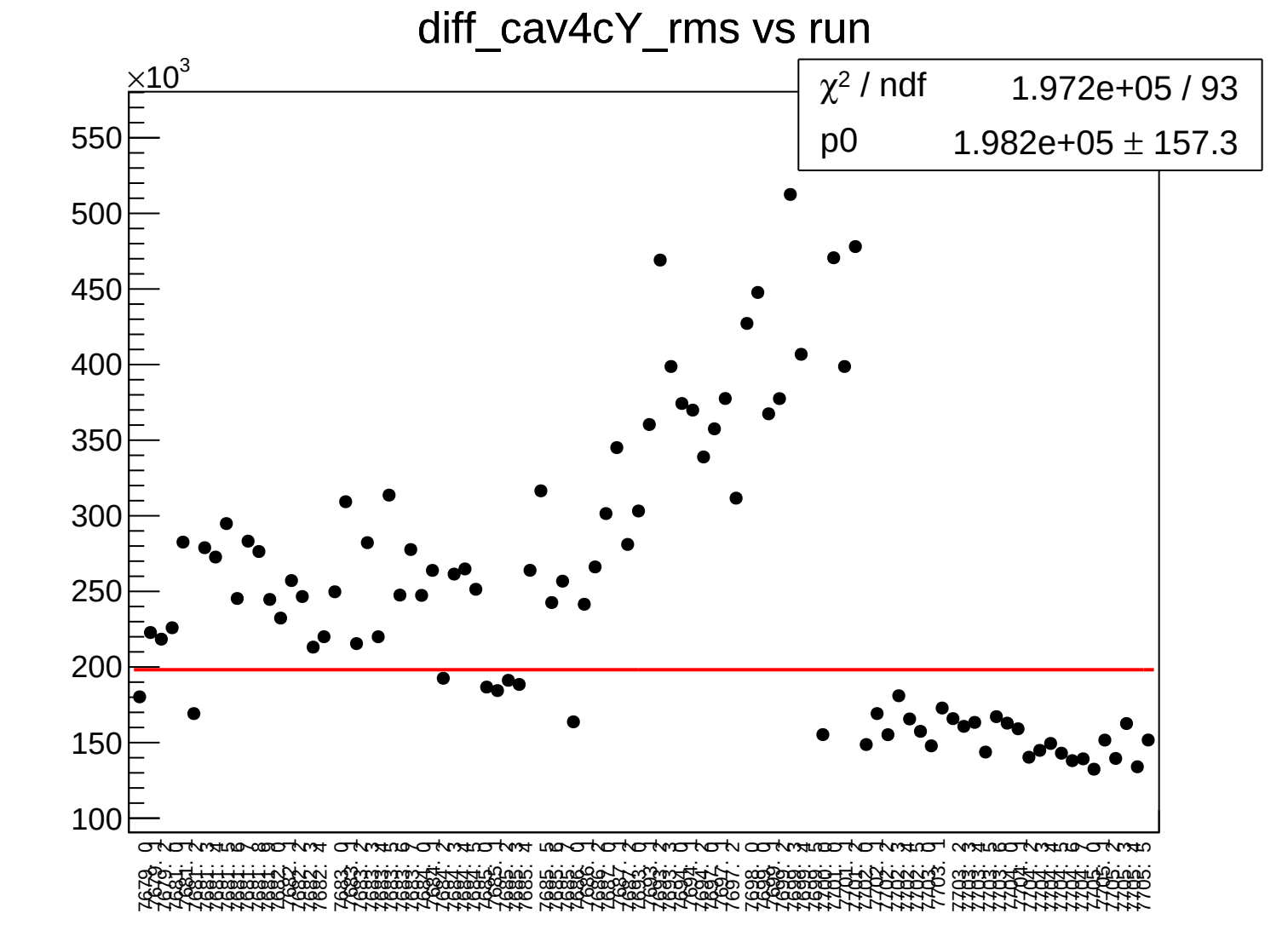

diff_cav4cX_mean vs run
χ² / ndf 83.57 / 93
p0 297.6 ± 773.1
30000
20000
10000
0
−10000
−20000
pull
Entries 94
Mean −318.2
Std Dev 370.5
2
1
0
−1
−2

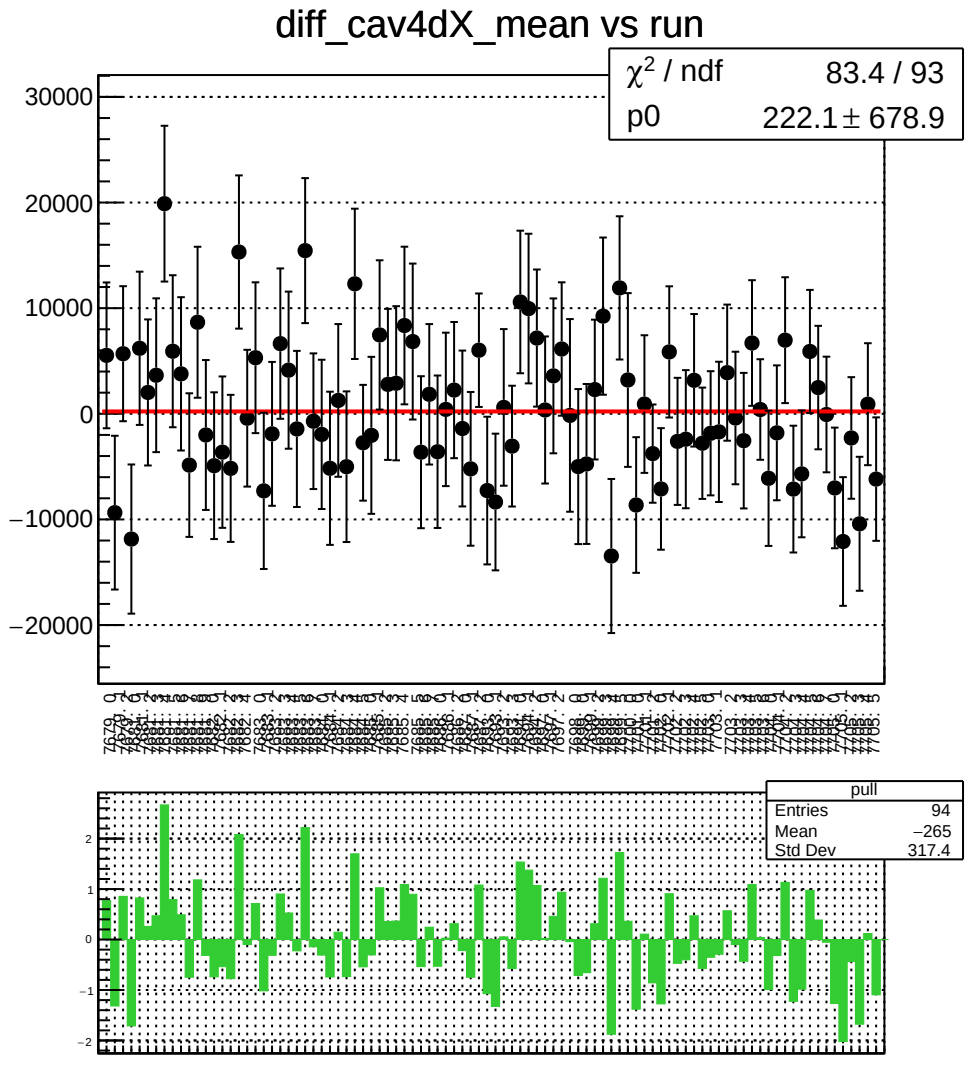

pull1D
Entries 94
Mean 0.01669
Std Dev 0.9427
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

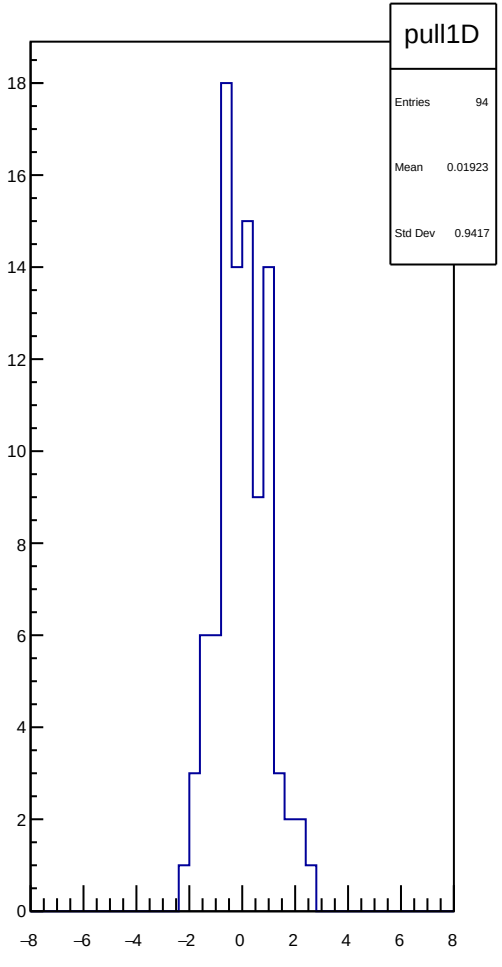

diff_cav4cX_rms vs run
×10^3
χ² / ndf 9273 / 93
p0 7.285e+05 ± 546.7
800
750
700
650
600

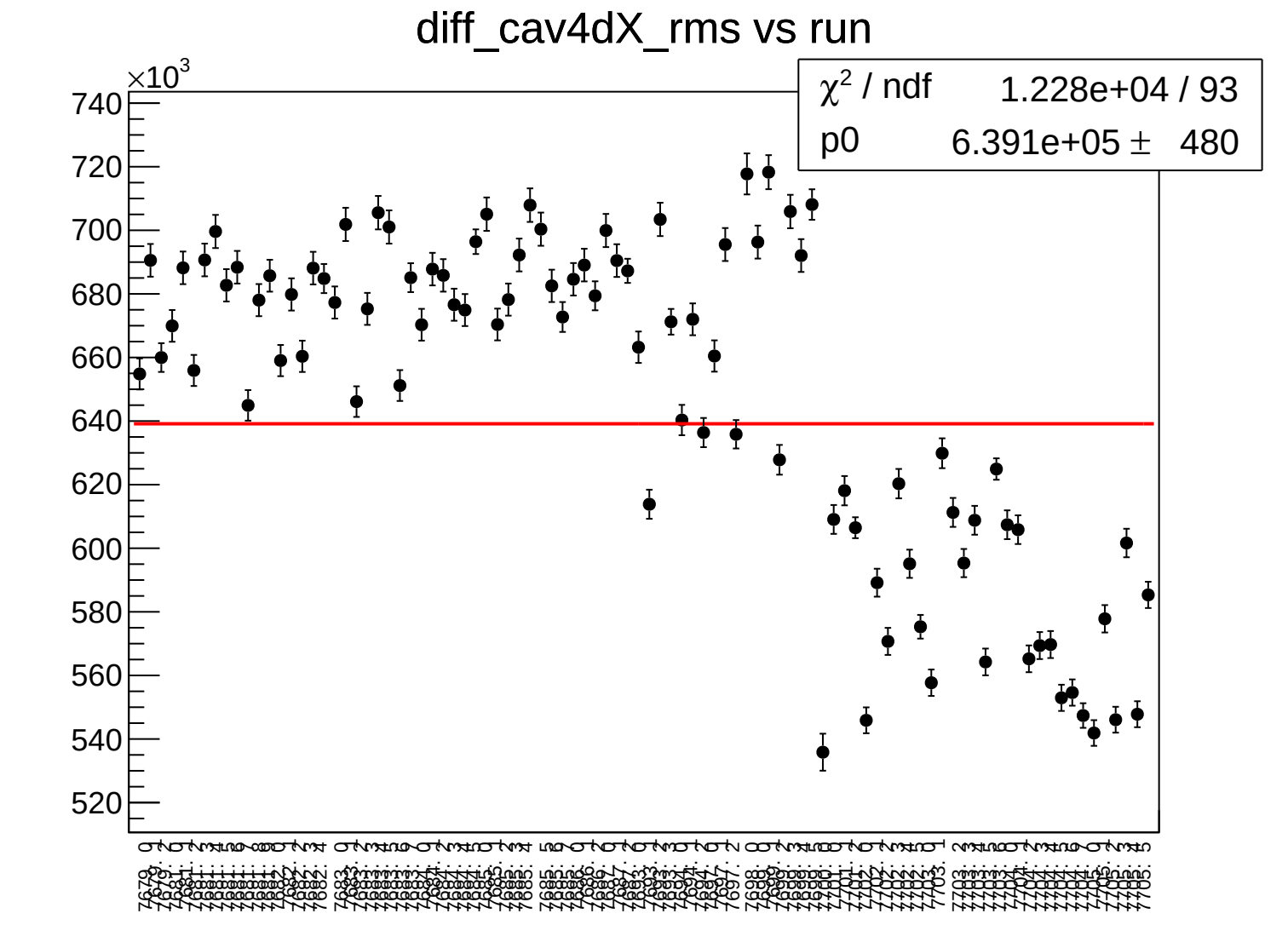

diff_cav4cY_mean vs run
χ² / ndf 86.23 / 93
p0 −53.95 ± 222.4
10000
5000
0
−5000
−10000
pull
Entries 94
Mean 20.86
Std Dev 32.69
2
1
0
−1
−2

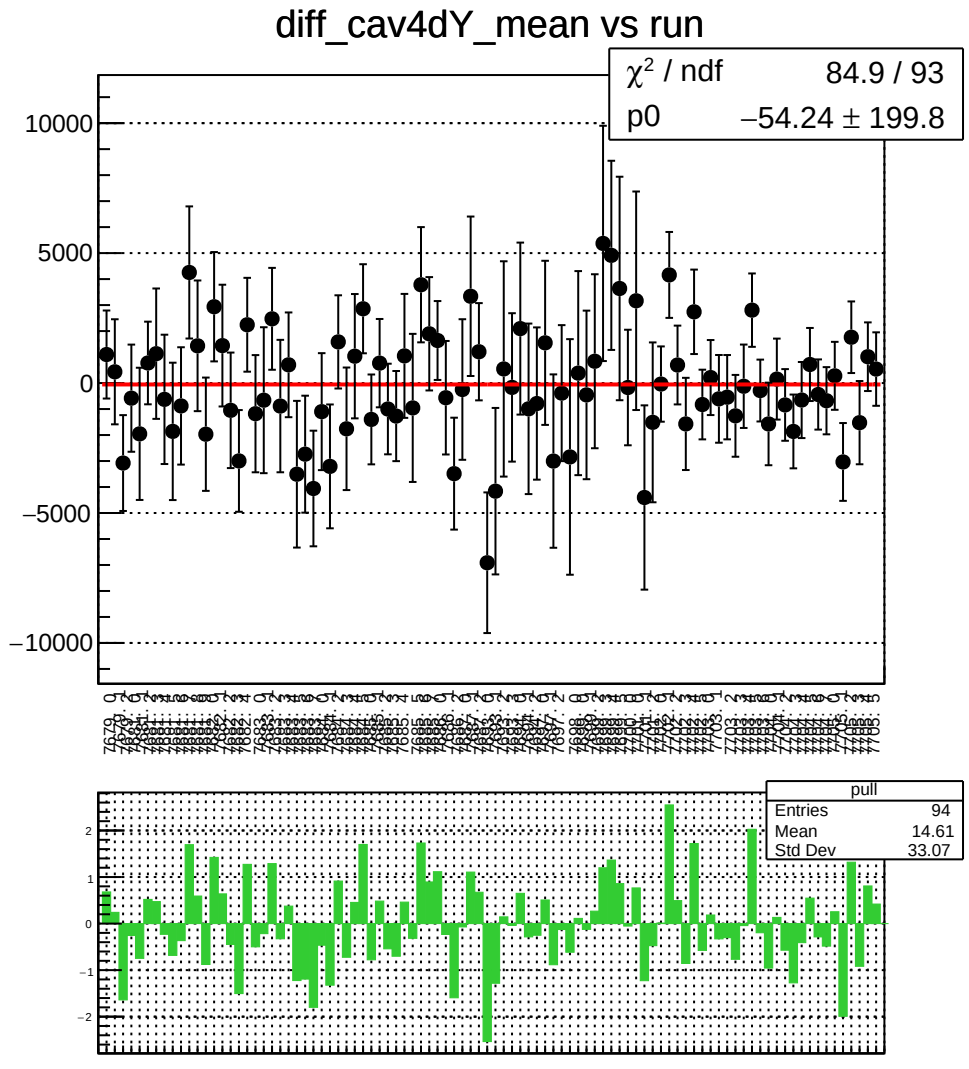

pull1D
Entries 94
Mean −0.01936
Std Dev 0.9576
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

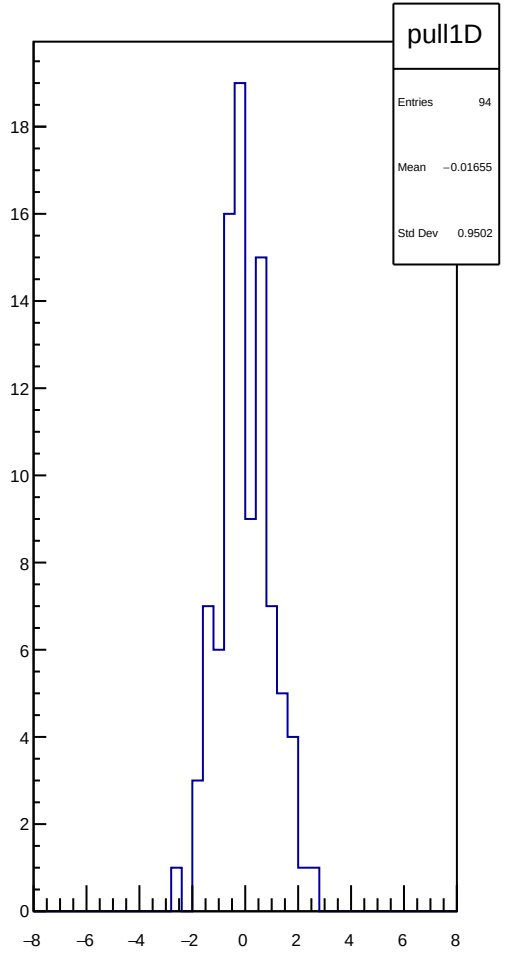

diff_cav4cY_rms vs run
×10^3
550
500
450
400
350
300
250
200
150
100
χ² / ndf 1.972e+05 / 93
p0 1.982e+05 ± 157.3

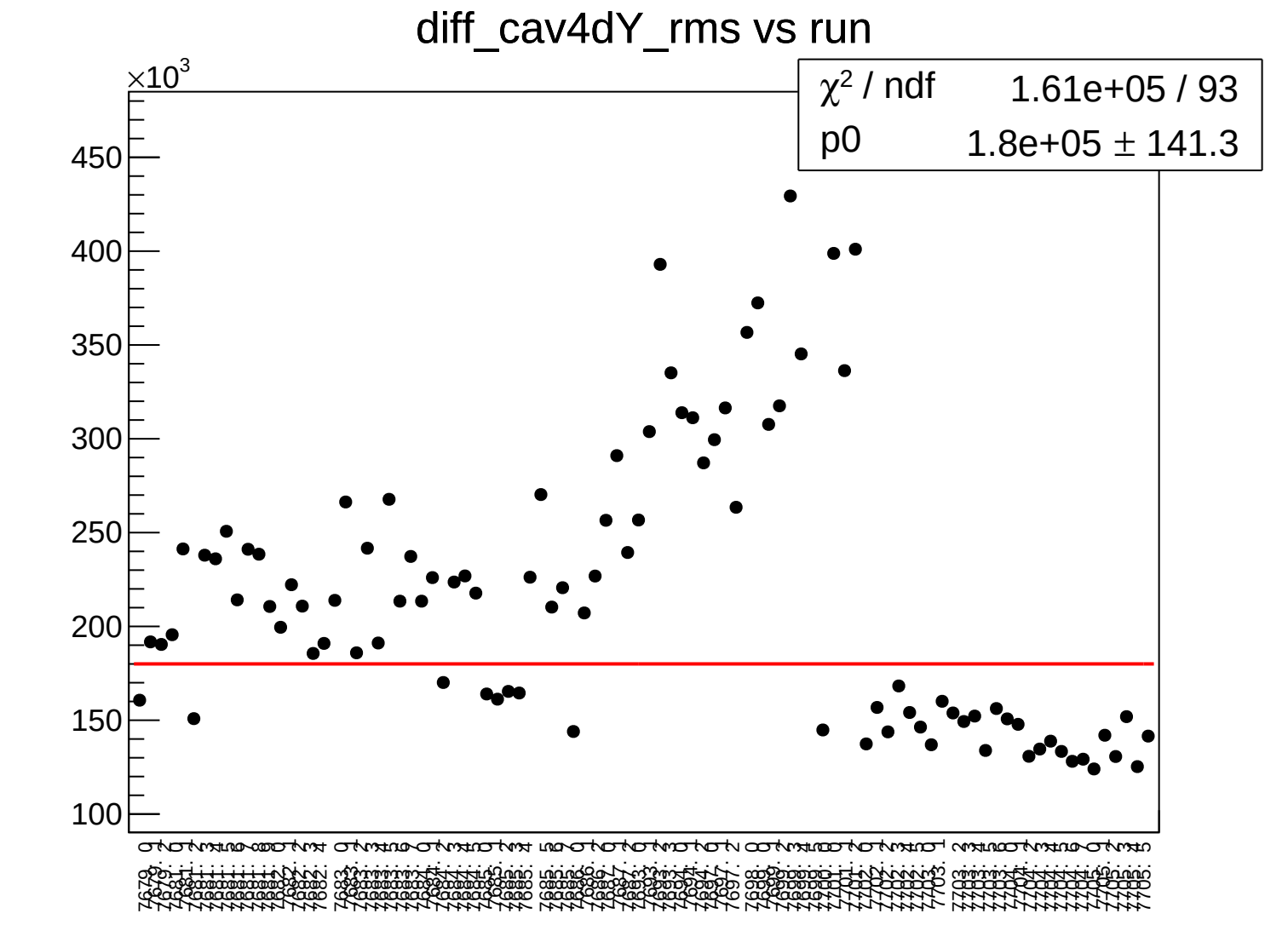

diff_cav4dX_mean vs run
χ² / ndf 83.4 / 93
p0 222.1 ± 678.9
30000
20000
10000
0
−10000
−20000
pull
Entries 94
Mean −265
Std Dev 317.4
2
1
0
−1
−2

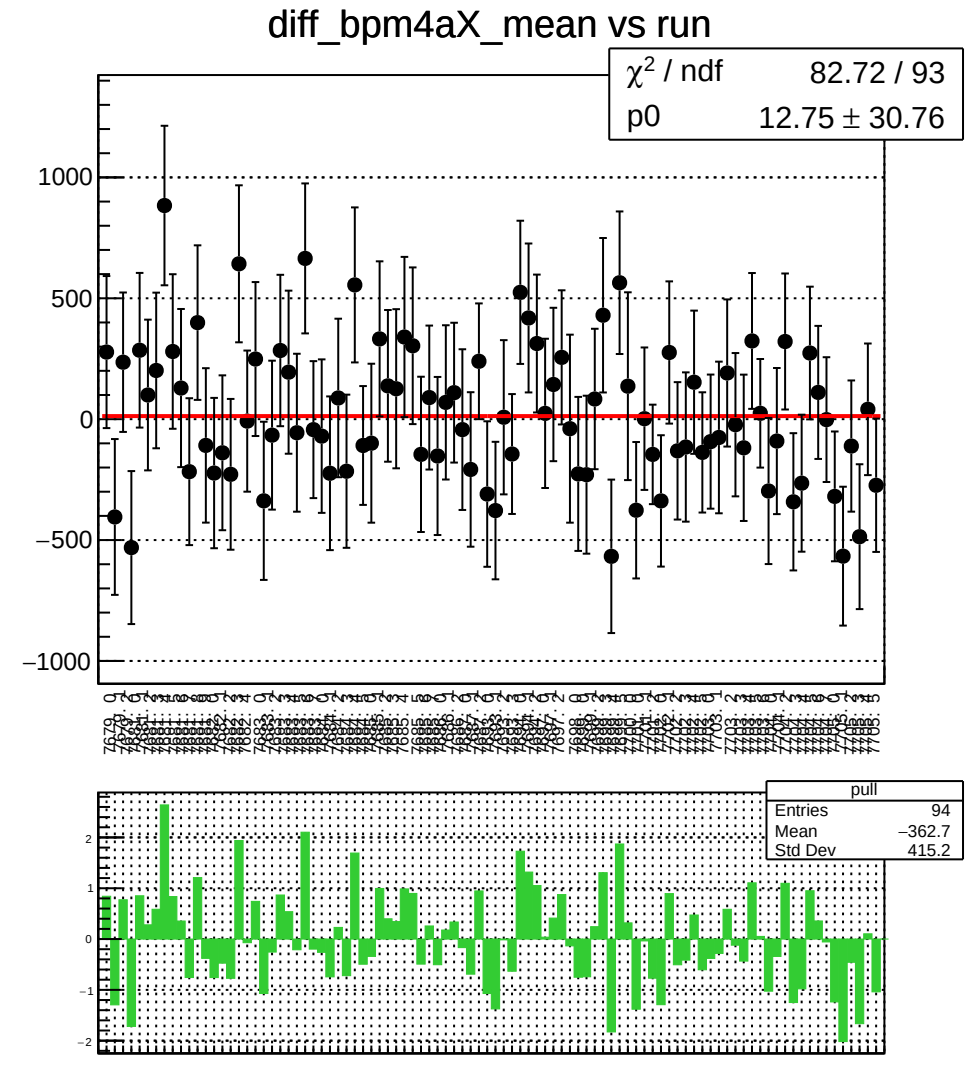

pull1D
Entries 94
Mean 0.01923
Std Dev 0.9417
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

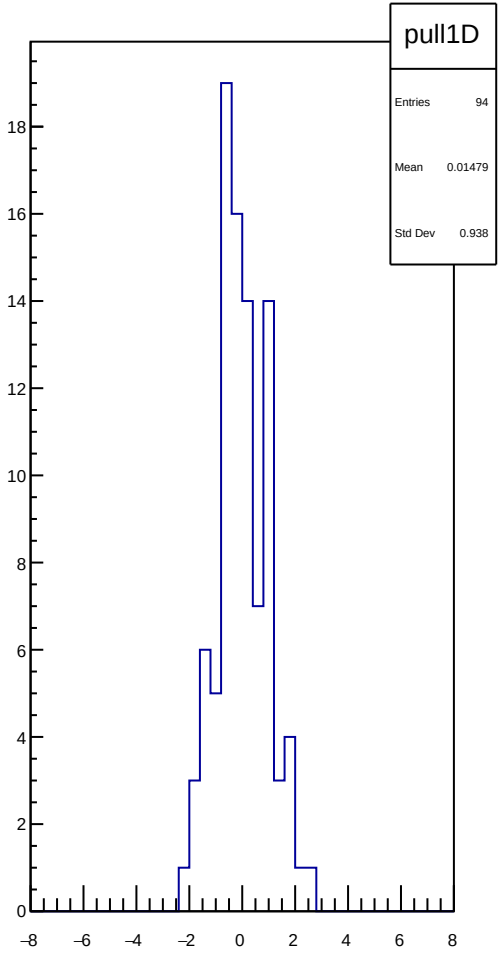

diff_cav4dX_rms vs run
×10^3
740
720
700
680
660
640
620
600
580
560
540
520
χ² / ndf 1.228e+04 / 93
p0 6.391e+05 ± 480

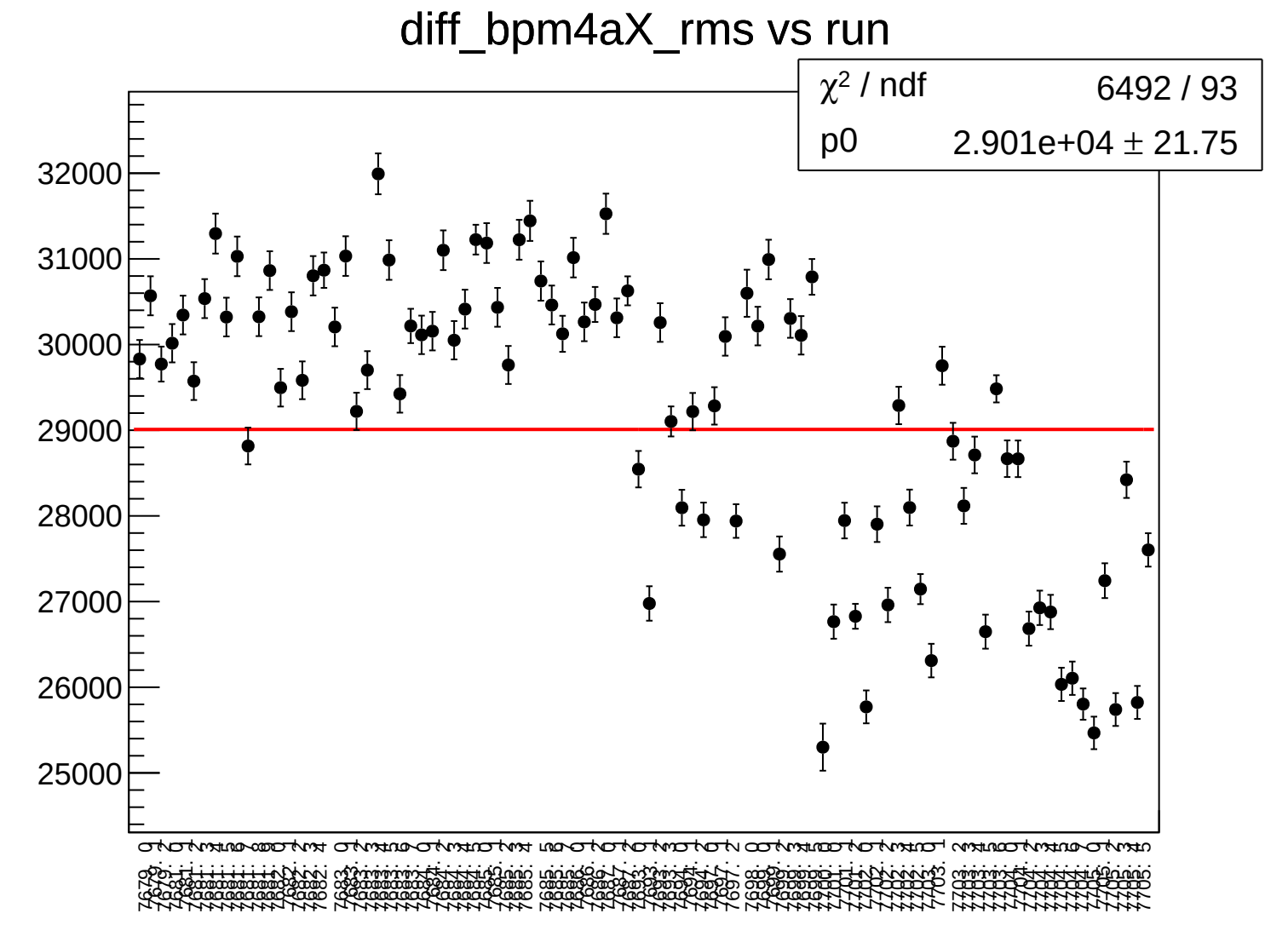

diff_cav4dY_mean vs run
χ^2 / ndf 84.9 / 93
p0 −54.24 ± 199.8
10000
5000
0
−5000
−10000
pull
Entries 94
Mean 14.61
Std Dev 33.07
2
1
0
−1
−2

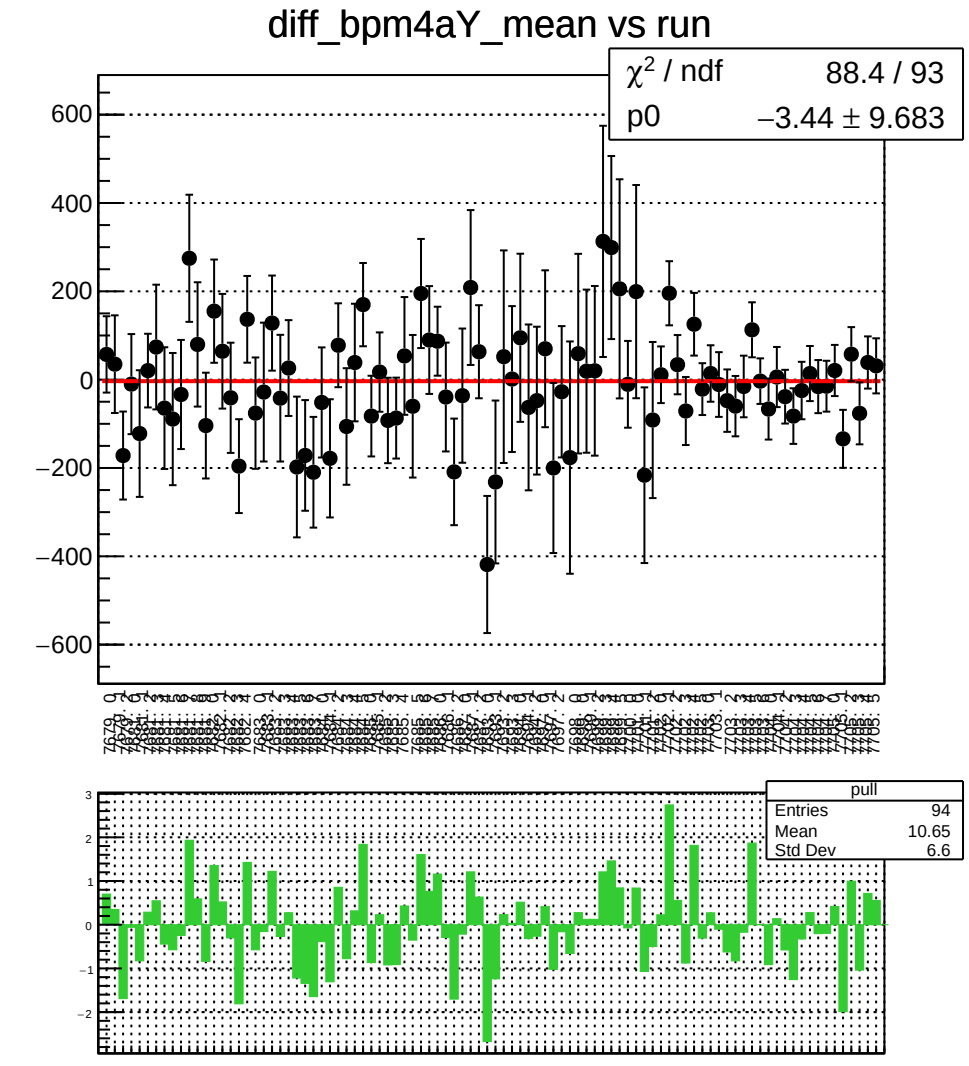

pull1D
Entries 94
Mean −0.01655
Std Dev 0.9502
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

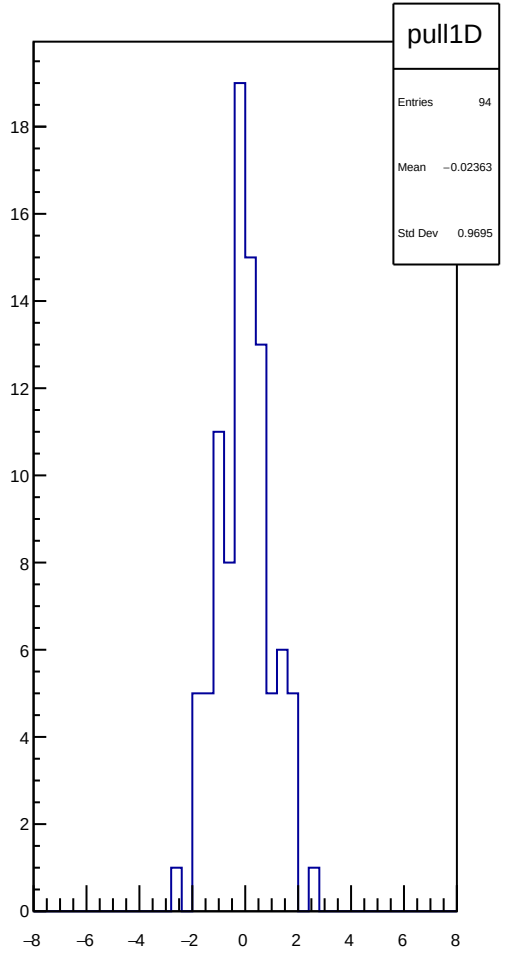

diff_cav4dY_rms vs run
×10^3
χ² / ndf 1.61e+05 / 93
p0 1.8e+05 ± 141.3
450
400
350
300
250
200
150
100

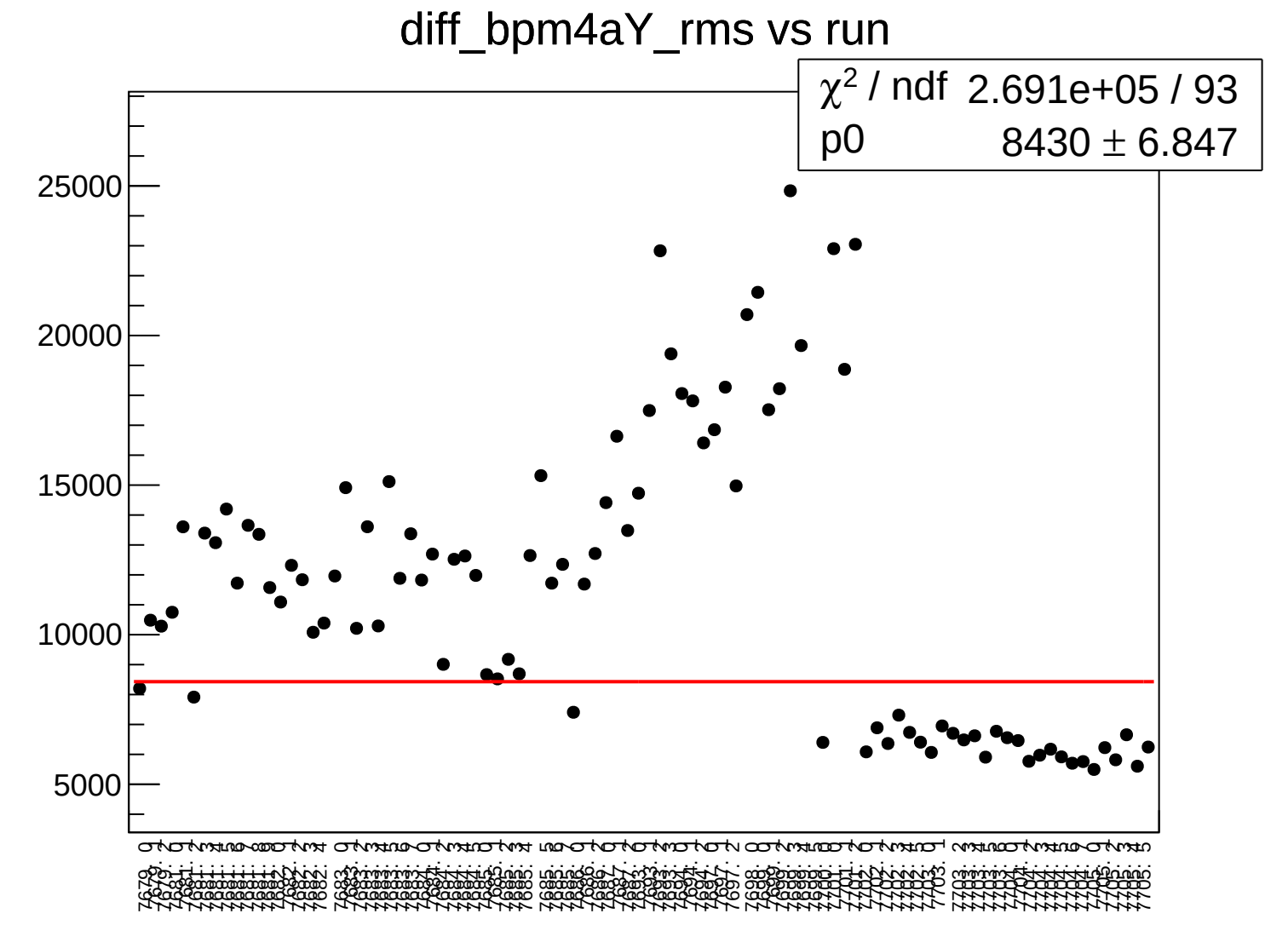

diff_bpm4aX_mean vs run
χ² / ndf 82.72 / 93
p0 12.75 ± 30.76
1000
500
0
−500
−1000
pull
Entries 94
Mean −362.7
Std Dev 415.2
2
1
0
−1
−2

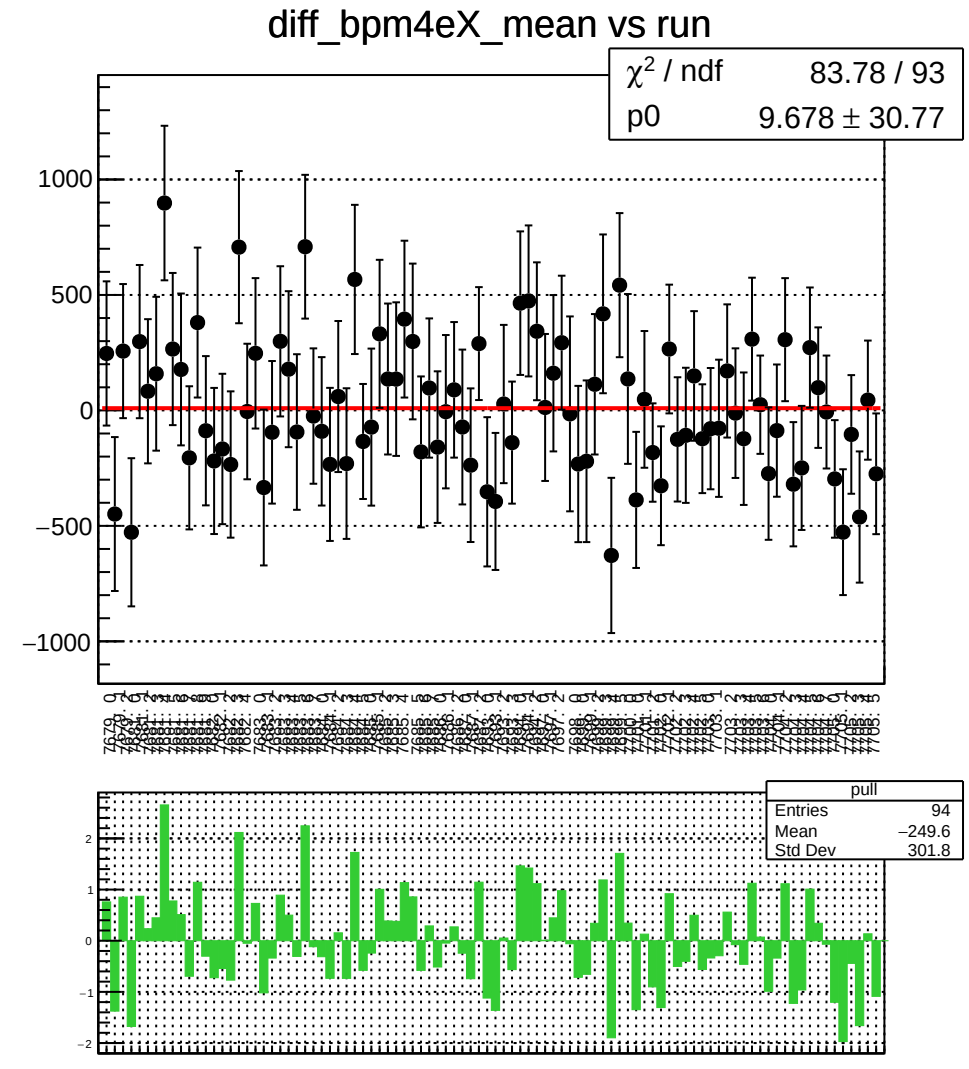

pull1D
Entries 94
Mean 0.01479
Std Dev 0.938
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

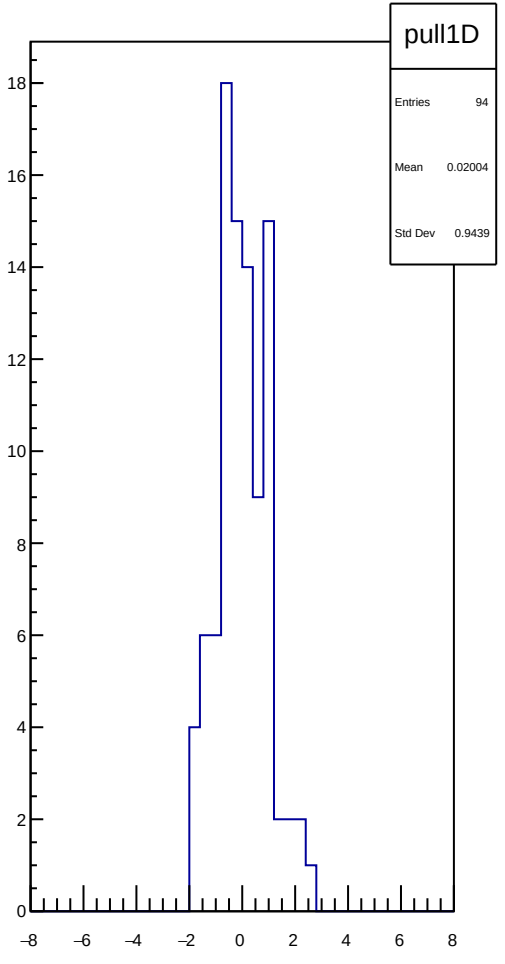

diff_bpm4aX_rms vs run
χ² / ndf 6492 / 93
p0 2.901e+04 ± 21.75
32000
31000
30000
29000
28000
27000
26000
25000

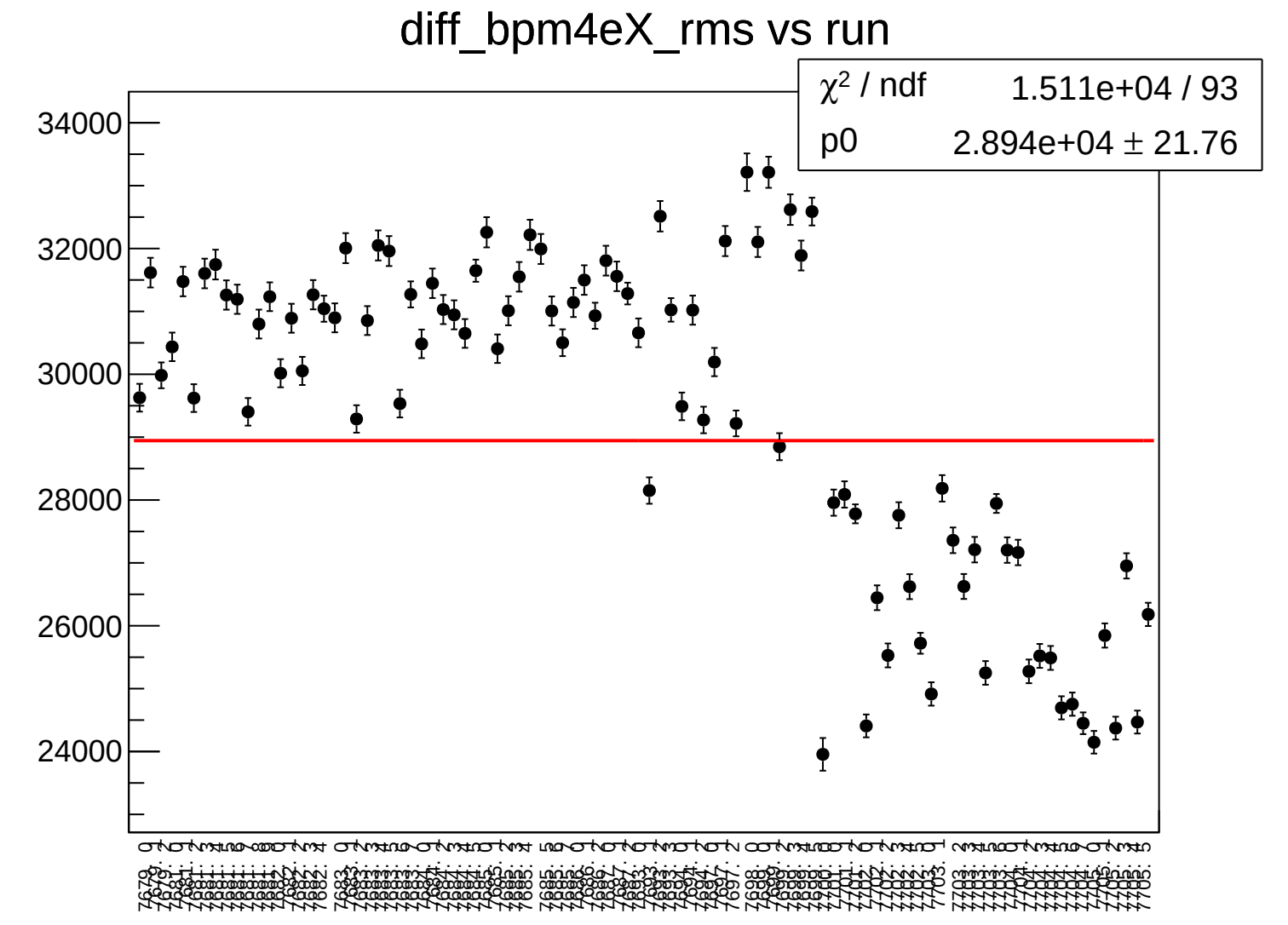

diff_bpm4aY_mean vs run
χ² / ndf 88.4 / 93
p0 −3.44 ± 9.683
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 10.65
Std Dev 6.6
3
2
1
0
−1
−2

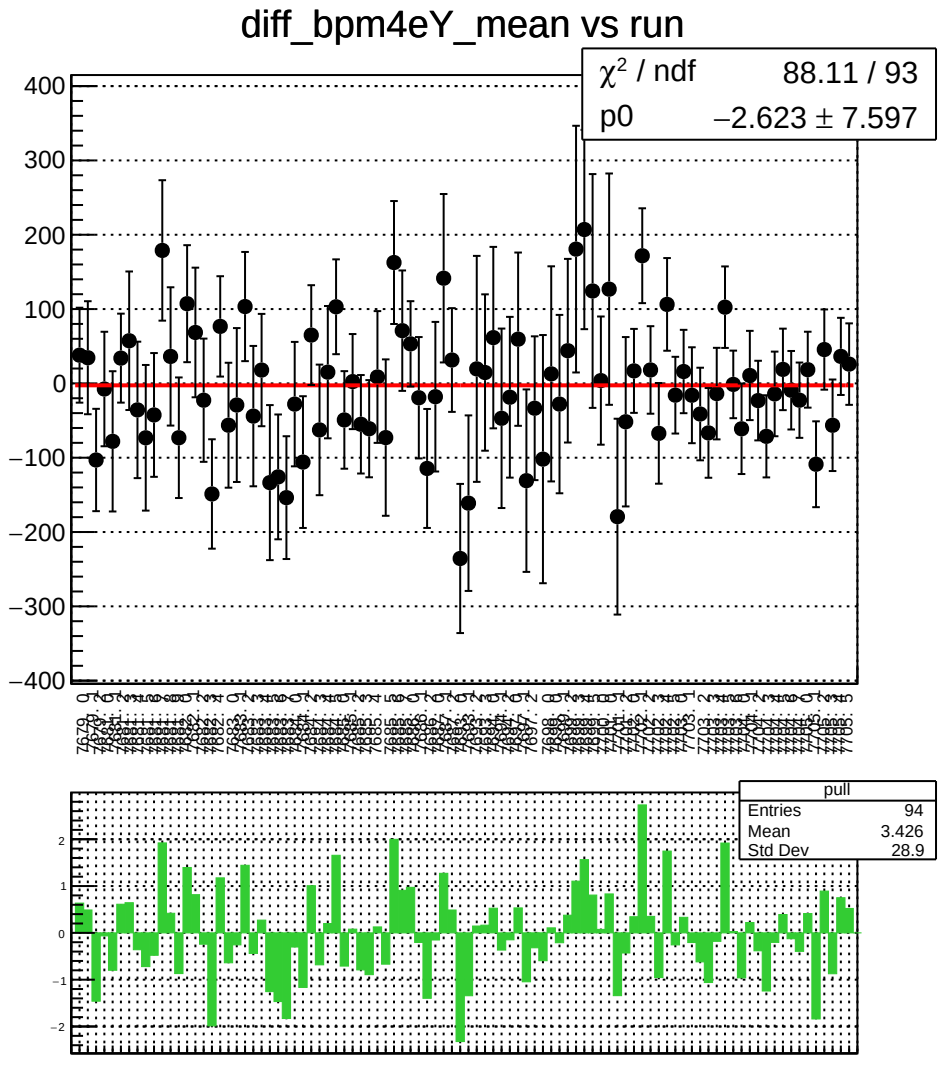

pull1D
Entries 94
Mean −0.02363
Std Dev 0.9695
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

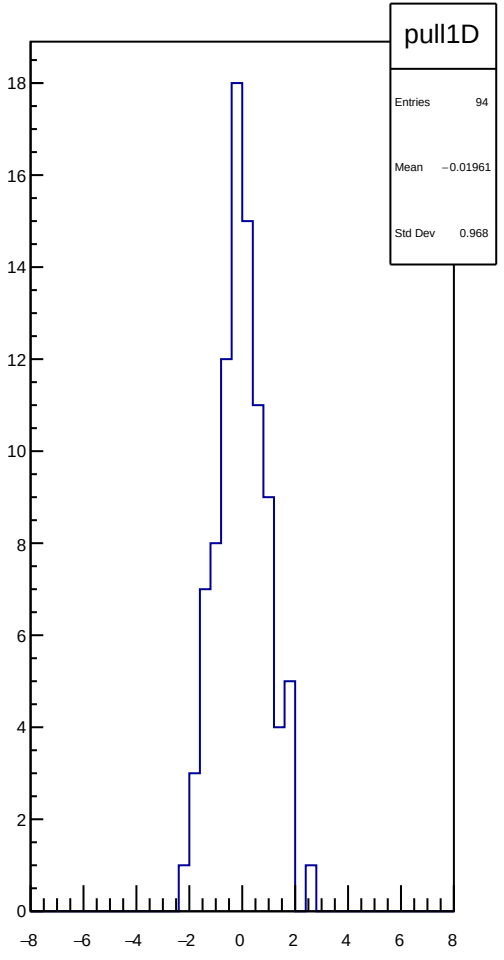

diff_bpm4aY_rms vs run
χ^2 / ndf 2.691e+05 / 93
p0 8430 ± 6.847
25000
20000
15000
10000
5000

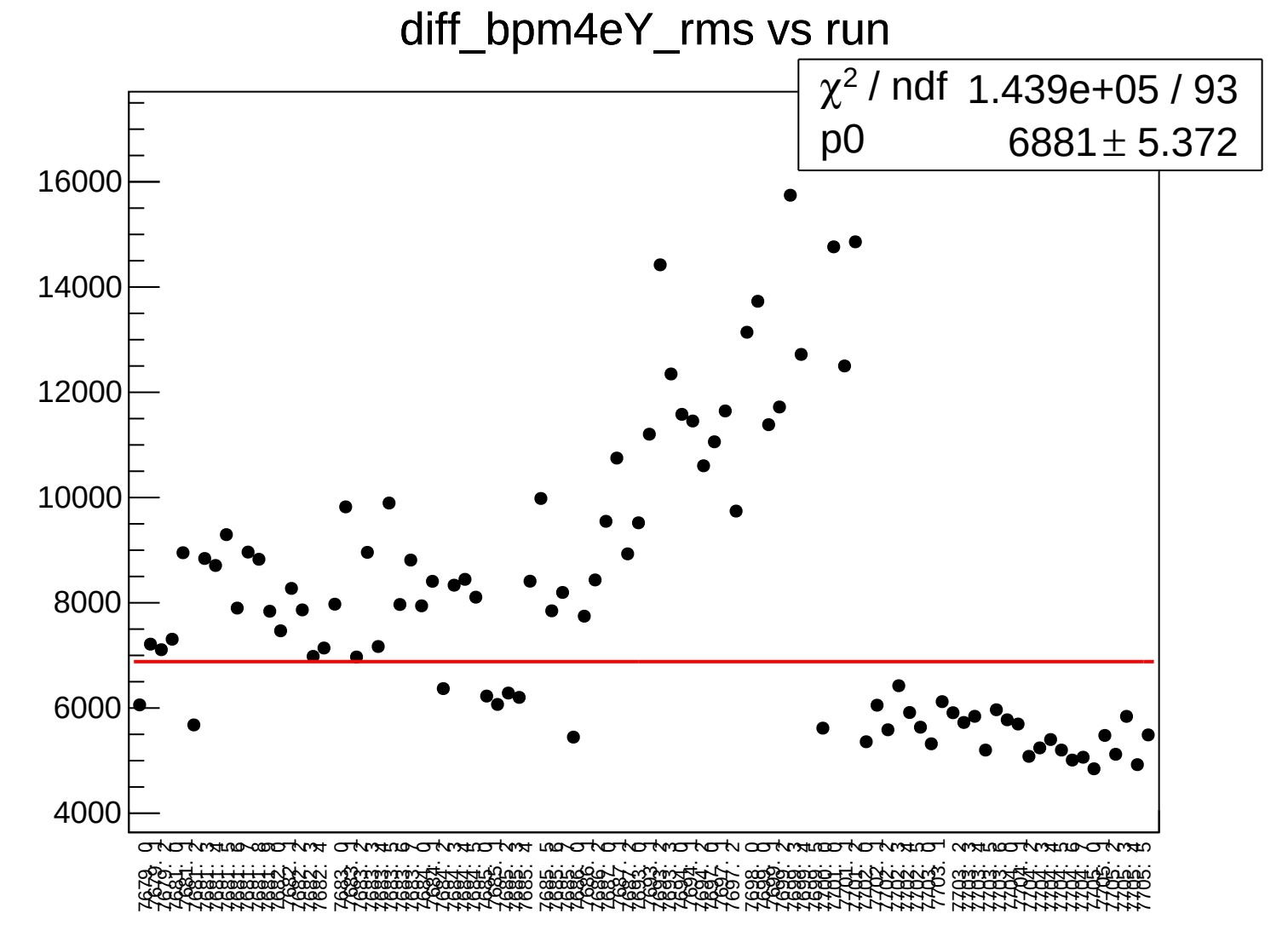

diff_bpm4eX_mean vs run
χ² / ndf 83.78 / 93
p0 9.678 ± 30.77
1000
500
0
−500
−1000
pull
Entries 94
Mean −249.6
Std Dev 301.8
2
1
0
−1
−2

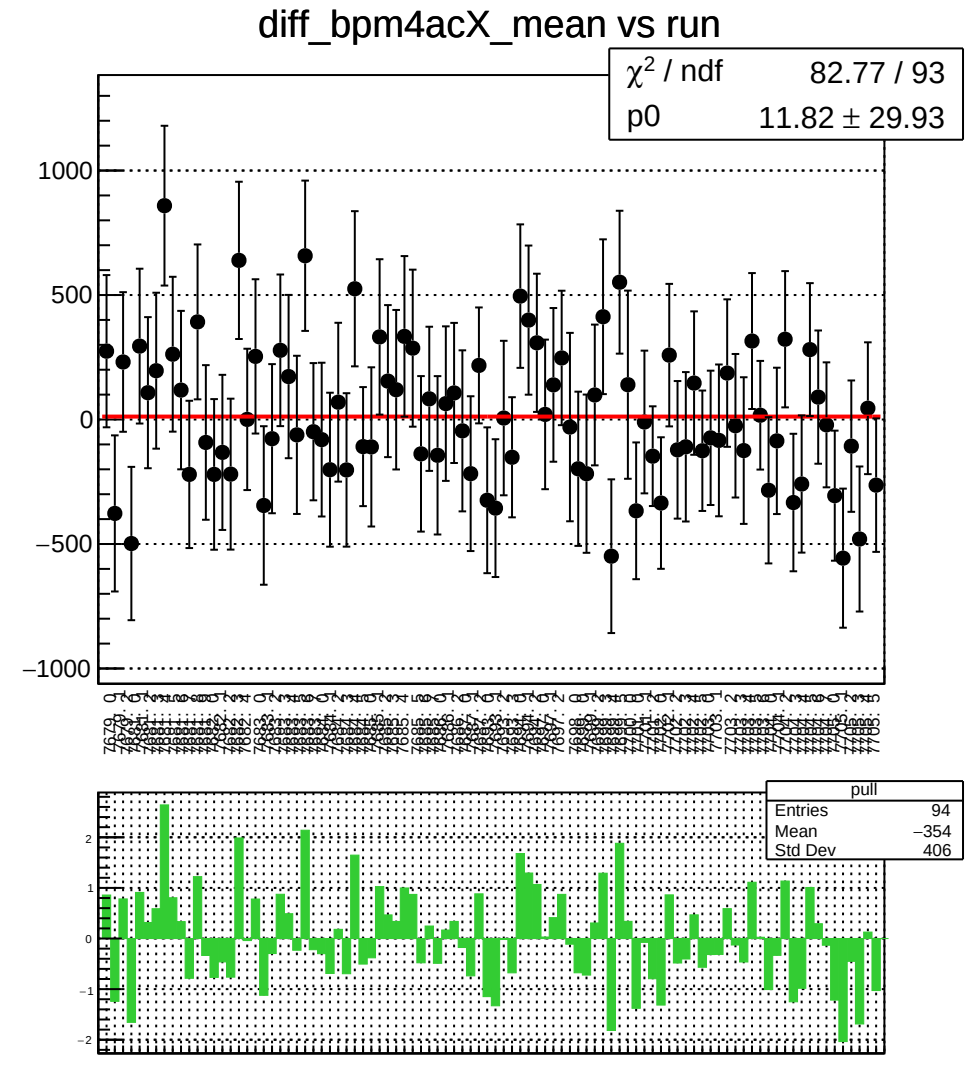

pull1D
Entries 94
Mean 0.02004
Std Dev 0.9439
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

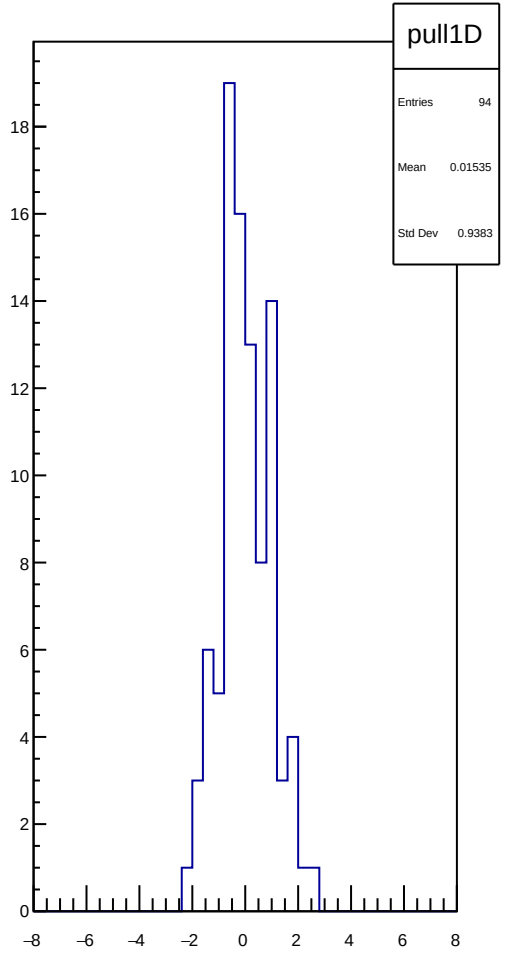

diff_bpm4eX_rms vs run
χ² / ndf 1.511e+04 / 93
p0 2.894e+04 ± 21.76
34000
32000
30000
28000
26000
24000

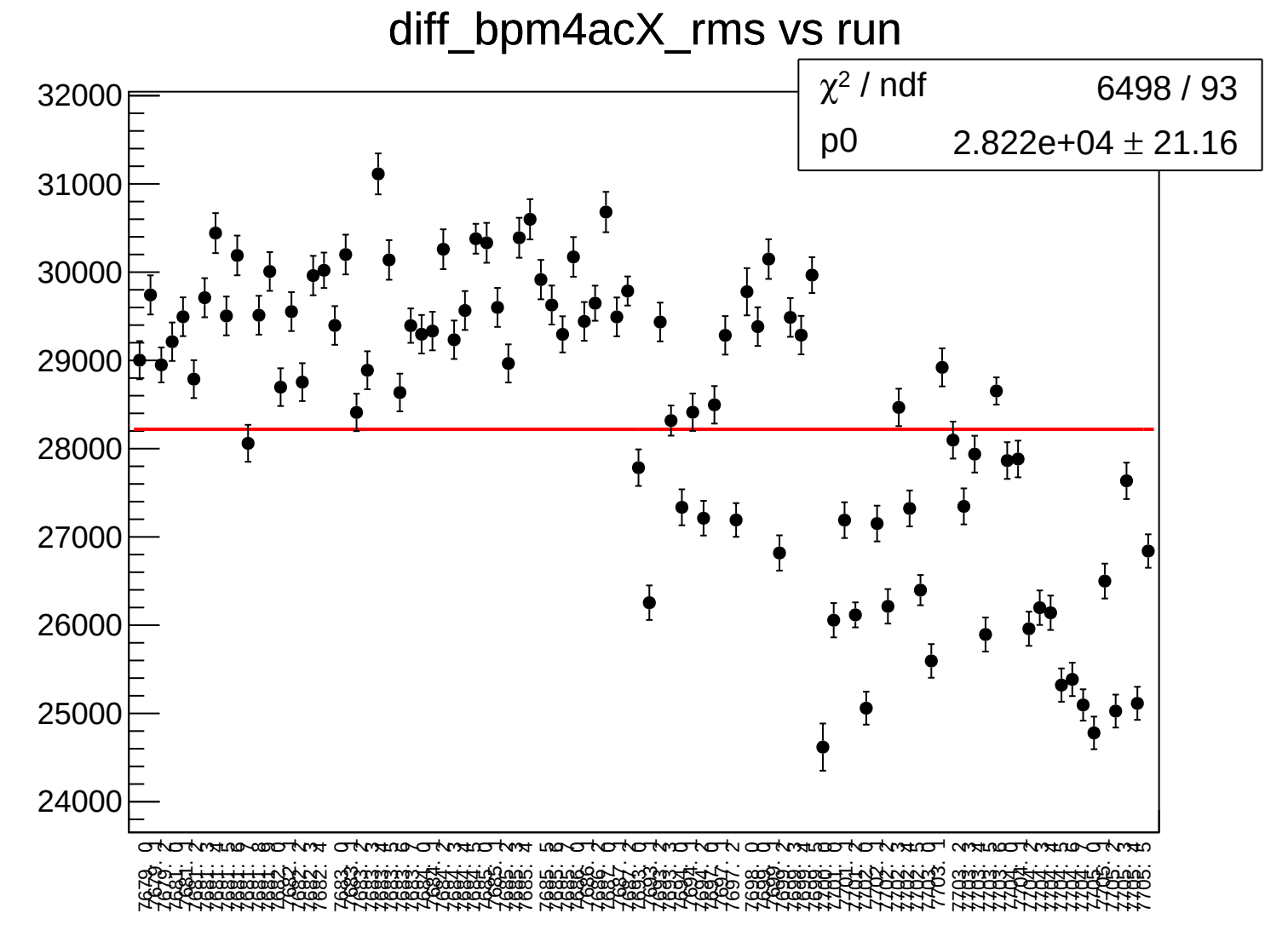

diff_bpm4eY_mean vs run
χ² / ndf 88.11 / 93
p0 −2.623 ± 7.597
pull
Entries 94
Mean 3.426
Std Dev 28.9

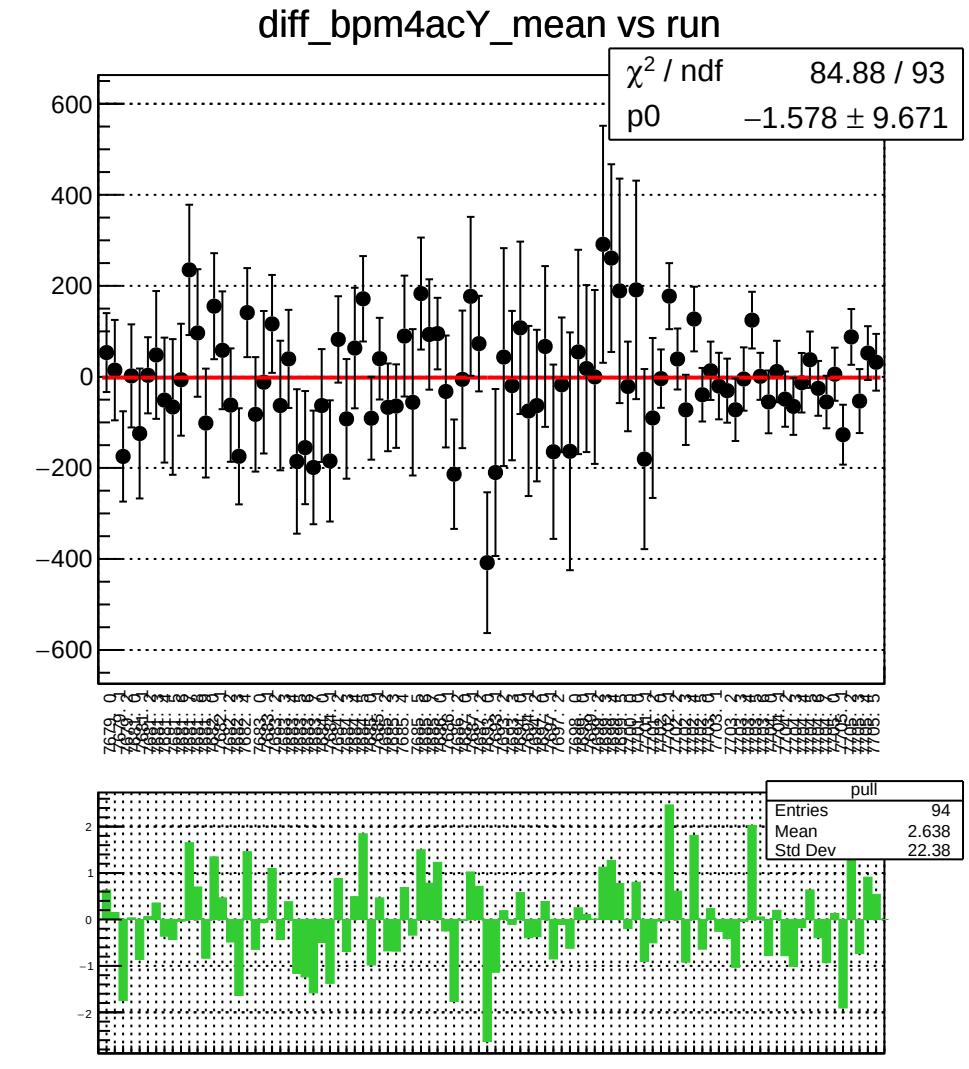

pull1D
Entries 94
Mean −0.01961
Std Dev 0.968

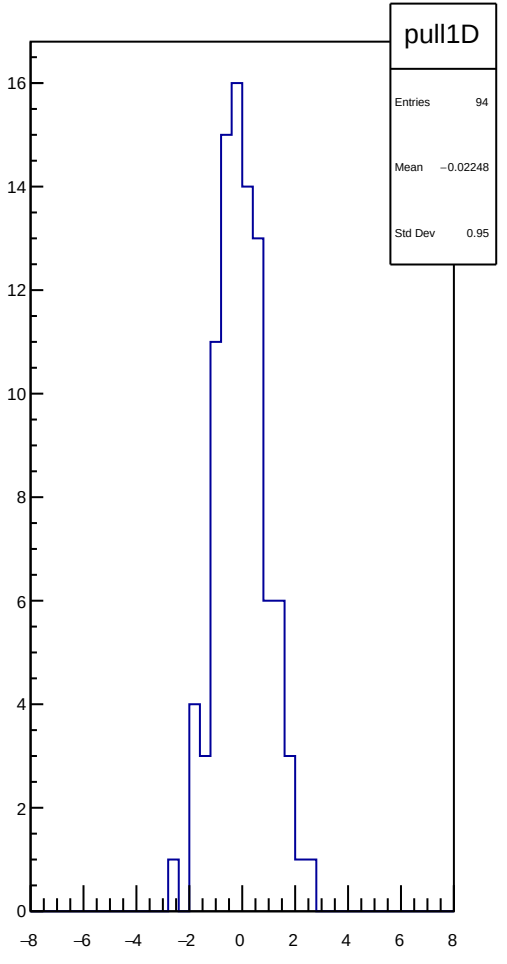

diff_bpm4eY_rms vs run
χ² / ndf 1.439e+05 / 93
p0 6881 ± 5.372
16000
14000
12000
10000
8000
6000
4000

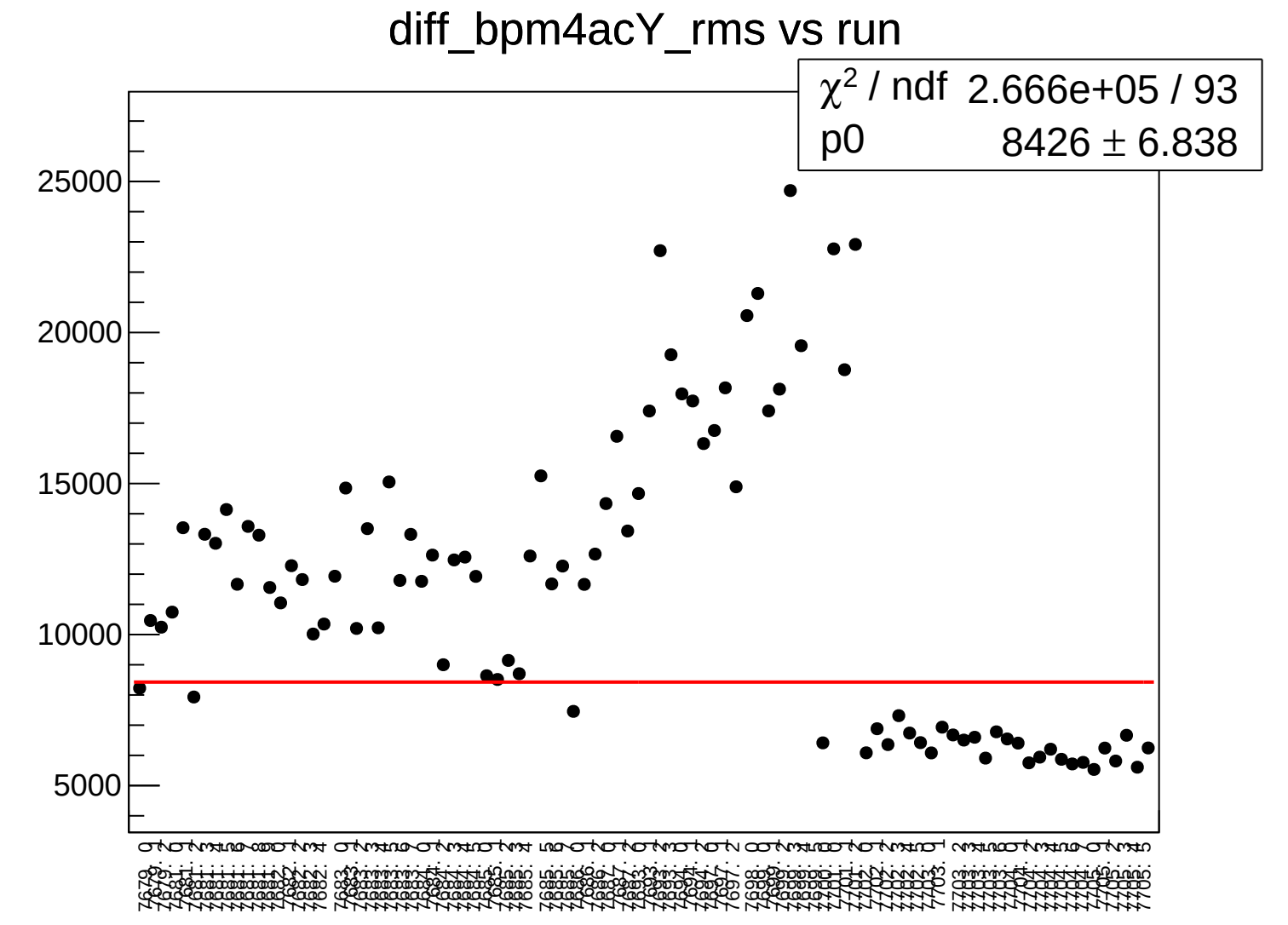

diff_bpm4acX_mean vs run
χ^2 / ndf 82.77 / 93
p0 11.82 ± 29.93
1000
500
0
−500
−1000
pull
Entries 94
Mean −354
Std Dev 406
2
1
0
−1
−2

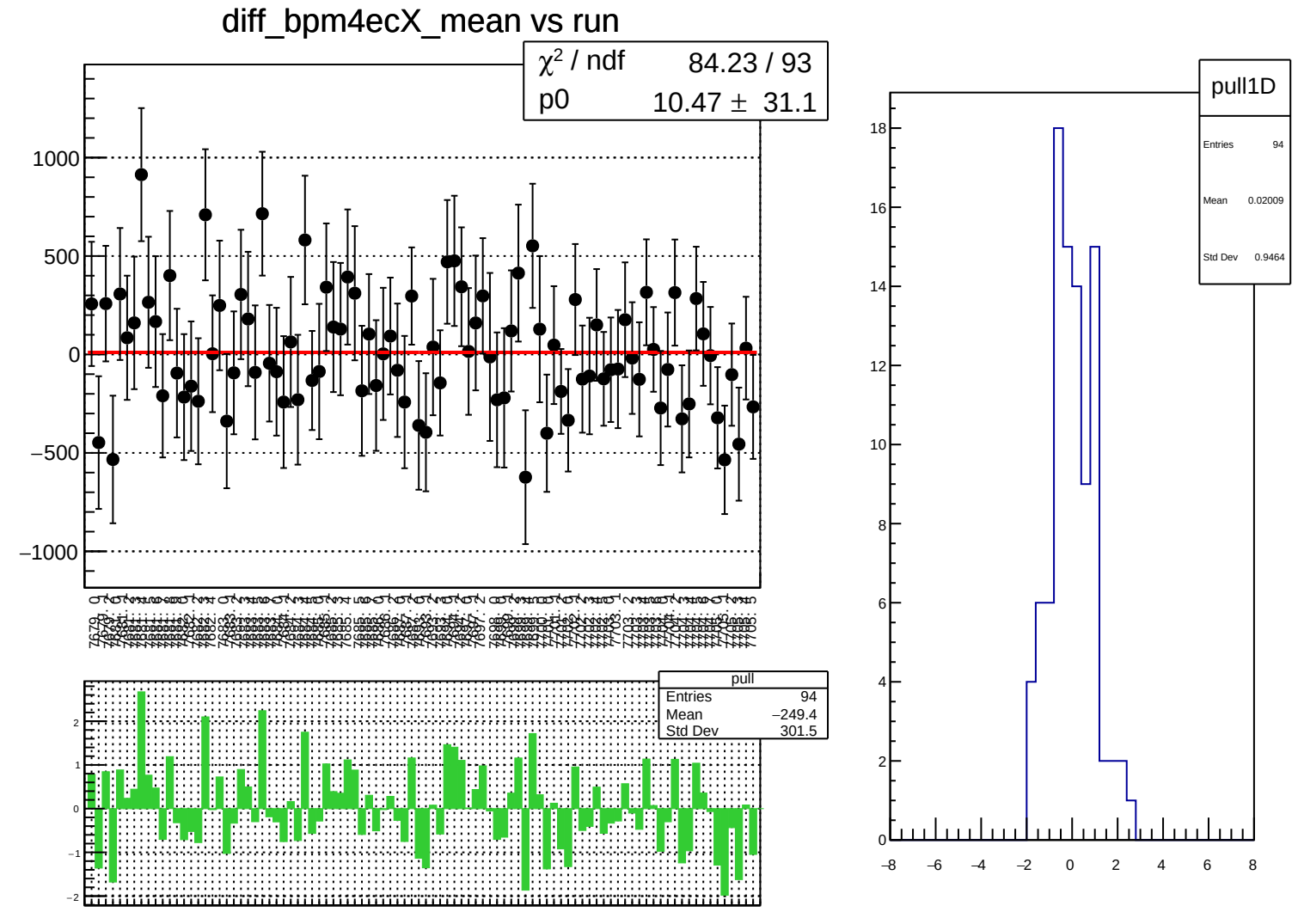

pull1D
Entries 94
Mean 0.01535
Std Dev 0.9383
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

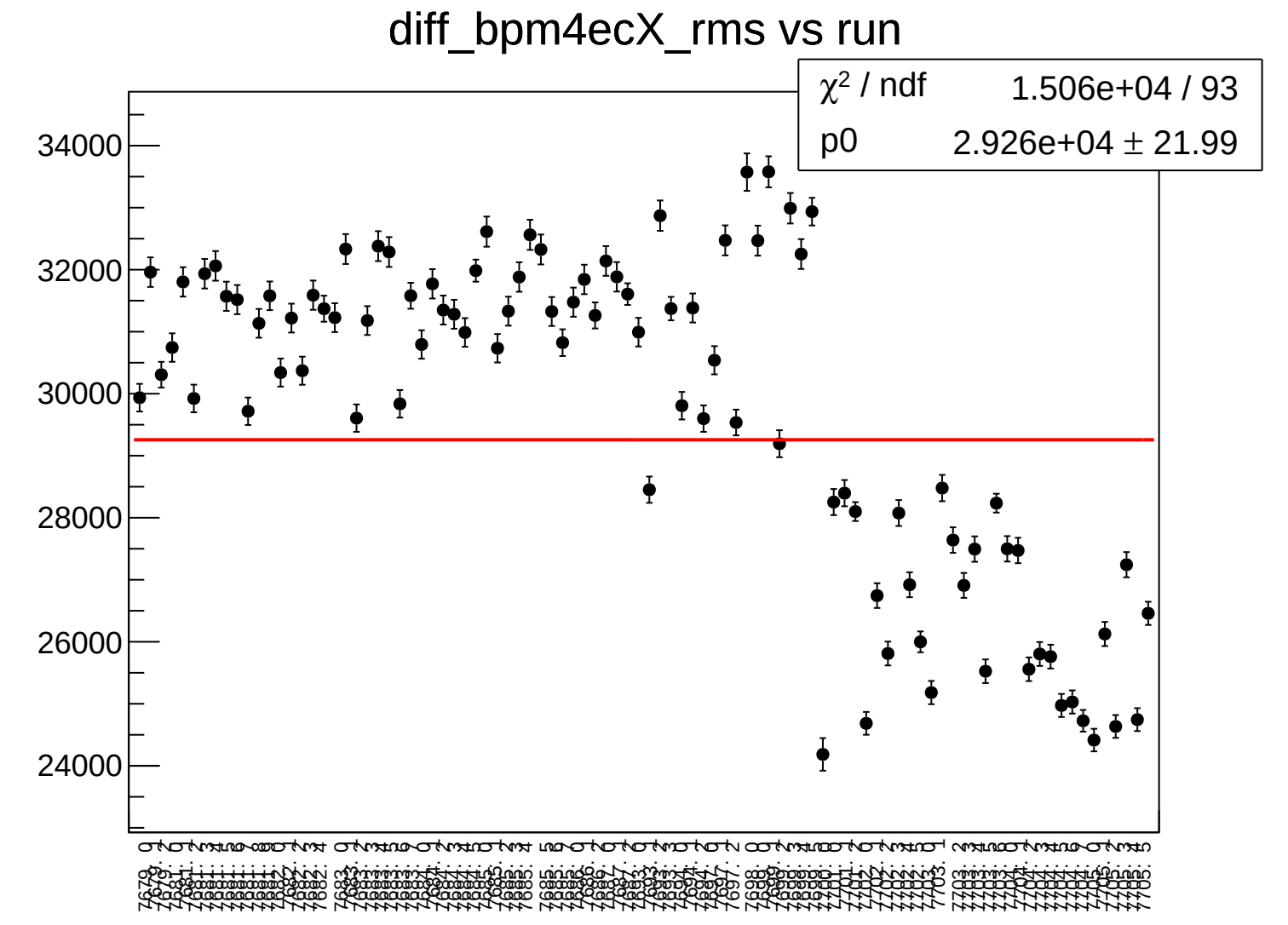

diff_bpm4acX_rms vs run
χ² / ndf 6498 / 93
p0 2.822e+04 ± 21.16
32000
31000
30000
29000
28000
27000
26000
25000
24000

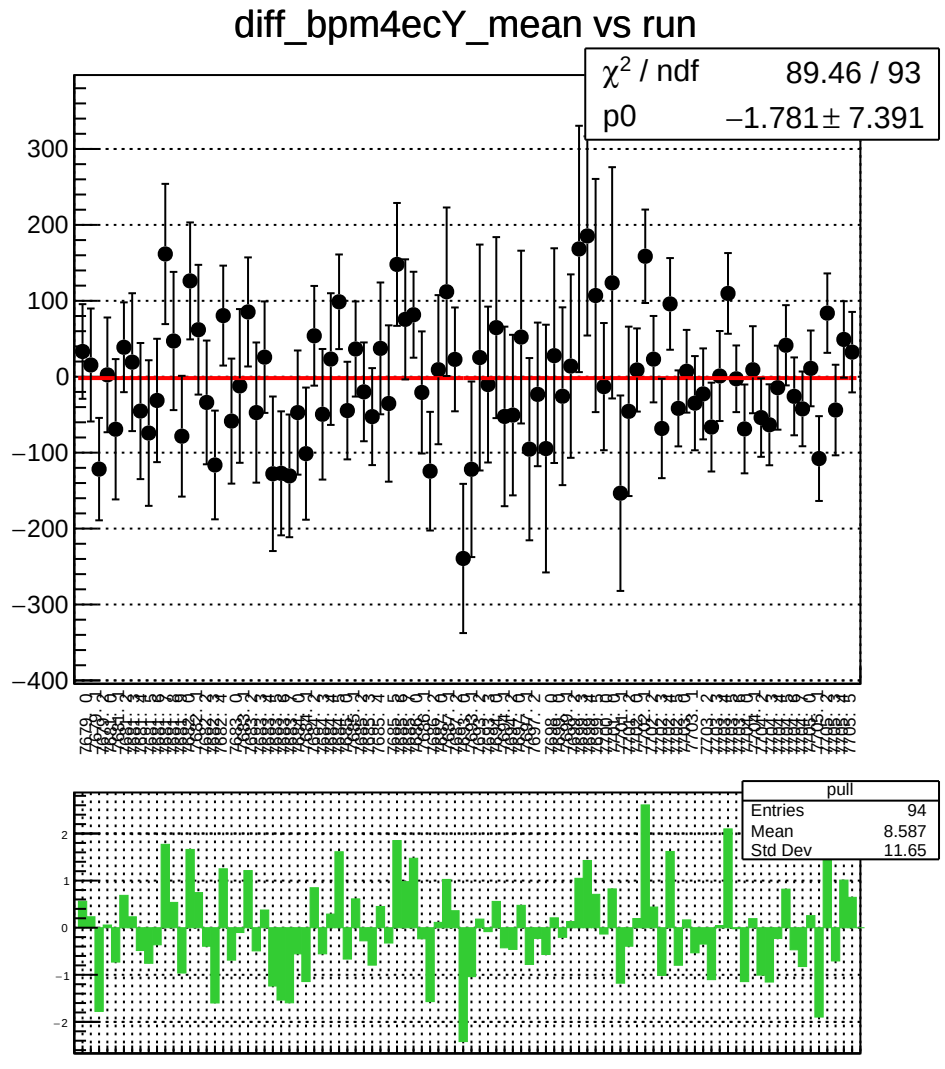

diff_bpm4acY_mean vs run
χ² / ndf 84.88 / 93
p0 −1.578 ± 9.671
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 2.638
Std Dev 22.38
2
1
0
−1
−2

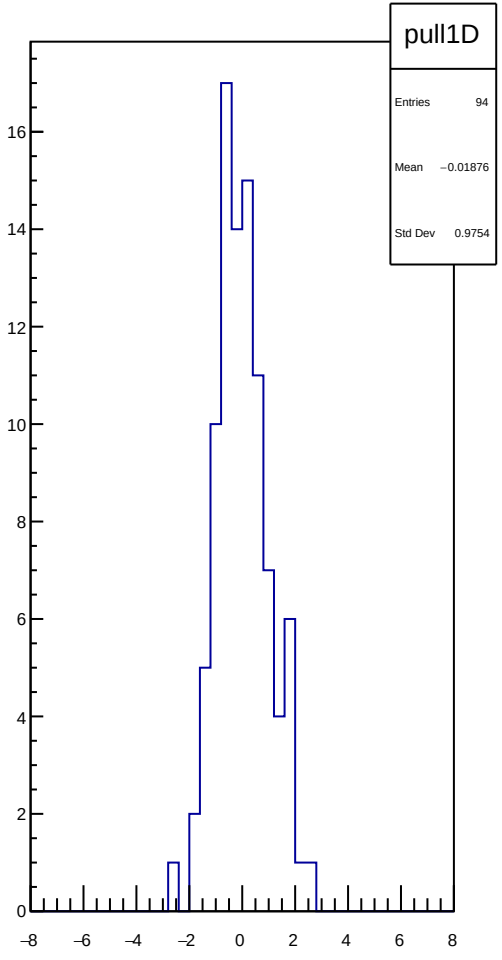

pull1D
Entries 94
Mean −0.02248
Std Dev 0.95
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

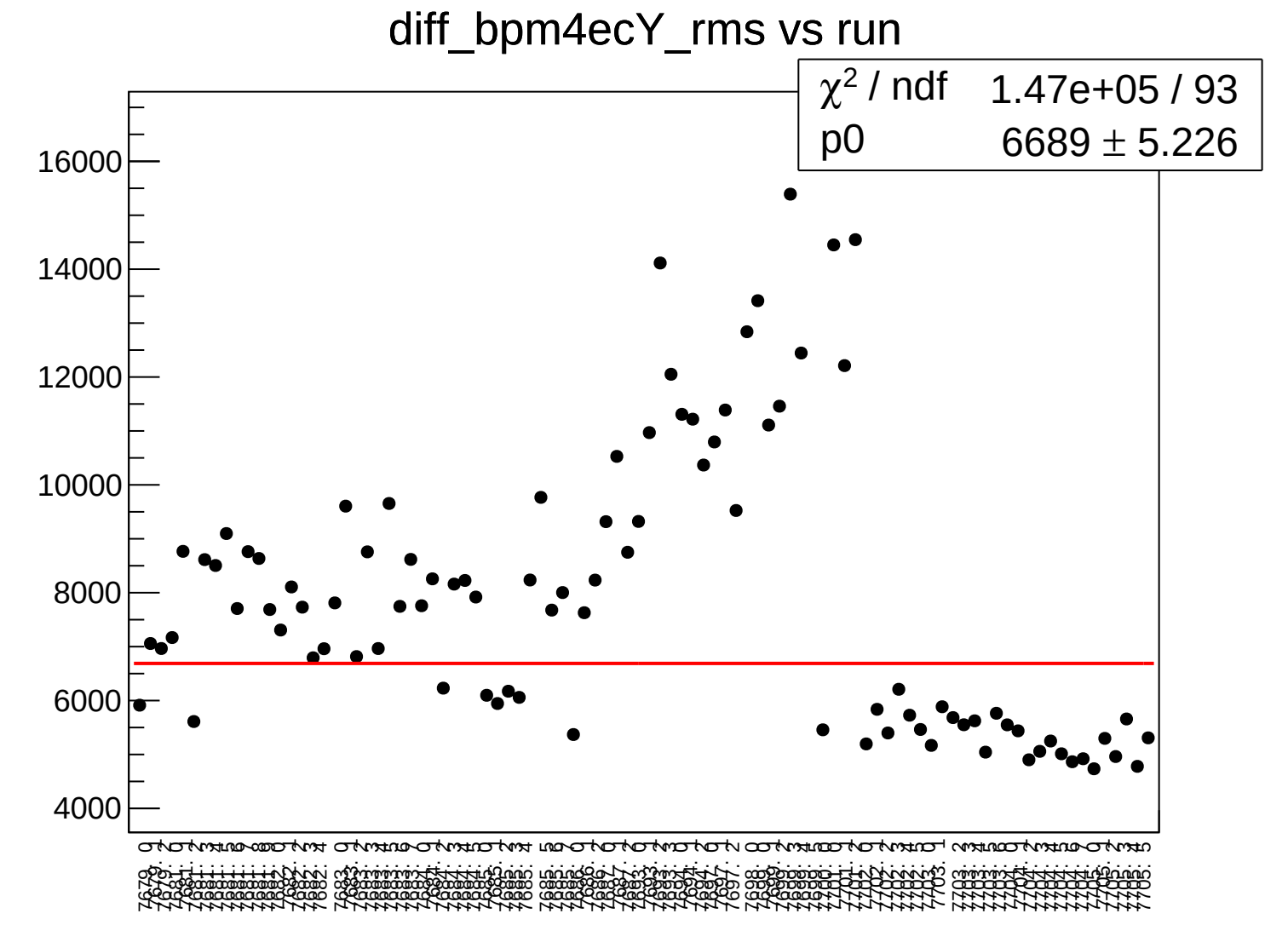

diff_bpm4acY_rms vs run
χ² / ndf 2.666e+05 / 93
p0 8426 ± 6.838
25000
20000
15000
10000
5000

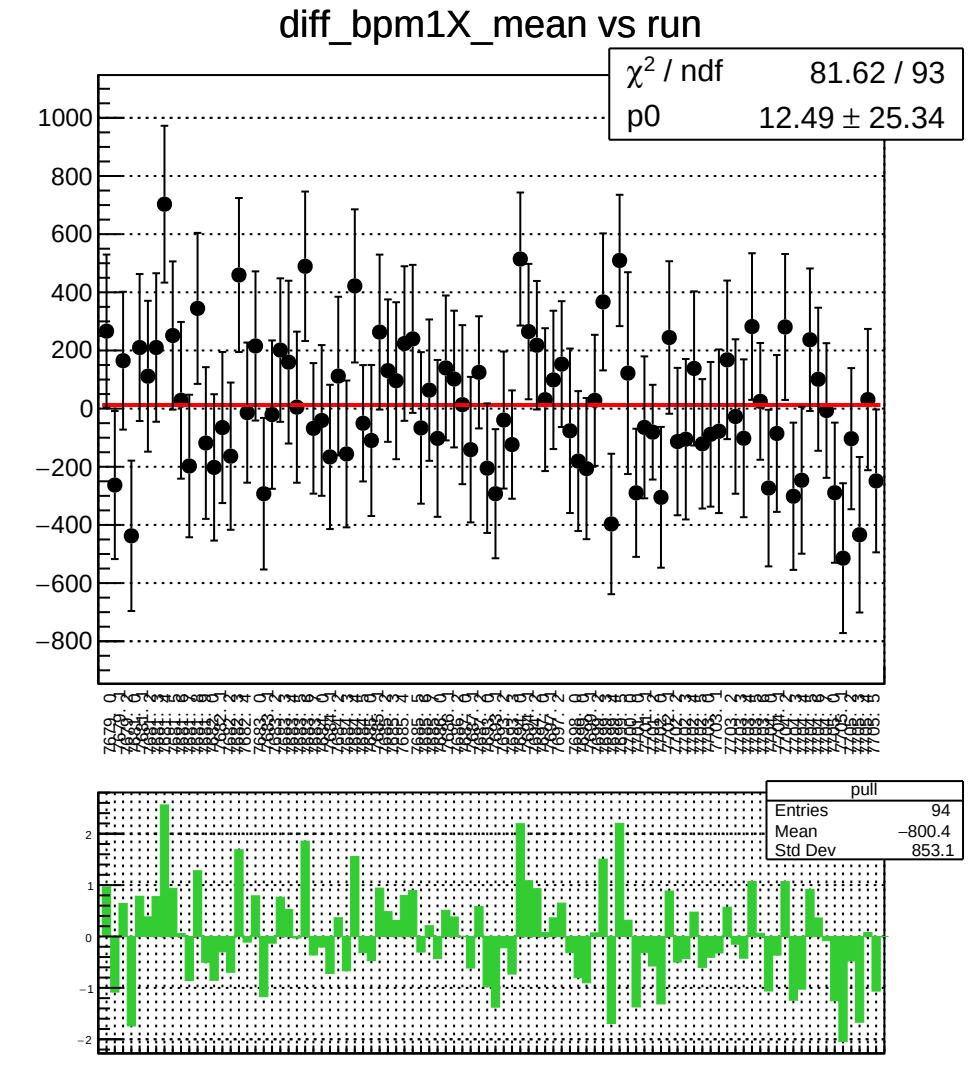

diff_bpm4ecX_mean vs run
χ² / ndf 84.23 / 93
p0 10.47 ± 31.1
1000
500
0
−500
−1000
pull
Entries 94
Mean −249.4
Std Dev 301.5
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.02009
Std Dev 0.9464
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

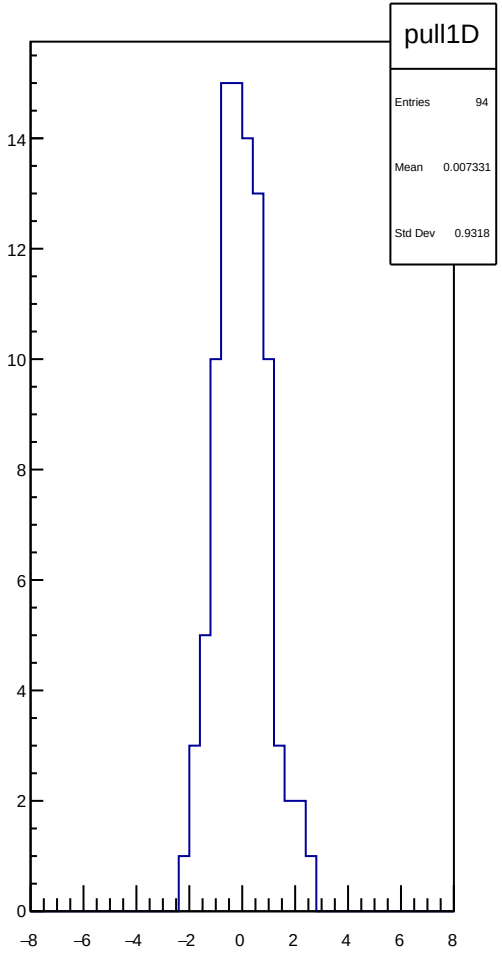

diff_bpm4ecX_rms vs run
χ² / ndf 1.506e+04 / 93
p0 2.926e+04 ± 21.99
34000
32000
30000
28000
26000
24000

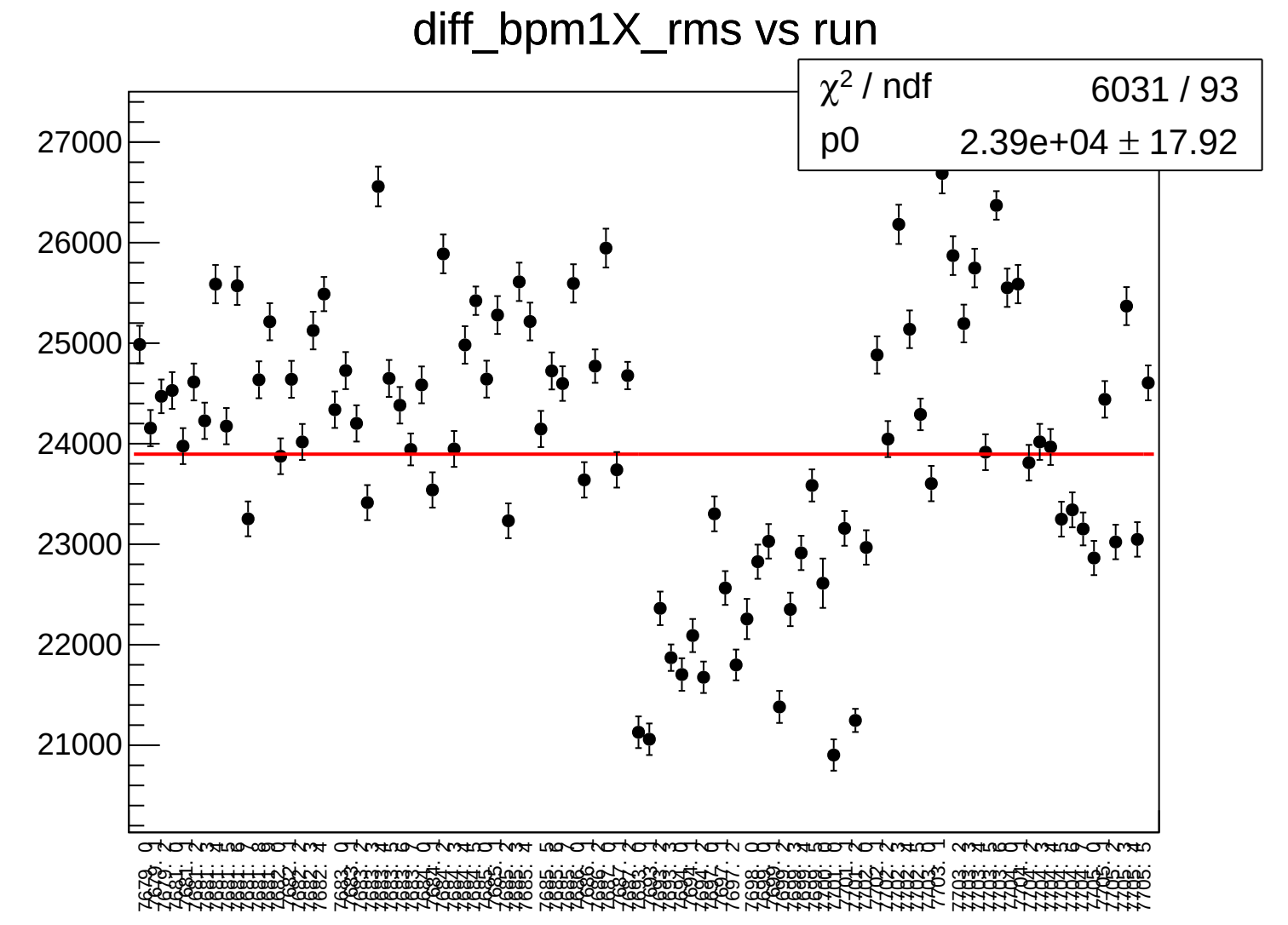

diff_bpm4ecY_mean vs run
χ^2 / ndf 89.46 / 93
p0 −1.781 ± 7.391
pull
Entries 94
Mean 8.587
Std Dev 11.65

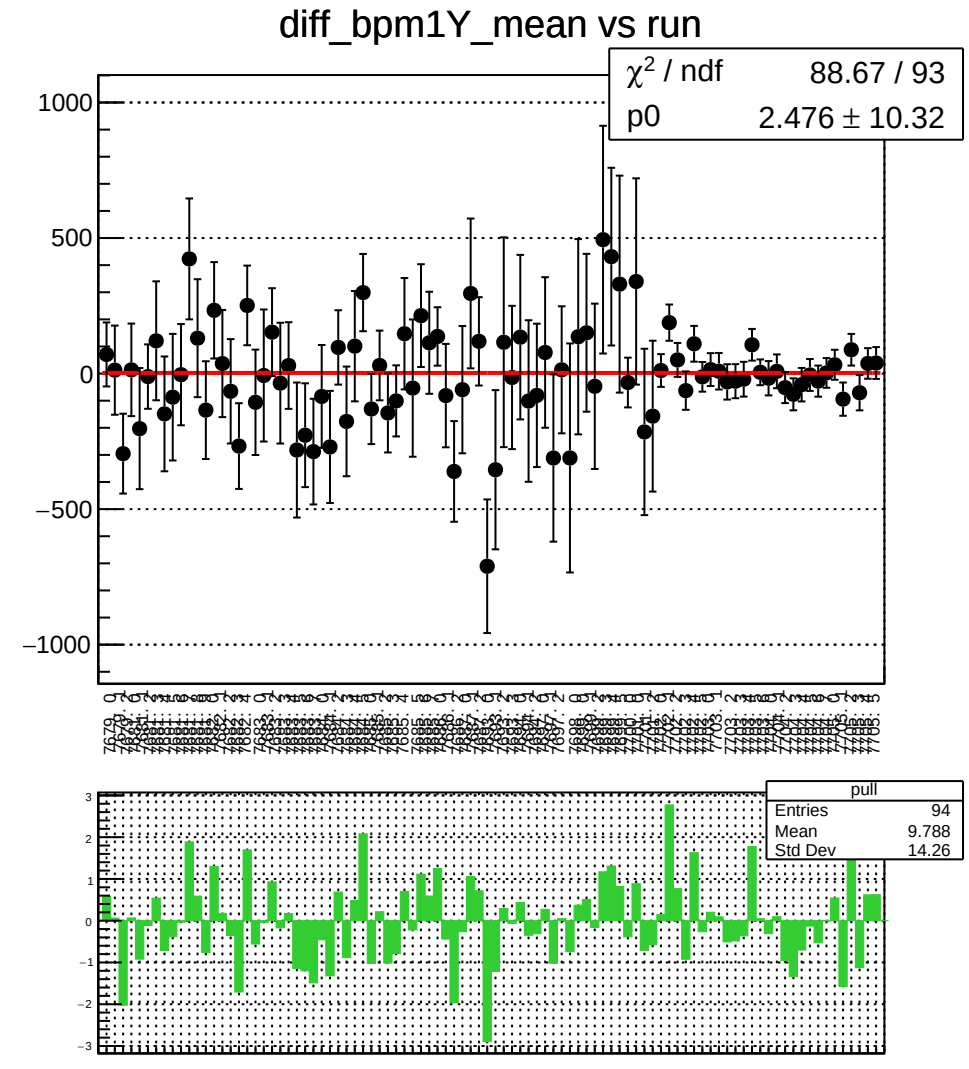

pull1D
Entries 94
Mean −0.01876
Std Dev 0.9754

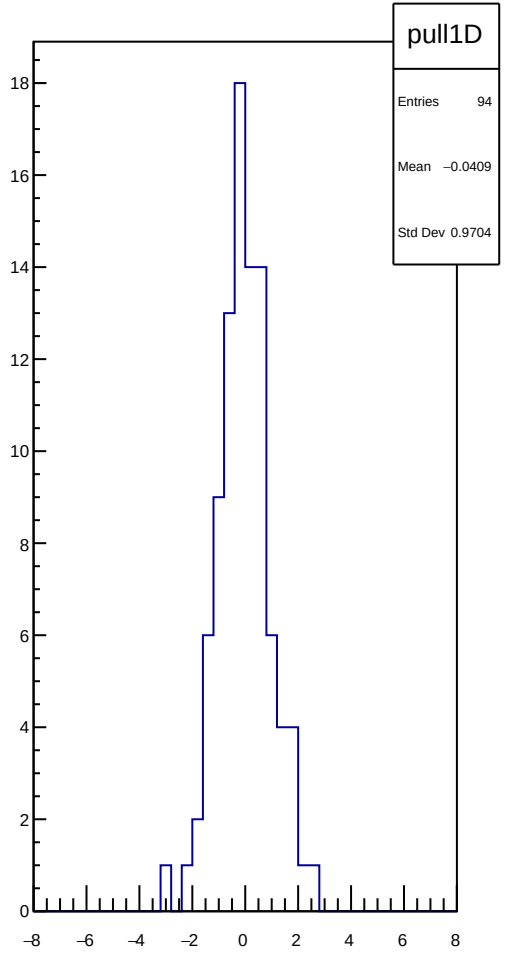

diff_bpm4ecY_rms vs run
χ² / ndf 1.47e+05 / 93
p0 6689 ± 5.226
16000
14000
12000
10000
8000
6000
4000

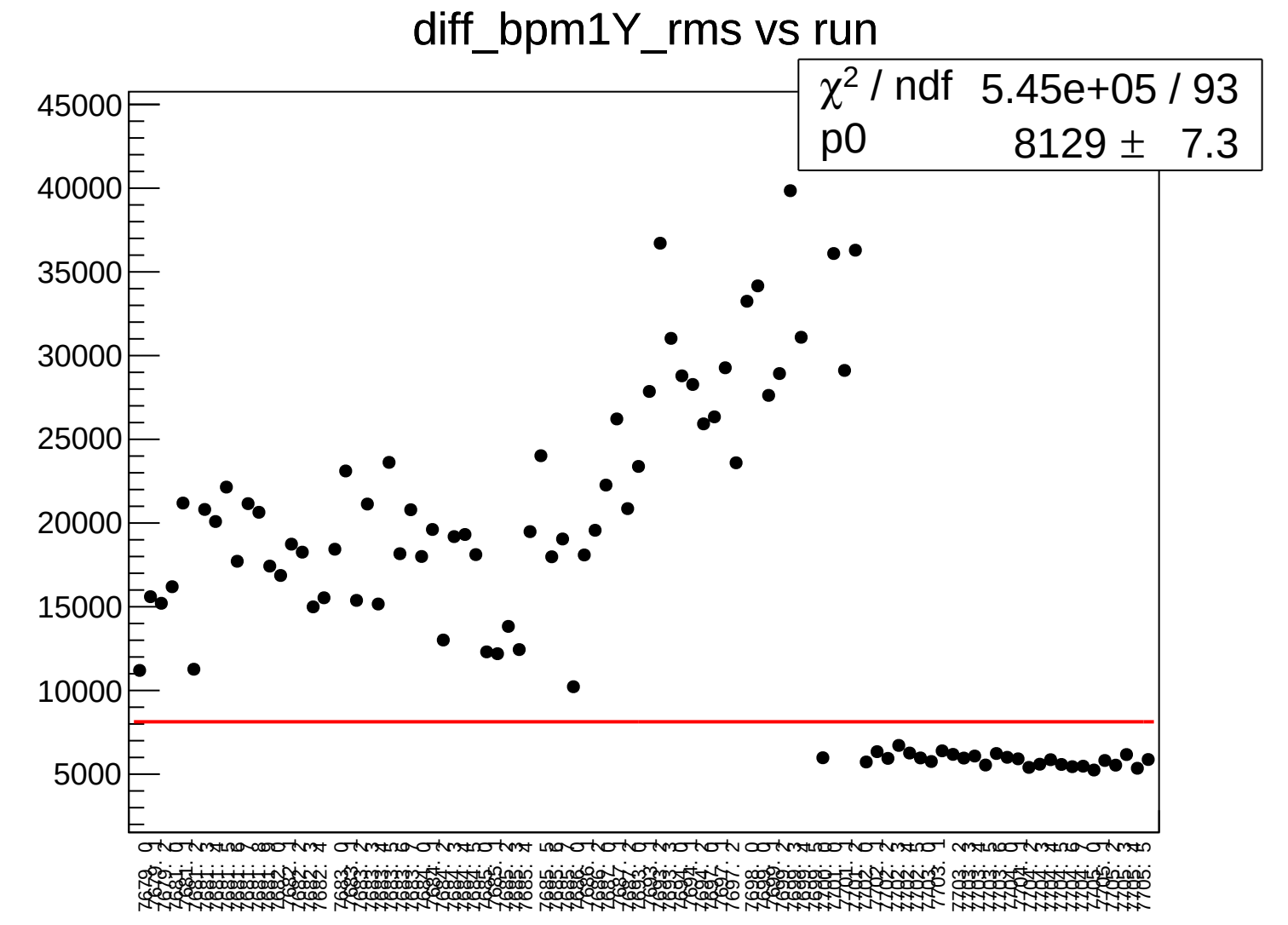

diff_bpm1X_mean vs run
χ^2 / ndf 81.62 / 93
p0 12.49 ± 25.34
pull
Entries 94
Mean −800.4
Std Dev 853.1

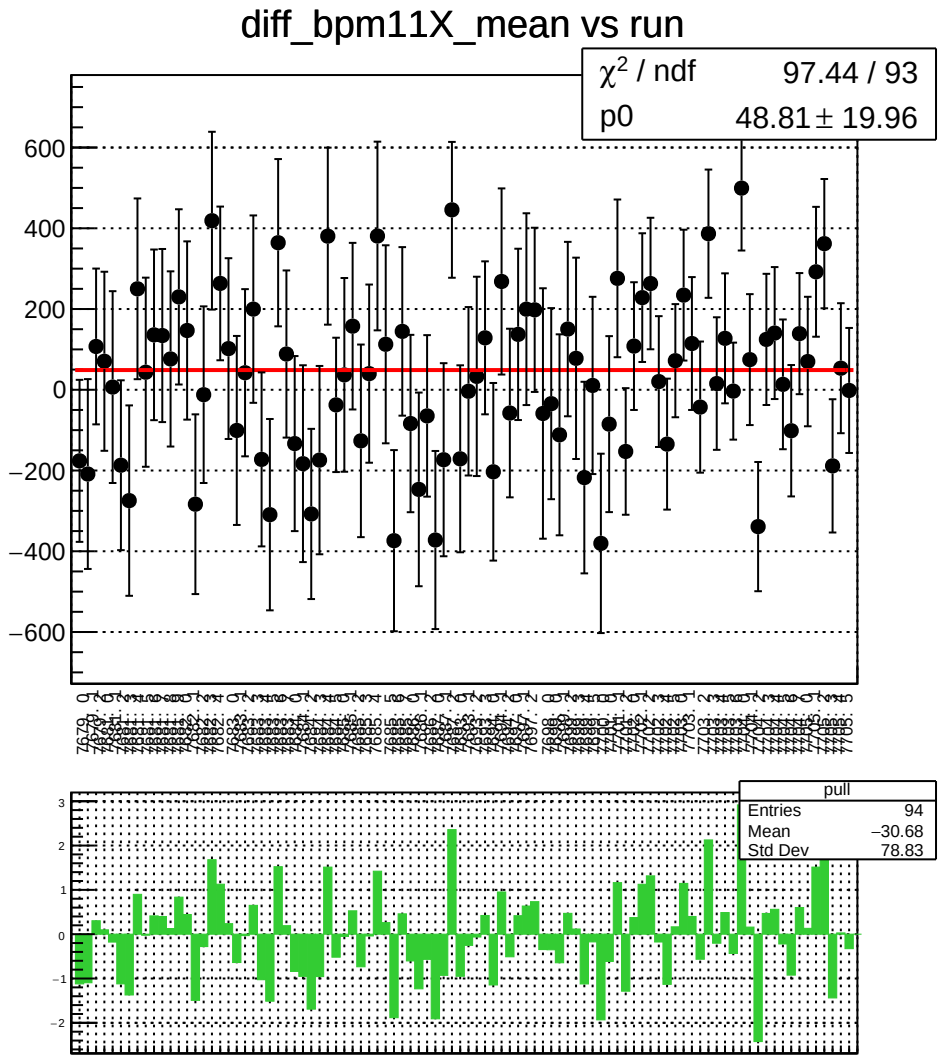

pull1D
Entries 94
Mean 0.007331
Std Dev 0.9318

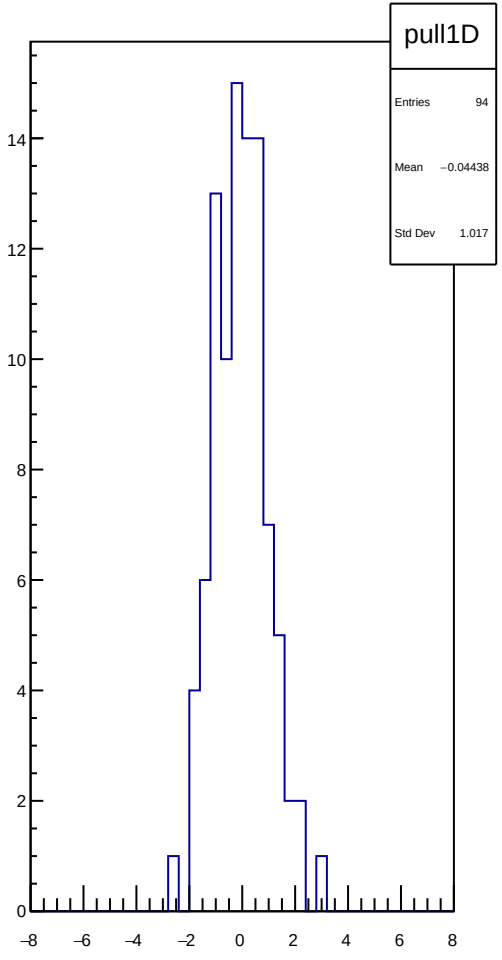

diff_bpm1X_rms vs run
χ^2 / ndf 6031 / 93
p0 2.39e+04 ± 17.92
27000
26000
25000
24000
23000
22000
21000

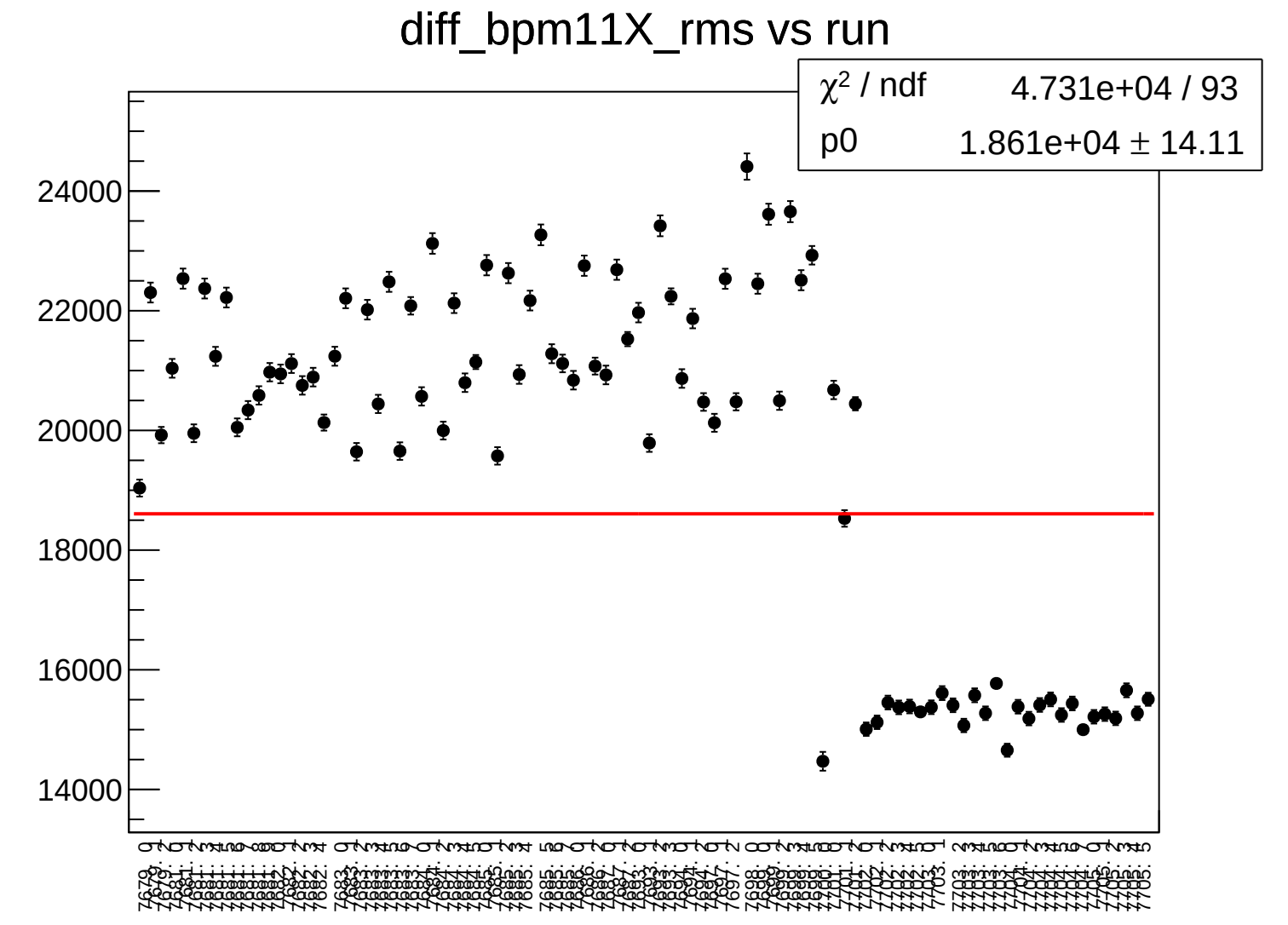

diff_bpm1Y_mean vs run
χ² / ndf 88.67 / 93
p0 2.476 ± 10.32
1000
500
0
−500
−1000
pull
Entries 94
Mean 9.788
Std Dev 14.26
3
2
1
0
−1
−2
−3

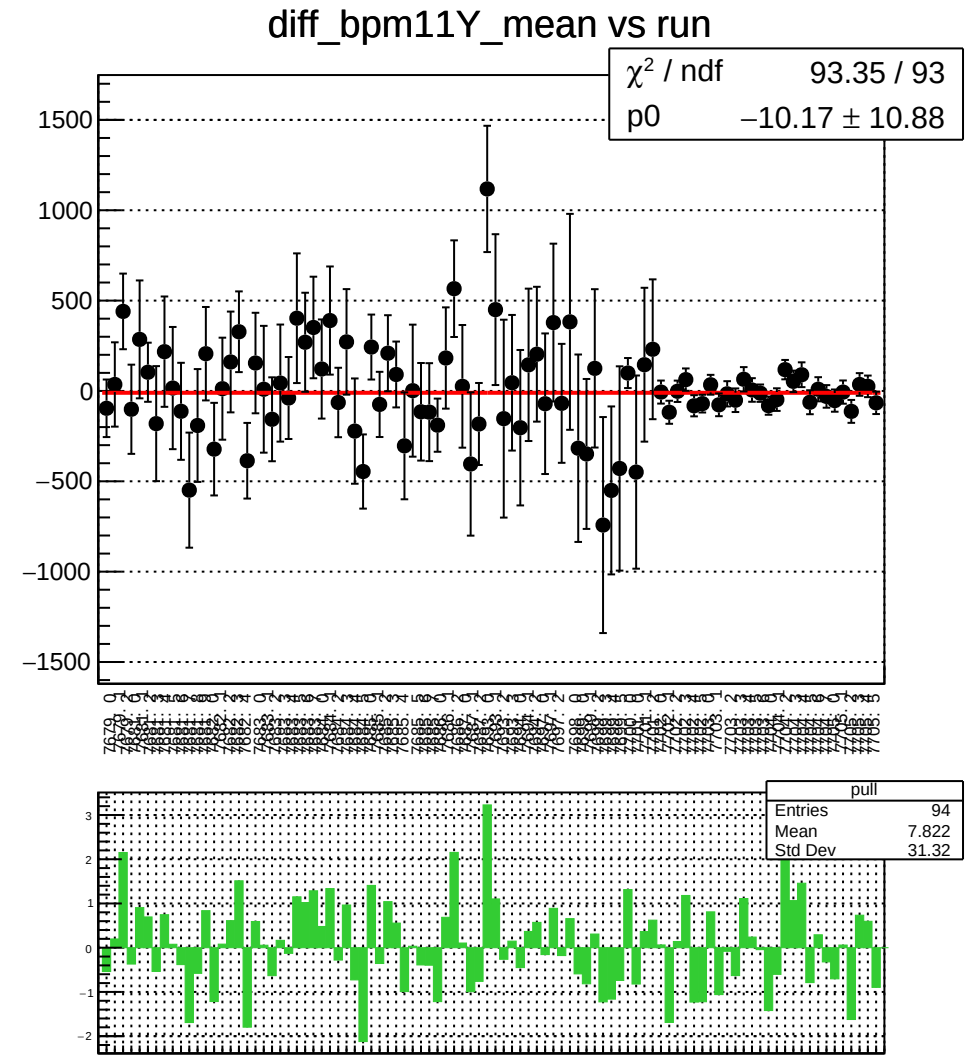

pull1D
Entries 94
Mean −0.0409
Std Dev 0.9704
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

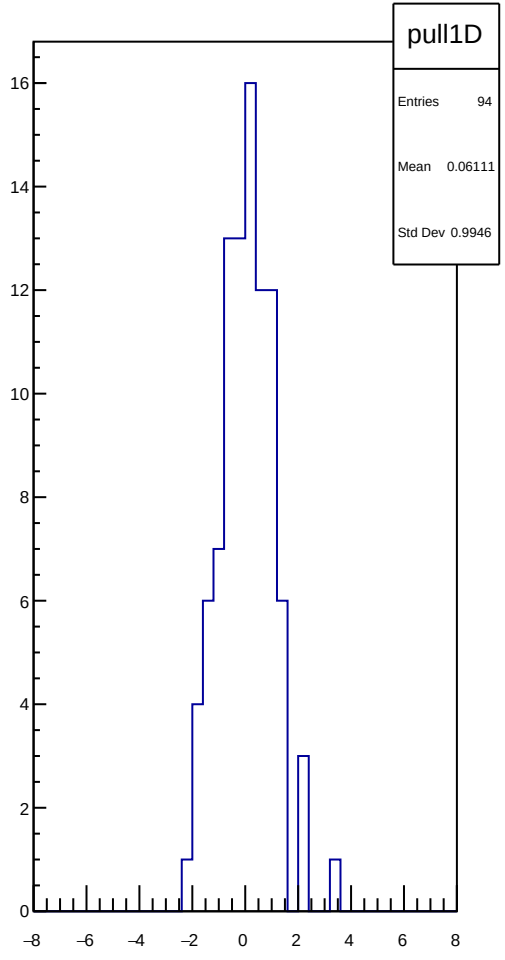

diff_bpm1Y_rms vs run
χ² / ndf 5.45e+05 / 93
p0 8129 ± 7.3
45000
40000
35000
30000
25000
20000
15000
10000
5000

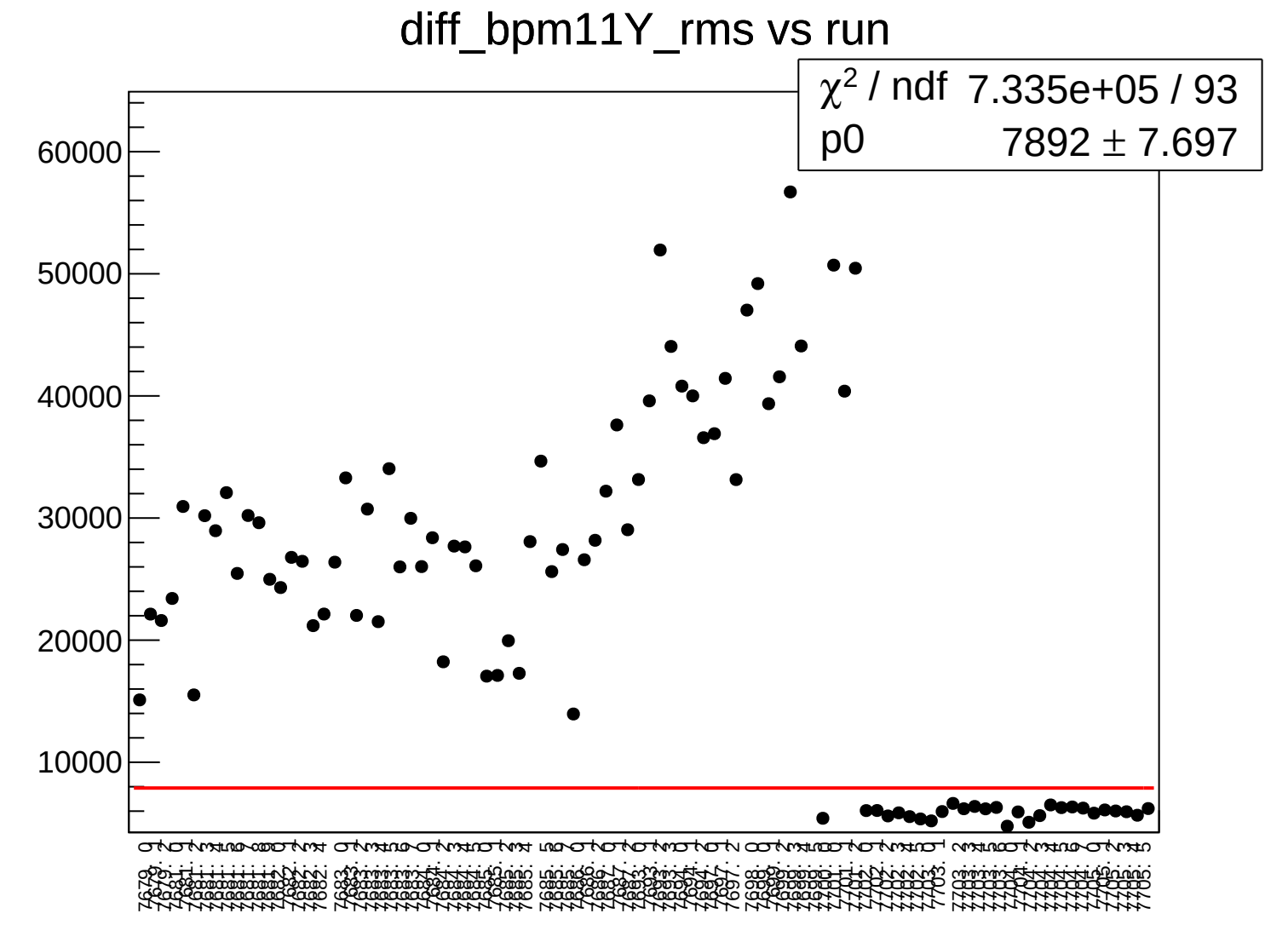

diff_bpm11X_mean vs run
χ^2 / ndf 97.44 / 93
p0 48.81 ± 19.96
pull
Entries 94
Mean −30.68
Std Dev 78.83

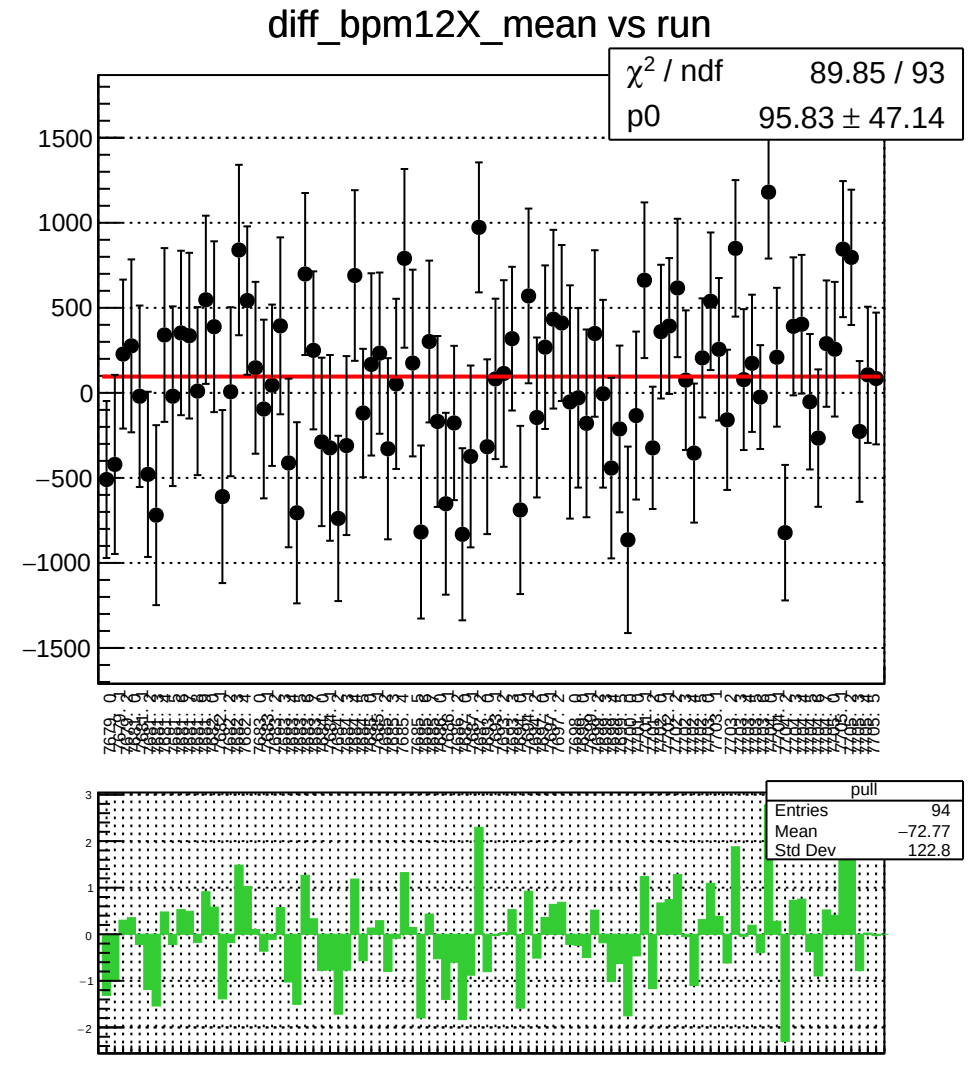

pull1D
Entries 94
Mean −0.04438
Std Dev 1.017

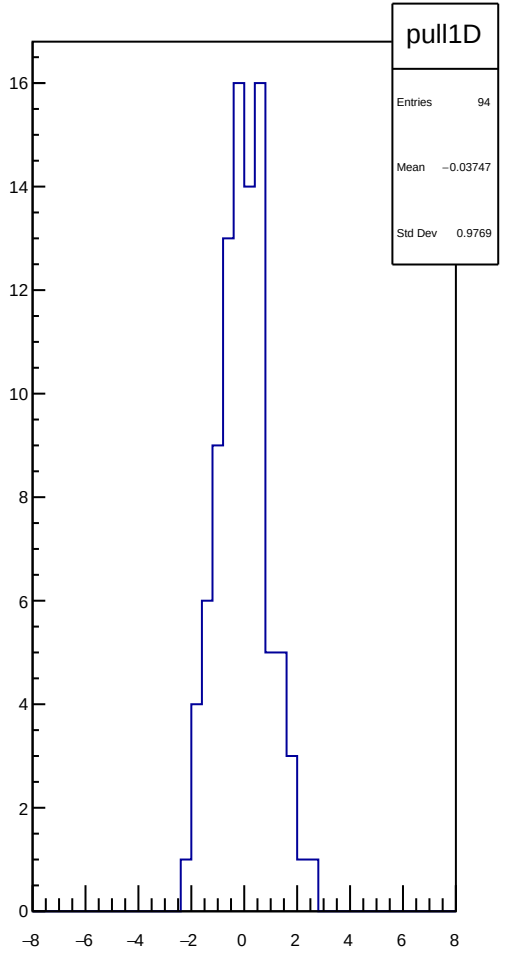

diff_bpm11X_rms vs run
χ² / ndf 4.731e+04 / 93
p0 1.861e+04 ± 14.11
24000
22000
20000
18000
16000
14000

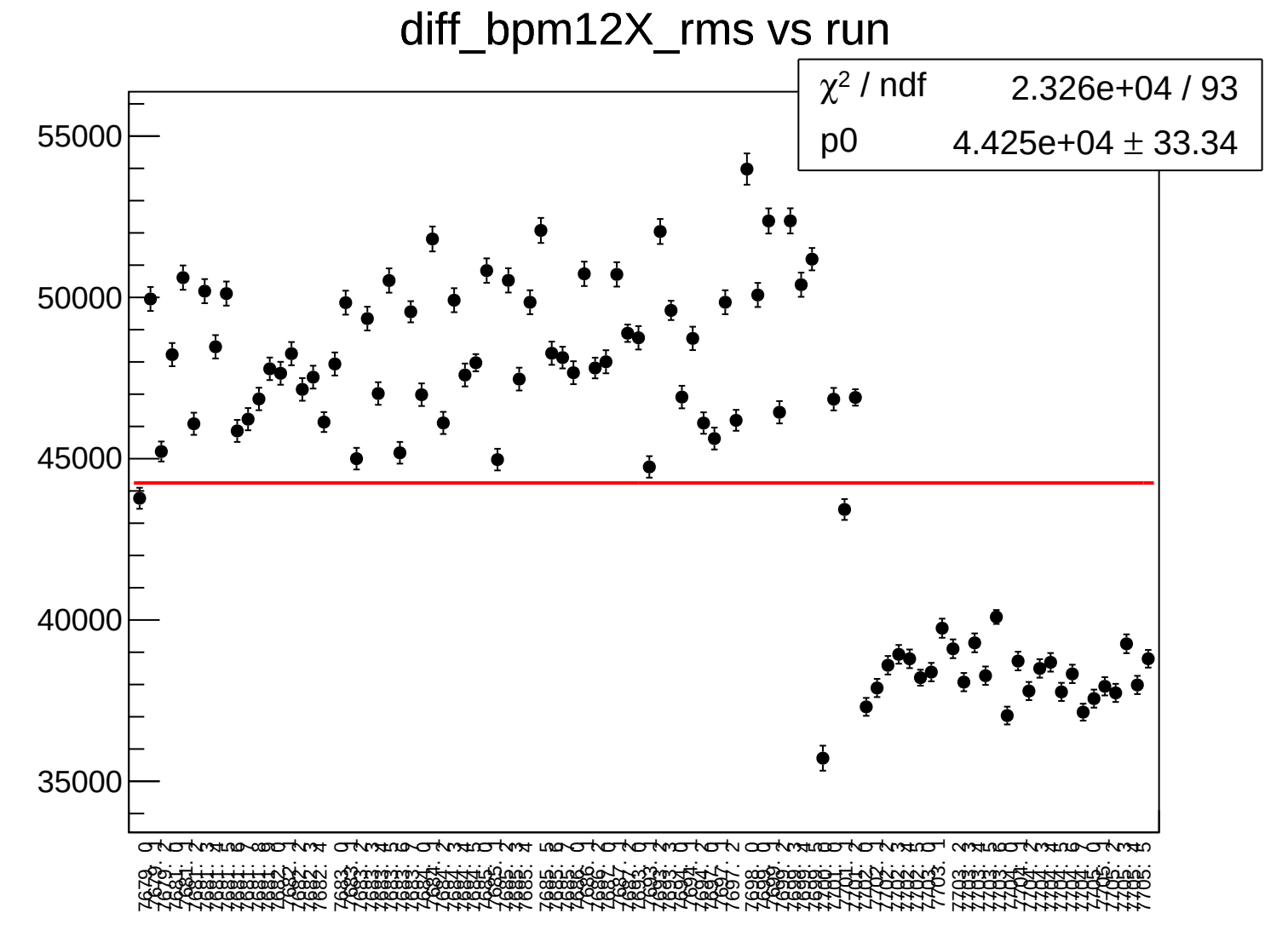

diff_bpm11Y_mean vs run
χ² / ndf 93.35 / 93
p0 −10.17 ± 10.88
1500
1000
500
0
−500
−1000
−1500
pull
Entries 94
Mean 7.822
Std Dev 31.32
3
2
1
0
−1
−2

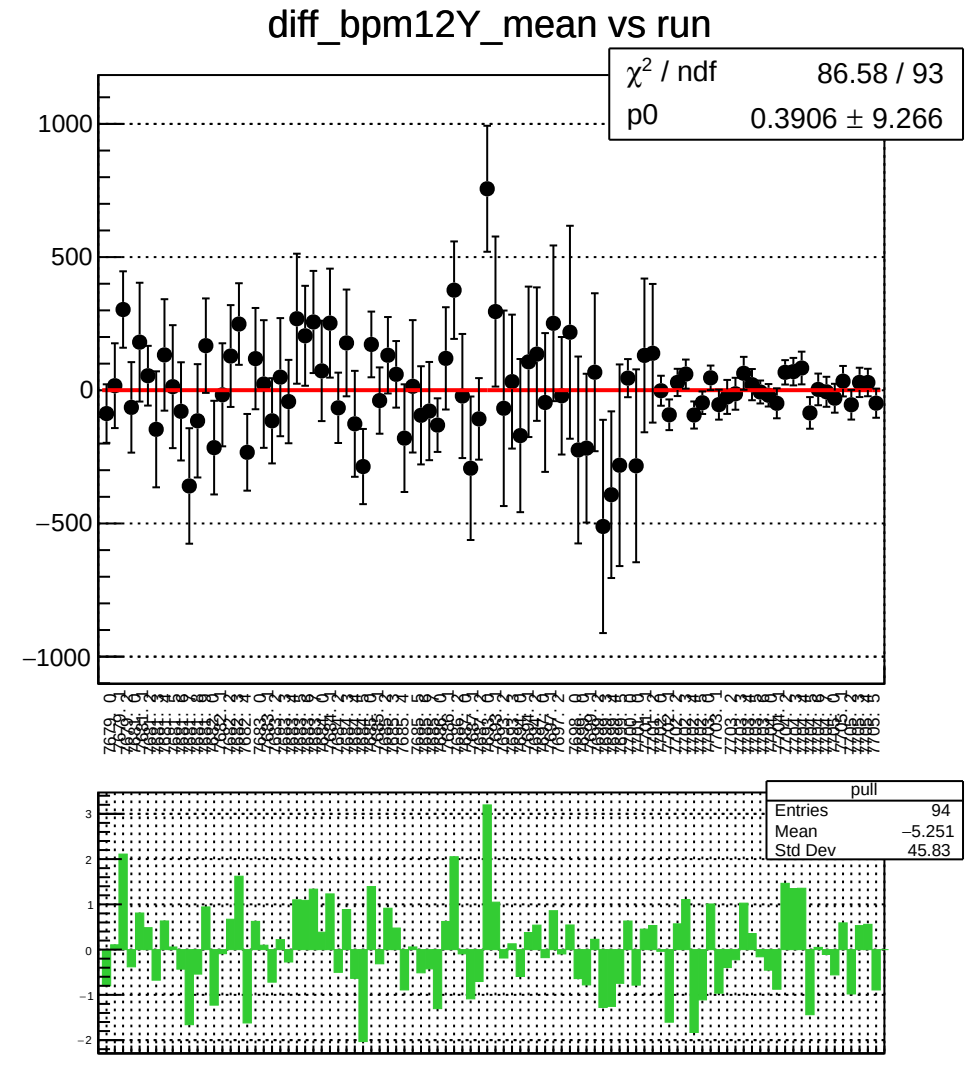

pull1D
Entries 94
Mean 0.06111
Std Dev 0.9946
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

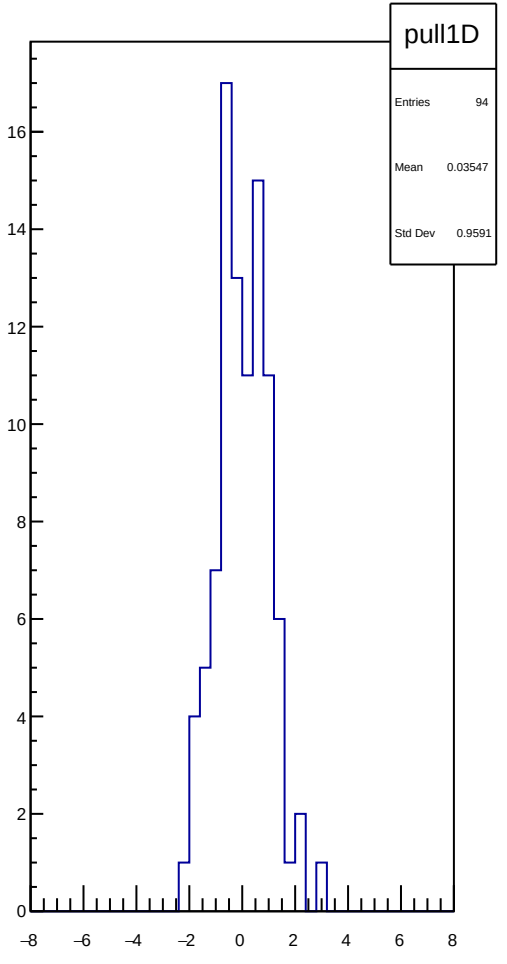

diff_bpm11Y_rms vs run
χ^2 / ndf 7.335e+05 / 93
p0 7892 ± 7.697
60000
50000
40000
30000
20000
10000

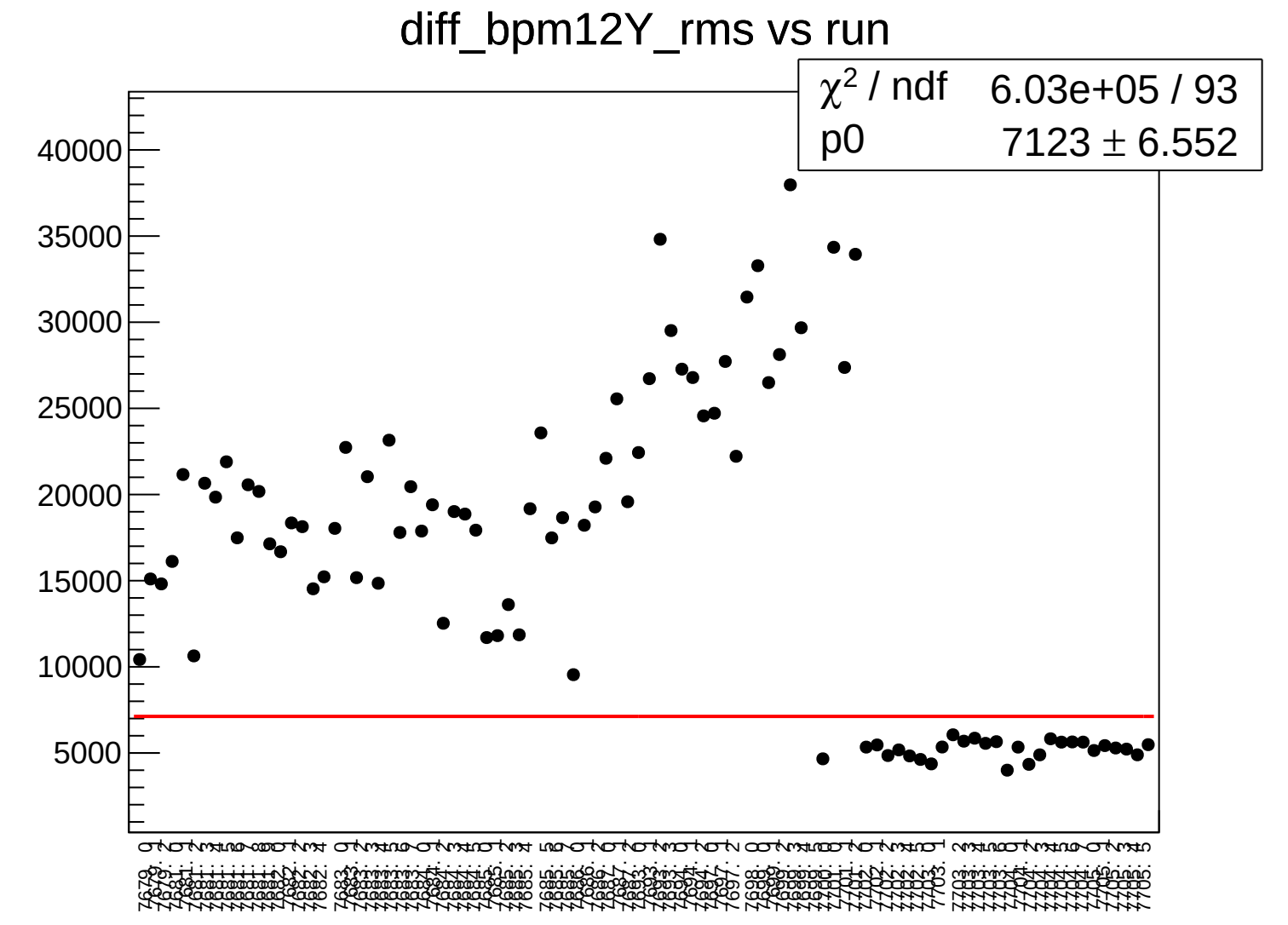

diff_bpm12X_mean vs run
χ² / ndf 89.85 / 93
p0 95.83 ± 47.14
1500
1000
500
0
−500
−1000
−1500
pull
Entries 94
Mean −72.77
Std Dev 122.8
3
2
1
0
−1
−2

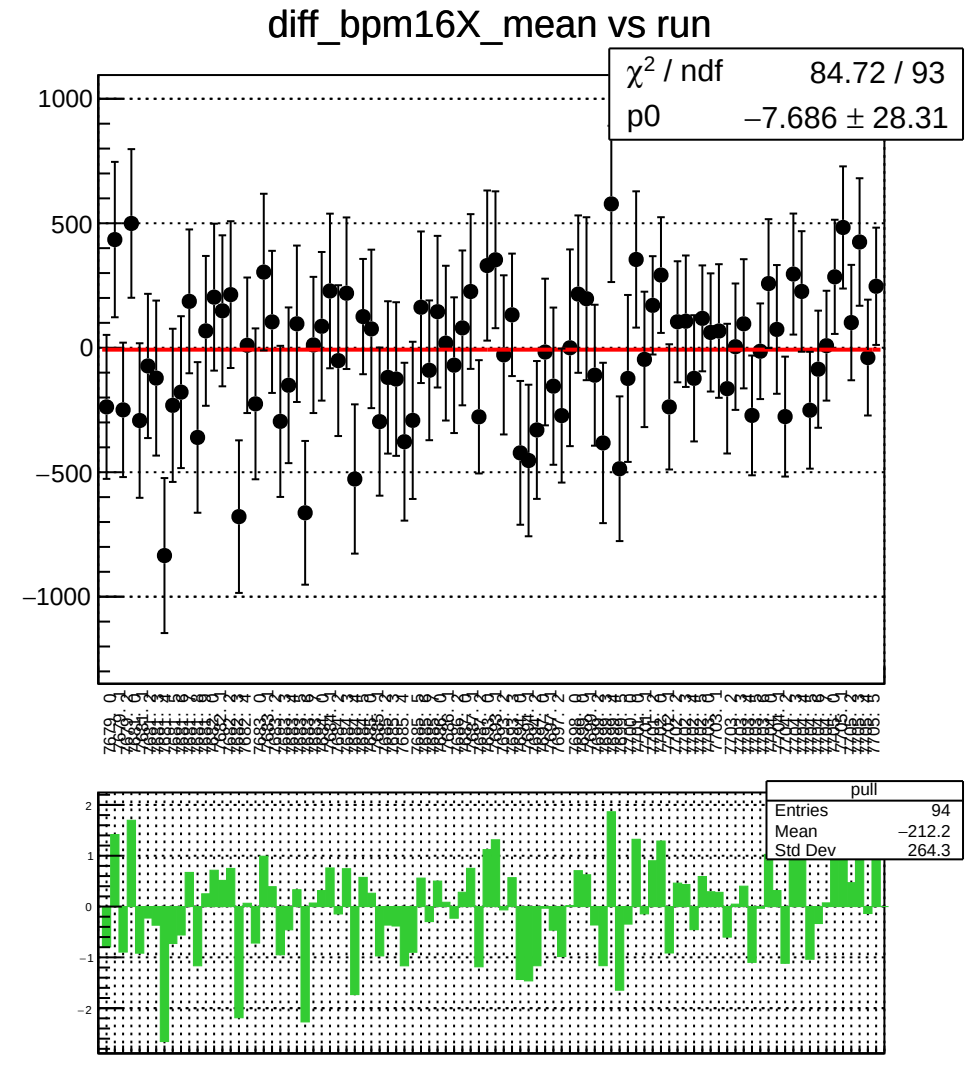

pull1D
Entries 94
Mean −0.03747
Std Dev 0.9769
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

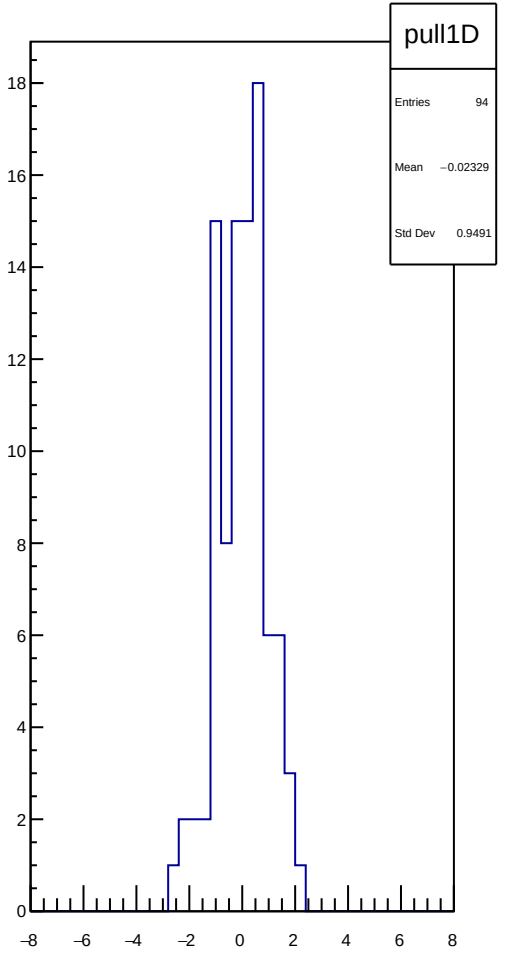

diff_bpm12X_rms vs run
χ² / ndf 2.326e+04 / 93
p0 4.425e+04 ± 33.34
55000
50000
45000
40000
35000

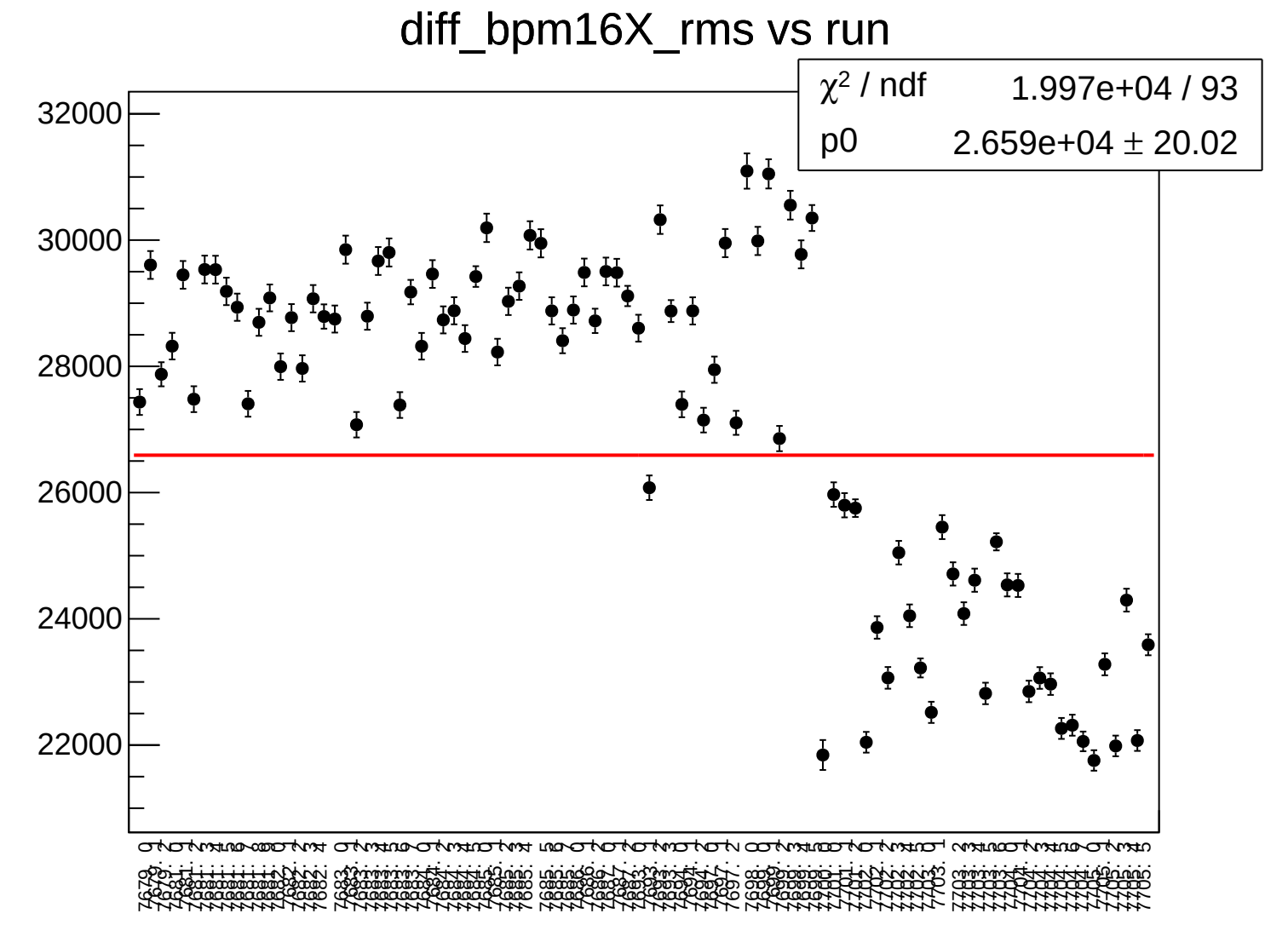

diff_bpm12Y_mean vs run
χ² / ndf 86.58 / 93
p0 0.3906 ± 9.266
1000
500
0
−500
−1000
pull
Entries 94
Mean −5.251
Std Dev 45.83
3
2
1
0
−1
−2

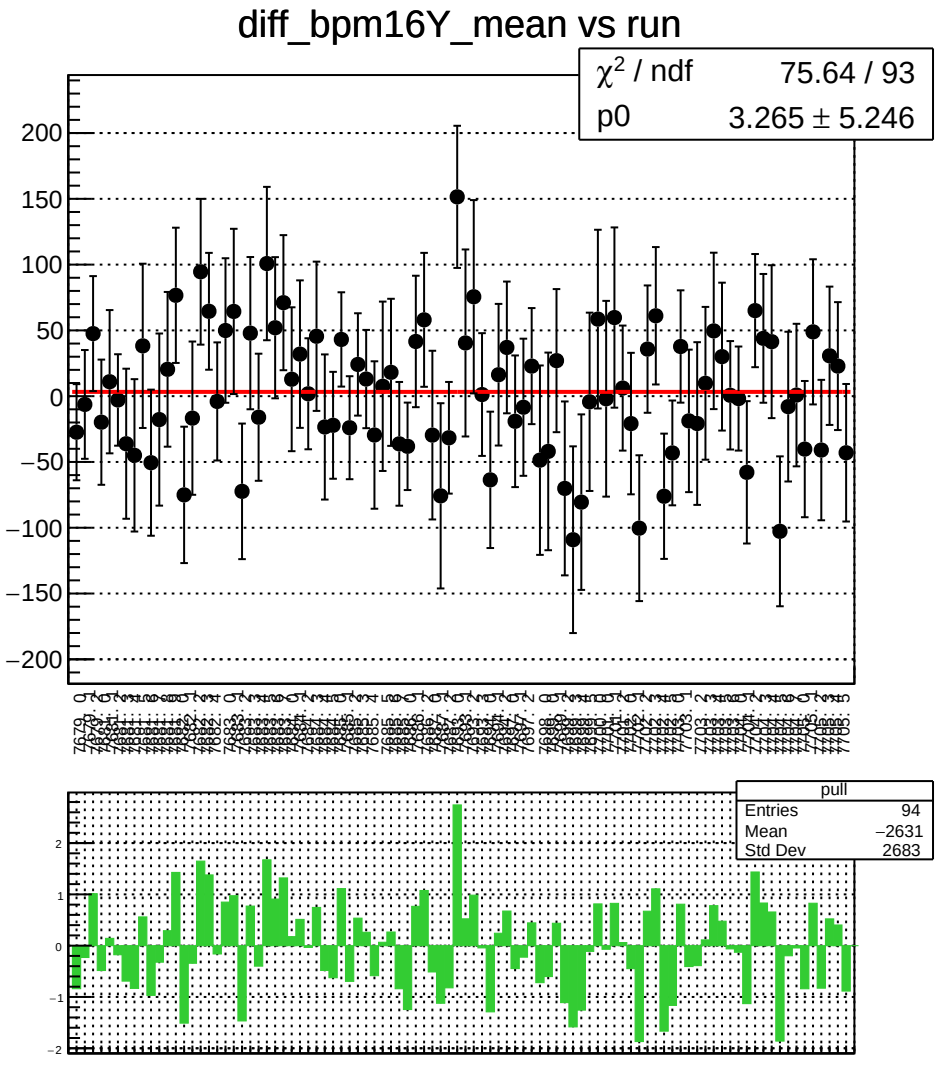

pull1D
Entries 94
Mean 0.03547
Std Dev 0.9591
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

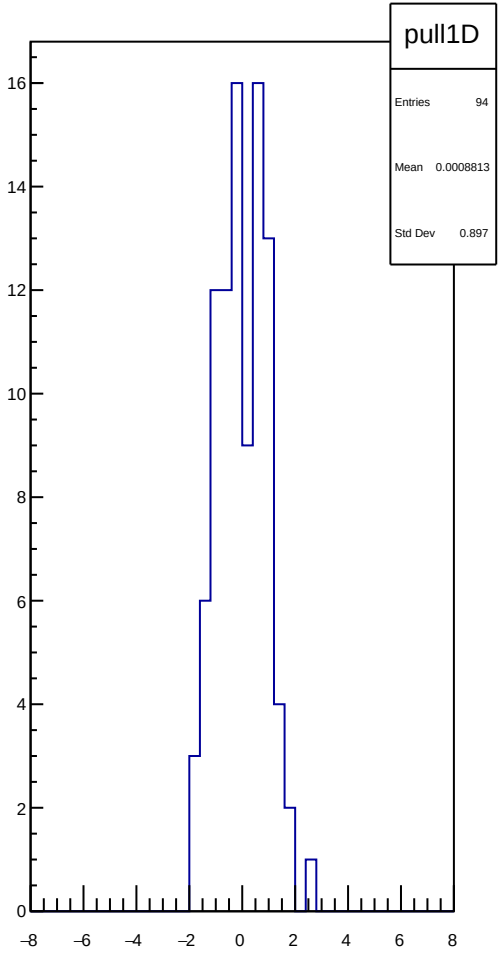

diff_bpm12Y_rms vs run
χ^2 / ndf 6.03e+05 / 93
p0 7123 ± 6.552
40000
35000
30000
25000
20000
15000
10000
5000

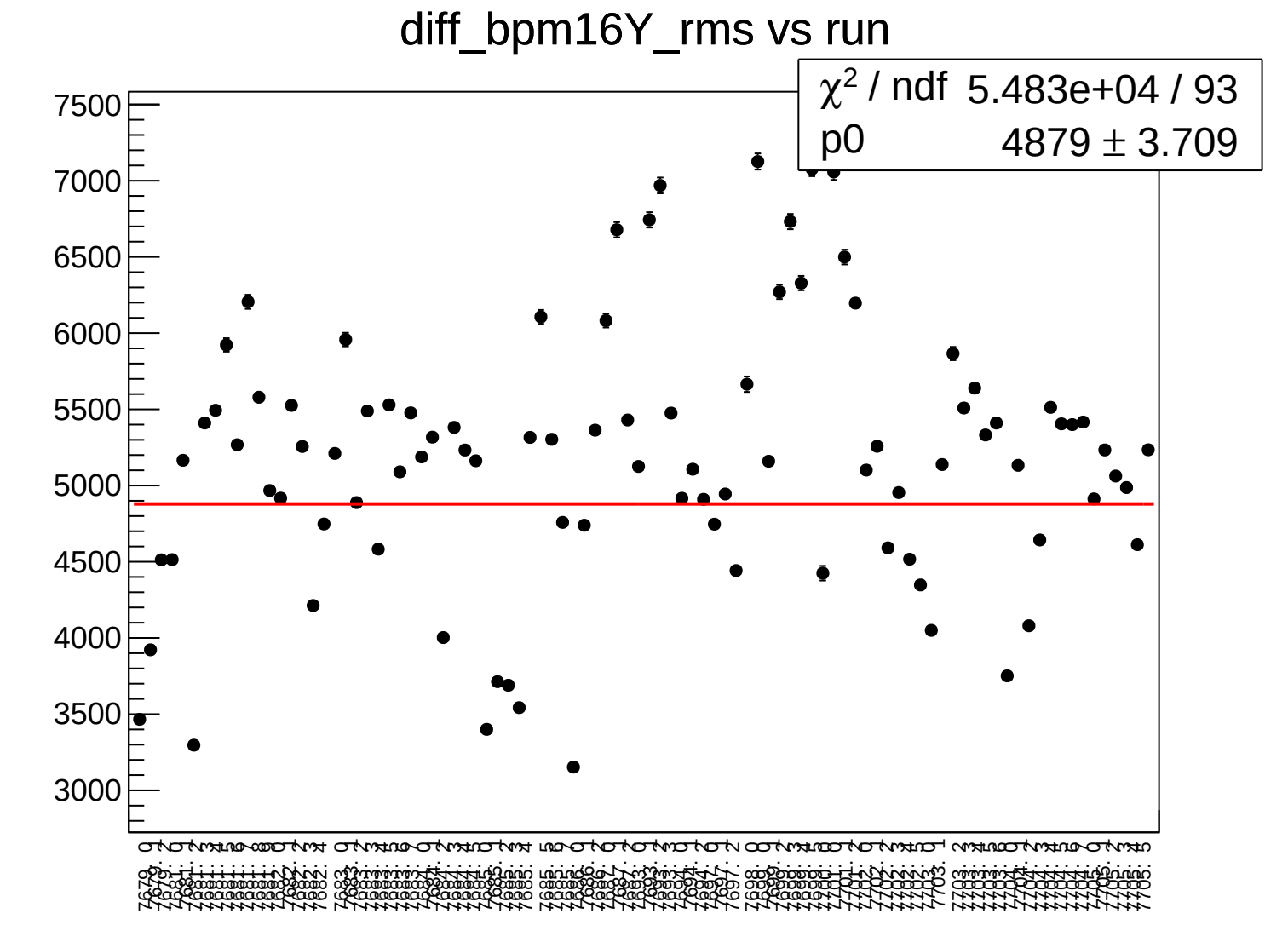

diff_bpm16X_mean vs run
χ² / ndf 84.72 / 93
p0 −7.686 ± 28.31
1000
500
0
−500
−1000
pull
Entries 94
Mean −212.2
Std Dev 264.3
2
1
0
−1
−2

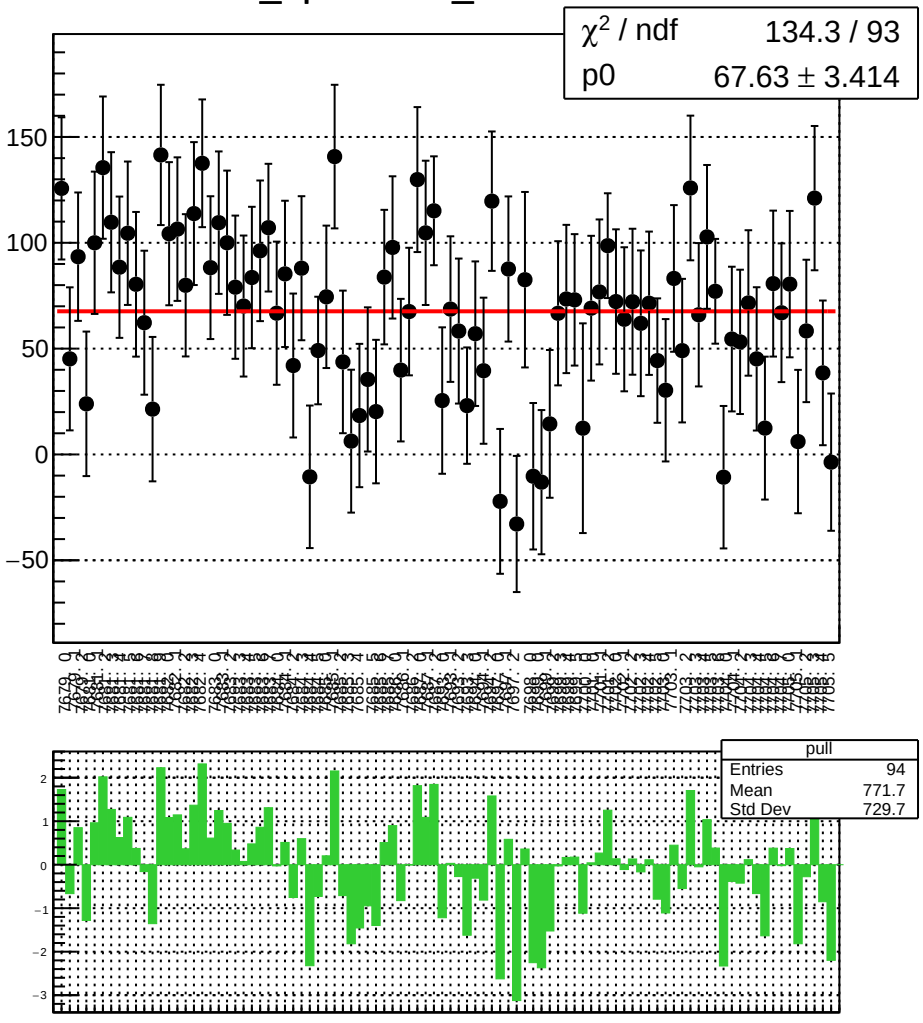

pull1D
Entries 94
Mean −0.02329
Std Dev 0.9491
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

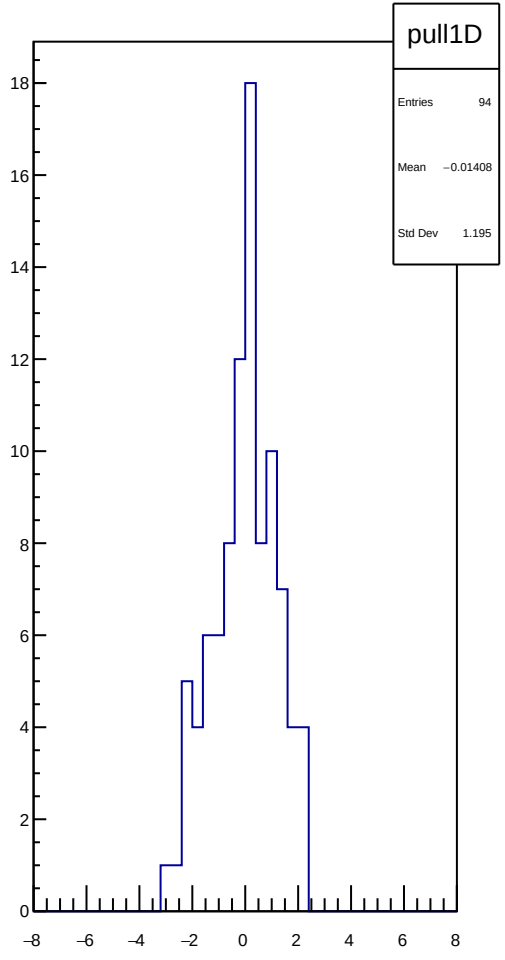

diff_bpm16X_rms vs run
χ² / ndf 1.997e+04 / 93
p0 2.659e+04 ± 20.02
32000
30000
28000
26000
24000
22000

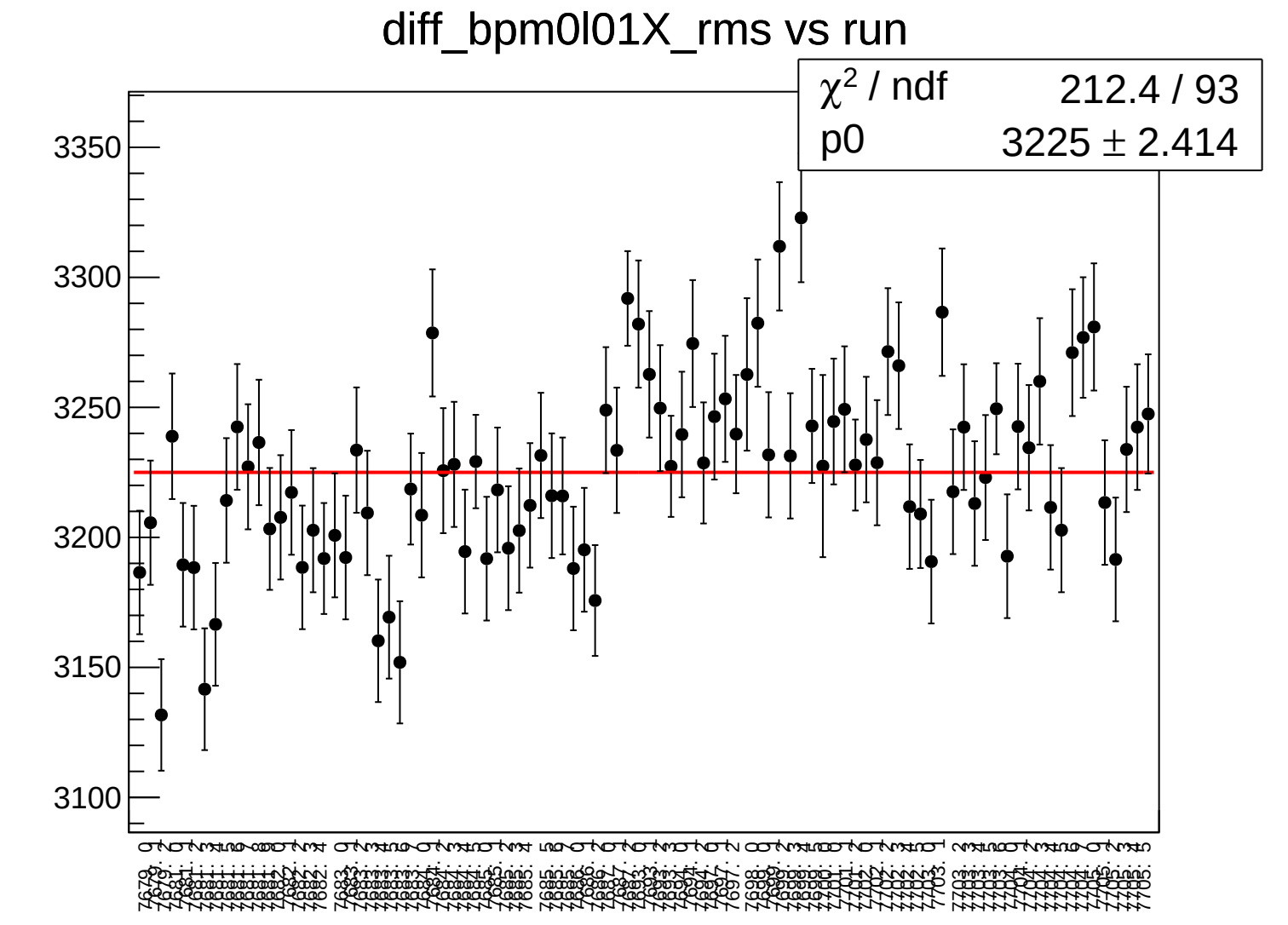

diff_bpm16Y_mean vs run
χ² / ndf 75.64 / 93
p0 3.265 ± 5.246
pull
Entries 94
Mean −2631
Std Dev 2683

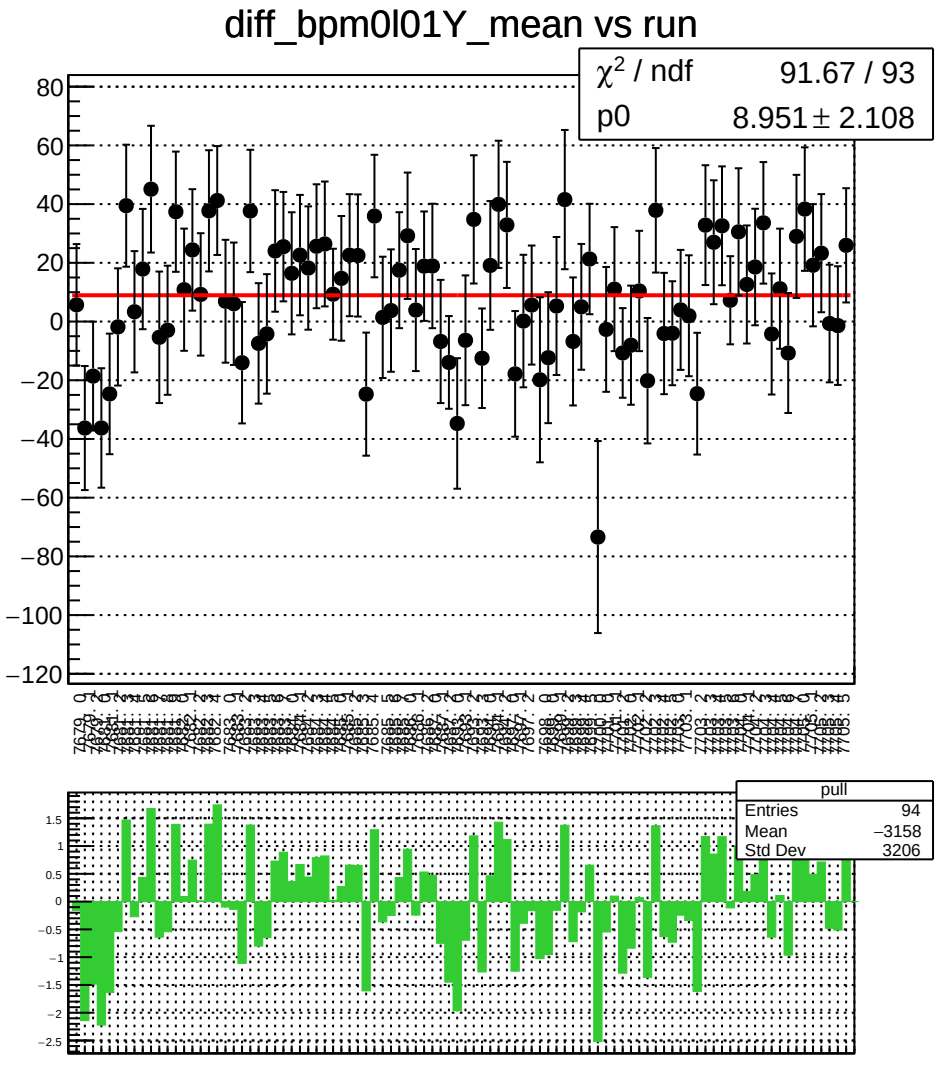

pull1D
Entries 94
Mean 0.0008813
Std Dev 0.897

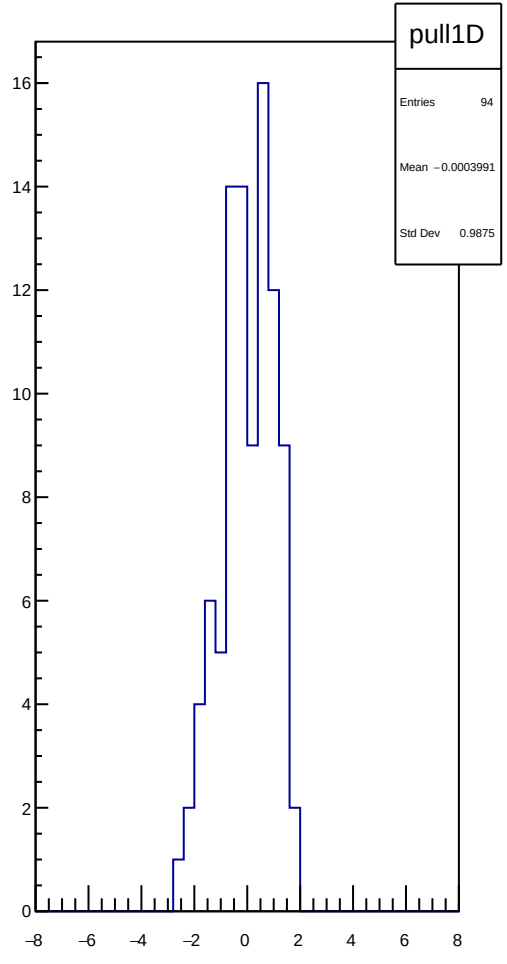

diff_bpm16Y_rms vs run
χ² / ndf 5.483e+04 / 93
p0 4879 ± 3.709
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000

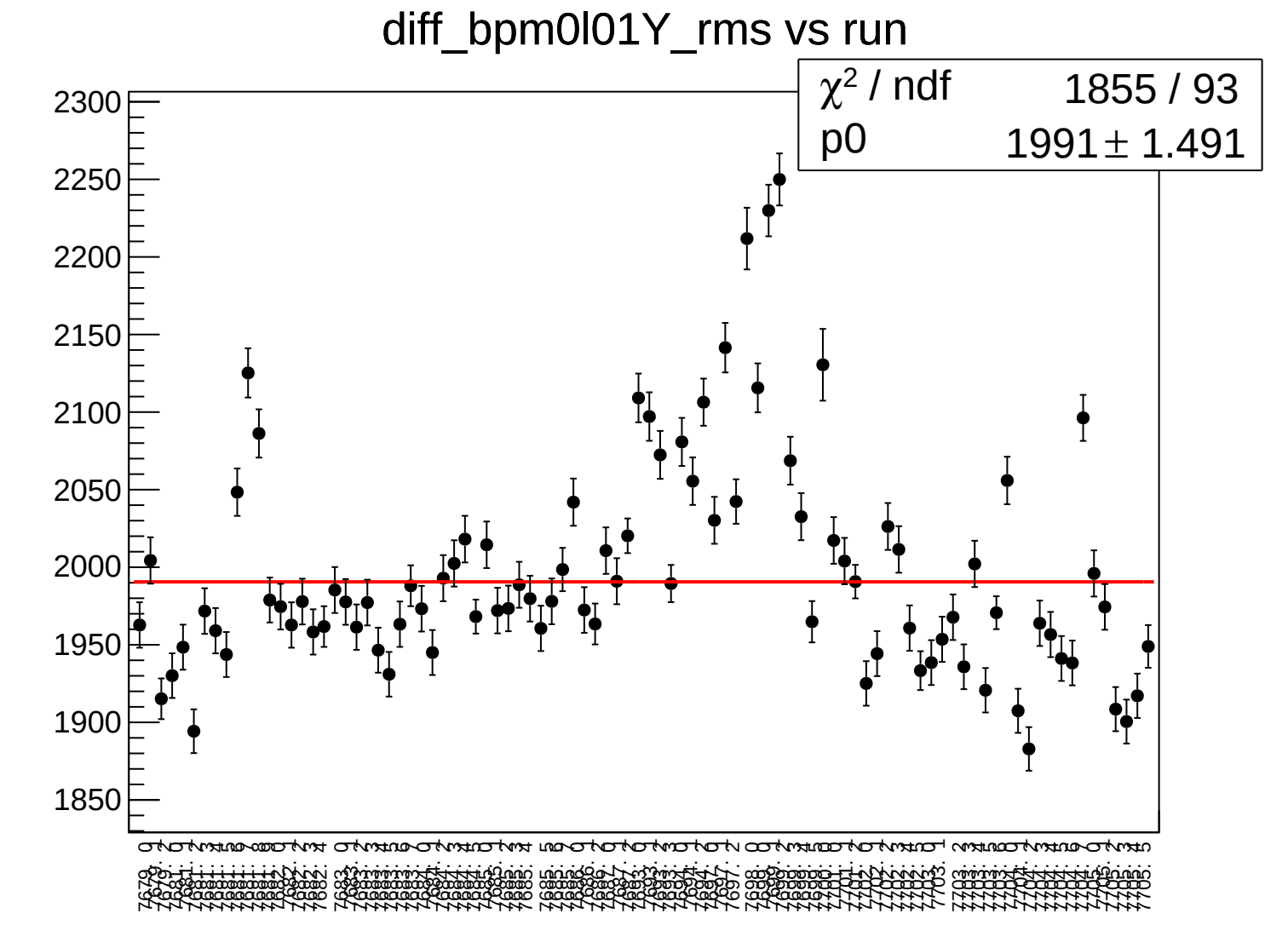

diff_bpm0l01X_mean vs run
χ² / ndf 134.3 / 93
p0 67.63 ± 3.414
150
100
50
0
−50
pull
Entries 94
Mean 771.7
Std Dev 729.7
2
1
0
−1
−2
−3

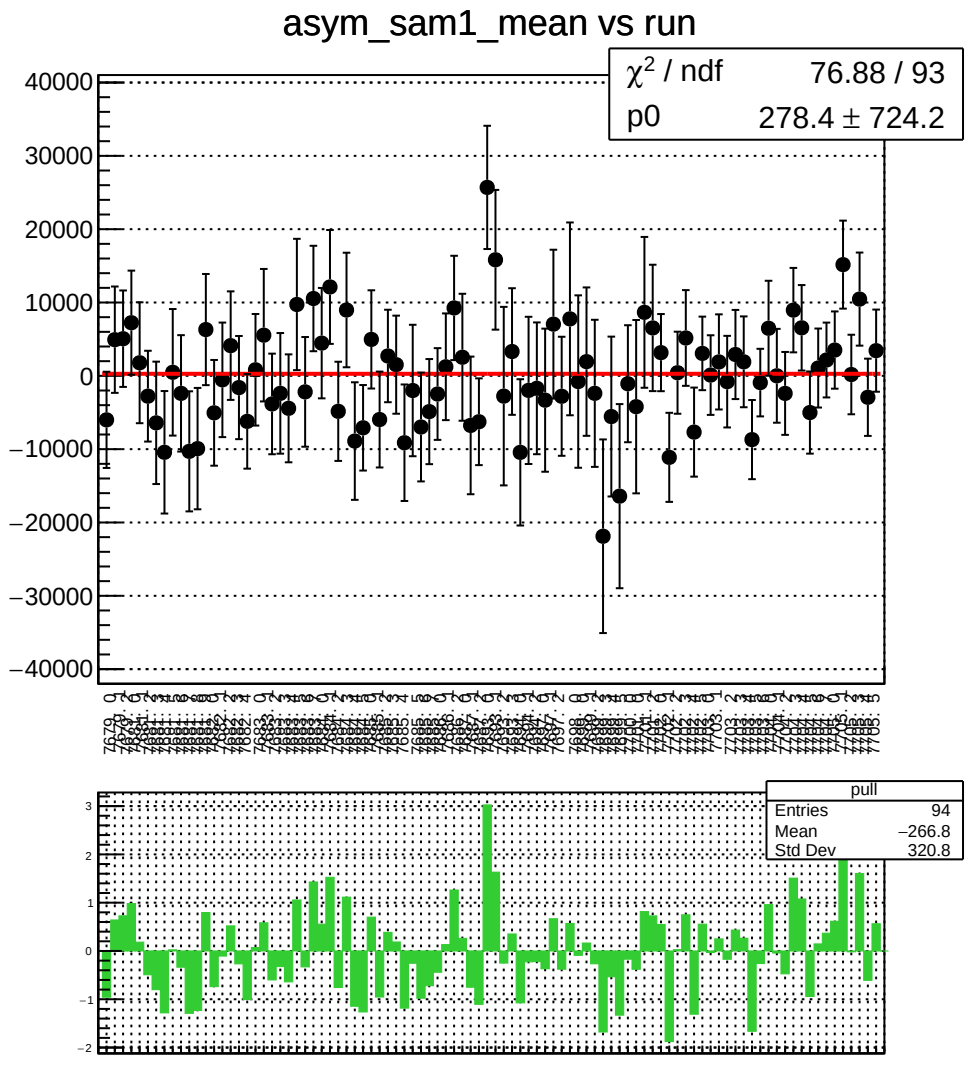

pull1D
Entries 94
Mean −0.01408
Std Dev 1.195
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

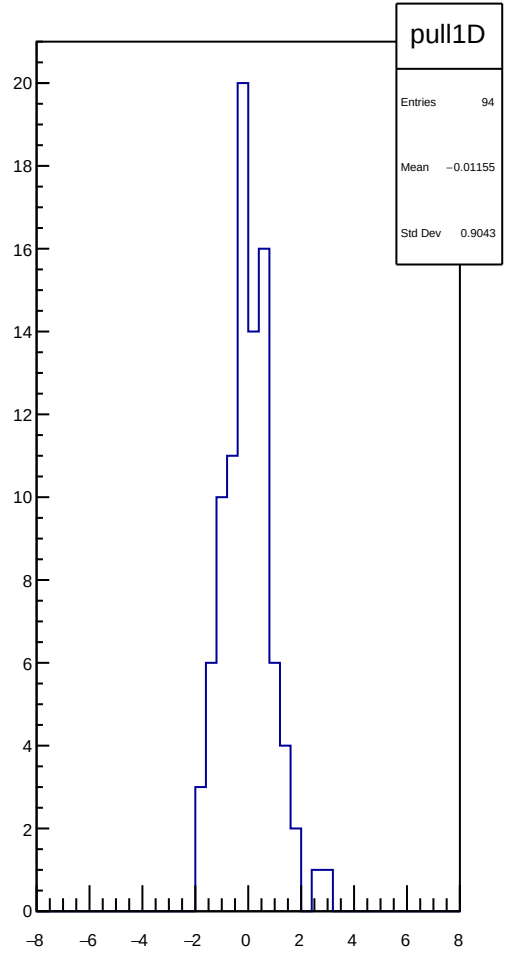

diff_bpm0l01X_rms vs run
χ² / ndf 212.4 / 93
p0 3225 ± 2.414
3350
3300
3250
3200
3150
3100

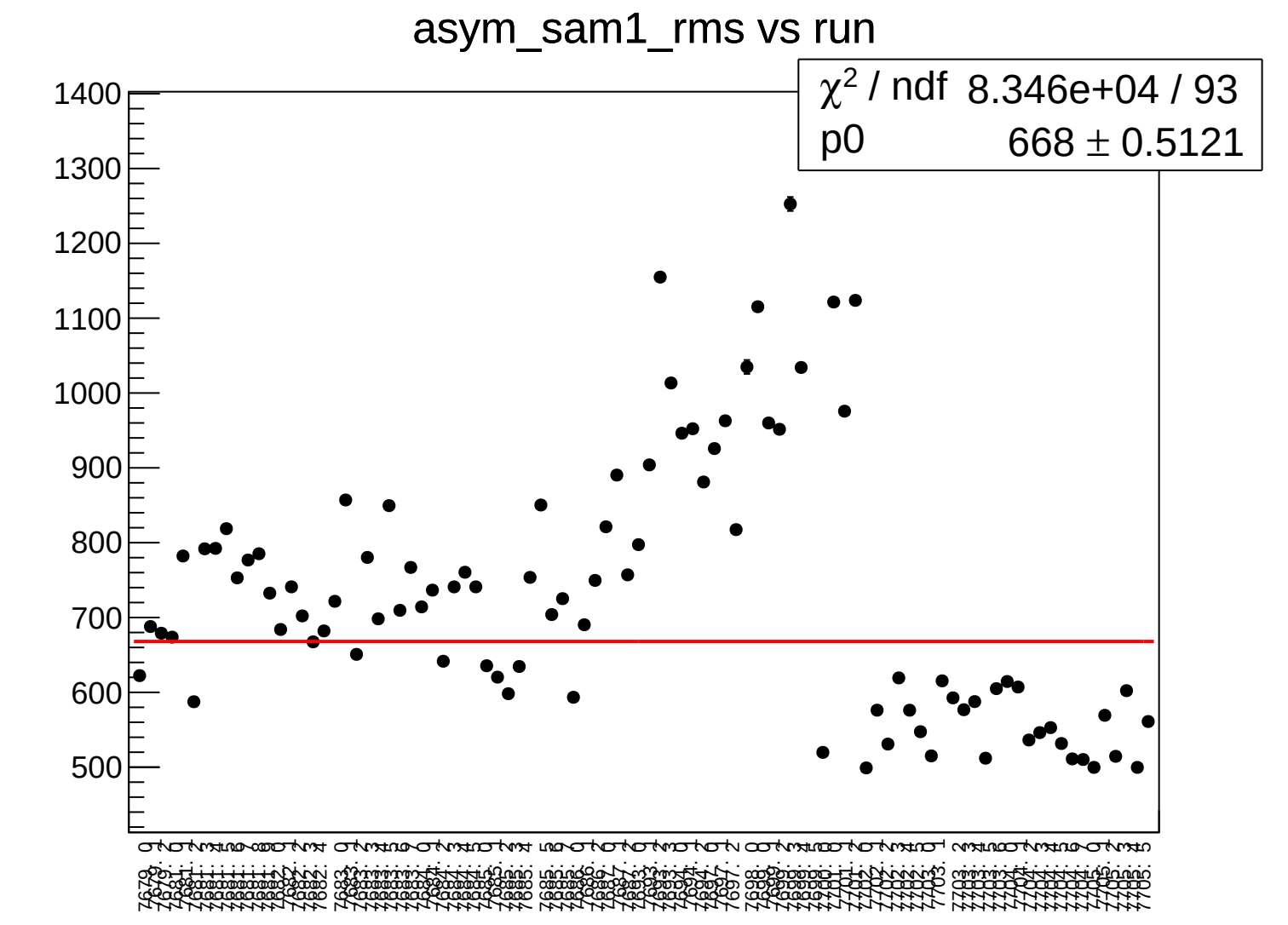

diff_bpm0l01Y_mean vs run
χ^2 / ndf 91.67 / 93
p0 8.951 ± 2.108
pull
Entries 94
Mean −3158
Std Dev 3206

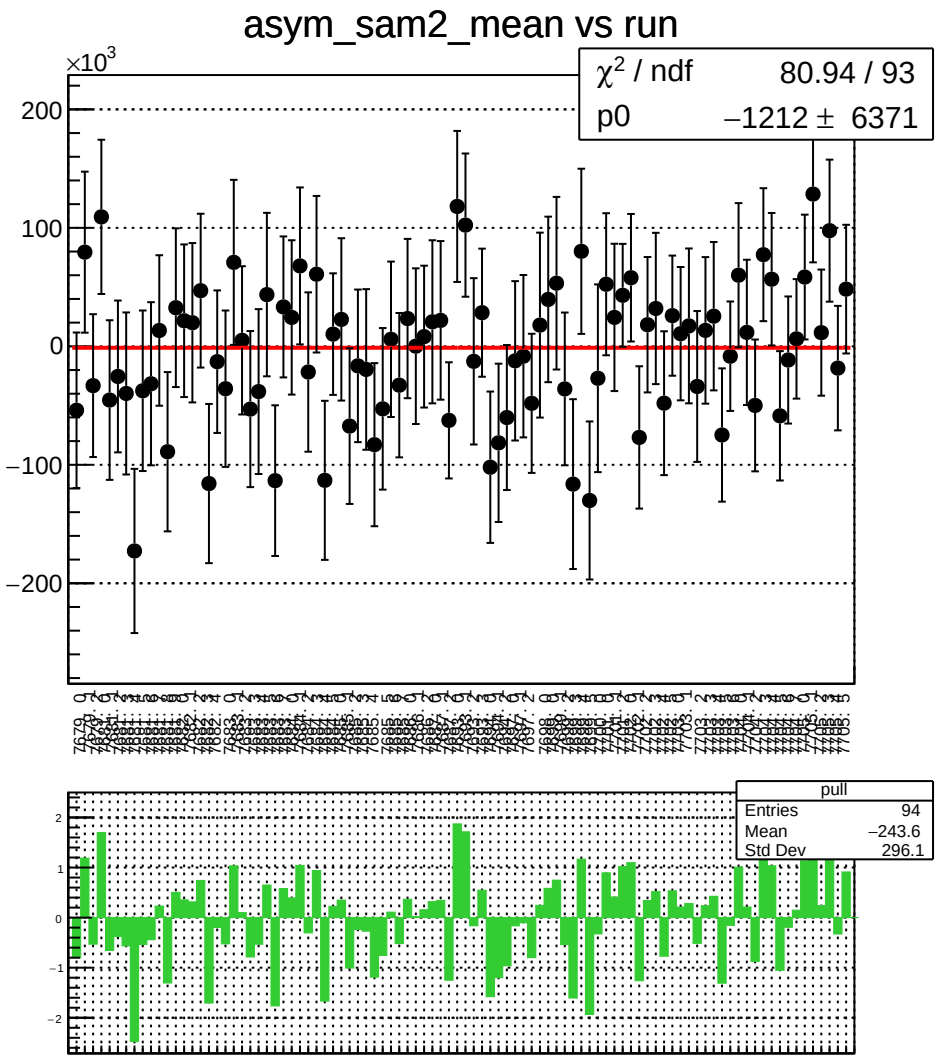

pull1D
Entries 94
Mean −0.0003991
Std Dev 0.9875

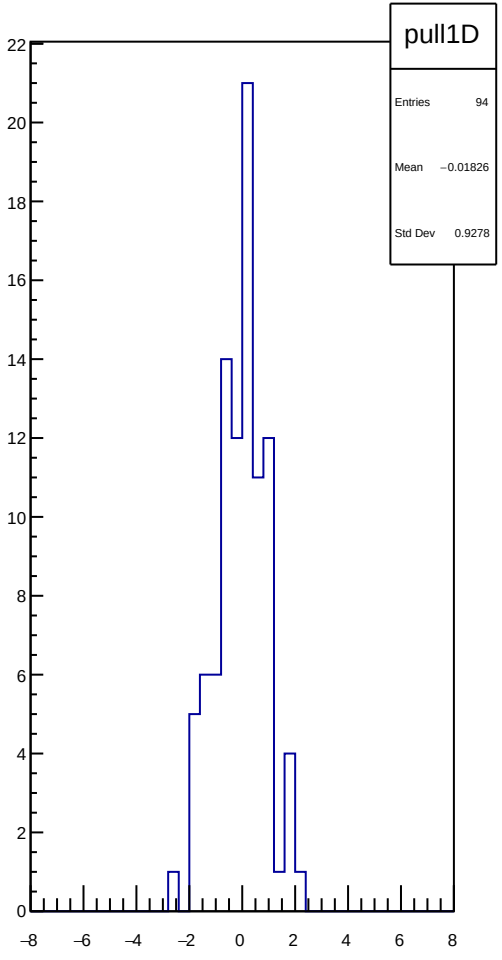

diff_bpm0l01Y_rms vs run
χ² / ndf 1855 / 93
p0 1991 ± 1.491
2300
2250
2200
2150
2100
2050
2000
1950
1900
1850

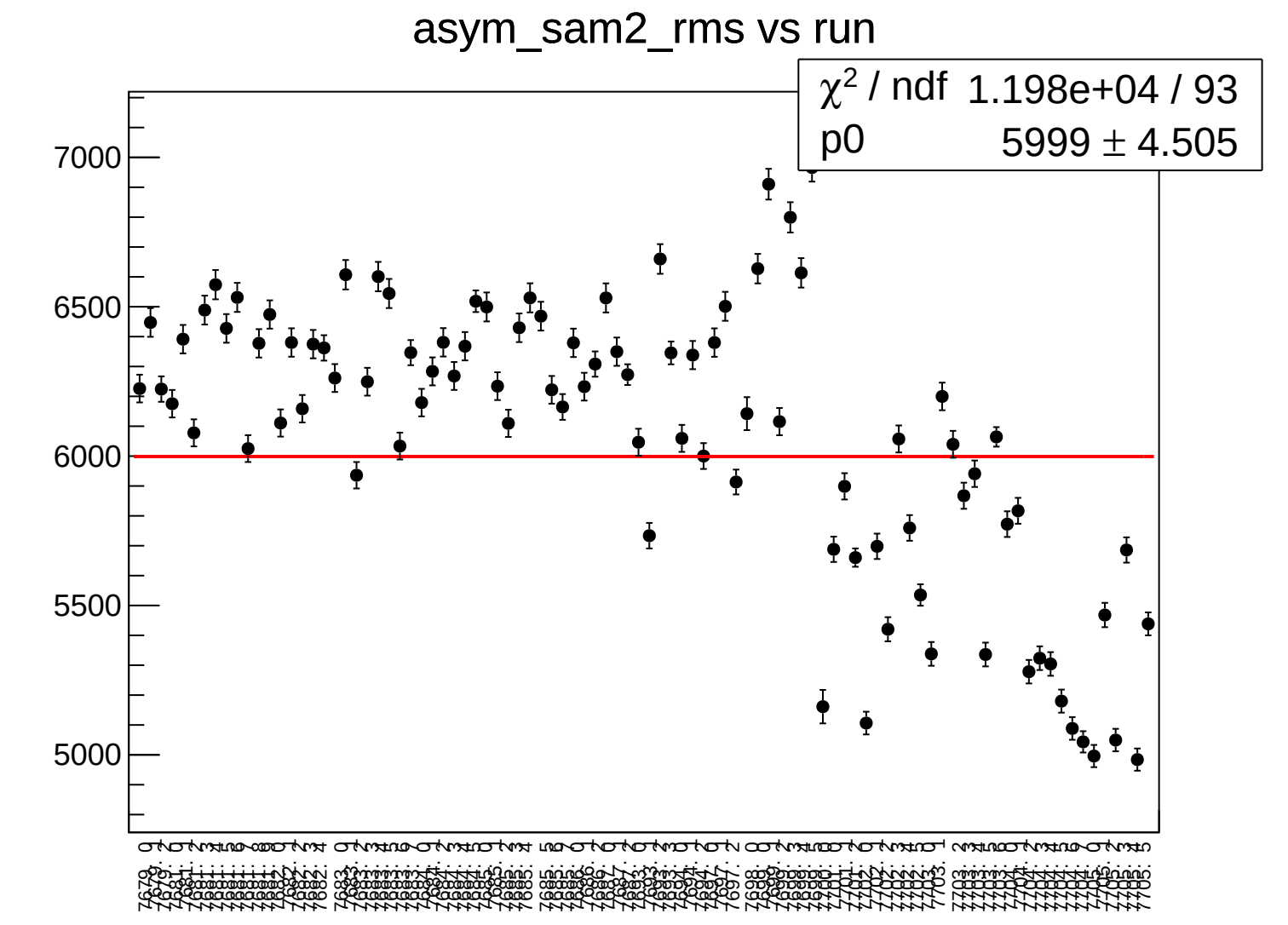

asym_sam1_mean vs run
χ² / ndf 76.88 / 93
p0 278.4 ± 724.2
pull
Entries 94
Mean −266.8
Std Dev 320.8

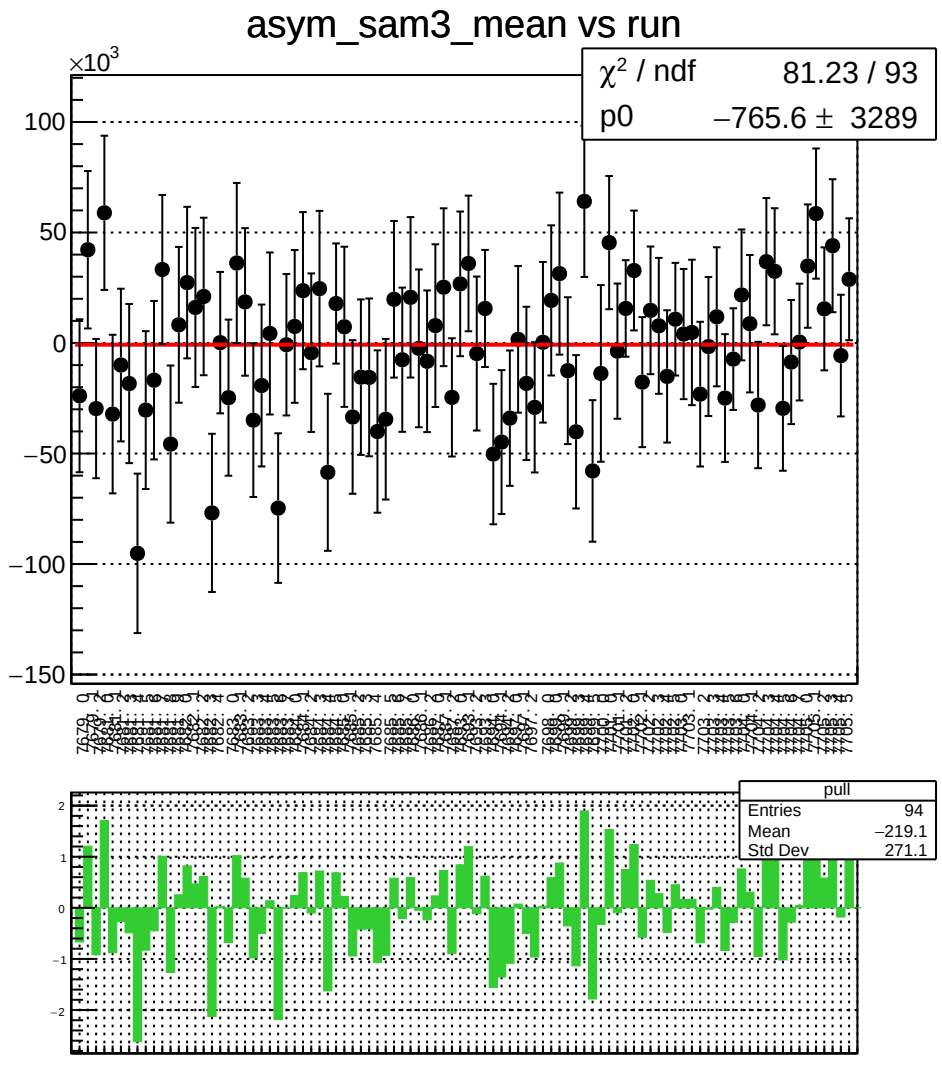

pull1D
Entries 94
Mean −0.01155
Std Dev 0.9043

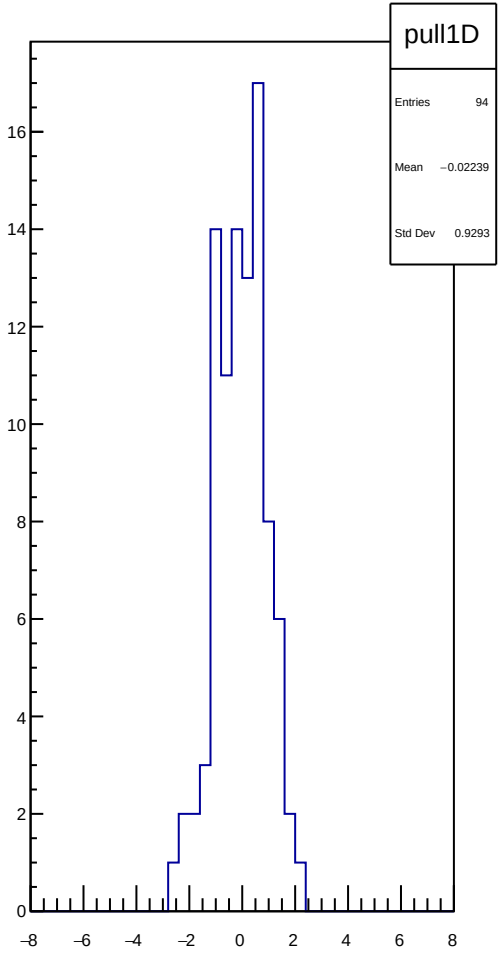

asym_sam1_rms vs run
χ² / ndf 8.346e+04 / 93
p0 668 ± 0.5121
1400
1300
1200
1100
1000
900
800
700
600
500

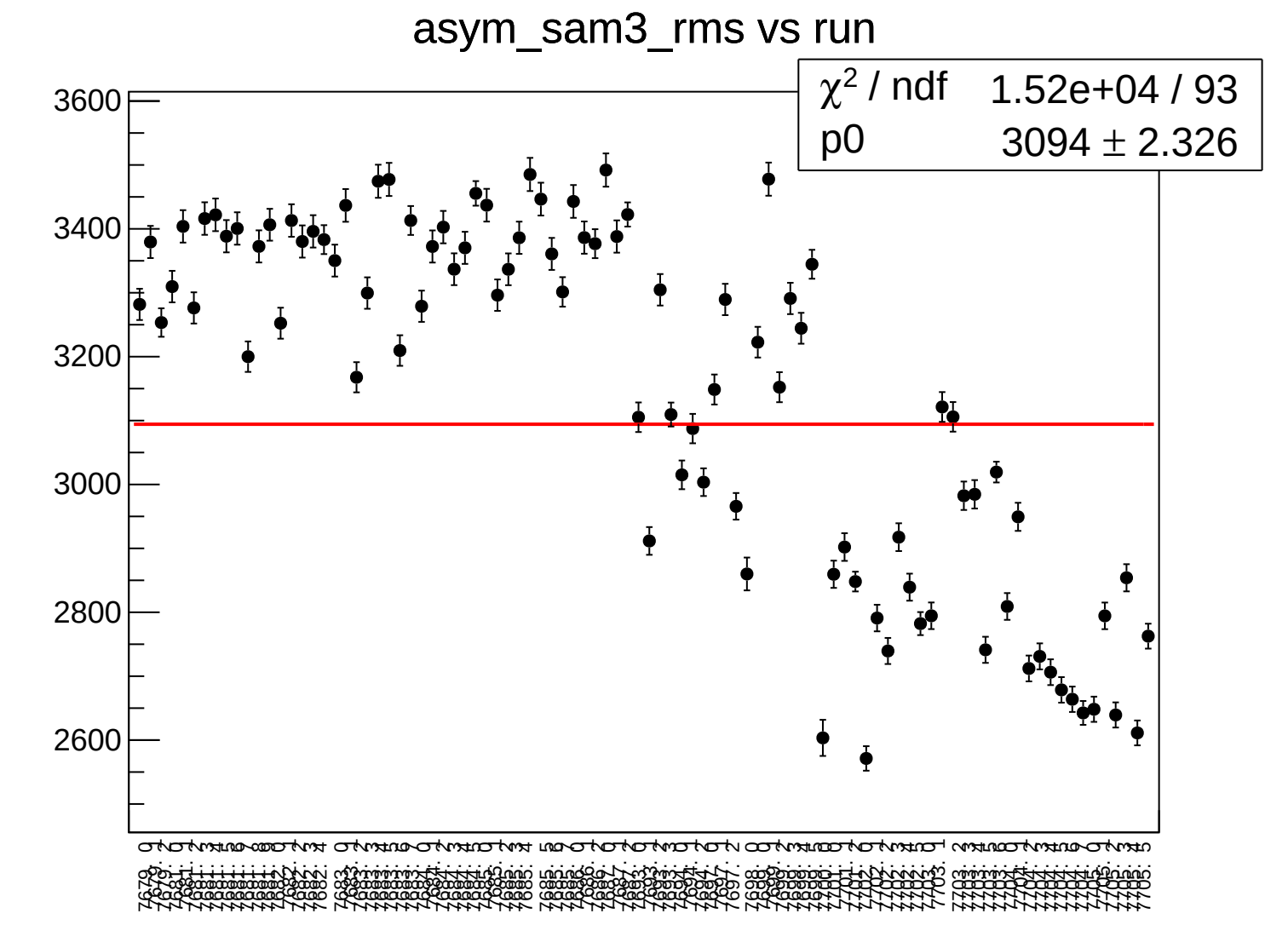

asym_sam2_mean vs run
×10^3
χ² / ndf 80.94 / 93
p0 −1212 ± 6371
200
100
0
−100
−200
pull
Entries 94
Mean −243.6
Std Dev 296.1
2
1
0
−1
−2

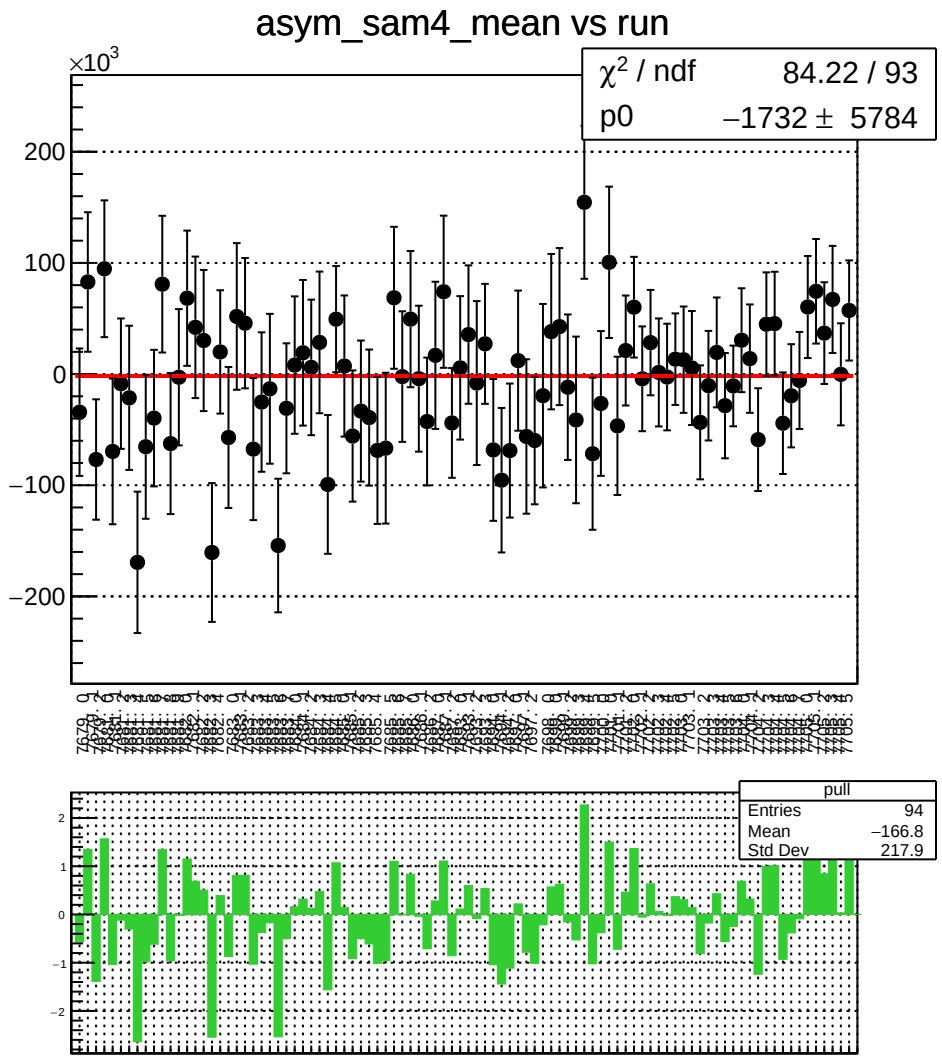

pull1D
Entries 94
Mean −0.01826
Std Dev 0.9278
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

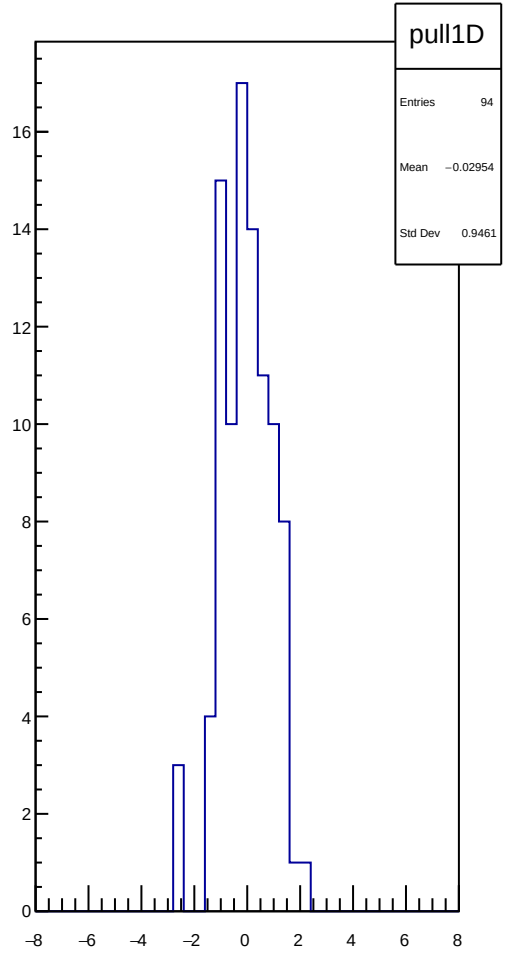

asym_sam2_rms vs run
χ^2 / ndf 1.198e+04 / 93
p0 5999 ± 4.505
7000
6500
6000
5500
5000

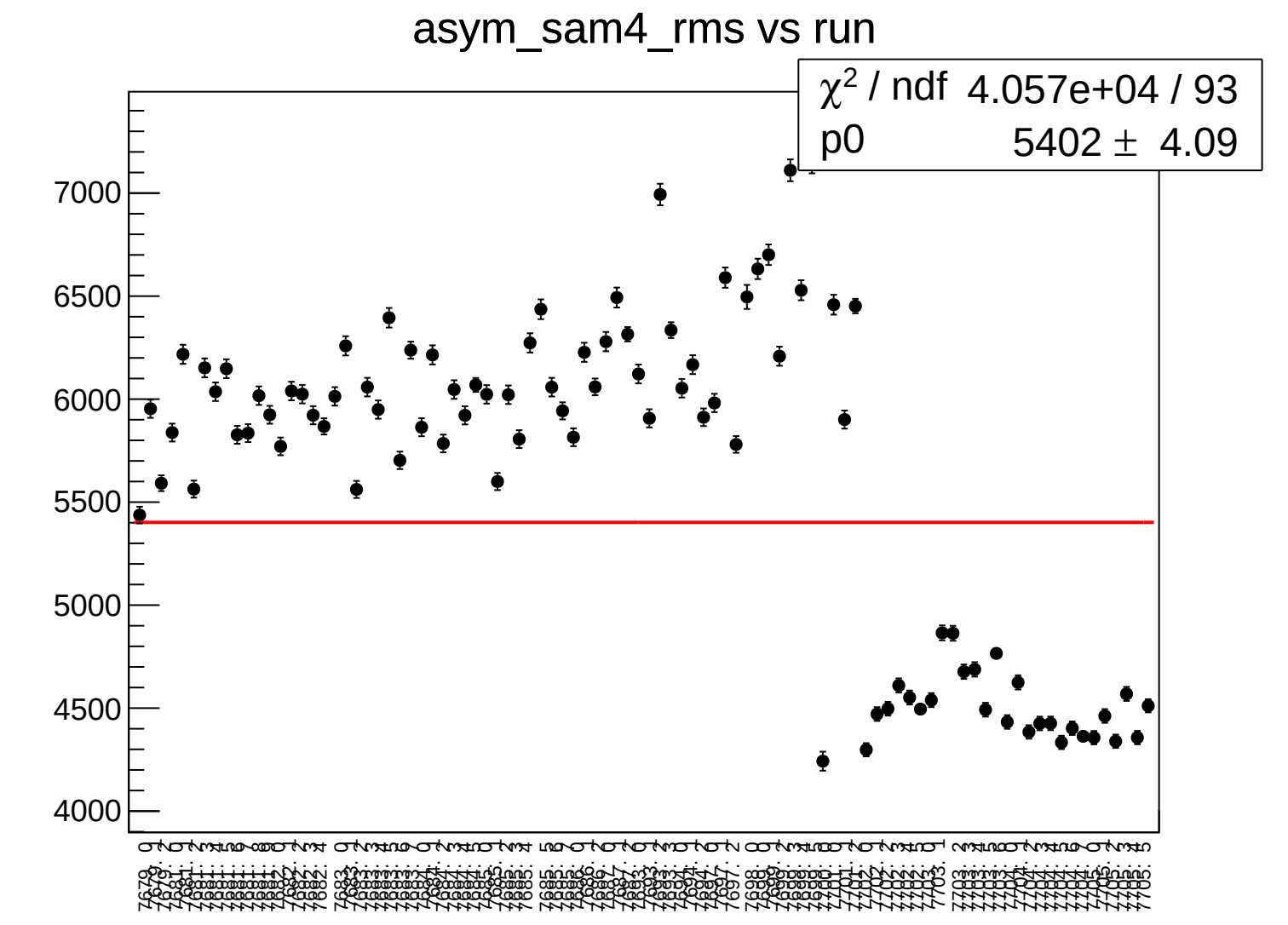

asym_sam3_mean vs run
×10^3
χ² / ndf 81.23 / 93
p0 −765.6 ± 3289
100
50
0
−50
−100
−150
pull
Entries 94
Mean −219.1
Std Dev 271.1
2
1
0
−1
−2

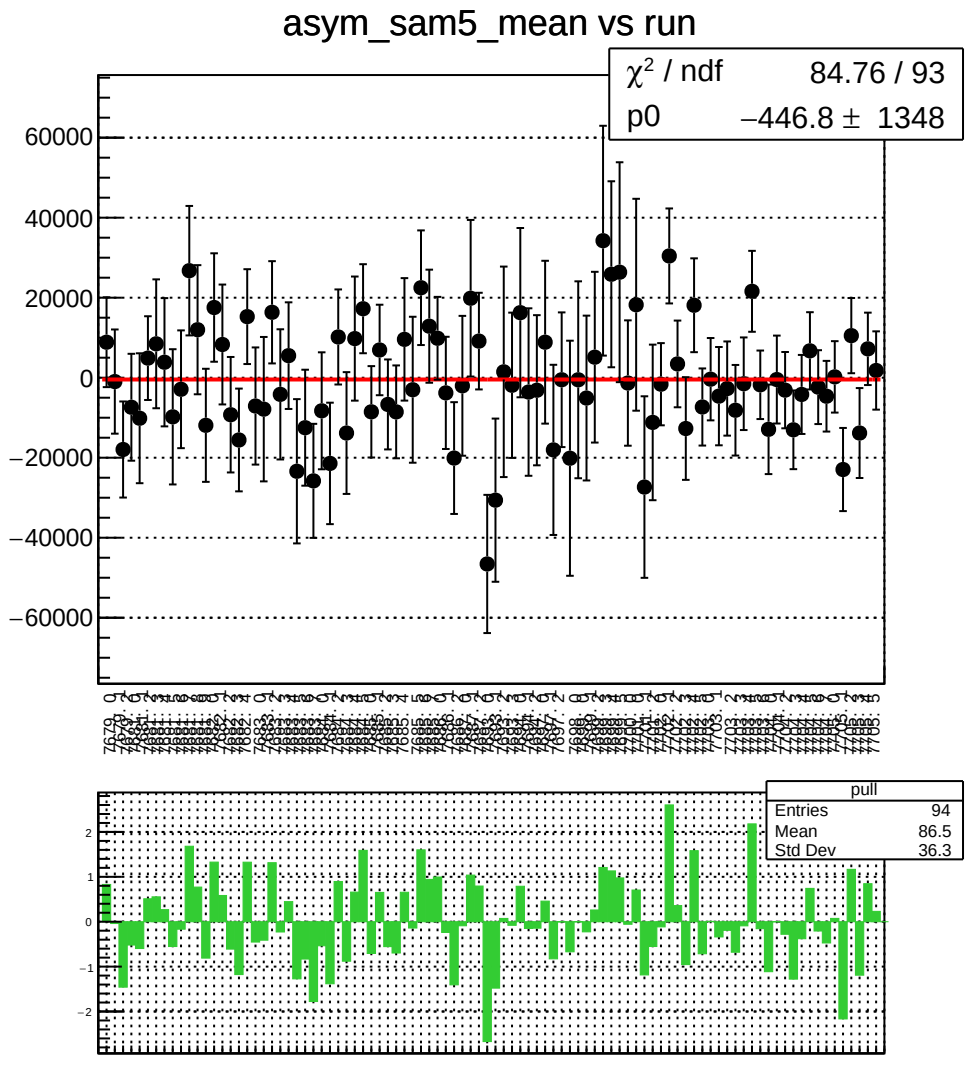

pull1D
Entries 94
Mean −0.02239
Std Dev 0.9293
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

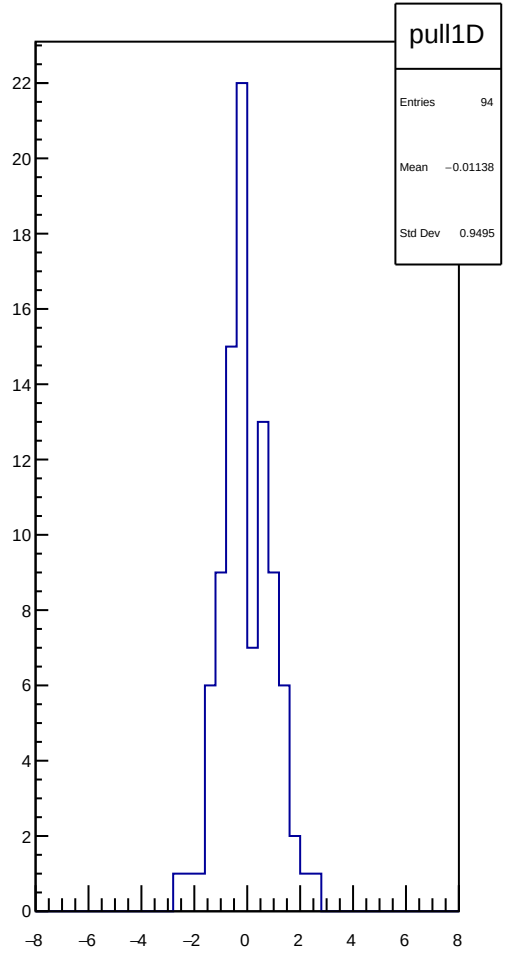

asym_sam3_rms vs run
χ² / ndf 1.52e+04 / 93
p0 3094 ± 2.326
3600
3400
3200
3000
2800
2600

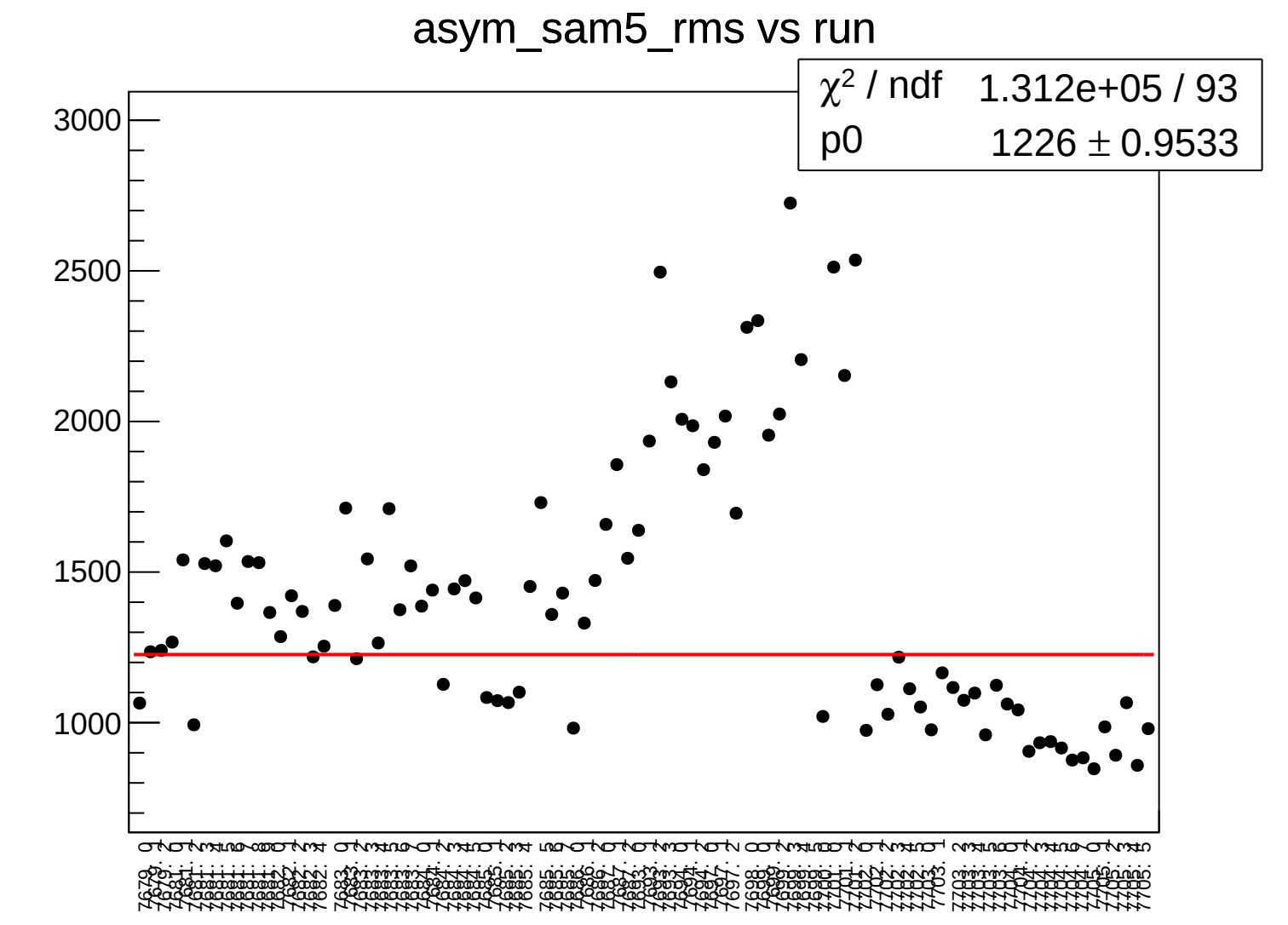

asym_sam4_mean vs run
×10^3
χ² / ndf 84.22 / 93
p0 −1732 ± 5784
200
100
0
−100
−200
pull
Entries 94
Mean −166.8
Std Dev 217.9
2
1
0
−1
−2

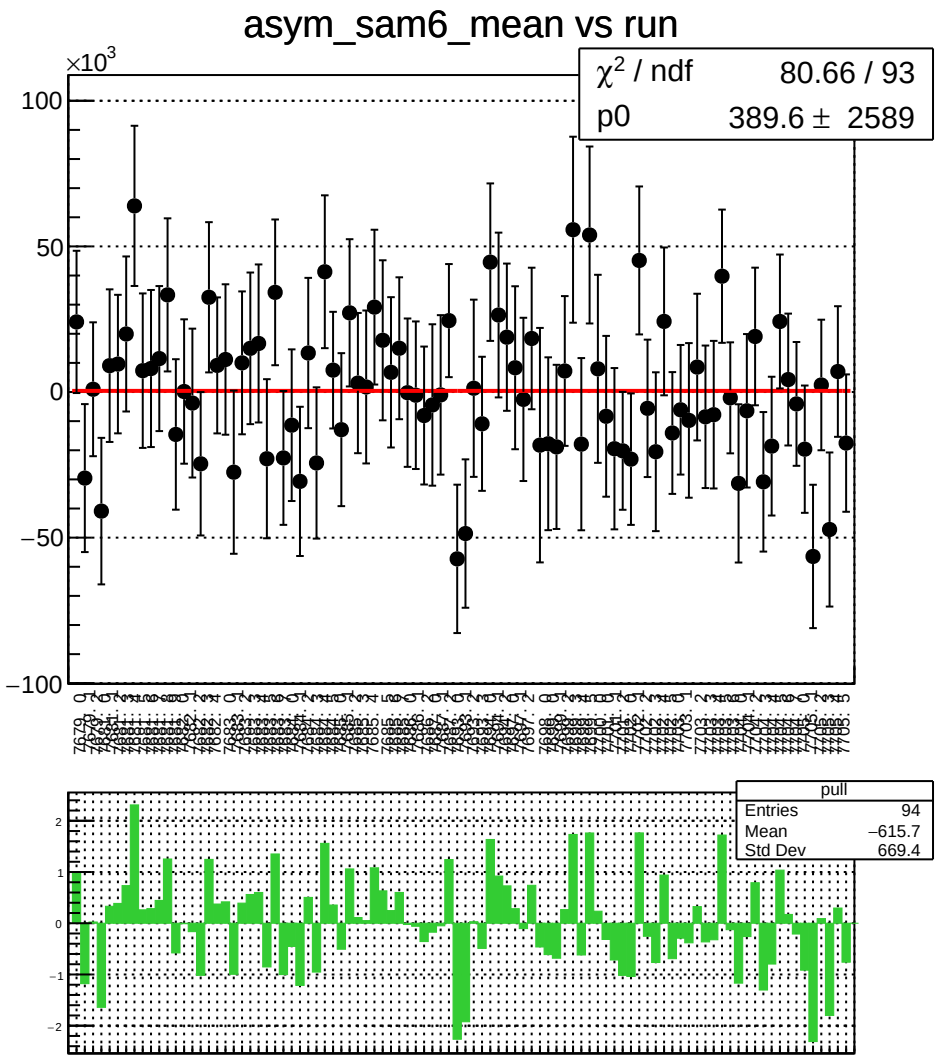

pull1D
Entries 94
Mean −0.02954
Std Dev 0.9461
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

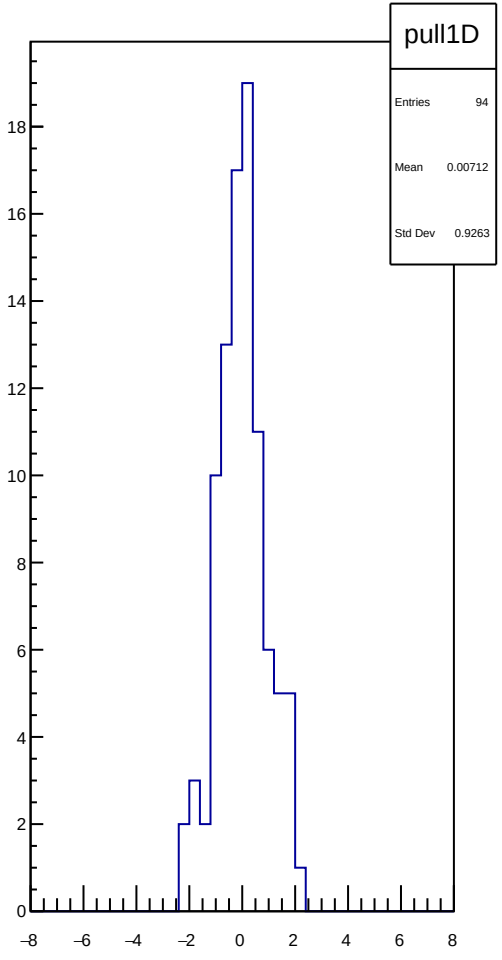

asym_sam4_rms vs run
χ² / ndf 4.057e+04 / 93
p0 5402 ± 4.09
7000
6500
6000
5500
5000
4500
4000

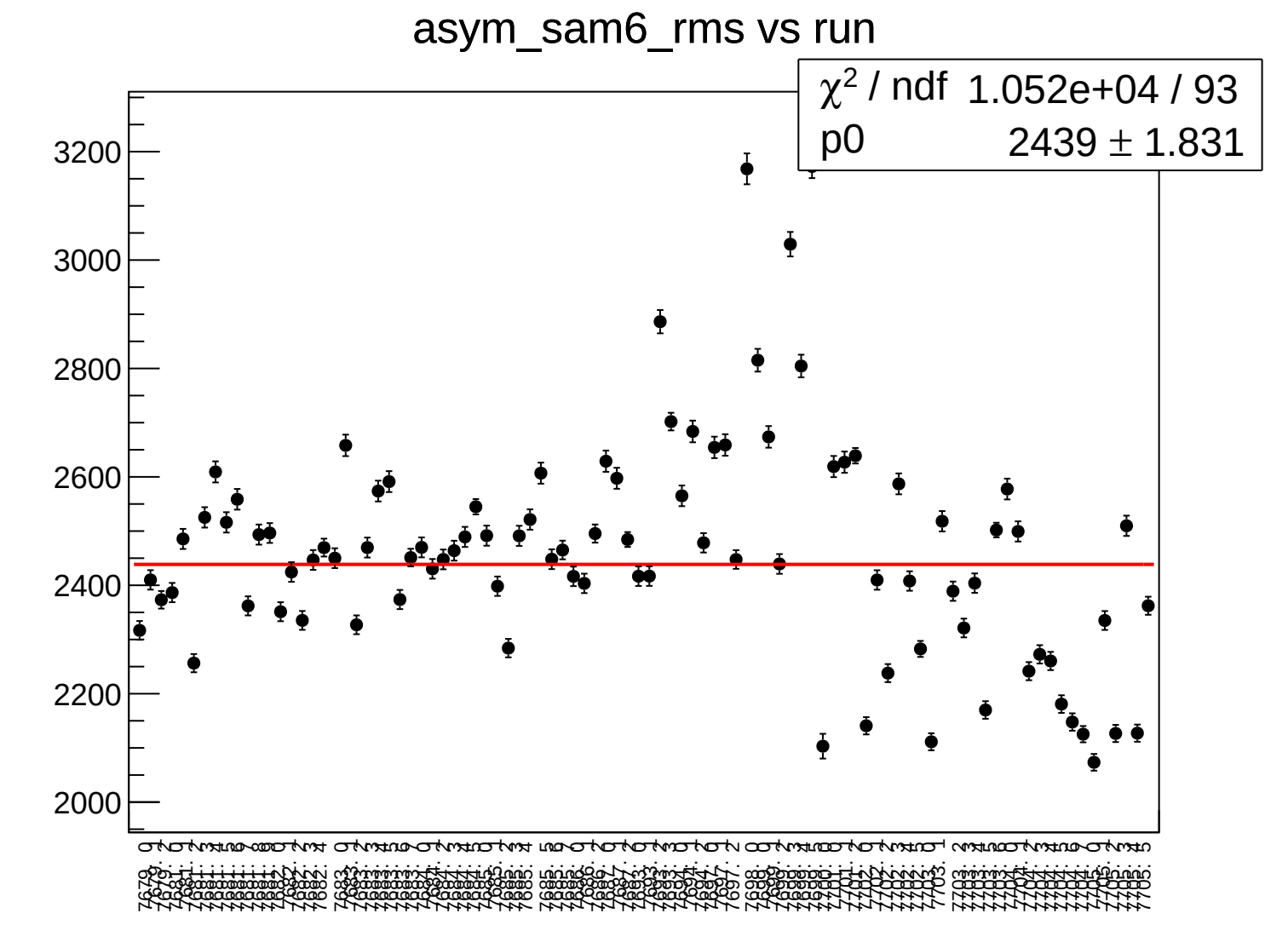

asym_sam5_mean vs run
χ² / ndf 84.76 / 93
p0 −446.8 ± 1348
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean 86.5
Std Dev 36.3
2
1
0
−1
−2

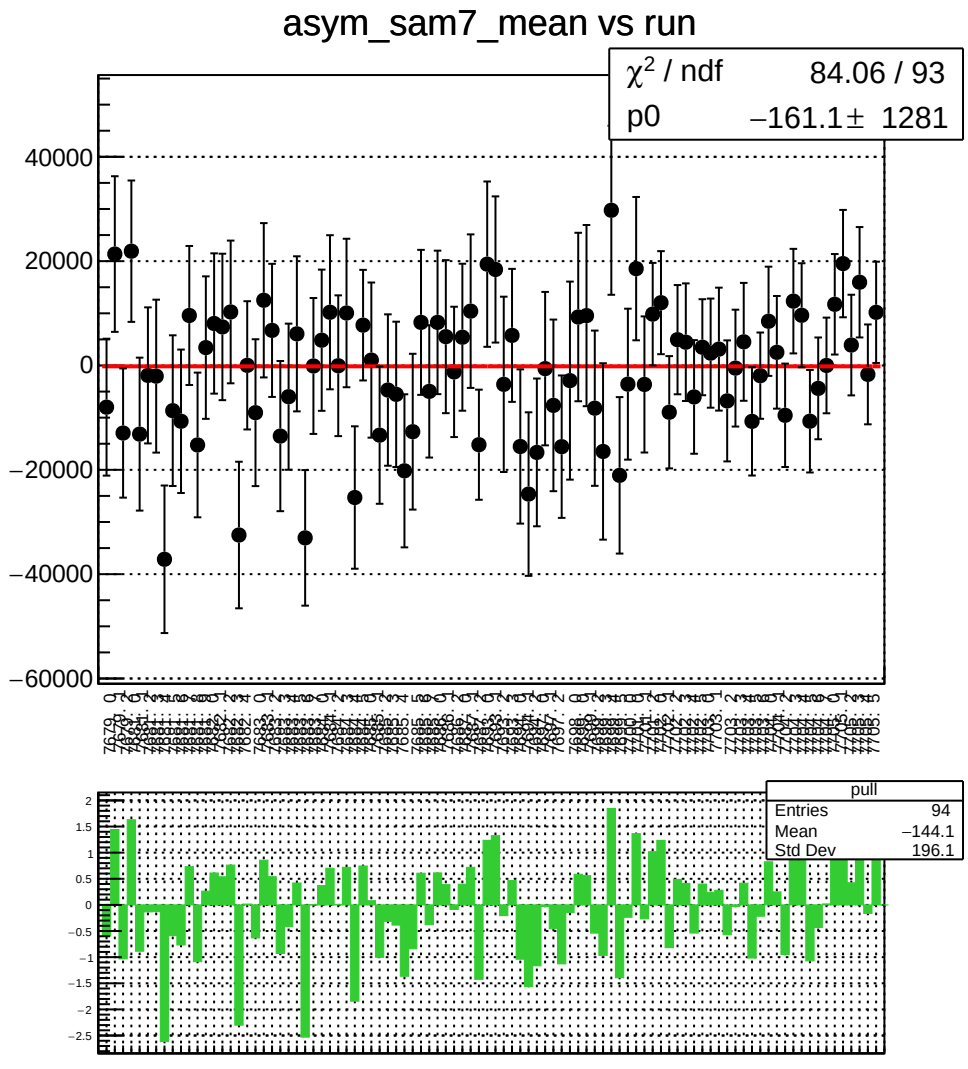

pull1D
Entries 94
Mean −0.01138
Std Dev 0.9495
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

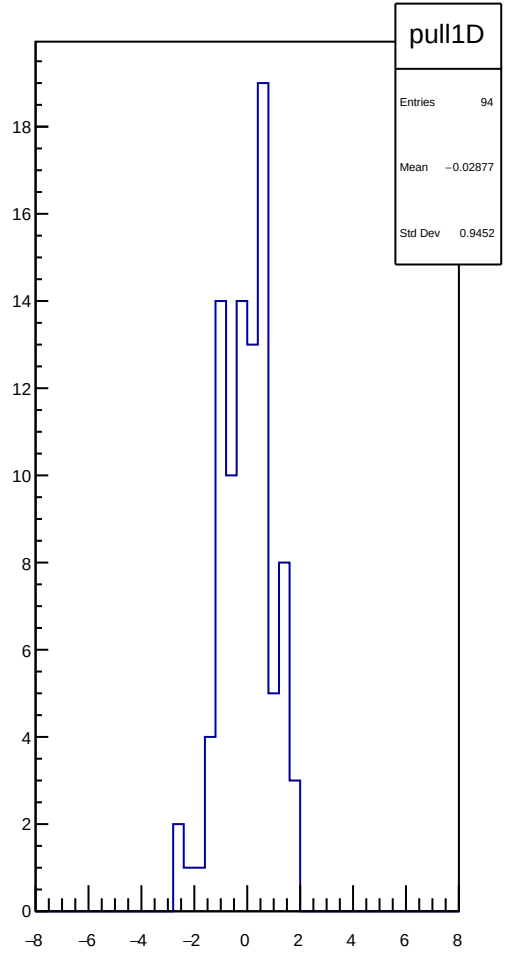

asym_sam5_rms vs run
χ^2 / ndf 1.312e+05 / 93
p0 1226 ± 0.9533
3000
2500
2000
1500
1000

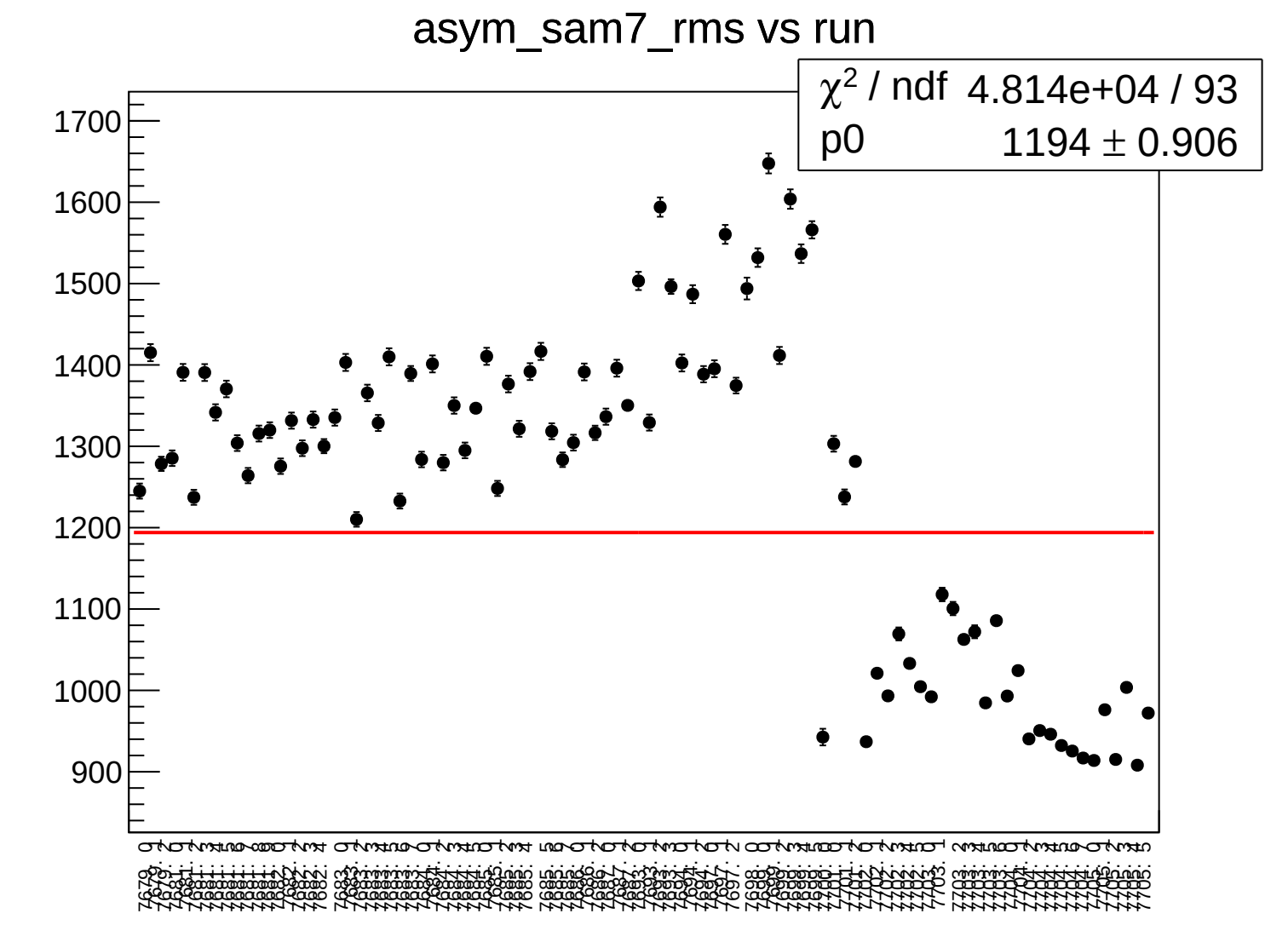

asym_sam6_mean vs run
×10^3
χ² / ndf 80.66 / 93
p0 389.6 ± 2589
100
50
0
−50
−100
pull
Entries 94
Mean −615.7
Std Dev 669.4
2
1
0
−1
−2

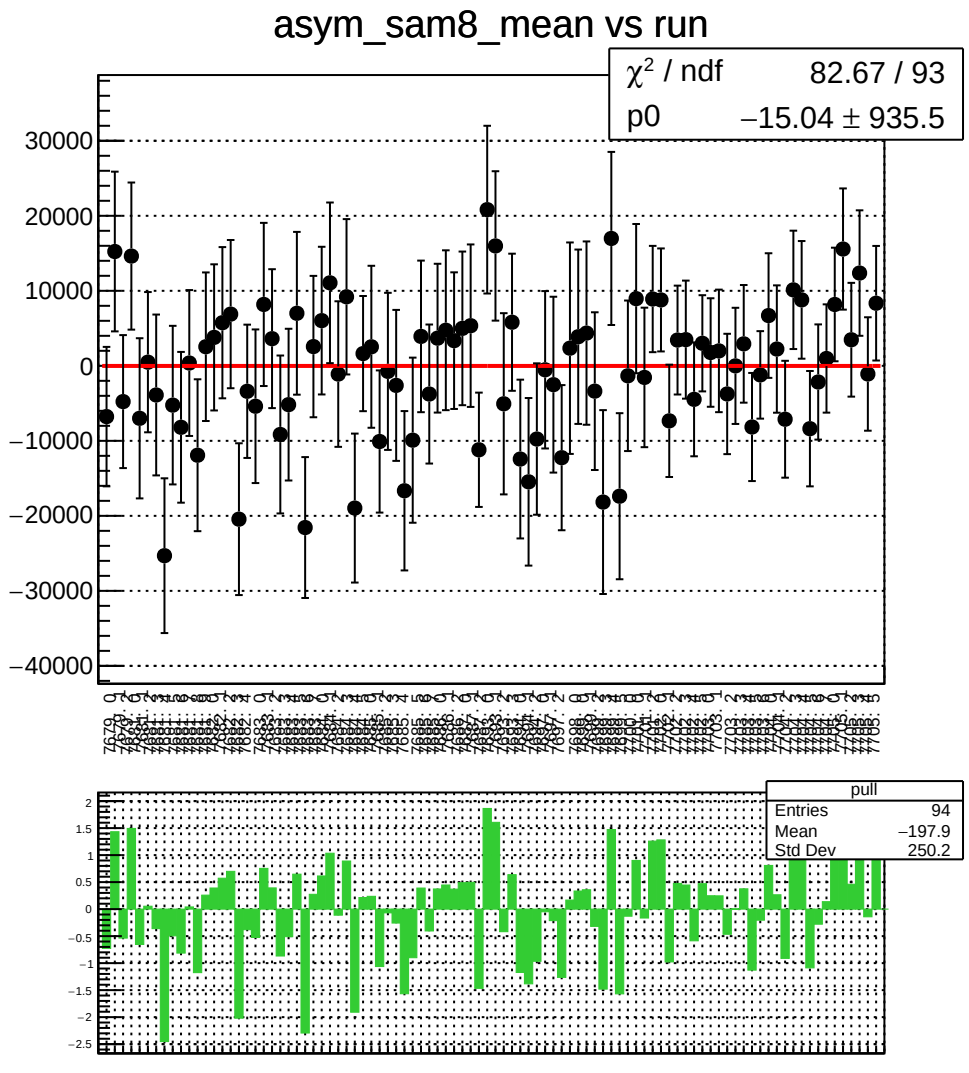

pull1D
Entries 94
Mean 0.00712
Std Dev 0.9263
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

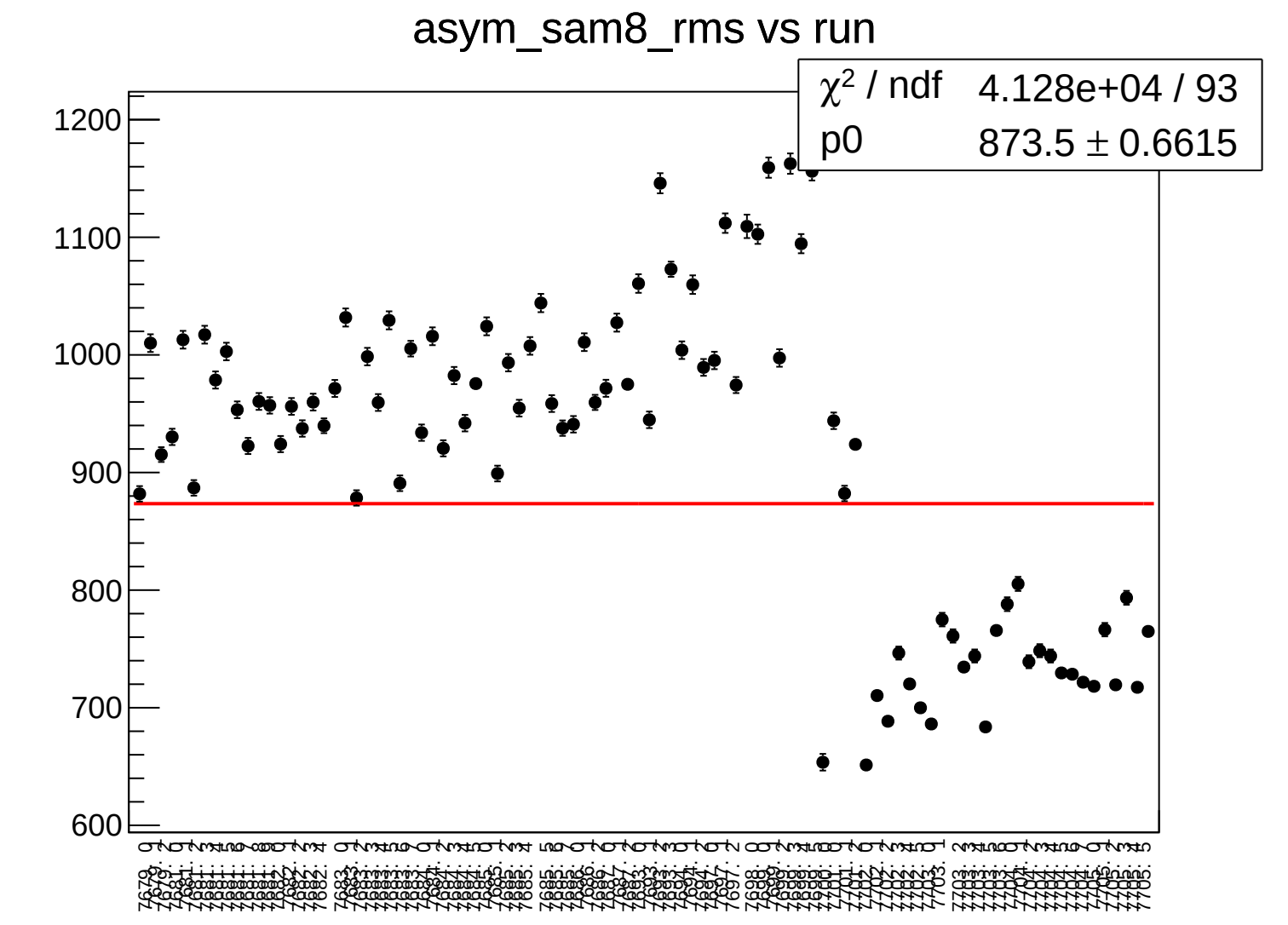

asym_sam6_rms vs run
χ² / ndf 1.052e+04 / 93
p0 2439 ± 1.831
3200
3000
2800
2600
2400
2200
2000

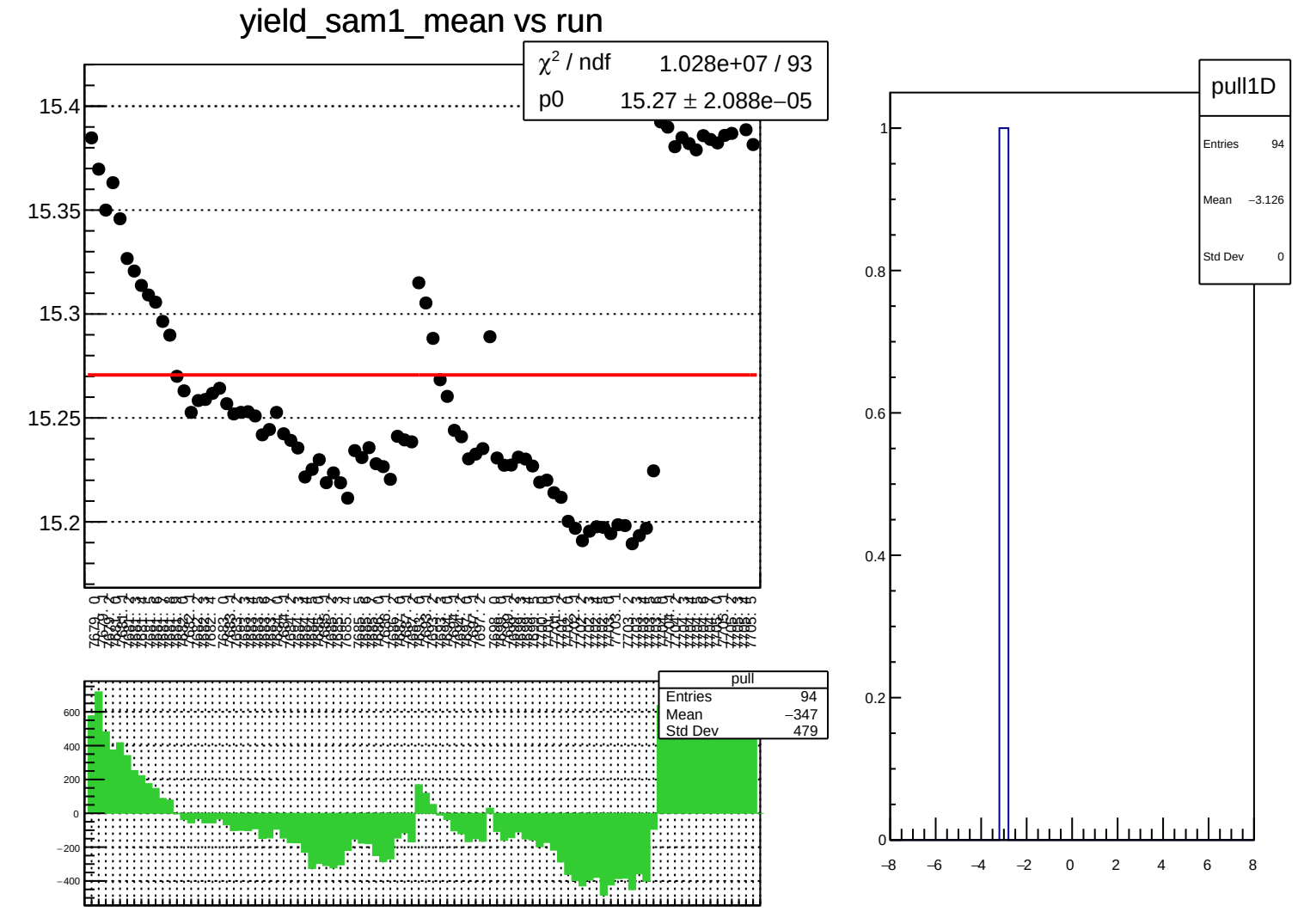

asym_sam7_mean vs run
χ² / ndf 84.06 / 93
p0 −161.1± 1281
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −144.1
Std Dev 196.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

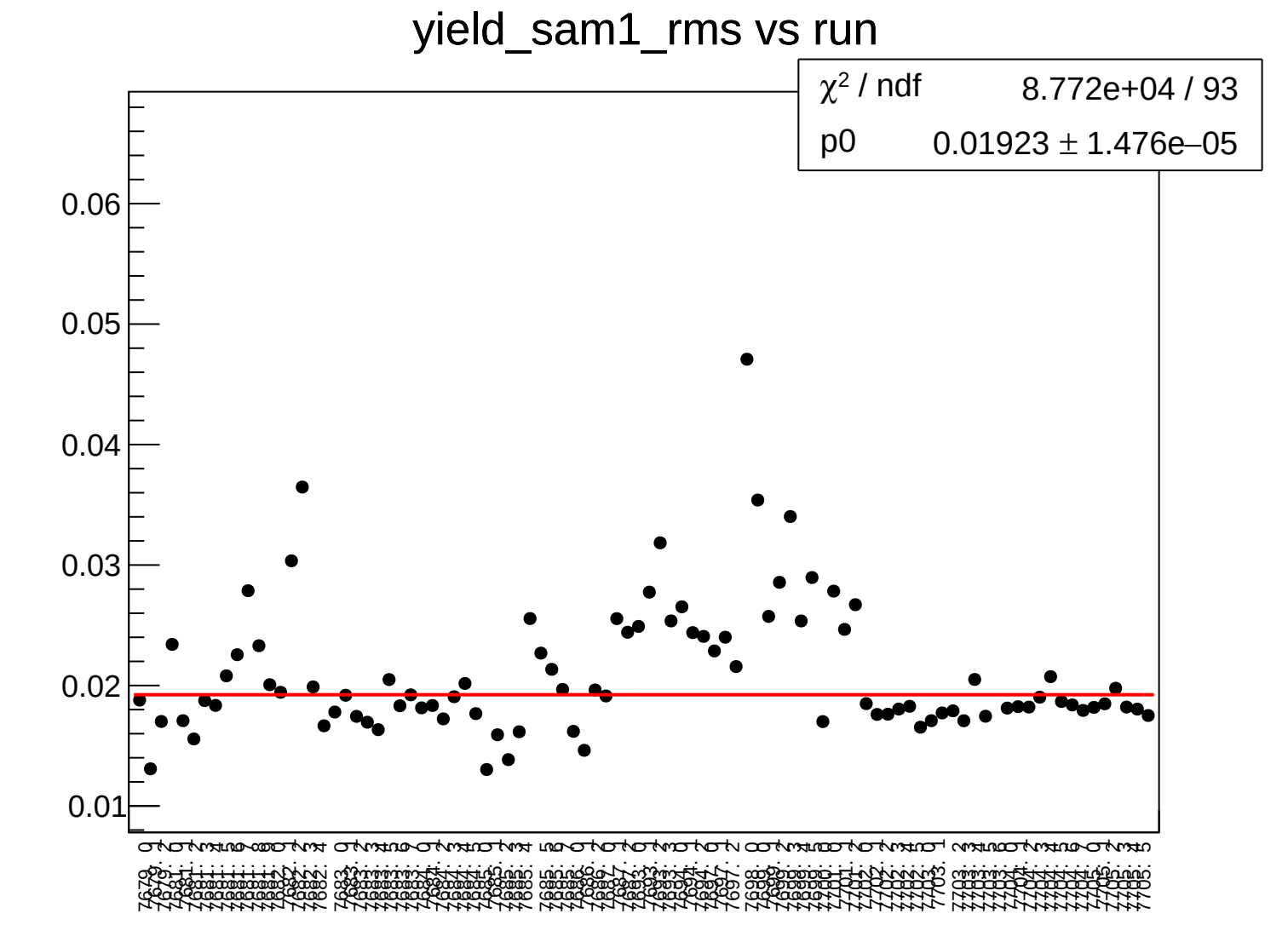

pull1D
Entries 94
Mean −0.02877
Std Dev 0.9452
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

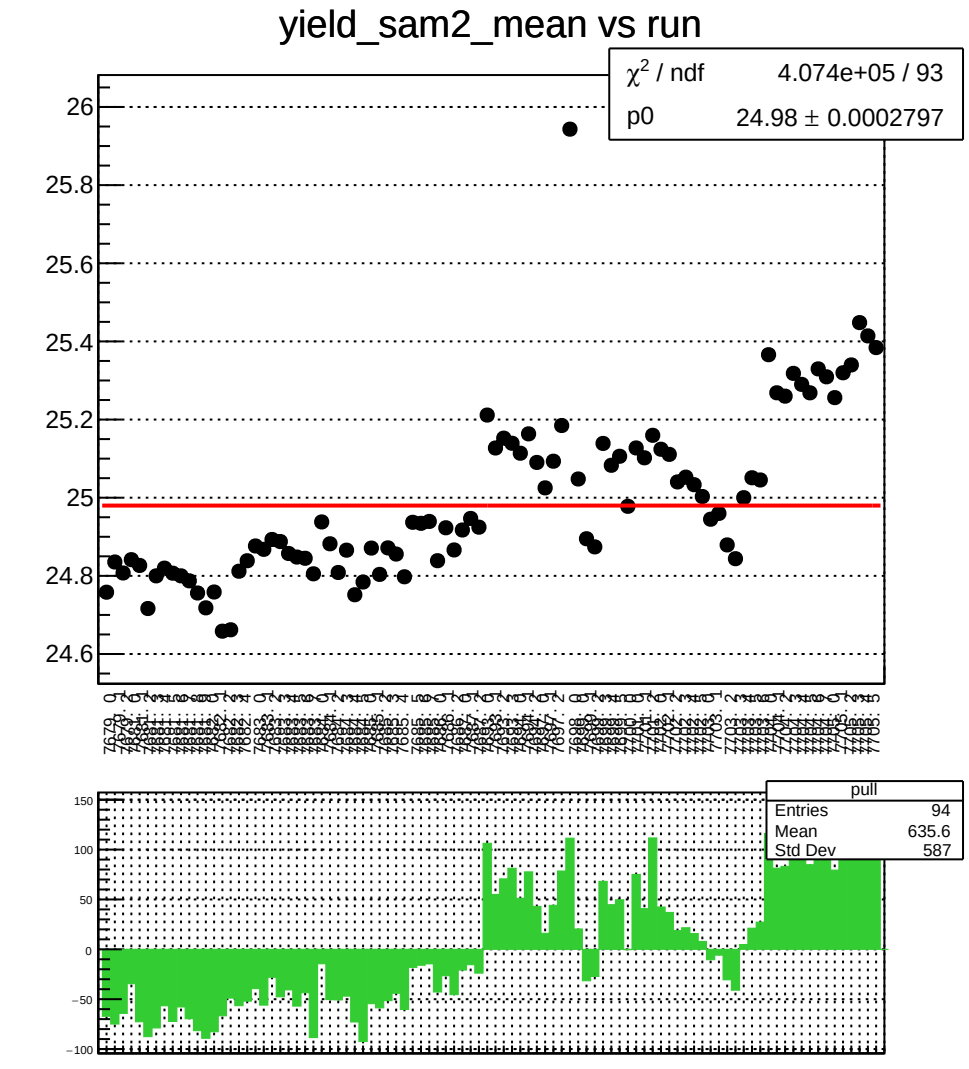

asym_sam7_rms vs run
χ² / ndf 4.814e+04 / 93
p0 1194 ± 0.906
1700
1600
1500
1400
1300
1200
1100
1000
900

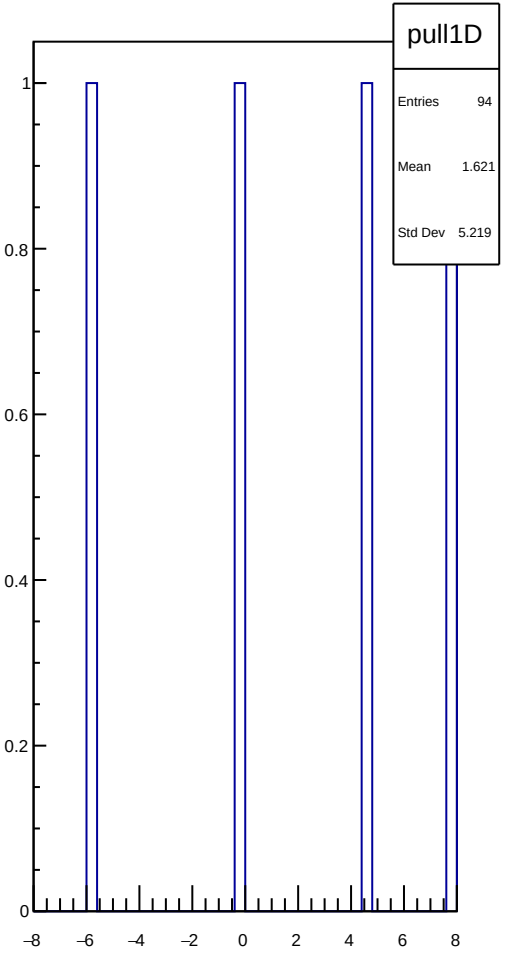

asym_sam8_mean vs run
χ² / ndf 82.67 / 93
p0 −15.04 ± 935.5
pull
Entries 94
Mean −197.9
Std Dev 250.2
pull1D
Entries 94
Mean −0.02232
Std Dev 0.9375

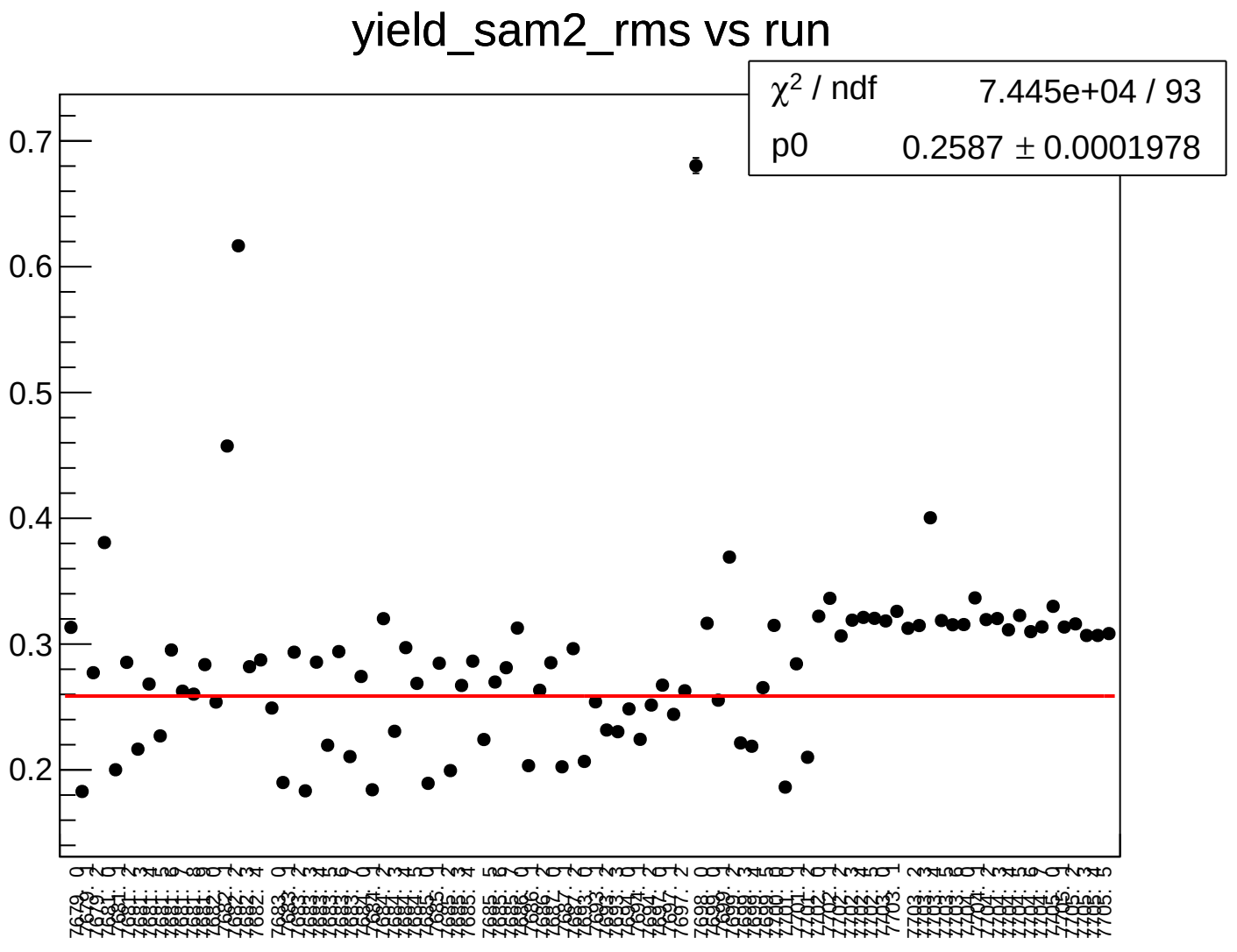

asym_sam8_rms vs run
χ² / ndf 4.128e+04 / 93
p0 873.5 ± 0.6615
1200
1100
1000
900
800
700
600

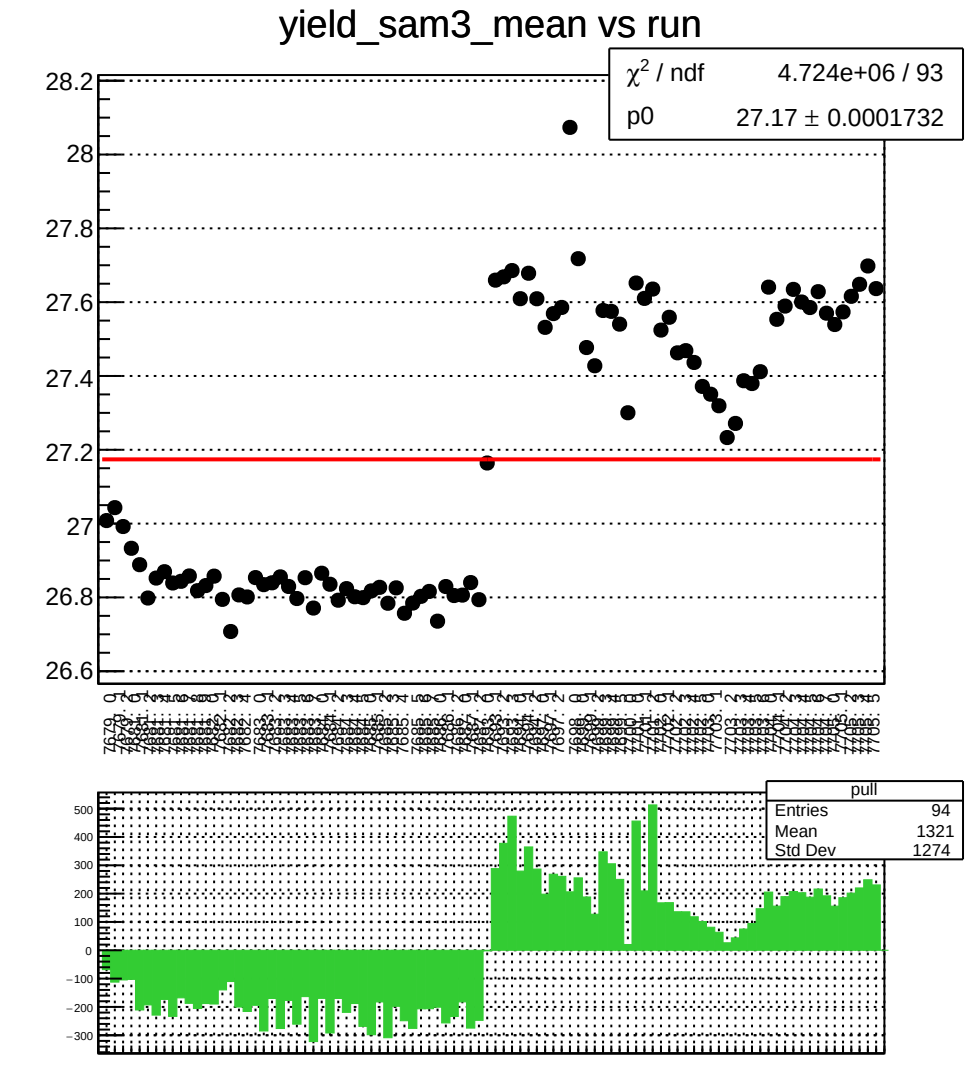

yield_sam1_mean vs run
χ² / ndf 1.028e+07 / 93
p0 15.27 ± 2.088e−05
15.4
15.35
15.3
15.25
15.2
pull
Entries 94
Mean −347
Std Dev 479
600
400
200
0
−200
−400
pull1D
Entries 94
Mean −3.126
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

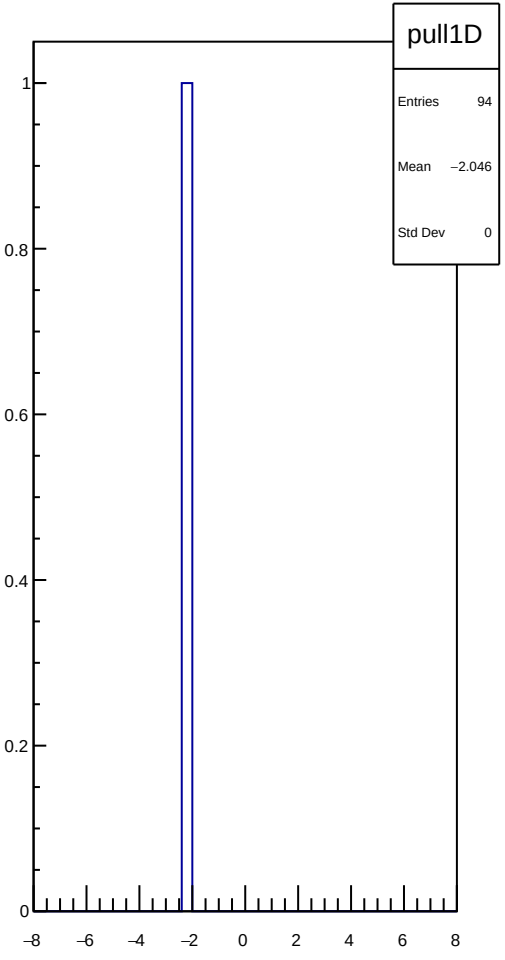

yield_sam1_rms vs run
χ² / ndf 8.772e+04 / 93
p0 0.01923 ± 1.476e−05
0.06
0.05
0.04
0.03
0.02
0.01

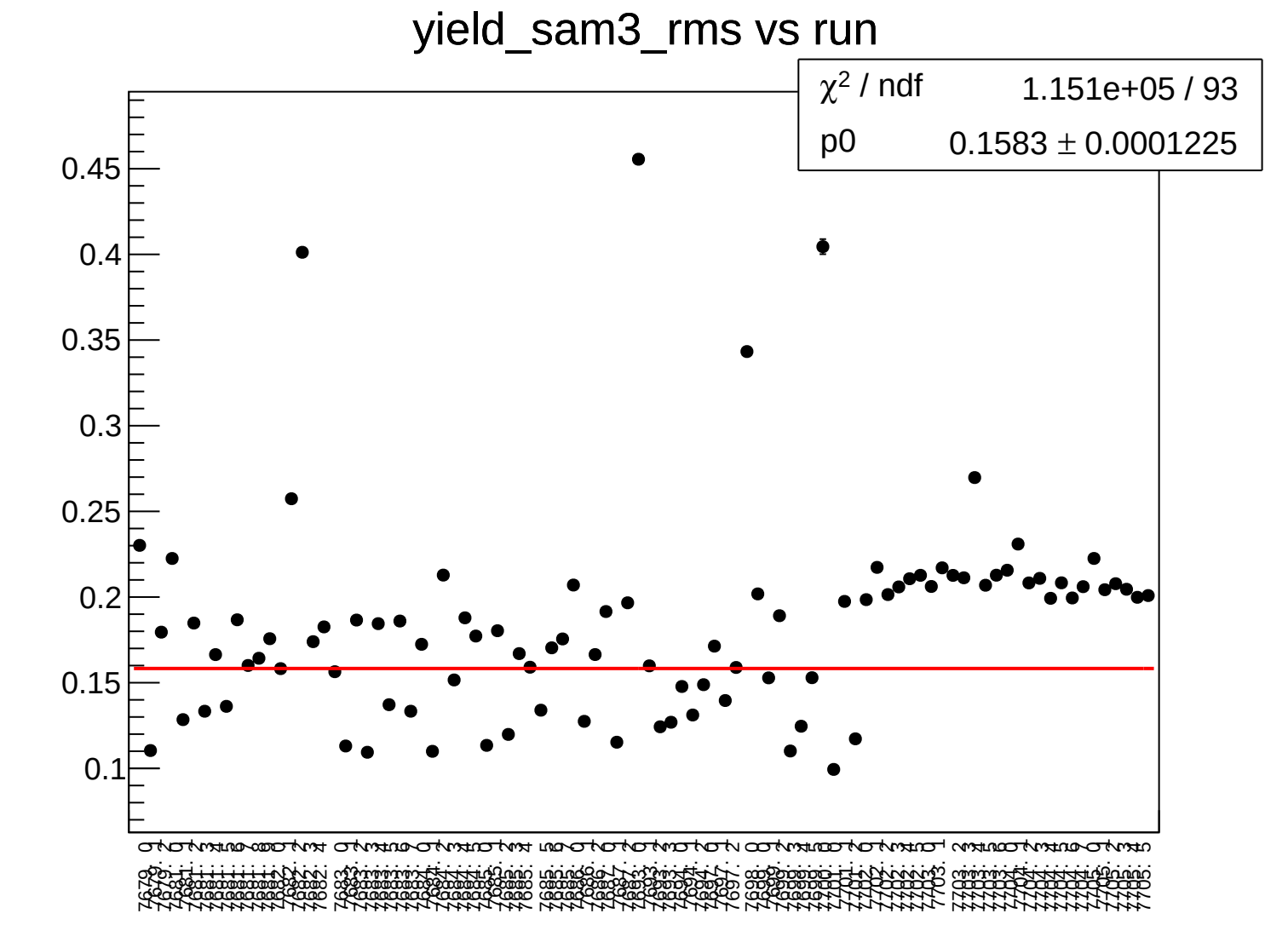

yield_sam2_mean vs run
χ² / ndf 4.074e+05 / 93
p0 24.98 ± 0.0002797
pull
Entries 94
Mean 635.6
Std Dev 587

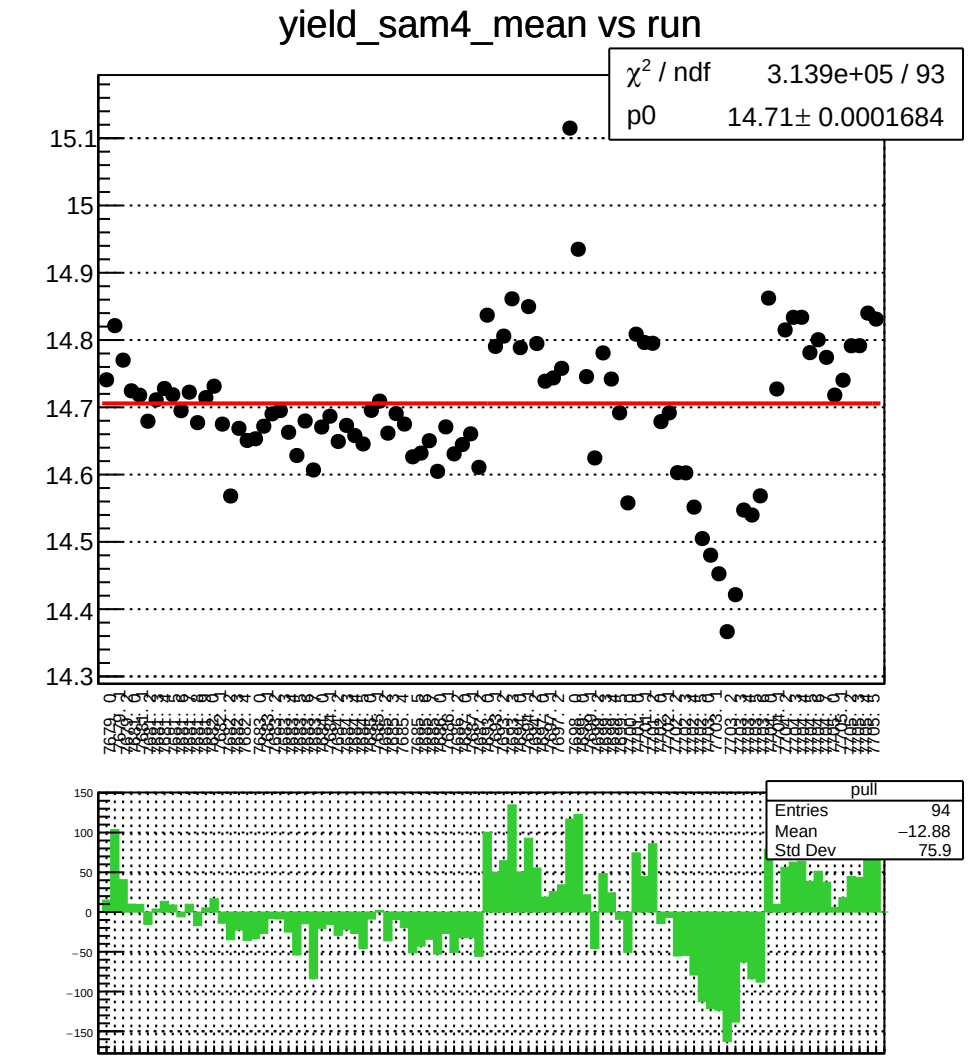

pull1D
Entries 94
Mean 1.621
Std Dev 5.219

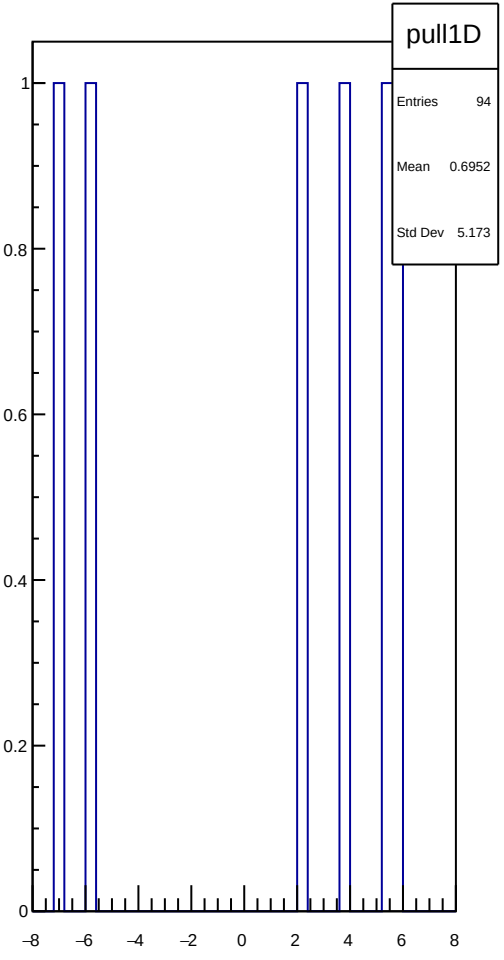

yield_sam2_rms vs run
χ² / ndf 7.445e+04 / 93
p0 0.2587 ± 0.0001978
0.7
0.6
0.5
0.4
0.3
0.2

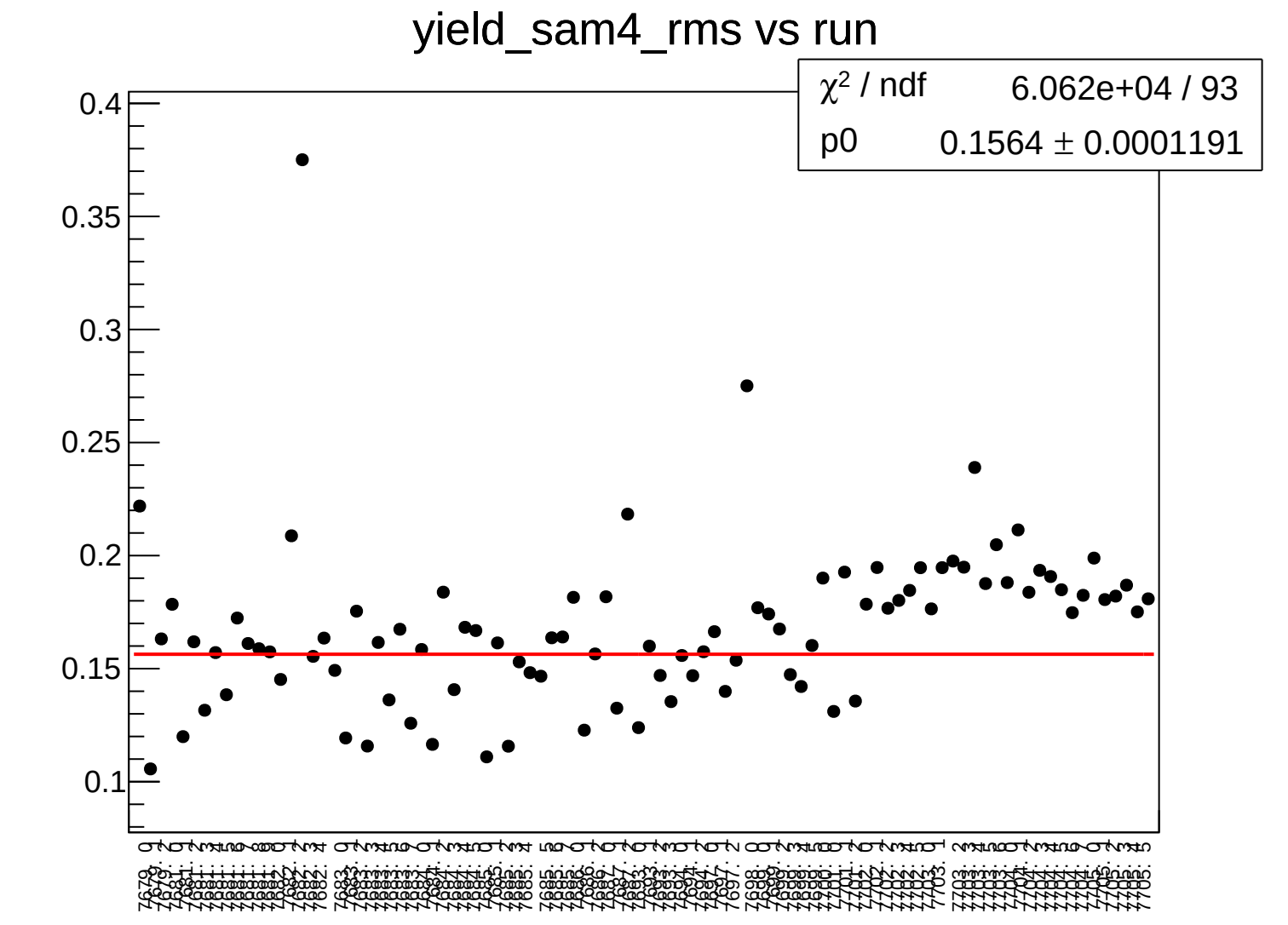

yield_sam3_mean vs run
χ² / ndf 4.724e+06 / 93
p0 27.17 ± 0.0001732
28.2
28
27.8
27.6
27.4
27.2
27
26.8
26.6
pull
Entries 94
Mean 1321
Std Dev 1274
500
400
300
200
100
0
−100
−200
−300

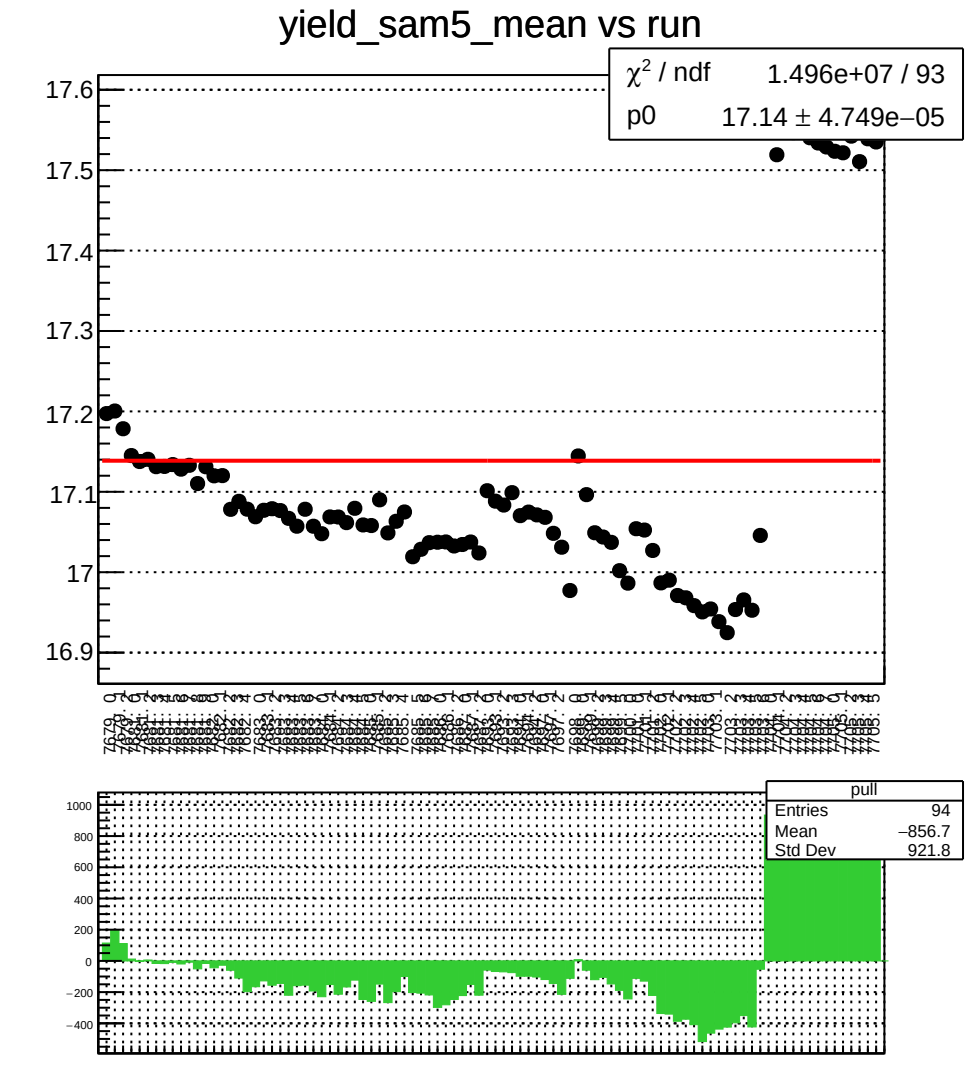

pull1D
Entries 94
Mean −2.046
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

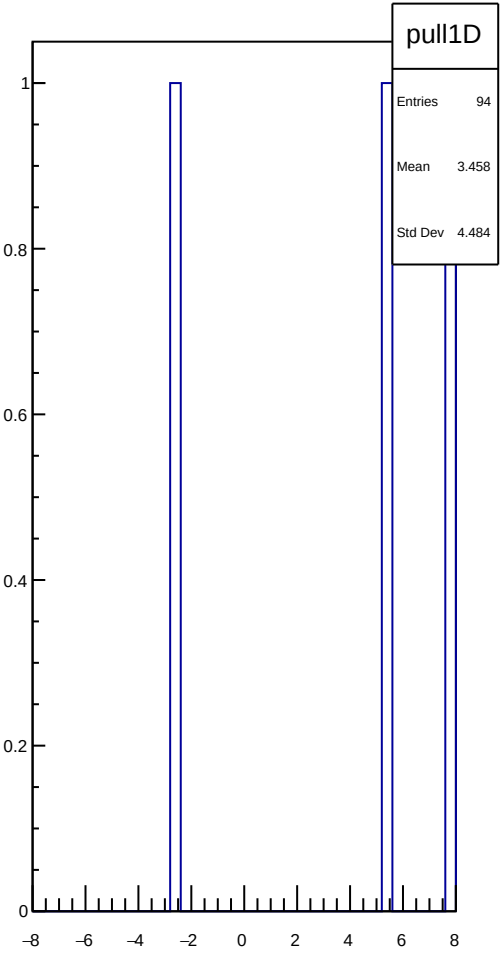

yield_sam3_rms vs run
χ² / ndf 1.151e+05 / 93
p0 0.1583 ± 0.0001225
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1

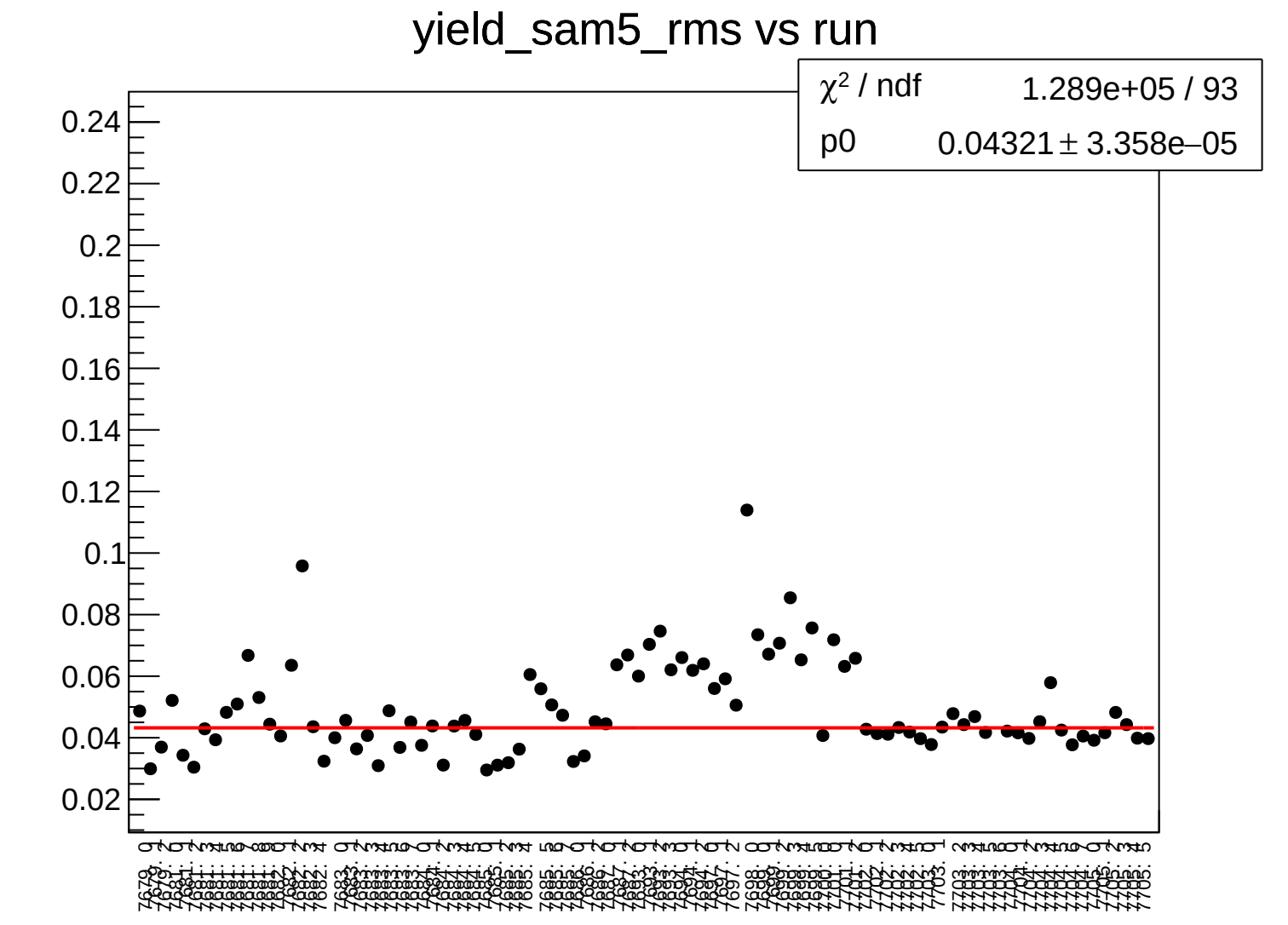

yield_sam4_mean vs run
χ² / ndf 3.139e+05 / 93
p0 14.71± 0.0001684
15.1
15
14.9
14.8
14.7
14.6
14.5
14.4
14.3
pull
Entries 94
Mean −12.88
Std Dev 75.9
150
100
50
0
−50
−100
−150

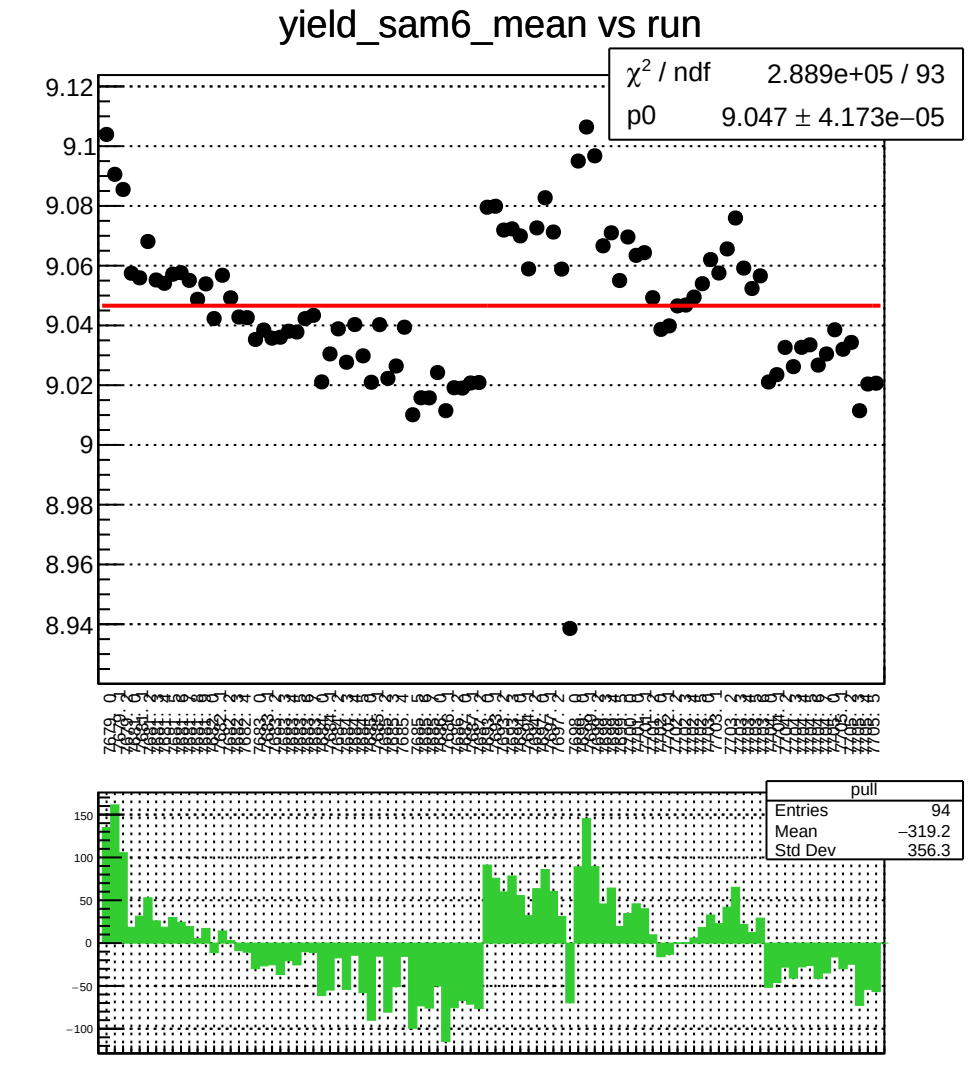

pull1D
Entries 94
Mean 0.6952
Std Dev 5.173
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

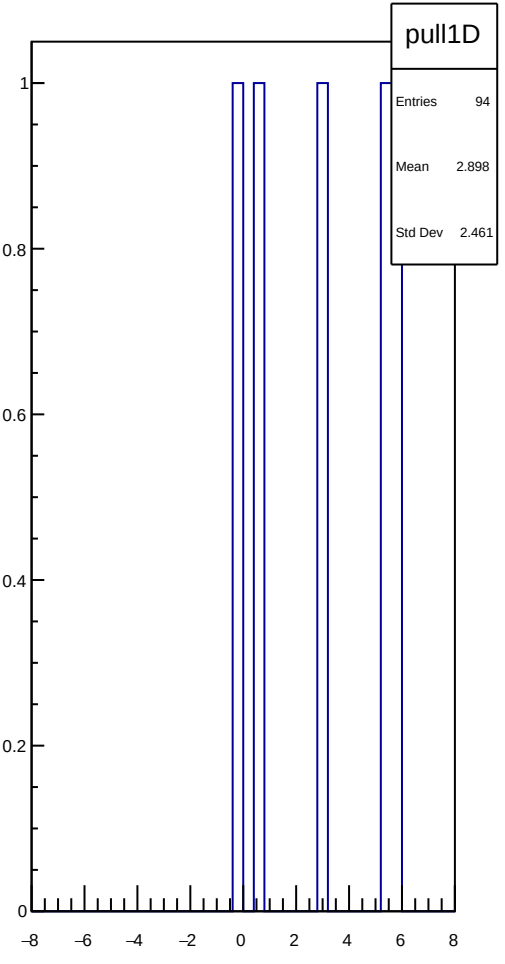

yield_sam4_rms vs run
χ² / ndf 6.062e+04 / 93
p0 0.1564 ± 0.0001191
0.4
0.35
0.3
0.25
0.2
0.15
0.1

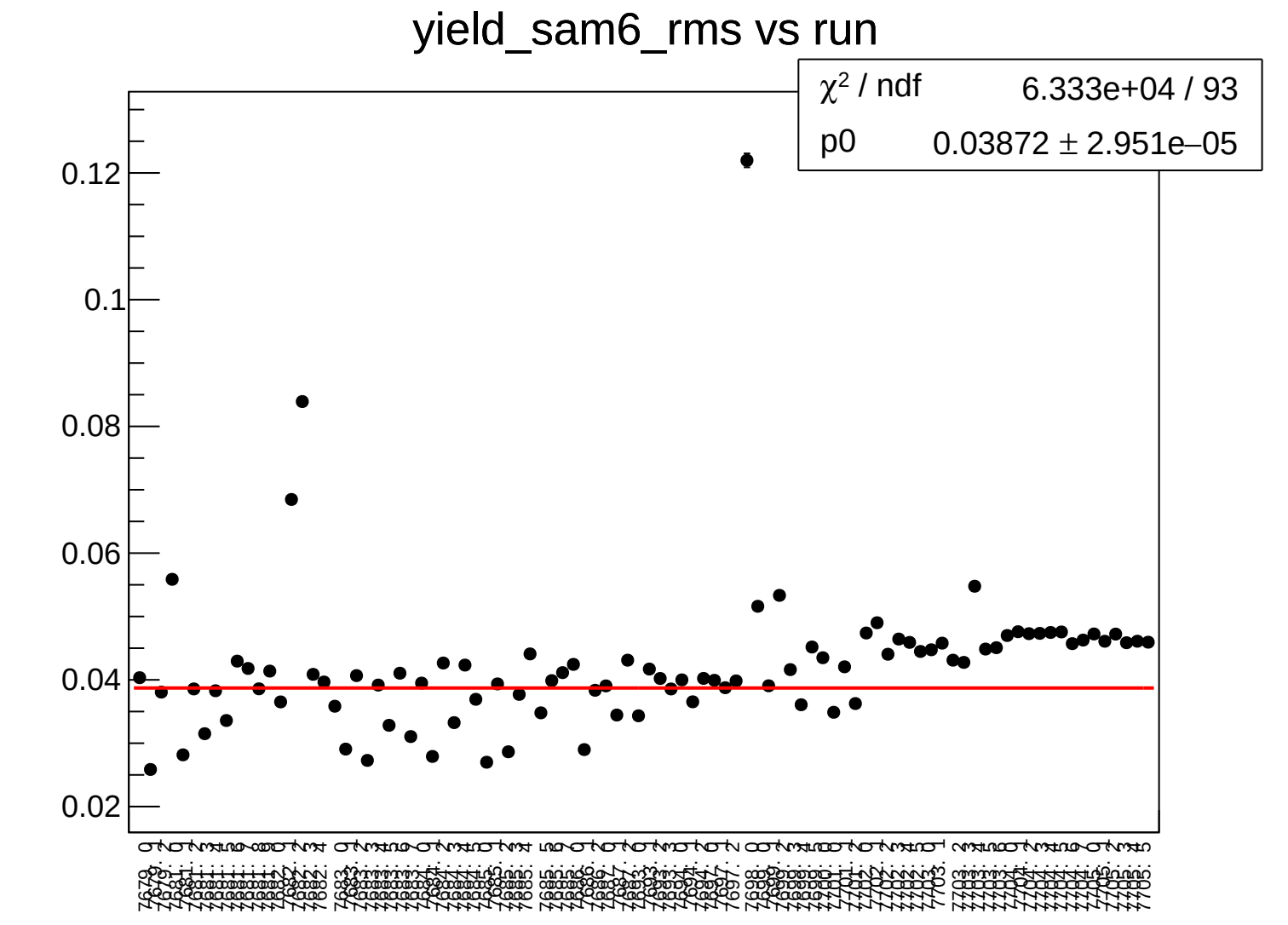

yield_sam5_mean vs run
χ² / ndf 1.496e+07 / 93
p0 17.14 ± 4.749e−05
17.6
17.5
17.4
17.3
17.2
17.1
17
16.9
pull
Entries 94
Mean −856.7
Std Dev 921.8
1000
800
600
400
200
0
−200
−400

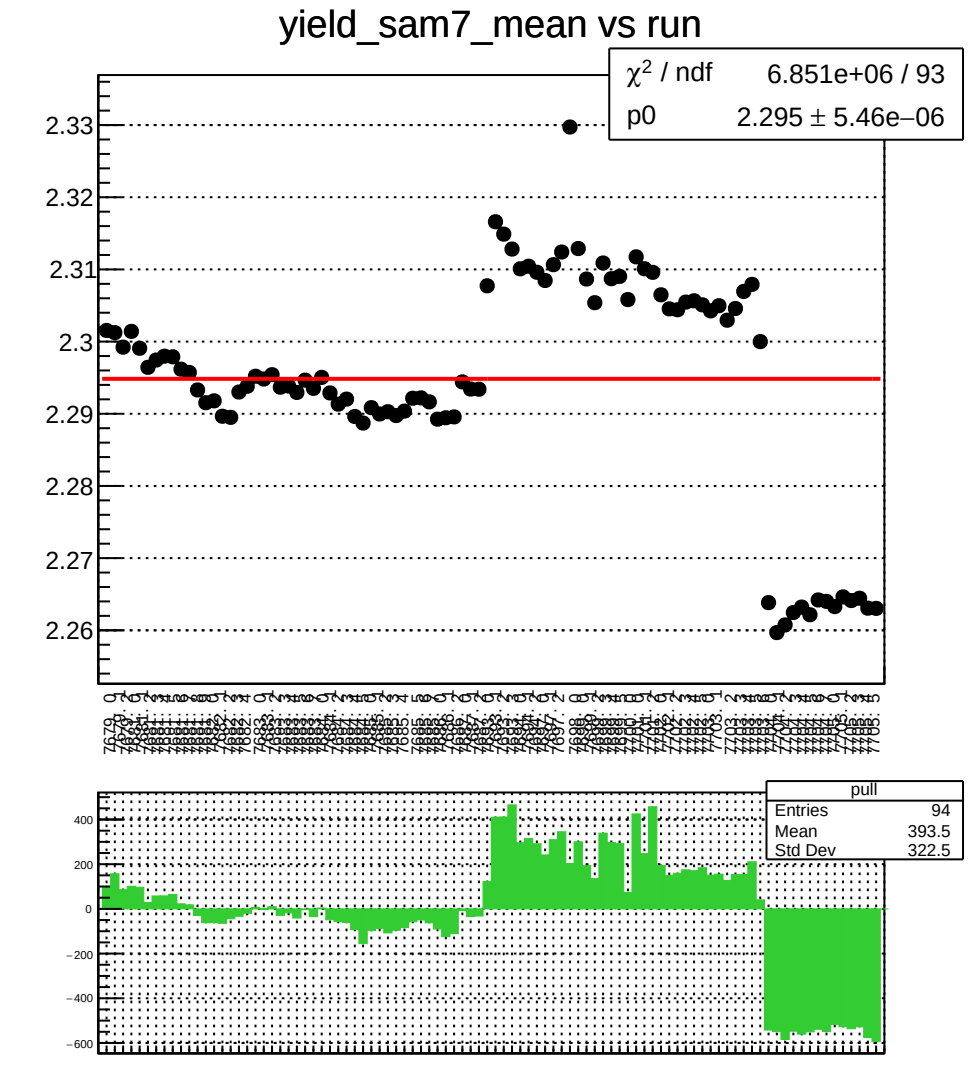

pull1D
Entries 94
Mean 3.458
Std Dev 4.484
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

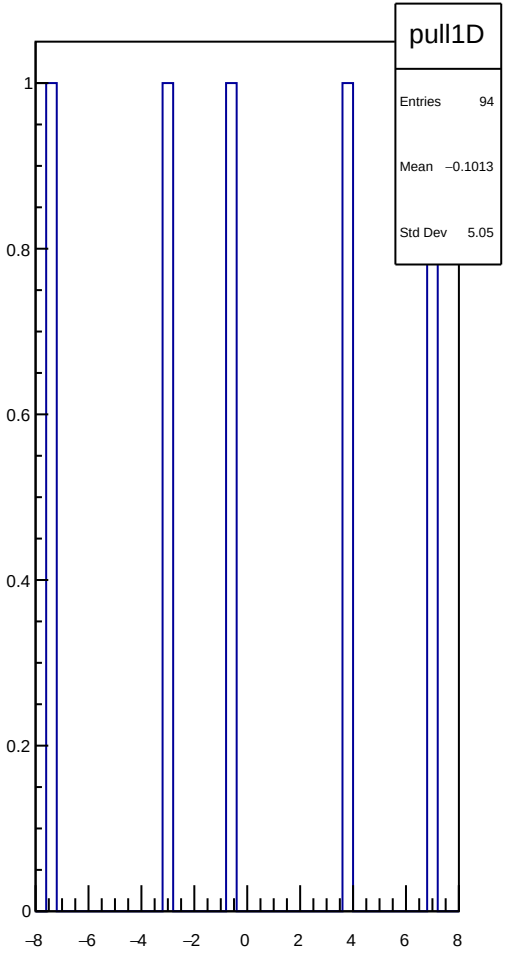

yield_sam5_rms vs run
χ² / ndf 1.289e+05 / 93
p0 0.04321 ± 3.358e–05
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

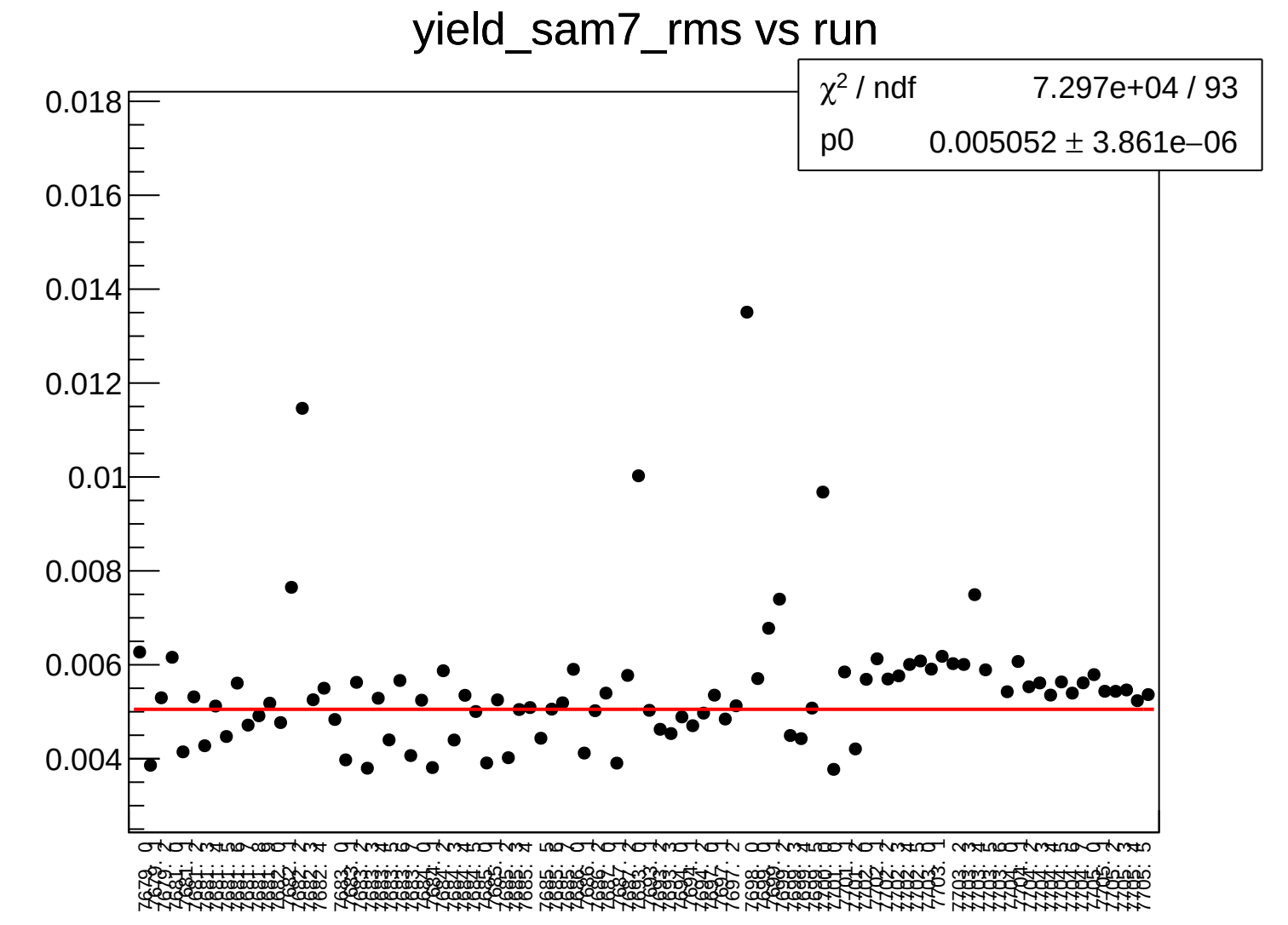

yield_sam6_mean vs run
χ² / ndf 2.889e+05 / 93
p0 9.047 ± 4.173e−05
9.12
9.1
9.08
9.06
9.04
9.02
9
8.98
8.96
8.94
pull
Entries 94
Mean −319.2
Std Dev 356.3
150
100
50
0
−50
−100

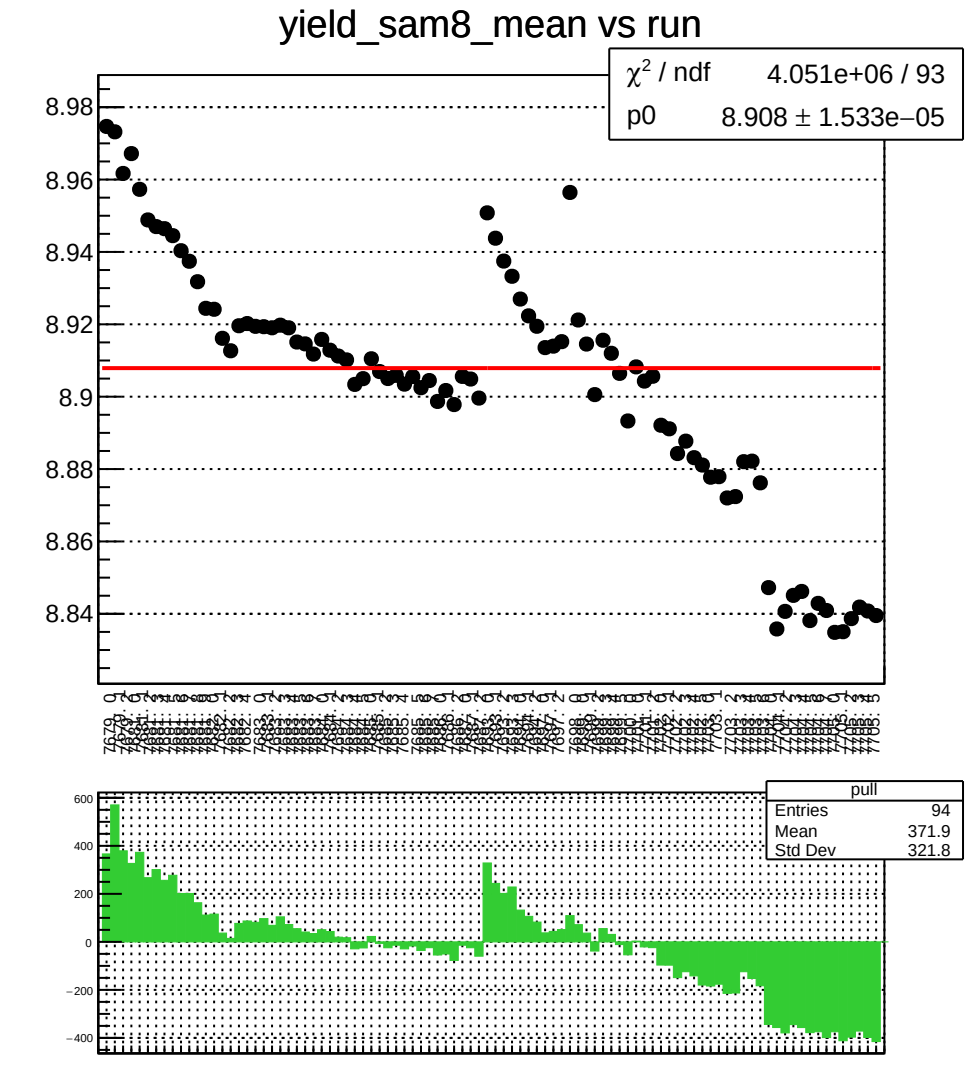

pull1D
Entries 94
Mean 2.898
Std Dev 2.461
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

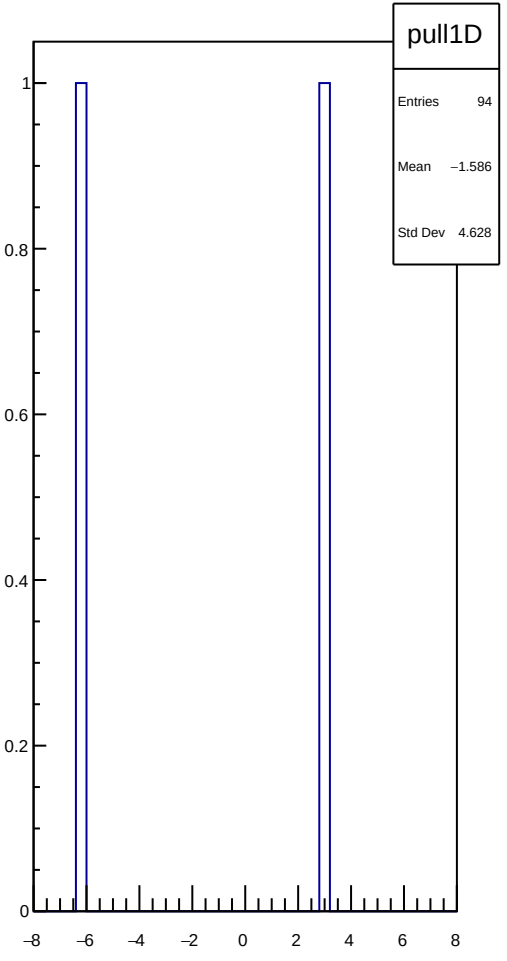

yield_sam6_rms vs run
χ² / ndf 6.333e+04 / 93
p0 0.03872 ± 2.951e–05
0.12
0.1
0.08
0.06
0.04
0.02

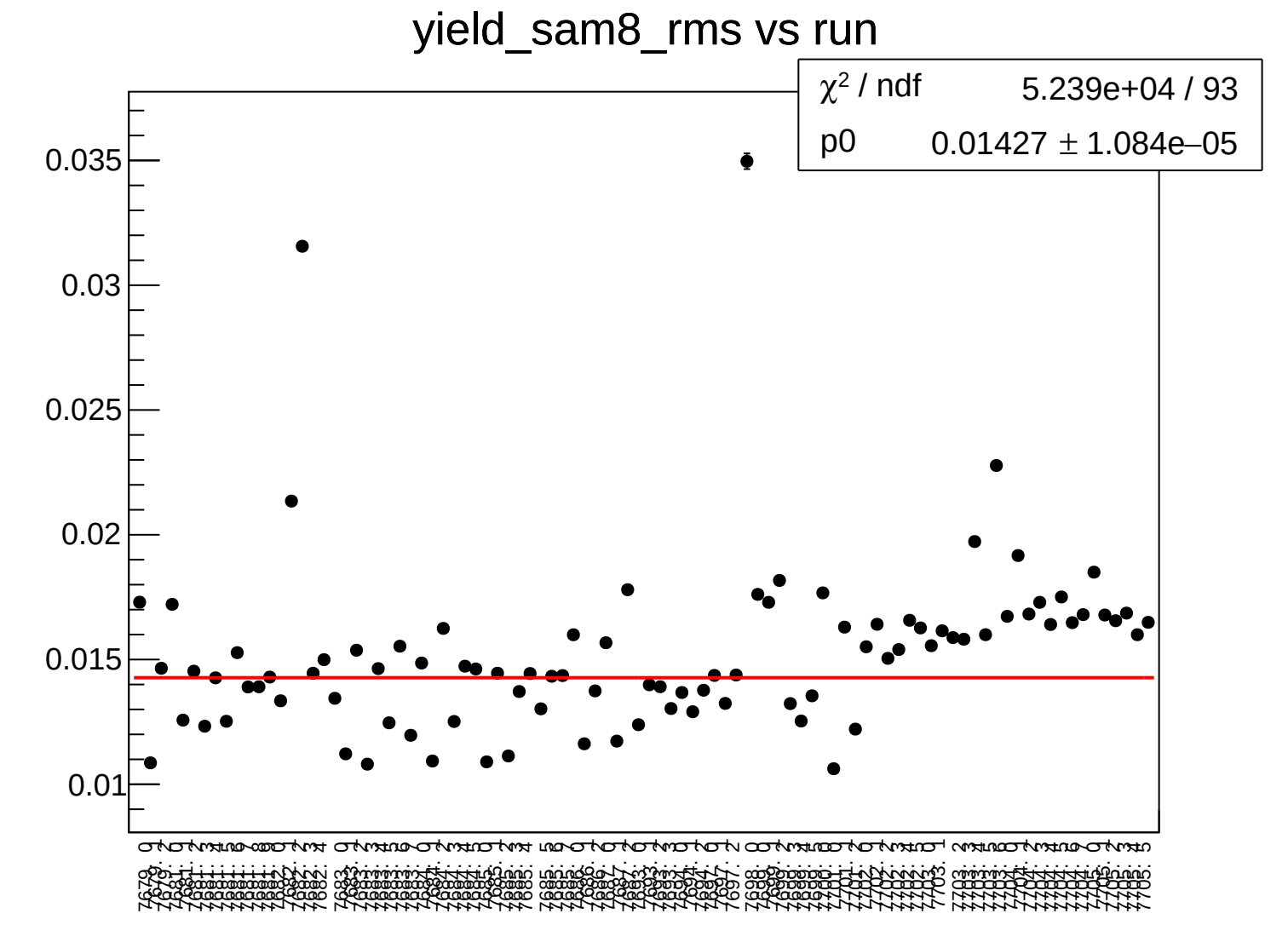

yield_sam7_mean vs run
χ² / ndf 6.851e+06 / 93
p0 2.295 ± 5.46e−06
2.33
2.32
2.31
2.3
2.29
2.28
2.27
2.26
pull
Entries 94
Mean 393.5
Std Dev 322.5
400
200
0
−200
−400
−600

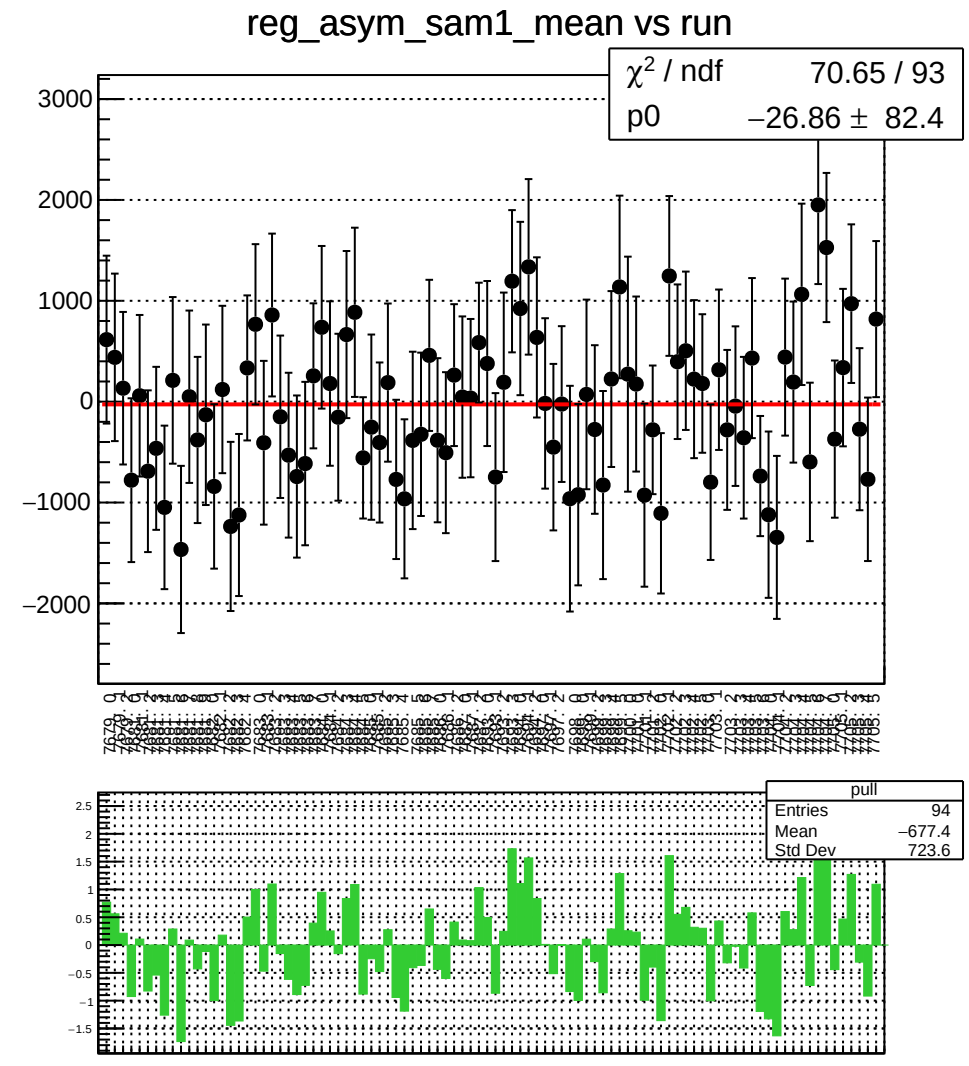

pull1D
Entries 94
Mean −0.1013
Std Dev 5.05
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

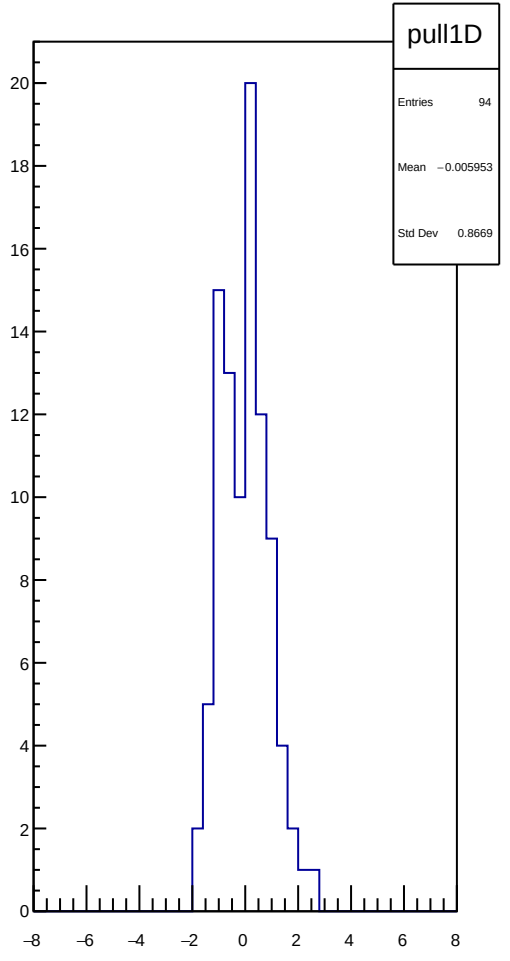

yield_sam7_rms vs run
χ^2 / ndf 7.297e+04 / 93
p0 0.005052 ± 3.861e−06
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004

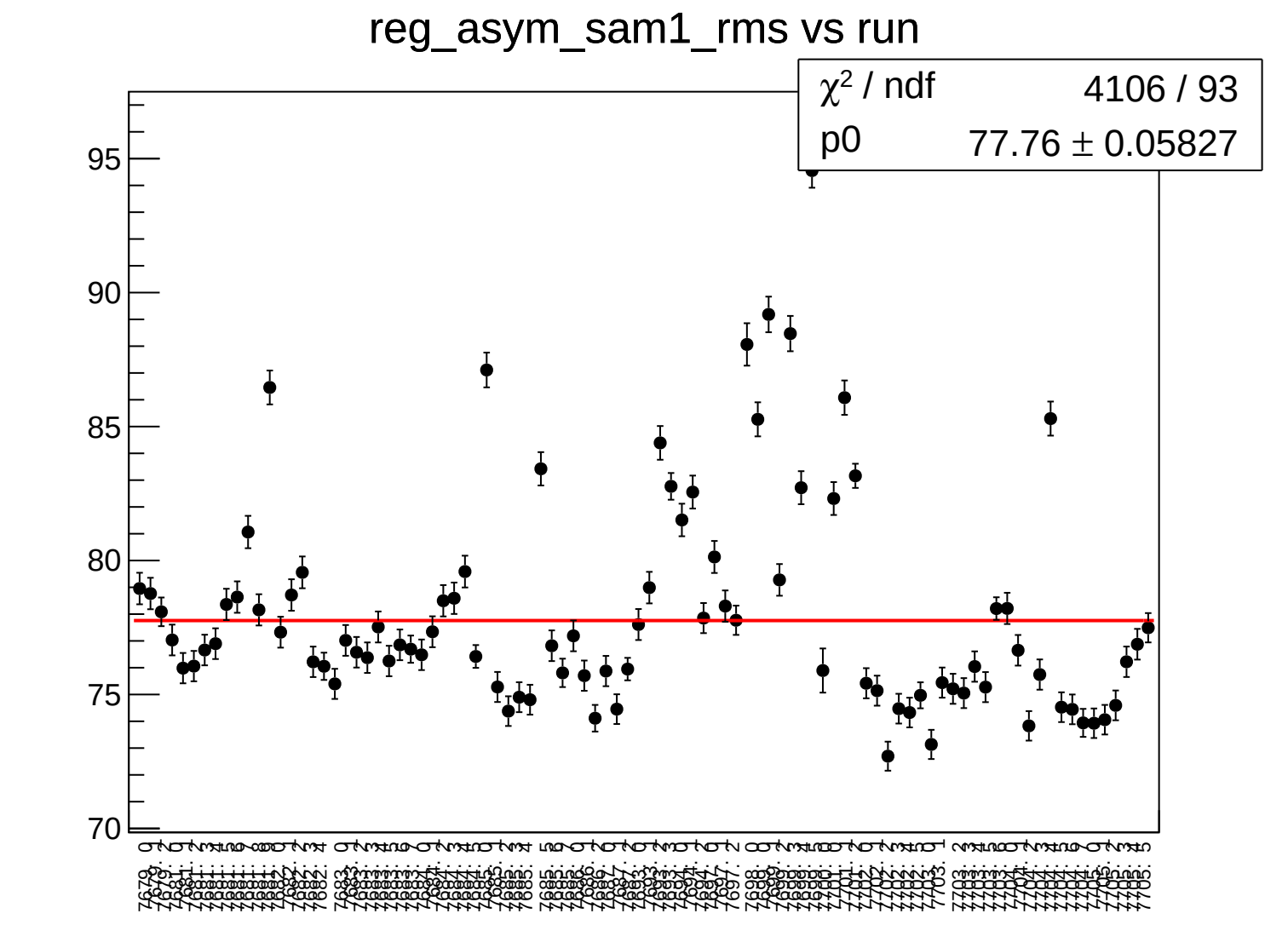

yield_sam8_mean vs run
χ² / ndf 4.051e+06 / 93
p0 8.908 ± 1.533e−05
8.98
8.96
8.94
8.92
8.9
8.88
8.86
8.84
pull
Entries 94
Mean 371.9
Std Dev 321.8
600
400
200
0
−200
−400

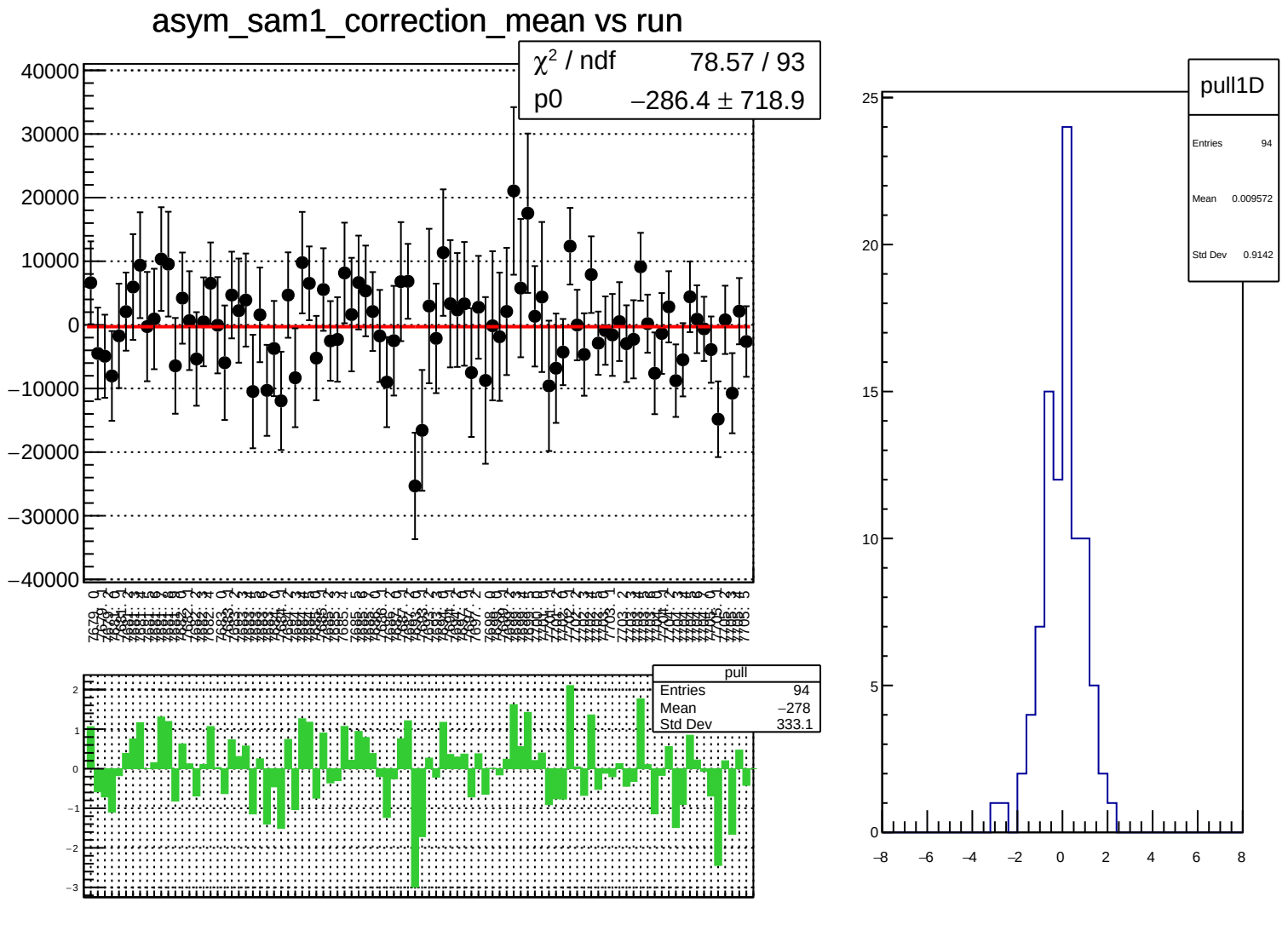

pull1D
Entries 94
Mean −1.586
Std Dev 4.628
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

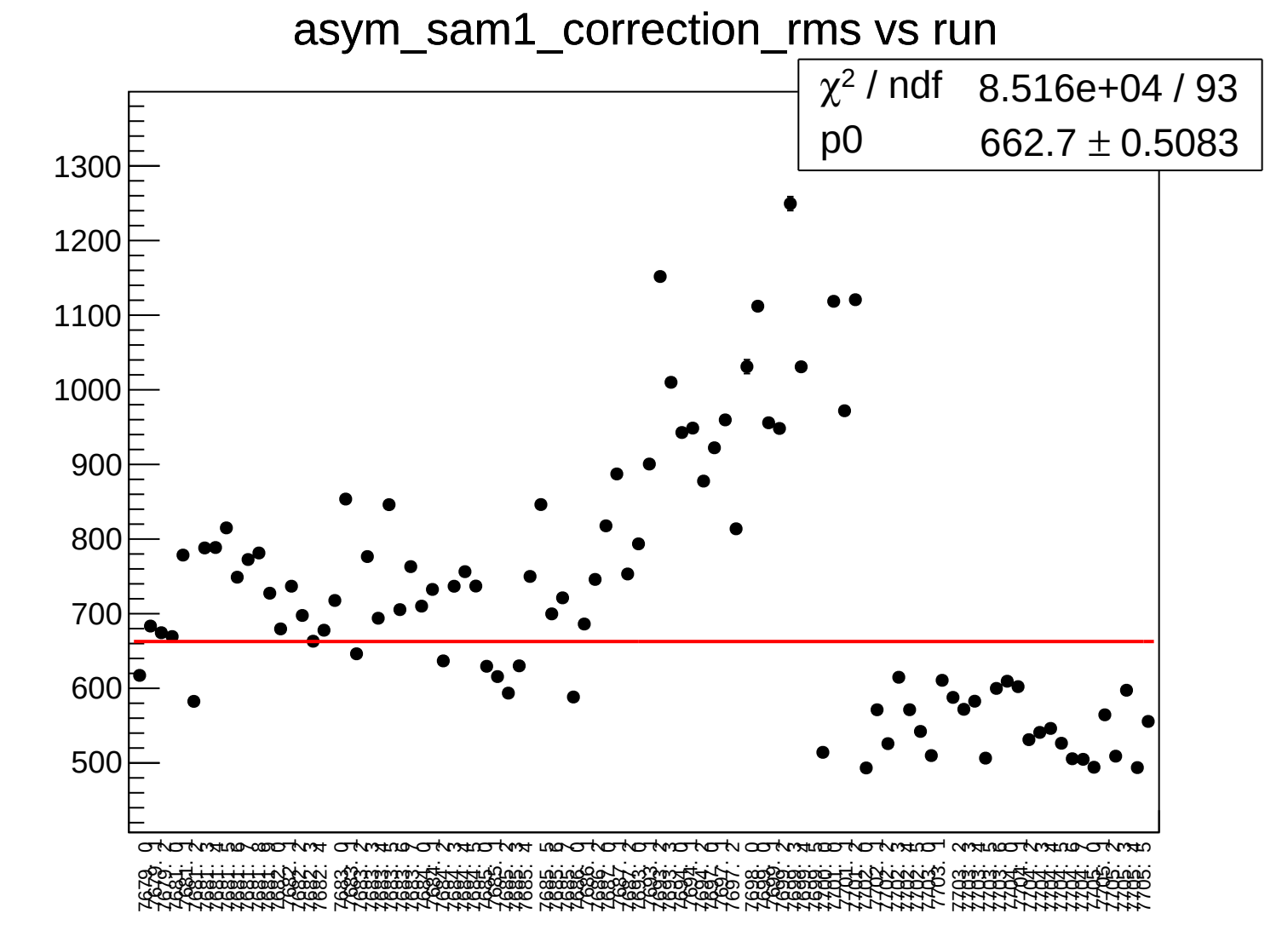

yield_sam8_rms vs run
χ² / ndf 5.239e+04 / 93
p0 0.01427 ± 1.084e−05
0.035
0.03
0.025
0.02
0.015
0.01

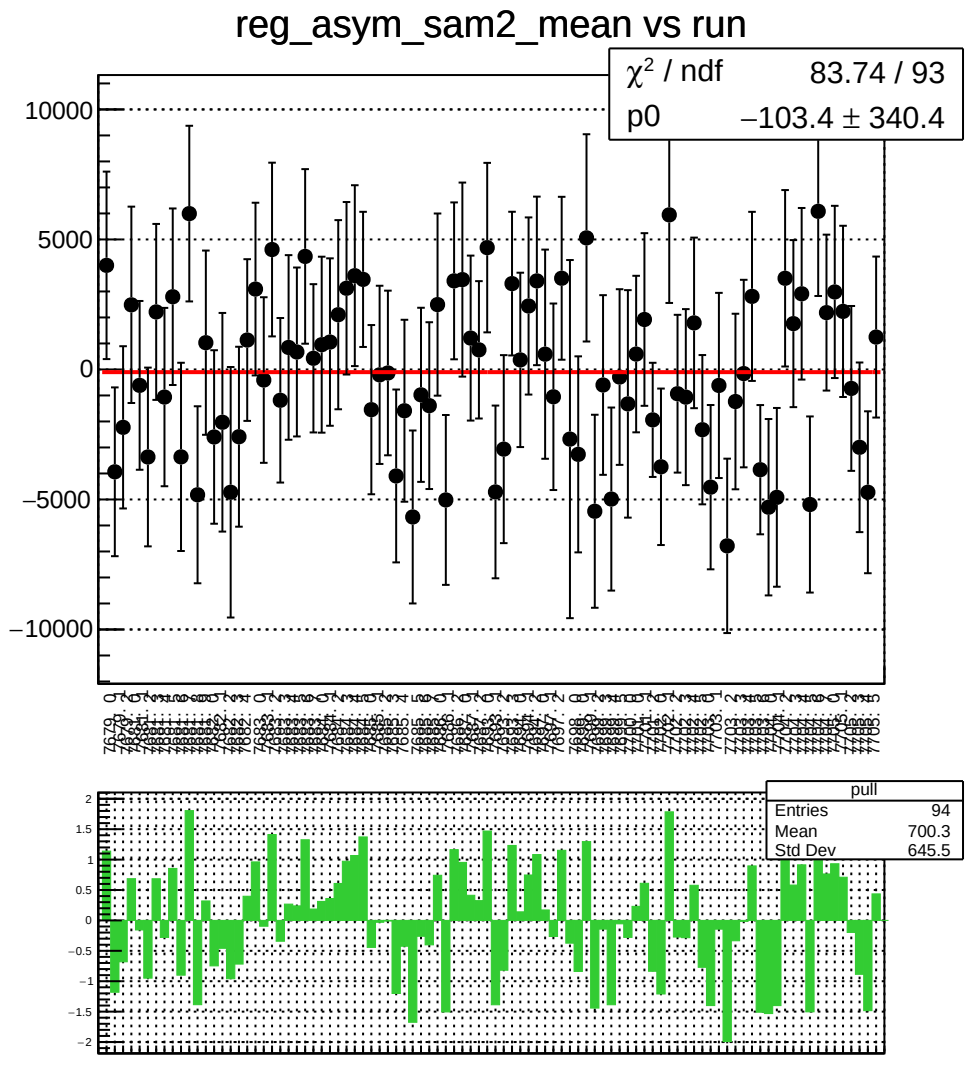

reg_asym_sam1_mean vs run
χ² / ndf 70.65 / 93
p0 −26.86 ± 82.4
3000
2000
1000
0
−1000
−2000
pull
Entries 94
Mean −677.4
Std Dev 723.6
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

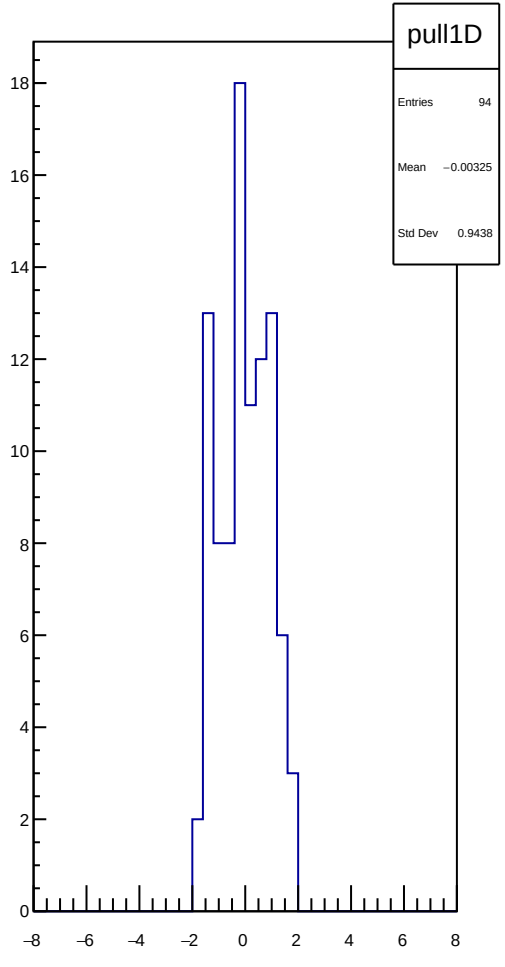

pull1D
Entries 94
Mean −0.005953
Std Dev 0.8669
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

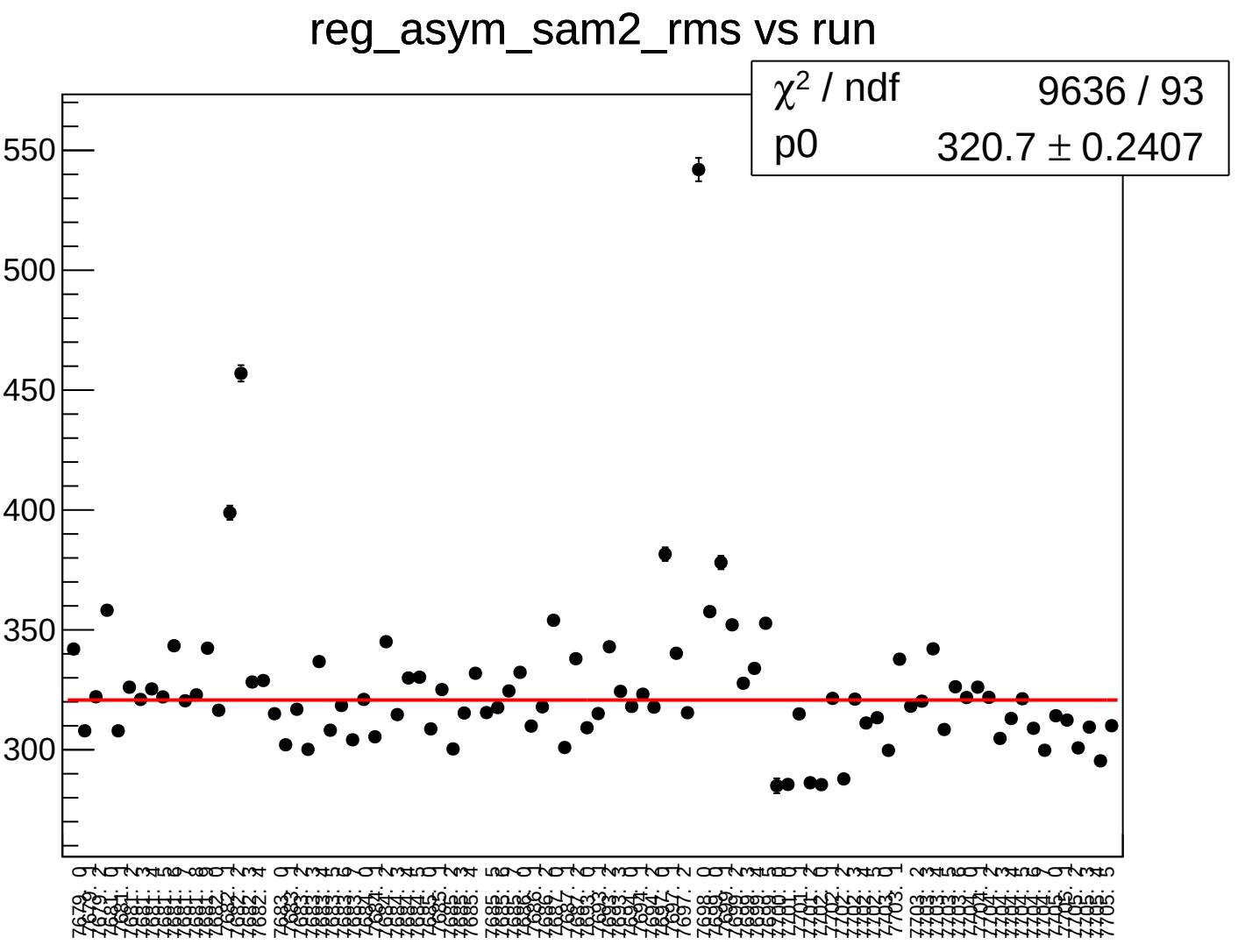

reg_asym_sam1_rms vs run
χ² / ndf 4106 / 93
p0 77.76 ± 0.05827
95
90
85
80
75
70

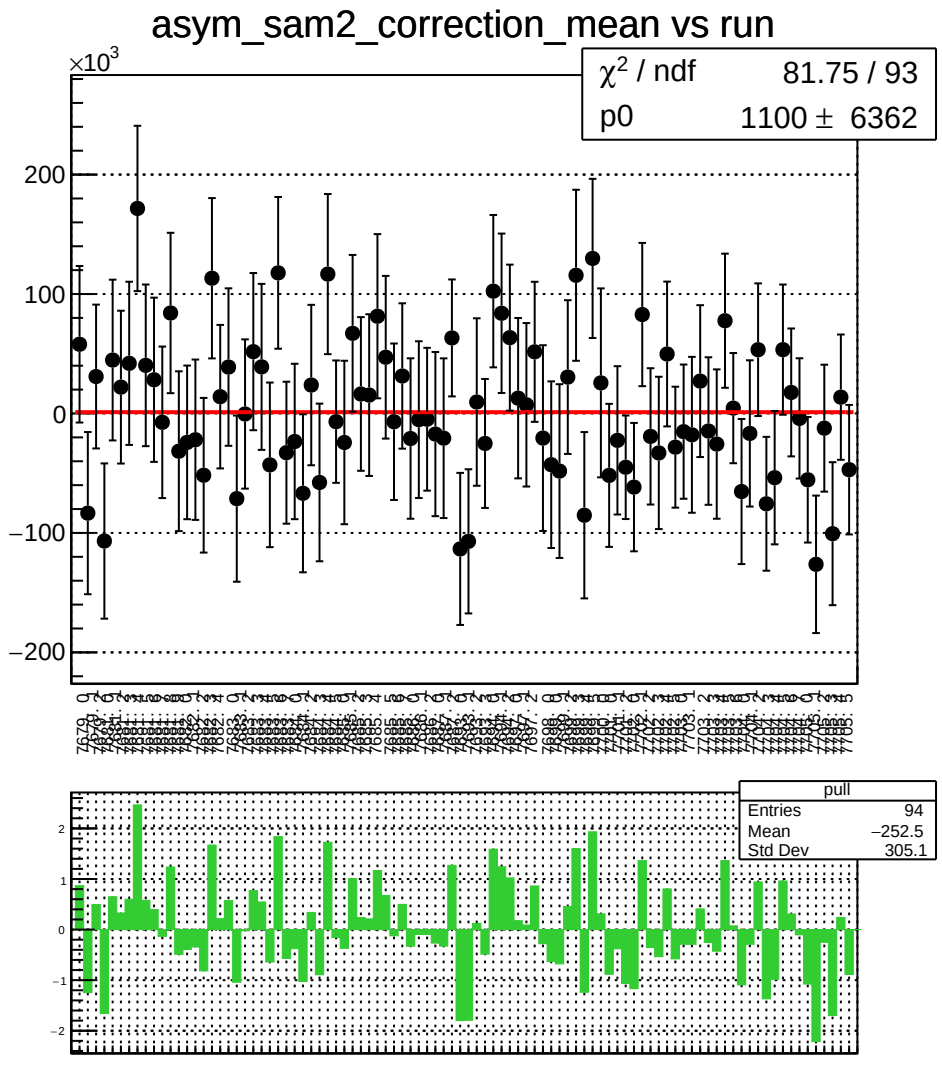

asym_sam1_correction_mean vs run
χ² / ndf 78.57 / 93
p0 −286.4 ± 718.9
pull
Entries 94
Mean −278
Std Dev 333.1
pull1D
Entries 94
Mean 0.009572
Std Dev 0.9142

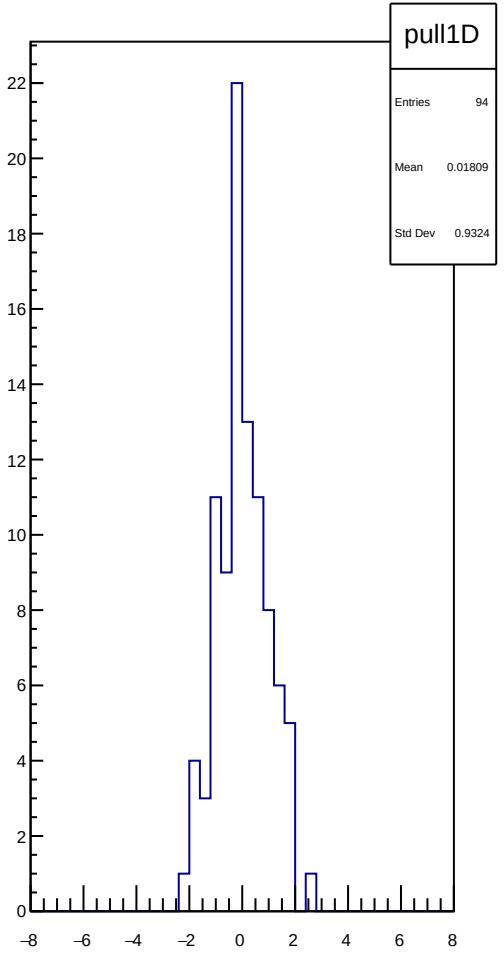

asym_sam1_correction_rms vs run
χ² / ndf 8.516e+04 / 93
p0 662.7 ± 0.5083
1300
1200
1100
1000
900
800
700
600
500

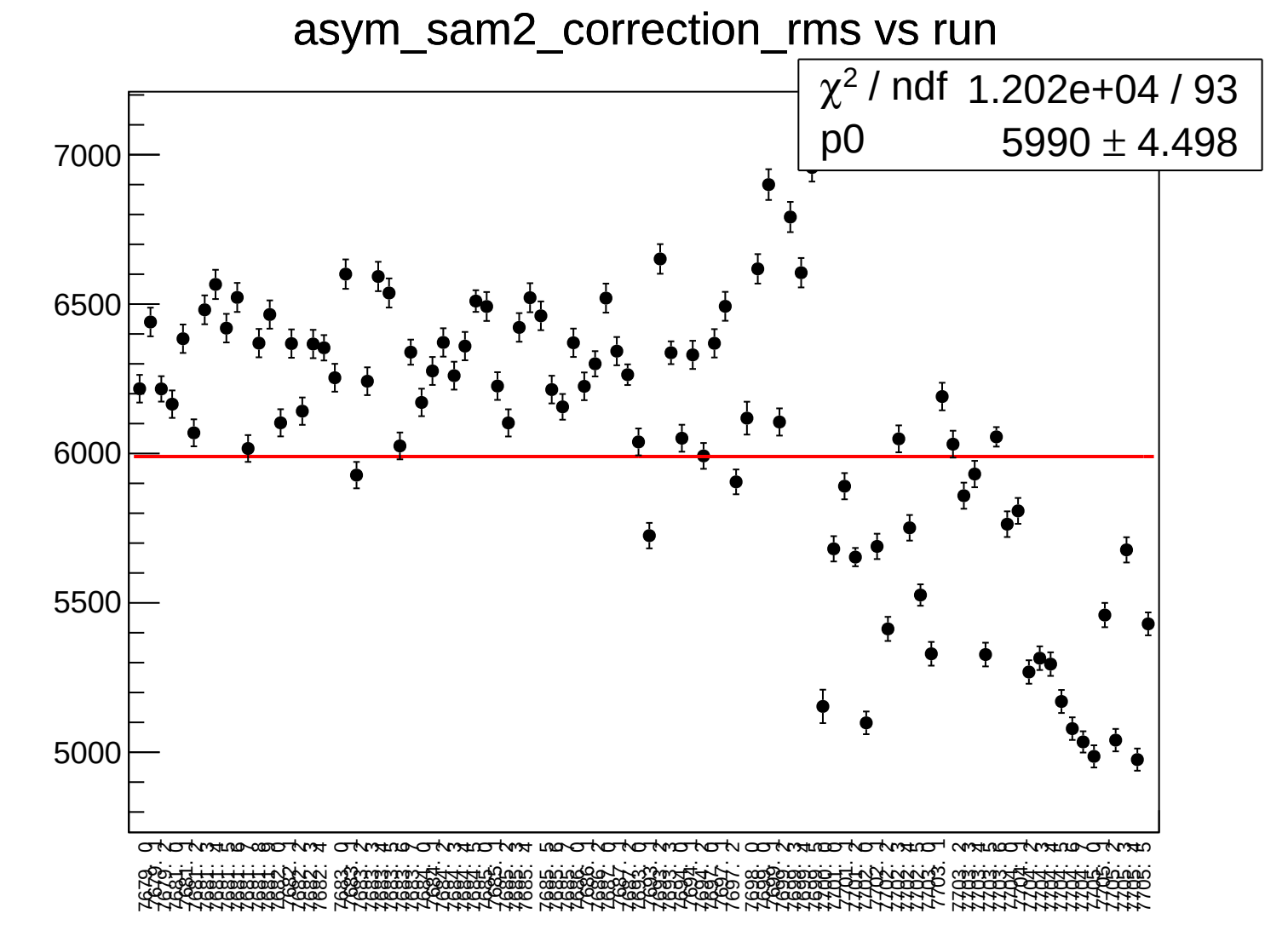

reg_asym_sam2_mean vs run
χ² / ndf 83.74 / 93
p0 −103.4 ± 340.4
10000
5000
0
−5000
−10000
pull
Entries 94
Mean 700.3
Std Dev 645.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

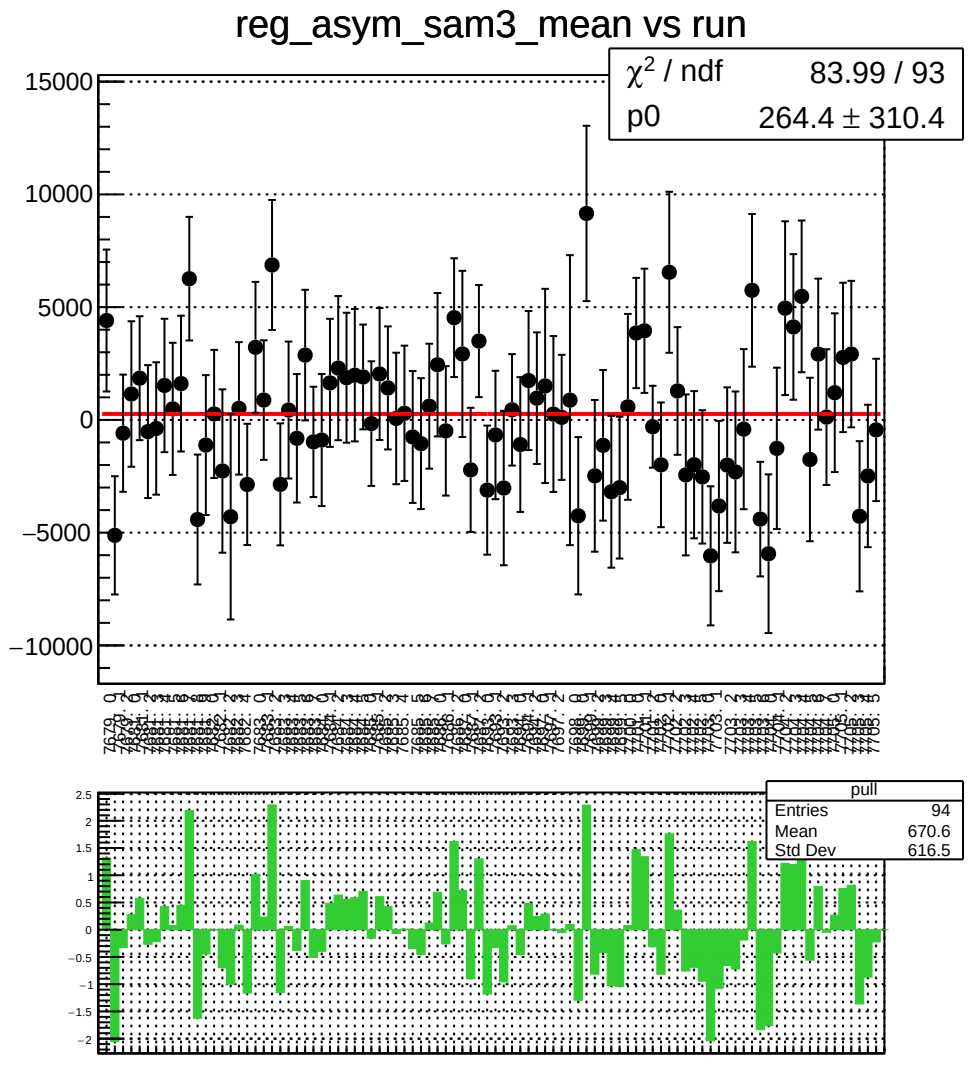

pull1D
Entries 94
Mean −0.00325
Std Dev 0.9438
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

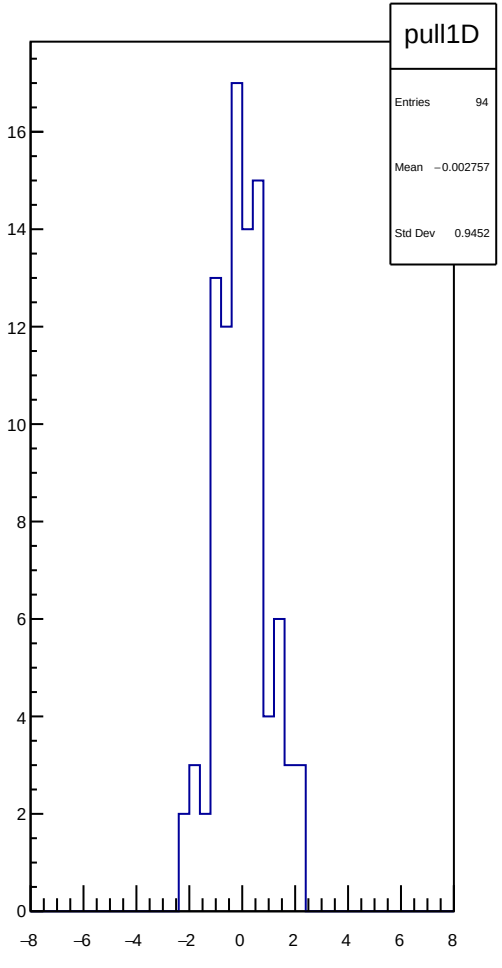

reg_asym_sam2_rms vs run
χ^2 / ndf 9636 / 93
p0 320.7 ± 0.2407
550
500
450
400
350
300

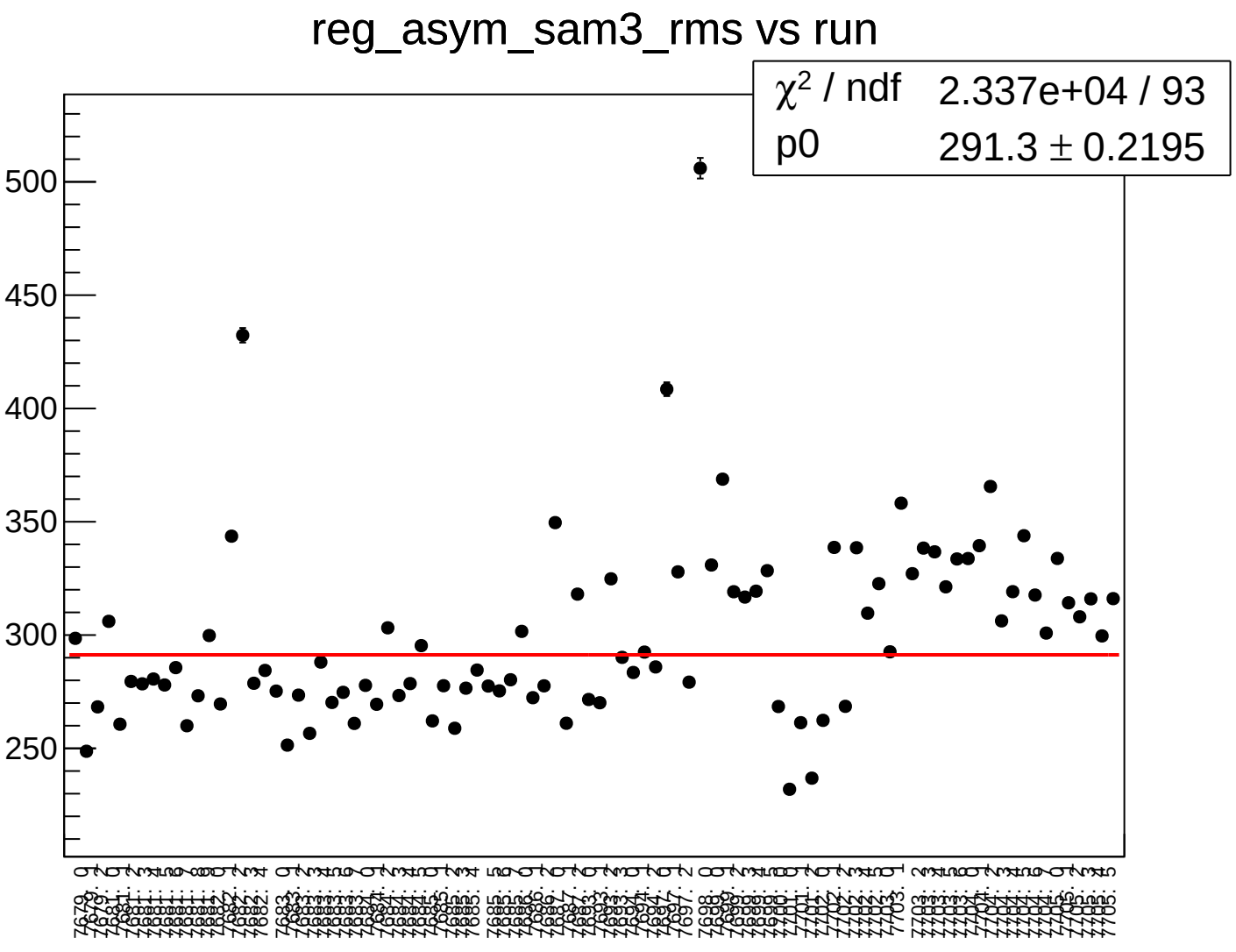

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 81.75 / 93
p0 1100 ± 6362
200
100
0
−100
−200
pull
Entries 94
Mean −252.5
Std Dev 305.1
2
1
0
−1
−2

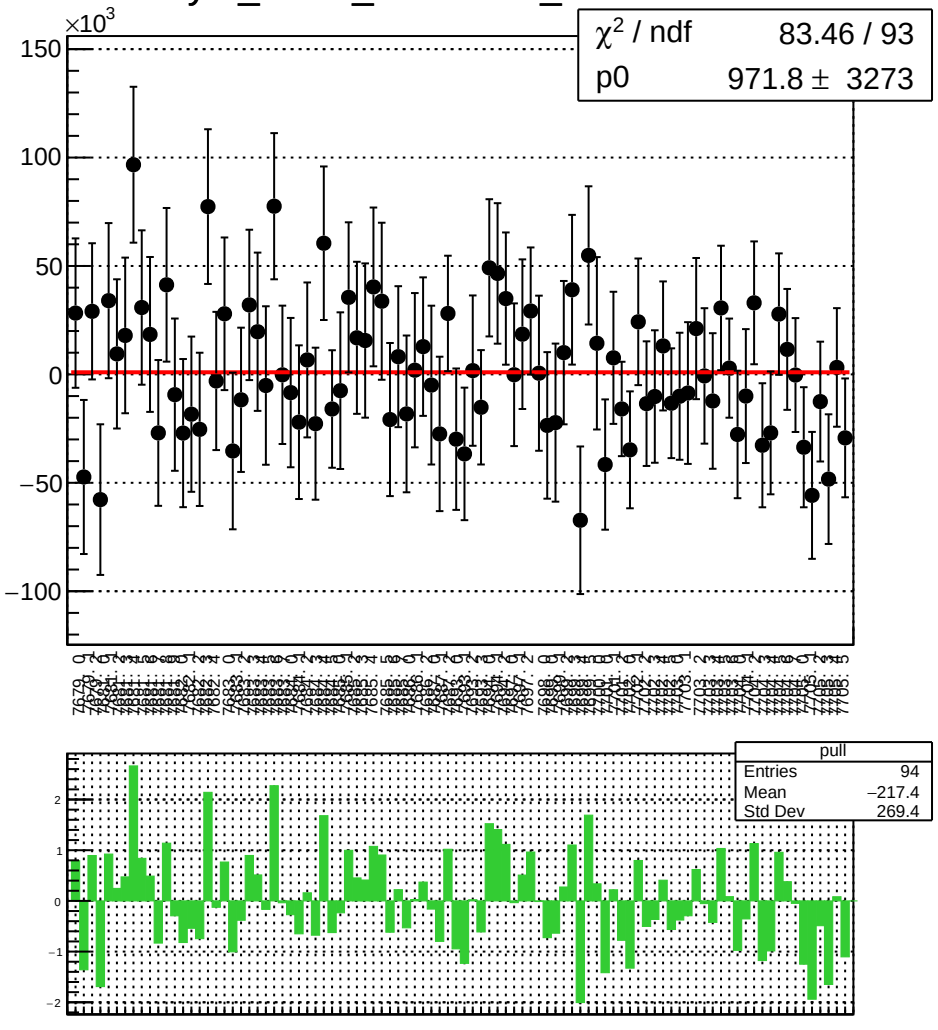

pull1D
Entries 94
Mean 0.01809
Std Dev 0.9324
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

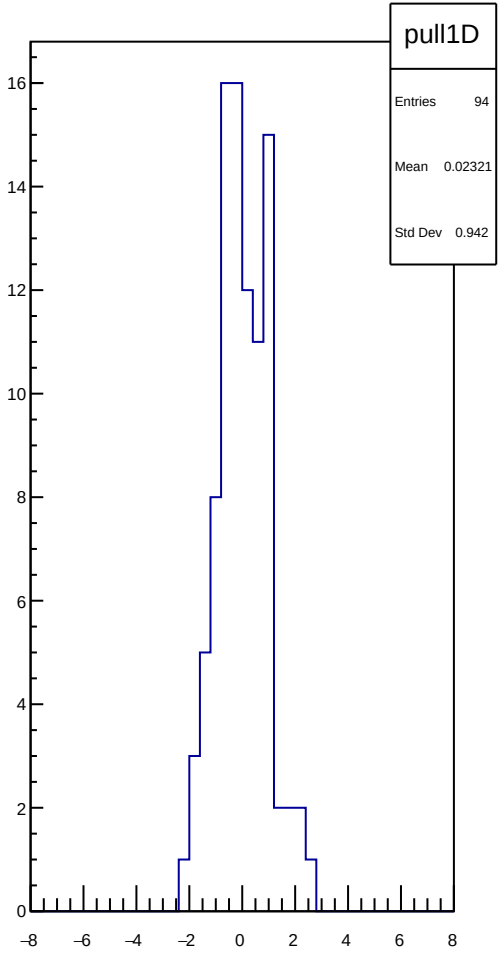

asym_sam2_correction_rms vs run
χ² / ndf 1.202e+04 / 93
p0 5990 ± 4.498
7000
6500
6000
5500
5000

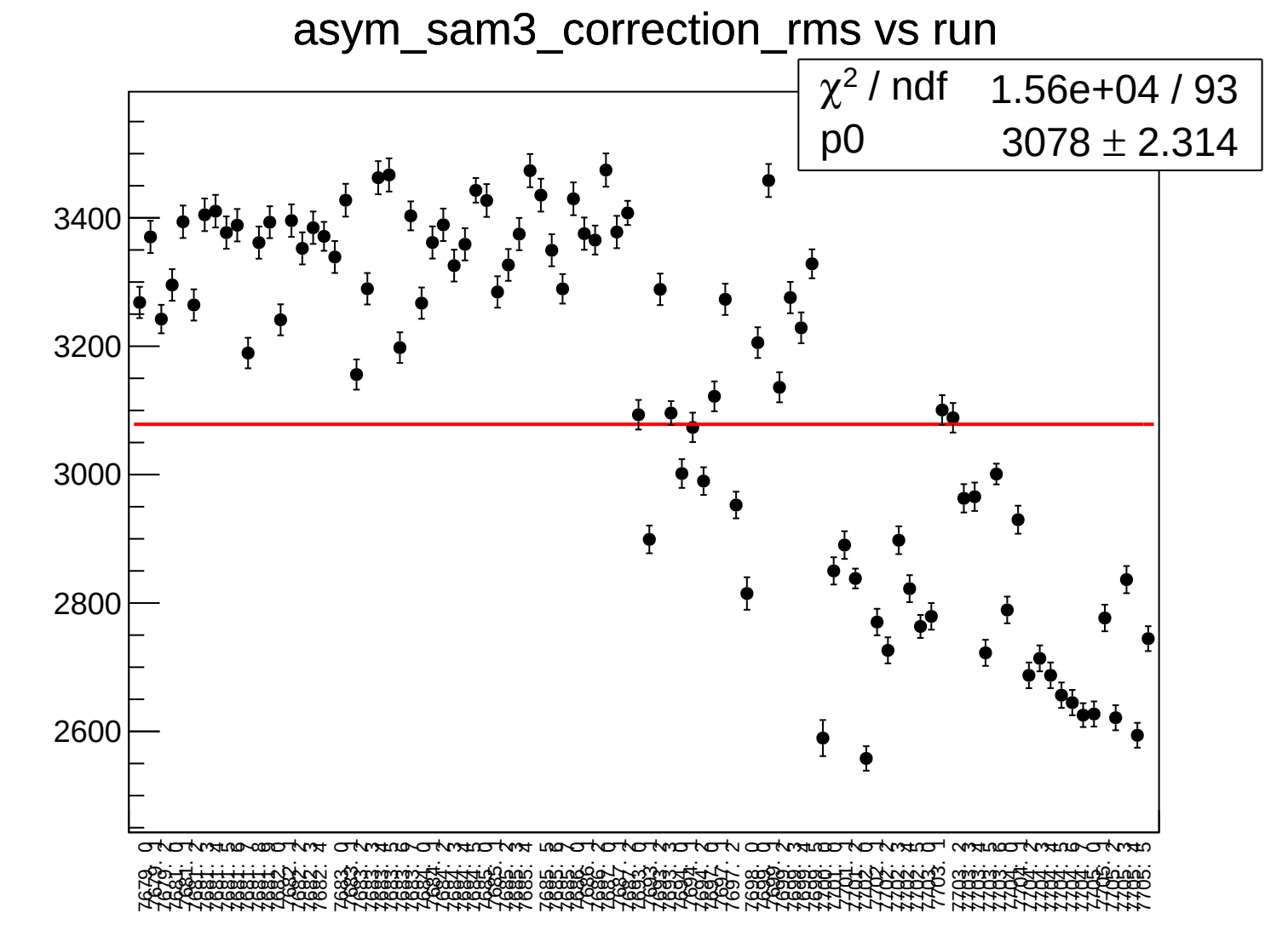

reg_asym_sam3_mean vs run
χ² / ndf 83.99 / 93
p0 264.4 ± 310.4
15000
10000
5000
0
−5000
−10000
pull
Entries 94
Mean 670.6
Std Dev 616.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

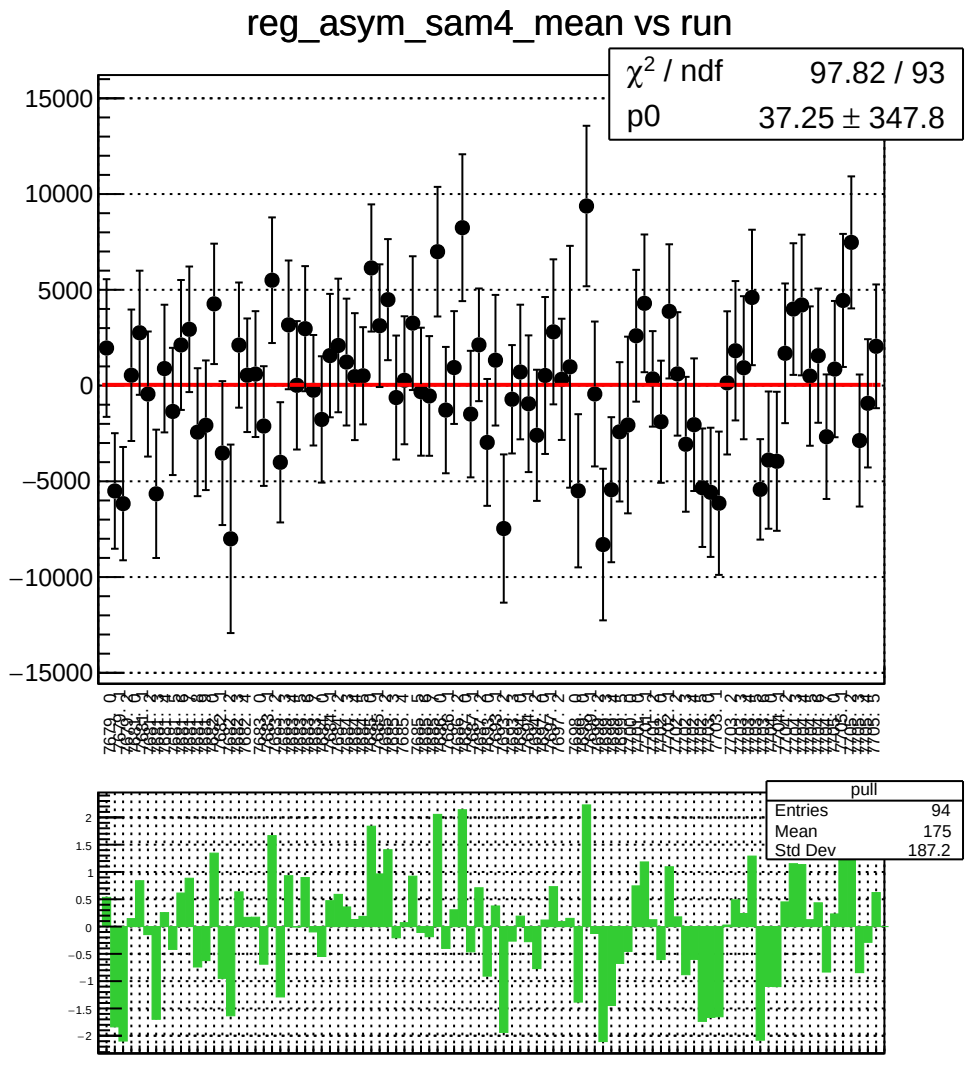

pull1D
Entries 94
Mean −0.002757
Std Dev 0.9452
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

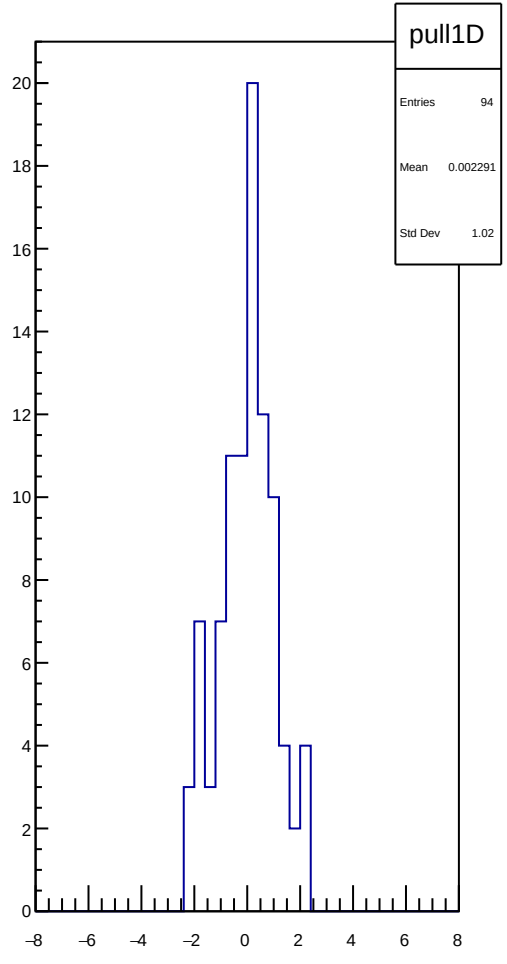

reg_asym_sam3_rms vs run
χ² / ndf 2.337e+04 / 93
p0 291.3 ± 0.2195
500
450
400
350
300
250

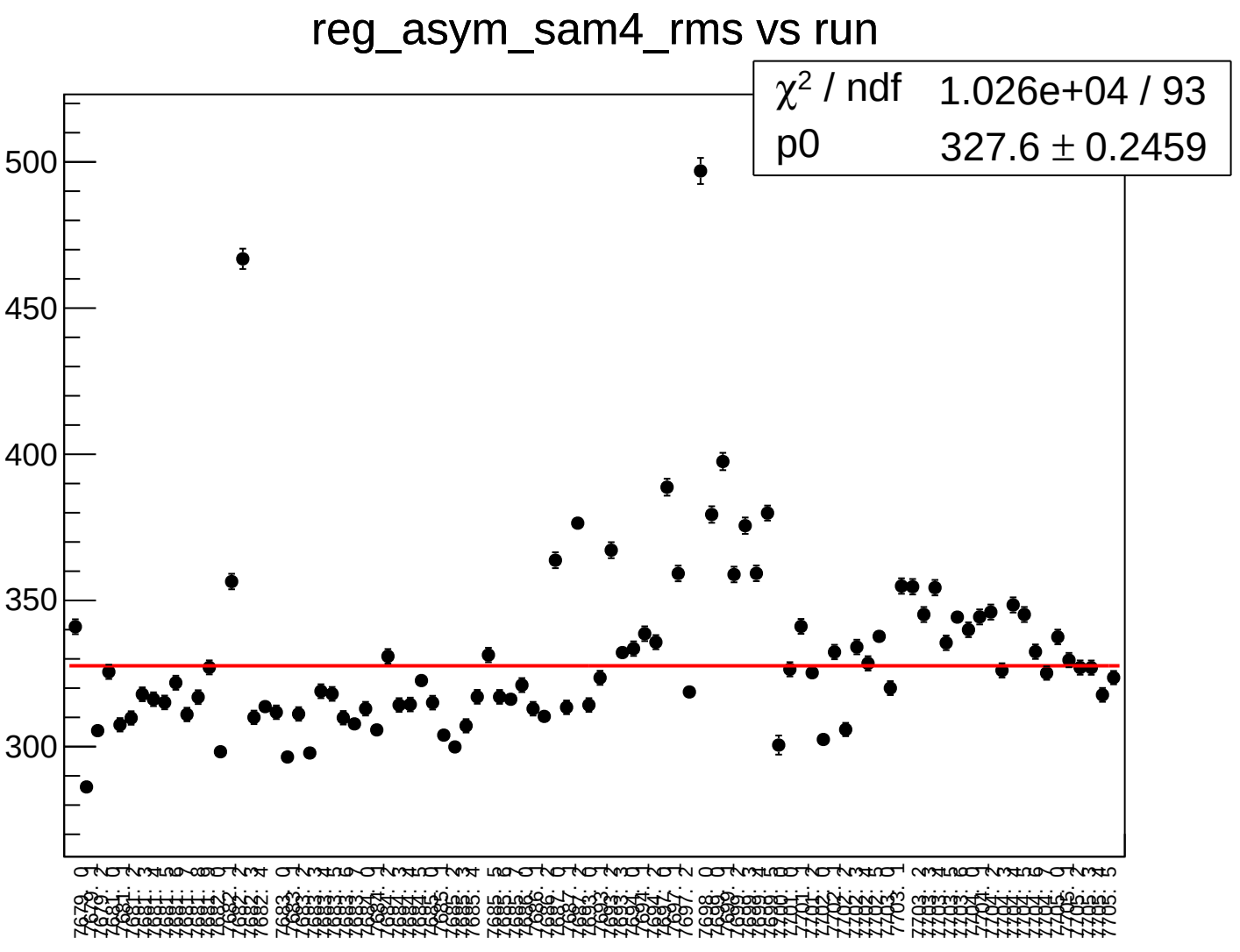

asym_sam3_correction_mean vs run
×10^3
χ² / ndf 83.46 / 93
p0 971.8 ± 3273
150
100
50
0
−50
−100
pull
Entries 94
Mean −217.4
Std Dev 269.4
2
1
0
−1
−2

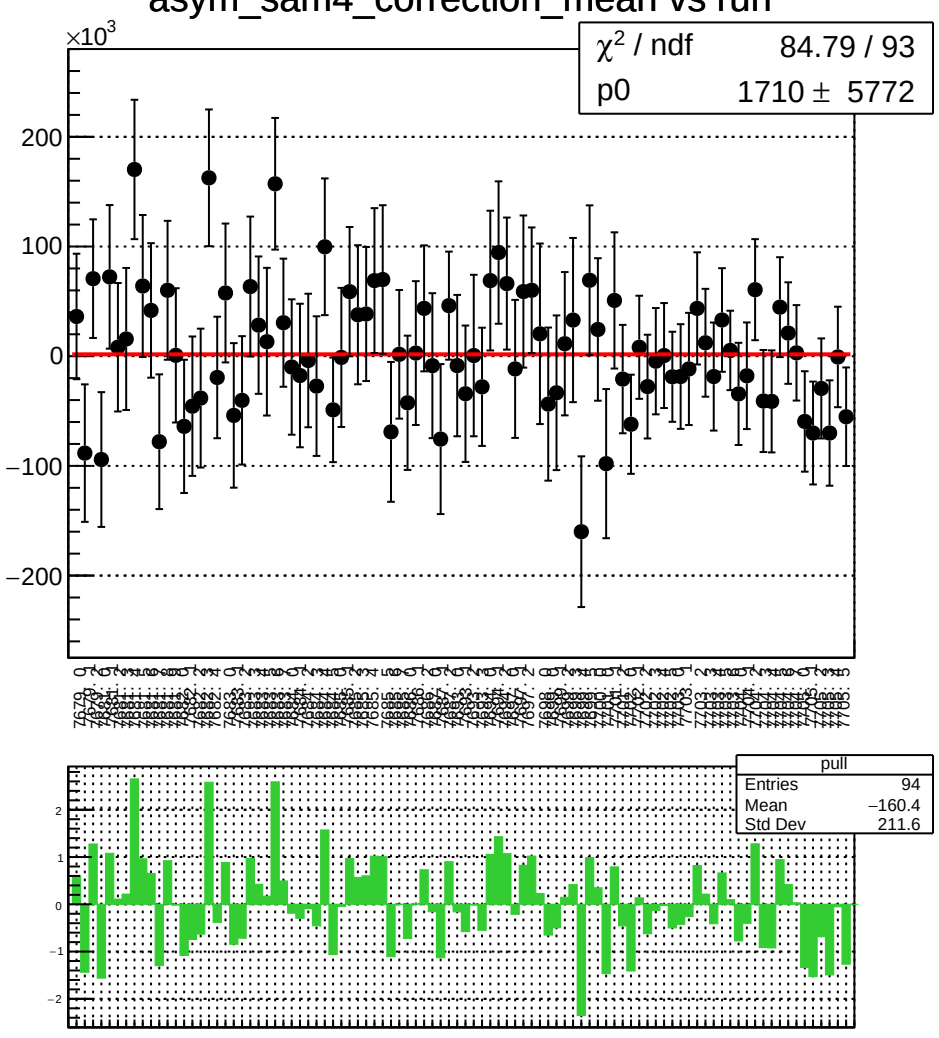

pull1D
Entries 94
Mean 0.02321
Std Dev 0.942
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

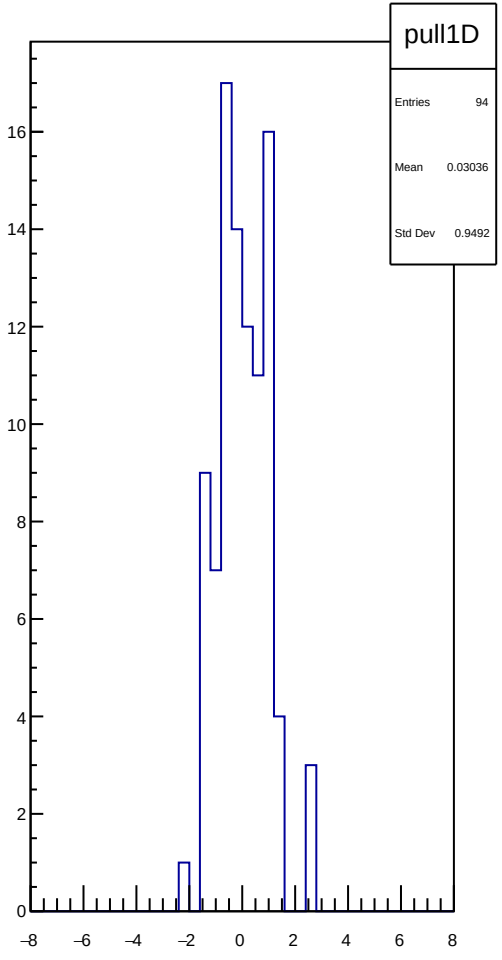

asym_sam3_correction_rms vs run
χ^2 / ndf 1.56e+04 / 93
p0 3078 ± 2.314
3400
3200
3000
2800
2600

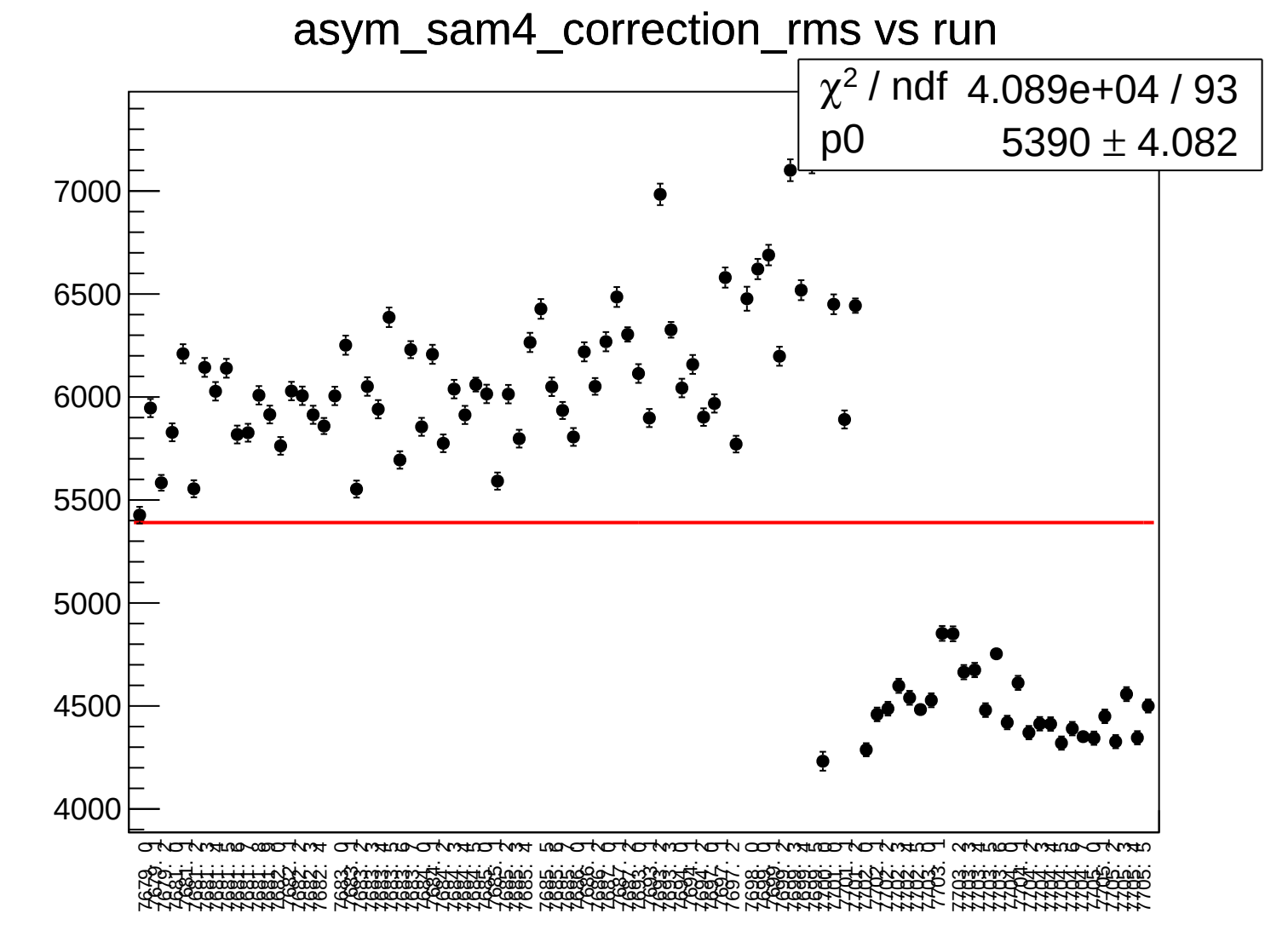

reg_asym_sam4_mean vs run
χ² / ndf 97.82 / 93
p0 37.25 ± 347.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 94
Mean 175
Std Dev 187.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

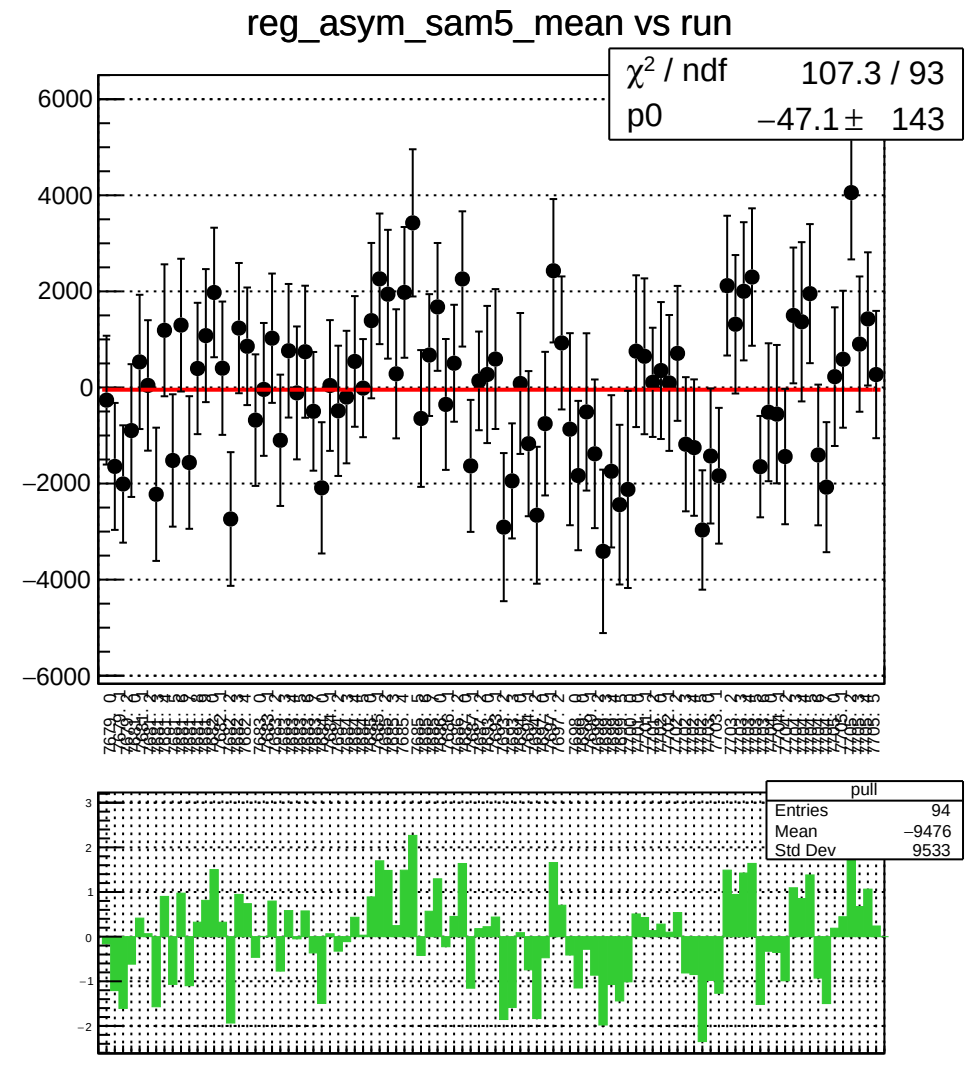

pull1D
Entries 94
Mean 0.002291
Std Dev 1.02
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

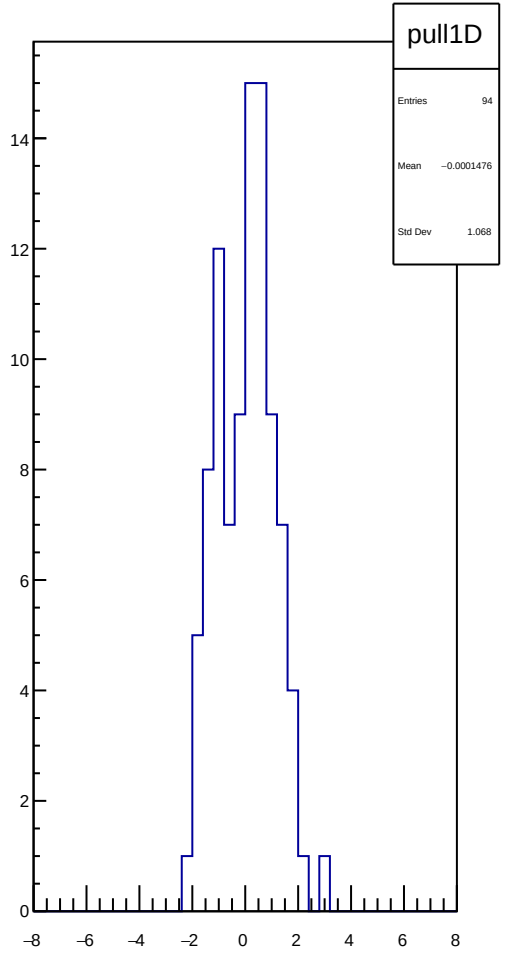

reg_asym_sam4_rms vs run
χ² / ndf 1.026e+04 / 93
p0 327.6 ± 0.2459
500
450
400
350
300

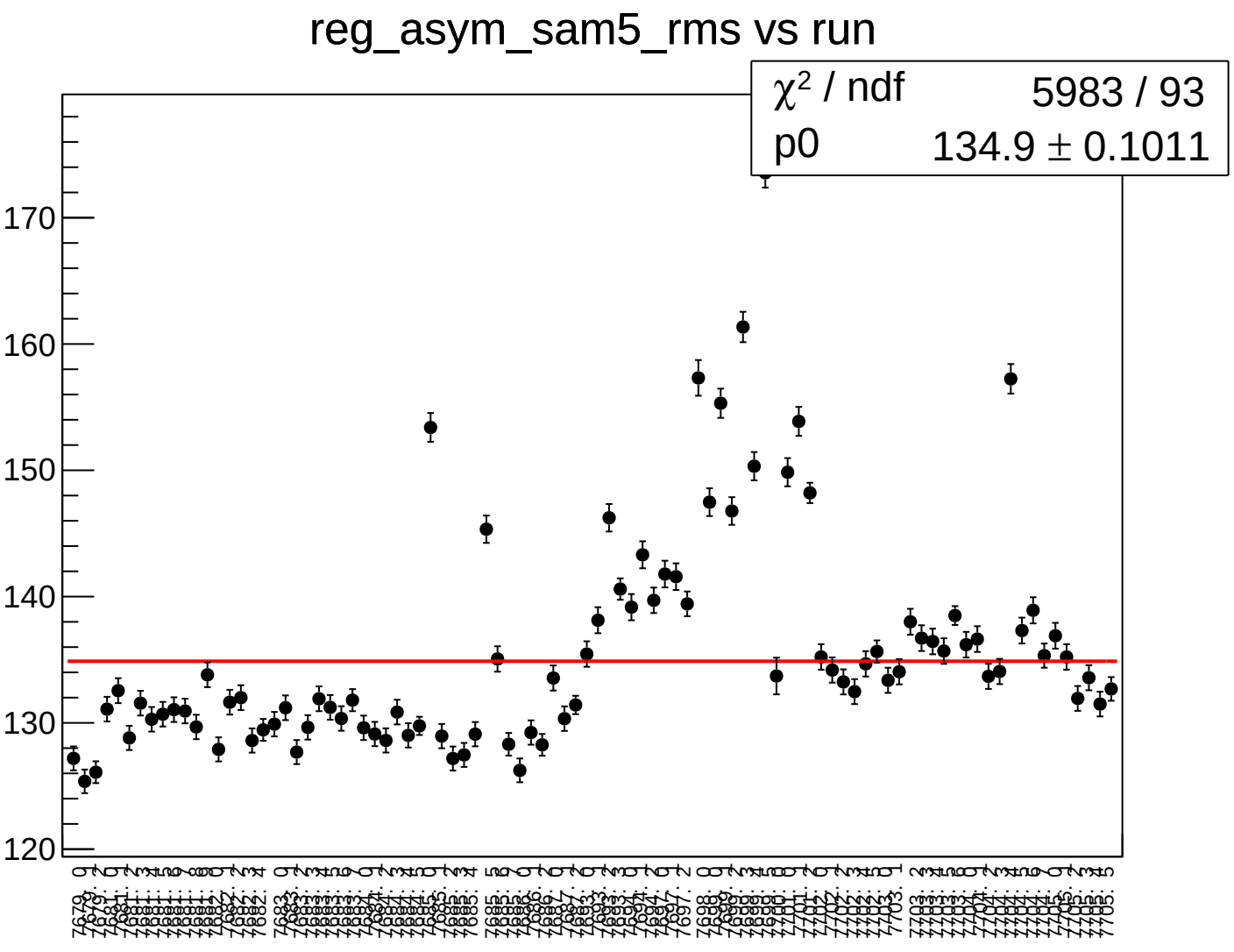

asym_sam4_correction_mean vs run
×10^3
χ² / ndf 84.79 / 93
p0 1710 ± 5772
200
100
0
−100
−200
pull
Entries 94
Mean −160.4
Std Dev 211.6
2
1
0
−1
−2

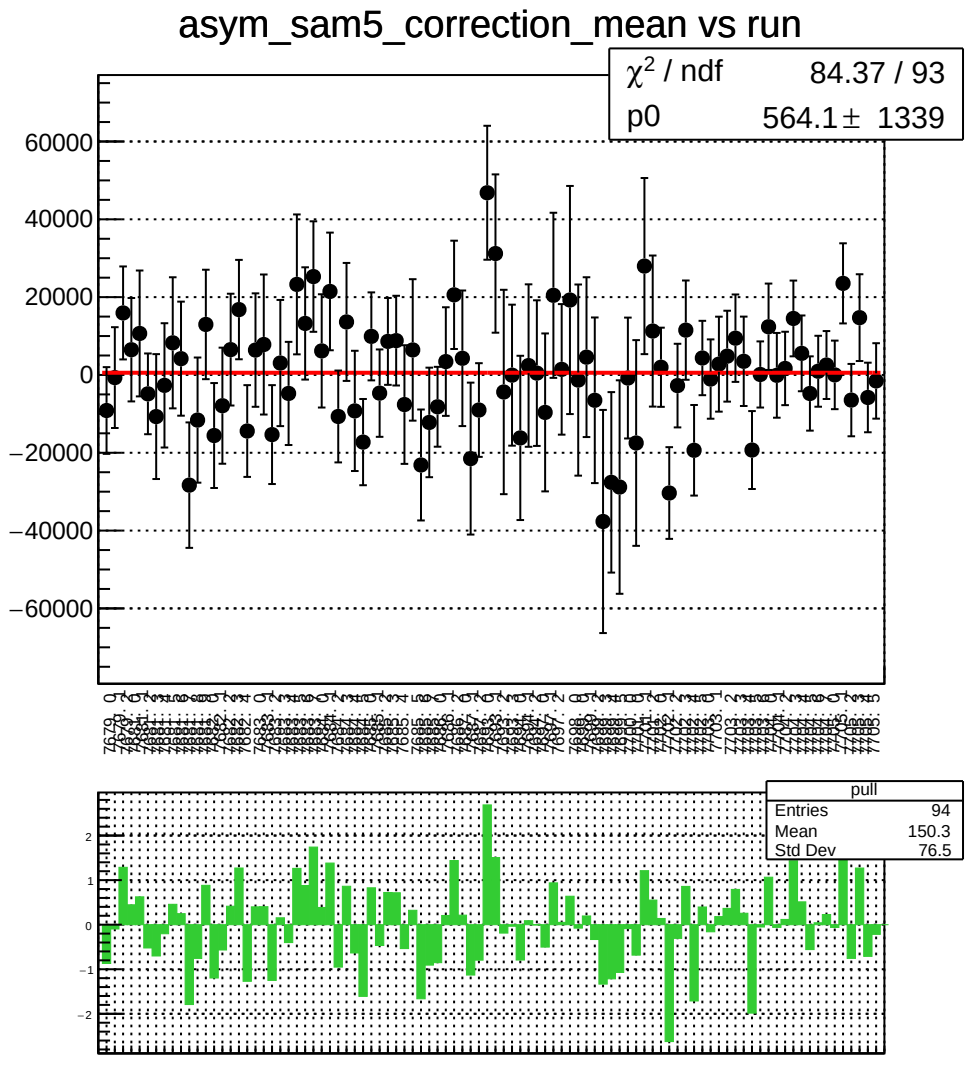

pull1D
Entries 94
Mean 0.03036
Std Dev 0.9492
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

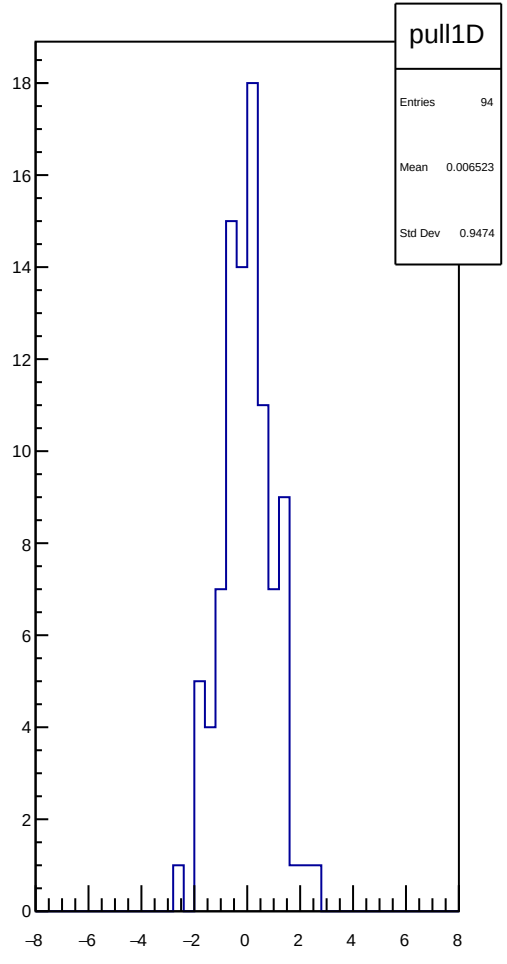

asym_sam4_correction_rms vs run
χ² / ndf 4.089e+04 / 93
p0 5390 ± 4.082
7000
6500
6000
5500
5000
4500
4000

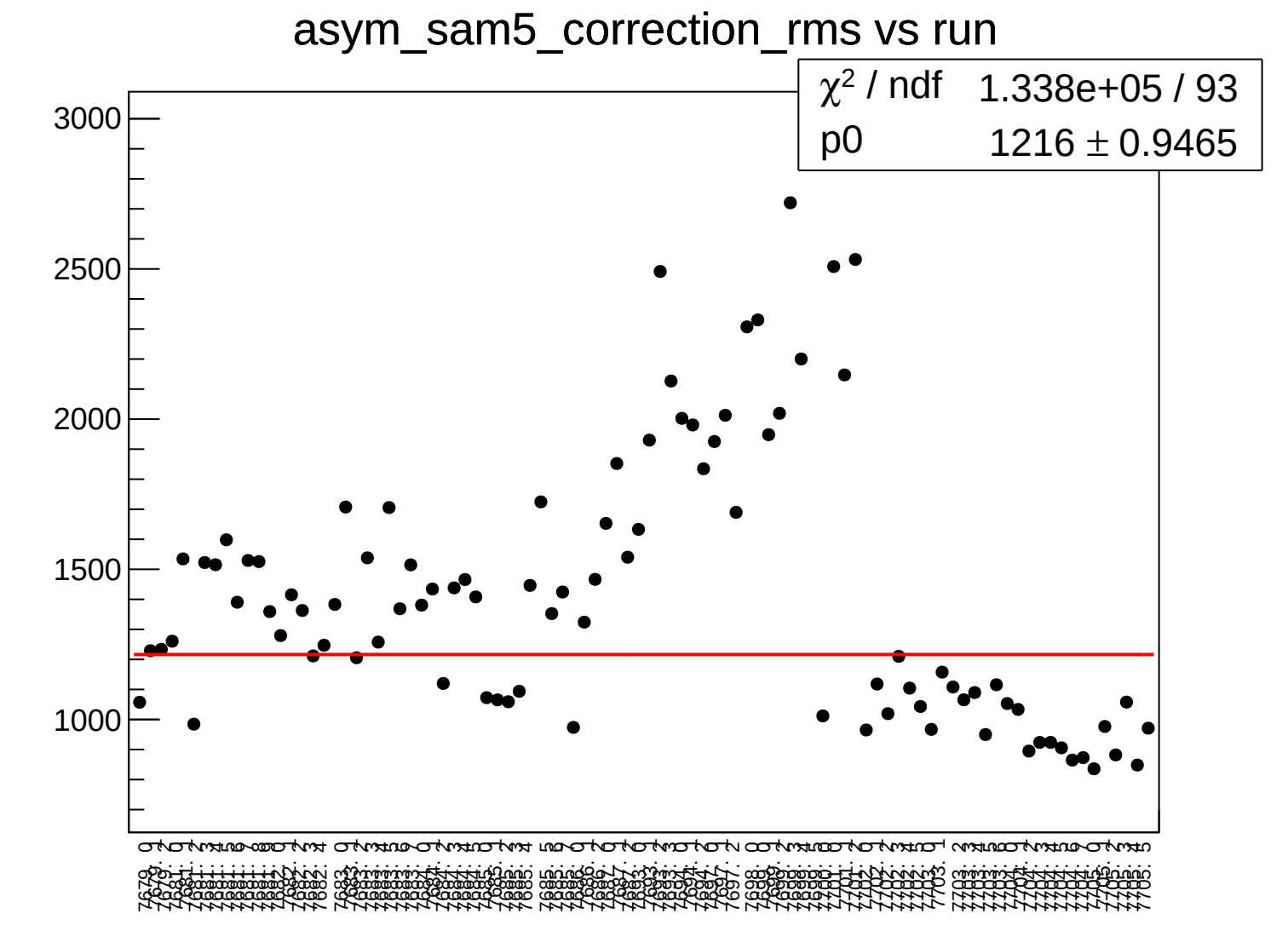

reg_asym_sam5_mean vs run
χ² / ndf 107.3 / 93
p0 −47.1 ± 143
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean −9476
Std Dev 9533
3
2
1
0
−1
−2

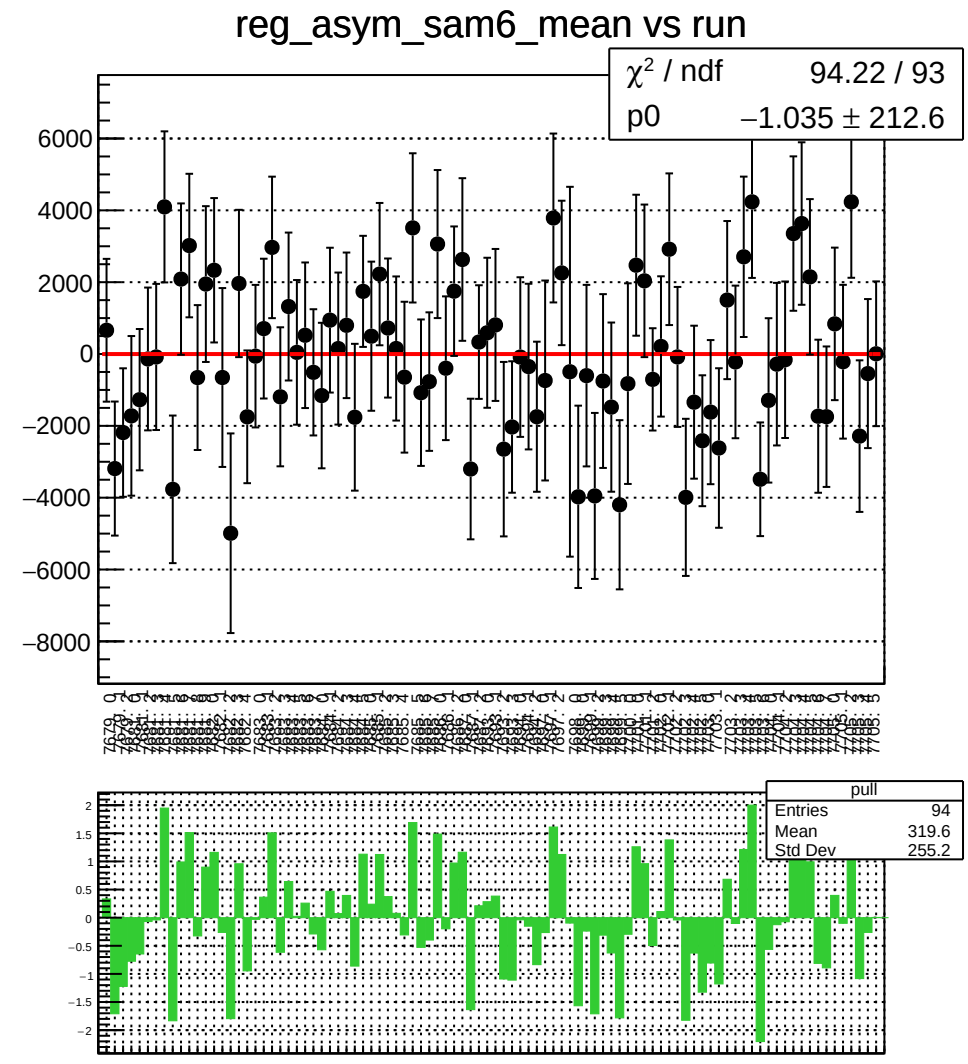

pull1D
Entries 94
Mean −0.0001476
Std Dev 1.068
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

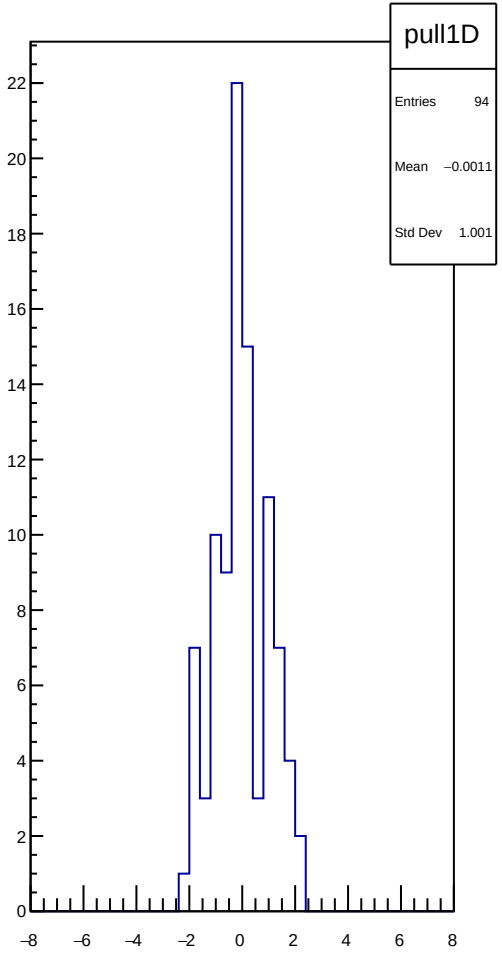

reg_asym_sam5_rms vs run
χ² / ndf 5983 / 93
p0 134.9 ± 0.1011
170
160
150
140
130
120

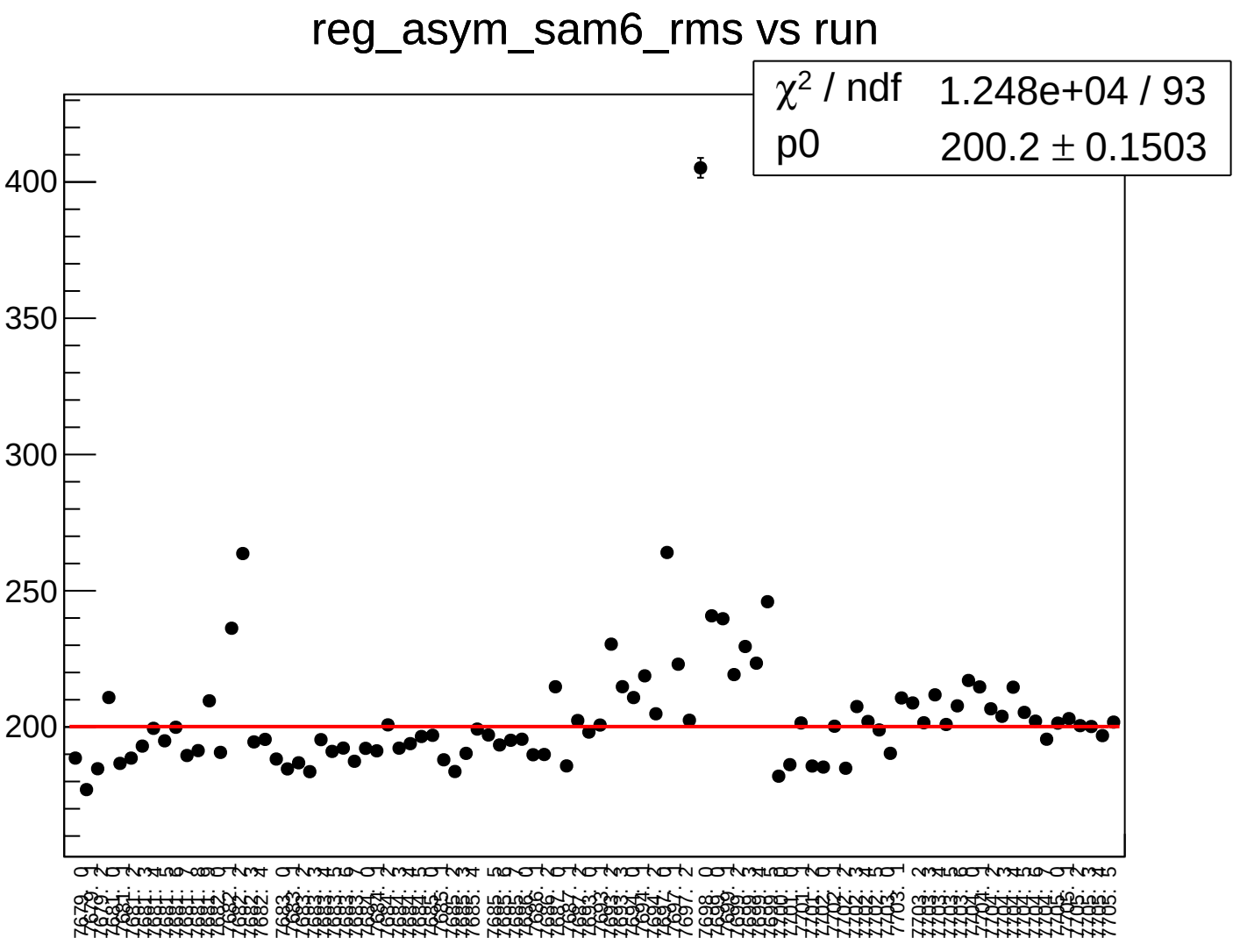

asym_sam5_correction_mean vs run
χ² / ndf 84.37 / 93
p0 564.1 ± 1339
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean 150.3
Std Dev 76.5
2
1
0
−1
−2

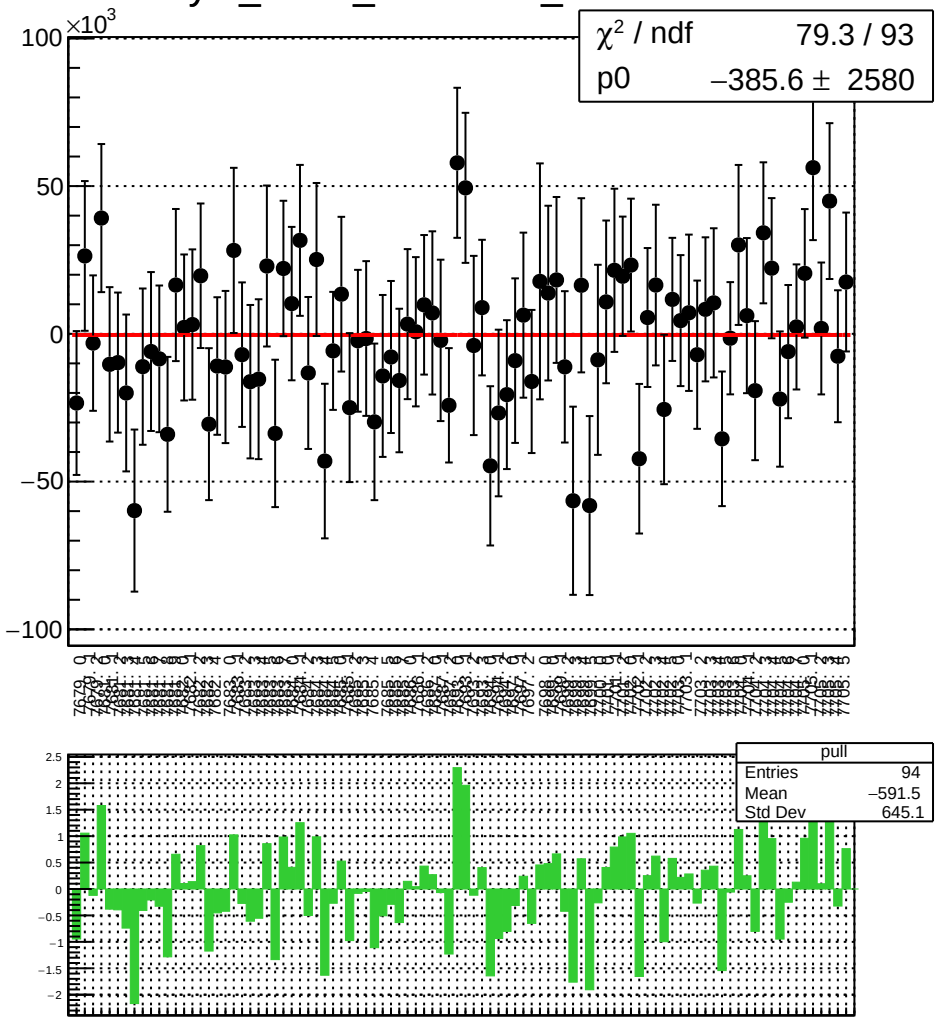

pull1D
Entries 94
Mean 0.006523
Std Dev 0.9474
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

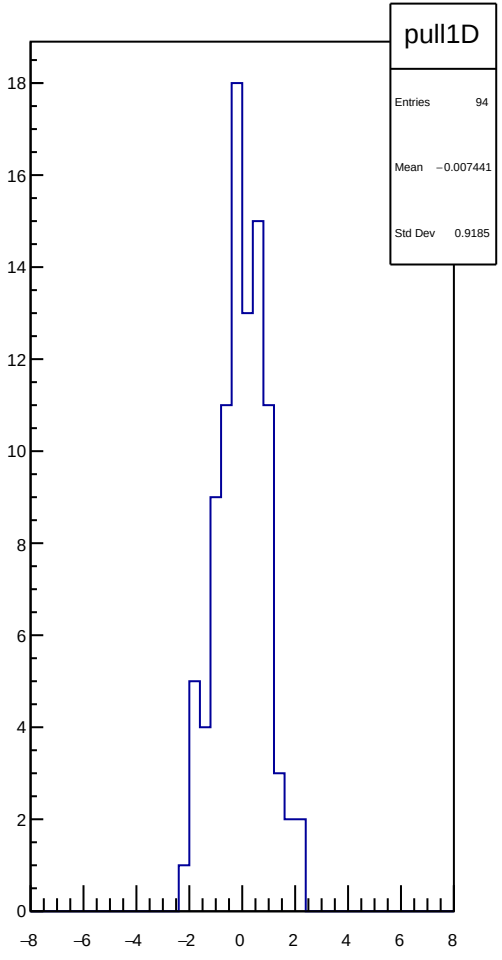

asym_sam5_correction_rms vs run
χ^2 / ndf 1.338e+05 / 93
p0 1216 ± 0.9465
3000
2500
2000
1500
1000

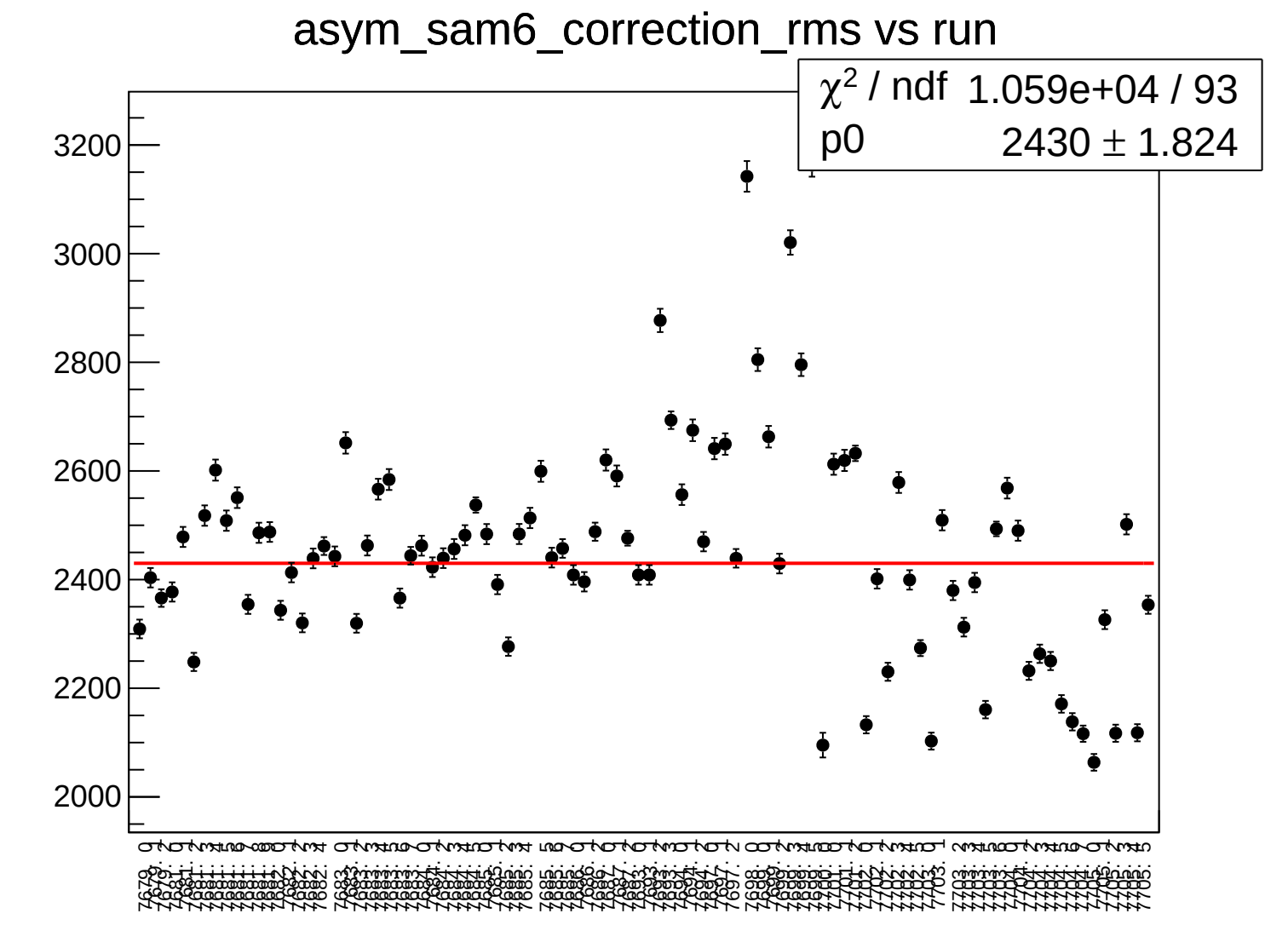

reg_asym_sam6_mean vs run
χ² / ndf 94.22 / 93
p0 −1.035 ± 212.6
pull
Entries 94
Mean 319.6
Std Dev 255.2

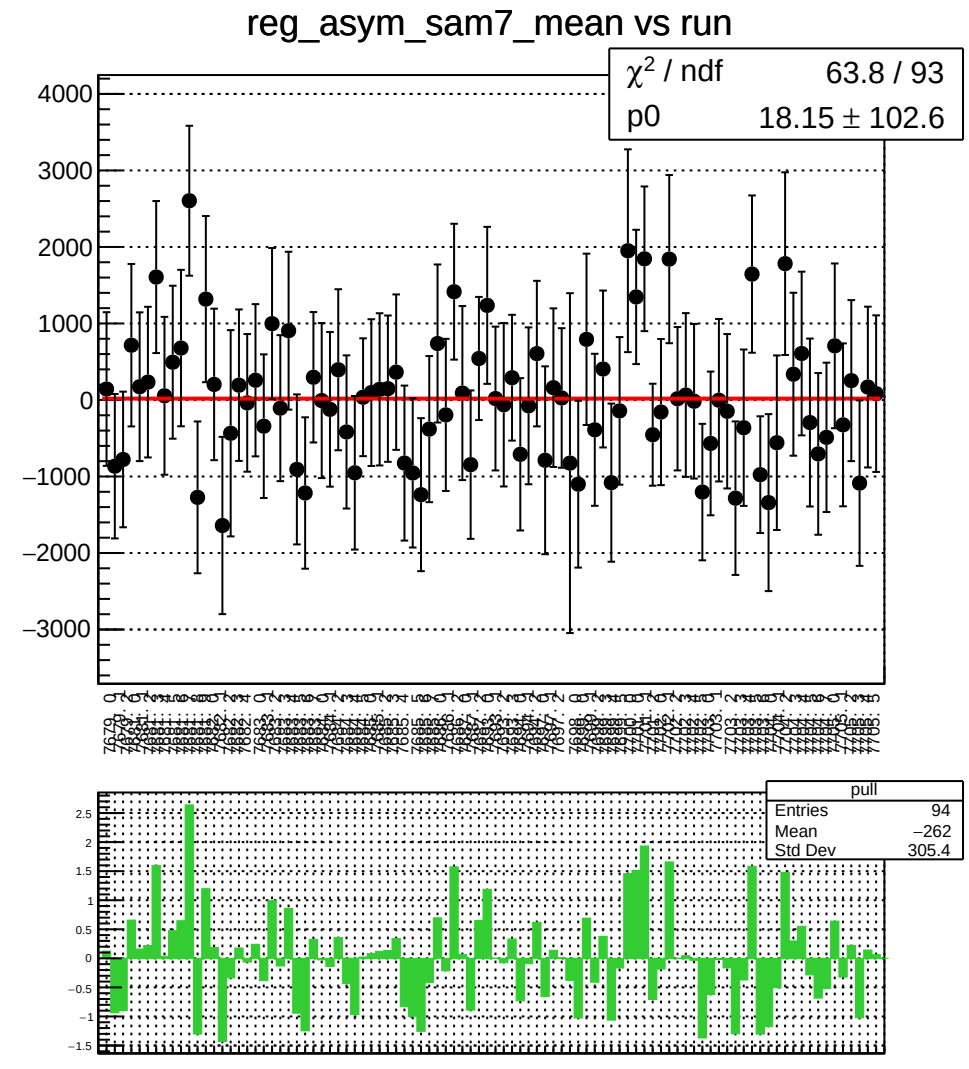

pull1D
Entries 94
Mean −0.0011
Std Dev 1.001

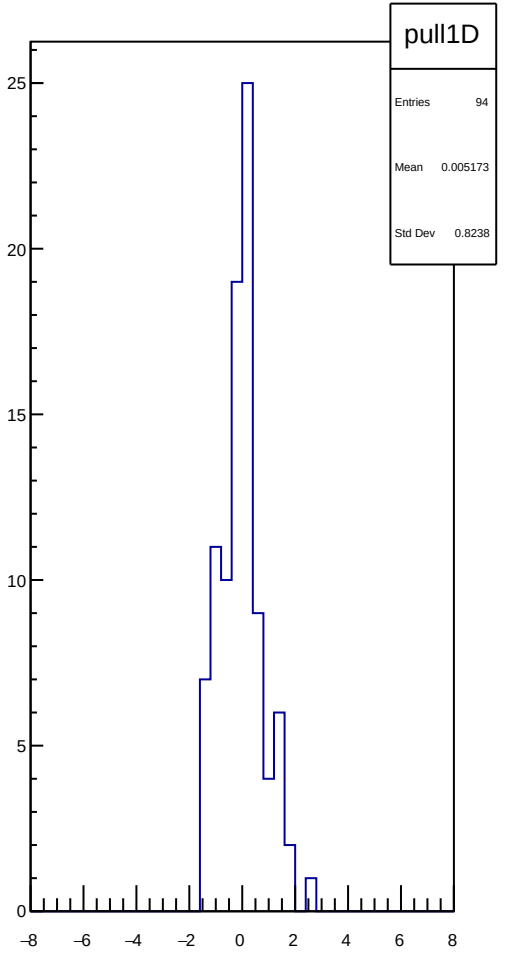

reg_asym_sam6_rms vs run
χ² / ndf 1.248e+04 / 93
p0 200.2 ± 0.1503
400
350
300
250
200

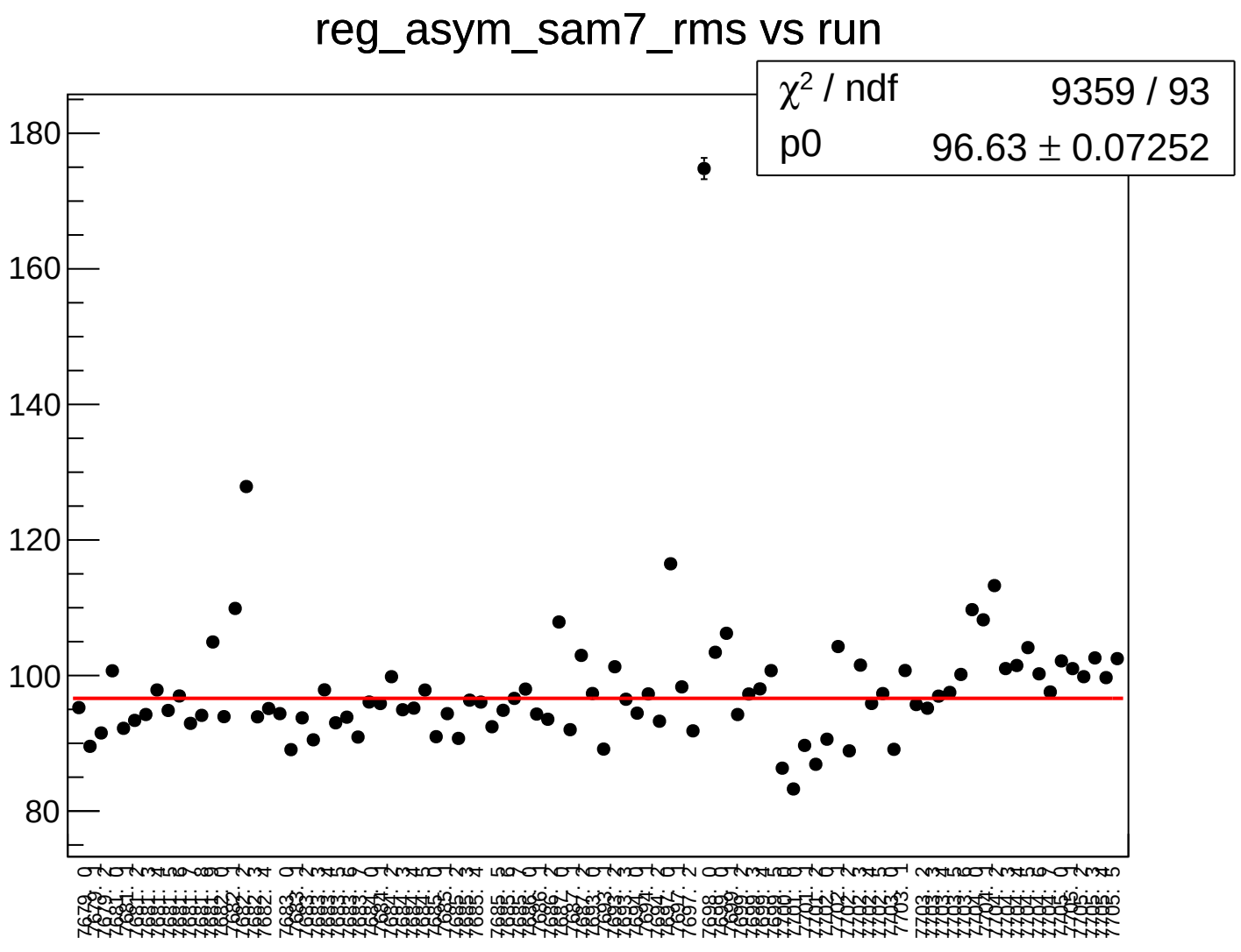

asym_sam6_correction_mean vs run
χ² / ndf 79.3 / 93
p0 −385.6 ± 2580
×10³
pull
Entries 94
Mean −591.5
Std Dev 645.1

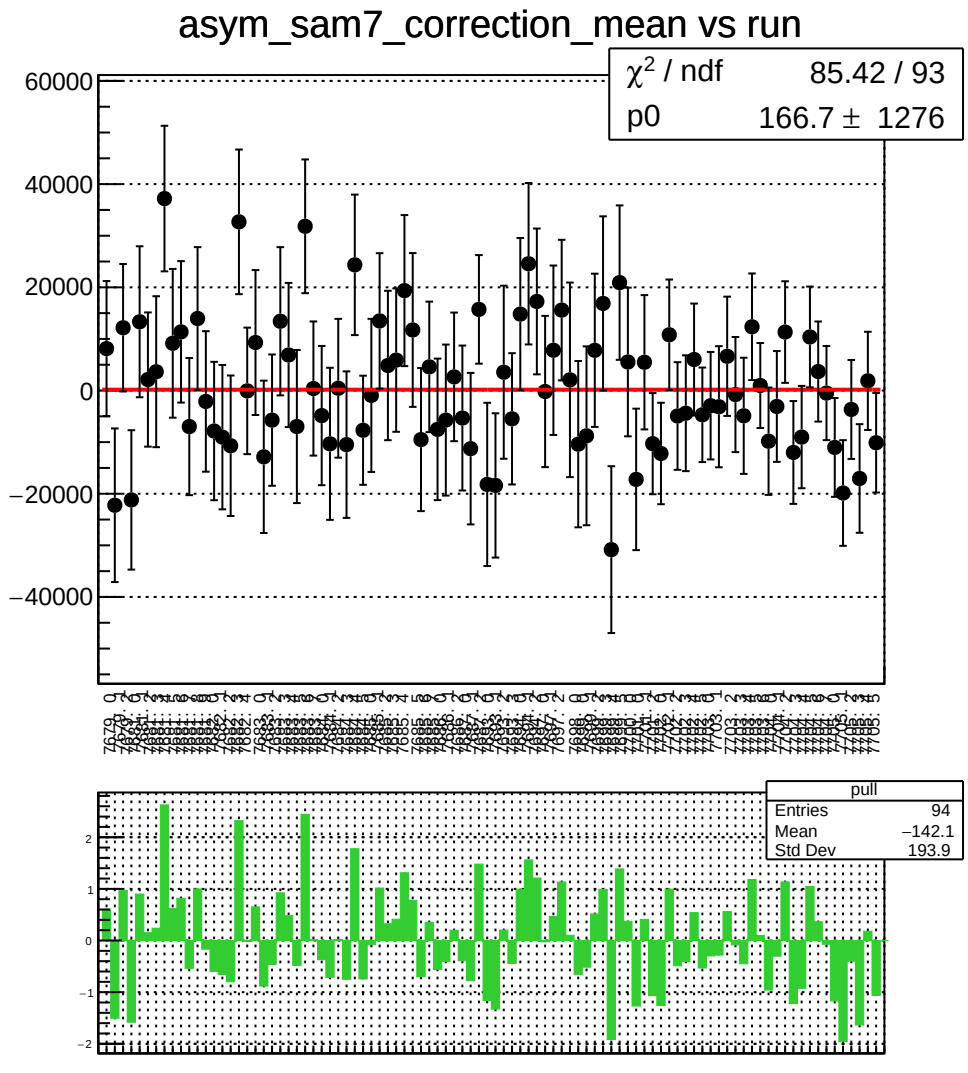

pull1D
Entries 94
Mean −0.007441
Std Dev 0.9185

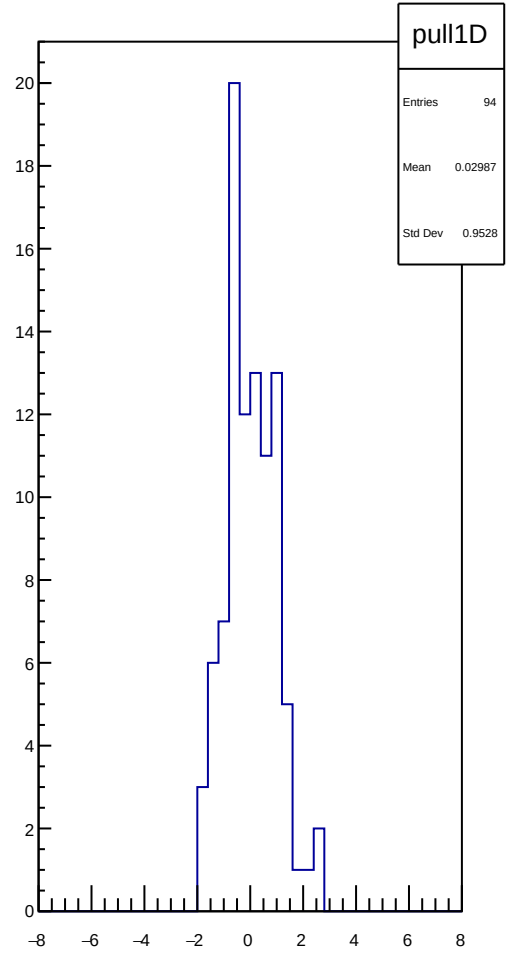

asym_sam6_correction_rms vs run
χ² / ndf 1.059e+04 / 93
p0 2430 ± 1.824
3200
3000
2800
2600
2400
2200
2000

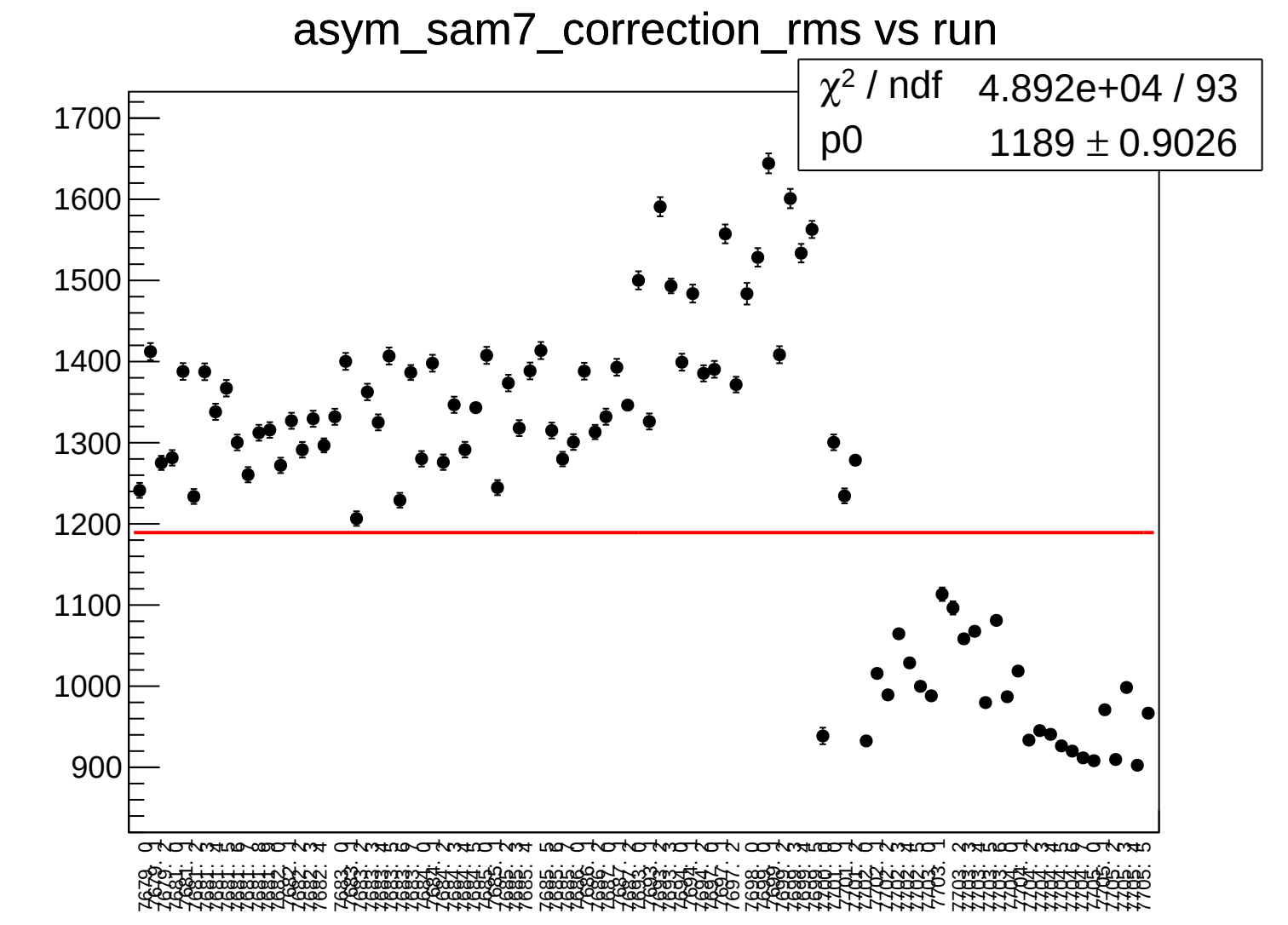

reg_asym_sam7_mean vs run
χ^2 / ndf 63.8 / 93
p0 18.15 ± 102.6
pull
Entries 94
Mean −262
Std Dev 305.4

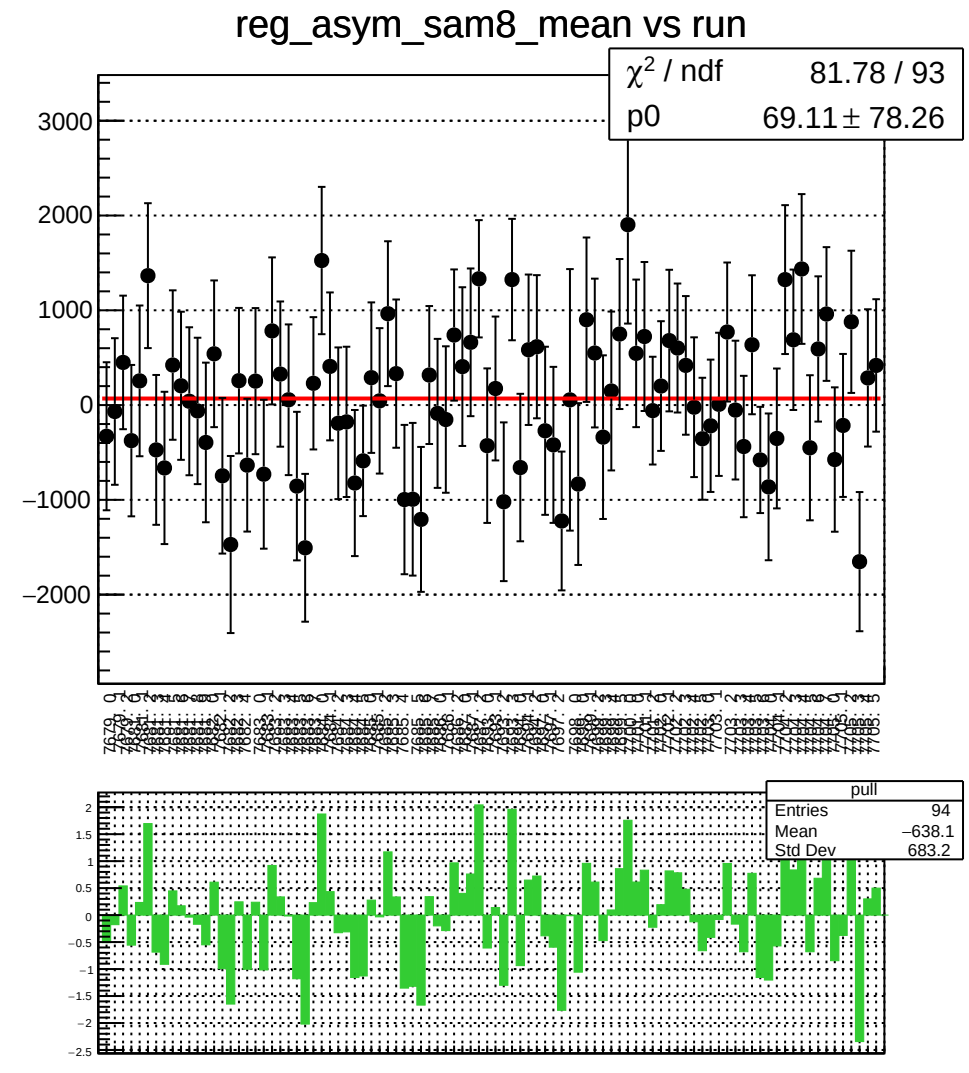

pull1D
Entries 94
Mean 0.005173
Std Dev 0.8238

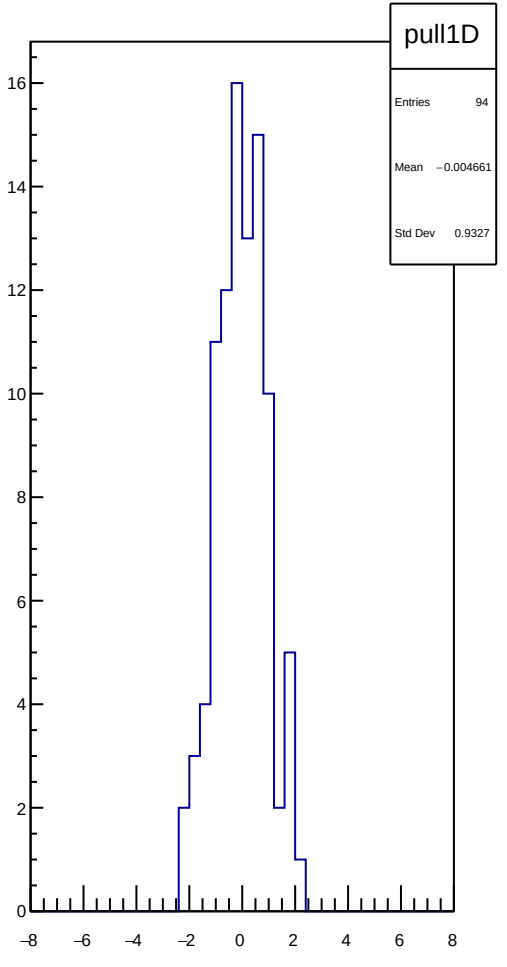

reg_asym_sam7_rms vs run
χ² / ndf 9359 / 93
p0 96.63 ± 0.07252
180
160
140
120
100
80

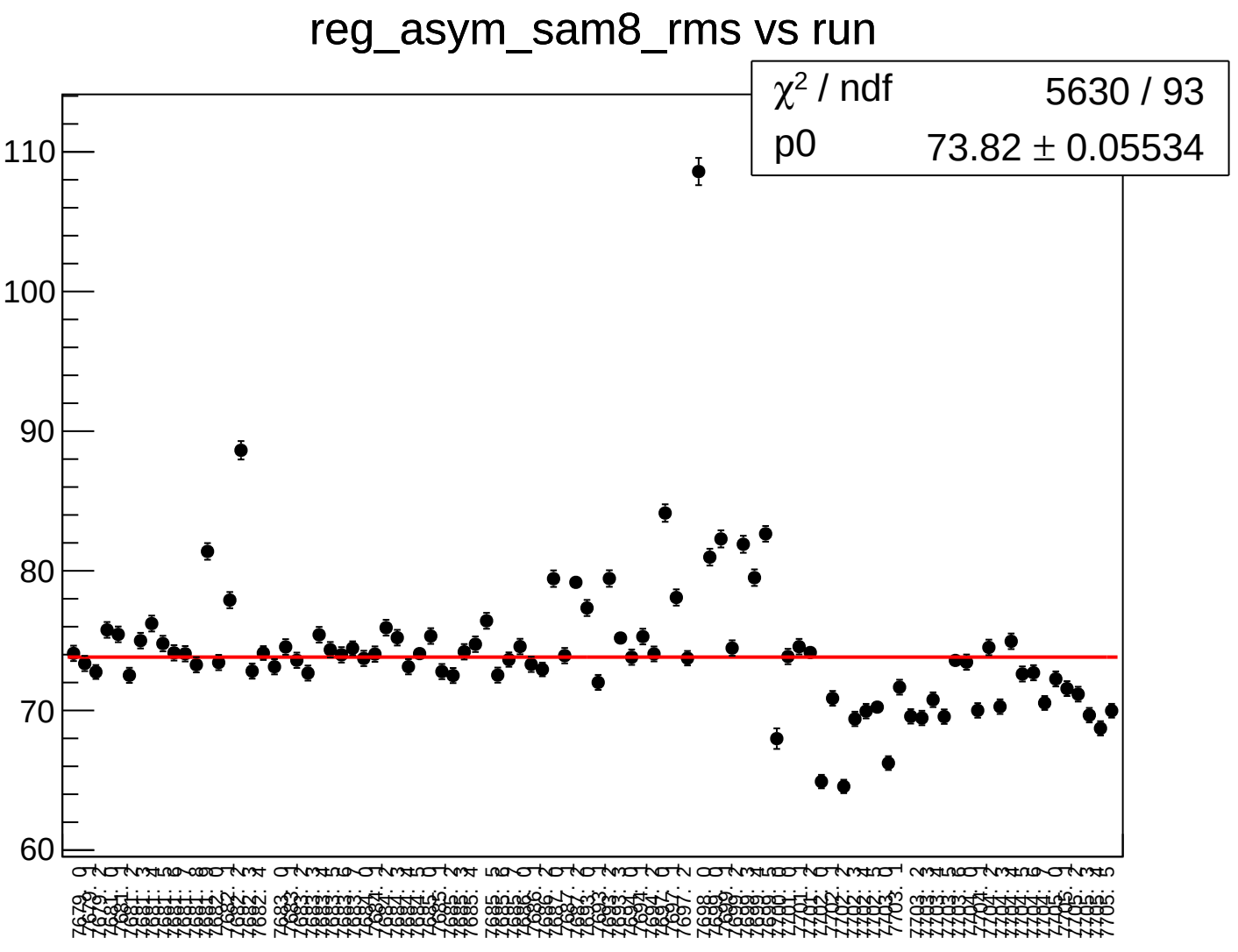

asym_sam7_correction_mean vs run
χ² / ndf 85.42 / 93
p0 166.7 ± 1276
60000
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −142.1
Std Dev 193.9
2
1
0
−1
−2

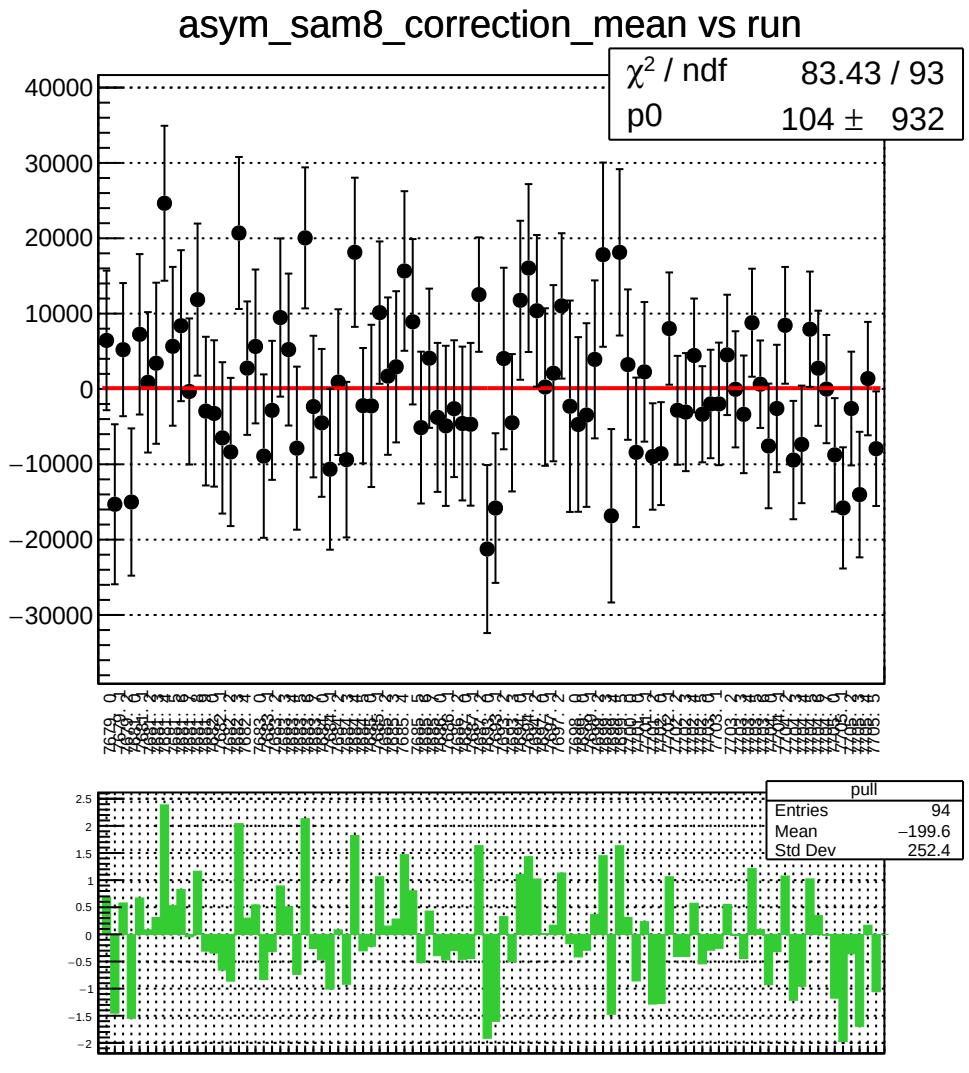

pull1D
Entries 94
Mean 0.02987
Std Dev 0.9528
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

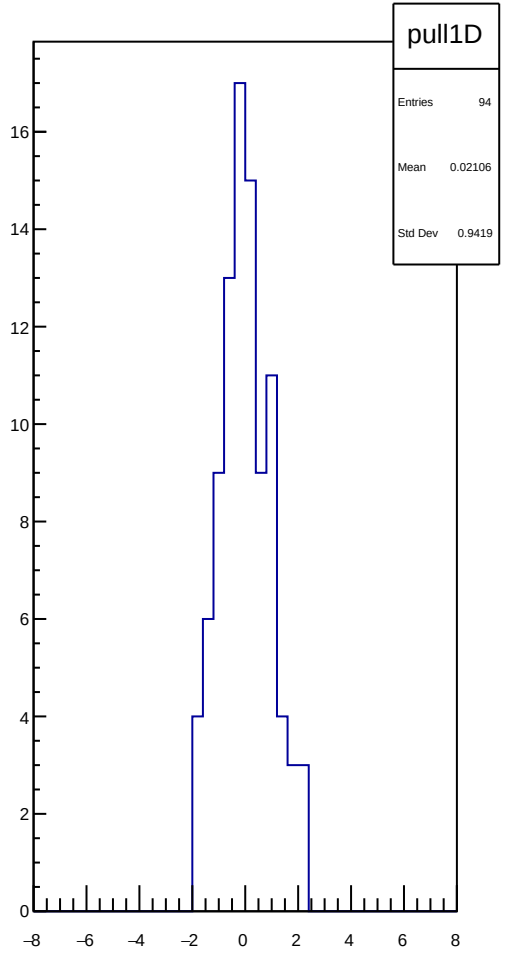

asym_sam7_correction_rms vs run
χ² / ndf 4.892e+04 / 93
p0 1189 ± 0.9026
1700
1600
1500
1400
1300
1200
1100
1000
900

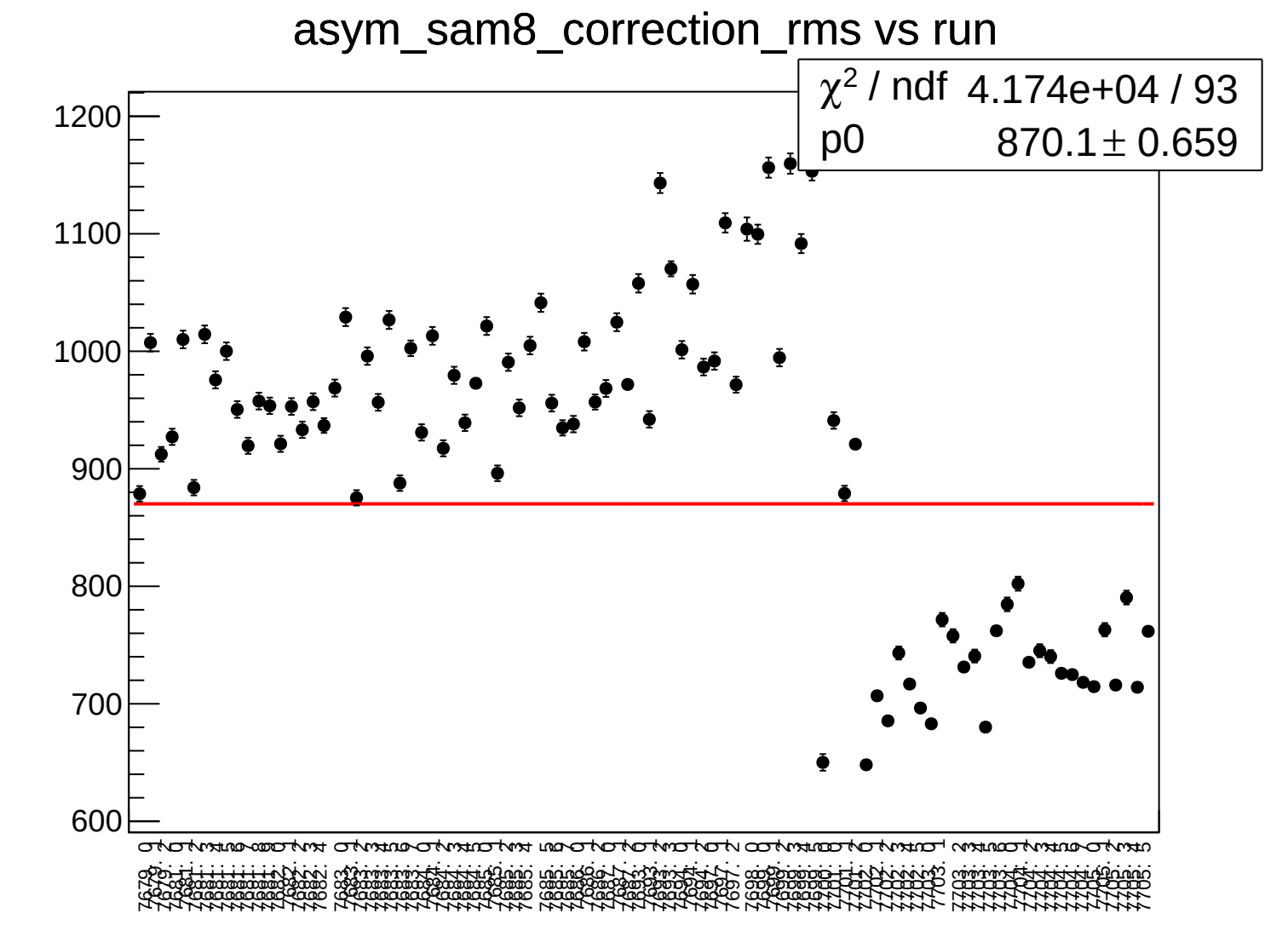

reg_asym_sam8_mean vs run
χ² / ndf 81.78 / 93
p0 69.11 ± 78.26
3000
2000
1000
0
−1000
−2000
pull
Entries 94
Mean −638.1
Std Dev 683.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

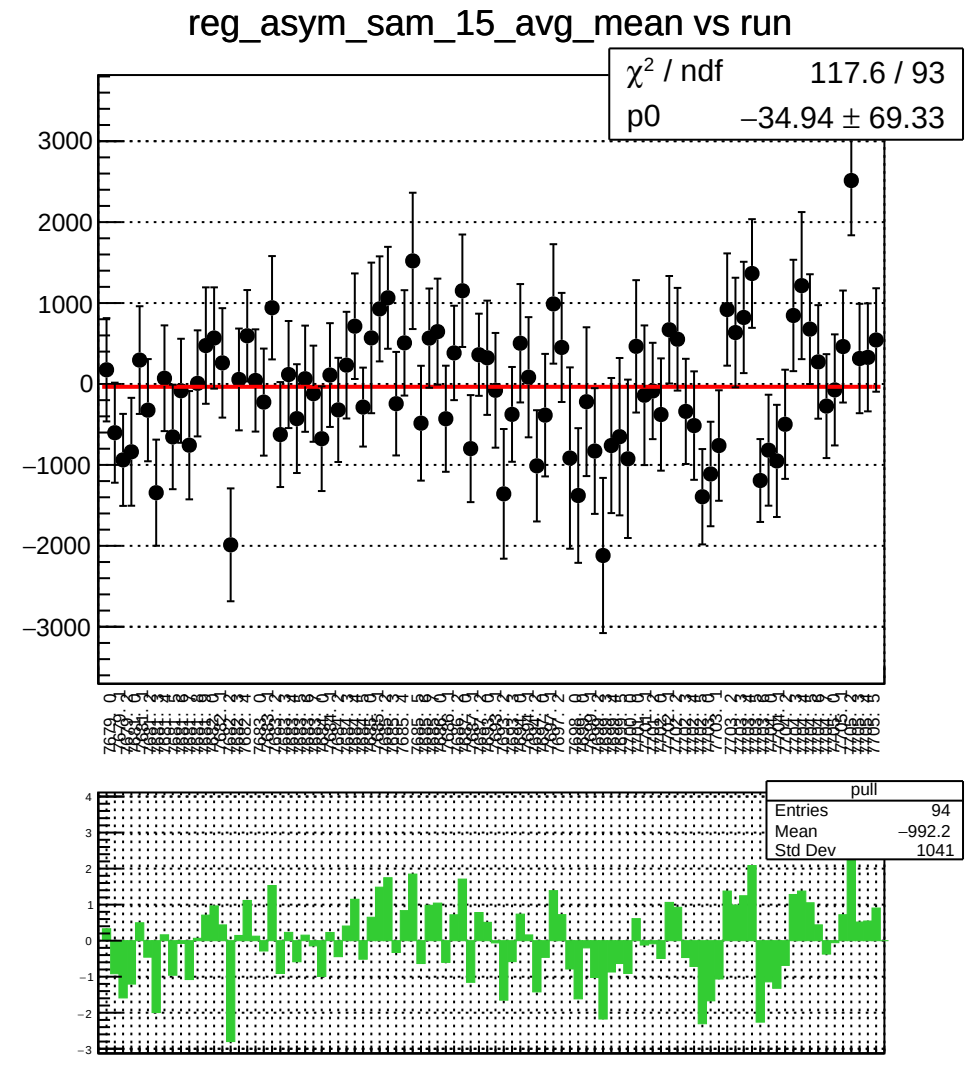

pull1D
Entries 94
Mean −0.004661
Std Dev 0.9327
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

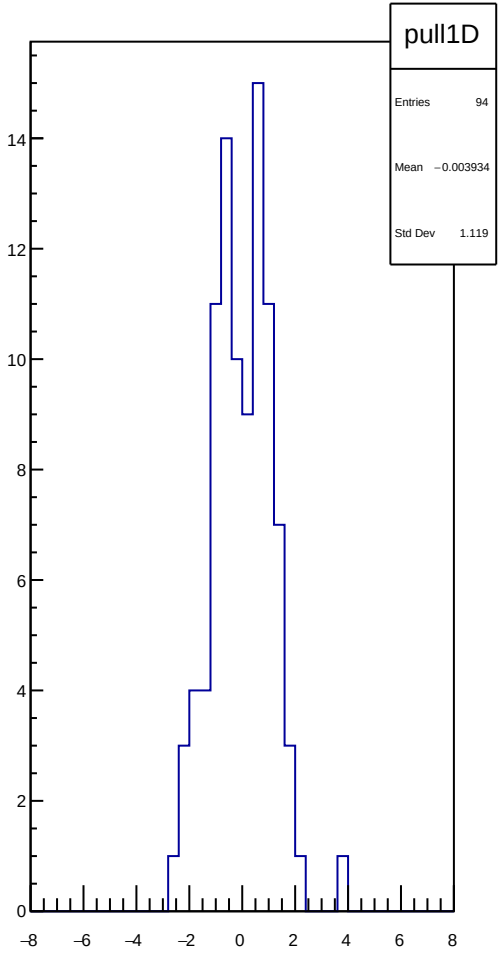

reg_asym_sam8_rms vs run
χ^2 / ndf 5630 / 93
p0 73.82 ± 0.05534
110
100
90
80
70
60

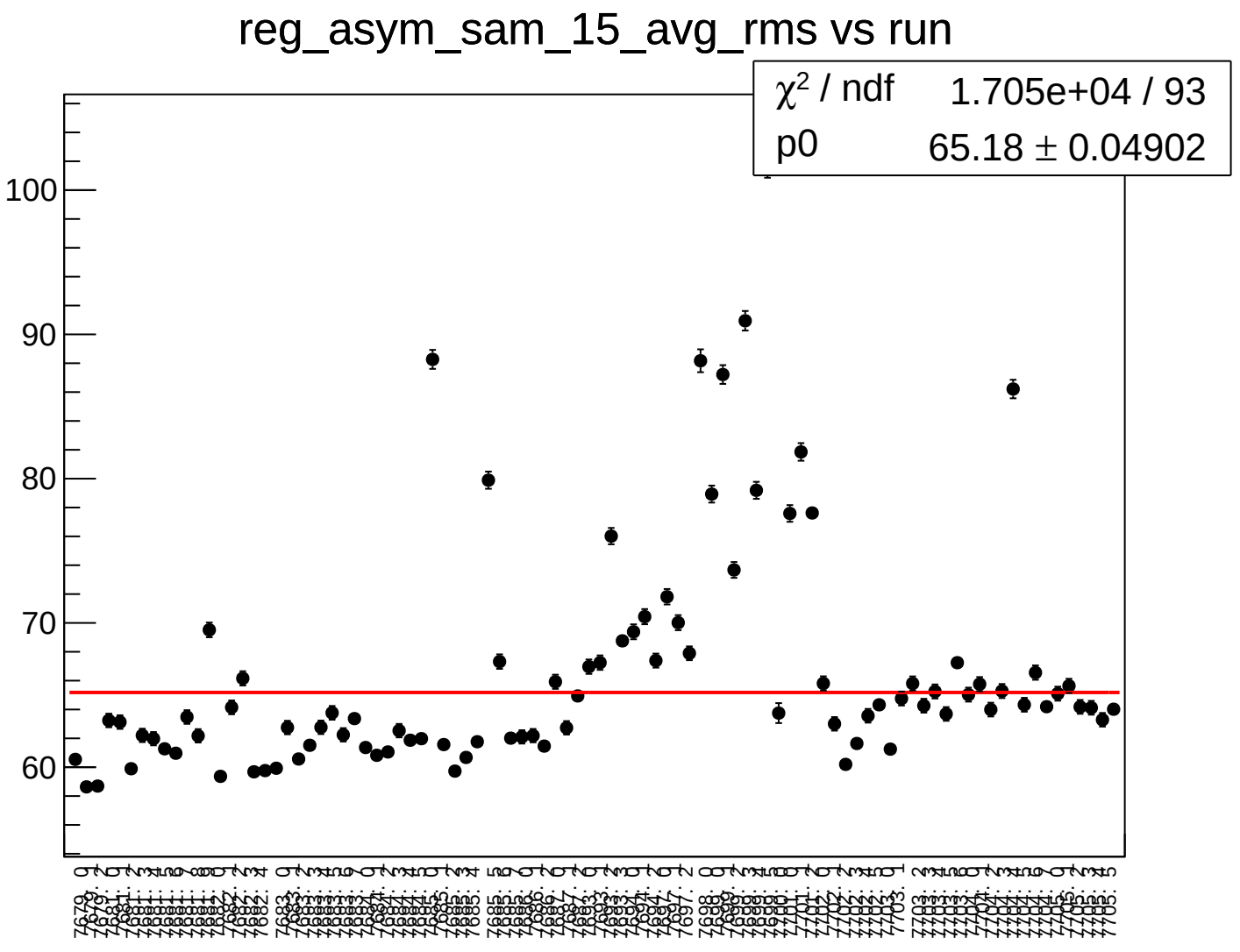

asym_sam8_correction_mean vs run
χ² / ndf 83.43 / 93
p0 104 ± 932
pull
Entries 94
Mean −199.6
Std Dev 252.4

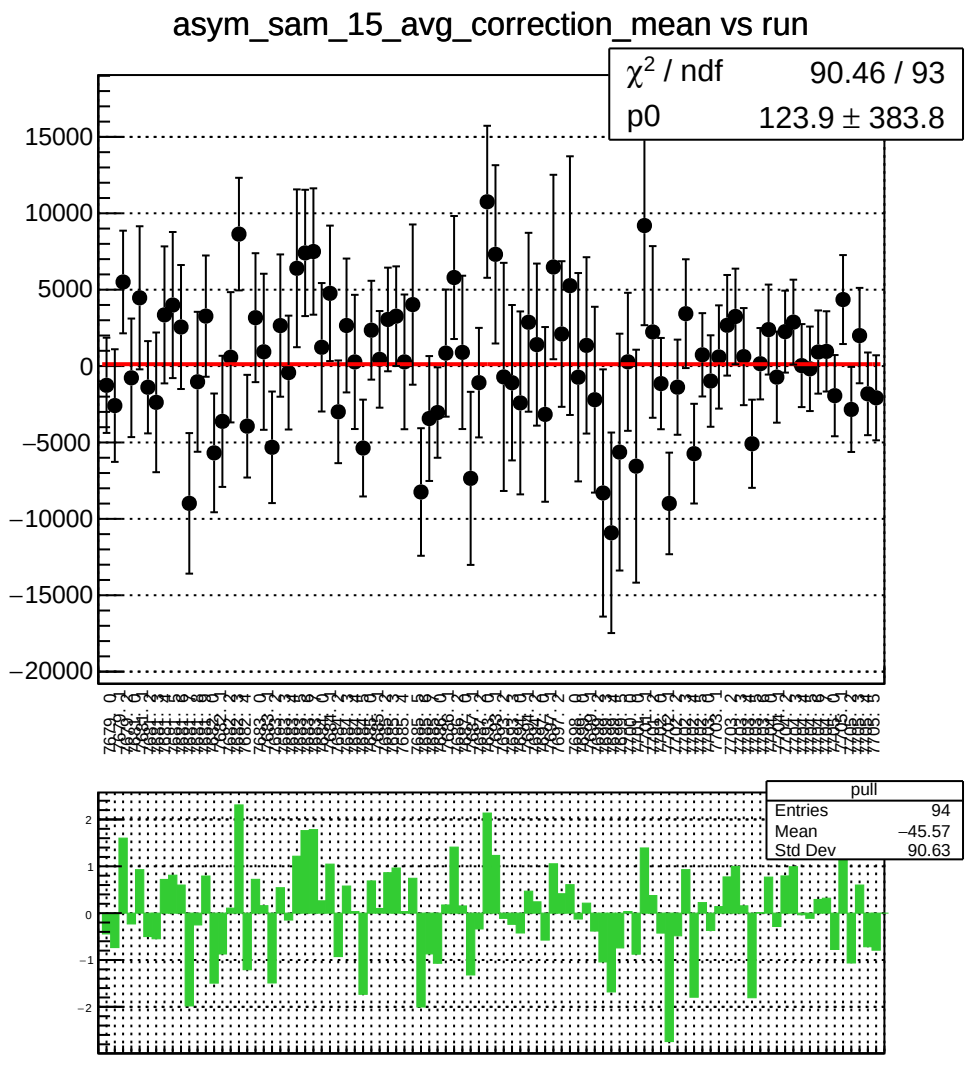

pull1D
Entries 94
Mean 0.02106
Std Dev 0.9419

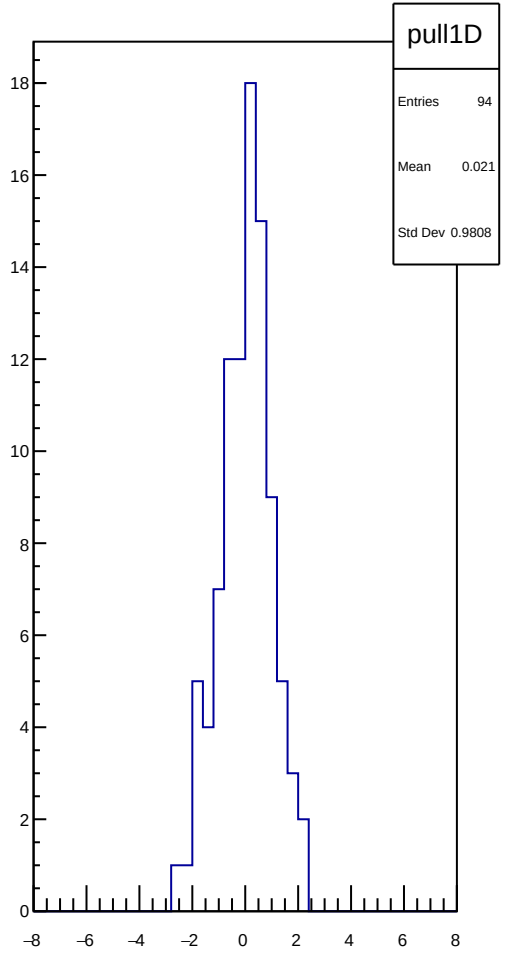

asym_sam8_correction_rms vs run
χ^2 / ndf 4.174e+04 / 93
p0 870.1 ± 0.659
1200
1100
1000
900
800
700
600

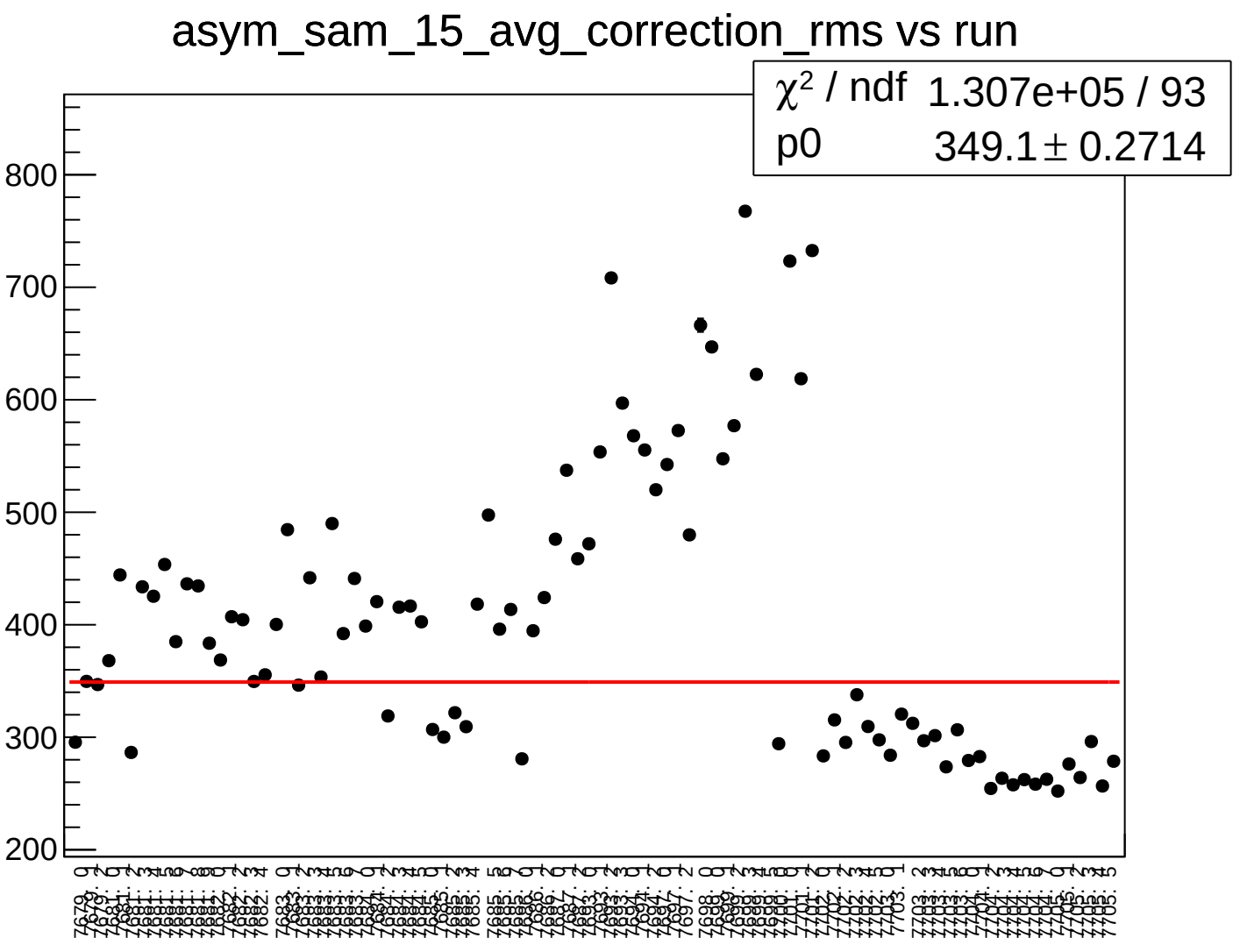

reg_asym_sam_15_avg_mean vs run
χ² / ndf 117.6 / 93
p0 −34.94 ± 69.33
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 94
Mean −992.2
Std Dev 1041
4
3
2
1
0
−1
−2
−3

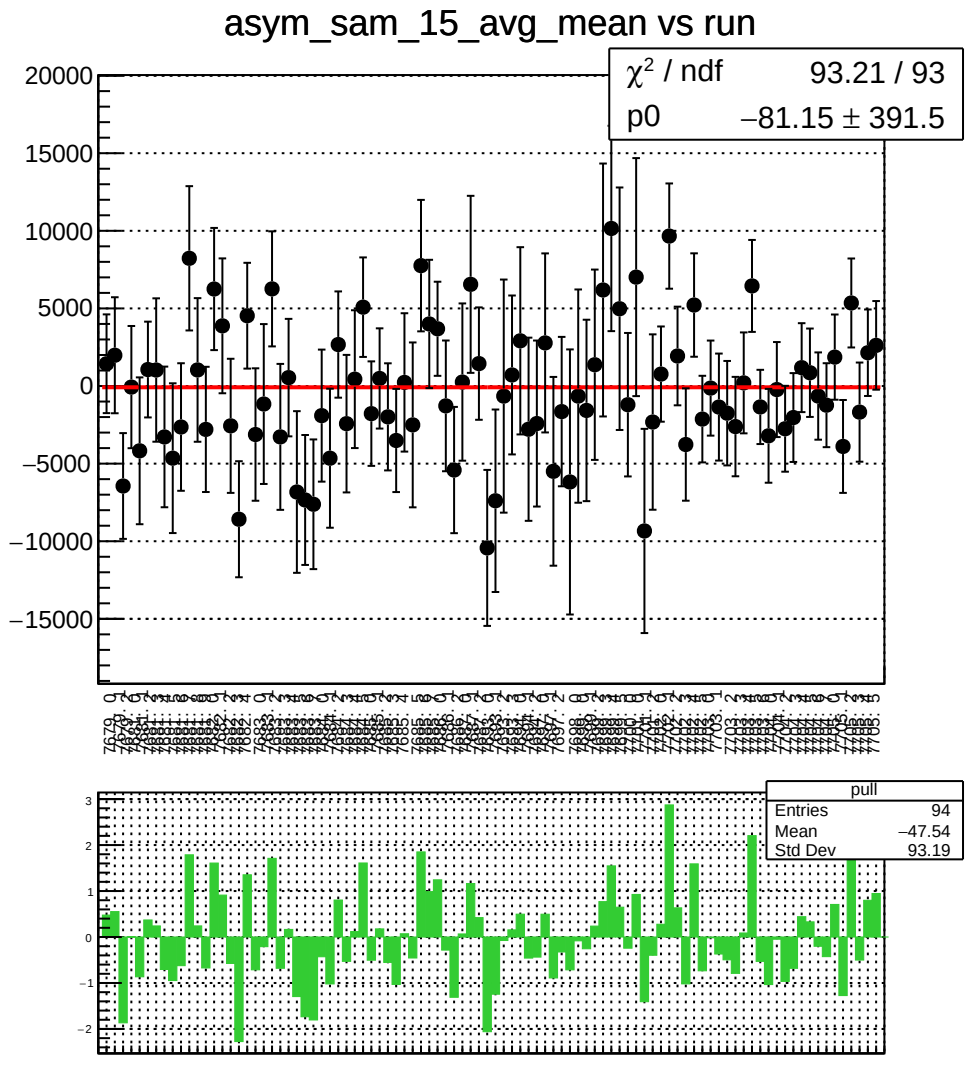

pull1D
Entries 94
Mean −0.003934
Std Dev 1.119
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

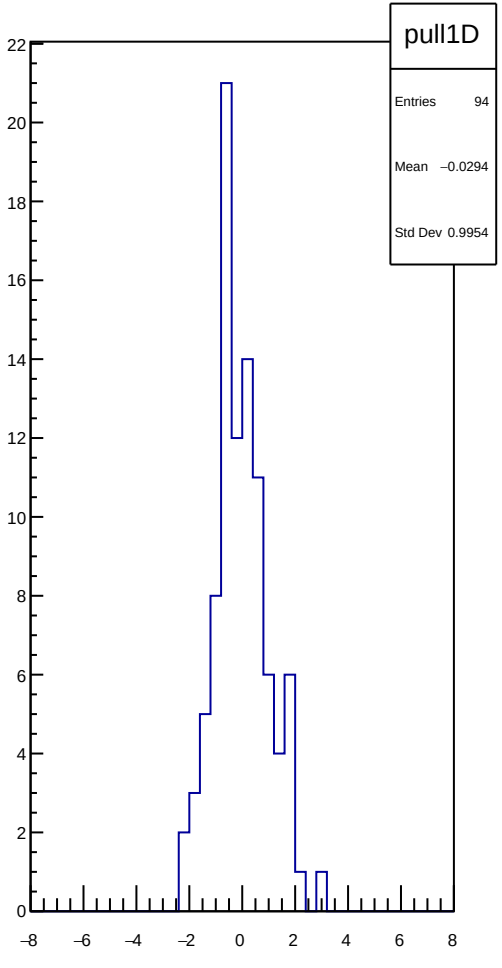

reg_asym_sam_15_avg_rms vs run
χ² / ndf 1.705e+04 / 93
p0 65.18 ± 0.04902
100
90
80
70
60

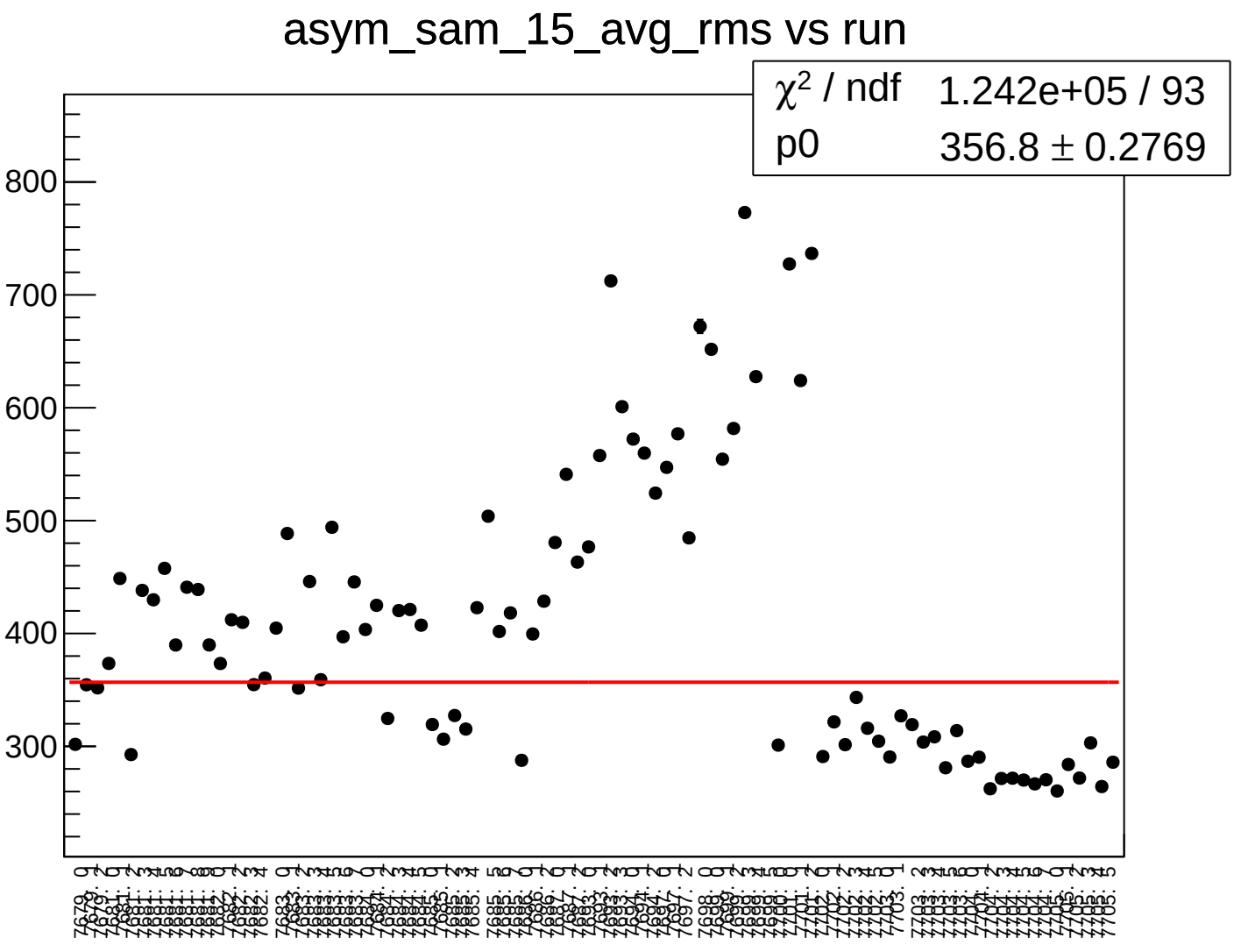

asym_sam_15_avg_correction_mean vs run
χ² / ndf 90.46 / 93
p0 123.9 ± 383.8
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 94
Mean −45.57
Std Dev 90.63
2
1
0
−1
−2

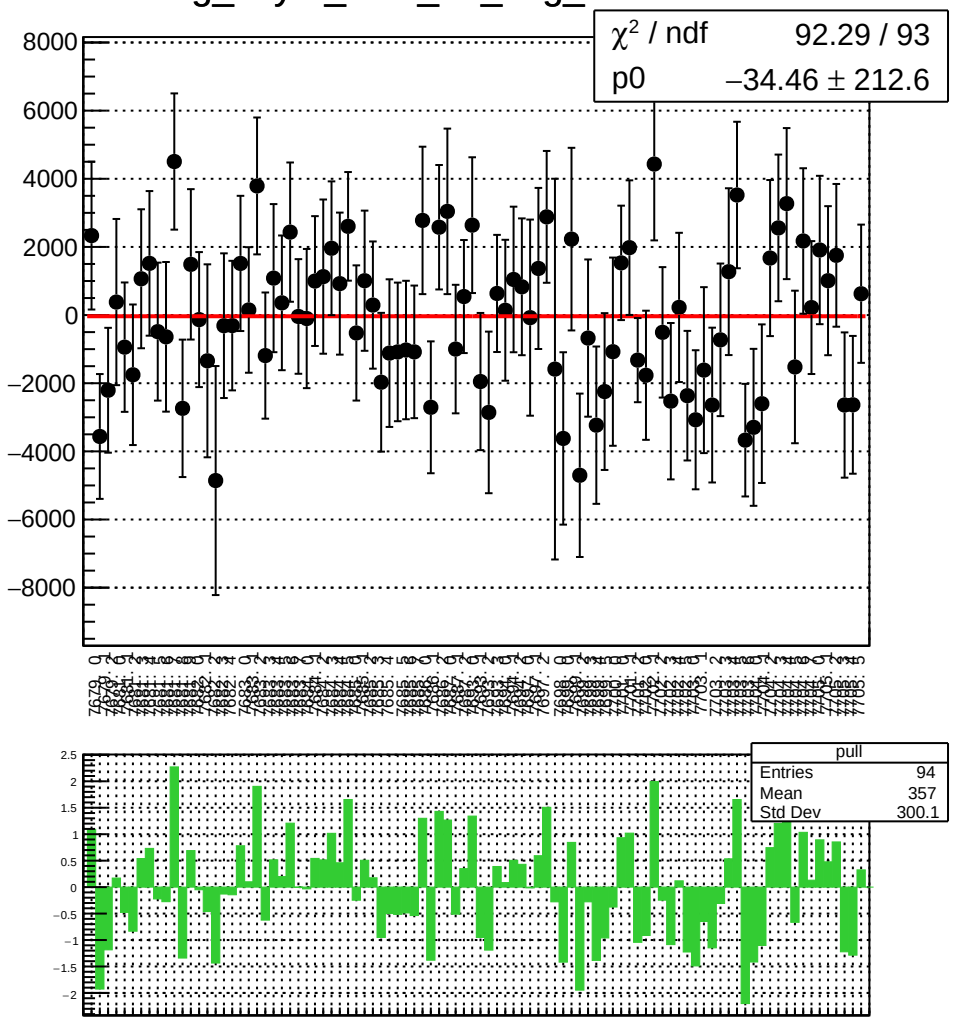

pull1D
Entries 94
Mean 0.021
Std Dev 0.9808
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

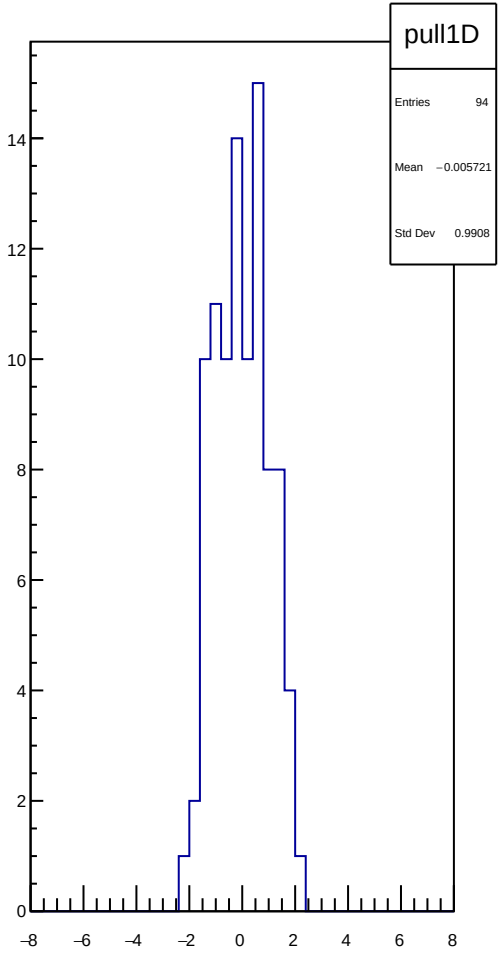

asym_sam_15_avg_correction_rms vs run
χ² / ndf 1.307e+05 / 93
p0 349.1 ± 0.2714
800
700
600
500
400
300
200

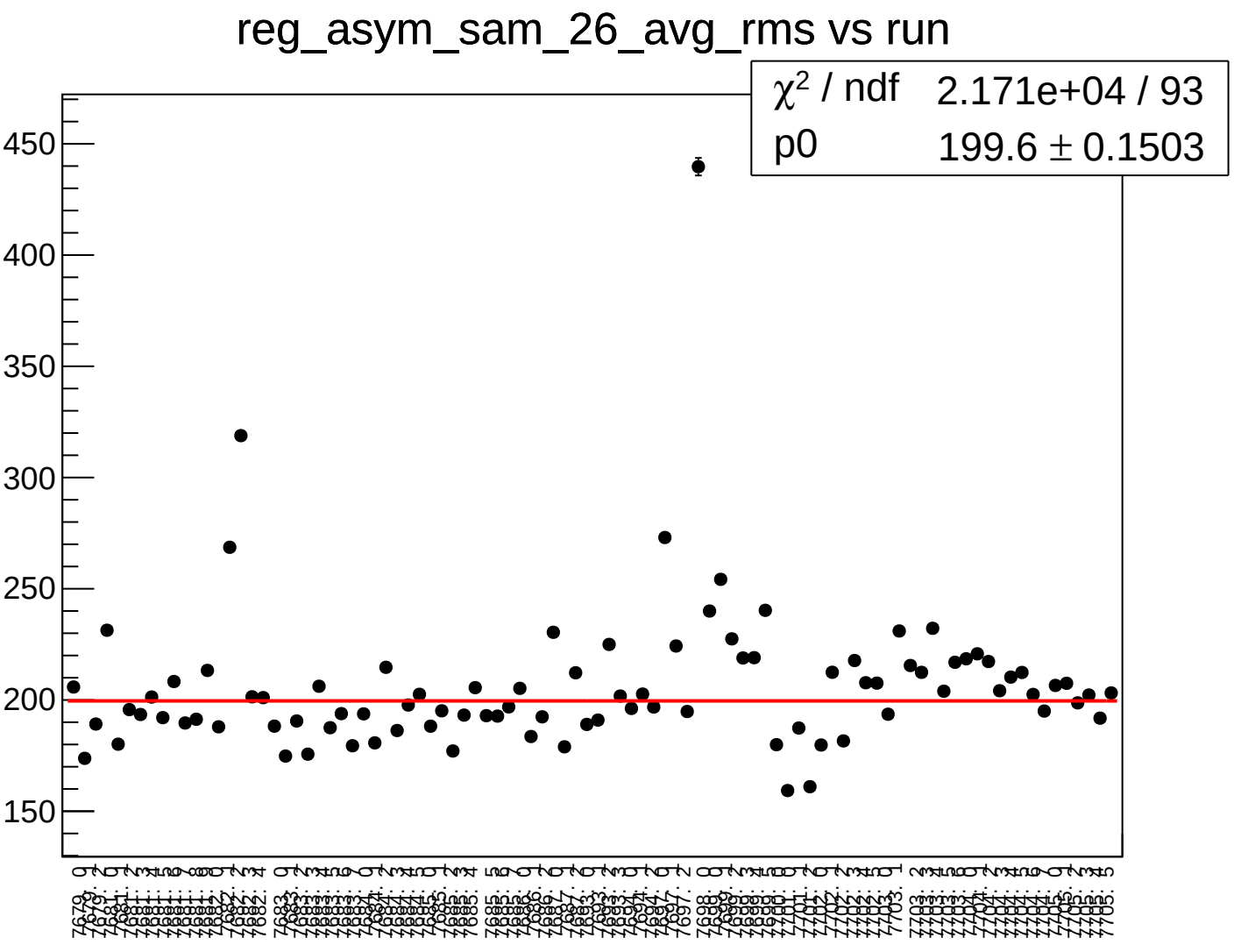

asym_sam_15_avg_mean vs run
χ² / ndf 93.21 / 93
p0 −81.15 ± 391.5
pull
Entries 94
Mean −47.54
Std Dev 93.19

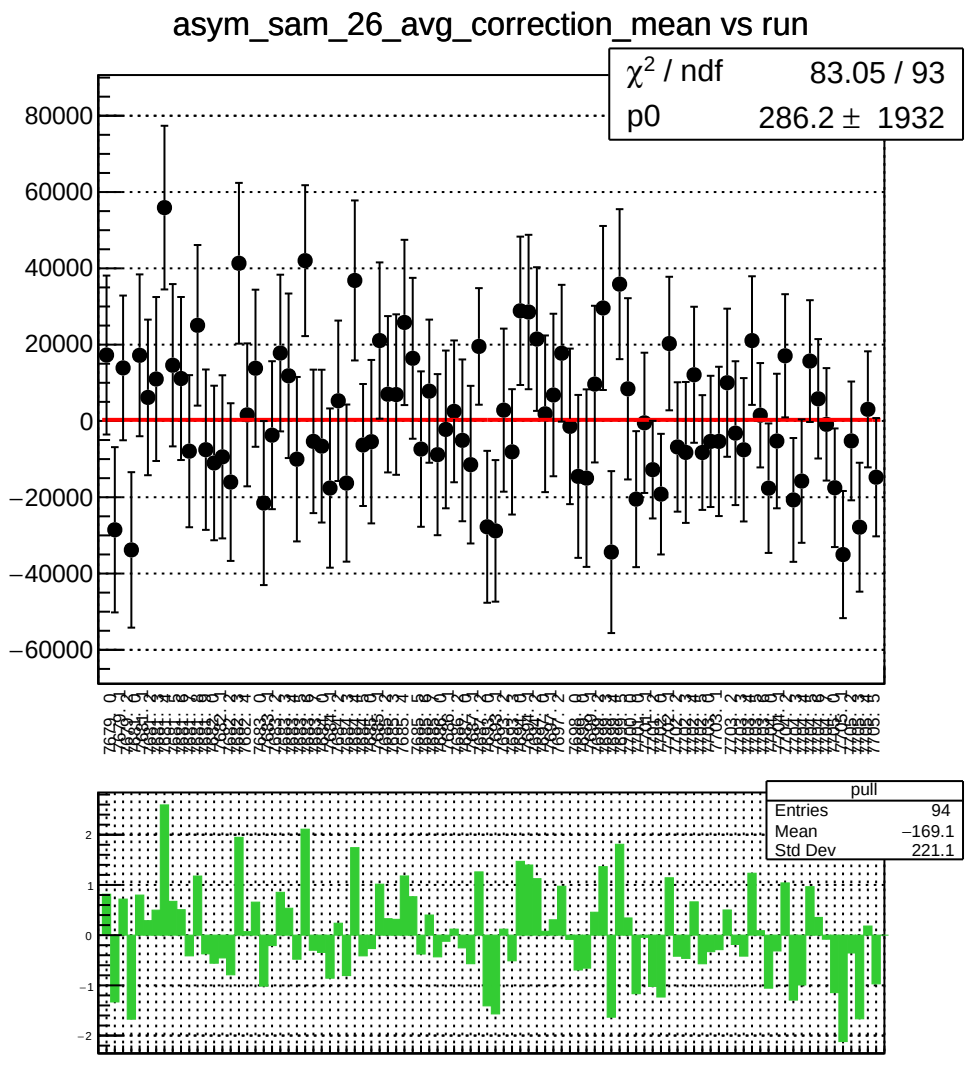

pull1D
Entries 94
Mean −0.0294
Std Dev 0.9954

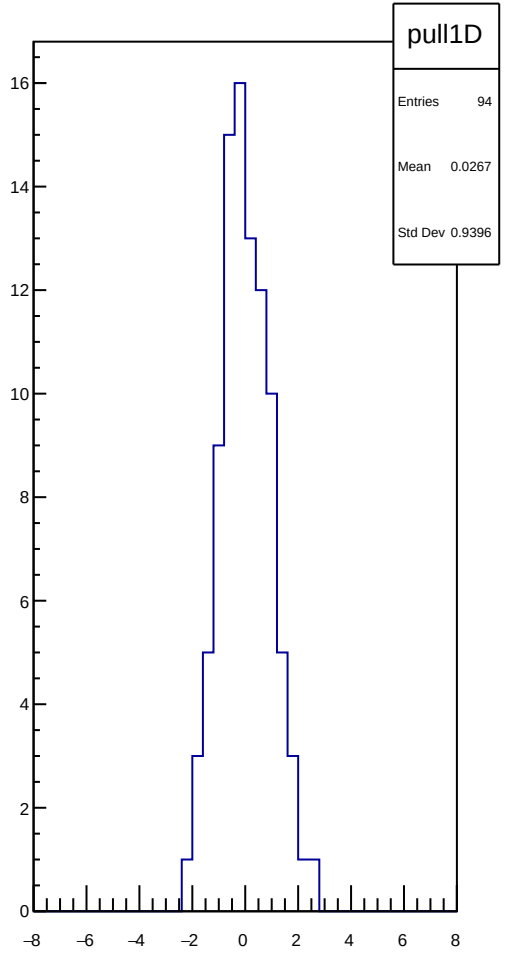

asym_sam_15_avg_rms vs run
χ² / ndf 1.242e+05 / 93
p0 356.8 ± 0.2769
800
700
600
500
400
300

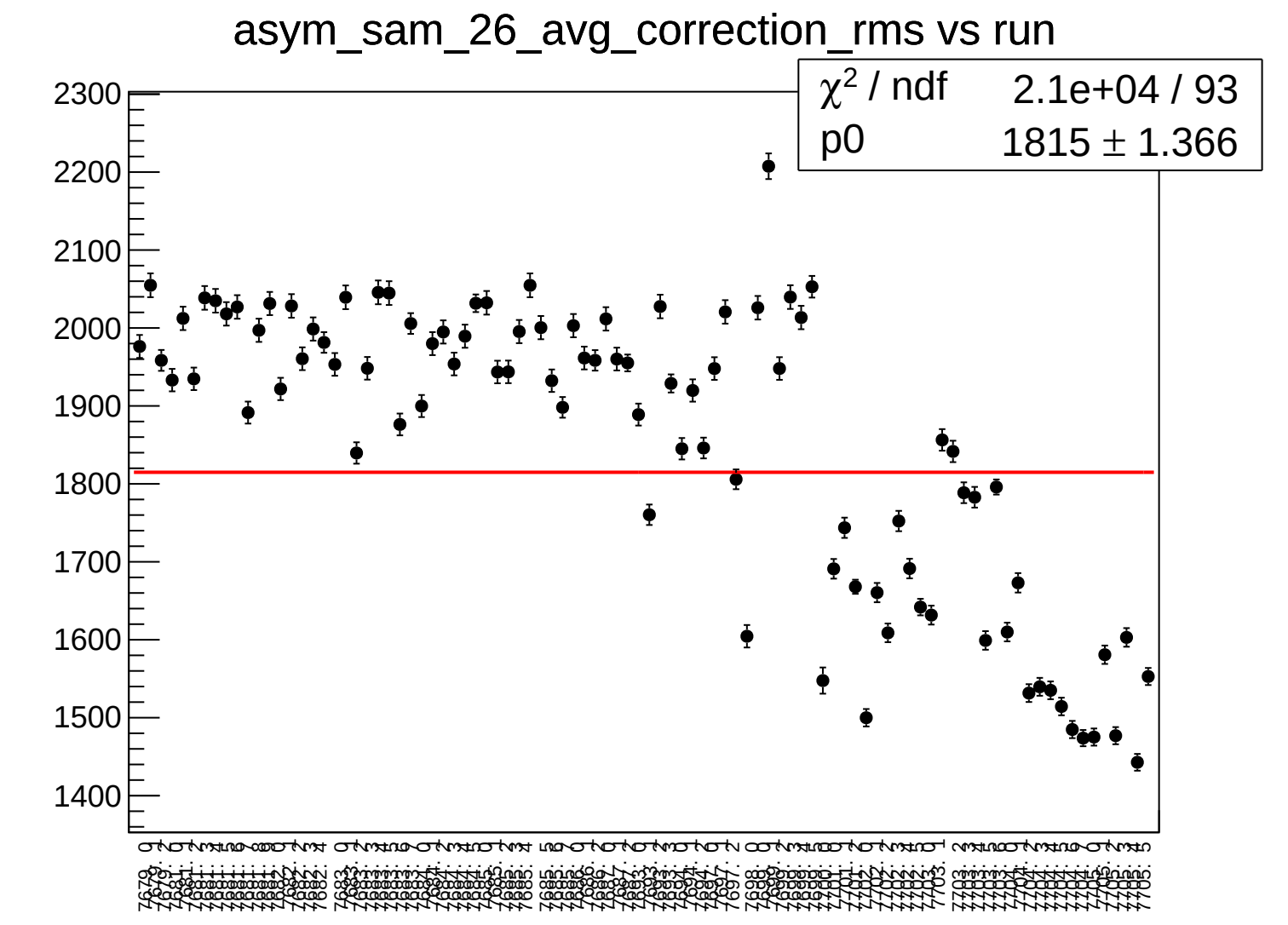

reg_asym_sam_26_avg_mean vs run
χ² / ndf 92.29 / 93
p0 −34.46 ± 212.6
pull
Entries 94
Mean 357
Std Dev 300.1

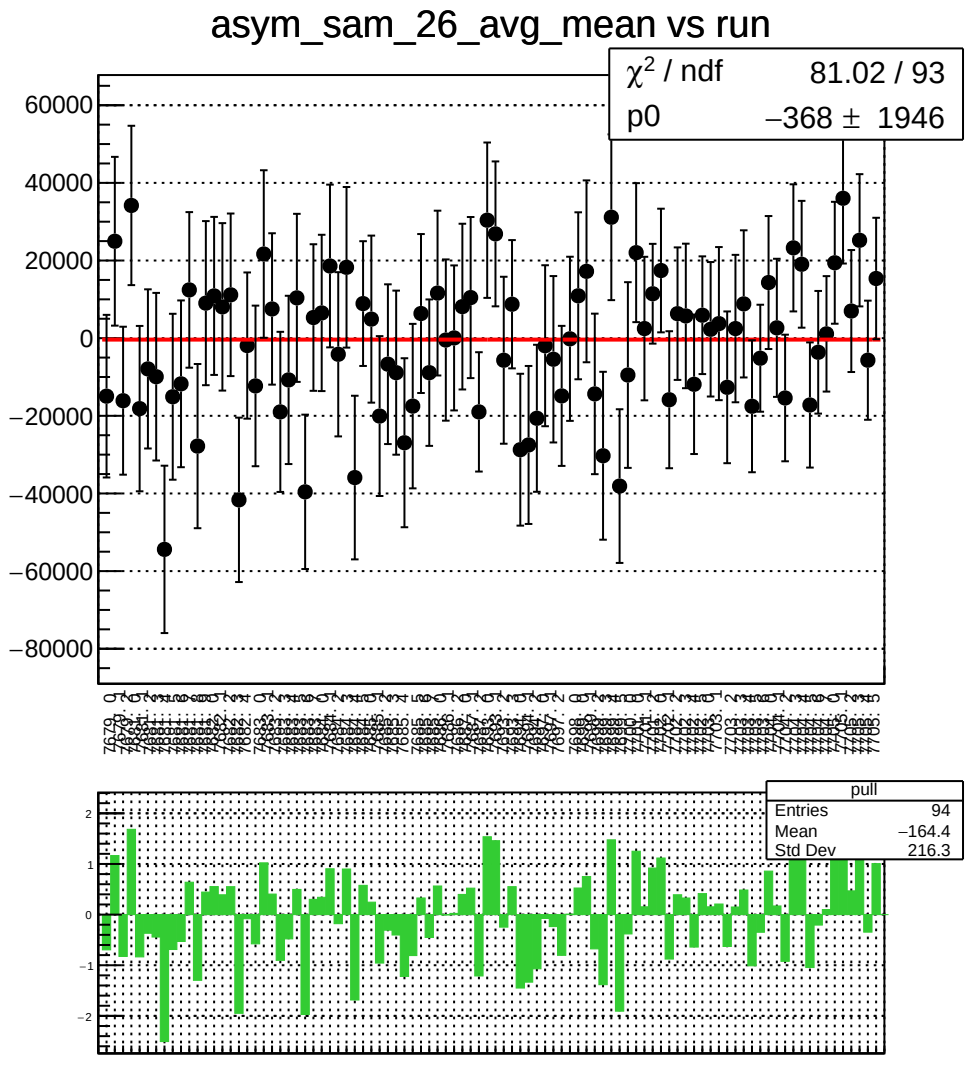

pull1D
Entries 94
Mean −0.005721
Std Dev 0.9908

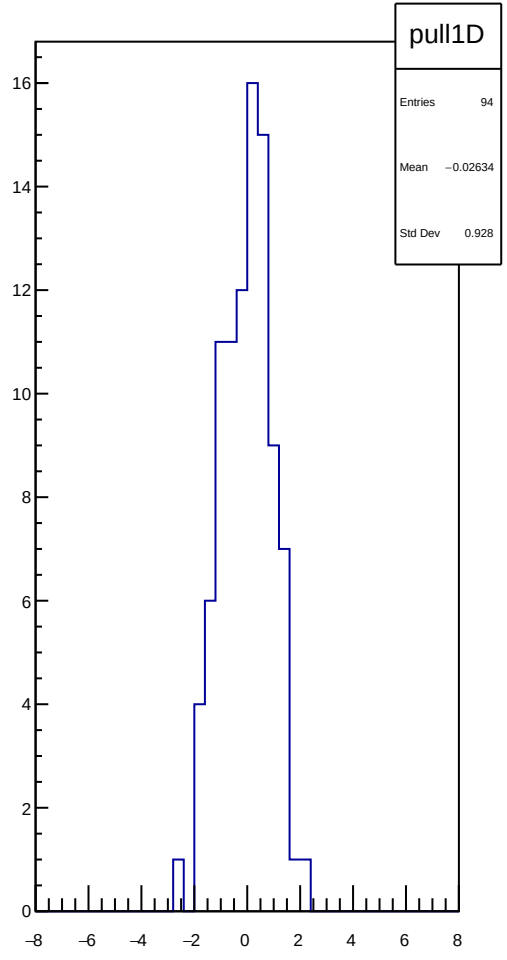

reg_asym_sam_26_avg_rms vs run
χ^2 / ndf 2.171e+04 / 93
p0 199.6 ± 0.1503
450
400
350
300
250
200
150

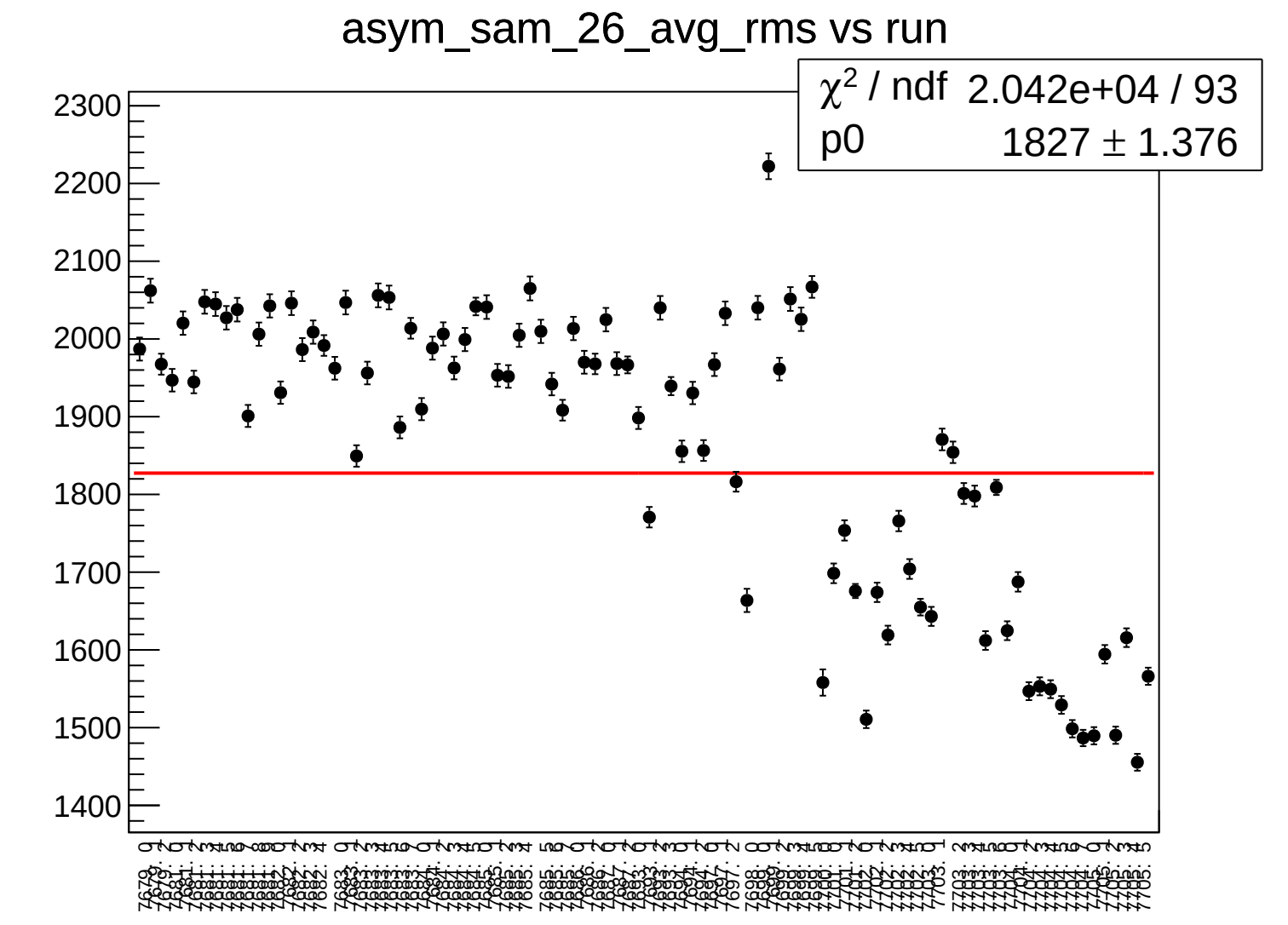

asym_sam_26_avg_correction_mean vs run
χ² / ndf 83.05 / 93
p0 286.2 ± 1932
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −169.1
Std Dev 221.1
2
1
0
−1
−2

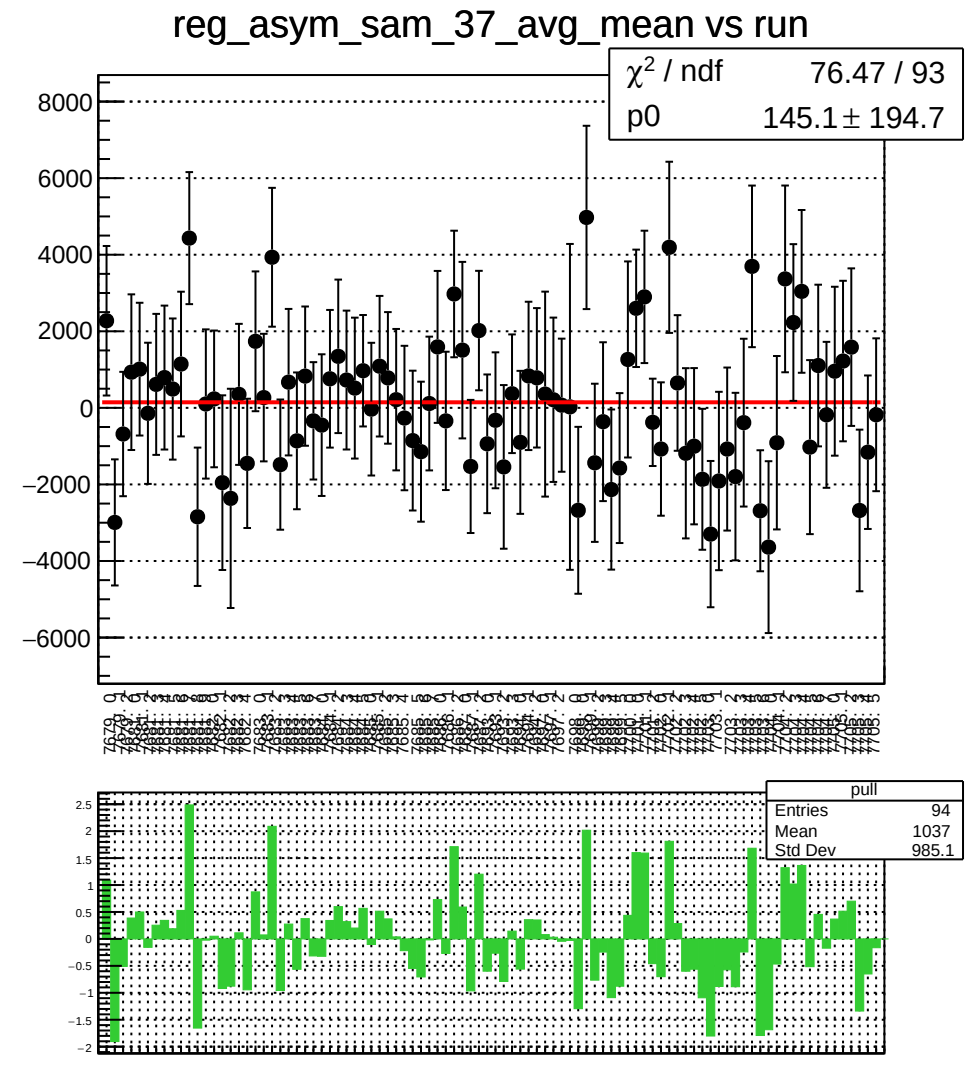

pull1D
Entries 94
Mean 0.0267
Std Dev 0.9396
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

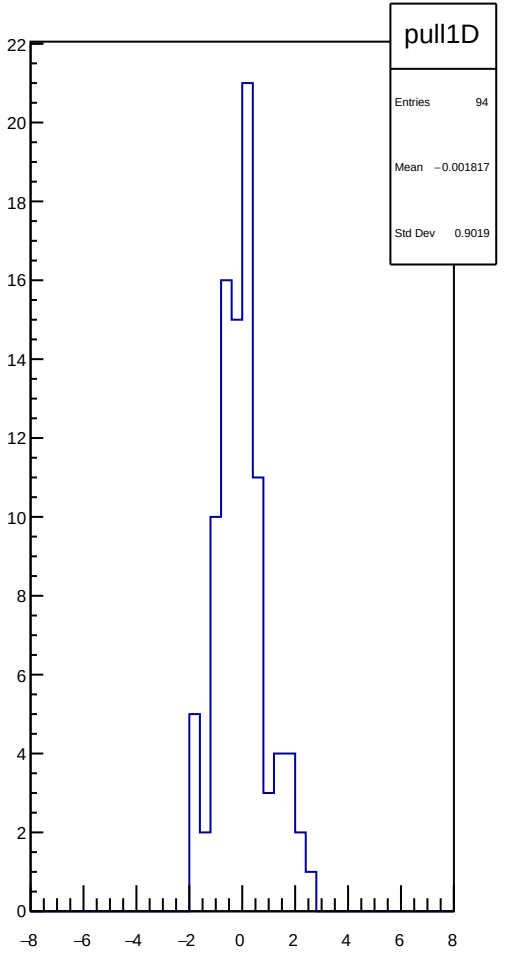

asym_sam_26_avg_correction_rms vs run
χ^2 / ndf 2.1e+04 / 93
p0 1815 ± 1.366
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400

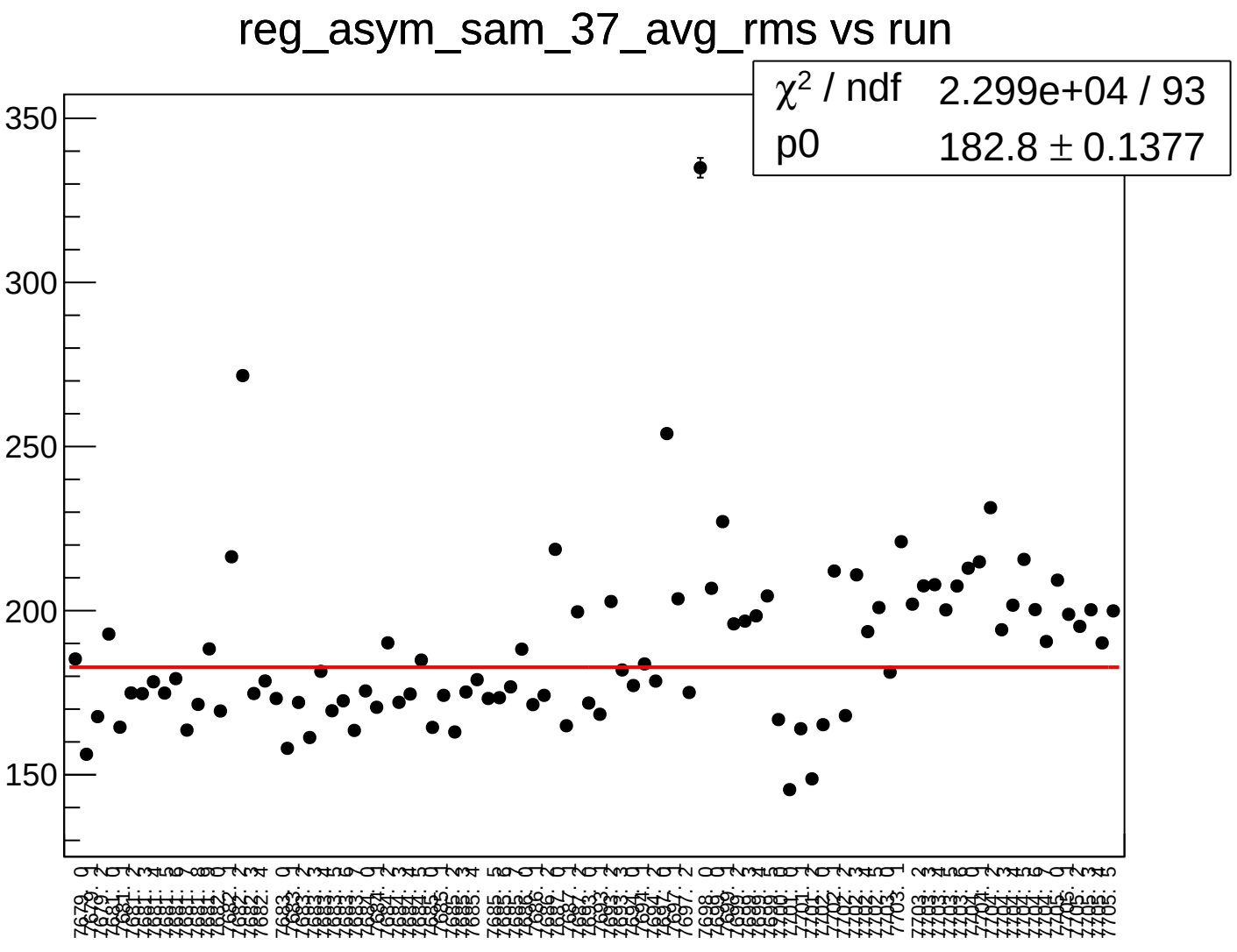

asym_sam_26_avg_mean vs run
χ² / ndf 81.02 / 93
p0 −368 ± 1946
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 94
Mean −164.4
Std Dev 216.3
2
1
0
−1
−2

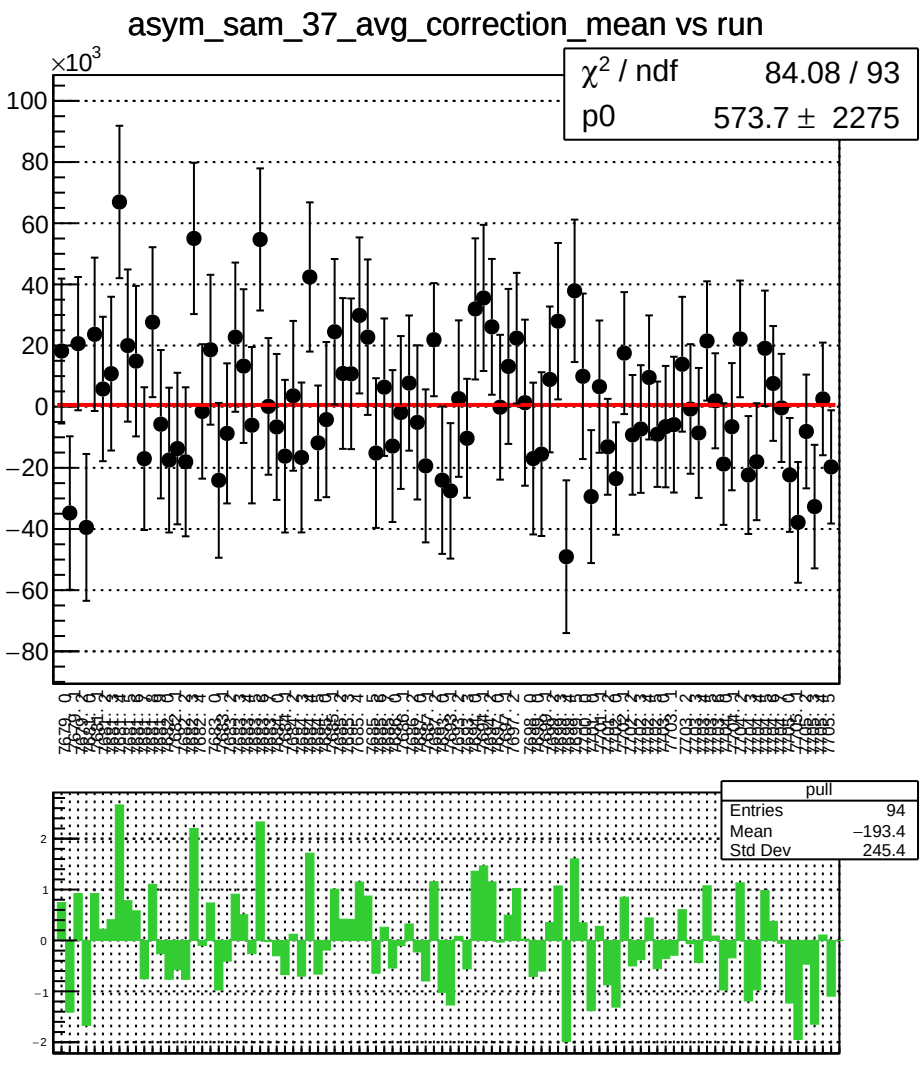

pull1D
Entries 94
Mean −0.02634
Std Dev 0.928
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

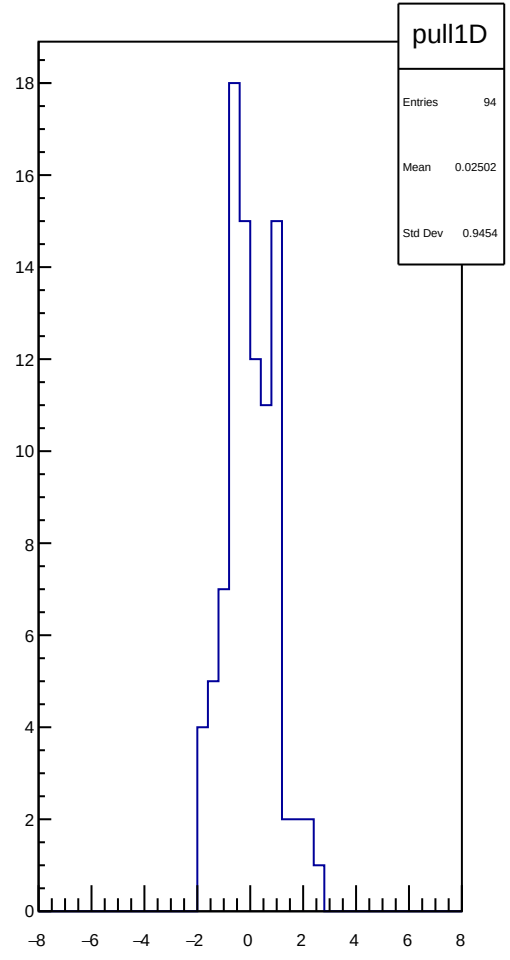

asym_sam_26_avg_rms vs run
χ^2 / ndf 2.042e+04 / 93
p0 1827 ± 1.376
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400

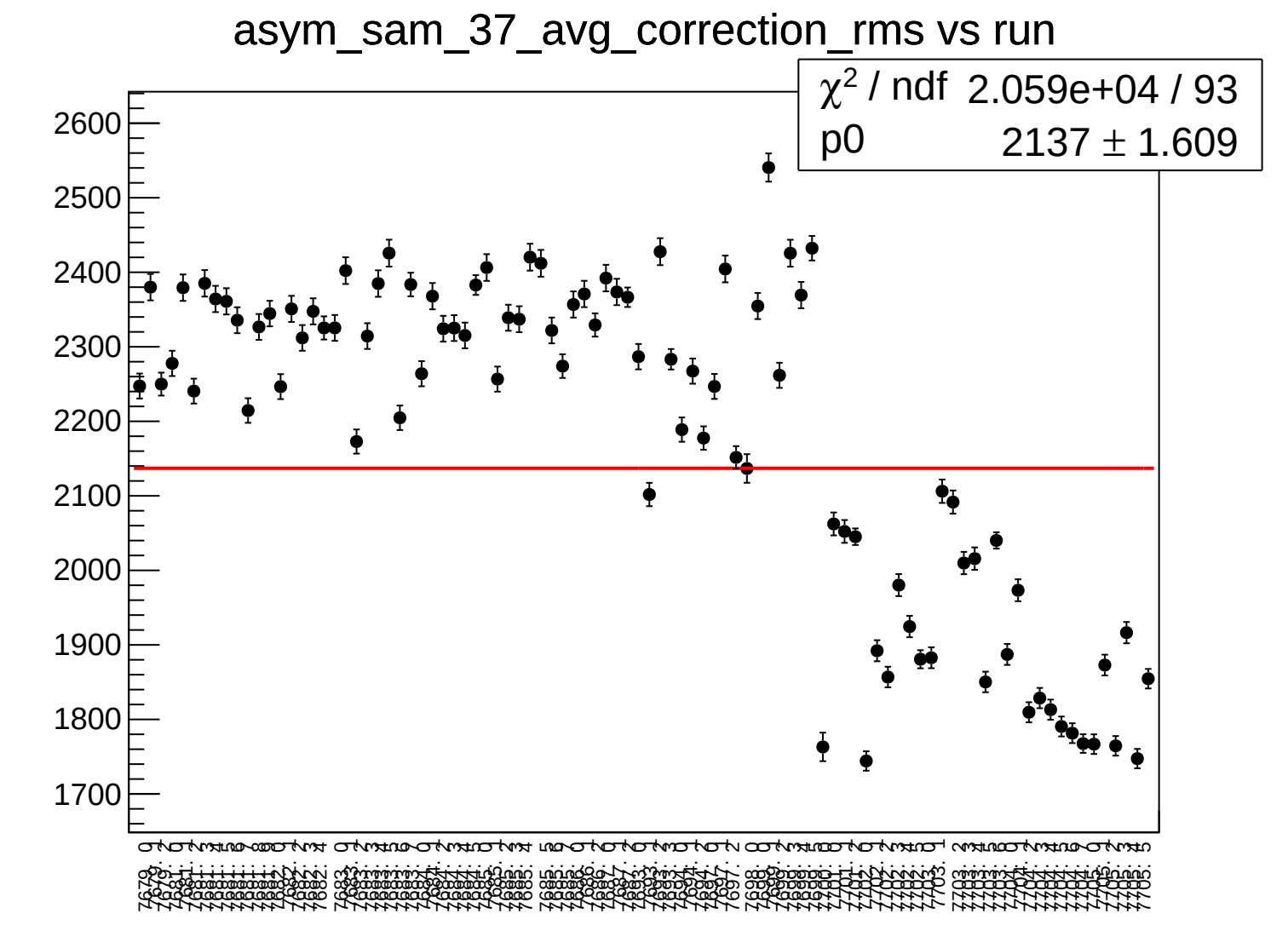

reg_asym_sam_37_avg_mean vs run
χ² / ndf 76.47 / 93
p0 145.1 ± 194.7
pull
Entries 94
Mean 1037
Std Dev 985.1

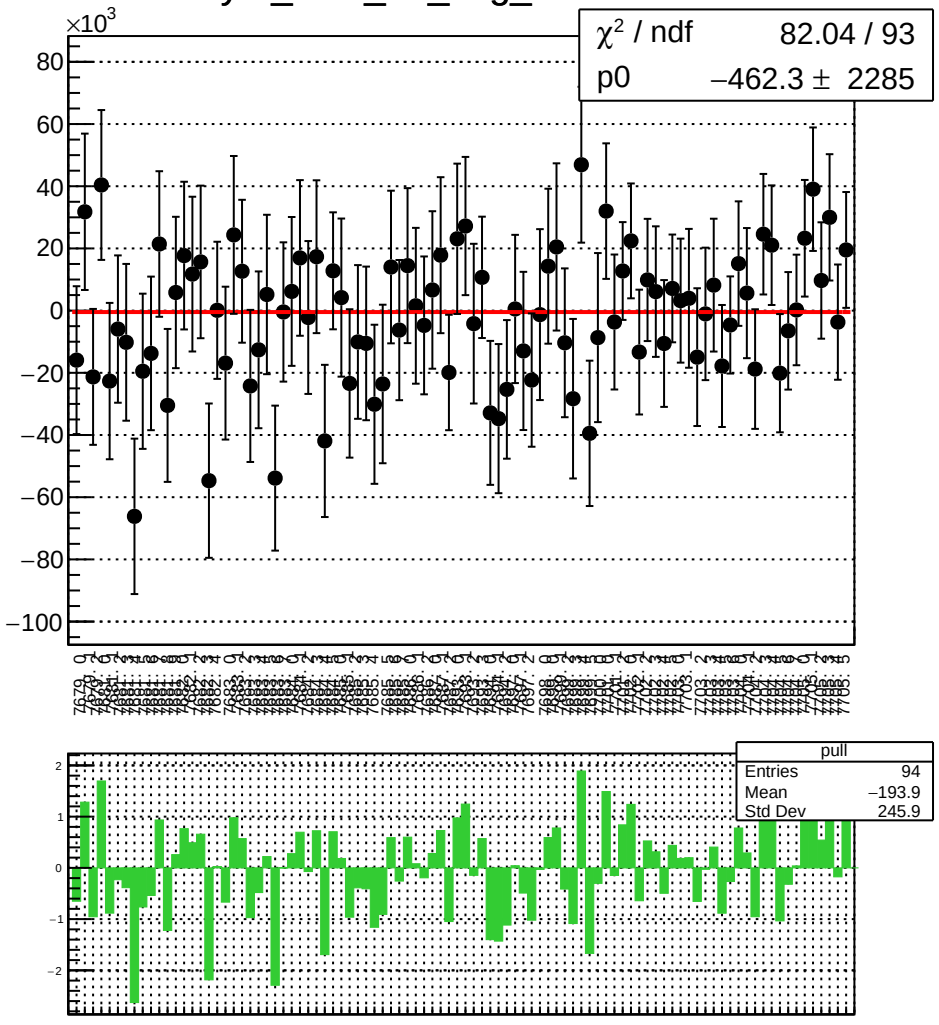

pull1D
Entries 94
Mean −0.001817
Std Dev 0.9019

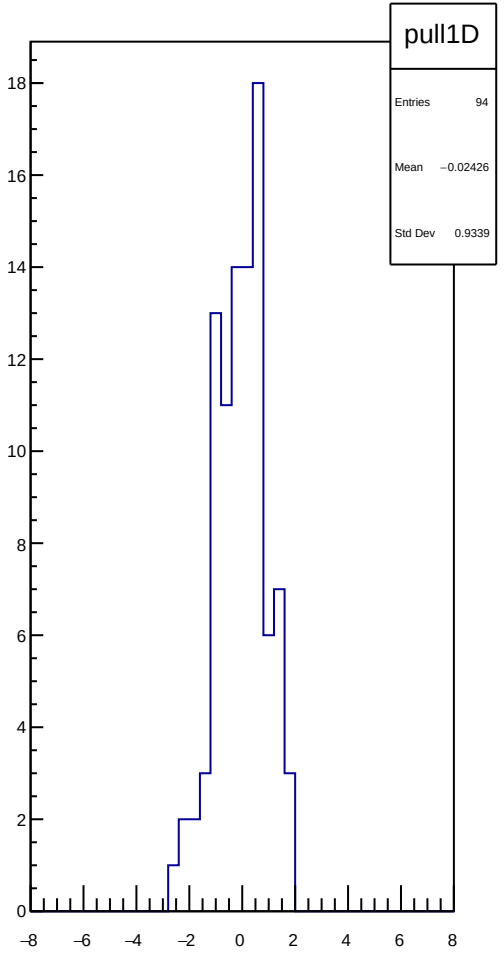

reg_asym_sam_37_avg_rms vs run
χ^2 / ndf 2.299e+04 / 93
p0 182.8 ± 0.1377
350
300
250
200
150

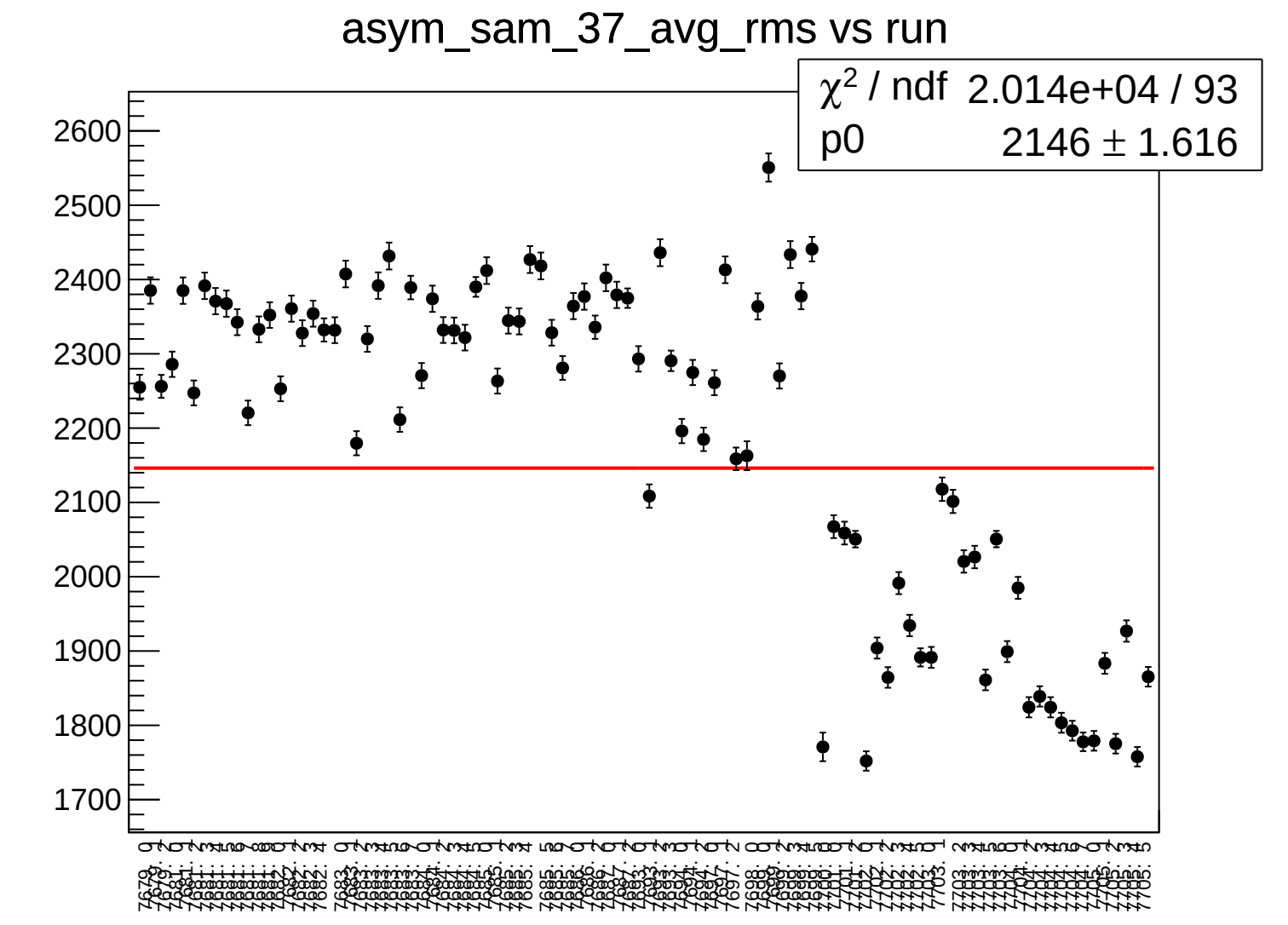

asym_sam_37_avg_correction_mean vs run
×10^3
χ² / ndf 84.08 / 93
p0 573.7 ± 2275
pull
Entries 94
Mean −193.4
Std Dev 245.4

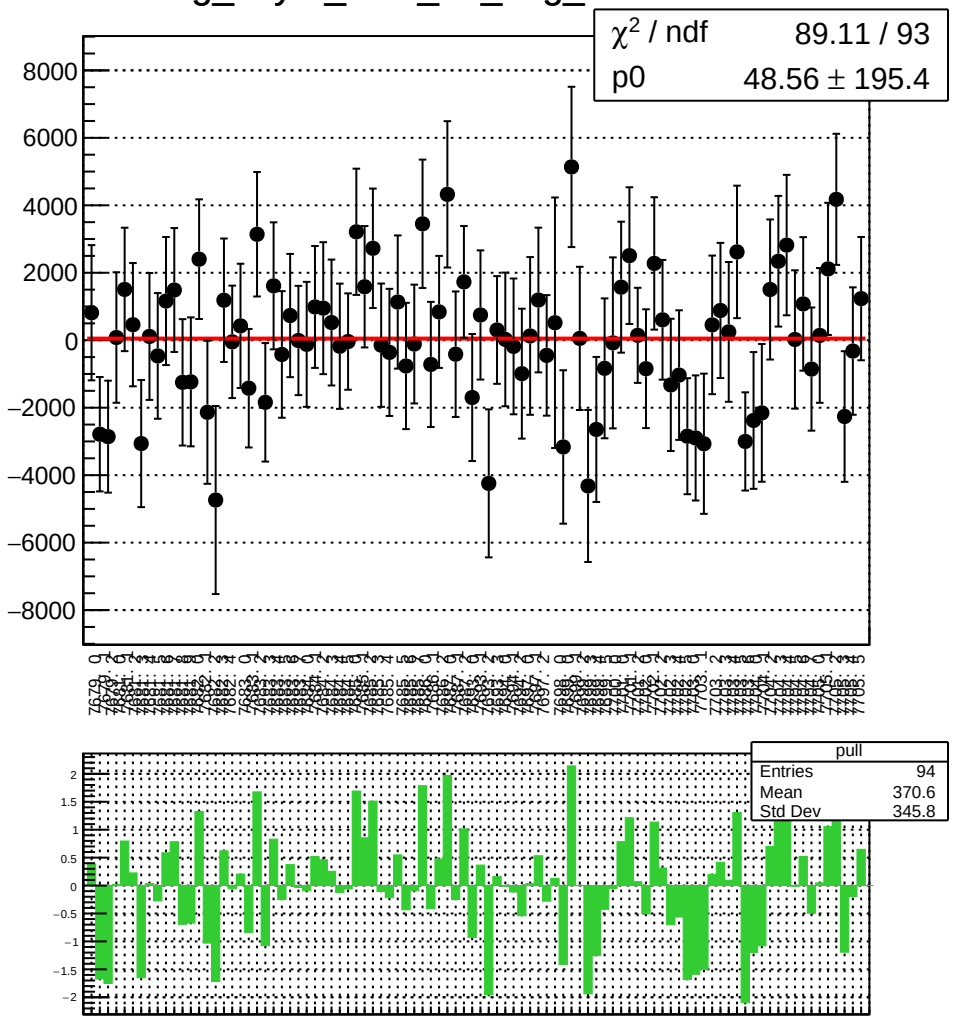

pull1D
Entries 94
Mean 0.02502
Std Dev 0.9454

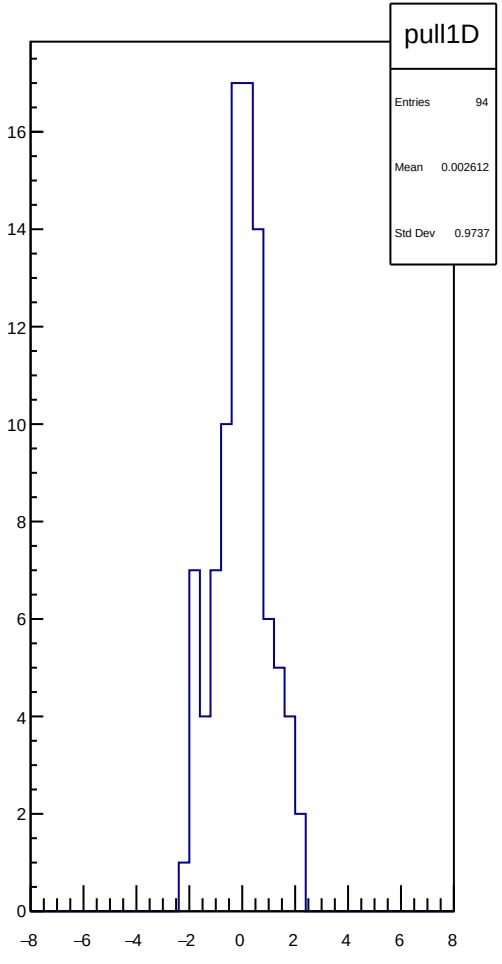

asym_sam_37_avg_correction_rms vs run
χ² / ndf 2.059e+04 / 93
p0 2137 ± 1.609
2600
2500
2400
2300
2200
2100
2000
1900
1800
1700

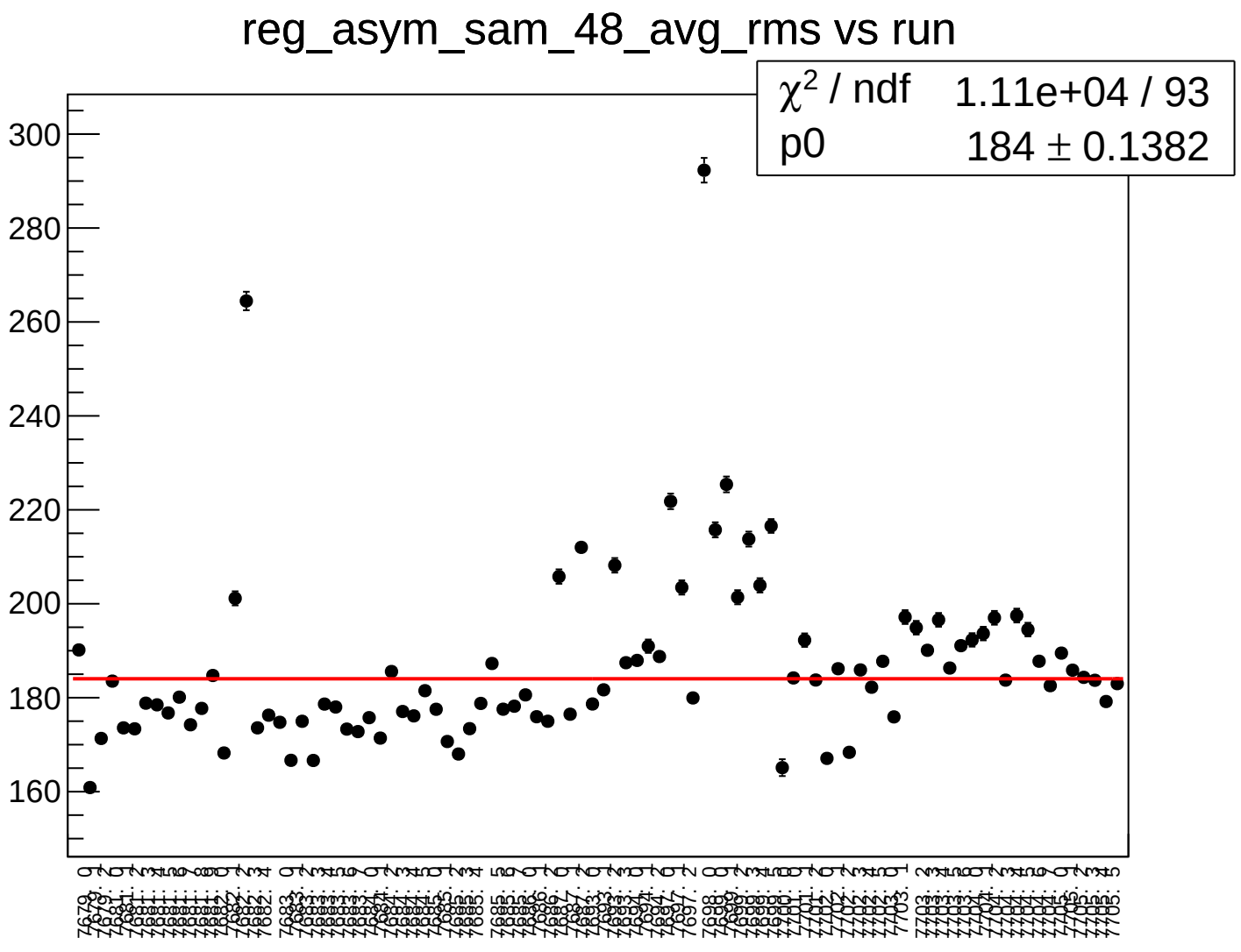

asym_sam_37_avg_mean vs run
×10^3
χ² / ndf 82.04 / 93
p0 −462.3 ± 2285
pull
Entries 94
Mean −193.9
Std Dev 245.9

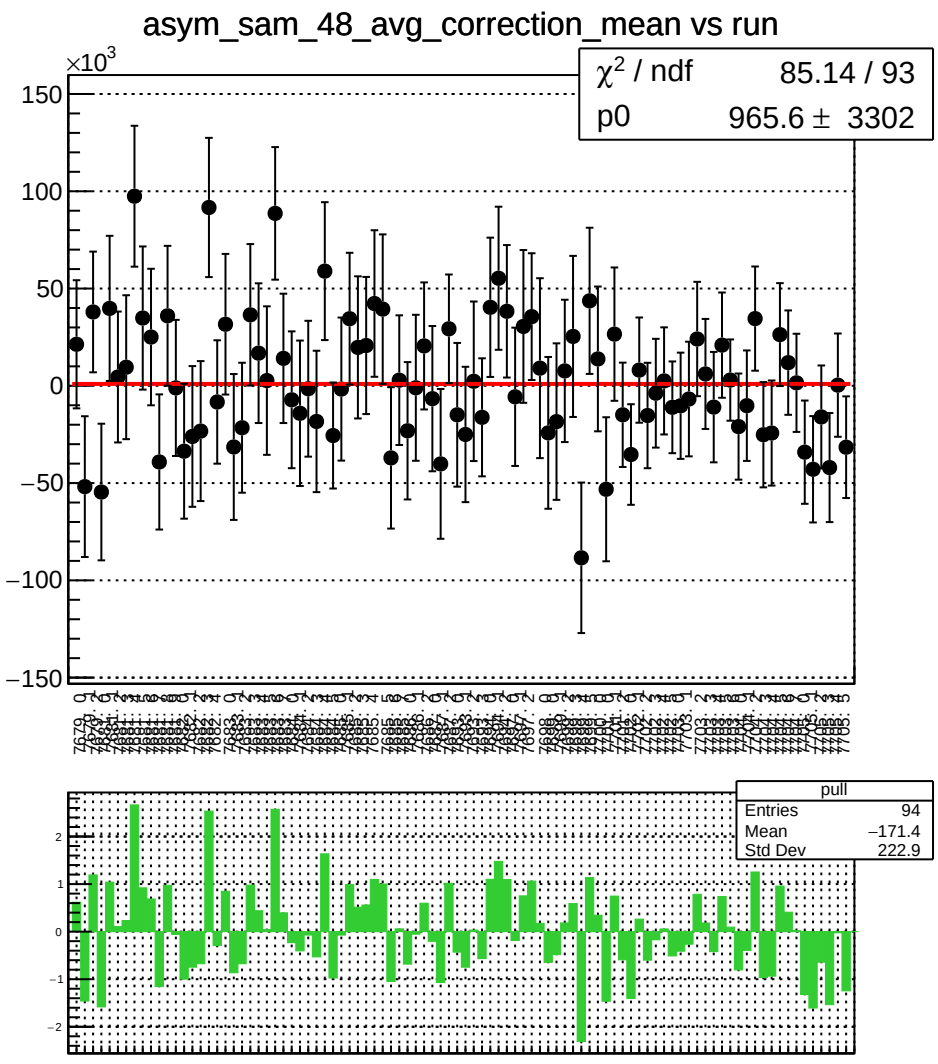

pull1D
Entries 94
Mean −0.02426
Std Dev 0.9339

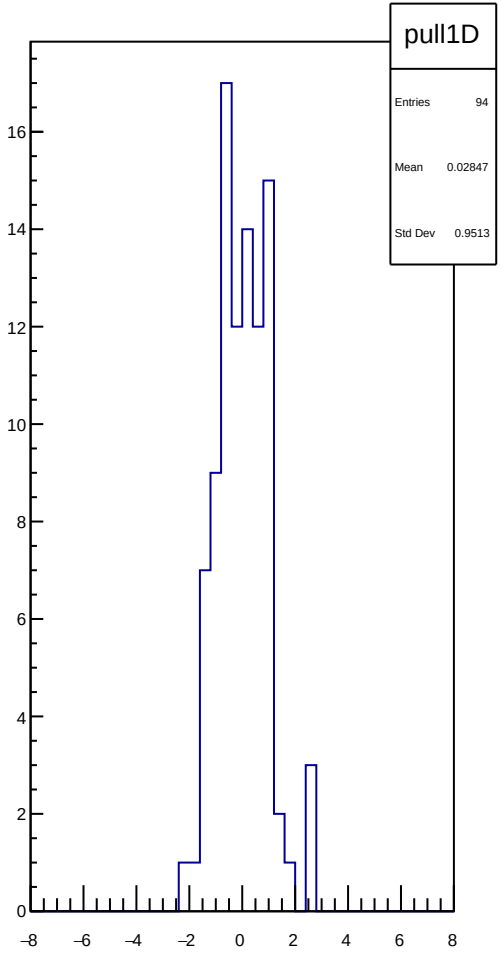

asym_sam_37_avg_rms vs run
χ² / ndf 2.014e+04 / 93
p0 2146 ± 1.616
2600
2500
2400
2300
2200
2100
2000
1900
1800
1700

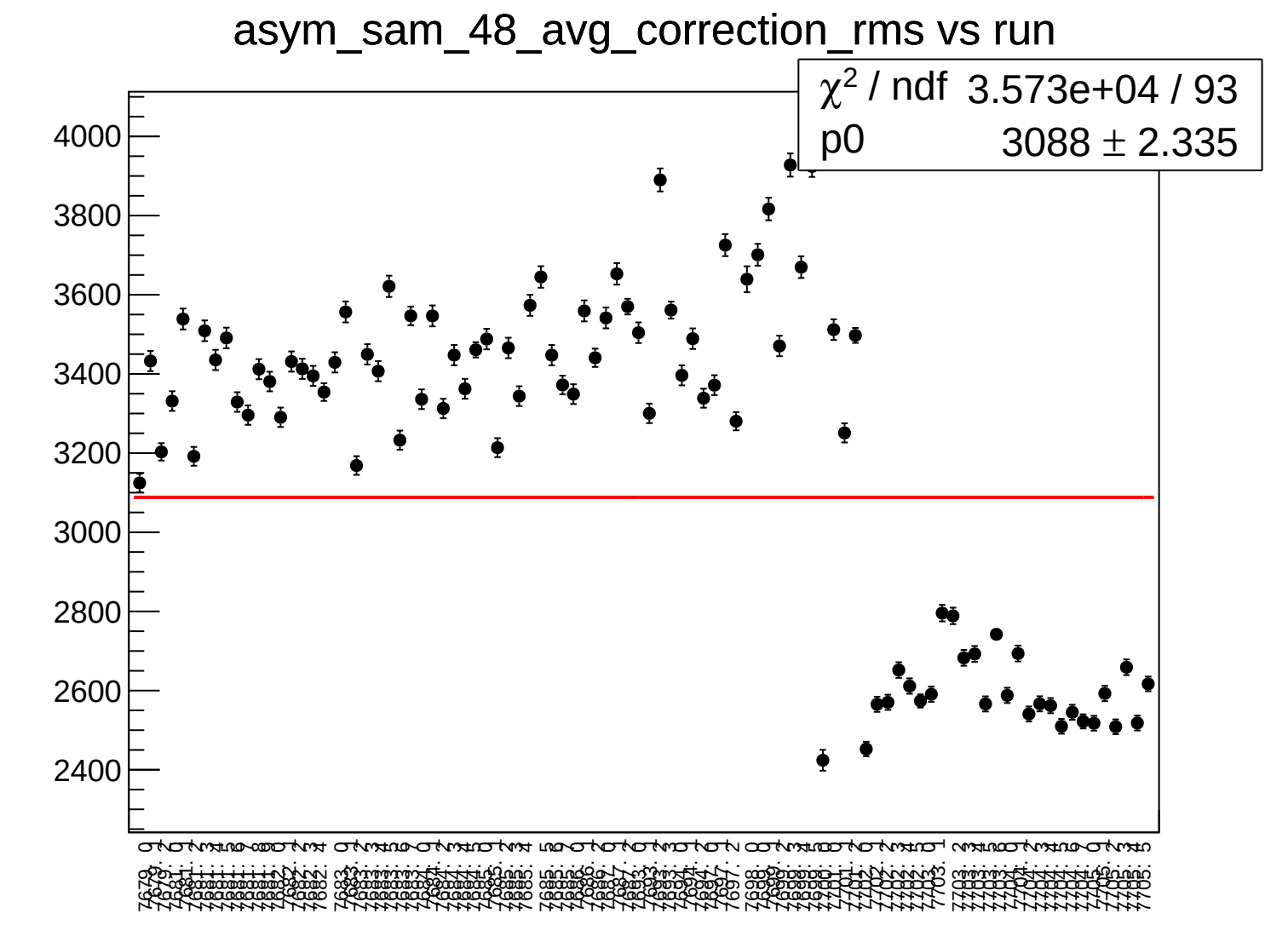

reg_asym_sam_48_avg_mean vs run
χ² / ndf 89.11 / 93
p0 48.56 ± 195.4
pull
Entries 94
Mean 370.6
Std Dev 345.8

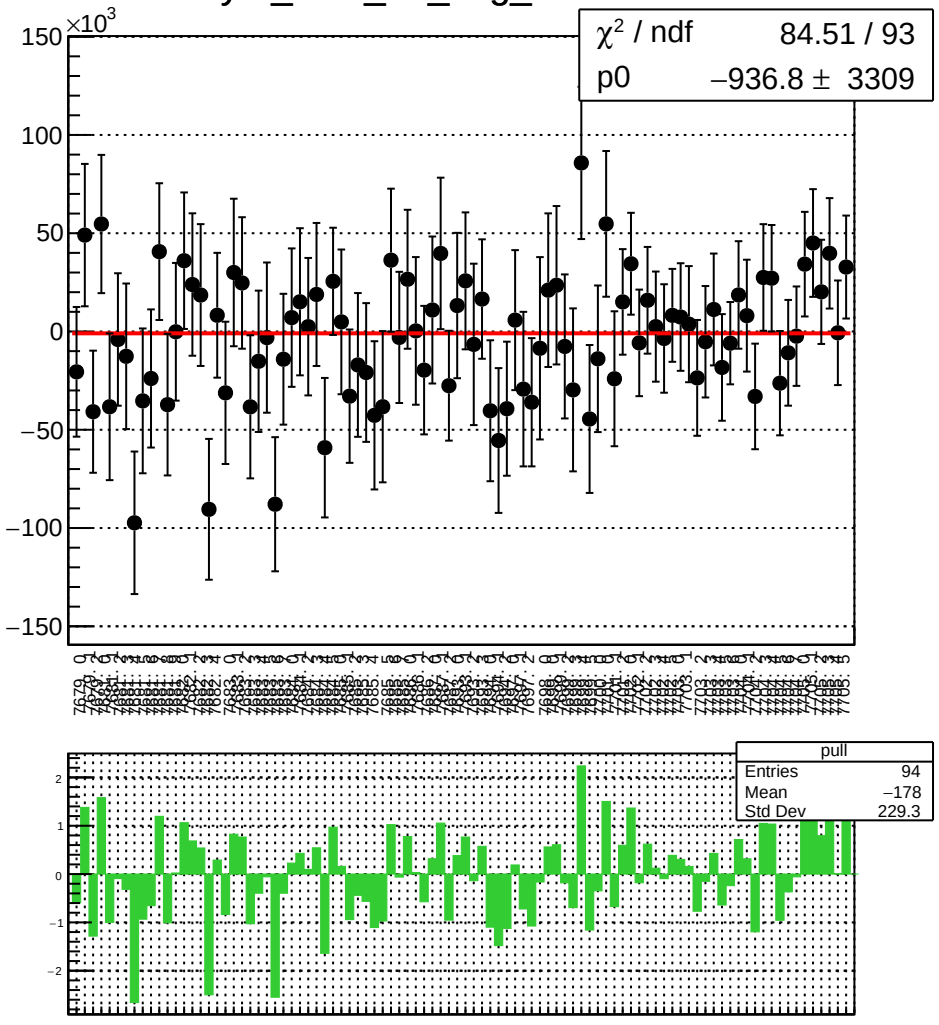

pull1D
Entries 94
Mean 0.002612
Std Dev 0.9737

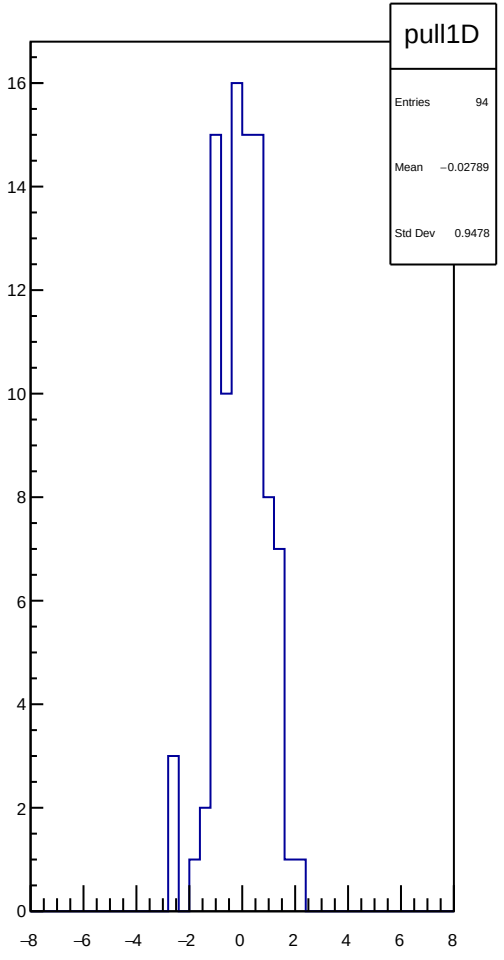

reg_asym_sam_48_avg_rms vs run
χ² / ndf 1.11e+04 / 93
p0 184 ± 0.1382
300
280
260
240
220
200
180
160

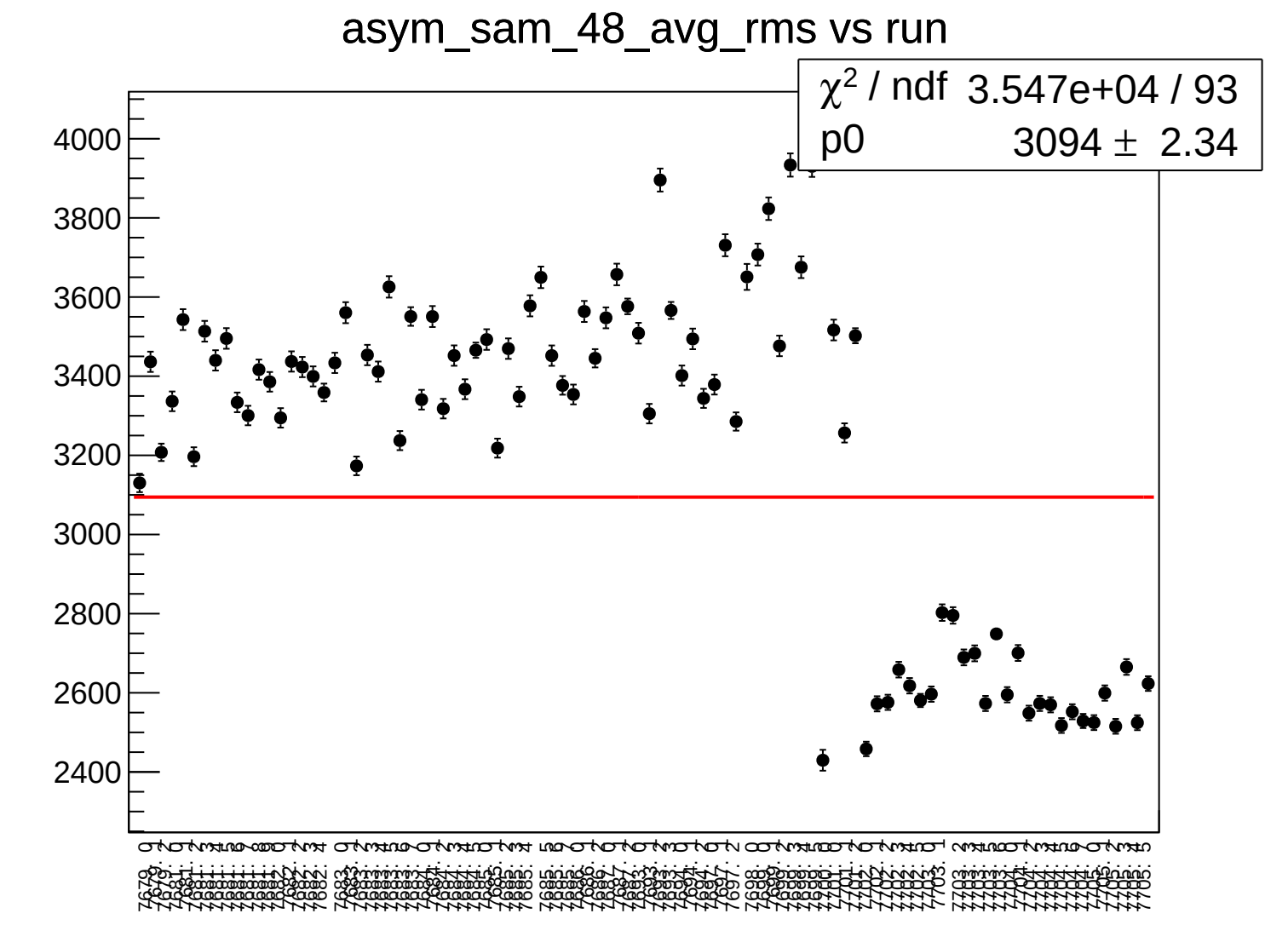

asym_sam_48_avg_correction_mean vs run
×10^3
χ² / ndf 85.14 / 93
p0 965.6 ± 3302
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean −171.4
Std Dev 222.9
2
1
0
−1
−2

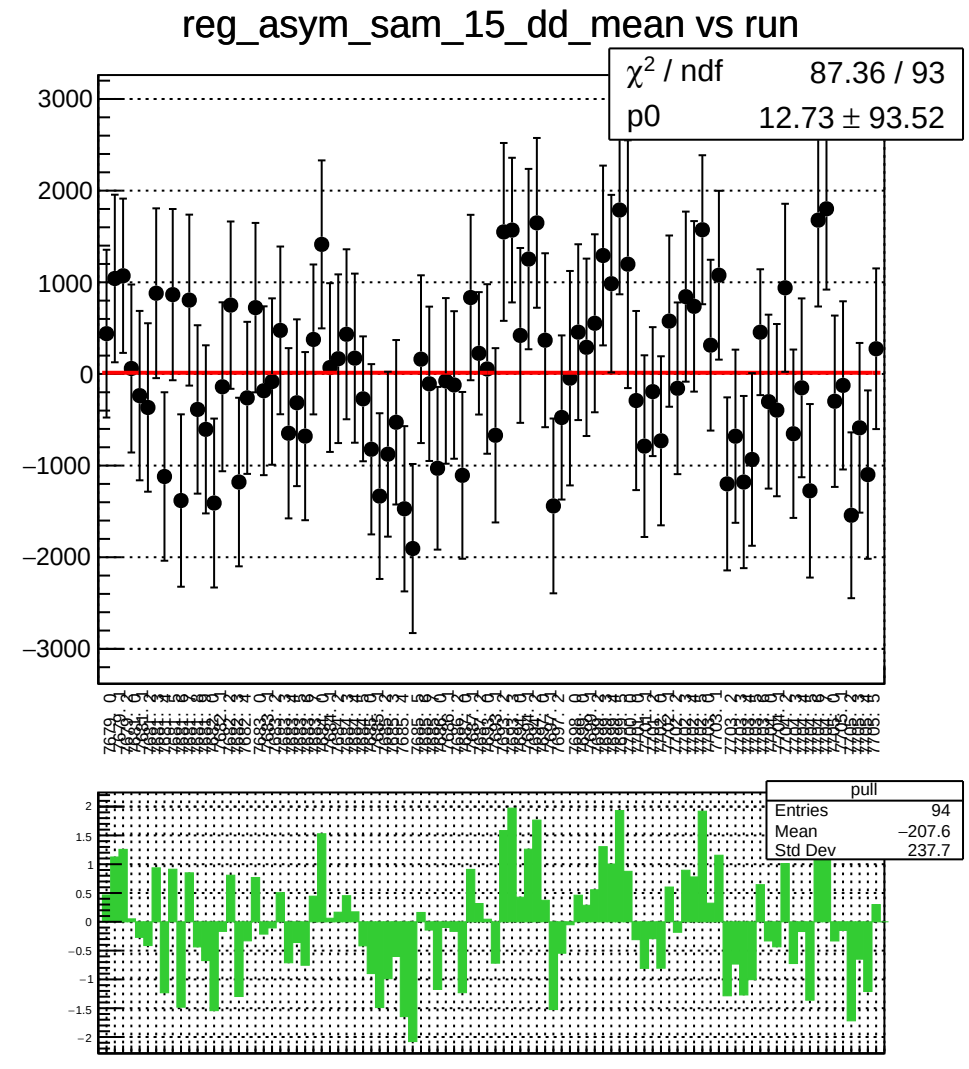

pull1D
Entries 94
Mean 0.02847
Std Dev 0.9513
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

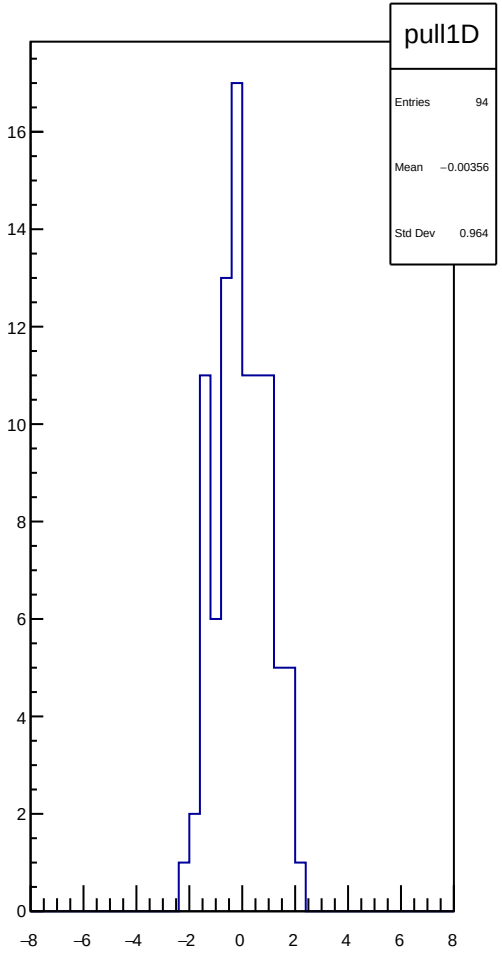

asym_sam_48_avg_correction_rms vs run
χ^2 / ndf 3.573e+04 / 93
p0 3088 ± 2.335
4000
3800
3600
3400
3200
3000
2800
2600
2400

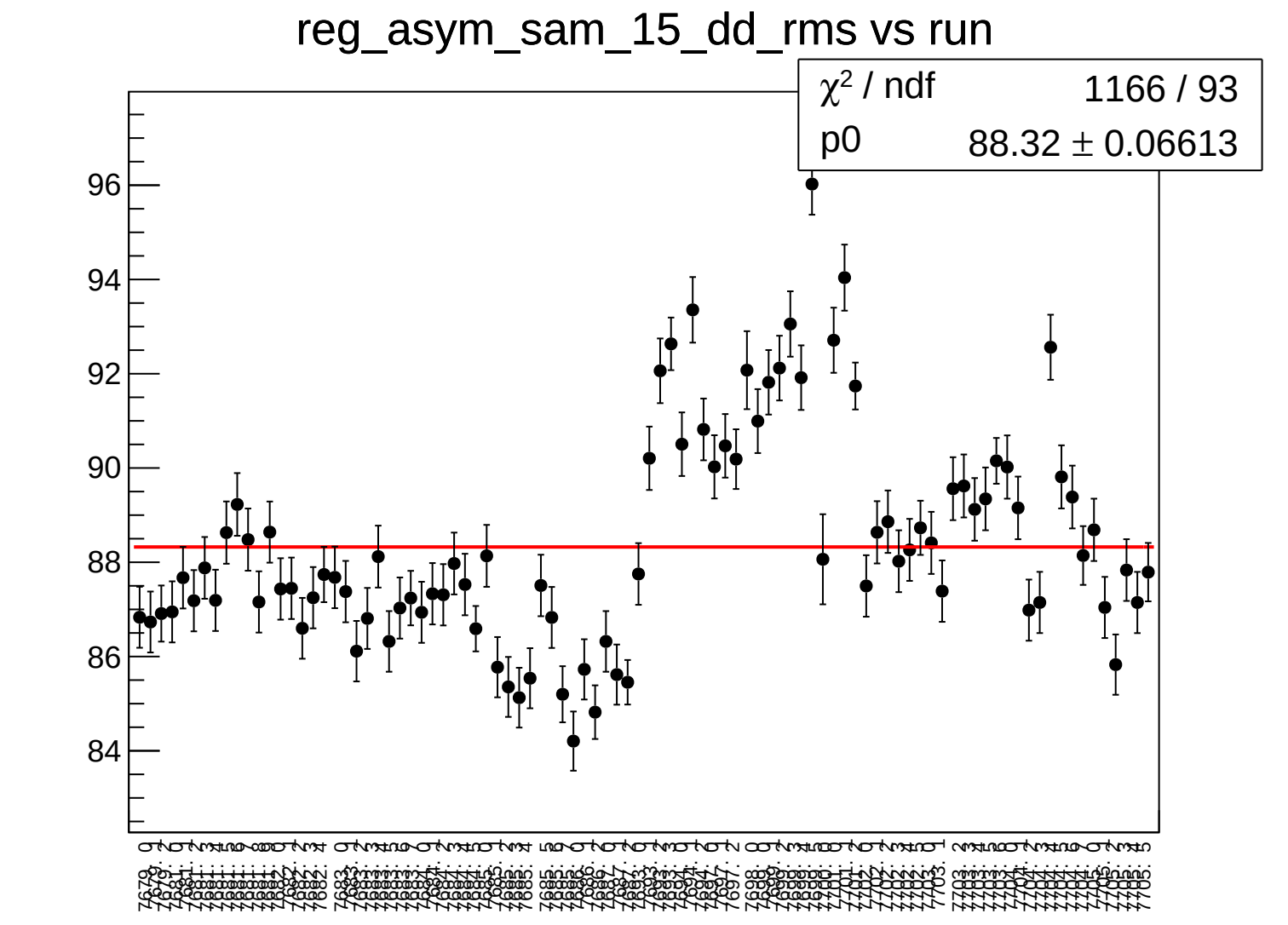

asym_sam_48_avg_mean vs run
χ² / ndf 84.51 / 93
p0 −936.8 ± 3309
×10³
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean −178
Std Dev 229.3
2
1
0
−1
−2

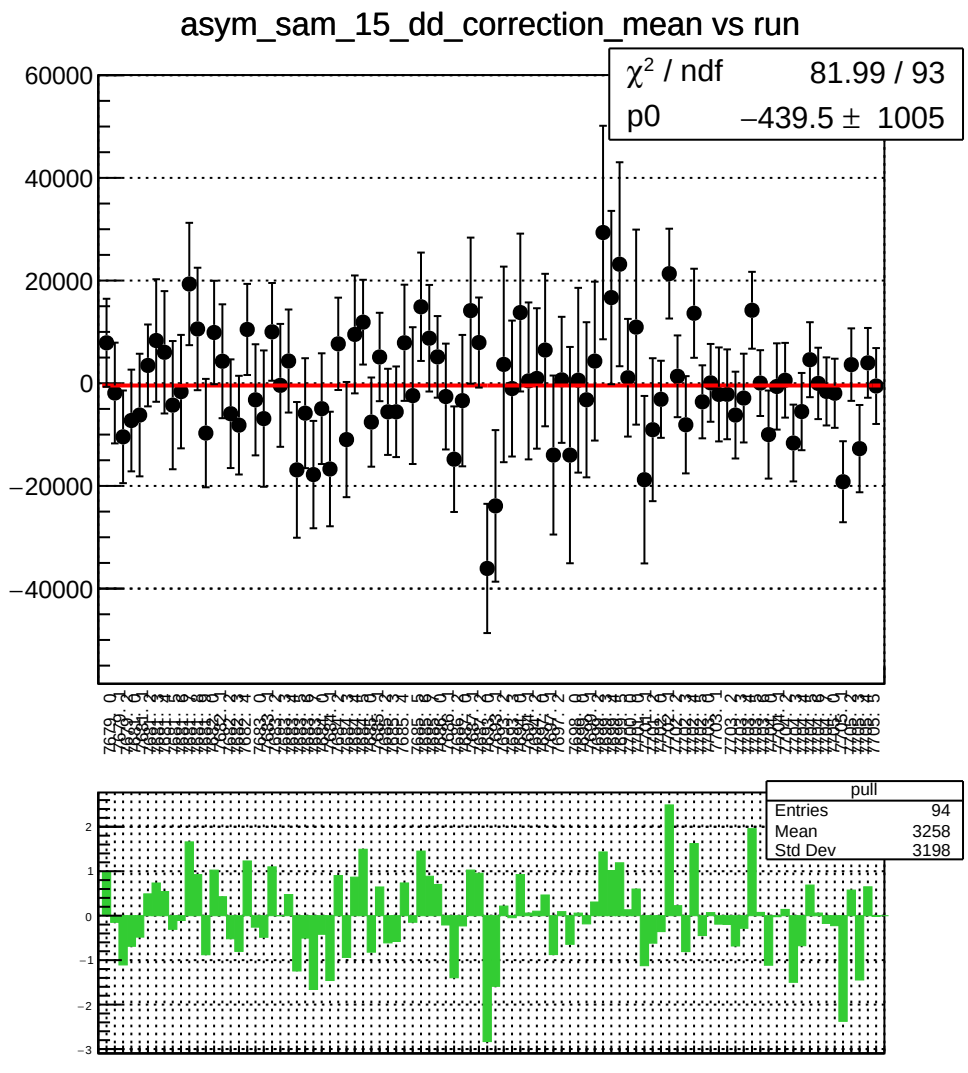

pull1D
Entries 94
Mean −0.02789
Std Dev 0.9478
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

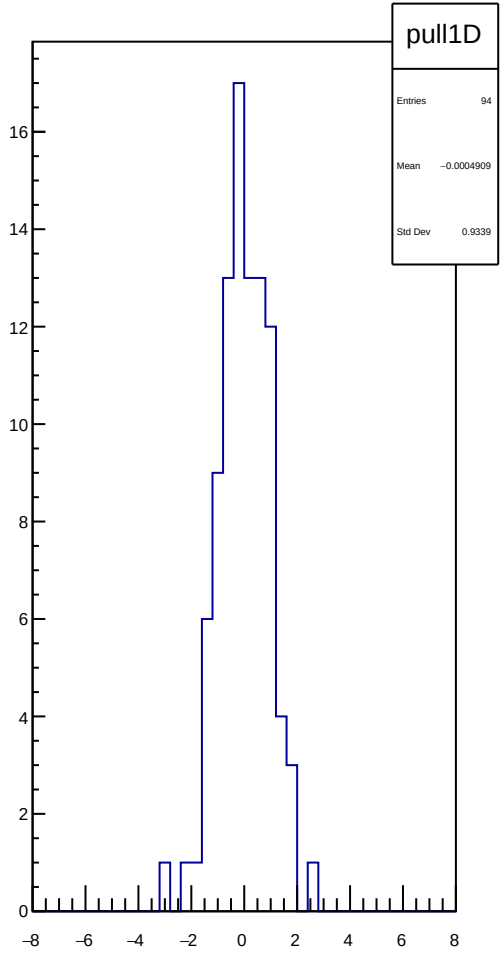

asym_sam_48_avg_rms vs run
χ² / ndf 3.547e+04 / 93
p0 3094 ± 2.34
4000
3800
3600
3400
3200
3000
2800
2600
2400

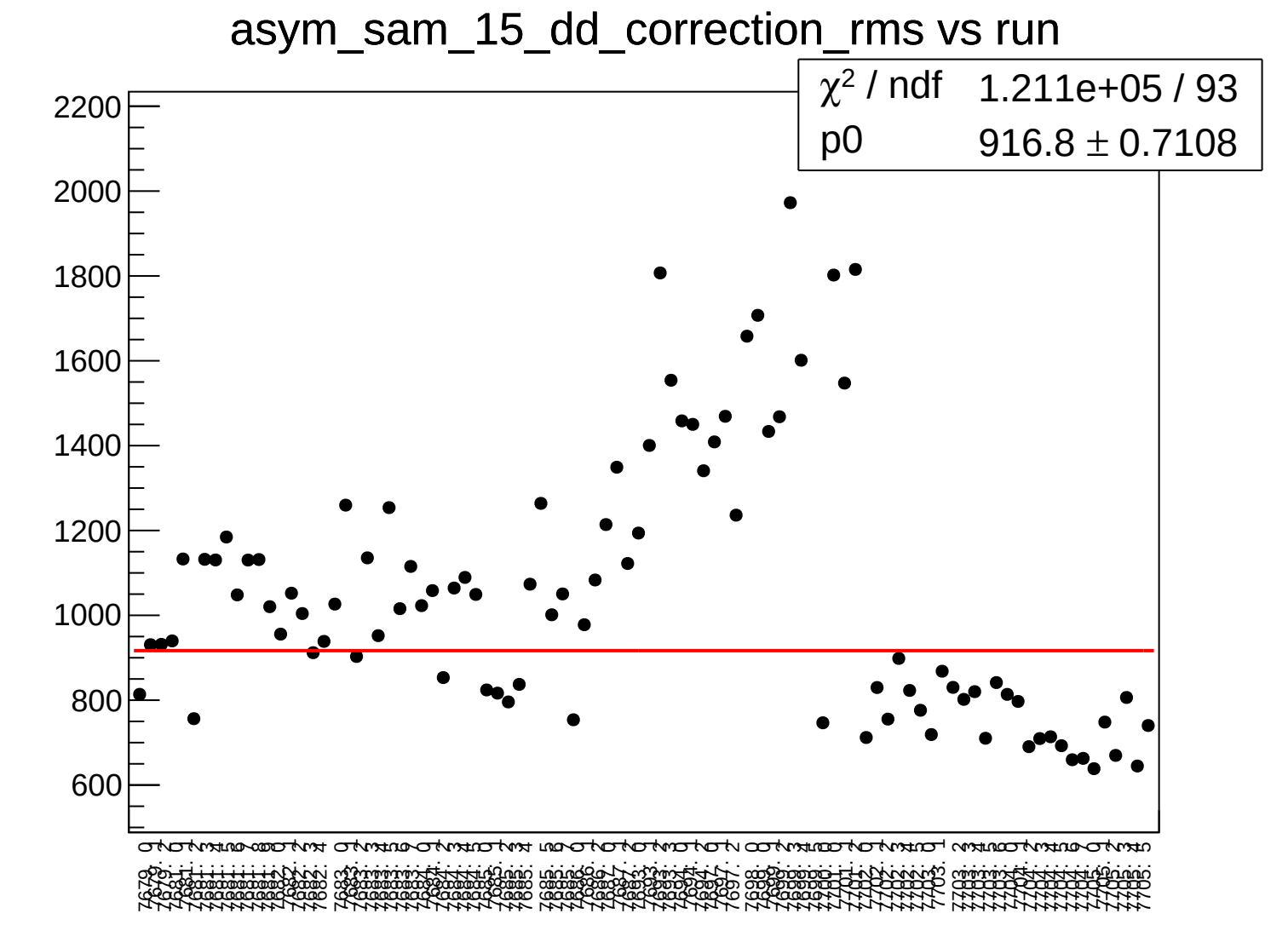

reg_asym_sam_15_dd_mean vs run
χ² / ndf 87.36 / 93
p0 12.73 ± 93.52
pull
Entries 94
Mean −207.6
Std Dev 237.7

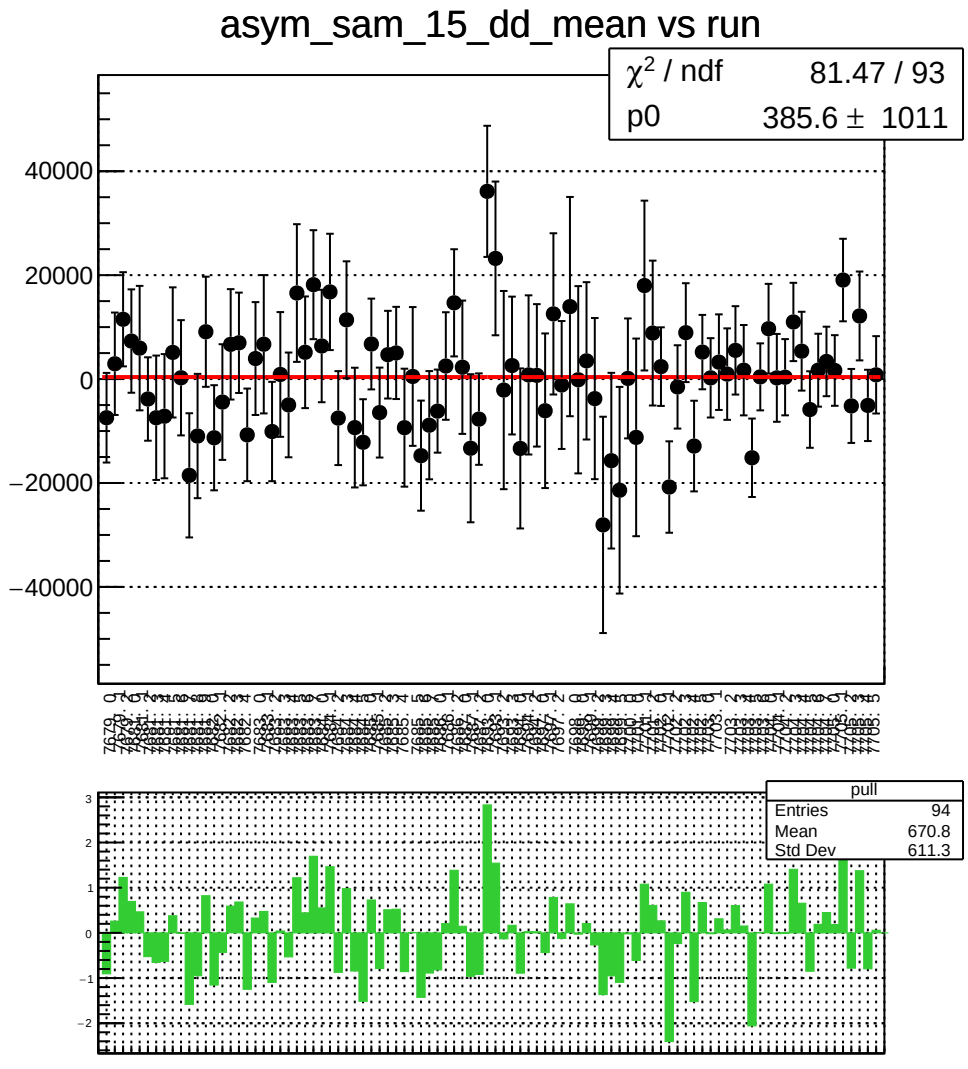

pull1D
Entries 94
Mean −0.00356
Std Dev 0.964

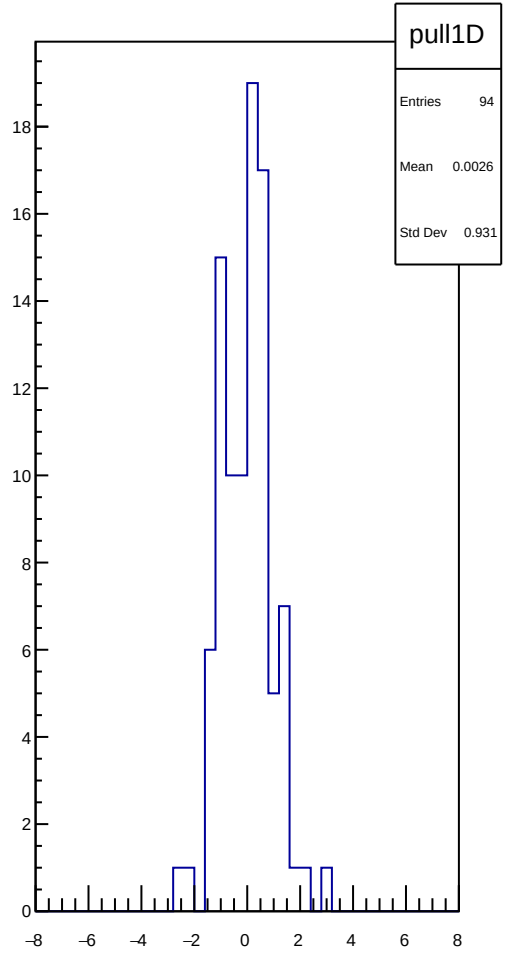

reg_asym_sam_15_dd_rms vs run
χ^2 / ndf 1166 / 93
p0 88.32 ± 0.06613
96
94
92
90
88
86
84

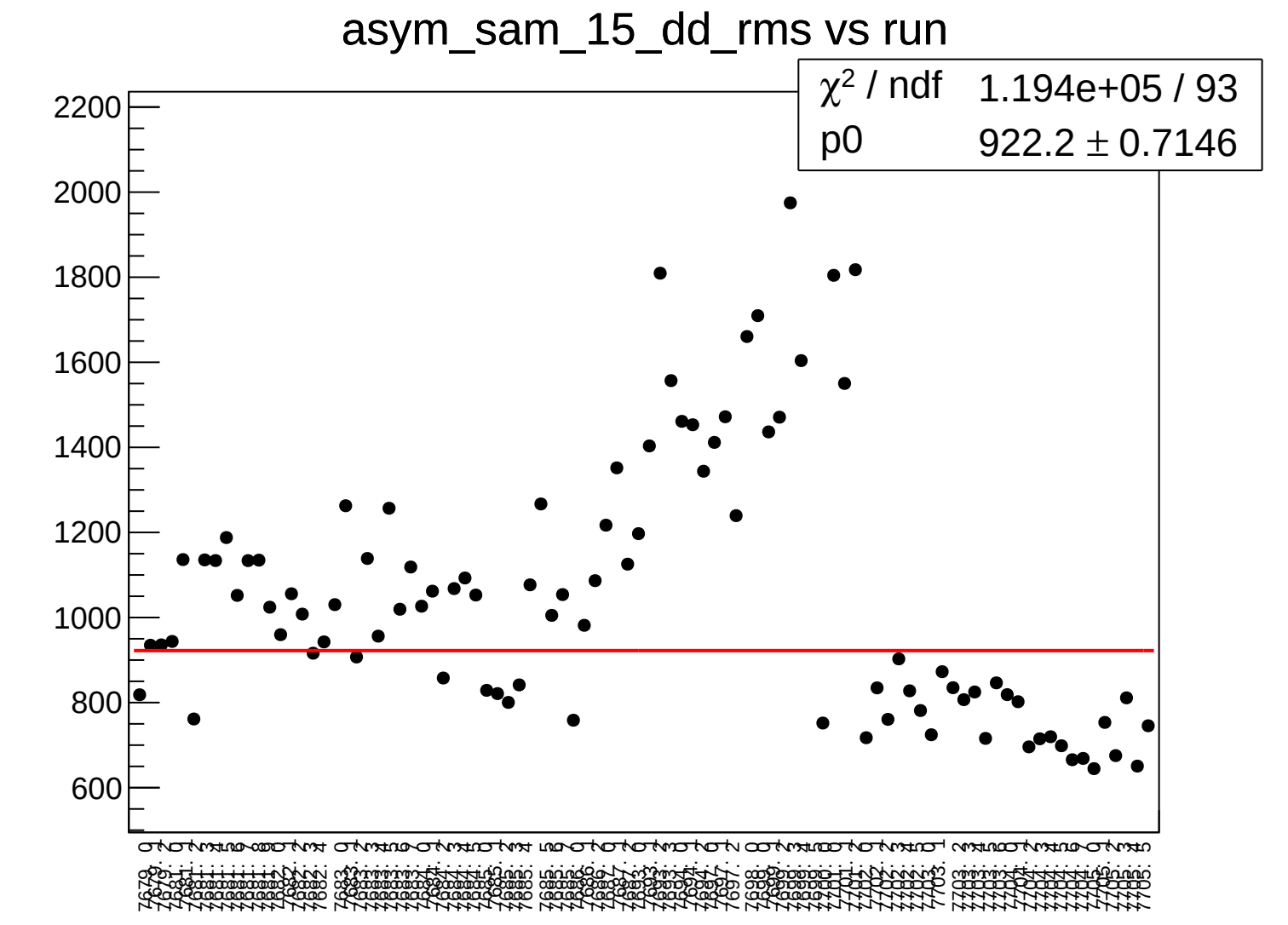

asym_sam_15_dd_correction_mean vs run
χ² / ndf 81.99 / 93
p0 −439.5 ± 1005
60000
40000
20000
0
−20000
−40000
pull
Entries 94
Mean 3258
Std Dev 3198
2
1
0
−1
−2
−3

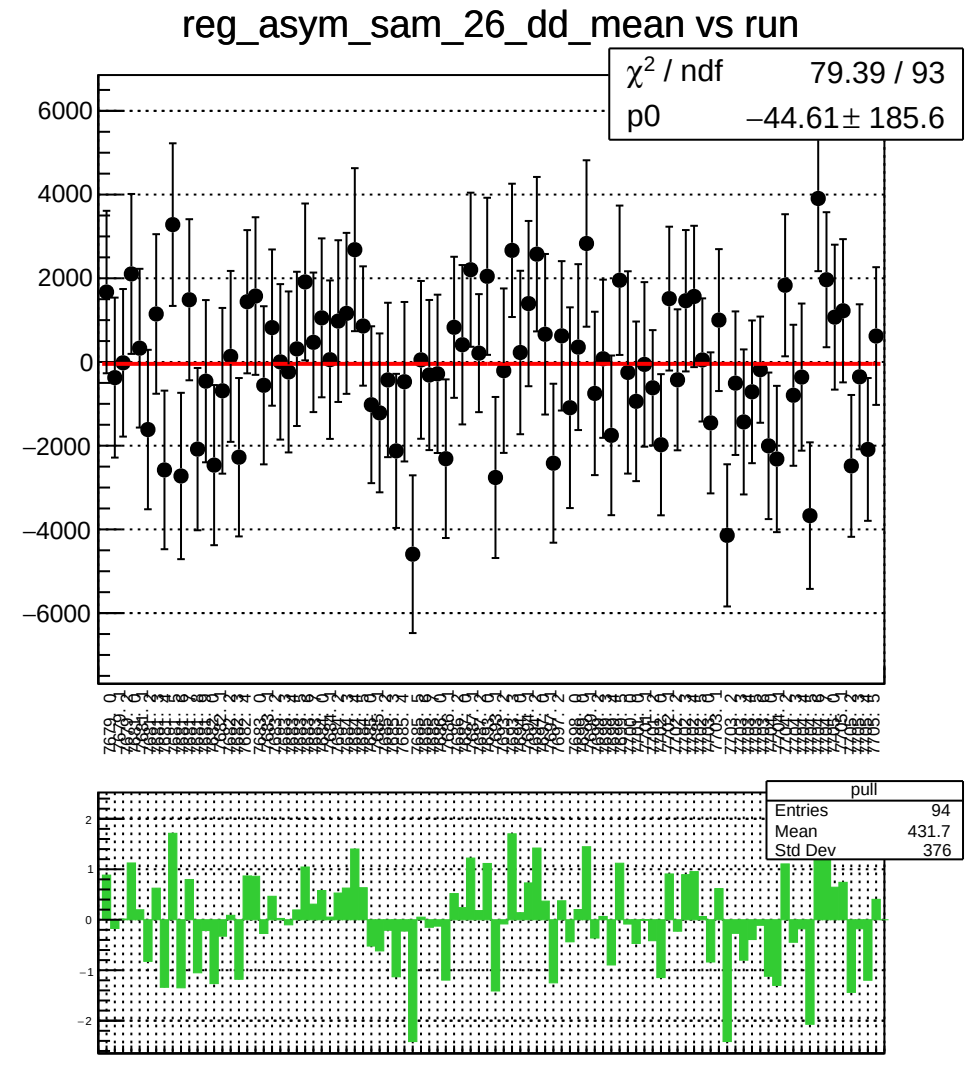

pull1D
Entries 94
Mean −0.0004909
Std Dev 0.9339
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

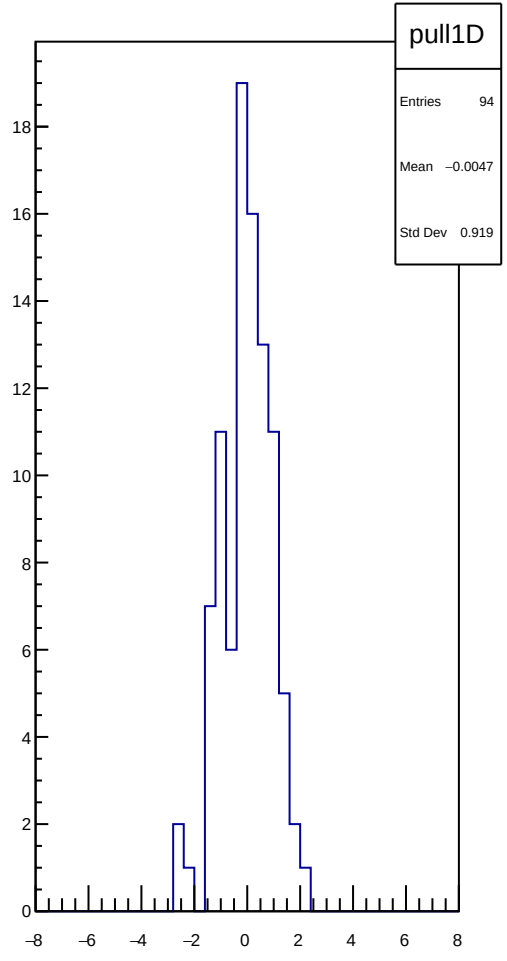

asym_sam_15_dd_correction_rms vs run
χ² / ndf 1.211e+05 / 93
p0 916.8 ± 0.7108
2200
2000
1800
1600
1400
1200
1000
800
600

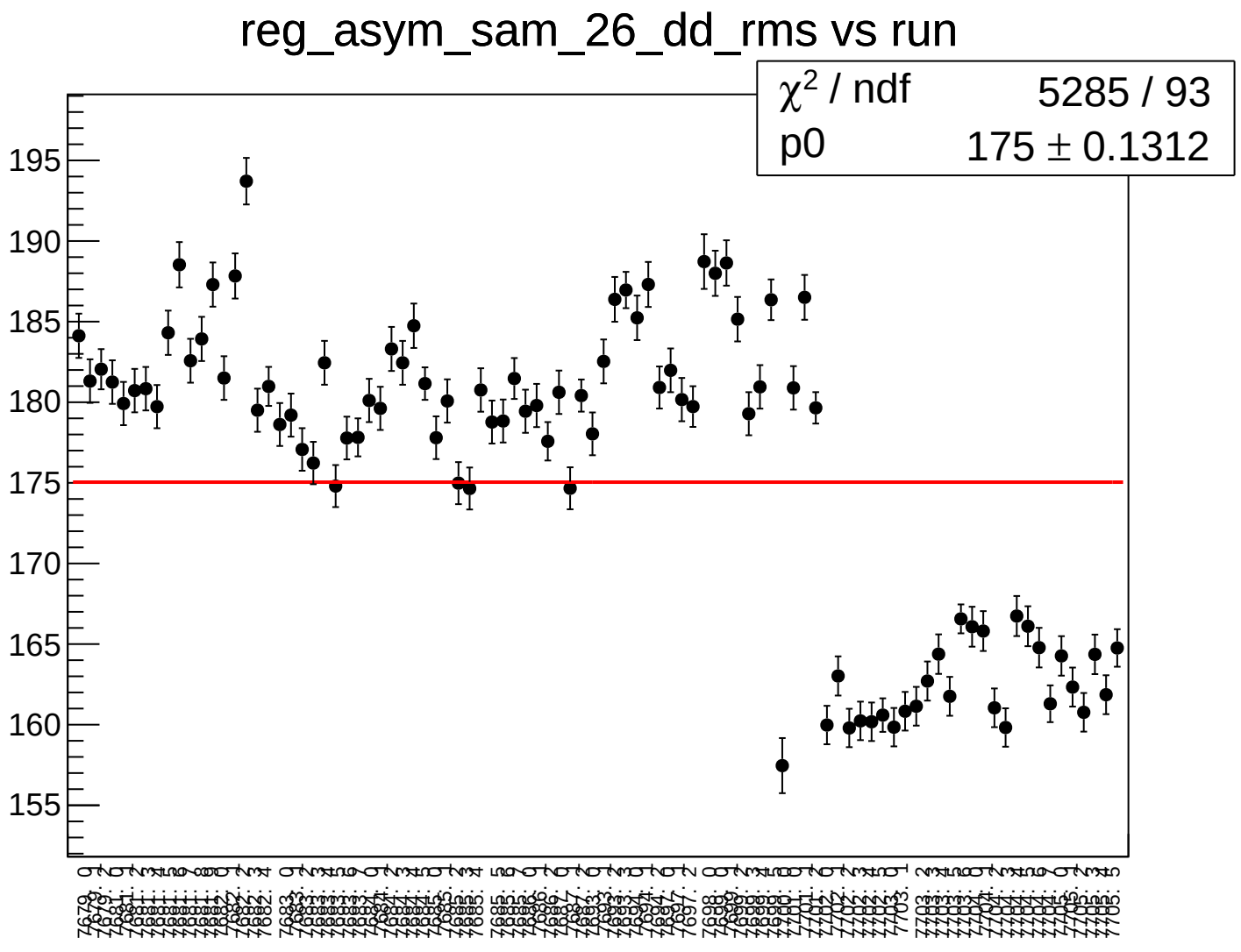

asym_sam_15_dd_mean vs run
χ² / ndf 81.47 / 93
p0 385.6 ± 1011
40000
20000
0
−20000
−40000
pull
Entries 94
Mean 670.8
Std Dev 611.3
3
2
1
0
−1
−2

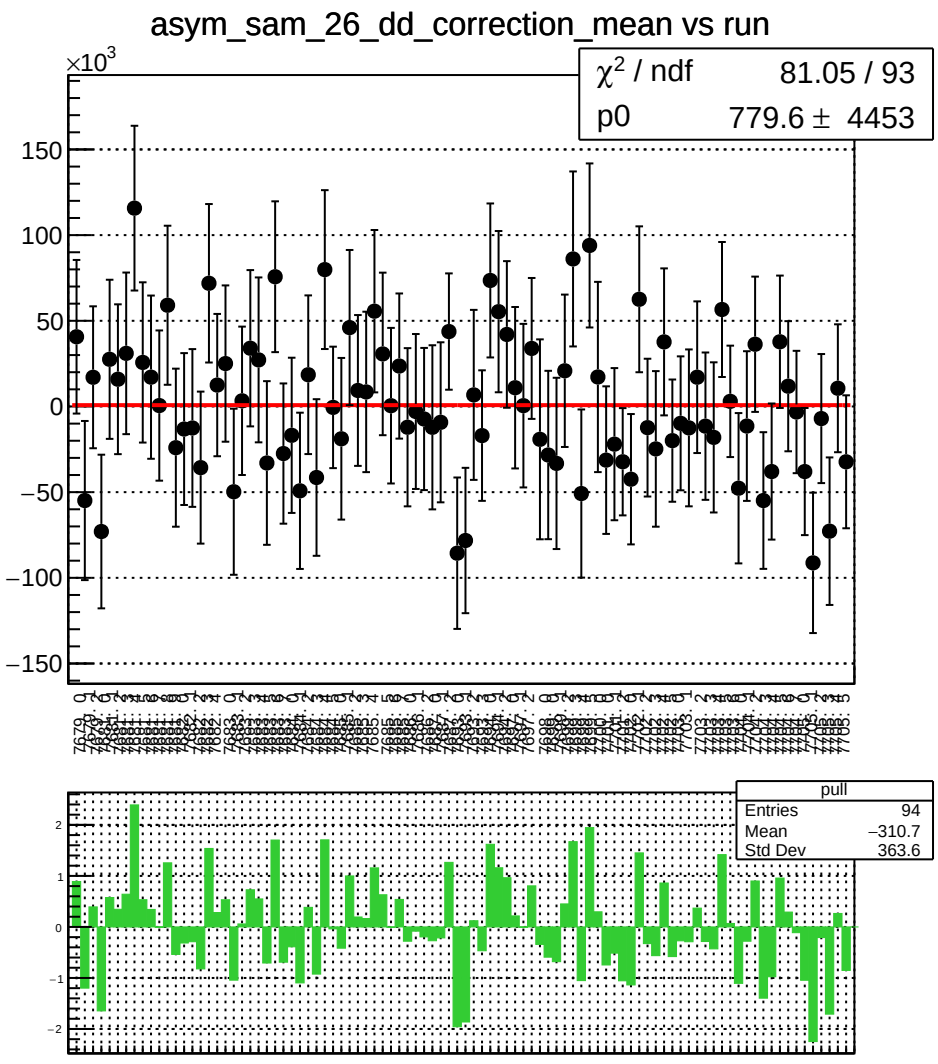

pull1D
Entries 94
Mean 0.0026
Std Dev 0.931
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

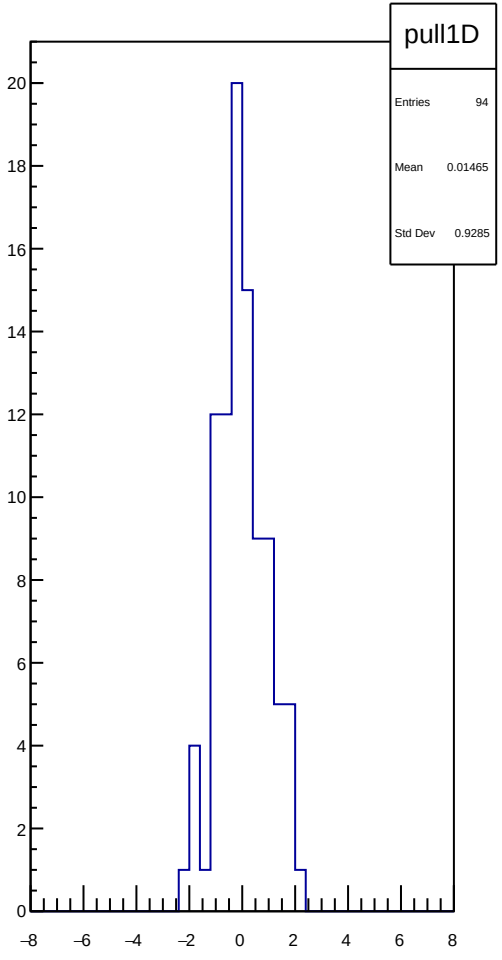

asym_sam_15_dd_rms vs run
χ² / ndf 1.194e+05 / 93
p0 922.2 ± 0.7146
2200
2000
1800
1600
1400
1200
1000
800
600

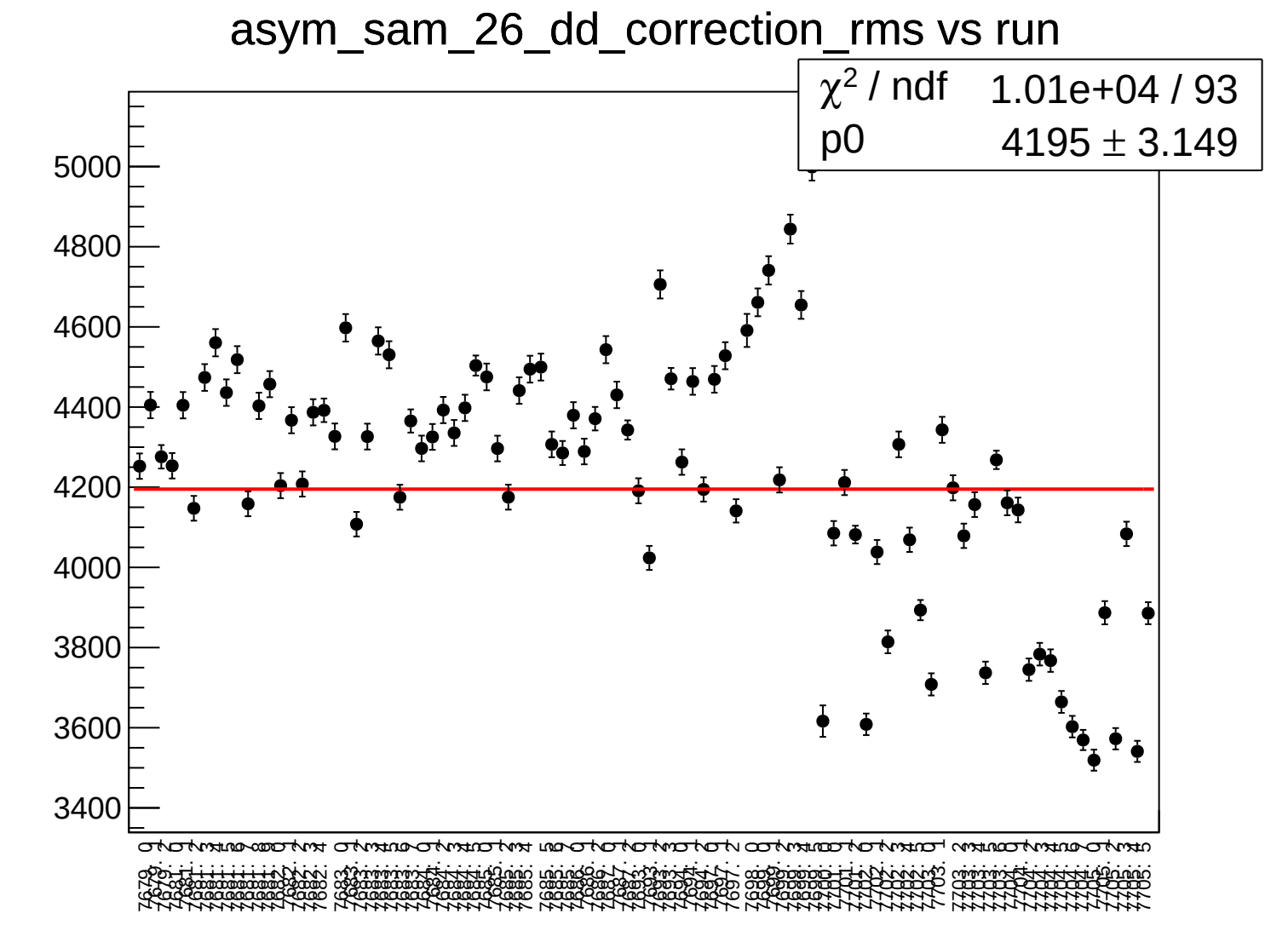

reg_asym_sam_26_dd_mean vs run
χ² / ndf 79.39 / 93
p0 −44.61 ± 185.6
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 431.7
Std Dev 376
2
1
0
−1
−2

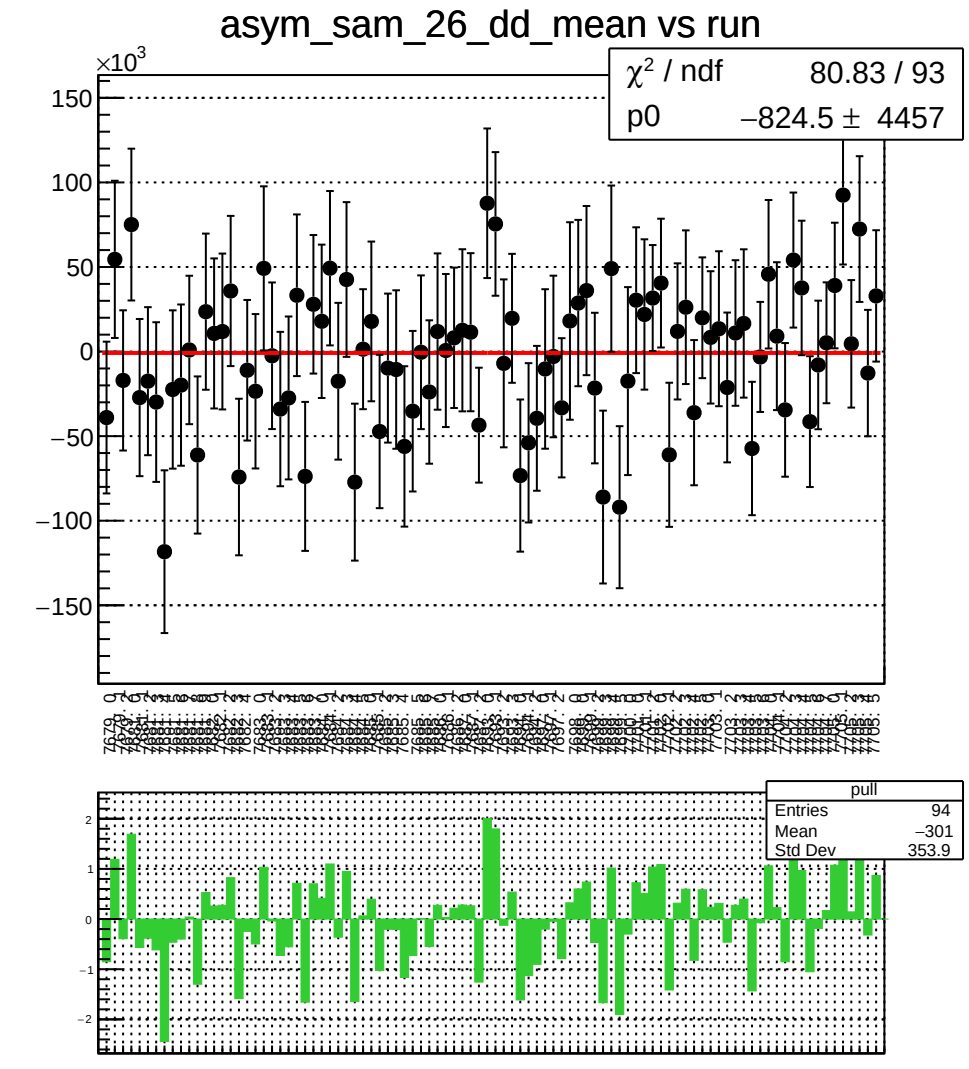

pull1D
Entries 94
Mean −0.0047
Std Dev 0.919
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

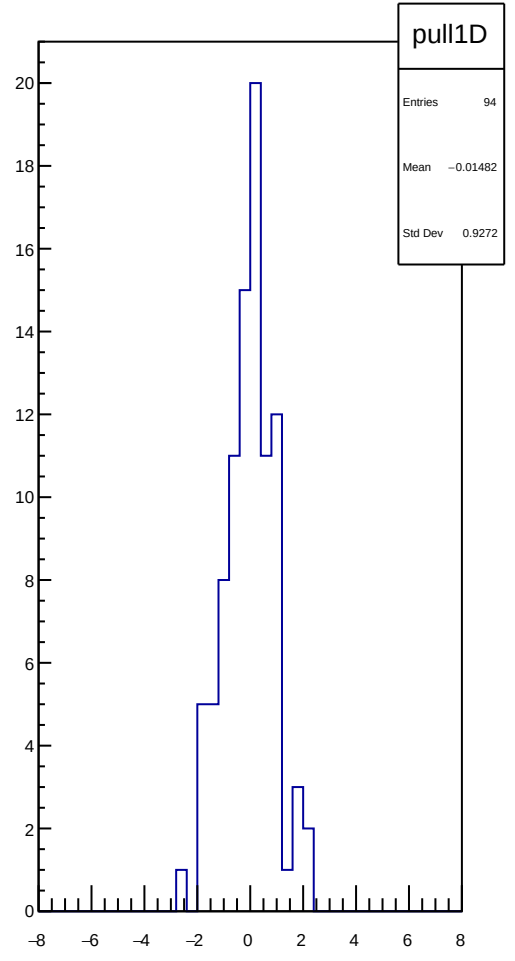

reg_asym_sam_26_dd_rms vs run
χ^2 / ndf 5285 / 93
p0 175 ± 0.1312
195
190
185
180
175
170
165
160
155

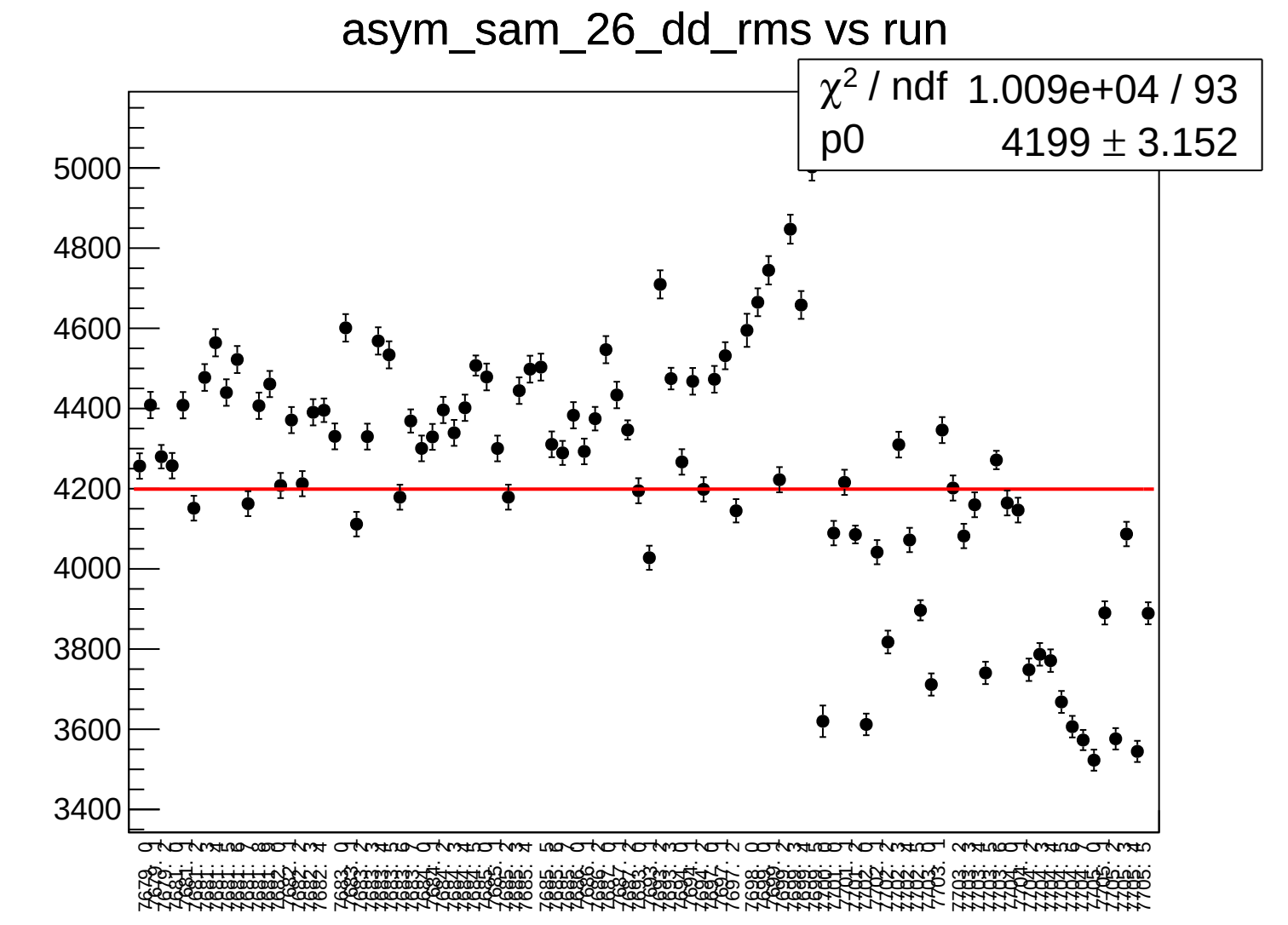

asym_sam_26_dd_correction_mean vs run
×10^3
χ² / ndf 81.05 / 93
p0 779.6 ± 4453
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean −310.7
Std Dev 363.6
2
1
0
−1
−2

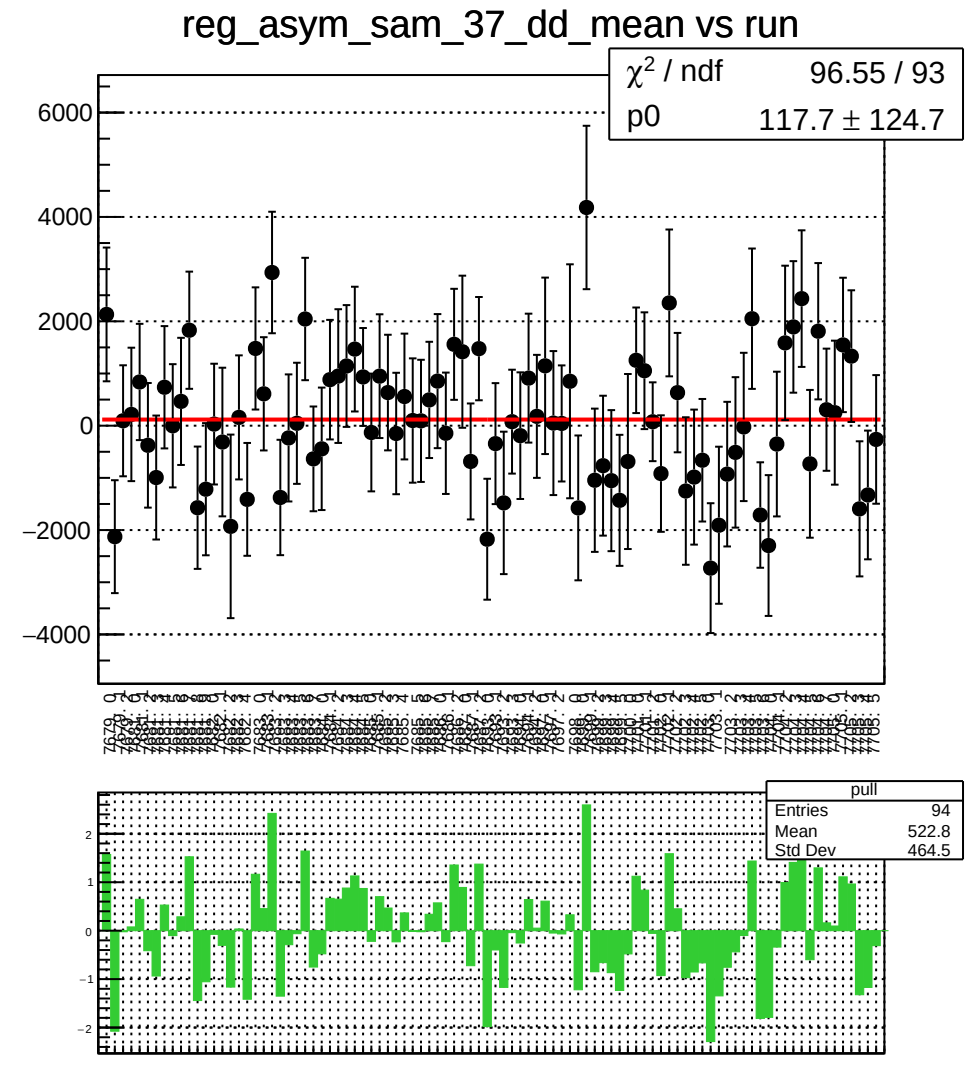

pull1D
Entries 94
Mean 0.01465
Std Dev 0.9285
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

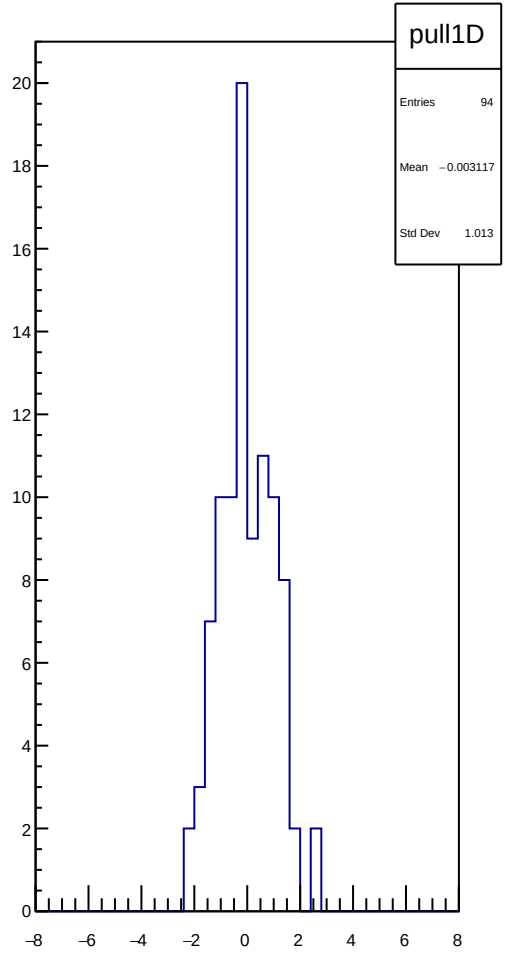

asym_sam_26_dd_correction_rms vs run
χ² / ndf 1.01e+04 / 93
p0 4195 ± 3.149
5000
4800
4600
4400
4200
4000
3800
3600
3400

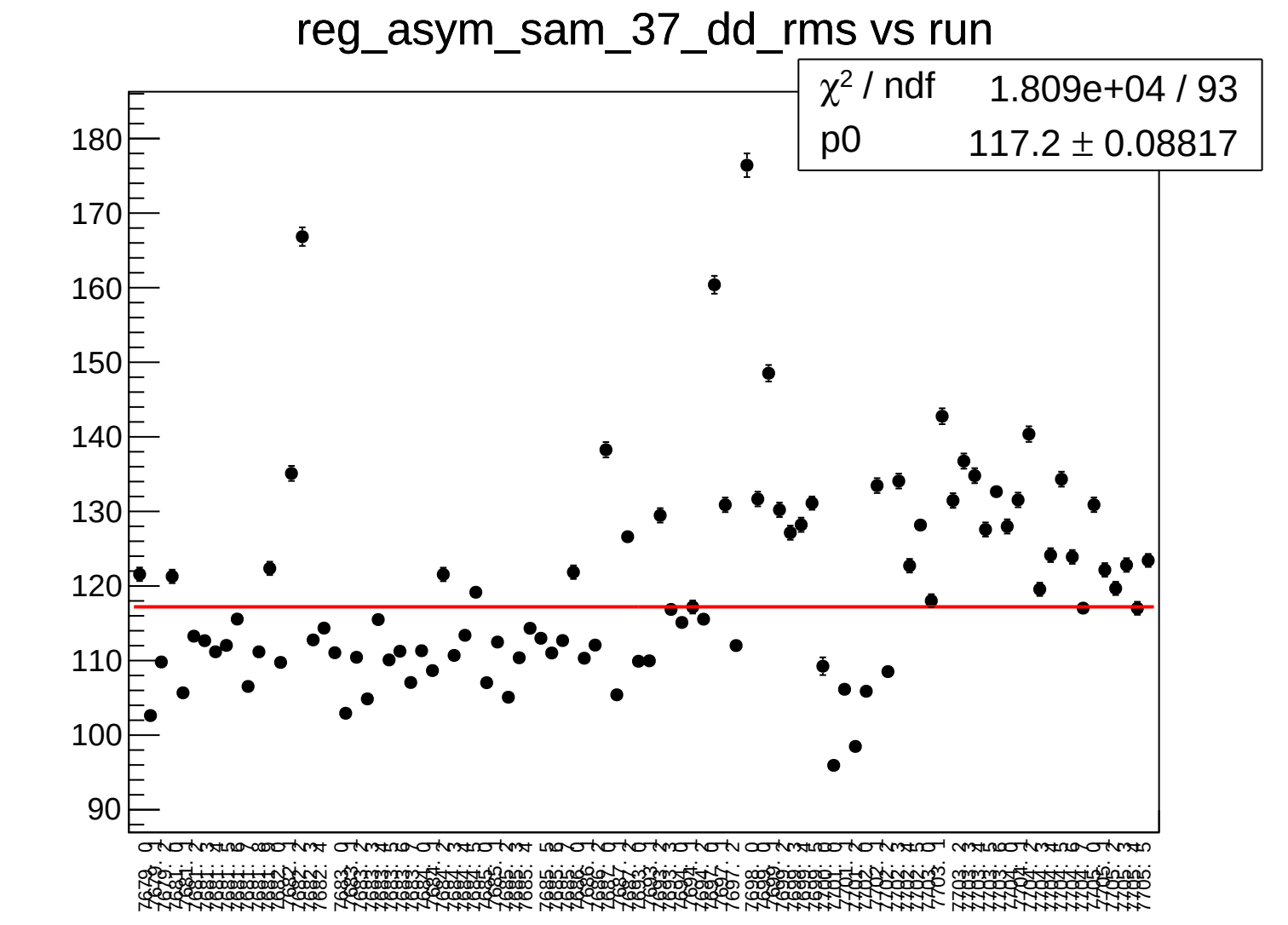

asym_sam_26_dd_mean vs run
×10^3
χ² / ndf 80.83 / 93
p0 −824.5 ± 4457
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean −301
Std Dev 353.9
2
1
0
−1
−2

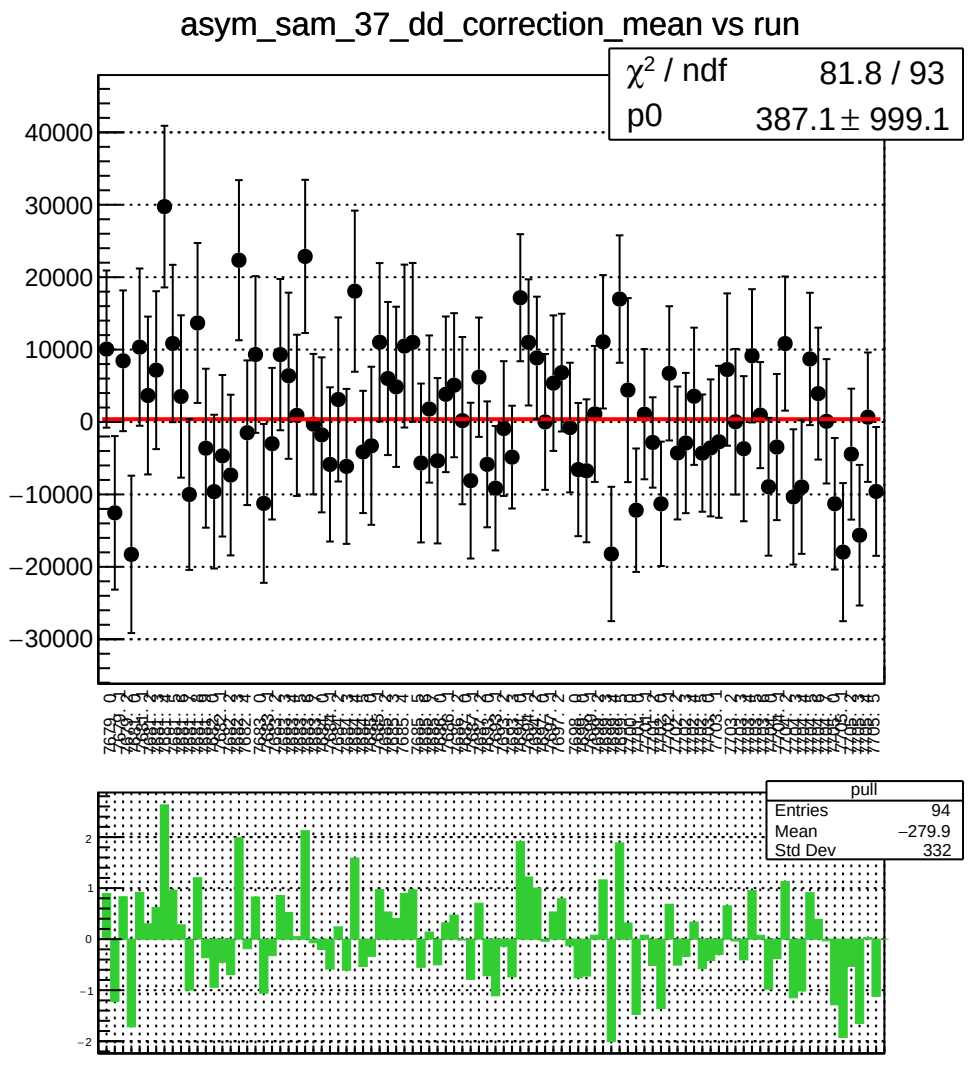

pull1D
Entries 94
Mean −0.01482
Std Dev 0.9272
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

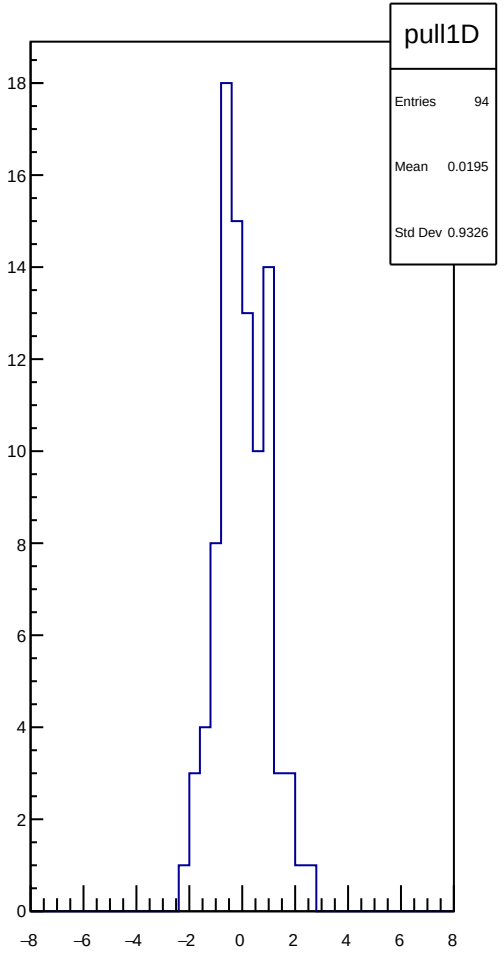

asym_sam_26_dd_rms vs run
χ² / ndf 1.009e+04 / 93
p0 4199 ± 3.152
5000
4800
4600
4400
4200
4000
3800
3600
3400

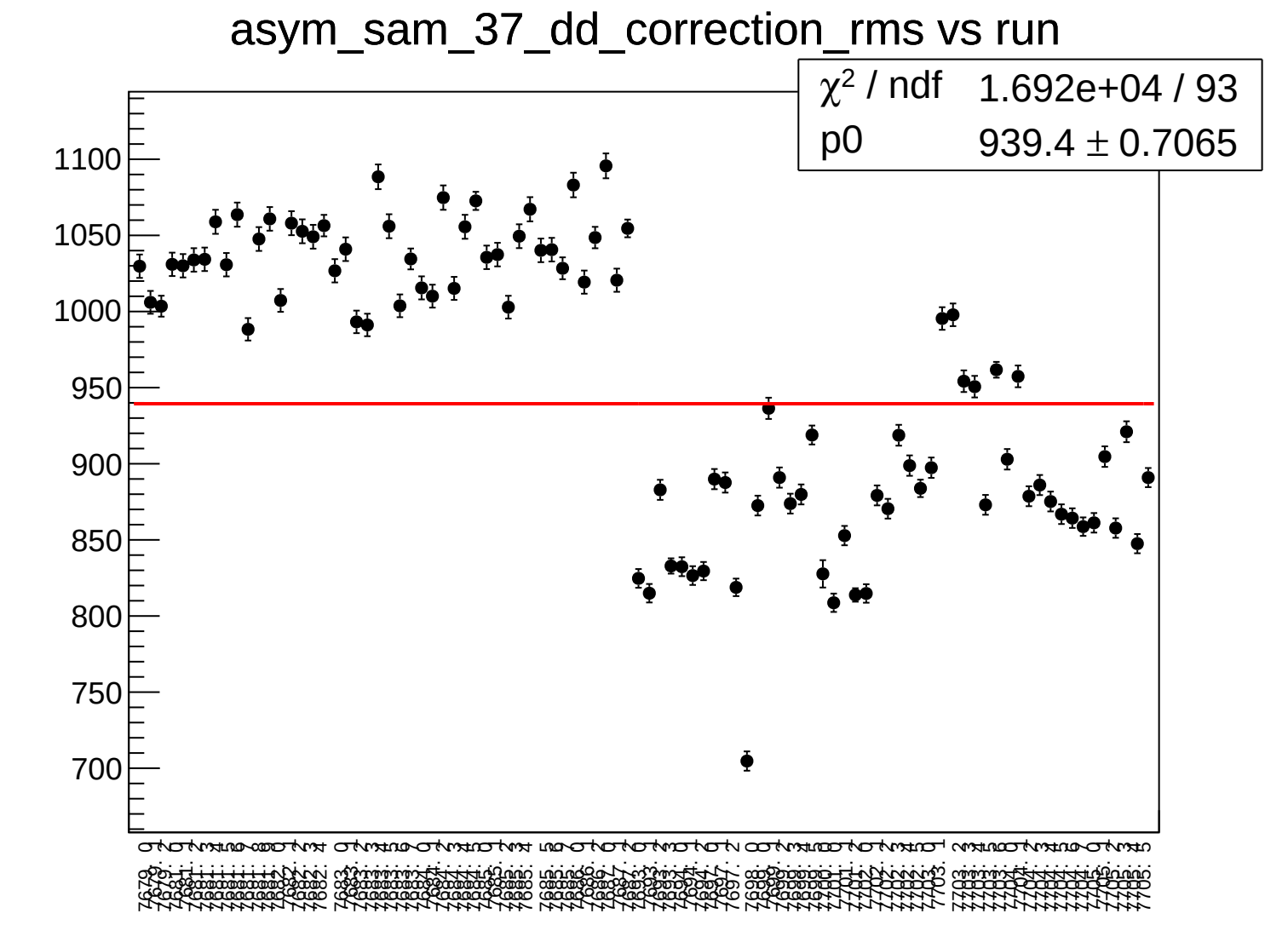

reg_asym_sam_37_dd_mean vs run
χ² / ndf 96.55 / 93
p0 117.7 ± 124.7
6000
4000
2000
0
−2000
−4000
pull
Entries 94
Mean 522.8
Std Dev 464.5
2
1
0
−1
−2

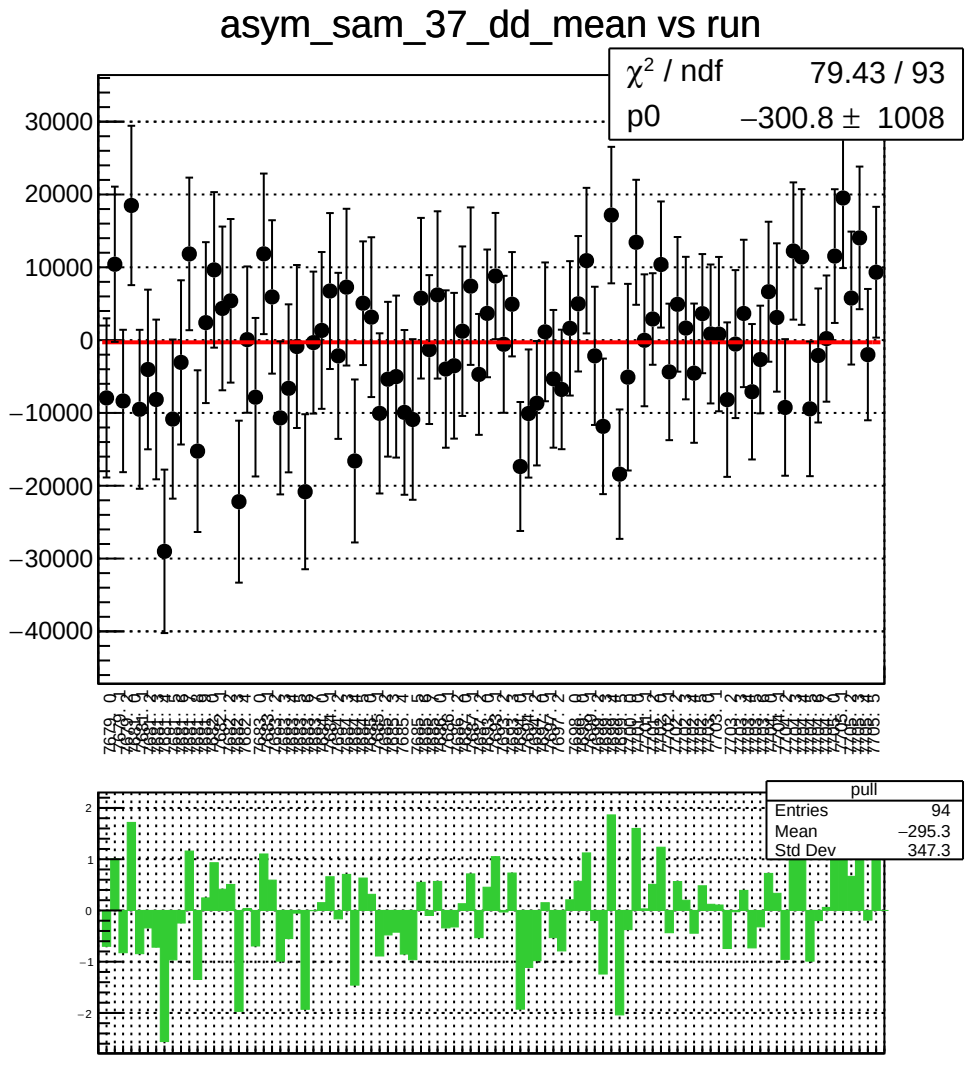

pull1D
Entries 94
Mean −0.003117
Std Dev 1.013
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

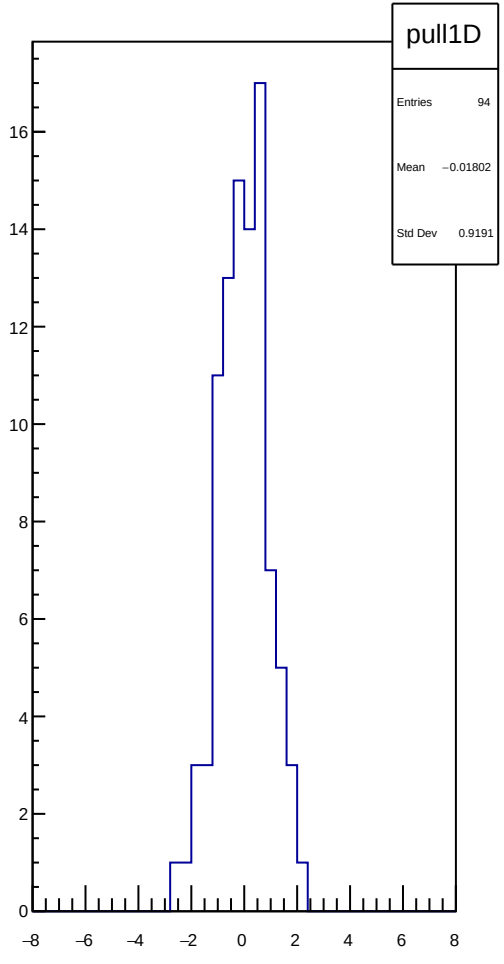

reg_asym_sam_37_dd_rms vs run
χ² / ndf 1.809e+04 / 93
p0 117.2 ± 0.08817
180
170
160
150
140
130
120
110
100
90

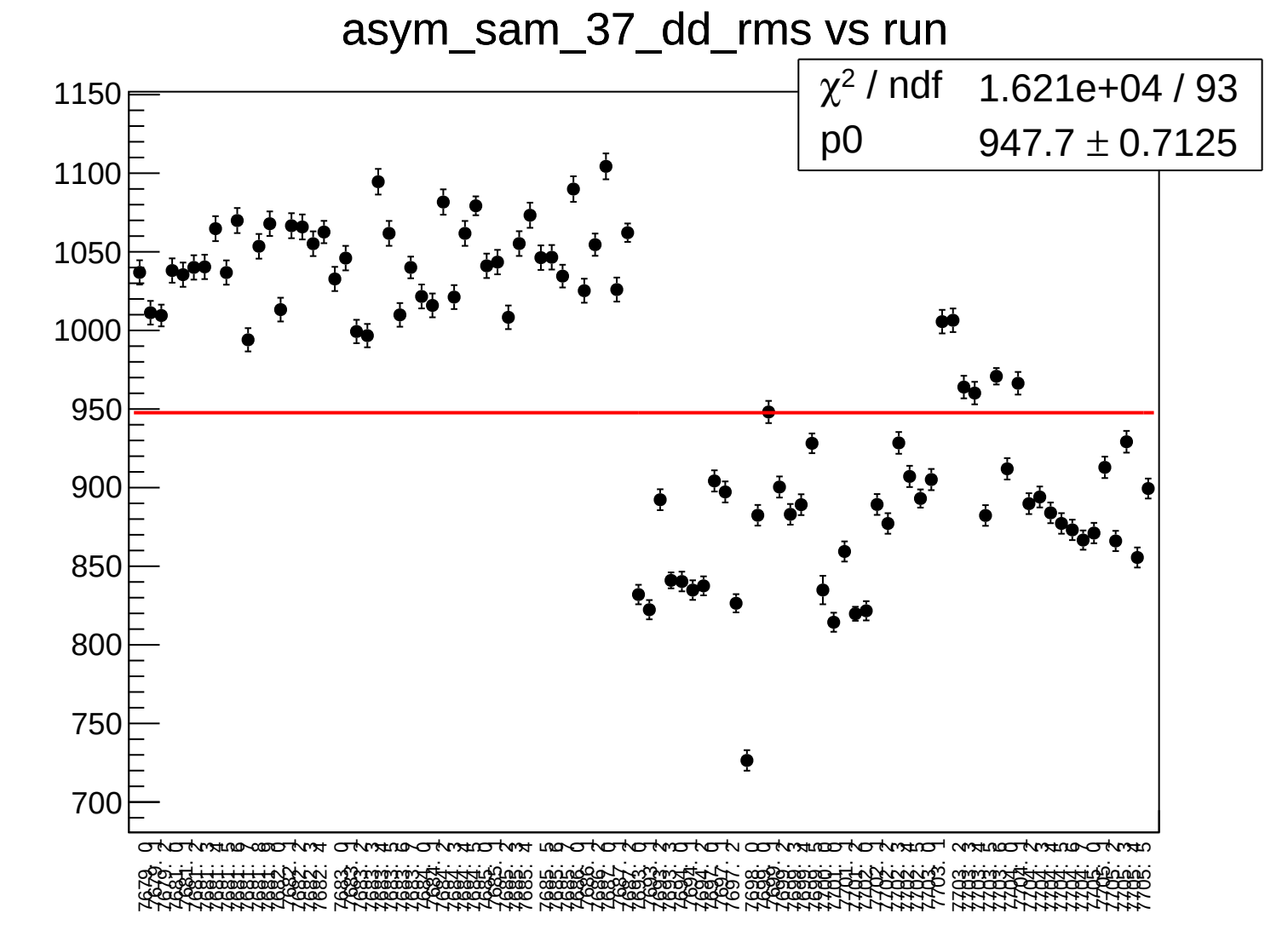

asym_sam_37_dd_correction_mean vs run
χ² / ndf 81.8 / 93
p0 387.1 ± 999.1
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −279.9
Std Dev 332
2
1
0
−1
−2

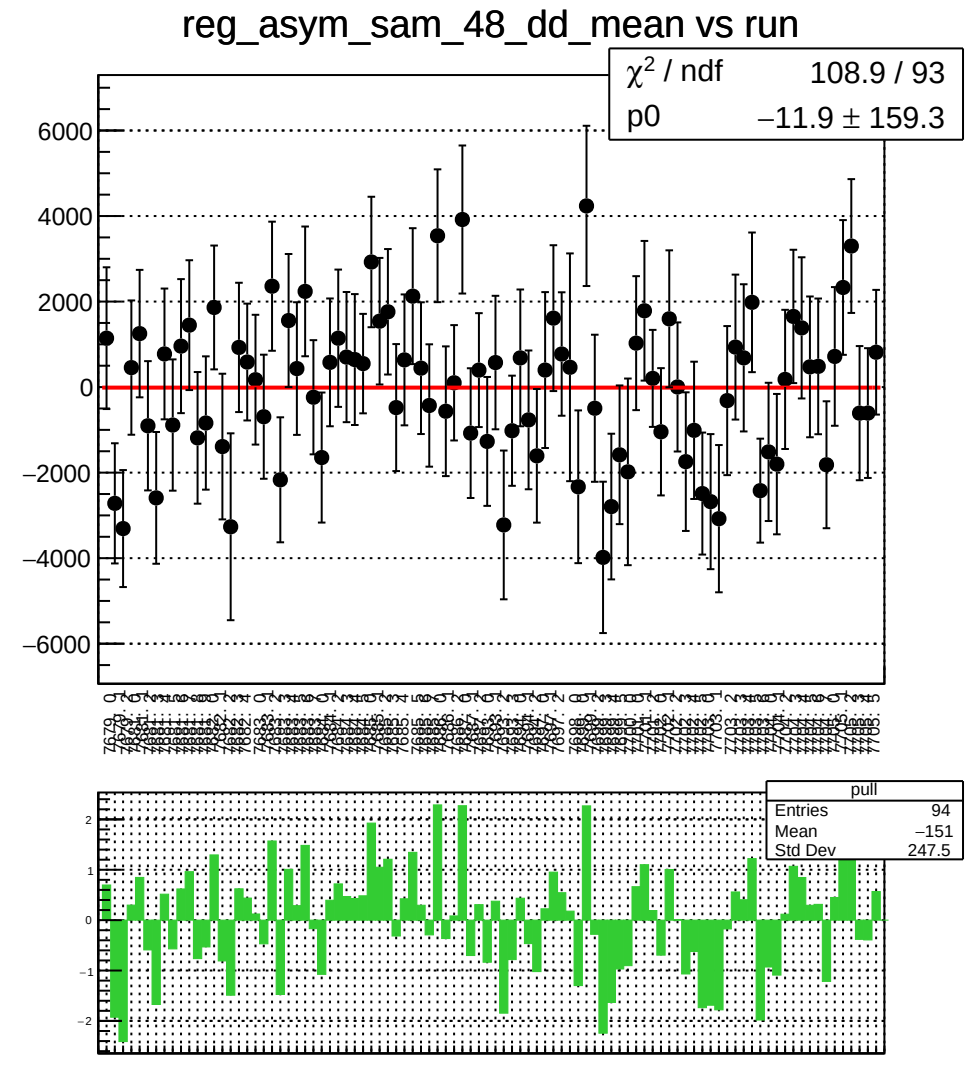

pull1D
Entries 94
Mean 0.0195
Std Dev 0.9326
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

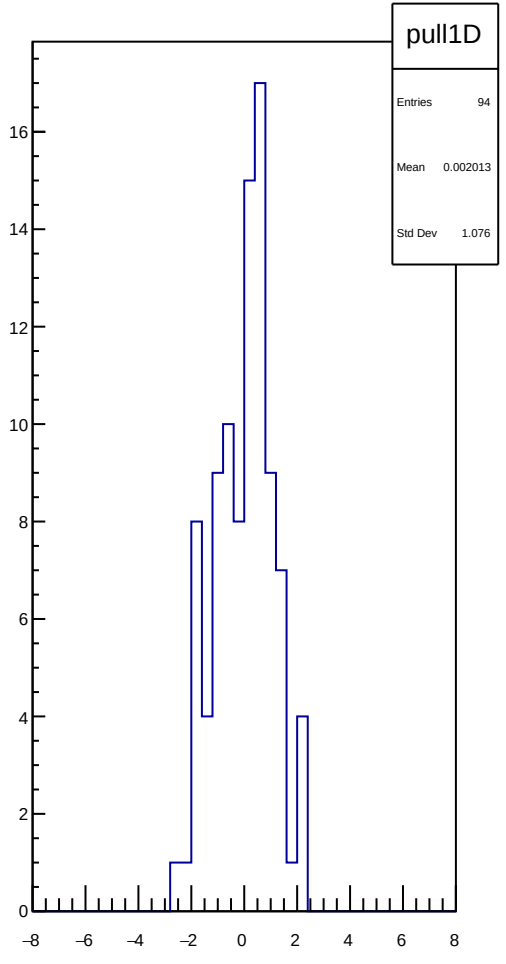

asym_sam_37_dd_correction_rms vs run
χ² / ndf 1.692e+04 / 93
p0 939.4 ± 0.7065
1100
1050
1000
950
900
850
800
750
700

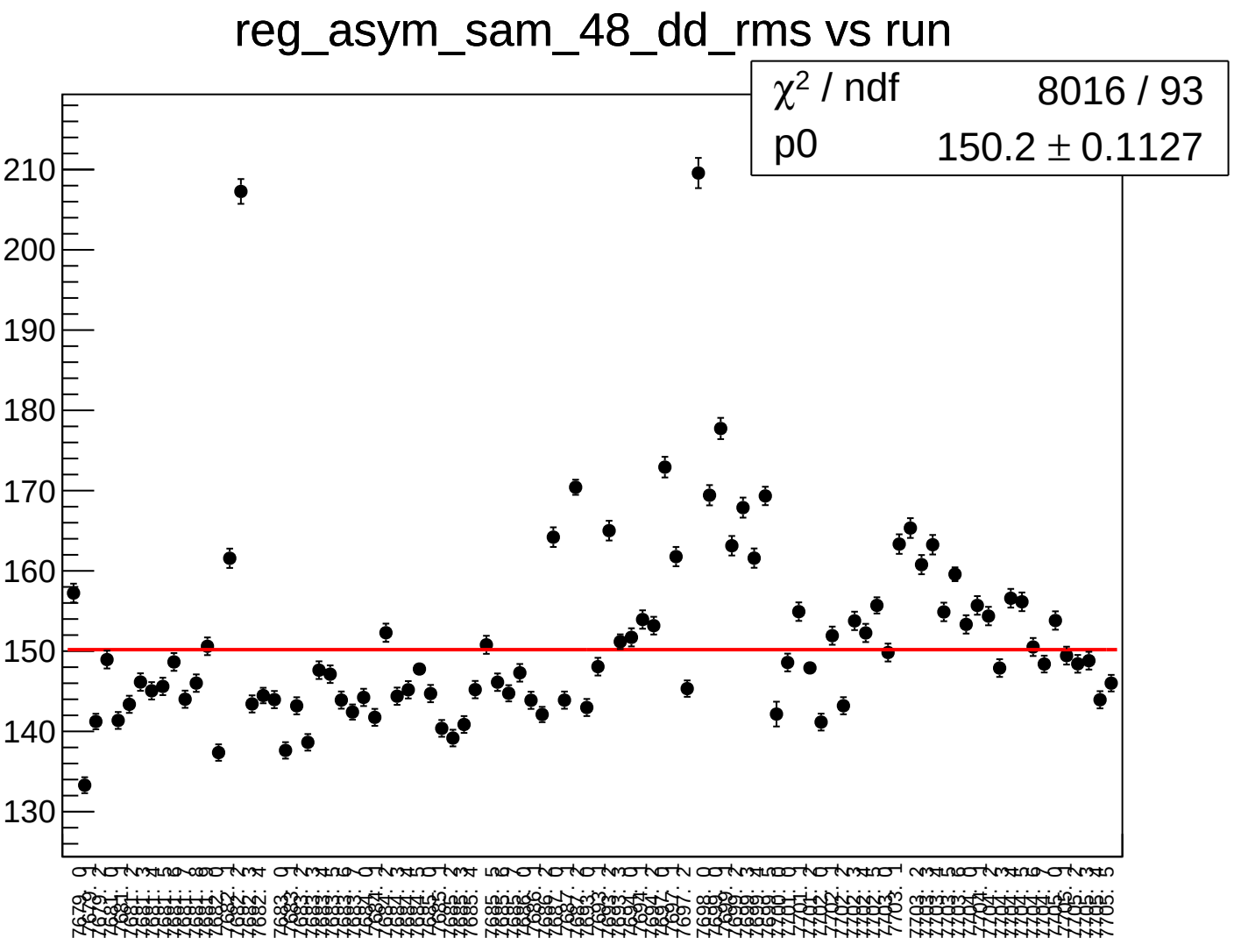

asym_sam_37_dd_mean vs run
χ² / ndf 79.43 / 93
p0 −300.8 ± 1008
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 94
Mean −295.3
Std Dev 347.3
2
1
0
−1
−2

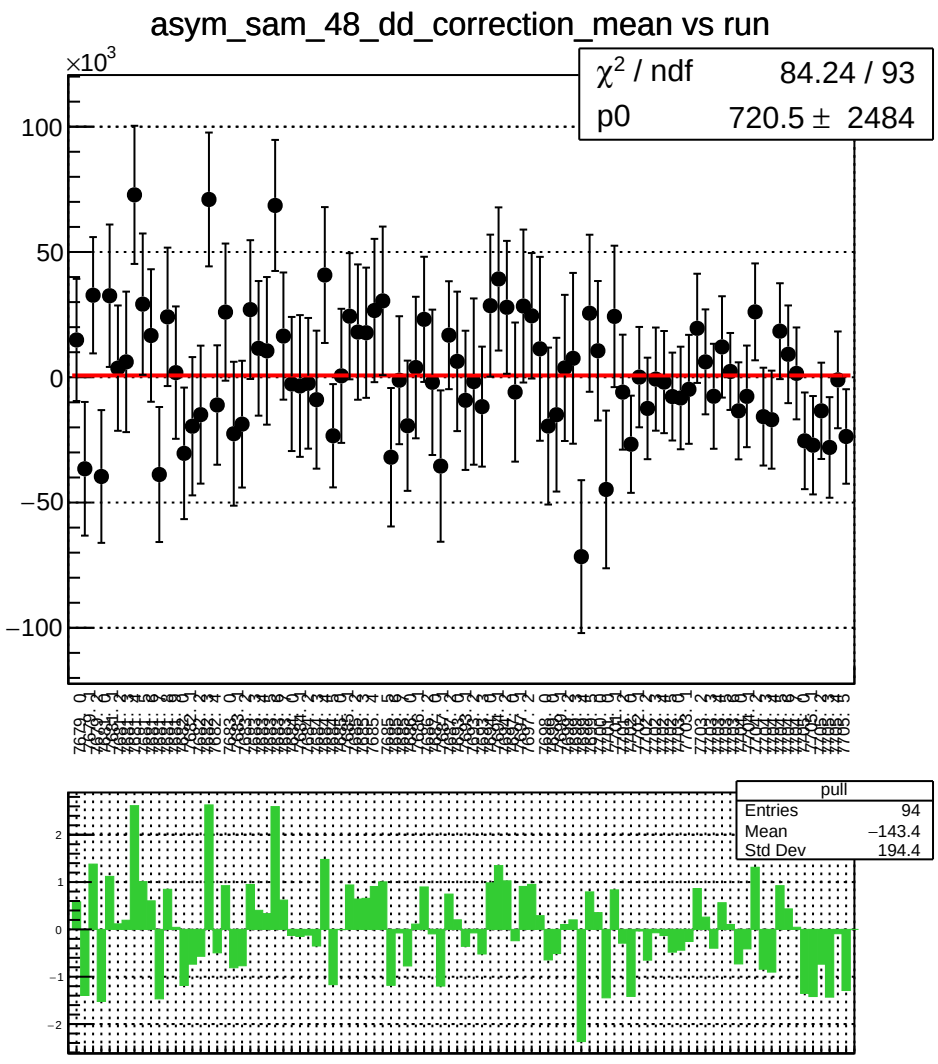

pull1D
Entries 94
Mean −0.01802
Std Dev 0.9191
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

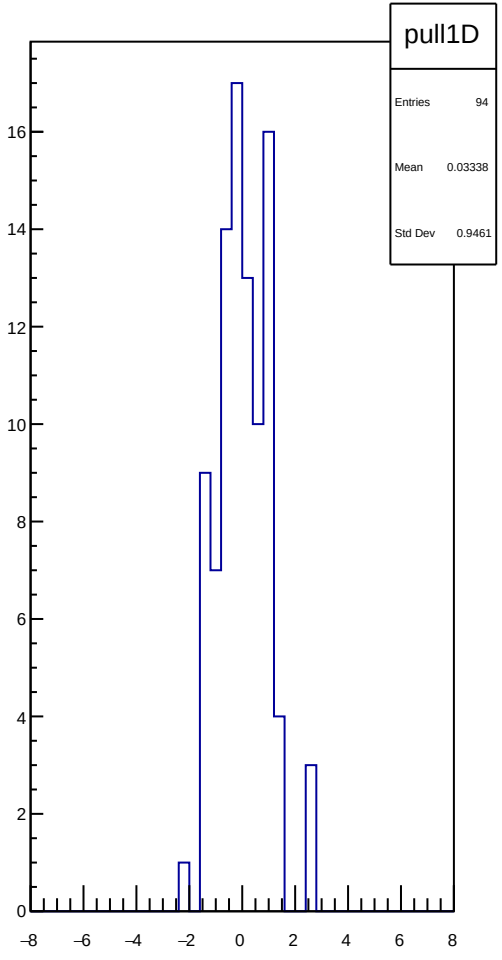

asym_sam_37_dd_rms vs run
χ^2 / ndf 1.621e+04 / 93
p0 947.7 ± 0.7125
1150
1100
1050
1000
950
900
850
800
750
700

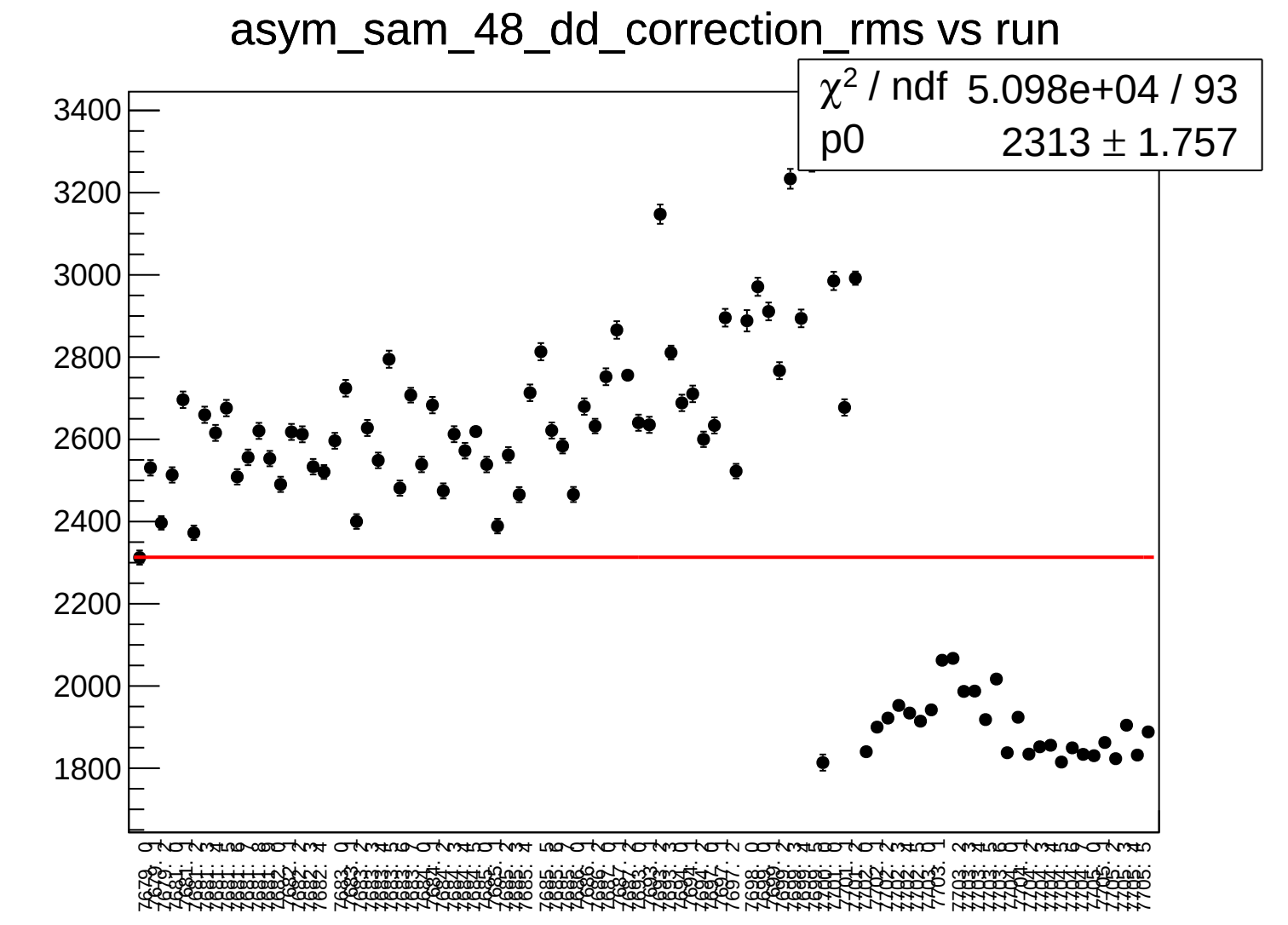

reg_asym_sam_48_dd_mean vs run
χ² / ndf 108.9 / 93
p0 −11.9 ± 159.3
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean −151
Std Dev 247.5
2
1
0
−1
−2

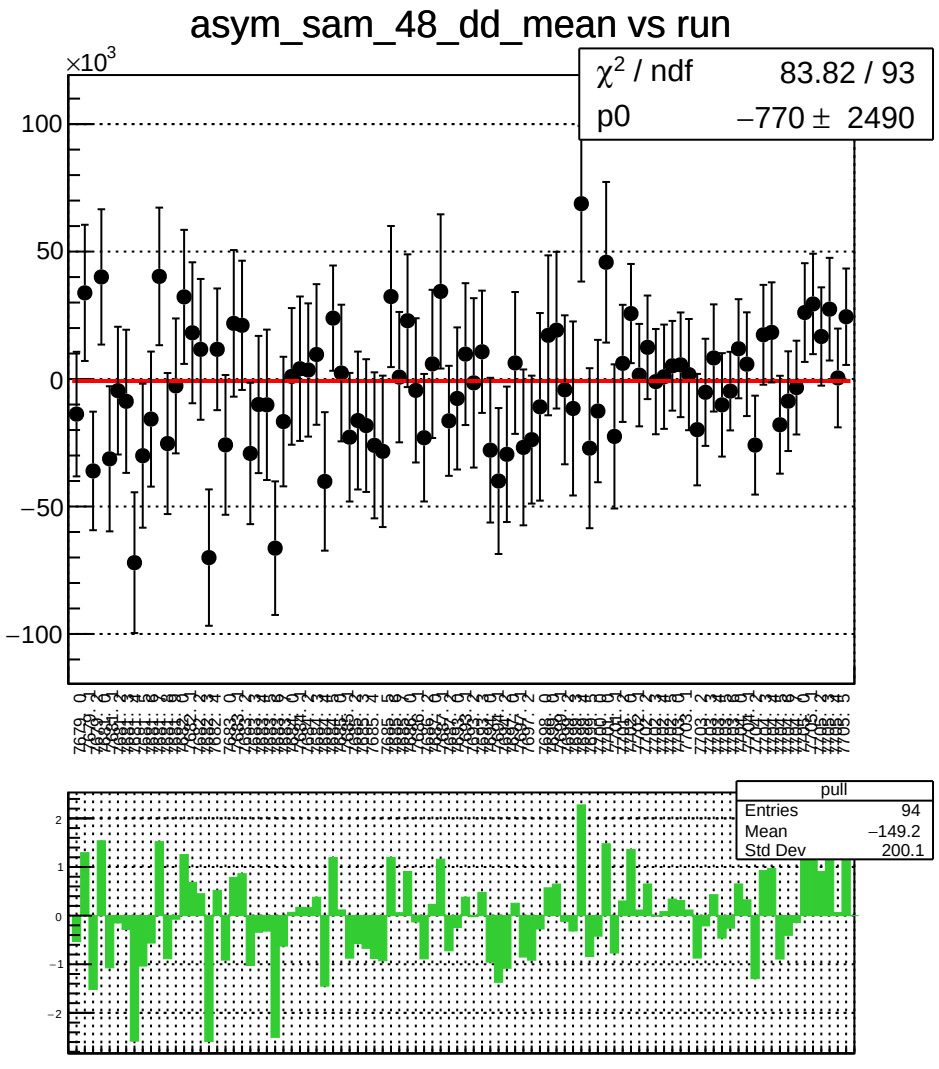

pull1D
Entries 94
Mean 0.002013
Std Dev 1.076
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

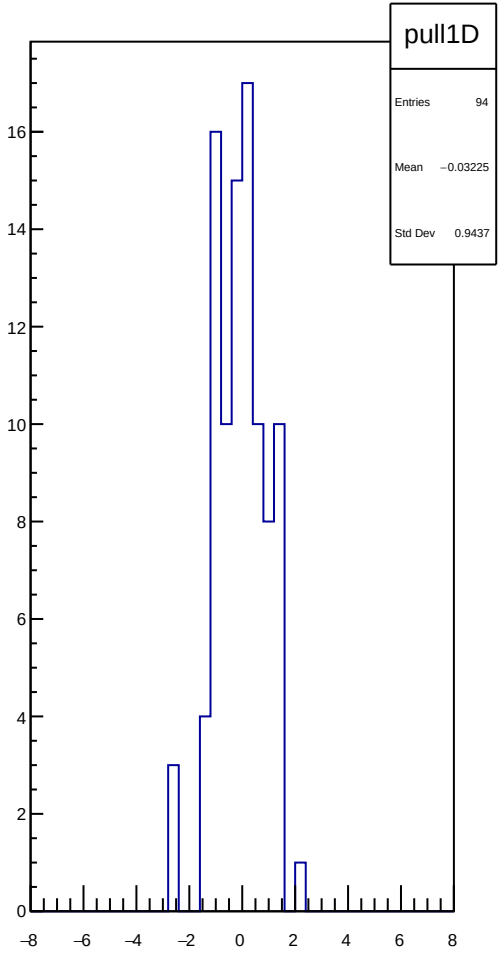

reg_asym_sam_48_dd_rms vs run
χ^2 / ndf 8016 / 93
p0 150.2 ± 0.1127
210
200
190
180
170
160
150
140
130

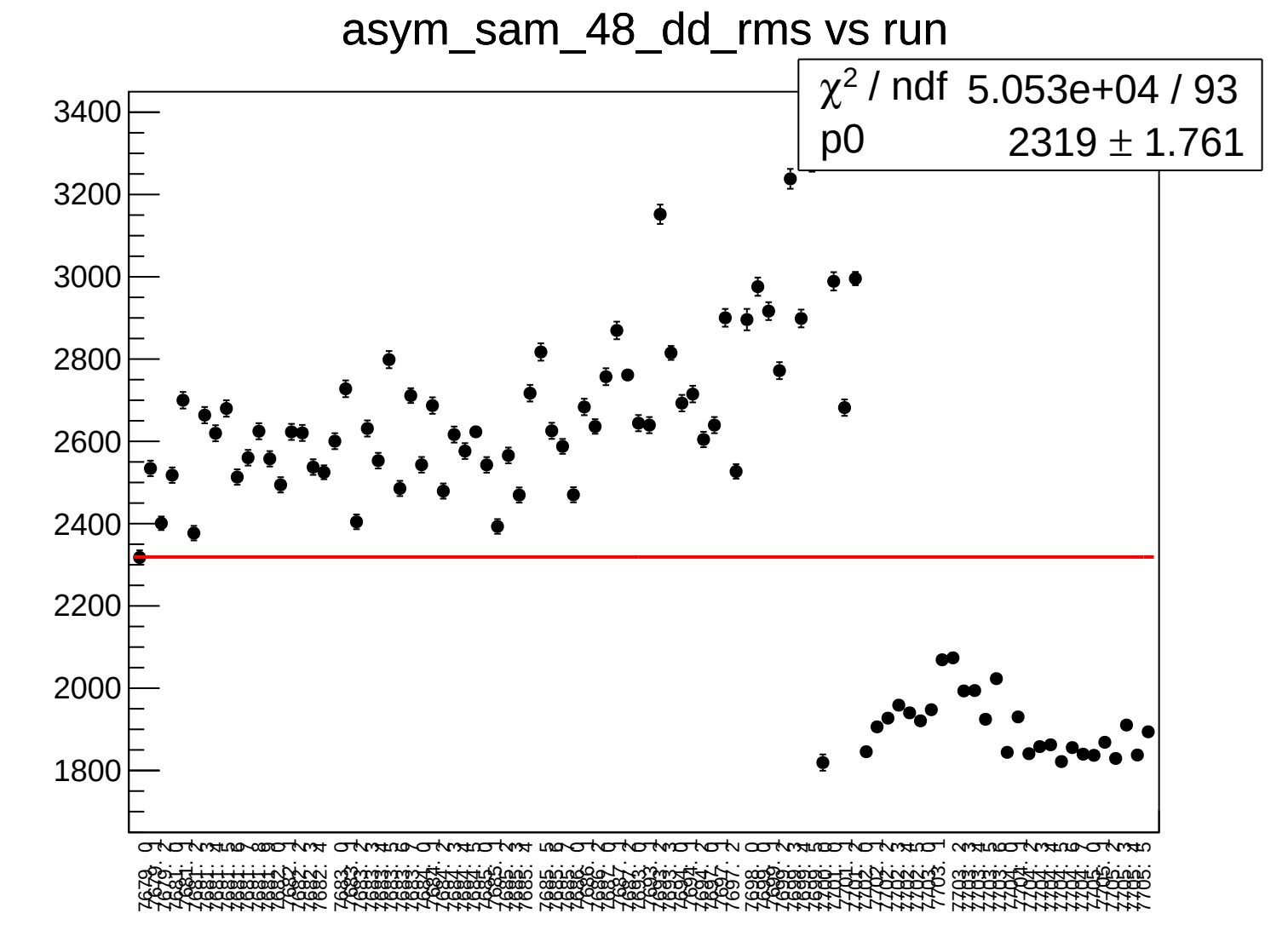

asym_sam_48_dd_correction_mean vs run
×10^3
χ² / ndf 84.24 / 93
p0 720.5 ± 2484
100
50
0
−50
−100
pull
Entries 94
Mean −143.4
Std Dev 194.4
2
1
0
−1
−2

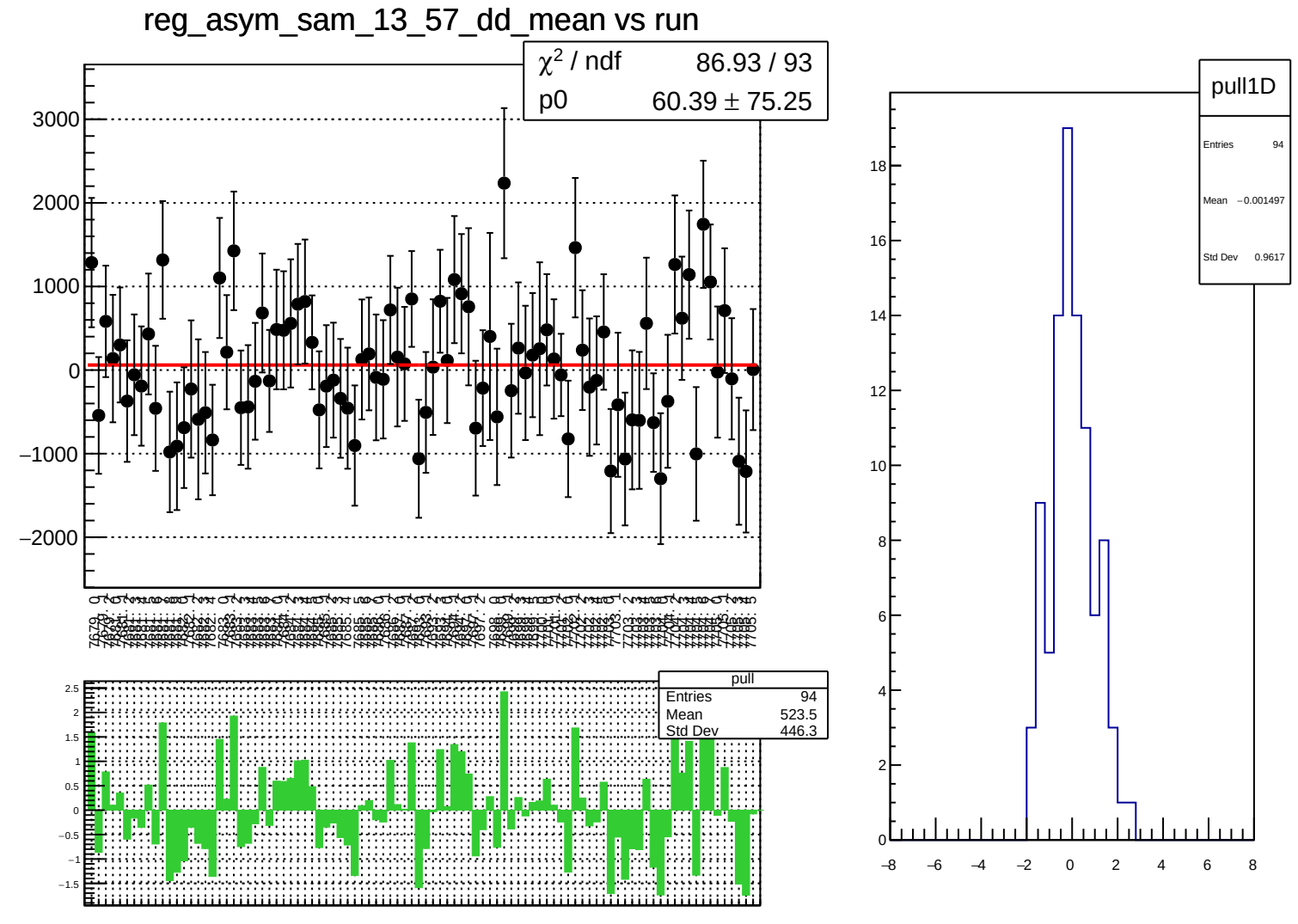

pull1D
Entries 94
Mean 0.03338
Std Dev 0.9461
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

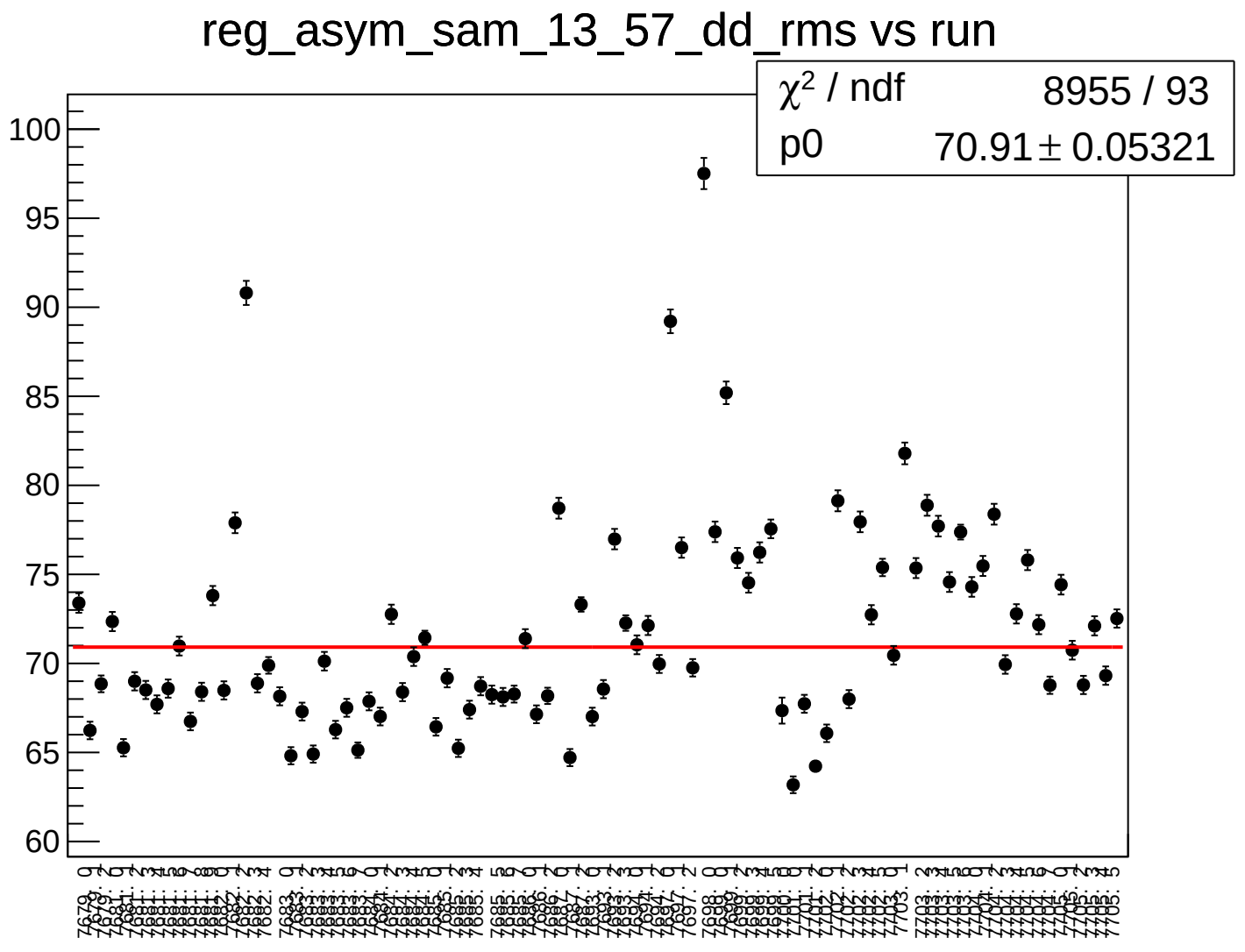

asym_sam_48_dd_correction_rms vs run
χ² / ndf 5.098e+04 / 93
p0 2313 ± 1.757
3400
3200
3000
2800
2600
2400
2200
2000
1800

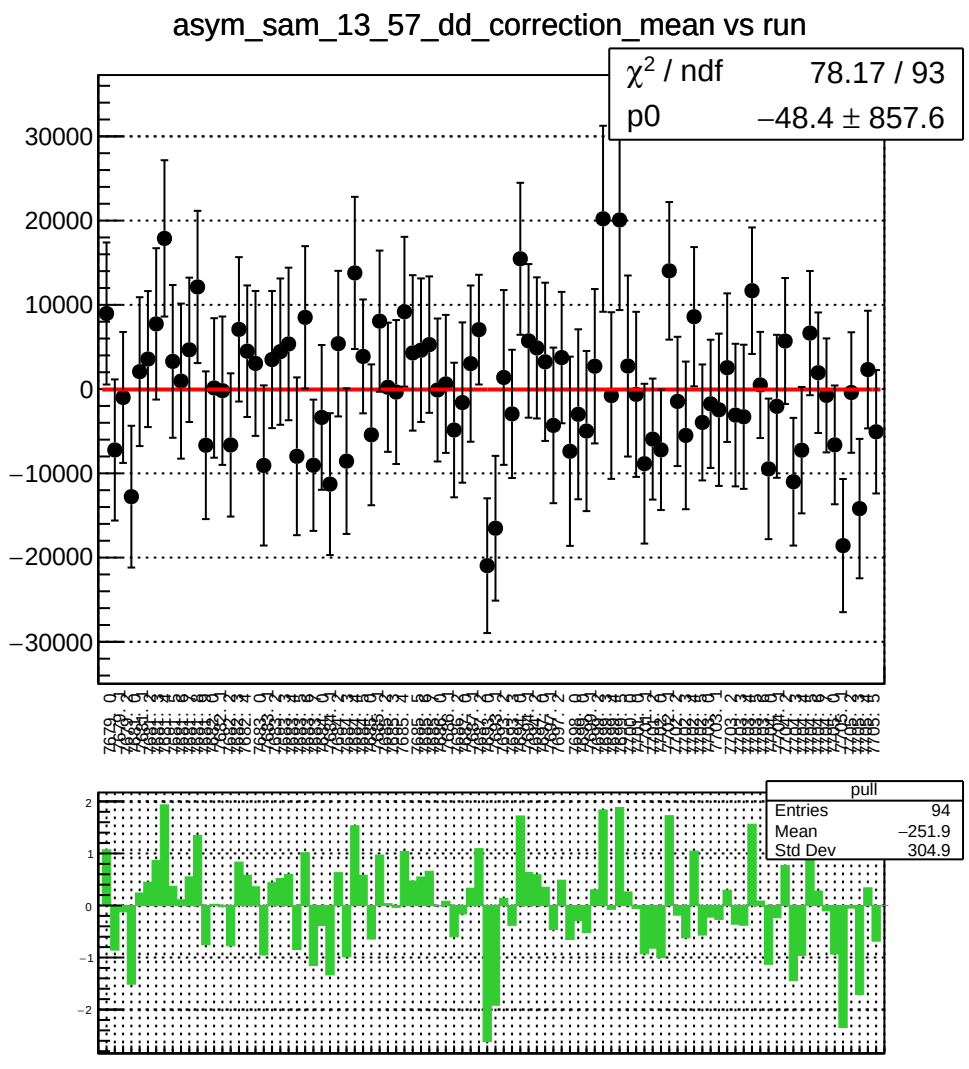

asym_sam_48_dd_mean vs run
×10^3
χ² / ndf 83.82 / 93
p0 −770 ± 2490
100
50
0
−50
−100
pull
Entries 94
Mean −149.2
Std Dev 200.1
2
1
0
−1
−2

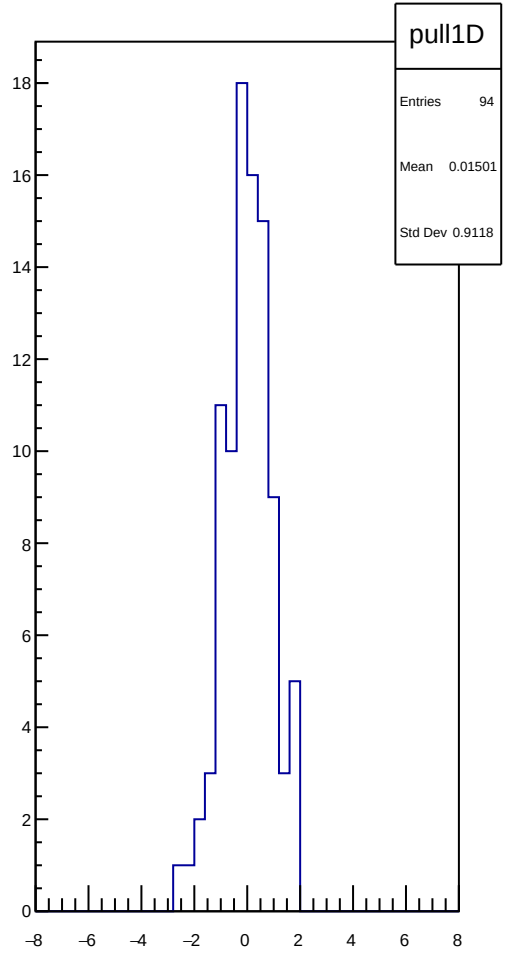

pull1D
Entries 94
Mean −0.03225
Std Dev 0.9437
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

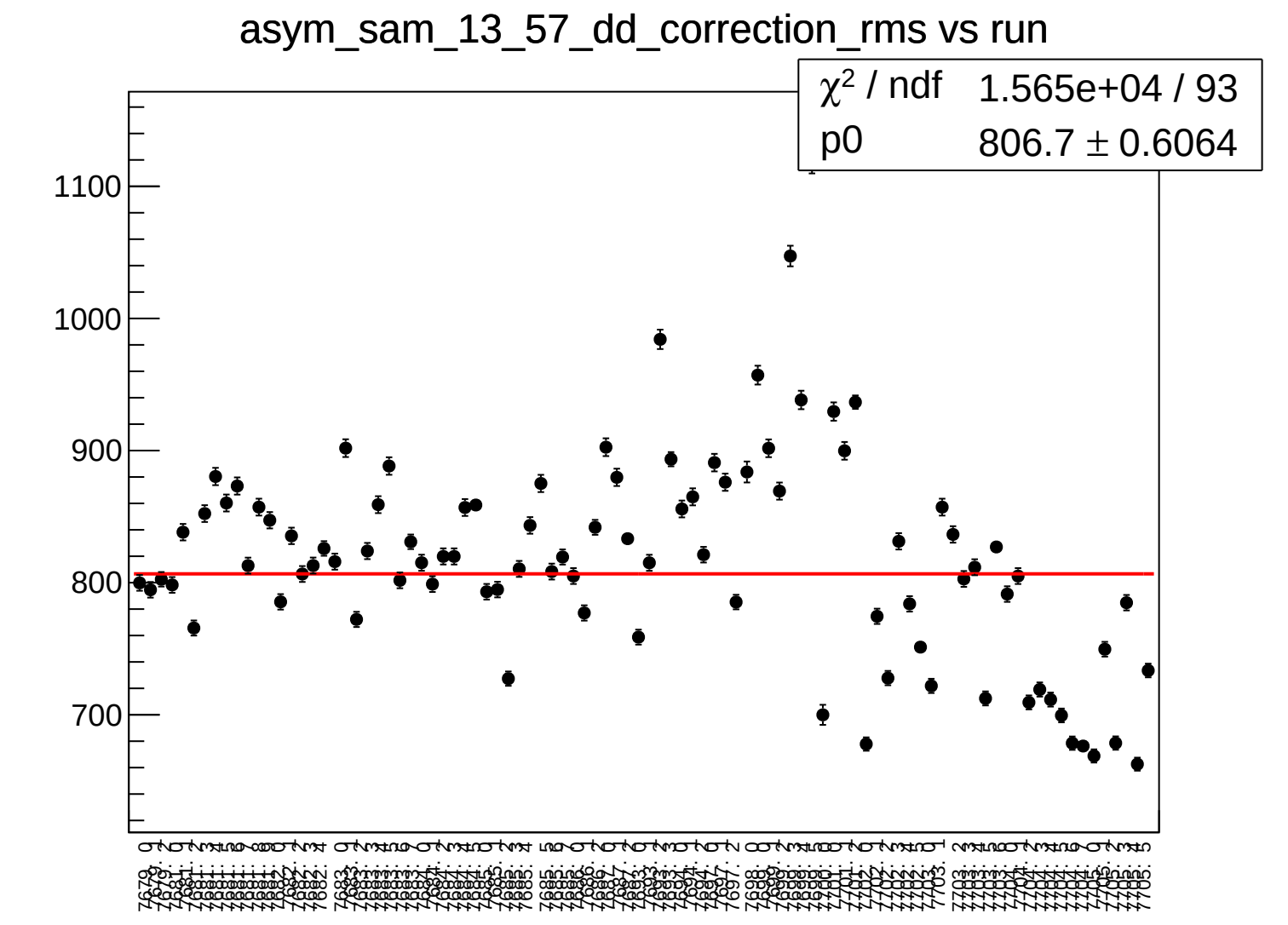

asym_sam_48_dd_rms vs run
χ² / ndf 5.053e+04 / 93
p0 2319 ± 1.761
3400
3200
3000
2800
2600
2400
2200
2000
1800

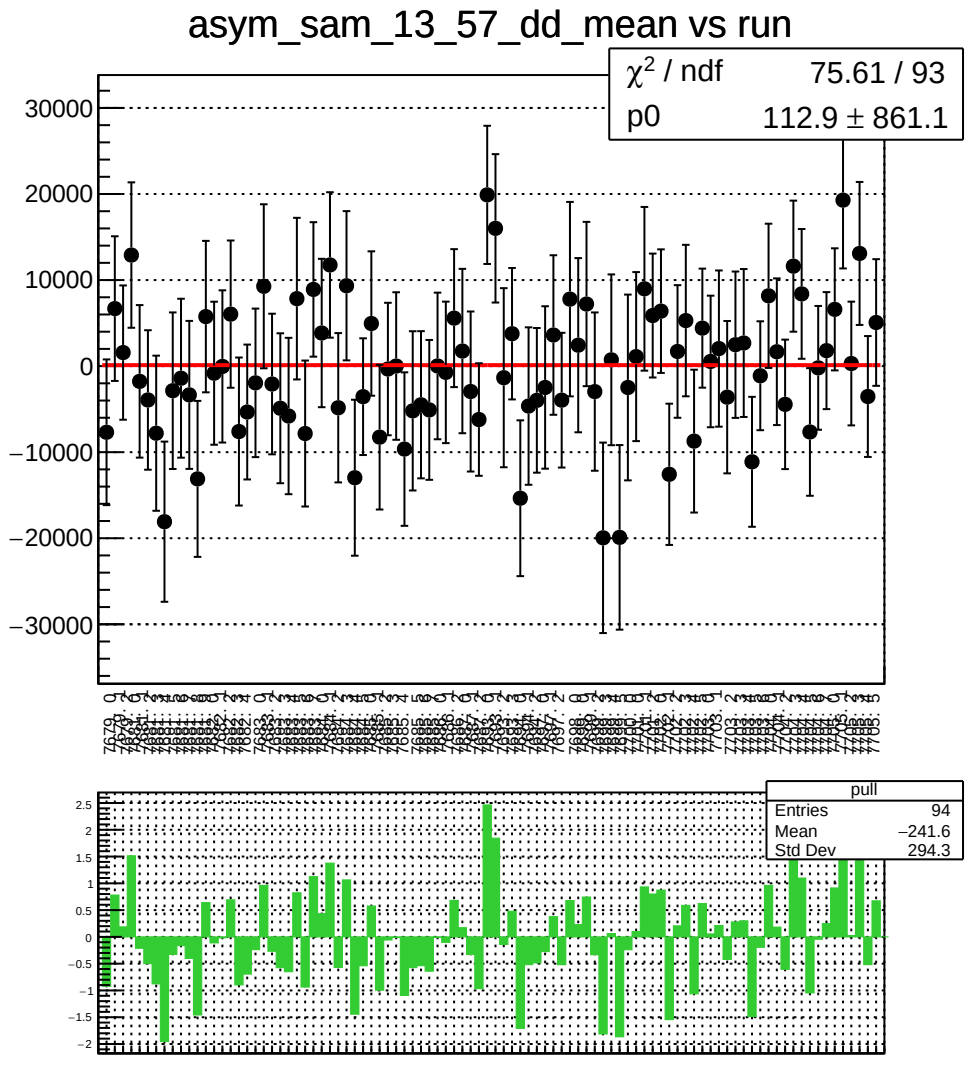

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 86.93 / 93
p0 60.39 ± 75.25
3000
2000
1000
0
−1000
−2000
pull
Entries 94
Mean 523.5
Std Dev 446.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.001497
Std Dev 0.9617
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

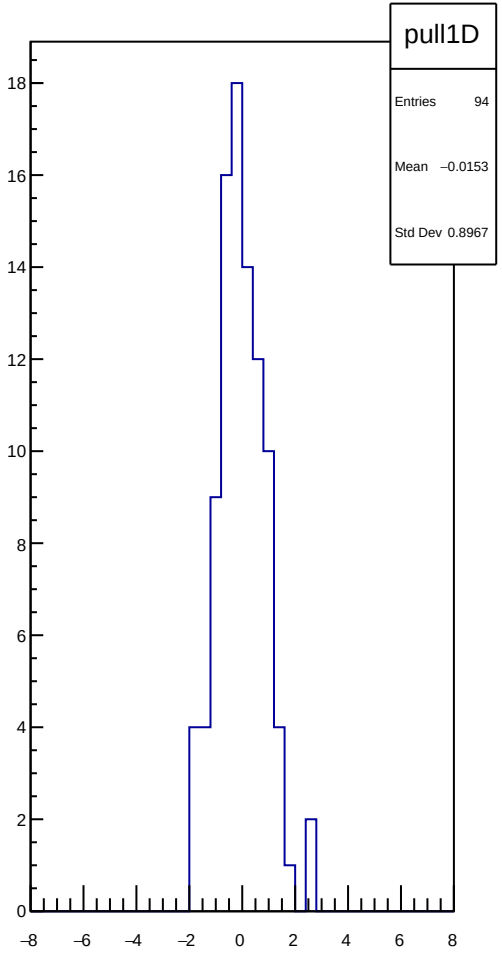

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 8955 / 93
p0 70.91 ± 0.05321
100
95
90
85
80
75
70
65
60

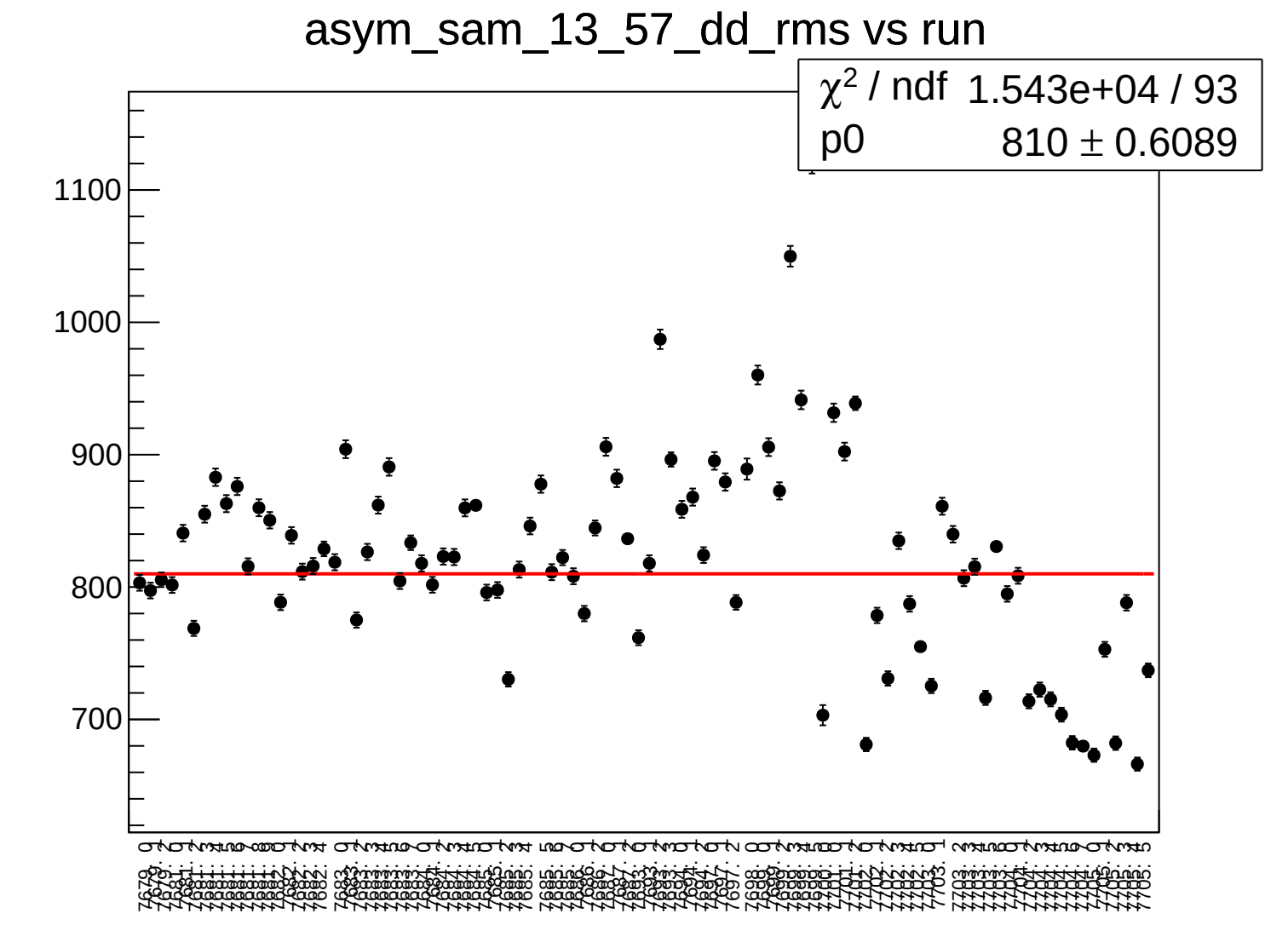

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 78.17 / 93
p0 −48.4 ± 857.6
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −251.9
Std Dev 304.9
2
1
0
−1
−2

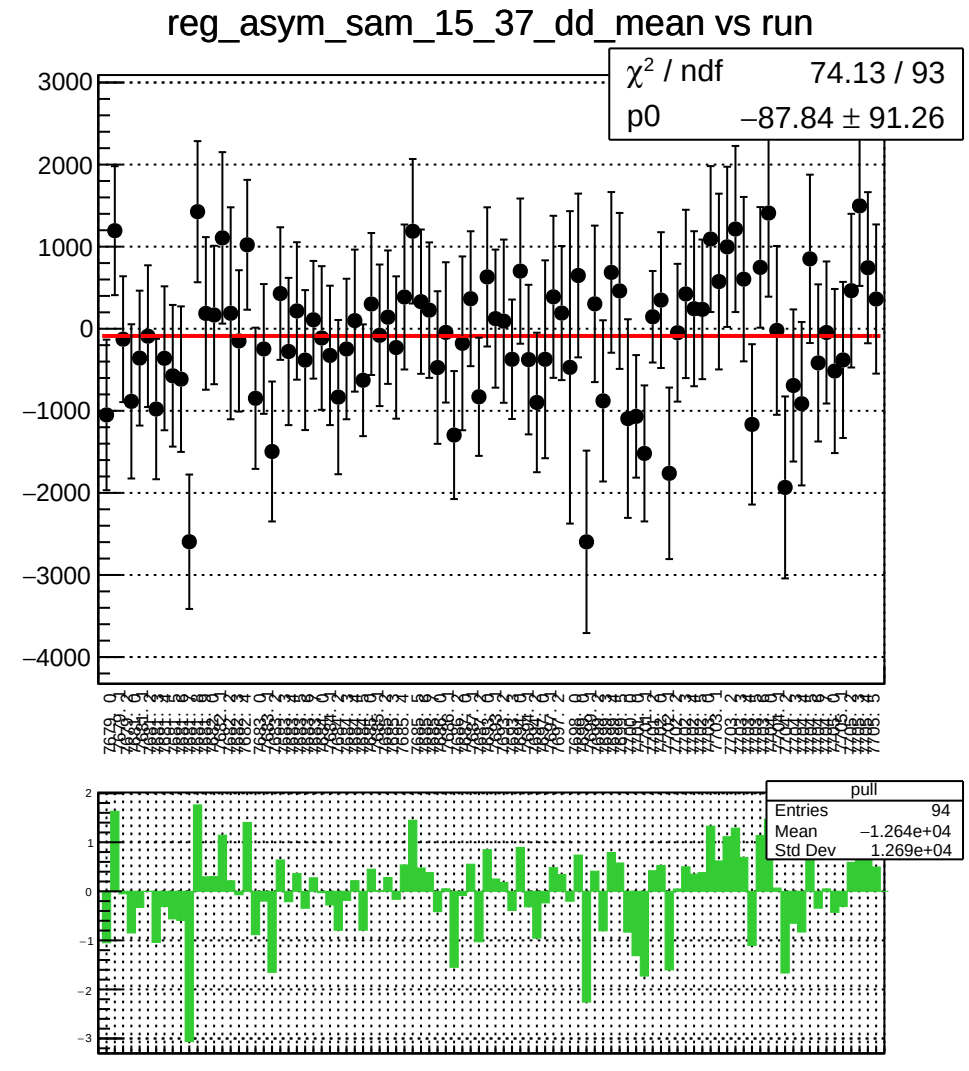

pull1D
Entries 94
Mean 0.01501
Std Dev 0.9118
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

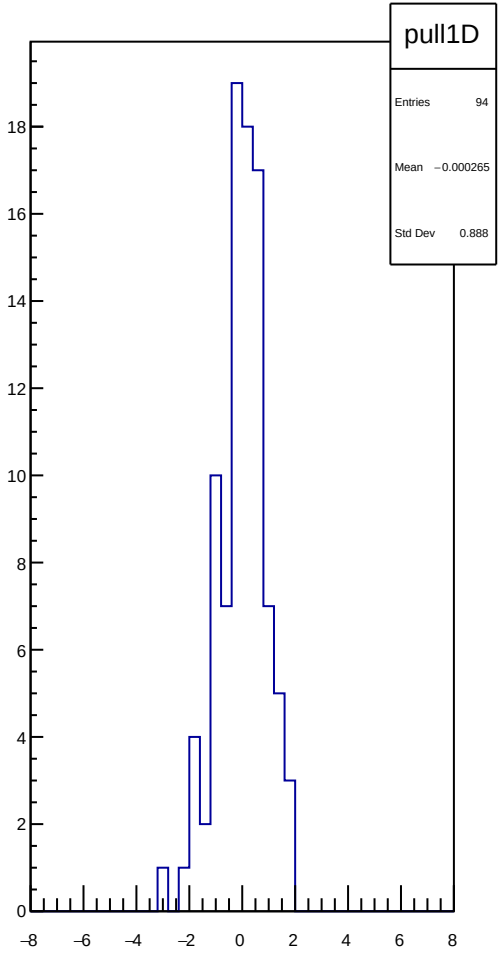

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 1.565e+04 / 93
p0 806.7 ± 0.6064
1100
1000
900
800
700

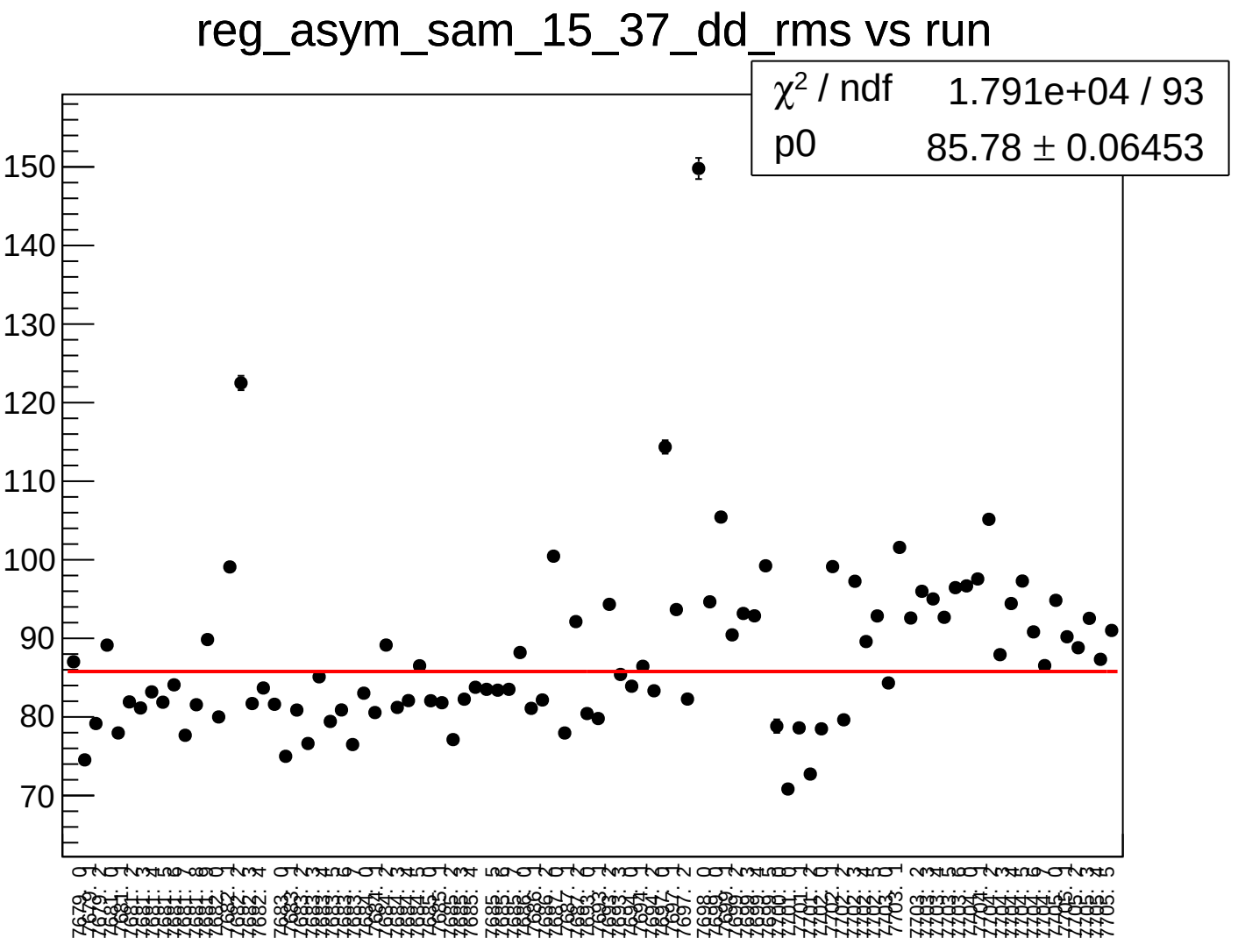

asym_sam_13_57_dd_mean vs run
χ^2 / ndf 75.61 / 93
p0 112.9 ± 861.1
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −241.6
Std Dev 294.3
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

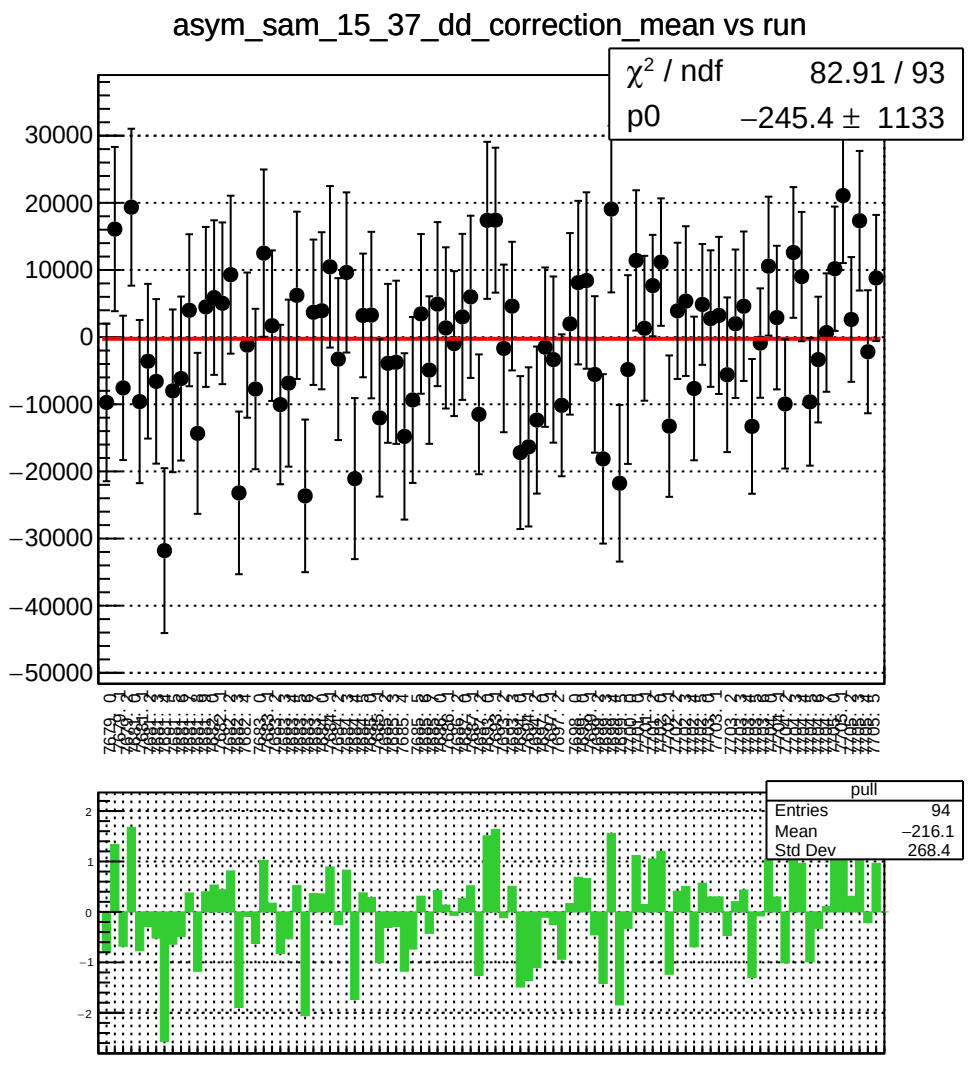

pull1D
Entries 94
Mean −0.0153
Std Dev 0.8967
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

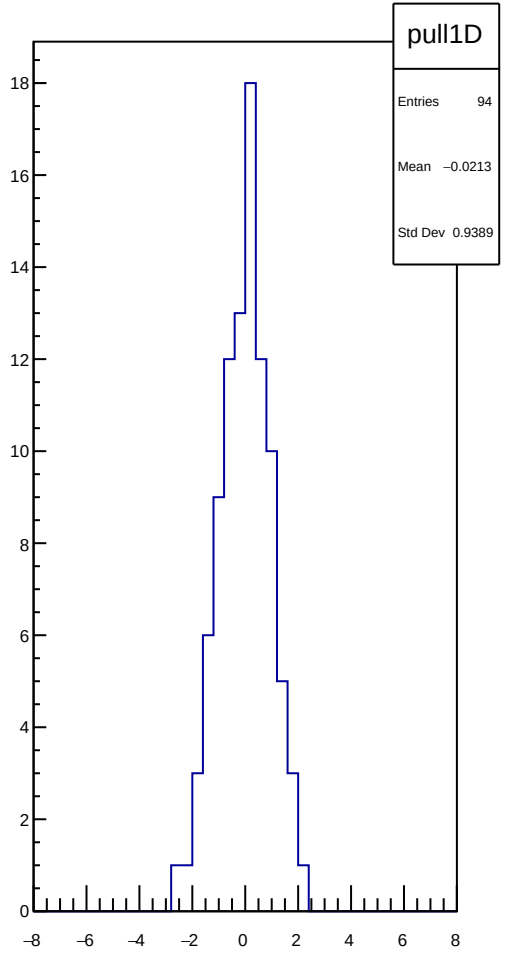

asym_sam_13_57_dd_rms vs run
χ^2 / ndf 1.543e+04 / 93
p0 810 ± 0.6089
1100
1000
900
800
700

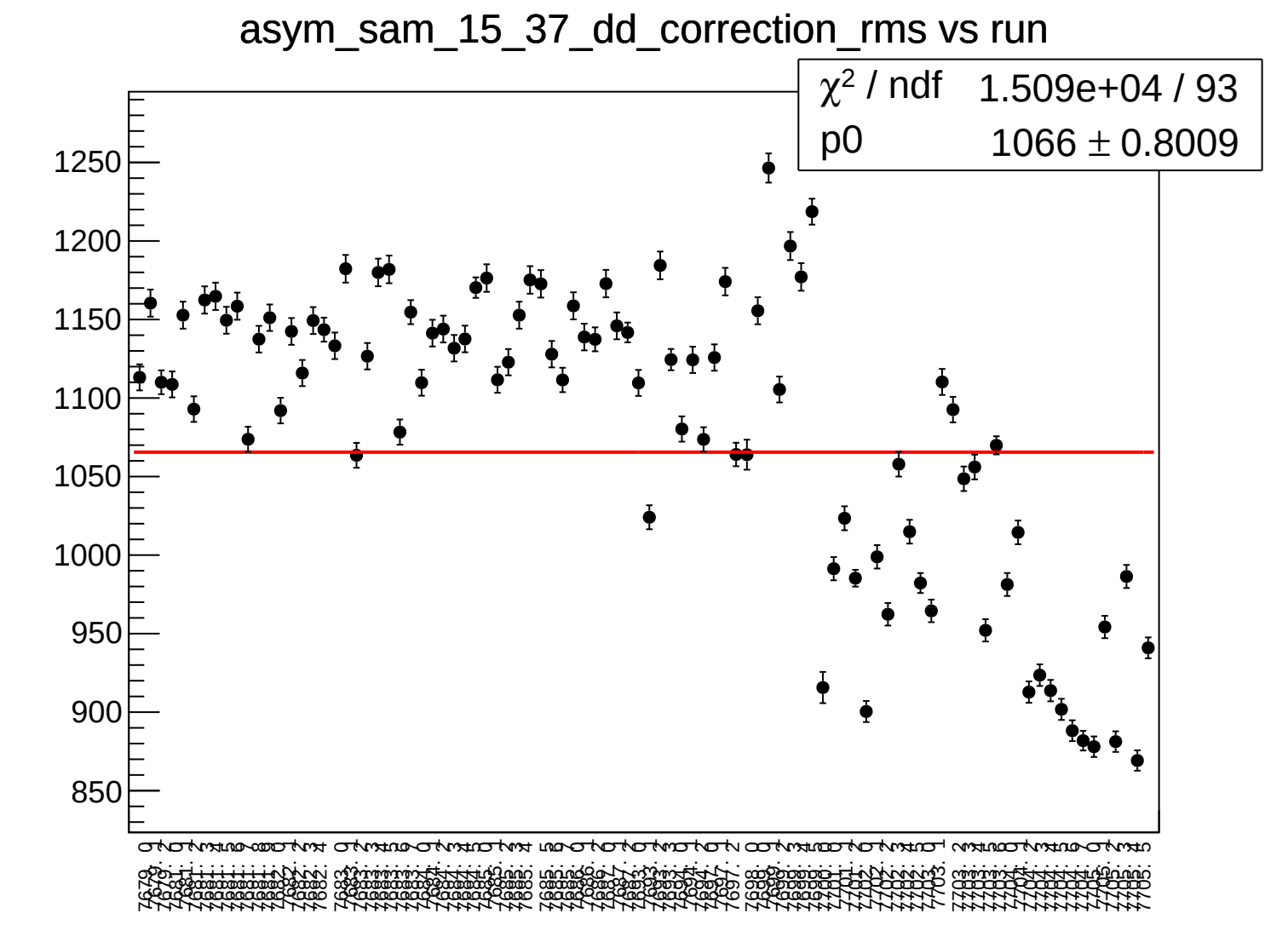

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 74.13 / 93
p0 −87.84 ± 91.26
pull
Entries 94
Mean −1.264e+04
Std Dev 1.269e+04

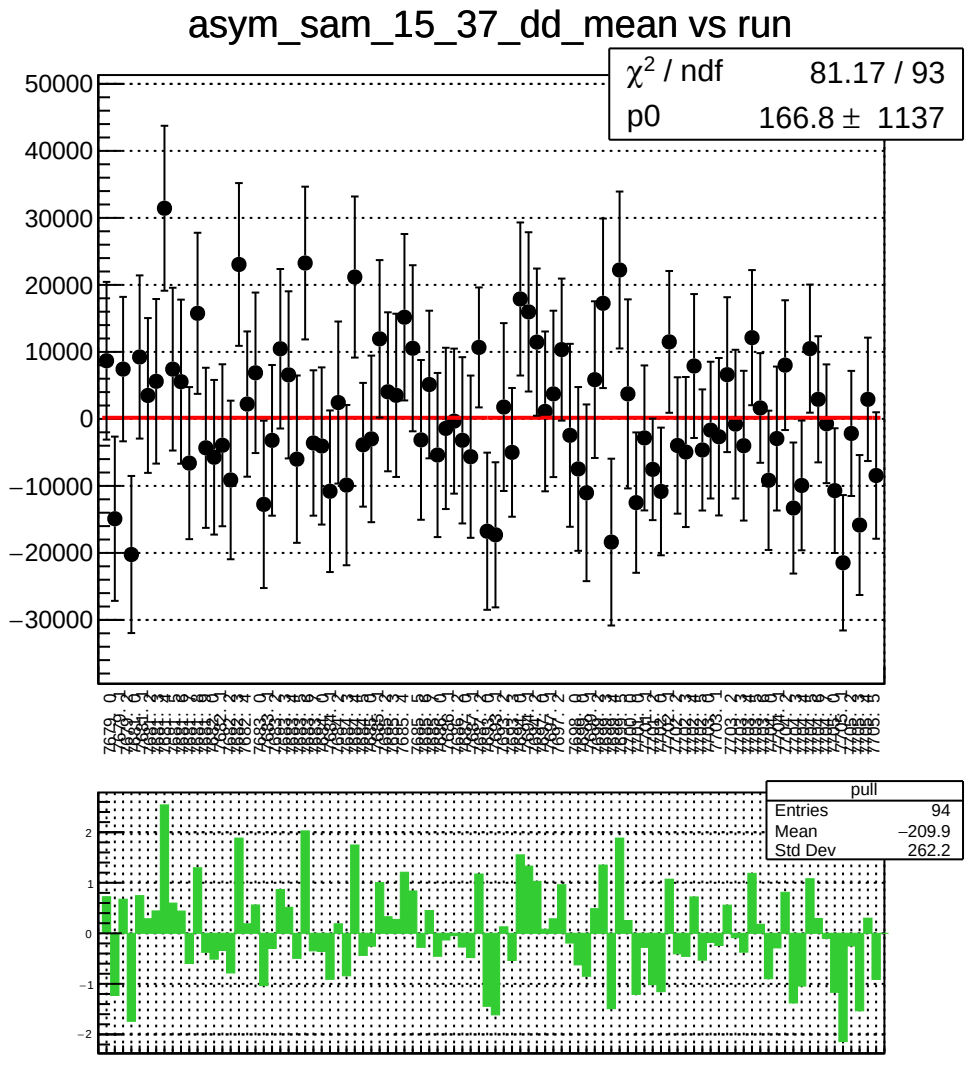

pull1D
Entries 94
Mean −0.000265
Std Dev 0.888

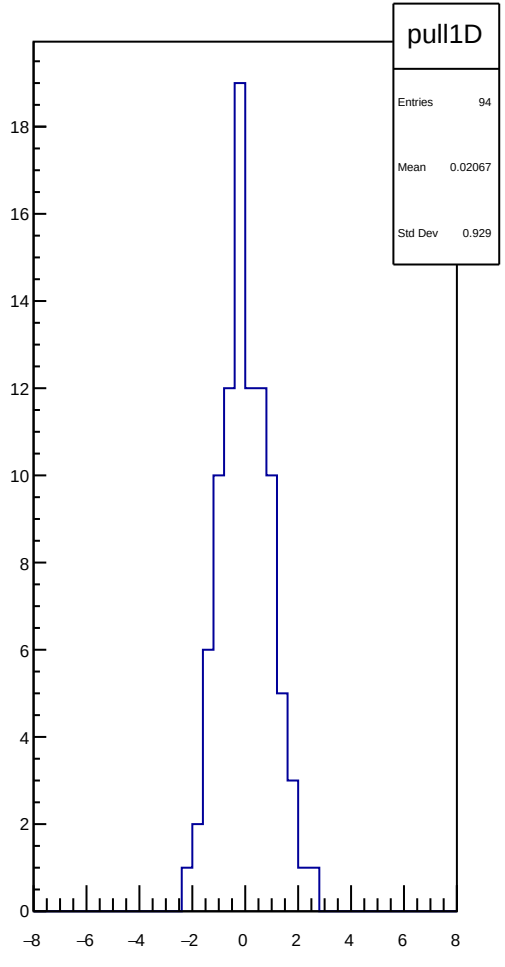

reg_asym_sam_15_37_dd_rms vs run
χ^2 / ndf 1.791e+04 / 93
p0 85.78 ± 0.06453
150
140
130
120
110
100
90
80
70

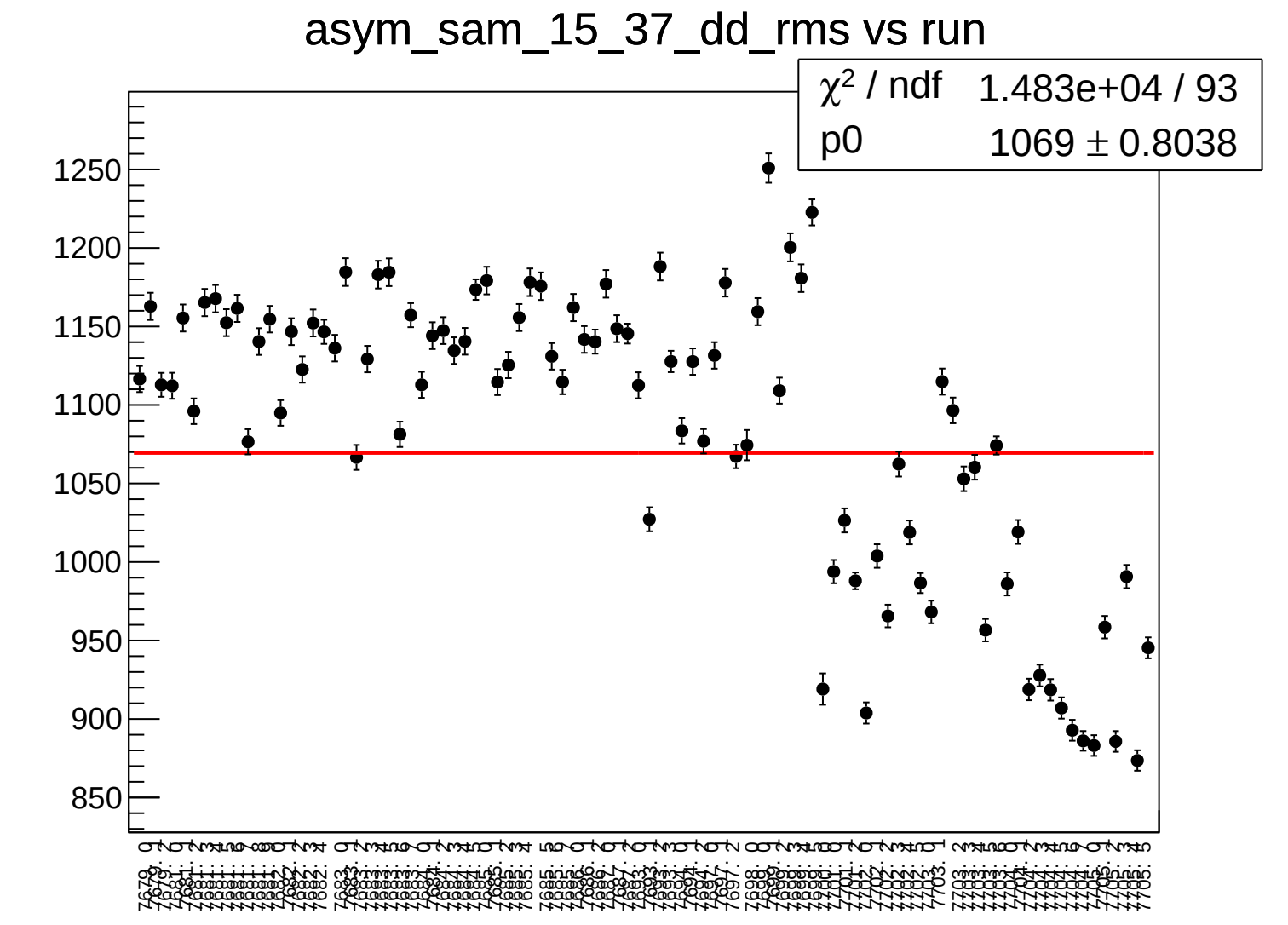

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 82.91 / 93
p0 −245.4 ± 1133
30000
20000
10000
0
−10000
−20000
−30000
−40000
−50000
pull
Entries 94
Mean −216.1
Std Dev 268.4
2
1
0
−1
−2

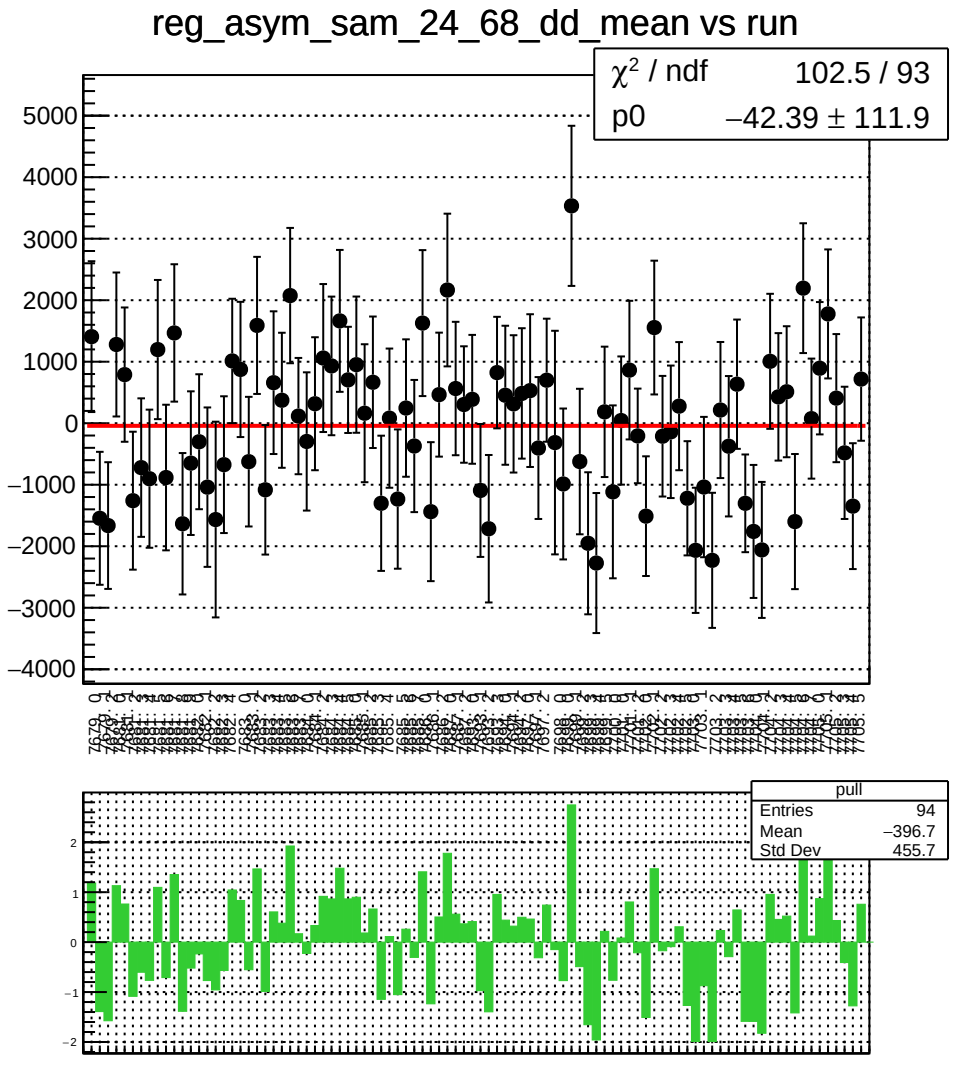

pull1D
Entries 94
Mean −0.0213
Std Dev 0.9389
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

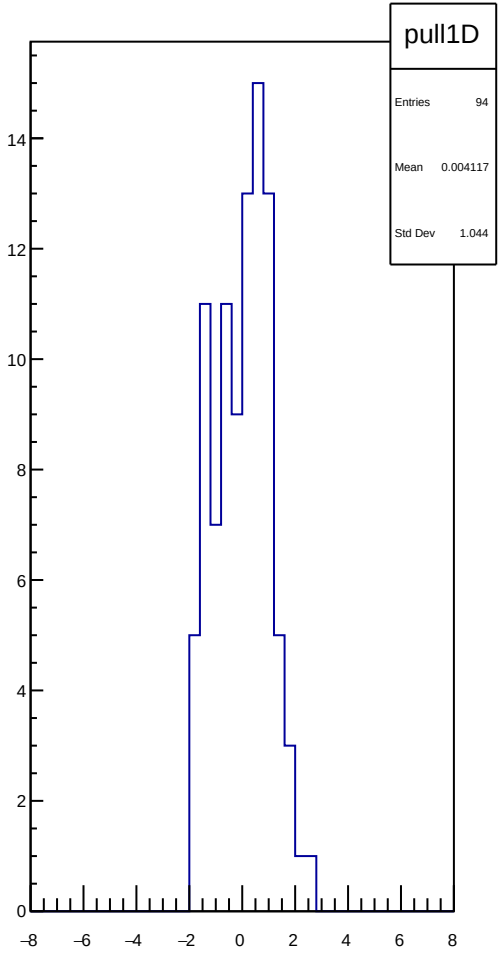

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 1.509e+04 / 93
p0 1066 ± 0.8009
1250
1200
1150
1100
1050
1000
950
900
850

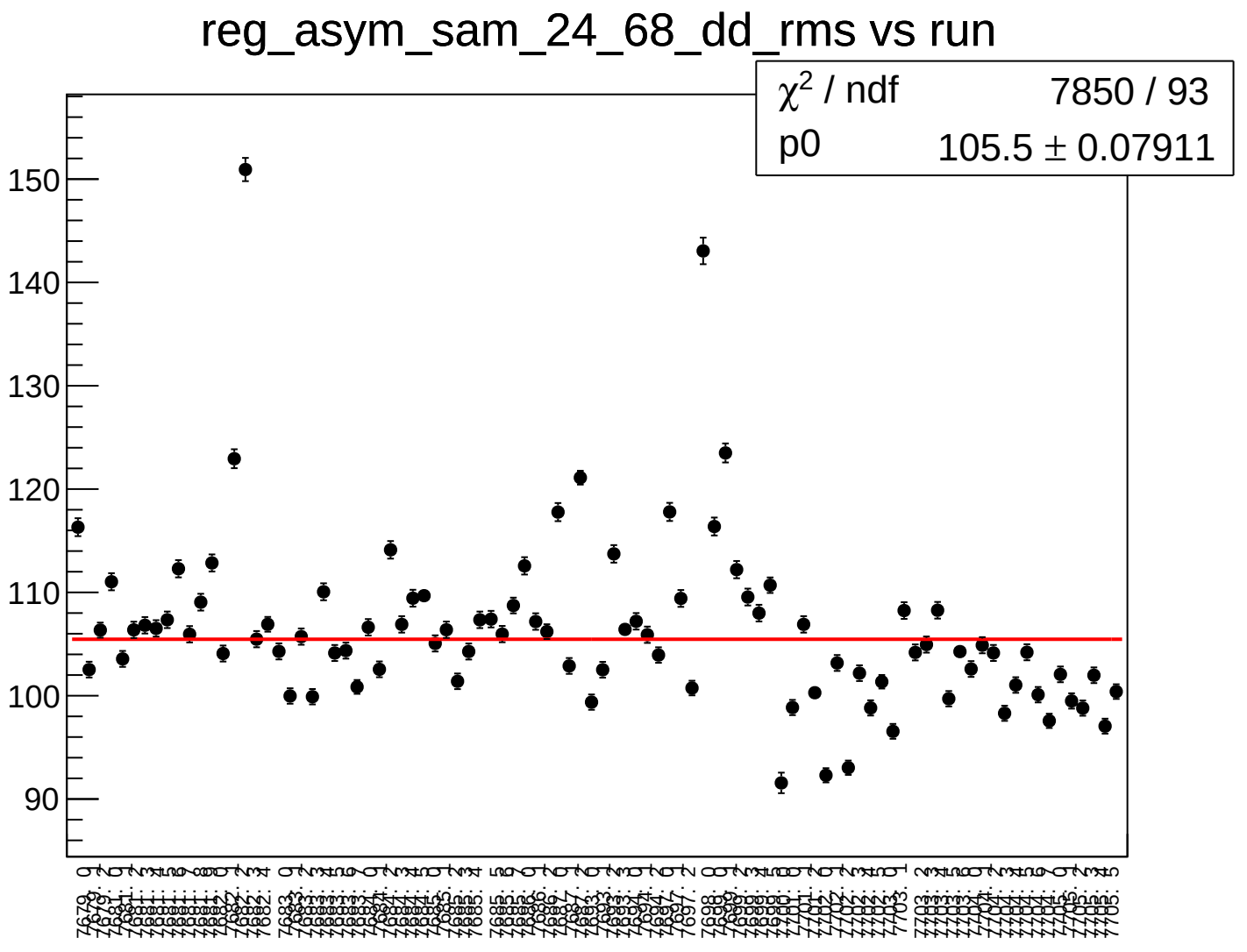

asym_sam_15_37_dd_mean vs run
χ² / ndf 81.17 / 93
p0 166.8 ± 1137
pull
Entries 94
Mean −209.9
Std Dev 262.2

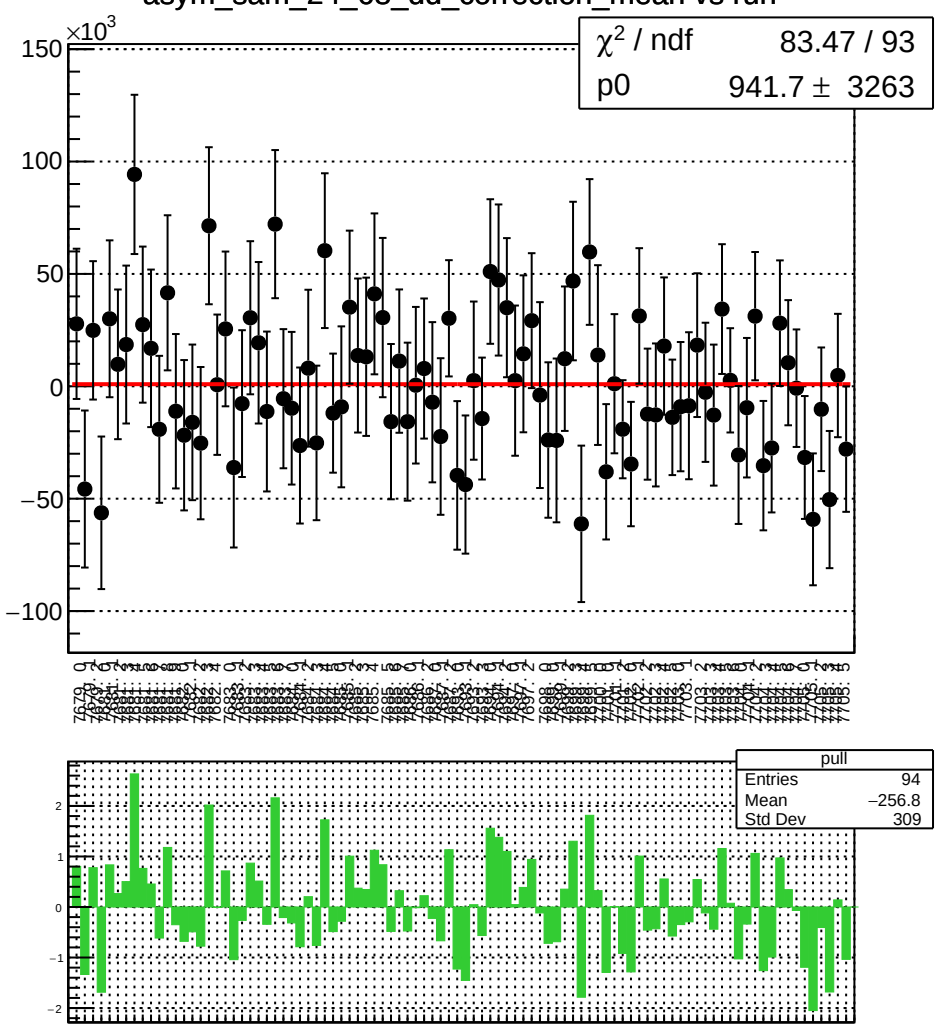

pull1D
Entries 94
Mean 0.02067
Std Dev 0.929

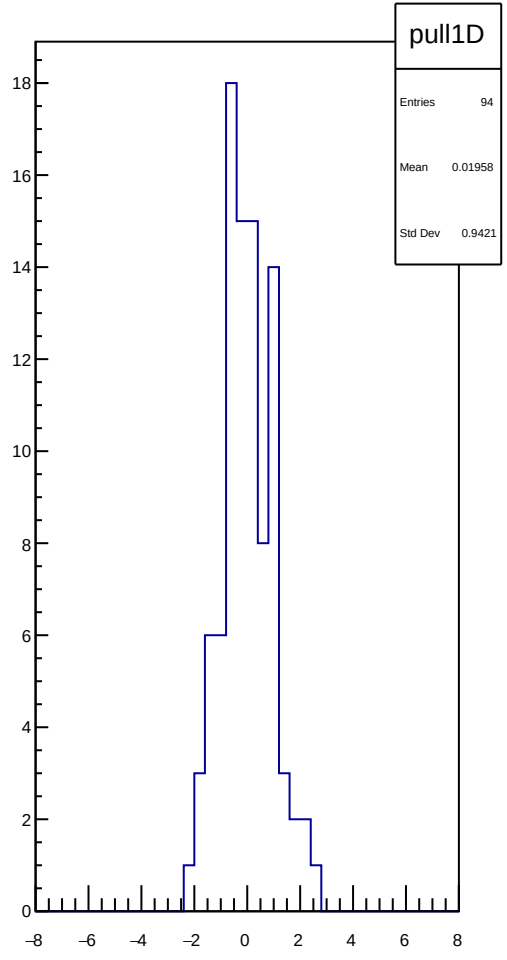

asym_sam_15_37_dd_rms vs run
χ^2 / ndf 1.483e+04 / 93
p0 1069 ± 0.8038
1250
1200
1150
1100
1050
1000
950
900
850

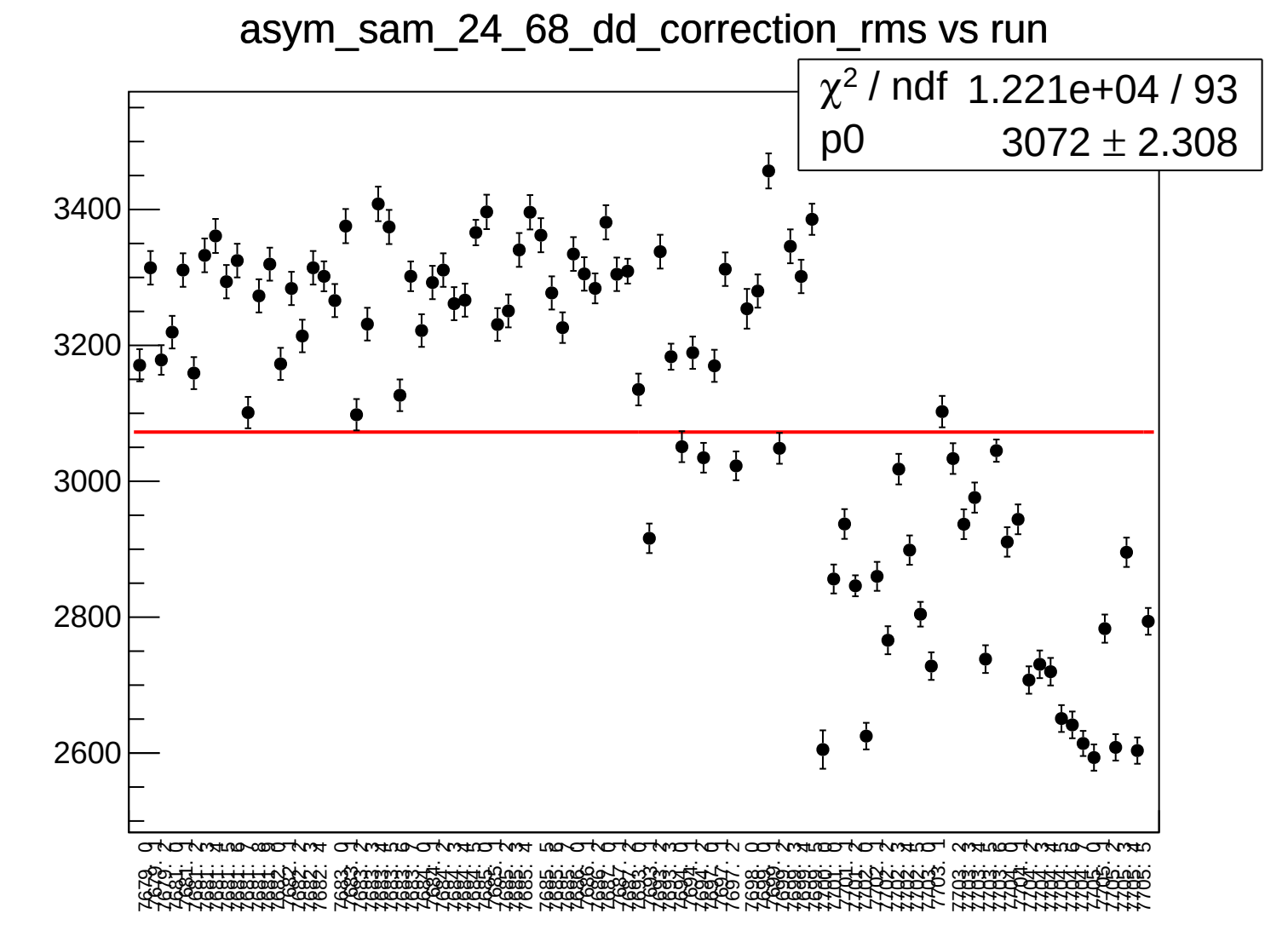

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 102.5 / 93
p0 −42.39 ± 111.9
pull
Entries 94
Mean −396.7
Std Dev 455.7

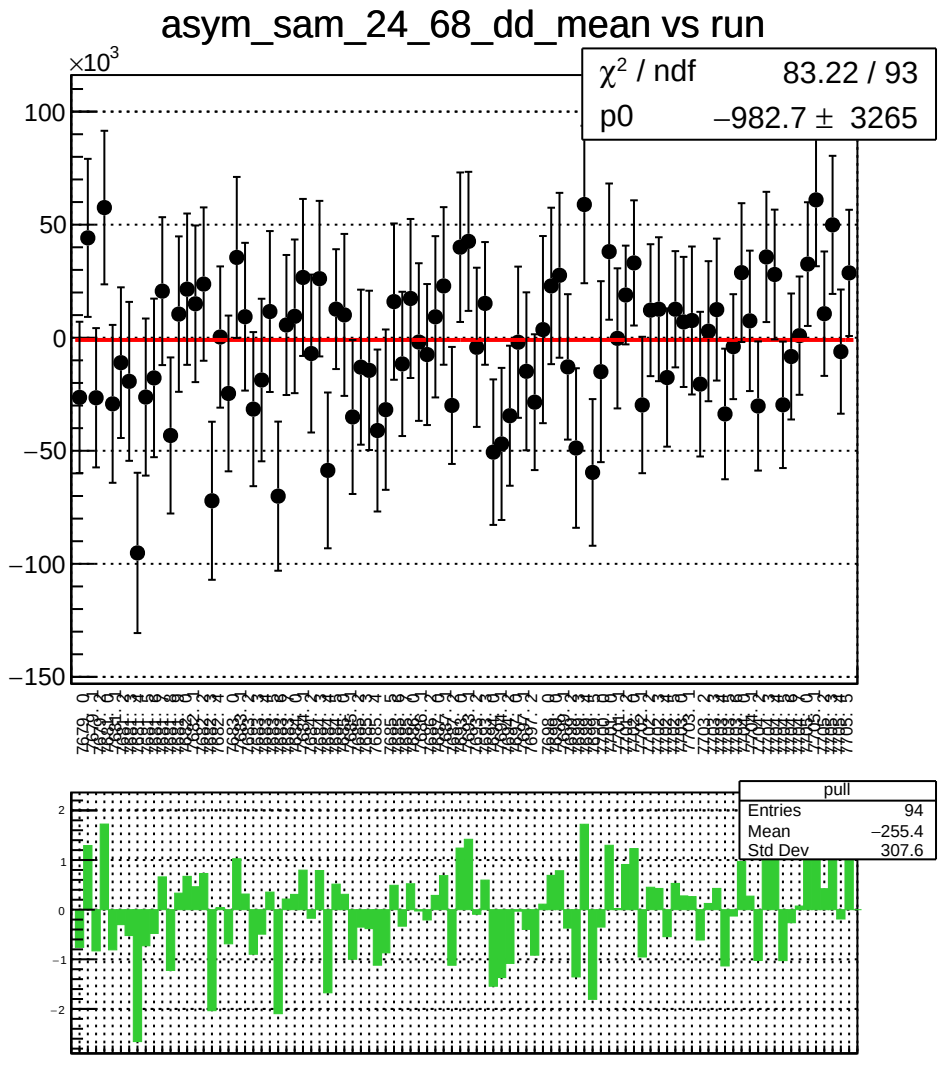

pull1D
Entries 94
Mean 0.004117
Std Dev 1.044

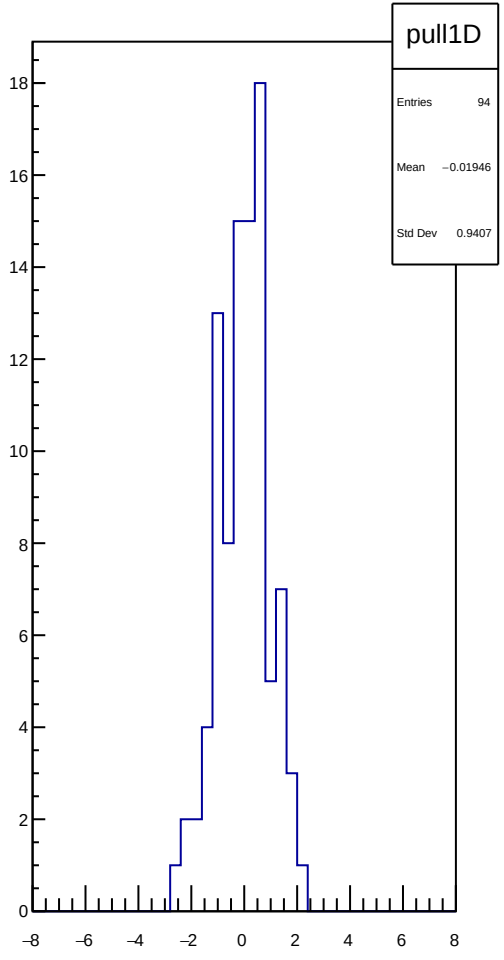

reg_asym_sam_24_68_dd_rms vs run
χ^2 / ndf 7850 / 93
p0 105.5 ± 0.07911
150
140
130
120
110
100
90

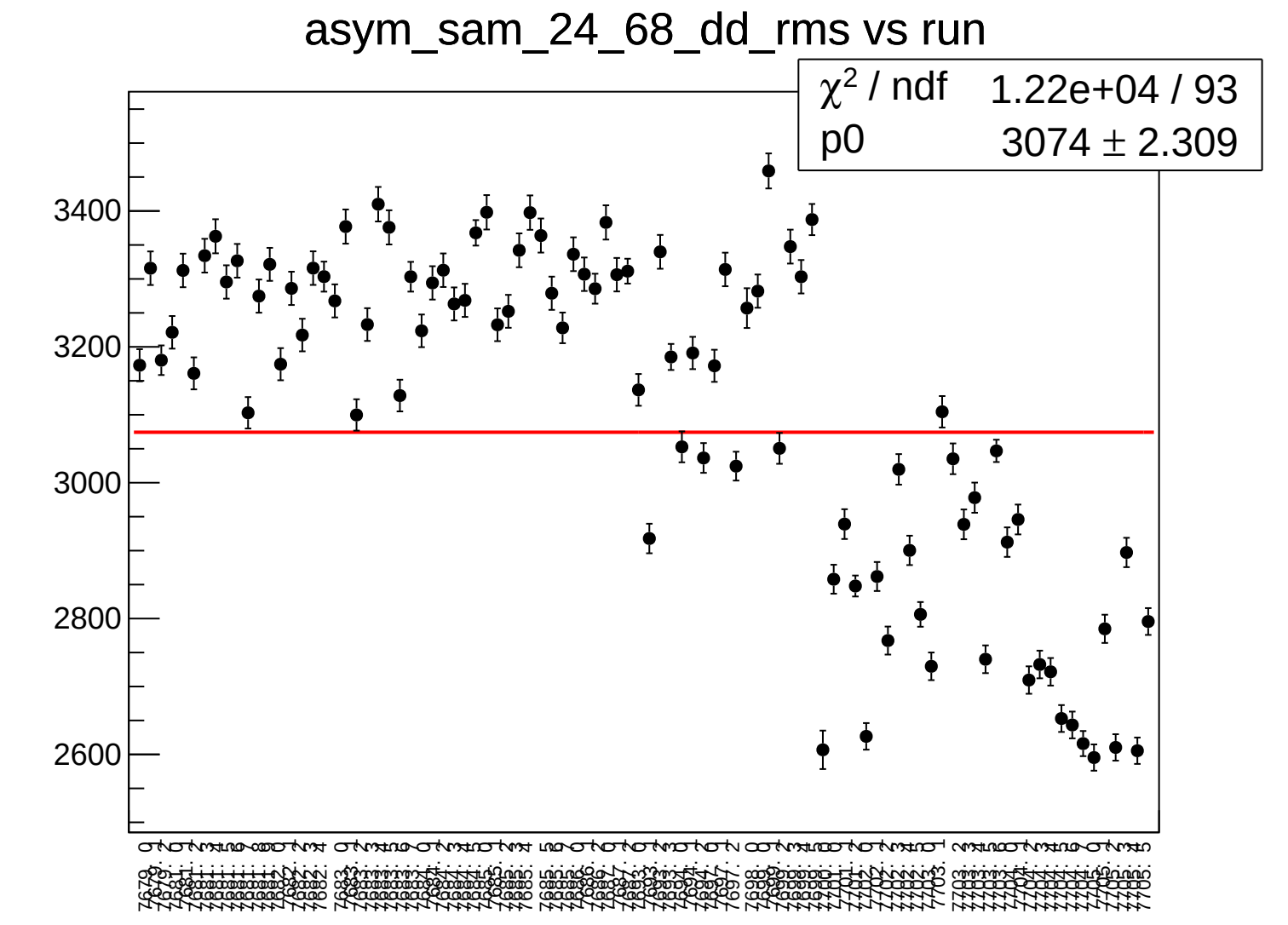

asym_sam_24_68_dd_correction_mean vs run
×10^3
χ² / ndf 83.47 / 93
p0 941.7 ± 3263
150
100
50
0
−50
−100
pull
Entries 94
Mean −256.8
Std Dev 309
2
1
0
−1
−2

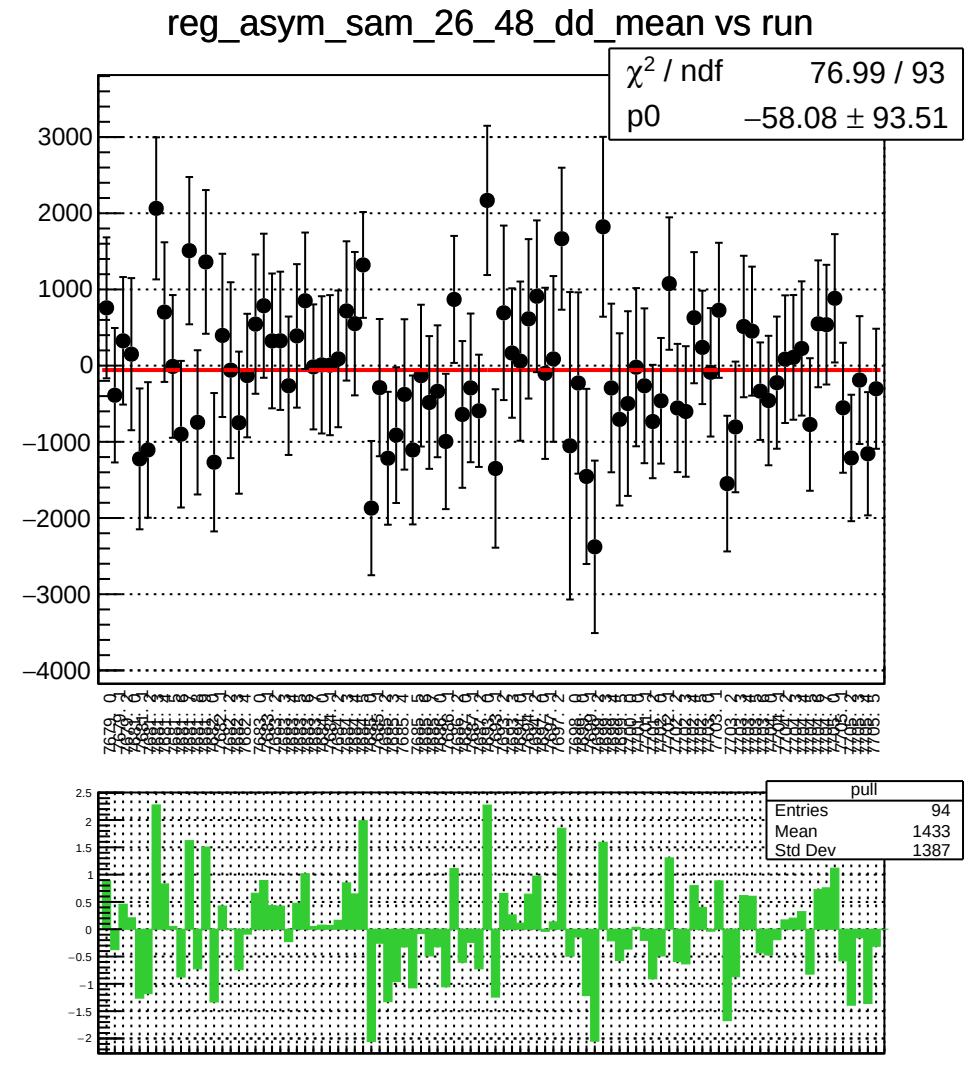

pull1D
Entries 94
Mean 0.01958
Std Dev 0.9421
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

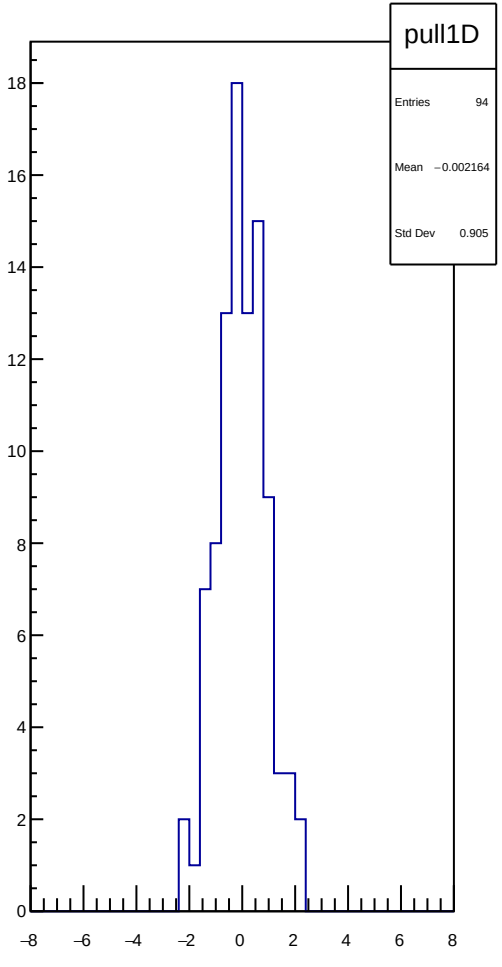

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 1.221e+04 / 93
p0 3072 ± 2.308
3400
3200
3000
2800
2600

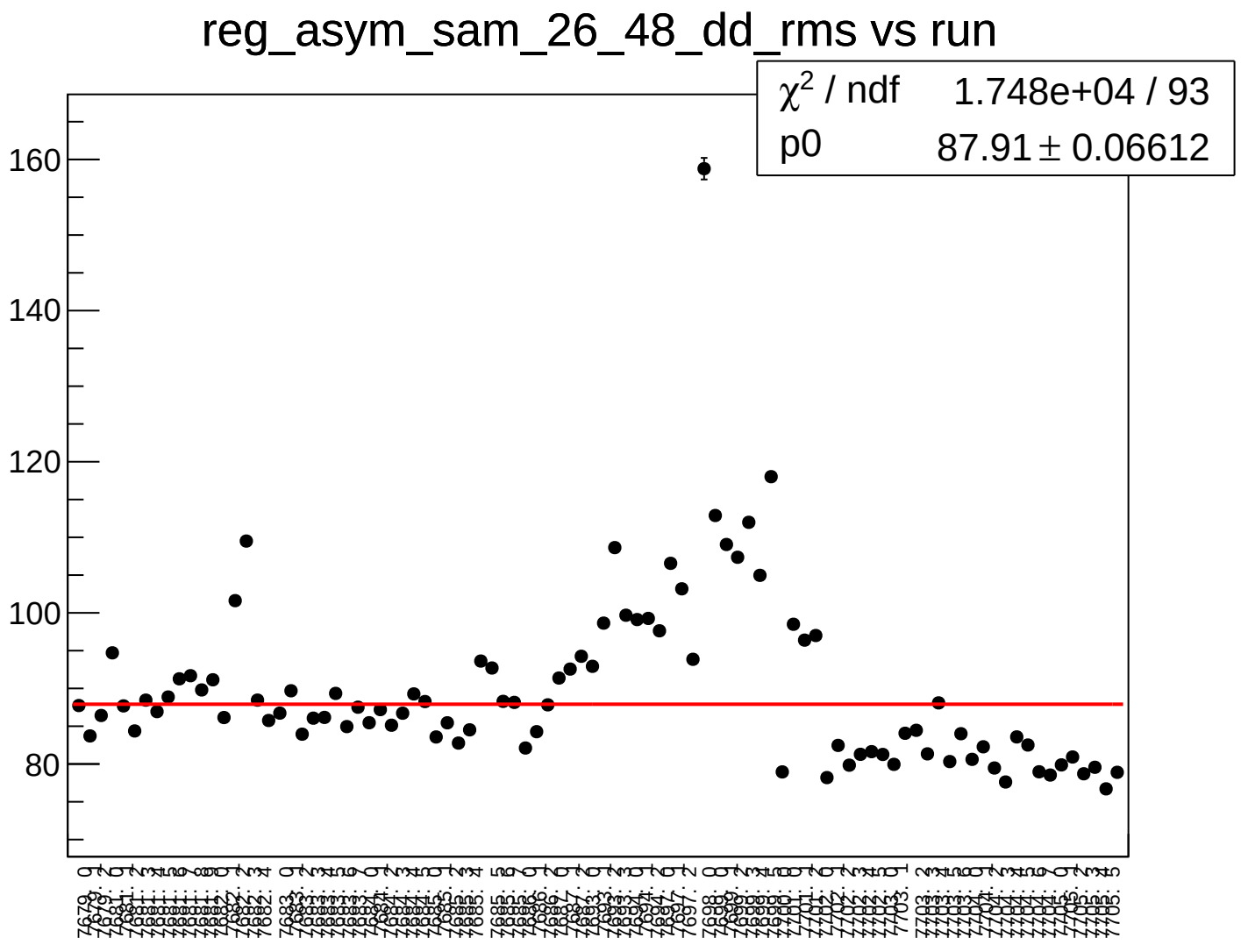

asym_sam_24_68_dd_mean vs run
×10^3
χ² / ndf 83.22 / 93
p0 −982.7 ± 3265
100
50
0
−50
−100
−150
pull
Entries 94
Mean −255.4
Std Dev 307.6
2
1
0
−1
−2

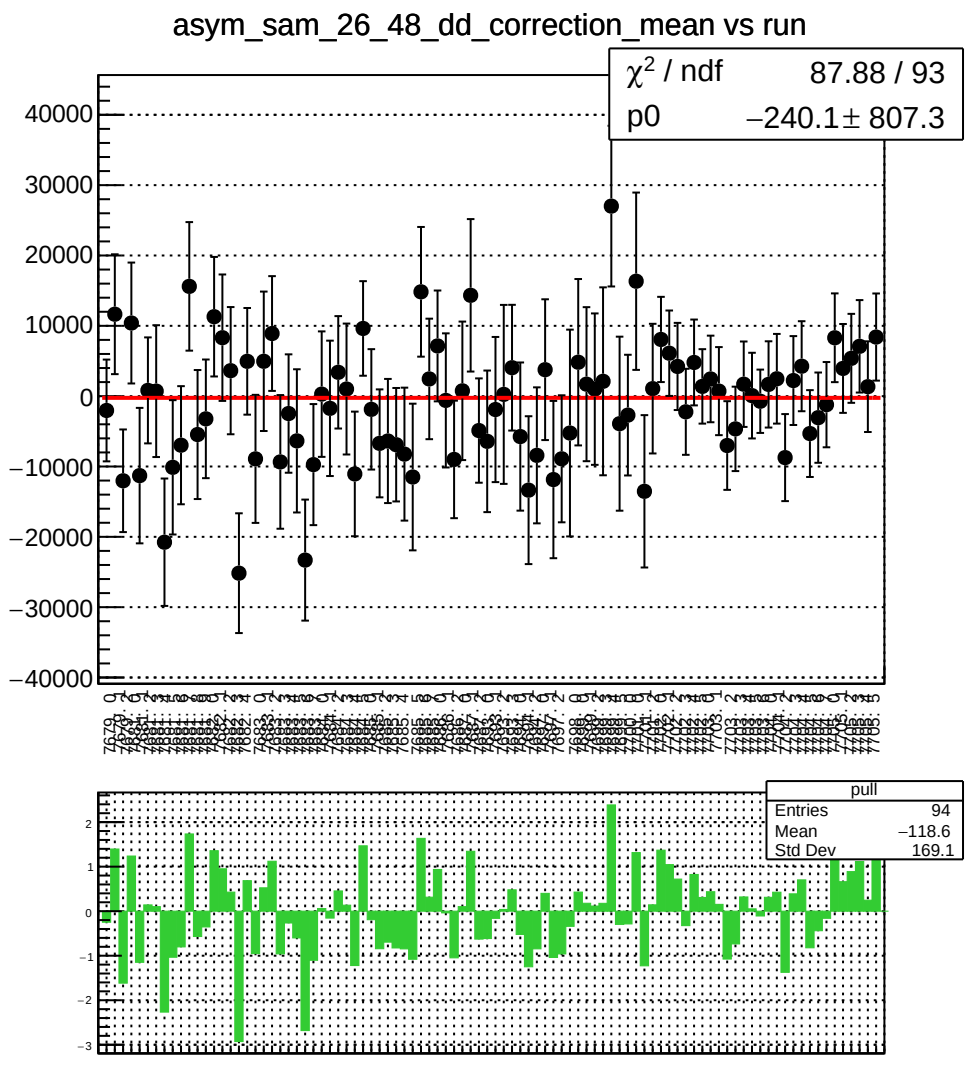

pull1D
Entries 94
Mean −0.01946
Std Dev 0.9407
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

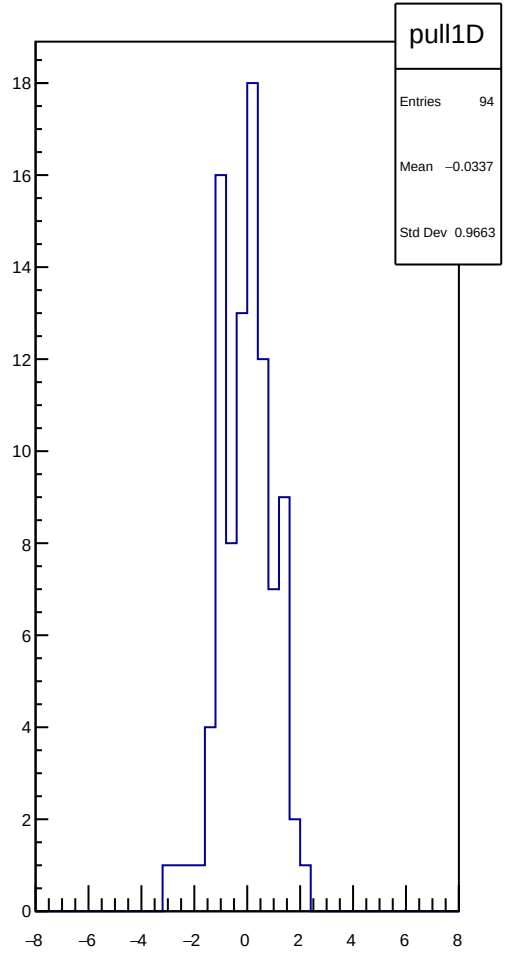

asym_sam_24_68_dd_rms vs run
χ² / ndf 1.22e+04 / 93
p0 3074 ± 2.309
3400
3200
3000
2800
2600

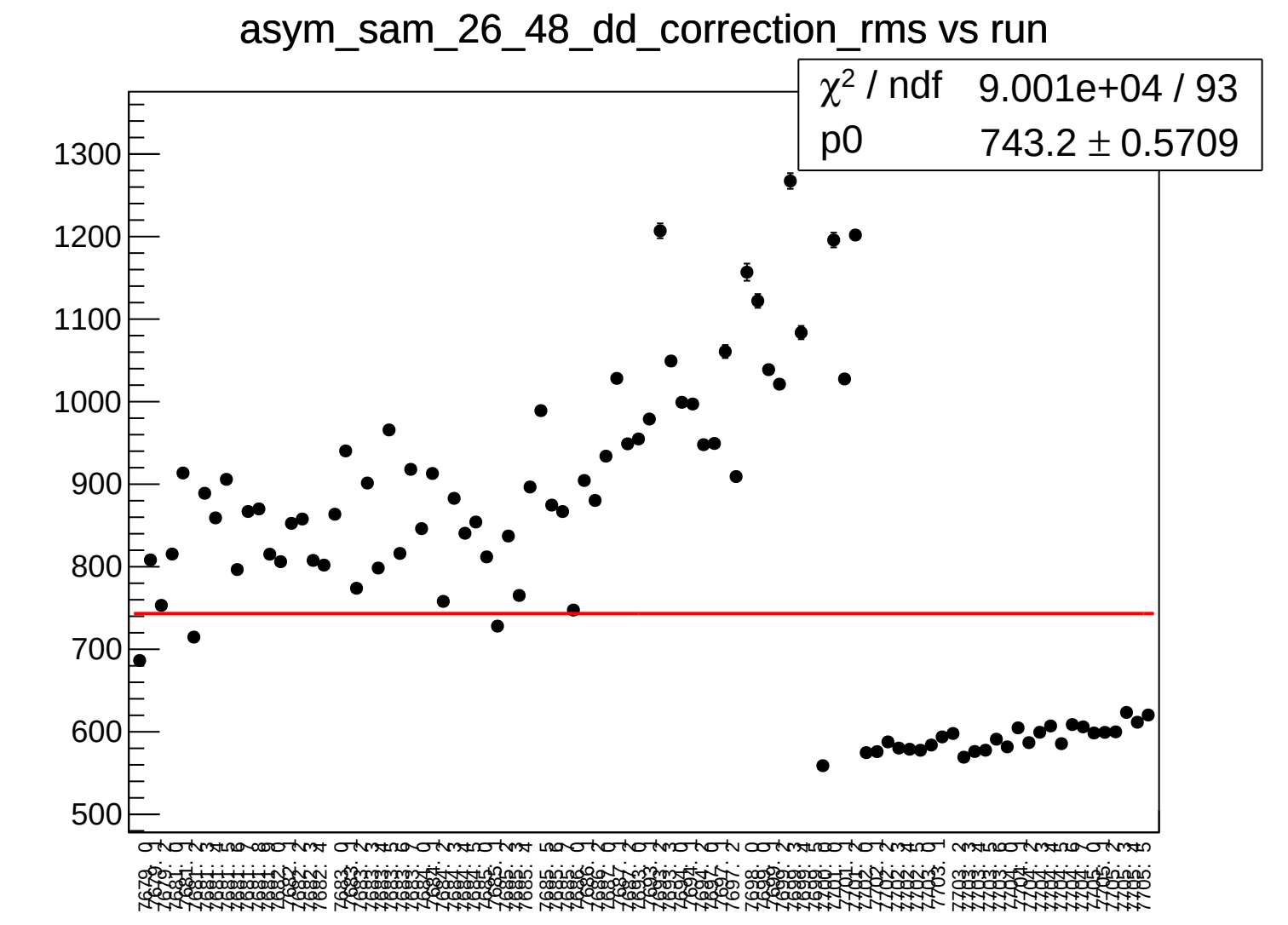

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 76.99 / 93
p0 −58.08 ± 93.51
pull
Entries 94
Mean 1433
Std Dev 1387

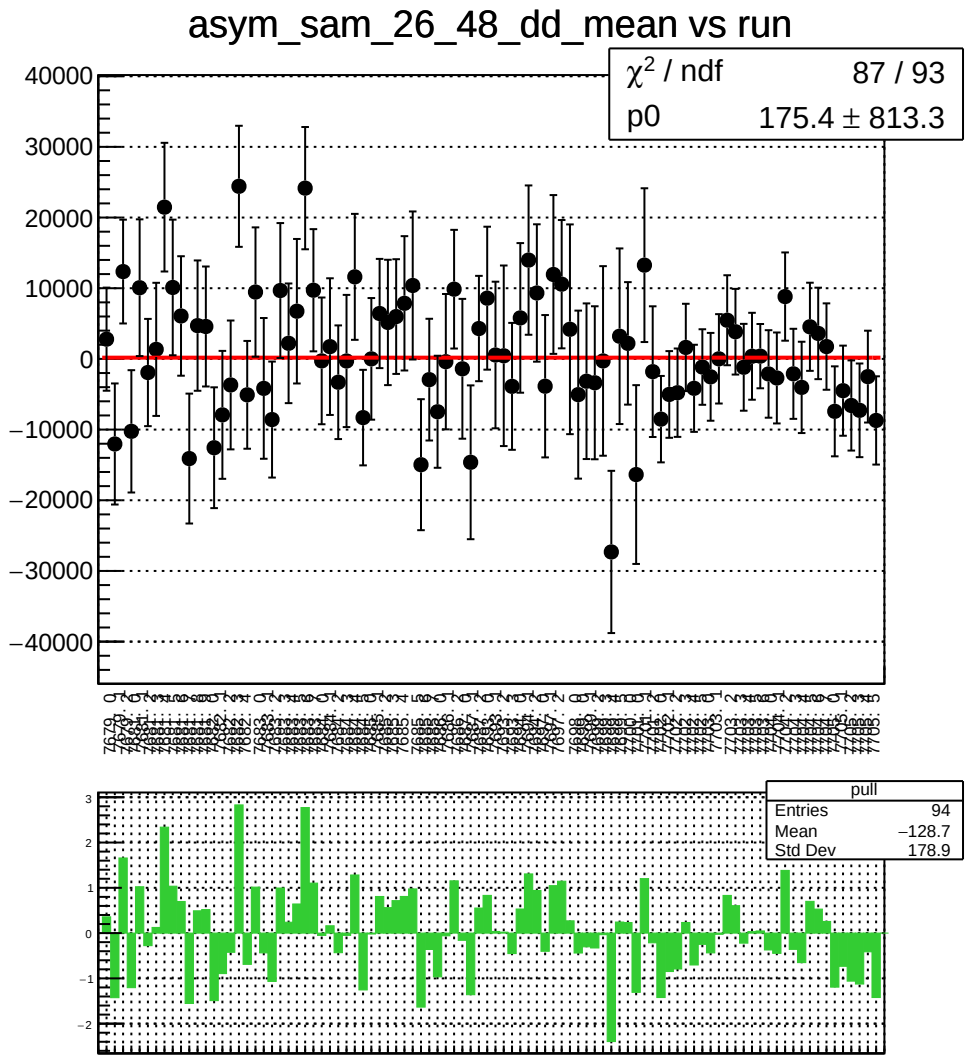

pull1D
Entries 94
Mean −0.002164
Std Dev 0.905

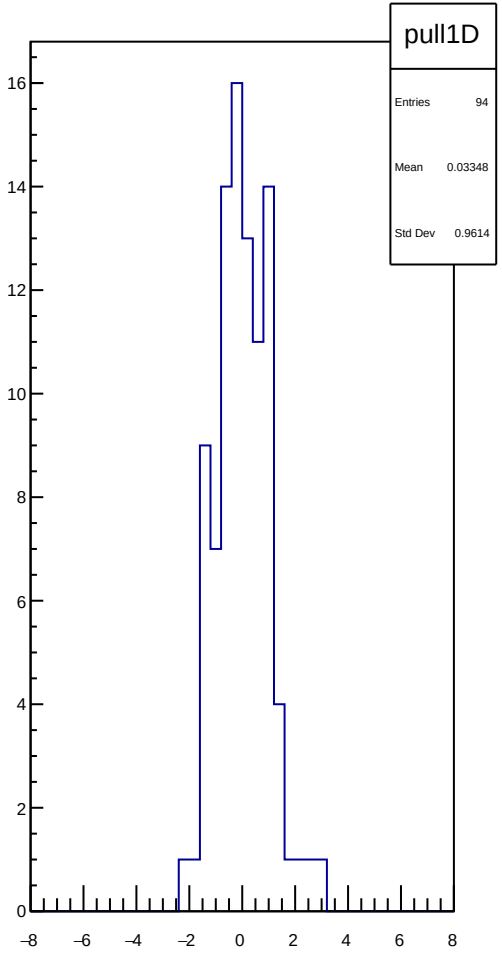

reg_asym_sam_26_48_dd_rms vs run
χ² / ndf 1.748e+04 / 93
p0 87.91 ± 0.06612
160
140
120
100
80

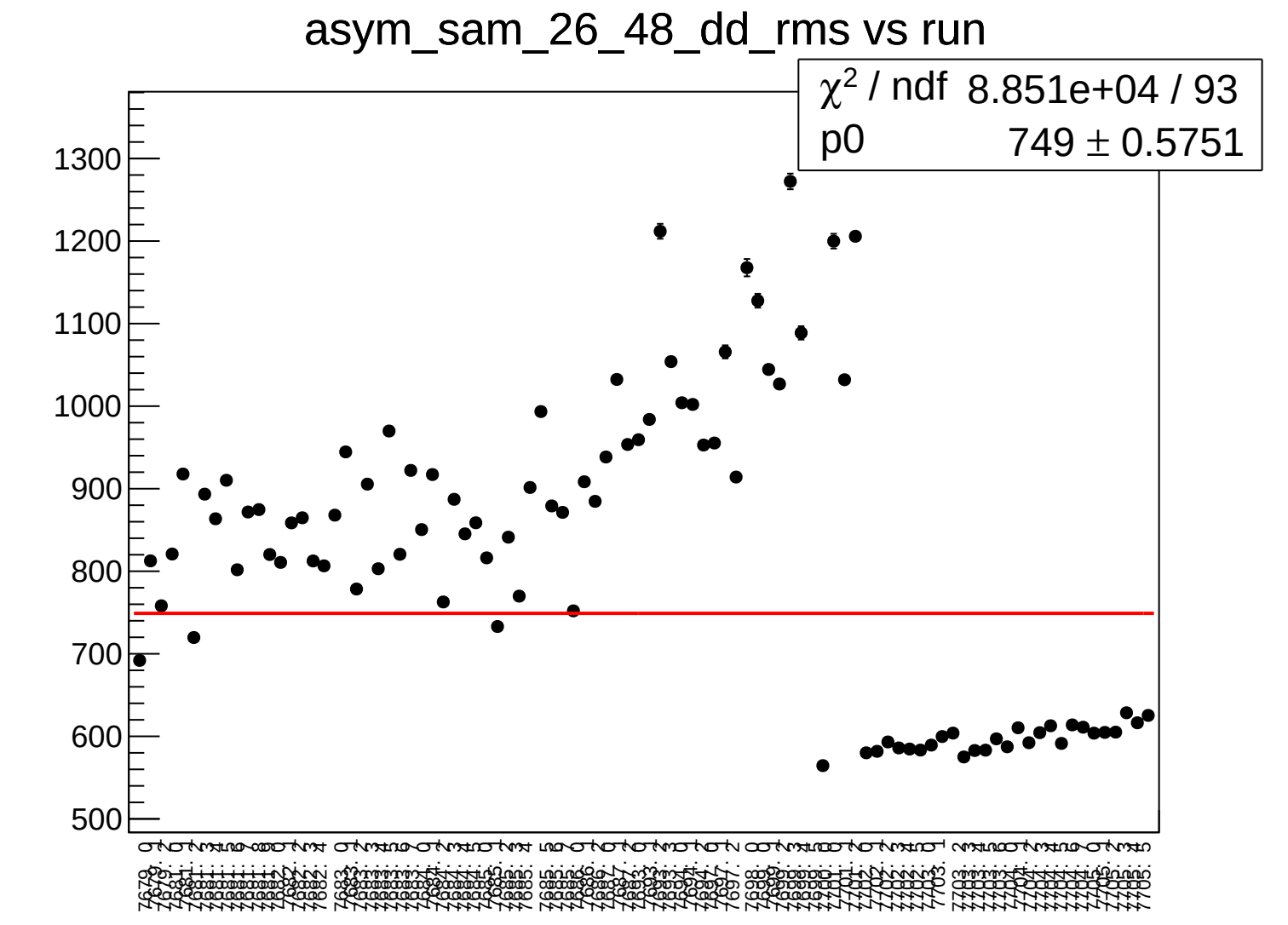

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 87.88 / 93
p0 −240.1 ± 807.3
pull
Entries 94
Mean −118.6
Std Dev 169.1

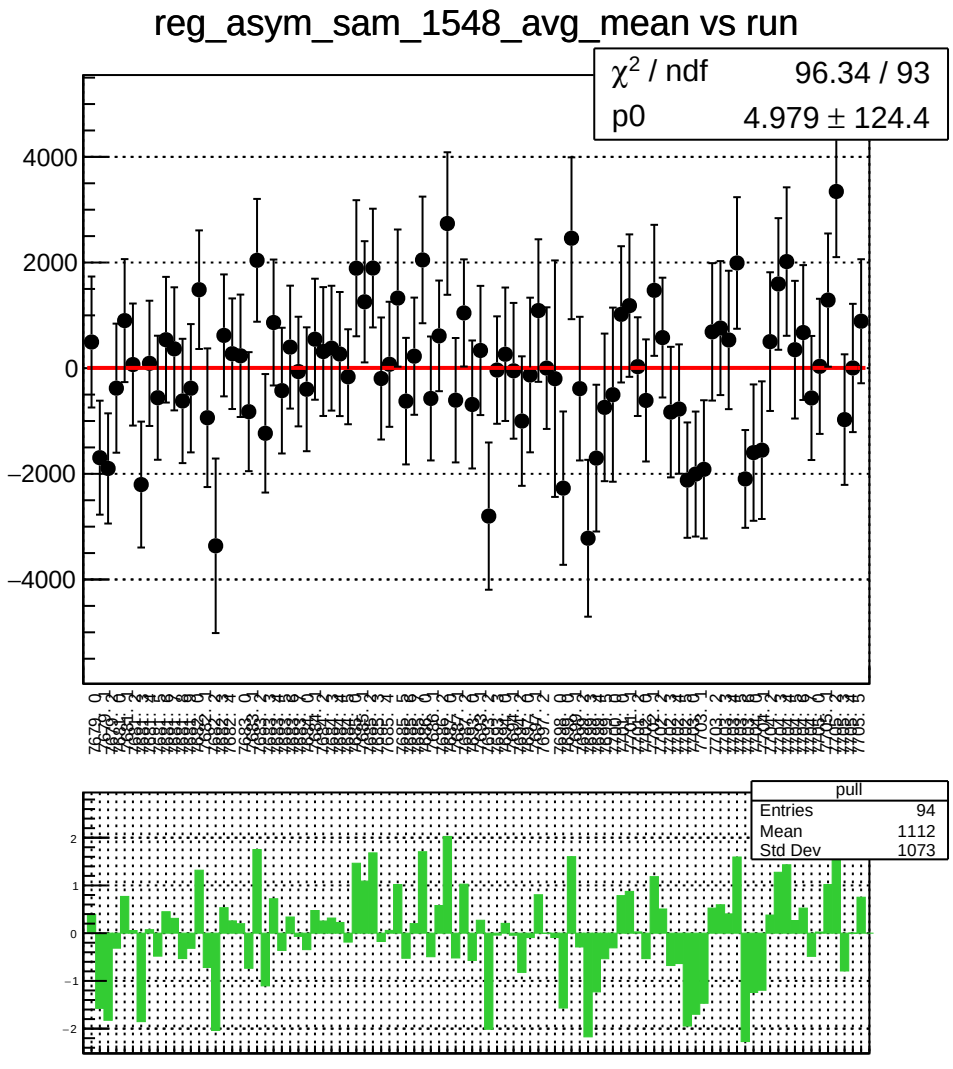

pull1D
Entries 94
Mean −0.0337
Std Dev 0.9663

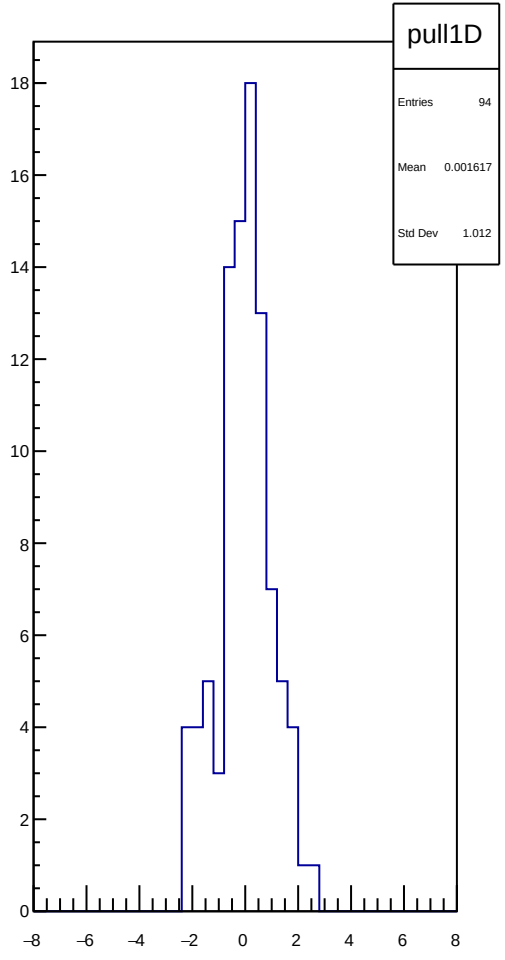

asym_sam_26_48_dd_correction_rms vs run
χ^2 / ndf 9.001e+04 / 93
p0 743.2 ± 0.5709
1300
1200
1100
1000
900
800
700
600
500

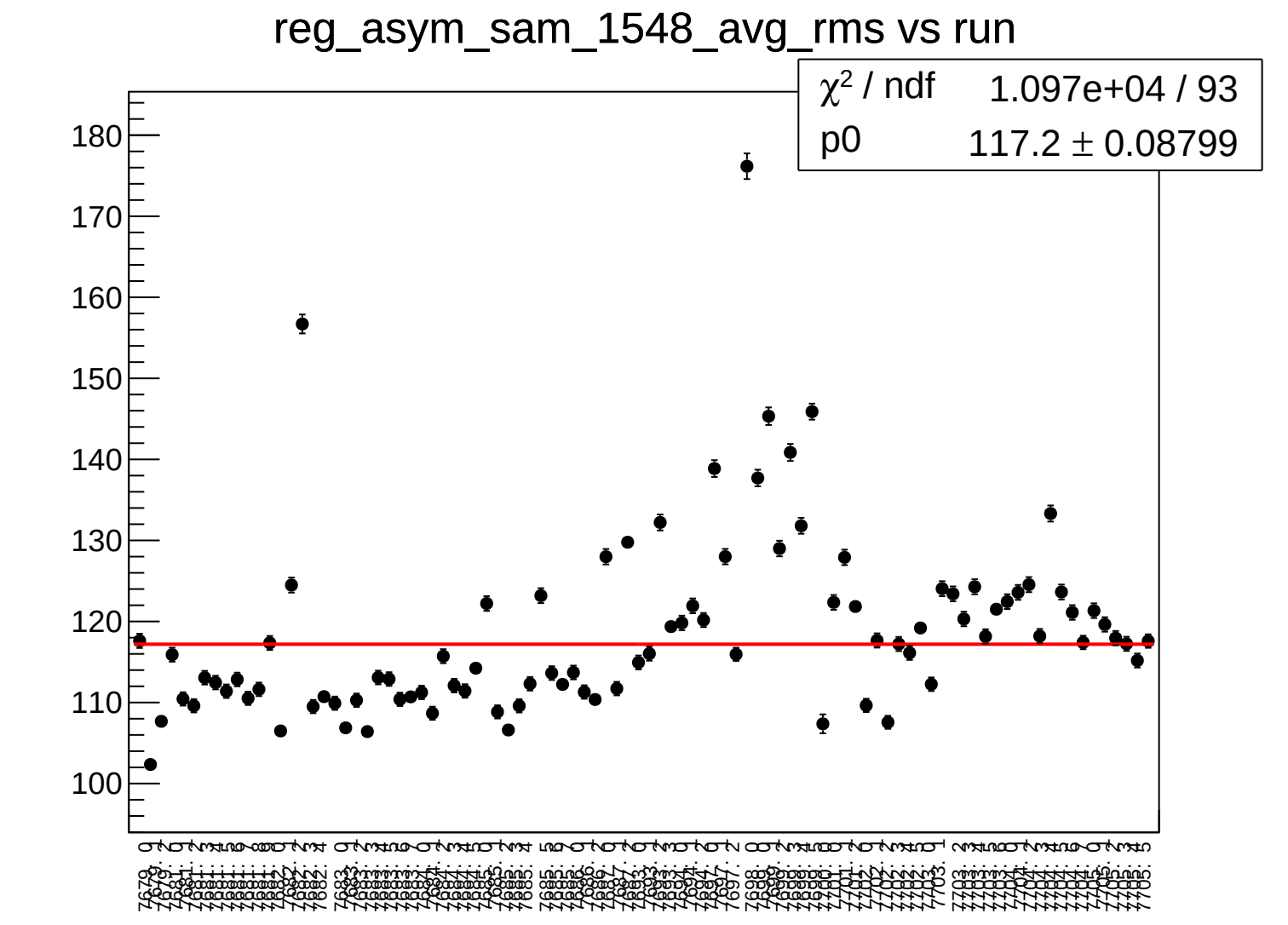

asym_sam_26_48_dd_mean vs run
χ² / ndf 87 / 93
p0 175.4 ± 813.3
pull
Entries 94
Mean −128.7
Std Dev 178.9

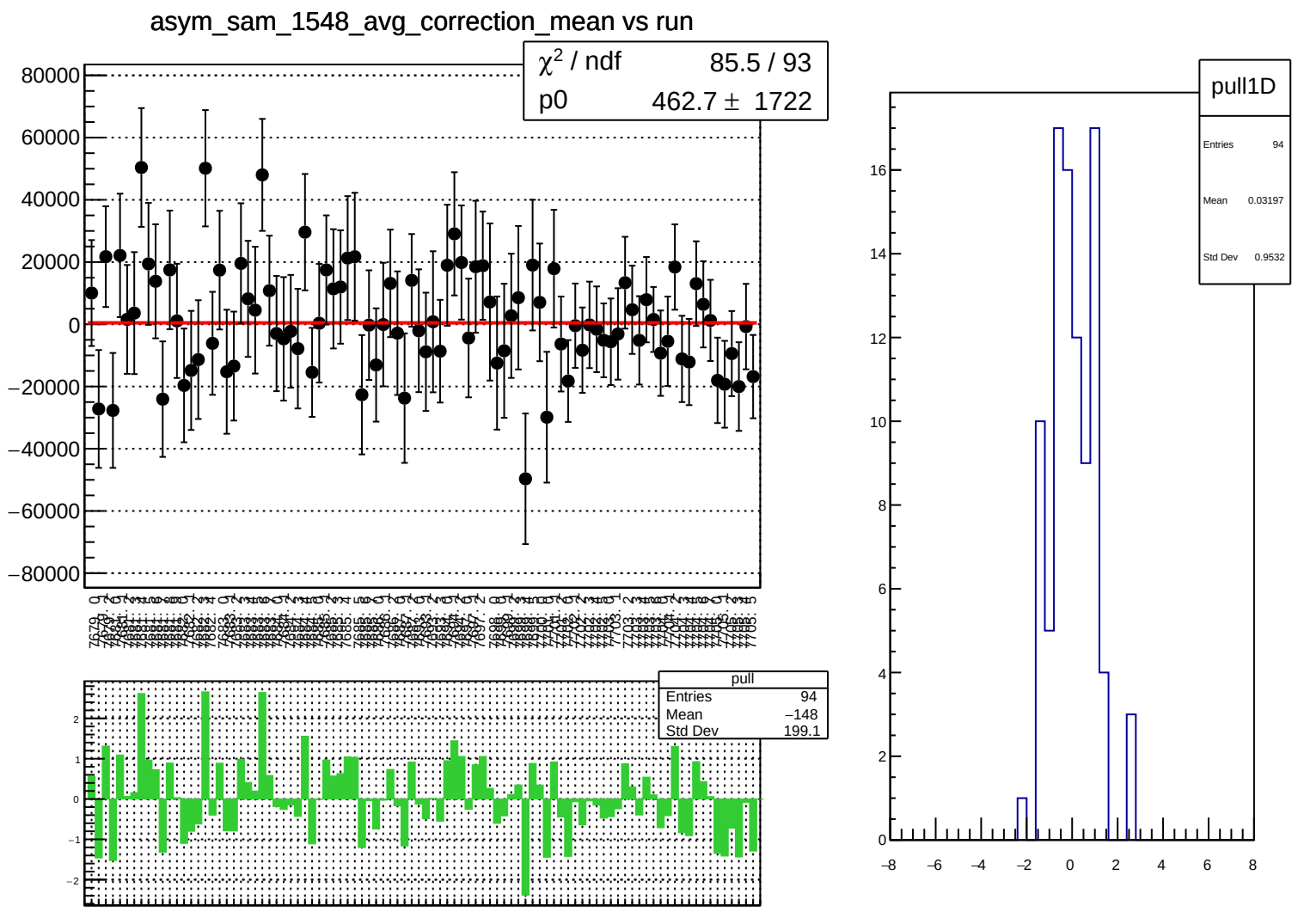

pull1D
Entries 94
Mean 0.03348
Std Dev 0.9614

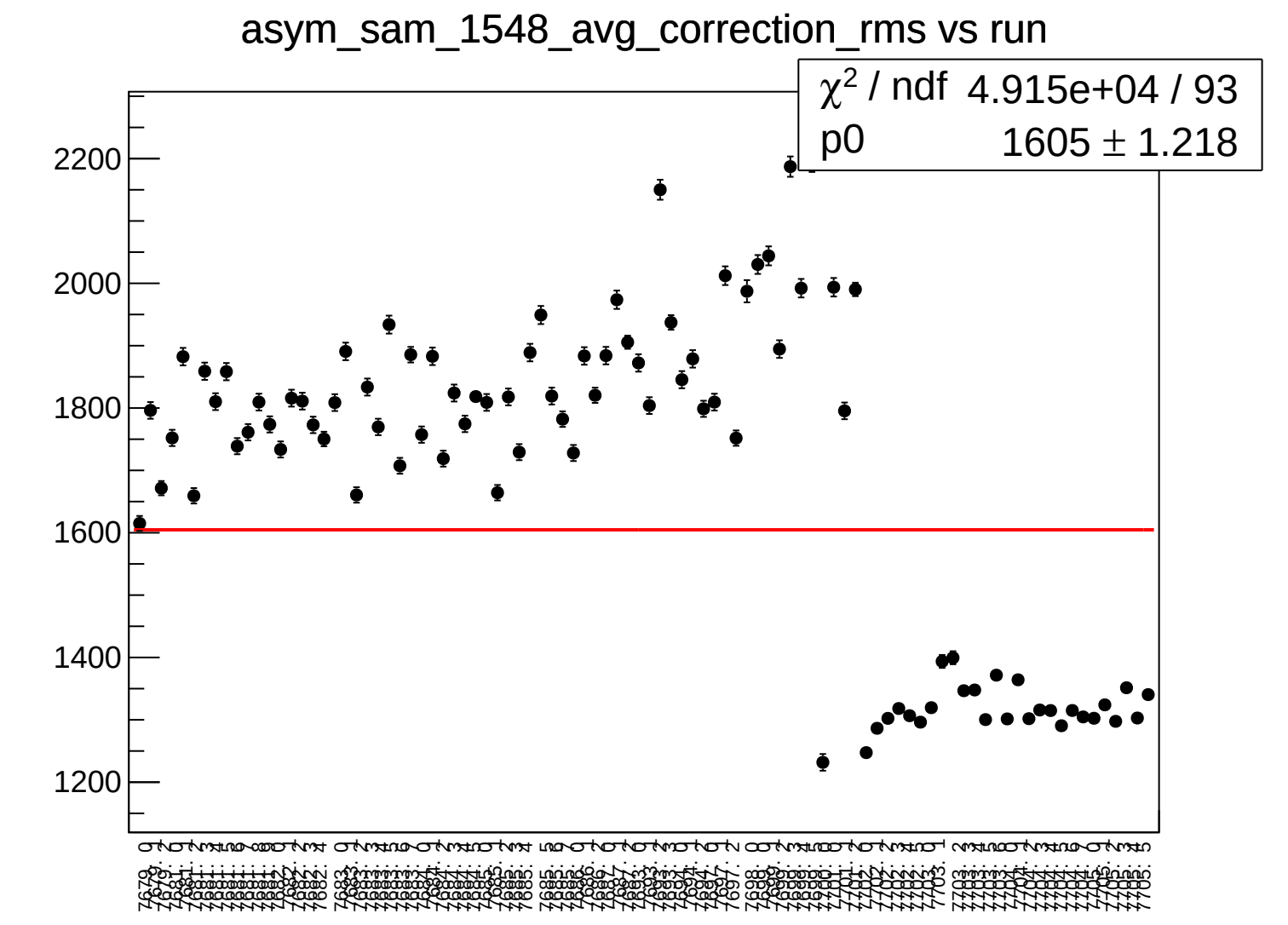

asym_sam_26_48_dd_rms vs run
χ^2 / ndf 8.851e+04 / 93
p0 749 ± 0.5751
1300
1200
1100
1000
900
800
700
600
500

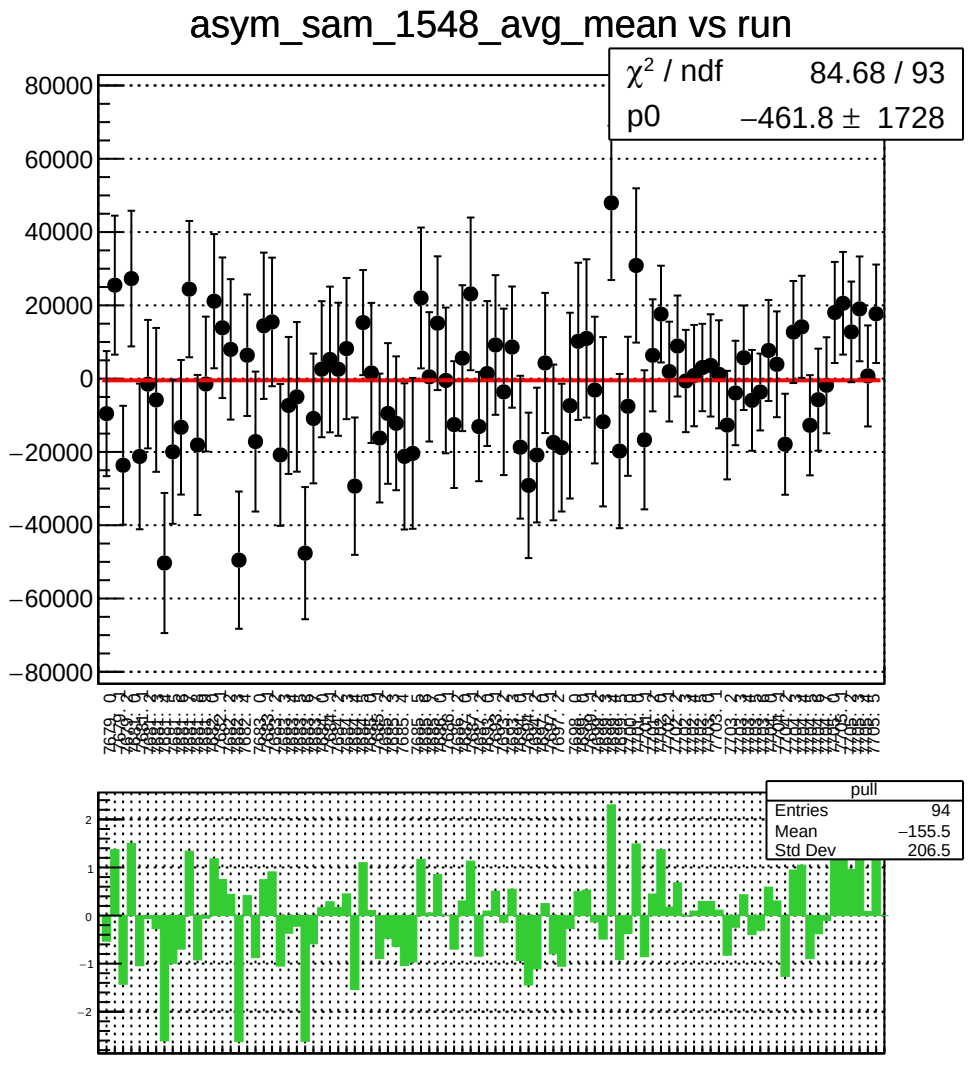

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 96.34 / 93
p0 4.979 ± 124.4
4000
2000
0
−2000
−4000
pull
Entries 94
Mean 1112
Std Dev 1073
2
1
0
−1
−2

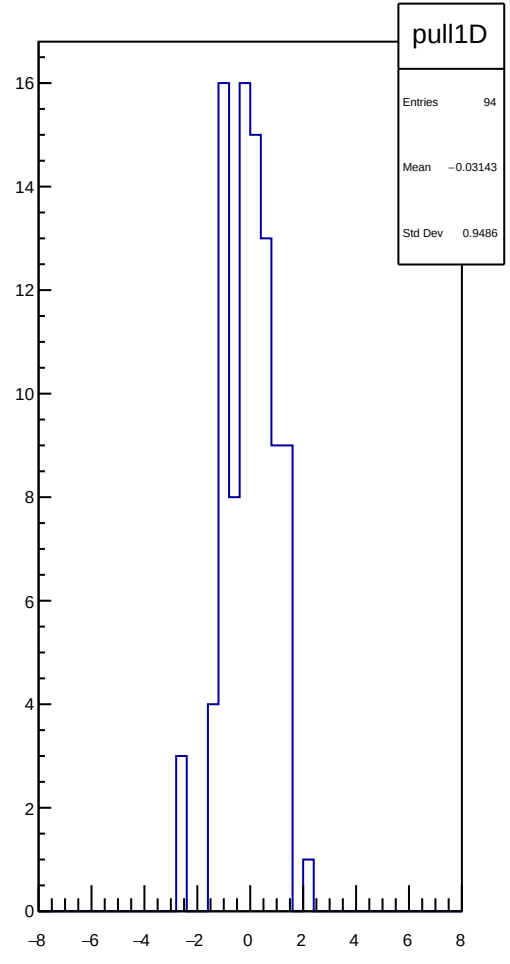

pull1D
Entries 94
Mean 0.001617
Std Dev 1.012
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

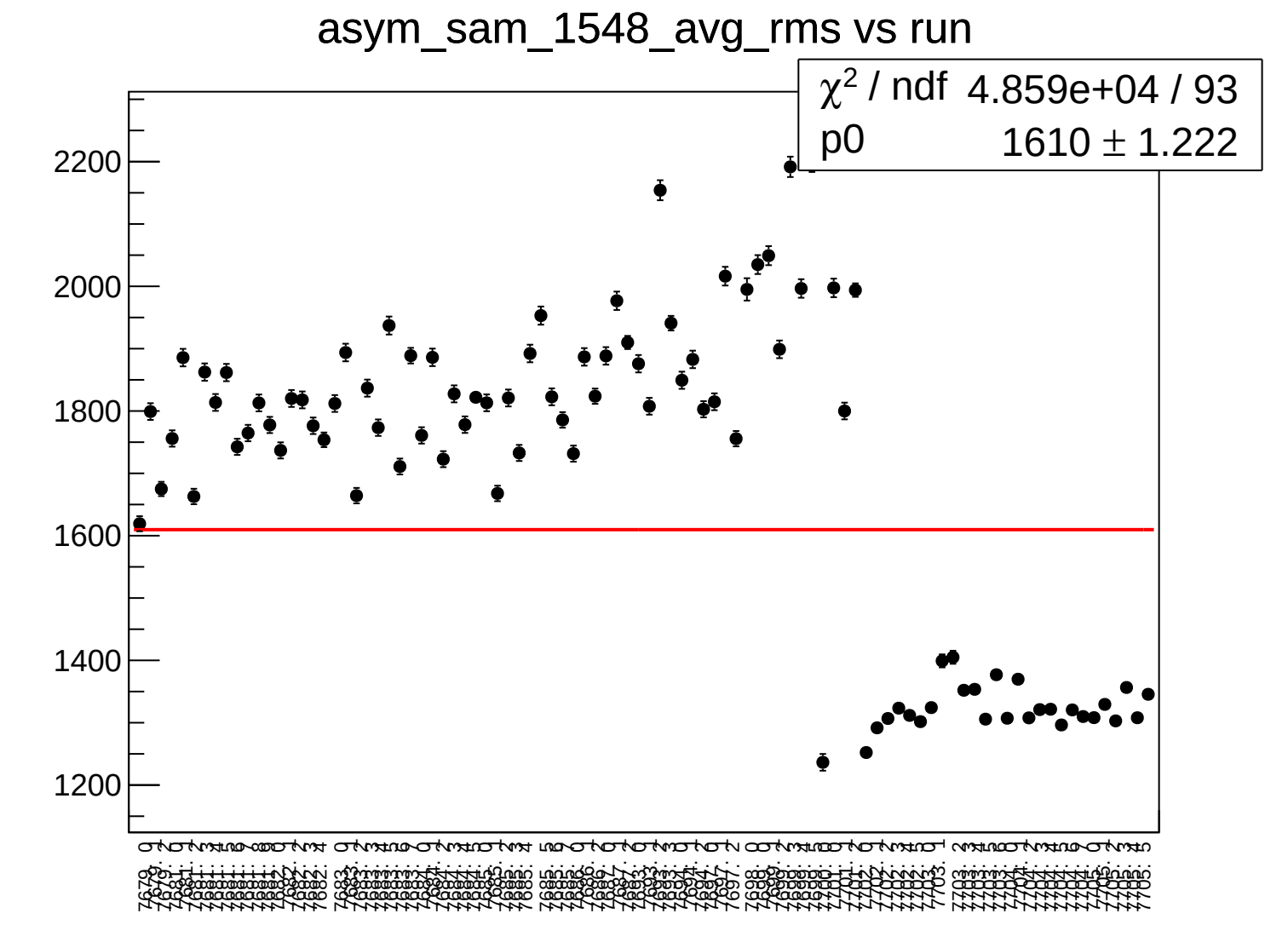

reg_asym_sam_1548_avg_rms vs run
χ^2 / ndf 1.097e+04 / 93
p0 117.2 ± 0.08799
180
170
160
150
140
130
120
110
100

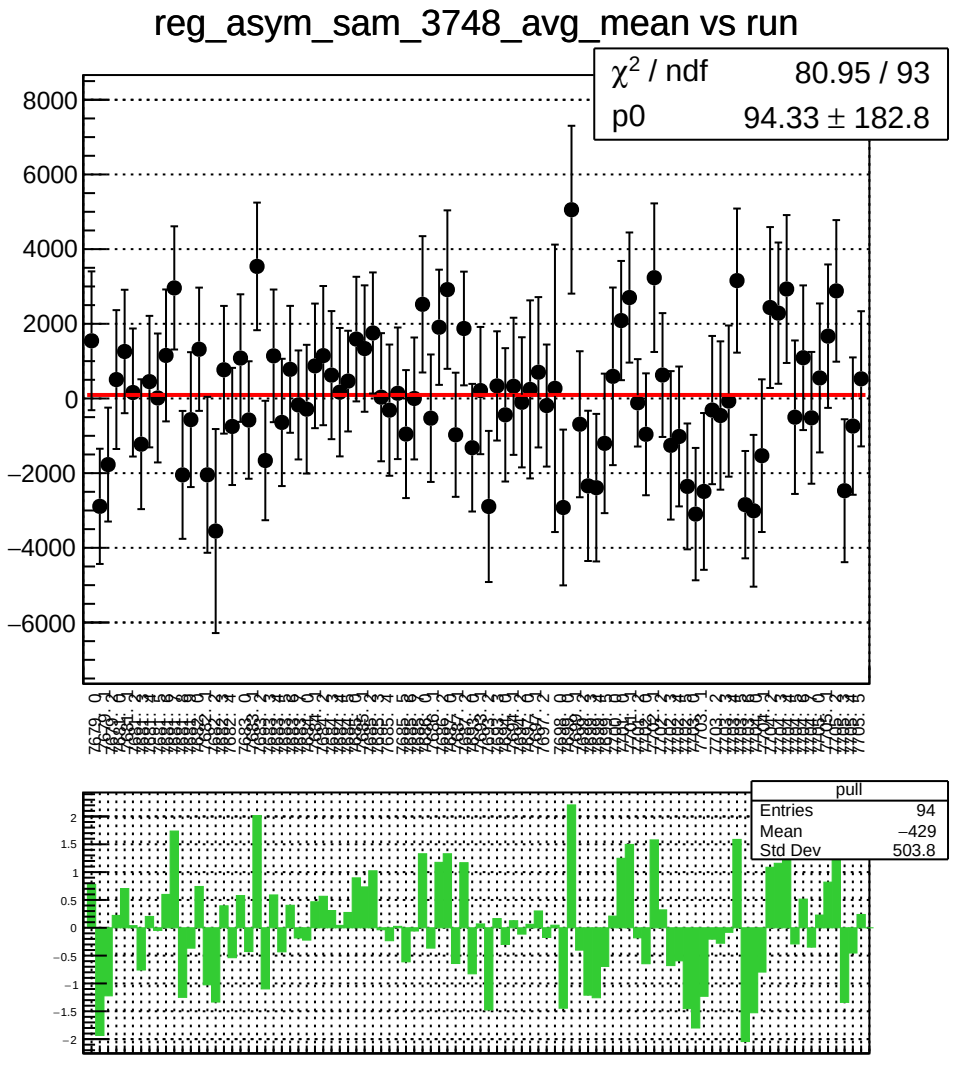

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 85.5 / 93
p0 462.7 ± 1722
pull
Entries 94
Mean −148
Std Dev 199.1
pull1D
Entries 94
Mean 0.03197
Std Dev 0.9532

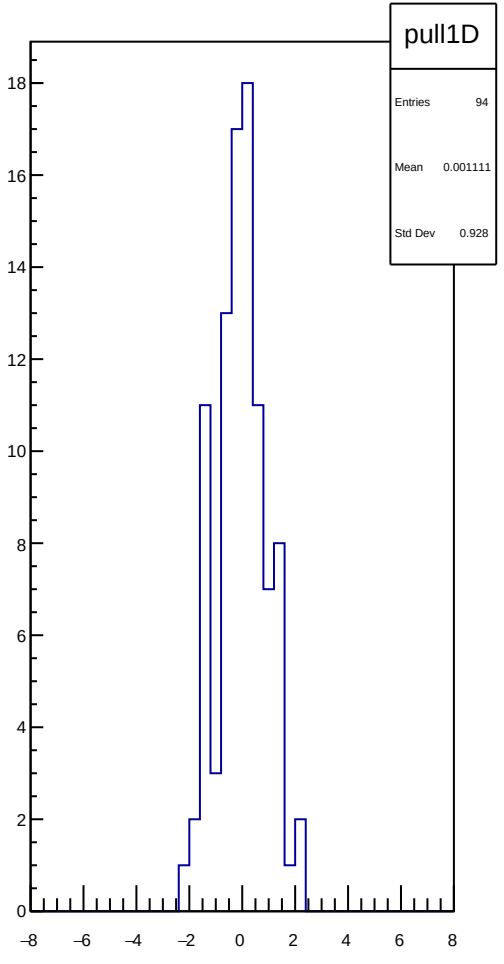

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 4.915e+04 / 93
p0 1605 ± 1.218
2200
2000
1800
1600
1400
1200

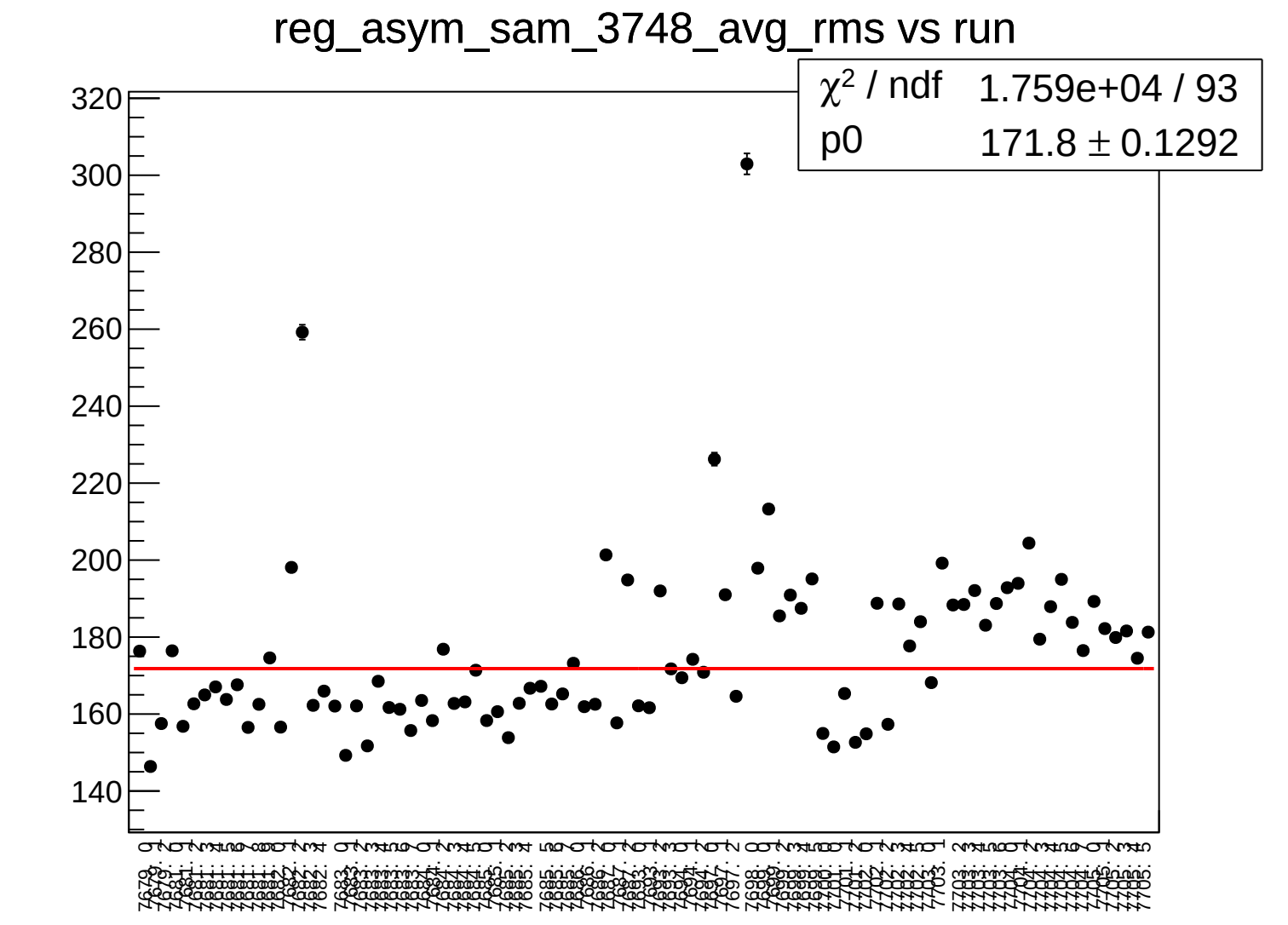

asym_sam_1548_avg_mean vs run
χ² / ndf 84.68 / 93
p0 −461.8 ± 1728
pull
Entries 94
Mean −155.5
Std Dev 206.5

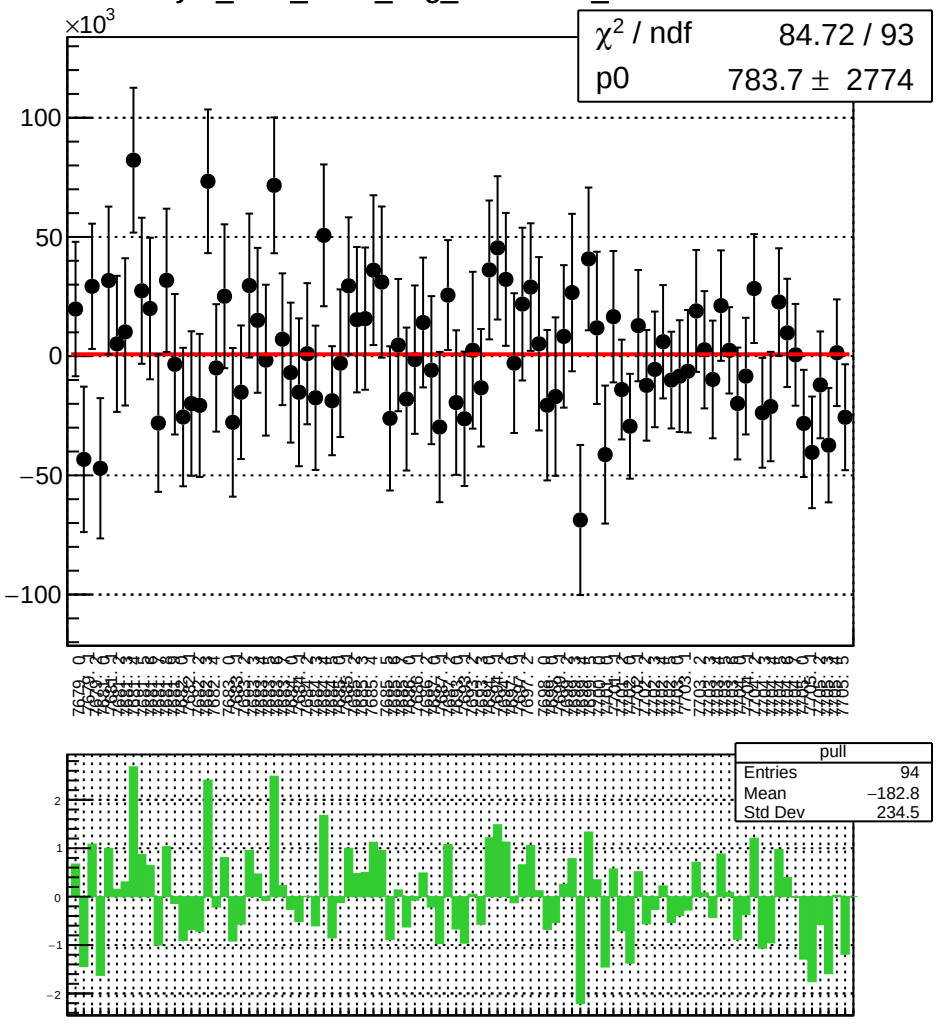

pull1D
Entries 94
Mean −0.03143
Std Dev 0.9486

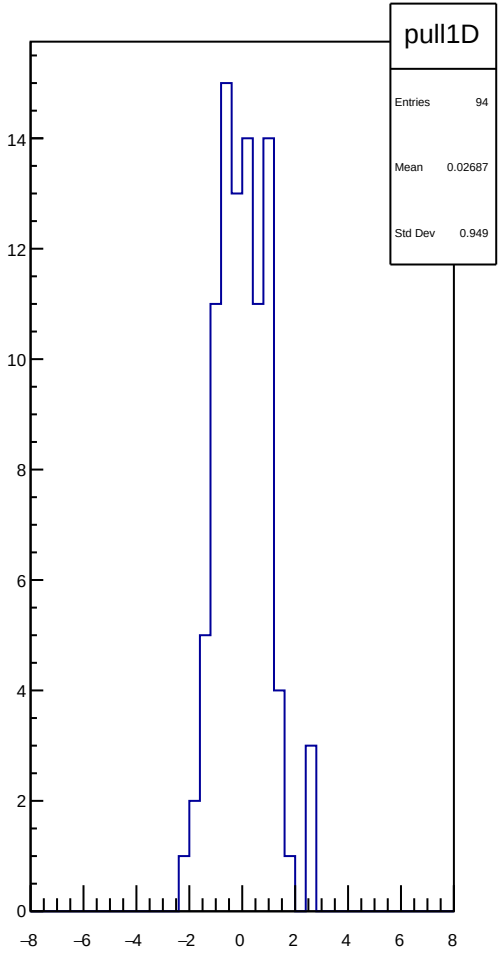

asym_sam_1548_avg_rms vs run
χ² / ndf 4.859e+04 / 93
p0 1610 ± 1.222
2200
2000
1800
1600
1400
1200

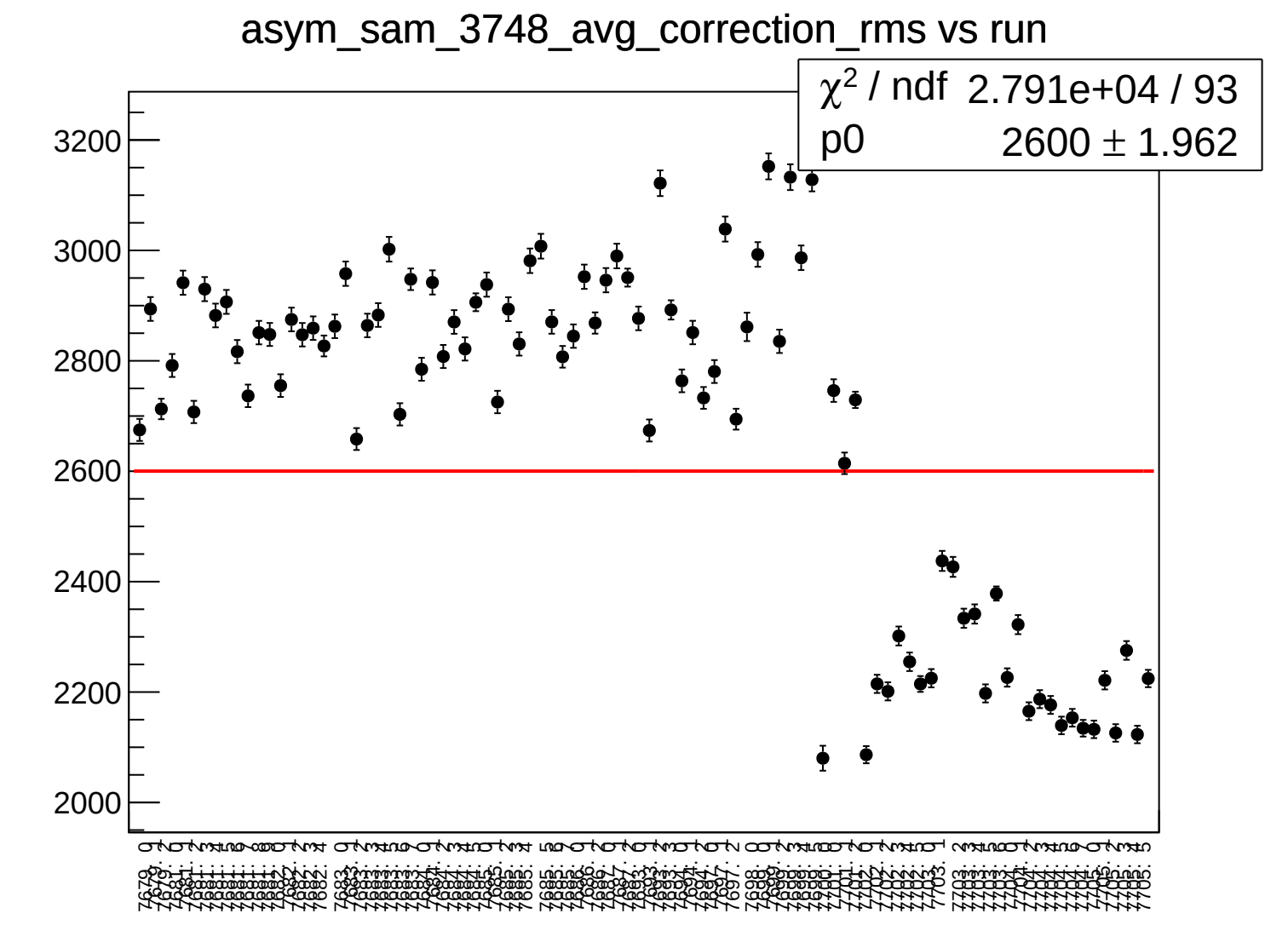

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 80.95 / 93
p0 94.33 ± 182.8
pull
Entries 94
Mean −429
Std Dev 503.8

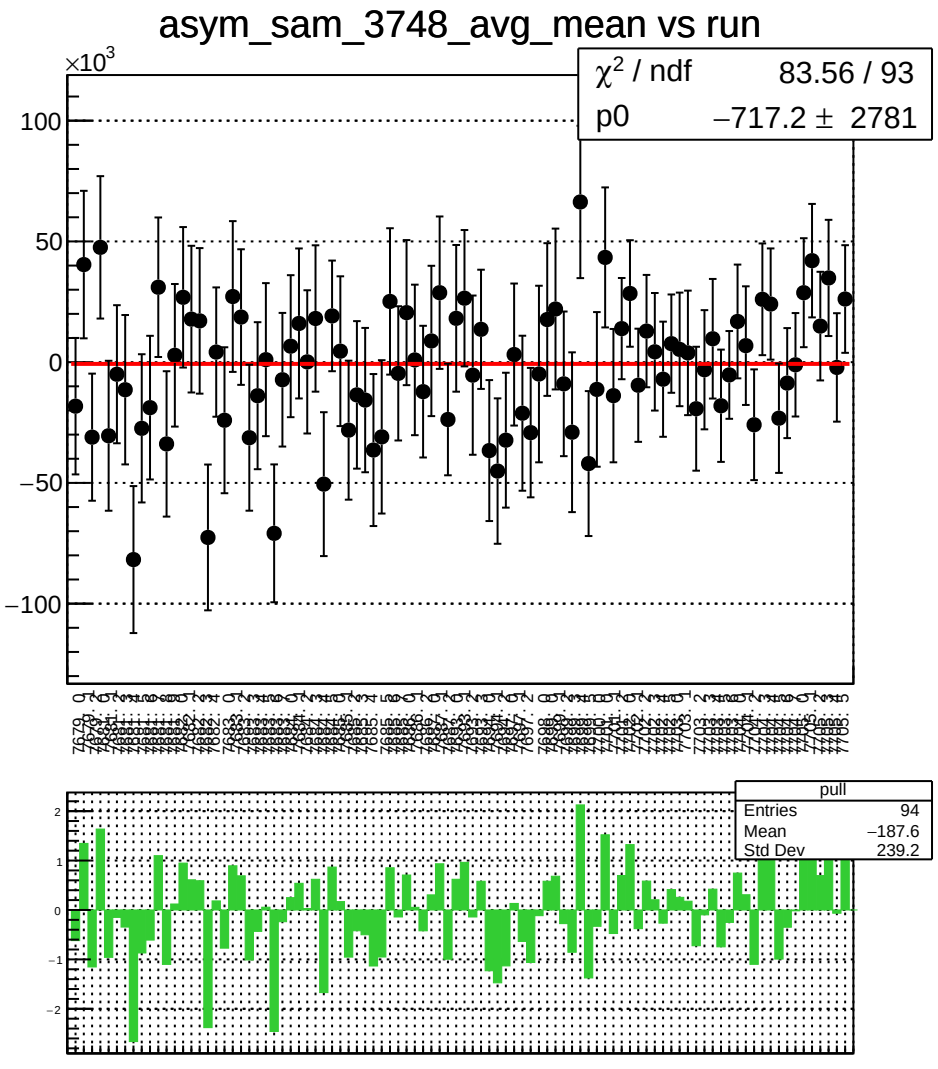

pull1D
Entries 94
Mean 0.001111
Std Dev 0.928

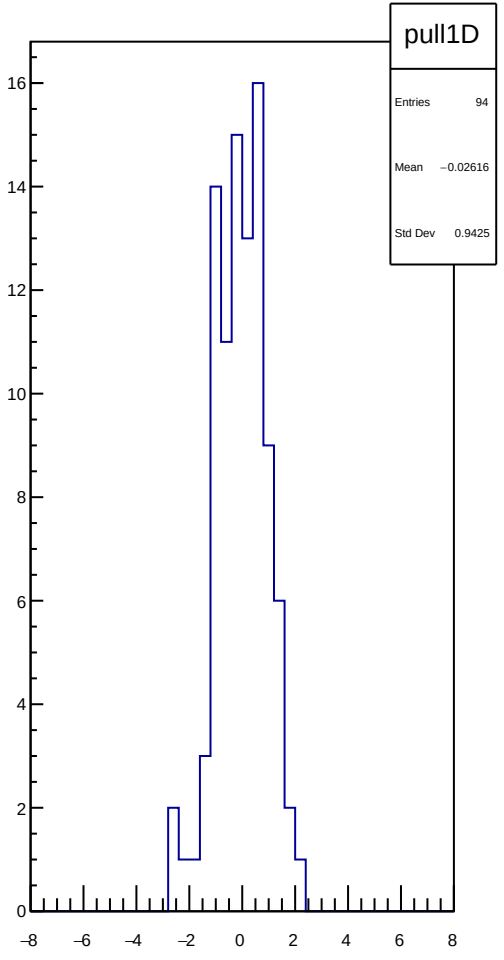

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 1.759e+04 / 93
p0 171.8 ± 0.1292
320
300
280
260
240
220
200
180
160
140

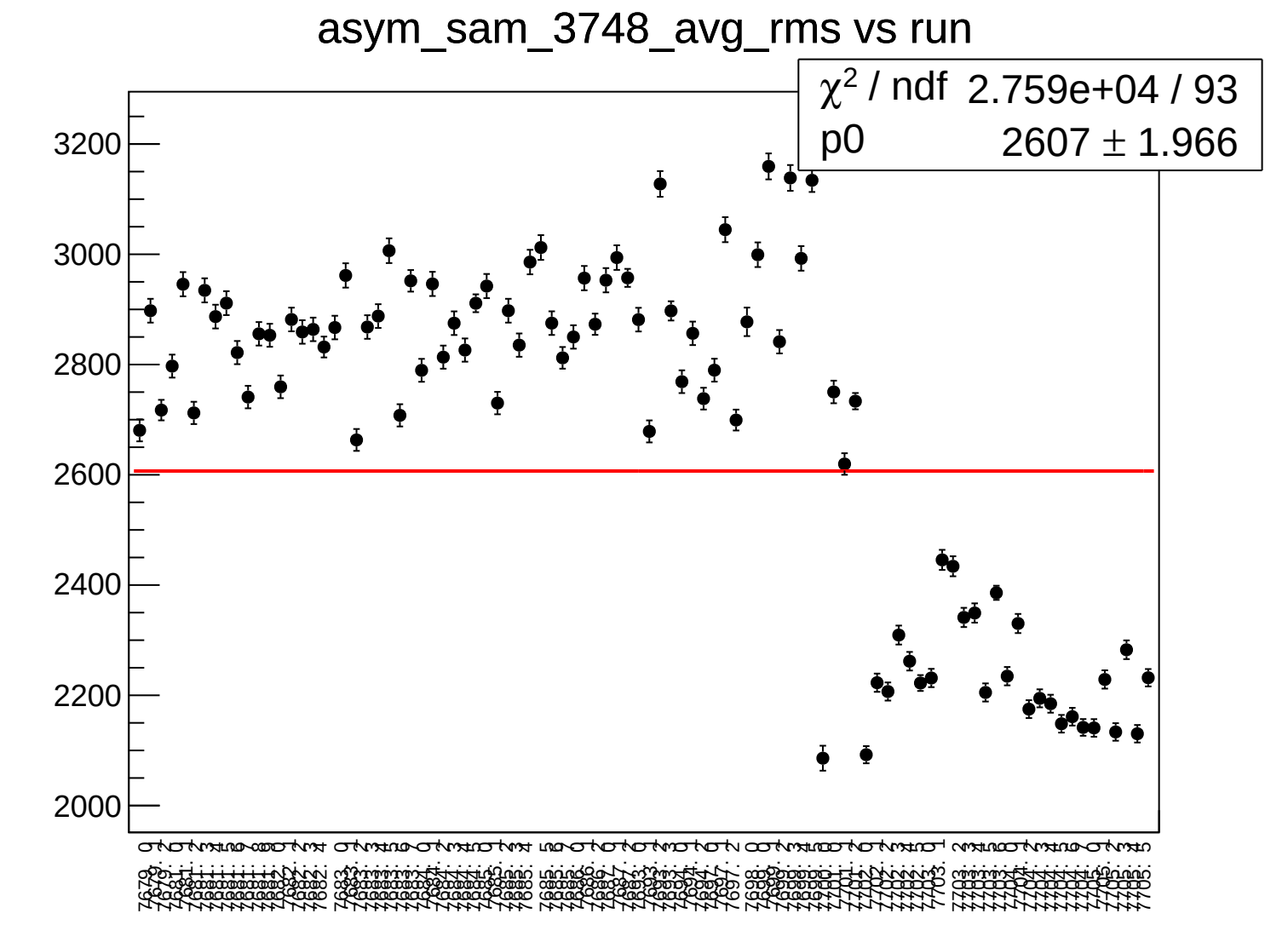

asym_sam_3748_avg_correction_mean vs run
×10^3
χ^2 / ndf 84.72 / 93
p0 783.7 ± 2774
100
50
0
−50
−100
pull
Entries 94
Mean −182.8
Std Dev 234.5
2
1
0
−1
−2

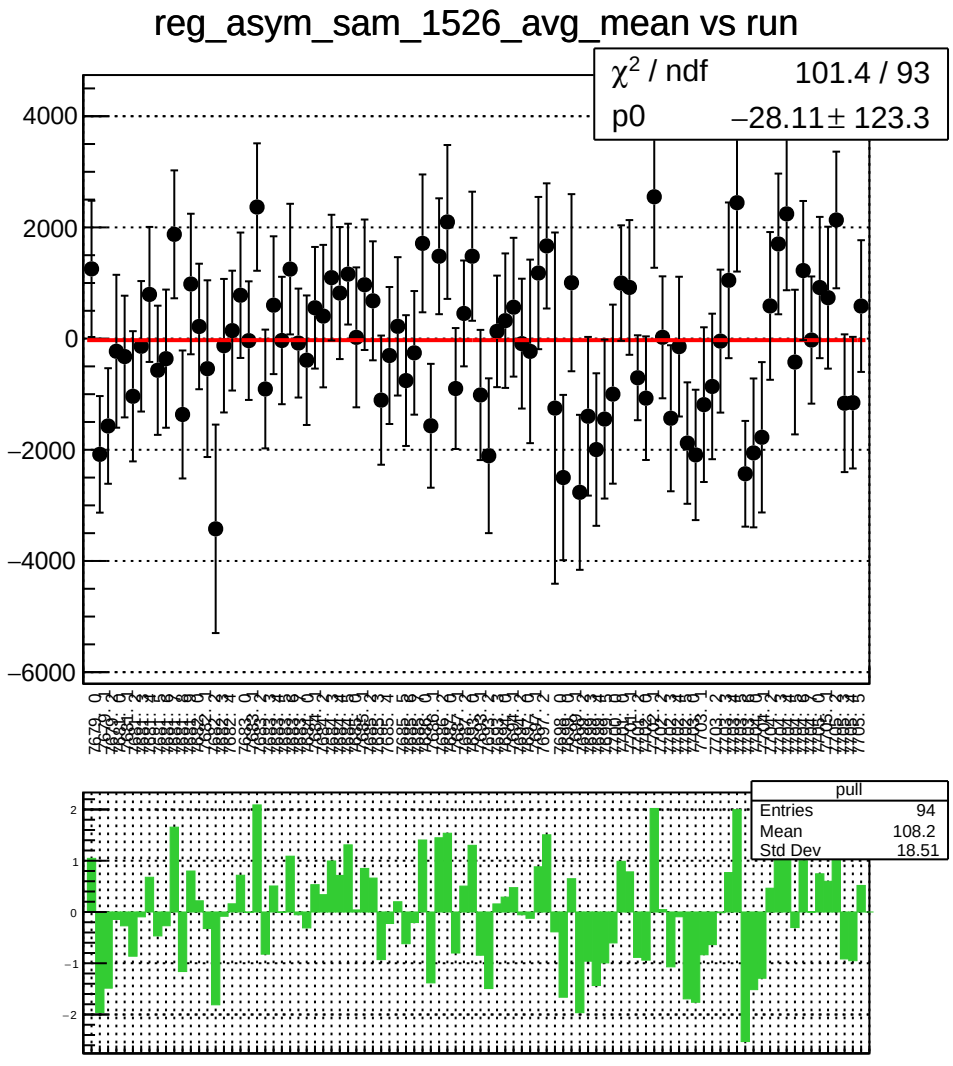

pull1D
Entries 94
Mean 0.02687
Std Dev 0.949
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

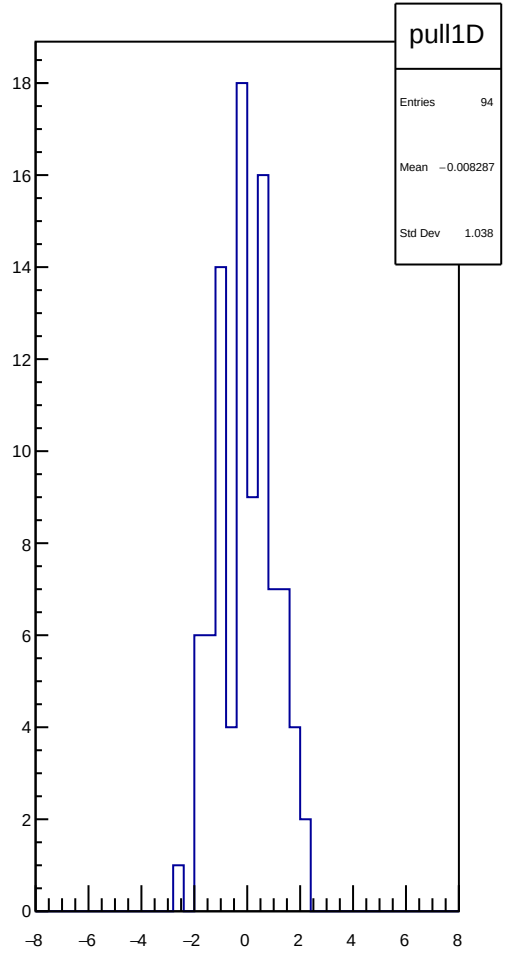

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 2.791e+04 / 93
p0 2600 ± 1.962
3200
3000
2800
2600
2400
2200
2000

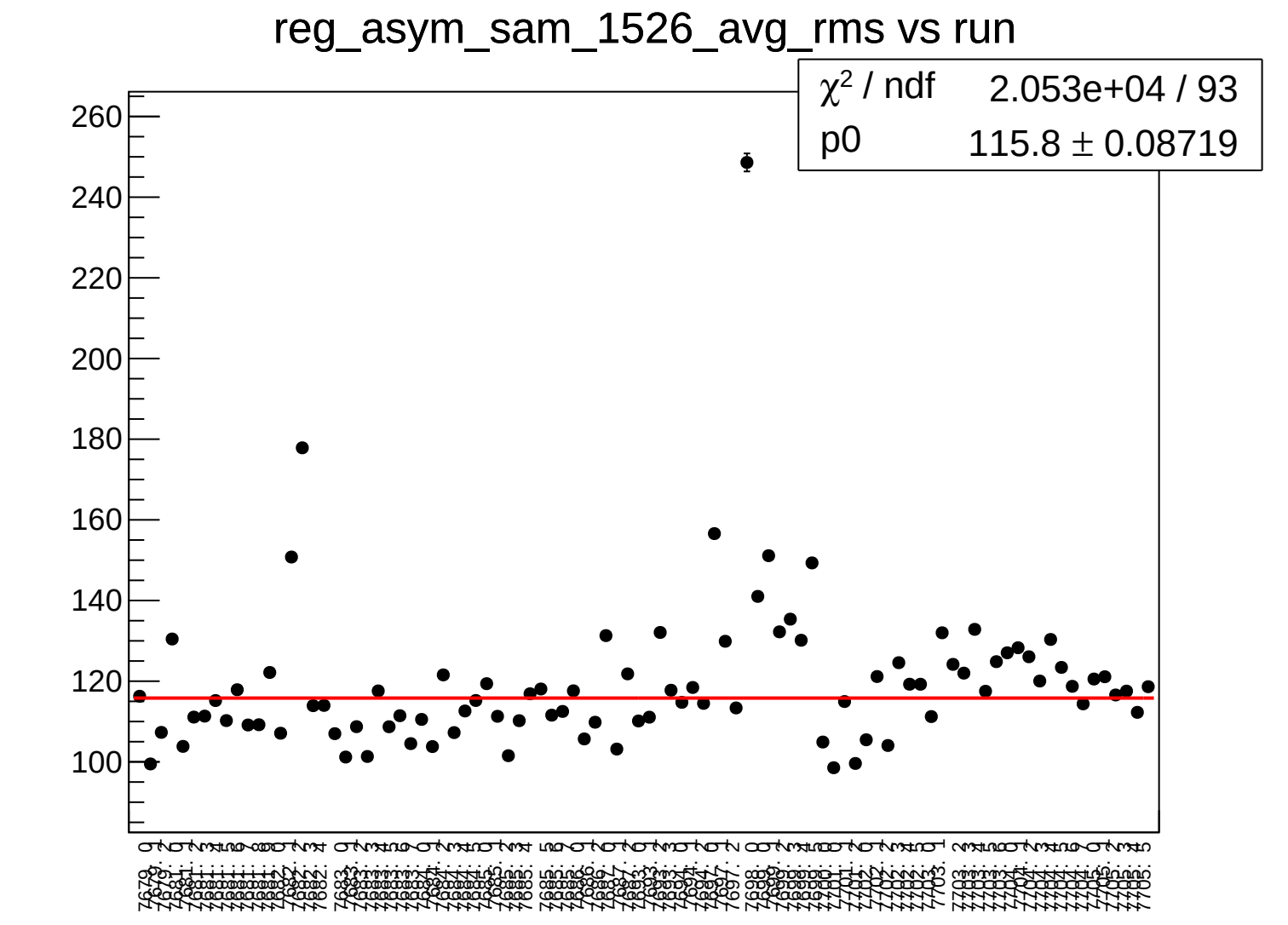

asym_sam_3748_avg_mean vs run
×10^3
χ² / ndf 83.56 / 93
p0 −717.2 ± 2781
100
50
0
−50
−100
pull
Entries 94
Mean −187.6
Std Dev 239.2
2
1
0
−1
−2

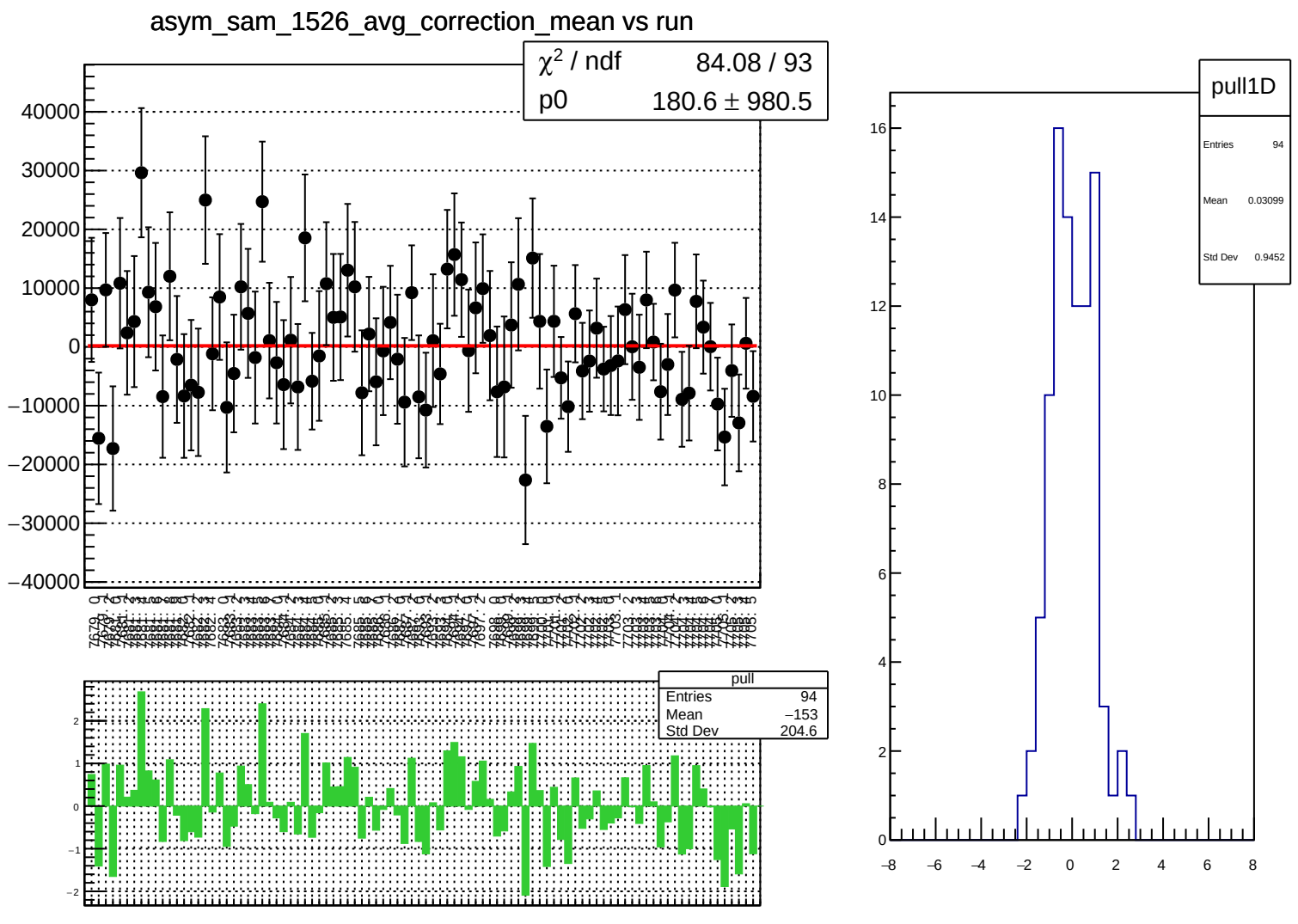

pull1D
Entries 94
Mean −0.02616
Std Dev 0.9425
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

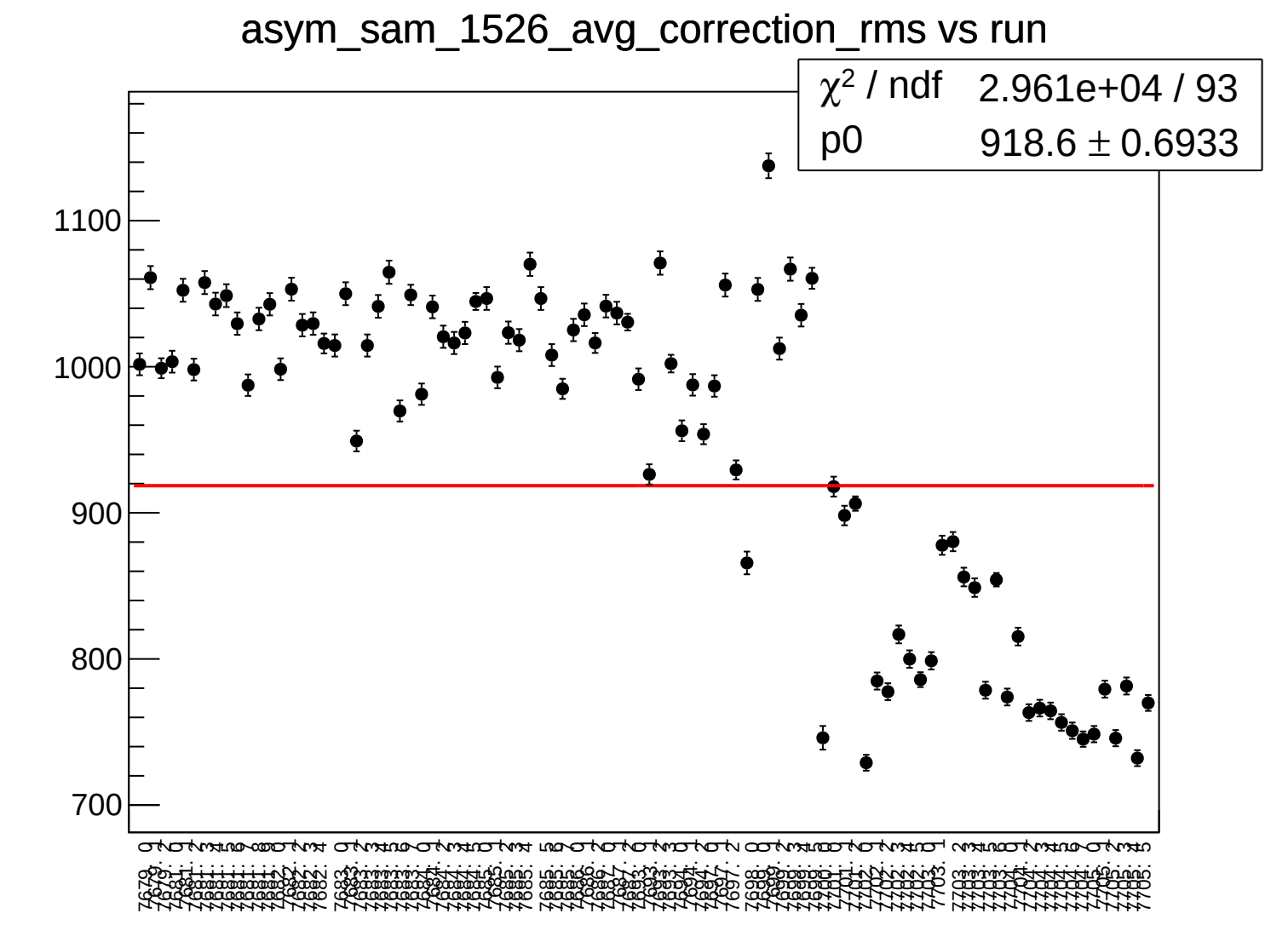

asym_sam_3748_avg_rms vs run
χ² / ndf 2.759e+04 / 93
p0 2607 ± 1.966
3200
3000
2800
2600
2400
2200
2000

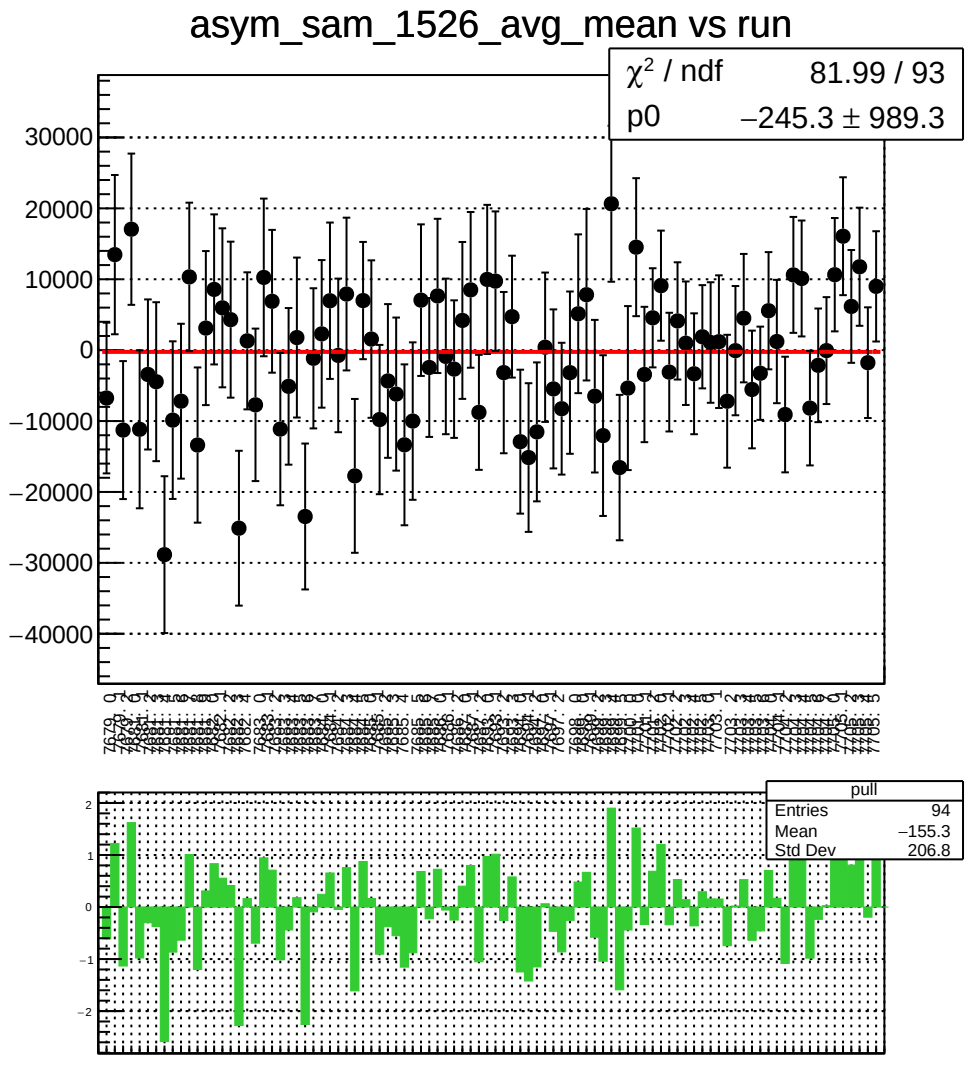

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 101.4 / 93
p0 −28.11± 123.3
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 108.2
Std Dev 18.51
2
1
0
−1
−2

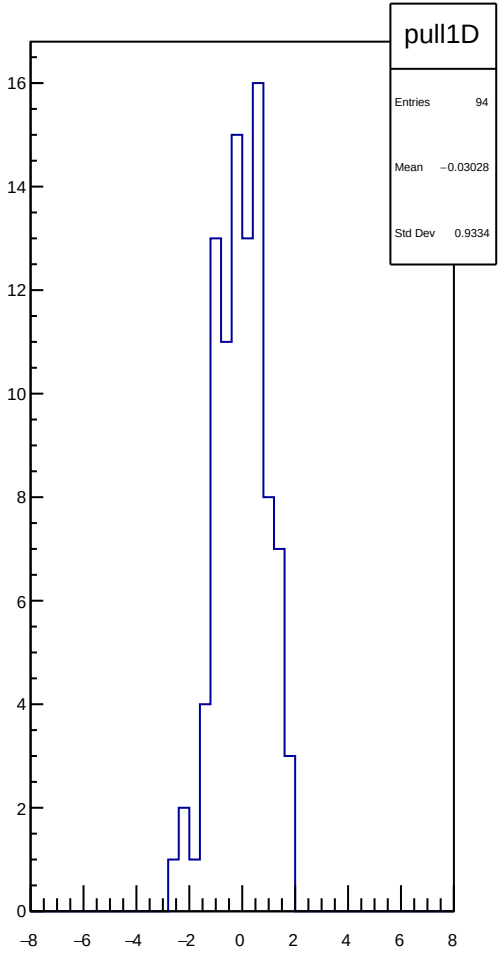

pull1D
Entries 94
Mean −0.008287
Std Dev 1.038
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

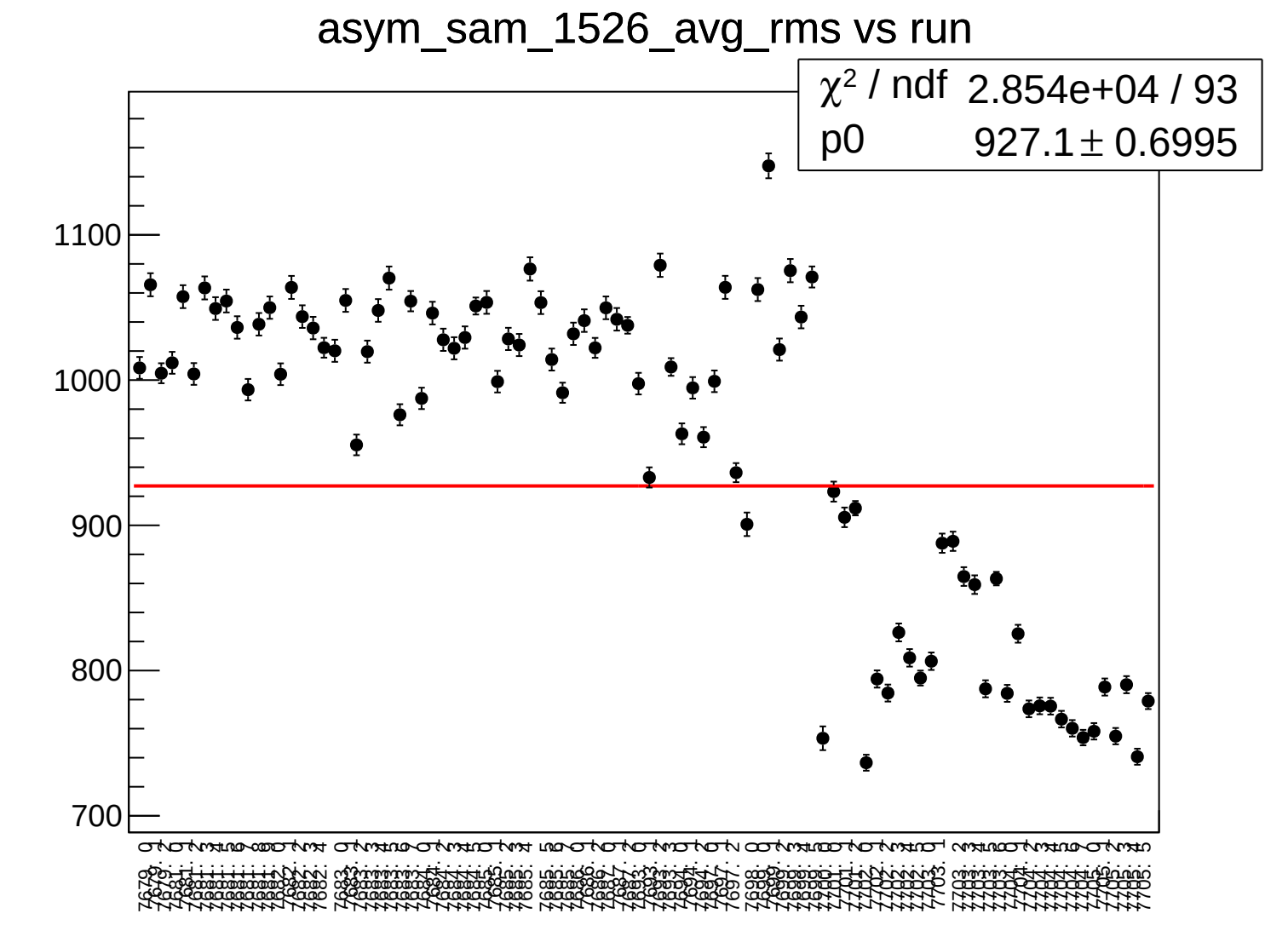

reg_asym_sam_1526_avg_rms vs run
χ² / ndf 2.053e+04 / 93
p0 115.8 ± 0.08719
260
240
220
200
180
160
140
120
100

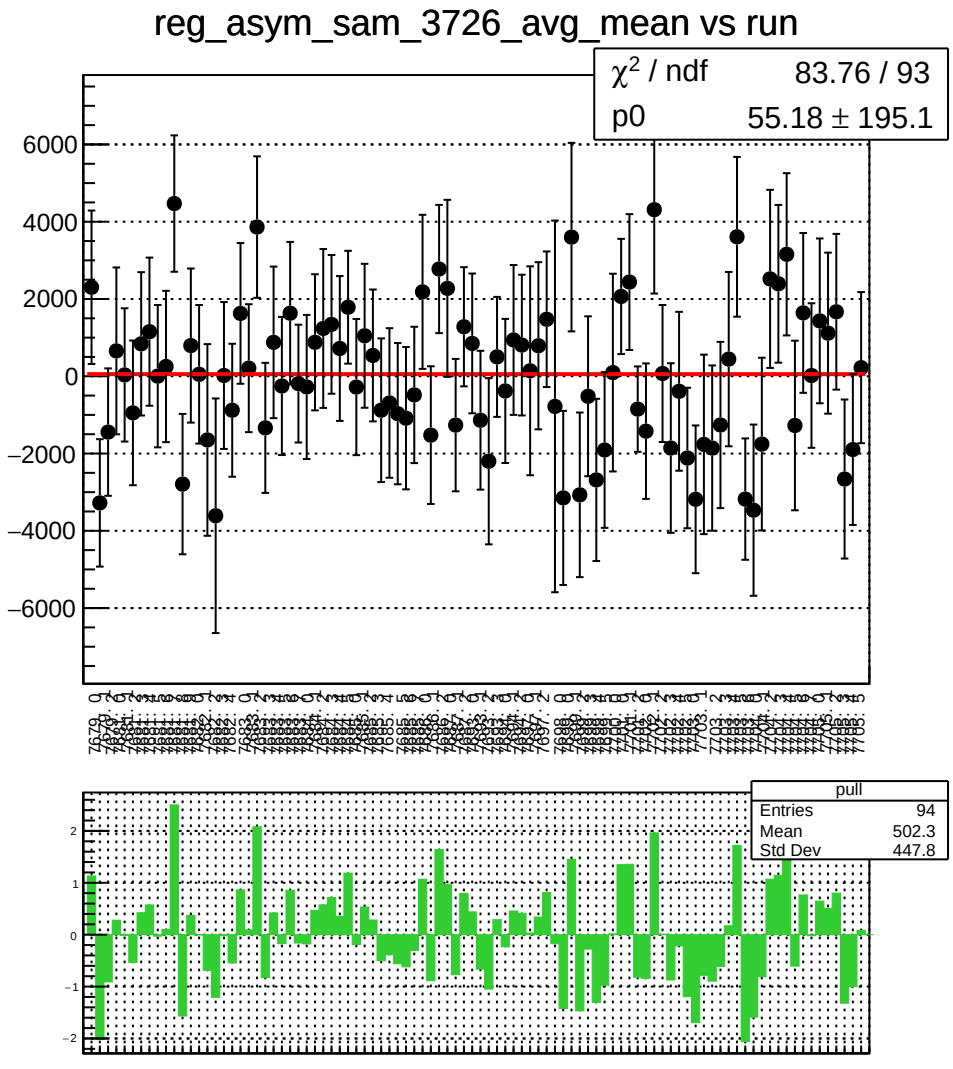

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 84.08 / 93
p0 180.6 ± 980.5
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 94
Mean −153
Std Dev 204.6
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.03099
Std Dev 0.9452
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

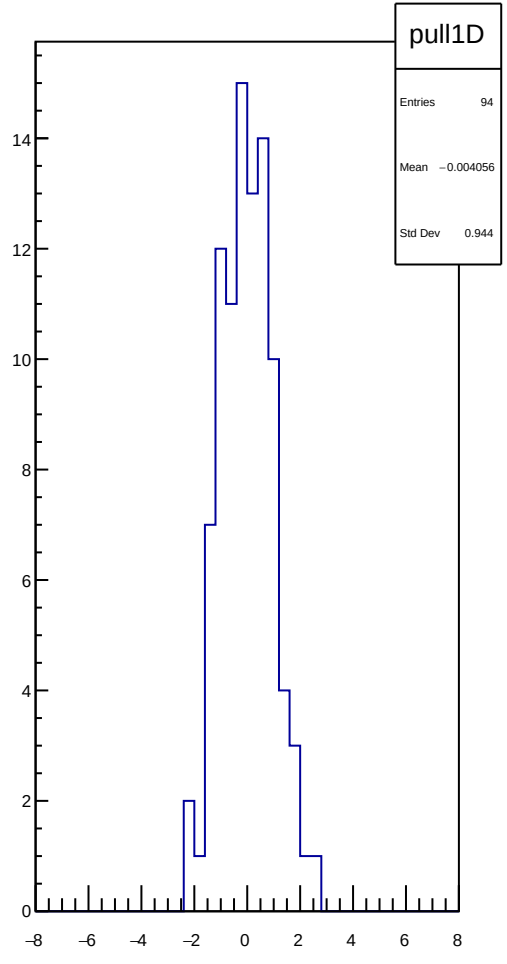

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 2.961e+04 / 93
p0 918.6 ± 0.6933
1100
1000
900
800
700

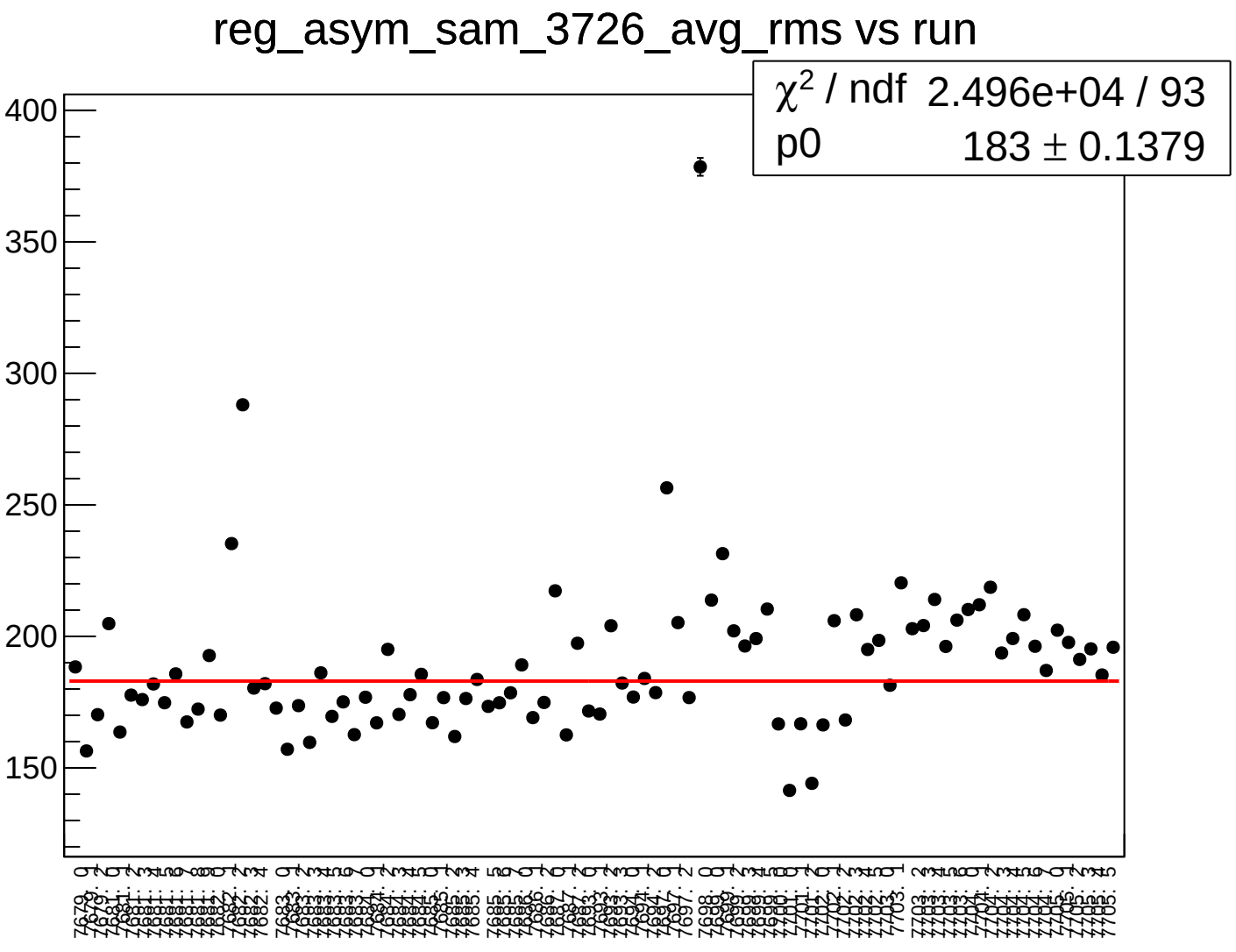

asym_sam_1526_avg_mean vs run
χ² / ndf 81.99 / 93
p0 −245.3 ± 989.3
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 94
Mean −155.3
Std Dev 206.8
2
1
0
−1
−2

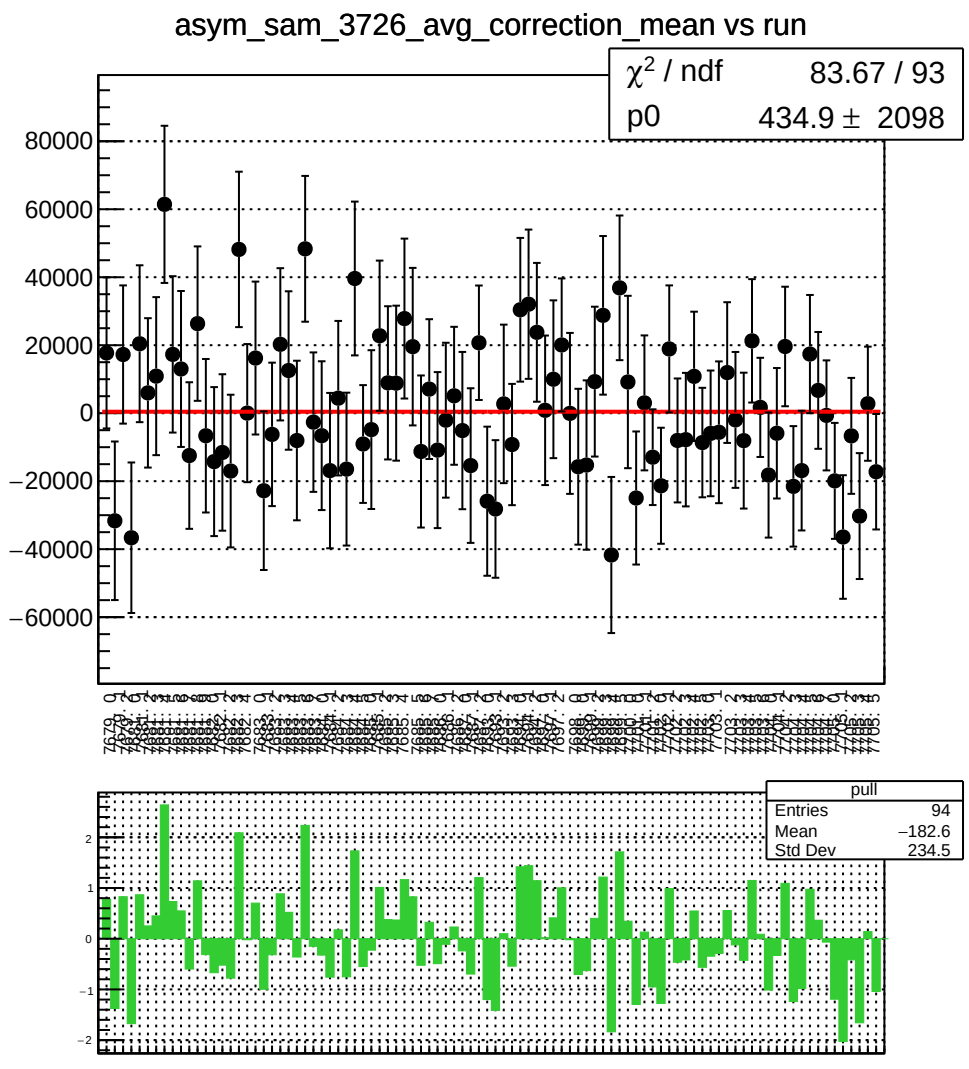

pull1D
Entries 94
Mean −0.03028
Std Dev 0.9334
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

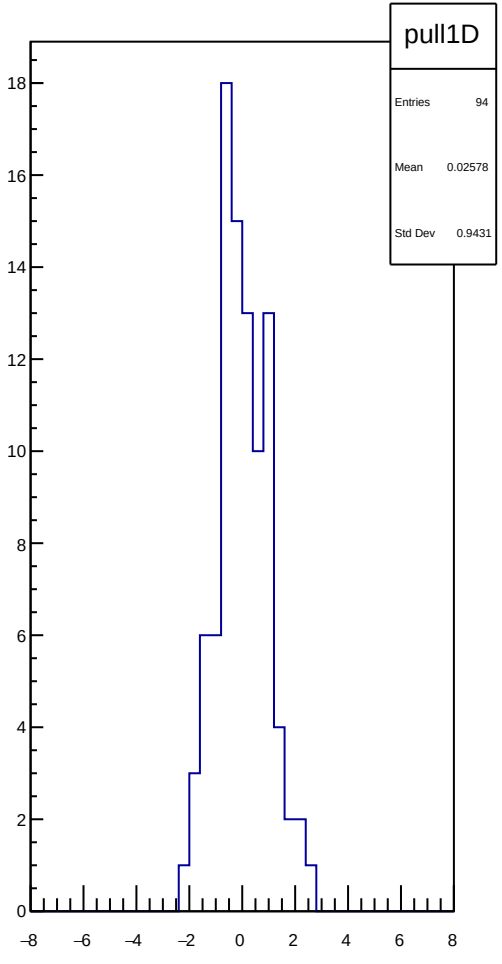

asym_sam_1526_avg_rms vs run
χ² / ndf 2.854e+04 / 93
p0 927.1 ± 0.6995
1100
1000
900
800
700

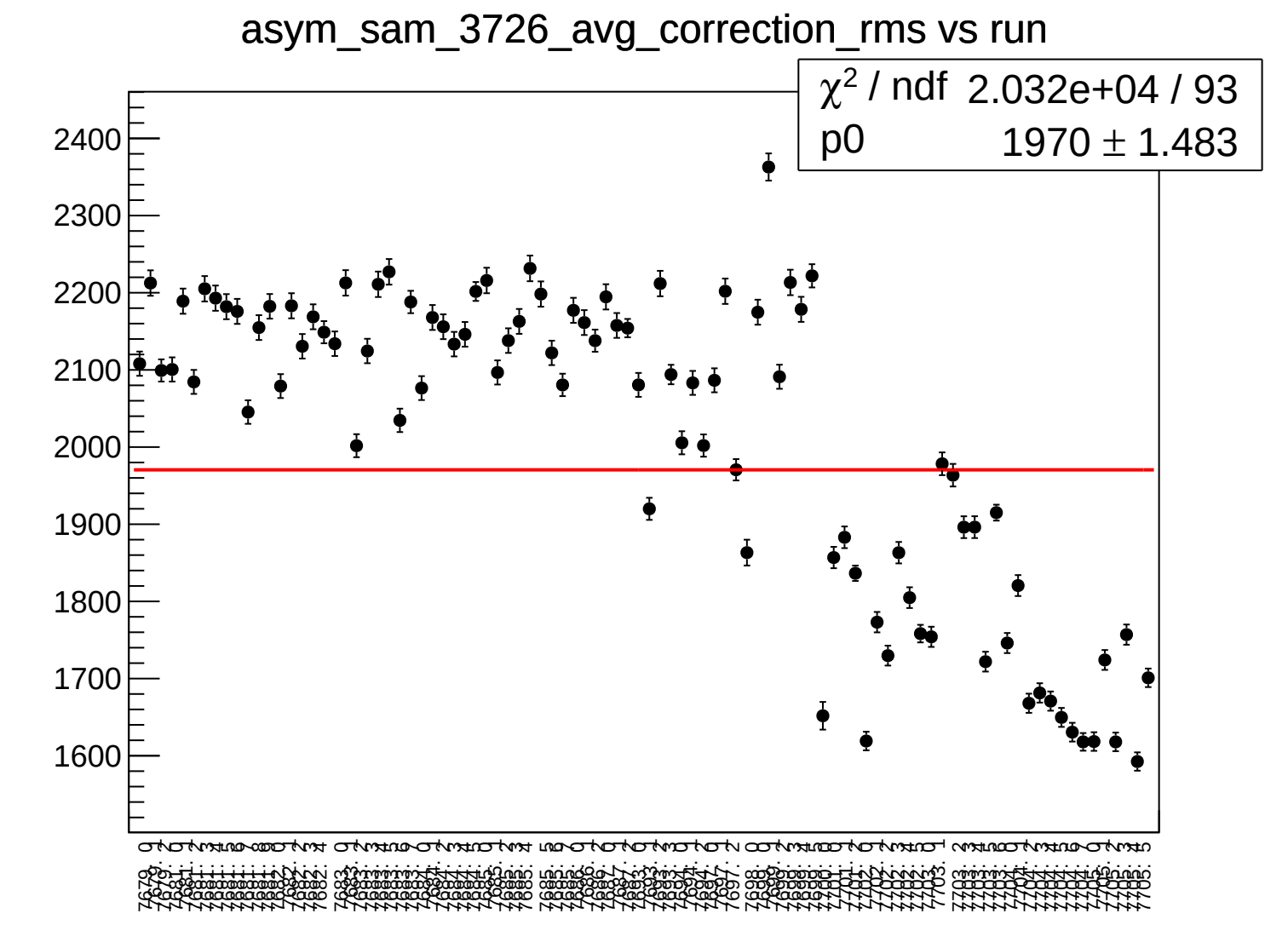

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 83.76 / 93
p0 55.18 ± 195.1
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 502.3
Std Dev 447.8
2
1
0
−1
−2

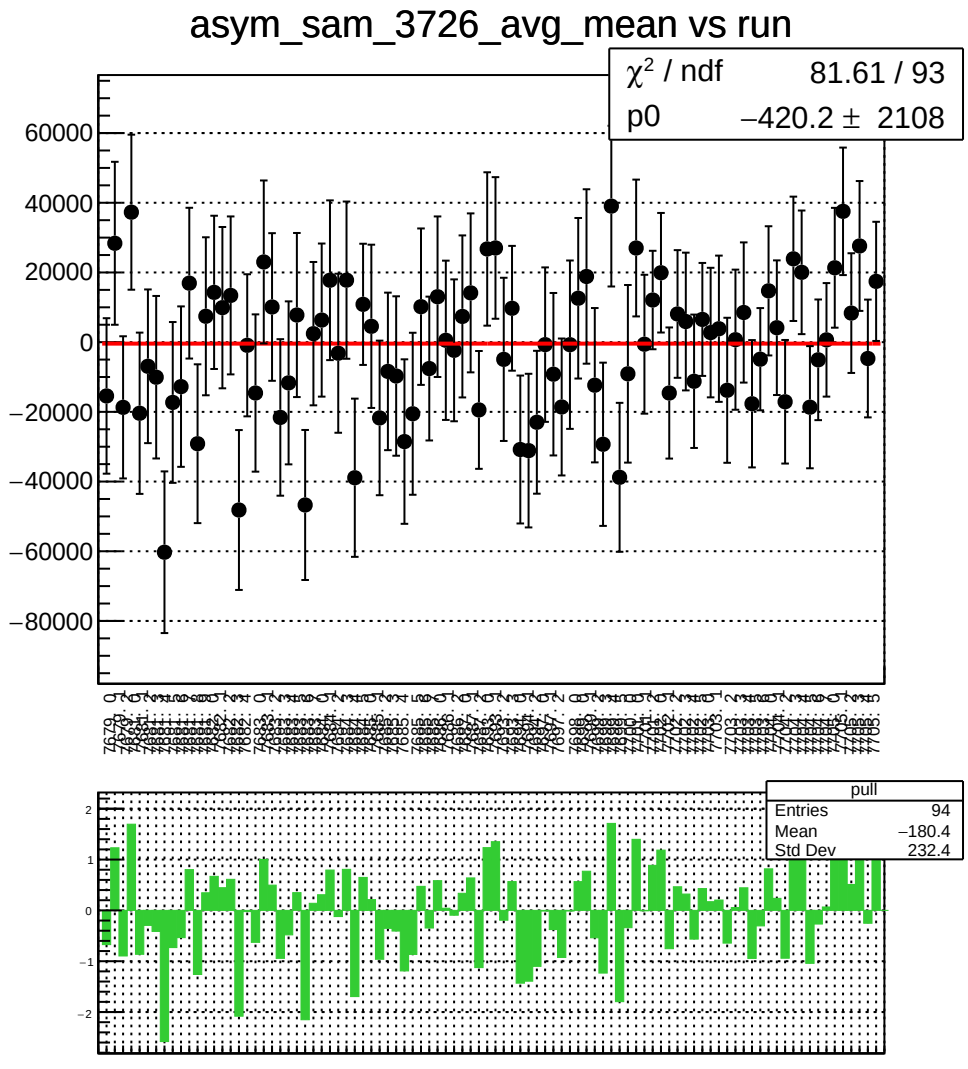

pull1D
Entries 94
Mean −0.004056
Std Dev 0.944
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

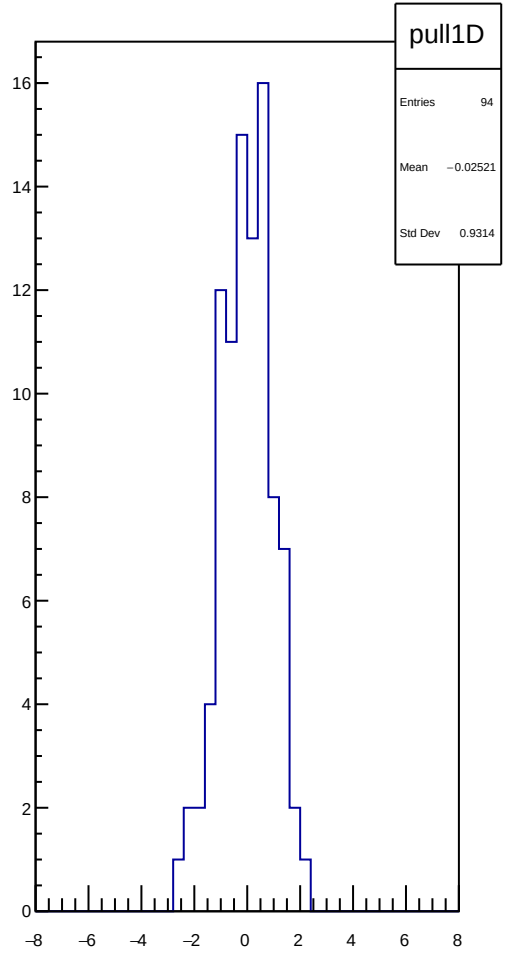

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 2.496e+04 / 93
p0 183 ± 0.1379
400
350
300
250
200
150

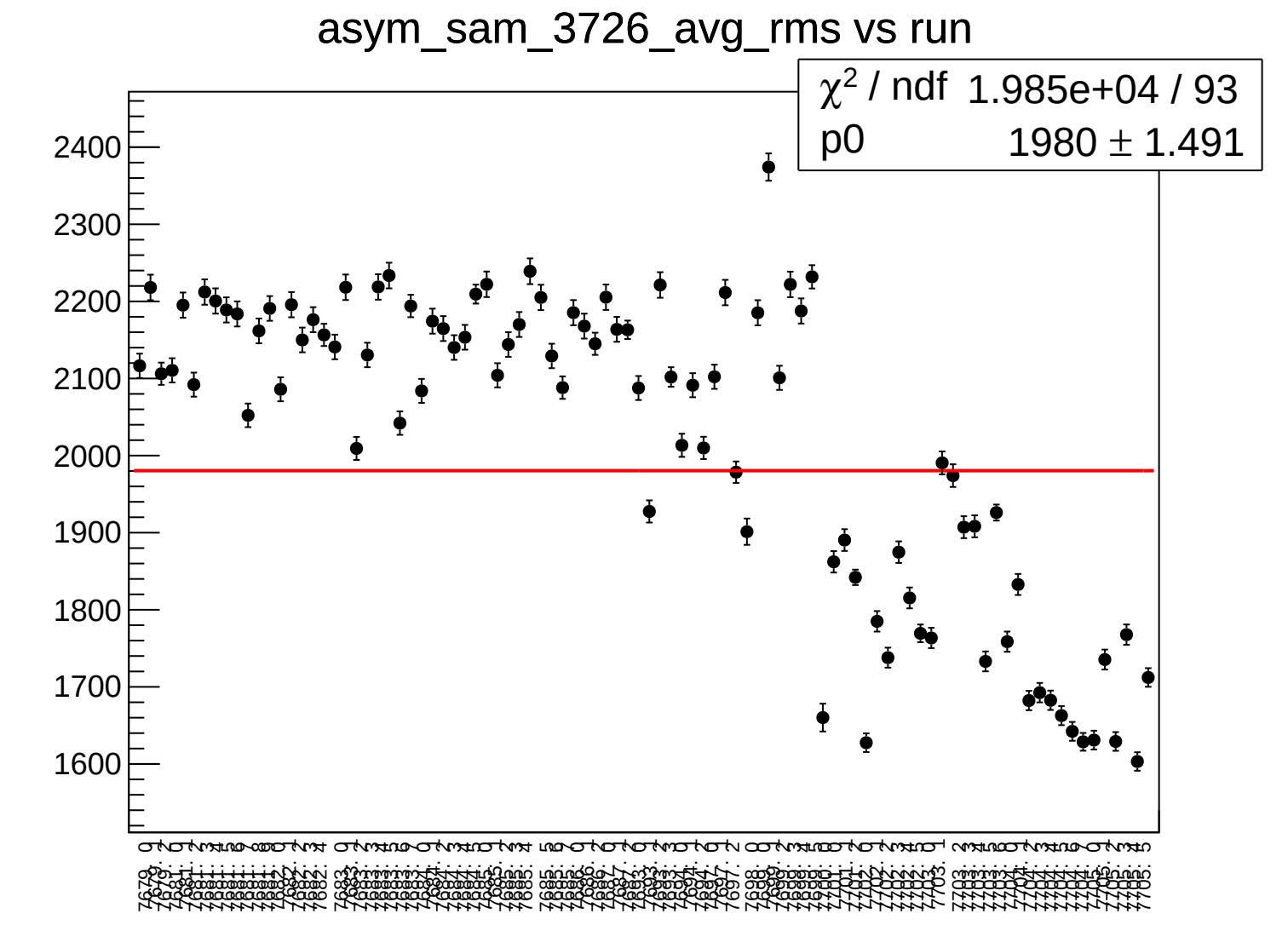

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 83.67 / 93
p0 434.9 ± 2098
pull
Entries 94
Mean −182.6
Std Dev 234.5

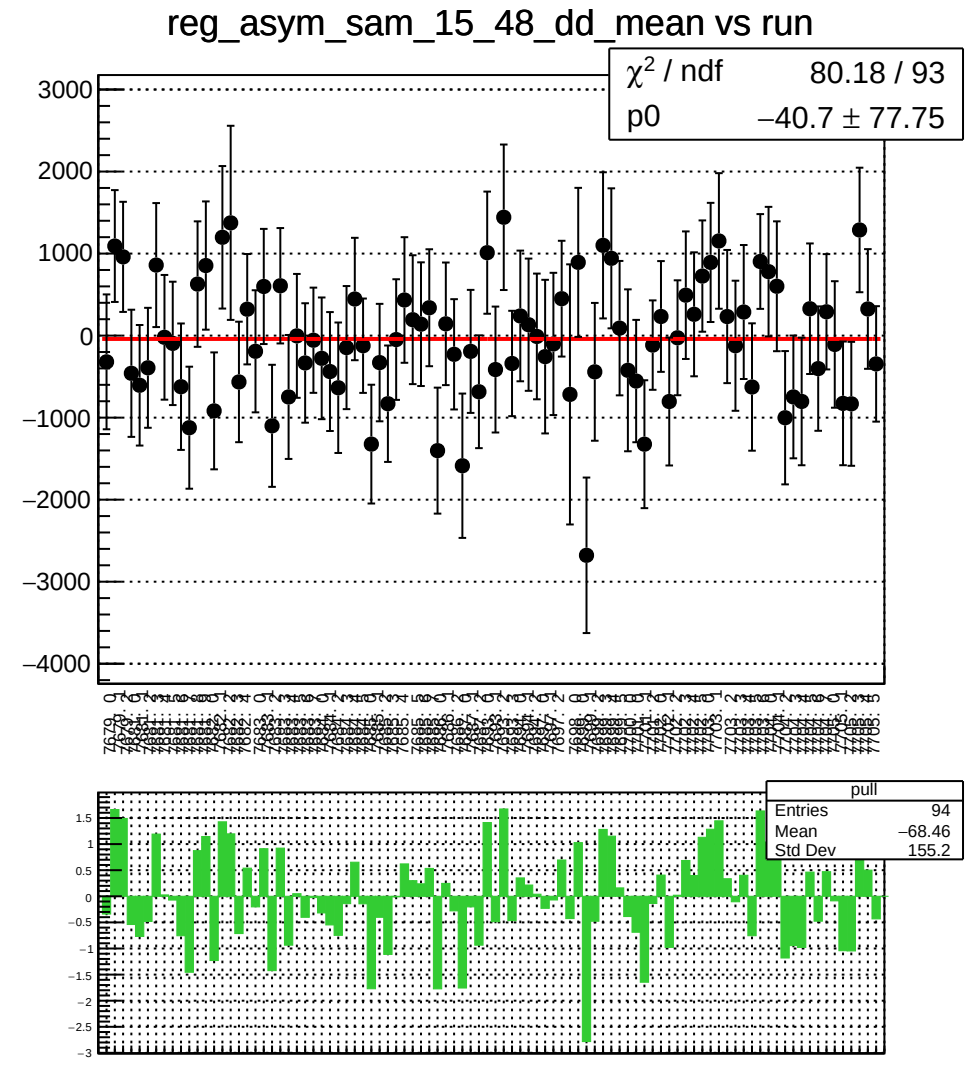

pull1D
Entries 94
Mean 0.02578
Std Dev 0.9431

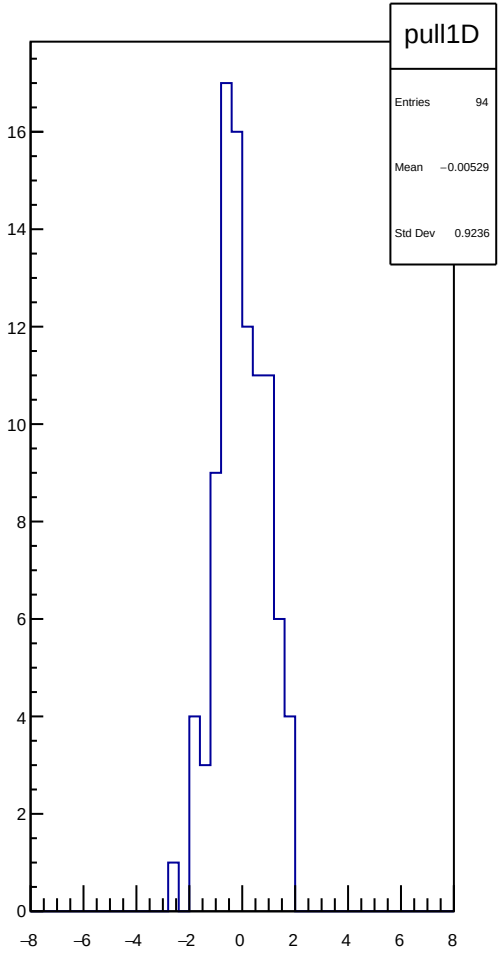

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 2.032e+04 / 93
p0 1970 ± 1.483
2400
2300
2200
2100
2000
1900
1800
1700
1600

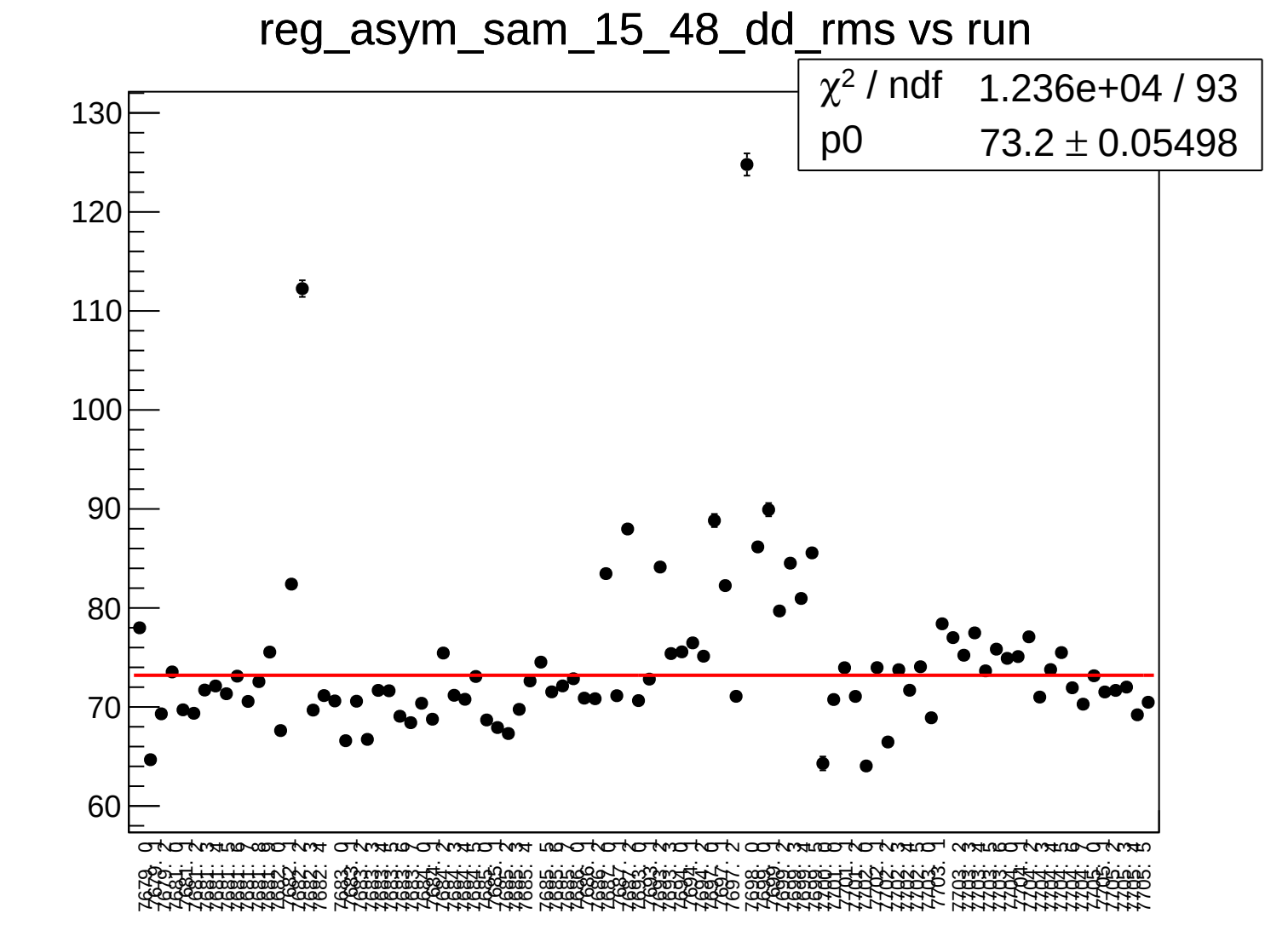

asym_sam_3726_avg_mean vs run
χ² / ndf 81.61 / 93
p0 −420.2 ± 2108
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 94
Mean −180.4
Std Dev 232.4
2
1
0
−1
−2

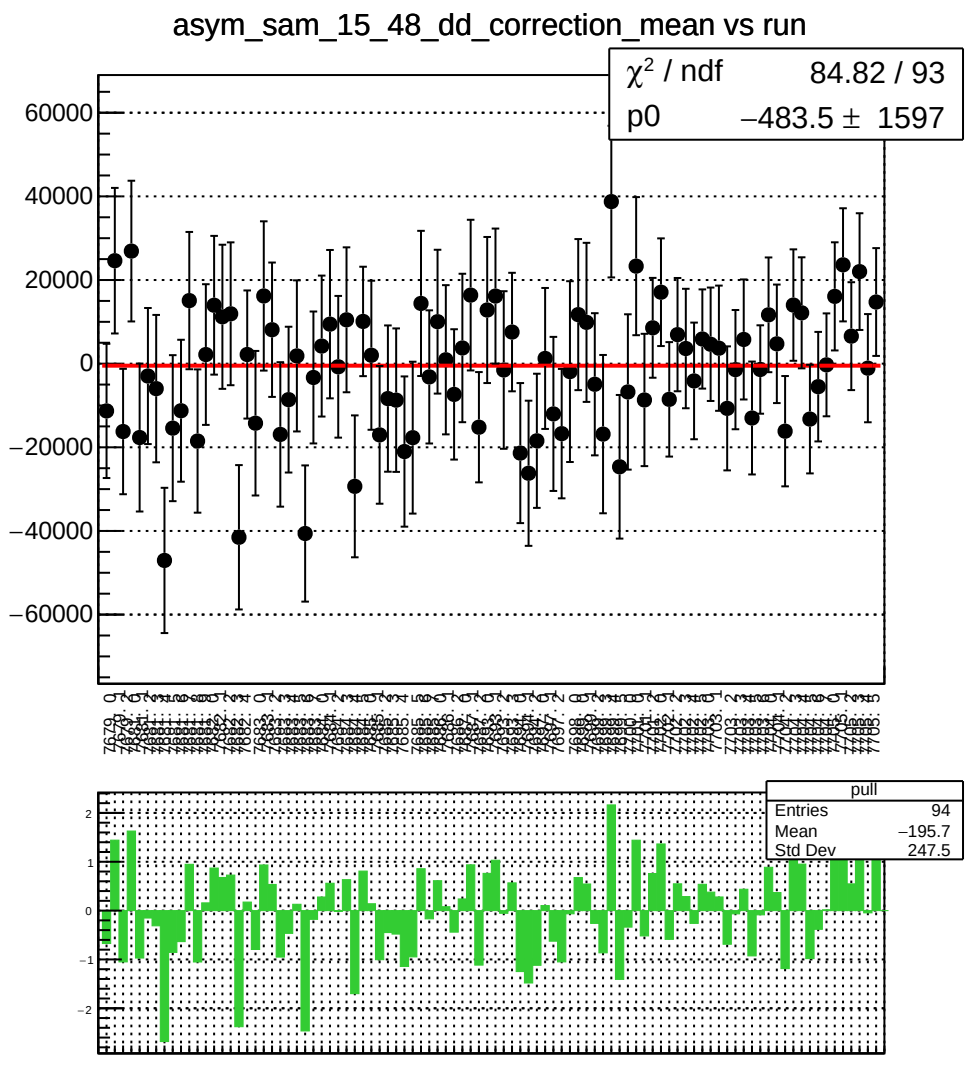

pull1D
Entries 94
Mean −0.02521
Std Dev 0.9314
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

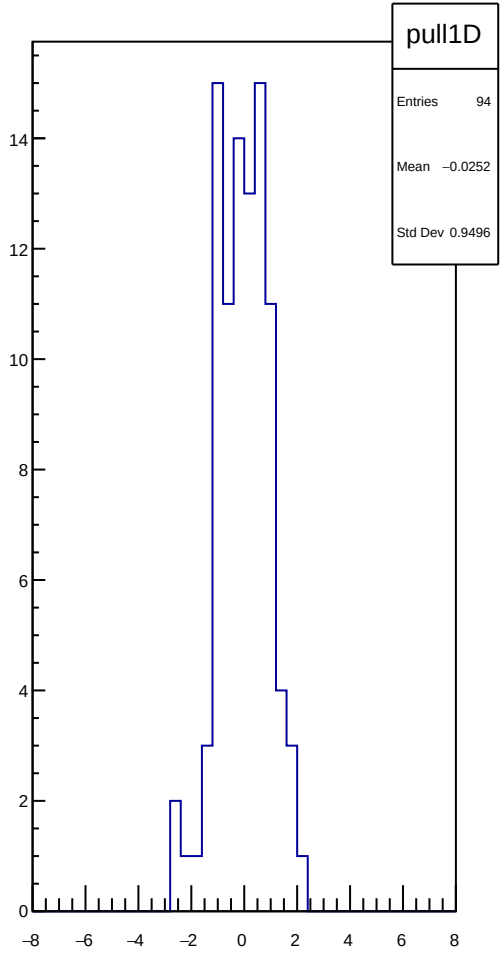

asym_sam_3726_avg_rms vs run
χ² / ndf 1.985e+04 / 93
p0 1980 ± 1.491
2400
2300
2200
2100
2000
1900
1800
1700
1600

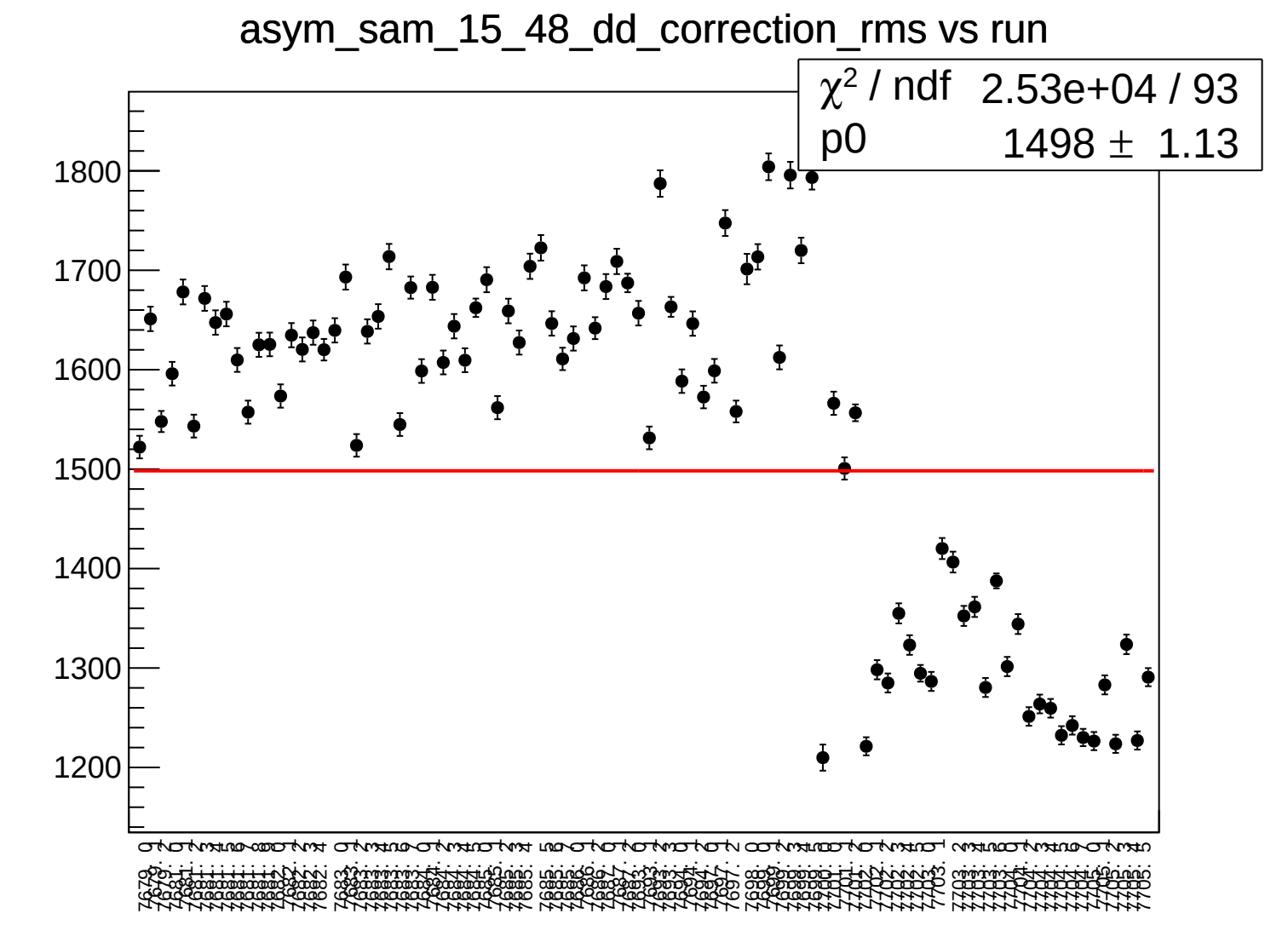

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 80.18 / 93
p0 −40.7 ± 77.75
pull
Entries 94
Mean −68.46
Std Dev 155.2

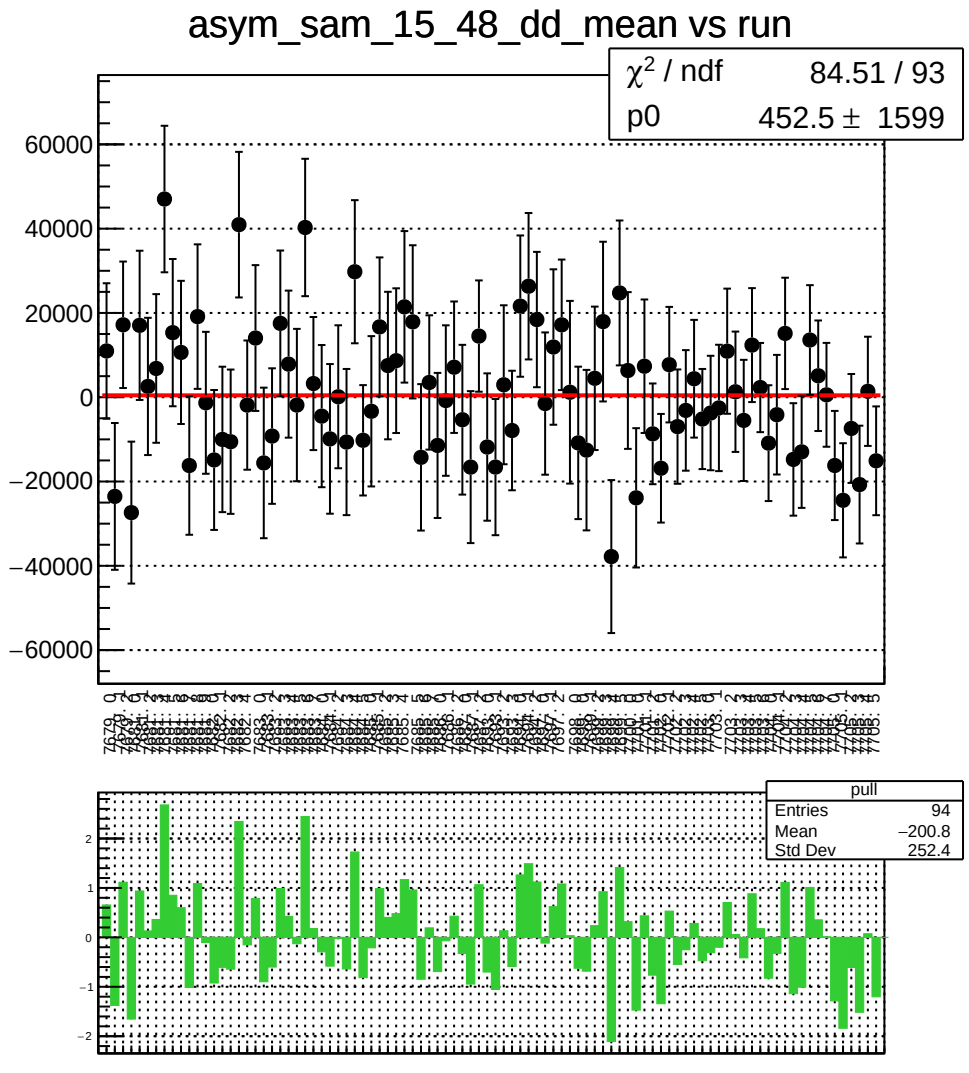

pull1D
Entries 94
Mean −0.00529
Std Dev 0.9236

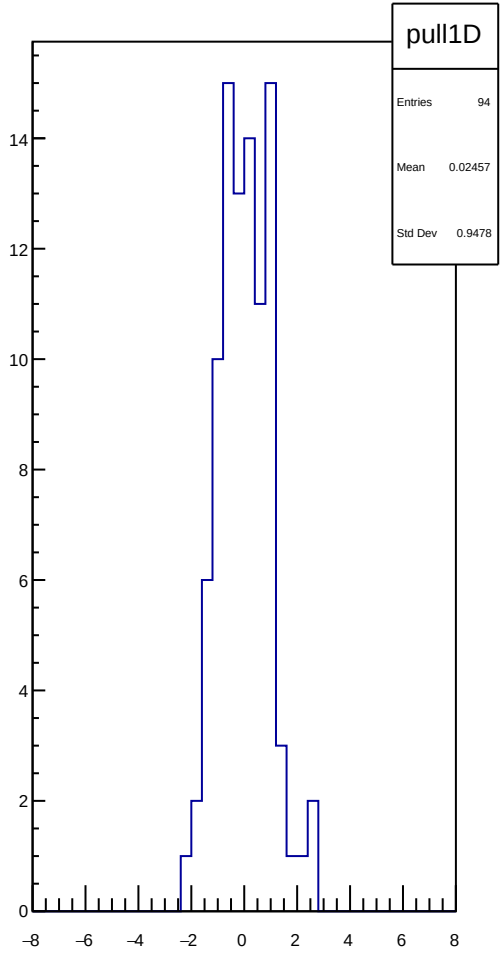

reg_asym_sam_15_48_dd_rms vs run
χ^2 / ndf 1.236e+04 / 93
p0 73.2 ± 0.05498
130
120
110
100
90
80
70
60

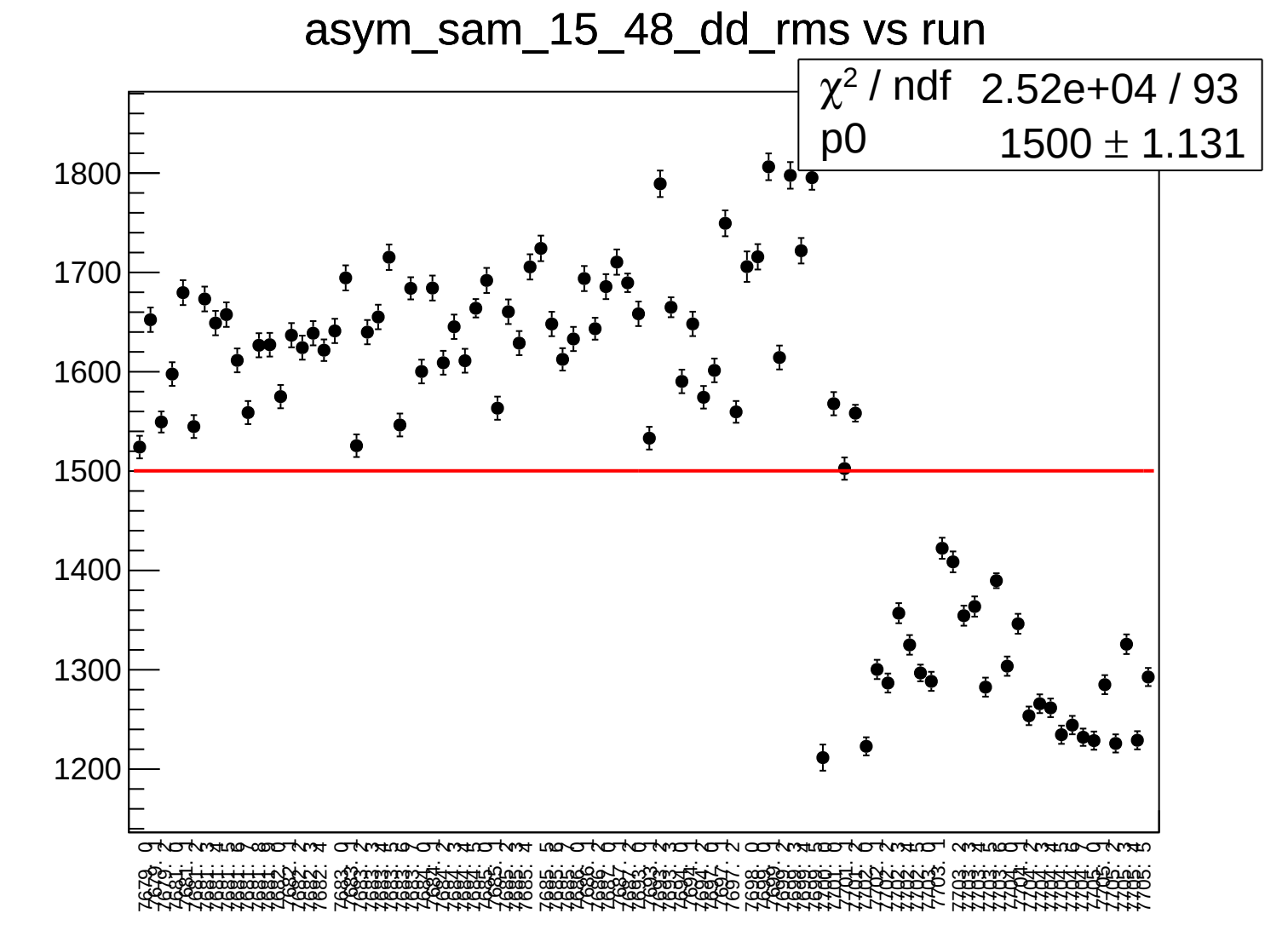

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 84.82 / 93
p0 −483.5 ± 1597
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −195.7
Std Dev 247.5
2
1
0
−1
−2

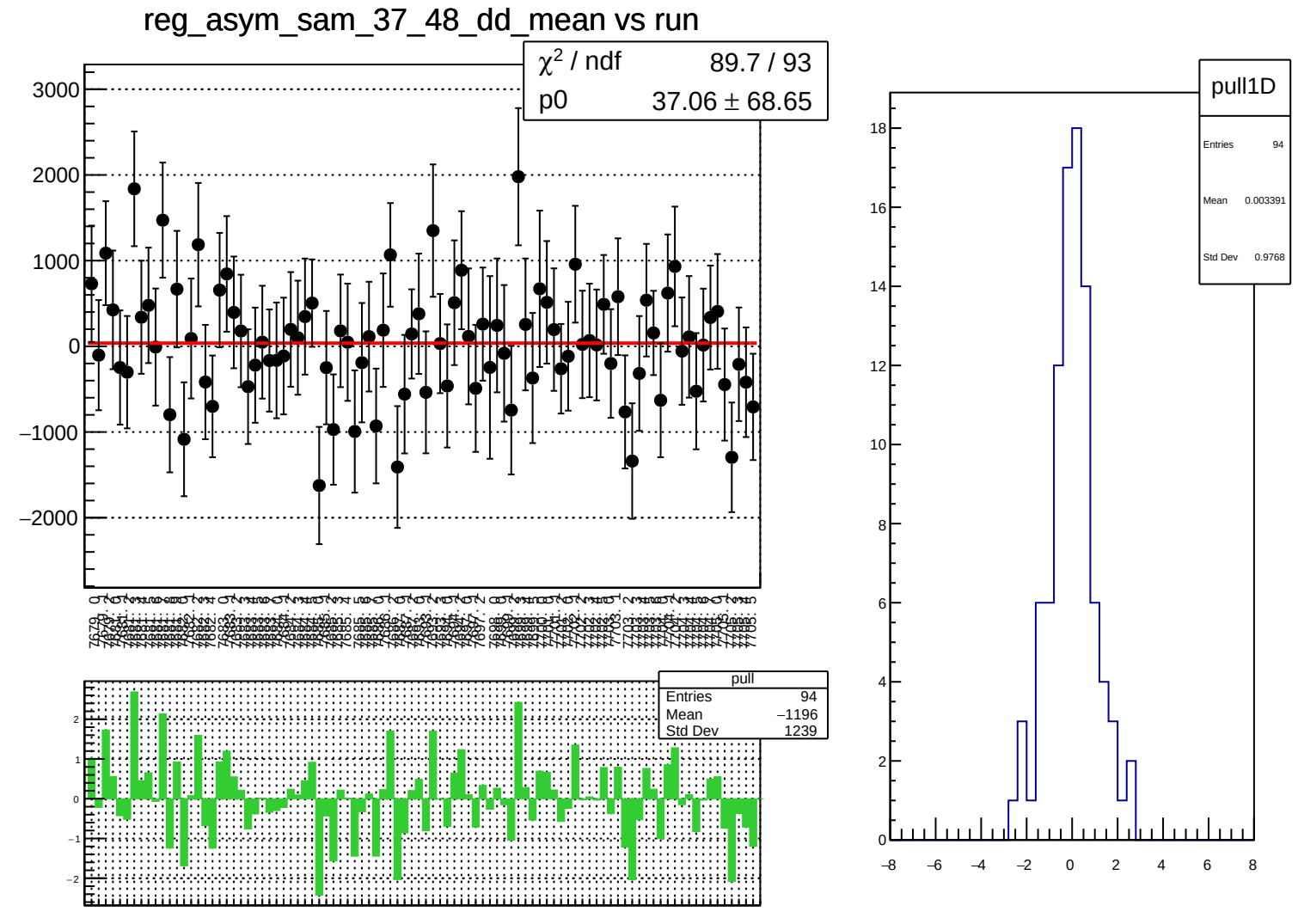

pull1D
Entries 94
Mean −0.0252
Std Dev 0.9496
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

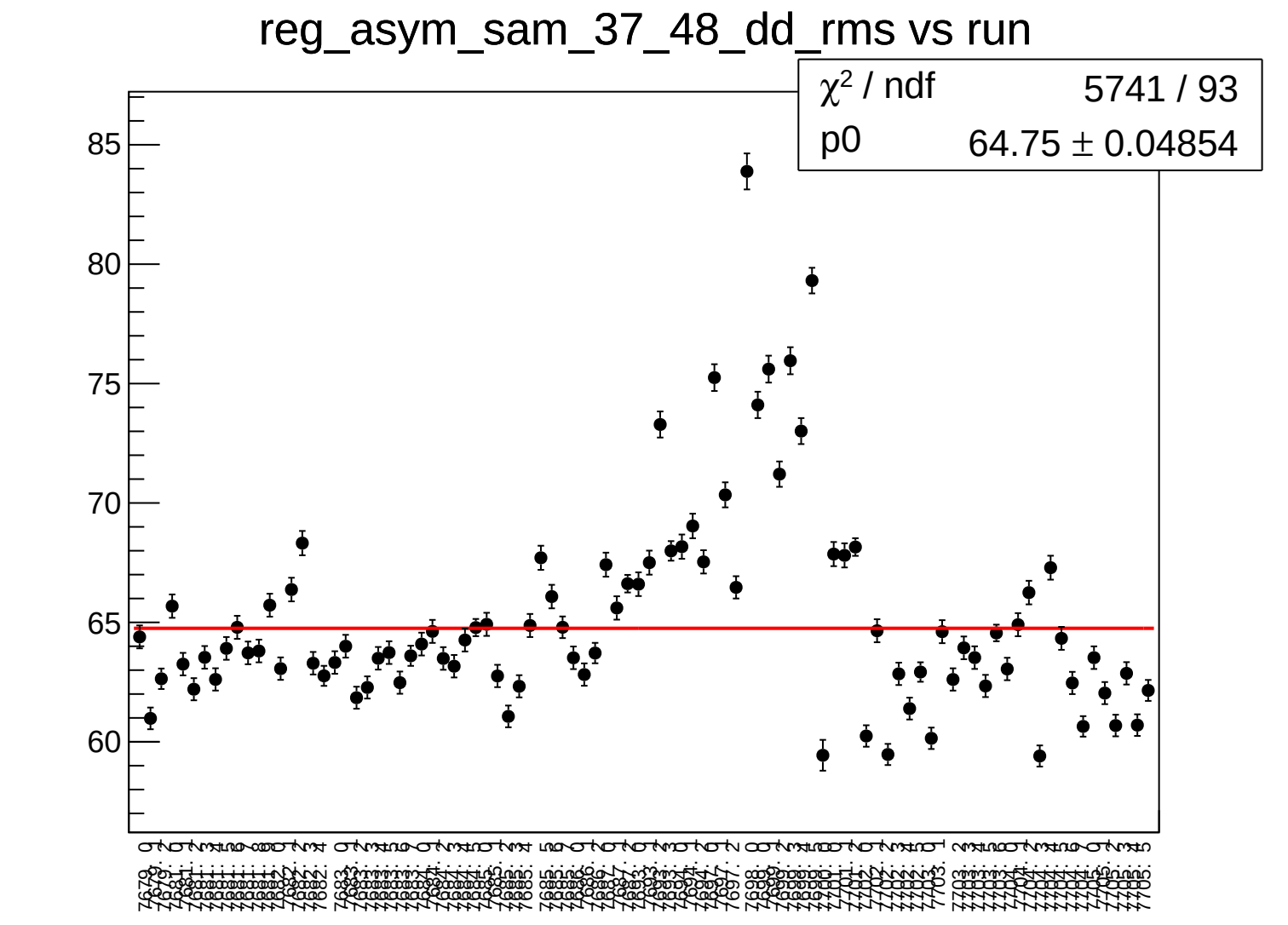

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 2.53e+04 / 93
p0 1498 ± 1.13
1800
1700
1600
1500
1400
1300
1200

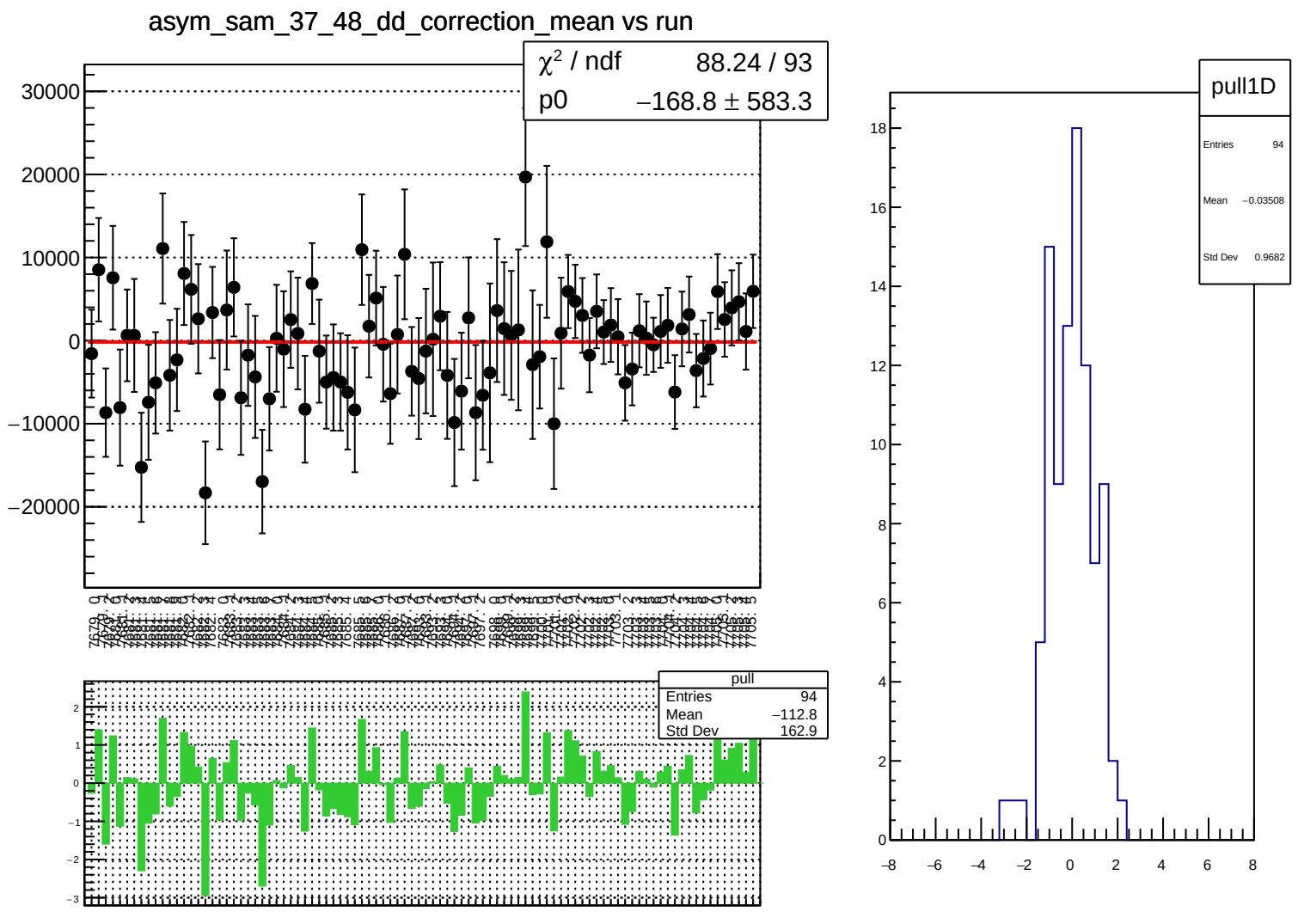

asym_sam_15_48_dd_mean vs run
χ² / ndf 84.51 / 93
p0 452.5 ± 1599
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean −200.8
Std Dev 252.4
2
1
0
−1
−2

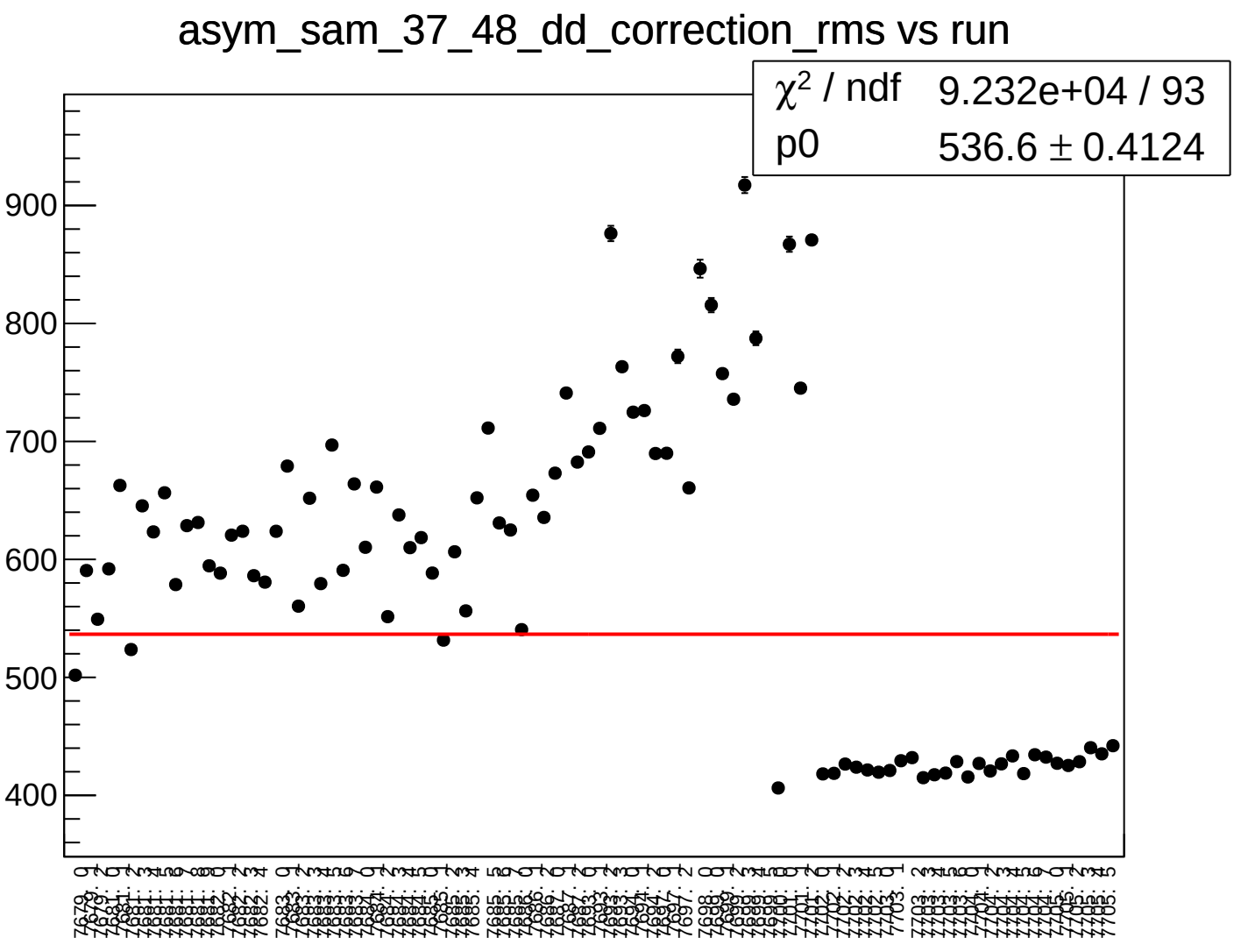

pull1D
Entries 94
Mean 0.02457
Std Dev 0.9478
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

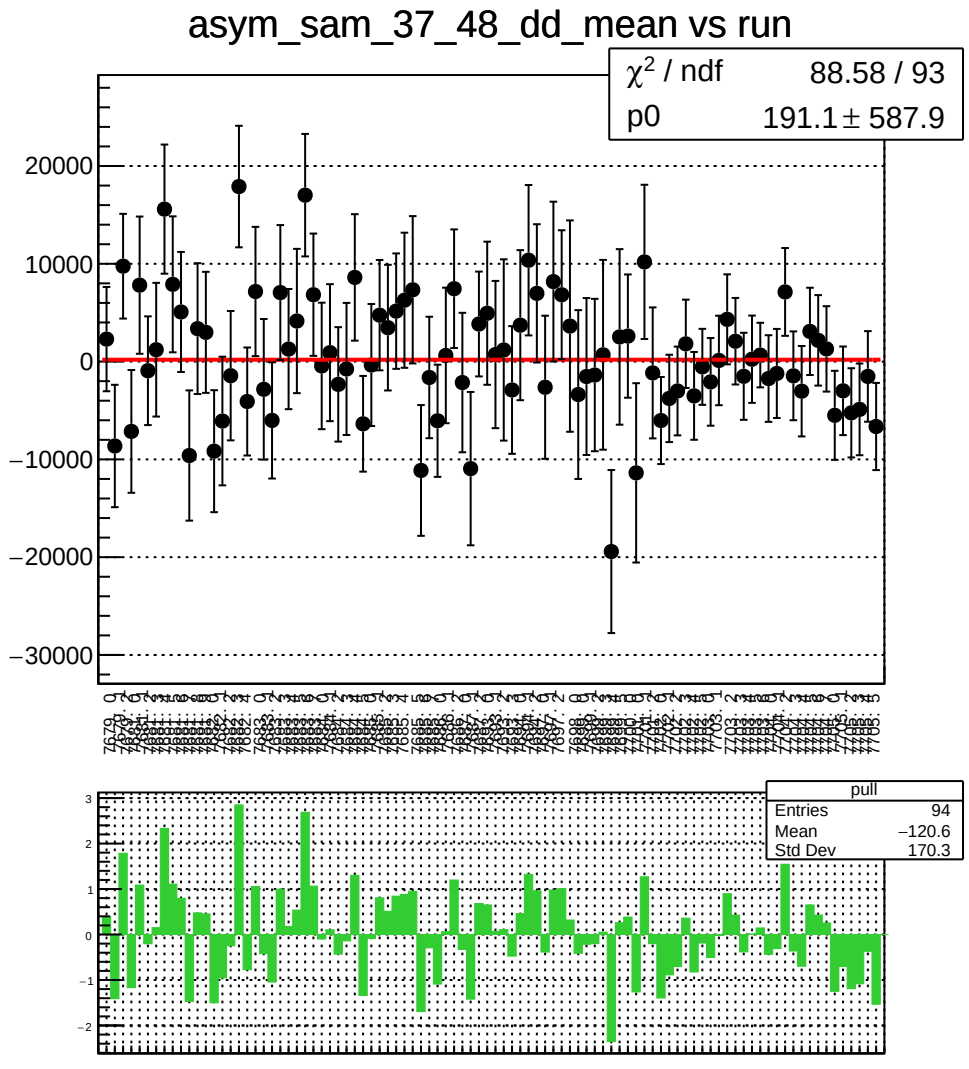

asym_sam_15_48_dd_rms vs run
χ² / ndf 2.52e+04 / 93
p0 1500 ± 1.131
1800
1700
1600
1500
1400
1300
1200

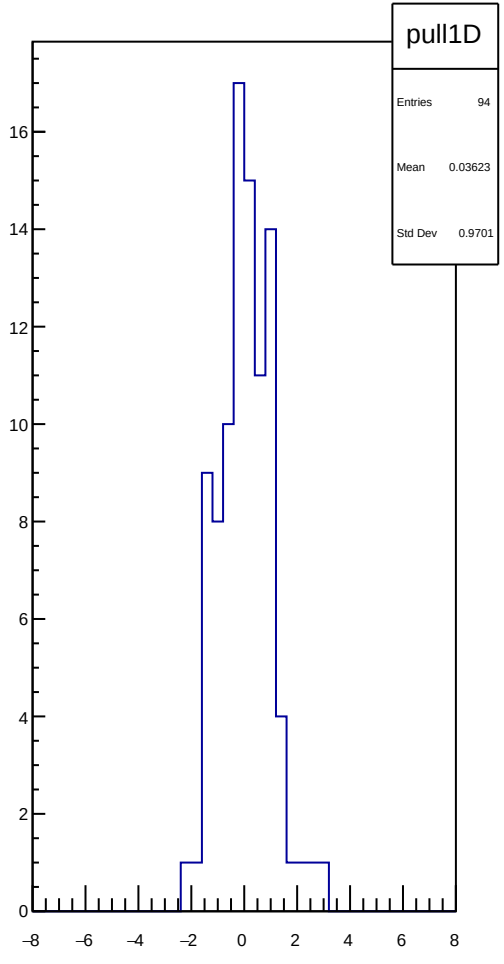

reg_asym_sam_37_48_dd_mean vs run
χ^2 / ndf 89.7 / 93
p0 37.06 ± 68.65
3000
2000
1000
0
−1000
−2000
pull
Entries 94
Mean −1196
Std Dev 1239
pull1D
Entries 94
Mean 0.003391
Std Dev 0.9768
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

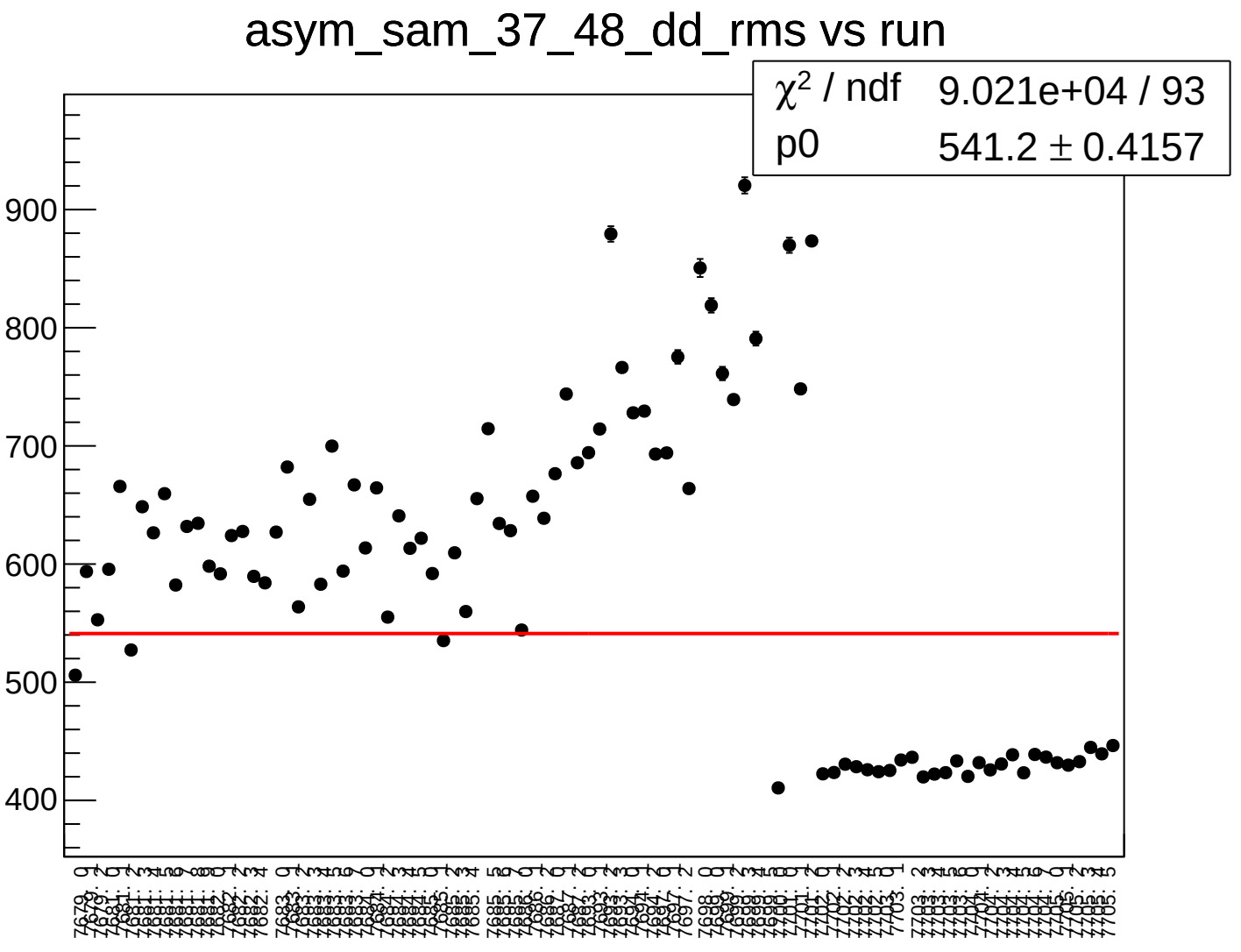

reg_asym_sam_37_48_dd_rms vs run
χ^2 / ndf 5741 / 93
p0 64.75 ± 0.04854
85
80
75
70
65
60

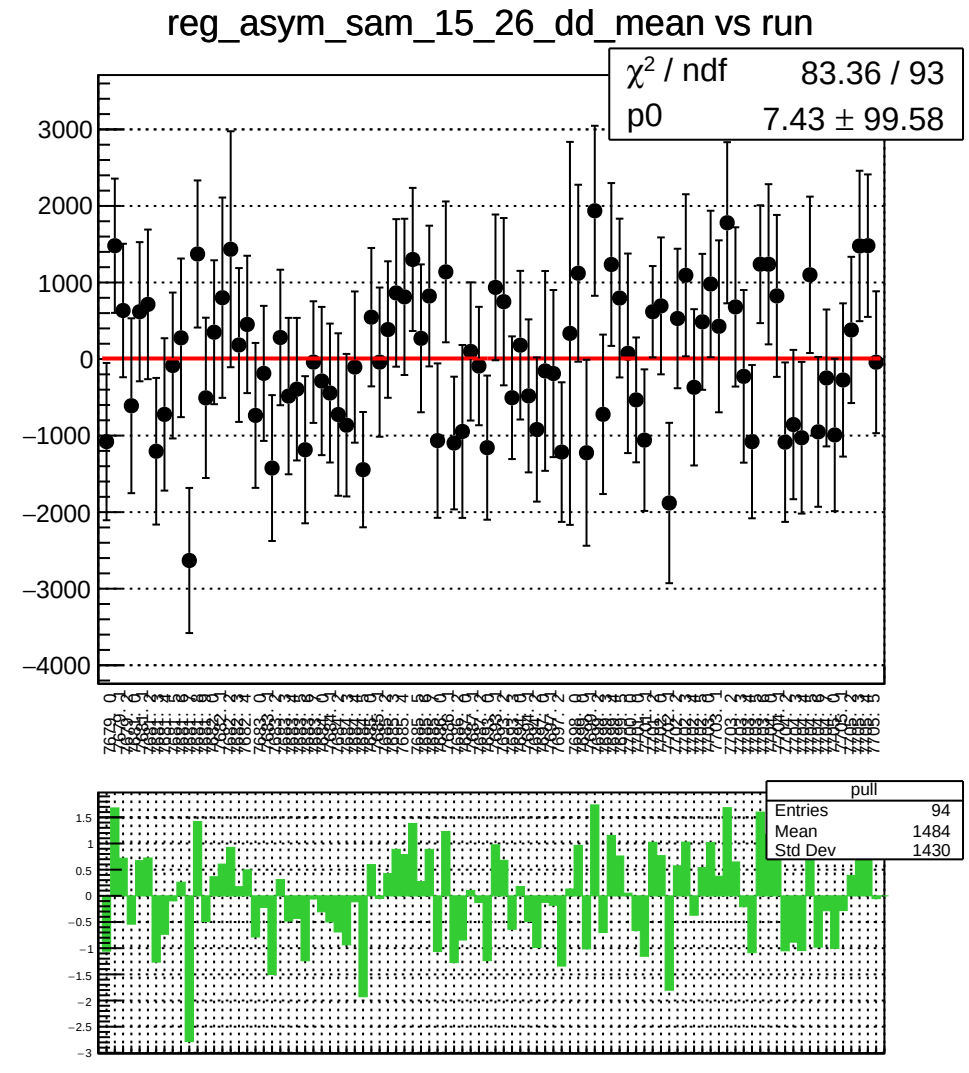

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 88.24 / 93
p0 −168.8 ± 583.3
30000
20000
10000
0
−10000
−20000
pull
Entries 94
Mean −112.8
Std Dev 162.9
2
1
0
−1
−2
−3
pull1D
Entries 94
Mean −0.03508
Std Dev 0.9682
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

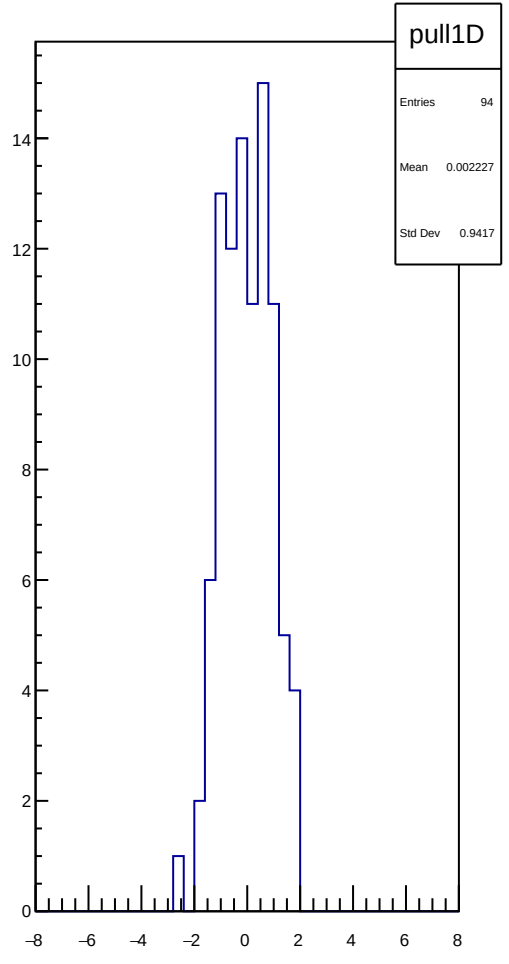

asym_sam_37_48_dd_correction_rms vs run
χ^2 / ndf 9.232e+04 / 93
p0 536.6 ± 0.4124
900
800
700
600
500
400

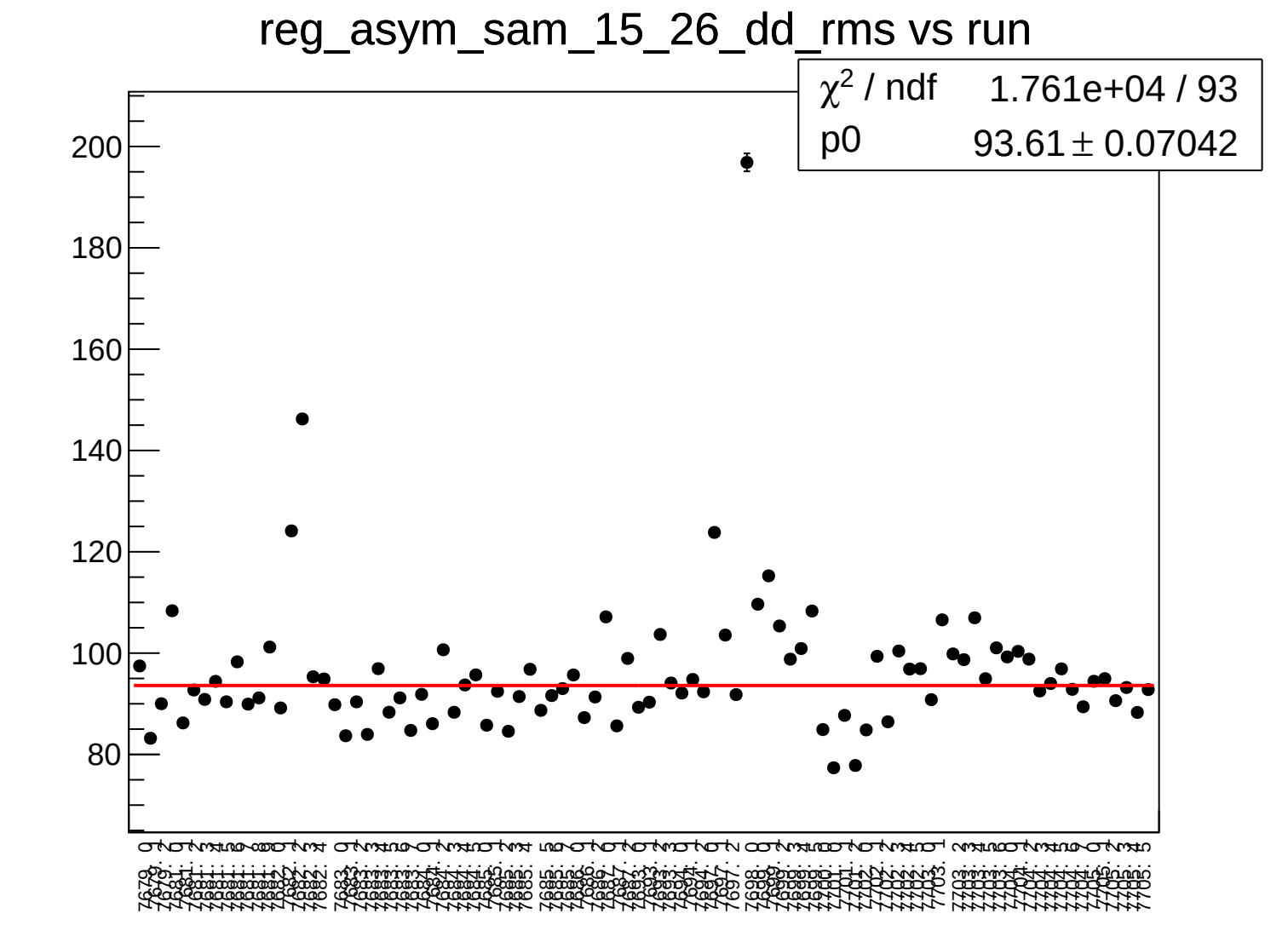

asym_sam_37_48_dd_mean vs run
χ² / ndf 88.58 / 93
p0 191.1 ± 587.9
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −120.6
Std Dev 170.3
3
2
1
0
−1
−2

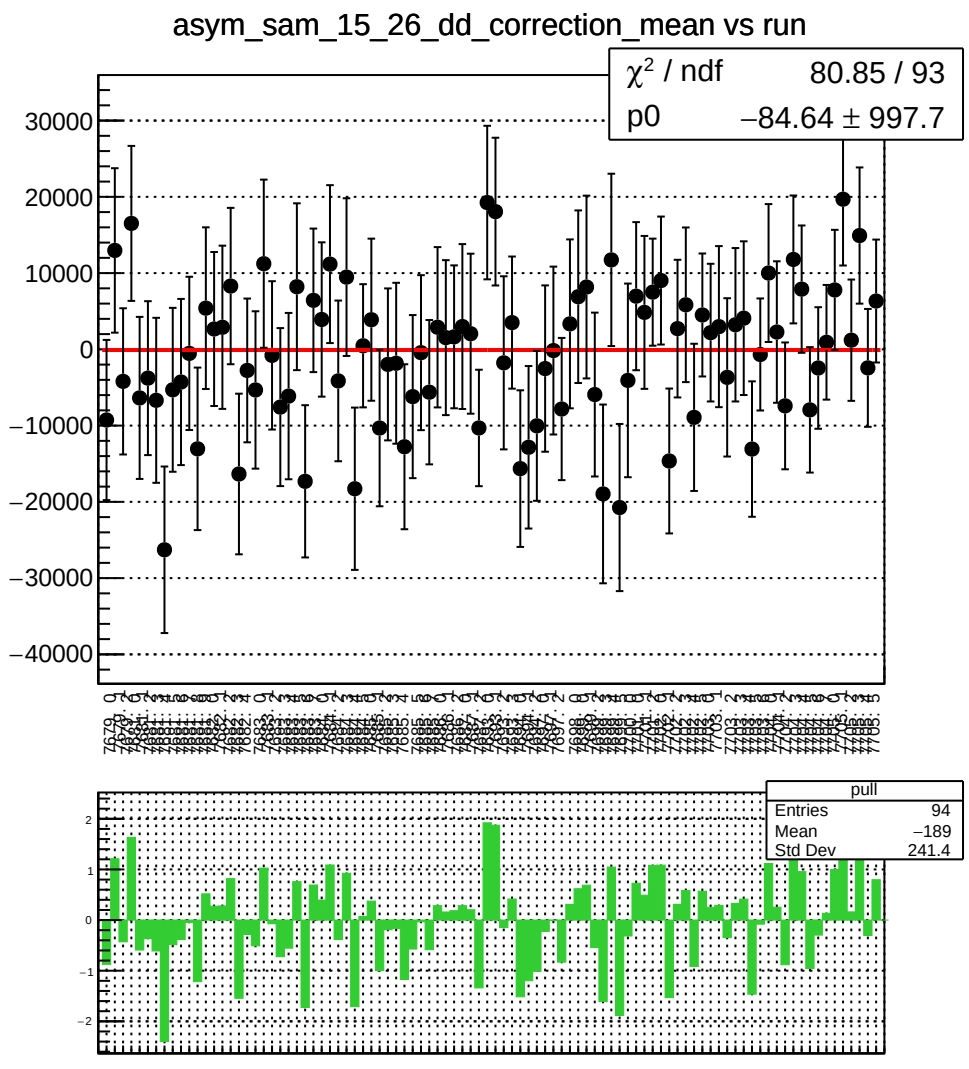

pull1D
Entries 94
Mean 0.03623
Std Dev 0.9701
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

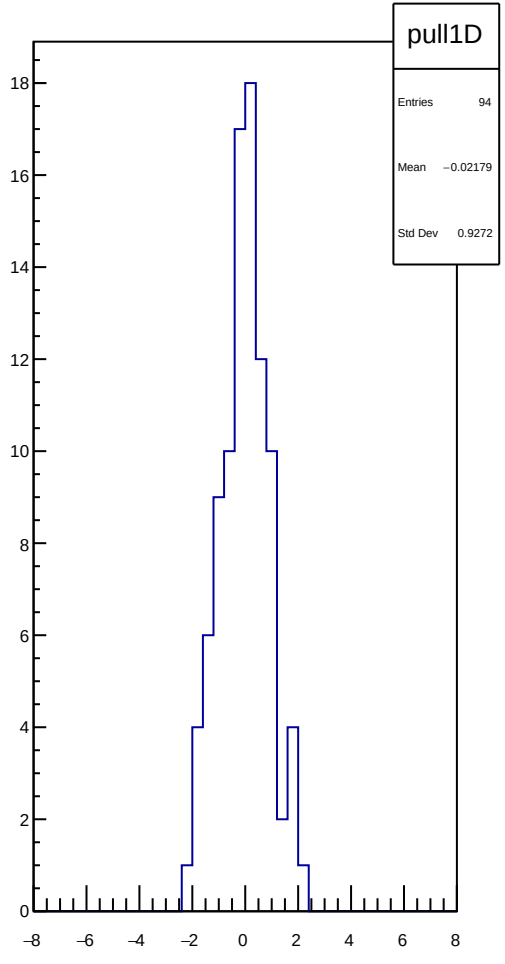

asym_sam_37_48_dd_rms vs run
χ^2 / ndf 9.021e+04 / 93
p0 541.2 ± 0.4157
900
800
700
600
500
400

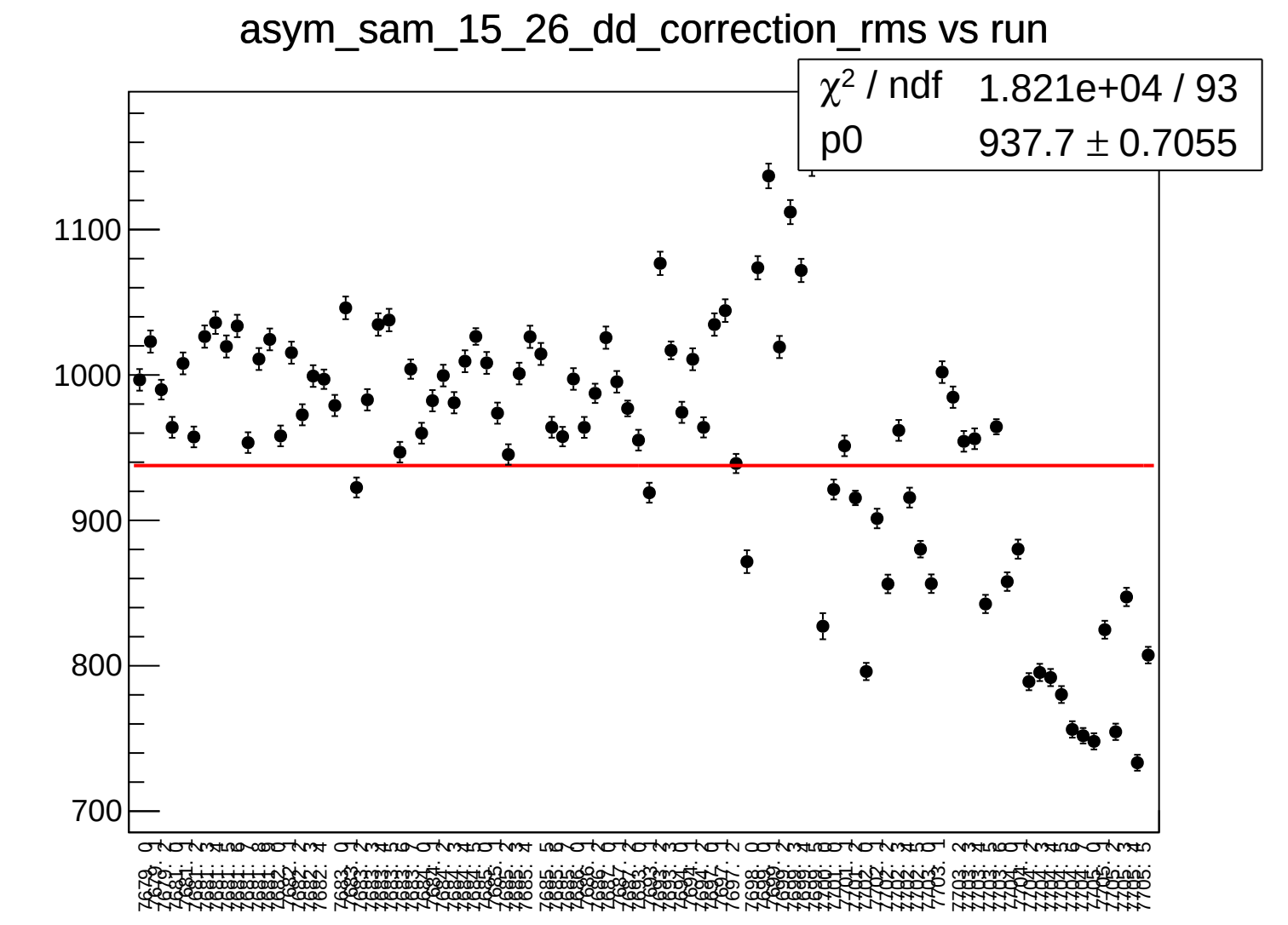

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 83.36 / 93
p0 7.43 ± 99.58
pull
Entries 94
Mean 1484
Std Dev 1430

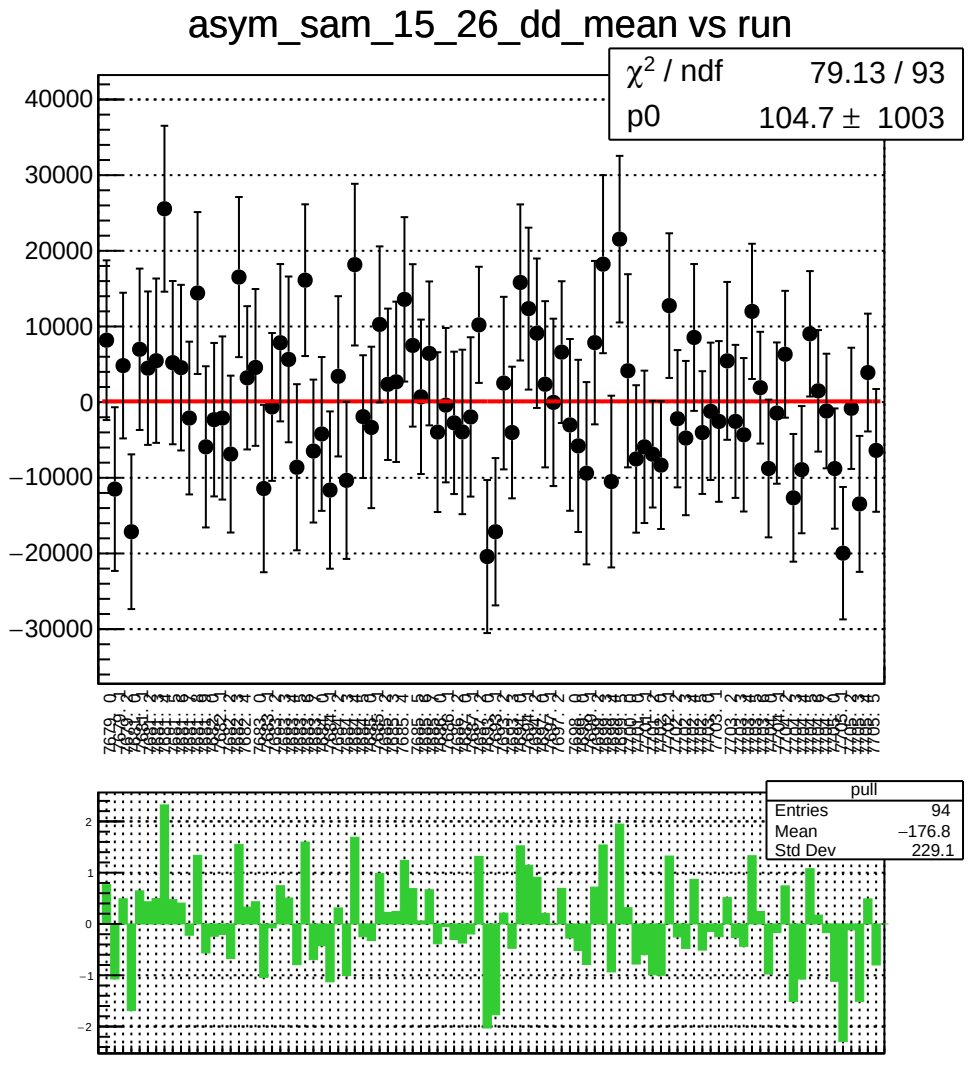

pull1D
Entries 94
Mean 0.002227
Std Dev 0.9417

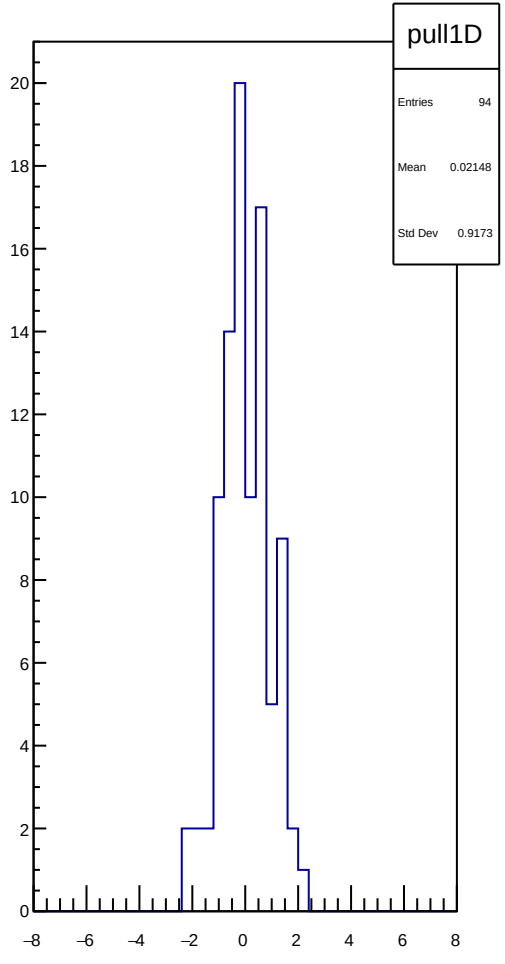

reg_asym_sam_15_26_dd_rms vs run
χ^2 / ndf 1.761e+04 / 93
p0 93.61 ± 0.07042
200
180
160
140
120
100
80

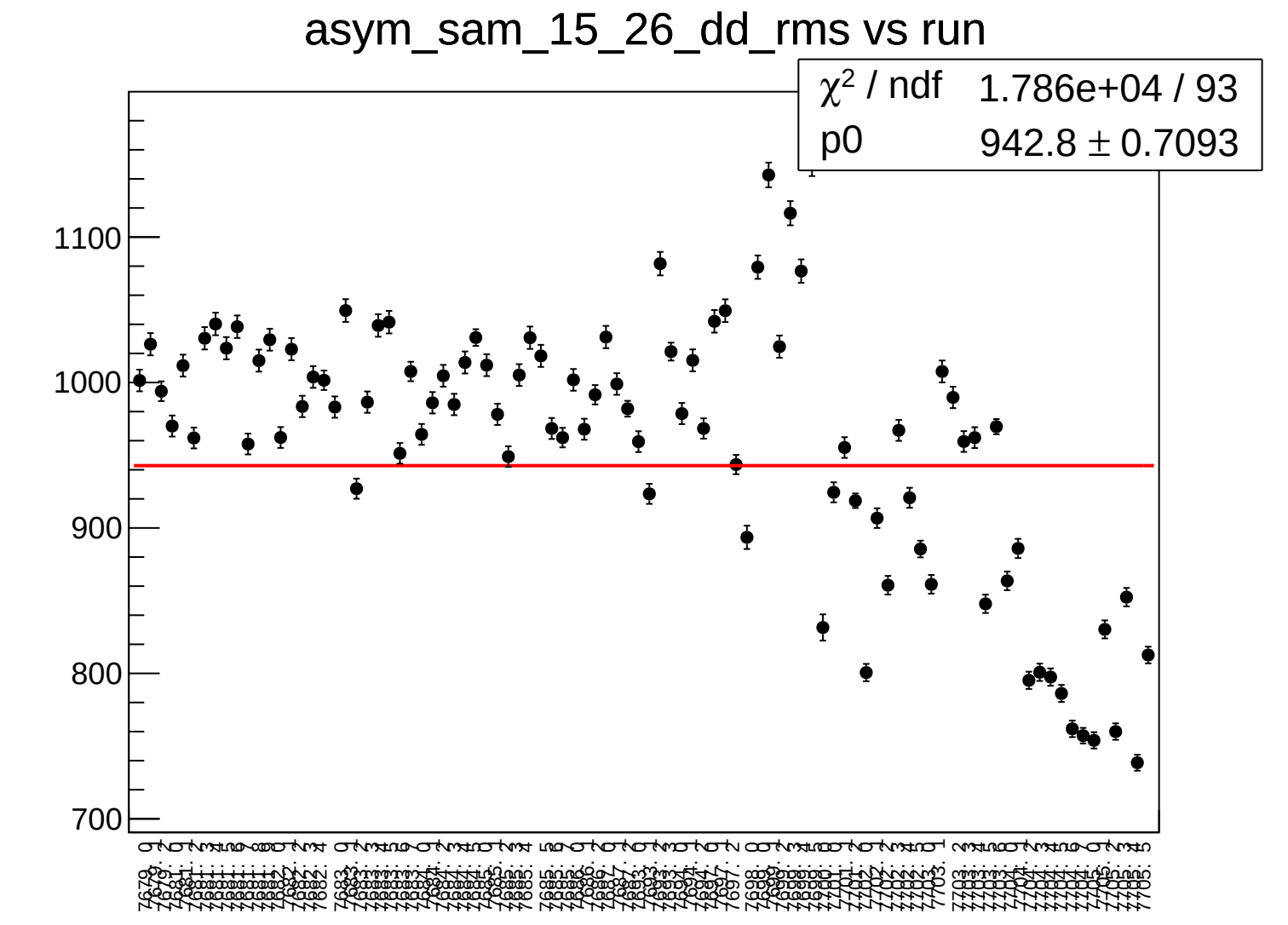

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 80.85 / 93
p0 −84.64 ± 997.7
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 94
Mean −189
Std Dev 241.4
2
1
0
−1
−2

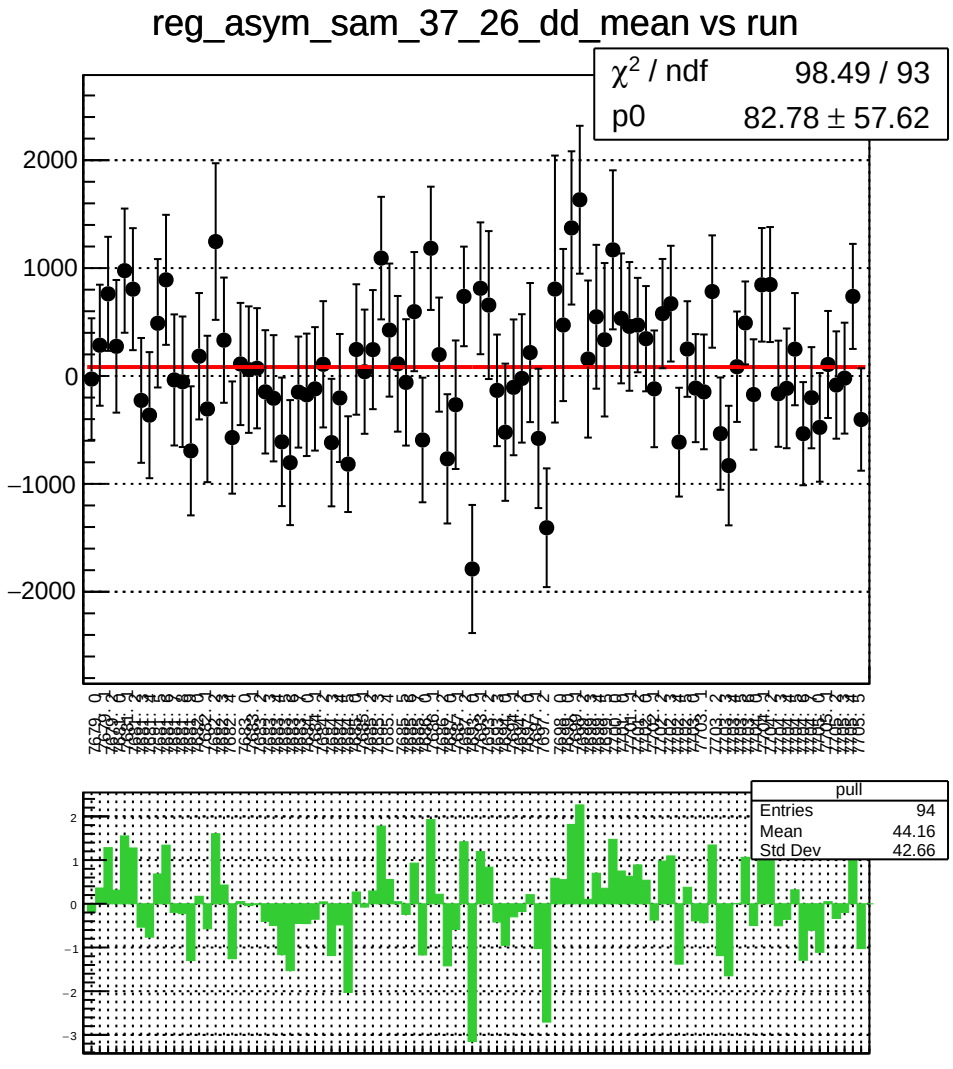

pull1D
Entries 94
Mean −0.02179
Std Dev 0.9272
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

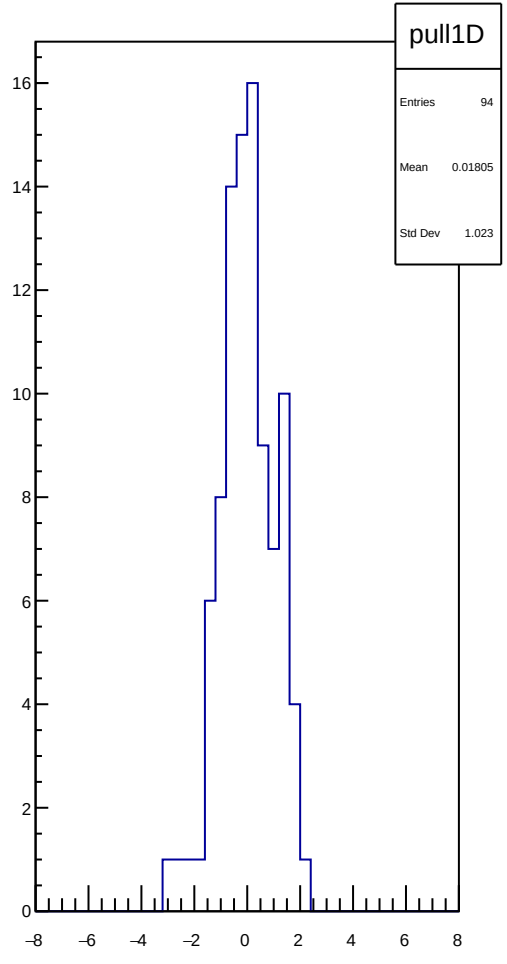

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 1.821e+04 / 93
p0 937.7 ± 0.7055
1100
1000
900
800
700

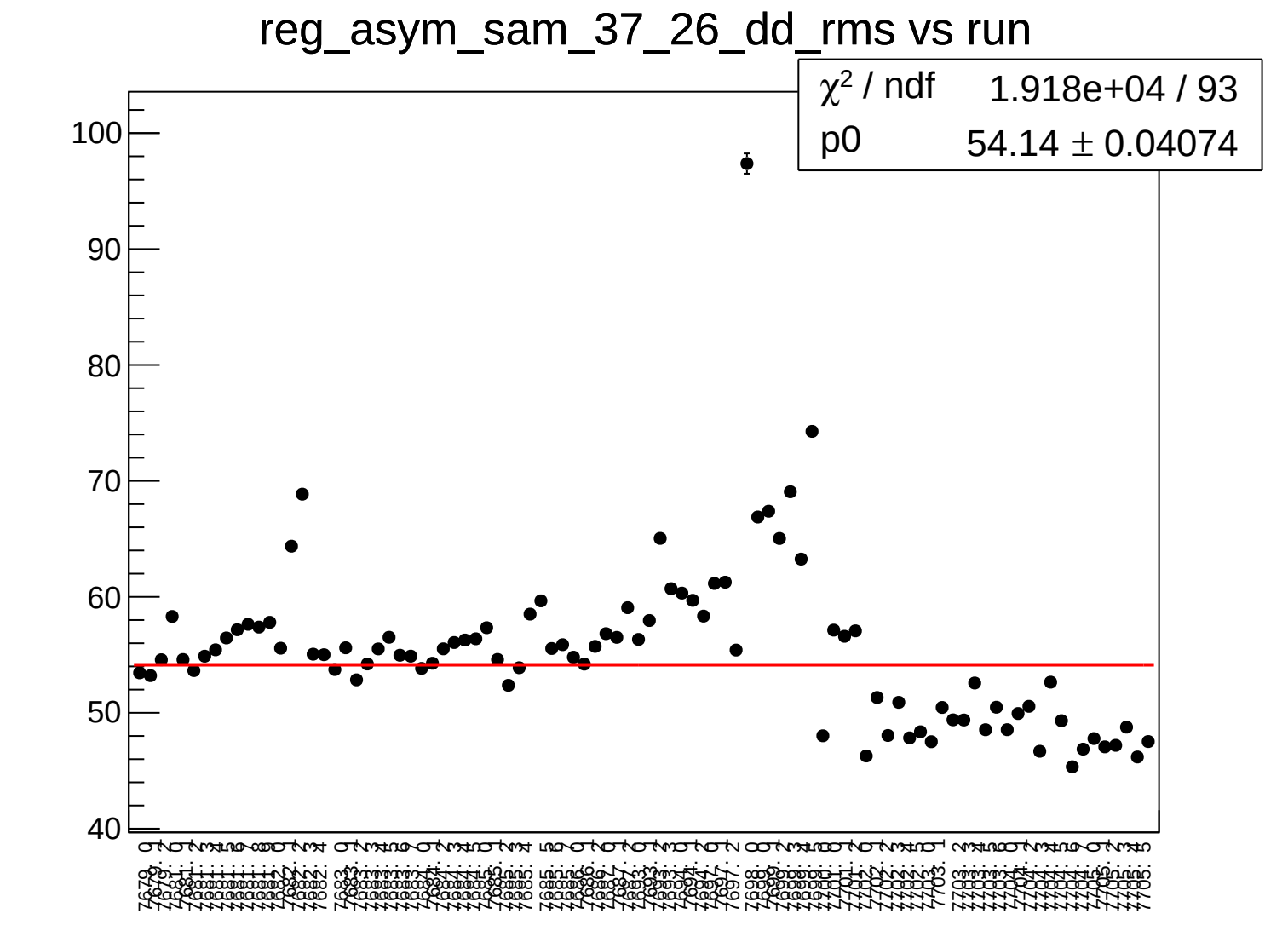

asym_sam_15_26_dd_mean vs run
χ² / ndf 79.13 / 93
p0 104.7 ± 1003
pull
Entries 94
Mean −176.8
Std Dev 229.1

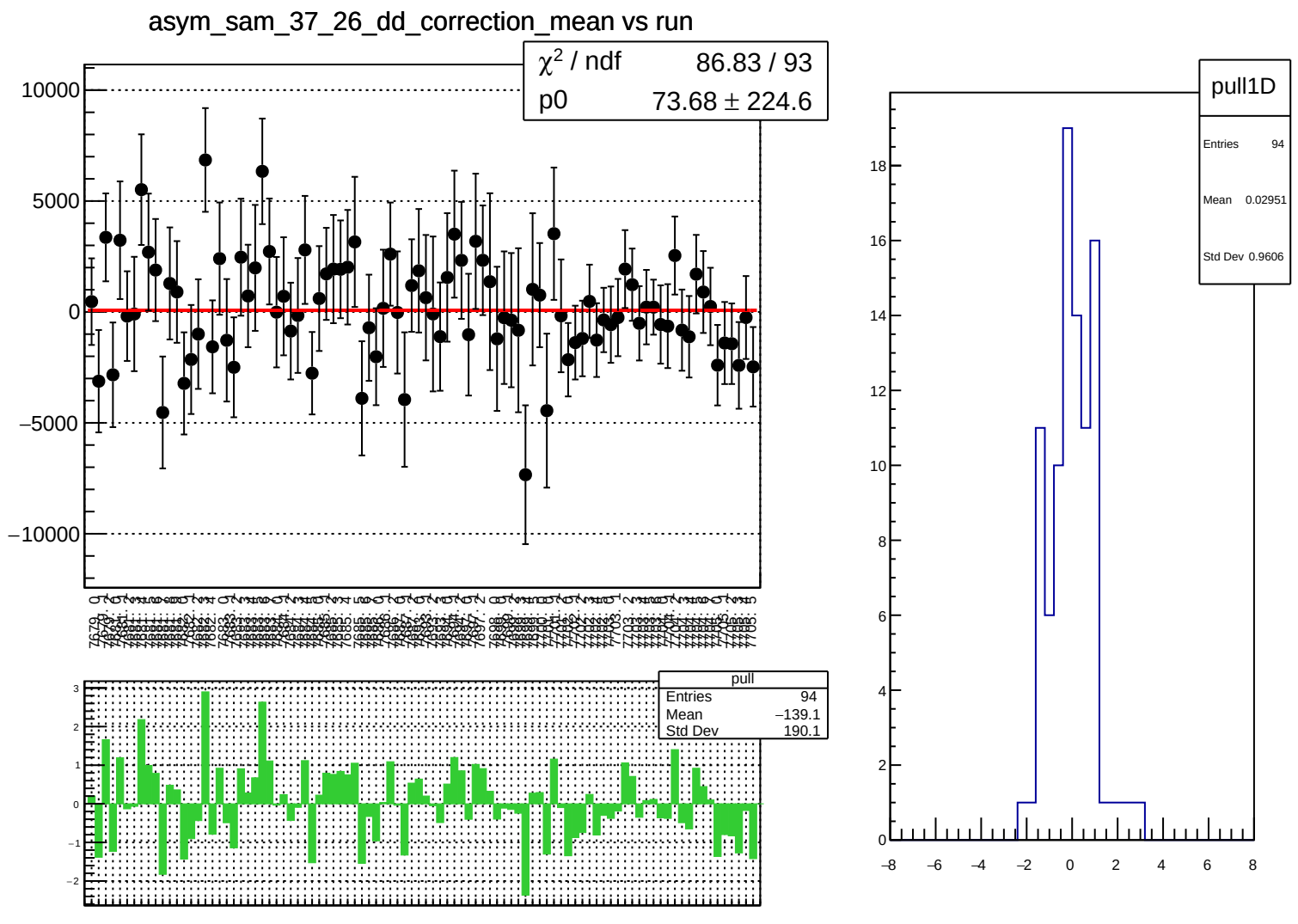

pull1D
Entries 94
Mean 0.02148
Std Dev 0.9173

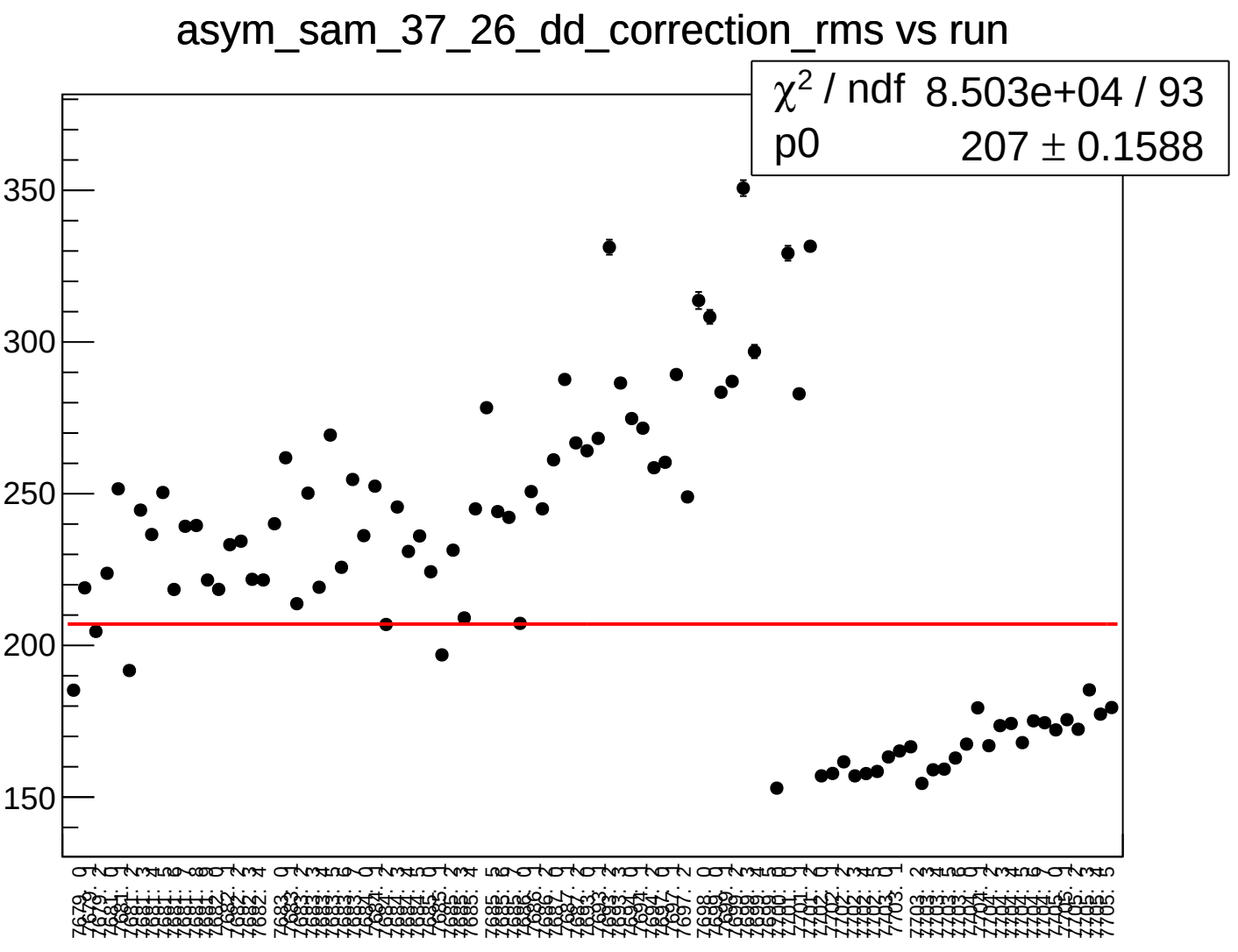

asym_sam_15_26_dd_rms vs run
χ² / ndf 1.786e+04 / 93
p0 942.8 ± 0.7093
1100
1000
900
800
700

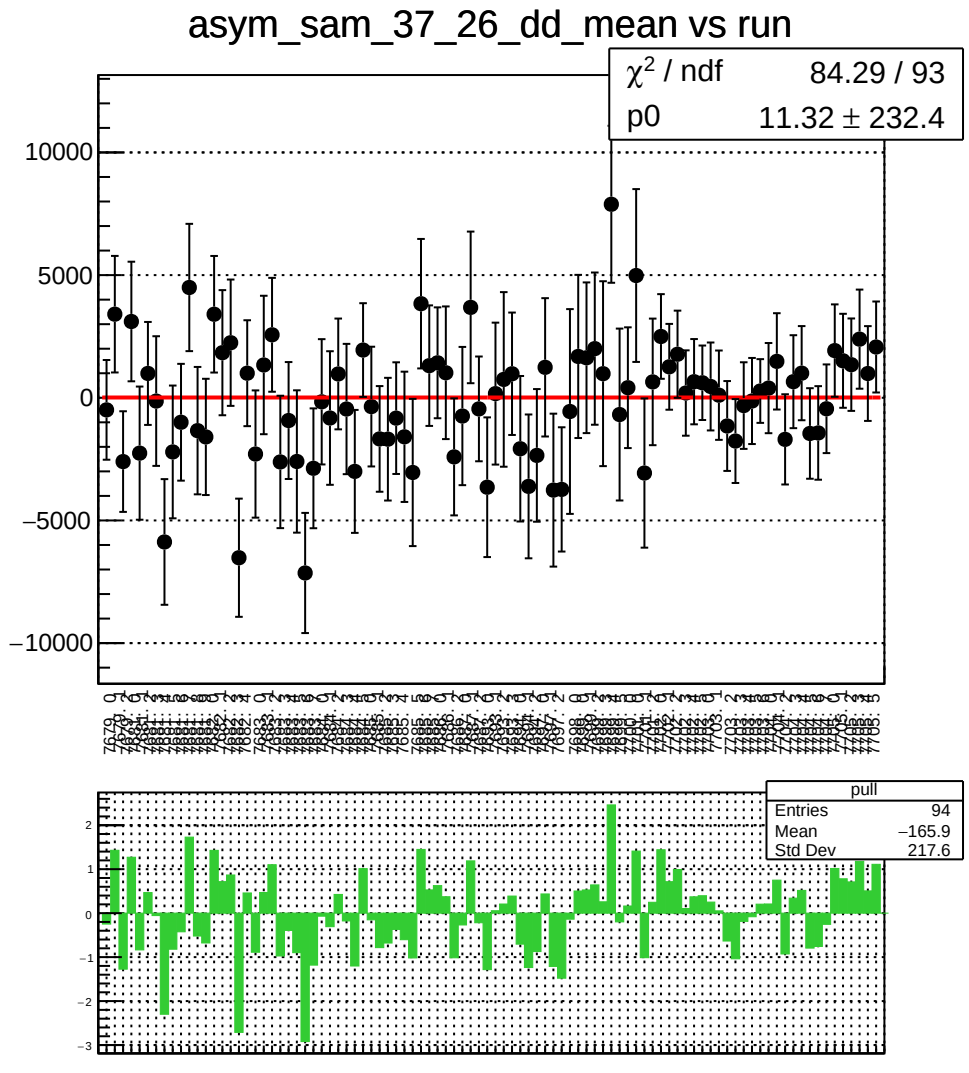

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 98.49 / 93
p0 82.78 ± 57.62
2000
1000
0
−1000
−2000
pull
Entries 94
Mean 44.16
Std Dev 42.66
2
1
0
−1
−2
−3

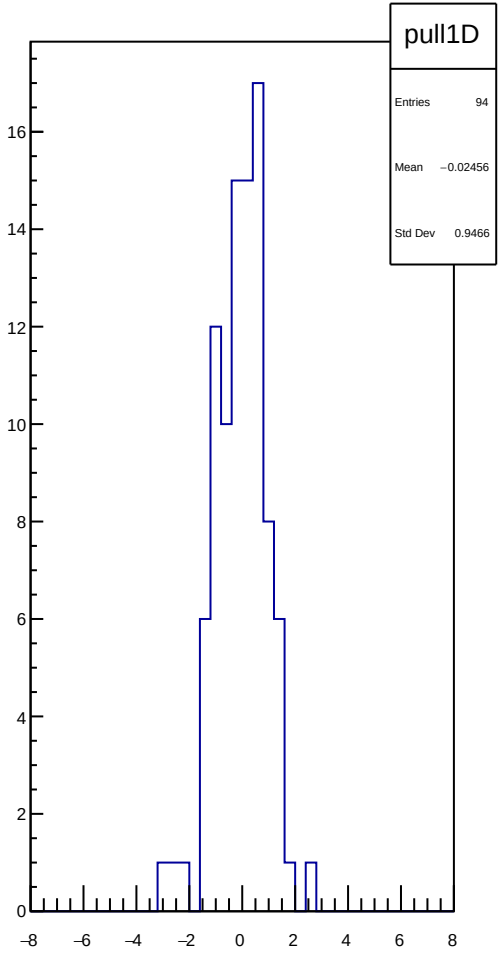

pull1D
Entries 94
Mean 0.01805
Std Dev 1.023
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

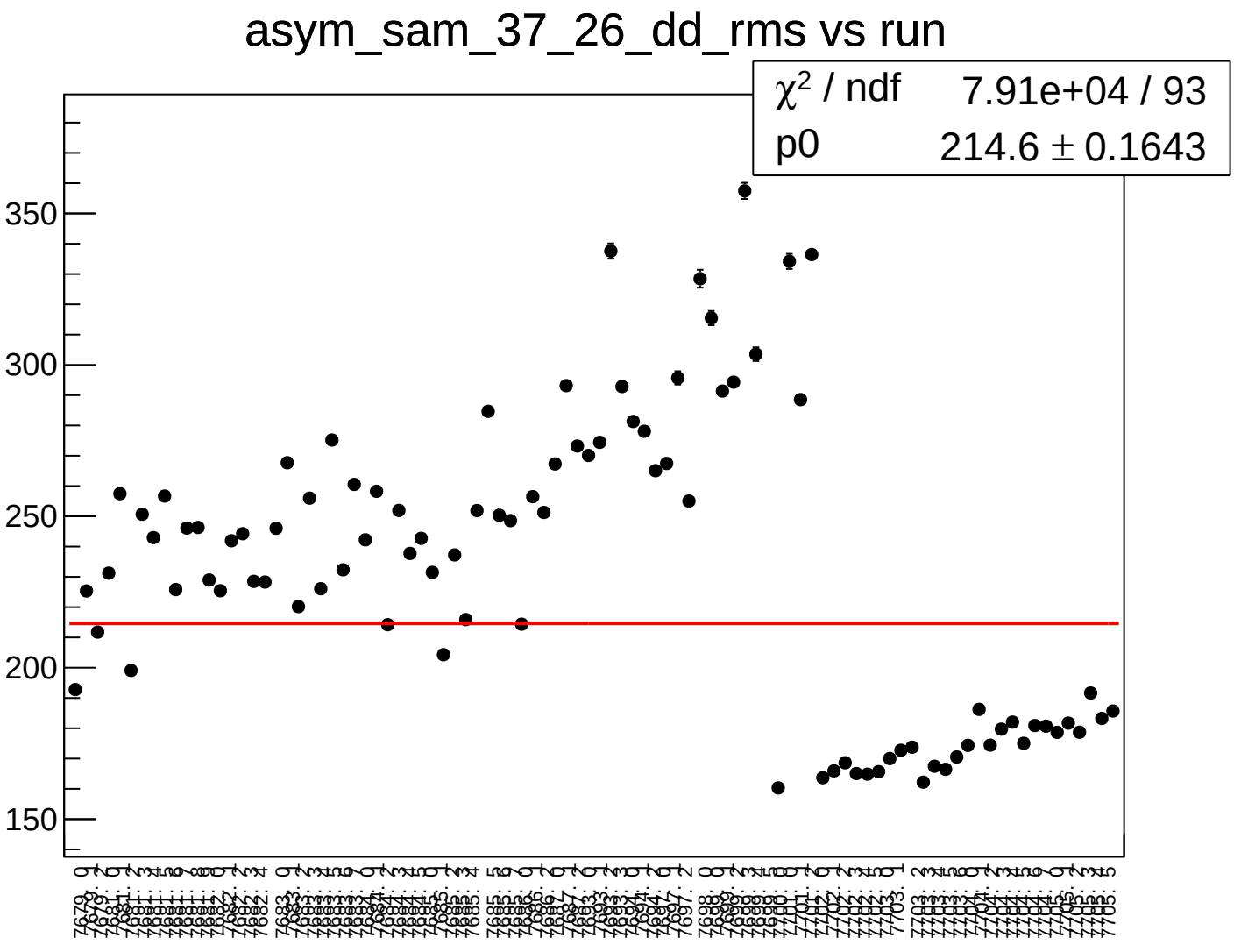

reg_asym_sam_37_26_dd_rms vs run
χ² / ndf 1.918e+04 / 93
p0 54.14 ± 0.04074
100
90
80
70
60
50
40

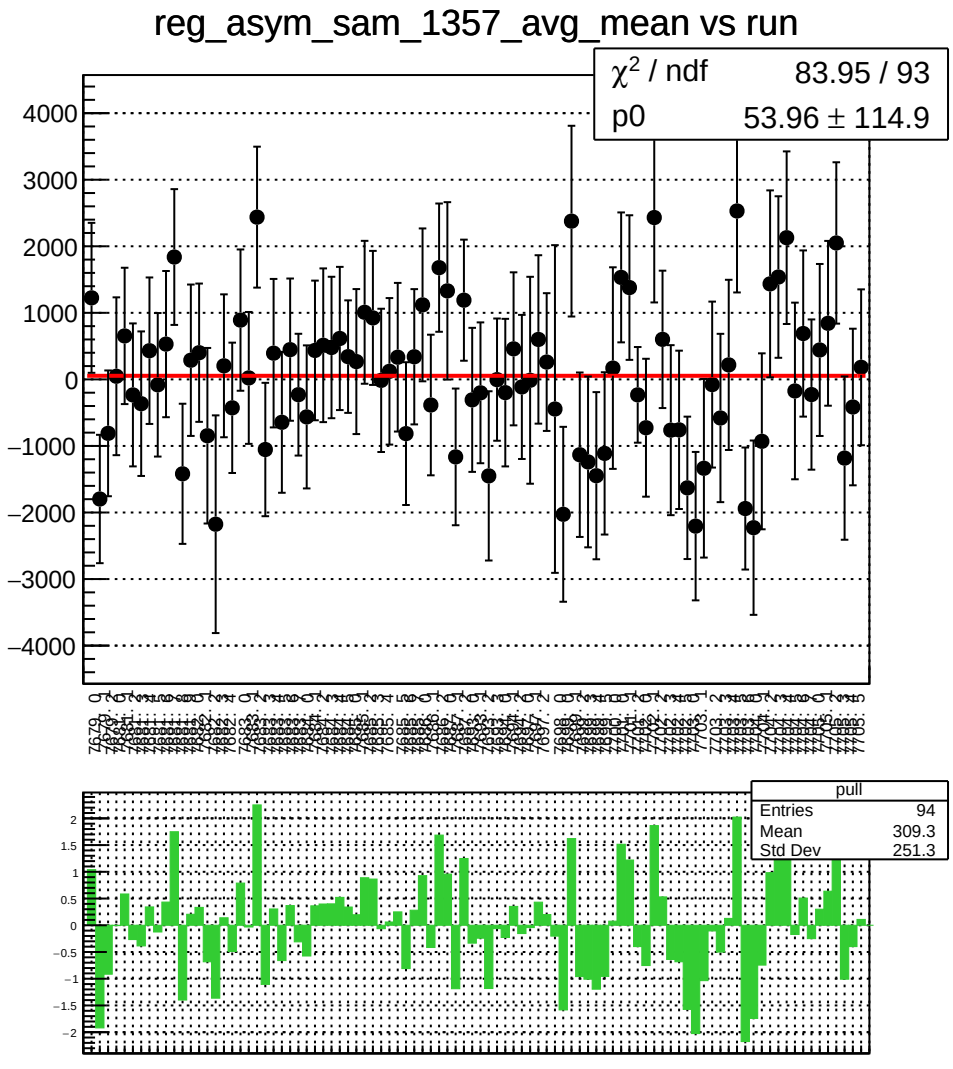

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 86.83 / 93
p0 73.68 ± 224.6
10000
5000
0
−5000
−10000
pull
Entries 94
Mean −139.1
Std Dev 190.1
pull1D
Entries 94
Mean 0.02951
Std Dev 0.9606

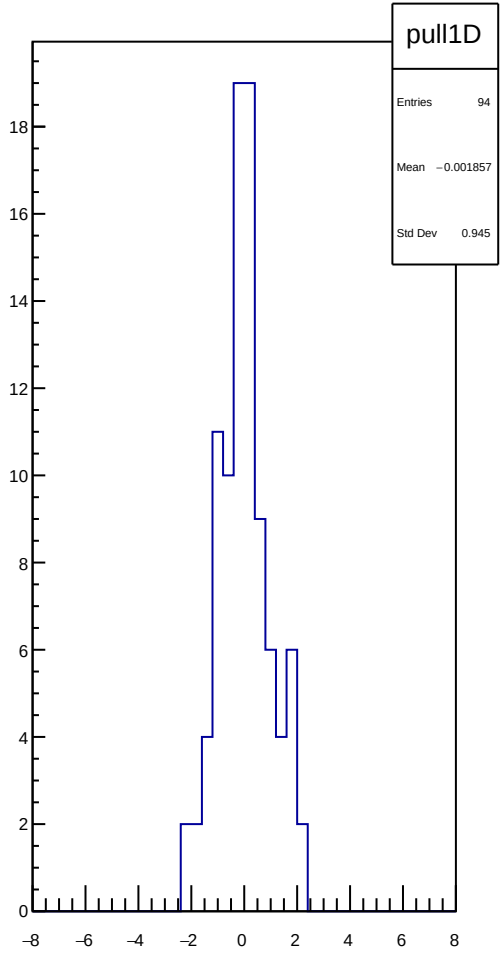

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 8.503e+04 / 93
p0 207 ± 0.1588
350
300
250
200
150

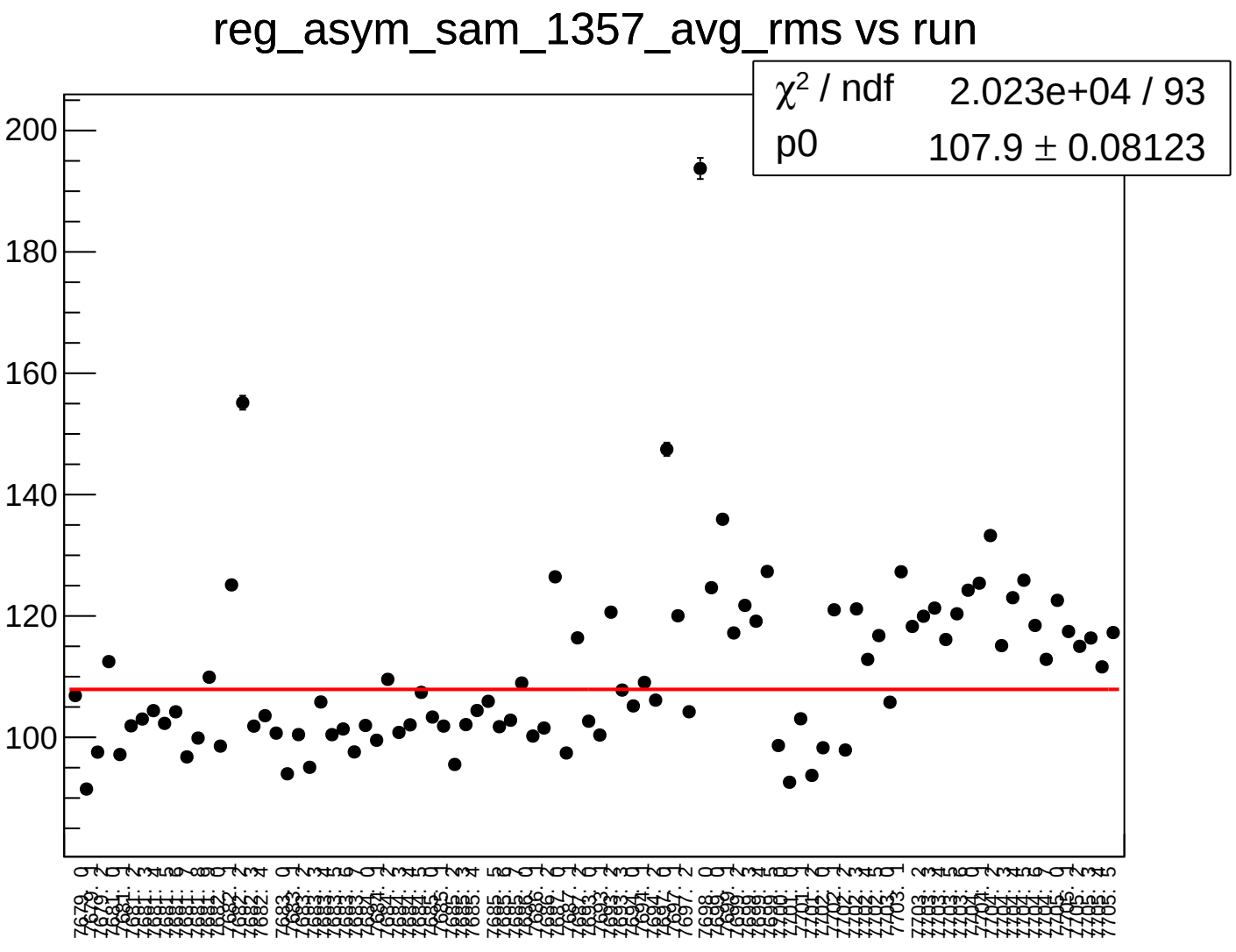

asym_sam_37_26_dd_mean vs run
χ² / ndf 84.29 / 93
p0 11.32 ± 232.4
10000
5000
0
−5000
−10000
pull
Entries 94
Mean −165.9
Std Dev 217.6
2
1
0
−1
−2
−3

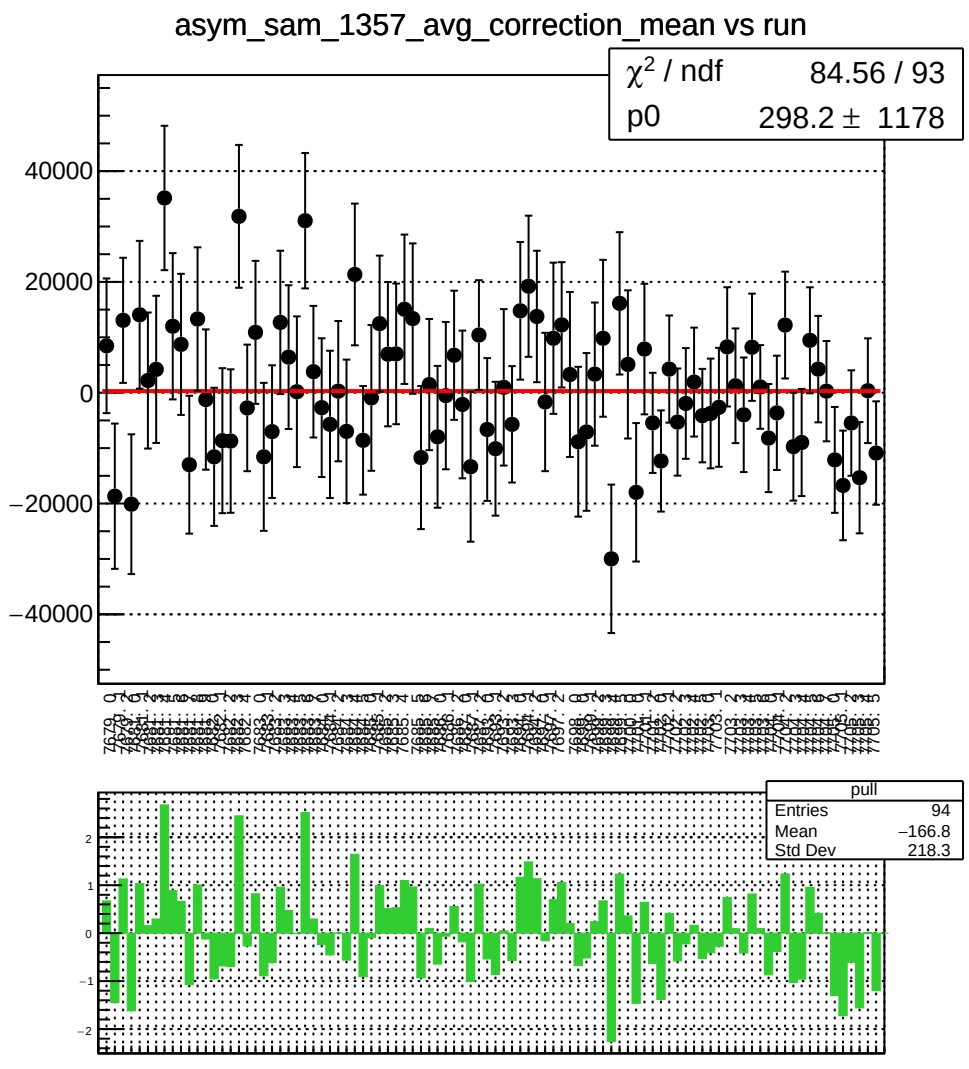

pull1D
Entries 94
Mean −0.02456
Std Dev 0.9466
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

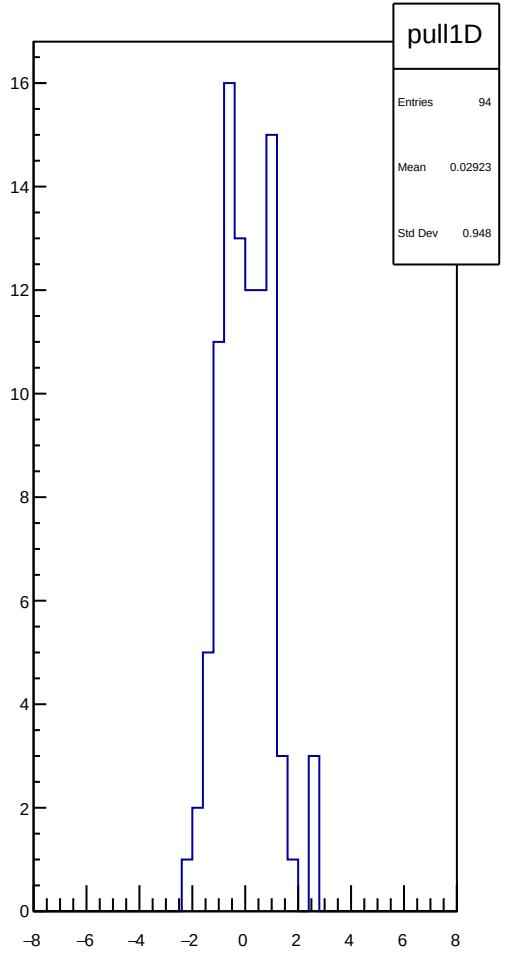

asym_sam_37_26_dd_rms vs run
χ^2 / ndf 7.91e+04 / 93
p0 214.6 ± 0.1643
350
300
250
200
150

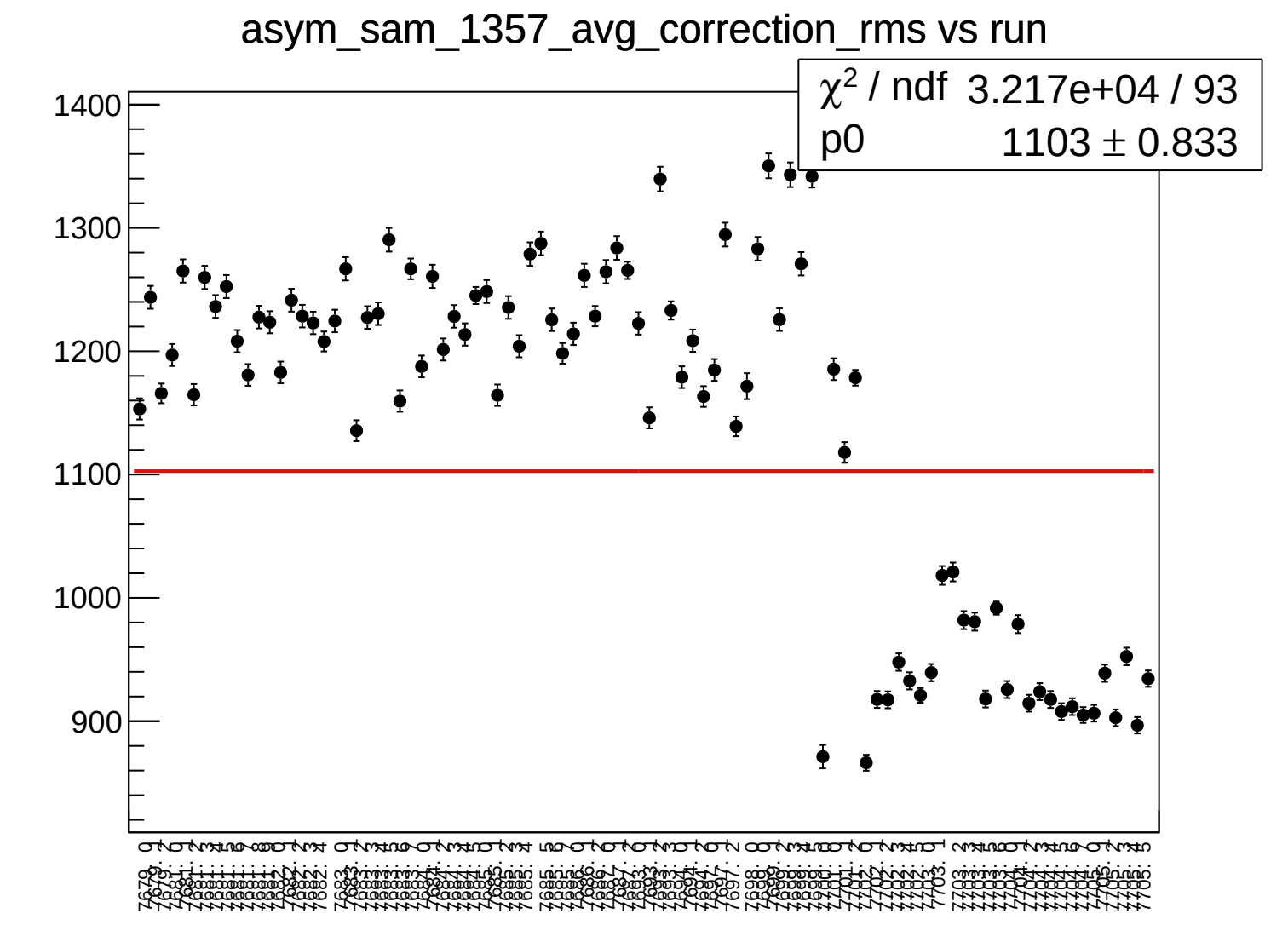

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 83.95 / 93
p0 53.96 ± 114.9
pull
Entries 94
Mean 309.3
Std Dev 251.3

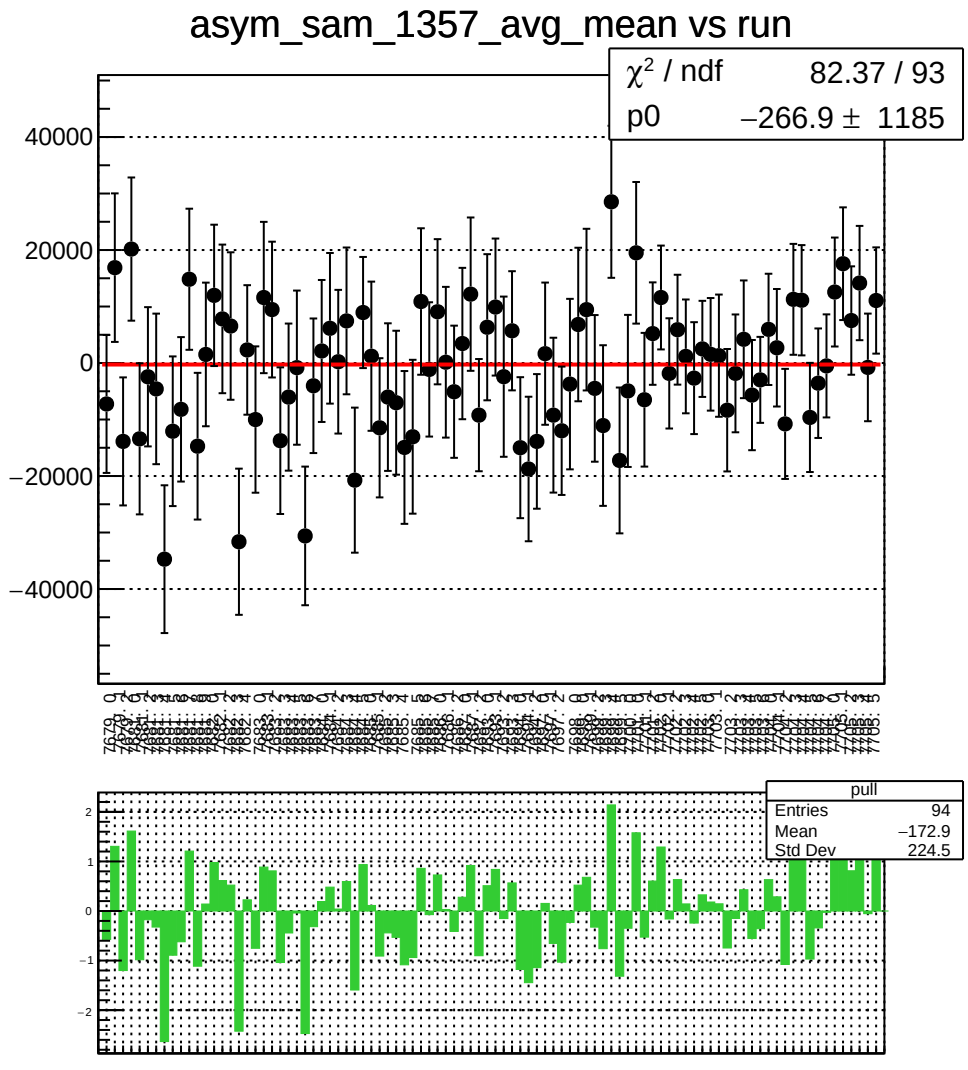

pull1D
Entries 94
Mean −0.001857
Std Dev 0.945

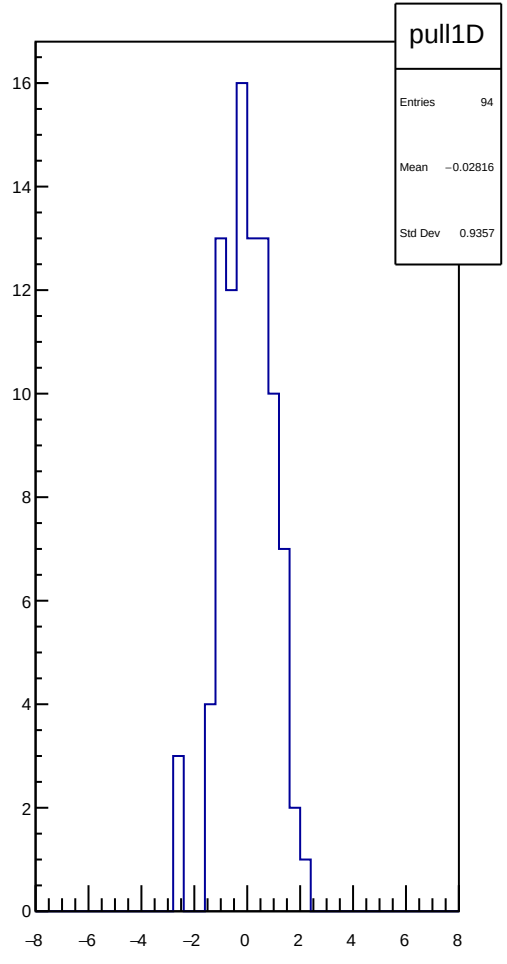

reg_asym_sam_1357_avg_rms vs run
χ² / ndf 2.023e+04 / 93
p0 107.9 ± 0.08123
200
180
160
140
120
100

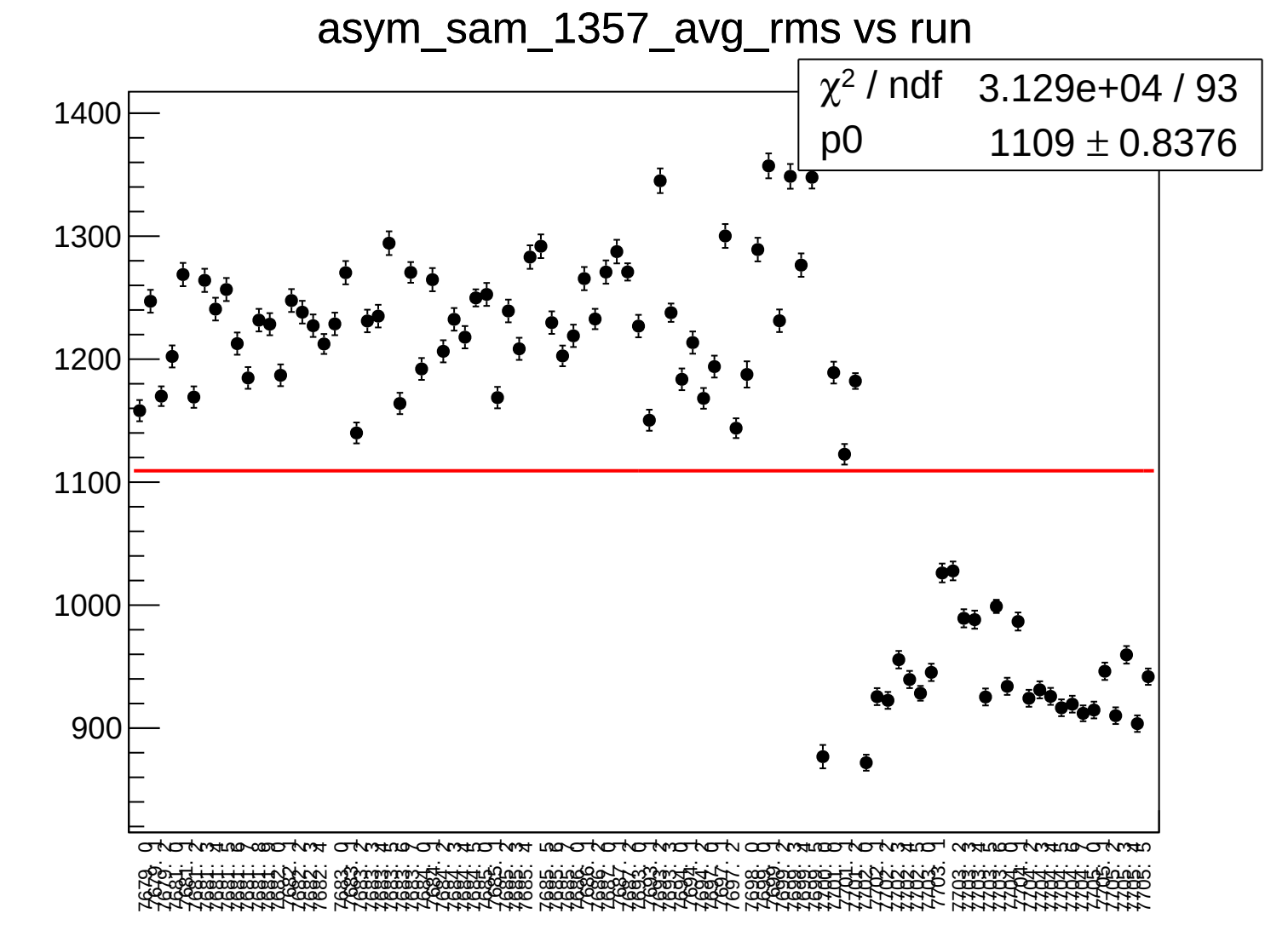

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 84.56 / 93
p0 298.2 ± 1178
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −166.8
Std Dev 218.3
2
1
0
−1
−2

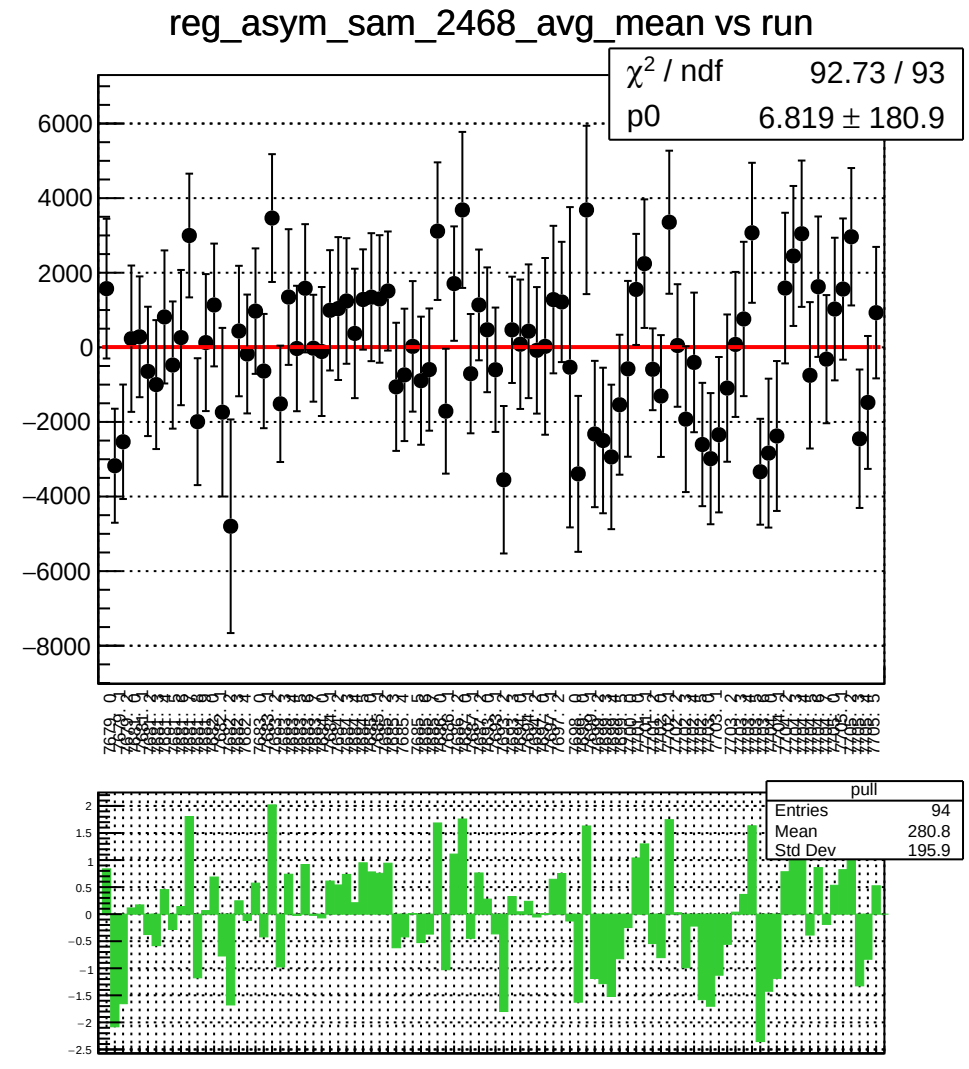

pull1D
Entries 94
Mean 0.02923
Std Dev 0.948
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

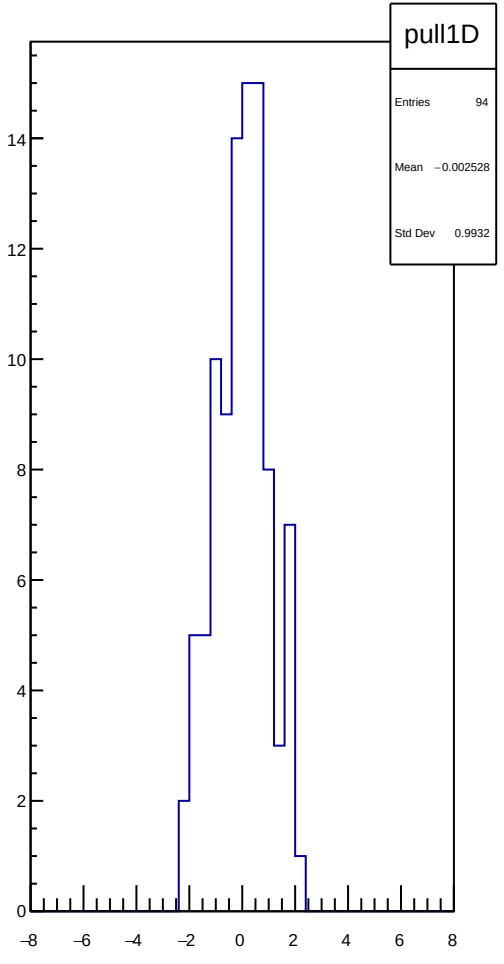

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 3.217e+04 / 93
p0 1103 ± 0.833
1400
1300
1200
1100
1000
900

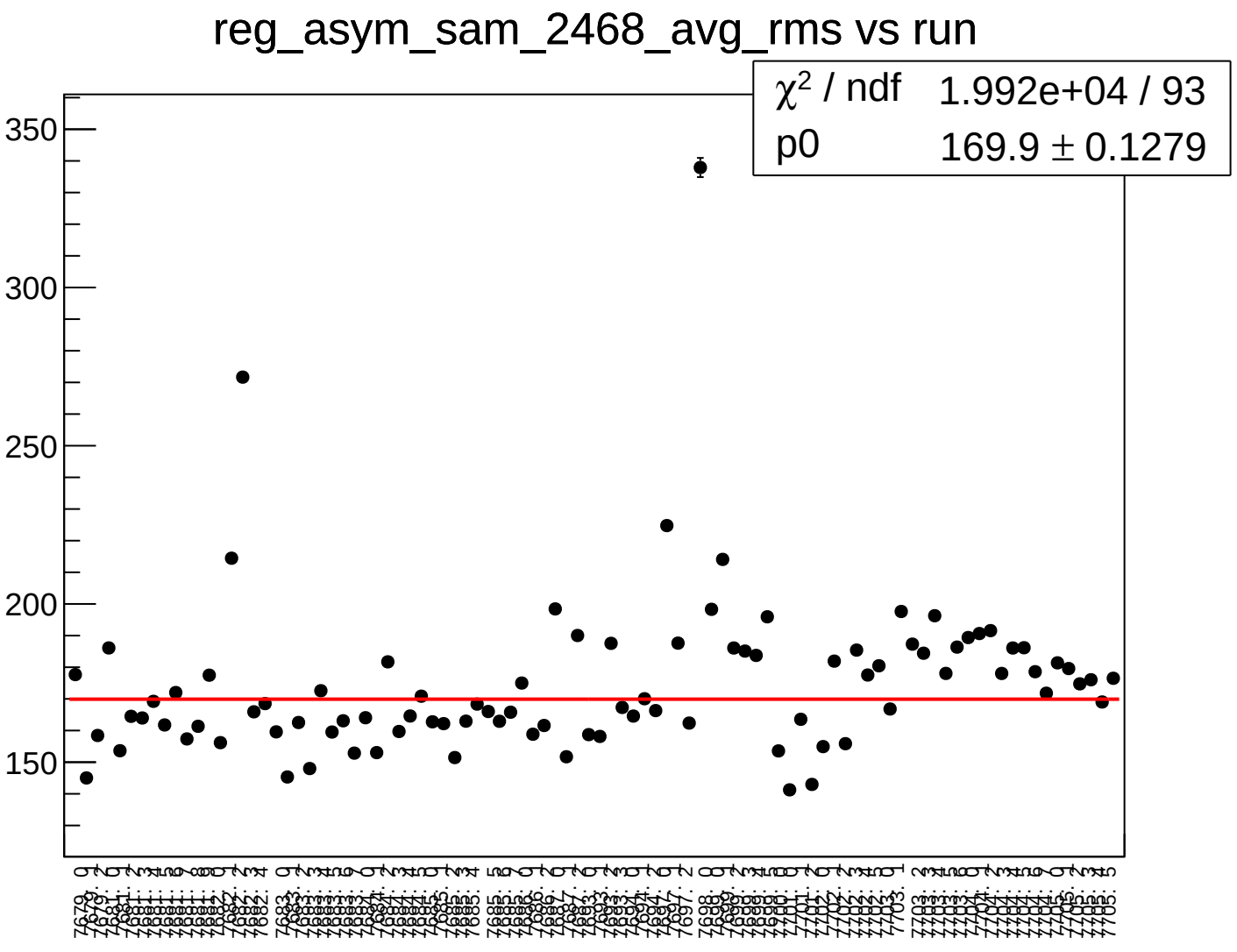

asym_sam_1357_avg_mean vs run
χ² / ndf 82.37 / 93
p0 −266.9 ± 1185
40000
20000
0
−20000
−40000
pull
Entries 94
Mean −172.9
Std Dev 224.5
2
1
0
−1
−2

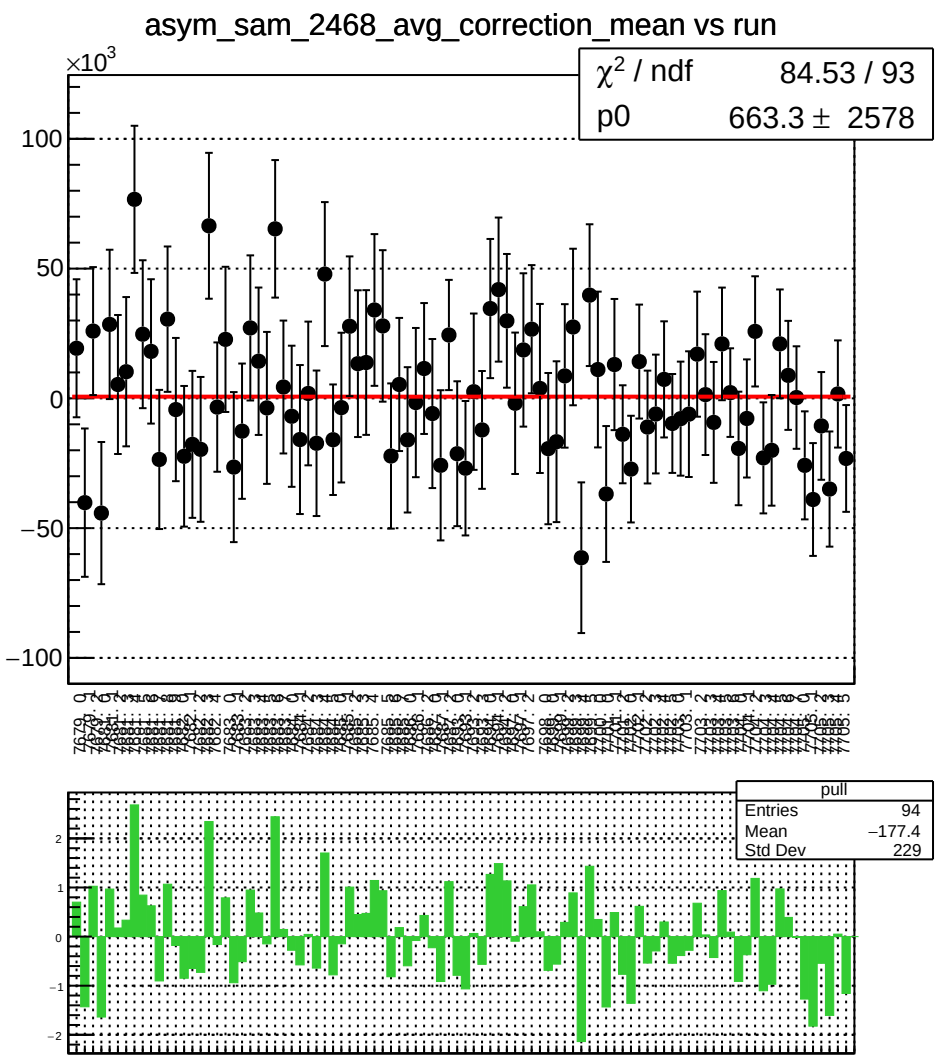

pull1D
Entries 94
Mean −0.02816
Std Dev 0.9357
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

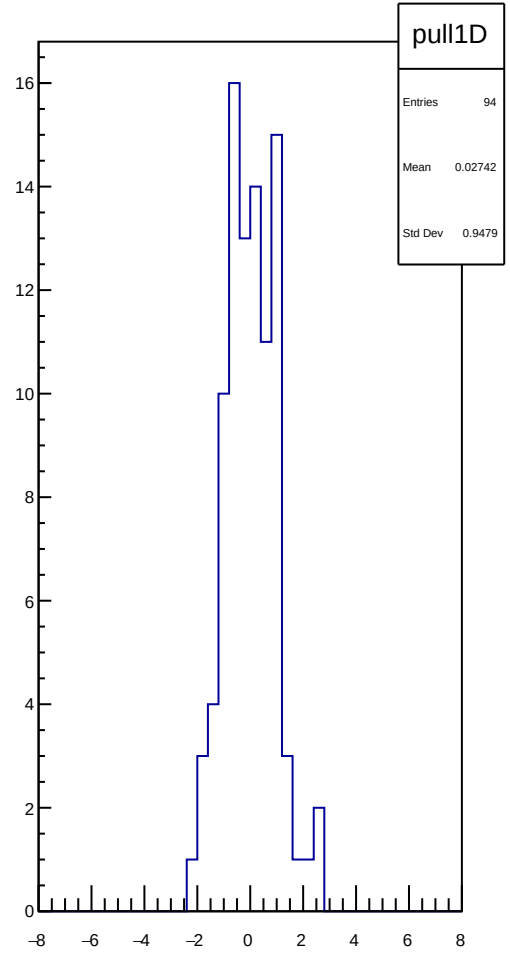

asym_sam_1357_avg_rms vs run
χ² / ndf 3.129e+04 / 93
p0 1109 ± 0.8376
1400
1300
1200
1100
1000
900

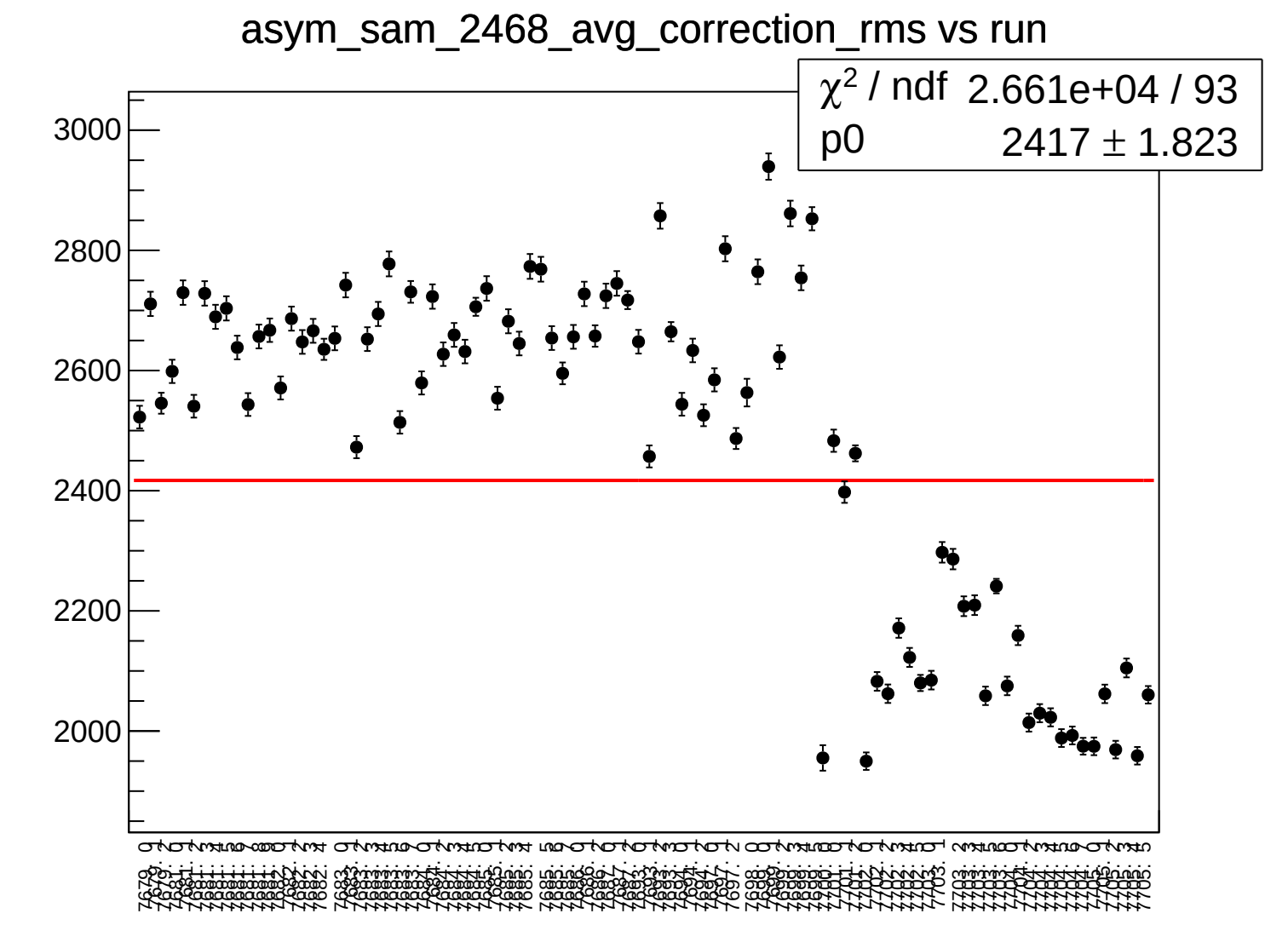

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 92.73 / 93
p0 6.819 ± 180.9
pull
Entries 94
Mean 280.8
Std Dev 195.9

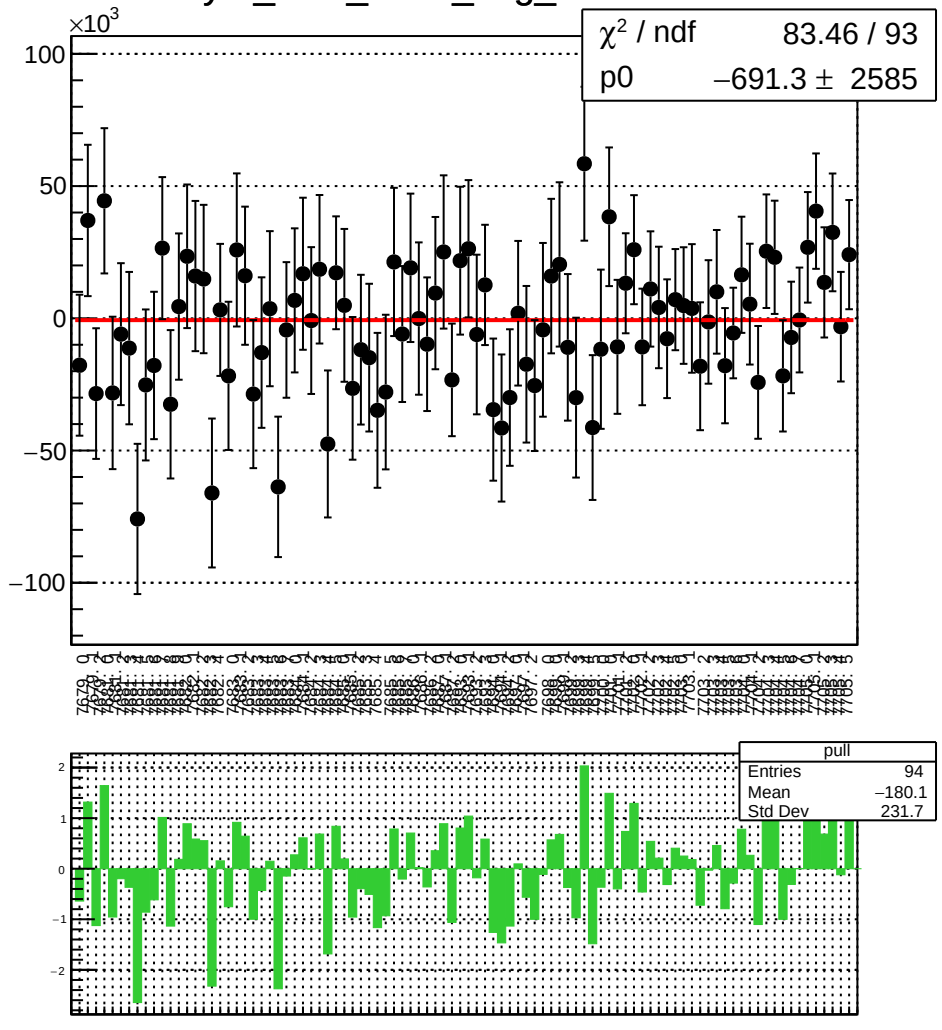

pull1D
Entries 94
Mean −0.002528
Std Dev 0.9932

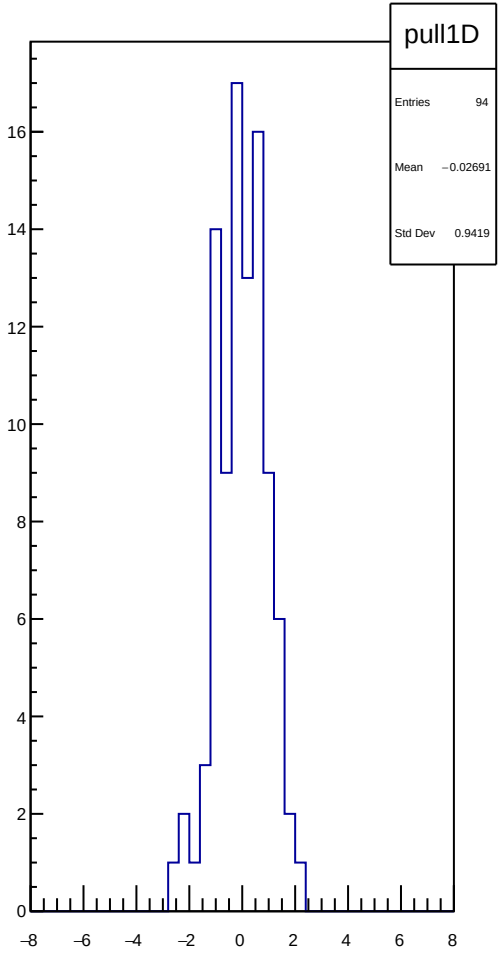

reg_asym_sam_2468_avg_rms vs run
χ^2 / ndf 1.992e+04 / 93
p0 169.9 ± 0.1279
350
300
250
200
150

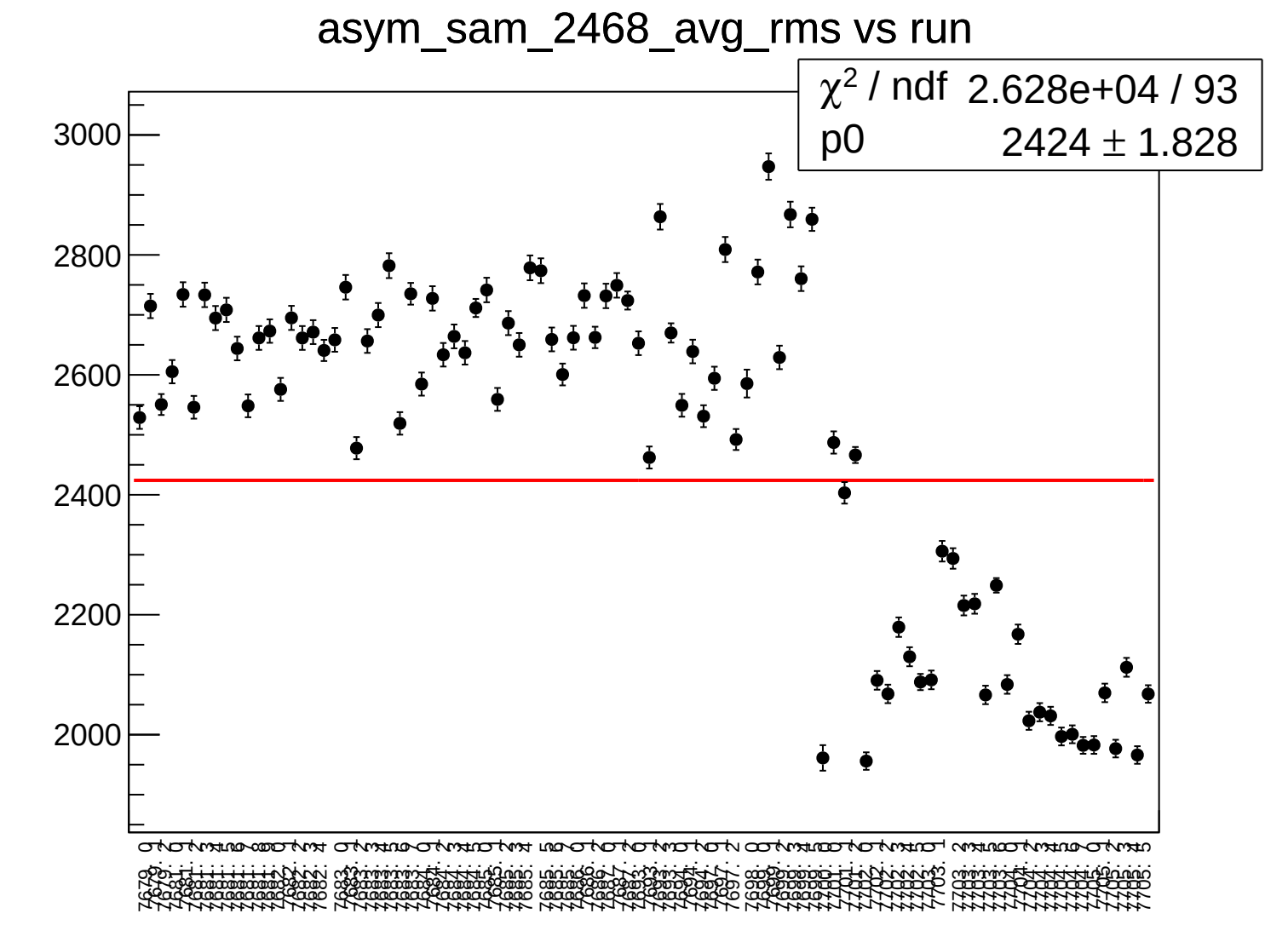

asym_sam_2468_avg_correction_mean vs run
×10^3
χ² / ndf 84.53 / 93
p0 663.3 ± 2578
100
50
0
−50
−100
pull
Entries 94
Mean −177.4
Std Dev 229
2
1
0
−1
−2

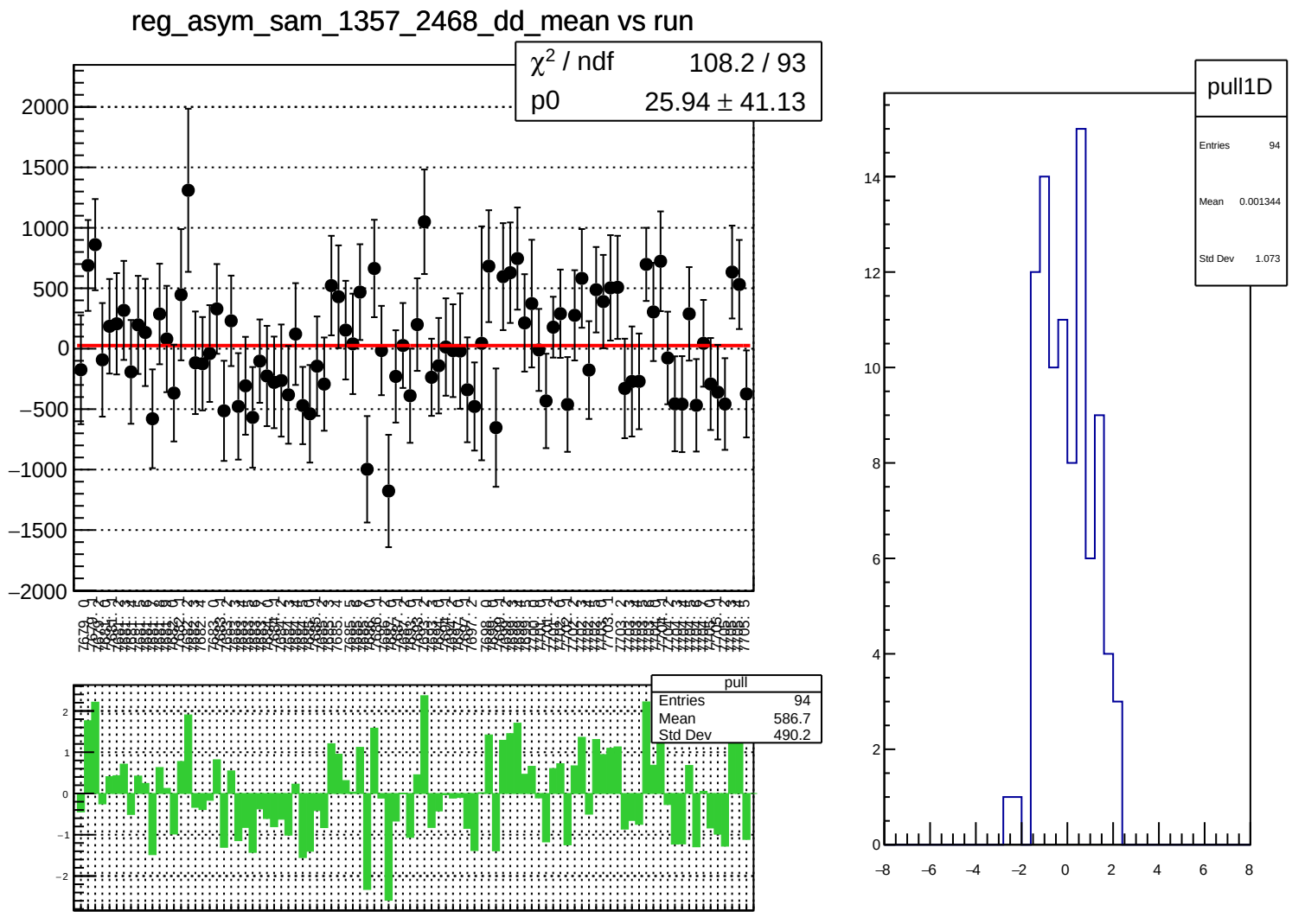

pull1D
Entries 94
Mean 0.02742
Std Dev 0.9479
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

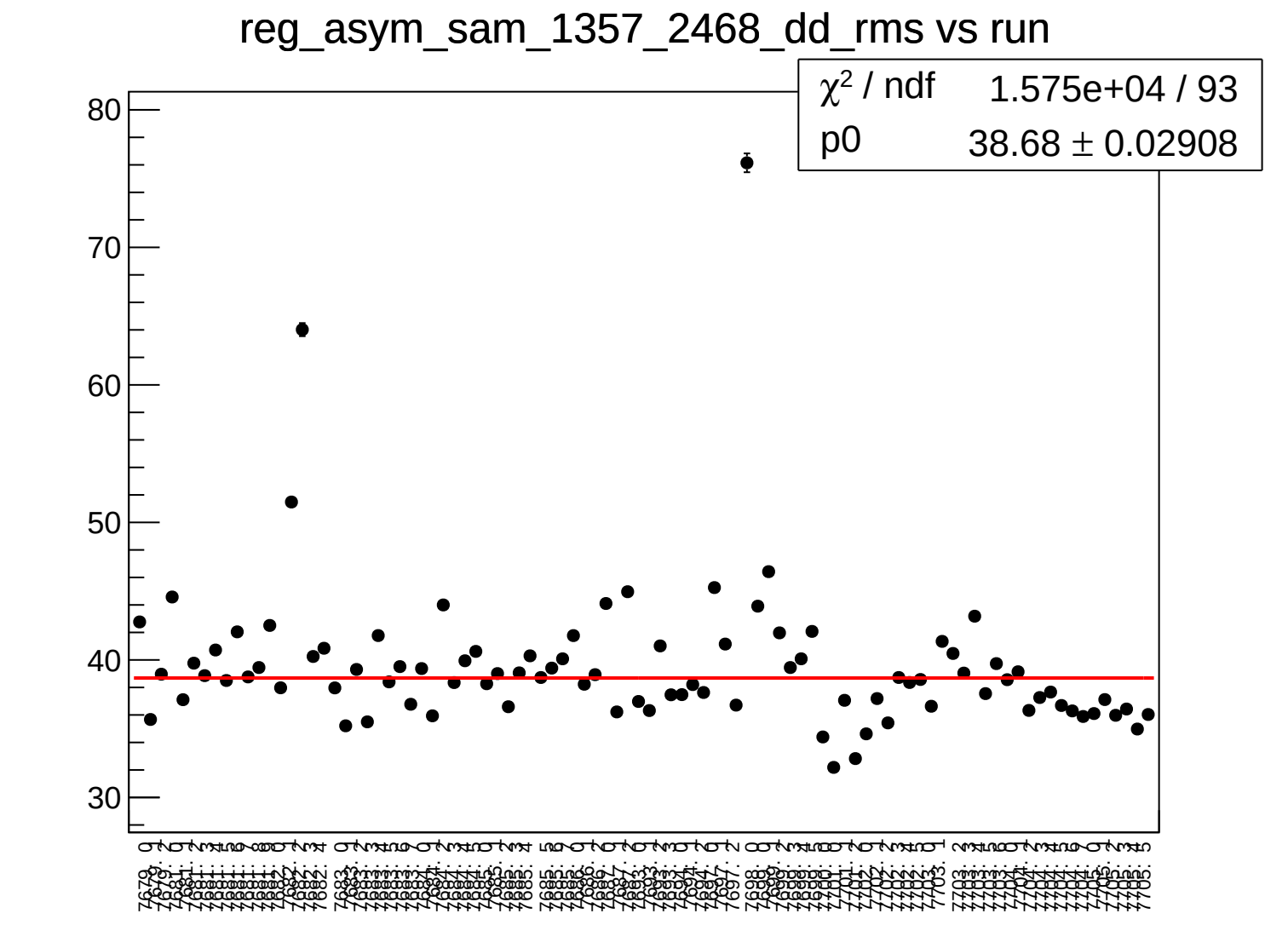

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 2.661e+04 / 93
p0 2417 ± 1.823
3000
2800
2600
2400
2200
2000

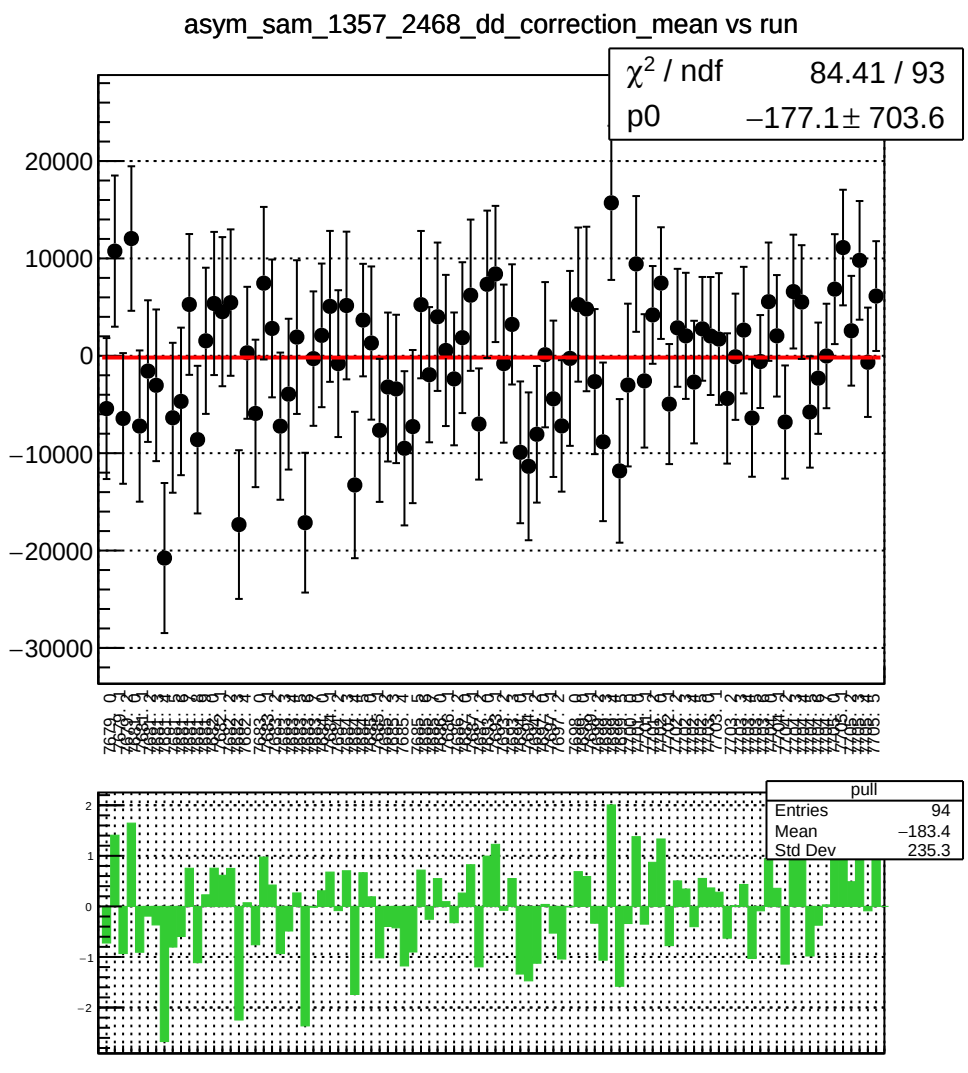

asym_sam_2468_avg_mean vs run
×10^3
χ² / ndf 83.46 / 93
p0 −691.3 ± 2585
pull
Entries 94
Mean −180.1
Std Dev 231.7

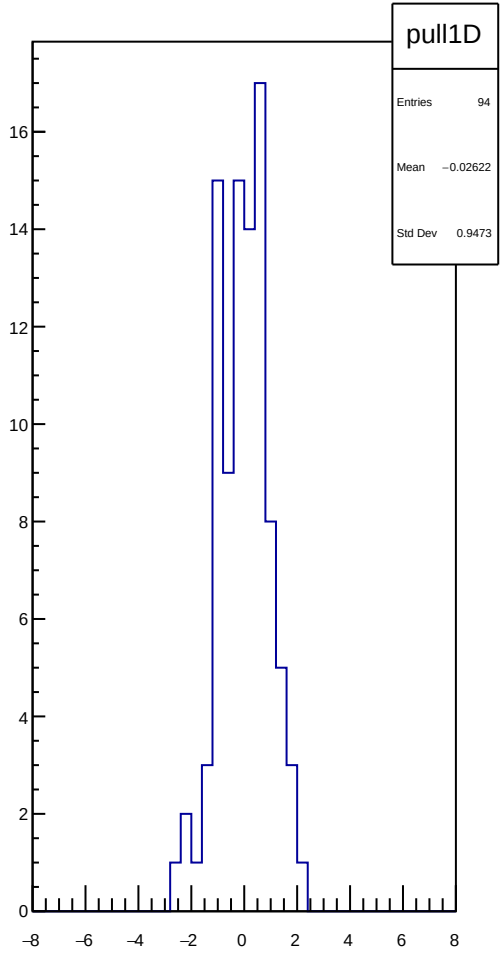

pull1D
Entries 94
Mean −0.02691
Std Dev 0.9419

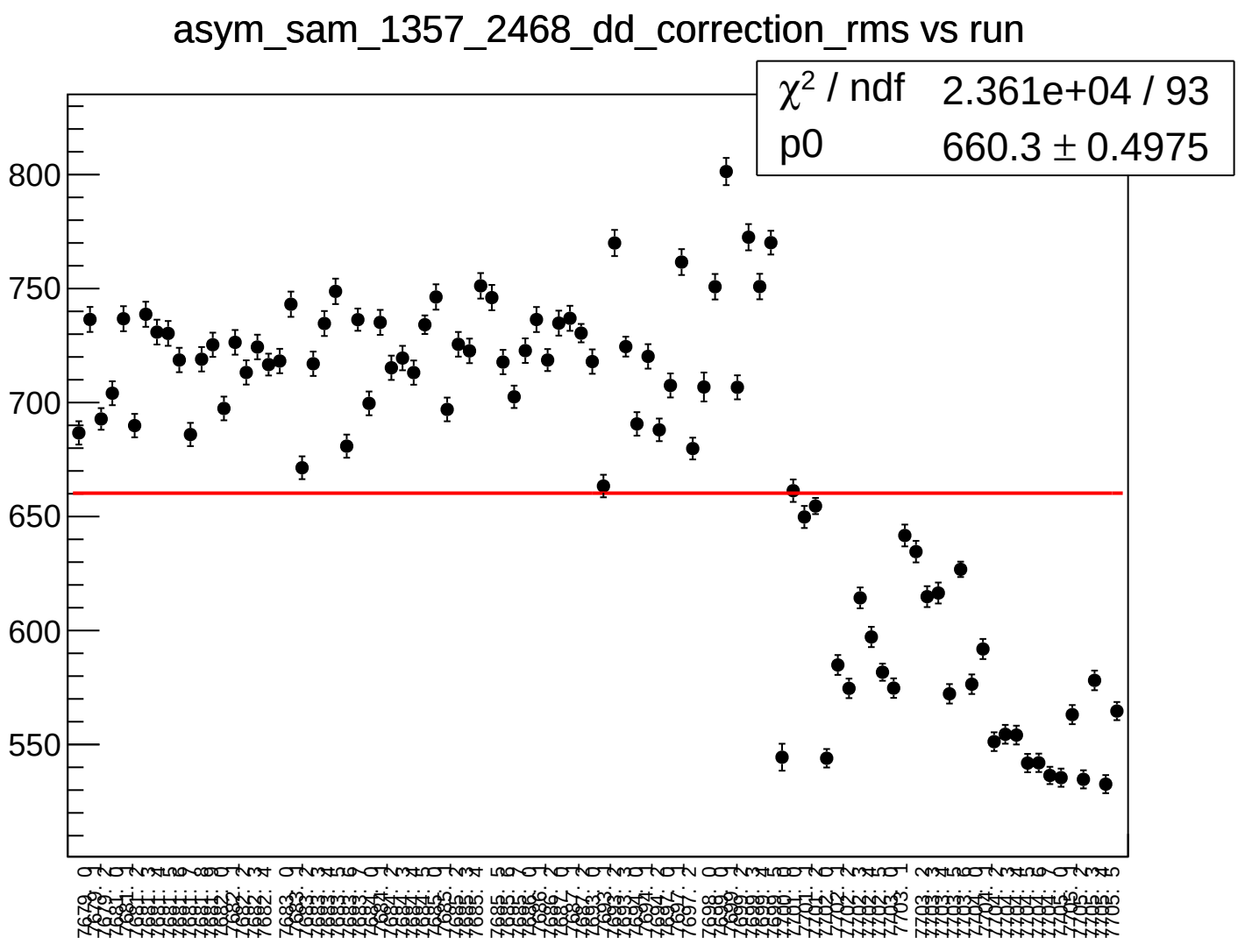

asym_sam_2468_avg_rms vs run
χ² / ndf 2.628e+04 / 93
p0 2424 ± 1.828
3000
2800
2600
2400
2200
2000

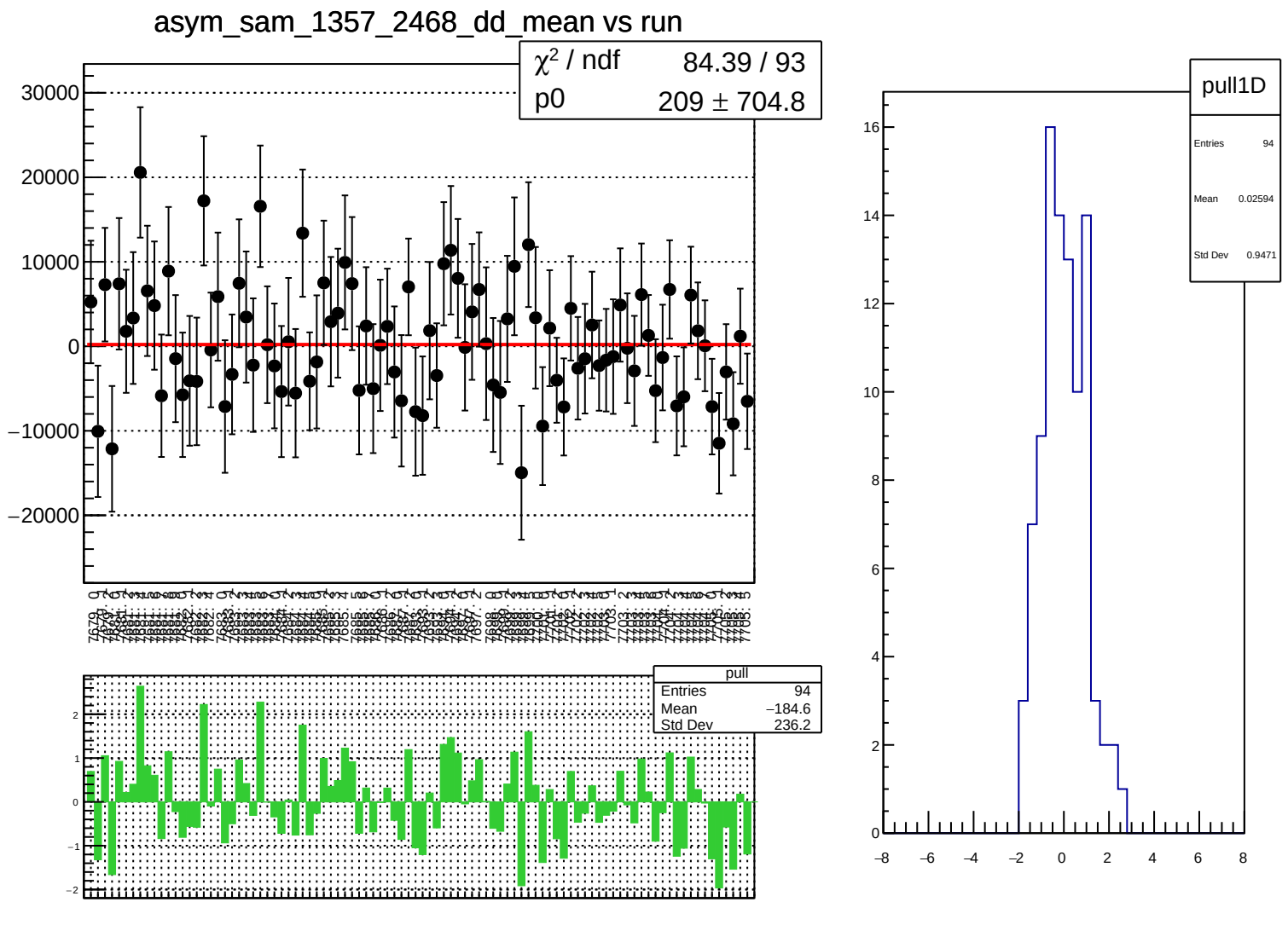

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 108.2 / 93
p0 25.94 ± 41.13
pull
Entries 94
Mean 586.7
Std Dev 490.2
pull1D
Entries 94
Mean 0.001344
Std Dev 1.073

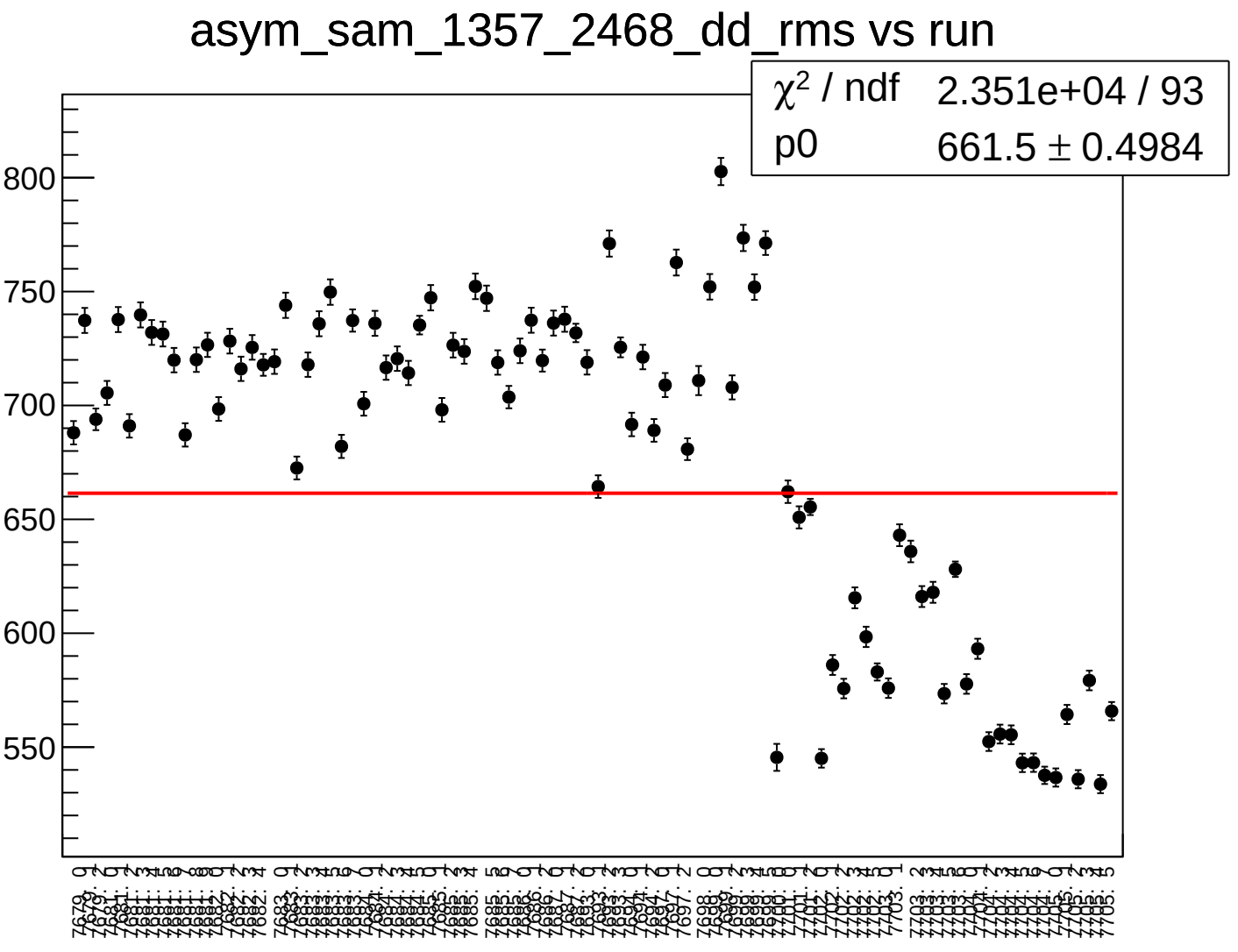

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.575e+04 / 93
p0 38.68 ± 0.02908
80
70
60
50
40
30

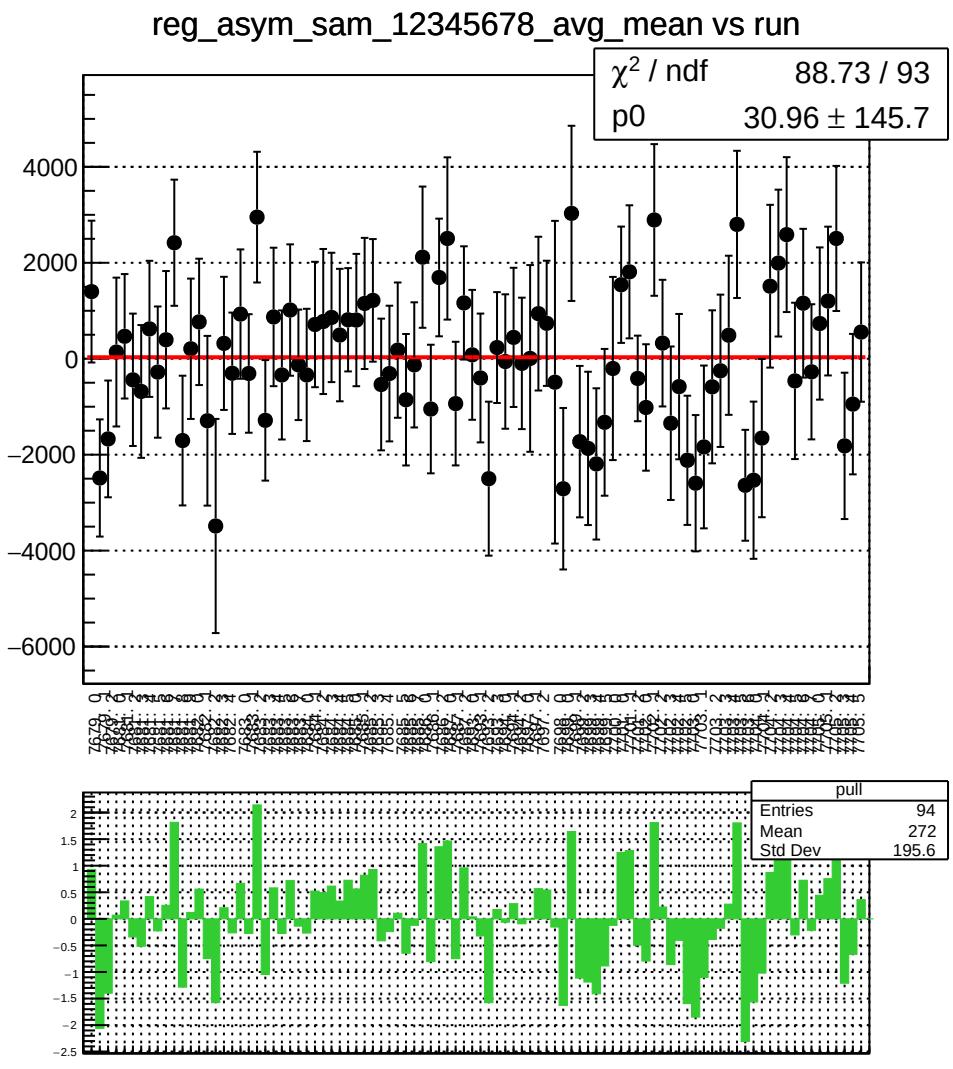

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 84.41 / 93
p0 −177.1± 703.6
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −183.4
Std Dev 235.3
2
1
0
−1
−2

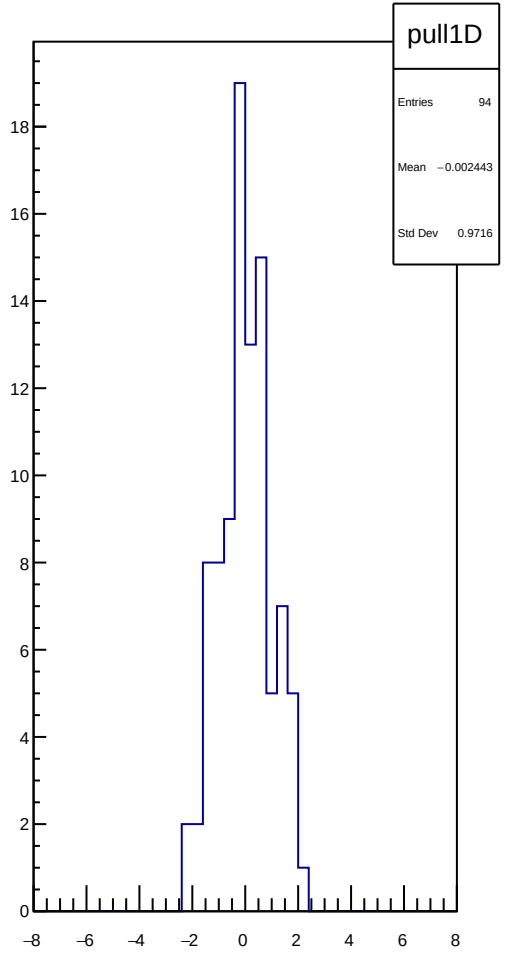

pull1D
Entries 94
Mean −0.02622
Std Dev 0.9473
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

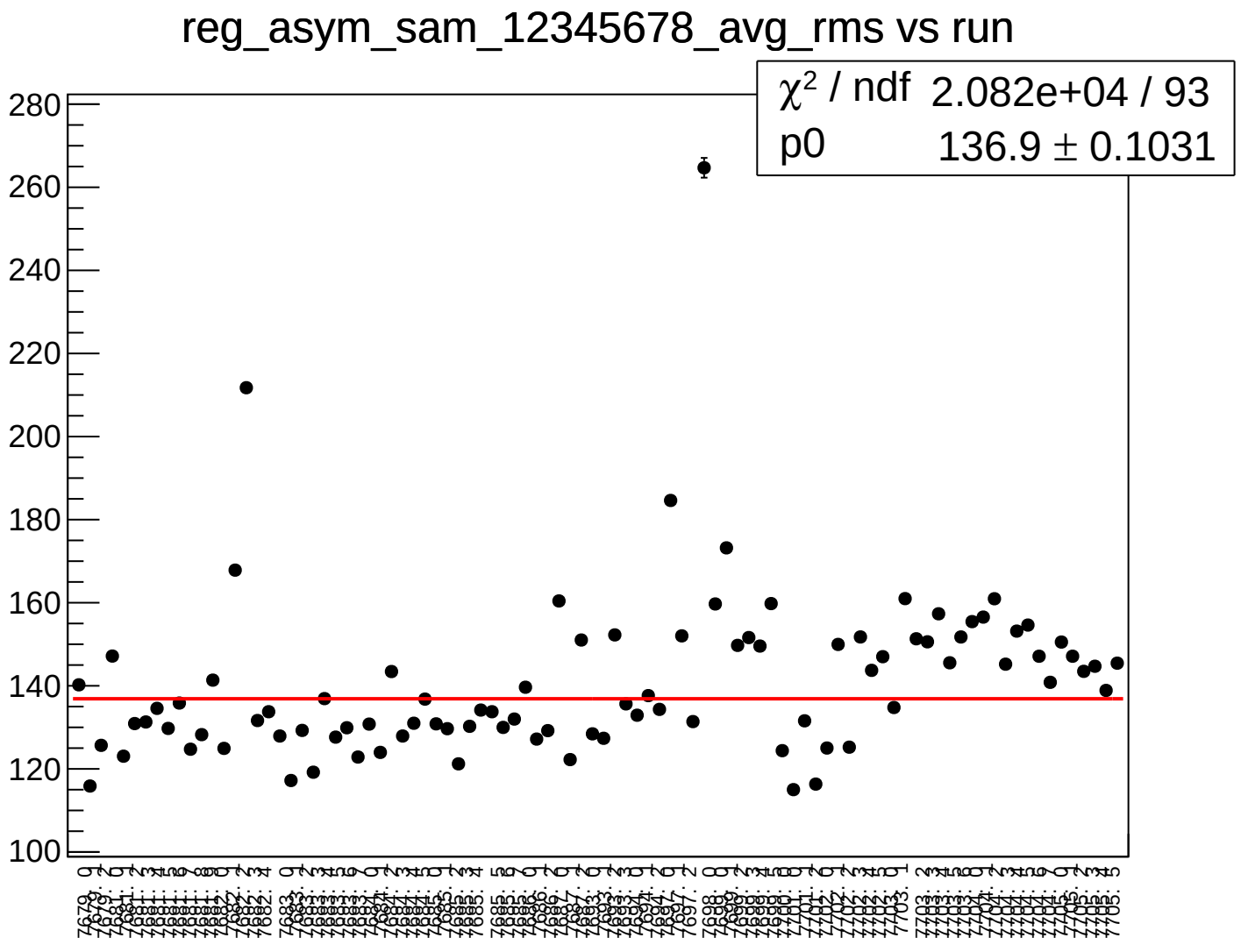

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 2.361e+04 / 93
p0 660.3 ± 0.4975
800
750
700
650
600
550

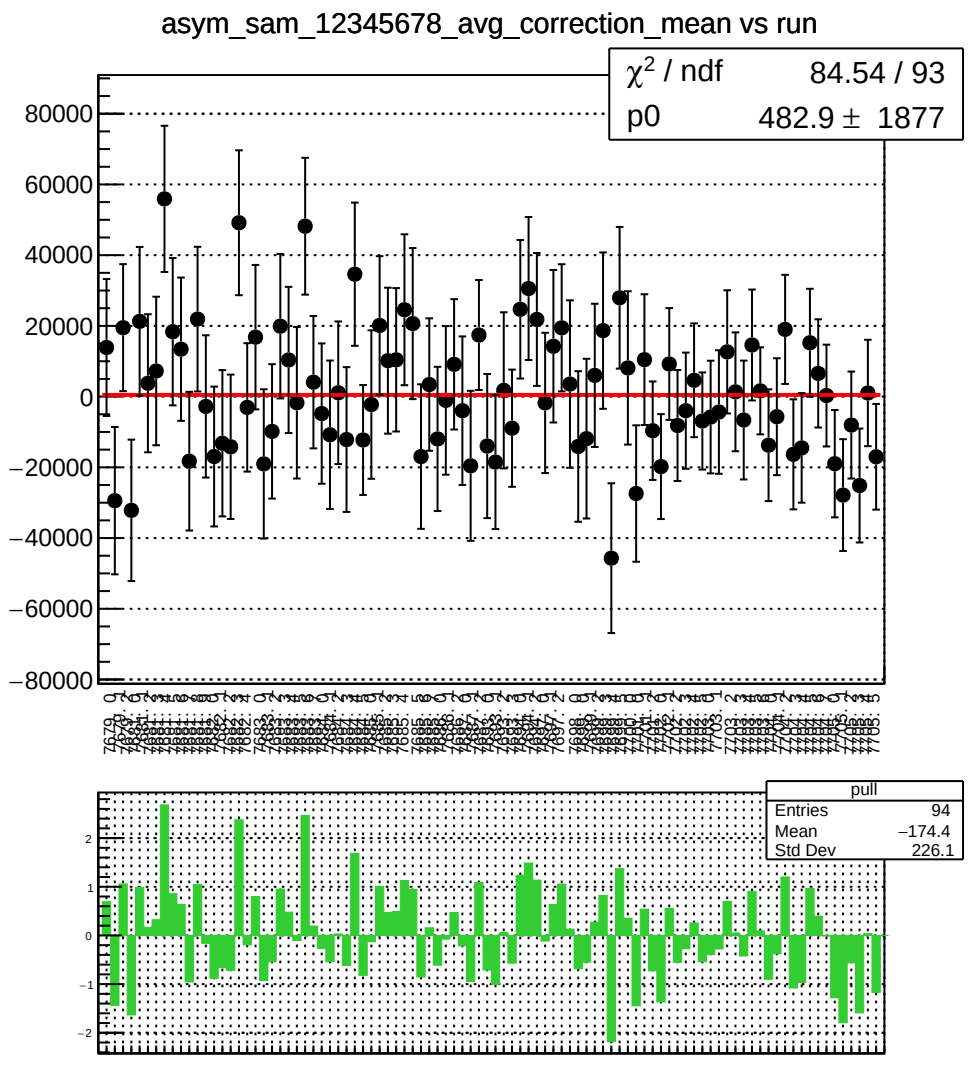

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 84.39 / 93
p0 209 ± 704.8
30000
20000
10000
0
−10000
−20000
pull
Entries 94
Mean −184.6
Std Dev 236.2
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.02594
Std Dev 0.9471
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

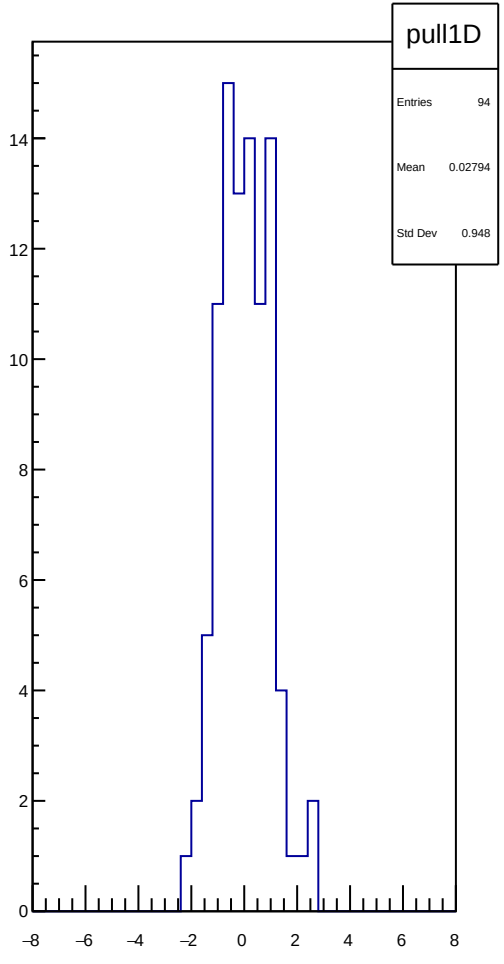

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 2.351e+04 / 93
p0 661.5 ± 0.4984
800
750
700
650
600
550

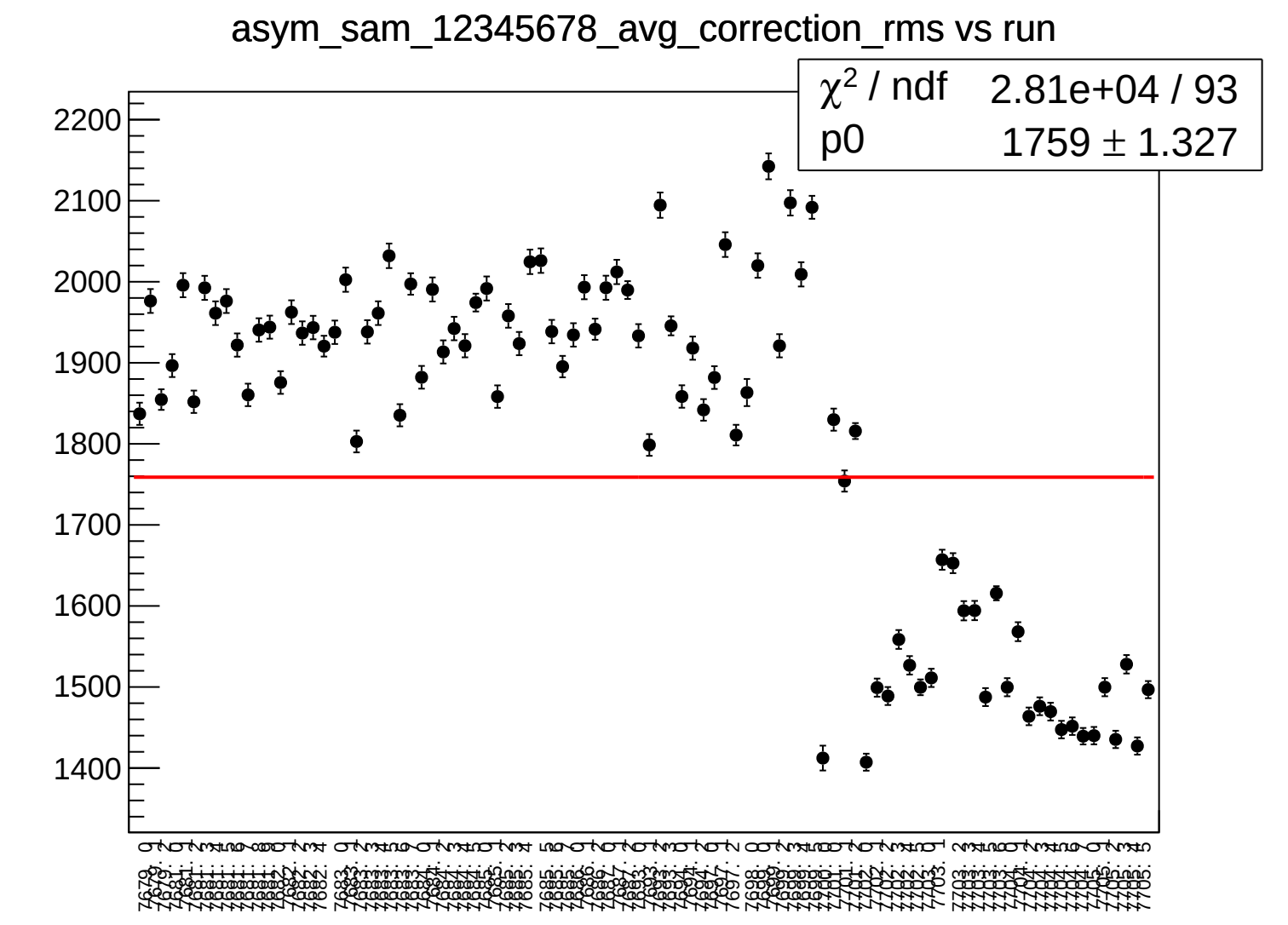

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 88.73 / 93
p0 30.96 ± 145.7
4000
2000
0
−2000
−4000
−6000
pull
Entries 94
Mean 272
Std Dev 195.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

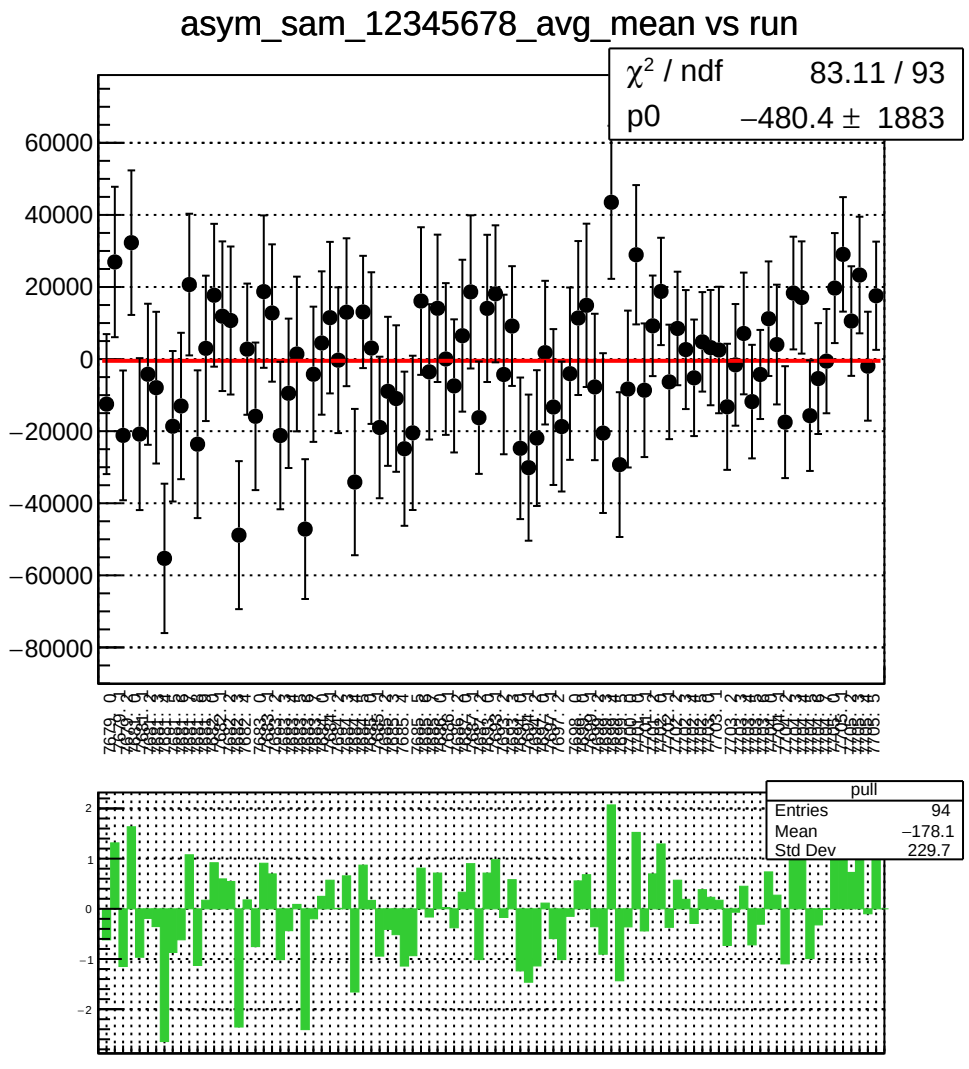

pull1D
Entries 94
Mean −0.002443
Std Dev 0.9716
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

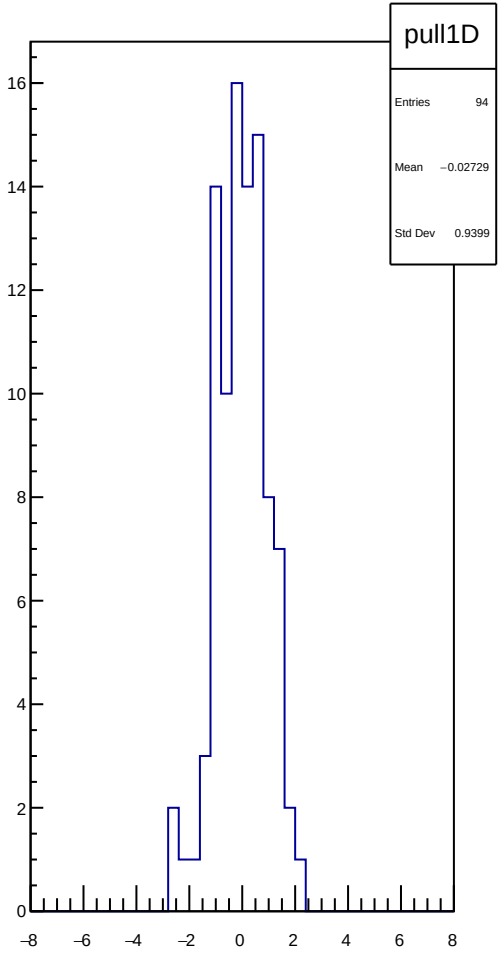

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 2.082e+04 / 93
p0 136.9 ± 0.1031
280
260
240
220
200
180
160
140
120
100

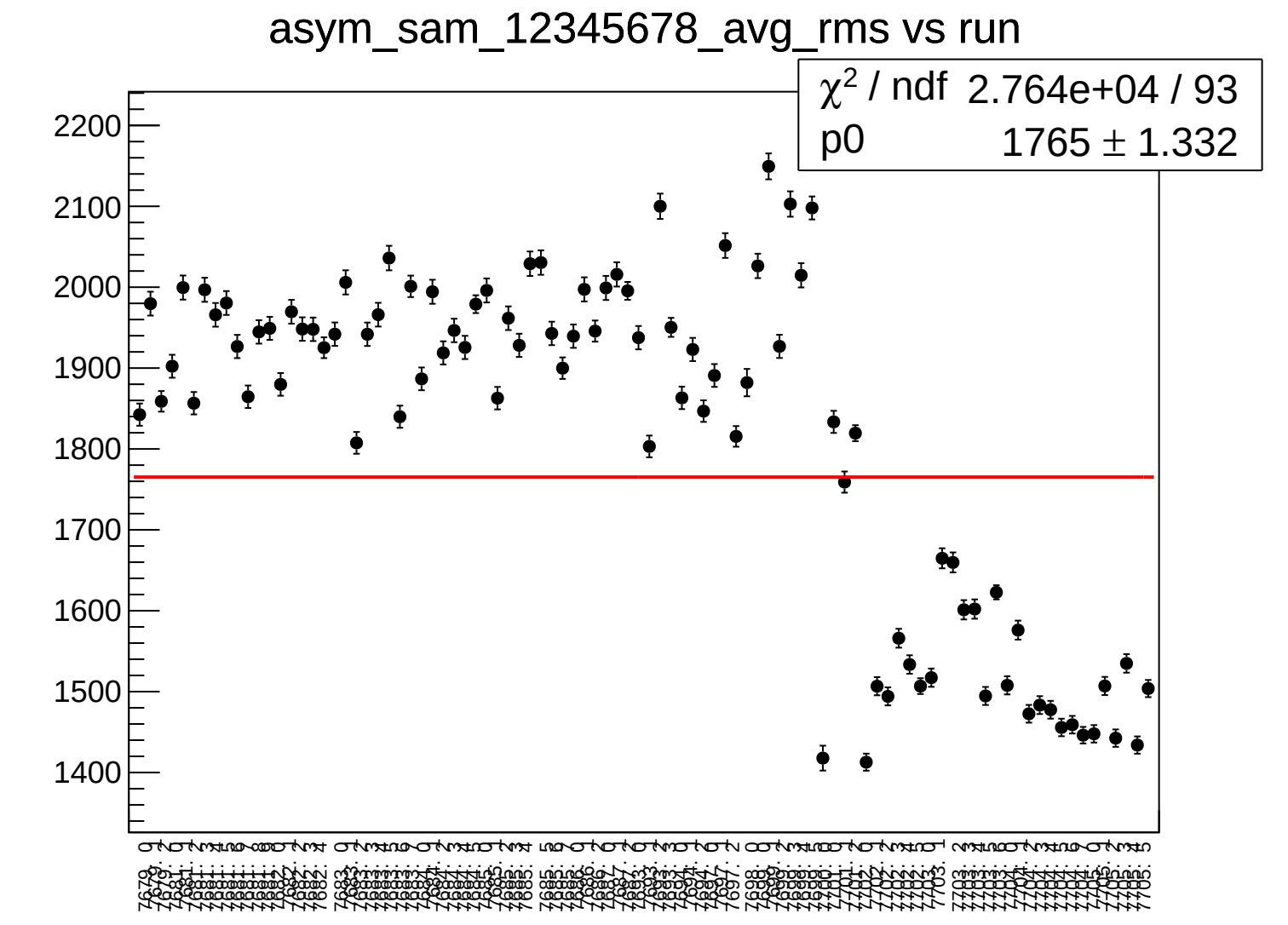

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 84.54 / 93
p0 482.9 ± 1877
pull
Entries 94
Mean −174.4
Std Dev 226.1

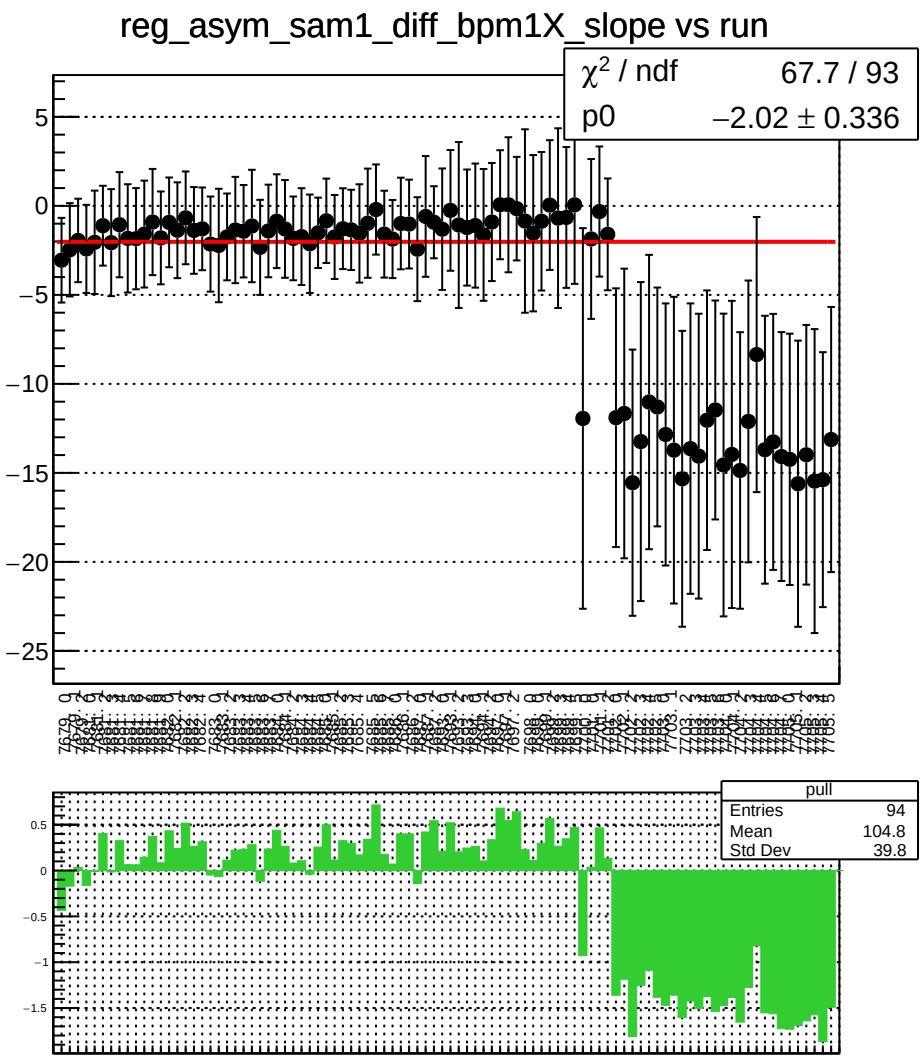

pull1D
Entries 94
Mean 0.02794
Std Dev 0.948

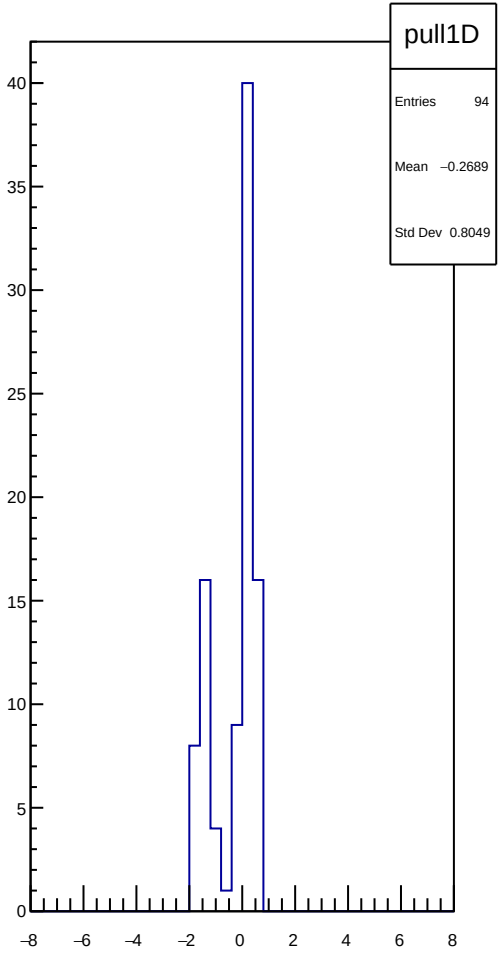

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 2.81e+04 / 93
p0 1759 ± 1.327
2200
2100
2000
1900
1800
1700
1600
1500
1400

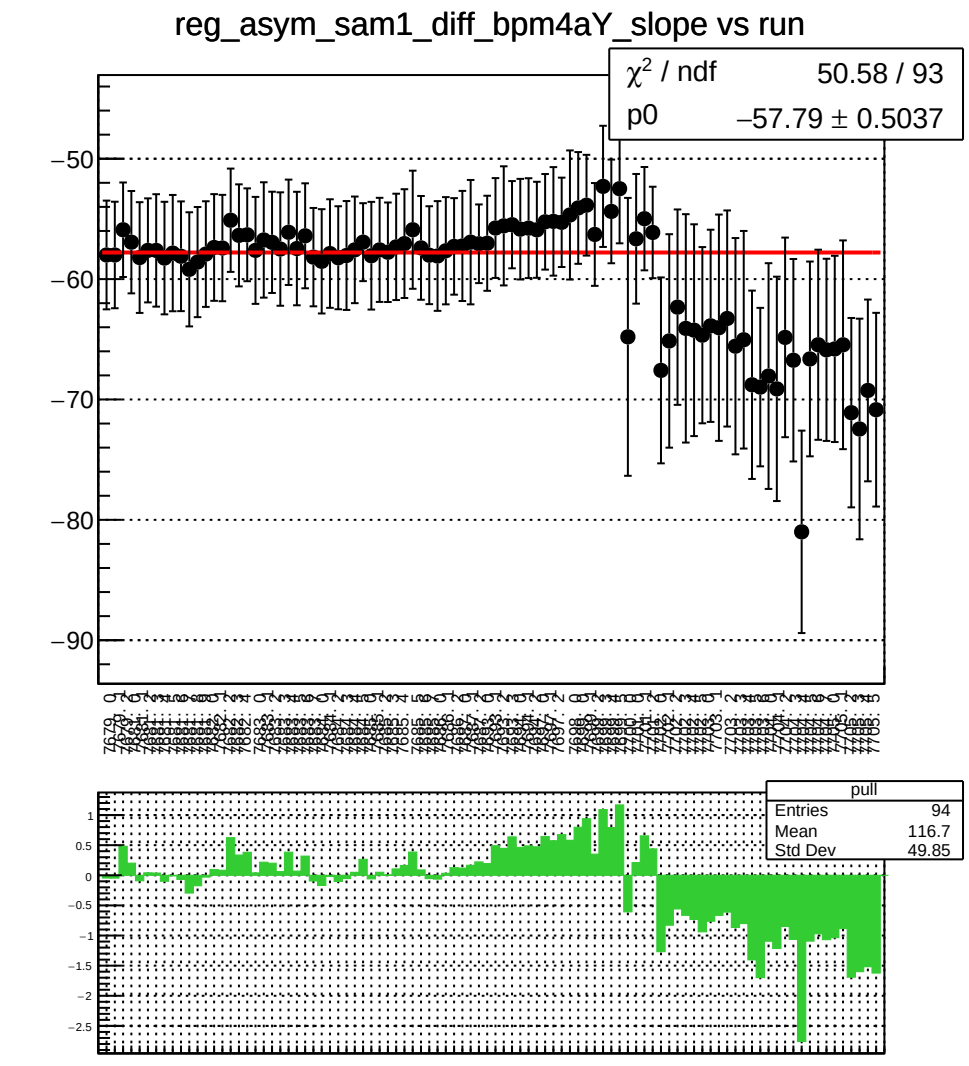

asym_sam_12345678_avg_mean vs run
χ² / ndf 83.11 / 93
p0 −480.4 ± 1883
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 94
Mean −178.1
Std Dev 229.7
2
1
0
−1
−2

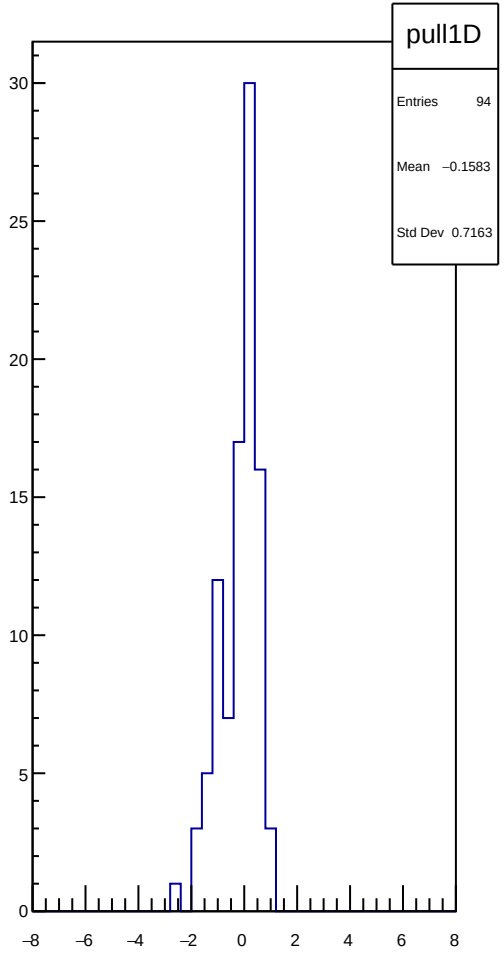

pull1D
Entries 94
Mean −0.02729
Std Dev 0.9399
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

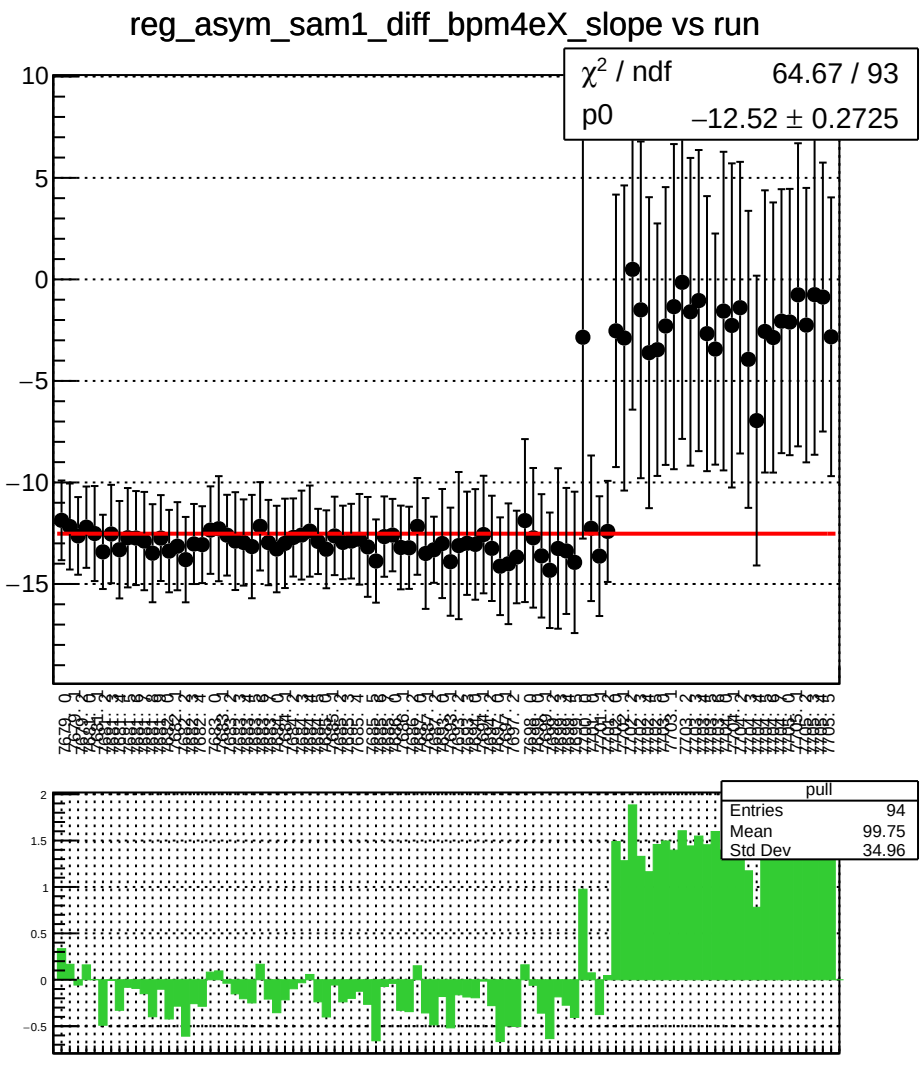

asym_sam_12345678_avg_rms vs run
χ² / ndf 2.764e+04 / 93
p0 1765 ± 1.332
2200
2100
2000
1900
1800
1700
1600
1500
1400

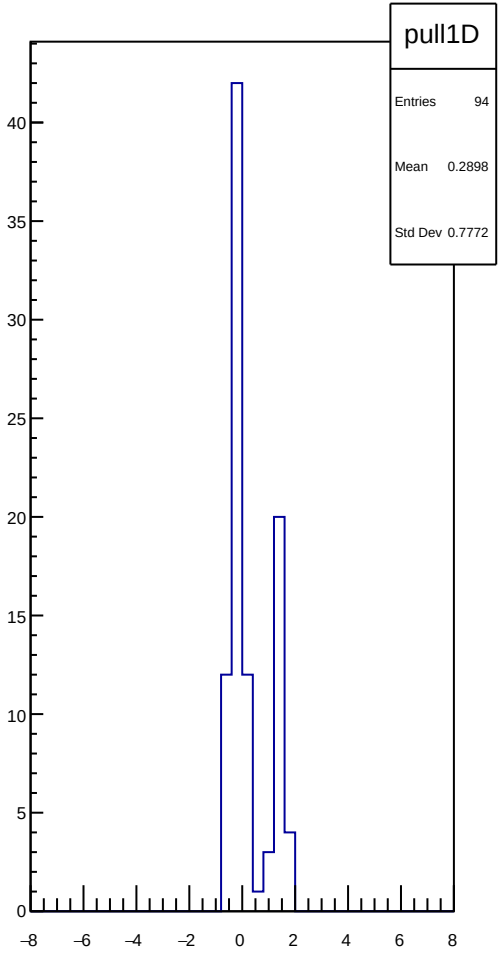

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 67.7 / 93
p0 −2.02 ± 0.336
pull
Entries 94
Mean 104.8
Std Dev 39.8

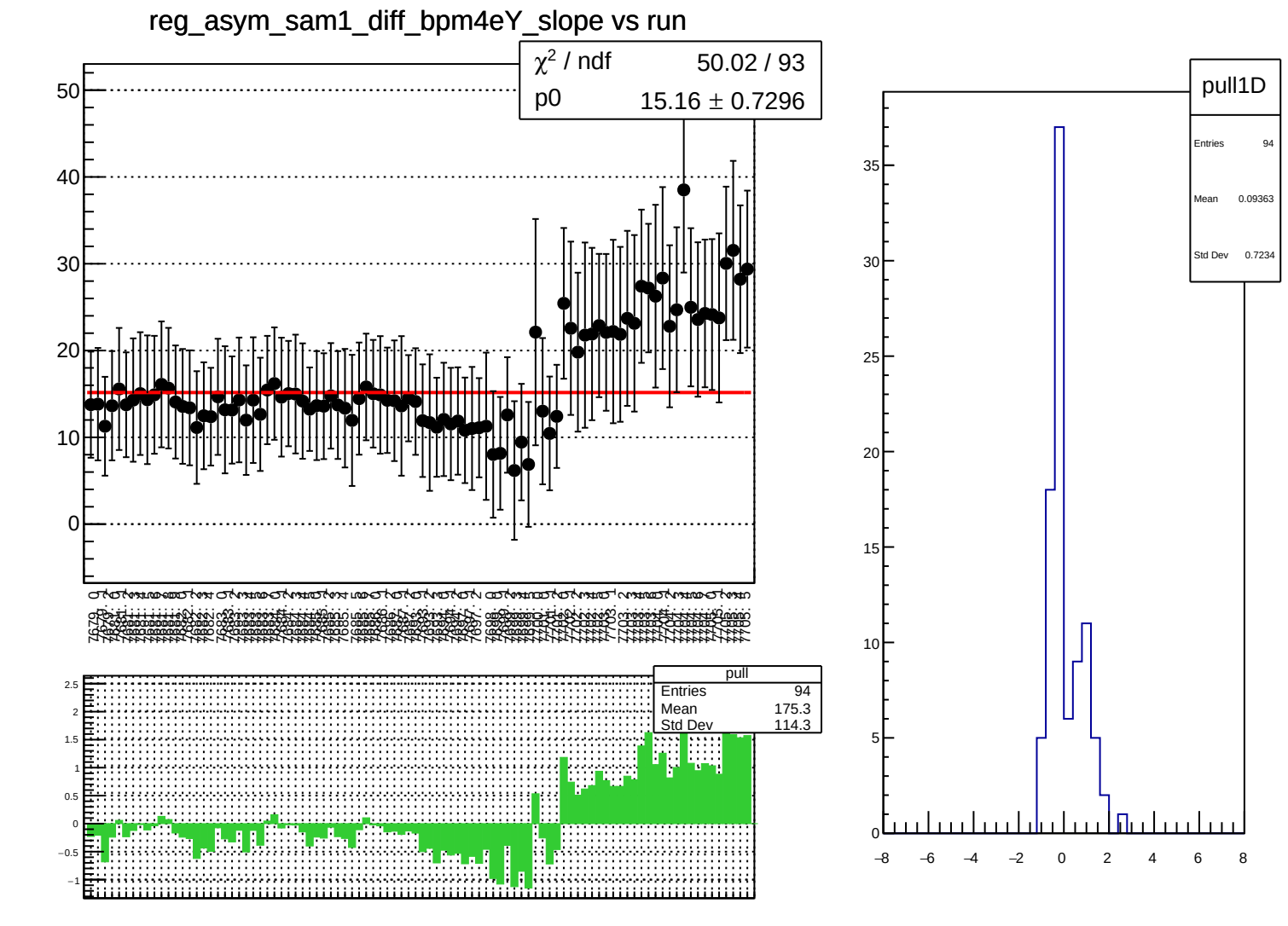

pull1D
Entries 94
Mean −0.2689
Std Dev 0.8049

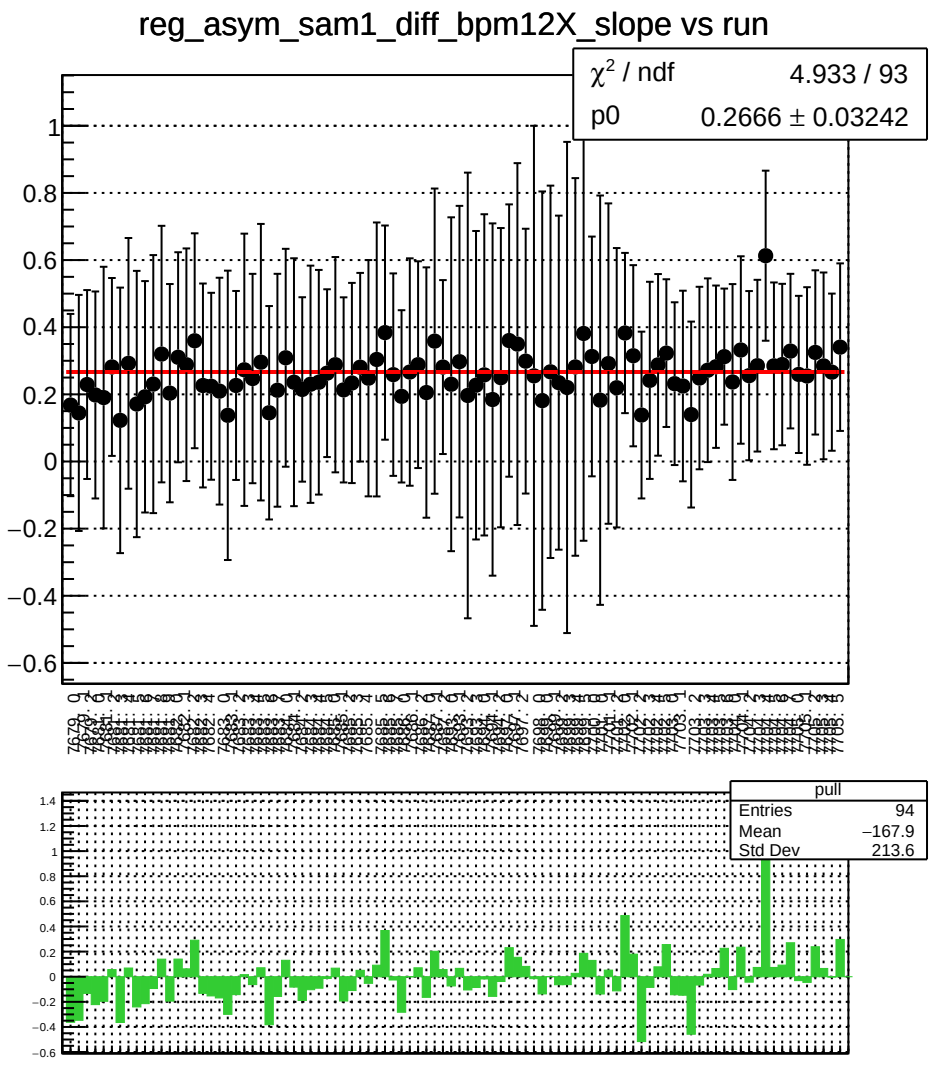

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 50.58 / 93
p0 −57.79 ± 0.5037
−50
−60
−70
−80
−90
pull
Entries 94
Mean 116.7
Std Dev 49.85
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

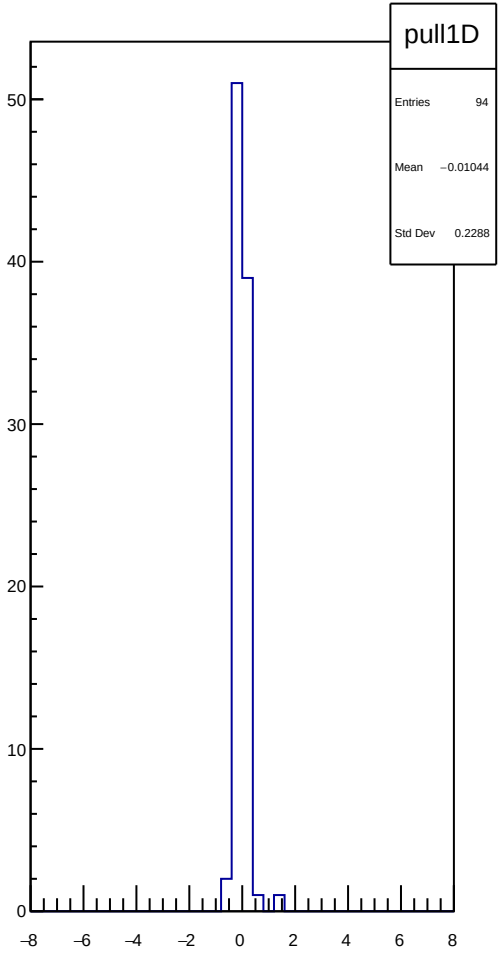

pull1D
Entries 94
Mean −0.1583
Std Dev 0.7163
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

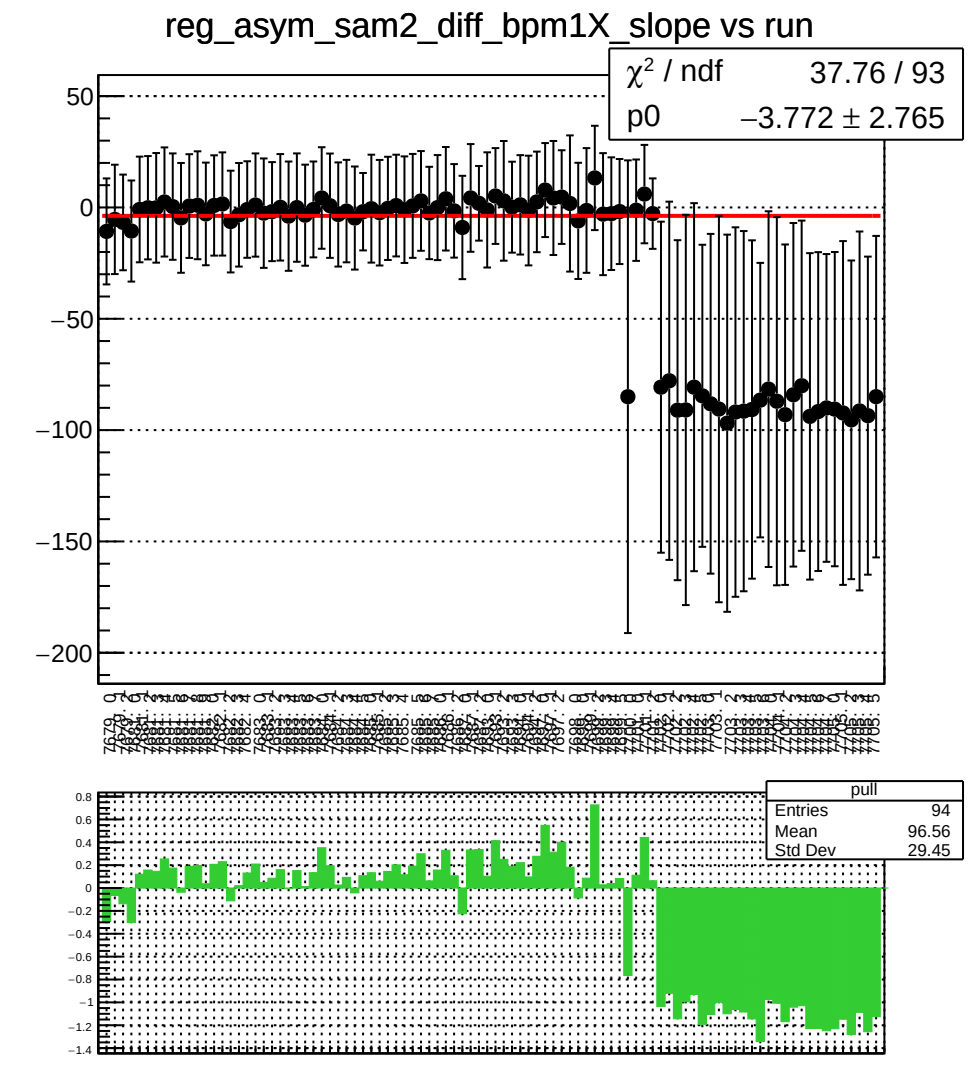

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 64.67 / 93
p0 −12.52 ± 0.2725
pull
Entries 94
Mean 99.75
Std Dev 34.96

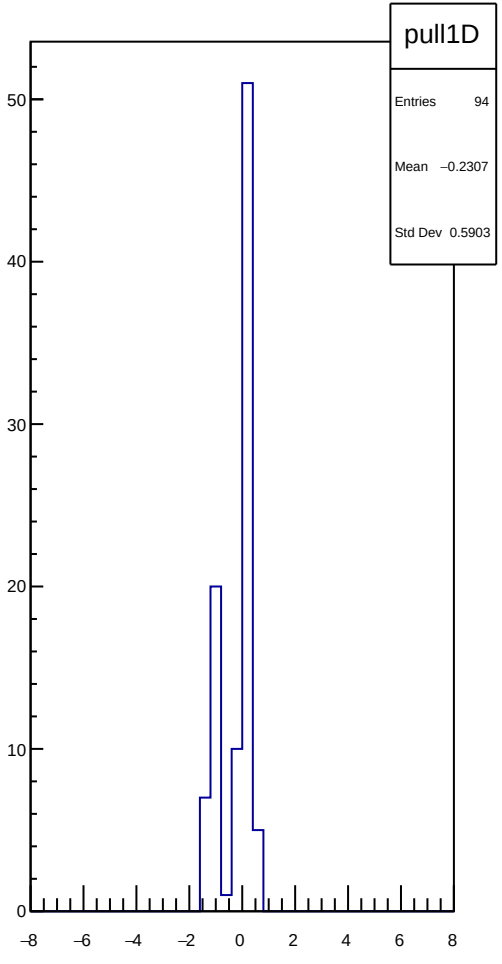

pull1D
Entries 94
Mean 0.2898
Std Dev 0.7772

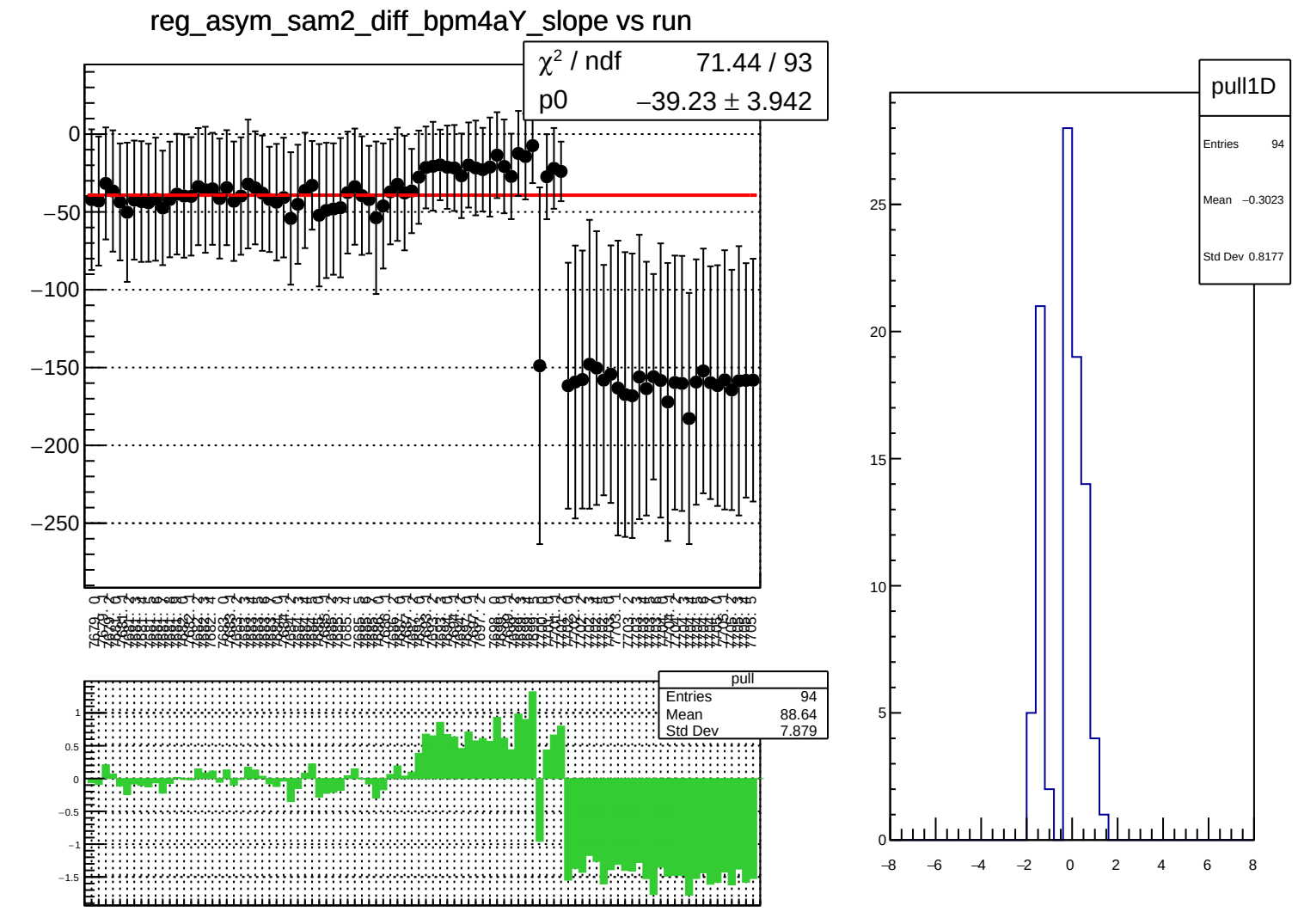

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 50.02 / 93
p0 15.16 ± 0.7296
pull
Entries 94
Mean 175.3
Std Dev 114.3
pull1D
Entries 94
Mean 0.09363
Std Dev 0.7234

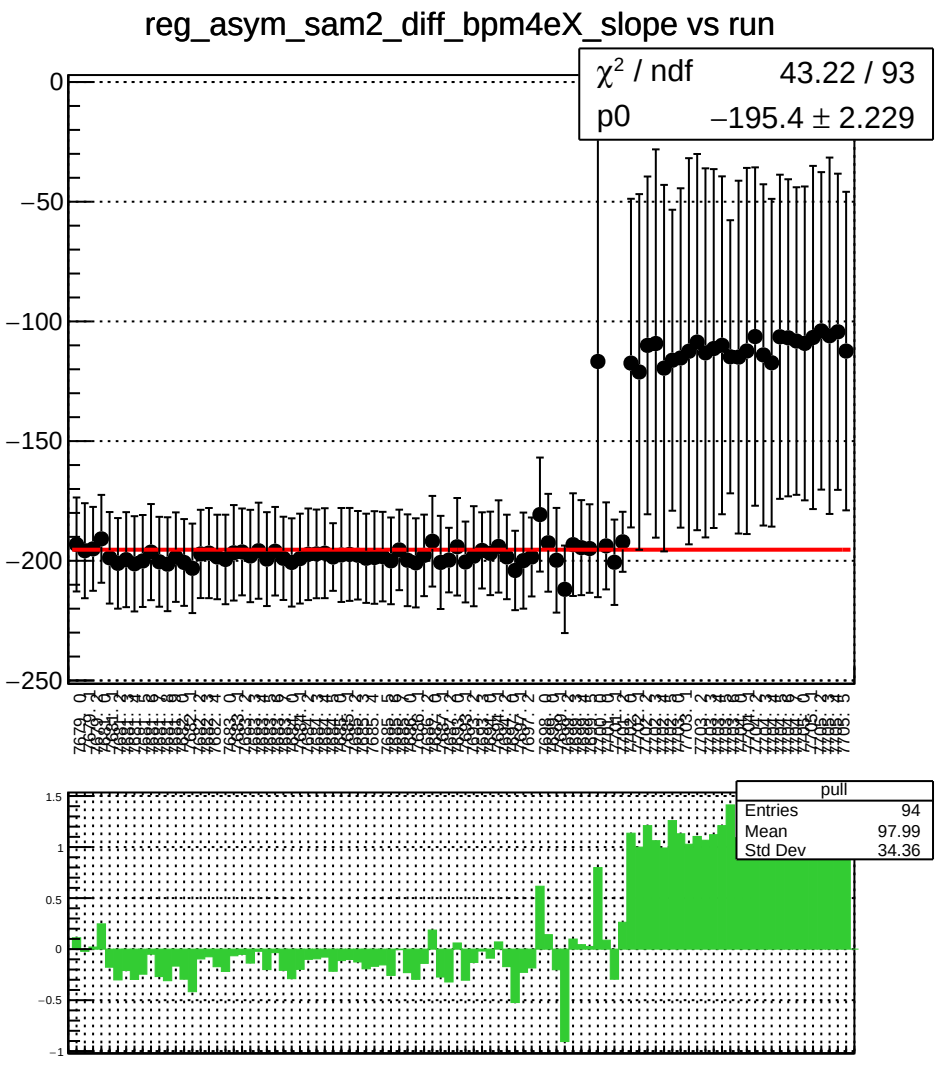

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 4.933 / 93
p0 0.2666 ± 0.03242
pull
Entries 94
Mean −167.9
Std Dev 213.6

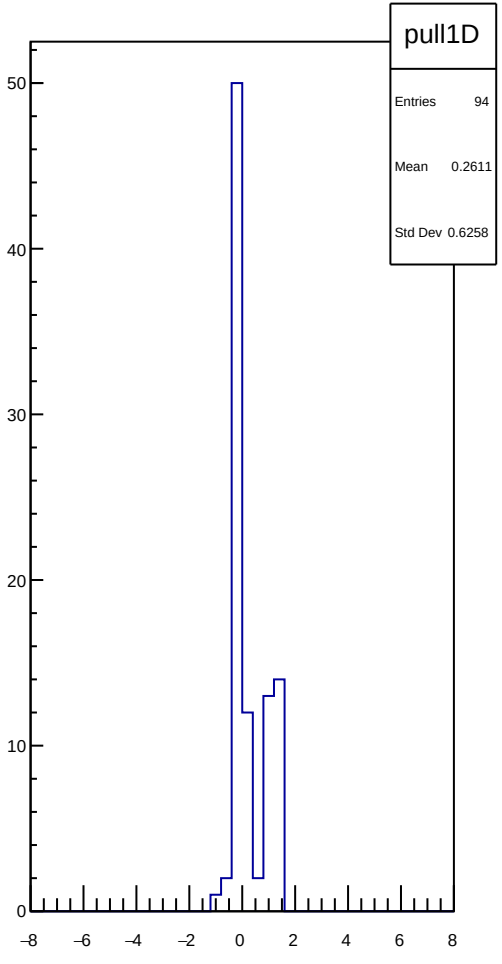

pull1D
Entries 94
Mean −0.01044
Std Dev 0.2288

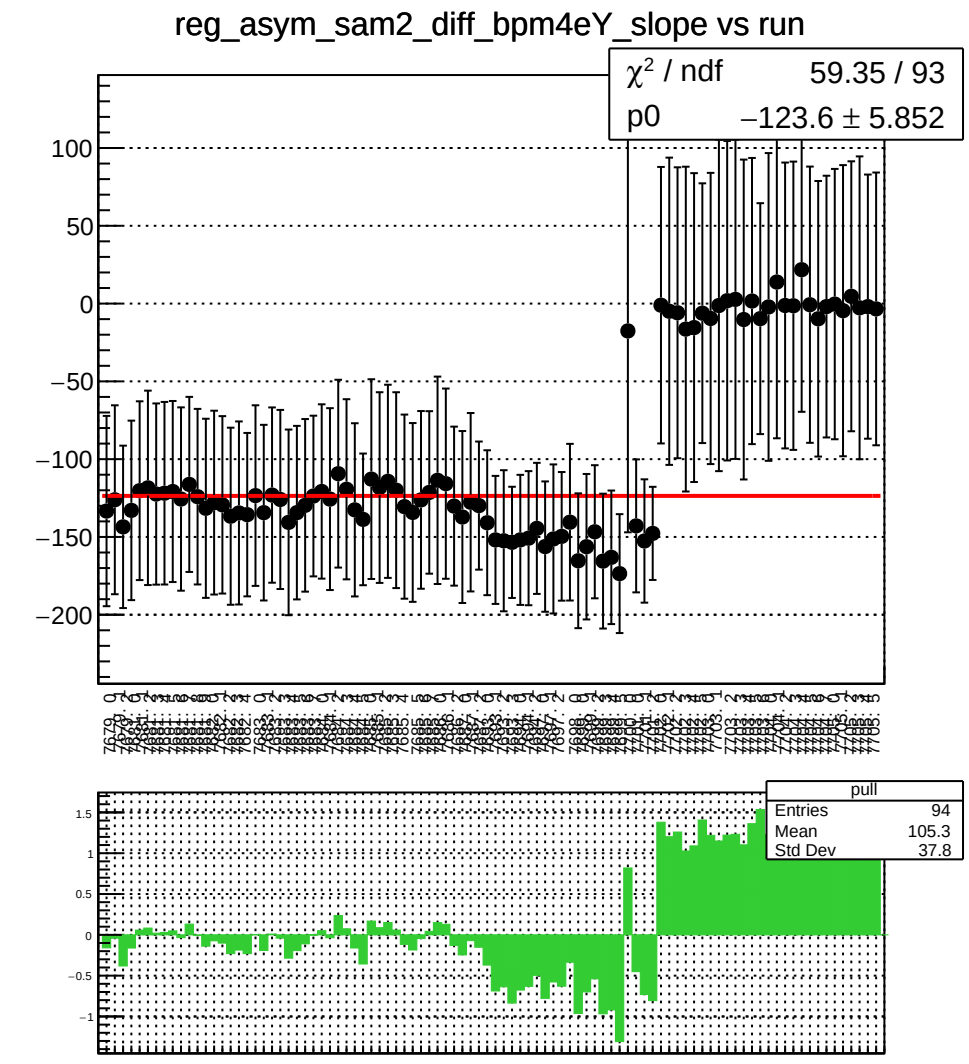

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 37.76 / 93
p0 −3.772 ± 2.765
pull
Entries 94
Mean 96.56
Std Dev 29.45

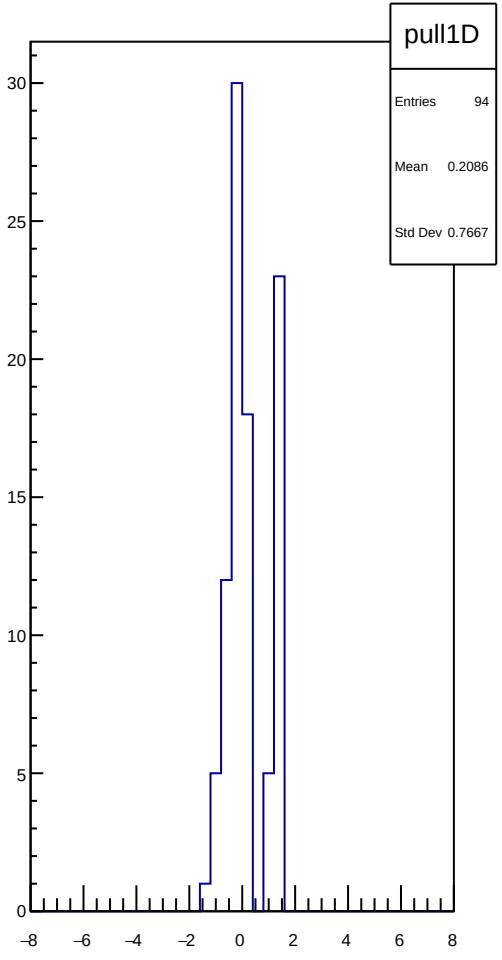

pull1D
Entries 94
Mean −0.2307
Std Dev 0.5903

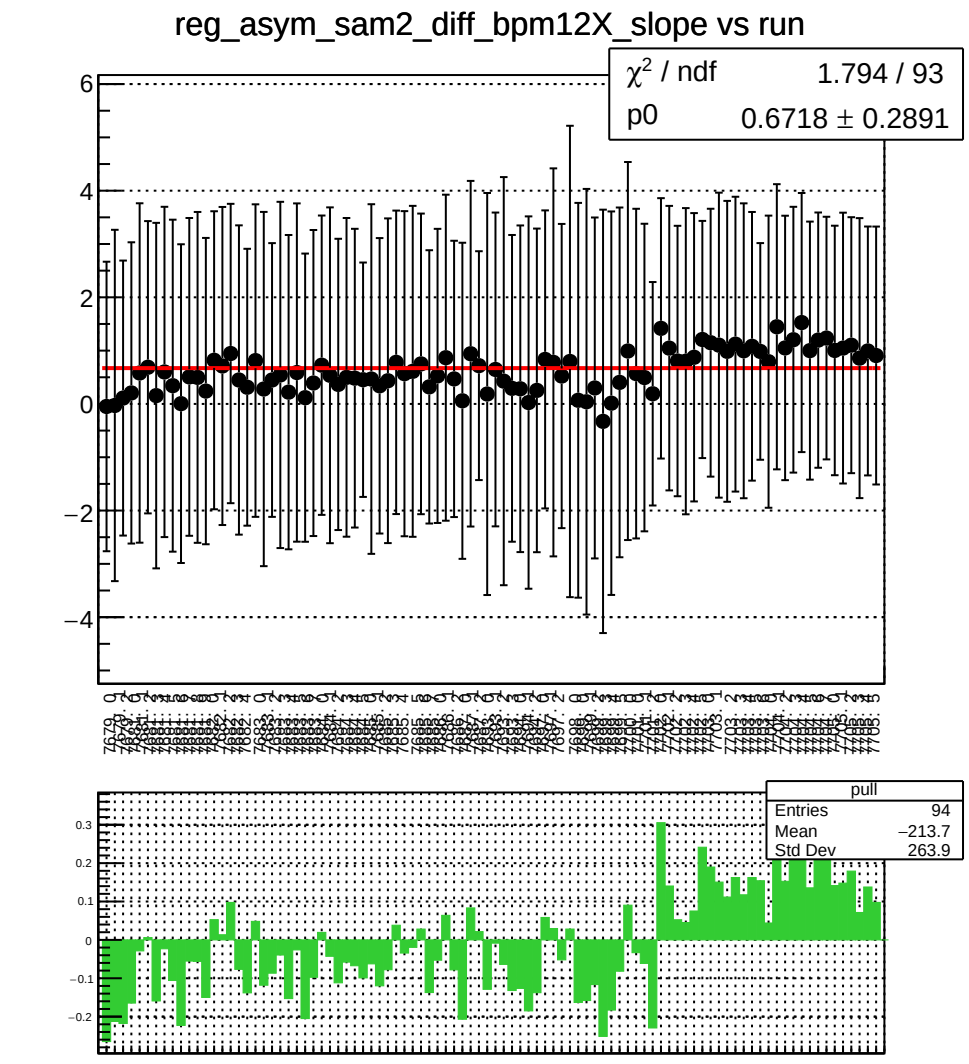

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 71.44 / 93
p0 −39.23 ± 3.942
0
−50
−100
−150
−200
−250
pull
Entries 94
Mean 88.64
Std Dev 7.879
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.3023
Std Dev 0.8177
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

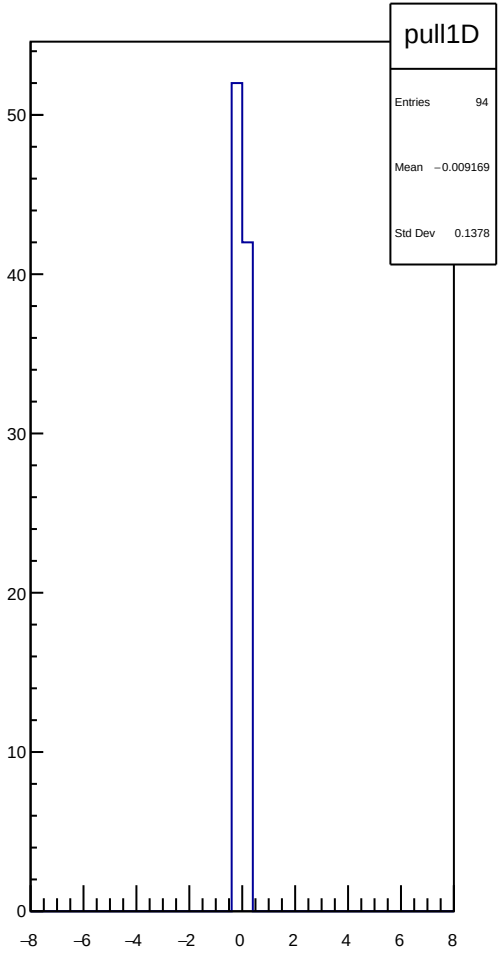

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 43.22 / 93
p0 −195.4 ± 2.229
pull
Entries 94
Mean 97.99
Std Dev 34.36

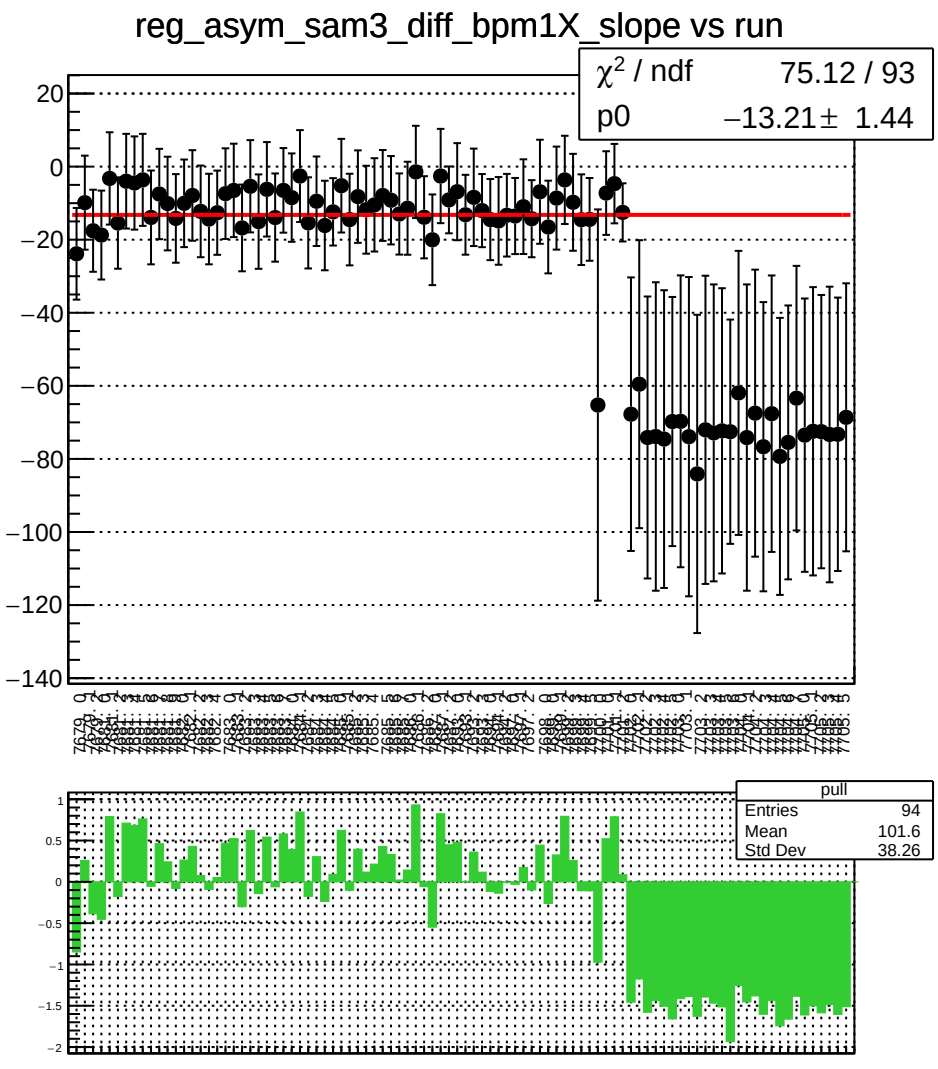

pull1D
Entries 94
Mean 0.2611
Std Dev 0.6258

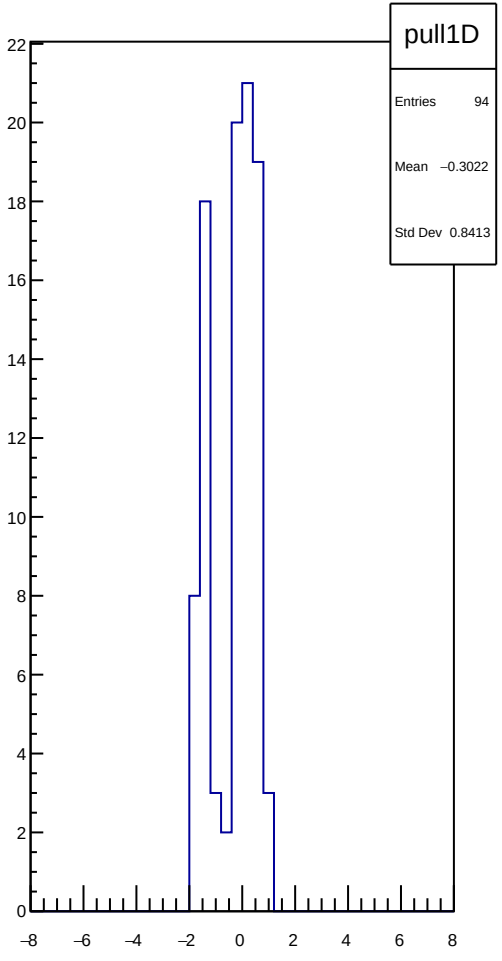

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 59.35 / 93
p0 −123.6 ± 5.852
pull
Entries 94
Mean 105.3
Std Dev 37.8

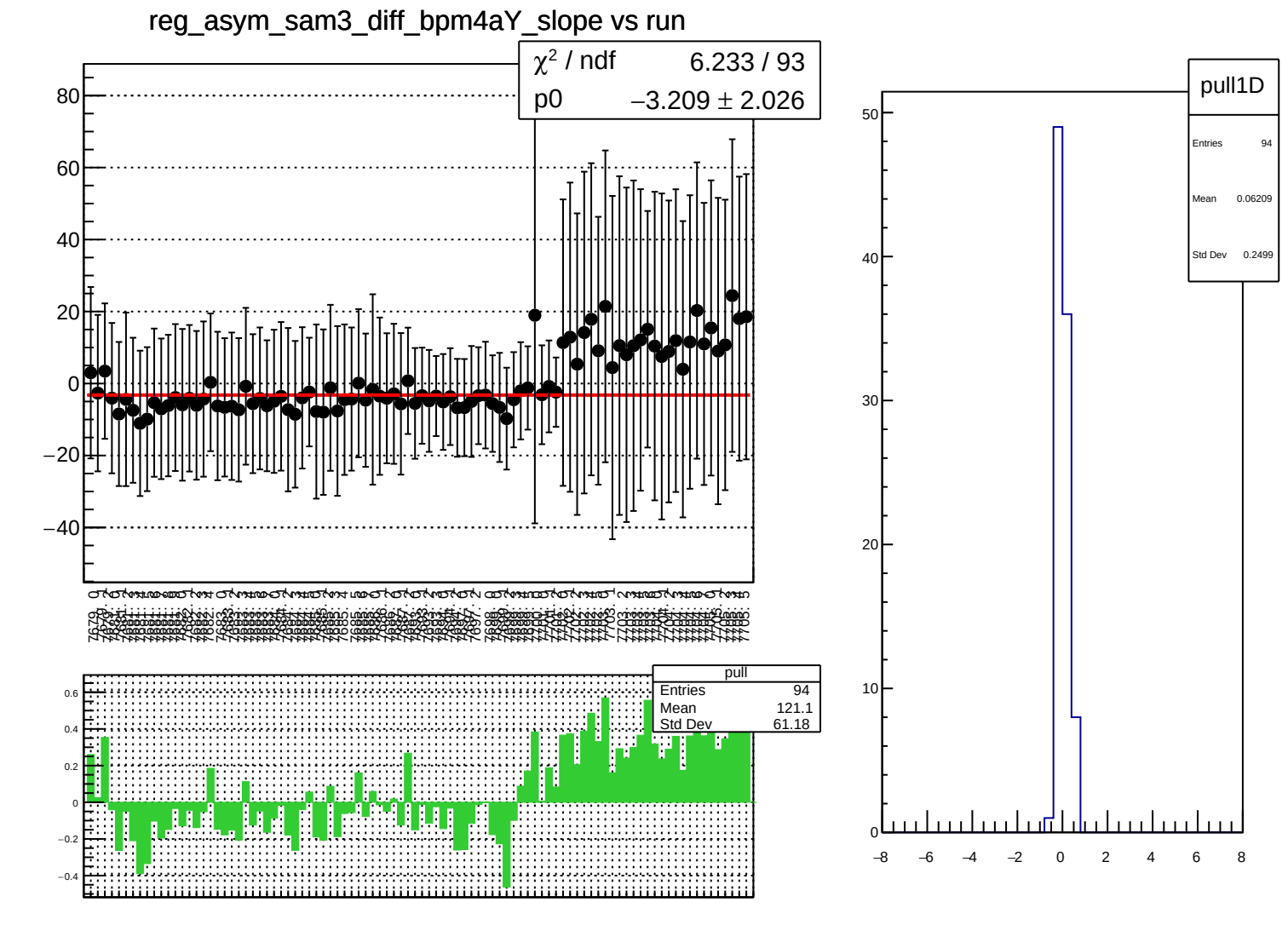

pull1D
Entries 94
Mean 0.2086
Std Dev 0.7667

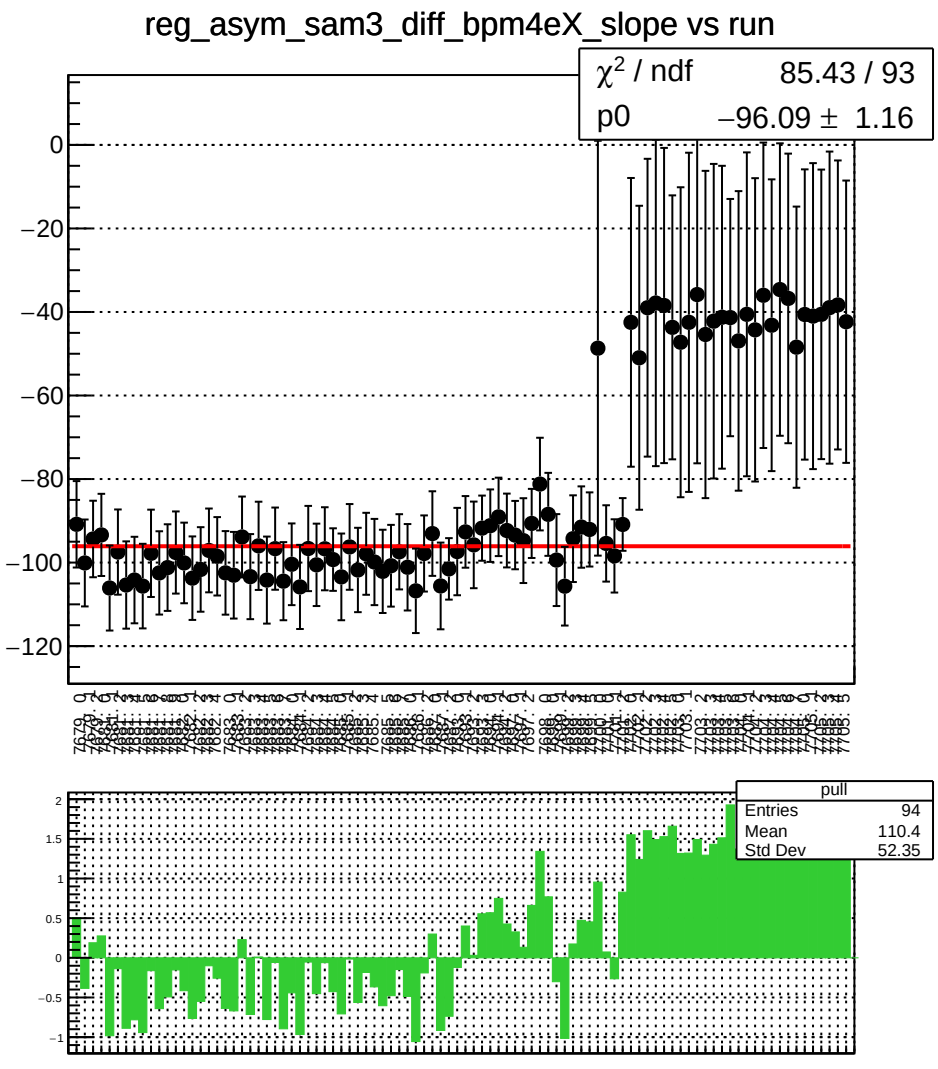

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 1.794 / 93
p0 0.6718 ± 0.2891
pull
Entries 94
Mean −213.7
Std Dev 263.9

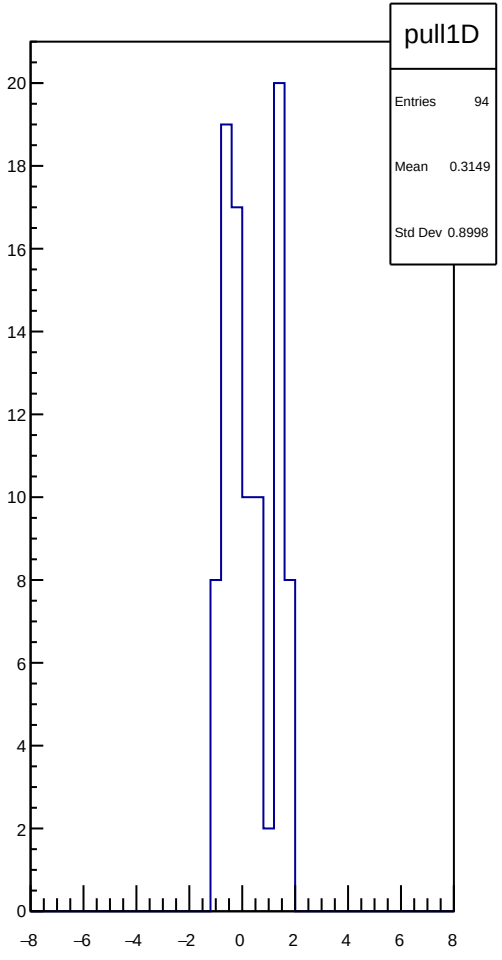

pull1D
Entries 94
Mean −0.009169
Std Dev 0.1378

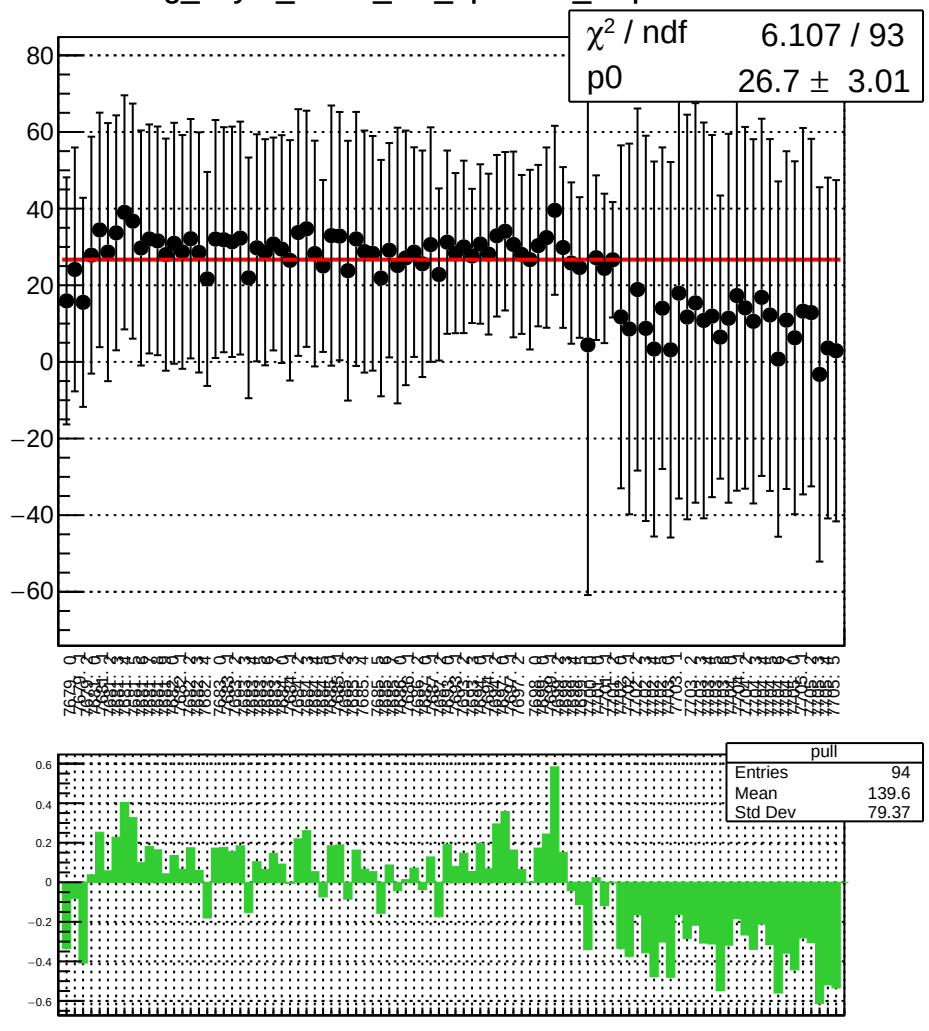

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 75.12 / 93
p0 −13.21 ± 1.44
pull
Entries 94
Mean 101.6
Std Dev 38.26

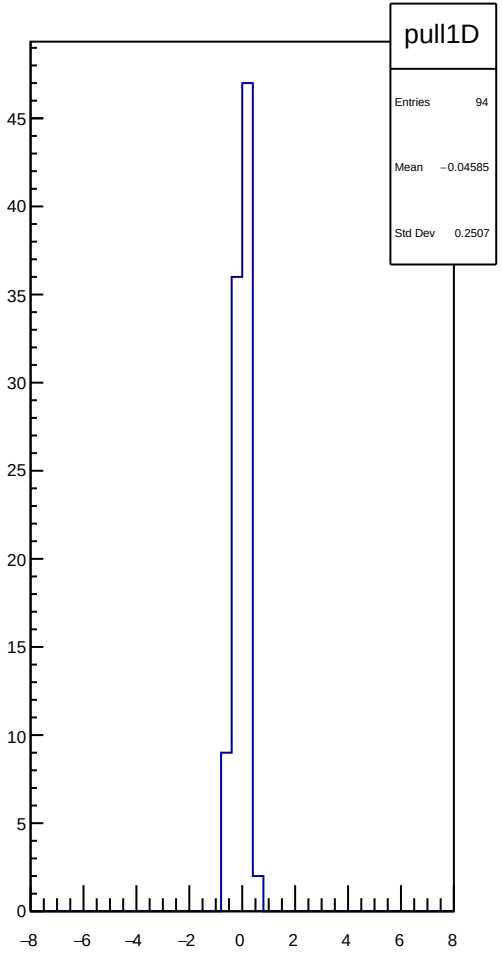

pull1D
Entries 94
Mean −0.3022
Std Dev 0.8413

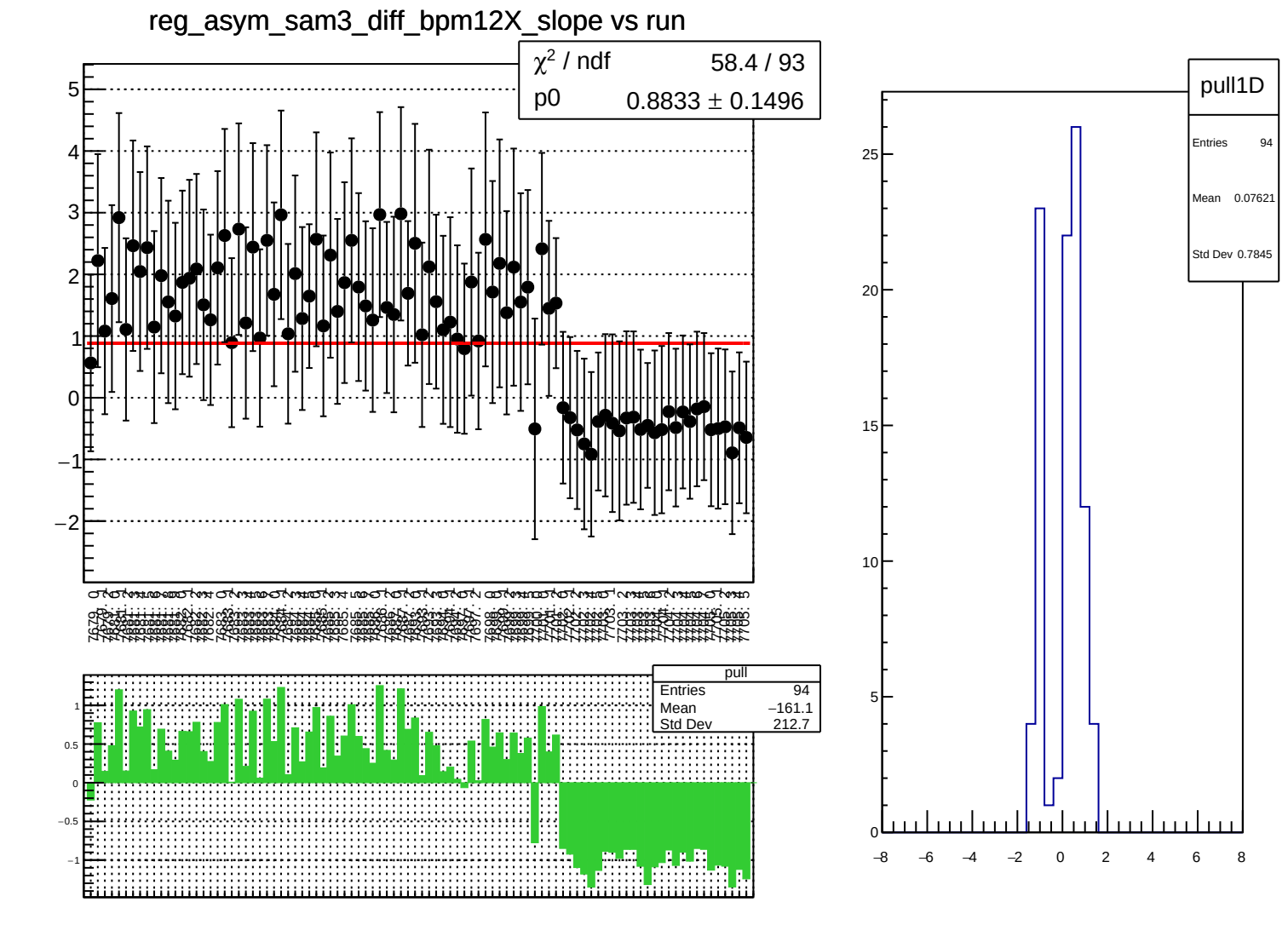

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 6.233 / 93
p0 −3.209 ± 2.026
pull
Entries 94
Mean 121.1
Std Dev 61.18
pull1D
Entries 94
Mean 0.06209
Std Dev 0.2499

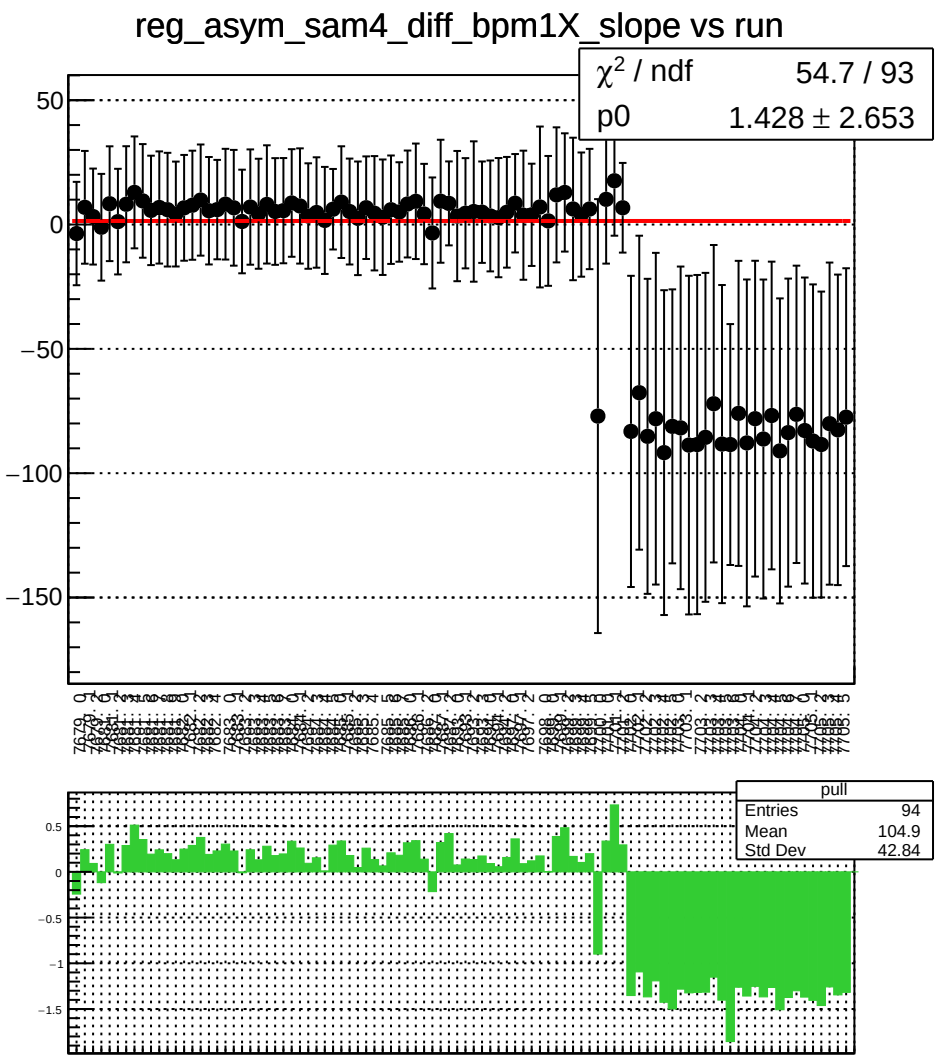

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 85.43 / 93
p0 −96.09 ± 1.16
pull
Entries 94
Mean 110.4
Std Dev 52.35

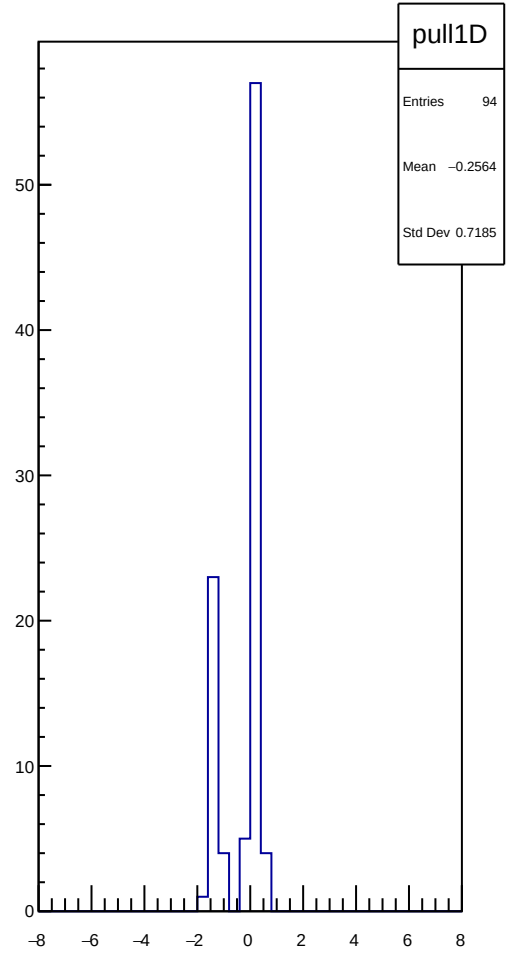

pull1D
Entries 94
Mean 0.3149
Std Dev 0.8998

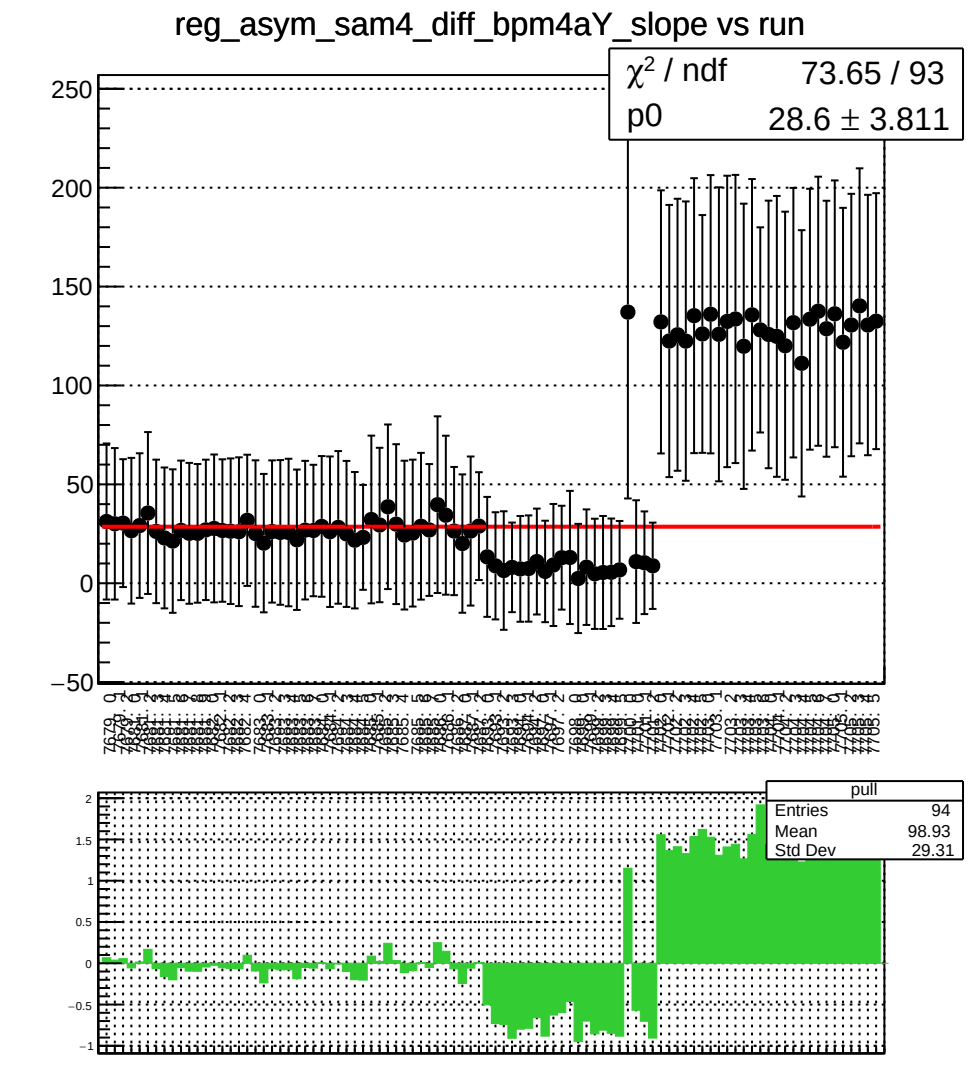

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 6.107 / 93
p0 26.7 ± 3.01
pull
Entries 94
Mean 139.6
Std Dev 79.37

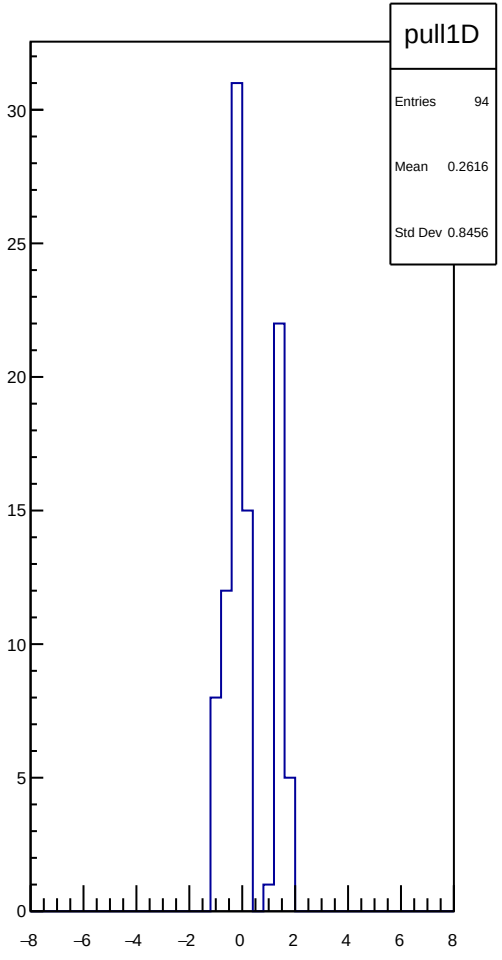

pull1D
Entries 94
Mean −0.04585
Std Dev 0.2507

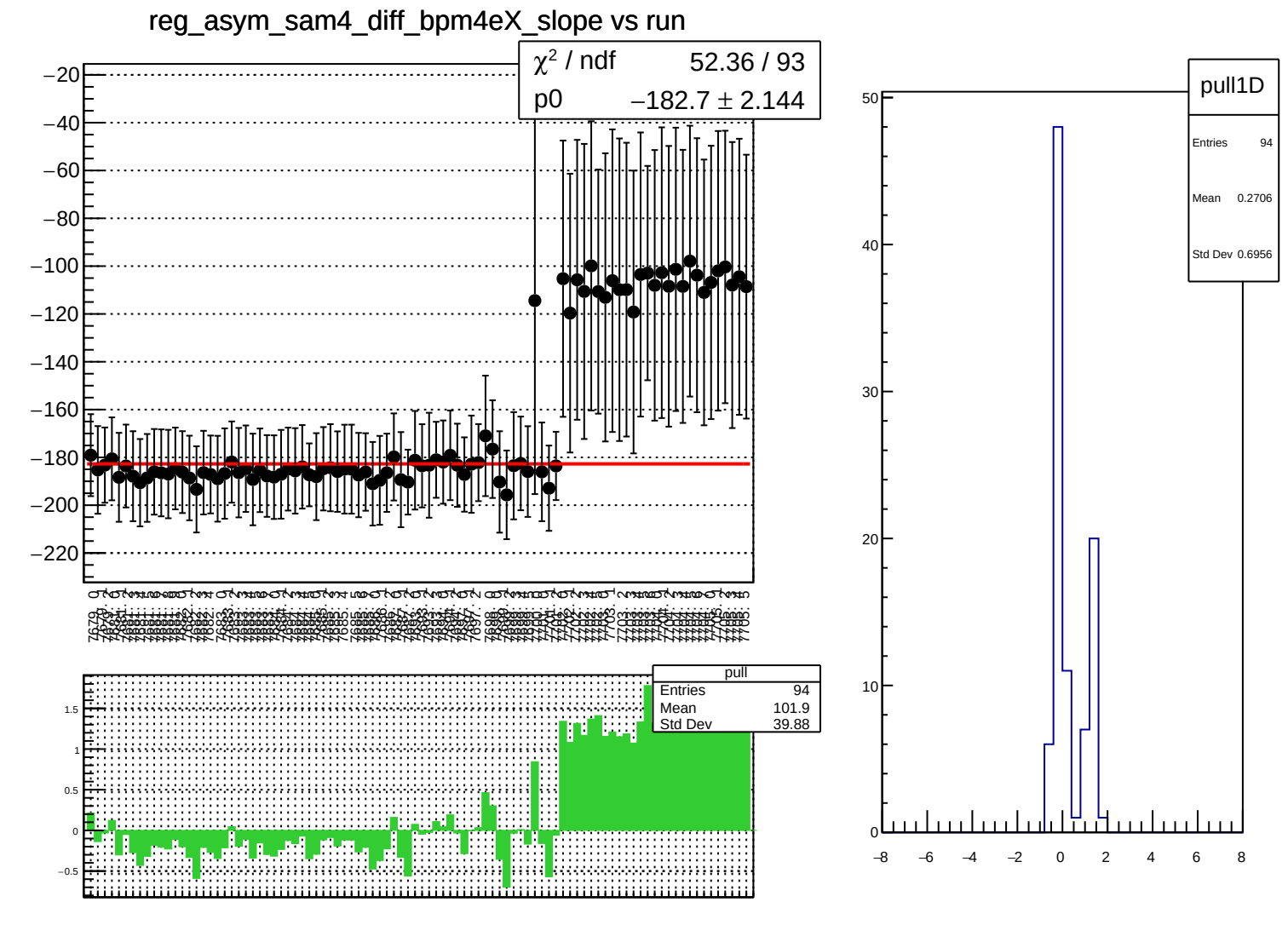

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 58.4 / 93
p0 0.8833 ± 0.1496
pull
Entries 94
Mean −161.1
Std Dev 212.7
pull1D
Entries 94
Mean 0.07621
Std Dev 0.7845

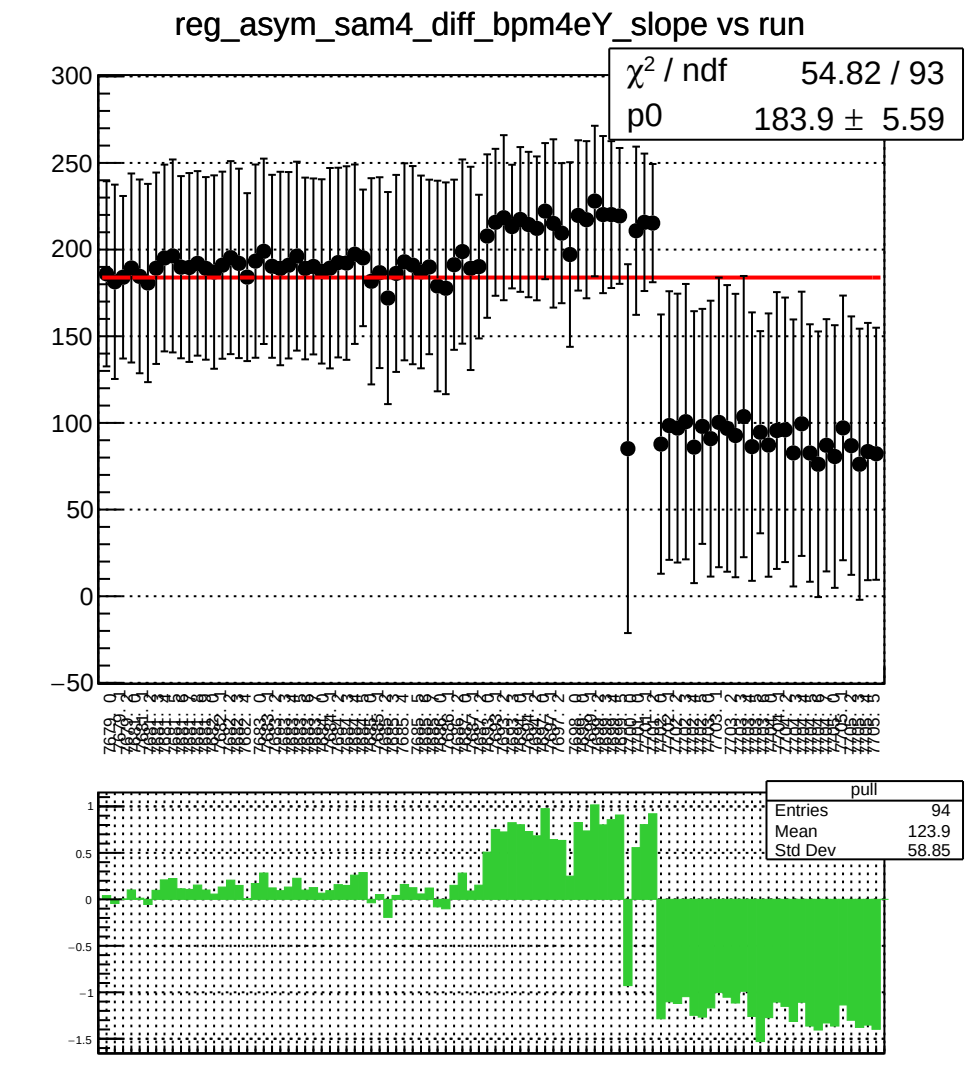

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 54.7 / 93
p0 1.428 ± 2.653
50
0
−50
−100
−150
pull
Entries 94
Mean 104.9
Std Dev 42.84
0.5
0
−0.5
−1
−1.5

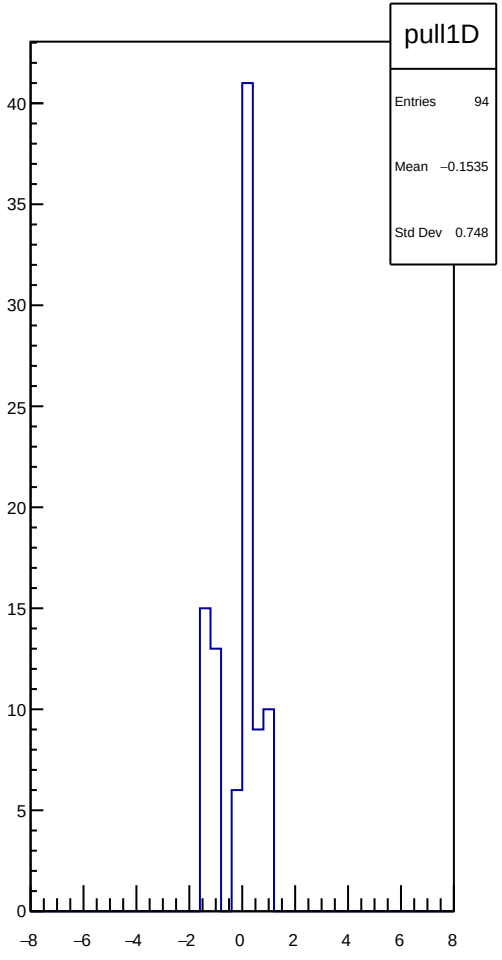

pull1D
Entries 94
Mean −0.2564
Std Dev 0.7185
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

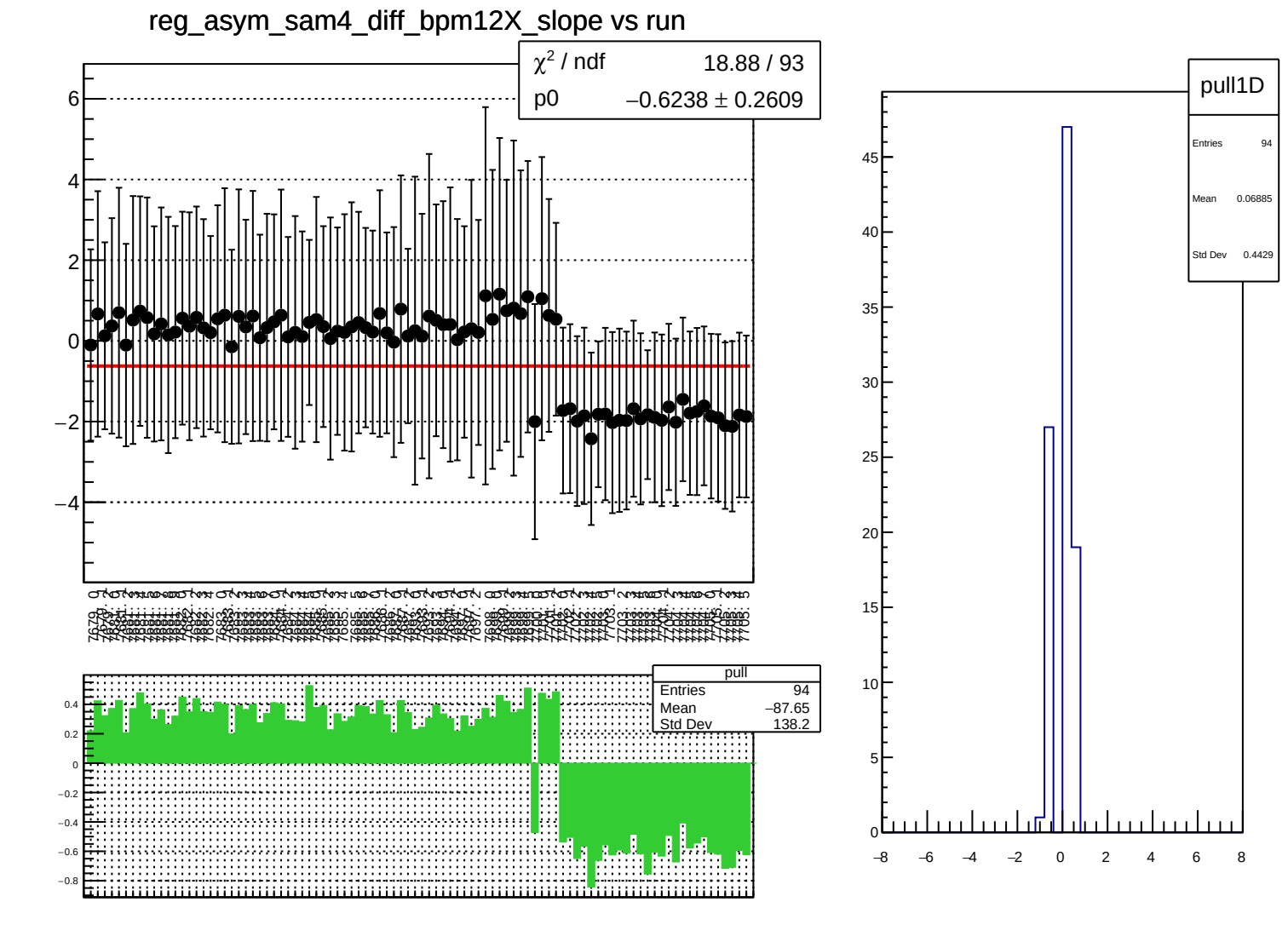

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 73.65 / 93
p0 28.6 ± 3.811
pull
Entries 94
Mean 98.93
Std Dev 29.31

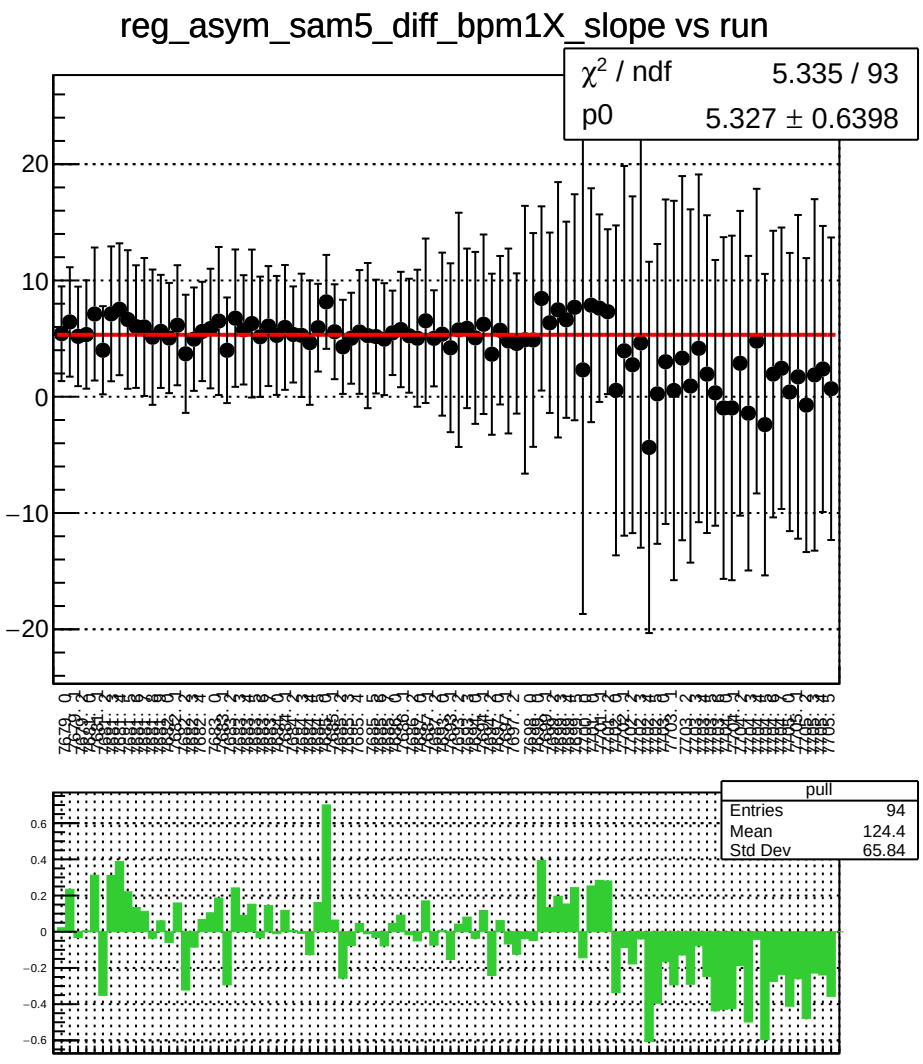

pull1D
Entries 94
Mean 0.2616
Std Dev 0.8456

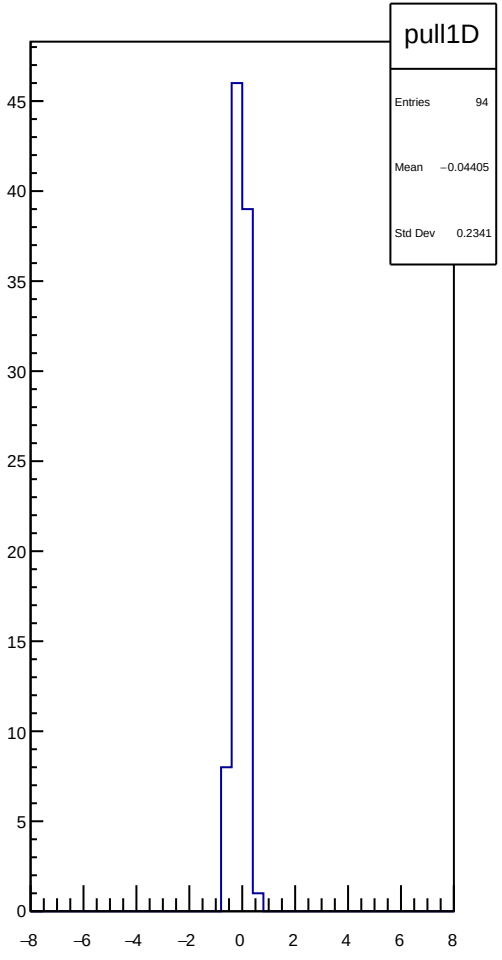

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 52.36 / 93
p0 −182.7 ± 2.144
pull
Entries 94
Mean 101.9
Std Dev 39.88
pull1D
Entries 94
Mean 0.2706
Std Dev 0.6956

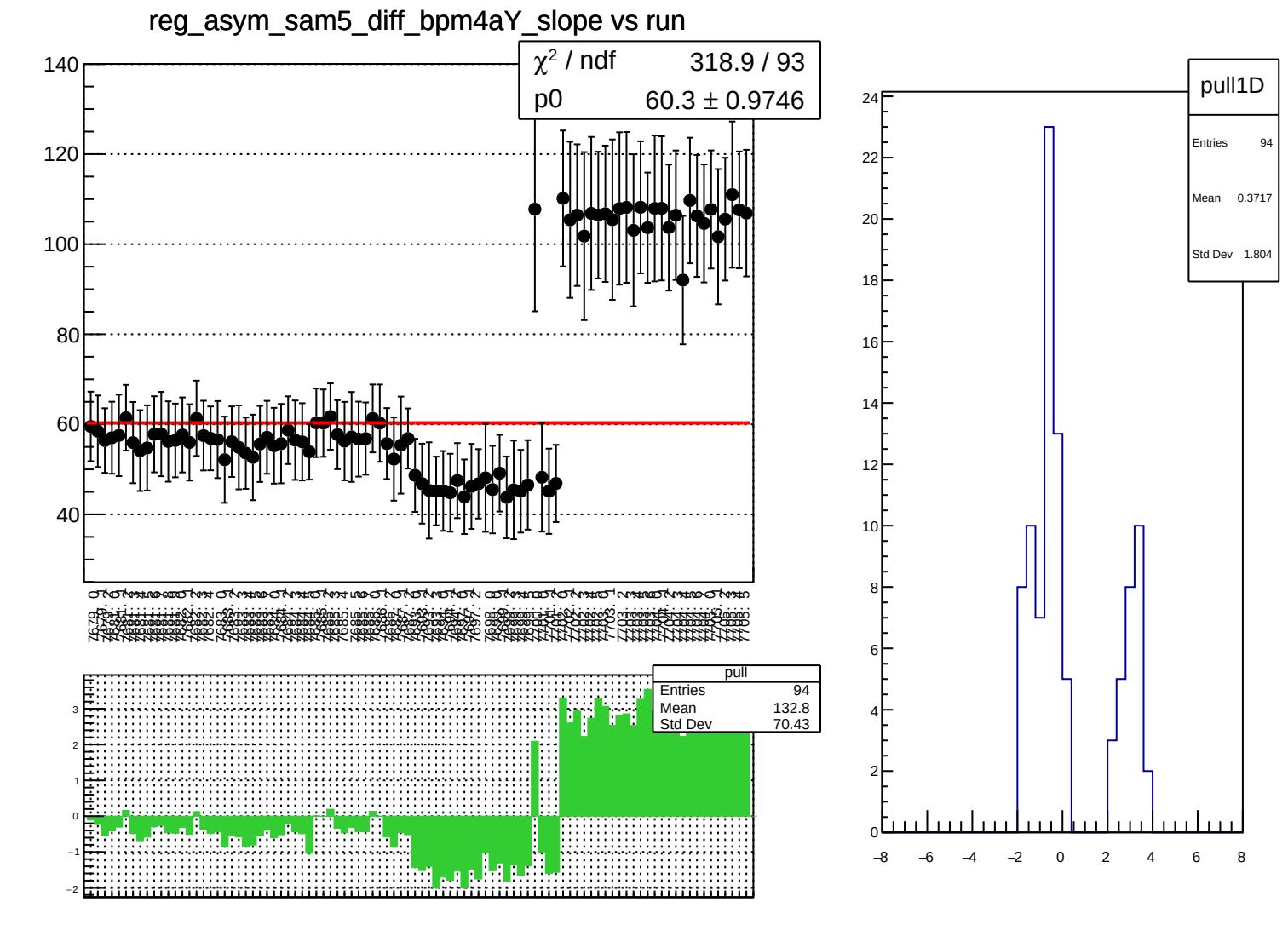

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 54.82 / 93
p0 183.9 ± 5.59
pull
Entries 94
Mean 123.9
Std Dev 58.85

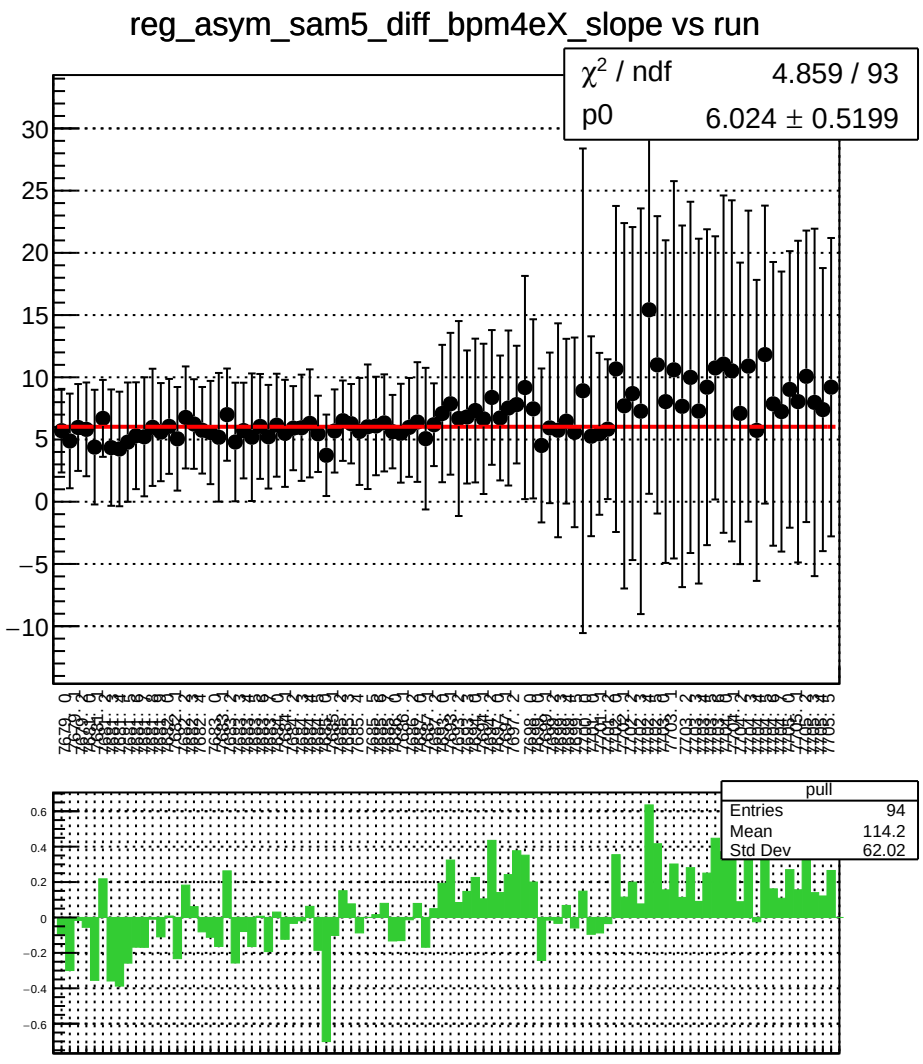

pull1D
Entries 94
Mean −0.1535
Std Dev 0.748

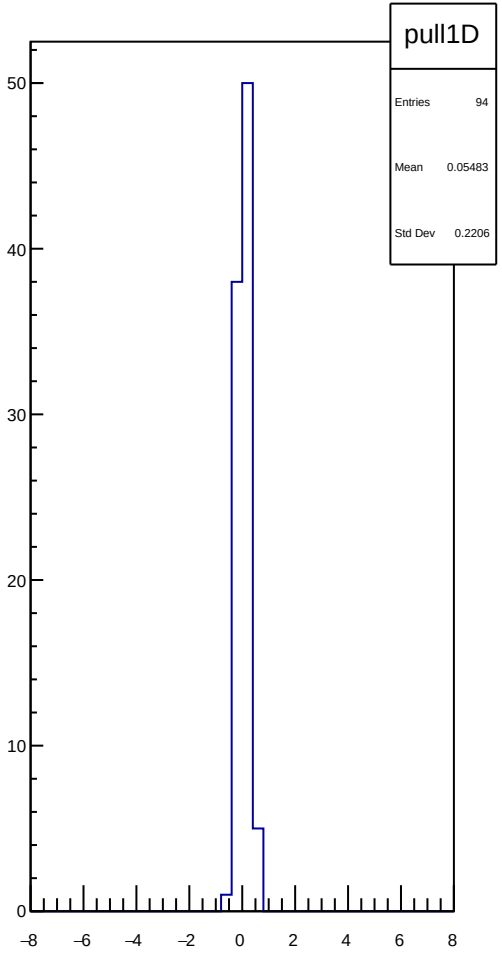

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 18.88 / 93
p0 −0.6238 ± 0.2609
pull
Entries 94
Mean −87.65
Std Dev 138.2
pull1D
Entries 94
Mean 0.06885
Std Dev 0.4429

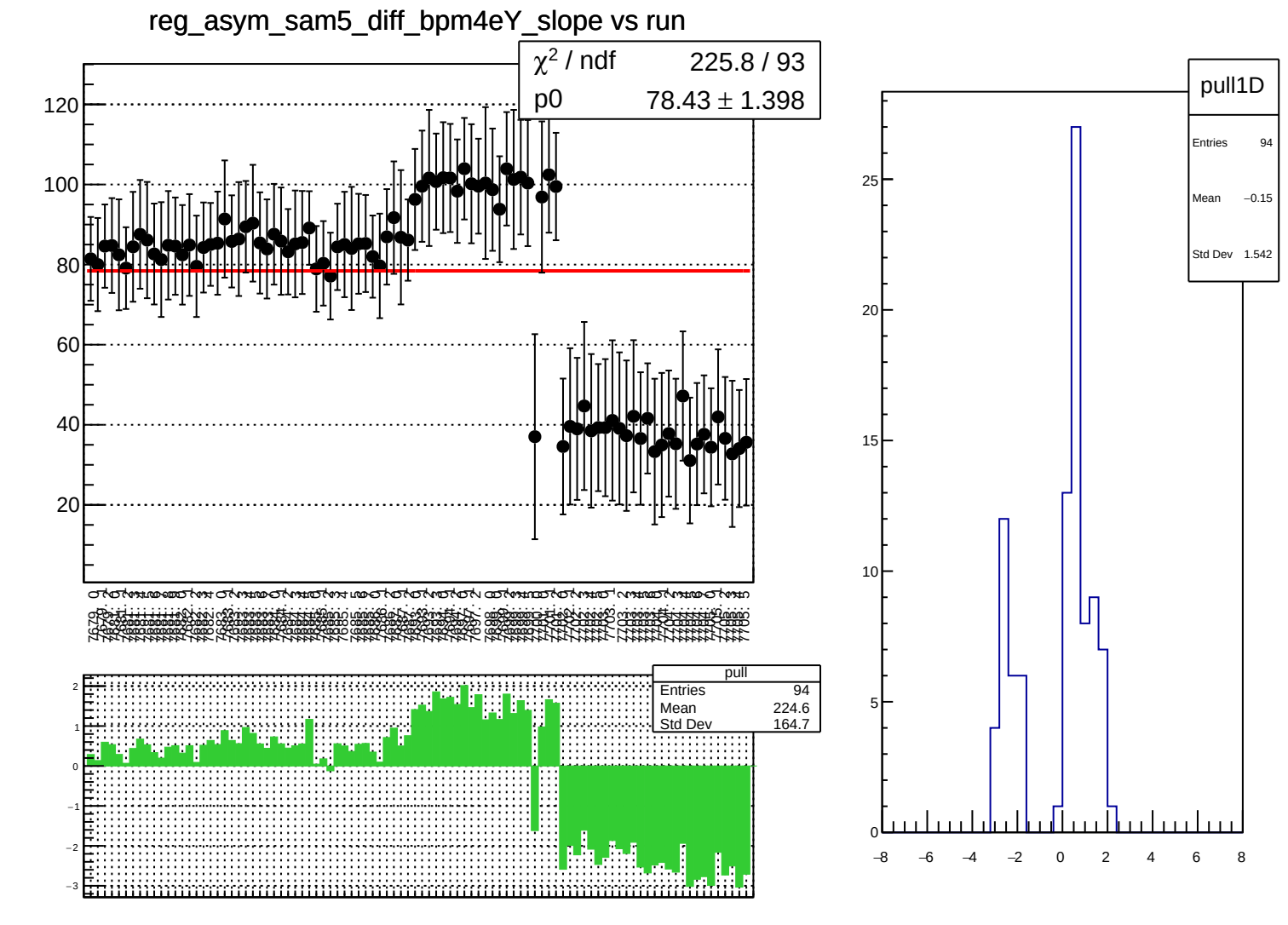

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 5.335 / 93
p0 5.327 ± 0.6398
20
10
0
−10
−20
pull
Entries 94
Mean 124.4
Std Dev 65.84
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

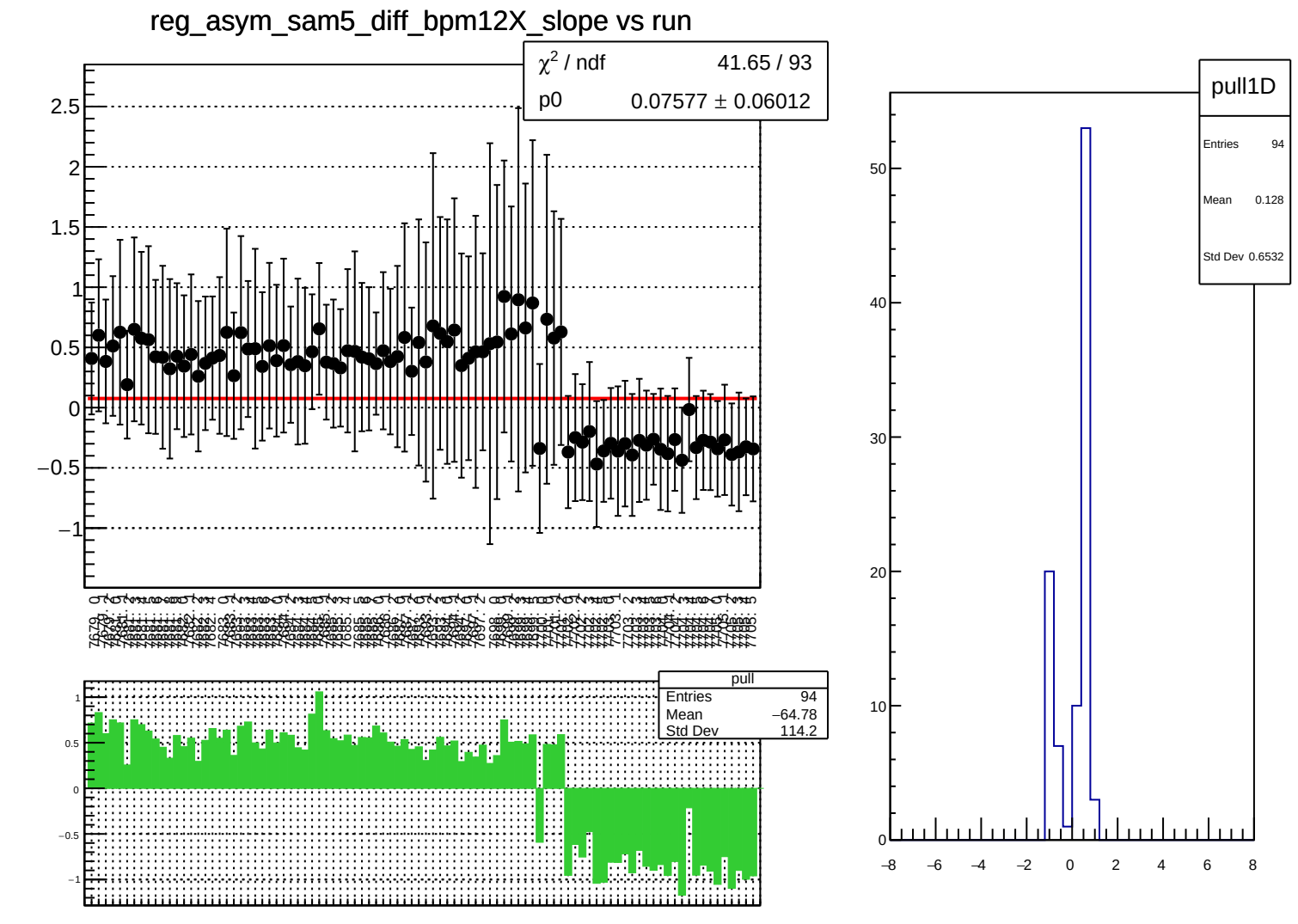

pull1D
Entries 94
Mean −0.04405
Std Dev 0.2341
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

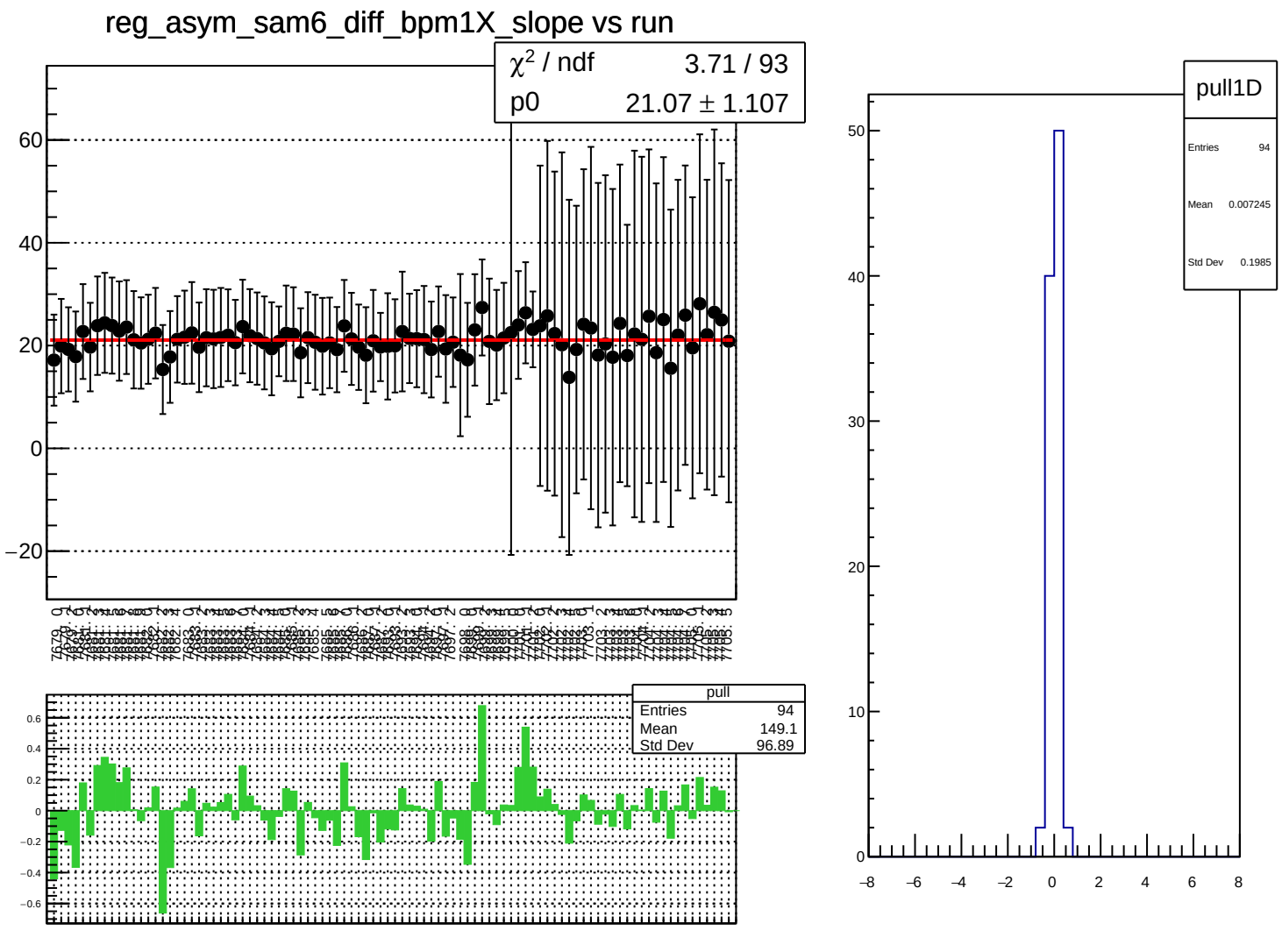

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 318.9 / 93
p0 60.3 ± 0.9746
pull
Entries 94
Mean 132.8
Std Dev 70.43
pull1D
Entries 94
Mean 0.3717
Std Dev 1.804

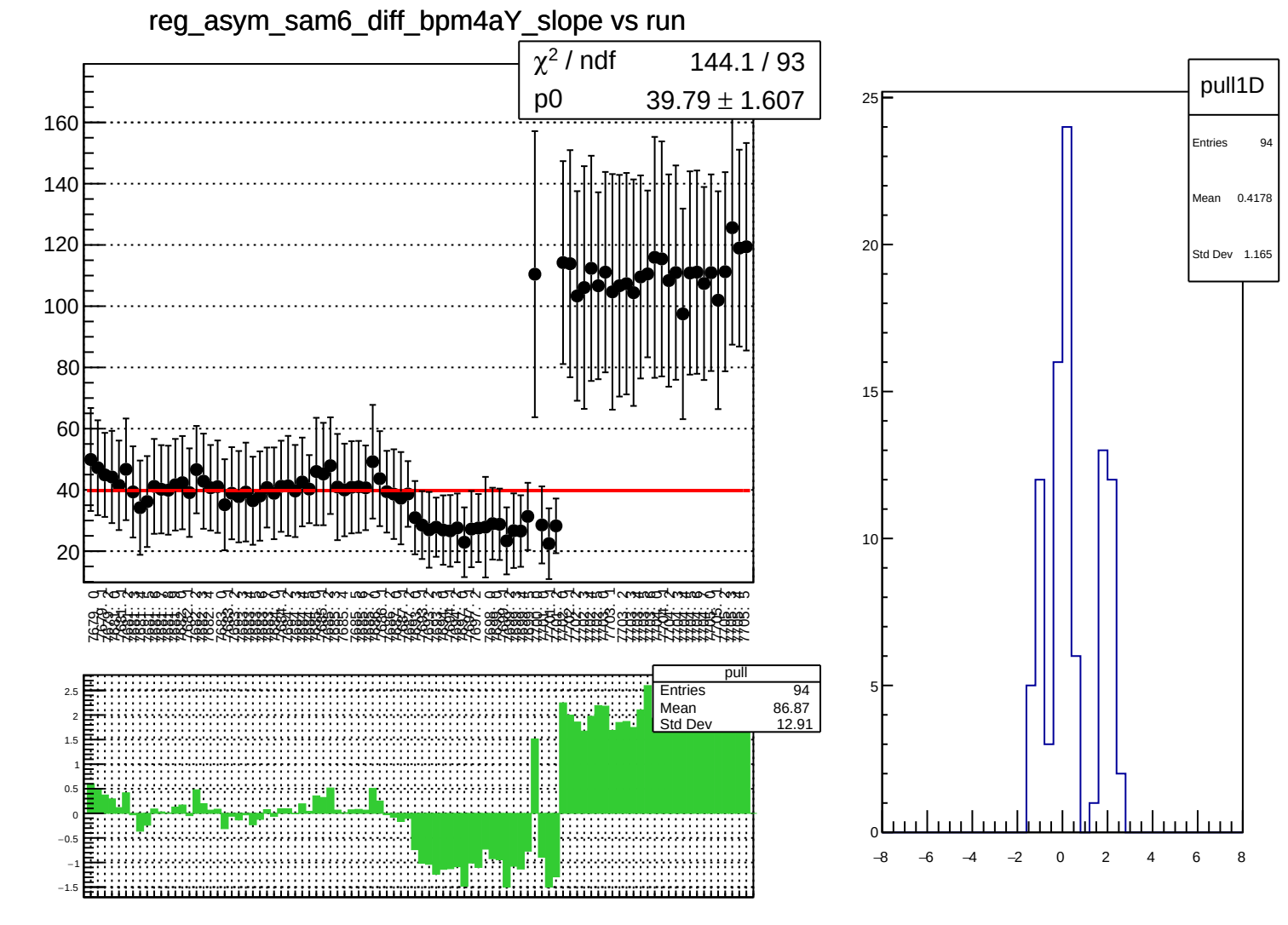

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 4.859 / 93
p0 6.024 ± 0.5199
pull
Entries 94
Mean 114.2
Std Dev 62.02

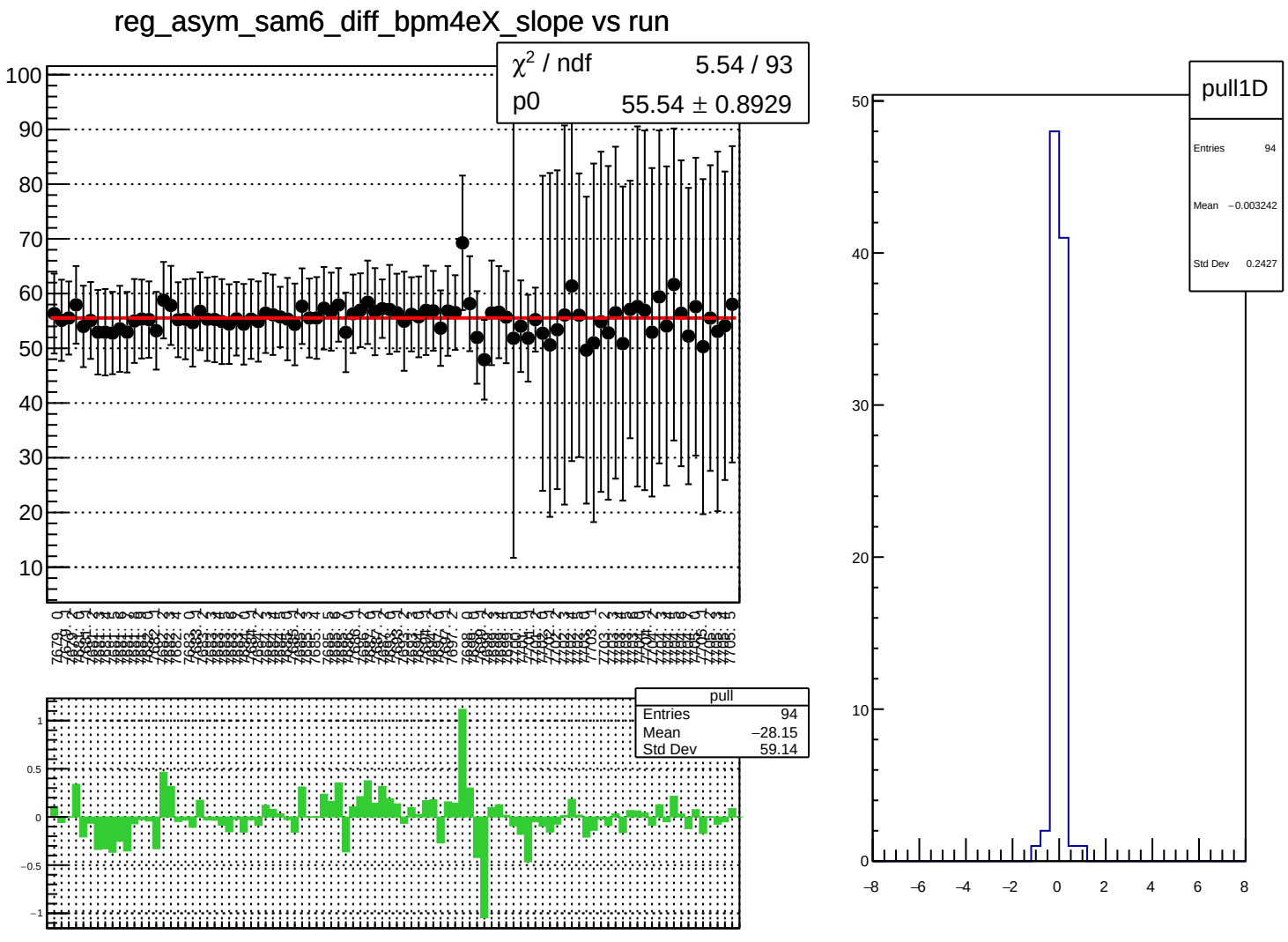

pull1D
Entries 94
Mean 0.05483
Std Dev 0.2206

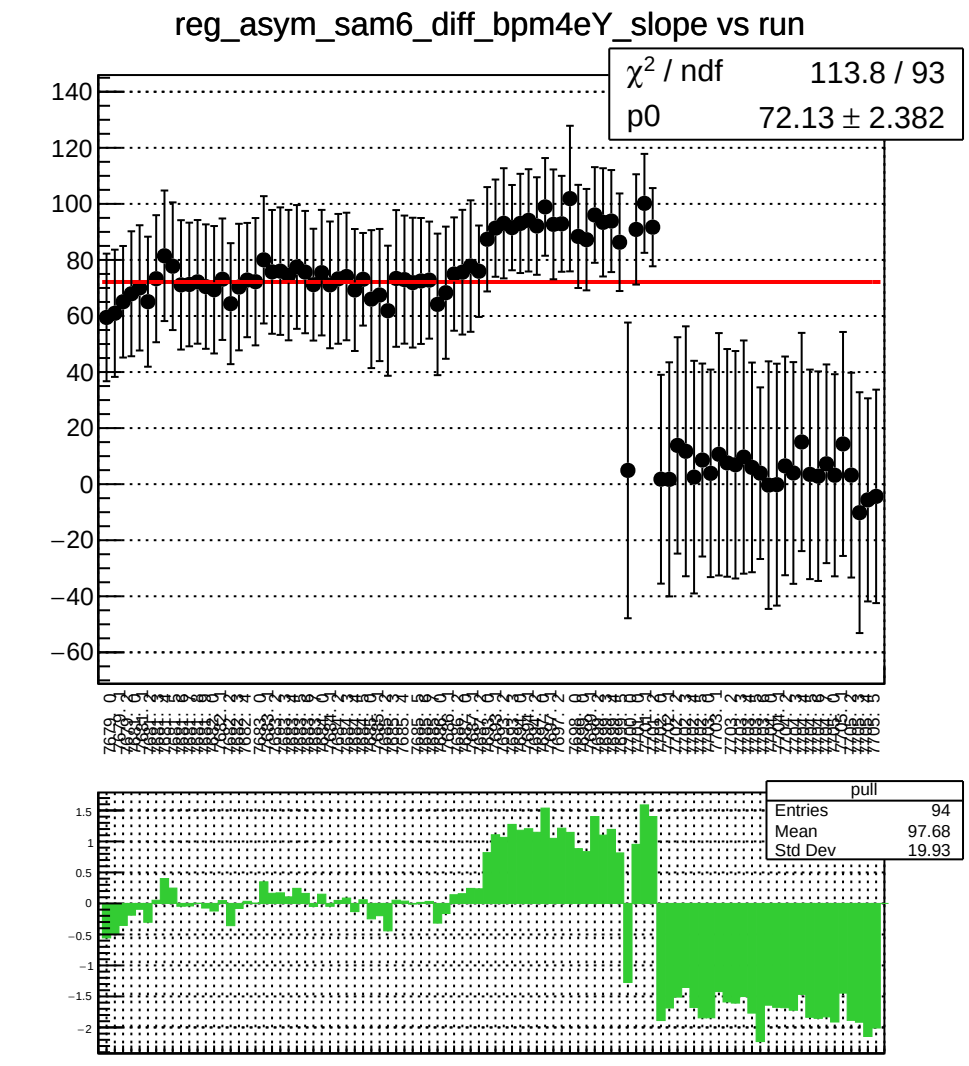

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 225.8 / 93
p0 78.43 ± 1.398
pull
Entries 94
Mean 224.6
Std Dev 164.7
pull1D
Entries 94
Mean −0.15
Std Dev 1.542

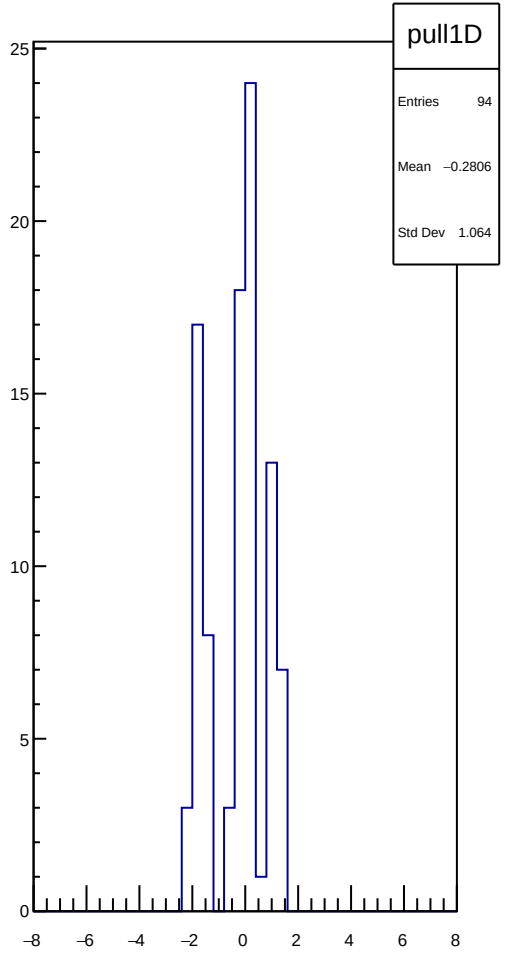

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 41.65 / 93
p0 0.07577 ± 0.06012
pull
Entries 94
Mean −64.78
Std Dev 114.2
pull1D
Entries 94
Mean 0.128
Std Dev 0.6532

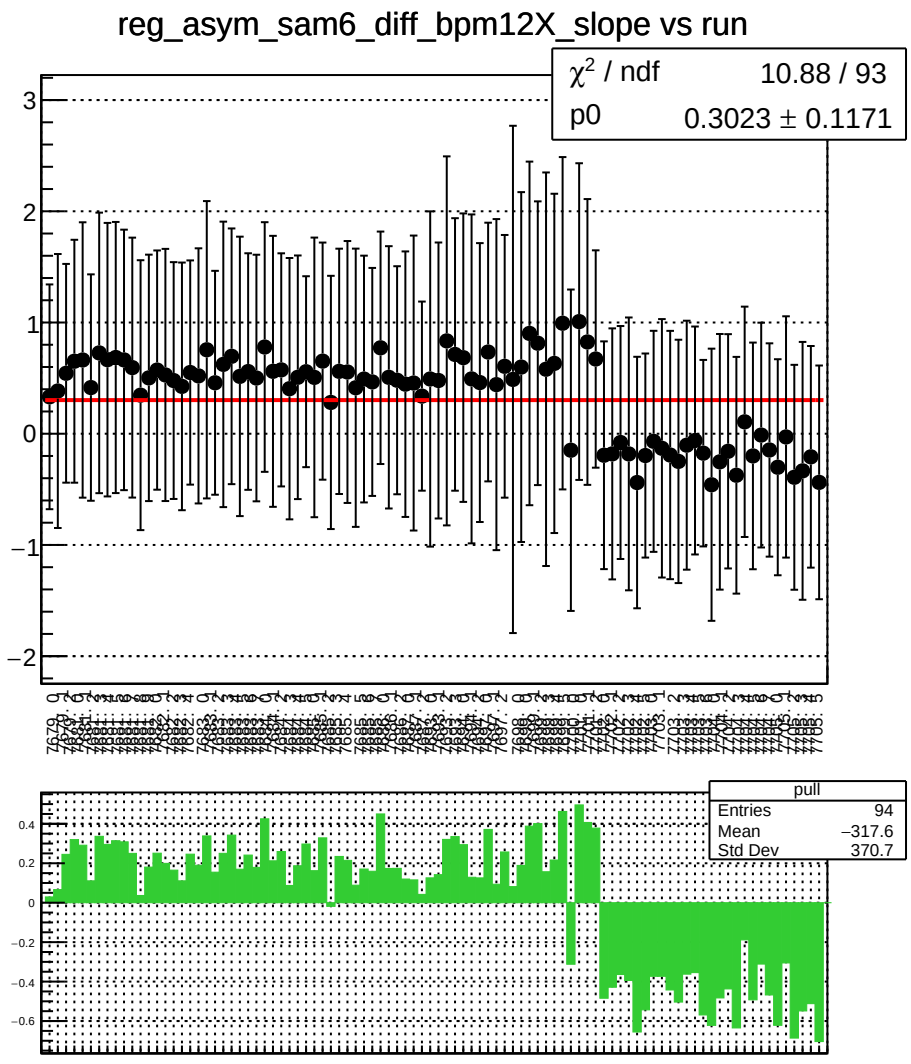

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 3.71 / 93
p0 21.07 ± 1.107
pull
Entries 94
Mean 149.1
Std Dev 96.89
pull1D
Entries 94
Mean 0.007245
Std Dev 0.1985

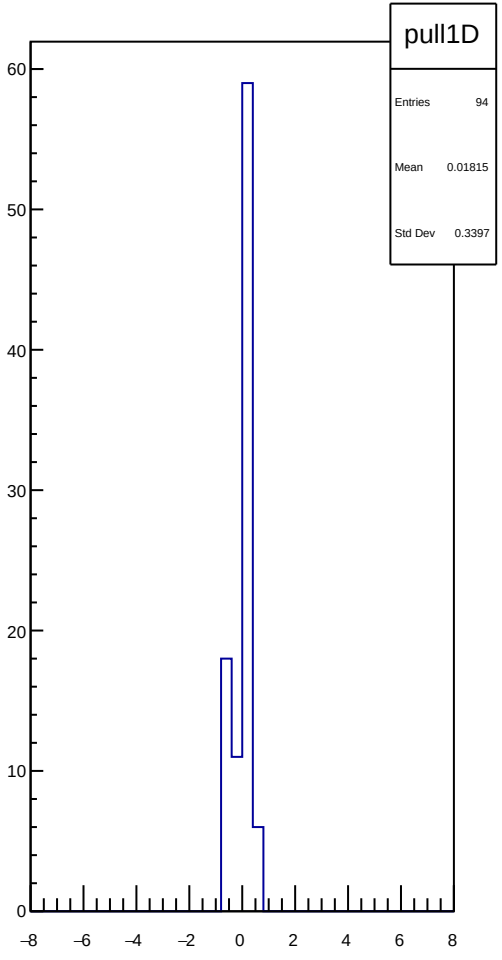

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 144.1 / 93
p0 39.79 ± 1.607
pull
Entries 94
Mean 86.87
Std Dev 12.91
pull1D
Entries 94
Mean 0.4178
Std Dev 1.165

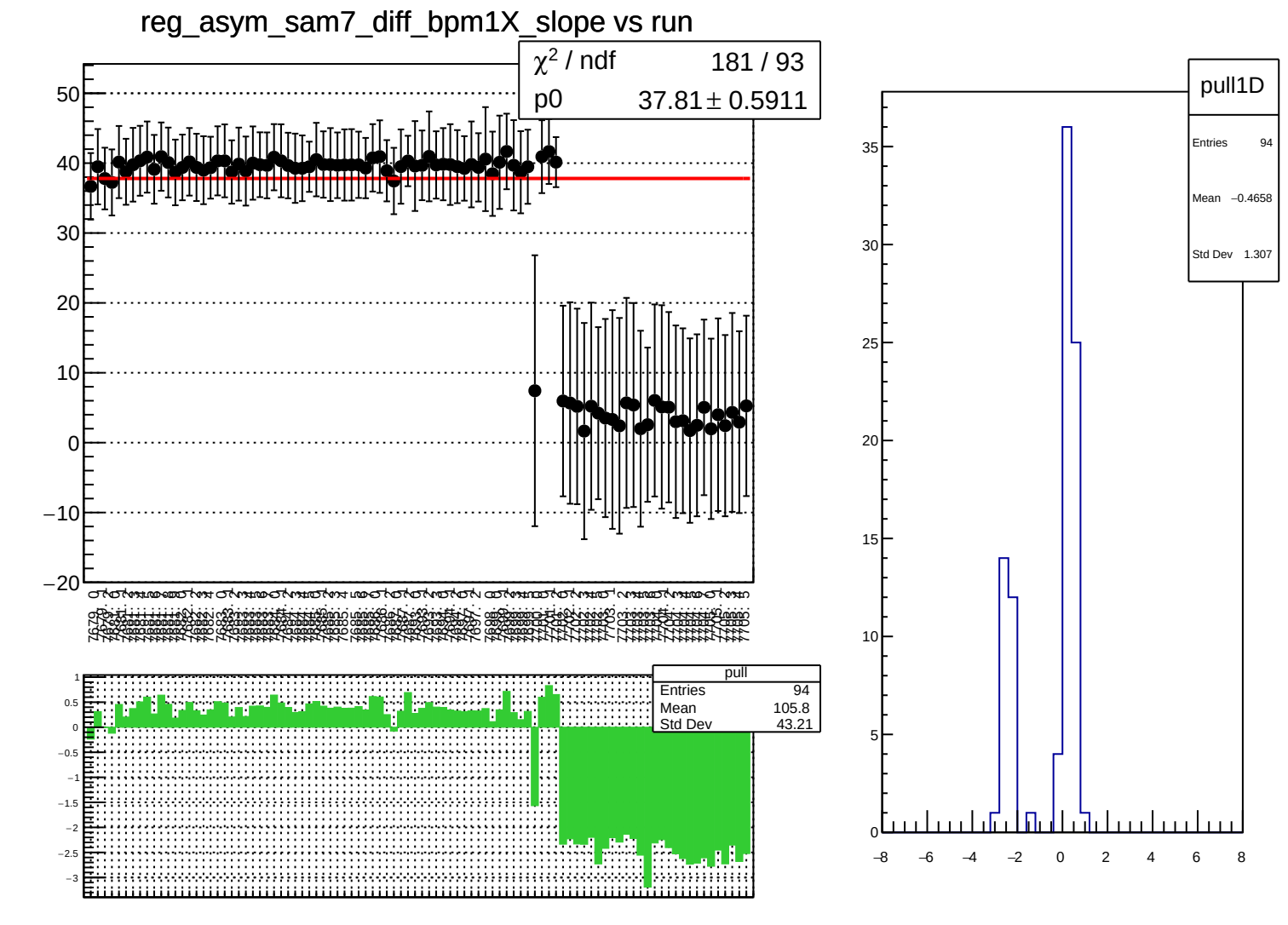

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 5.54 / 93
p0 55.54 ± 0.8929
pull
Entries 94
Mean −28.15
Std Dev 59.14
pull1D
Entries 94
Mean −0.003242
Std Dev 0.2427

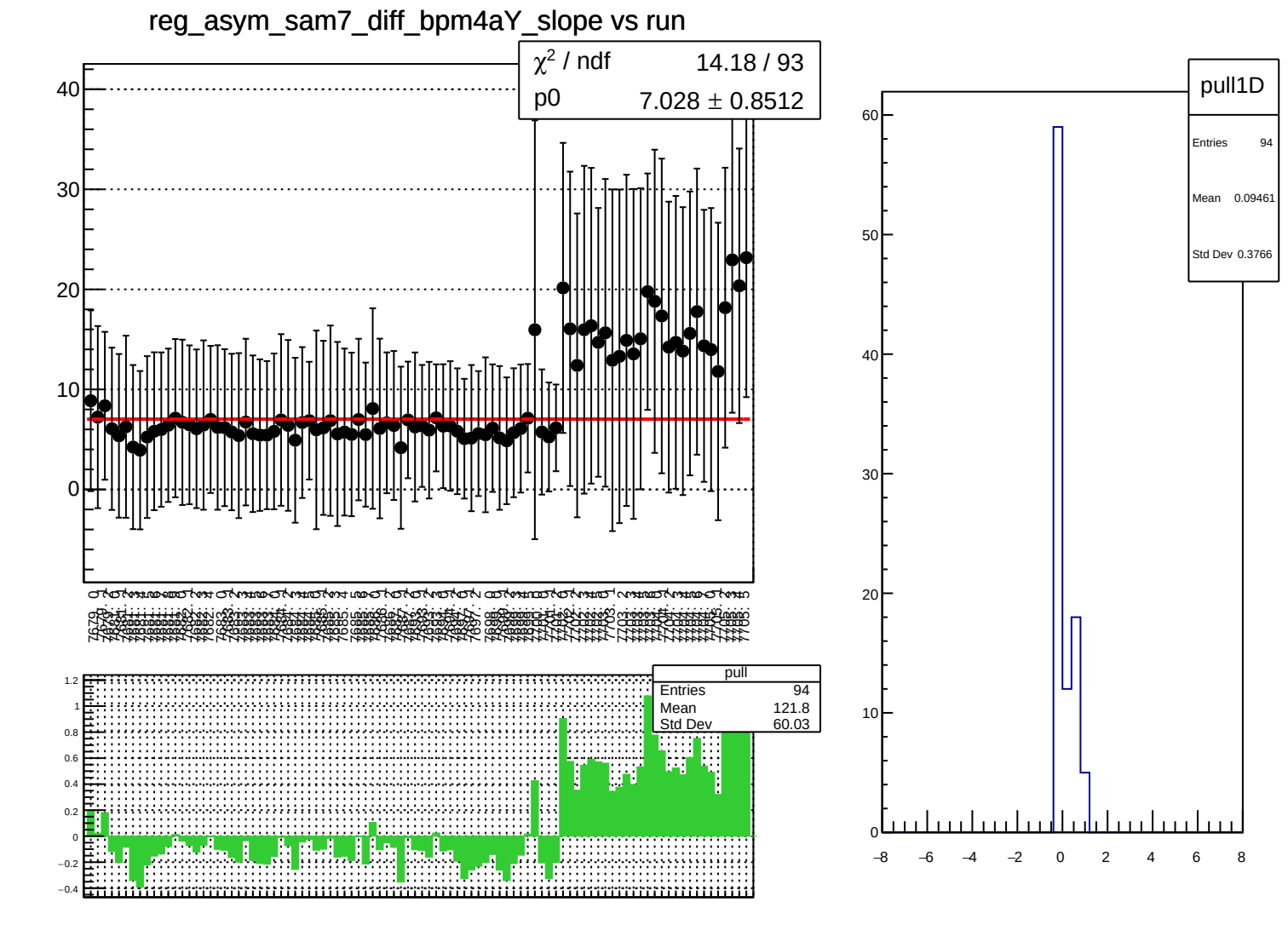

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 113.8 / 93
p0 72.13 ± 2.382
pull
Entries 94
Mean 97.68
Std Dev 19.93

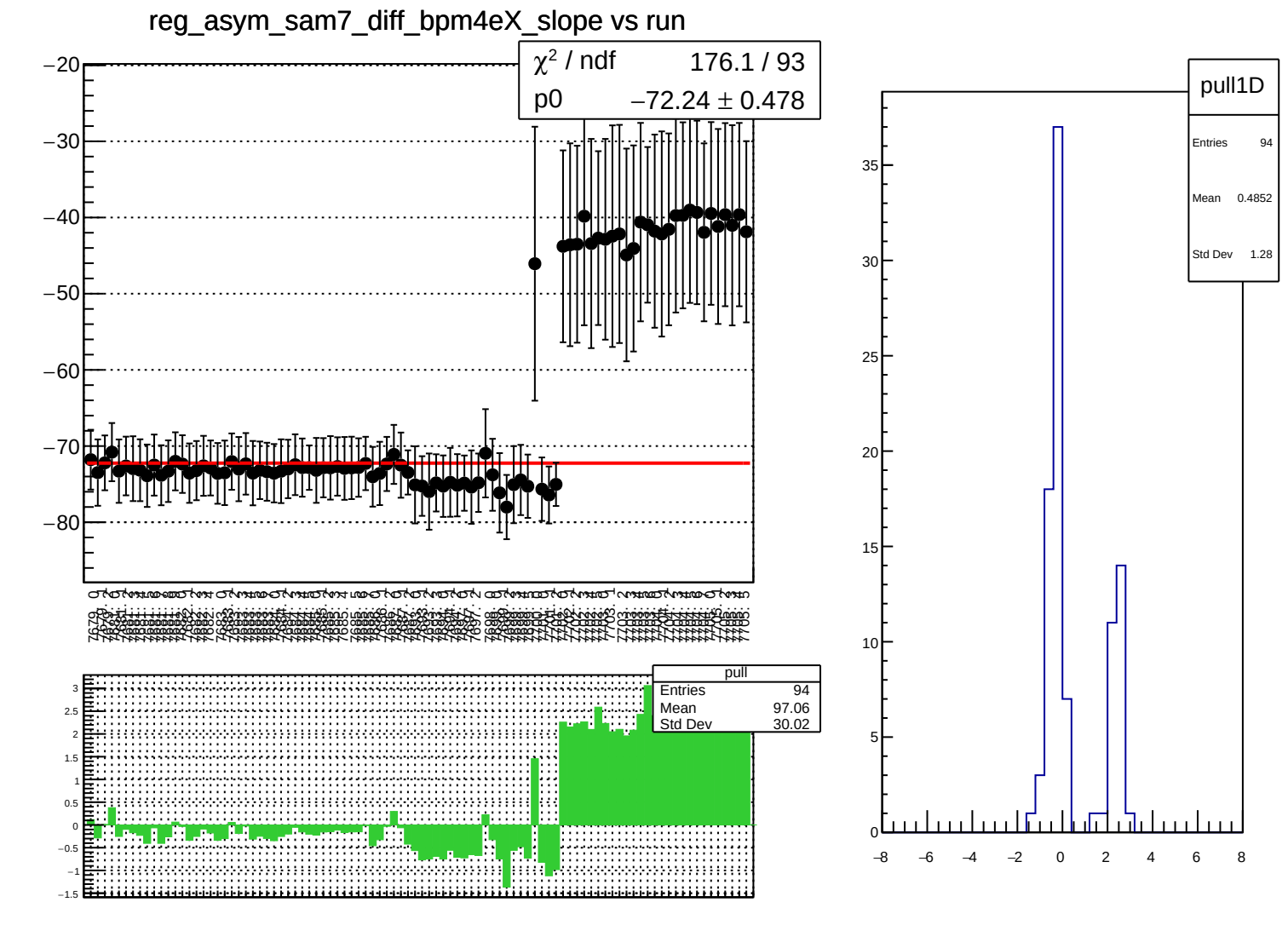

pull1D
Entries 94
Mean −0.2806
Std Dev 1.064

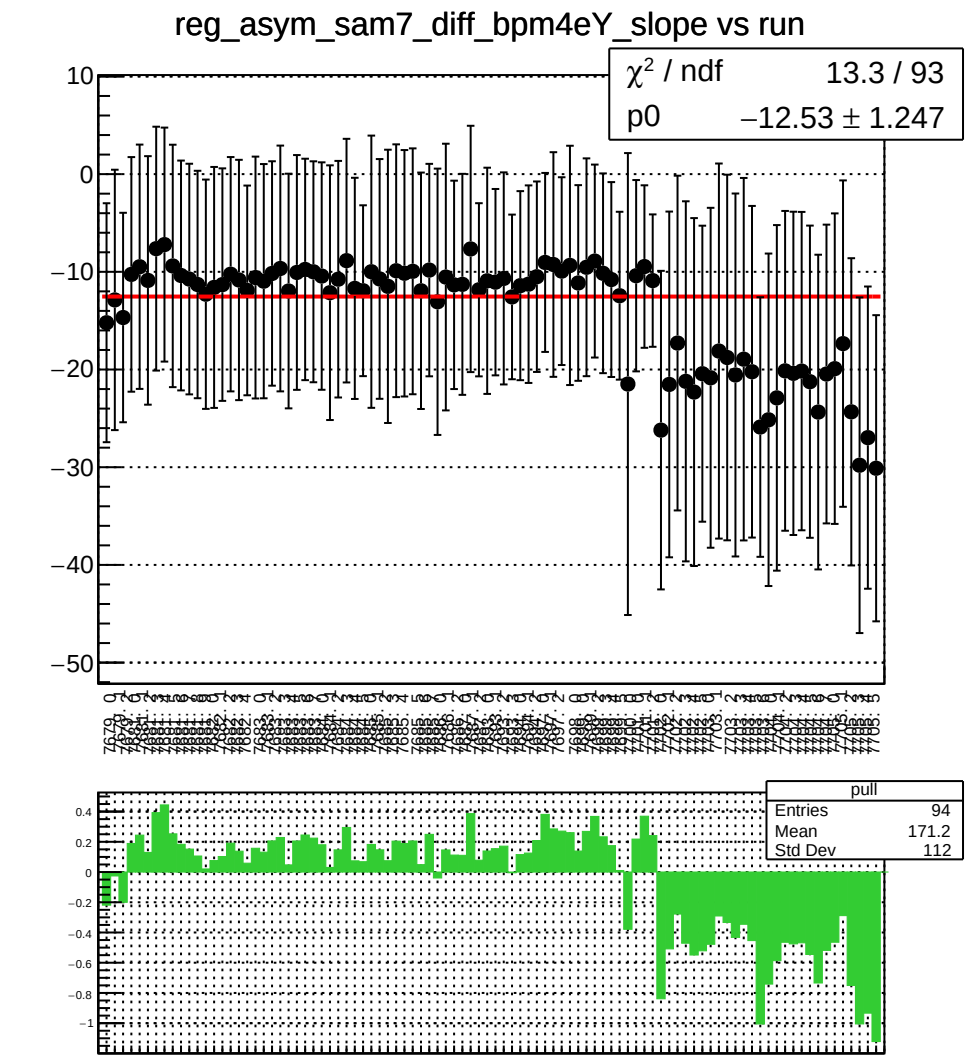

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 10.88 / 93
p0 0.3023 ± 0.1171
pull
Entries 94
Mean −317.6
Std Dev 370.7

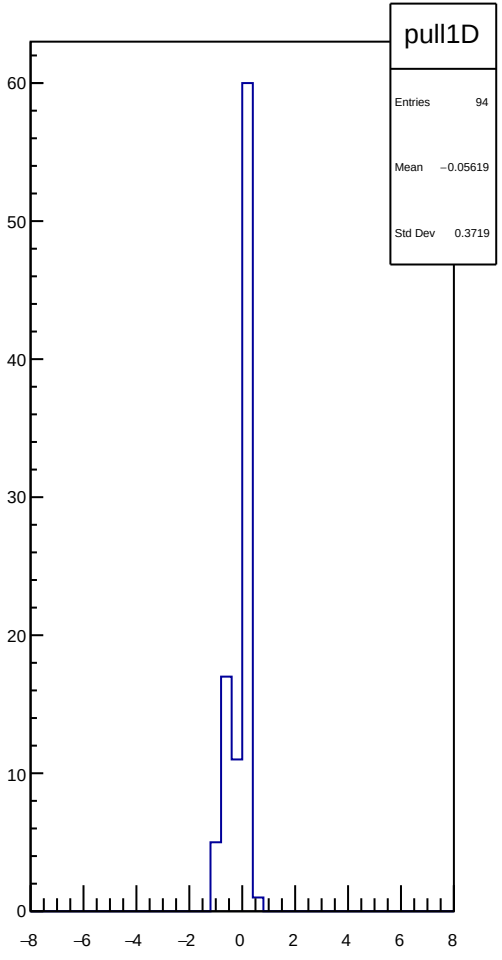

pull1D
Entries 94
Mean 0.01815
Std Dev 0.3397

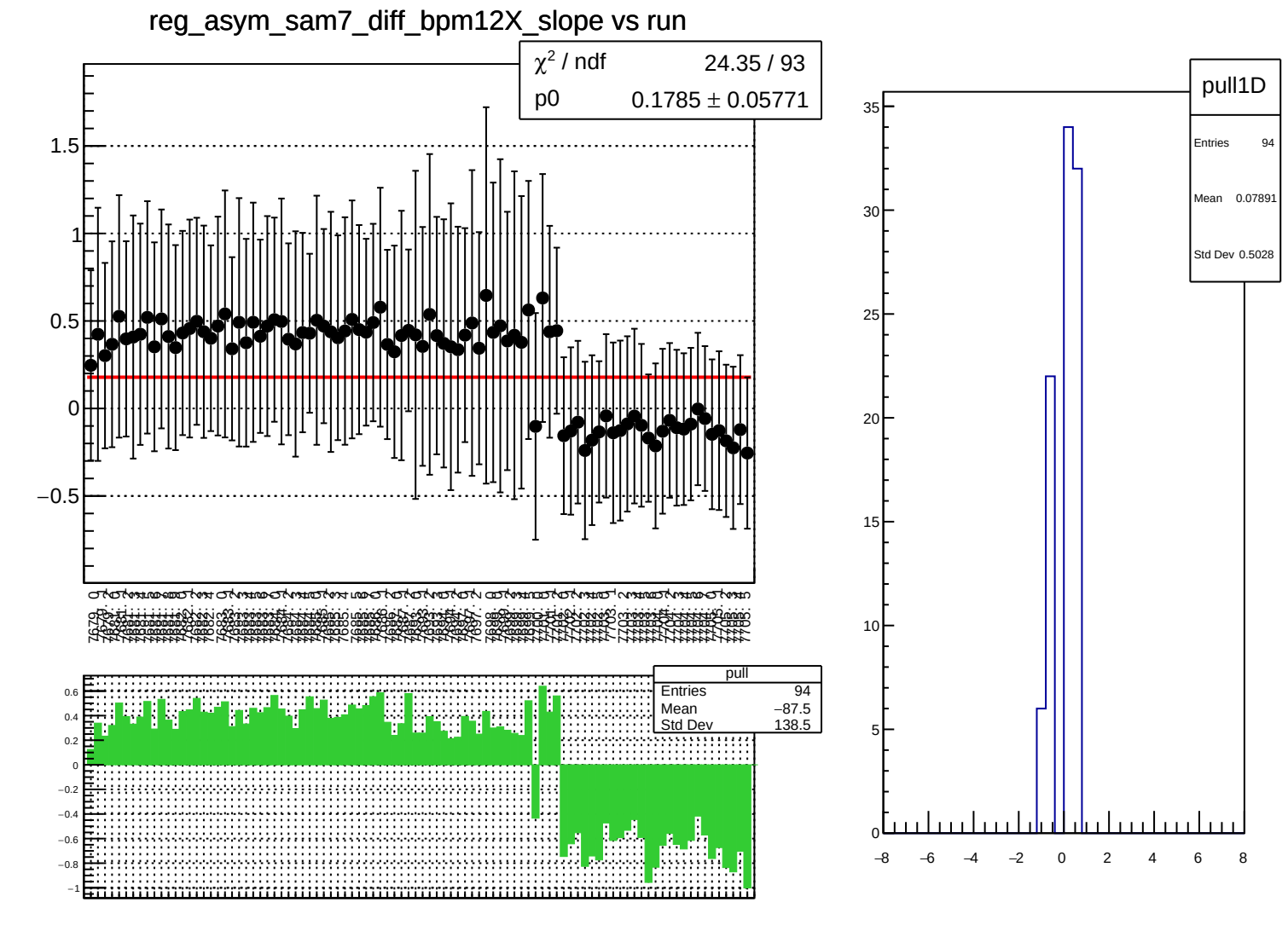

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 181 / 93
p0 37.81 ± 0.5911
pull
Entries 94
Mean 105.8
Std Dev 43.21
pull1D
Entries 94
Mean −0.4658
Std Dev 1.307

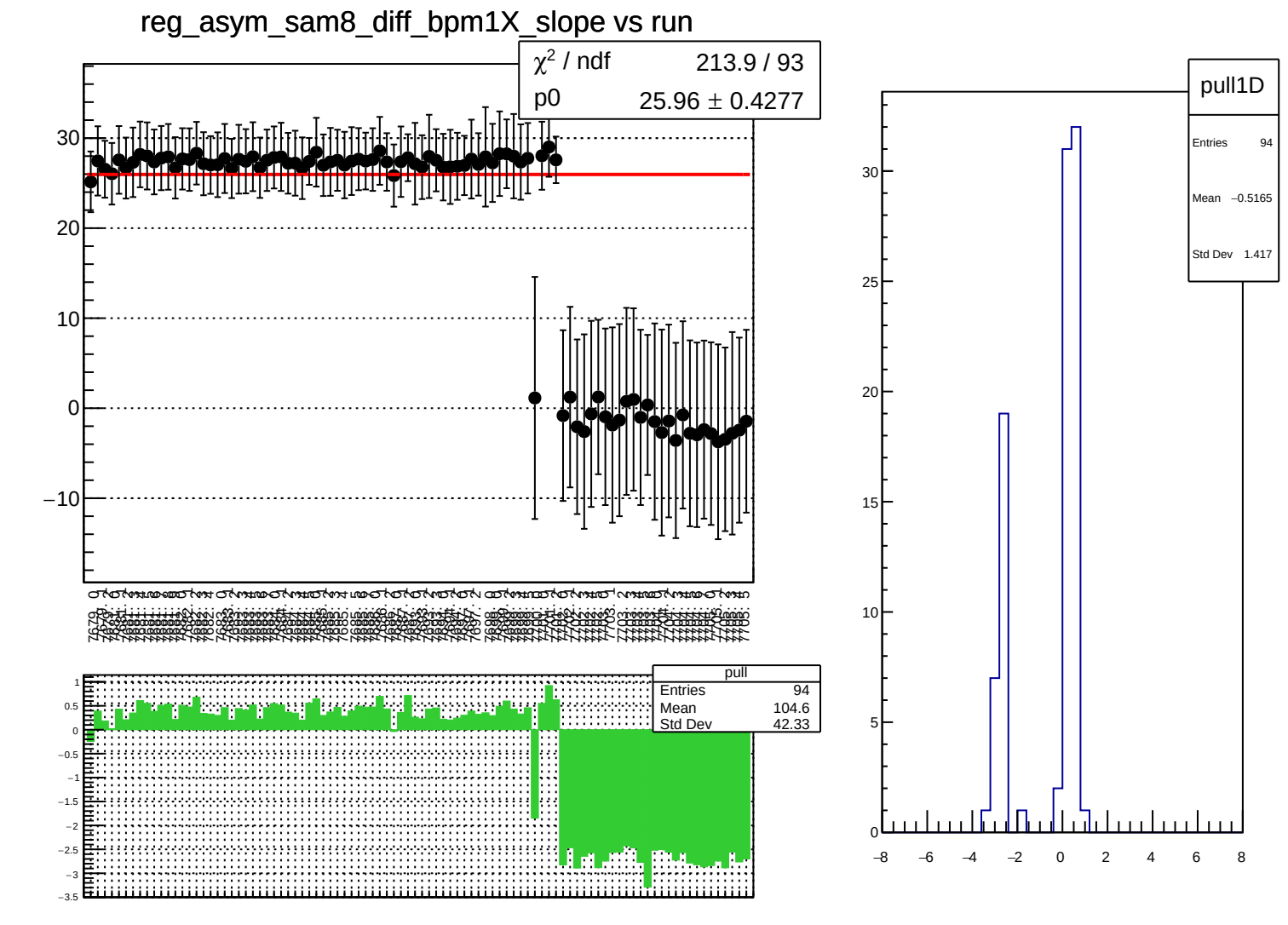

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 14.18 / 93
p0 7.028 ± 0.8512
pull
Entries 94
Mean 121.8
Std Dev 60.03
pull1D
Entries 94
Mean 0.09461
Std Dev 0.3766

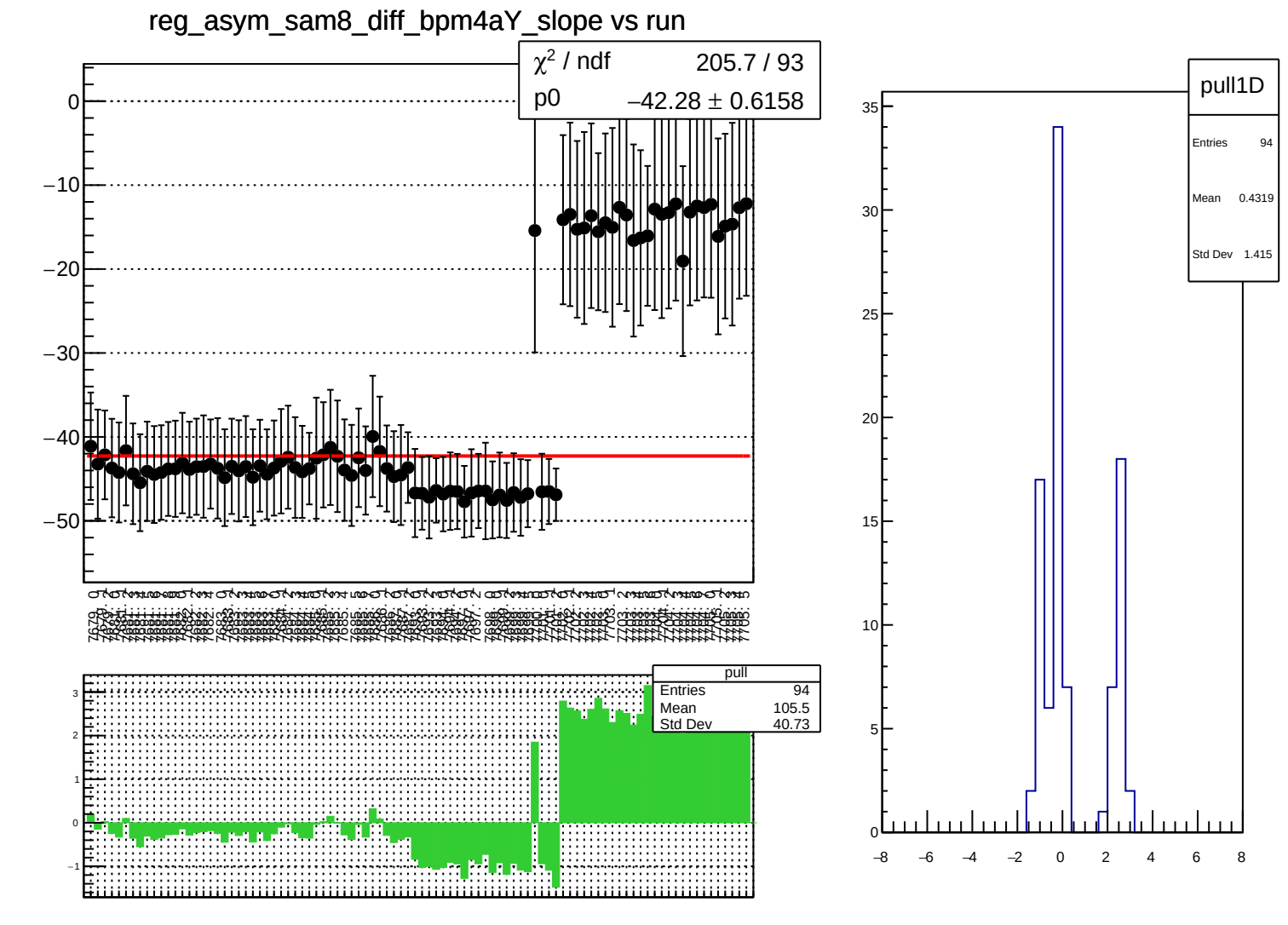

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 176.1 / 93
p0 −72.24 ± 0.478
pull
Entries 94
Mean 97.06
Std Dev 30.02
pull1D
Entries 94
Mean 0.4852
Std Dev 1.28

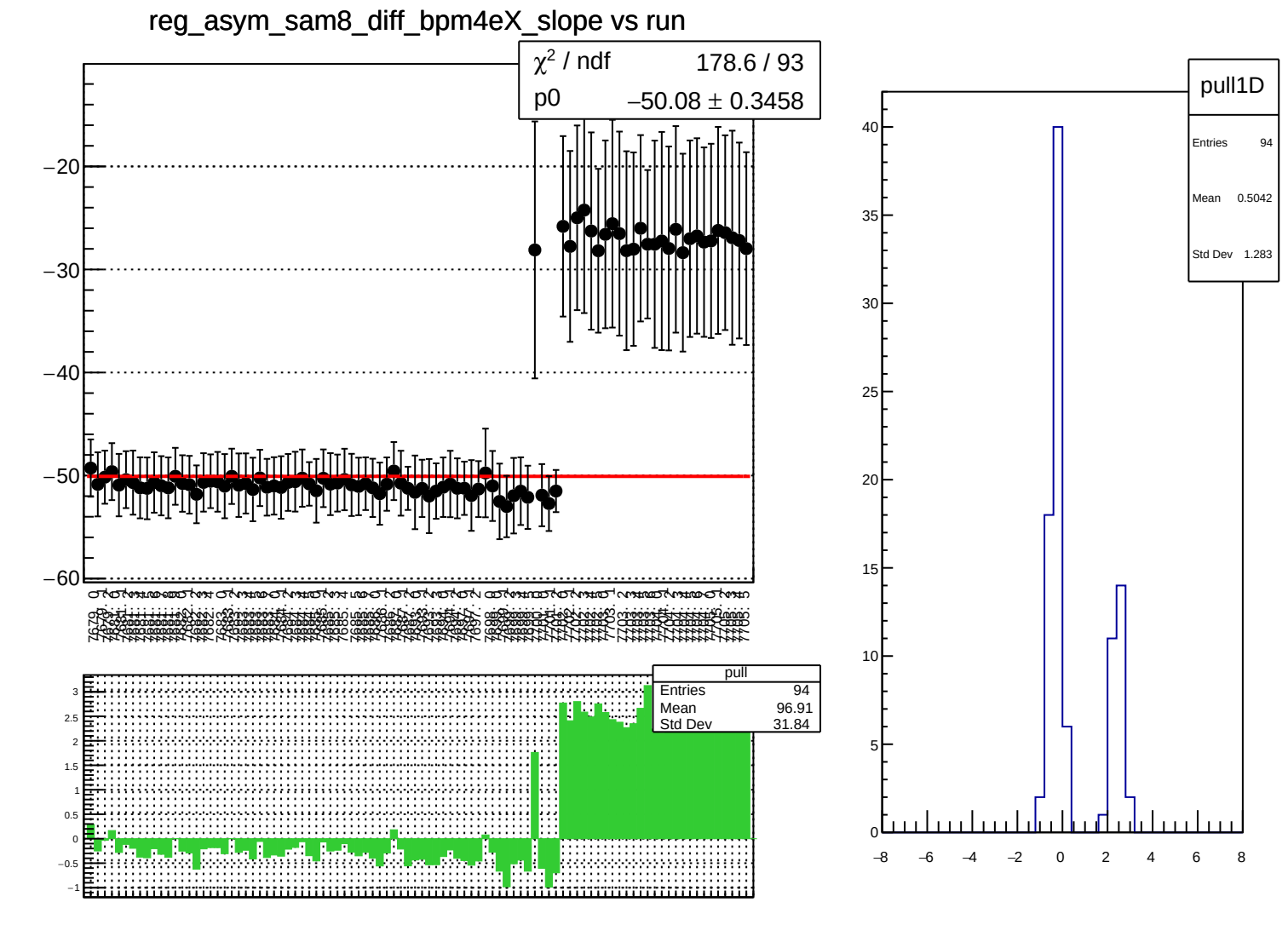

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 13.3 / 93
p0 −12.53 ± 1.247
pull
Entries 94
Mean 171.2
Std Dev 112

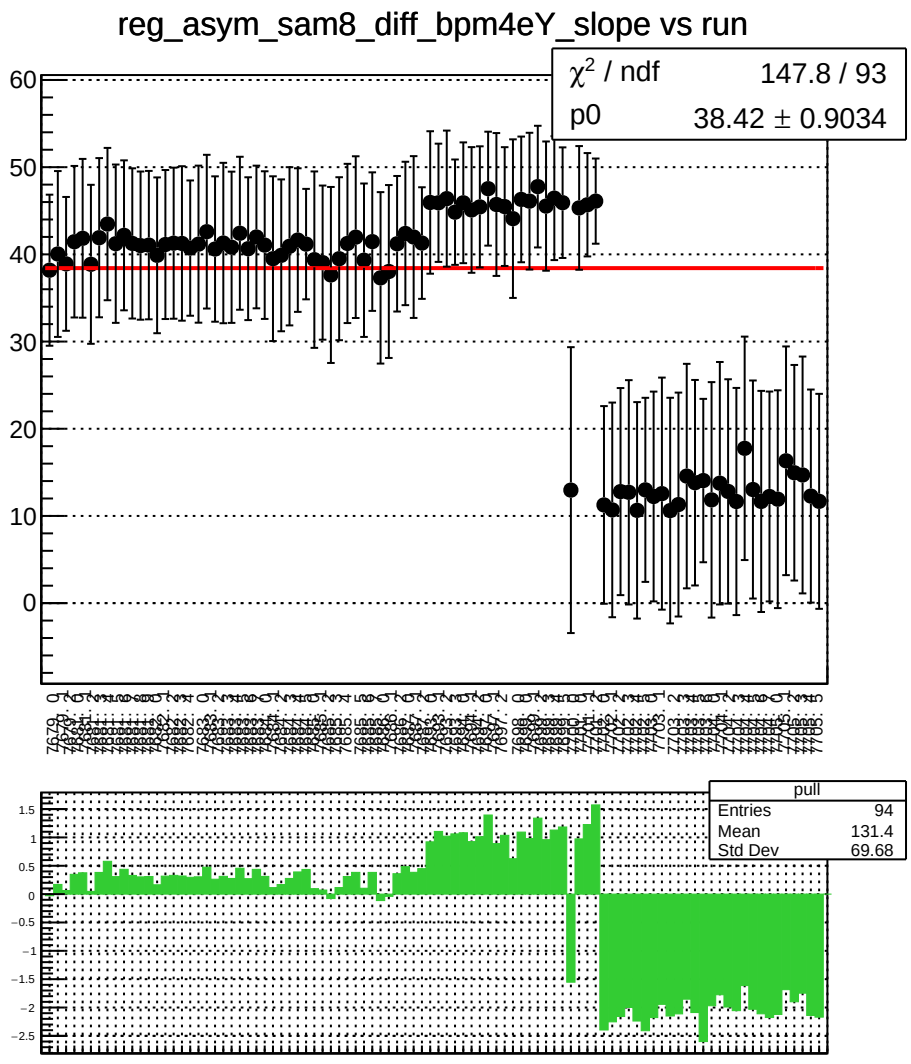

pull1D
Entries 94
Mean −0.05619
Std Dev 0.3719

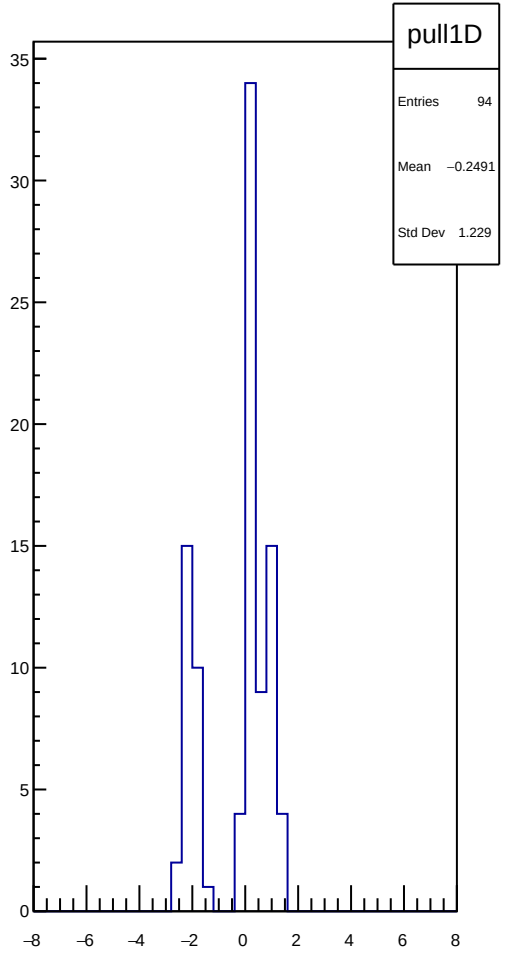

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 24.35 / 93
p0 0.1785 ± 0.05771
pull
Entries 94
Mean −87.5
Std Dev 138.5
pull1D
Entries 94
Mean 0.07891
Std Dev 0.5028

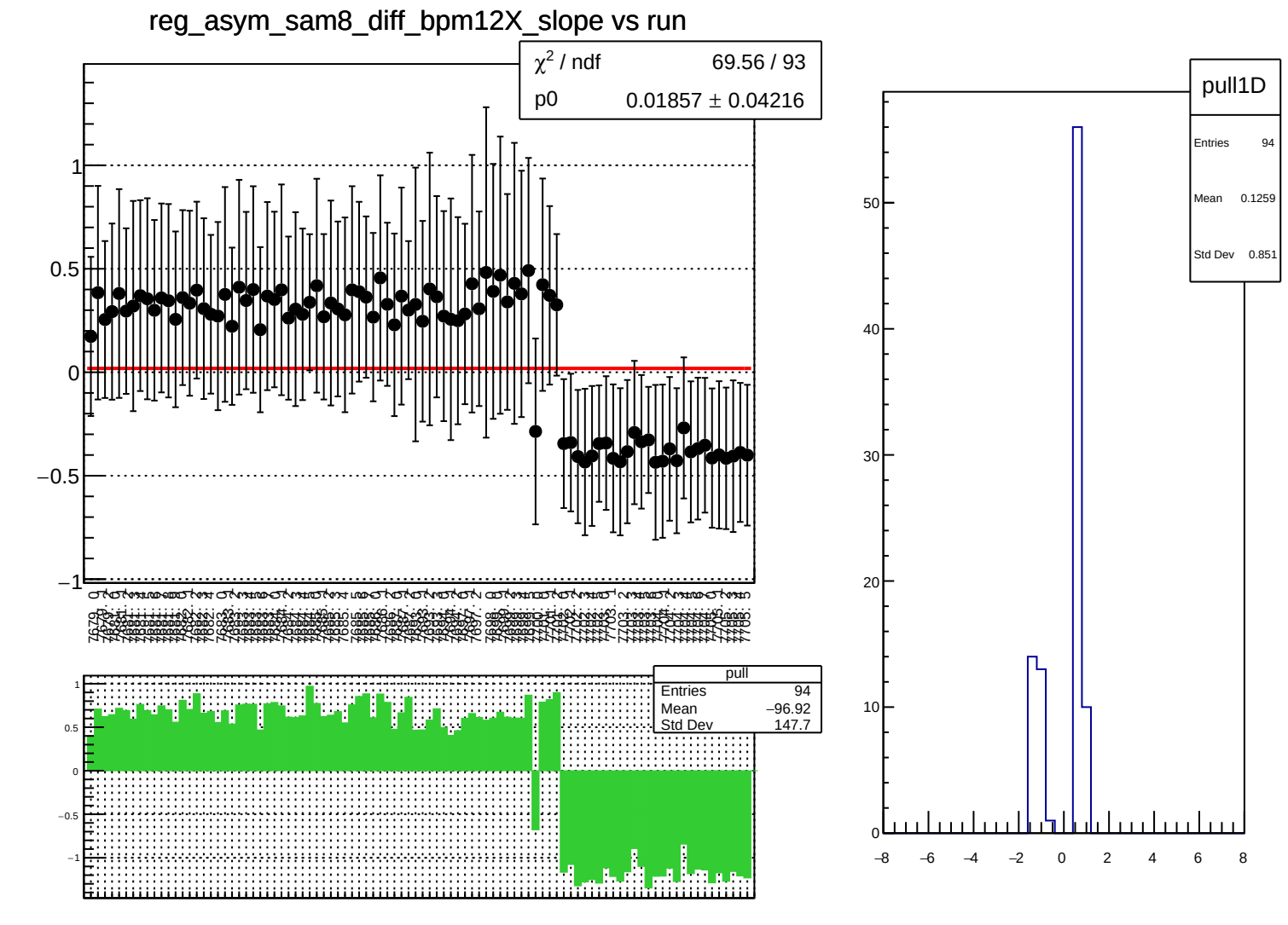

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 213.9 / 93
p0 25.96 ± 0.4277
30
20
10
0
−10
pull
Entries 94
Mean 104.6
Std Dev 42.33
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
−3.5
pull1D
Entries 94
Mean −0.5165
Std Dev 1.417
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

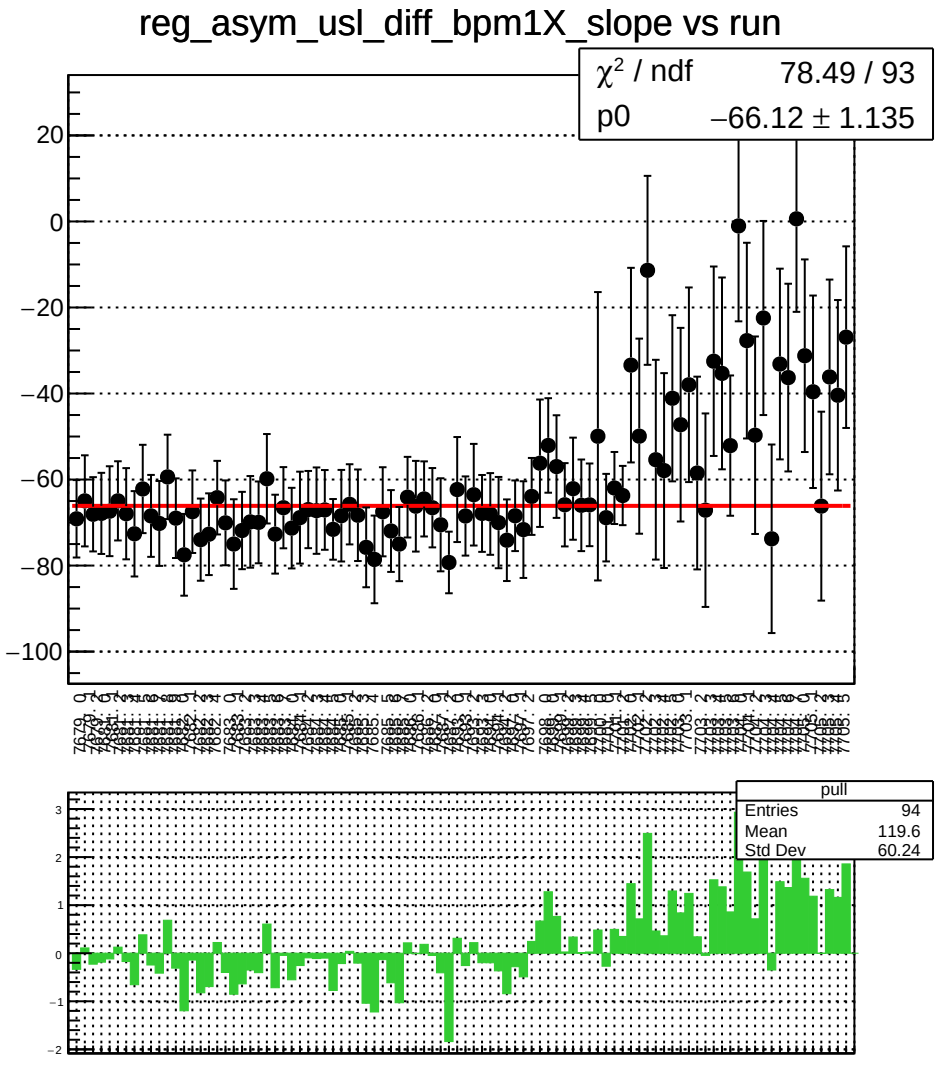

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 205.7 / 93
p0 −42.28 ± 0.6158
pull
Entries 94
Mean 105.5
Std Dev 40.73
pull1D
Entries 94
Mean 0.4319
Std Dev 1.415

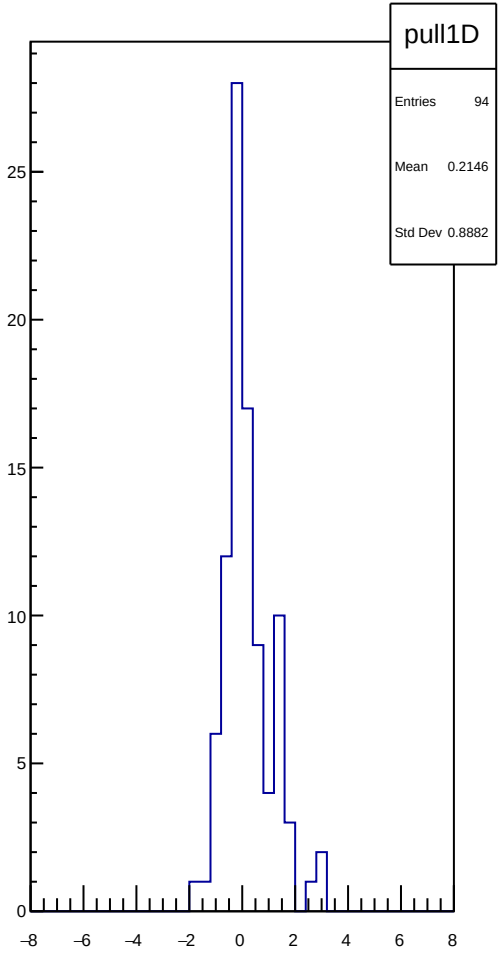

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 178.6 / 93
p0 −50.08 ± 0.3458
pull
Entries 94
Mean 96.91
Std Dev 31.84
pull1D
Entries 94
Mean 0.5042
Std Dev 1.283

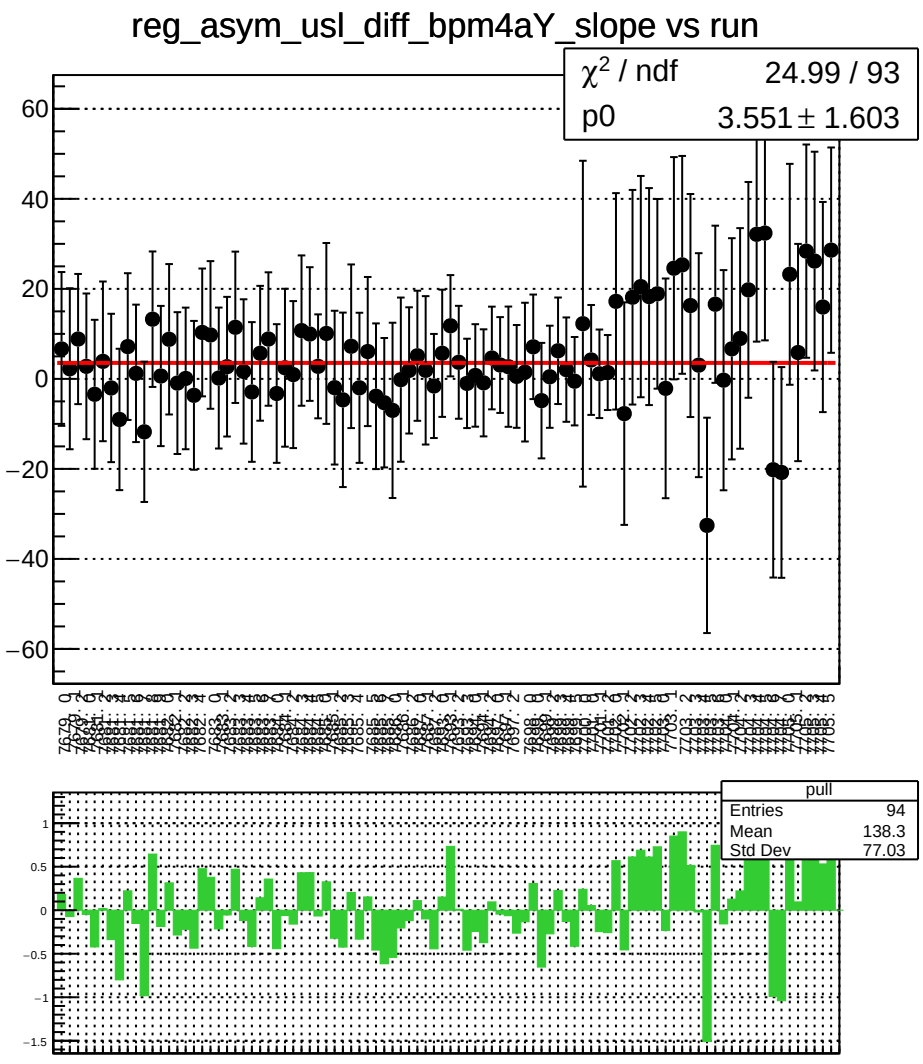

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 147.8 / 93
p0 38.42 ± 0.9034
pull
Entries 94
Mean 131.4
Std Dev 69.68

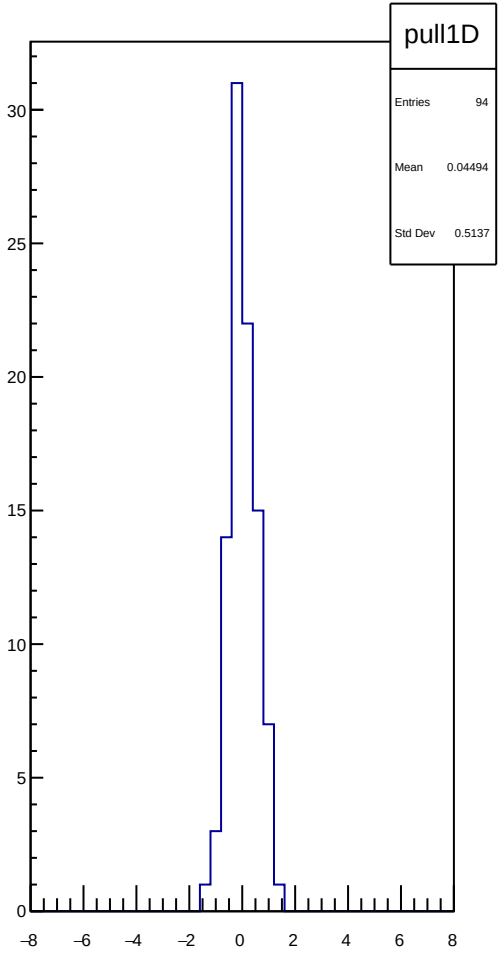

pull1D
Entries 94
Mean −0.2491
Std Dev 1.229

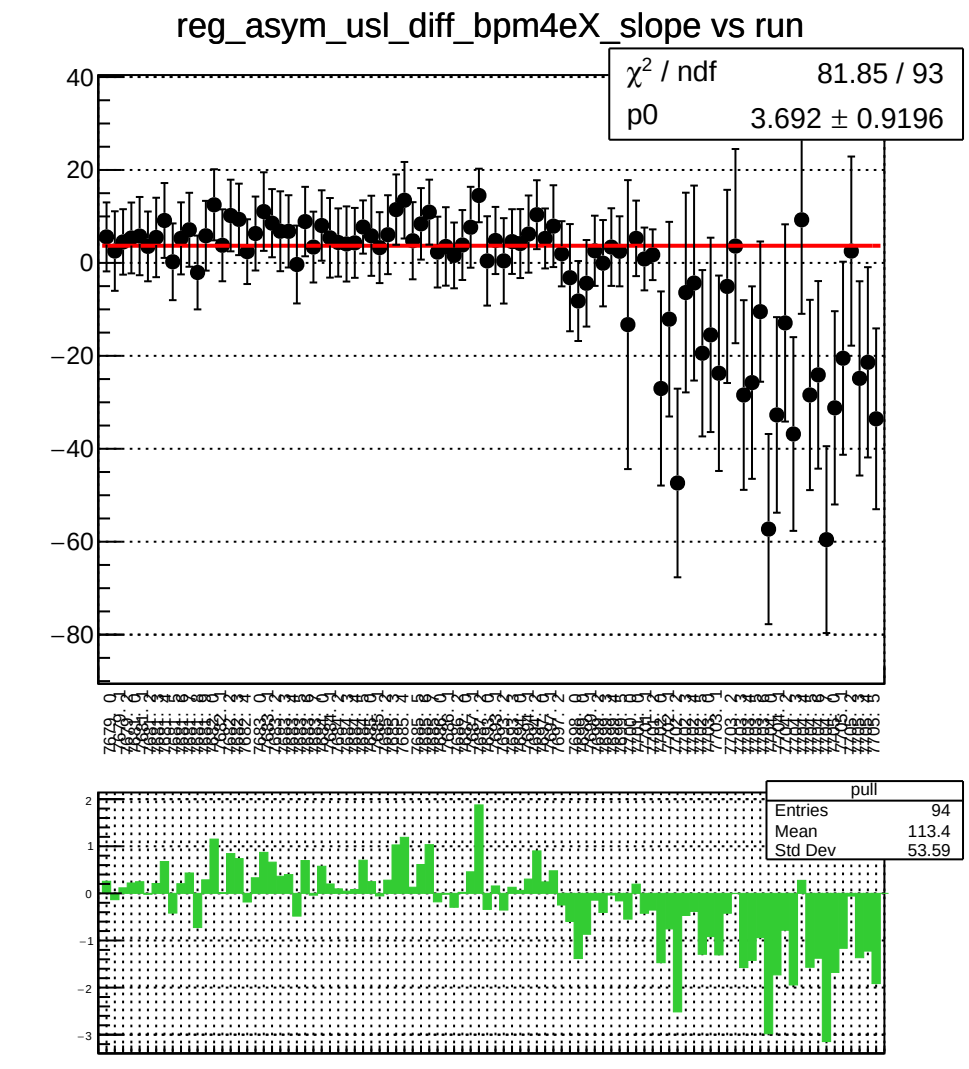

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 69.56 / 93
p0 0.01857 ± 0.04216
pull
Entries 94
Mean −96.92
Std Dev 147.7
pull1D
Entries 94
Mean 0.1259
Std Dev 0.851

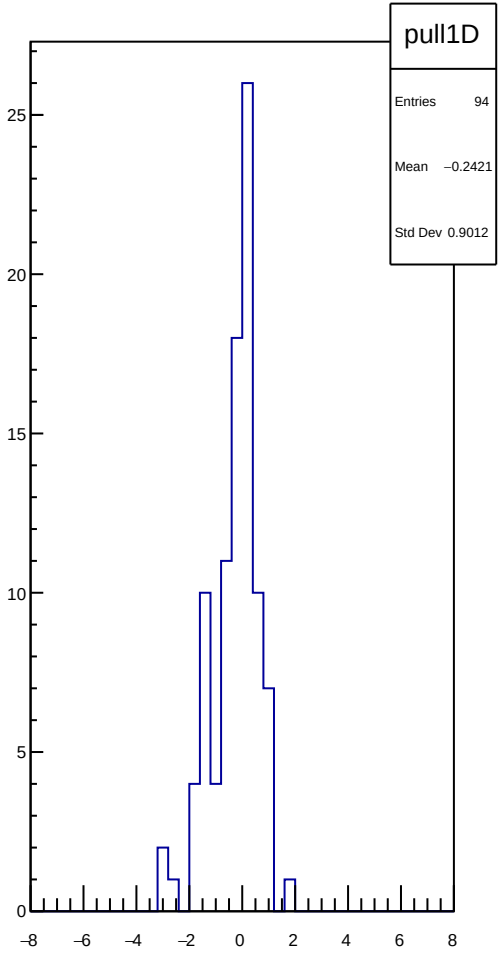

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 78.49 / 93
p0 −66.12 ± 1.135
pull
Entries 94
Mean 119.6
Std Dev 60.24

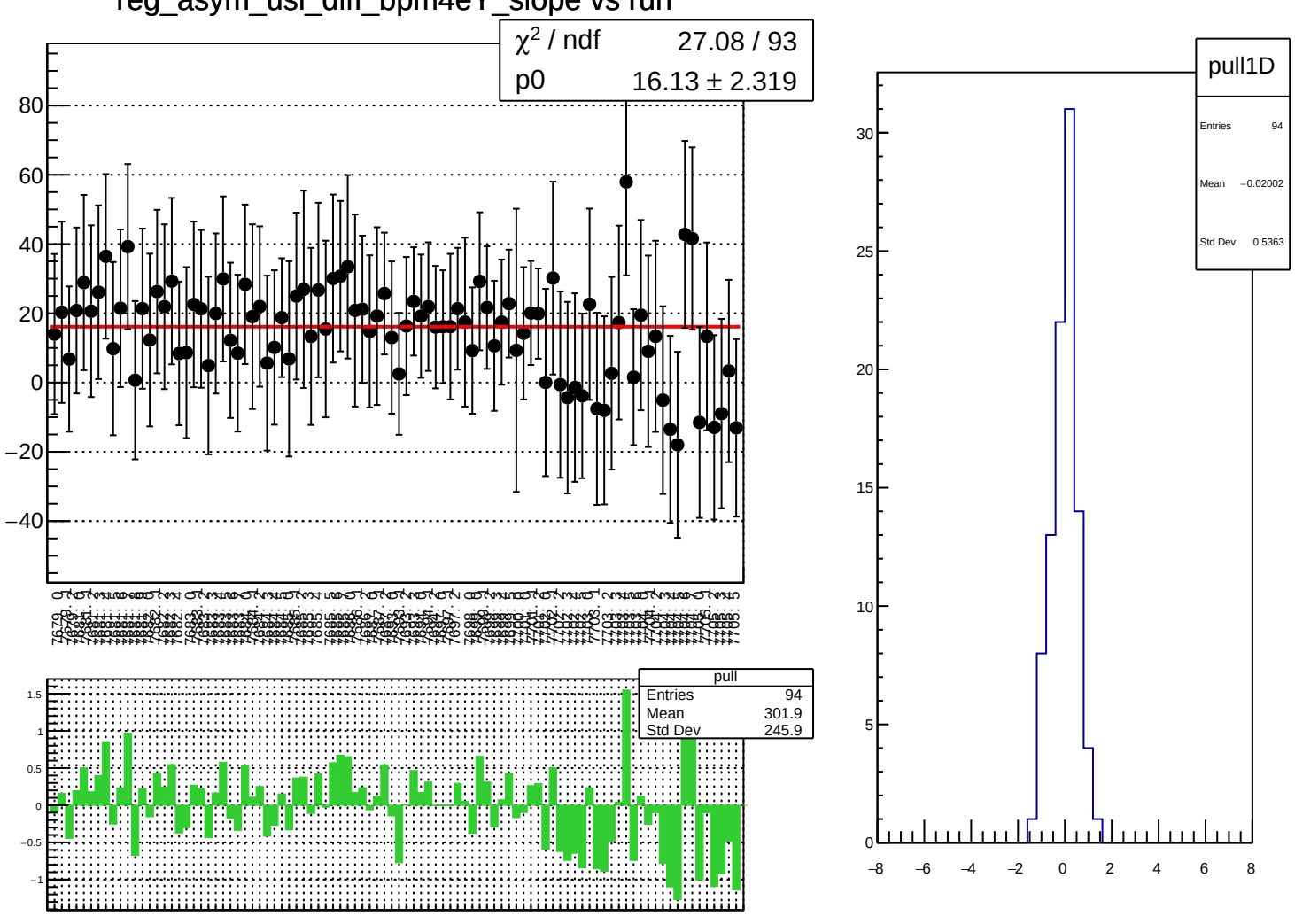

pull1D
Entries 94
Mean 0.2146
Std Dev 0.8882

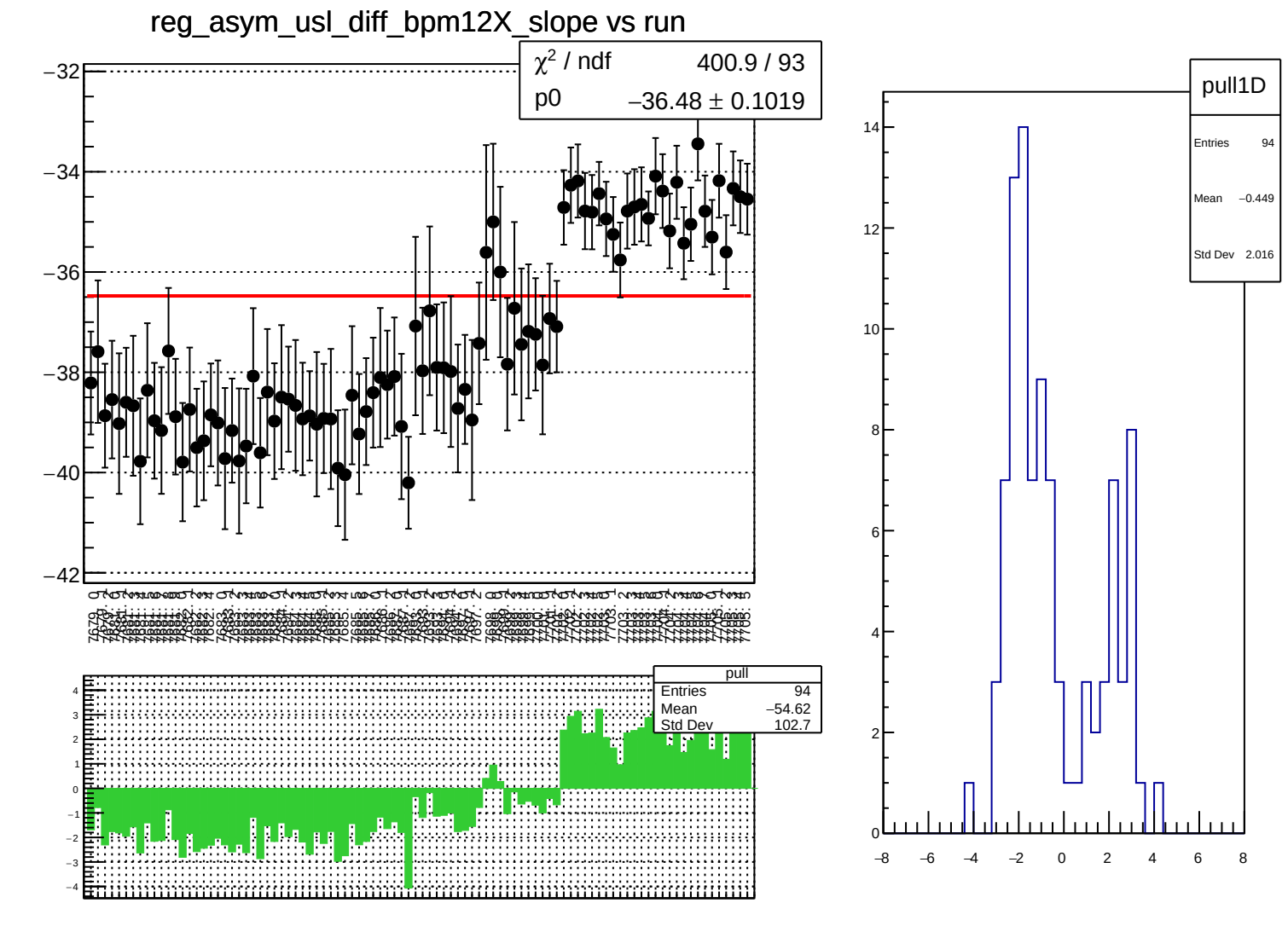

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 24.99 / 93
p0 3.551 ± 1.603
pull
Entries 94
Mean 138.3
Std Dev 77.03

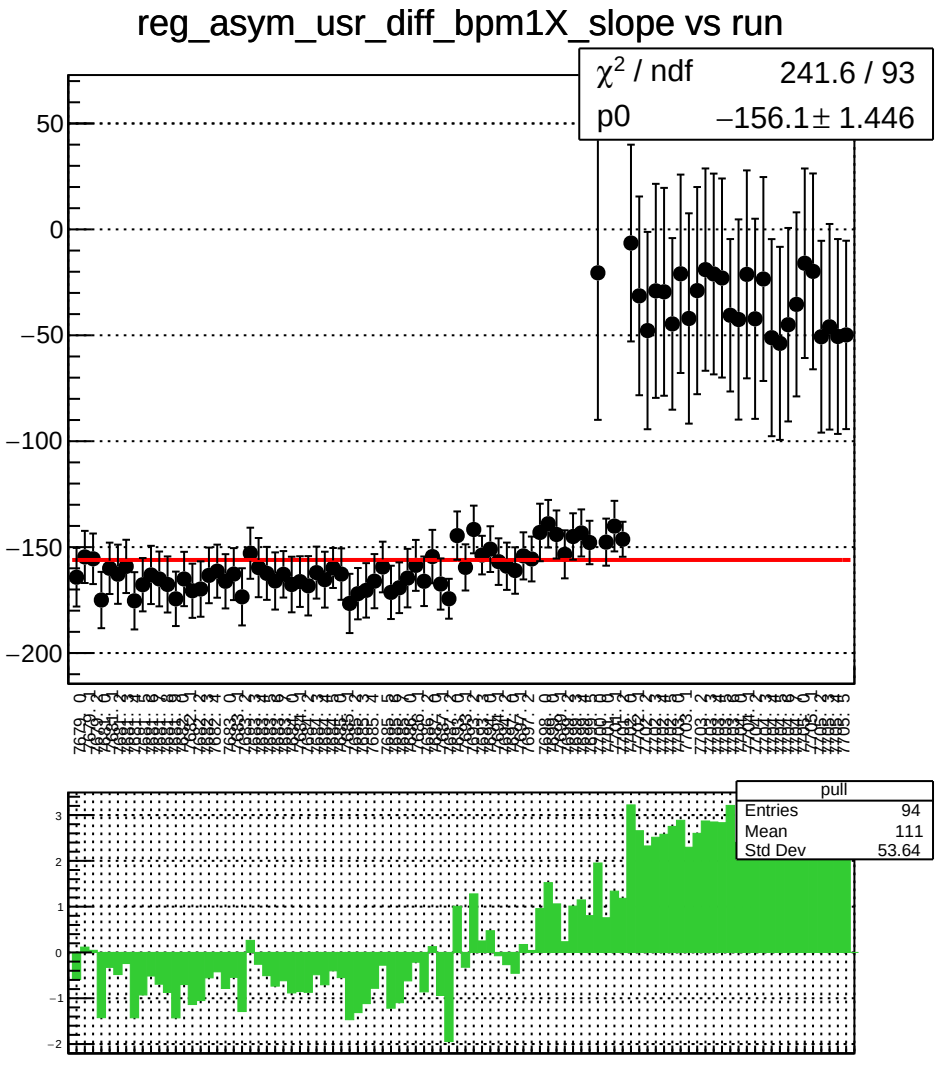

pull1D
Entries 94
Mean 0.04494
Std Dev 0.5137

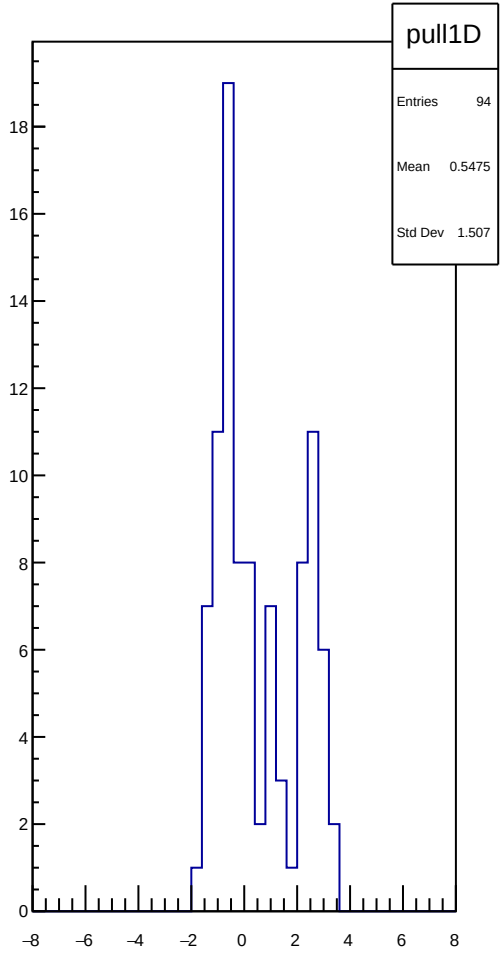

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 81.85 / 93
p0 3.692 ± 0.9196
pull
Entries 94
Mean 113.4
Std Dev 53.59

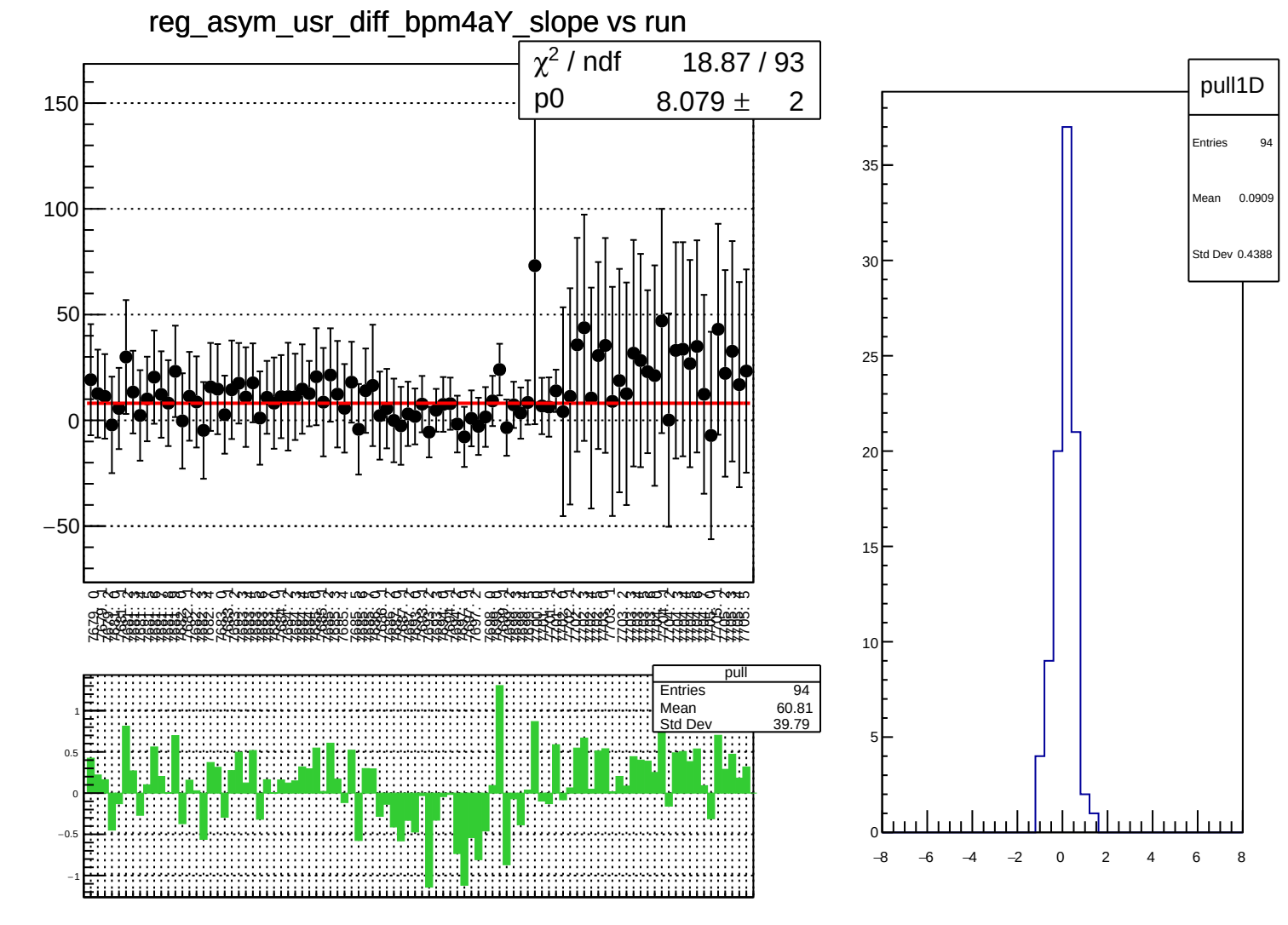

pull1D
Entries 94
Mean −0.2421
Std Dev 0.9012

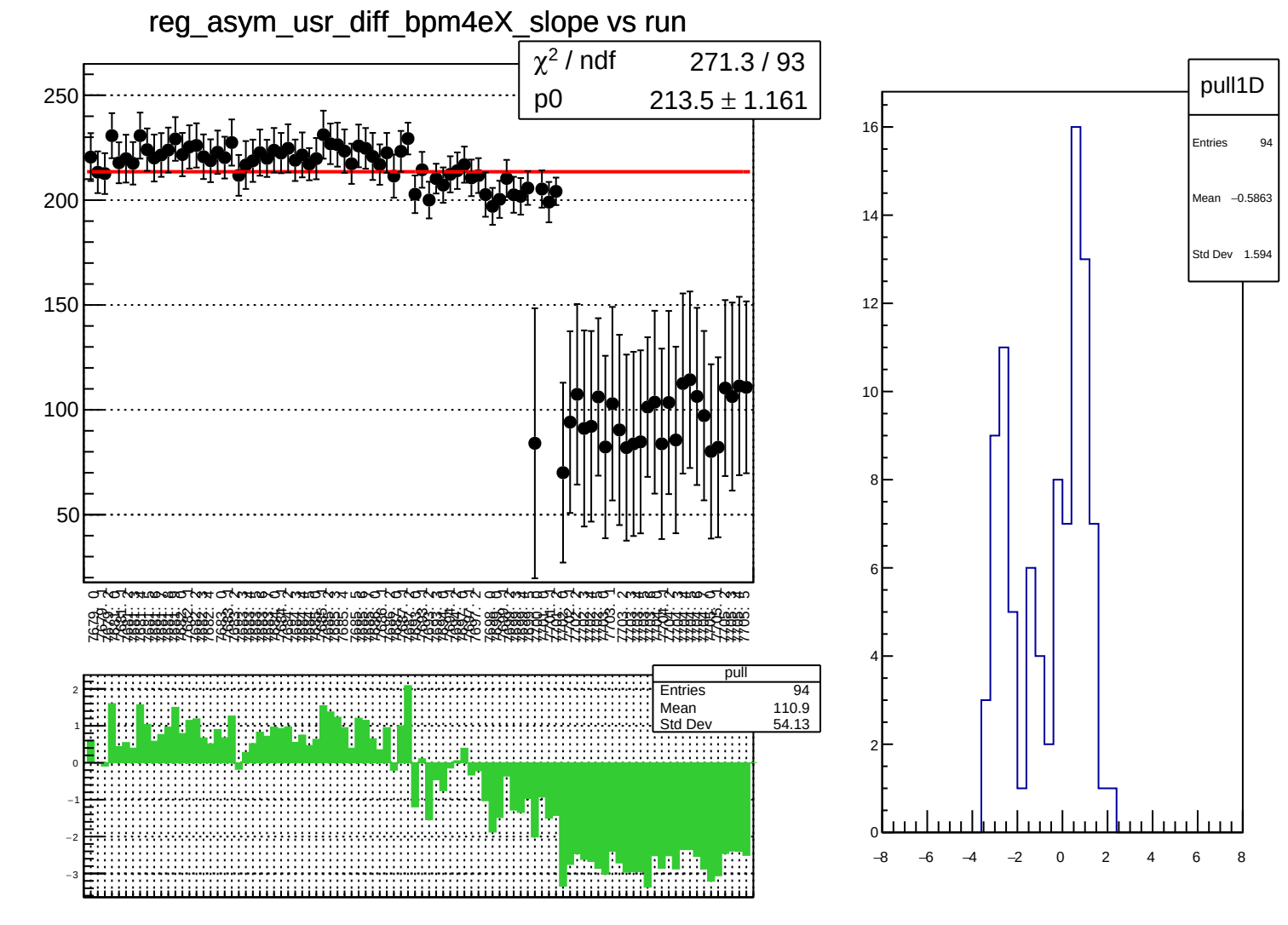

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 27.08 / 93
p0 16.13 ± 2.319
pull
Entries 94
Mean 301.9
Std Dev 245.9
pull1D
Entries 94
Mean −0.02002
Std Dev 0.5363

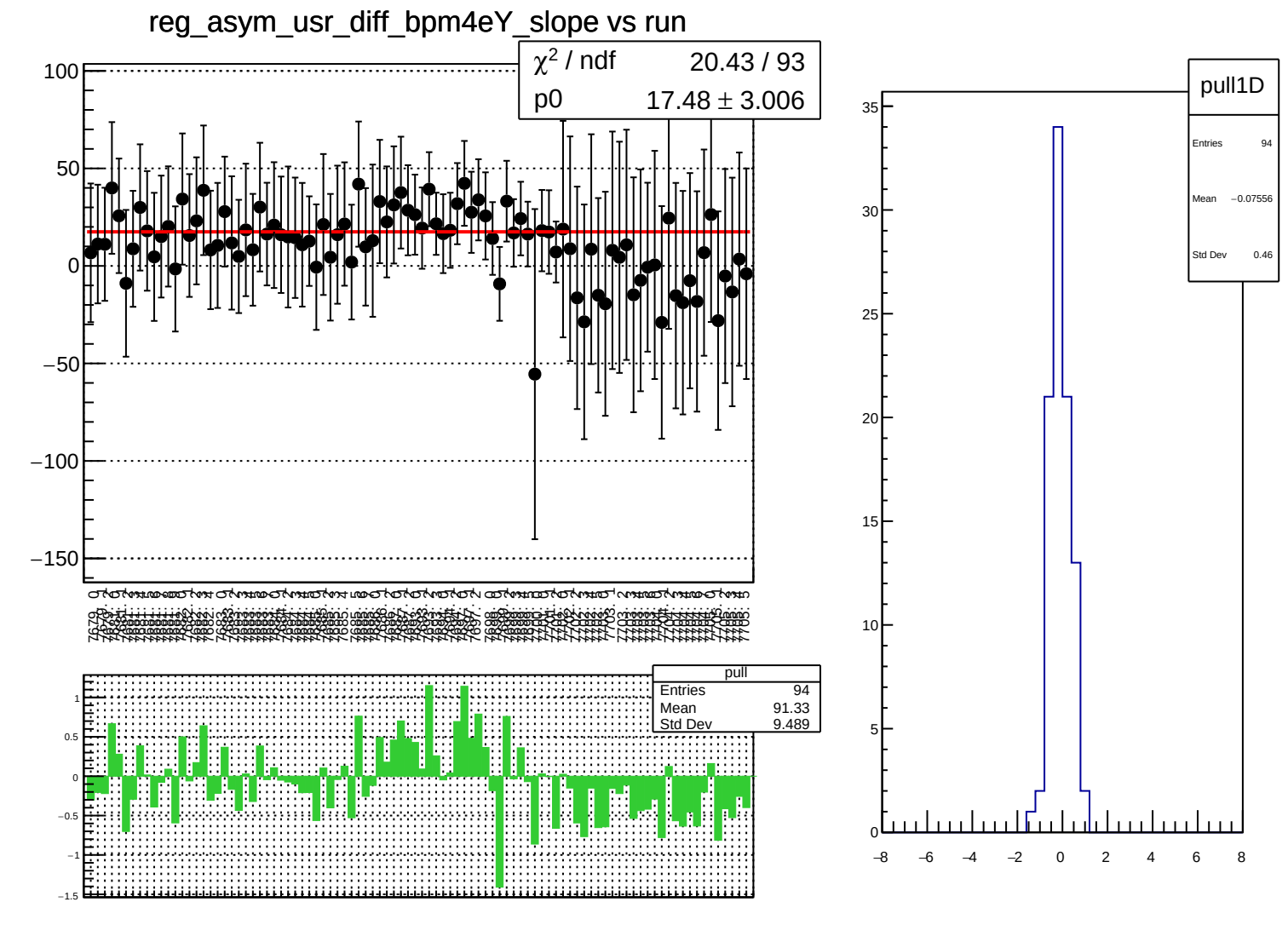

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 400.9 / 93
p0 −36.48 ± 0.1019
−32
−34
−36
−38
−40
−42
pull
Entries 94
Mean −54.62
Std Dev 102.7
4
3
2
1
0
−1
−2
−3
−4
pull1D
Entries 94
Mean −0.449
Std Dev 2.016
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

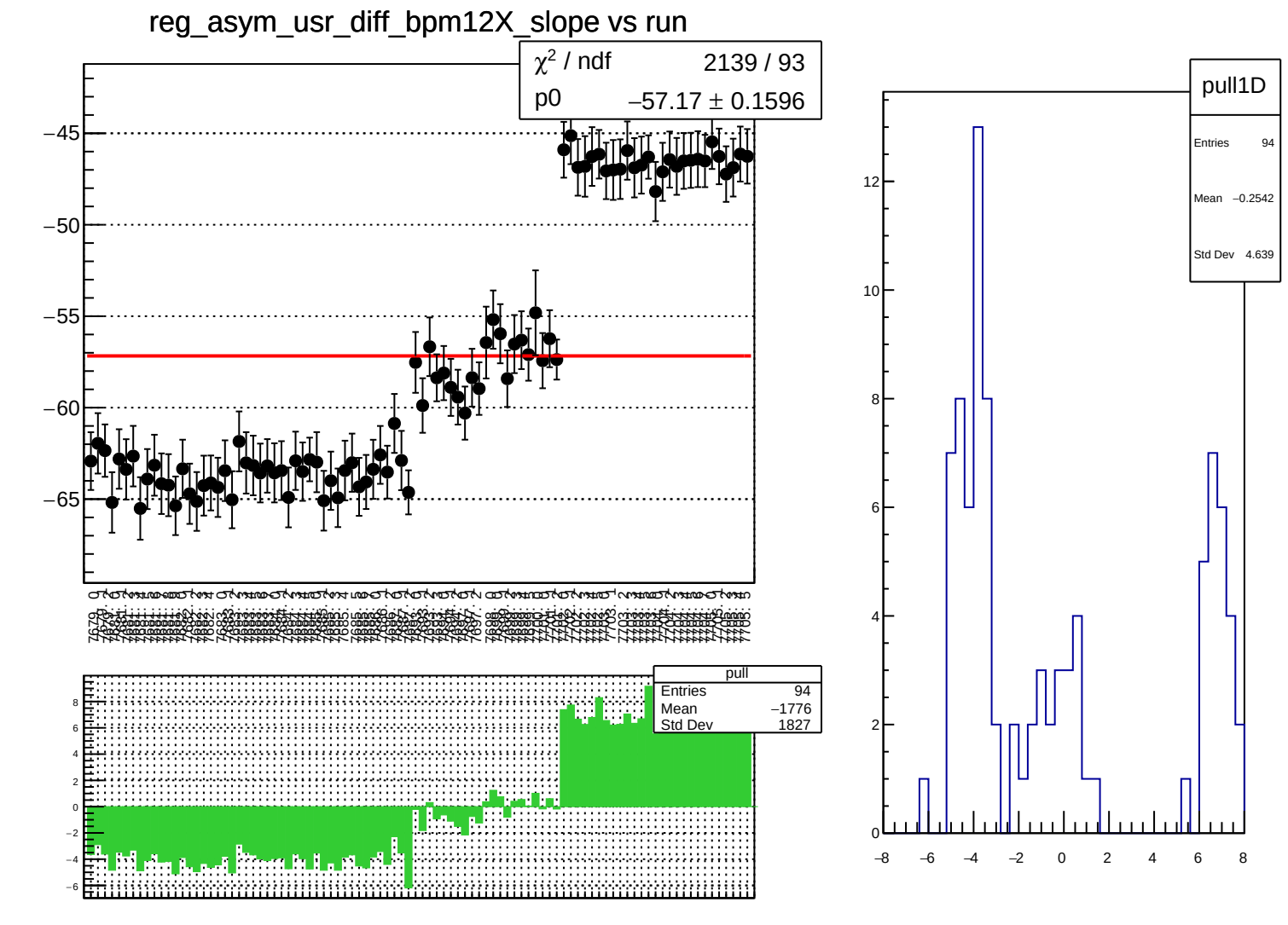

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 241.6 / 93
p0 −156.1± 1.446
50
0
−50
−100
−150
−200
pull
Entries 94
Mean 111
Std Dev 53.64
3
2
1
0
−1
−2

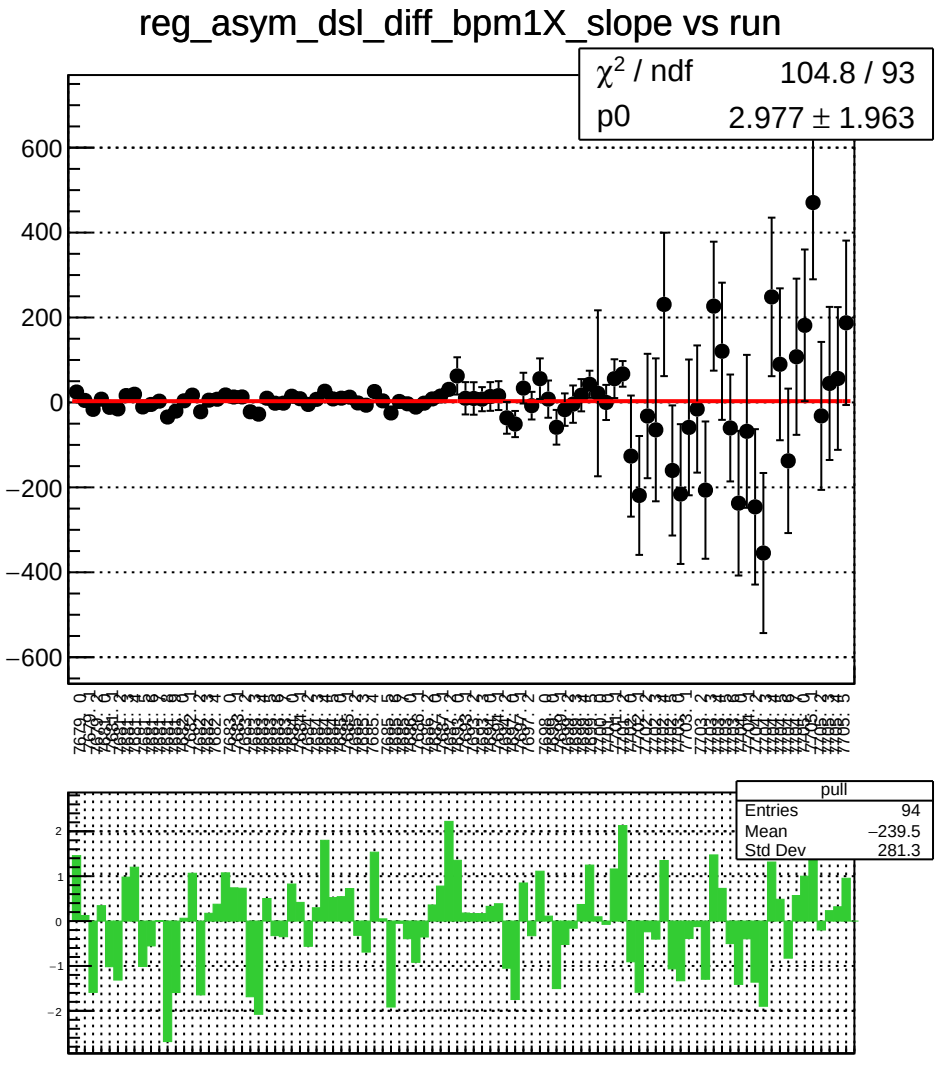

pull1D
Entries 94
Mean 0.5475
Std Dev 1.507
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

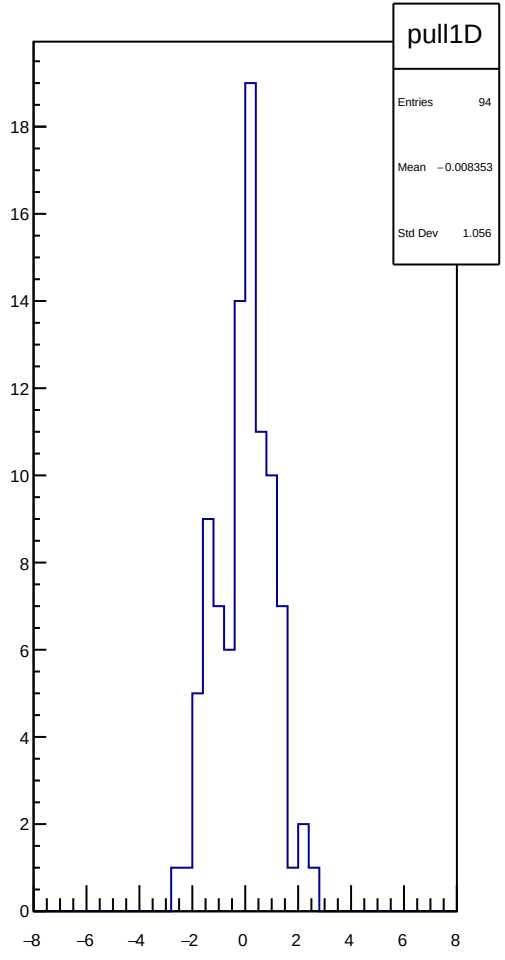

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 18.87 / 93
p0 8.079 ± 2
150
100
50
0
−50
pull
Entries 94
Mean 60.81
Std Dev 39.79
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean 0.0909
Std Dev 0.4388
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

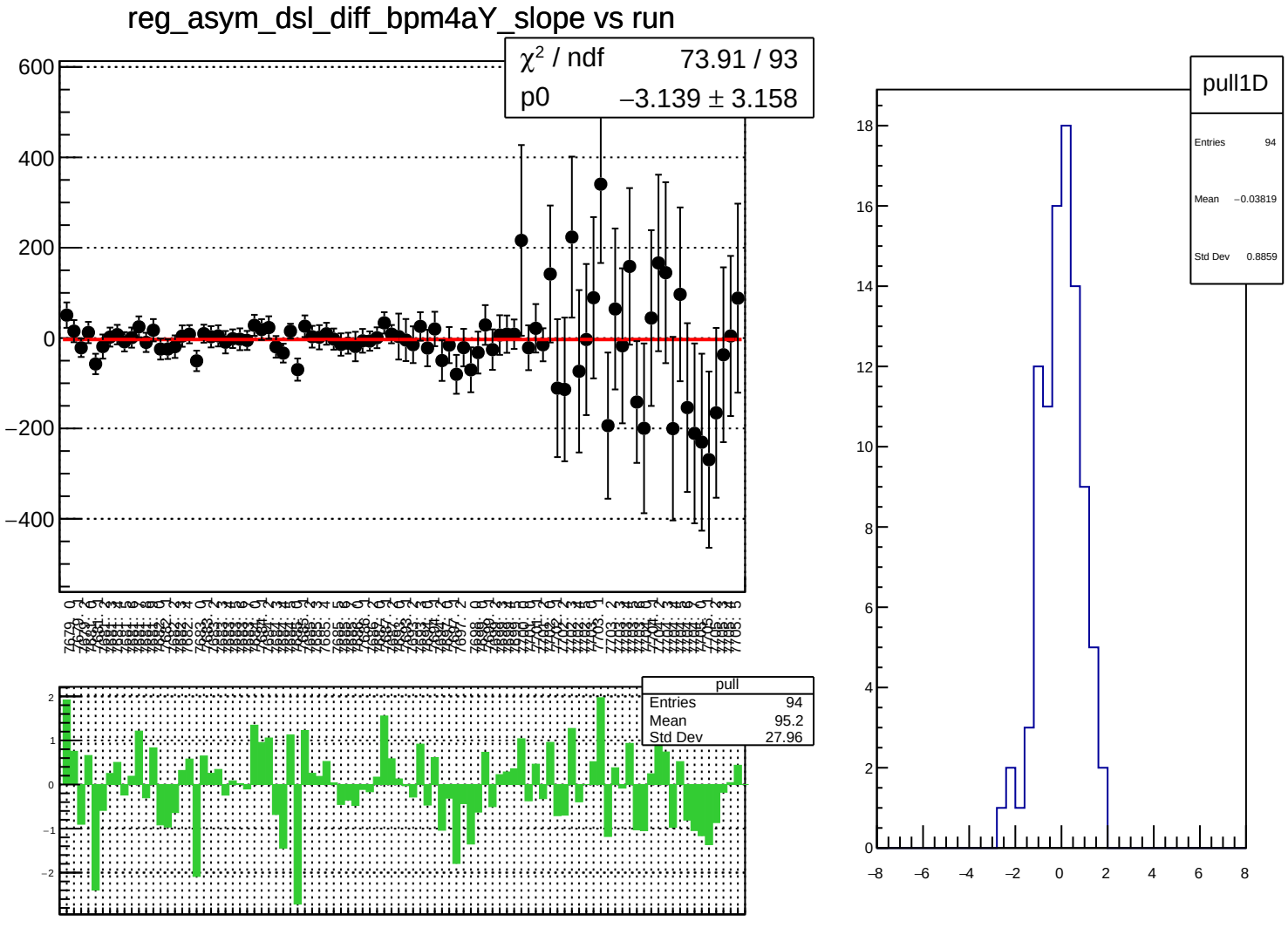

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 271.3 / 93
p0 213.5 ± 1.161
250
200
150
100
50
pull
Entries 94
Mean 110.9
Std Dev 54.13
2
1
0
−1
−2
−3
pull1D
Entries 94
Mean −0.5863
Std Dev 1.594
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

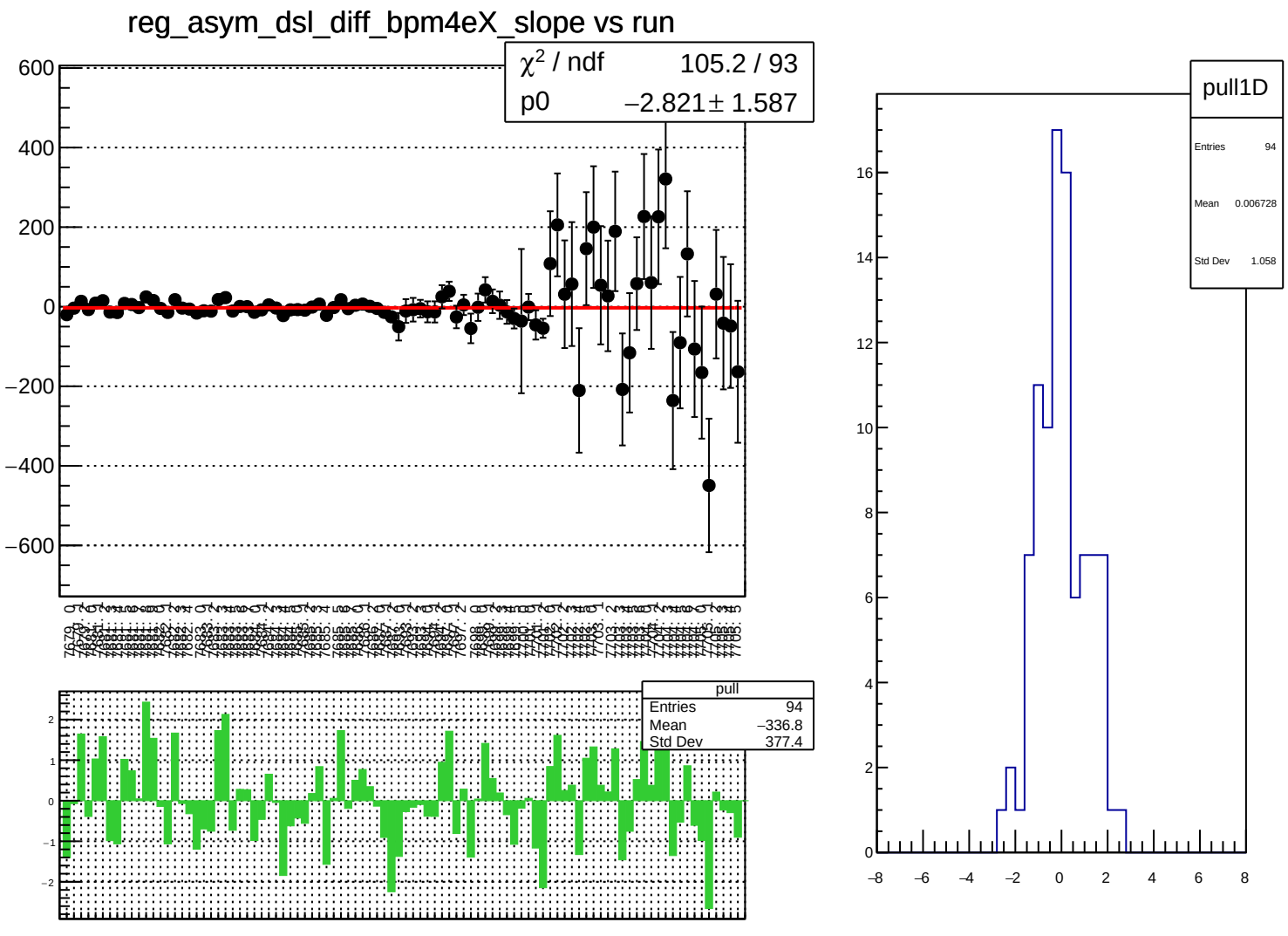

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 20.43 / 93
p0 17.48 ± 3.006
pull
Entries 94
Mean 91.33
Std Dev 9.489
pull1D
Entries 94
Mean −0.07556
Std Dev 0.46

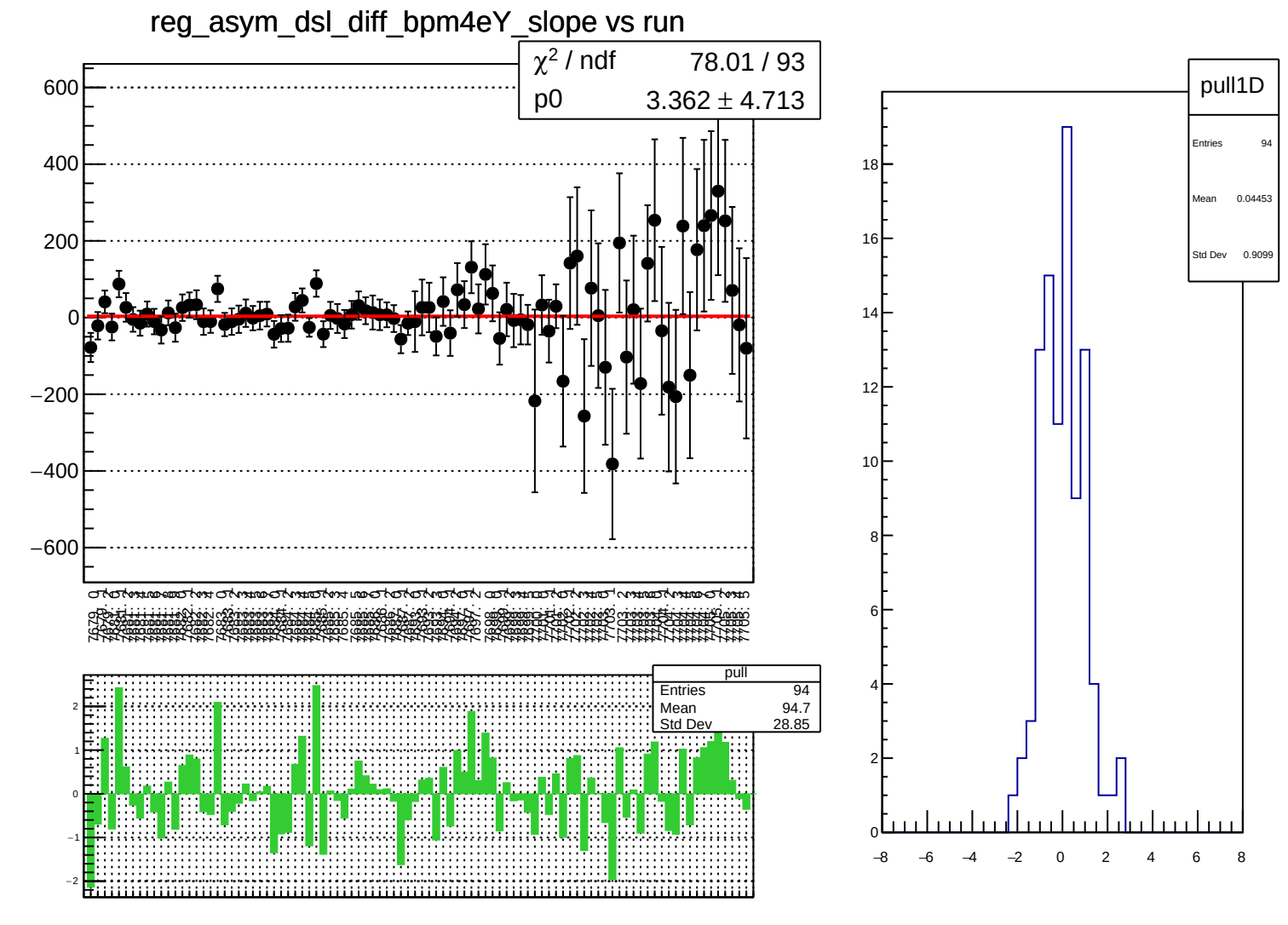

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 2139 / 93
p0 −57.17 ± 0.1596
−45
−50
−55
−60
−65
pull
Entries 94
Mean −1776
Std Dev 1827
8
6
4
2
0
−2
−4
−6
pull1D
Entries 94
Mean −0.2542
Std Dev 4.639
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

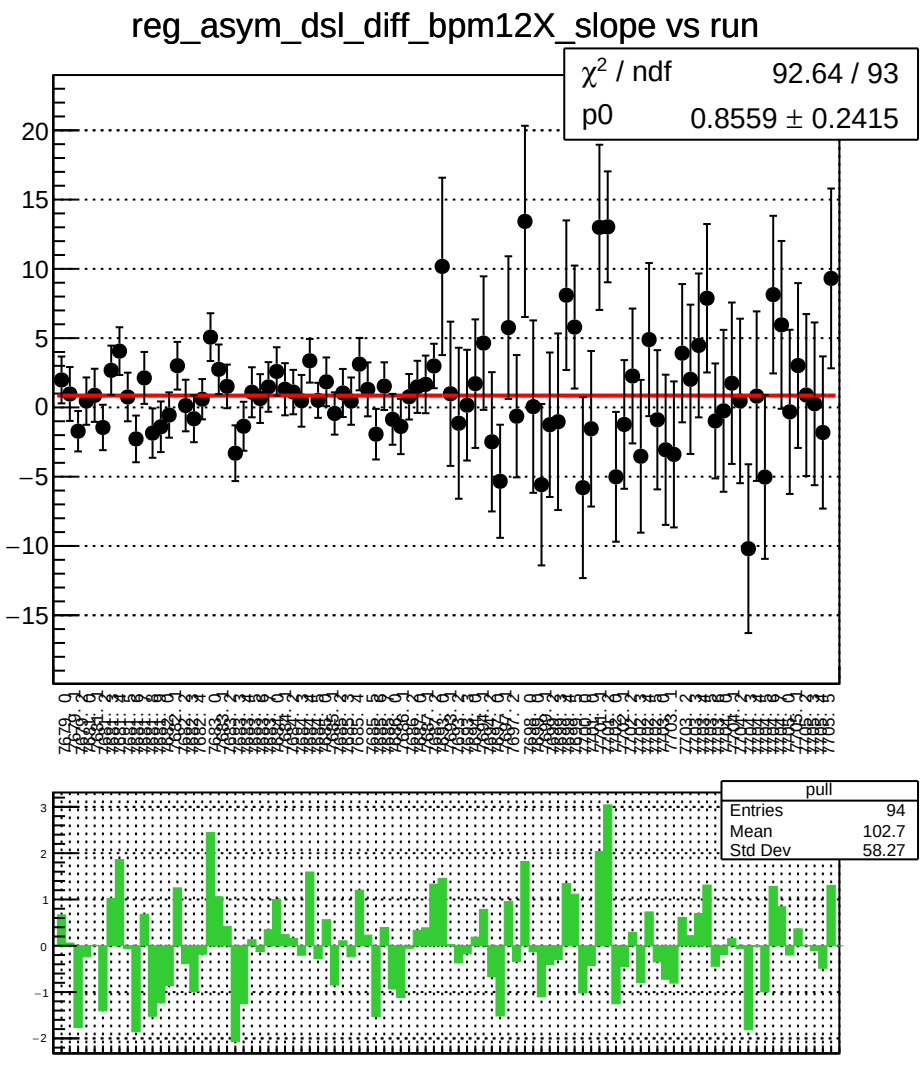

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 104.8 / 93
p0 2.977 ± 1.963
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean −239.5
Std Dev 281.3
2
1
0
−1
−2

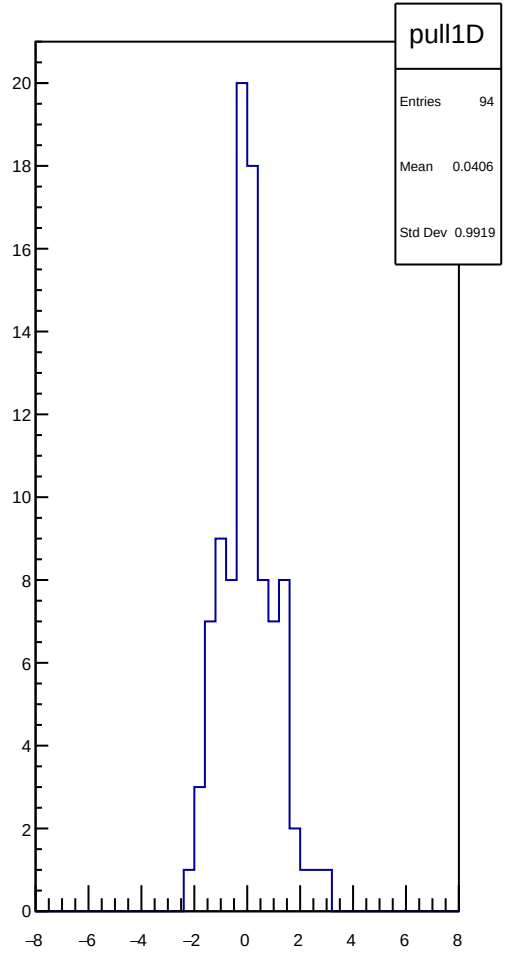

pull1D
Entries 94
Mean −0.008353
Std Dev 1.056
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

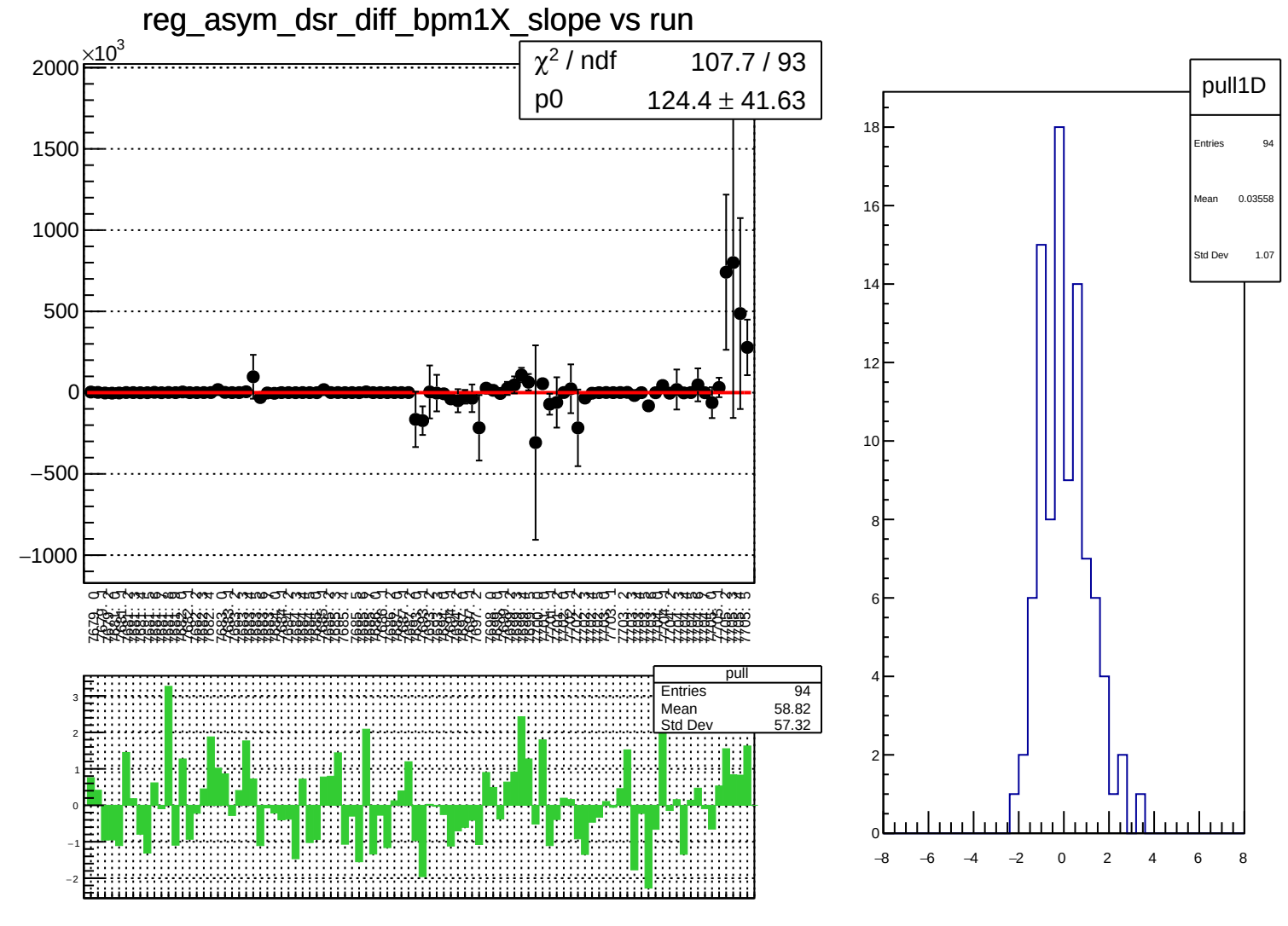

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 73.91 / 93
p0 −3.139 ± 3.158
600
400
200
0
−200
−400
pull
Entries 94
Mean 95.2
Std Dev 27.96
2
1
0
−1
−2
pull1D
Entries 94
Mean −0.03819
Std Dev 0.8859
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

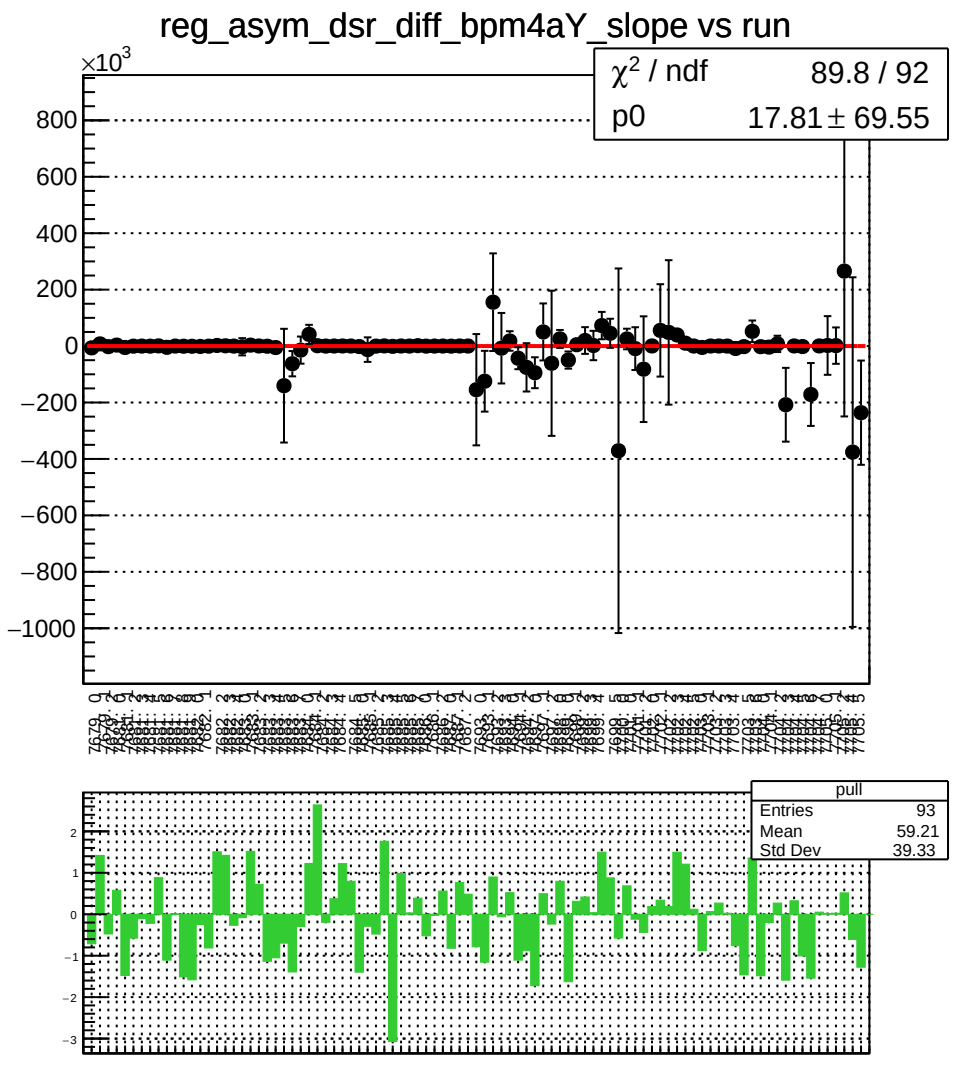

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 105.2 / 93
p0 −2.821 ± 1.587
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean −336.8
Std Dev 377.4
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.006728
Std Dev 1.058
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

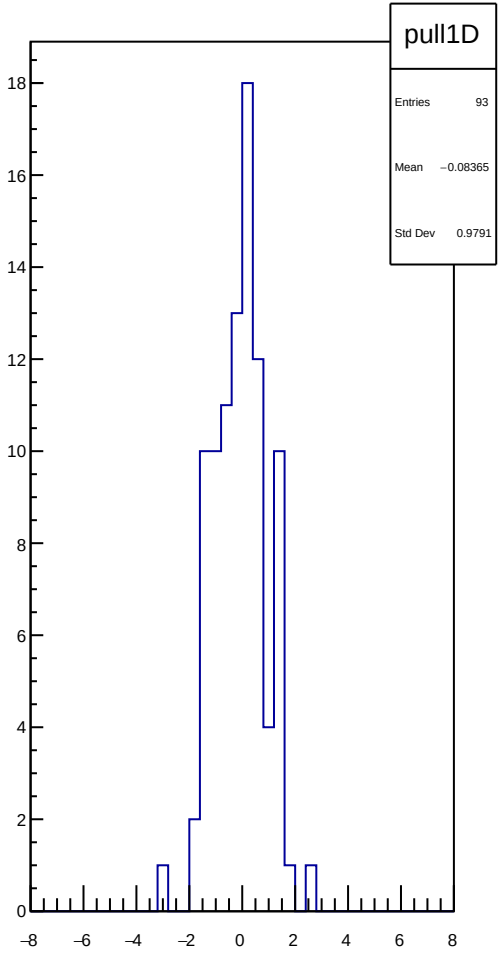

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 78.01 / 93
p0 3.362 ± 4.713
pull
Entries 94
Mean 94.7
Std Dev 28.85
pull1D
Entries 94
Mean 0.04453
Std Dev 0.9099

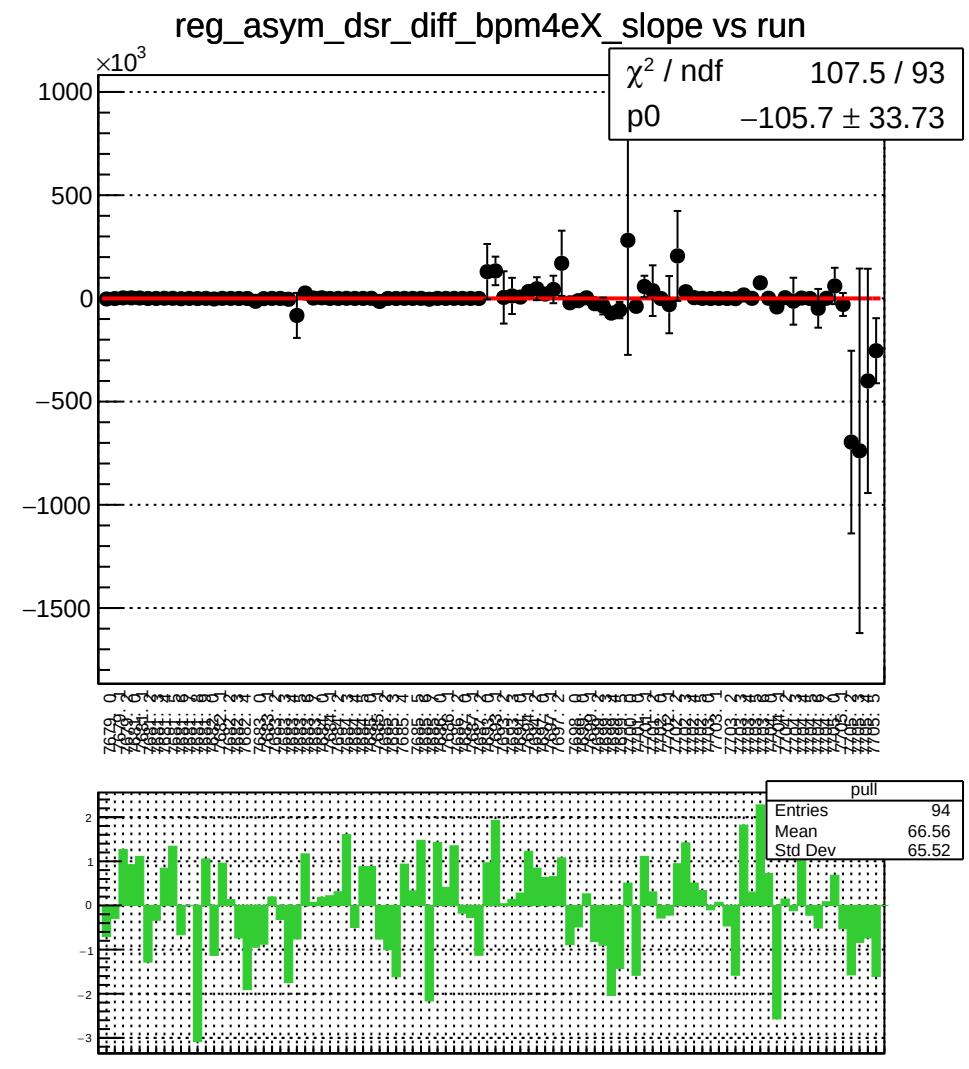

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 92.64 / 93
p0 0.8559 ± 0.2415
pull
Entries 94
Mean 102.7
Std Dev 58.27

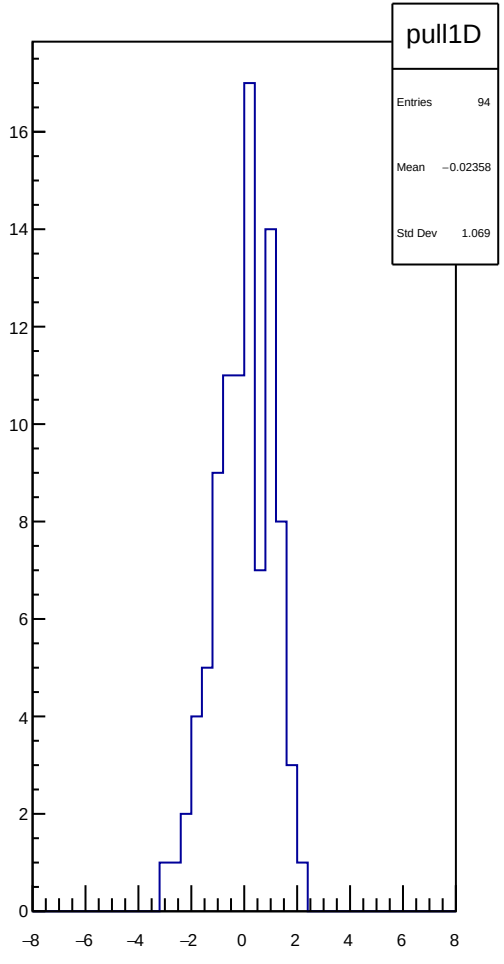

pull1D
Entries 94
Mean 0.0406
Std Dev 0.9919

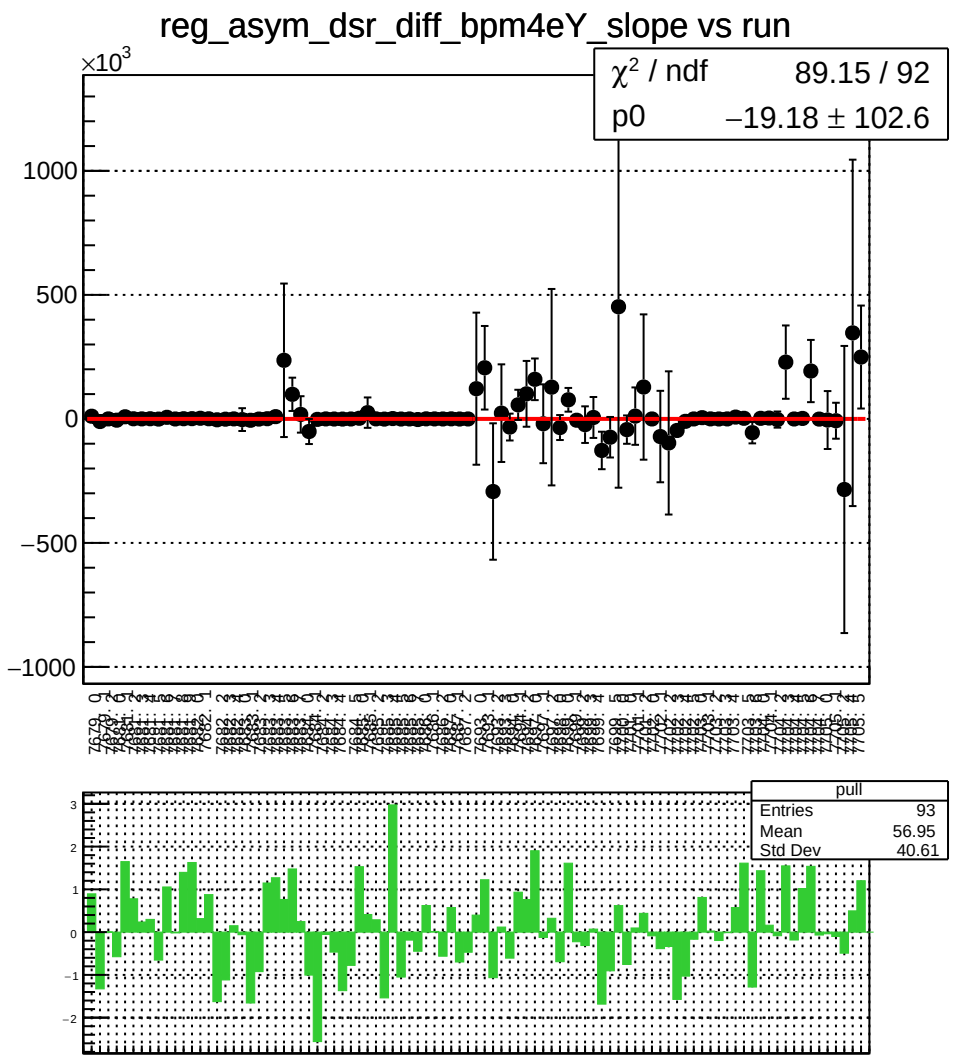

reg_asym_dsr_diff_bpm1X_slope vs run
×10^3
2000
1500
1000
500
0
−500
−1000
χ² / ndf 107.7 / 93
p0 124.4 ± 41.63
pull
Entries 94
Mean 58.82
Std Dev 57.32
3
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.03558
Std Dev 1.07
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

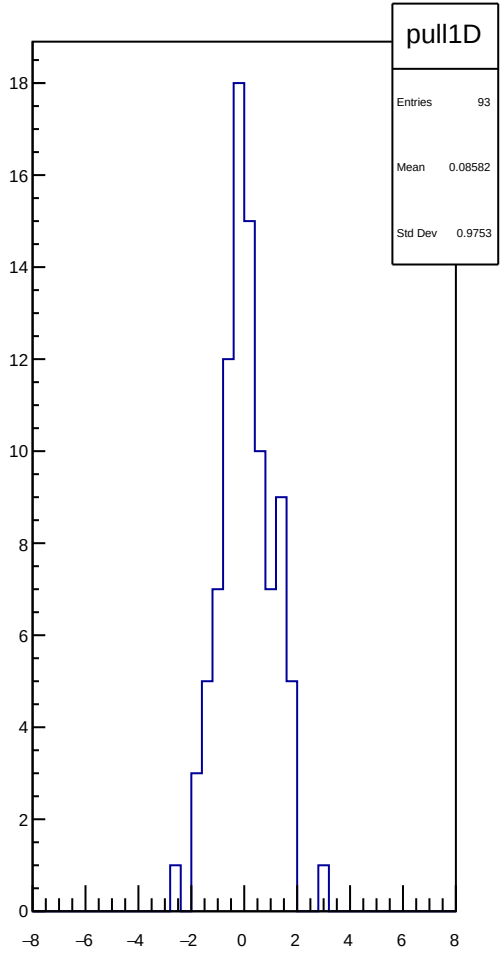

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 89.8 / 92
p0 17.81 ± 69.55
pull
Entries 93
Mean 59.21
Std Dev 39.33

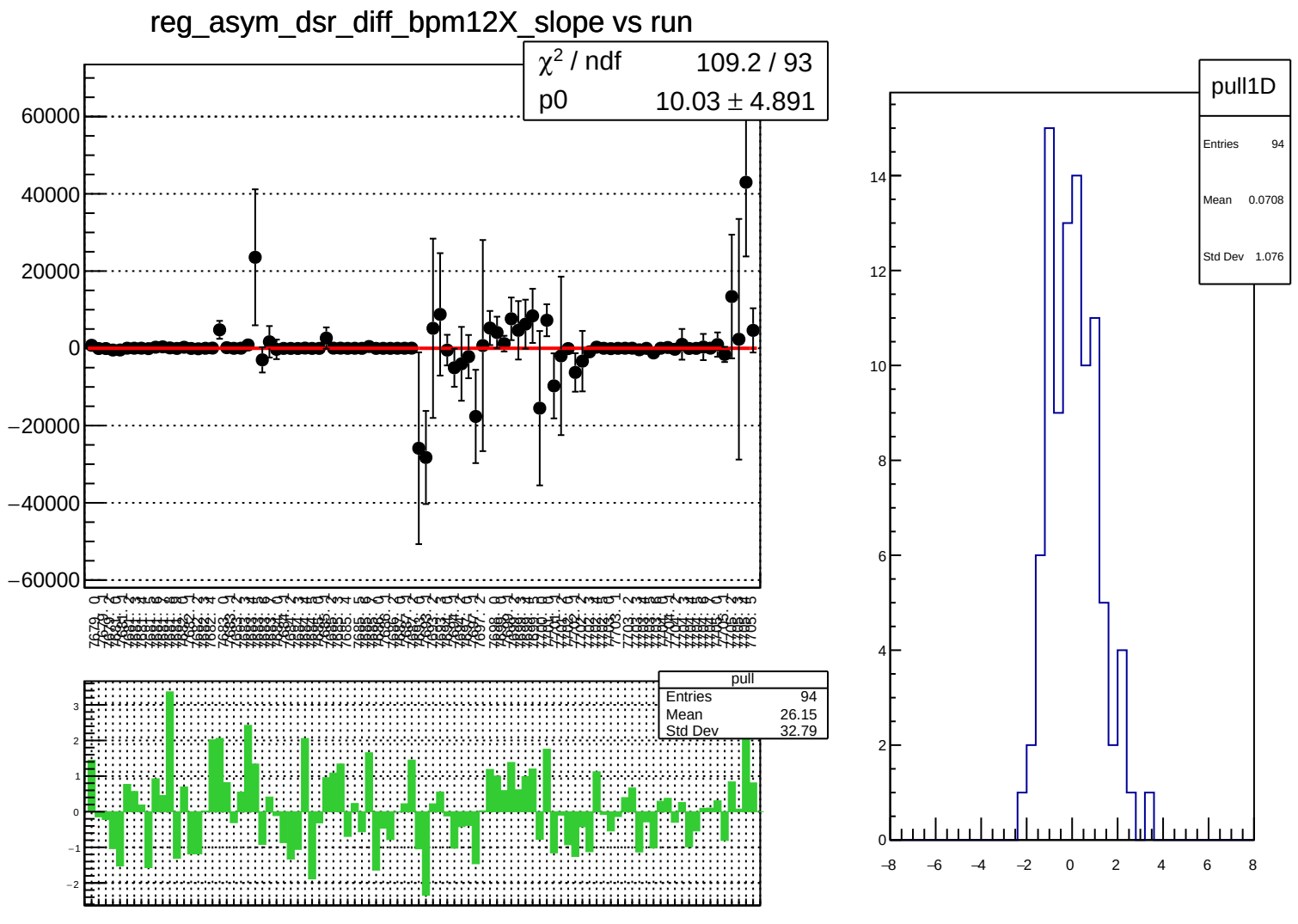

pull1D
Entries 93
Mean −0.08365
Std Dev 0.9791

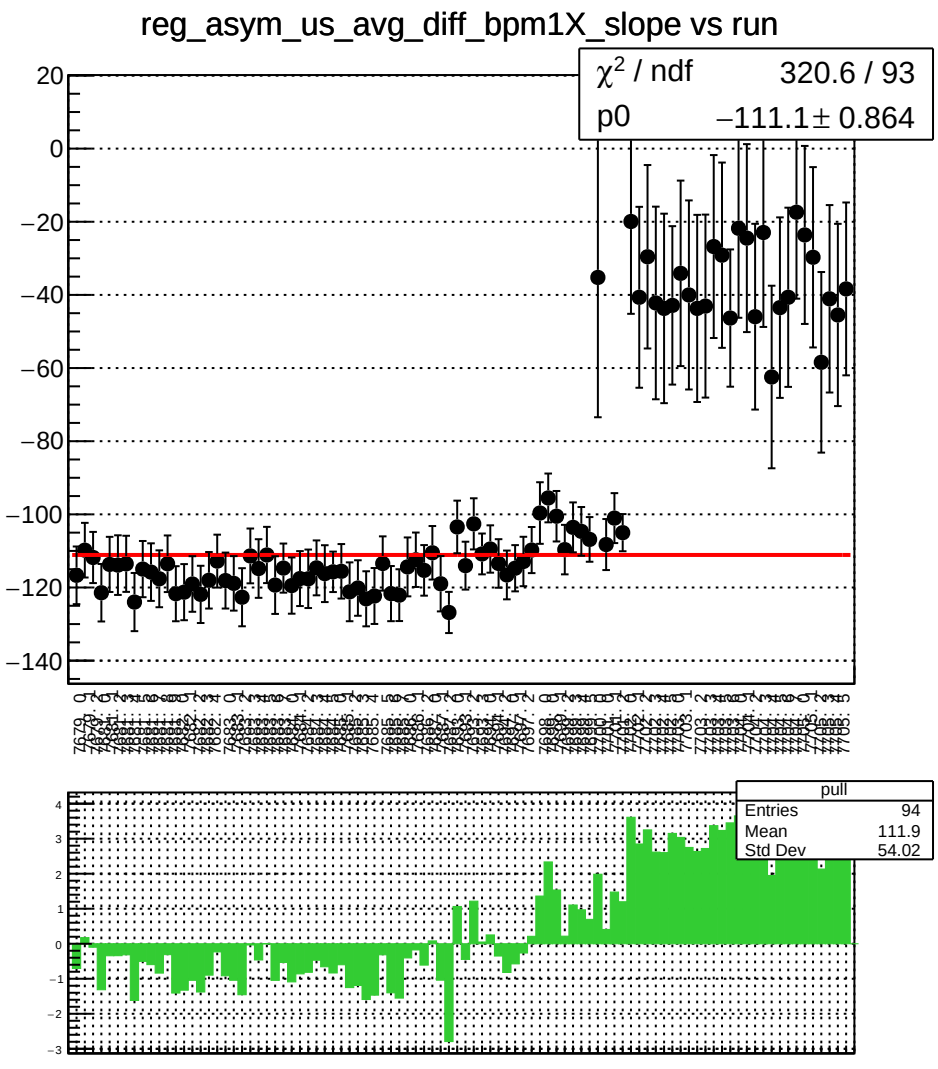

reg_asym_dsr_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 107.5 / 93
p0 −105.7 ± 33.73
1000
500
0
−500
−1000
−1500
pull
Entries 94
Mean 66.56
Std Dev 65.52
2
1
0
−1
−2
−3

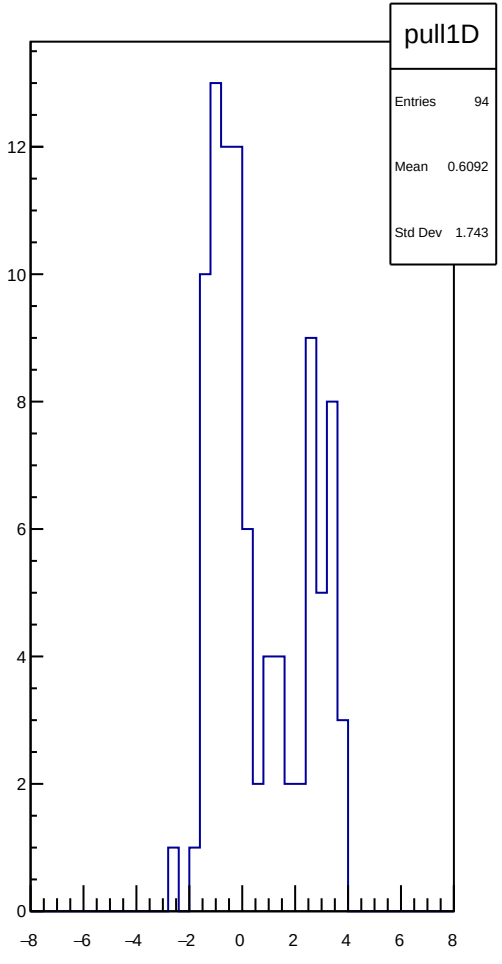

pull1D
Entries 94
Mean −0.02358
Std Dev 1.069
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

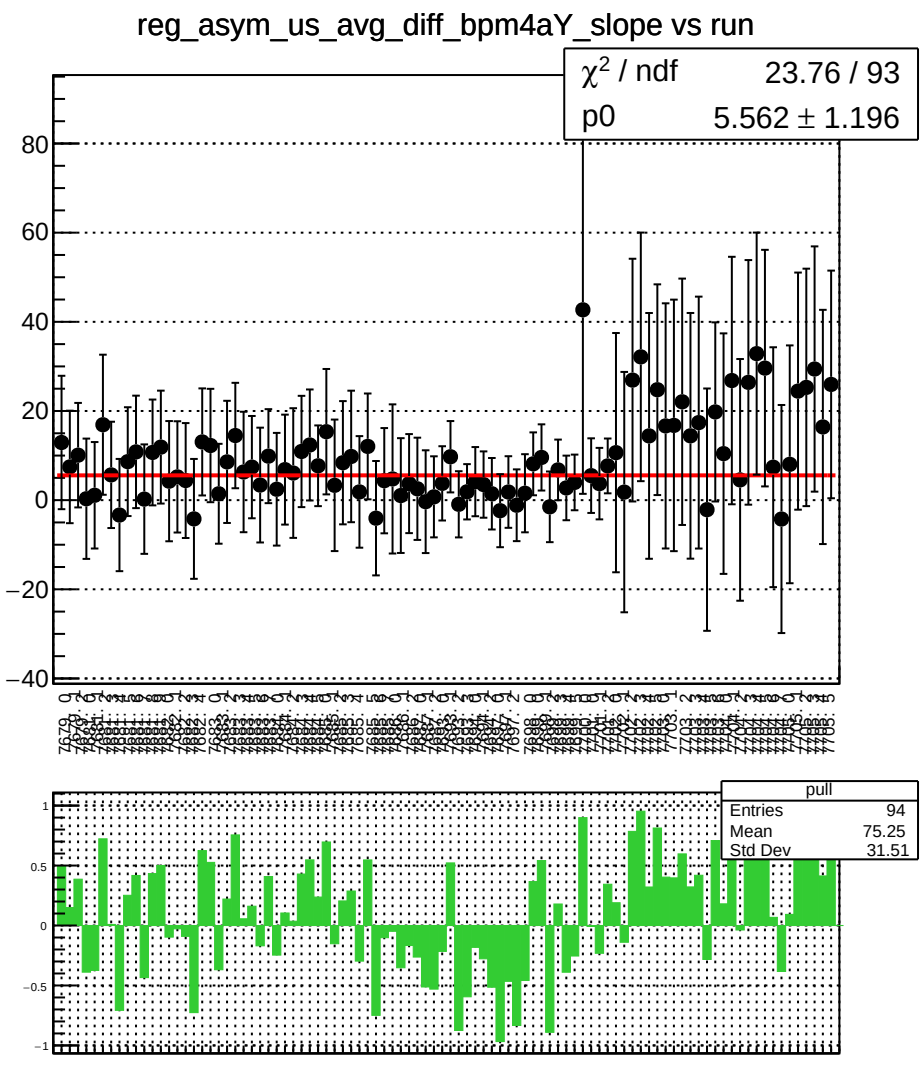

reg_asym_dsr_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 89.15 / 92
p0 −19.18 ± 102.6
1000
500
0
−500
−1000
pull
Entries 93
Mean 56.95
Std Dev 40.61
3
2
1
0
−1
−2

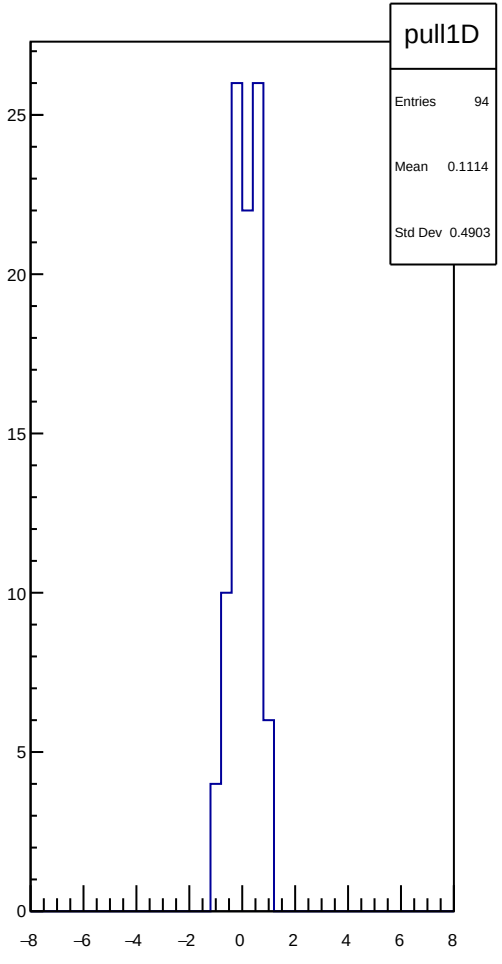

pull1D
Entries 93
Mean 0.08582
Std Dev 0.9753
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

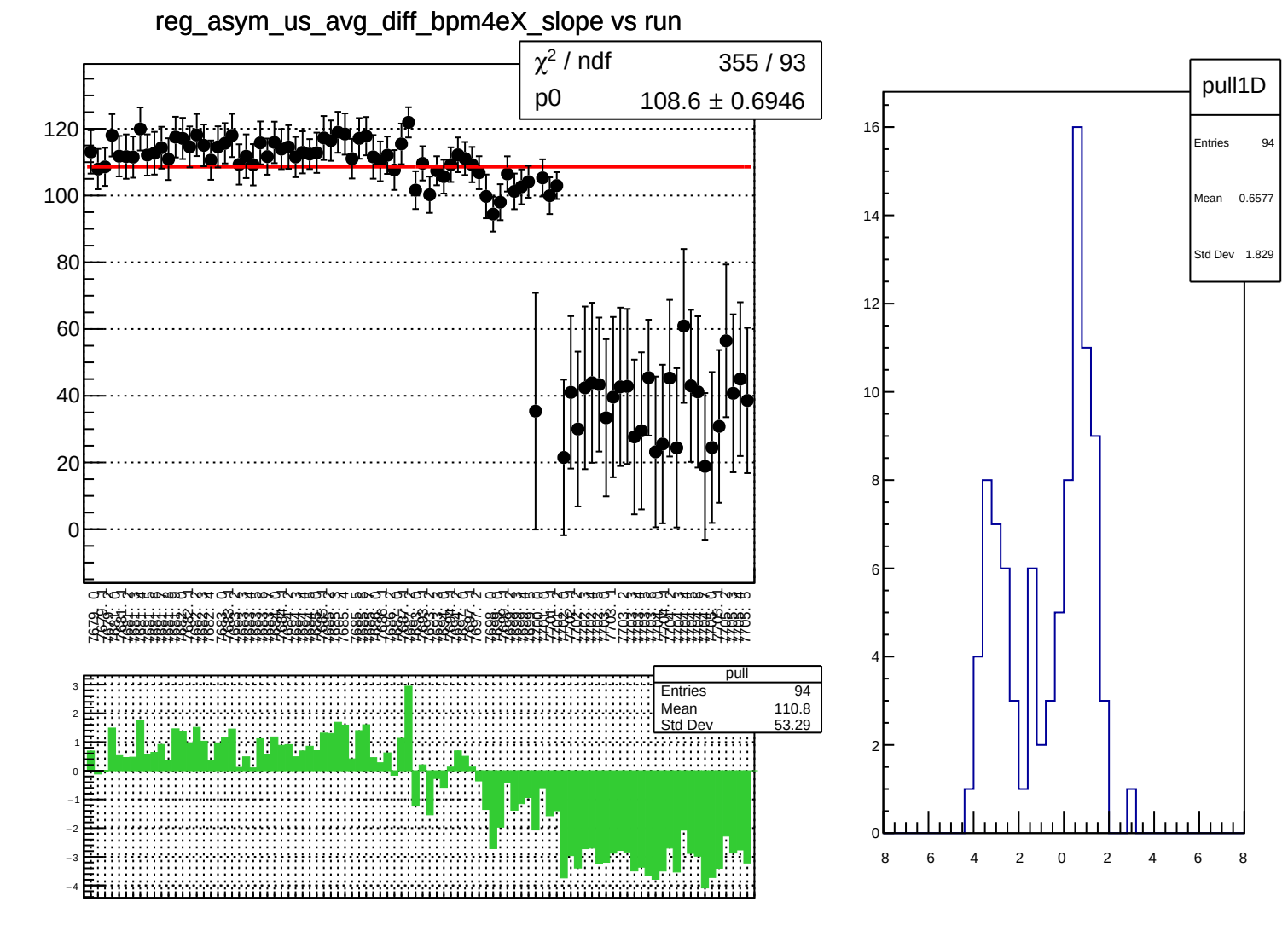

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 109.2 / 93
p0 10.03 ± 4.891
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 94
Mean 26.15
Std Dev 32.79
3
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.0708
Std Dev 1.076
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

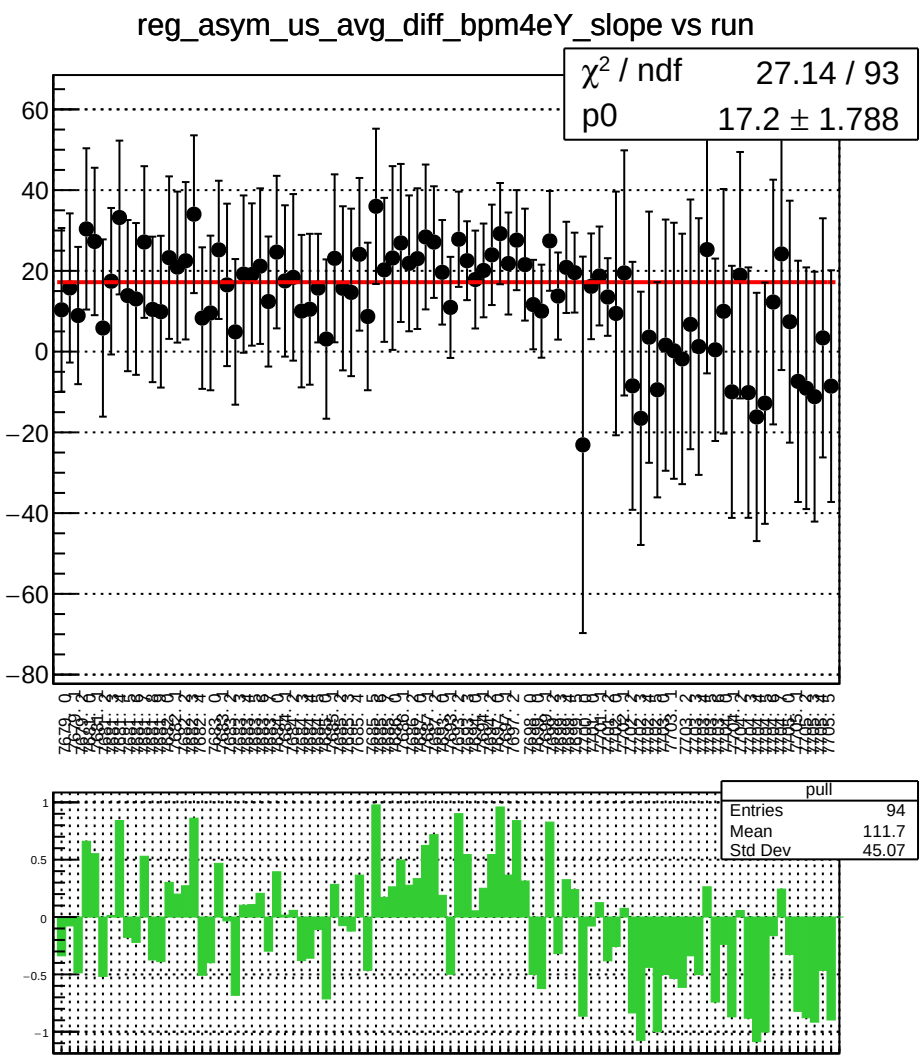

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 320.6 / 93
p0 −111.1 ± 0.864
pull
Entries 94
Mean 111.9
Std Dev 54.02

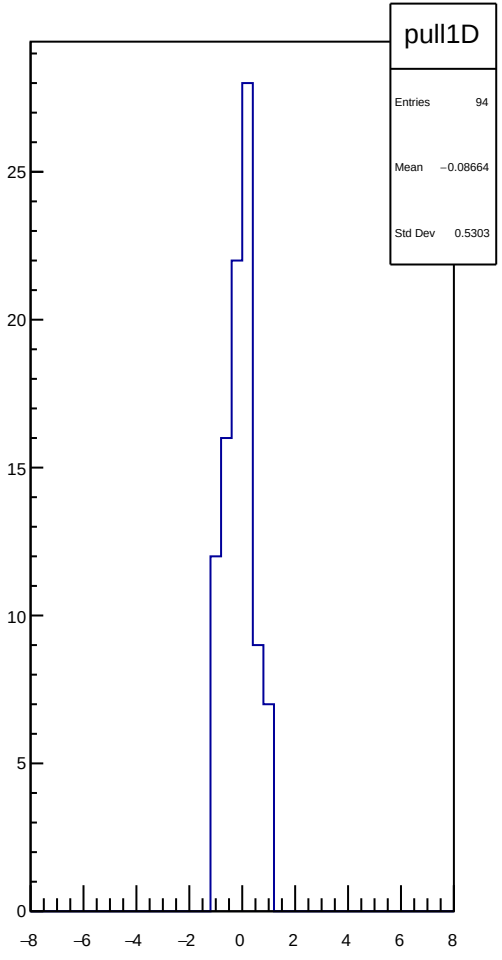

pull1D
Entries 94
Mean 0.6092
Std Dev 1.743

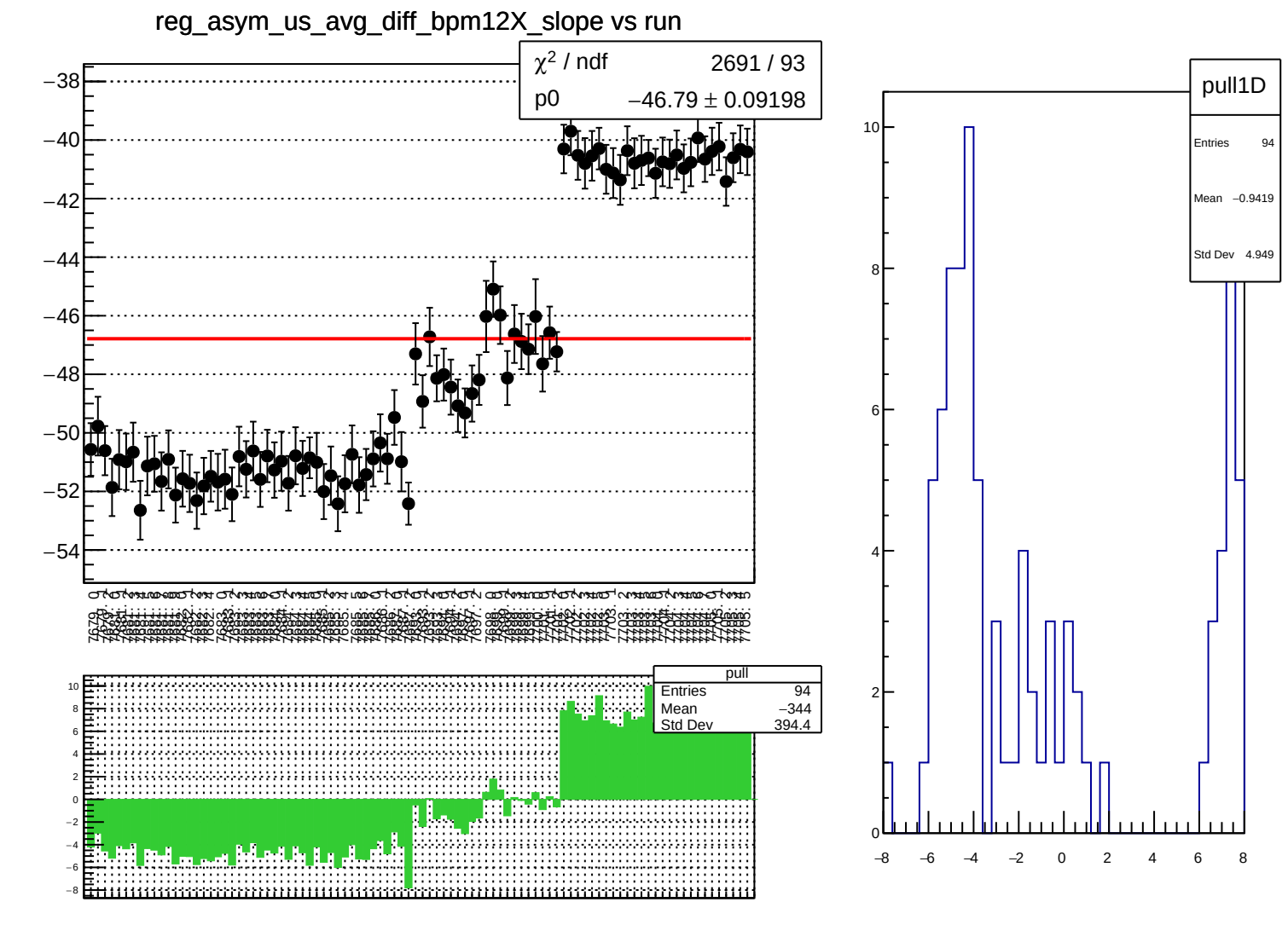

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 23.76 / 93
p0 5.562 ± 1.196
pull
Entries 94
Mean 75.25
Std Dev 31.51

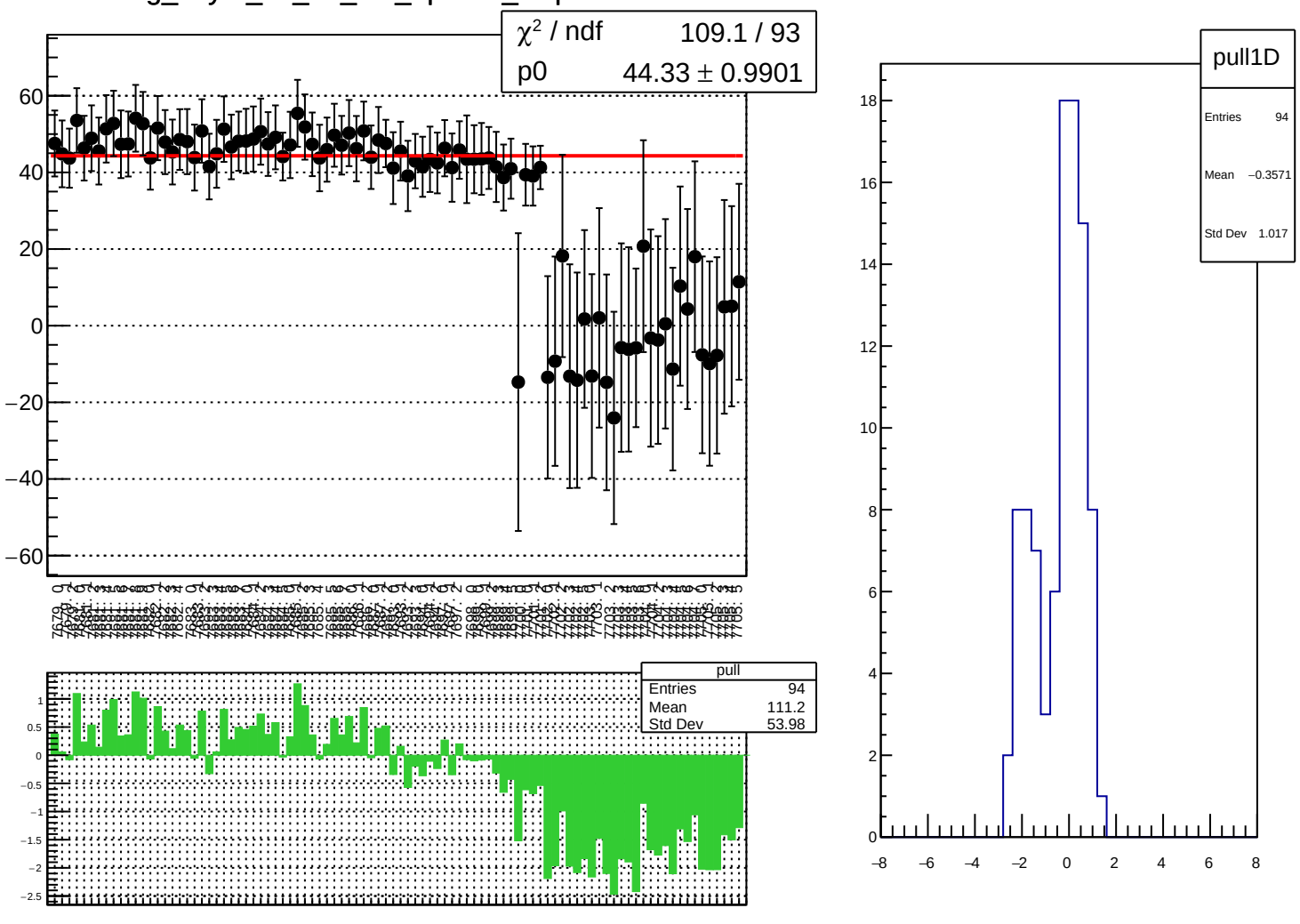

pull1D
Entries 94
Mean 0.1114
Std Dev 0.4903

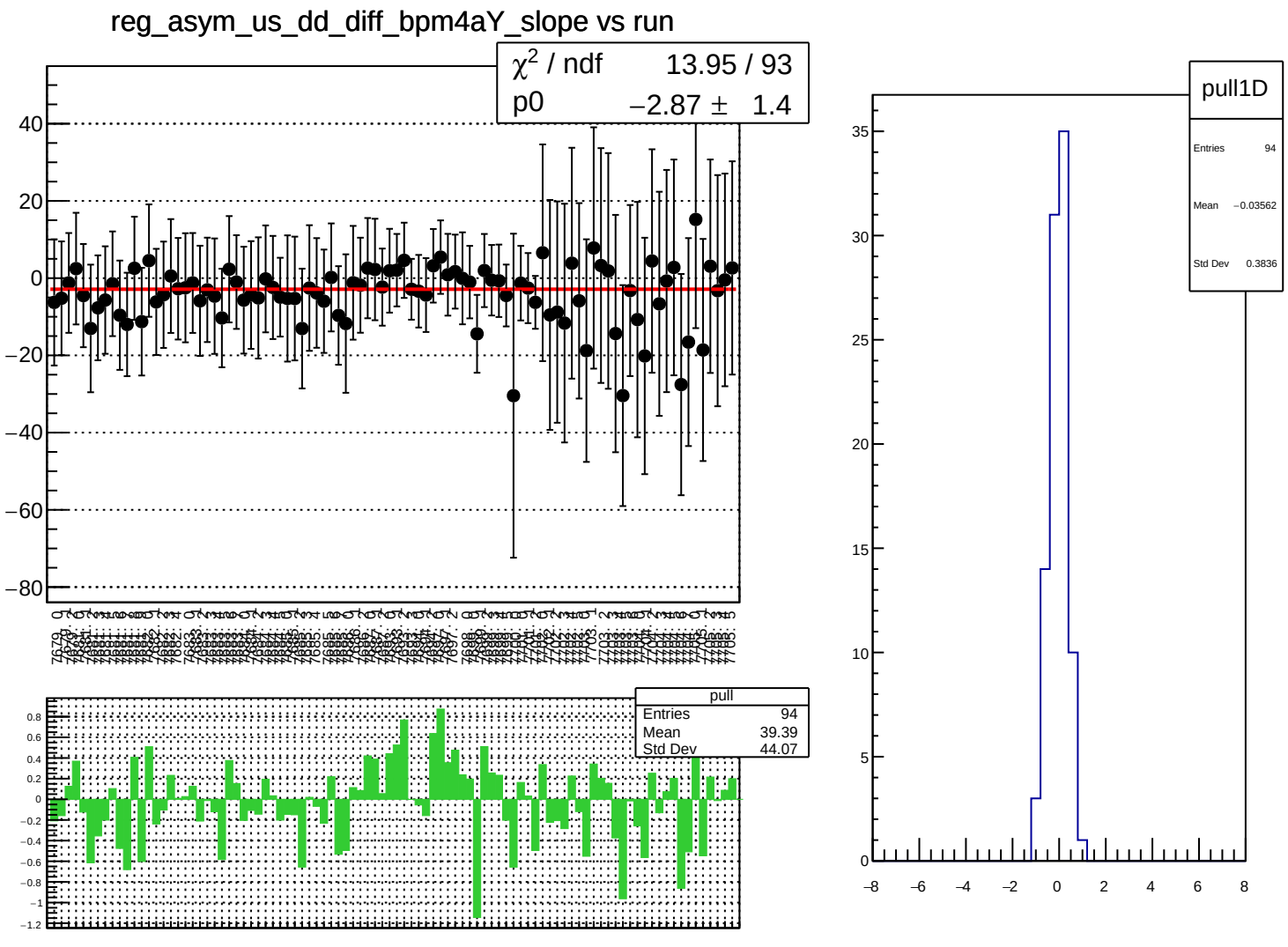

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 355 / 93
p0 108.6 ± 0.6946
pull
Entries 94
Mean 110.8
Std Dev 53.29
pull1D
Entries 94
Mean −0.6577
Std Dev 1.829

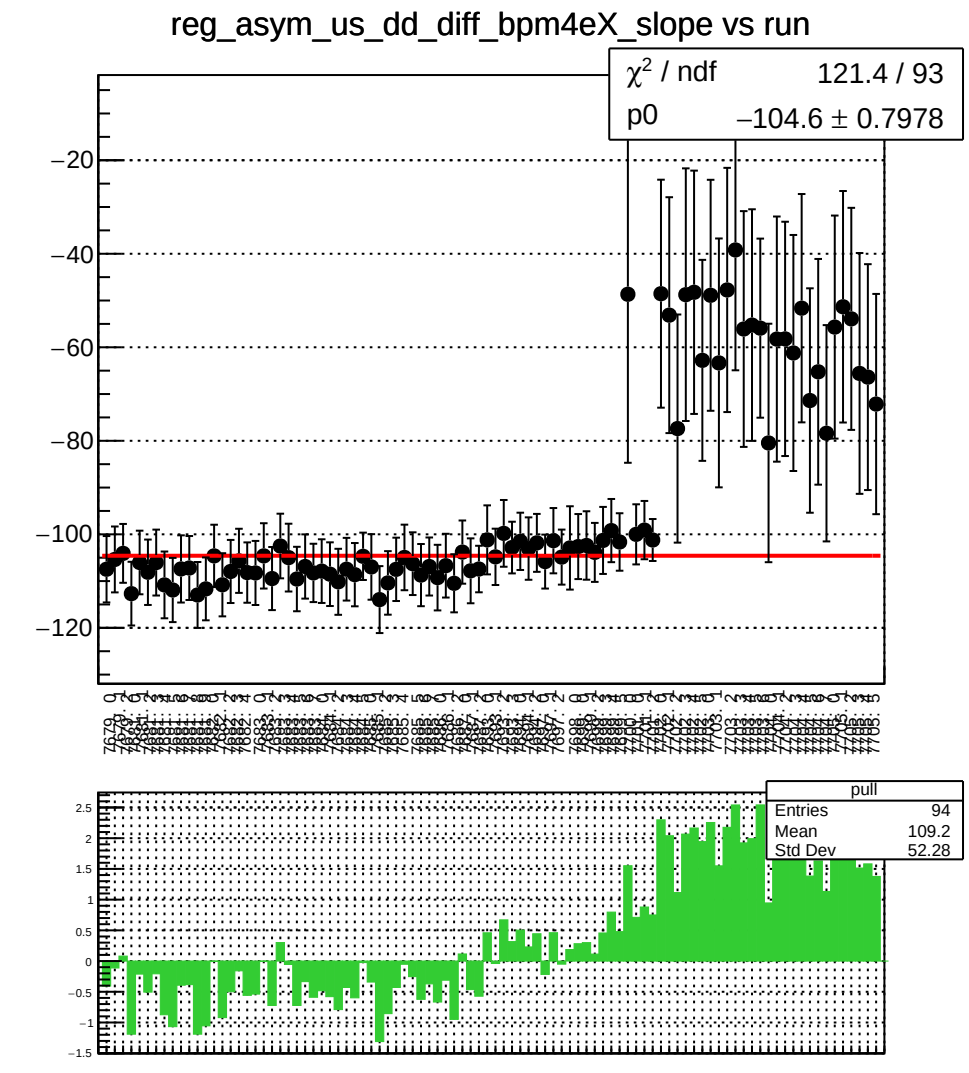

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 27.14 / 93
p0 17.2 ± 1.788
pull
Entries 94
Mean 111.7
Std Dev 45.07

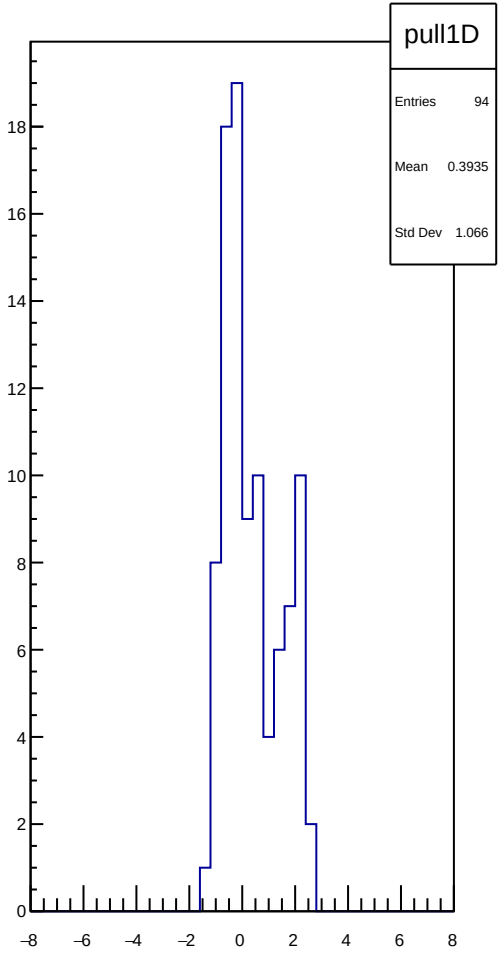

pull1D
Entries 94
Mean −0.08664
Std Dev 0.5303

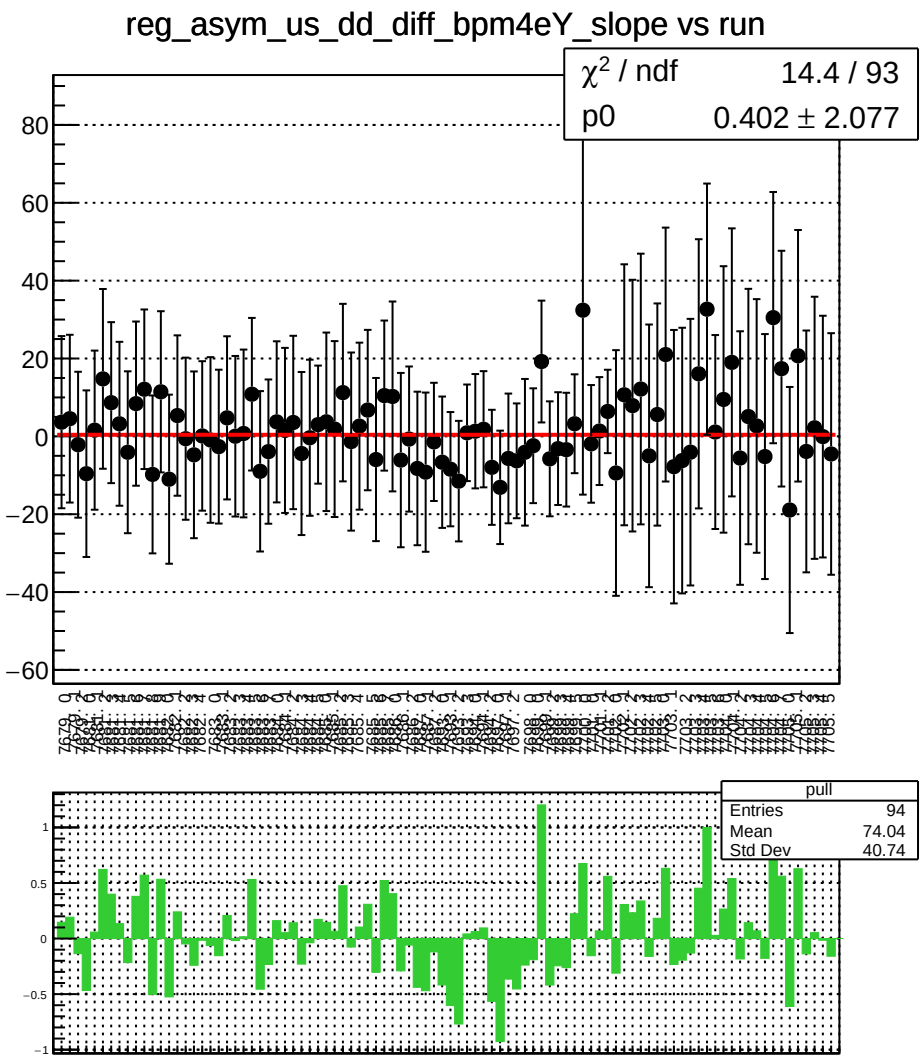

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 2691 / 93
p0 −46.79 ± 0.09198
pull
Entries 94
Mean −344
Std Dev 394.4
pull1D
Entries 94
Mean −0.9419
Std Dev 4.949

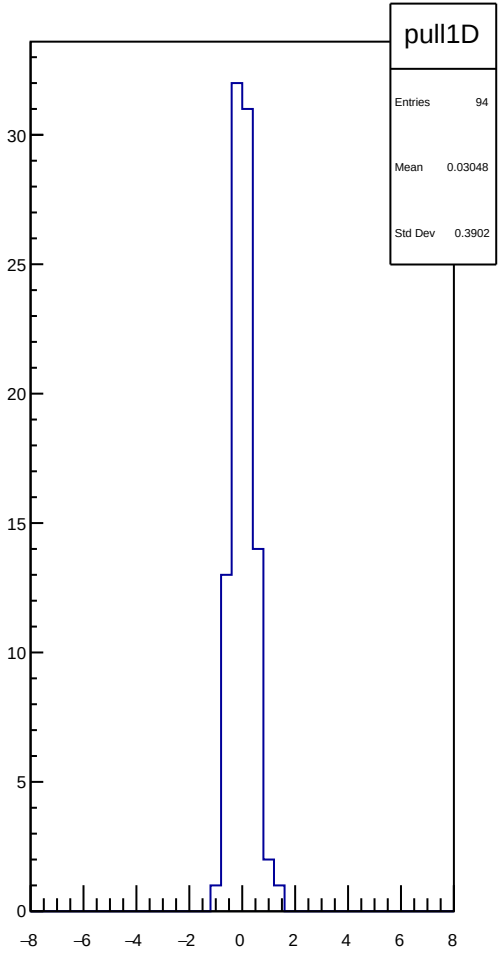

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 109.1 / 93
p0 44.33 ± 0.9901
pull
Entries 94
Mean 111.2
Std Dev 53.98
pull1D
Entries 94
Mean −0.3571
Std Dev 1.017

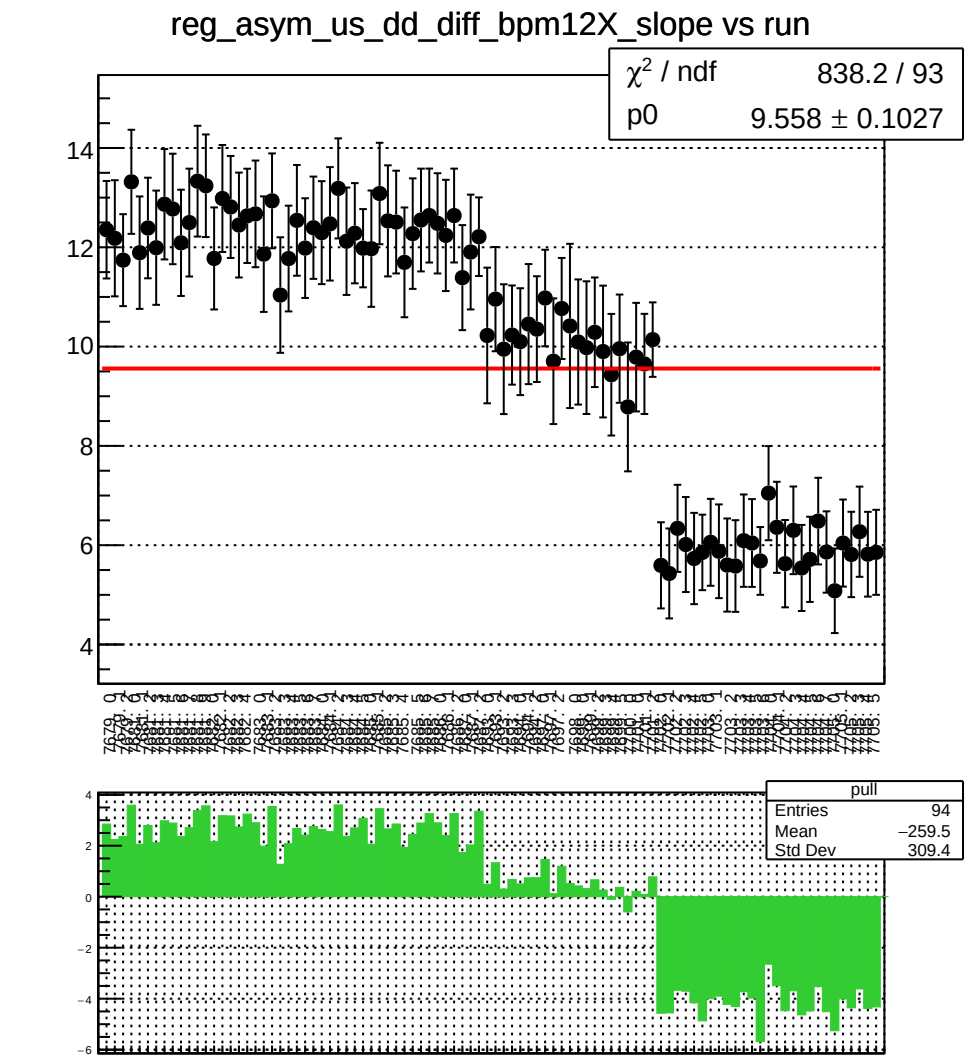

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 13.95 / 93
p0 −2.87 ± 1.4
pull
Entries 94
Mean 39.39
Std Dev 44.07
pull1D
Entries 94
Mean −0.03562
Std Dev 0.3836

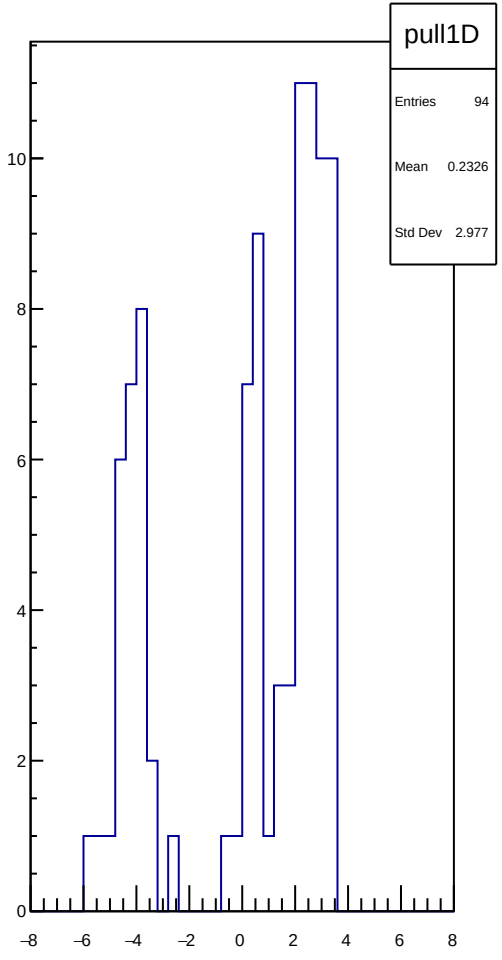

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 121.4 / 93
p0 −104.6 ± 0.7978
pull
Entries 94
Mean 109.2
Std Dev 52.28

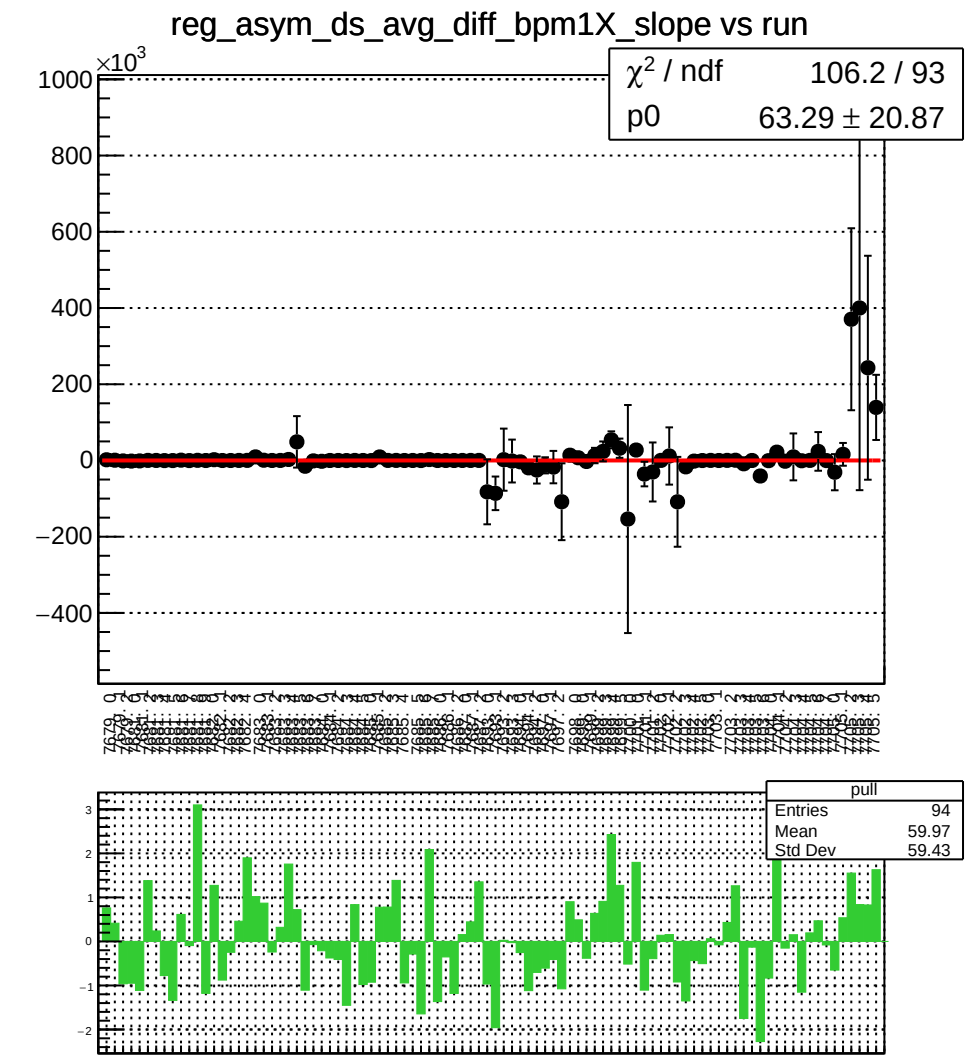

pull1D
Entries 94
Mean 0.3935
Std Dev 1.066

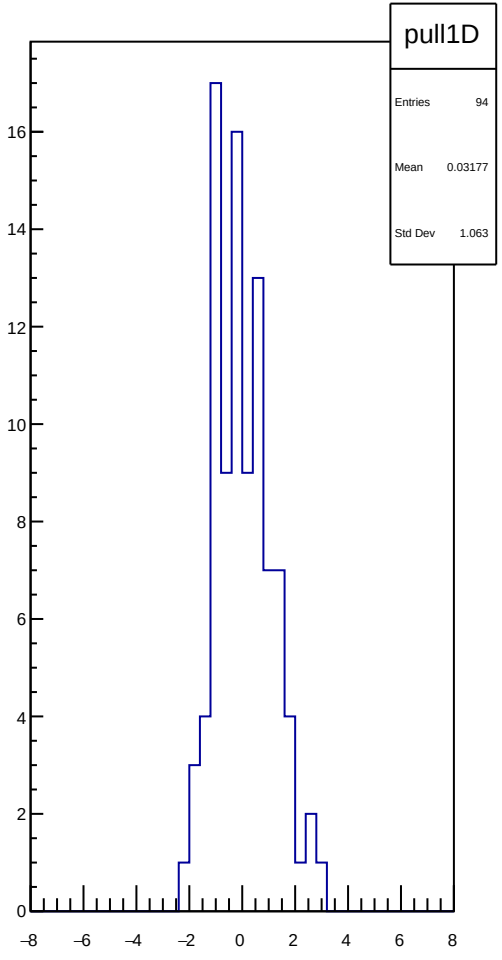

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 14.4 / 93
p0 0.402 ± 2.077
pull
Entries 94
Mean 74.04
Std Dev 40.74

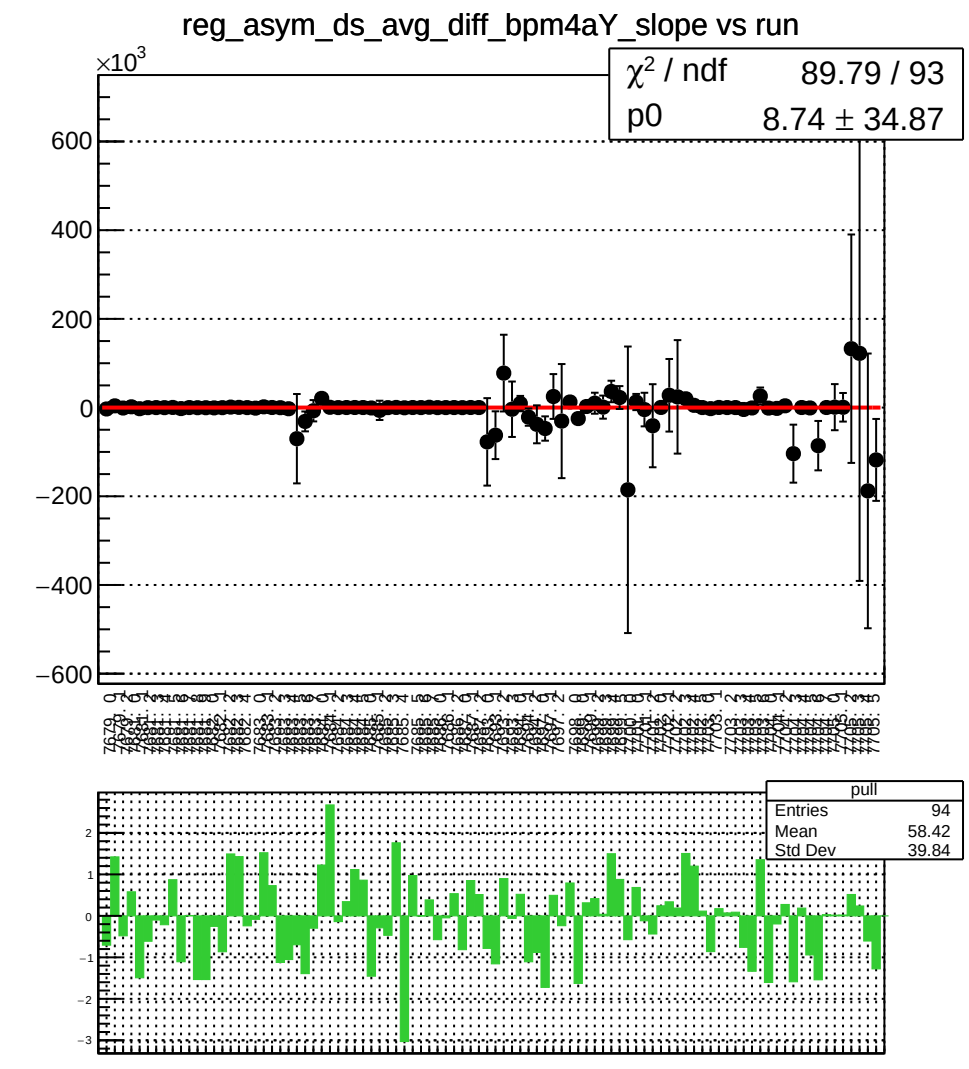

pull1D
Entries 94
Mean 0.03048
Std Dev 0.3902

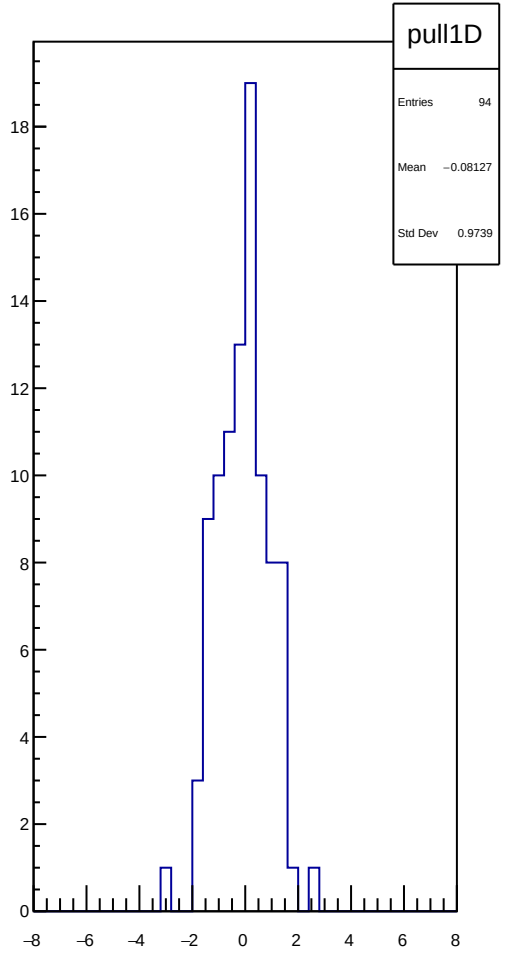

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 838.2 / 93
p0 9.558 ± 0.1027
pull
Entries 94
Mean −259.5
Std Dev 309.4

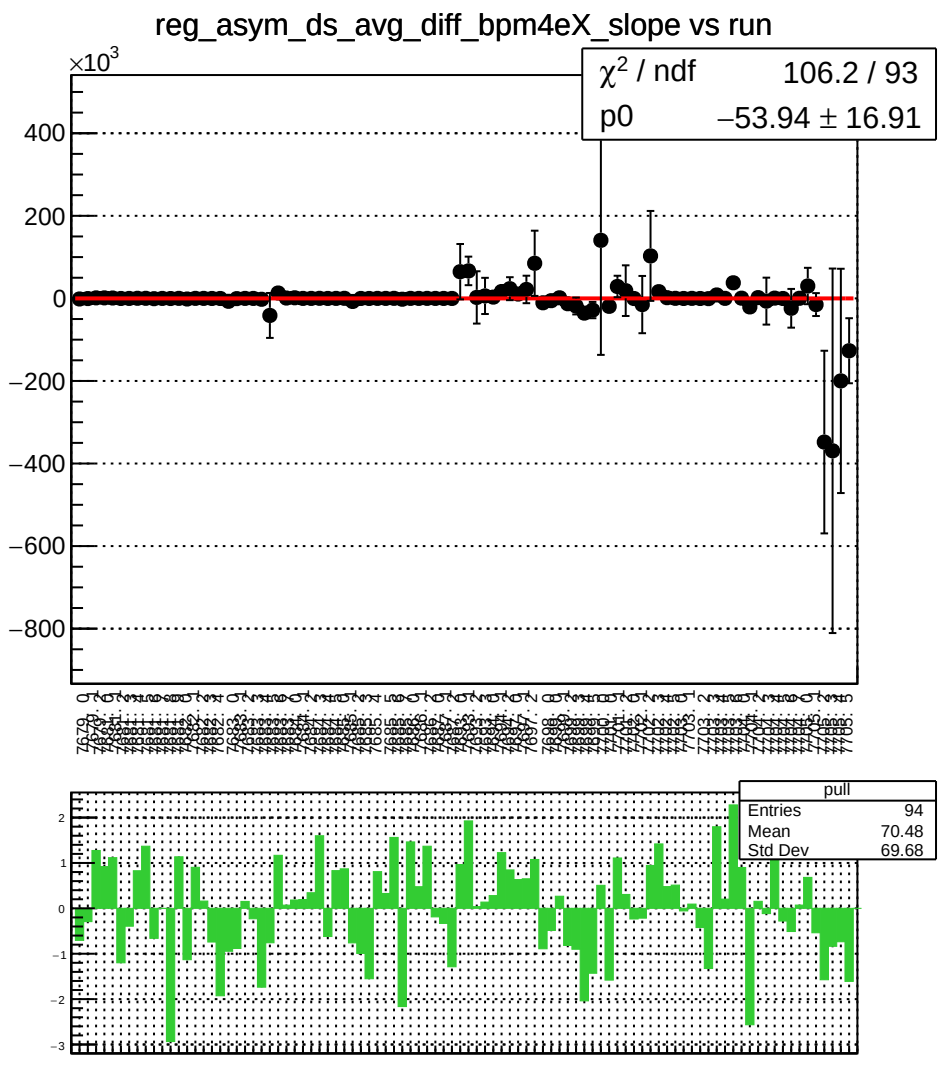

pull1D
Entries 94
Mean 0.2326
Std Dev 2.977

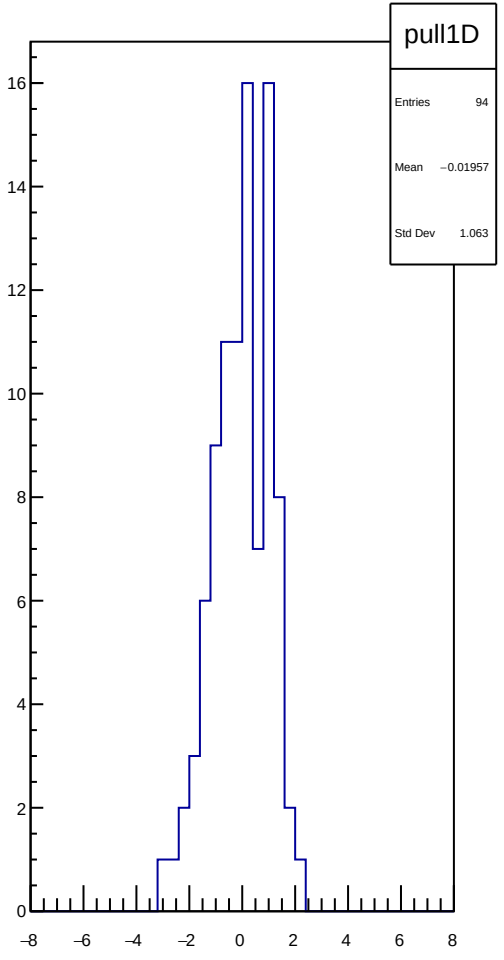

reg_asym_ds_avg_diff_bpm1X_slope vs run
×10^3
χ^2 / ndf 106.2 / 93
p0 63.29 ± 20.87
pull
Entries 94
Mean 59.97
Std Dev 59.43

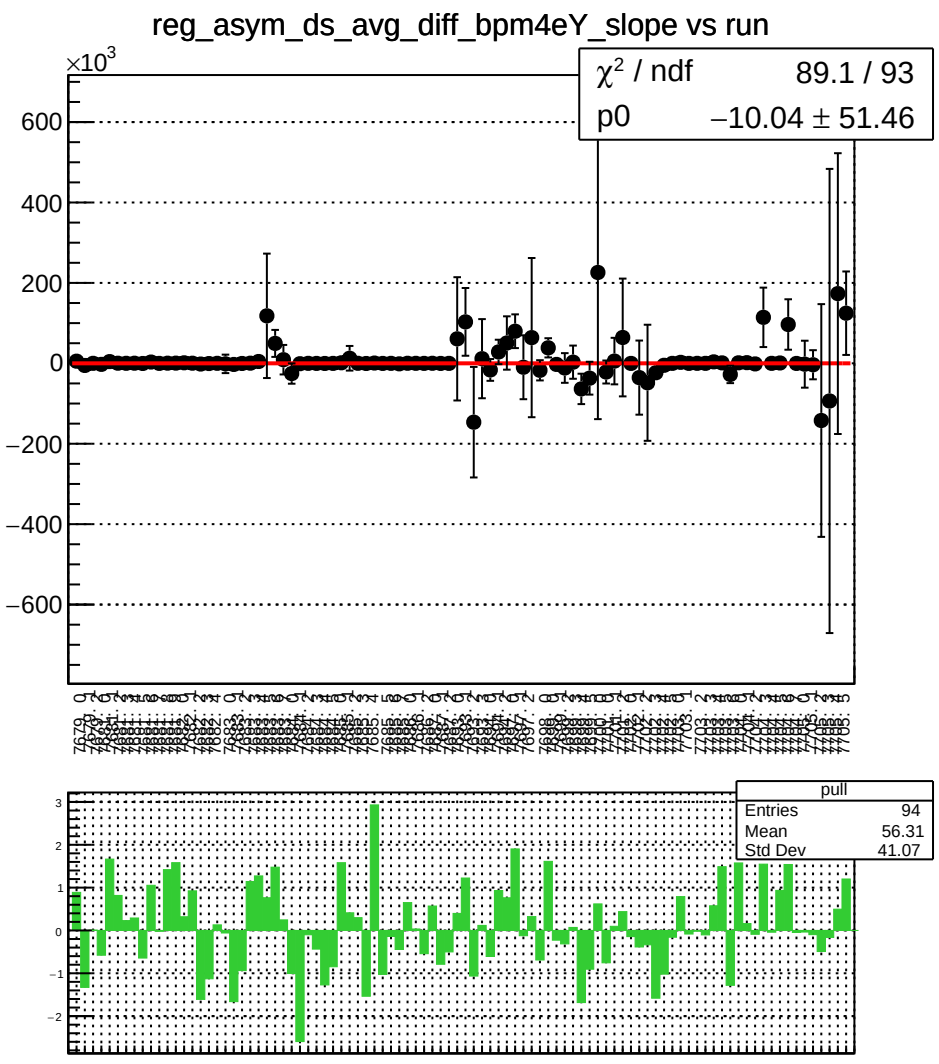

pull1D
Entries 94
Mean 0.03177
Std Dev 1.063

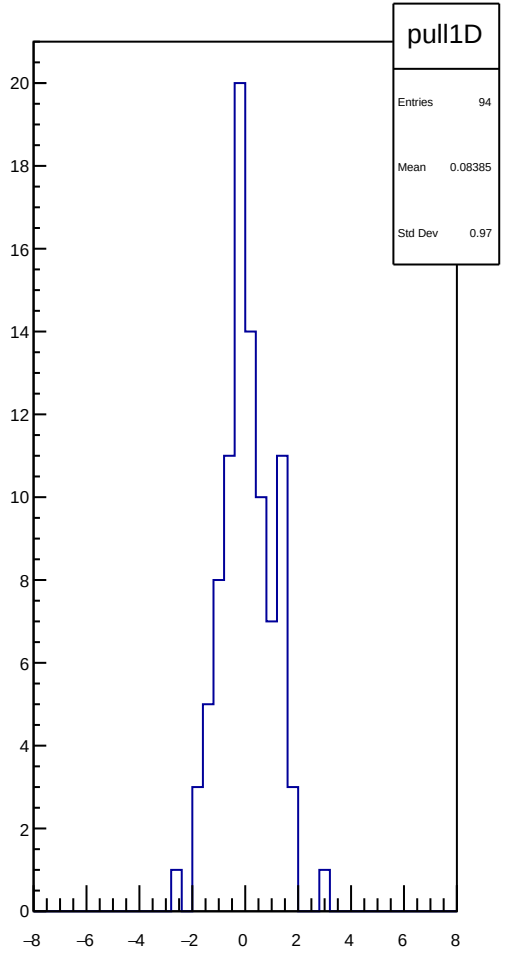

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ^2 / ndf 89.79 / 93
p0 8.74 ± 34.87
×10^3
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 58.42
Std Dev 39.84
2
1
0
−1
−2
−3

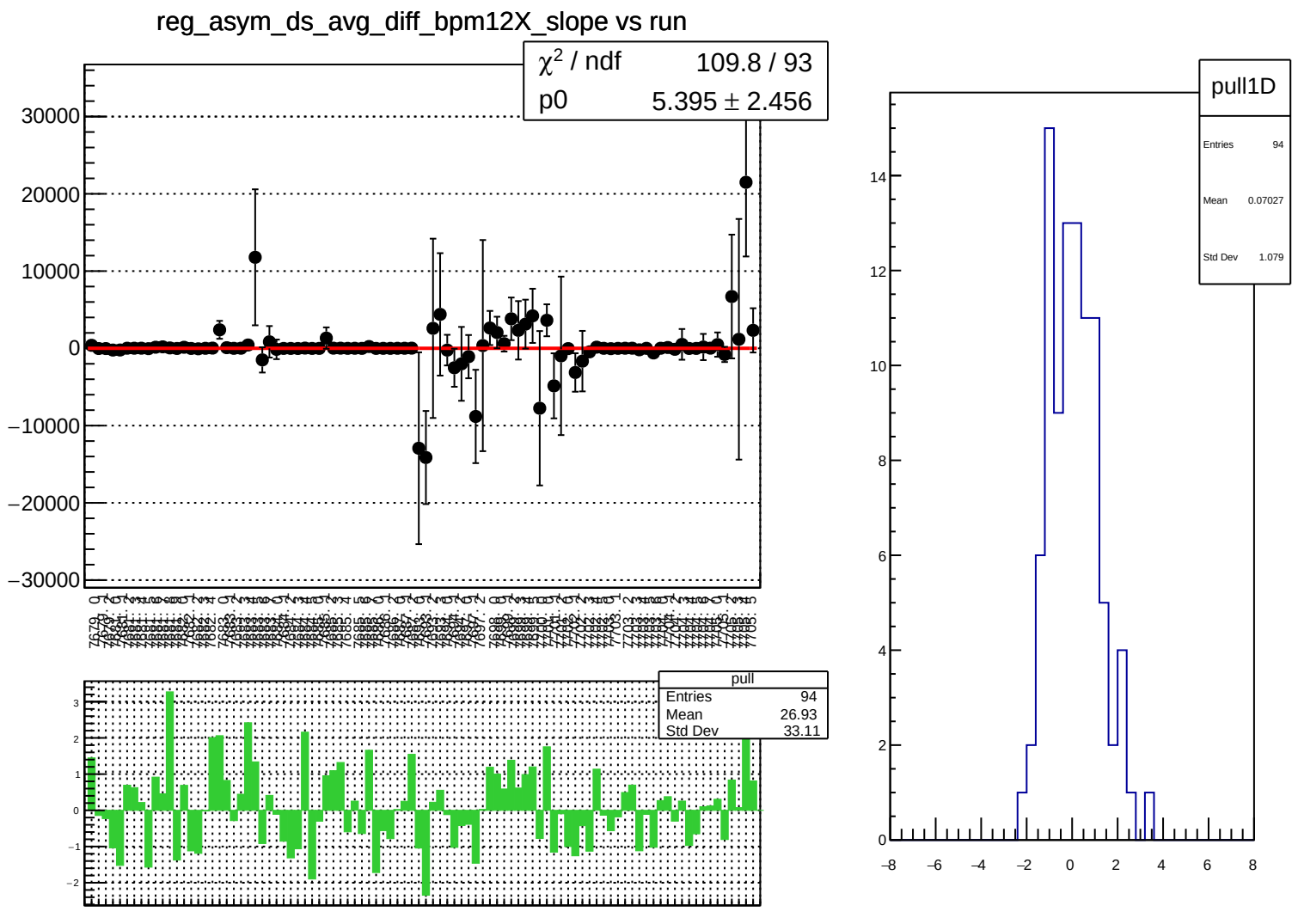

pull1D
Entries 94
Mean −0.08127
Std Dev 0.9739
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

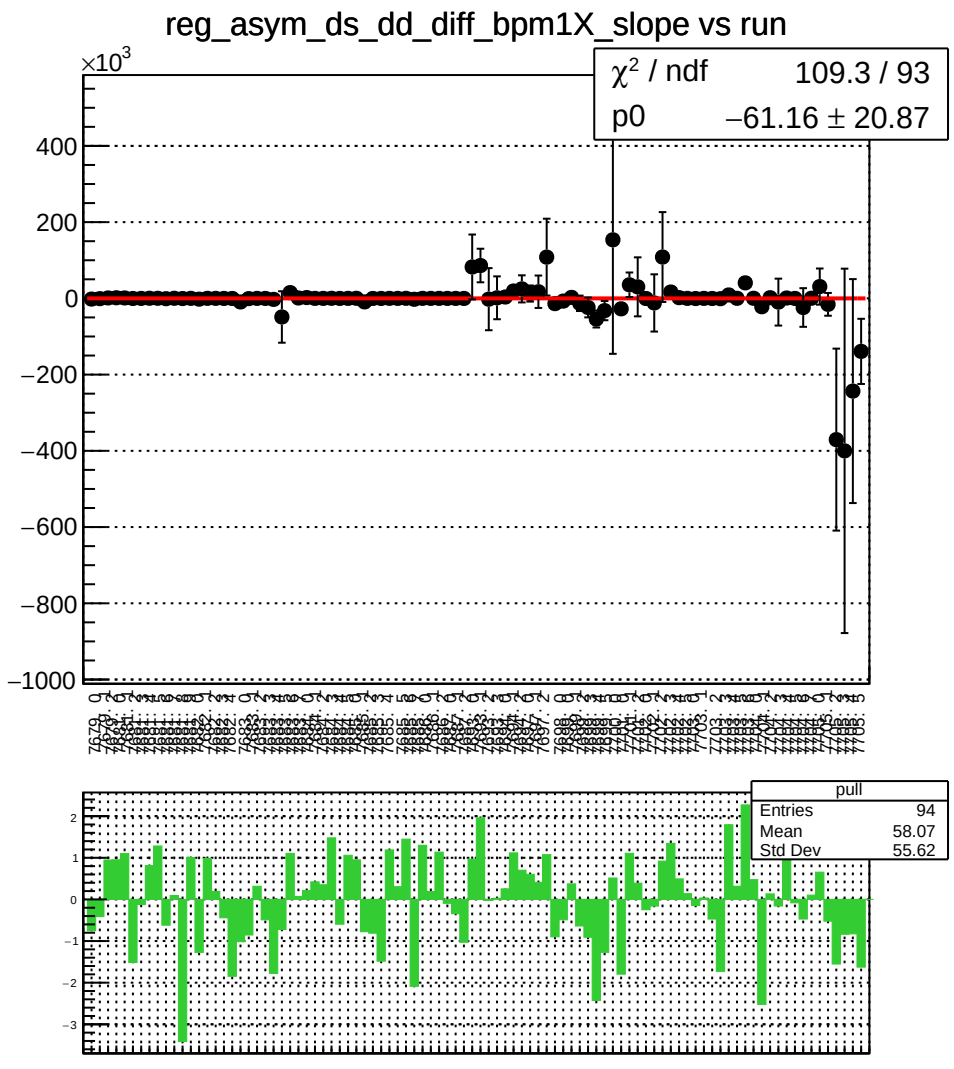

reg_asym_ds_avg_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 106.2 / 93
p0 −53.94 ± 16.91
400
200
0
−200
−400
−600
−800
pull
Entries 94
Mean 70.48
Std Dev 69.68
2
1
0
−1
−2
−3

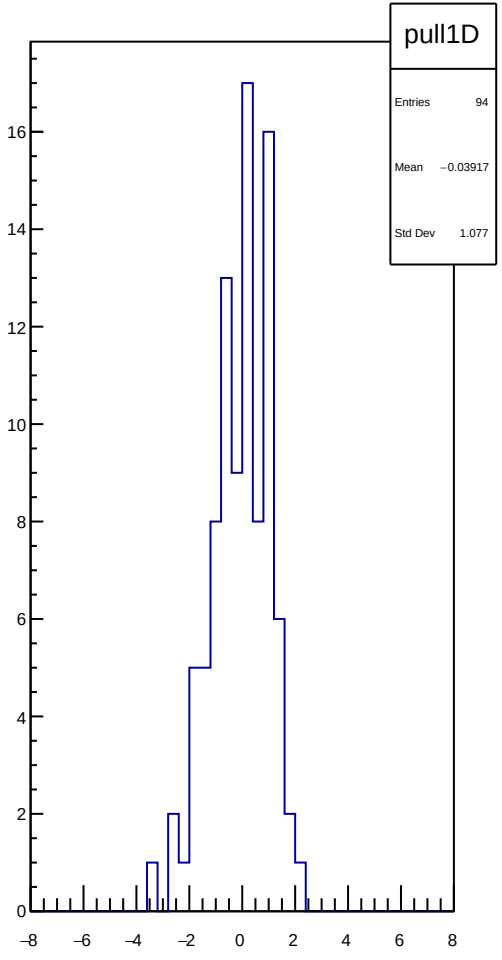

pull1D
Entries 94
Mean −0.01957
Std Dev 1.063
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

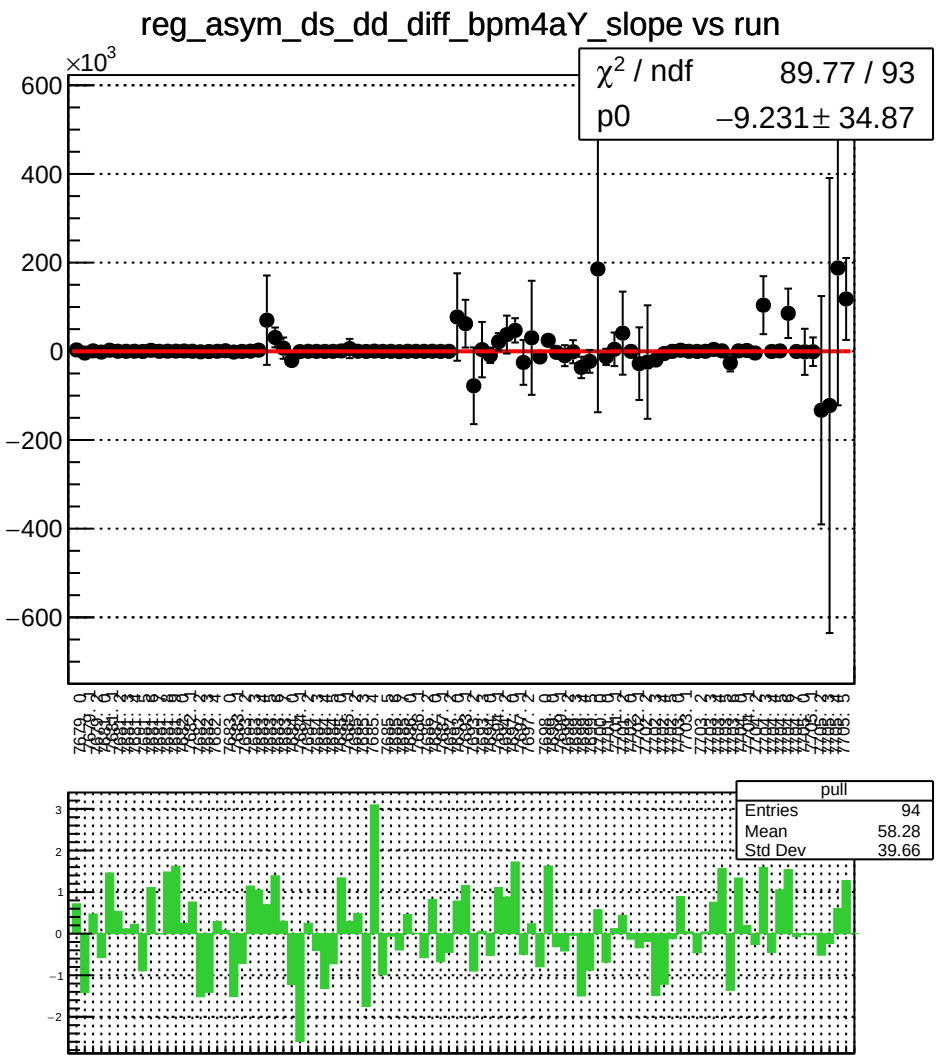

reg_asym_ds_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 89.1 / 93
p0 −10.04 ± 51.46
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 56.31
Std Dev 41.07
3
2
1
0
−1
−2

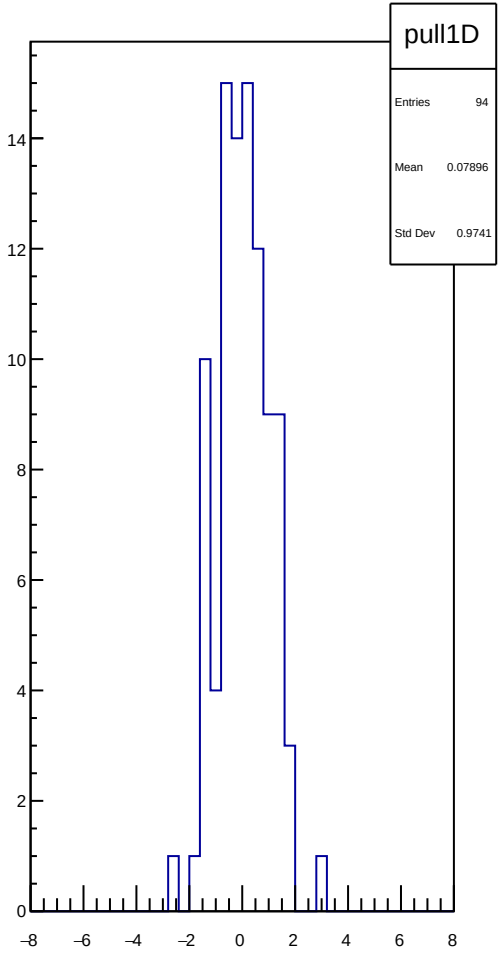

pull1D
Entries 94
Mean 0.08385
Std Dev 0.97
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

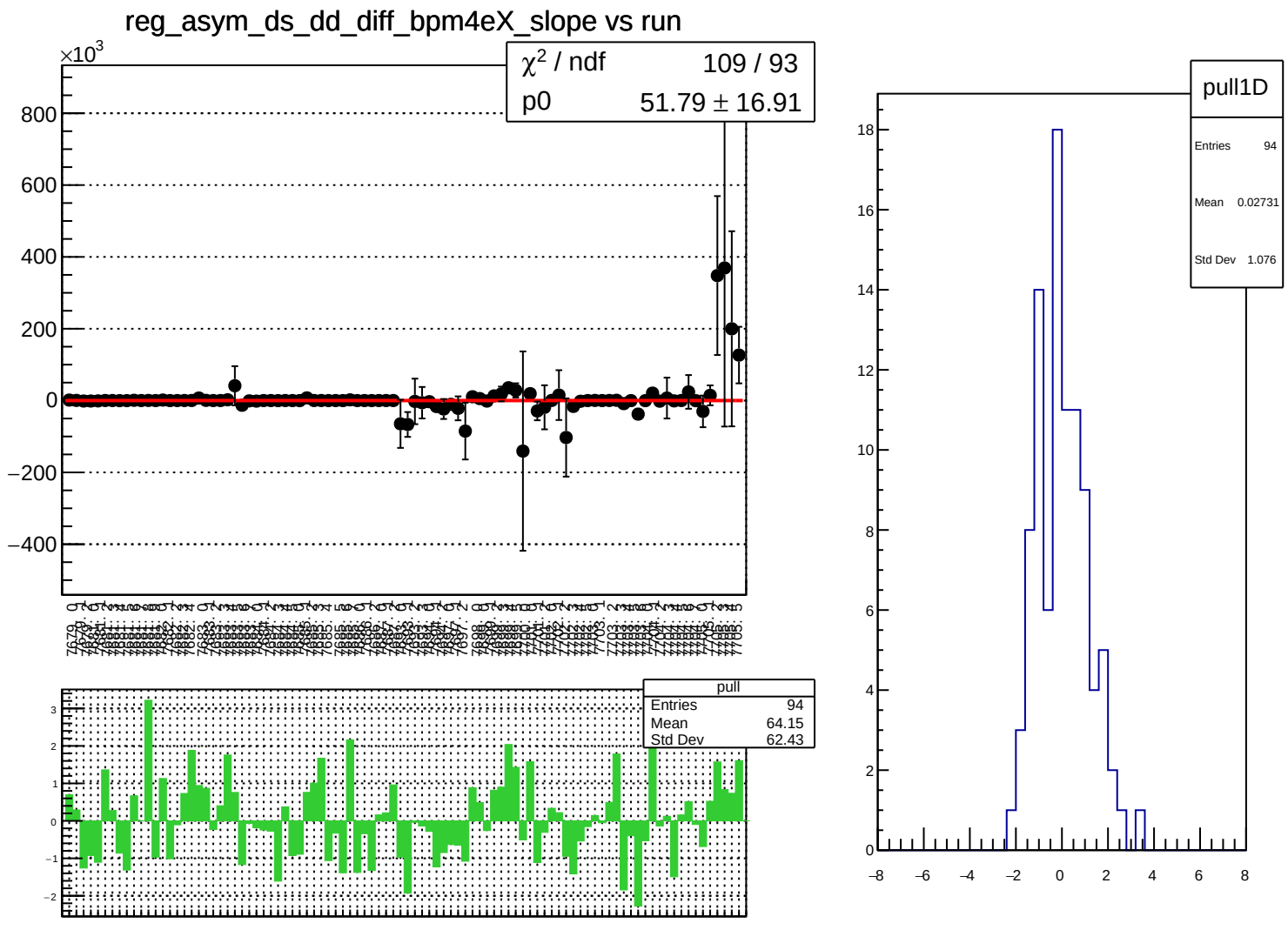

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 109.8 / 93
p0 5.395 ± 2.456
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean 26.93
Std Dev 33.11
3
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.07027
Std Dev 1.079
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

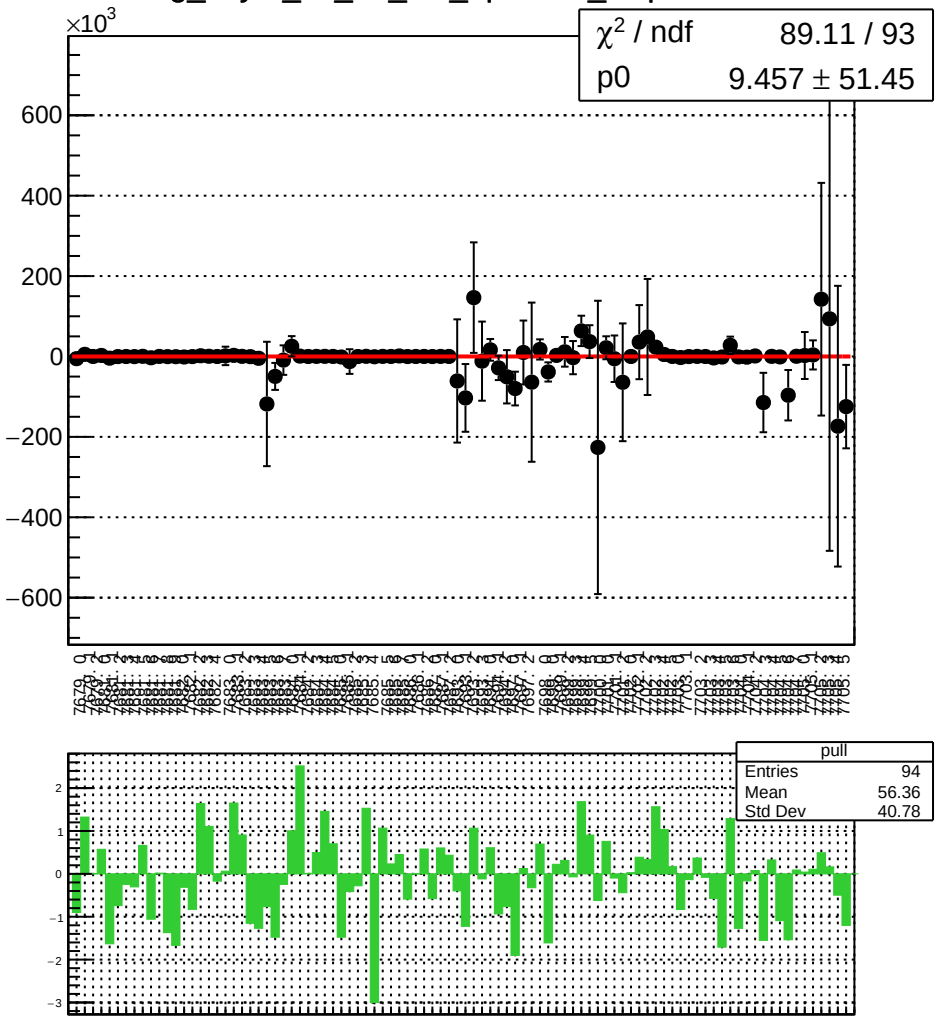

reg_asym_ds_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 109.3 / 93
p0 −61.16 ± 20.87
400
200
0
−200
−400
−600
−800
−1000
pull
Entries 94
Mean 58.07
Std Dev 55.62
2
1
0
−1
−2
−3

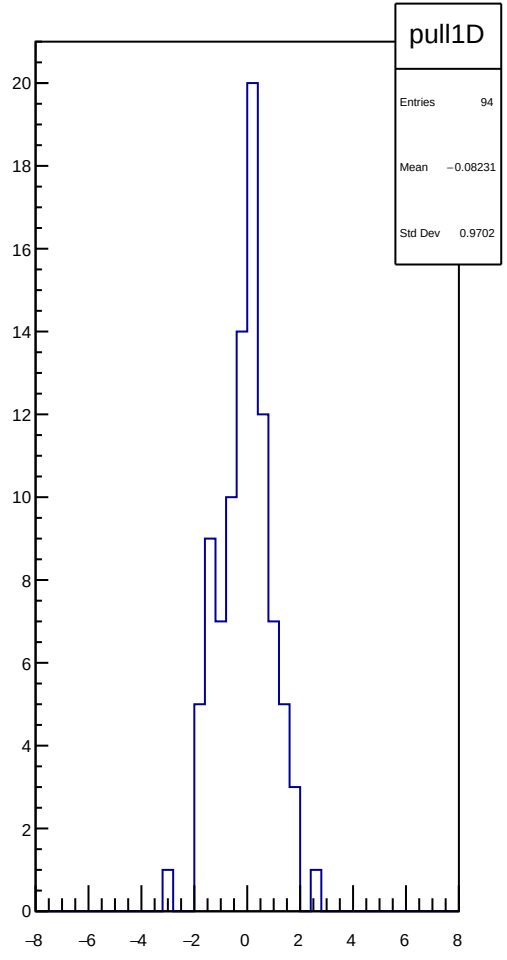

pull1D
Entries 94
Mean −0.03917
Std Dev 1.077
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

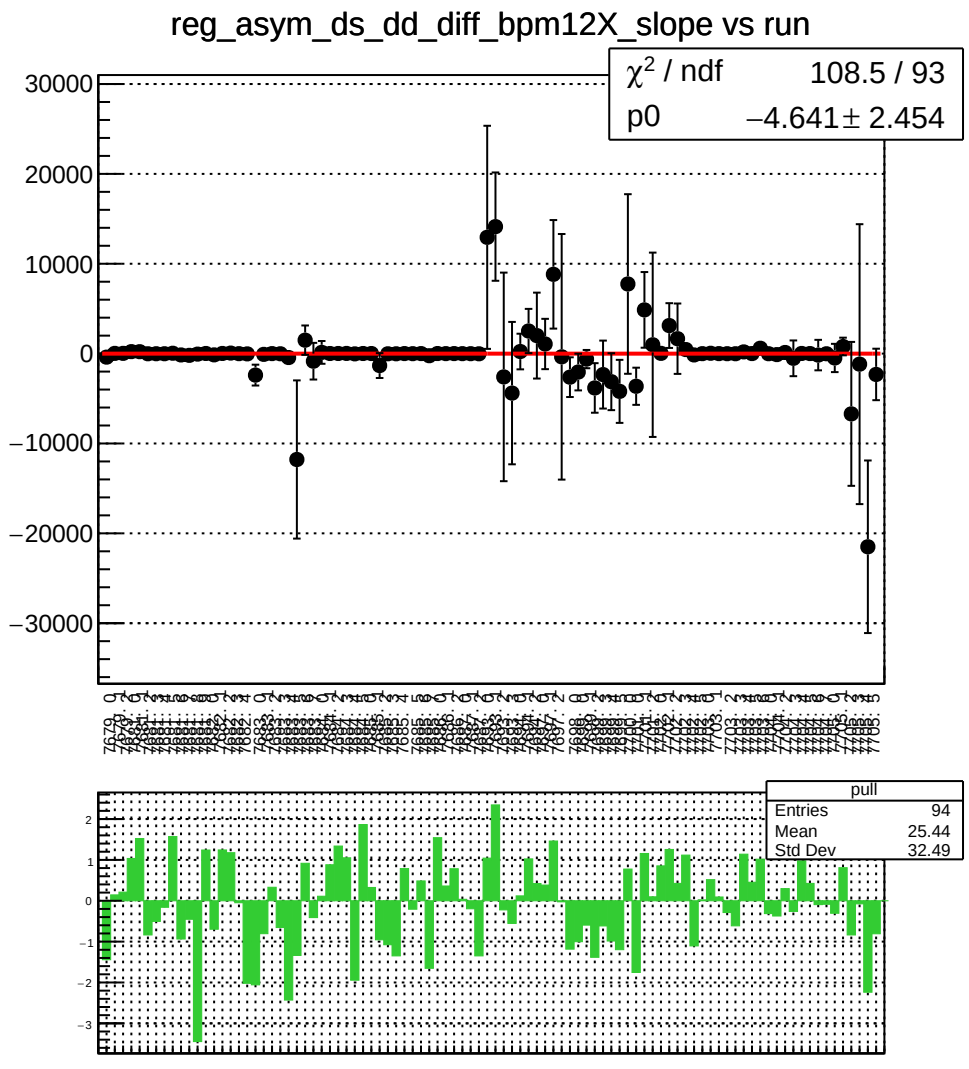

reg_asym_ds_dd_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 89.77 / 93
p0 −9.231 ± 34.87
pull
Entries 94
Mean 58.28
Std Dev 39.66

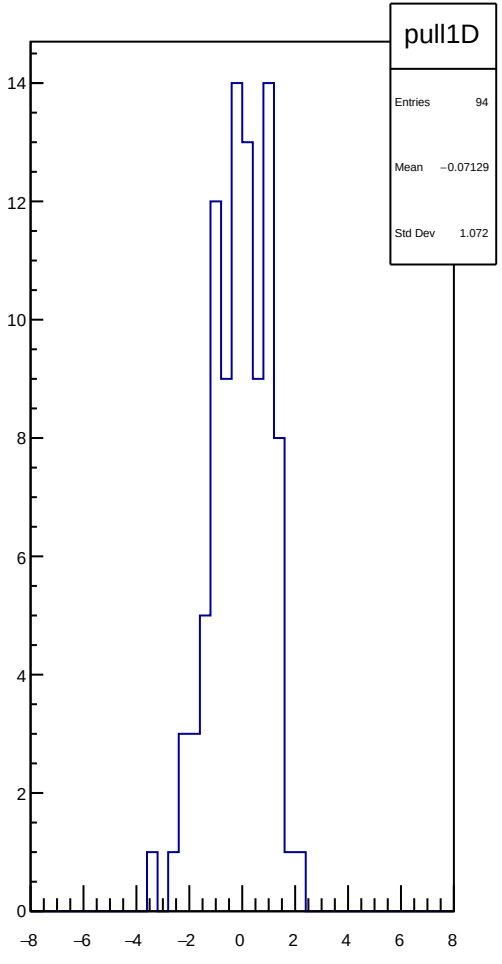

pull1D
Entries 94
Mean 0.07896
Std Dev 0.9741

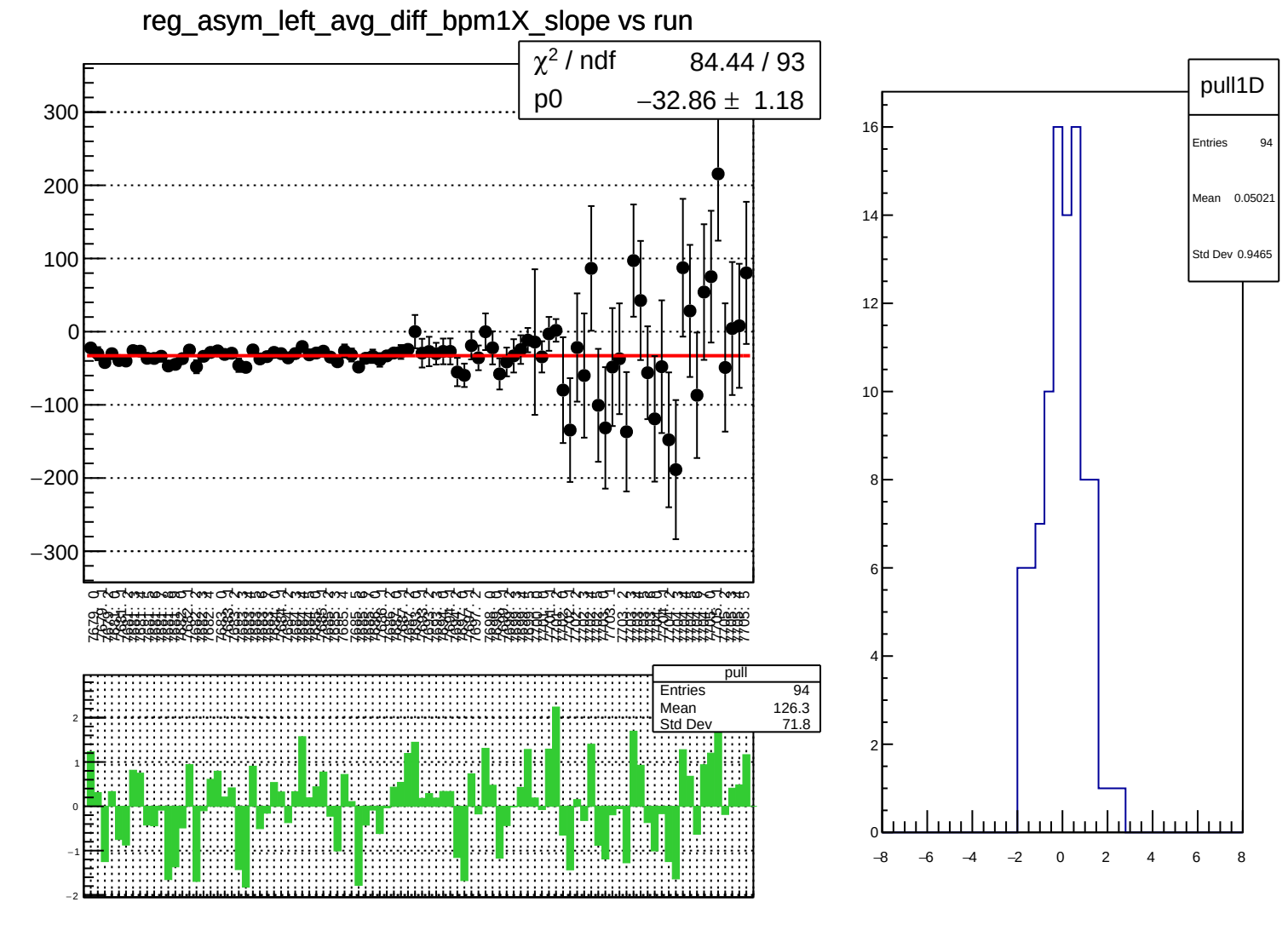

reg_asym_ds_dd_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 109 / 93
p0 51.79 ± 16.91
800
600
400
200
0
−200
−400
pull
Entries 94
Mean 64.15
Std Dev 62.43
3
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.02731
Std Dev 1.076
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

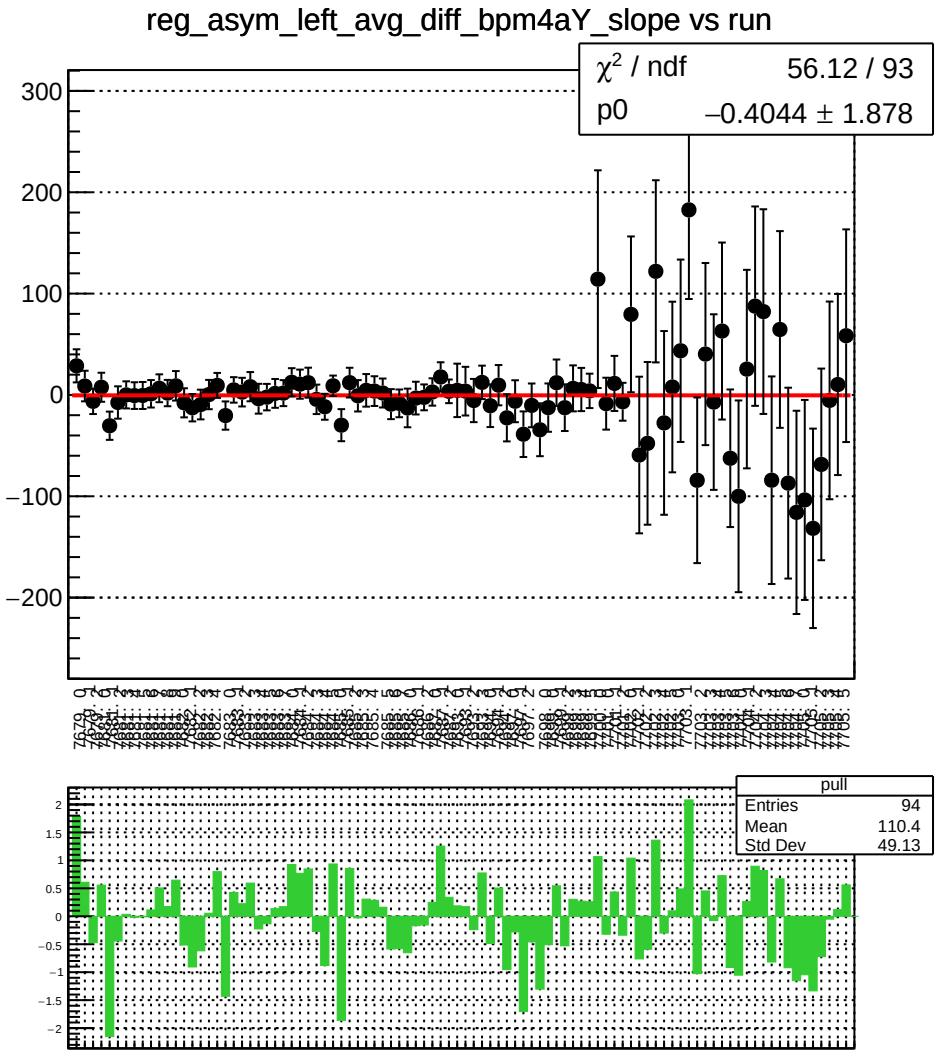

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 89.11 / 93
p0 9.457 ± 51.45
×10³
pull
Entries 94
Mean 56.36
Std Dev 40.78

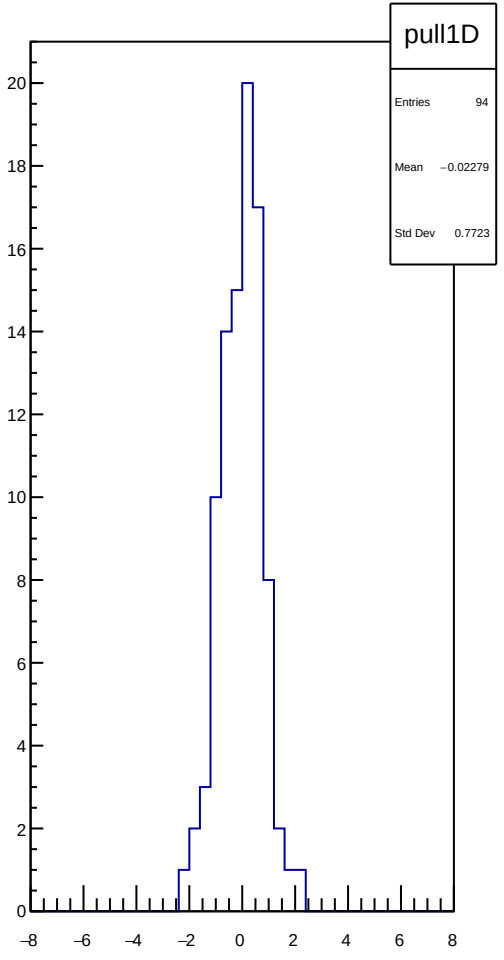

pull1D
Entries 94
Mean −0.08231
Std Dev 0.9702

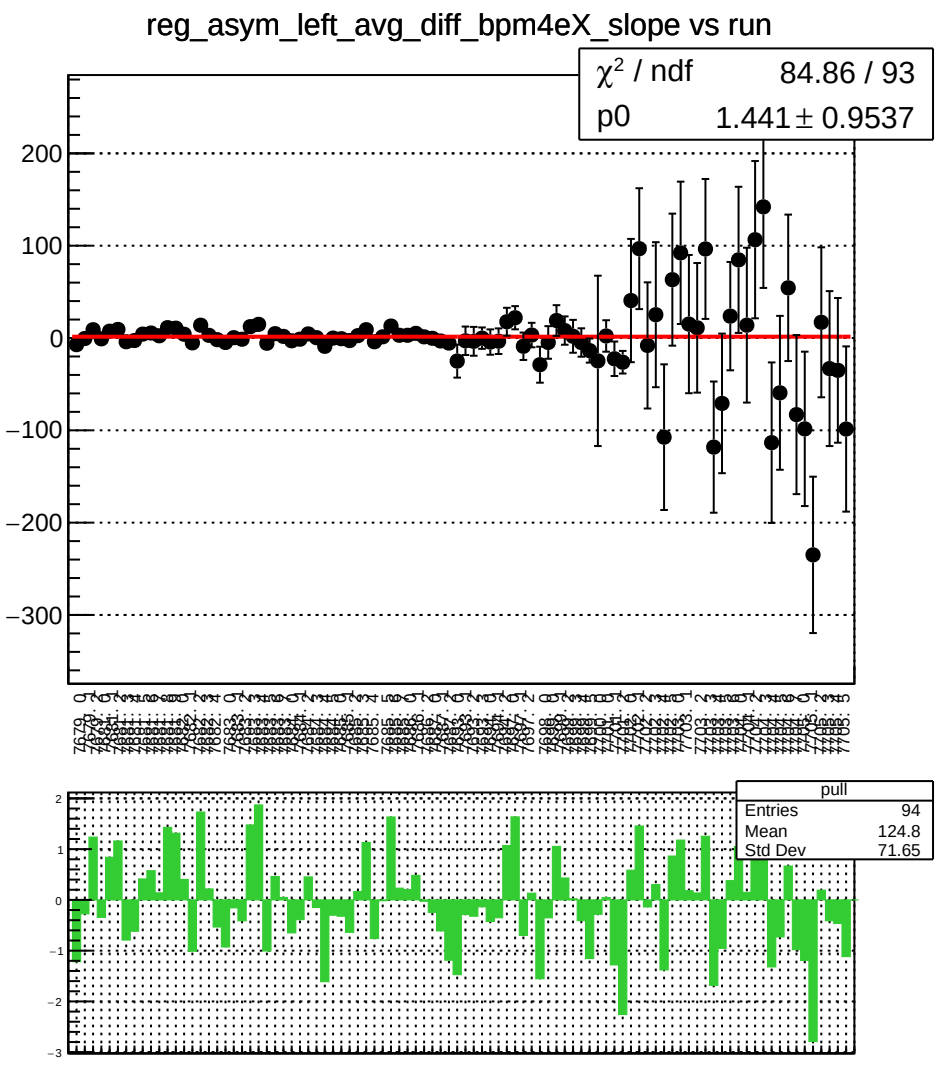

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 108.5 / 93
p0 −4.641 ± 2.454
pull
Entries 94
Mean 25.44
Std Dev 32.49

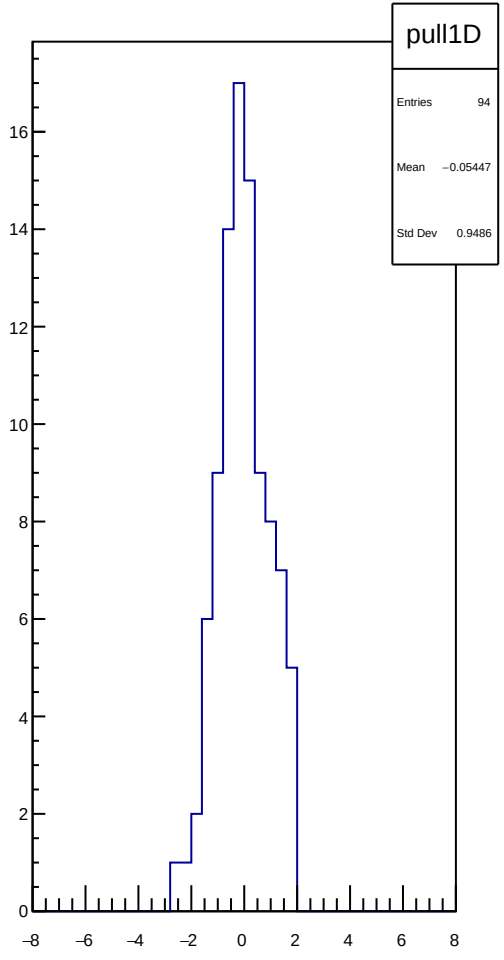

pull1D
Entries 94
Mean −0.07129
Std Dev 1.072

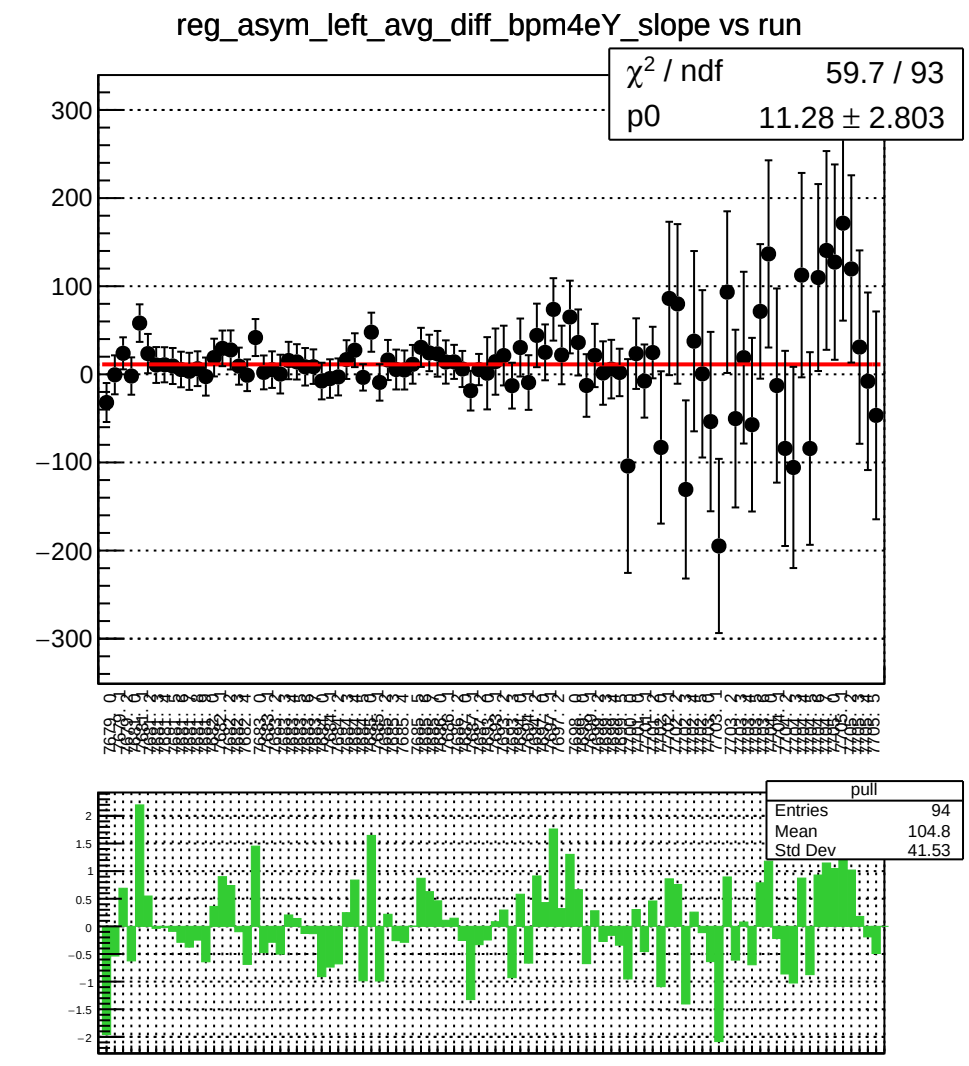

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 84.44 / 93
p0 −32.86 ± 1.18
pull
Entries 94
Mean 126.3
Std Dev 71.8
pull1D
Entries 94
Mean 0.05021
Std Dev 0.9465

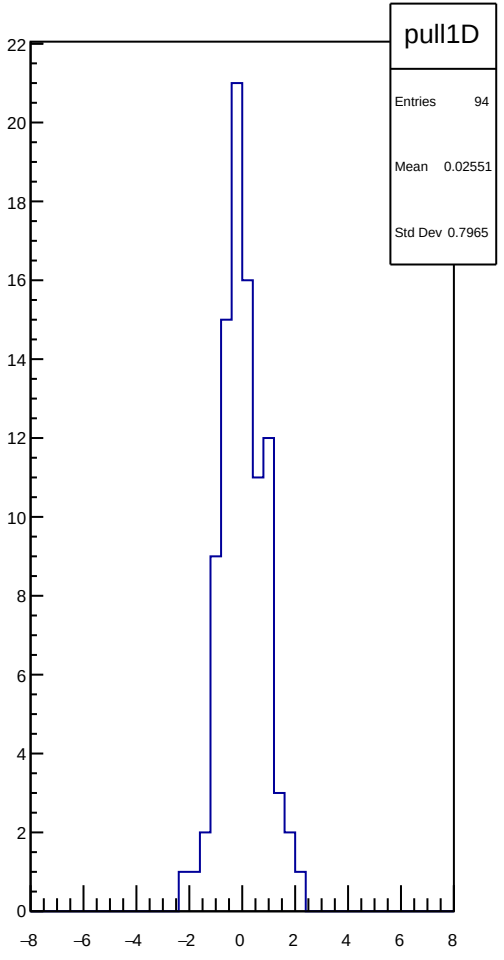

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 56.12 / 93
p0 −0.4044 ± 1.878
pull
Entries 94
Mean 110.4
Std Dev 49.13

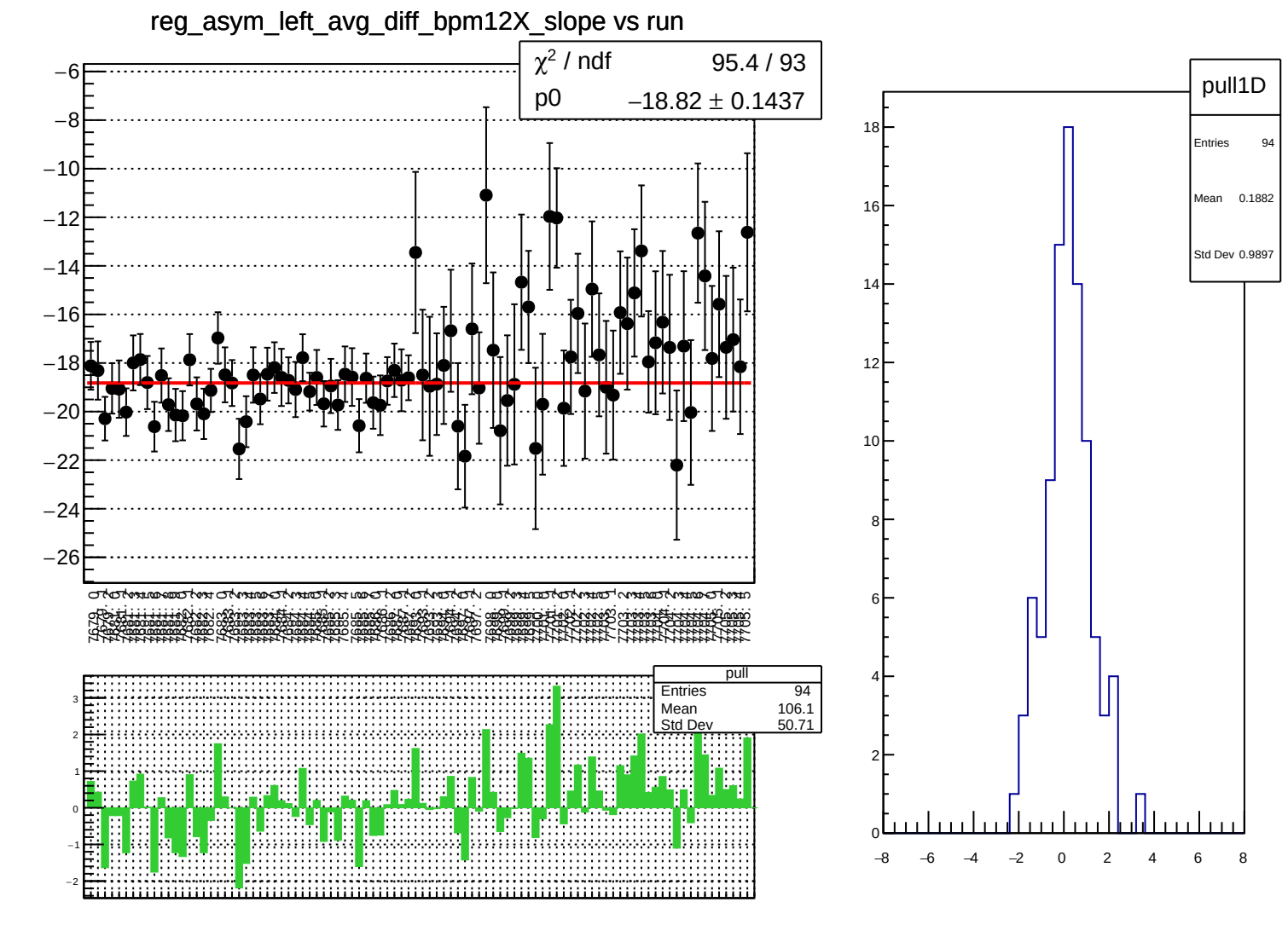

pull1D
Entries 94
Mean −0.02279
Std Dev 0.7723

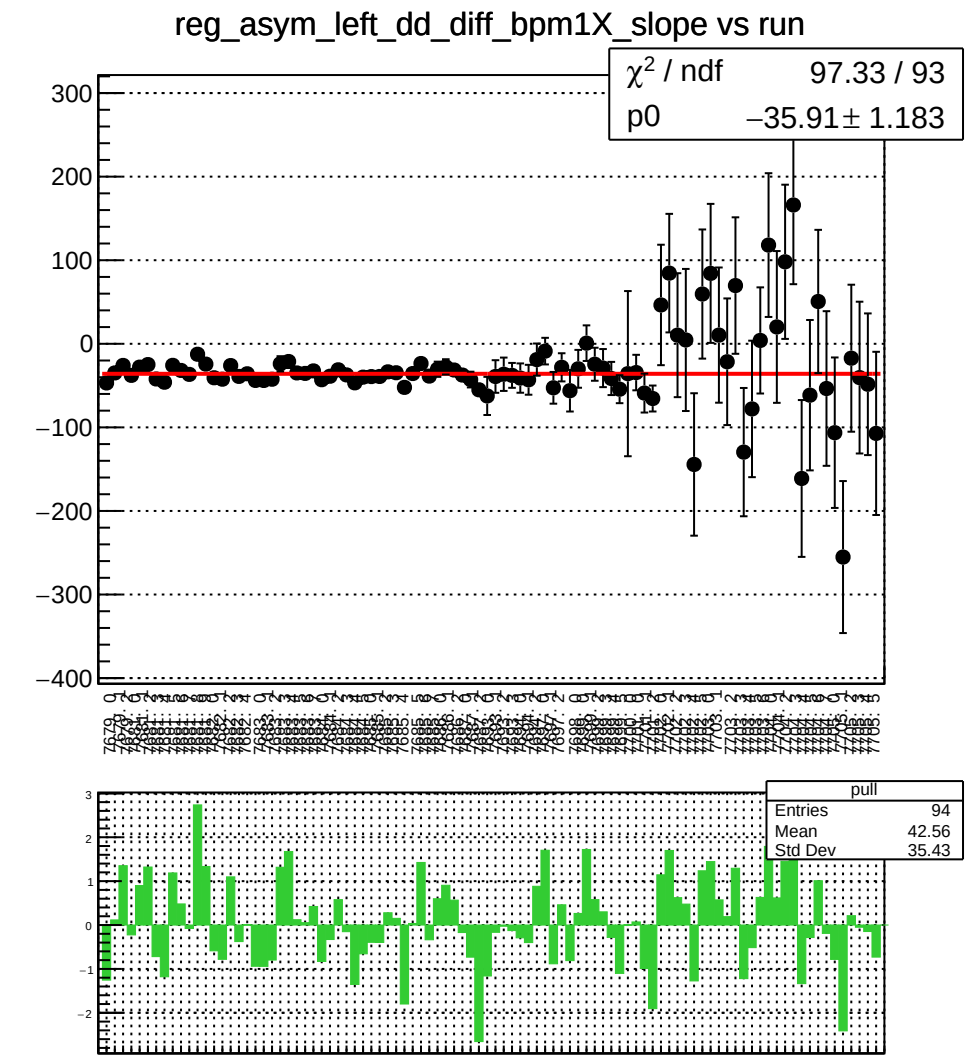

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 84.86 / 93
p0 1.441 ± 0.9537
200
100
0
−100
−200
−300
pull
Entries 94
Mean 124.8
Std Dev 71.65
2
1
0
−1
−2
−3

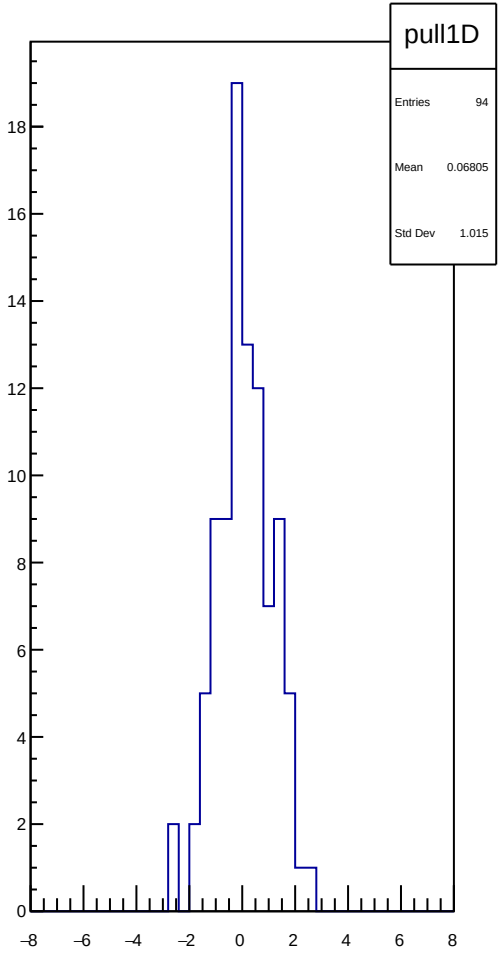

pull1D
Entries 94
Mean −0.05447
Std Dev 0.9486
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

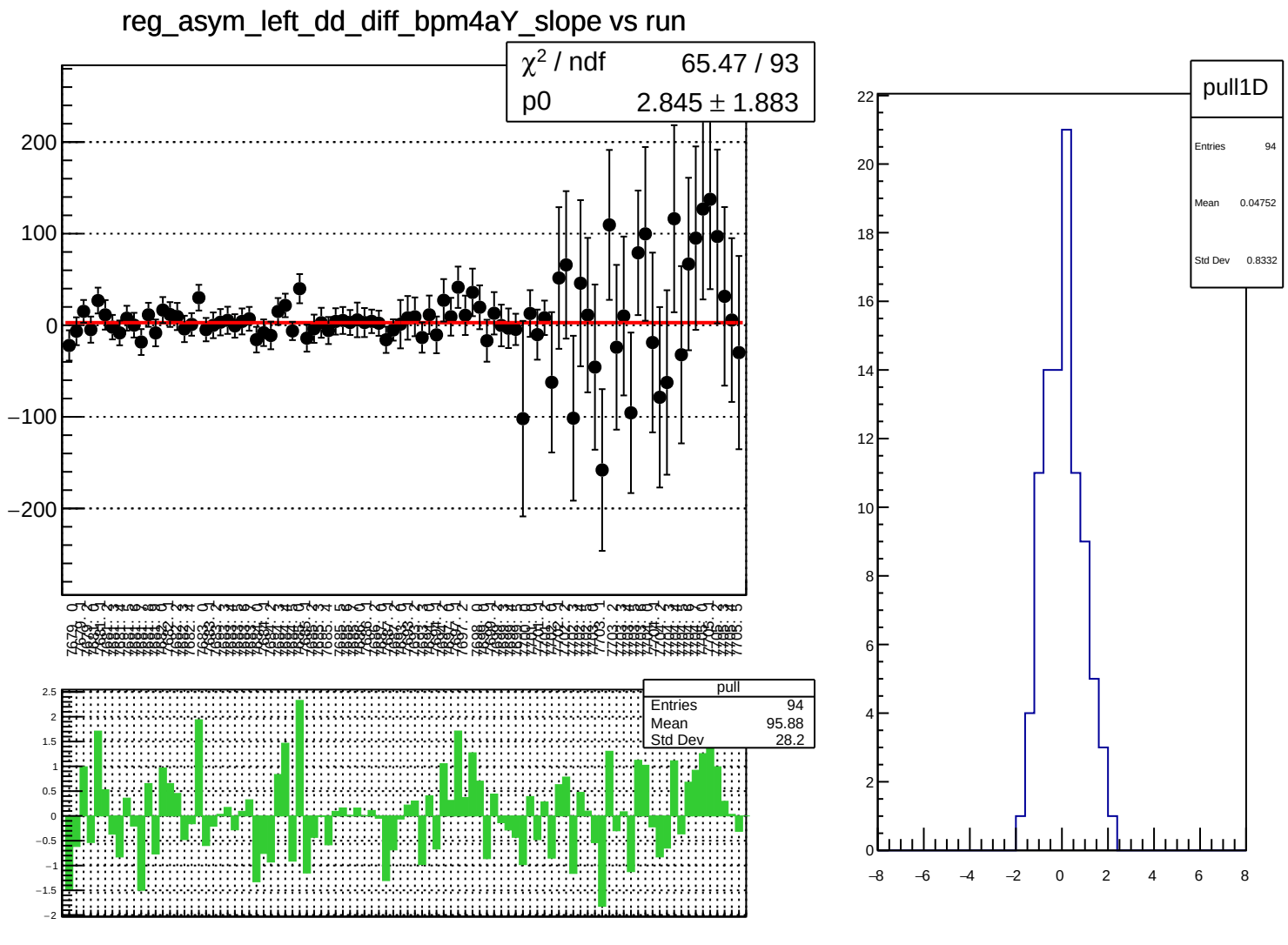

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 59.7 / 93
p0 11.28 ± 2.803
pull
Entries 94
Mean 104.8
Std Dev 41.53

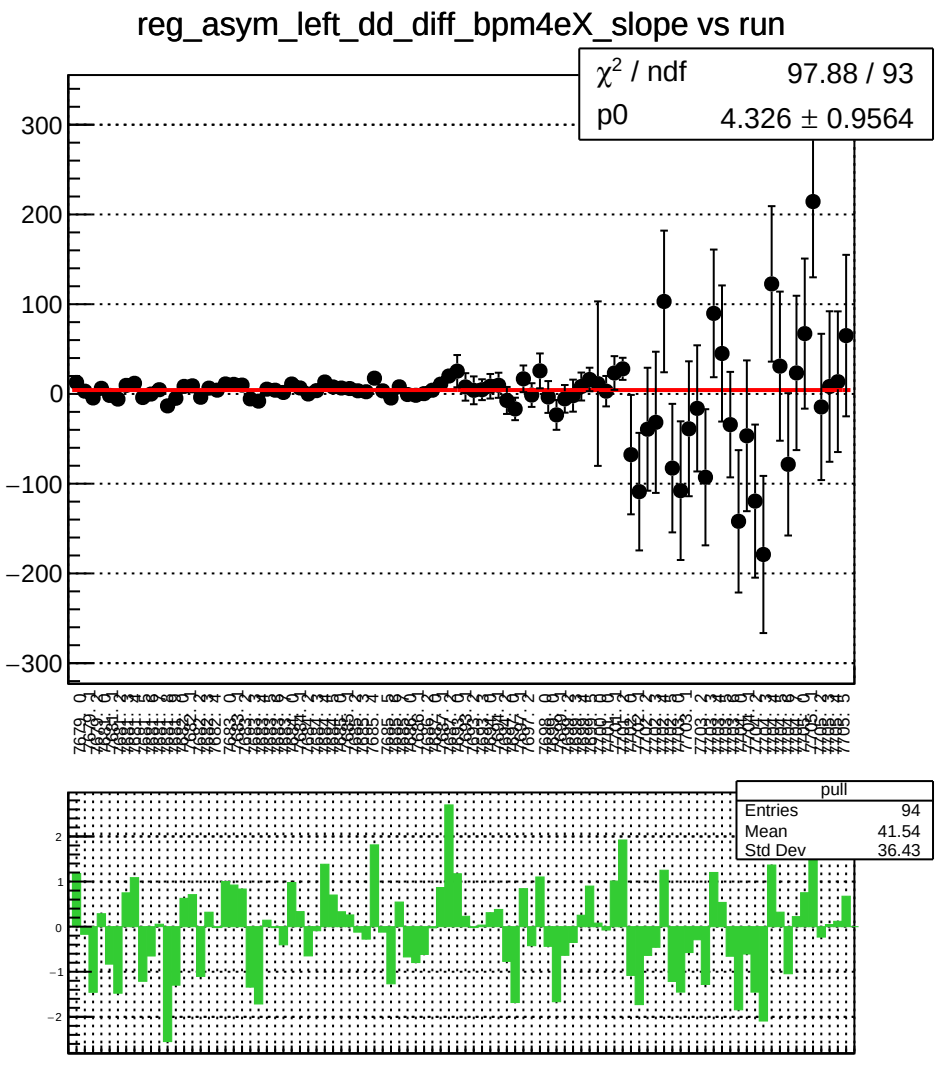

pull1D
Entries 94
Mean 0.02551
Std Dev 0.7965

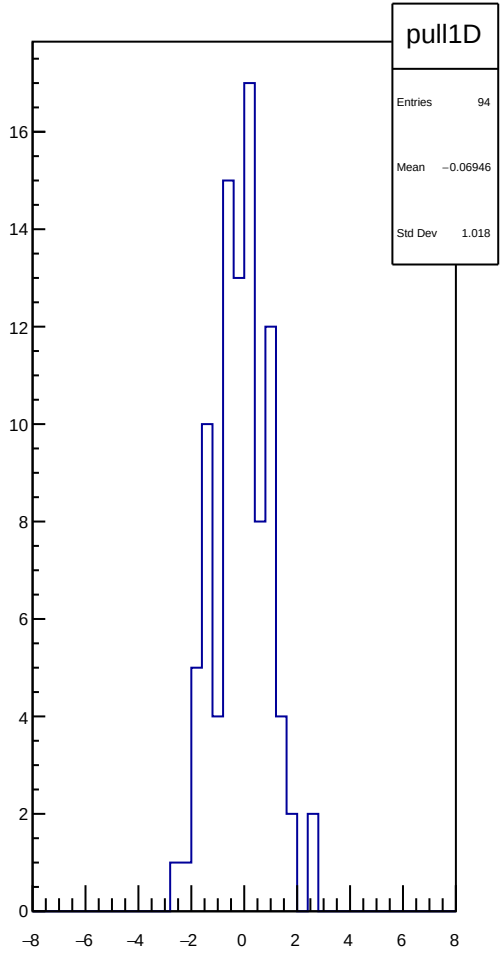

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 95.4 / 93
p0 −18.82 ± 0.1437
pull
Entries 94
Mean 106.1
Std Dev 50.71
pull1D
Entries 94
Mean 0.1882
Std Dev 0.9897

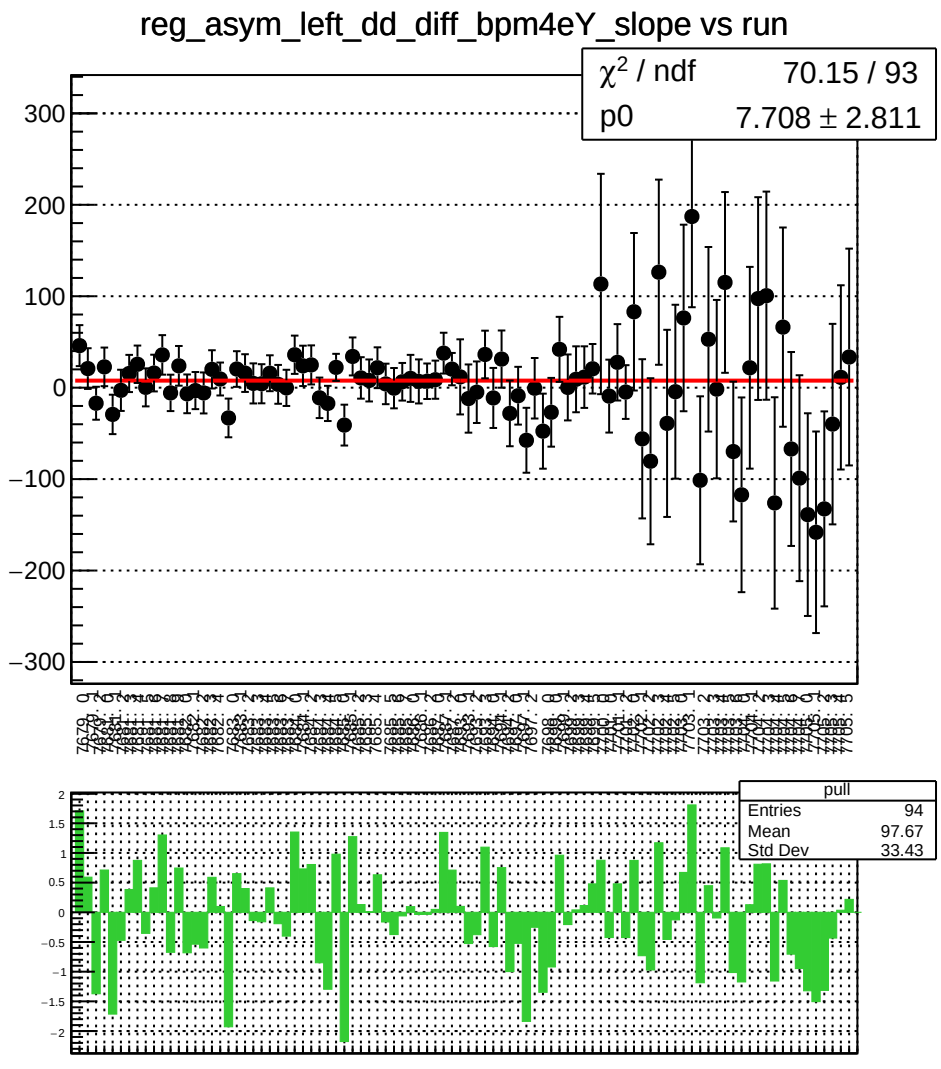

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 97.33 / 93
p0 −35.91 ± 1.183
pull
Entries 94
Mean 42.56
Std Dev 35.43

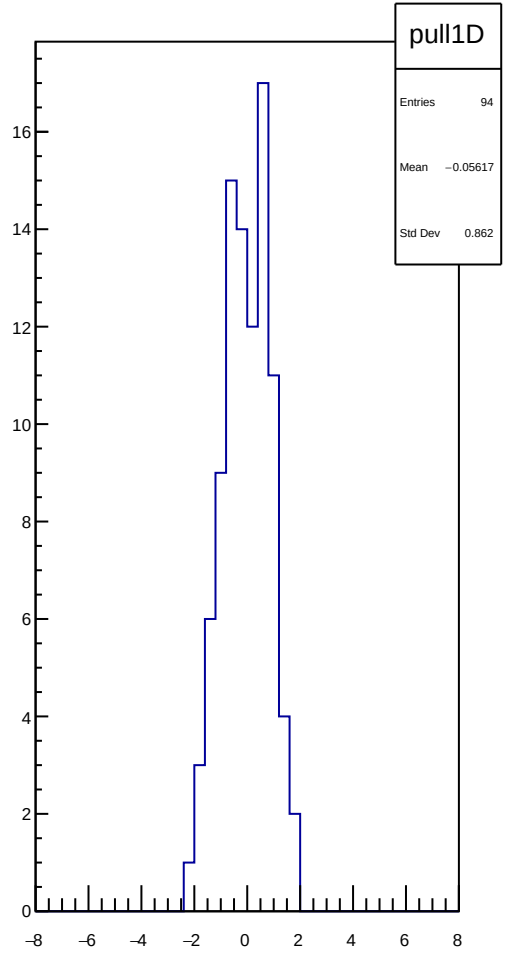

pull1D
Entries 94
Mean 0.06805
Std Dev 1.015

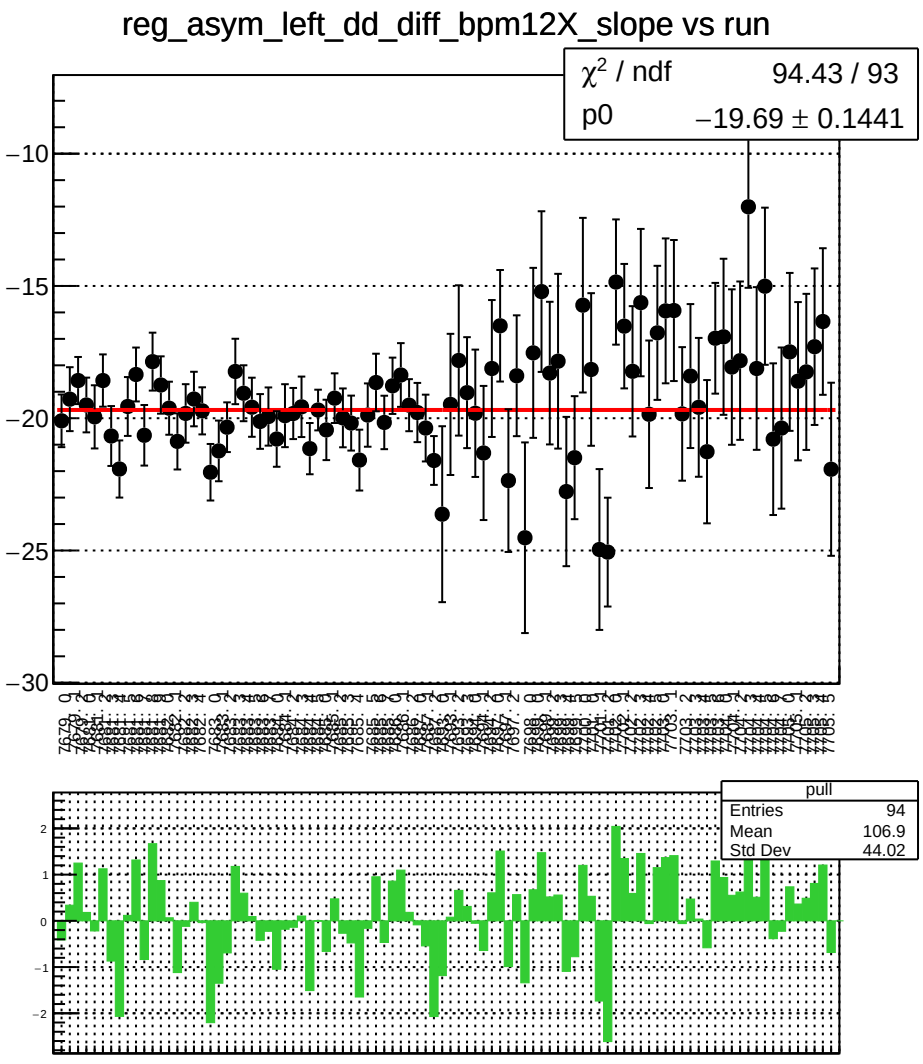

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 65.47 / 93
p0 2.845 ± 1.883
200
100
0
−100
−200
pull
Entries 94
Mean 95.88
Std Dev 28.2
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 94
Mean 0.04752
Std Dev 0.8332
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

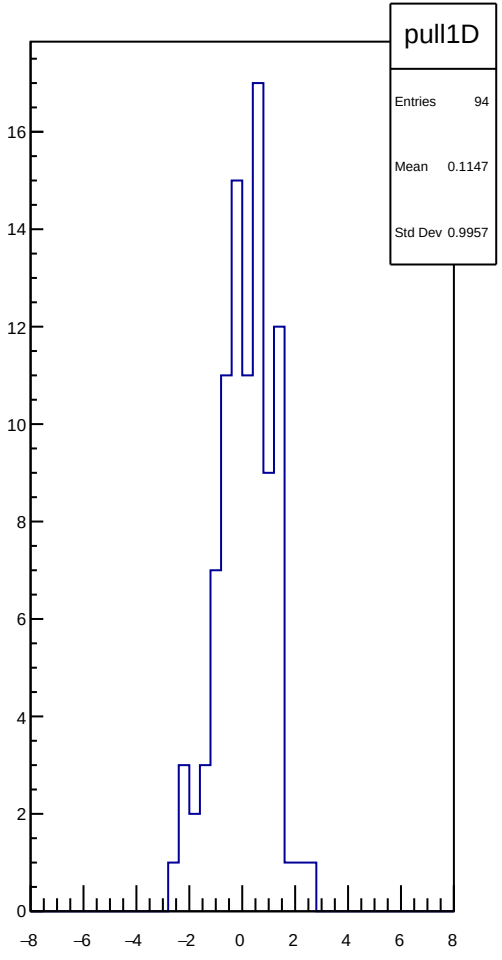

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 97.88 / 93
p0 4.326 ± 0.9564
300
200
100
0
−100
−200
−300
pull
Entries 94
Mean 41.54
Std Dev 36.43
2
1
0
−1
−2

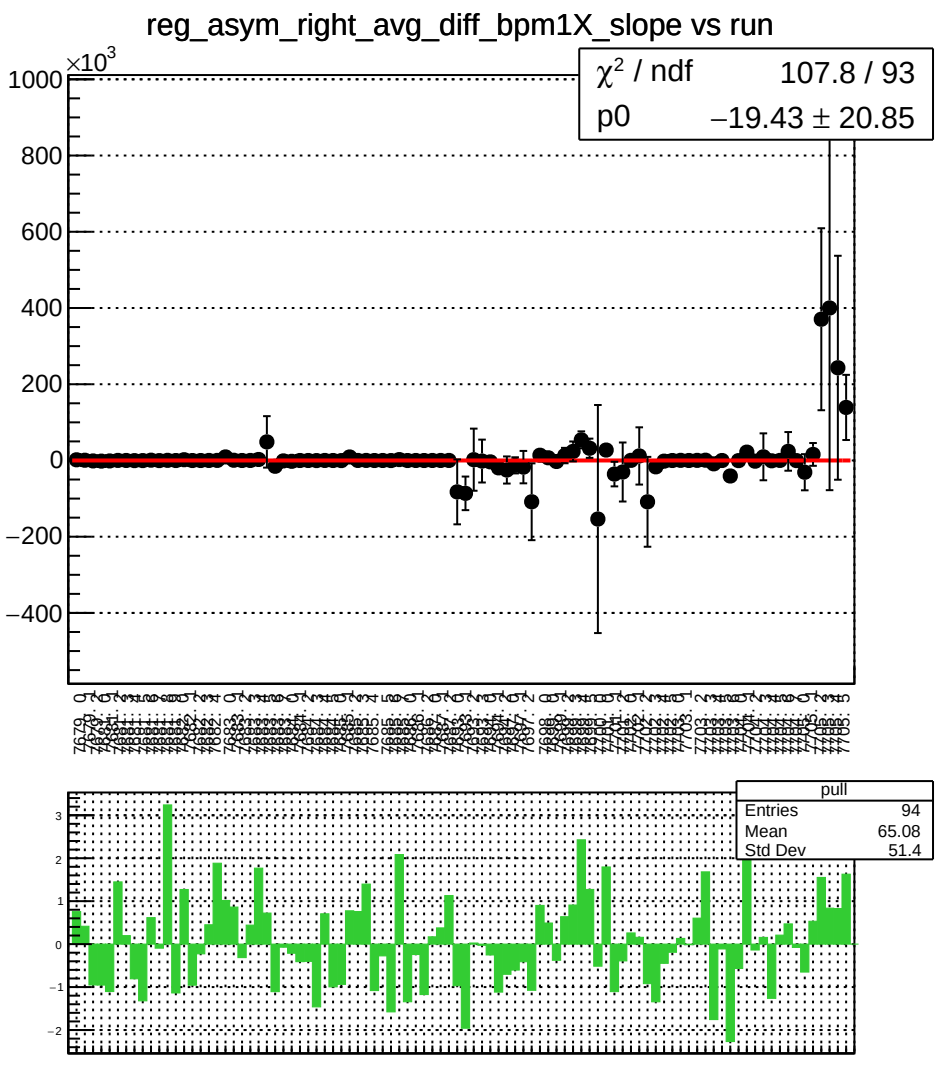

pull1D
Entries 94
Mean −0.06946
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

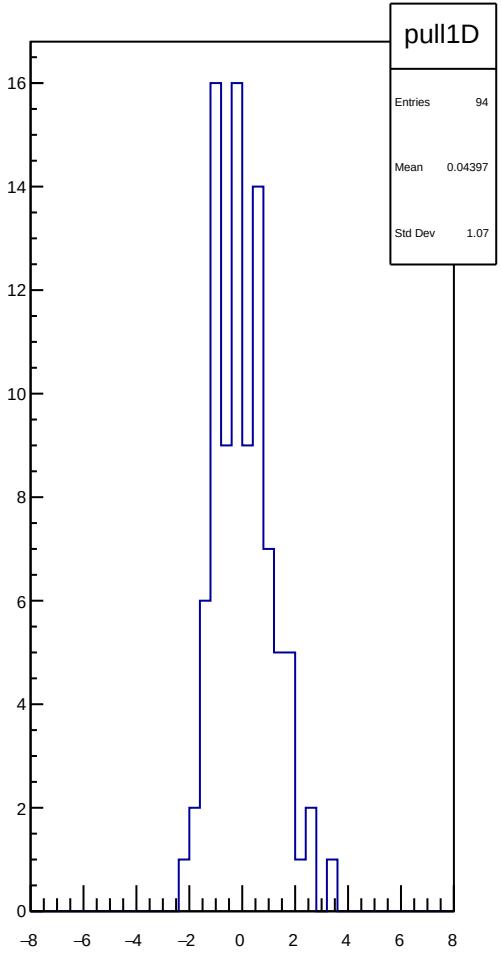

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 70.15 / 93
p0 7.708 ± 2.811
pull
Entries 94
Mean 97.67
Std Dev 33.43

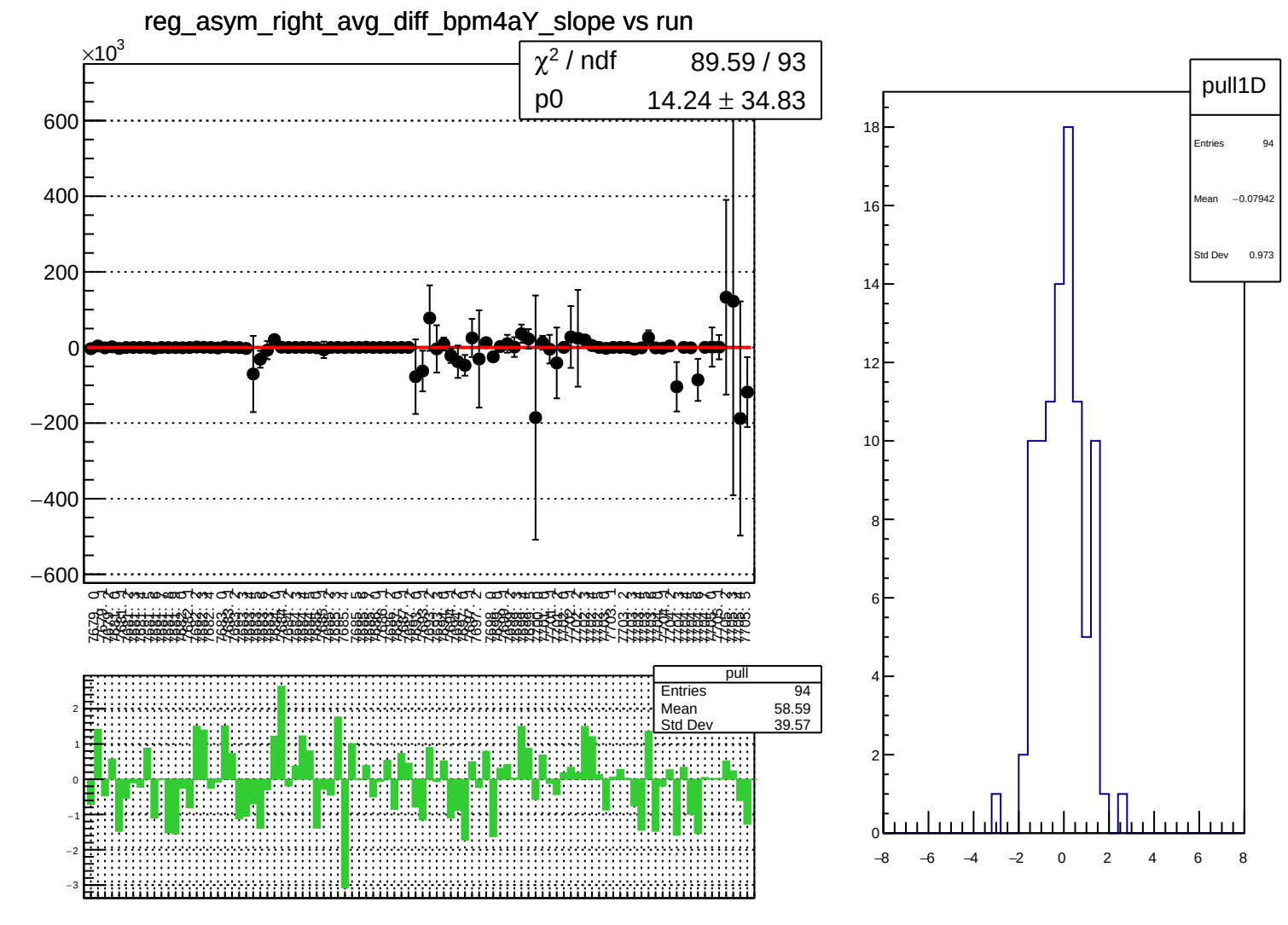

pull1D
Entries 94
Mean −0.05617
Std Dev 0.862

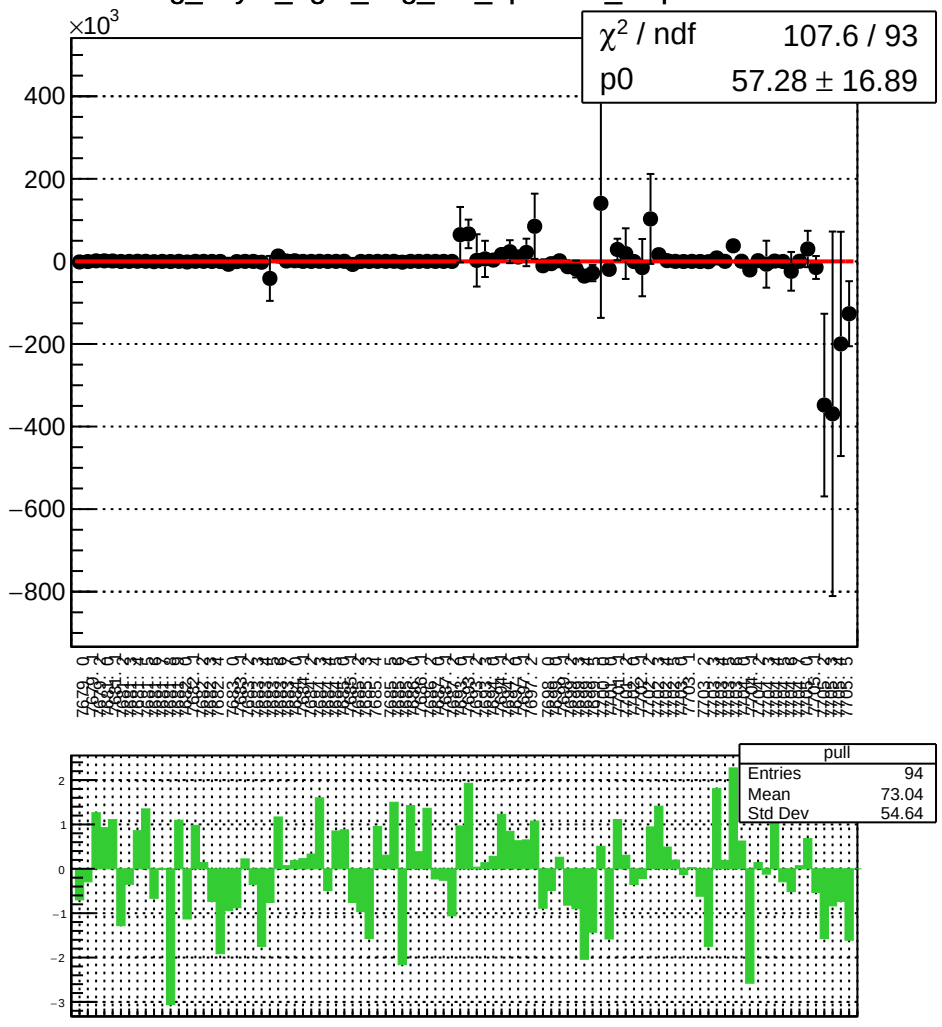

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 94.43 / 93
p0 −19.69 ± 0.1441
−10
−15
−20
−25
−30
pull
Entries 94
Mean 106.9
Std Dev 44.02
2
1
0
−1
−2

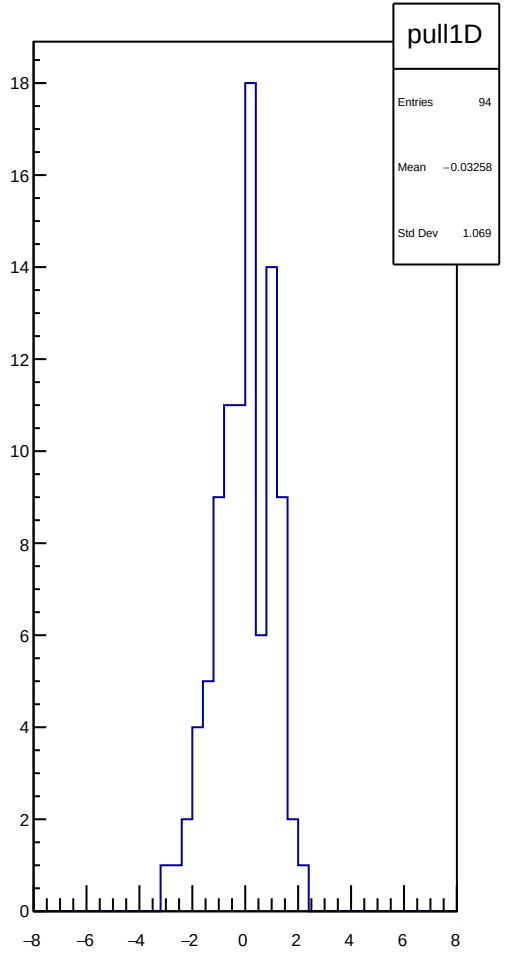

pull1D
Entries 94
Mean 0.1147
Std Dev 0.9957
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

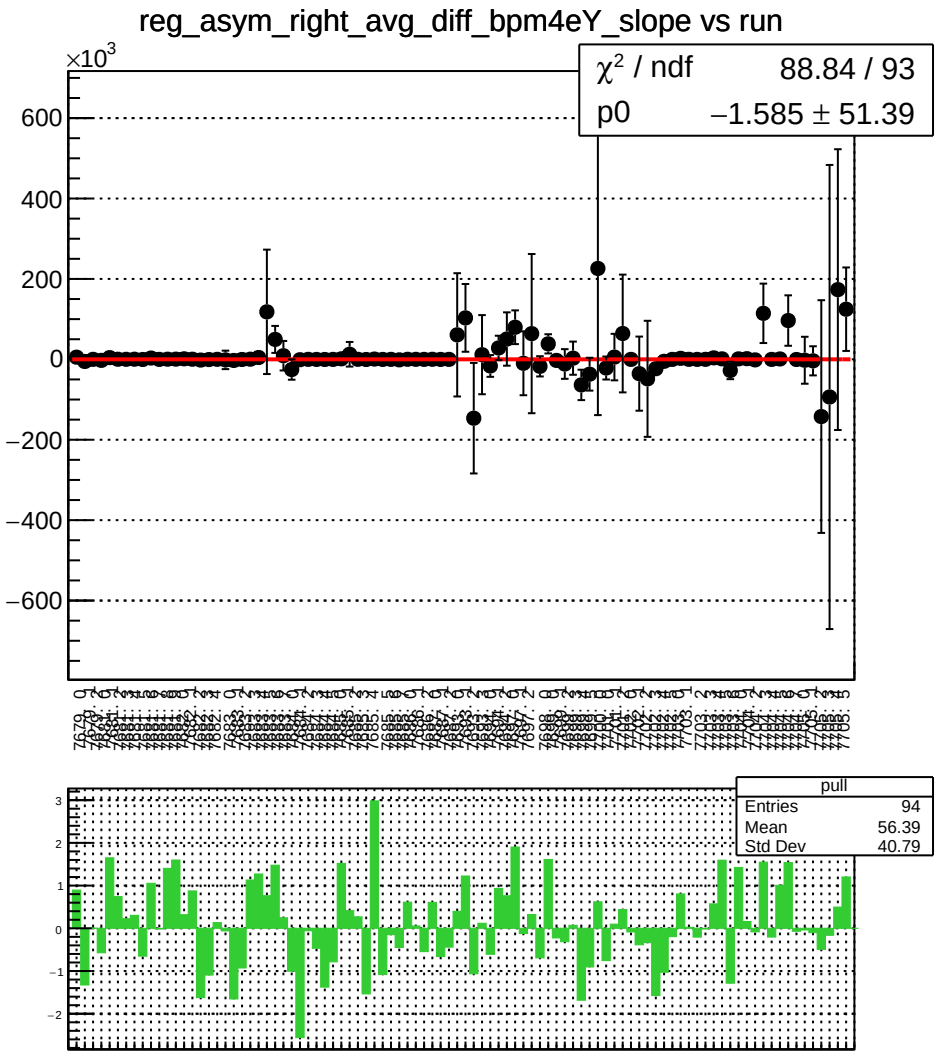

reg_asym_right_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 107.8 / 93
p0 −19.43 ± 20.85
pull
Entries 94
Mean 65.08
Std Dev 51.4

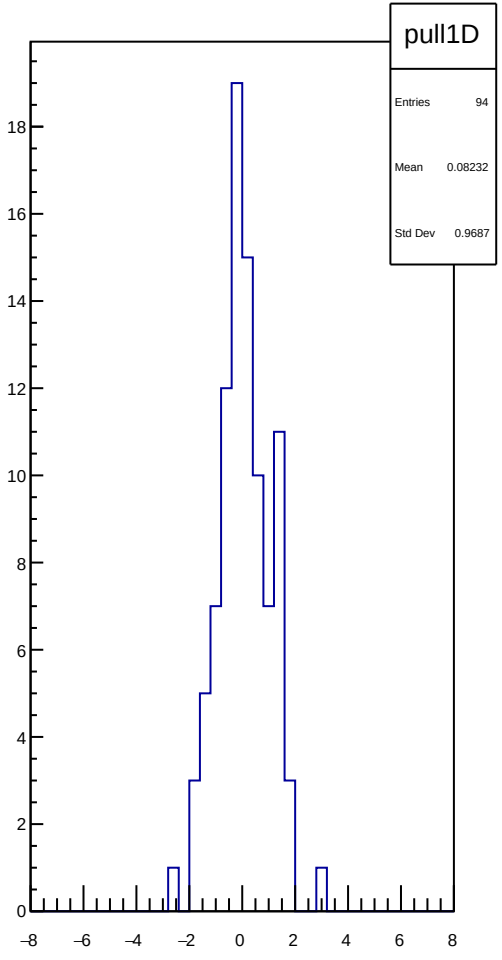

pull1D
Entries 94
Mean 0.04397
Std Dev 1.07

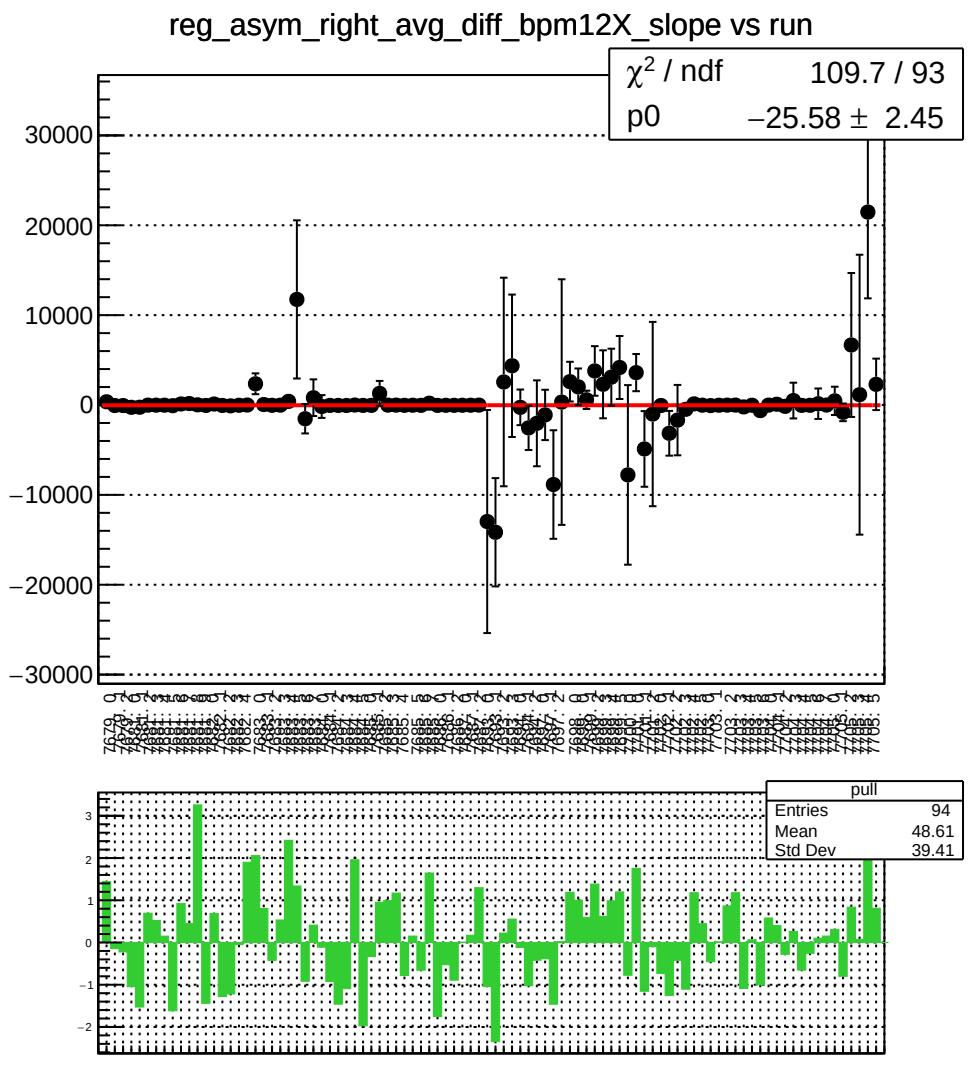

reg_asym_right_avg_diff_bpm4aY_slope vs run
×10^3
χ^2 / ndf 89.59 / 93
p0 14.24 ± 34.83
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 58.59
Std Dev 39.57
2
1
0
−1
−2
−3
pull1D
Entries 94
Mean −0.07942
Std Dev 0.973
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

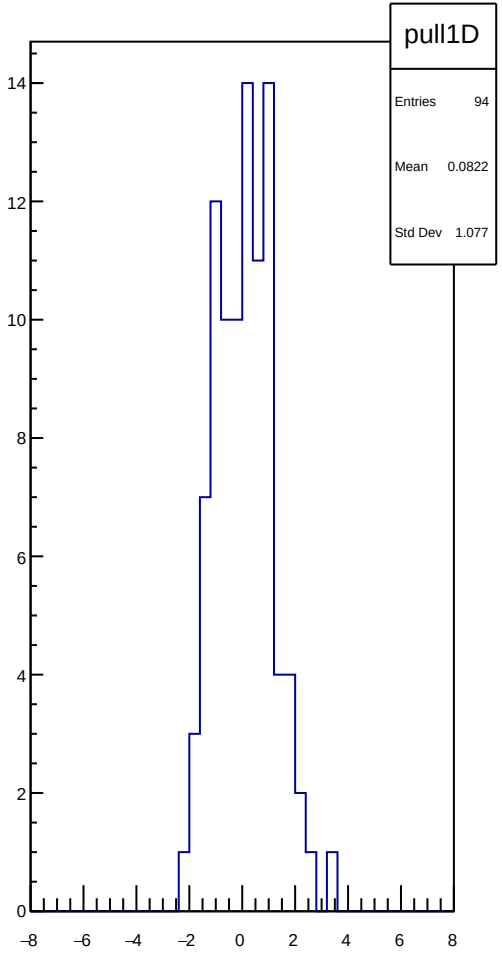

reg_asym_right_avg_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 107.6 / 93
p0 57.28 ± 16.89
400
200
0
−200
−400
−600
−800
pull
Entries 94
Mean 73.04
Std Dev 54.64
2
1
0
−1
−2
−3

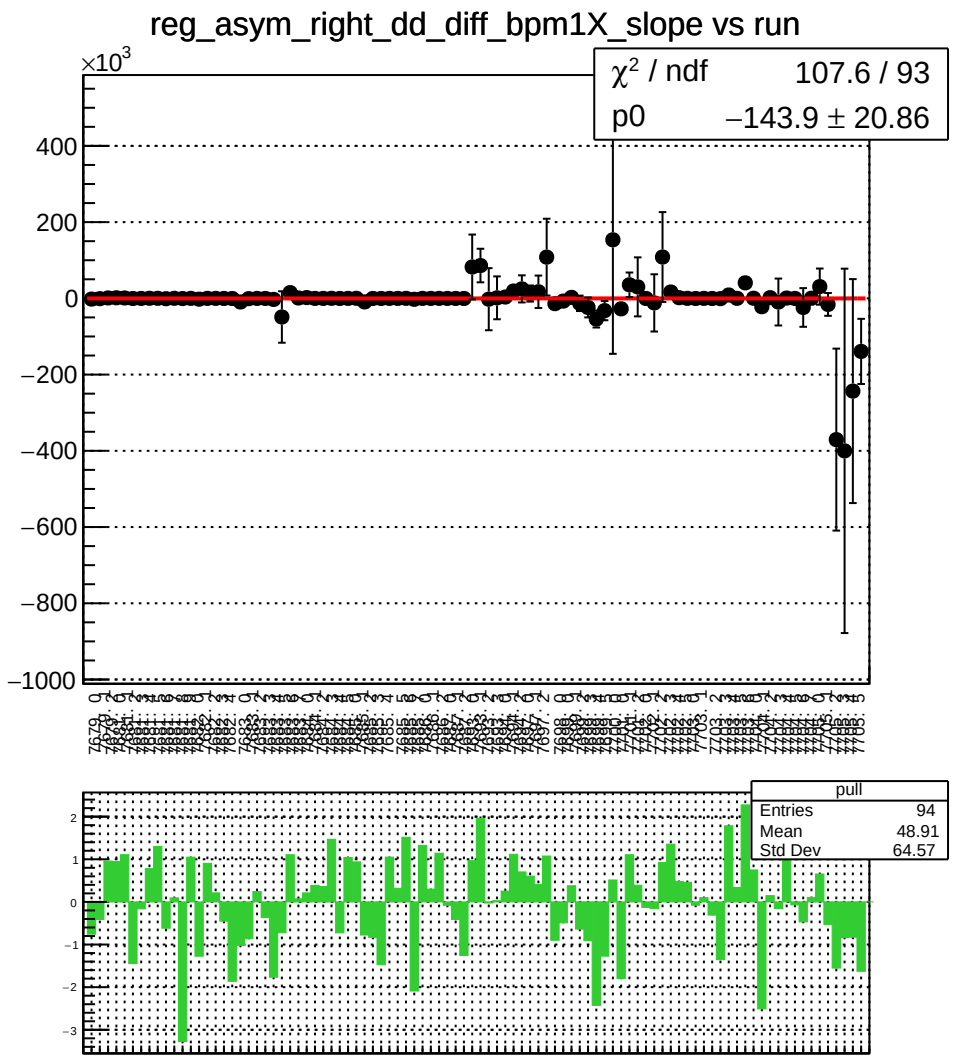

pull1D
Entries 94
Mean −0.03258
Std Dev 1.069
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

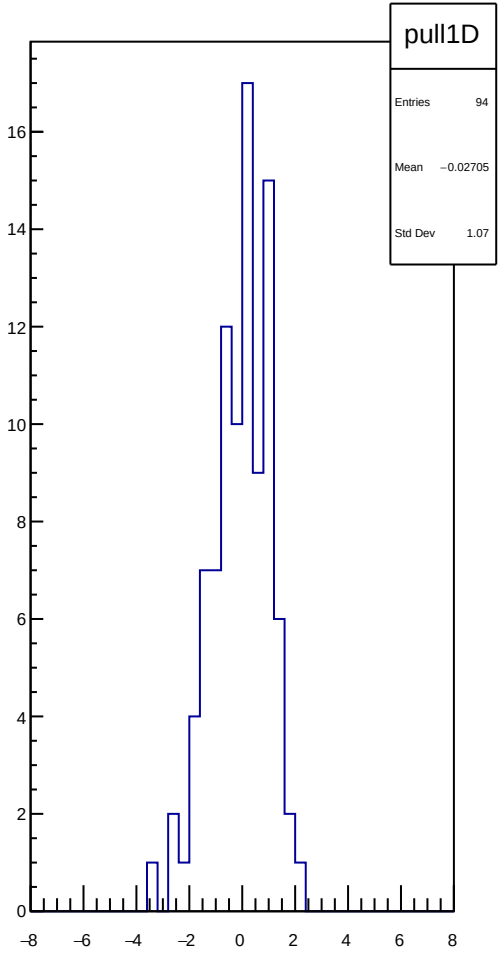

reg_asym_right_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 88.84 / 93
p0 −1.585 ± 51.39
600
400
200
0
−200
−400
−600
pull
Entries 94
Mean 56.39
Std Dev 40.79
3
2
1
0
−1
−2

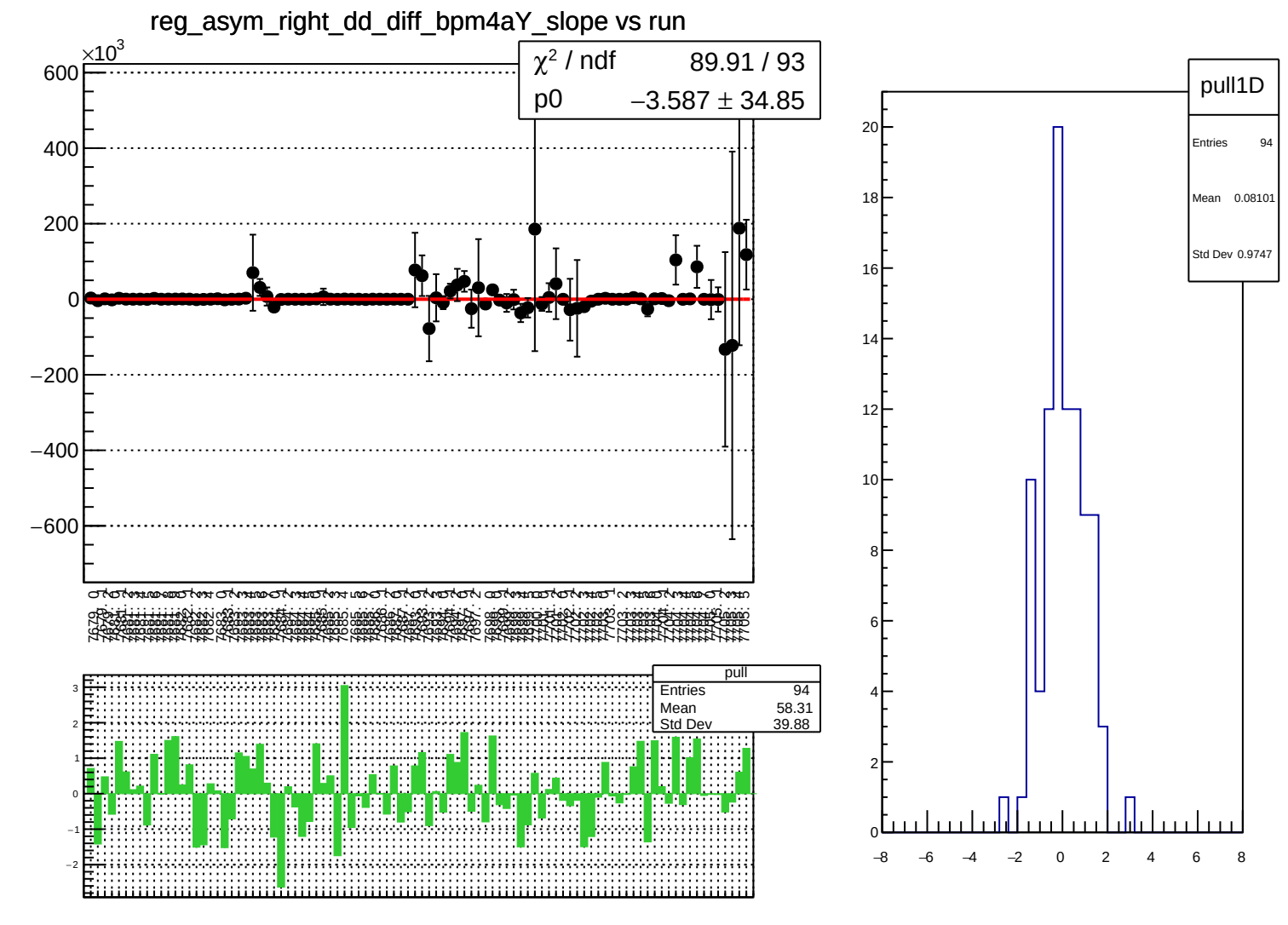

pull1D
Entries 94
Mean 0.08232
Std Dev 0.9687
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

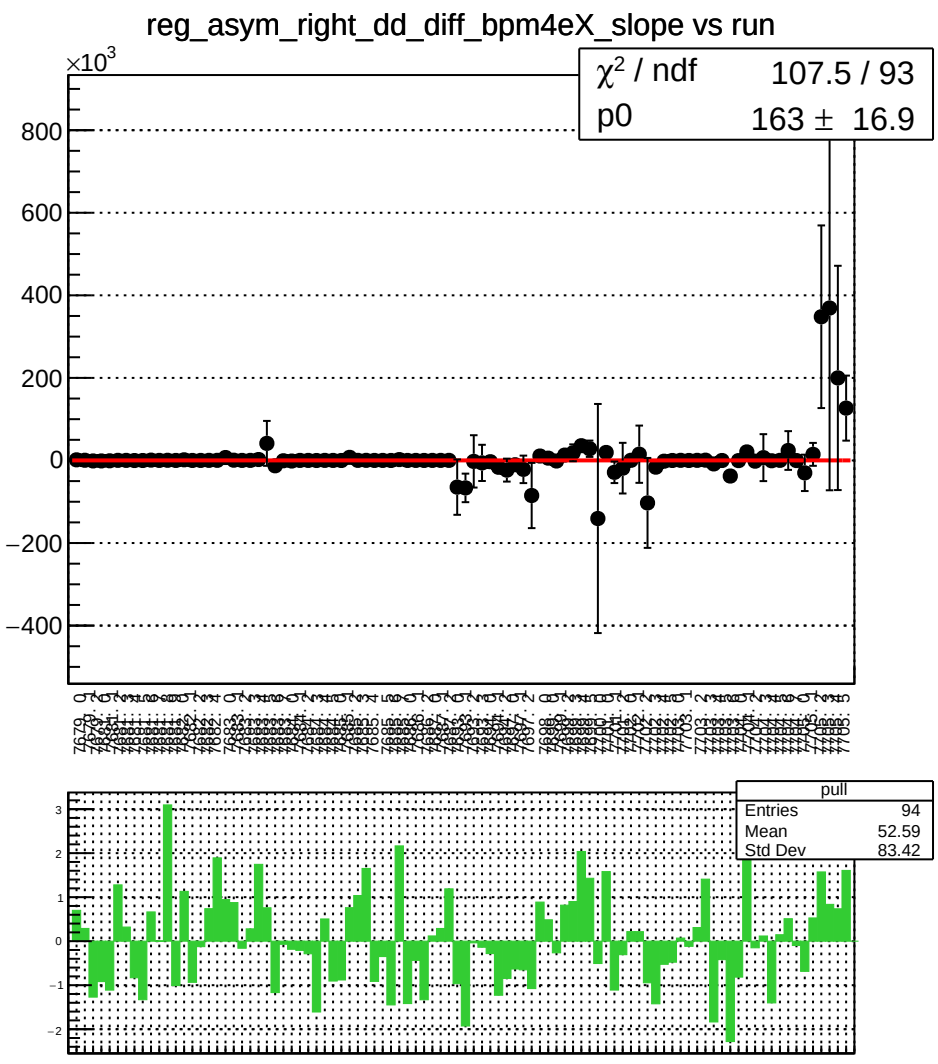

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 109.7 / 93
p0 −25.58 ± 2.45
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean 48.61
Std Dev 39.41
3
2
1
0
−1
−2

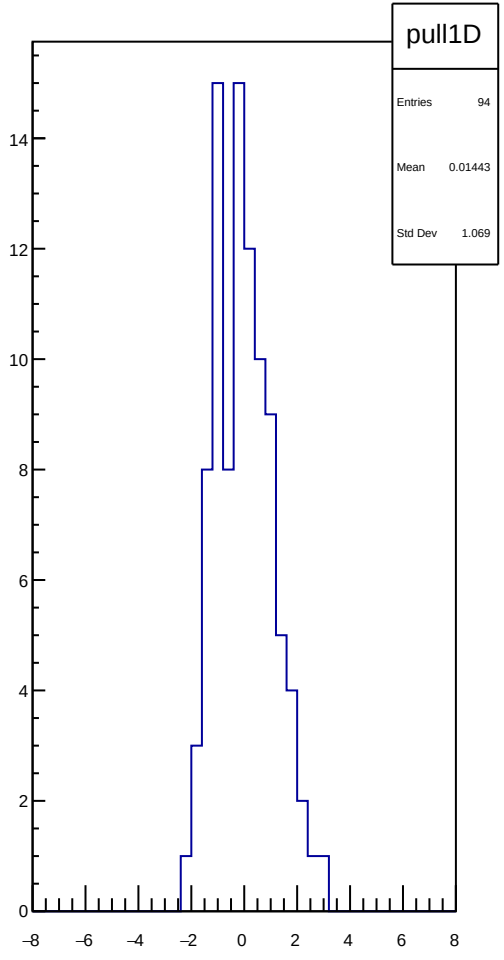

pull1D
Entries 94
Mean 0.0822
Std Dev 1.077
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

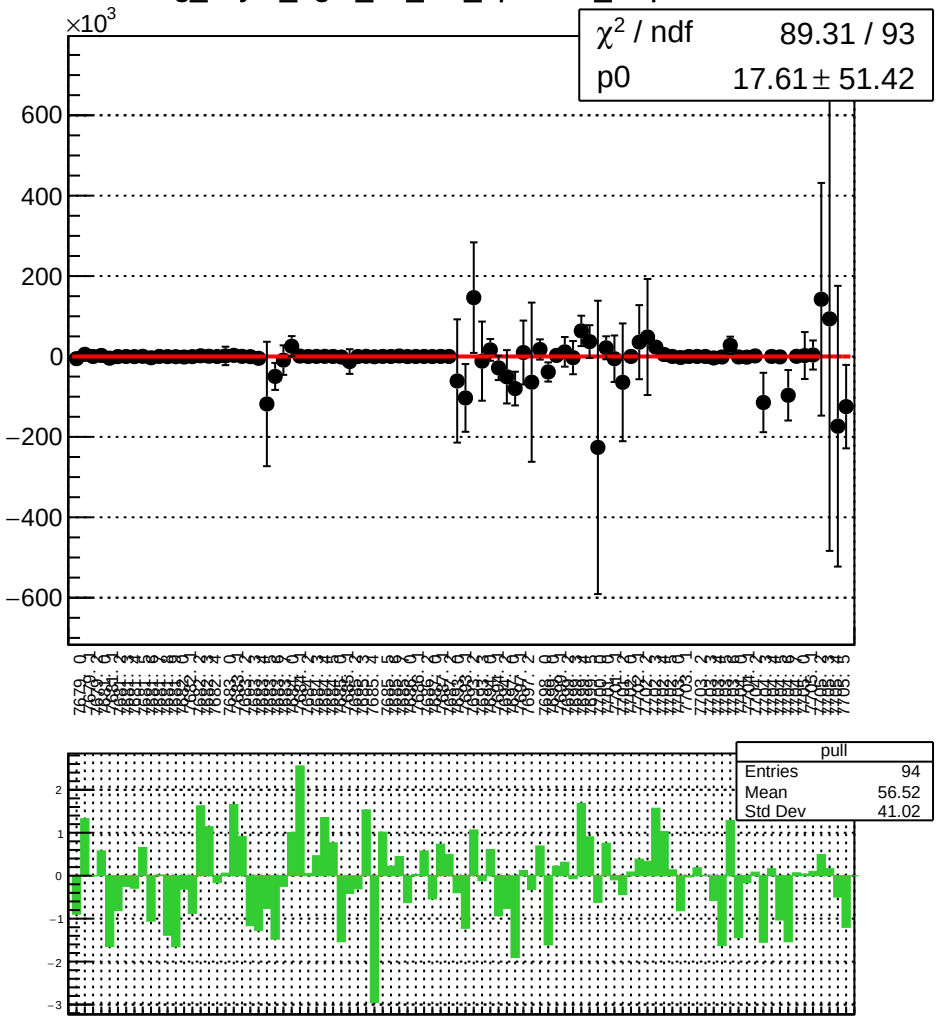

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 107.6 / 93
p0 −143.9 ± 20.86
×10³
pull
Entries 94
Mean 48.91
Std Dev 64.57

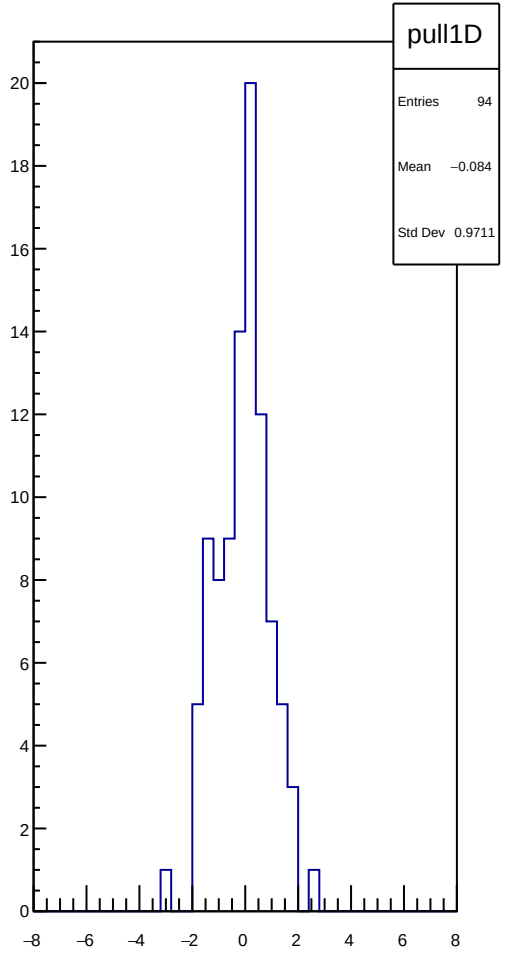

pull1D
Entries 94
Mean −0.02705
Std Dev 1.07

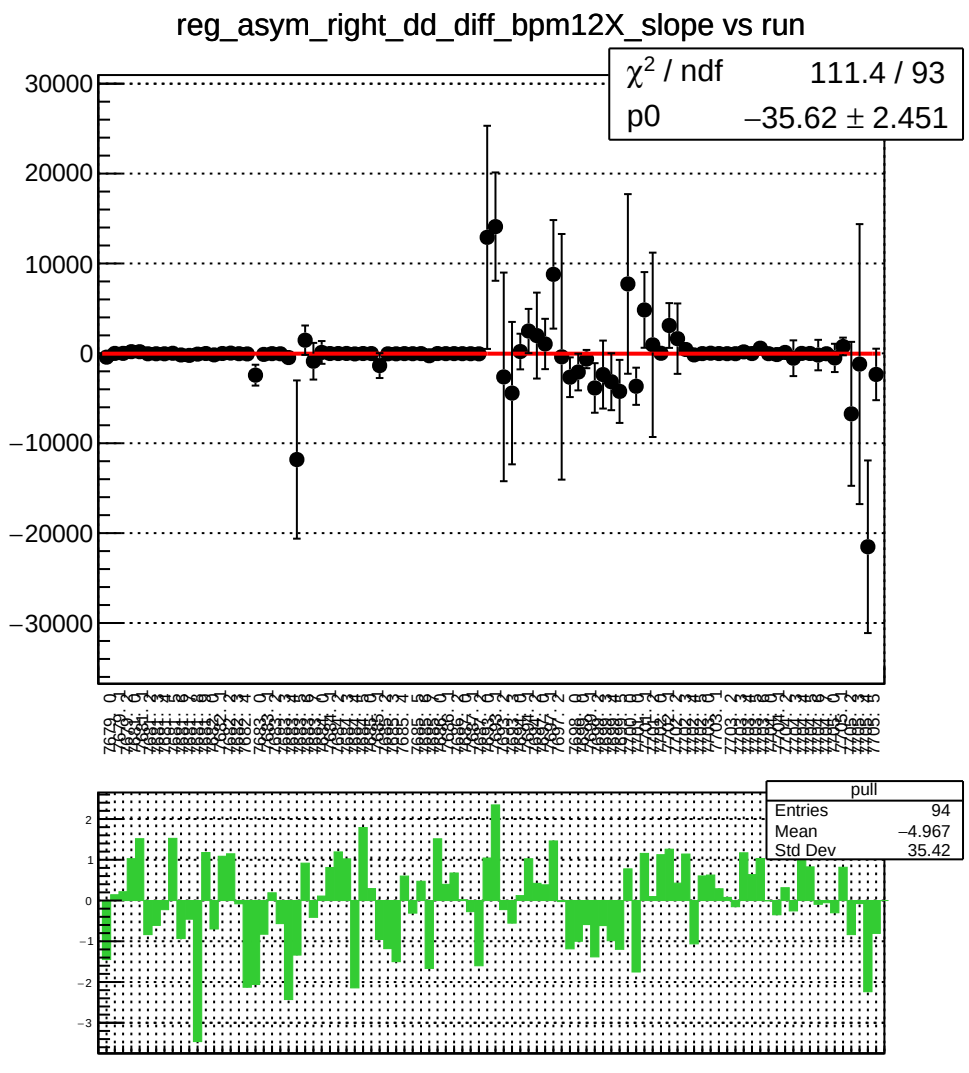

reg_asym_right_dd_diff_bpm4aY_slope vs run
×10^3
600
400
200
0
−200
−400
−600
χ² / ndf 89.91 / 93
p0 −3.587 ± 34.85
pull
Entries 94
Mean 58.31
Std Dev 39.88
3
2
1
0
−1
−2
pull1D
Entries 94
Mean 0.08101
Std Dev 0.9747
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

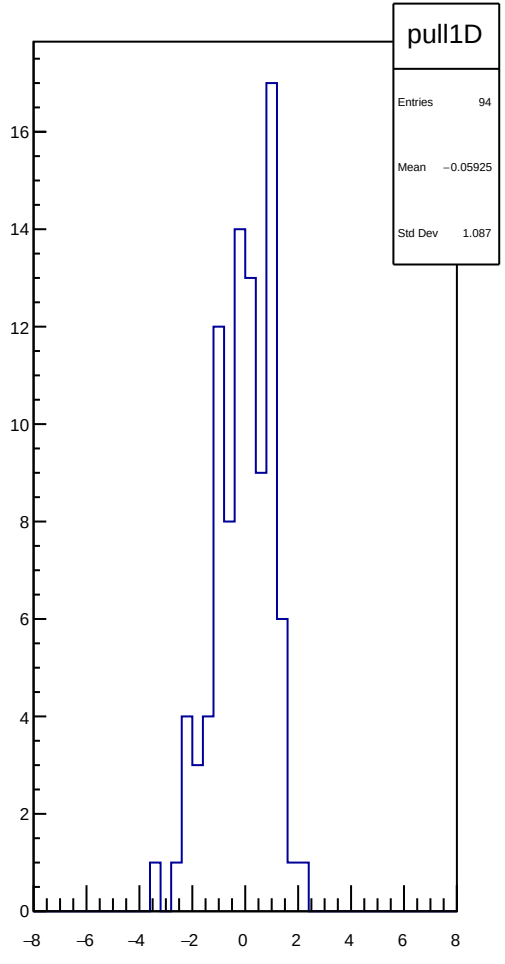

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 107.5 / 93
p0 163 ± 16.9
×10³
800
600
400
200
0
−200
−400
pull
Entries 94
Mean 52.59
Std Dev 83.42
3
2
1
0
−1
−2

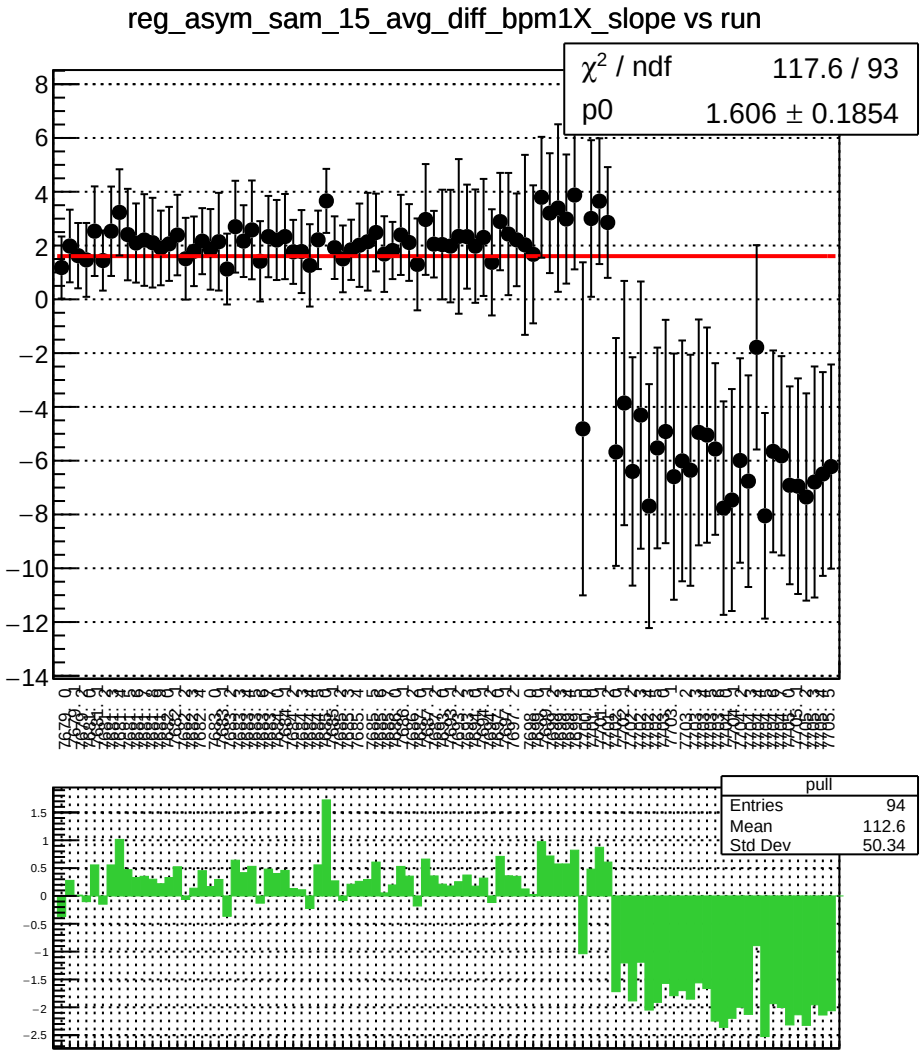

pull1D
Entries 94
Mean 0.01443
Std Dev 1.069
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

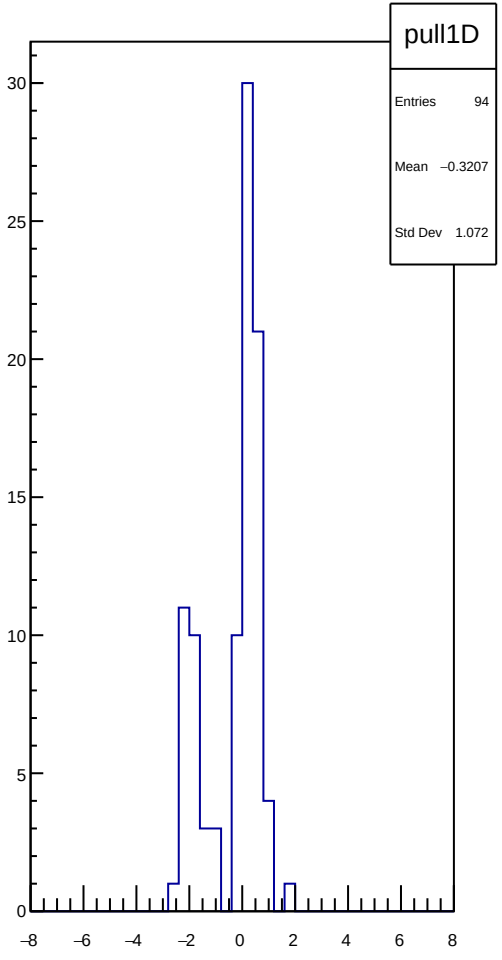

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 89.31 / 93
p0 17.61 ± 51.42
×10³
pull
Entries 94
Mean 56.52
Std Dev 41.02

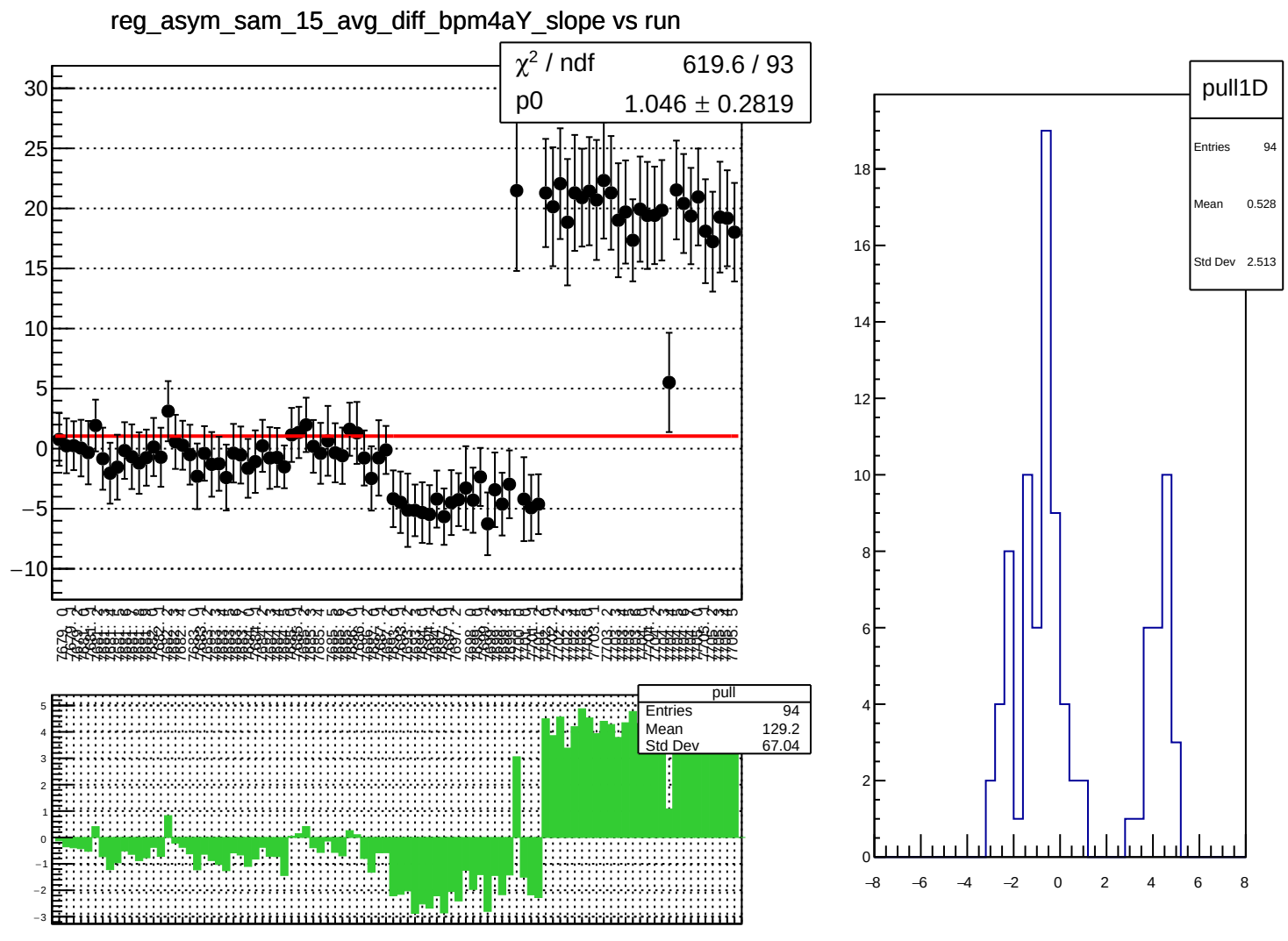

pull1D
Entries 94
Mean −0.084
Std Dev 0.9711

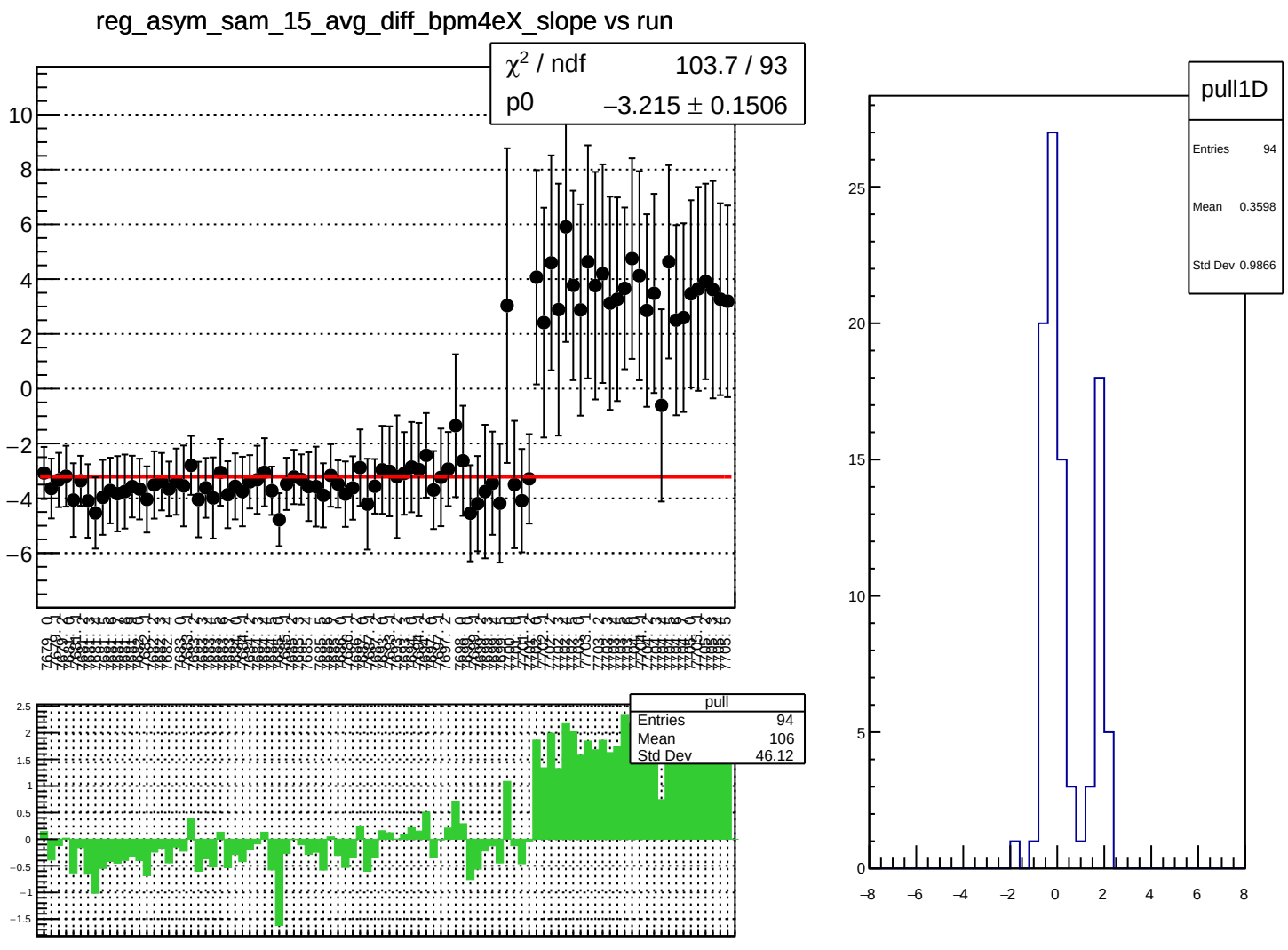

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 111.4 / 93
p0 −35.62 ± 2.451
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 94
Mean −4.967
Std Dev 35.42
2
1
0
−1
−2
−3

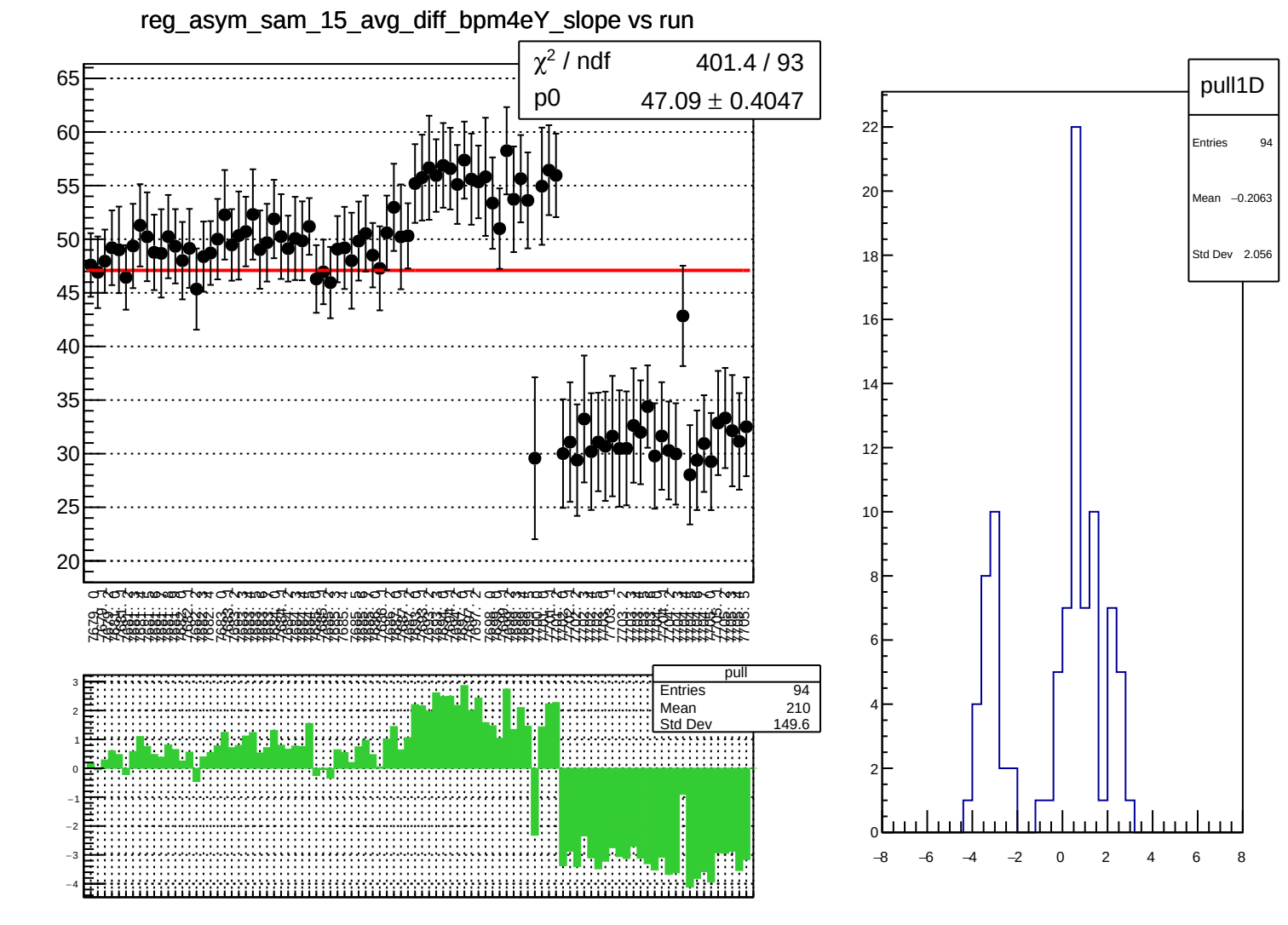

pull1D
Entries 94
Mean −0.05925
Std Dev 1.087
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

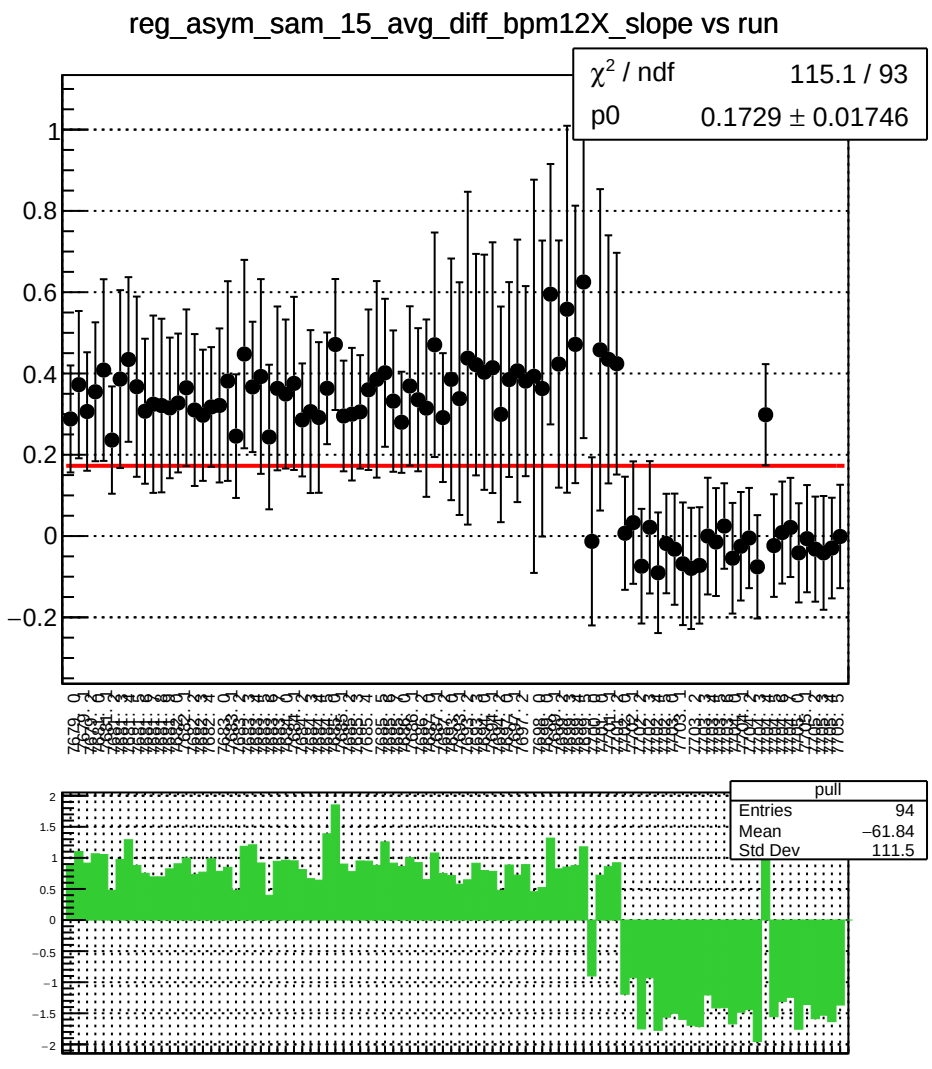

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 117.6 / 93
p0 1.606 ± 0.1854
pull
Entries 94
Mean 112.6
Std Dev 50.34

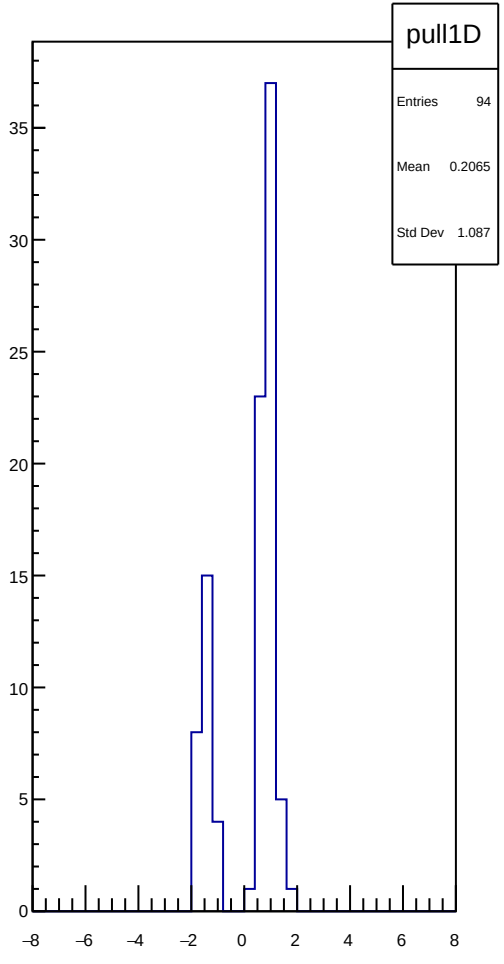

pull1D
Entries 94
Mean −0.3207
Std Dev 1.072

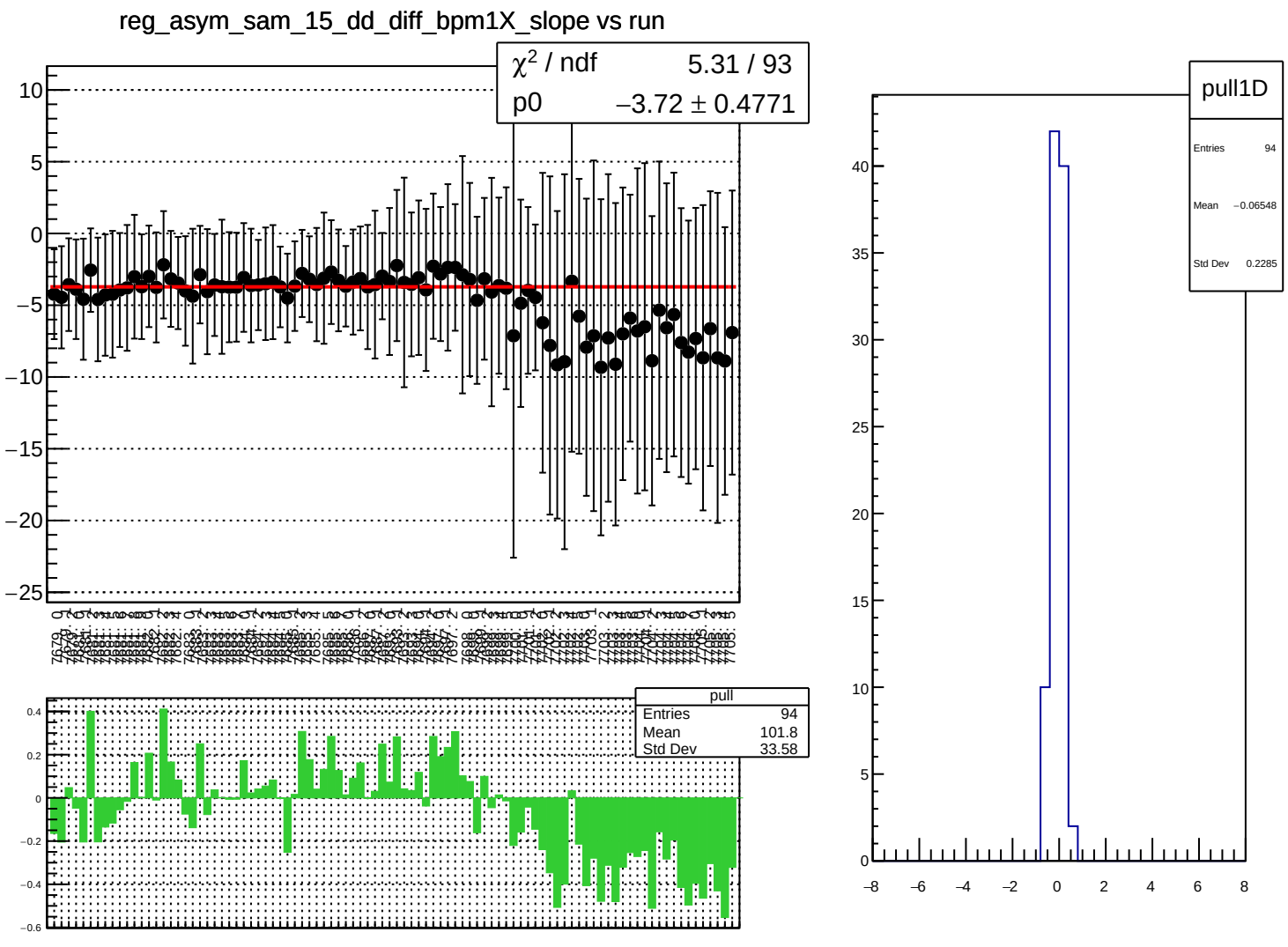

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 619.6 / 93
p0 1.046 ± 0.2819
pull
Entries 94
Mean 129.2
Std Dev 67.04
pull1D
Entries 94
Mean 0.528
Std Dev 2.513

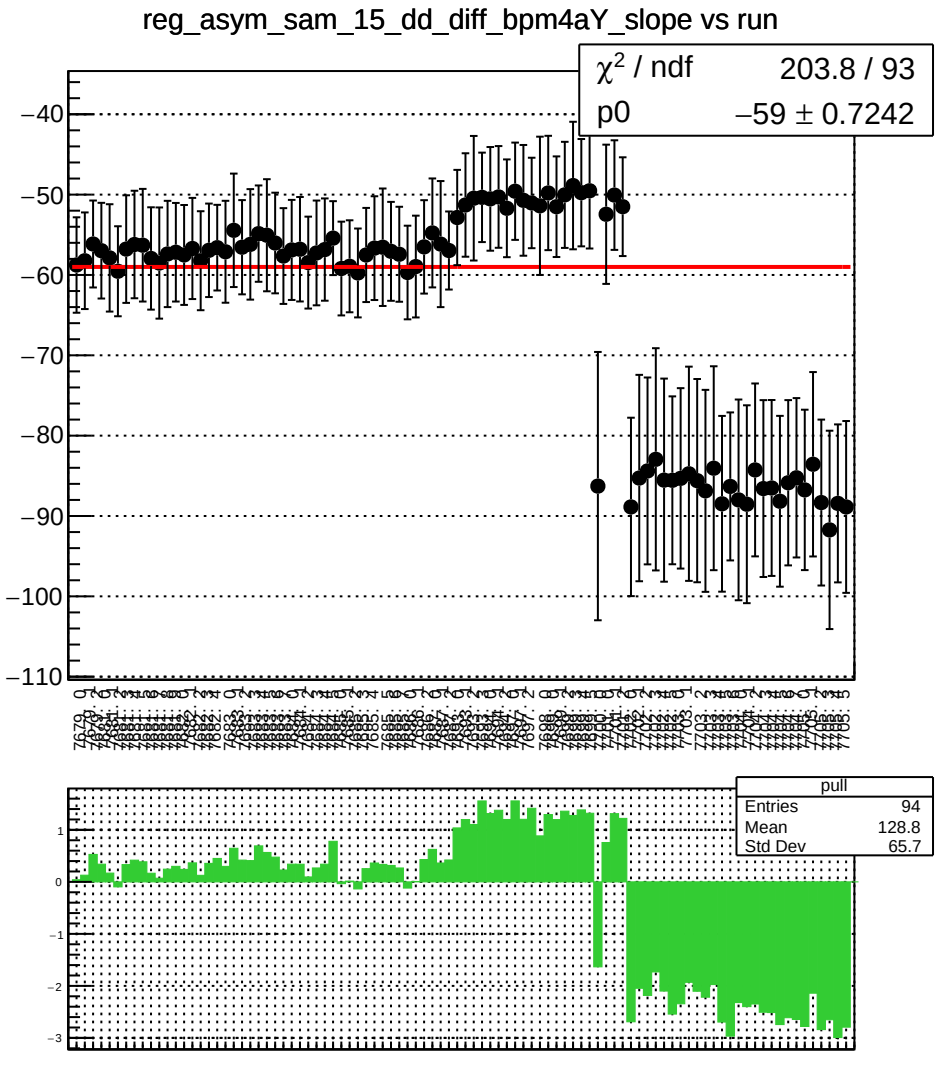

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 103.7 / 93
p0 −3.215 ± 0.1506
pull
Entries 94
Mean 106
Std Dev 46.12
pull1D
Entries 94
Mean 0.3598
Std Dev 0.9866

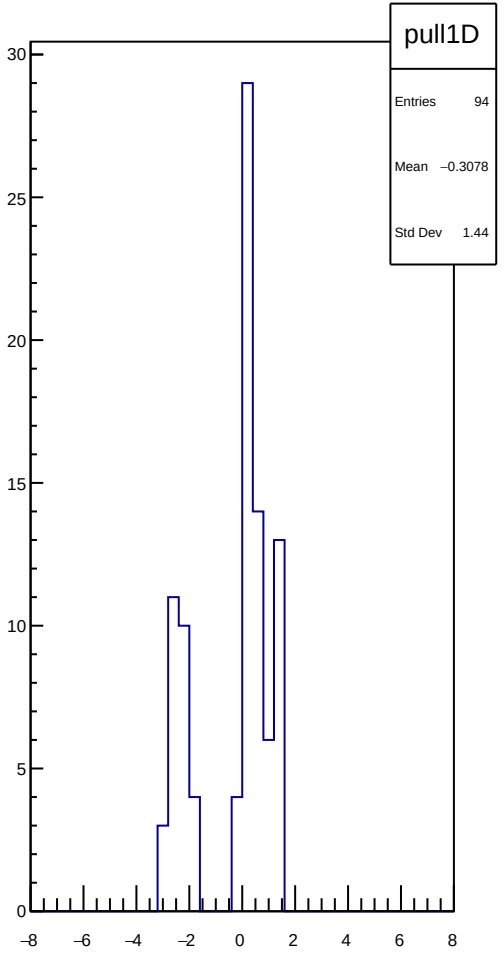

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 401.4 / 93
p0 47.09 ± 0.4047
pull
Entries 94
Mean 210
Std Dev 149.6
pull1D
Entries 94
Mean −0.2063
Std Dev 2.056

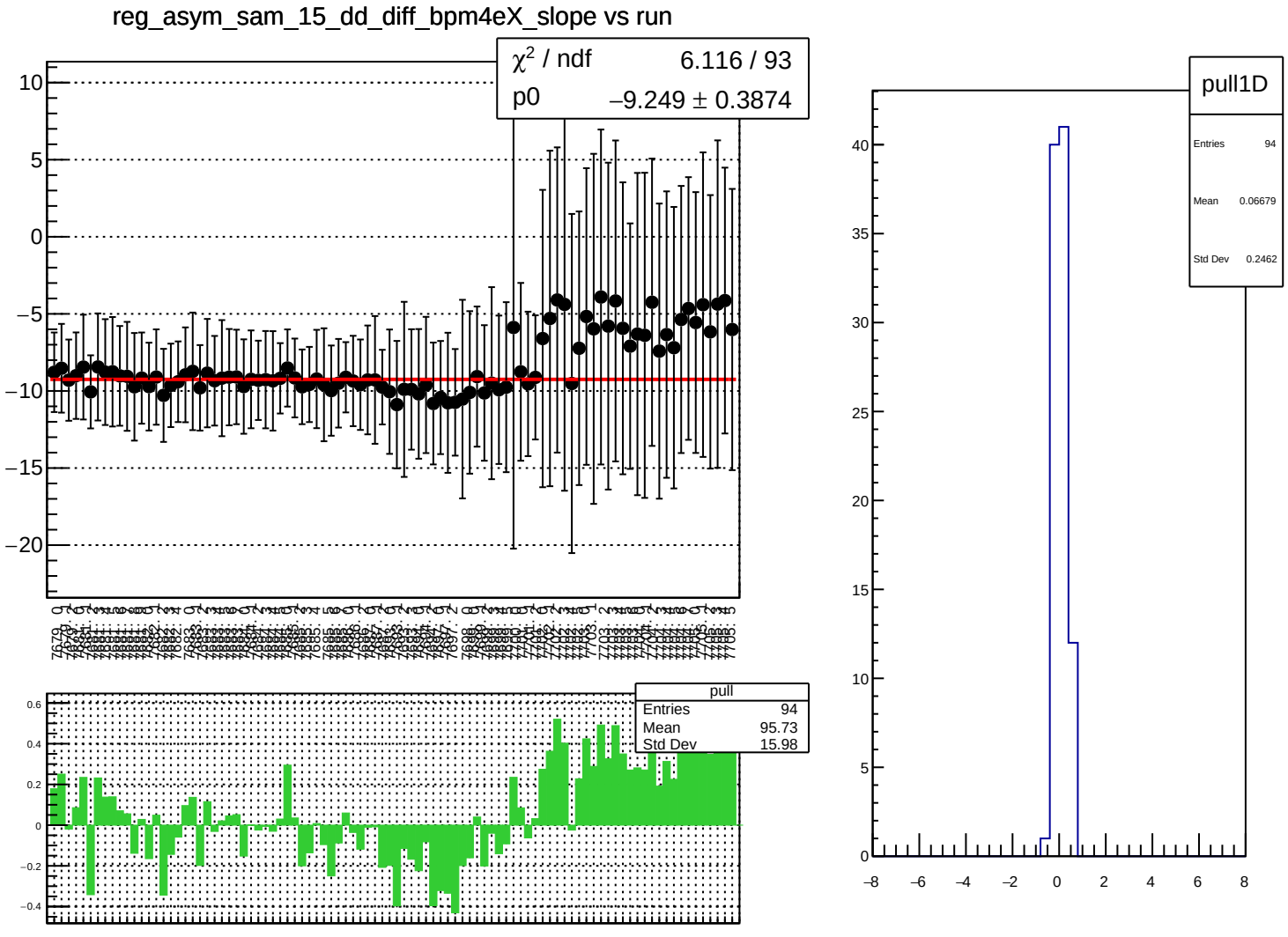

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 115.1 / 93
p0 0.1729 ± 0.01746
pull
Entries 94
Mean −61.84
Std Dev 111.5

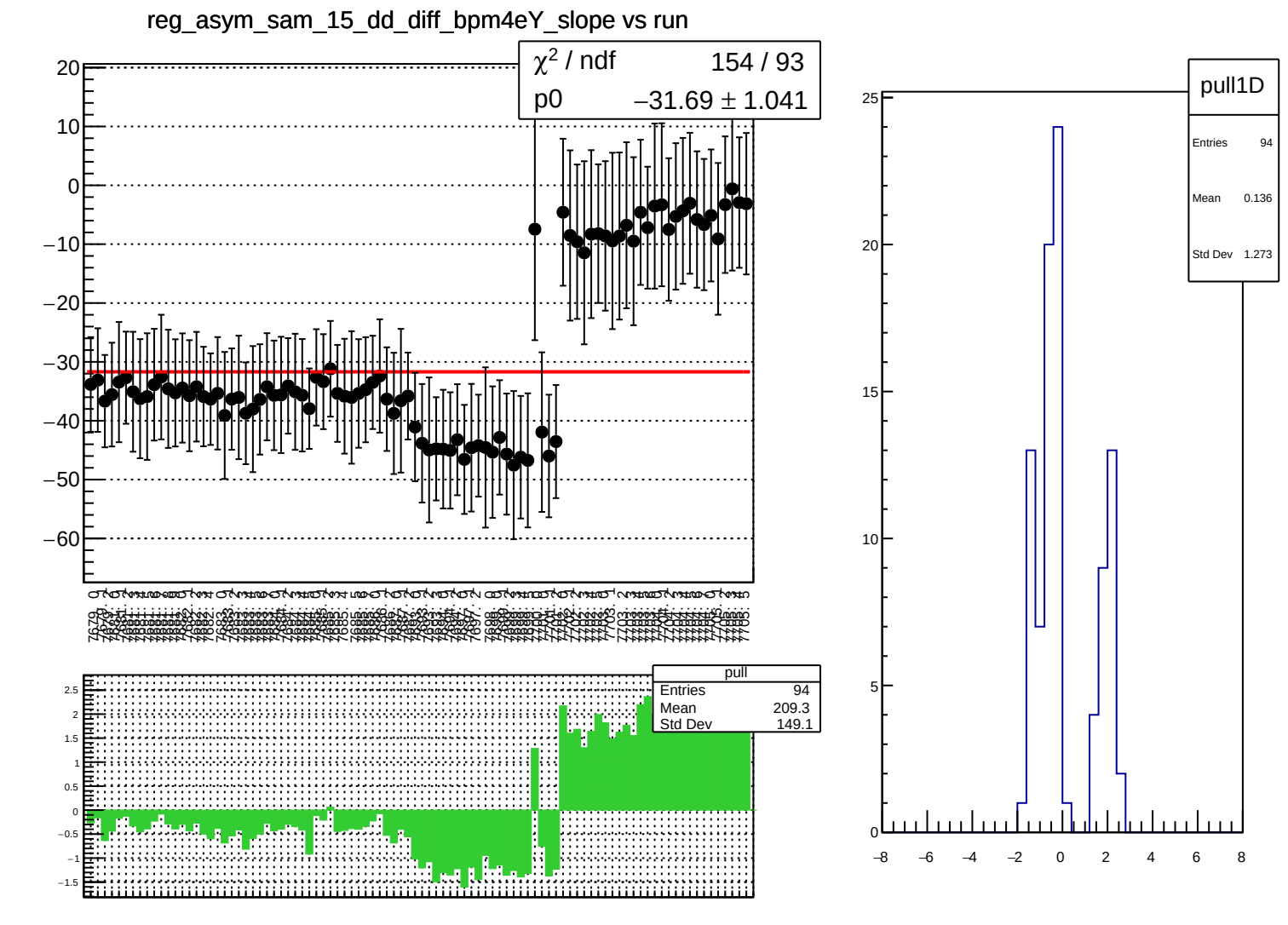

pull1D
Entries 94
Mean 0.2065
Std Dev 1.087

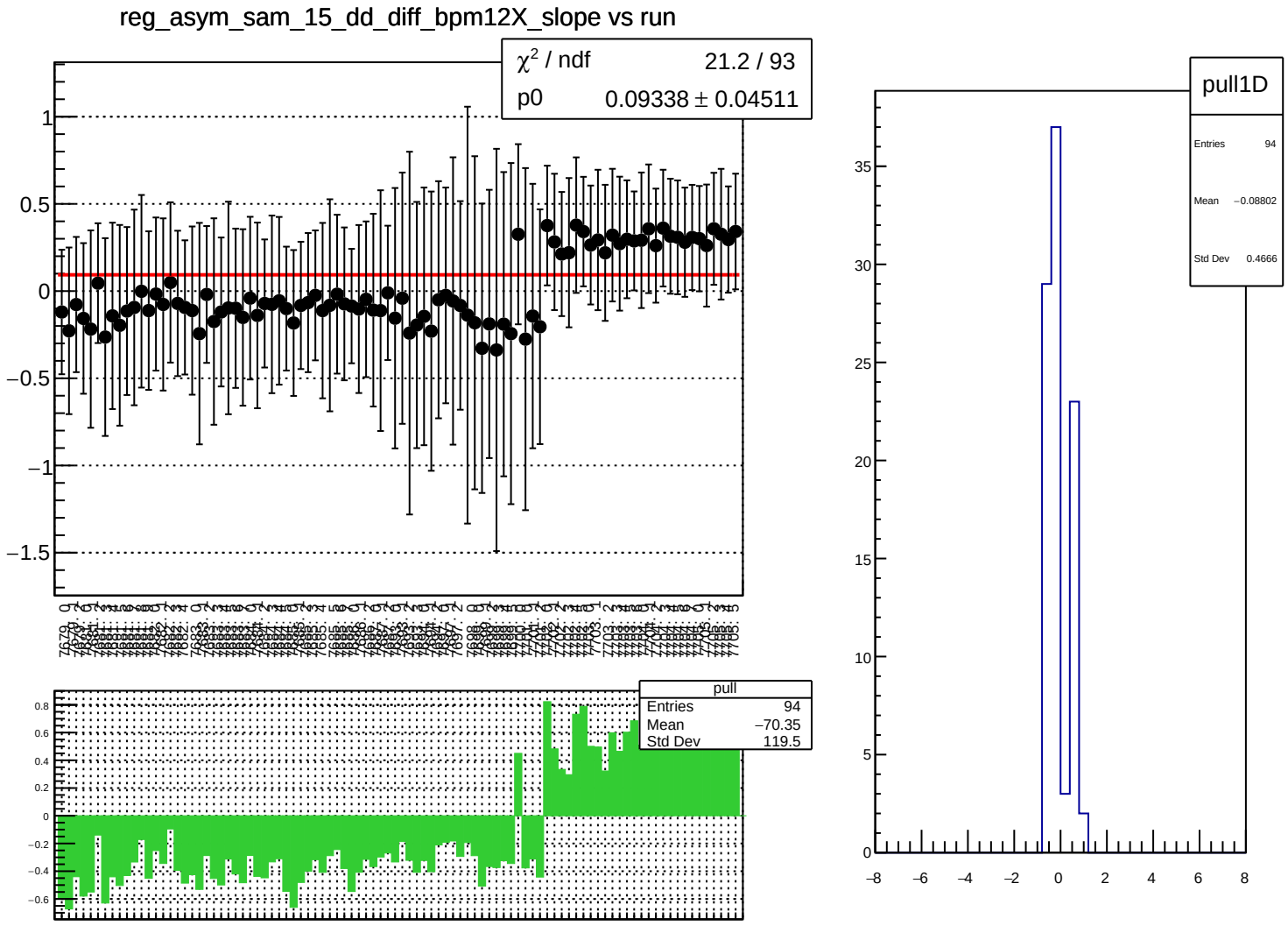

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 5.31 / 93
p0 −3.72 ± 0.4771
pull
Entries 94
Mean 101.8
Std Dev 33.58
pull1D
Entries 94
Mean −0.06548
Std Dev 0.2285

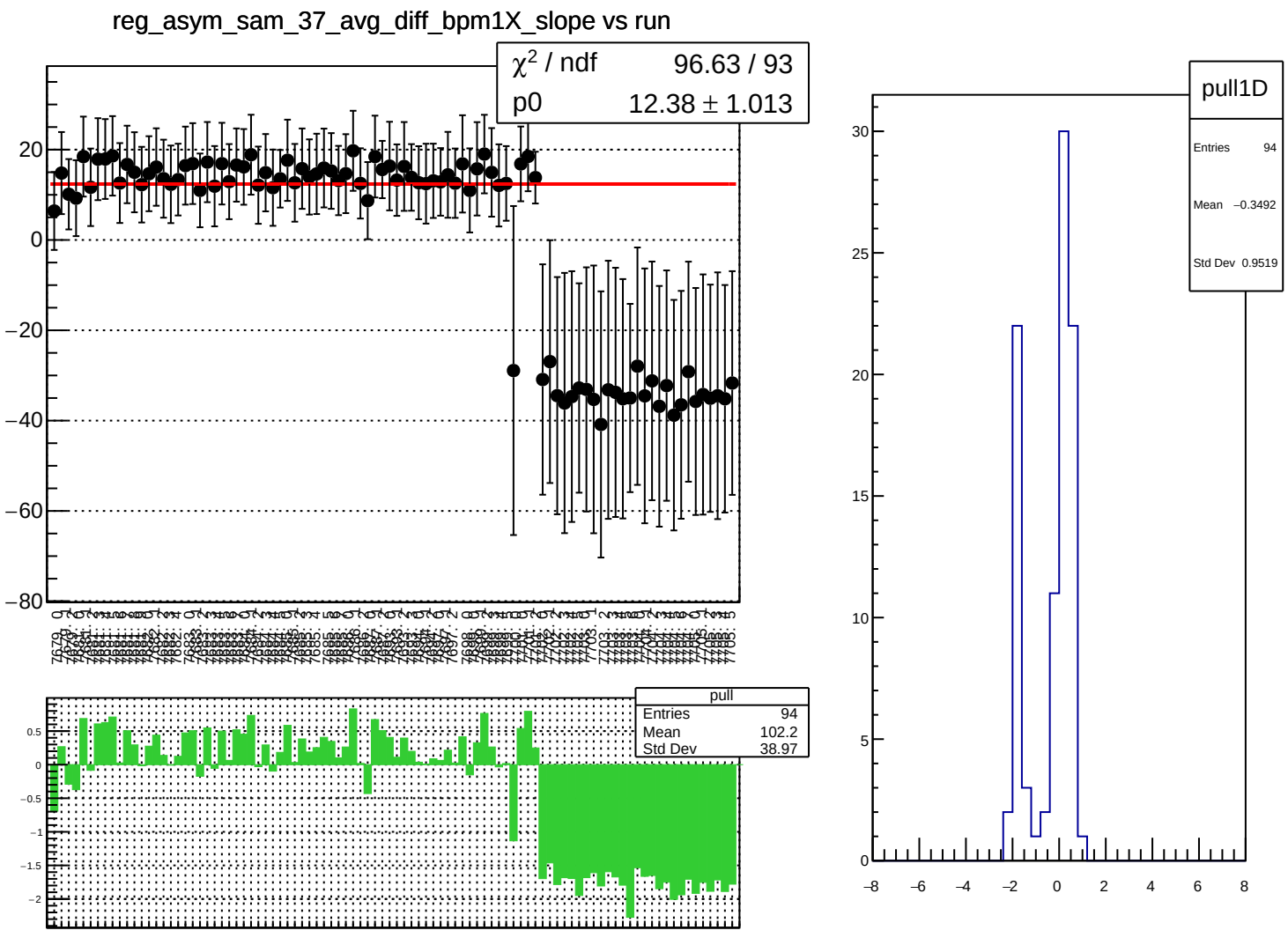

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 203.8 / 93
p0 −59 ± 0.7242
pull
Entries 94
Mean 128.8
Std Dev 65.7

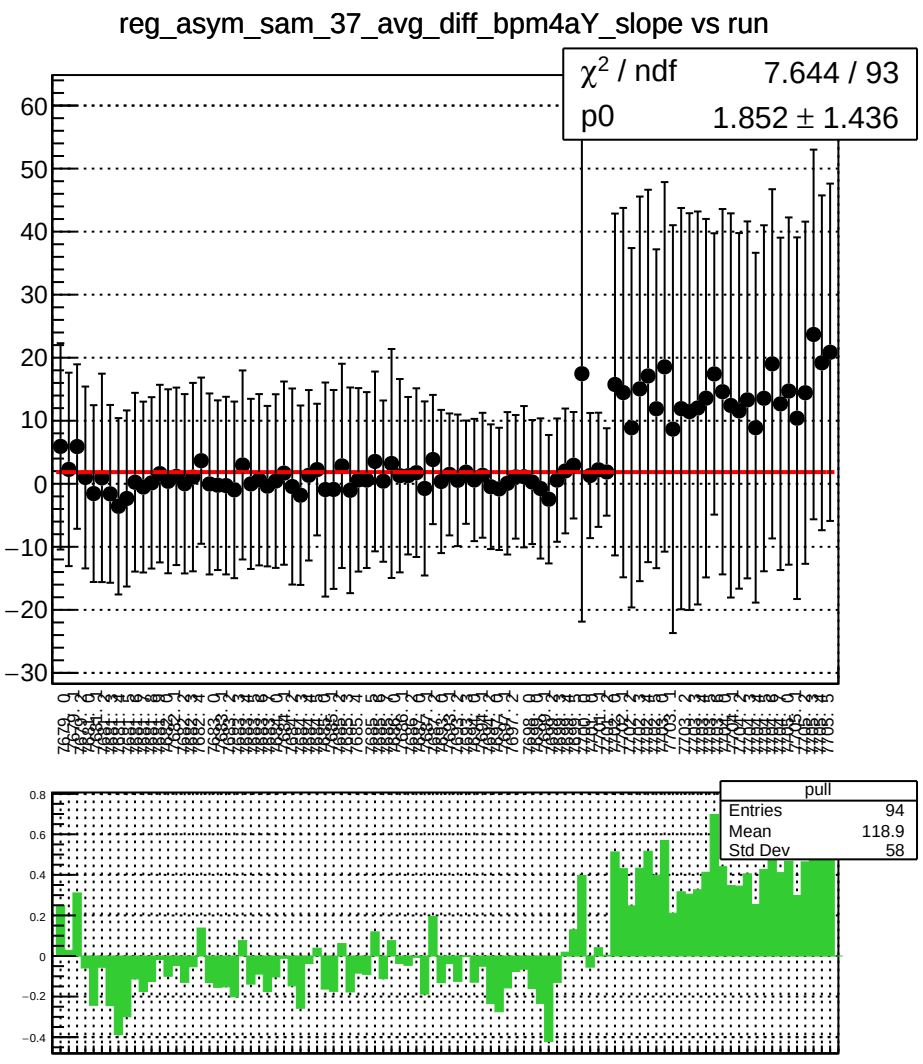

pull1D
Entries 94
Mean −0.3078
Std Dev 1.44

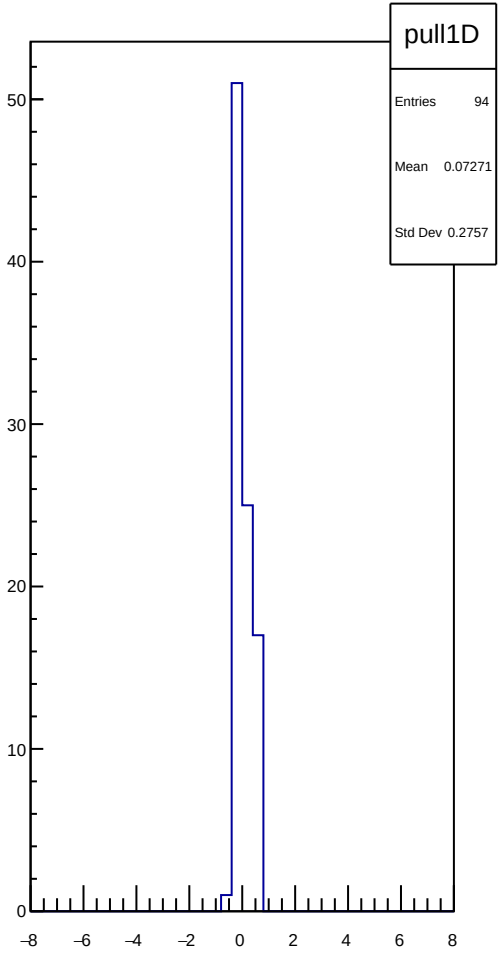

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 6.116 / 93
p0 −9.249 ± 0.3874
pull
Entries 94
Mean 95.73
Std Dev 15.98
pull1D
Entries 94
Mean 0.06679
Std Dev 0.2462

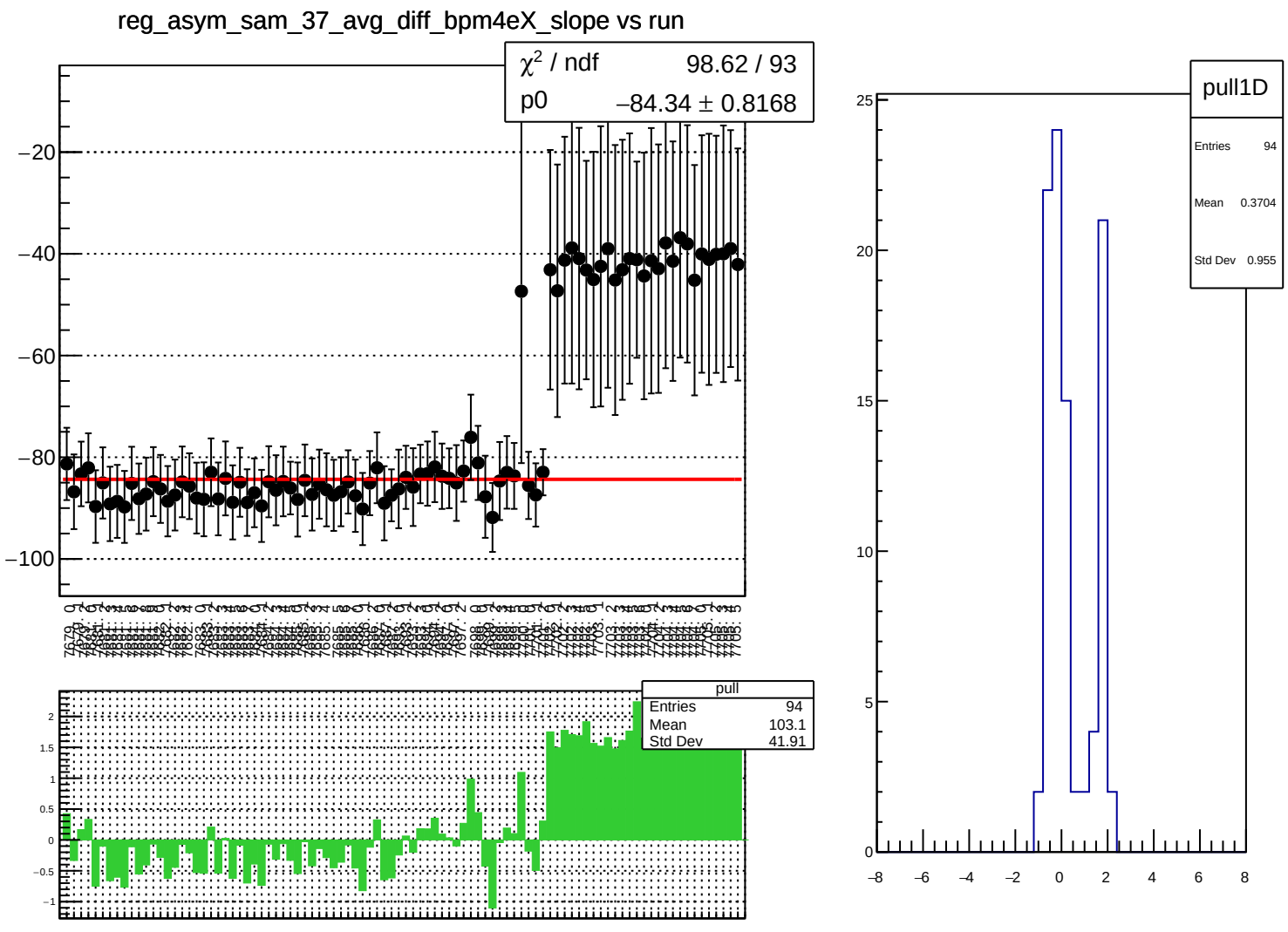

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 154 / 93
p0 −31.69 ± 1.041
pull
Entries 94
Mean 209.3
Std Dev 149.1
pull1D
Entries 94
Mean 0.136
Std Dev 1.273

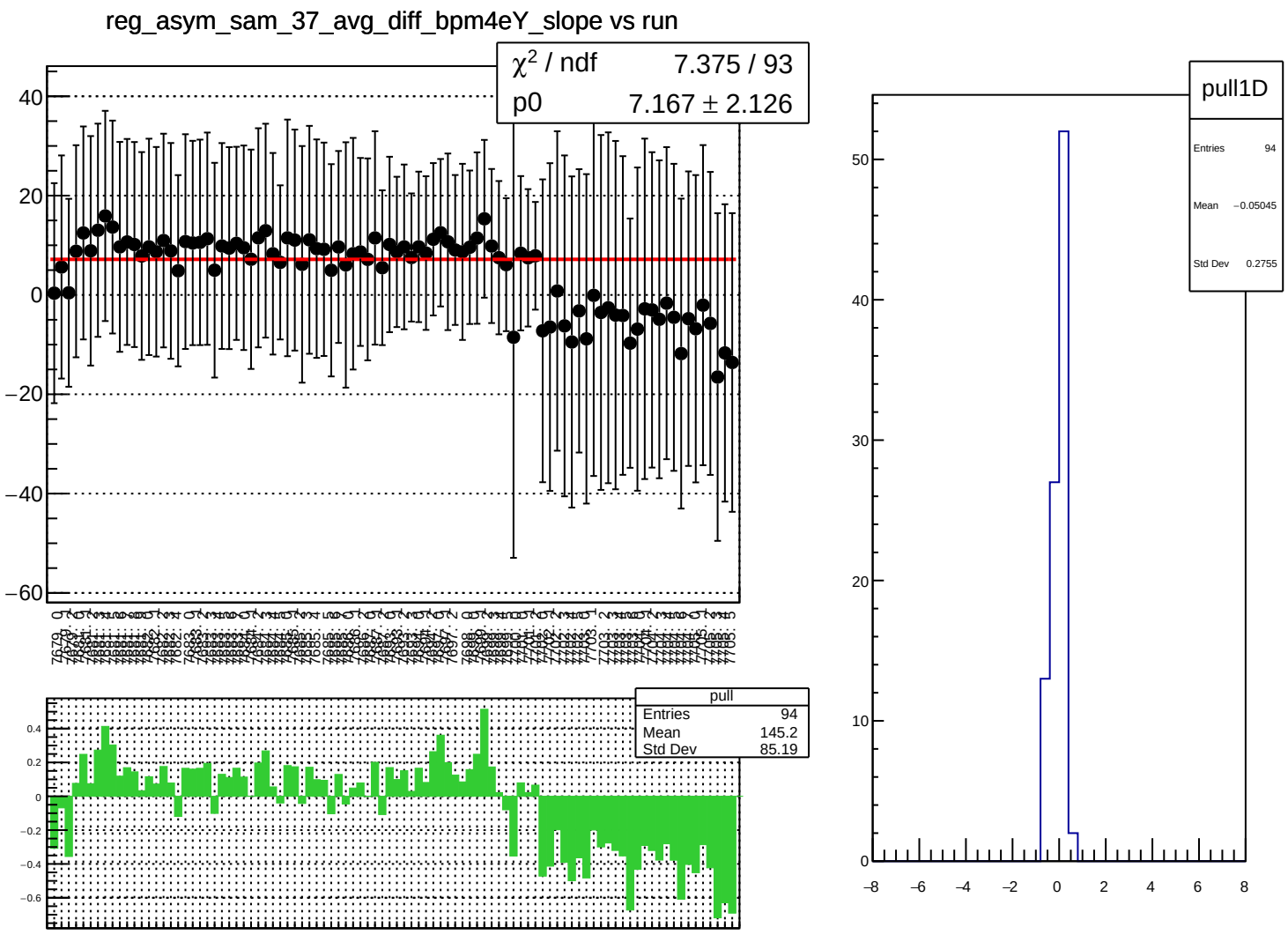

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 21.2 / 93
p0 0.09338 ± 0.04511
pull
Entries 94
Mean −70.35
Std Dev 119.5
pull1D
Entries 94
Mean −0.08802
Std Dev 0.4666

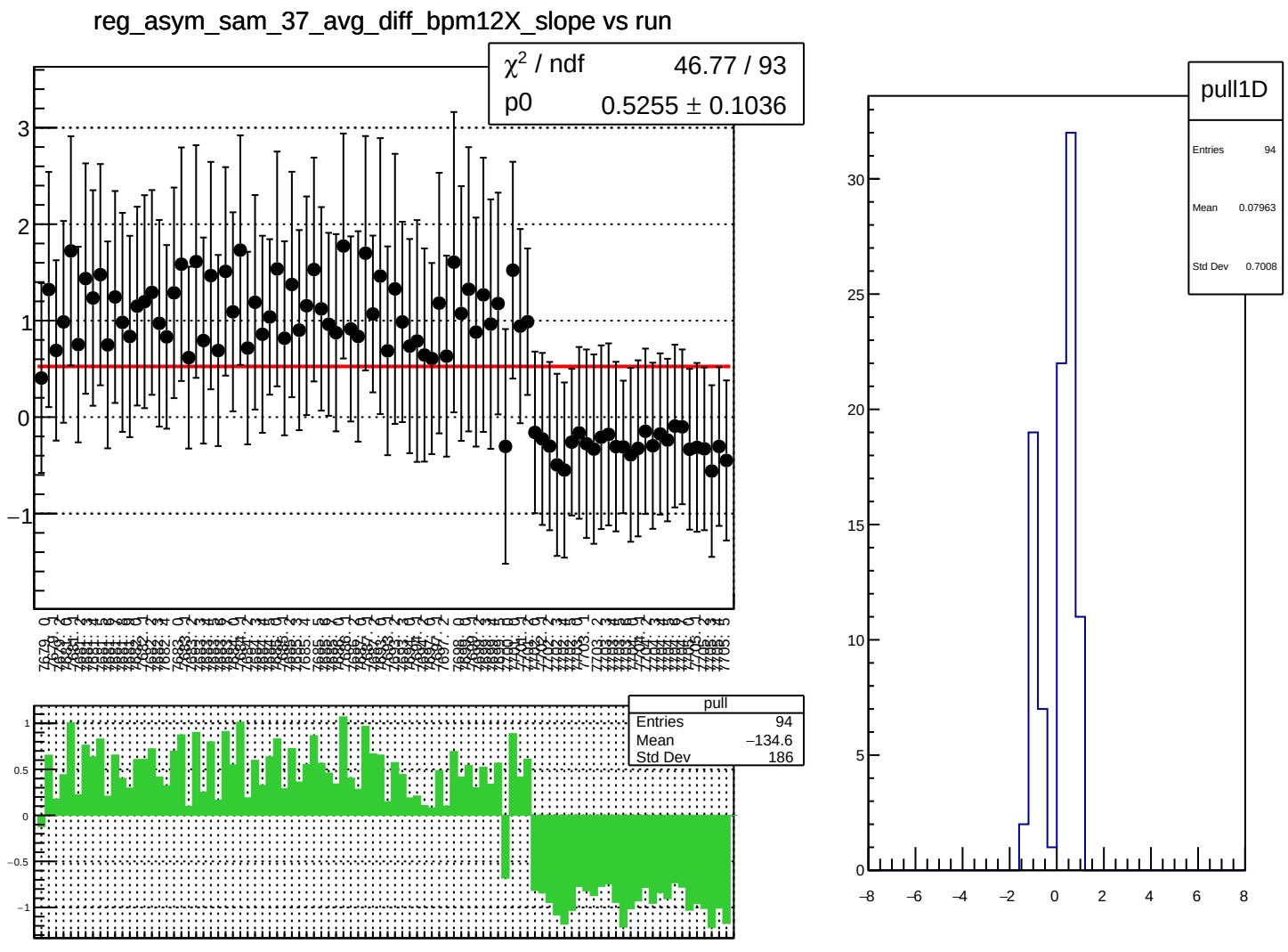

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 96.63 / 93
p0 12.38 ± 1.013
20
0
−20
−40
−60
−80
pull
Entries 94
Mean 102.2
Std Dev 38.97
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 94
Mean −0.3492
Std Dev 0.9519
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

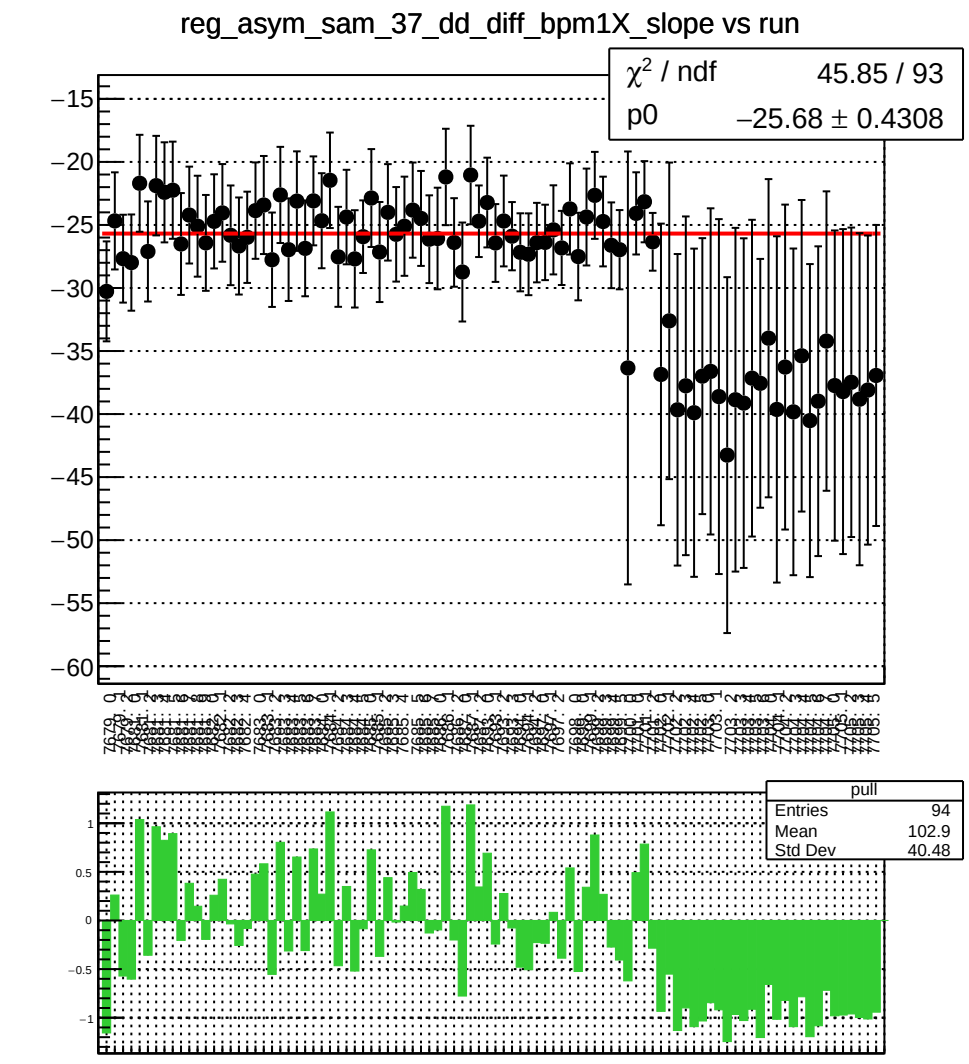

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.644 / 93
p0 1.852 ± 1.436
pull
Entries 94
Mean 118.9
Std Dev 58

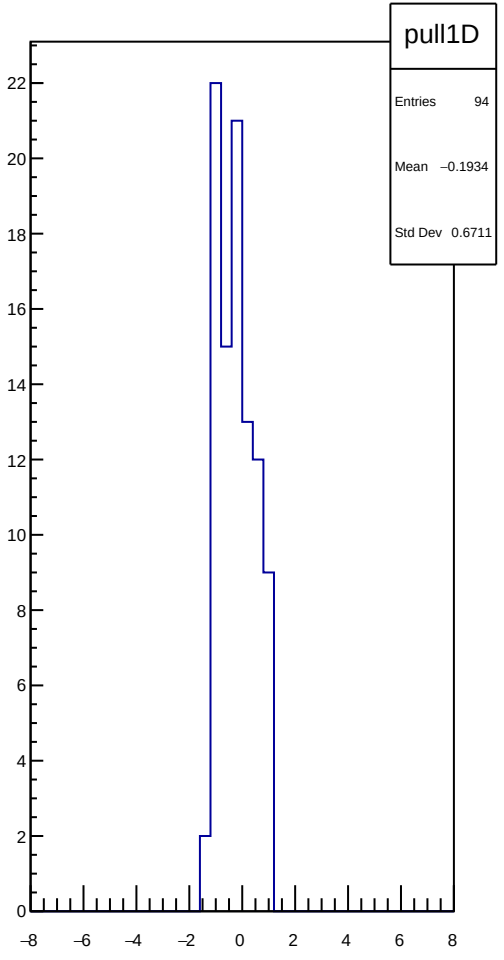

pull1D
Entries 94
Mean 0.07271
Std Dev 0.2757

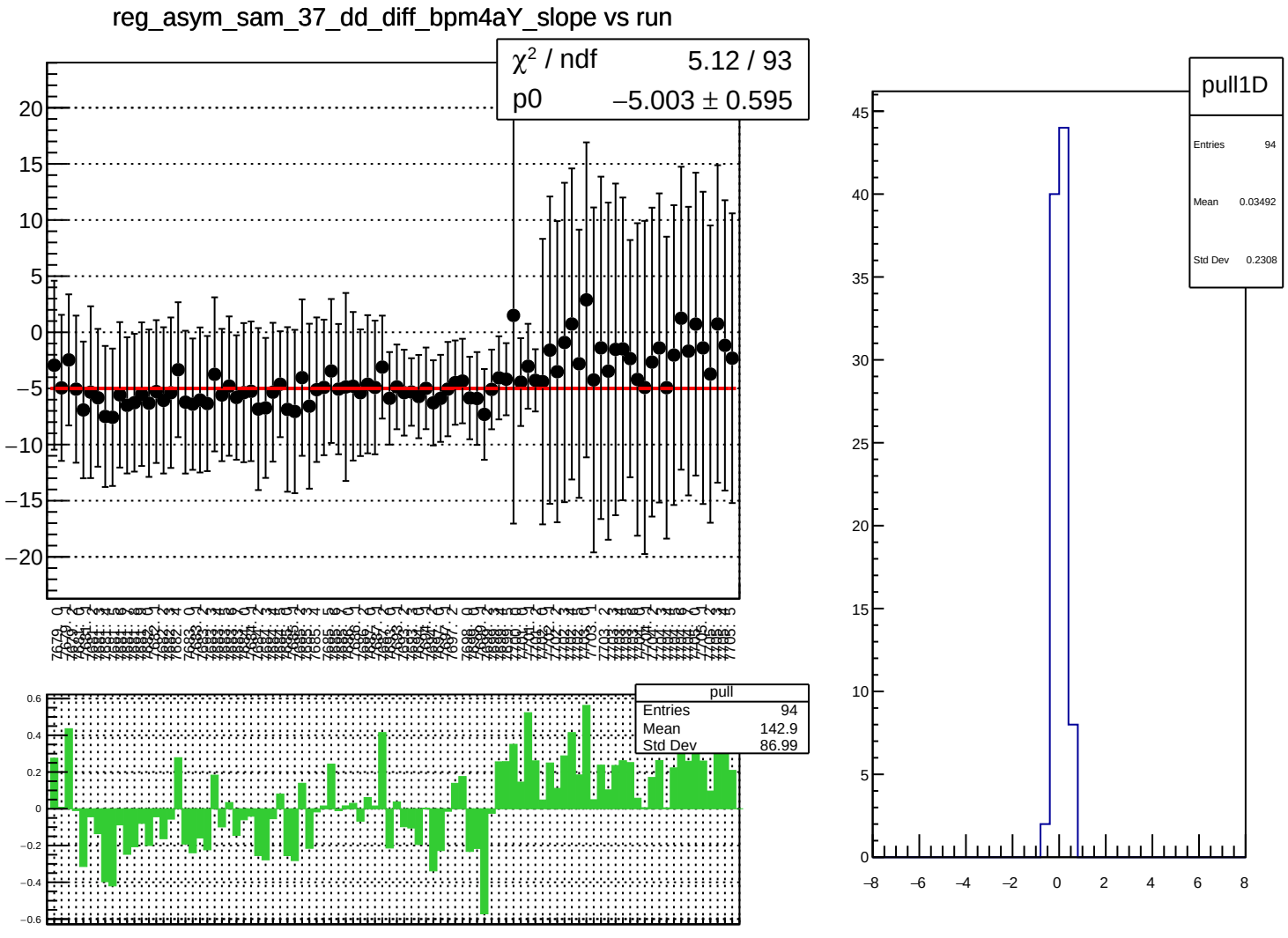

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 98.62 / 93
p0 −84.34 ± 0.8168
−20
−40
−60
−80
−100
pull
Entries 94
Mean 103.1
Std Dev 41.91
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean 0.3704
Std Dev 0.955
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

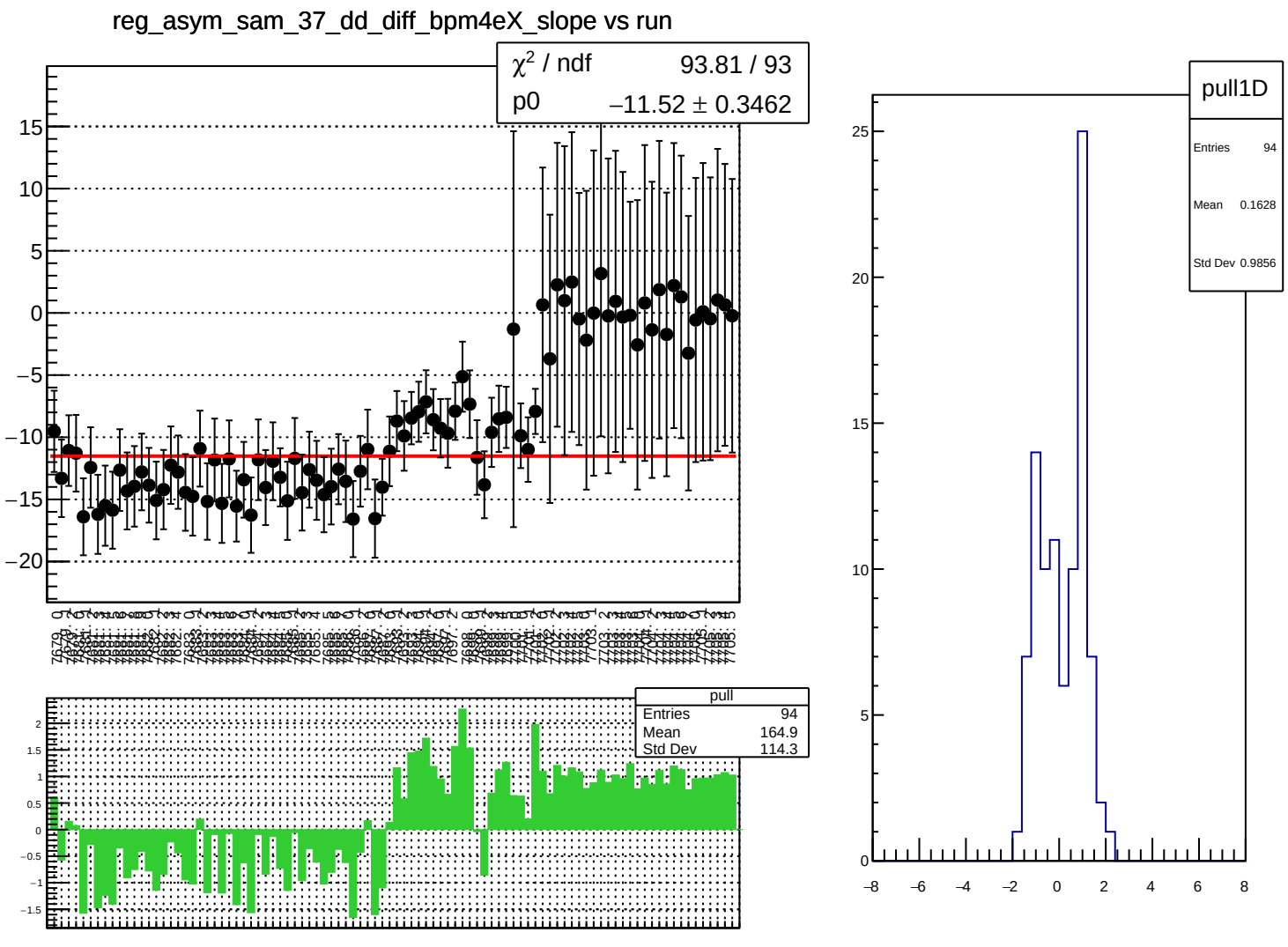

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.375 / 93
p0 7.167 ± 2.126
pull
Entries 94
Mean 145.2
Std Dev 85.19
pull1D
Entries 94
Mean −0.05045
Std Dev 0.2755

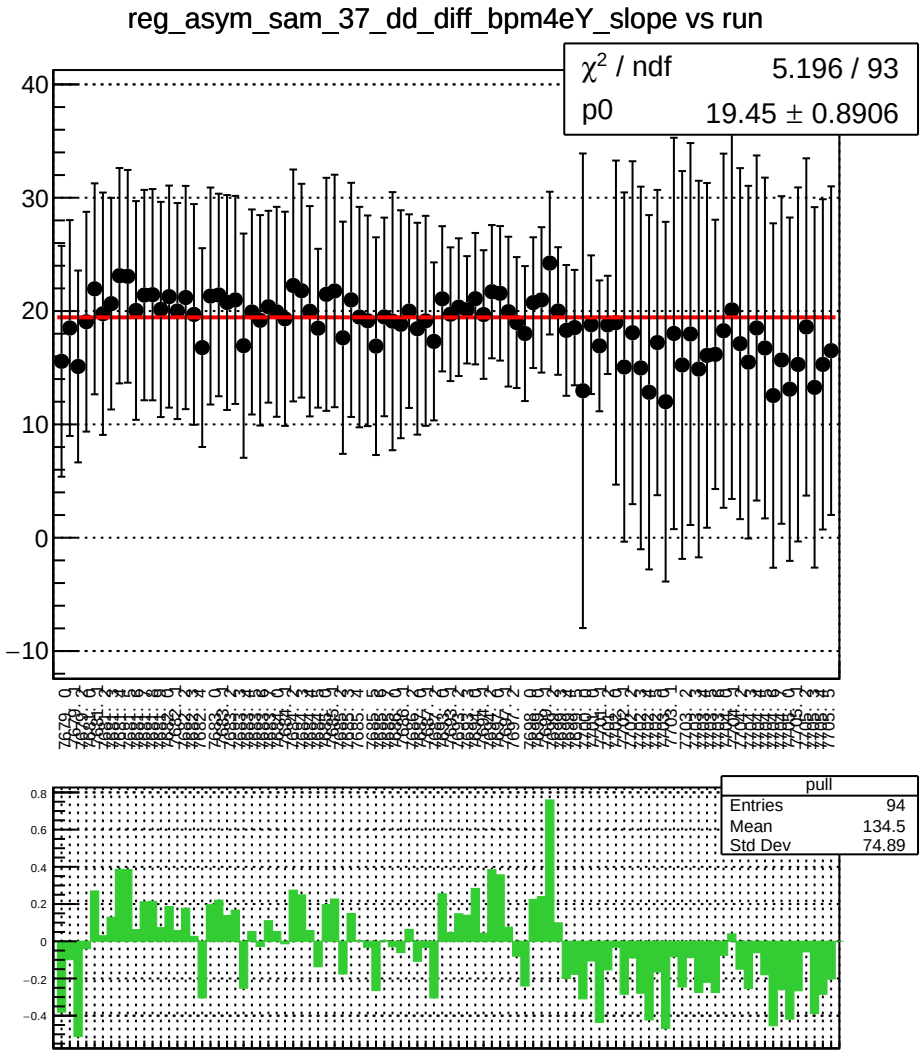

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 46.77 / 93
p0 0.5255 ± 0.1036
pull
Entries 94
Mean −134.6
Std Dev 186
pull1D
Entries 94
Mean 0.07963
Std Dev 0.7008

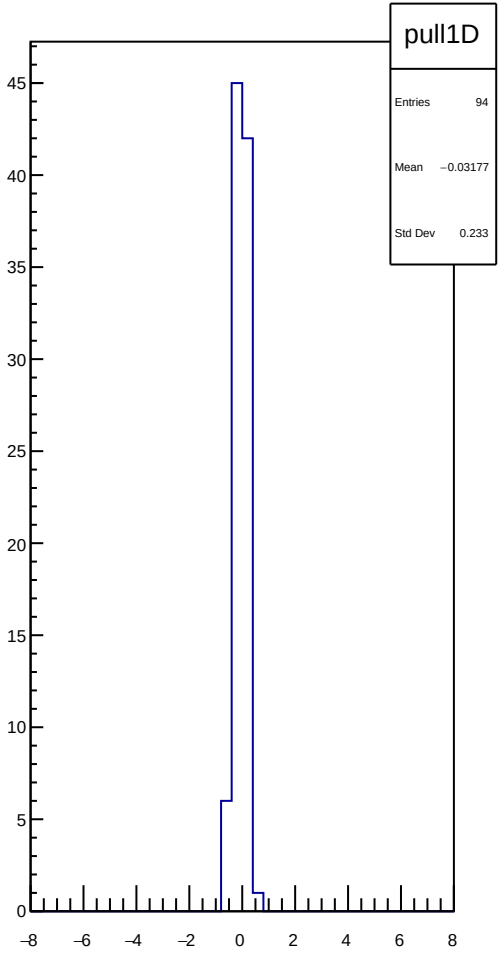

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 45.85 / 93
p0 −25.68 ± 0.4308
pull
Entries 94
Mean 102.9
Std Dev 40.48

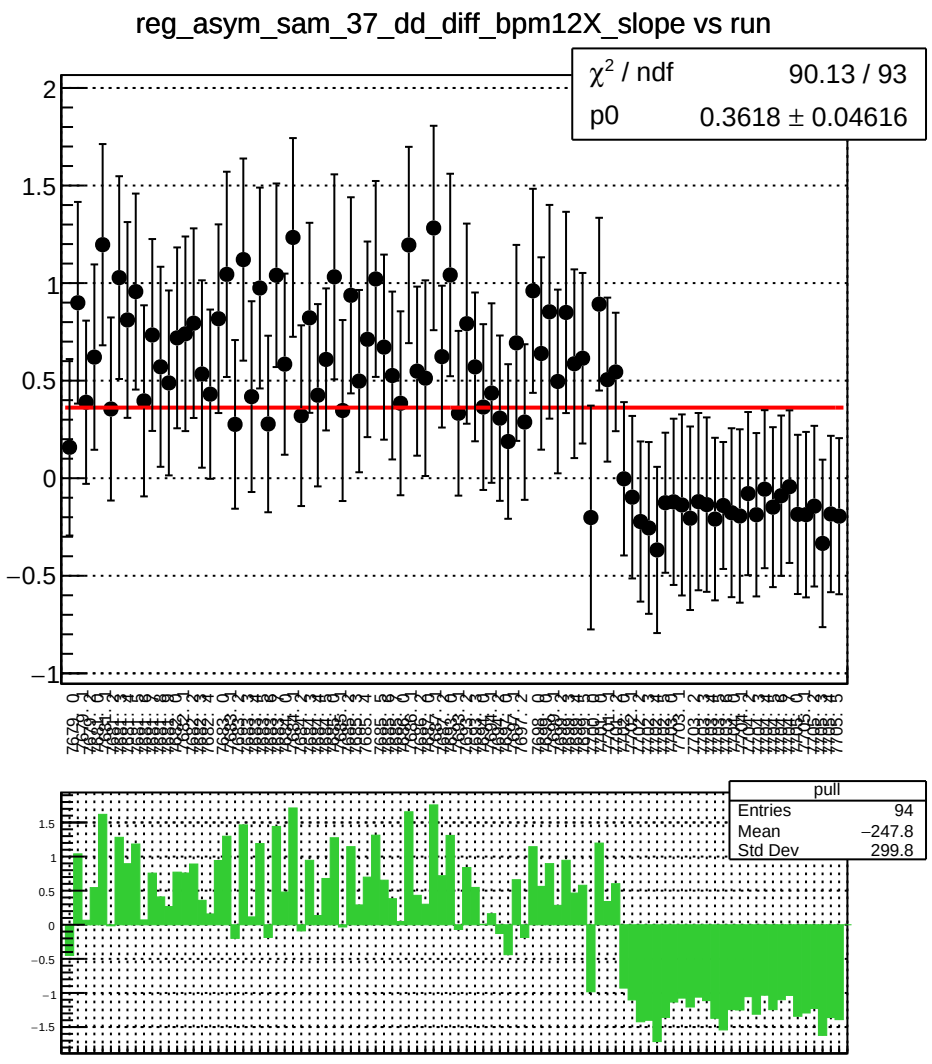

pull1D
Entries 94
Mean −0.1934
Std Dev 0.6711

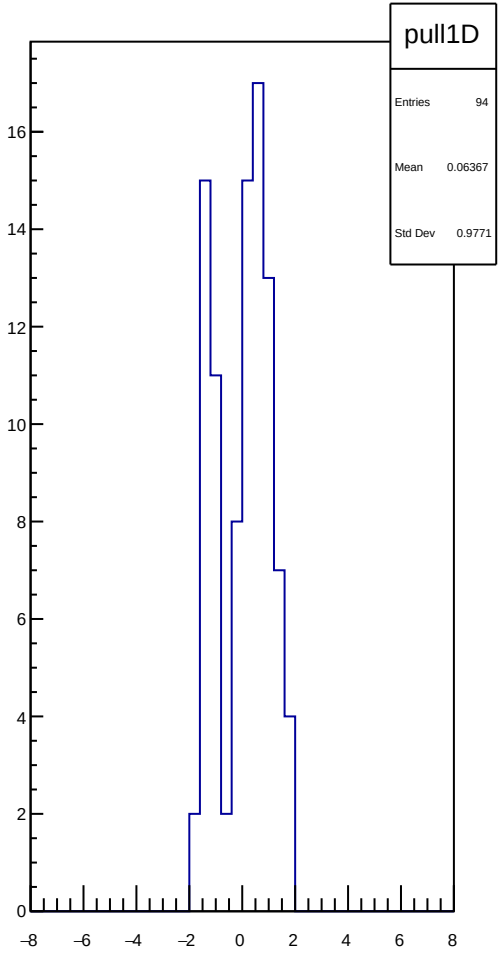

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.12 / 93
p0 −5.003 ± 0.595
pull
Entries 94
Mean 142.9
Std Dev 86.99
pull1D
Entries 94
Mean 0.03492
Std Dev 0.2308

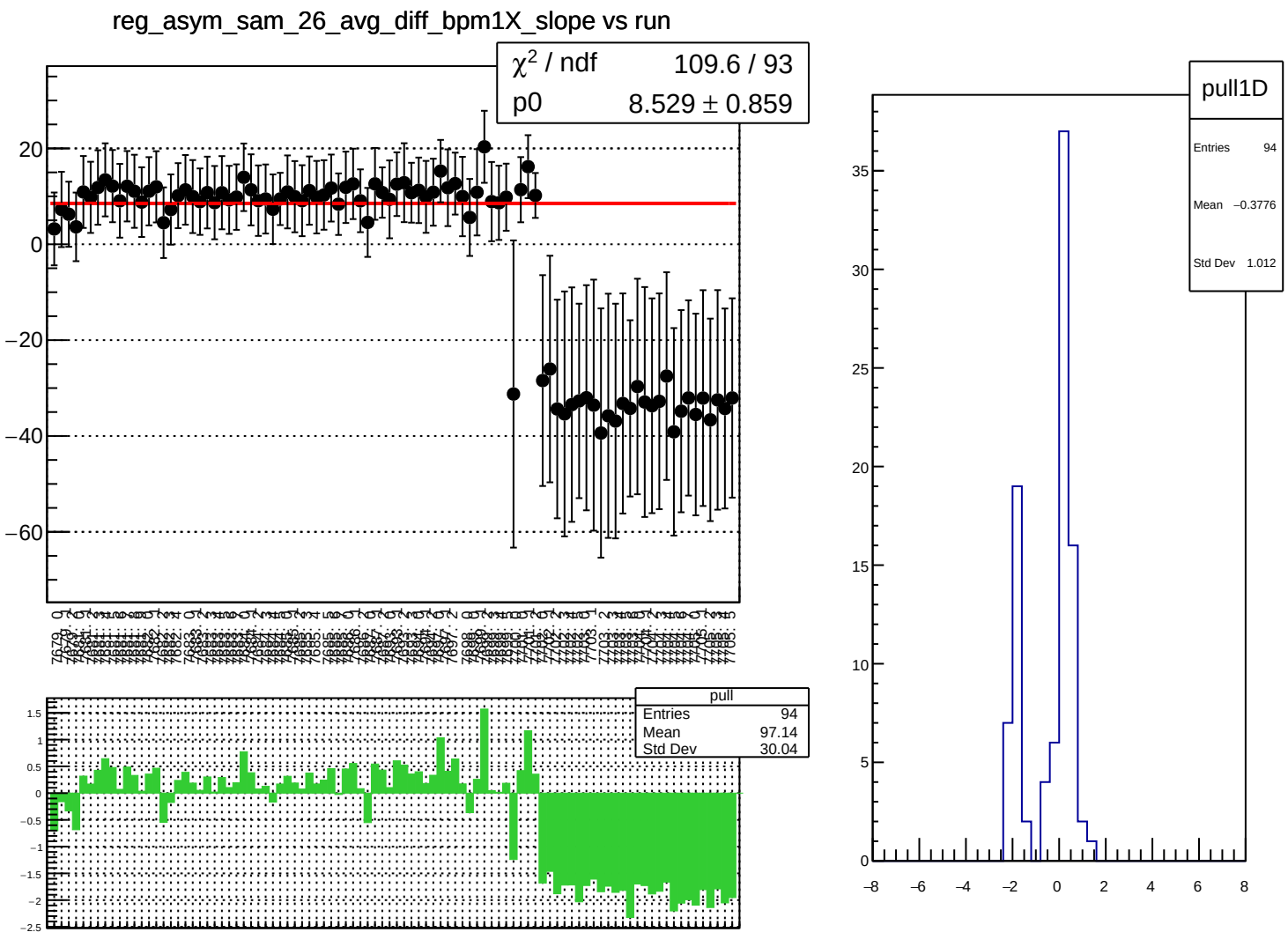

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 93.81 / 93
p0 −11.52 ± 0.3462
pull
Entries 94
Mean 164.9
Std Dev 114.3
pull1D
Entries 94
Mean 0.1628
Std Dev 0.9856

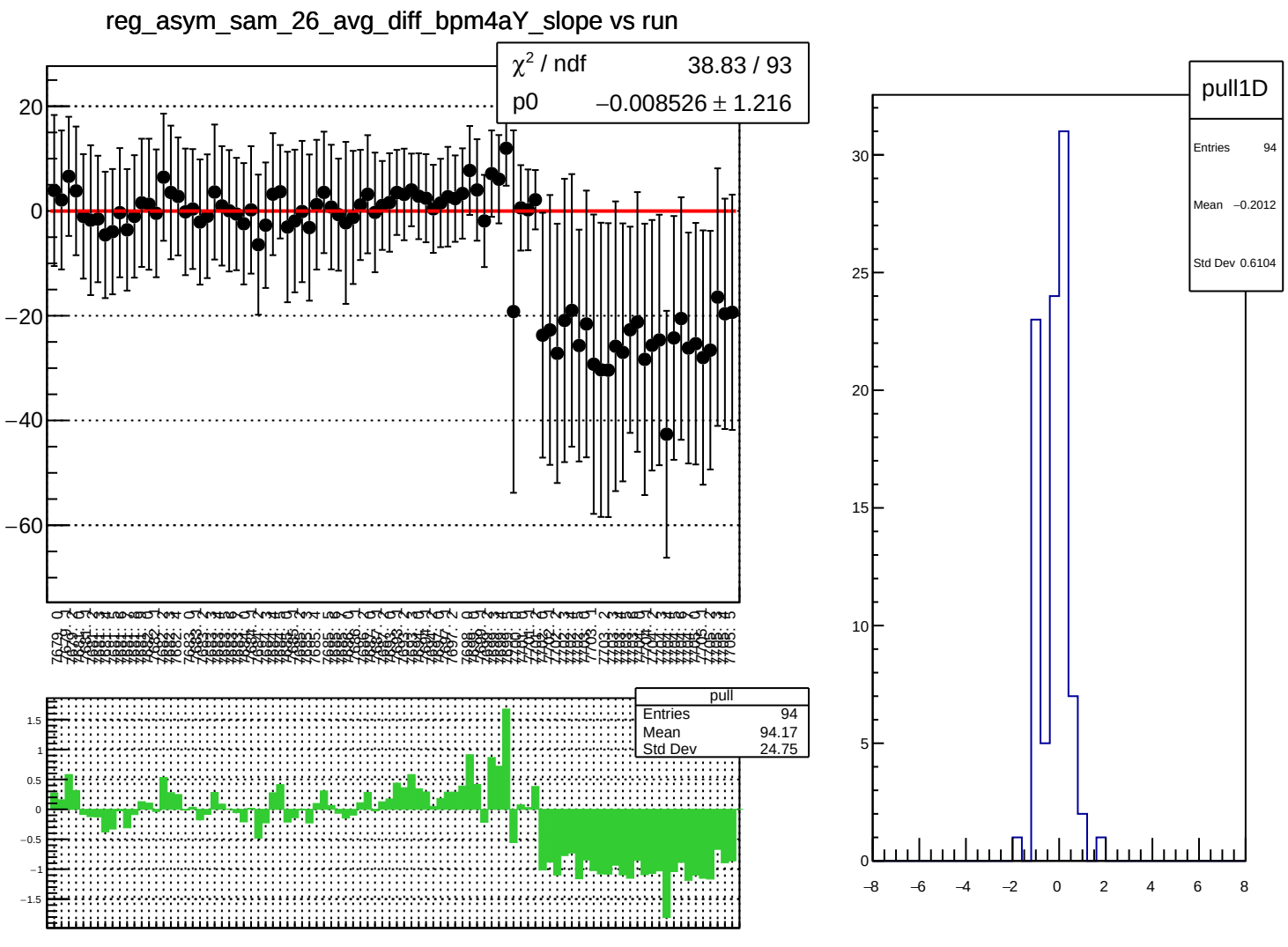

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.196 / 93
p0 19.45 ± 0.8906
pull
Entries 94
Mean 134.5
Std Dev 74.89

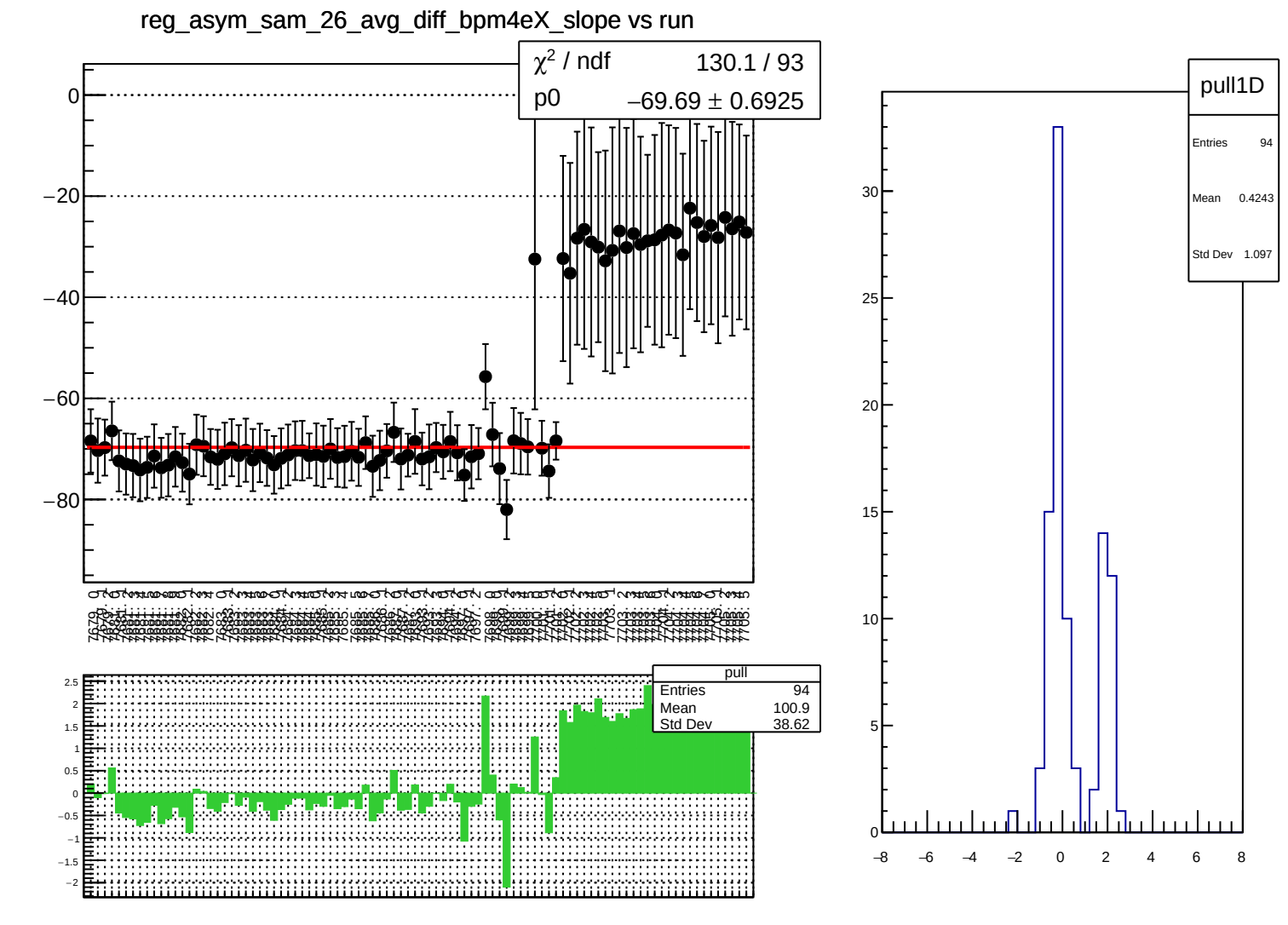

pull1D
Entries 94
Mean −0.03177
Std Dev 0.233

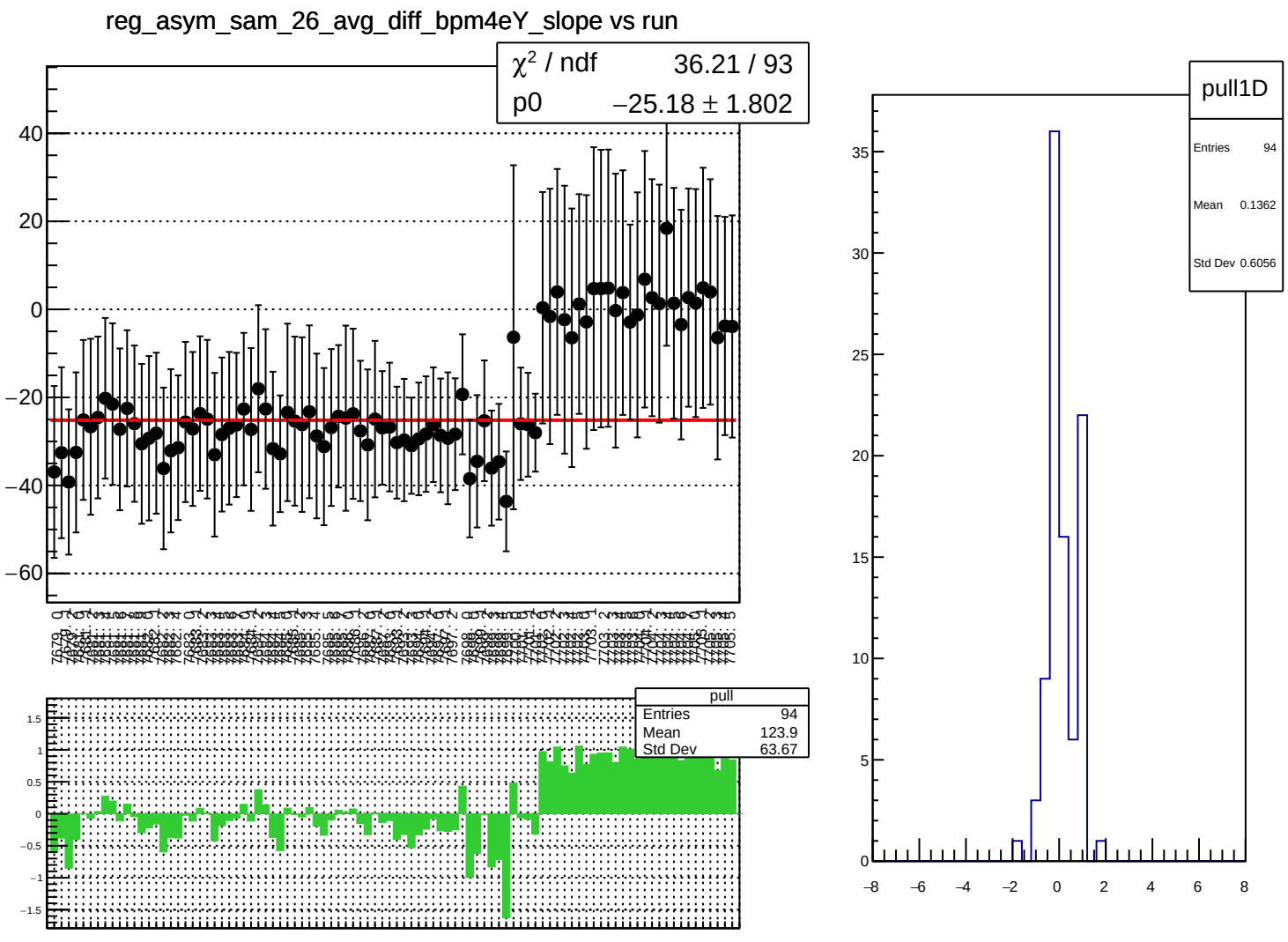

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 90.13 / 93
p0 0.3618 ± 0.04616
pull
Entries 94
Mean −247.8
Std Dev 299.8

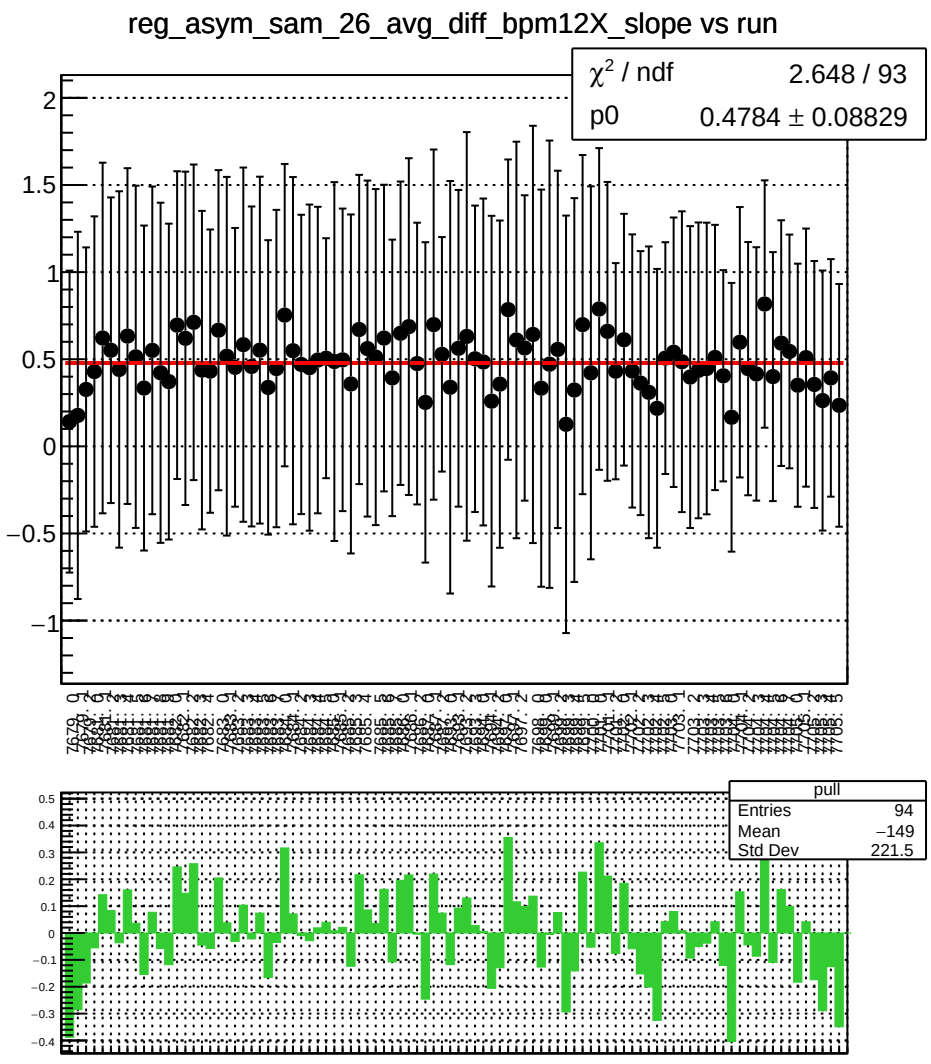

pull1D
Entries 94
Mean 0.06367
Std Dev 0.9771

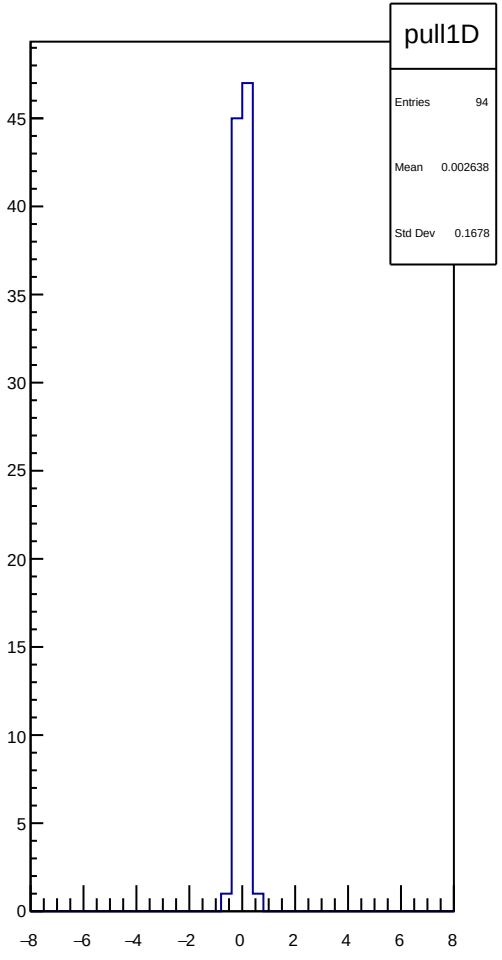

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 109.6 / 93
p0 8.529 ± 0.859
pull
Entries 94
Mean 97.14
Std Dev 30.04
pull1D
Entries 94
Mean −0.3776
Std Dev 1.012

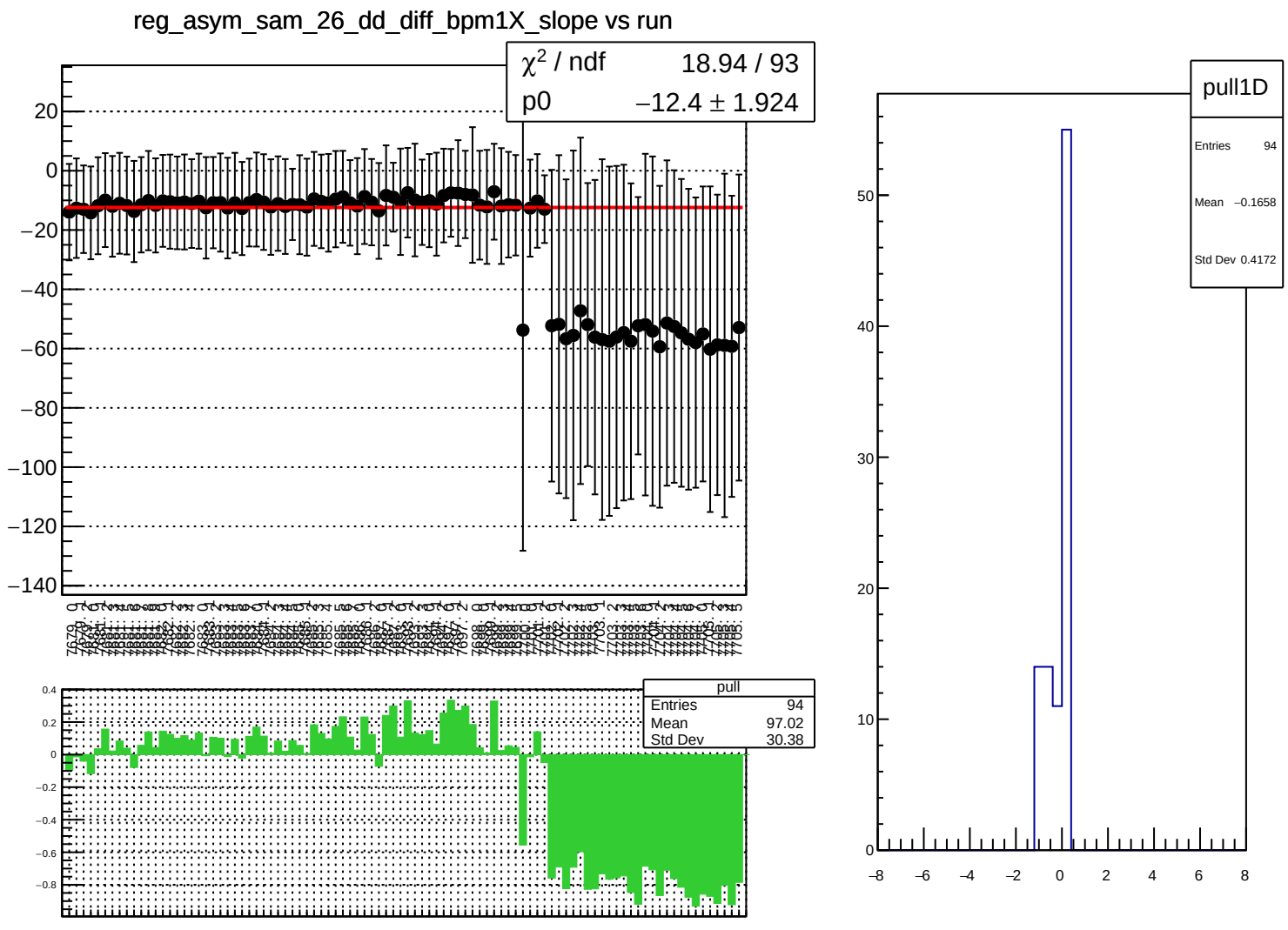

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 38.83 / 93
p0 −0.008526 ± 1.216
20
0
−20
−40
−60
pull
Entries 94
Mean 94.17
Std Dev 24.75
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.2012
Std Dev 0.6104
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

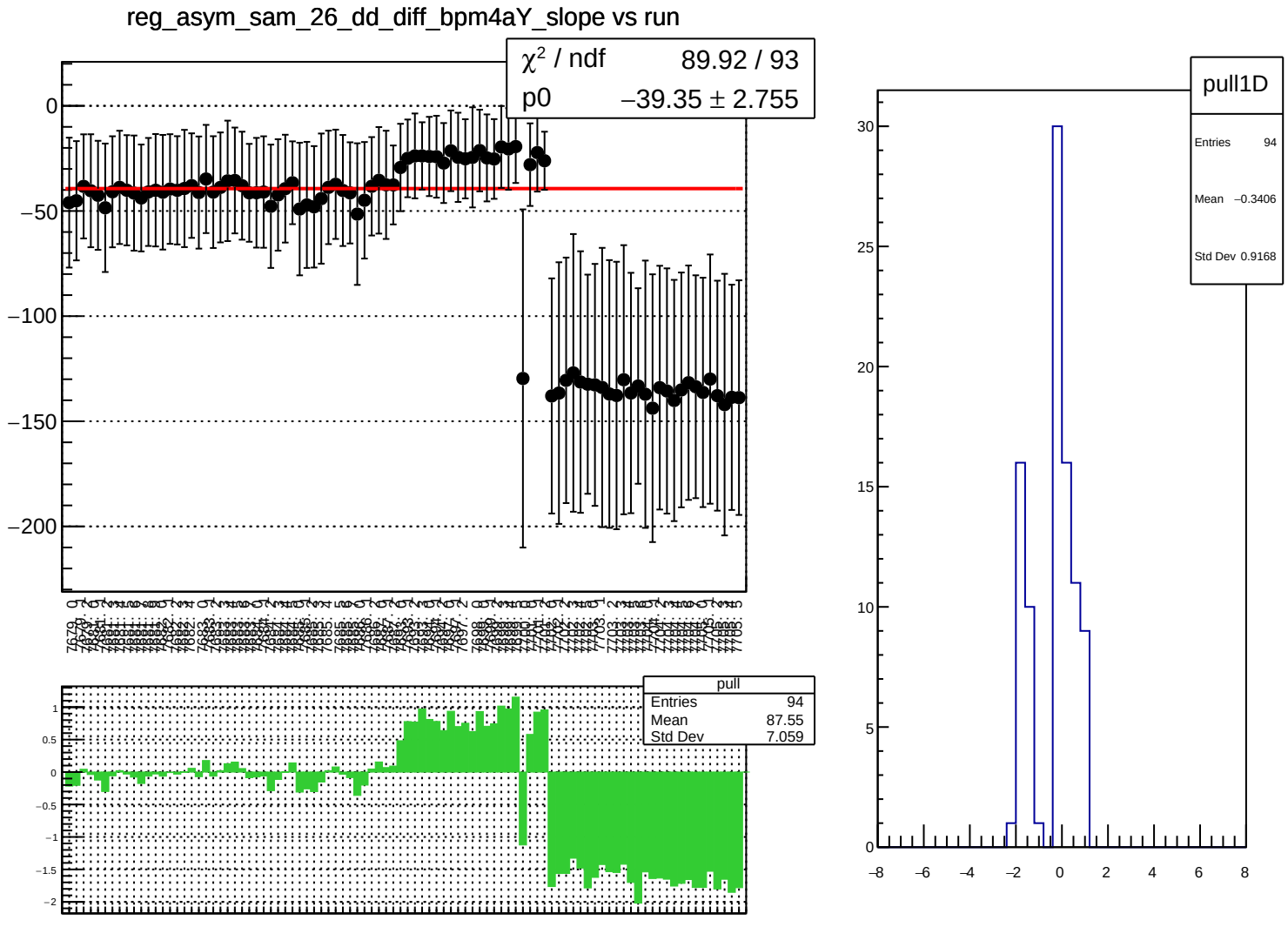

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 130.1 / 93
p0 −69.69 ± 0.6925
0
−20
−40
−60
−80
pull
Entries 94
Mean 100.9
Std Dev 38.62
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 94
Mean 0.4243
Std Dev 1.097
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

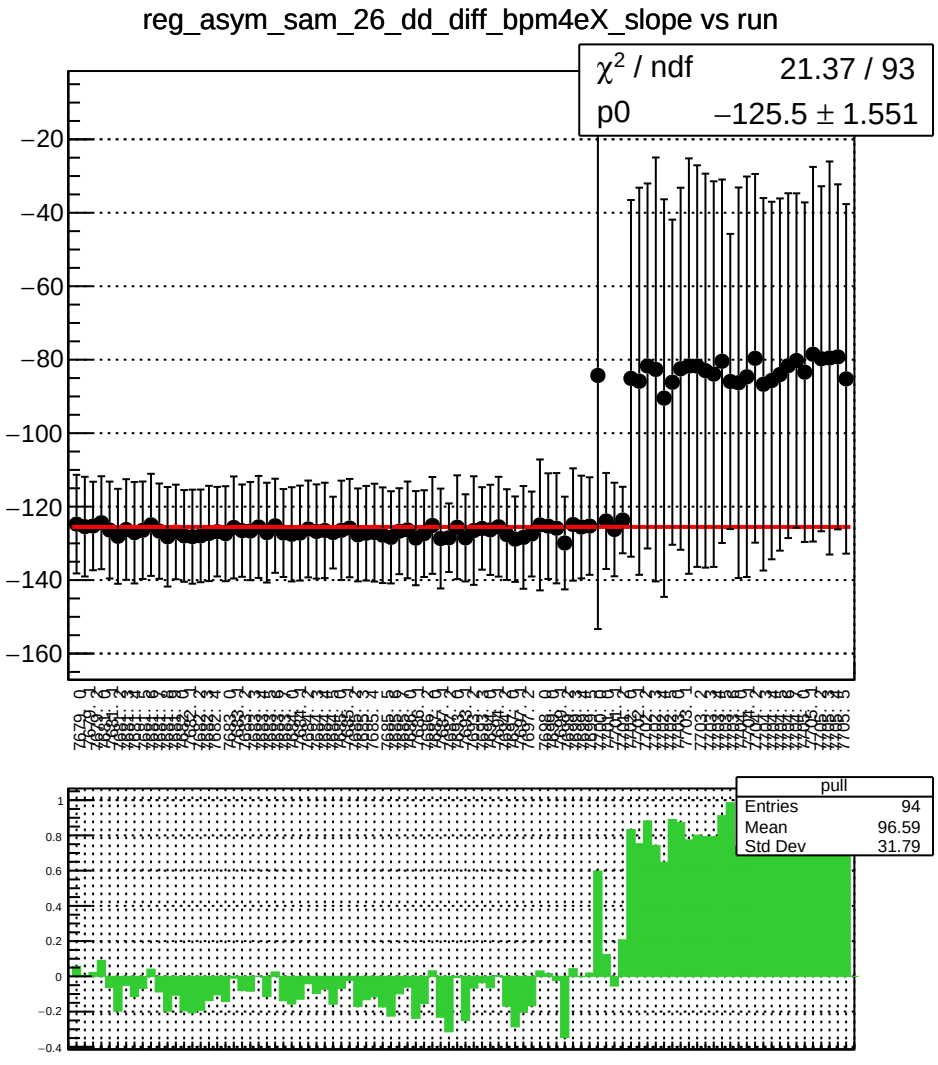

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 36.21 / 93
p0 −25.18 ± 1.802
pull
Entries 94
Mean 123.9
Std Dev 63.67
pull1D
Entries 94
Mean 0.1362
Std Dev 0.6056

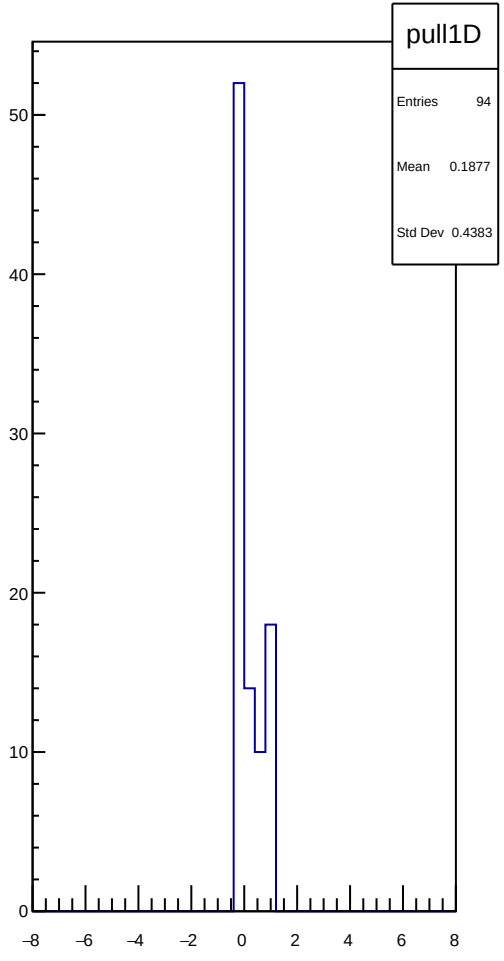

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 2.648 / 93
p0 0.4784 ± 0.08829
pull
Entries 94
Mean −149
Std Dev 221.5

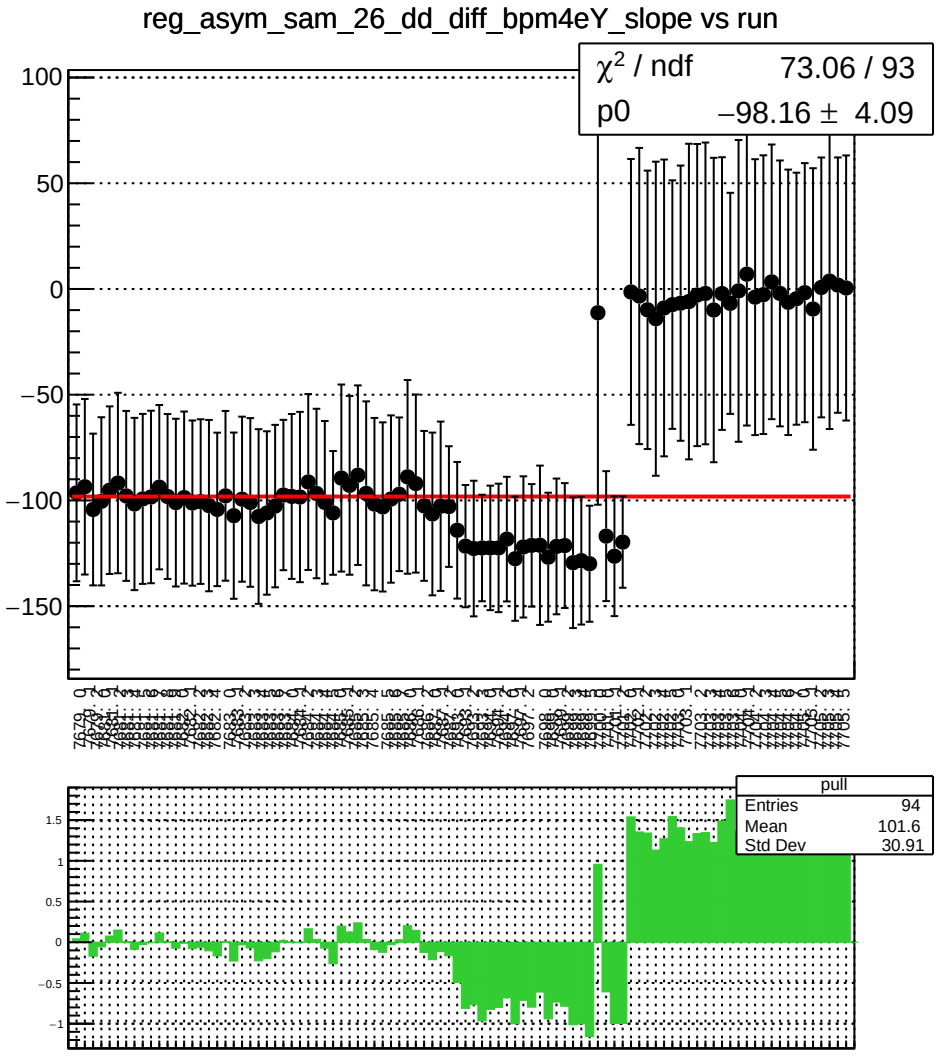

pull1D
Entries 94
Mean 0.002638
Std Dev 0.1678

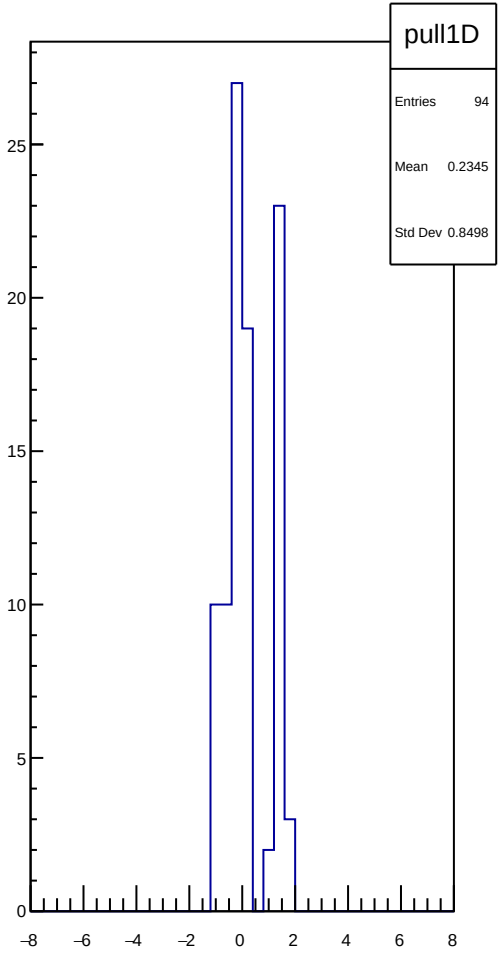

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 18.94 / 93
p0 −12.4 ± 1.924
pull
Entries 94
Mean 97.02
Std Dev 30.38
pull1D
Entries 94
Mean −0.1658
Std Dev 0.4172

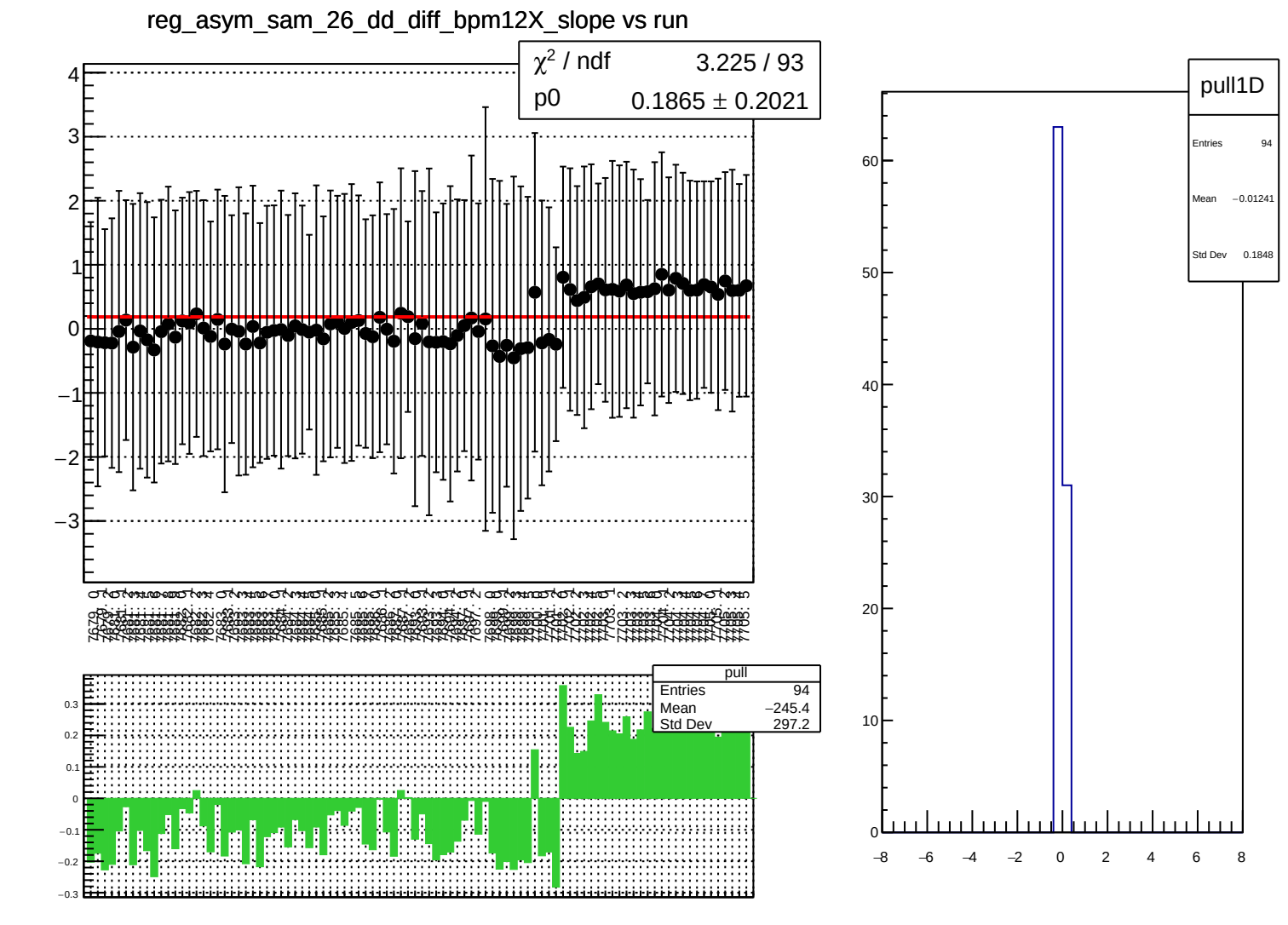

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 89.92 / 93
p0 −39.35 ± 2.755
0
−50
−100
−150
−200
pull
Entries 94
Mean 87.55
Std Dev 7.059
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 94
Mean −0.3406
Std Dev 0.9168
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

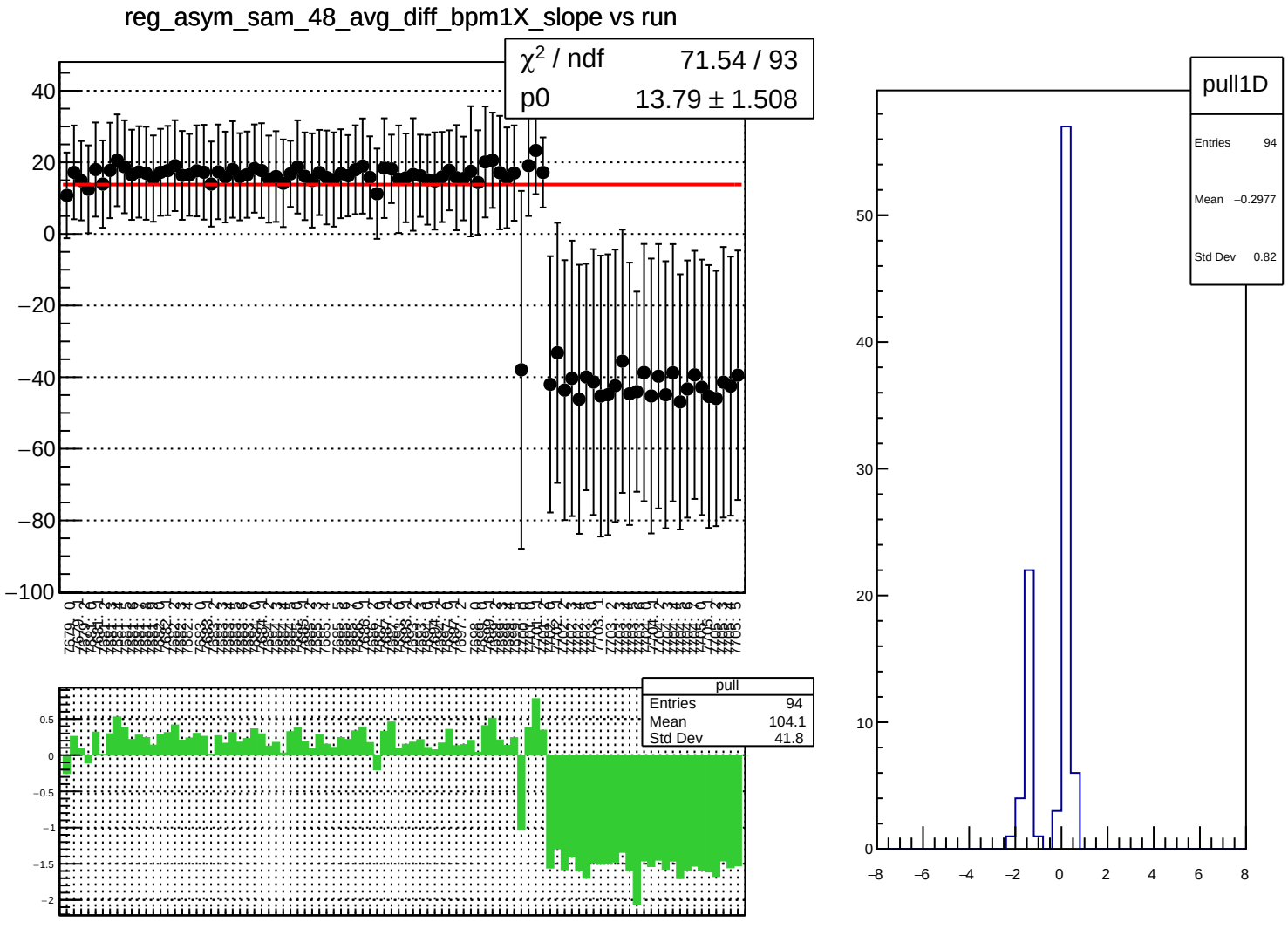

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 21.37 / 93
p0 −125.5 ± 1.551
pull
Entries 94
Mean 96.59
Std Dev 31.79

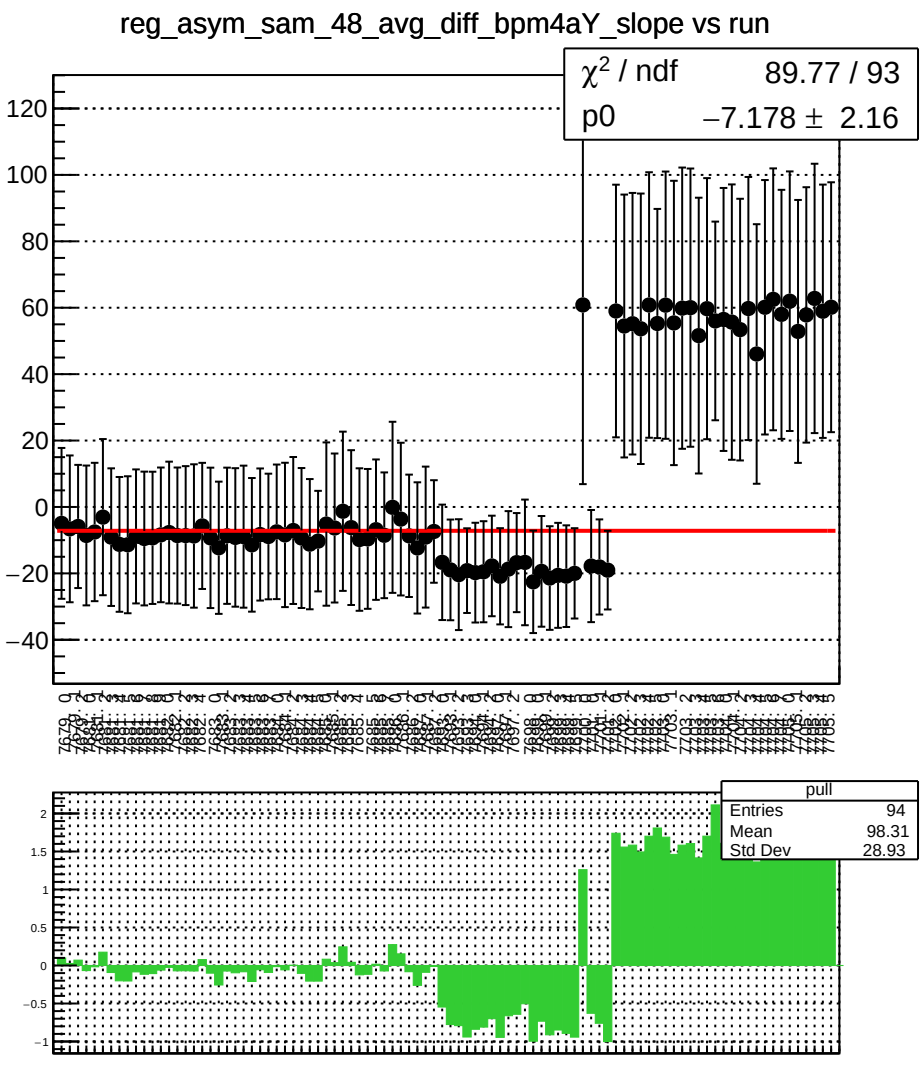

pull1D
Entries 94
Mean 0.1877
Std Dev 0.4383

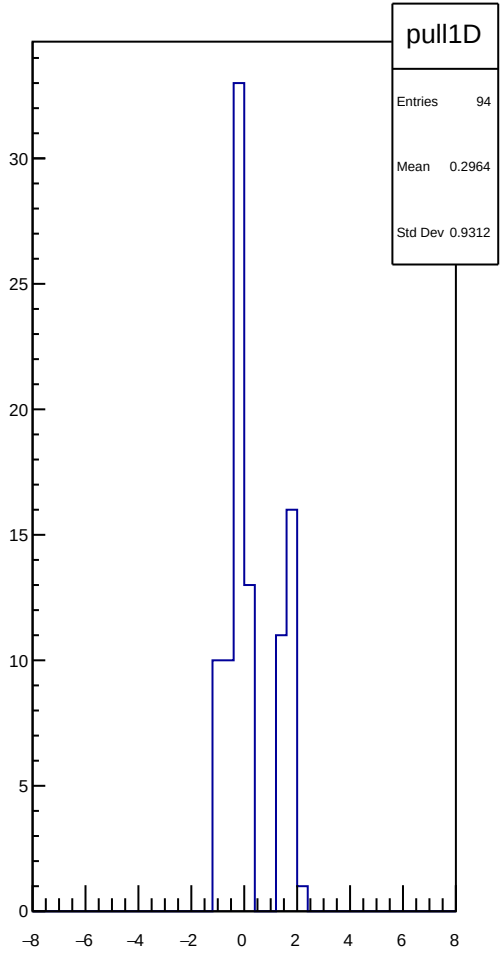

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 73.06 / 93
p0 −98.16 ± 4.09
100
50
0
−50
−100
−150
pull
Entries 94
Mean 101.6
Std Dev 30.91
1.5
1
0.5
0
−0.5
−1

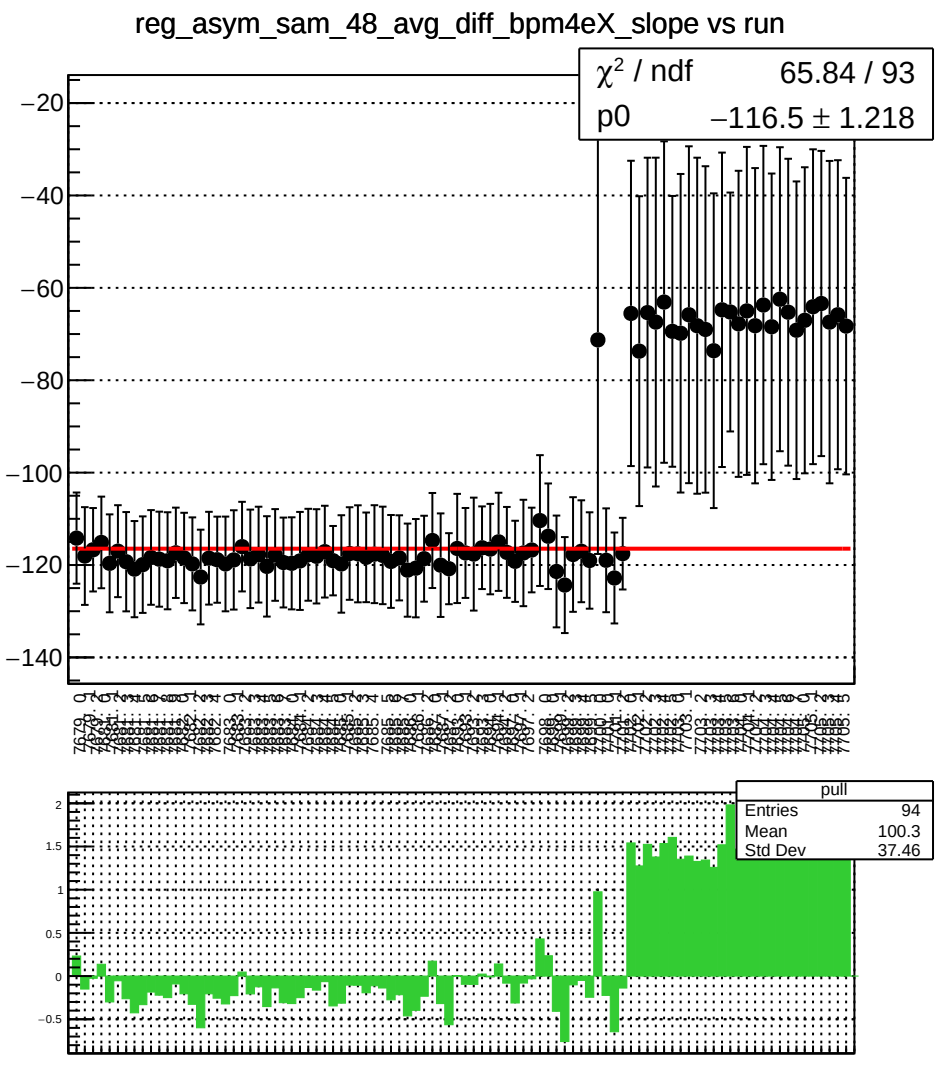

pull1D
Entries 94
Mean 0.2345
Std Dev 0.8498
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

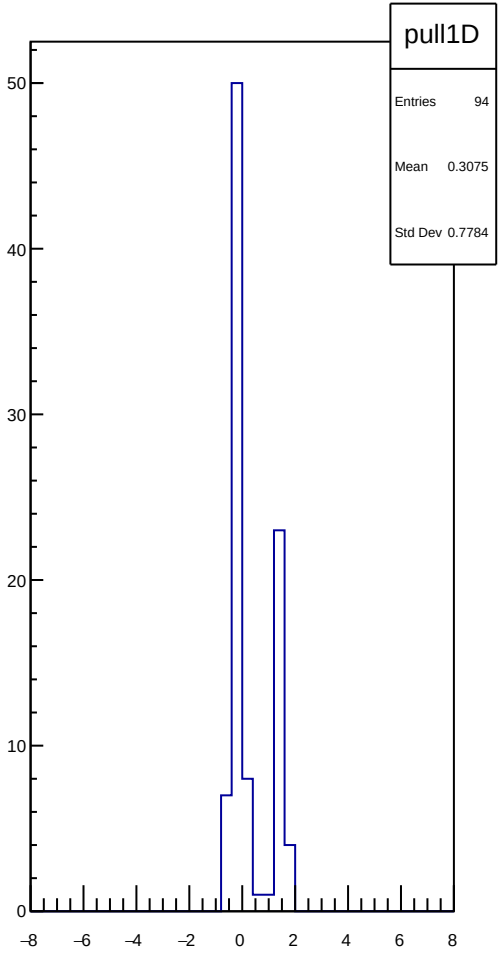

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 3.225 / 93
p0 0.1865 ± 0.2021
pull
Entries 94
Mean −245.4
Std Dev 297.2
pull1D
Entries 94
Mean −0.01241
Std Dev 0.1848

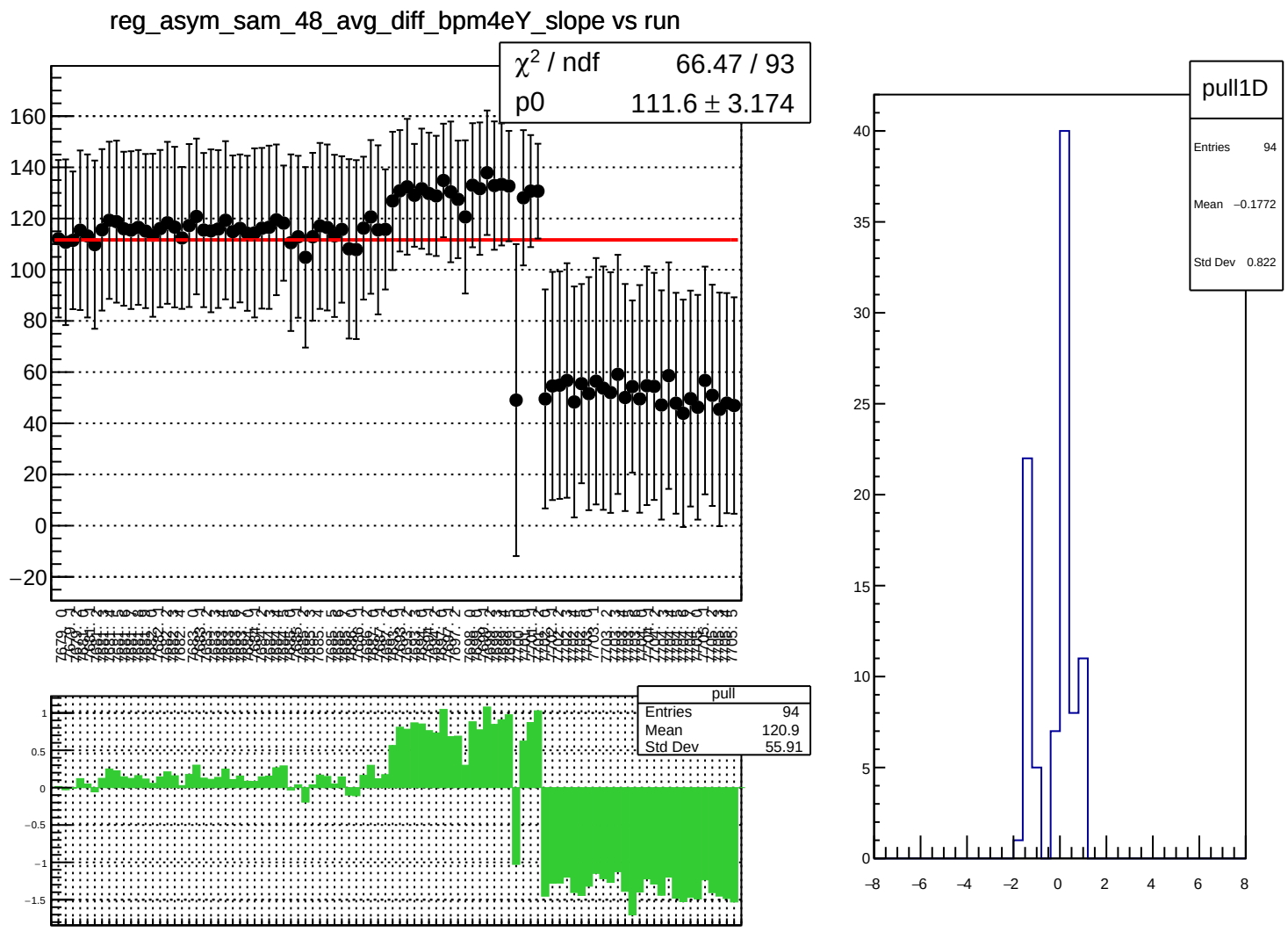

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 71.54 / 93
p0 13.79 ± 1.508
pull
Entries 94
Mean 104.1
Std Dev 41.8
pull1D
Entries 94
Mean −0.2977
Std Dev 0.82

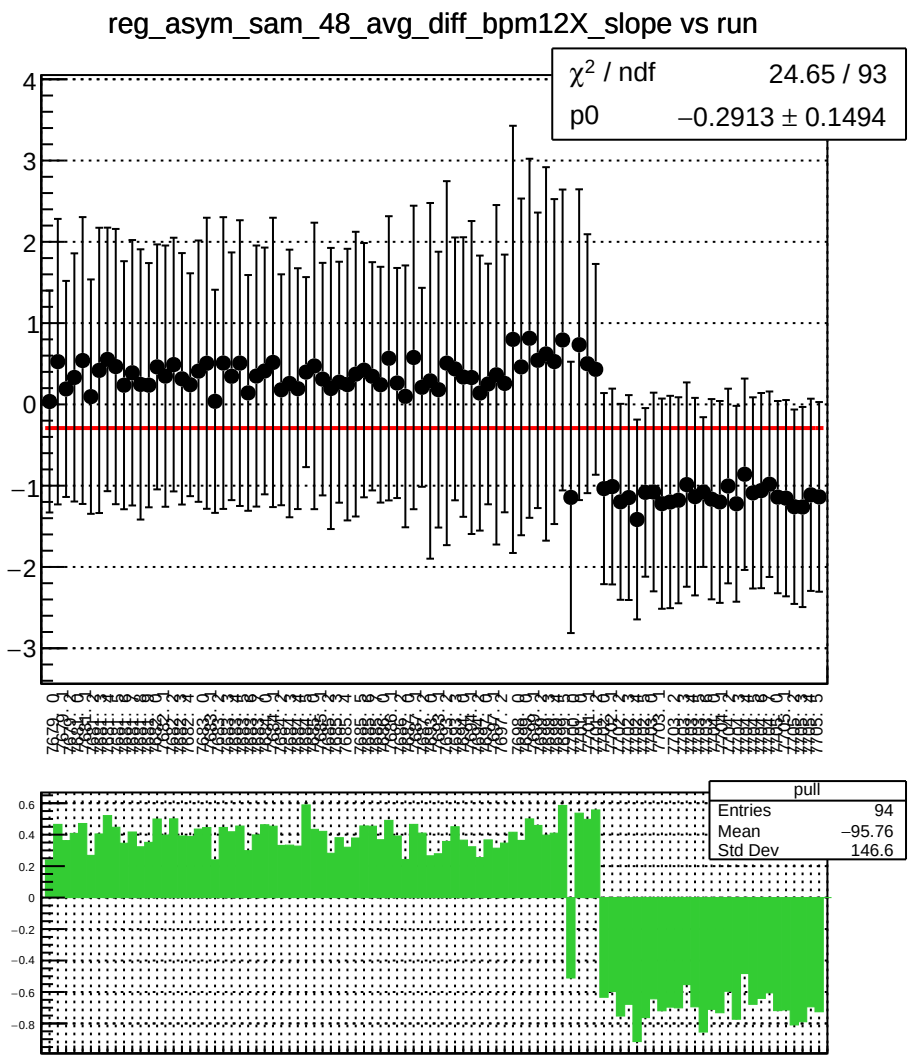

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 89.77 / 93
p0 −7.178 ± 2.16
120
100
80
60
40
20
0
−20
−40
pull
Entries 94
Mean 98.31
Std Dev 28.93
2
1.5
1
0.5
0
−0.5
−1

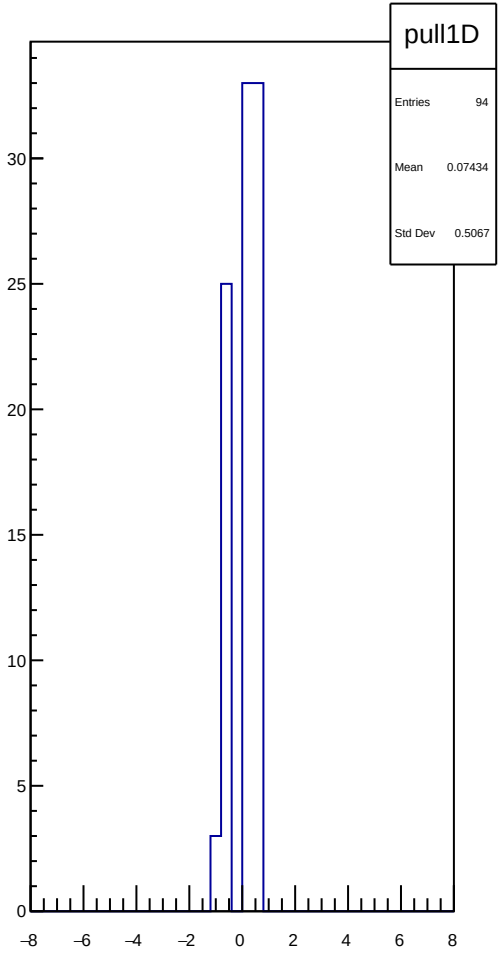

pull1D
Entries 94
Mean 0.2964
Std Dev 0.9312
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

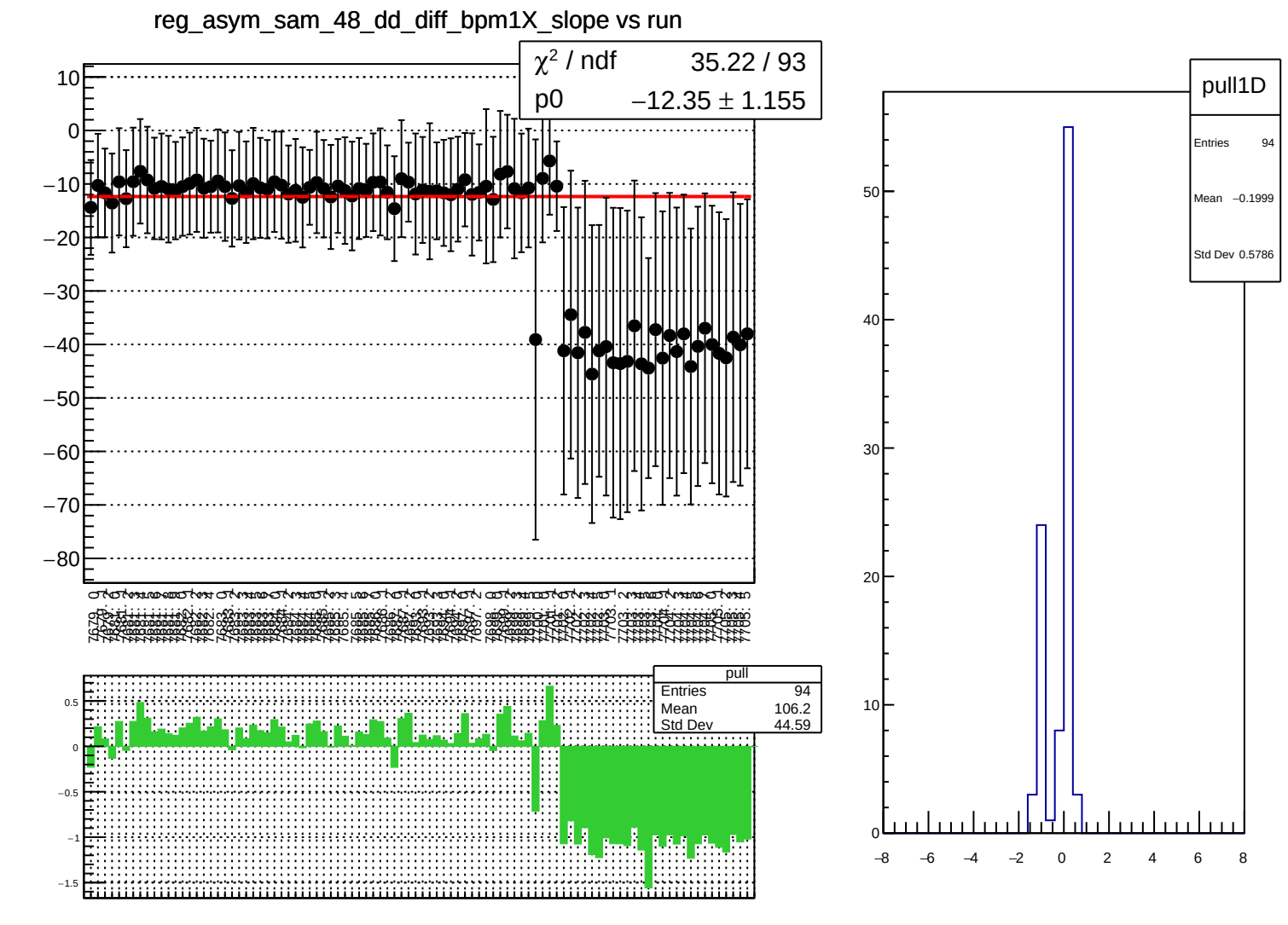

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 65.84 / 93
p0 −116.5 ± 1.218
pull
Entries 94
Mean 100.3
Std Dev 37.46

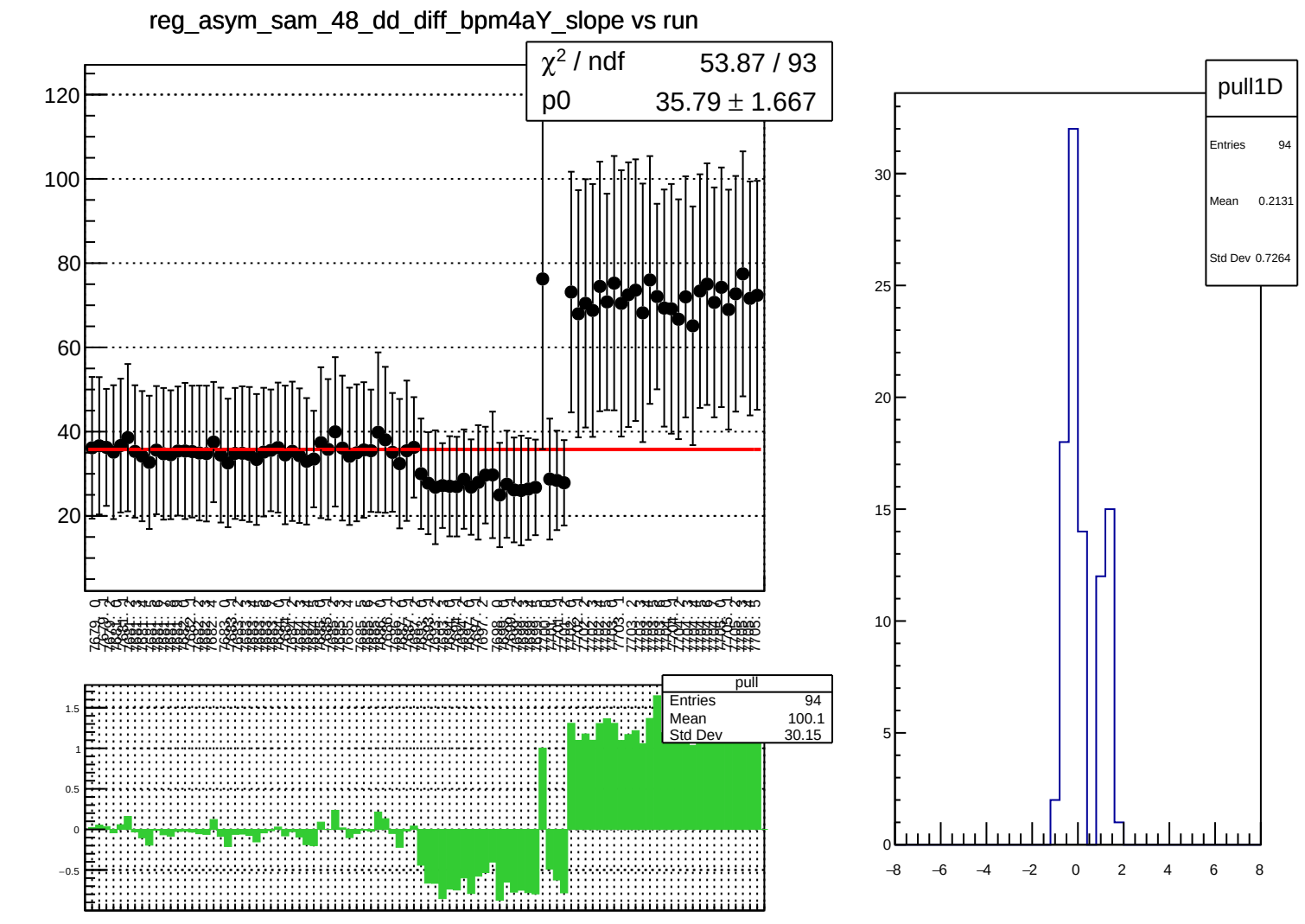

pull1D
Entries 94
Mean 0.3075
Std Dev 0.7784

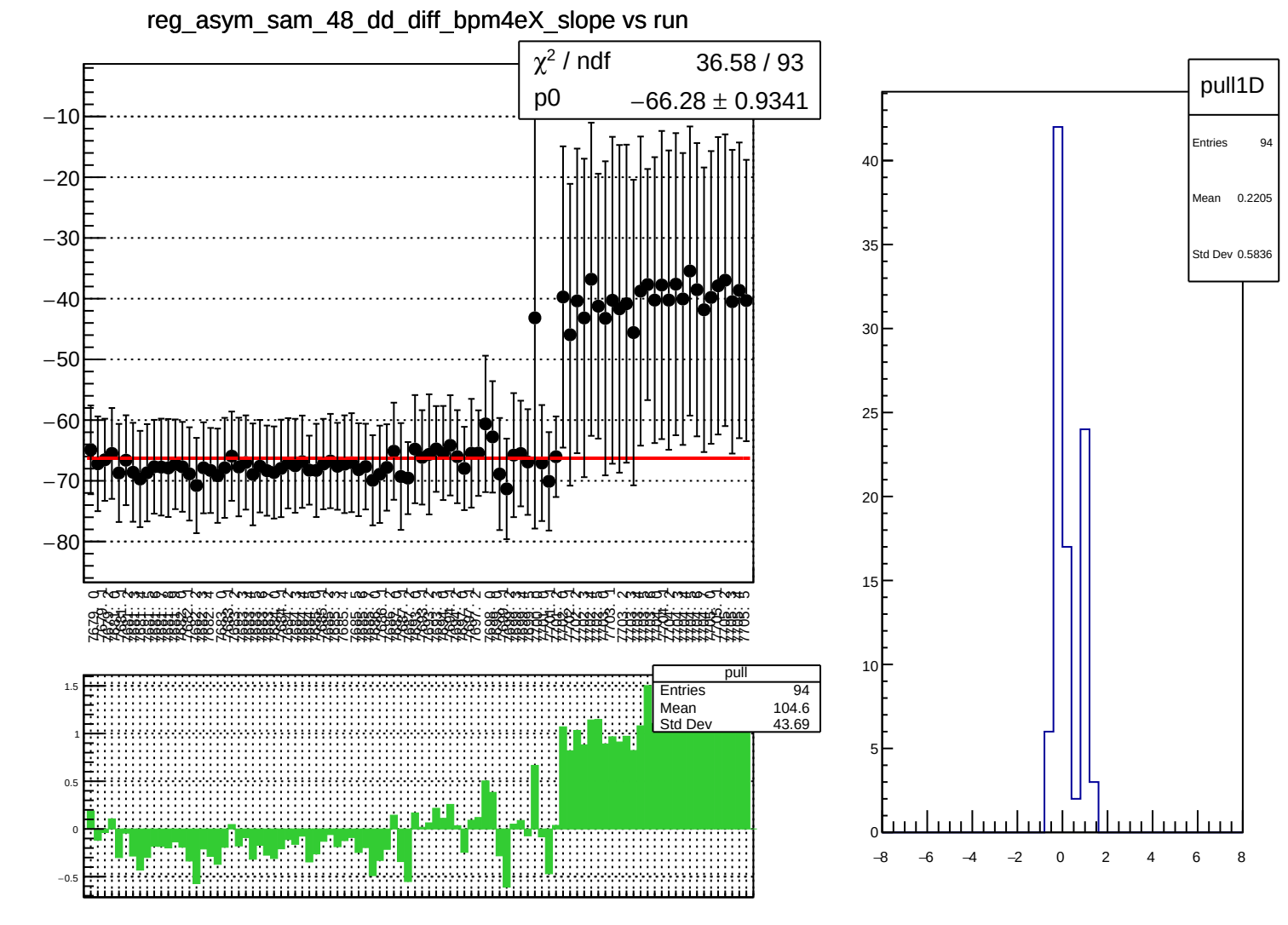

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 66.47 / 93
p0 111.6 ± 3.174
pull
Entries 94
Mean 120.9
Std Dev 55.91
pull1D
Entries 94
Mean −0.1772
Std Dev 0.822

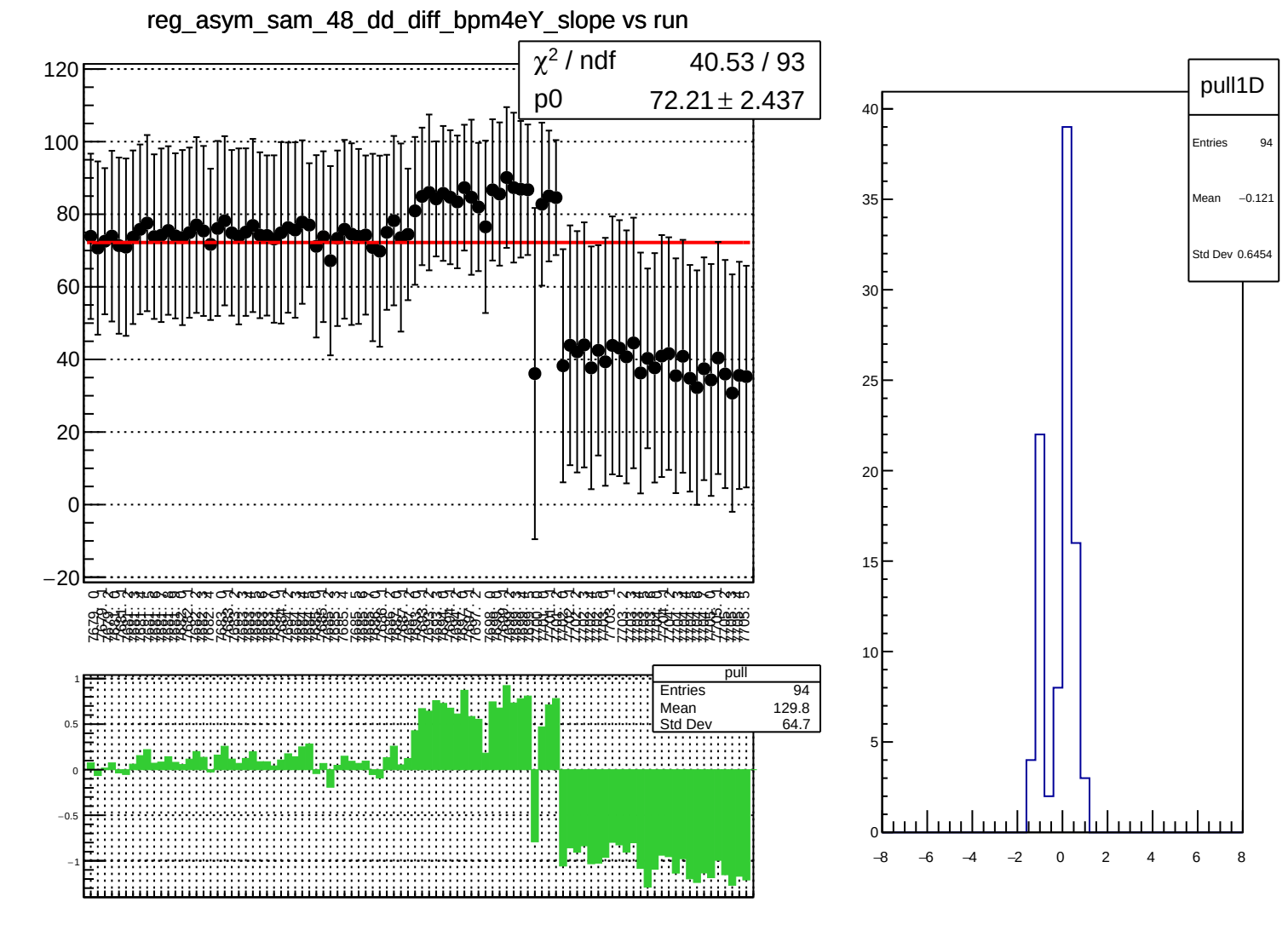

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 24.65 / 93
p0 −0.2913 ± 0.1494
pull
Entries 94
Mean −95.76
Std Dev 146.6

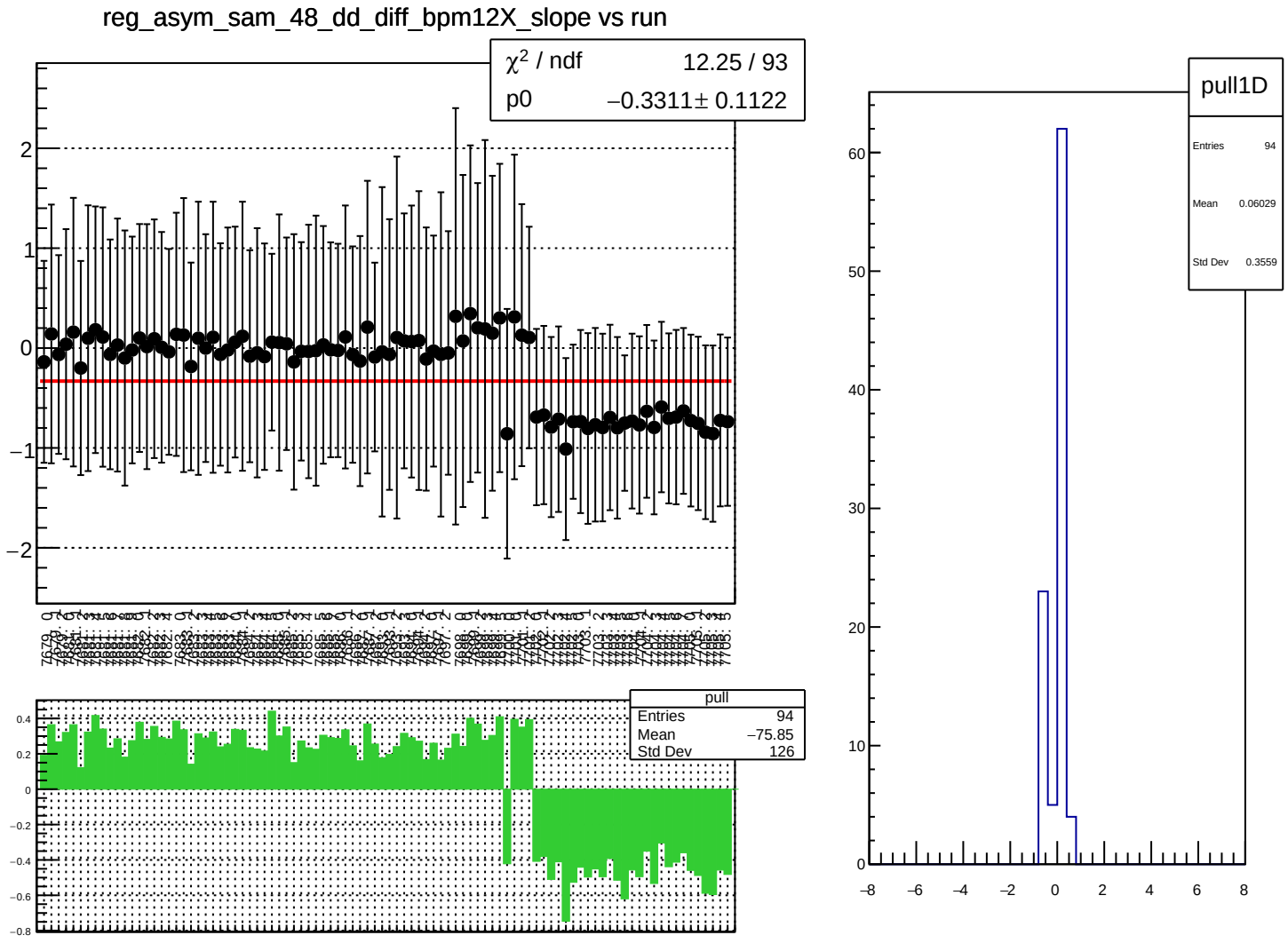

pull1D
Entries 94
Mean 0.07434
Std Dev 0.5067

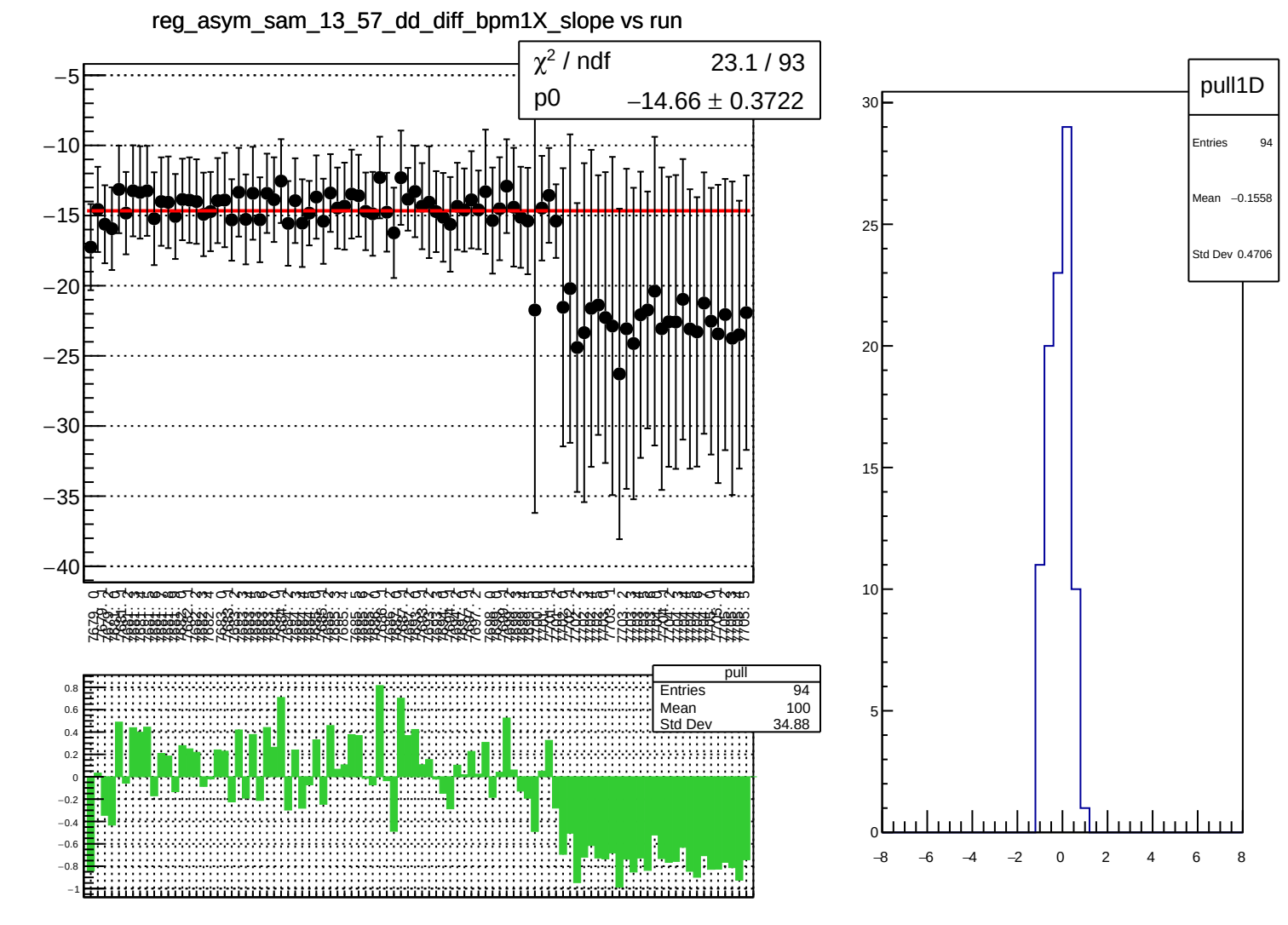

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 35.22 / 93
p0 −12.35 ± 1.155
pull
Entries 94
Mean 106.2
Std Dev 44.59
pull1D
Entries 94
Mean −0.1999
Std Dev 0.5786

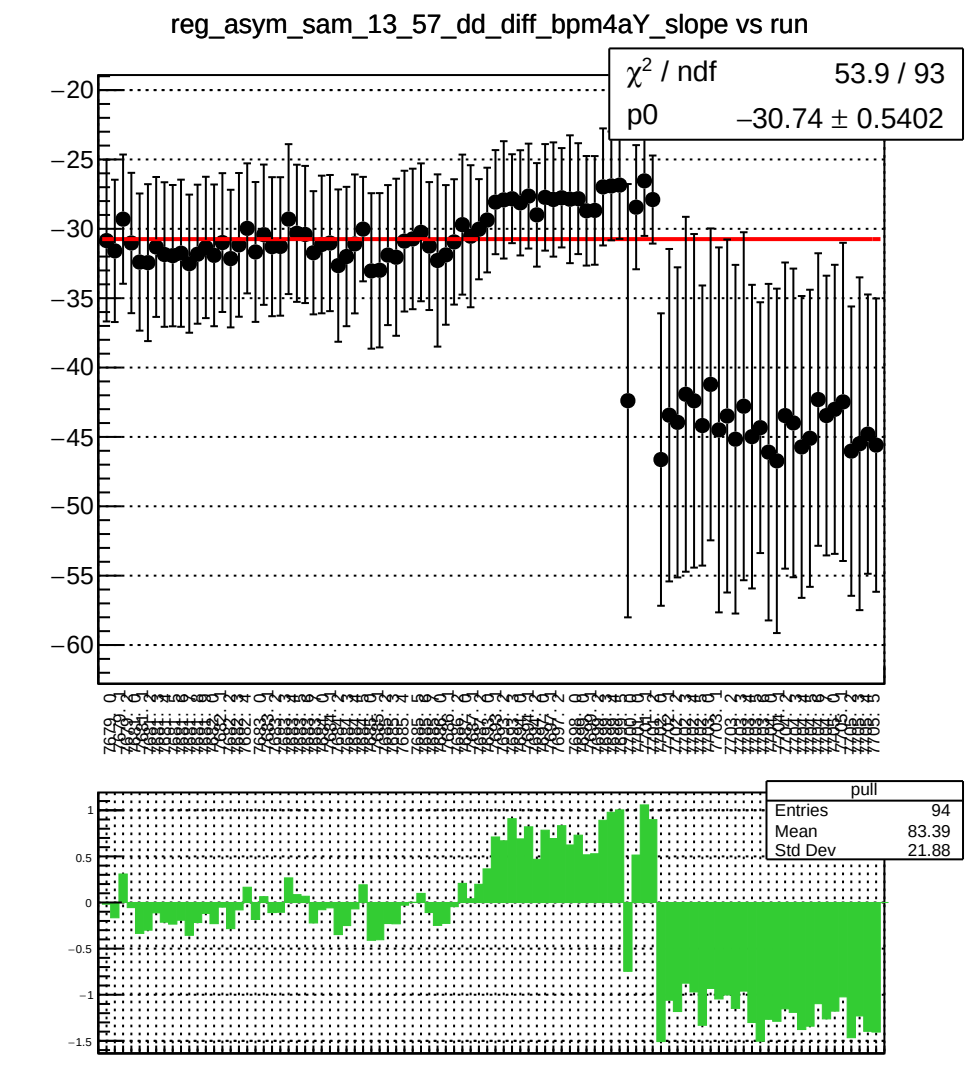

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 53.87 / 93
p0 35.79 ± 1.667
120
100
80
60
40
20
pull
Entries 94
Mean 100.1
Std Dev 30.15
1.5
1
0.5
0
−0.5
pull1D
Entries 94
Mean 0.2131
Std Dev 0.7264
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

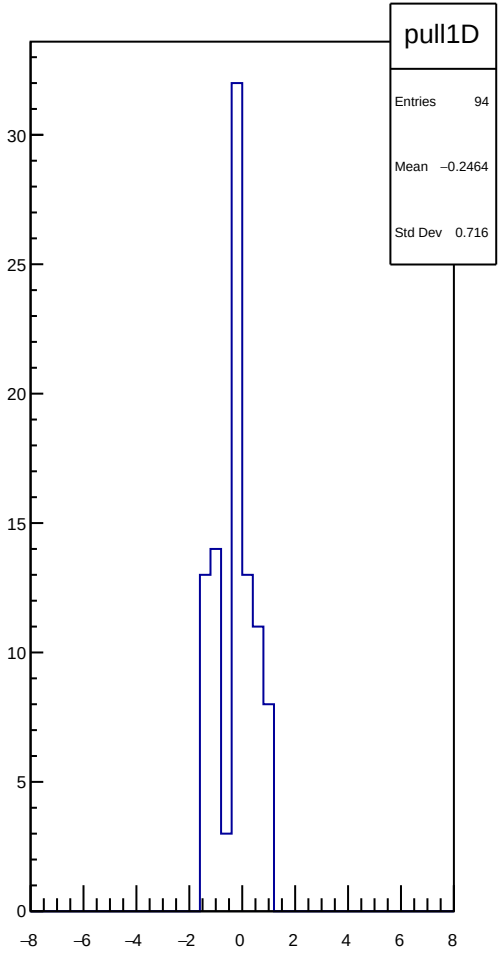

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 36.58 / 93
p0 −66.28 ± 0.9341
pull
Entries 94
Mean 104.6
Std Dev 43.69
pull1D
Entries 94
Mean 0.2205
Std Dev 0.5836

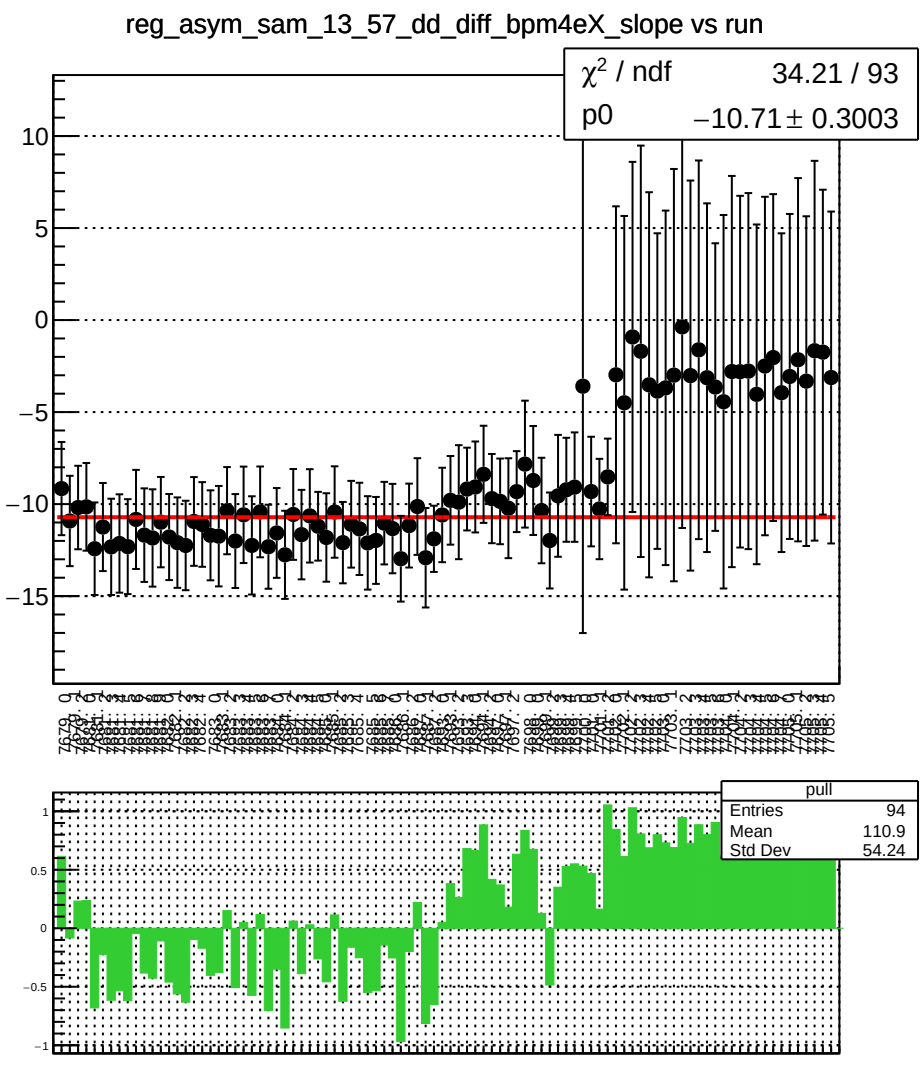

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 40.53 / 93
p0 72.21 ± 2.437
pull
Entries 94
Mean 129.8
Std Dev 64.7
pull1D
Entries 94
Mean −0.121
Std Dev 0.6454

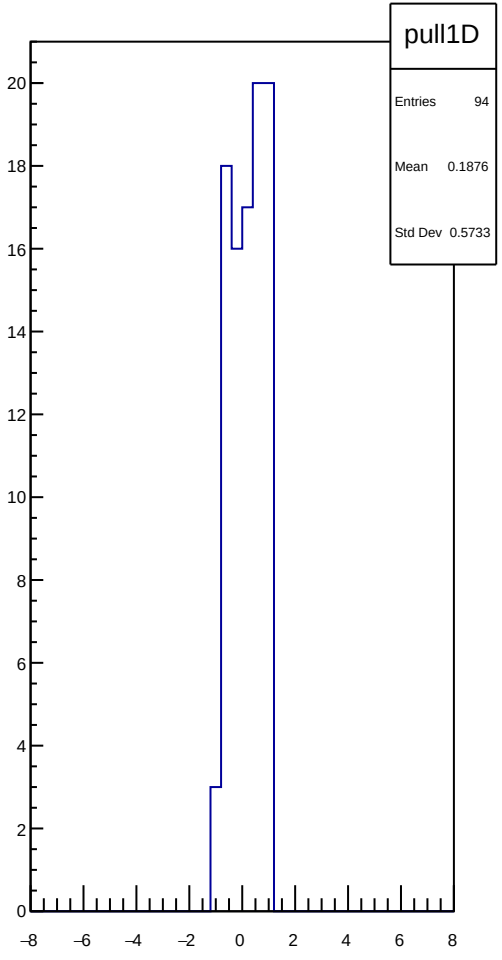

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 12.25 / 93
p0 −0.3311± 0.1122
pull
Entries 94
Mean −75.85
Std Dev 126
pull1D
Entries 94
Mean 0.06029
Std Dev 0.3559

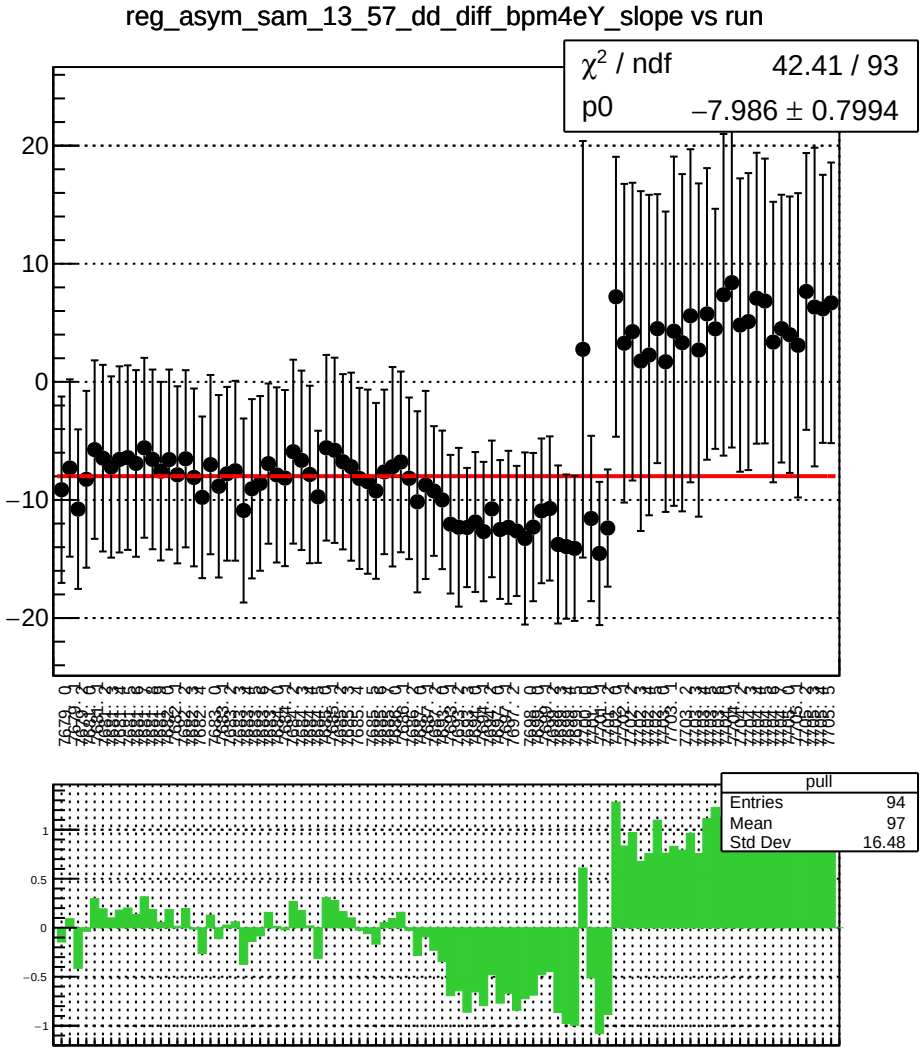

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 23.1 / 93
p0 −14.66 ± 0.3722
pull
Entries 94
Mean 100
Std Dev 34.88
pull1D
Entries 94
Mean −0.1558
Std Dev 0.4706

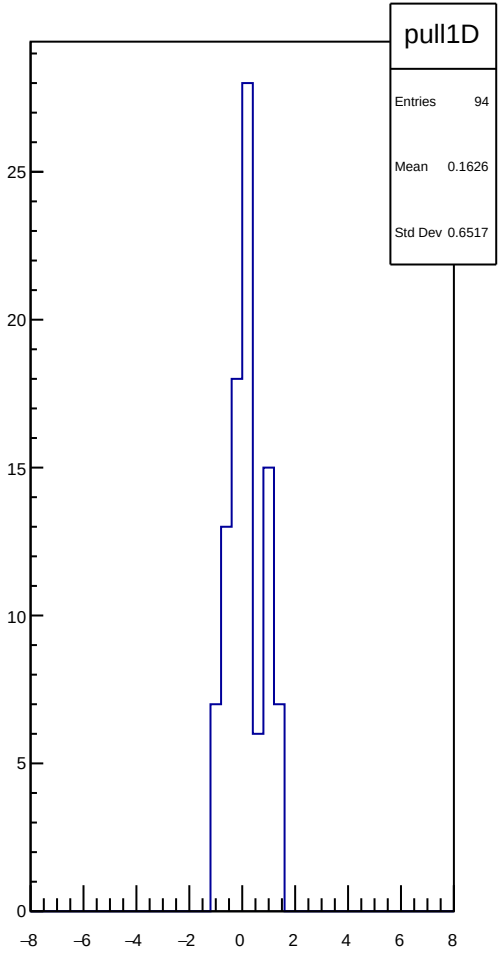

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 53.9 / 93
p0 −30.74 ± 0.5402
pull
Entries 94
Mean 83.39
Std Dev 21.88

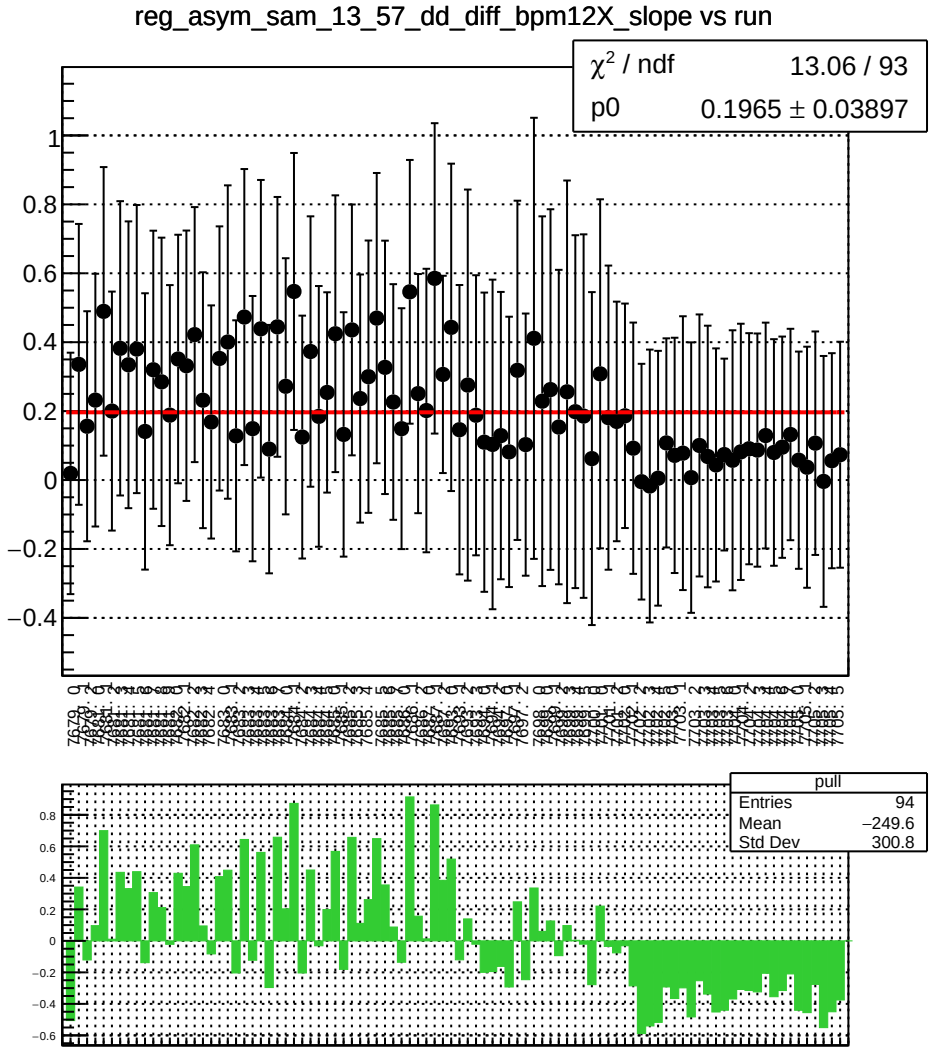

pull1D
Entries 94
Mean −0.2464
Std Dev 0.716

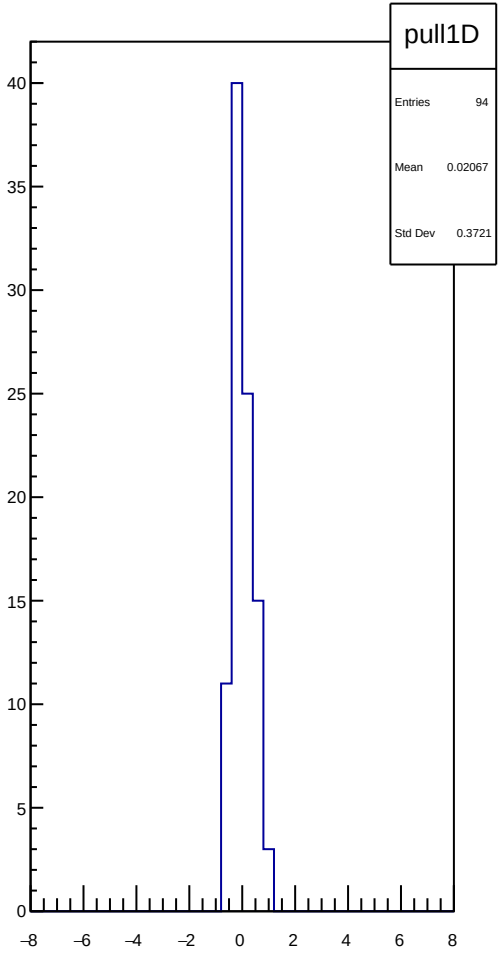

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 34.21 / 93
p0 −10.71 ± 0.3003
pull
Entries 94
Mean 110.9
Std Dev 54.24

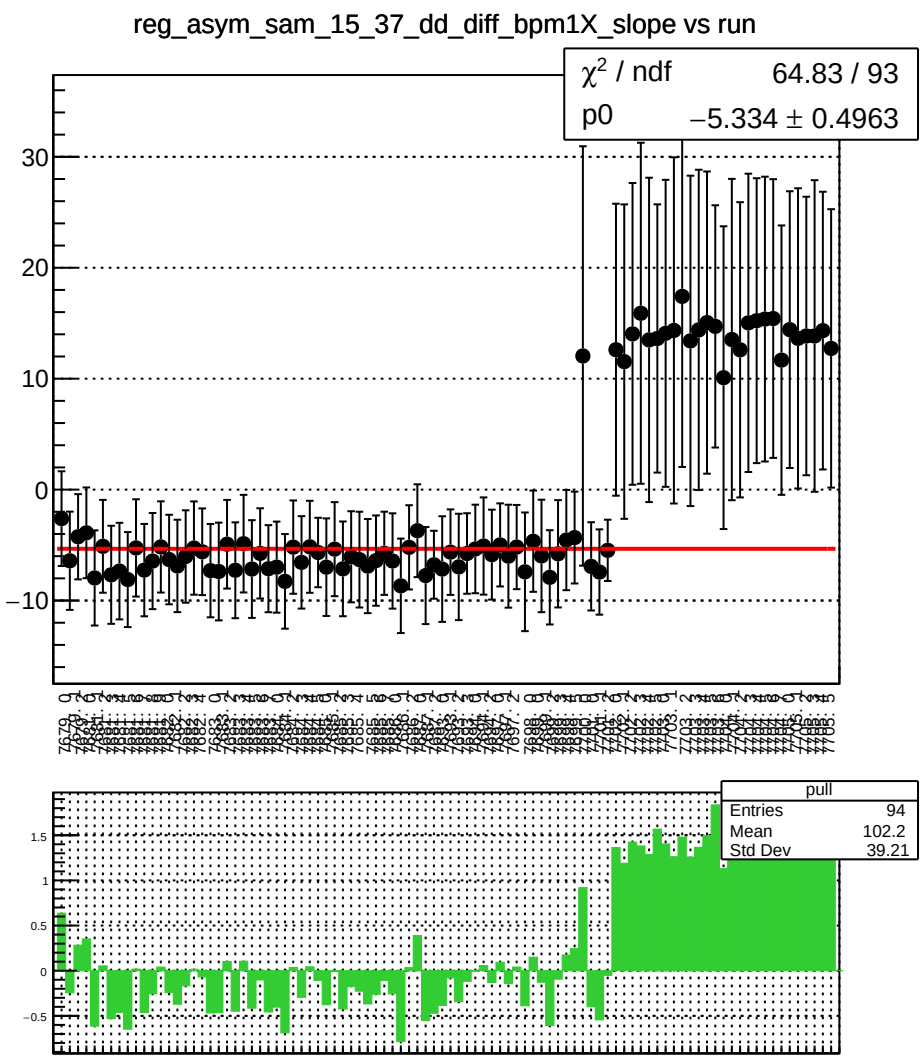

pull1D
Entries 94
Mean 0.1876
Std Dev 0.5733

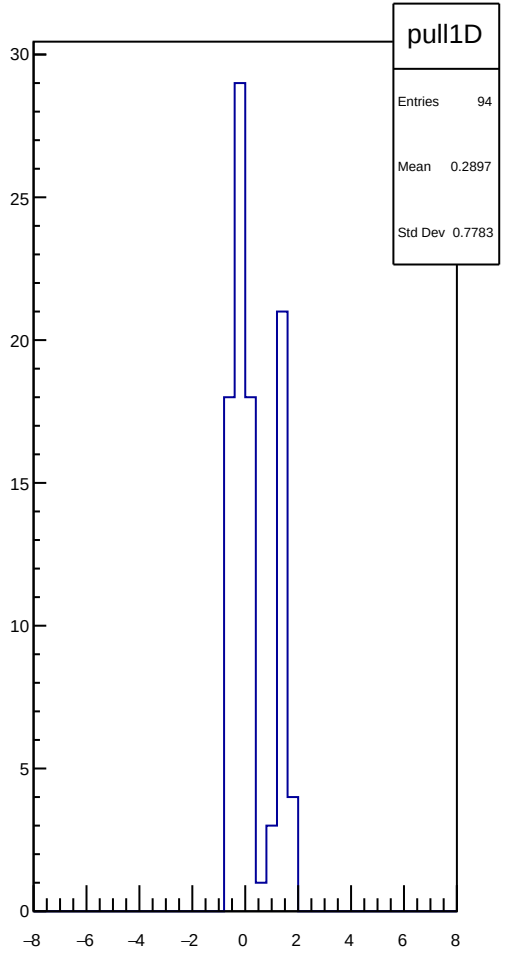

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 42.41 / 93
p0 −7.986 ± 0.7994
pull
Entries 94
Mean 97
Std Dev 16.48

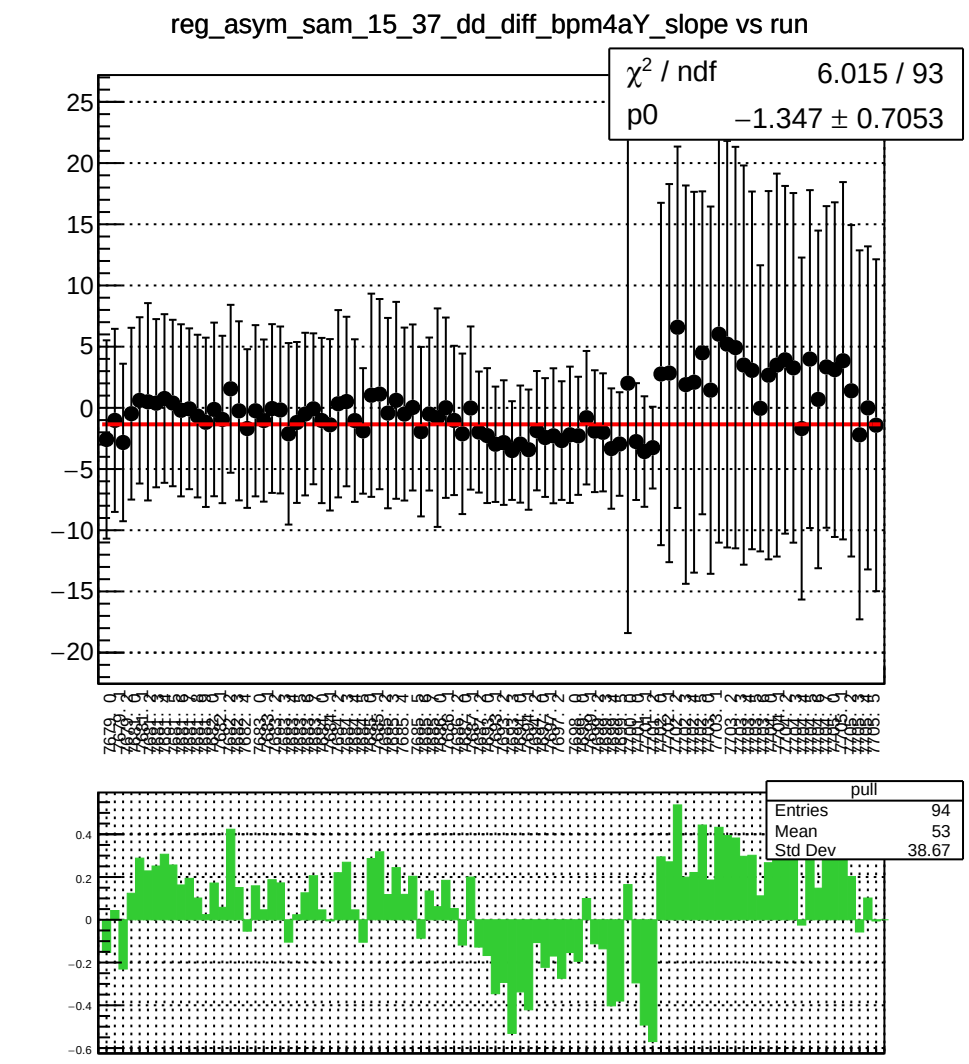

pull1D
Entries 94
Mean 0.1626
Std Dev 0.6517

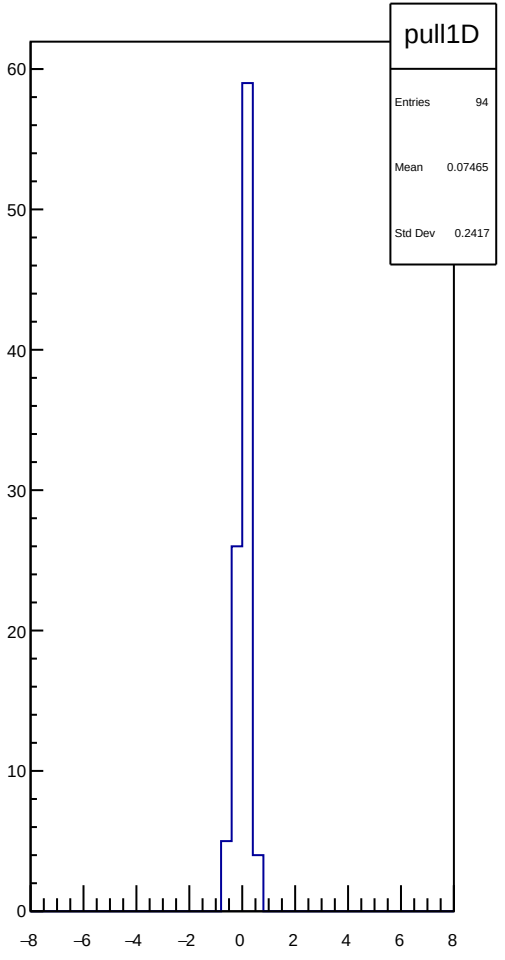

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 13.06 / 93
p0 0.1965 ± 0.03897
pull
Entries 94
Mean −249.6
Std Dev 300.8

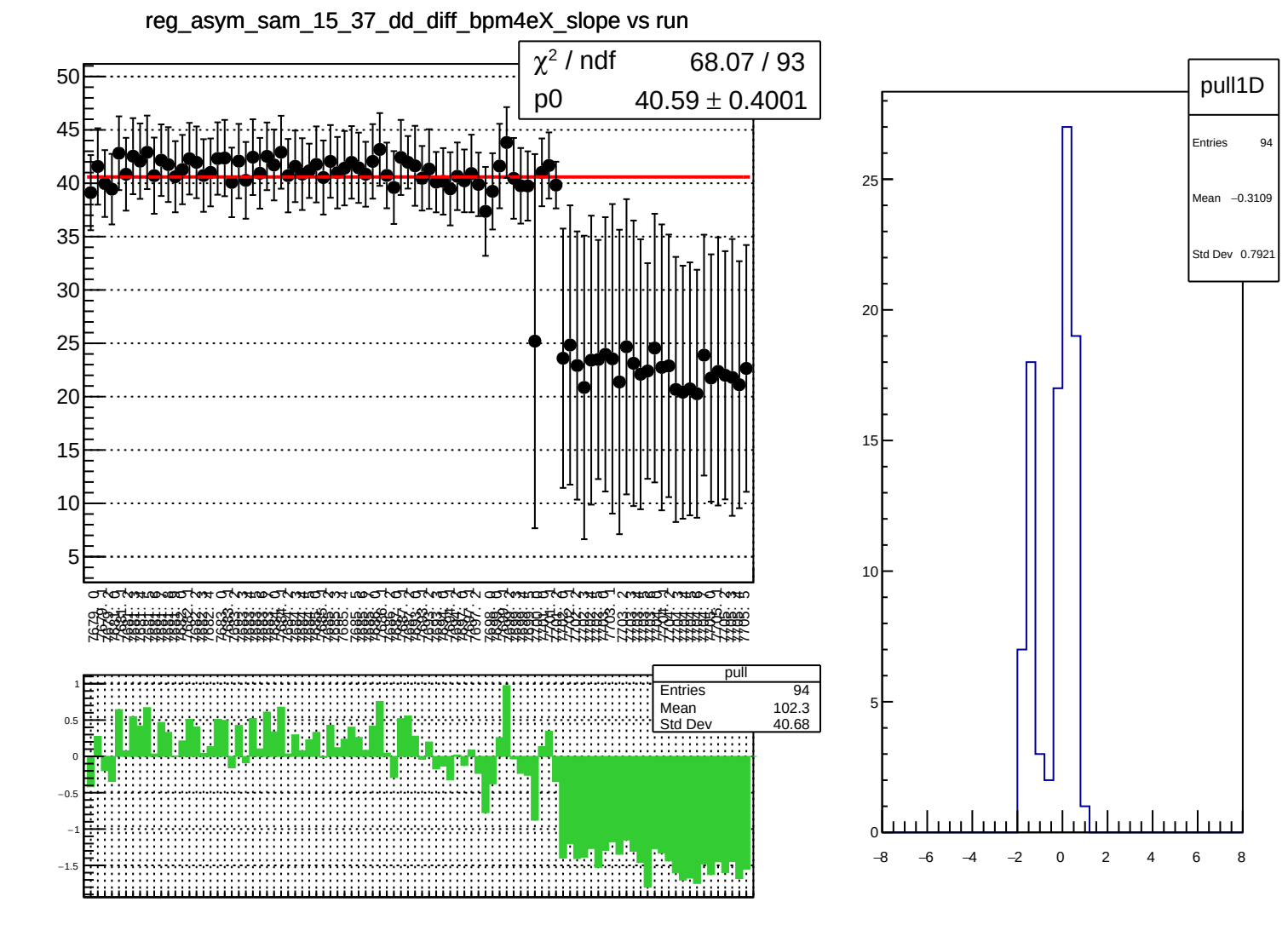

pull1D
Entries 94
Mean 0.02067
Std Dev 0.3721

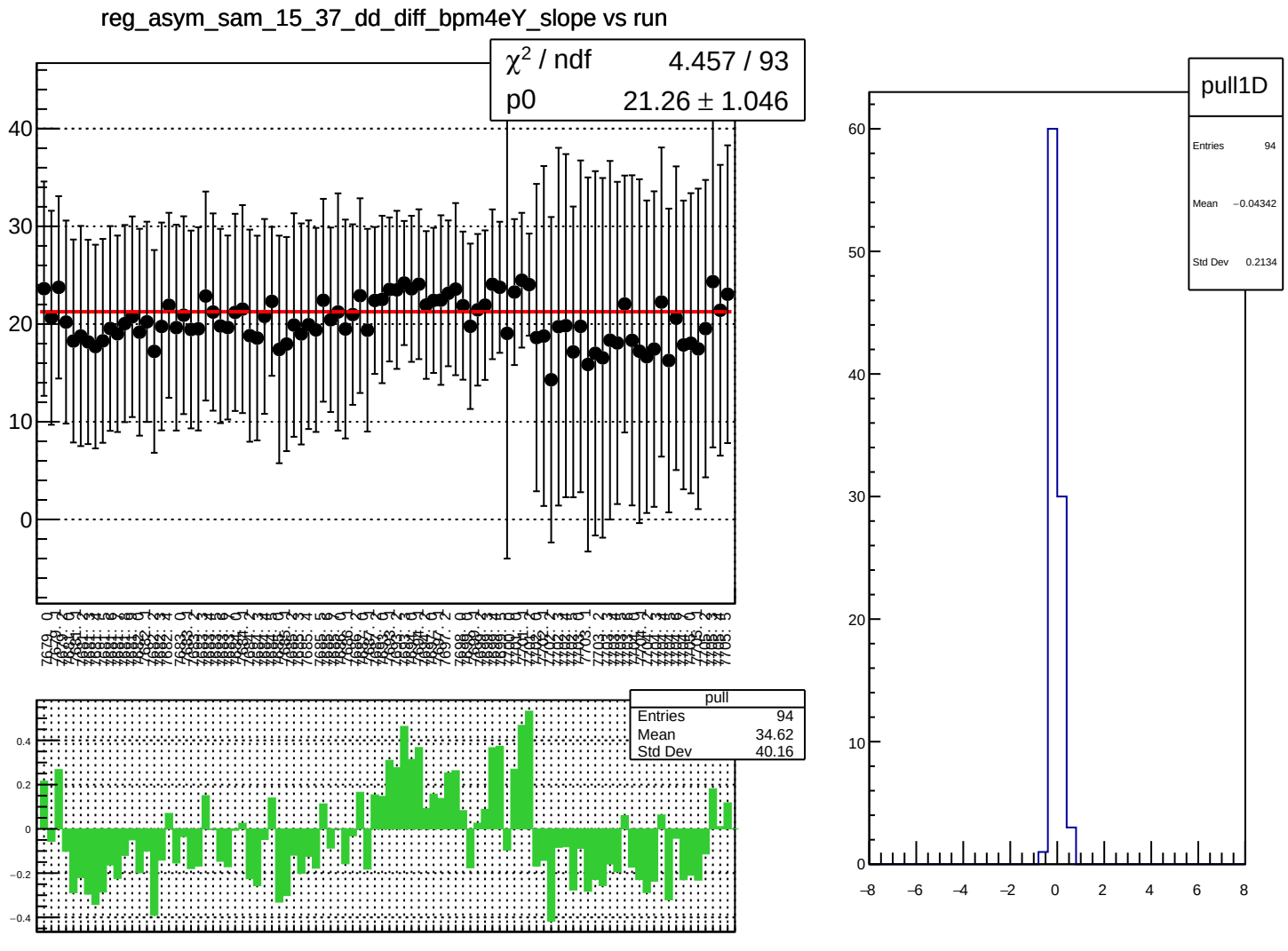

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 64.83 / 93
p0 −5.334 ± 0.4963
30
20
10
0
−10
pull
Entries 94
Mean 102.2
Std Dev 39.21
1.5
1
0.5
0
−0.5

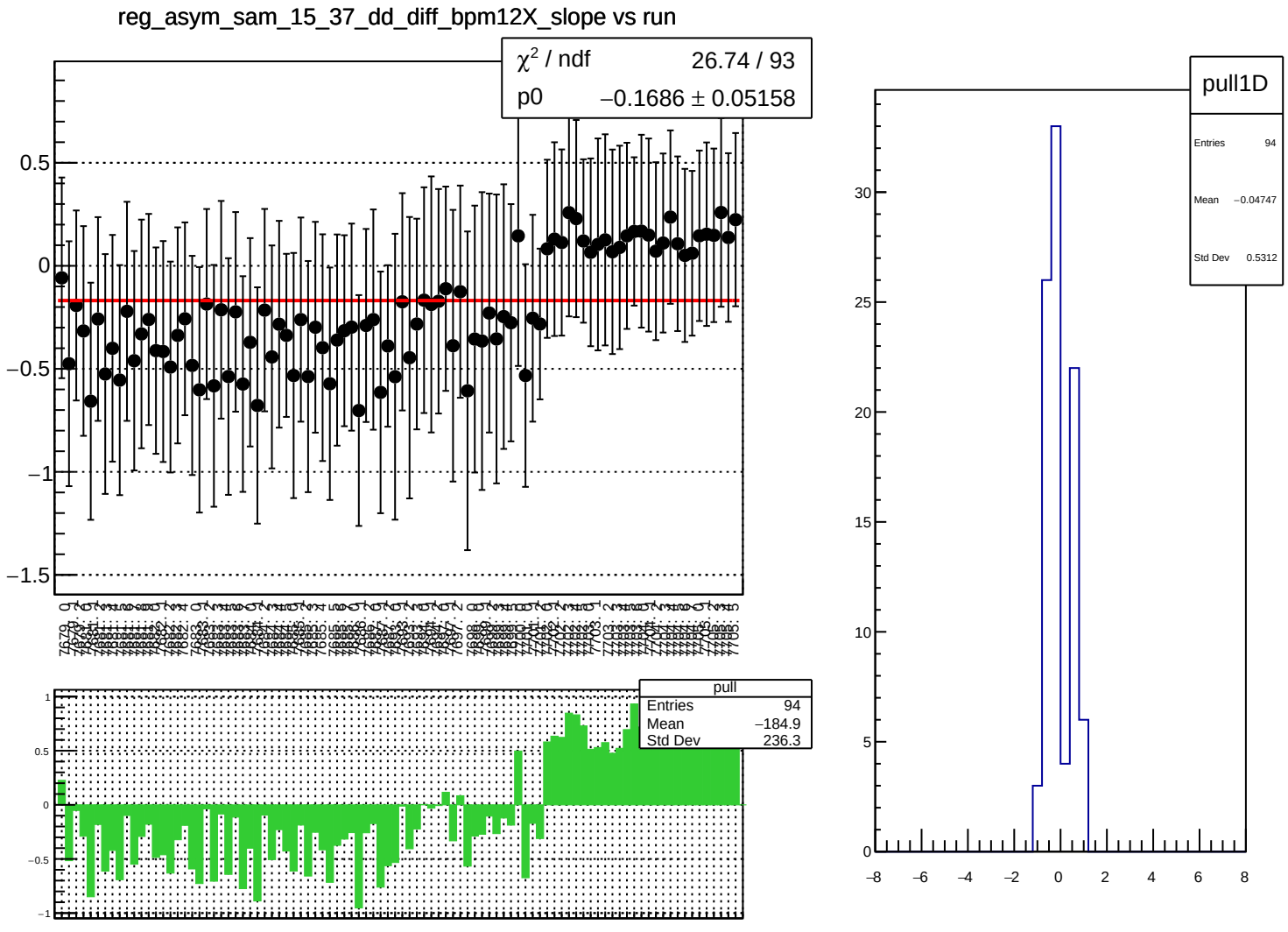

pull1D
Entries 94
Mean 0.2897
Std Dev 0.7783
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

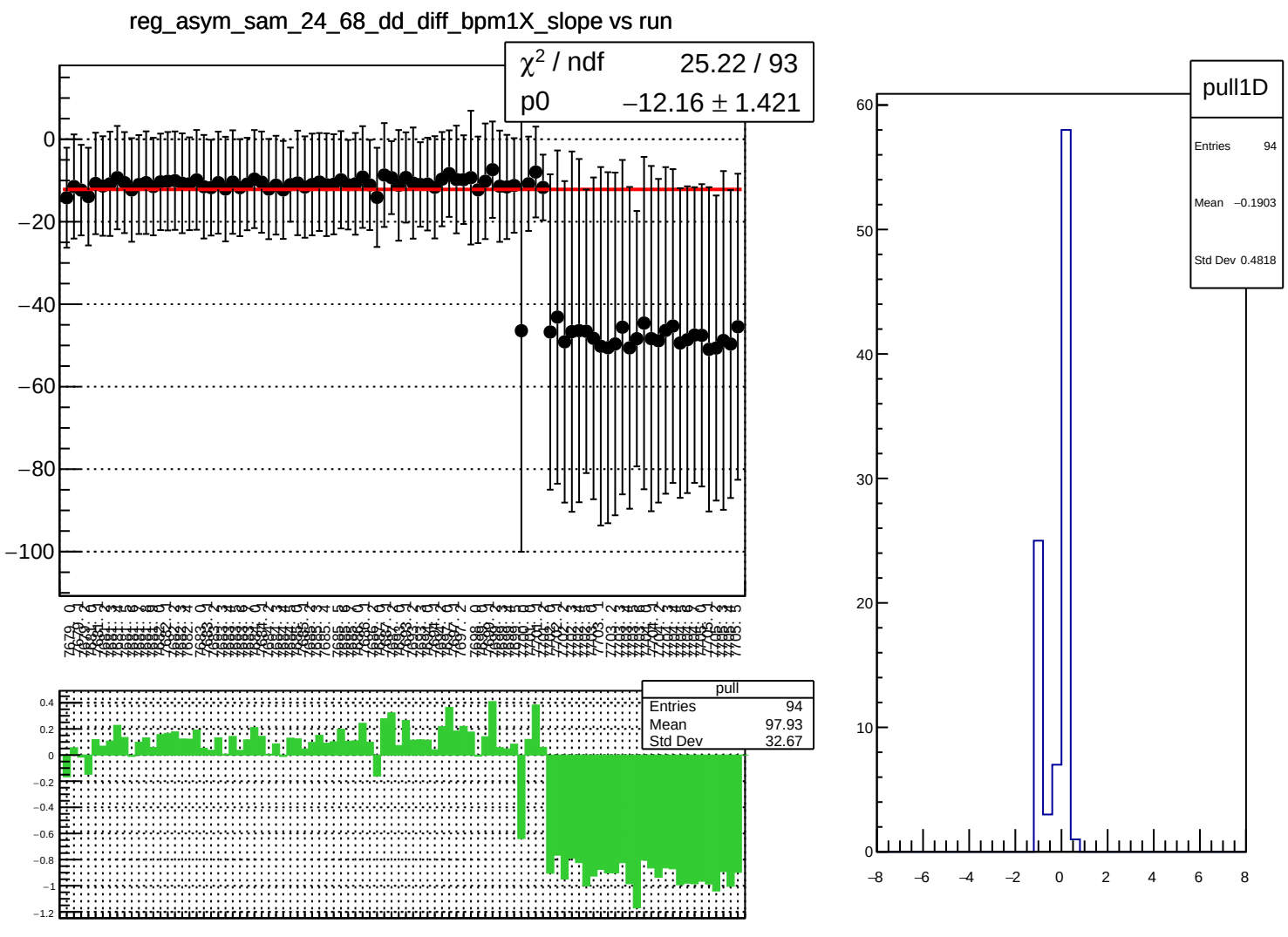

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.015 / 93
p0 −1.347 ± 0.7053
pull
Entries 94
Mean 53
Std Dev 38.67

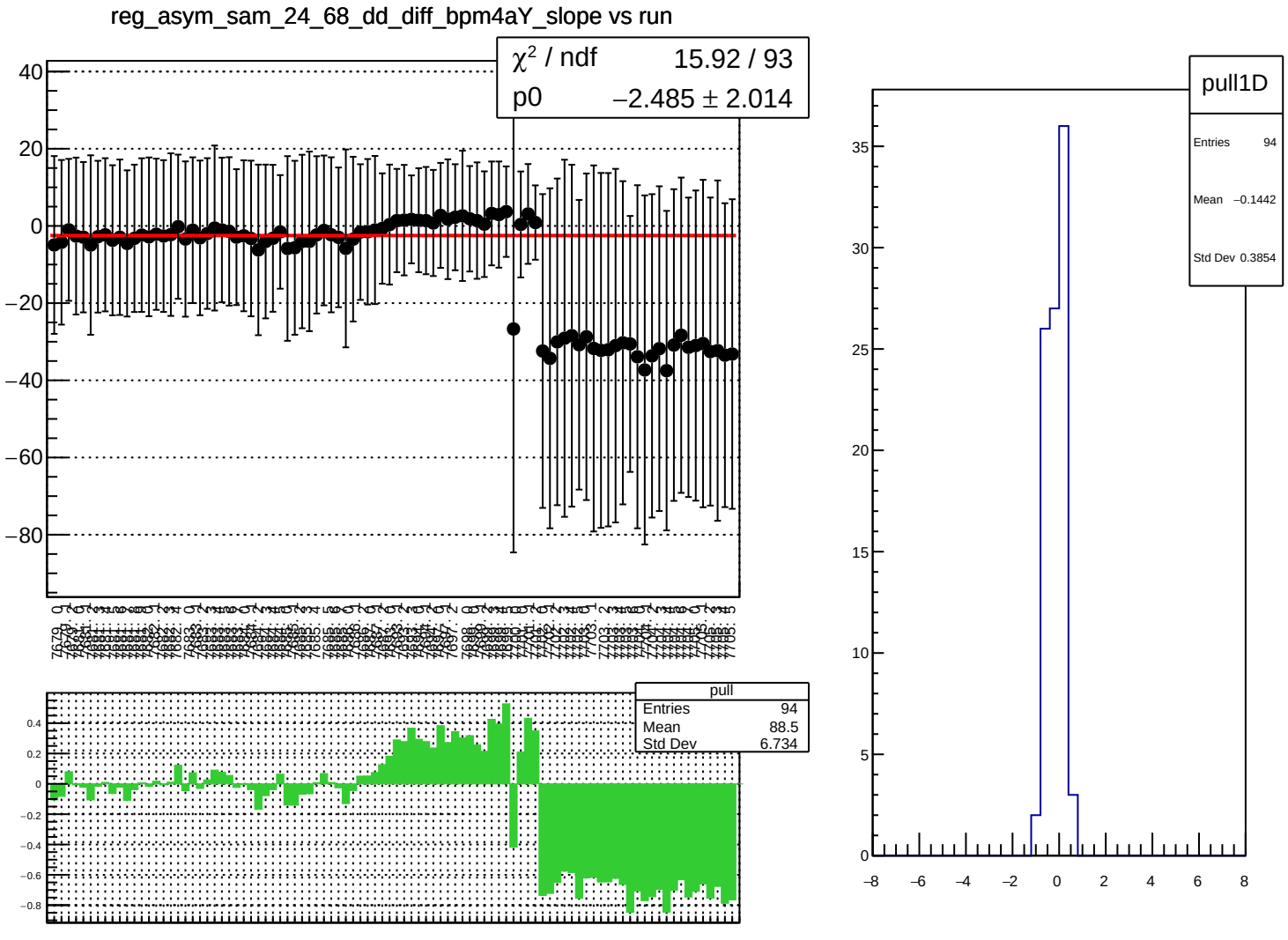

pull1D
Entries 94
Mean 0.07465
Std Dev 0.2417

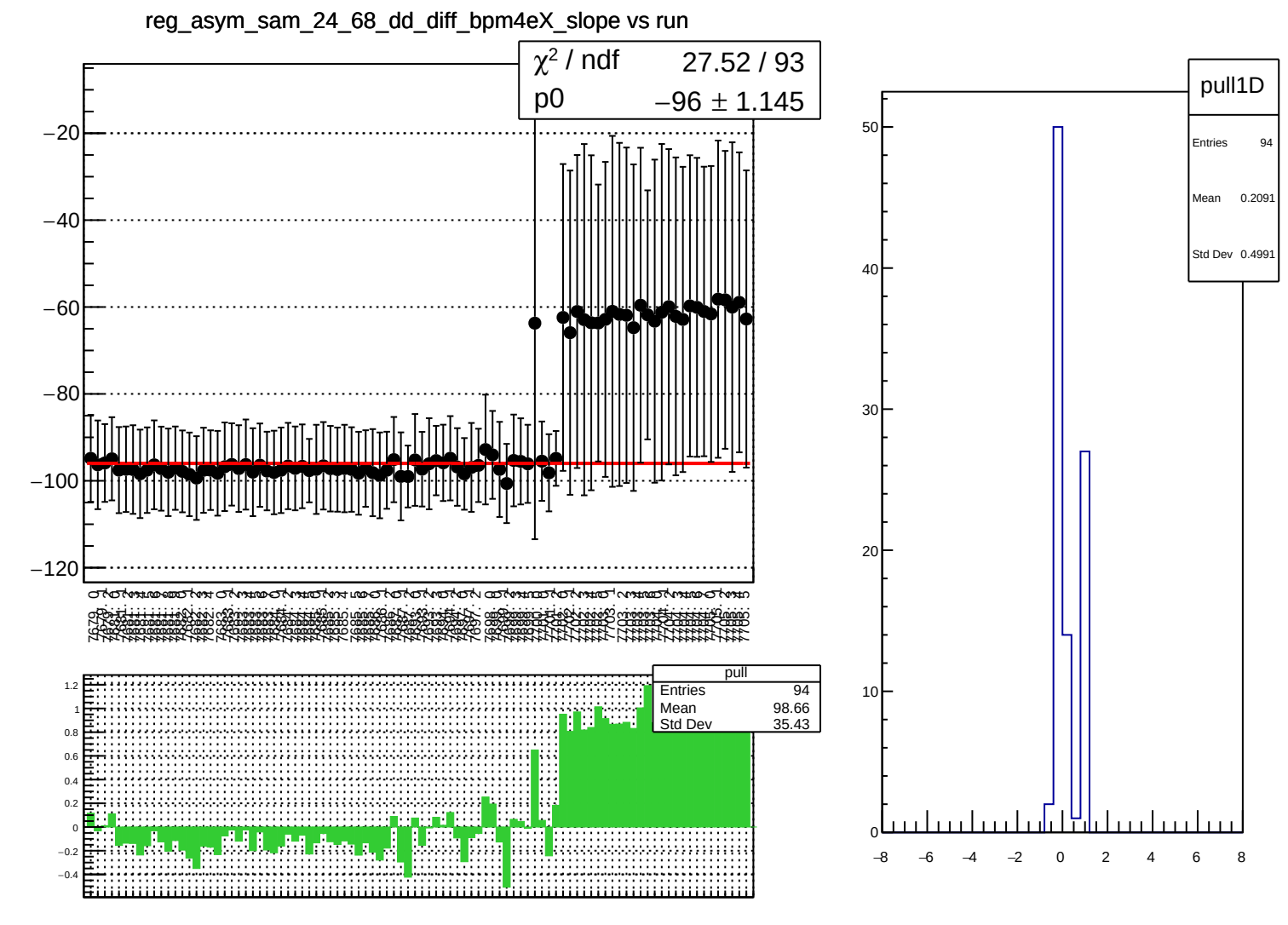

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 68.07 / 93
p0 40.59 ± 0.4001
pull
Entries 94
Mean 102.3
Std Dev 40.68
pull1D
Entries 94
Mean −0.3109
Std Dev 0.7921

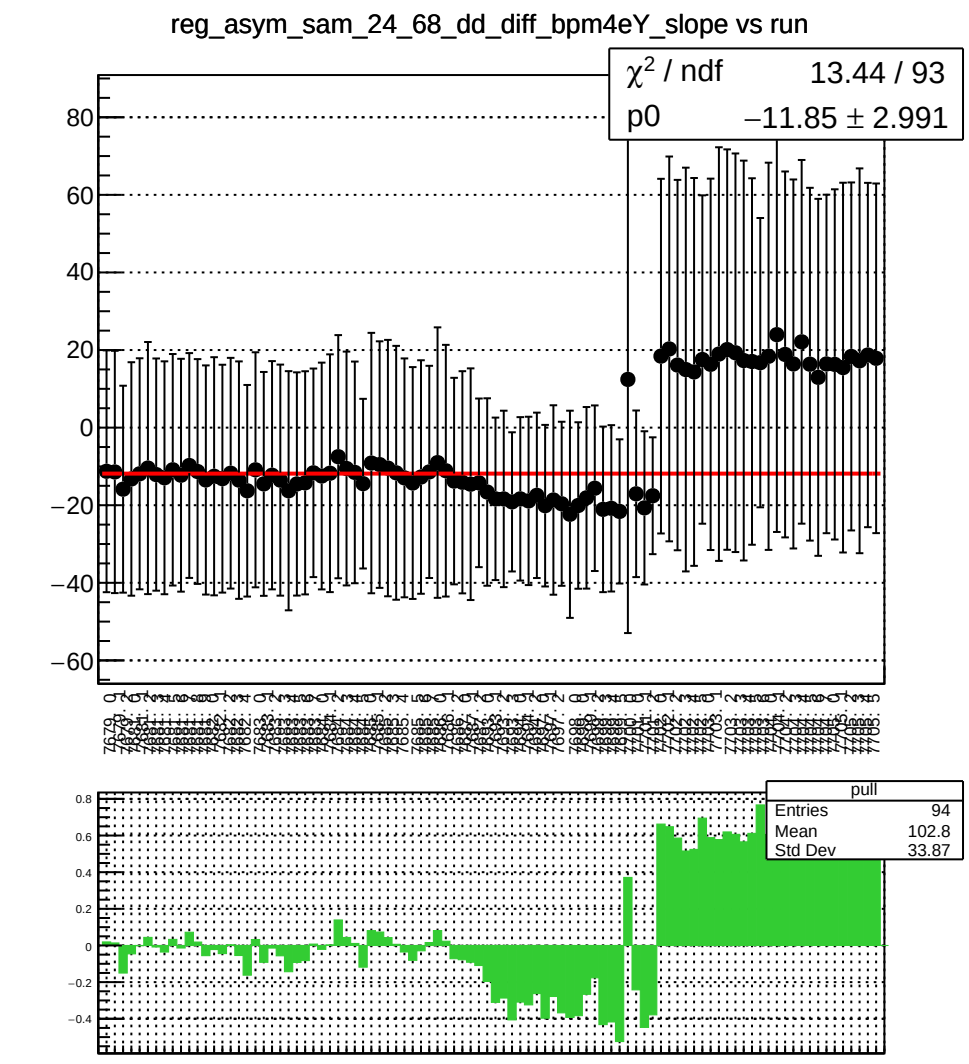

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.457 / 93
p0 21.26 ± 1.046
pull
Entries 94
Mean 34.62
Std Dev 40.16
pull1D
Entries 94
Mean −0.04342
Std Dev 0.2134

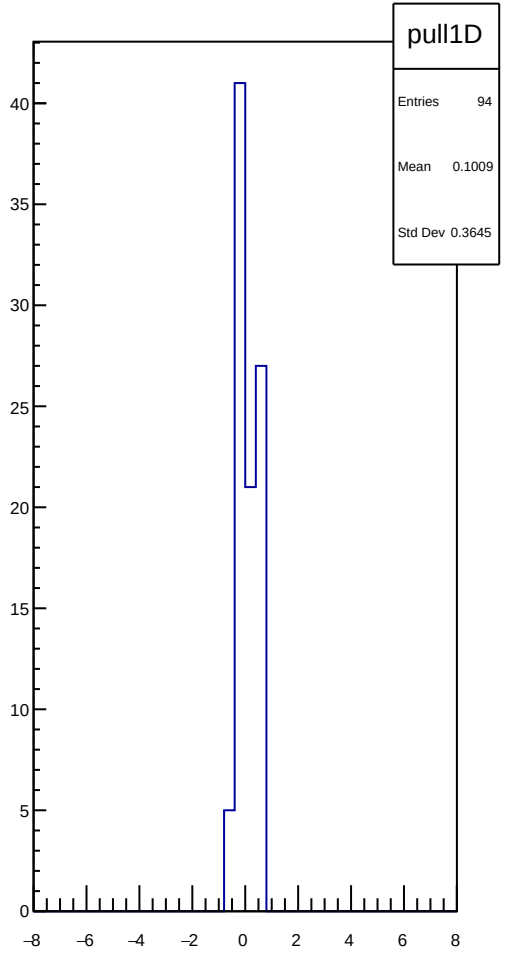

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 26.74 / 93
p0 −0.1686 ± 0.05158
pull
Entries 94
Mean −184.9
Std Dev 236.3
pull1D
Entries 94
Mean −0.04747
Std Dev 0.5312

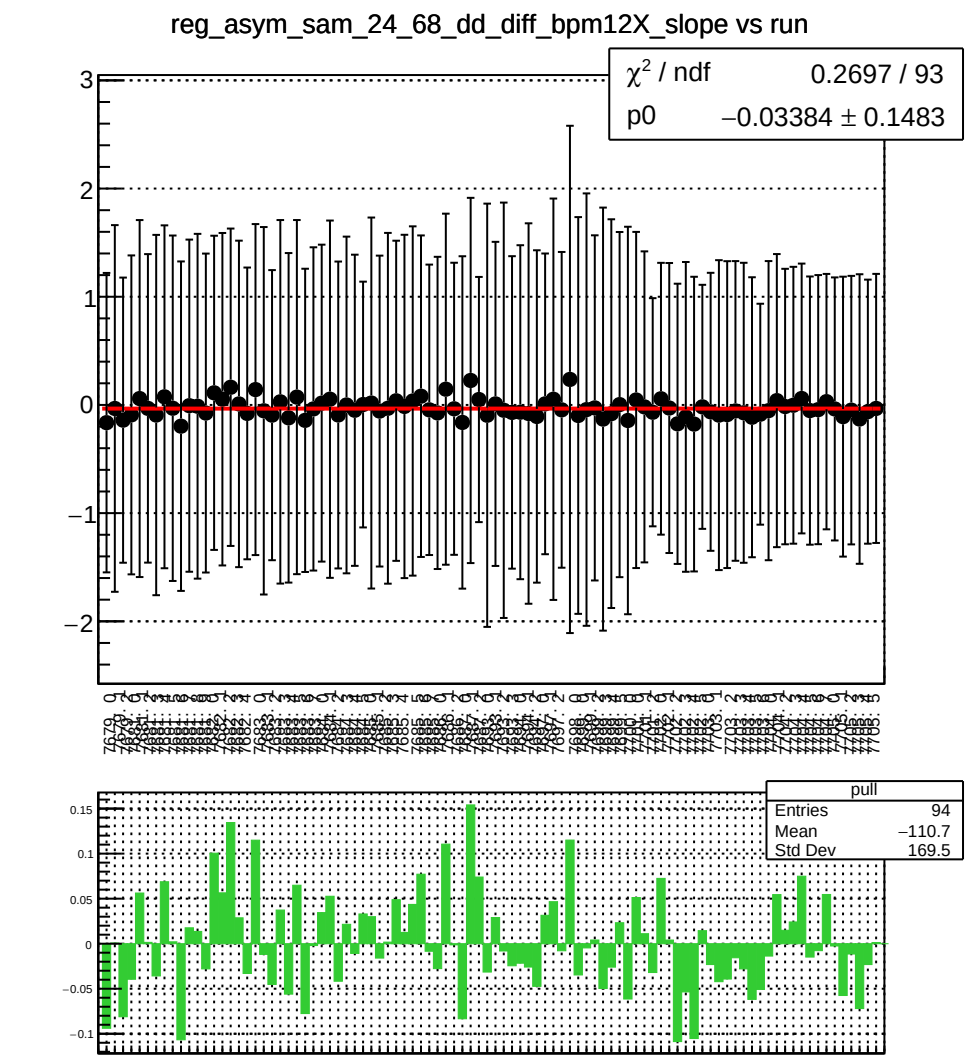

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 25.22 / 93
p0 −12.16 ± 1.421
pull
Entries 94
Mean 97.93
Std Dev 32.67
pull1D
Entries 94
Mean −0.1903
Std Dev 0.4818

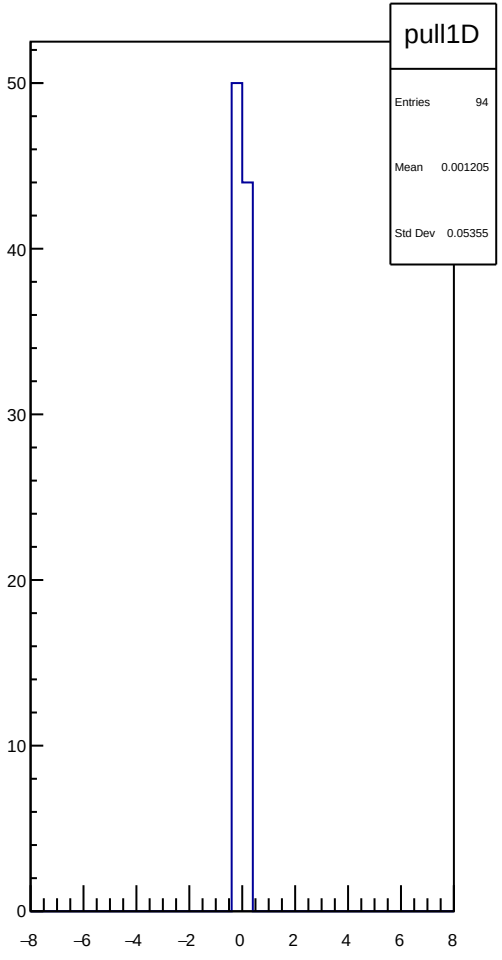

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 15.92 / 93
p0 −2.485 ± 2.014
pull
Entries 94
Mean 88.5
Std Dev 6.734
pull1D
Entries 94
Mean −0.1442
Std Dev 0.3854

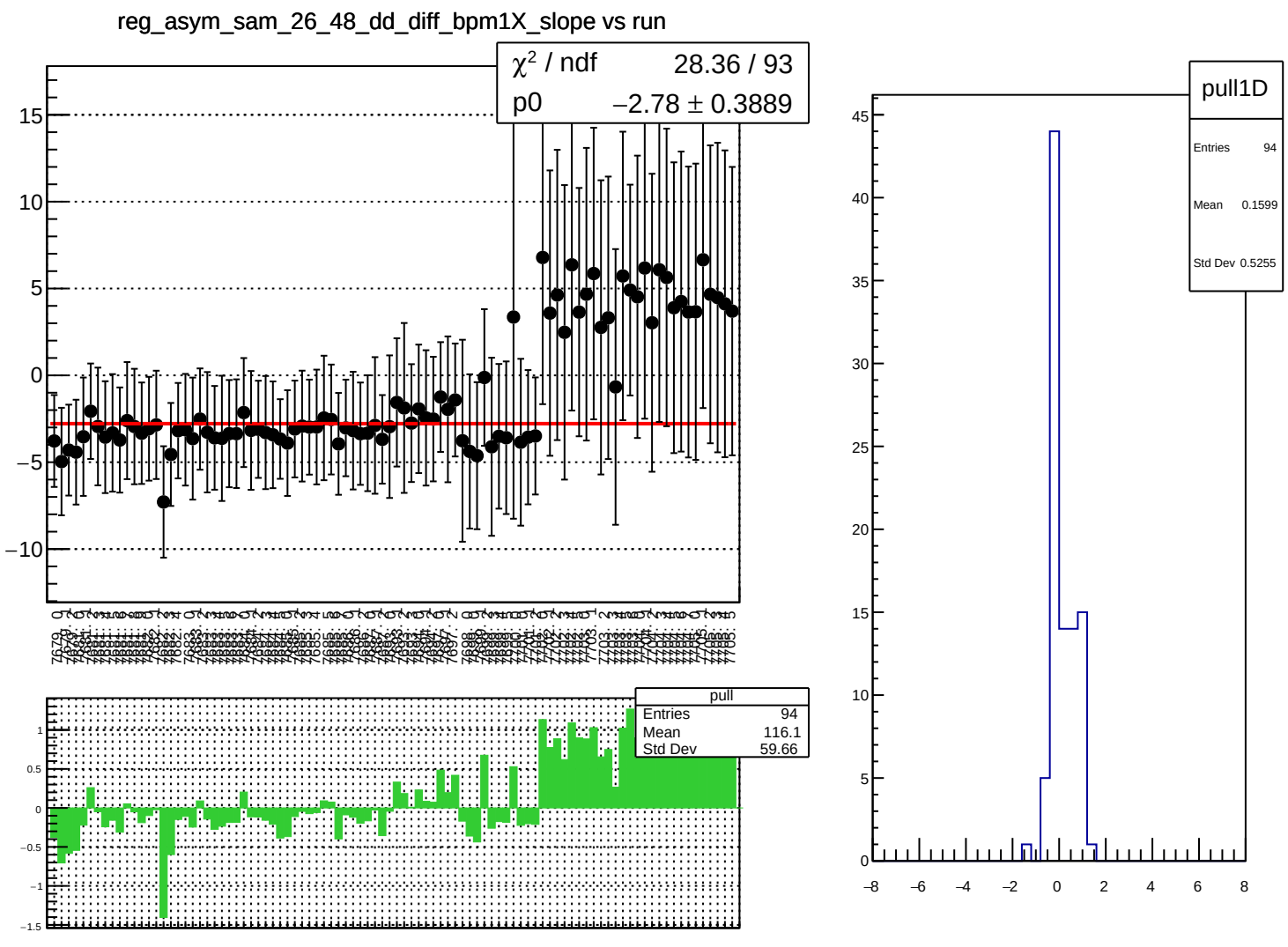

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 27.52 / 93
p0 −96 ± 1.145
−20
−40
−60
−80
−100
−120
pull
Entries 94
Mean 98.66
Std Dev 35.43
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 94
Mean 0.2091
Std Dev 0.4991
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

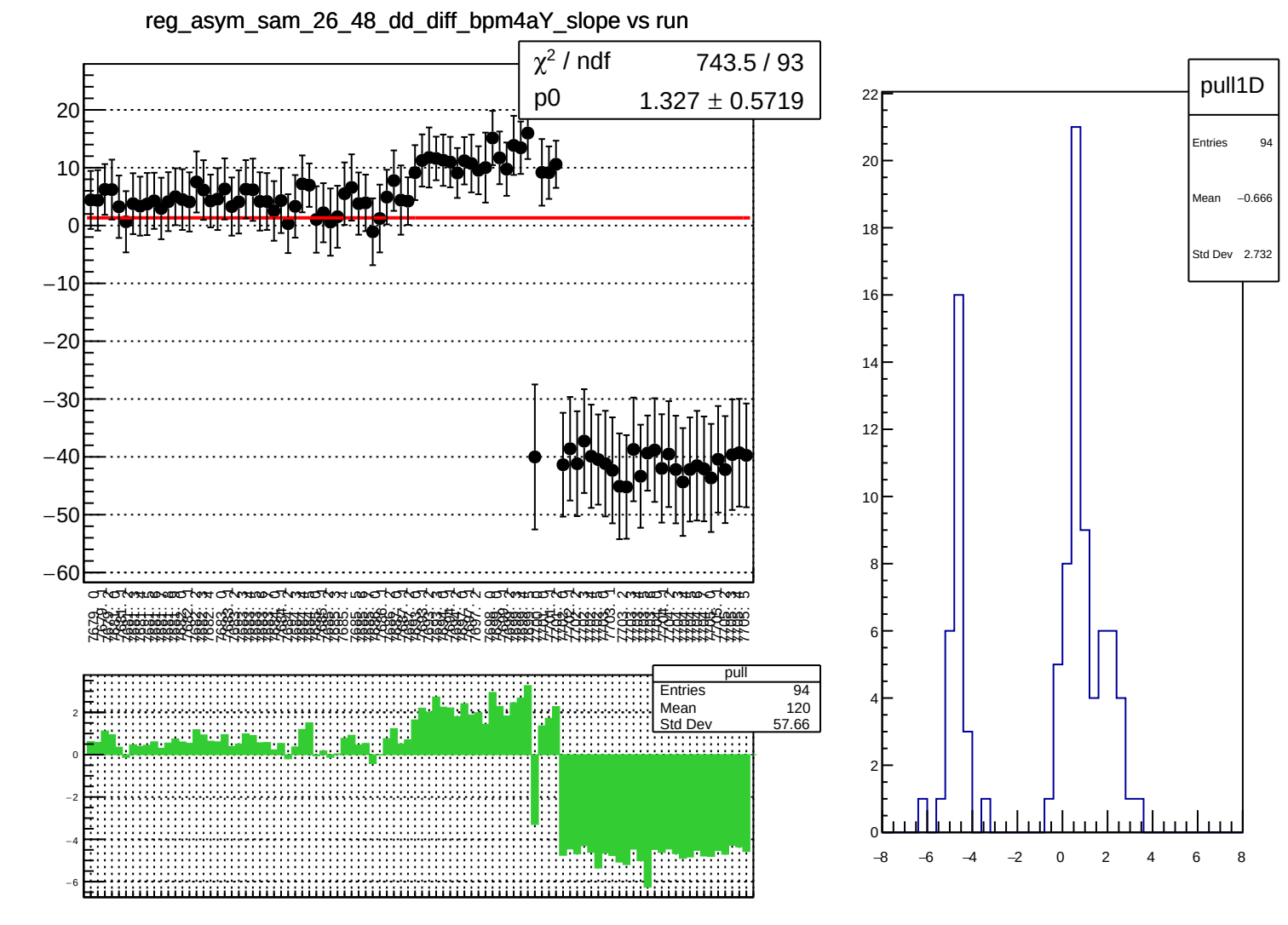

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 13.44 / 93
p0 −11.85 ± 2.991
pull
Entries 94
Mean 102.8
Std Dev 33.87

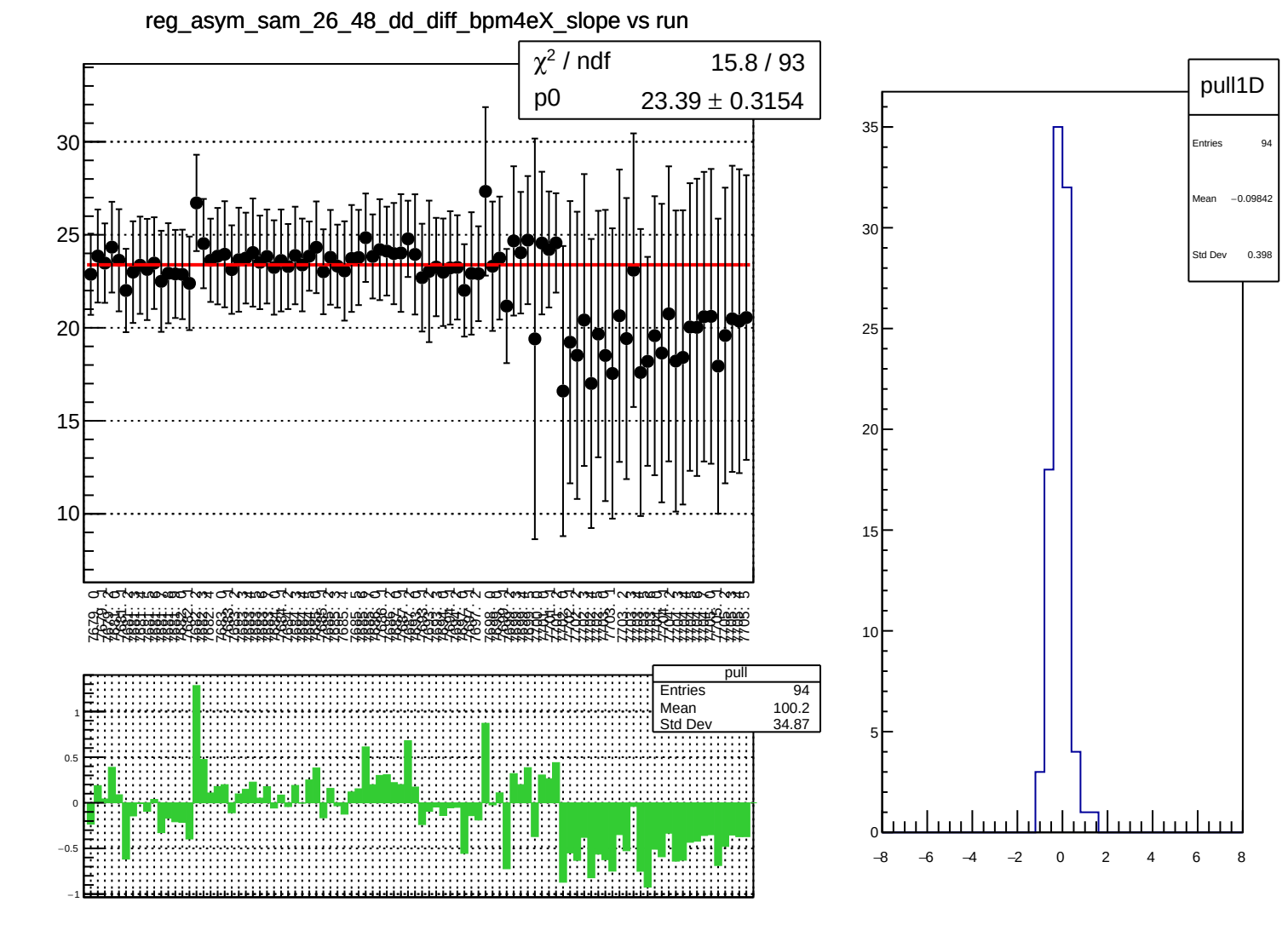

pull1D
Entries 94
Mean 0.1009
Std Dev 0.3645

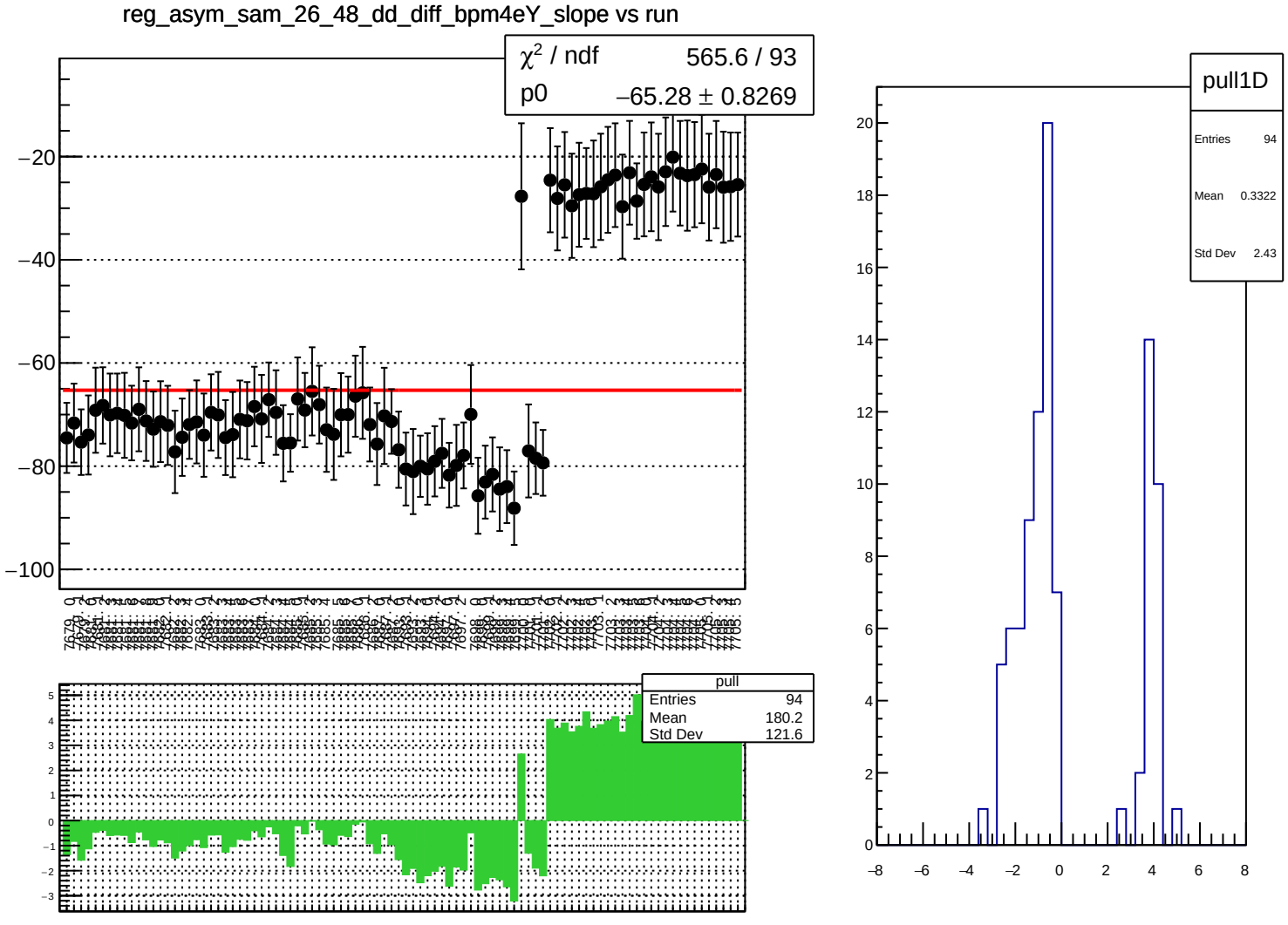

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 0.2697 / 93
p0 −0.03384 ± 0.1483
pull
Entries 94
Mean −110.7
Std Dev 169.5

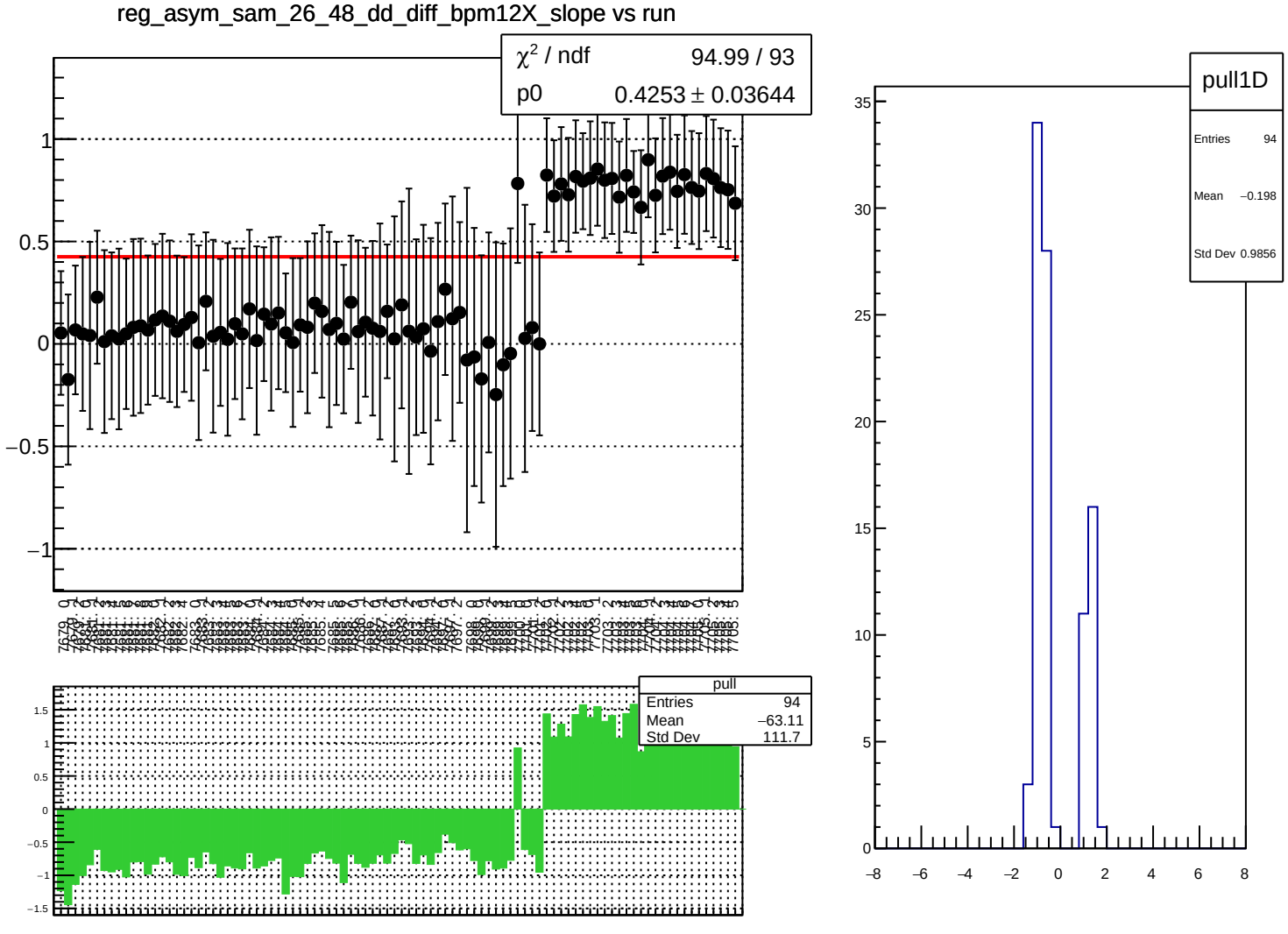

pull1D
Entries 94
Mean 0.001205
Std Dev 0.05355

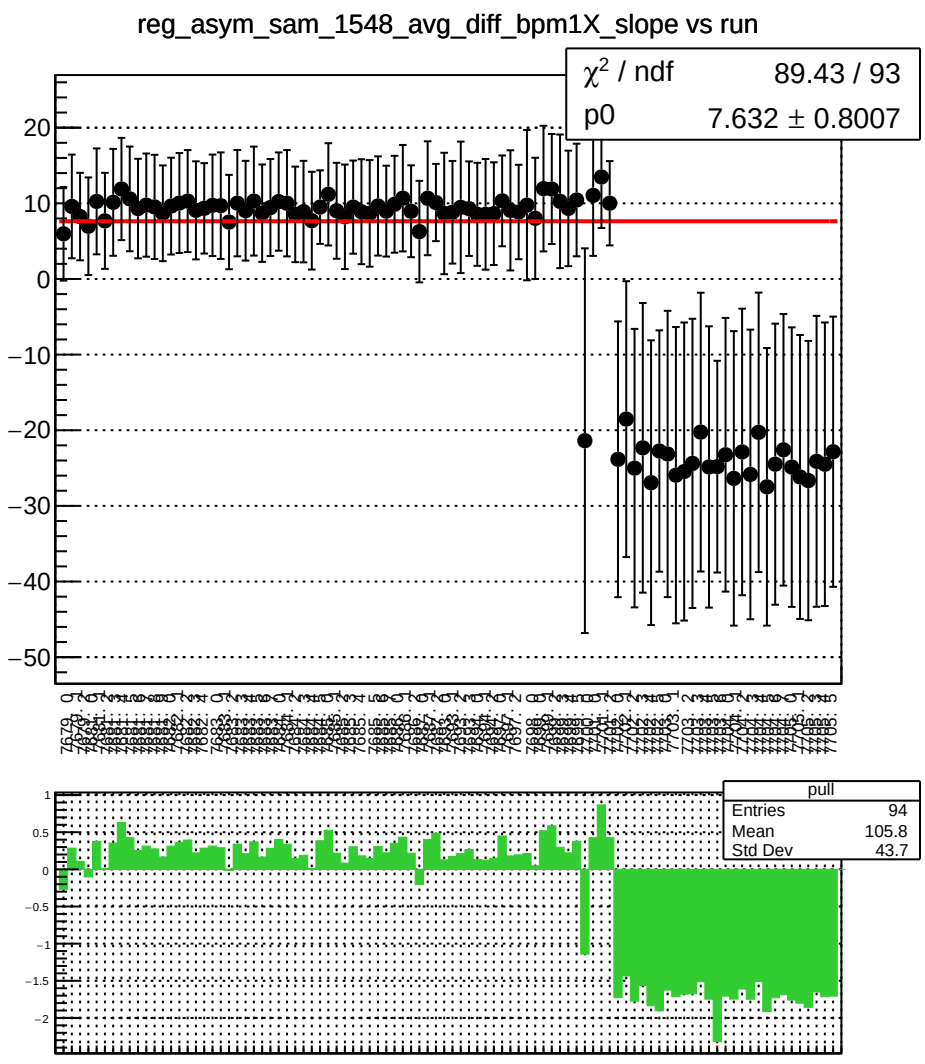

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 28.36 / 93
p0 −2.78 ± 0.3889
pull
Entries 94
Mean 116.1
Std Dev 59.66
pull1D
Entries 94
Mean 0.1599
Std Dev 0.5255

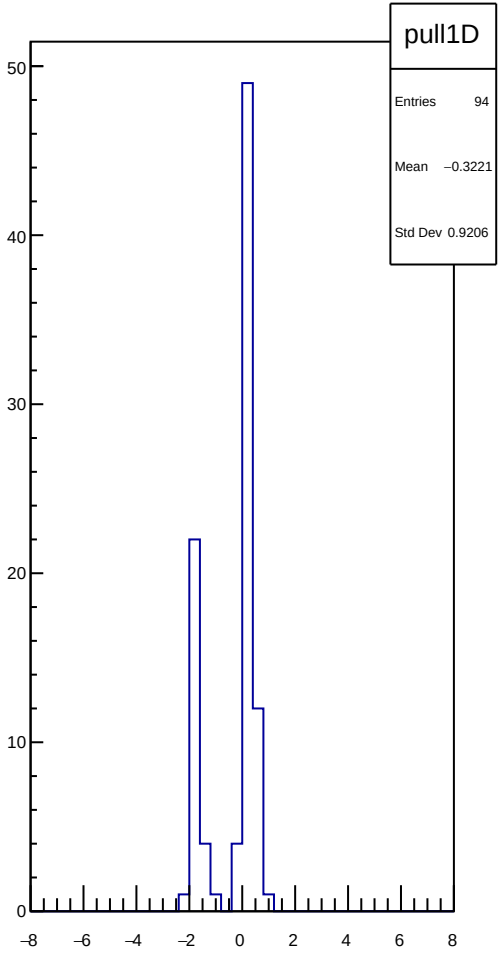

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 743.5 / 93
p0 1.327 ± 0.5719
pull
Entries 94
Mean 120
Std Dev 57.66
pull1D
Entries 94
Mean −0.666
Std Dev 2.732

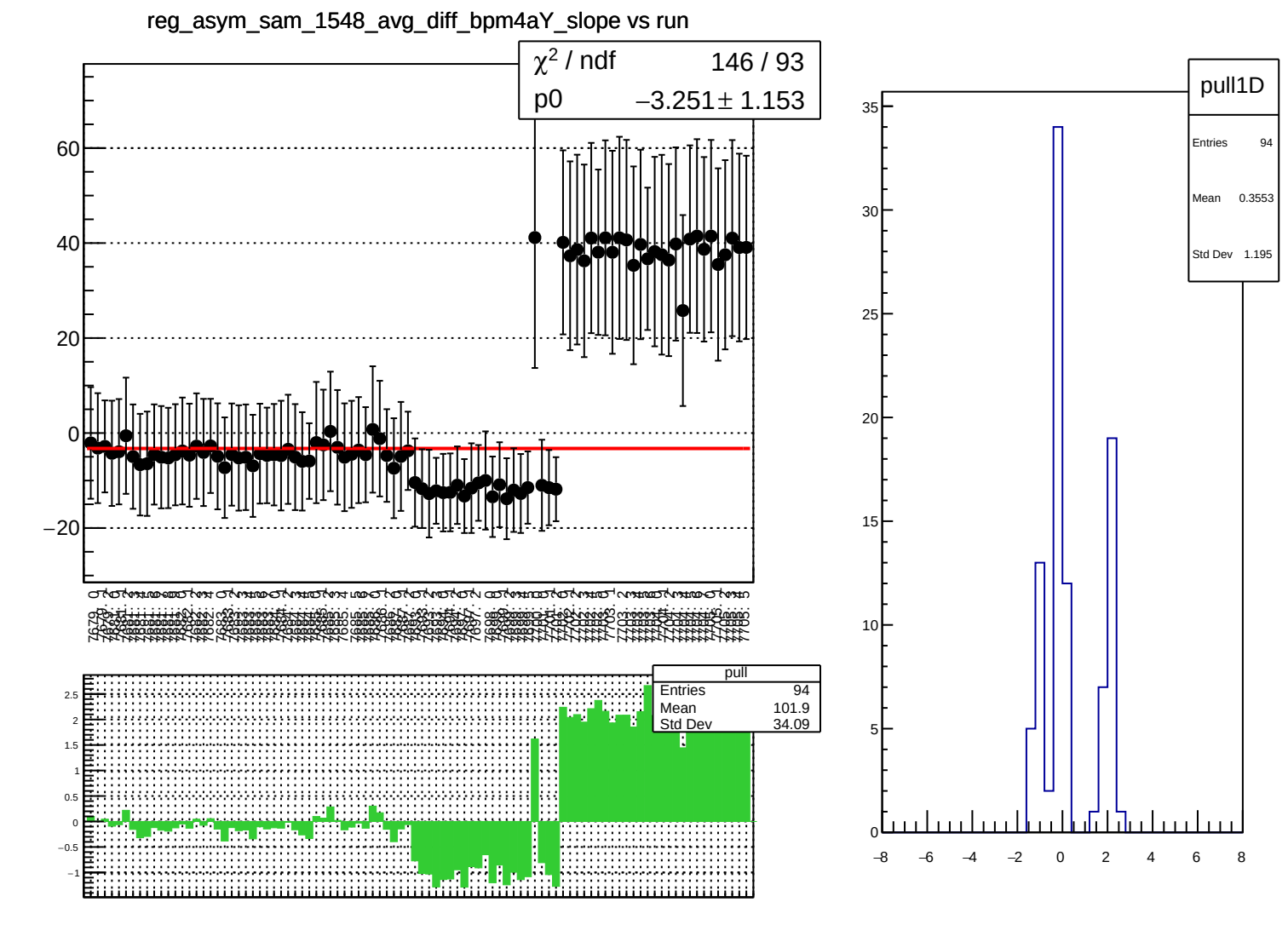

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 15.8 / 93
p0 23.39 ± 0.3154
pull
Entries 94
Mean 100.2
Std Dev 34.87
pull1D
Entries 94
Mean −0.09842
Std Dev 0.398

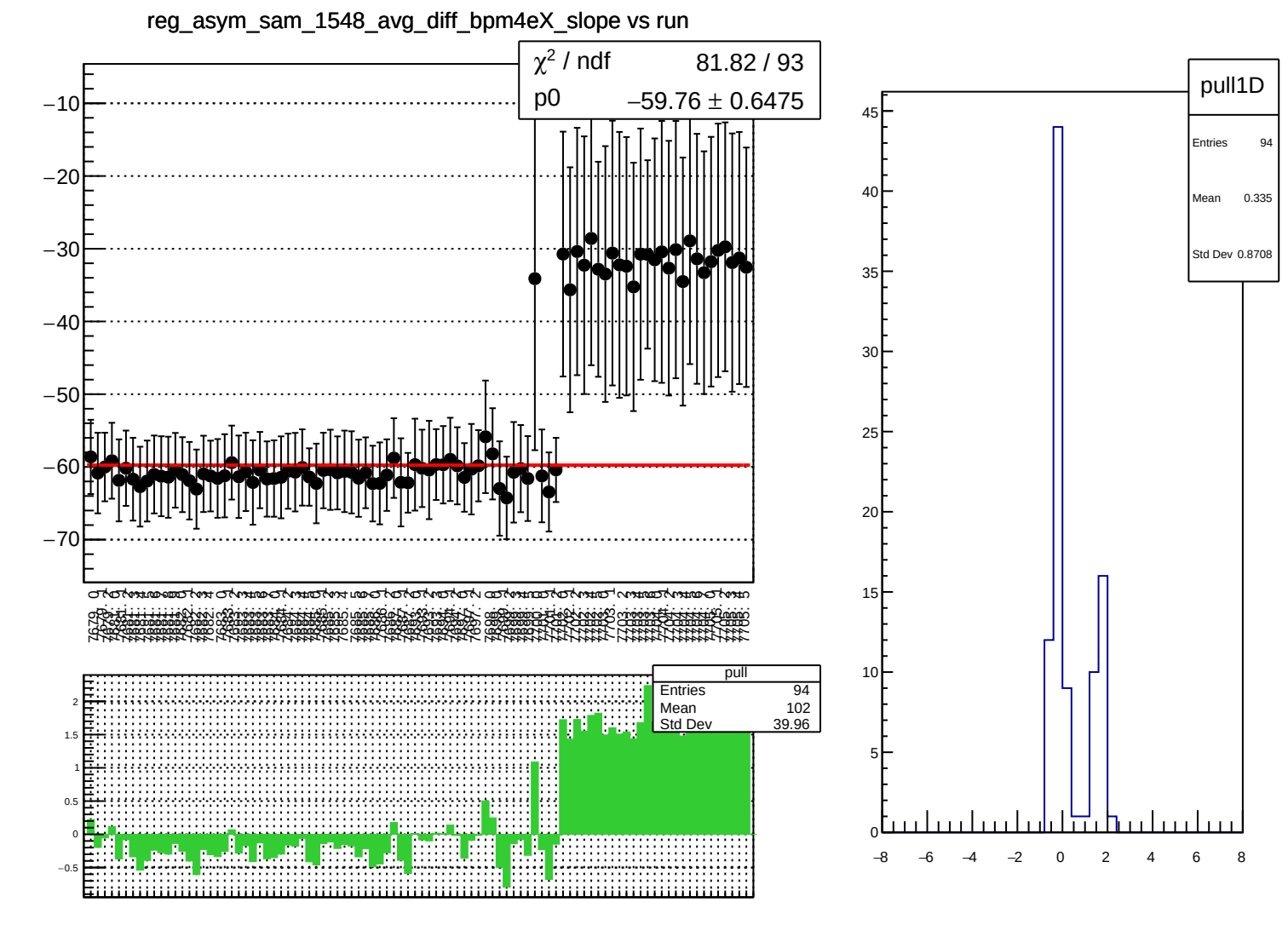

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 565.6 / 93
p0 −65.28 ± 0.8269
−20
−40
−60
−80
−100
pull
Entries 94
Mean 180.2
Std Dev 121.6
pull1D
Entries 94
Mean 0.3322
Std Dev 2.43

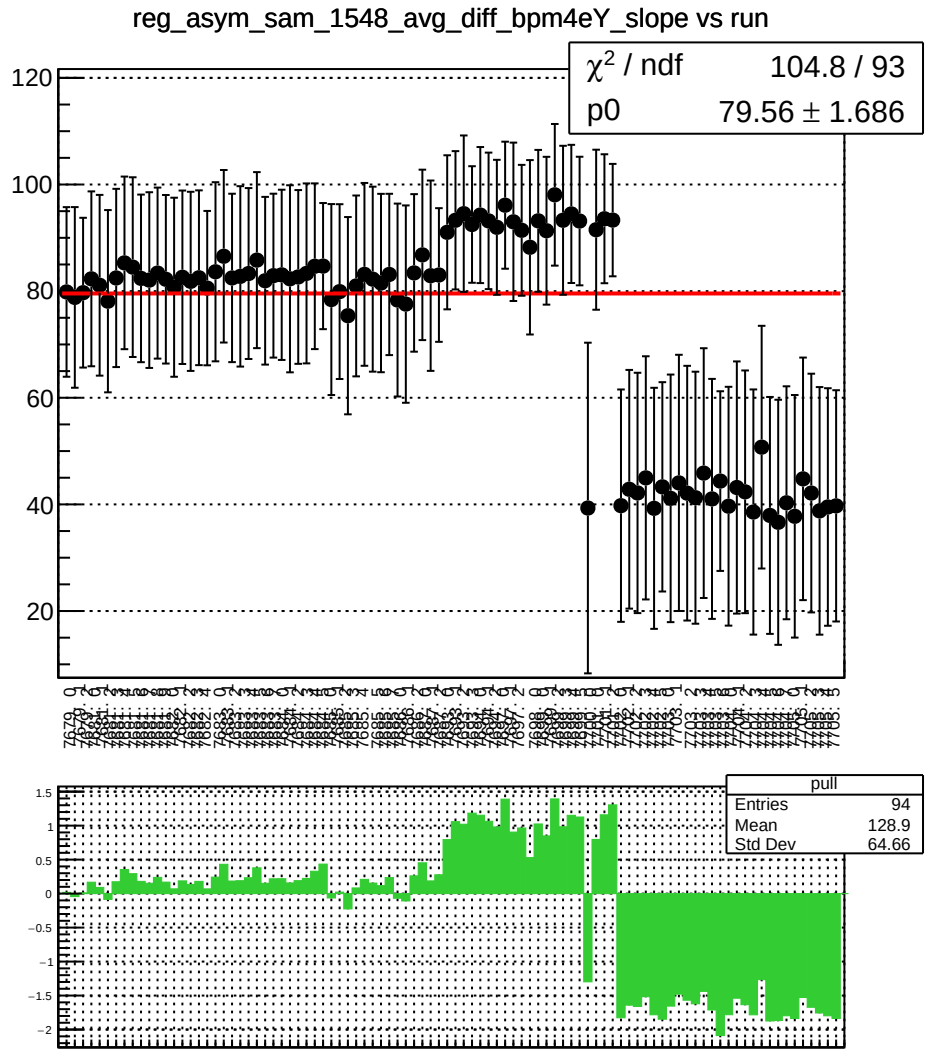

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 94.99 / 93
p0 0.4253 ± 0.03644
pull
Entries 94
Mean −63.11
Std Dev 111.7
pull1D
Entries 94
Mean −0.198
Std Dev 0.9856

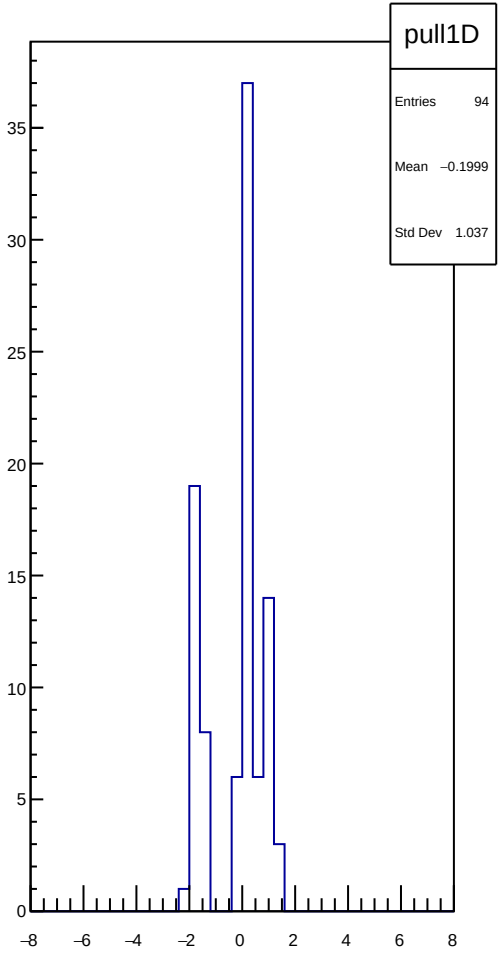

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 89.43 / 93
p0 7.632 ± 0.8007
pull
Entries 94
Mean 105.8
Std Dev 43.7

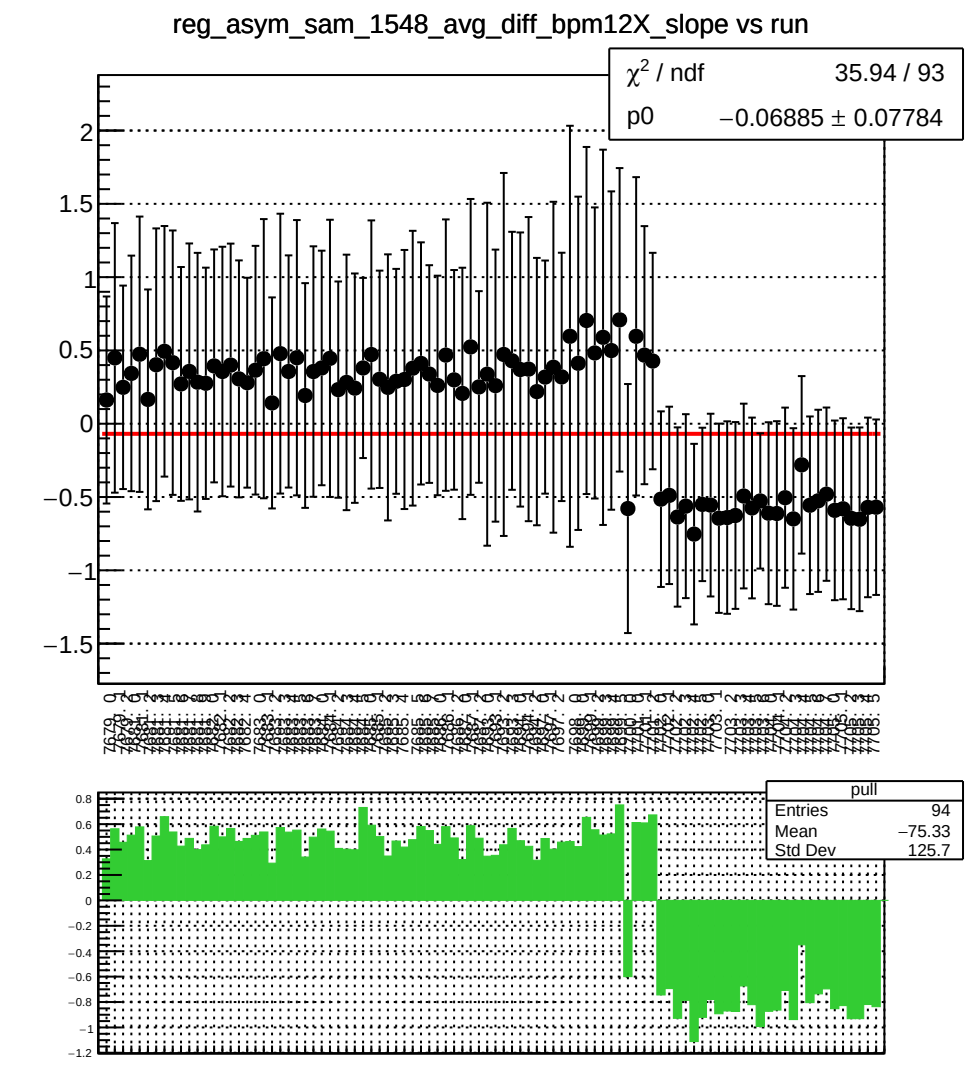

pull1D
Entries 94
Mean −0.3221
Std Dev 0.9206

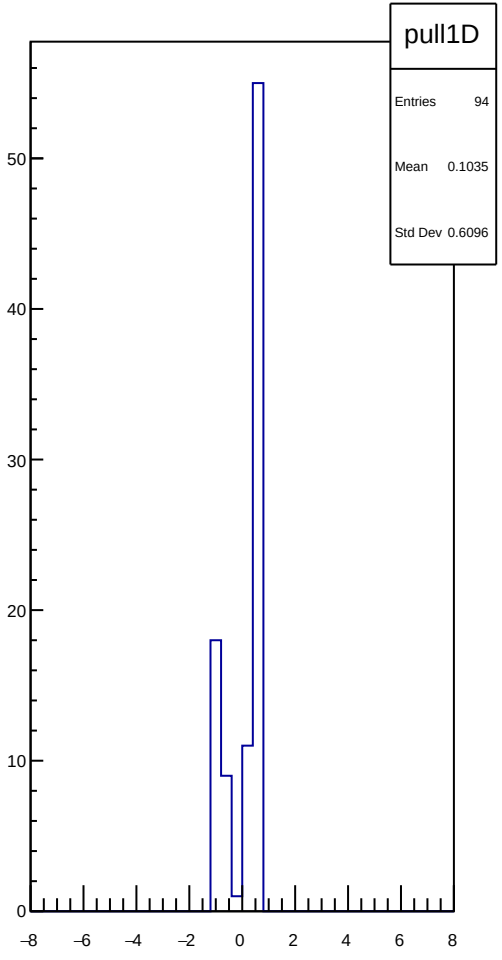

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 146 / 93
p0 −3.251 ± 1.153
60
40
20
0
−20
pull
Entries 94
Mean 101.9
Std Dev 34.09
2.5
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean 0.3553
Std Dev 1.195
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

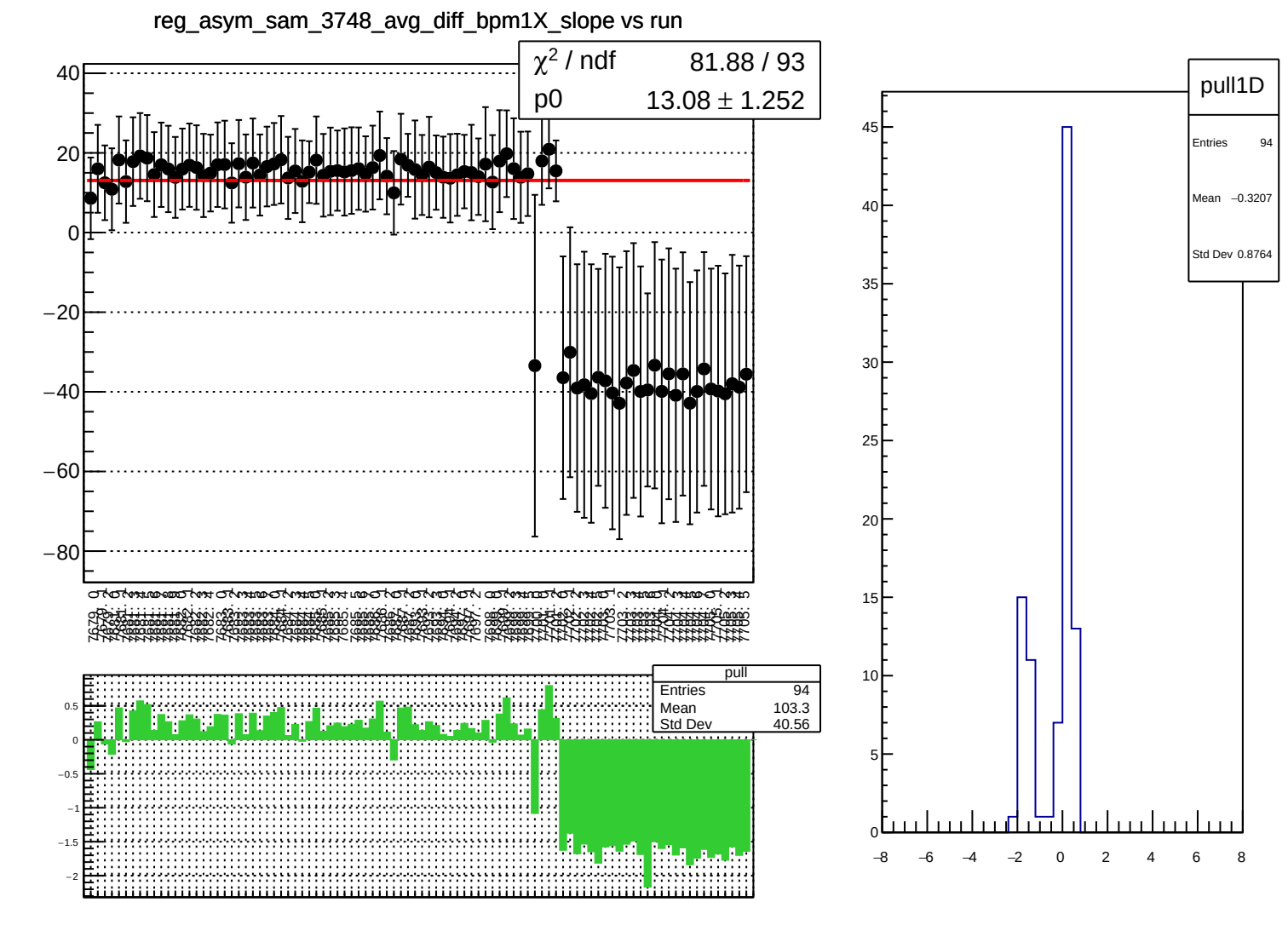

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 81.82 / 93
p0 −59.76 ± 0.6475
pull
Entries 94
Mean 102
Std Dev 39.96
pull1D
Entries 94
Mean 0.335
Std Dev 0.8708

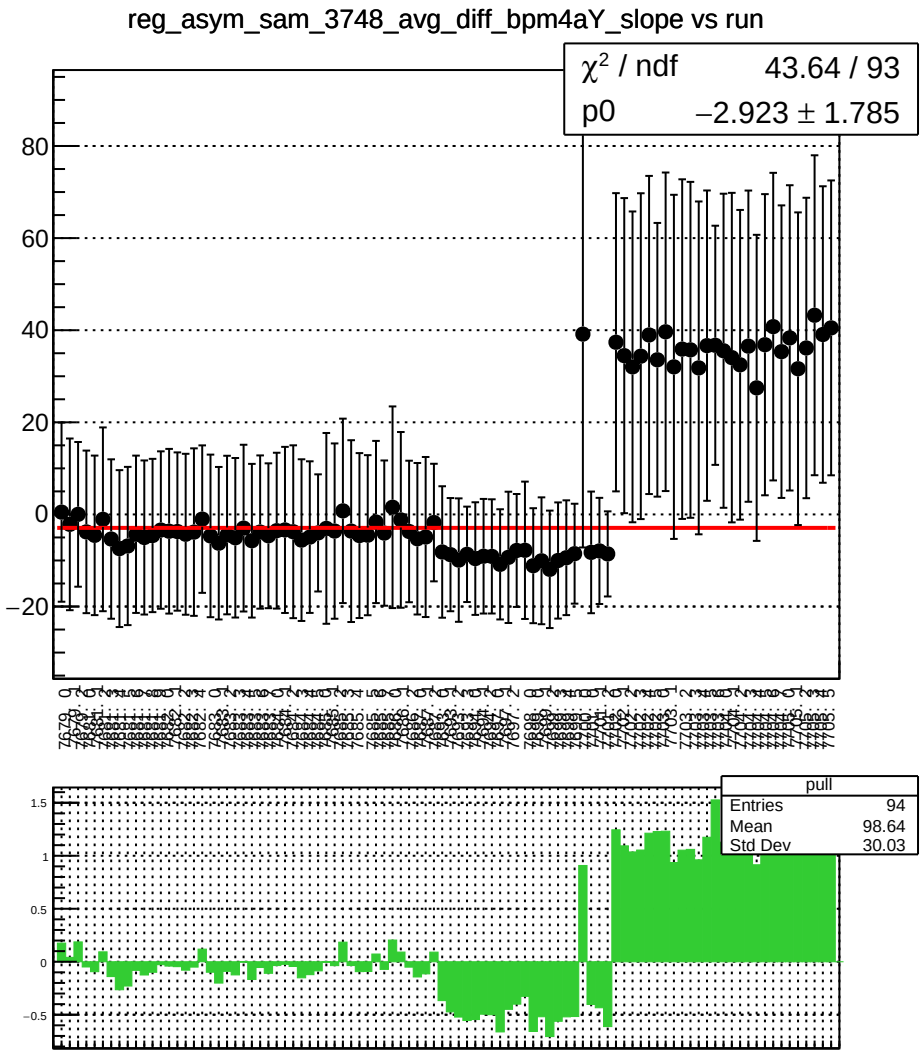

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 104.8 / 93
p0 79.56 ± 1.686
120
100
80
60
40
20
pull
Entries 94
Mean 128.9
Std Dev 64.66
1.5
1
0.5
0
−0.5
−1
−1.5
−2

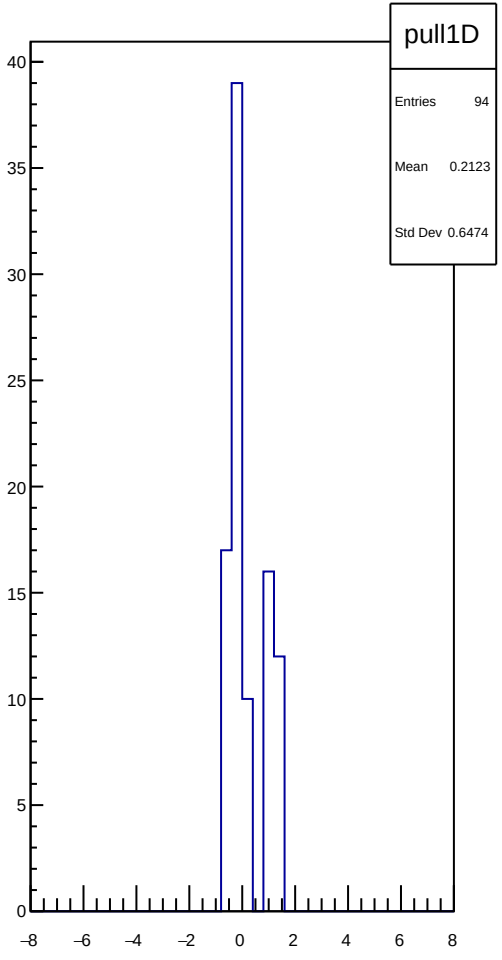

pull1D
Entries 94
Mean −0.1999
Std Dev 1.037
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

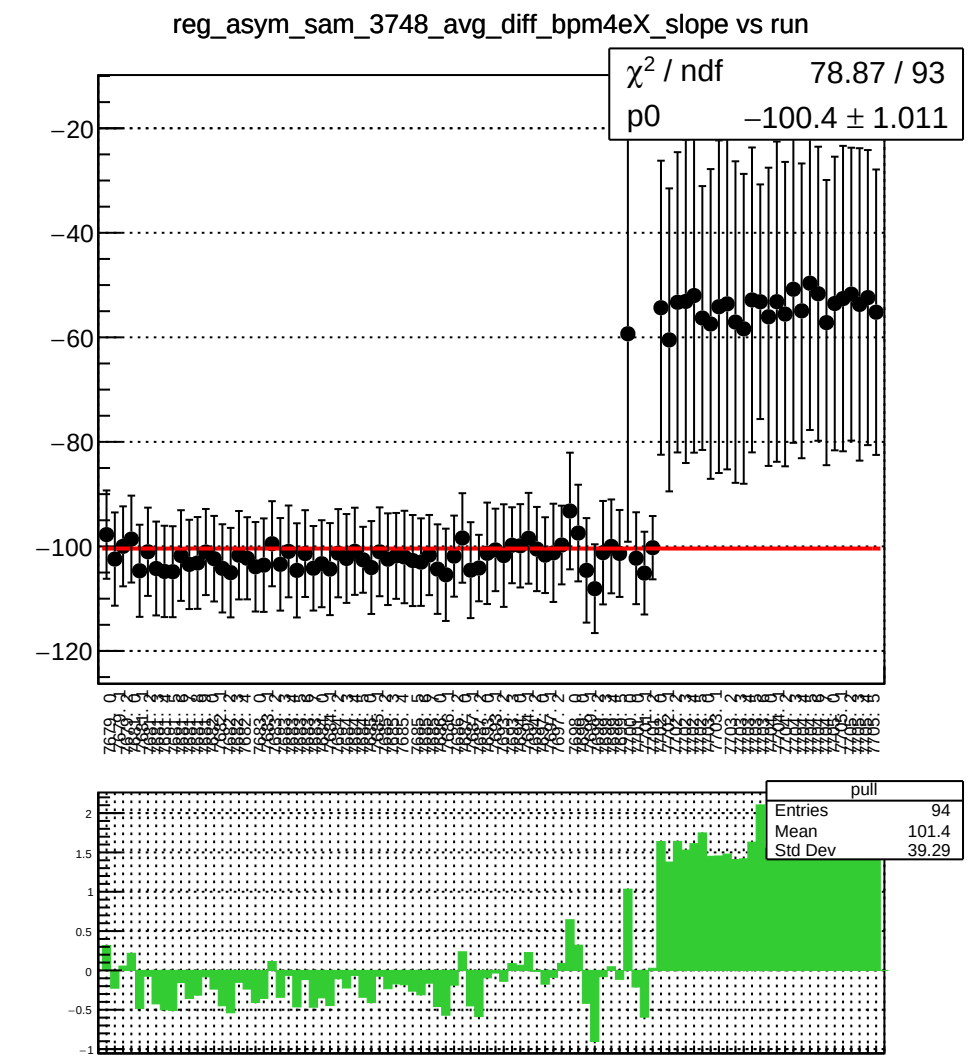

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 35.94 / 93
p0 −0.06885 ± 0.07784
pull
Entries 94
Mean −75.33
Std Dev 125.7

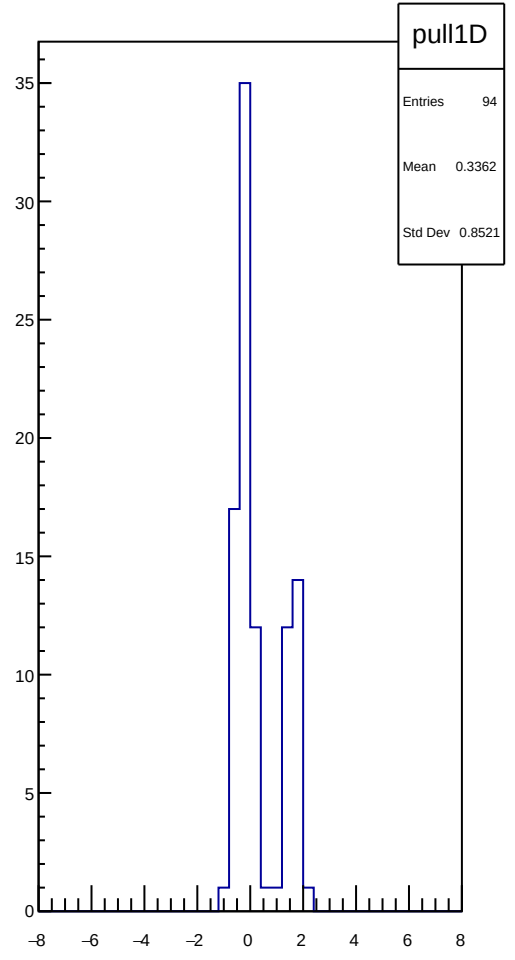

pull1D
Entries 94
Mean 0.1035
Std Dev 0.6096

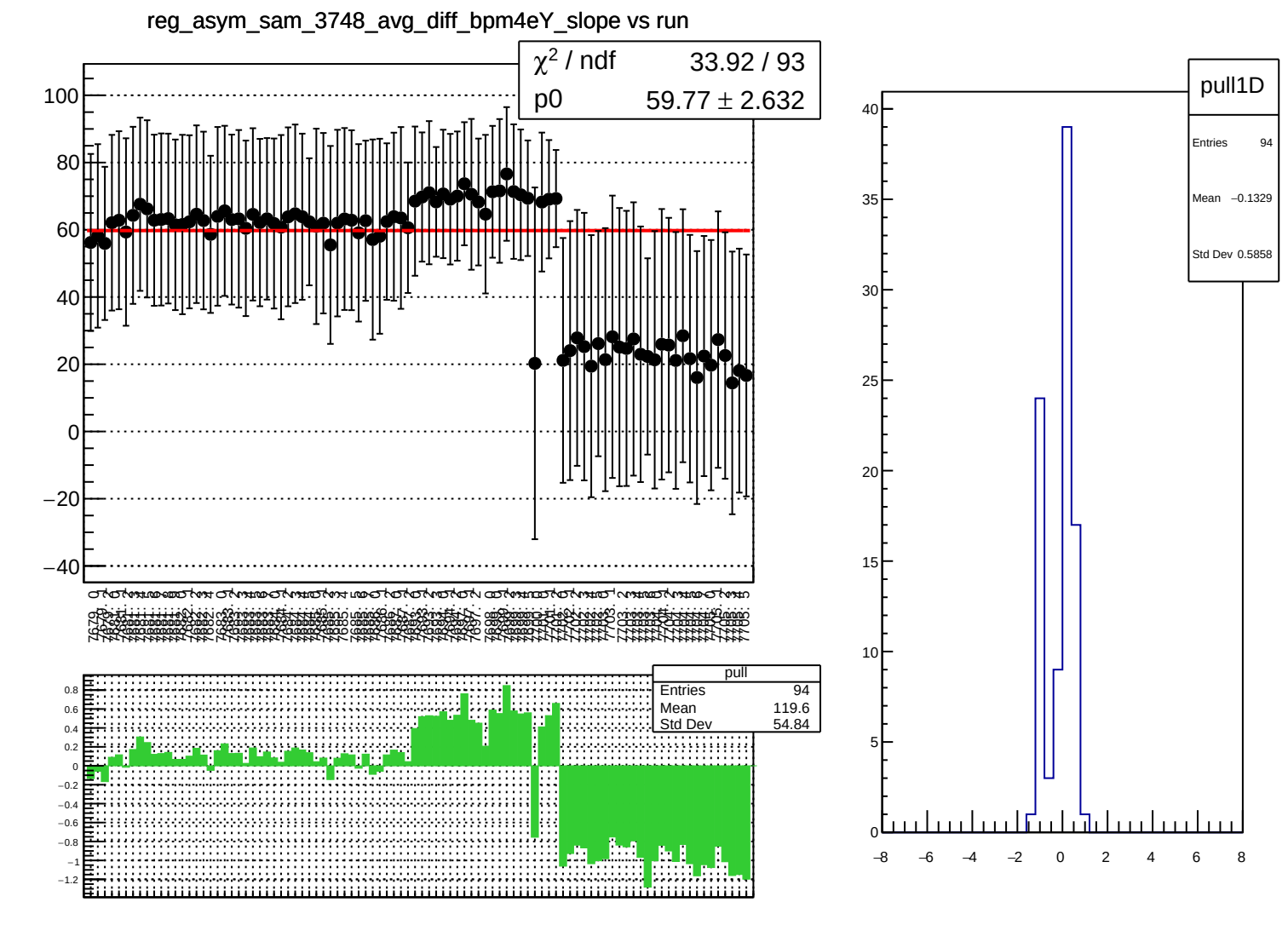

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 81.88 / 93
p0 13.08 ± 1.252
pull
Entries 94
Mean 103.3
Std Dev 40.56
pull1D
Entries 94
Mean −0.3207
Std Dev 0.8764

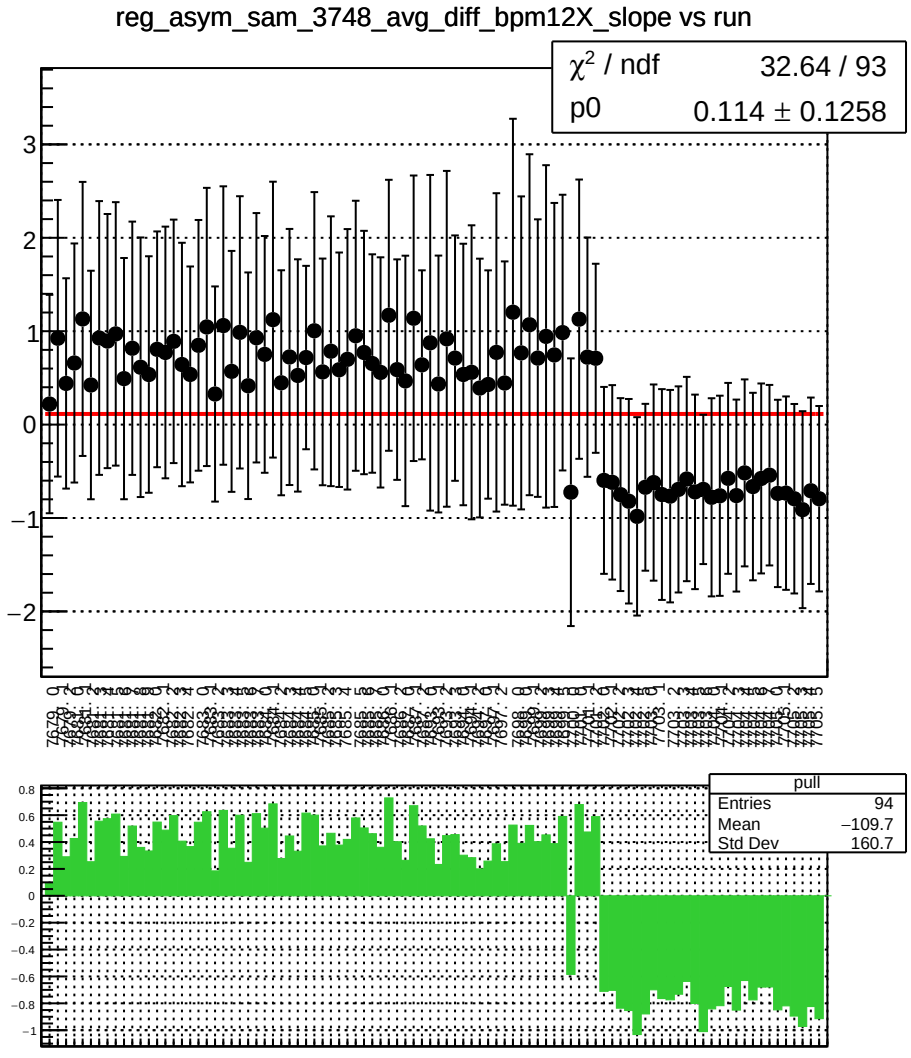

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 43.64 / 93
p0 −2.923 ± 1.785
pull
Entries 94
Mean 98.64
Std Dev 30.03

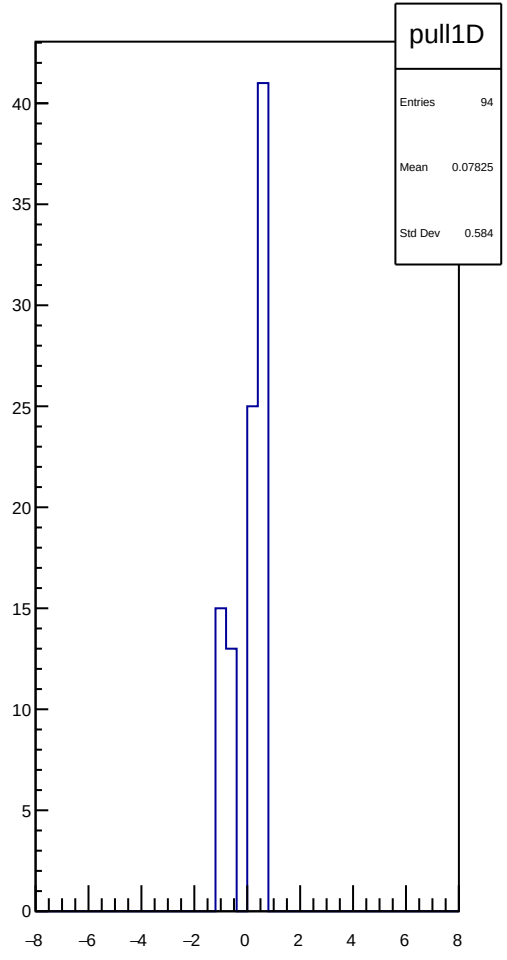

pull1D
Entries 94
Mean 0.2123
Std Dev 0.6474

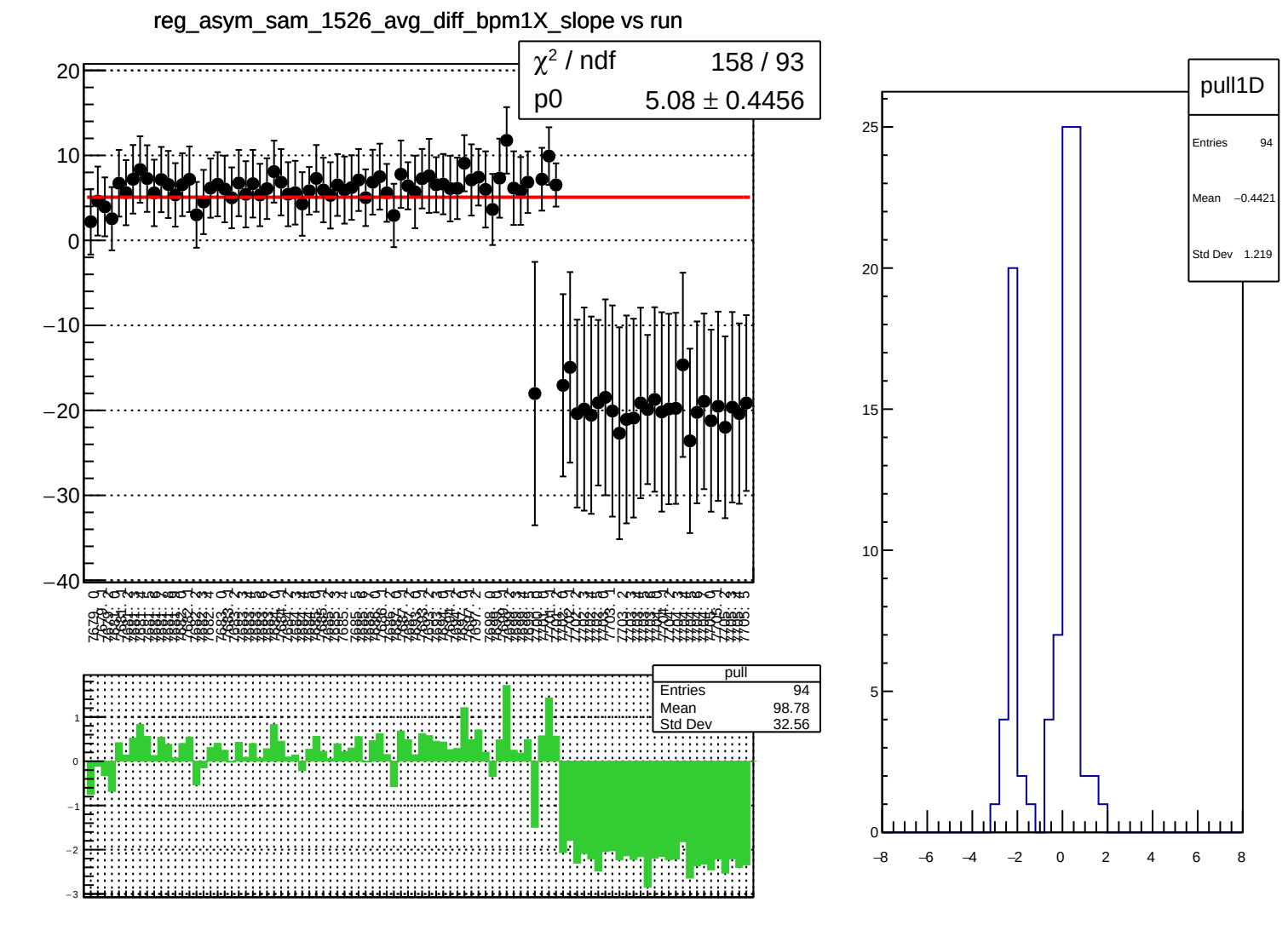

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 78.87 / 93
p0 −100.4 ± 1.011
pull
Entries 94
Mean 101.4
Std Dev 39.29

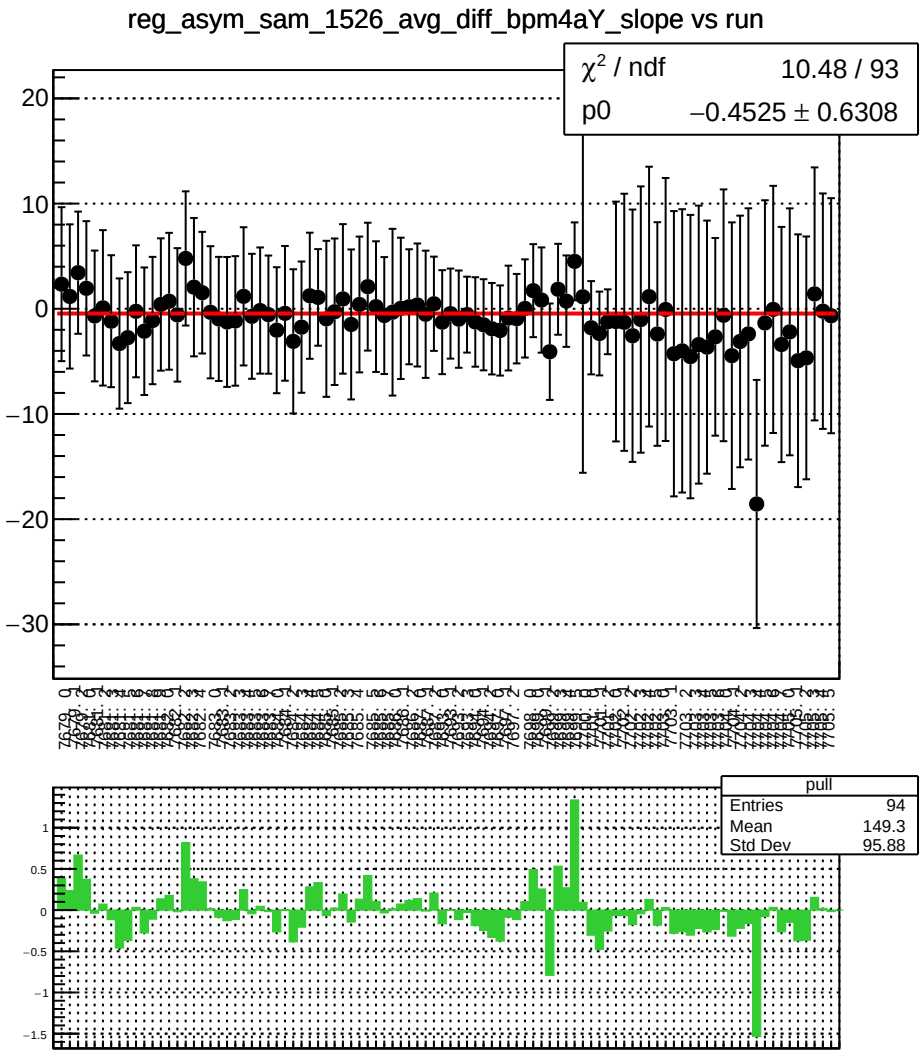

pull1D
Entries 94
Mean 0.3362
Std Dev 0.8521

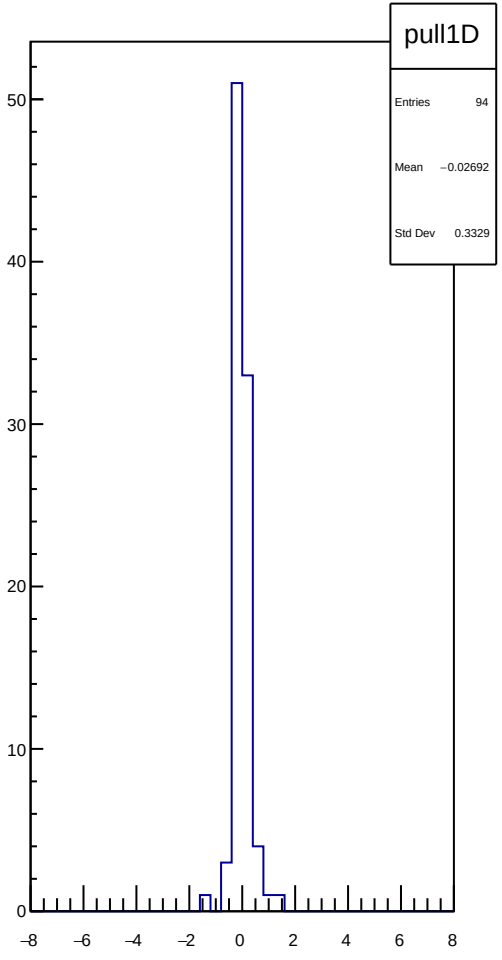

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 33.92 / 93
p0 59.77 ± 2.632
pull
Entries 94
Mean 119.6
Std Dev 54.84
pull1D
Entries 94
Mean −0.1329
Std Dev 0.5858

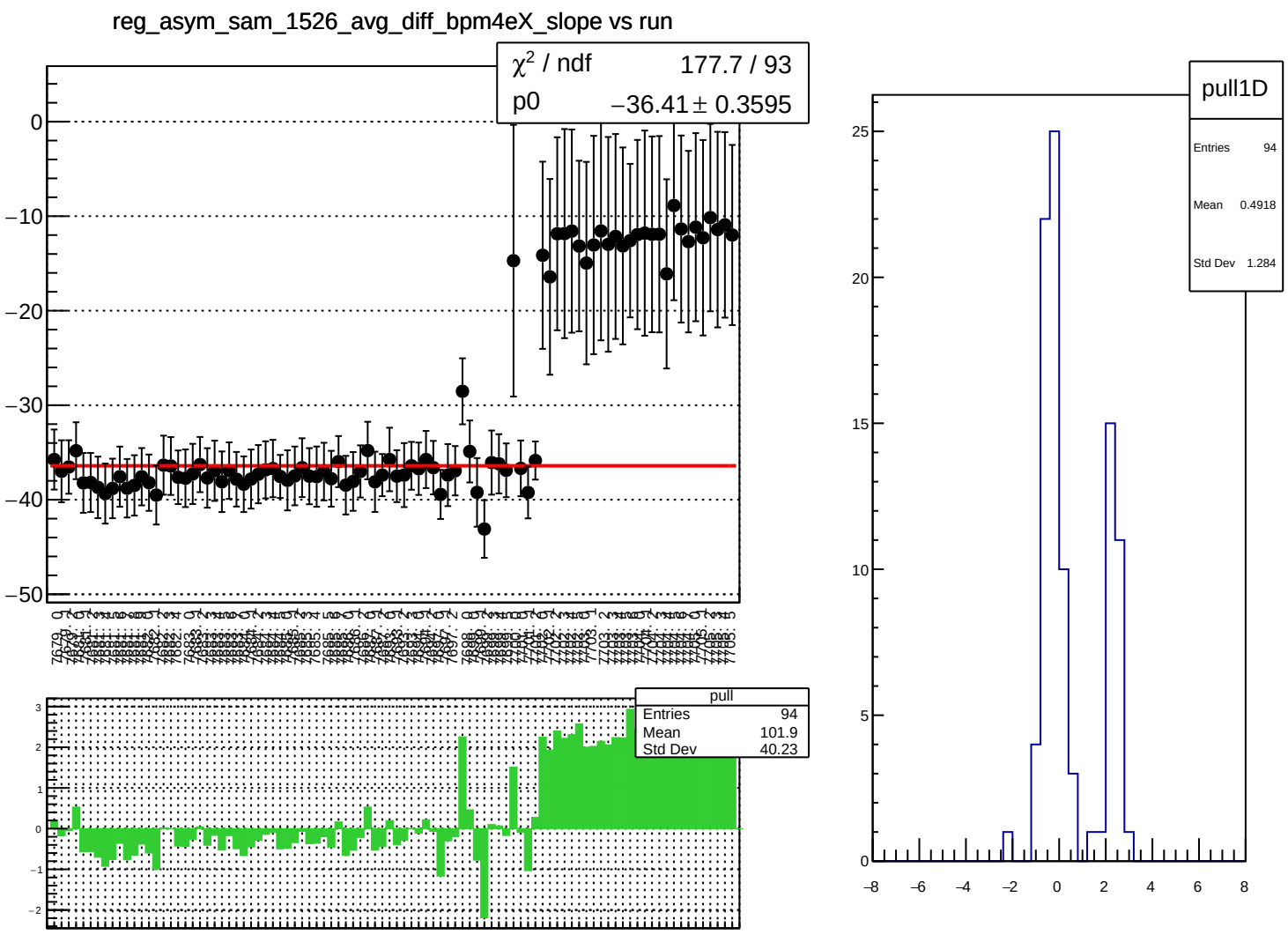

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 32.64 / 93
p0 0.114 ± 0.1258
pull
Entries 94
Mean −109.7
Std Dev 160.7

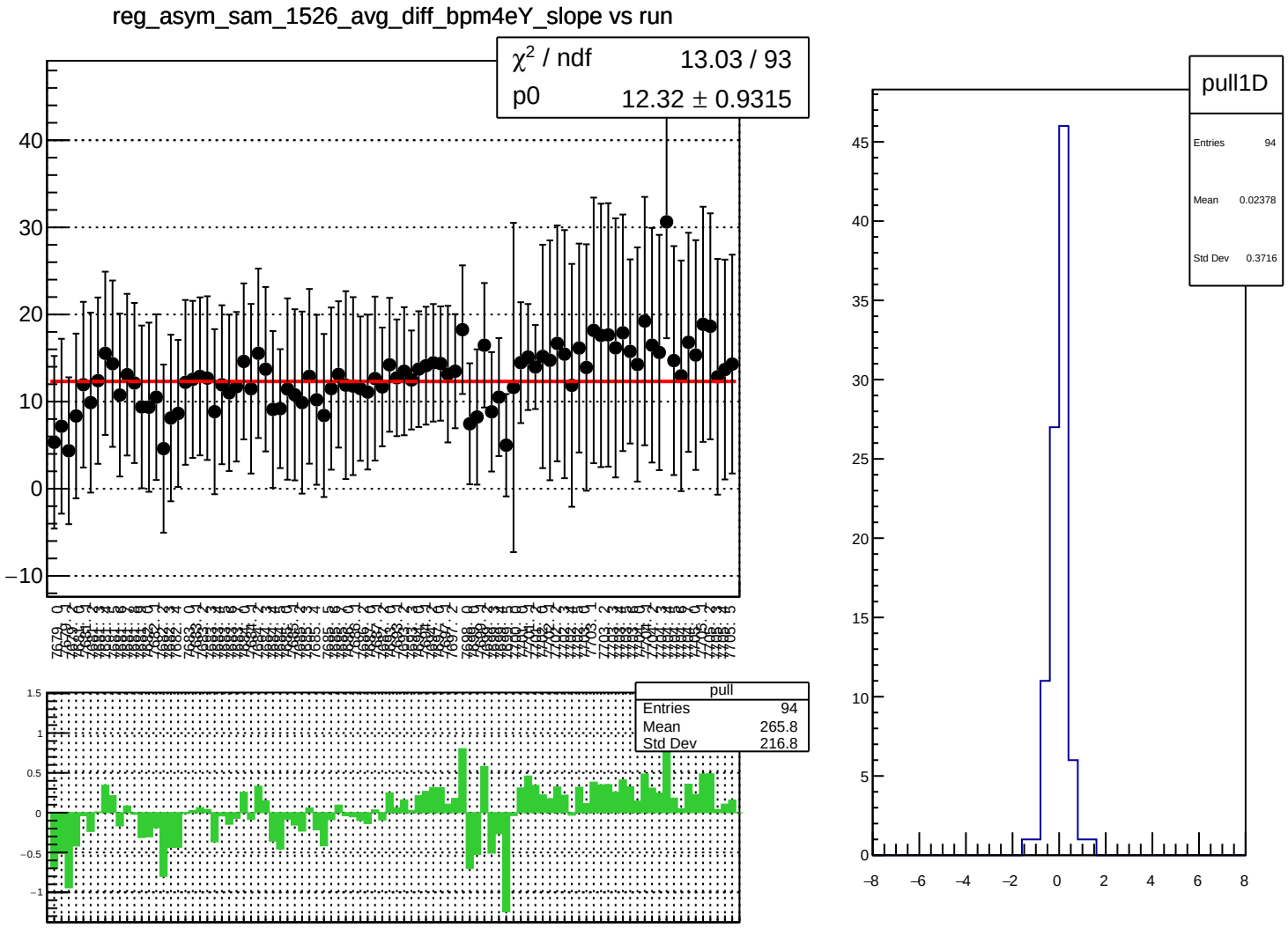

pull1D
Entries 94
Mean 0.07825
Std Dev 0.584

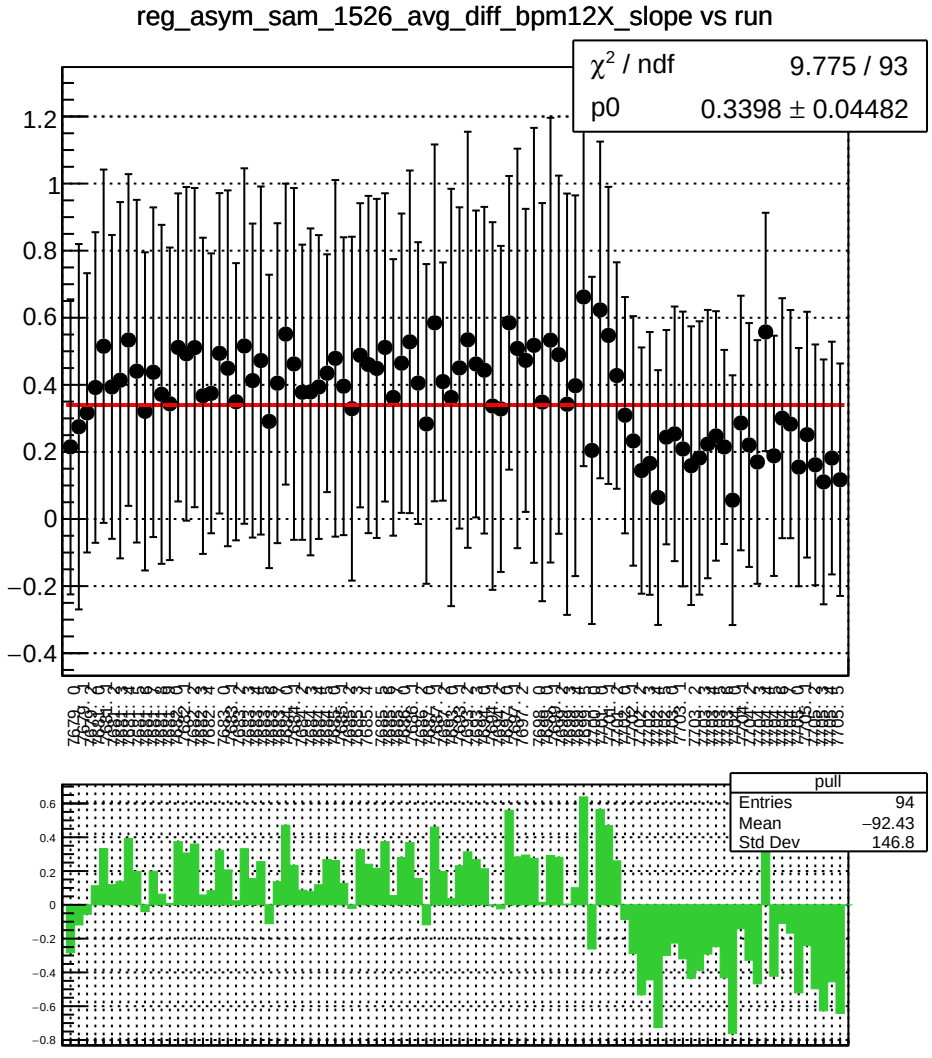

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 158 / 93
p0 5.08 ± 0.4456
pull
Entries 94
Mean 98.78
Std Dev 32.56
pull1D
Entries 94
Mean −0.4421
Std Dev 1.219

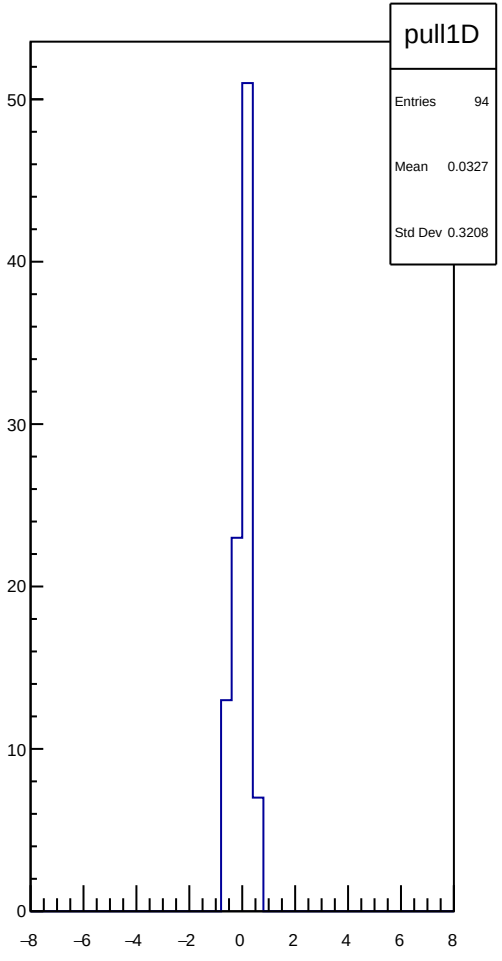

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 10.48 / 93
p0 −0.4525 ± 0.6308
pull
Entries 94
Mean 149.3
Std Dev 95.88

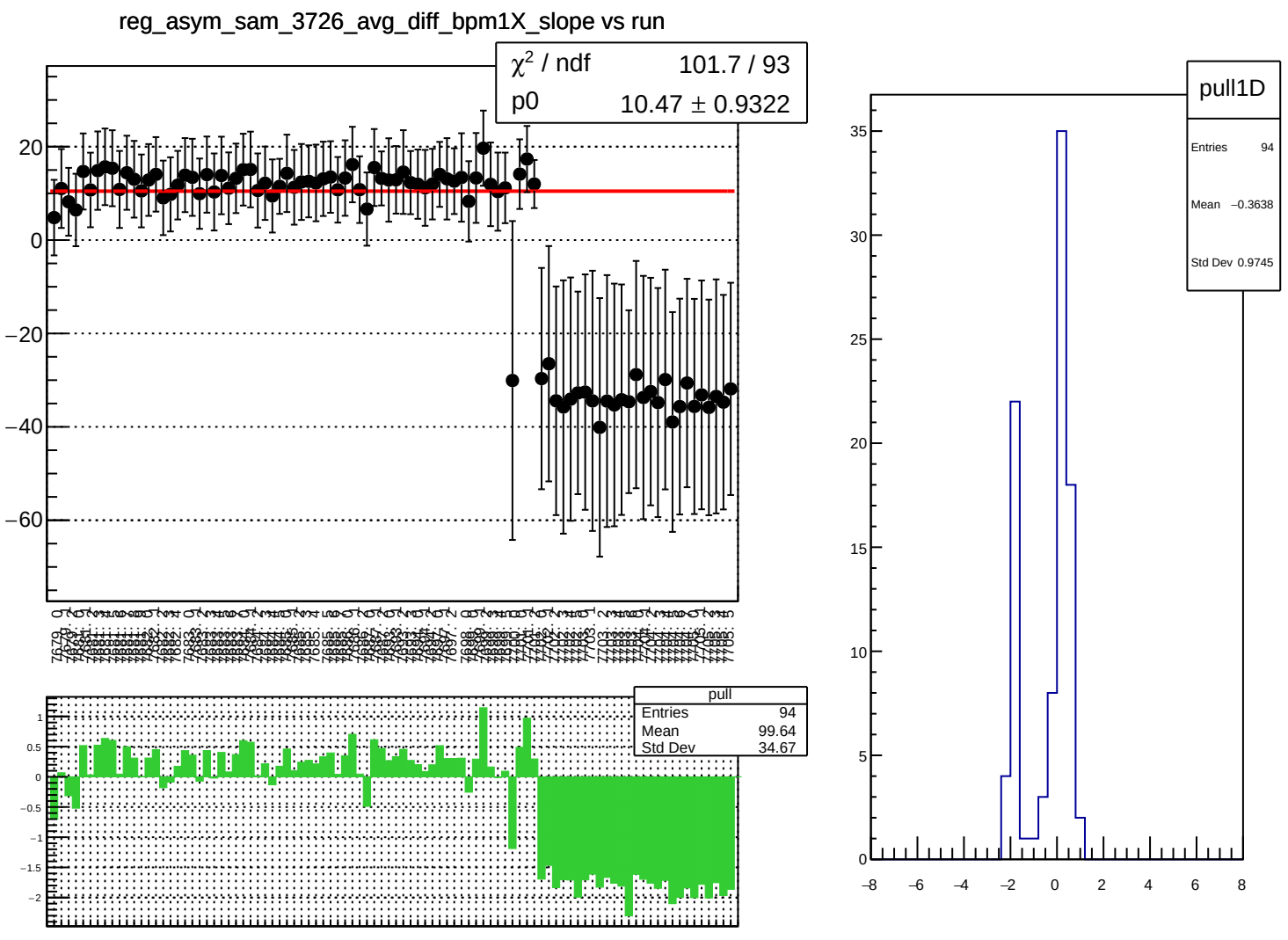

pull1D
Entries 94
Mean −0.02692
Std Dev 0.3329

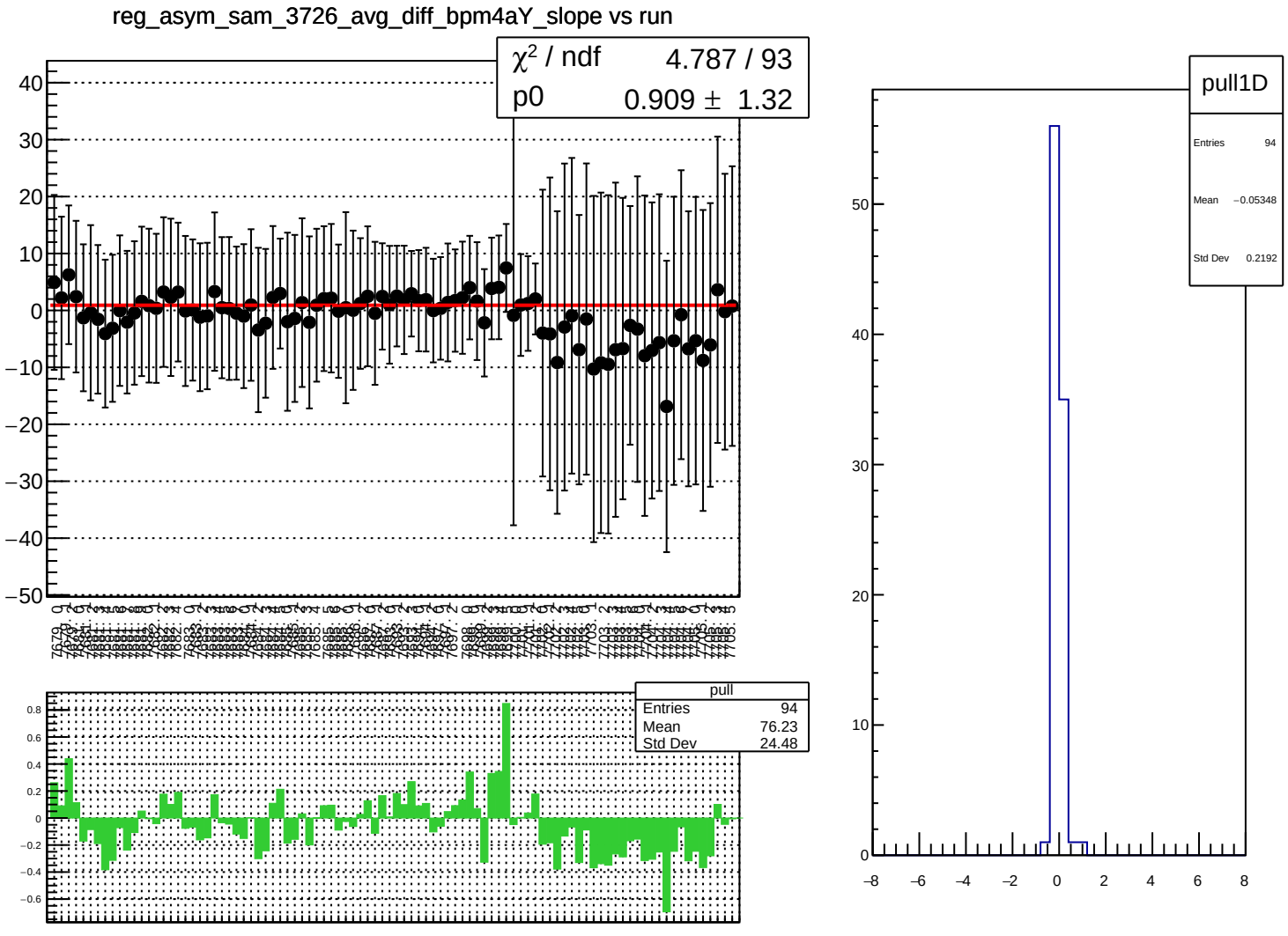

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 177.7 / 93
p0 −36.41 ± 0.3595
pull
Entries 94
Mean 101.9
Std Dev 40.23
pull1D
Entries 94
Mean 0.4918
Std Dev 1.284

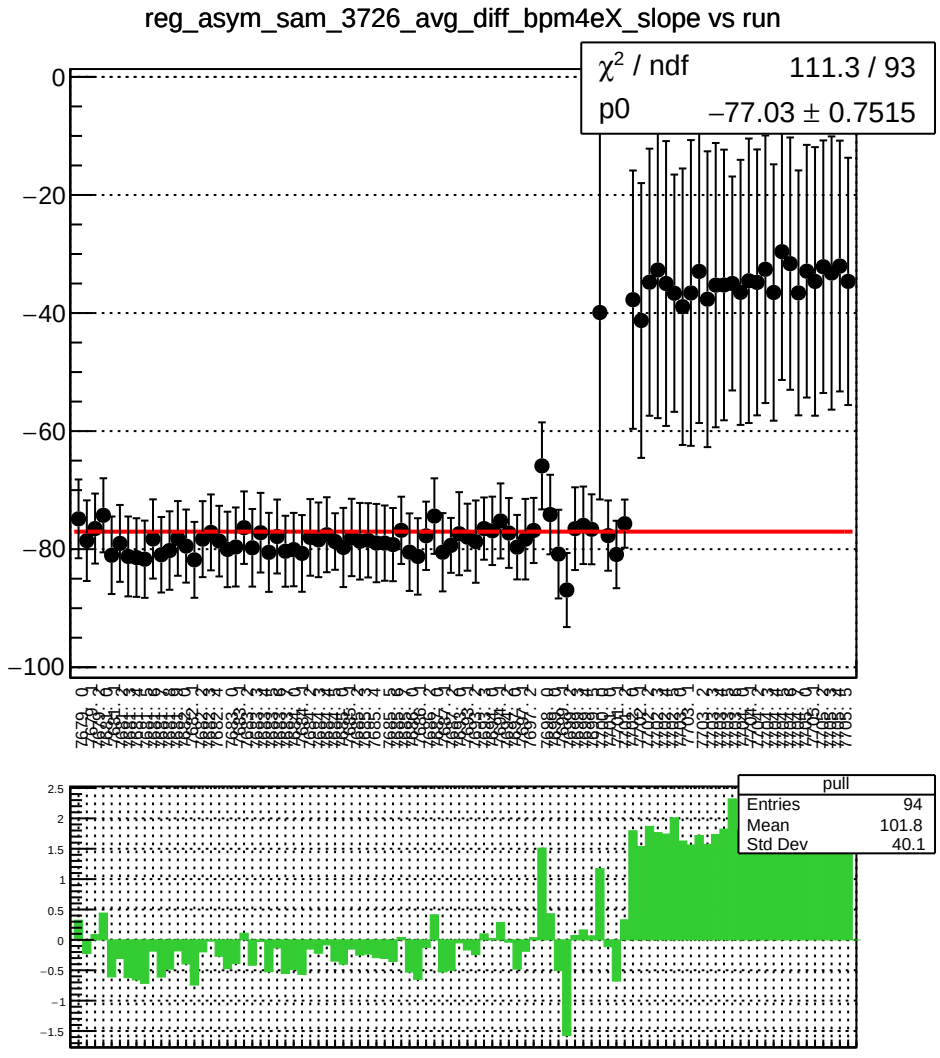

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 13.03 / 93
p0 12.32 ± 0.9315
pull
Entries 94
Mean 265.8
Std Dev 216.8
pull1D
Entries 94
Mean 0.02378
Std Dev 0.3716

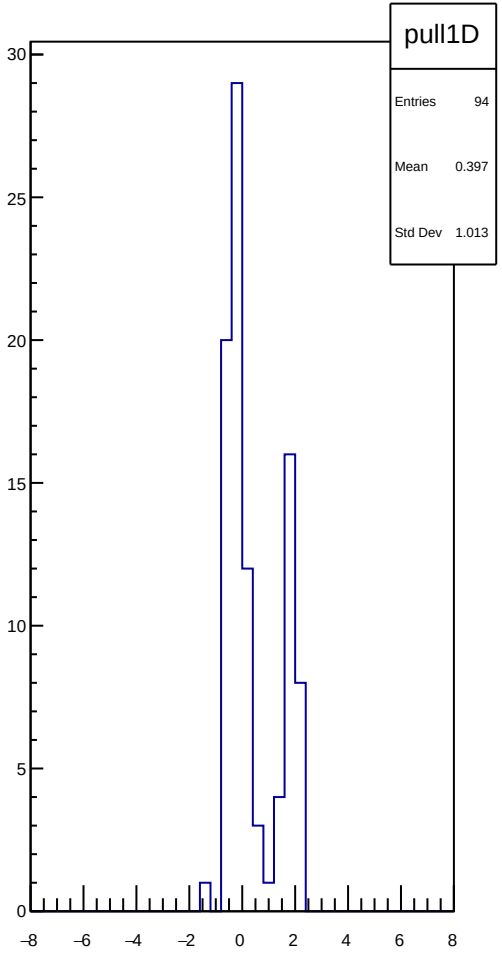

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 9.775 / 93
p0 0.3398 ± 0.04482
pull
Entries 94
Mean −92.43
Std Dev 146.8

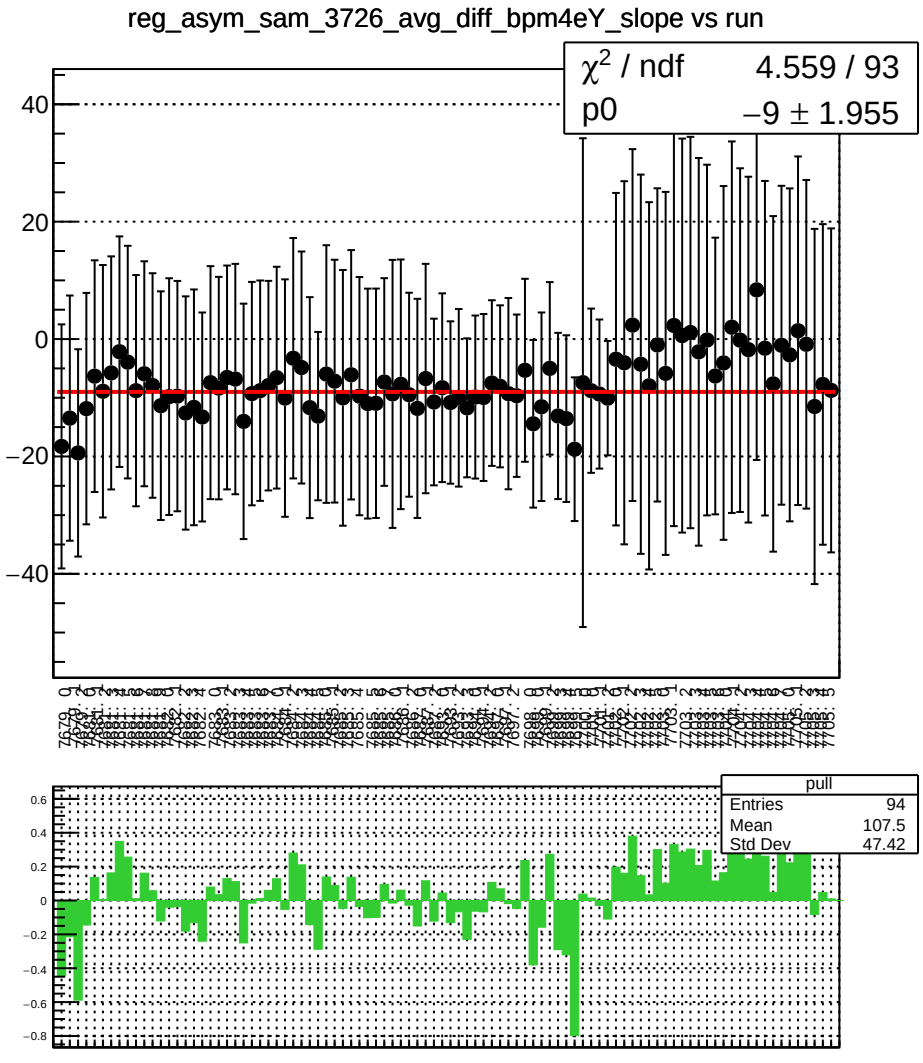

pull1D
Entries 94
Mean 0.0327
Std Dev 0.3208

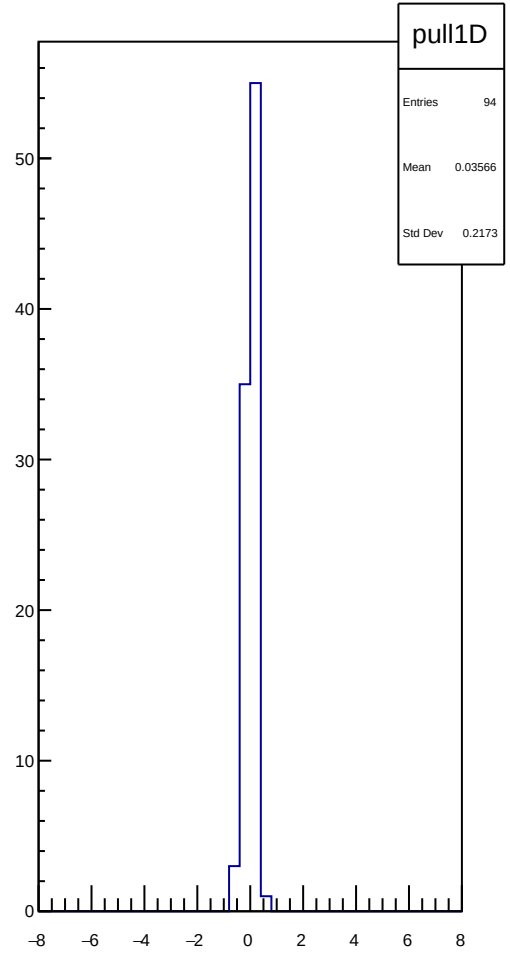

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 101.7 / 93
p0 10.47 ± 0.9322
pull
Entries 94
Mean 99.64
Std Dev 34.67
pull1D
Entries 94
Mean −0.3638
Std Dev 0.9745

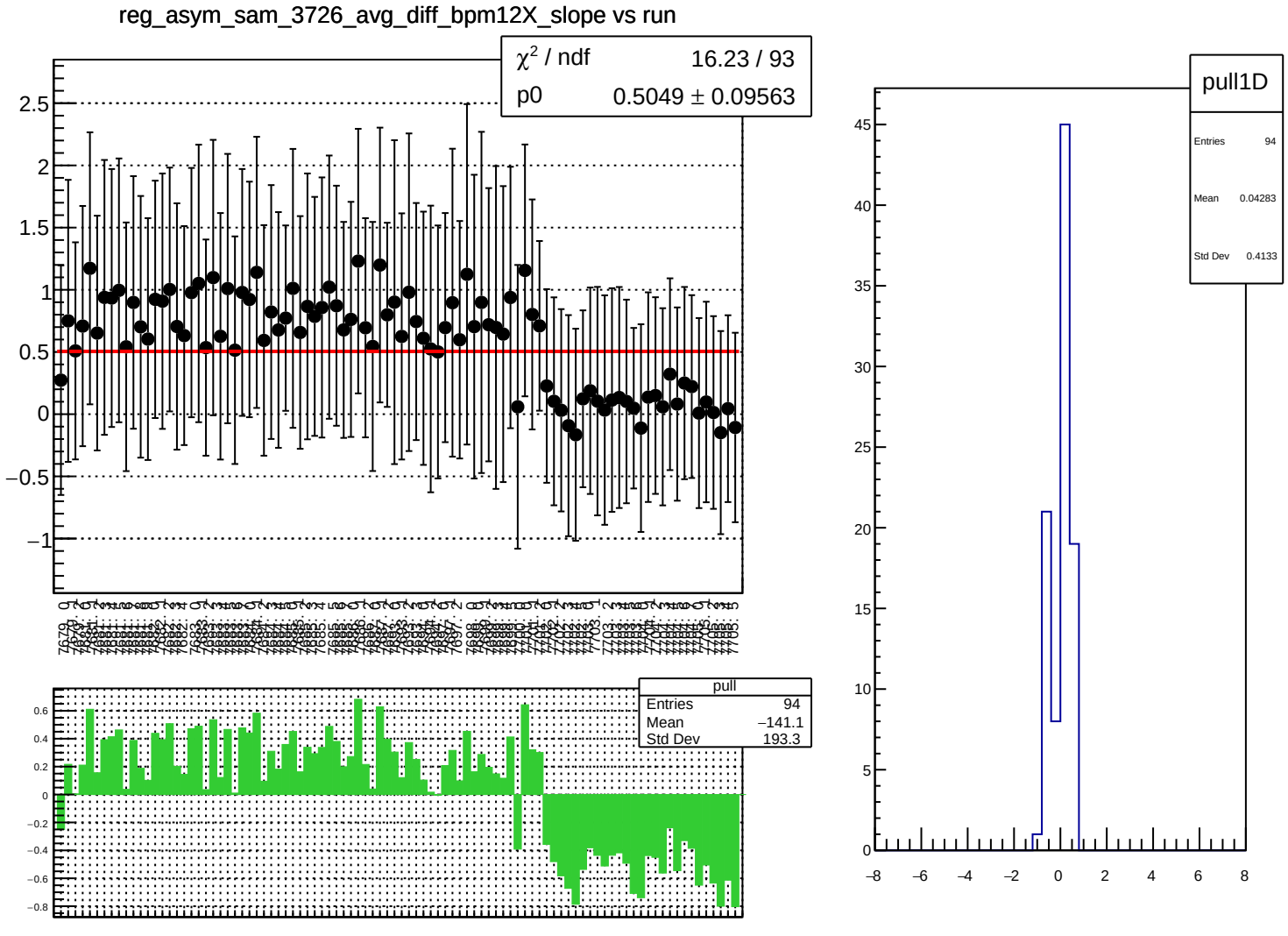

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.787 / 93
p0 0.909 ± 1.32
pull
Entries 94
Mean 76.23
Std Dev 24.48
pull1D
Entries 94
Mean −0.05348
Std Dev 0.2192

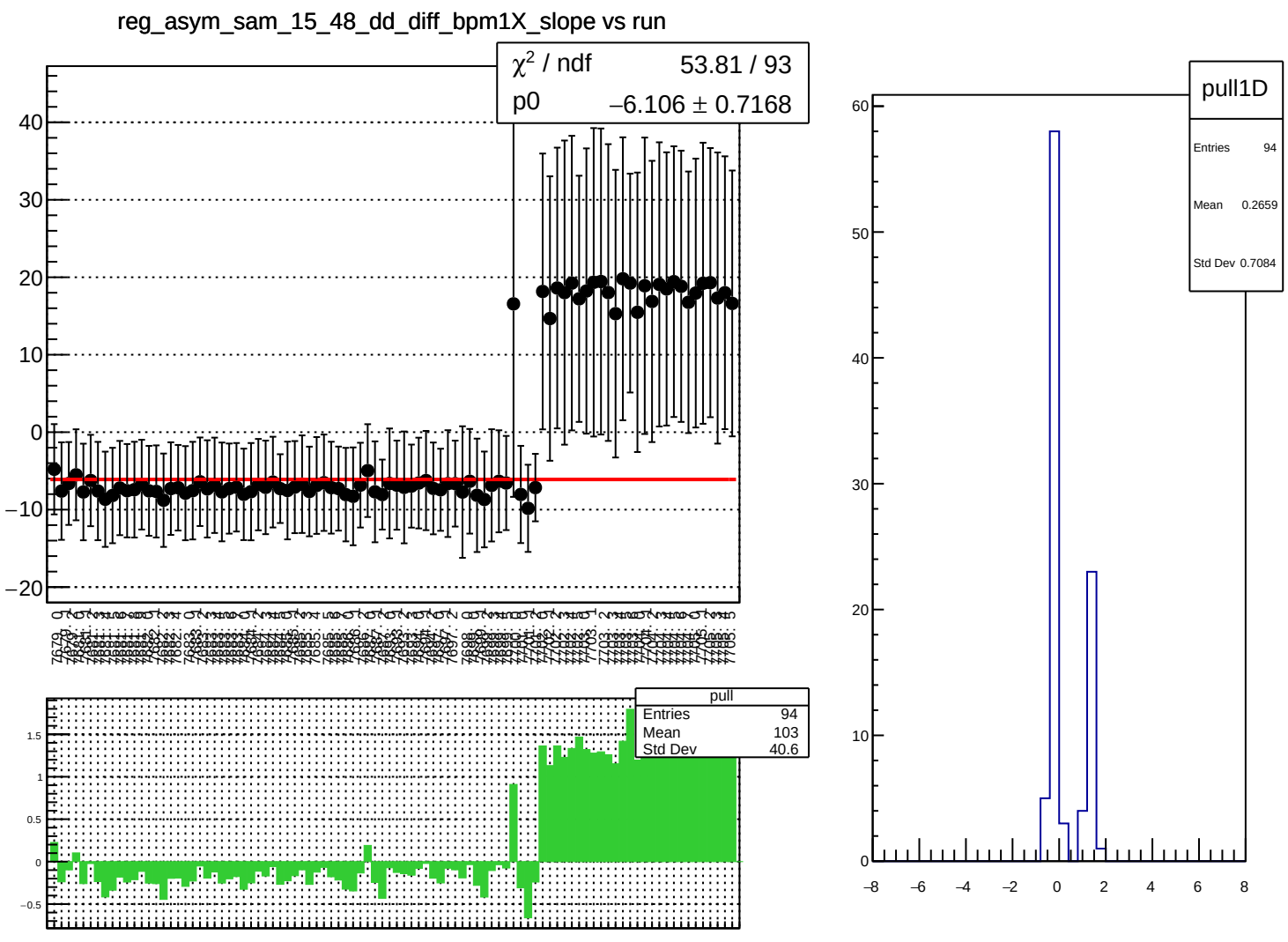

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 111.3 / 93
p0 −77.03 ± 0.7515
pull
Entries 94
Mean 101.8
Std Dev 40.1

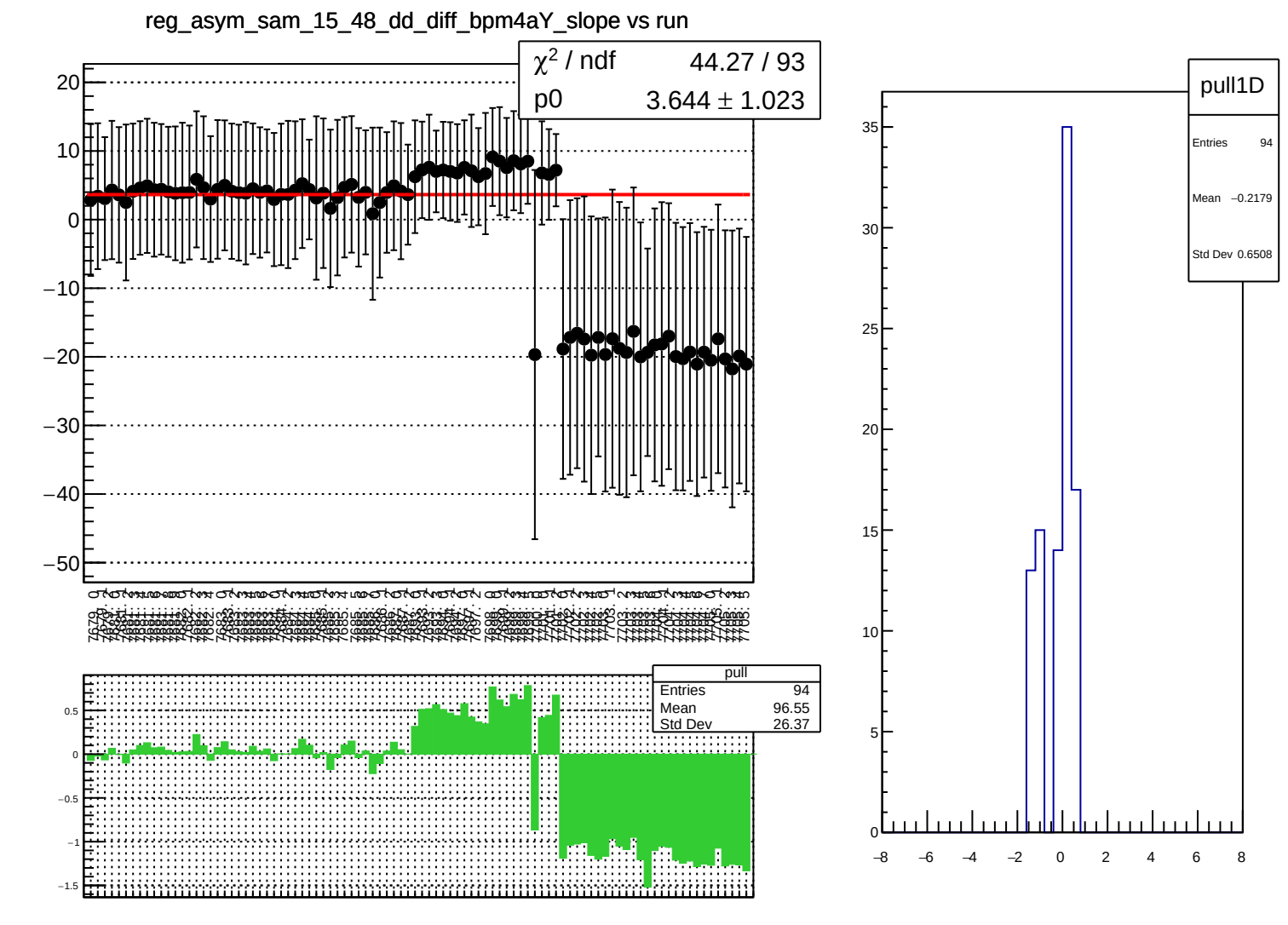

pull1D
Entries 94
Mean 0.397
Std Dev 1.013

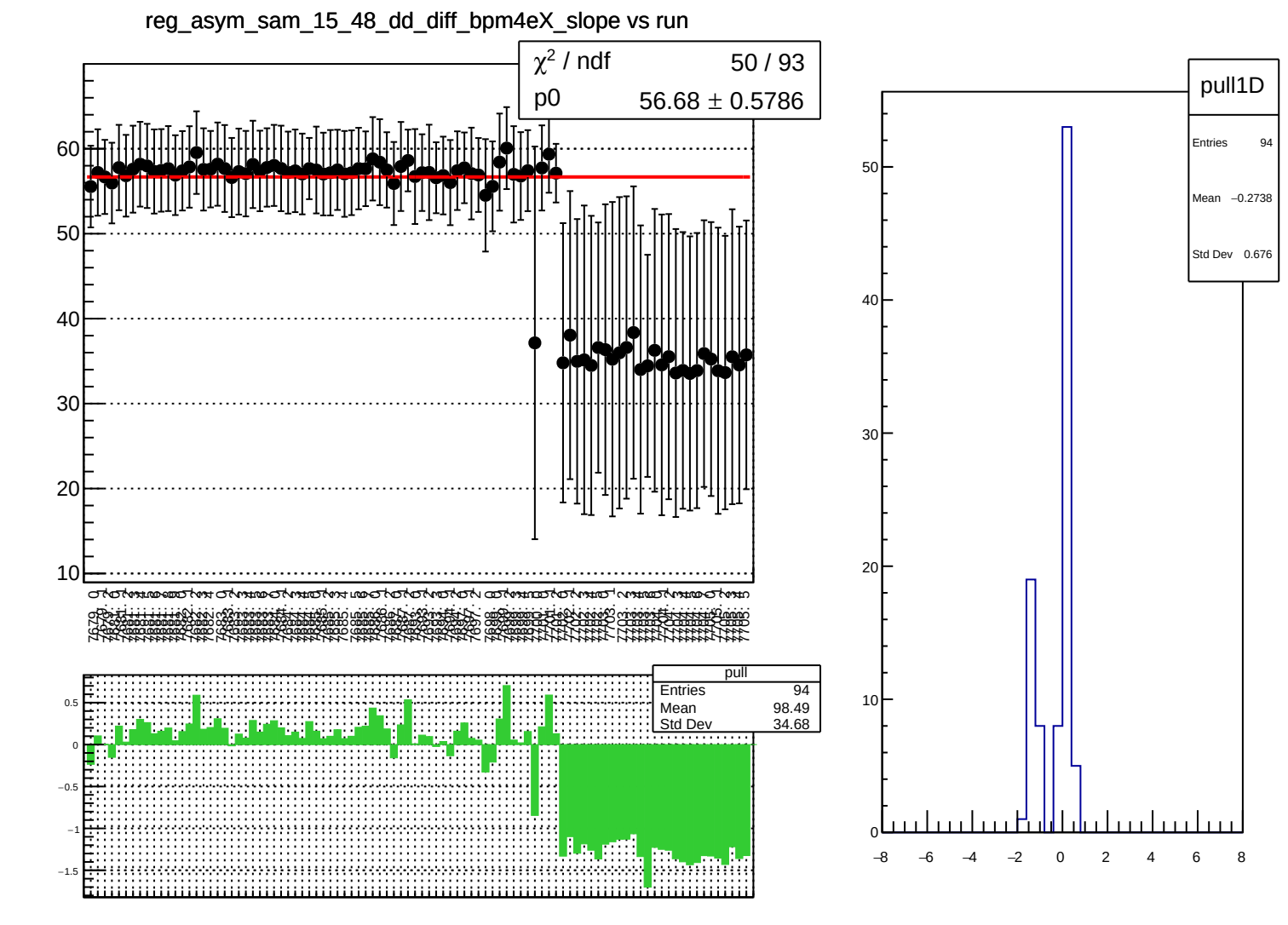

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.559 / 93
p0 −9 ± 1.955
pull
Entries 94
Mean 107.5
Std Dev 47.42

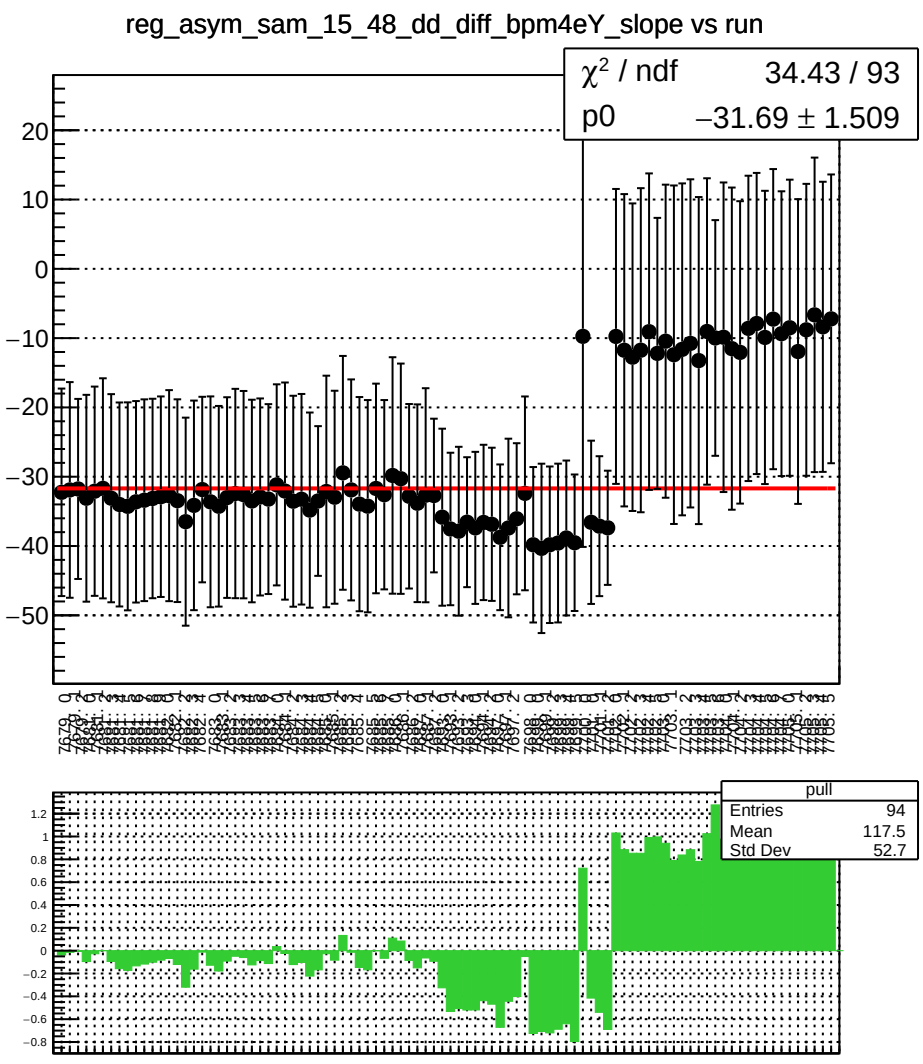

pull1D
Entries 94
Mean 0.03566
Std Dev 0.2173

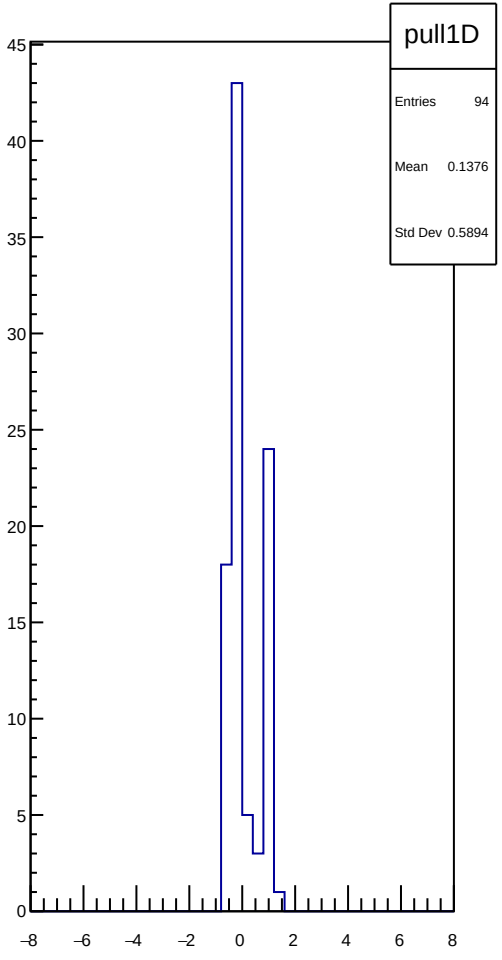

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 16.23 / 93
p0 0.5049 ± 0.09563
pull
Entries 94
Mean −141.1
Std Dev 193.3
pull1D
Entries 94
Mean 0.04283
Std Dev 0.4133

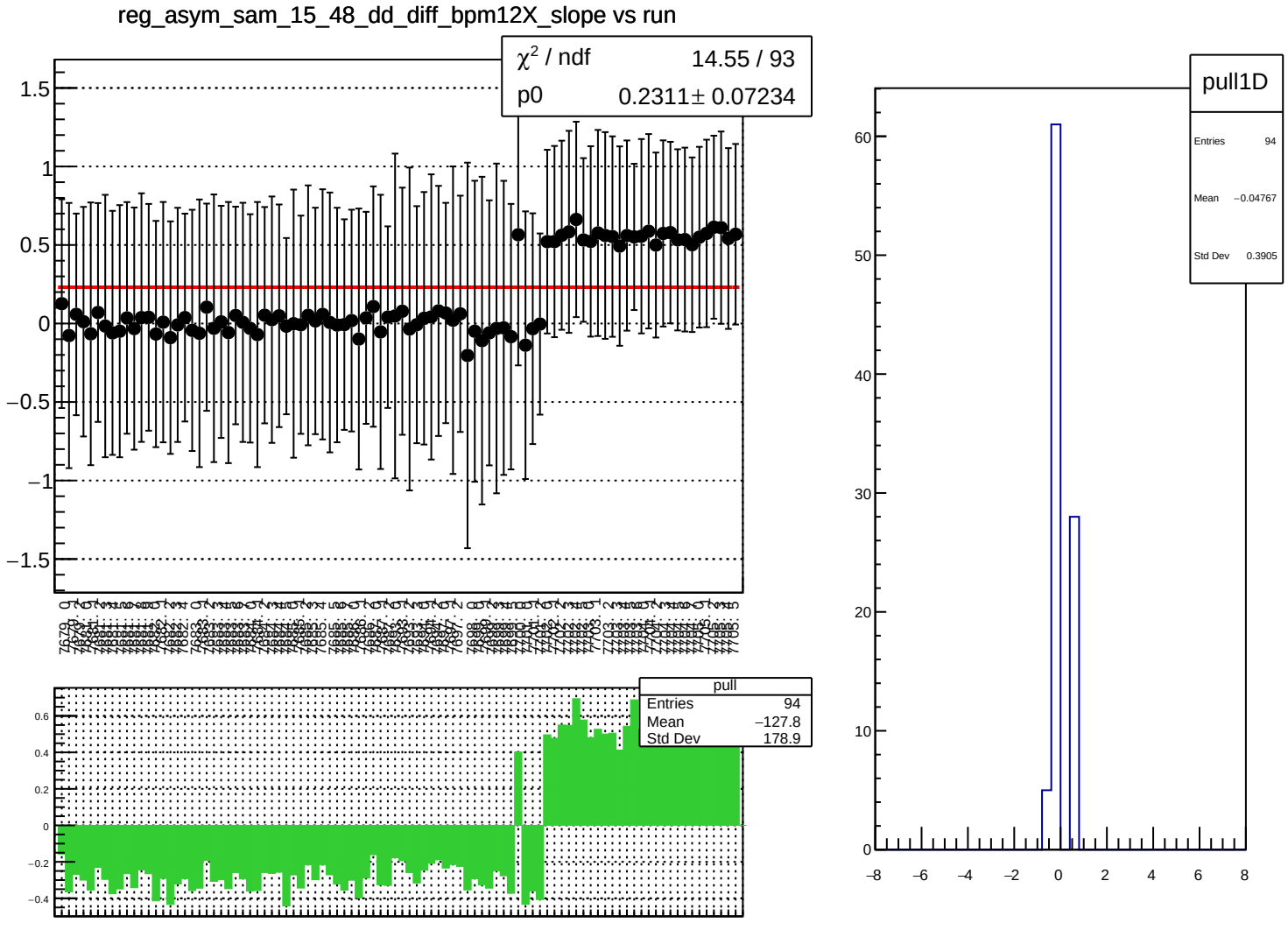

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 53.81 / 93
p0 −6.106 ± 0.7168
pull
Entries 94
Mean 103
Std Dev 40.6
pull1D
Entries 94
Mean 0.2659
Std Dev 0.7084

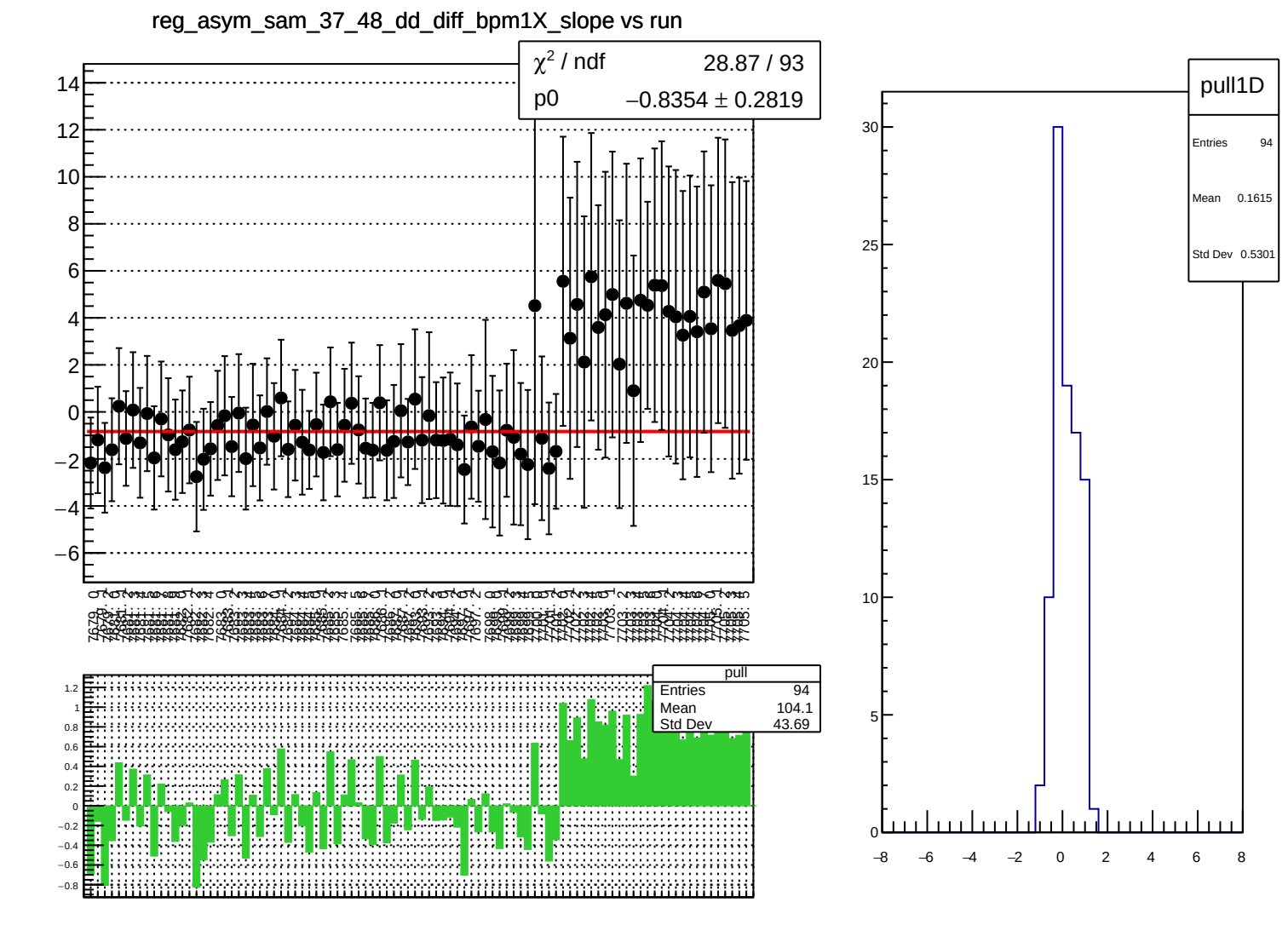

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 44.27 / 93
p0 3.644 ± 1.023
pull
Entries 94
Mean 96.55
Std Dev 26.37
pull1D
Entries 94
Mean −0.2179
Std Dev 0.6508

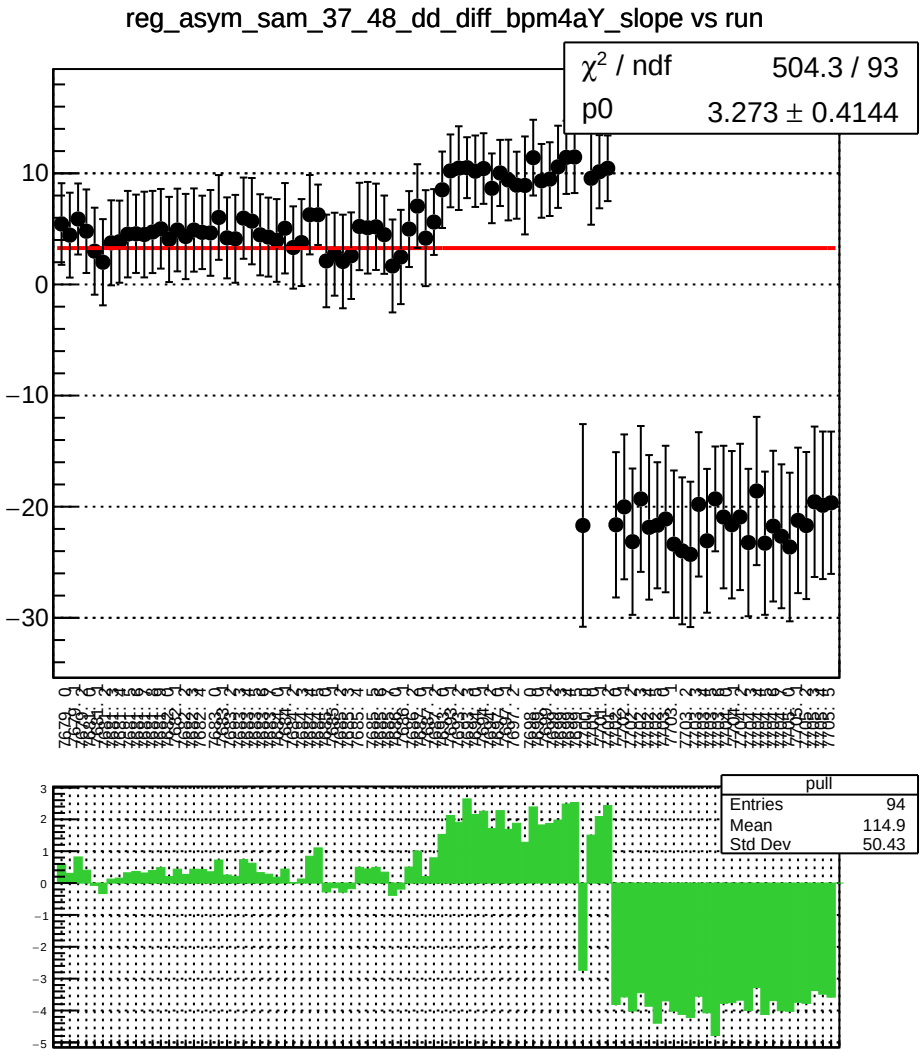

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 50 / 93
p0 56.68 ± 0.5786
pull
Entries 94
Mean 98.49
Std Dev 34.68
pull1D
Entries 94
Mean −0.2738
Std Dev 0.676

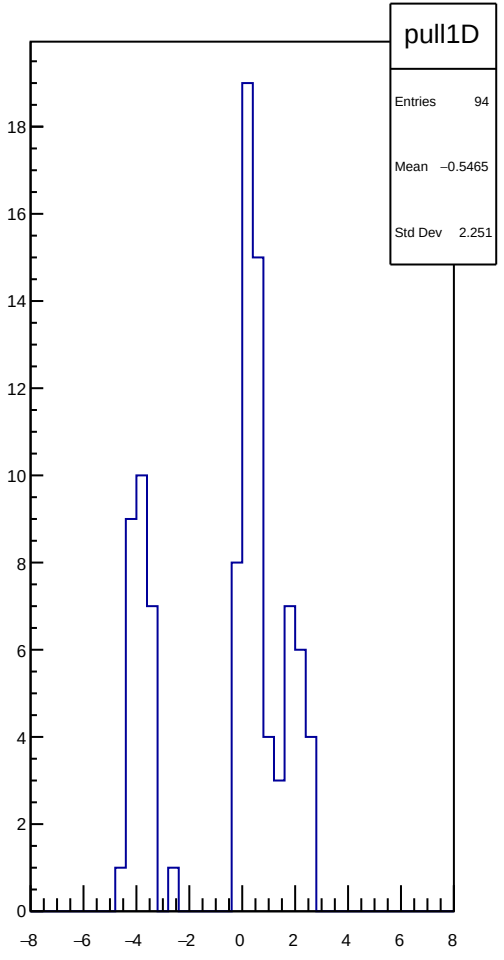

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 34.43 / 93
p0 −31.69 ± 1.509
pull
Entries 94
Mean 117.5
Std Dev 52.7

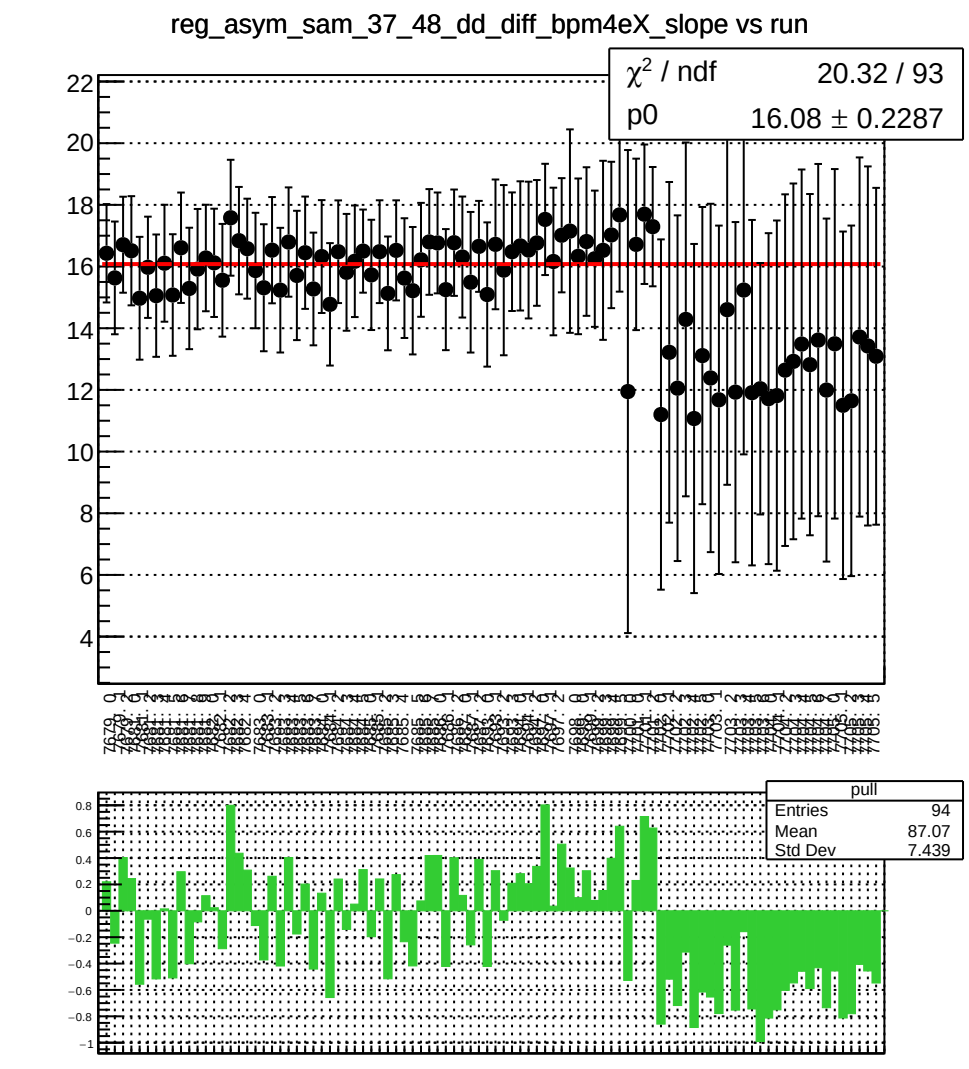

pull1D
Entries 94
Mean 0.1376
Std Dev 0.5894

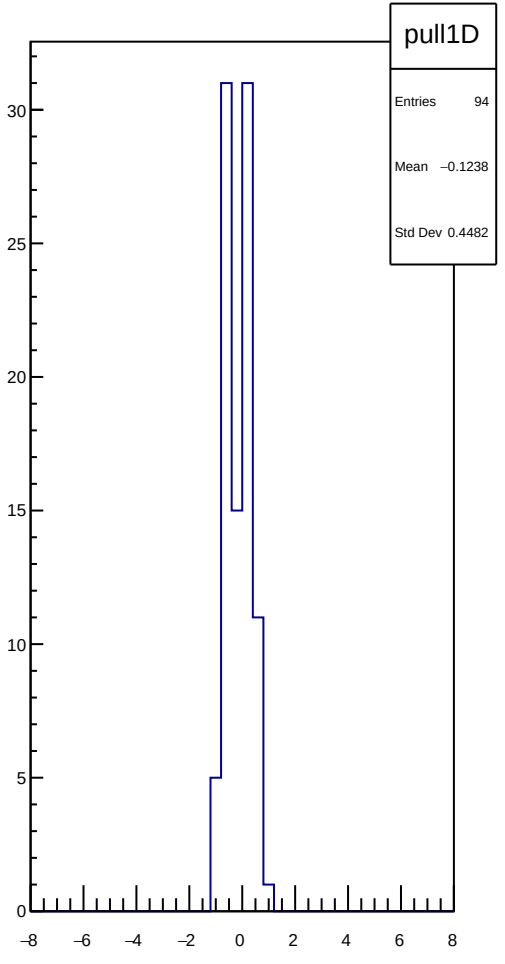

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 14.55 / 93
p0 0.2311± 0.07234
pull
Entries 94
Mean −127.8
Std Dev 178.9
pull1D
Entries 94
Mean −0.04767
Std Dev 0.3905

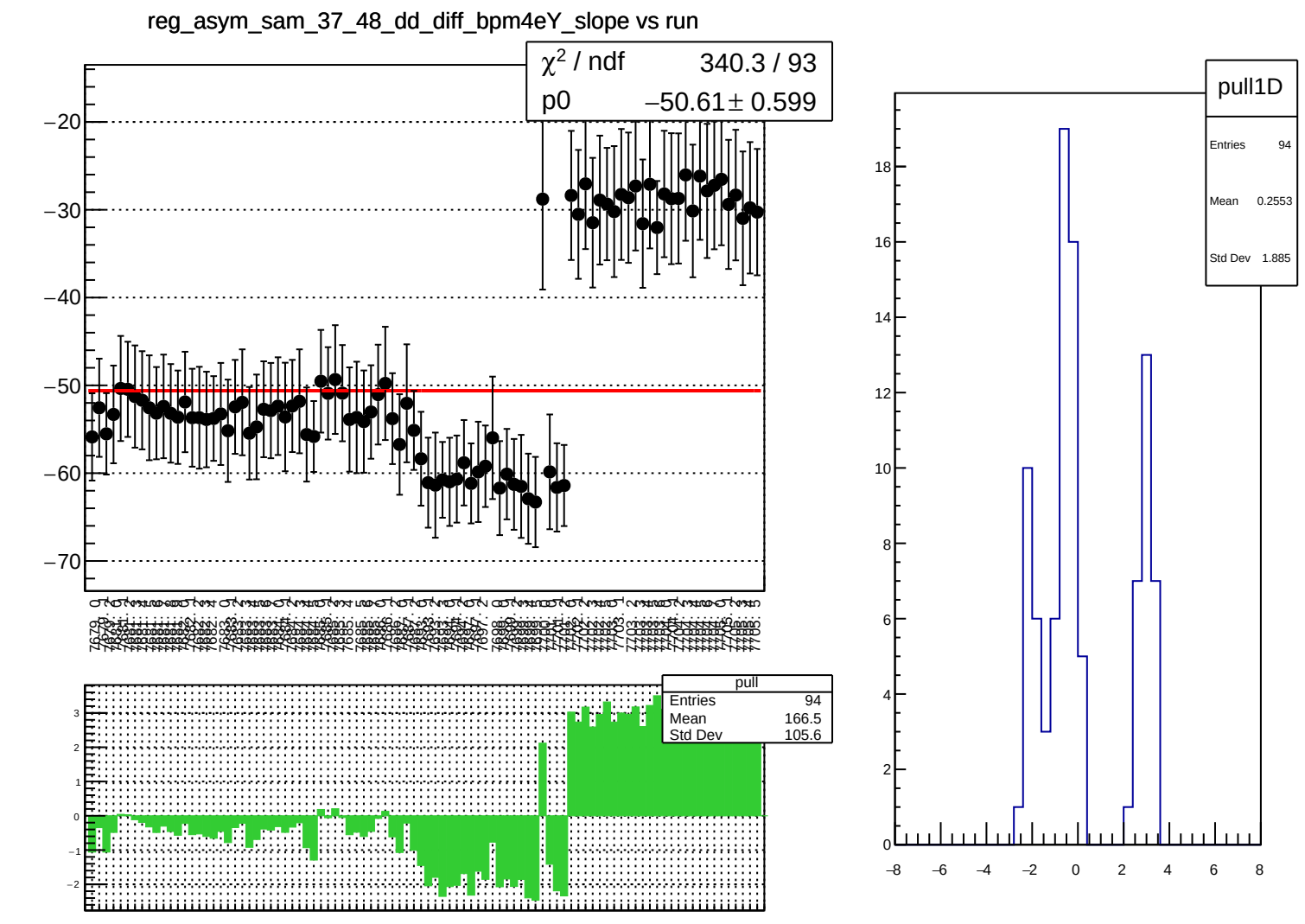

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 28.87 / 93
p0 −0.8354 ± 0.2819
pull
Entries 94
Mean 104.1
Std Dev 43.69
pull1D
Entries 94
Mean 0.1615
Std Dev 0.5301

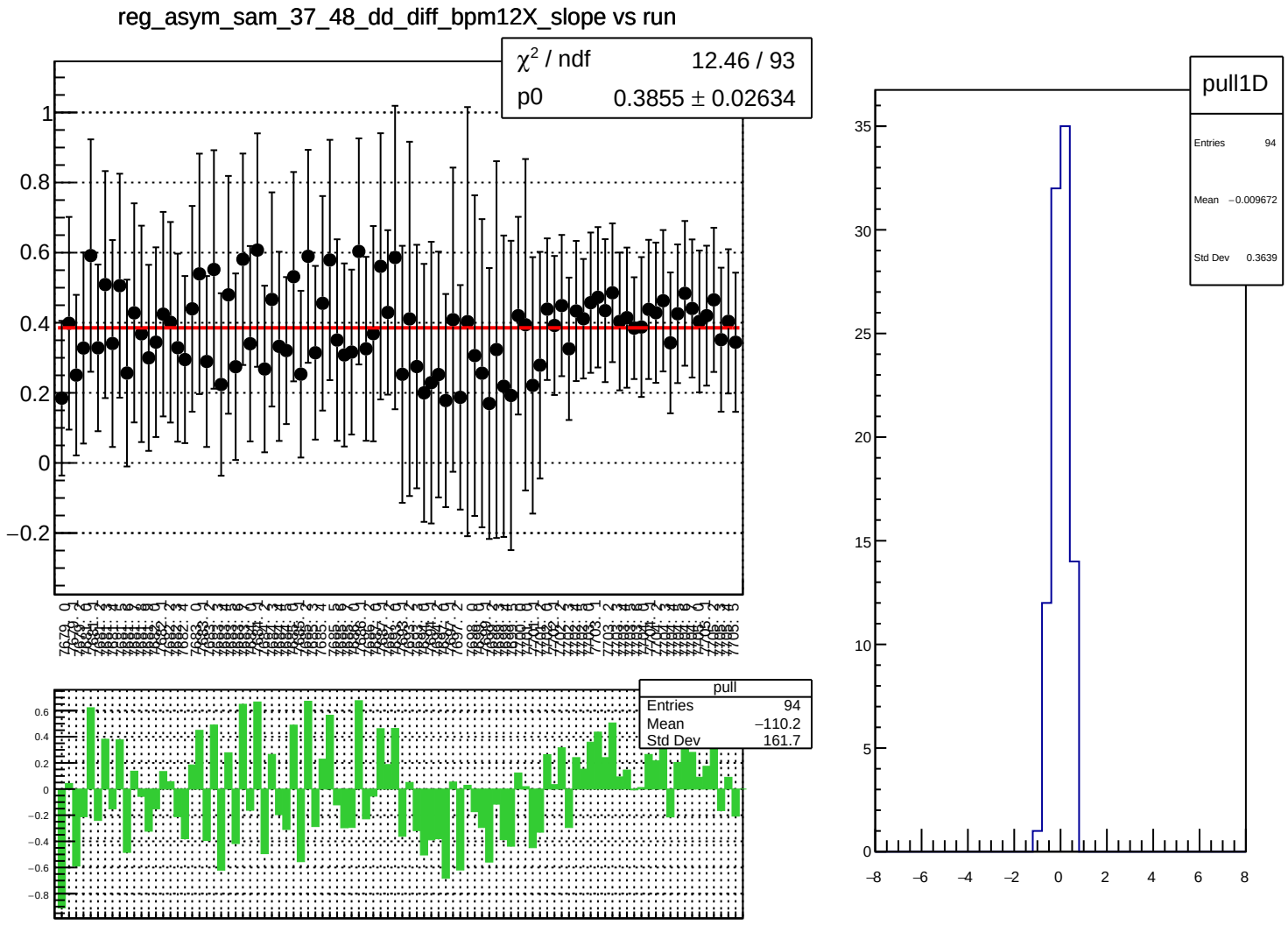

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 504.3 / 93
p0 3.273 ± 0.4144
pull
Entries 94
Mean 114.9
Std Dev 50.43

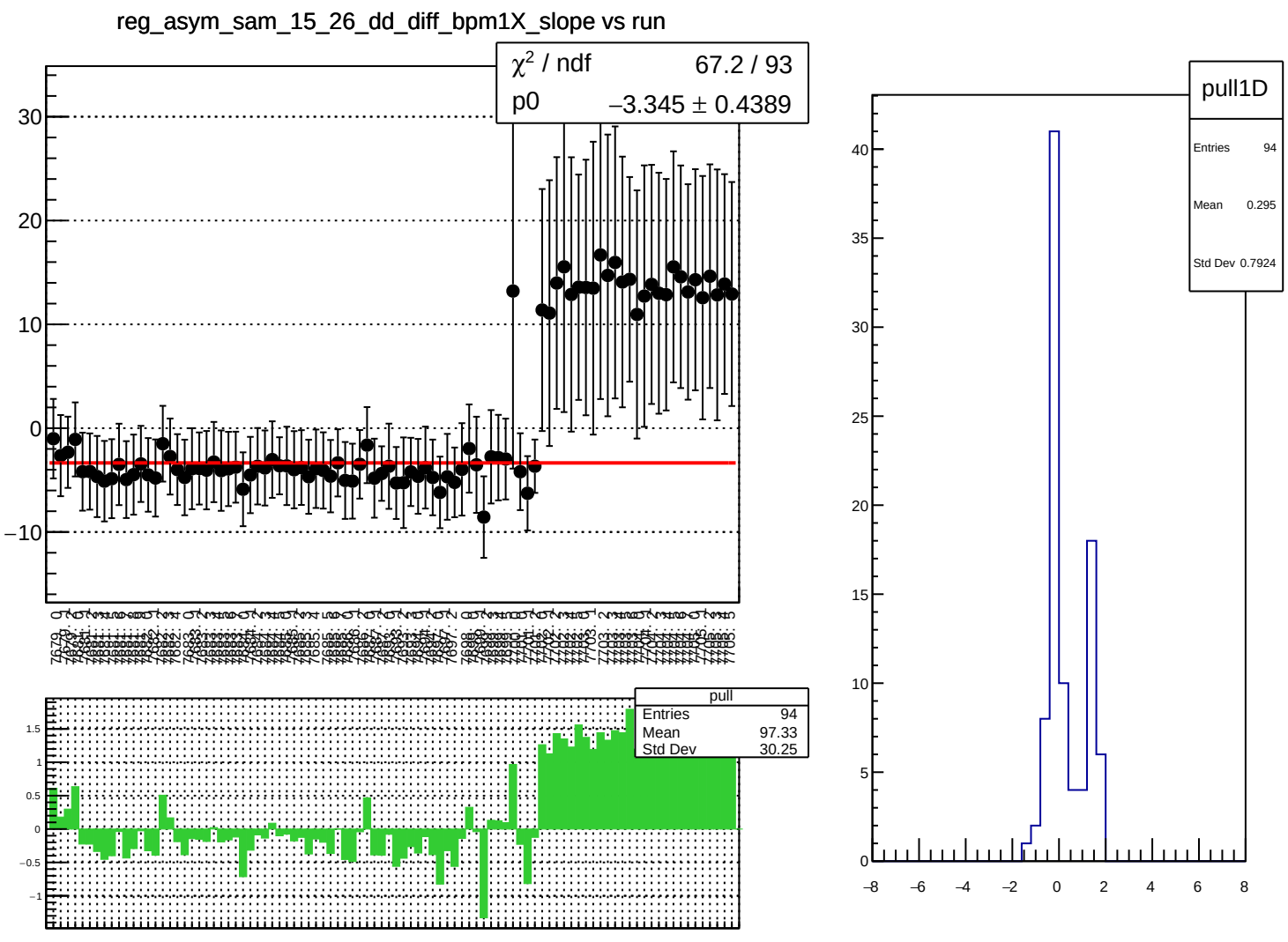

pull1D
Entries 94
Mean −0.5465
Std Dev 2.251

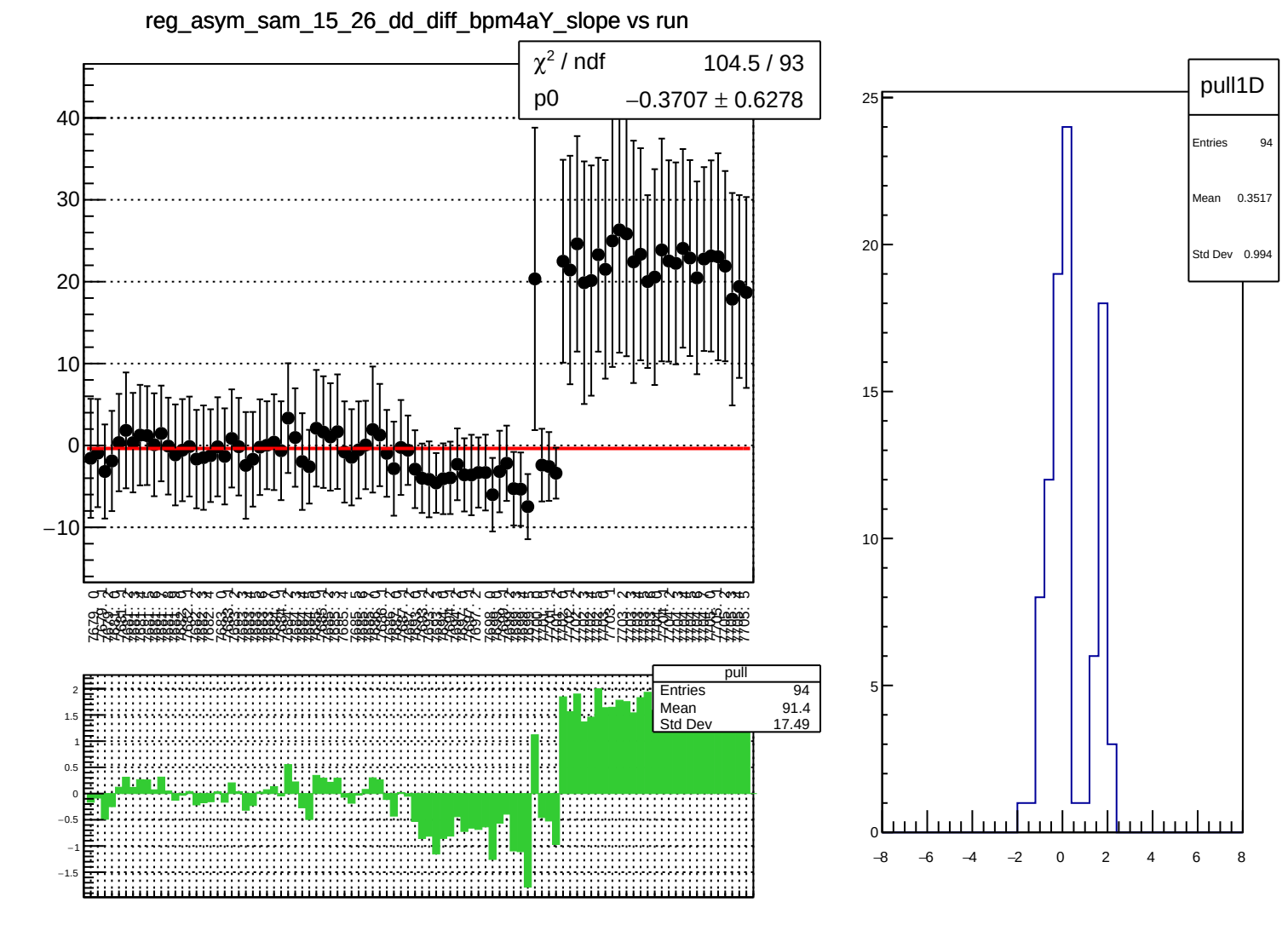

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 20.32 / 93
p0 16.08 ± 0.2287
pull
Entries 94
Mean 87.07
Std Dev 7.439

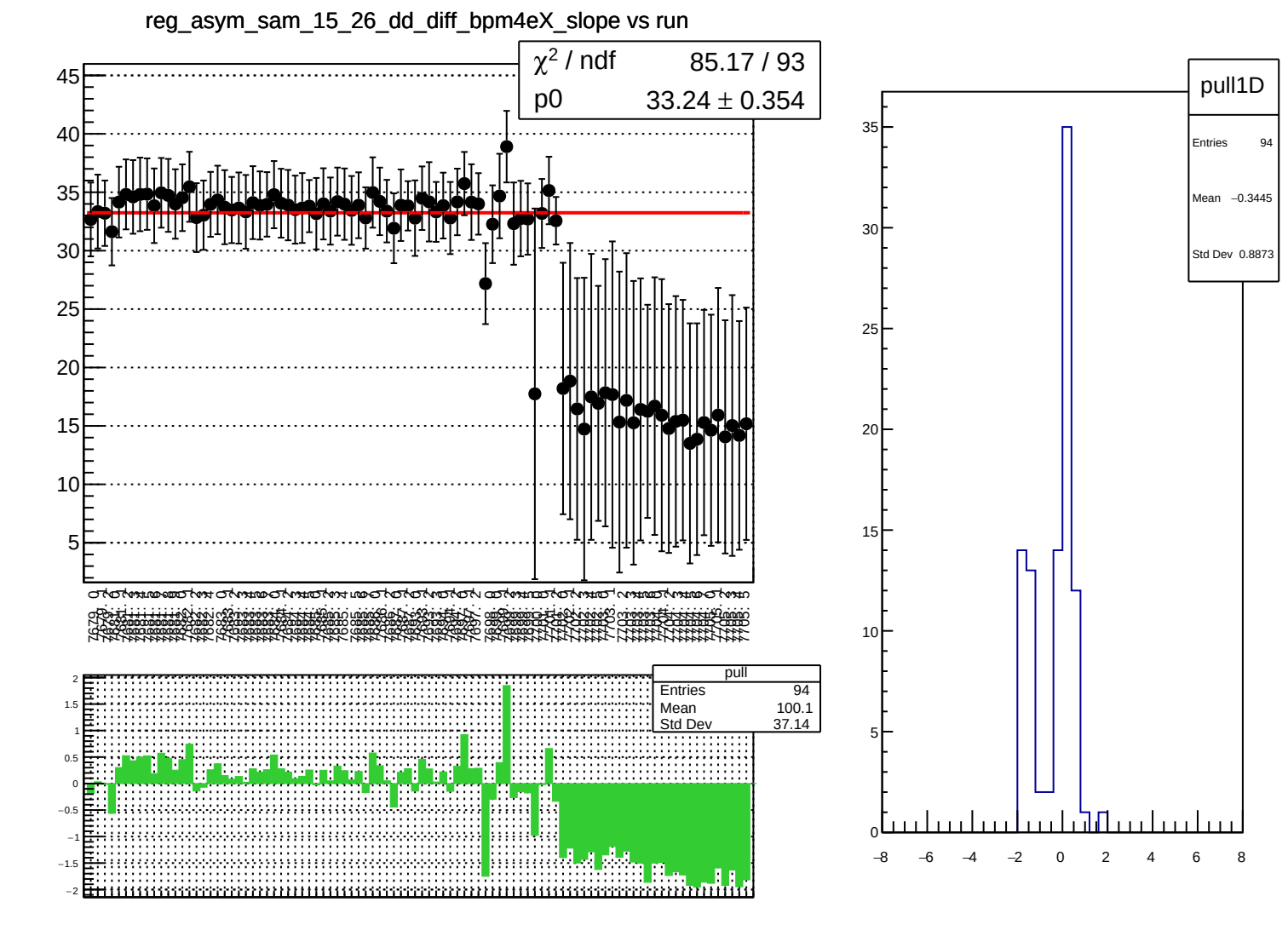

pull1D
Entries 94
Mean −0.1238
Std Dev 0.4482

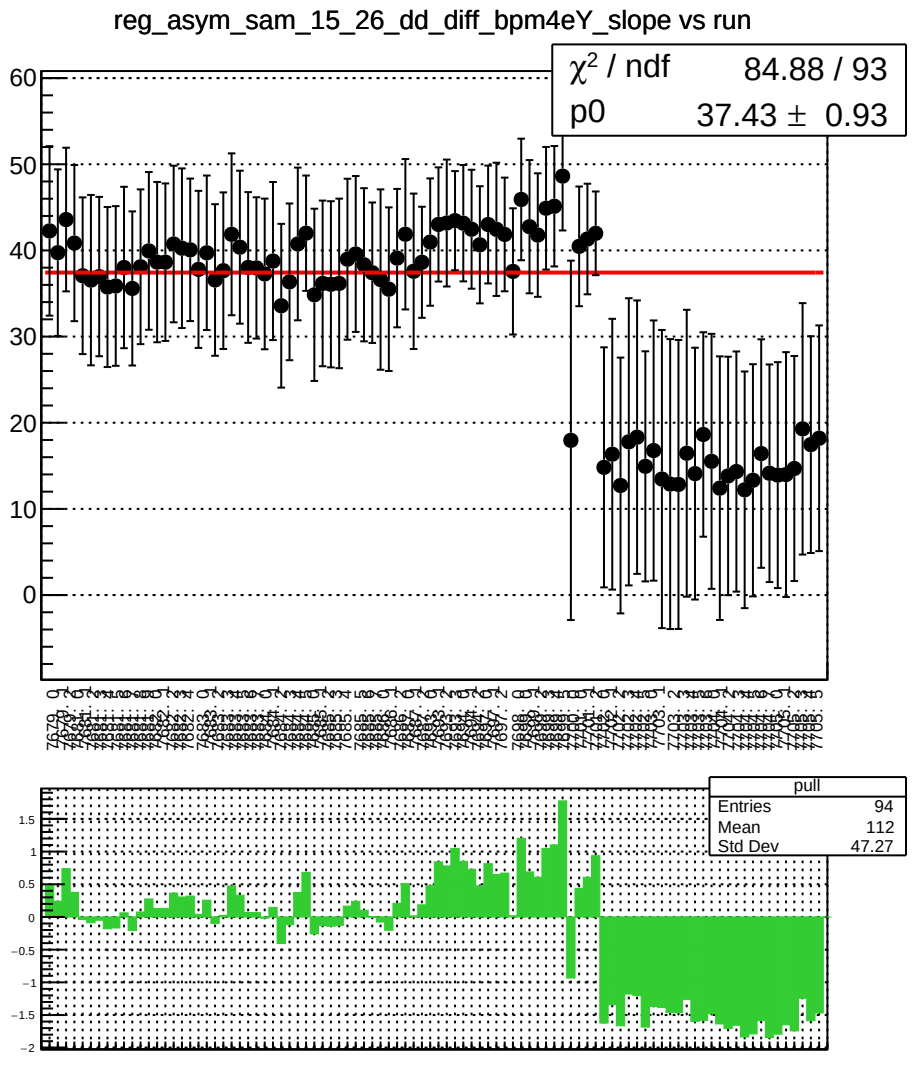

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 340.3 / 93
p0 −50.61 ± 0.599
pull
Entries 94
Mean 166.5
Std Dev 105.6
pull1D
Entries 94
Mean 0.2553
Std Dev 1.885

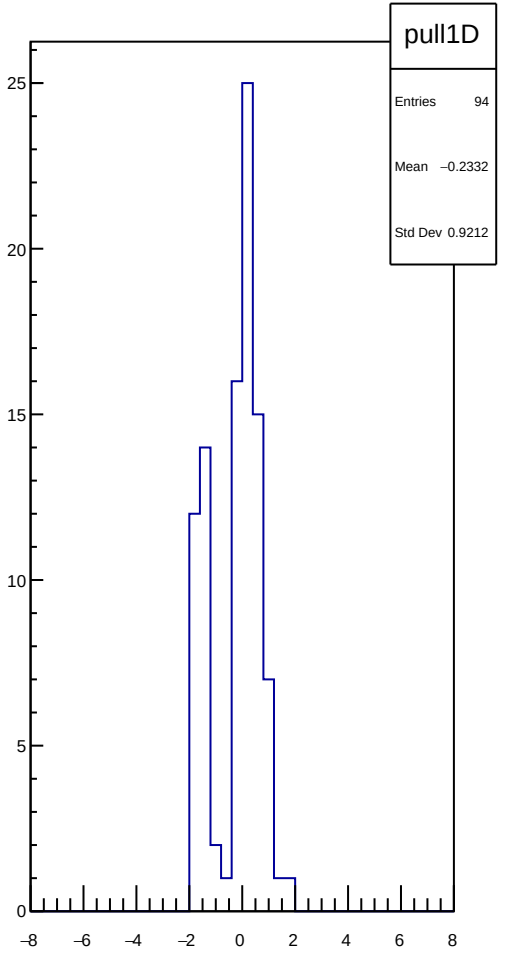

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 12.46 / 93
p0 0.3855 ± 0.02634
pull
Entries 94
Mean −110.2
Std Dev 161.7
pull1D
Entries 94
Mean −0.009672
Std Dev 0.3639

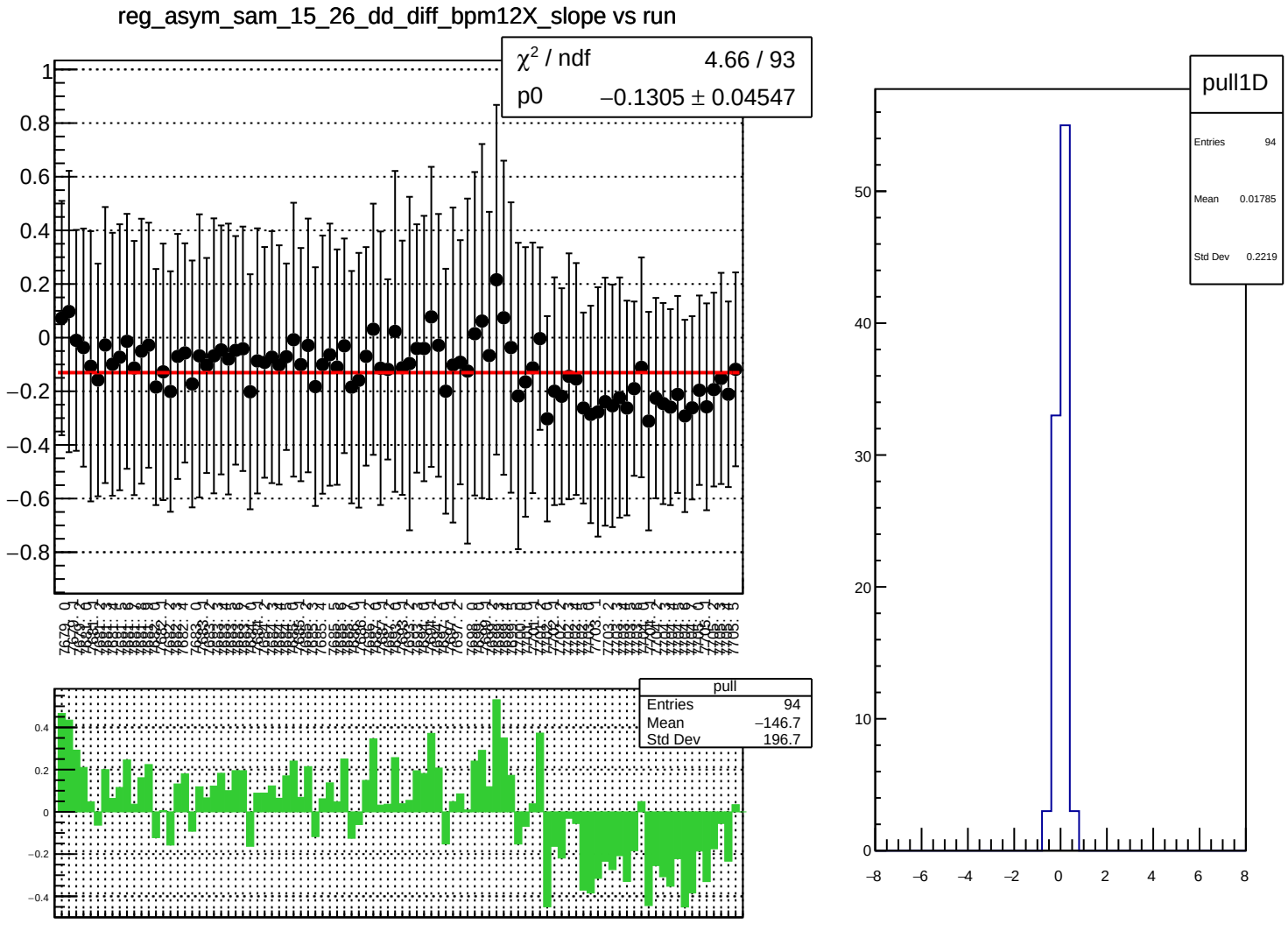

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 67.2 / 93
p0 −3.345 ± 0.4389
30
20
10
0
−10
pull
Entries 94
Mean 97.33
Std Dev 30.25
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean 0.295
Std Dev 0.7924
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

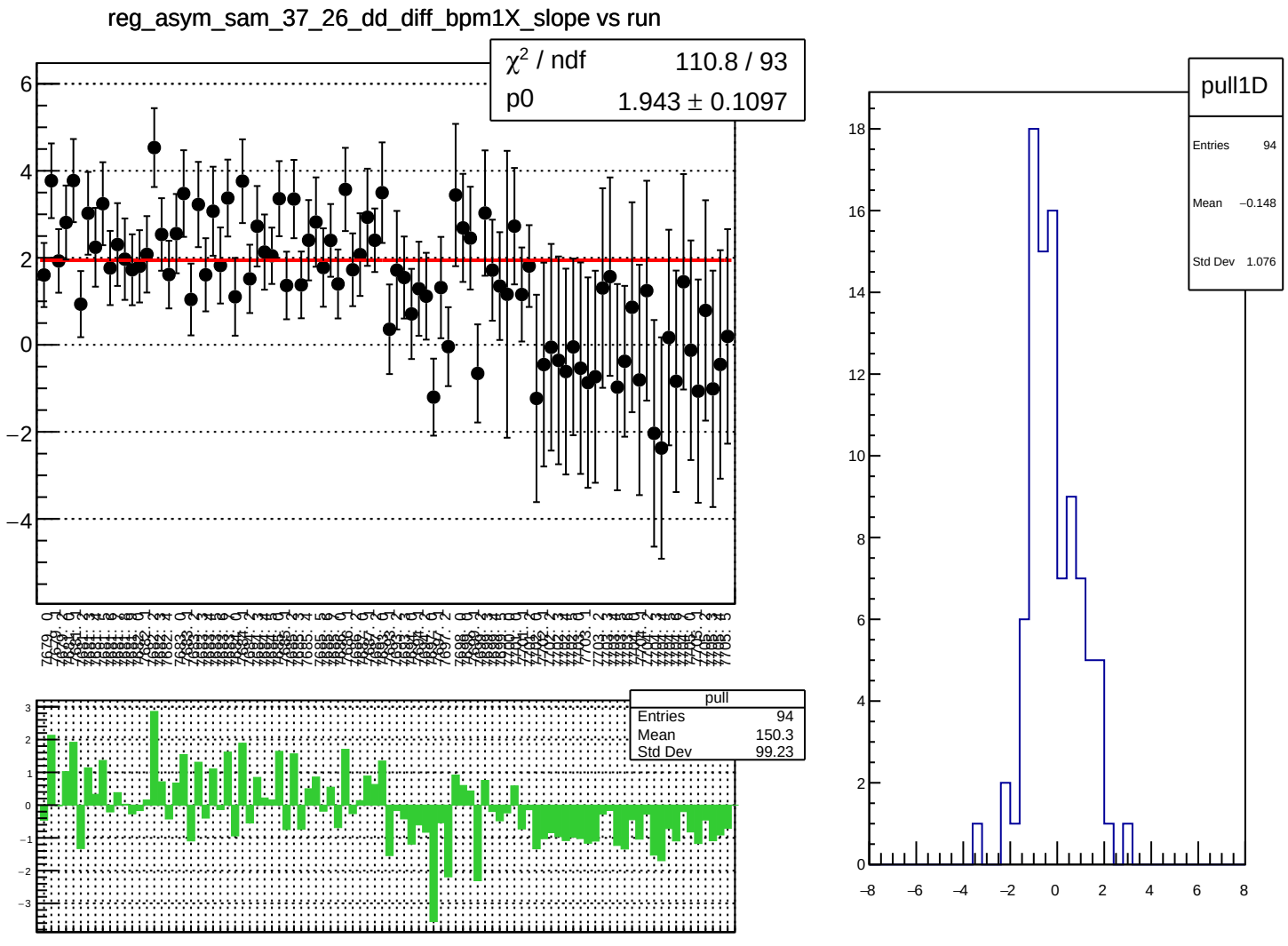

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 104.5 / 93
p0 −0.3707 ± 0.6278
pull
Entries 94
Mean 91.4
Std Dev 17.49
pull1D
Entries 94
Mean 0.3517
Std Dev 0.994

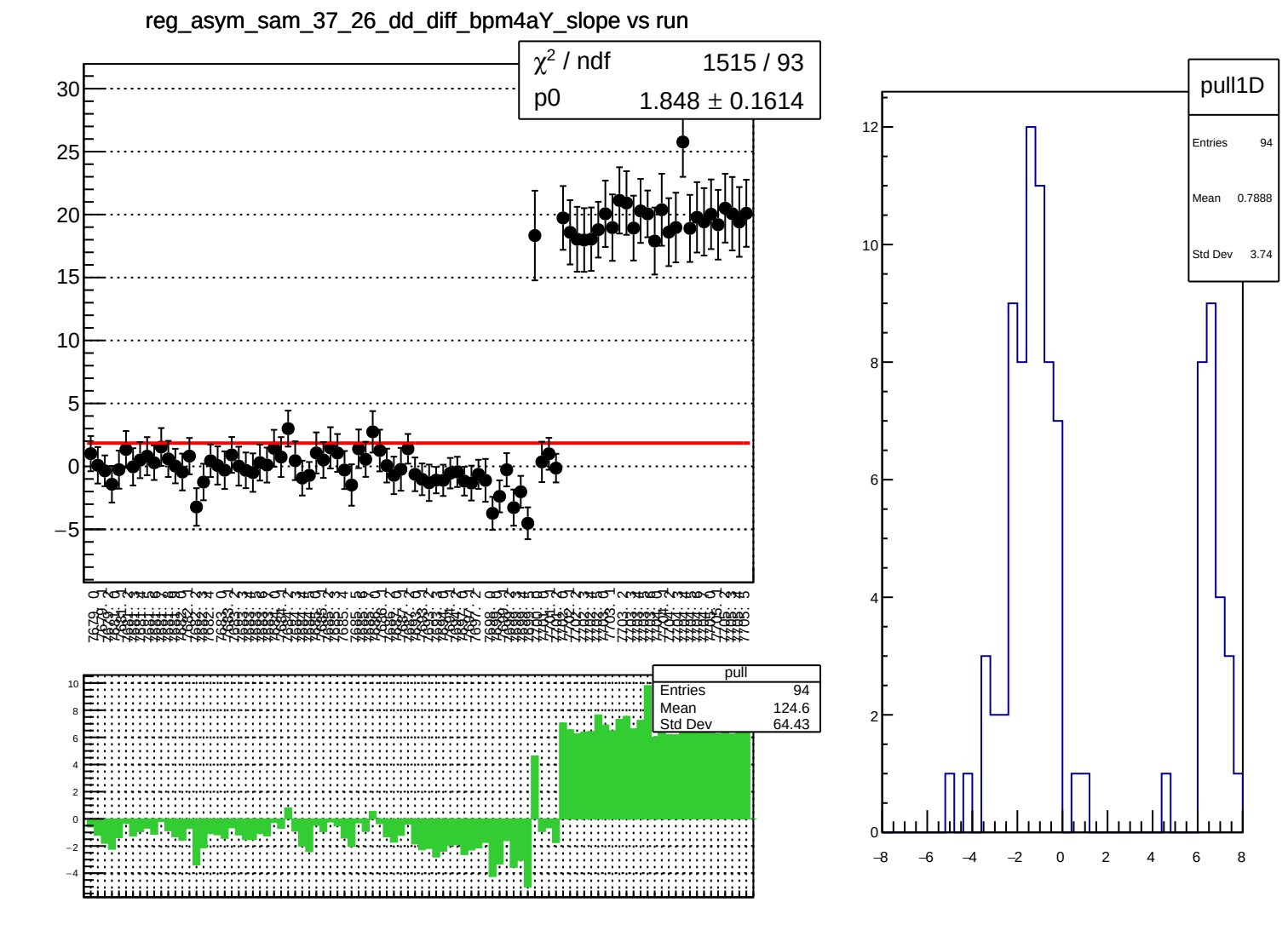

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 85.17 / 93
p0 33.24 ± 0.354
pull
Entries 94
Mean 100.1
Std Dev 37.14
pull1D
Entries 94
Mean −0.3445
Std Dev 0.8873

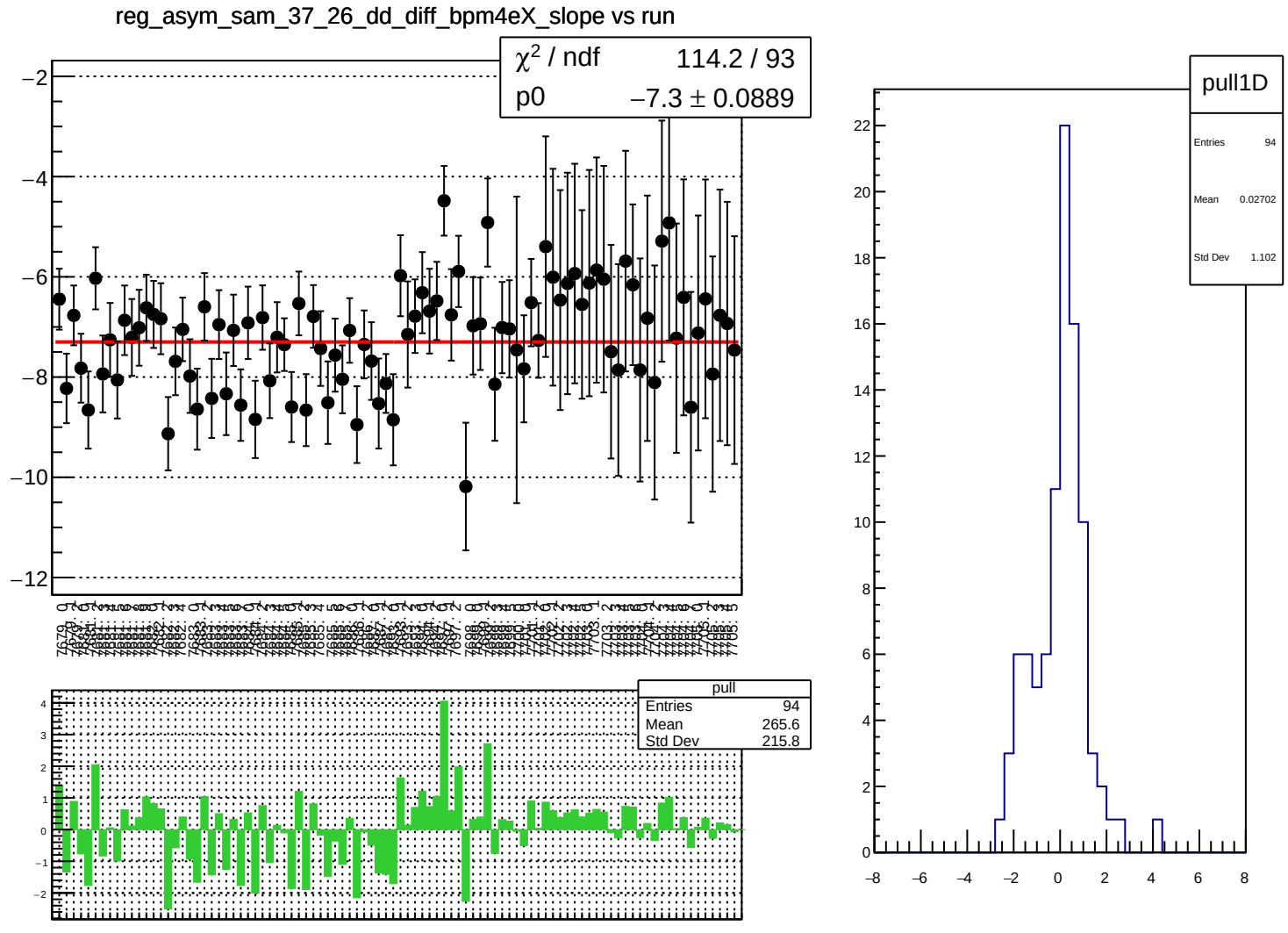

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 84.88 / 93
p0 37.43 ± 0.93
pull
Entries 94
Mean 112
Std Dev 47.27

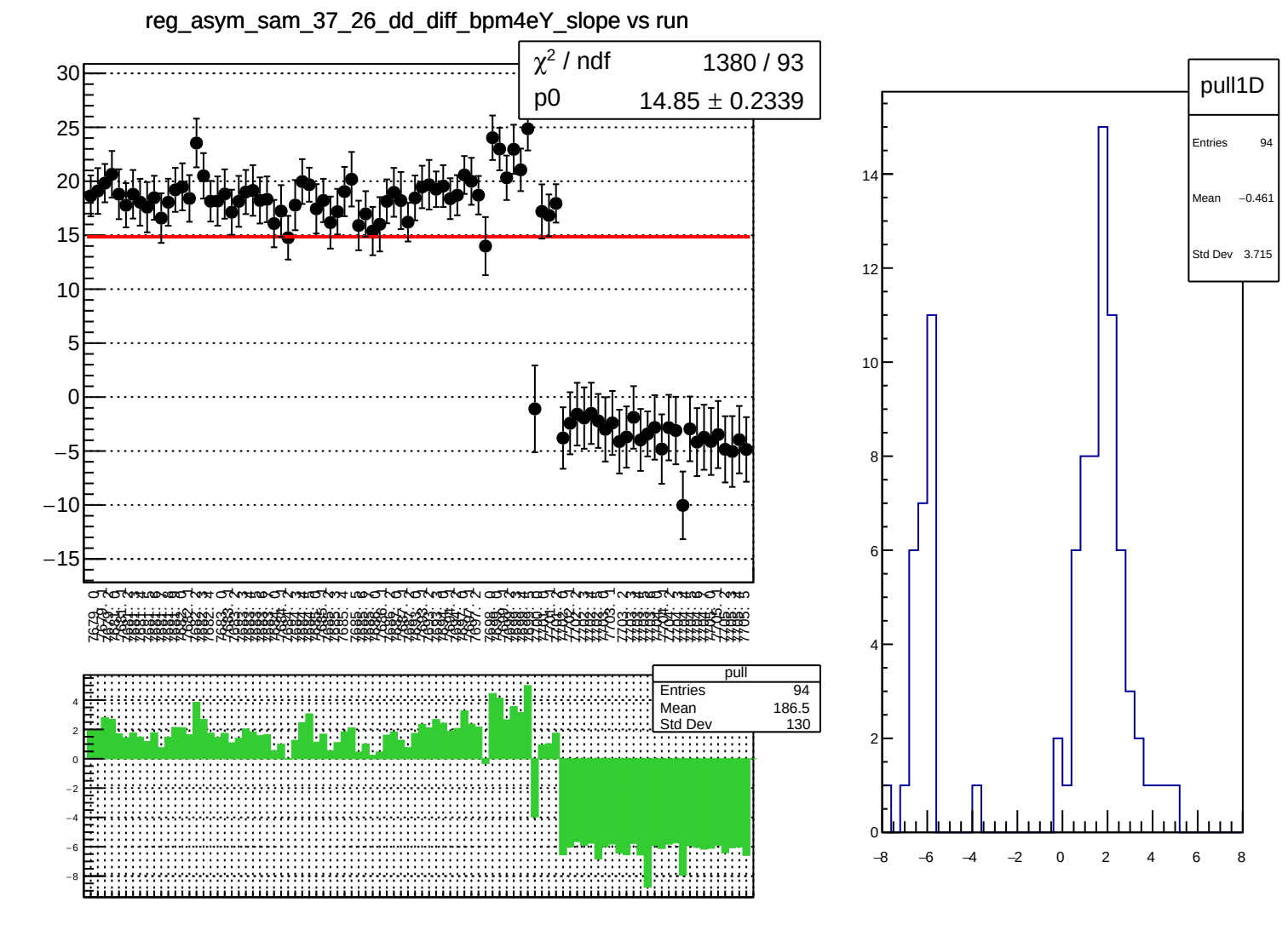

pull1D
Entries 94
Mean −0.2332
Std Dev 0.9212

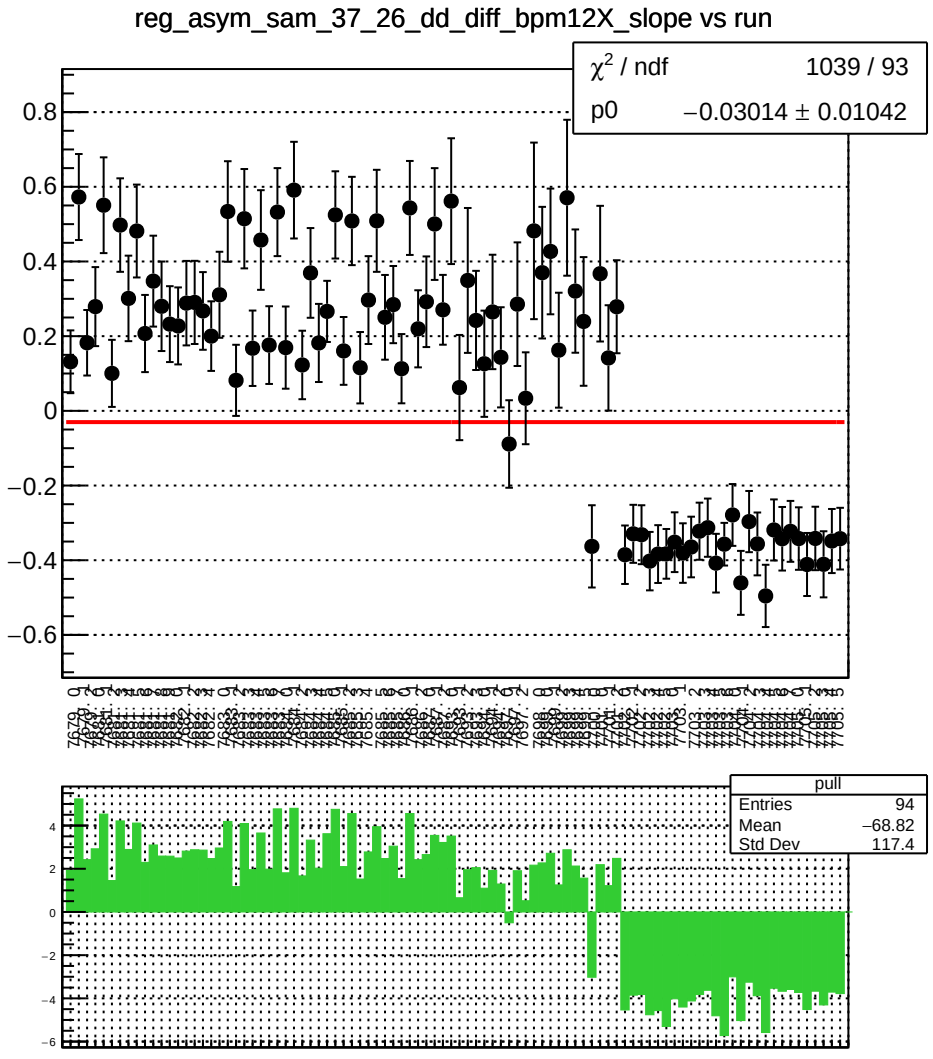

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 4.66 / 93
p0 −0.1305 ± 0.04547
pull
Entries 94
Mean −146.7
Std Dev 196.7
pull1D
Entries 94
Mean 0.01785
Std Dev 0.2219

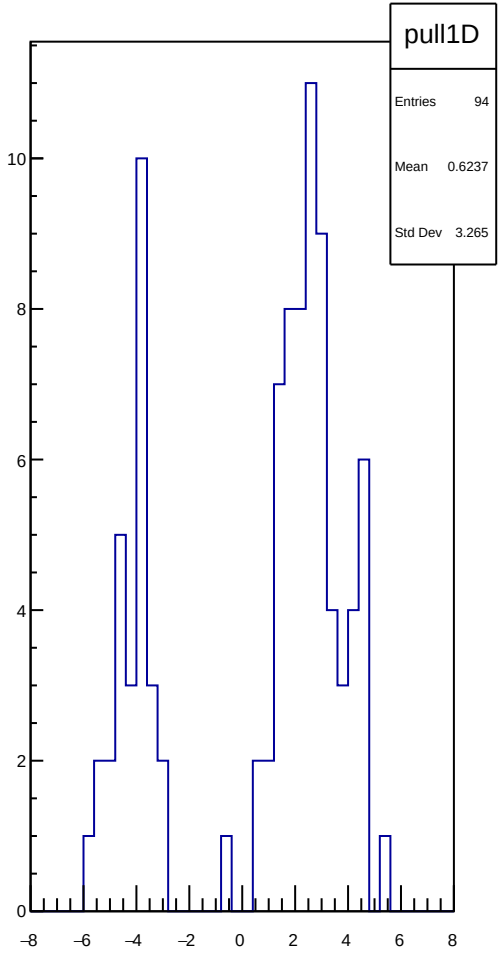

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 110.8 / 93
p0 1.943 ± 0.1097
pull
Entries 94
Mean 150.3
Std Dev 99.23
pull1D
Entries 94
Mean −0.148
Std Dev 1.076

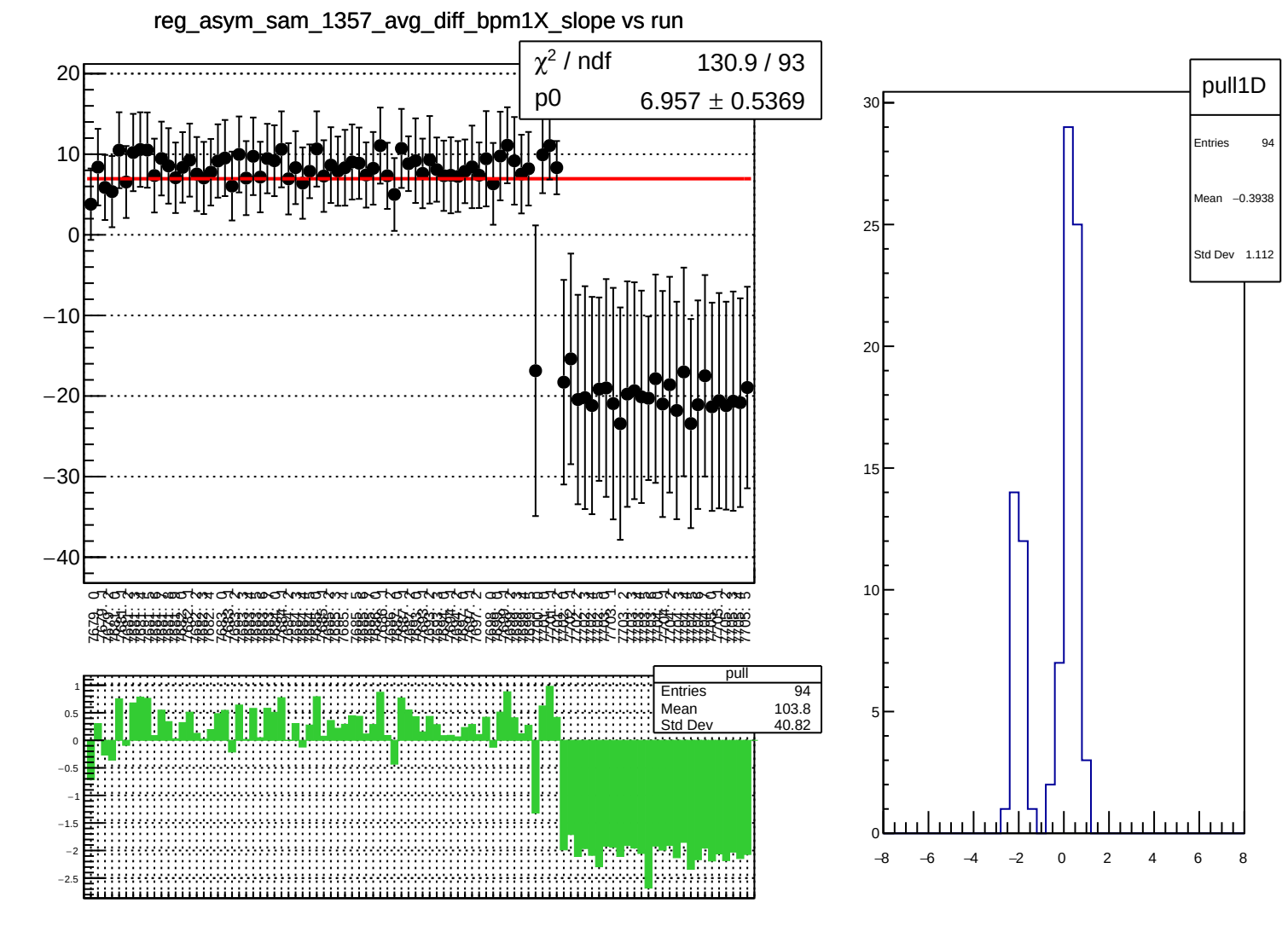

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 1515 / 93
p0 1.848 ± 0.1614
pull
Entries 94
Mean 124.6
Std Dev 64.43
pull1D
Entries 94
Mean 0.7888
Std Dev 3.74

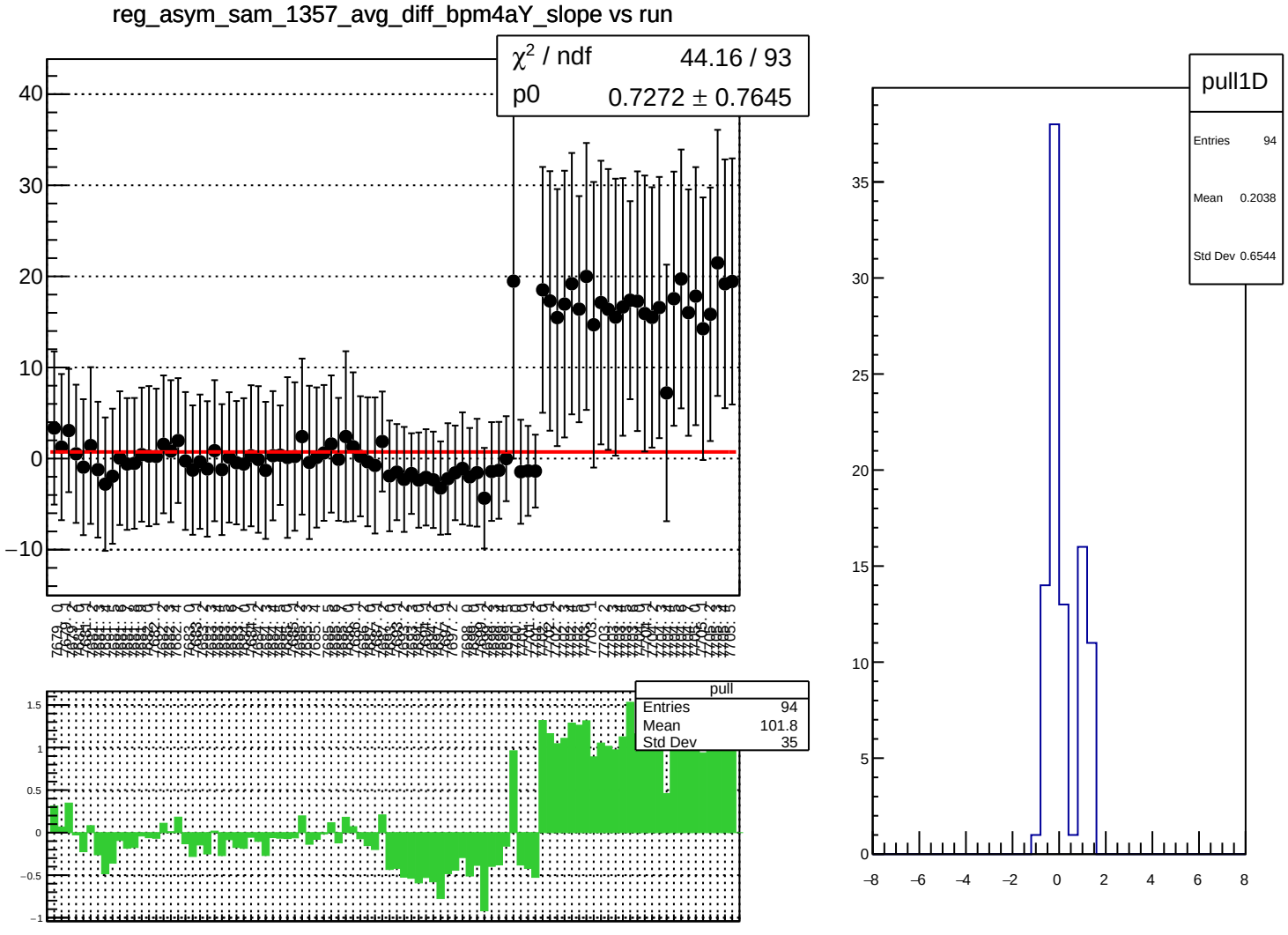

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 114.2 / 93
p0 −7.3 ± 0.0889
pull
Entries 94
Mean 265.6
Std Dev 215.8
pull1D
Entries 94
Mean 0.02702
Std Dev 1.102

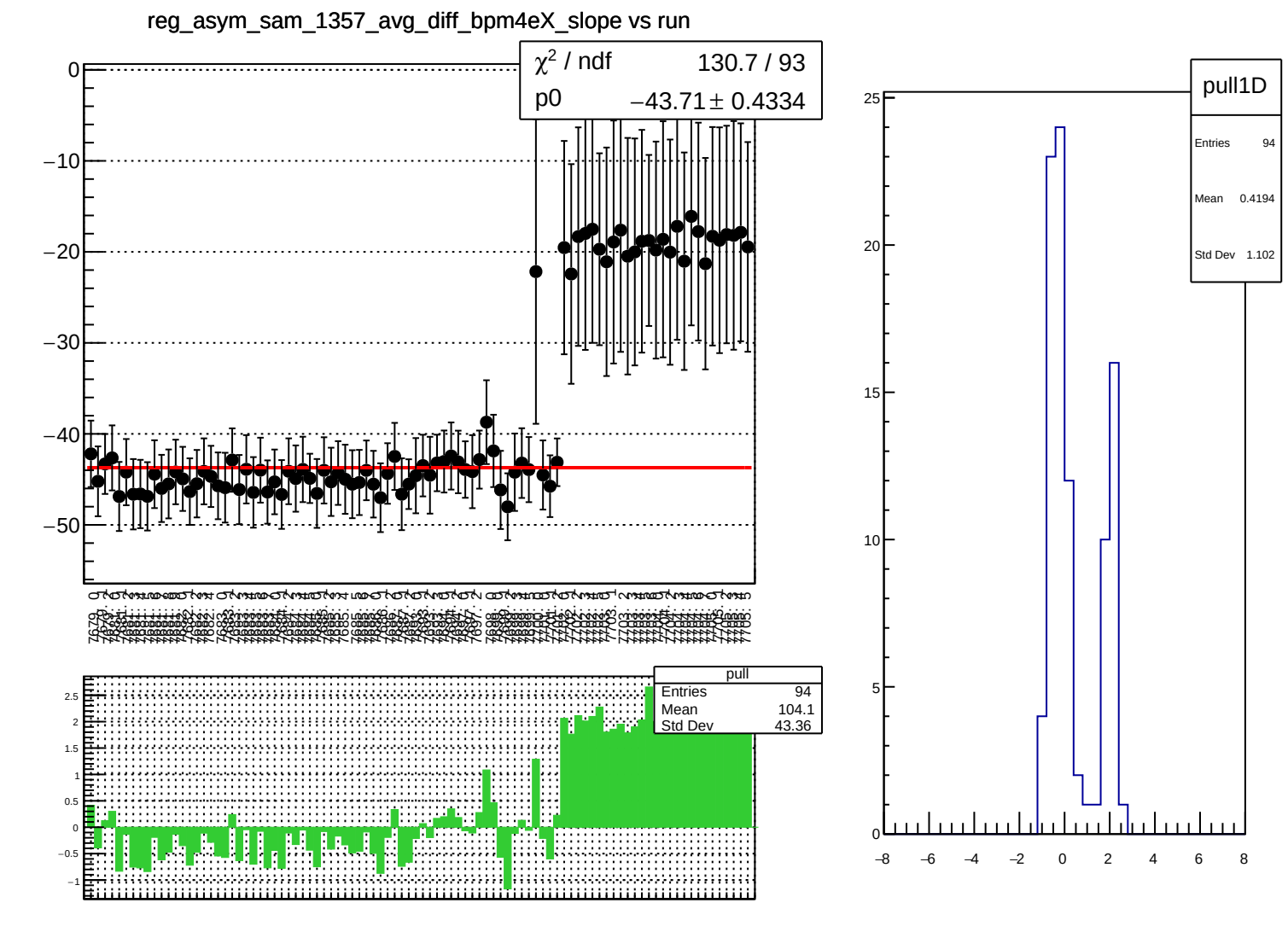

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 1380 / 93
p0 14.85 ± 0.2339
pull
Entries 94
Mean 186.5
Std Dev 130
pull1D
Entries 94
Mean −0.461
Std Dev 3.715

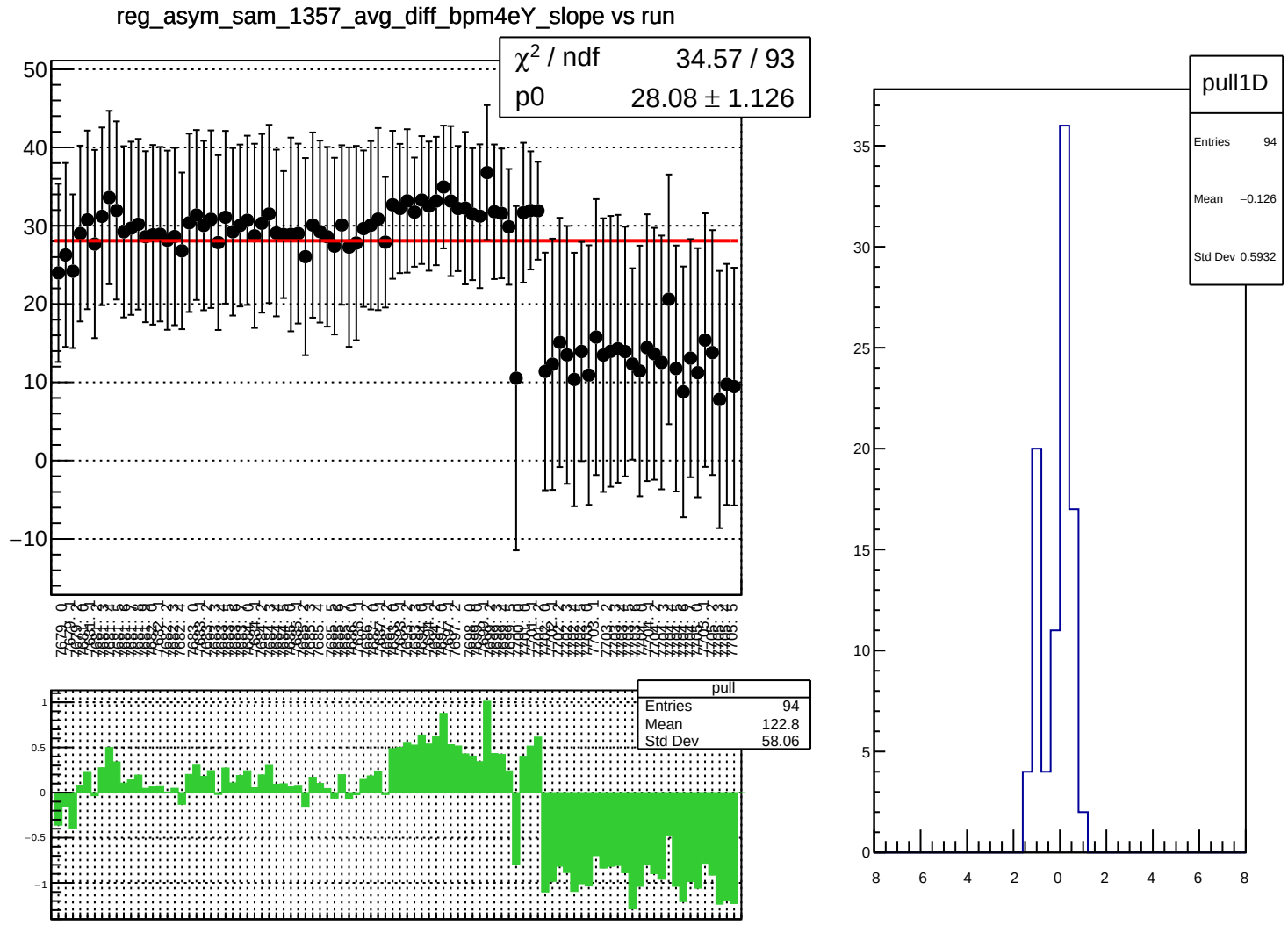

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 1039 / 93
p0 −0.03014 ± 0.01042
pull
Entries 94
Mean −68.82
Std Dev 117.4

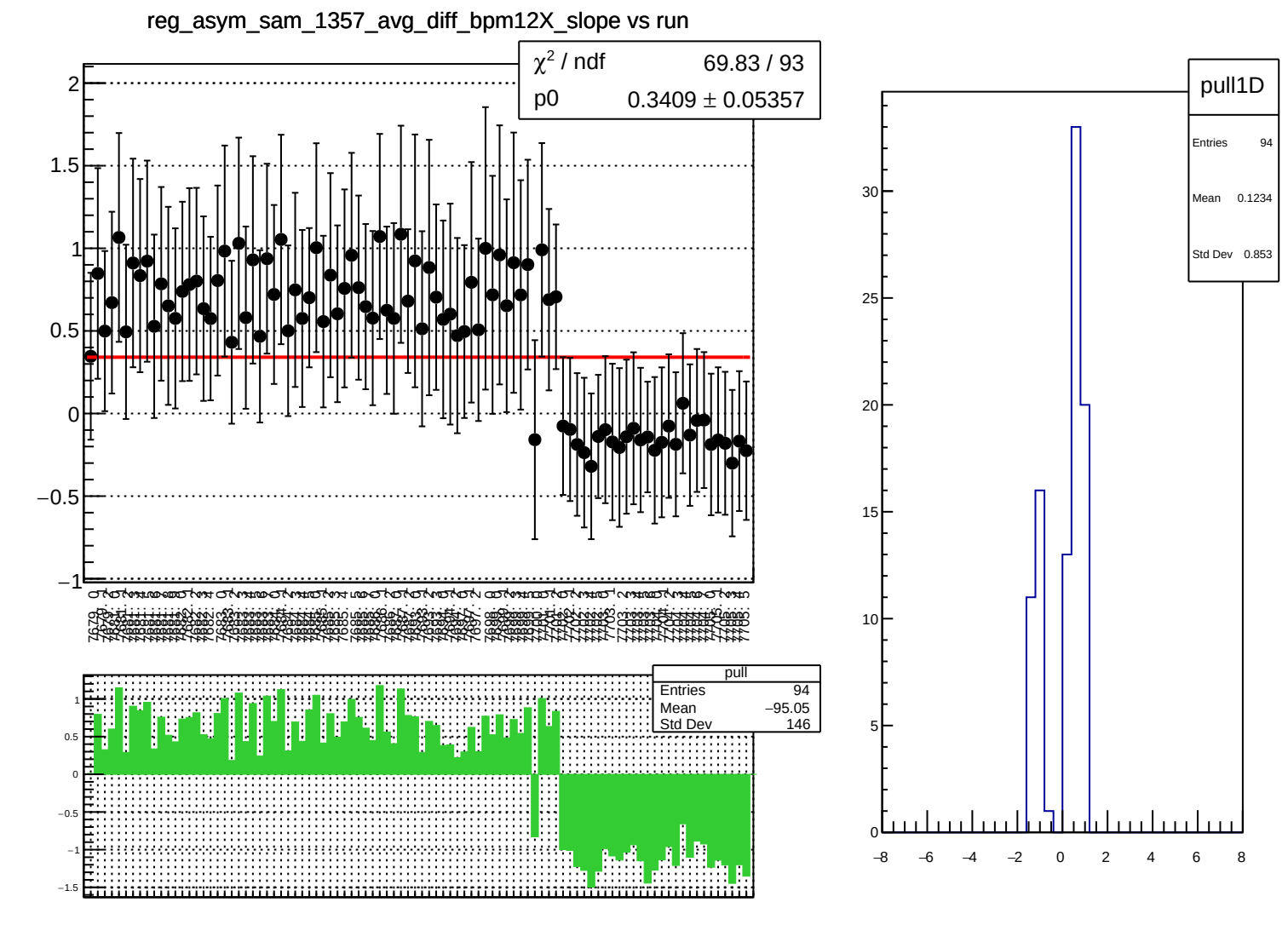

pull1D
Entries 94
Mean 0.6237
Std Dev 3.265

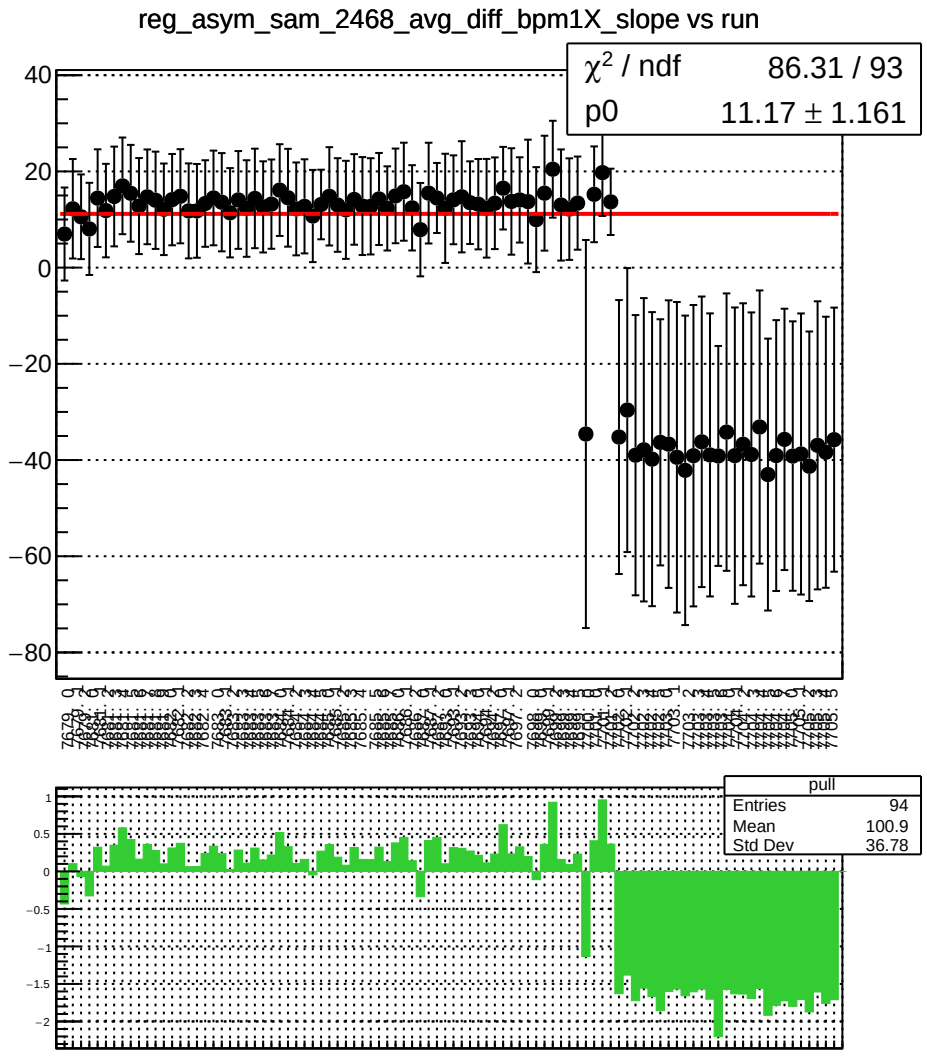

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 130.9 / 93
p0 6.957 ± 0.5369
pull
Entries 94
Mean 103.8
Std Dev 40.82
pull1D
Entries 94
Mean −0.3938
Std Dev 1.112

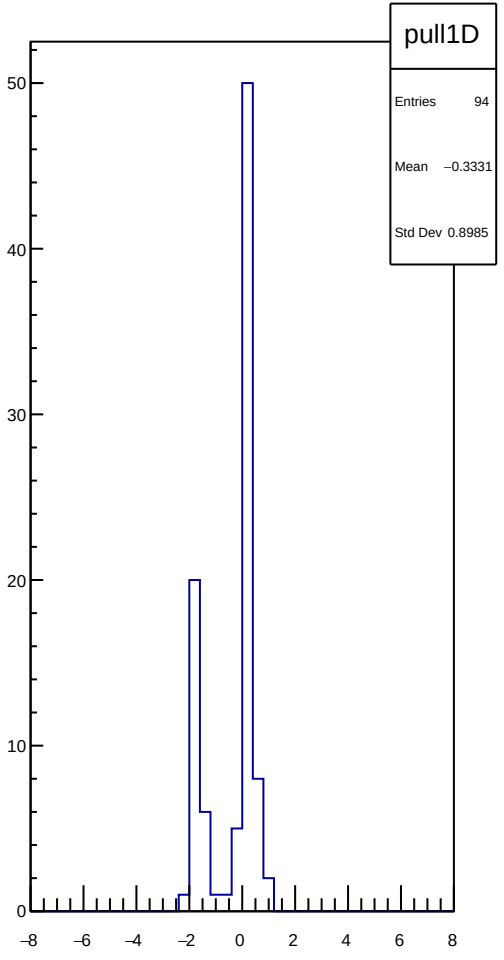

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 44.16 / 93
p0 0.7272 ± 0.7645
pull
Entries 94
Mean 101.8
Std Dev 35
pull1D
Entries 94
Mean 0.2038
Std Dev 0.6544

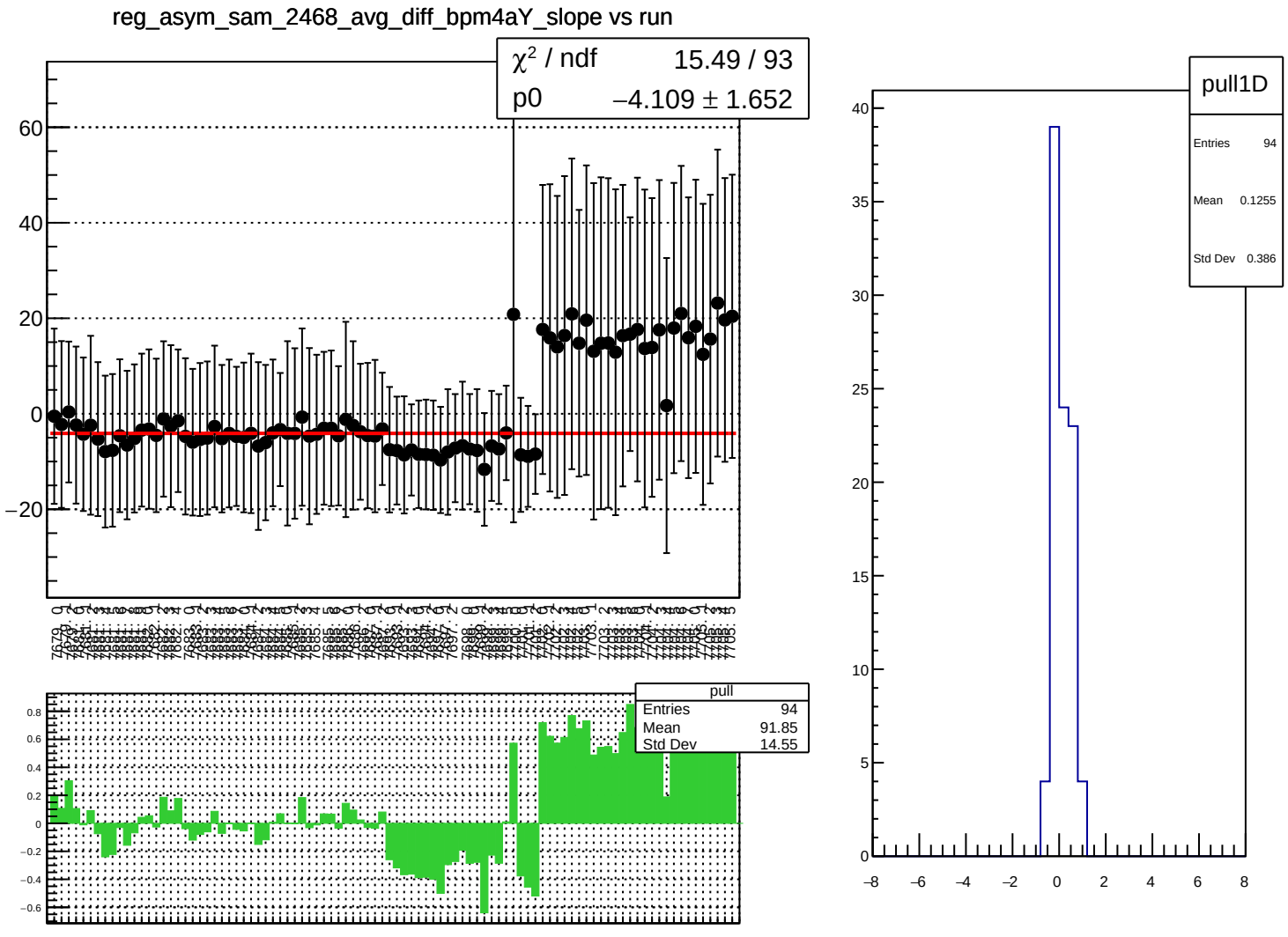

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 130.7 / 93
p0 −43.71 ± 0.4334
pull
Entries 94
Mean 104.1
Std Dev 43.36
pull1D
Entries 94
Mean 0.4194
Std Dev 1.102

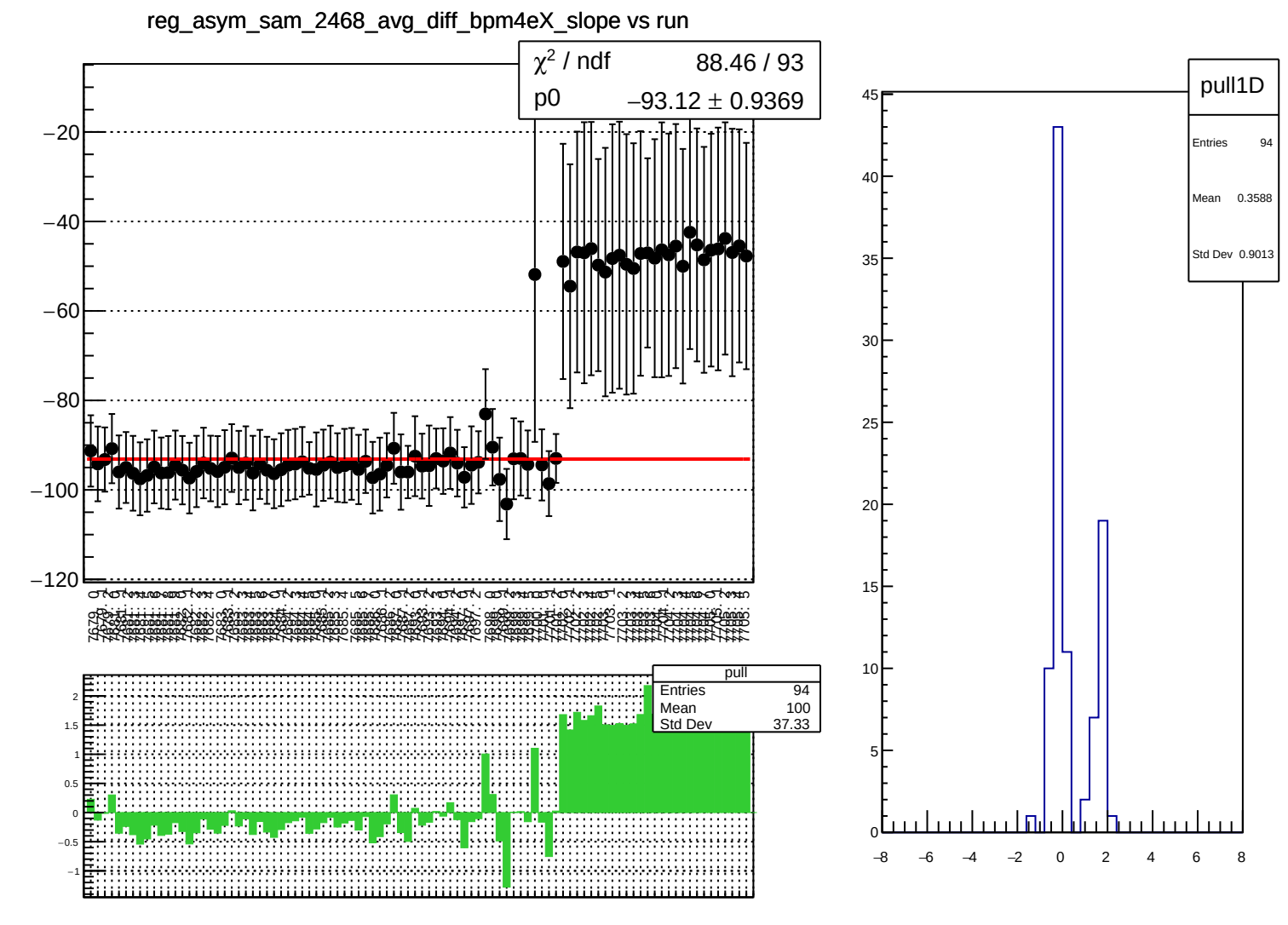

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 34.57 / 93
p0 28.08 ± 1.126
pull
Entries 94
Mean 122.8
Std Dev 58.06
pull1D
Entries 94
Mean −0.126
Std Dev 0.5932

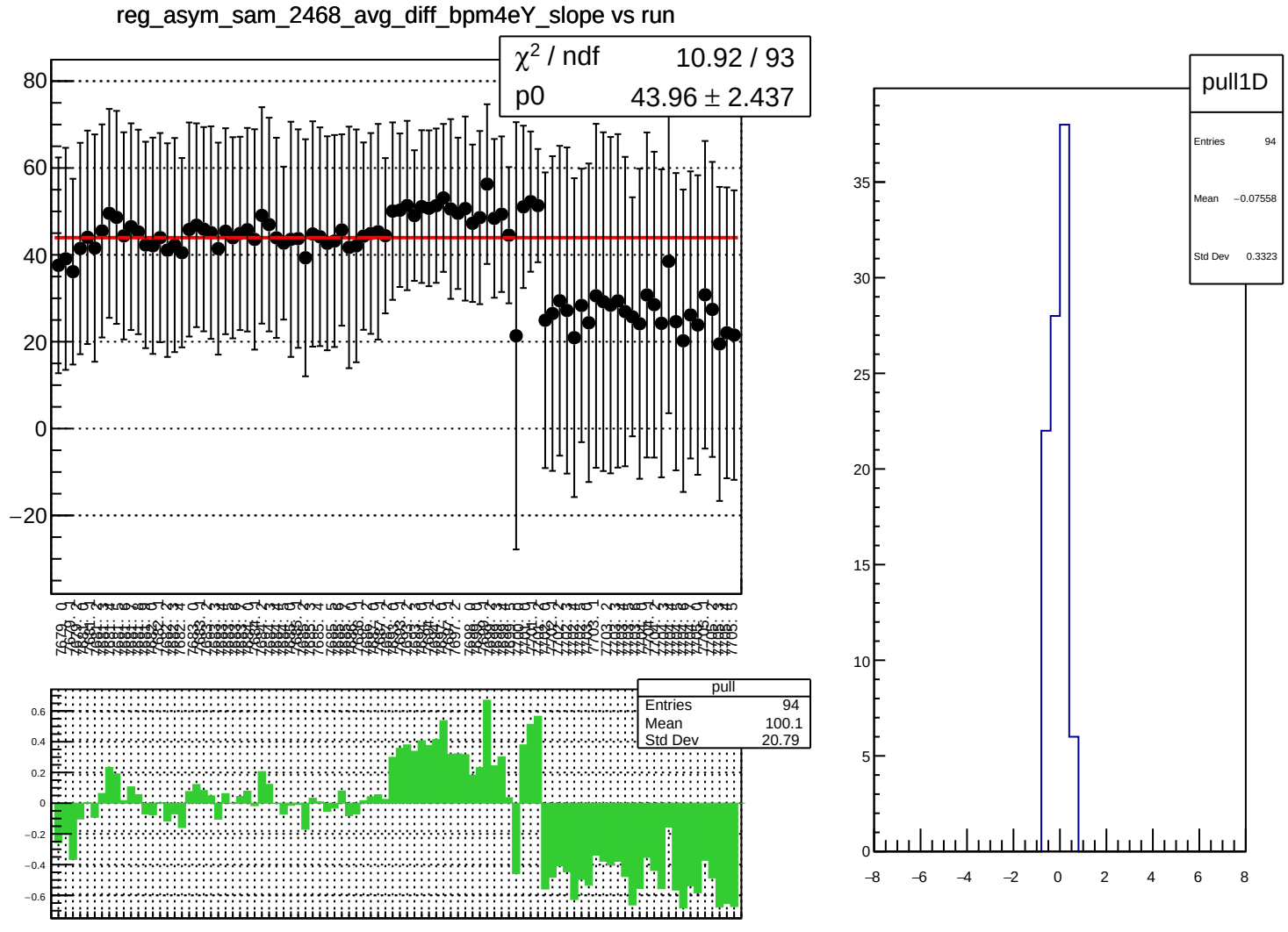

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 69.83 / 93
p0 0.3409 ± 0.05357
pull
Entries 94
Mean −95.05
Std Dev 146
pull1D
Entries 94
Mean 0.1234
Std Dev 0.853

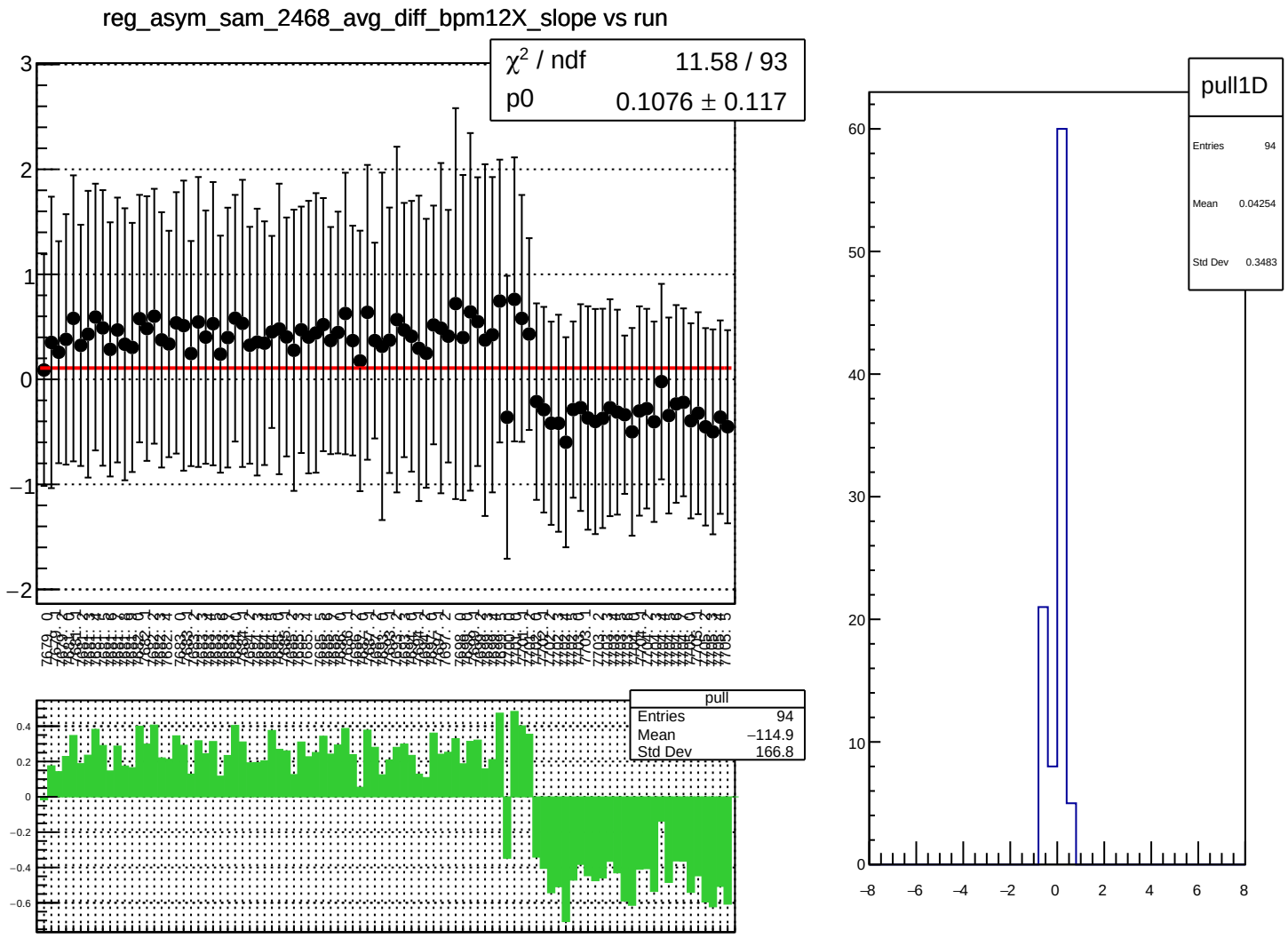

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 86.31 / 93
p0 11.17 ± 1.161
pull
Entries 94
Mean 100.9
Std Dev 36.78

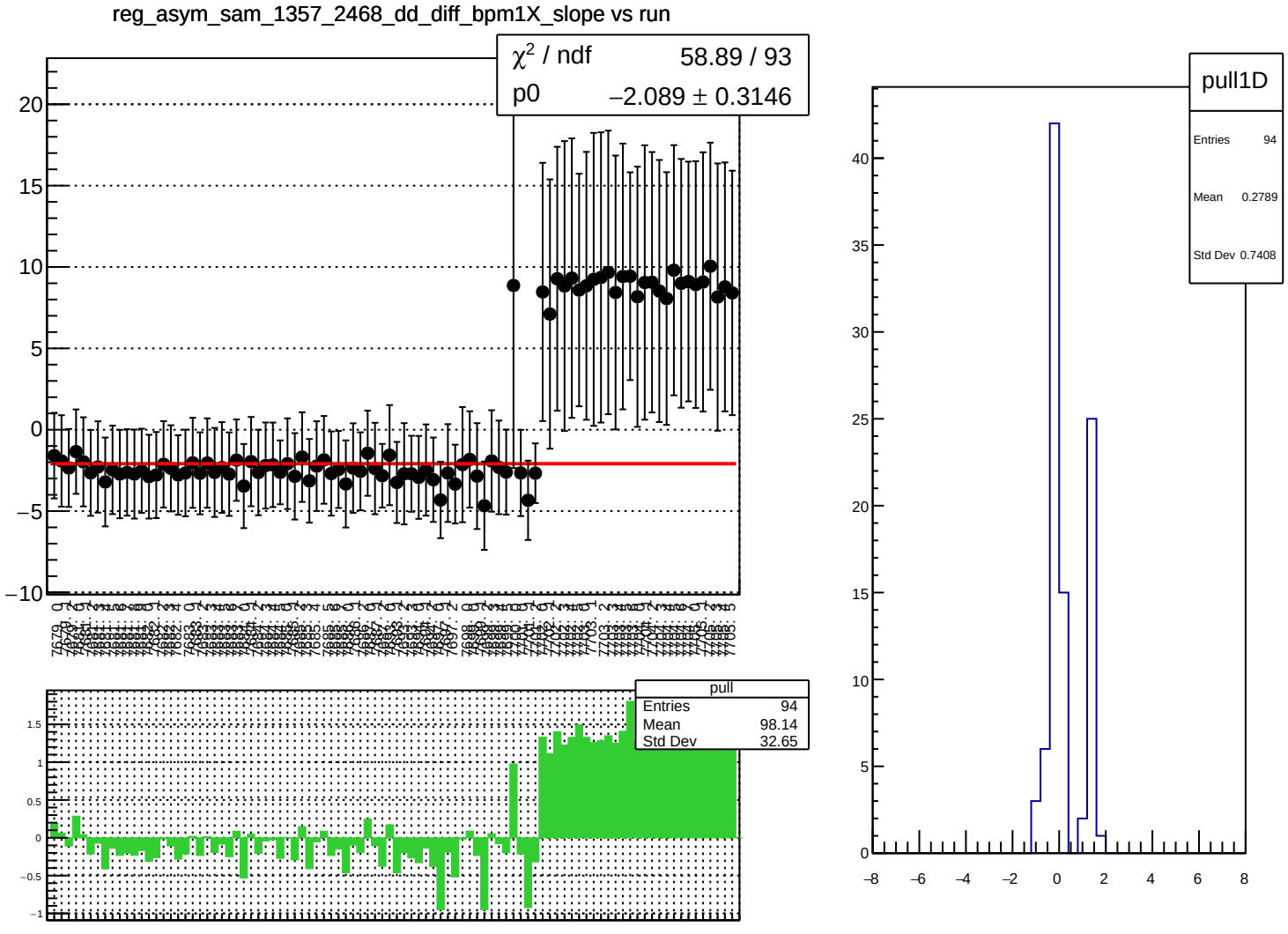

pull1D
Entries 94
Mean −0.3331
Std Dev 0.8985

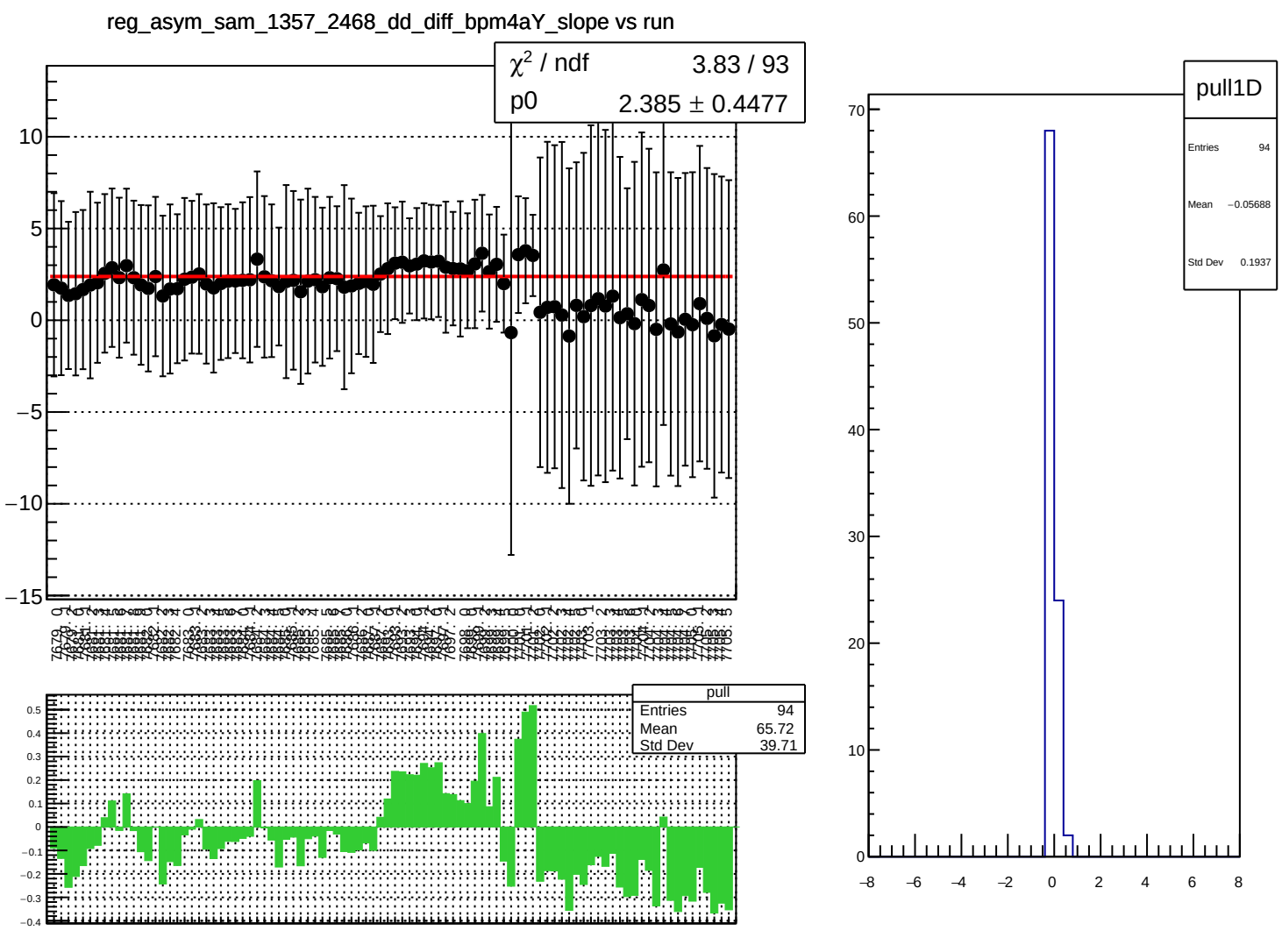

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 15.49 / 93
p0 −4.109 ± 1.652
pull
Entries 94
Mean 91.85
Std Dev 14.55
pull1D
Entries 94
Mean 0.1255
Std Dev 0.386

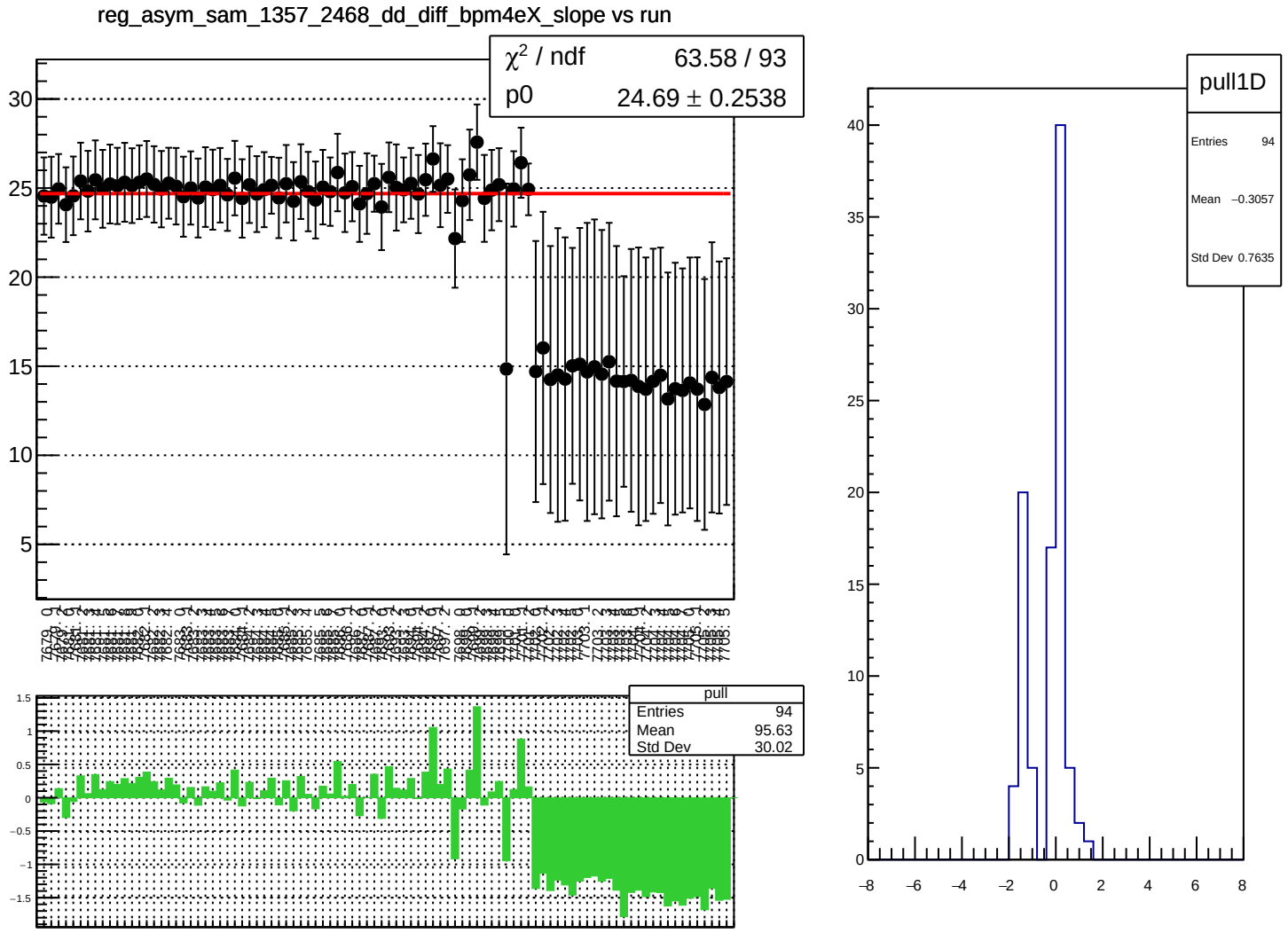

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 88.46 / 93
p0 −93.12 ± 0.9369
−20
−40
−60
−80
−100
−120
pull
Entries 94
Mean 100
Std Dev 37.33
2
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean 0.3588
Std Dev 0.9013
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

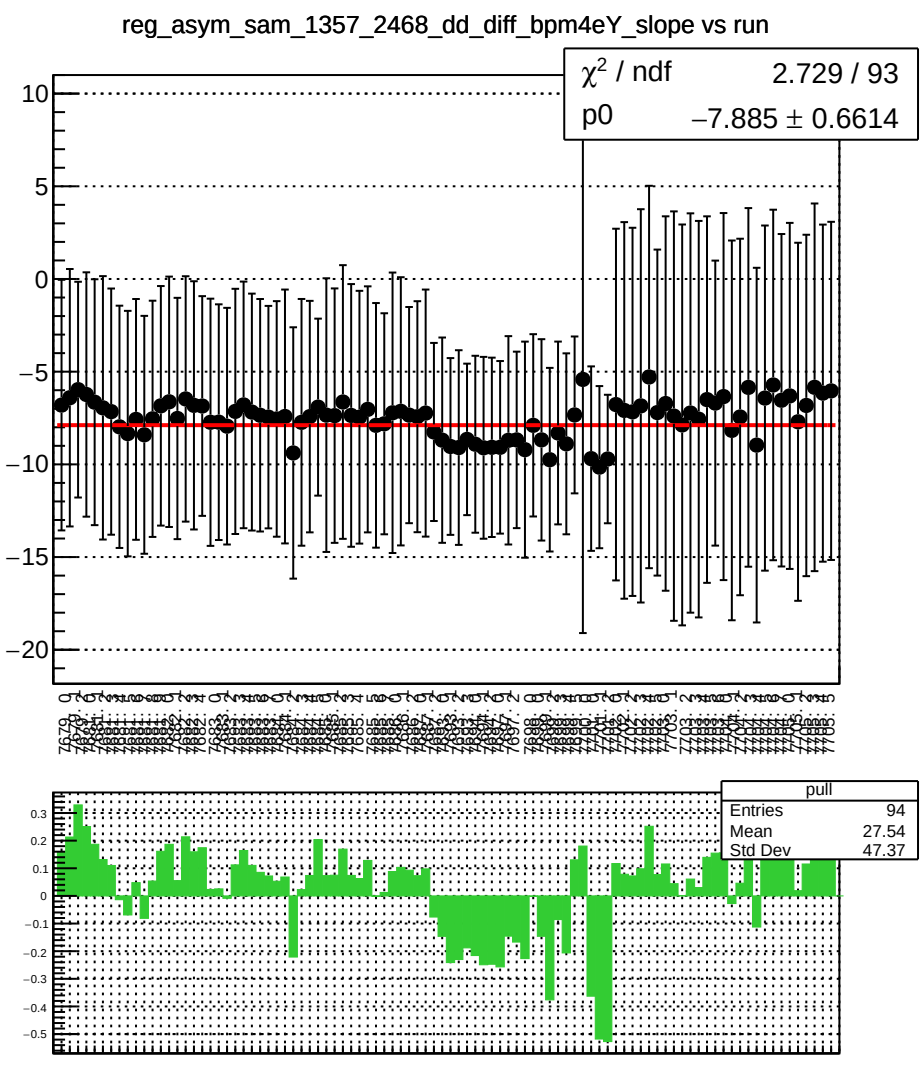

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.92 / 93
p0 43.96 ± 2.437
80
60
40
20
0
−20
pull
Entries 94
Mean 100.1
Std Dev 20.79
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 94
Mean −0.07558
Std Dev 0.3323
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

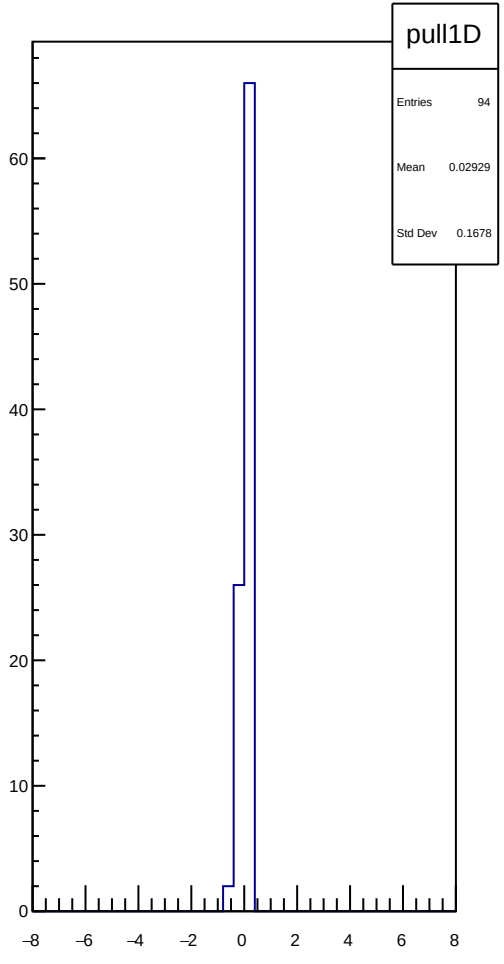

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 11.58 / 93
p0 0.1076 ± 0.117
pull
Entries 94
Mean −114.9
Std Dev 166.8
pull1D
Entries 94
Mean 0.04254
Std Dev 0.3483

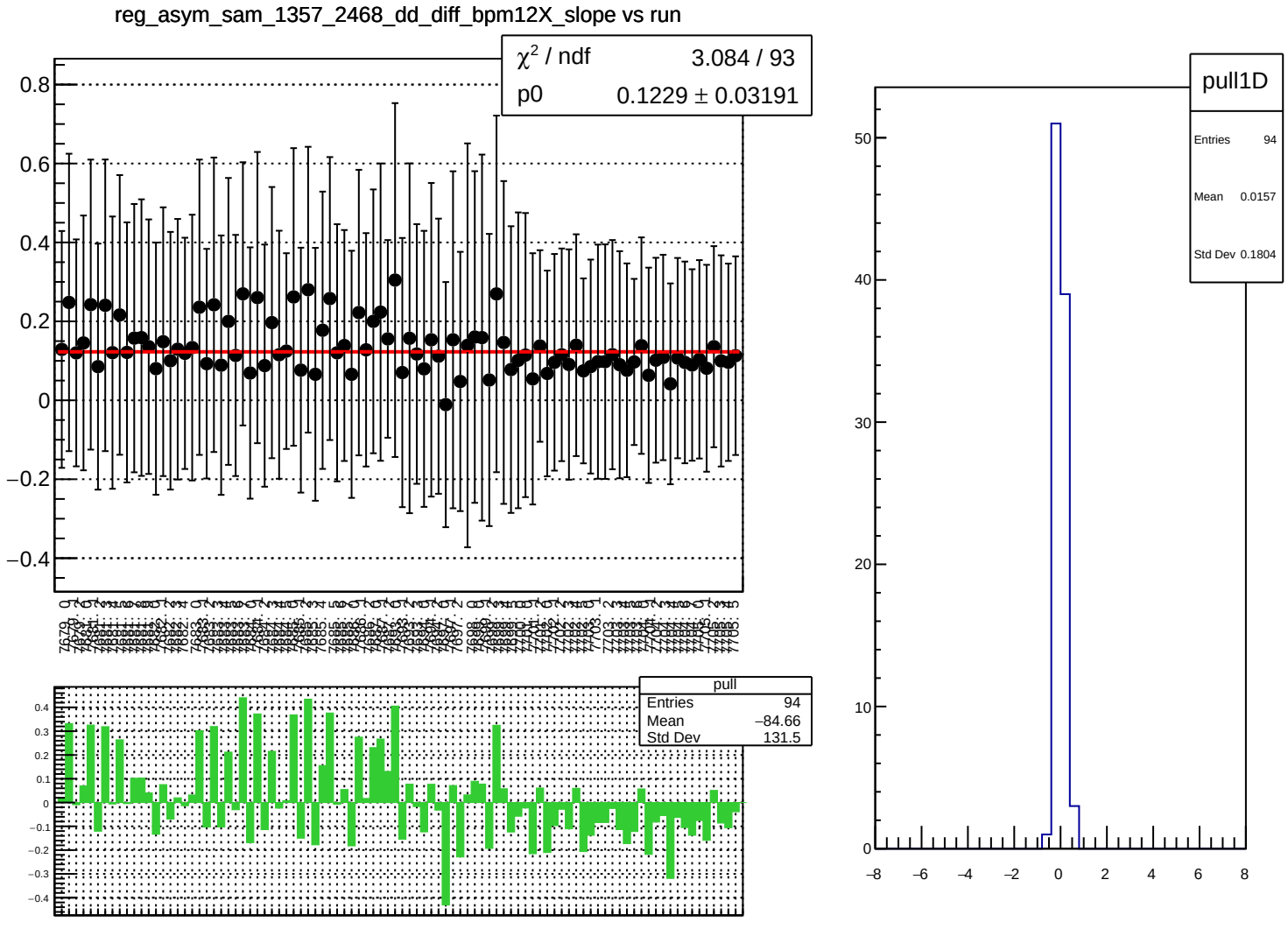

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 58.89 / 93
p0 −2.089 ± 0.3146
pull
Entries 94
Mean 98.14
Std Dev 32.65
pull1D
Entries 94
Mean 0.2789
Std Dev 0.7408

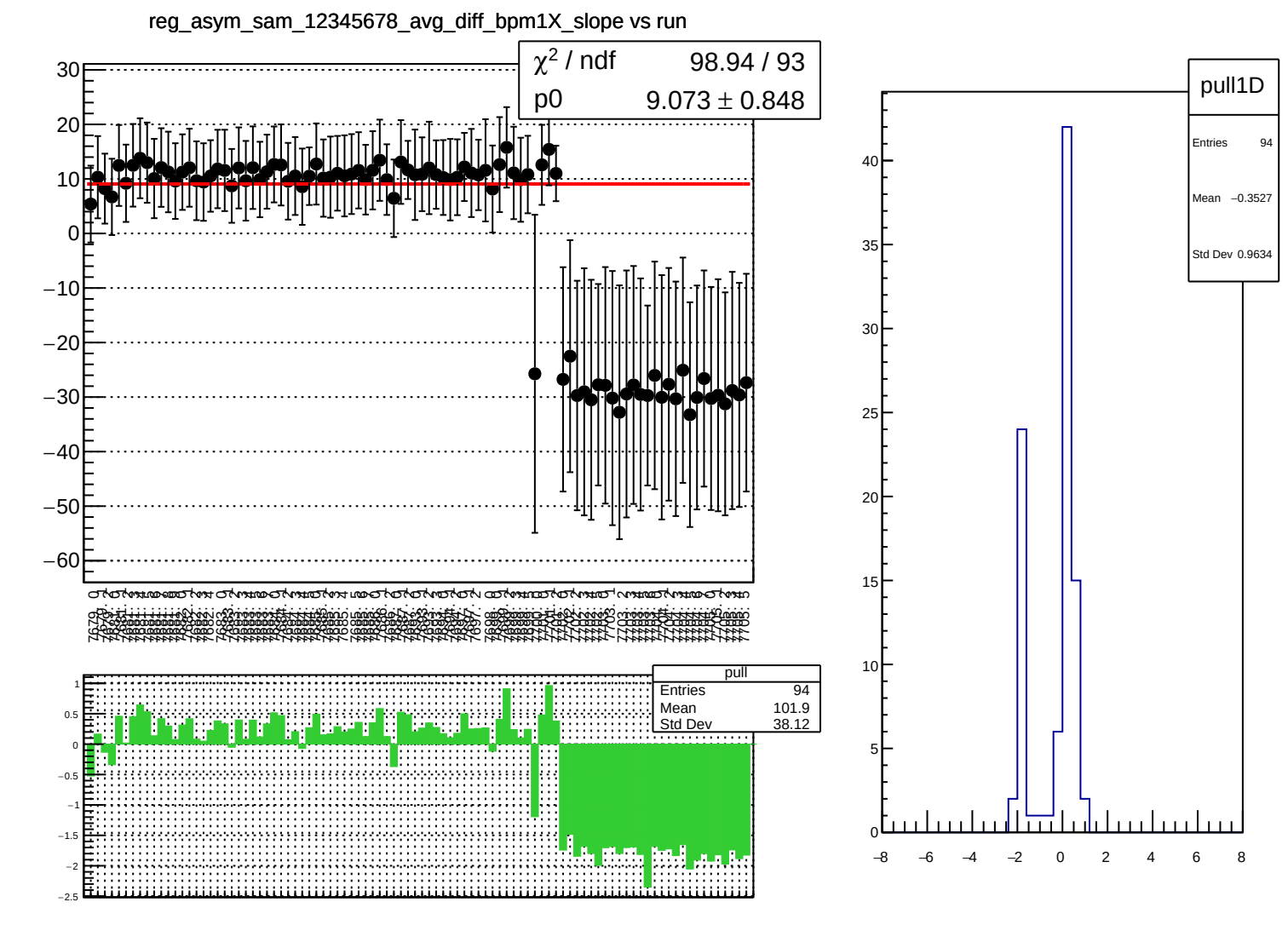

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.83 / 93
p0 2.385 ± 0.4477
pull
Entries 94
Mean 65.72
Std Dev 39.71
pull1D
Entries 94
Mean −0.05688
Std Dev 0.1937

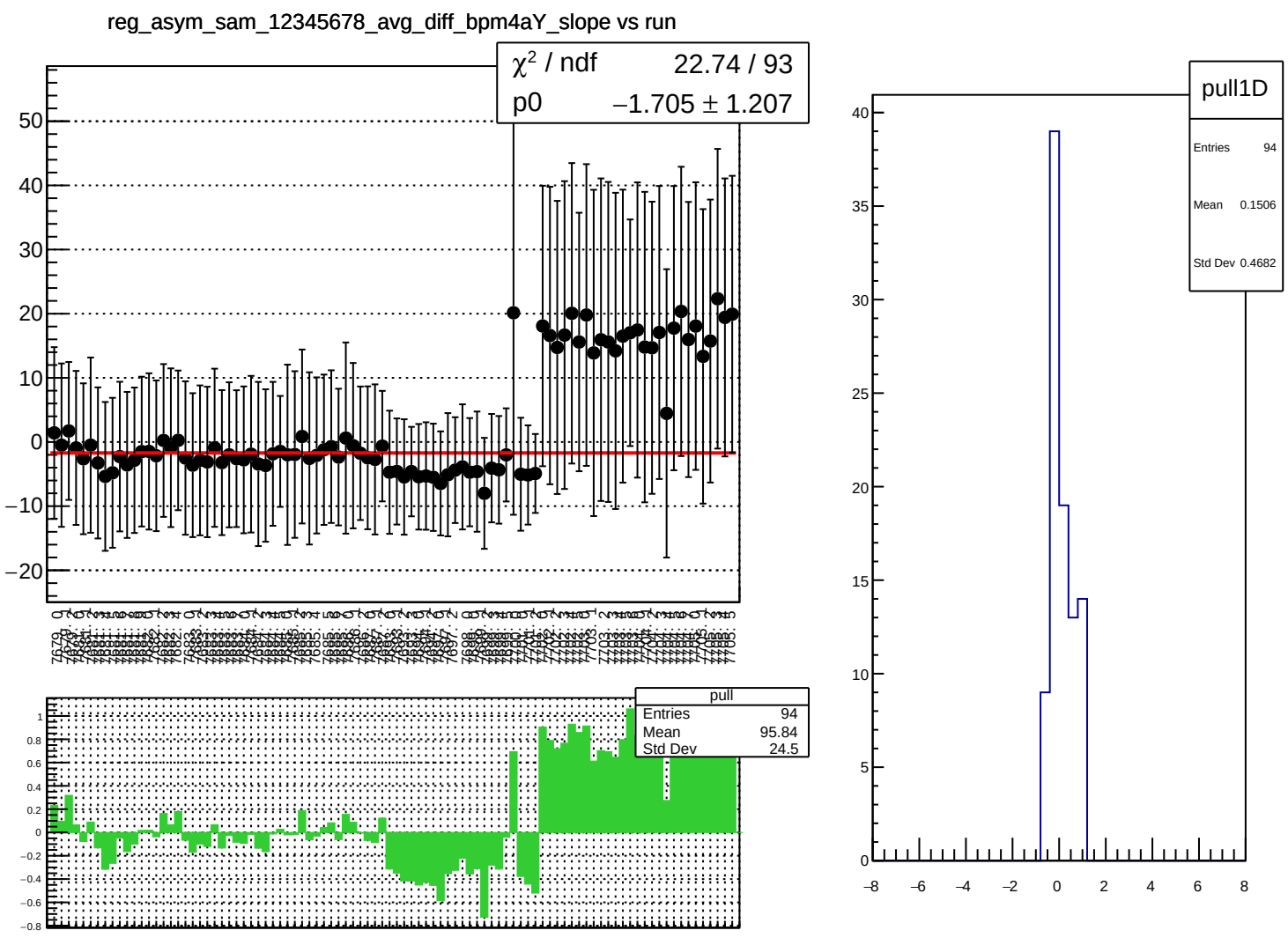

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 63.58 / 93
p0 24.69 ± 0.2538
pull
Entries 94
Mean 95.63
Std Dev 30.02
pull1D
Entries 94
Mean −0.3057
Std Dev 0.7635

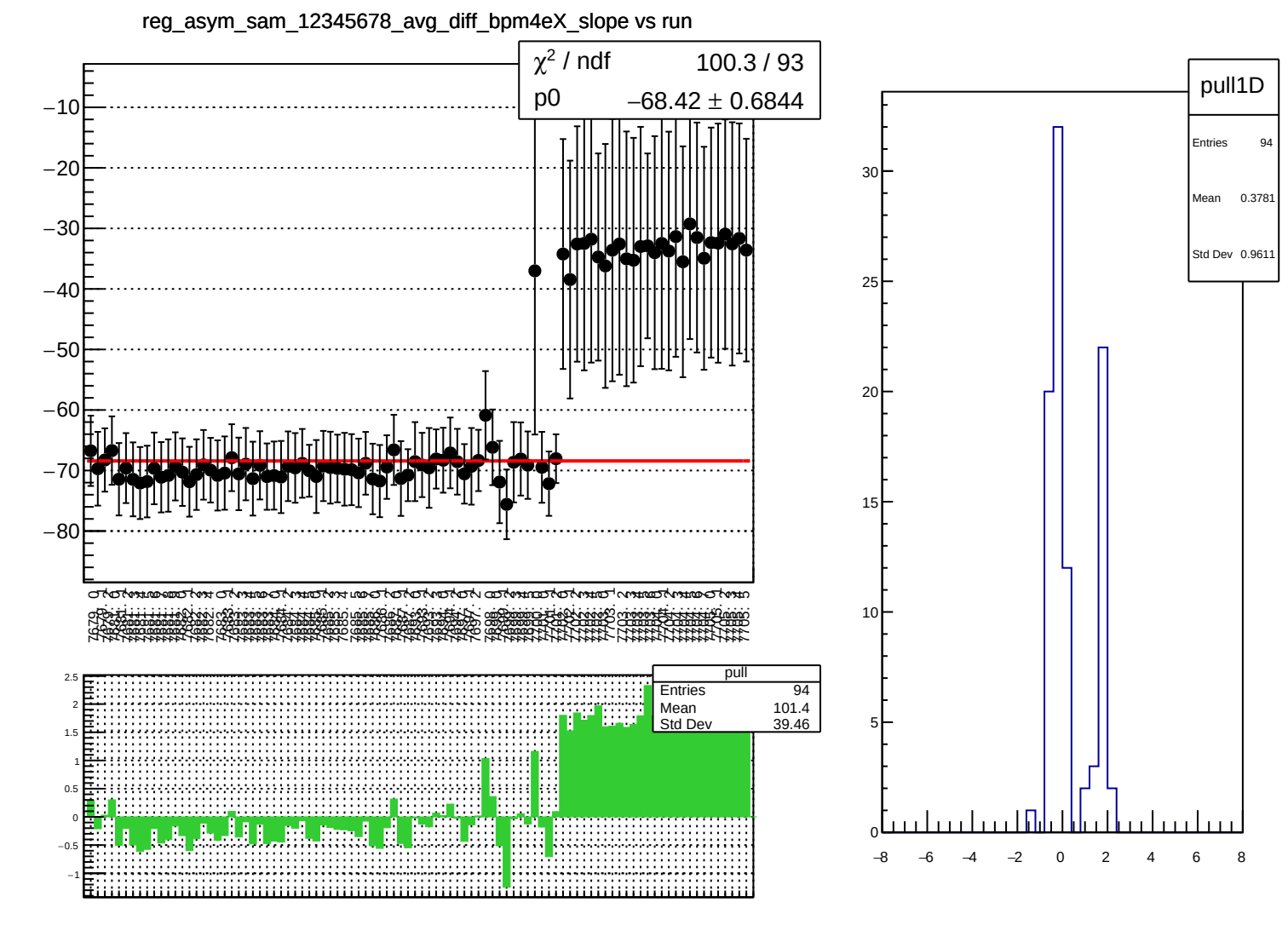

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.729 / 93
p0 −7.885 ± 0.6614
pull
Entries 94
Mean 27.54
Std Dev 47.37

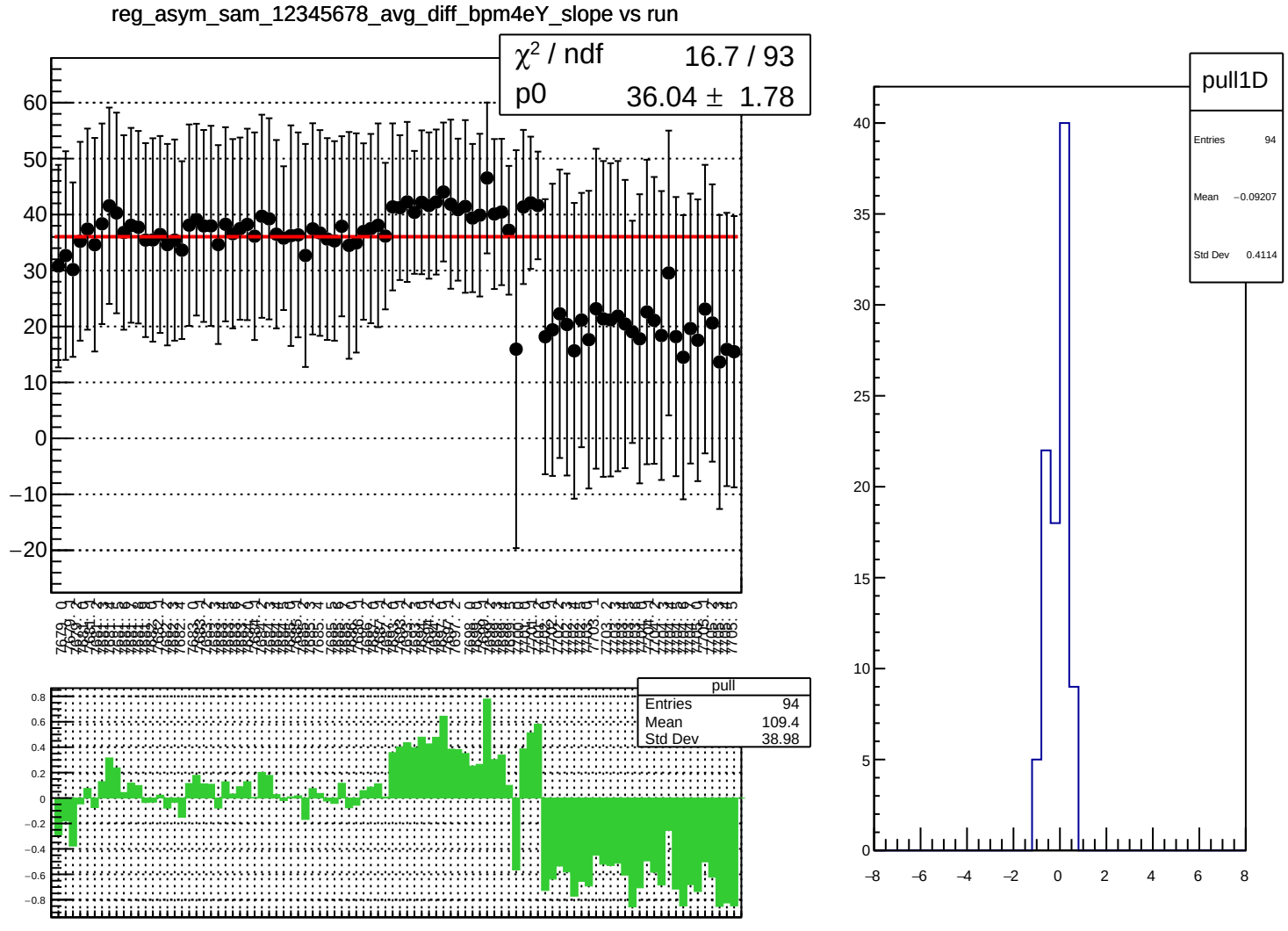

pull1D
Entries 94
Mean 0.02929
Std Dev 0.1678

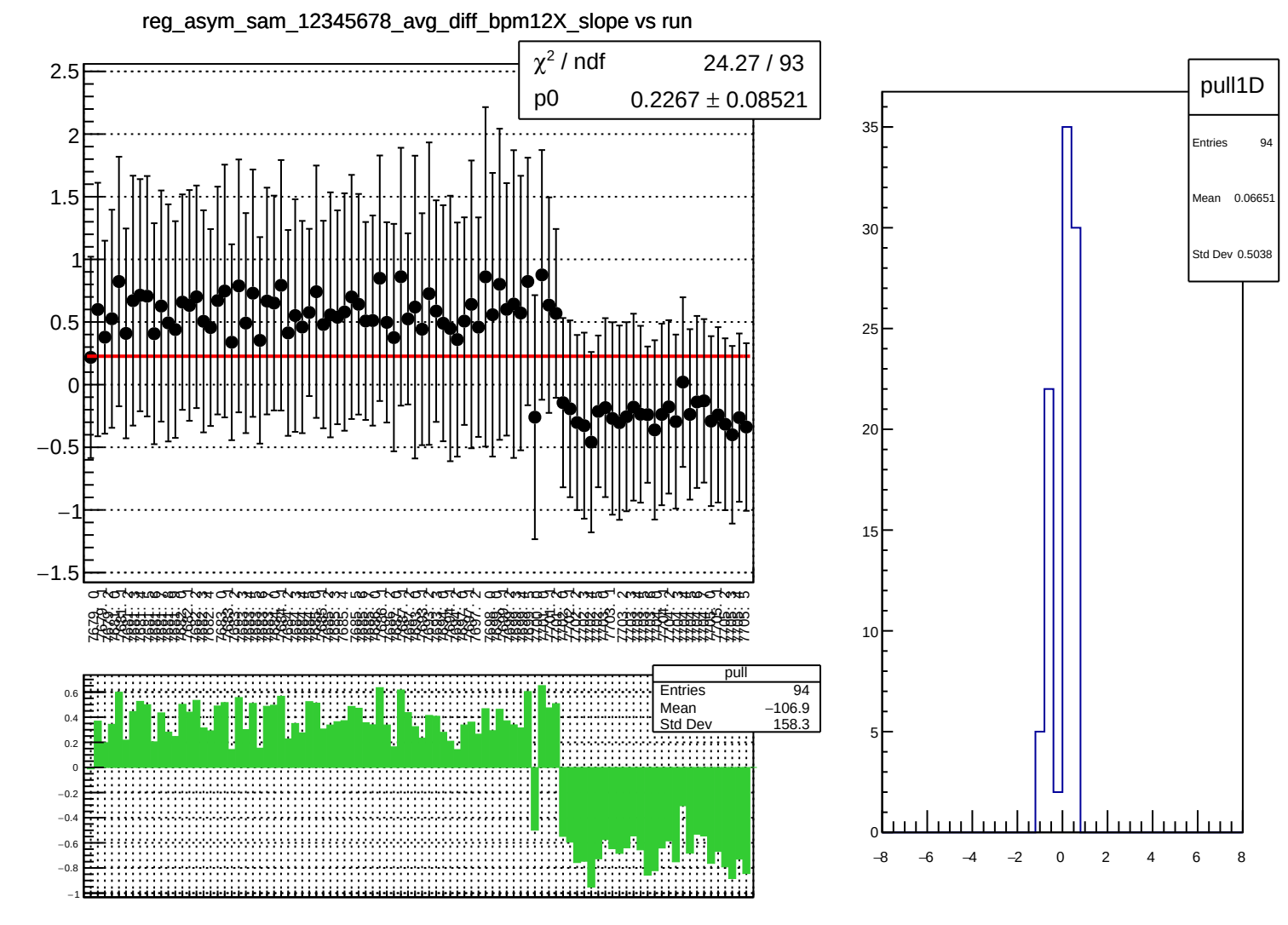

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 3.084 / 93
p0 0.1229 ± 0.03191
pull
Entries 94
Mean −84.66
Std Dev 131.5
pull1D
Entries 94
Mean 0.0157
Std Dev 0.1804

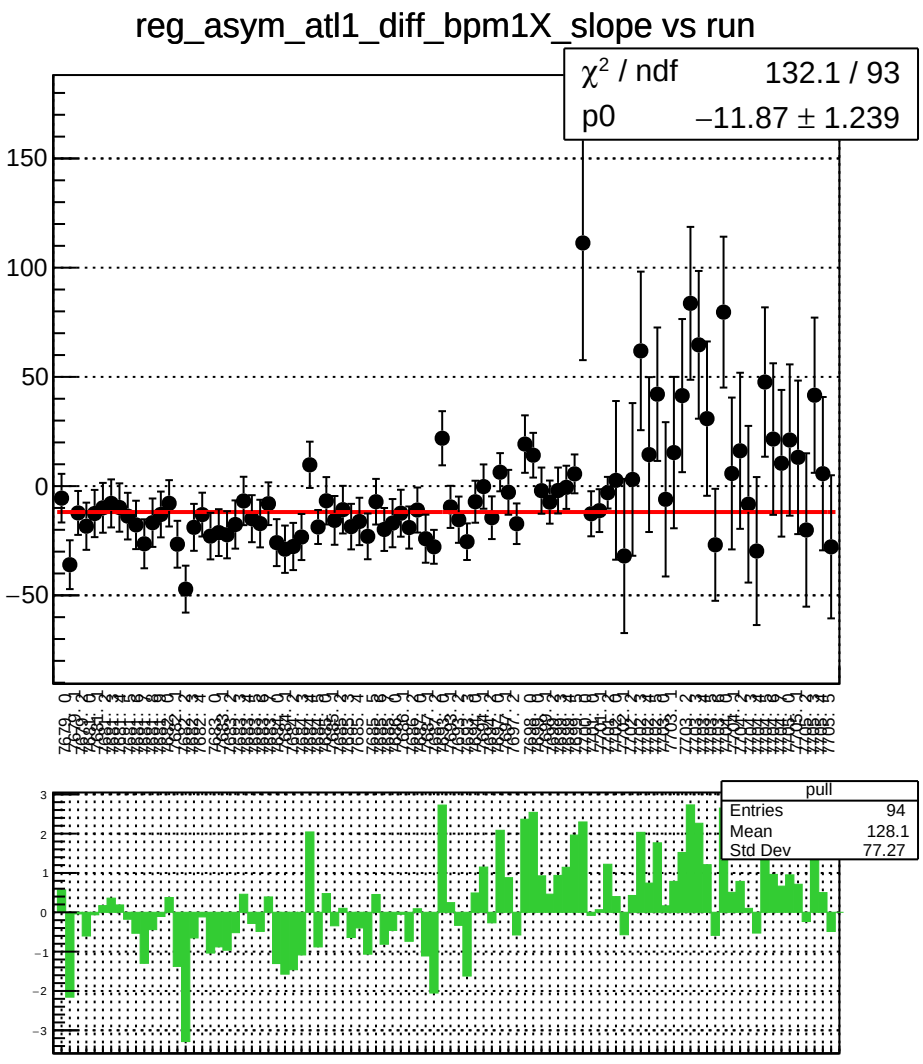

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 98.94 / 93
p0 9.073 ± 0.848
pull
Entries 94
Mean 101.9
Std Dev 38.12
pull1D
Entries 94
Mean −0.3527
Std Dev 0.9634

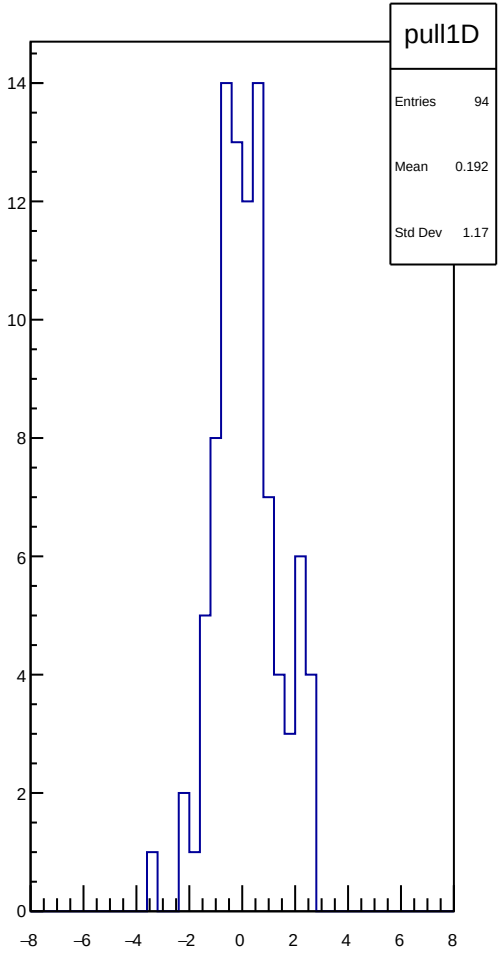

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 22.74 / 93
p0 −1.705 ± 1.207
pull
Entries 94
Mean 95.84
Std Dev 24.5
pull1D
Entries 94
Mean 0.1506
Std Dev 0.4682

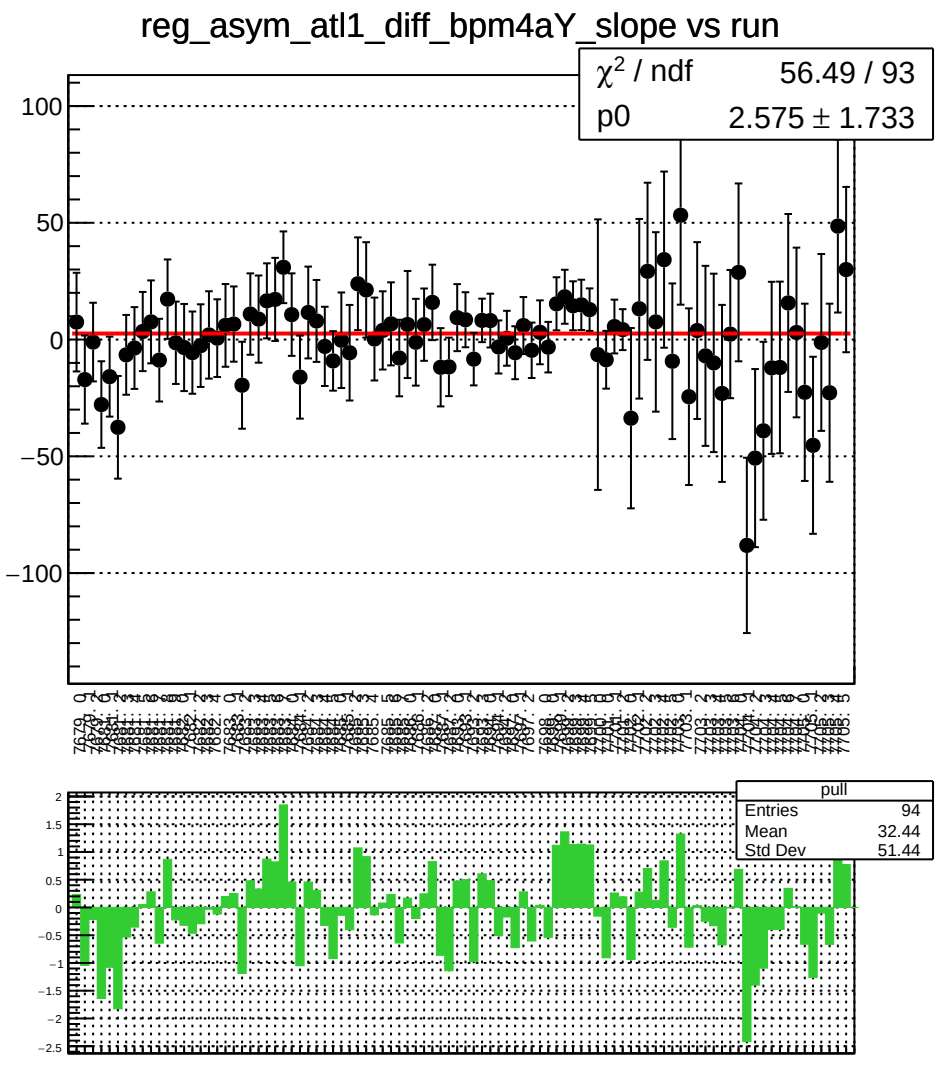

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 100.3 / 93
p0 −68.42 ± 0.6844
pull
Entries 94
Mean 101.4
Std Dev 39.46
pull1D
Entries 94
Mean 0.3781
Std Dev 0.9611

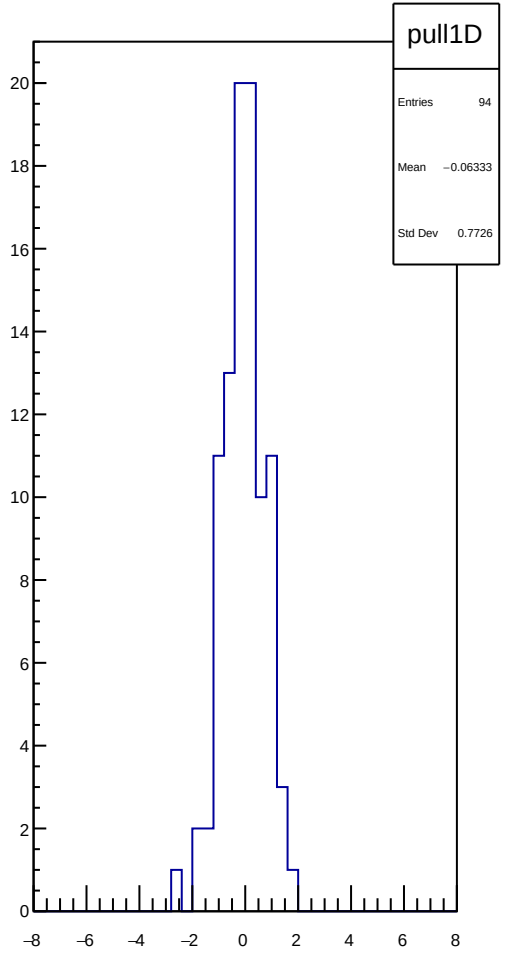

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 16.7 / 93
p0 36.04 ± 1.78
pull
Entries 94
Mean 109.4
Std Dev 38.98
pull1D
Entries 94
Mean −0.09207
Std Dev 0.4114

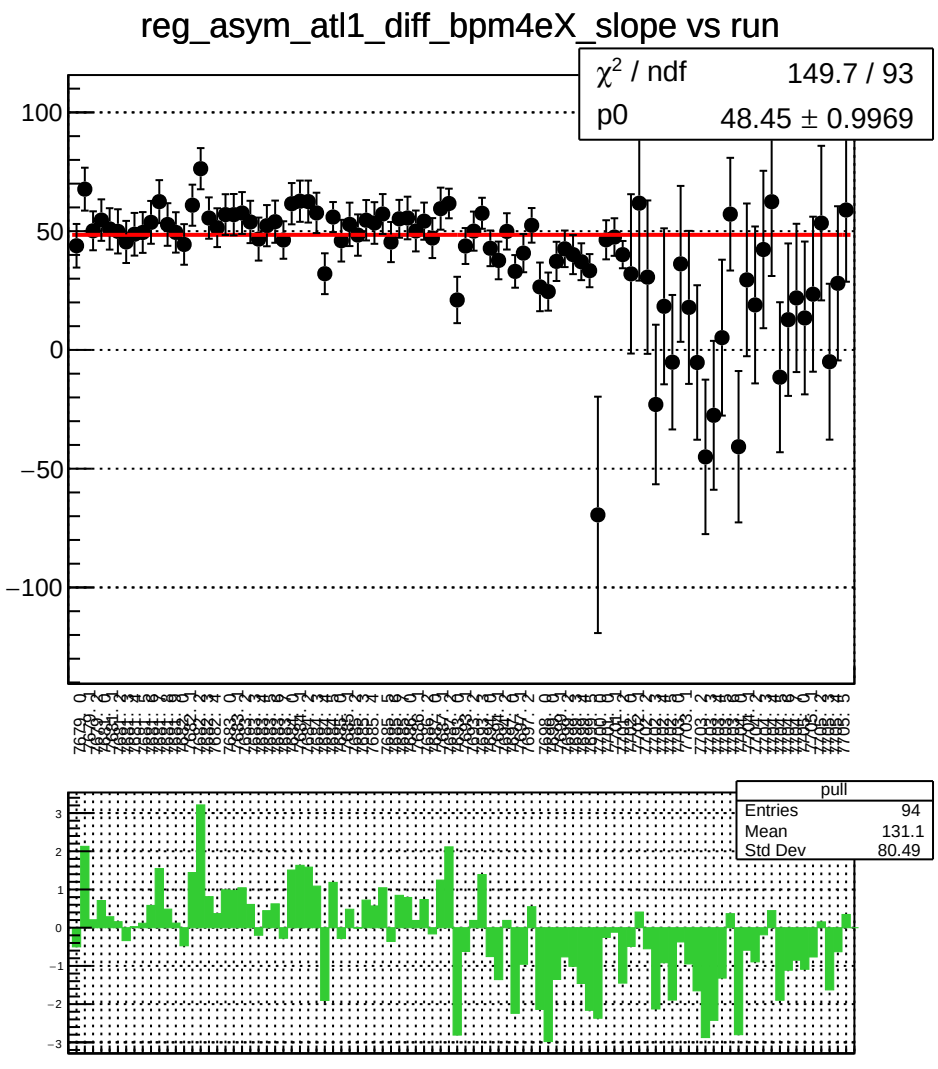

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 24.27 / 93
p0 0.2267 ± 0.08521
pull
Entries 94
Mean −106.9
Std Dev 158.3
pull1D
Entries 94
Mean 0.06651
Std Dev 0.5038

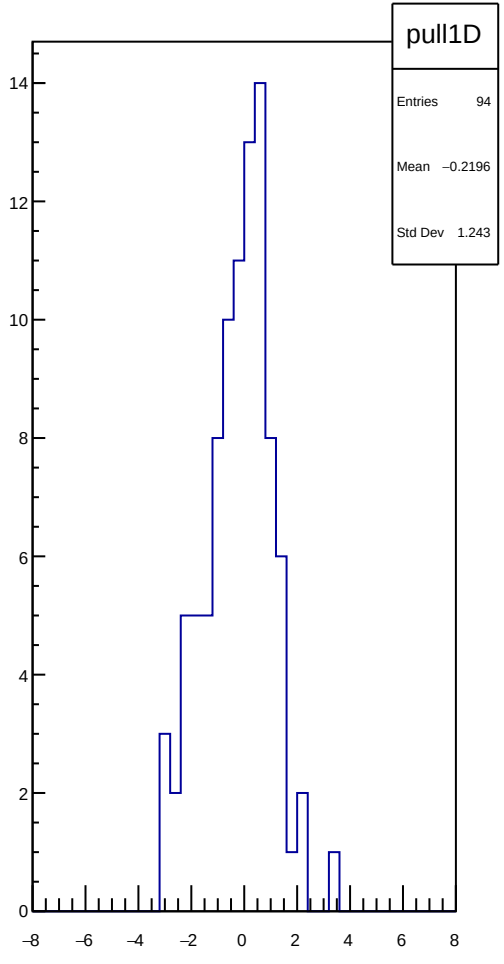

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 132.1 / 93
p0 −11.87 ± 1.239
150
100
50
0
−50
pull
Entries 94
Mean 128.1
Std Dev 77.27
3
2
1
0
−1
−2
−3

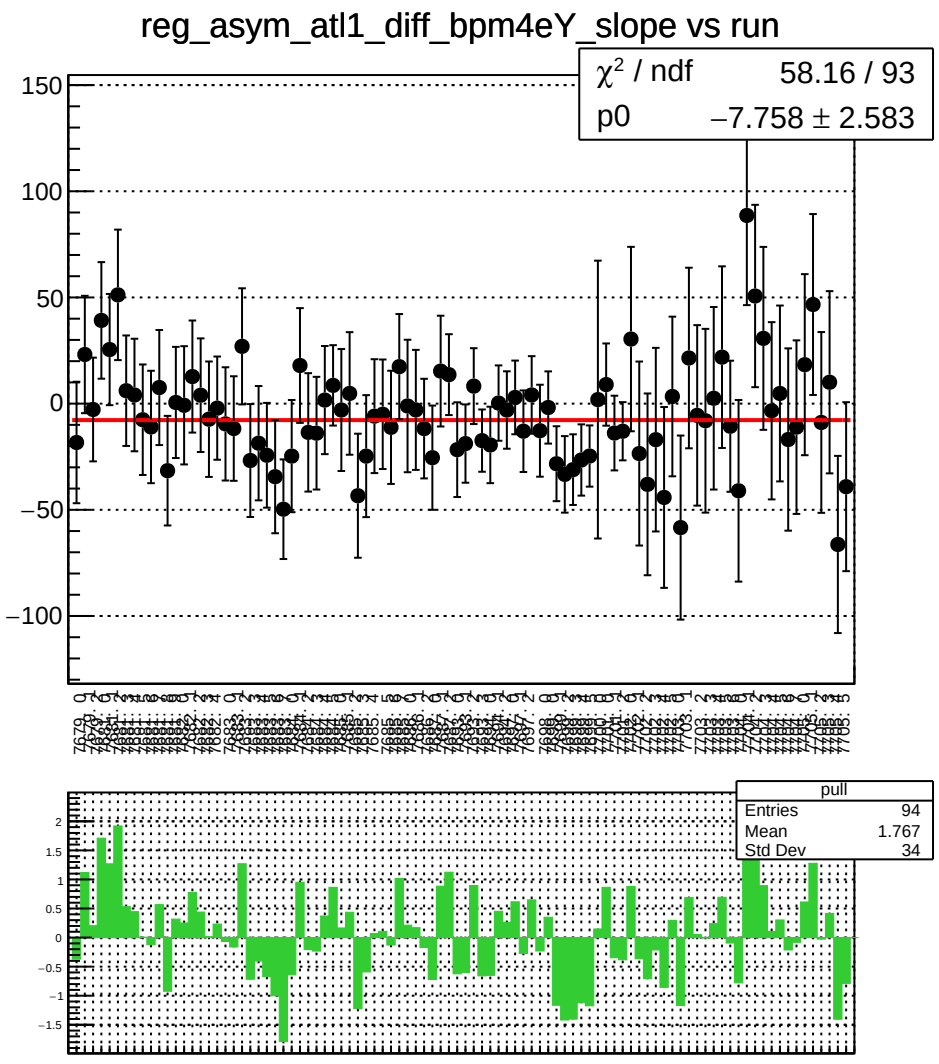

pull1D
Entries 94
Mean 0.192
Std Dev 1.17
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

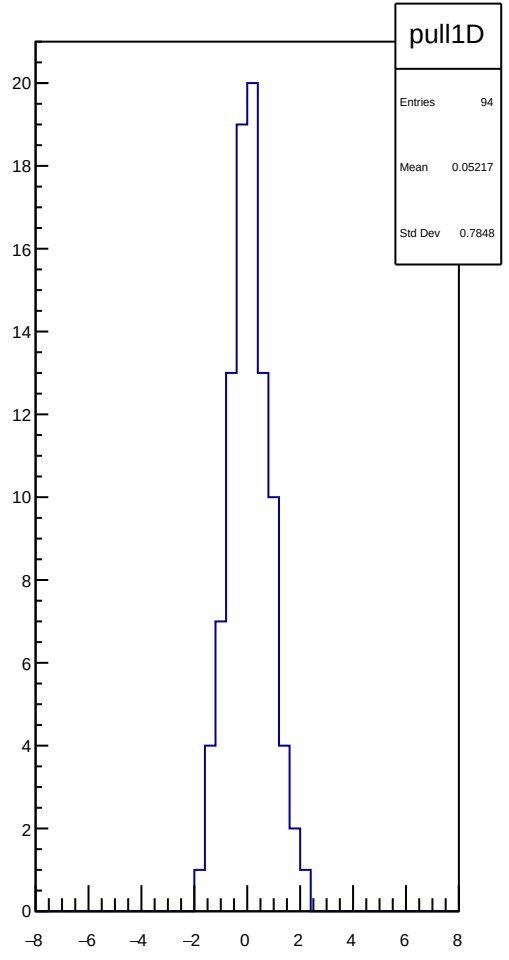

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 56.49 / 93
p0 2.575 ± 1.733
pull
Entries 94
Mean 32.44
Std Dev 51.44

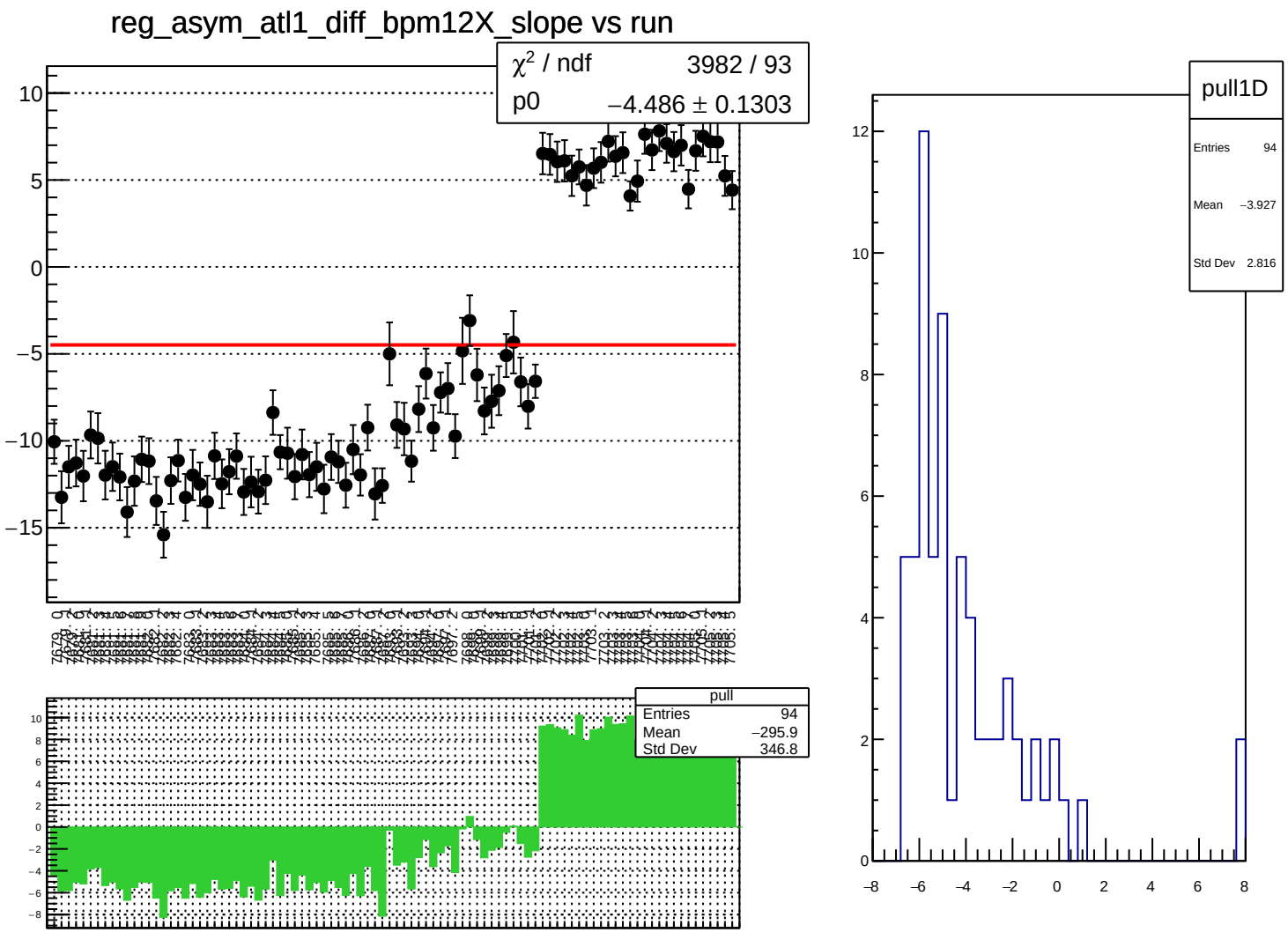

pull1D
Entries 94
Mean −0.06333
Std Dev 0.7726

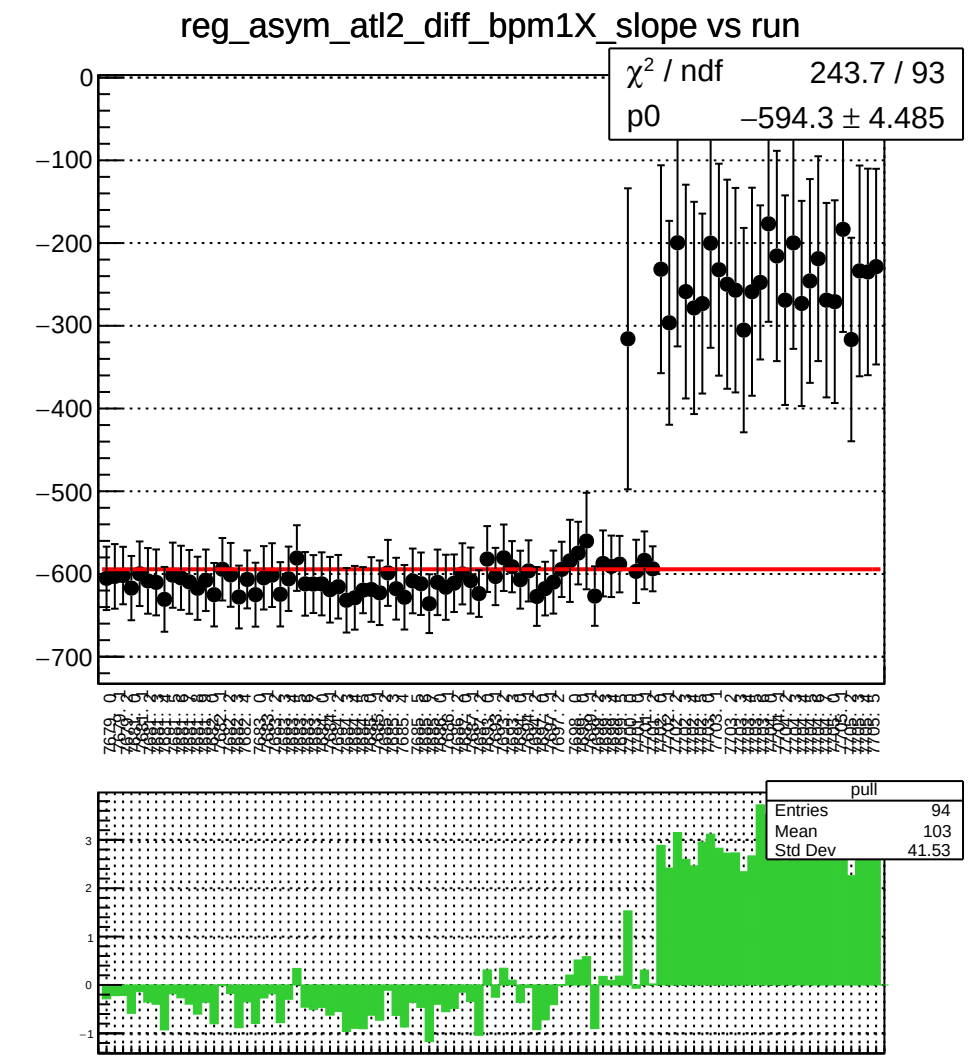

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 149.7 / 93
p0 48.45 ± 0.9969
100
50
0
−50
−100
pull
Entries 94
Mean 131.1
Std Dev 80.49
3
2
1
0
−1
−2
−3

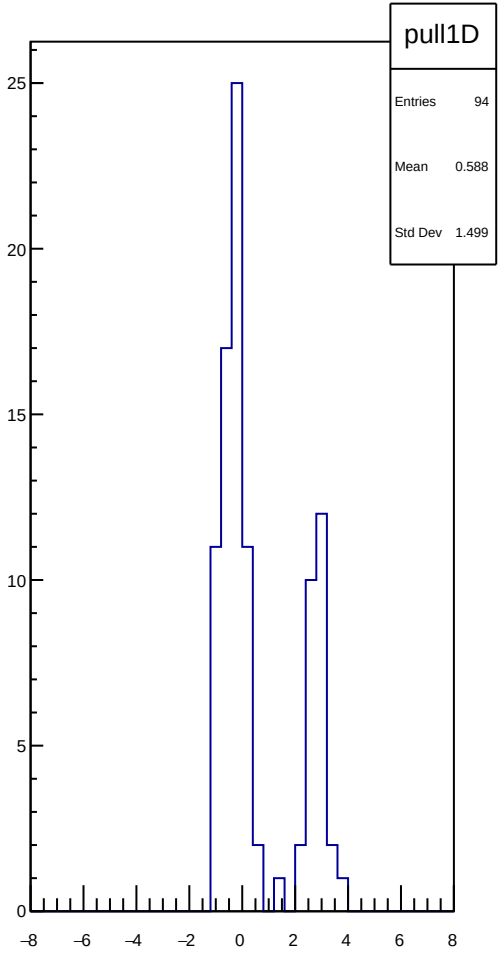

pull1D
Entries 94
Mean −0.2196
Std Dev 1.243
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

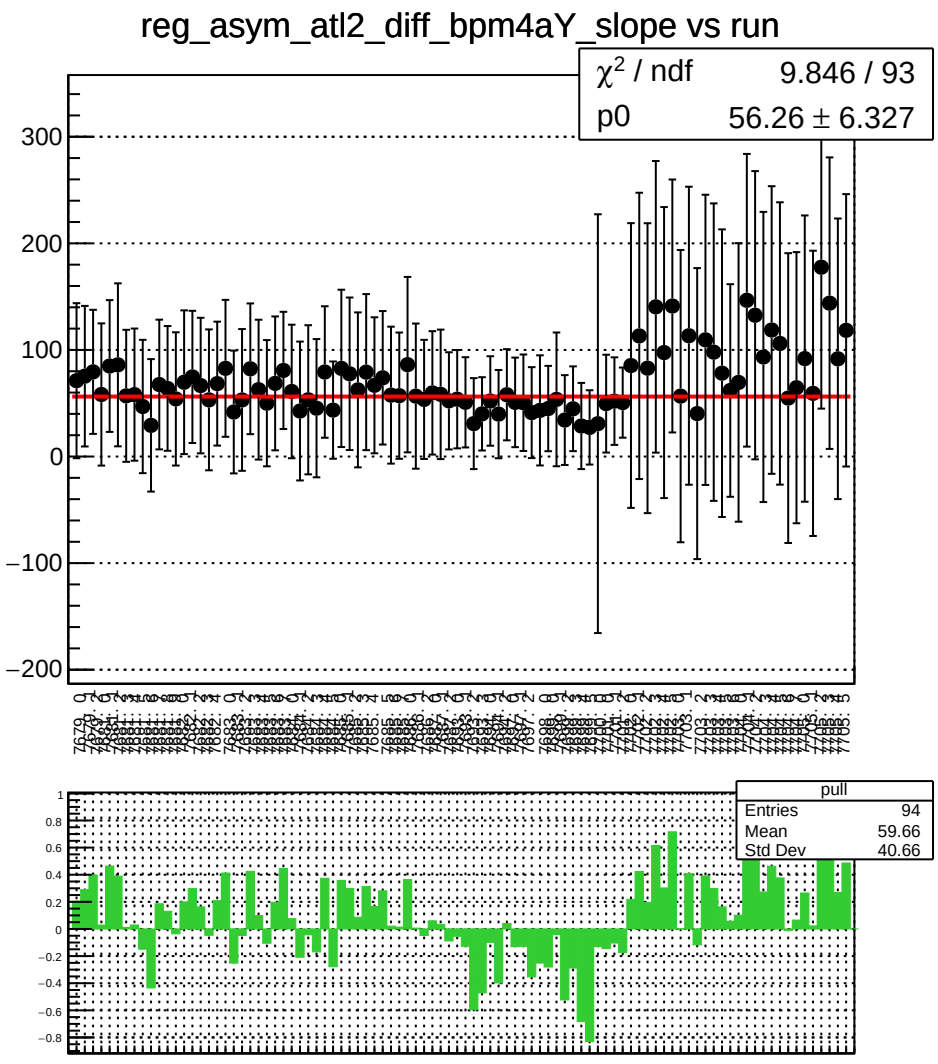

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 58.16 / 93
p0 −7.758 ± 2.583
150
100
50
0
−50
−100
pull
Entries 94
Mean 1.767
Std Dev 34
2
1.5
1
0.5
0
−0.5
−1
−1.5

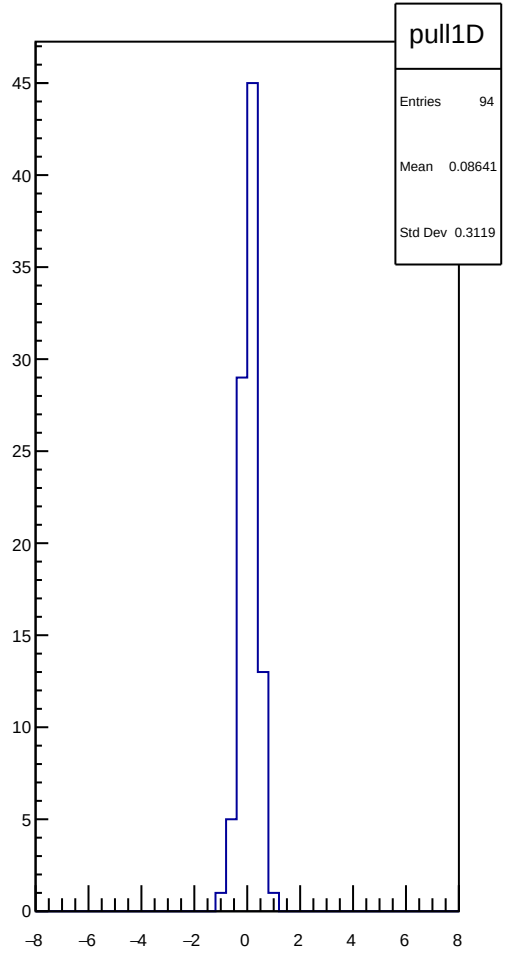

pull1D
Entries 94
Mean 0.05217
Std Dev 0.7848
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

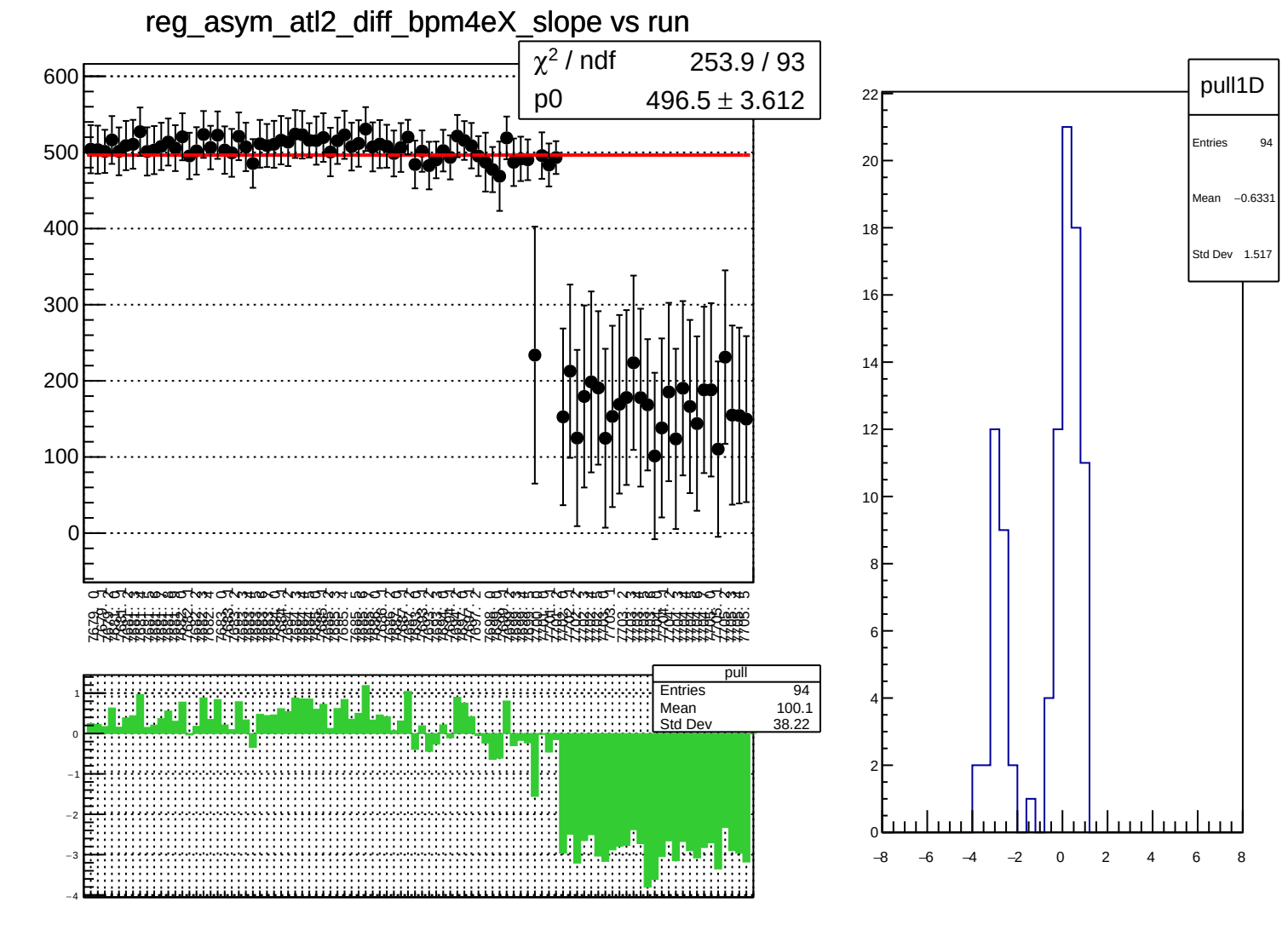

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 3982 / 93
p0 −4.486 ± 0.1303
pull
Entries 94
Mean −295.9
Std Dev 346.8
pull1D
Entries 94
Mean −3.927
Std Dev 2.816

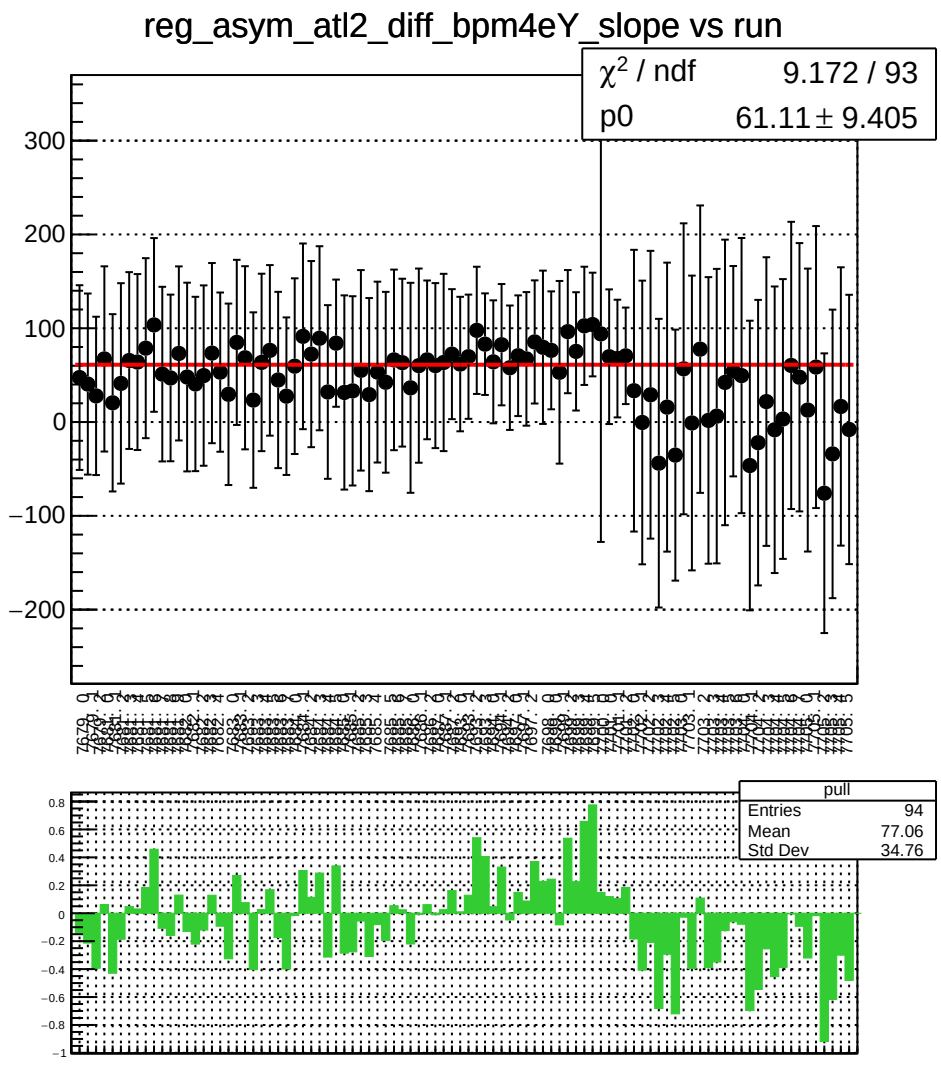

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 243.7 / 93
p0 −594.3 ± 4.485
pull
Entries 94
Mean 103
Std Dev 41.53

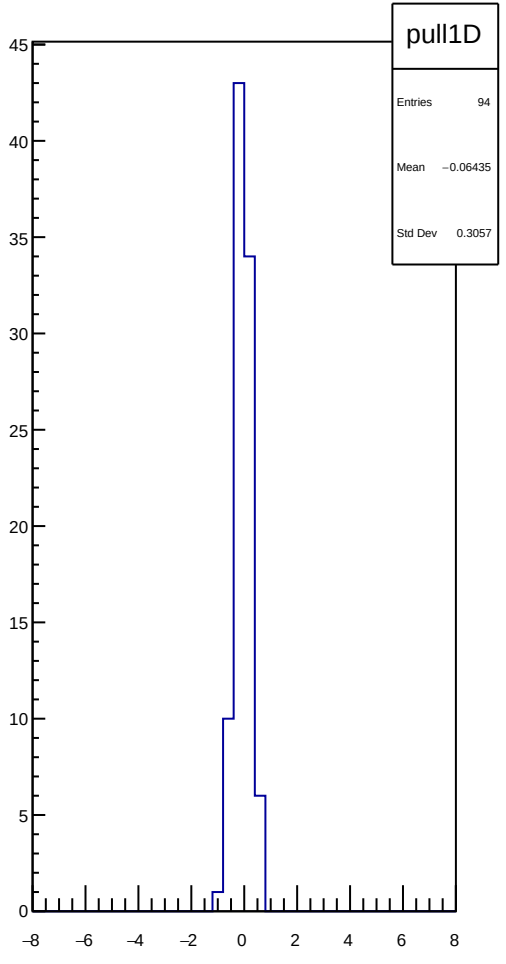

pull1D
Entries 94
Mean 0.588
Std Dev 1.499

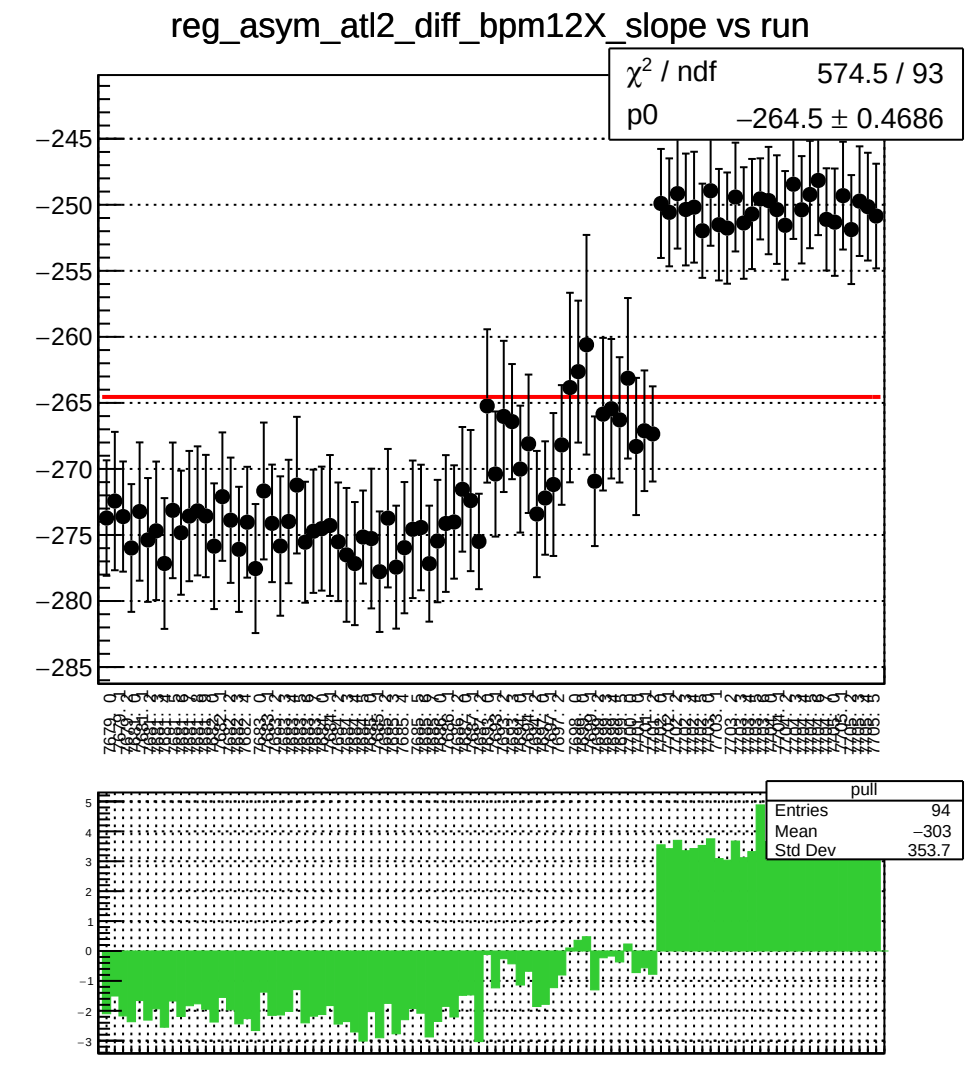

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 9.846 / 93
p0 56.26 ± 6.327
300
200
100
0
−100
−200
pull
Entries 94
Mean 59.66
Std Dev 40.66
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

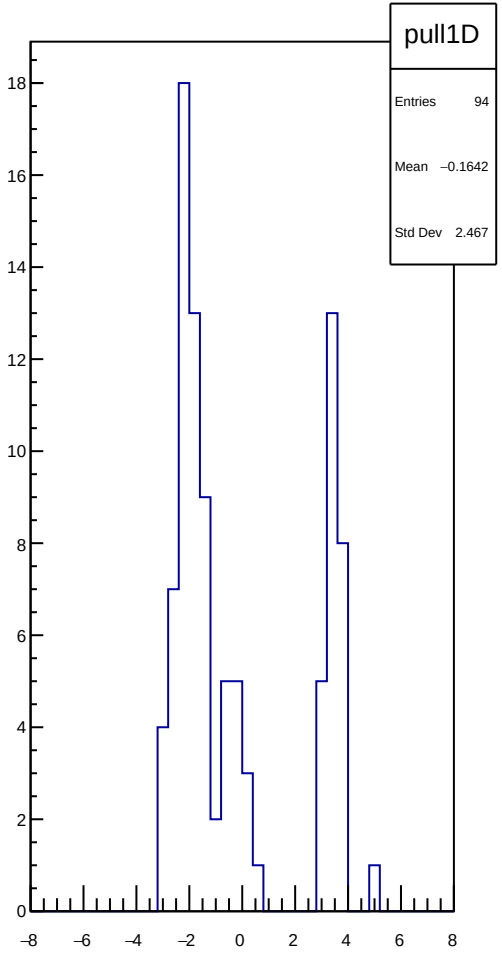

pull1D
Entries 94
Mean 0.08641
Std Dev 0.3119
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

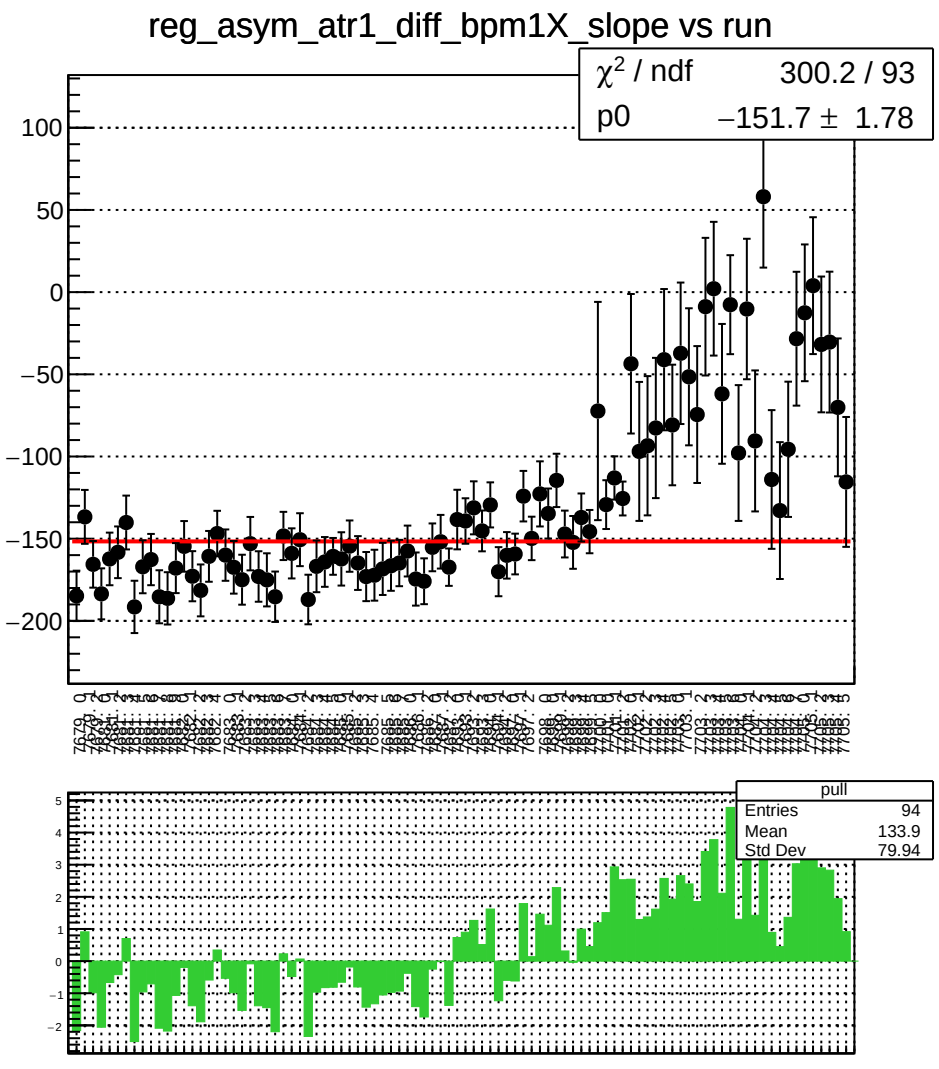

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 253.9 / 93
p0 496.5 ± 3.612
pull
Entries 94
Mean 100.1
Std Dev 38.22
pull1D
Entries 94
Mean −0.6331
Std Dev 1.517

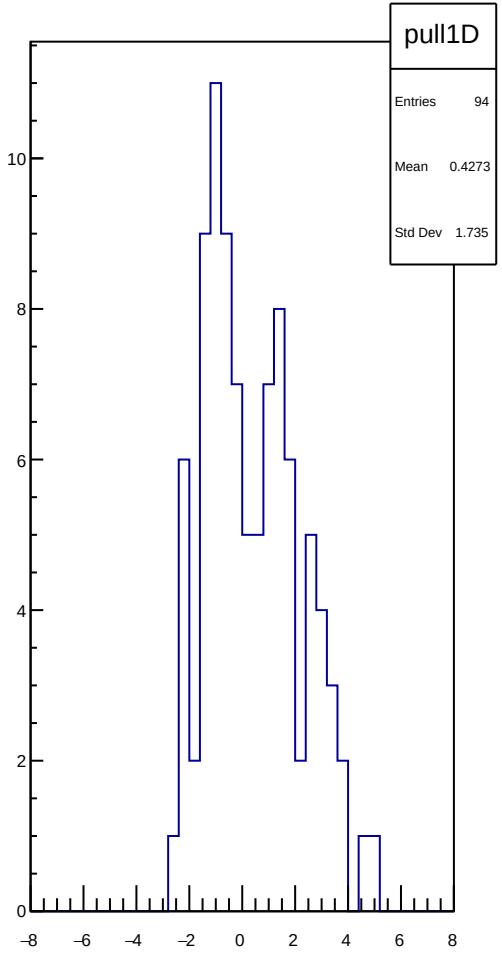

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 9.172 / 93
p0 61.11 ± 9.405
300
200
100
0
−100
−200
pull
Entries 94
Mean 77.06
Std Dev 34.76
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

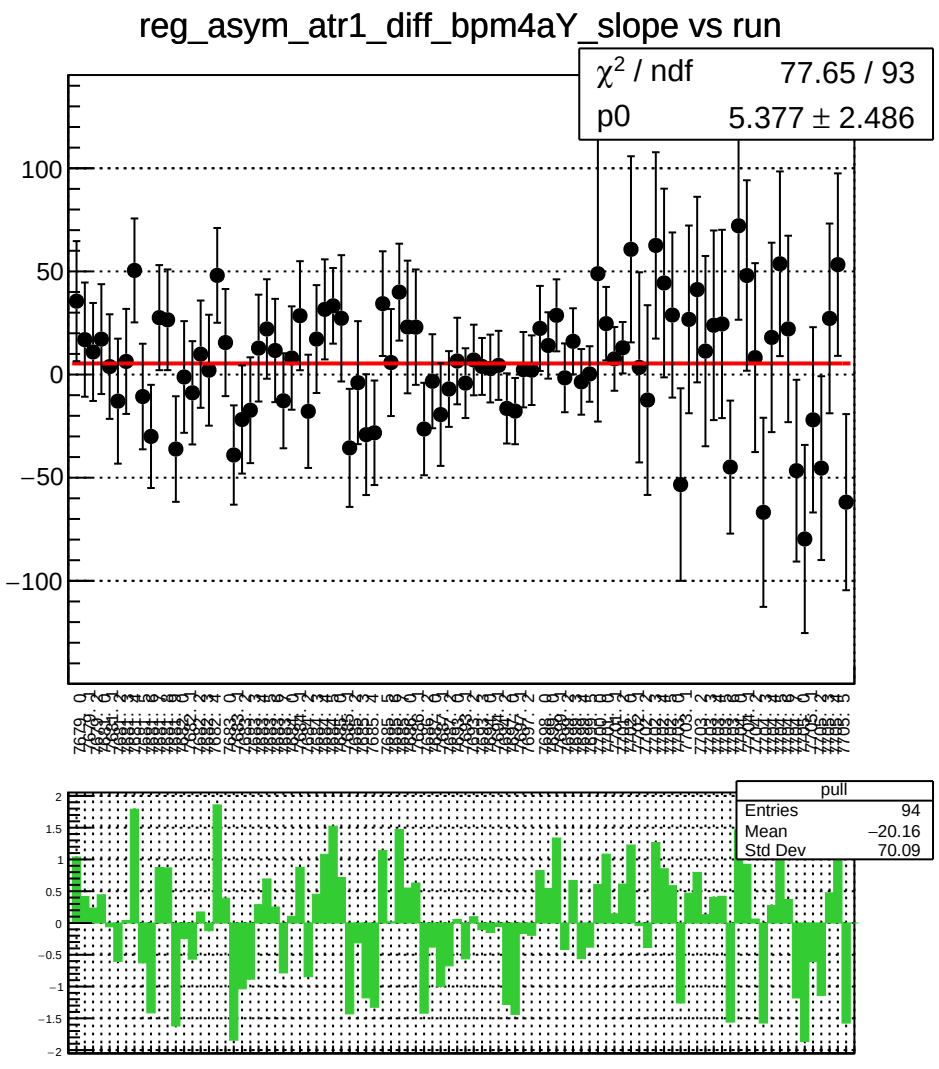

pull1D
Entries 94
Mean −0.06435
Std Dev 0.3057
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

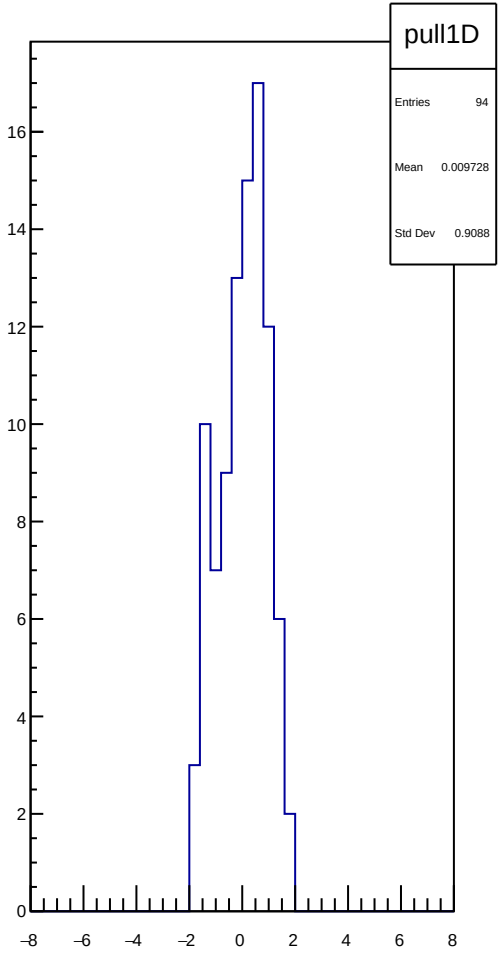

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 574.5 / 93
p0 −264.5 ± 0.4686
pull
Entries 94
Mean −303
Std Dev 353.7

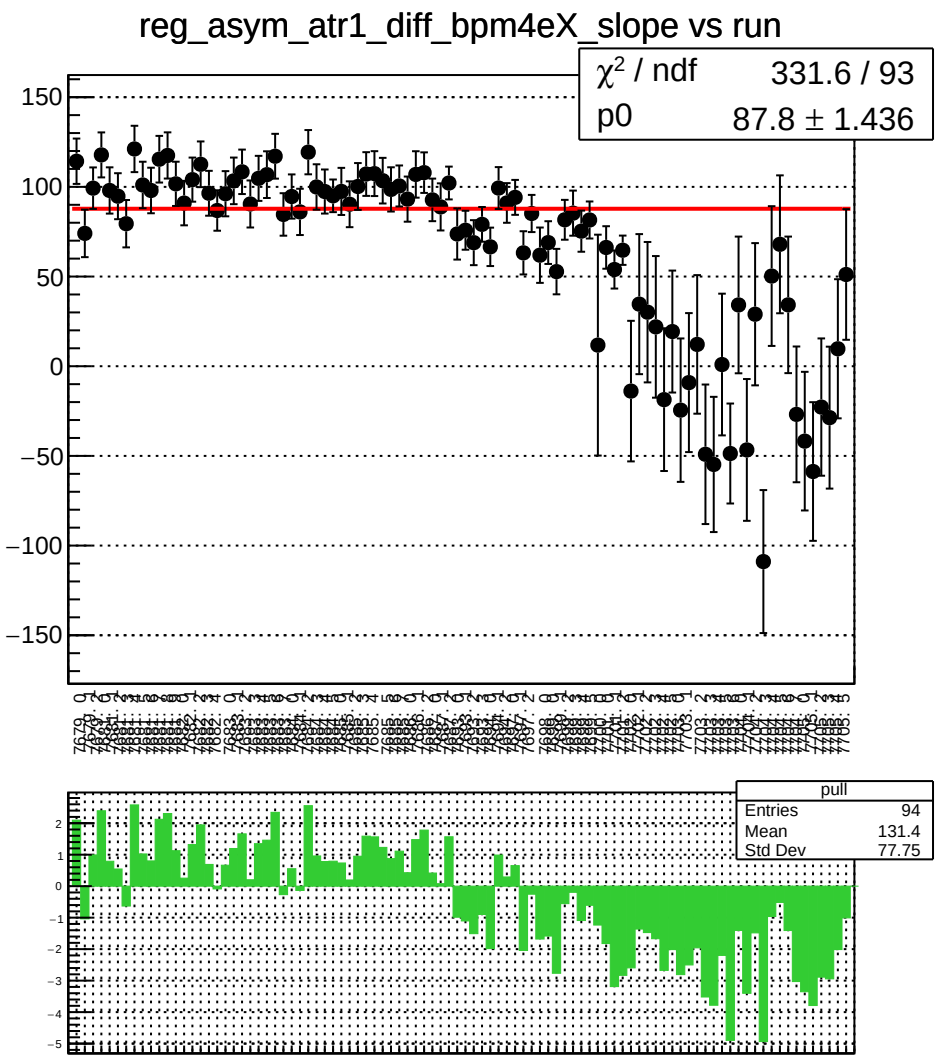

pull1D
Entries 94
Mean −0.1642
Std Dev 2.467

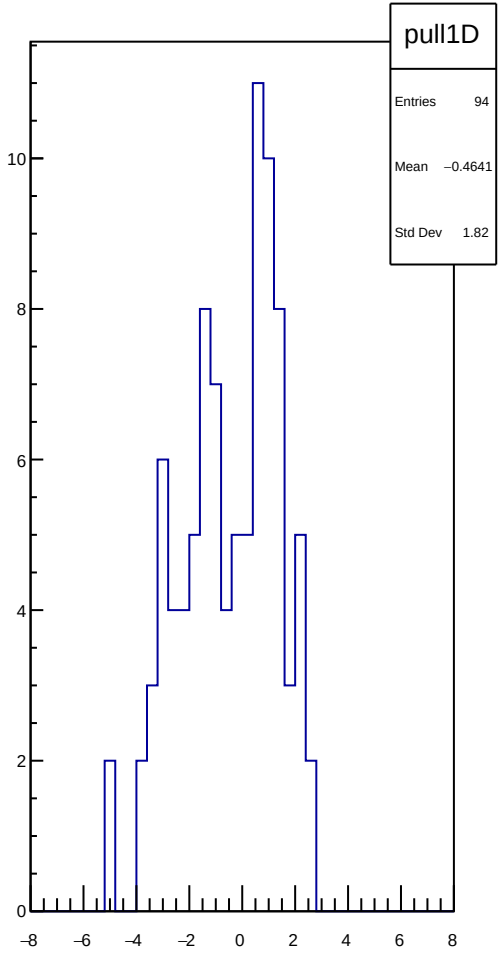

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 300.2 / 93
p0 −151.7 ± 1.78
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean 133.9
Std Dev 79.94
5
4
3
2
1
0
−1
−2

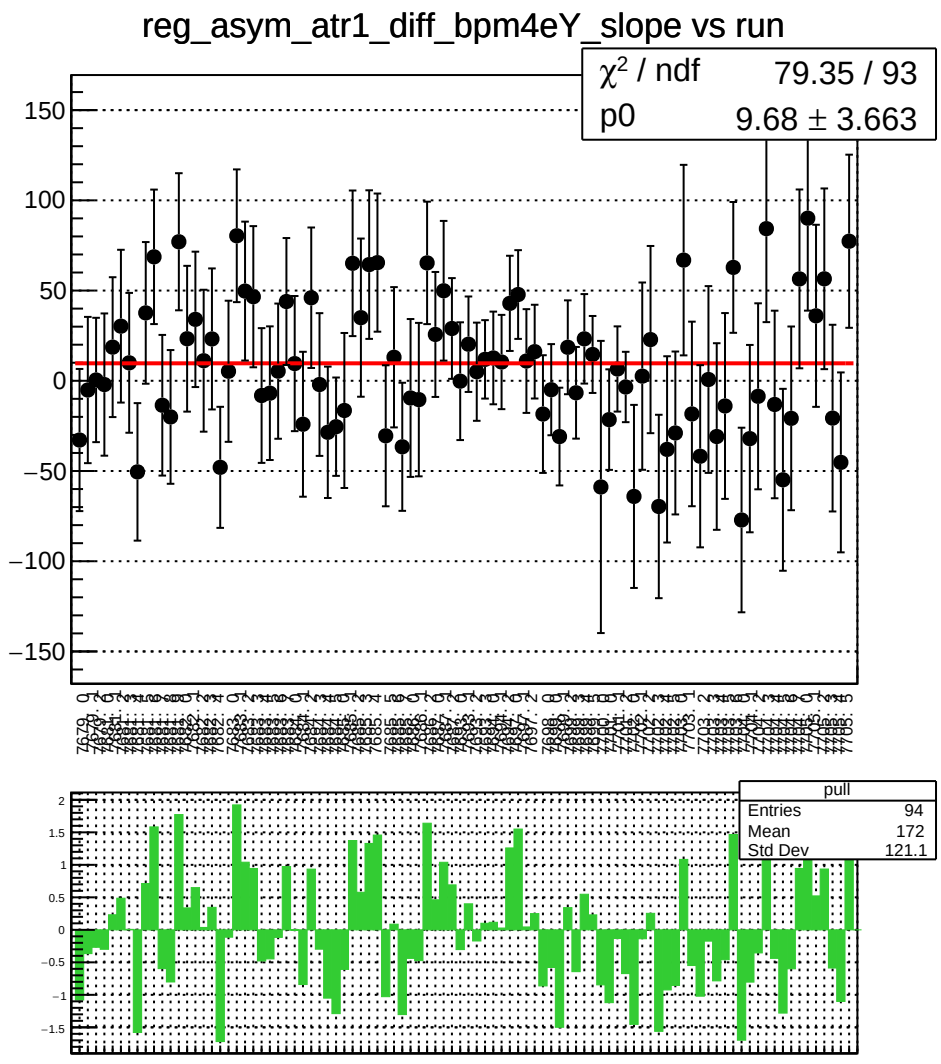

pull1D
Entries 94
Mean 0.4273
Std Dev 1.735
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

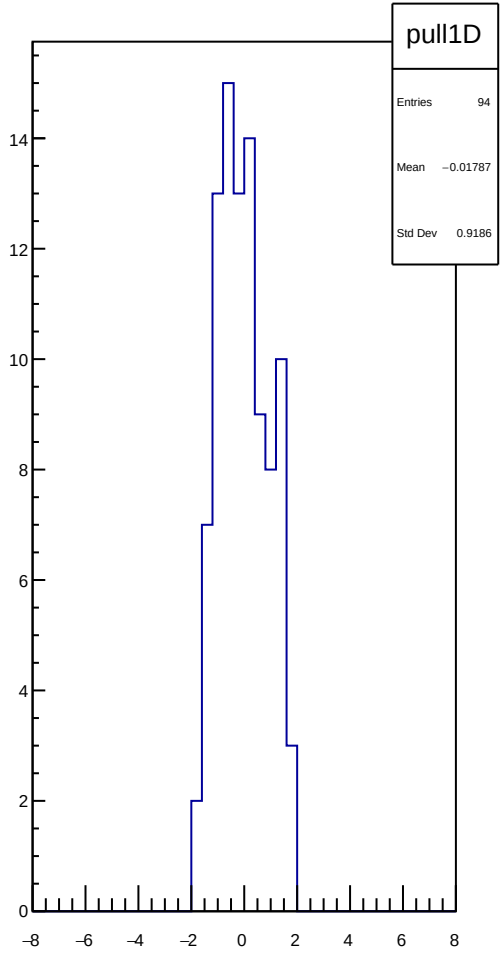

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 77.65 / 93
p0 5.377 ± 2.486
pull
Entries 94
Mean −20.16
Std Dev 70.09

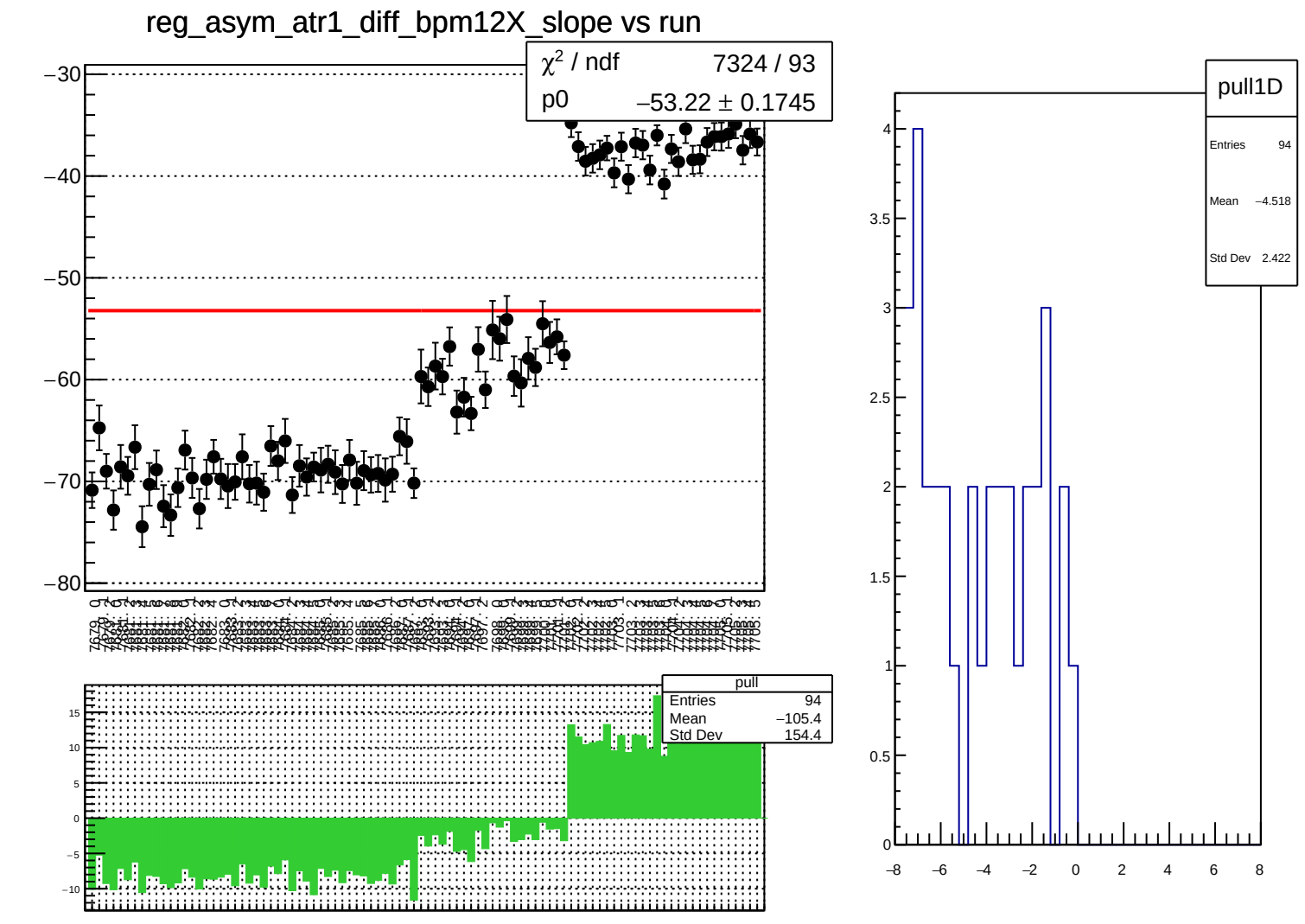

pull1D
Entries 94
Mean 0.009728
Std Dev 0.9088

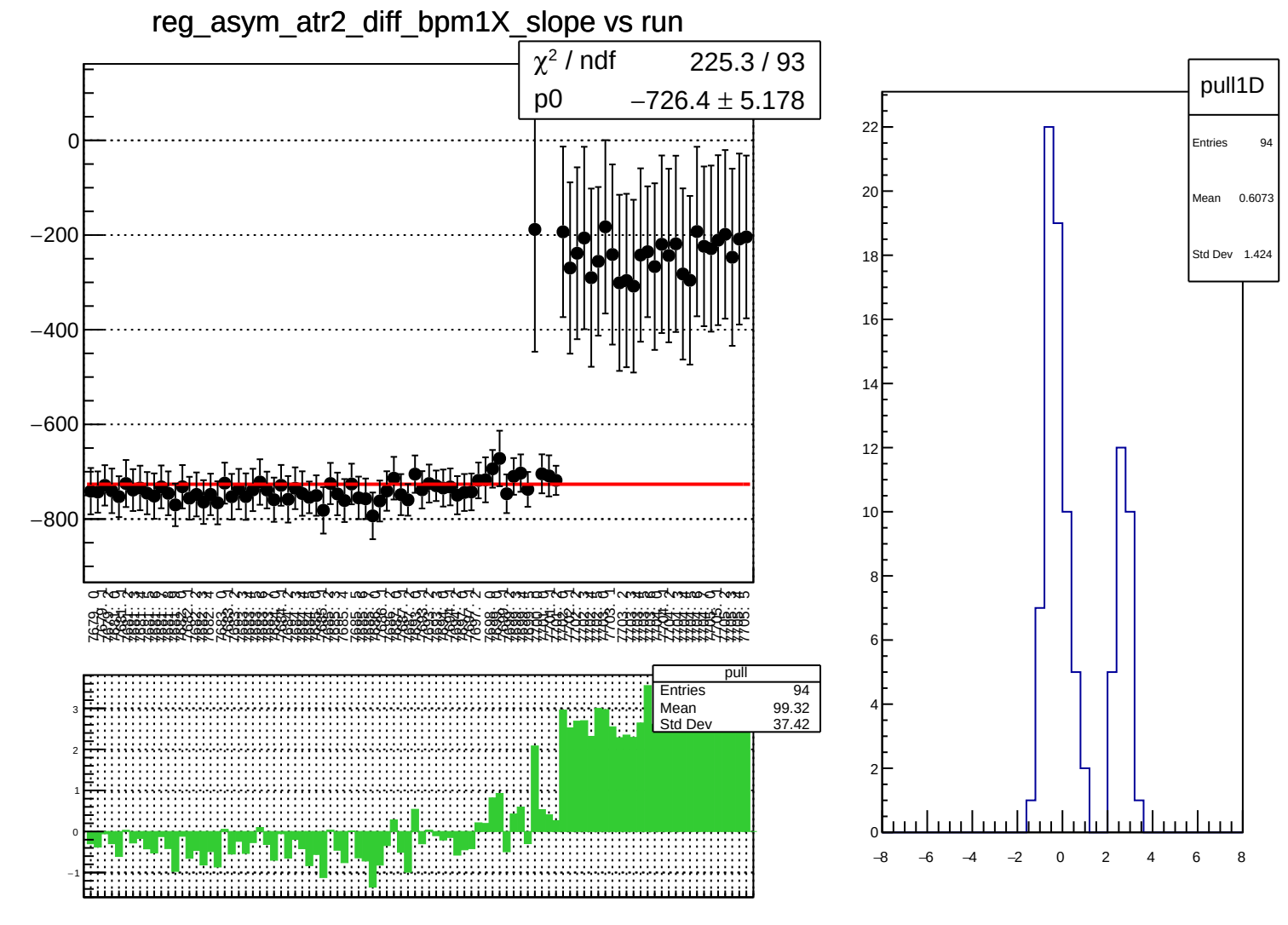

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 331.6 / 93
p0 87.8 ± 1.436
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean 131.4
Std Dev 77.75
2
1
0
−1
−2
−3
−4
−5

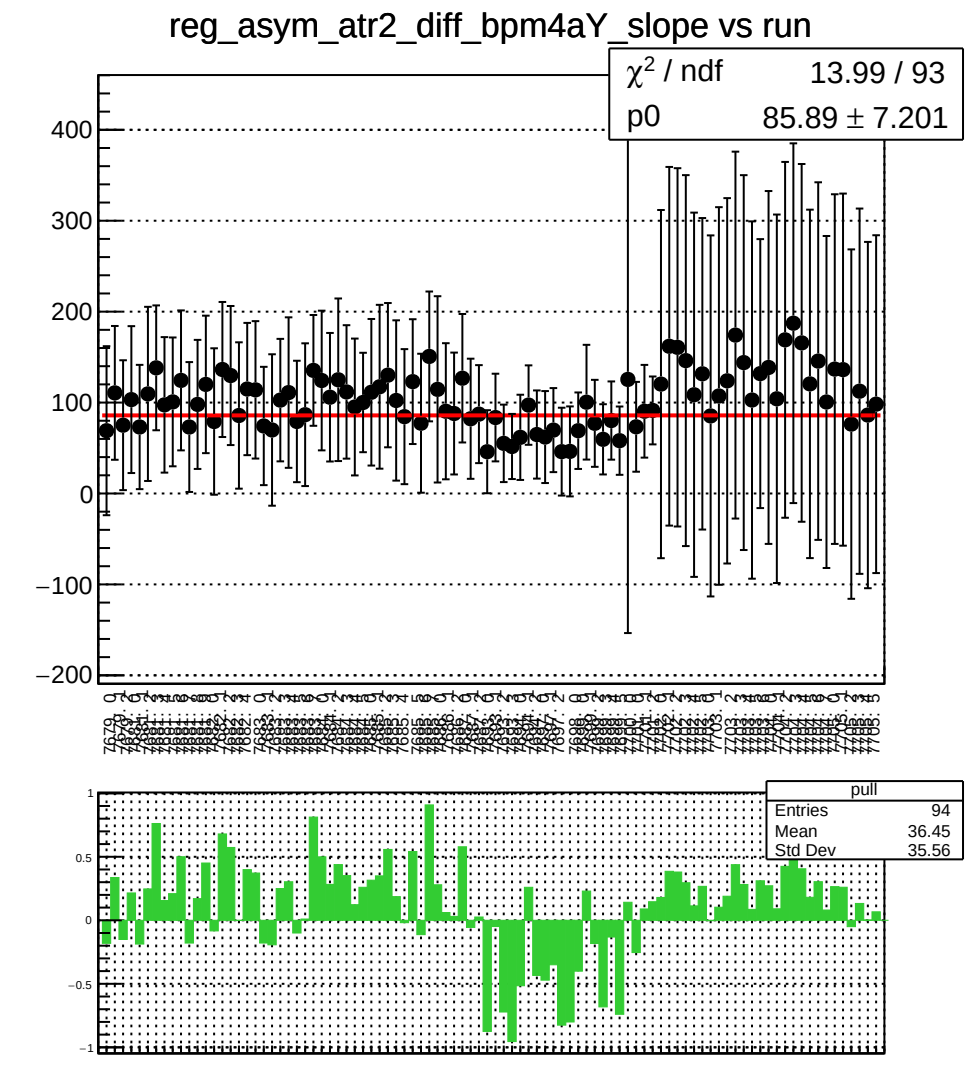

pull1D
Entries 94
Mean −0.4641
Std Dev 1.82
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

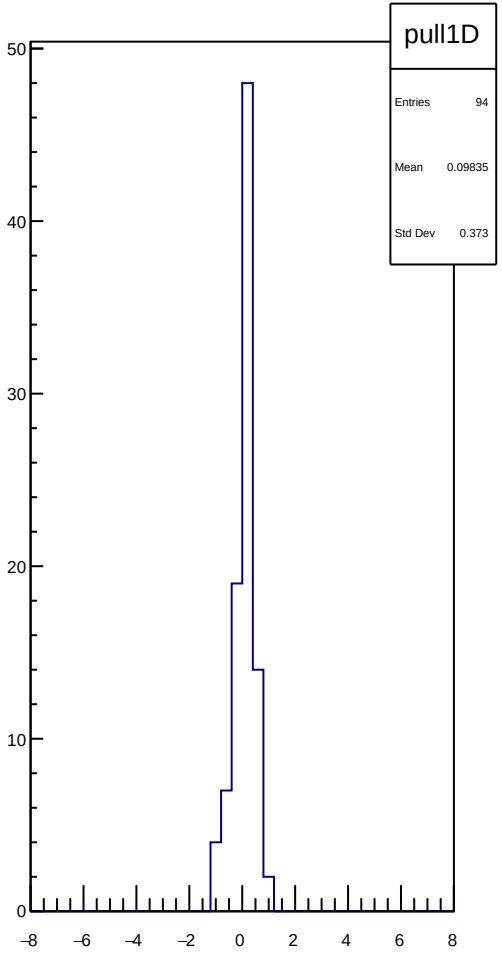

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 79.35 / 93
p0 9.68 ± 3.663
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean 172
Std Dev 121.1
2
1.5
1
0.5
0
−0.5
−1
−1.5

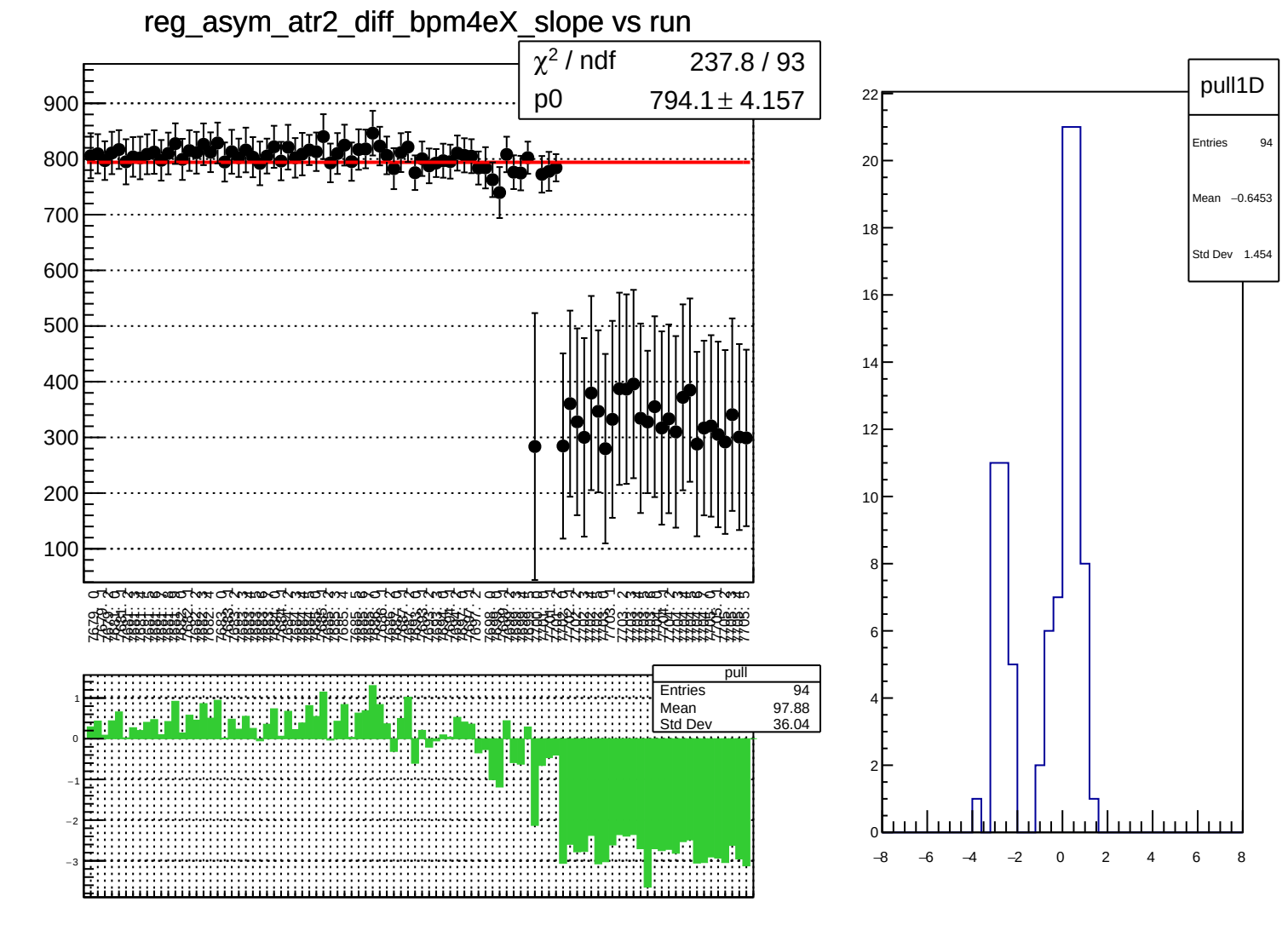

pull1D
Entries 94
Mean −0.01787
Std Dev 0.9186
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

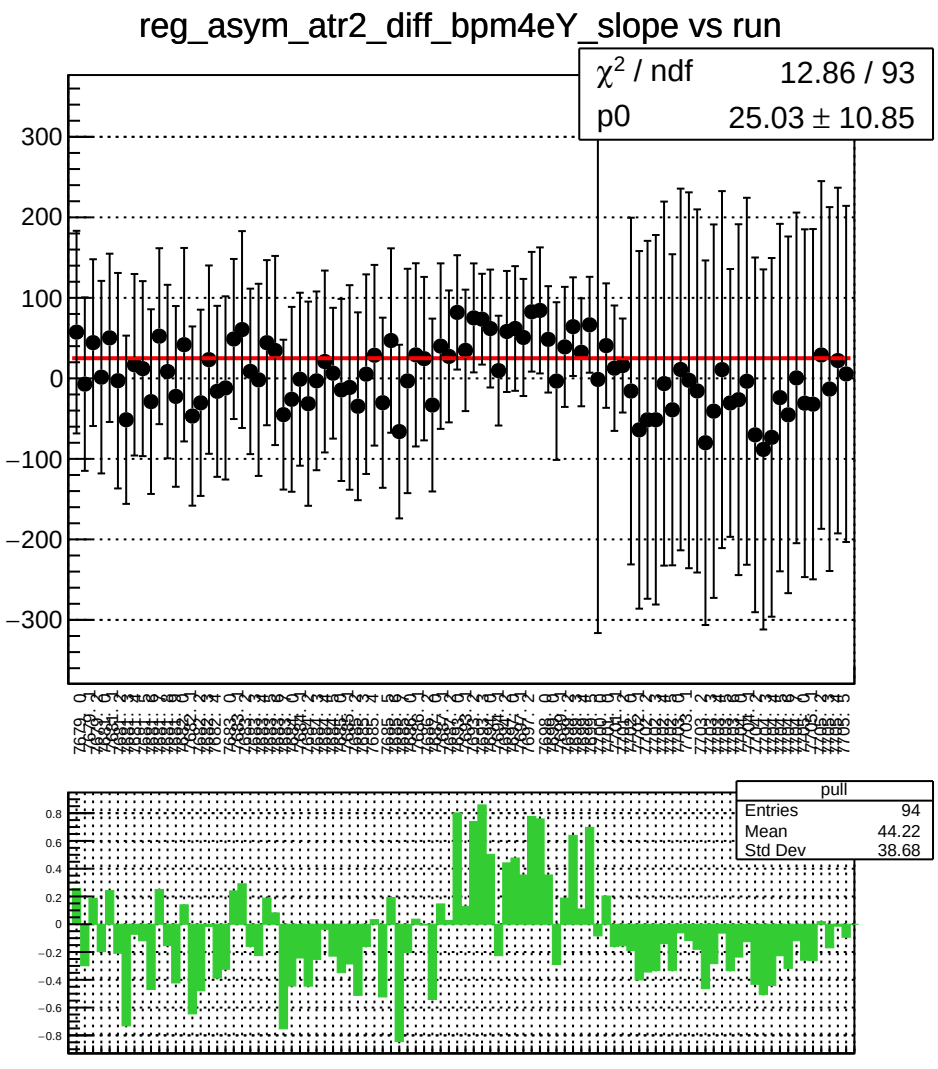

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 7324 / 93
p0 −53.22 ± 0.1745
pull
Entries 94
Mean −105.4
Std Dev 154.4
pull1D
Entries 94
Mean −4.518
Std Dev 2.422

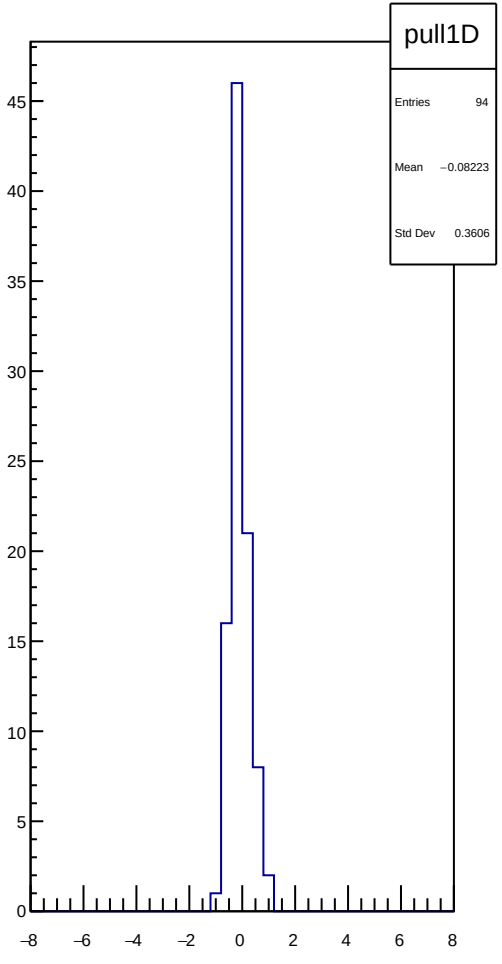

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 225.3 / 93
p0 −726.4 ± 5.178
0
−200
−400
−600
−800
pull
Entries 94
Mean 99.32
Std Dev 37.42
3
2
1
0
−1
pull1D
Entries 94
Mean 0.6073
Std Dev 1.424
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

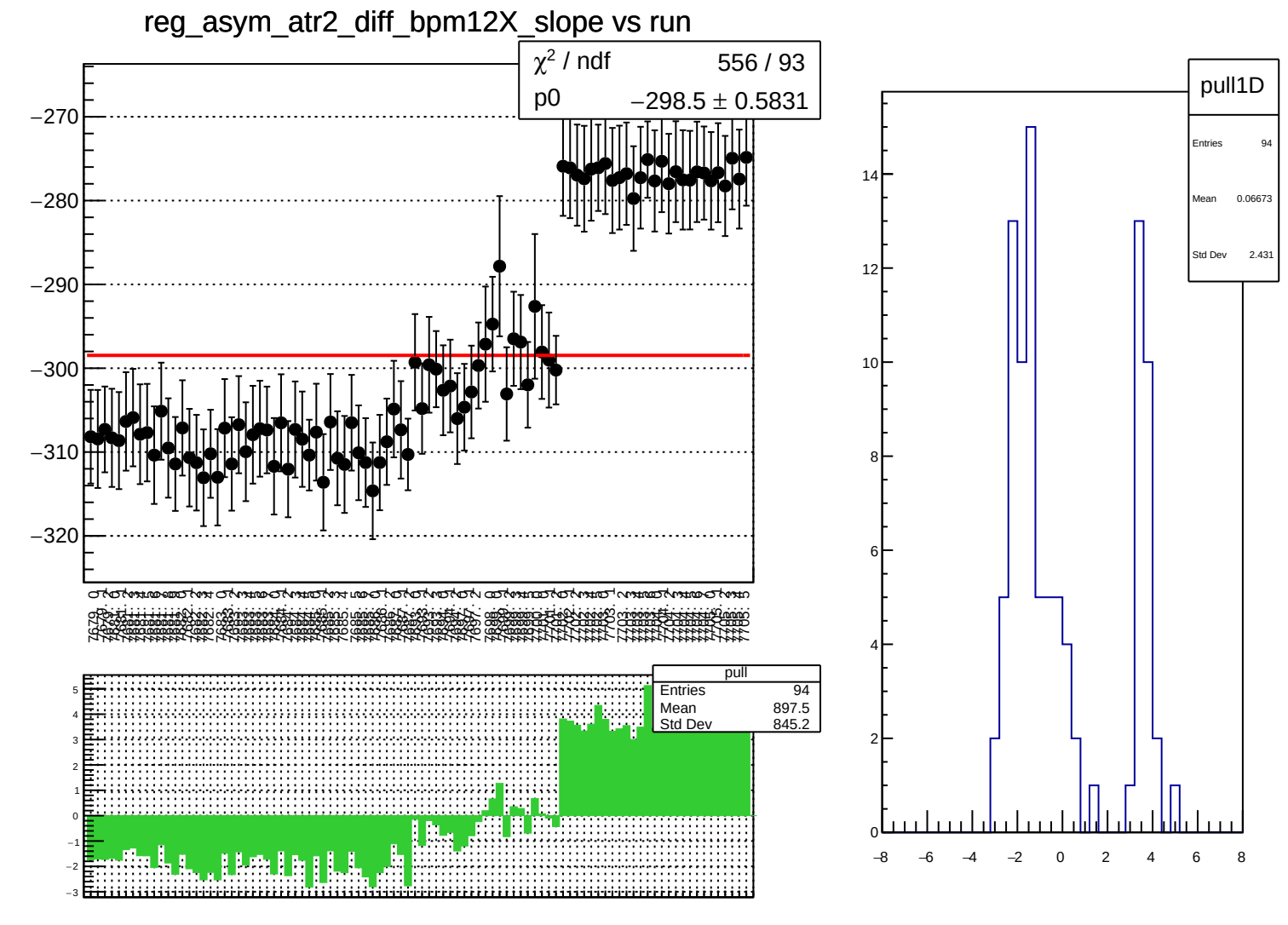

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 13.99 / 93
p0 85.89 ± 7.201
pull
Entries 94
Mean 36.45
Std Dev 35.56

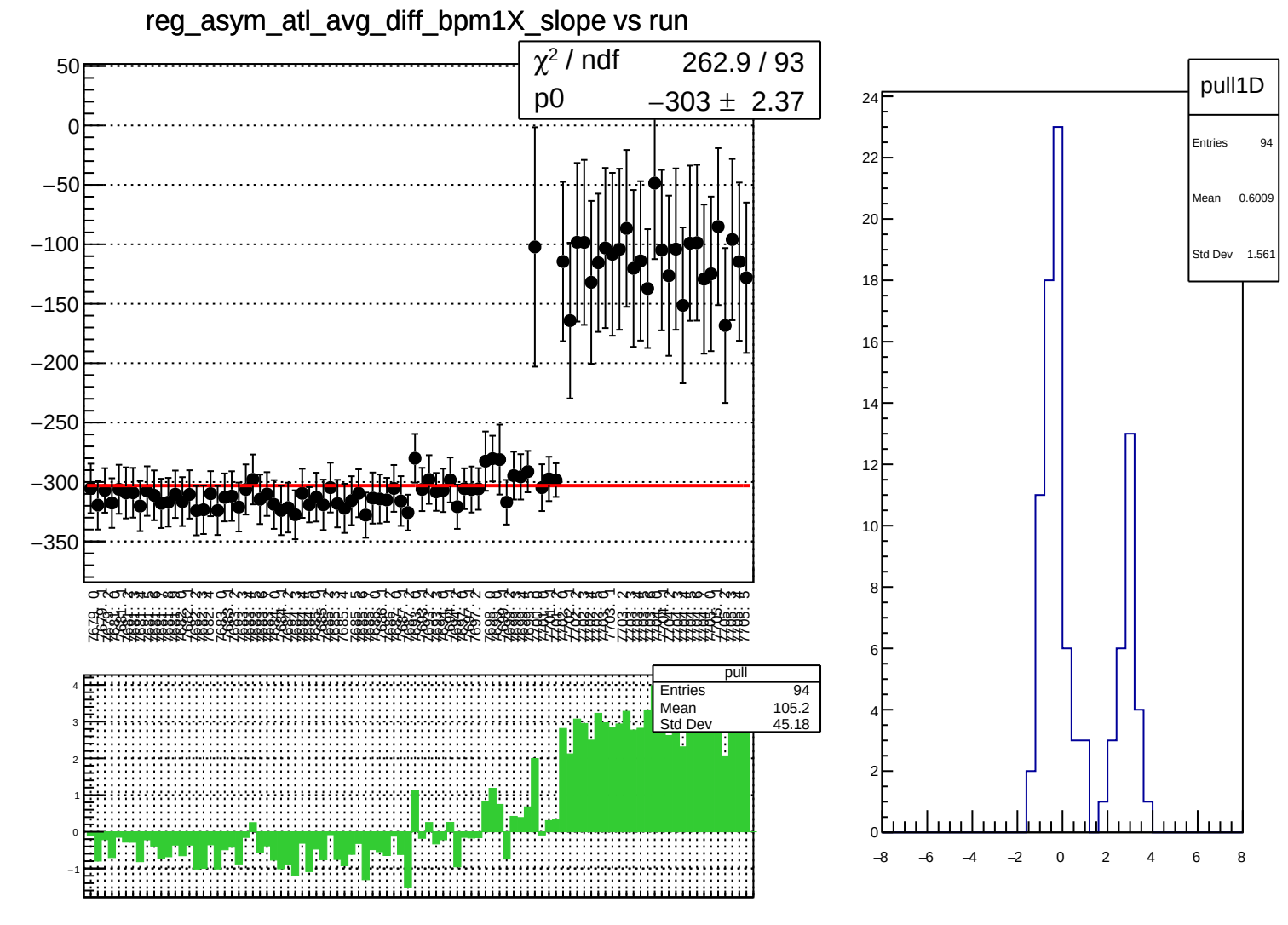

pull1D
Entries 94
Mean 0.09835
Std Dev 0.373

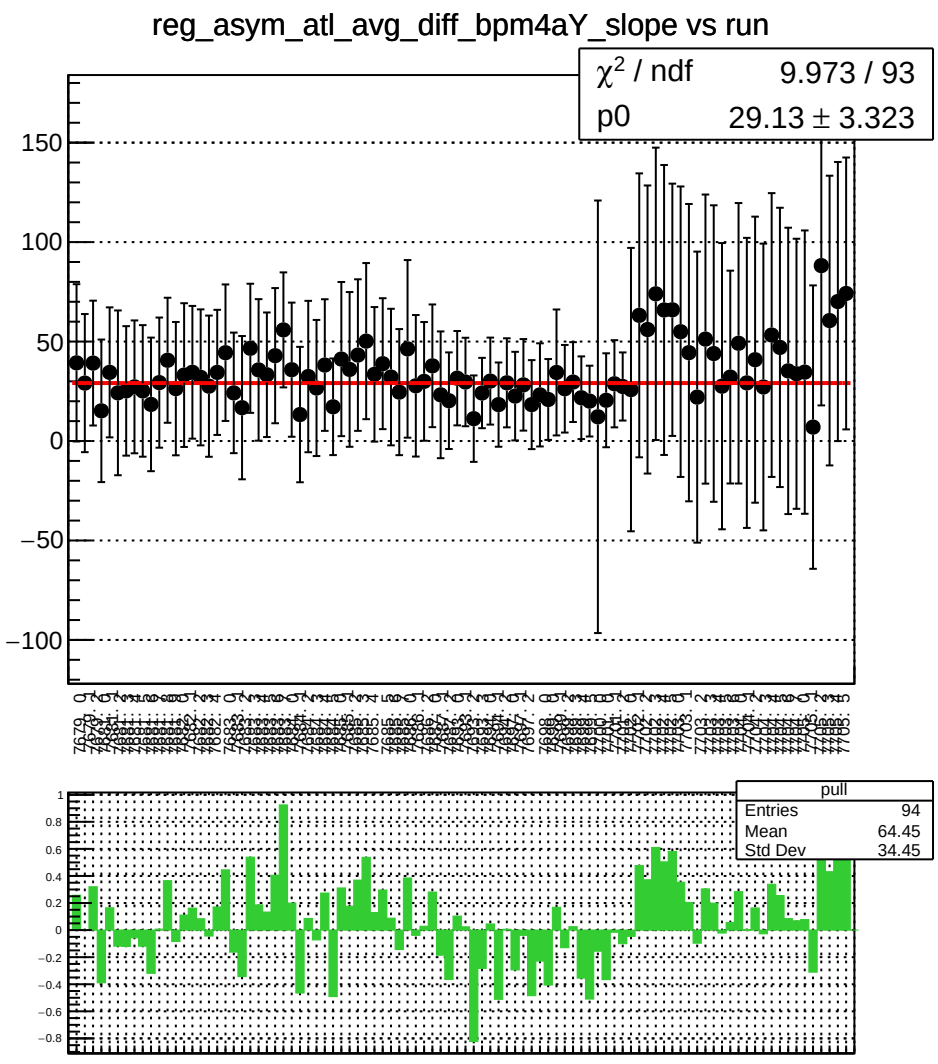

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 237.8 / 93
p0 794.1 ± 4.157
pull
Entries 94
Mean 97.88
Std Dev 36.04
pull1D
Entries 94
Mean −0.6453
Std Dev 1.454

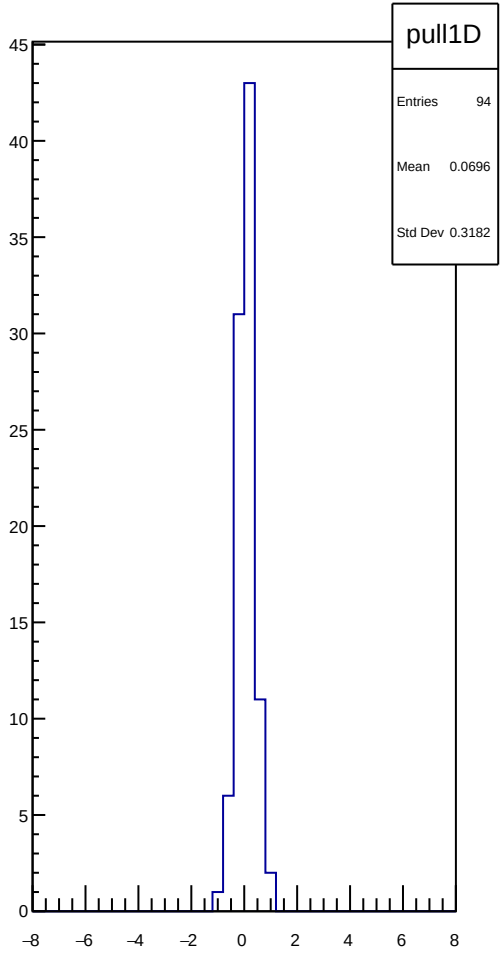

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 12.86 / 93
p0 25.03 ± 10.85
pull
Entries 94
Mean 44.22
Std Dev 38.68

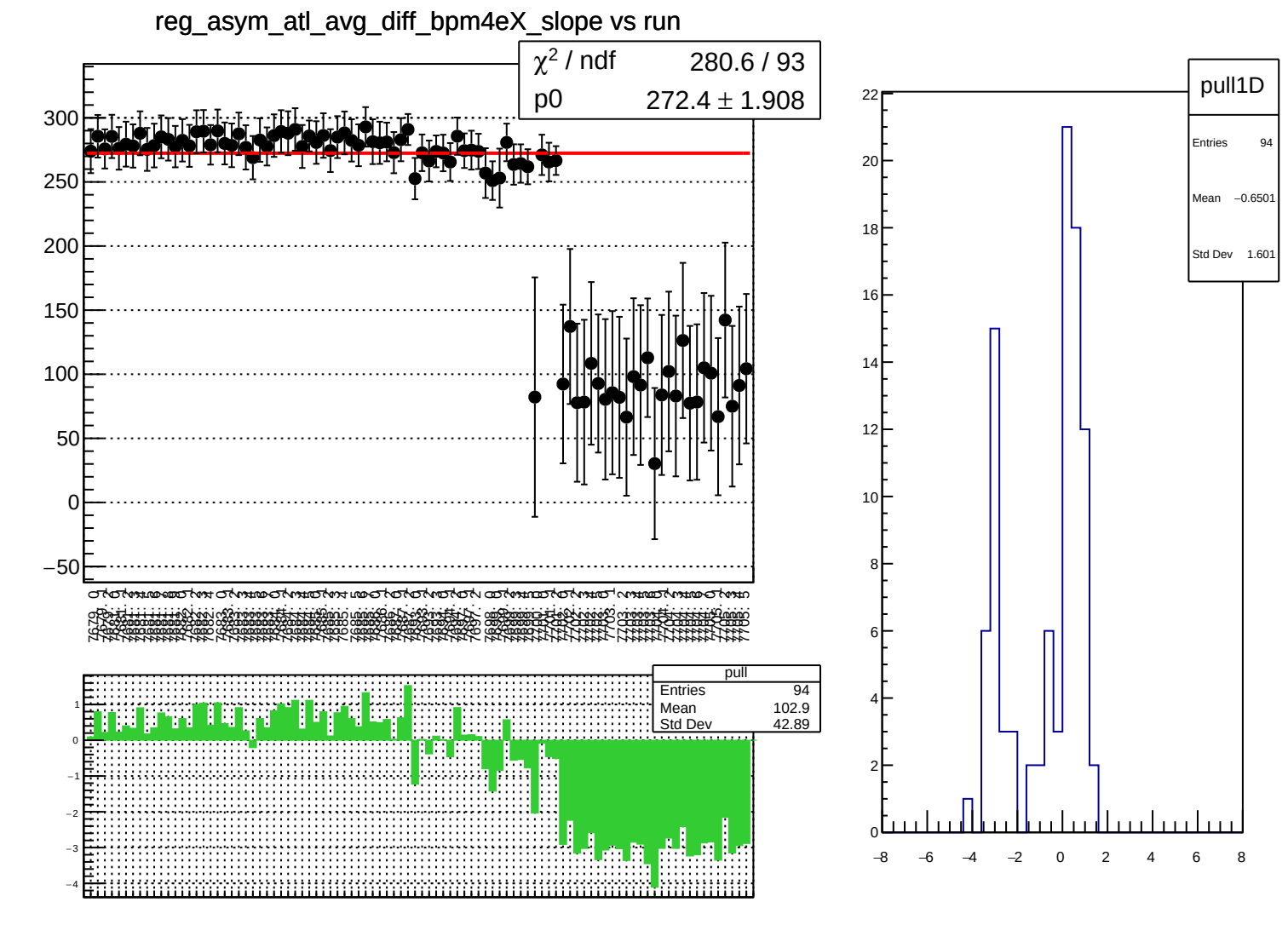

pull1D
Entries 94
Mean −0.08223
Std Dev 0.3606

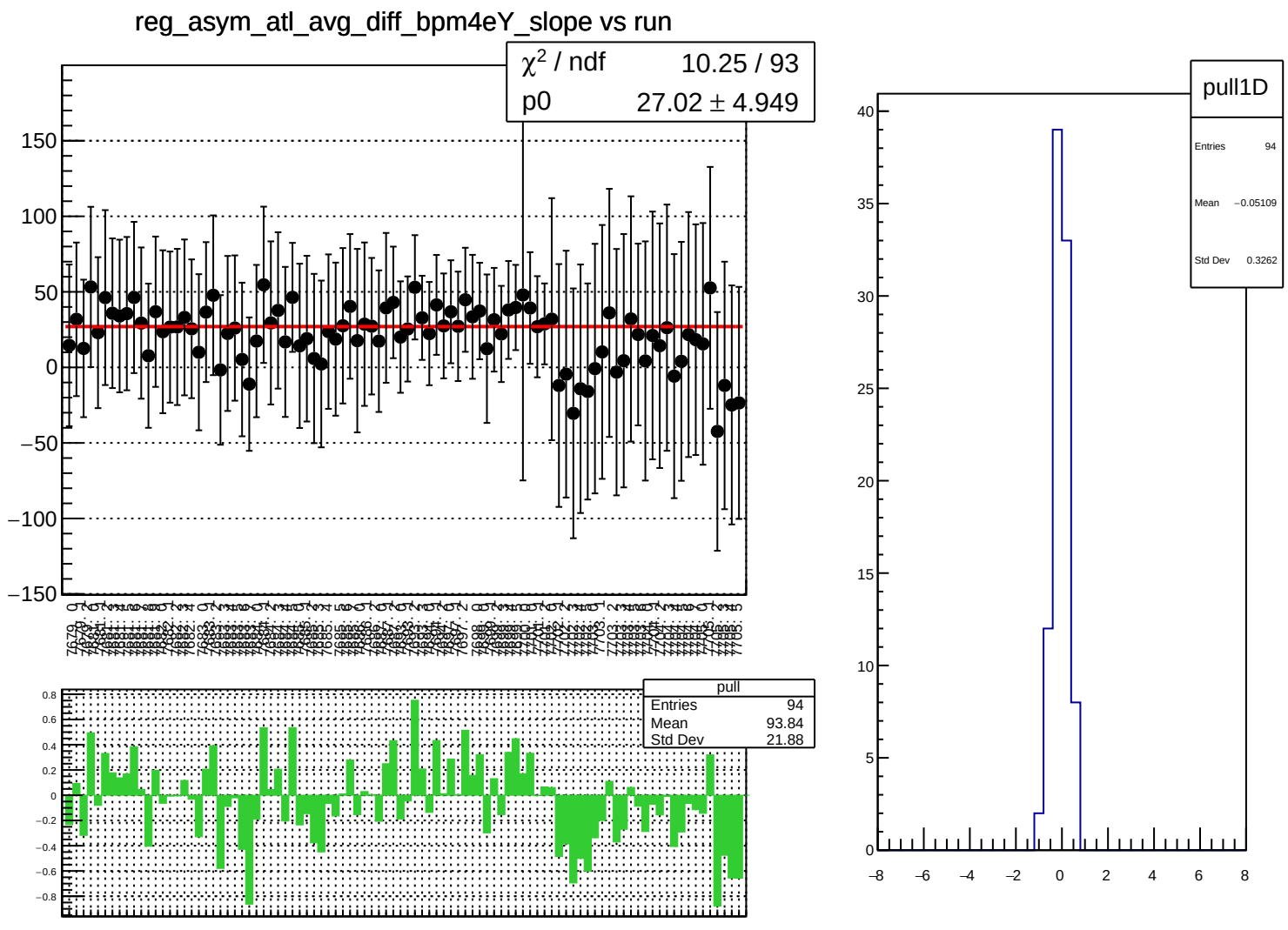

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 556 / 93
p0 −298.5 ± 0.5831
−270
−280
−290
−300
−310
−320
pull
Entries 94
Mean 897.5
Std Dev 845.2
5
4
3
2
1
0
−1
−2
−3
pull1D
Entries 94
Mean 0.06673
Std Dev 2.431
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

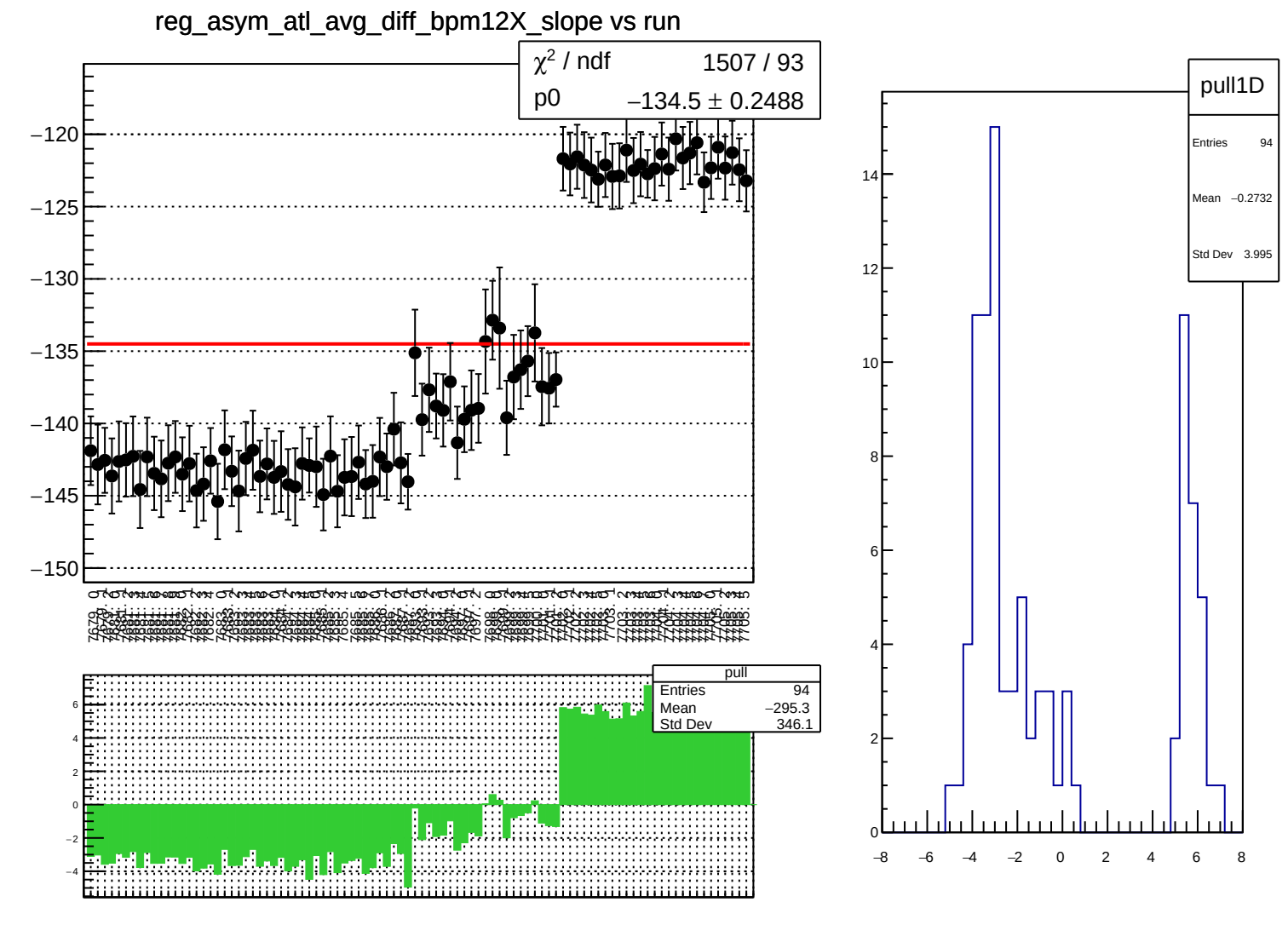

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 262.9 / 93
p0 −303 ± 2.37
pull
Entries 94
Mean 105.2
Std Dev 45.18
pull1D
Entries 94
Mean 0.6009
Std Dev 1.561

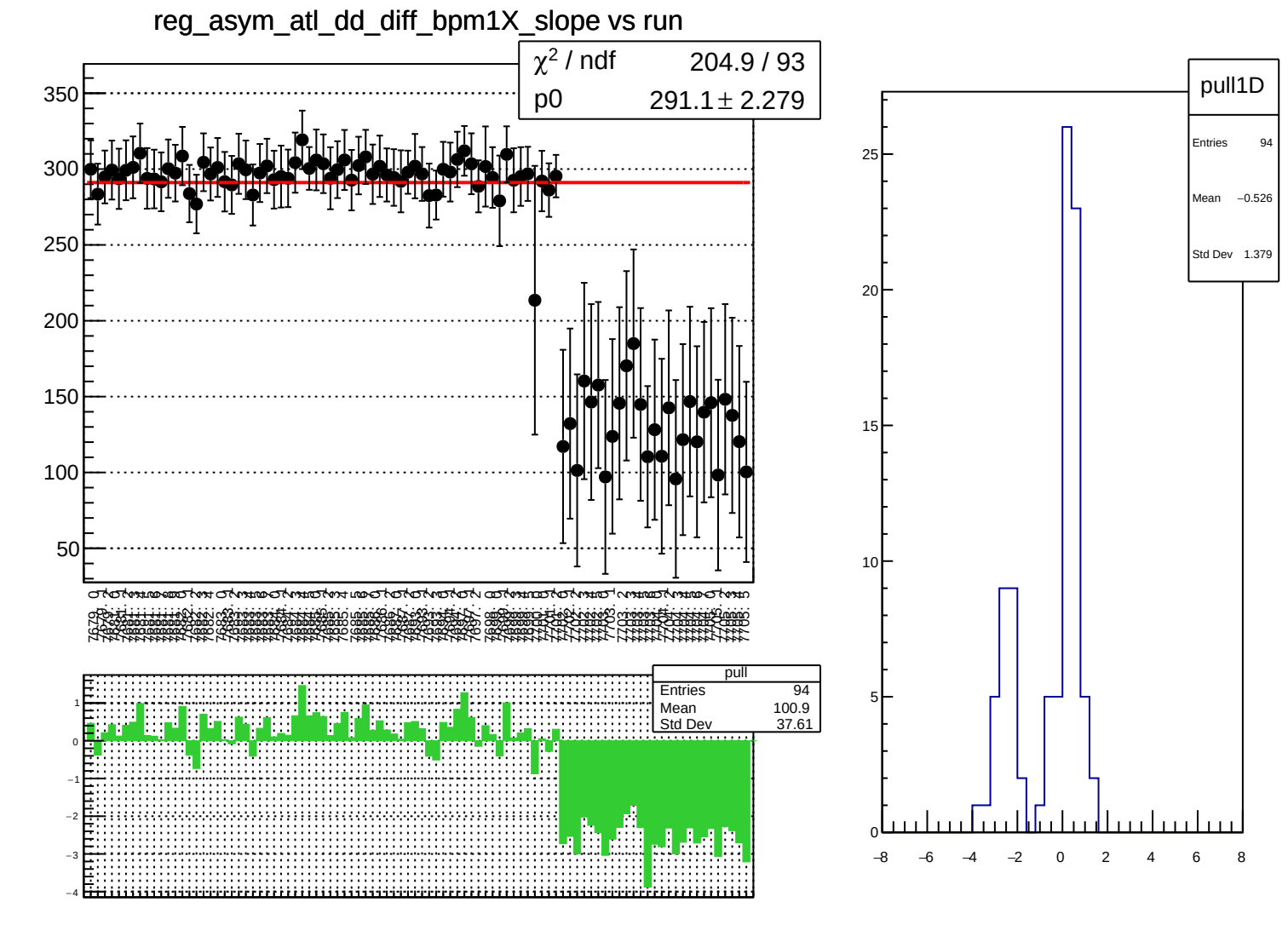

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.973 / 93
p0 29.13 ± 3.323
150
100
50
0
−50
−100
pull
Entries 94
Mean 64.45
Std Dev 34.45
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

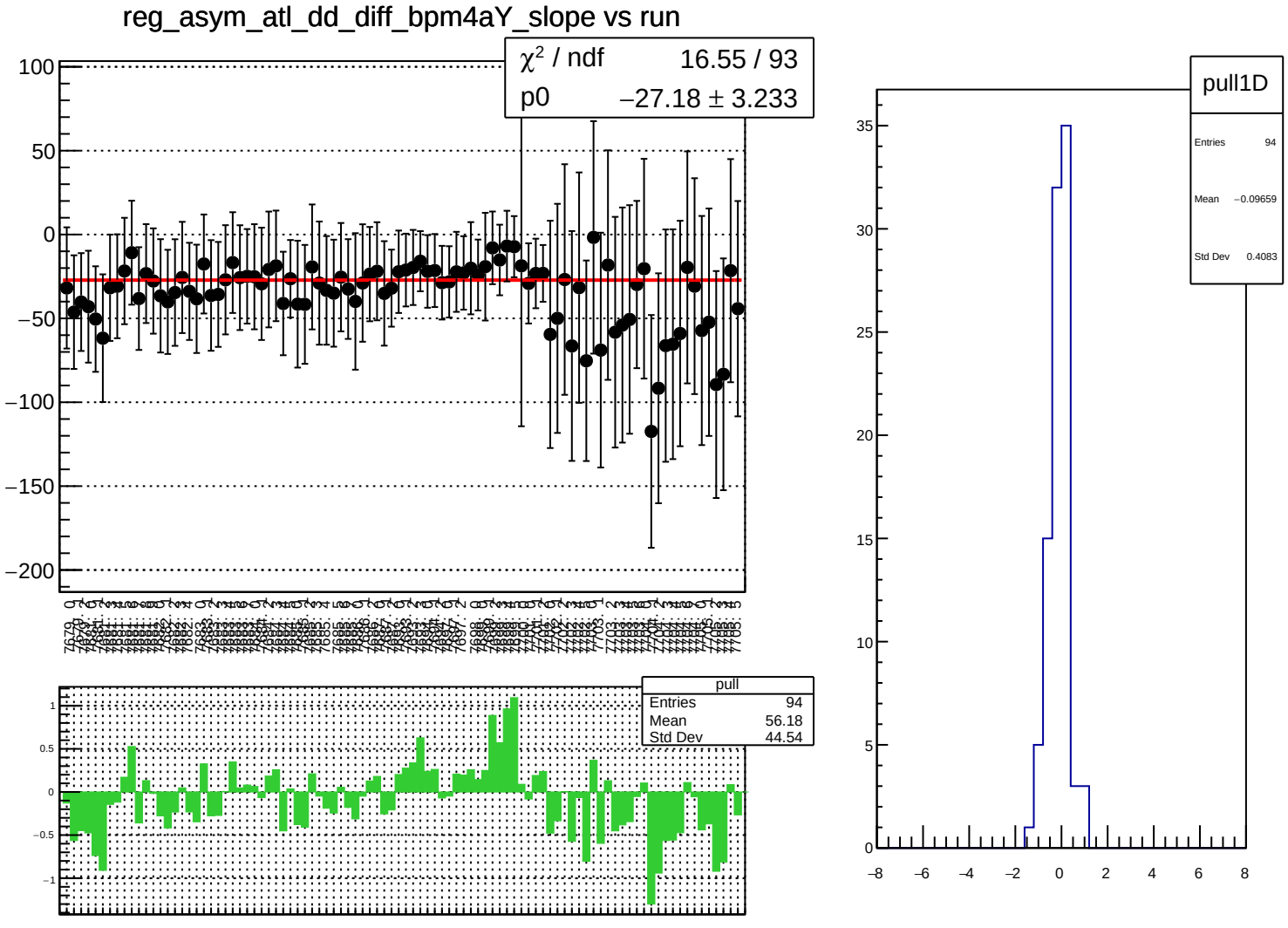

pull1D
Entries 94
Mean 0.0696
Std Dev 0.3182
45
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

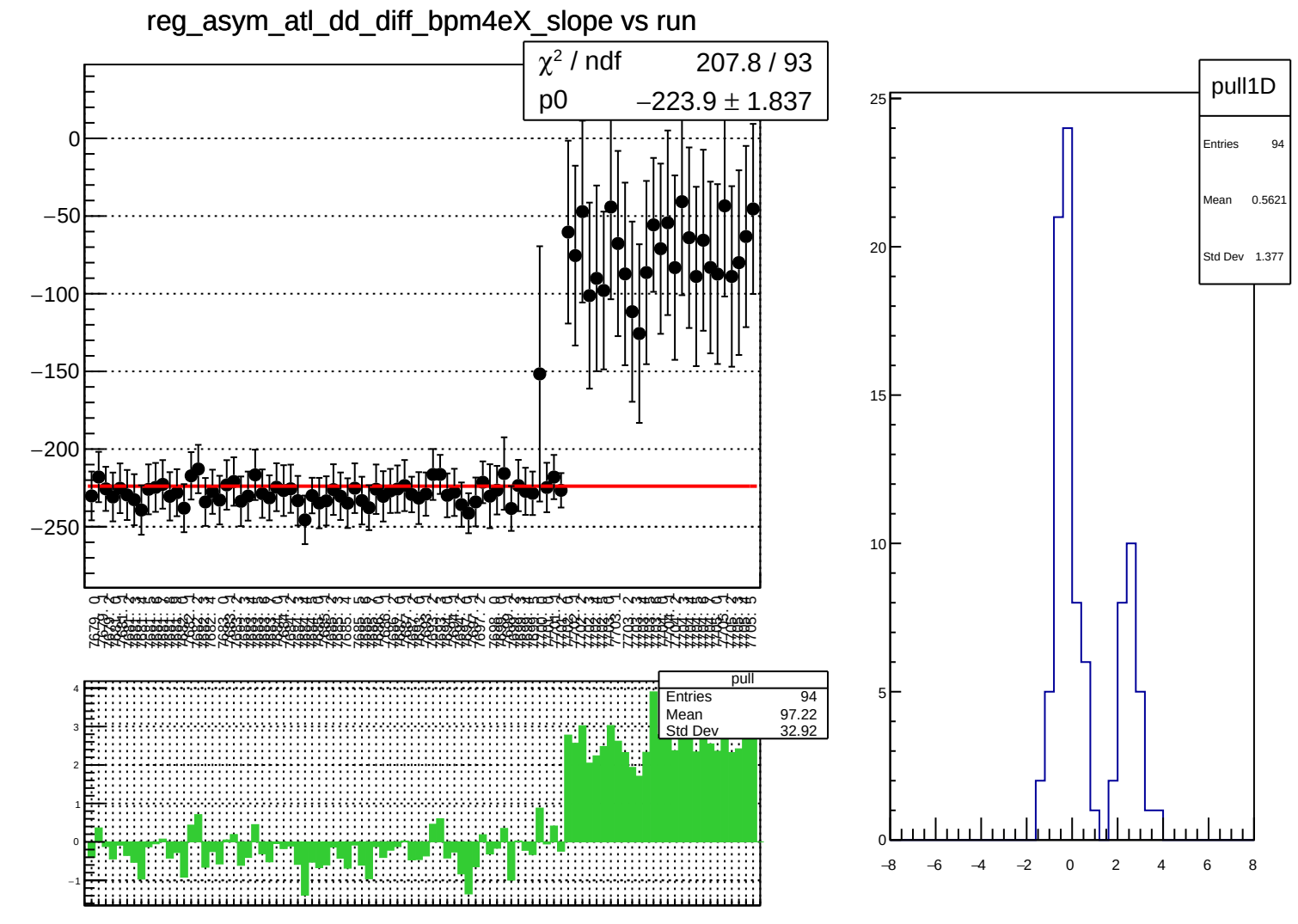

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 280.6 / 93
p0 272.4 ± 1.908
pull
Entries 94
Mean 102.9
Std Dev 42.89
pull1D
Entries 94
Mean −0.6501
Std Dev 1.601

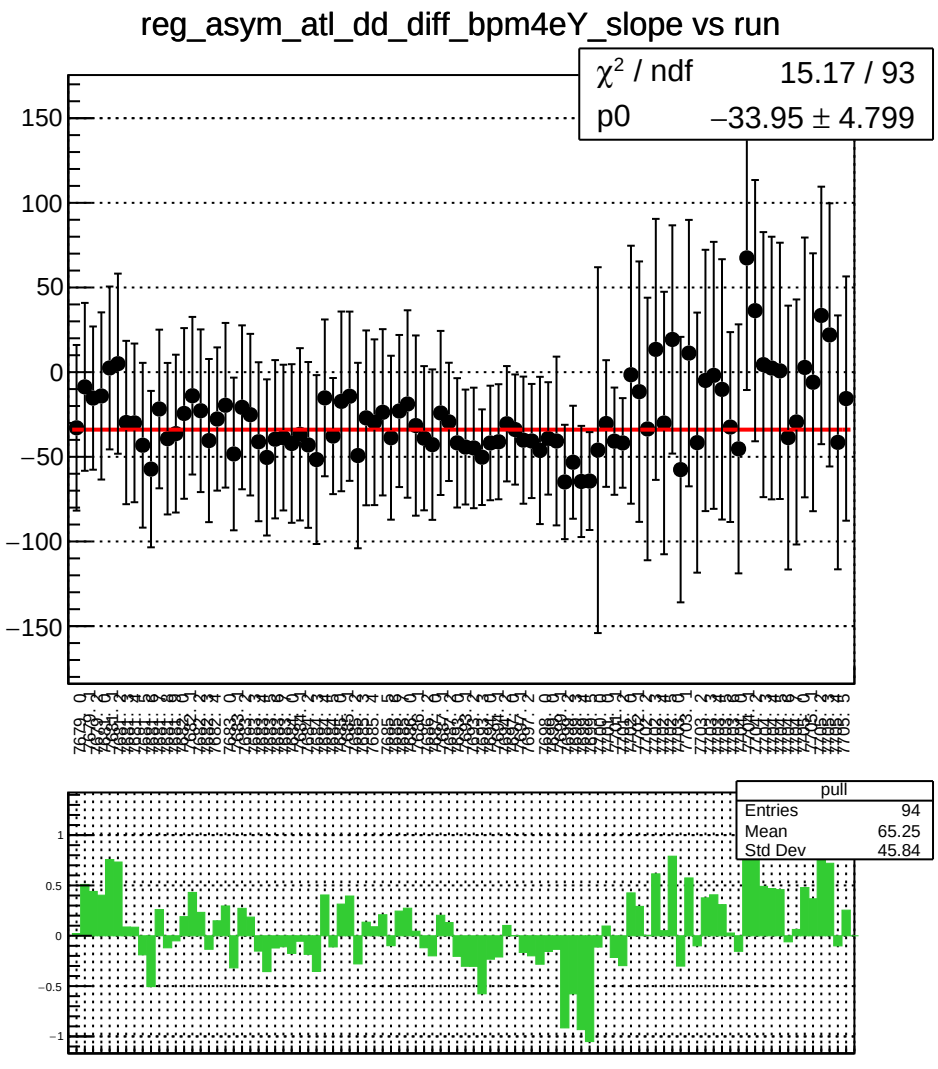

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 10.25 / 93
p0 27.02 ± 4.949
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean 93.84
Std Dev 21.88
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 94
Mean −0.05109
Std Dev 0.3262
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

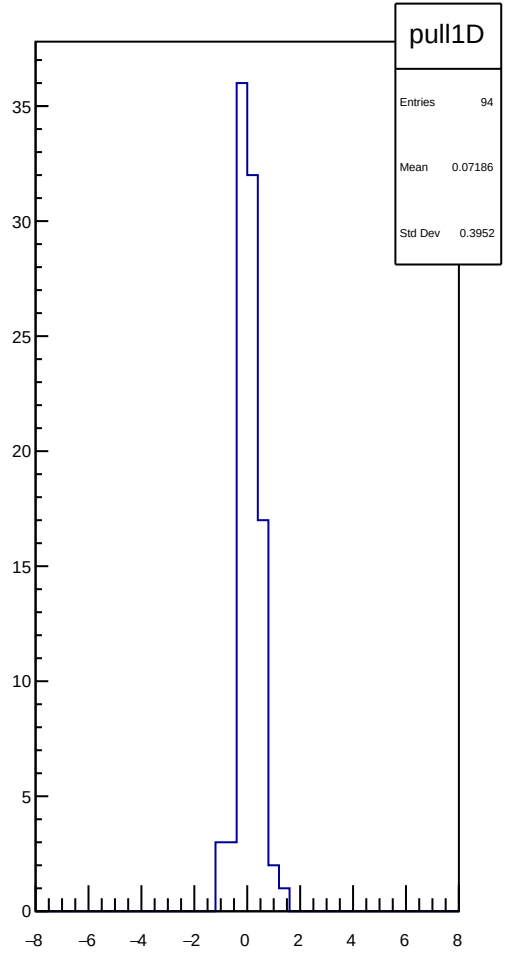

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 1507 / 93
p0 −134.5 ± 0.2488
pull
Entries 94
Mean −295.3
Std Dev 346.1
pull1D
Entries 94
Mean −0.2732
Std Dev 3.995

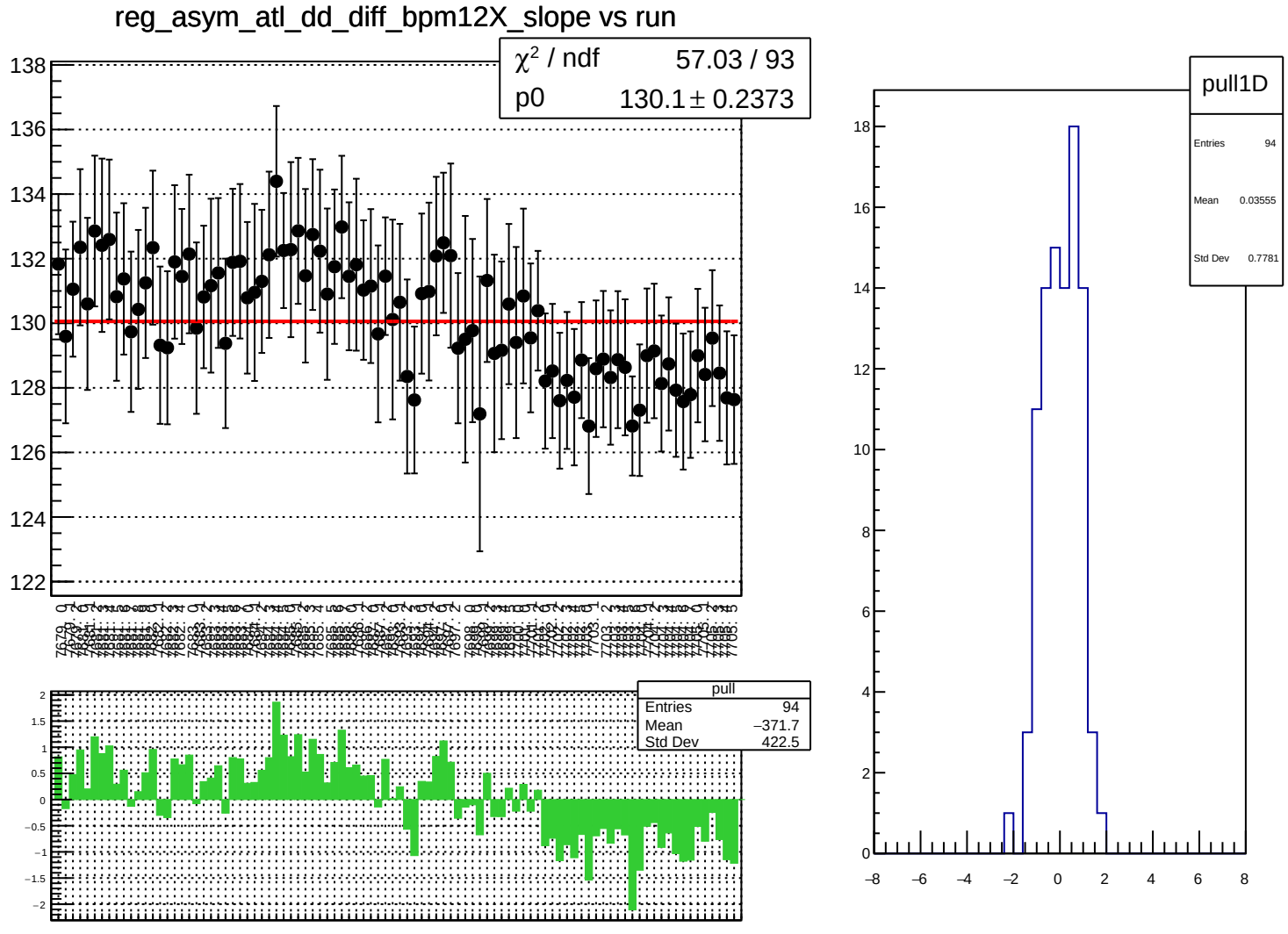

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 204.9 / 93
p0 291.1 ± 2.279
350
300
250
200
150
100
50
pull
Entries 94
Mean 100.9
Std Dev 37.61
1
0
−1
−2
−3
−4
pull1D
Entries 94
Mean −0.526
Std Dev 1.379
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

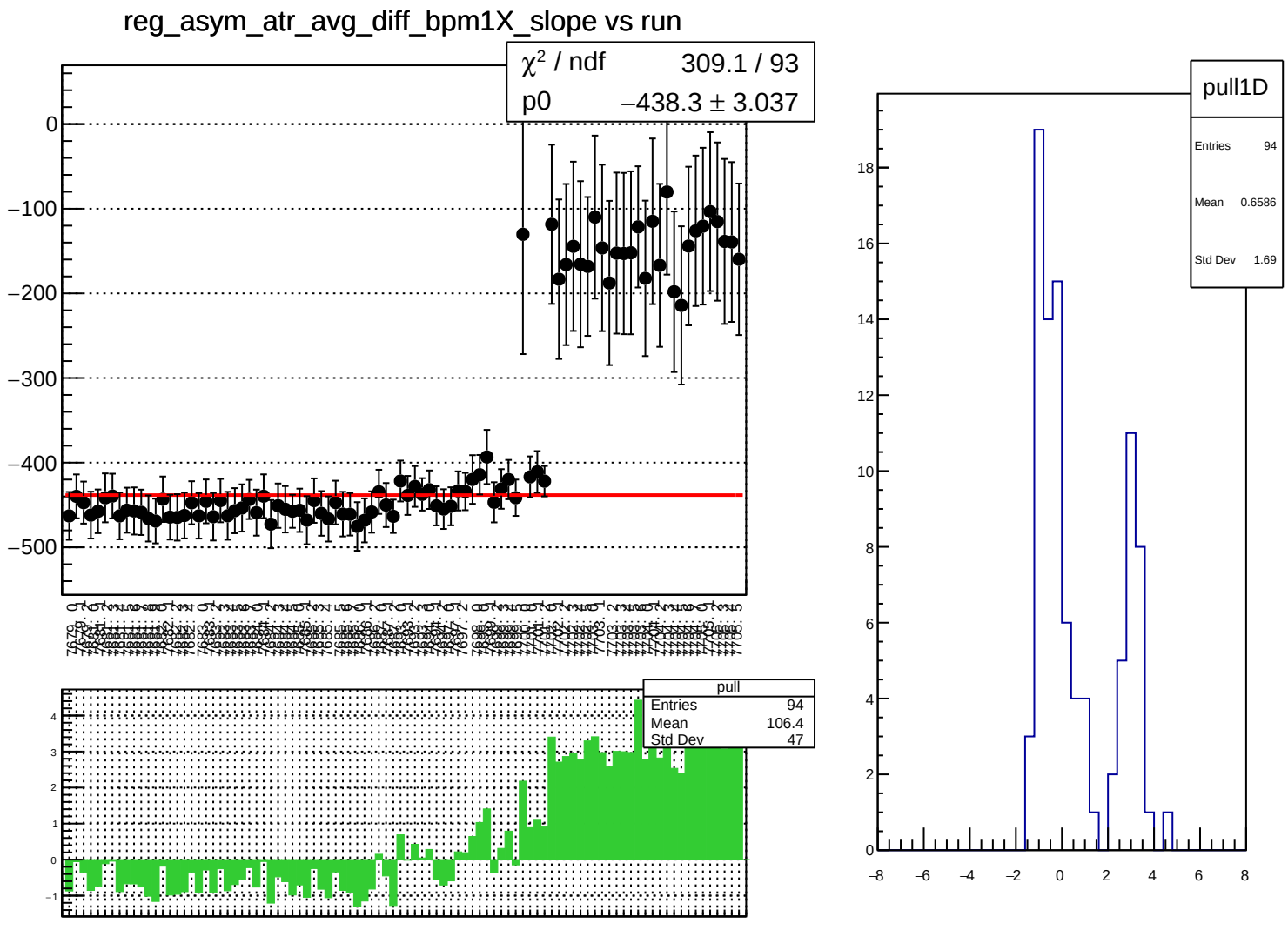

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 16.55 / 93
p0 −27.18 ± 3.233
pull
Entries 94
Mean 56.18
Std Dev 44.54
pull1D
Entries 94
Mean −0.09659
Std Dev 0.4083

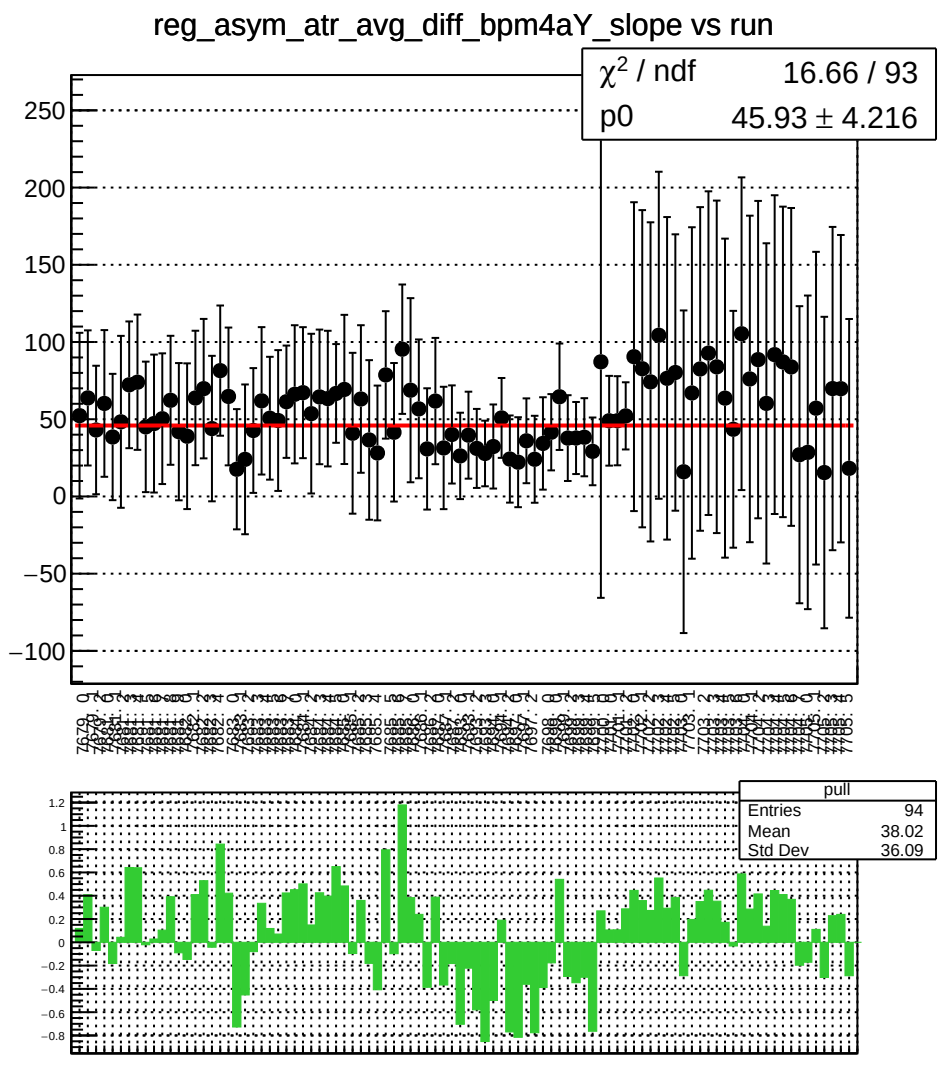

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 207.8 / 93
p0 −223.9 ± 1.837
0
−50
−100
−150
−200
−250
pull
Entries 94
Mean 97.22
Std Dev 32.92
4
3
2
1
0
−1
pull1D
Entries 94
Mean 0.5621
Std Dev 1.377
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

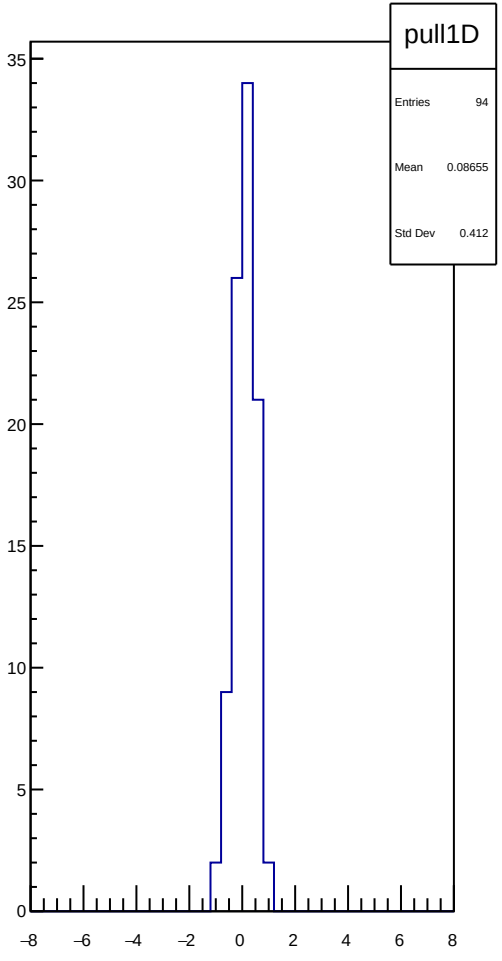

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 15.17 / 93
p0 −33.95 ± 4.799
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean 65.25
Std Dev 45.84
1
0.5
0
−0.5
−1

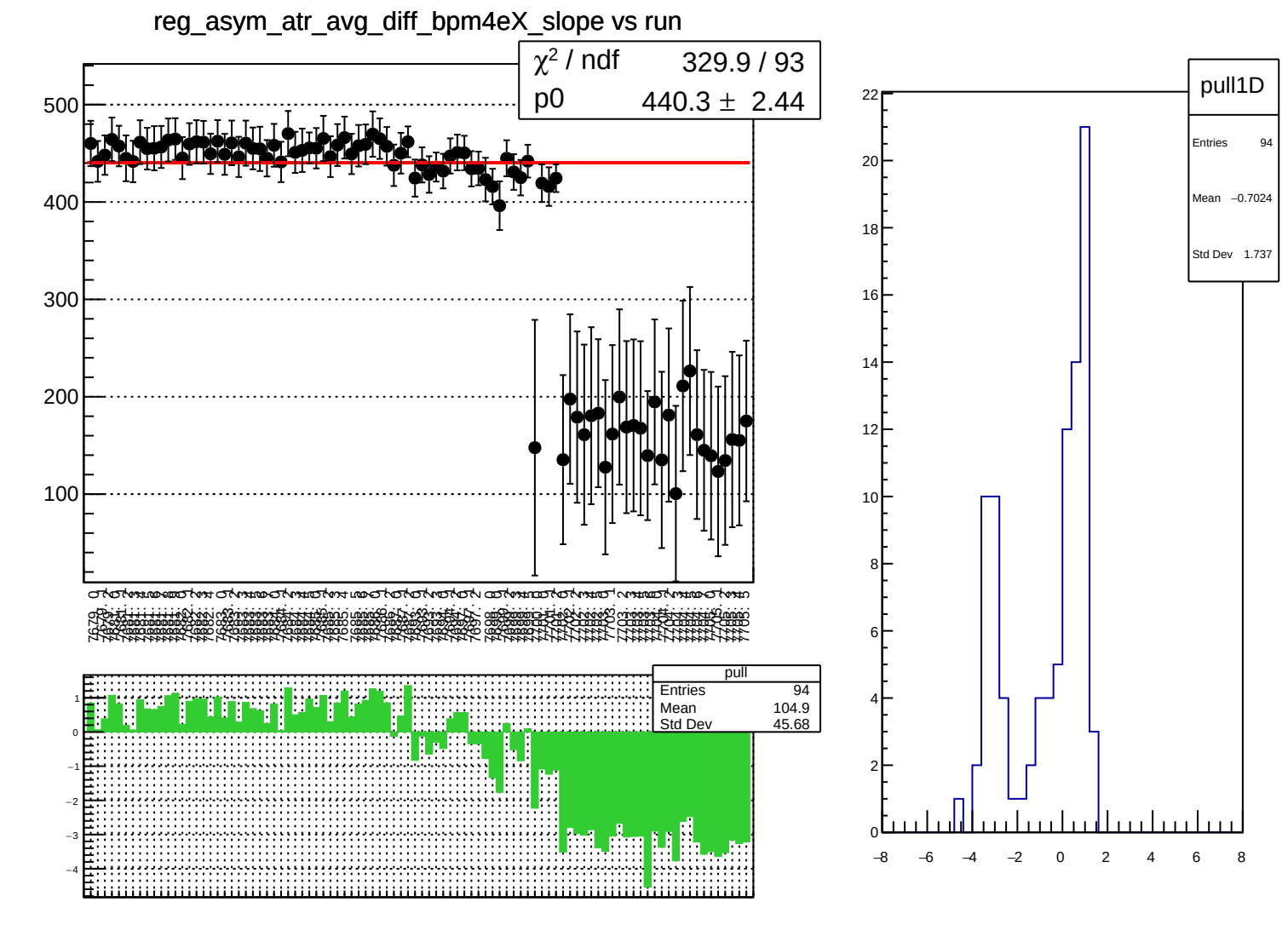

pull1D
Entries 94
Mean 0.07186
Std Dev 0.3952
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

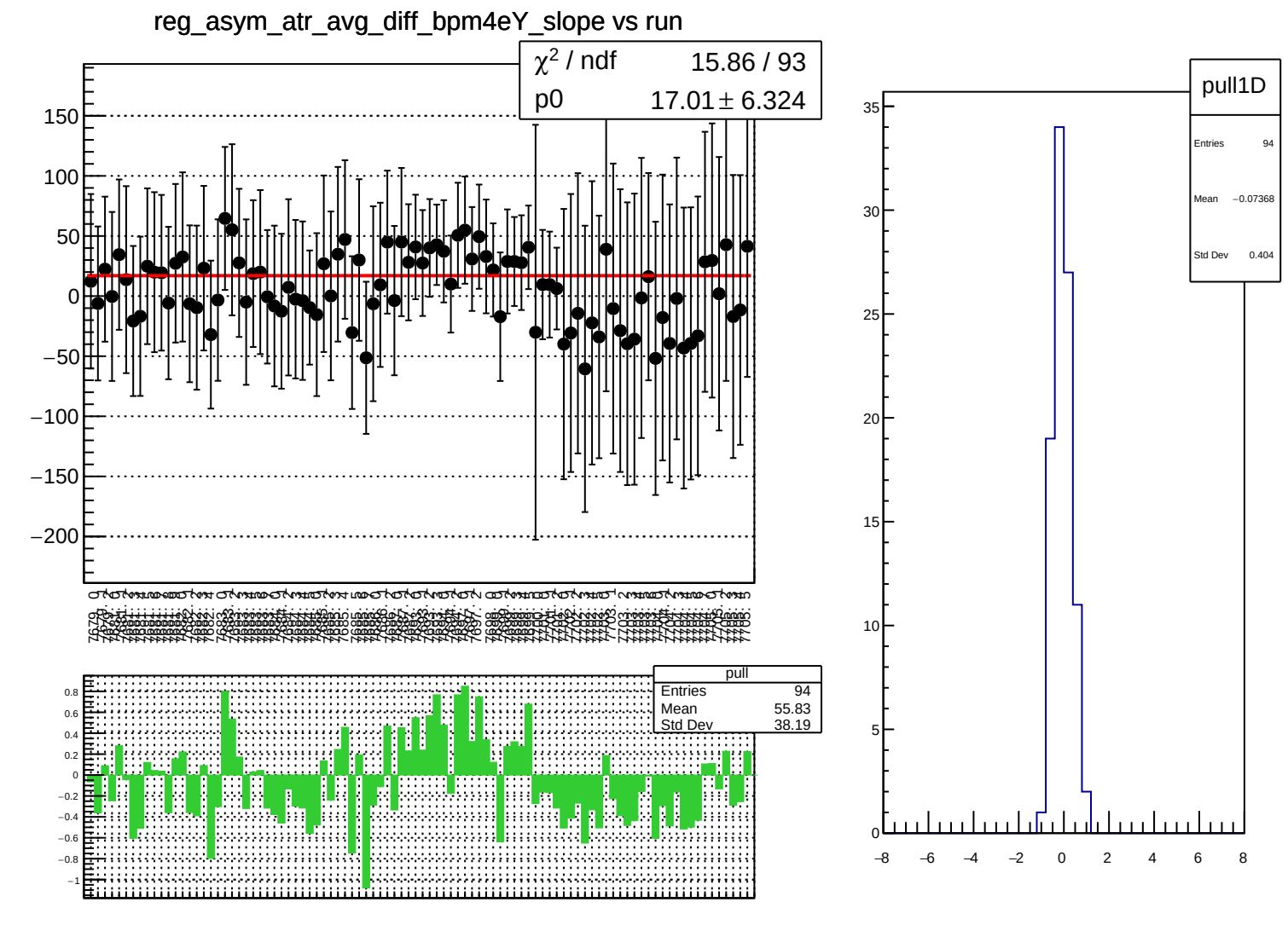

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 57.03 / 93
p0 130.1 ± 0.2373
pull
Entries 94
Mean −371.7
Std Dev 422.5
pull1D
Entries 94
Mean 0.03555
Std Dev 0.7781

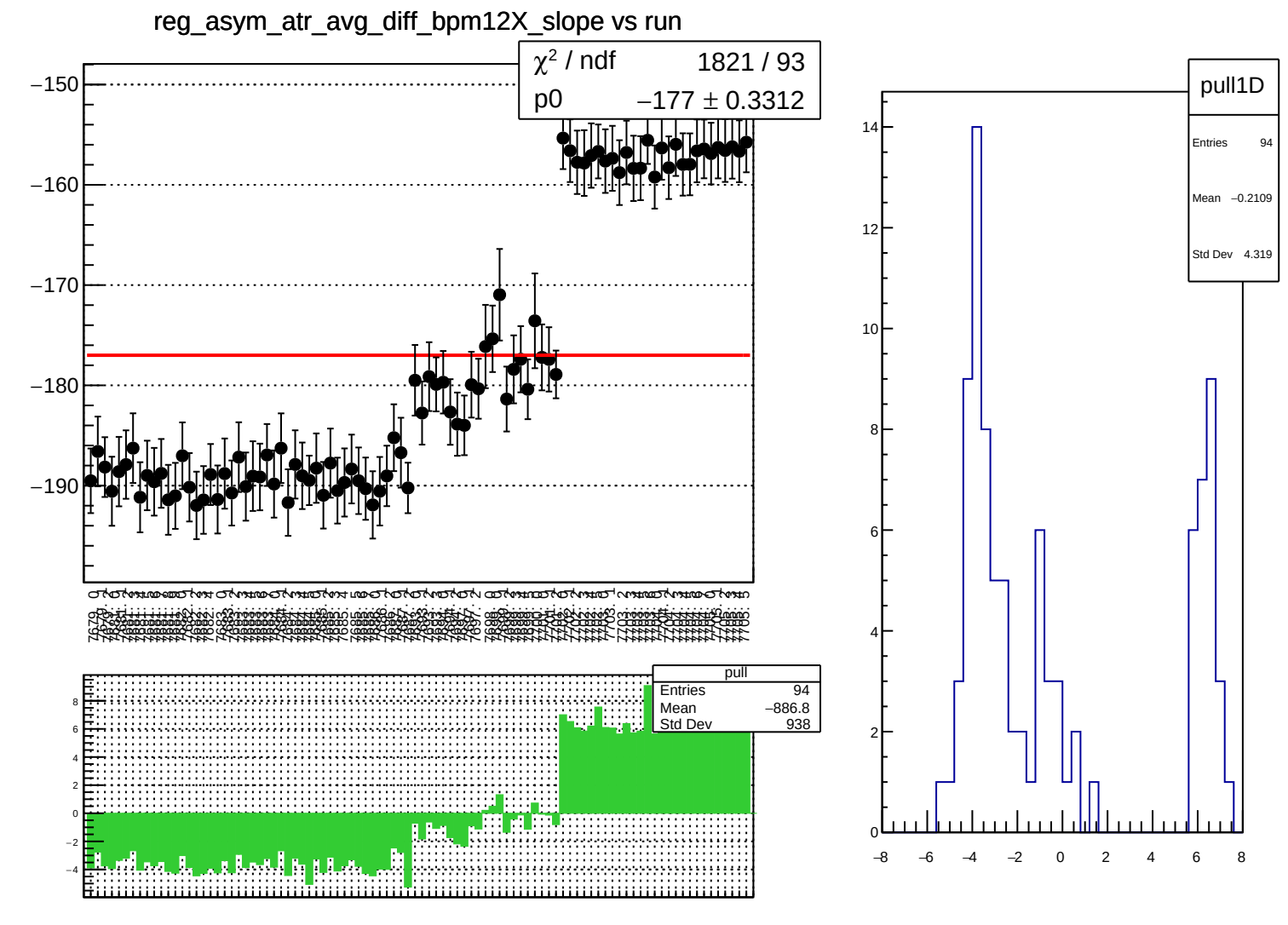

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 309.1 / 93
p0 −438.3 ± 3.037
0
−100
−200
−300
−400
−500
pull
Entries 94
Mean 106.4
Std Dev 47
4
3
2
1
0
−1
pull1D
Entries 94
Mean 0.6586
Std Dev 1.69
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

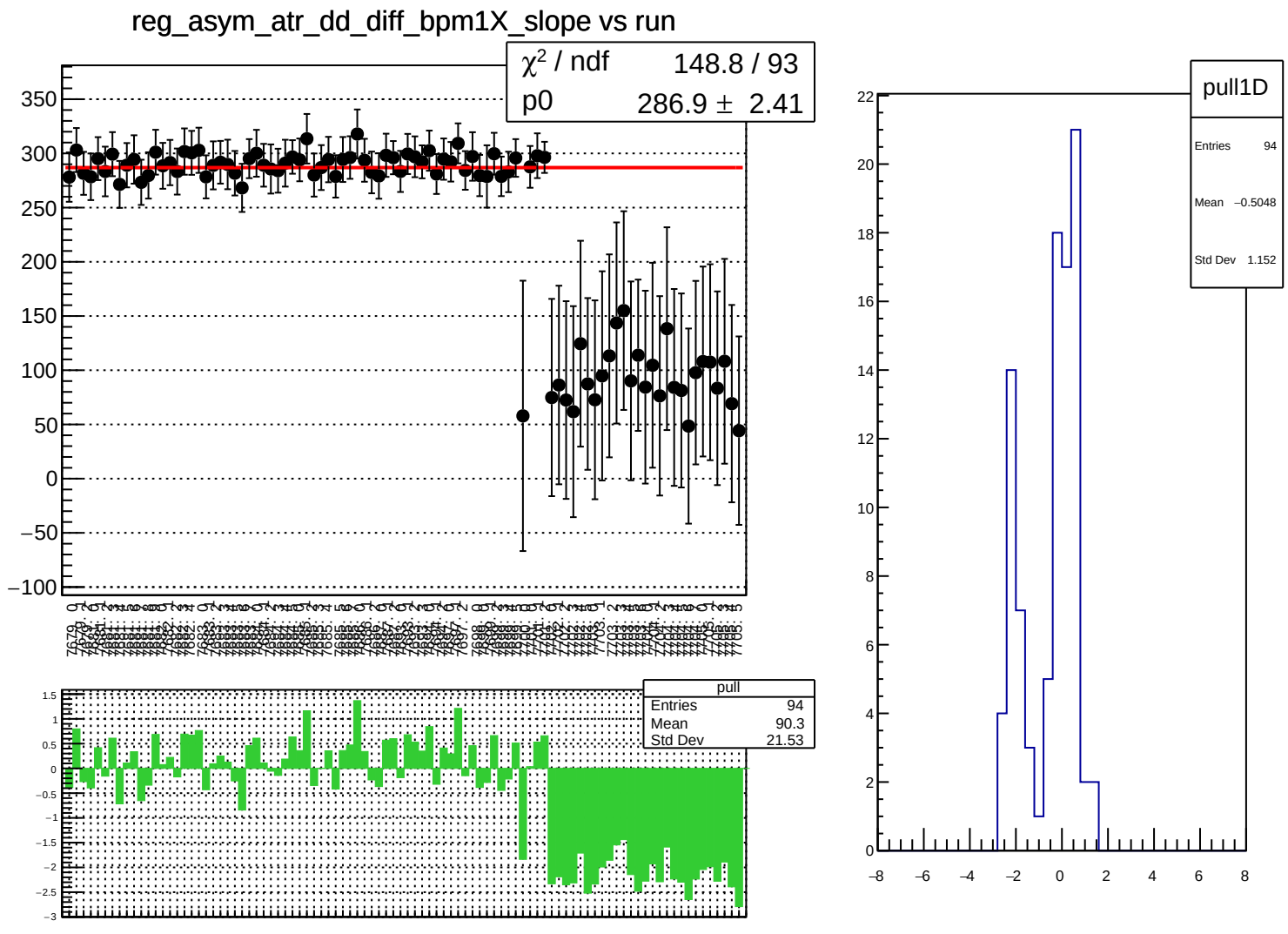

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 16.66 / 93
p0 45.93 ± 4.216
pull
Entries 94
Mean 38.02
Std Dev 36.09

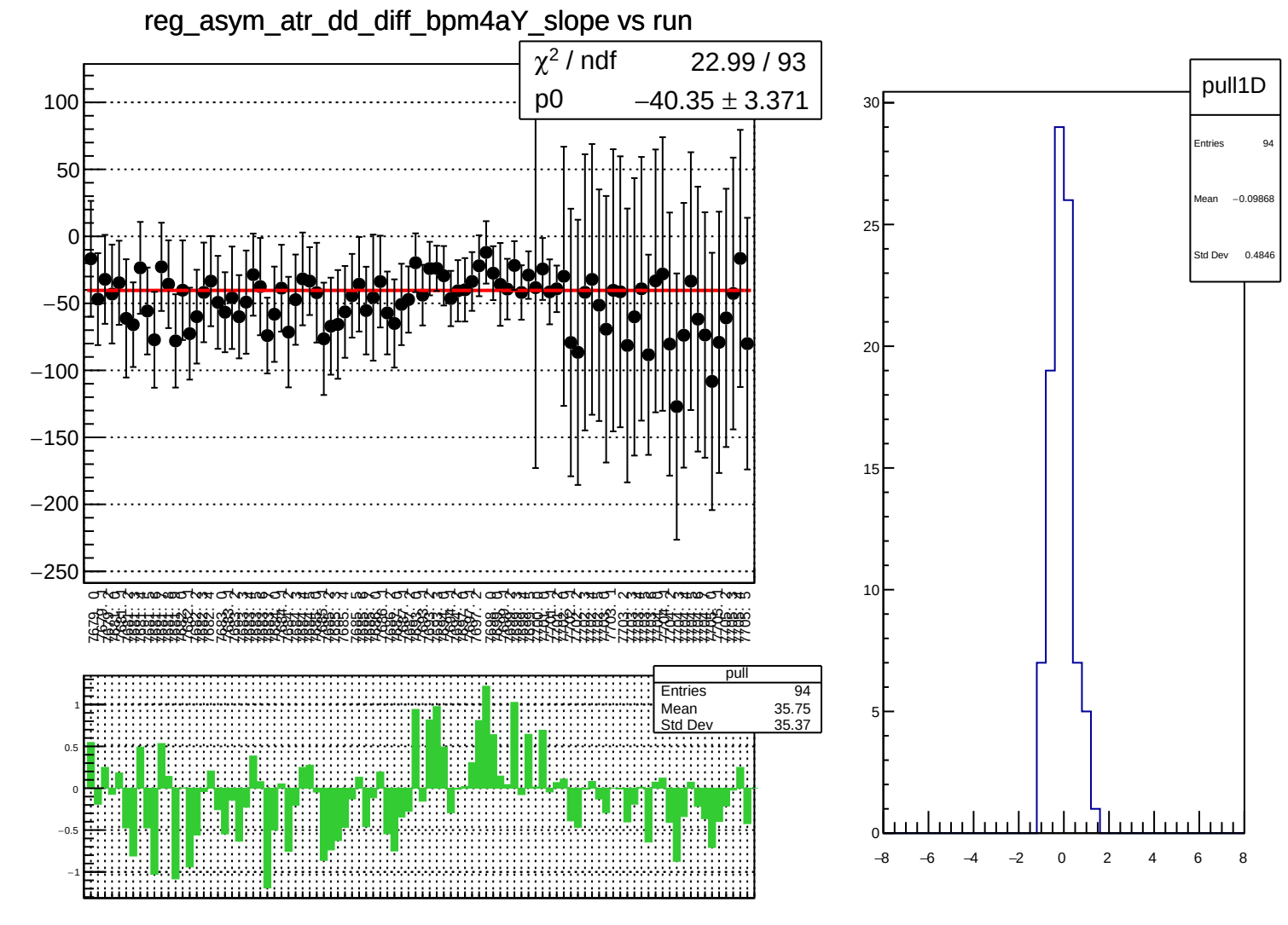

pull1D
Entries 94
Mean 0.08655
Std Dev 0.412

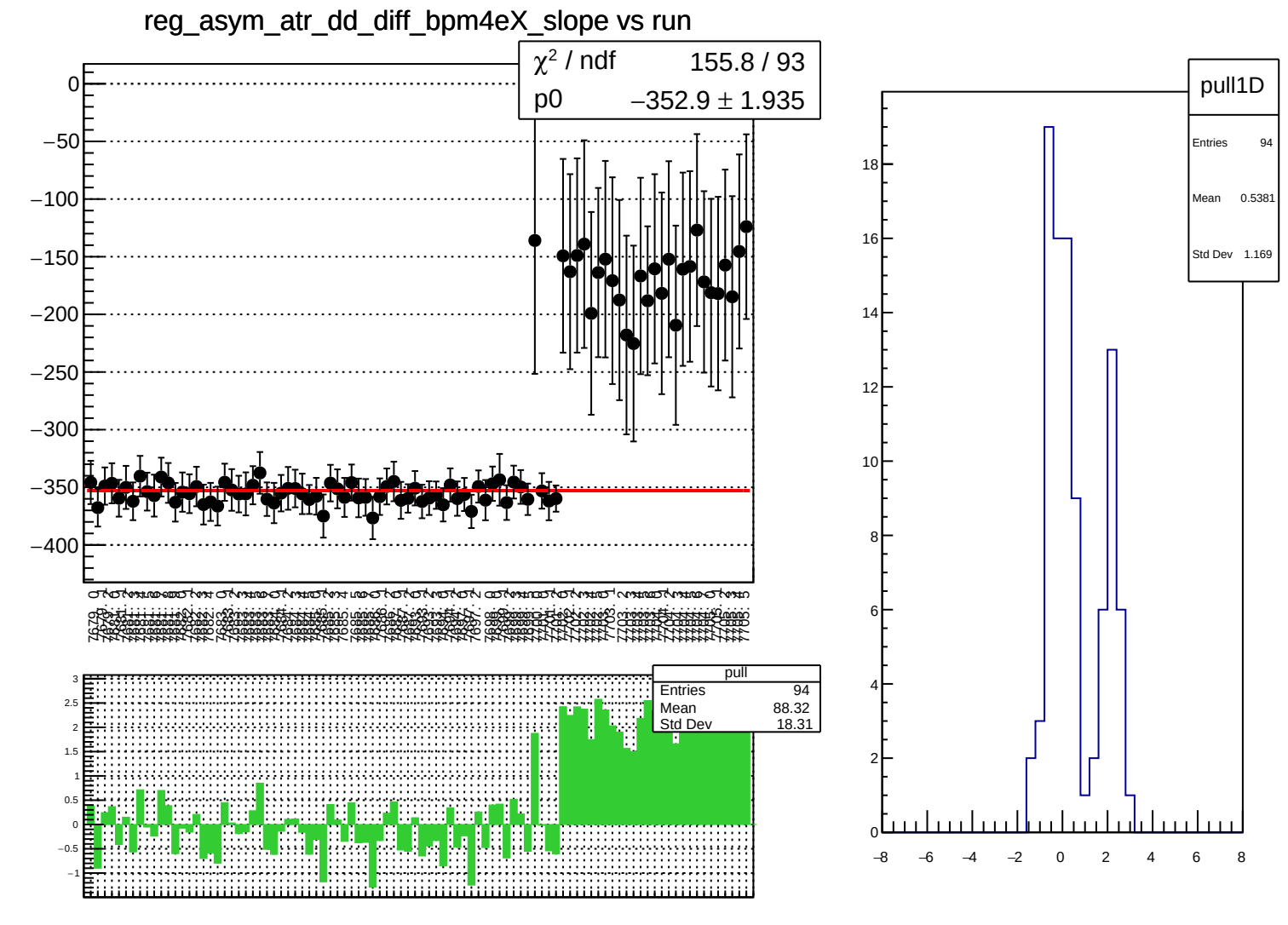

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 329.9 / 93
p0 440.3 ± 2.44
pull
Entries 94
Mean 104.9
Std Dev 45.68
pull1D
Entries 94
Mean −0.7024
Std Dev 1.737

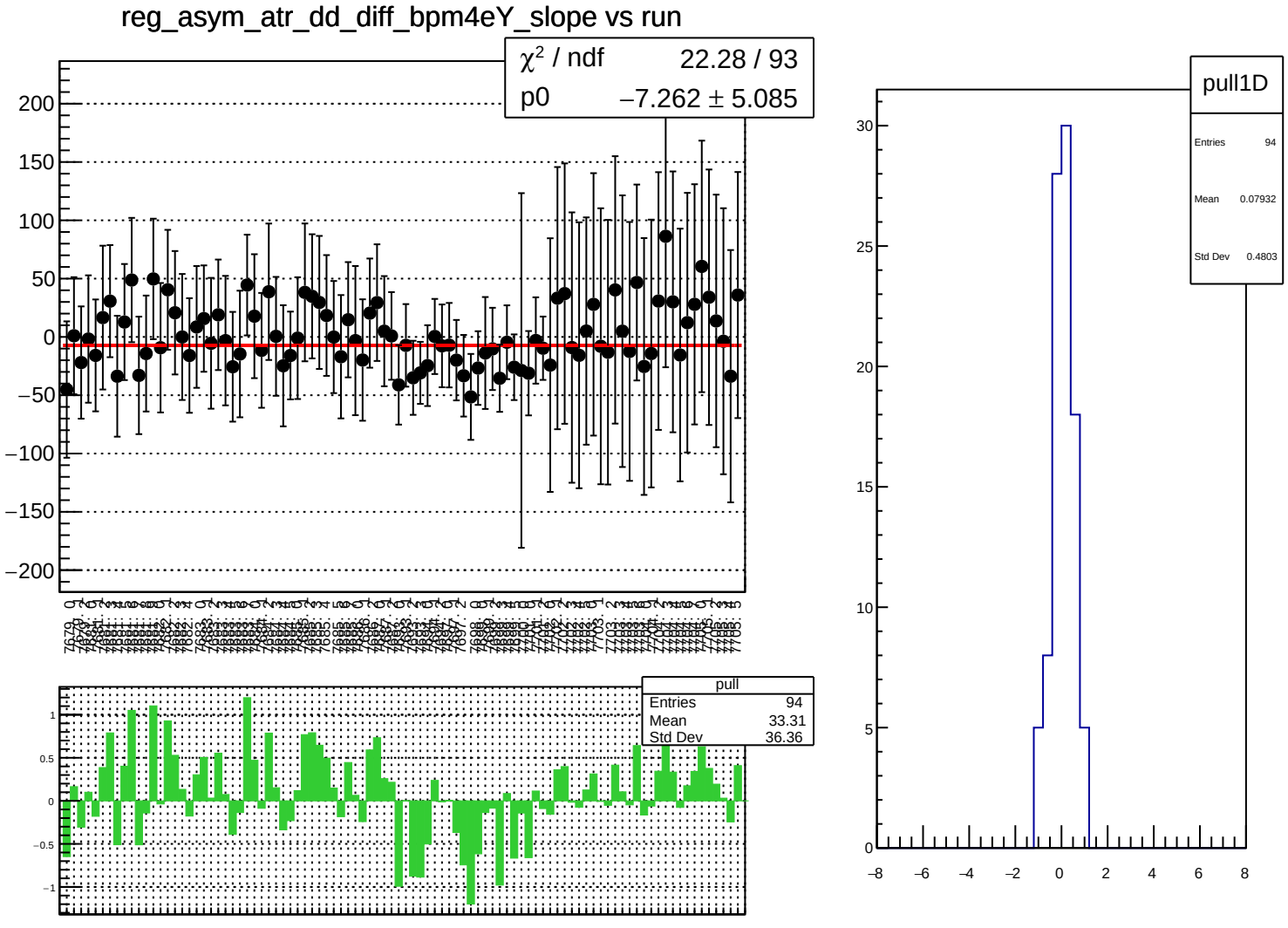

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 15.86 / 93
p0 17.01 ± 6.324
150
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean 55.83
Std Dev 38.19
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 94
Mean −0.07368
Std Dev 0.404
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

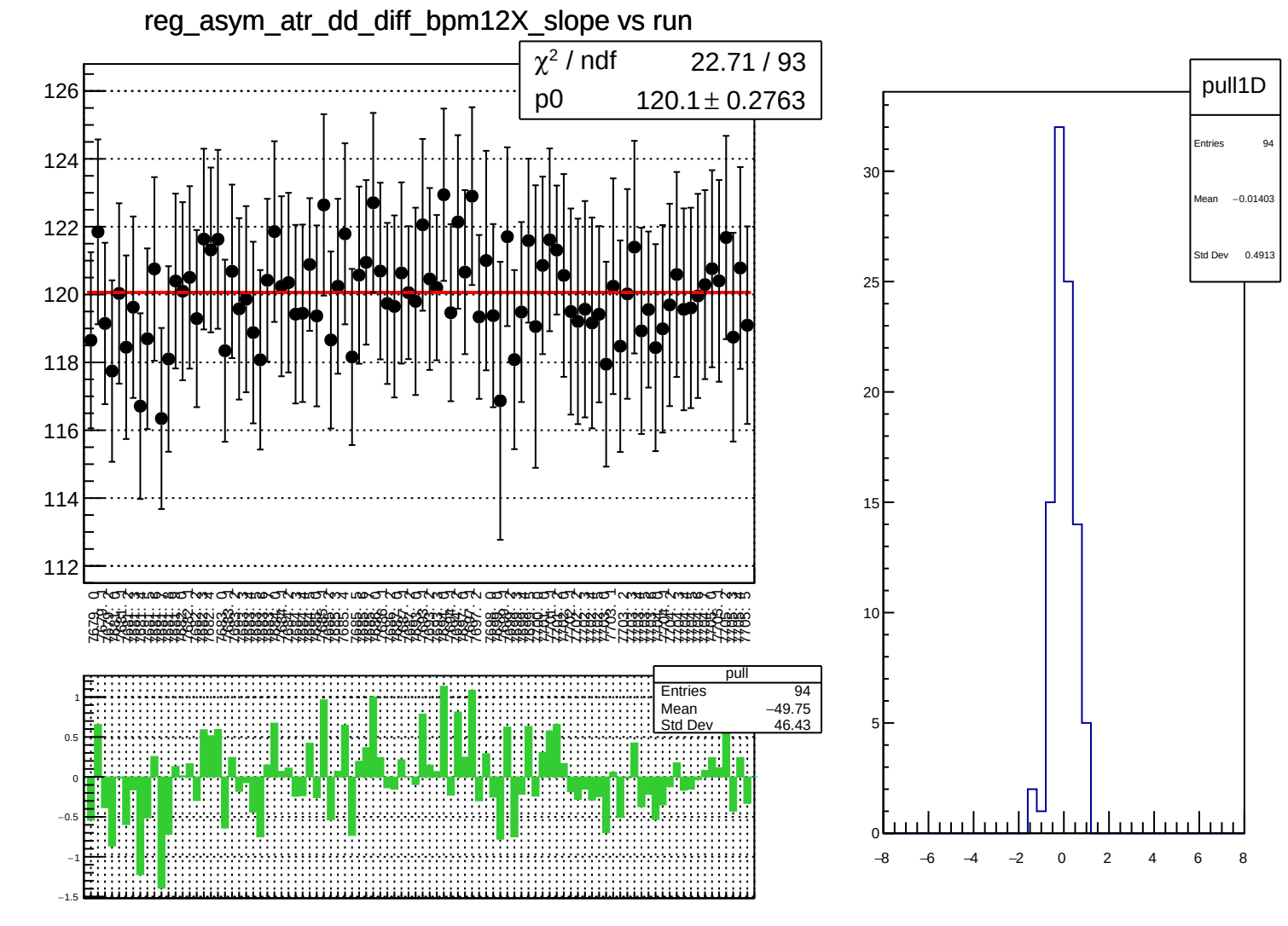

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 1821 / 93
p0 −177 ± 0.3312
−150
−160
−170
−180
−190
pull
Entries 94
Mean −886.8
Std Dev 938
8
6
4
2
0
−2
−4
pull1D
Entries 94
Mean −0.2109
Std Dev 4.319
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

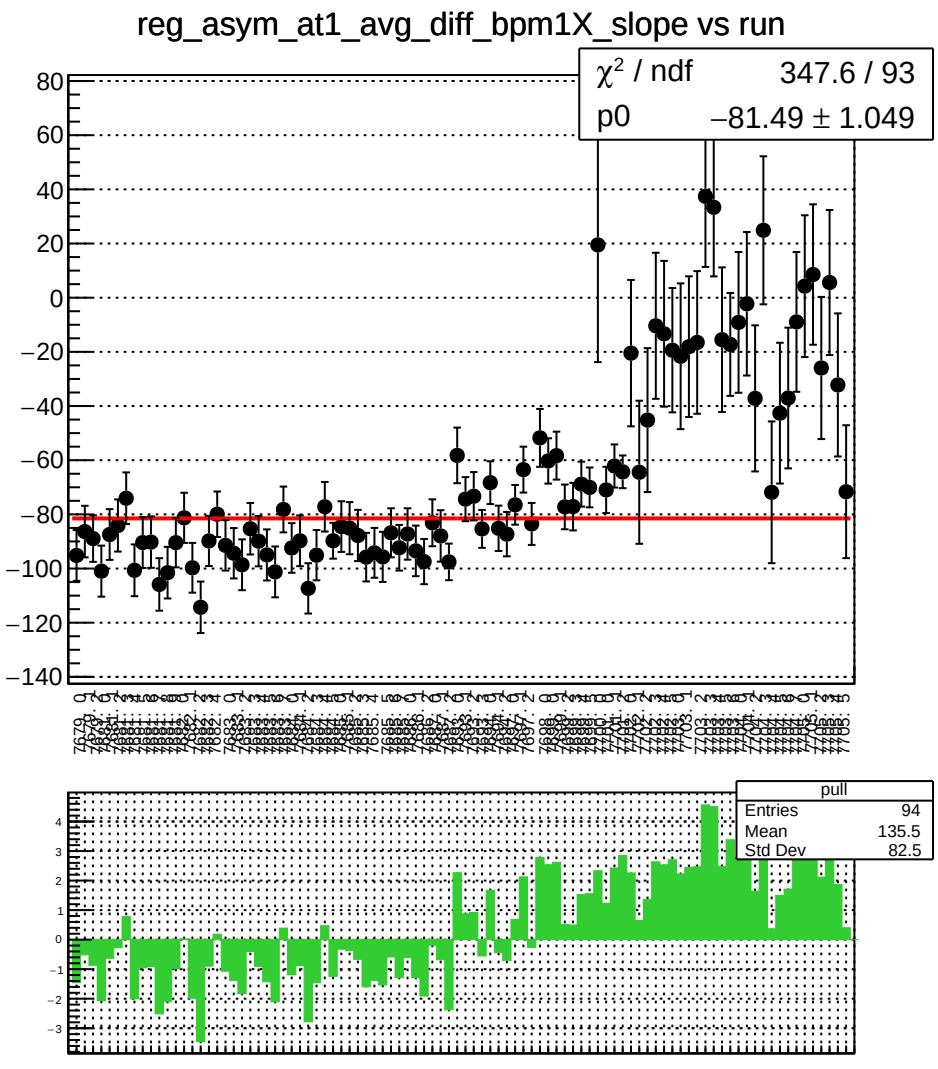

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 148.8 / 93
p0 286.9 ± 2.41
pull
Entries 94
Mean 90.3
Std Dev 21.53
pull1D
Entries 94
Mean −0.5048
Std Dev 1.152

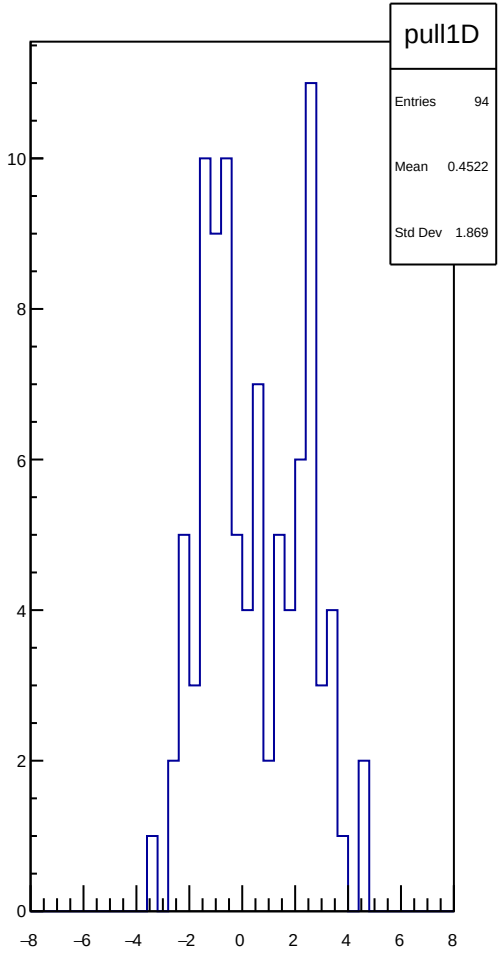

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 22.99 / 93
p0 −40.35 ± 3.371
pull
Entries 94
Mean 35.75
Std Dev 35.37
pull1D
Entries 94
Mean −0.09868
Std Dev 0.4846

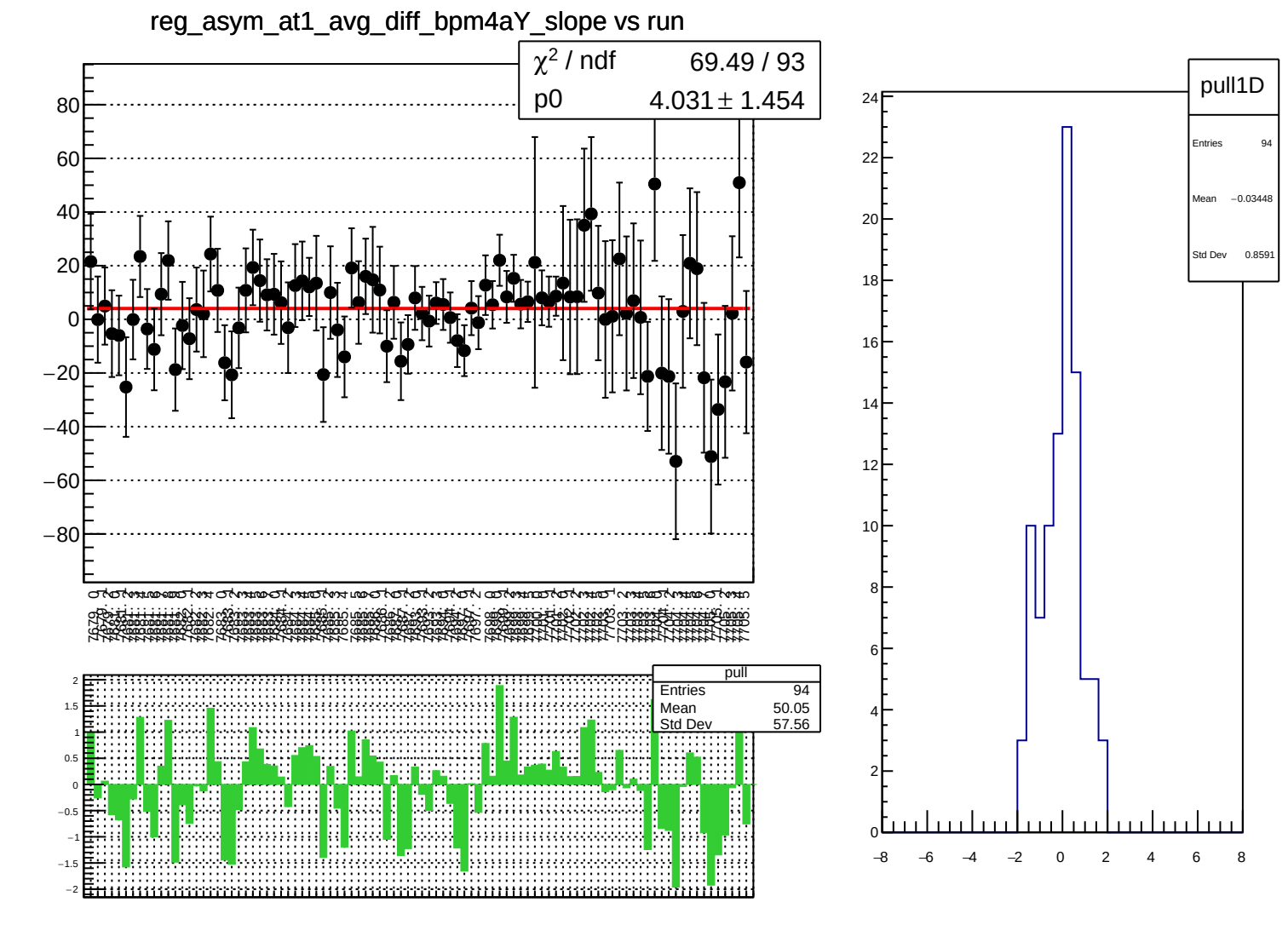

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 155.8 / 93
p0 −352.9 ± 1.935
pull
Entries 94
Mean 88.32
Std Dev 18.31
pull1D
Entries 94
Mean 0.5381
Std Dev 1.169

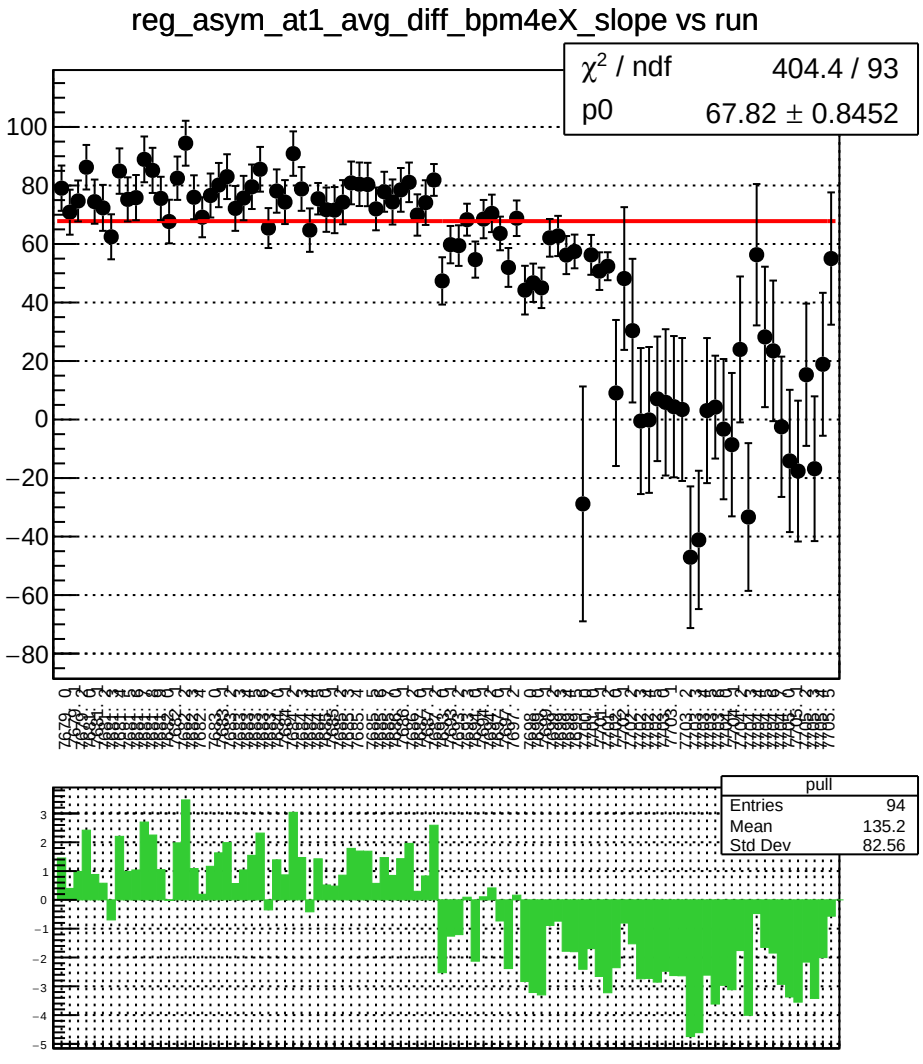

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 22.28 / 93
p0 −7.262 ± 5.085
pull
Entries 94
Mean 33.31
Std Dev 36.36
pull1D
Entries 94
Mean 0.07932
Std Dev 0.4803

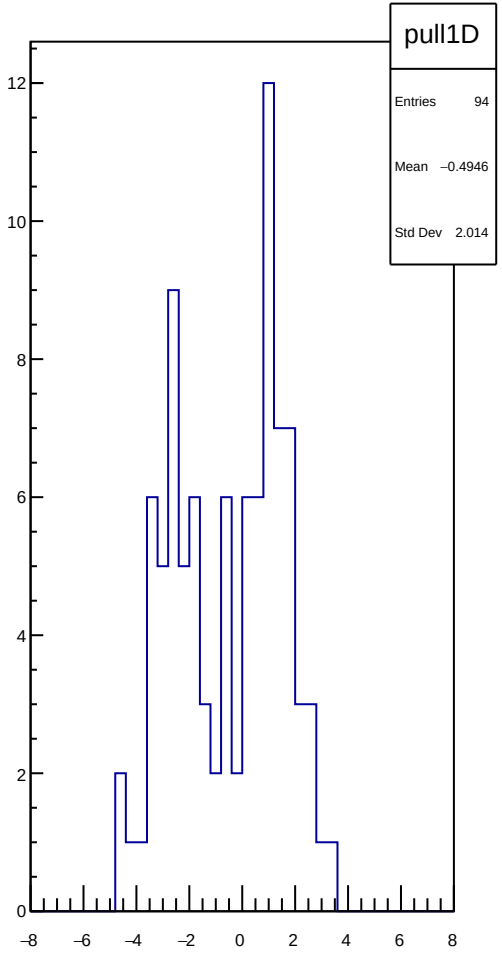

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 22.71 / 93
p0 120.1 ± 0.2763
126
124
122
120
118
116
114
112
pull
Entries 94
Mean −49.75
Std Dev 46.43
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 94
Mean −0.01403
Std Dev 0.4913
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

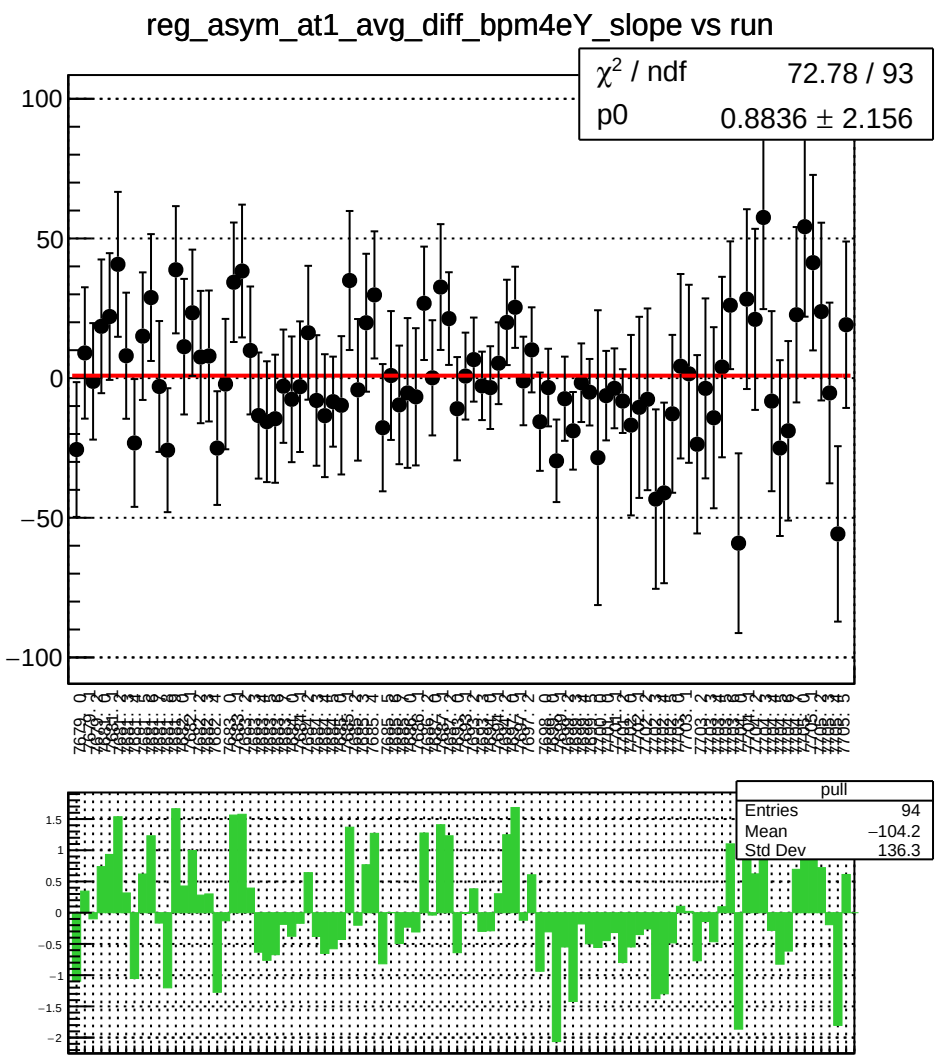

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 347.6 / 93
p0 −81.49 ± 1.049
pull
Entries 94
Mean 135.5
Std Dev 82.5

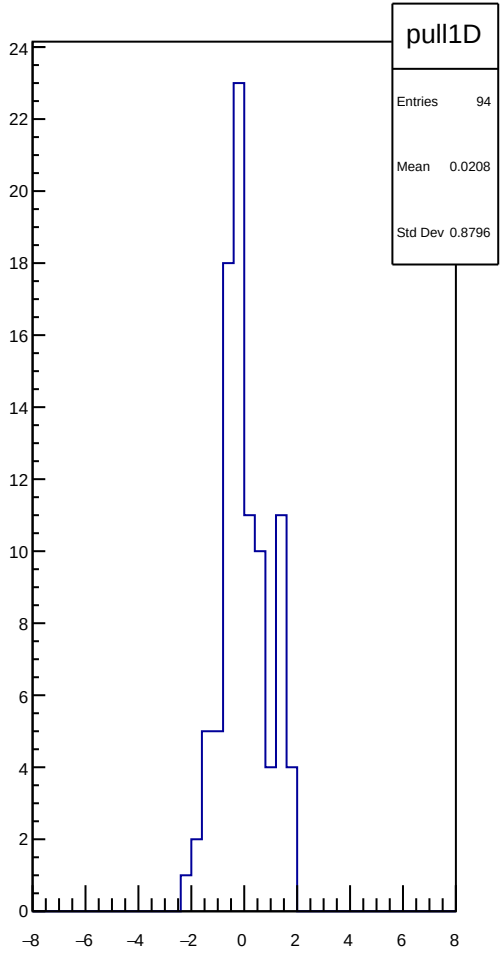

pull1D
Entries 94
Mean 0.4522
Std Dev 1.869

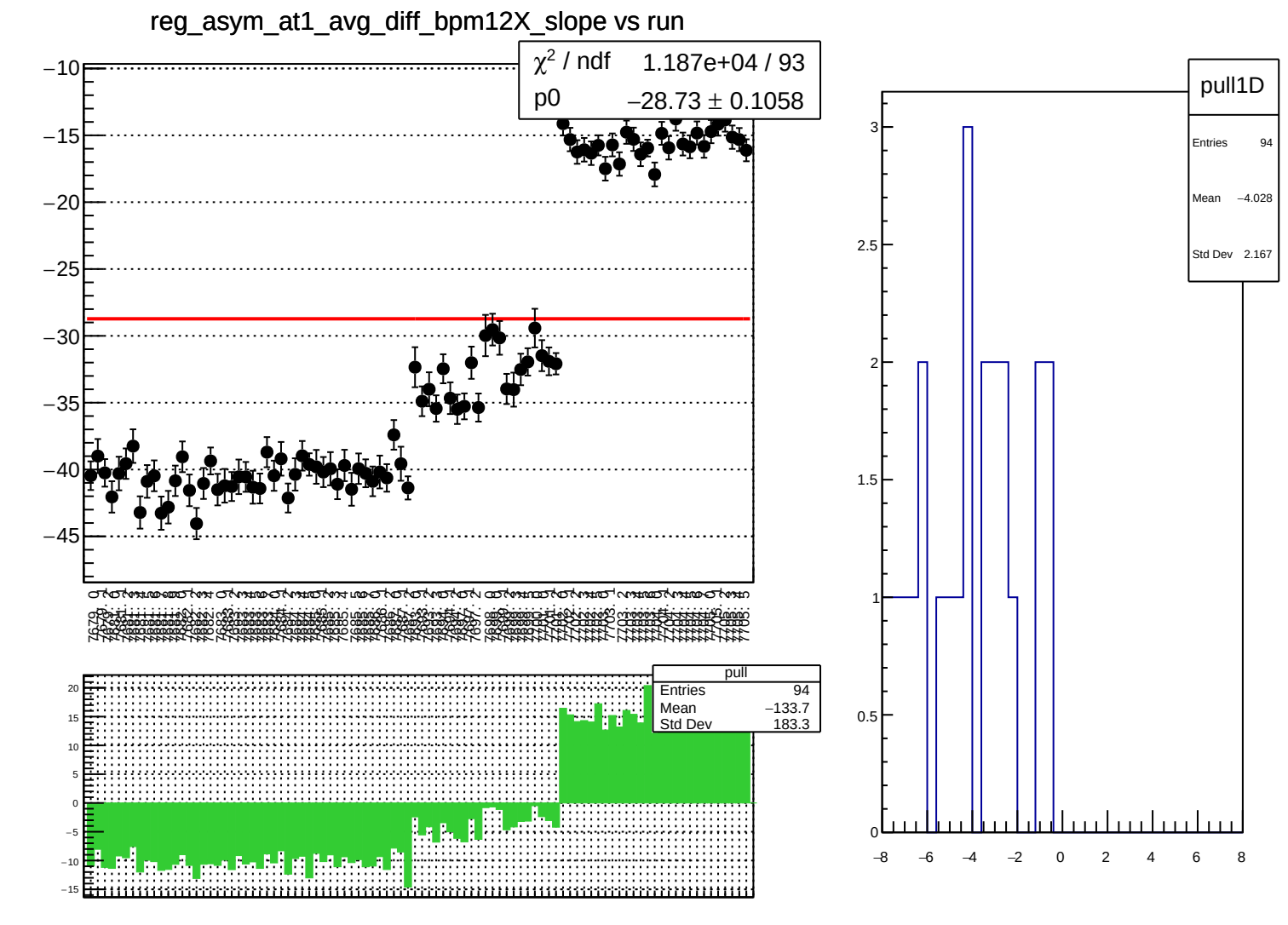

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 69.49 / 93
p0 4.031 ± 1.454
pull
Entries 94
Mean 50.05
Std Dev 57.56
pull1D
Entries 94
Mean −0.03448
Std Dev 0.8591

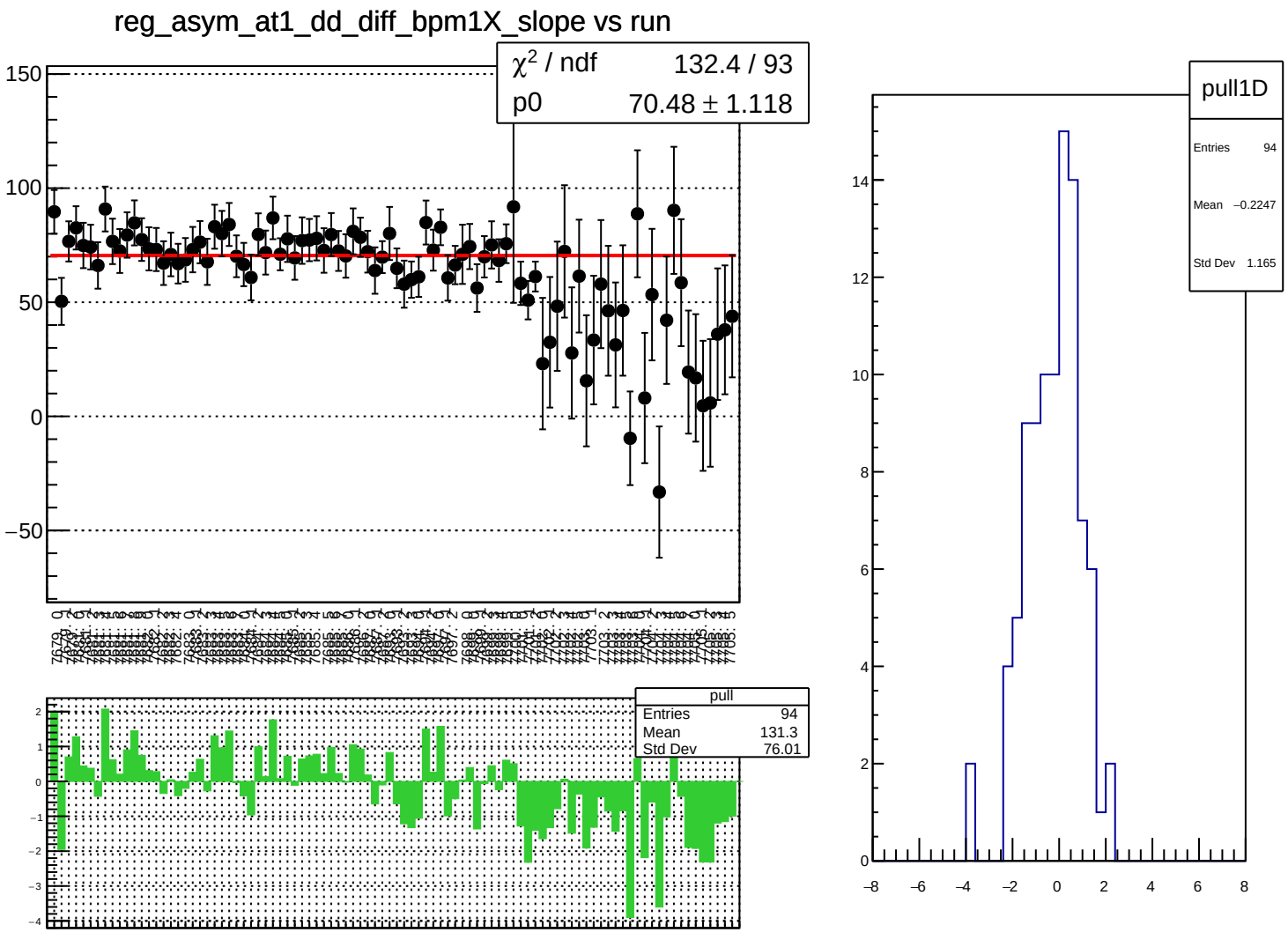

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 404.4 / 93
p0 67.82 ± 0.8452
pull
Entries 94
Mean 135.2
Std Dev 82.56

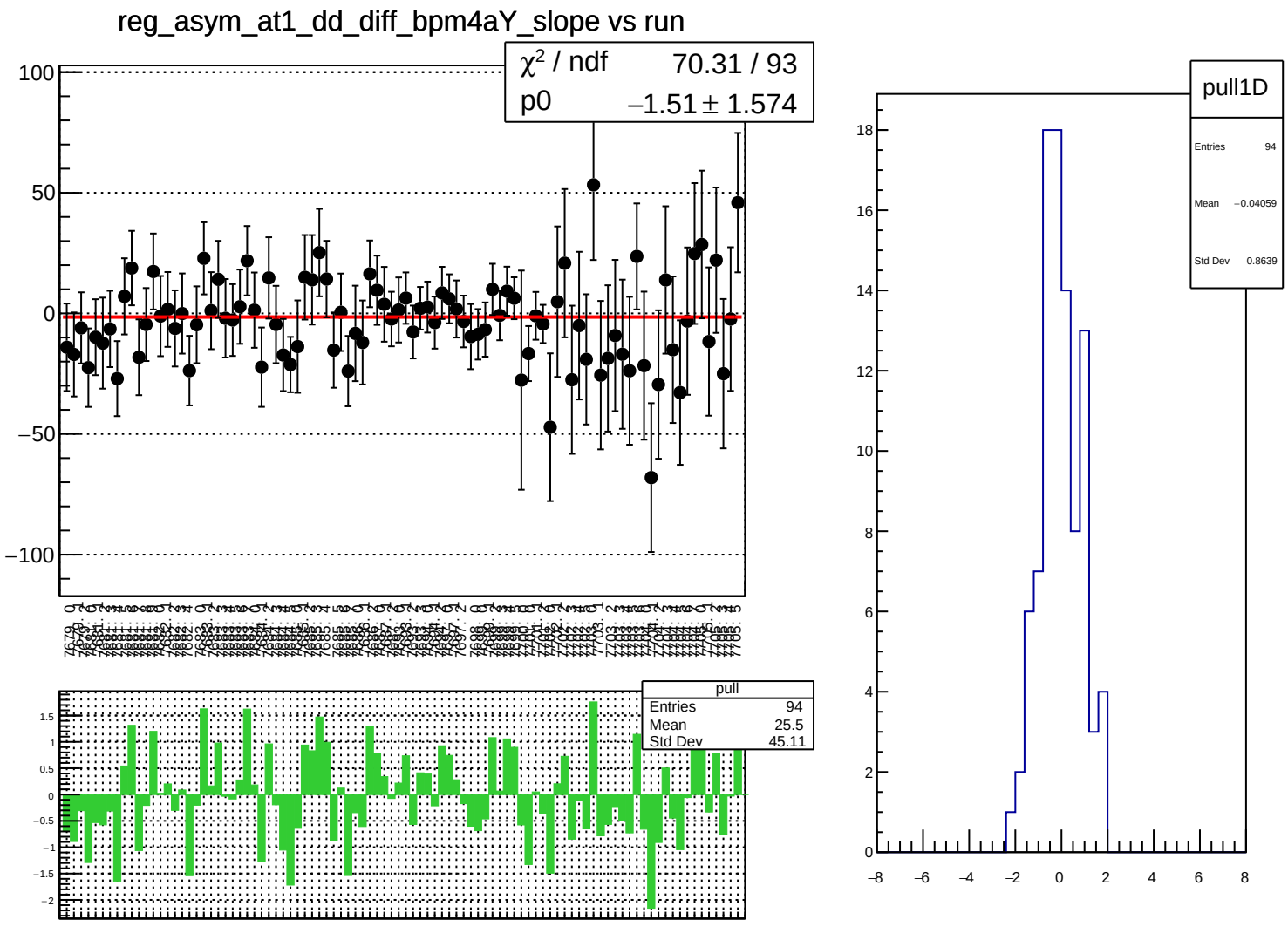

pull1D
Entries 94
Mean −0.4946
Std Dev 2.014

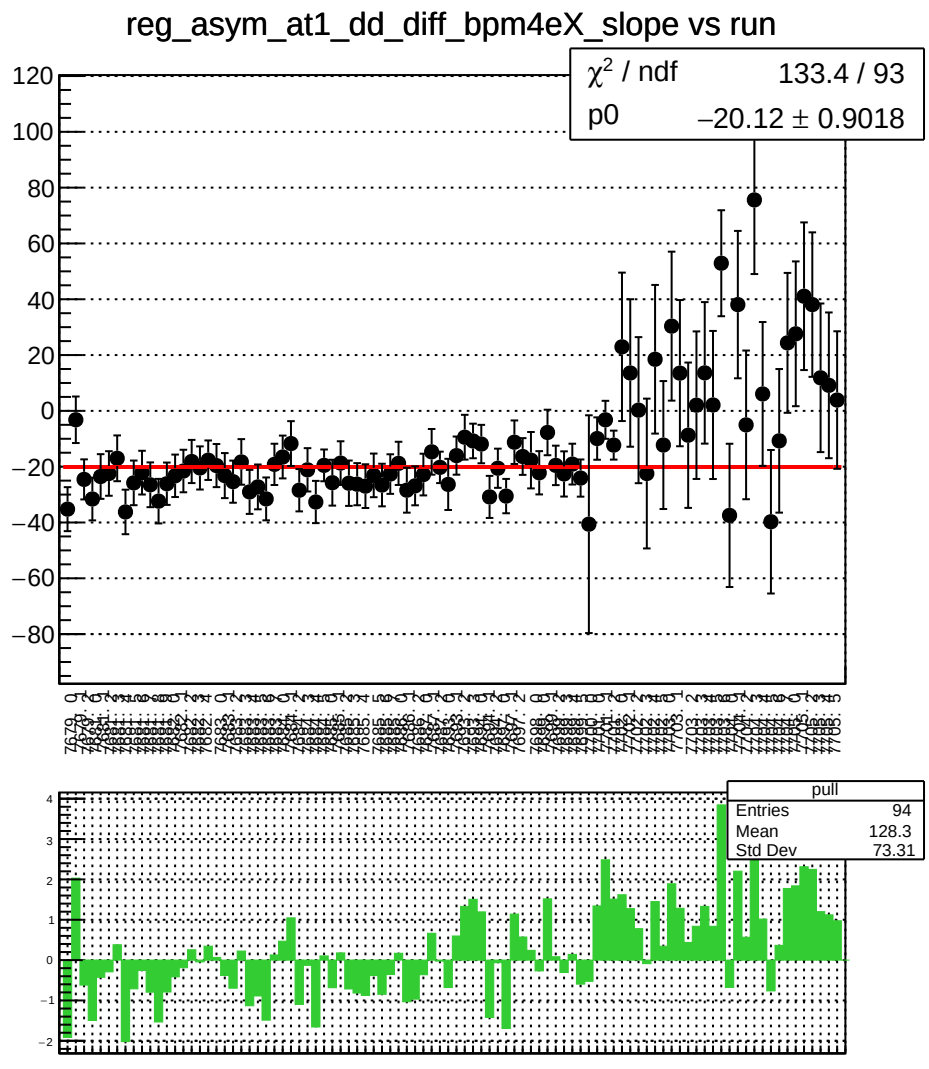

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 72.78 / 93
p0 0.8836 ± 2.156
100
50
0
−50
−100
pull
Entries 94
Mean −104.2
Std Dev 136.3
1.5
1
0.5
0
−0.5
−1
−1.5
−2

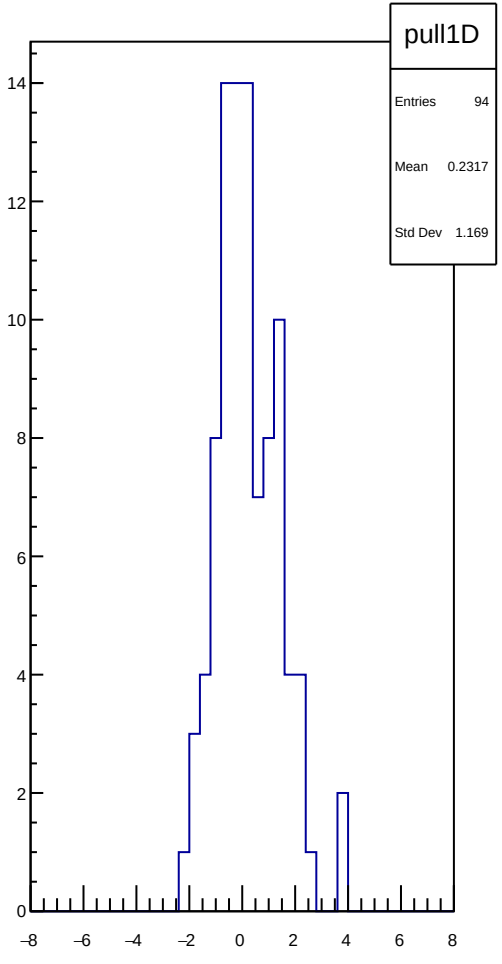

pull1D
Entries 94
Mean 0.0208
Std Dev 0.8796
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

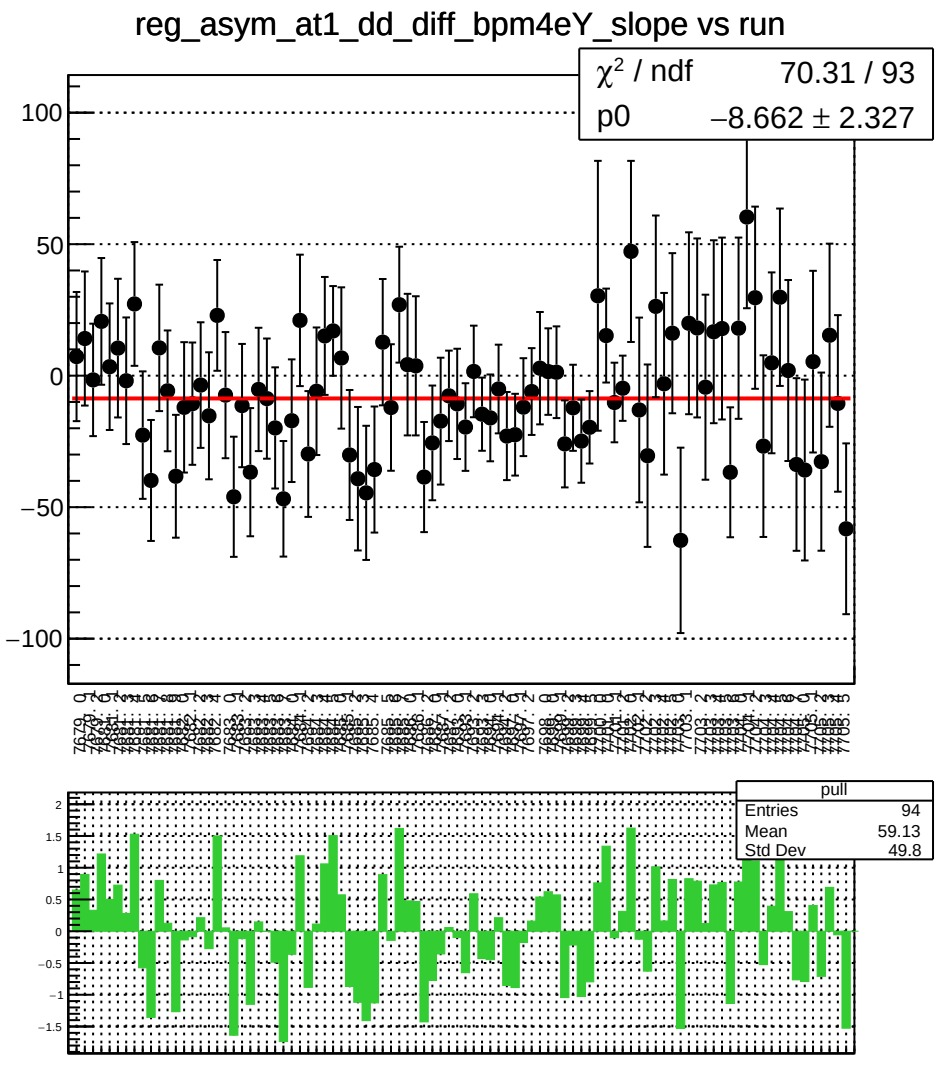

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 1.187e+04 / 93
p0 −28.73 ± 0.1058
pull
Entries 94
Mean −133.7
Std Dev 183.3
pull1D
Entries 94
Mean −4.028
Std Dev 2.167

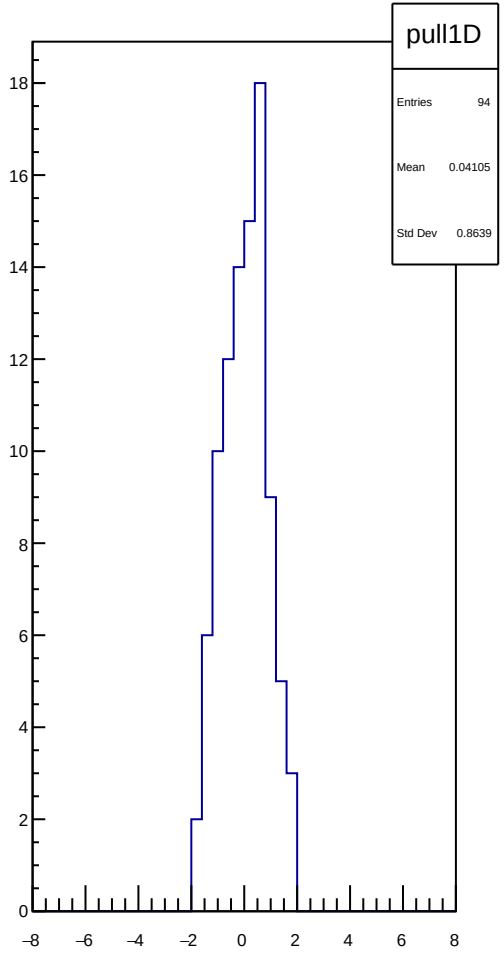

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 132.4 / 93
p0 70.48 ± 1.118
150
100
50
0
−50
pull
Entries 94
Mean 131.3
Std Dev 76.01
2
1
0
−1
−2
−3
−4
pull1D
Entries 94
Mean −0.2247
Std Dev 1.165
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

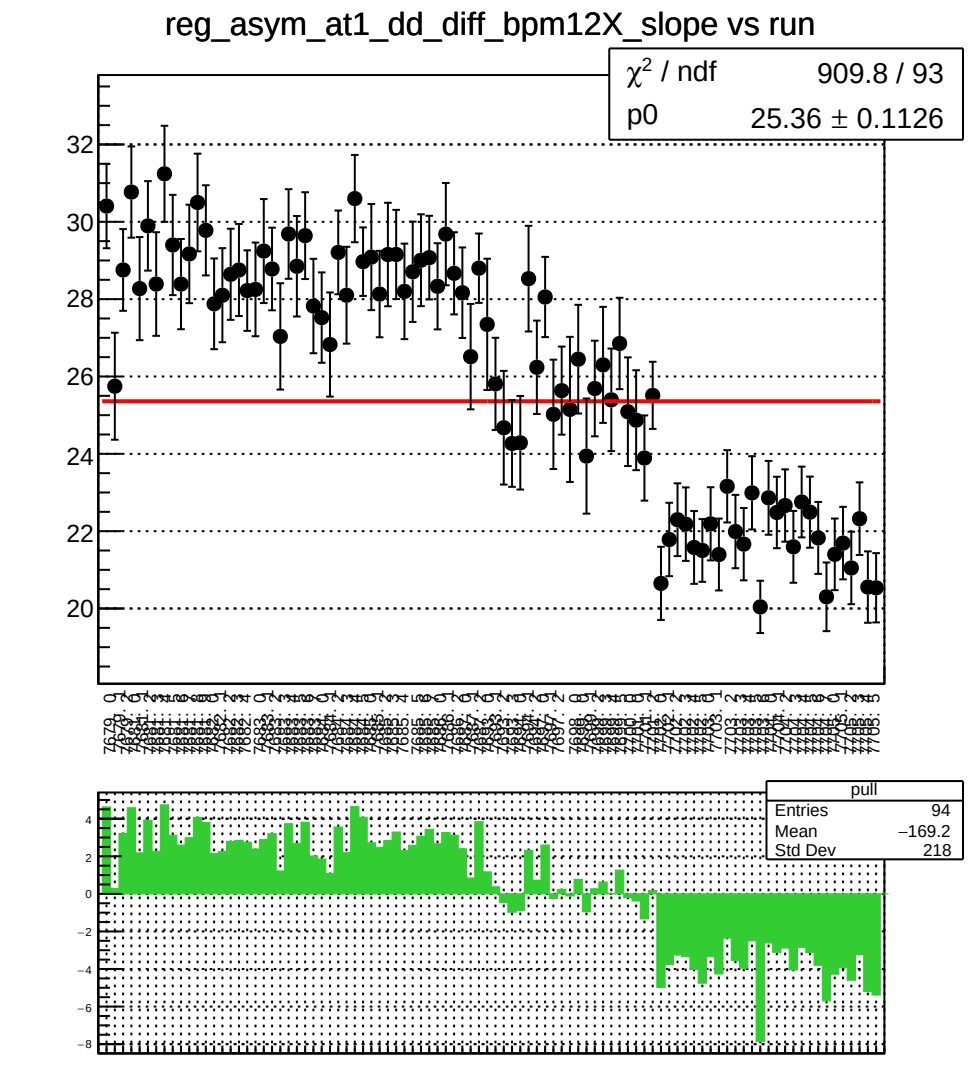

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 70.31 / 93
p0 −1.51 ± 1.574
100
50
0
−50
−100
pull
Entries 94
Mean 25.5
Std Dev 45.11
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 94
Mean −0.04059
Std Dev 0.8639
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

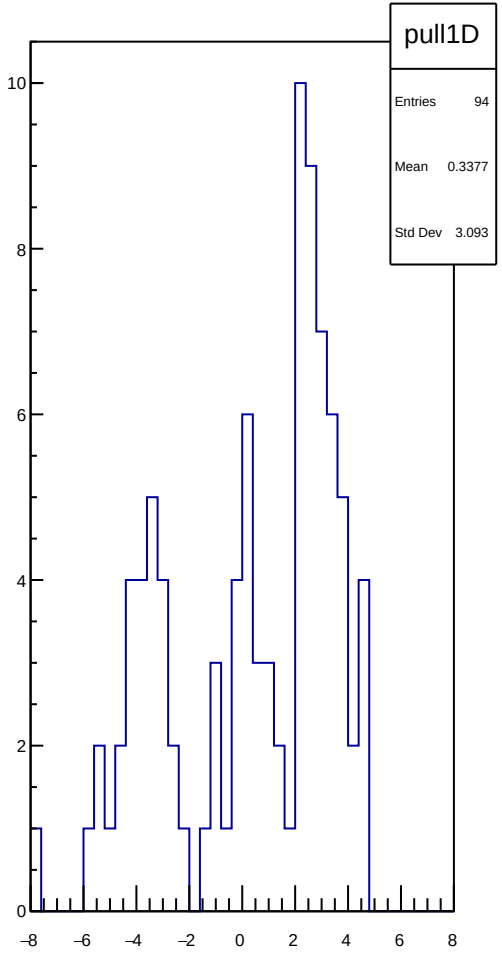

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 133.4 / 93
p0 −20.12 ± 0.9018
pull
Entries 94
Mean 128.3
Std Dev 73.31

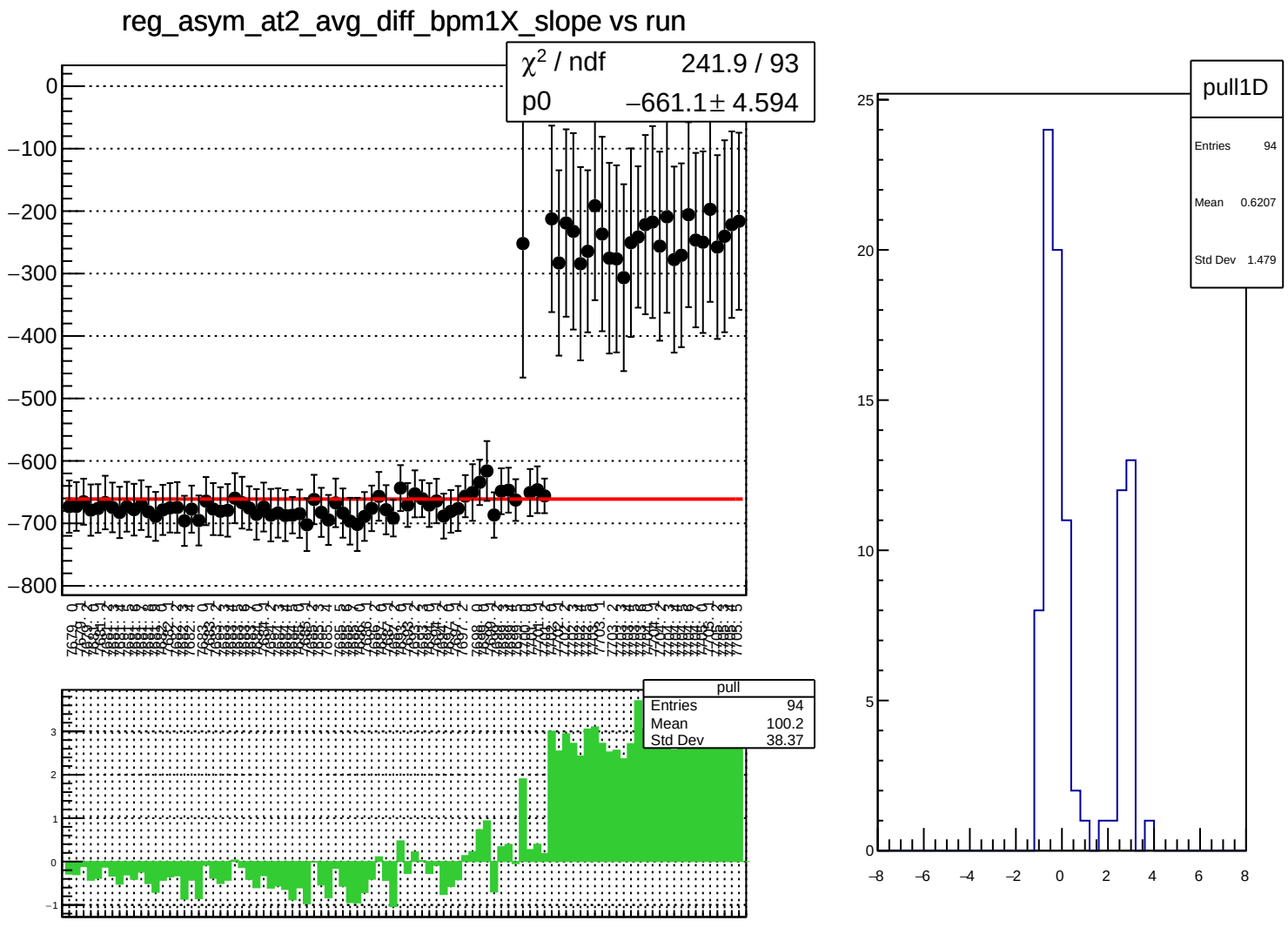

pull1D
Entries 94
Mean 0.2317
Std Dev 1.169

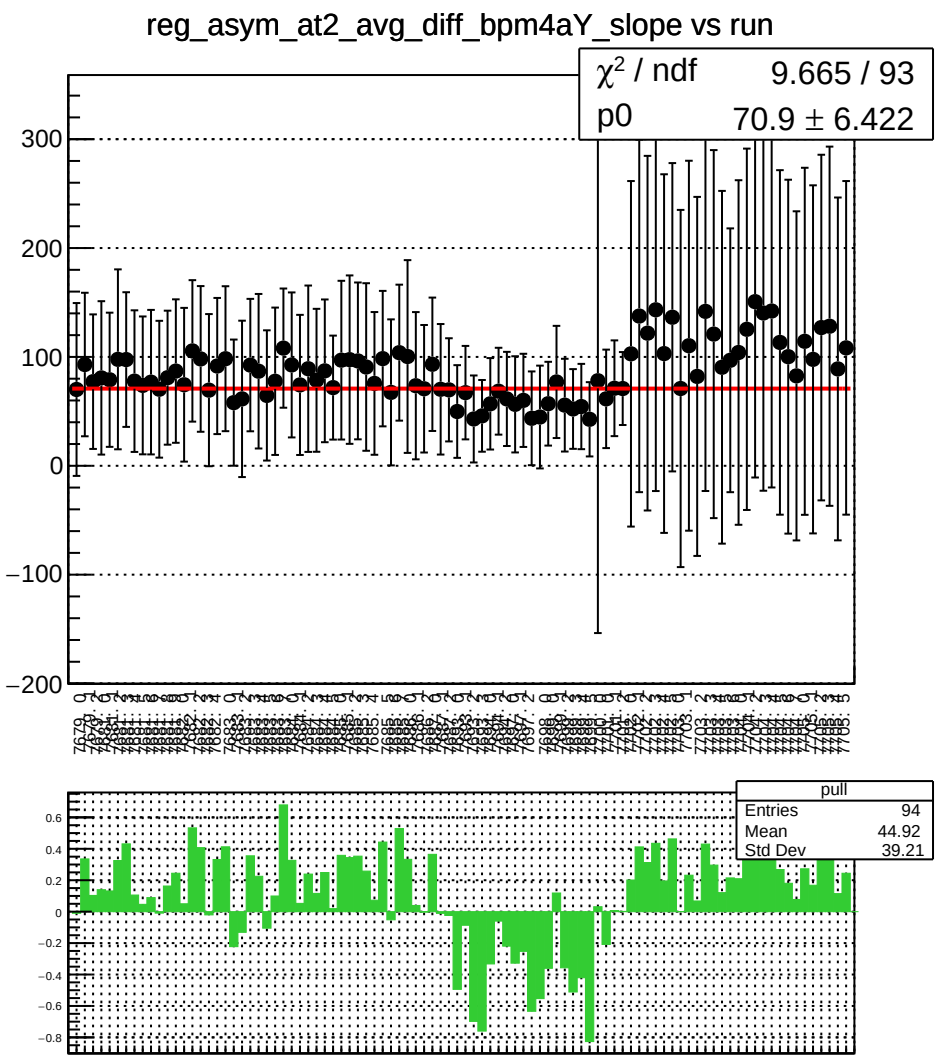

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 70.31 / 93
p0 −8.662 ± 2.327
100
50
0
−50
−100
pull
Entries 94
Mean 59.13
Std Dev 49.8
2
1.5
1
0.5
0
−0.5
−1
−1.5

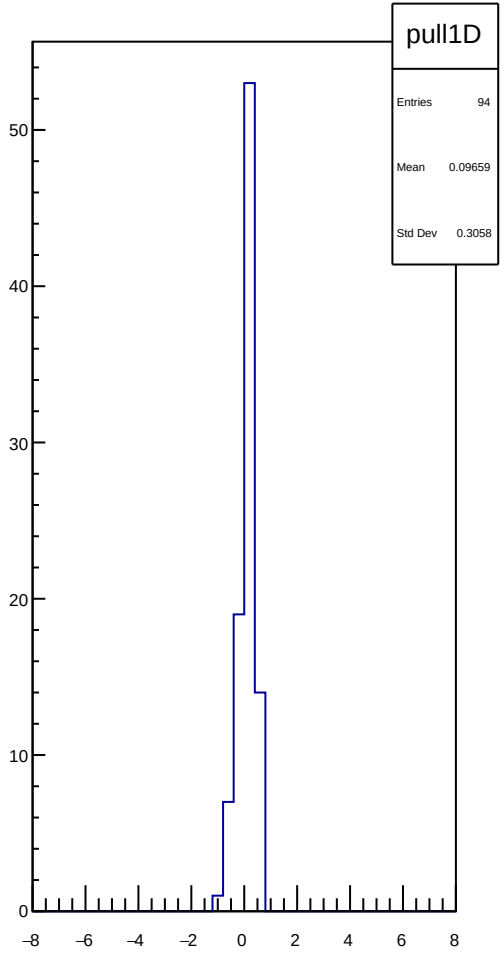

pull1D
Entries 94
Mean 0.04105
Std Dev 0.8639
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

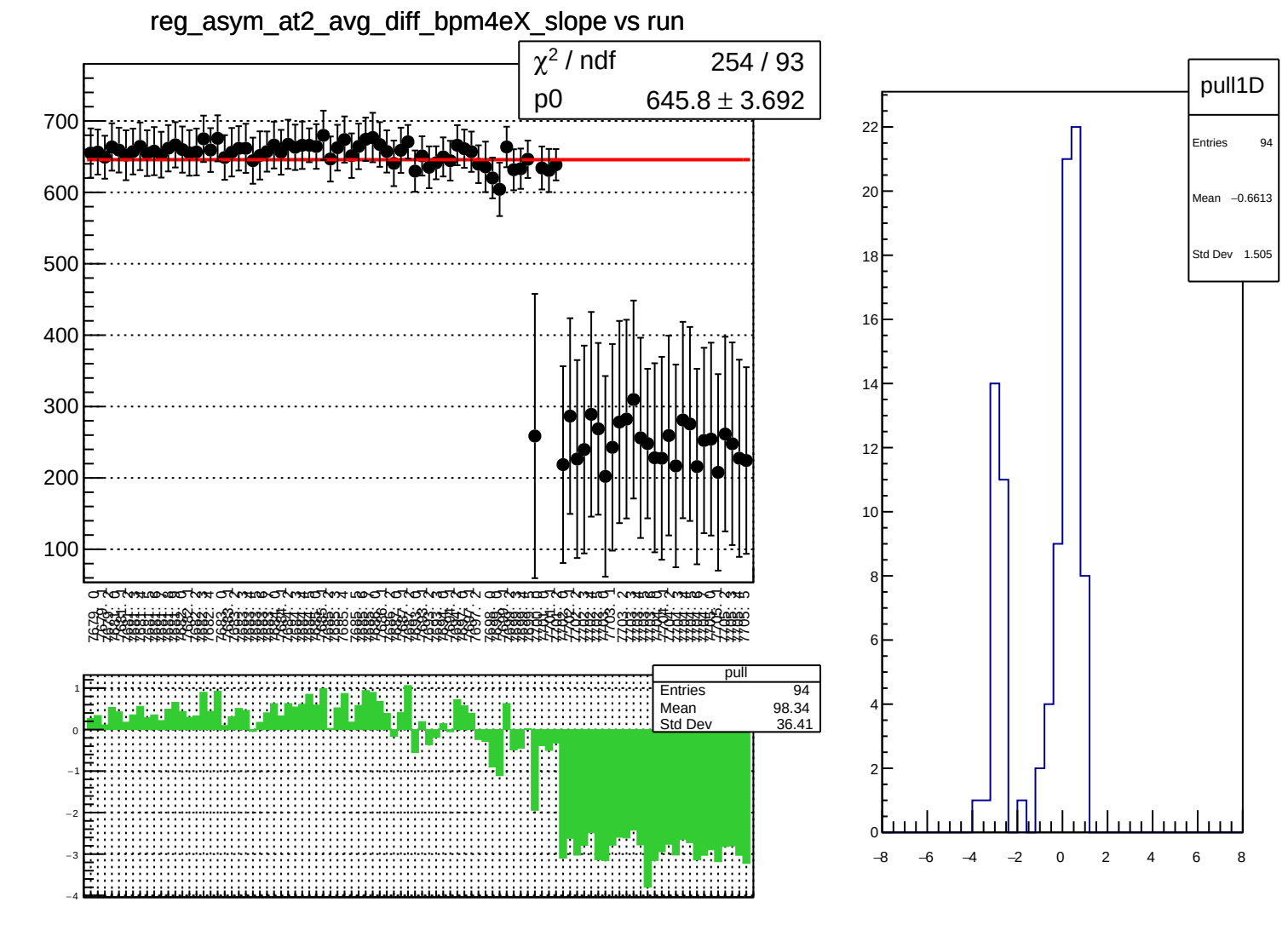

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 909.8 / 93
p0 25.36 ± 0.1126
pull
Entries 94
Mean −169.2
Std Dev 218

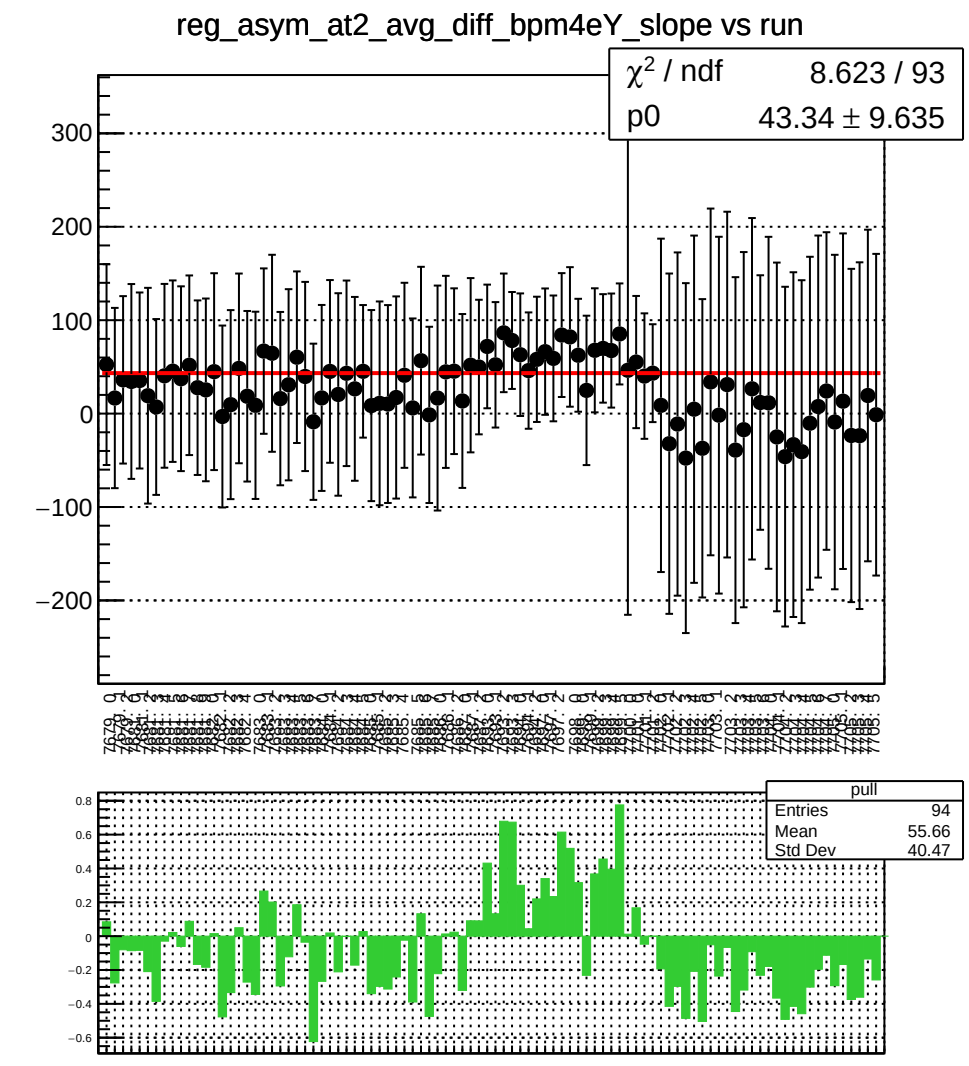

pull1D
Entries 94
Mean 0.3377
Std Dev 3.093

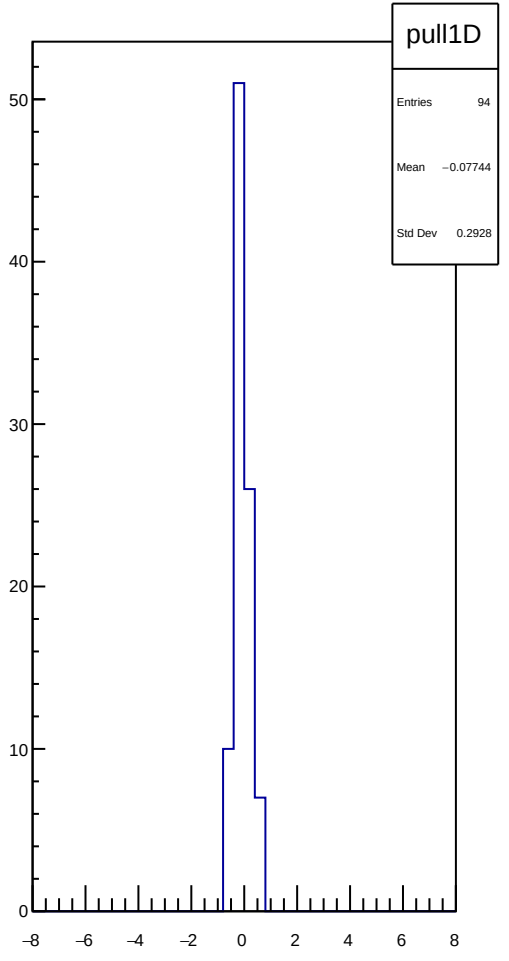

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 241.9 / 93
p0 −661.1 ± 4.594
0
−100
−200
−300
−400
−500
−600
−700
−800
pull
Entries 94
Mean 100.2
Std Dev 38.37
3
2
1
0
−1
pull1D
Entries 94
Mean 0.6207
Std Dev 1.479
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

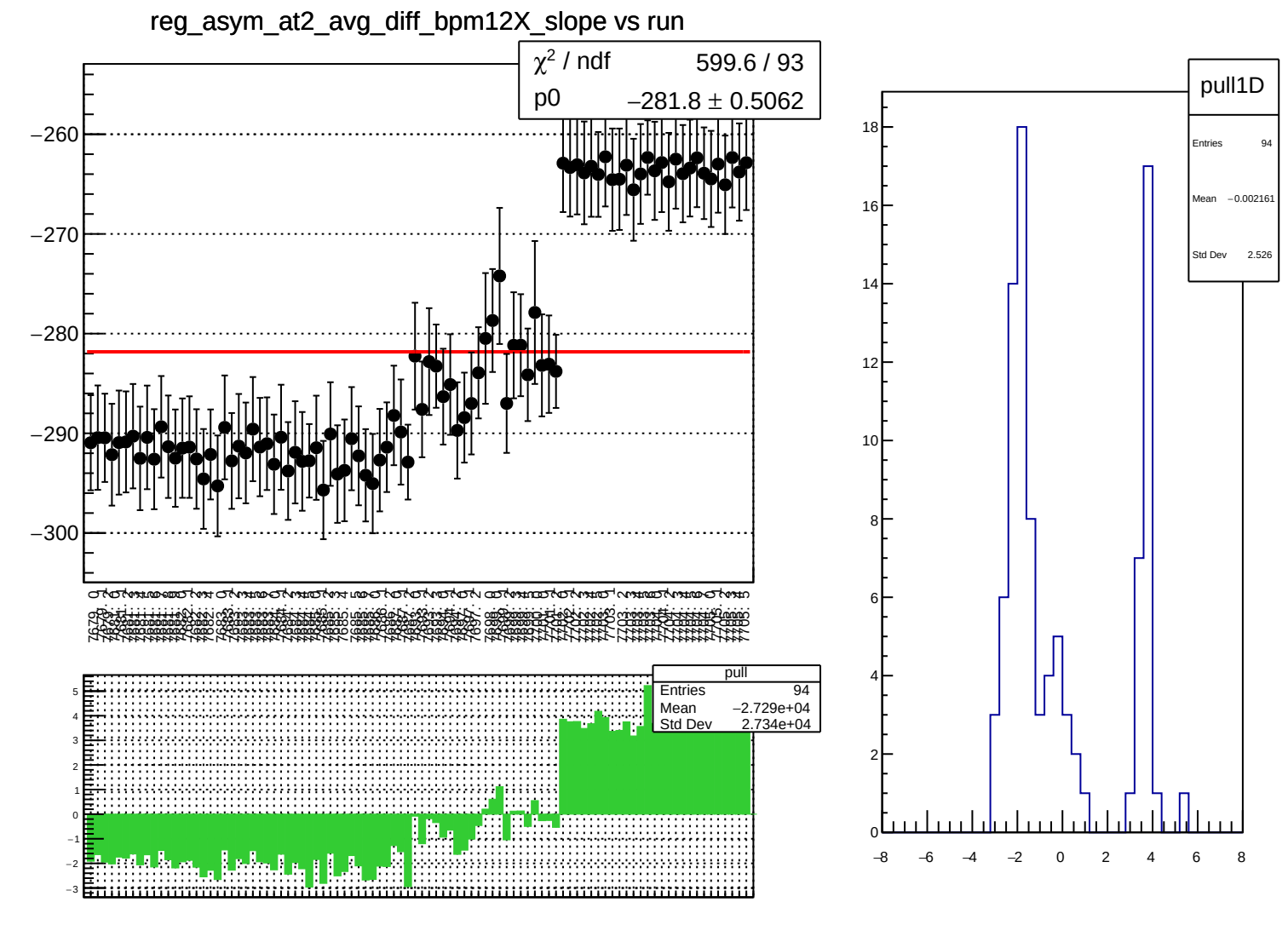

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.665 / 93
p0 70.9 ± 6.422
300
200
100
0
−100
−200
pull
Entries 94
Mean 44.92
Std Dev 39.21
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

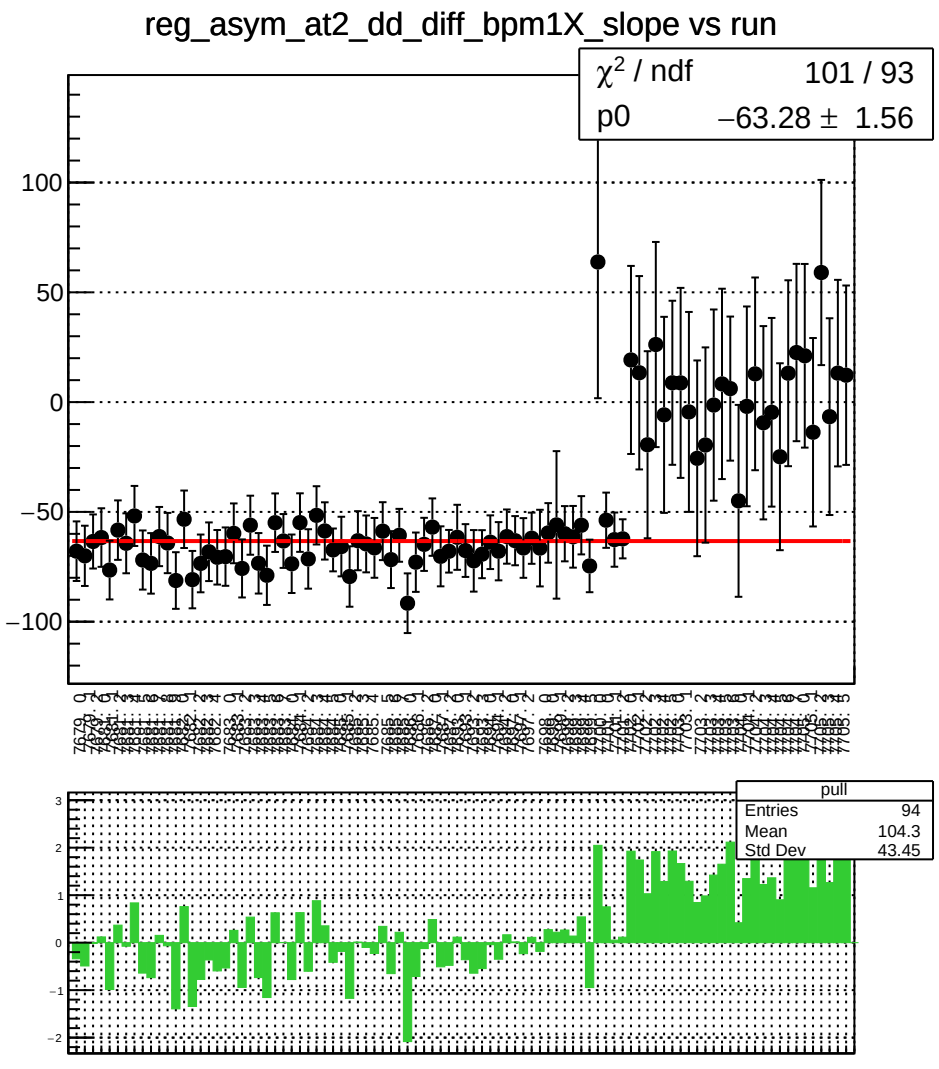

pull1D
Entries 94
Mean 0.09659
Std Dev 0.3058
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

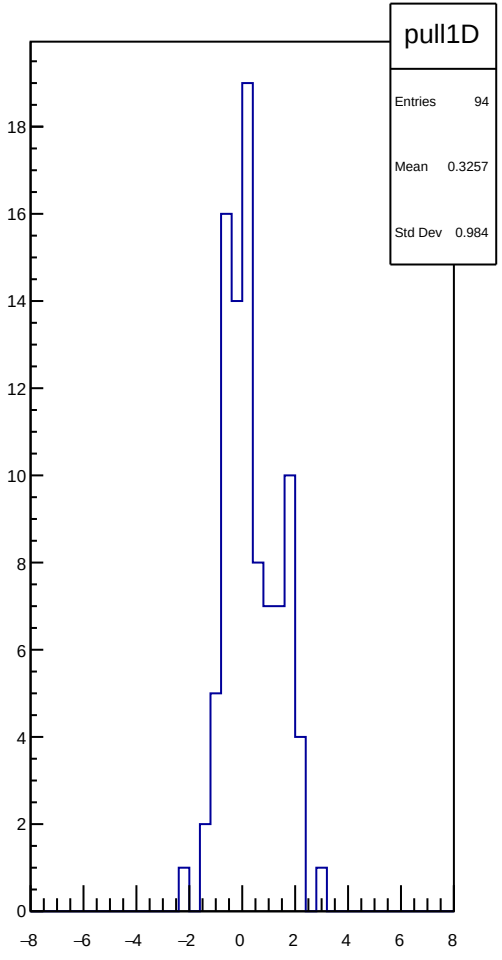

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 254 / 93
p0 645.8 ± 3.692
700
600
500
400
300
200
100
pull
Entries 94
Mean 98.34
Std Dev 36.41
1
0
−1
−2
−3
−4
pull1D
Entries 94
Mean −0.6613
Std Dev 1.505
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

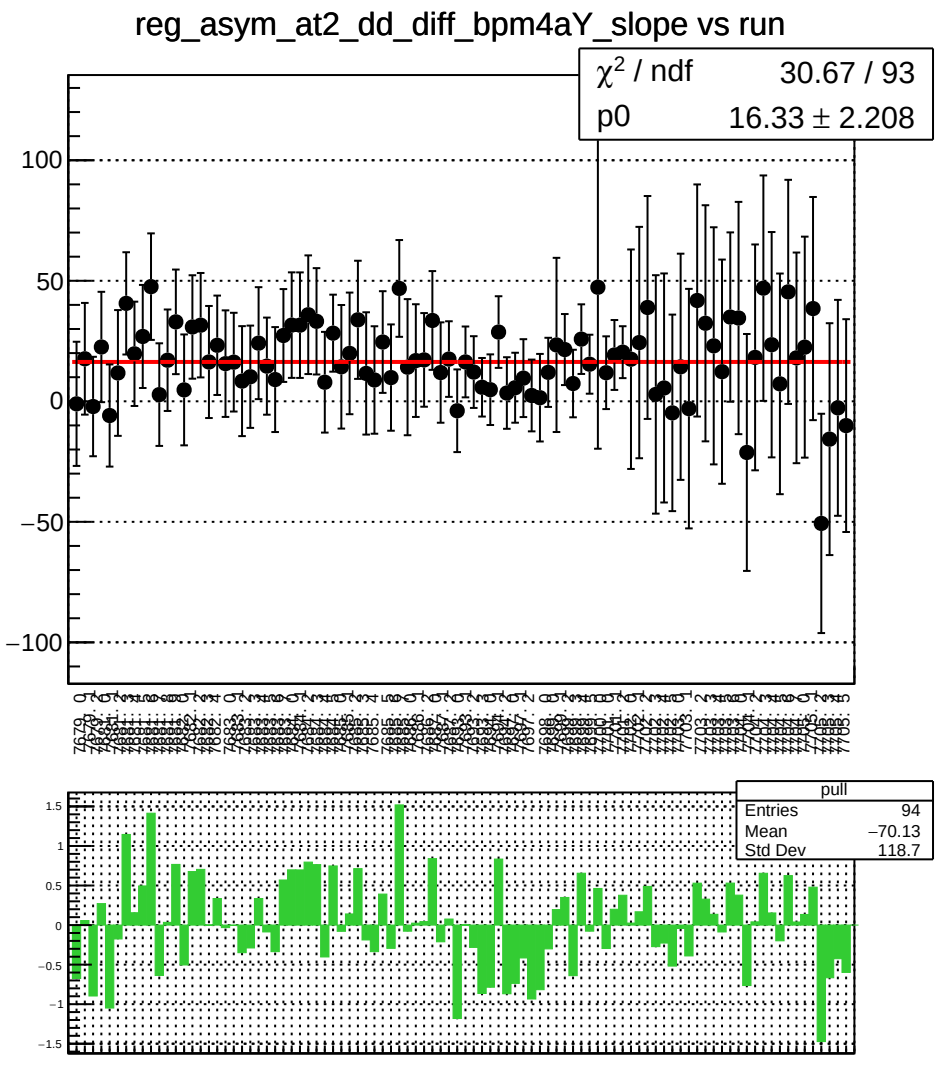

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 8.623 / 93
p0 43.34 ± 9.635
300
200
100
0
−100
−200
pull
Entries 94
Mean 55.66
Std Dev 40.47
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

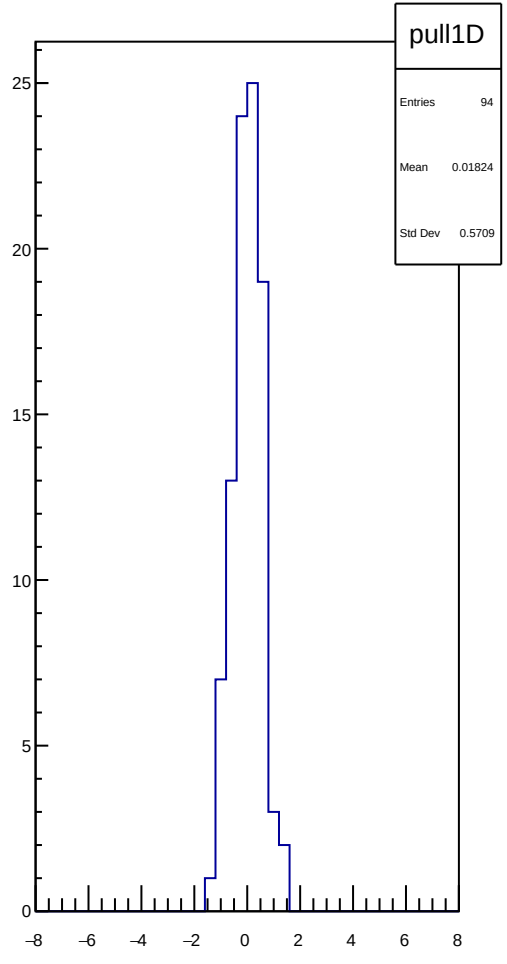

pull1D
Entries 94
Mean −0.07744
Std Dev 0.2928
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

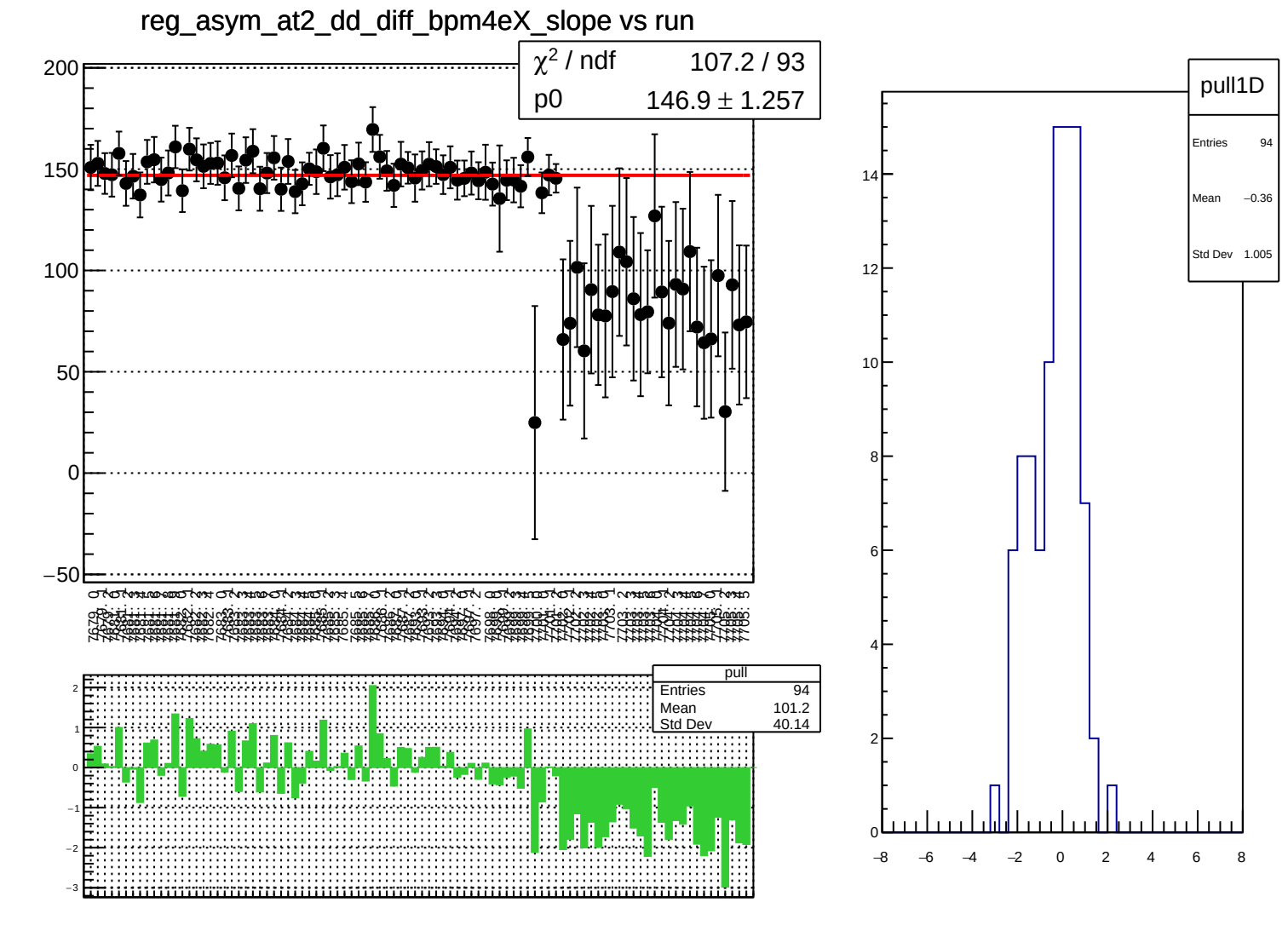

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 599.6 / 93
p0 −281.8 ± 0.5062
−260
−270
−280
−290
−300
pull
Entries 94
Mean −2.729e+04
Std Dev 2.734e+04
pull1D
Entries 94
Mean −0.002161
Std Dev 2.526

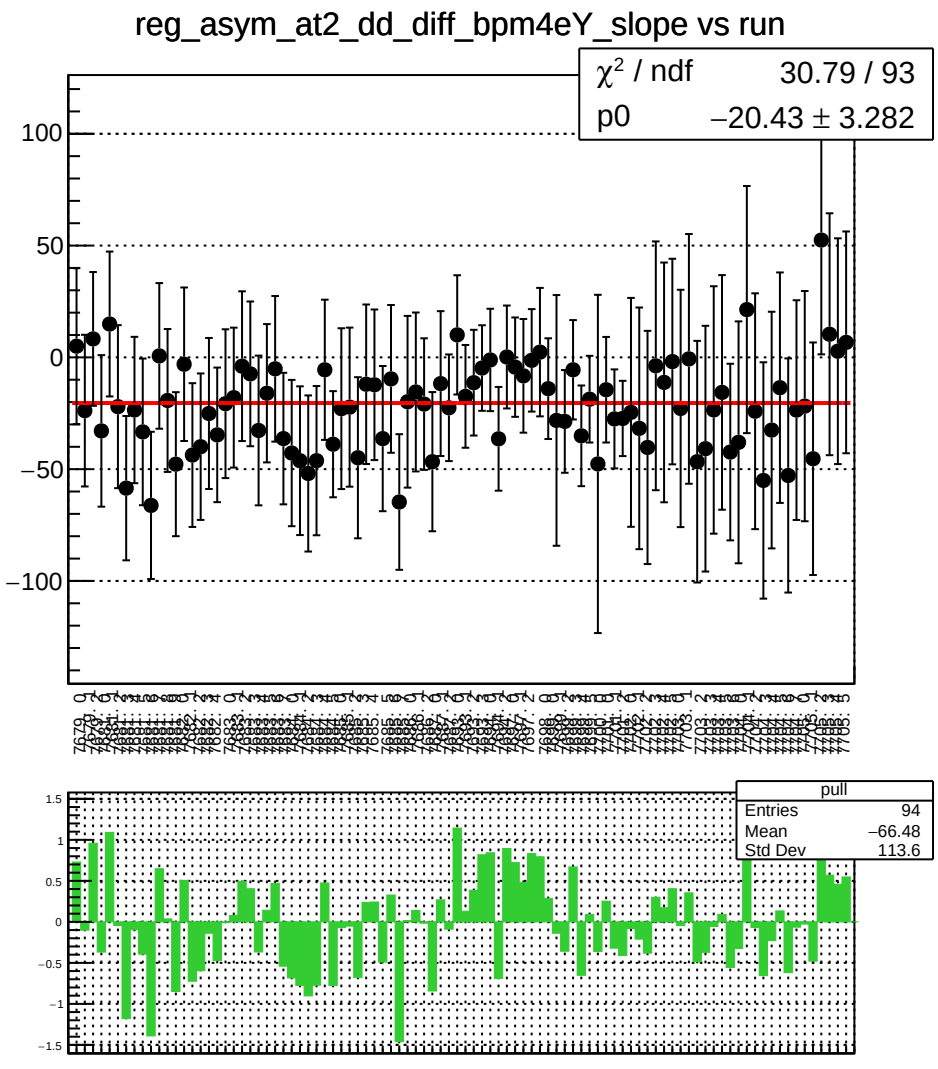

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 101 / 93
p0 −63.28 ± 1.56
100
50
0
−50
−100
pull
Entries 94
Mean 104.3
Std Dev 43.45
3
2
1
0
−1
−2

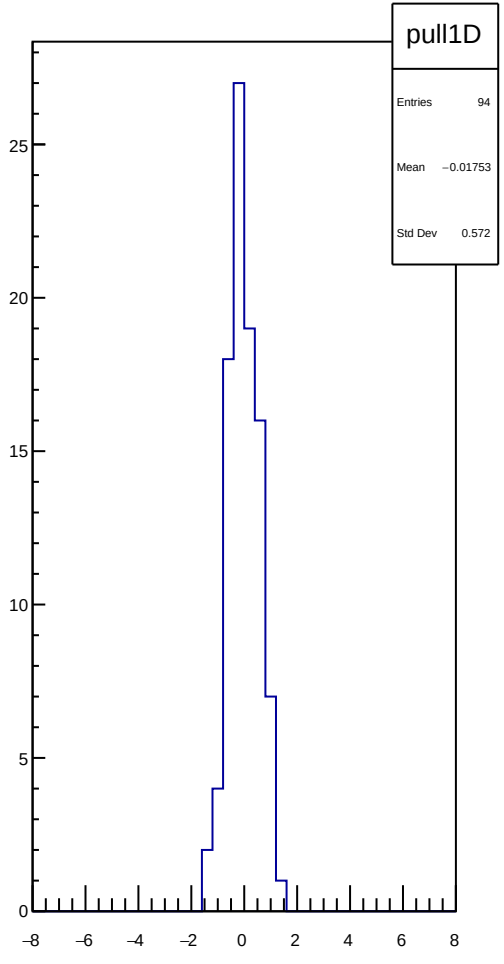

pull1D
Entries 94
Mean 0.3257
Std Dev 0.984
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

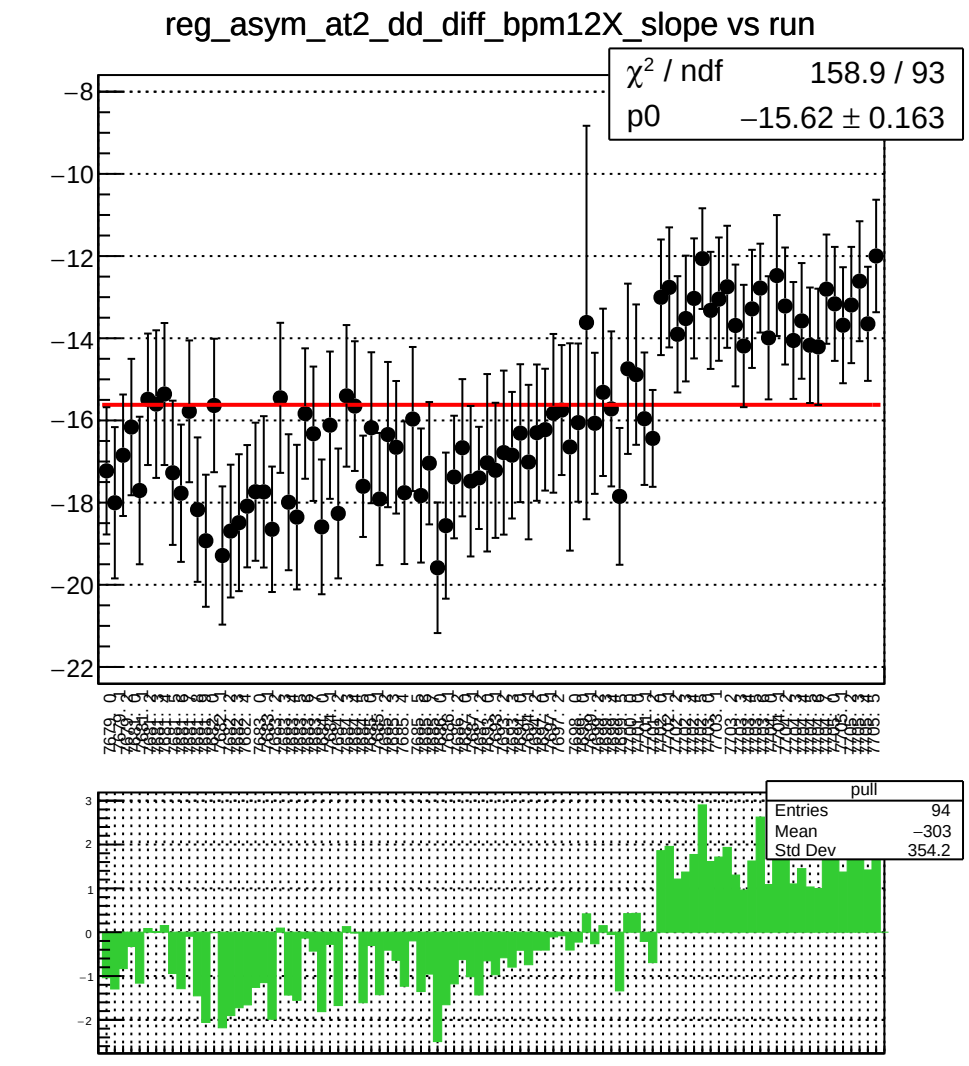

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 30.67 / 93
p0 16.33 ± 2.208
100
50
0
−50
−100
pull
Entries 94
Mean −70.13
Std Dev 118.7
1.5
1
0.5
0
−0.5
−1
−1.5

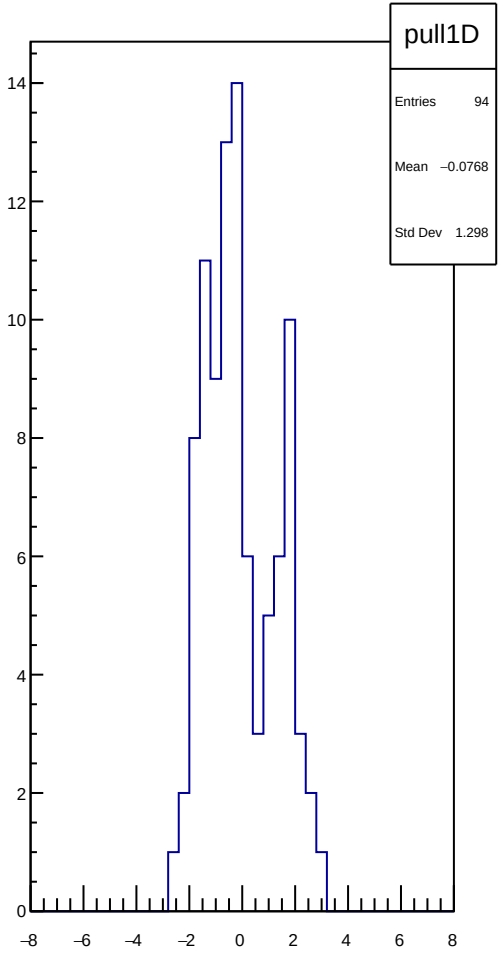

pull1D
Entries 94
Mean 0.01824
Std Dev 0.5709
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

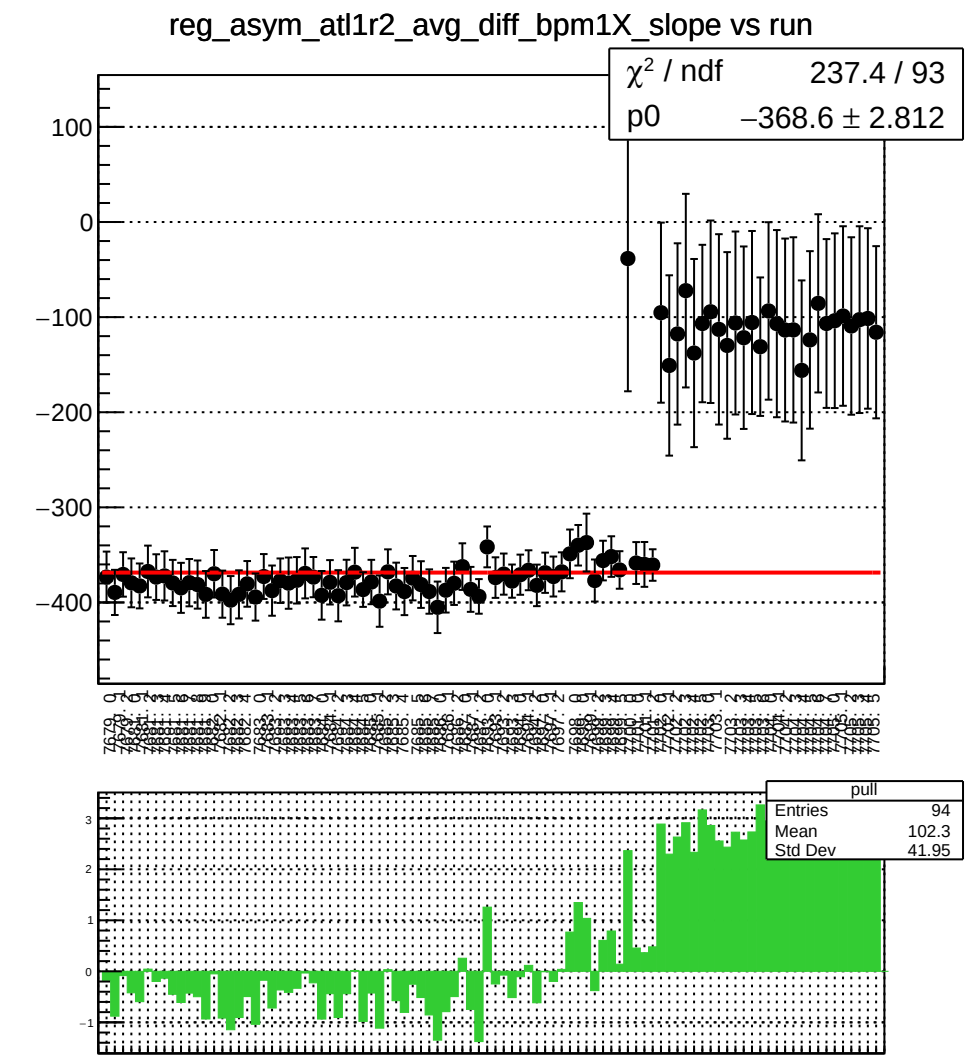

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 107.2 / 93
p0 146.9 ± 1.257
pull
Entries 94
Mean 101.2
Std Dev 40.14
pull1D
Entries 94
Mean −0.36
Std Dev 1.005

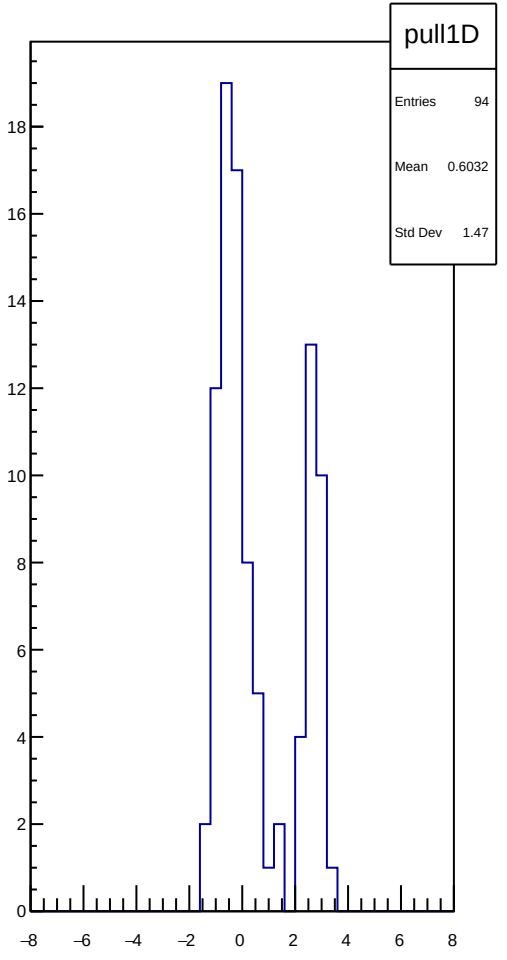

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 30.79 / 93
p0 −20.43 ± 3.282
100
50
0
−50
−100
pull
Entries 94
Mean −66.48
Std Dev 113.6
1.5
1
0.5
0
−0.5
−1
−1.5

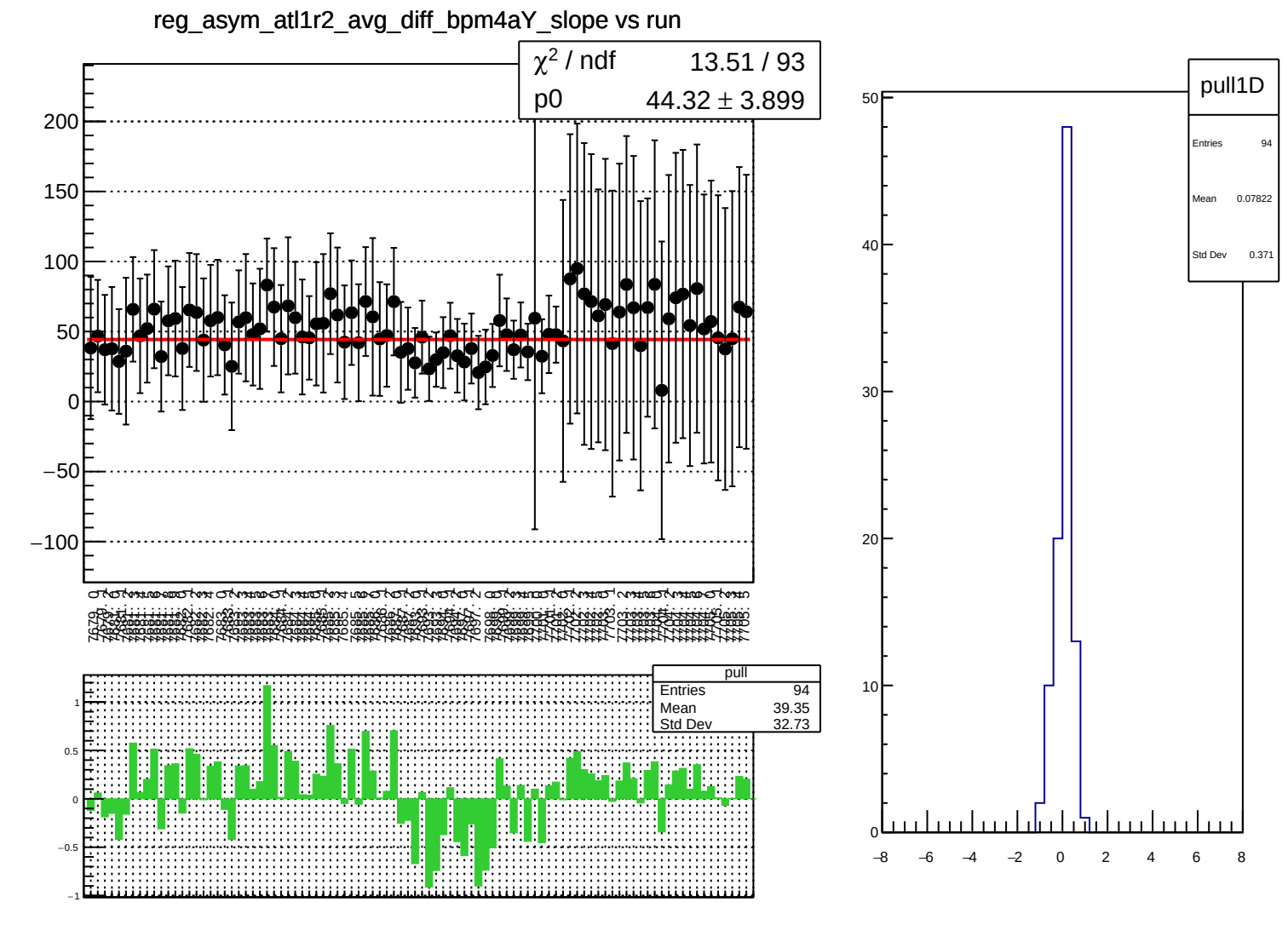

pull1D
Entries 94
Mean −0.01753
Std Dev 0.572
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

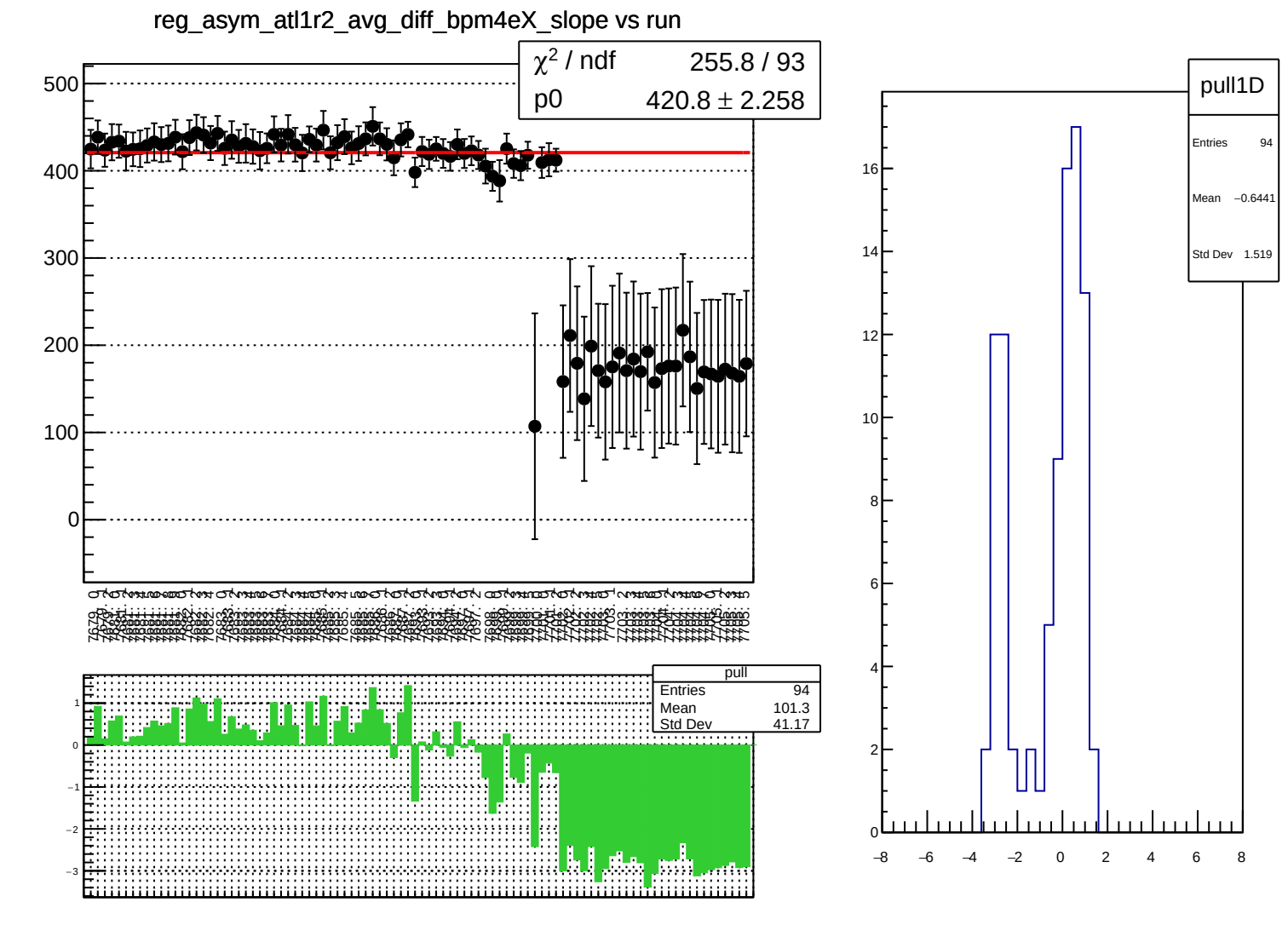

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 158.9 / 93
p0 −15.62 ± 0.163
pull
Entries 94
Mean −303
Std Dev 354.2

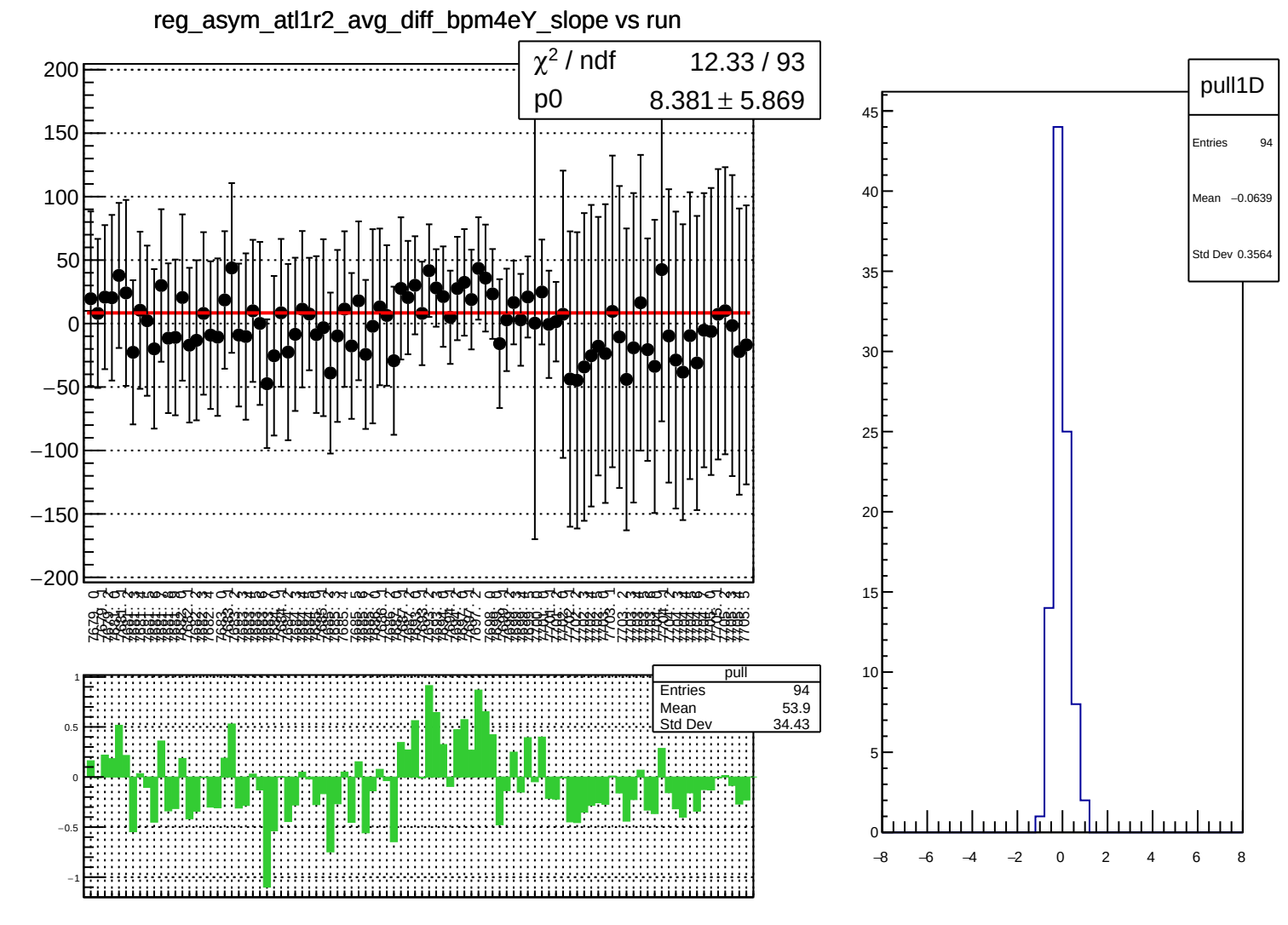

pull1D
Entries 94
Mean −0.0768
Std Dev 1.298

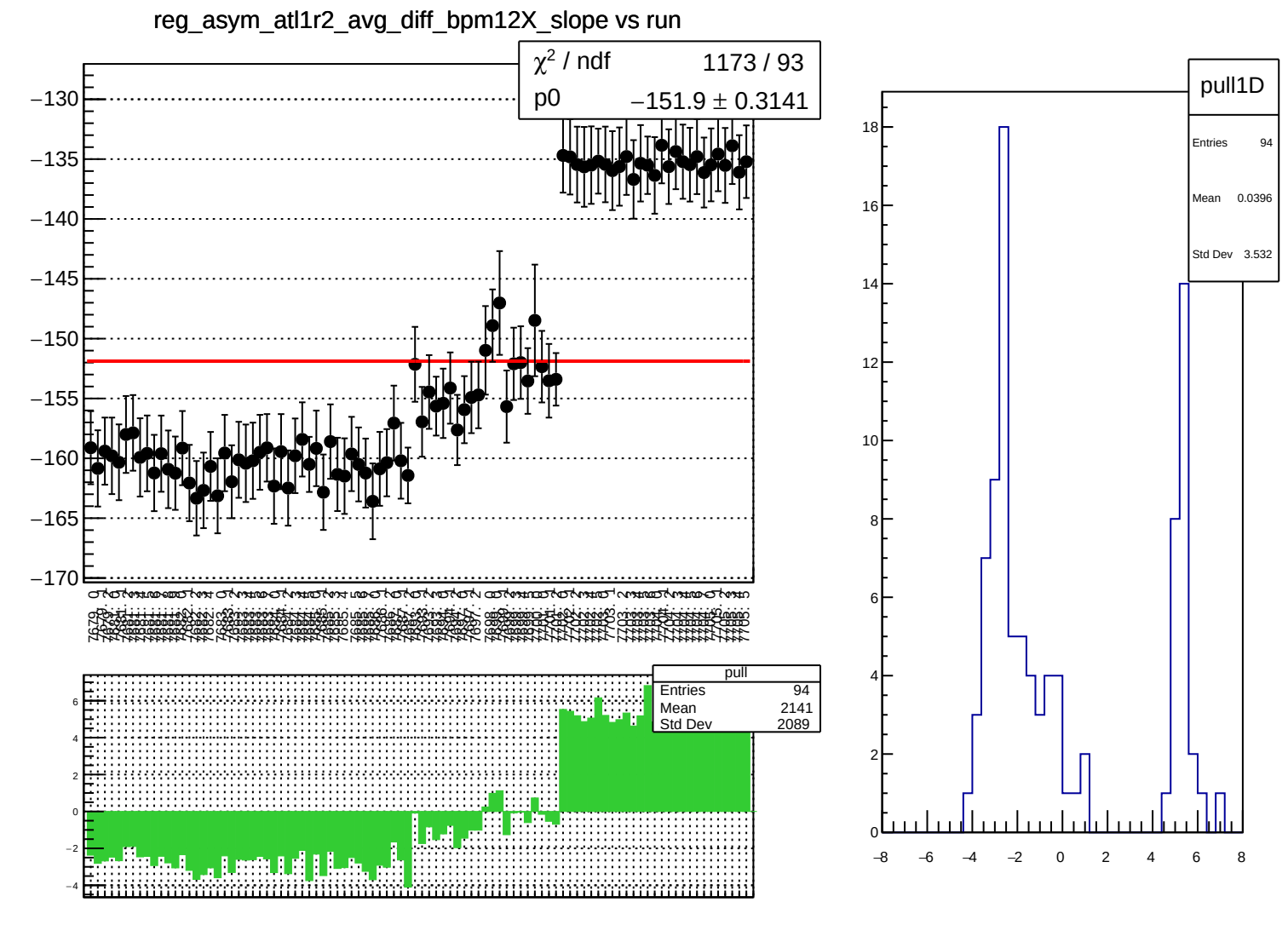

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 237.4 / 93
p0 −368.6 ± 2.812
100
0
−100
−200
−300
−400
pull
Entries 94
Mean 102.3
Std Dev 41.95
3
2
1
0
−1

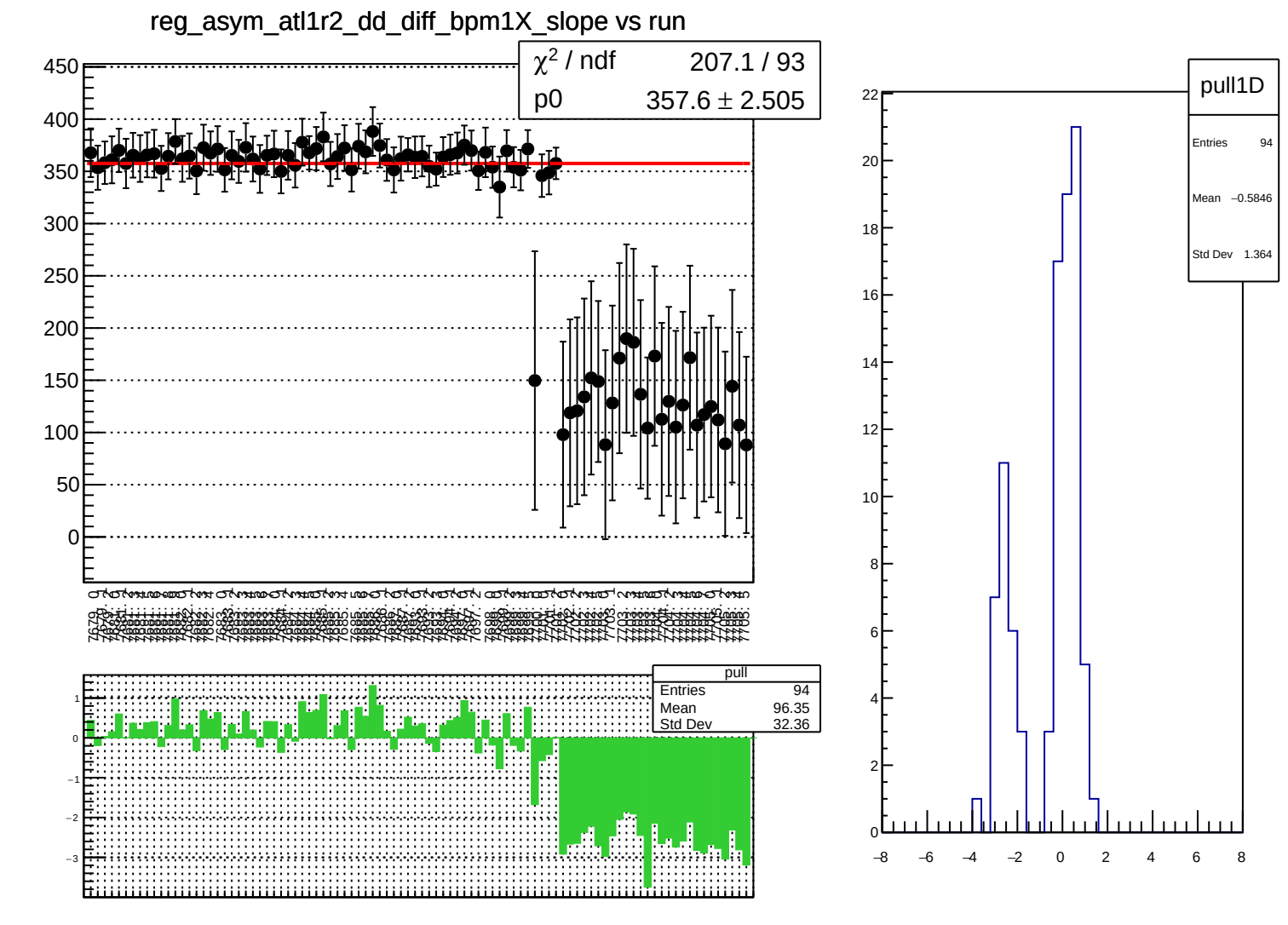

pull1D
Entries 94
Mean 0.6032
Std Dev 1.47
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

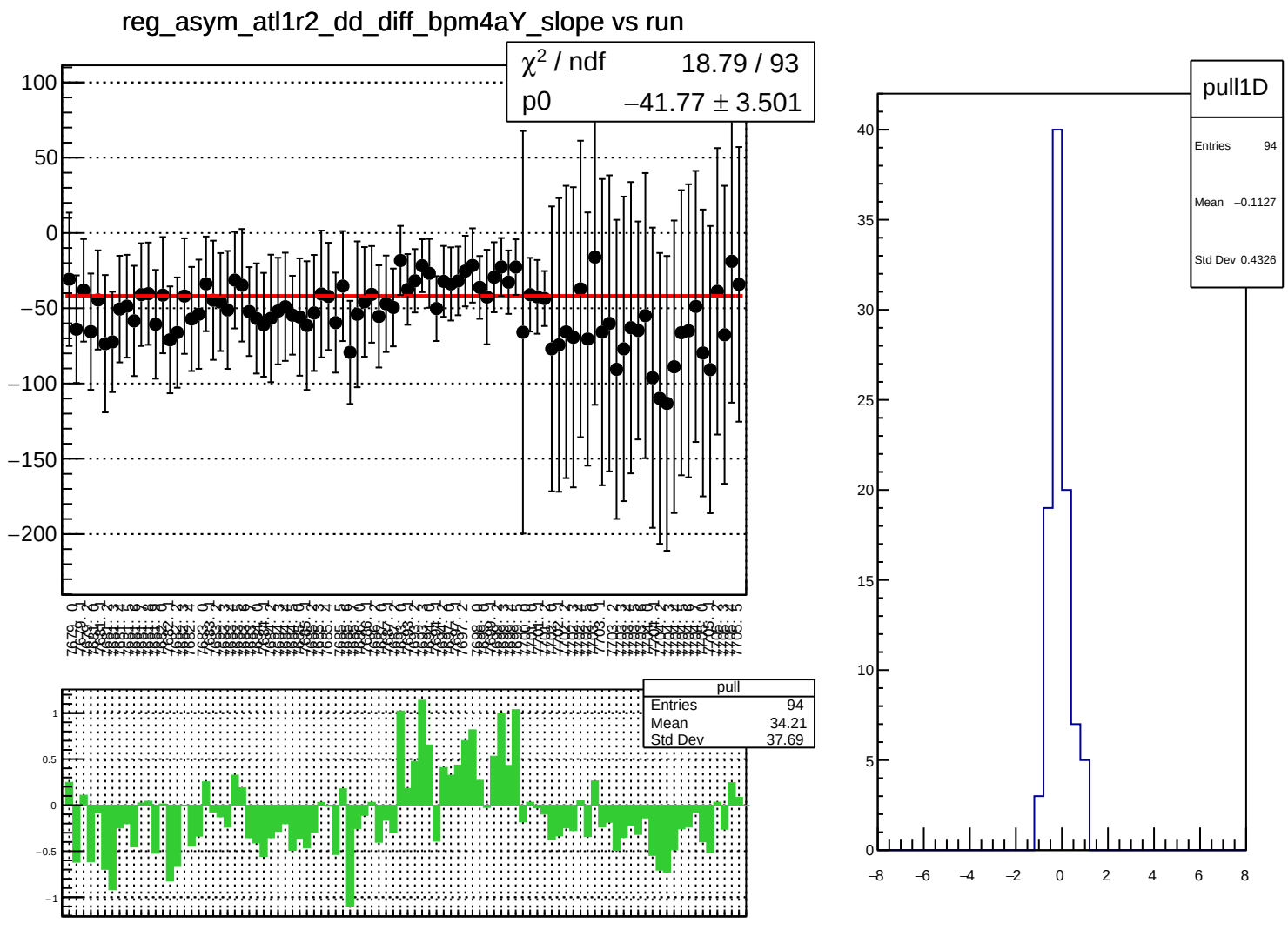

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 13.51 / 93
p0 44.32 ± 3.899
pull
Entries 94
Mean 39.35
Std Dev 32.73
pull1D
Entries 94
Mean 0.07822
Std Dev 0.371

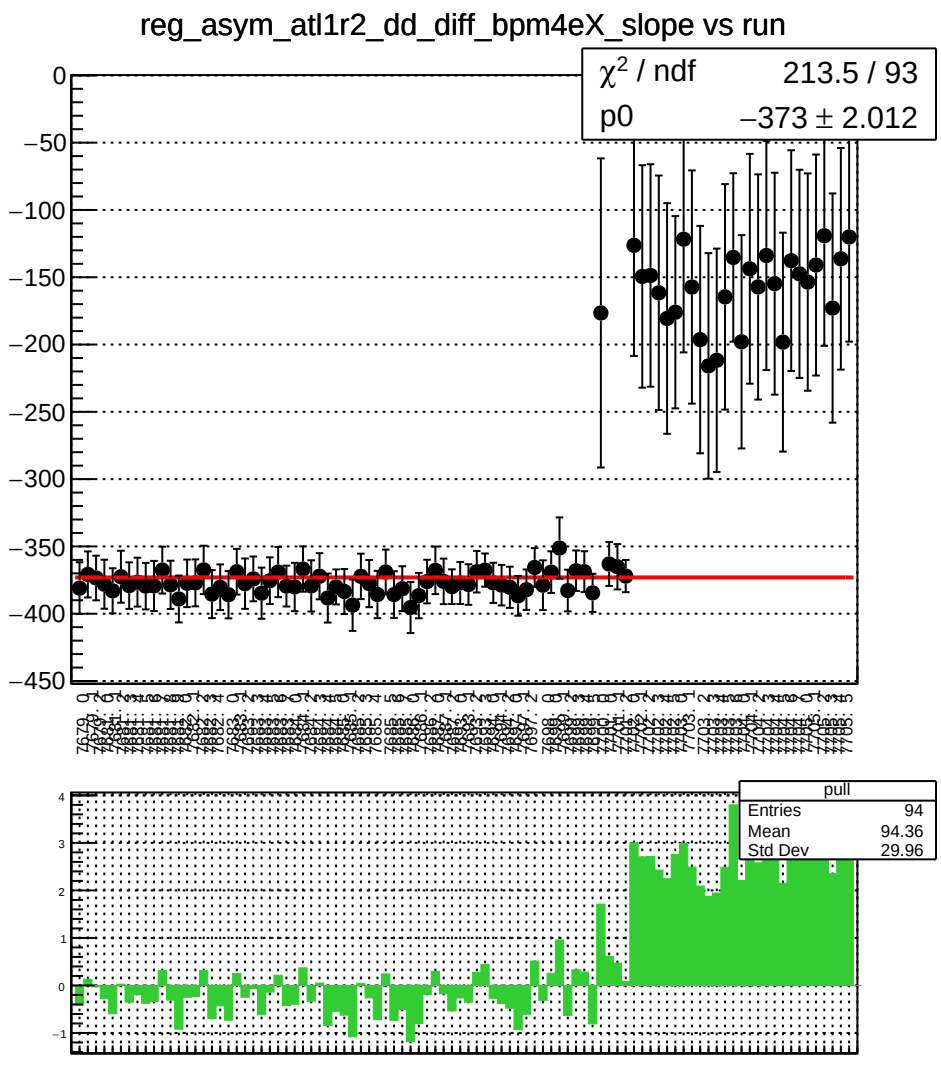

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 255.8 / 93
p0 420.8 ± 2.258
500
400
300
200
100
0
pull
Entries 94
Mean 101.3
Std Dev 41.17
1
0
−1
−2
−3
pull1D
Entries 94
Mean −0.6441
Std Dev 1.519
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

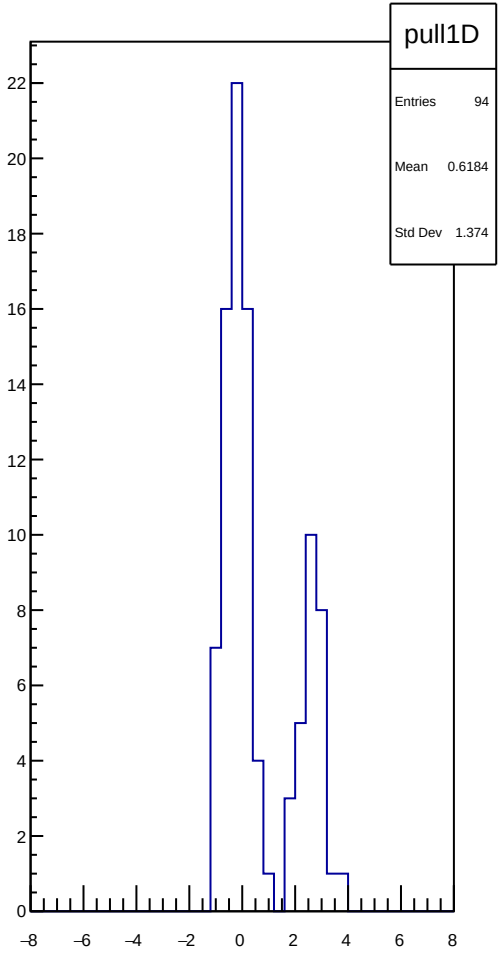

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 12.33 / 93
p0 8.381 ± 5.869
pull
Entries 94
Mean 53.9
Std Dev 34.43
pull1D
Entries 94
Mean −0.0639
Std Dev 0.3564

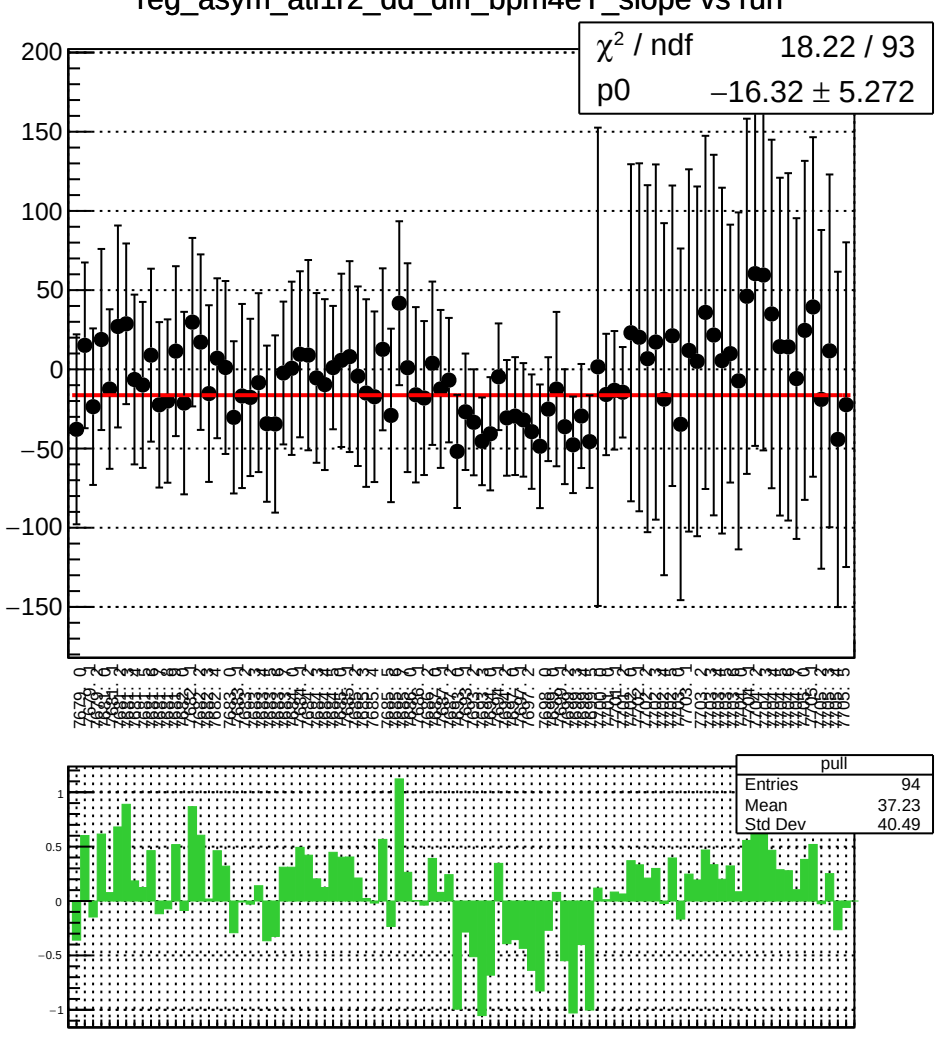

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 1173 / 93
p0 −151.9 ± 0.3141
pull
Entries 94
Mean 2141
Std Dev 2089
pull1D
Entries 94
Mean 0.0396
Std Dev 3.532

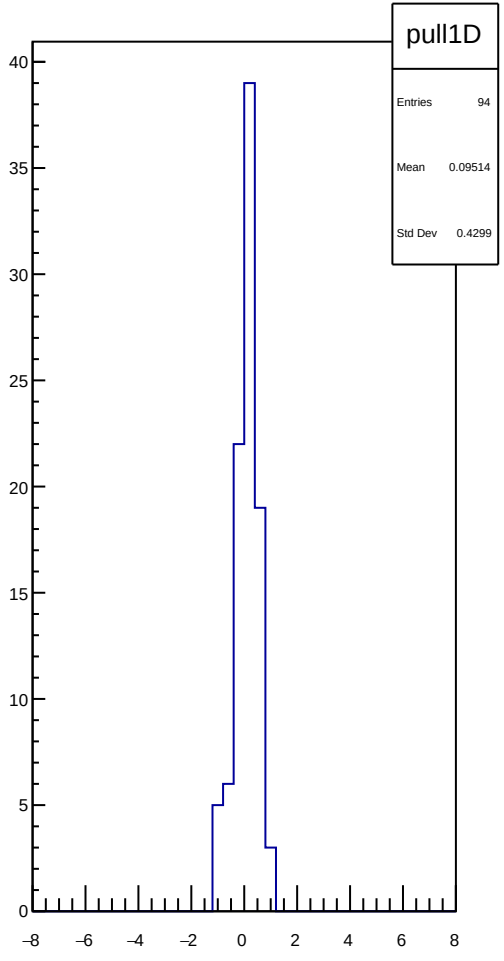

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ^2 / ndf 207.1 / 93
p0 357.6 ± 2.505
pull
Entries 94
Mean 96.35
Std Dev 32.36
pull1D
Entries 94
Mean −0.5846
Std Dev 1.364

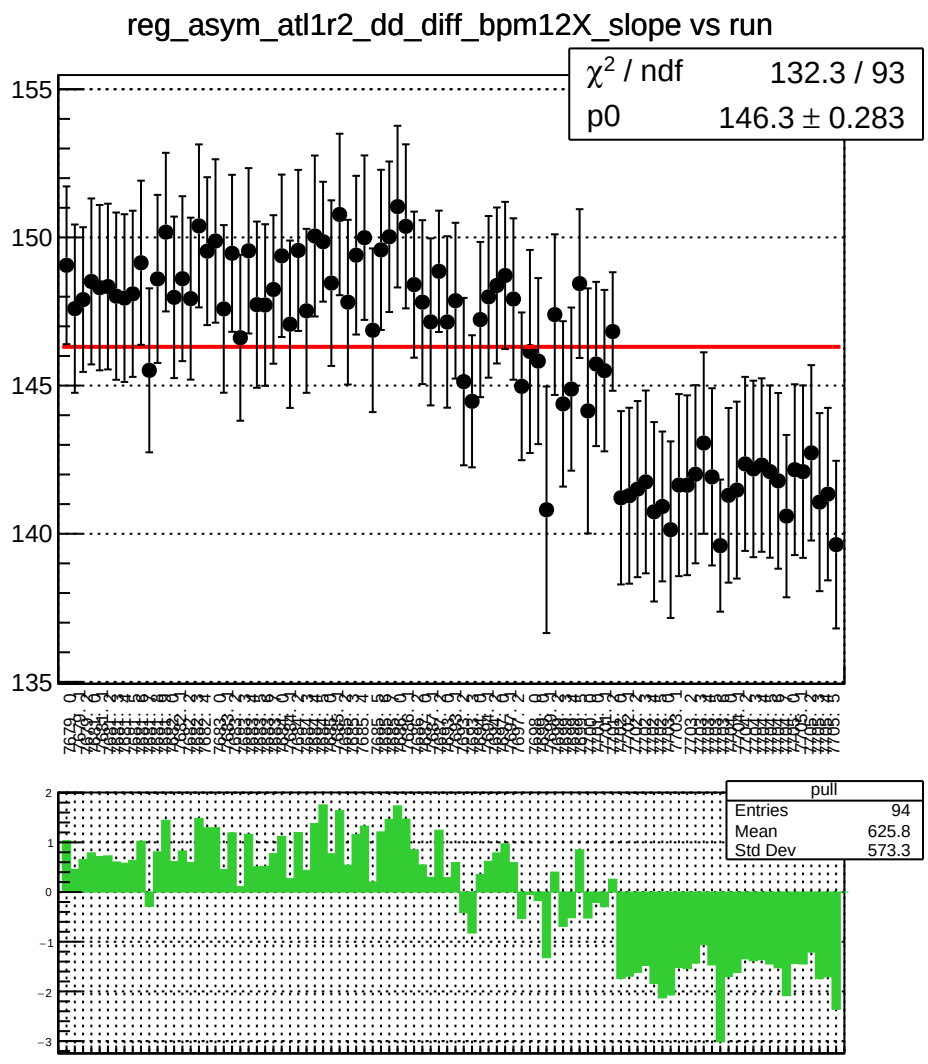

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 18.79 / 93
p0 −41.77 ± 3.501
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean 34.21
Std Dev 37.69
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean −0.1127
Std Dev 0.4326
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

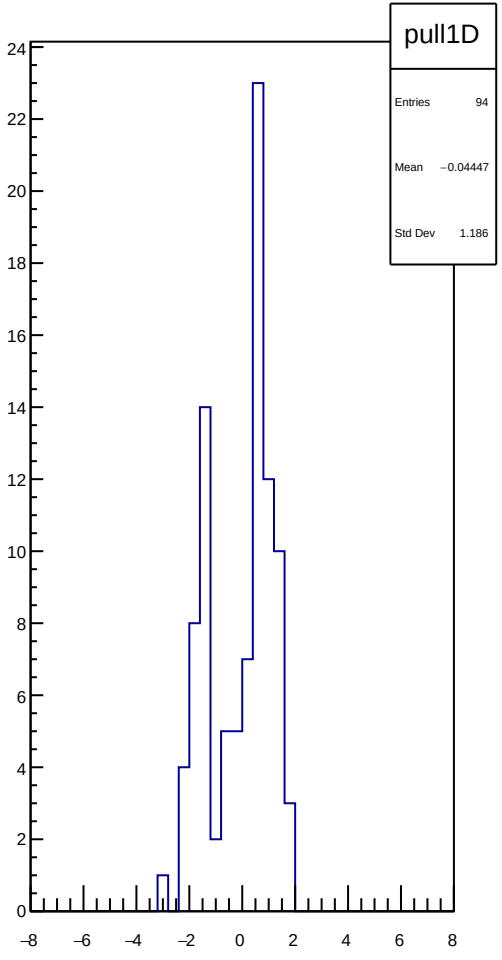

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 213.5 / 93
p0 −373 ± 2.012
pull
Entries 94
Mean 94.36
Std Dev 29.96

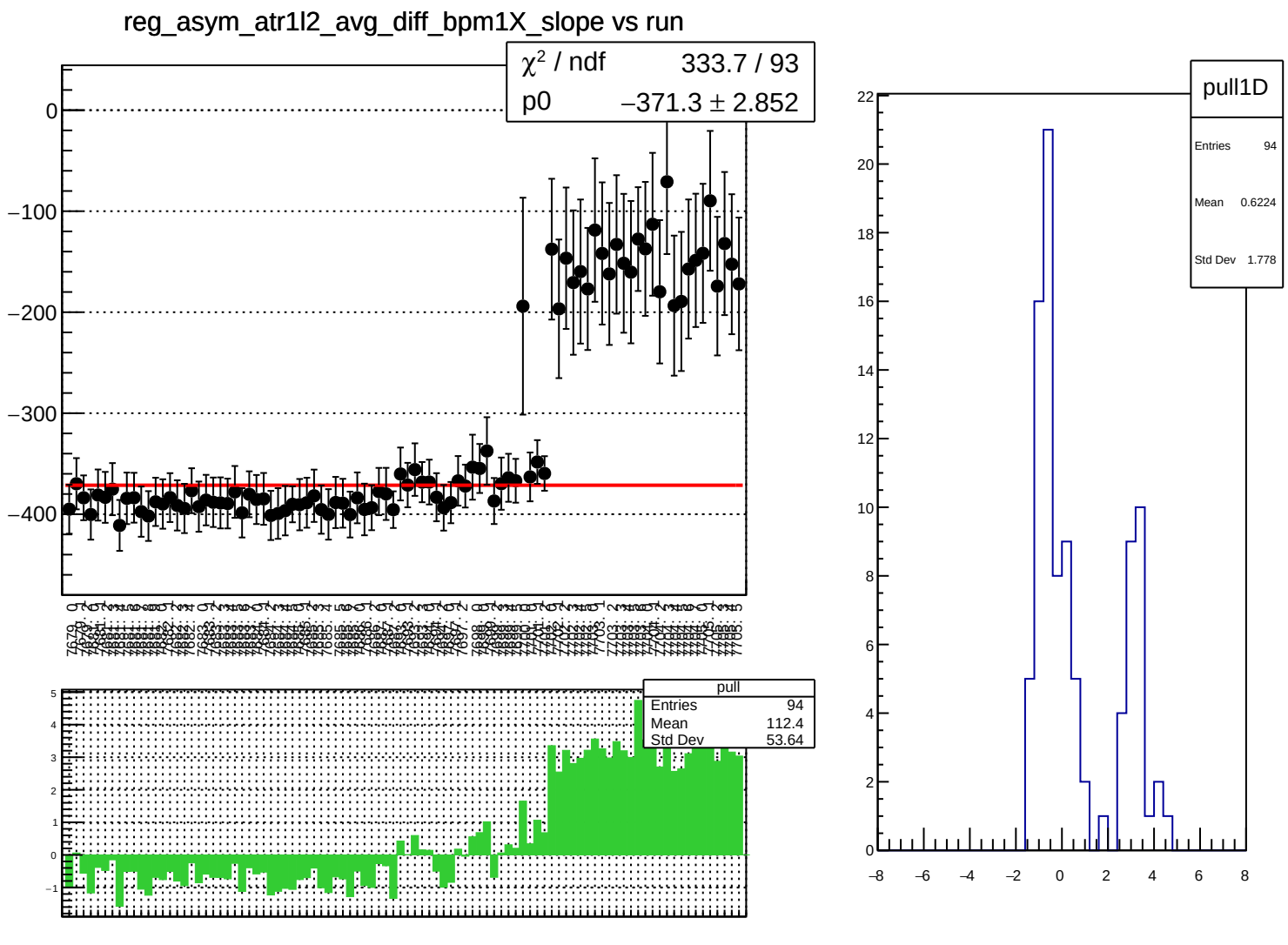

pull1D
Entries 94
Mean 0.6184
Std Dev 1.374

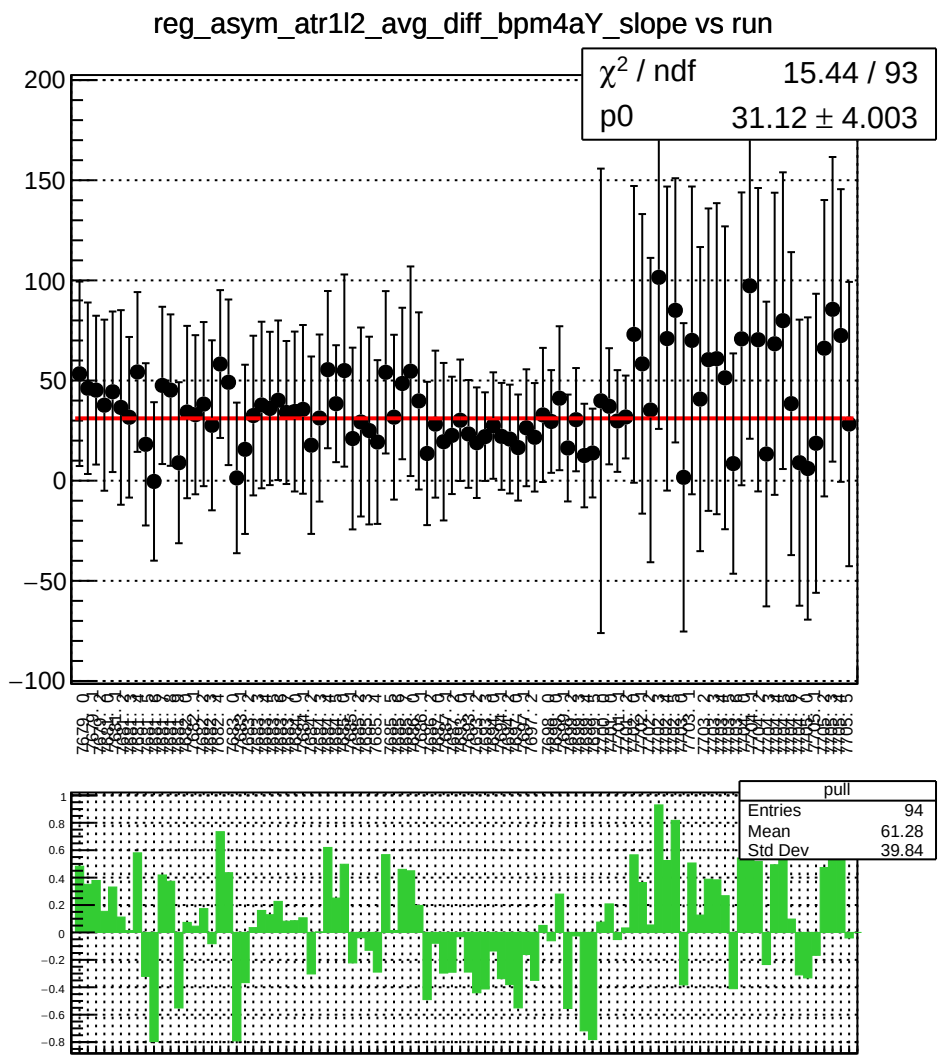

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 18.22 / 93
p0 −16.32 ± 5.272
pull
Entries 94
Mean 37.23
Std Dev 40.49

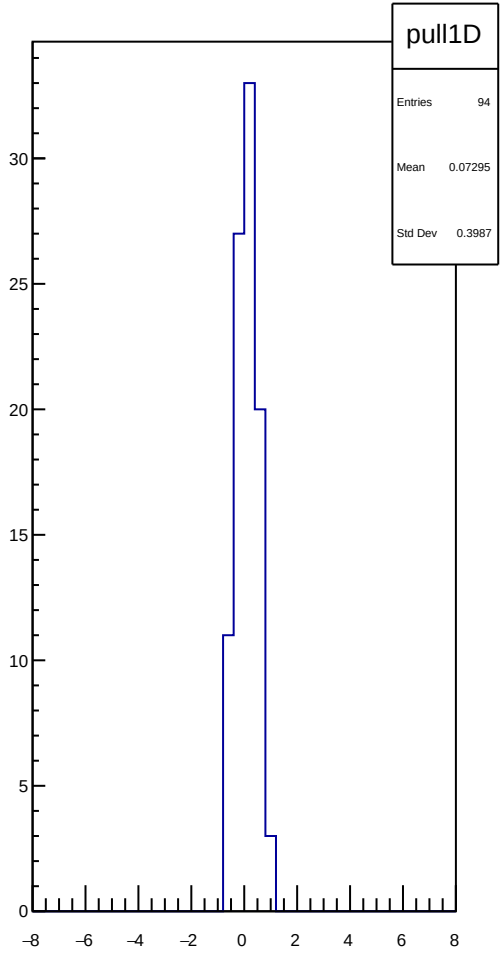

pull1D
Entries 94
Mean 0.09514
Std Dev 0.4299

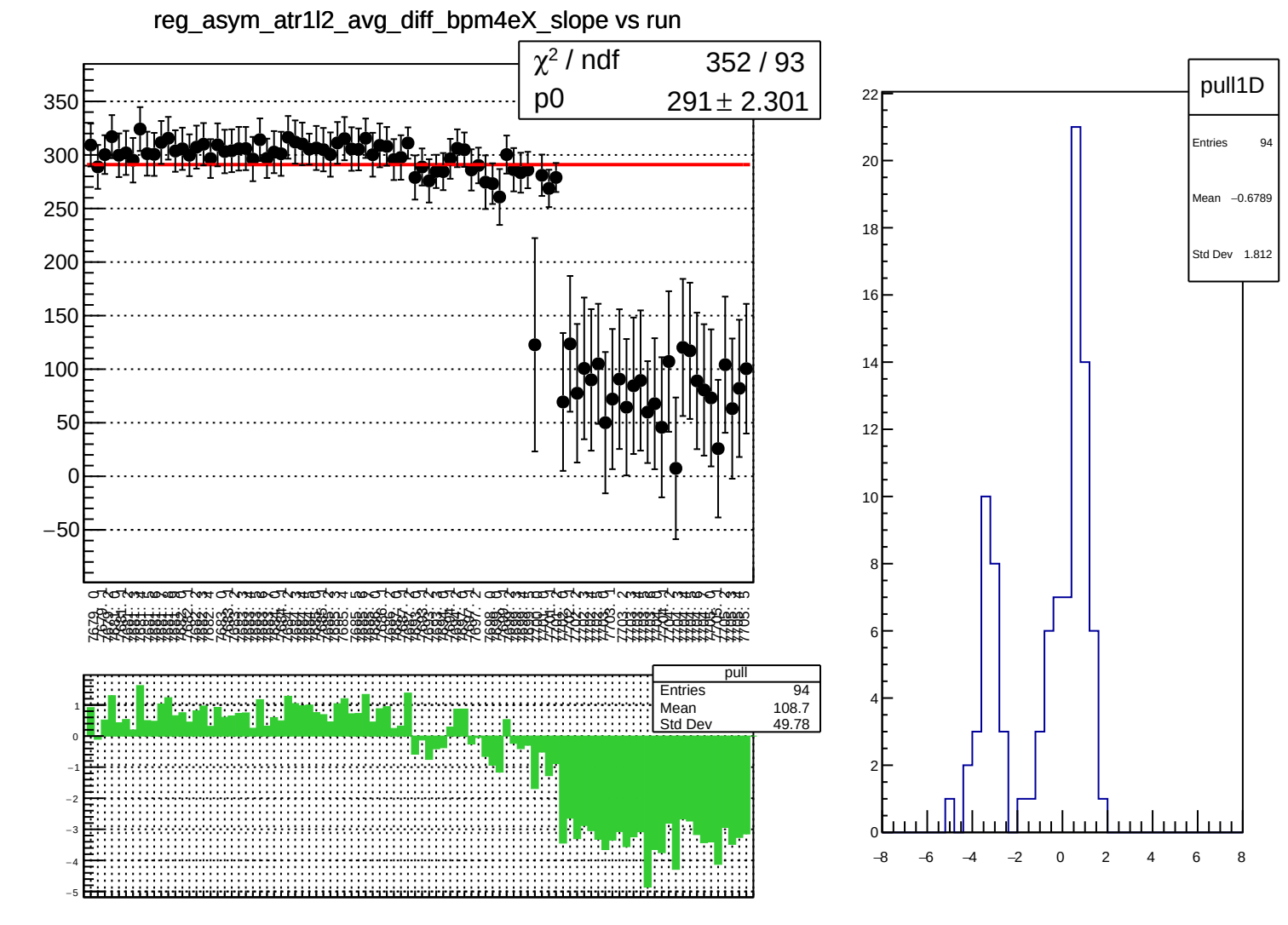

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ^2 / ndf 132.3 / 93
p0 146.3 ± 0.283
155
150
145
140
135
pull
Entries 94
Mean 625.8
Std Dev 573.3
2
1
0
−1
−2
−3

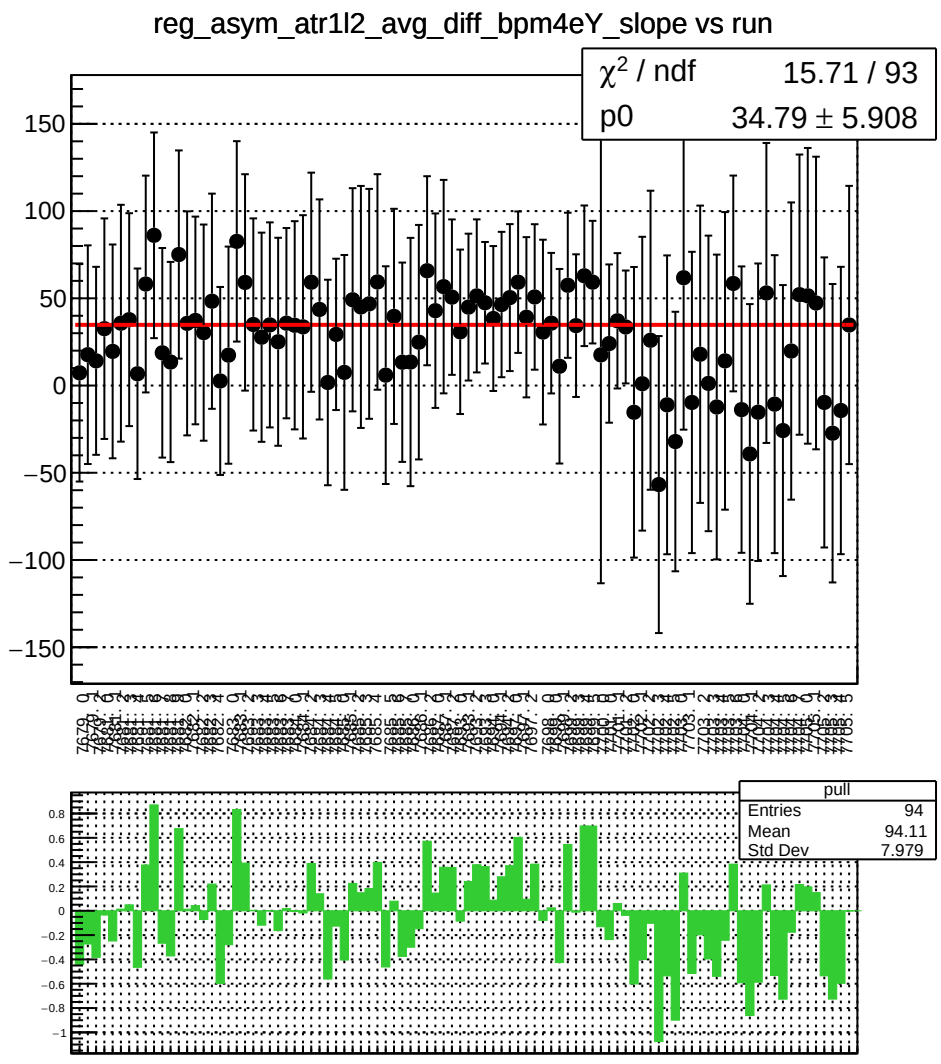

pull1D
Entries 94
Mean −0.04447
Std Dev 1.186
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

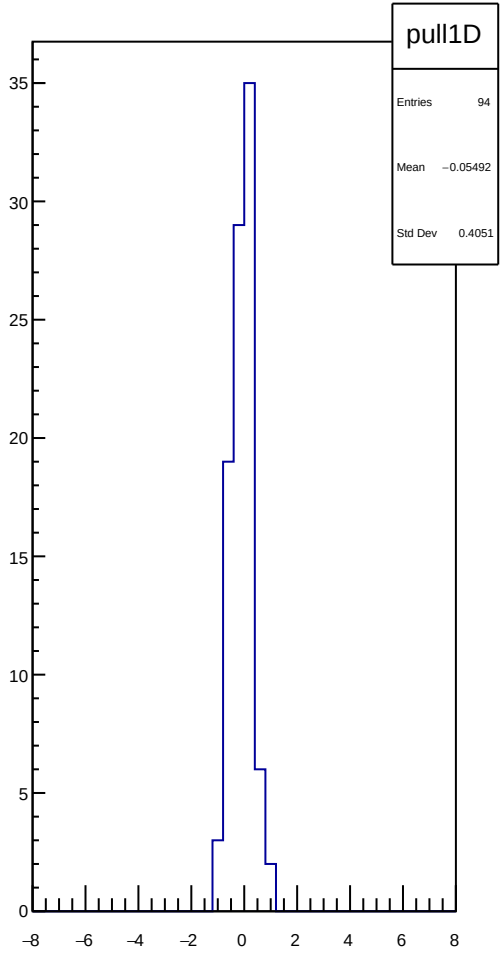

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 333.7 / 93
p0 −371.3 ± 2.852
0
−100
−200
−300
−400
pull
Entries 94
Mean 112.4
Std Dev 53.64
5
4
3
2
1
0
−1
pull1D
Entries 94
Mean 0.6224
Std Dev 1.778
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

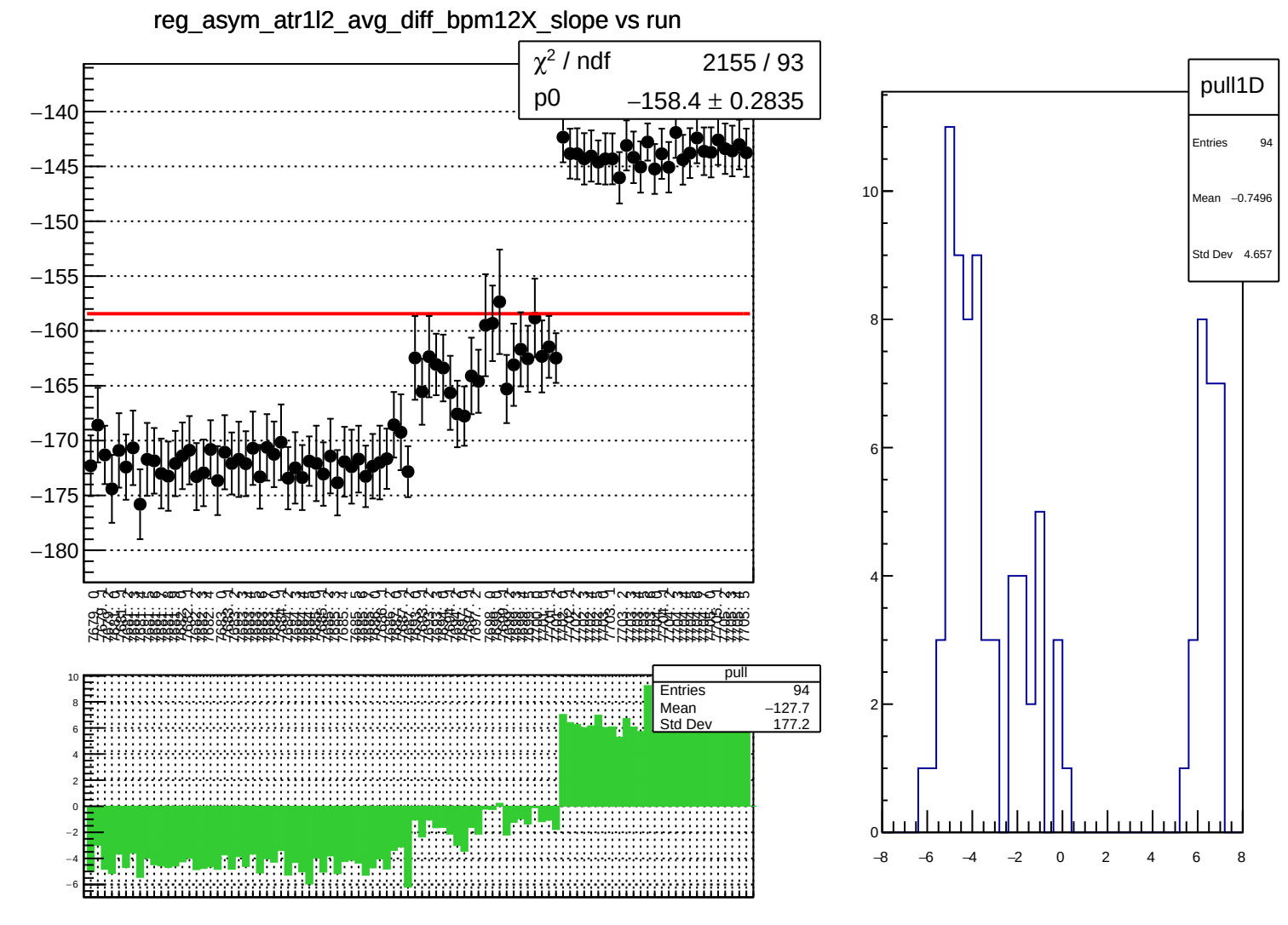

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ^2 / ndf 15.44 / 93
p0 31.12 ± 4.003
pull
Entries 94
Mean 61.28
Std Dev 39.84

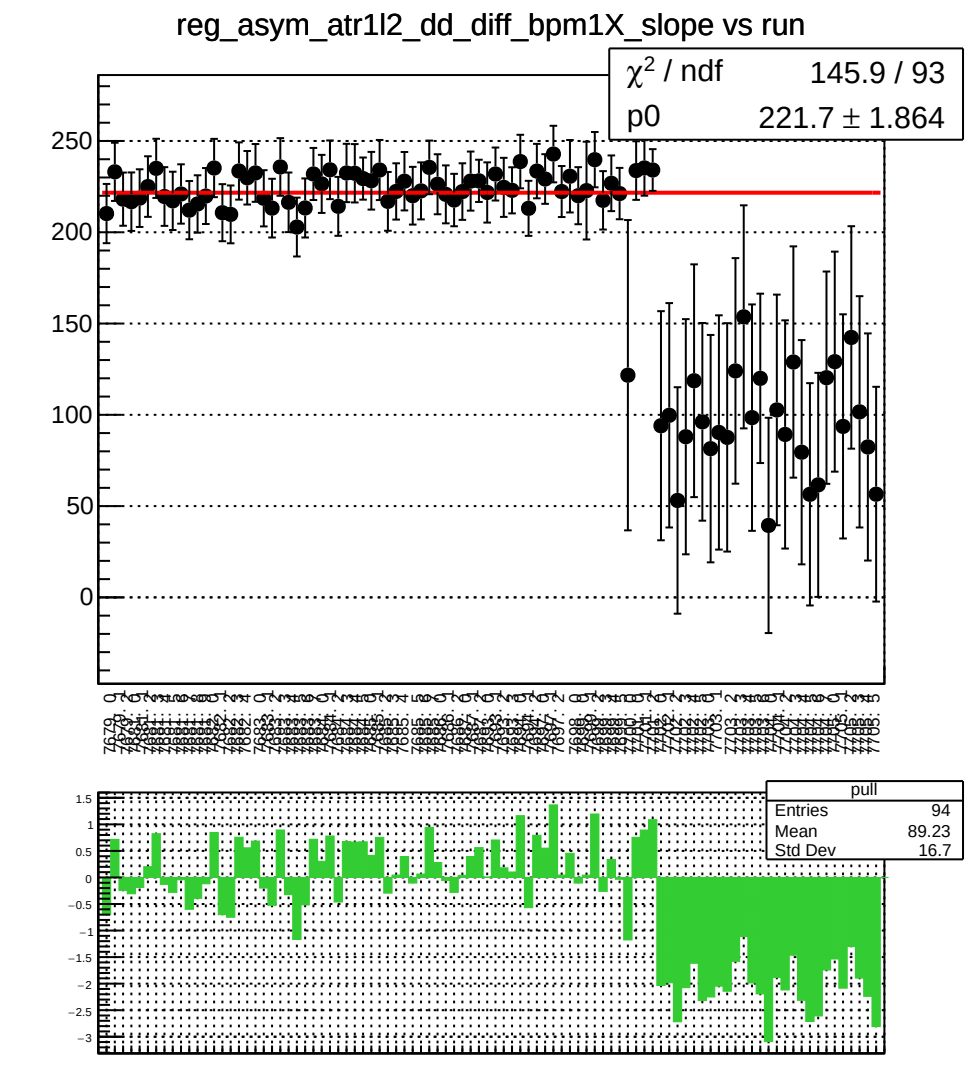

pull1D
Entries 94
Mean 0.07295
Std Dev 0.3987

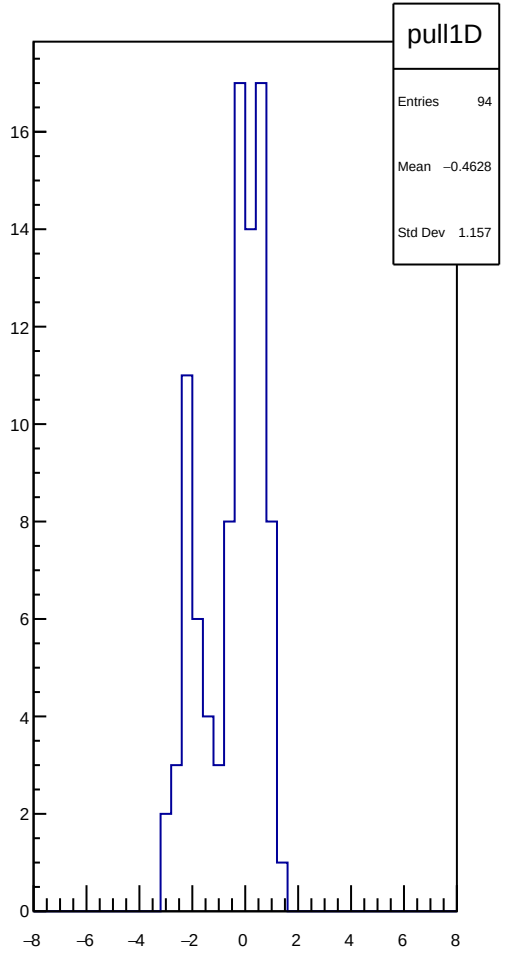

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 352 / 93
p0 291 ± 2.301
pull
Entries 94
Mean 108.7
Std Dev 49.78
pull1D
Entries 94
Mean −0.6789
Std Dev 1.812

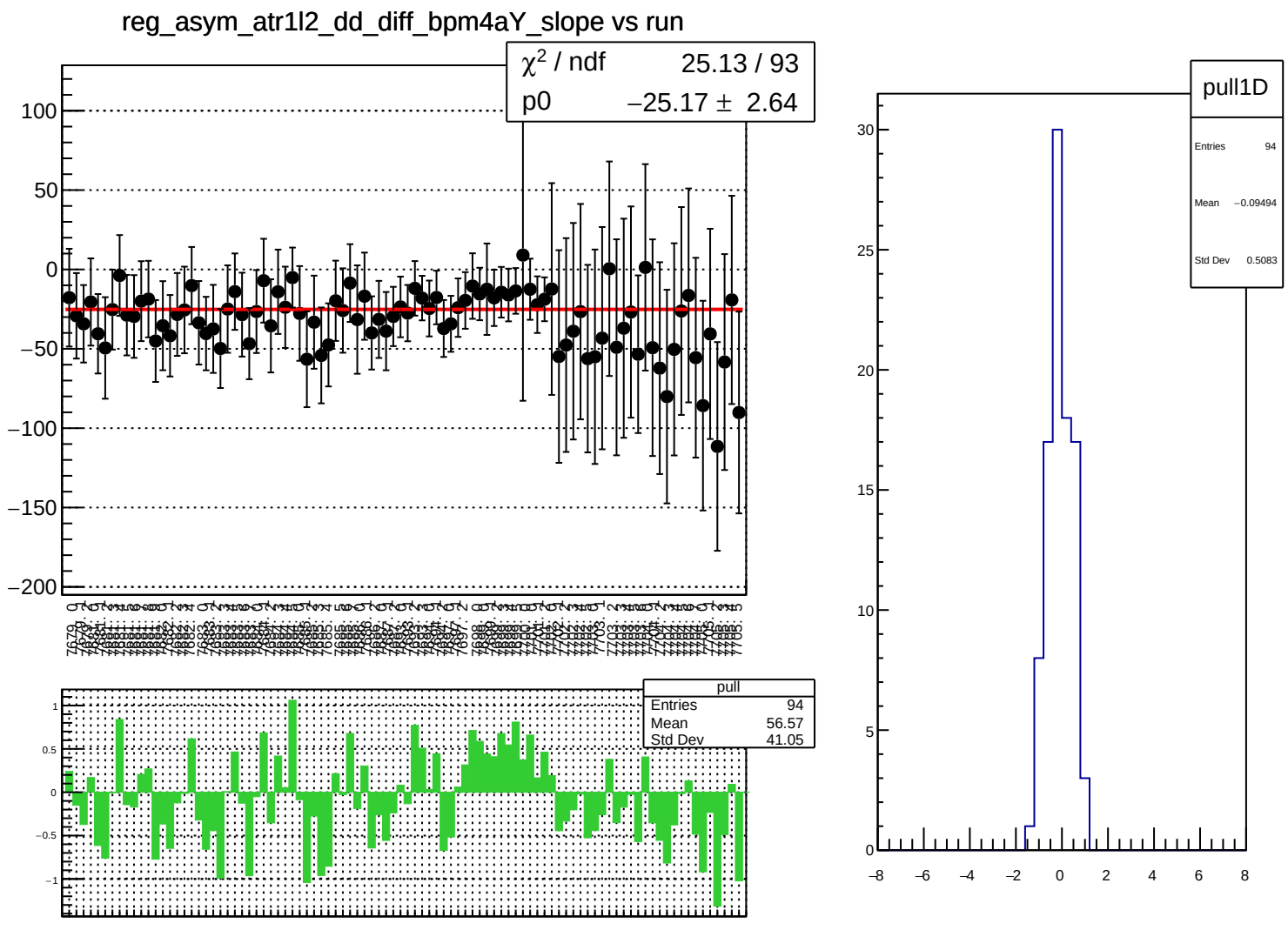

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 15.71 / 93
p0 34.79 ± 5.908
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean 94.11
Std Dev 7.979
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

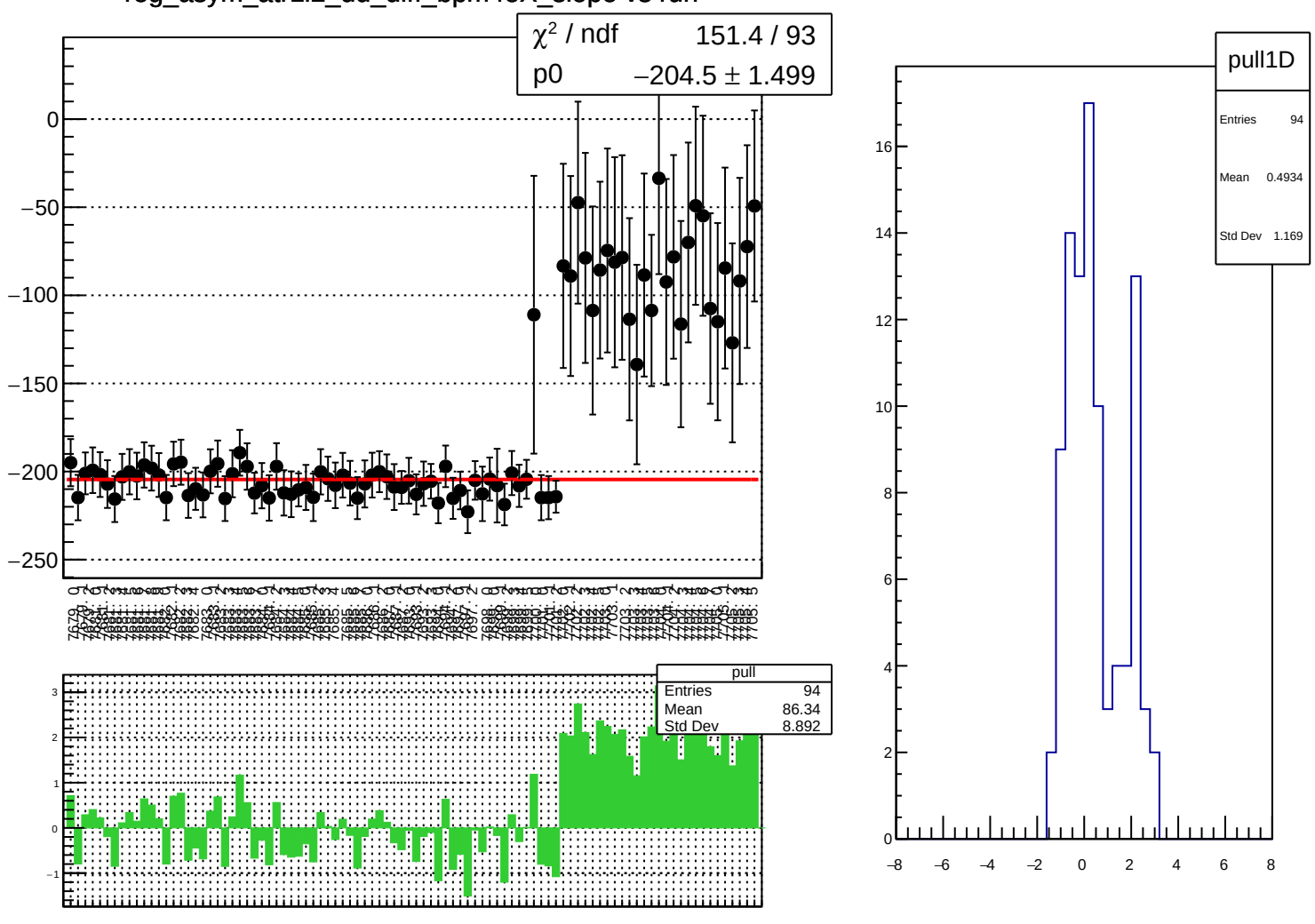

pull1D
Entries 94
Mean −0.05492
Std Dev 0.4051
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

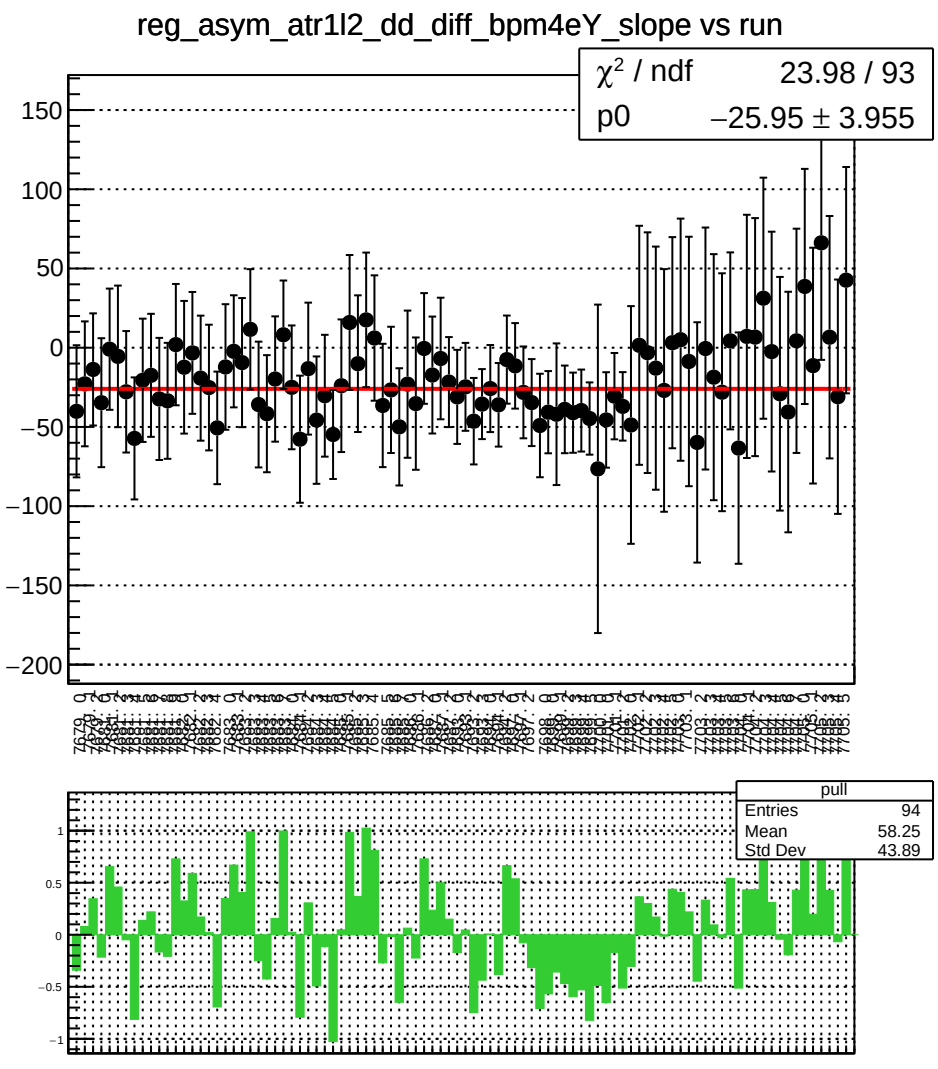

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 2155 / 93
p0 −158.4 ± 0.2835
pull
Entries 94
Mean −127.7
Std Dev 177.2
pull1D
Entries 94
Mean −0.7496
Std Dev 4.657

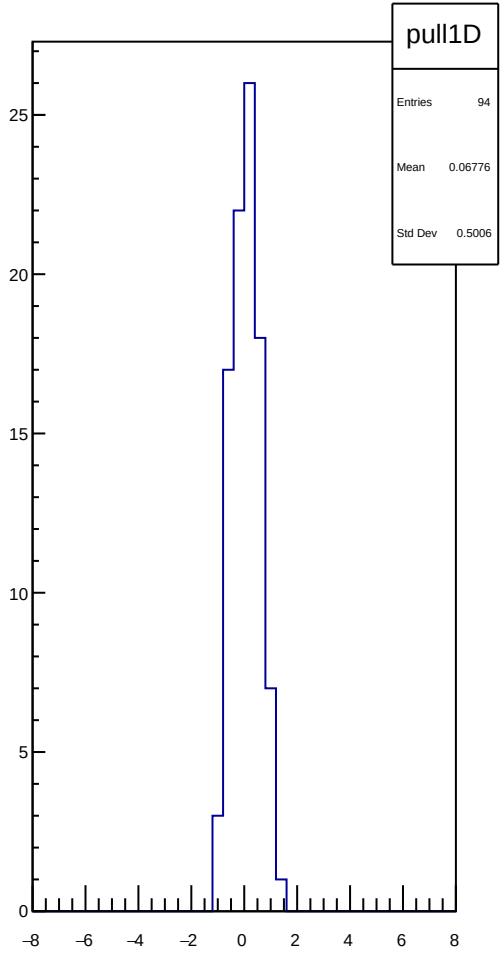

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 145.9 / 93
p0 221.7 ± 1.864
250
200
150
100
50
0
pull
Entries 94
Mean 89.23
Std Dev 16.7
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3

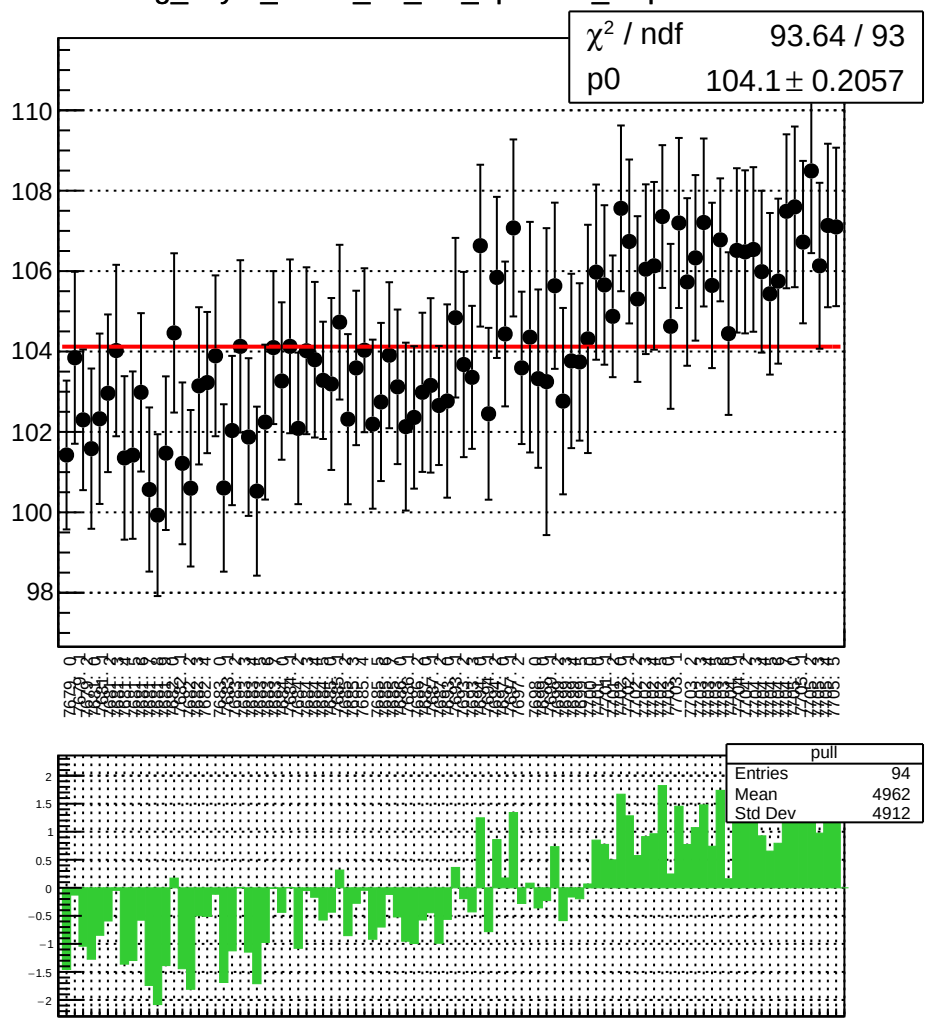

pull1D
Entries 94
Mean −0.4628
Std Dev 1.157
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

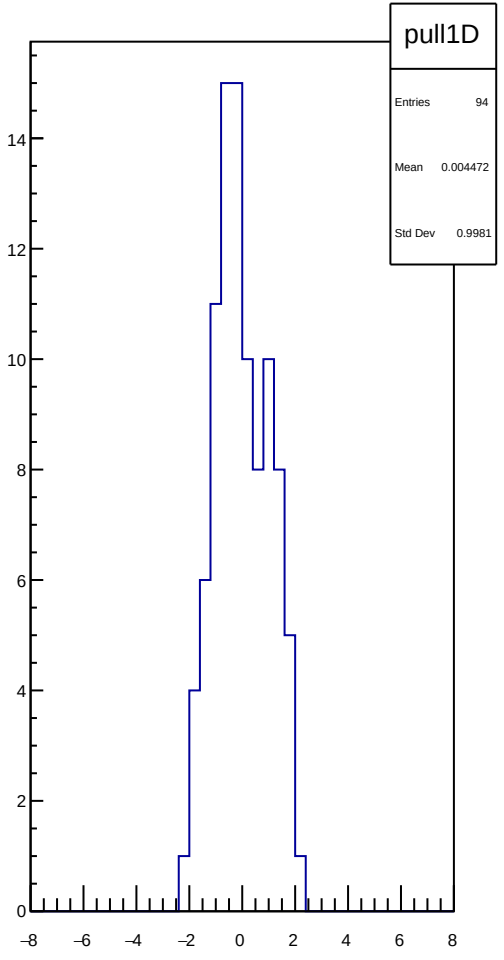

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 25.13 / 93
p0 −25.17 ± 2.64
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean 56.57
Std Dev 41.05
1
0.5
0
−0.5
−1
pull1D
Entries 94
Mean −0.09494
Std Dev 0.5083
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

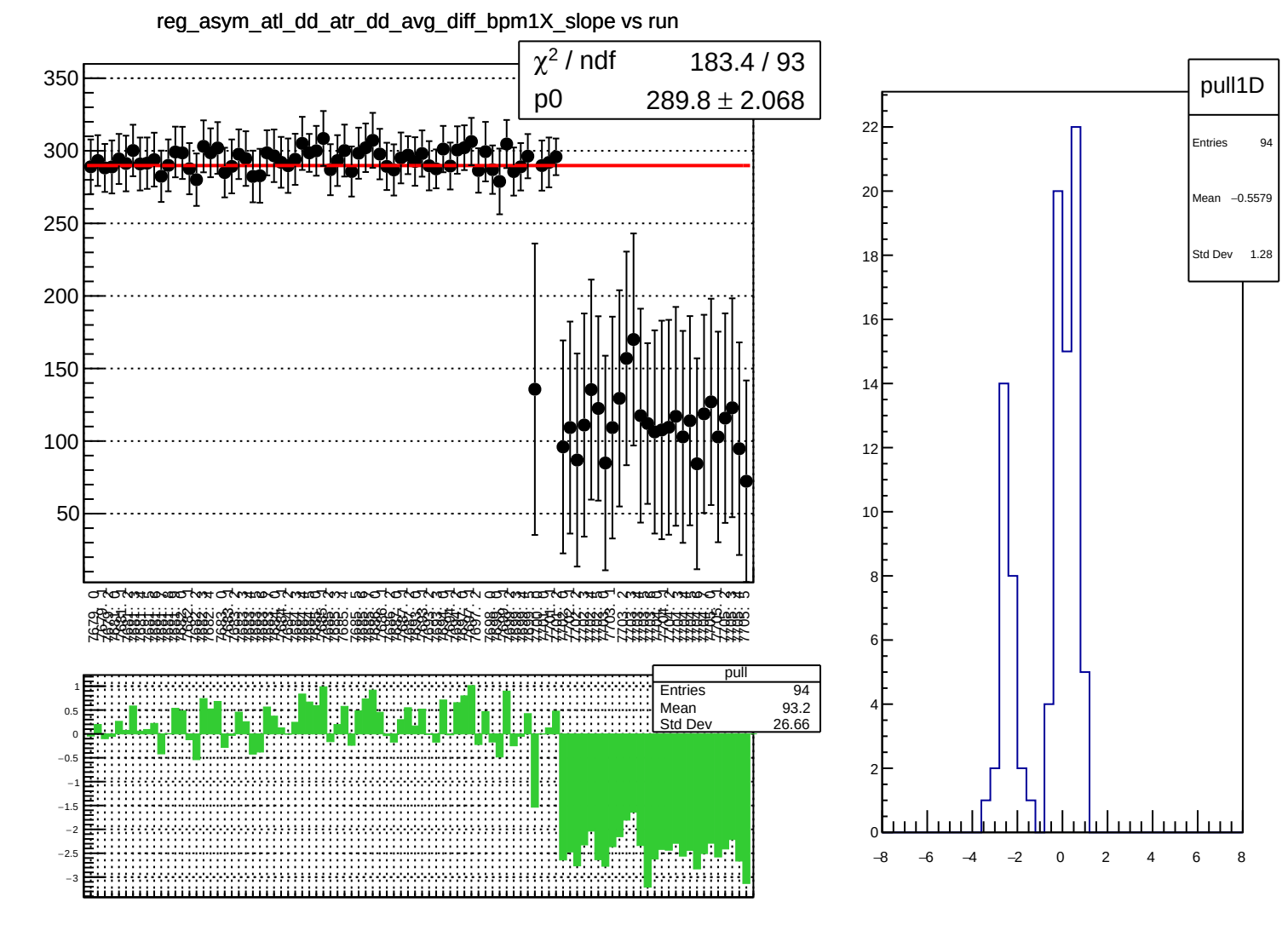

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 151.4 / 93
p0 −204.5 ± 1.499
0
−50
−100
−150
−200
−250
pull
Entries 94
Mean 86.34
Std Dev 8.892
3
2
1
0
−1
pull1D
Entries 94
Mean 0.4934
Std Dev 1.169
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

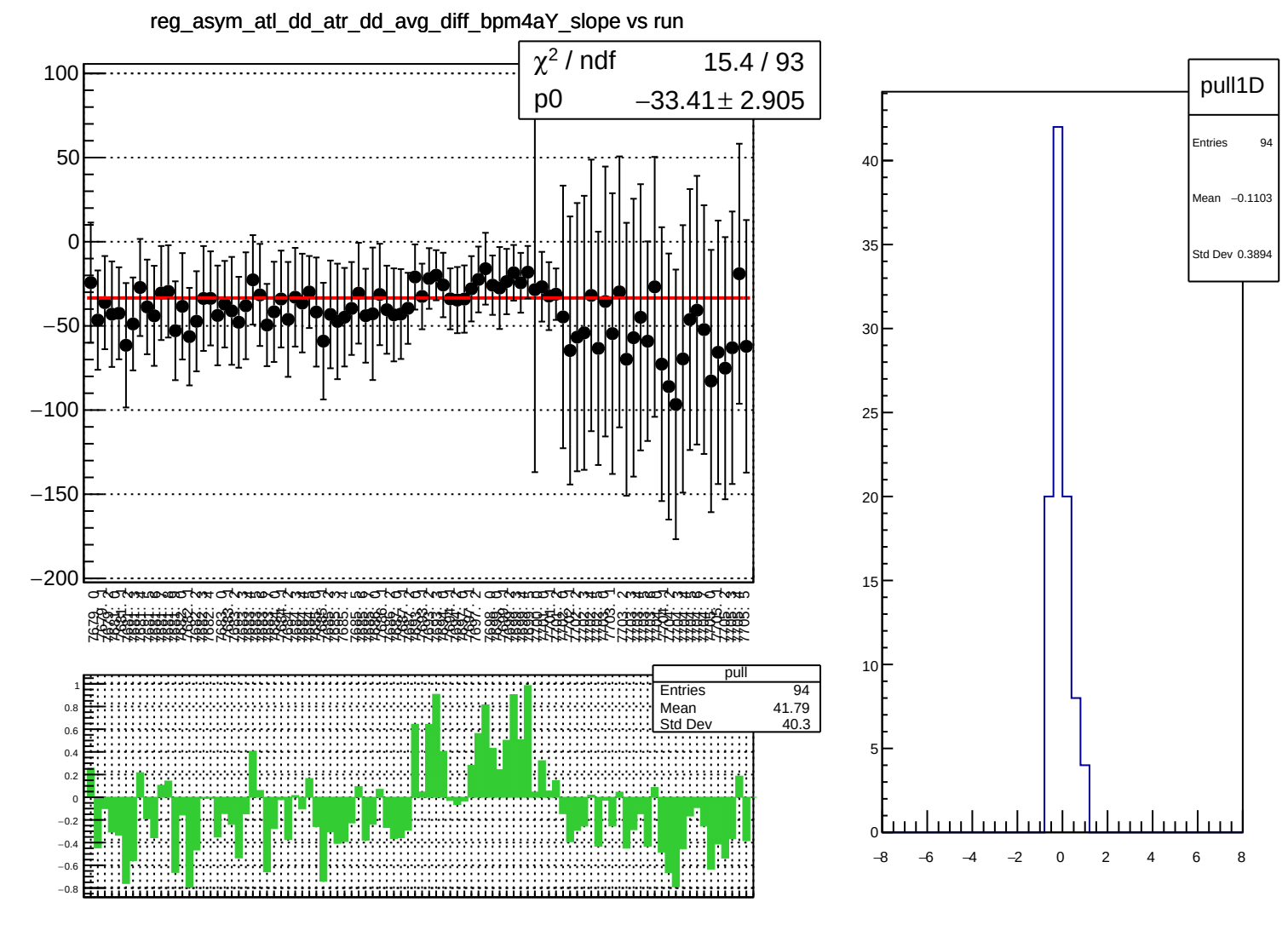

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 23.98 / 93
p0 −25.95 ± 3.955
150
100
50
0
−50
−100
−150
−200
pull
Entries 94
Mean 58.25
Std Dev 43.89
1
0.5
0
−0.5
−1

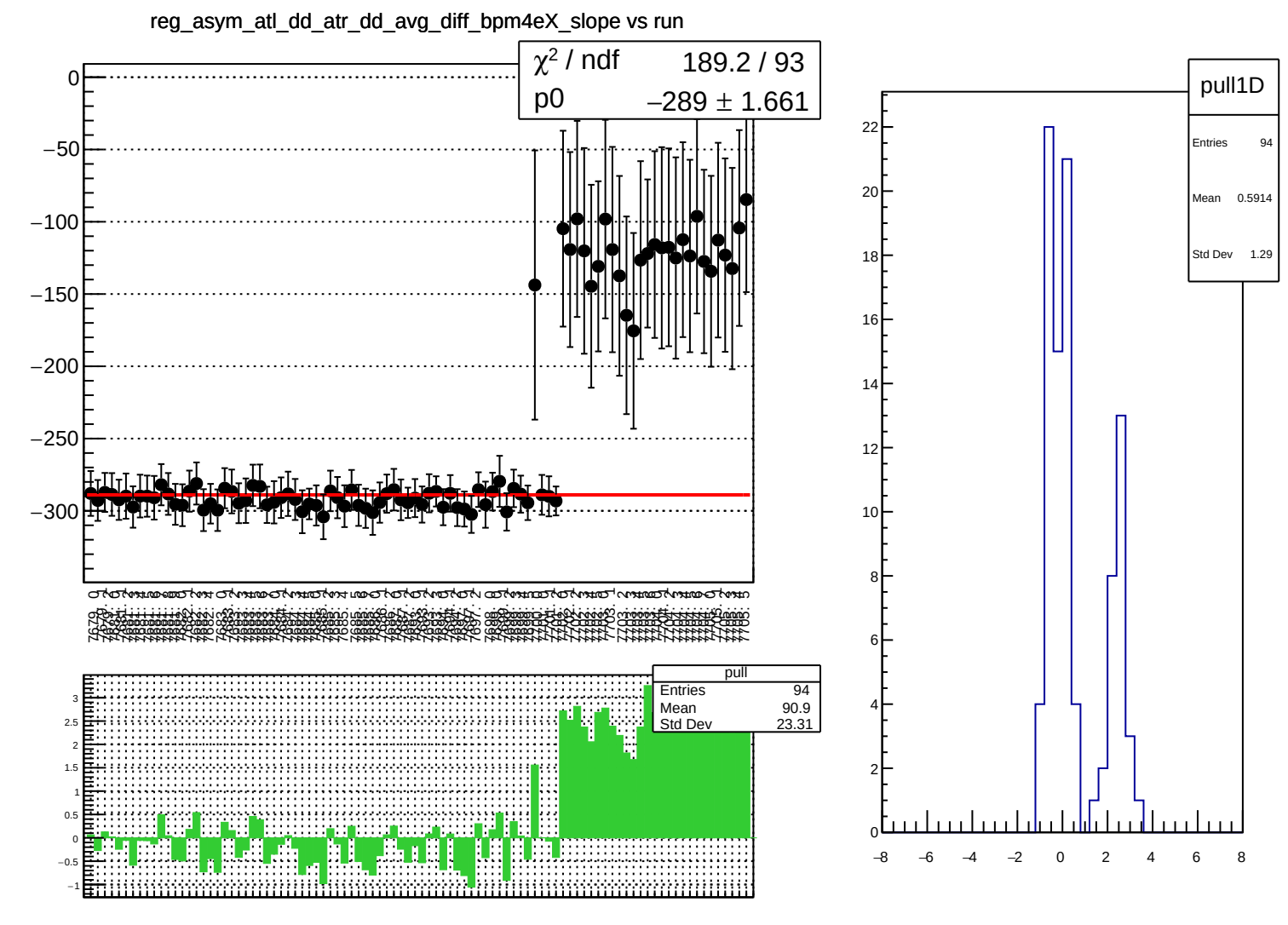

pull1D
Entries 94
Mean 0.06776
Std Dev 0.5006
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

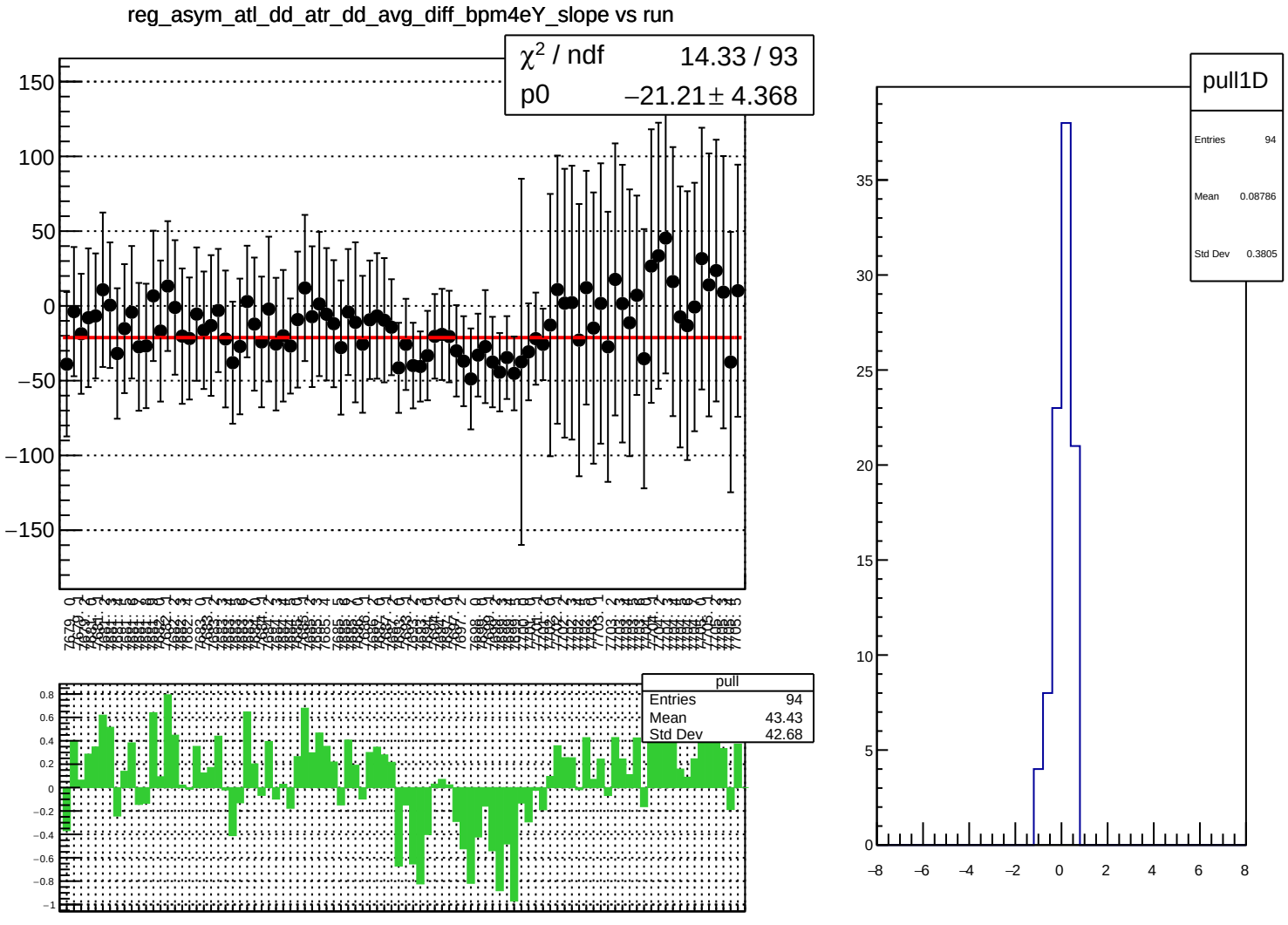

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 93.64 / 93
p0 104.1 ± 0.2057
110
108
106
104
102
100
98
pull
Entries 94
Mean 4962
Std Dev 4912
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

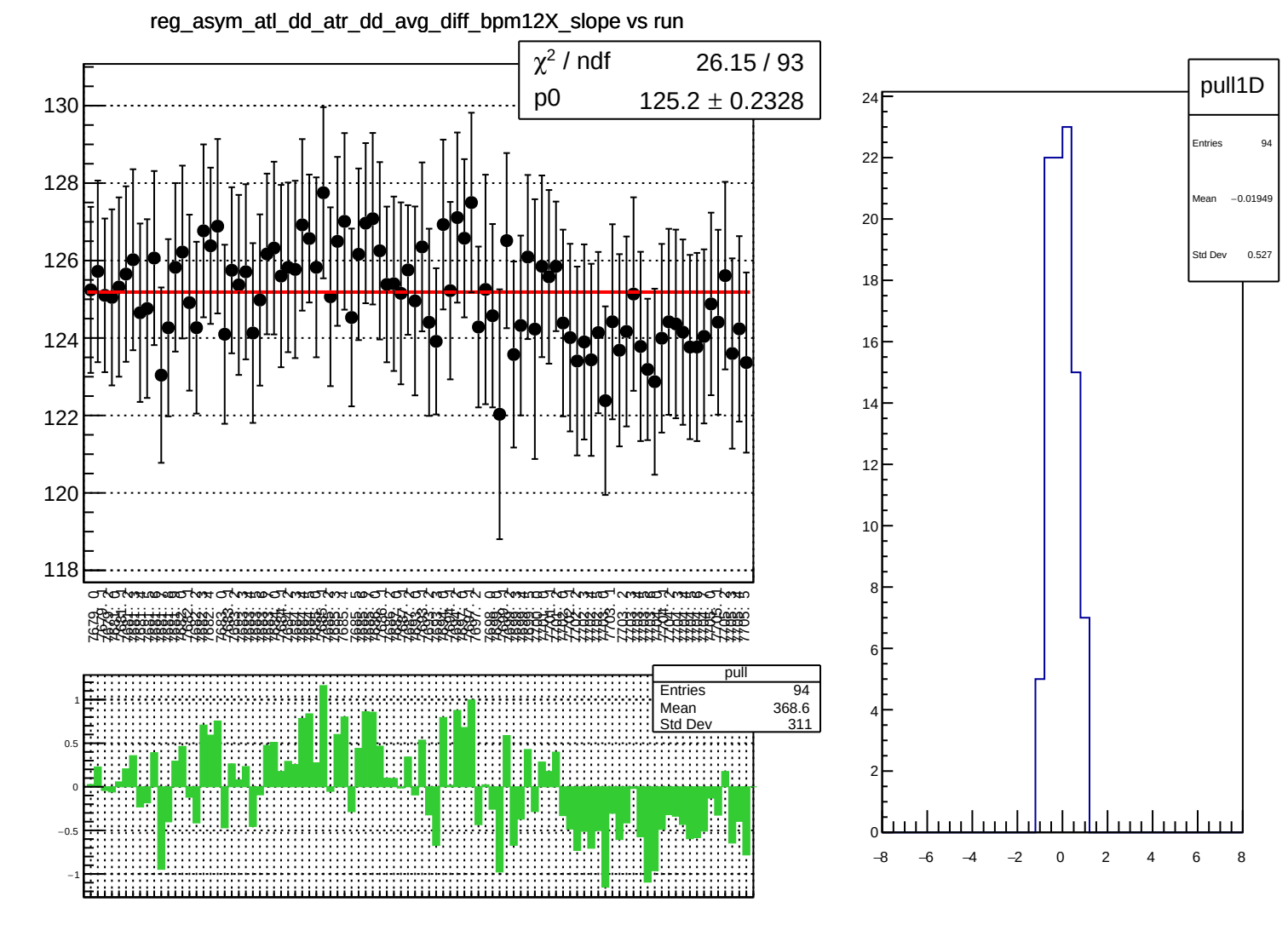

pull1D
Entries 94
Mean 0.004472
Std Dev 0.9981
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

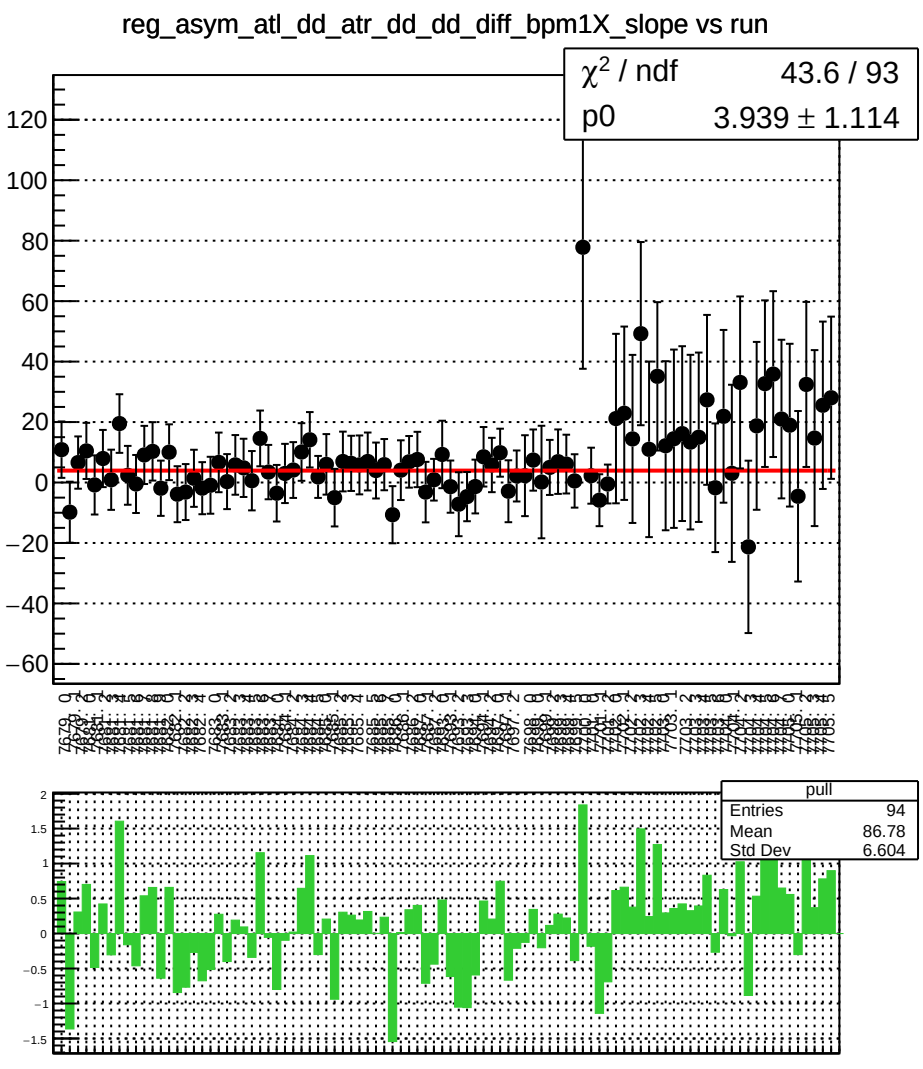

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 183.4 / 93
p0 289.8 ± 2.068
pull
Entries 94
Mean 93.2
Std Dev 26.66
pull1D
Entries 94
Mean −0.5579
Std Dev 1.28

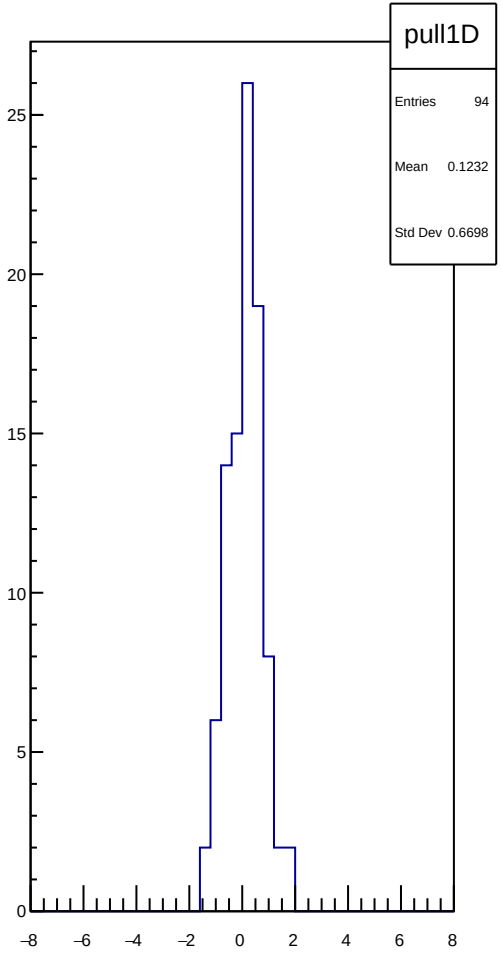

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 15.4 / 93
p0 −33.41 ± 2.905
pull
Entries 94
Mean 41.79
Std Dev 40.3
pull1D
Entries 94
Mean −0.1103
Std Dev 0.3894

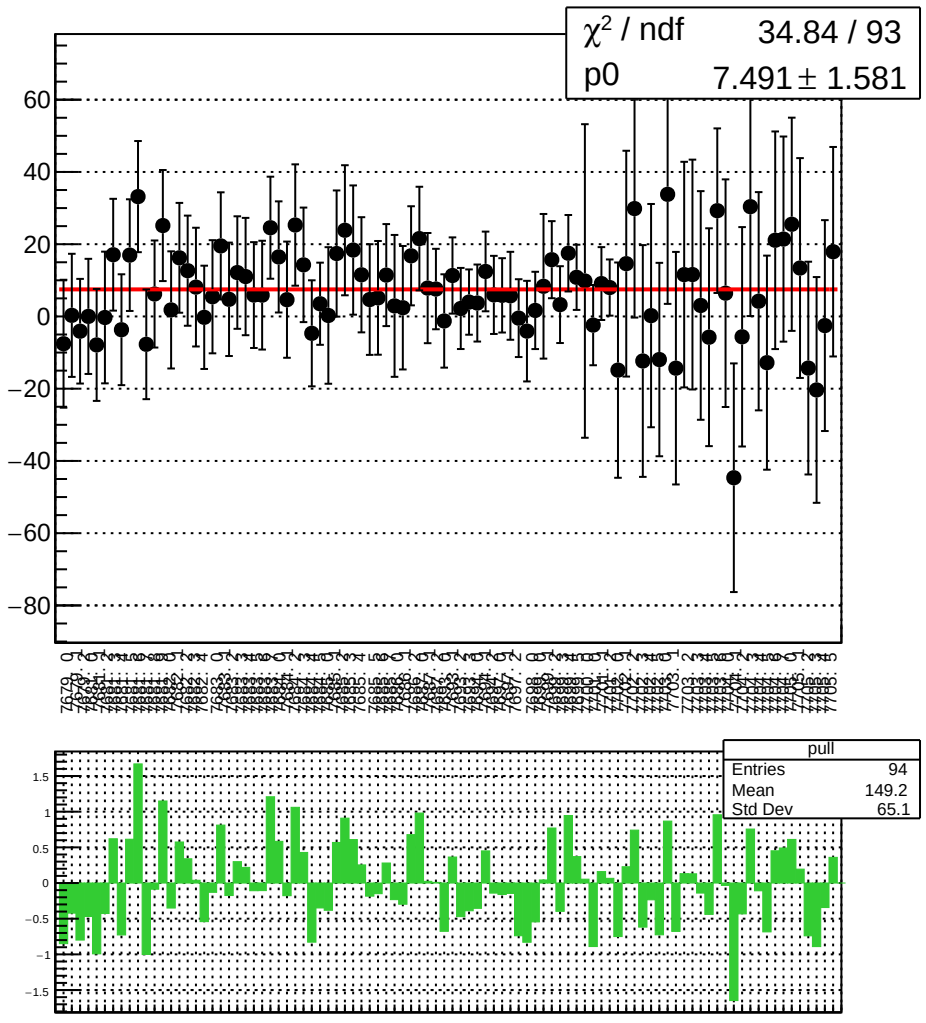

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 189.2 / 93
p0 −289 ± 1.661
pull
Entries 94
Mean 90.9
Std Dev 23.31
pull1D
Entries 94
Mean 0.5914
Std Dev 1.29

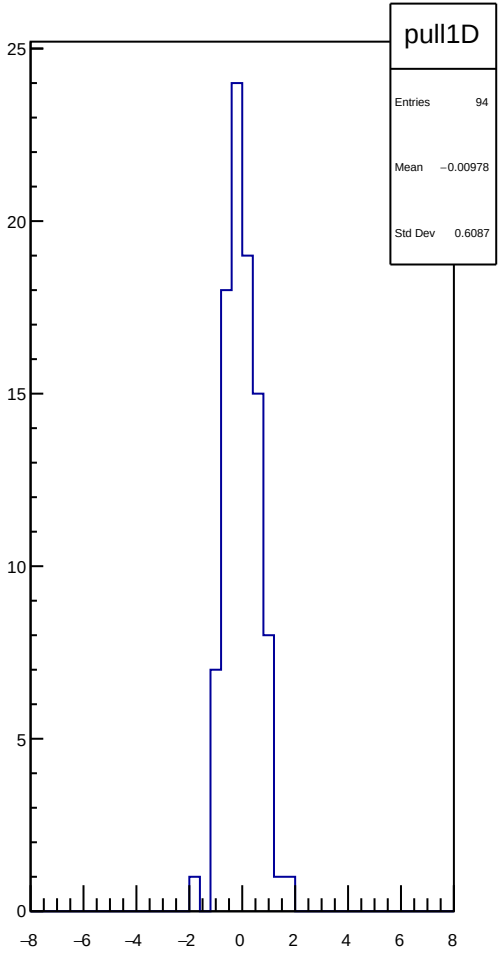

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 14.33 / 93
p0 −21.21 ± 4.368
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean 43.43
Std Dev 42.68
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 94
Mean 0.08786
Std Dev 0.3805
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

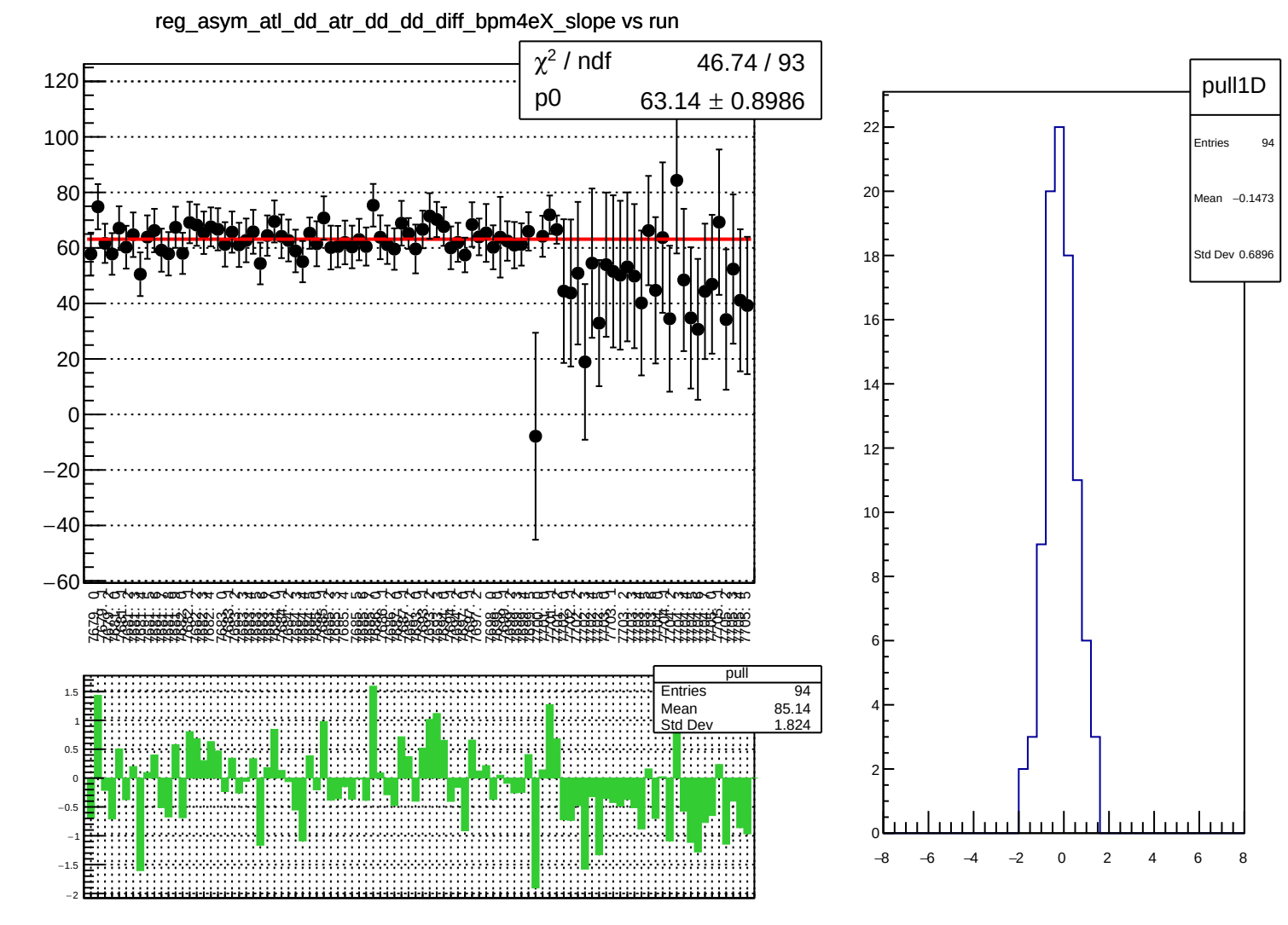

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 26.15 / 93
p0 125.2 ± 0.2328
pull
Entries 94
Mean 368.6
Std Dev 311
pull1D
Entries 94
Mean −0.01949
Std Dev 0.527

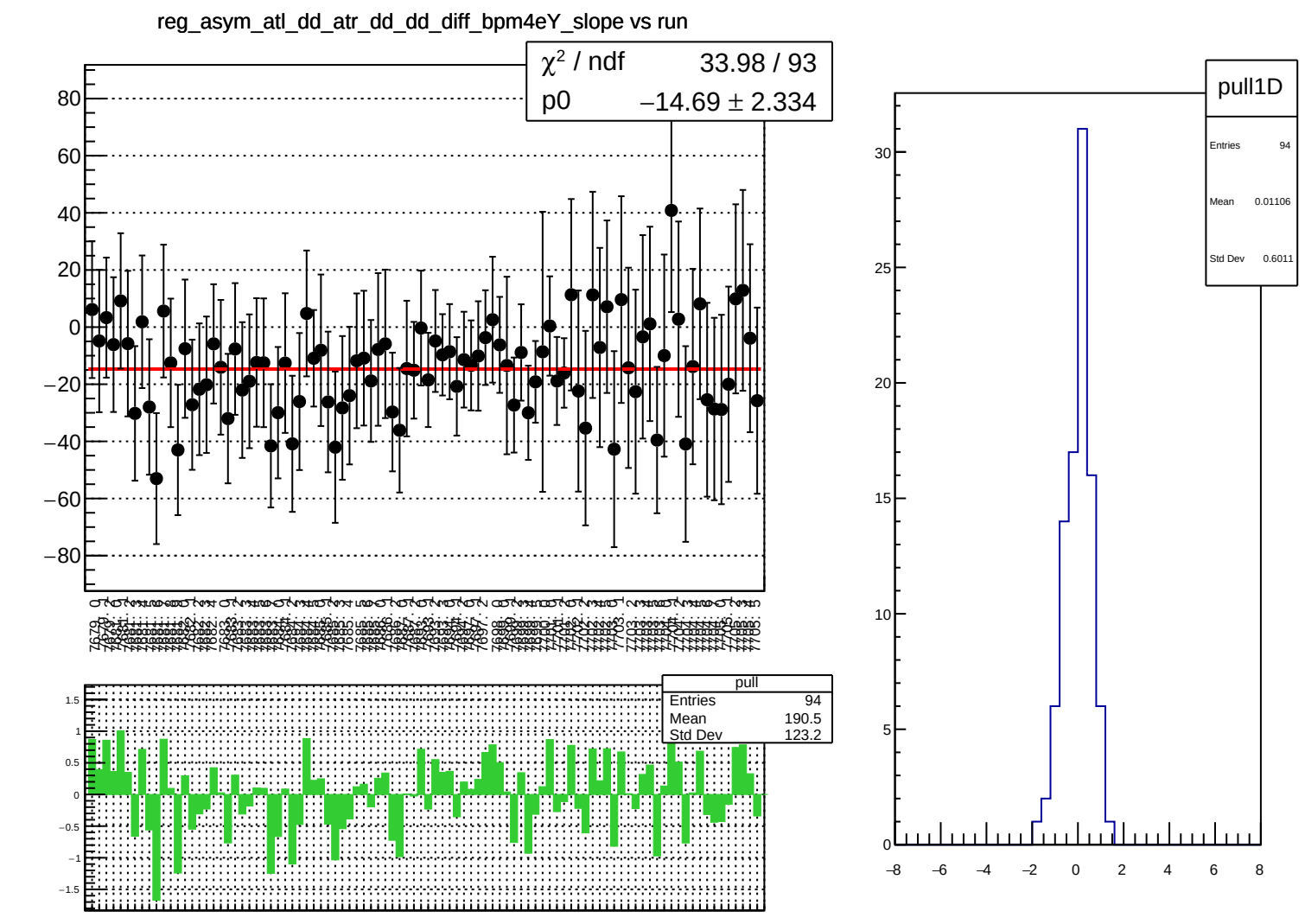

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 43.6 / 93
p0 3.939 ± 1.114
pull
Entries 94
Mean 86.78
Std Dev 6.604

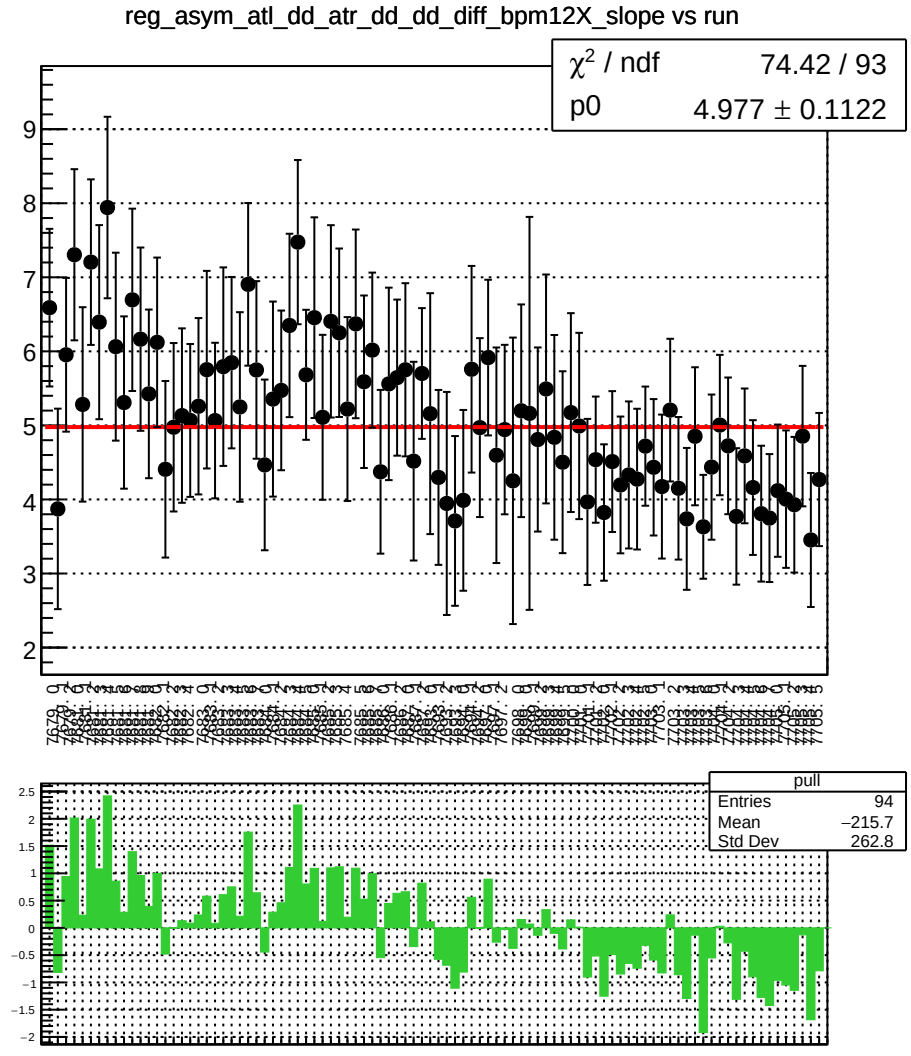

pull1D
Entries 94
Mean 0.1232
Std Dev 0.6698

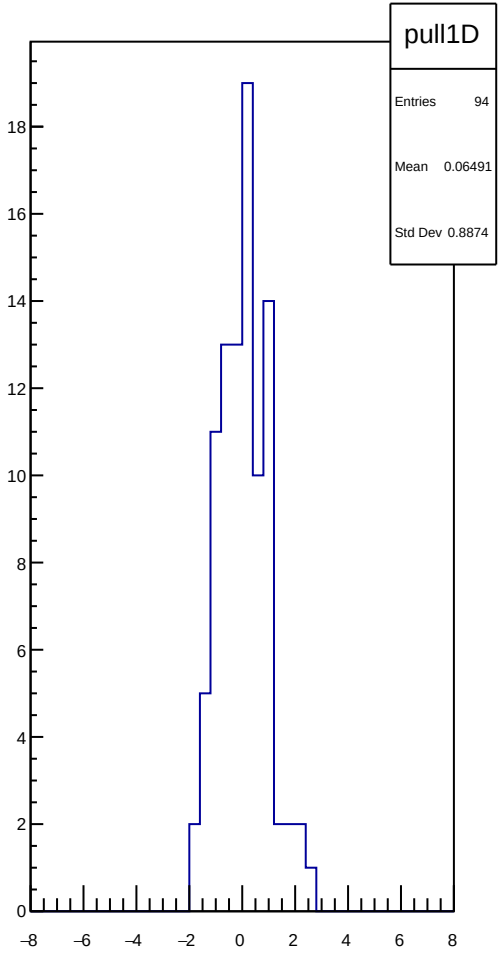

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 34.84 / 93
p0 7.491 ± 1.581
pull
Entries 94
Mean 149.2
Std Dev 65.1

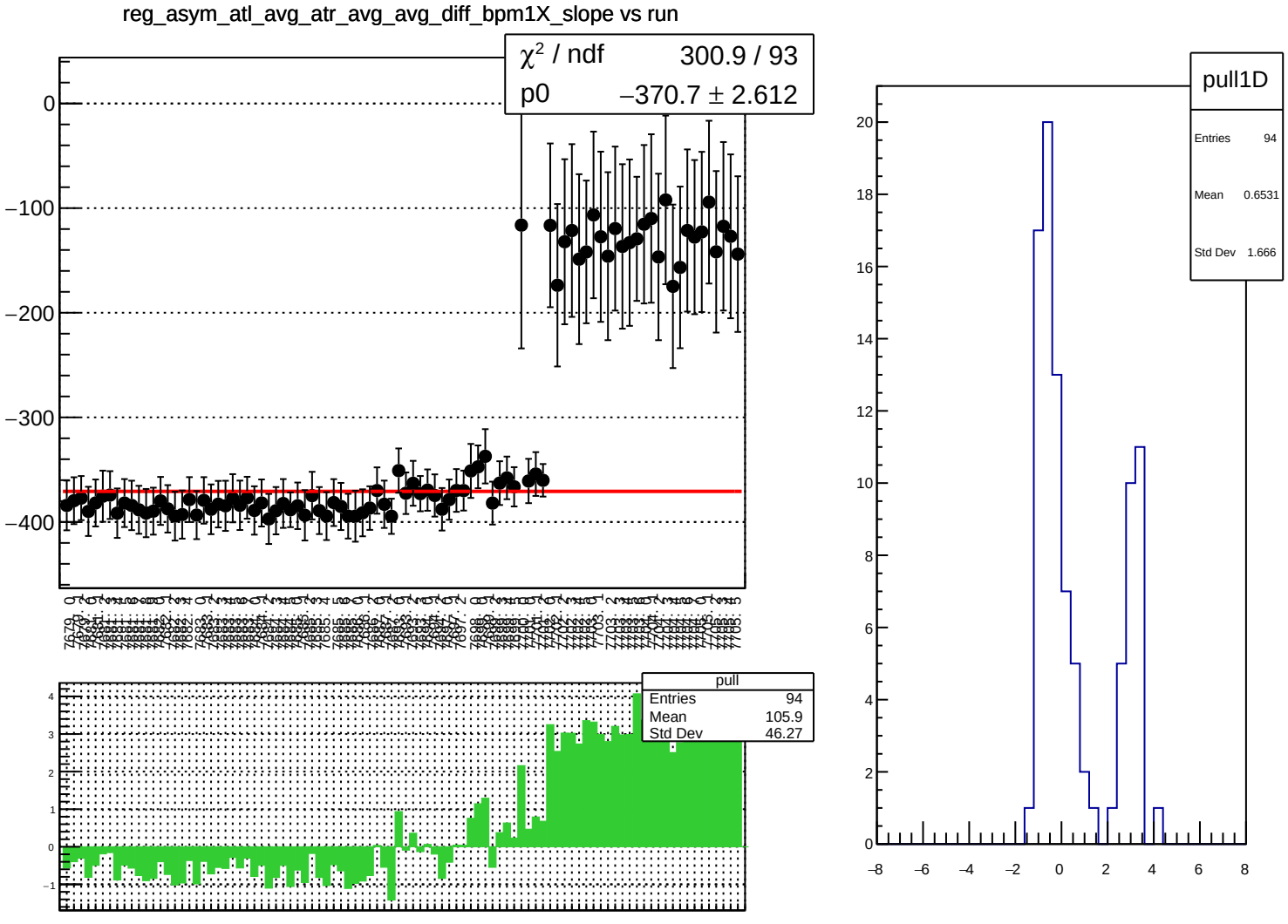

pull1D
Entries 94
Mean −0.00978
Std Dev 0.6087

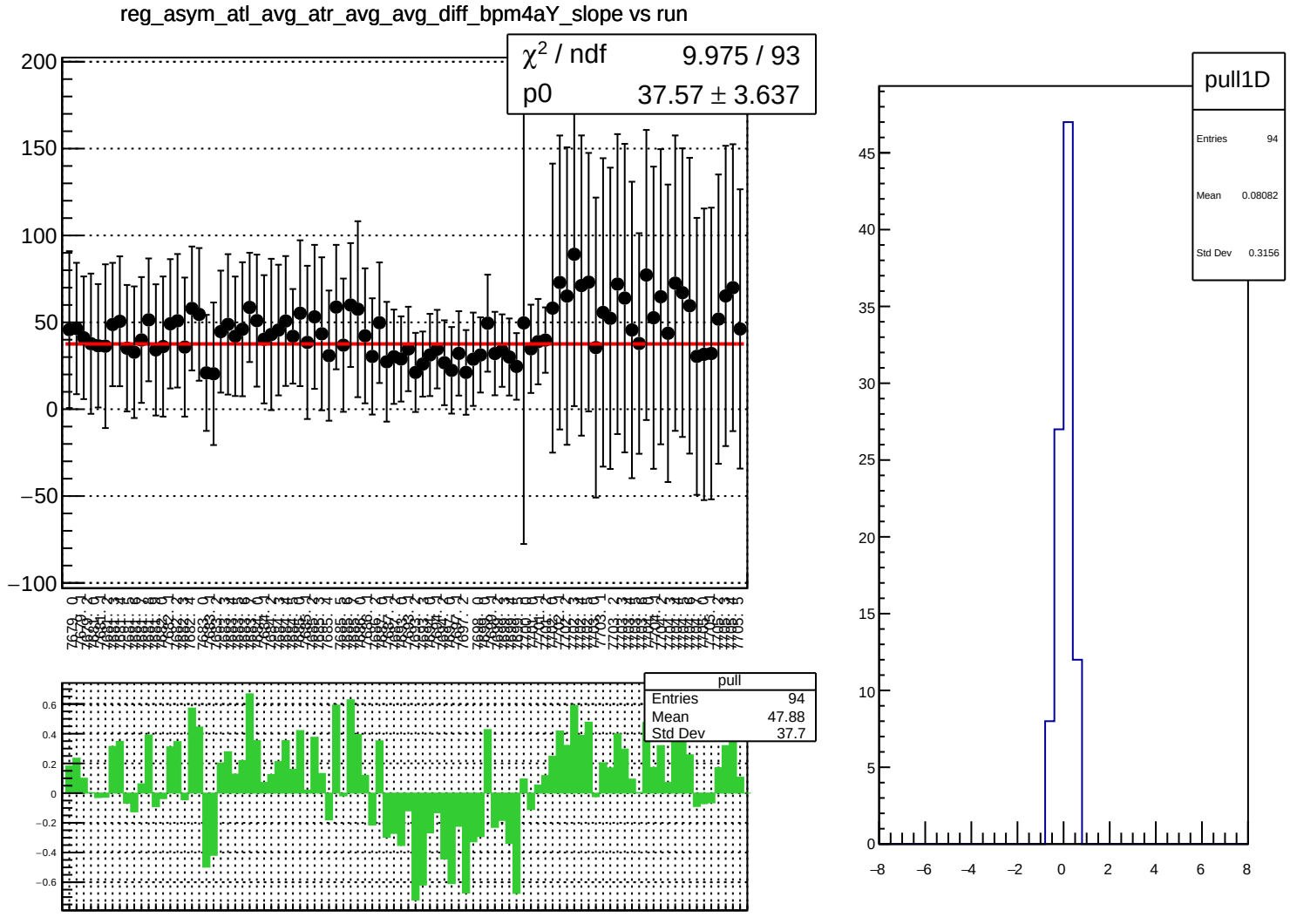

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 46.74 / 93
p0 63.14 ± 0.8986
pull
Entries 94
Mean 85.14
Std Dev 1.824
pull1D
Entries 94
Mean −0.1473
Std Dev 0.6896

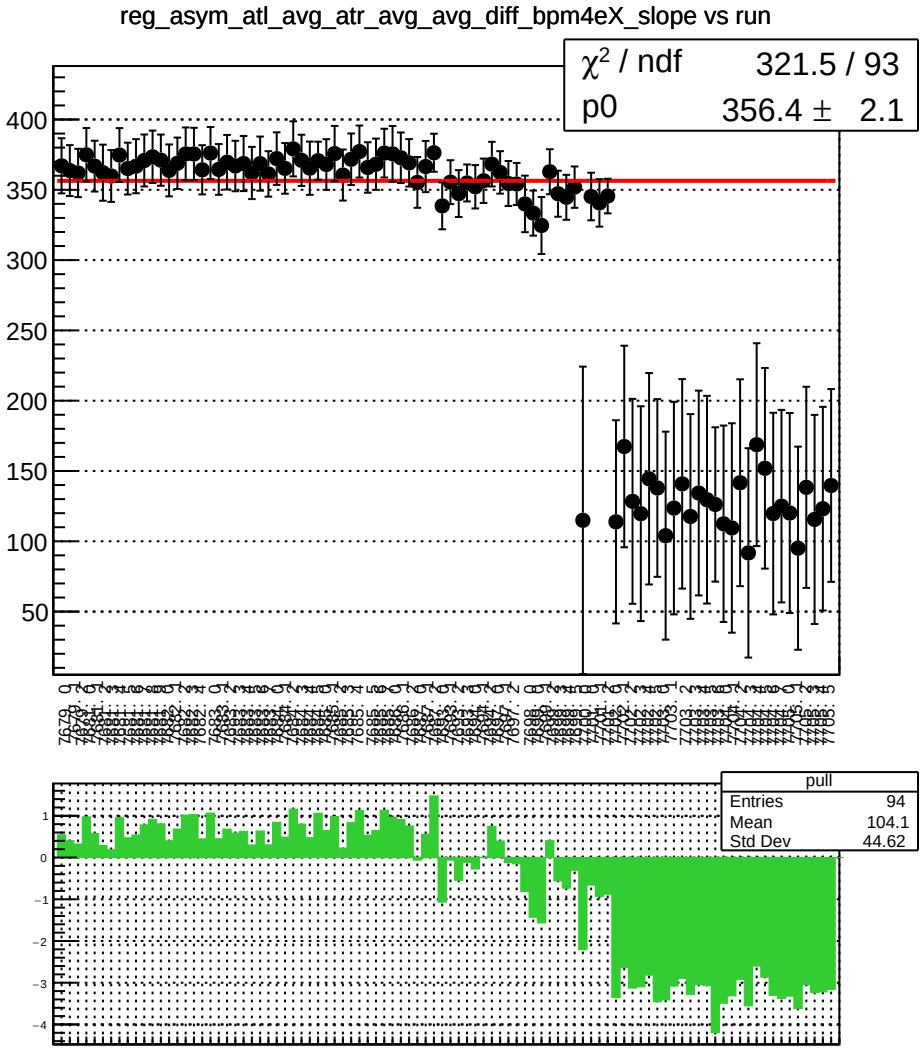

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 33.98 / 93
p0 −14.69 ± 2.334
pull
Entries 94
Mean 190.5
Std Dev 123.2
pull1D
Entries 94
Mean 0.01106
Std Dev 0.6011

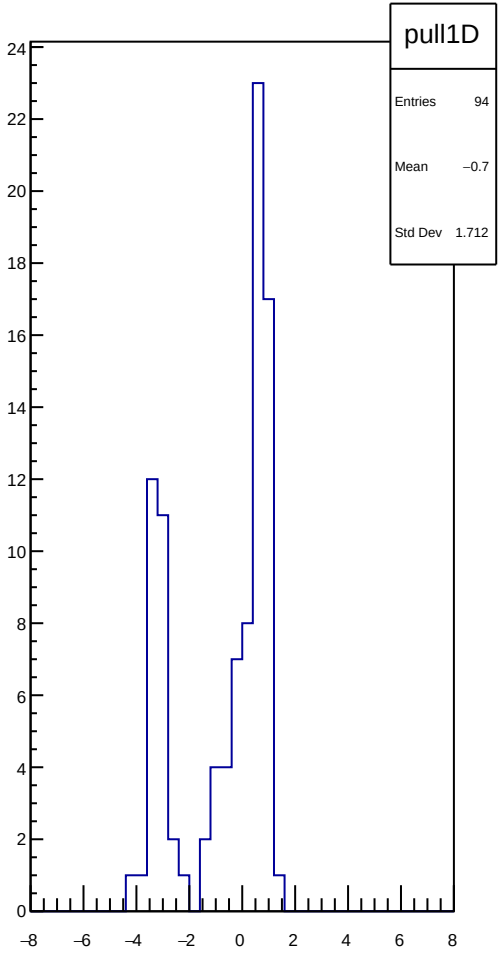

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 74.42 / 93
p0 4.977 ± 0.1122
pull
Entries 94
Mean −215.7
Std Dev 262.8

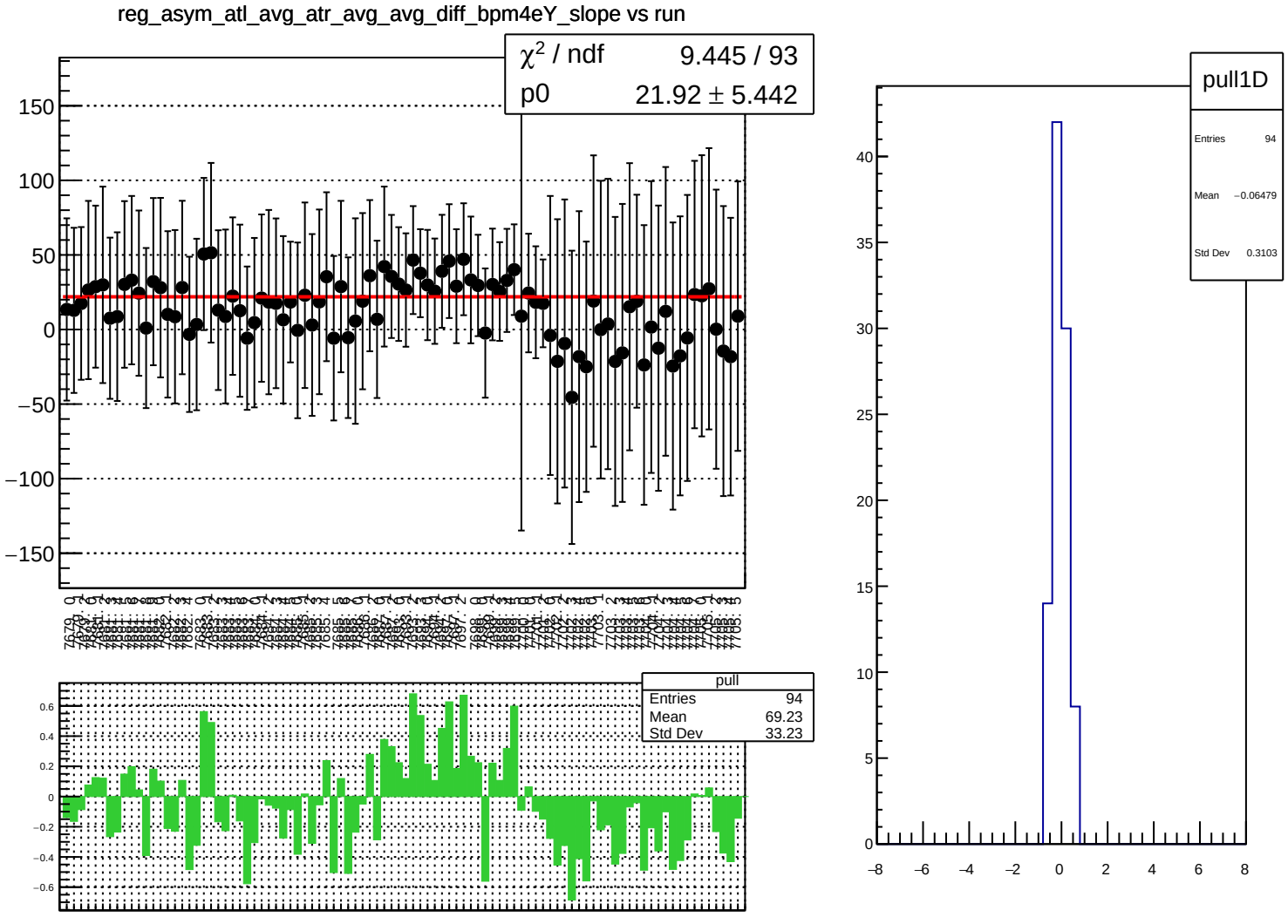

pull1D
Entries 94
Mean 0.06491
Std Dev 0.8874

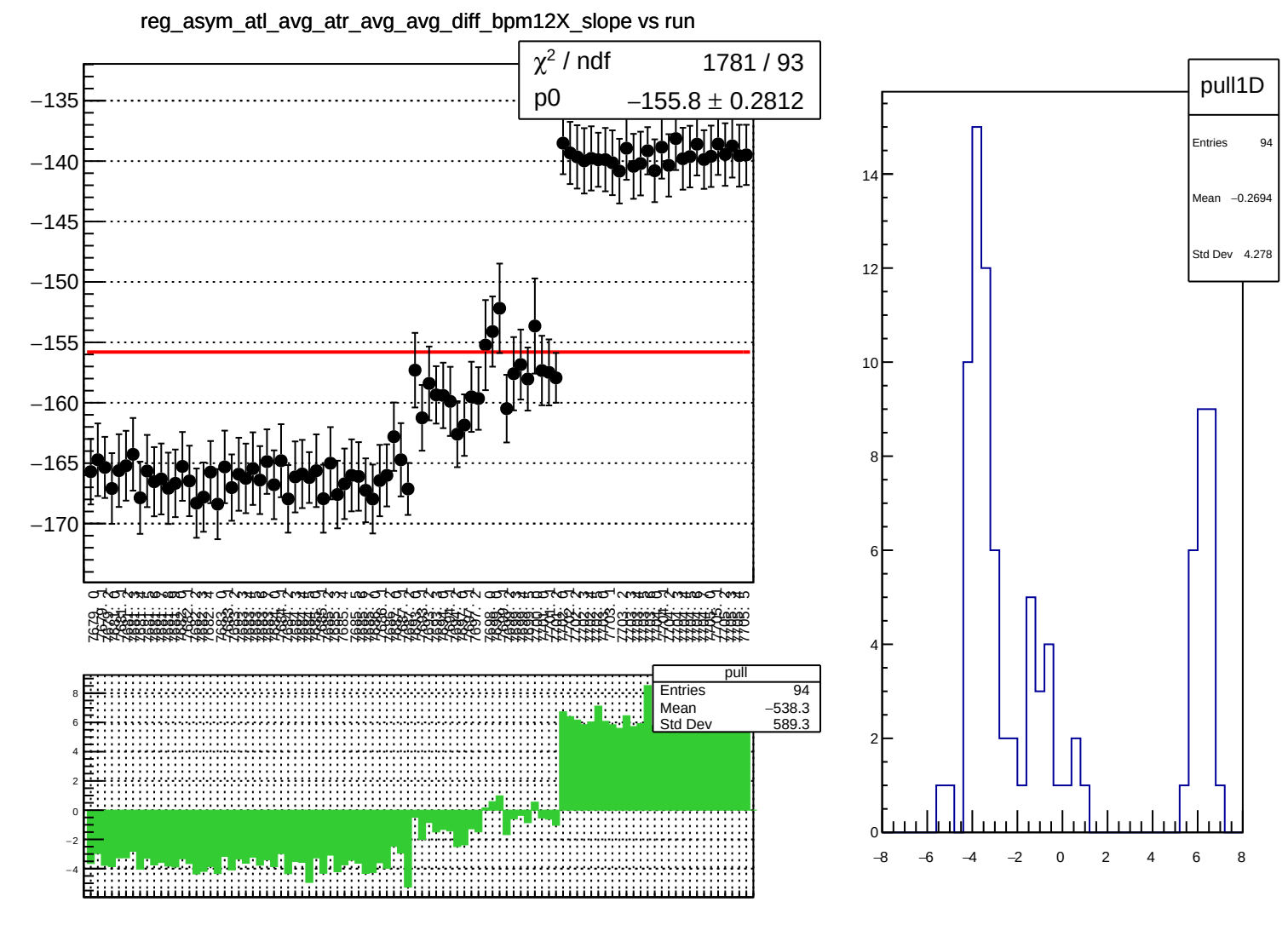

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 300.9 / 93
p0 −370.7 ± 2.612
pull
Entries 94
Mean 105.9
Std Dev 46.27
pull1D
Entries 94
Mean 0.6531
Std Dev 1.666

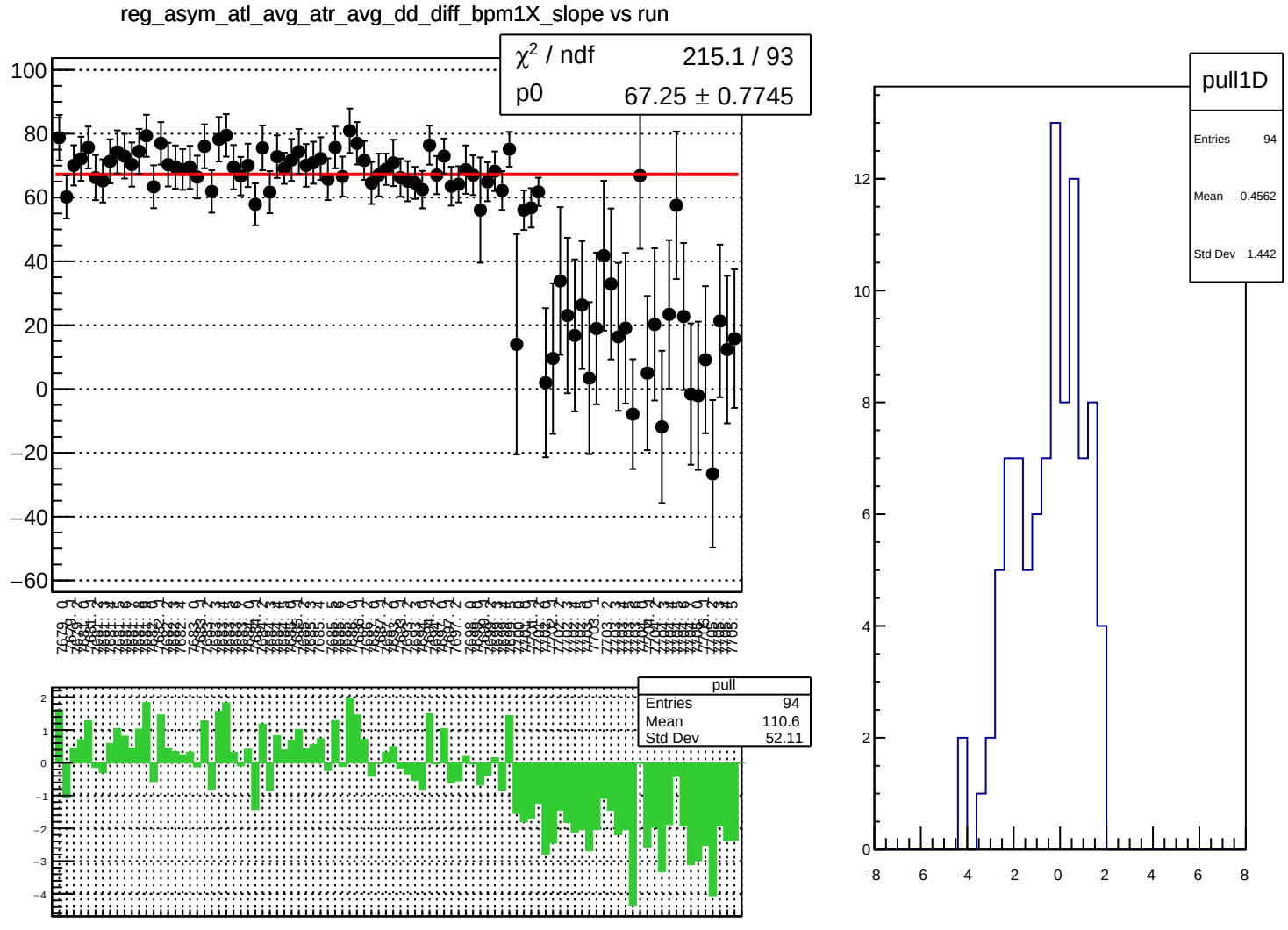

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 9.975 / 93
p0 37.57 ± 3.637
pull
Entries 94
Mean 47.88
Std Dev 37.7
pull1D
Entries 94
Mean 0.08082
Std Dev 0.3156

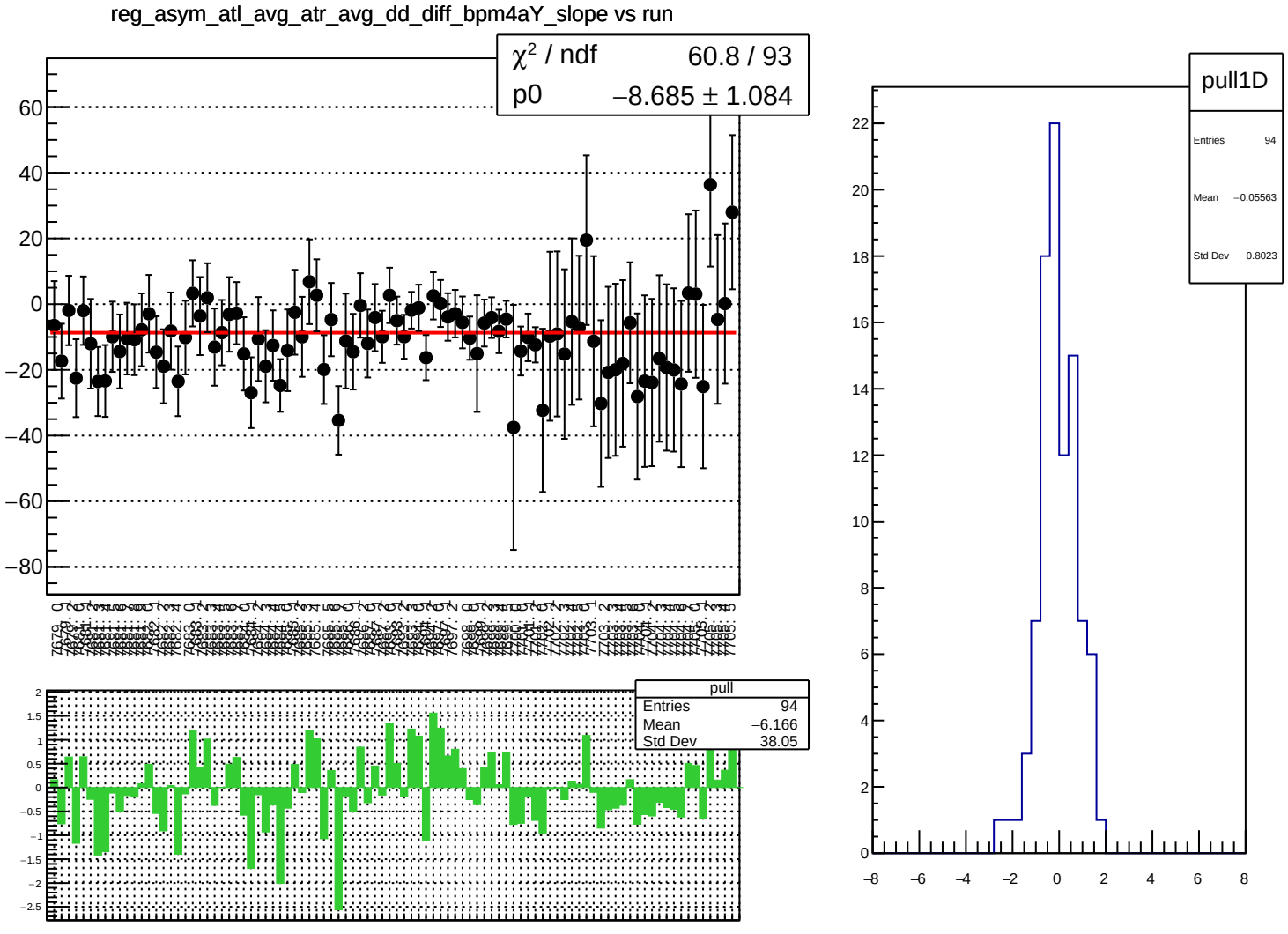

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 321.5 / 93
p0 356.4 ± 2.1
pull
Entries 94
Mean 104.1
Std Dev 44.62

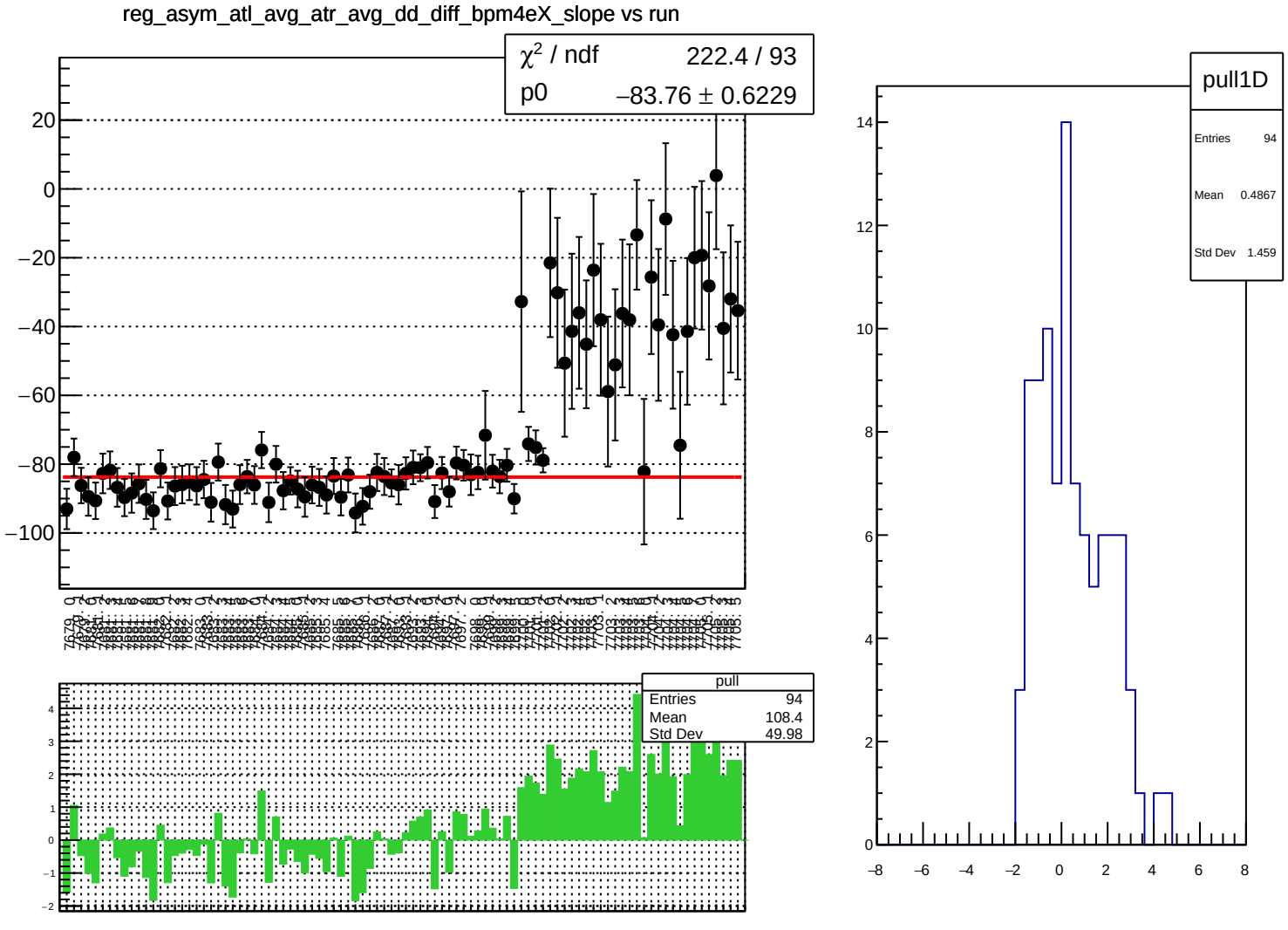

pull1D
Entries 94
Mean −0.7
Std Dev 1.712

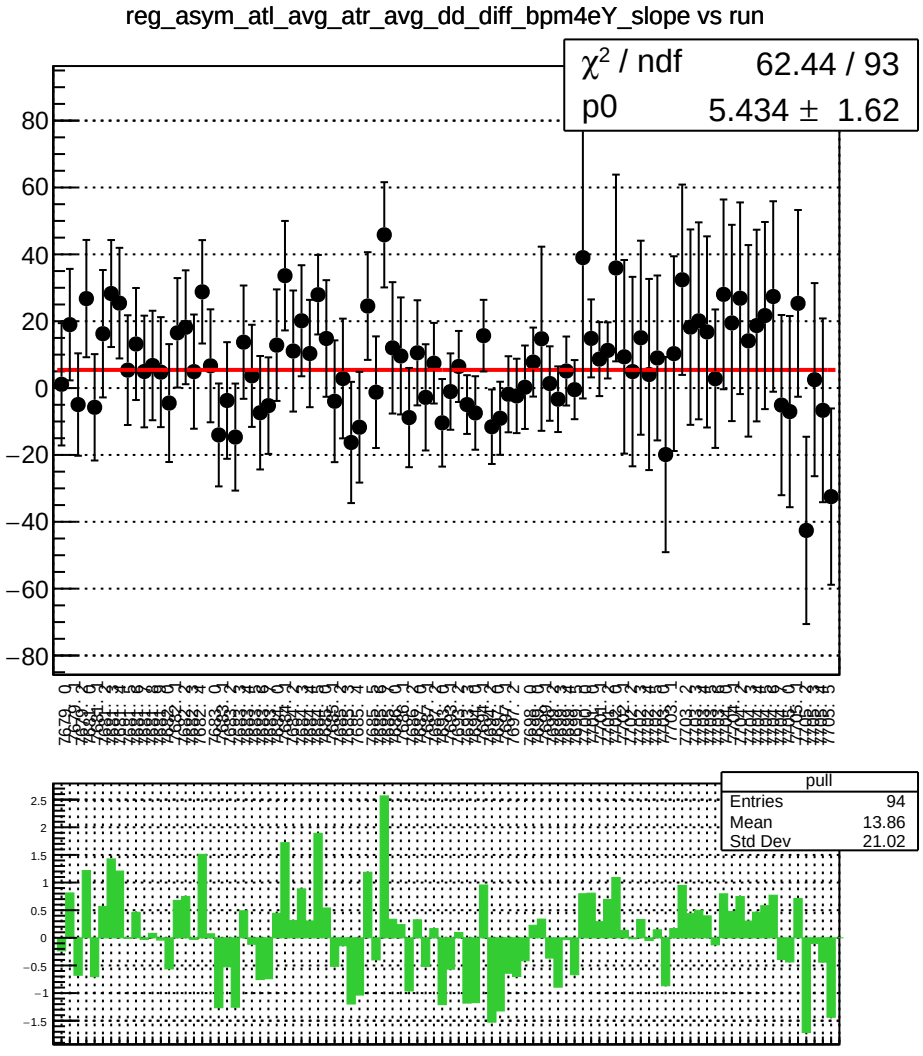

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 9.445 / 93
p0 21.92 ± 5.442
150
100
50
0
−50
−100
−150
pull
Entries 94
Mean 69.23
Std Dev 33.23
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 94
Mean −0.06479
Std Dev 0.3103
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

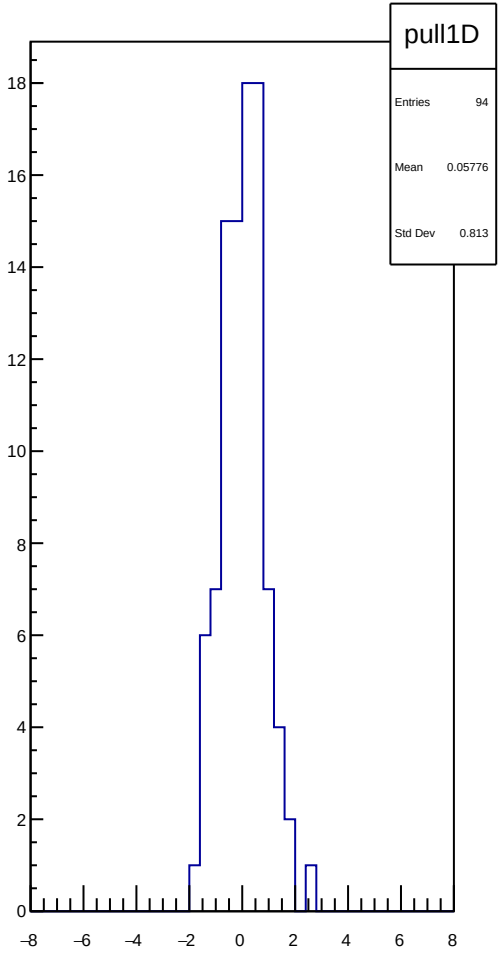

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 1781 / 93
p0 −155.8 ± 0.2812
pull
Entries 94
Mean −538.3
Std Dev 589.3
pull1D
Entries 94
Mean −0.2694
Std Dev 4.278

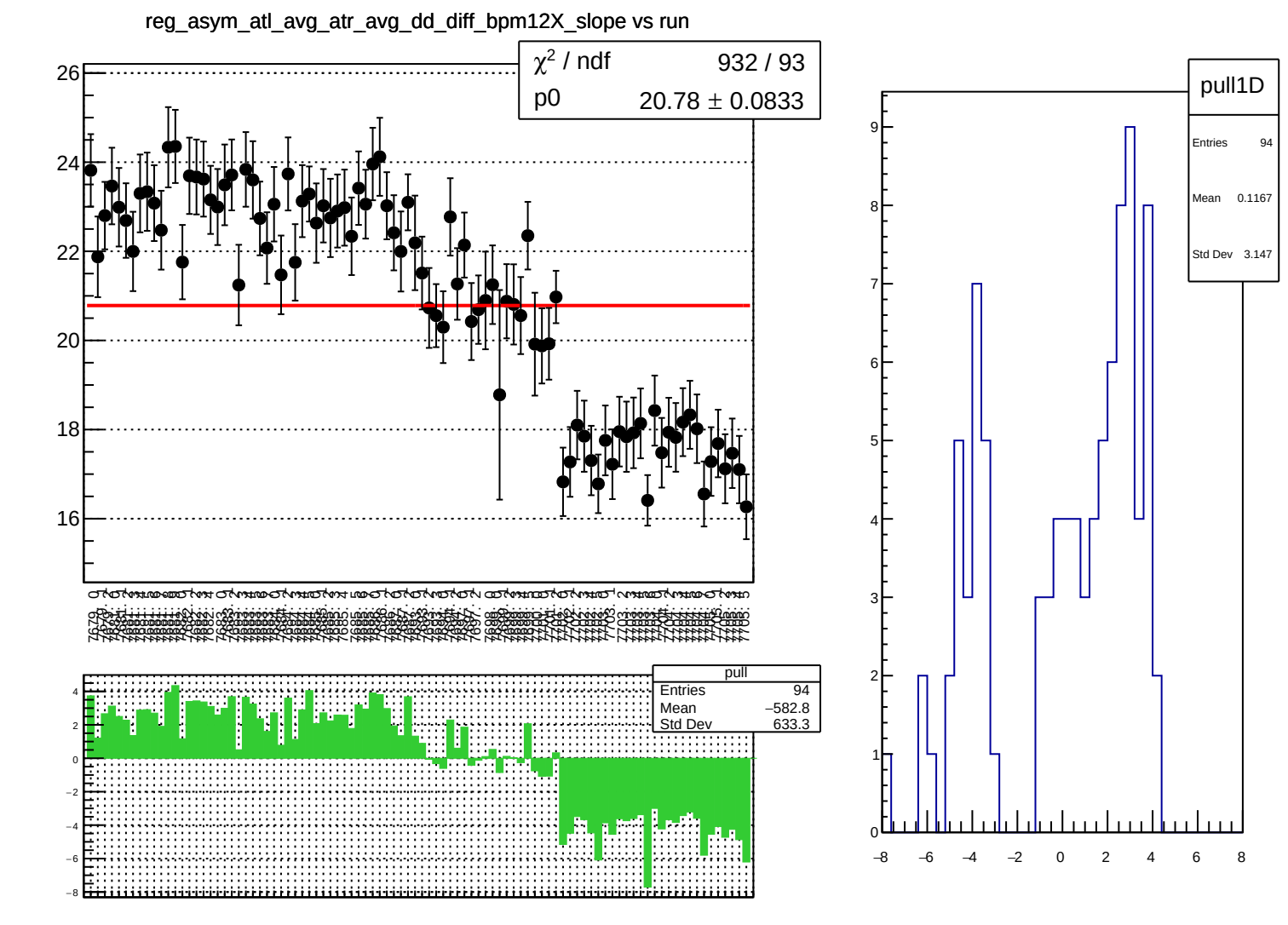

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 215.1 / 93
p0 67.25 ± 0.7745
pull
Entries 94
Mean 110.6
Std Dev 52.11
pull1D
Entries 94
Mean −0.4562
Std Dev 1.442

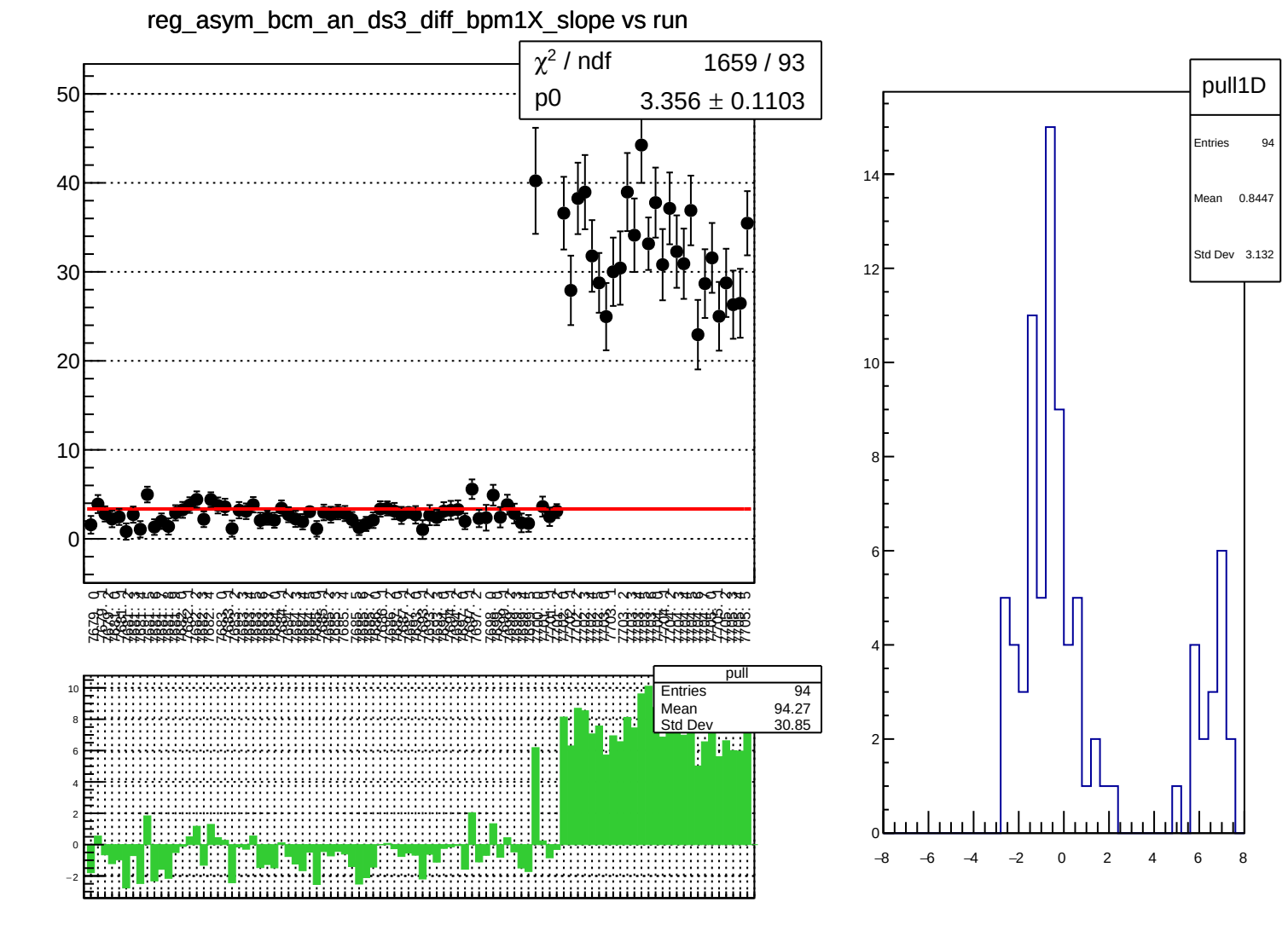

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 60.8 / 93
p0 −8.685 ± 1.084
pull
Entries 94
Mean −6.166
Std Dev 38.05
pull1D
Entries 94
Mean −0.05563
Std Dev 0.8023

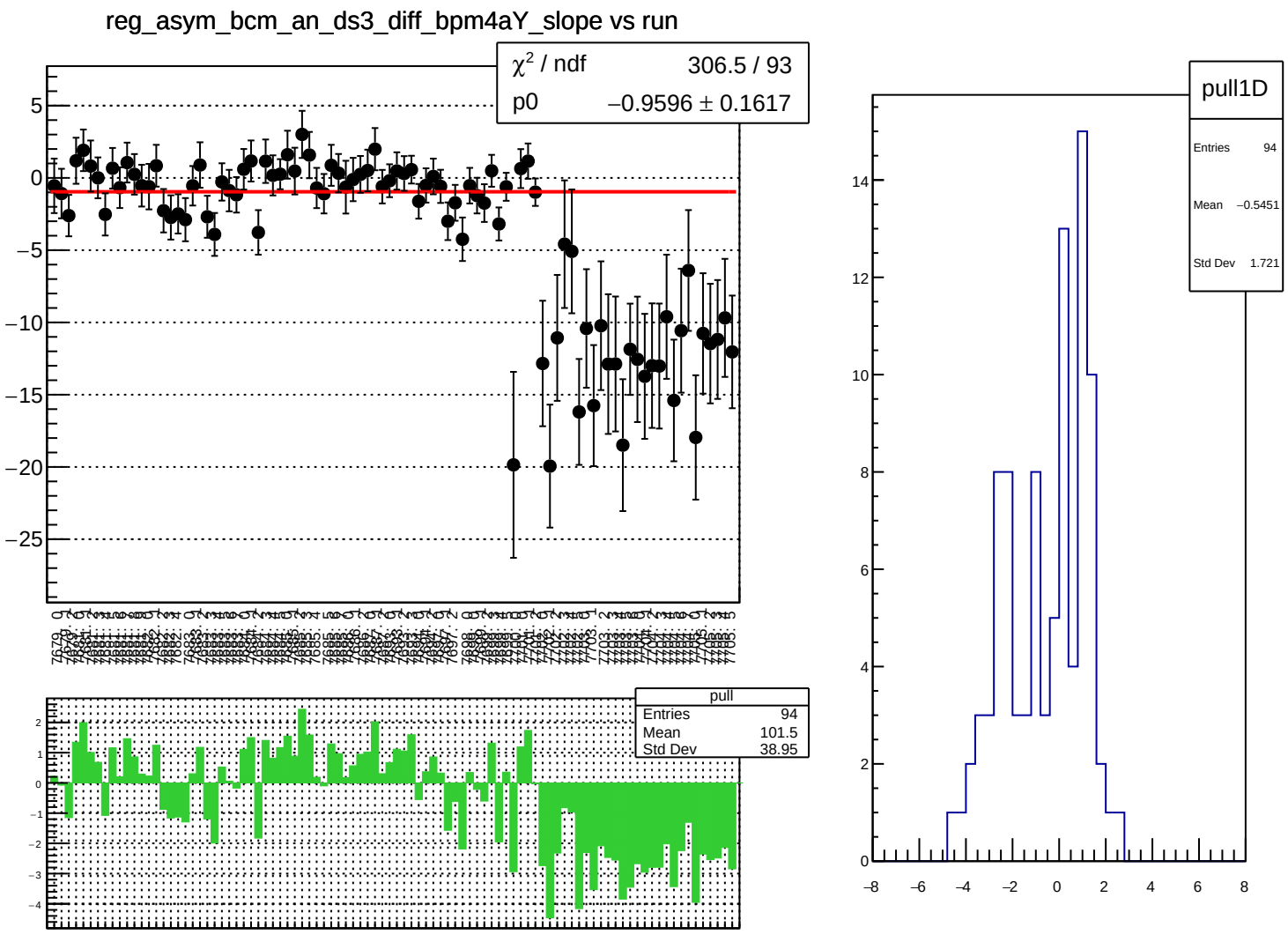

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 222.4 / 93
p0 −83.76 ± 0.6229
pull
Entries 94
Mean 108.4
Std Dev 49.98
pull1D
Entries 94
Mean 0.4867
Std Dev 1.459

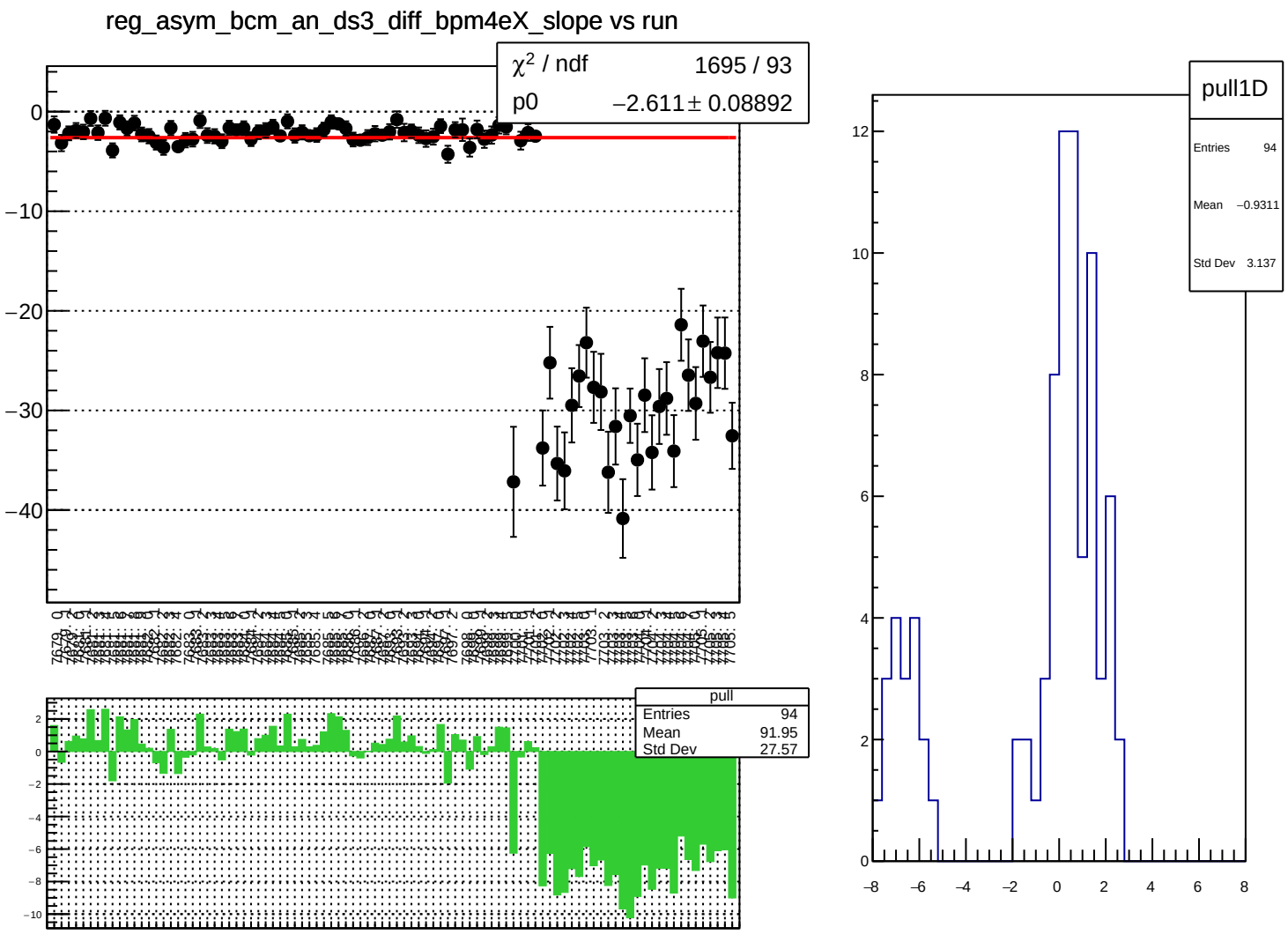

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 62.44 / 93
p0 5.434 ± 1.62
pull
Entries 94
Mean 13.86
Std Dev 21.02

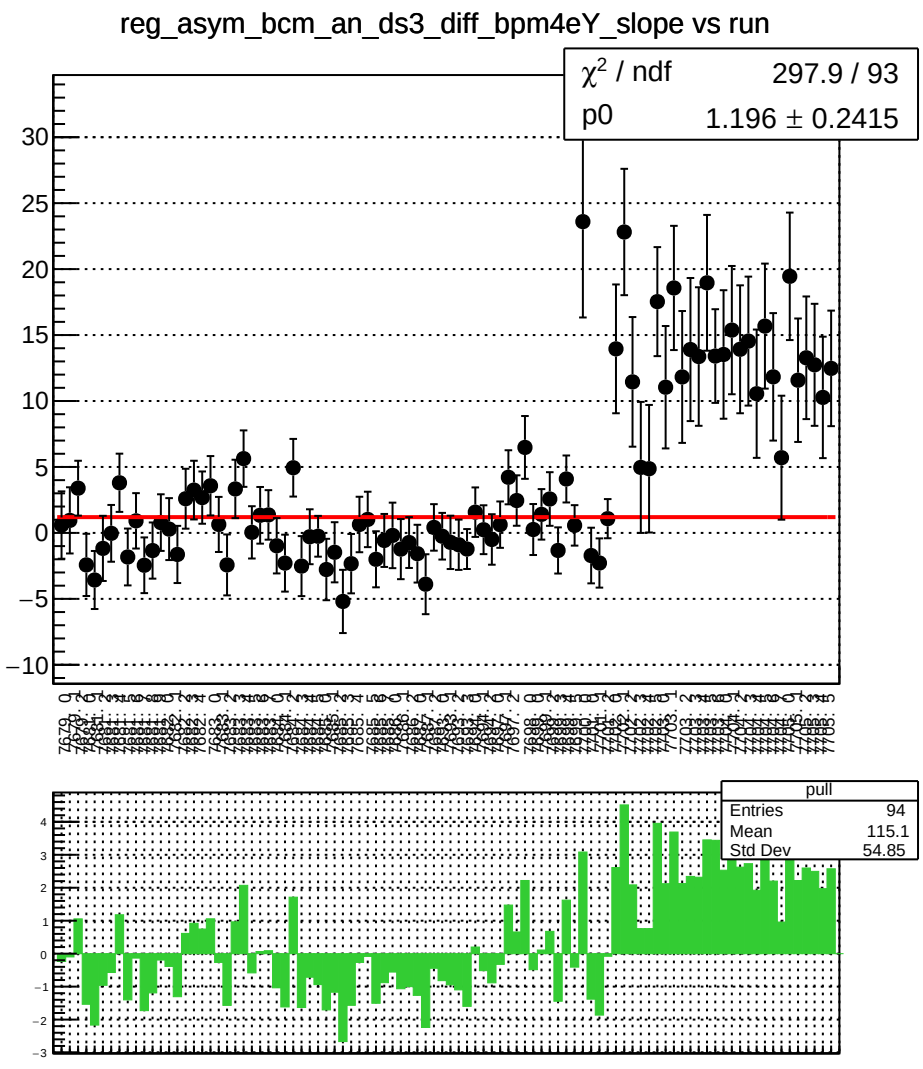

pull1D
Entries 94
Mean 0.05776
Std Dev 0.813

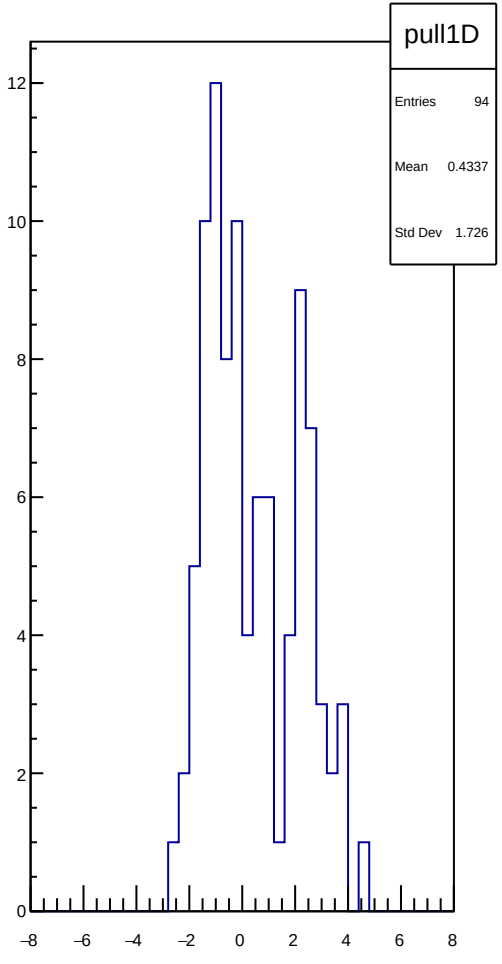

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 932 / 93
p0 20.78 ± 0.0833
pull
Entries 94
Mean −582.8
Std Dev 633.3
pull1D
Entries 94
Mean 0.1167
Std Dev 3.147

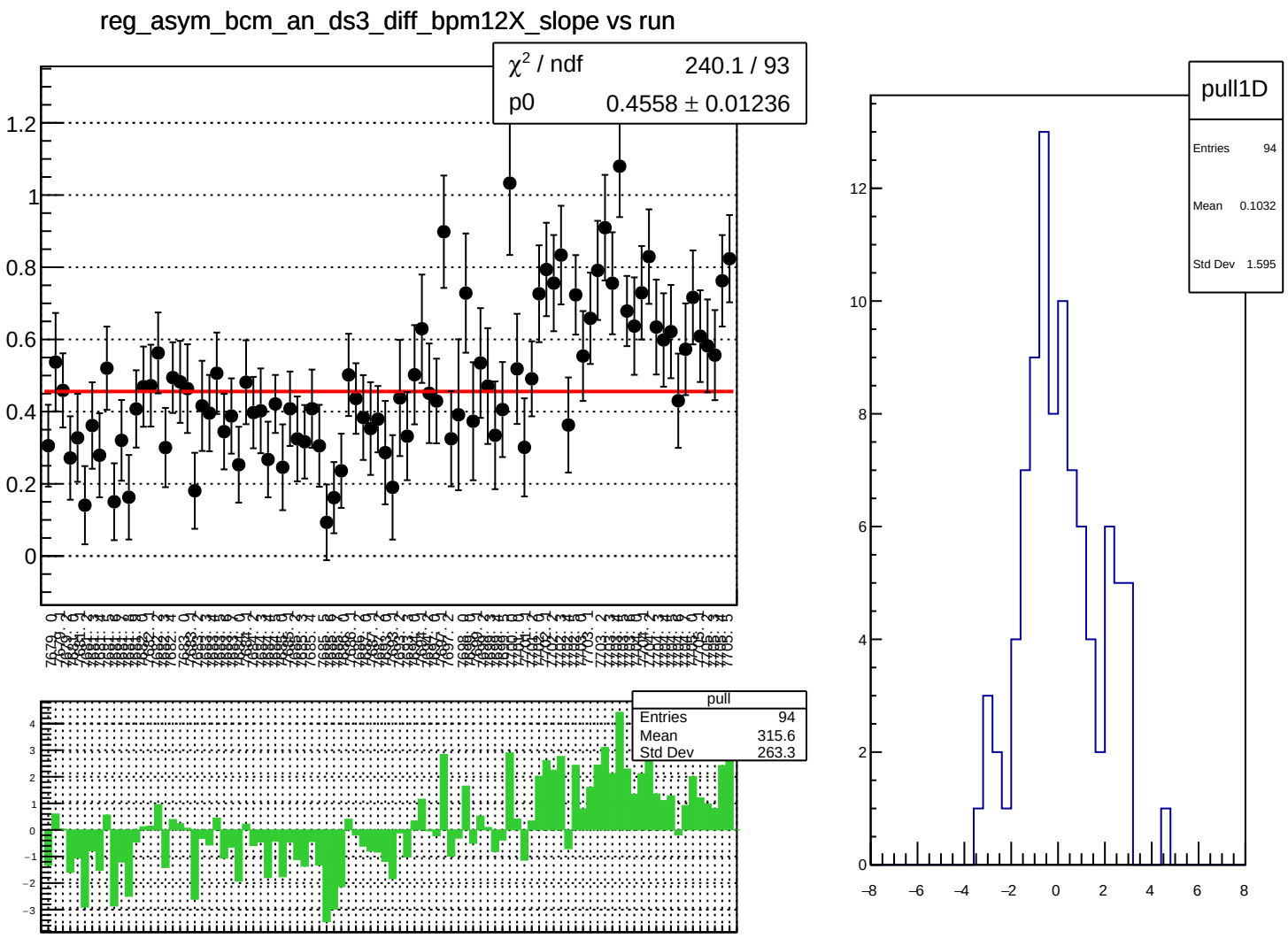

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 1659 / 93
p0 3.356 ± 0.1103
pull
Entries 94
Mean 94.27
Std Dev 30.85
pull1D
Entries 94
Mean 0.8447
Std Dev 3.132

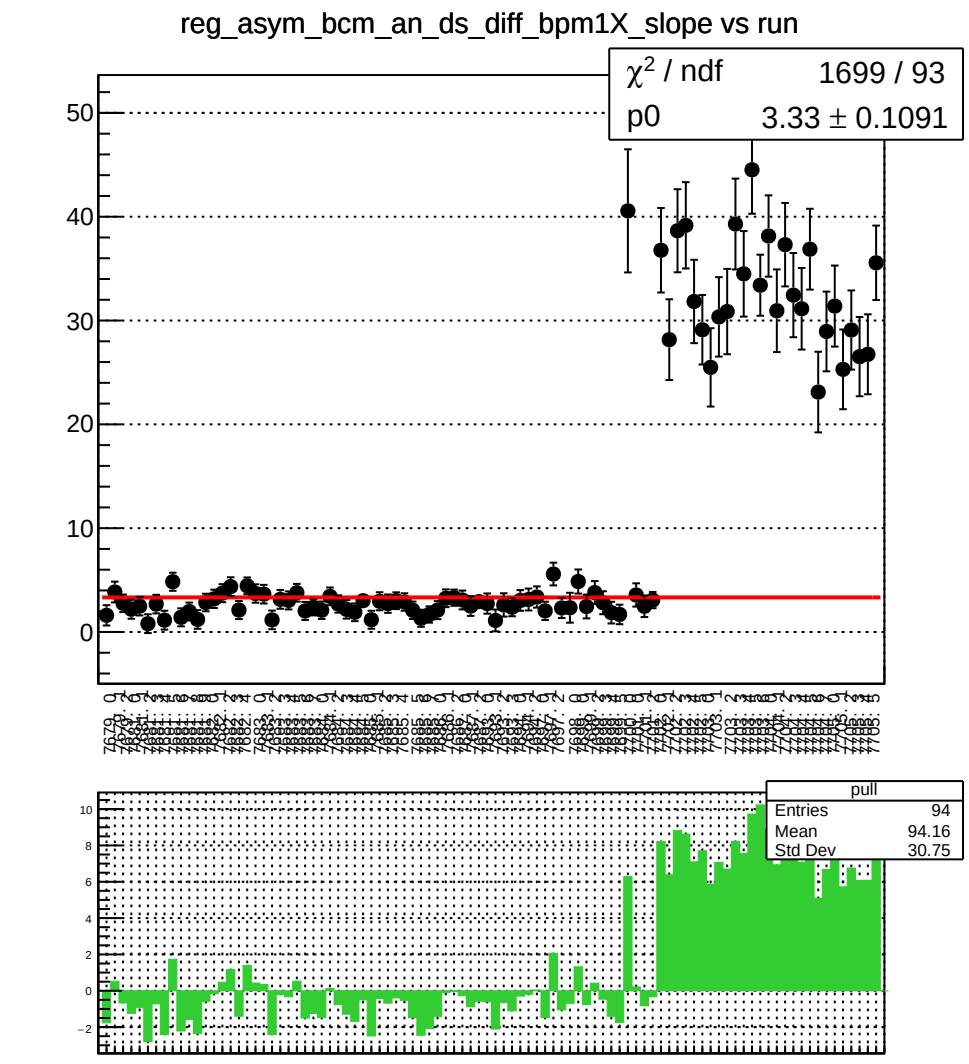

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 306.5 / 93
p0 −0.9596 ± 0.1617
pull
Entries 94
Mean 101.5
Std Dev 38.95
pull1D
Entries 94
Mean −0.5451
Std Dev 1.721

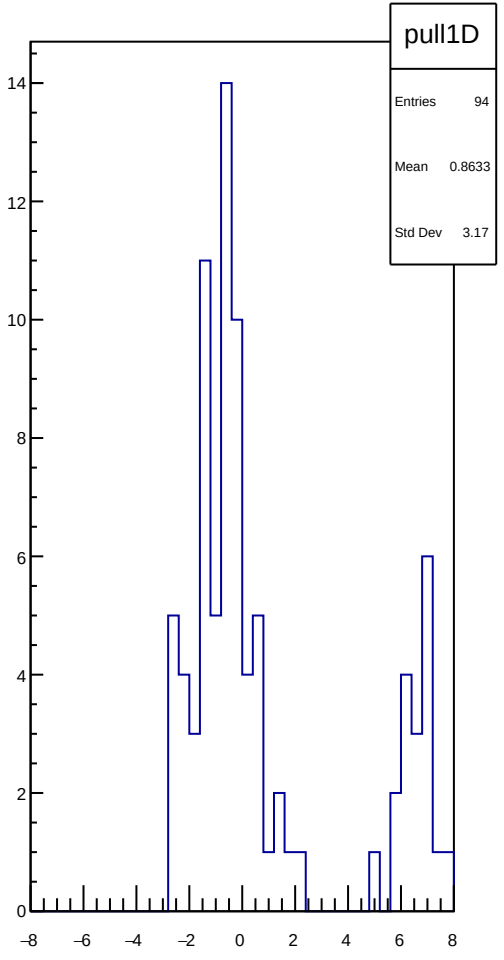

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 1695 / 93
p0 −2.611 ± 0.08892
0
−10
−20
−30
−40
pull
Entries 94
Mean 91.95
Std Dev 27.57
2
0
−2
−4
−6
−8
−10
pull1D
Entries 94
Mean −0.9311
Std Dev 3.137
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

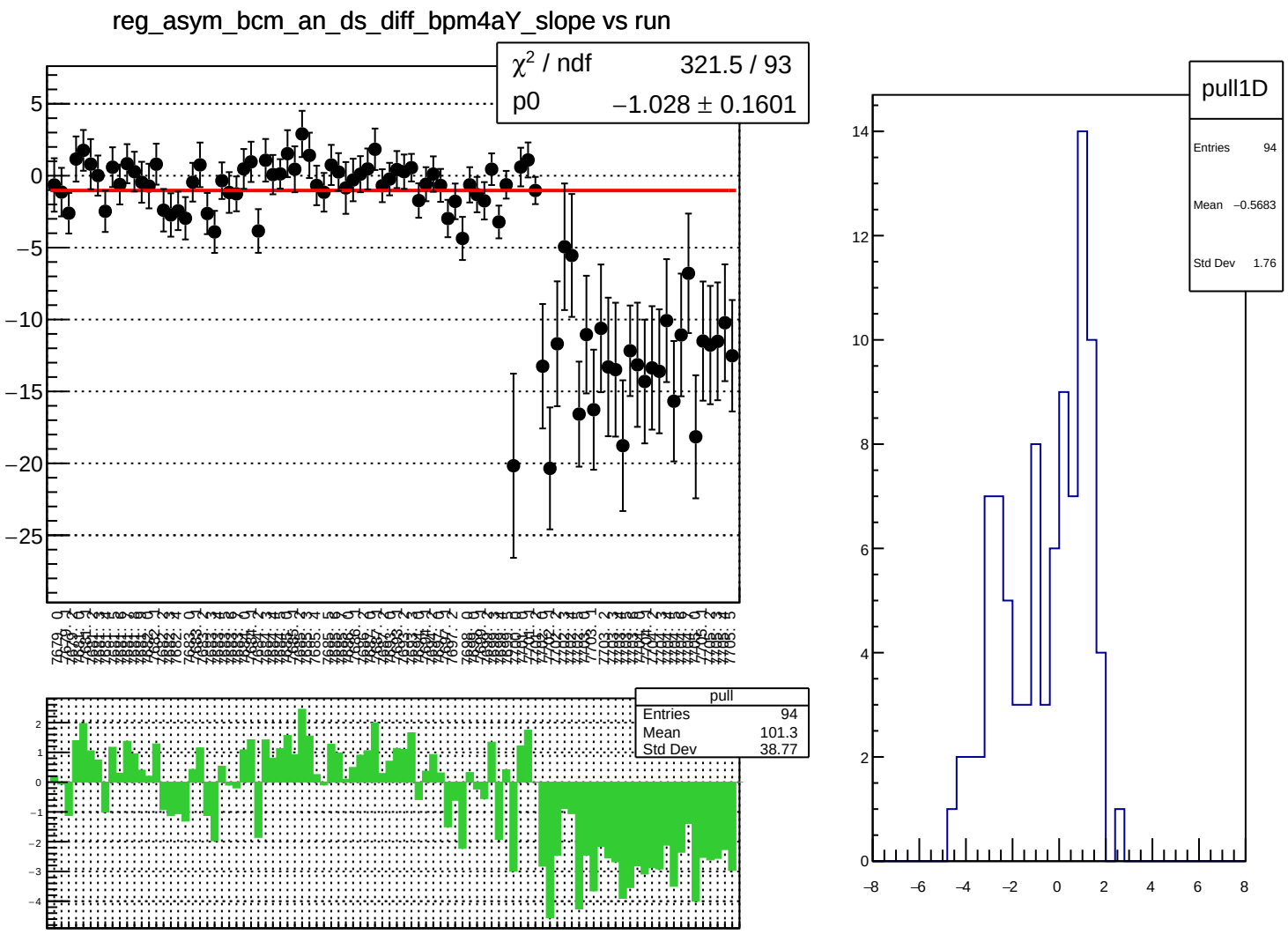

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 297.9 / 93
p0 1.196 ± 0.2415
pull
Entries 94
Mean 115.1
Std Dev 54.85

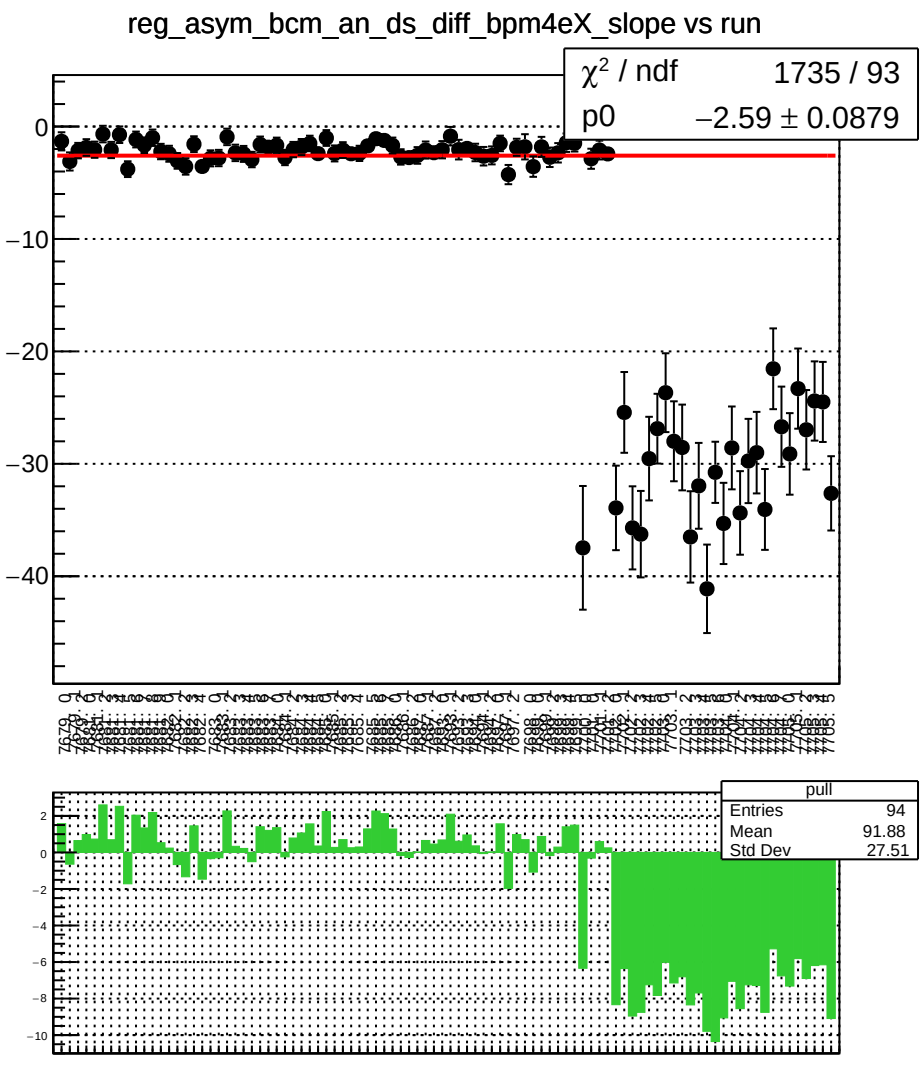

pull1D
Entries 94
Mean 0.4337
Std Dev 1.726

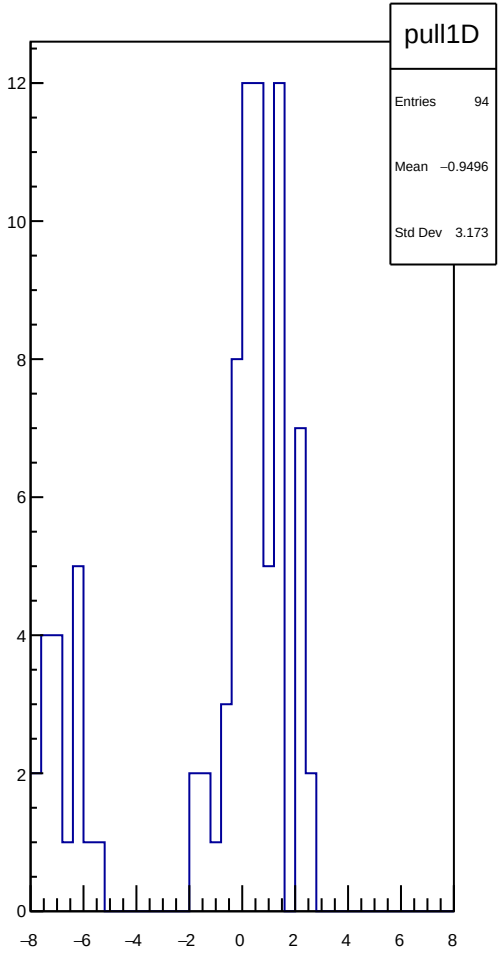

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 240.1 / 93
p0 0.4558 ± 0.01236
pull
Entries 94
Mean 315.6
Std Dev 263.3
pull1D
Entries 94
Mean 0.1032
Std Dev 1.595

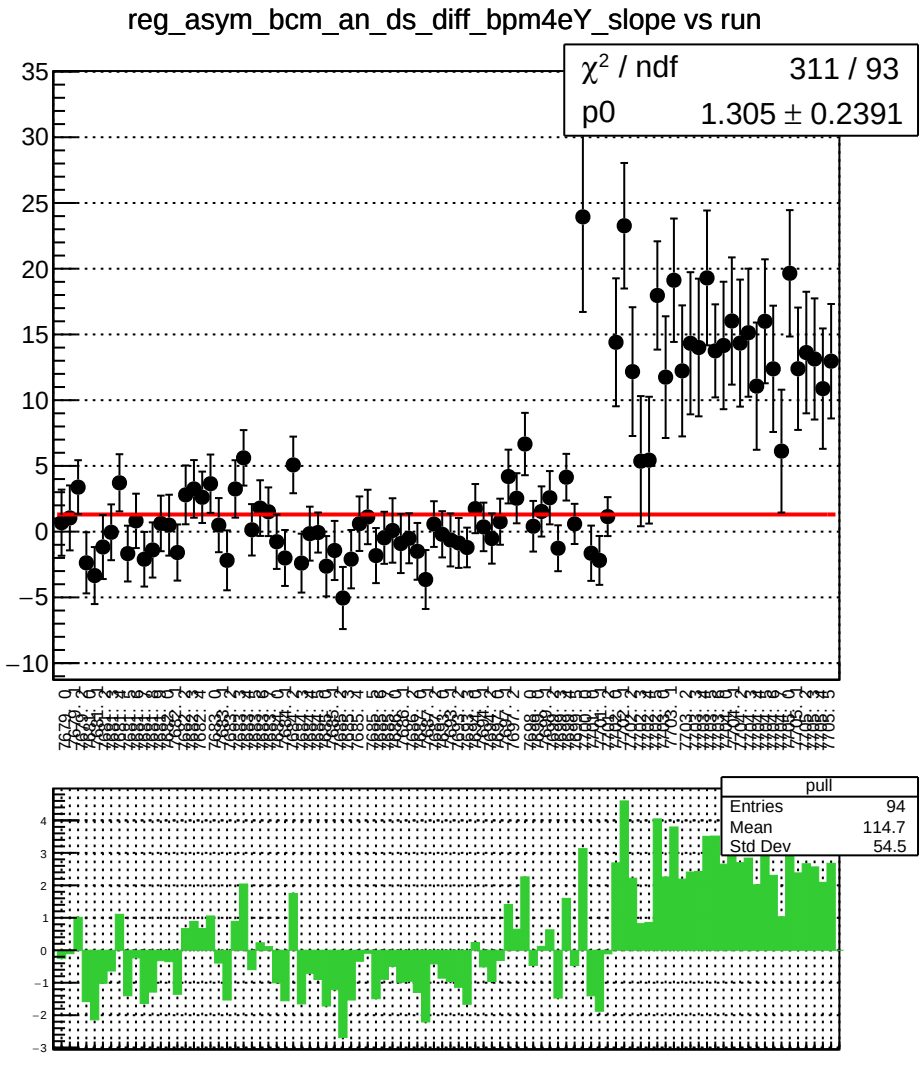

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 1699 / 93
p0 3.33 ± 0.1091
pull
Entries 94
Mean 94.16
Std Dev 30.75

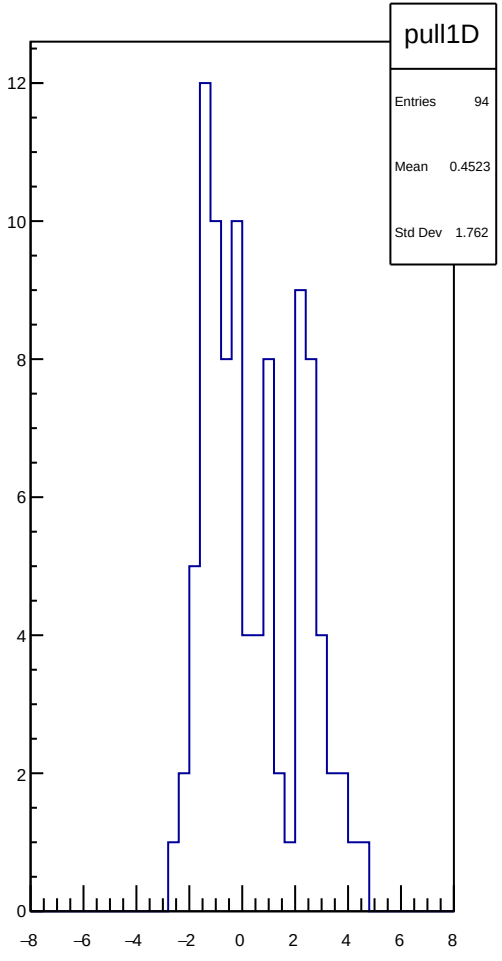

pull1D
Entries 94
Mean 0.8633
Std Dev 3.17

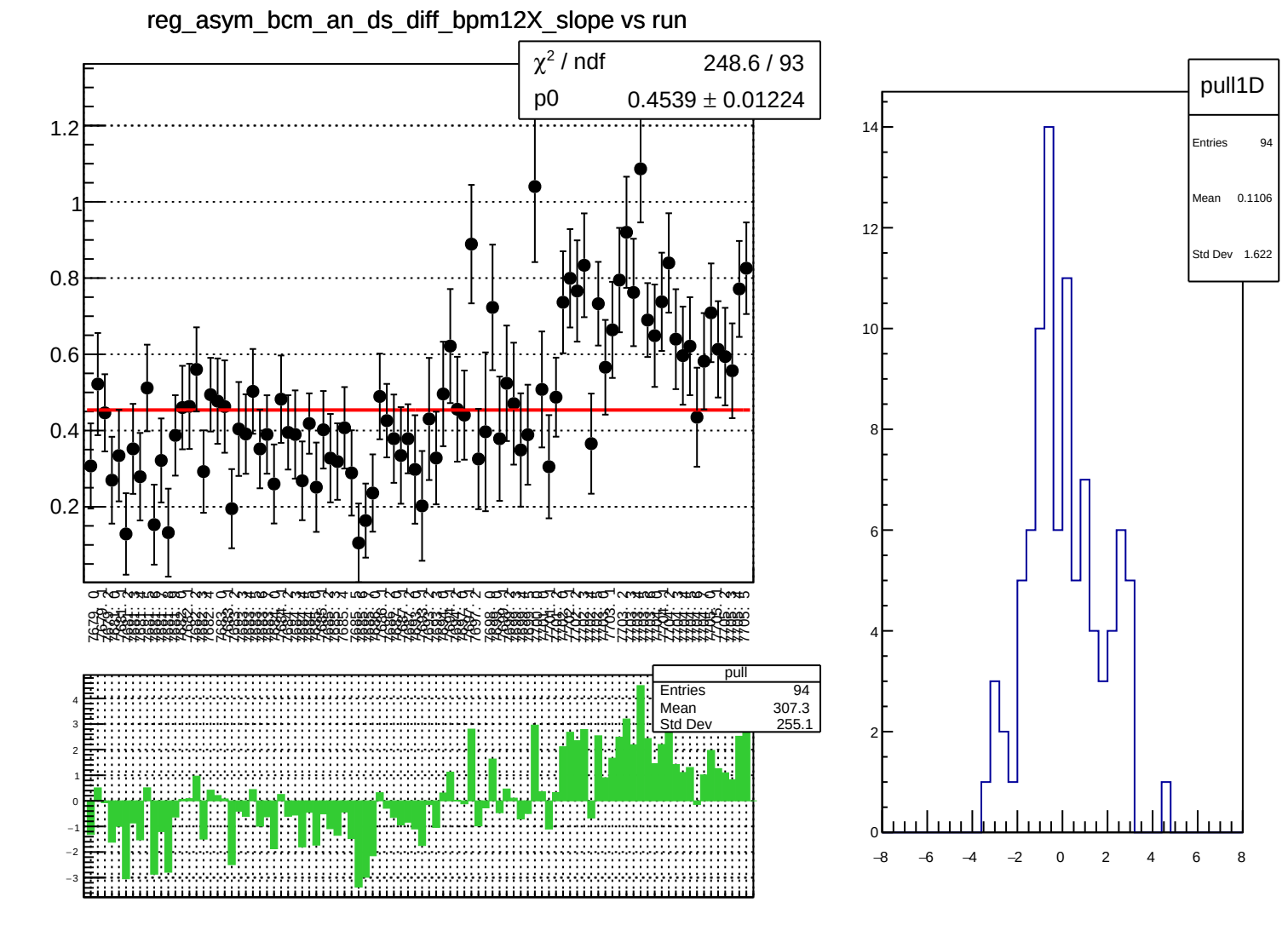

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 321.5 / 93
p0 −1.028 ± 0.1601
pull
Entries 94
Mean 101.3
Std Dev 38.77
pull1D
Entries 94
Mean −0.5683
Std Dev 1.76

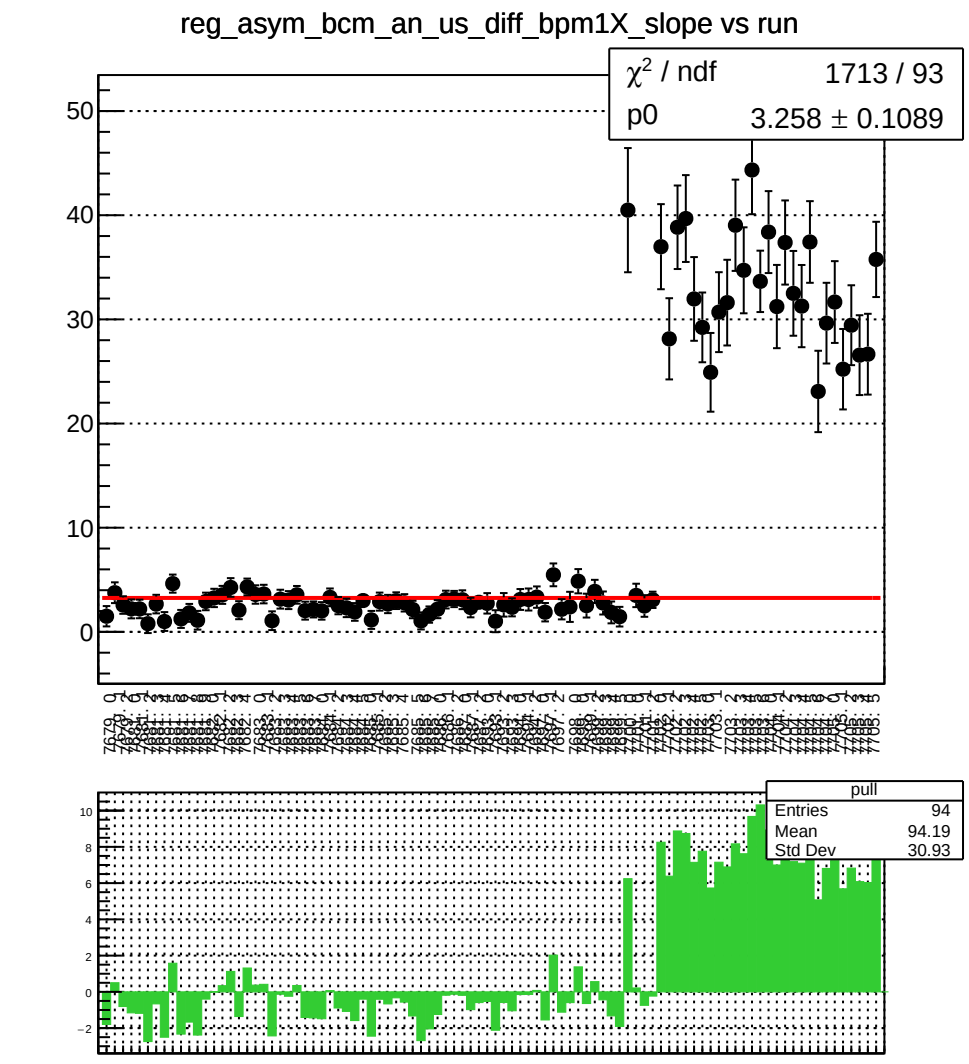

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 1735 / 93
p0 −2.59 ± 0.0879
pull
Entries 94
Mean 91.88
Std Dev 27.51

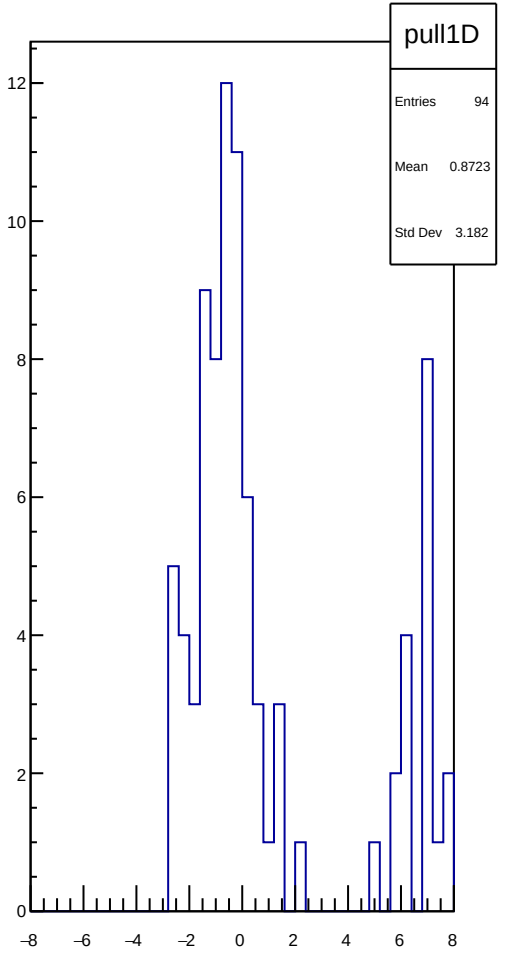

pull1D
Entries 94
Mean −0.9496
Std Dev 3.173

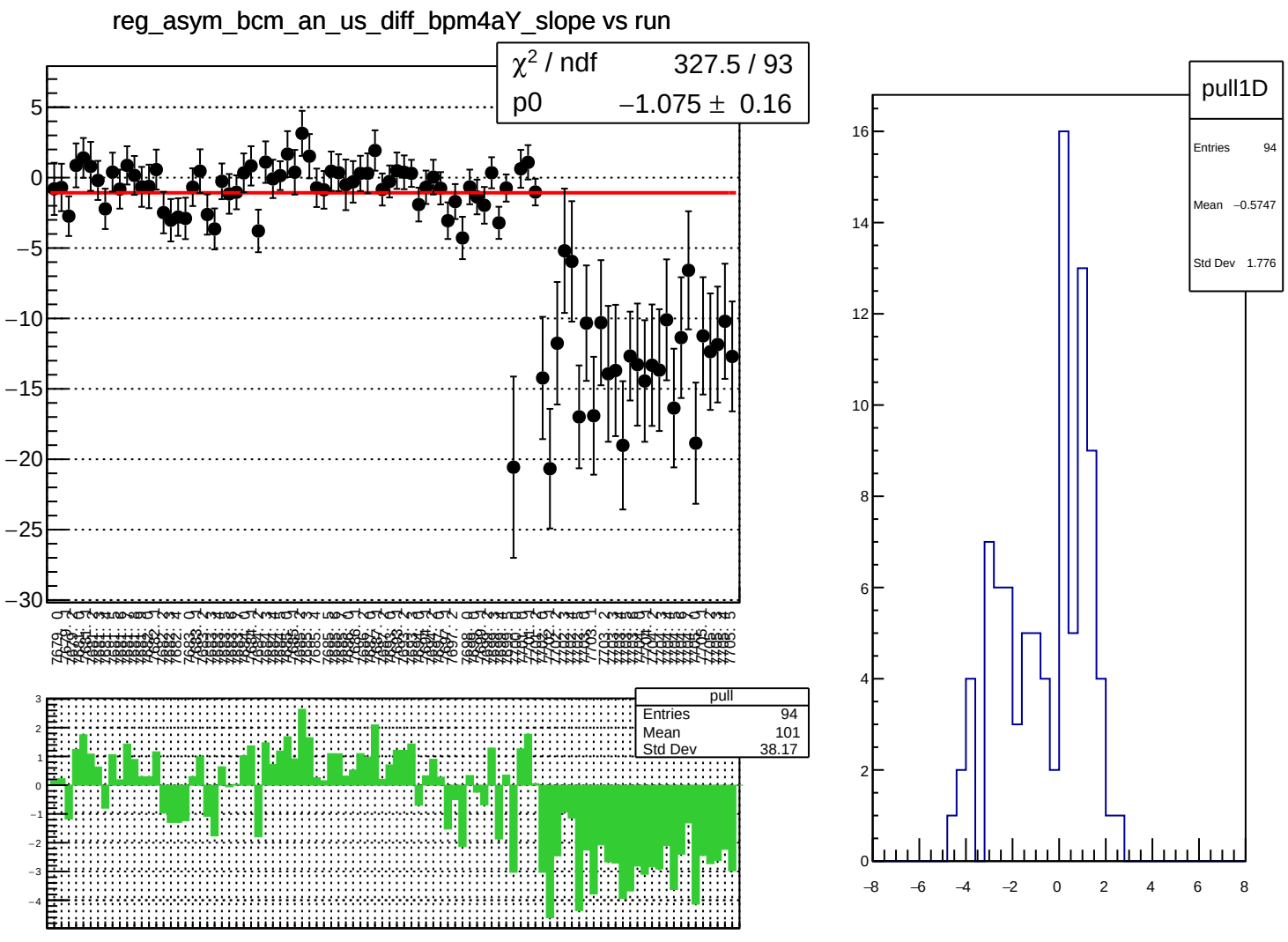

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 311 / 93
p0 1.305 ± 0.2391
pull
Entries 94
Mean 114.7
Std Dev 54.5

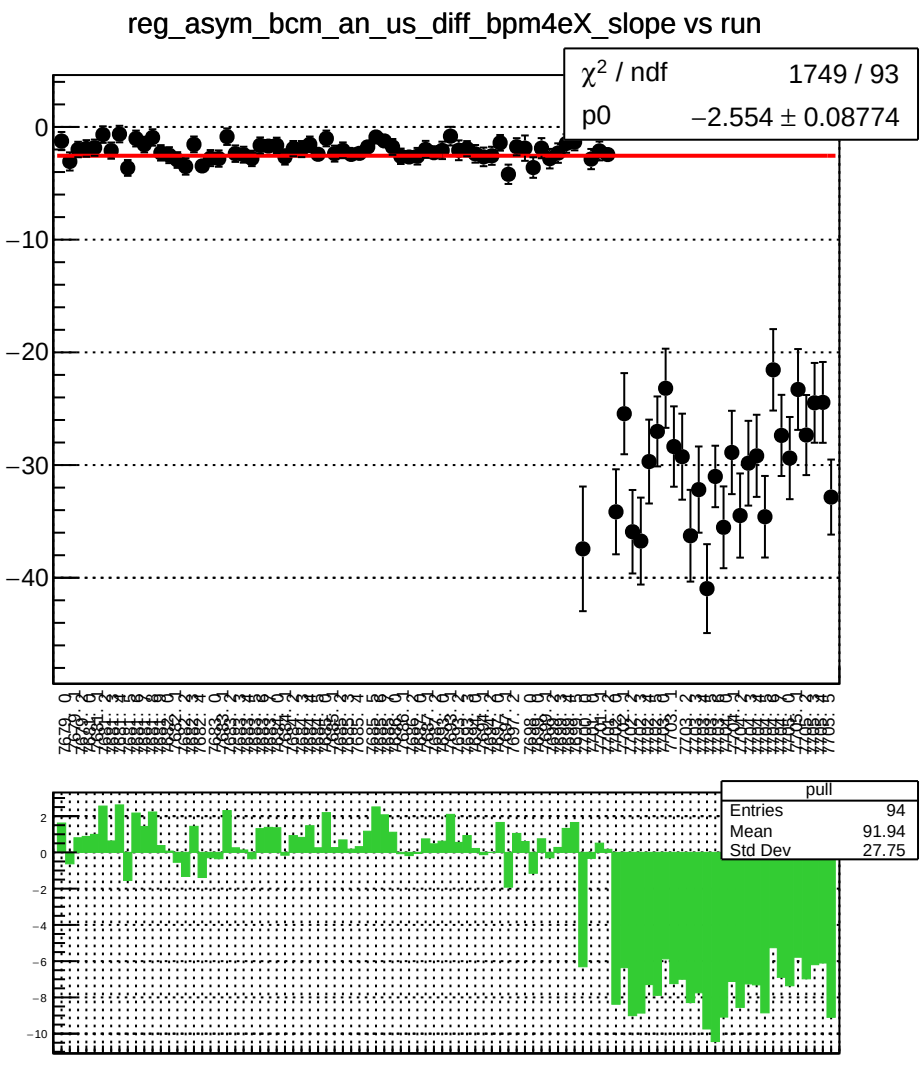

pull1D
Entries 94
Mean 0.4523
Std Dev 1.762

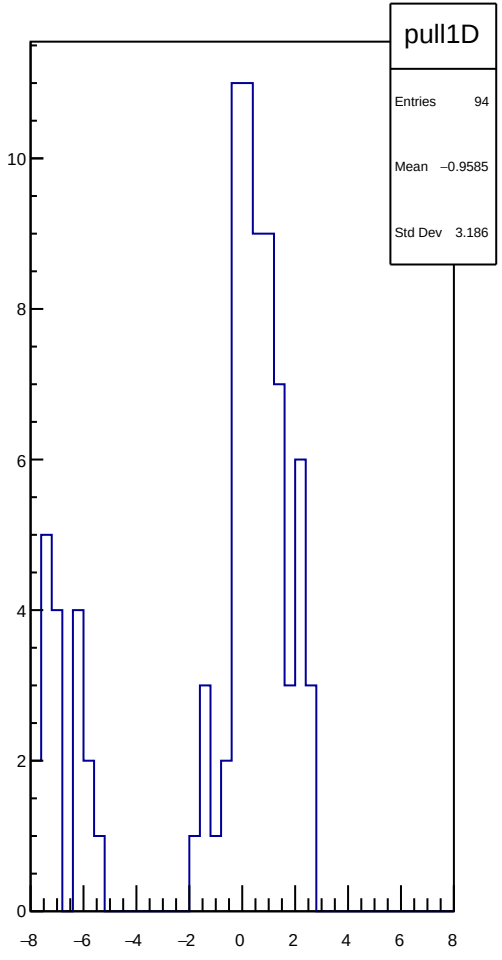

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 248.6 / 93
p0 0.4539 ± 0.01224
pull
Entries 94
Mean 307.3
Std Dev 255.1
pull1D
Entries 94
Mean 0.1106
Std Dev 1.622

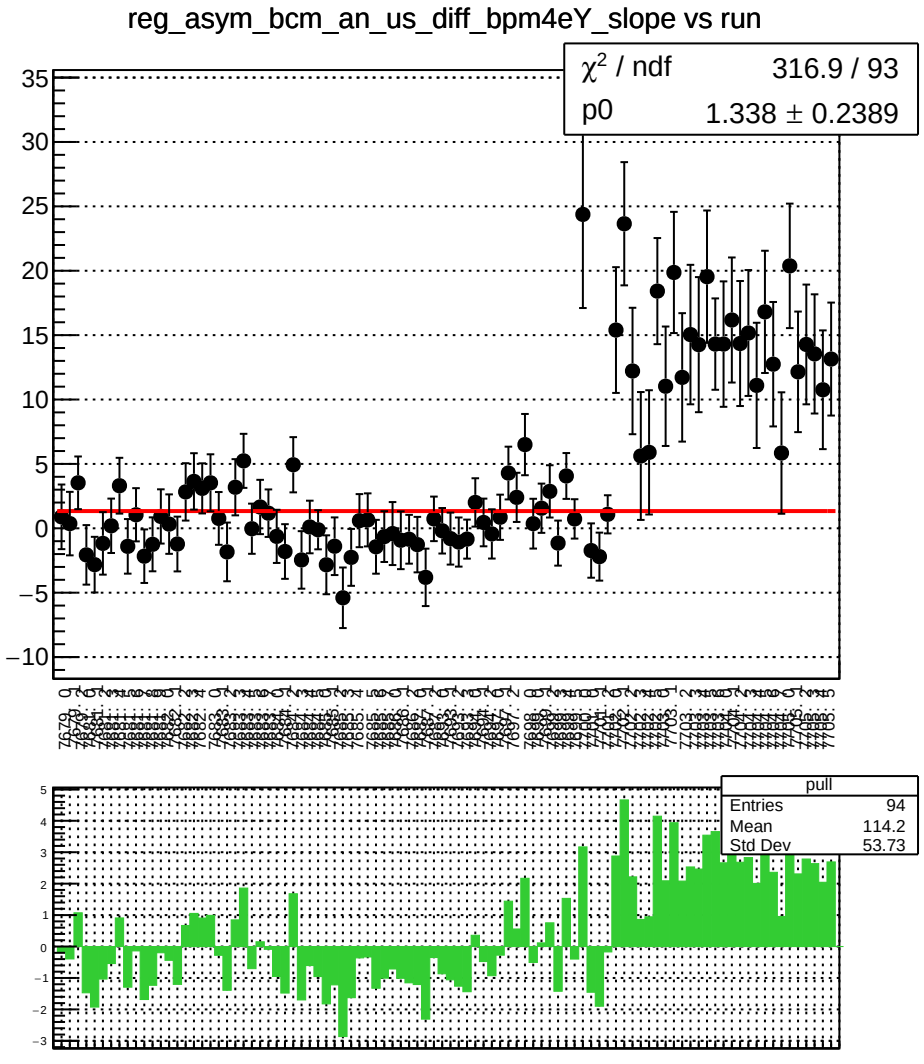

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 1713 / 93
p0 3.258 ± 0.1089
pull
Entries 94
Mean 94.19
Std Dev 30.93

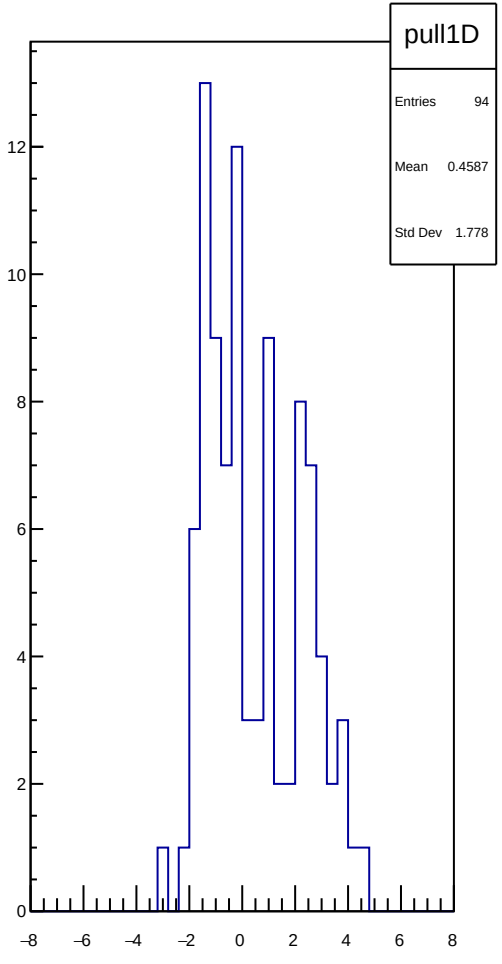

pull1D
Entries 94
Mean 0.8723
Std Dev 3.182

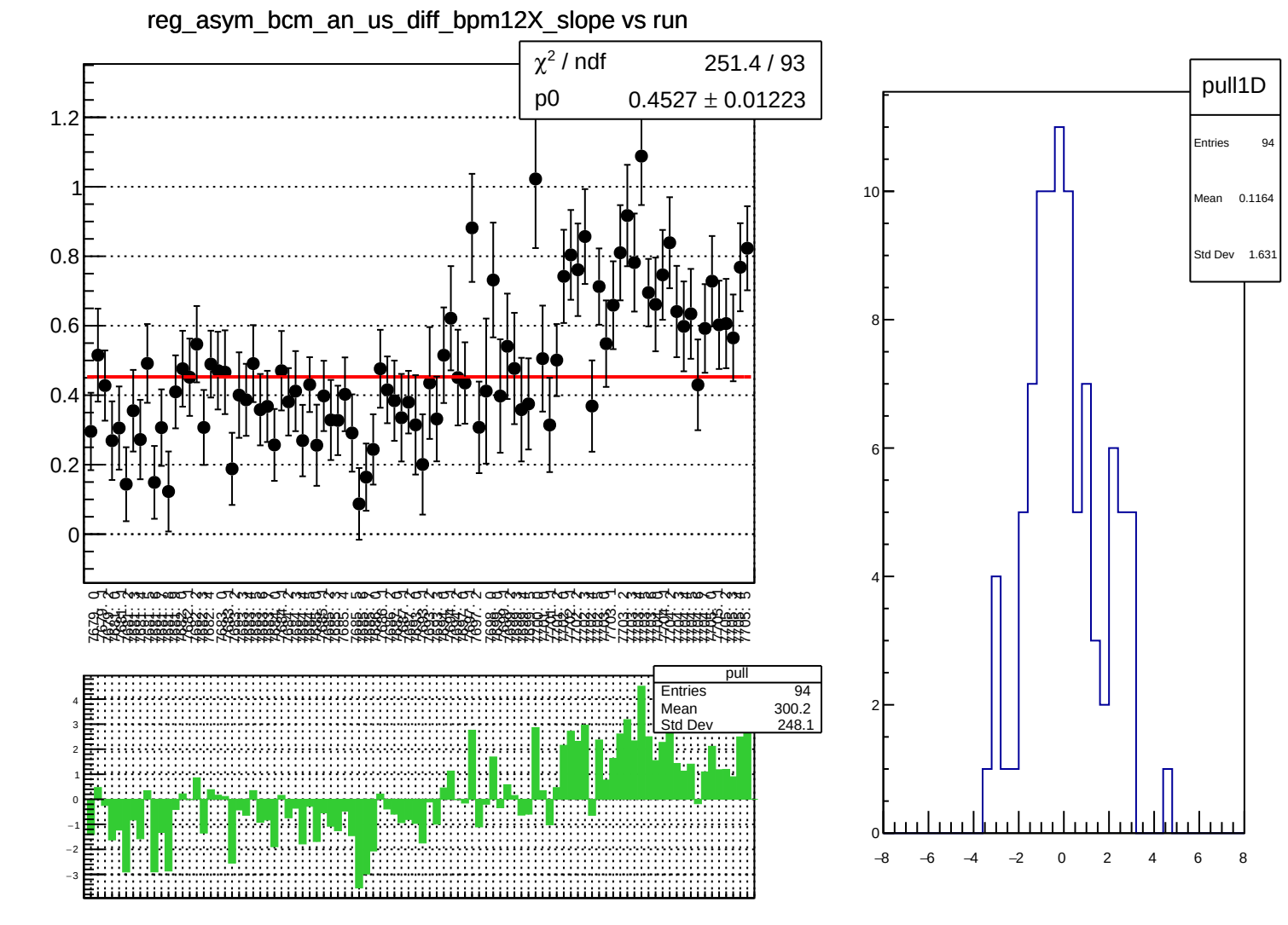

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 327.5 / 93
p0 −1.075 ± 0.16
pull
Entries 94
Mean 101
Std Dev 38.17
pull1D
Entries 94
Mean −0.5747
Std Dev 1.776

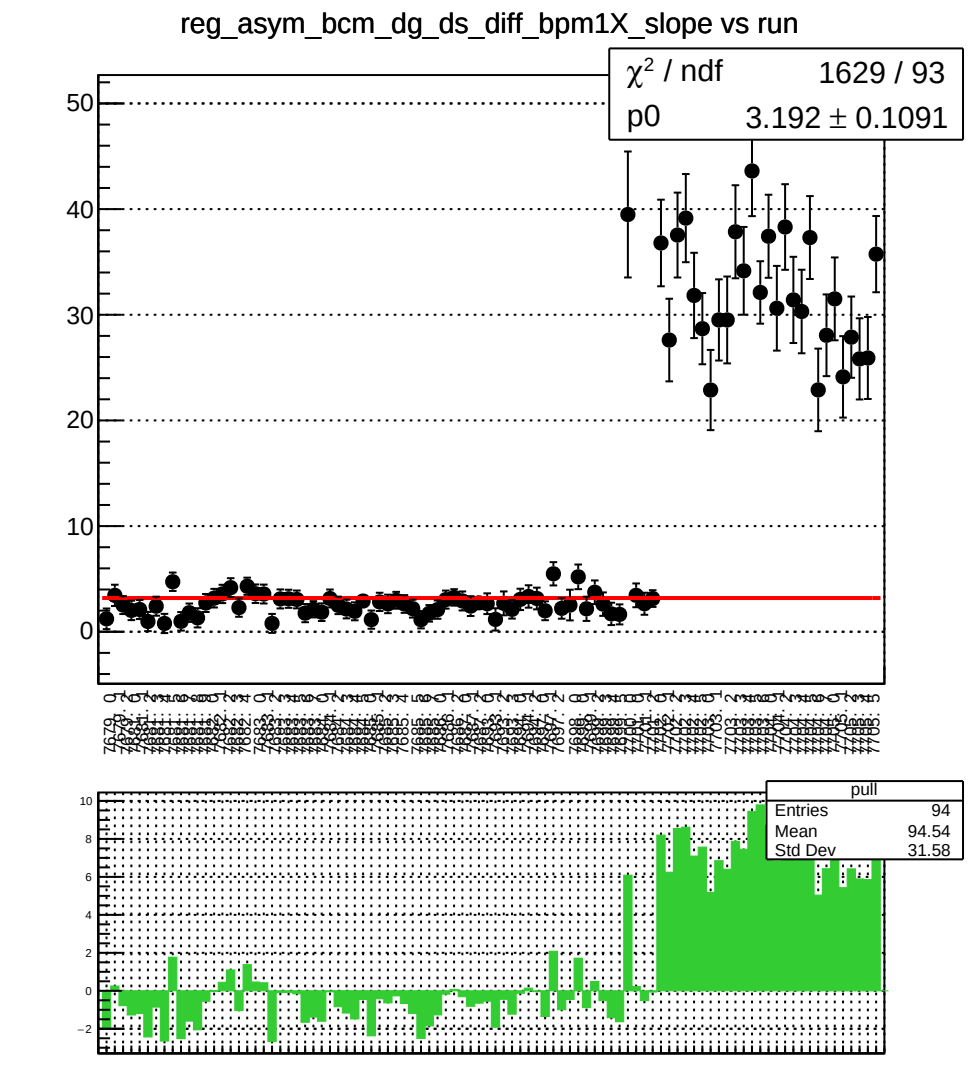

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 1749 / 93
p0 −2.554 ± 0.08774
pull
Entries 94
Mean 91.94
Std Dev 27.75

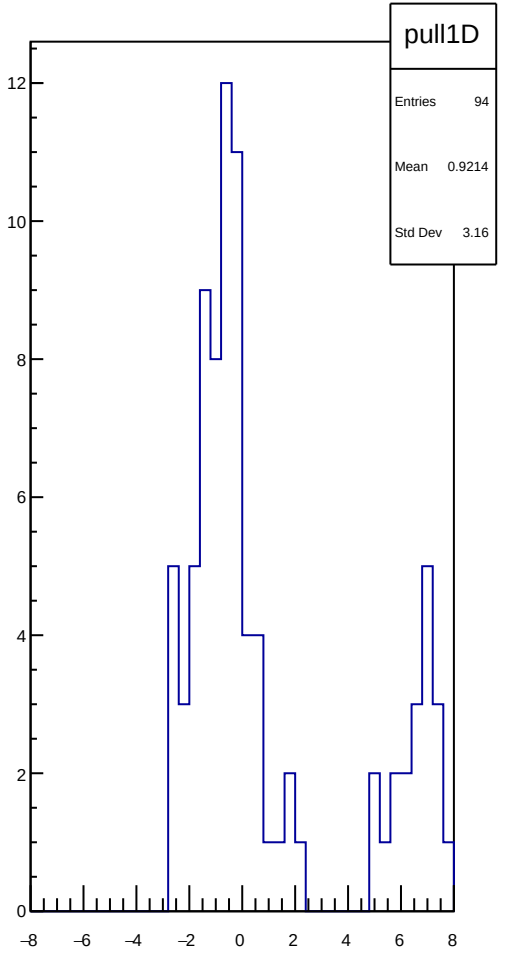

pull1D
Entries 94
Mean −0.9585
Std Dev 3.186

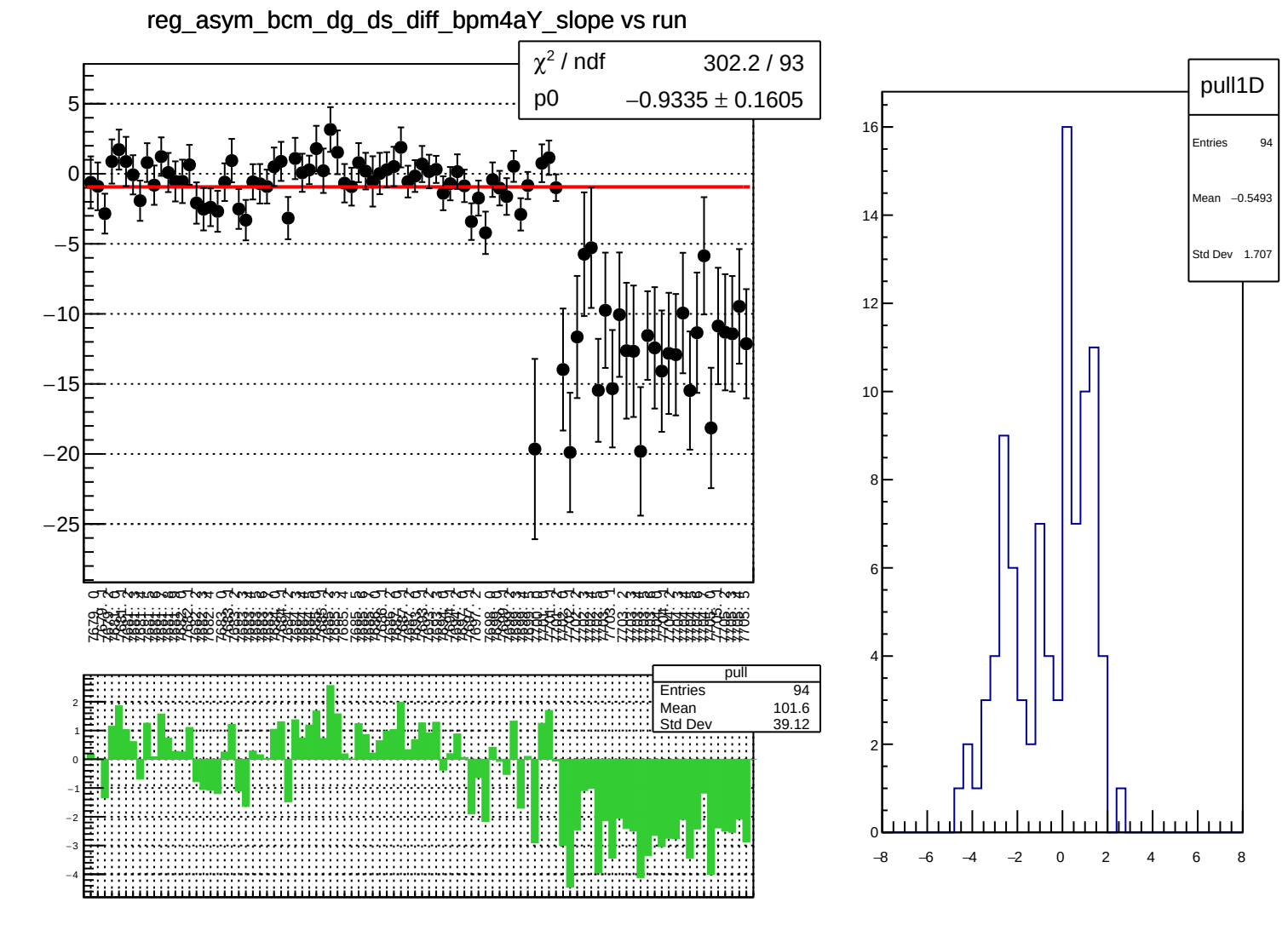

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 316.9 / 93
p0 1.338 ± 0.2389
pull
Entries 94
Mean 114.2
Std Dev 53.73

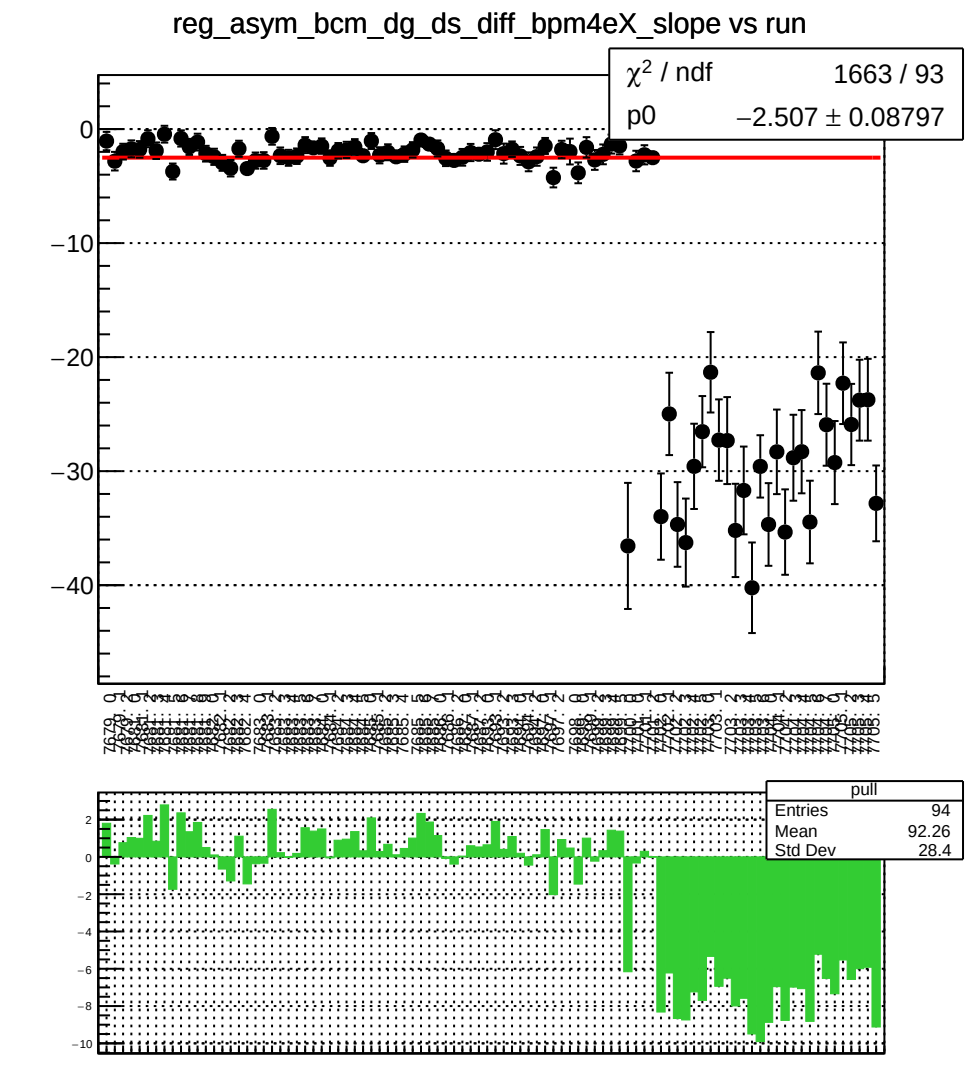

pull1D
Entries 94
Mean 0.4587
Std Dev 1.778

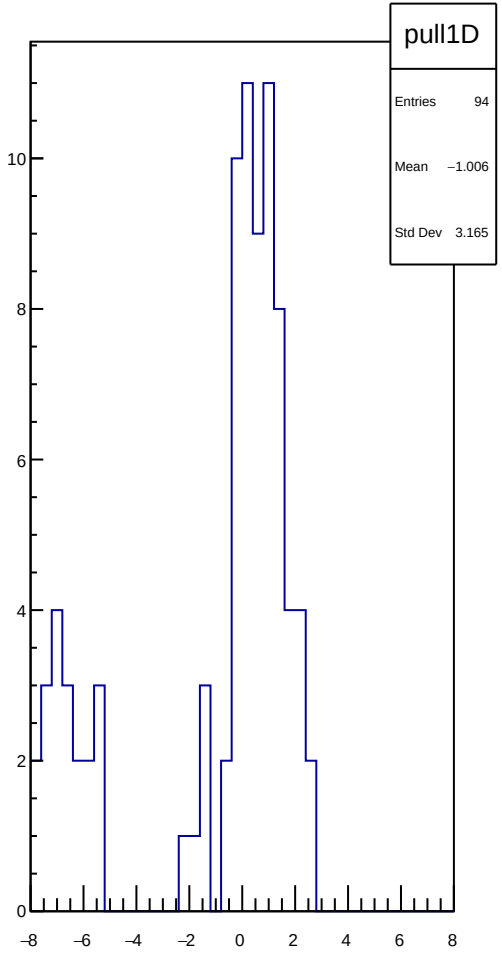

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 251.4 / 93
p0 0.4527 ± 0.01223
pull
Entries 94
Mean 300.2
Std Dev 248.1
pull1D
Entries 94
Mean 0.1164
Std Dev 1.631

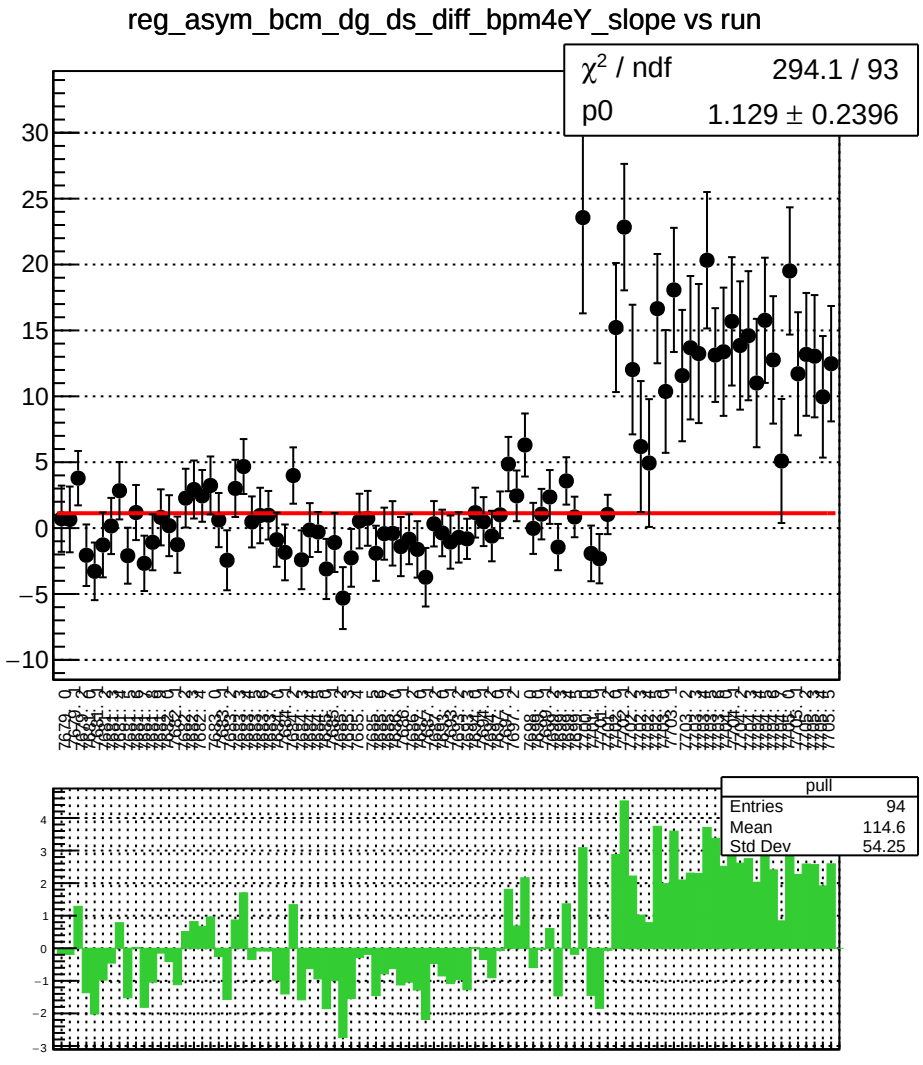

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 1629 / 93
p0 3.192 ± 0.1091
pull
Entries 94
Mean 94.54
Std Dev 31.58

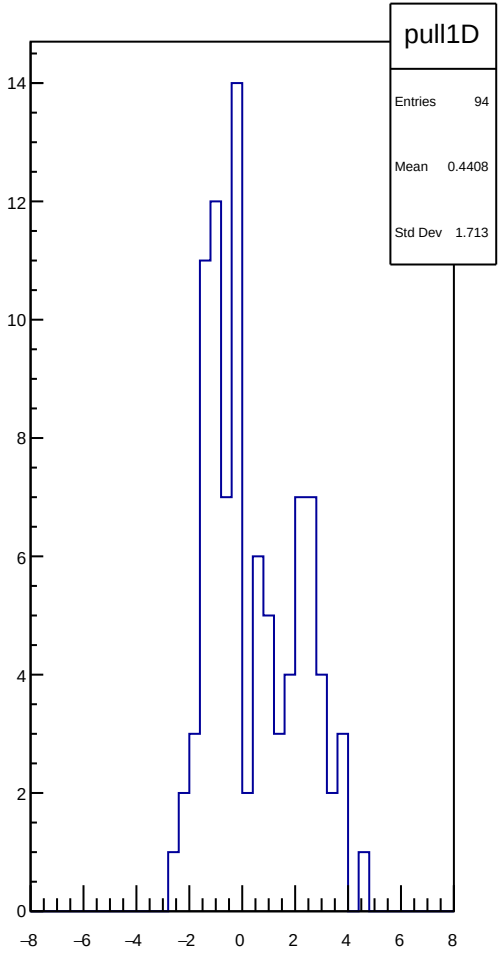

pull1D
Entries 94
Mean 0.9214
Std Dev 3.16

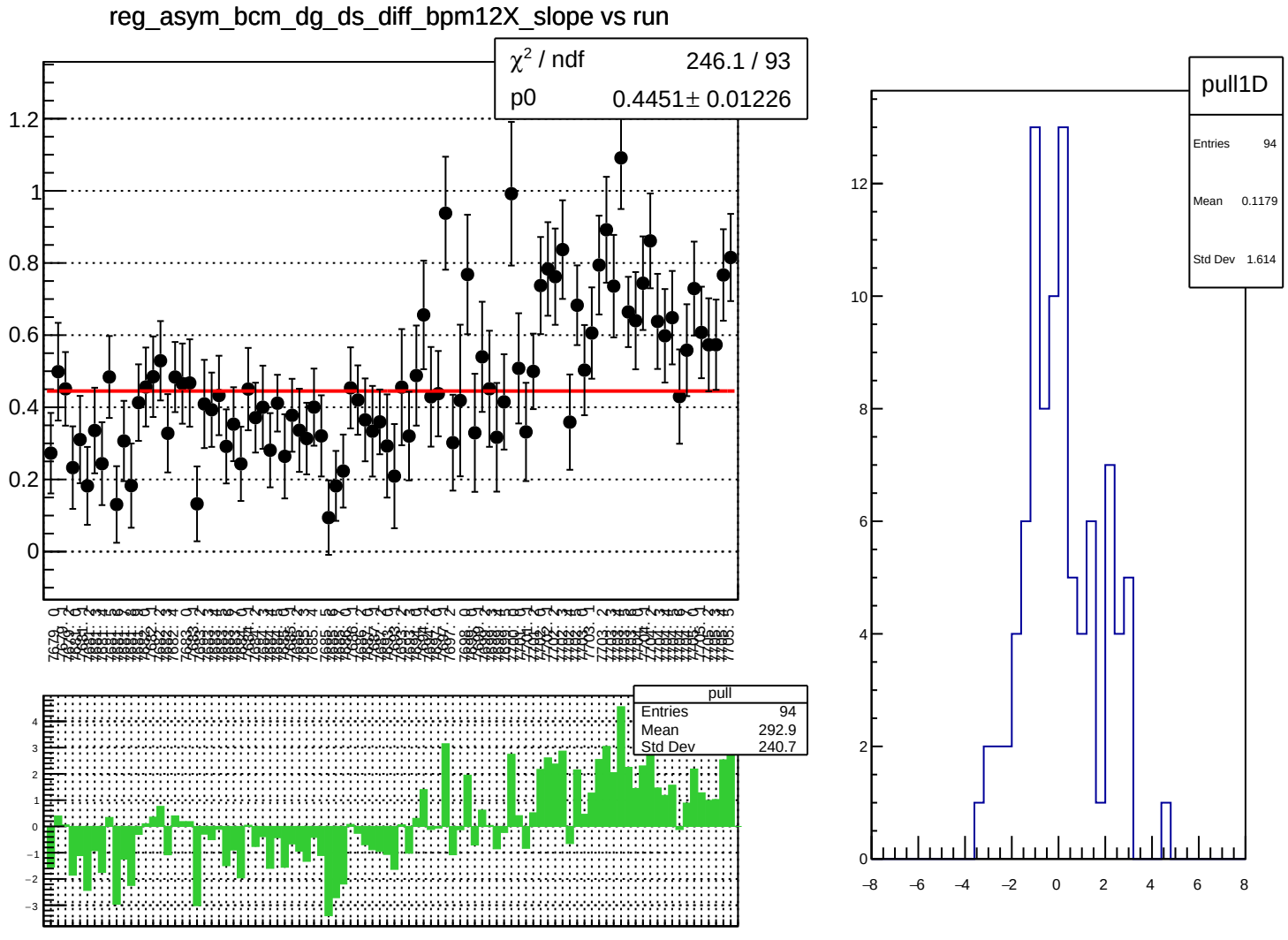

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 302.2 / 93
p0 −0.9335 ± 0.1605
pull
Entries 94
Mean 101.6
Std Dev 39.12
pull1D
Entries 94
Mean −0.5493
Std Dev 1.707

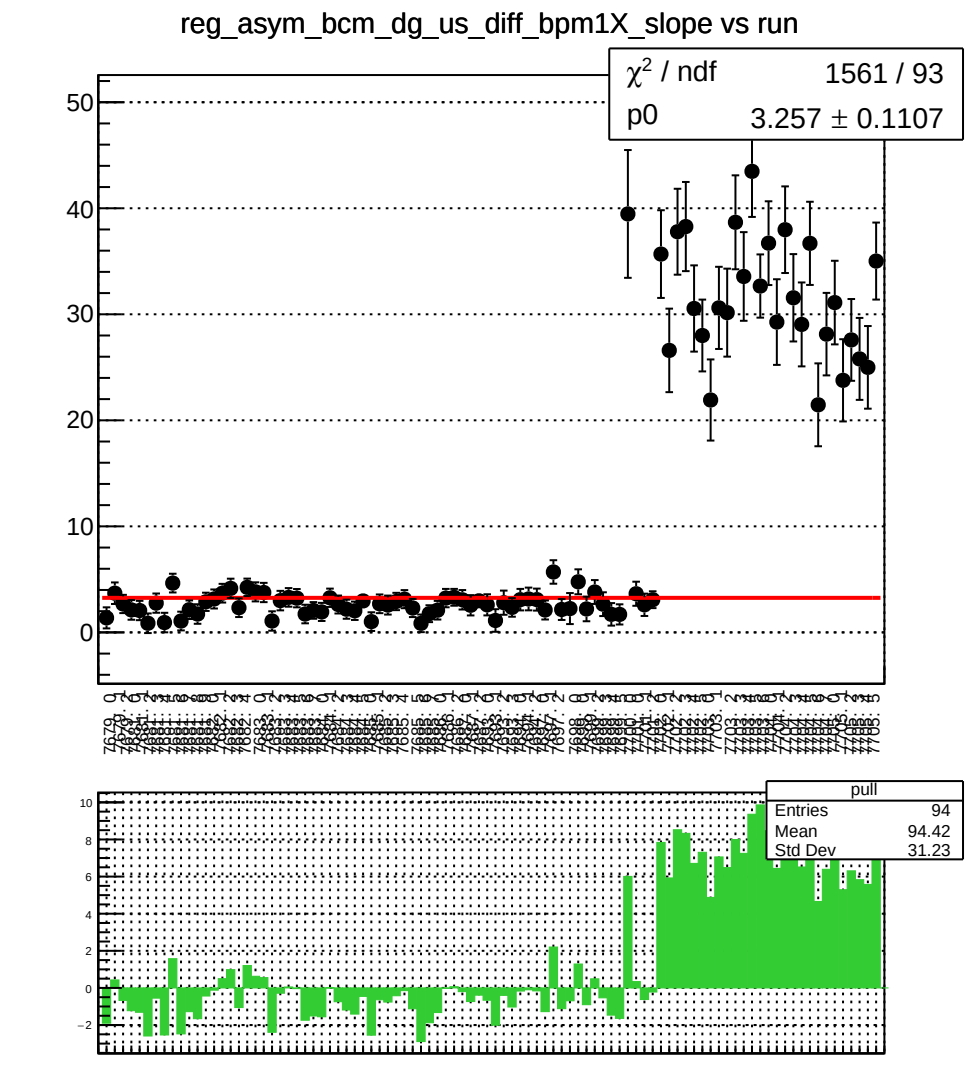

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 1663 / 93
p0 −2.507 ± 0.08797
pull
Entries 94
Mean 92.26
Std Dev 28.4

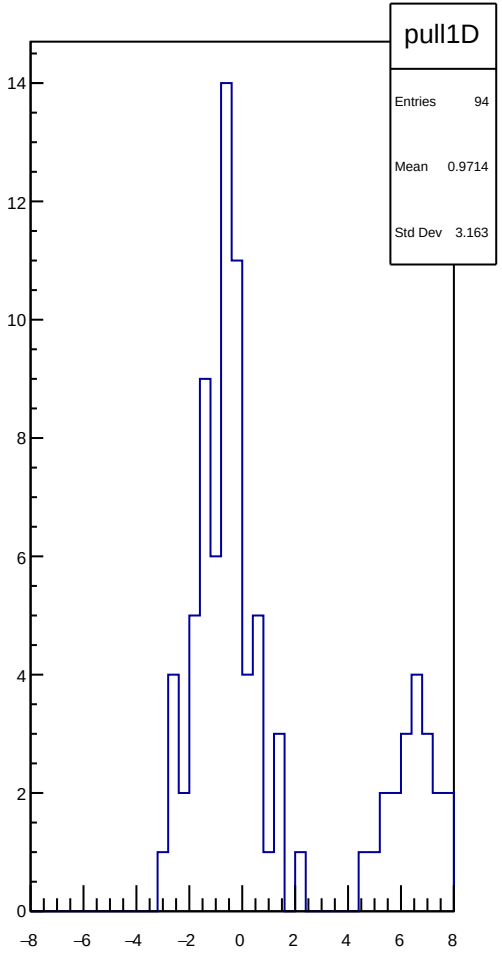

pull1D
Entries 94
Mean −1.006
Std Dev 3.165

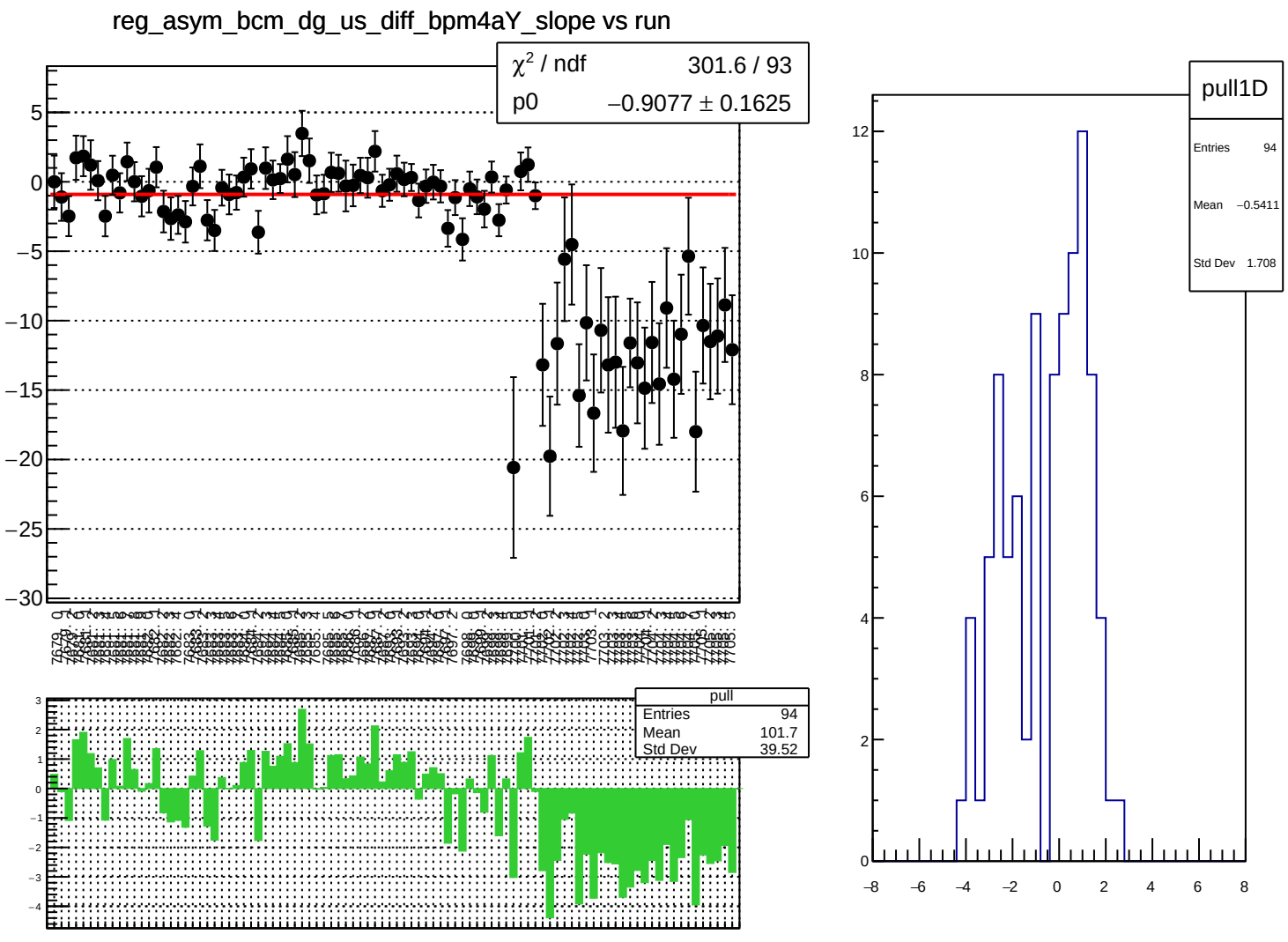

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 294.1 / 93
p0 1.129 ± 0.2396
pull
Entries 94
Mean 114.6
Std Dev 54.25

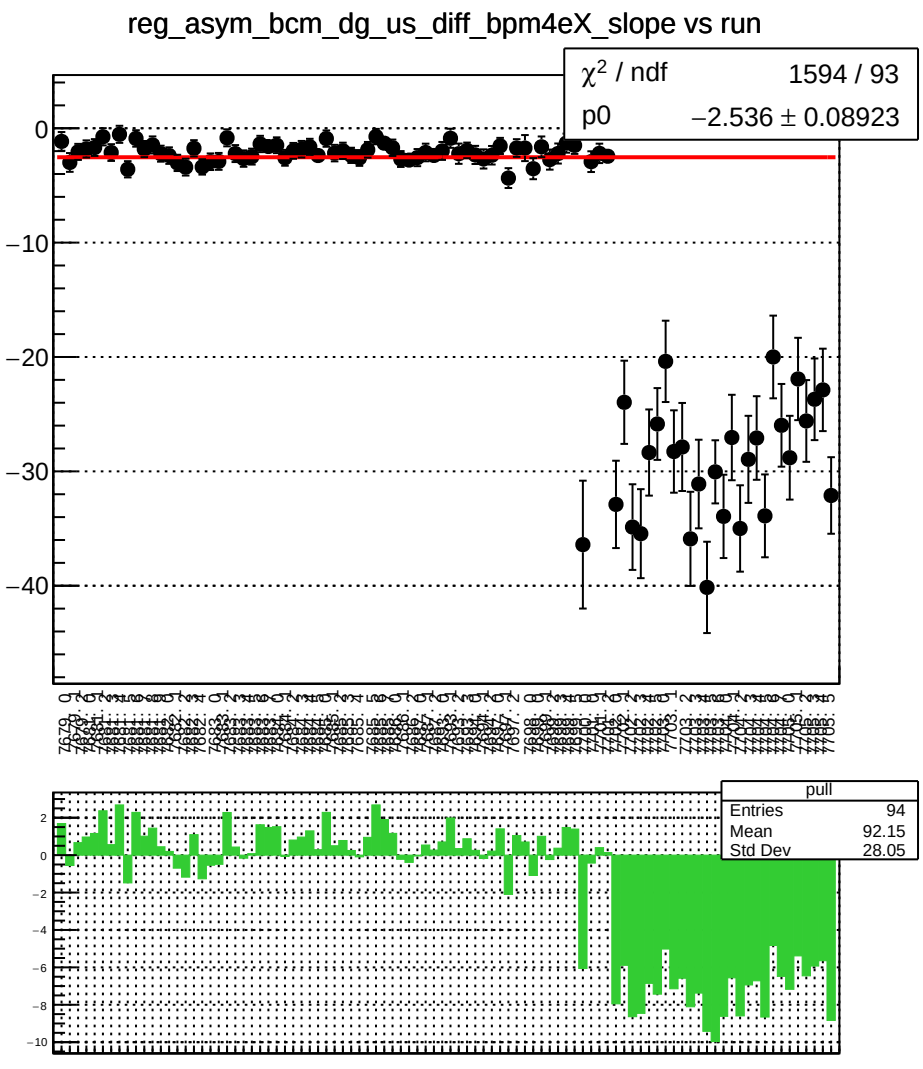

pull1D
Entries 94
Mean 0.4408
Std Dev 1.713

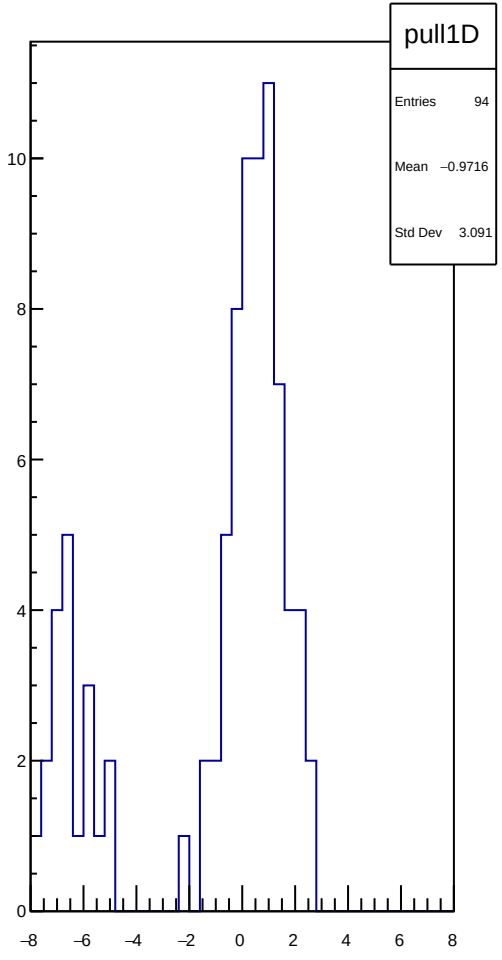

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 246.1 / 93
p0 0.4451± 0.01226
pull
Entries 94
Mean 292.9
Std Dev 240.7
pull1D
Entries 94
Mean 0.1179
Std Dev 1.614

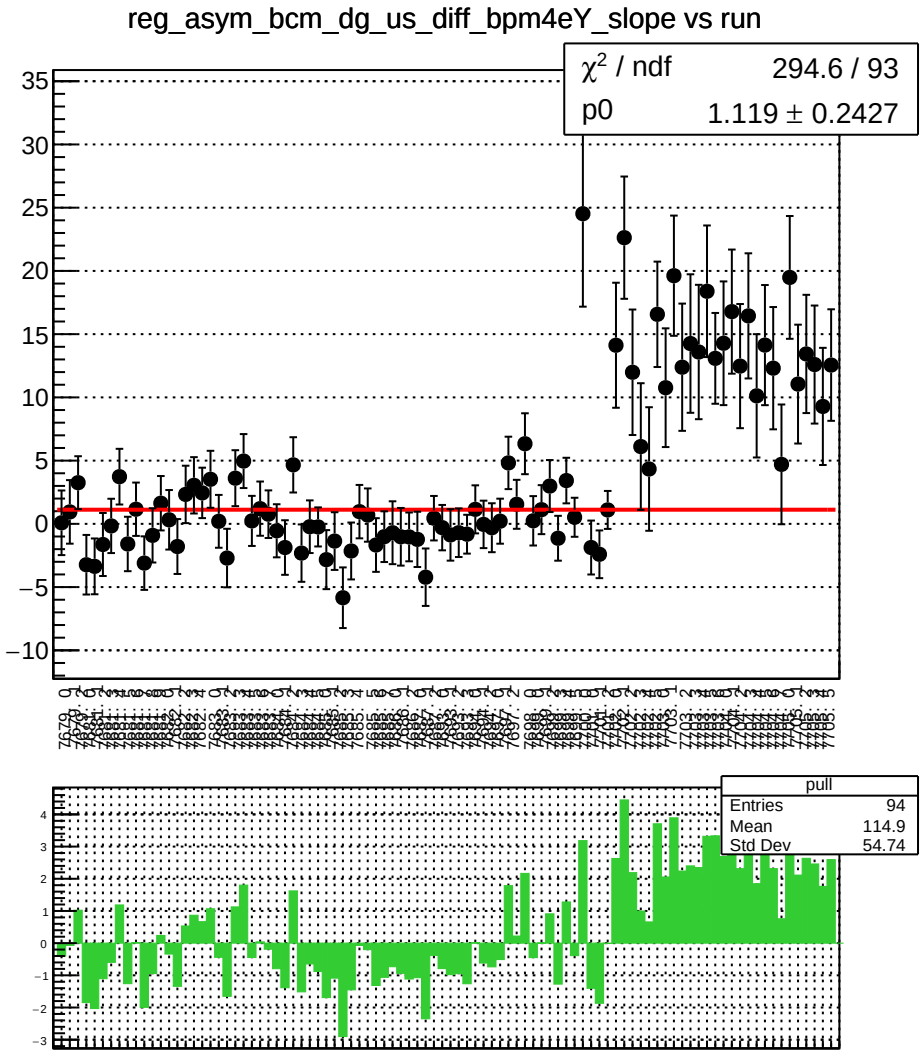

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 1561 / 93
p0 3.257 ± 0.1107
pull
Entries 94
Mean 94.42
Std Dev 31.23

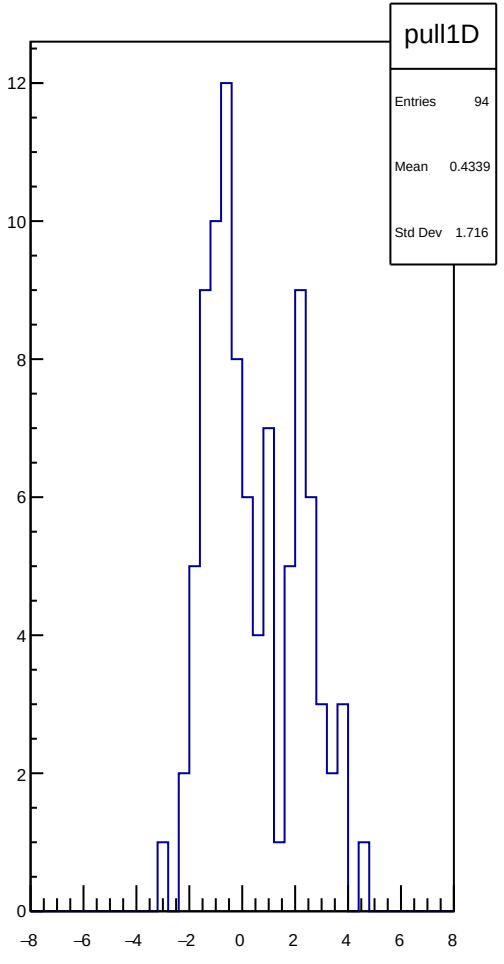

pull1D
Entries 94
Mean 0.9714
Std Dev 3.163

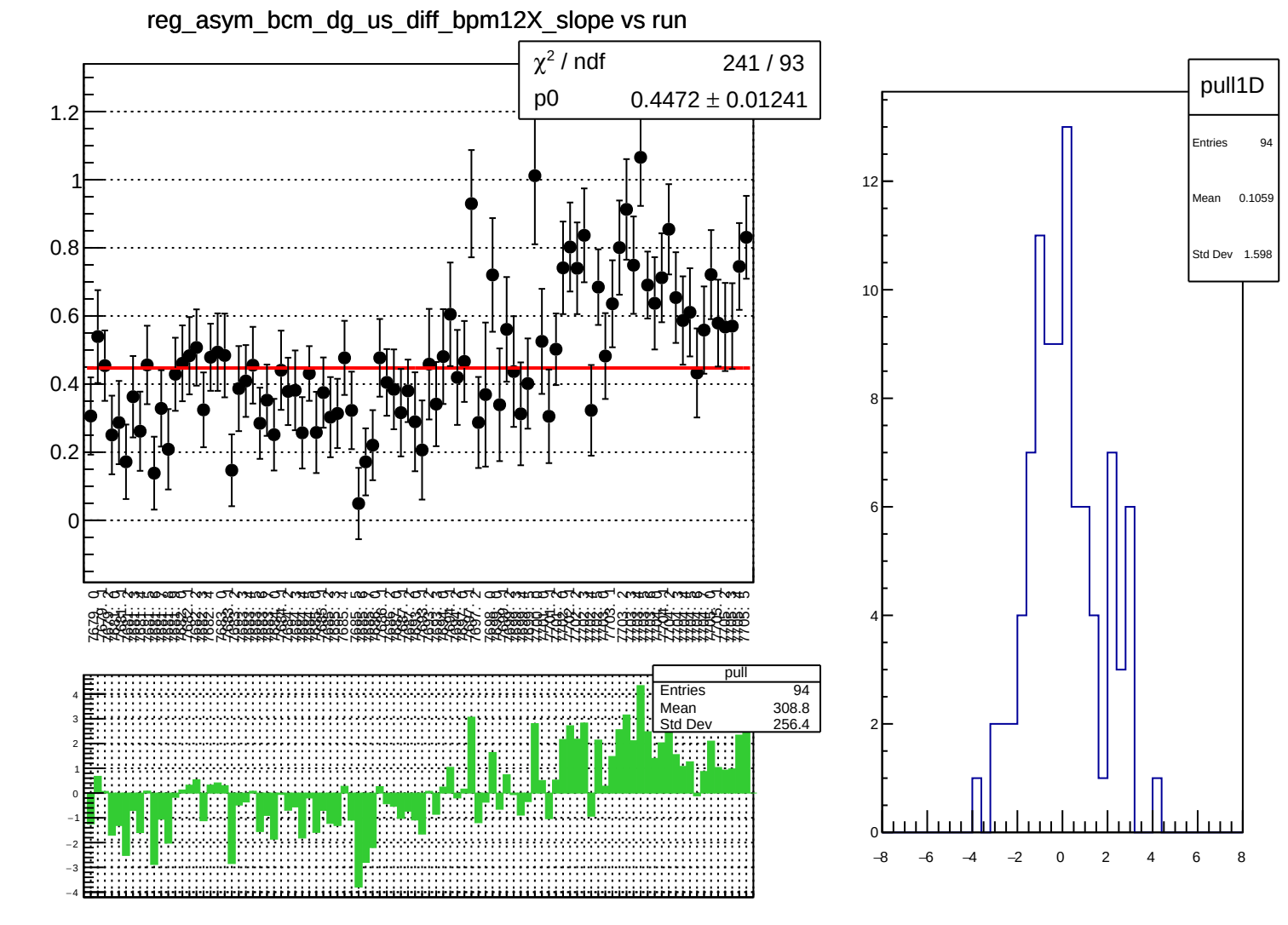

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 301.6 / 93
p0 −0.9077 ± 0.1625
pull
Entries 94
Mean 101.7
Std Dev 39.52
pull1D
Entries 94
Mean −0.5411
Std Dev 1.708

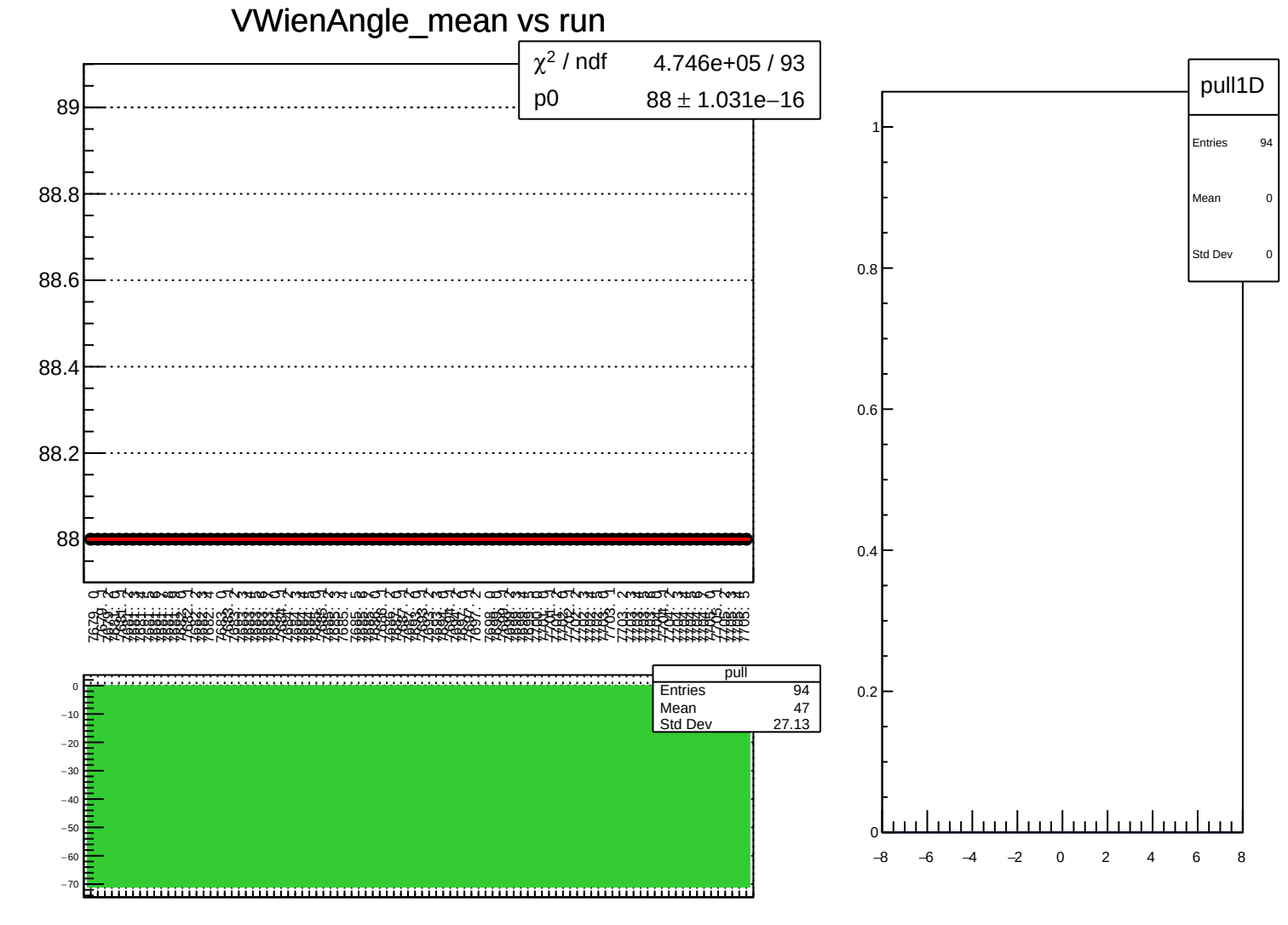

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 1594 / 93
p0 −2.536 ± 0.08923
pull
Entries 94
Mean 92.15
Std Dev 28.05

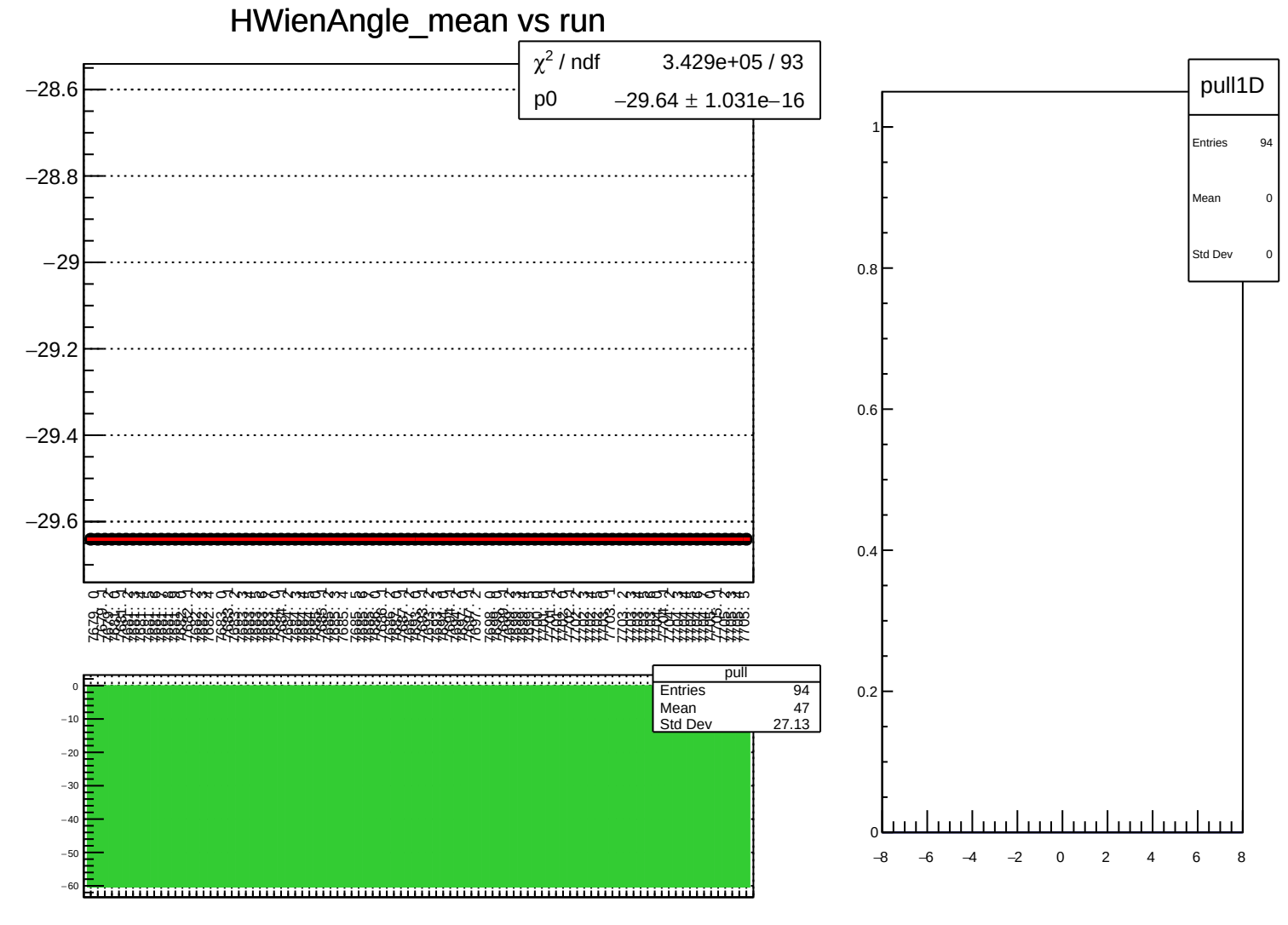

pull1D
Entries 94
Mean −0.9716
Std Dev 3.091

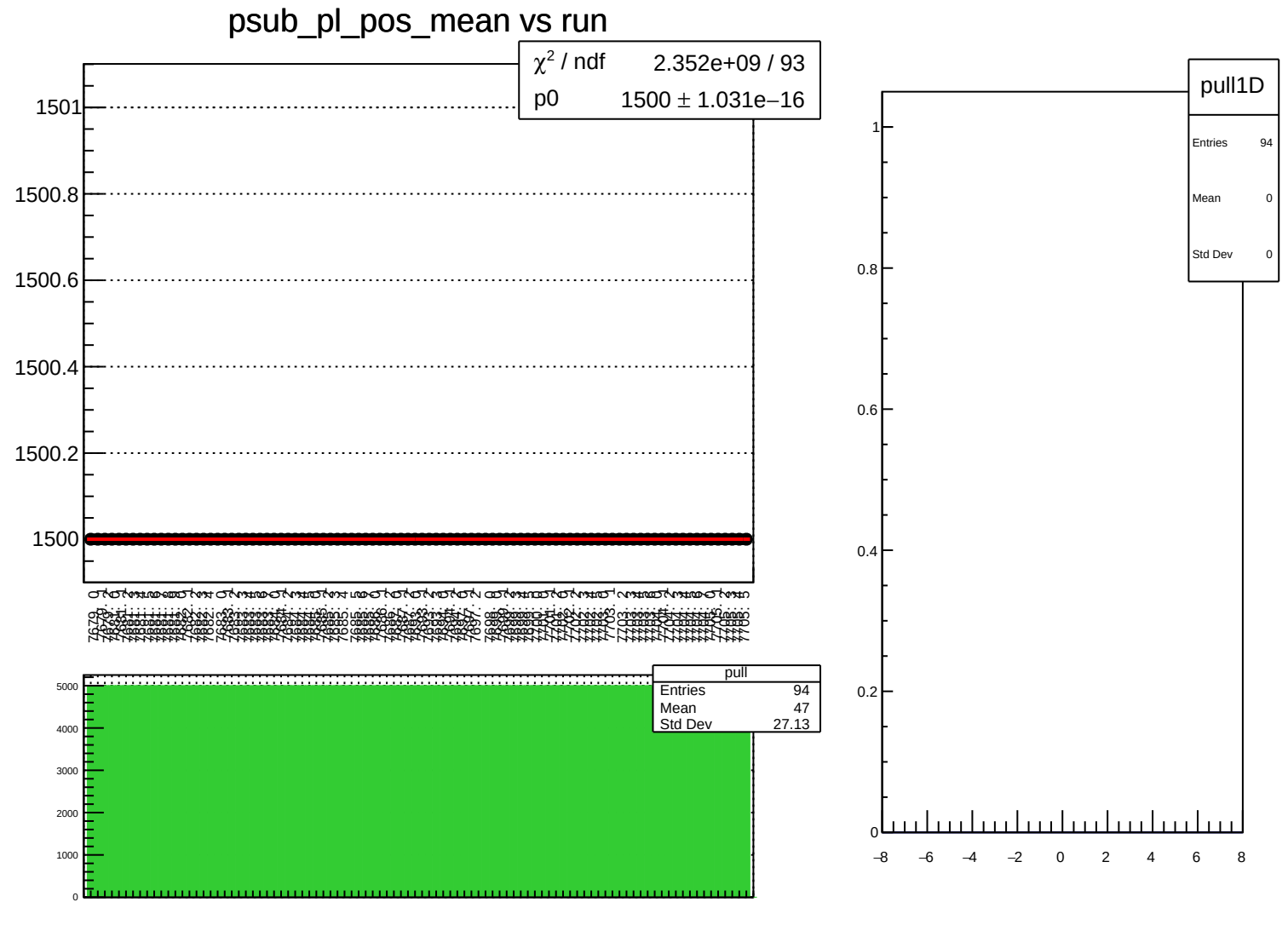

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 294.6 / 93
p0 1.119 ± 0.2427
pull
Entries 94
Mean 114.9
Std Dev 54.74

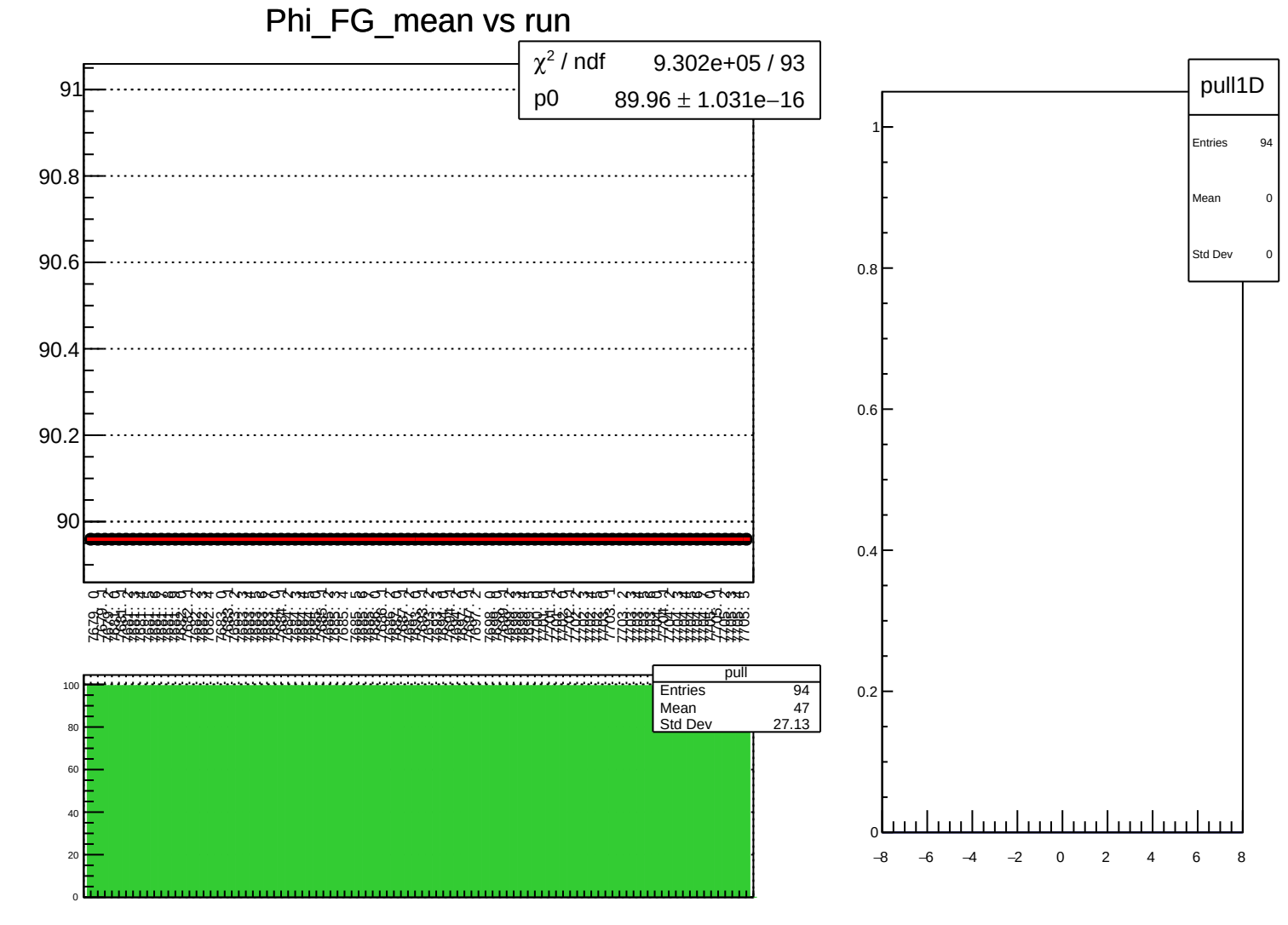

pull1D
Entries 94
Mean 0.4339
Std Dev 1.716

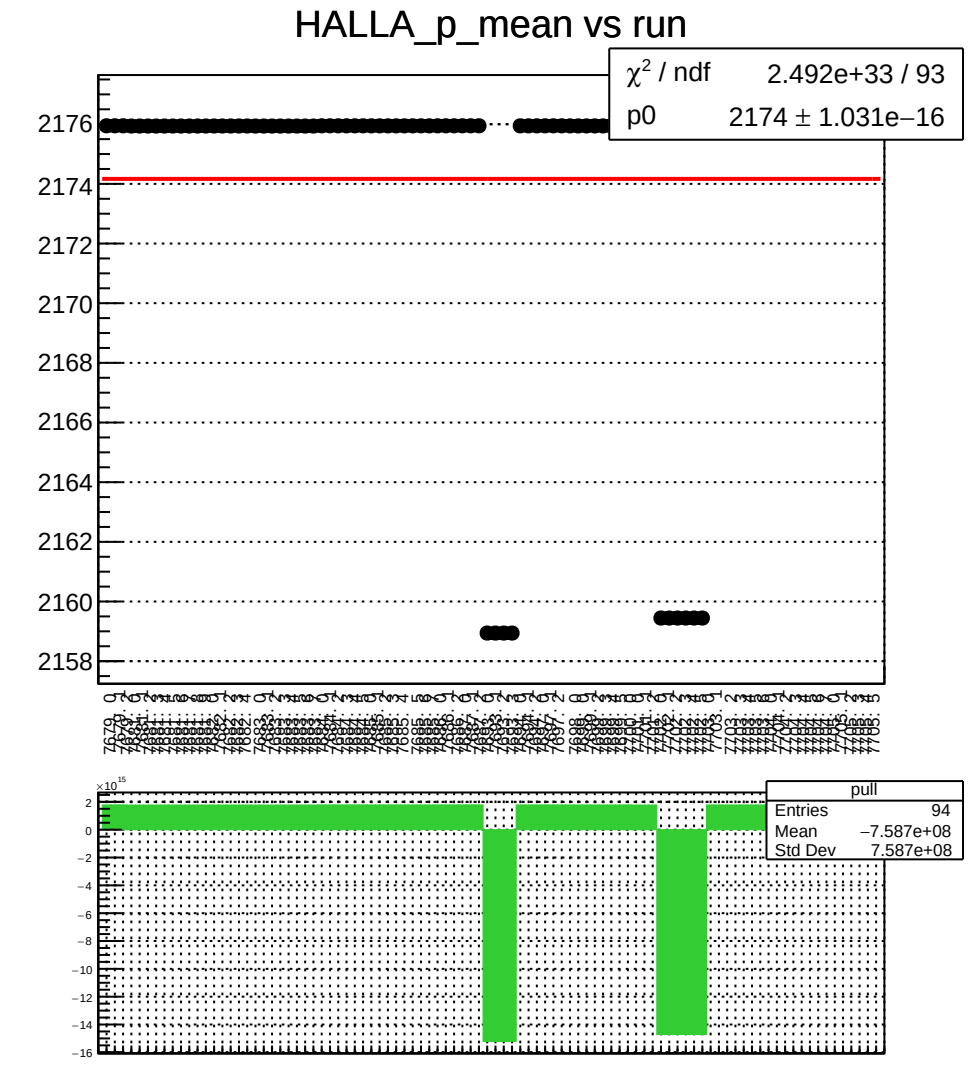

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 241 / 93
p0 0.4472 ± 0.01241
pull
Entries 94
Mean 308.8
Std Dev 256.4
pull1D
Entries 94
Mean 0.1059
Std Dev 1.598

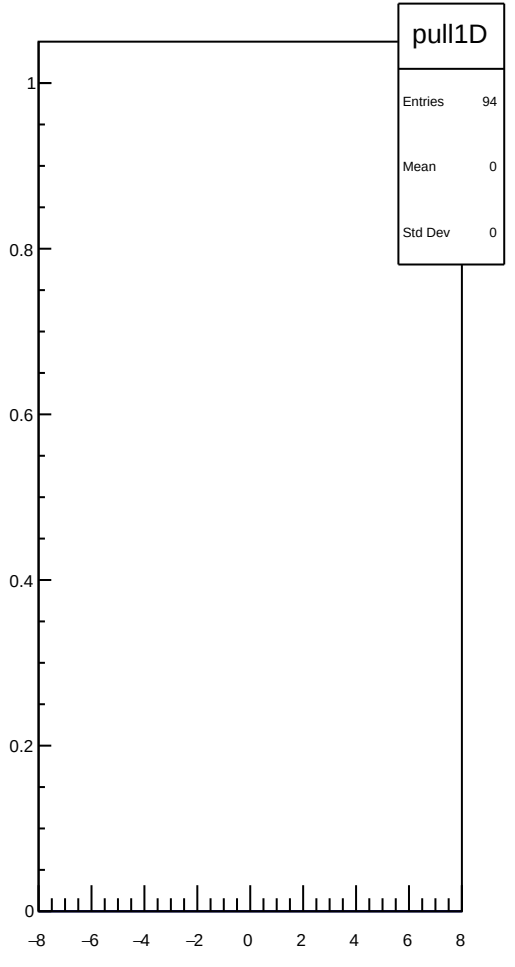

VWienAngle_mean vs run
χ² / ndf 4.746e+05 / 93
p0 88 ± 1.031e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 94
Mean 47
Std Dev 27.13
0
−10
−20
−30
−40
−50
−60
−70
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

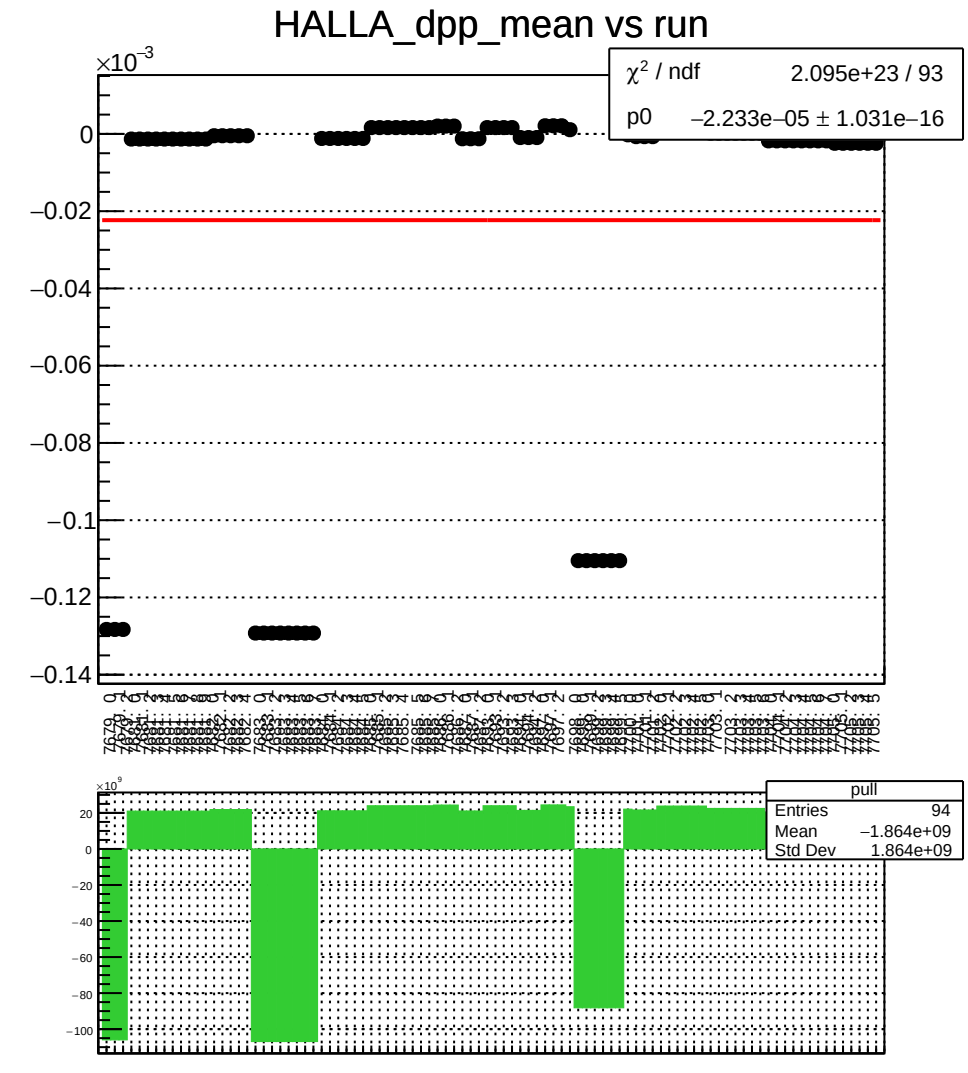

HWienAngle_mean vs run
χ² / ndf 3.429e+05 / 93
p0 −29.64 ± 1.031e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 94
Mean 47
Std Dev 27.13
0
−10
−20
−30
−40
−50
−60
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

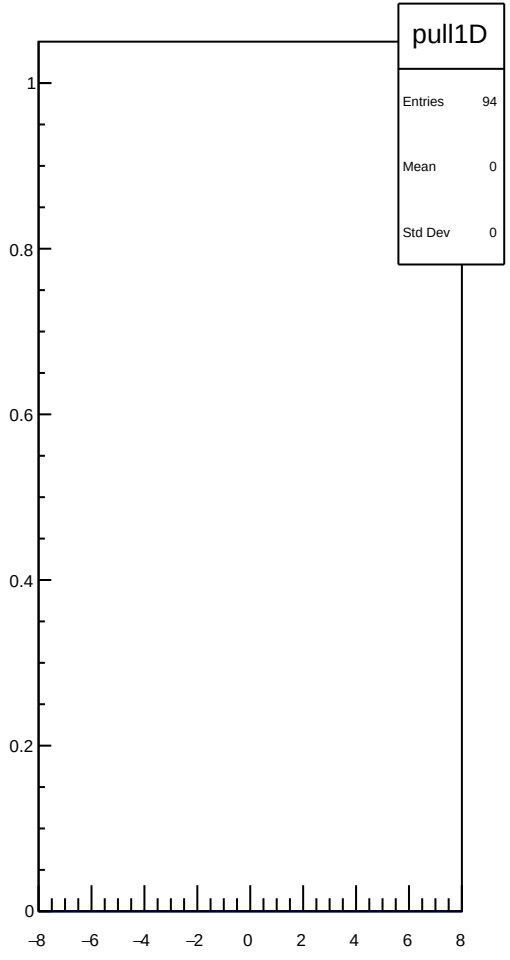

psub_pl_pos_mean vs run
χ² / ndf 2.352e+09 / 93
p0 1500 ± 1.031e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 94
Mean 47
Std Dev 27.13
5000
4000
3000
2000
1000
0
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

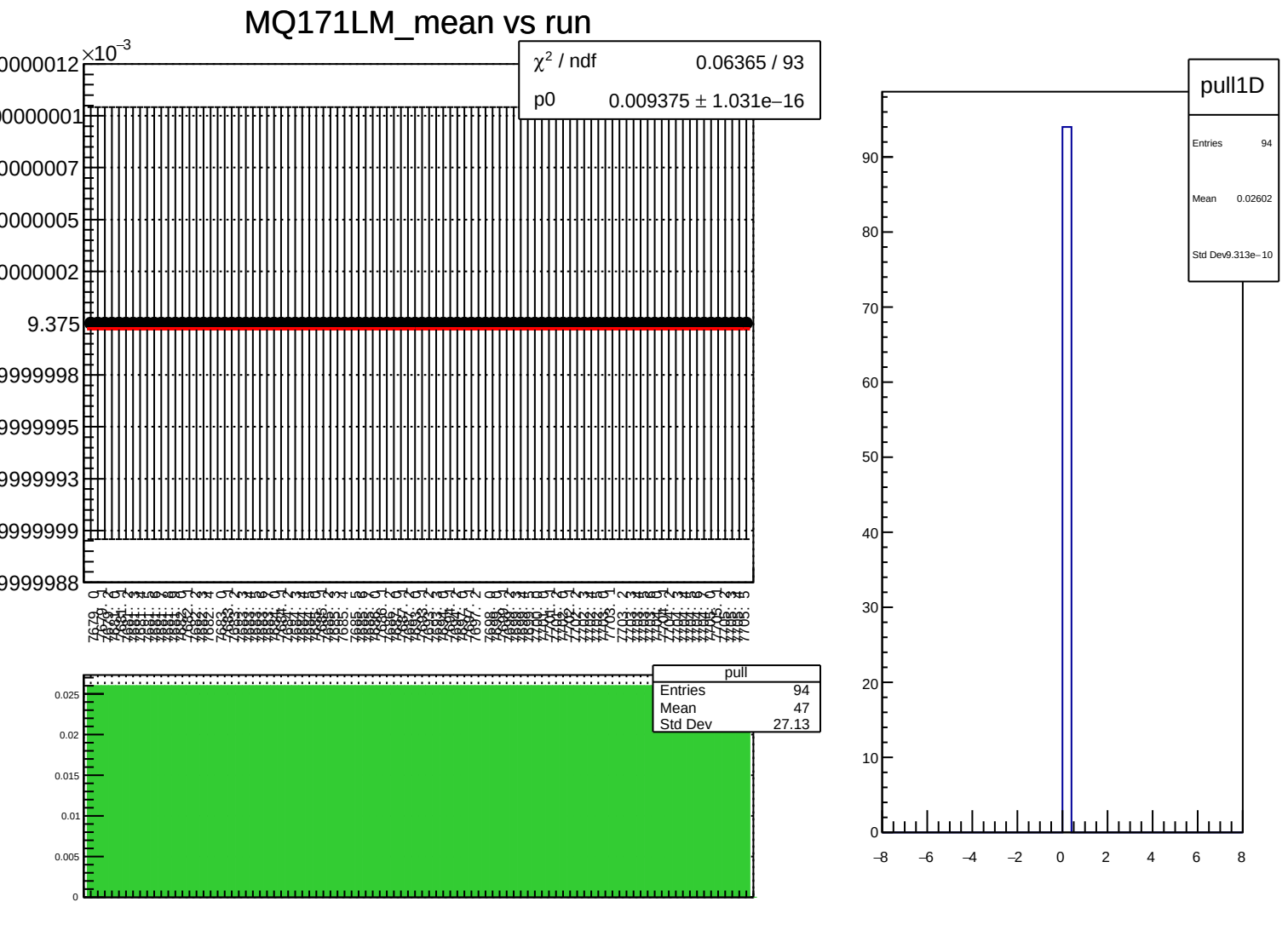

Phi_FG_mean vs run
χ² / ndf 9.302e+05 / 93
p0 89.96 ± 1.031e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 94
Mean 47
Std Dev 27.13
100
80
60
40
20
0
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

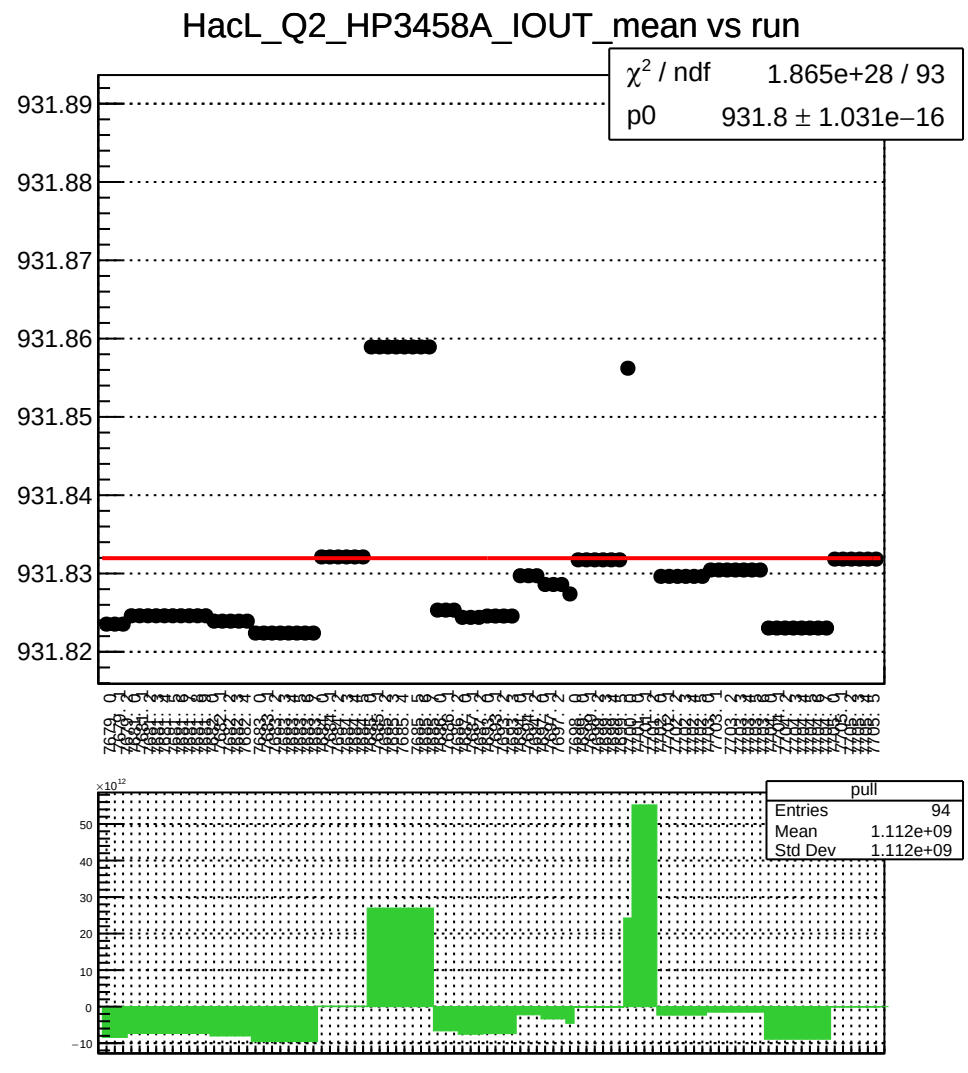

HALLA_p_mean vs run
χ² / ndf 2.492e+33 / 93
p0 2174 ± 1.031e−16
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
pull
Entries 94
Mean −7.587e+08
Std Dev 7.587e+08
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14
−16

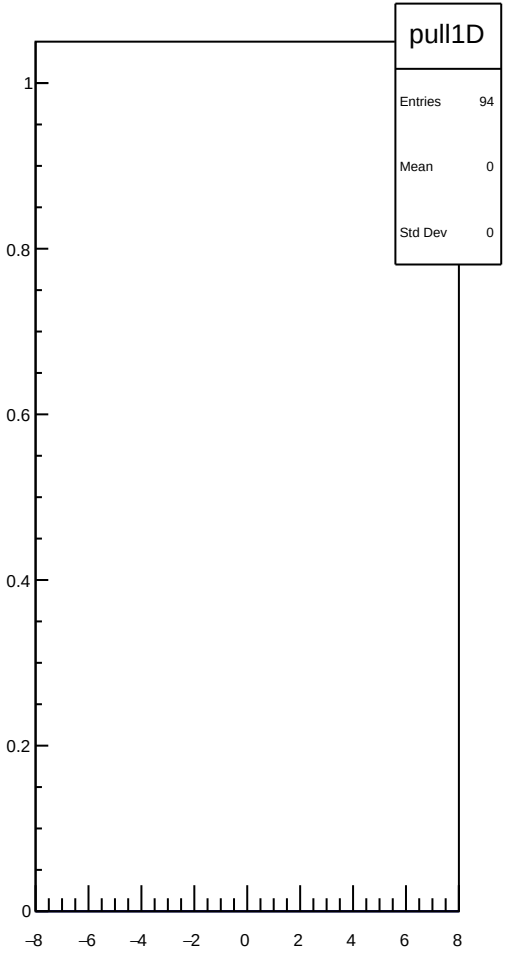

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

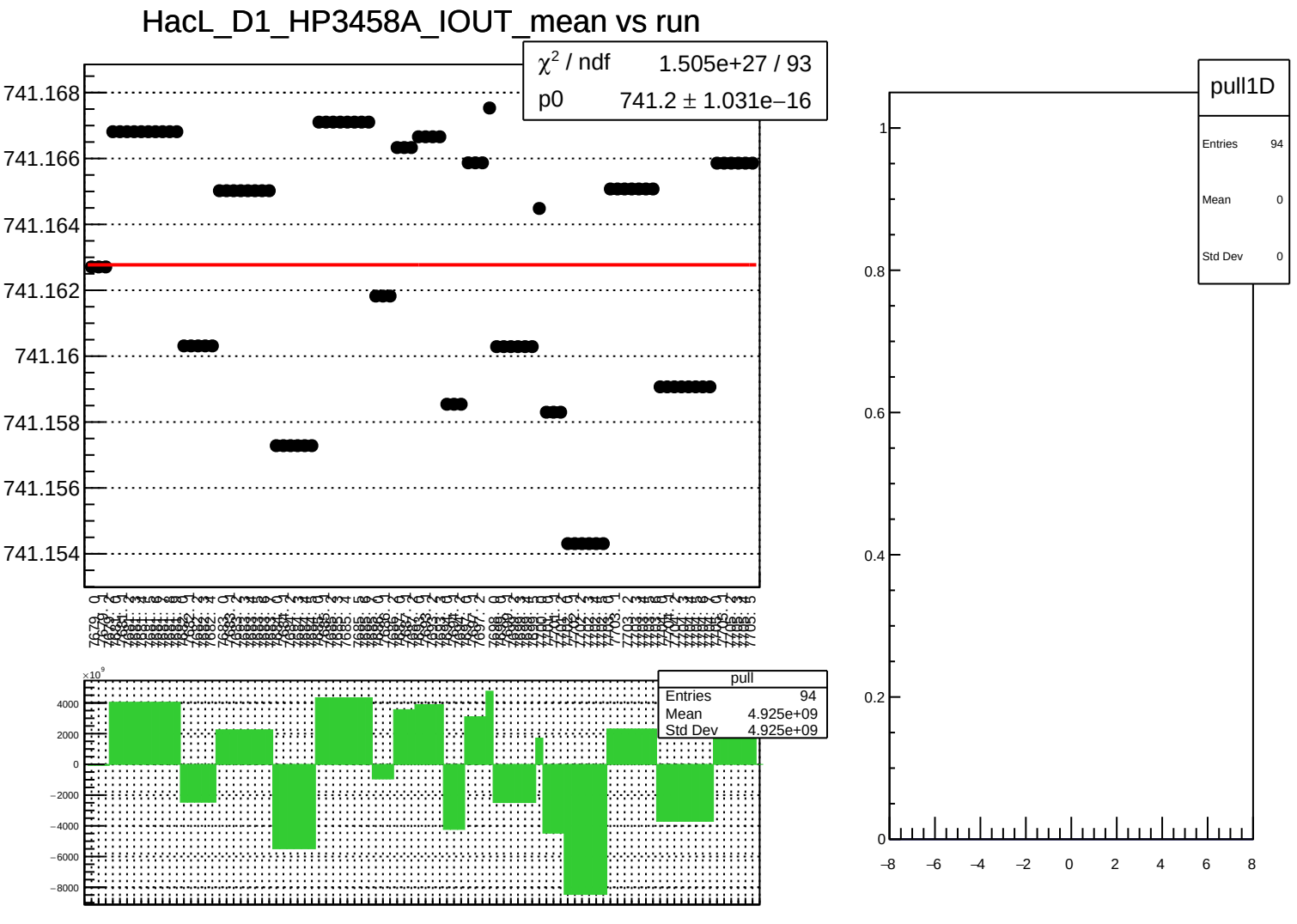

HALLA_dpp_mean vs run
χ² / ndf 2.095e+23 / 93
p0 −2.233e−05 ± 1.031e−16
pull
Entries 94
Mean −1.864e+09
Std Dev 1.864e+09

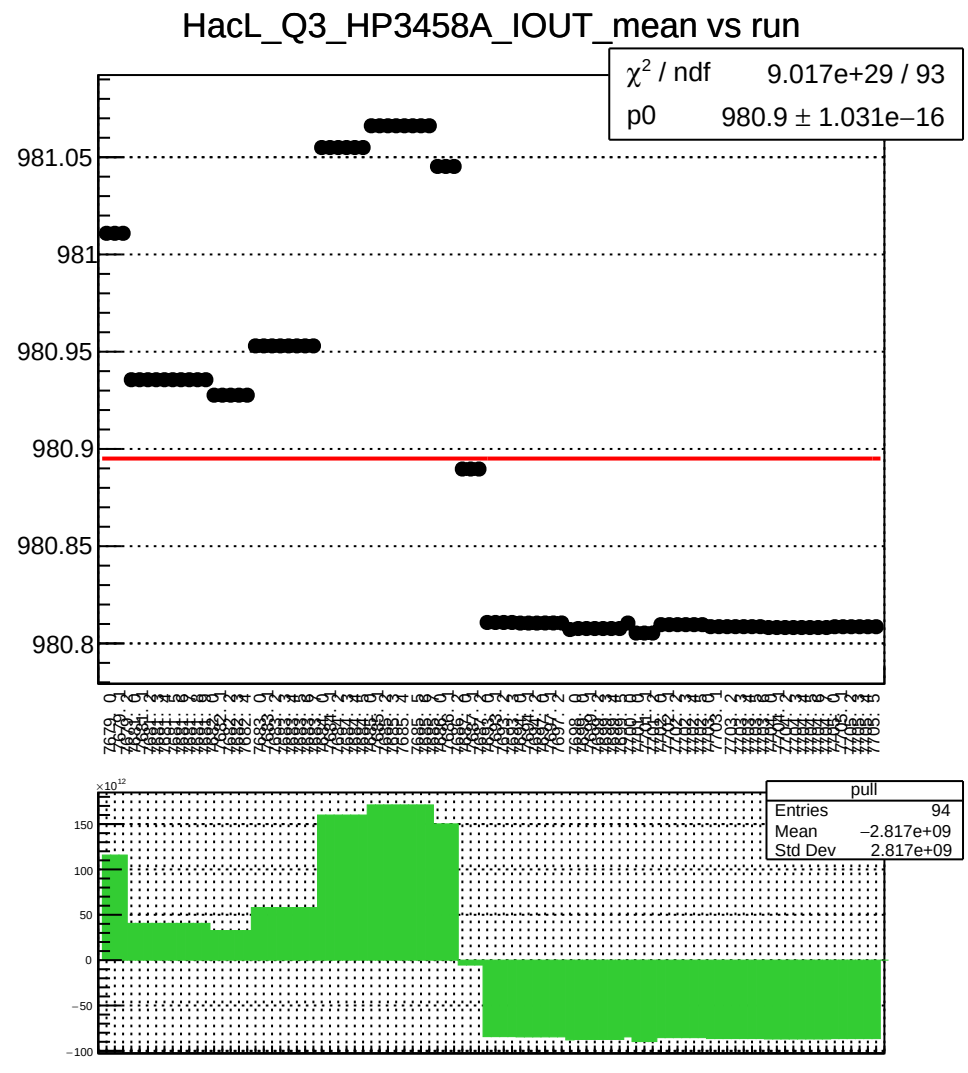

pull1D
Entries 94
Mean 0
Std Dev 0

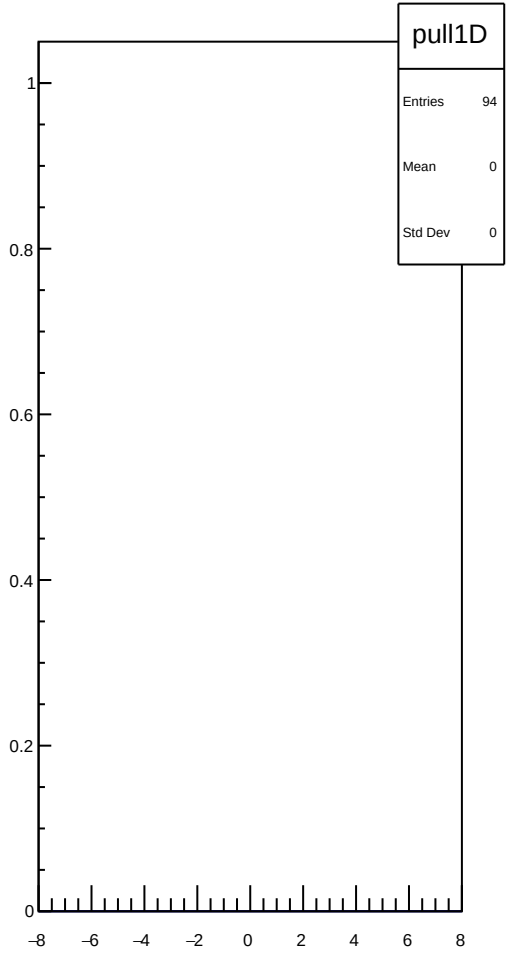

MQ171LM_mean vs run
χ² / ndf 0.06365 / 93
p0 0.009375 ± 1.031e−16
×10⁻³
pull
Entries 94
Mean 47
Std Dev 27.13
pull1D
Entries 94
Mean 0.02602
Std Dev 9.313e−10

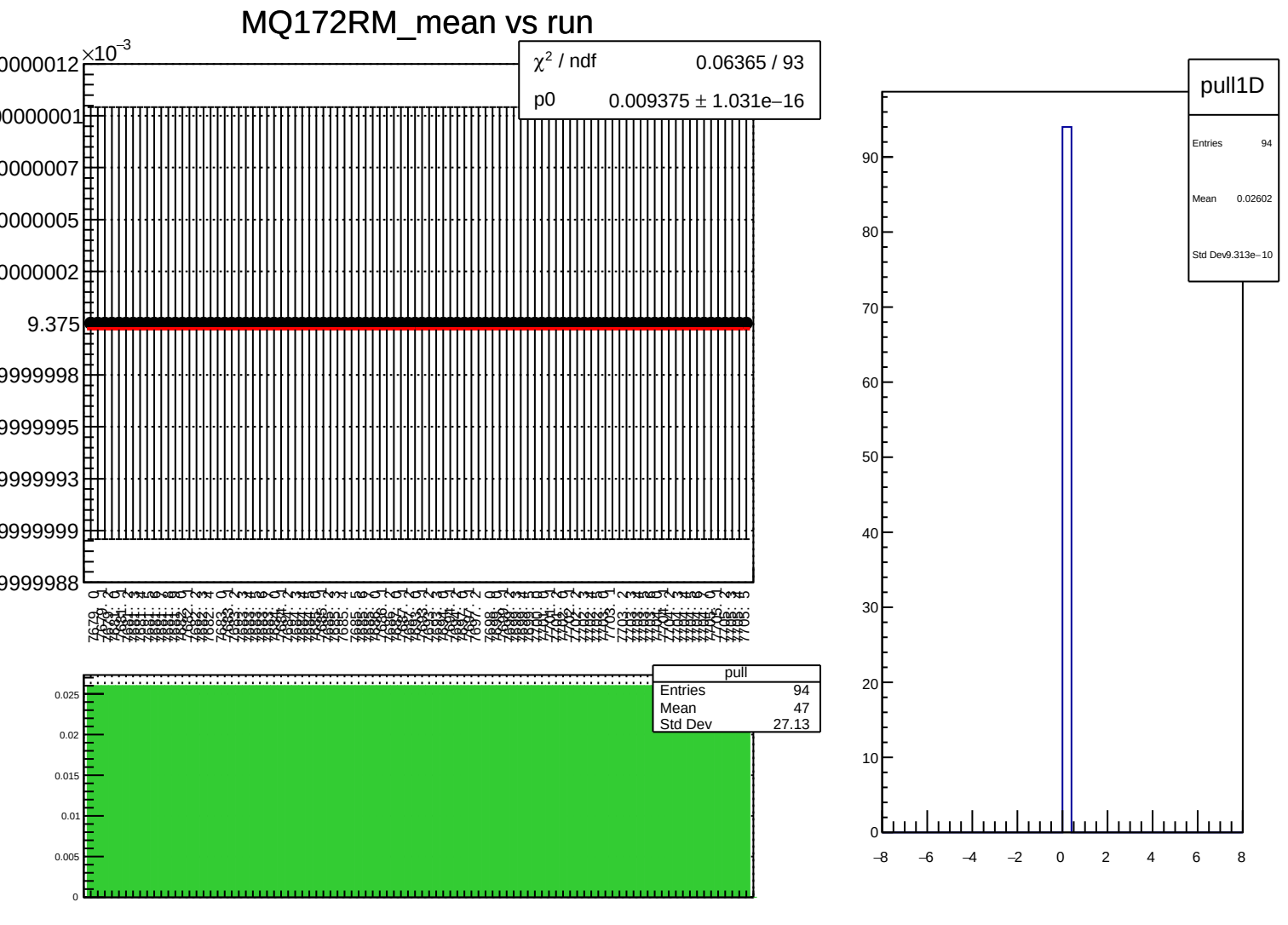

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 1.865e+28 / 93
p0 931.8 ± 1.031e−16
931.89
931.88
931.87
931.86
931.85
931.84
931.83
931.82
pull
Entries 94
Mean 1.112e+09
Std Dev 1.112e+09
×10¹²
50
40
30
20
10
0
−10

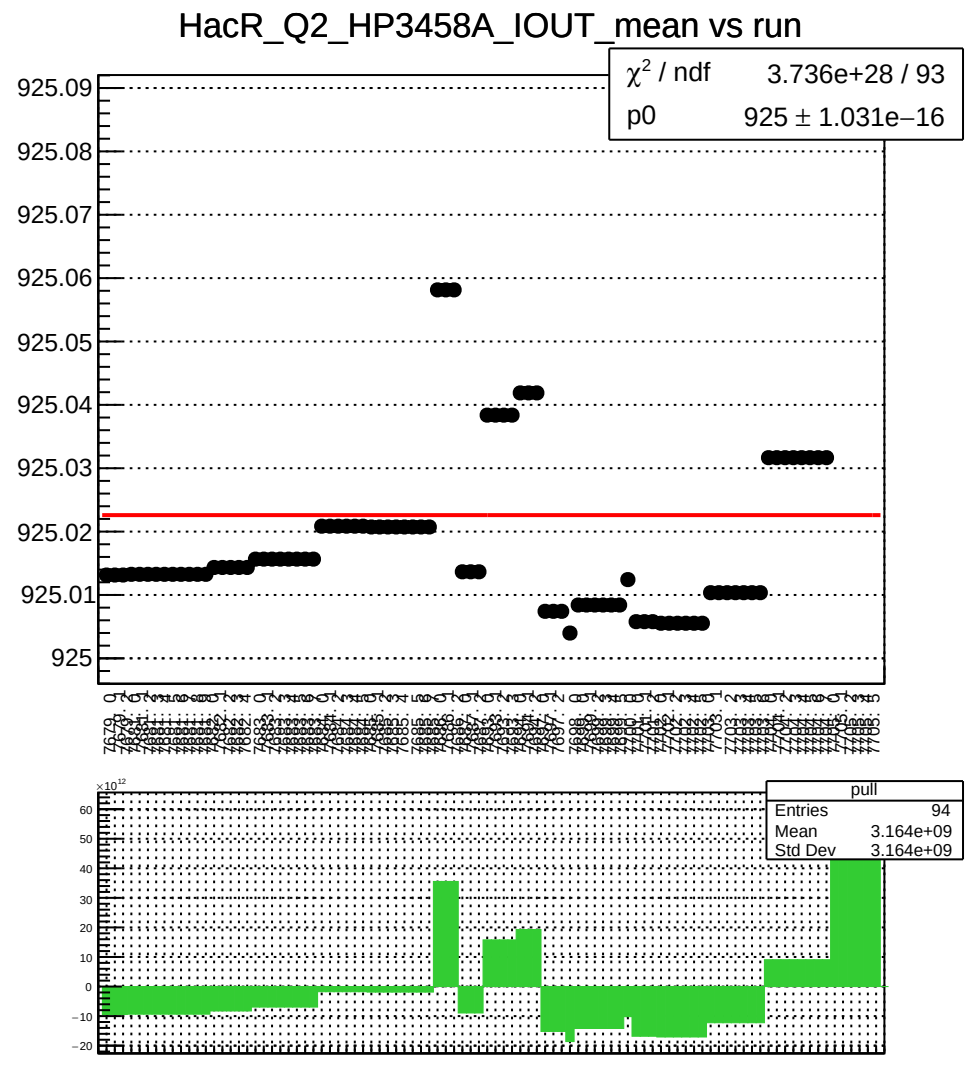

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

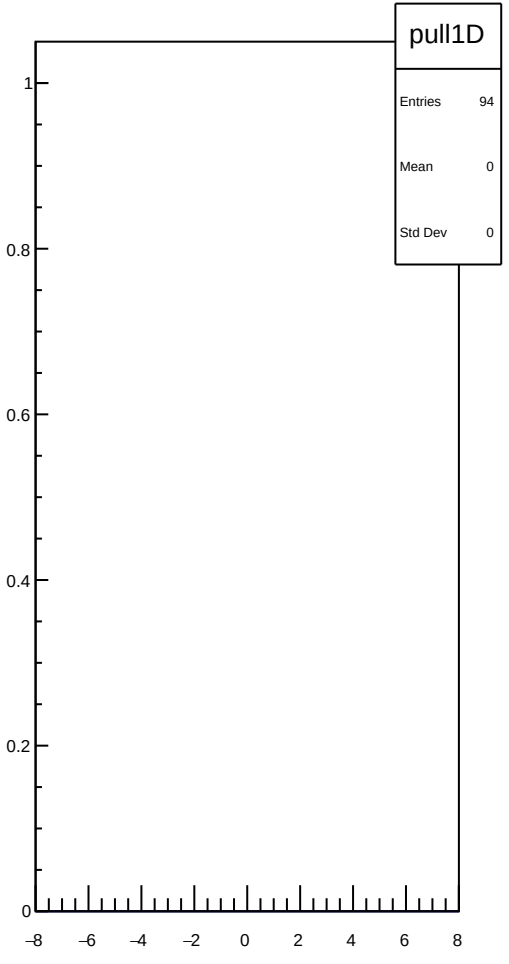

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.505e+27 / 93
p0 741.2 ± 1.031e−16
741.168
741.166
741.164
741.162
741.16
741.158
741.156
741.154
×10⁹
4000
2000
0
−2000
−4000
−6000
−8000
pull
Entries 94
Mean 4.925e+09
Std Dev 4.925e+09
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

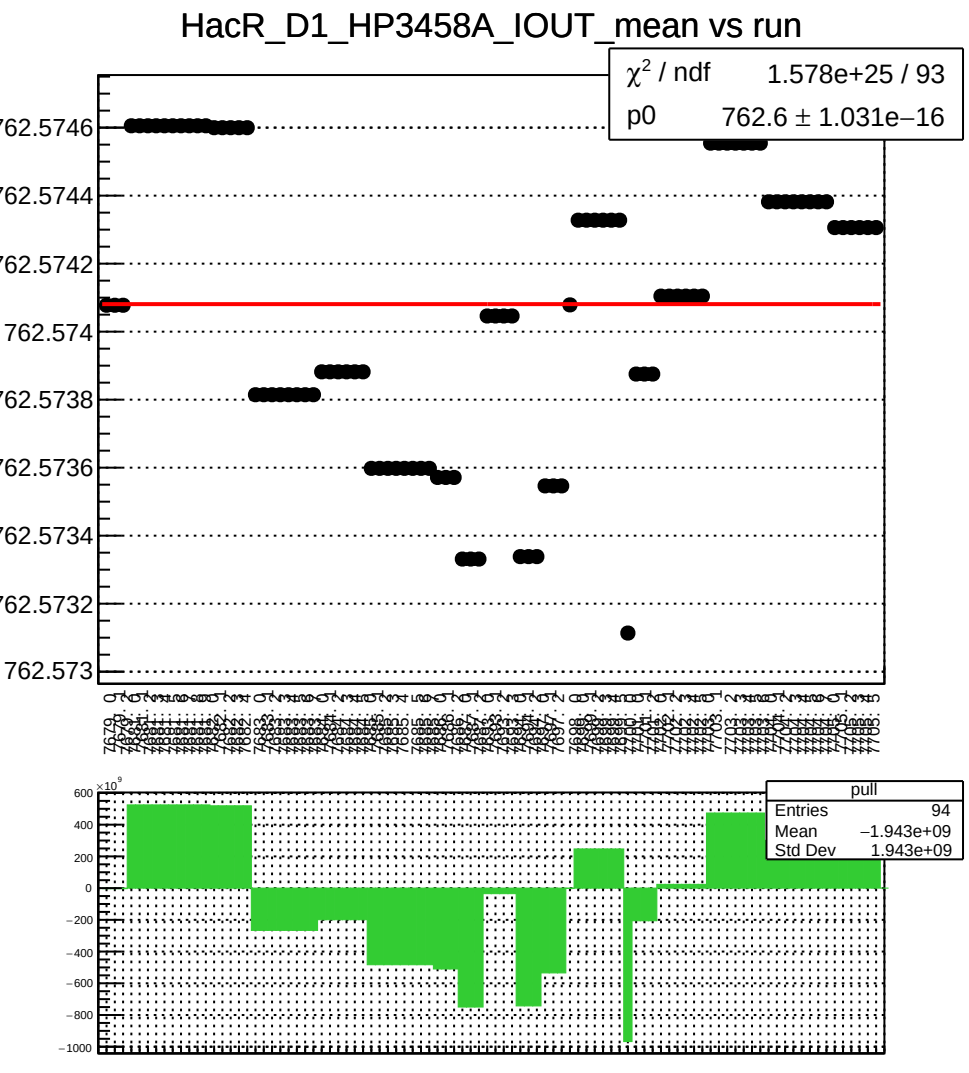

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 9.017e+29 / 93
p0 980.9 ± 1.031e−16
981.05
981
980.95
980.9
980.85
980.8
×10¹²
150
100
50
0
−50
−100
pull
Entries 94
Mean −2.817e+09
Std Dev 2.817e+09

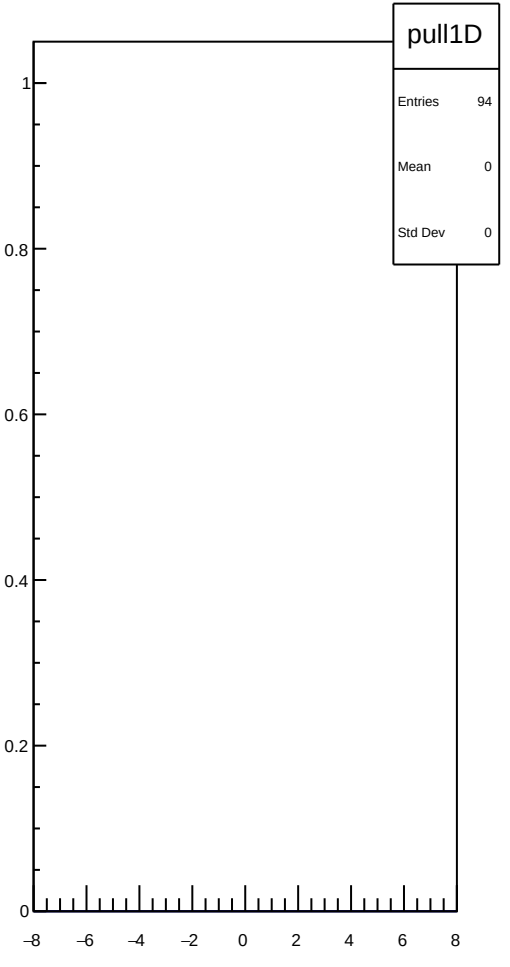

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

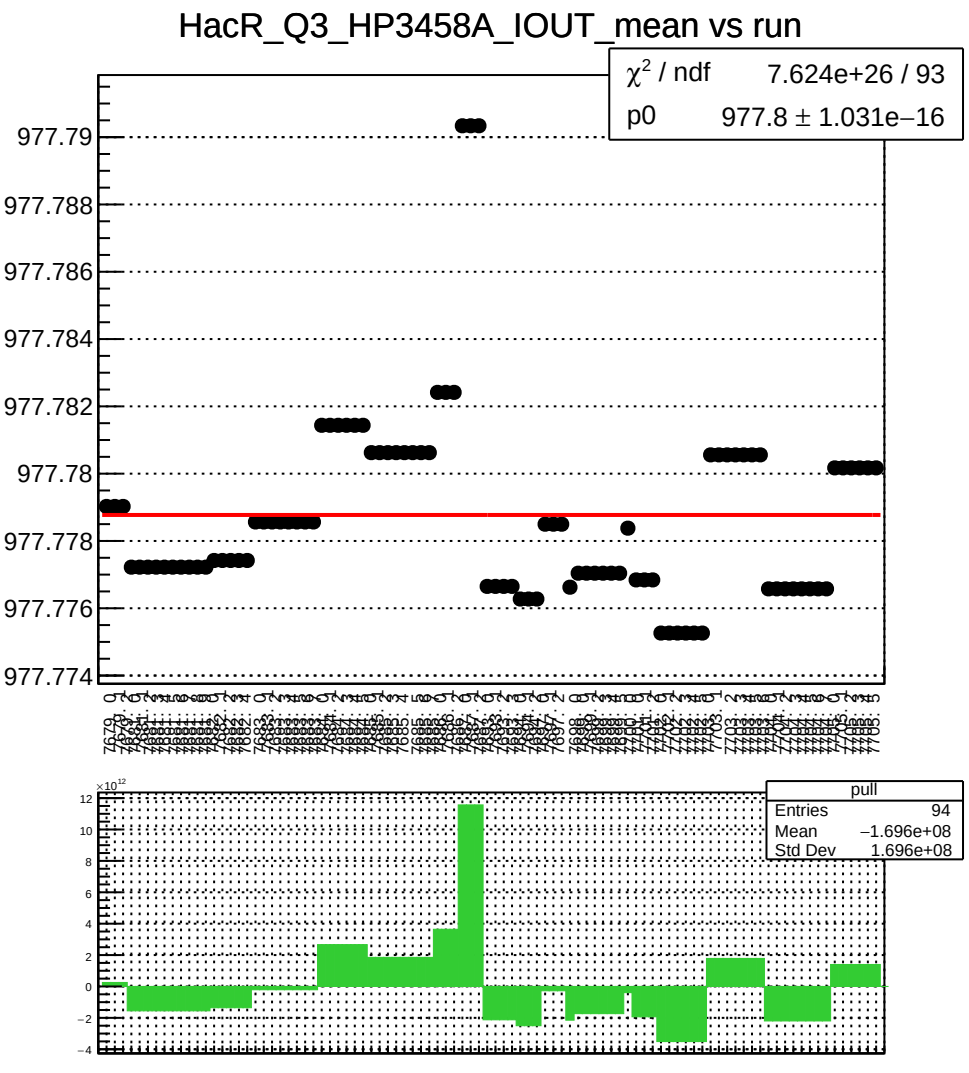

MQ172RM_mean vs run
χ² / ndf 0.06365 / 93
p0 0.009375 ± 1.031e−16
×10⁻³
pull
Entries 94
Mean 47
Std Dev 27.13
pull1D
Entries 94
Mean 0.02602
Std Dev 9.313e−10

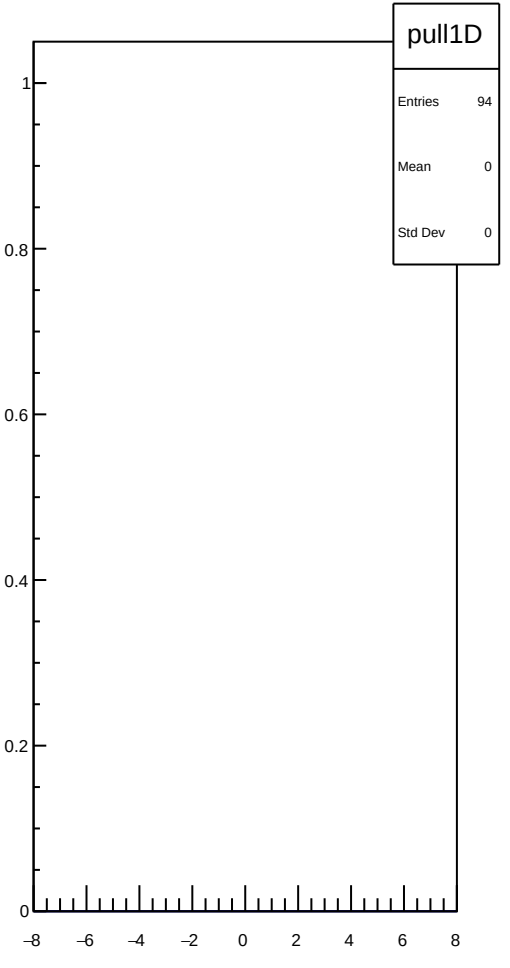

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 3.736e+28 / 93
p0 925 ± 1.031e−16
925.09
925.08
925.07
925.06
925.05
925.04
925.03
925.02
925.01
925
pull
Entries 94
Mean 3.164e+09
Std Dev 3.164e+09
×10¹²
60
50
40
30
20
10
0
−10
−20

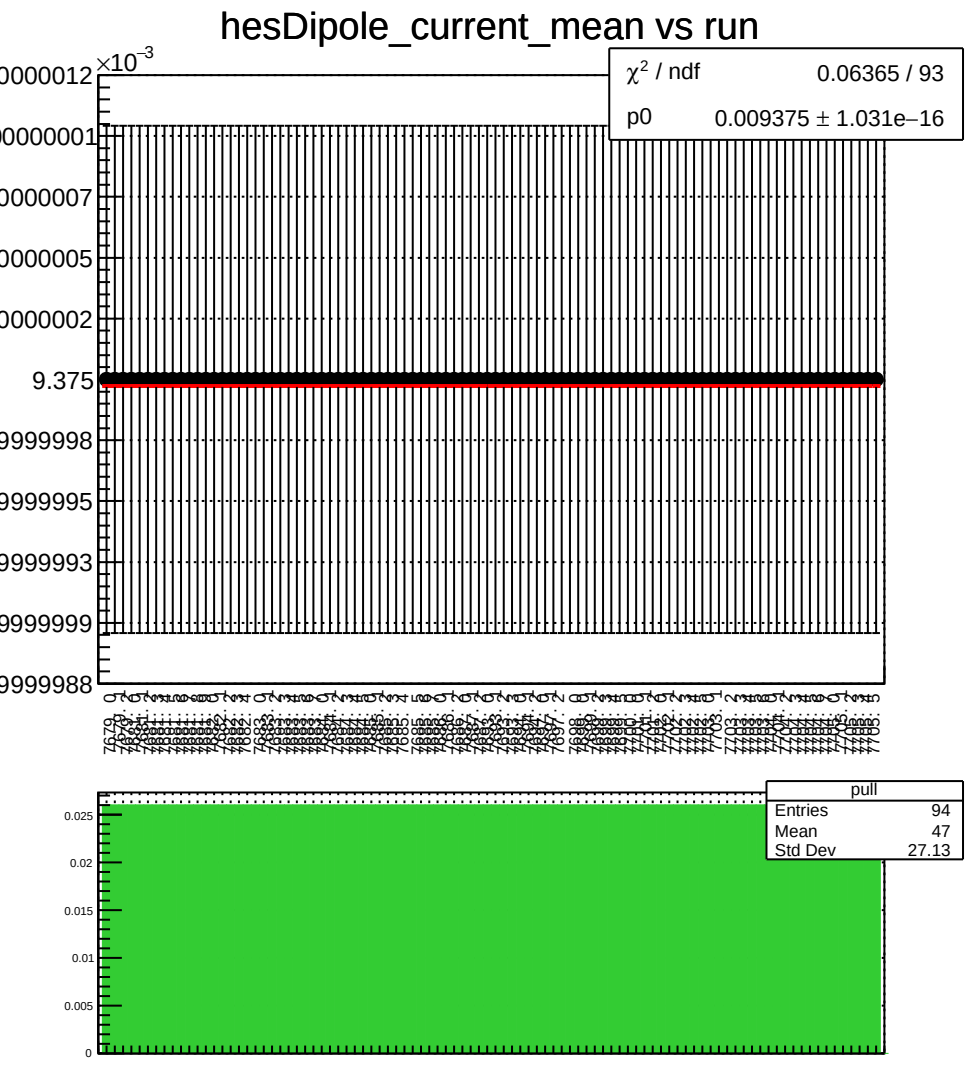

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

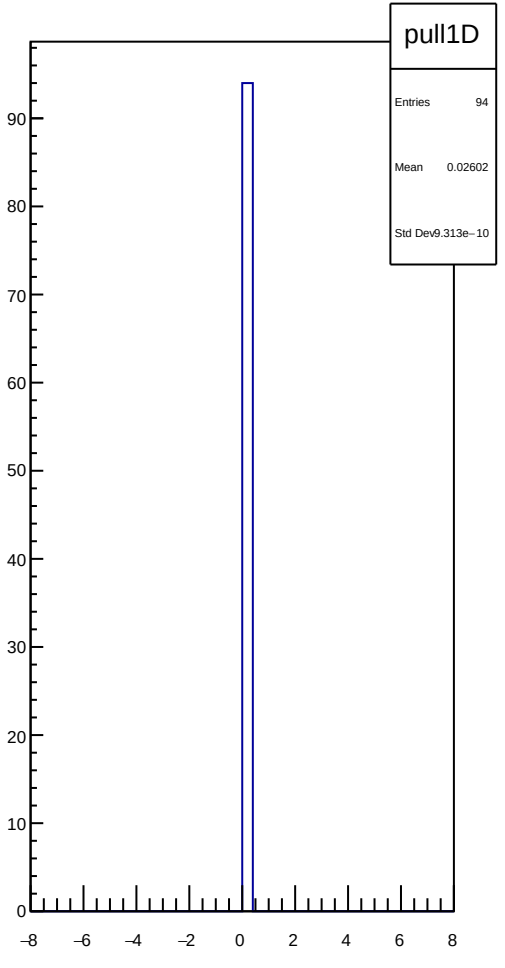

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 1.578e+25 / 93
p0 762.6 ± 1.031e−16
762.5746
762.5744
762.5742
762.574
762.5738
762.5736
762.5734
762.5732
762.573
pull
Entries 94
Mean −1.943e+09
Std Dev 1.943e+09
×10⁹
600
400
200
0
−200
−400
−600
−800
−1000

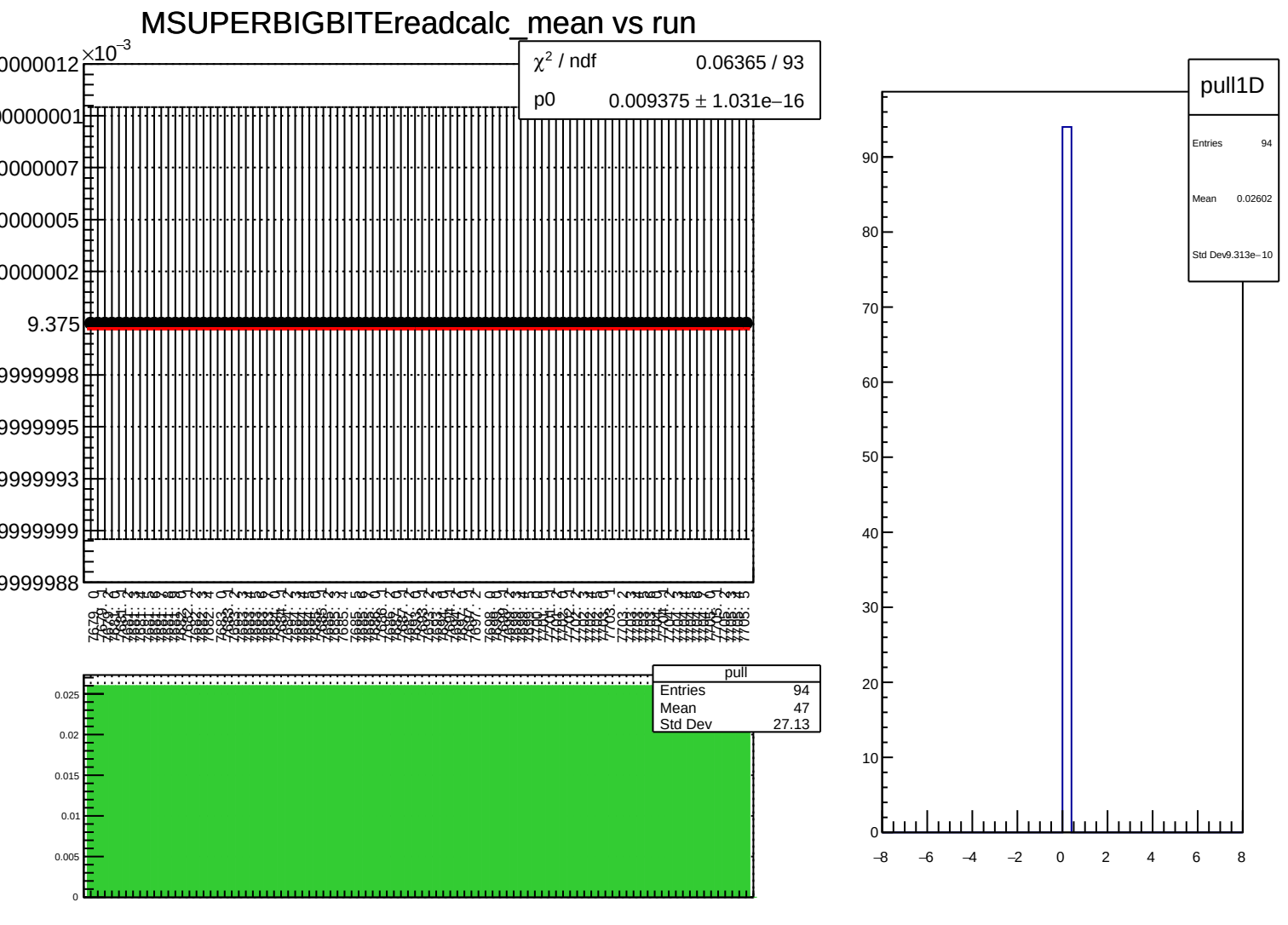

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

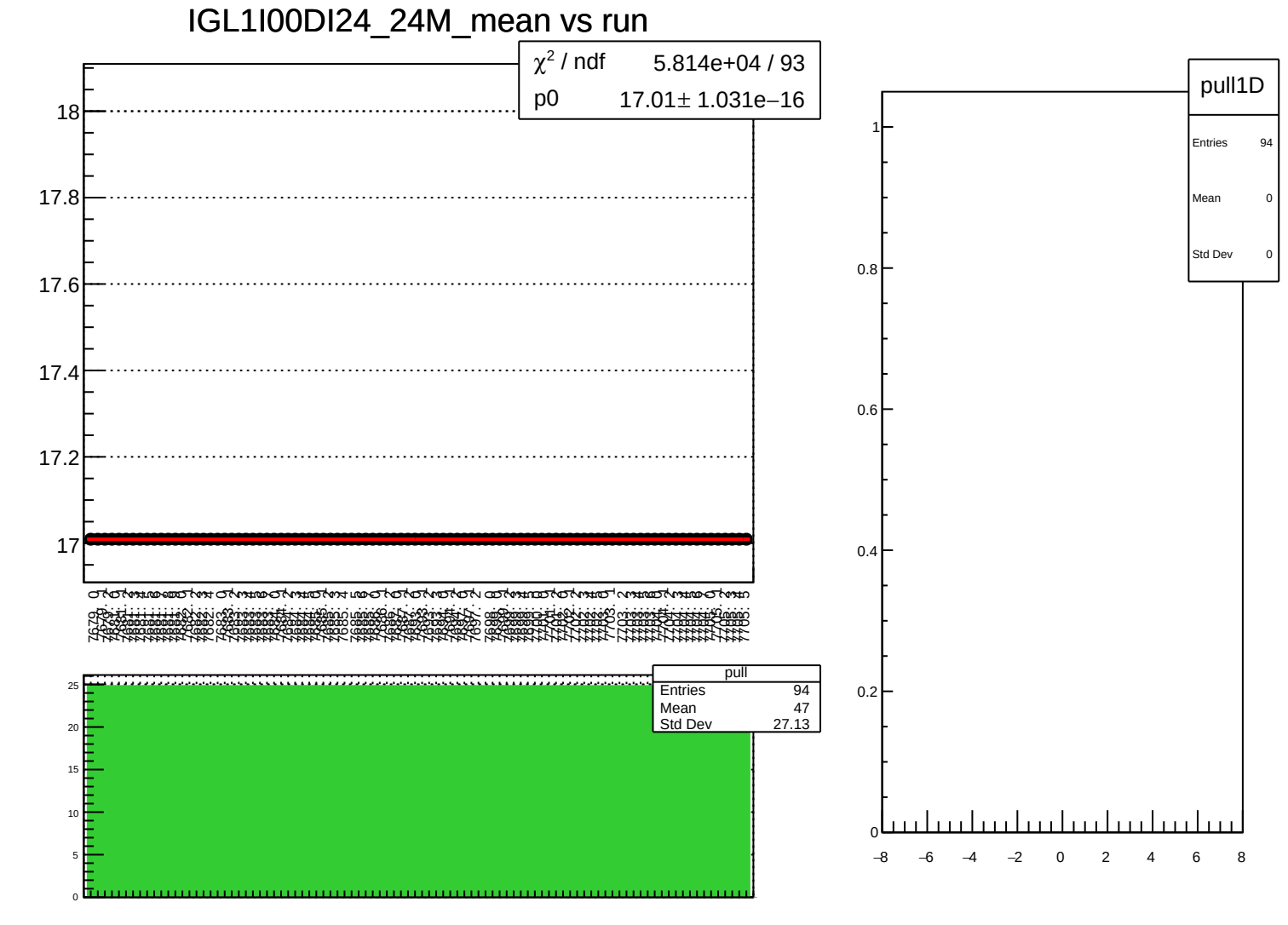

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 7.624e+26 / 93
p0 977.8 ± 1.031e−16
977.79
977.788
977.786
977.784
977.782
977.78
977.778
977.776
977.774
pull
Entries 94
Mean −1.696e+08
Std Dev 1.696e+08
×10¹²
12
10
8
6
4
2
0
−2
−4

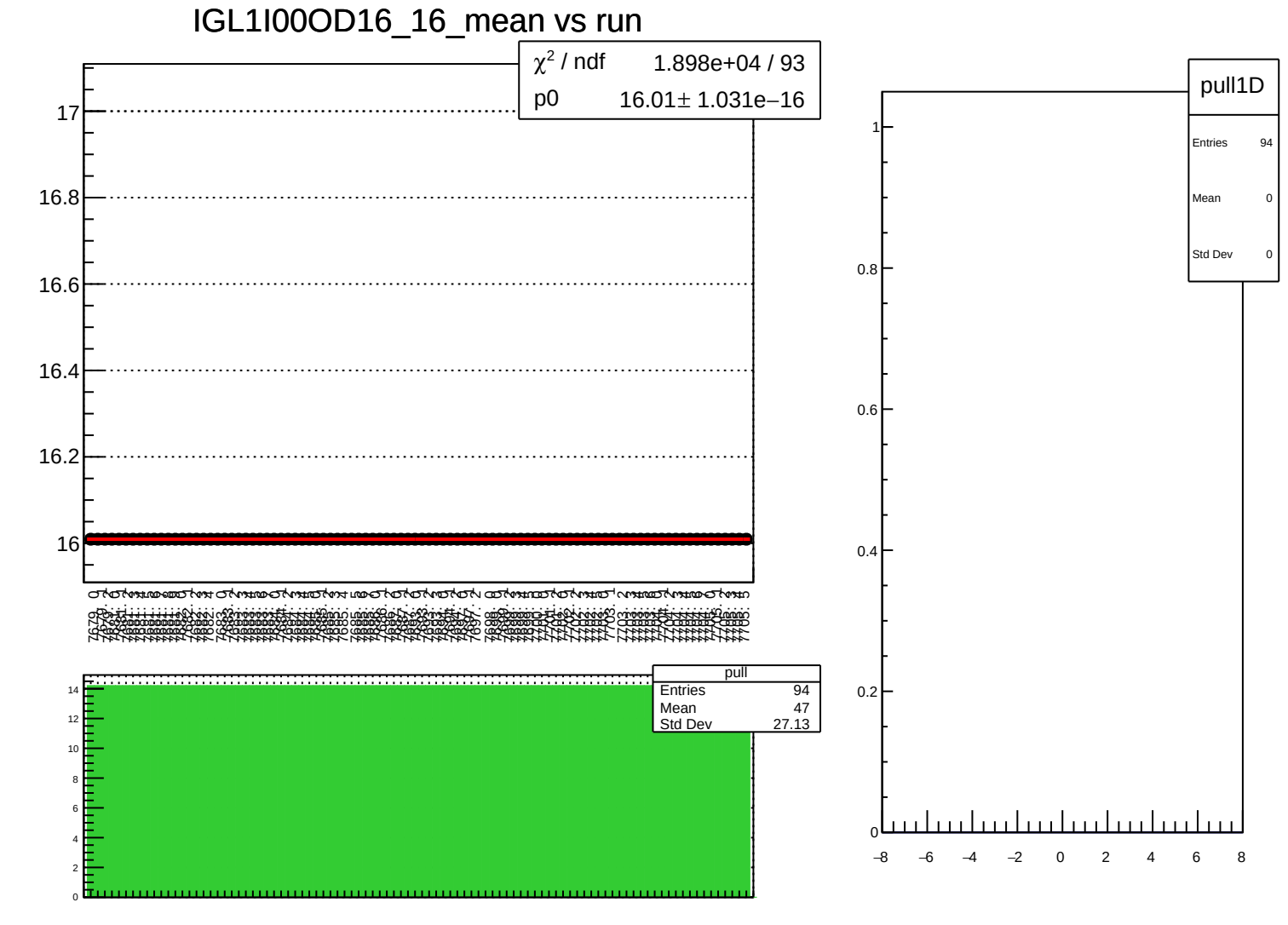

pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

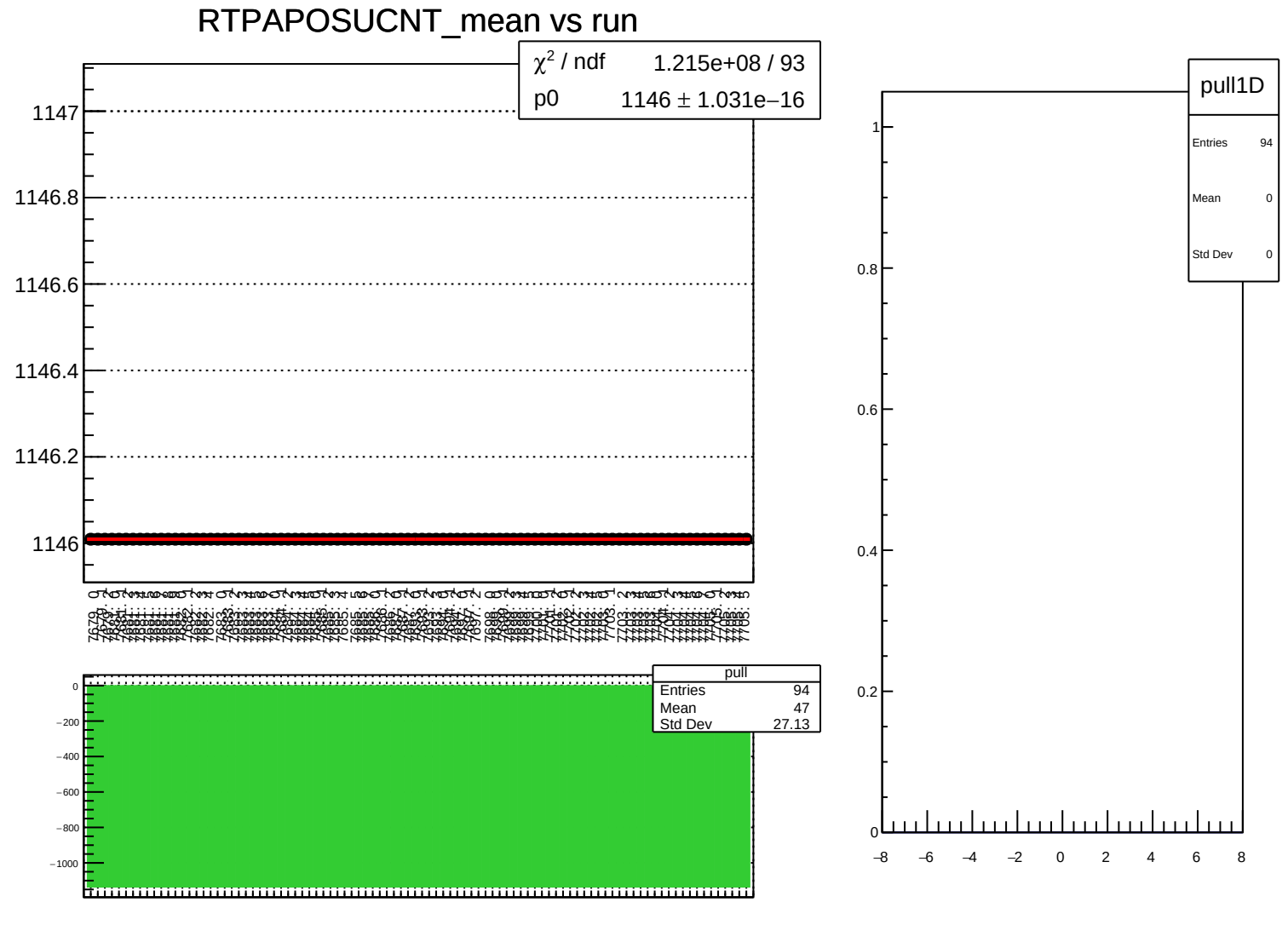

hesDipole_current_mean vs run
×10⁻³
χ² / ndf 0.06365 / 93
p0 0.009375 ± 1.031e−16
9.375
pull
Entries 94
Mean 47
Std Dev 27.13

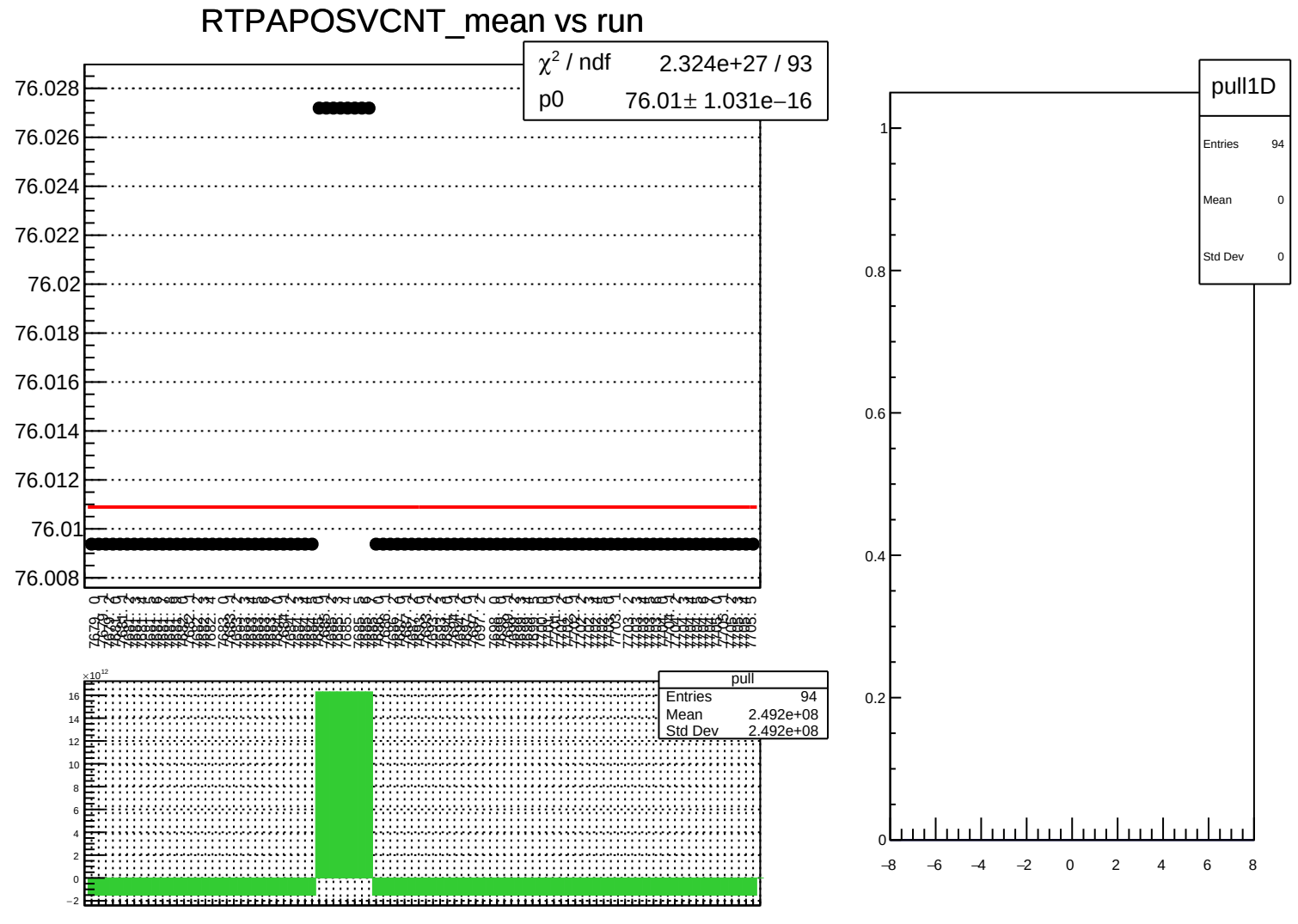

pull1D
Entries 94
Mean 0.02602
Std Dev 9.313e−10


MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.06365 / 93
p0 0.009375 ± 1.031e−16
×10⁻³
pull
Entries 94
Mean 47
Std Dev 27.13
pull1D
Entries 94
Mean 0.02602
Std Dev 9.313e−10


IGL1I00DI24_24M_mean vs run
χ² / ndf 5.814e+04 / 93
p0 17.01± 1.031e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 94
Mean 47
Std Dev 27.13
25
20
15
10
5
0
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 1.898e+04 / 93
p0 16.01± 1.031e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 94
Mean 47
Std Dev 27.13
14
12
10
8
6
4
2
0
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 1.215e+08 / 93
p0 1146 ± 1.031e−16
1147
1146.8
1146.6
1146.4
1146.2
1146
pull
Entries 94
Mean 47
Std Dev 27.13
0
−200
−400
−600
−800
−1000
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSVCNT_mean vs run
χ² / ndf 2.324e+27 / 93
p0 76.01± 1.031e−16
76.028
76.026
76.024
76.022
76.02
76.018
76.016
76.014
76.012
76.01
76.008
pull
Entries 94
Mean 2.492e+08
Std Dev 2.492e+08
×10¹²
16
14
12
10
8
6
4
2
0
−2
pull1D
Entries 94
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8