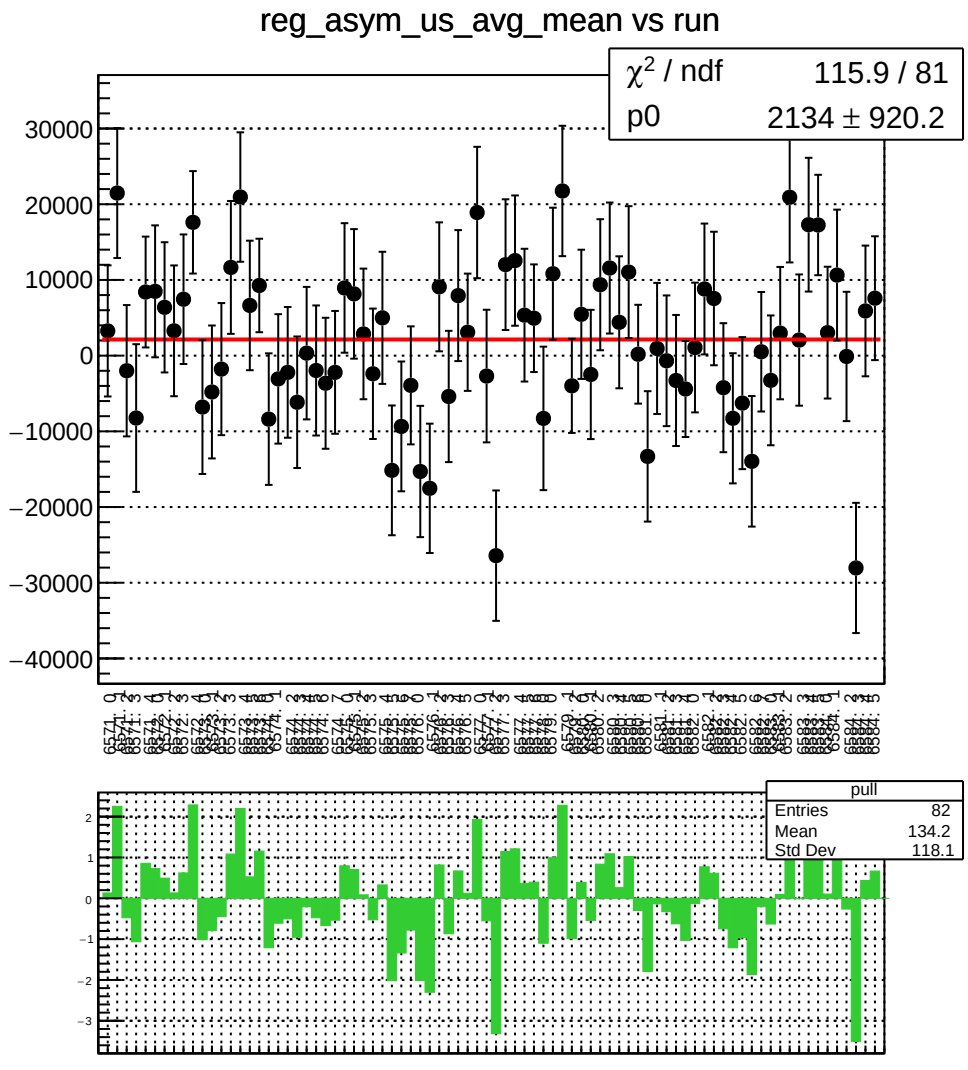
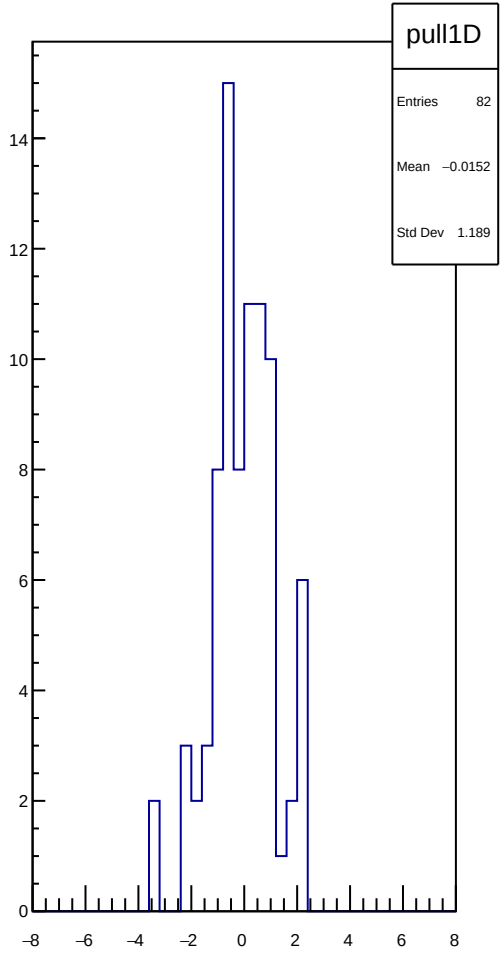
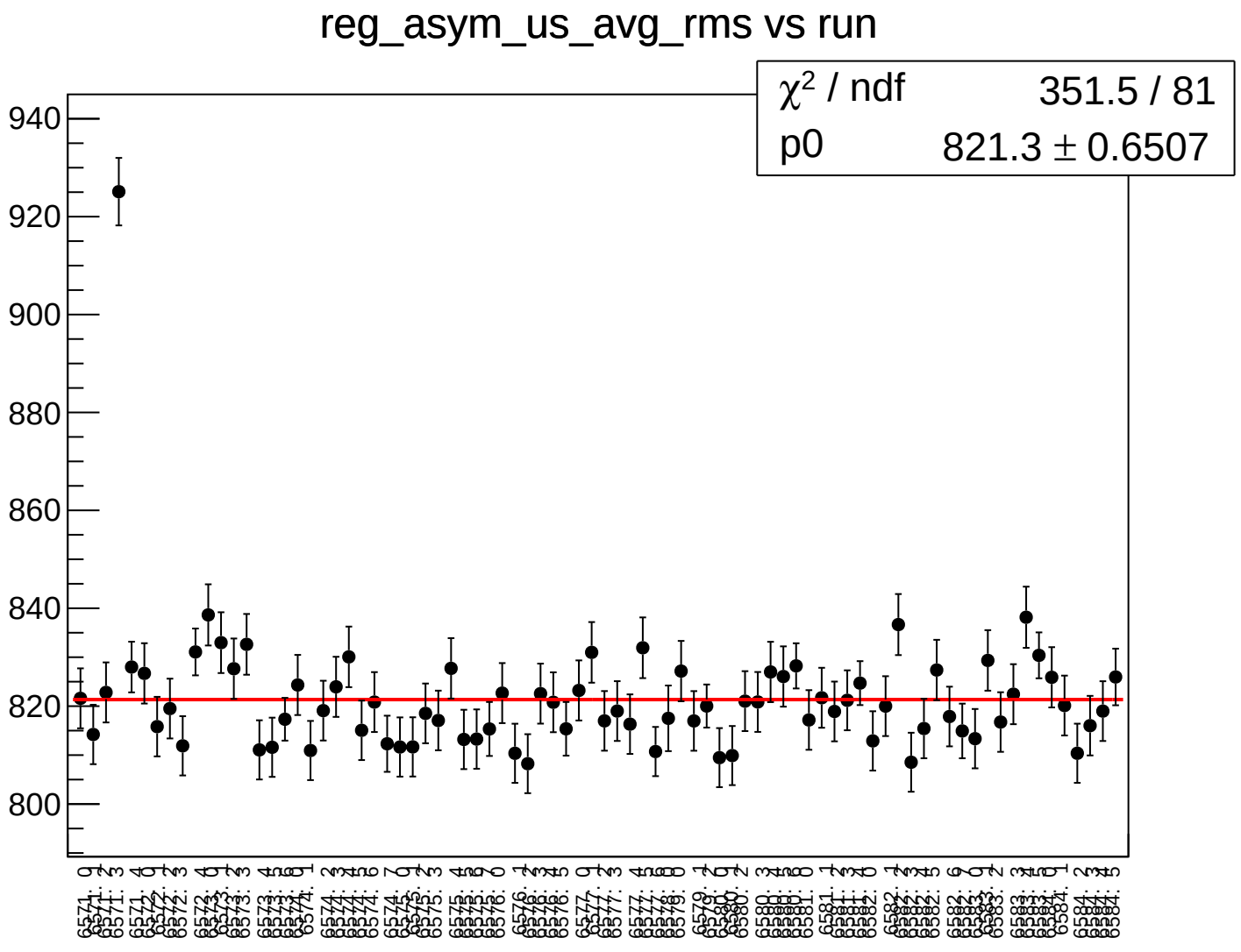
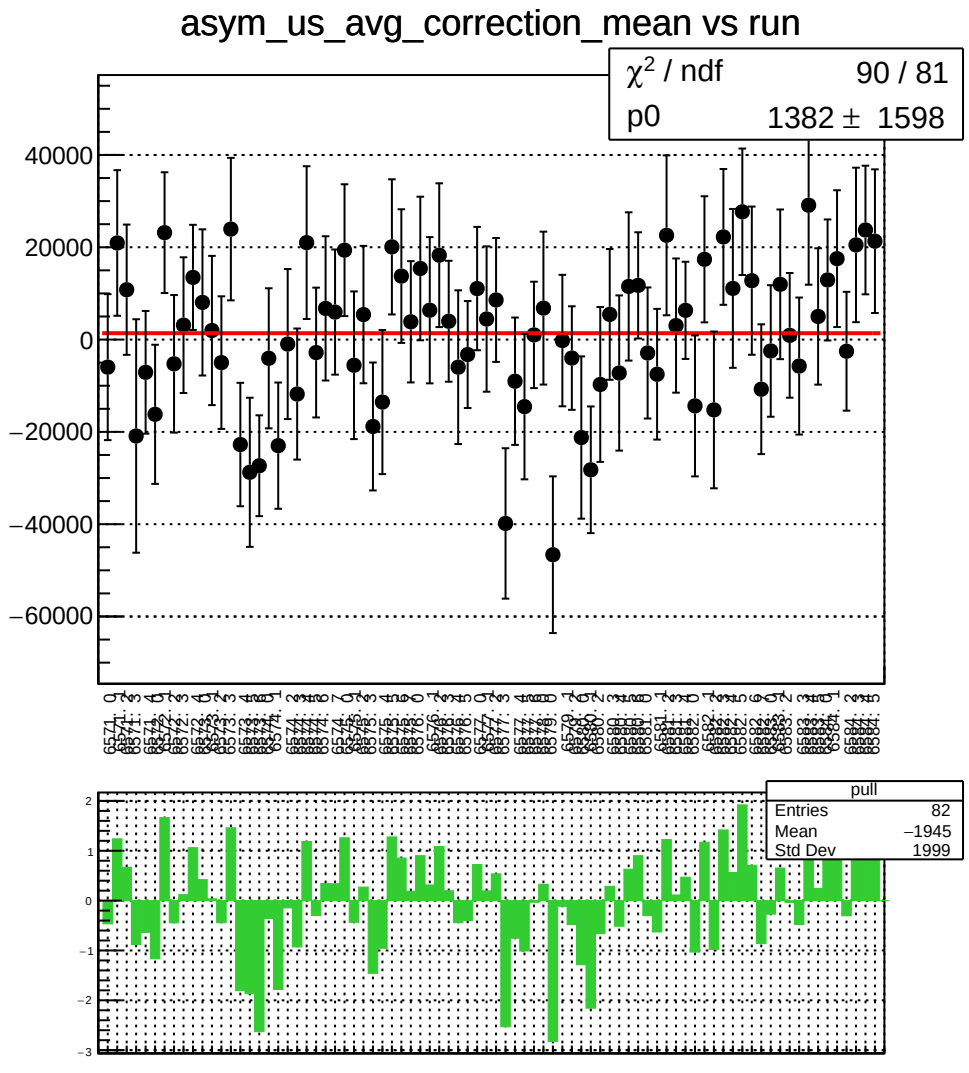
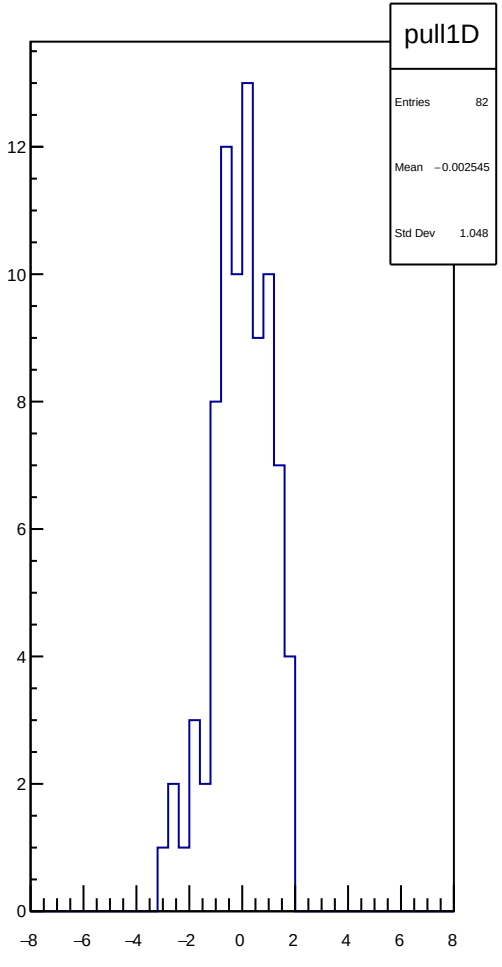
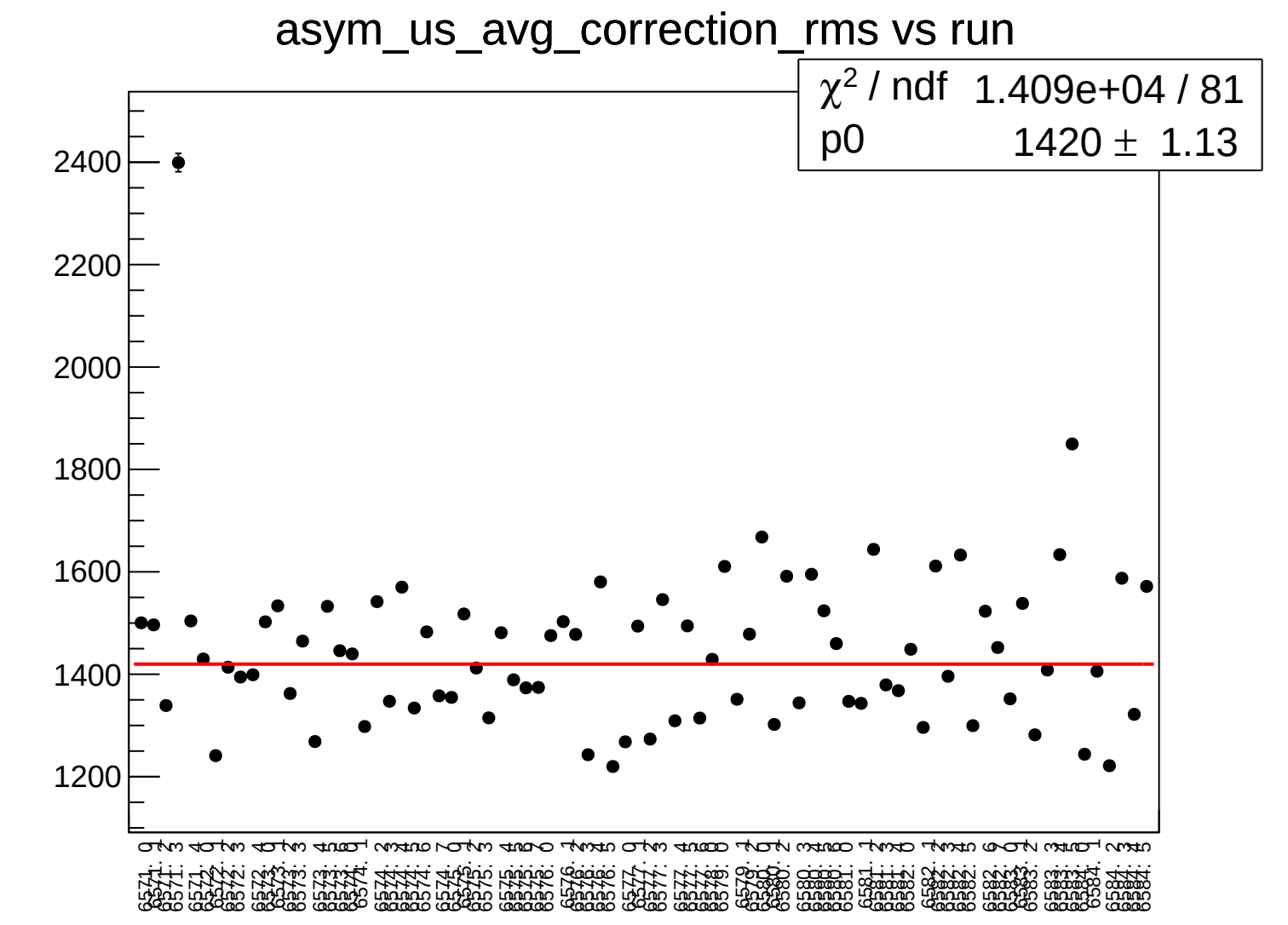

reg_asym_us_avg_mean vs run
χ² / ndf 115.9 / 81
p0 2134 ± 920.2
pull
Entries 82
Mean 134.2
Std Dev 118.1

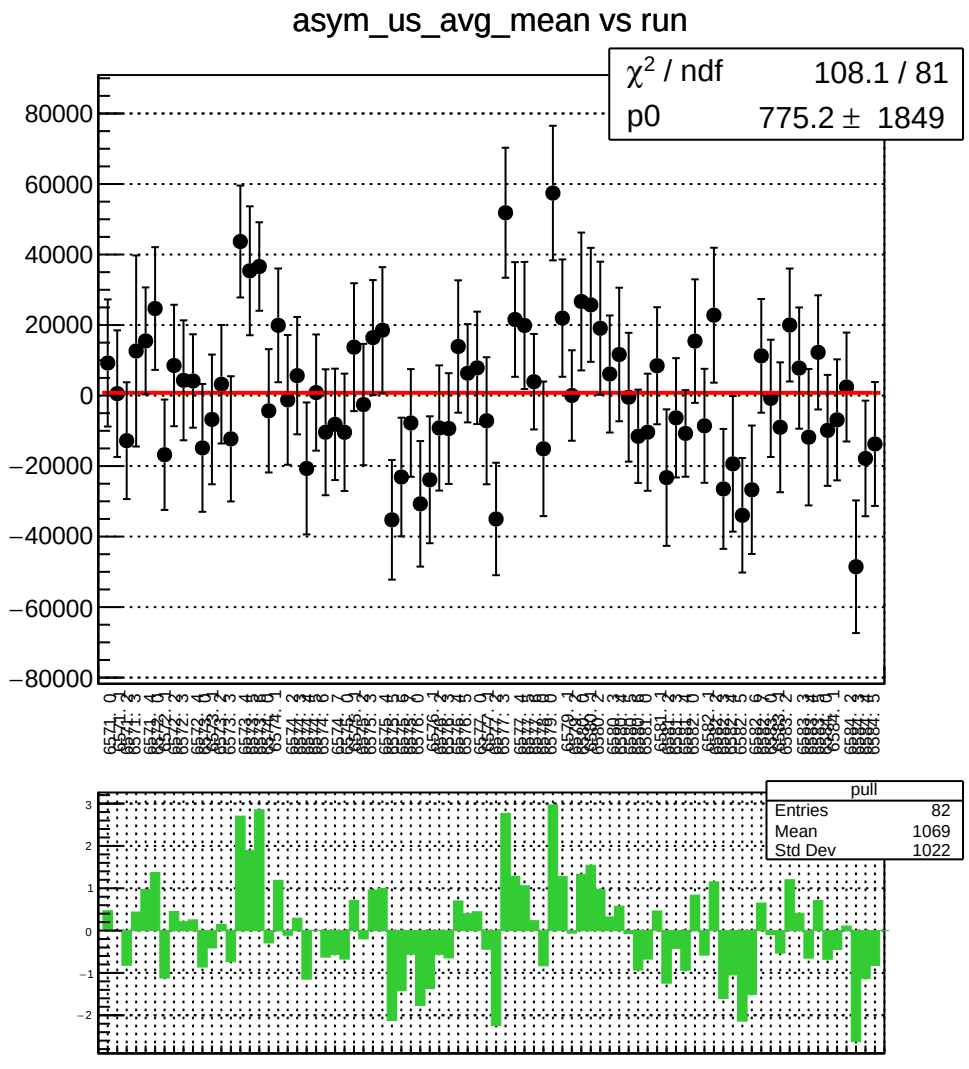

pull1D
Entries 82
Mean −0.0152
Std Dev 1.189

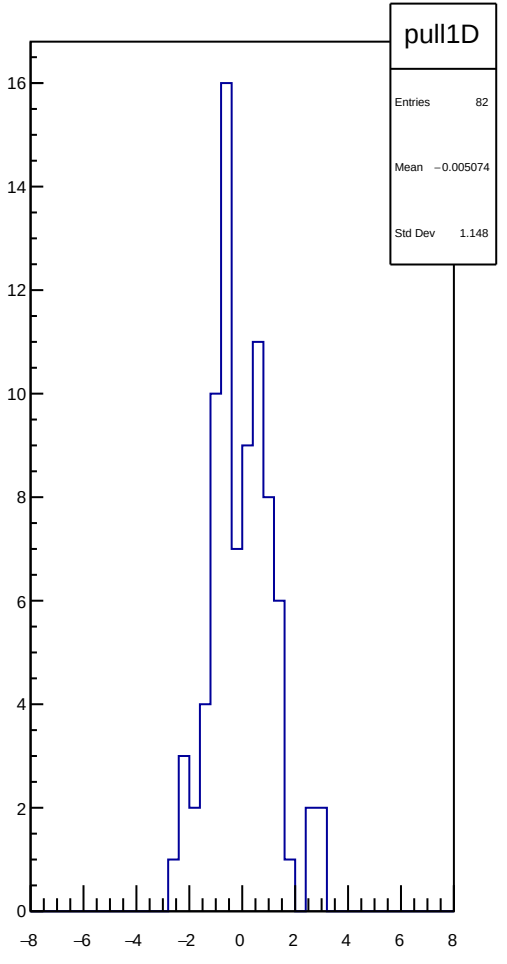

reg_asym_us_avg_rms vs run
χ² / ndf 351.5 / 81
p0 821.3 ± 0.6507
940
920
900
880
860
840
820
800

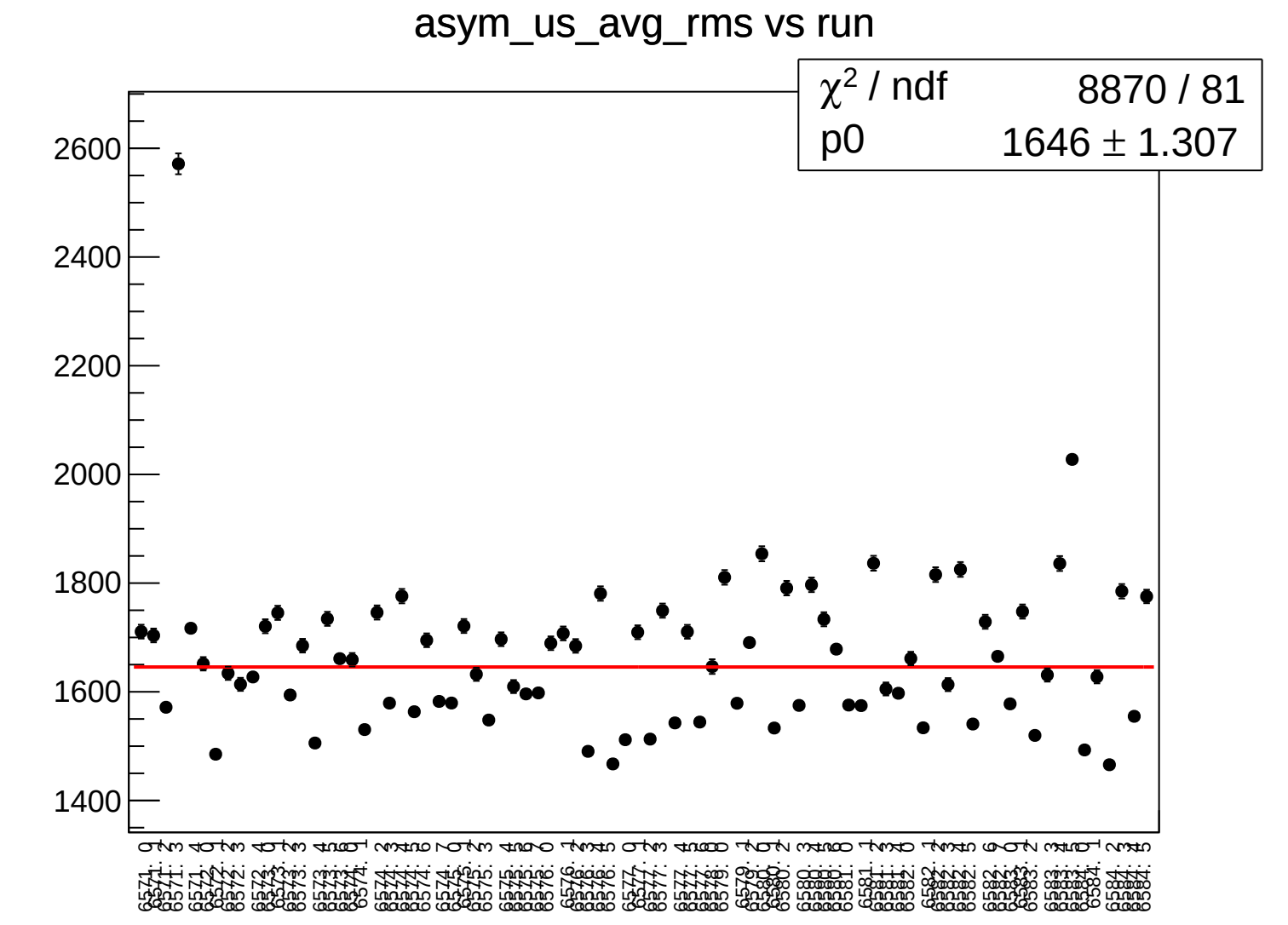

asym_us_avg_correction_mean vs run
χ² / ndf 90 / 81
p0 1382 ± 1598
40000
20000
0
−20000
−40000
−60000
pull
Entries 82
Mean −1945
Std Dev 1999
2
1
0
−1
−2
−3

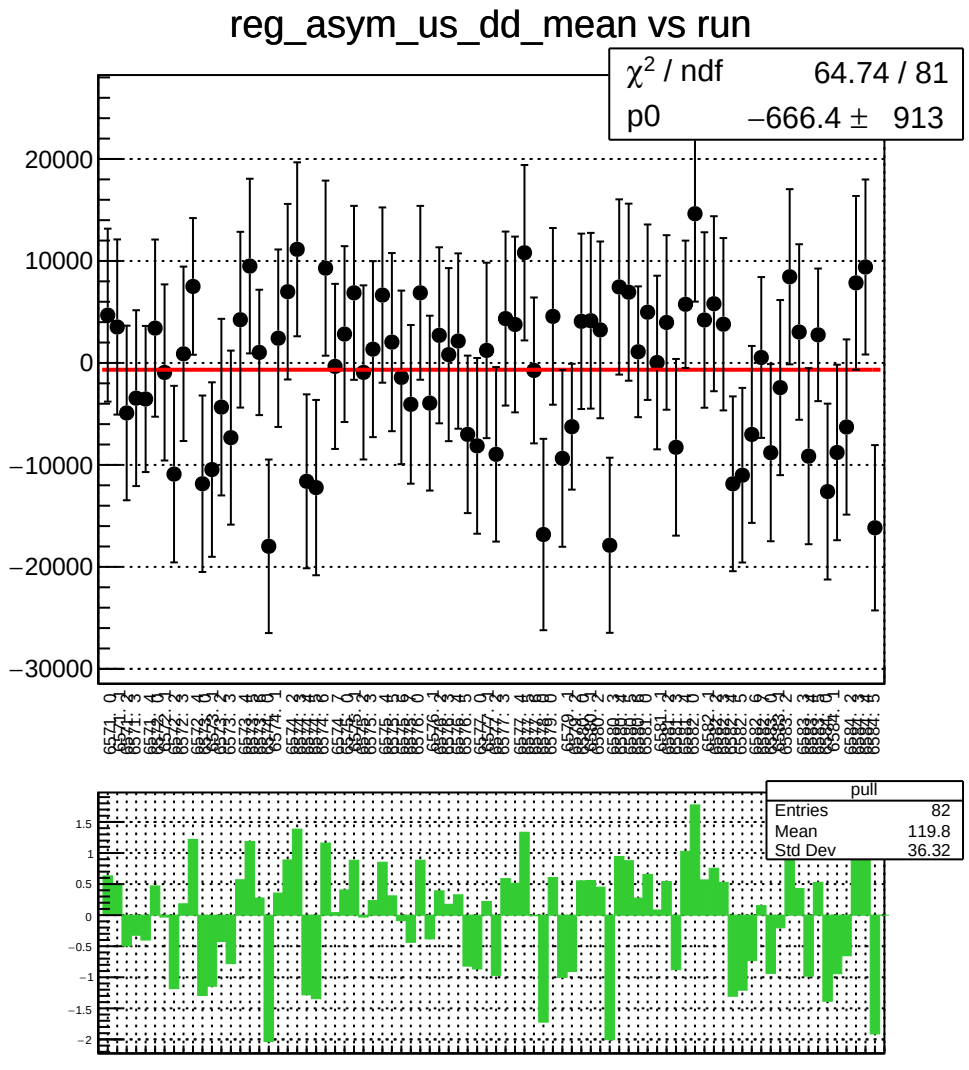

pull1D
Entries 82
Mean −0.002545
Std Dev 1.048
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

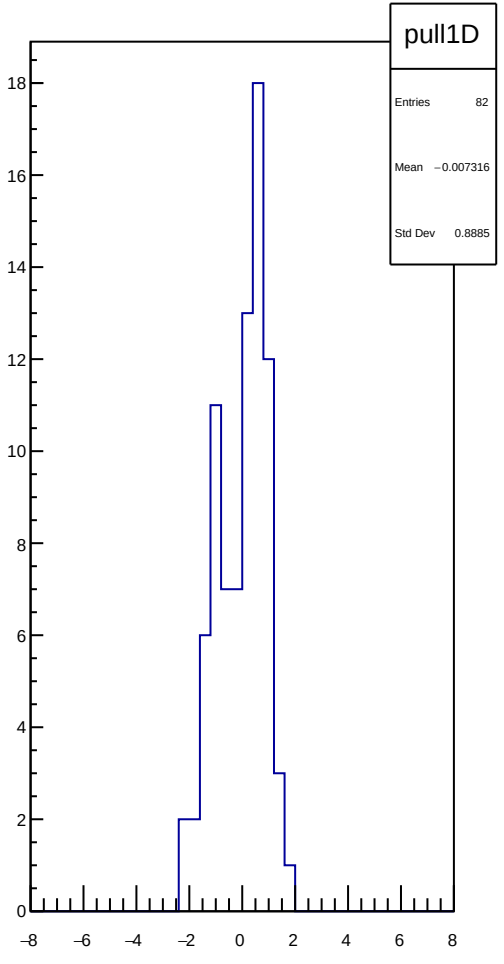

asym_us_avg_correction_rms vs run
χ² / ndf 1.409e+04 / 81
p0 1420 ± 1.13
2400
2200
2000
1800
1600
1400
1200

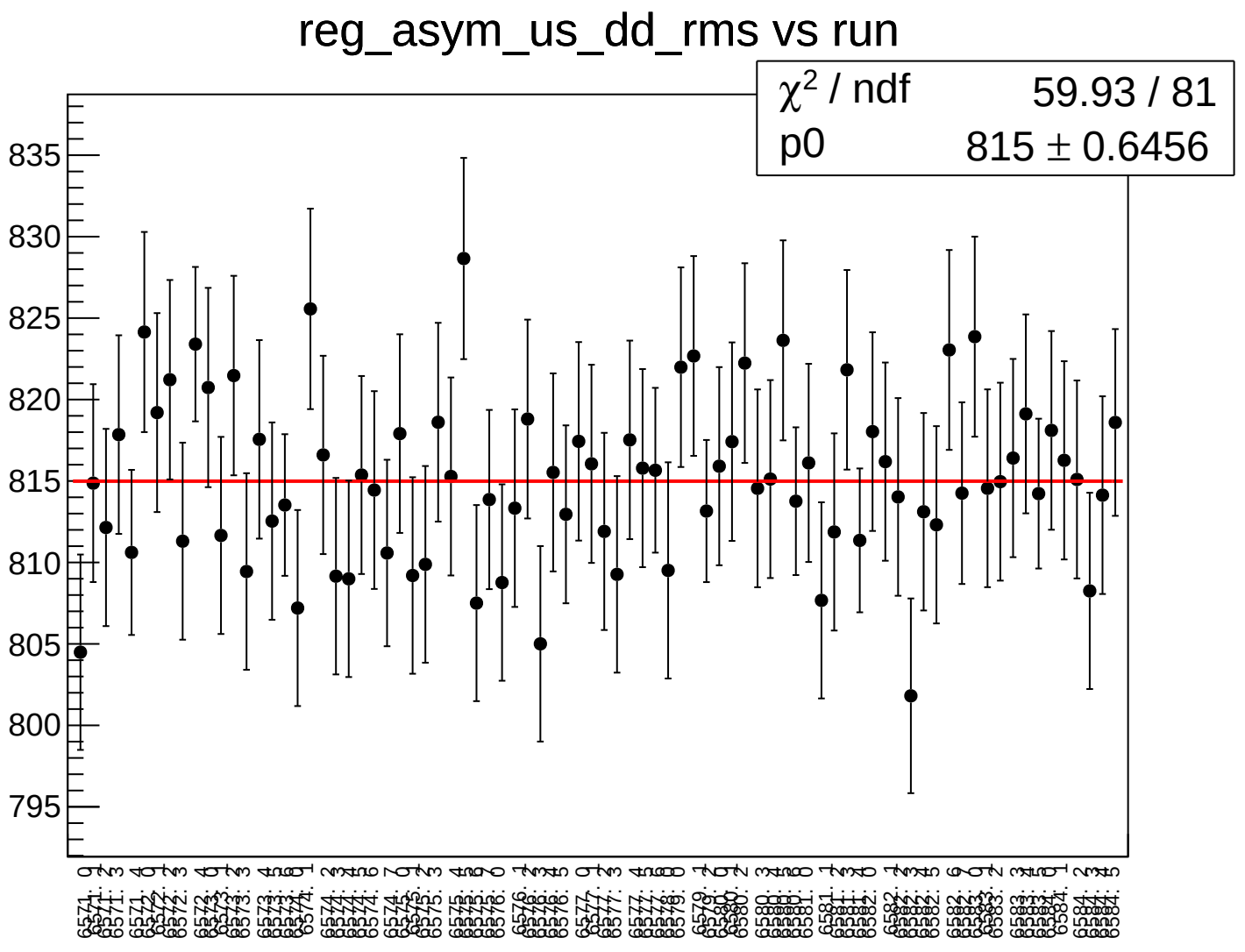

asym_us_avg_mean vs run
χ² / ndf 108.1 / 81
p0 775.2 ± 1849
pull
Entries 82
Mean 1069
Std Dev 1022

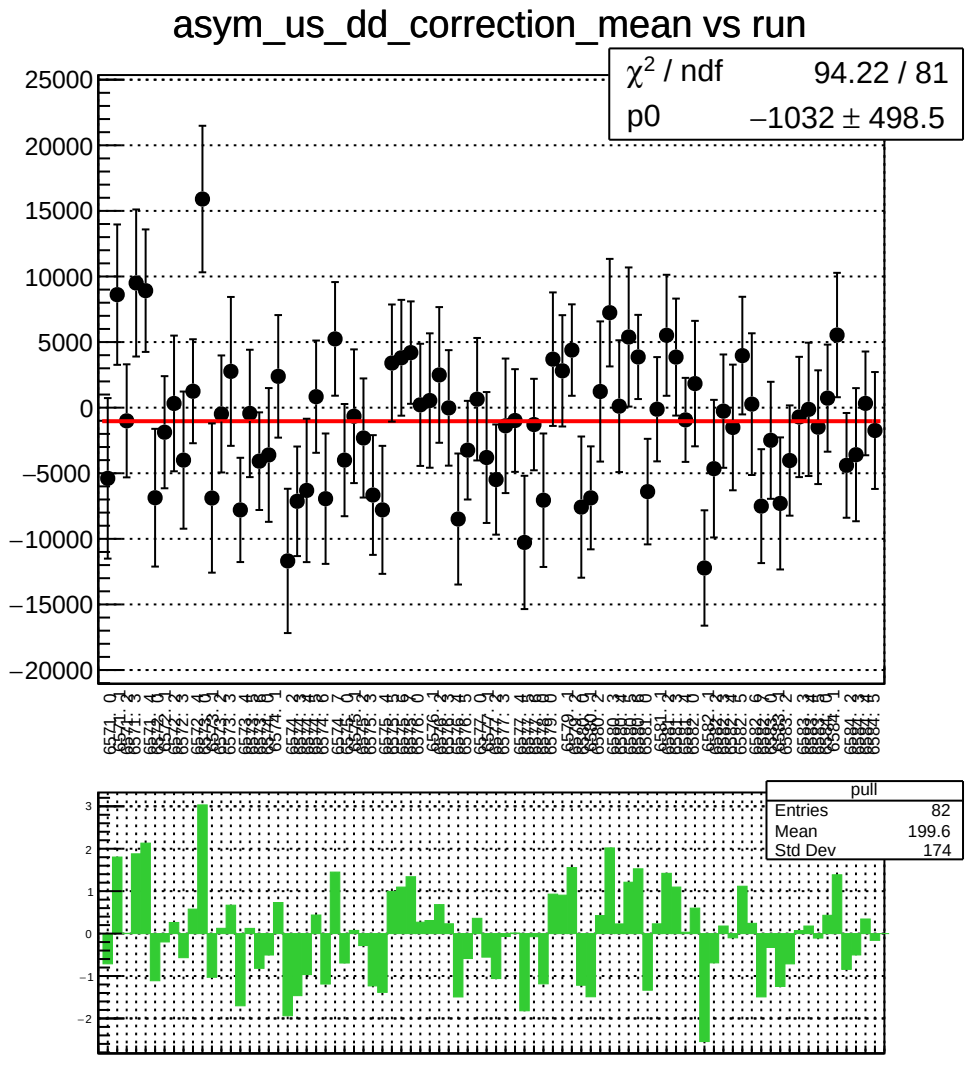

pull1D
Entries 82
Mean −0.005074
Std Dev 1.148

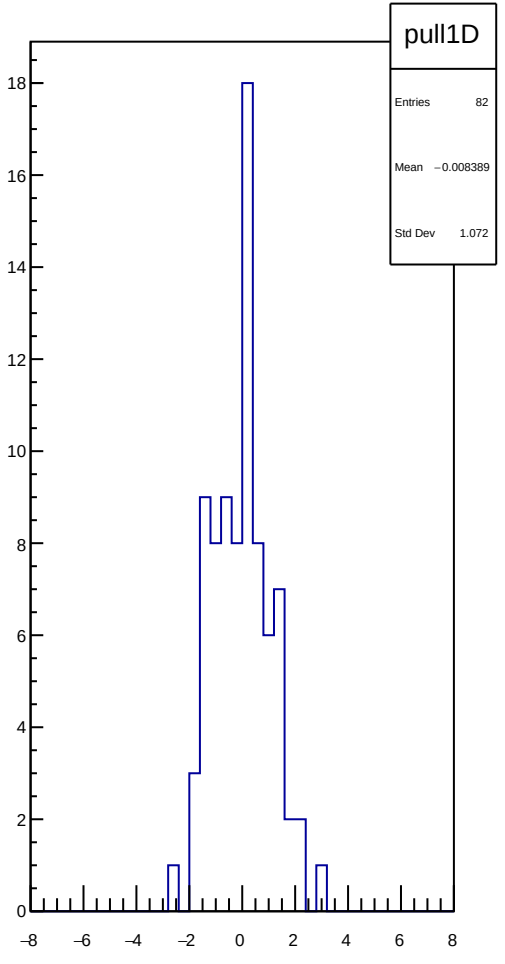

asym_us_avg_rms vs run
$\chi^2$ / ndf 8870 / 81
p0 1646 ± 1.307
2600
2400
2200
2000
1800
1600
1400

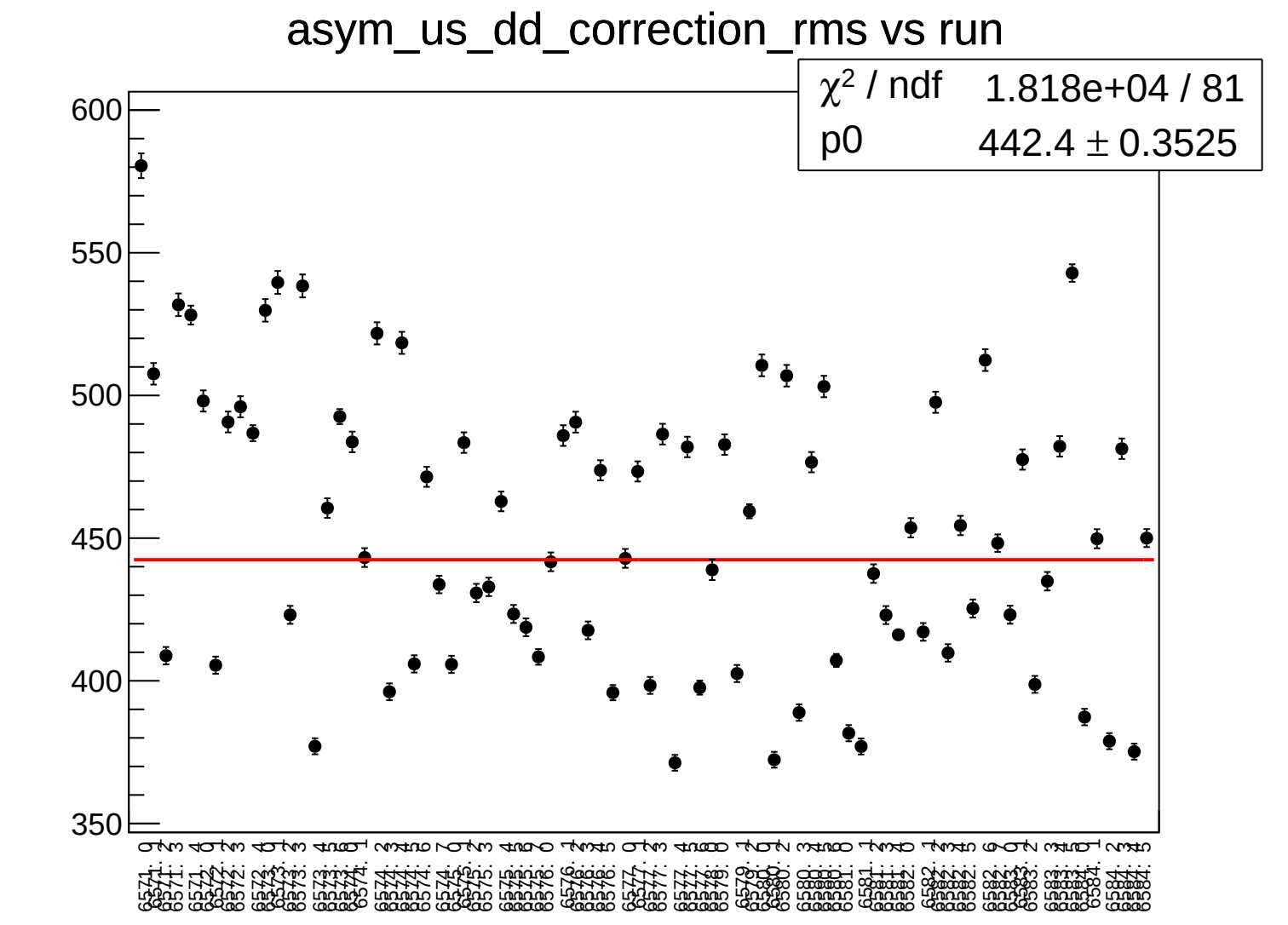

reg_asym_us_dd_mean vs run
χ² / ndf 64.74 / 81
p0 −666.4 ± 913
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 119.8
Std Dev 36.32
1.5
1
0.5
0
−0.5
−1
−1.5
−2

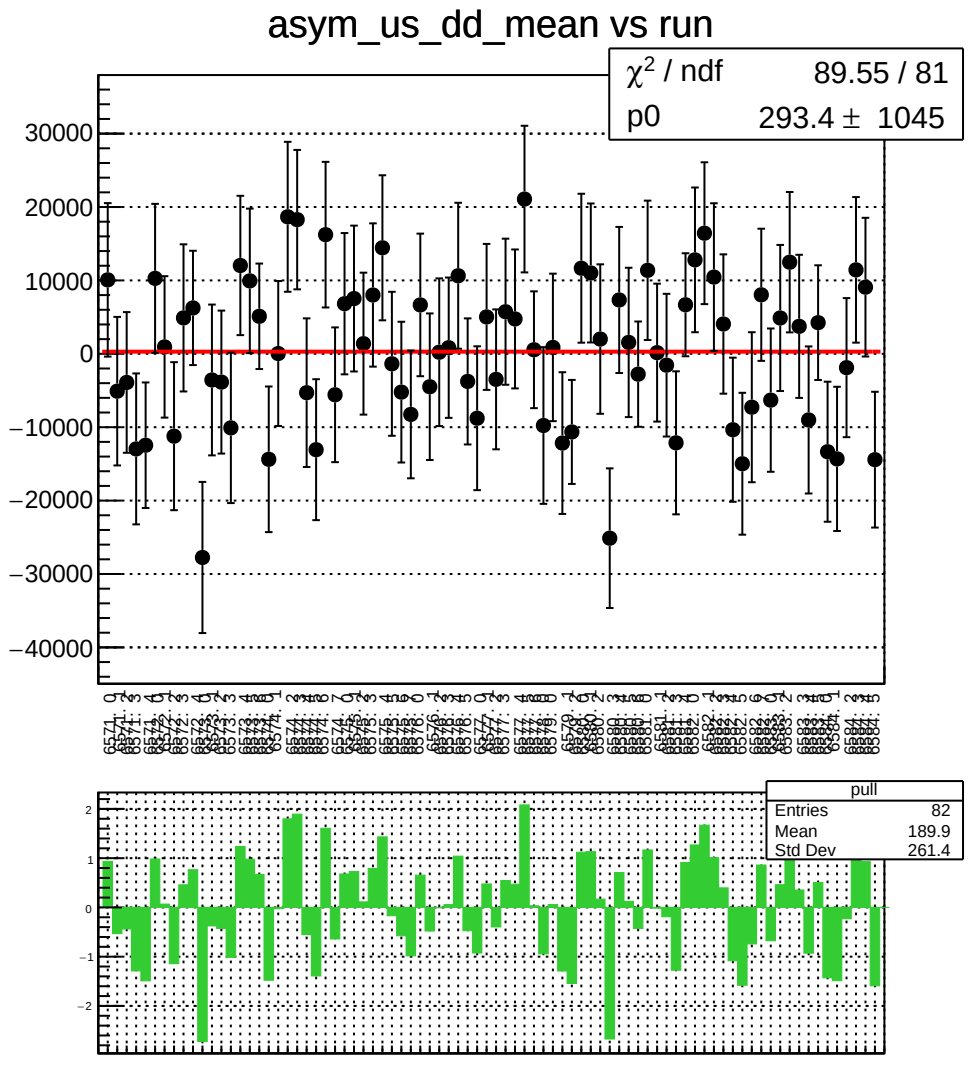

pull1D
Entries 82
Mean −0.007316
Std Dev 0.8885
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

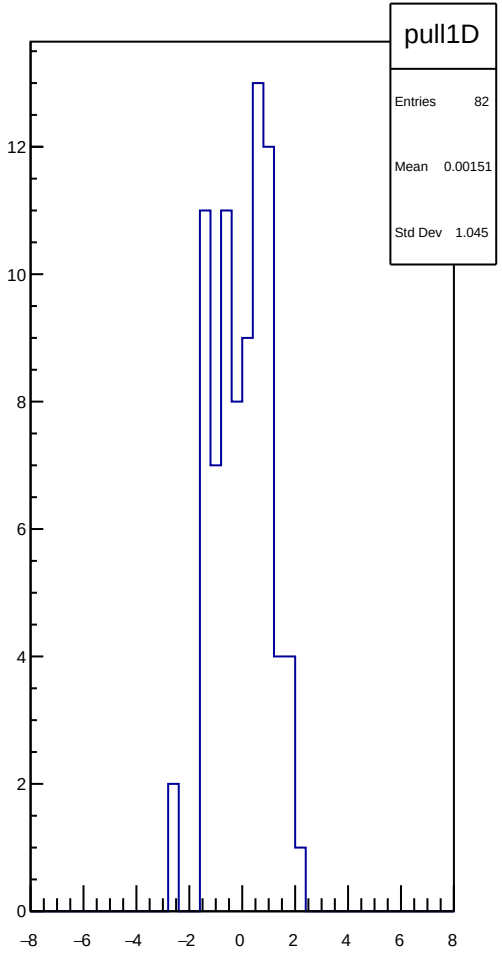

reg_asym_us_dd_rms vs run
χ² / ndf 59.93 / 81
p0 815 ± 0.6456
835
830
825
820
815
810
805
800
795

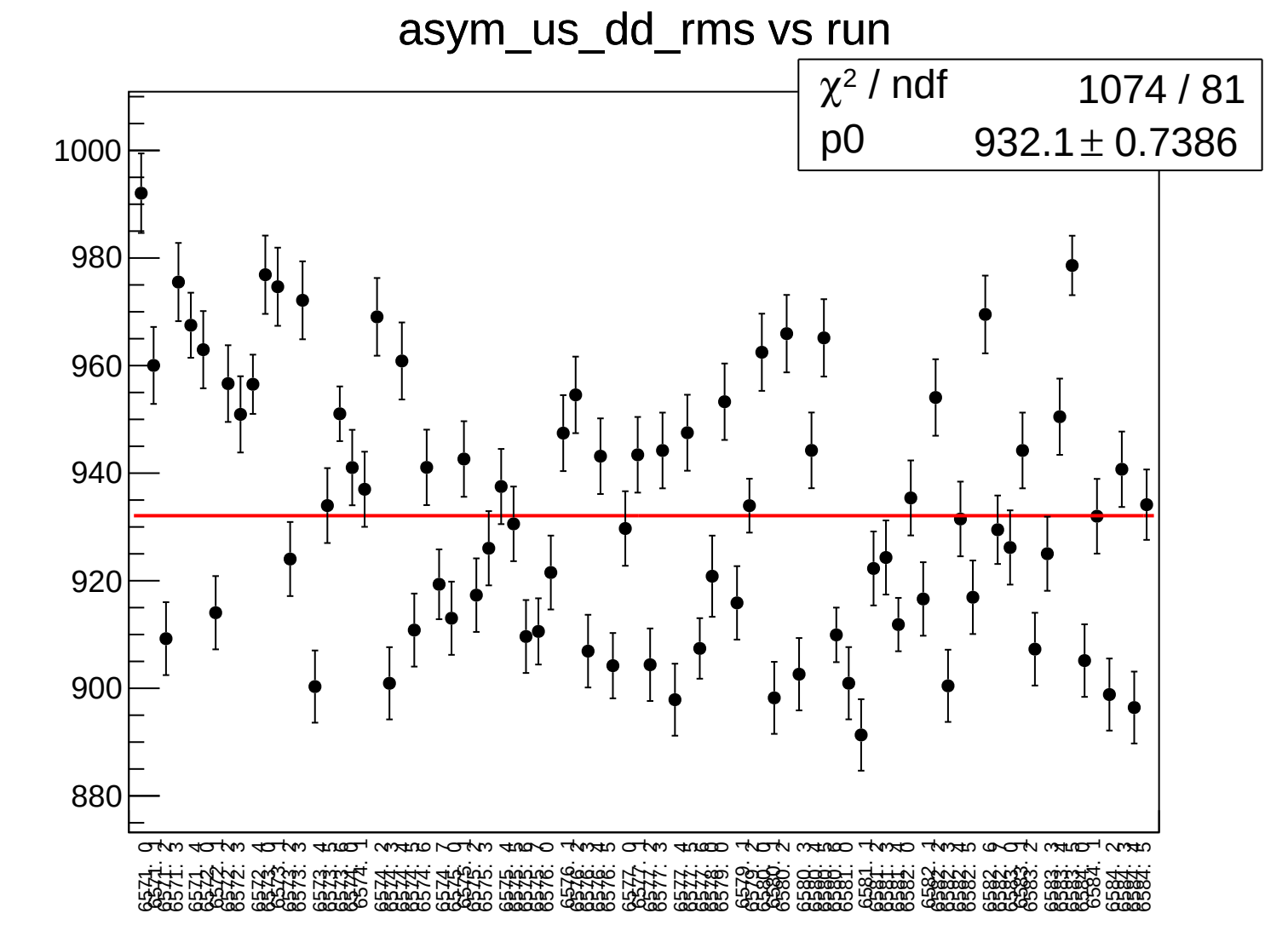

asym_us_dd_correction_mean vs run
χ² / ndf 94.22 / 81
p0 −1032 ± 498.5
pull
Entries 82
Mean 199.6
Std Dev 174

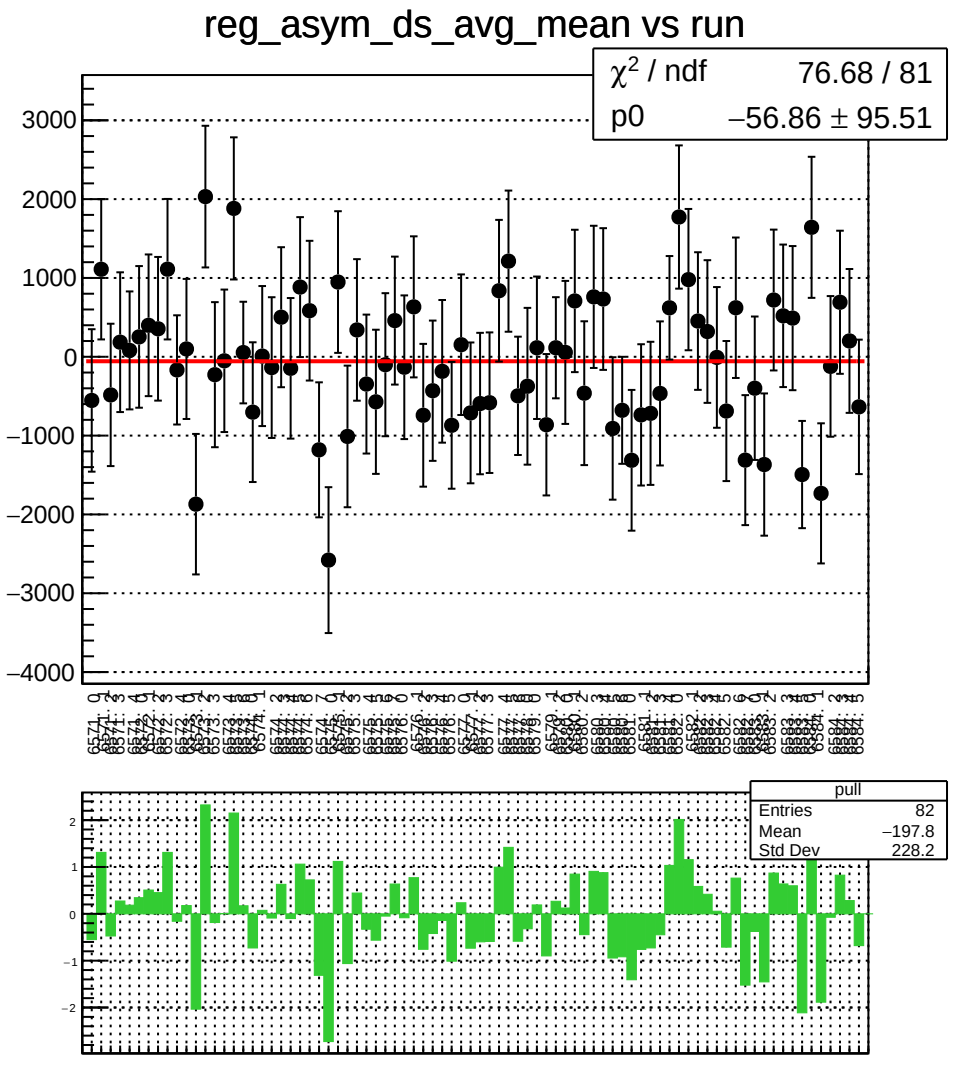

pull1D
Entries 82
Mean −0.008389
Std Dev 1.072

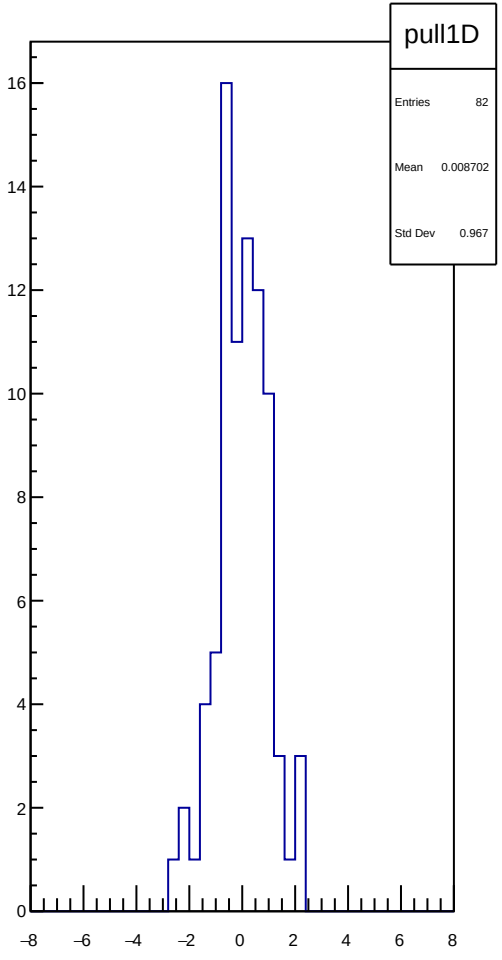

asym_us_dd_correction_rms vs run
χ² / ndf 1.818e+04 / 81
p0 442.4 ± 0.3525
600
550
500
450
400
350

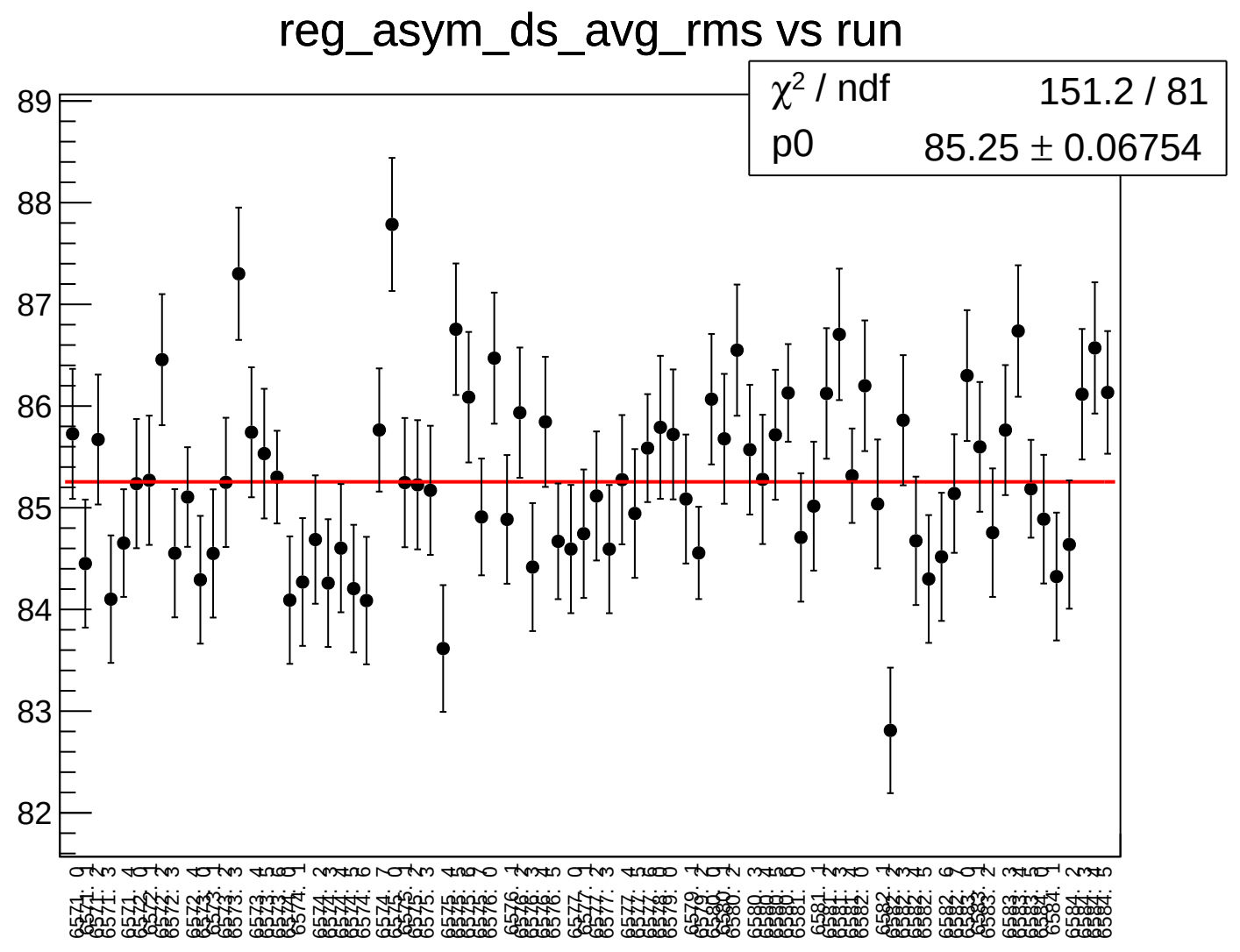

asym_us_dd_mean vs run
χ² / ndf 89.55 / 81
p0 293.4 ± 1045
pull
Entries 82
Mean 189.9
Std Dev 261.4

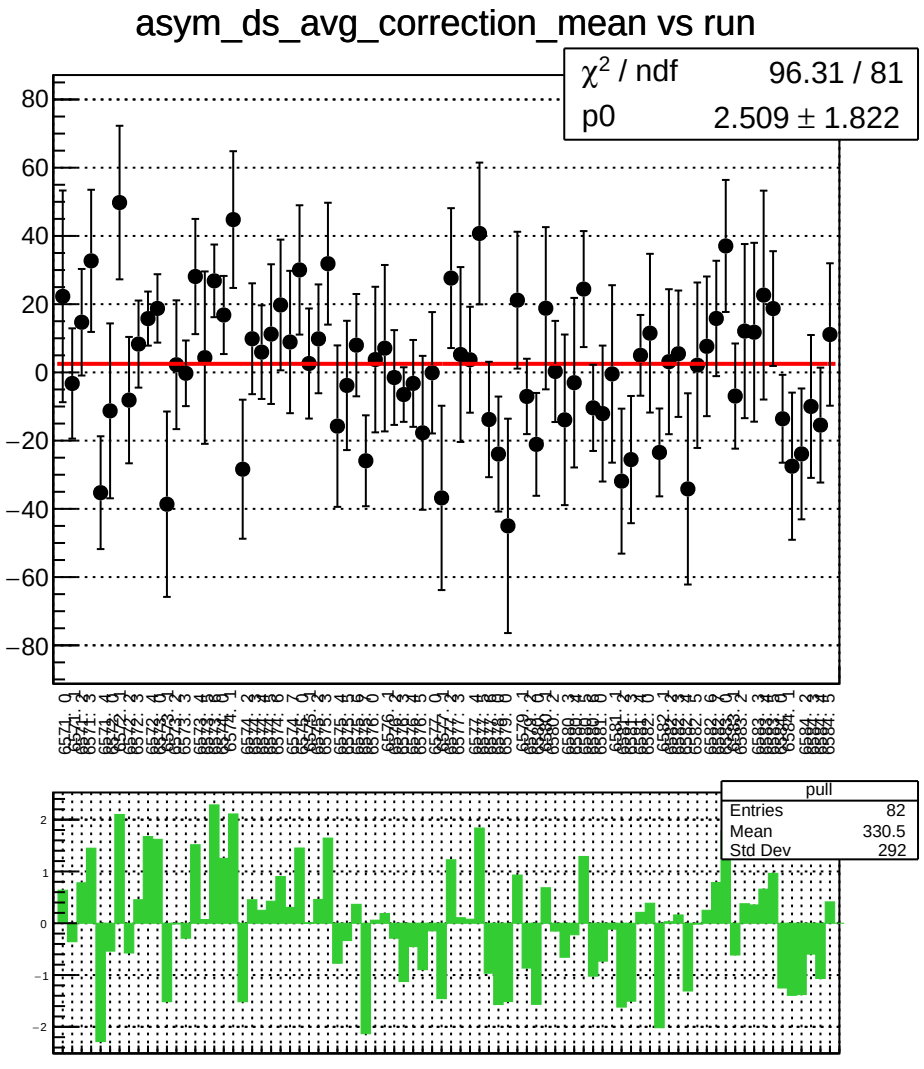

pull1D
Entries 82
Mean 0.00151
Std Dev 1.045

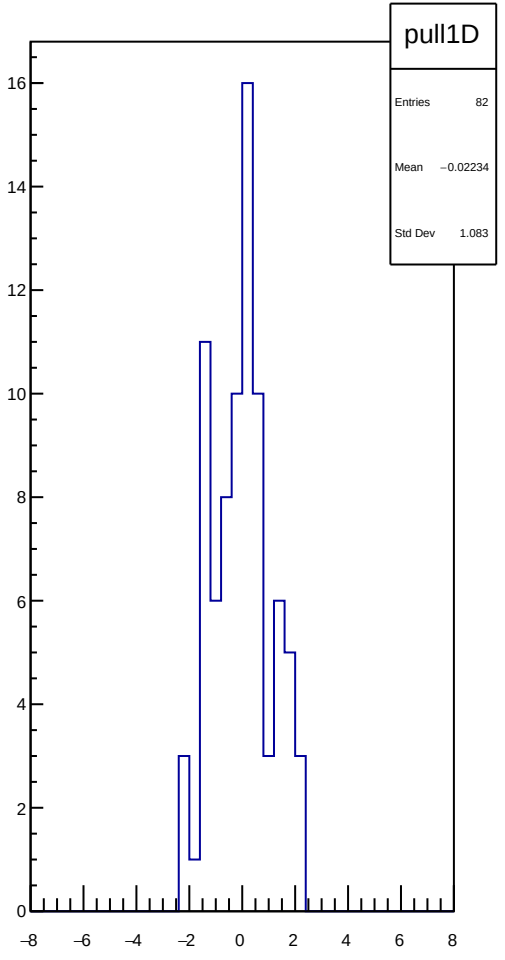

asym_us_dd_rms vs run
χ² / ndf 1074 / 81
p0 932.1 ± 0.7386
1000
980
960
940
920
900
880

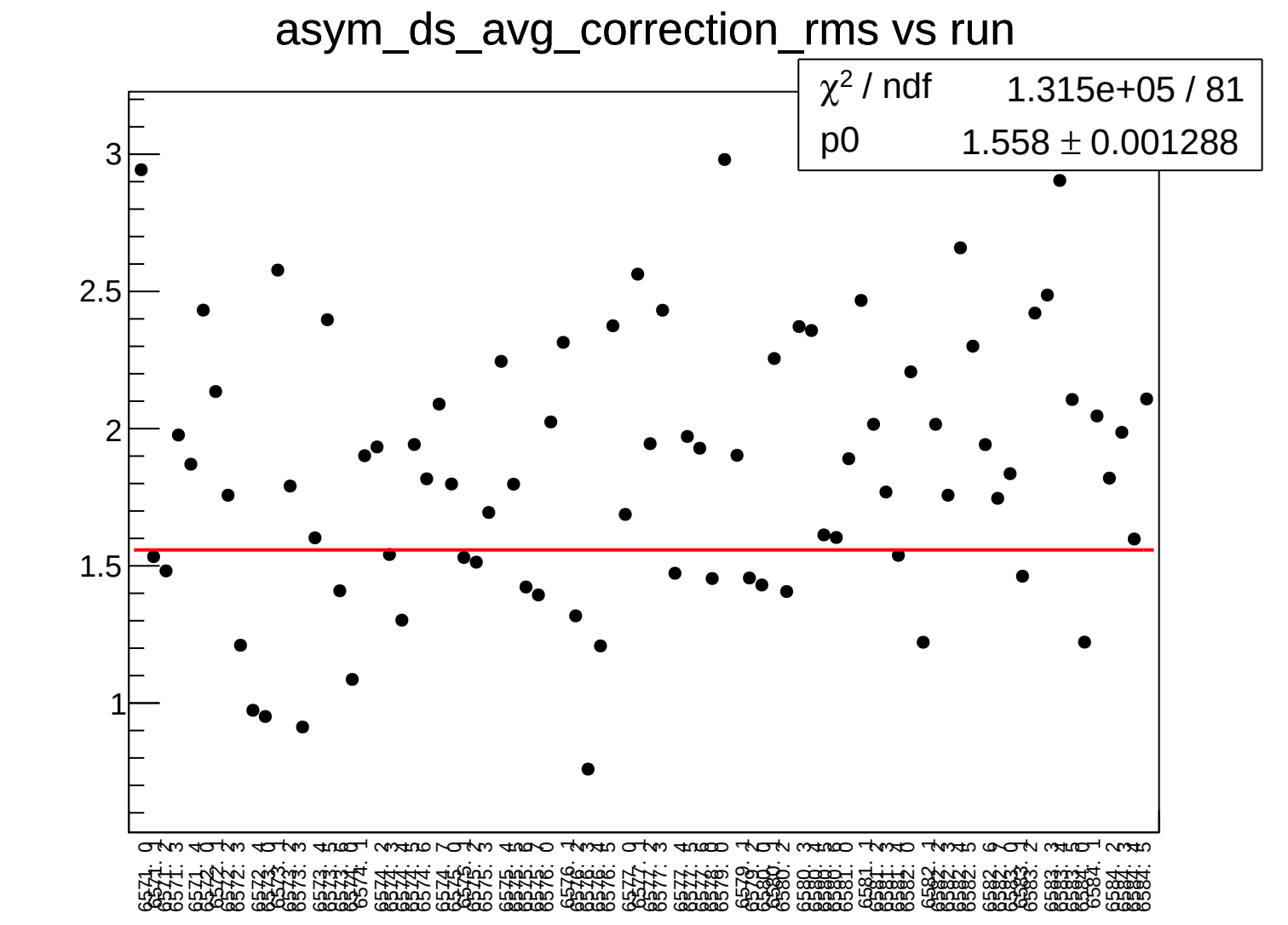

reg_asym_ds_avg_mean vs run
χ² / ndf 76.68 / 81
p0 −56.86 ± 95.51
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 82
Mean −197.8
Std Dev 228.2
2
1
0
−1
−2

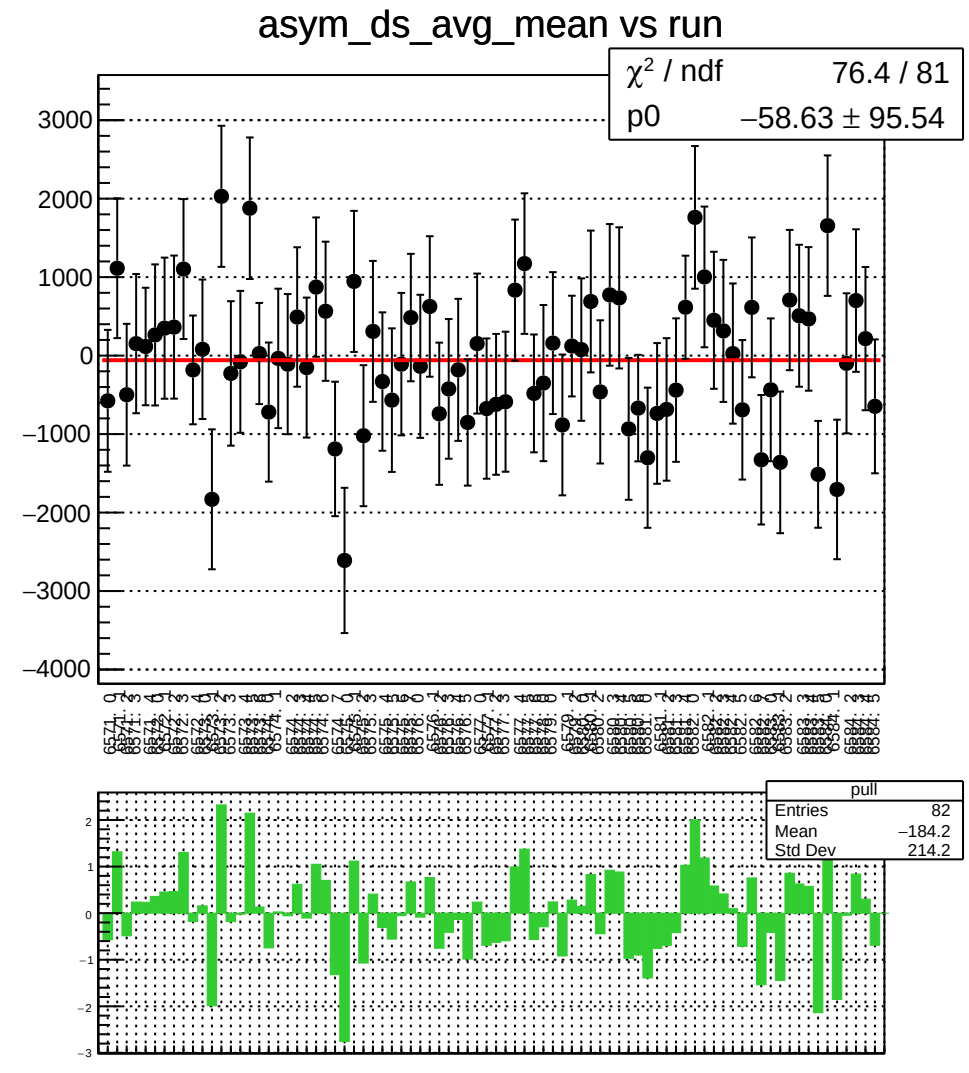

pull1D
Entries 82
Mean 0.008702
Std Dev 0.967
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

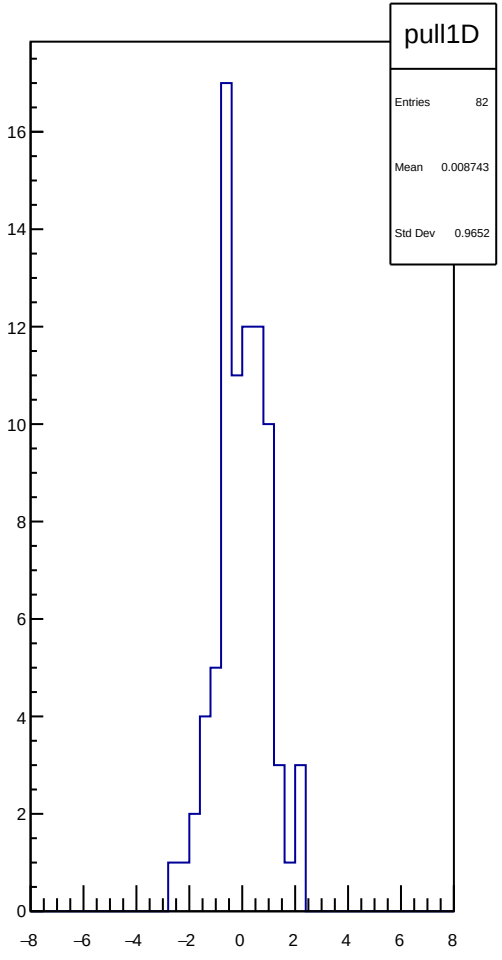

reg_asym_ds_avg_rms vs run
$\chi^2$ / ndf 151.2 / 81
p0 85.25 ± 0.06754
89
88
87
86
85
84
83
82

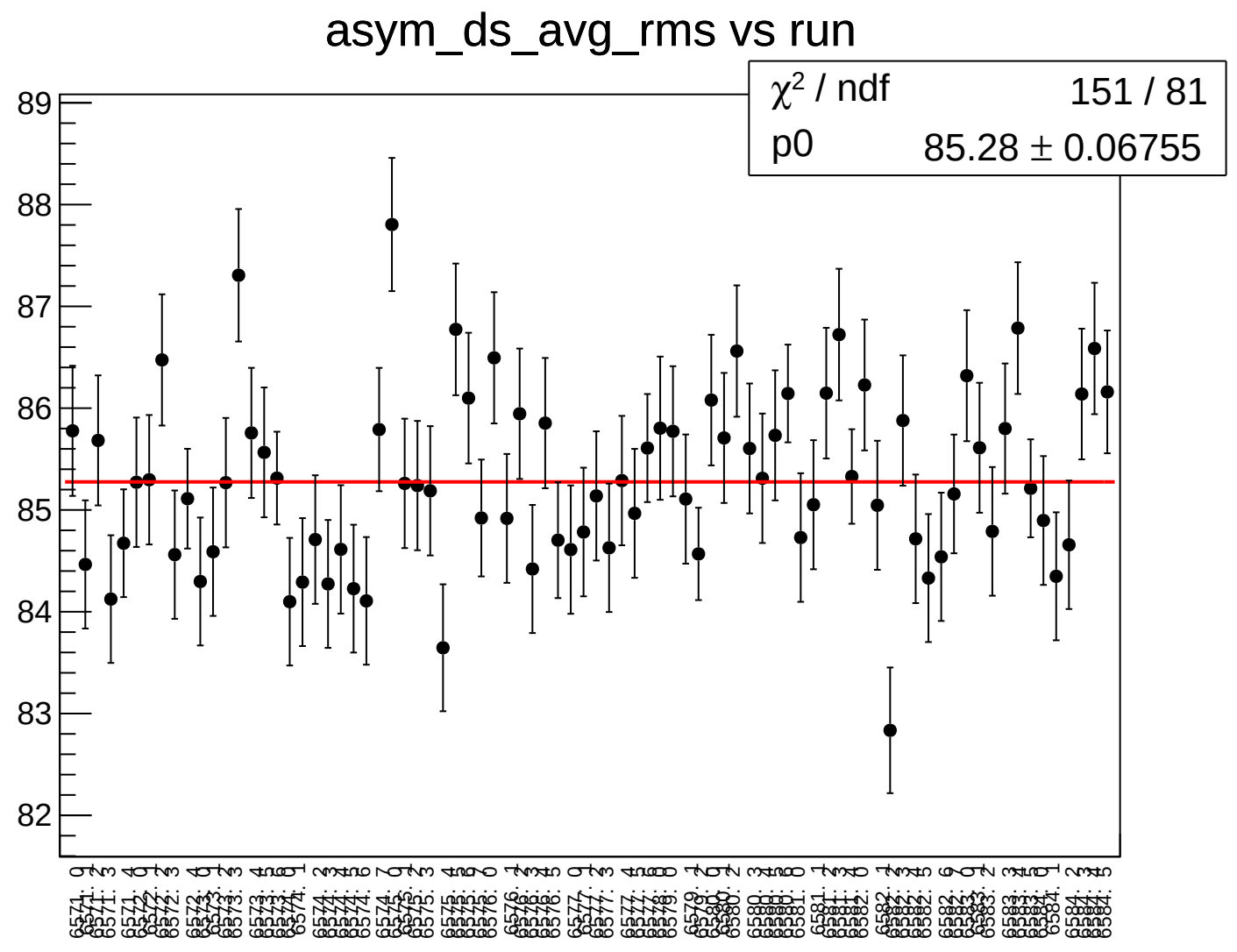

asym_ds_avg_correction_mean vs run
χ² / ndf 96.31 / 81
p0 2.509 ± 1.822
pull
Entries 82
Mean 330.5
Std Dev 292

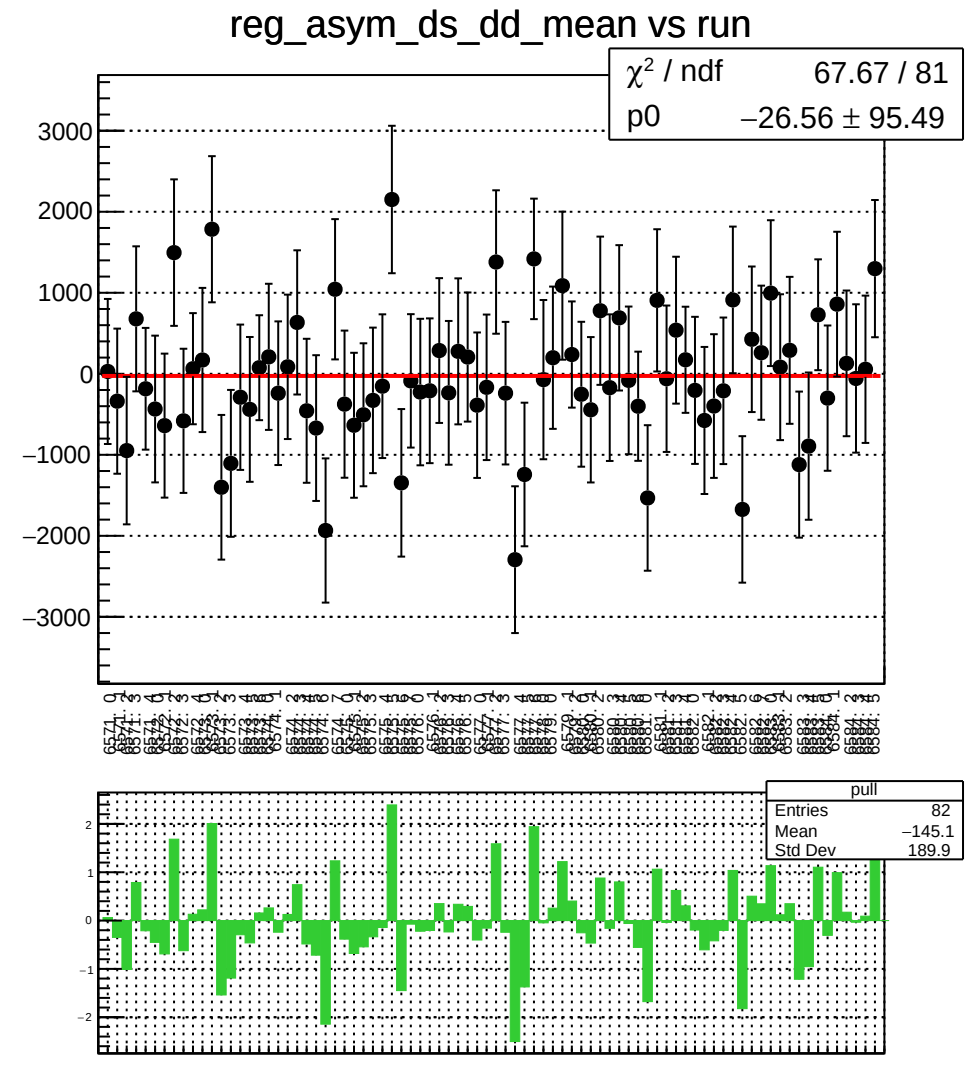

pull1D
Entries 82
Mean −0.02234
Std Dev 1.083

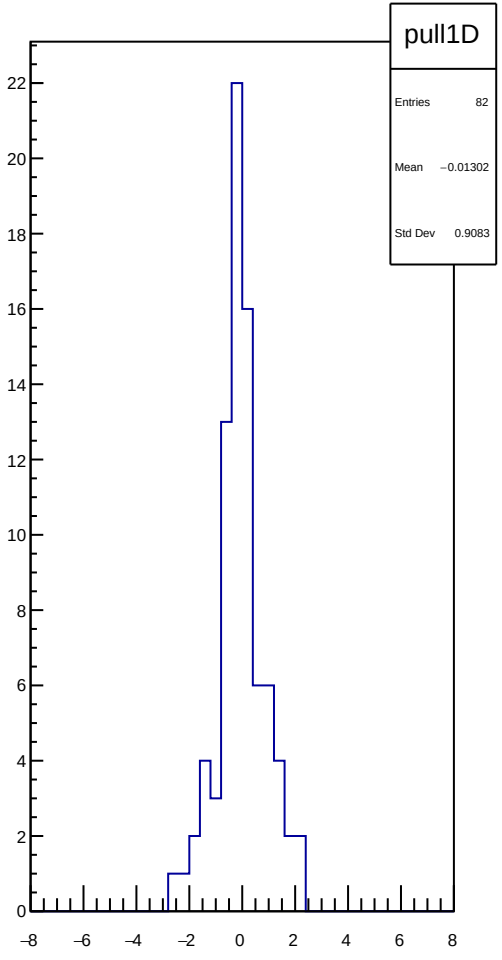

asym_ds_avg_correction_rms vs run
χ² / ndf 1.315e+05 / 81
p0 1.558 ± 0.001288
3
2.5
2
1.5
1

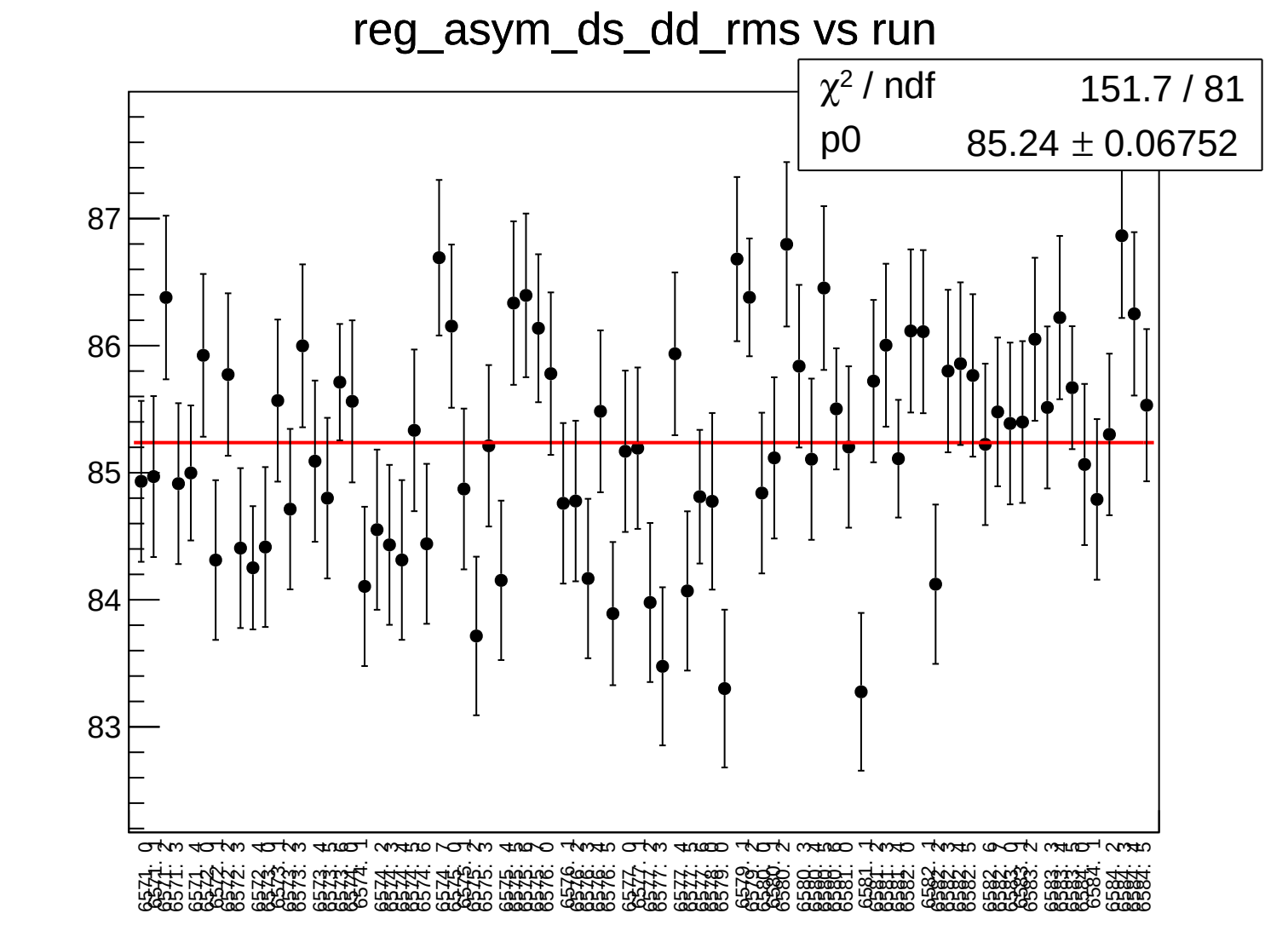

asym_ds_avg_mean vs run
χ² / ndf 76.4 / 81
p0 −58.63 ± 95.54
pull
Entries 82
Mean −184.2
Std Dev 214.2

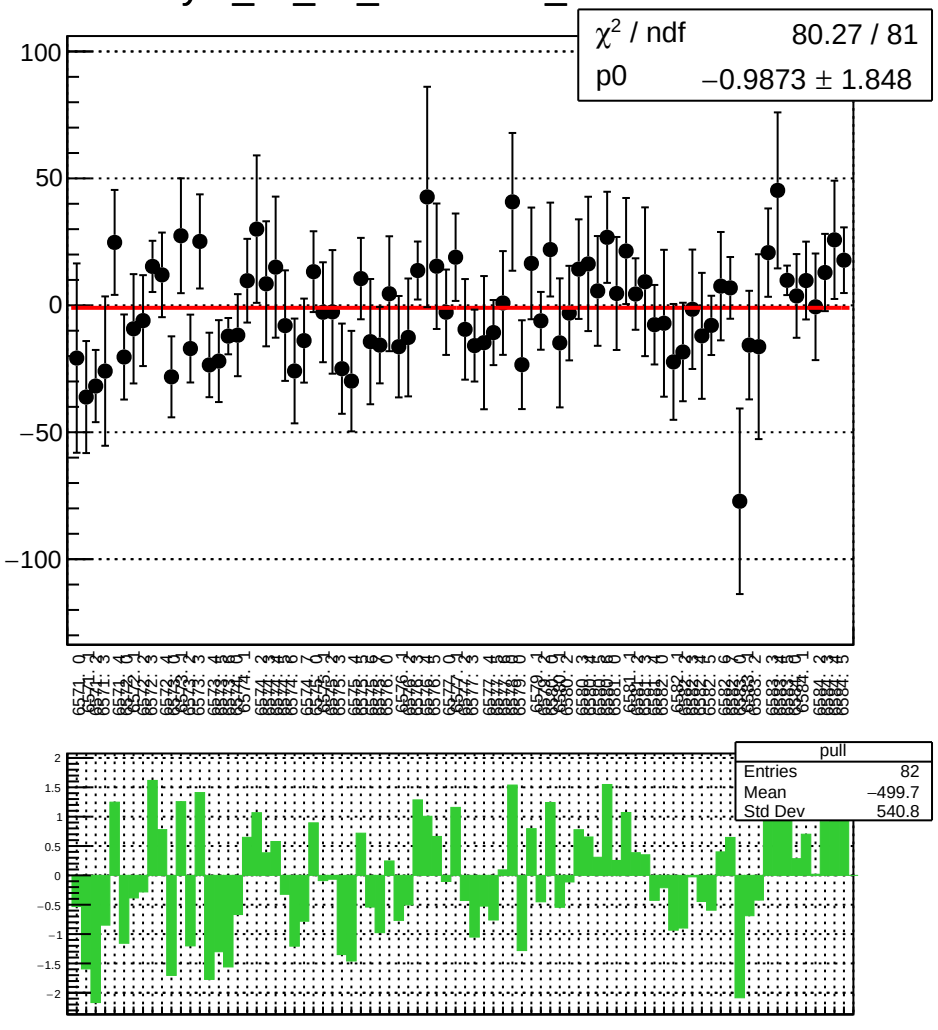

pull1D
Entries 82
Mean 0.008743
Std Dev 0.9652

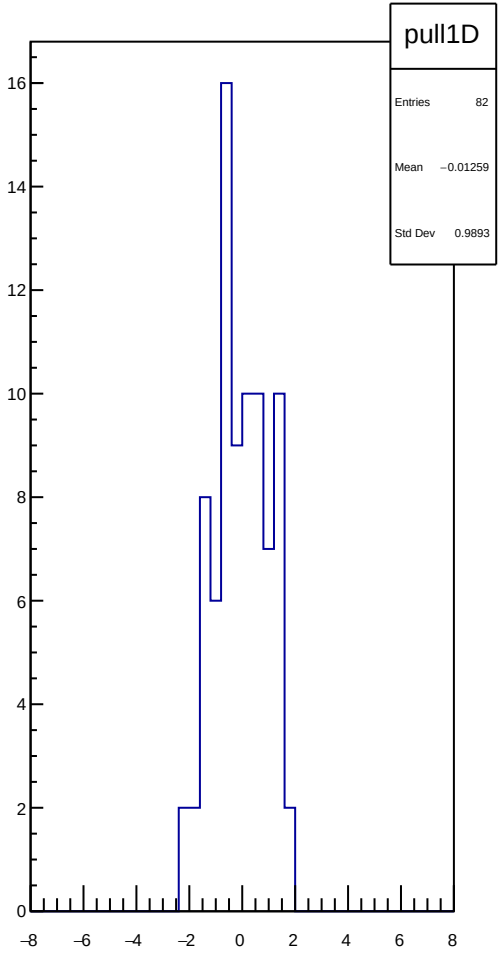

asym_ds_avg_rms vs run
χ² / ndf 151 / 81
p0 85.28 ± 0.06755
89
88
87
86
85
84
83
82

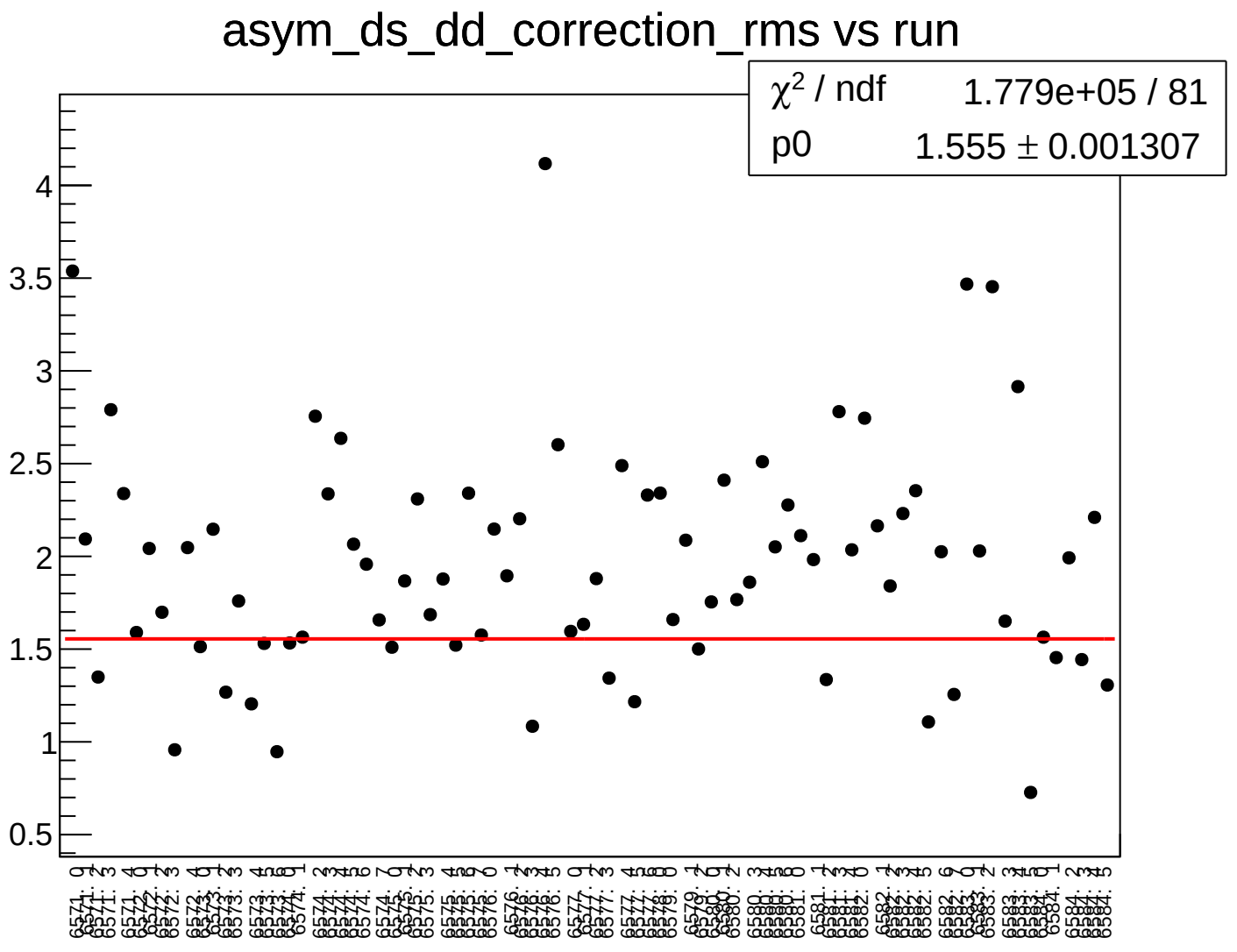

reg_asym_ds_dd_mean vs run
χ² / ndf 67.67 / 81
p0 −26.56 ± 95.49
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 82
Mean −145.1
Std Dev 189.9
2
1
0
−1
−2

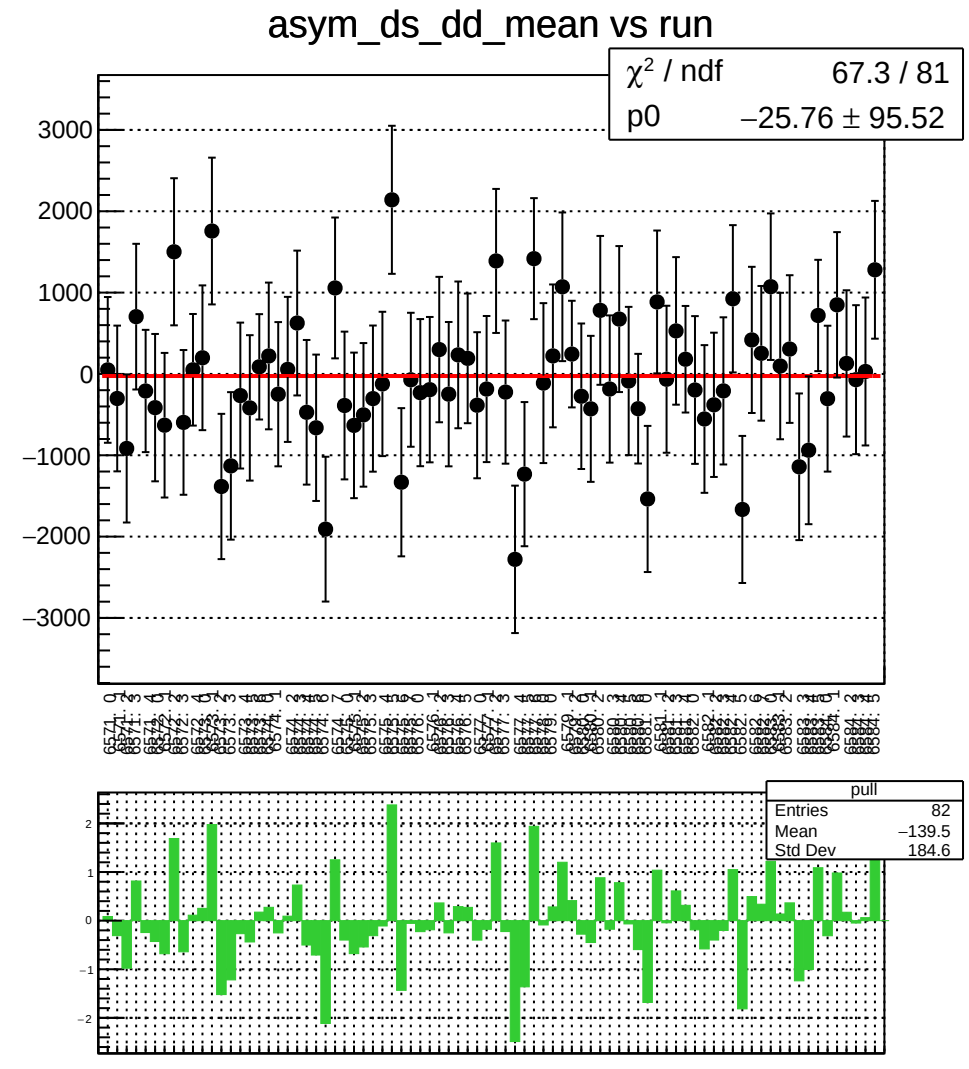

pull1D
Entries 82
Mean −0.01302
Std Dev 0.9083
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

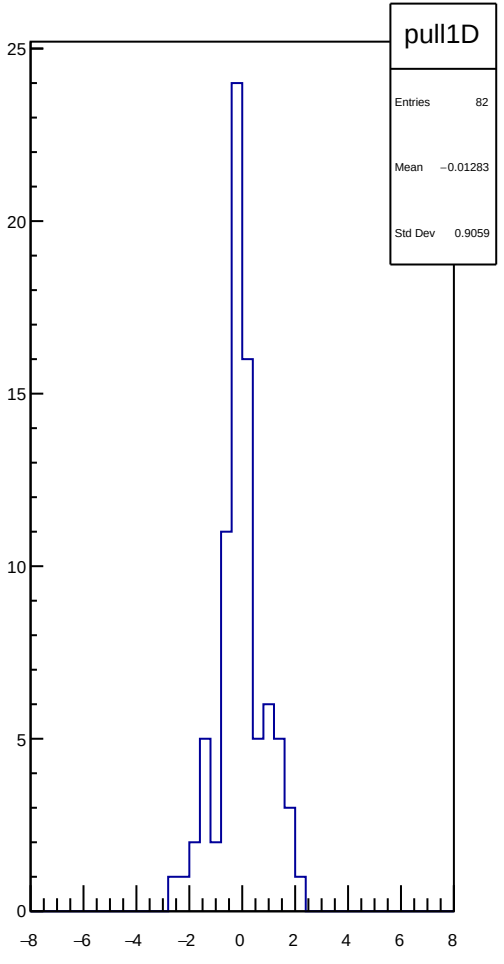

reg_asym_ds_dd_rms vs run
χ² / ndf 151.7 / 81
p0 85.24 ± 0.06752
87
86
85
84
83

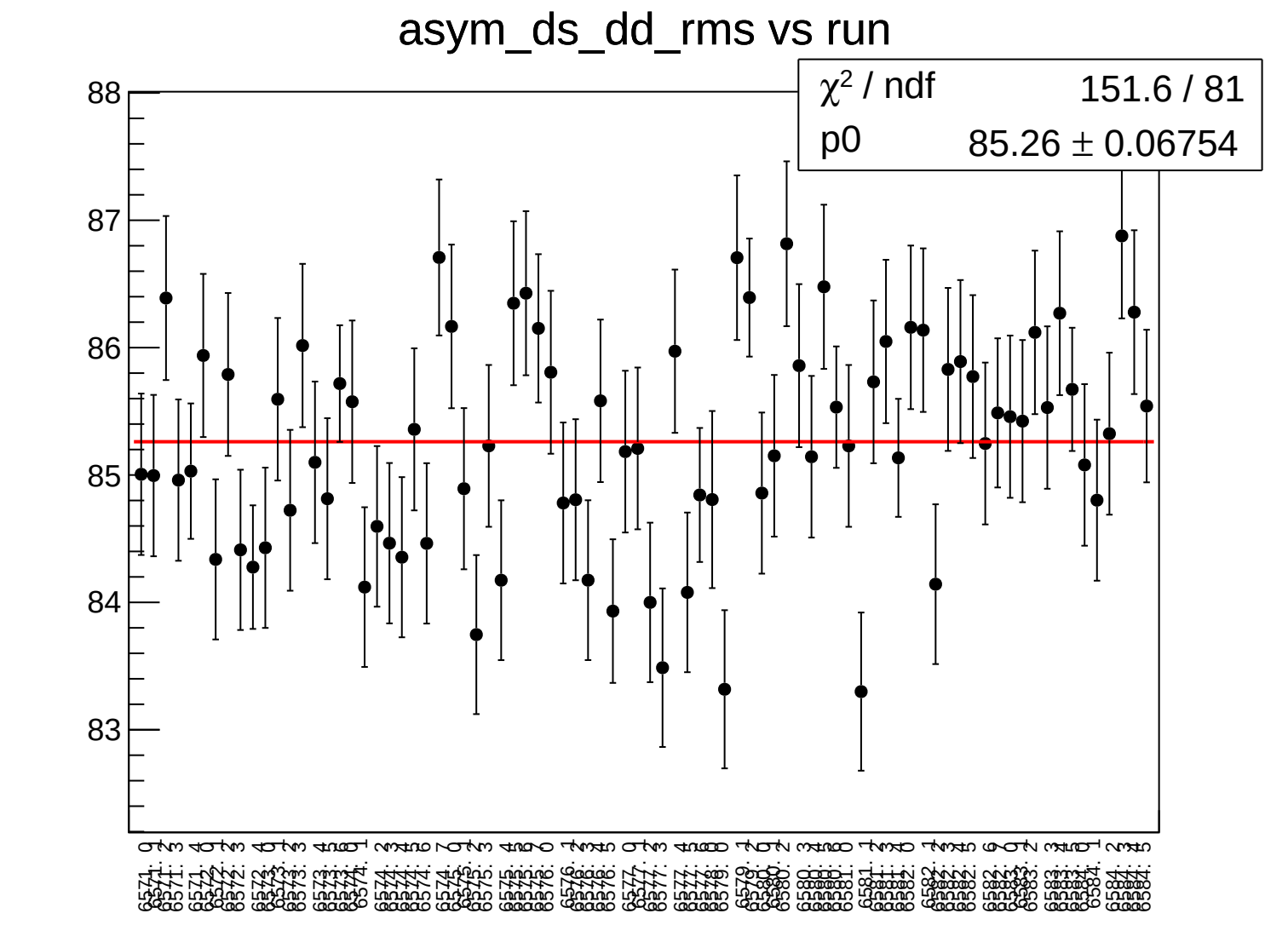

asym_ds_dd_correction_mean vs run
χ² / ndf 80.27 / 81
p0 −0.9873 ± 1.848
pull
Entries 82
Mean −499.7
Std Dev 540.8

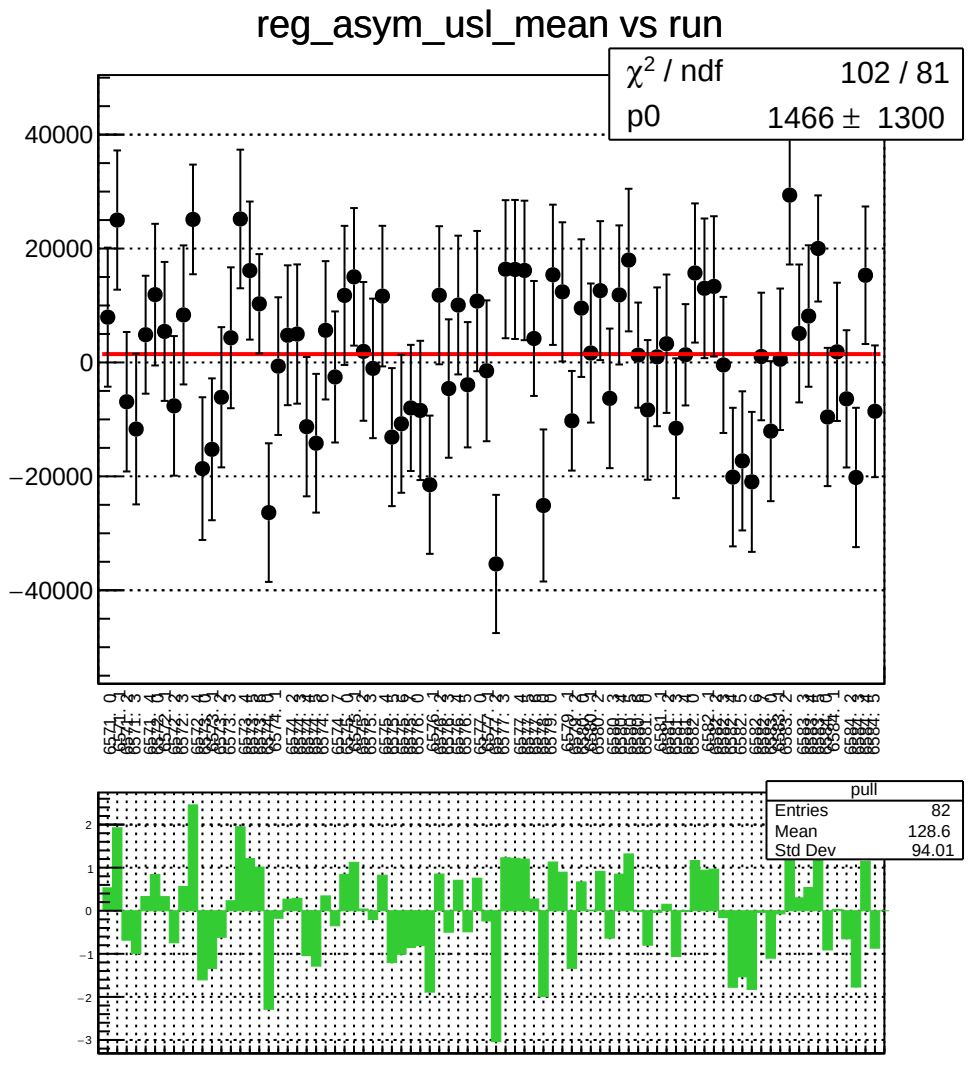

pull1D
Entries 82
Mean −0.01259
Std Dev 0.9893

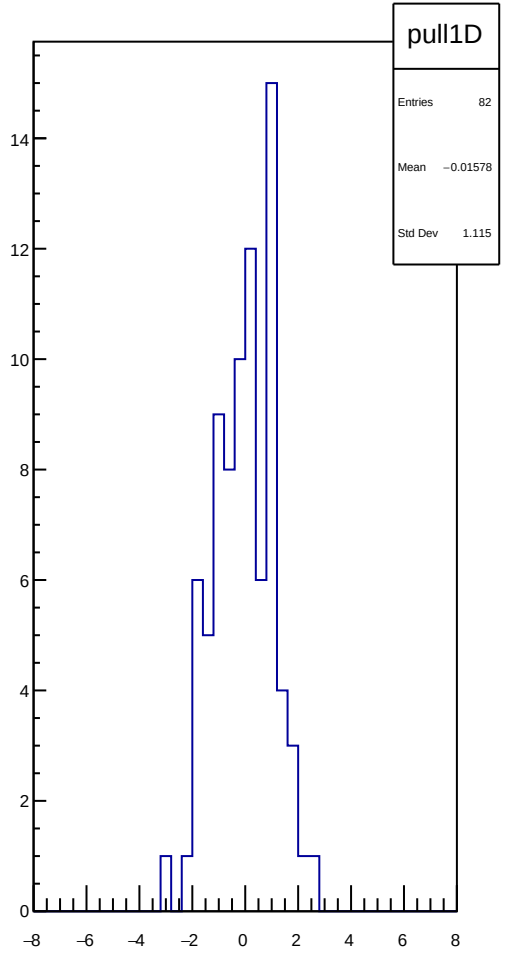

asym_ds_dd_correction_rms vs run
$\chi^2$ / ndf 1.779e+05 / 81
p0 1.555 ± 0.001307
4
3.5
3
2.5
2
1.5
1
0.5

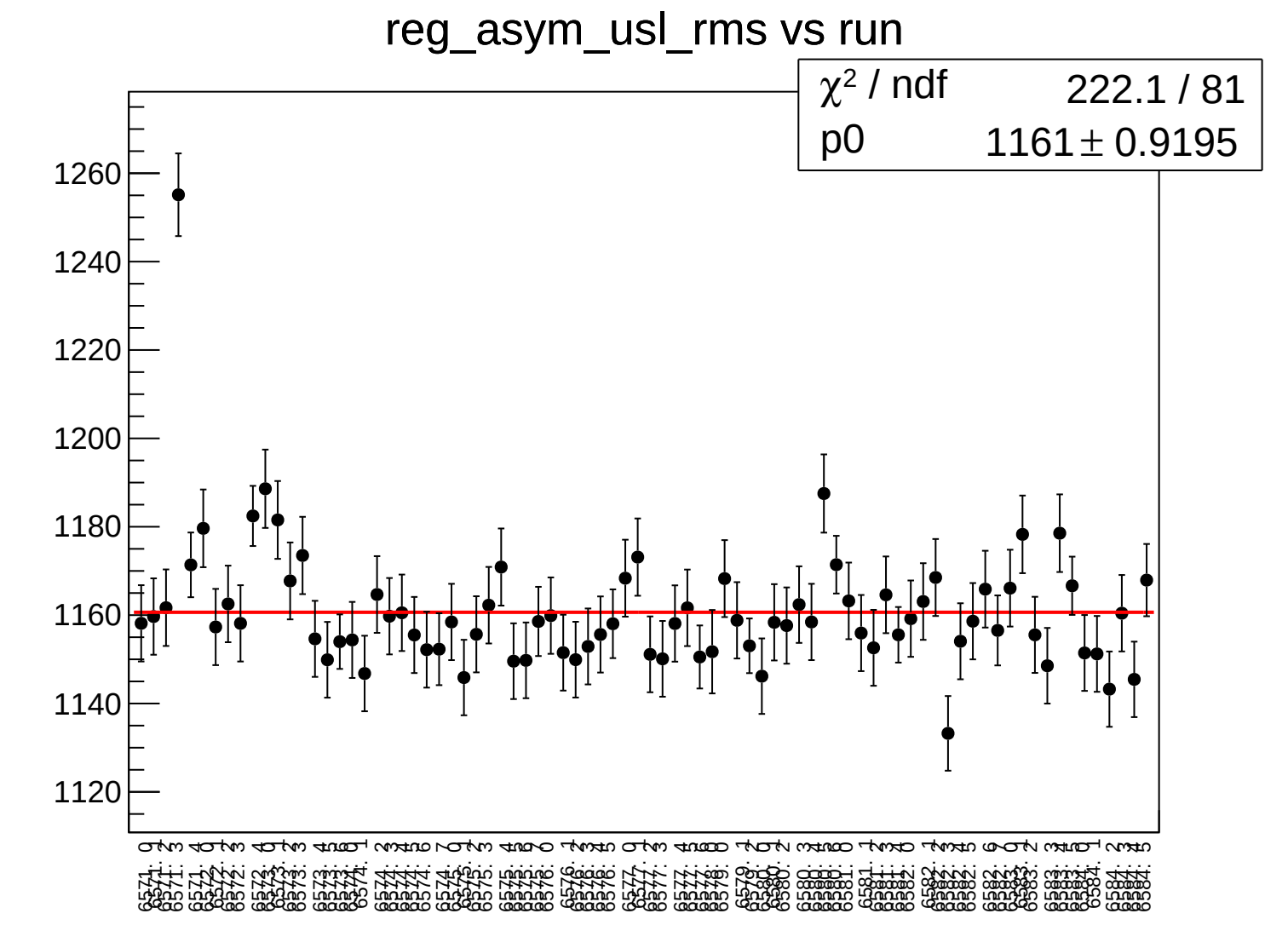

asym_ds_dd_mean vs run
χ² / ndf 67.3 / 81
p0 −25.76 ± 95.52
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 82
Mean −139.5
Std Dev 184.6
2
1
0
−1
−2

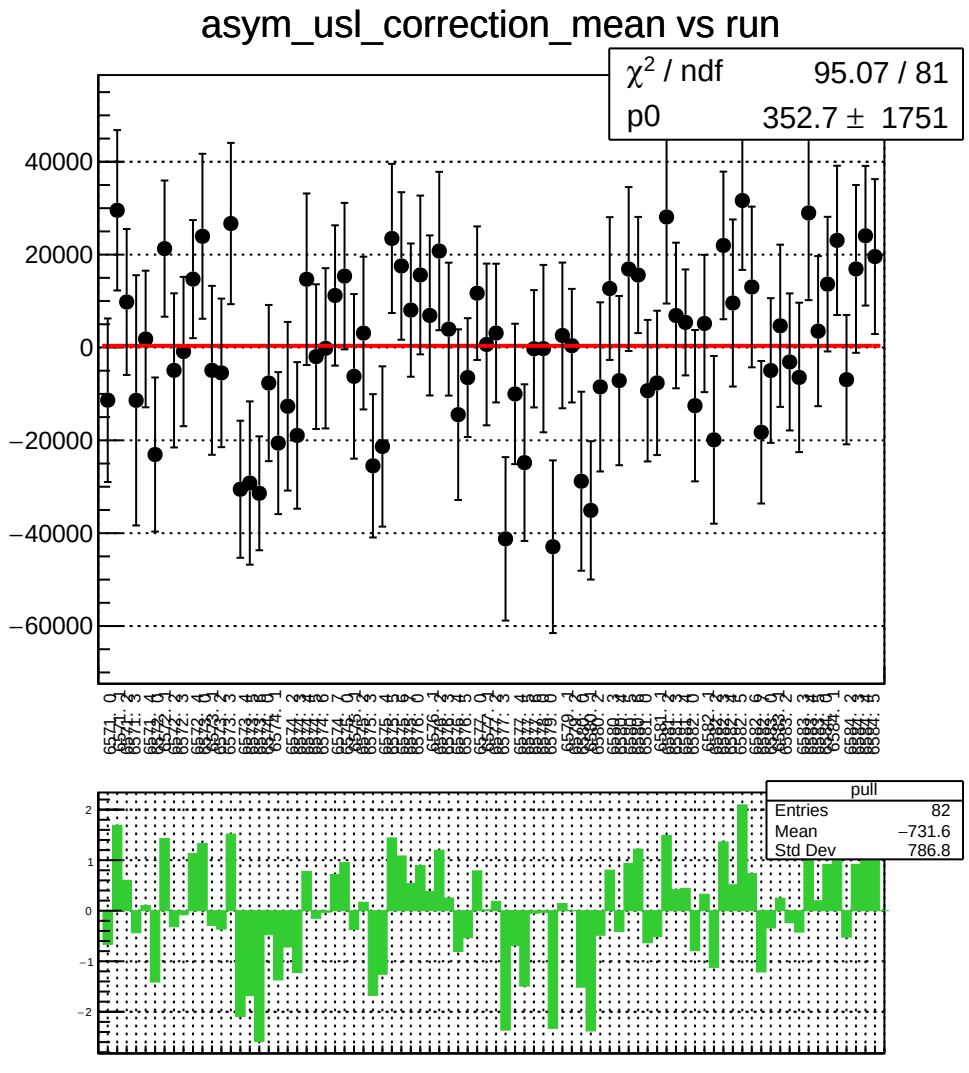

pull1D
Entries 82
Mean −0.01283
Std Dev 0.9059
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

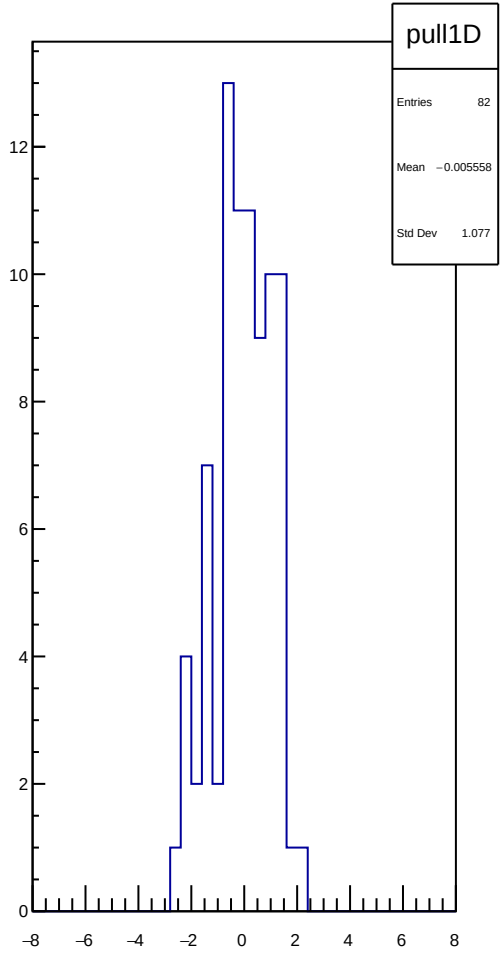

asym_ds_dd_rms vs run
$\chi^2$ / ndf 151.6 / 81
p0 85.26 ± 0.06754
88
87
86
85
84
83


reg_asym_usl_mean vs run
χ² / ndf 102 / 81
p0 1466 ± 1300
40000
20000
0
−20000
−40000
pull
Entries 82
Mean 128.6
Std Dev 94.01
2
1
0
−1
−2
−3

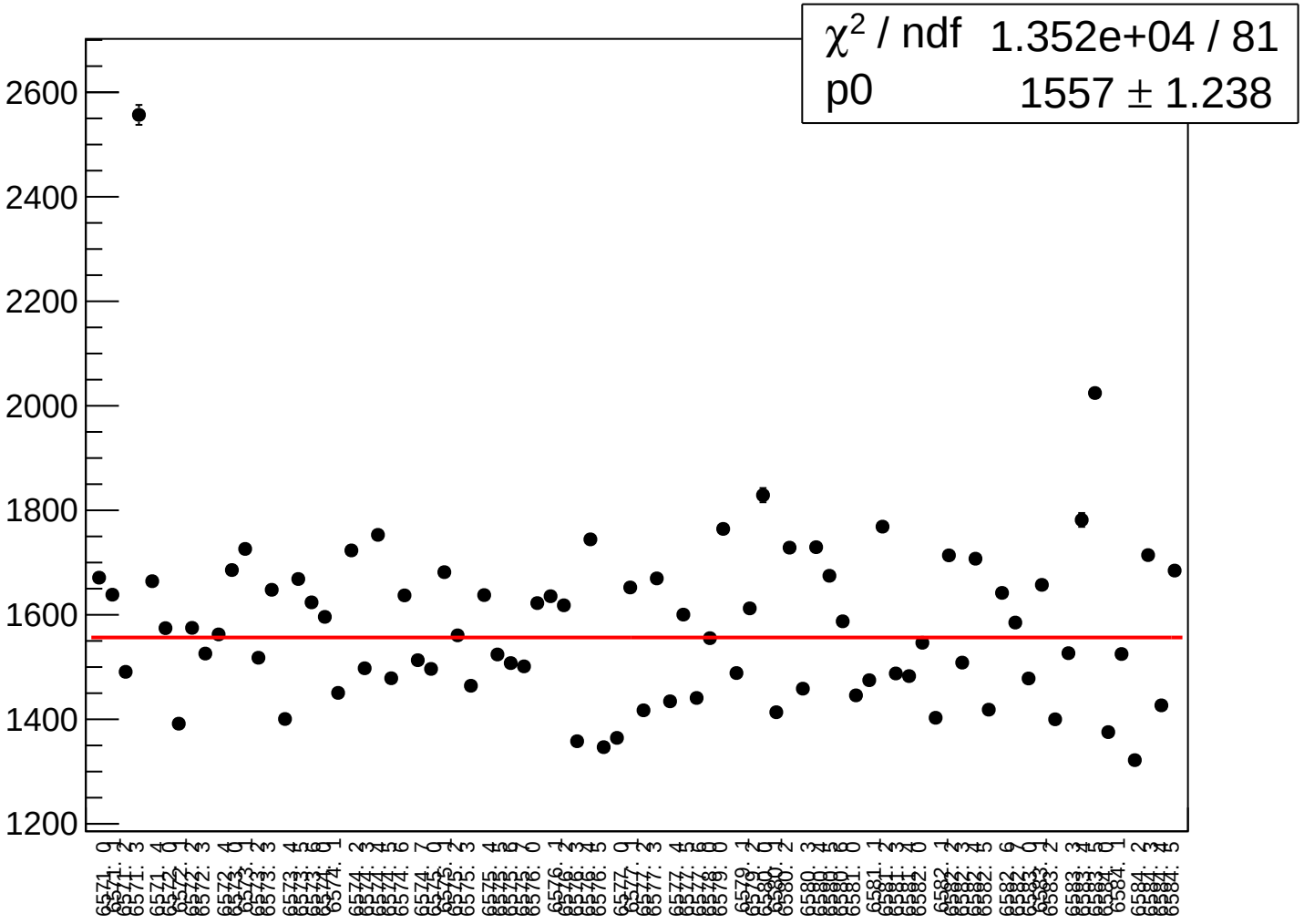

pull1D
Entries 82
Mean −0.01578
Std Dev 1.115
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

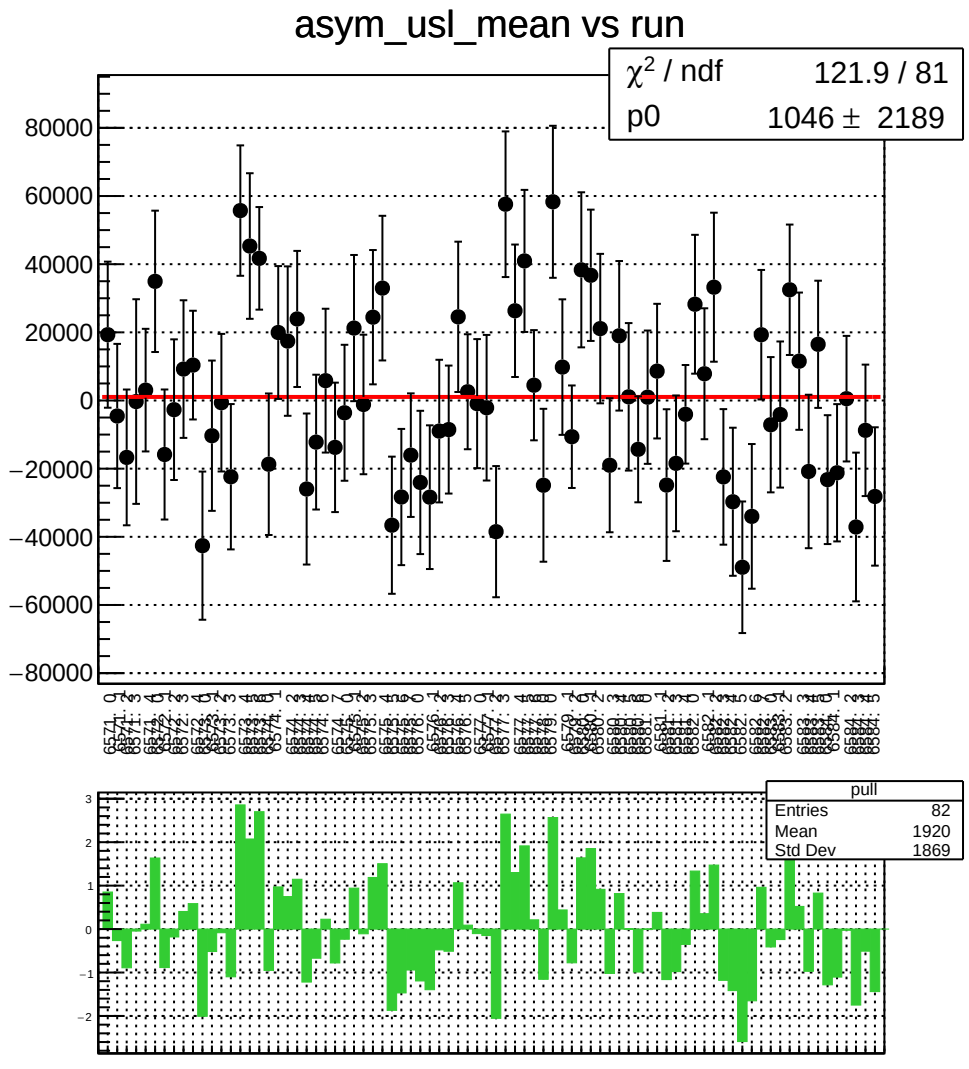

reg_asym_usl_rms vs run
χ² / ndf 222.1 / 81
p0 1161 ± 0.9195
1260
1240
1220
1200
1180
1160
1140
1120

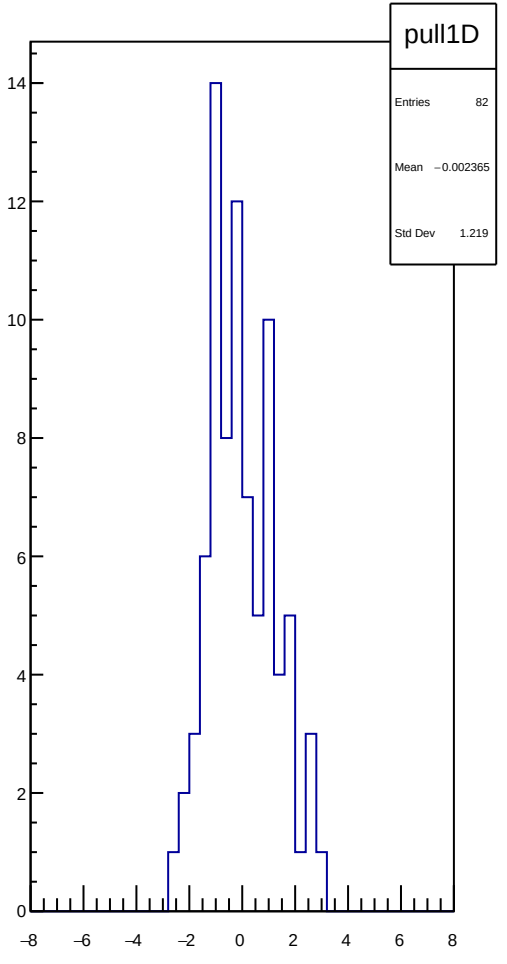

asym_usl_correction_mean vs run
χ² / ndf 95.07 / 81
p0 352.7 ± 1751
40000
20000
0
−20000
−40000
−60000
pull
Entries 82
Mean −731.6
Std Dev 786.8
2
1
0
−1
−2

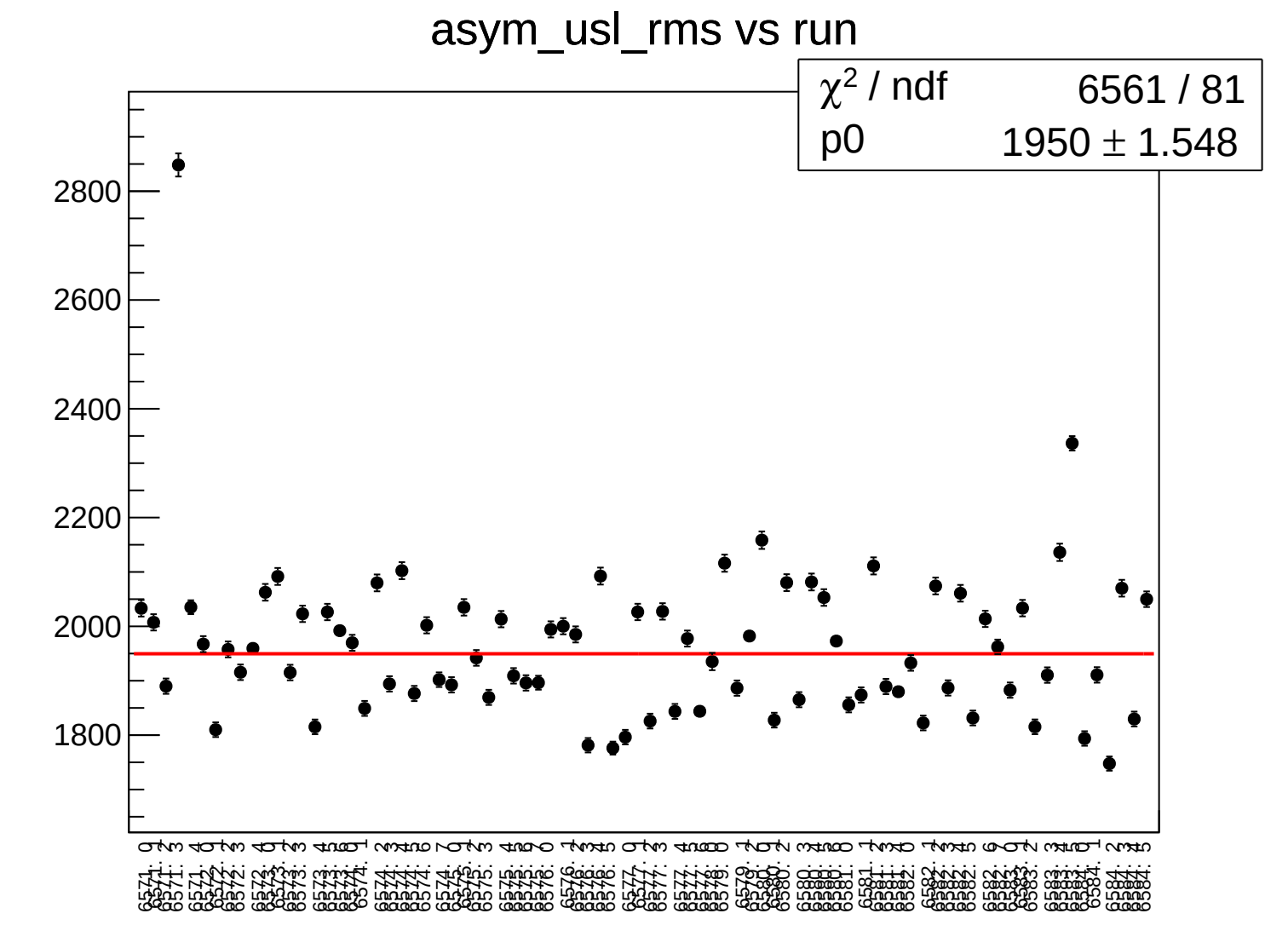

pull1D
Entries 82
Mean −0.005558
Std Dev 1.077
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

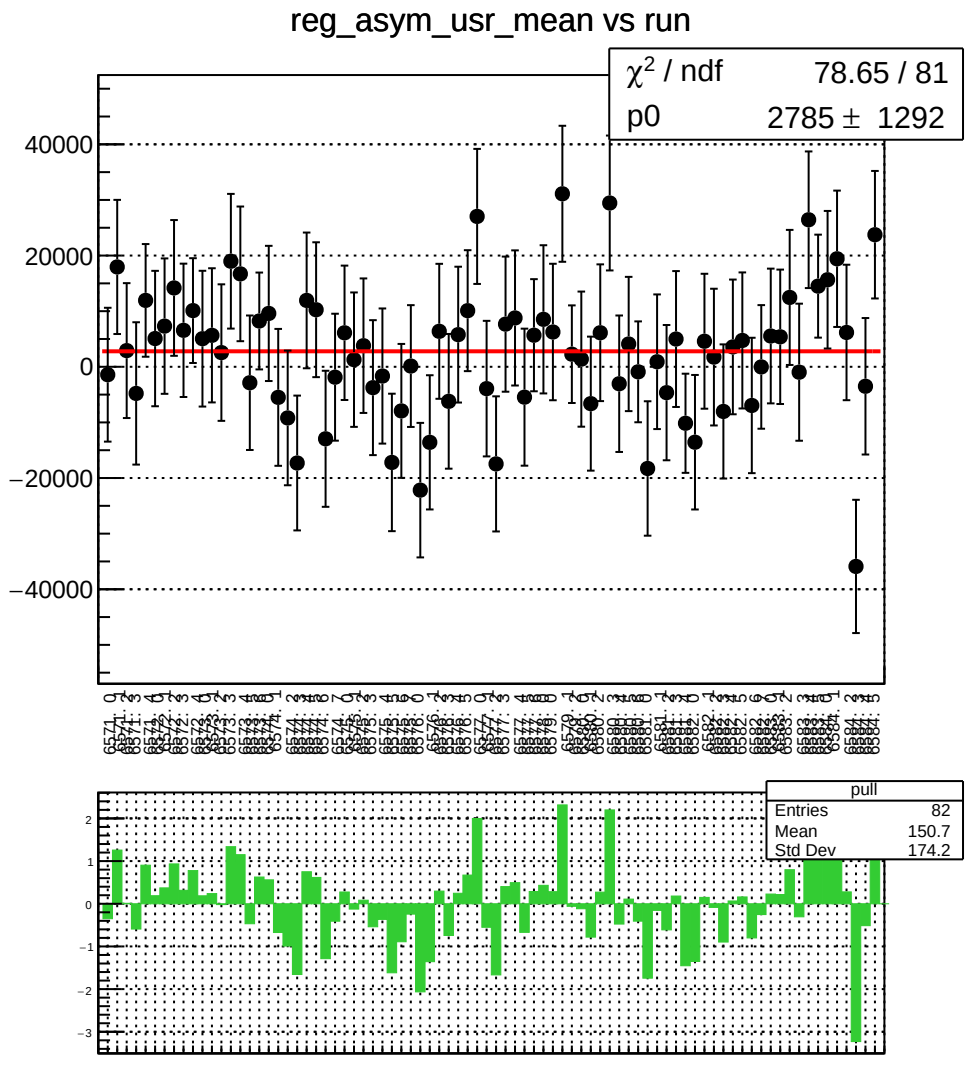
# asym_usl_correction_rms vs run

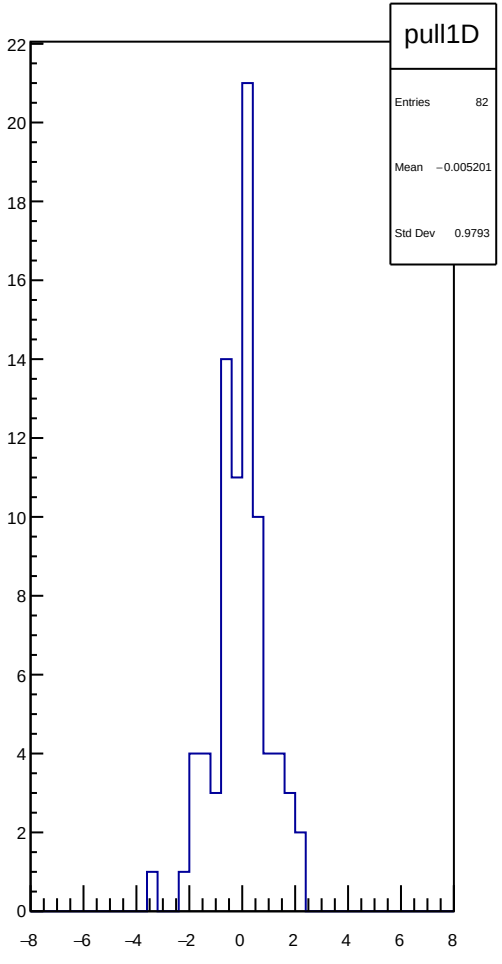


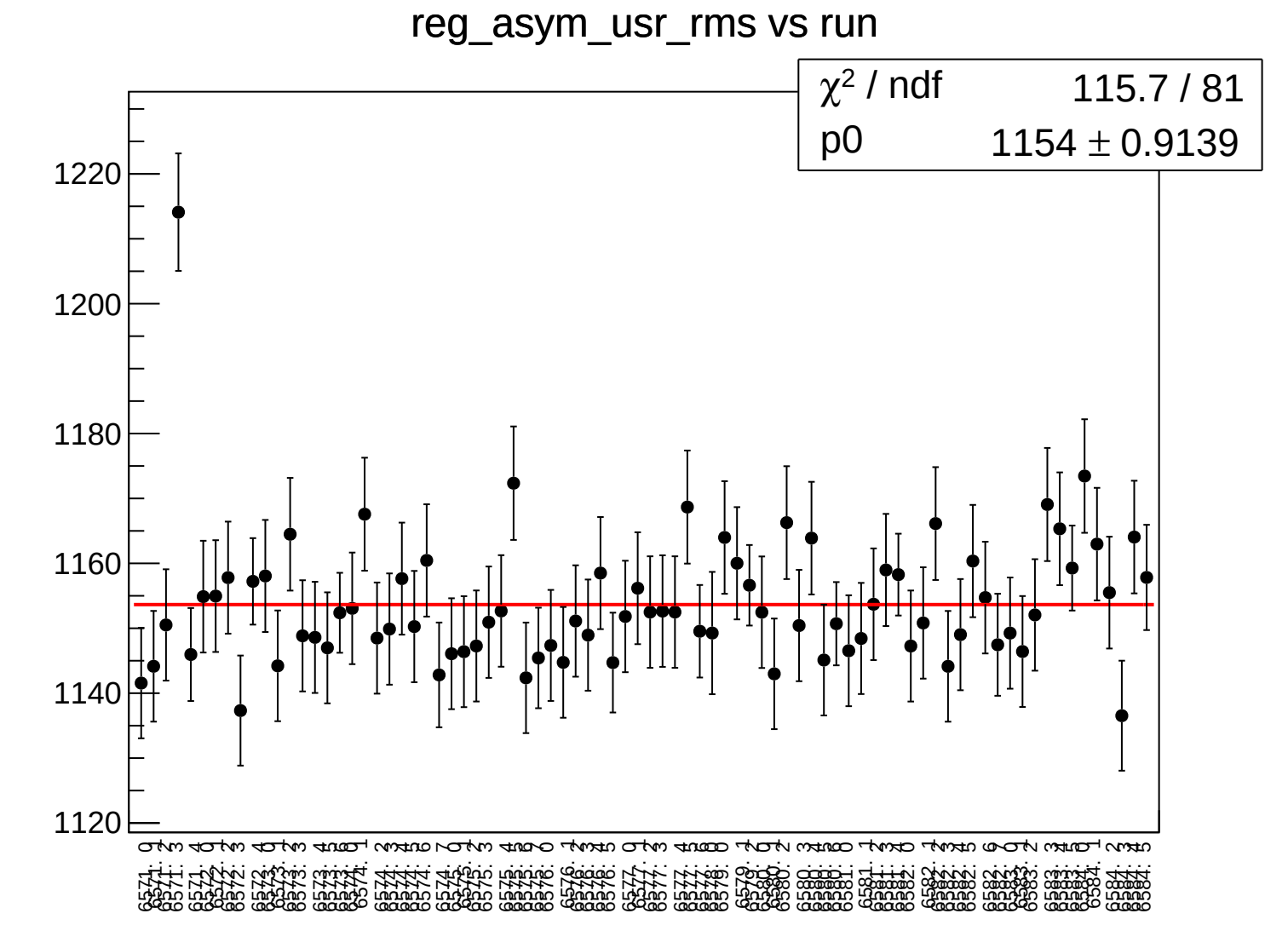

asym_usl_mean vs run
χ² / ndf 121.9 / 81
p0 1046 ± 2189
pull
Entries 82
Mean 1920
Std Dev 1869

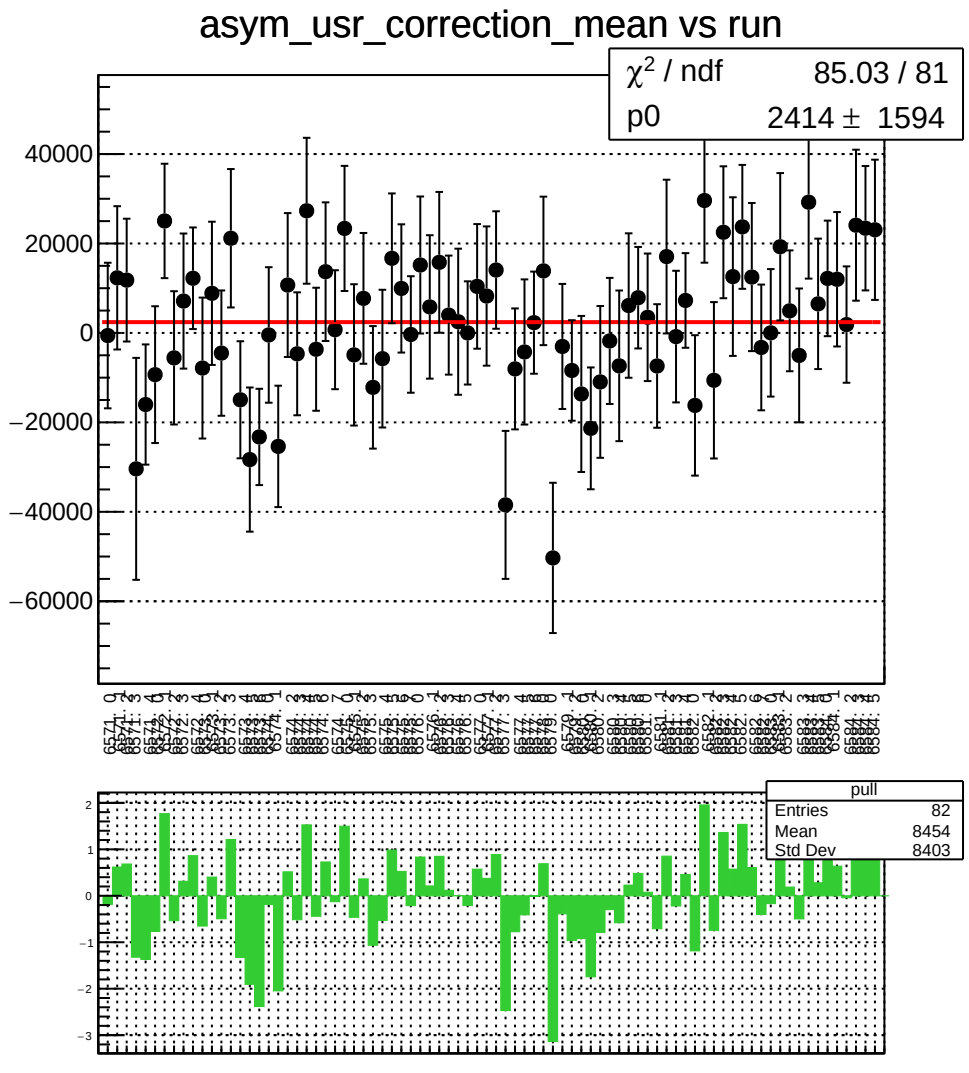

pull1D
Entries 82
Mean −0.002365
Std Dev 1.219

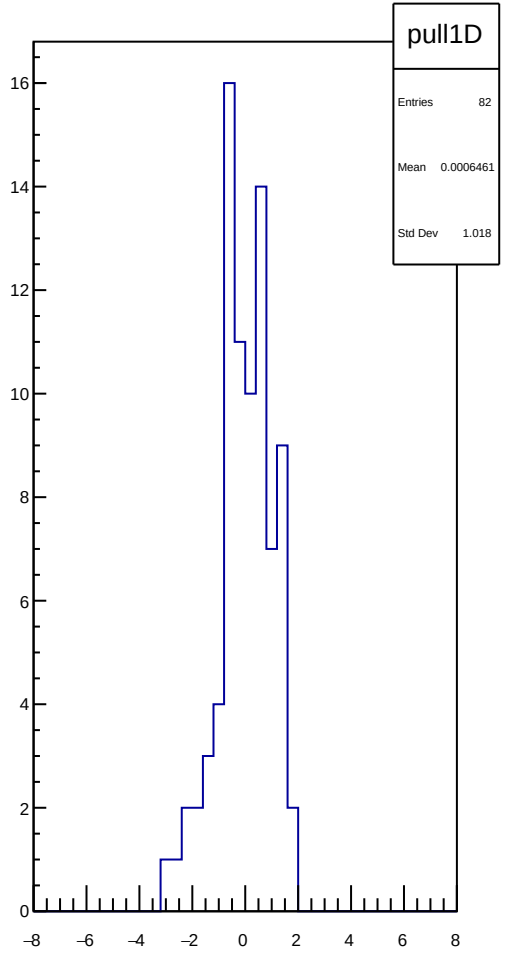

asym_usl_rms vs run
$\chi^2$ / ndf 6561 / 81
p0 1950 ± 1.548
2800
2600
2400
2200
2000
1800


reg_asym_usr_mean vs run
χ² / ndf 78.65 / 81
p0 2785 ± 1292
40000
20000
0
−20000
−40000
pull
Entries 82
Mean 150.7
Std Dev 174.2
2
1
0
−1
−2
−3

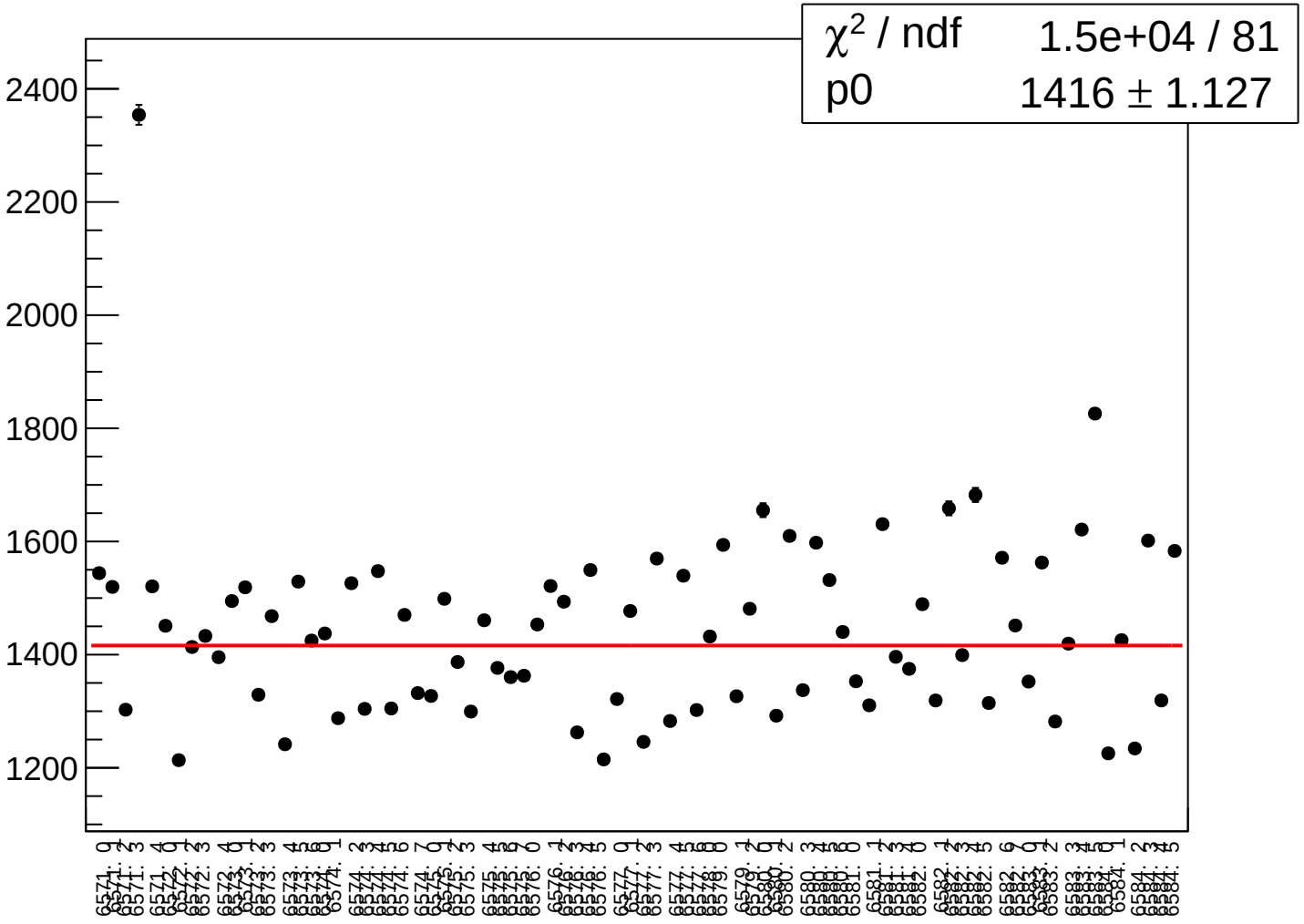

pull1D
Entries 82
Mean −0.005201
Std Dev 0.9793
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

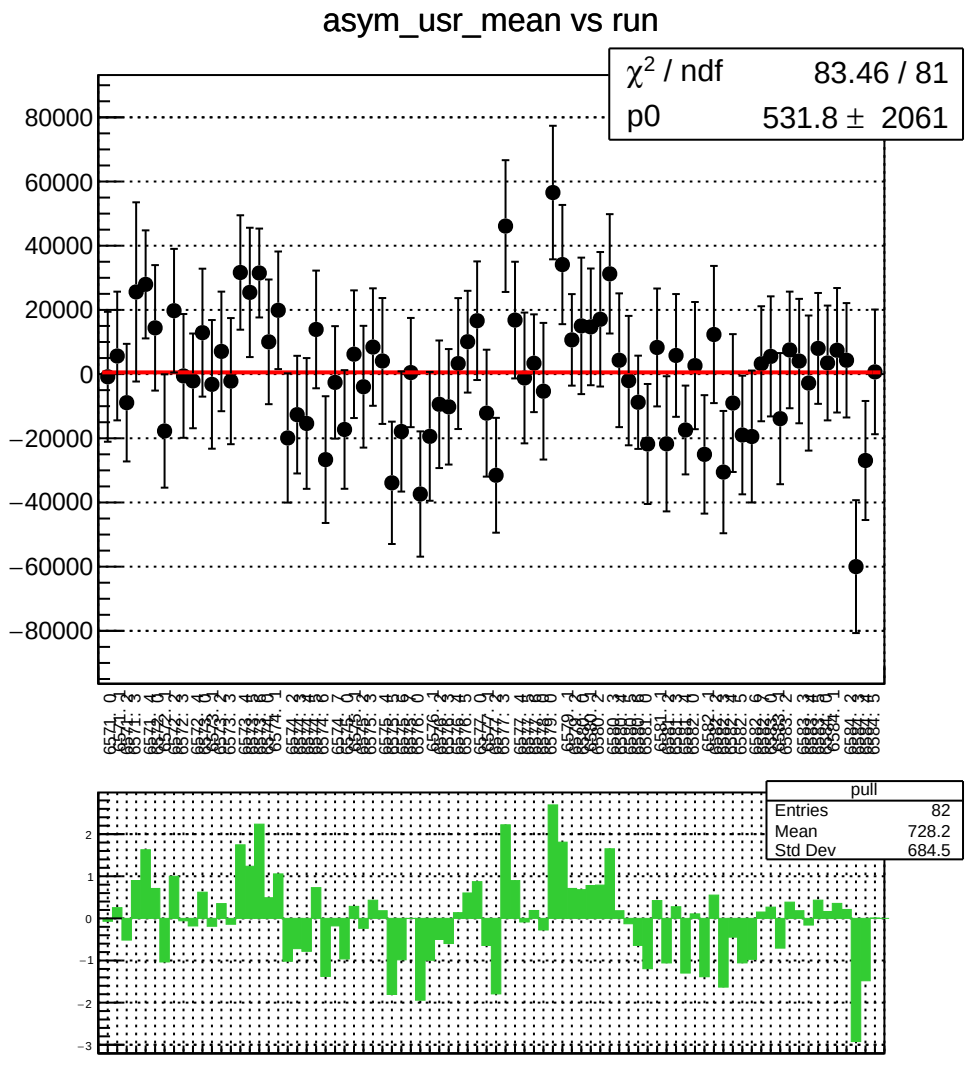

reg_asym_usr_rms vs run
$\chi^2$ / ndf 115.7 / 81
p0 1154 ± 0.9139
1220
1200
1180
1160
1140
1120

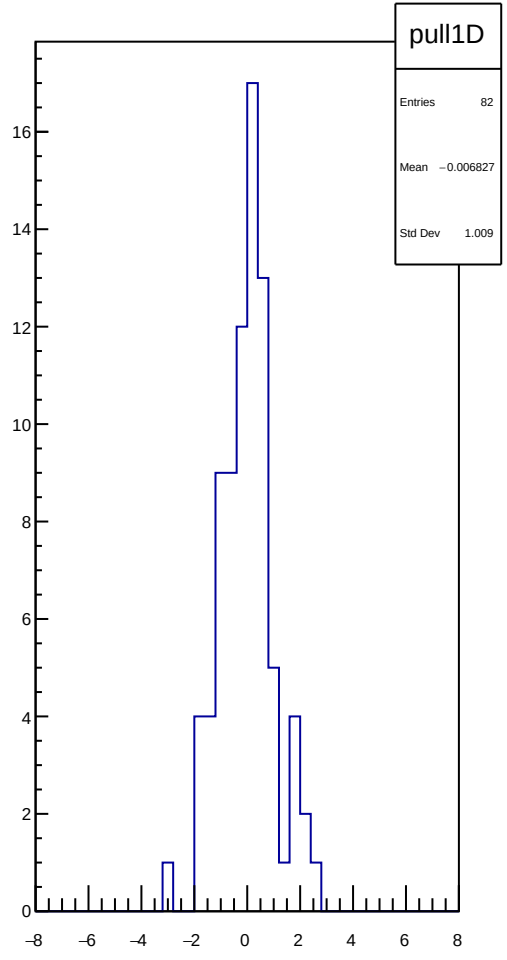

asym_usr_correction_mean vs run
χ² / ndf 85.03 / 81
p0 2414 ± 1594
40000
20000
0
−20000
−40000
−60000
pull
Entries 82
Mean 8454
Std Dev 8403
2
1
0
−1
−2
−3

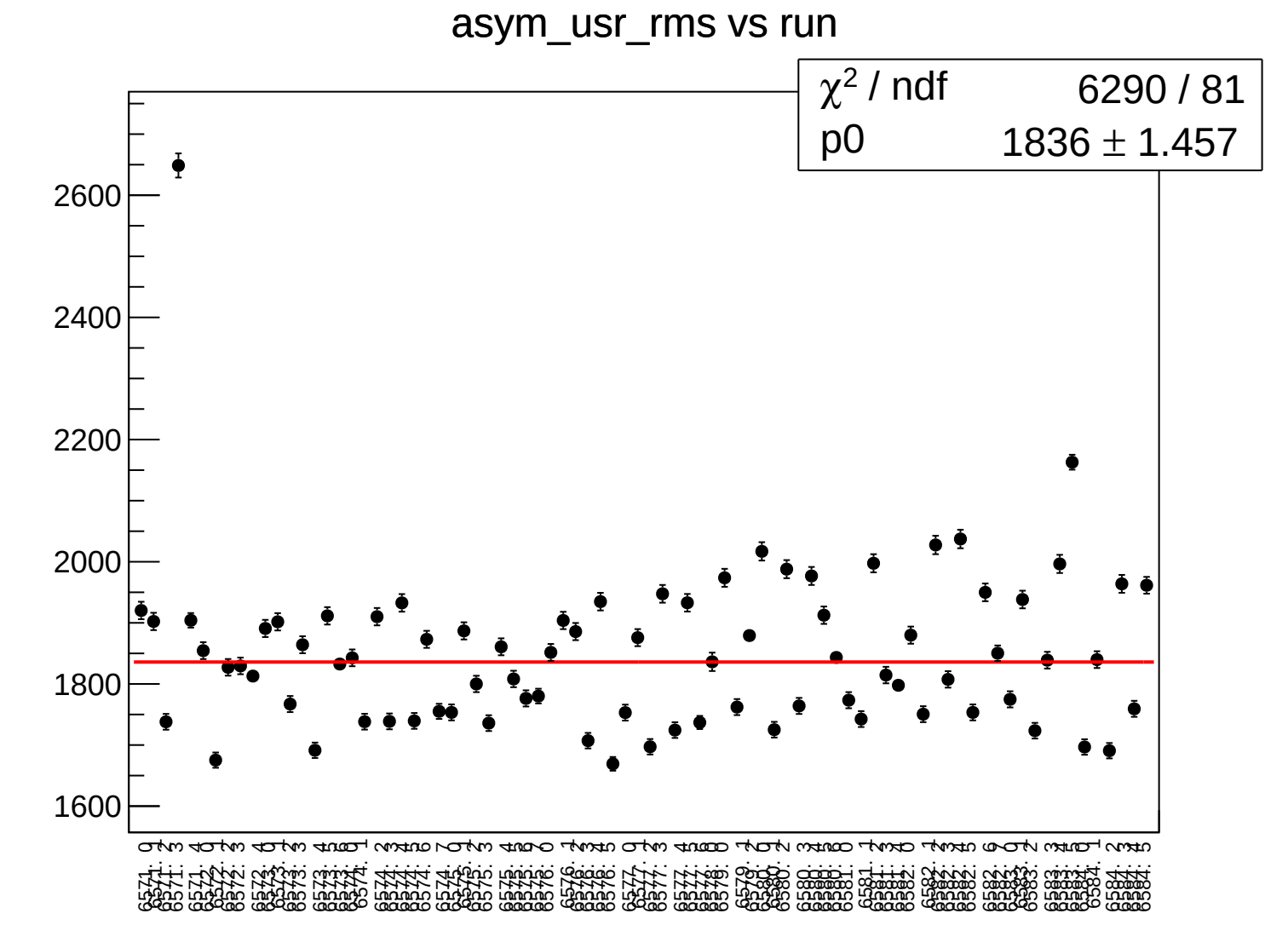

pull1D
Entries 82
Mean 0.0006461
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

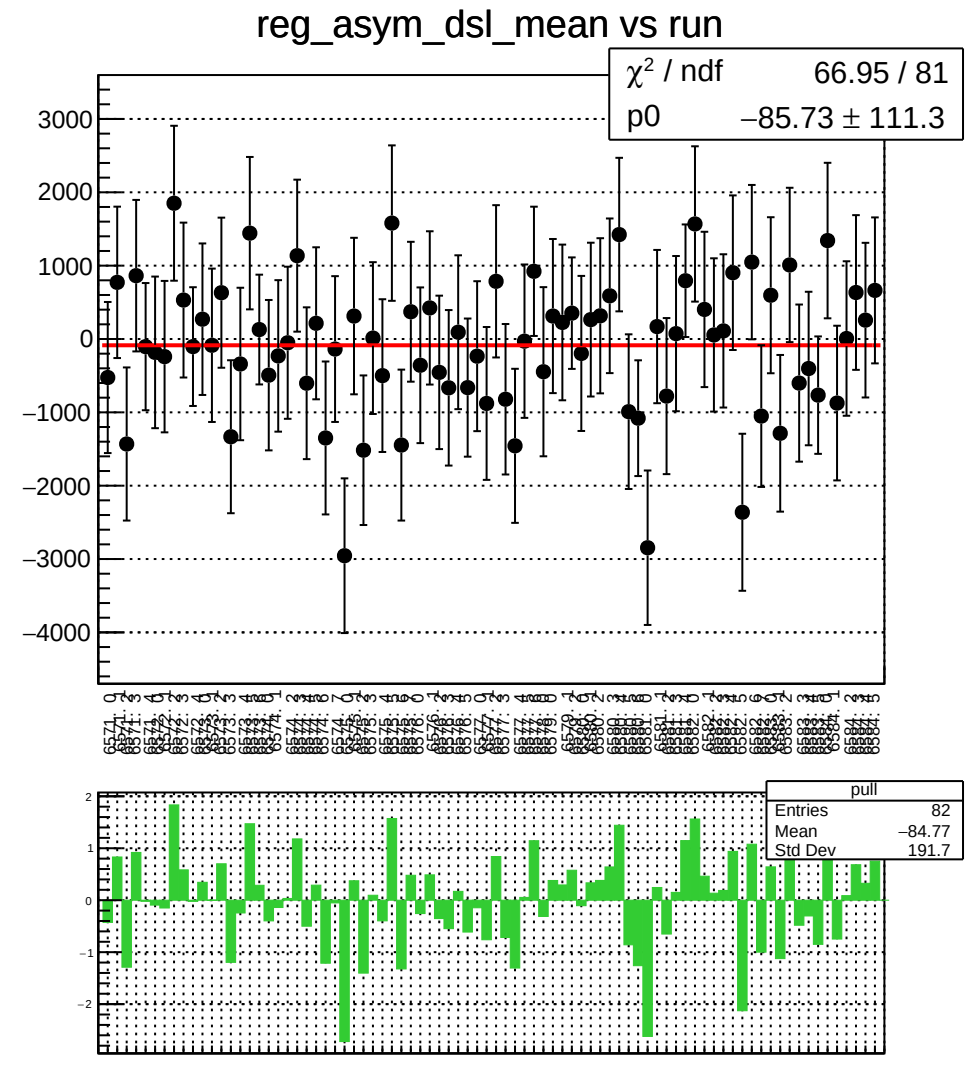
# asym_usr_correction_rms vs run

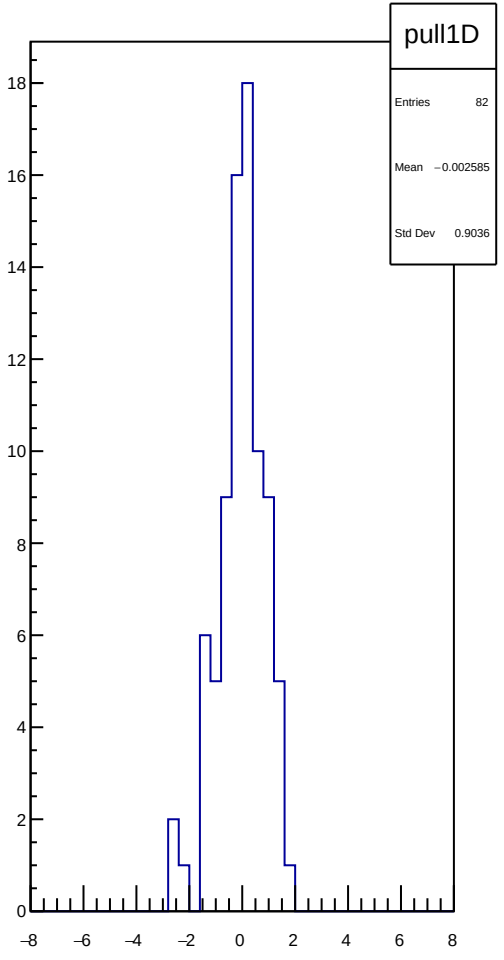


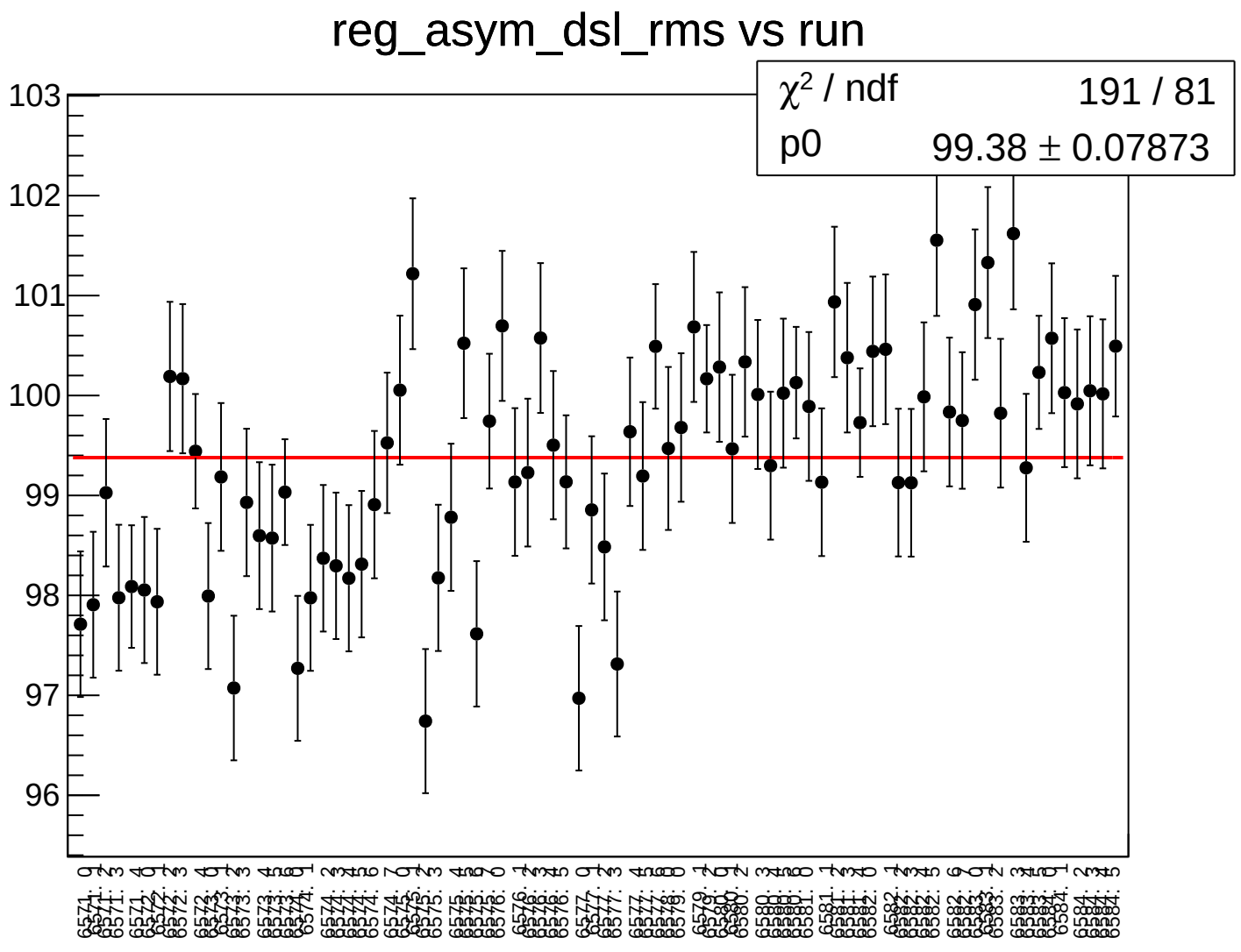

asym_usr_mean vs run
χ² / ndf 83.46 / 81
p0 531.8 ± 2061
pull
Entries 82
Mean 728.2
Std Dev 684.5

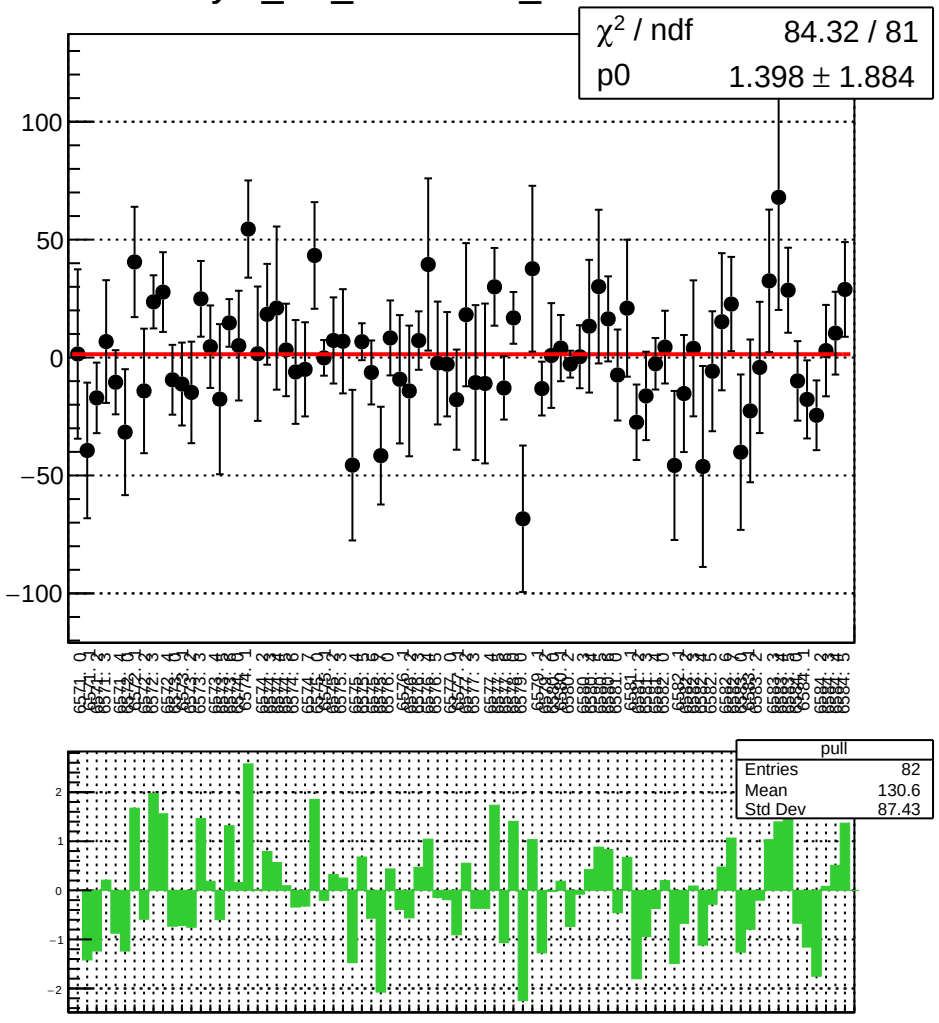

pull1D
Entries 82
Mean −0.006827
Std Dev 1.009

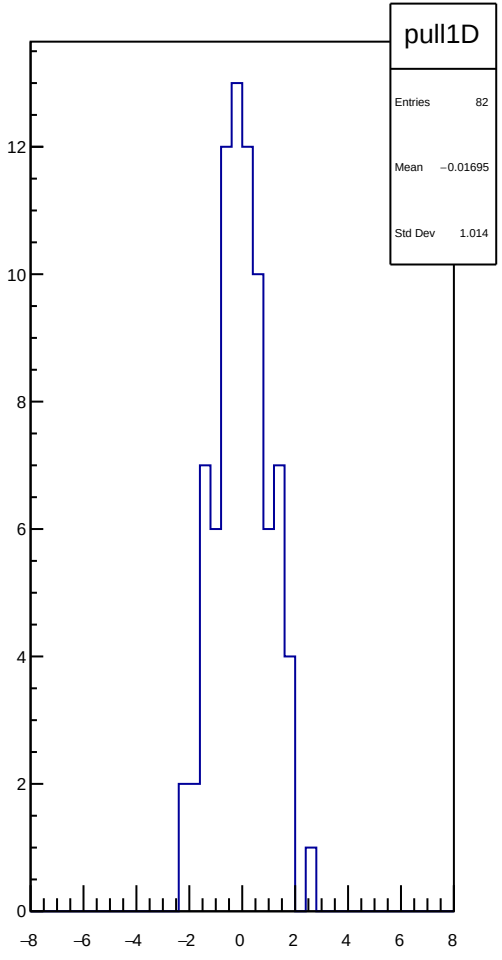

asym_usr_rms vs run
χ² / ndf 6290 / 81
p0 1836 ± 1.457
2600
2400
2200
2000
1800
1600

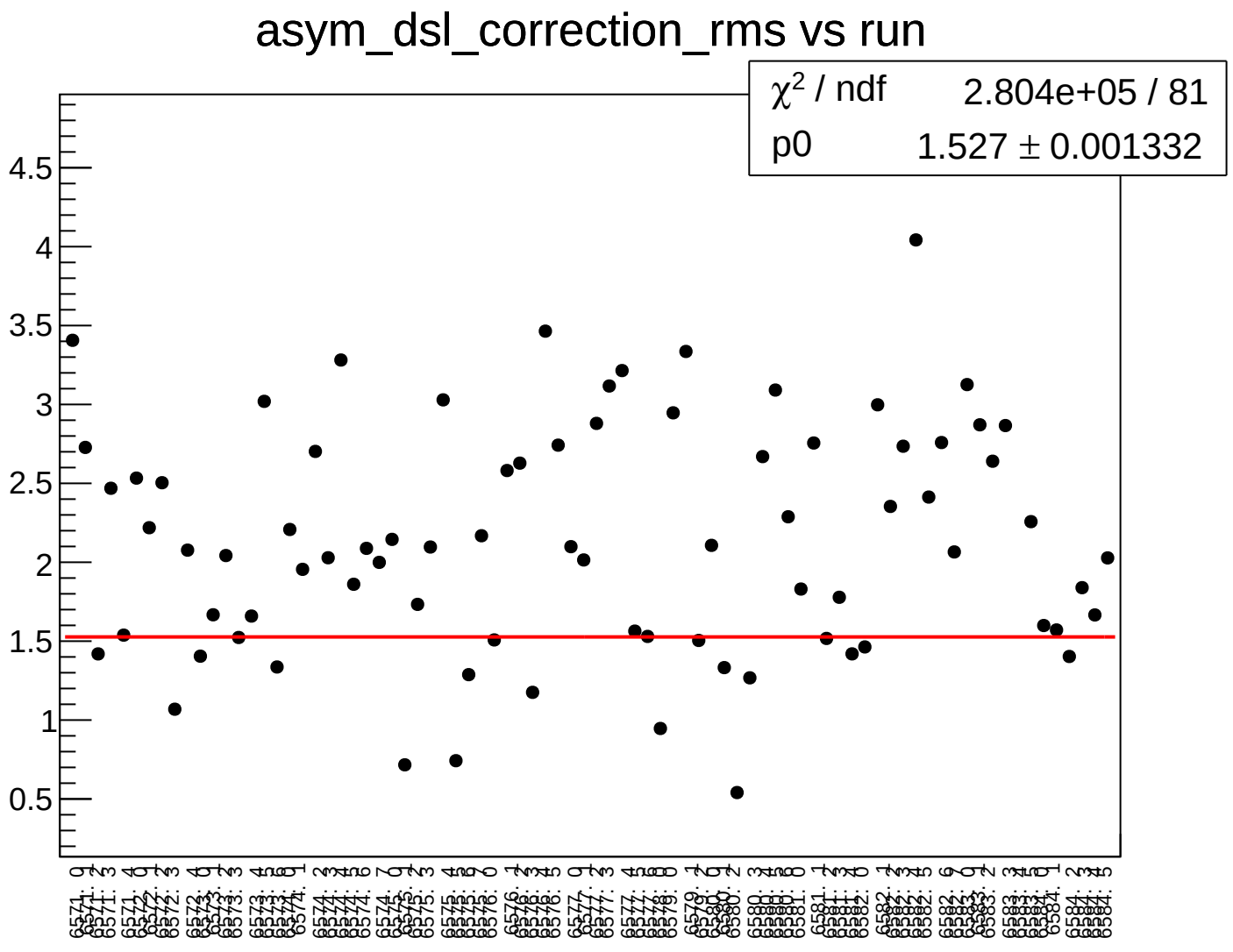

reg_asym_dsl_mean vs run
χ² / ndf 66.95 / 81
p0 −85.73 ± 111.3
pull
Entries 82
Mean −84.77
Std Dev 191.7

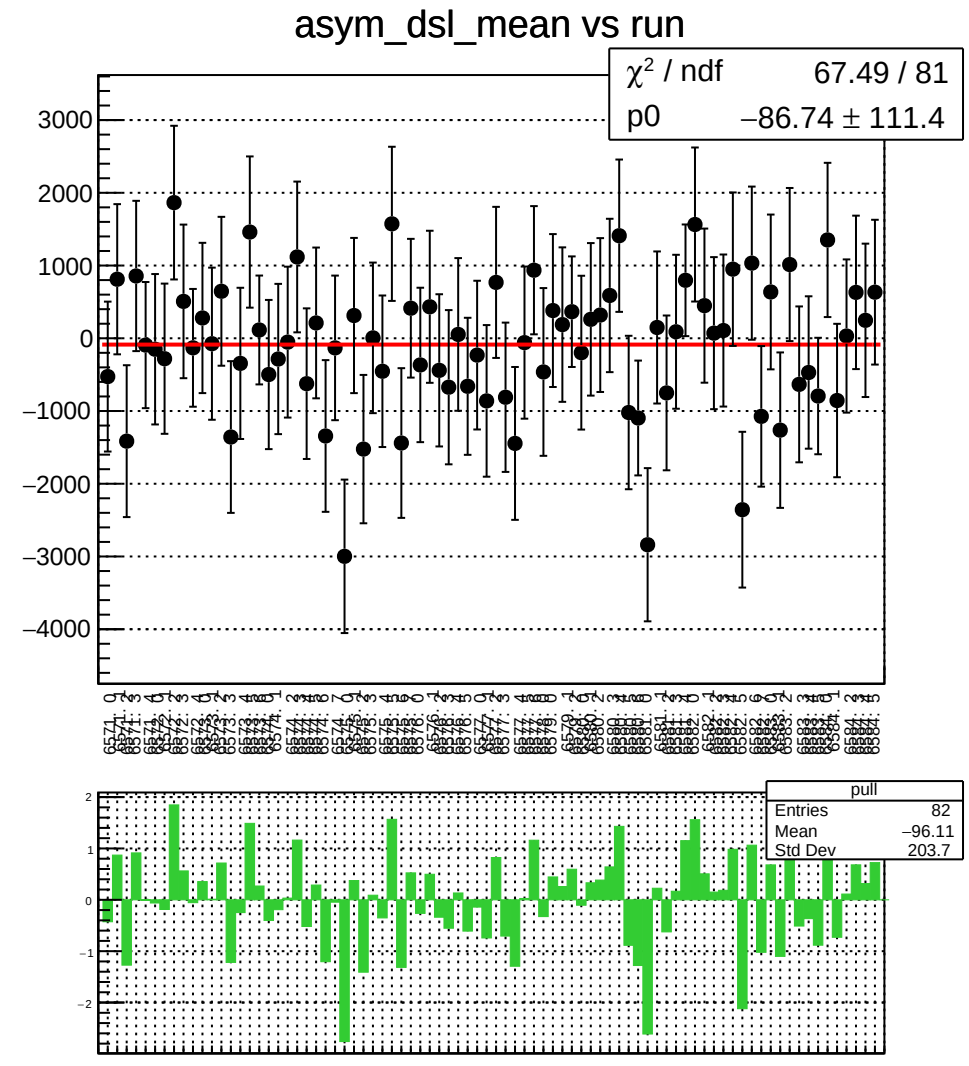

pull1D
Entries 82
Mean −0.002585
Std Dev 0.9036

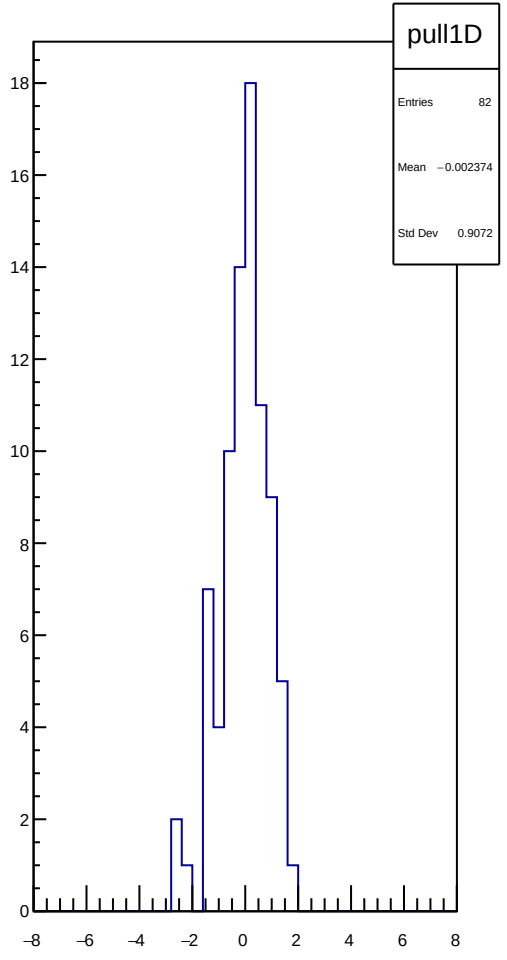

reg_asym_dsl_rms vs run
$\chi^2$ / ndf 191 / 81
p0 99.38 ± 0.07873
103
102
101
100
99
98
97
96

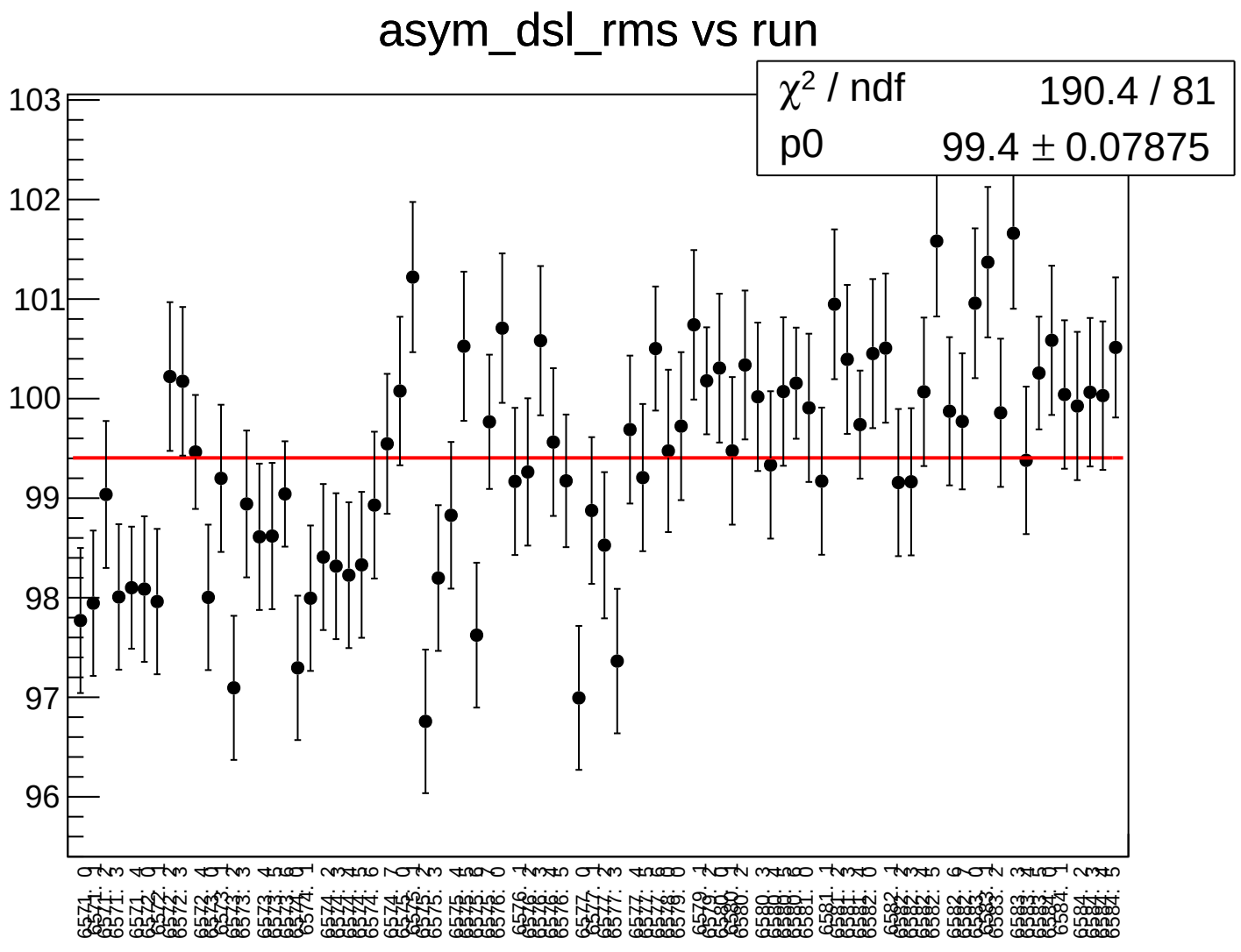

asym_dsl_correction_mean vs run
χ² / ndf 84.32 / 81
p0 1.398 ± 1.884
100
50
0
−50
−100
pull
Entries 82
Mean 130.6
Std Dev 87.43
2
1
0
−1
−2

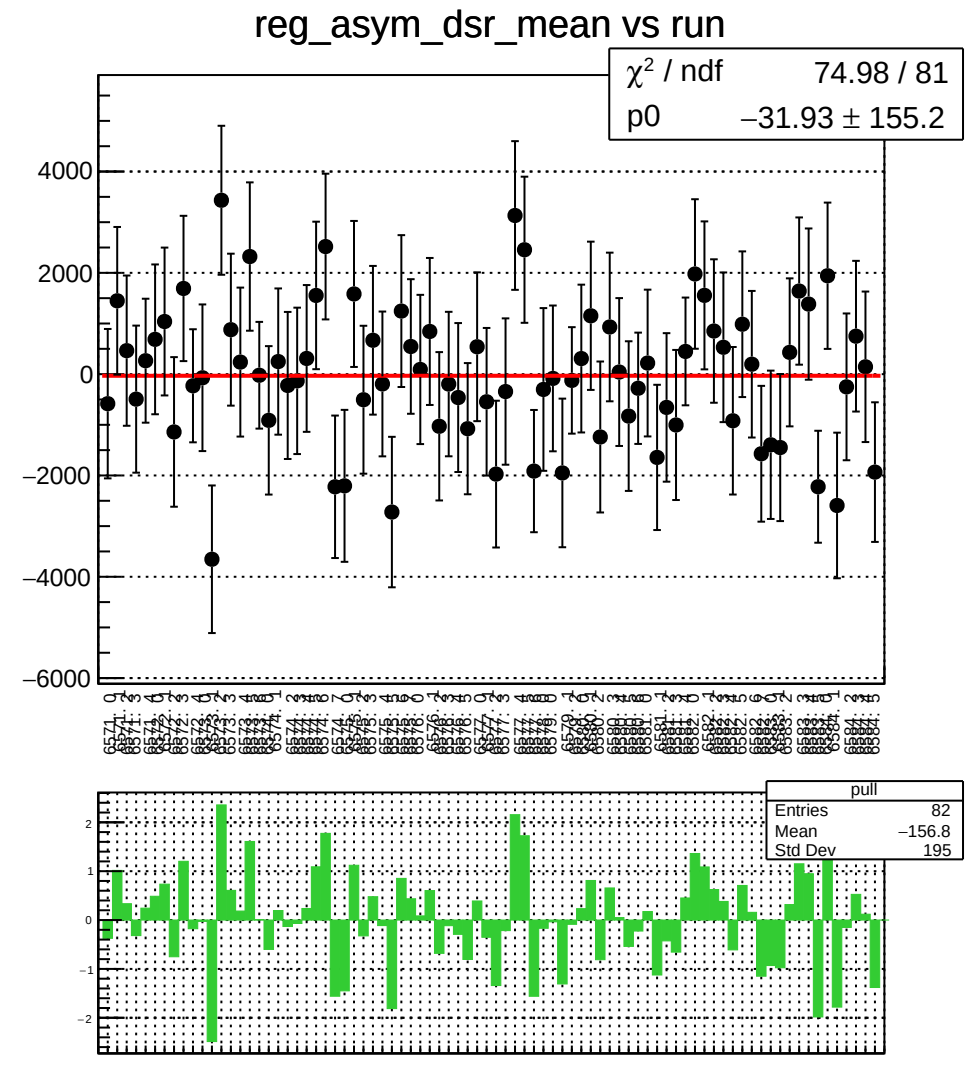

pull1D
Entries 82
Mean −0.01695
Std Dev 1.014
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

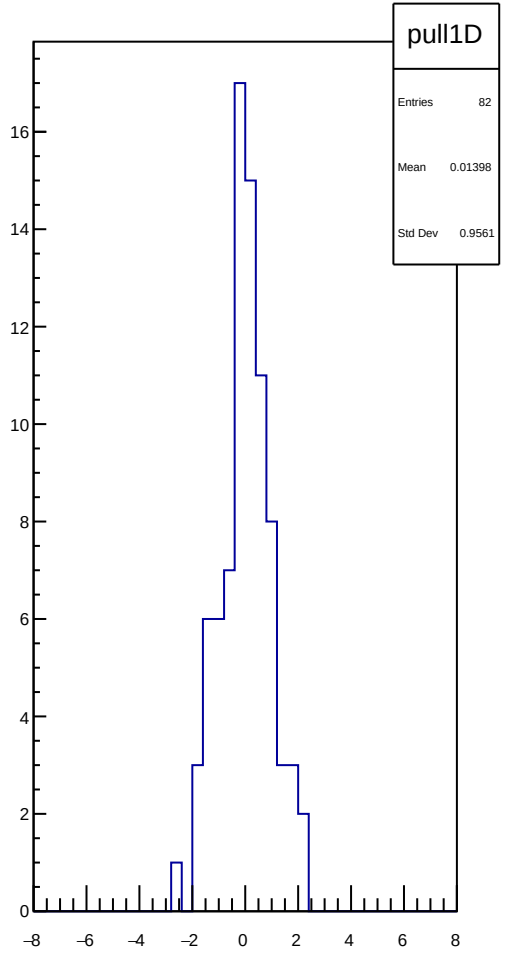

asym_dsl_correction_rms vs run
χ² / ndf 2.804e+05 / 81
p0 1.527 ± 0.001332
4.5
4
3.5
3
2.5
2
1.5
1
0.5

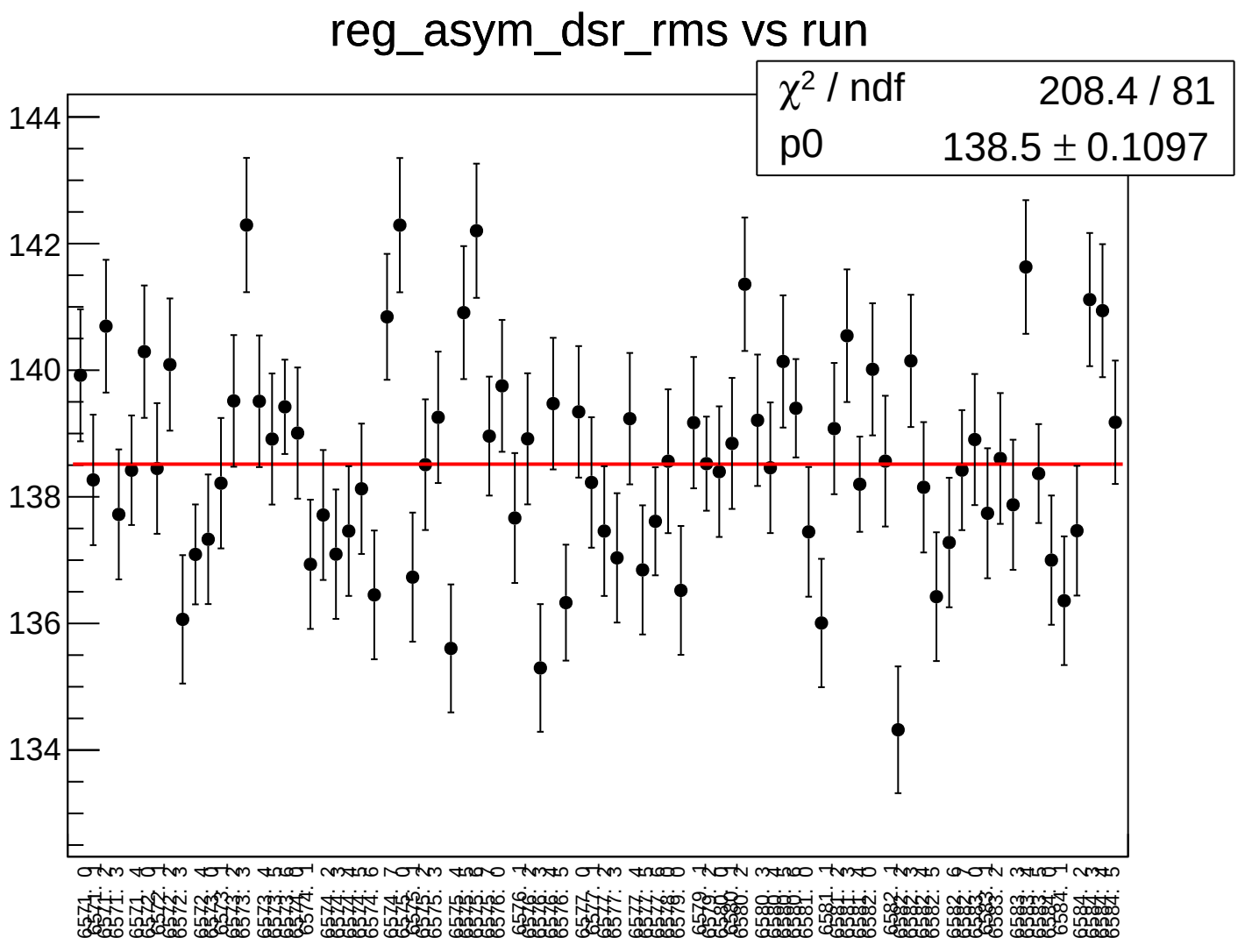

asym_dsl_mean vs run
χ² / ndf 67.49 / 81
p0 −86.74 ± 111.4
pull
Entries 82
Mean −96.11
Std Dev 203.7

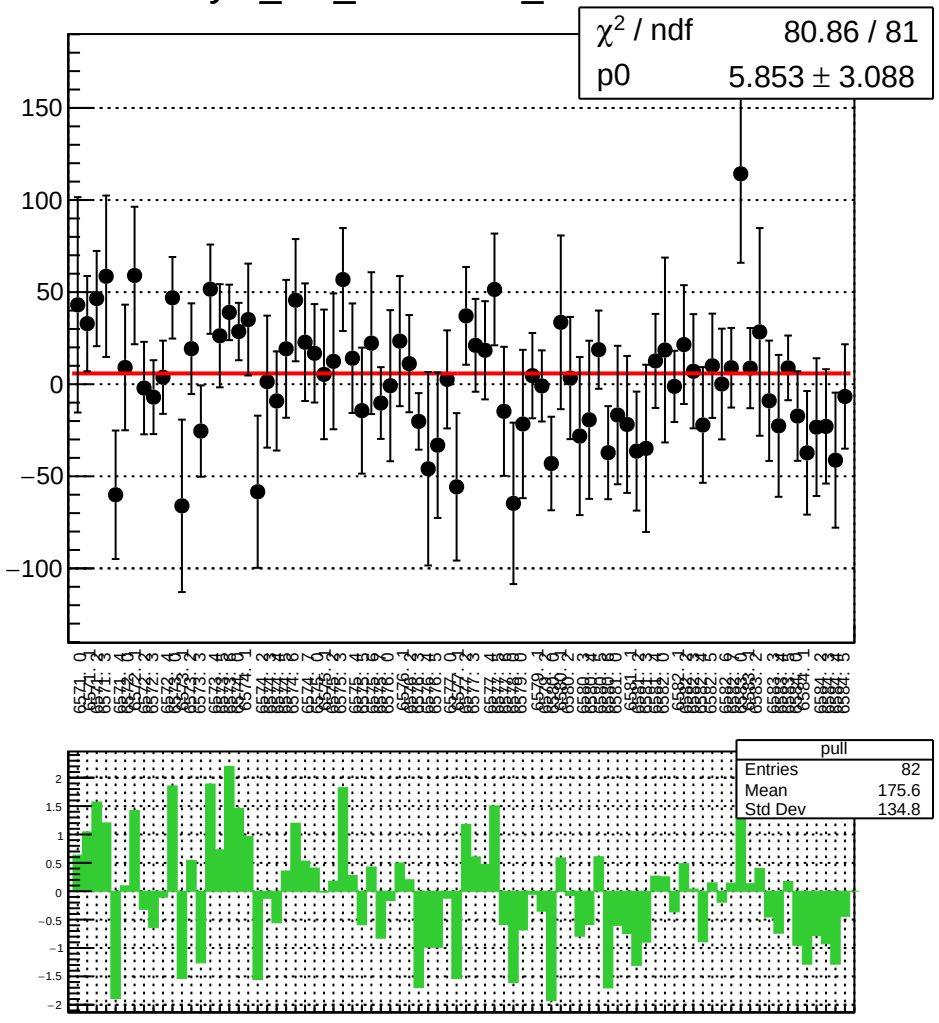

pull1D
Entries 82
Mean −0.002374
Std Dev 0.9072

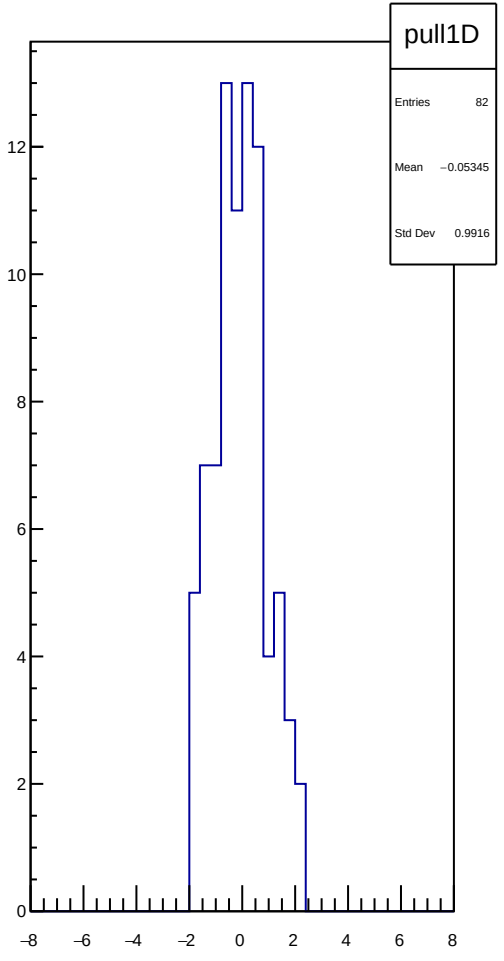

asym_dsl_rms vs run
χ² / ndf 190.4 / 81
p0 99.4 ± 0.07875
103
102
101
100
99
98
97
96

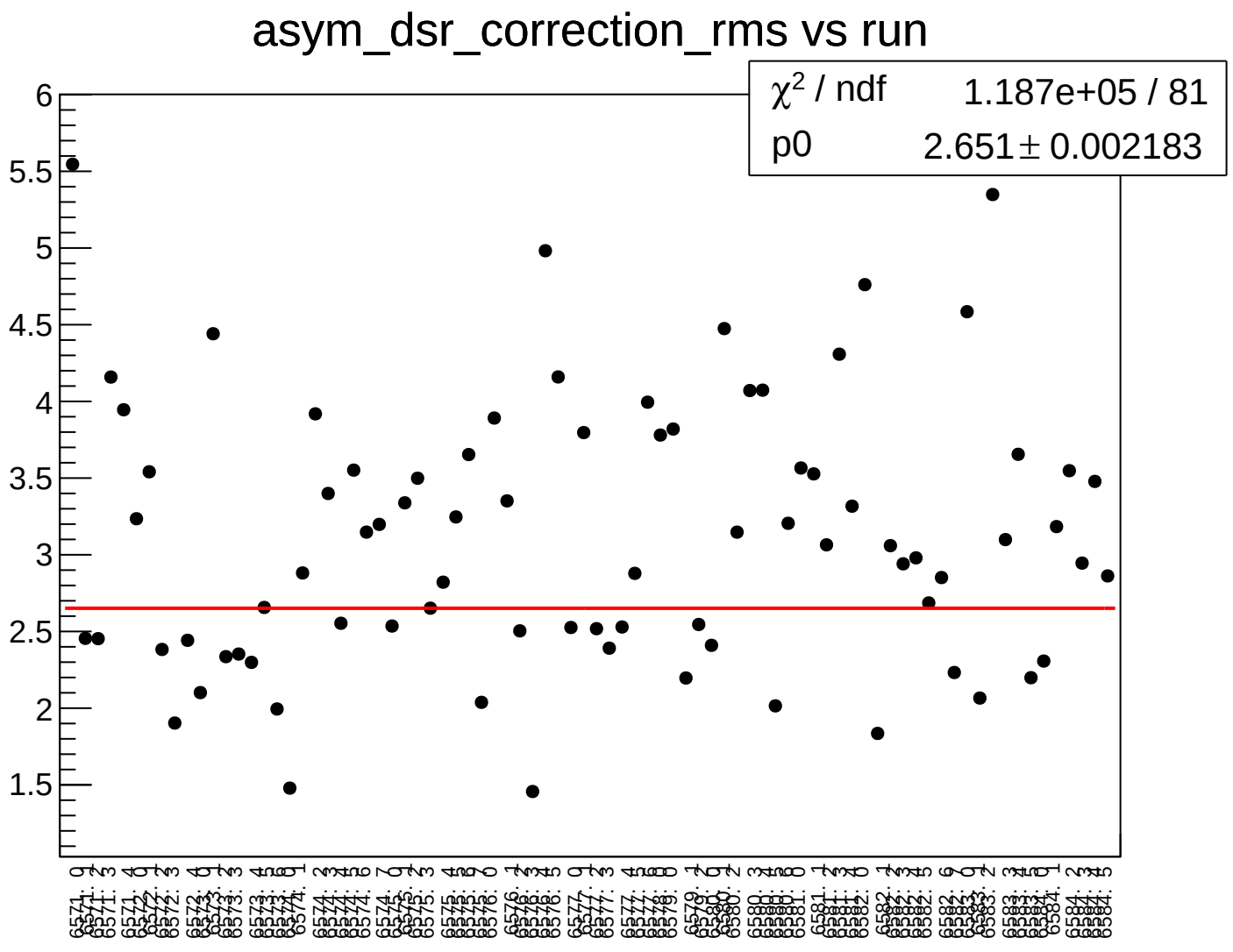

reg_asym_dsr_mean vs run
χ² / ndf 74.98 / 81
p0 −31.93 ± 155.2
4000
2000
0
−2000
−4000
−6000
pull
Entries 82
Mean −156.8
Std Dev 195
2
1
0
−1
−2

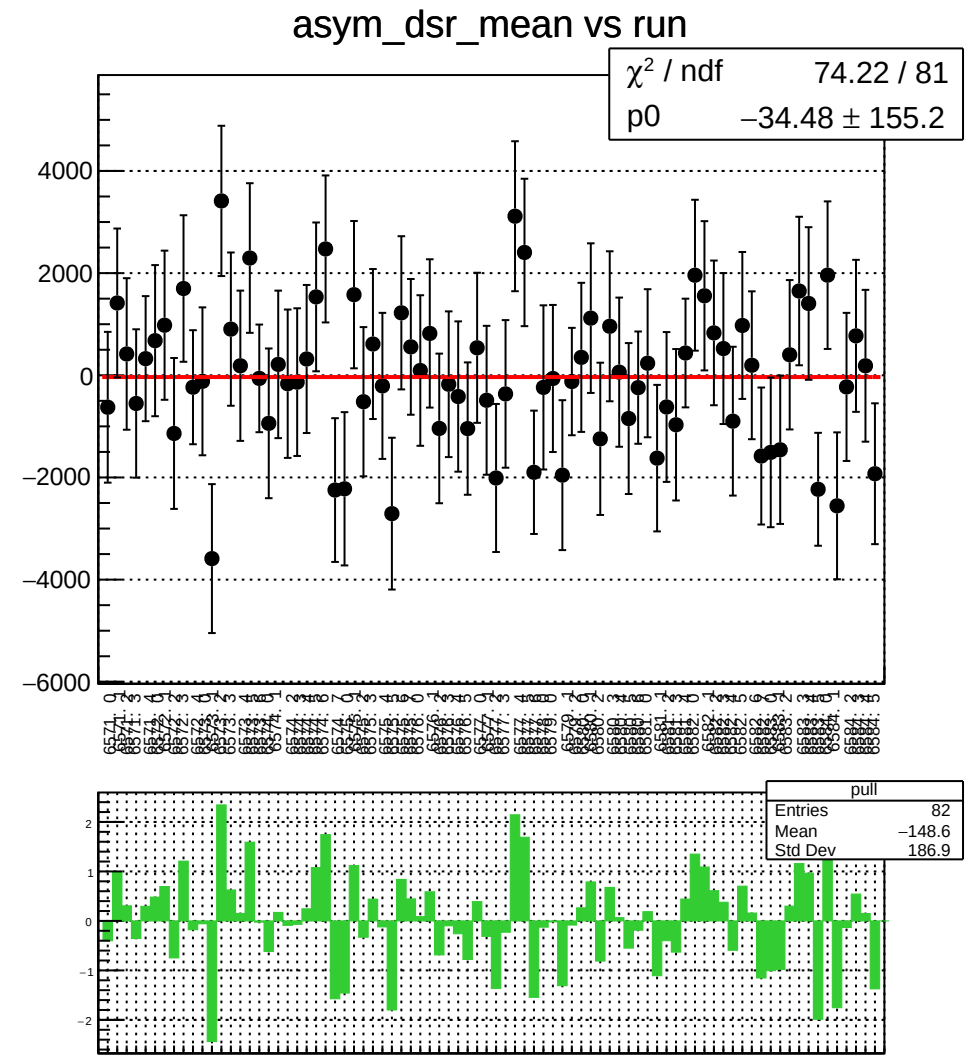

pull1D
Entries 82
Mean 0.01398
Std Dev 0.9561
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

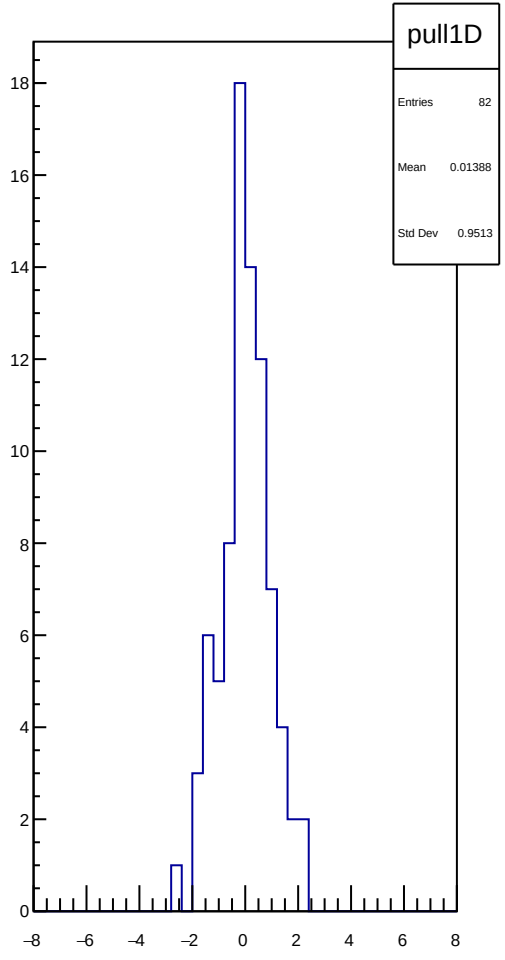

reg_asym_dsr_rms vs run
χ² / ndf 208.4 / 81
p0 138.5 ± 0.1097
144
142
140
138
136
134

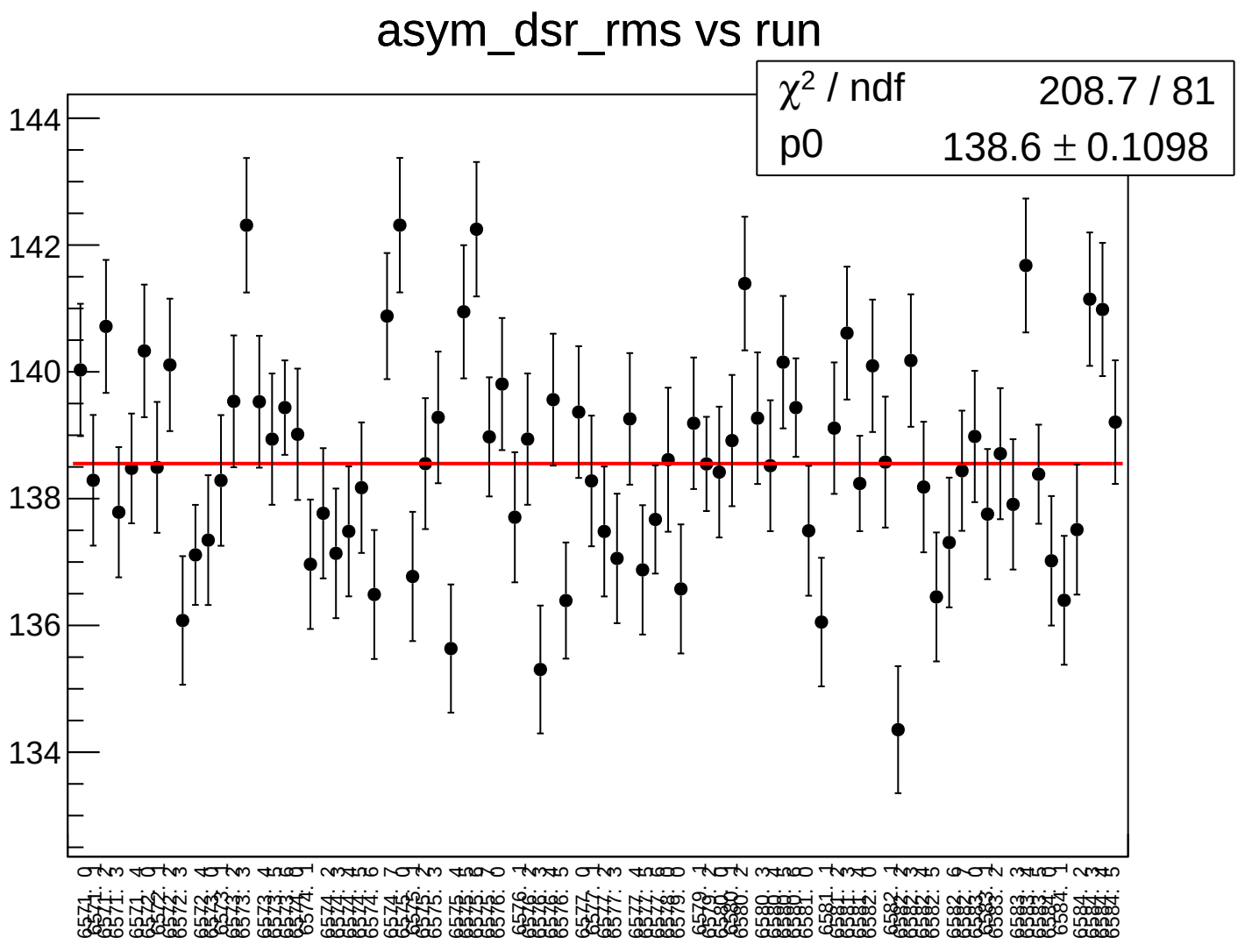

asym_dsr_correction_mean vs run
χ² / ndf 80.86 / 81
p0 5.853 ± 3.088
150
100
50
0
−50
−100
pull
Entries 82
Mean 175.6
Std Dev 134.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

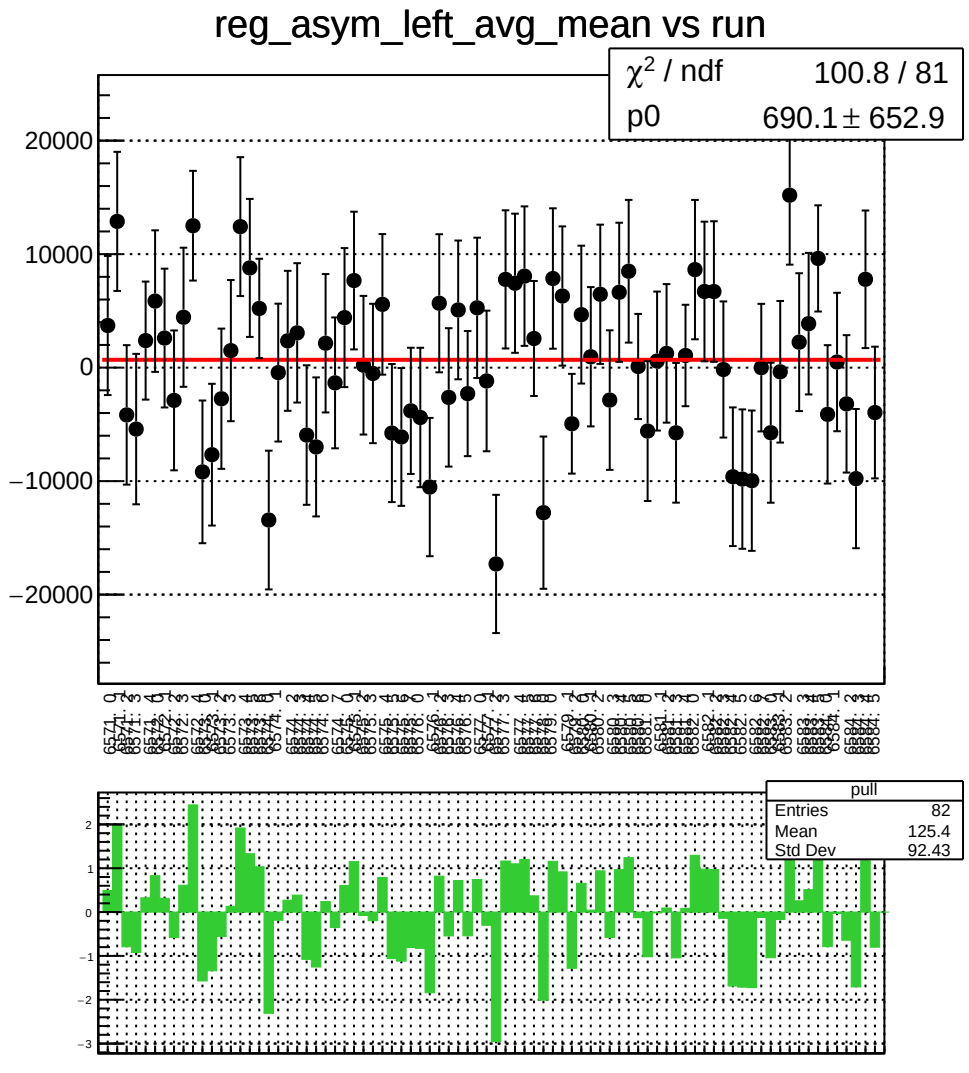

pull1D
Entries 82
Mean −0.05345
Std Dev 0.9916
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

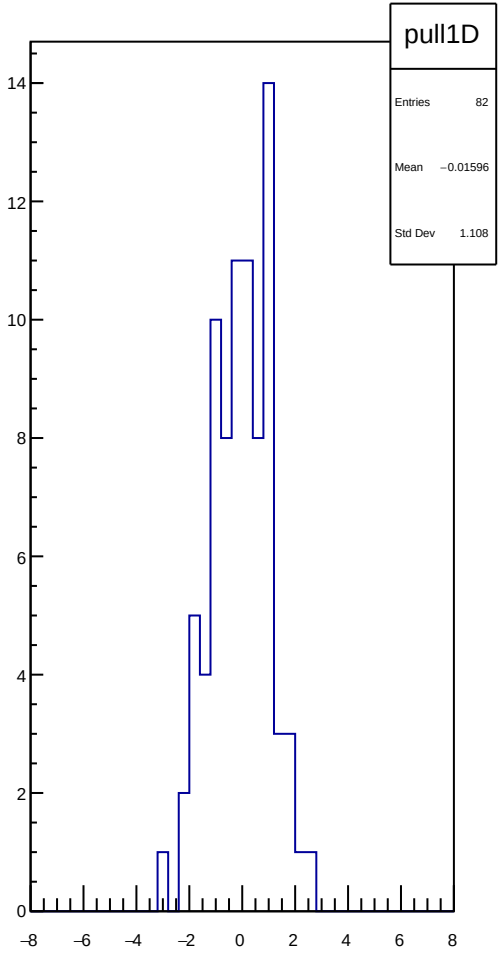

asym_dsr_correction_rms vs run
$\chi^2$ / ndf 1.187e+05 / 81
p0 2.651 ± 0.002183
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5

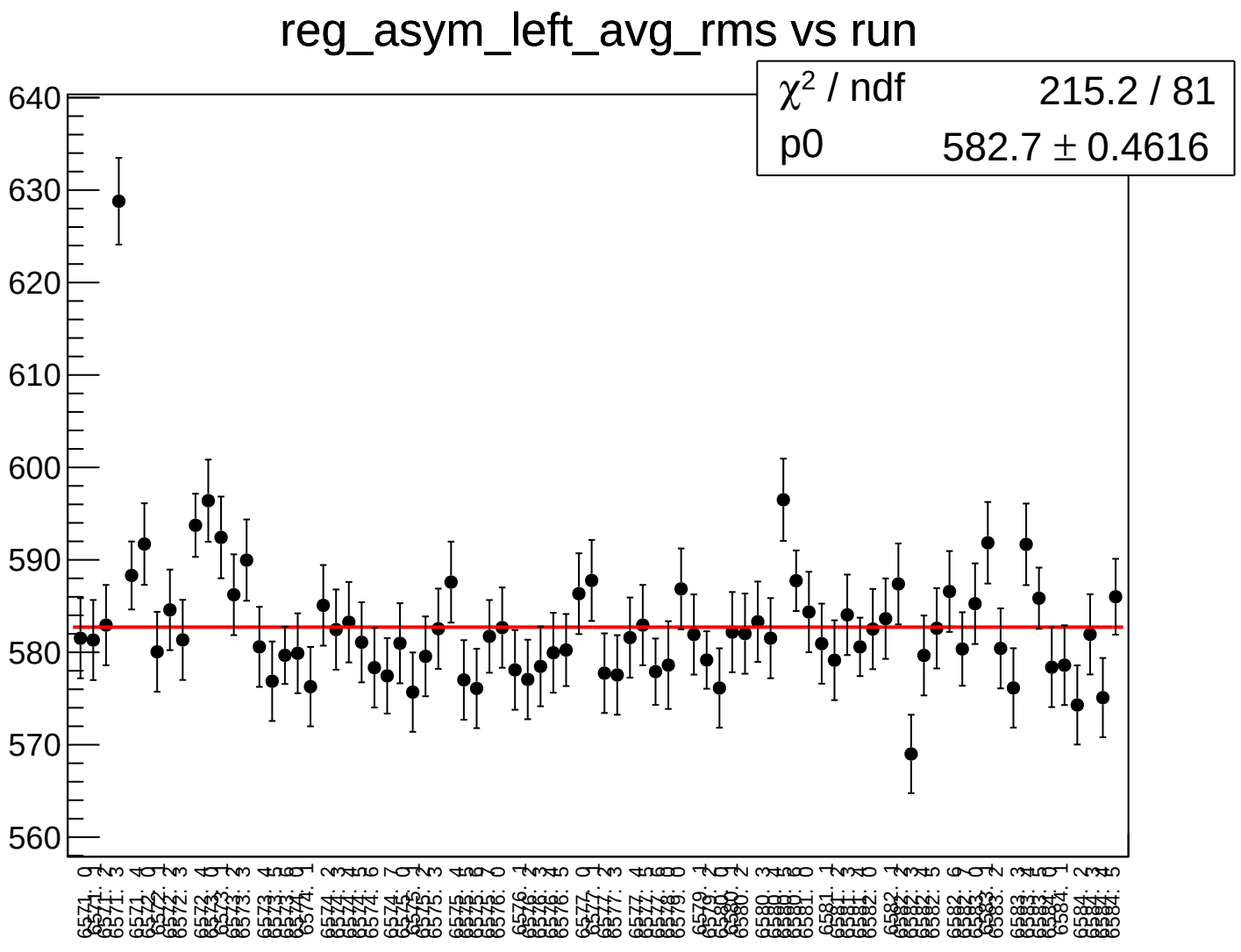

asym_dsr_mean vs run
χ² / ndf 74.22 / 81
p0 −34.48 ± 155.2
4000
2000
0
−2000
−4000
−6000
pull
Entries 82
Mean −148.6
Std Dev 186.9
2
1
0
−1
−2

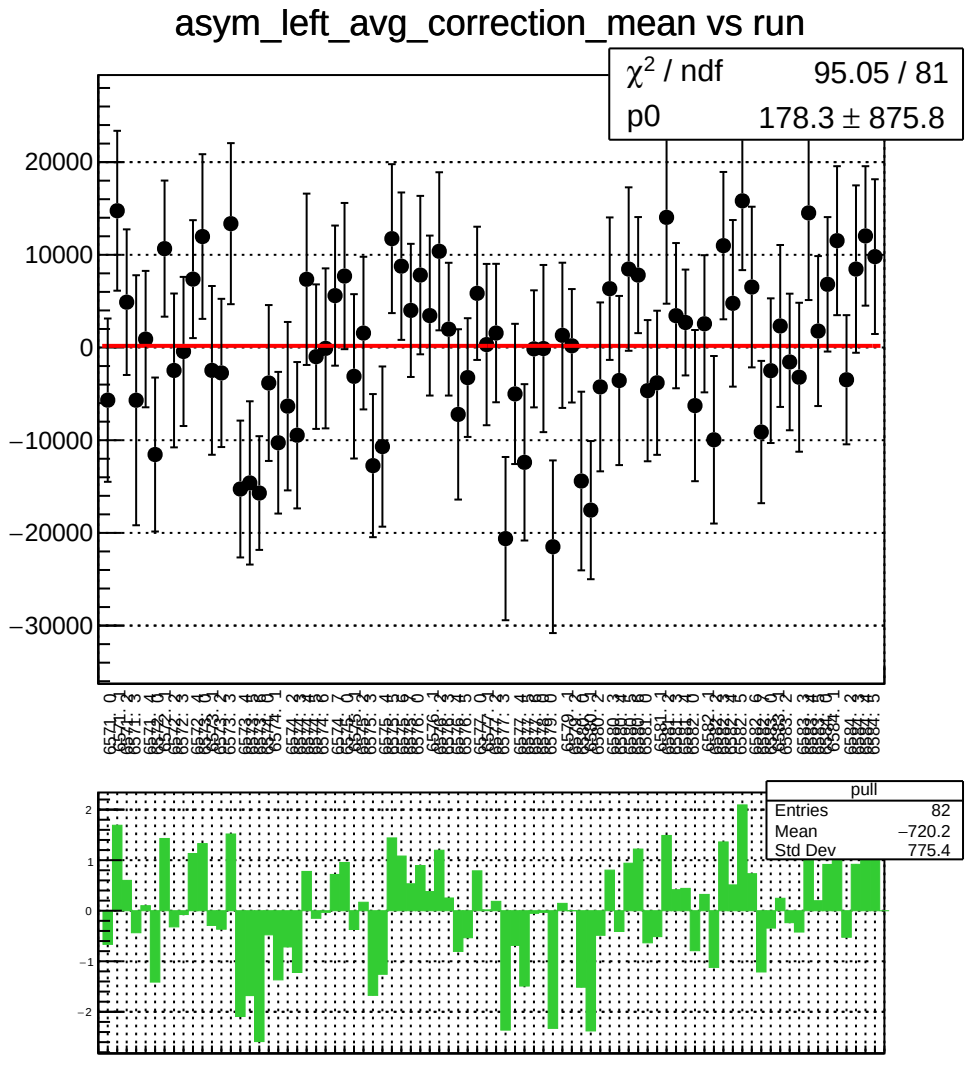

pull1D
Entries 82
Mean 0.01388
Std Dev 0.9513
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

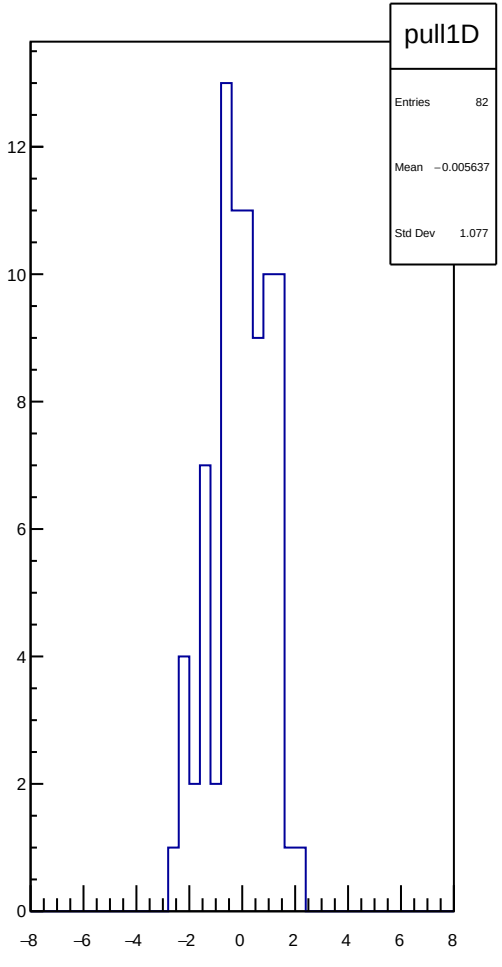

asym_dsr_rms vs run
$\chi^2$ / ndf 208.7 / 81
p0 138.6 ± 0.1098
144
142
140
138
136
134

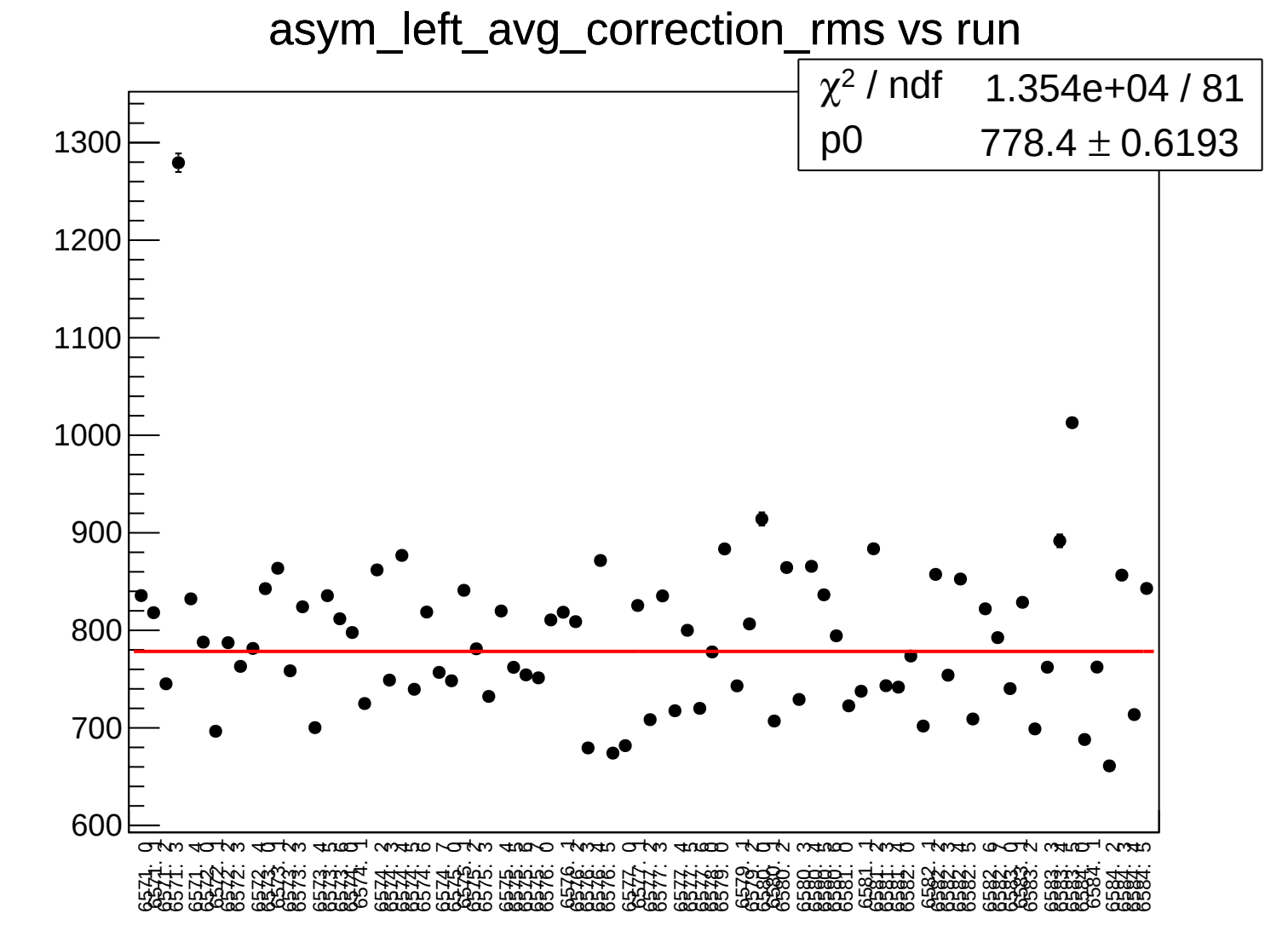

reg_asym_left_avg_mean vs run
χ² / ndf 100.8 / 81
p0 690.1 ± 652.9
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 125.4
Std Dev 92.43
2
1
0
−1
−2
−3

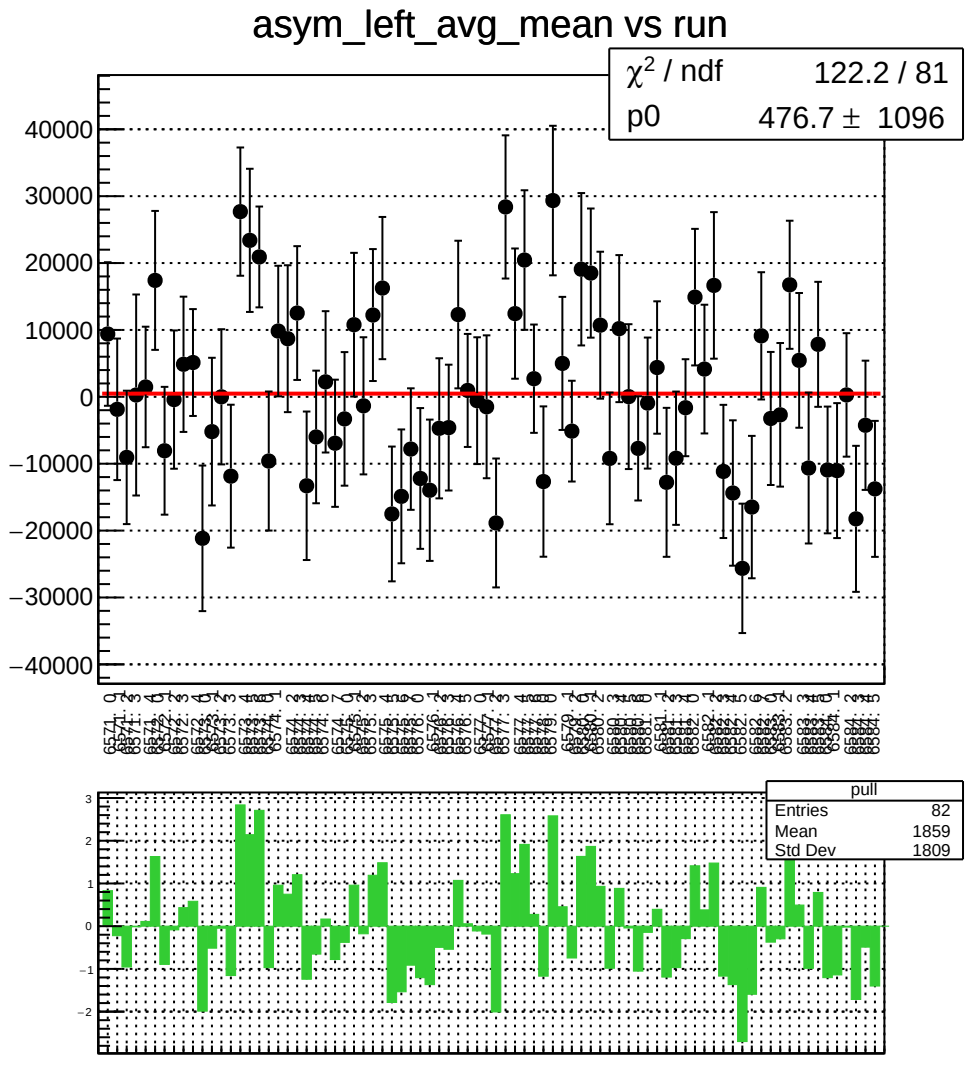

pull1D
Entries 82
Mean −0.01596
Std Dev 1.108
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

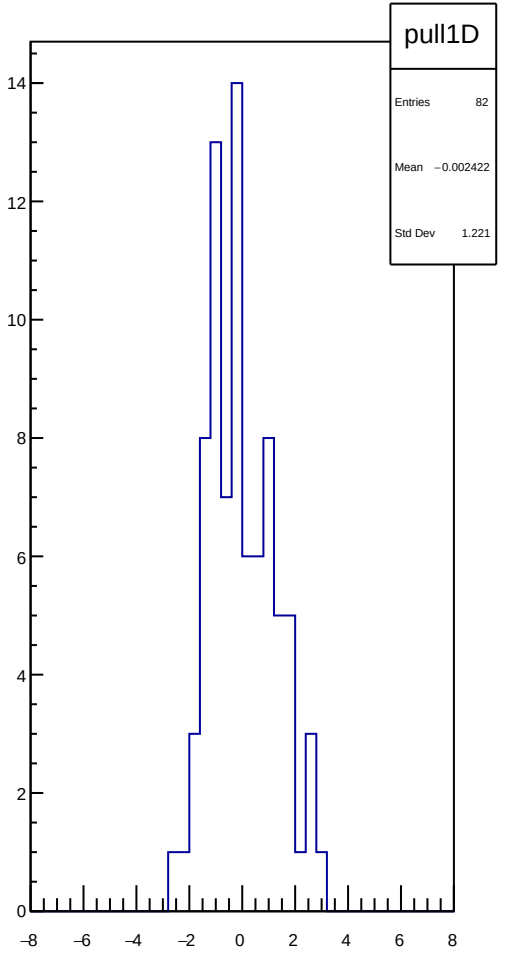

reg_asym_left_avg_rms vs run
χ² / ndf 215.2 / 81
p0 582.7 ± 0.4616
640
630
620
610
600
590
580
570
560

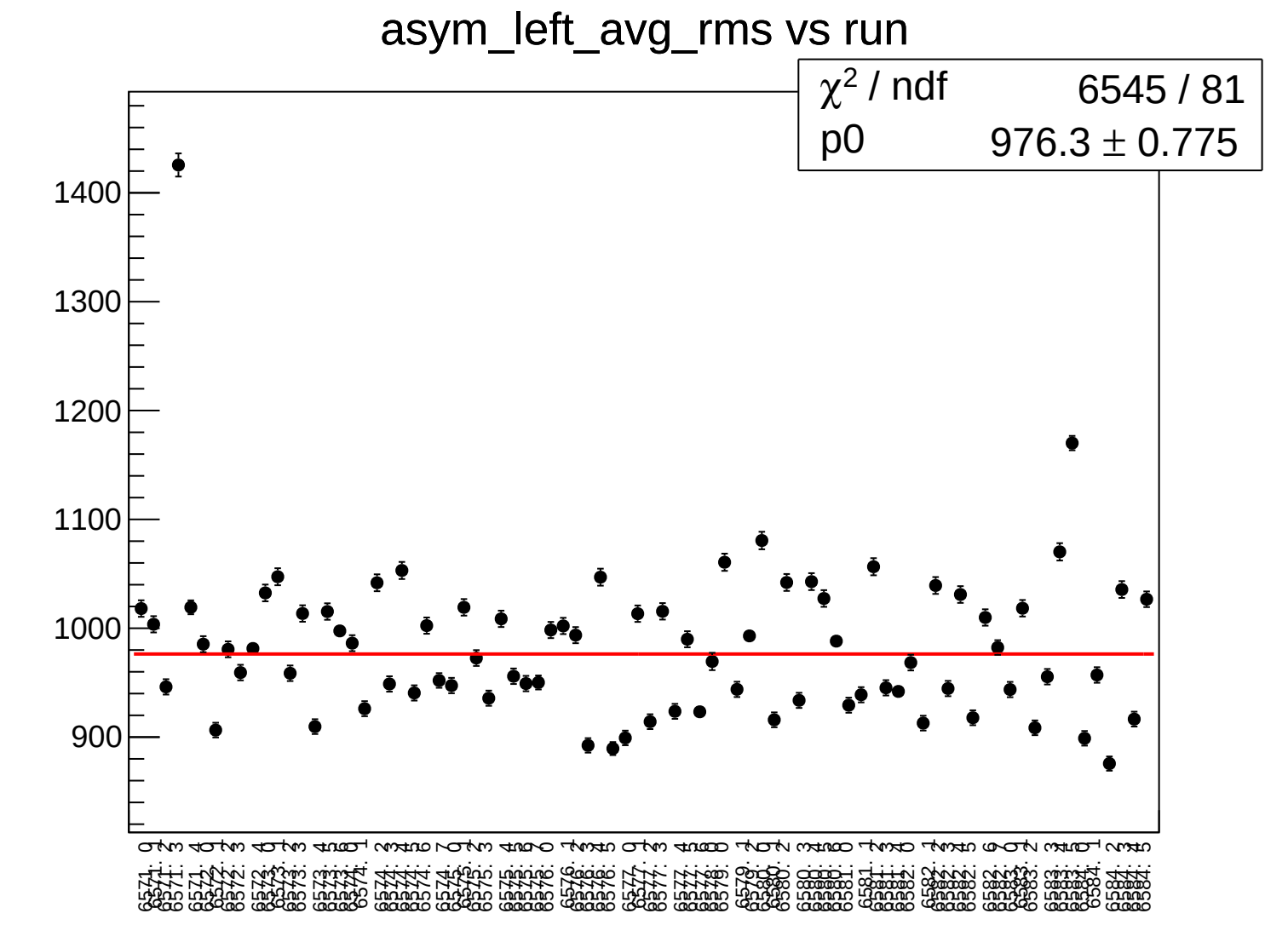

asym_left_avg_correction_mean vs run
χ² / ndf 95.05 / 81
p0 178.3 ± 875.8
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean −720.2
Std Dev 775.4
2
1
0
−1
−2

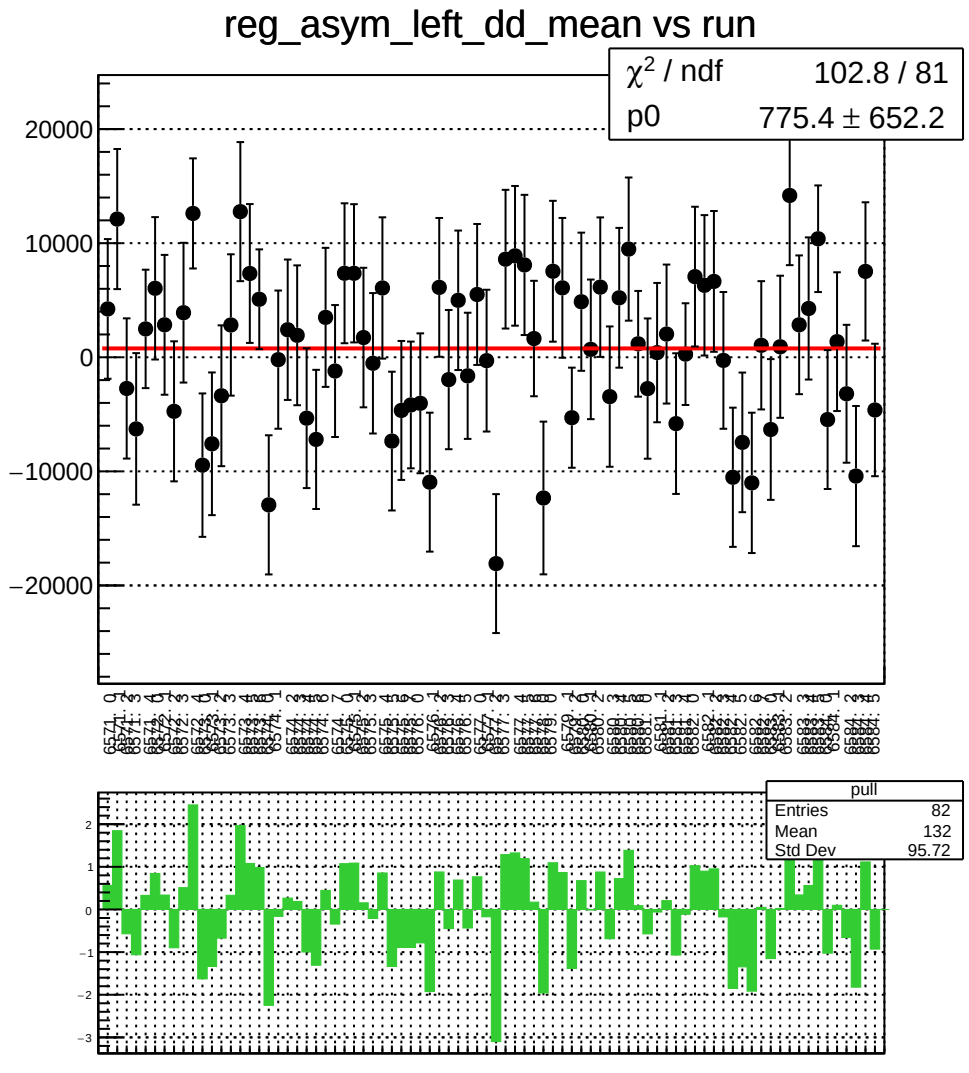

pull1D
Entries 82
Mean −0.005637
Std Dev 1.077
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

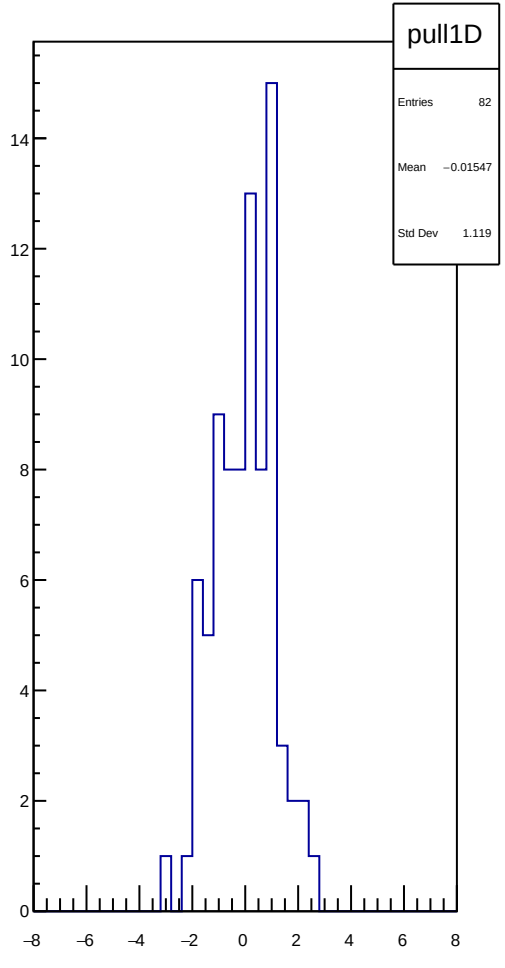

asym_left_avg_correction_rms vs run
χ² / ndf 1.354e+04 / 81
p0 778.4 ± 0.6193
1300
1200
1100
1000
900
800
700
600

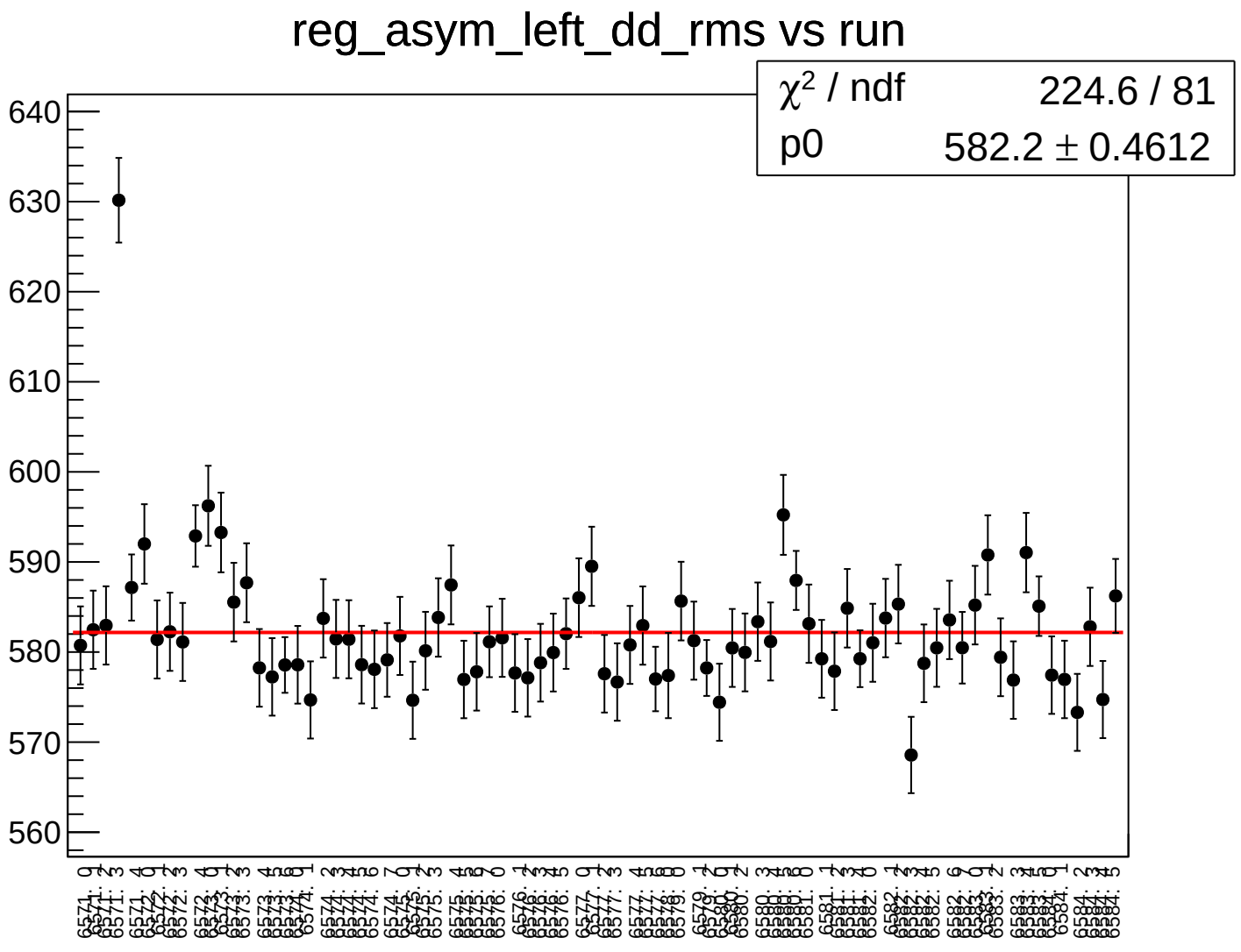

asym_left_avg_mean vs run
χ² / ndf 122.2 / 81
p0 476.7 ± 1096
pull
Entries 82
Mean 1859
Std Dev 1809

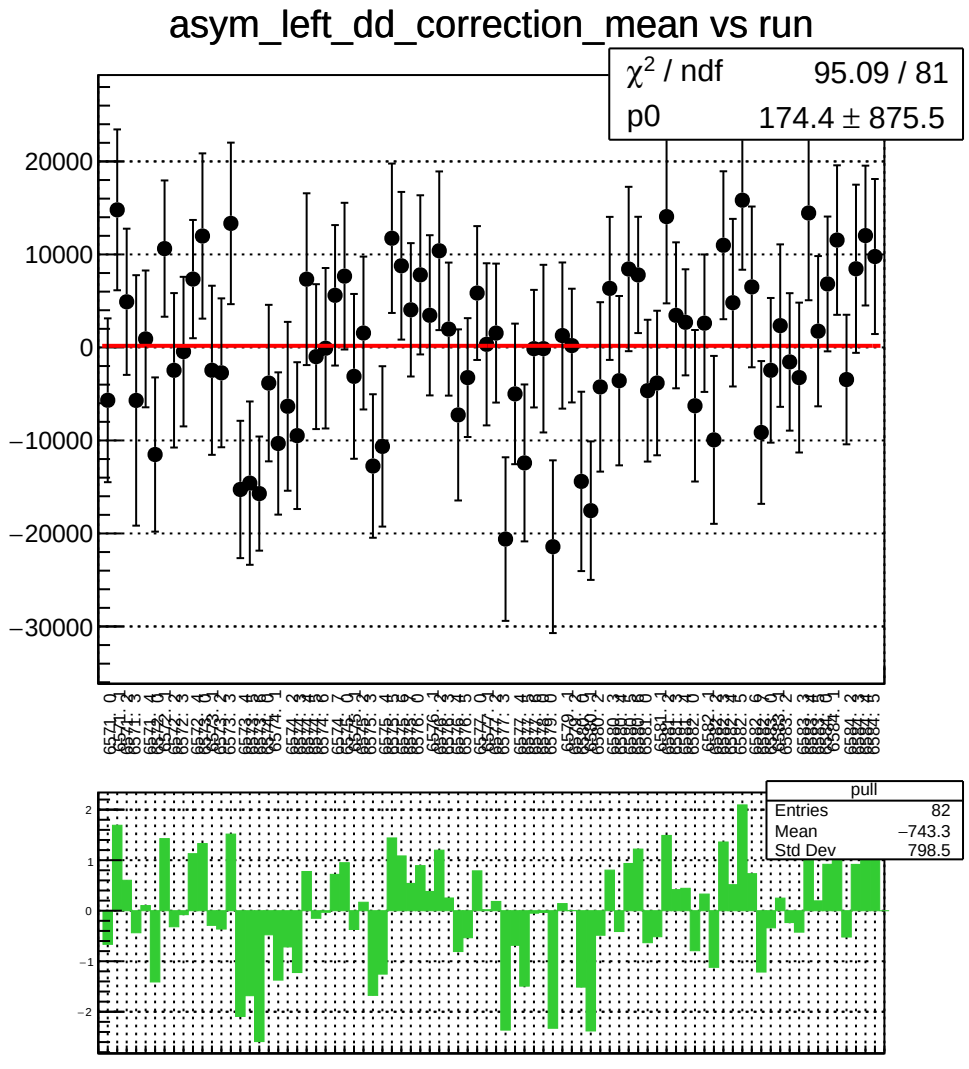

pull1D
Entries 82
Mean −0.002422
Std Dev 1.221

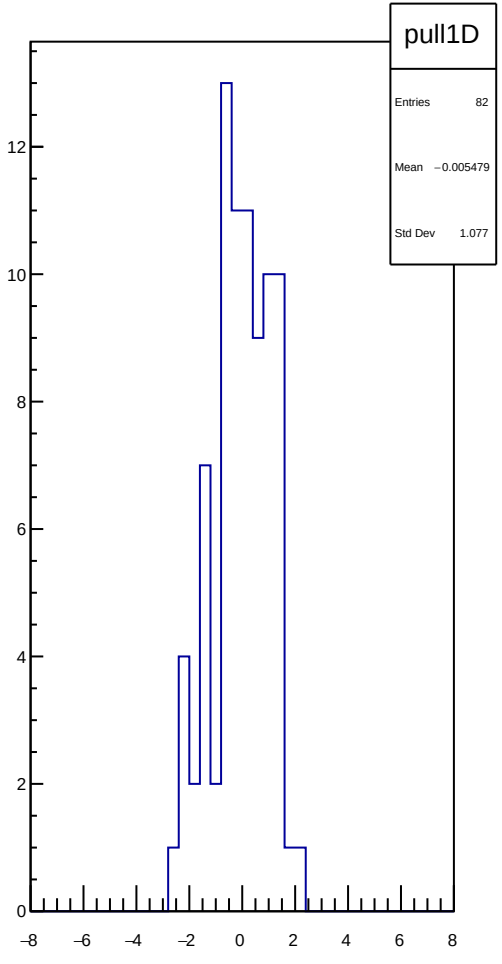

asym_left_avg_rms vs run
χ² / ndf 6545 / 81
p0 976.3 ± 0.775
1400
1300
1200
1100
1000
900

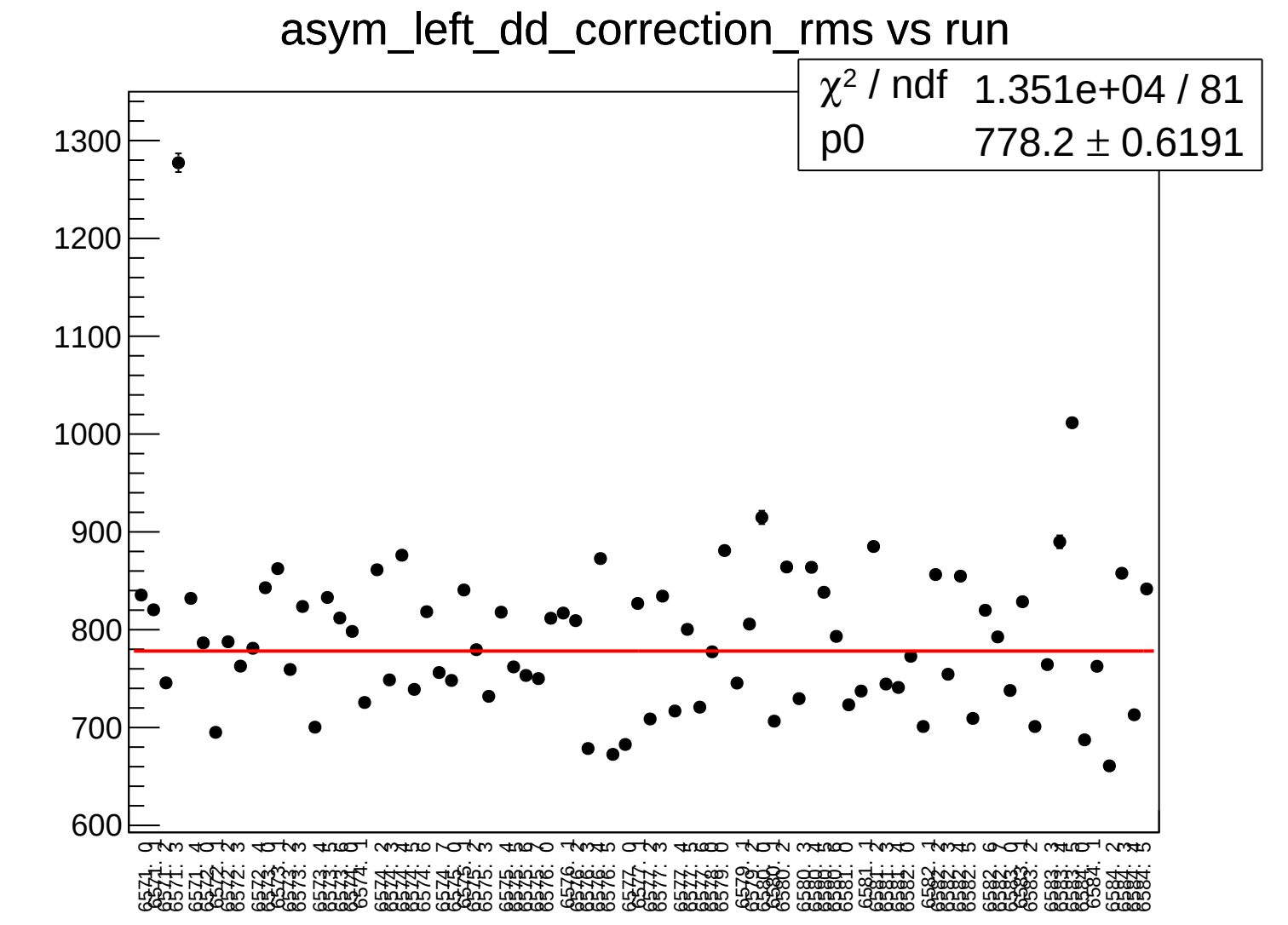

reg_asym_left_dd_mean vs run
χ² / ndf 102.8 / 81
p0 775.4 ± 652.2
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 132
Std Dev 95.72
2
1
0
−1
−2
−3

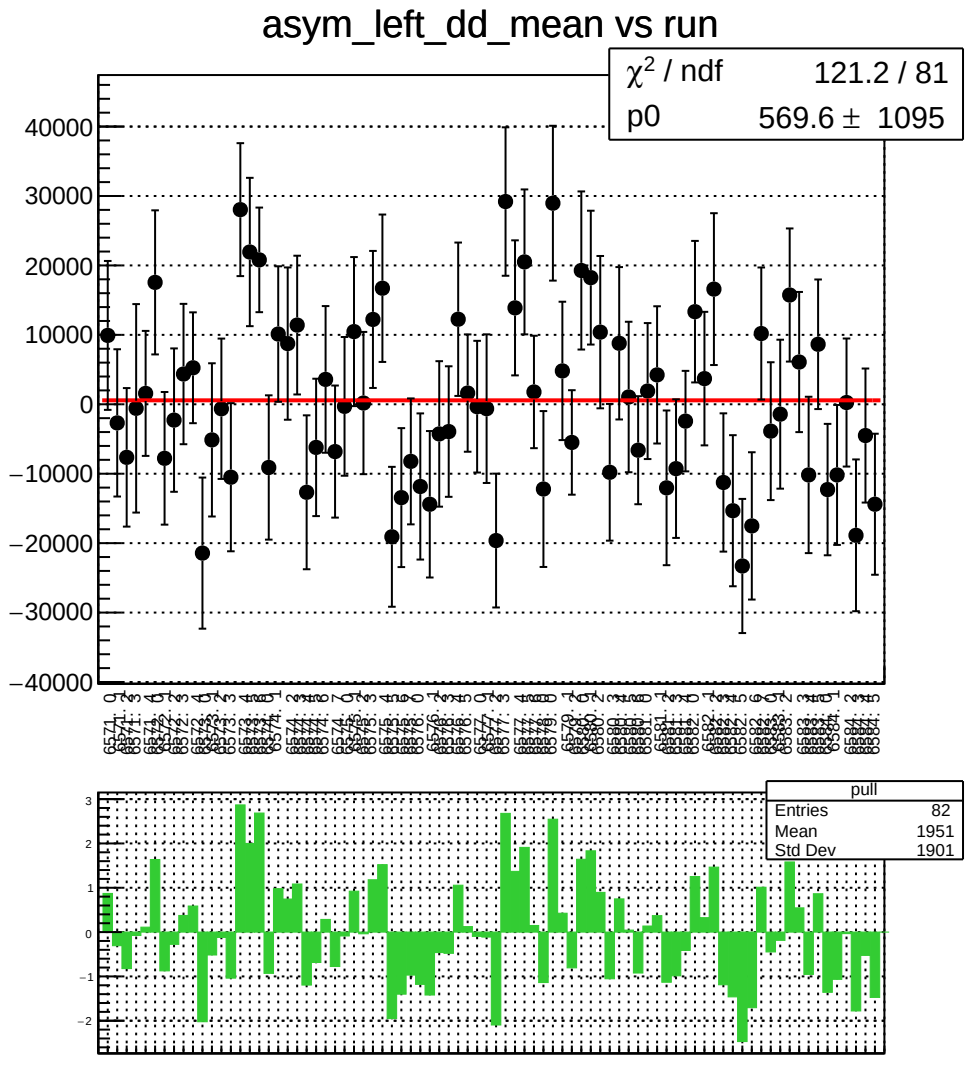

pull1D
Entries 82
Mean −0.01547
Std Dev 1.119
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

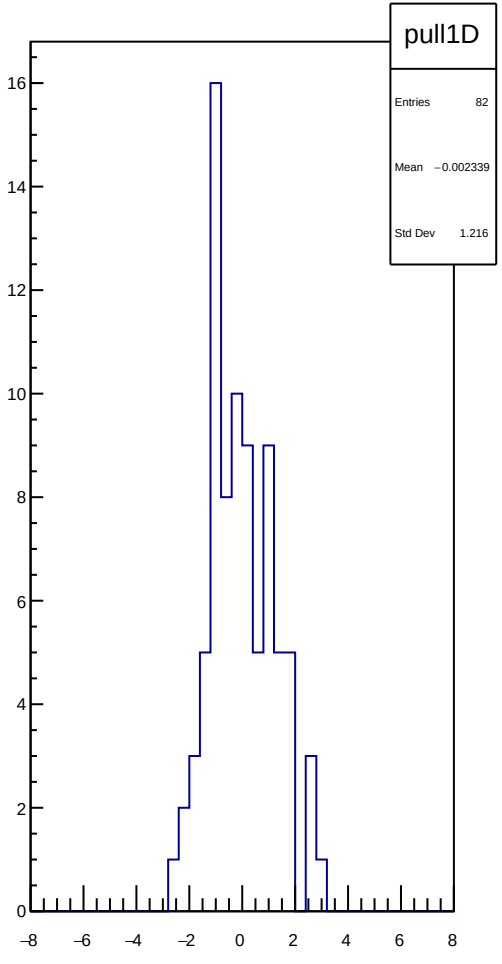

reg_asym_left_dd_rms vs run
χ² / ndf 224.6 / 81
p0 582.2 ± 0.4612
640
630
620
610
600
590
580
570
560

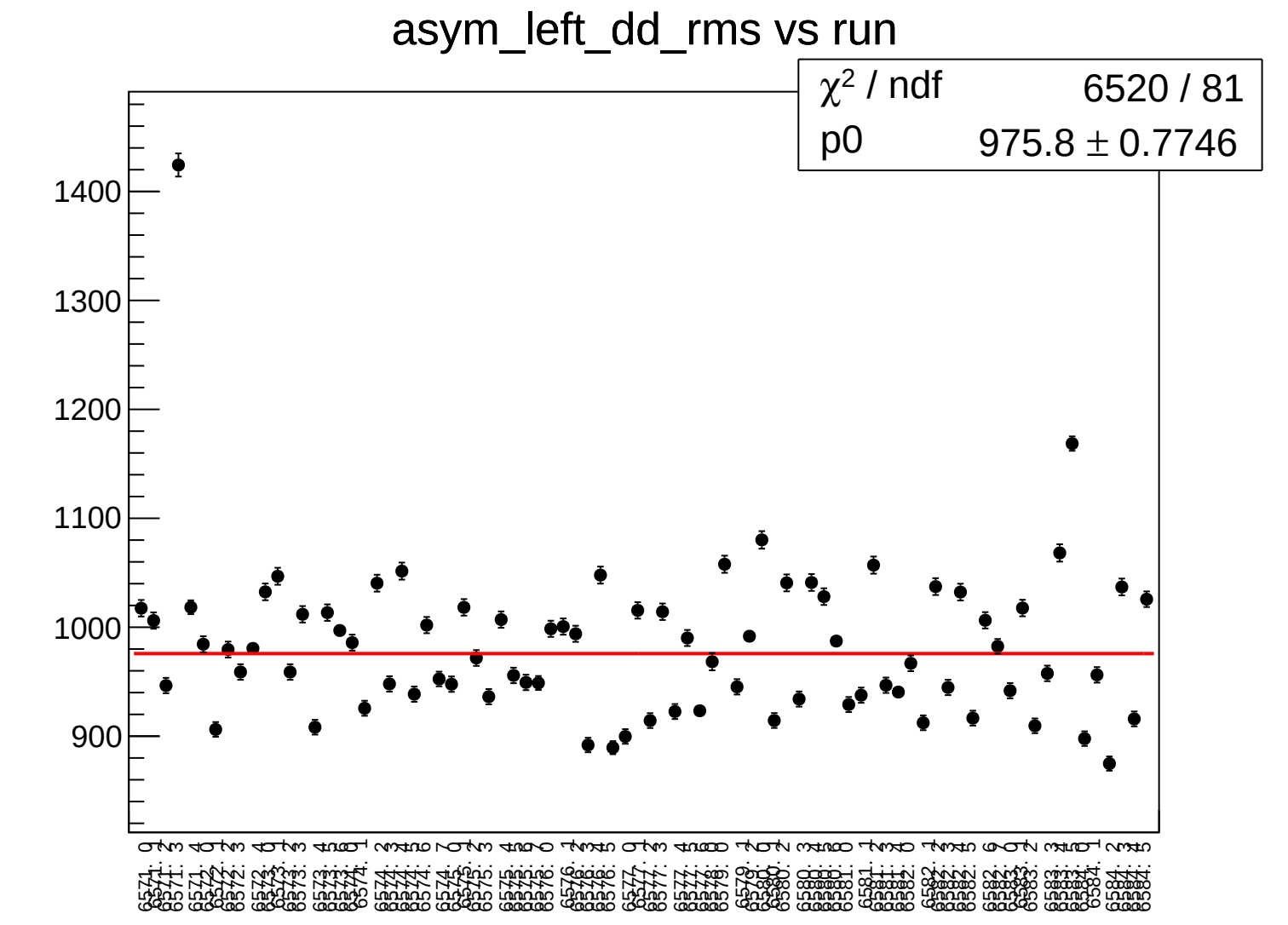

asym_left_dd_correction_mean vs run
χ² / ndf 95.09 / 81
p0 174.4 ± 875.5
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean −743.3
Std Dev 798.5
2
1
0
−1
−2

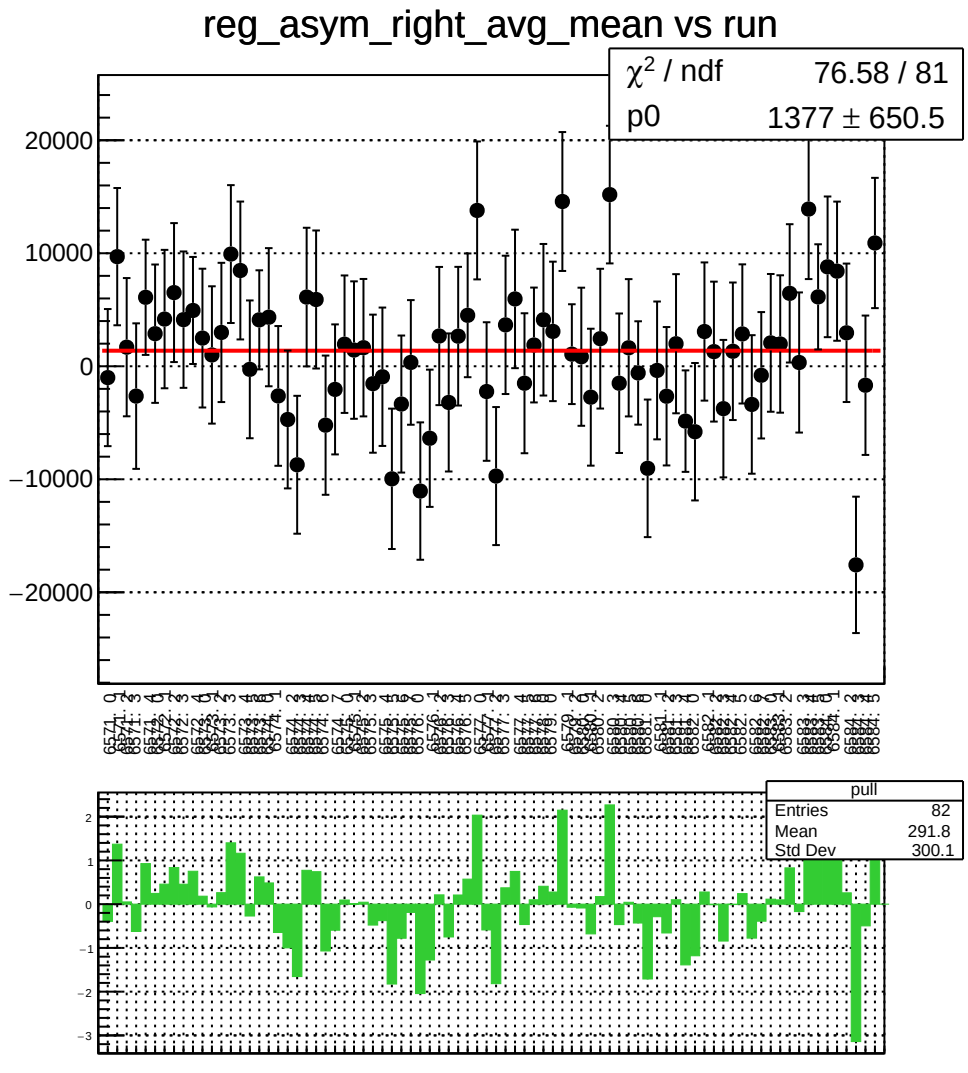

pull1D
Entries 82
Mean −0.005479
Std Dev 1.077
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

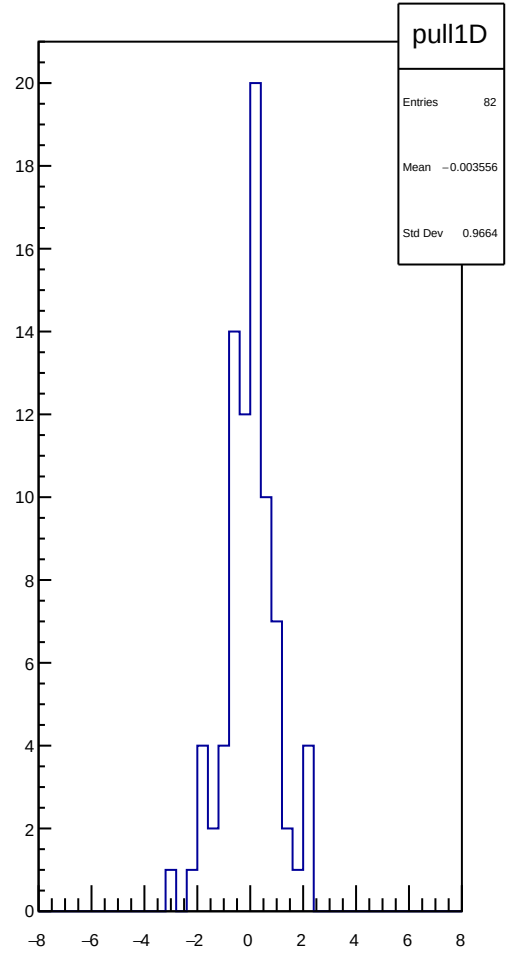

asym_left_dd_correction_rms vs run
χ² / ndf 1.351e+04 / 81
p0 778.2 ± 0.6191
1300
1200
1100
1000
900
800
700
600

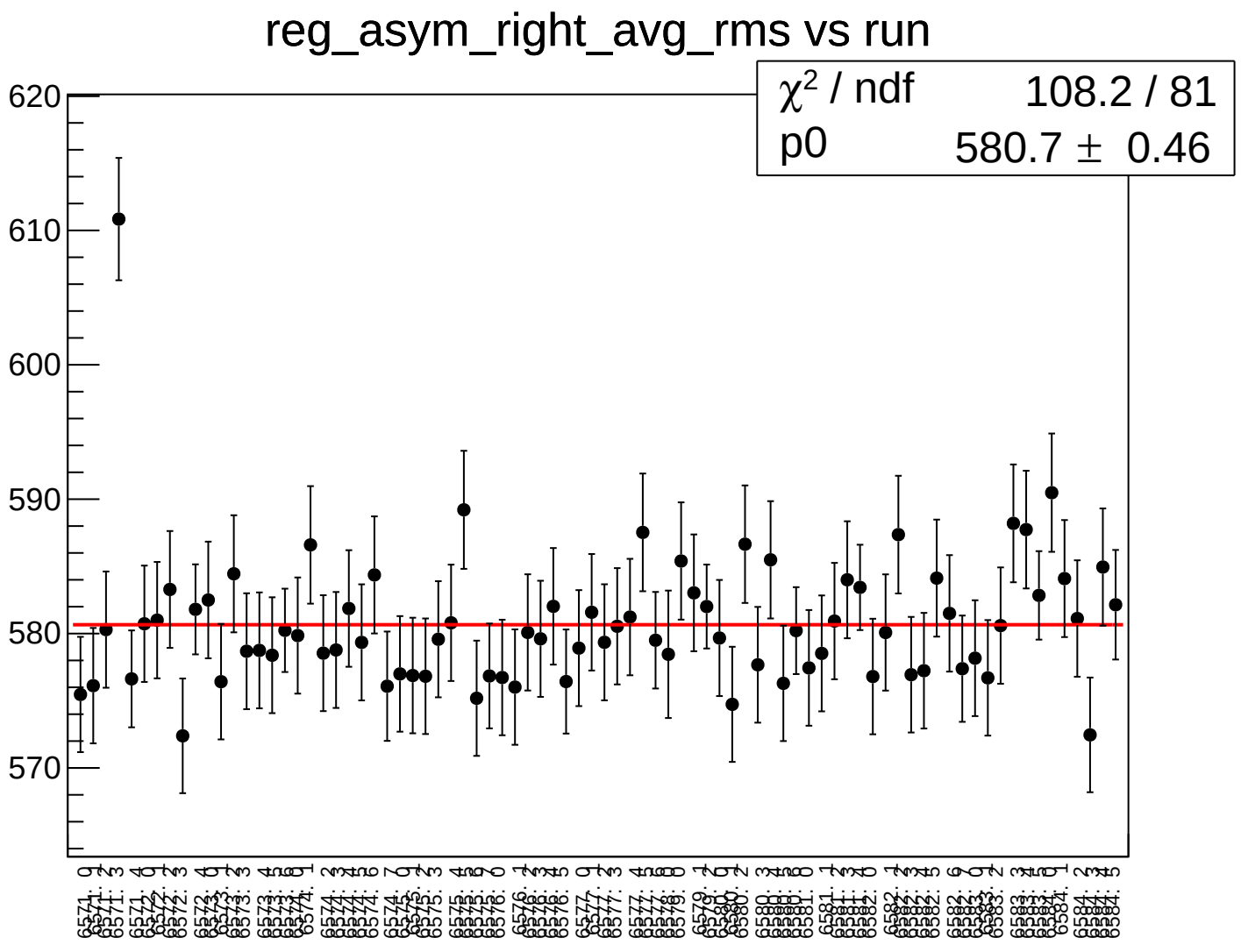

asym_left_dd_mean vs run
$\chi^2$ / ndf 121.2 / 81
p0 569.6 ± 1095
pull
Entries 82
Mean 1951
Std Dev 1901

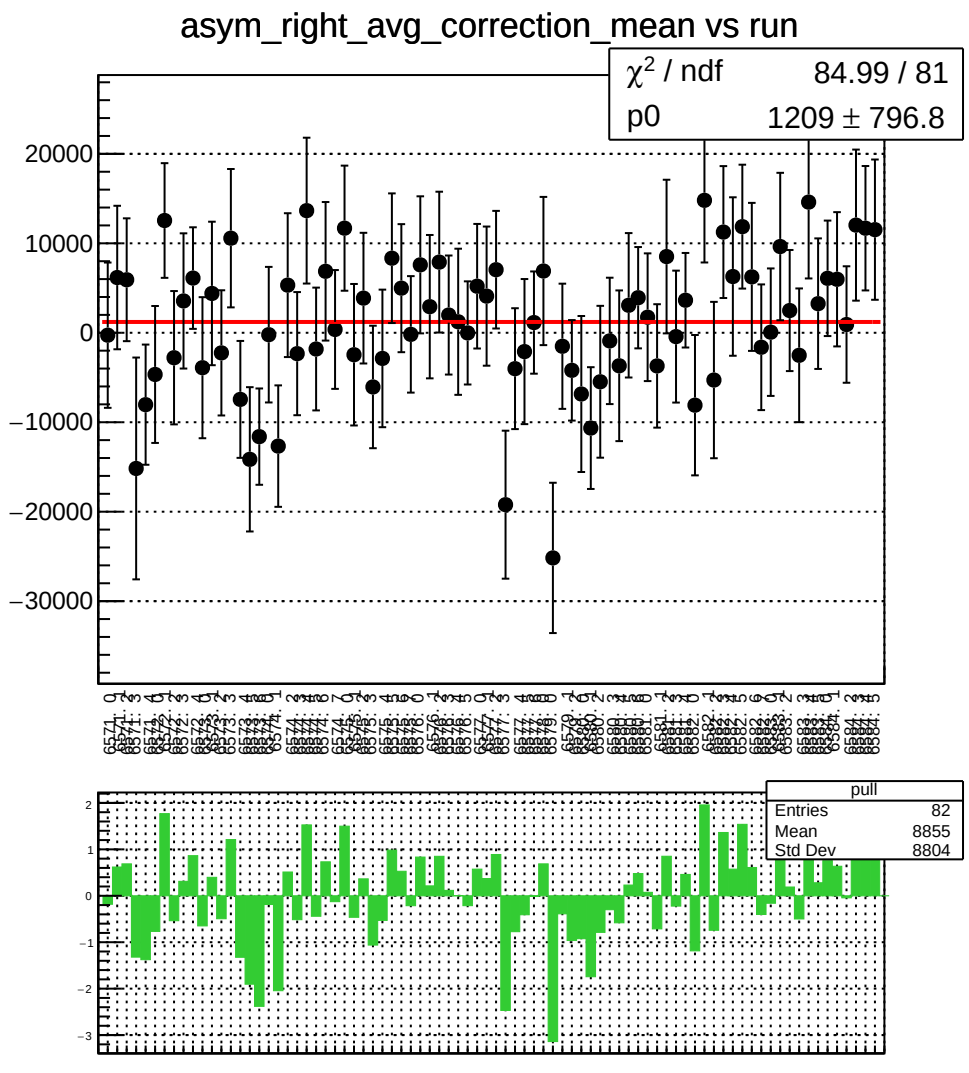

pull1D
Entries 82
Mean −0.002339
Std Dev 1.216

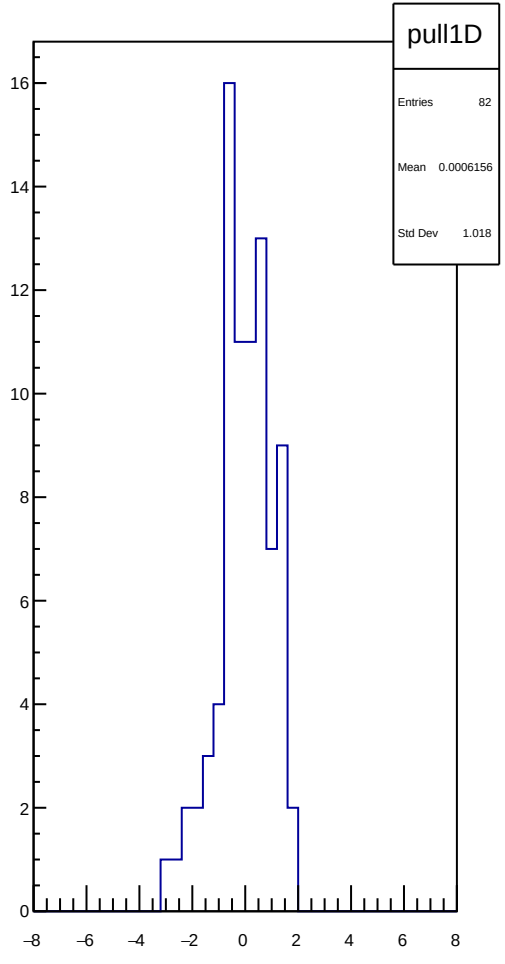

asym_left_dd_rms vs run
χ² / ndf 6520 / 81
p0 975.8 ± 0.7746
1400
1300
1200
1100
1000
900

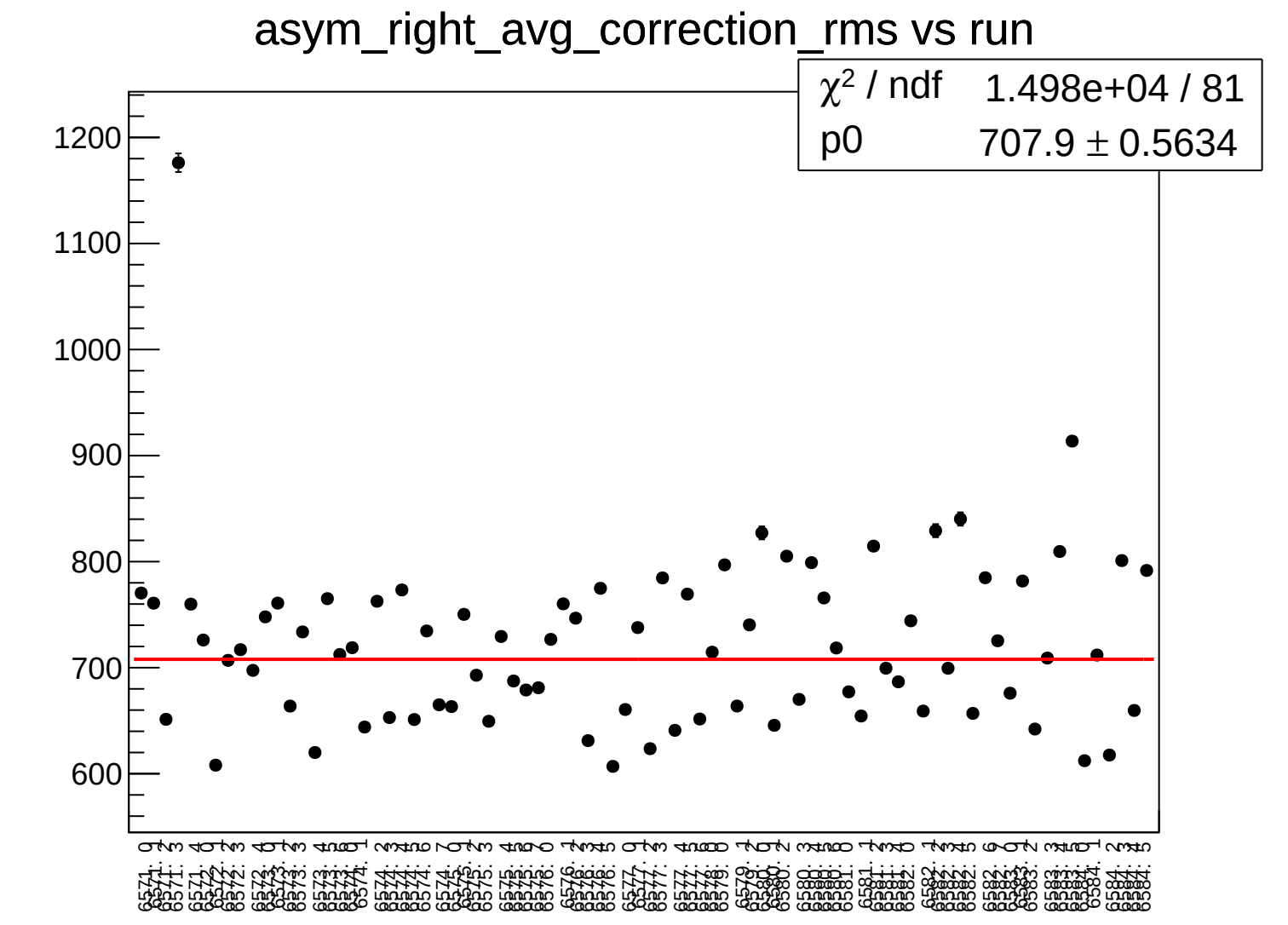

reg_asym_right_avg_mean vs run
χ² / ndf 76.58 / 81
p0 1377 ± 650.5
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 291.8
Std Dev 300.1
2
1
0
−1
−2
−3

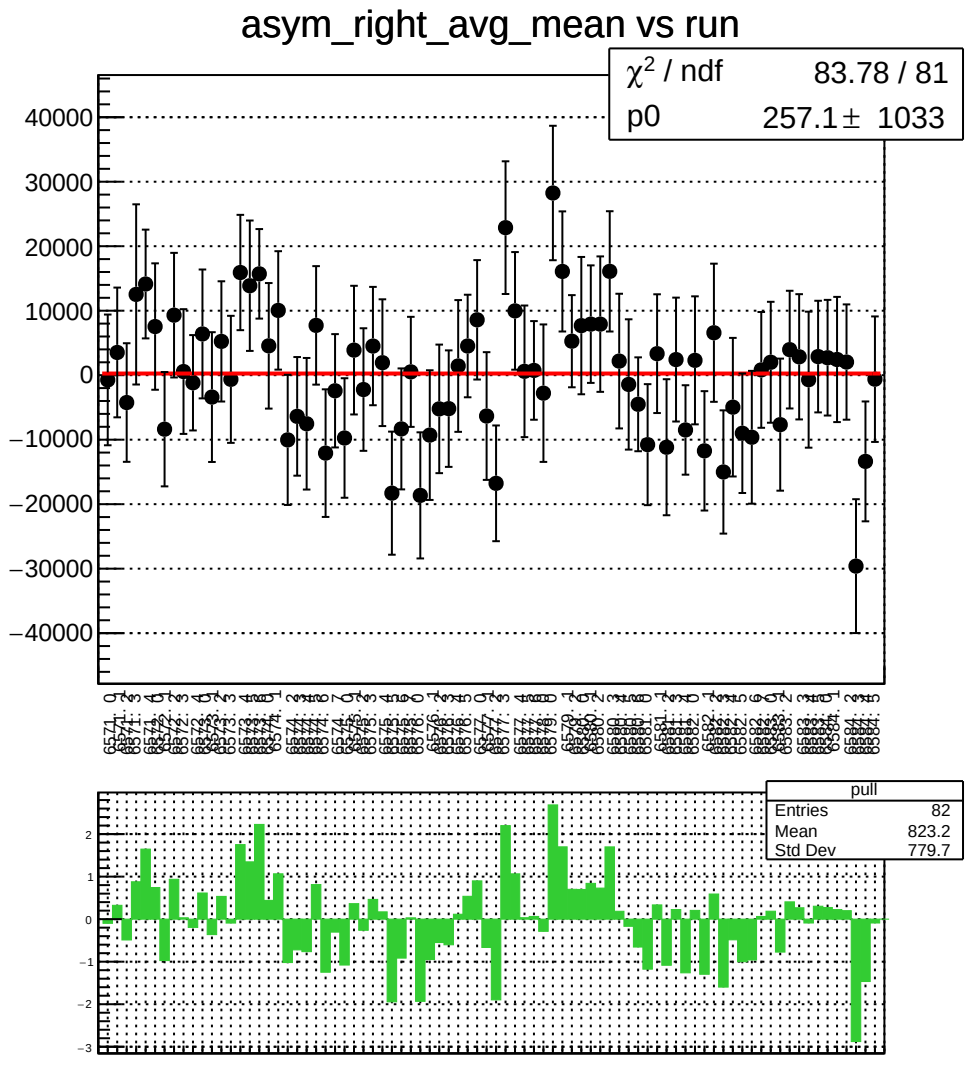

pull1D
Entries 82
Mean −0.003556
Std Dev 0.9664
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

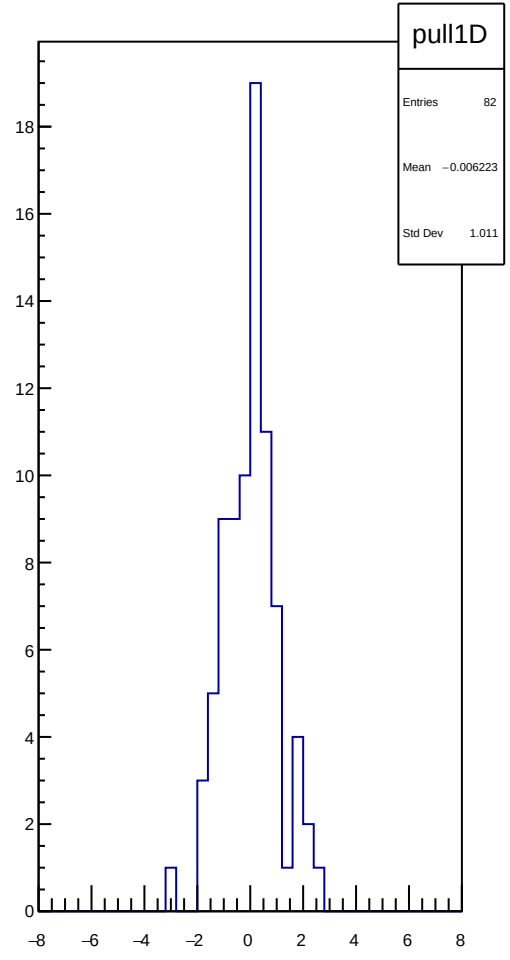

reg_asym_right_avg_rms vs run
χ² / ndf 108.2 / 81
p0 580.7 ± 0.46
620
610
600
590
580
570

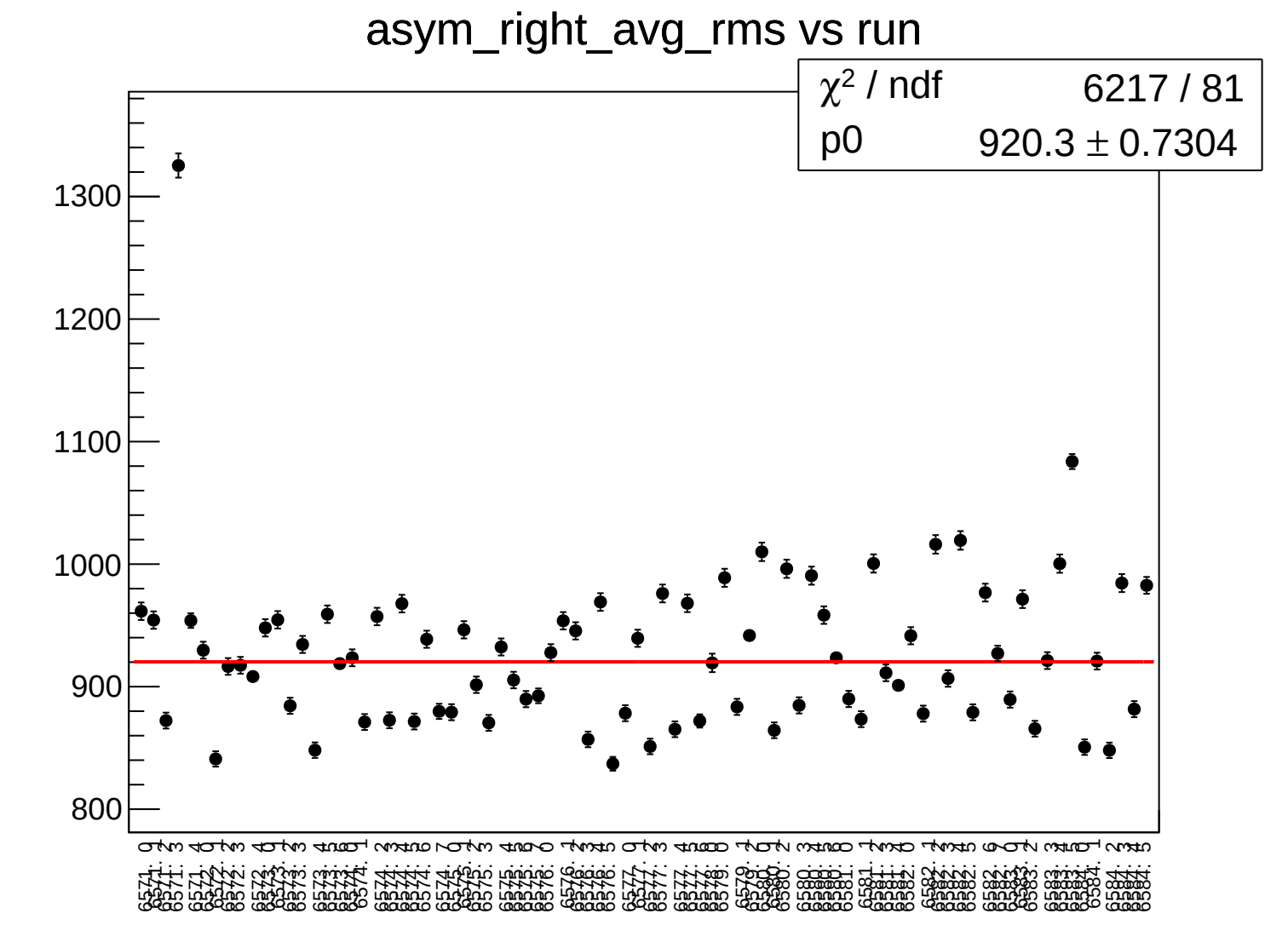

asym_right_avg_correction_mean vs run
χ² / ndf 84.99 / 81
p0 1209 ± 796.8
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 8855
Std Dev 8804
2
1
0
−1
−2
−3

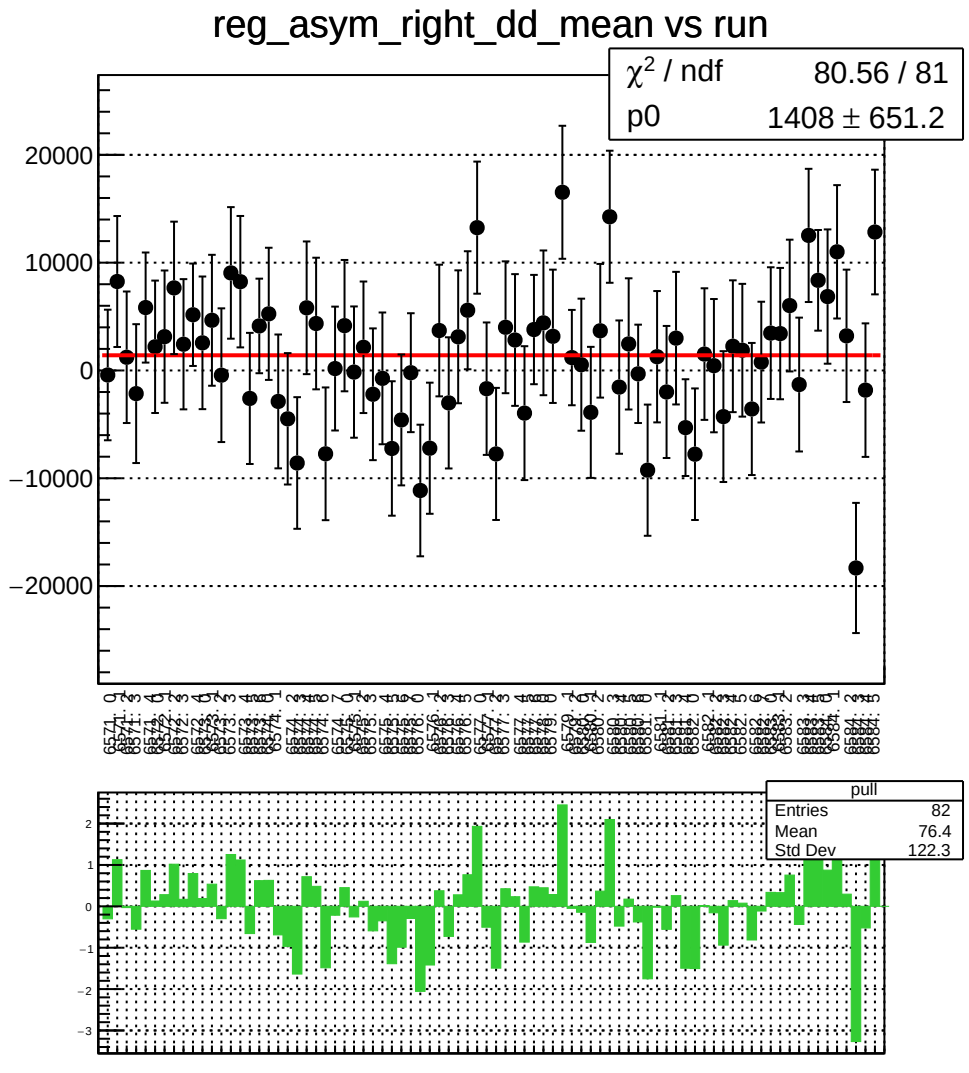

pull1D
Entries 82
Mean 0.0006156
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

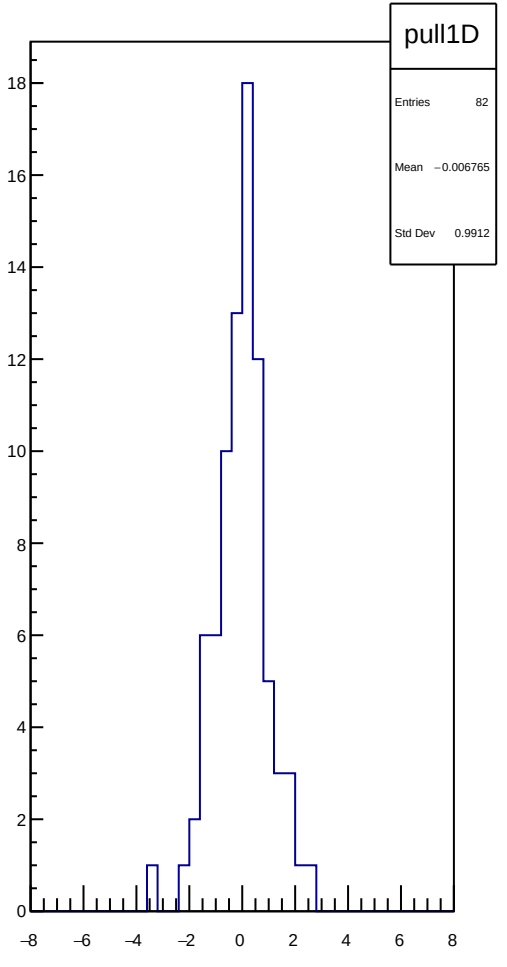

asym_right_avg_correction_rms vs run
χ² / ndf 1.498e+04 / 81
p0 707.9 ± 0.5634
1200
1100
1000
900
800
700
600

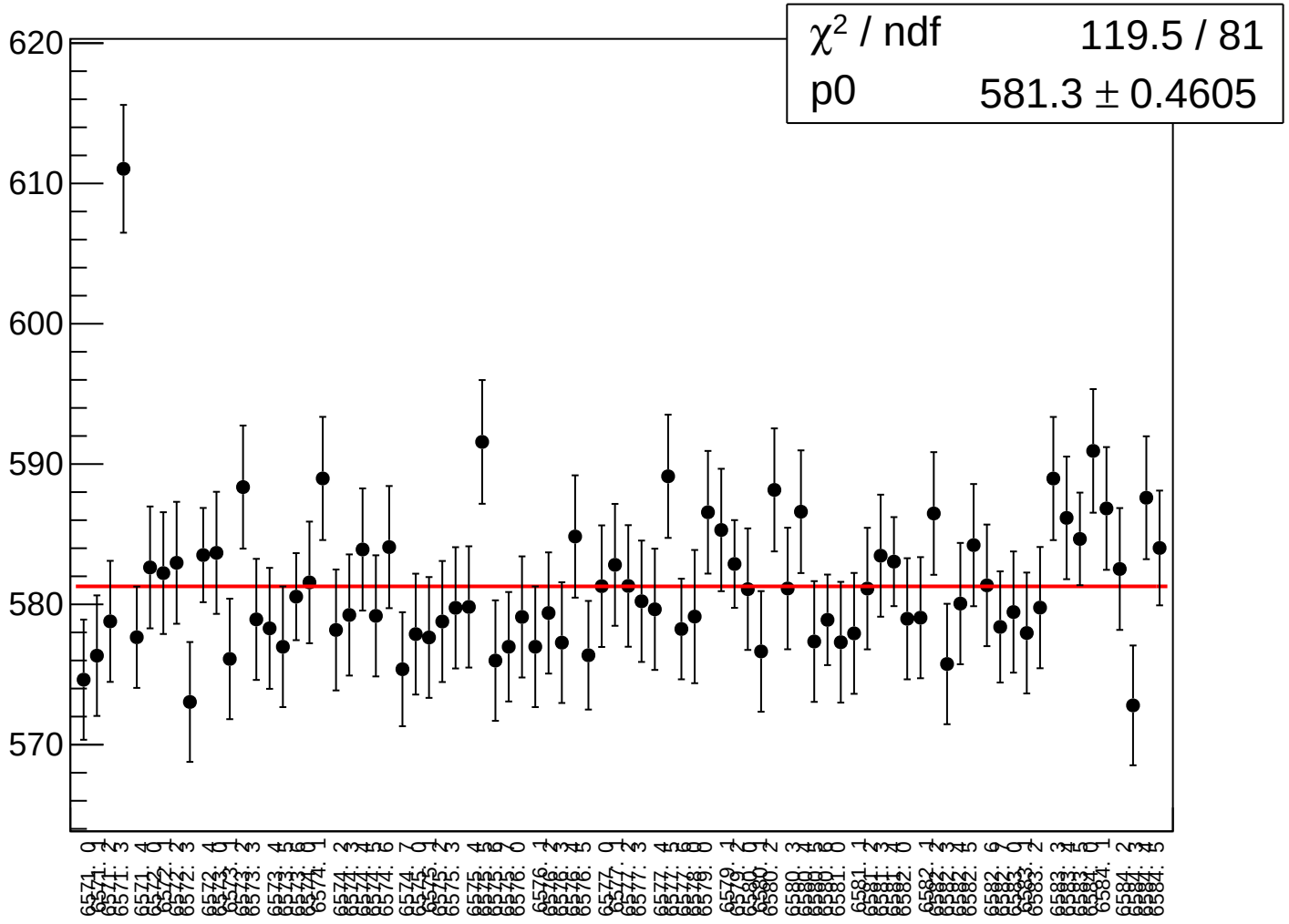

asym_right_avg_mean vs run
χ² / ndf 83.78 / 81
p0 257.1± 1033
pull
Entries 82
Mean 823.2
Std Dev 779.7

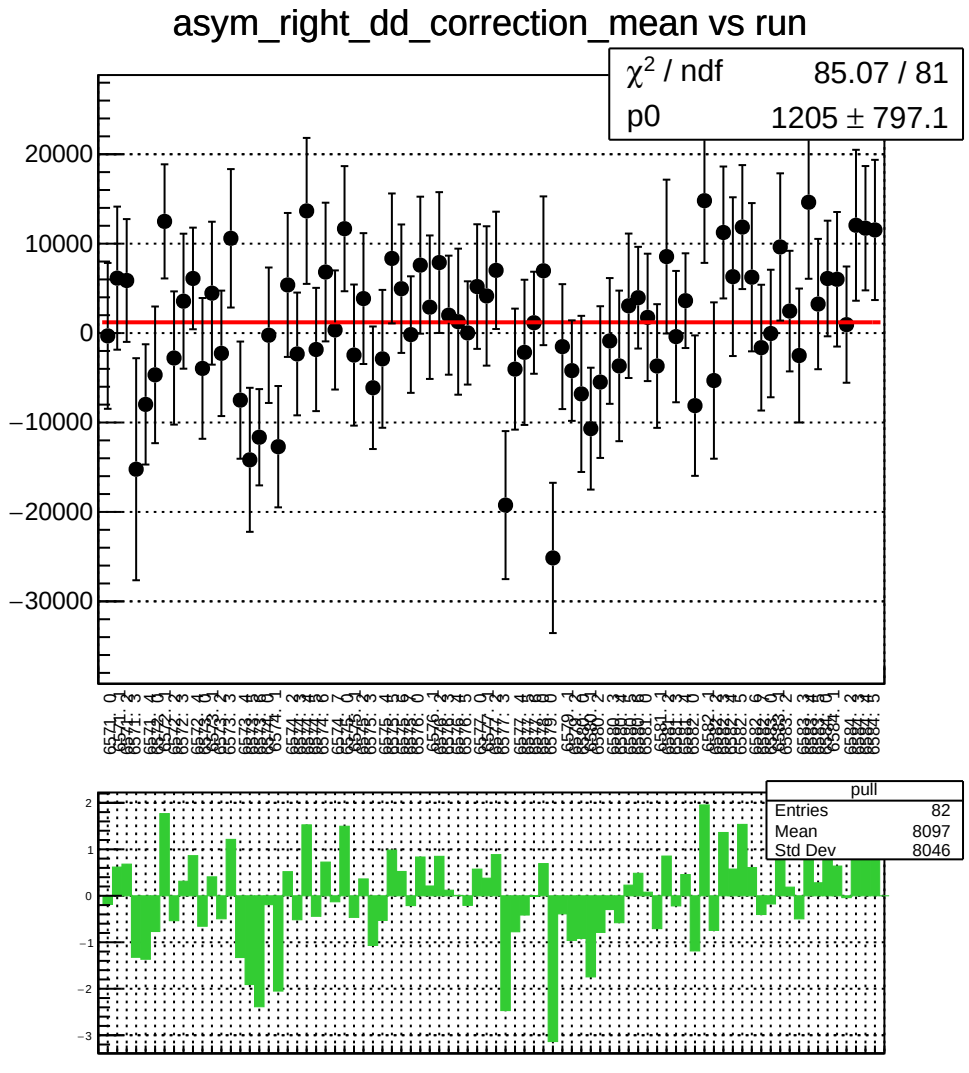

pull1D
Entries 82
Mean −0.006223
Std Dev 1.011

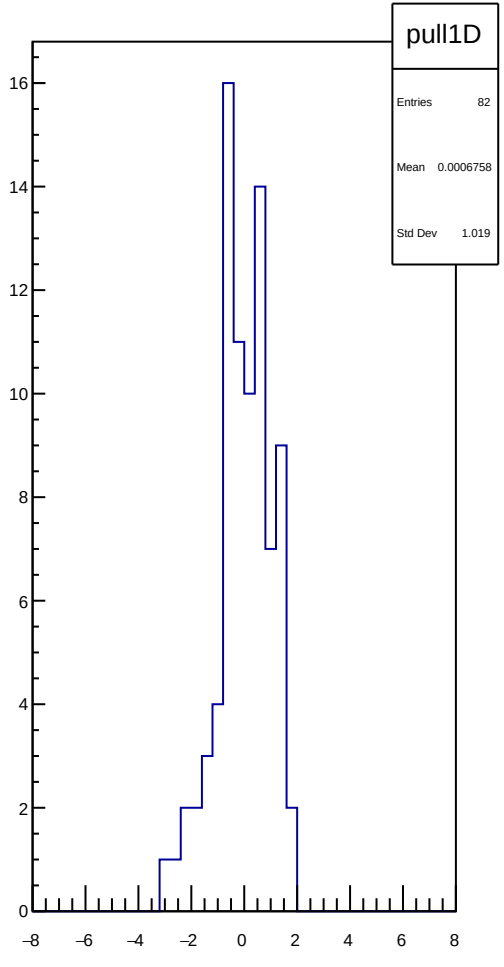

asym_right_avg_rms vs run
χ² / ndf 6217 / 81
p0 920.3 ± 0.7304
1300
1200
1100
1000
900
800

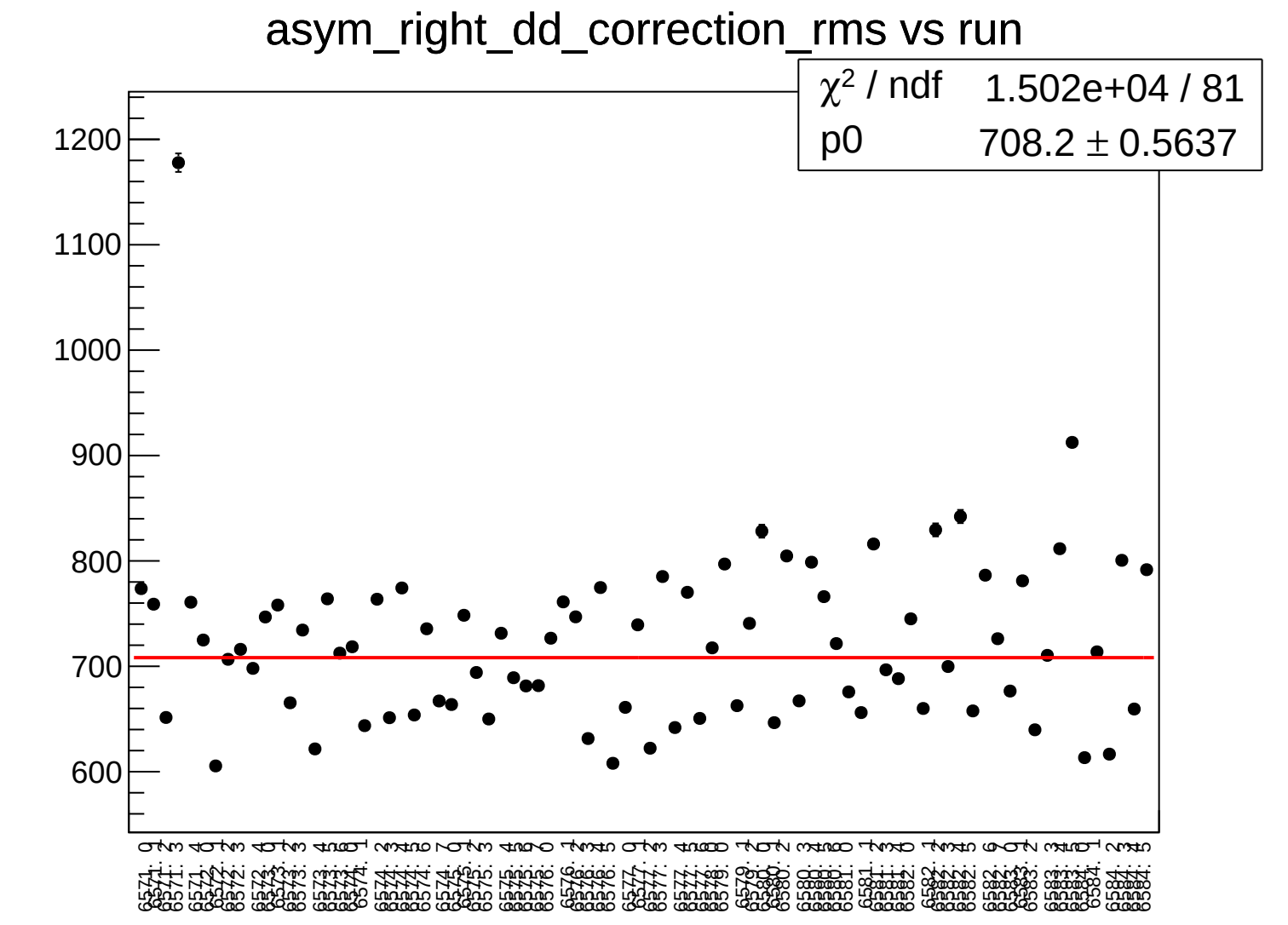

reg_asym_right_dd_mean vs run
χ² / ndf 80.56 / 81
p0 1408 ± 651.2
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 76.4
Std Dev 122.3
2
1
0
−1
−2
−3

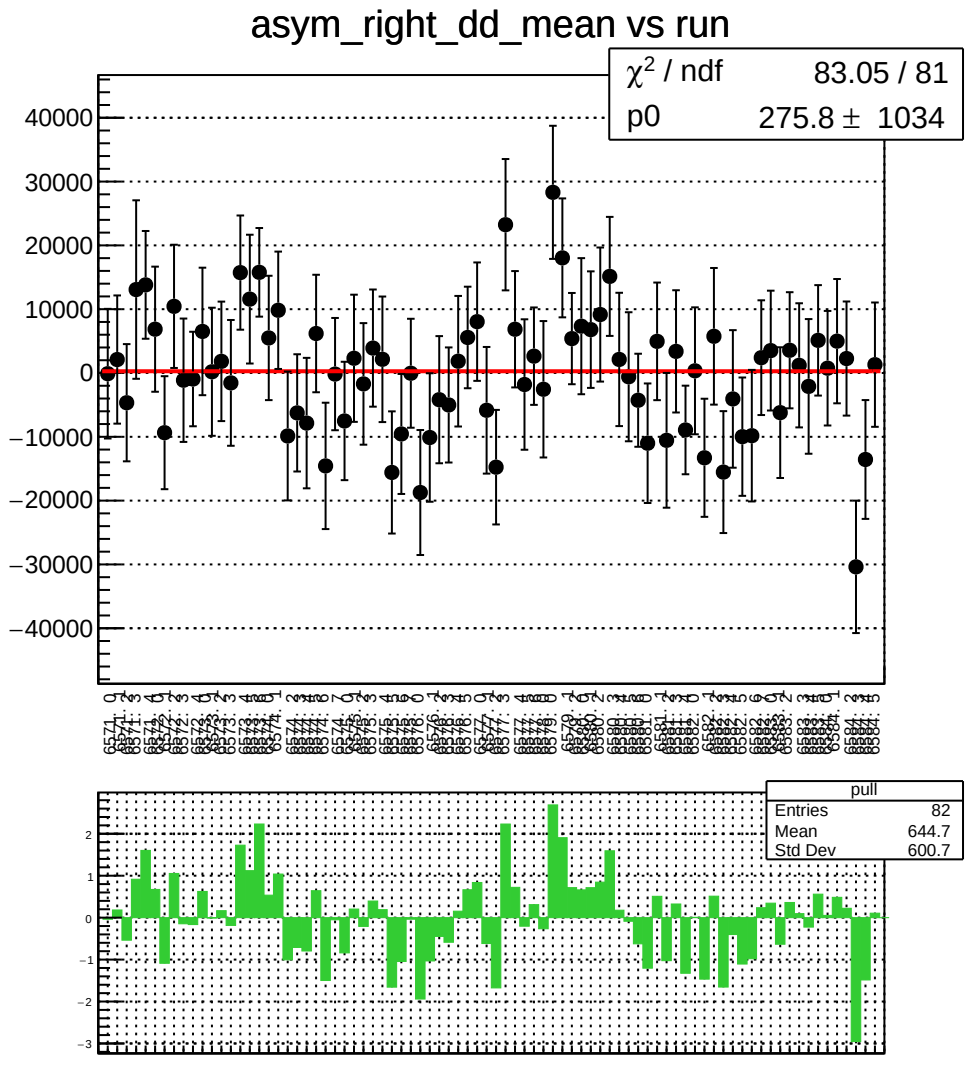

pull1D
Entries 82
Mean −0.006765
Std Dev 0.9912
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

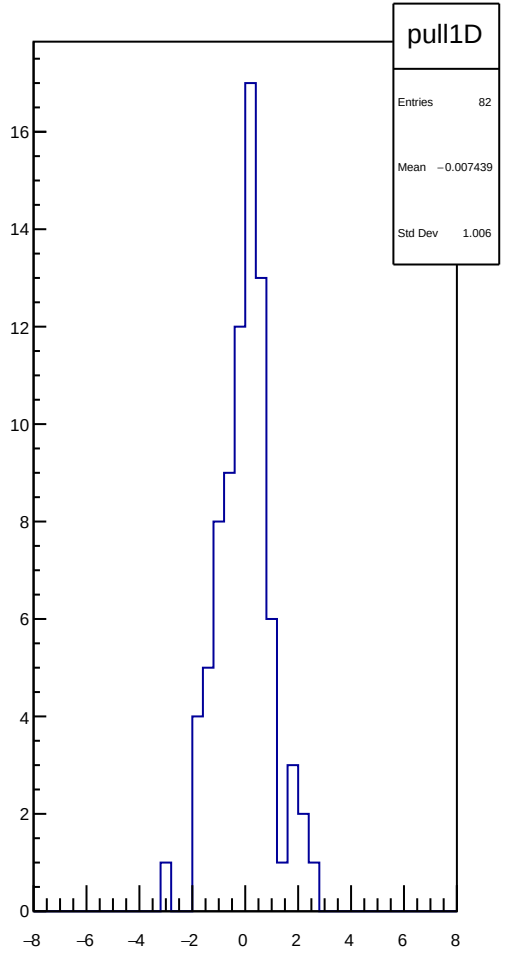

reg_asym_right_dd_rms vs run
χ² / ndf 119.5 / 81
p0 581.3 ± 0.4605
620
610
600
590
580
570

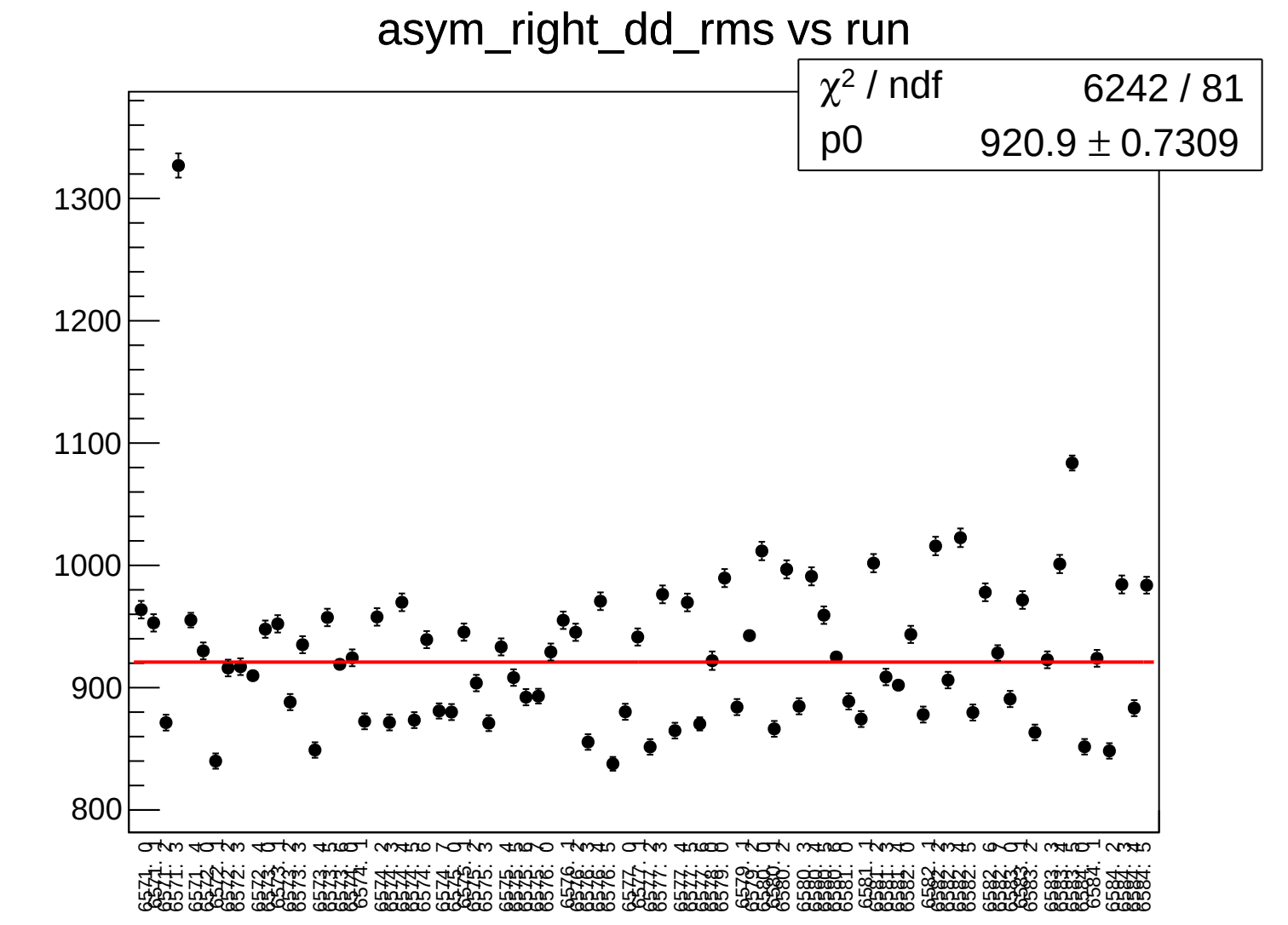

asym_right_dd_correction_mean vs run
χ² / ndf 85.07 / 81
p0 1205 ± 797.1
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 8097
Std Dev 8046
2
1
0
−1
−2
−3

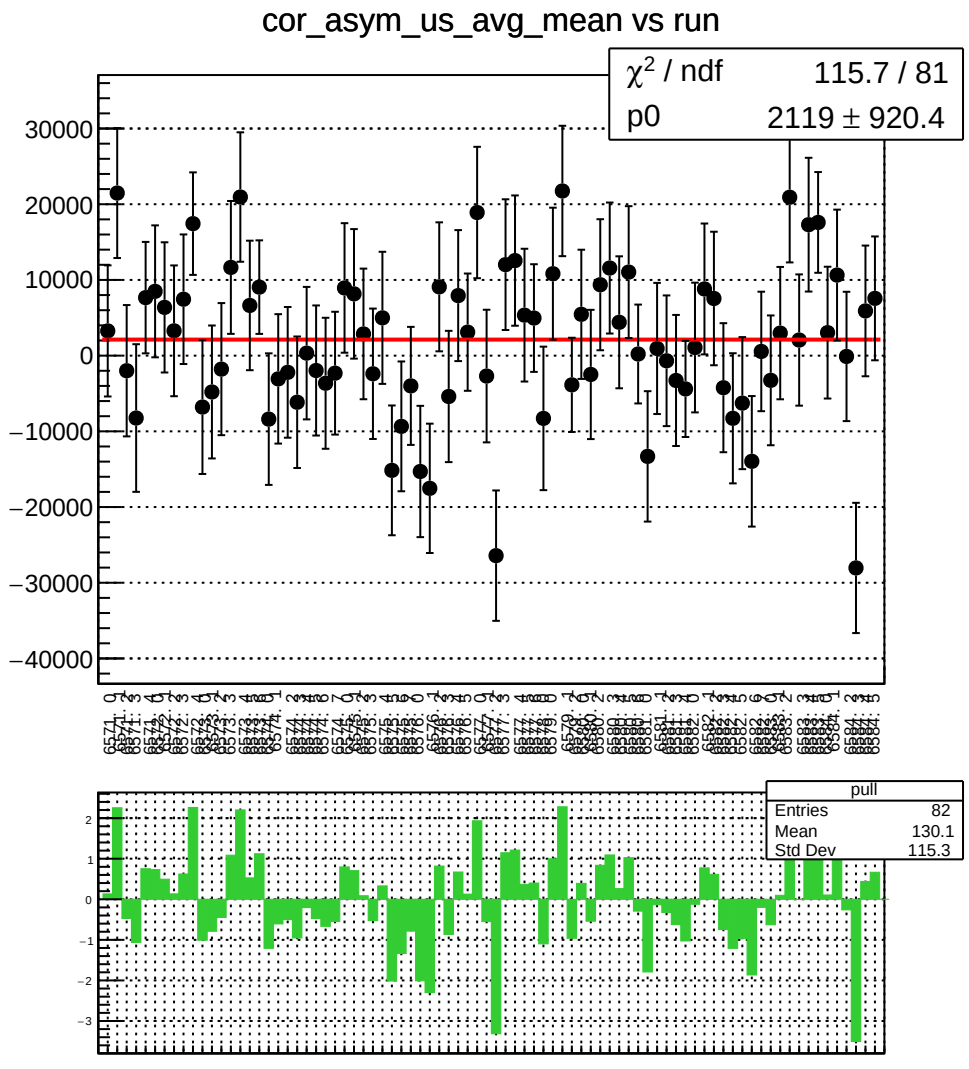

pull1D
Entries 82
Mean 0.0006758
Std Dev 1.019
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

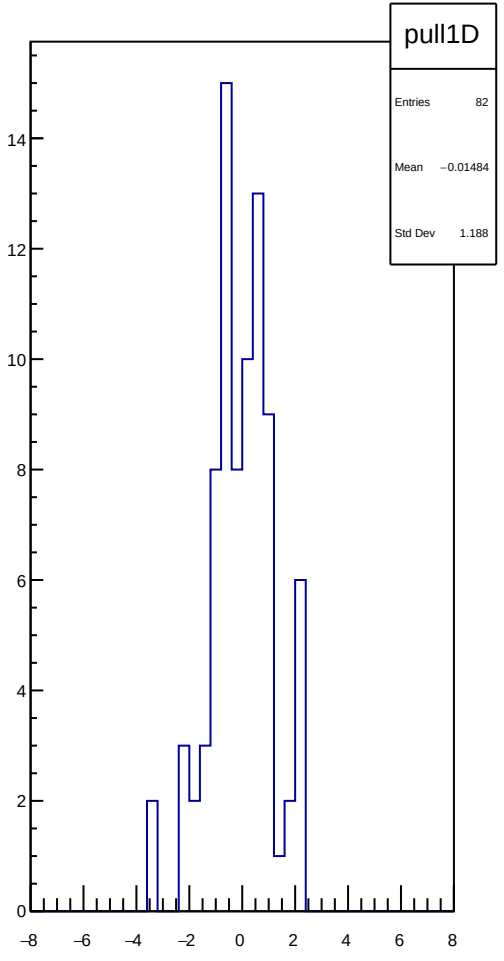

asym_right_dd_correction_rms vs run
χ² / ndf 1.502e+04 / 81
p0 708.2 ± 0.5637
1200
1100
1000
900
800
700
600

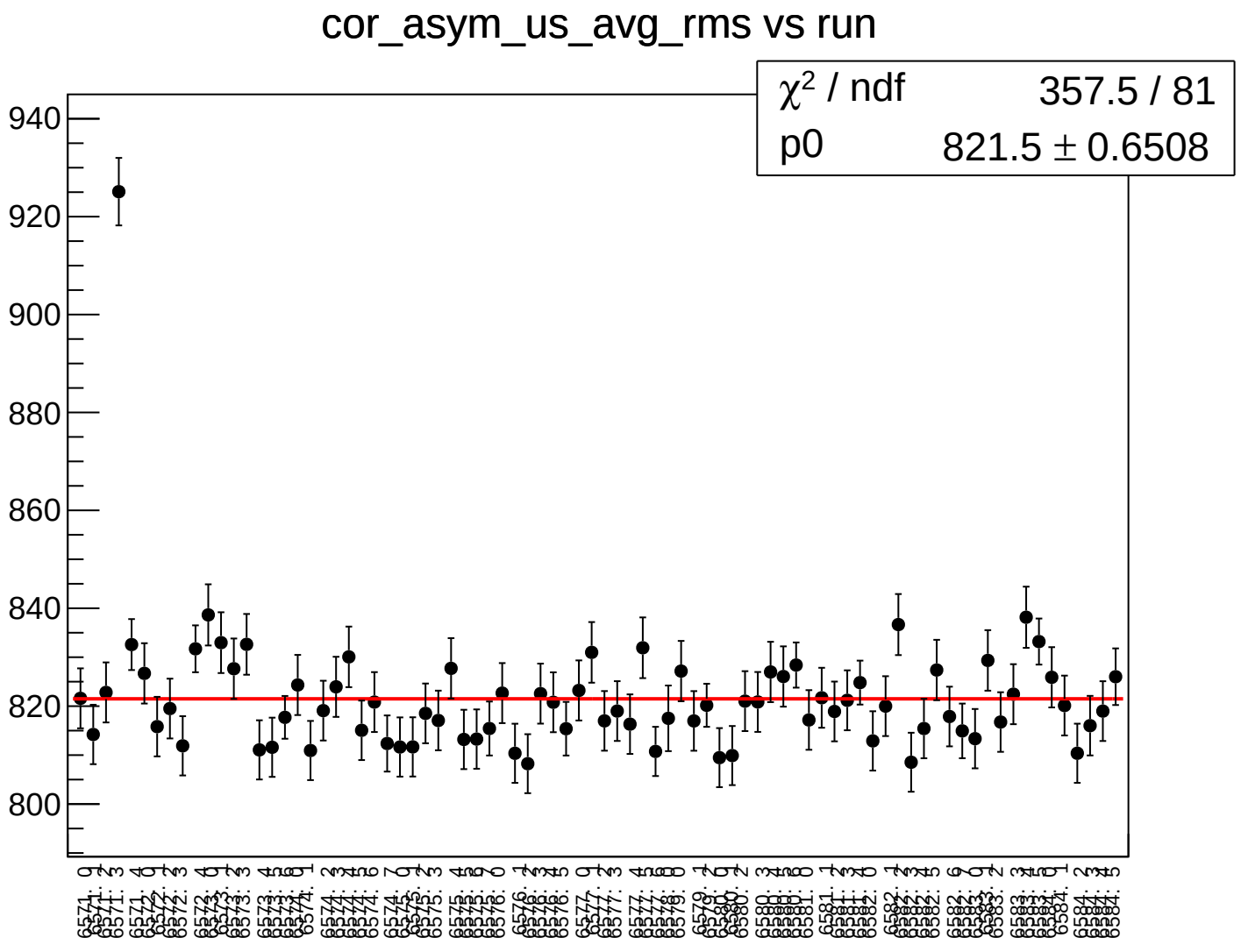

asym_right_dd_mean vs run
χ² / ndf 83.05 / 81
p0 275.8 ± 1034
pull
Entries 82
Mean 644.7
Std Dev 600.7

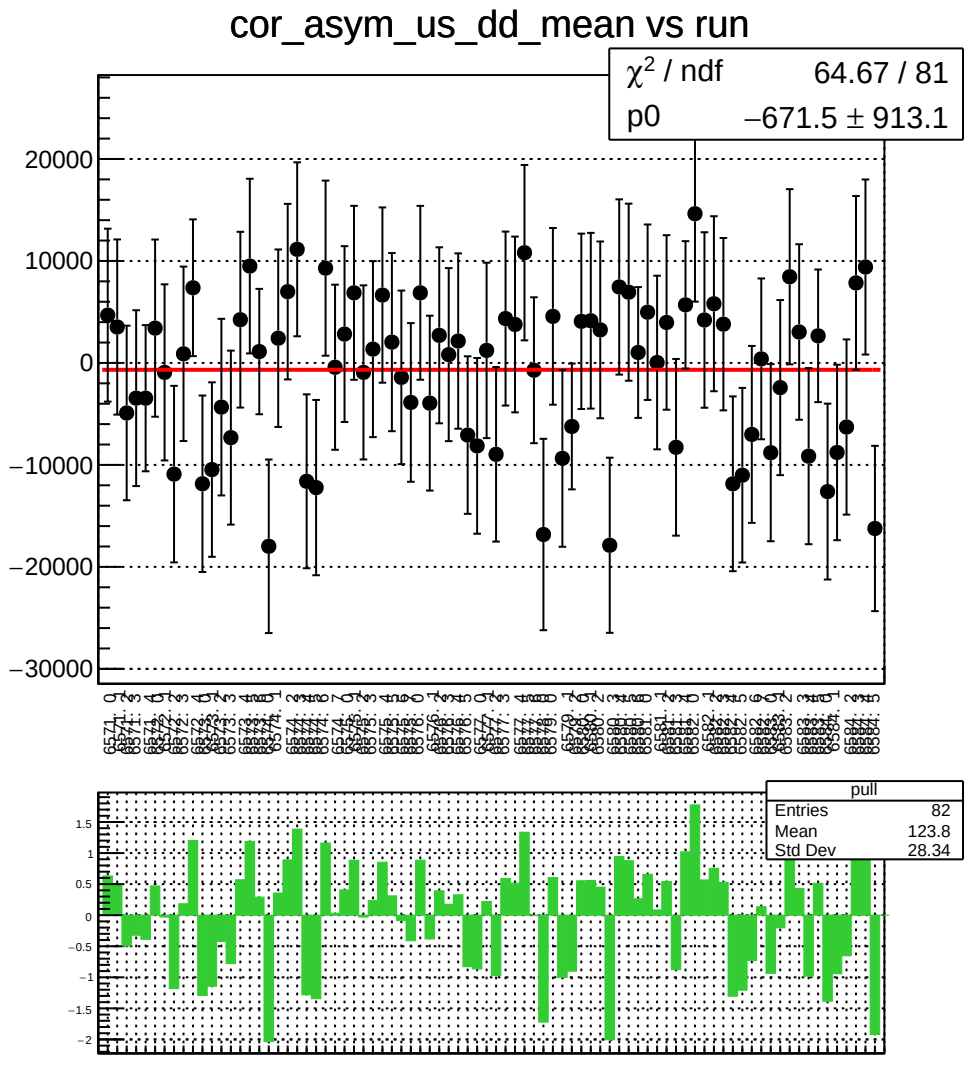

pull1D
Entries 82
Mean −0.007439
Std Dev 1.006

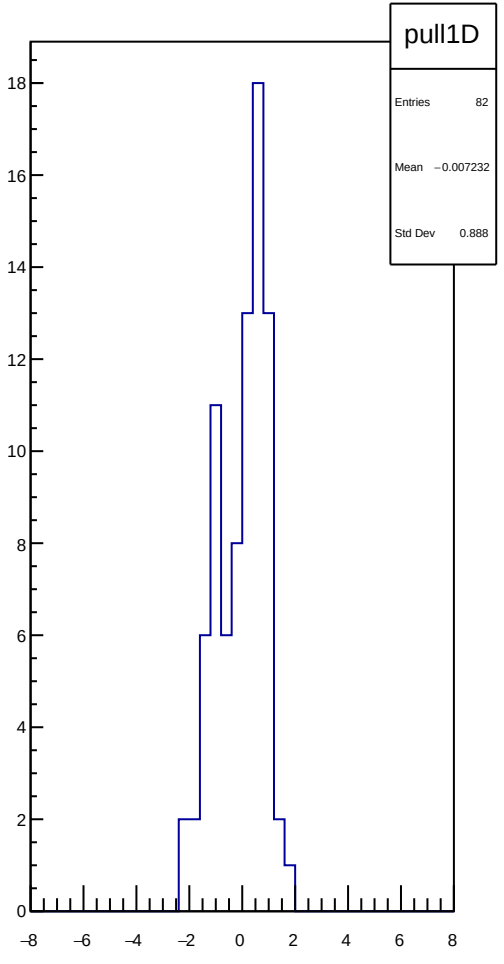

asym_right_dd_rms vs run
χ² / ndf 6242 / 81
p0 920.9 ± 0.7309
1300
1200
1100
1000
900
800

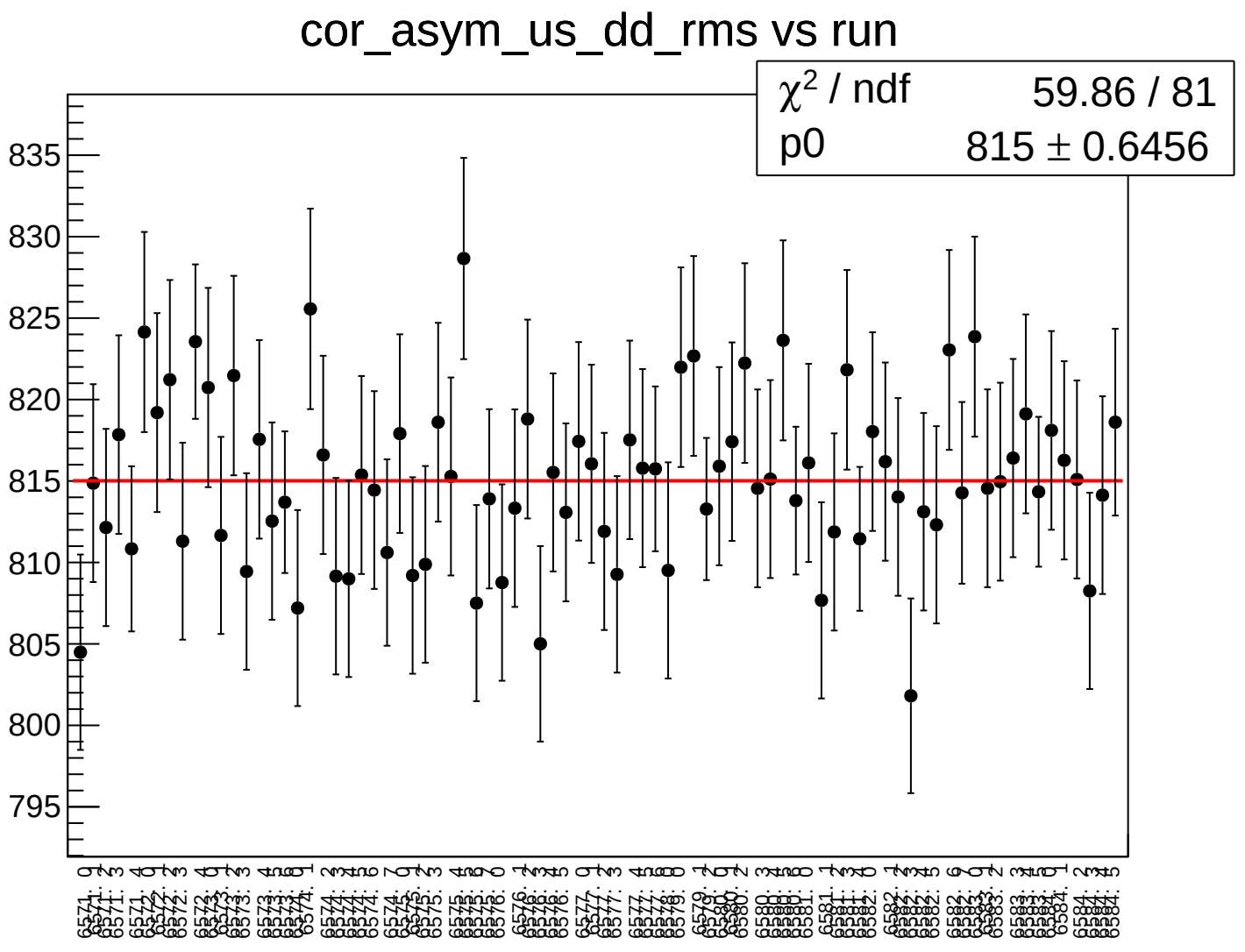

cor_asym_us_avg_mean vs run
χ² / ndf 115.7 / 81
p0 2119 ± 920.4
pull
Entries 82
Mean 130.1
Std Dev 115.3

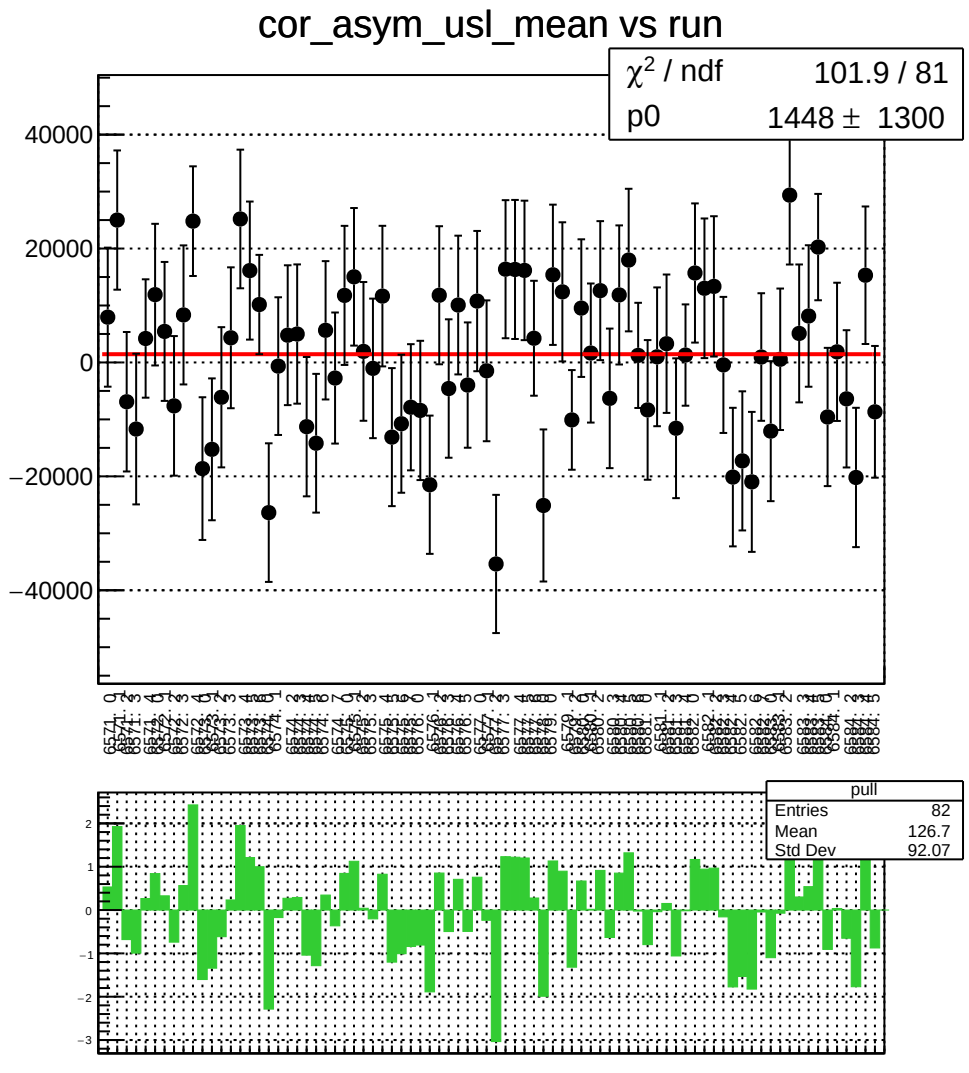

pull1D
Entries 82
Mean −0.01484
Std Dev 1.188

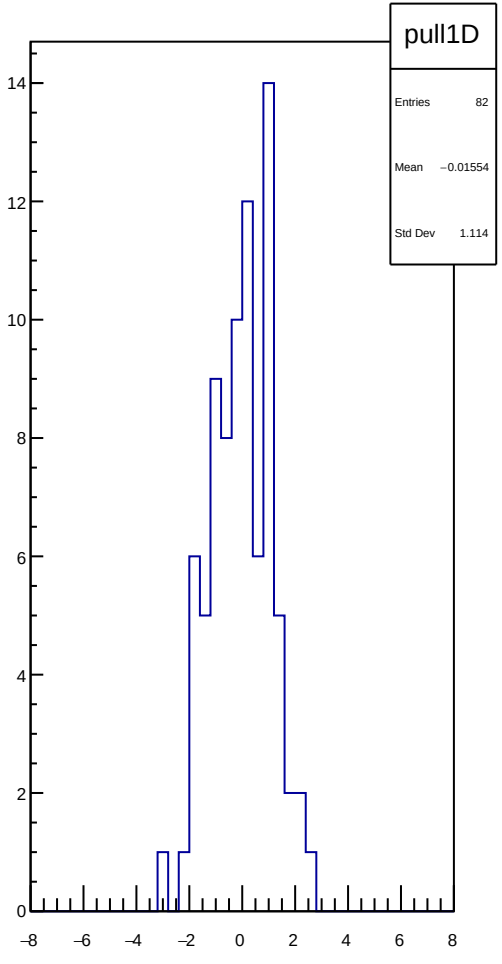

cor_asym_us_avg_rms vs run
χ² / ndf 357.5 / 81
p0 821.5 ± 0.6508
940
920
900
880
860
840
820
800

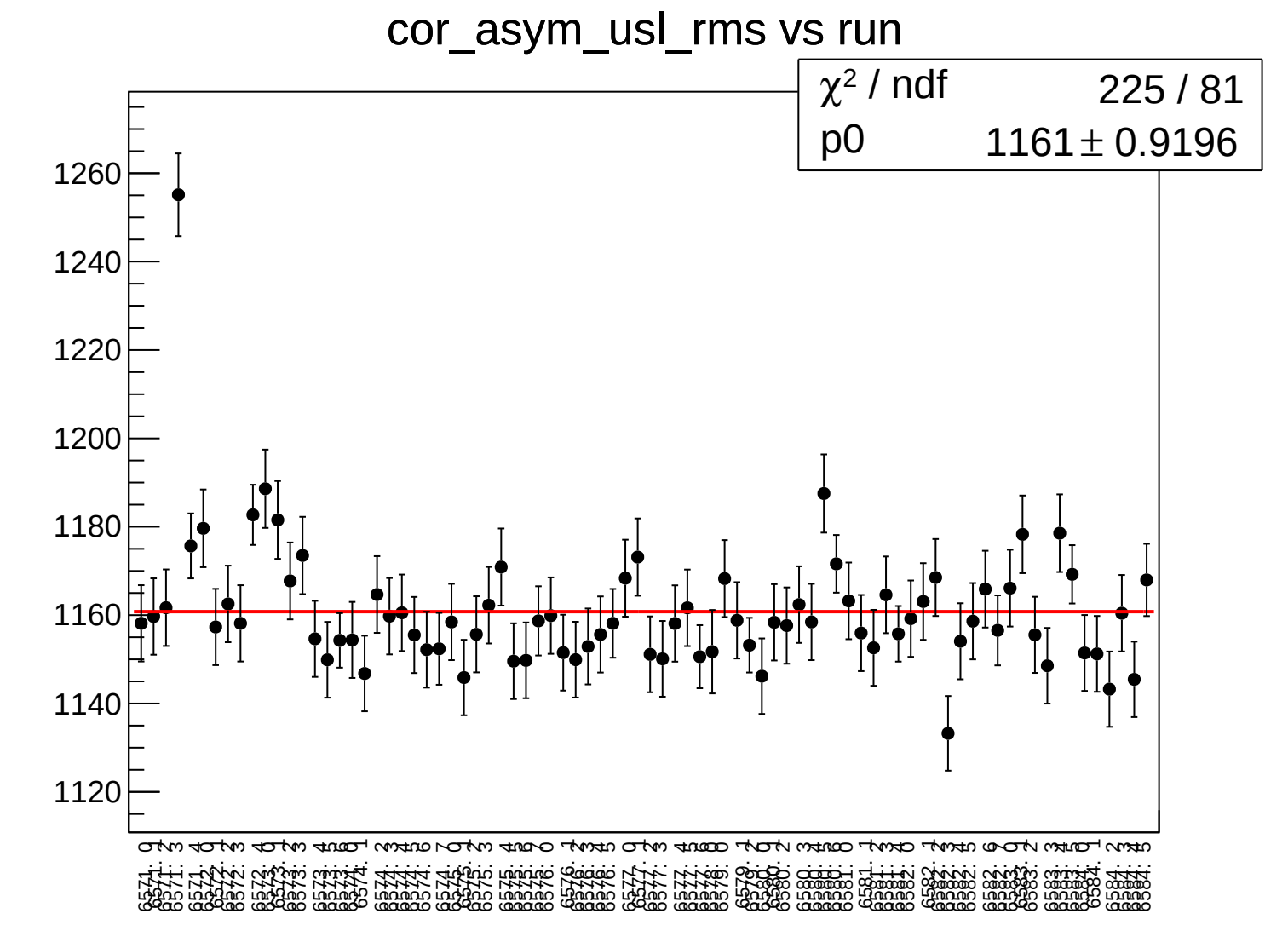

cor_asym_us_dd_mean vs run
χ² / ndf 64.67 / 81
p0 −671.5 ± 913.1
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 123.8
Std Dev 28.34
1.5
1
0.5
0
−0.5
−1
−1.5
−2

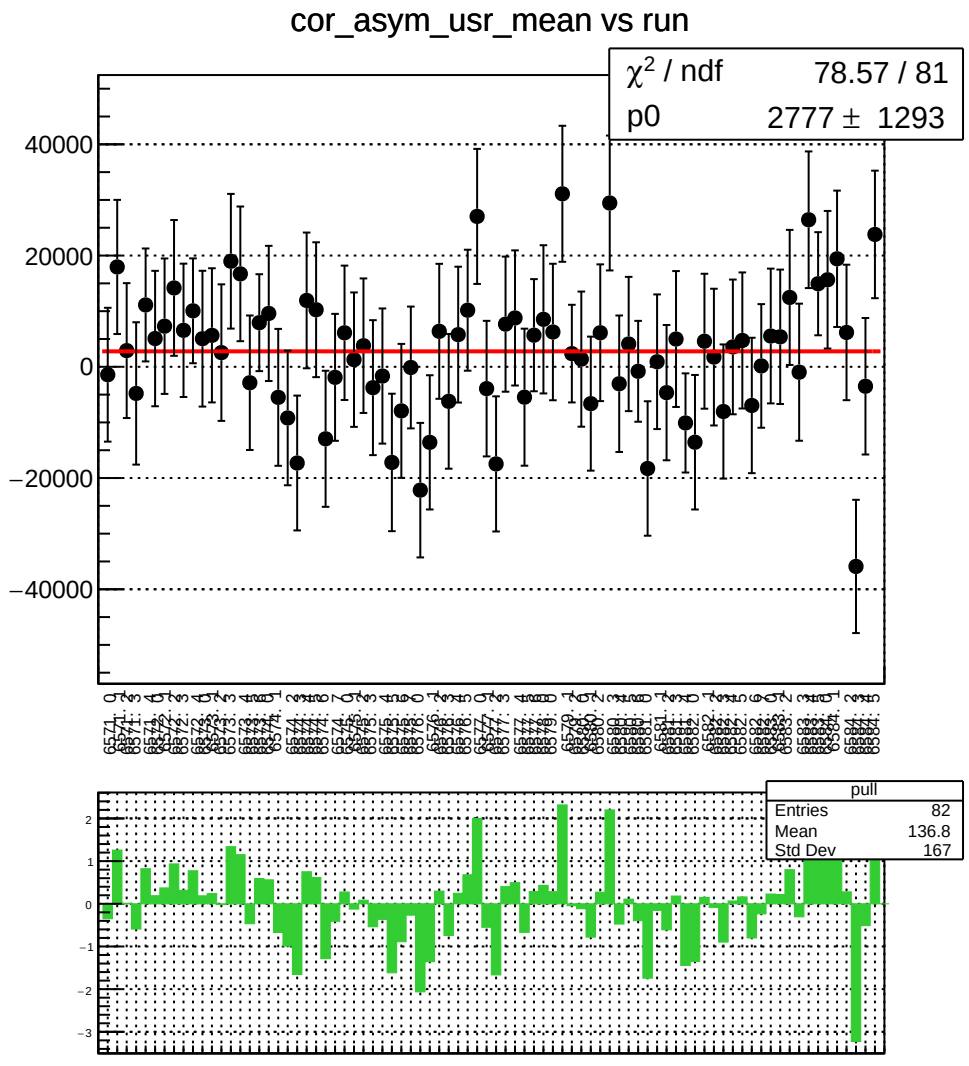

pull1D
Entries 82
Mean −0.007232
Std Dev 0.888
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

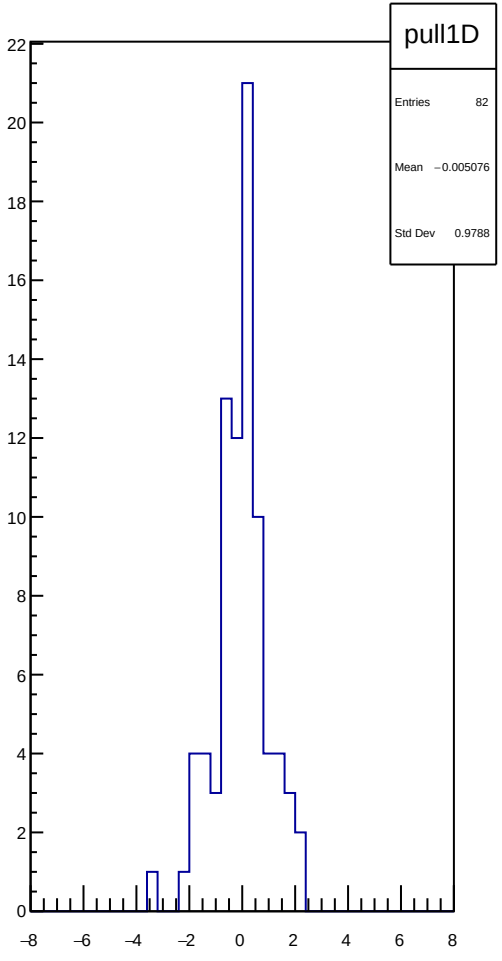

cor_asym_us_dd_rms vs run
$\chi^2$ / ndf 59.86 / 81
p0 815 ± 0.6456
835
830
825
820
815
810
805
800
795

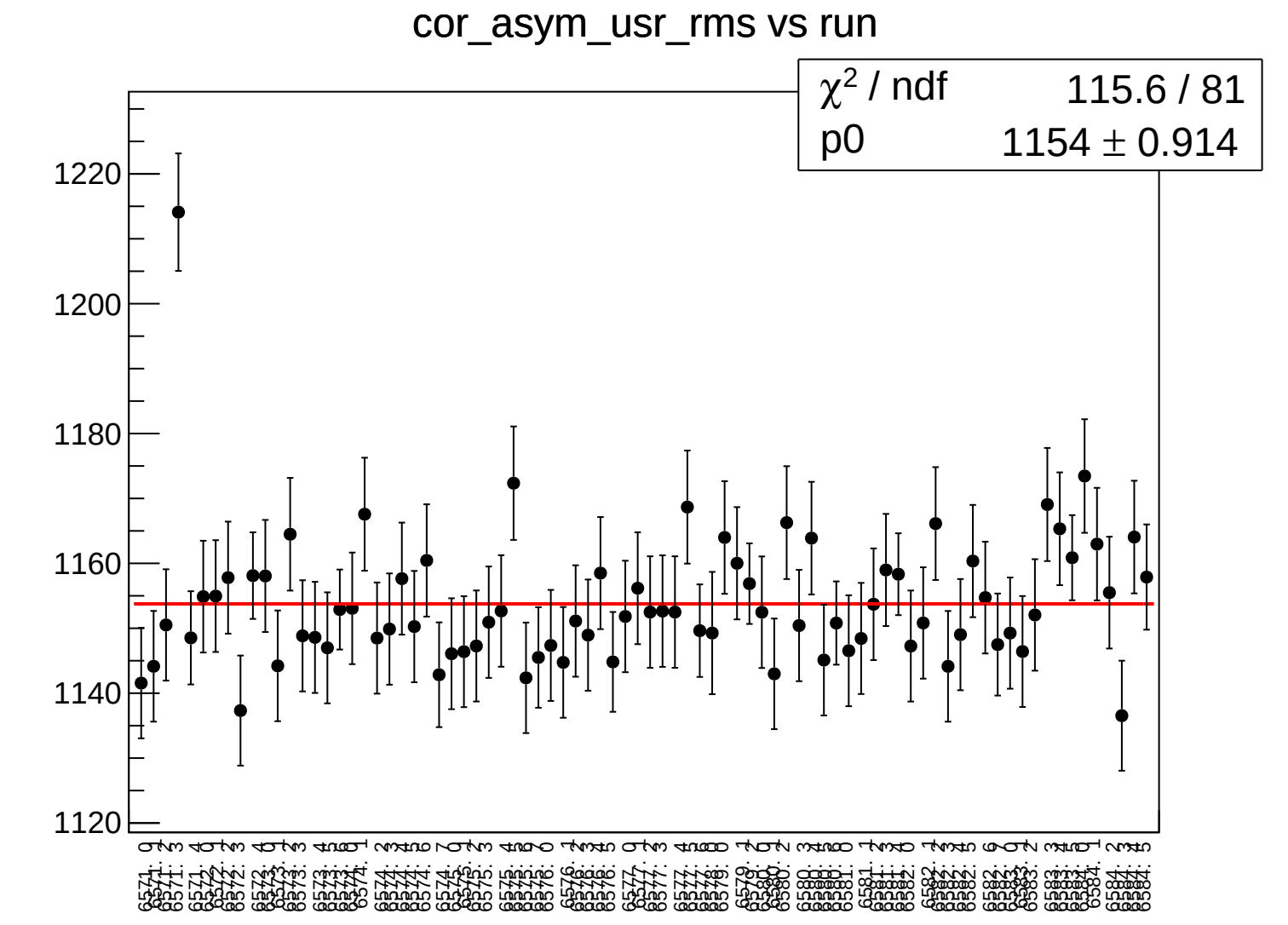

cor_asym_usl_mean vs run
χ² / ndf 101.9 / 81
p0 1448 ± 1300
40000
20000
0
−20000
−40000
pull
Entries 82
Mean 126.7
Std Dev 92.07
2
1
0
−1
−2
−3

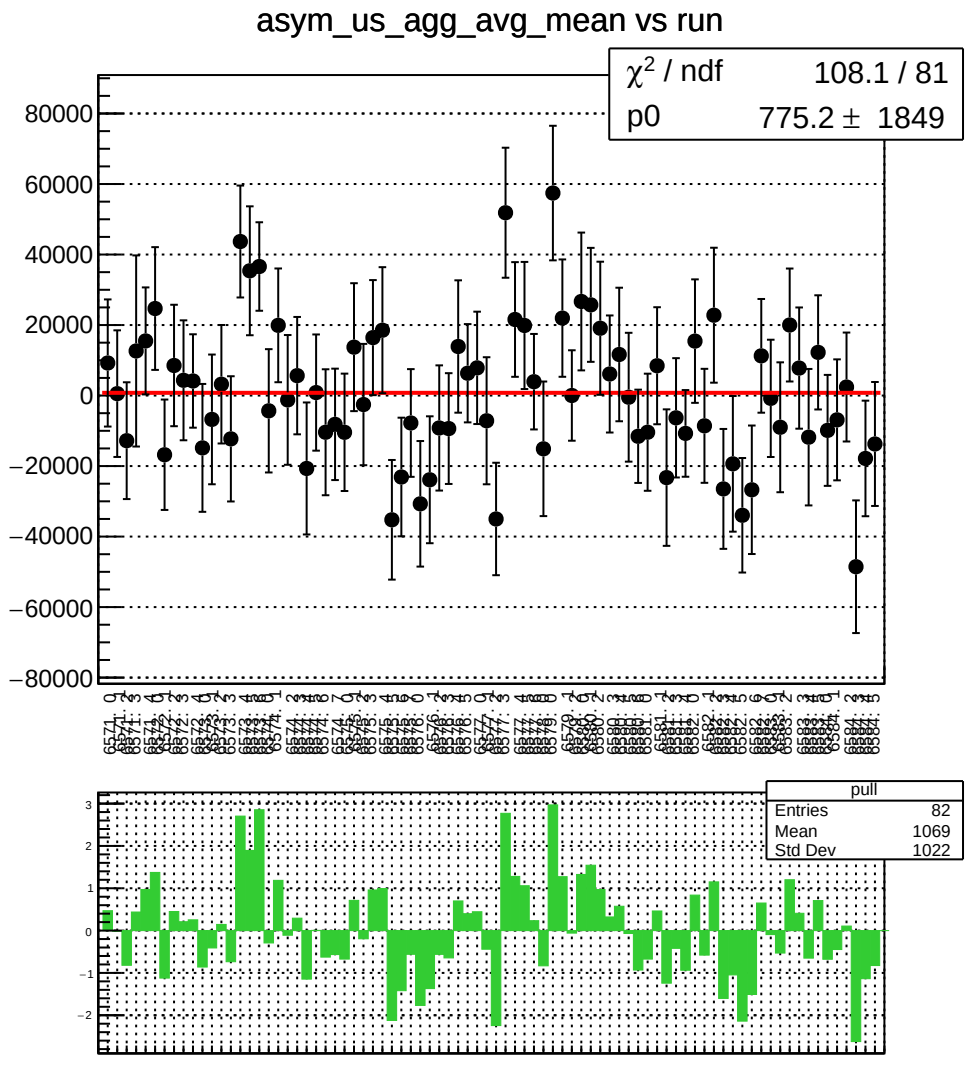

pull1D
Entries 82
Mean −0.01554
Std Dev 1.114
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

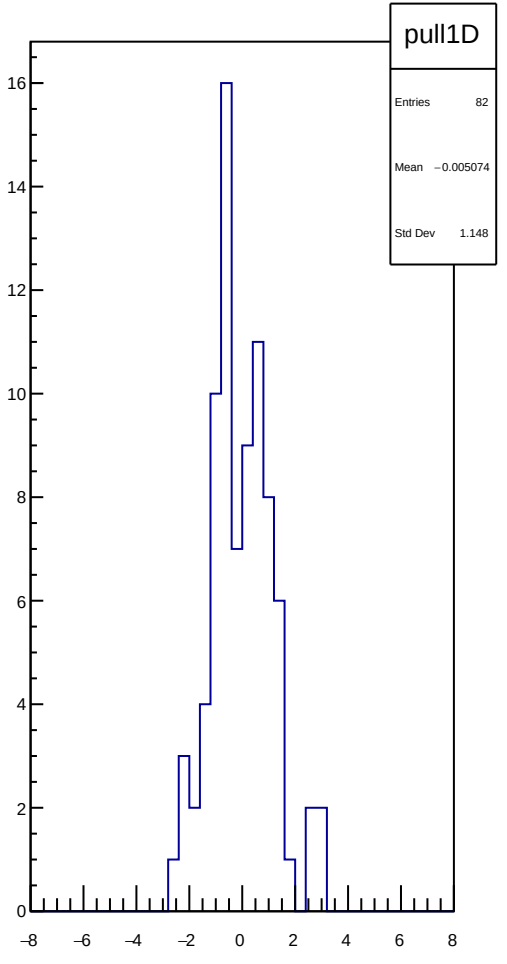

cor_asym_usl_rms vs run
χ² / ndf 225 / 81
p0 1161 ± 0.9196
1260
1240
1220
1200
1180
1160
1140
1120

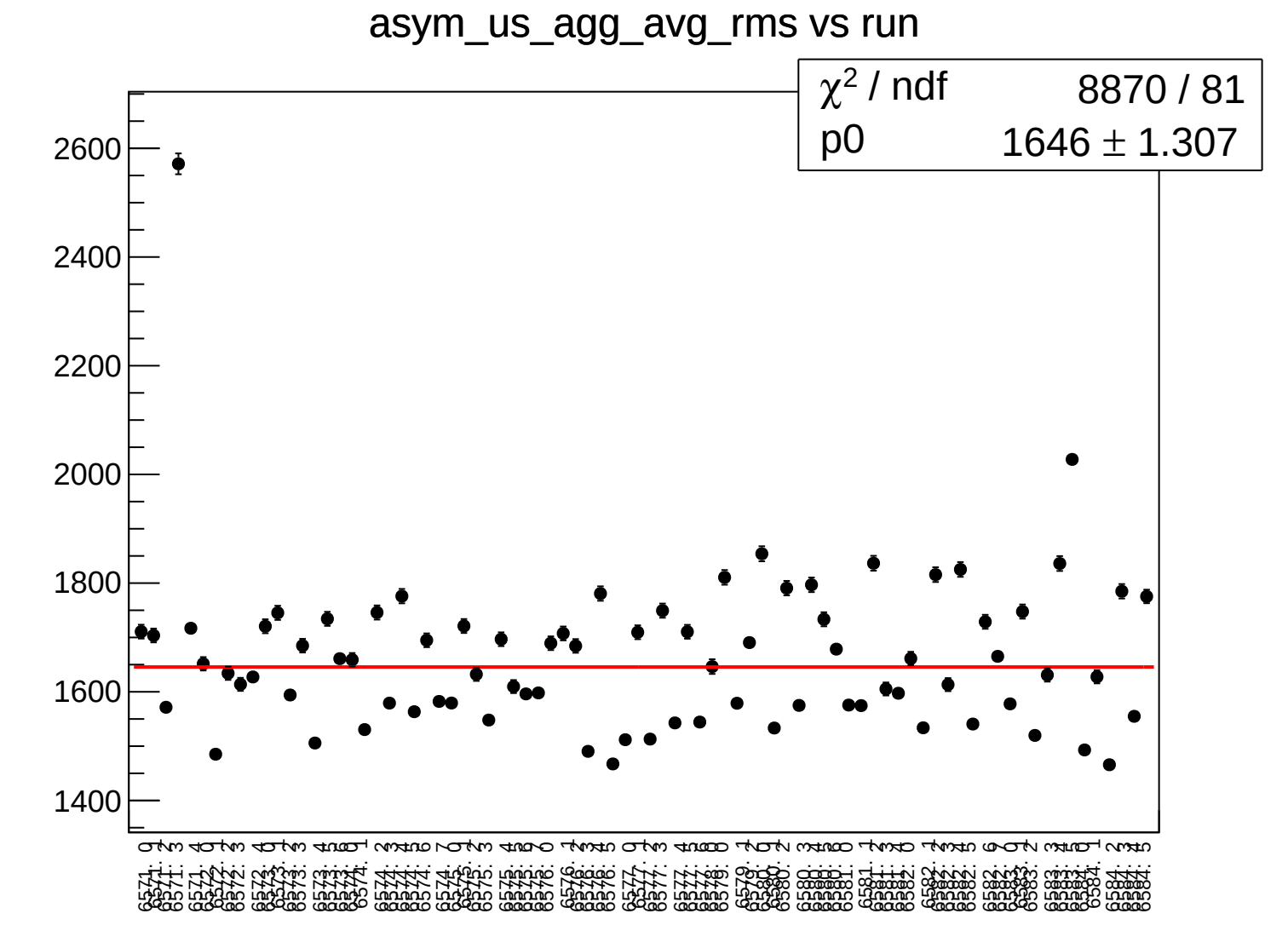

cor_asym_usr_mean vs run
χ² / ndf 78.57 / 81
p0 2777 ± 1293
40000
20000
0
−20000
−40000
pull
Entries 82
Mean 136.8
Std Dev 167
2
1
0
−1
−2
−3

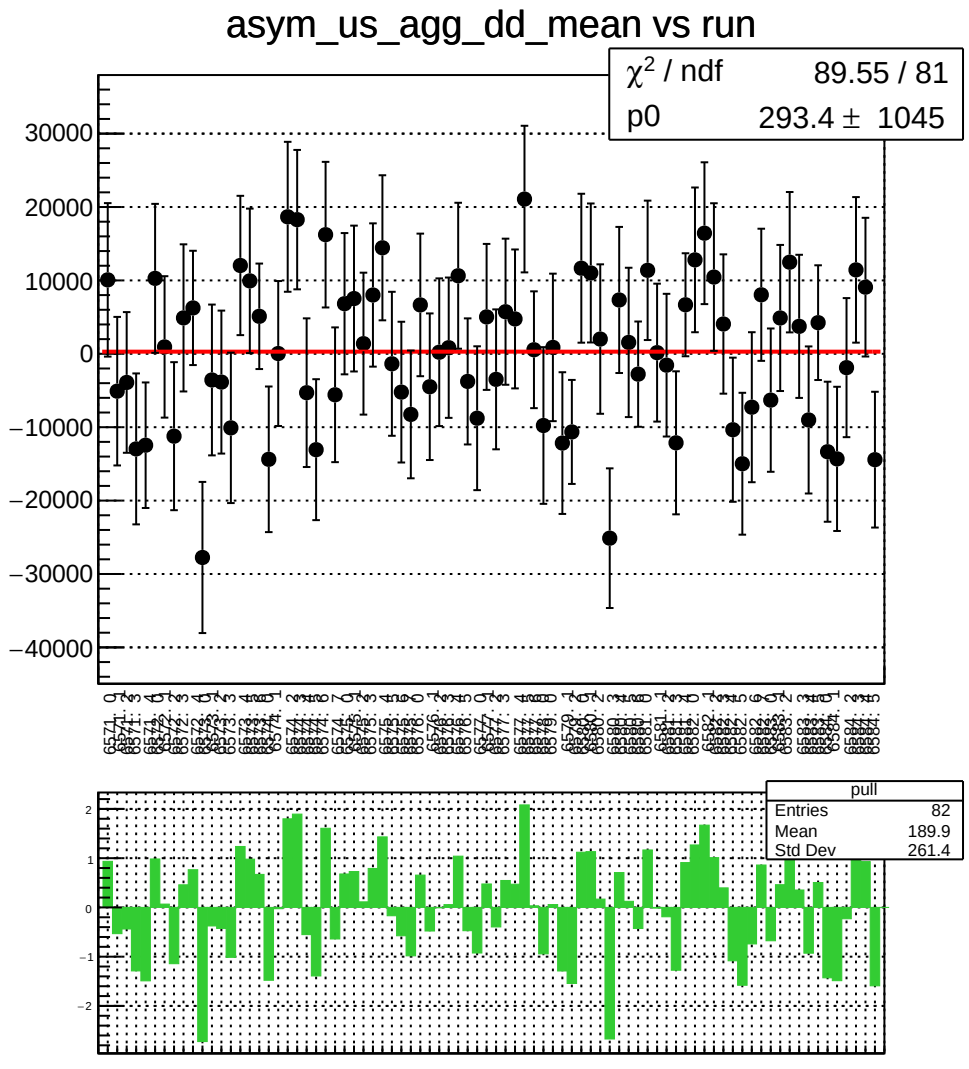

pull1D
Entries 82
Mean −0.005076
Std Dev 0.9788
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

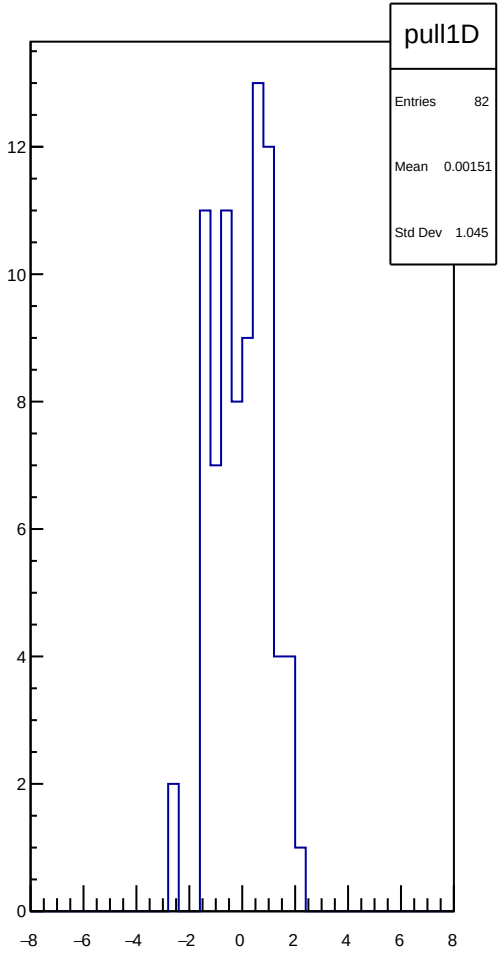

cor_asym_usr_rms vs run
$\chi^2$ / ndf 115.6 / 81
p0 1154 ± 0.914
1220
1200
1180
1160
1140
1120

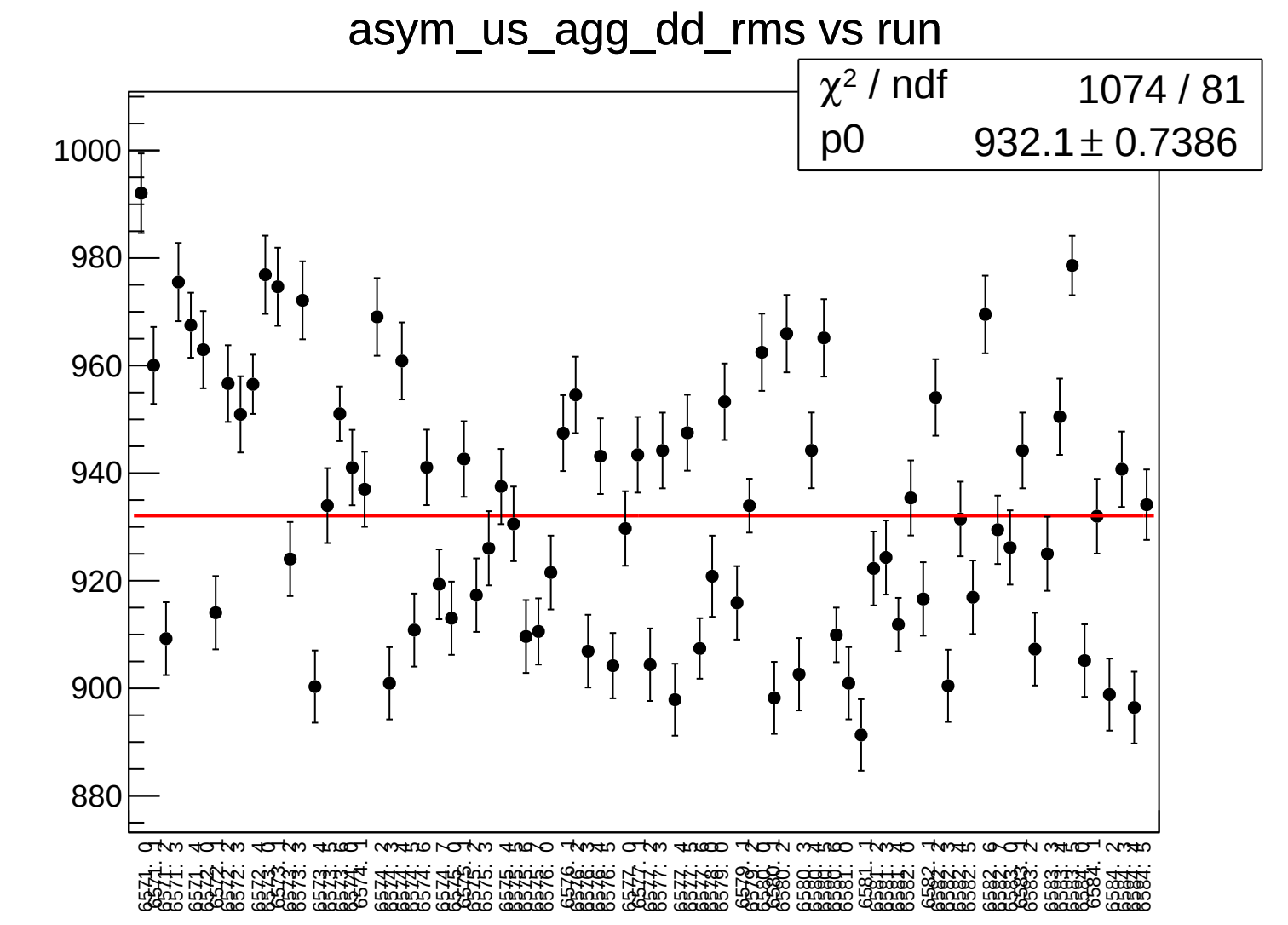

asym_us_agg_avg_mean vs run
χ² / ndf 108.1 / 81
p0 775.2 ± 1849
pull
Entries 82
Mean 1069
Std Dev 1022

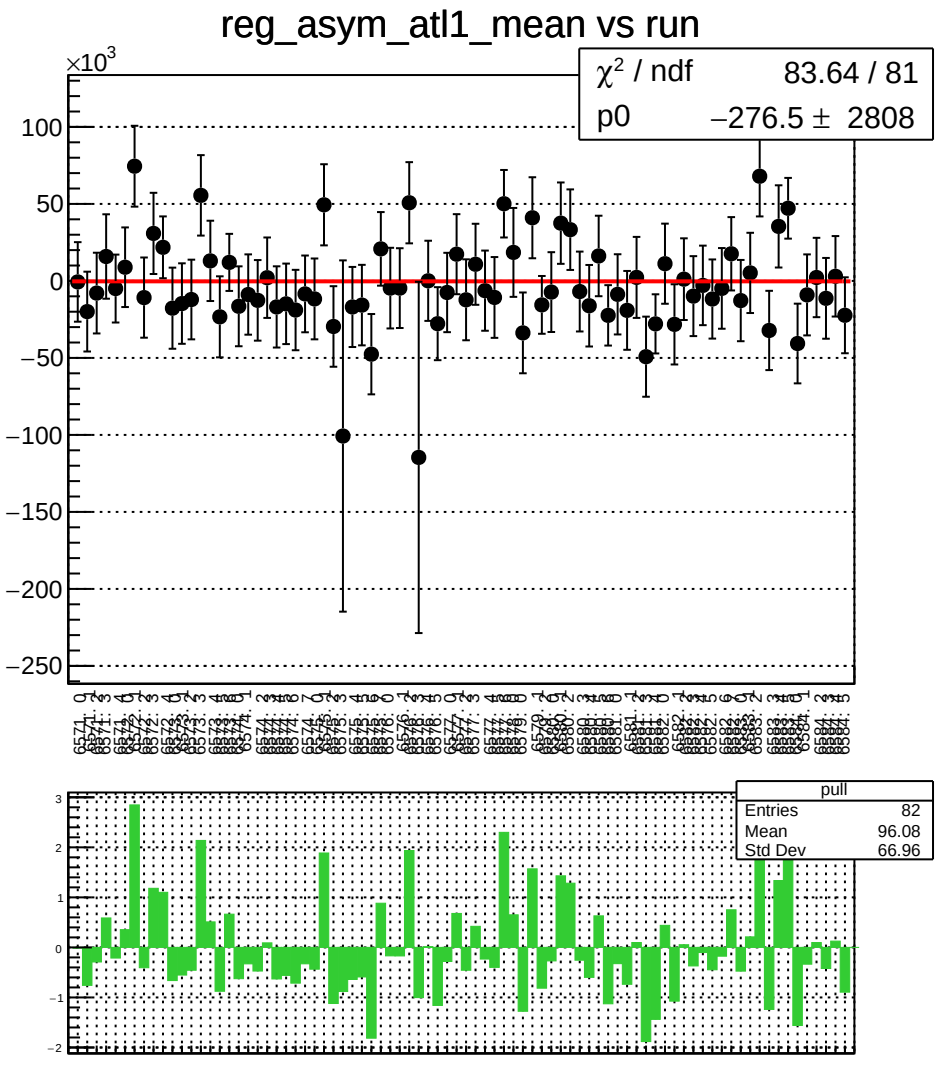

pull1D
Entries 82
Mean −0.005074
Std Dev 1.148

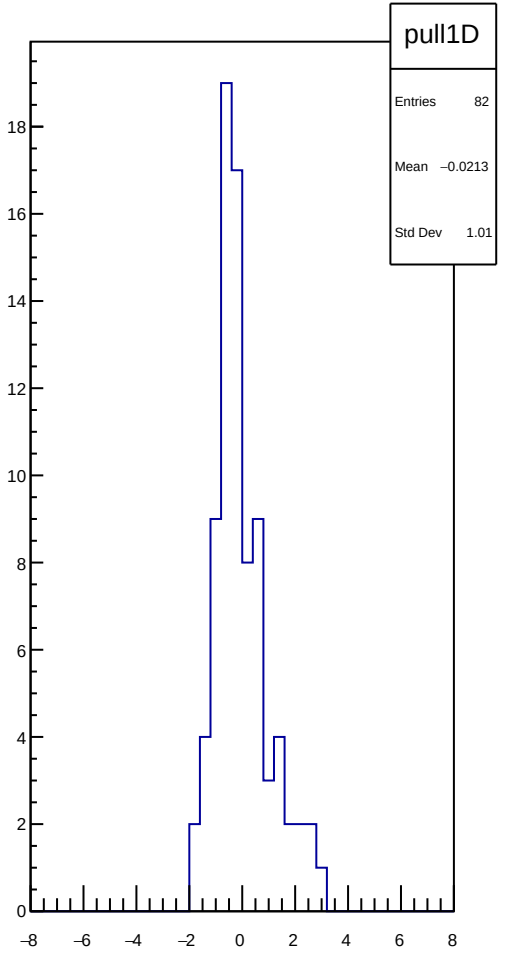

asym_us_agg_avg_rms vs run
$\chi^2$ / ndf 8870 / 81
p0 1646 ± 1.307
2600
2400
2200
2000
1800
1600
1400

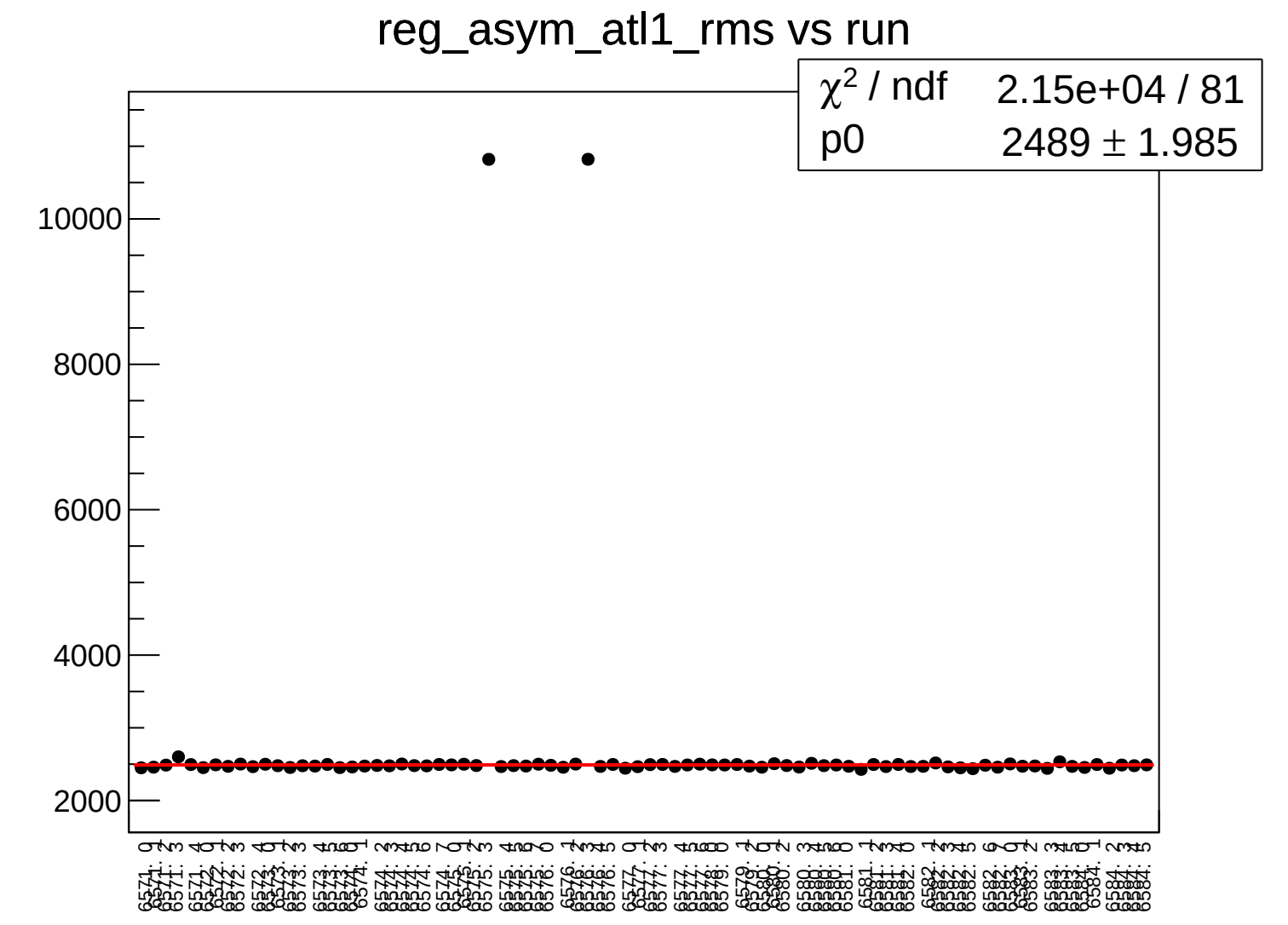

asym_us_agg_dd_mean vs run
$\chi^2$ / ndf 89.55 / 81
p0 293.4 ± 1045
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 82
Mean 189.9
Std Dev 261.4
2
1
0
−1
−2

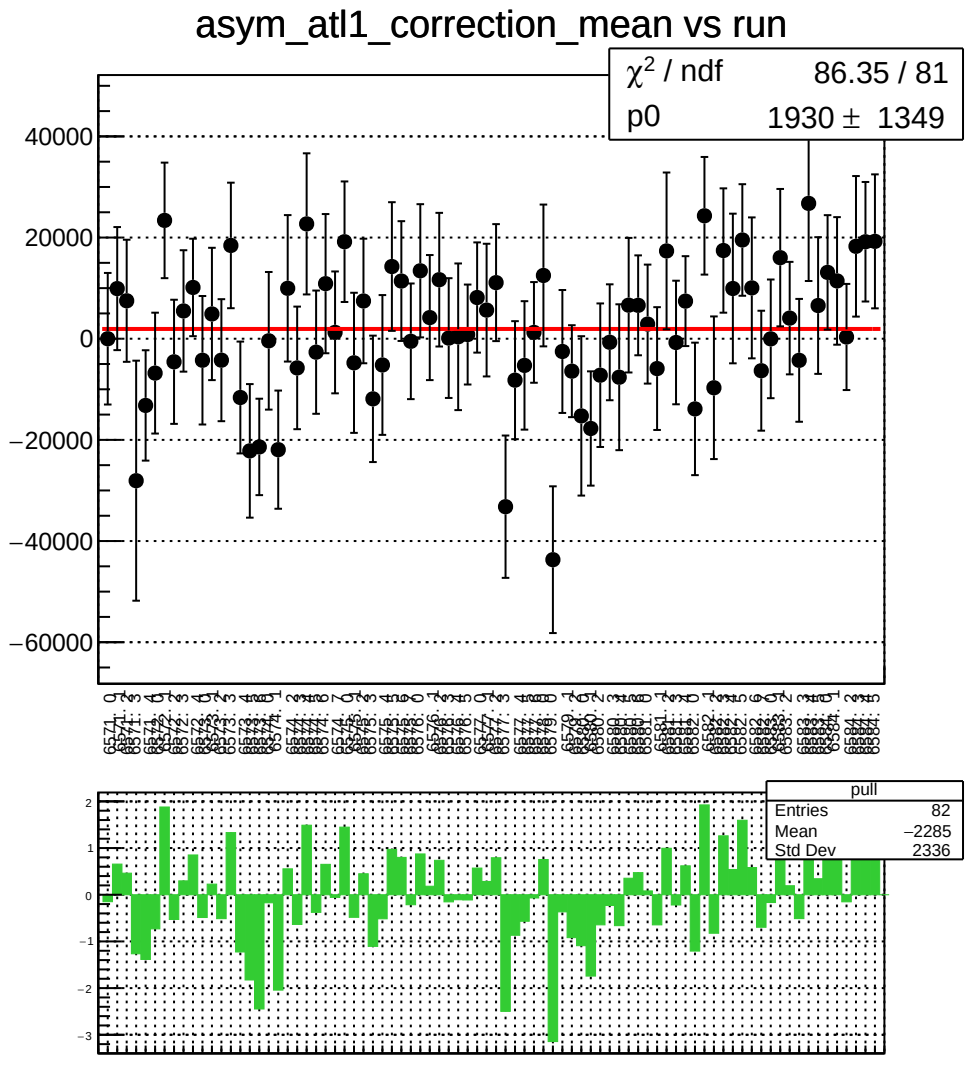

pull1D
Entries 82
Mean 0.00151
Std Dev 1.045
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

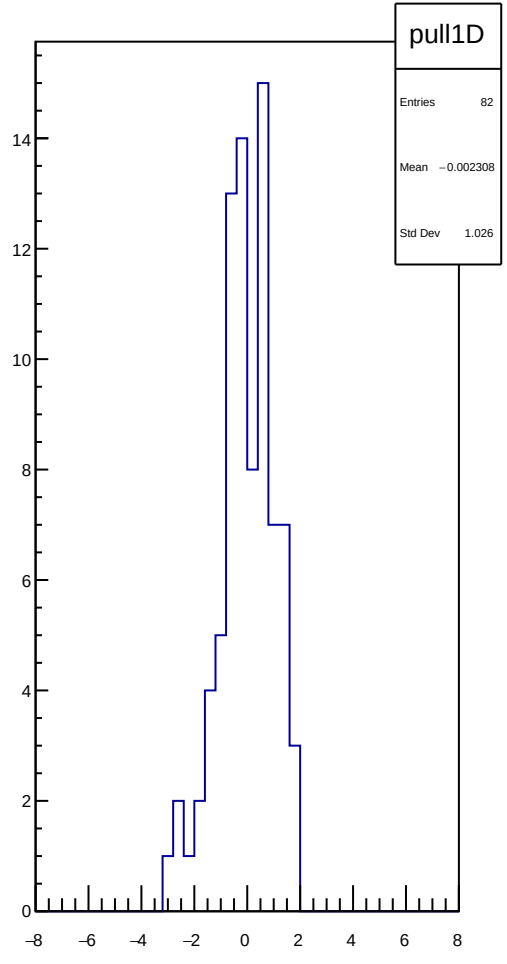

asym_us_agg_dd_rms vs run
χ² / ndf 1074 / 81
p0 932.1 ± 0.7386
1000
980
960
940
920
900
880

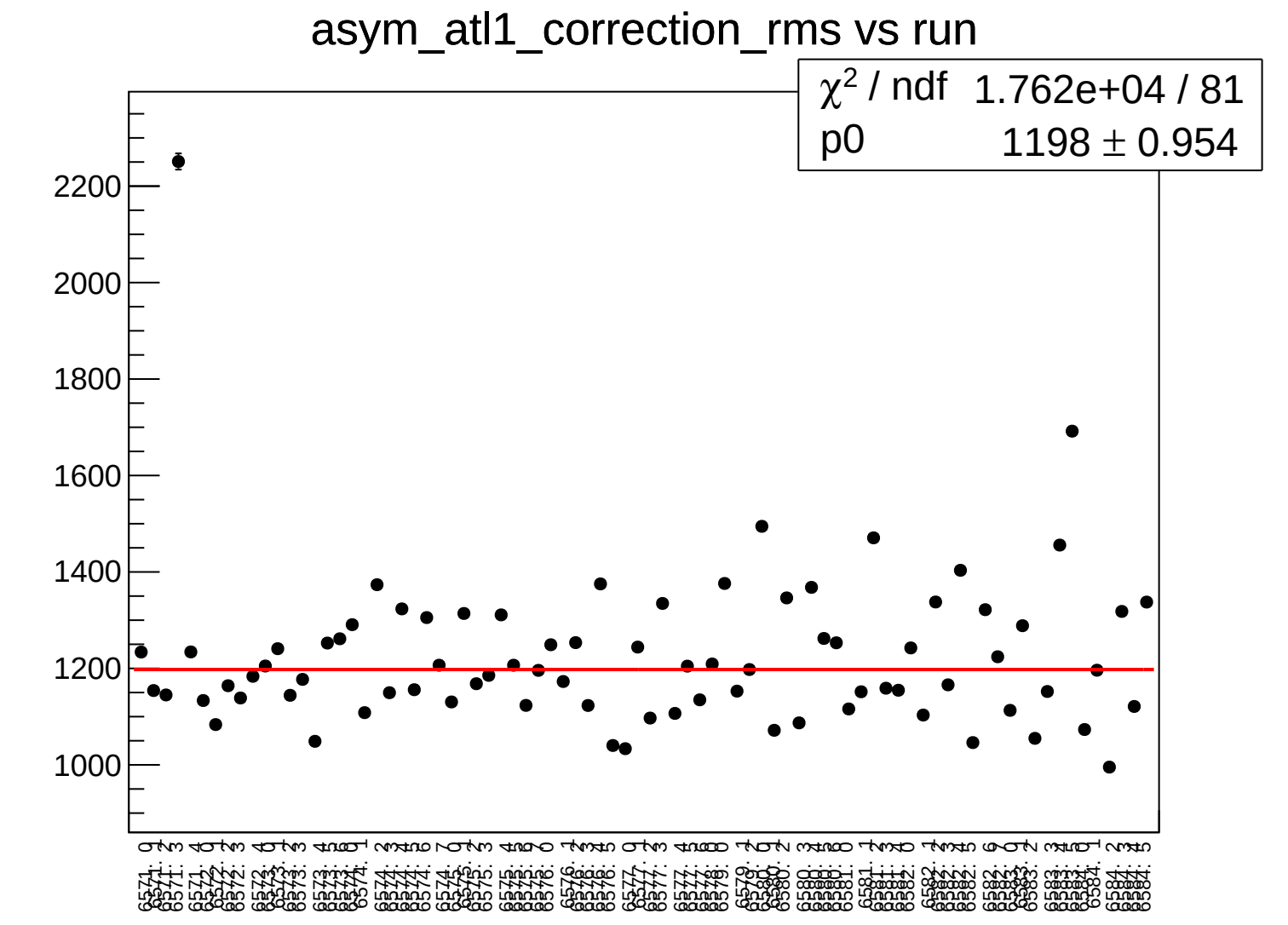

reg_asym_atl1_mean vs run
×10^3
χ² / ndf 83.64 / 81
p0 −276.5 ± 2808
pull
Entries 82
Mean 96.08
Std Dev 66.96

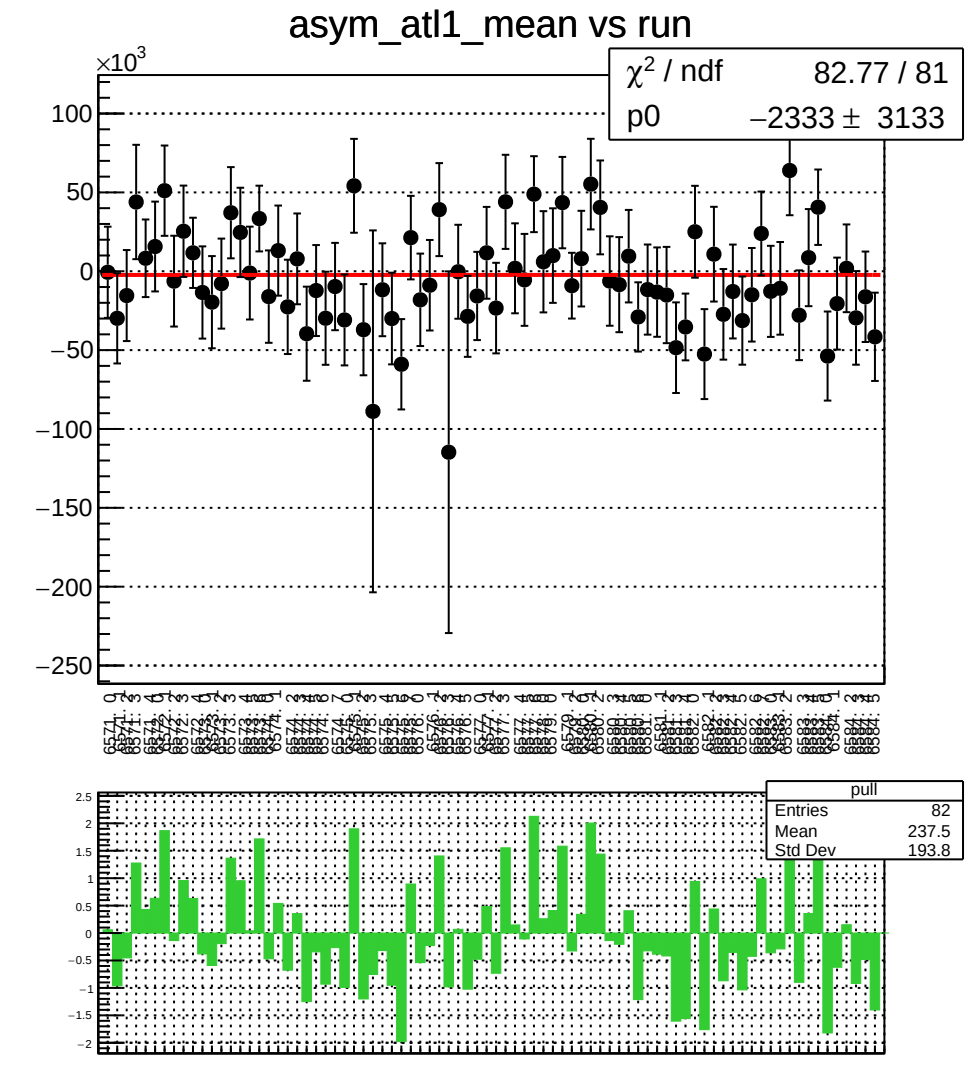

pull1D
Entries 82
Mean −0.0213
Std Dev 1.01

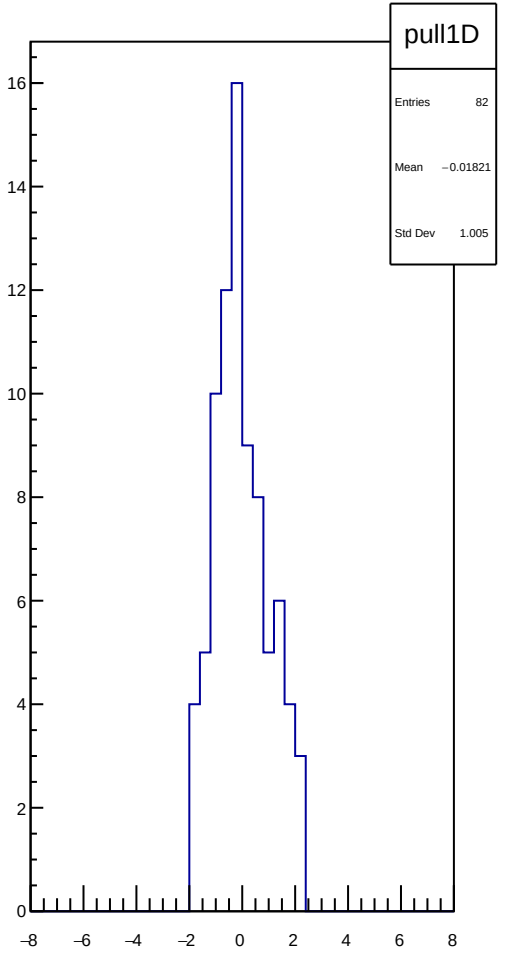

reg_asym_atl1_rms vs run
χ² / ndf 2.15e+04 / 81
p0 2489 ± 1.985
10000
8000
6000
4000
2000

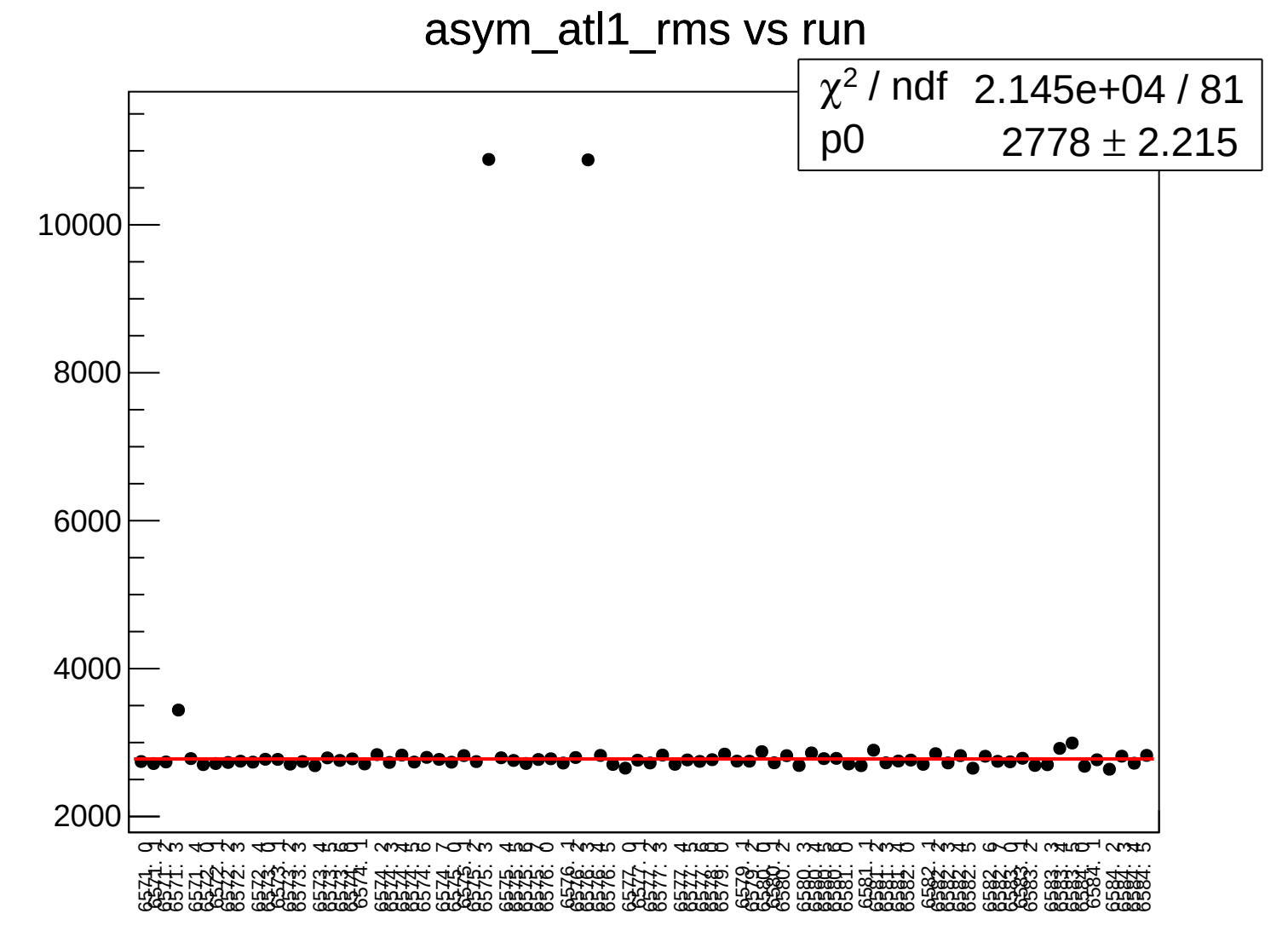

asym_atl1_correction_mean vs run
χ² / ndf 86.35 / 81
p0 1930 ± 1349
40000
20000
0
−20000
−40000
−60000
pull
Entries 82
Mean −2285
Std Dev 2336
2
1
0
−1
−2
−3

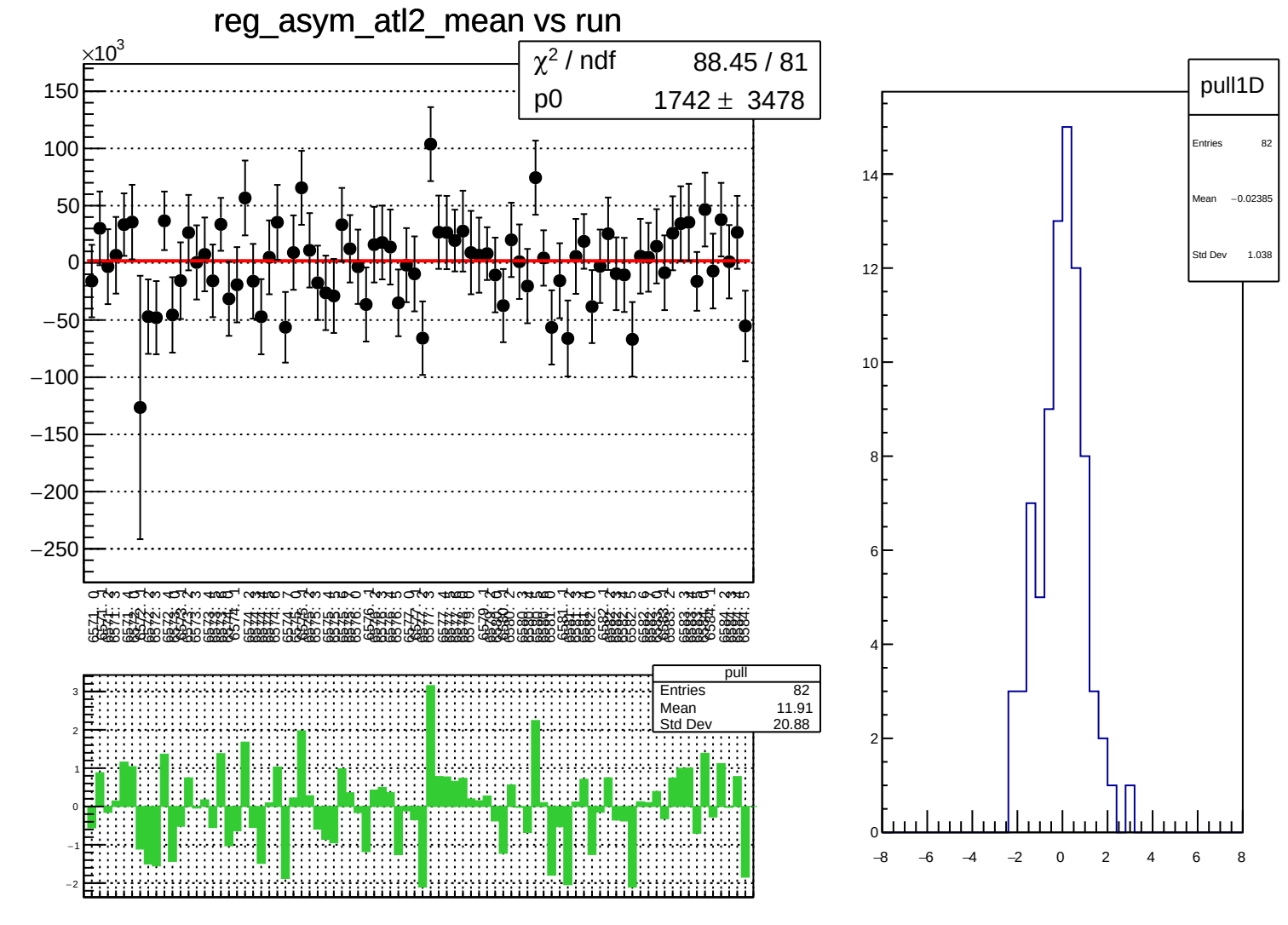

pull1D
Entries 82
Mean −0.002308
Std Dev 1.026
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

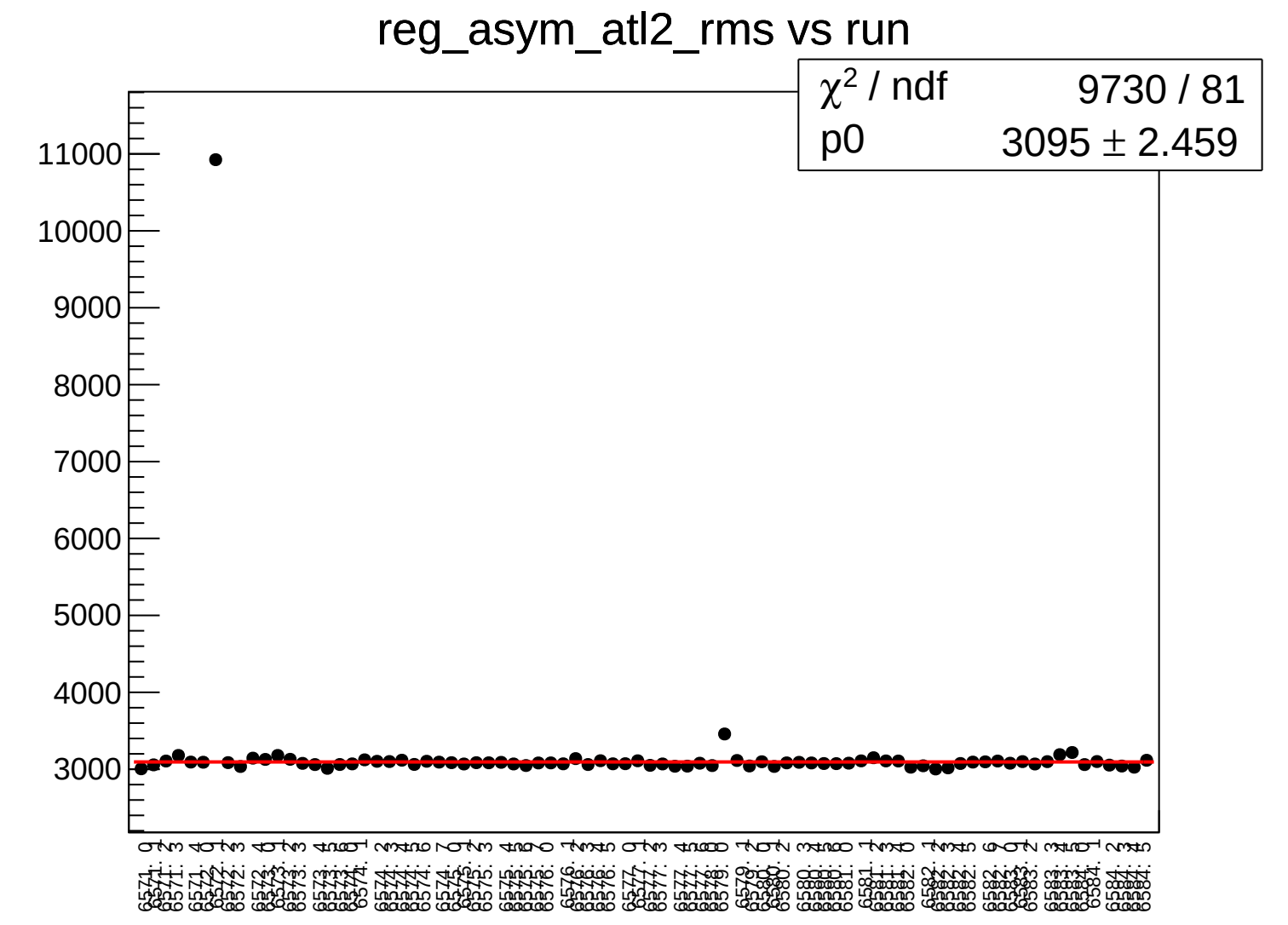

asym_atl1_correction_rms vs run
χ² / ndf 1.762e+04 / 81
p0 1198 ± 0.954
2200
2000
1800
1600
1400
1200
1000

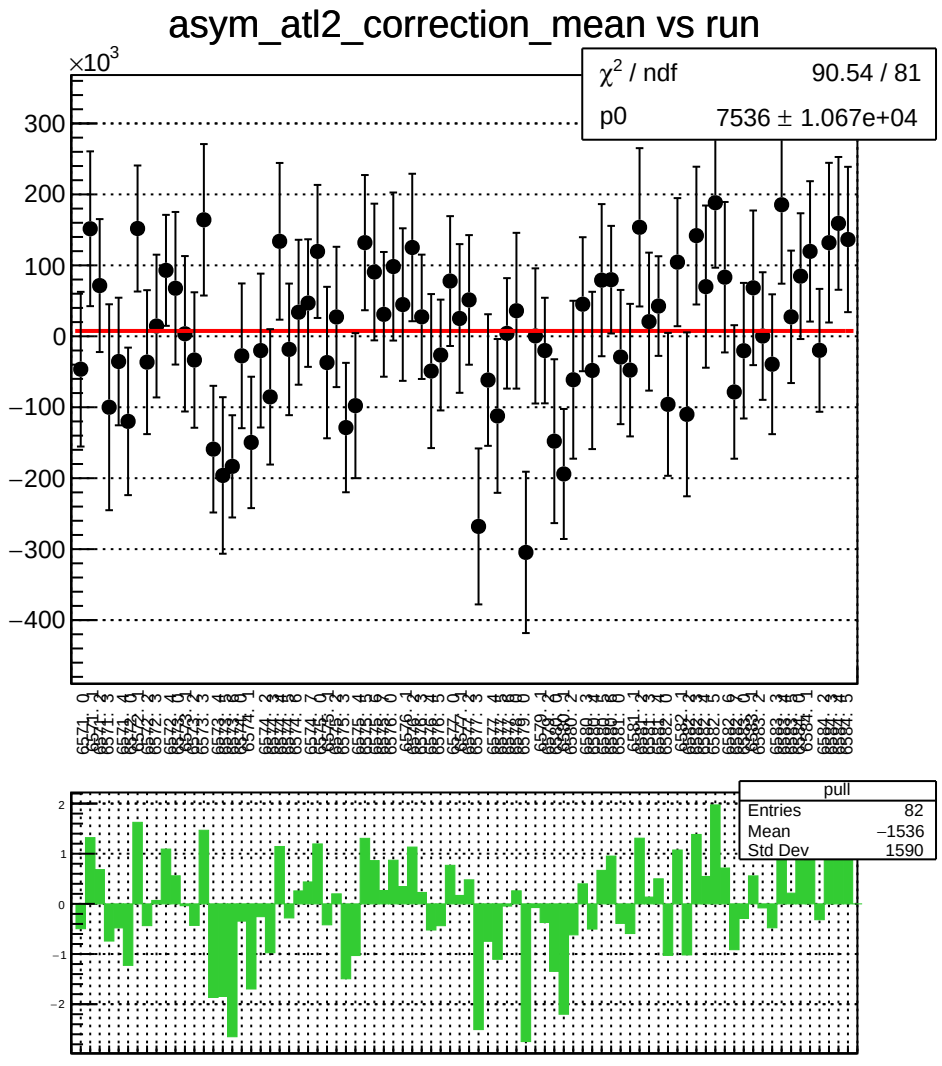

asym_atl1_mean vs run
×10^3
χ² / ndf 82.77 / 81
p0 −2333 ± 3133
pull
Entries 82
Mean 237.5
Std Dev 193.8

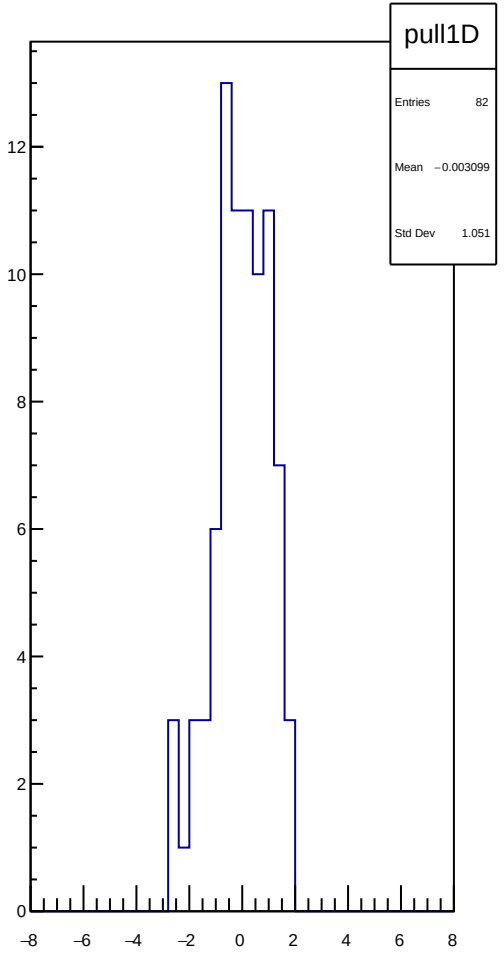

pull1D
Entries 82
Mean −0.01821
Std Dev 1.005

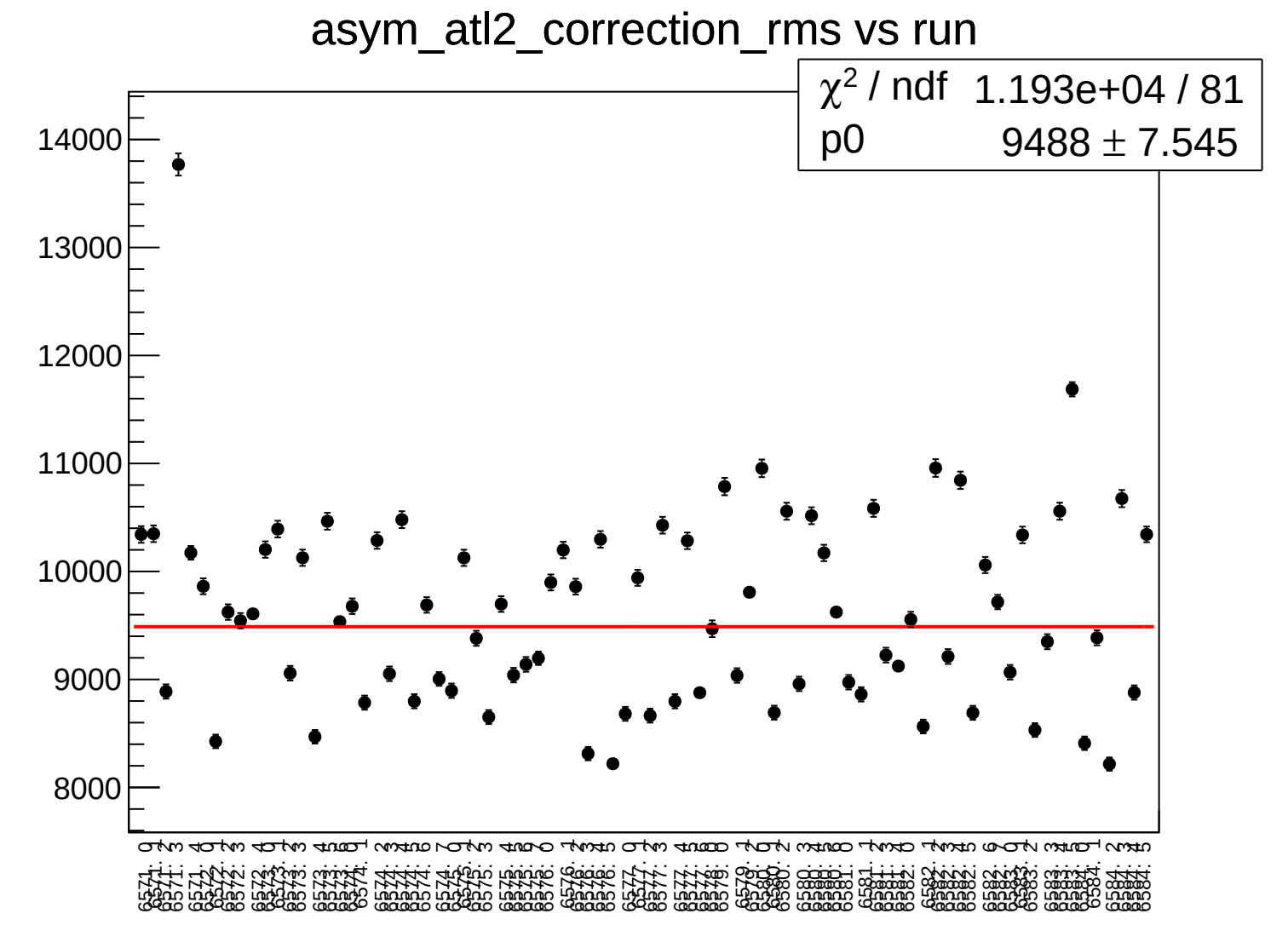

asym_atl1_rms vs run
χ² / ndf 2.145e+04 / 81
p0 2778 ± 2.215
10000
8000
6000
4000
2000

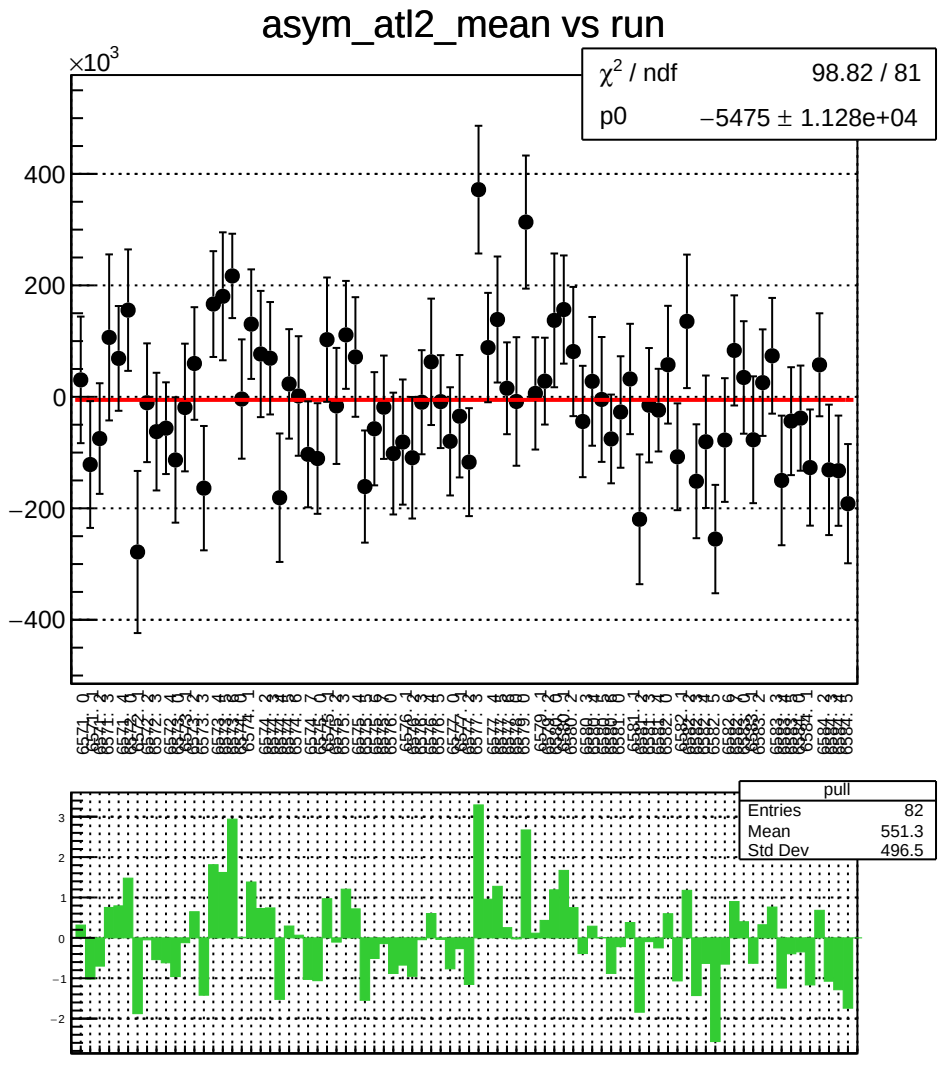

reg_asym_atl2_mean vs run
×10^3
χ^2 / ndf 88.45 / 81
p0 1742 ± 3478
150
100
50
0
−50
−100
−150
−200
−250
pull
Entries 82
Mean 11.91
Std Dev 20.88
3
2
1
0
−1
−2
pull1D
Entries 82
Mean −0.02385
Std Dev 1.038
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

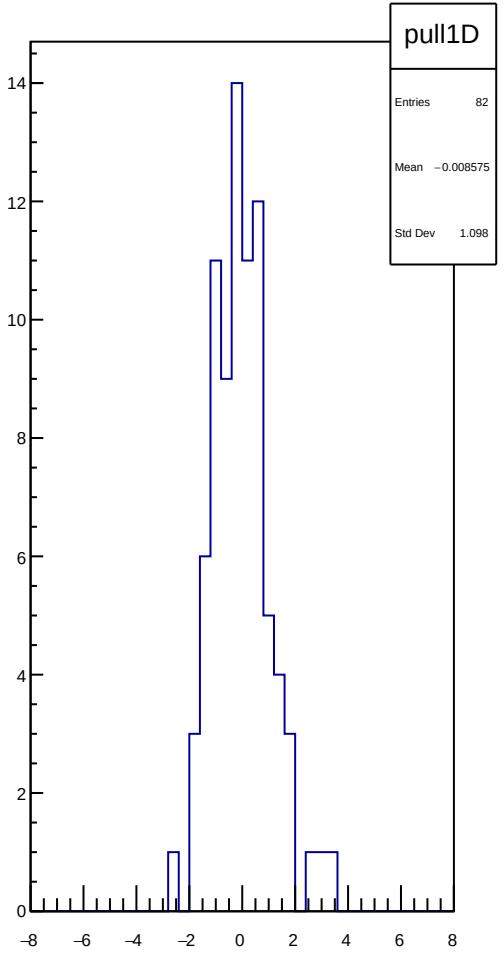

reg_asym_atl2_rms vs run
$\chi^2$ / ndf 9730 / 81
p0 3095 ± 2.459
11000
10000
9000
8000
7000
6000
5000
4000
3000

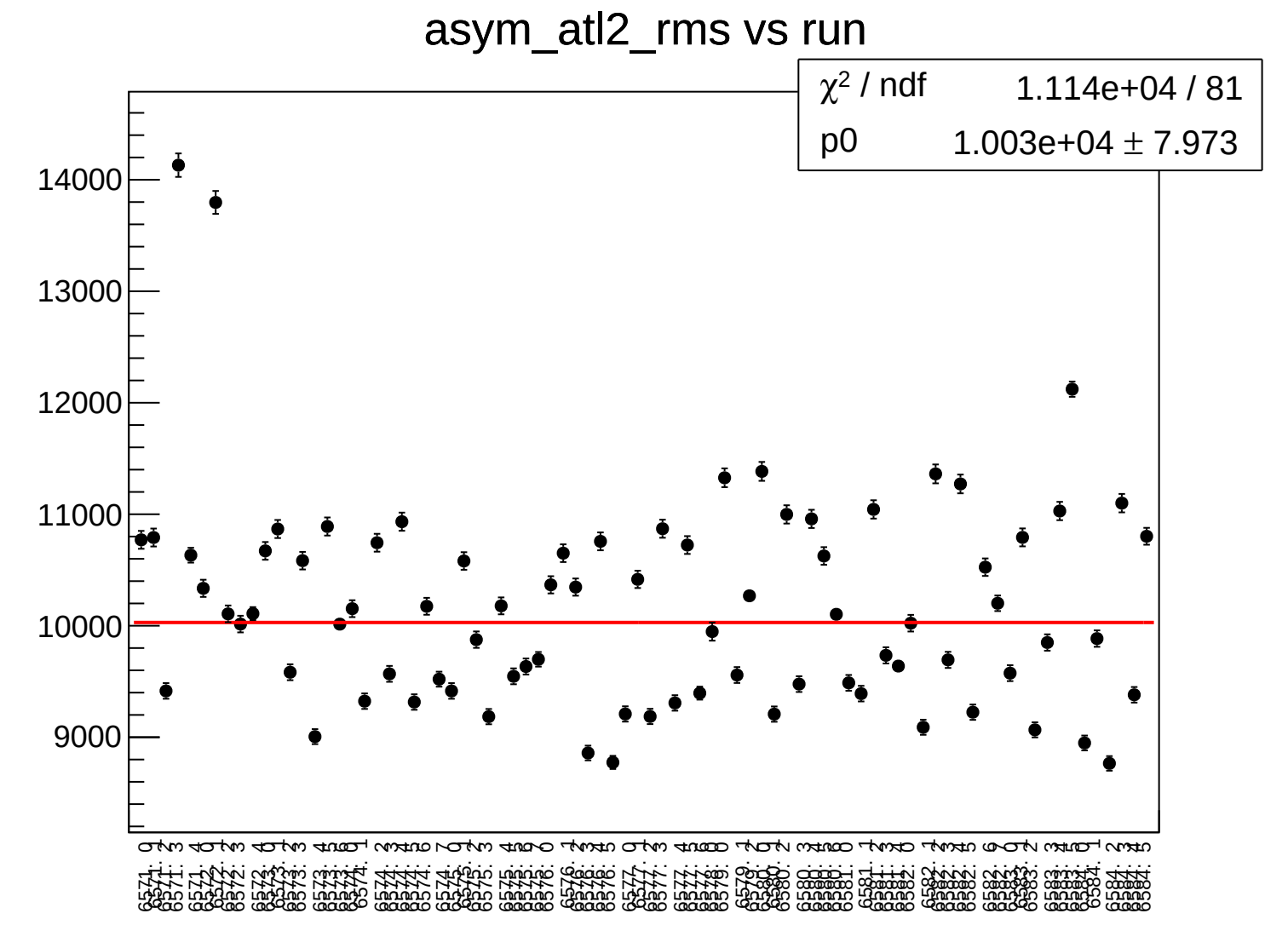

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 90.54 / 81
p0 7536 ± 1.067e+04
300
200
100
0
−100
−200
−300
−400
pull
Entries 82
Mean −1536
Std Dev 1590
2
1
0
−1
−2

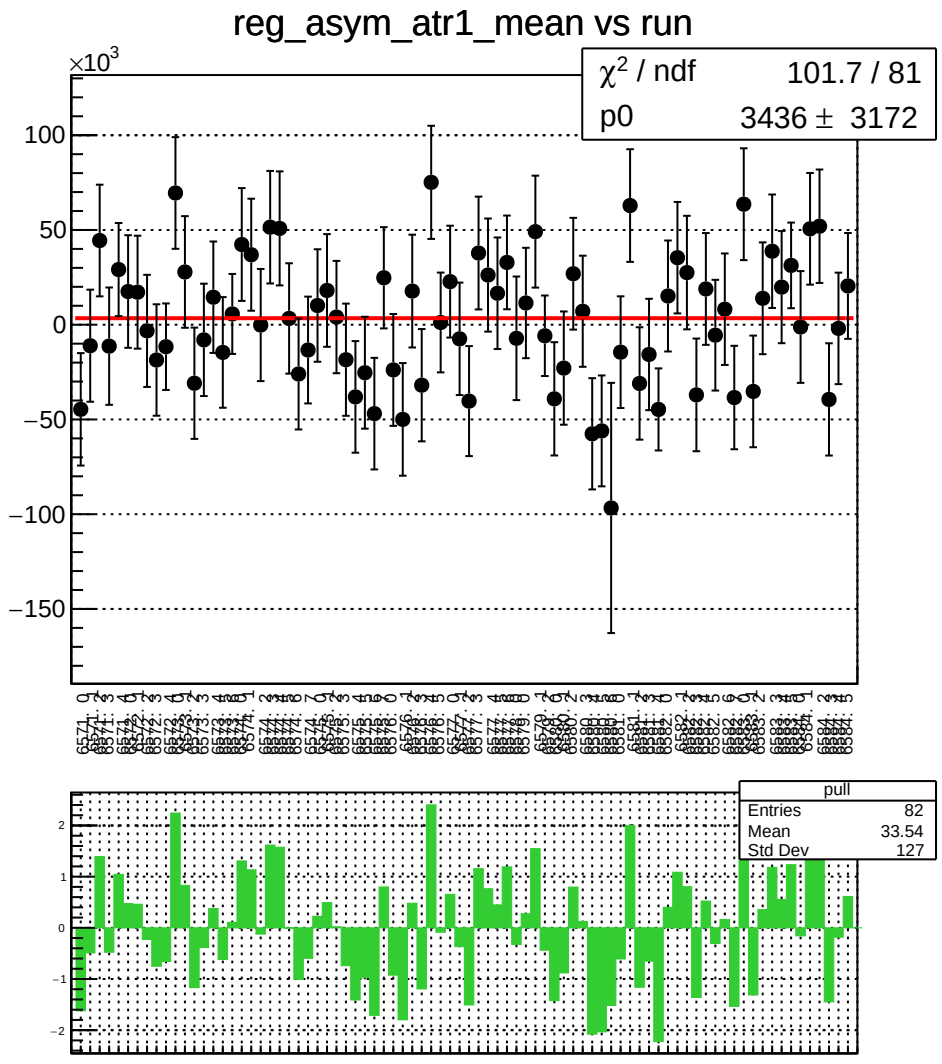

pull1D
Entries 82
Mean −0.003099
Std Dev 1.051
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

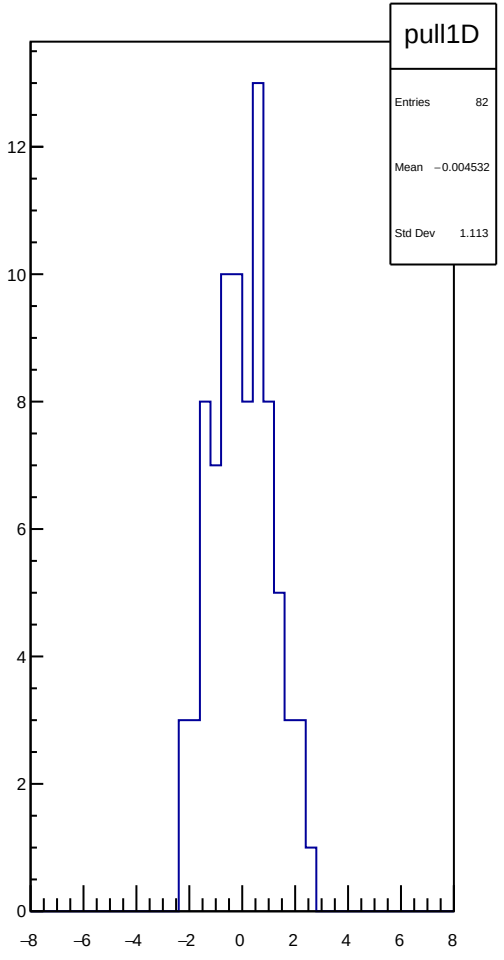

asym_atl2_correction_rms vs run
χ² / ndf 1.193e+04 / 81
p0 9488 ± 7.545
14000
13000
12000
11000
10000
9000
8000

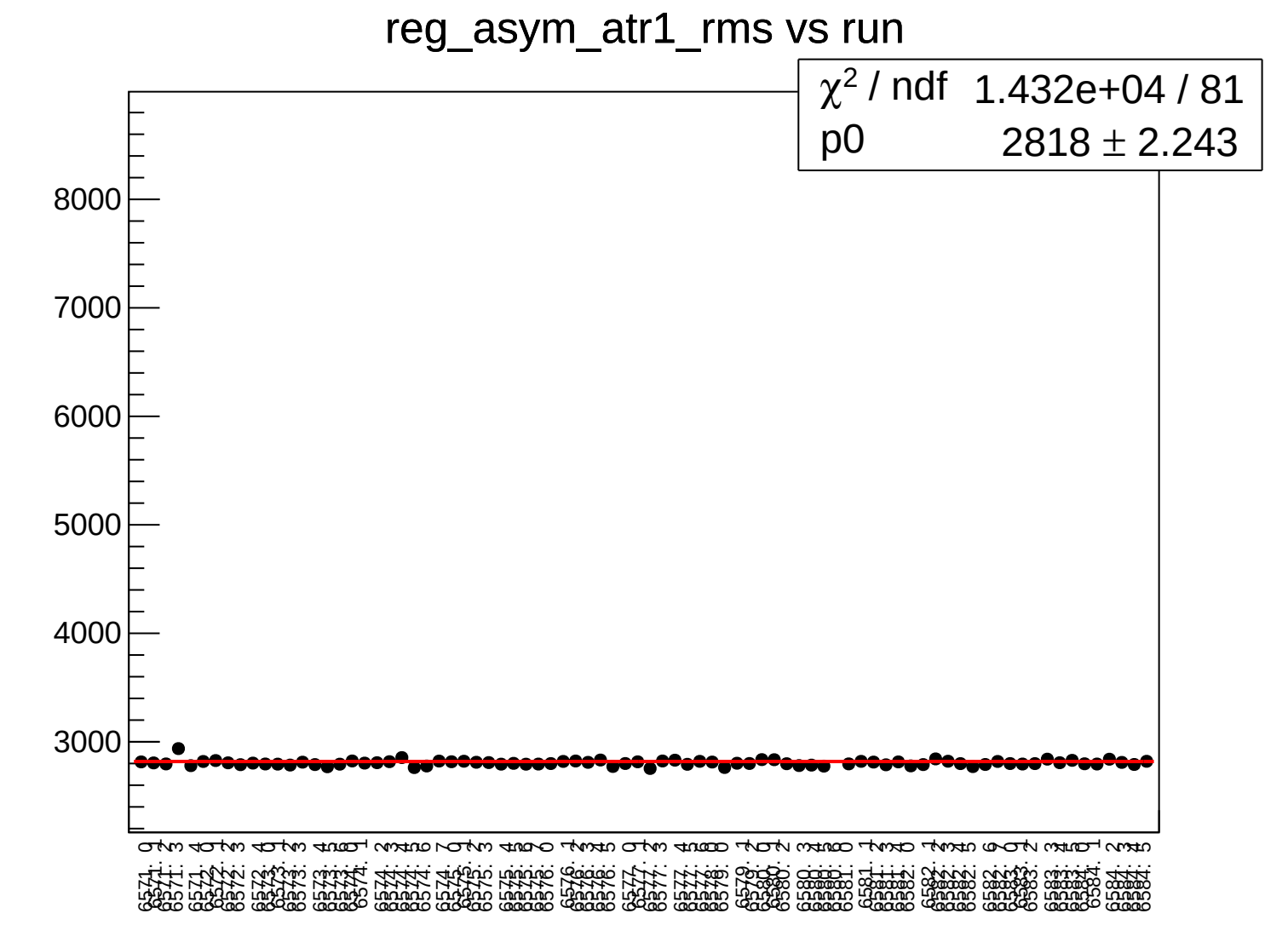

asym_atl2_mean vs run
×10^3
χ² / ndf 98.82 / 81
p0 −5475 ± 1.128e+04
400
200
0
−200
−400
pull
Entries 82
Mean 551.3
Std Dev 496.5
3
2
1
0
−1
−2

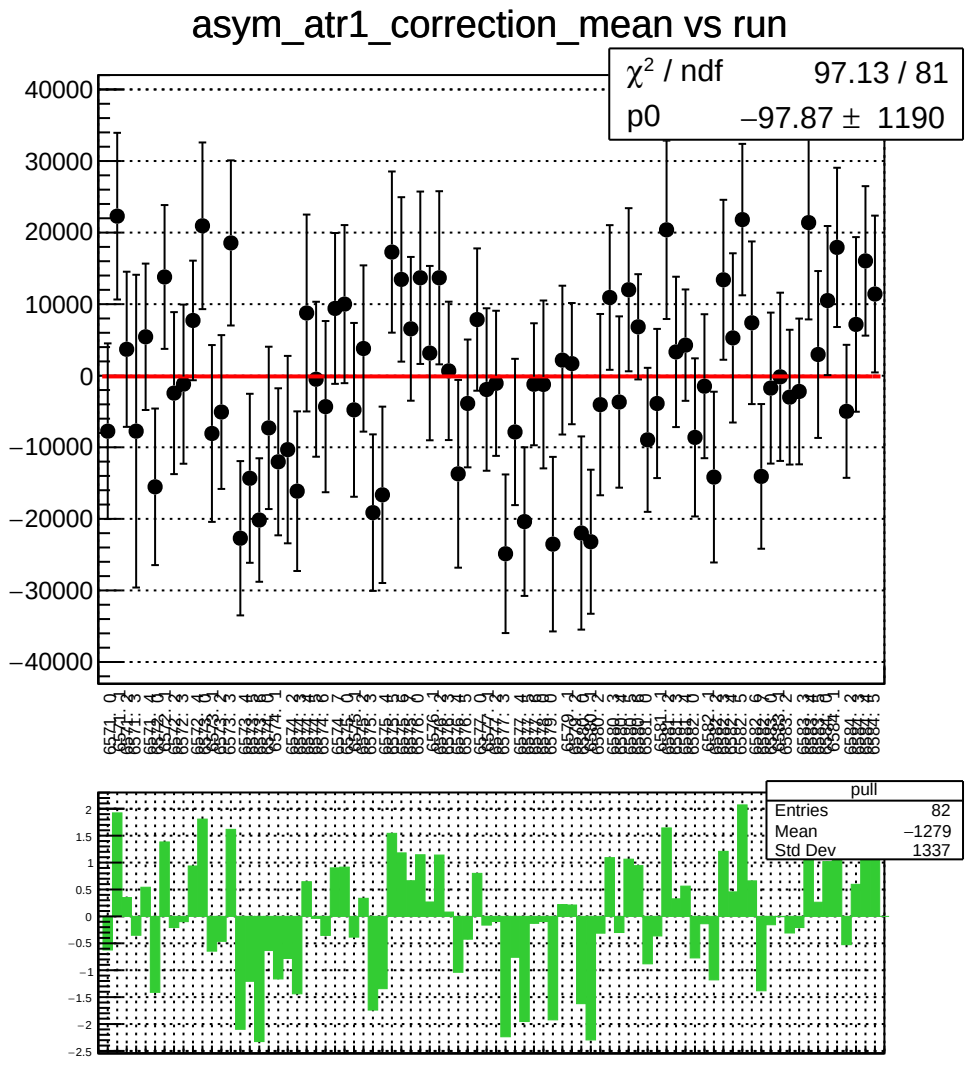

pull1D
Entries 82
Mean −0.008575
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

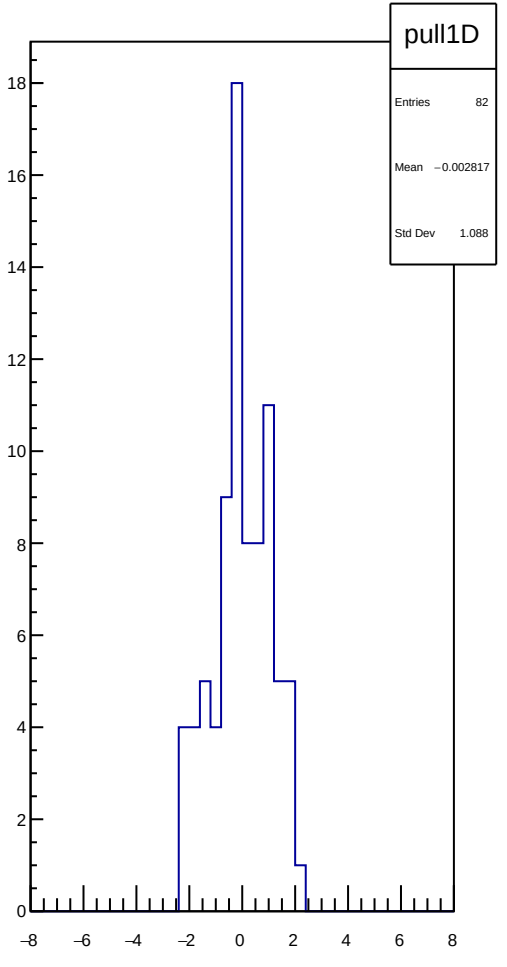

asym_atl2_rms vs run
χ² / ndf 1.114e+04 / 81
p0 1.003e+04 ± 7.973
14000
13000
12000
11000
10000
9000

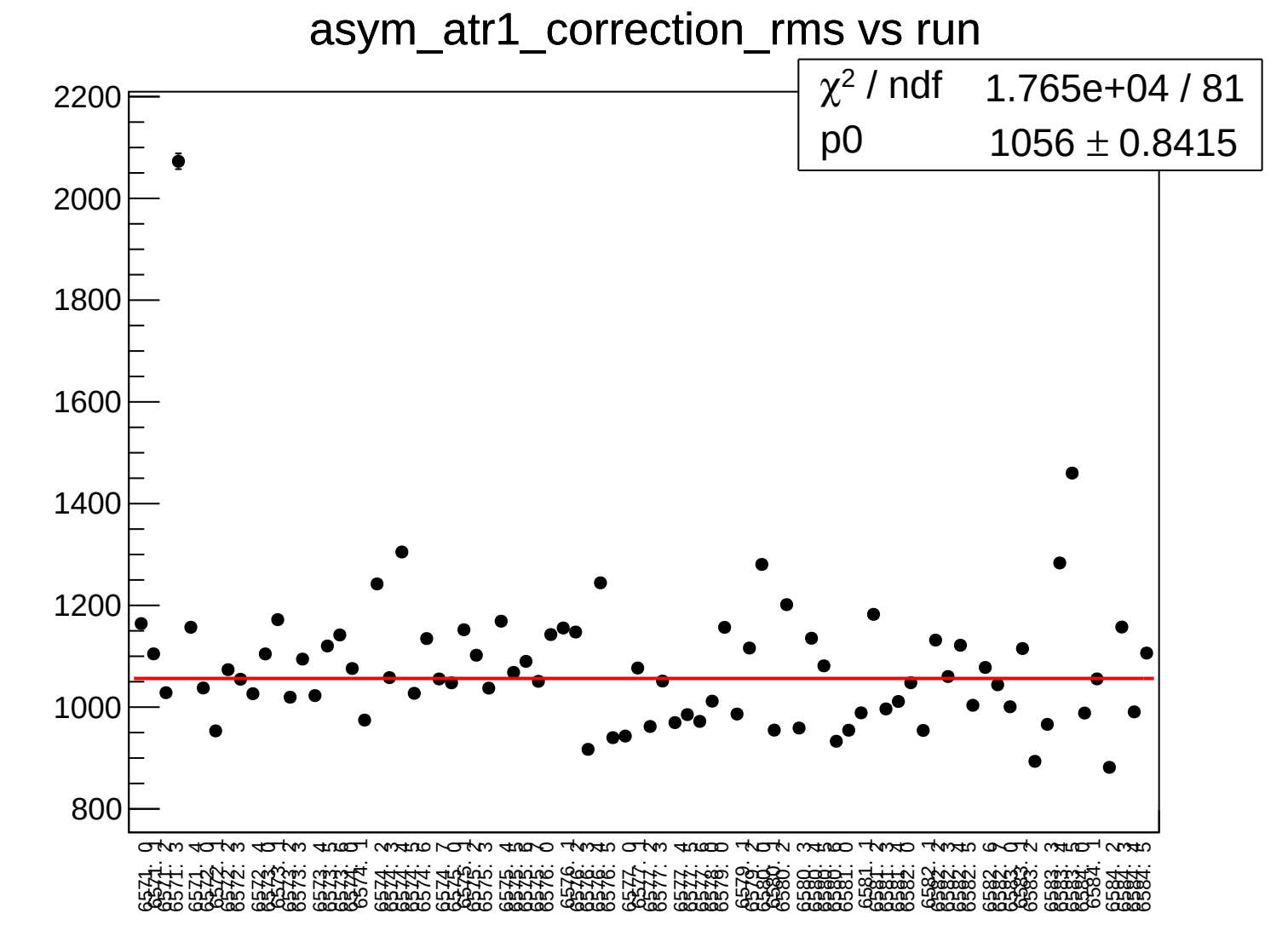

reg_asym_atr1_mean vs run
×10^3
χ^2 / ndf 101.7 / 81
p0 3436 ± 3172
100
50
0
−50
−100
−150
pull
Entries 82
Mean 33.54
Std Dev 127
2
1
0
−1
−2

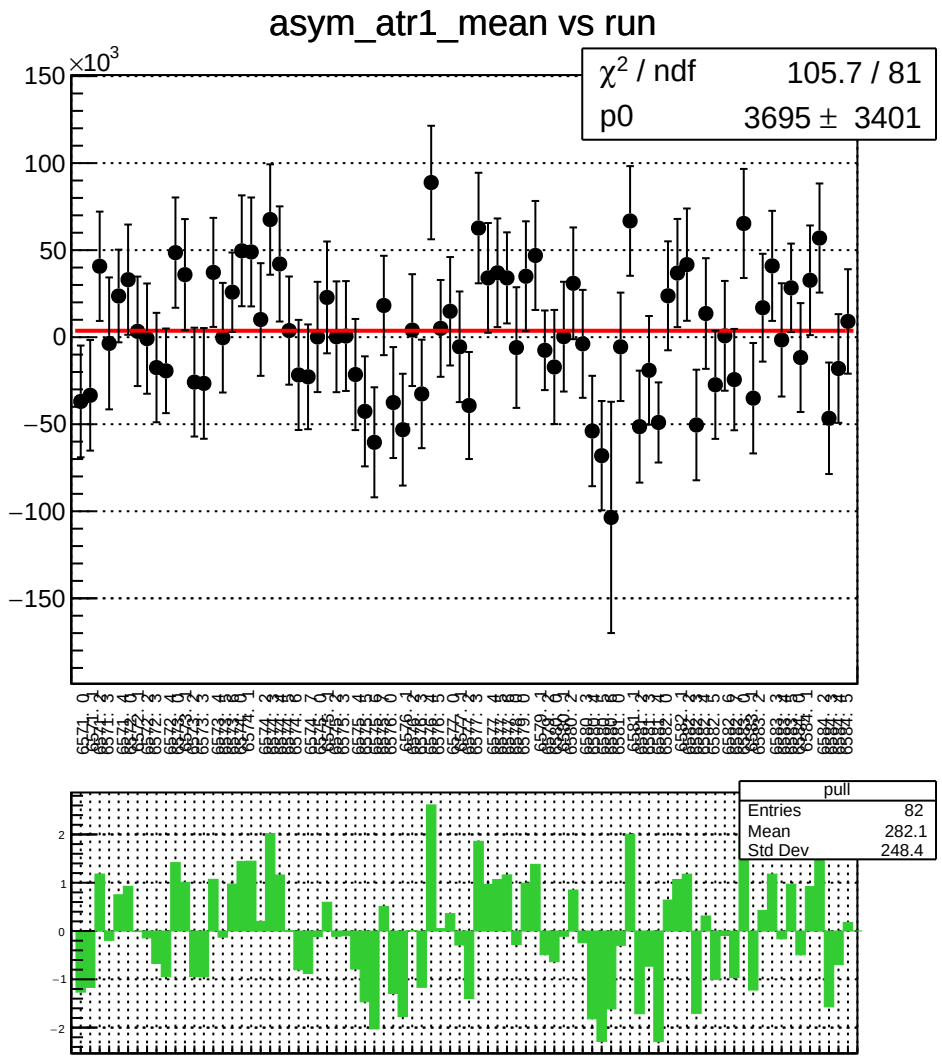

pull1D
Entries 82
Mean −0.004532
Std Dev 1.113
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

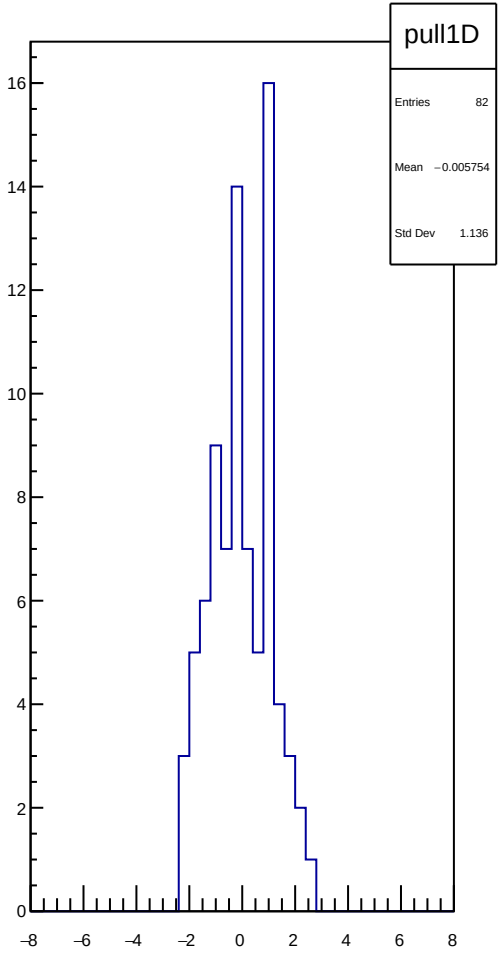

reg_asym_atr1_rms vs run
χ² / ndf 1.432e+04 / 81
p0 2818 ± 2.243
8000
7000
6000
5000
4000
3000

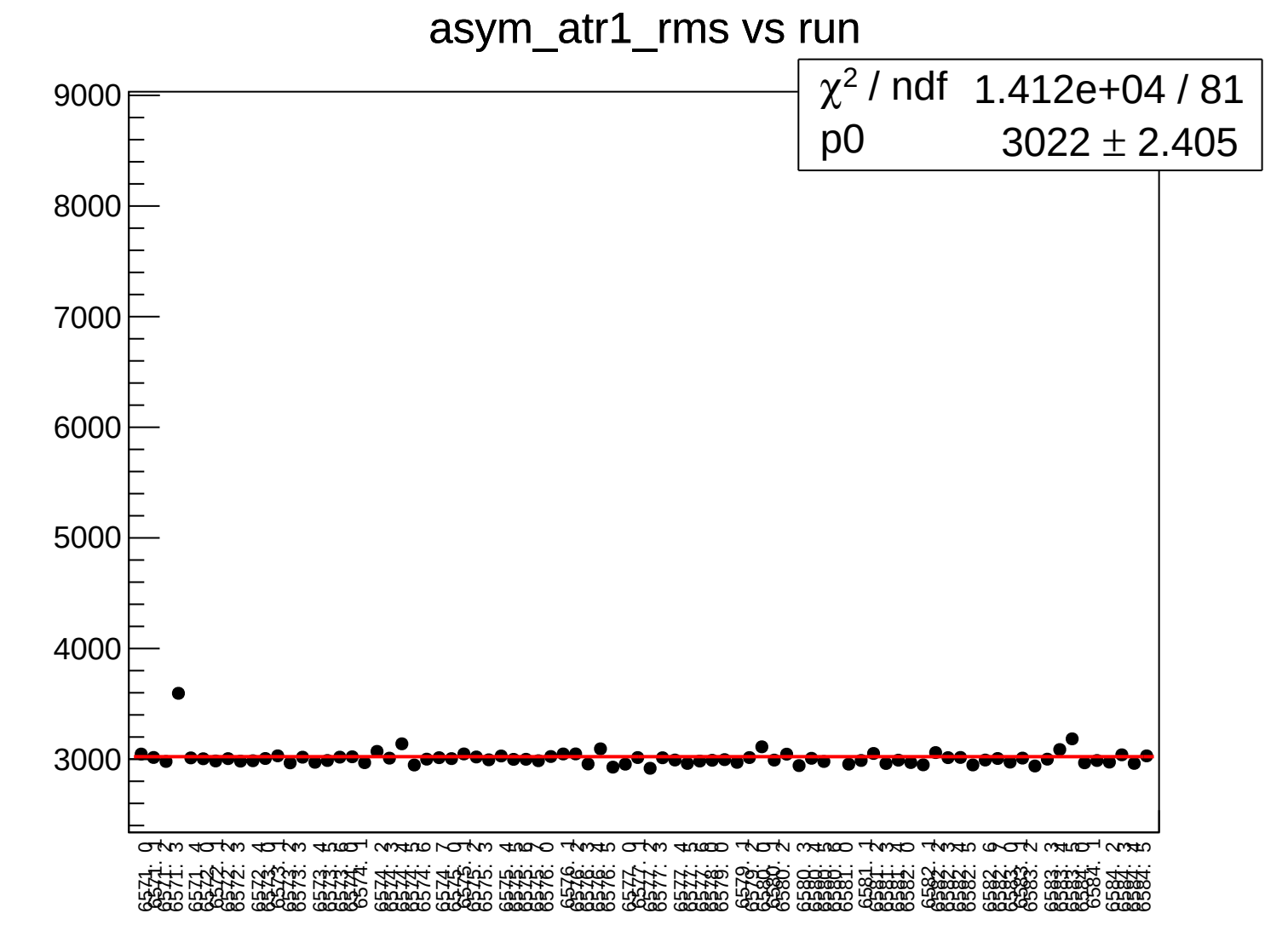

asym_atr1_correction_mean vs run
χ² / ndf 97.13 / 81
p0 −97.87 ± 1190
pull
Entries 82
Mean −1279
Std Dev 1337

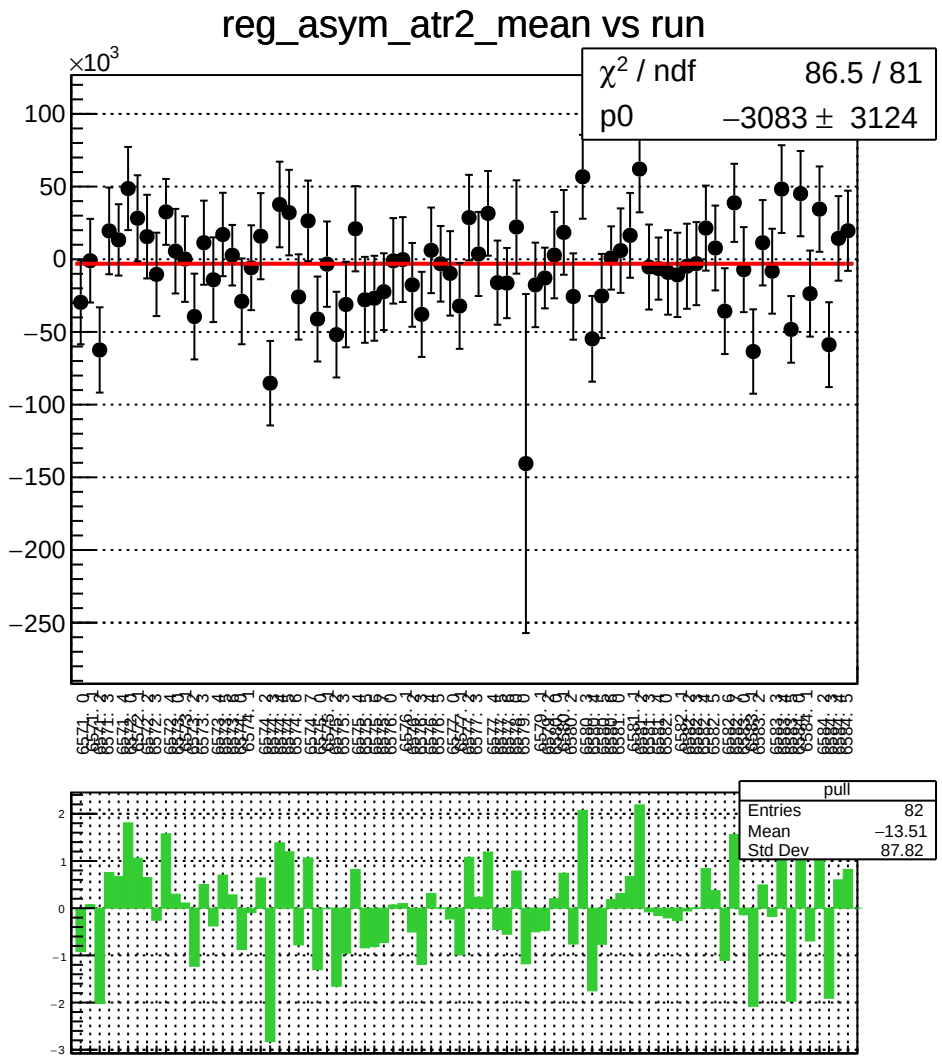

pull1D
Entries 82
Mean −0.002817
Std Dev 1.088

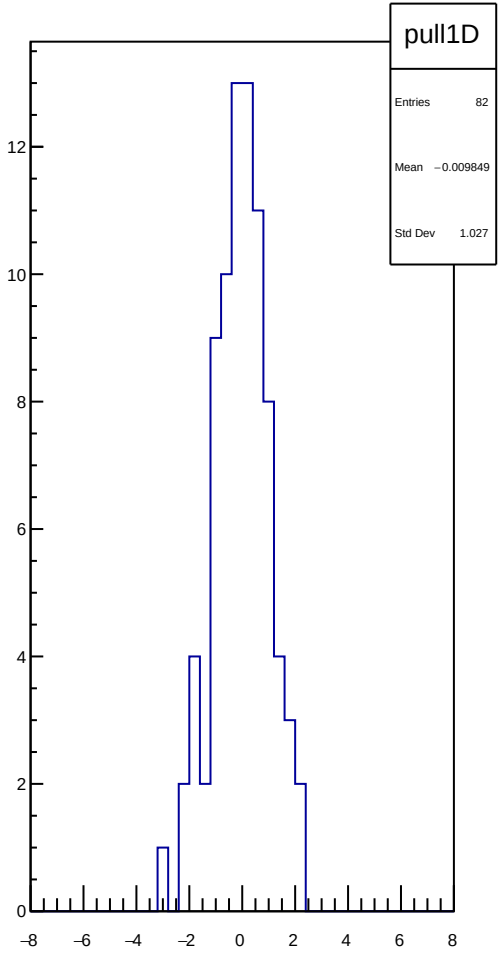

asym_atr1_correction_rms vs run
χ² / ndf 1.765e+04 / 81
p0 1056 ± 0.8415
2200
2000
1800
1600
1400
1200
1000
800

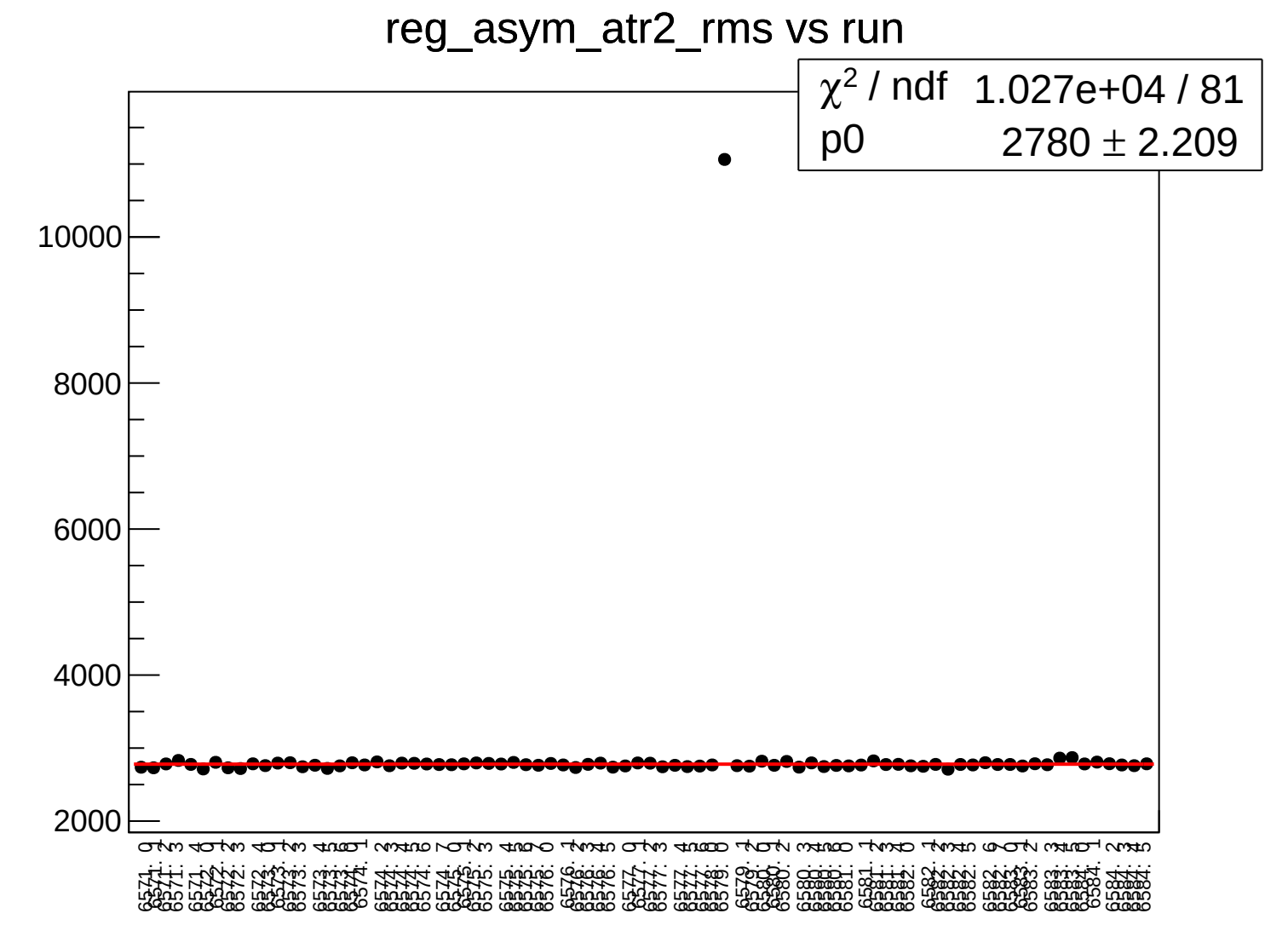

asym_atr1_mean vs run
×10^3
150
100
50
0
−50
−100
−150
χ² / ndf 105.7 / 81
p0 3695 ± 3401
pull
Entries 82
Mean 282.1
Std Dev 248.4
2
1
0
−1
−2

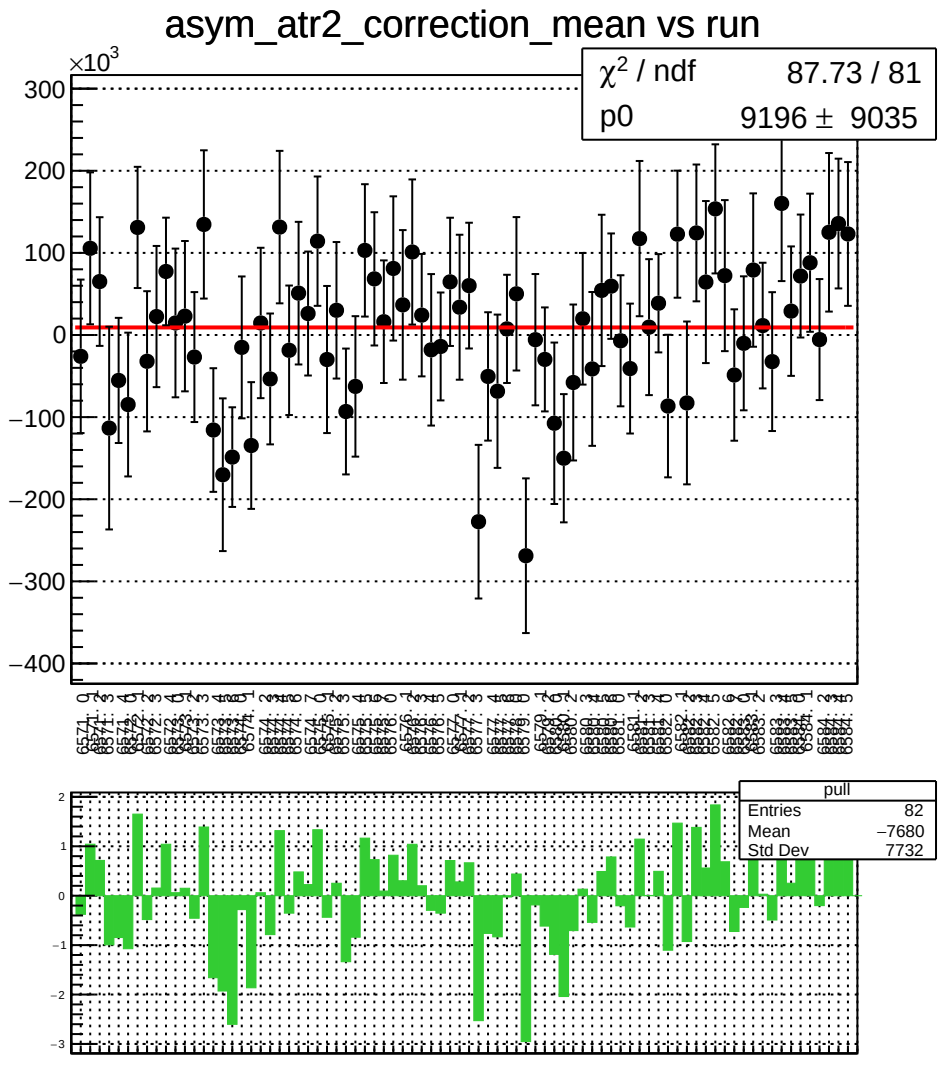

pull1D
Entries 82
Mean −0.005754
Std Dev 1.136
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

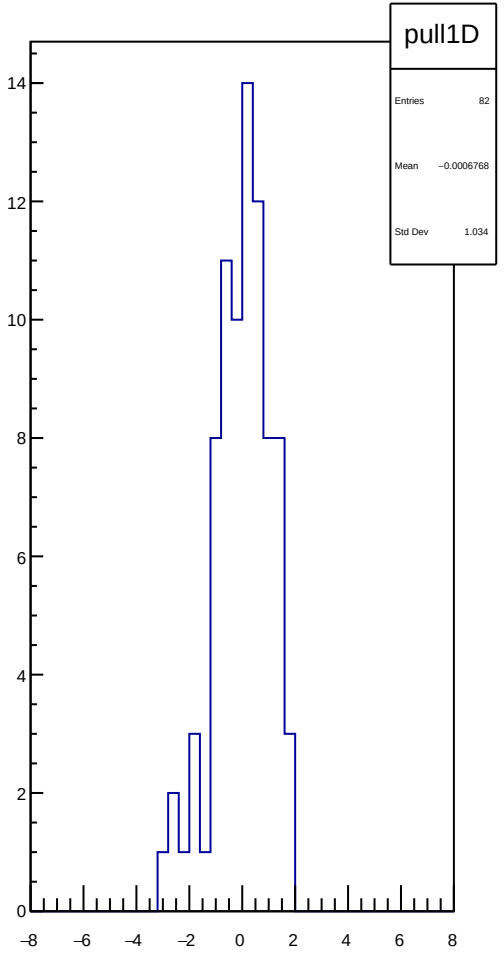

asym_atr1_rms vs run
χ² / ndf 1.412e+04 / 81
p0 3022 ± 2.405
9000
8000
7000
6000
5000
4000
3000

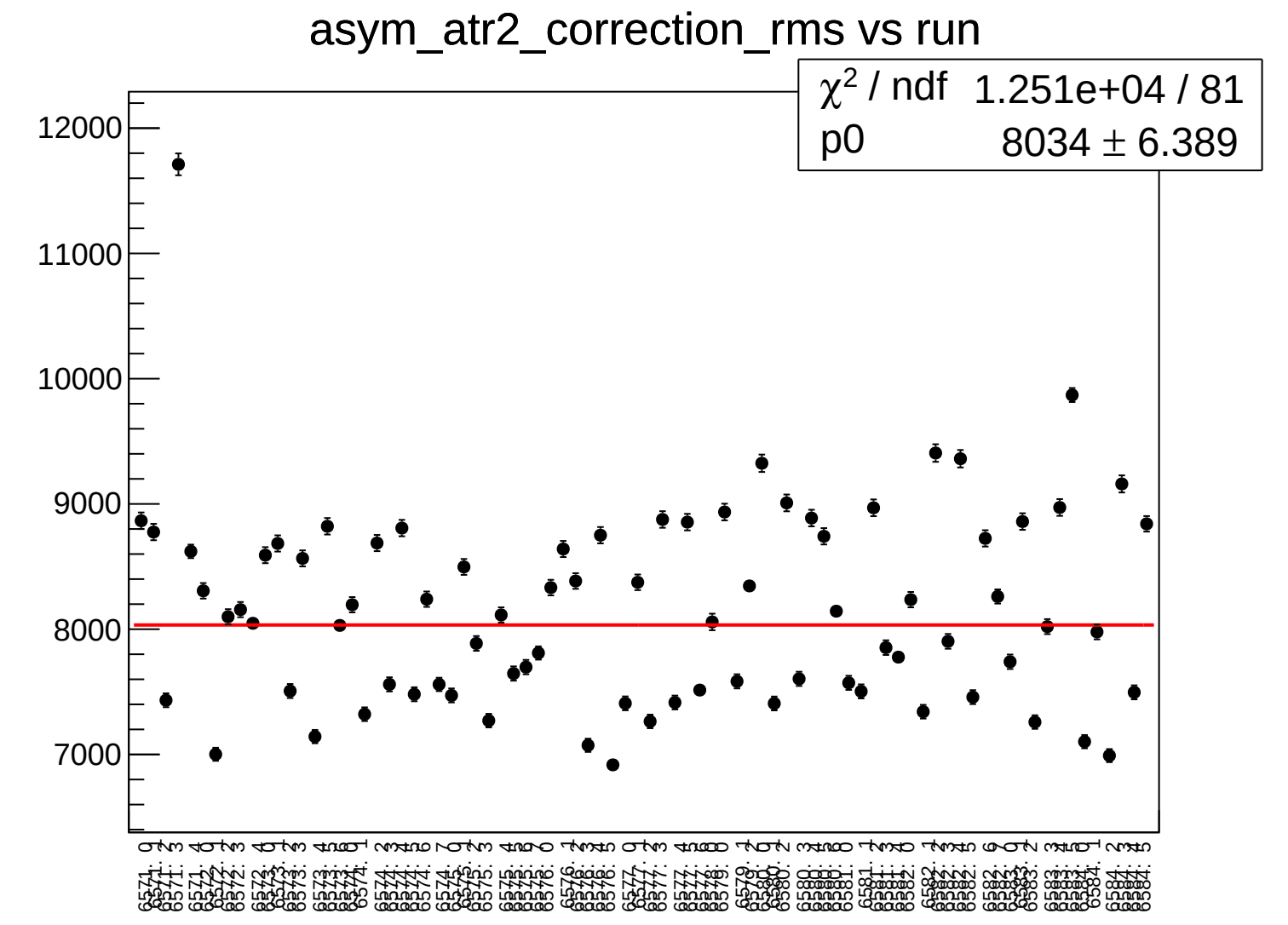

reg_asym_atr2_mean vs run
×10^3
χ^2 / ndf 86.5 / 81
p0 −3083 ± 3124
pull
Entries 82
Mean −13.51
Std Dev 87.82

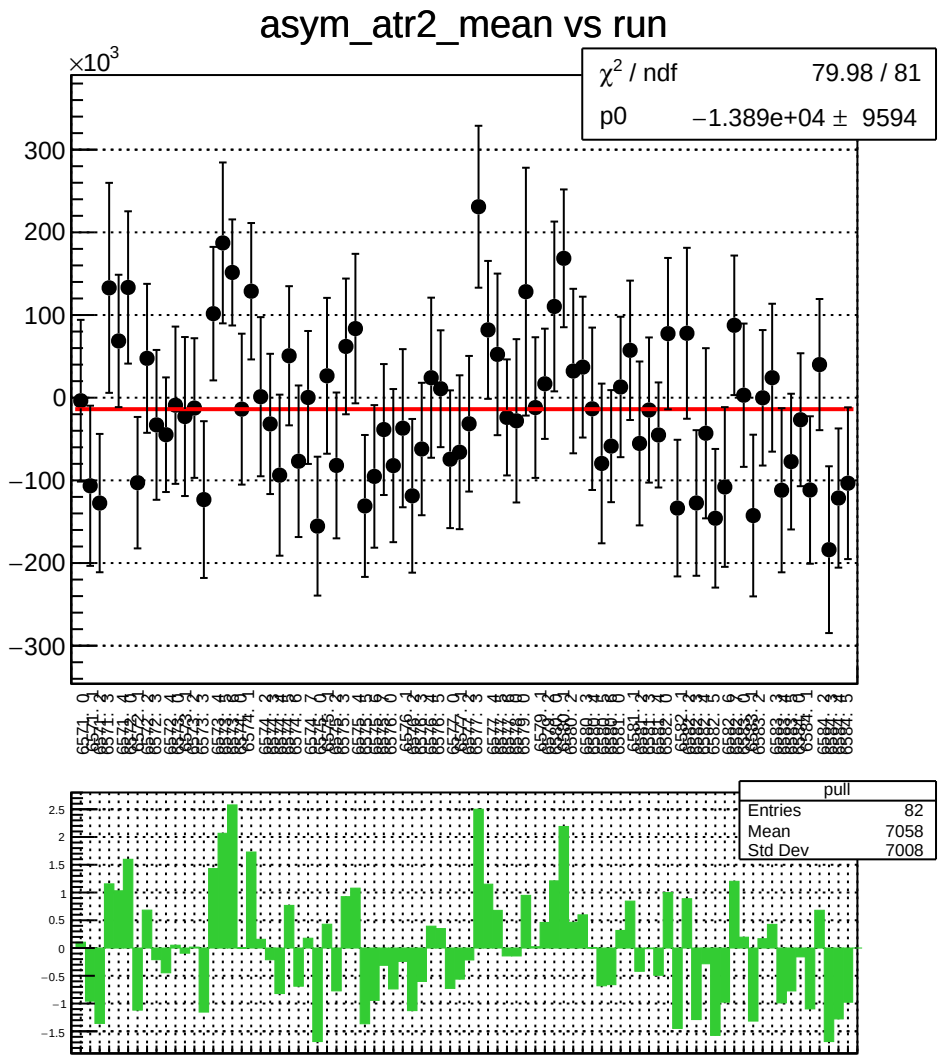

pull1D
Entries 82
Mean −0.009849
Std Dev 1.027

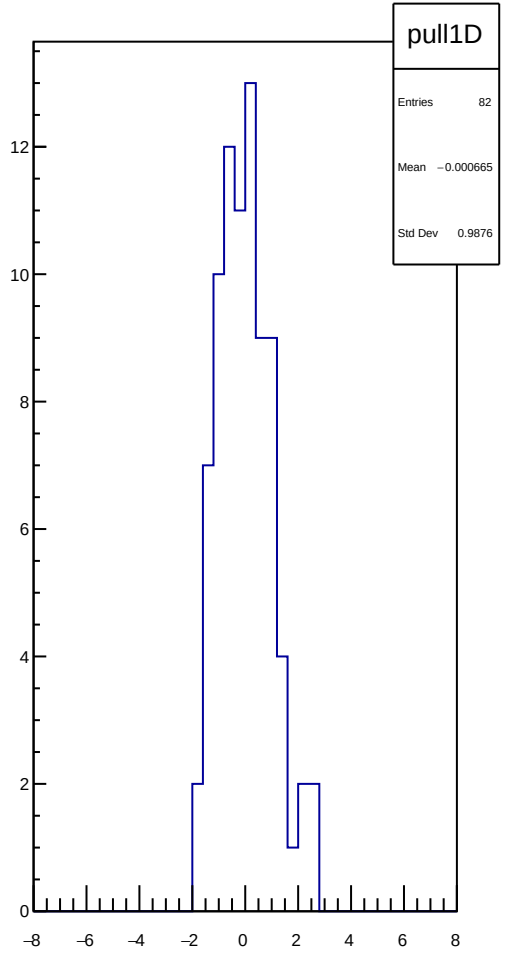

reg_asym_atr2_rms vs run
χ² / ndf 1.027e+04 / 81
p0 2780 ± 2.209
10000
8000
6000
4000
2000

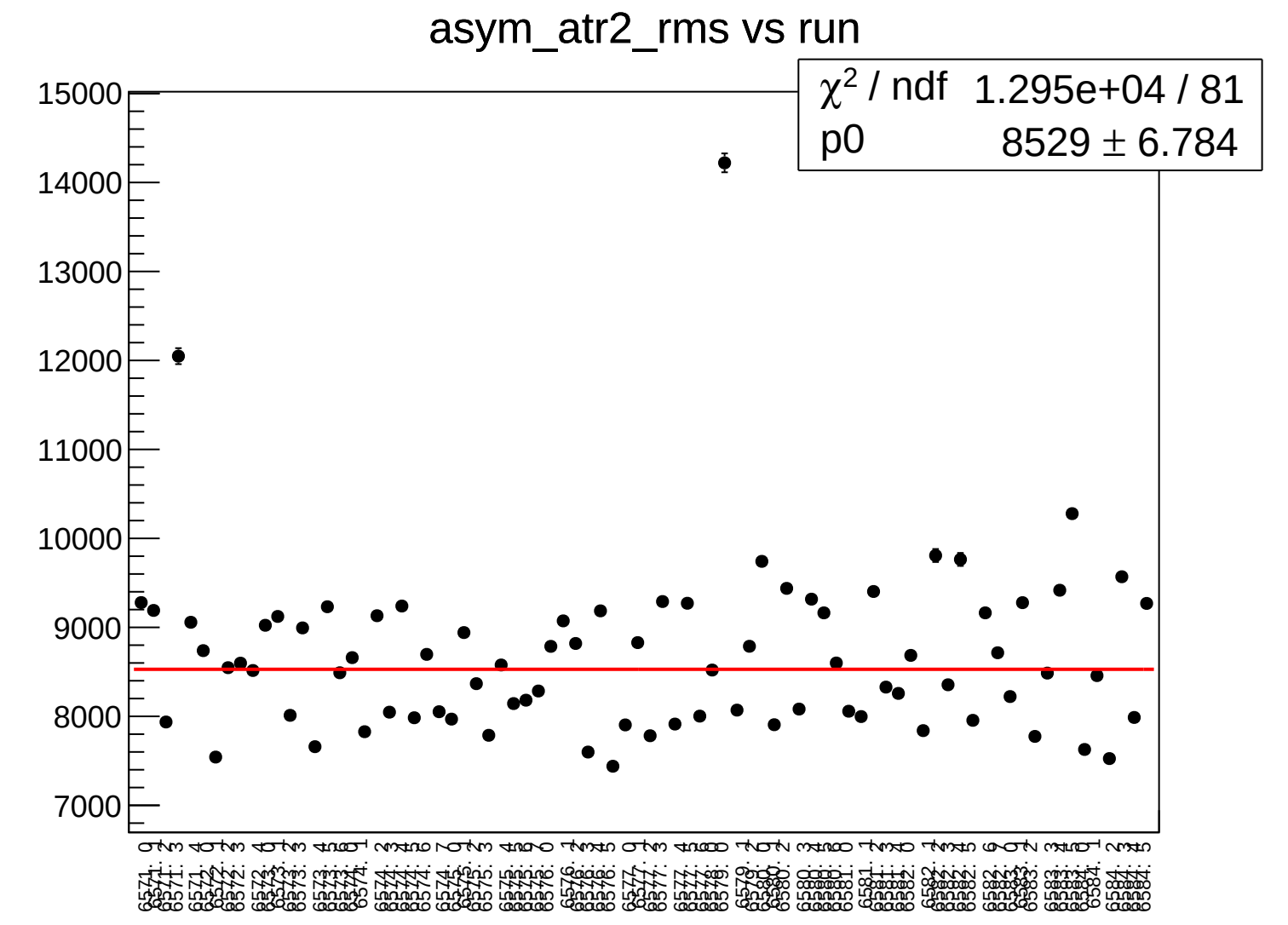

asym_atr2_correction_mean vs run
×10^3
χ^2 / ndf 87.73 / 81
p0 9196 ± 9035
pull
Entries 82
Mean −7680
Std Dev 7732

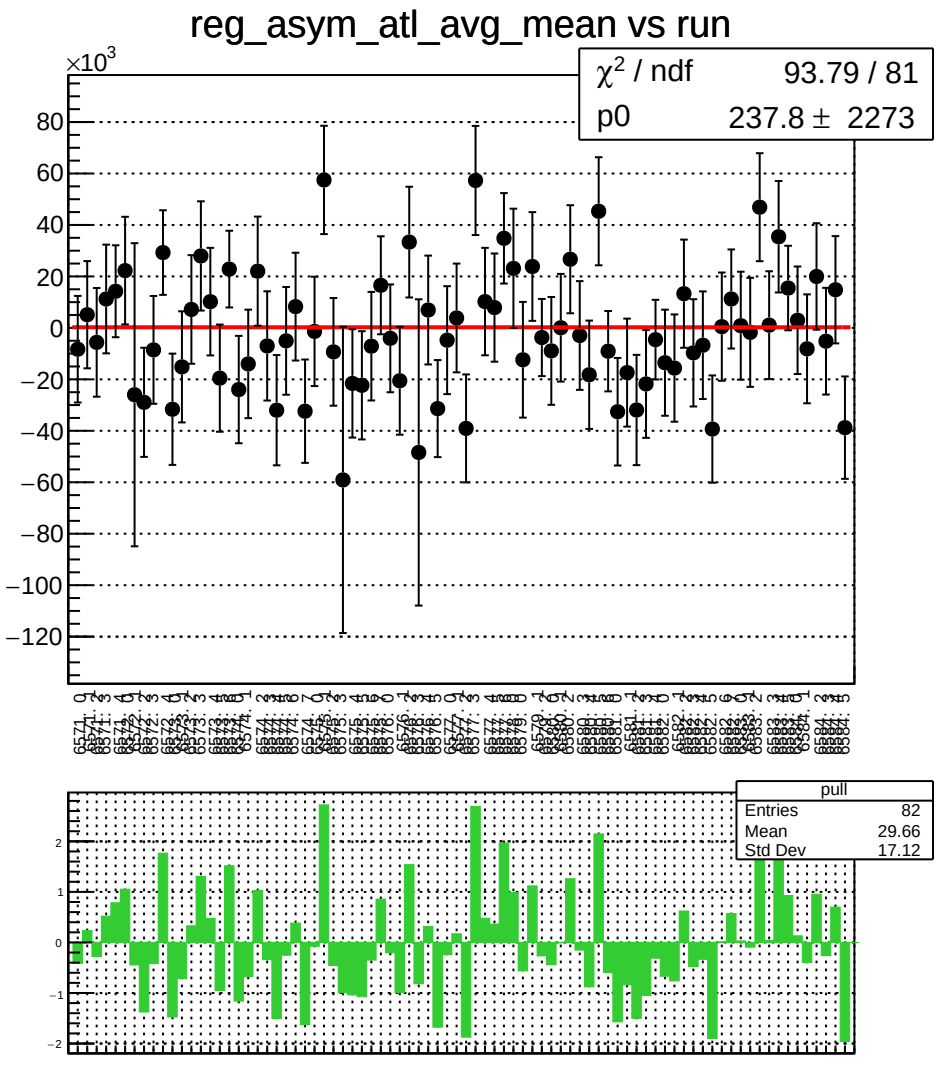

pull1D
Entries 82
Mean −0.0006768
Std Dev 1.034

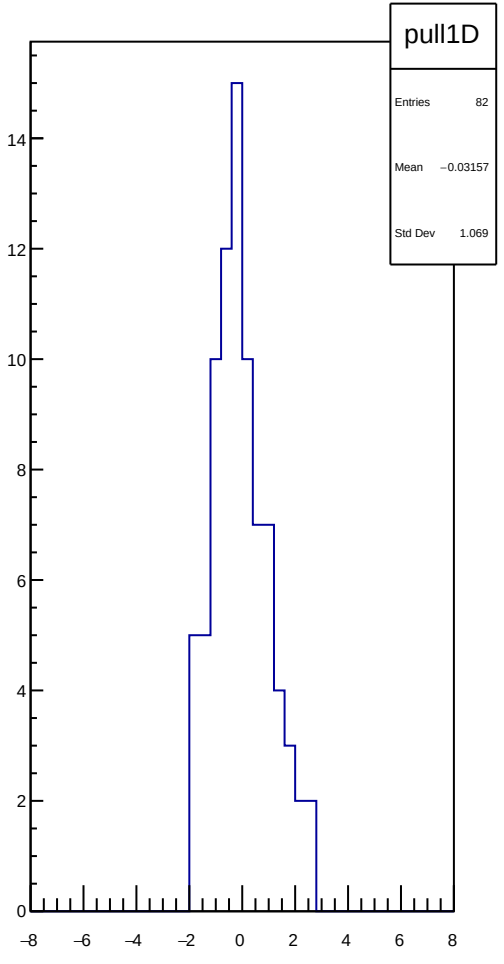

asym_atr2_correction_rms vs run
χ² / ndf 1.251e+04 / 81
p0 8034 ± 6.389
12000
11000
10000
9000
8000
7000

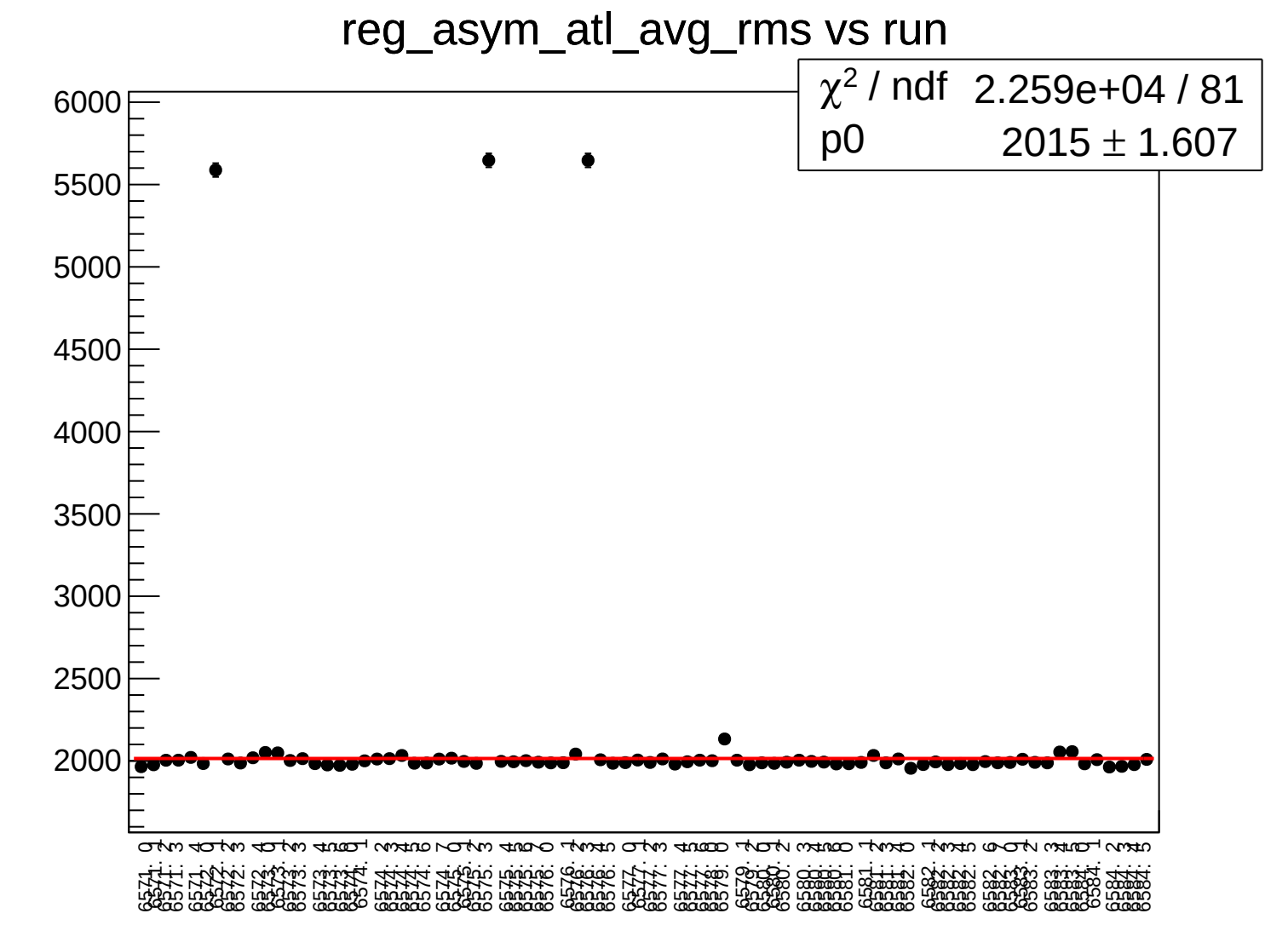

asym_atr2_mean vs run
×10^3
χ² / ndf 79.98 / 81
p0 −1.389e+04 ± 9594
300
200
100
0
−100
−200
−300
pull
Entries 82
Mean 7058
Std Dev 7008
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5

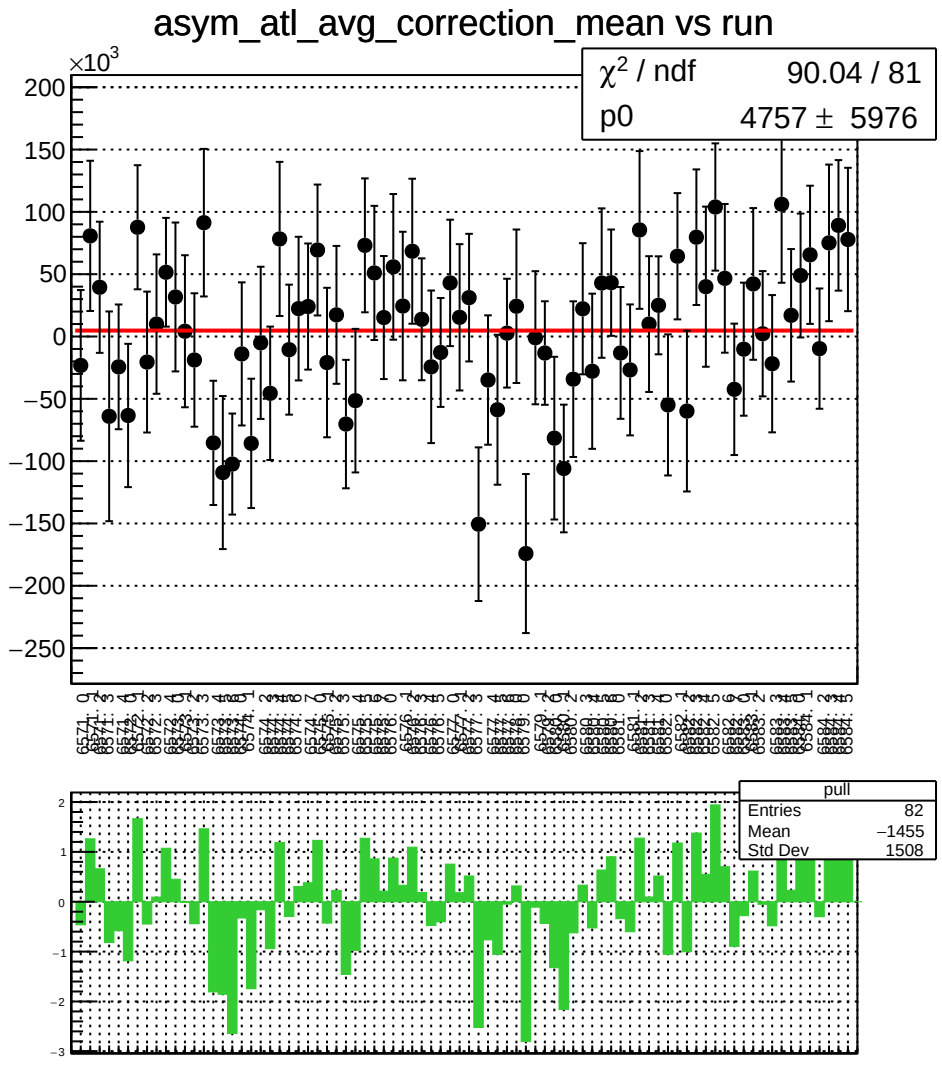

pull1D
Entries 82
Mean −0.000665
Std Dev 0.9876
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

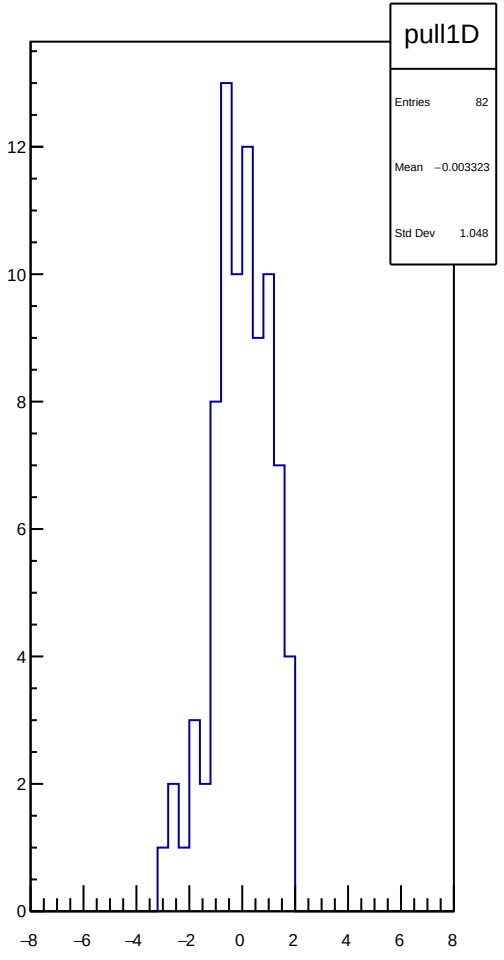

asym_atr2_rms vs run
$\chi^2$ / ndf 1.295e+04 / 81
p0 8529 ± 6.784
15000
14000
13000
12000
11000
10000
9000
8000
7000

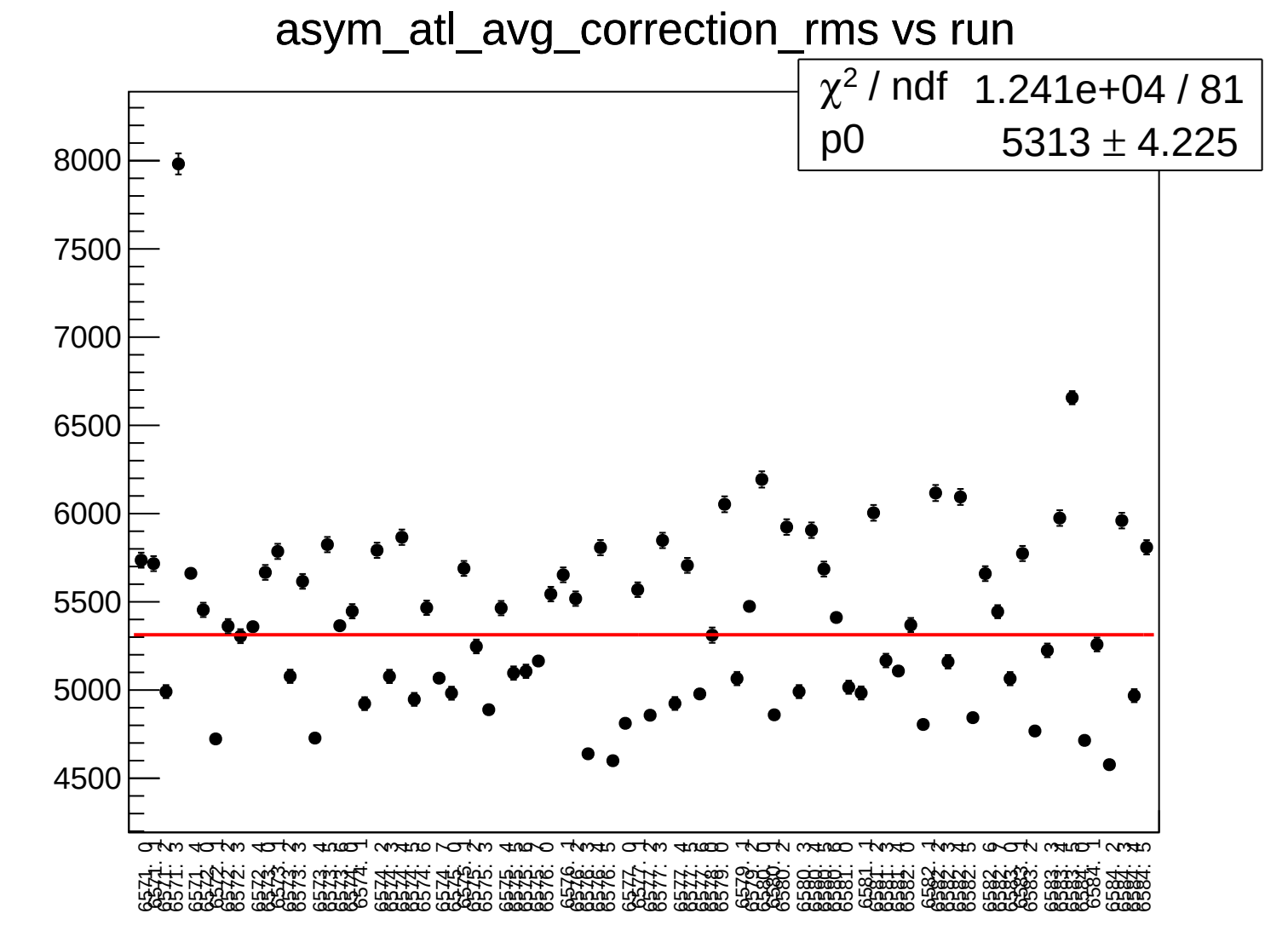

reg_asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 93.79 / 81
p0 237.8 ± 2273
pull
Entries 82
Mean 29.66
Std Dev 17.12

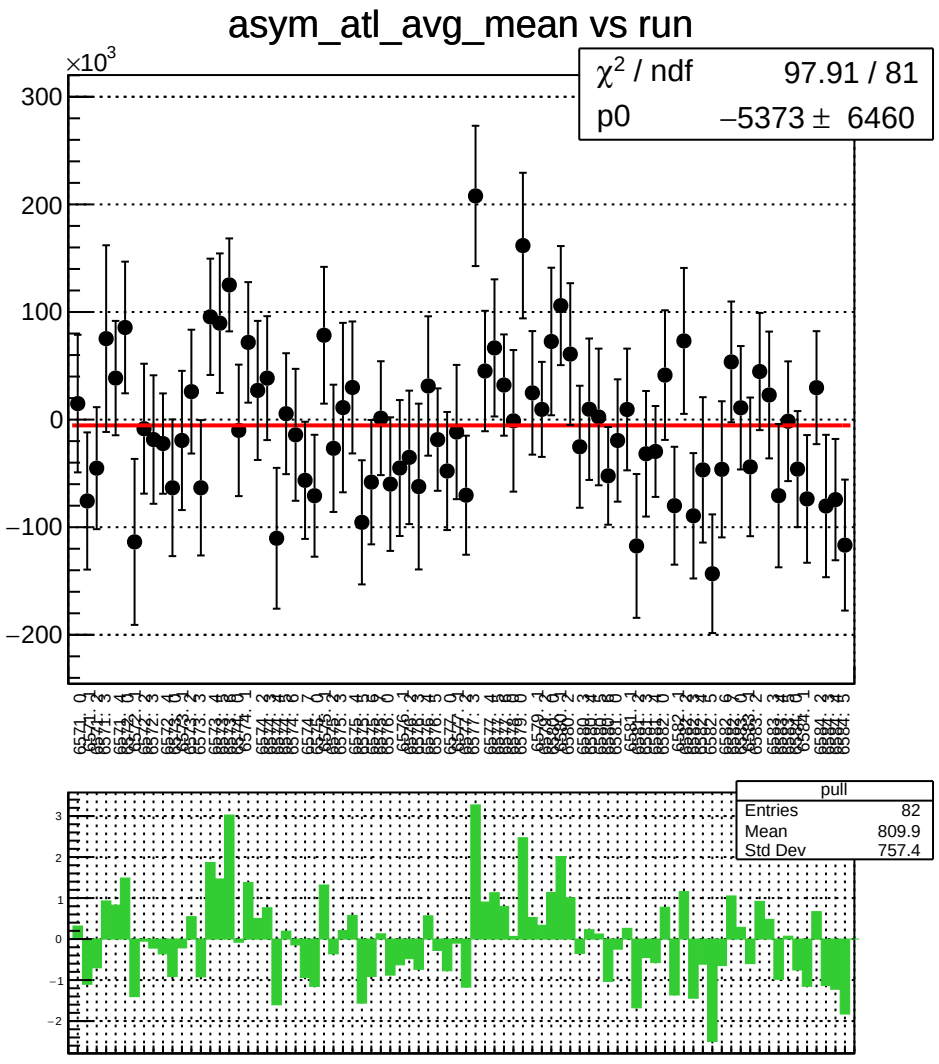

pull1D
Entries 82
Mean −0.03157
Std Dev 1.069

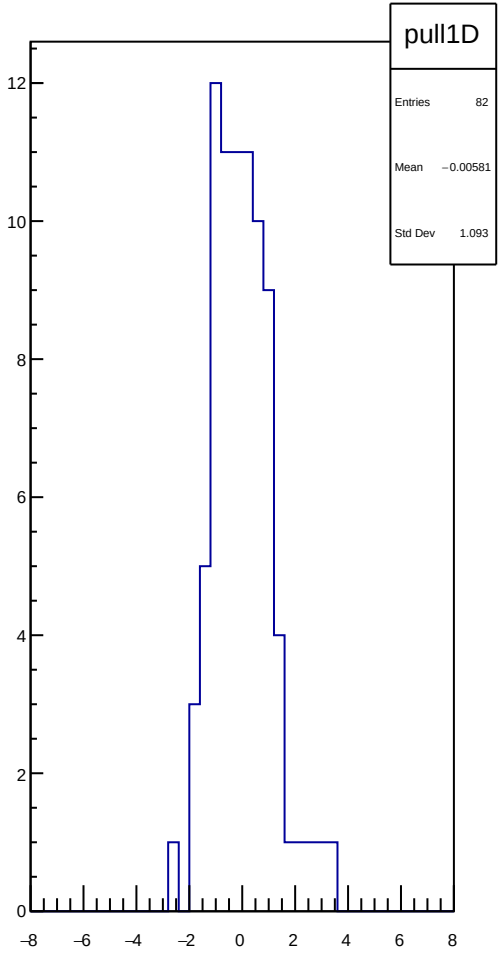

reg_asym_atl_avg_rms vs run
$\chi^2$ / ndf 2.259e+04 / 81
p0 2015 ± 1.607
6000
5500
5000
4500
4000
3500
3000
2500
2000

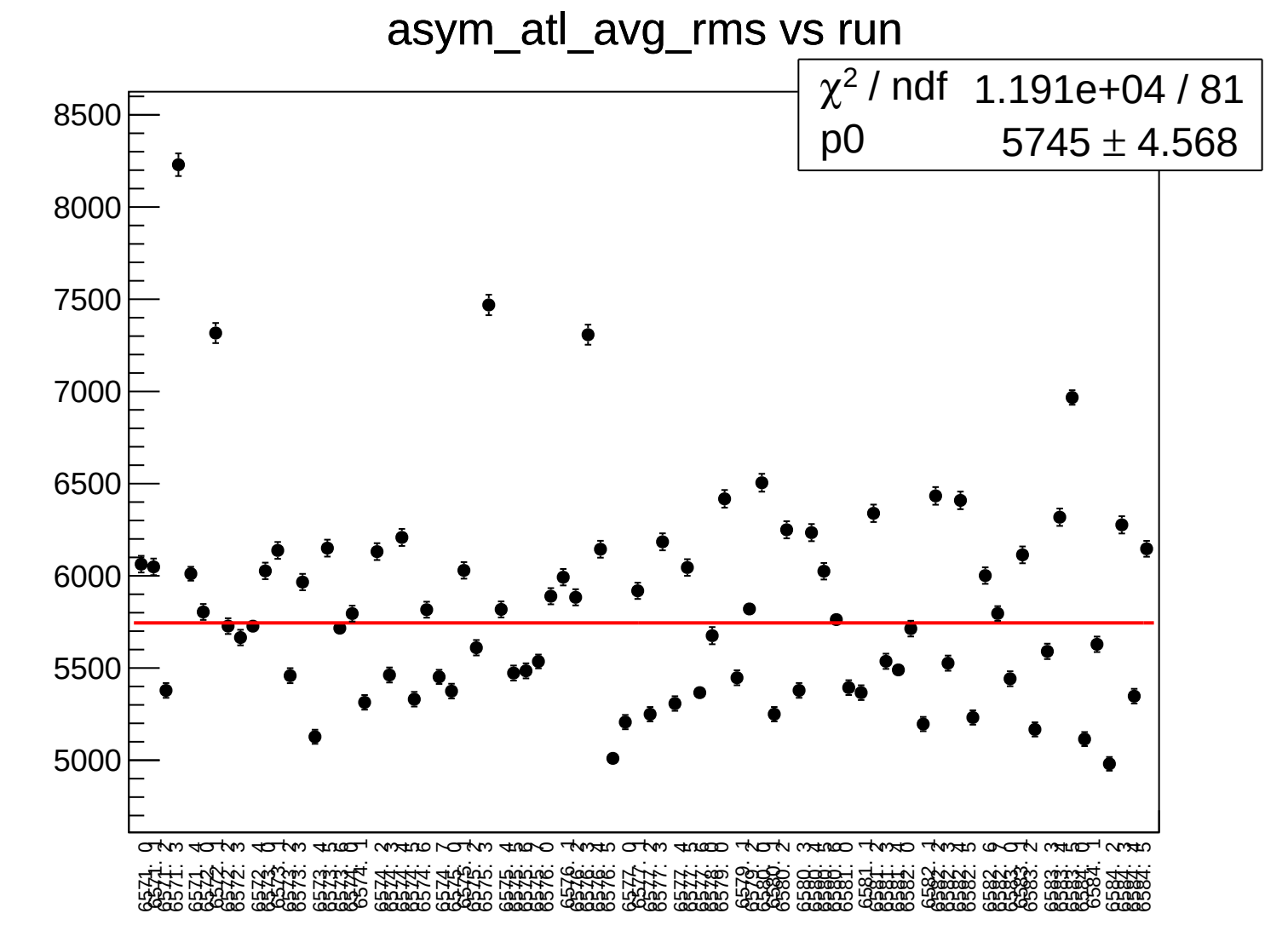

asym_atl_avg_correction_mean vs run
×10^3
χ^2 / ndf 90.04 / 81
p0 4757 ± 5976
pull
Entries 82
Mean −1455
Std Dev 1508

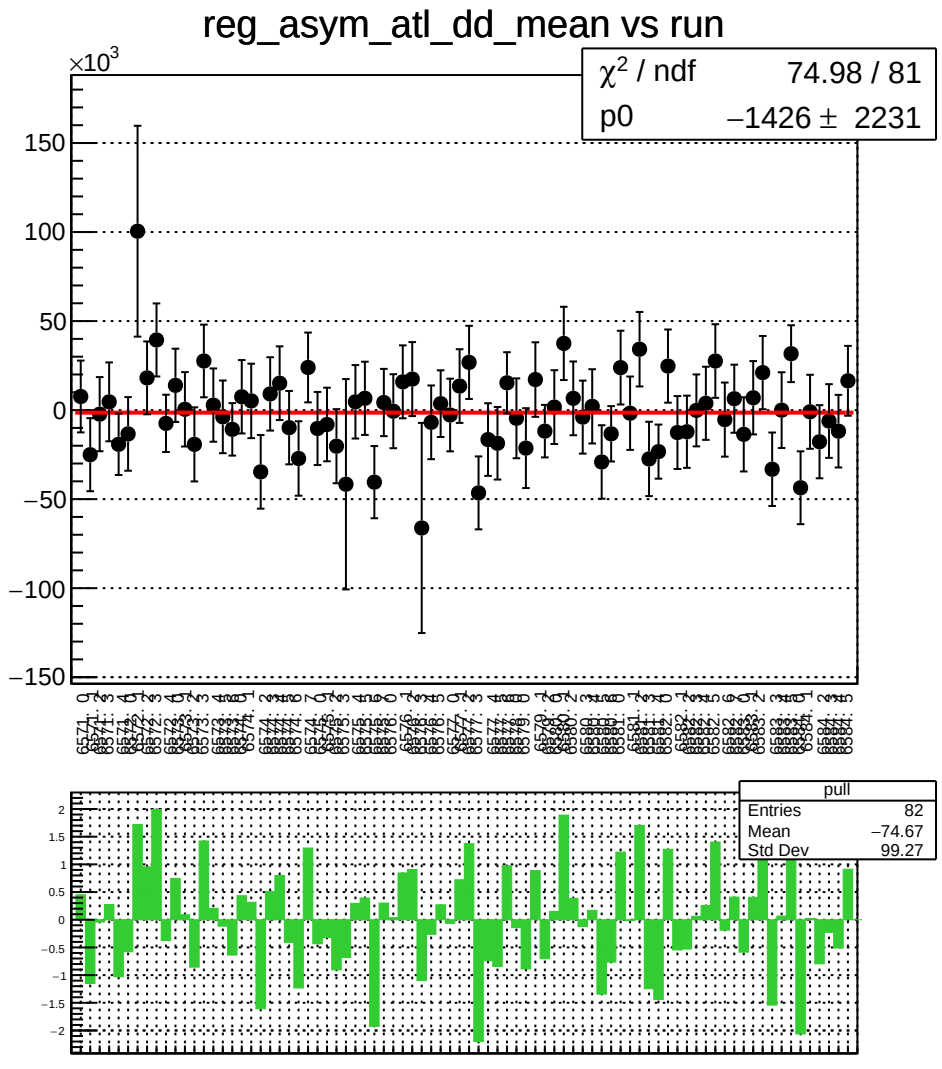

pull1D
Entries 82
Mean −0.003323
Std Dev 1.048

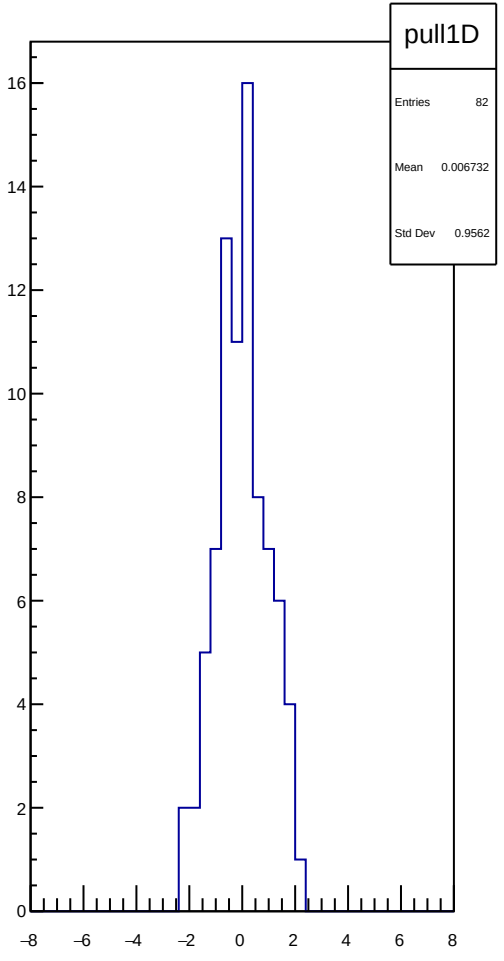

asym_atl_avg_correction_rms vs run
χ² / ndf 1.241e+04 / 81
p0 5313 ± 4.225
8000
7500
7000
6500
6000
5500
5000
4500

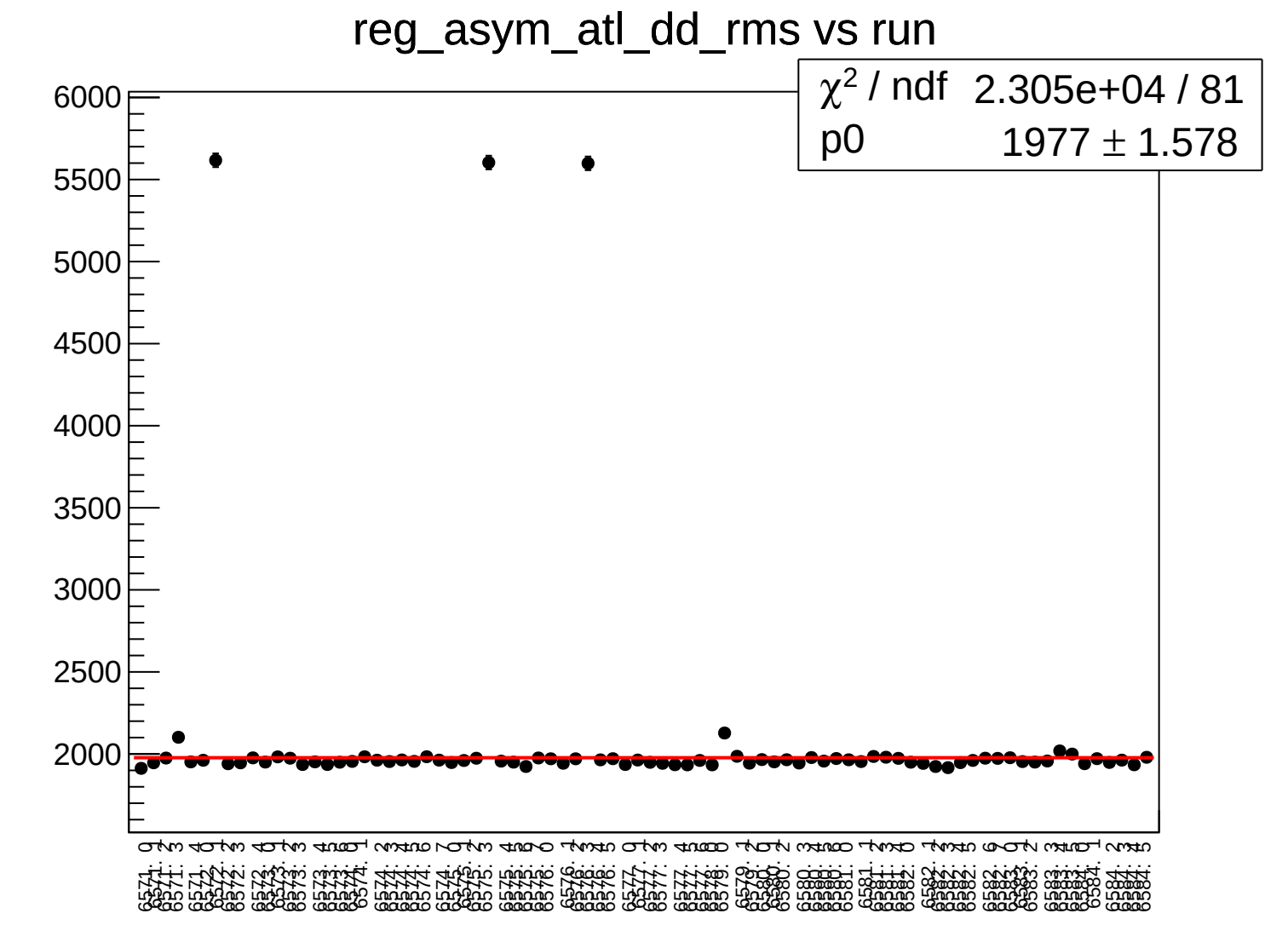

asym_atl_avg_mean vs run
×10^3
χ² / ndf 97.91 / 81
p0 −5373 ± 6460
pull
Entries 82
Mean 809.9
Std Dev 757.4

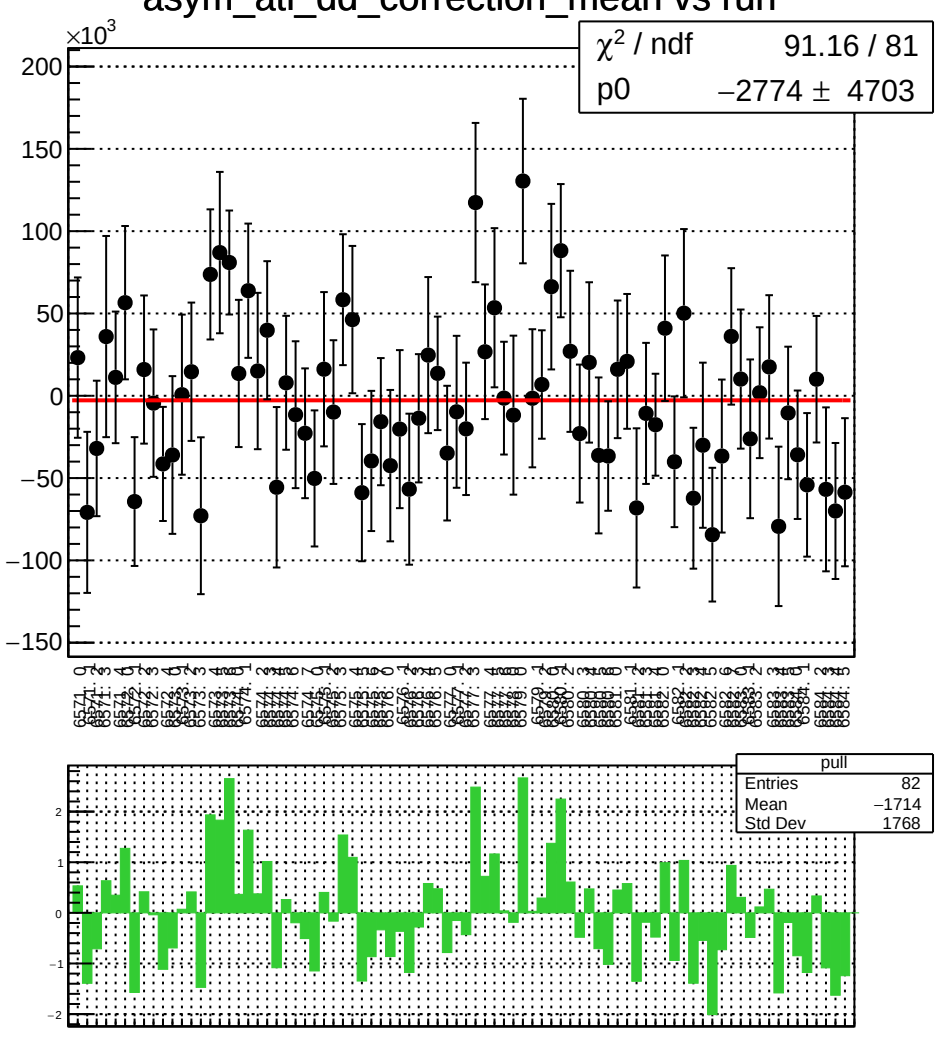

pull1D
Entries 82
Mean −0.00581
Std Dev 1.093

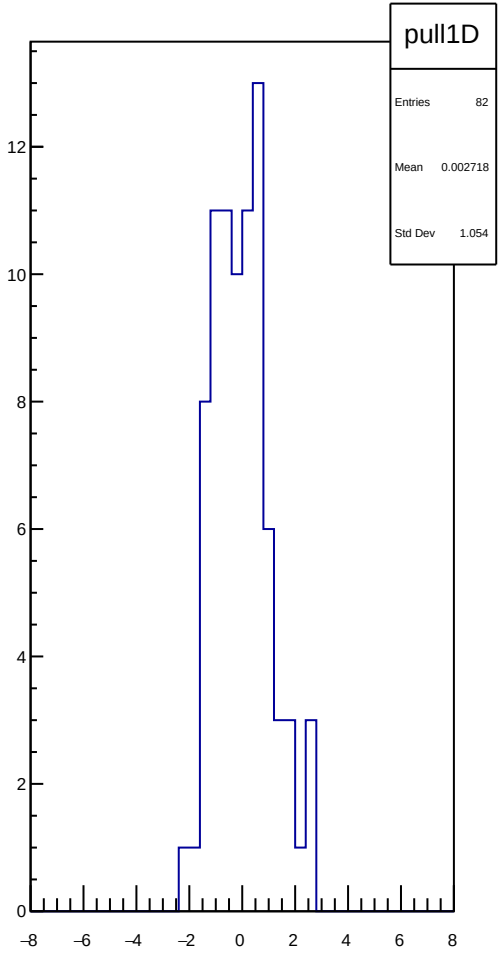

asym_atl_avg_rms vs run
χ² / ndf 1.191e+04 / 81
p0 5745 ± 4.568
8500
8000
7500
7000
6500
6000
5500
5000

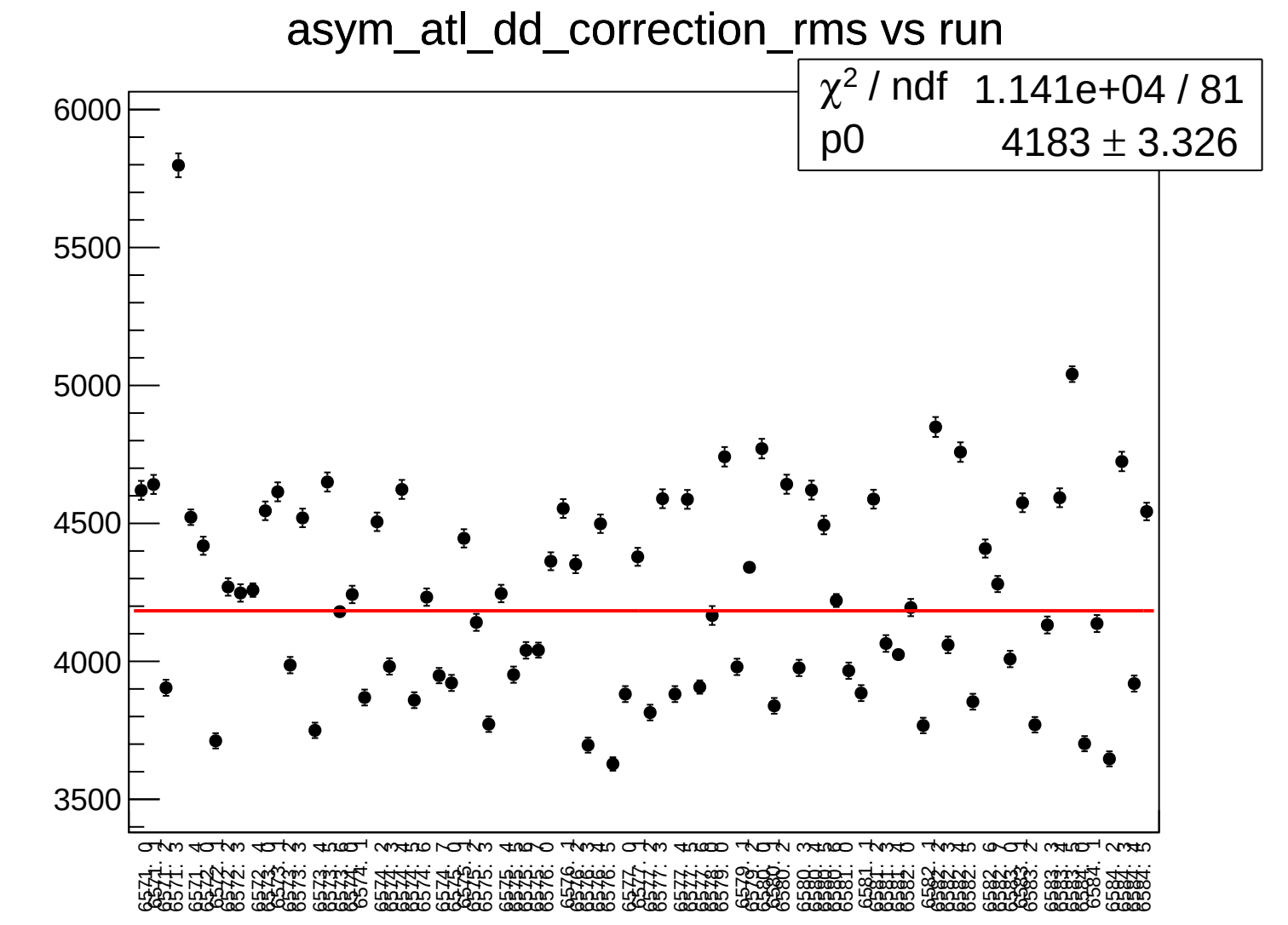

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 74.98 / 81
p0 −1426 ± 2231
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean −74.67
Std Dev 99.27
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

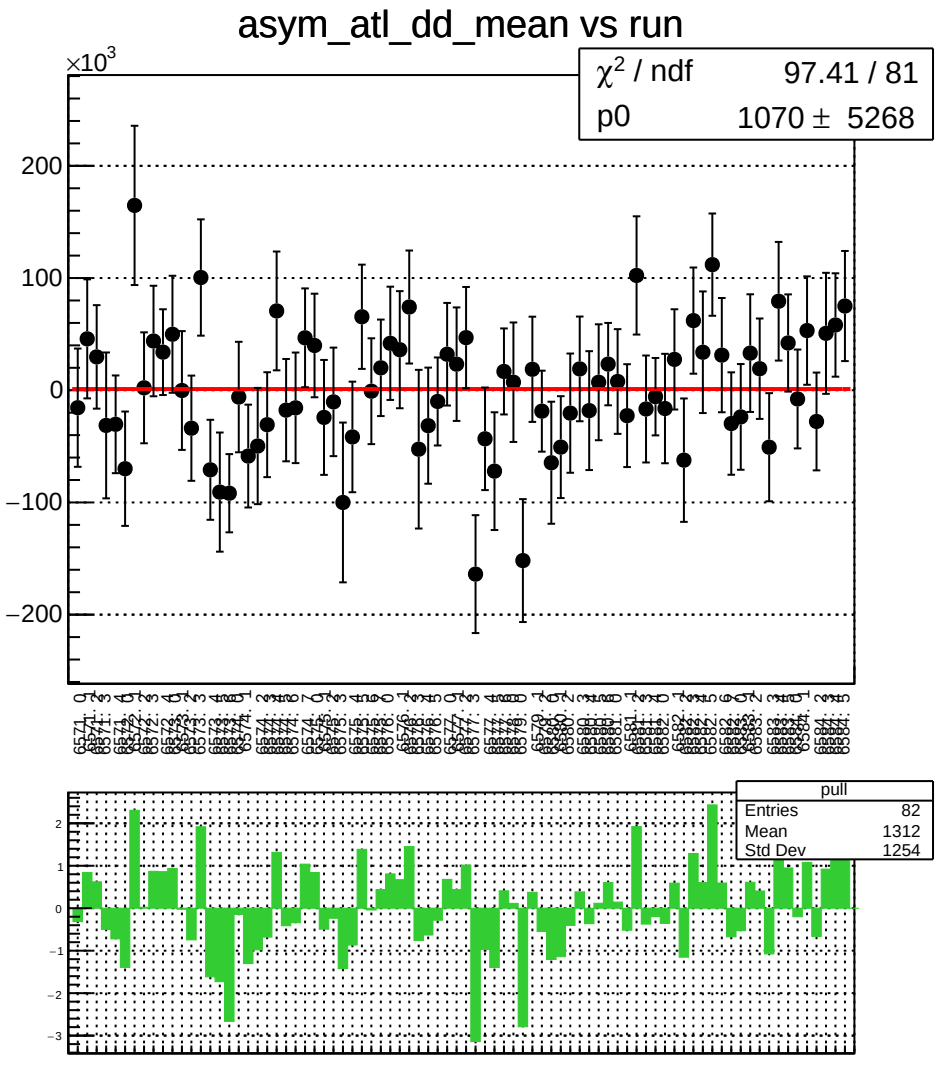

pull1D
Entries 82
Mean 0.006732
Std Dev 0.9562
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

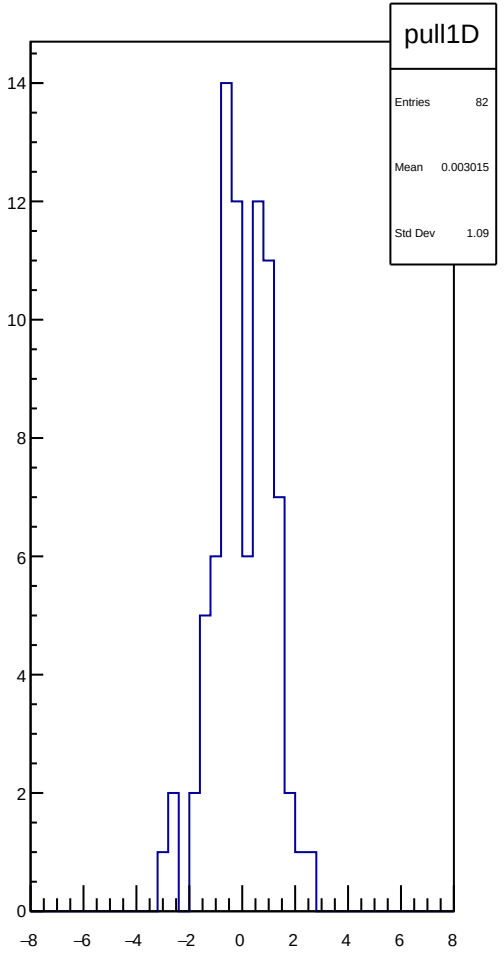

reg_asym_atl_dd_rms vs run
$\chi^2$ / ndf 2.305e+04 / 81
p0 1977 ± 1.578
6000
5500
5000
4500
4000
3500
3000
2500
2000

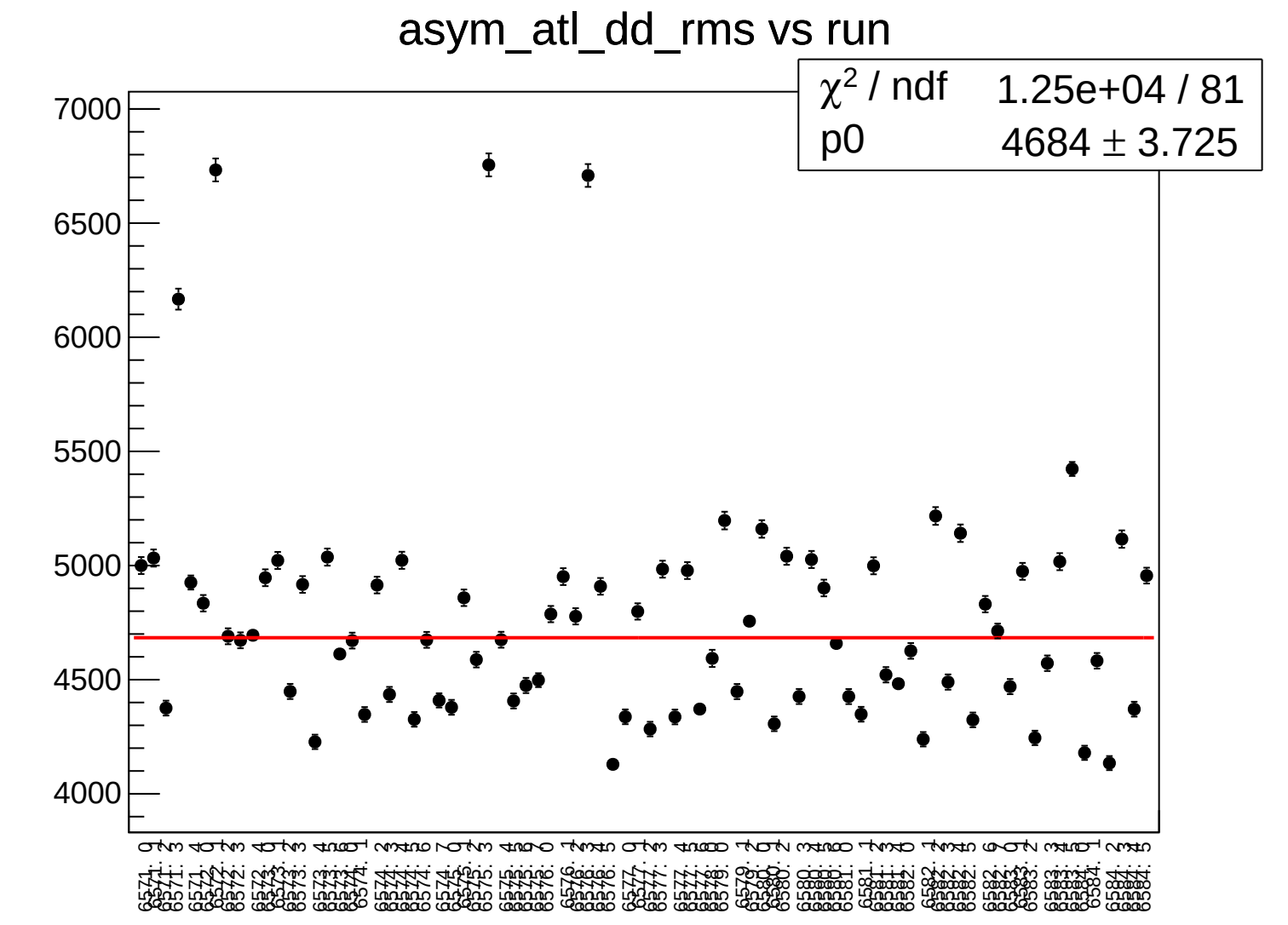

asym_atl_dd_correction_mean vs run
χ² / ndf 91.16 / 81
p0 −2774 ± 4703
×10³
pull
Entries 82
Mean −1714
Std Dev 1768

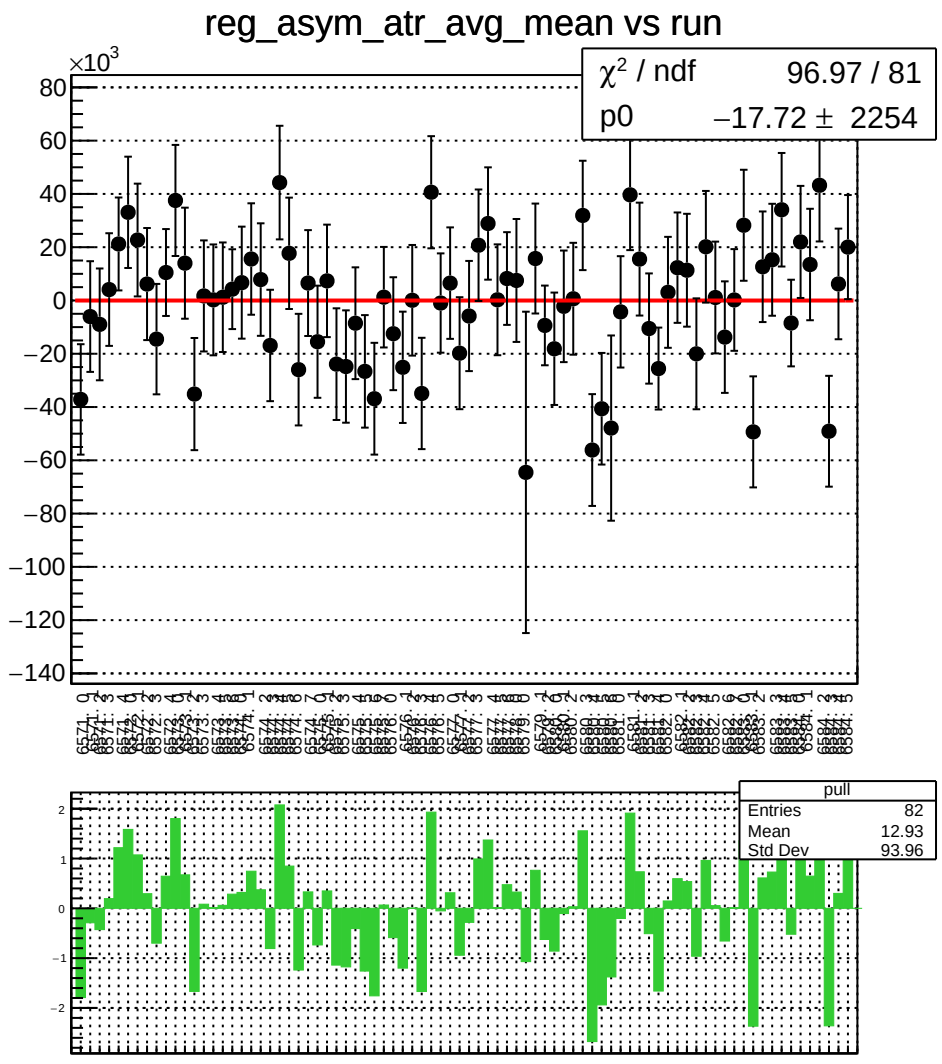

pull1D
Entries 82
Mean 0.002718
Std Dev 1.054

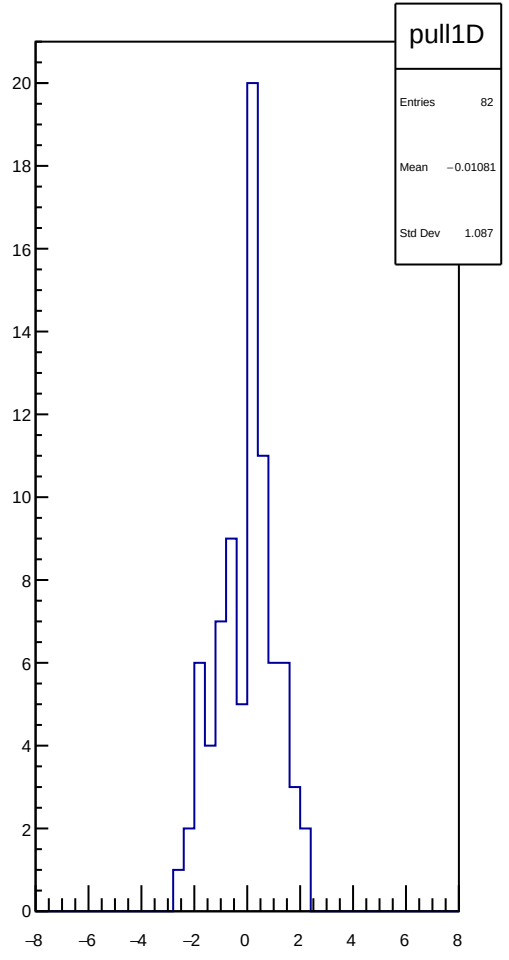

asym_atl_dd_correction_rms vs run
χ² / ndf 1.141e+04 / 81
p0 4183 ± 3.326
6000
5500
5000
4500
4000
3500

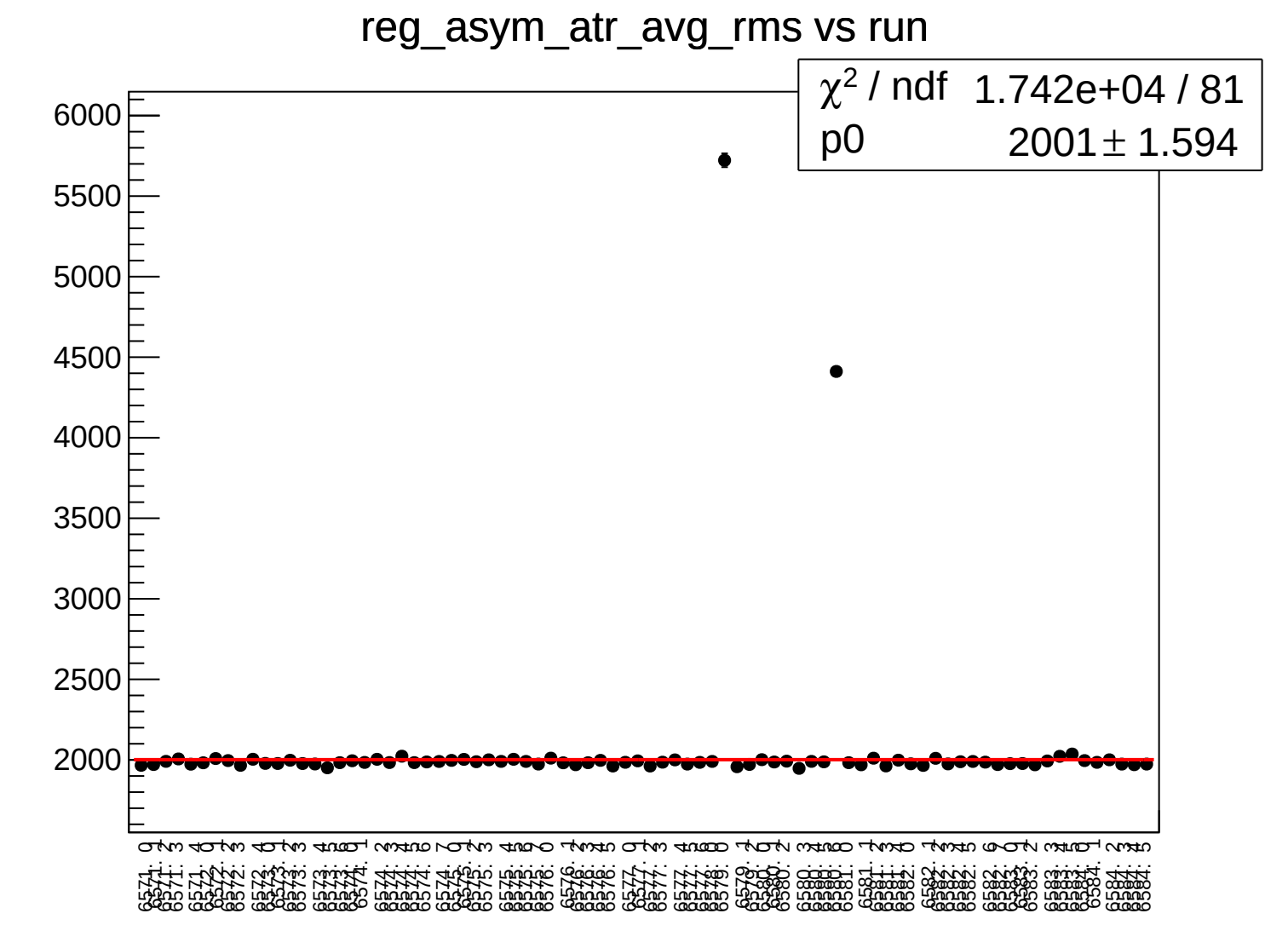

asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 97.41 / 81
p0 1070 ± 5268
200
100
0
−100
−200
pull
Entries 82
Mean 1312
Std Dev 1254
2
1
0
−1
−2
−3

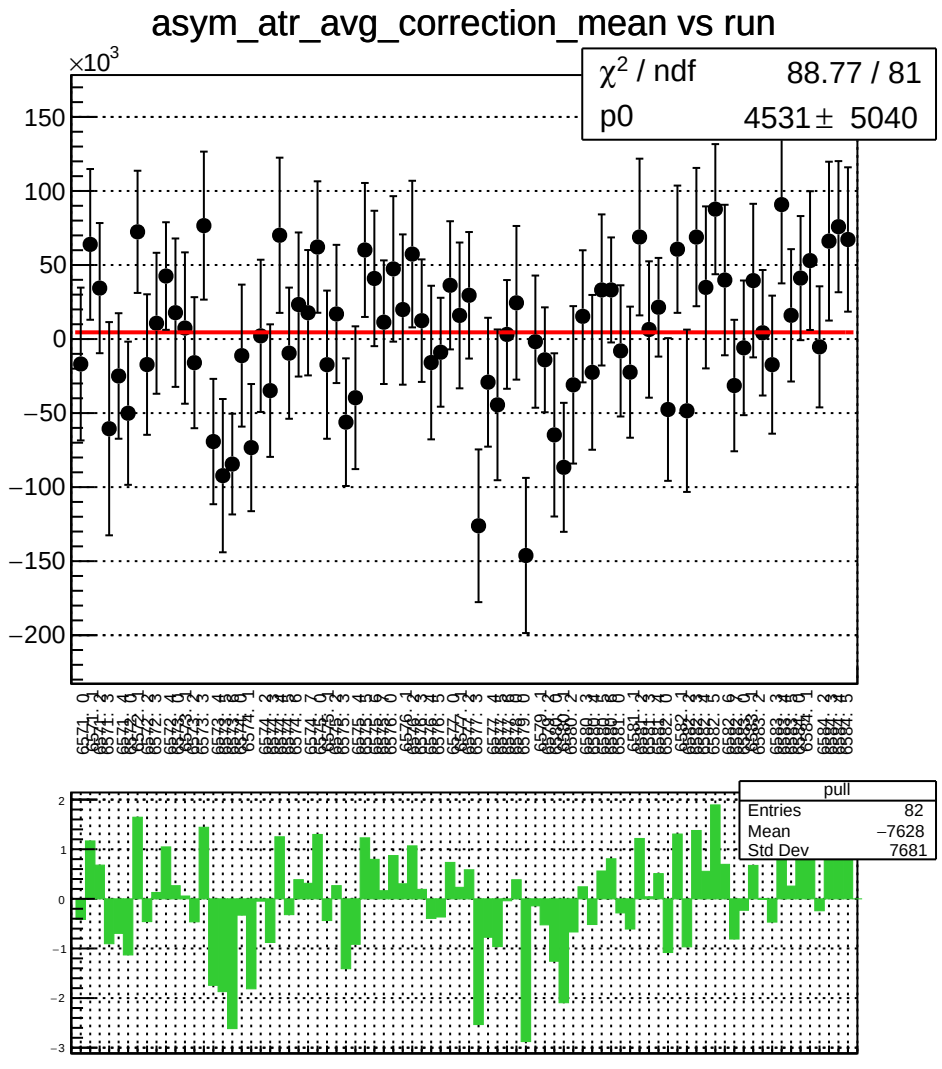

pull1D
Entries 82
Mean 0.003015
Std Dev 1.09
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

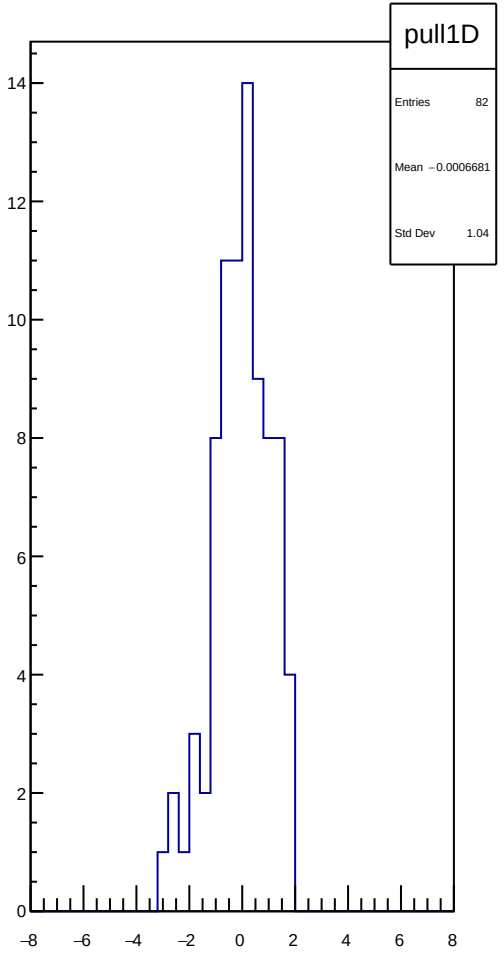

asym_atl_dd_rms vs run
χ² / ndf 1.25e+04 / 81
p0 4684 ± 3.725
7000
6500
6000
5500
5000
4500
4000

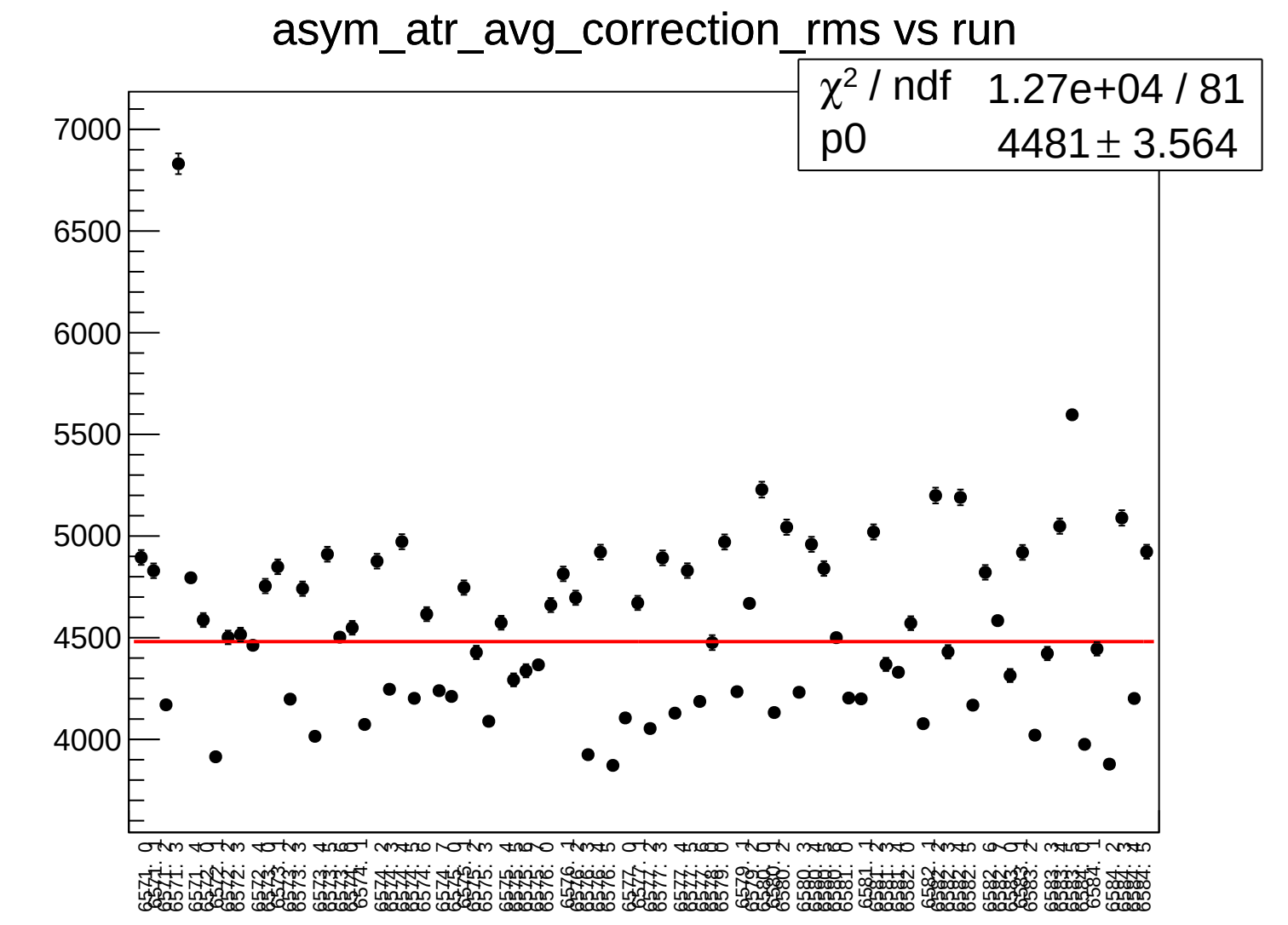

reg_asym_atr_avg_mean vs run
×10^3
χ² / ndf 96.97 / 81
p0 −17.72 ± 2254
pull
Entries 82
Mean 12.93
Std Dev 93.96

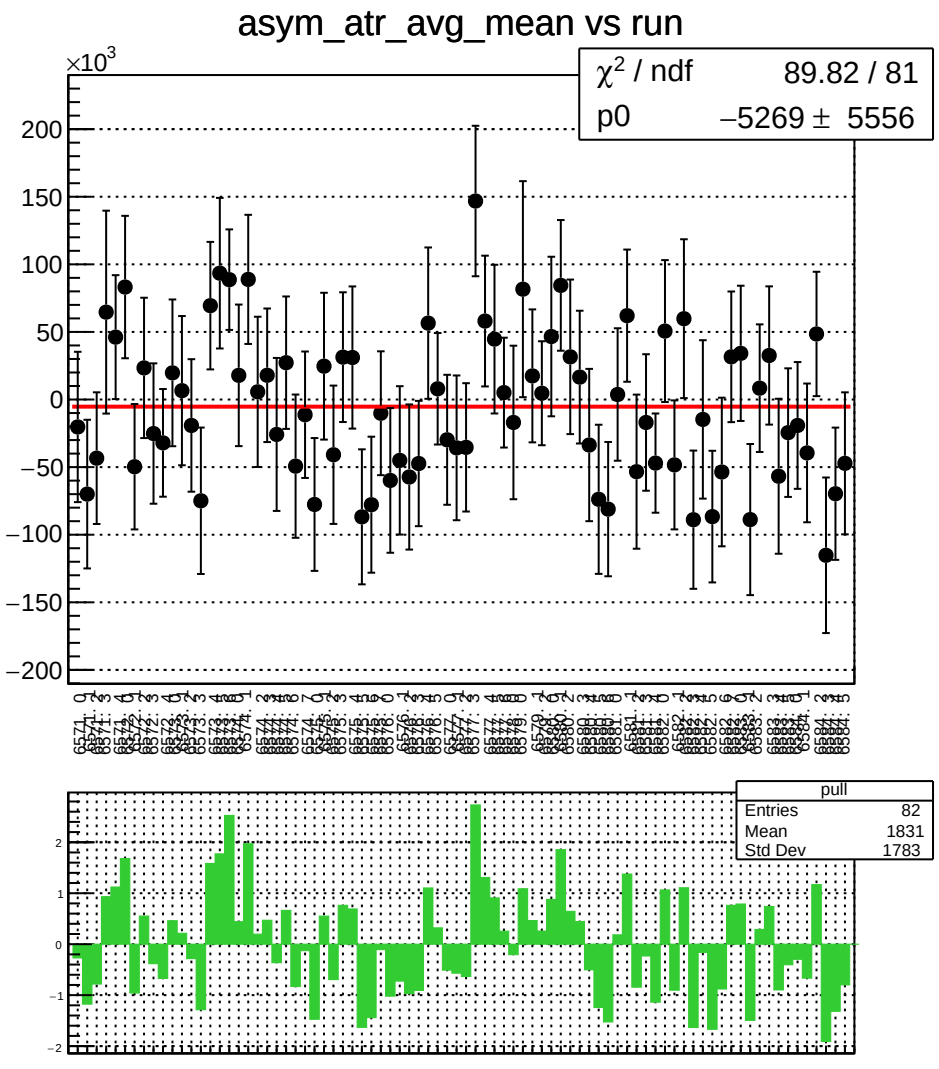

pull1D
Entries 82
Mean −0.01081
Std Dev 1.087

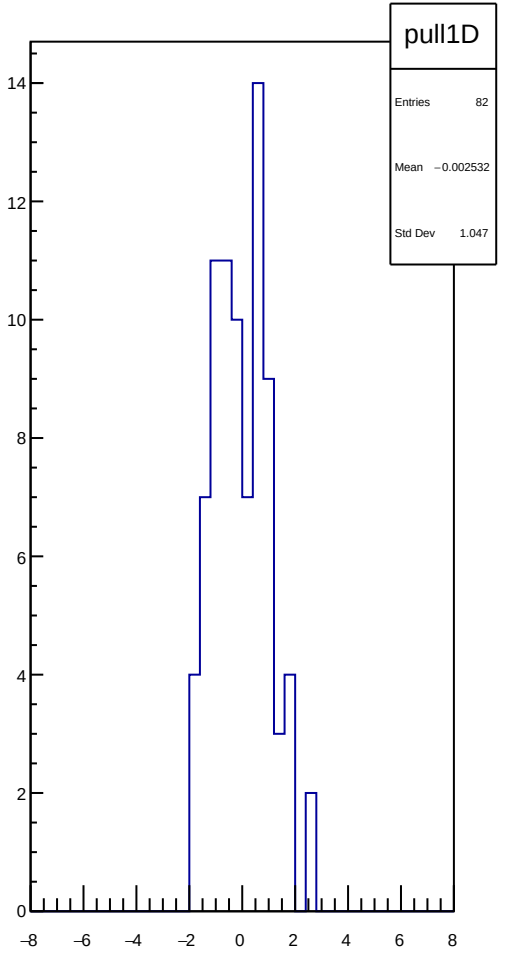

reg_asym_atr_avg_rms vs run
χ² / ndf 1.742e+04 / 81
p0 2001 ± 1.594
6000
5500
5000
4500
4000
3500
3000
2500
2000

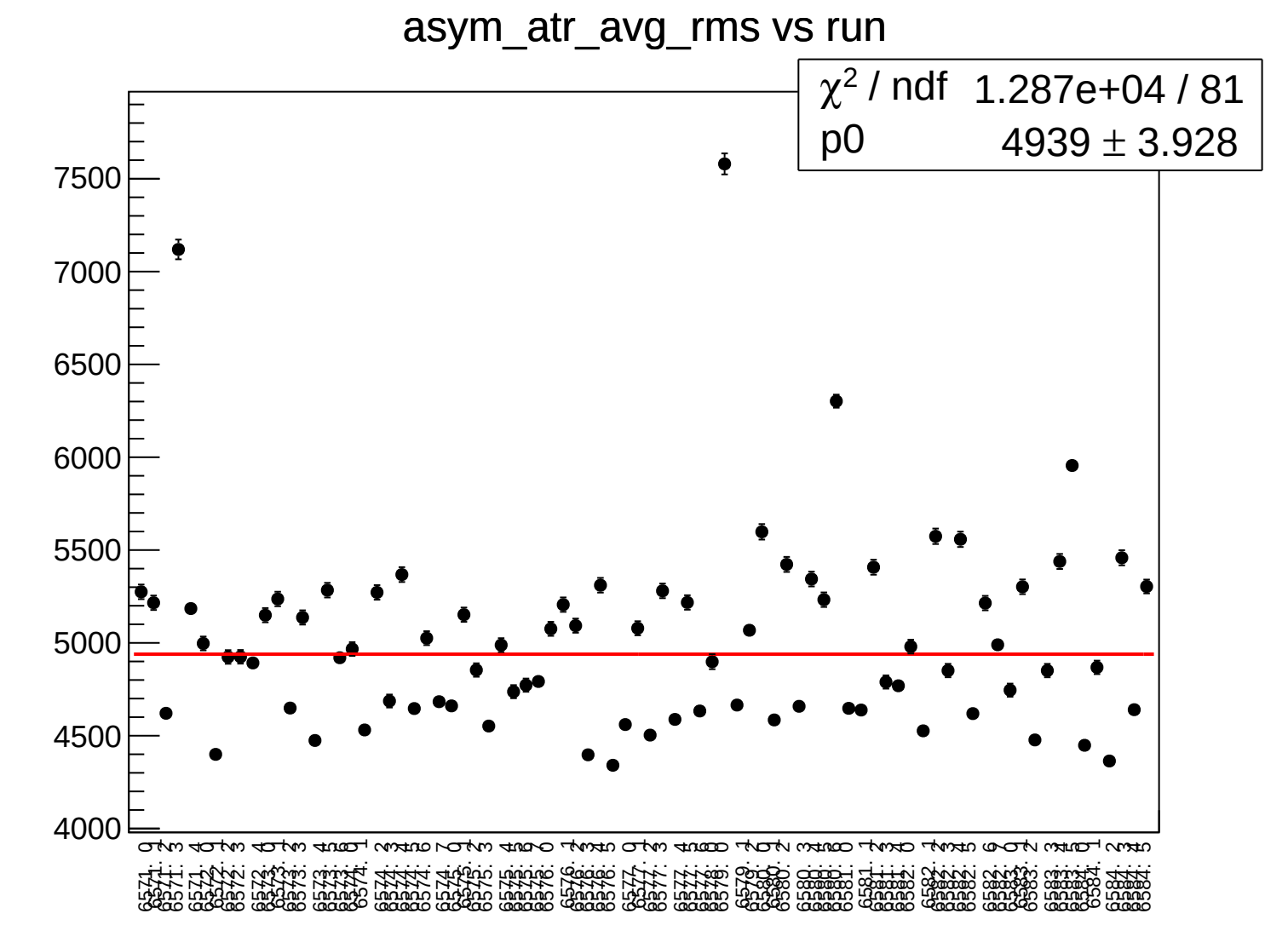

asym_atr_avg_correction_mean vs run
×10^3
χ^2 / ndf 88.77 / 81
p0 4531 ± 5040
150
100
50
0
−50
−100
−150
−200
pull
Entries 82
Mean −7628
Std Dev 7681
2
1
0
−1
−2
−3

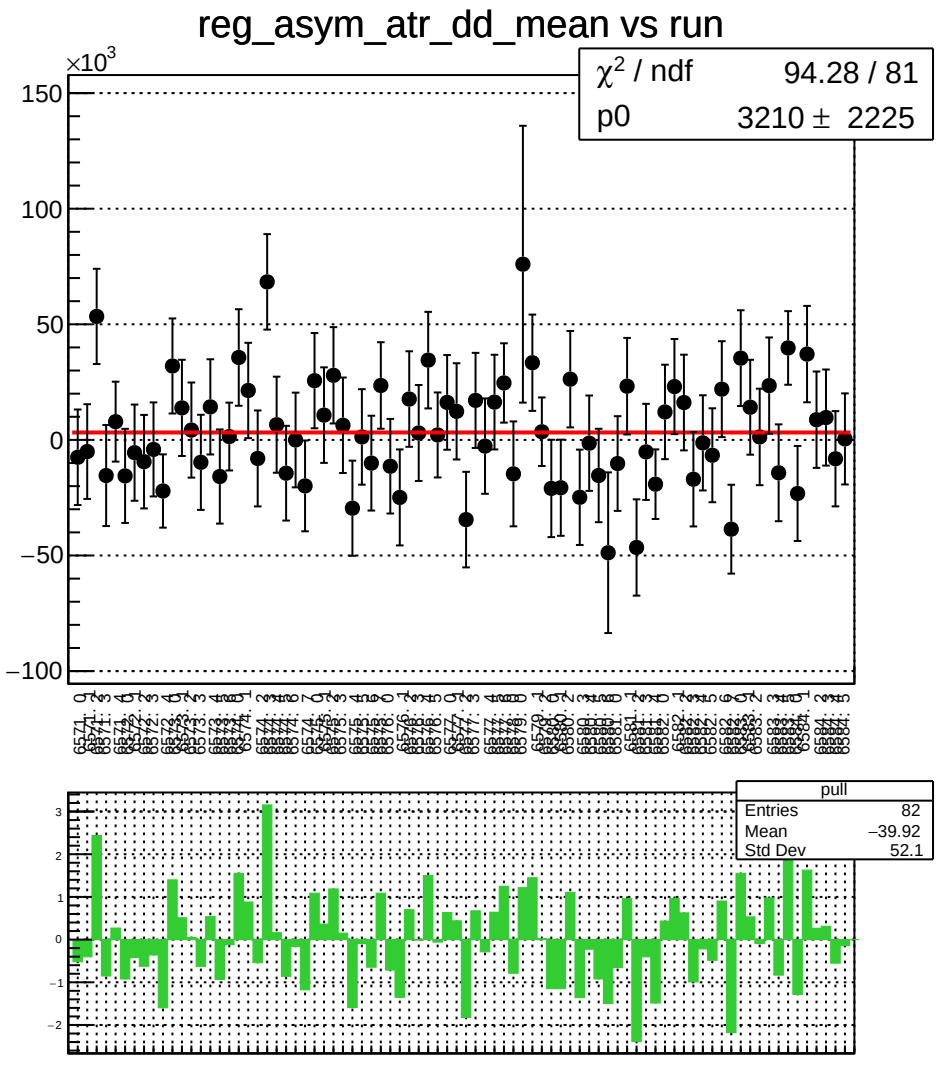

pull1D
Entries 82
Mean −0.0006681
Std Dev 1.04
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

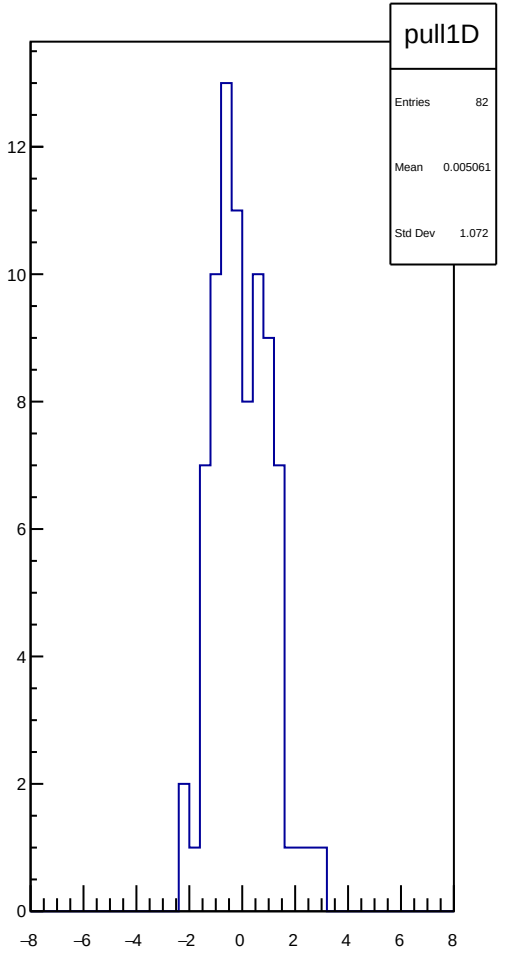

asym_atr_avg_correction_rms vs run
χ² / ndf 1.27e+04 / 81
p0 4481 ± 3.564
7000
6500
6000
5500
5000
4500
4000

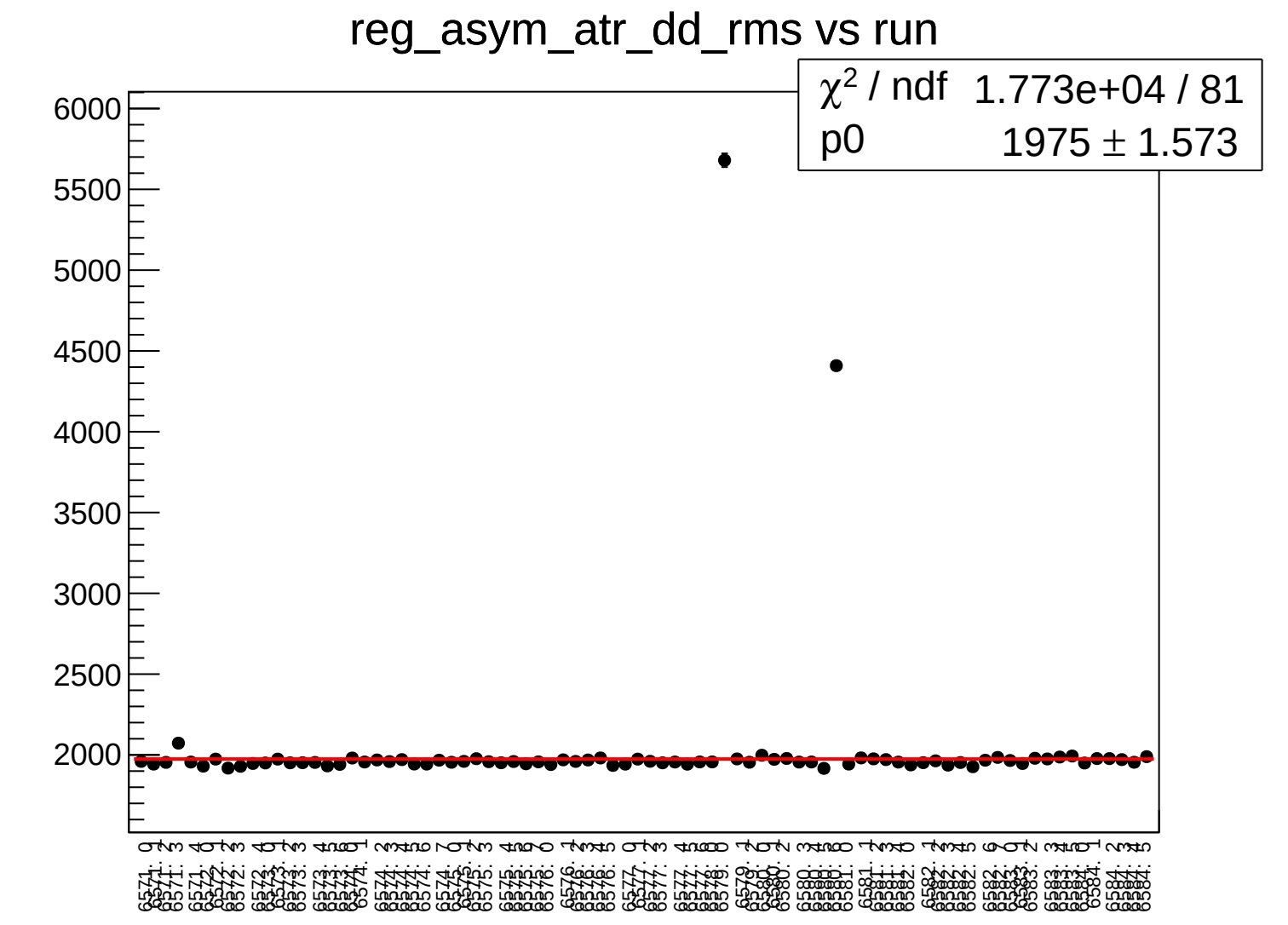

asym_atr_avg_mean vs run
×10^3
χ² / ndf 89.82 / 81
p0 −5269 ± 5556
pull
Entries 82
Mean 1831
Std Dev 1783

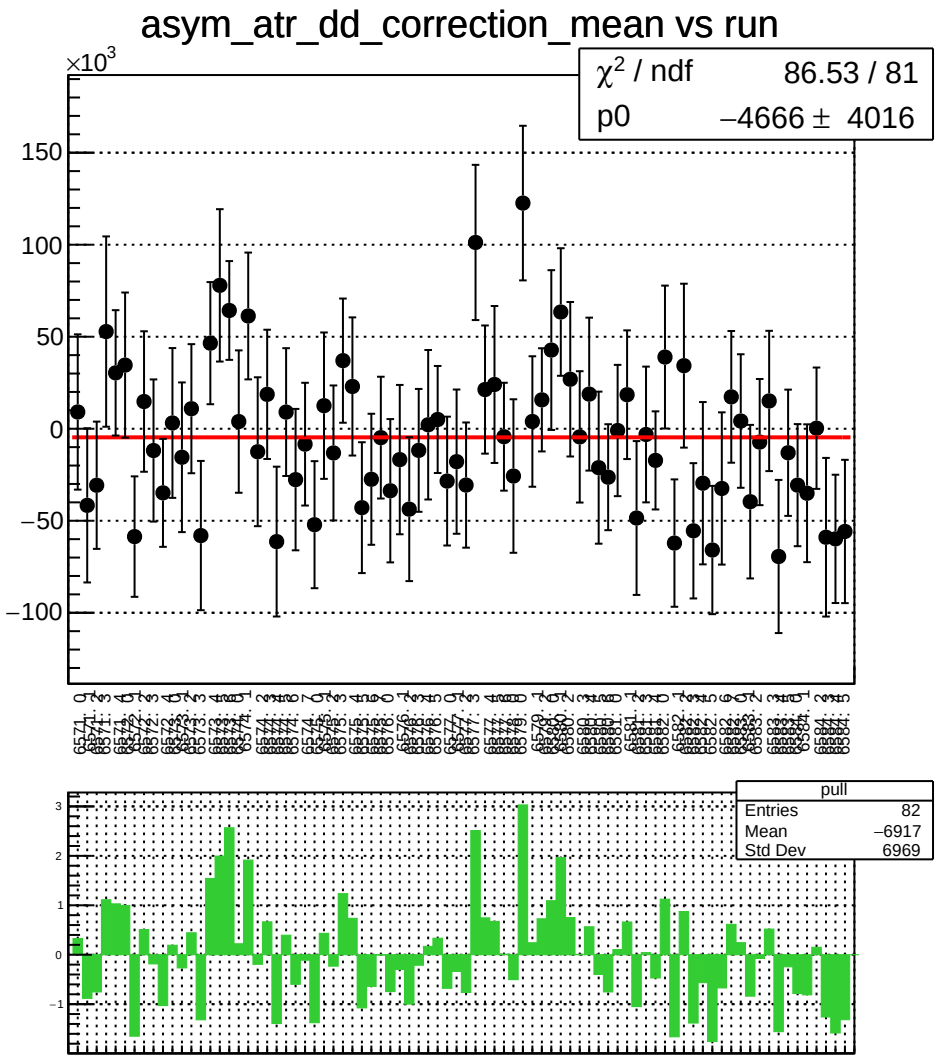

pull1D
Entries 82
Mean −0.002532
Std Dev 1.047

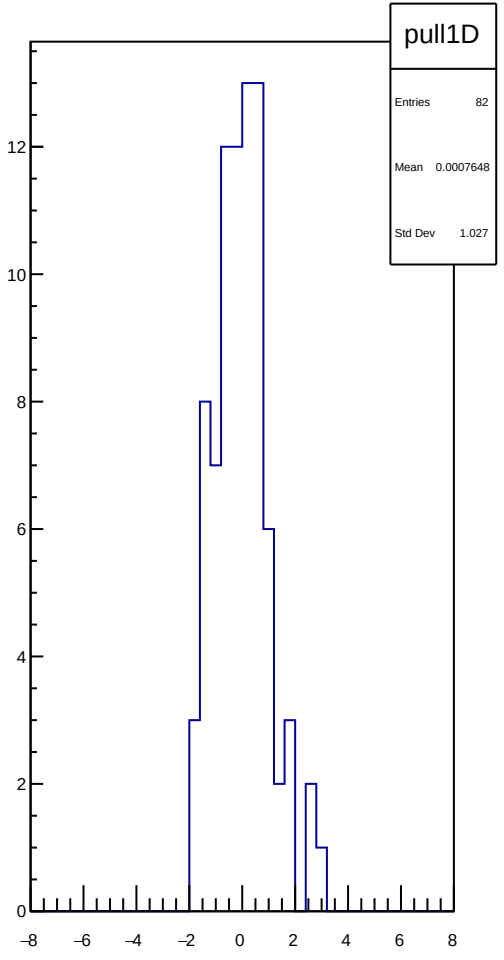

asym_atr_avg_rms vs run
$\chi^2$ / ndf 1.287e+04 / 81
p0 4939 ± 3.928
7500
7000
6500
6000
5500
5000
4500
4000

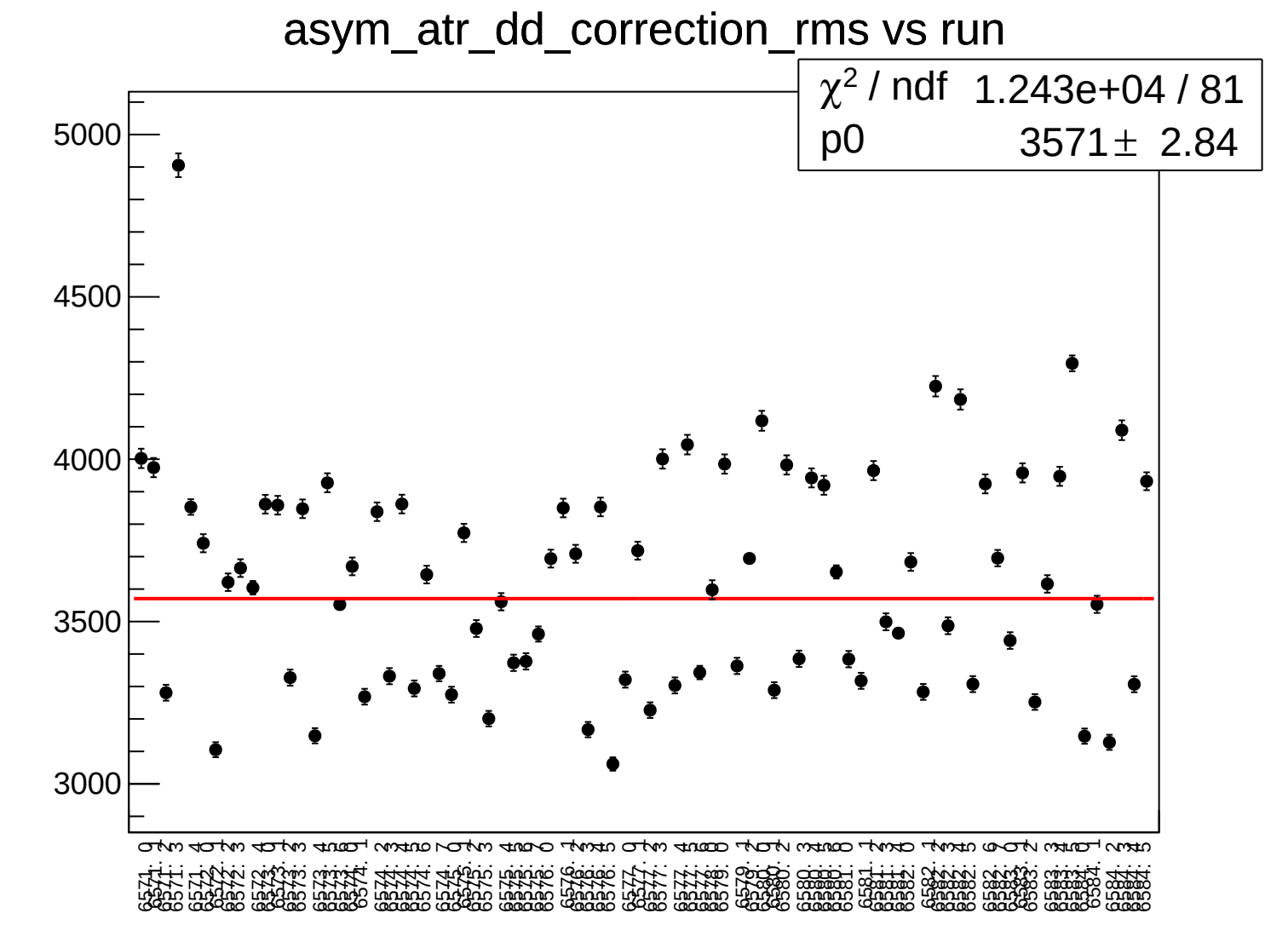

reg_asym_atr_dd_mean vs run
×10^3
χ^2 / ndf 94.28 / 81
p0 3210 ± 2225
150
100
50
0
−50
−100
pull
Entries 82
Mean −39.92
Std Dev 52.1
3
2
1
0
−1
−2

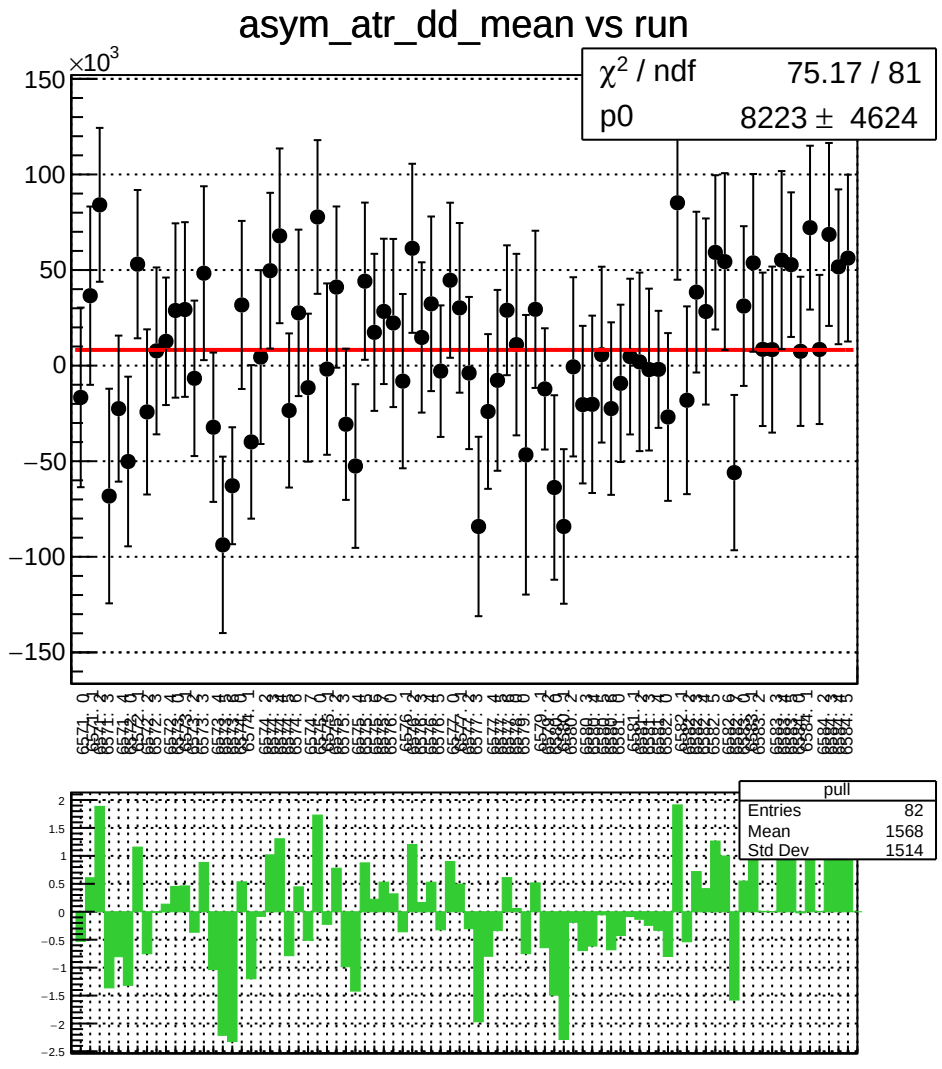

pull1D
Entries 82
Mean 0.005061
Std Dev 1.072
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

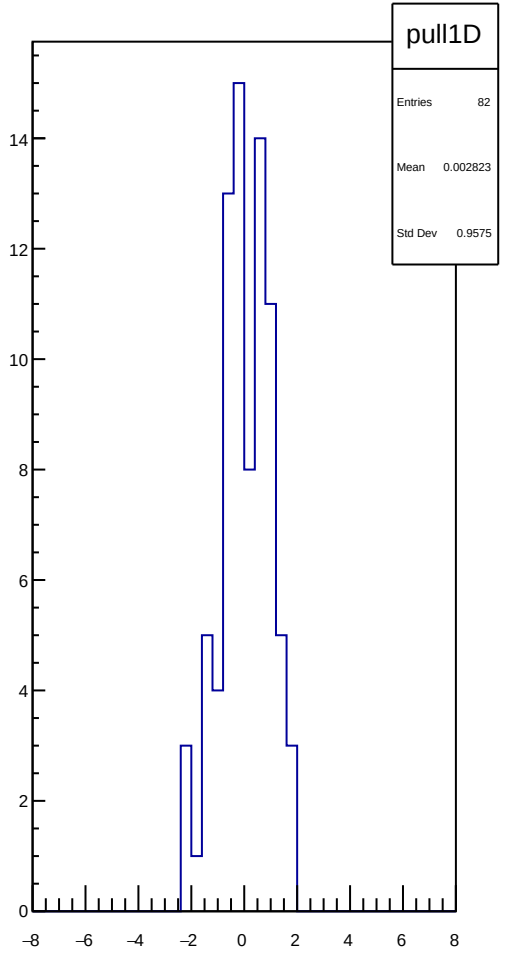

reg_asym_atr_dd_rms vs run
χ² / ndf 1.773e+04 / 81
p0 1975 ± 1.573
6000
5500
5000
4500
4000
3500
3000
2500
2000

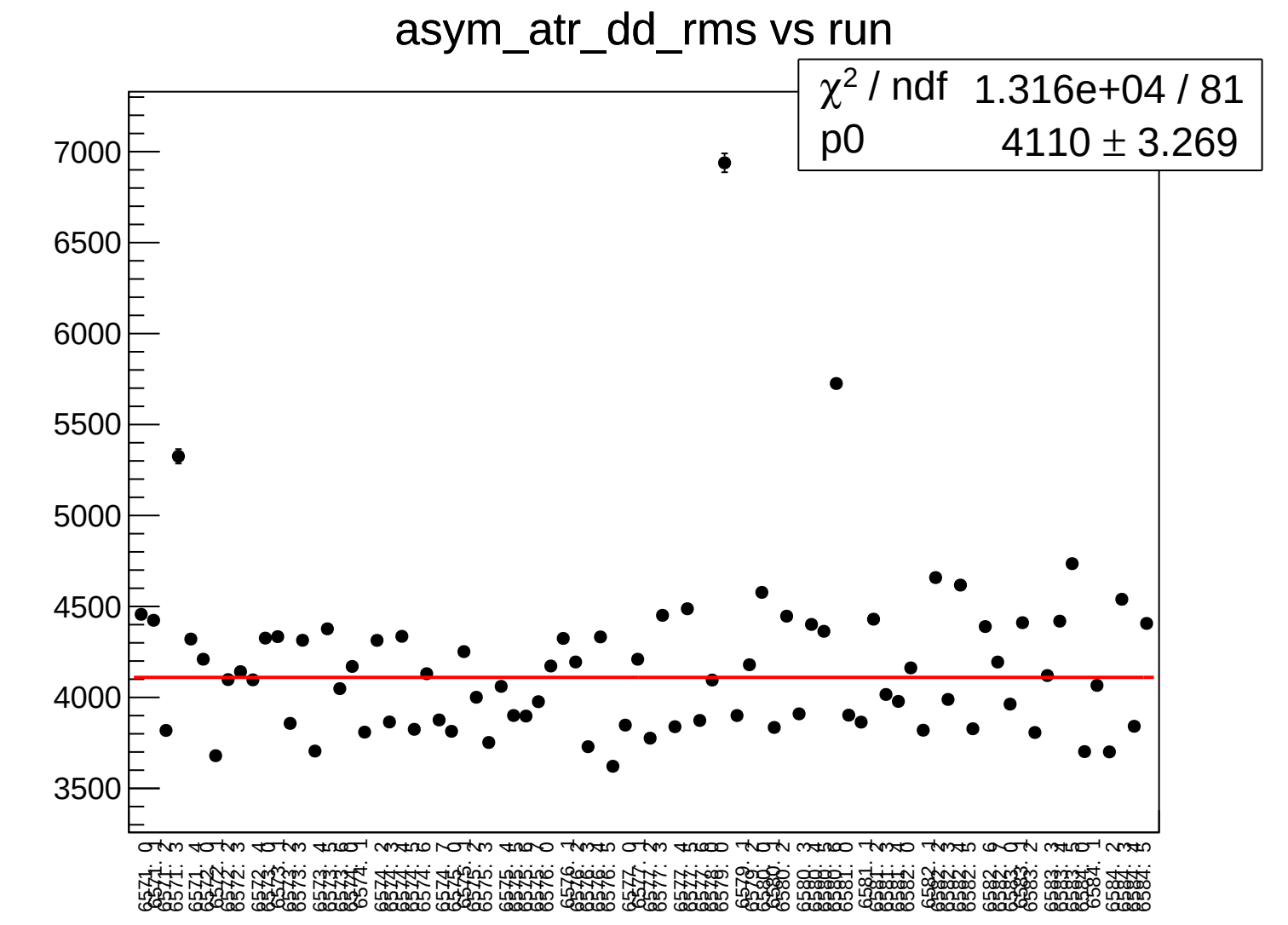

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 86.53 / 81
p0 −4666 ± 4016
150
100
50
0
−50
−100
pull
Entries 82
Mean −6917
Std Dev 6969
3
2
1
0
−1

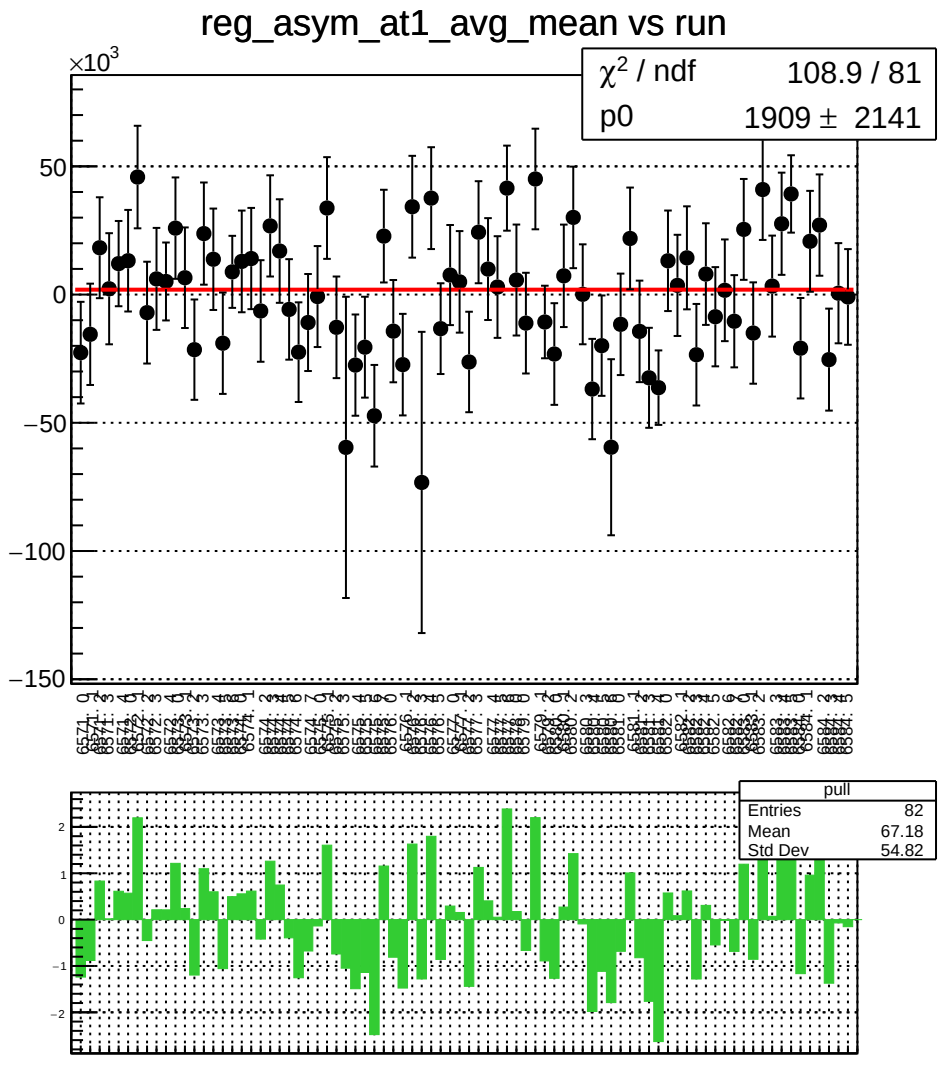

pull1D
Entries 82
Mean 0.0007648
Std Dev 1.027
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

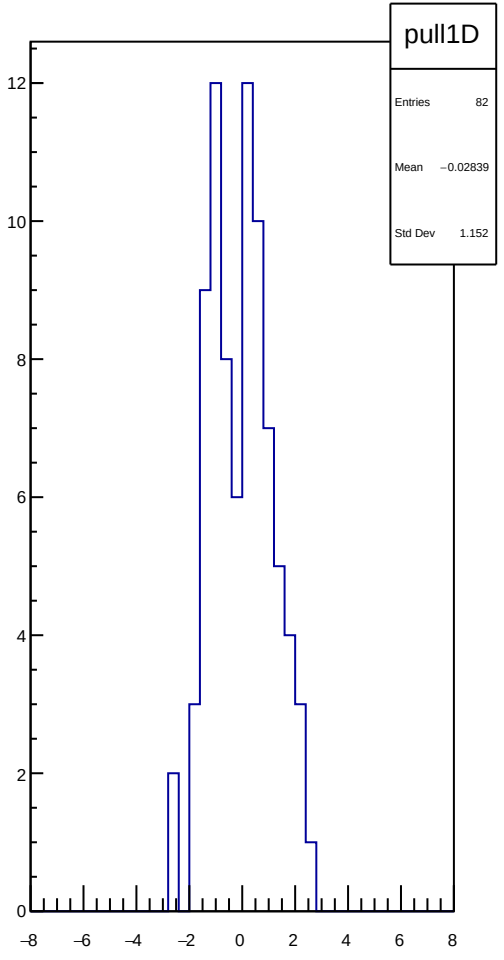

asym_atr_dd_correction_rms vs run
χ² / ndf 1.243e+04 / 81
p0 3571 ± 2.84
5000
4500
4000
3500
3000

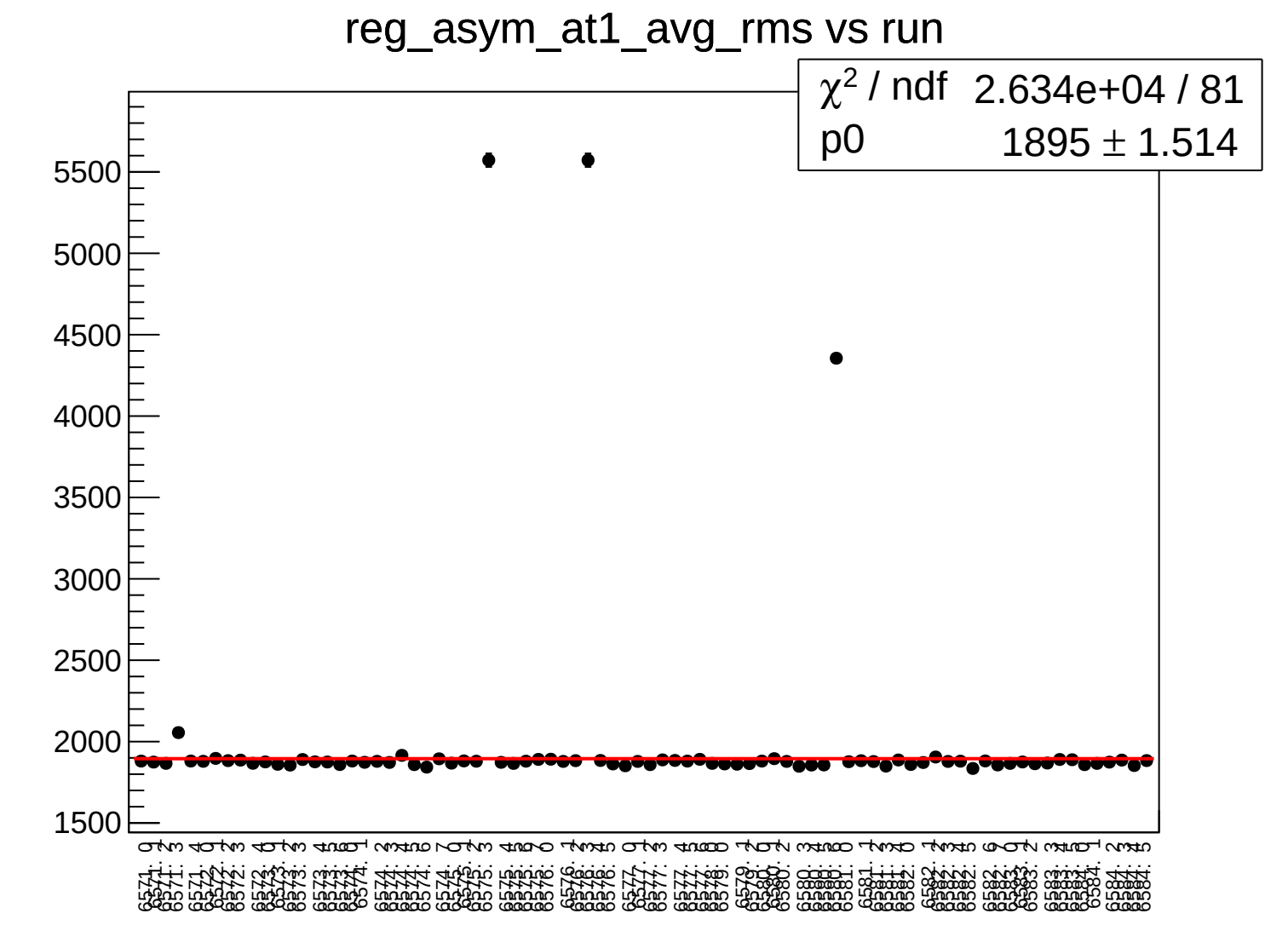

asym_atr_dd_mean vs run
×10^3
χ^2 / ndf 75.17 / 81
p0 8223 ± 4624
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean 1568
Std Dev 1514
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

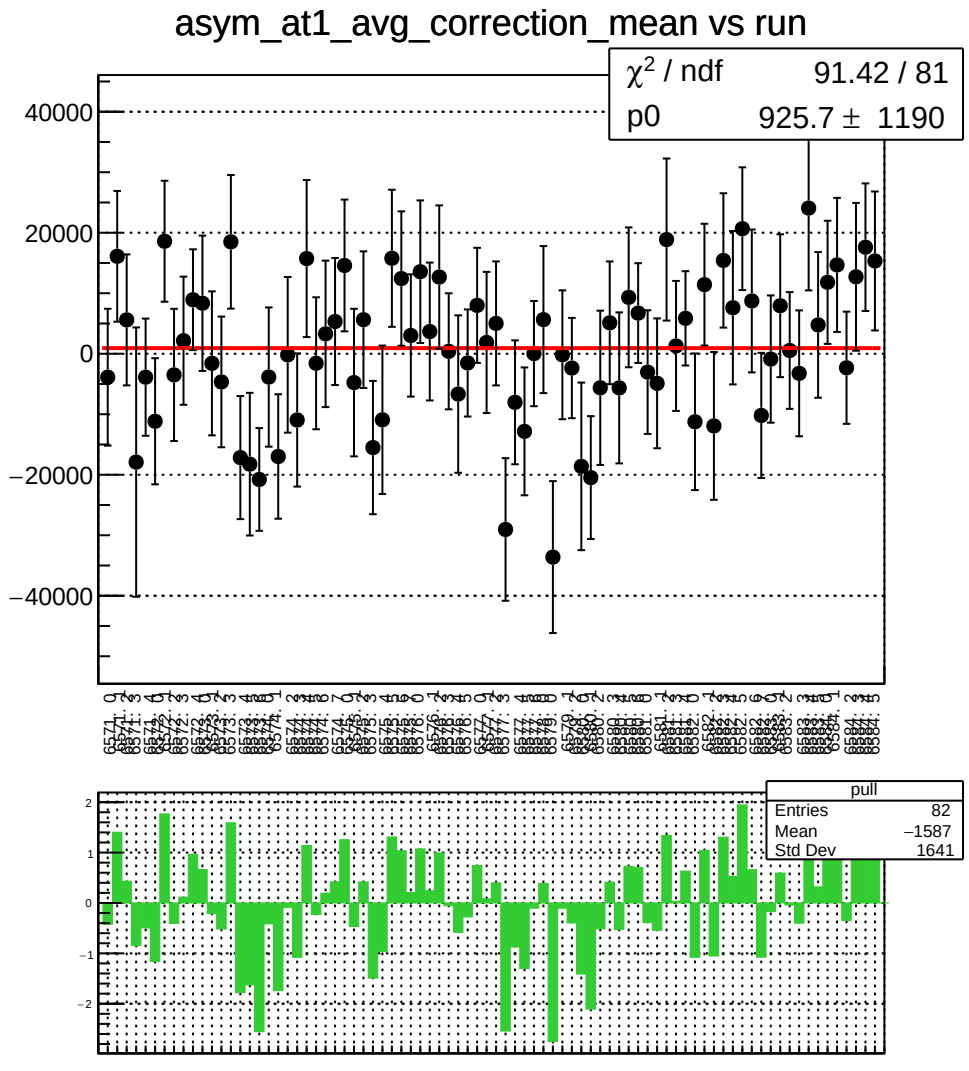

pull1D
Entries 82
Mean 0.002823
Std Dev 0.9575
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

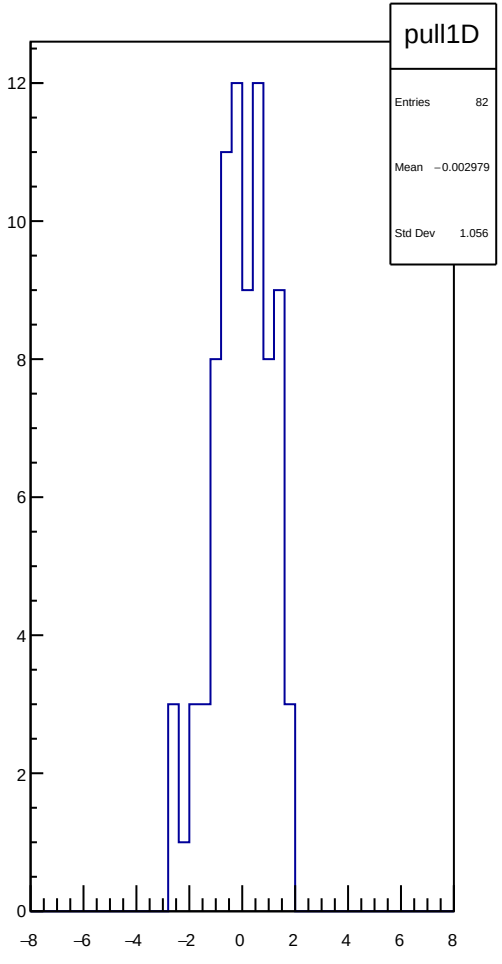

asym_atr_dd_rms vs run
$\chi^2$ / ndf 1.316e+04 / 81
p0 4110 ± 3.269
7000
6500
6000
5500
5000
4500
4000
3500

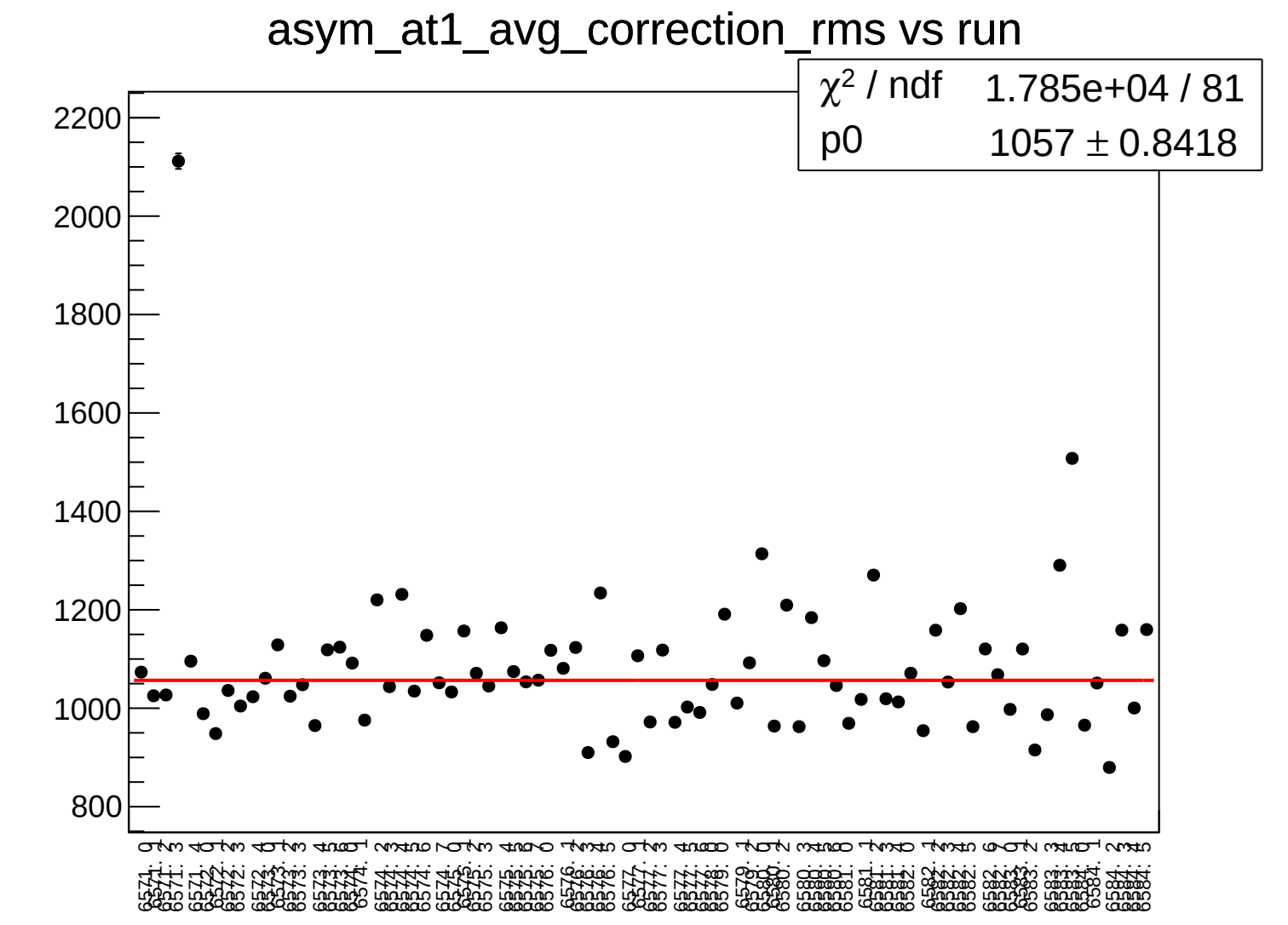

reg_asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 108.9 / 81
p0 1909 ± 2141
50
0
−50
−100
−150
pull
Entries 82
Mean 67.18
Std Dev 54.82
2
1
0
−1
−2

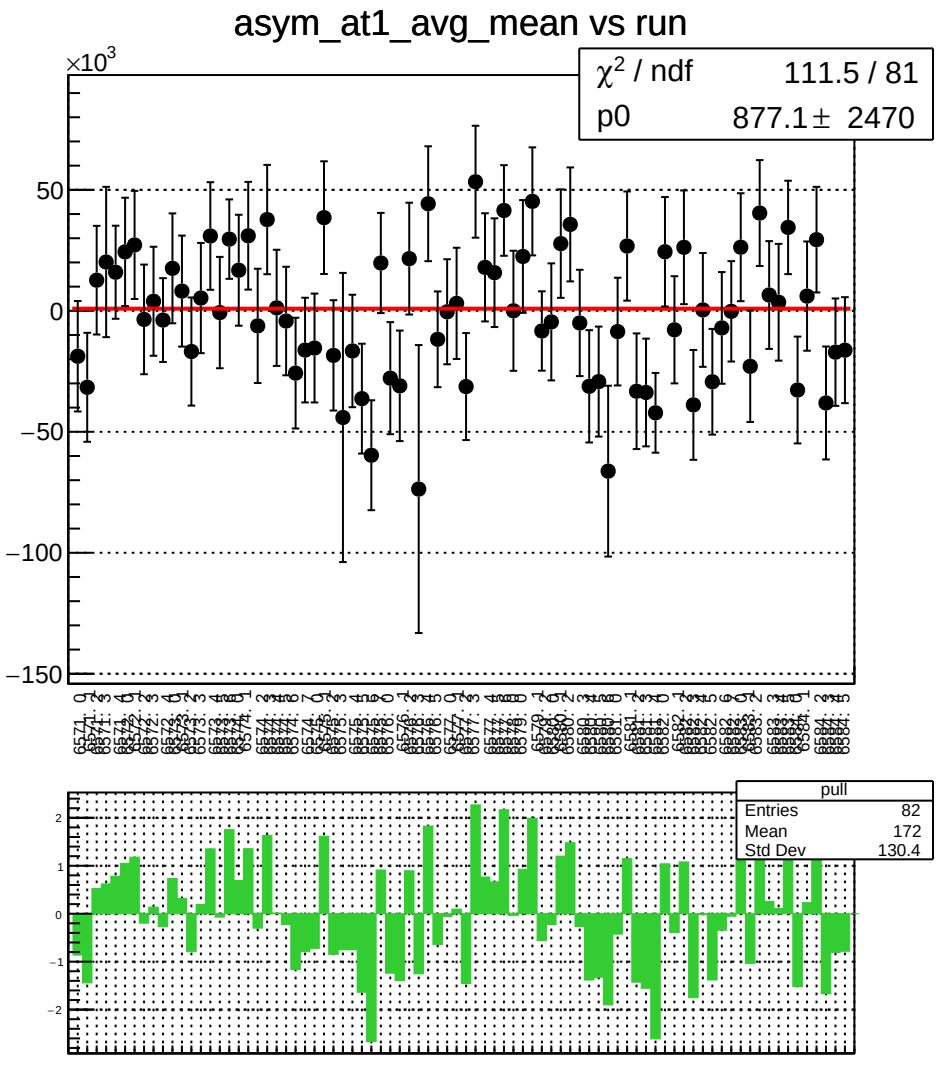

pull1D
Entries 82
Mean −0.02839
Std Dev 1.152
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

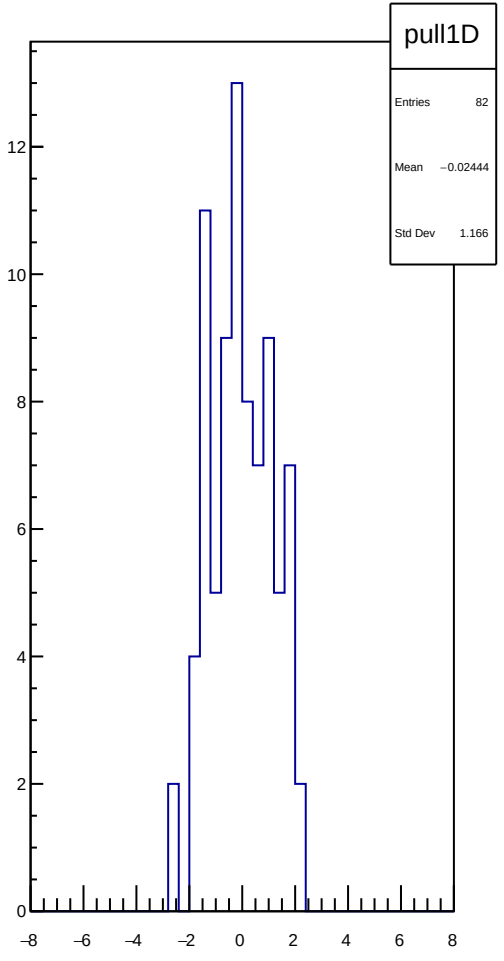

reg_asym_at1_avg_rms vs run
$\chi^2$ / ndf 2.634e+04 / 81
p0 1895 ± 1.514
5500
5000
4500
4000
3500
3000
2500
2000
1500

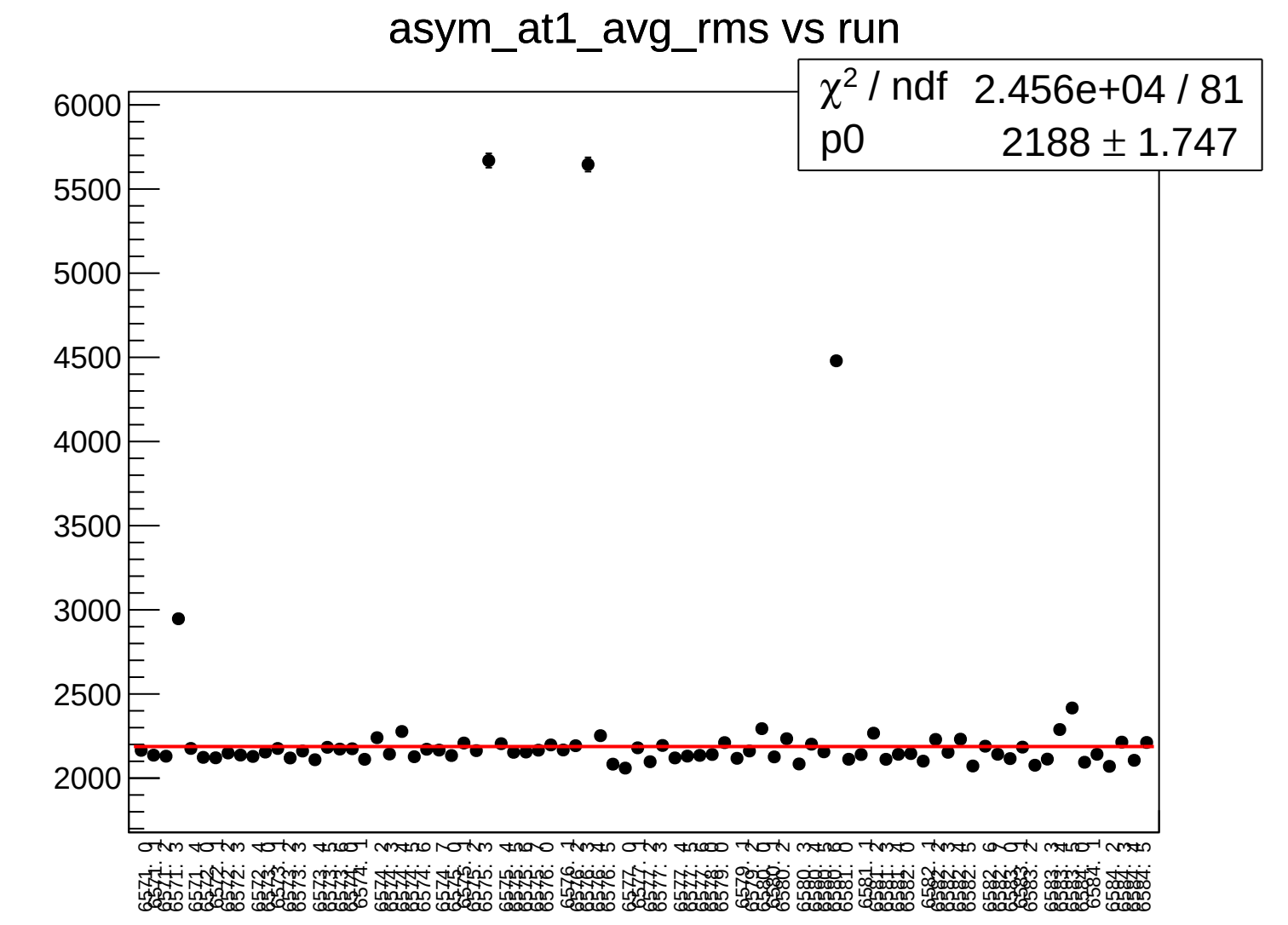

asym_at1_avg_correction_mean vs run
χ² / ndf 91.42 / 81
p0 925.7 ± 1190
40000
20000
0
−20000
−40000
pull
Entries 82
Mean −1587
Std Dev 1641
2
1
0
−1
−2

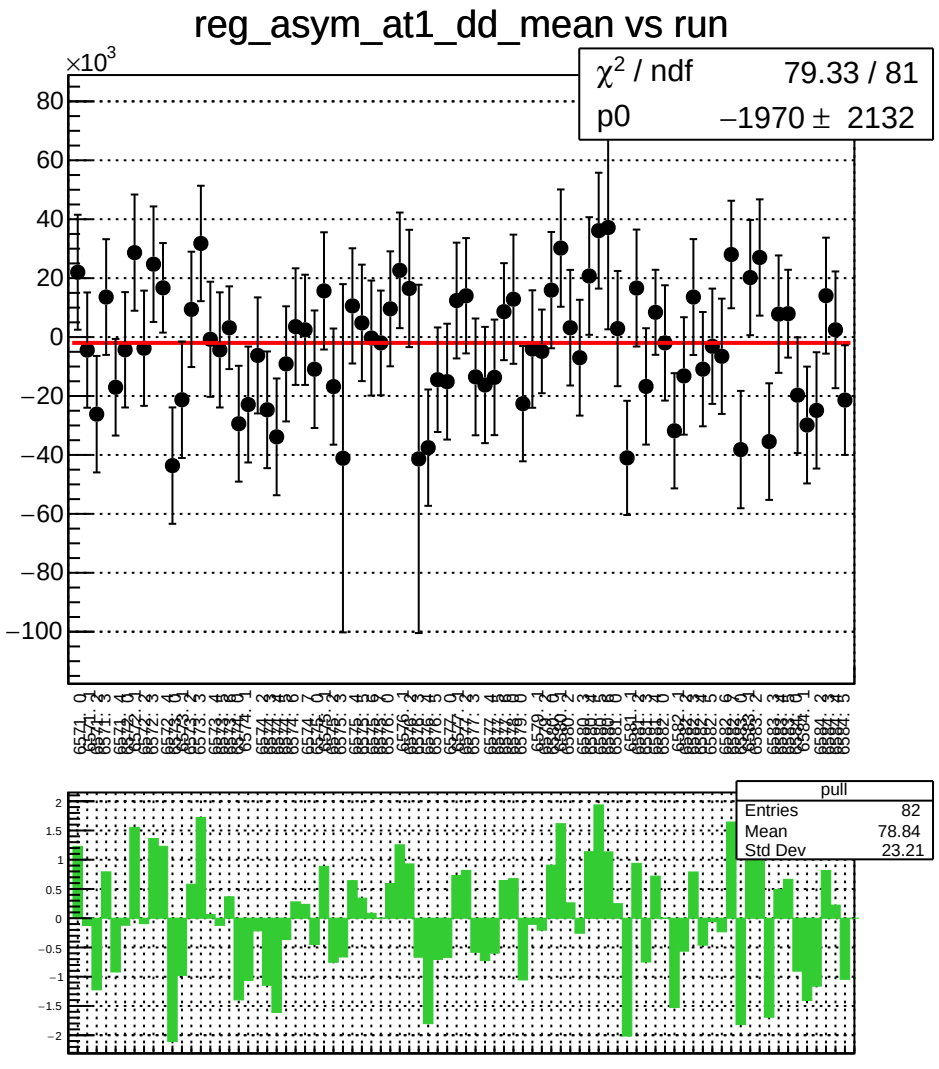

pull1D
Entries 82
Mean −0.002979
Std Dev 1.056
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

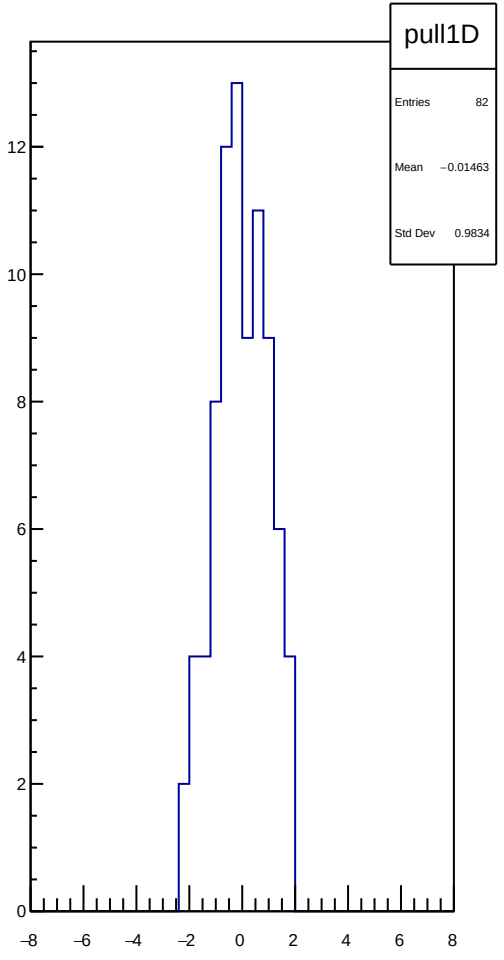

asym_at1_avg_correction_rms vs run
χ² / ndf 1.785e+04 / 81
p0 1057 ± 0.8418
2200
2000
1800
1600
1400
1200
1000
800

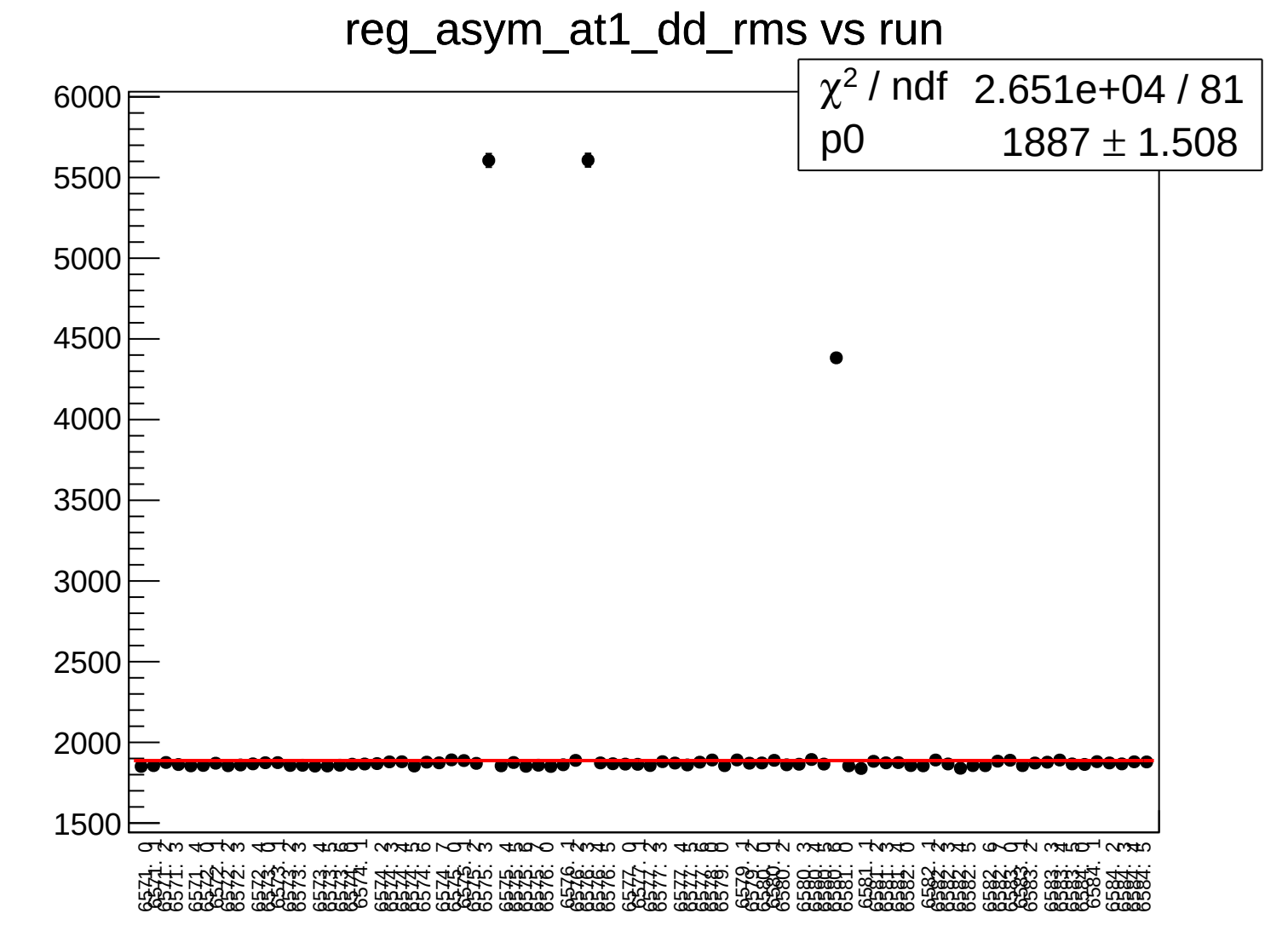

asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 111.5 / 81
p0 877.1± 2470
50
0
−50
−100
−150
pull
Entries 82
Mean 172
Std Dev 130.4
2
1
0
−1
−2

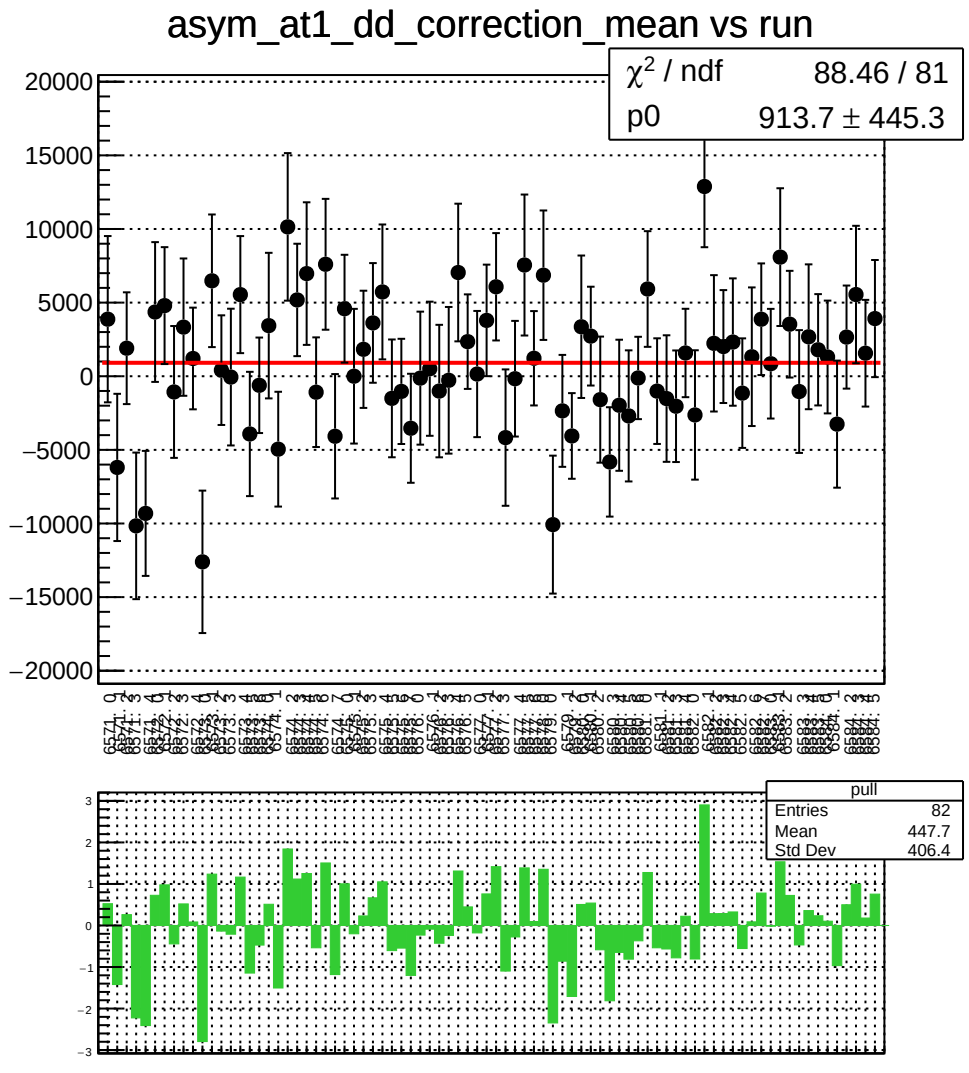

pull1D
Entries 82
Mean −0.02444
Std Dev 1.166
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

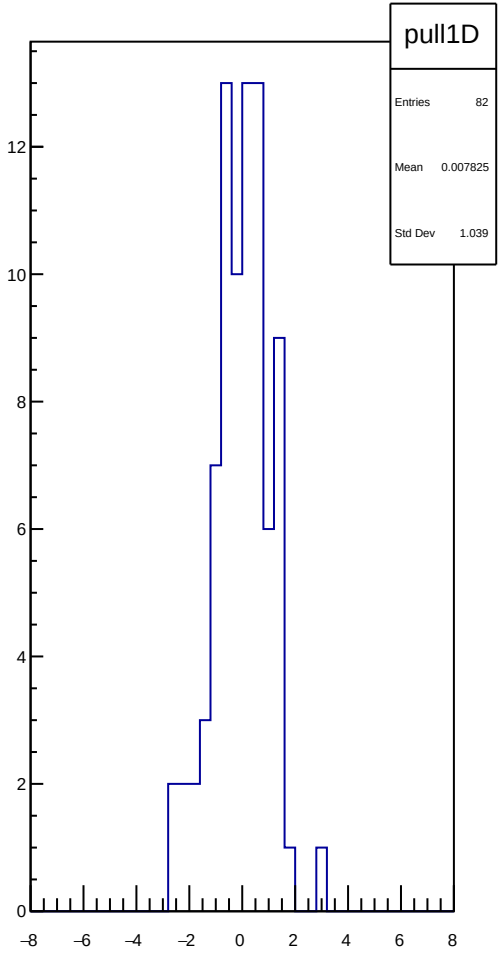

asym_at1_avg_rms vs run
$\chi^2$ / ndf 2.456e+04 / 81
p0 2188 ± 1.747
6000
5500
5000
4500
4000
3500
3000
2500
2000

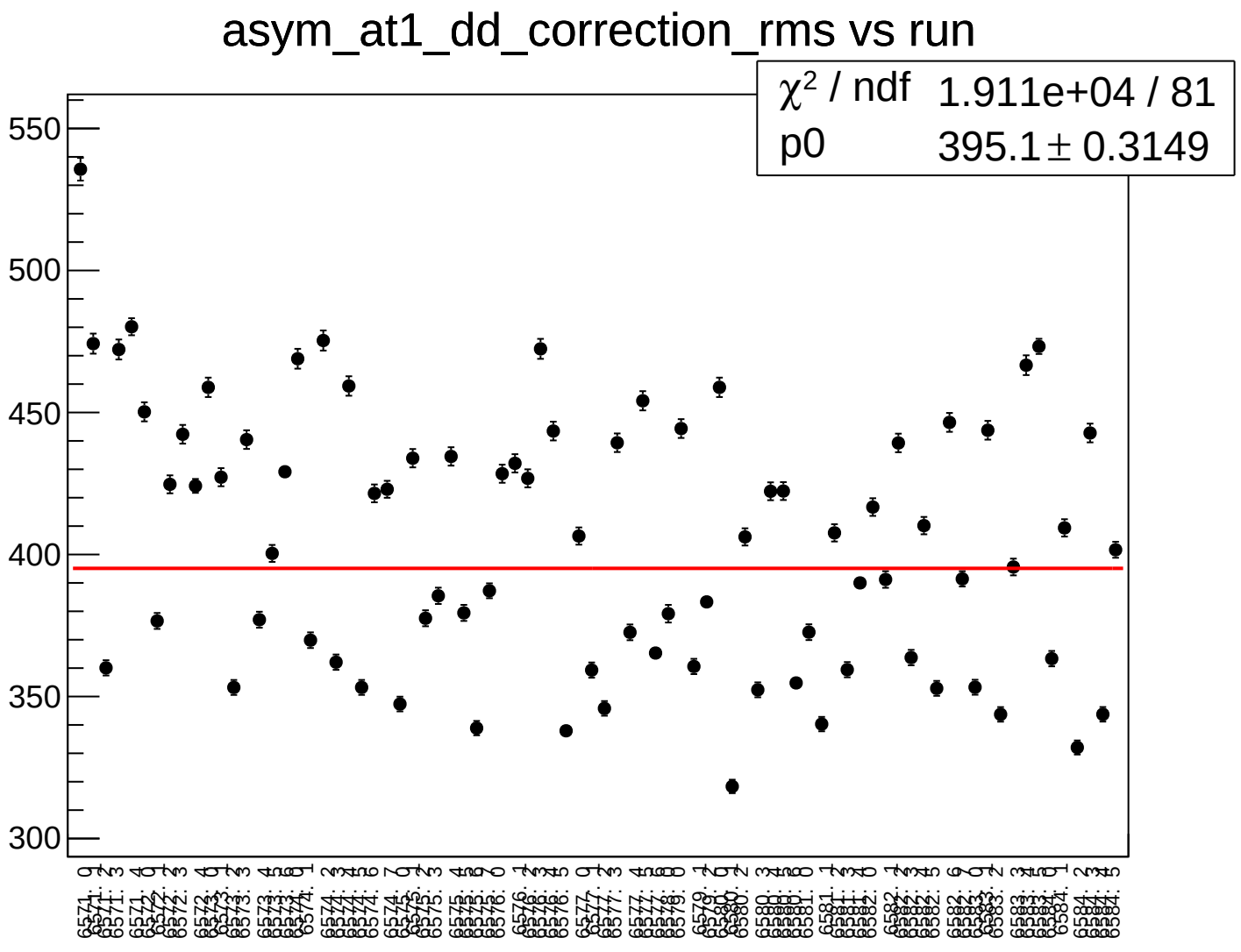

reg_asym_at1_dd_mean vs run
×10^3
χ² / ndf 79.33 / 81
p0 −1970 ± 2132
pull
Entries 82
Mean 78.84
Std Dev 23.21

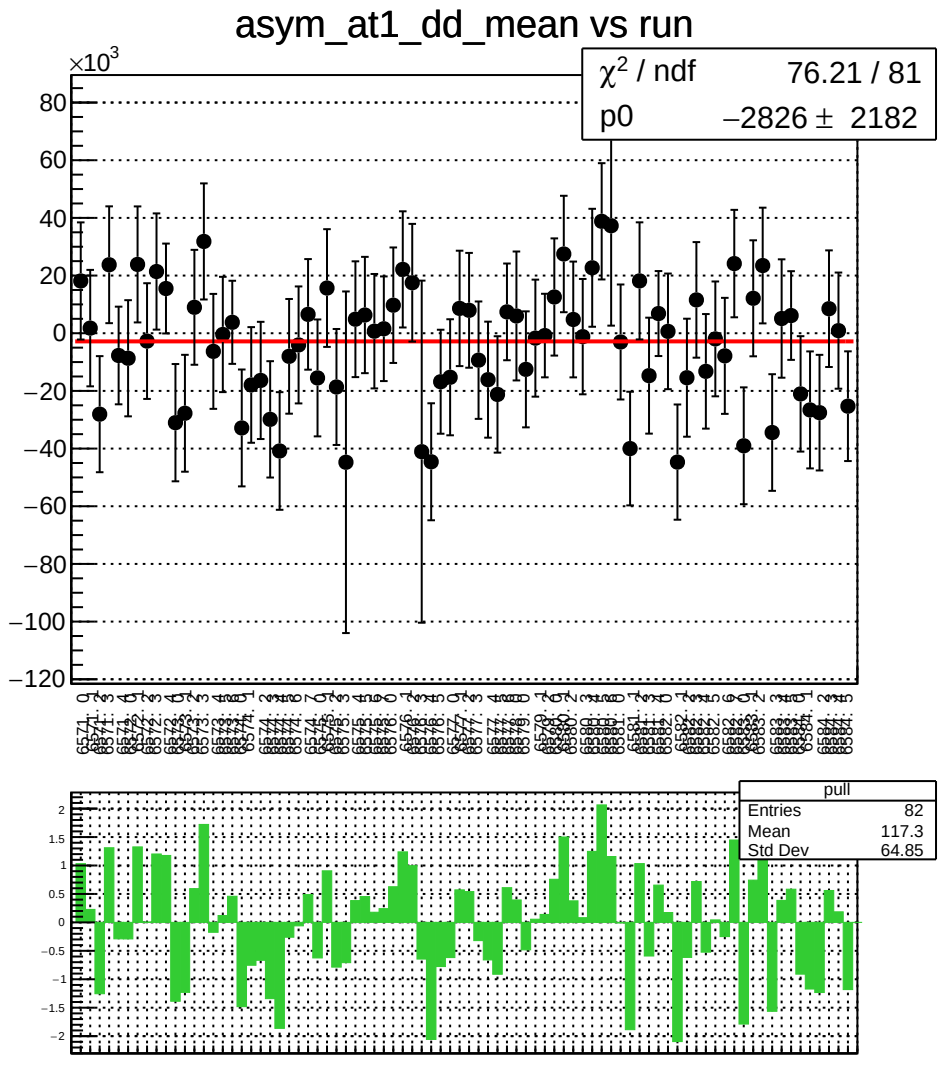

pull1D
Entries 82
Mean −0.01463
Std Dev 0.9834

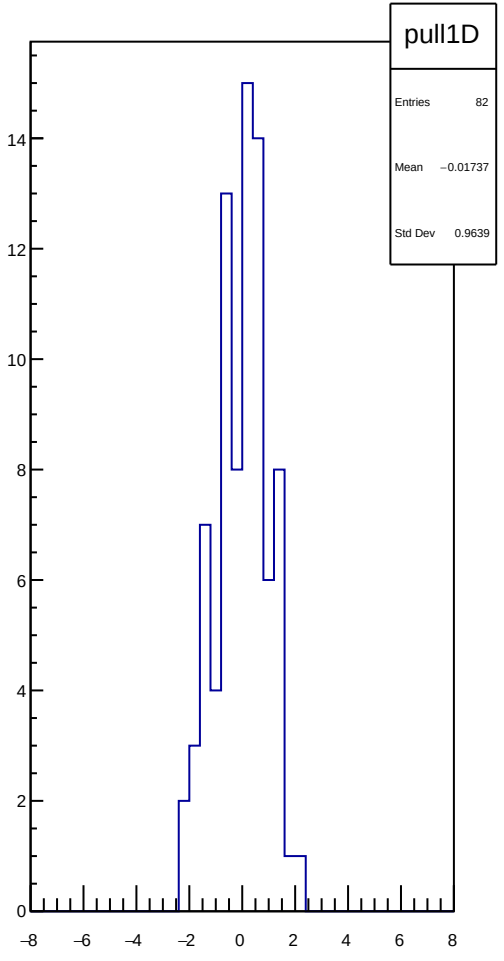

reg_asym_at1_dd_rms vs run
χ² / ndf 2.651e+04 / 81
p0 1887 ± 1.508
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

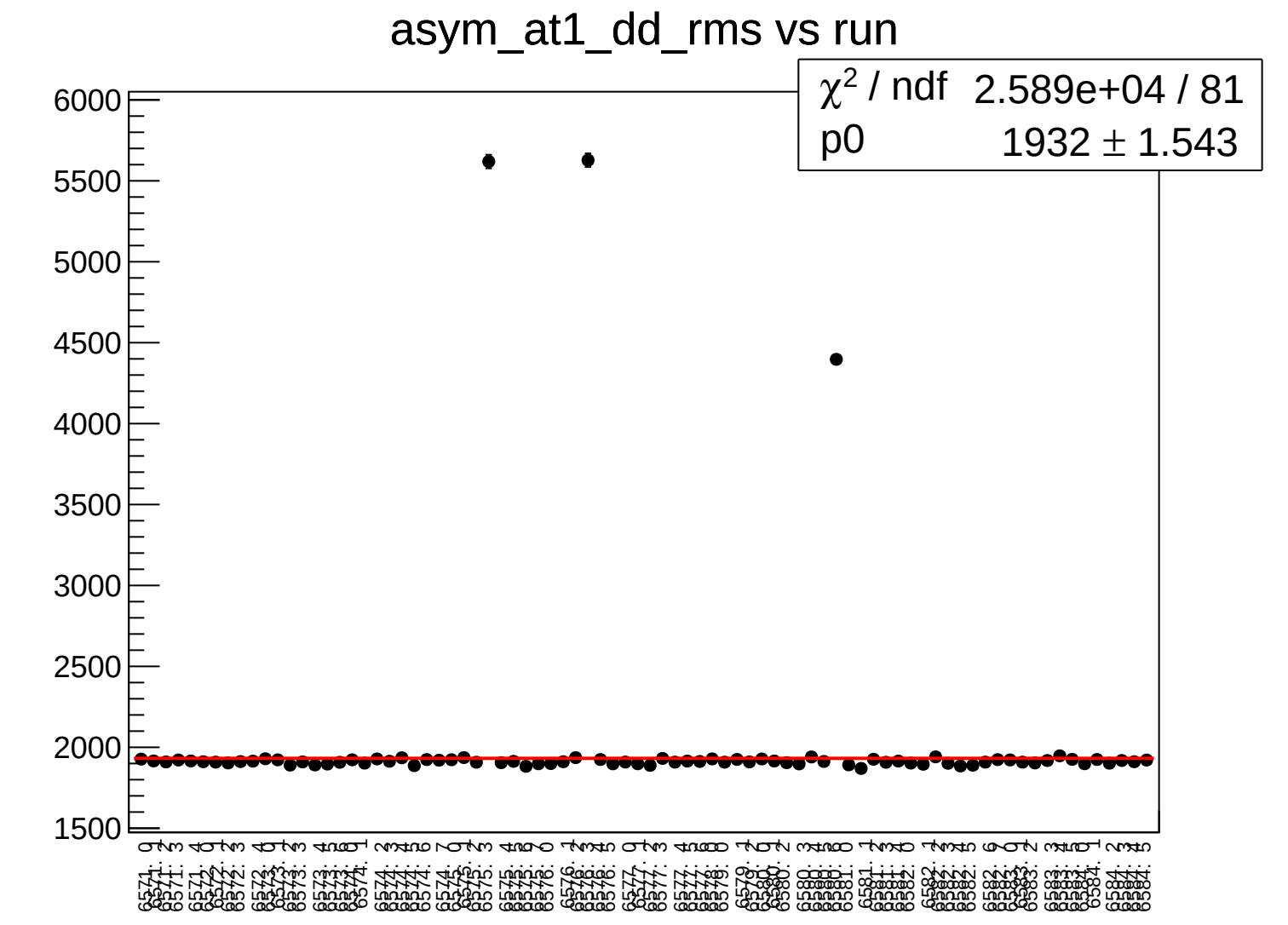

asym_at1_dd_correction_mean vs run
χ² / ndf 88.46 / 81
p0 913.7 ± 445.3
pull
Entries 82
Mean 447.7
Std Dev 406.4

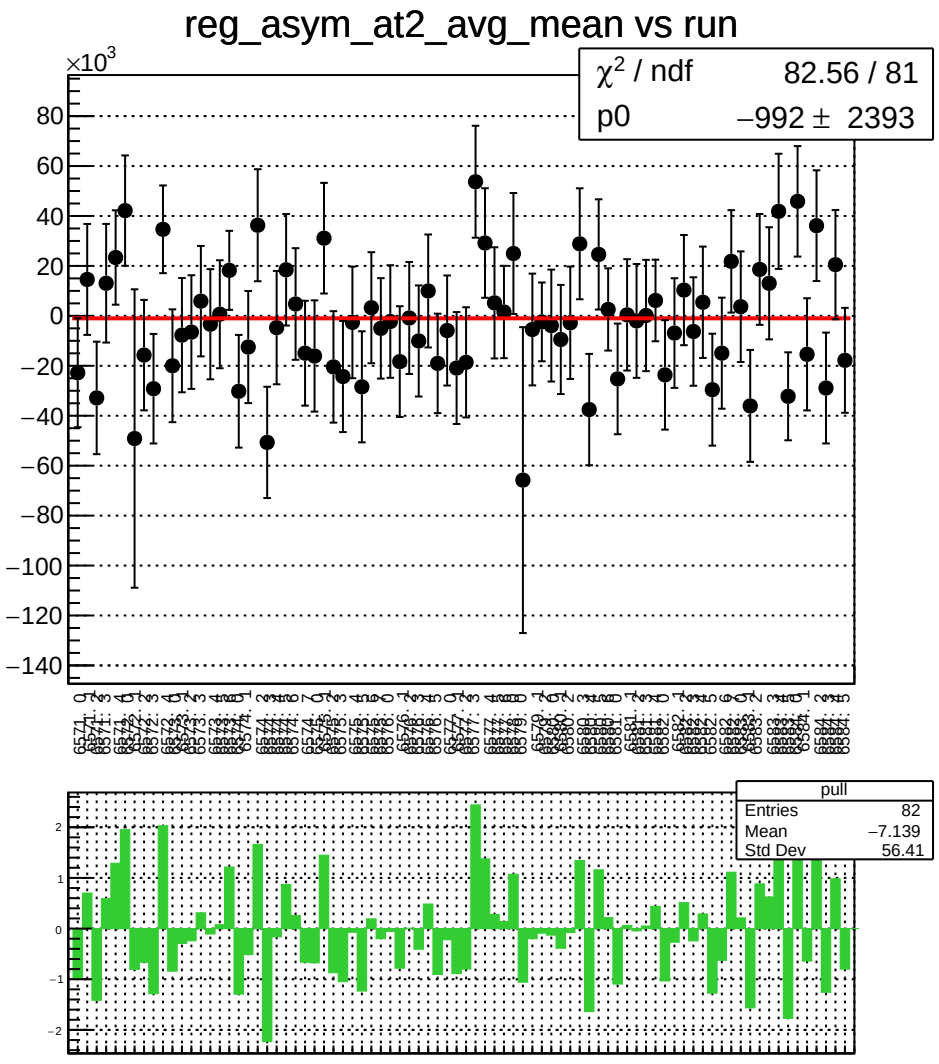

pull1D
Entries 82
Mean 0.007825
Std Dev 1.039

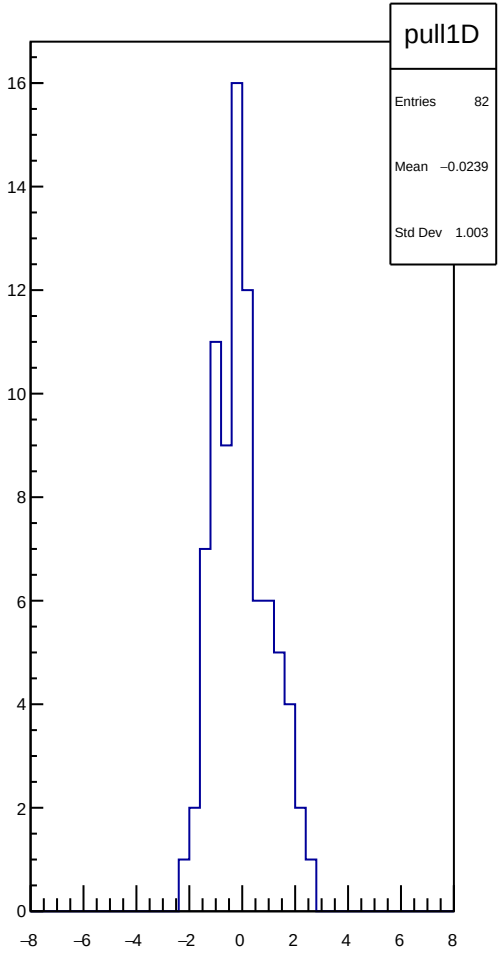

asym_at1_dd_correction_rms vs run
χ² / ndf 1.911e+04 / 81
p0 395.1 ± 0.3149
550
500
450
400
350
300

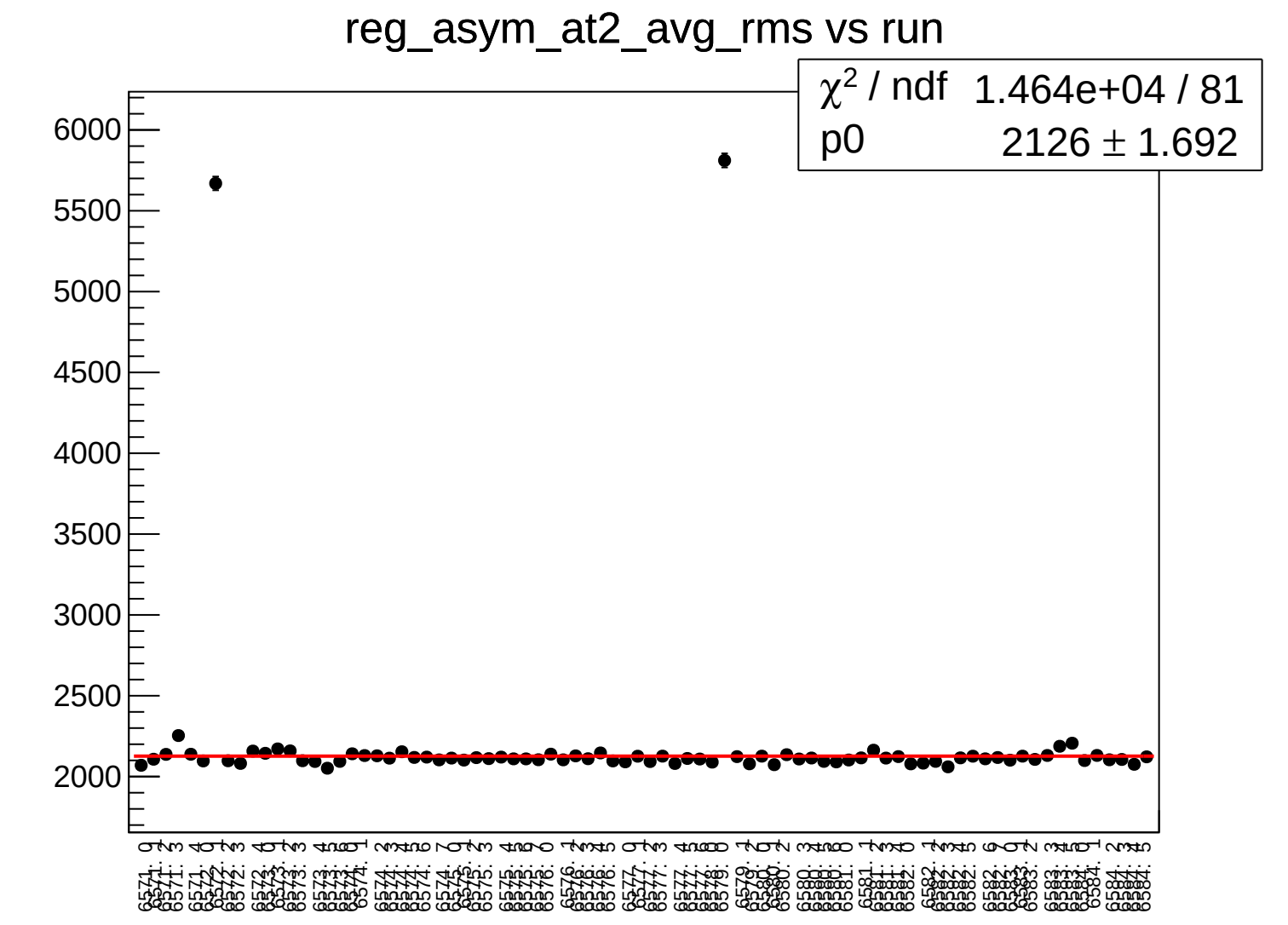

asym_at1_dd_mean vs run
χ² / ndf 76.21 / 81
p0 −2826 ± 2182
×10³
pull
Entries 82
Mean 117.3
Std Dev 64.85

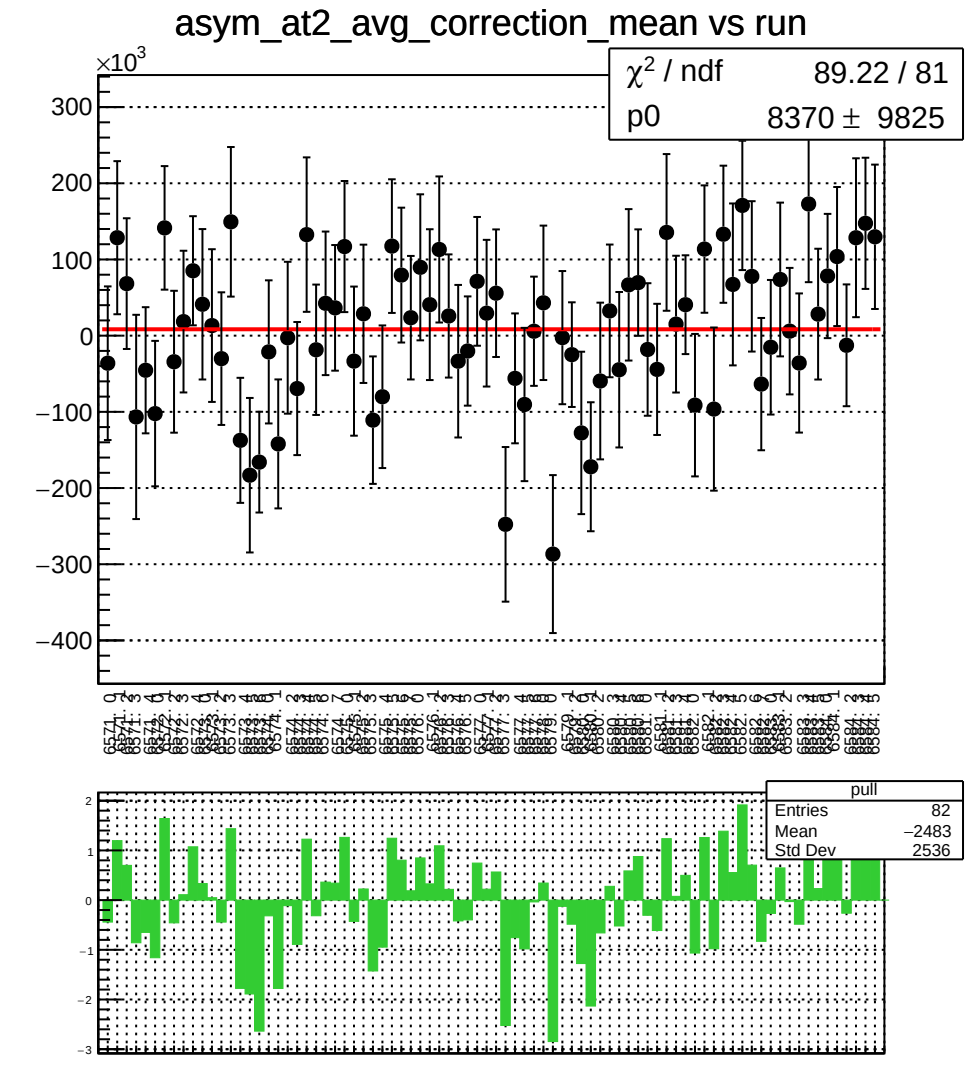

pull1D
Entries 82
Mean −0.01737
Std Dev 0.9639

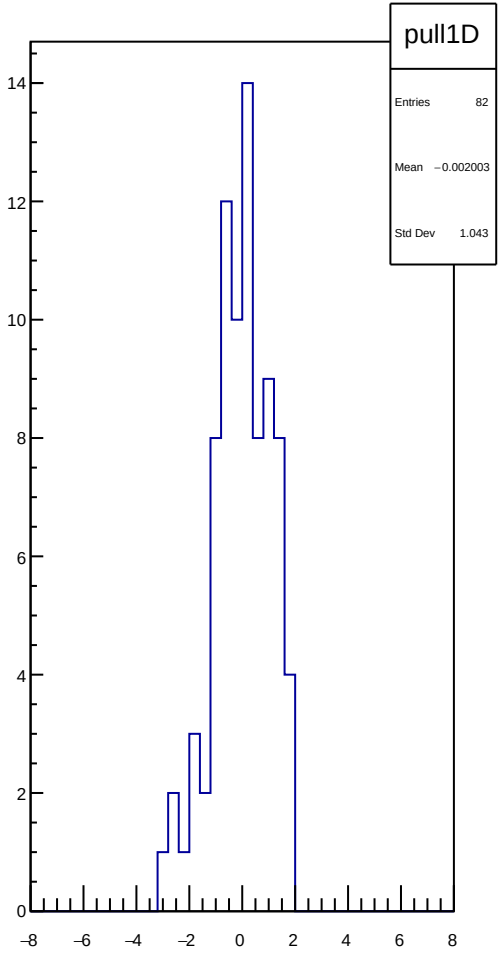

asym_at1_dd_rms vs run
χ² / ndf 2.589e+04 / 81
p0 1932 ± 1.543
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500


reg_asym_at2_avg_mean vs run
×10^3
χ^2 / ndf 82.56 / 81
p0 −992 ± 2393
pull
Entries 82
Mean −7.139
Std Dev 56.41

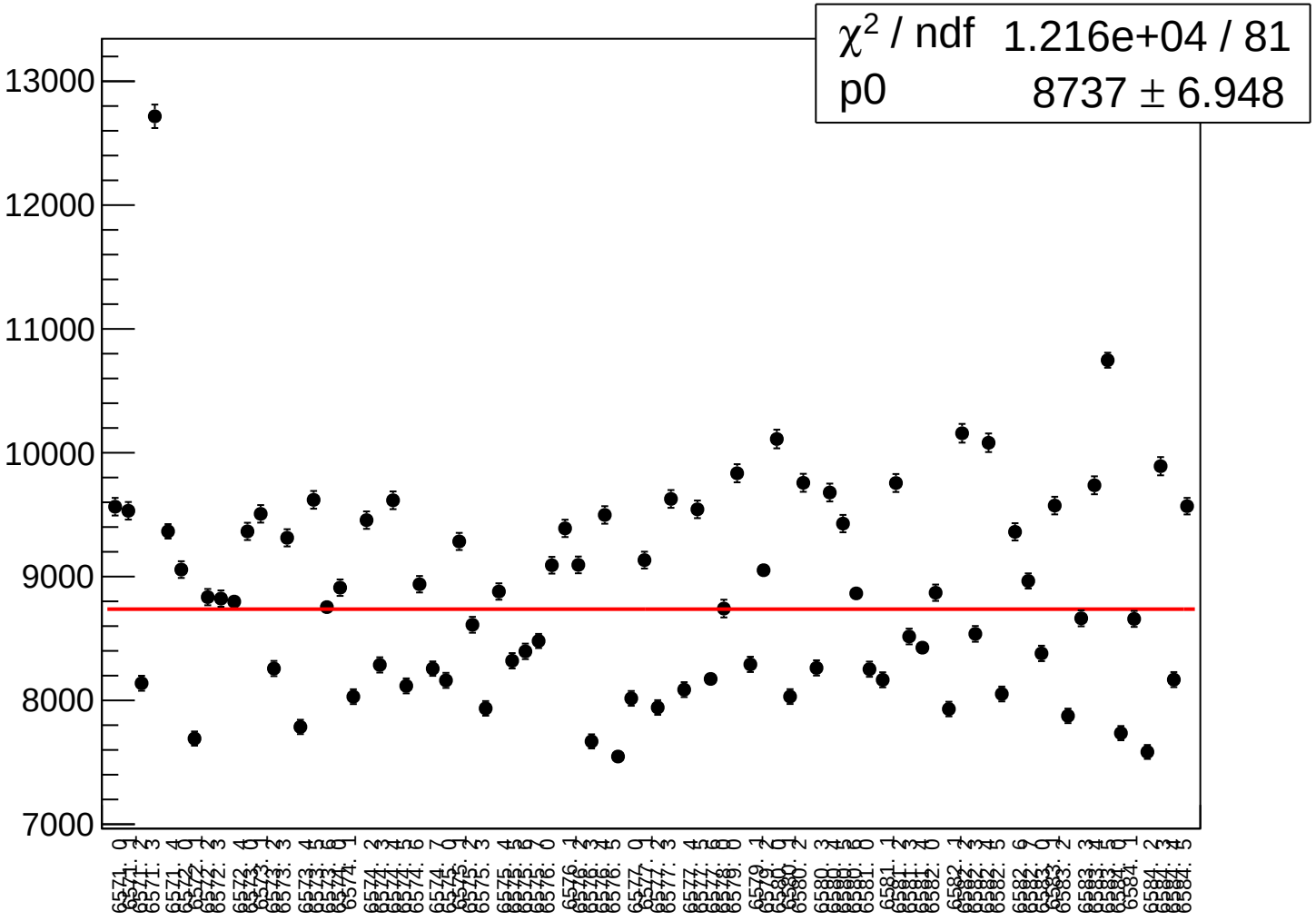

pull1D
Entries 82
Mean −0.0239
Std Dev 1.003

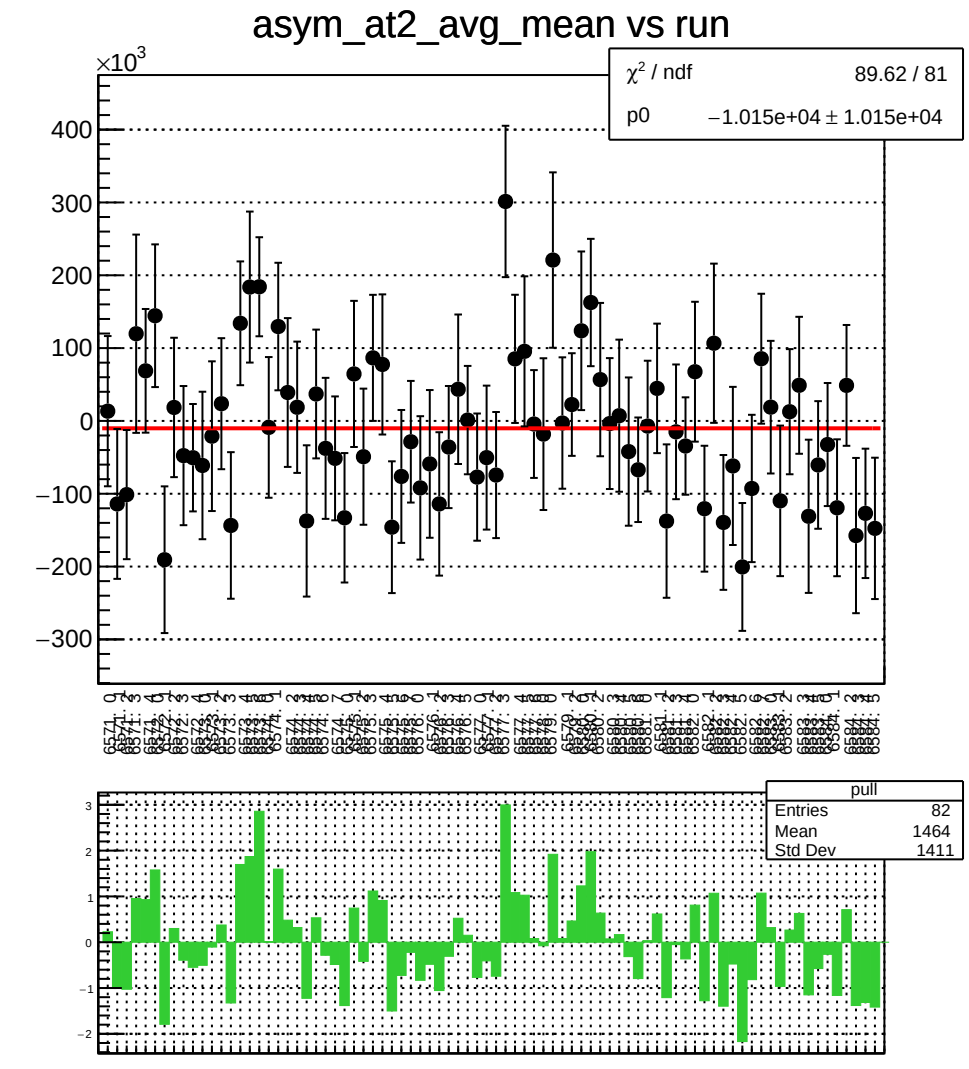

reg_asym_at2_avg_rms vs run
χ² / ndf 1.464e+04 / 81
p0 2126 ± 1.692
6000
5500
5000
4500
4000
3500
3000
2500
2000

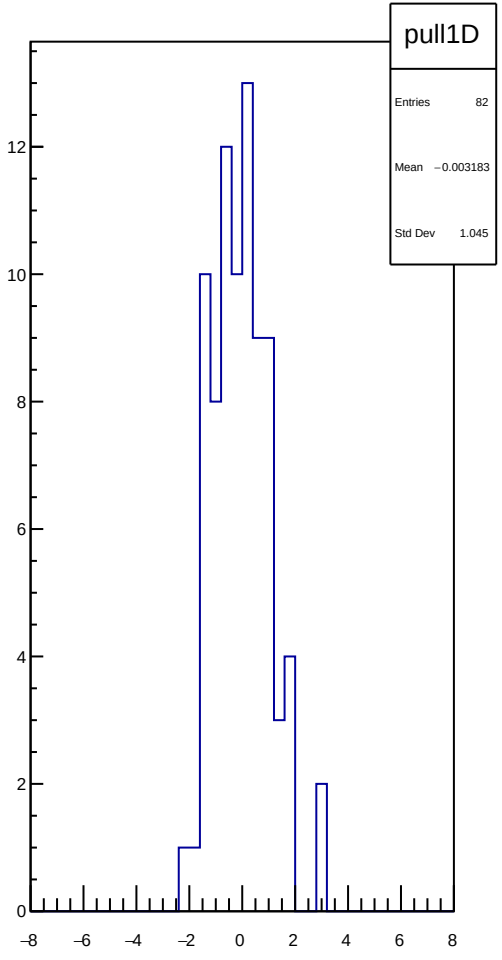

asym_at2_avg_correction_mean vs run
χ² / ndf 89.22 / 81
p0 8370 ± 9825
×10³
pull
Entries 82
Mean −2483
Std Dev 2536

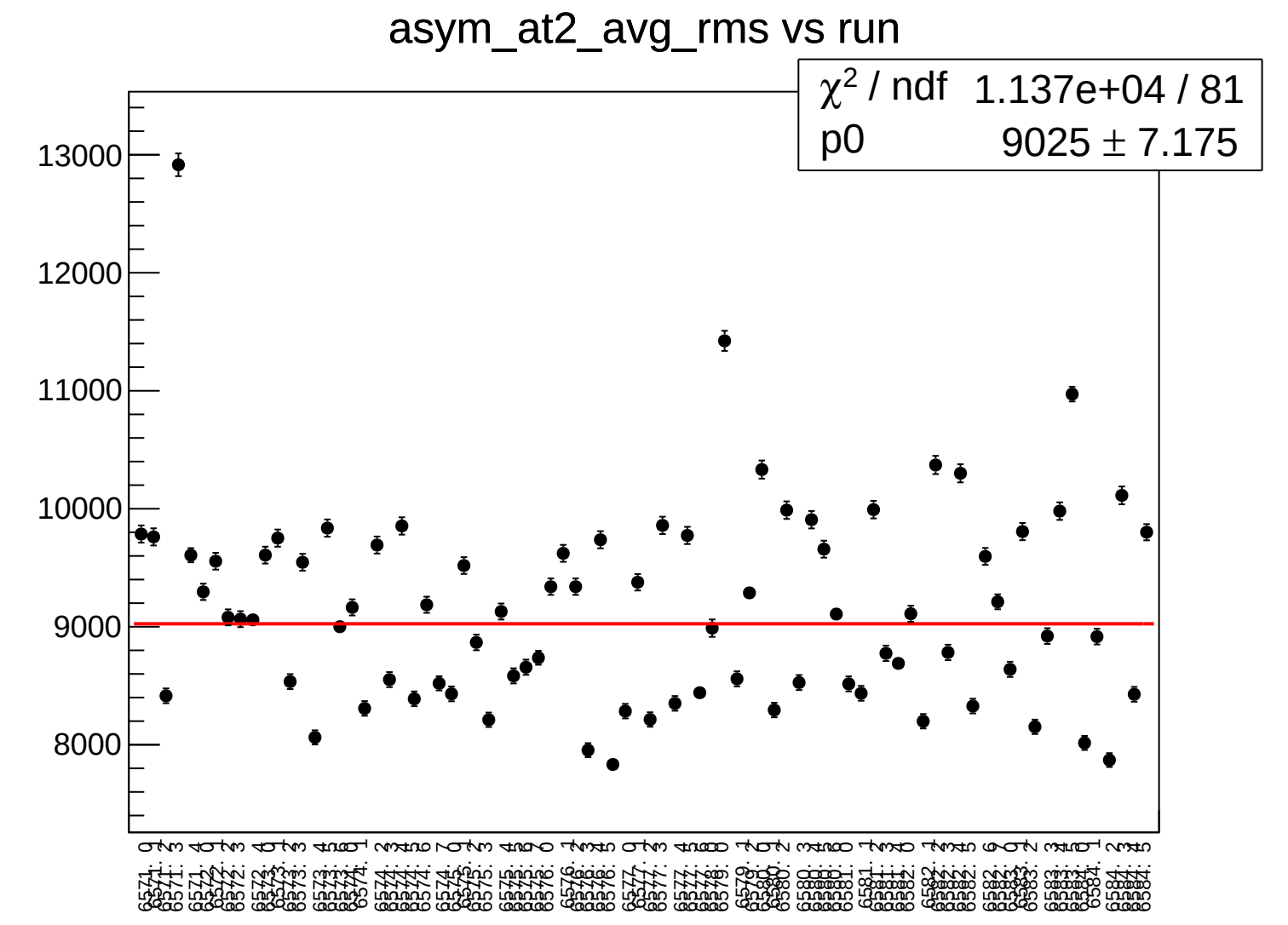

pull1D
Entries 82
Mean −0.002003
Std Dev 1.043

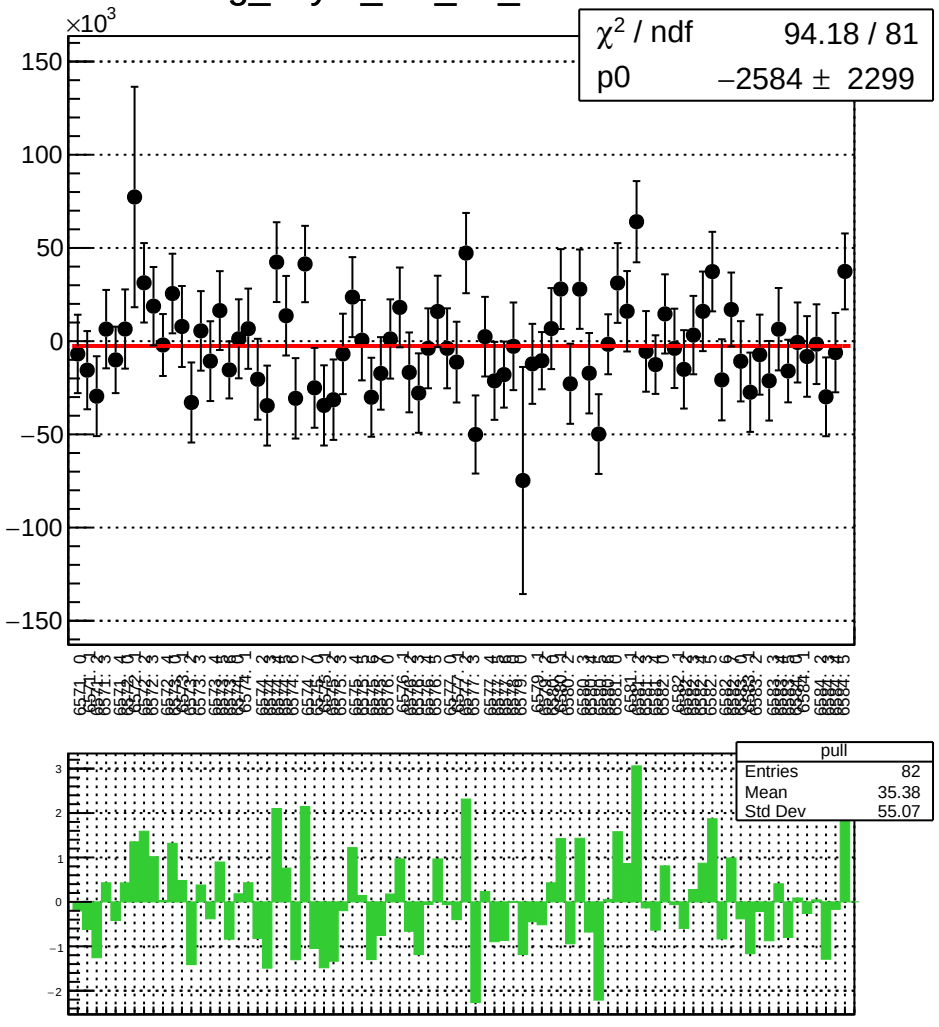
# asym_at2_avg_correction_rms vs run

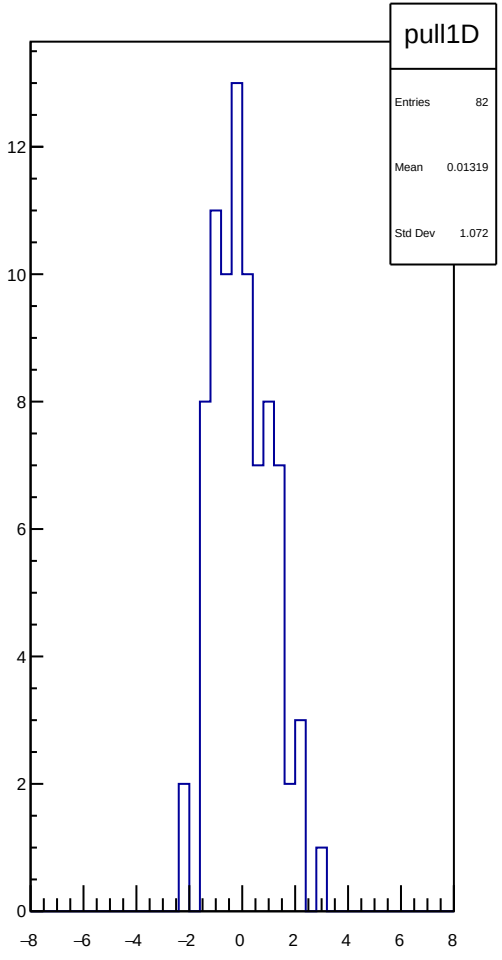


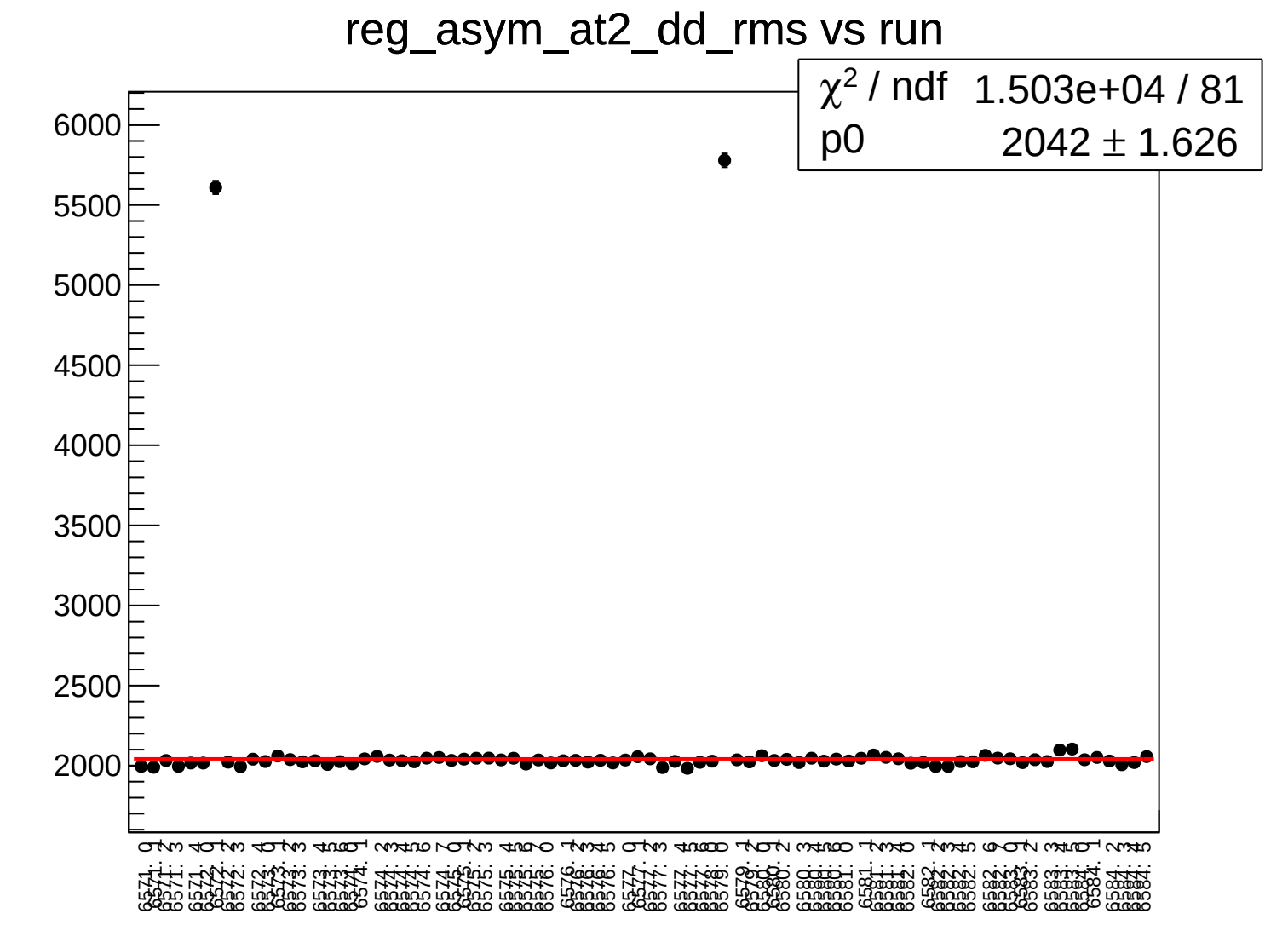

asym_at2_avg_mean vs run
×10^3
χ² / ndf 89.62 / 81
p0 −1.015e+04 ± 1.015e+04
pull
Entries 82
Mean 1464
Std Dev 1411

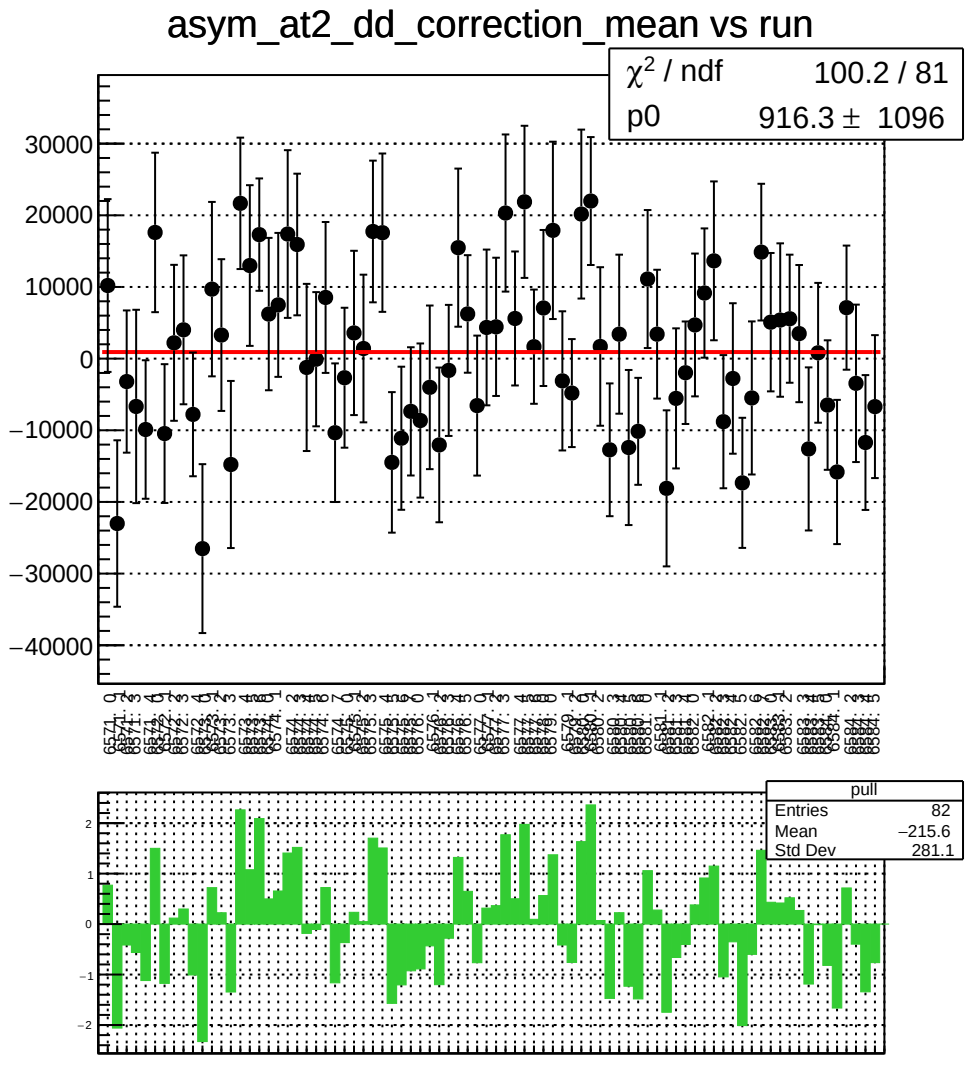

pull1D
Entries 82
Mean −0.003183
Std Dev 1.045

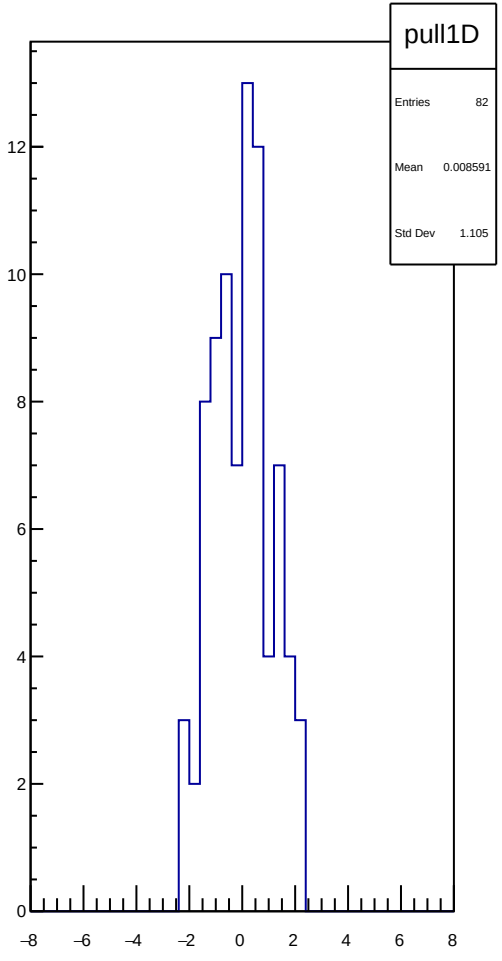

asym_at2_avg_rms vs run
χ² / ndf 1.137e+04 / 81
p0 9025 ± 7.175
13000
12000
11000
10000
9000
8000

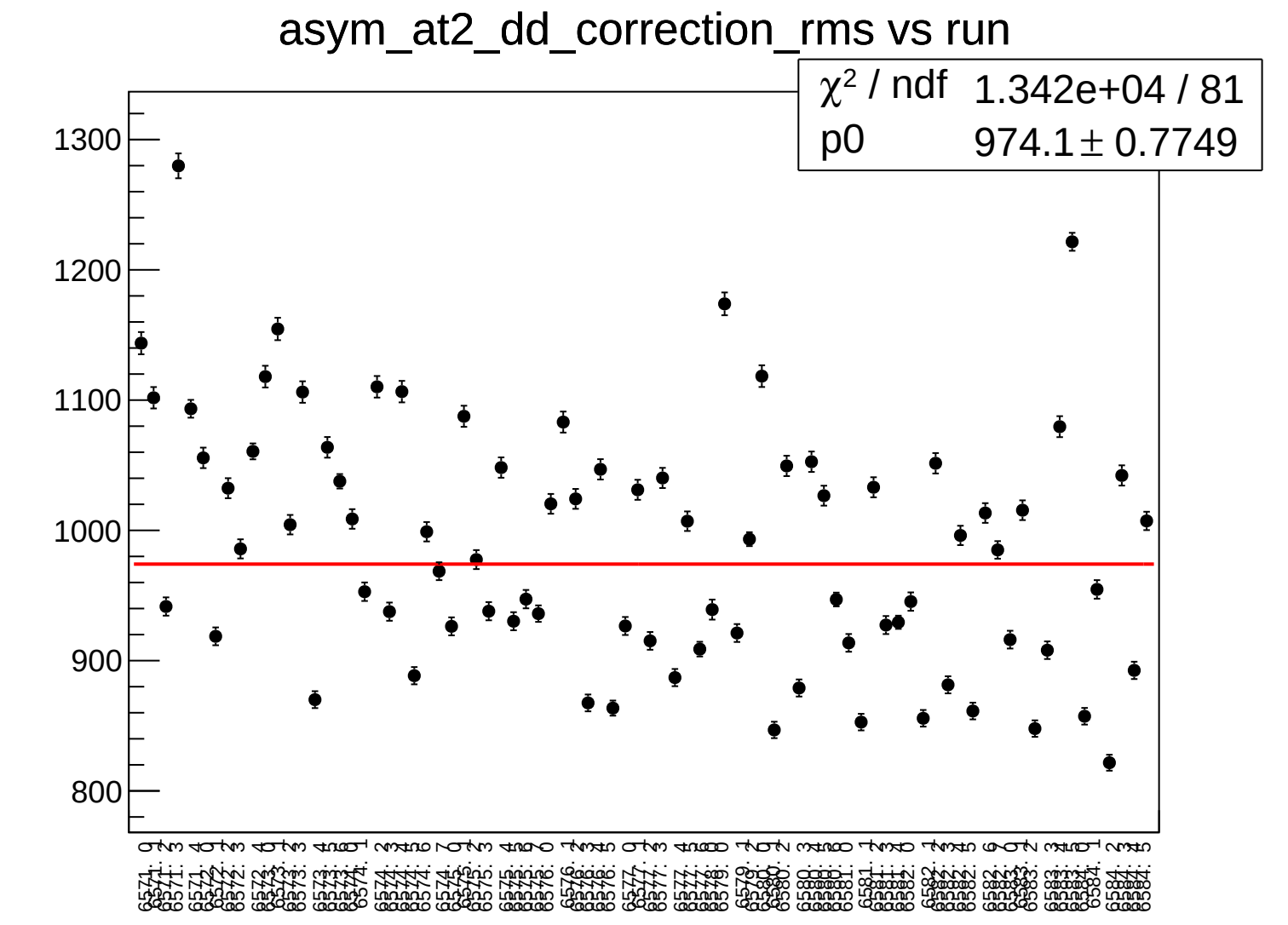

reg_asym_at2_dd_mean vs run
×10^3
χ^2 / ndf 94.18 / 81
p0 −2584 ± 2299
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean 35.38
Std Dev 55.07
3
2
1
0
−1
−2

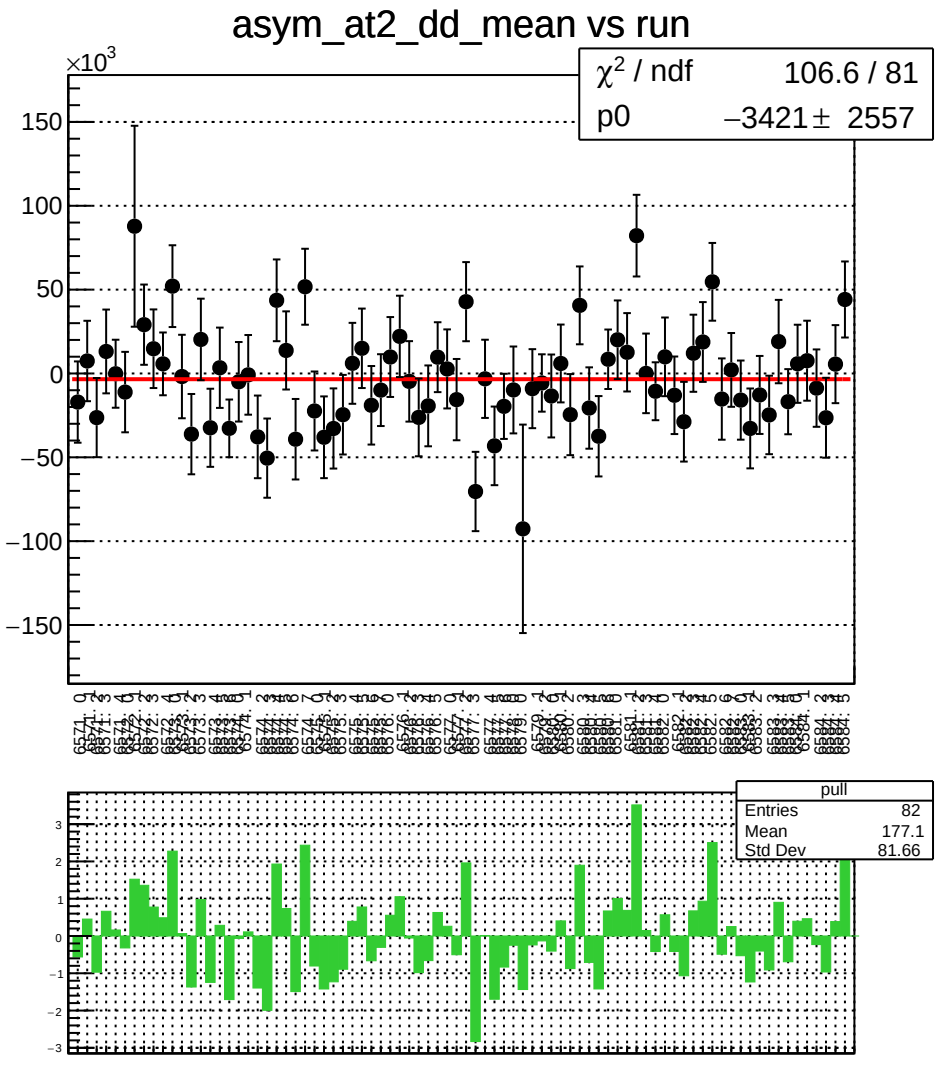

pull1D
Entries 82
Mean 0.01319
Std Dev 1.072
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

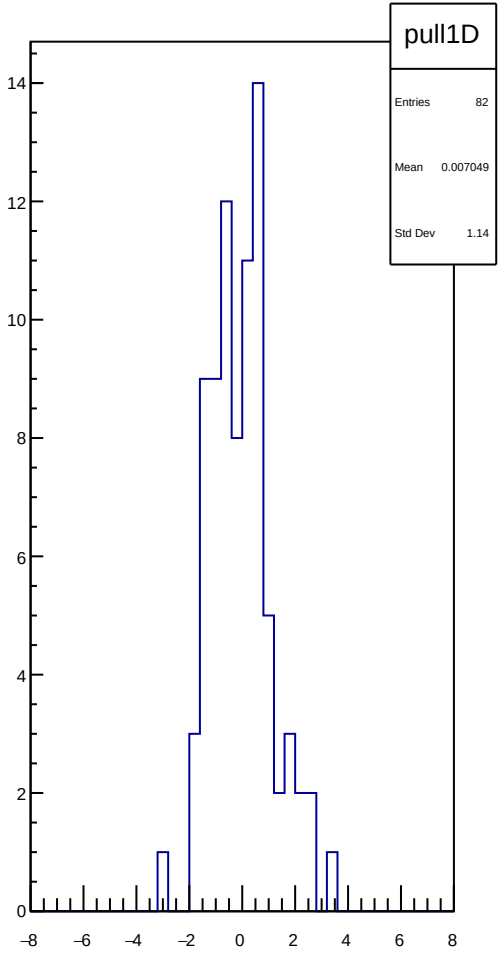

reg_asym_at2_dd_rms vs run
χ² / ndf 1.503e+04 / 81
p0 2042 ± 1.626
6000
5500
5000
4500
4000
3500
3000
2500
2000

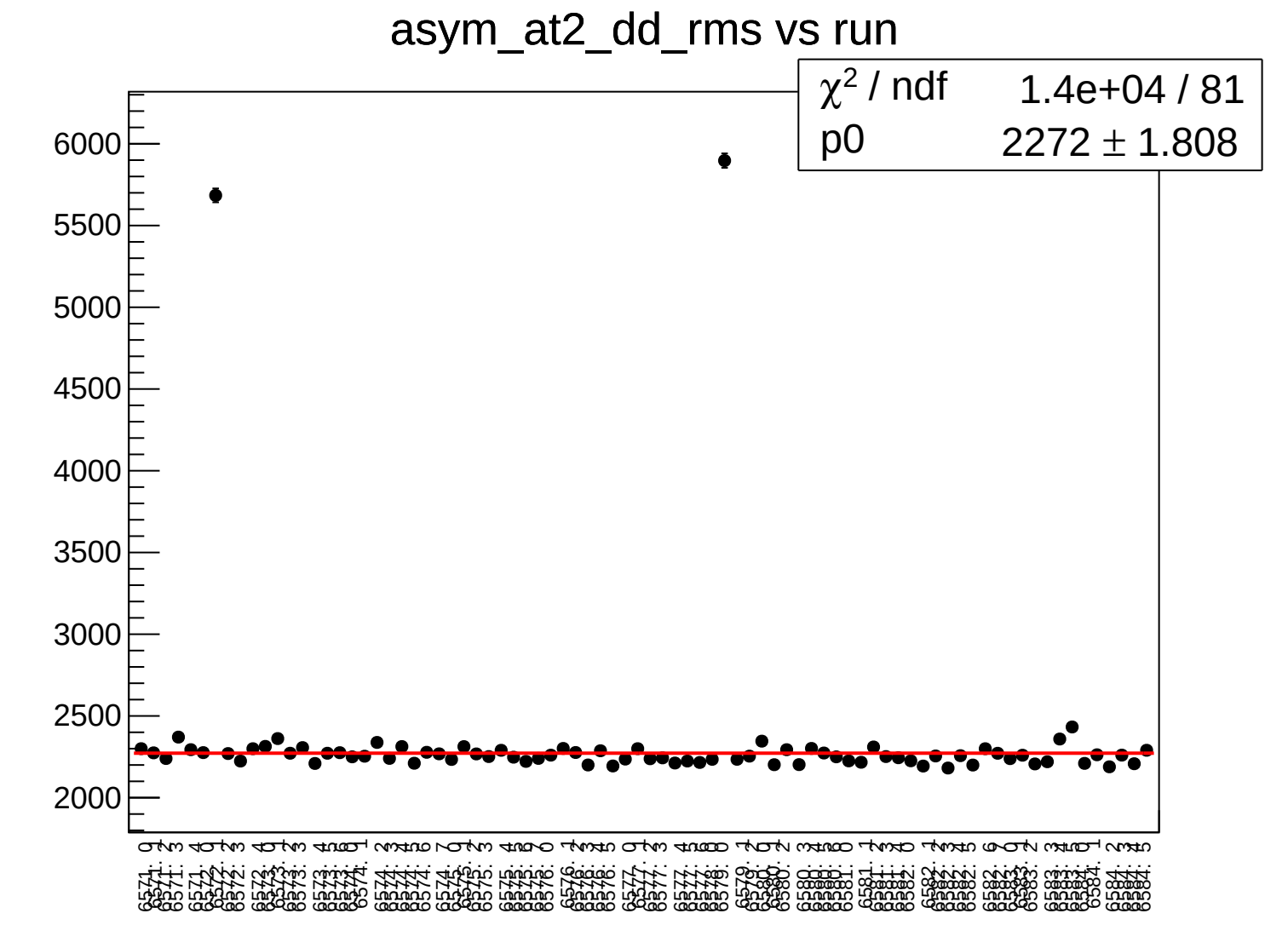

asym_at2_dd_correction_mean vs run
χ² / ndf 100.2 / 81
p0 916.3 ± 1096
pull
Entries 82
Mean −215.6
Std Dev 281.1

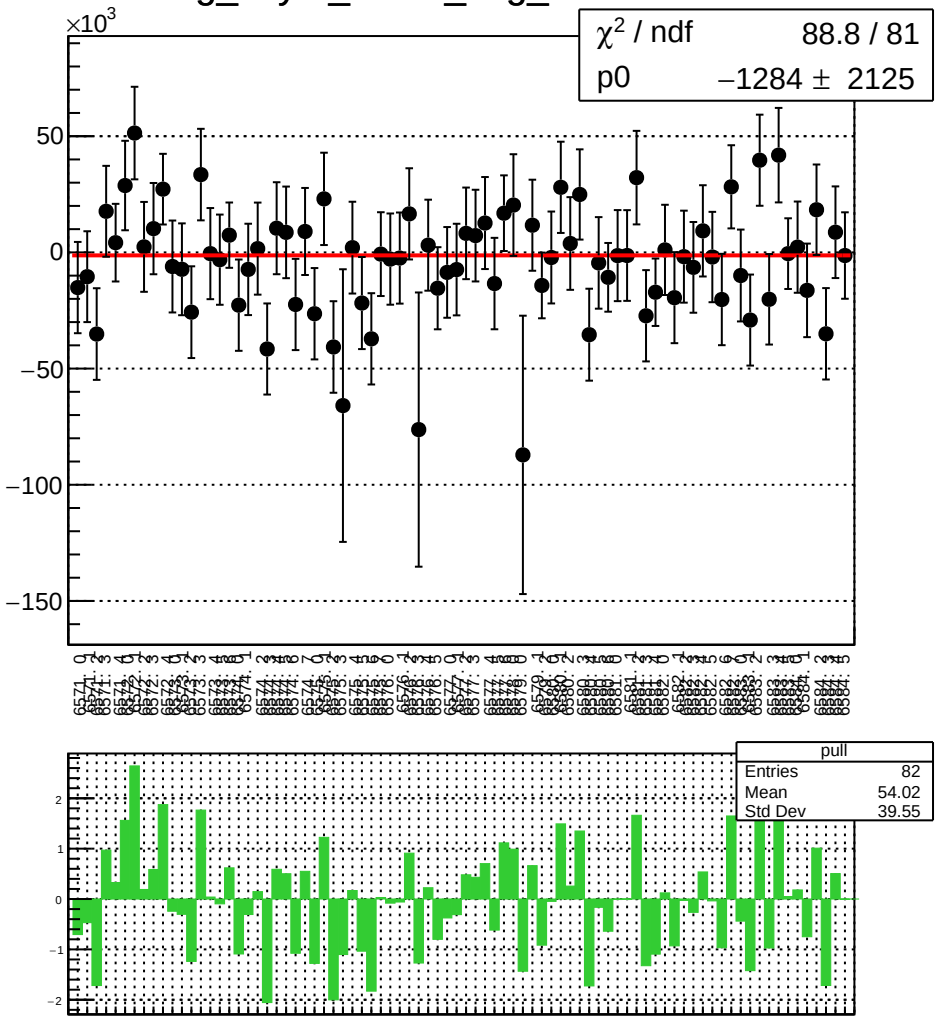

pull1D
Entries 82
Mean 0.008591
Std Dev 1.105

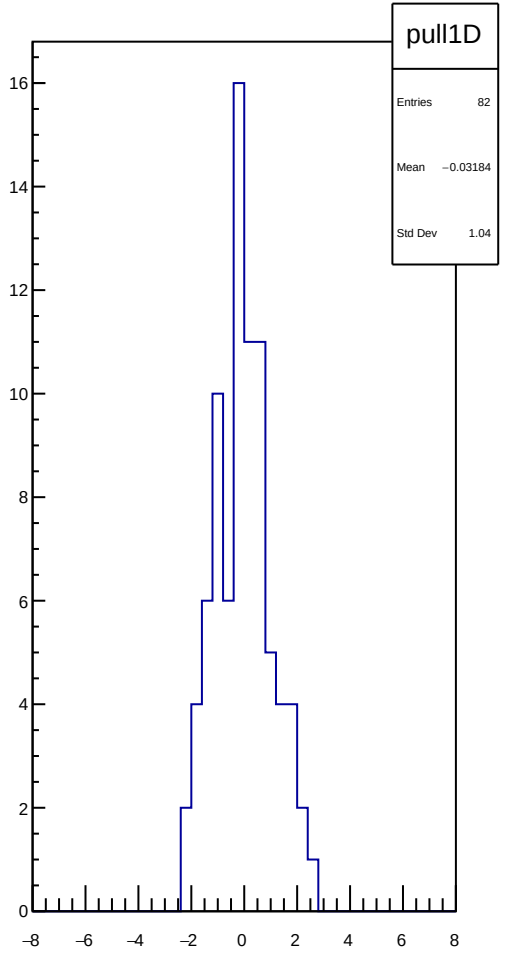

asym_at2_dd_correction_rms vs run
χ² / ndf 1.342e+04 / 81
p0 974.1 ± 0.7749
1300
1200
1100
1000
900
800

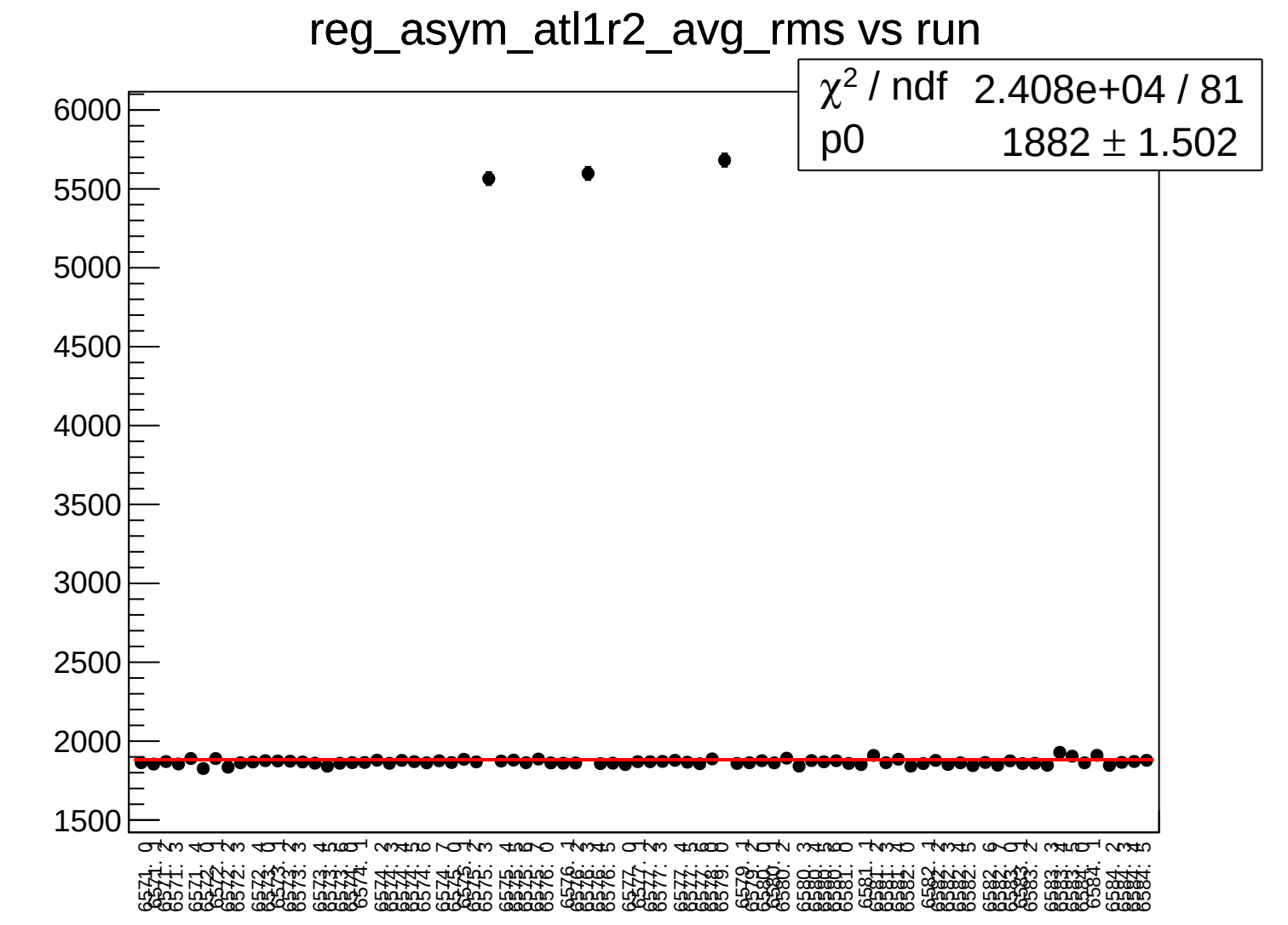

asym_at2_dd_mean vs run
×10^3
χ^2 / ndf 106.6 / 81
p0 −3421 ± 2557
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean 177.1
Std Dev 81.66
3
2
1
0
−1
−2
−3

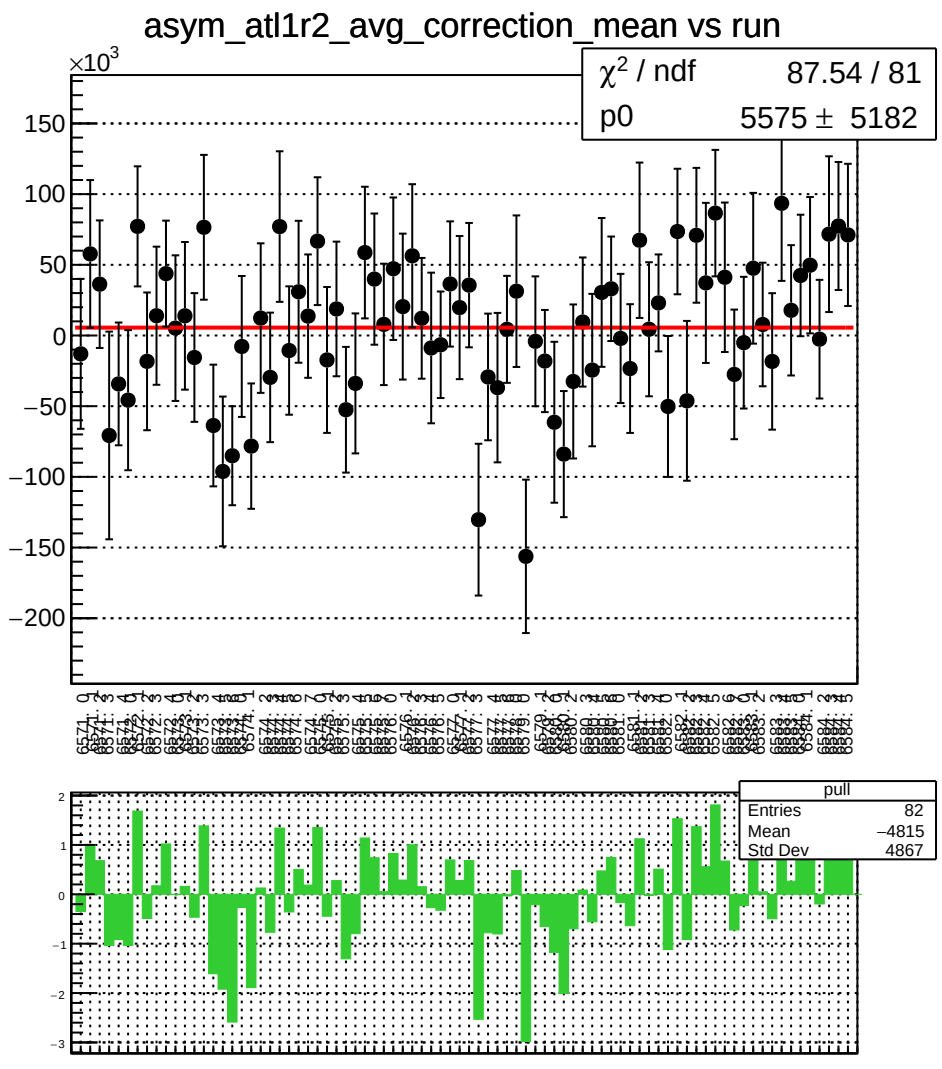

pull1D
Entries 82
Mean 0.007049
Std Dev 1.14
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

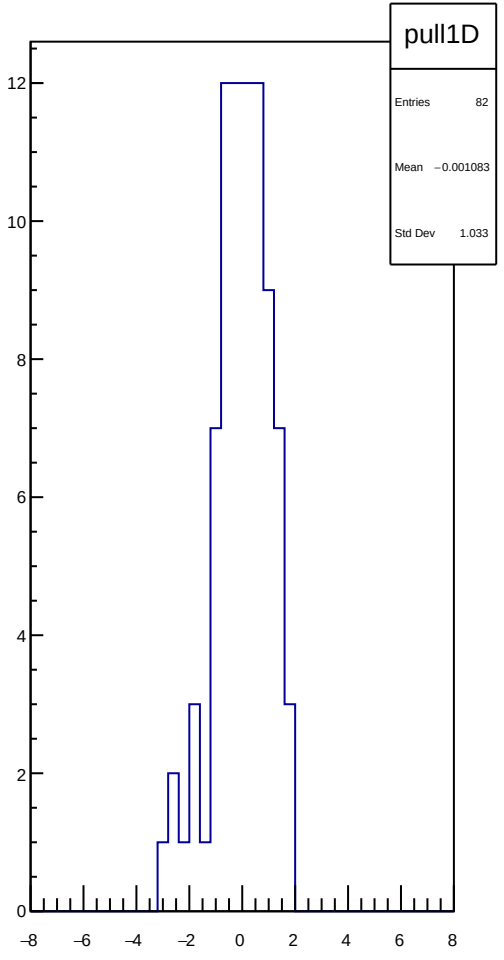

asym_at2_dd_rms vs run
$\chi^2$ / ndf 1.4e+04 / 81
p0 2272 ± 1.808
6000
5500
5000
4500
4000
3500
3000
2500
2000

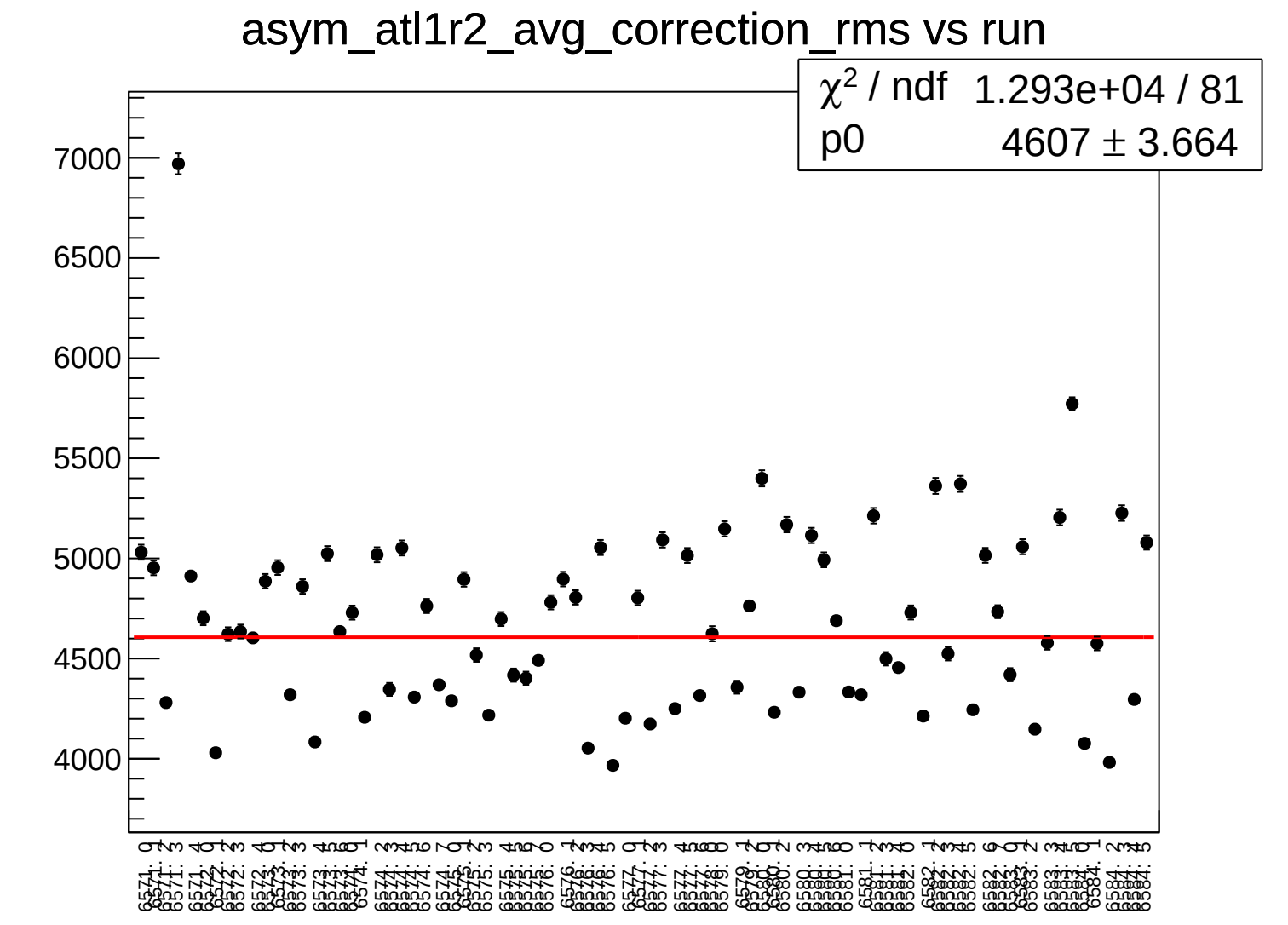

reg_asym_atl1r2_avg_mean vs run
χ² / ndf 88.8 / 81
p0 −1284 ± 2125
×10³
50
0
−50
−100
−150
pull
Entries 82
Mean 54.02
Std Dev 39.55
2
1
0
−1
−2

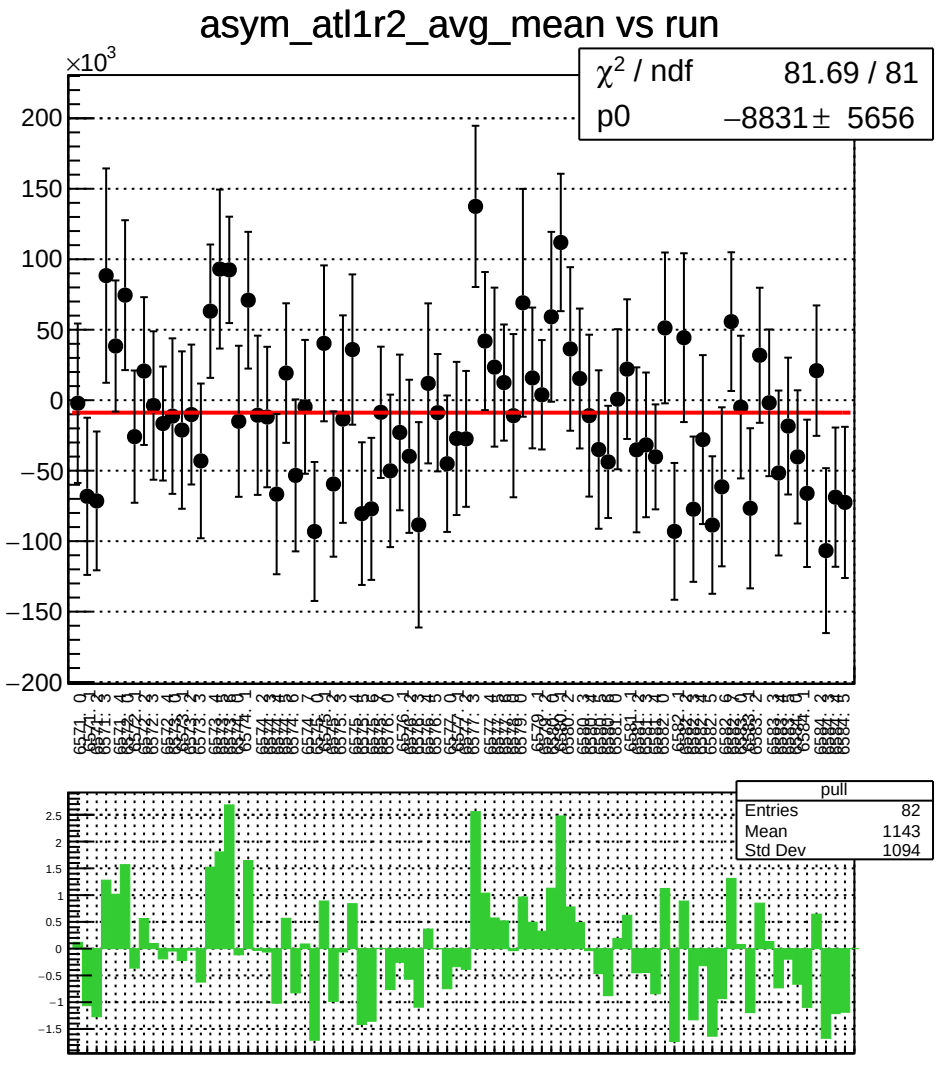

pull1D
Entries 82
Mean −0.03184
Std Dev 1.04
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

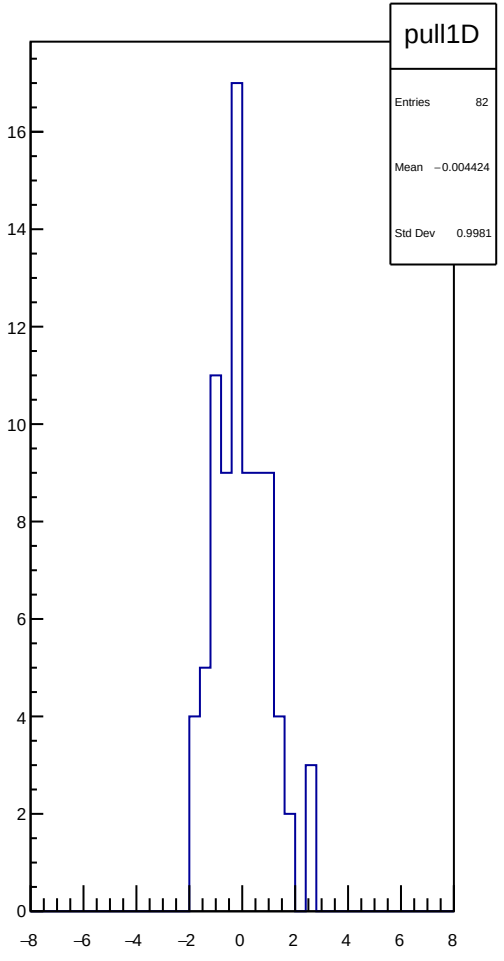

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 2.408e+04 / 81
p0 1882 ± 1.502
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

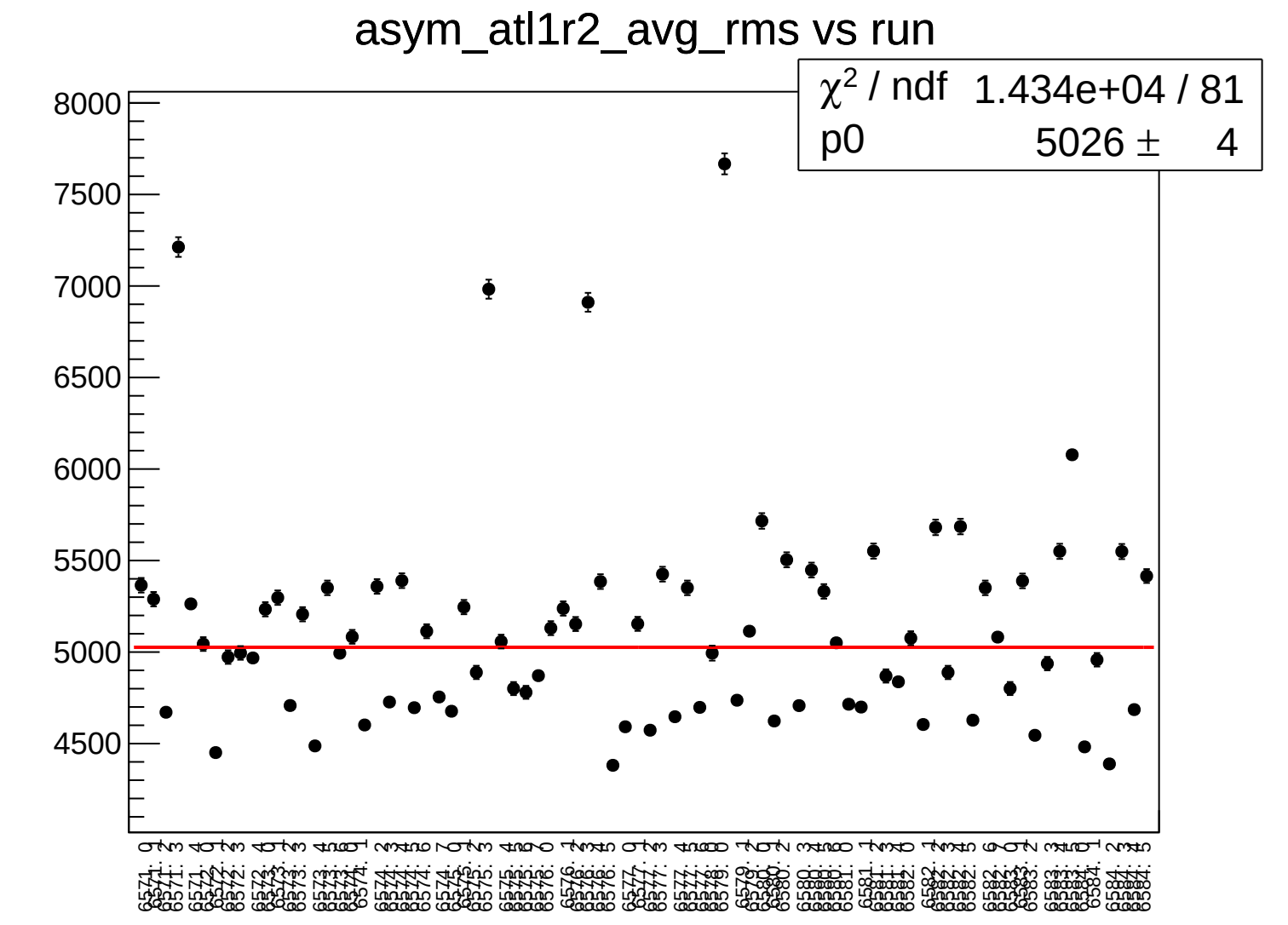

asym_atl1r2_avg_correction_mean vs run
×10^3
χ^2 / ndf 87.54 / 81
p0 5575 ± 5182
150
100
50
0
−50
−100
−150
−200
pull
Entries 82
Mean −4815
Std Dev 4867
2
1
0
−1
−2
−3

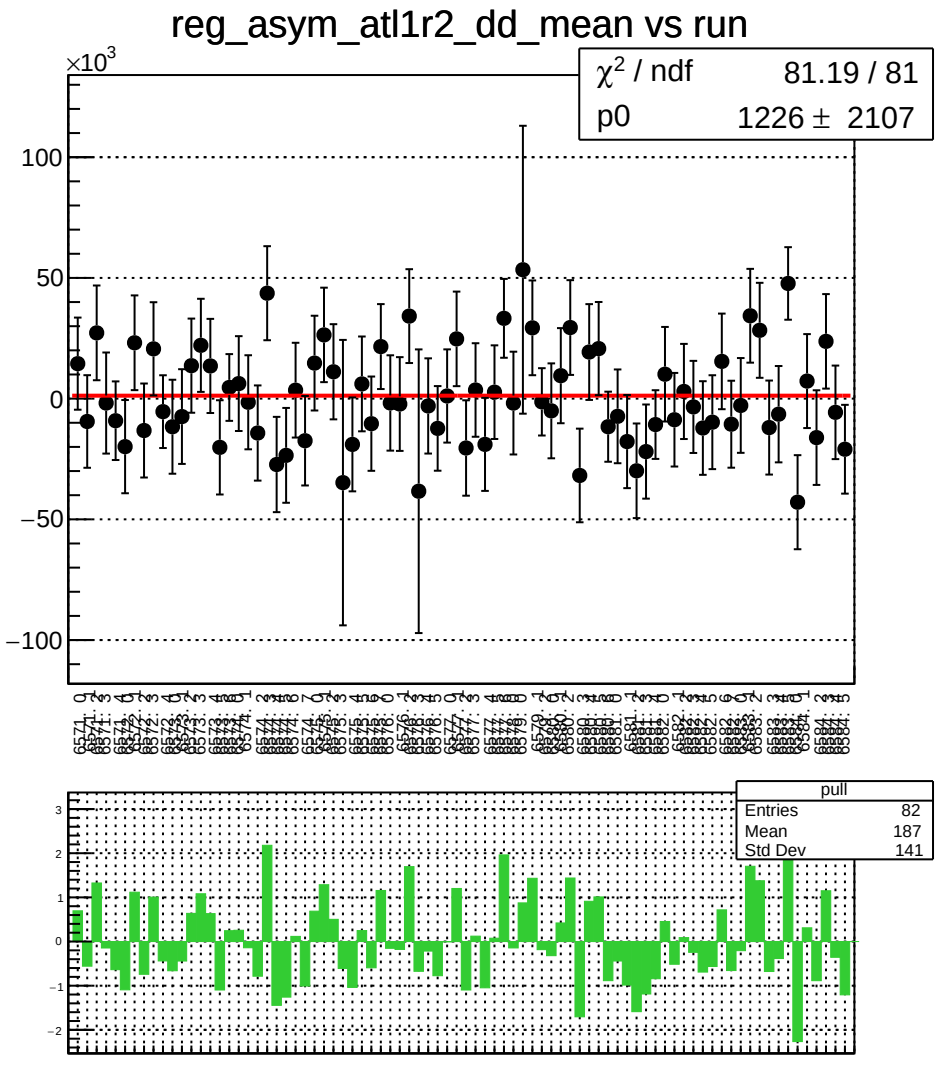

pull1D
Entries 82
Mean −0.001083
Std Dev 1.033
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

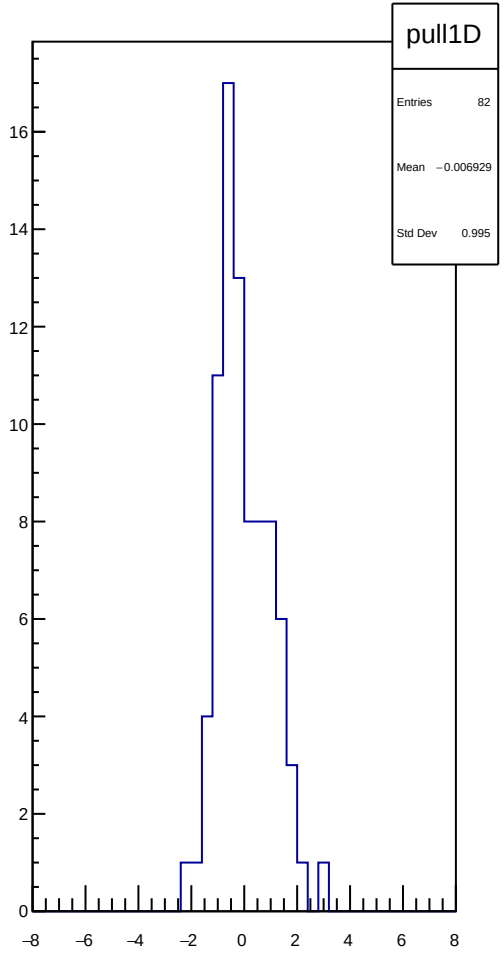

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 1.293e+04 / 81
p0 4607 ± 3.664
7000
6500
6000
5500
5000
4500
4000


asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 81.69 / 81
p0 −8831 ± 5656
pull
Entries 82
Mean 1143
Std Dev 1094


pull1D
Entries 82
Mean −0.004424
Std Dev 0.9981


asym_atl1r2_avg_rms vs run
χ² / ndf 1.434e+04 / 81
p0 5026 ± 4
8000
7500
7000
6500
6000
5500
5000
4500


reg_asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 81.19 / 81
p0 1226 ± 2107
100
50
0
−50
−100
pull
Entries 82
Mean 187
Std Dev 141
3
2
1
0
−1
−2


pull1D
Entries 82
Mean −0.006929
Std Dev 0.995
16
14
12
10
8
6
4
2
0
−8
−6
−4
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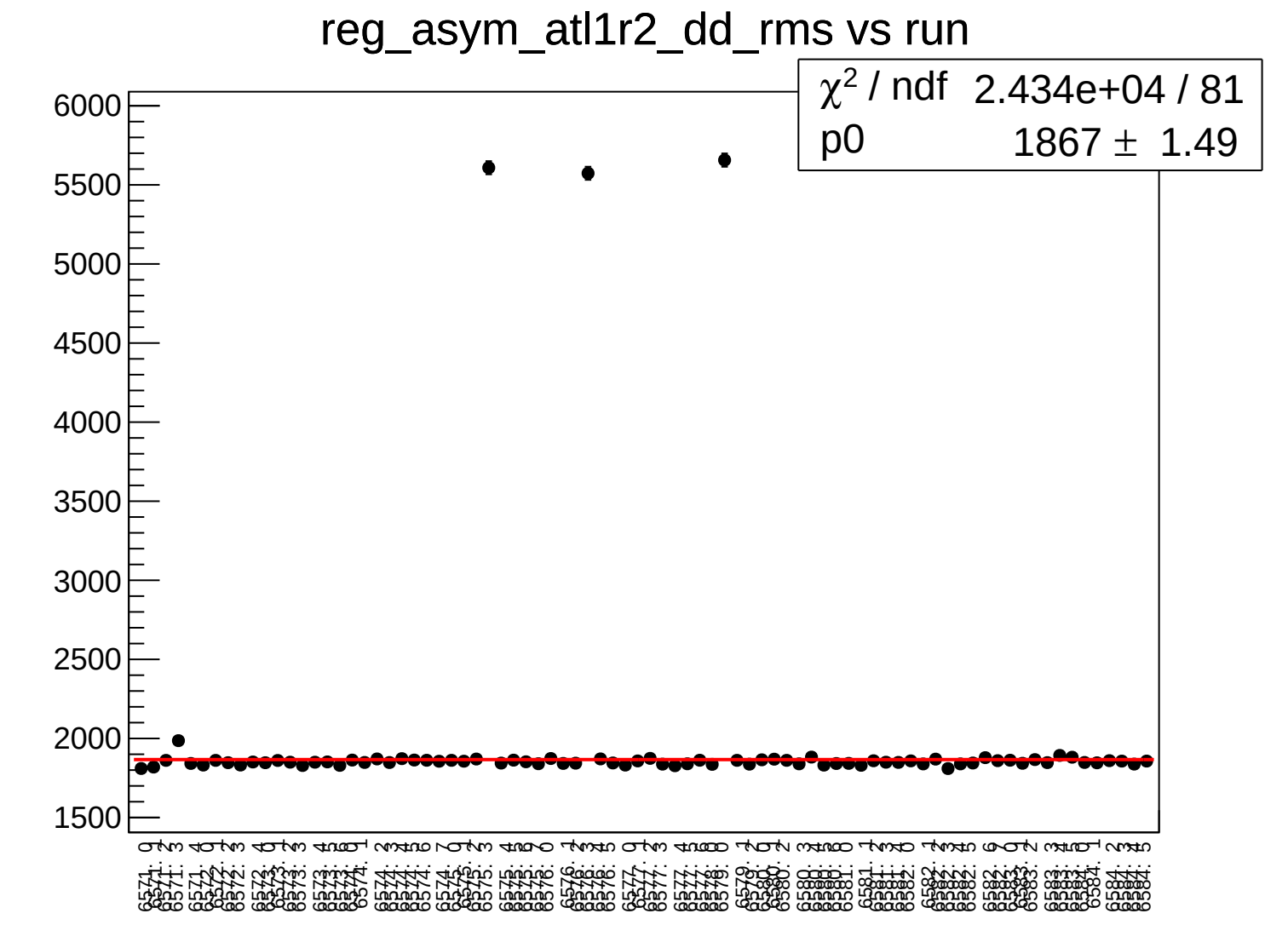
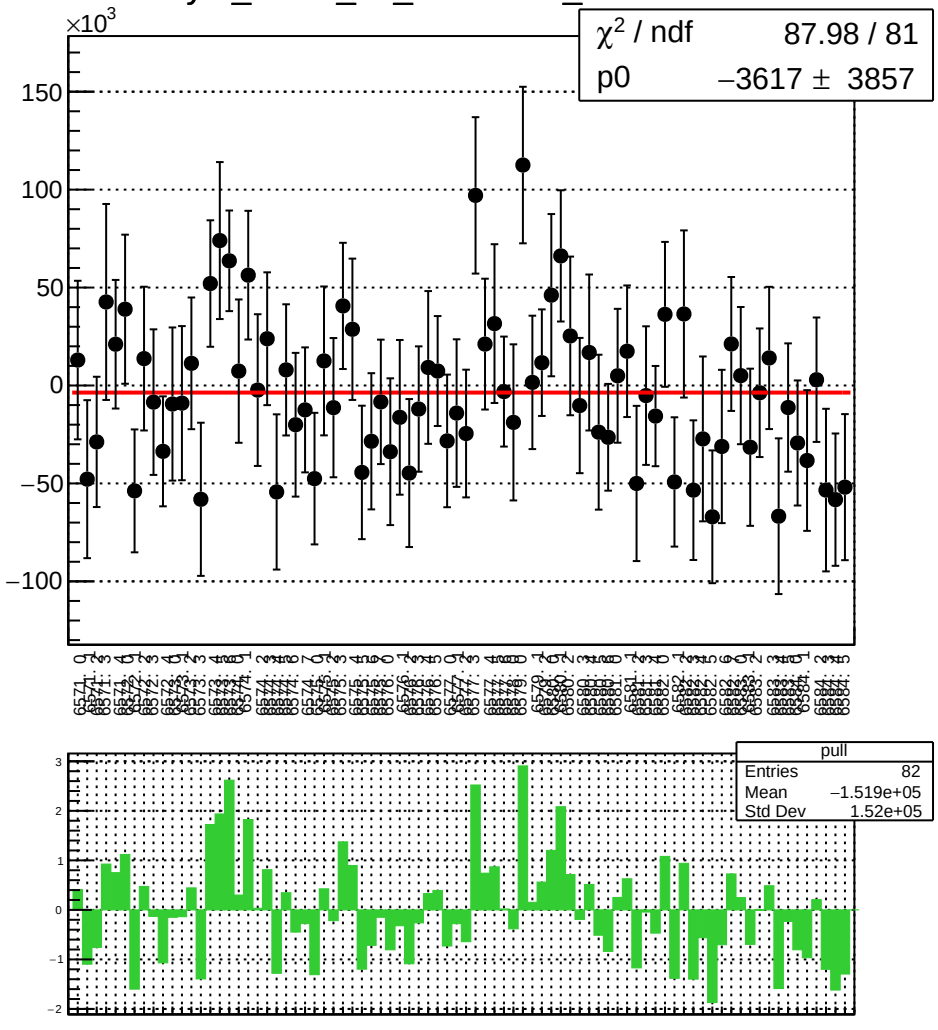
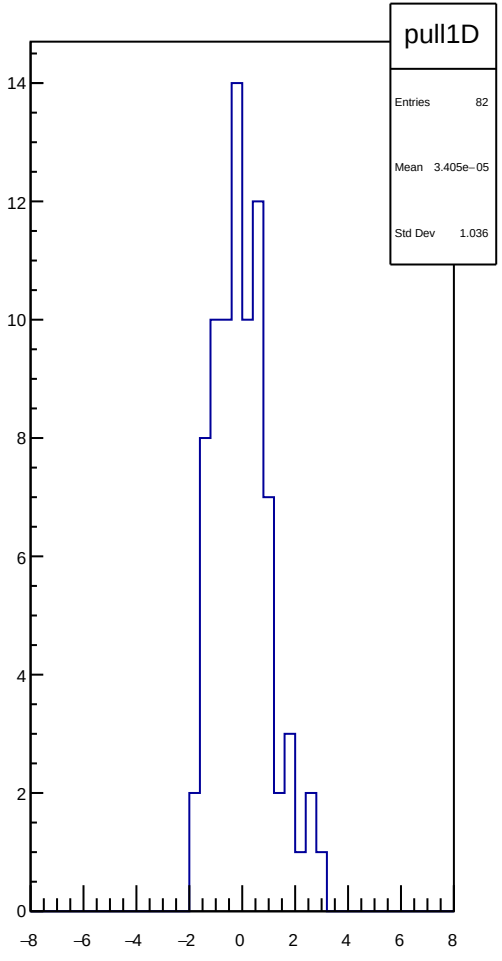
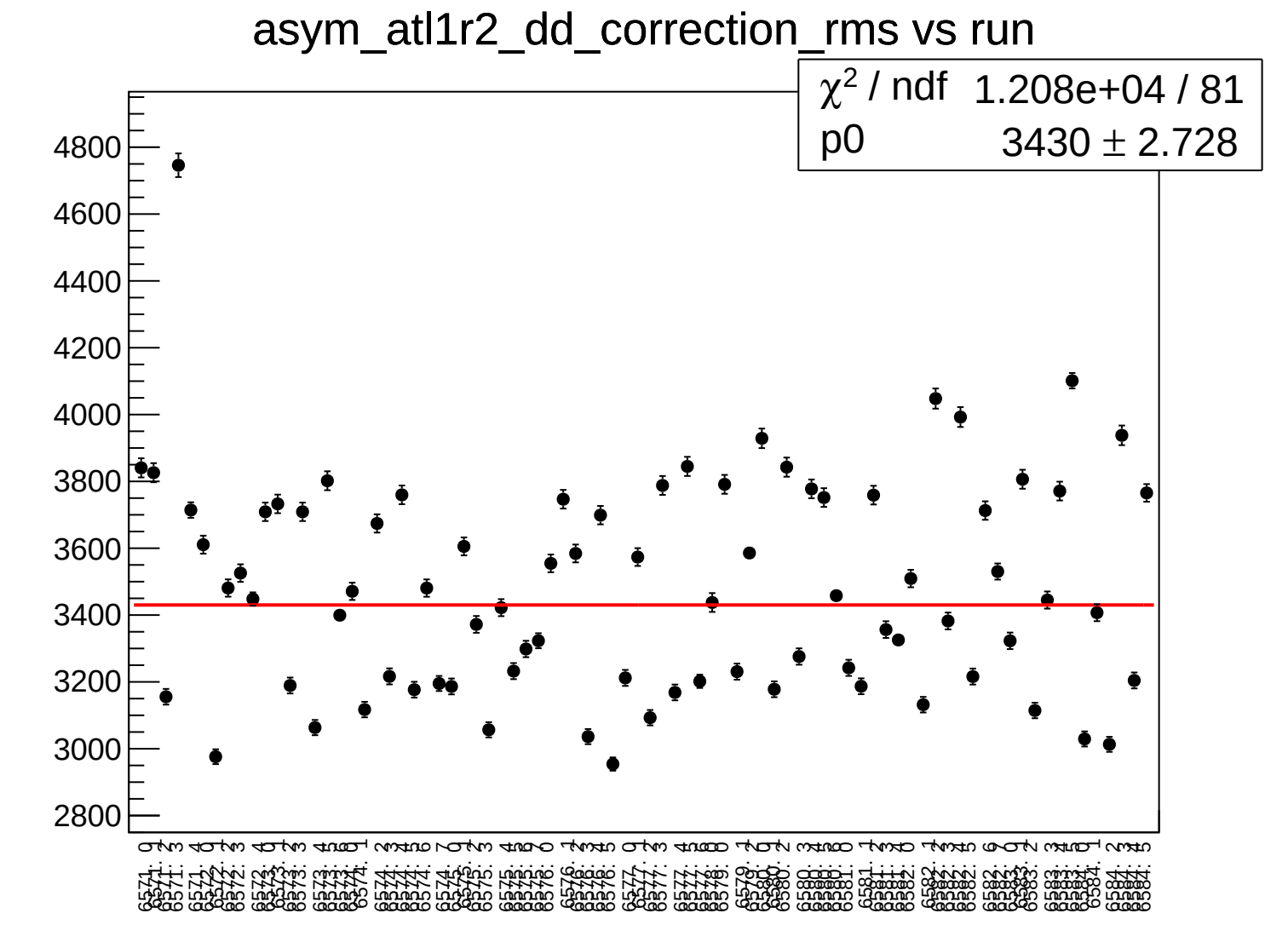
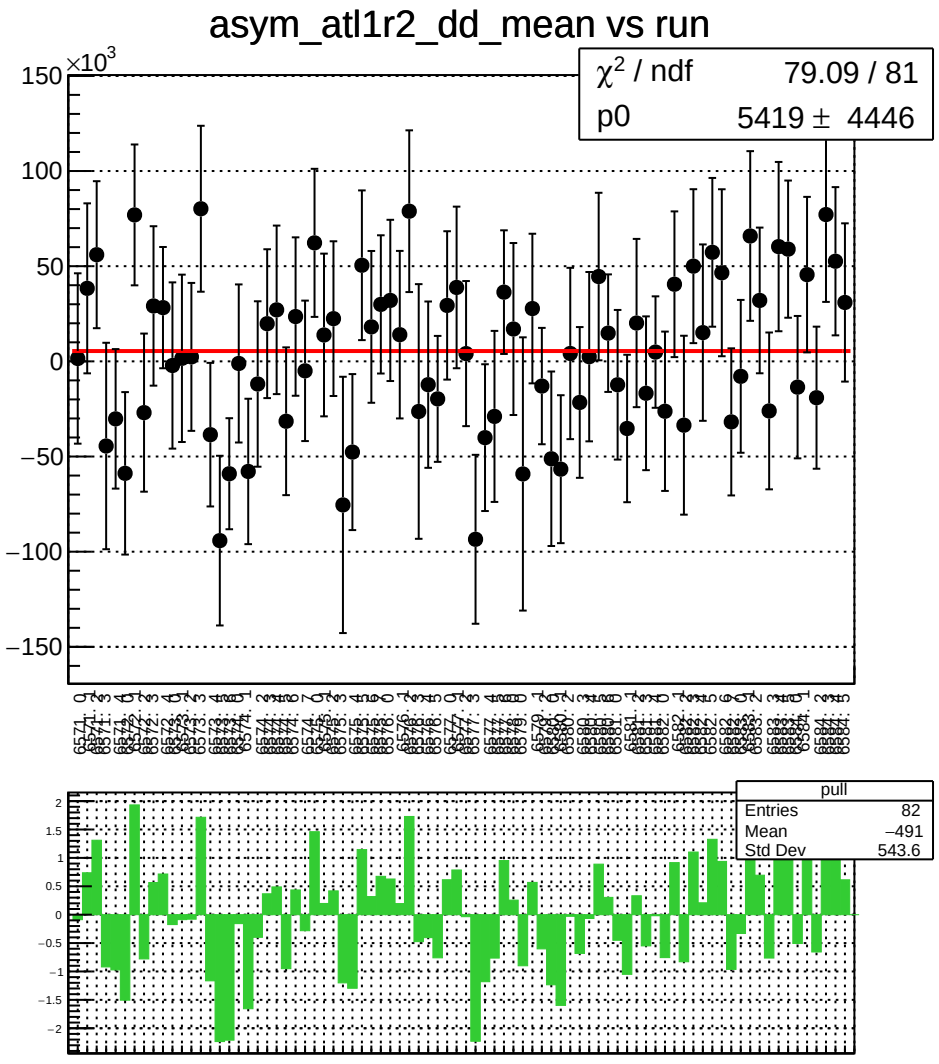
0
2
4
6
8

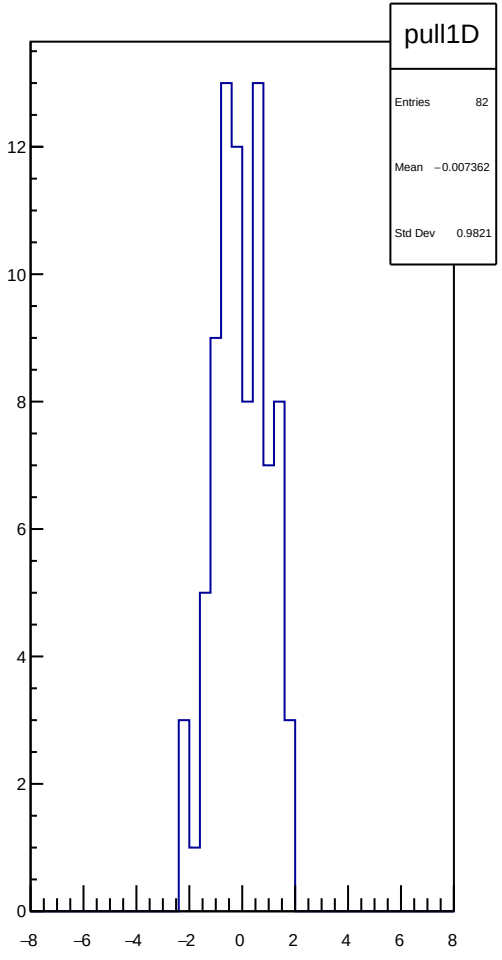

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 2.434e+04 / 81
p0 1867 ± 1.49
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

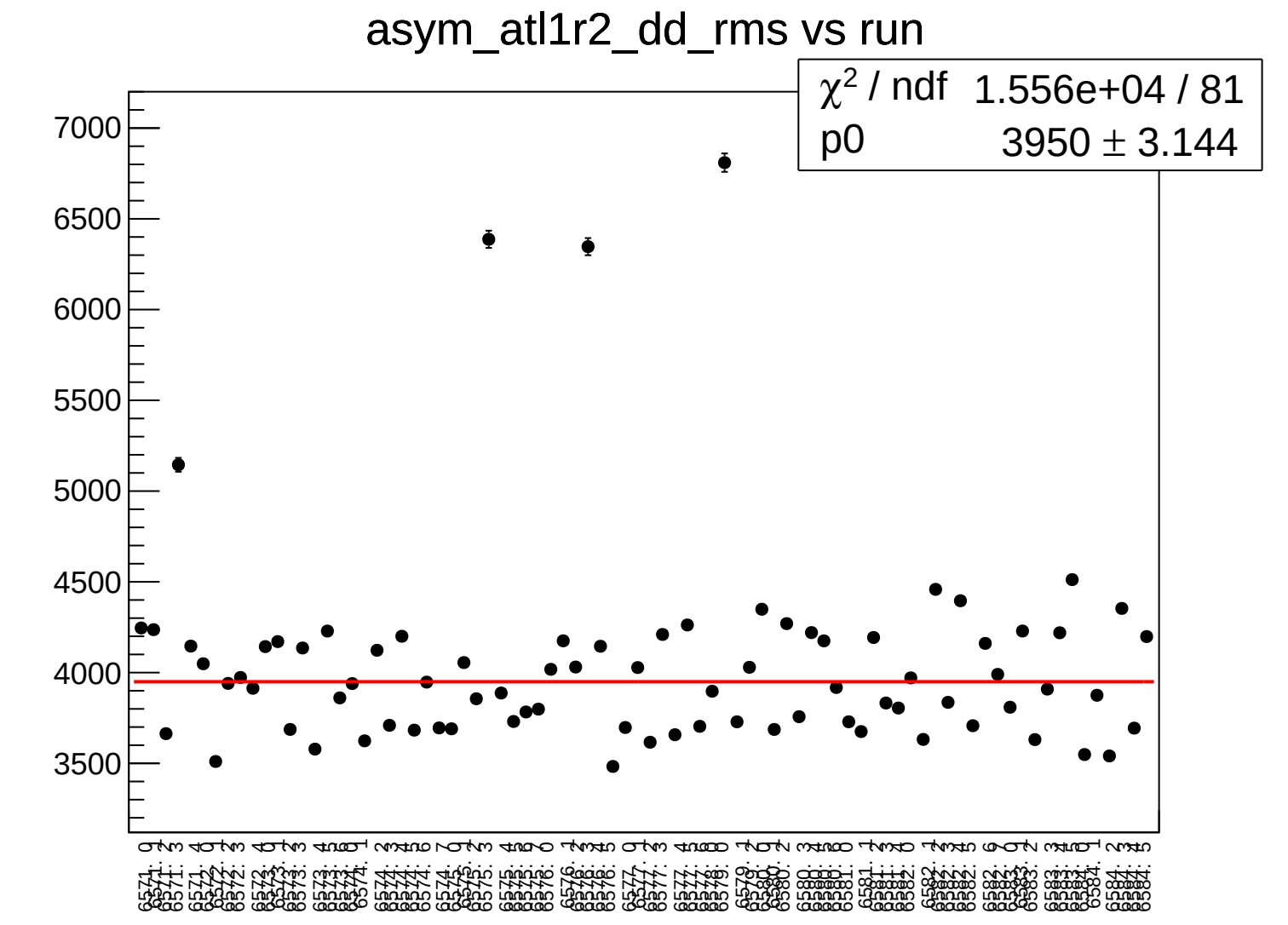

asym_atl1r2_dd_correction_mean vs run
×10^3
χ² / ndf 87.98 / 81
p0 −3617 ± 3857
150
100
50
0
−50
−100
pull
Entries 82
Mean −1.519e+05
Std Dev 1.52e+05
3
2
1
0
−1
−2

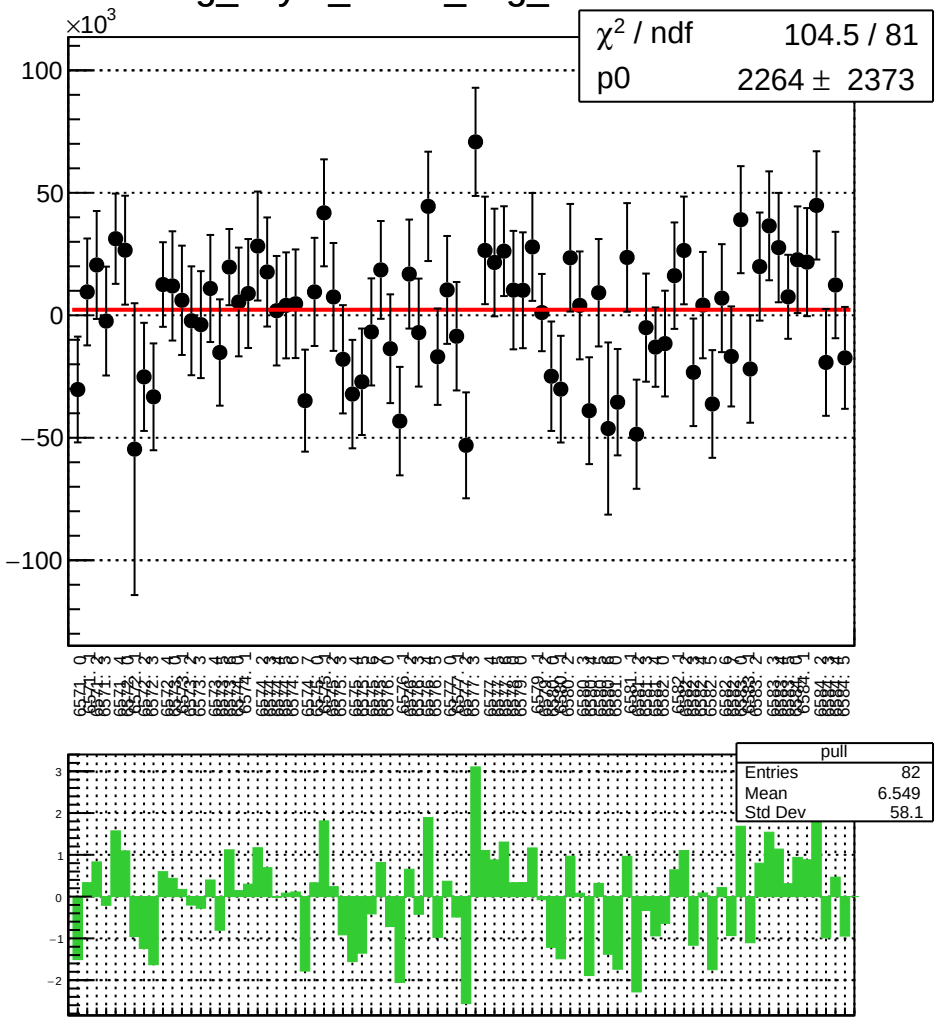

pull1D
Entries 82
Mean 3.405e−05
Std Dev 1.036
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

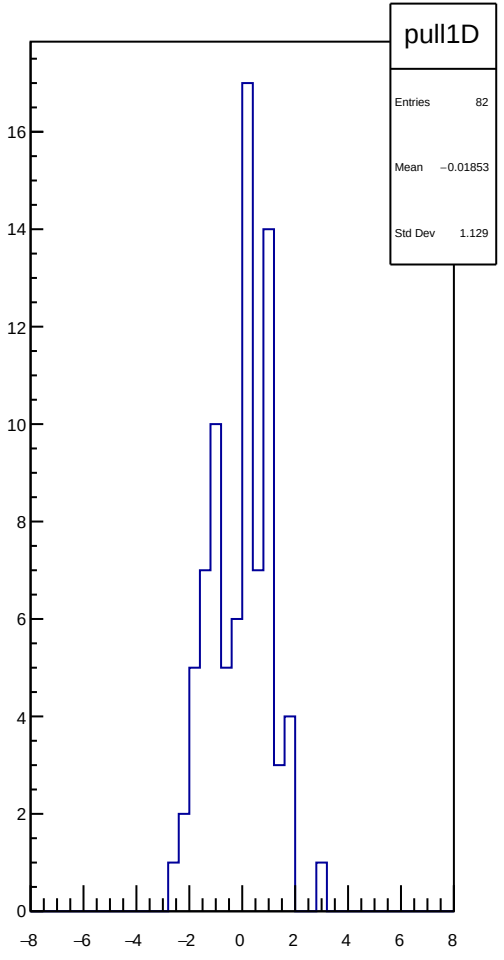

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 1.208e+04 / 81
p0 3430 ± 2.728
4800
4600
4400
4200
4000
3800
3600
3400
3200
3000
2800

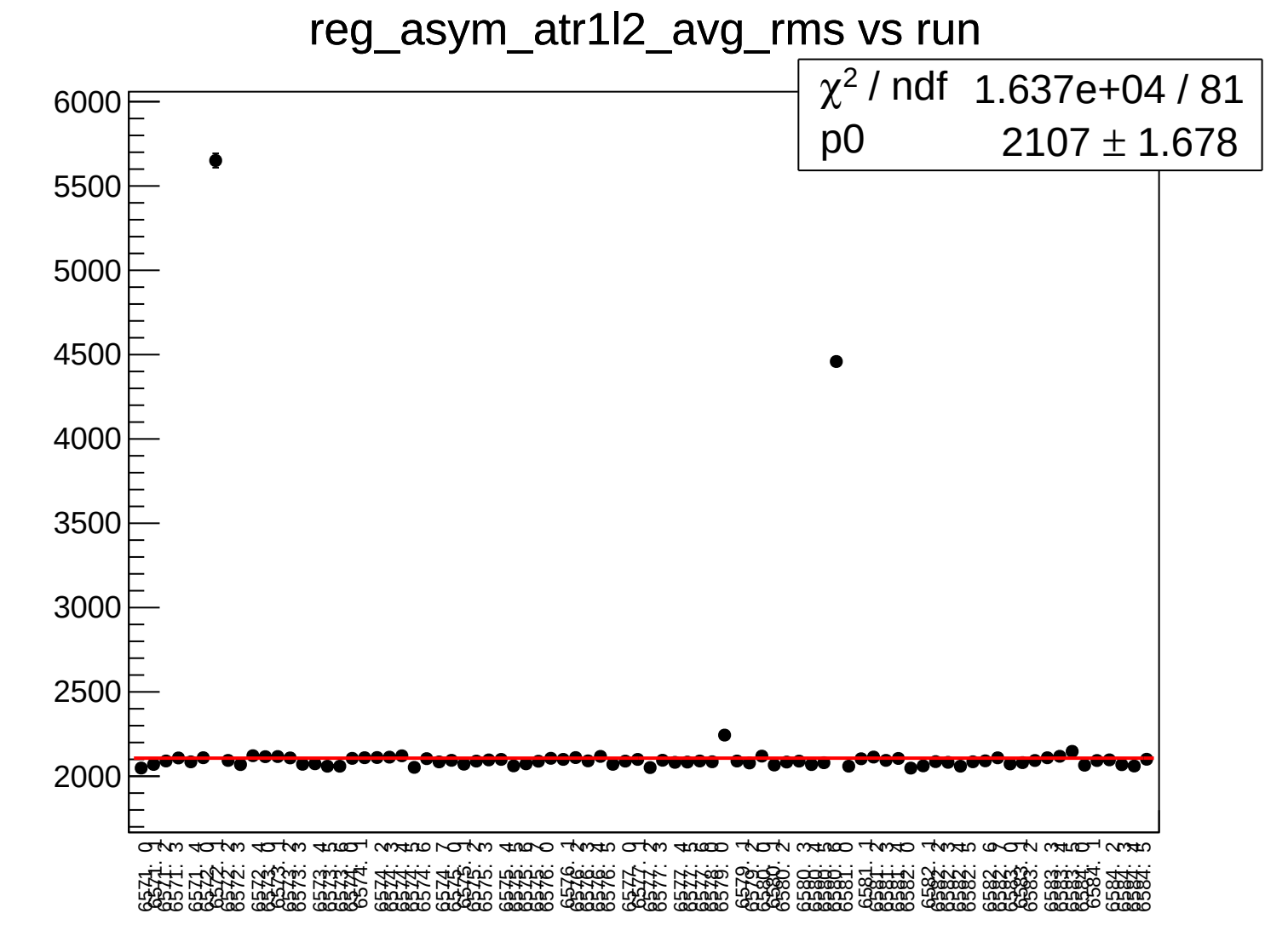

asym_atl1r2_dd_mean vs run
χ² / ndf 79.09 / 81
p0 5419 ± 4446
×10³
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean −491
Std Dev 543.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

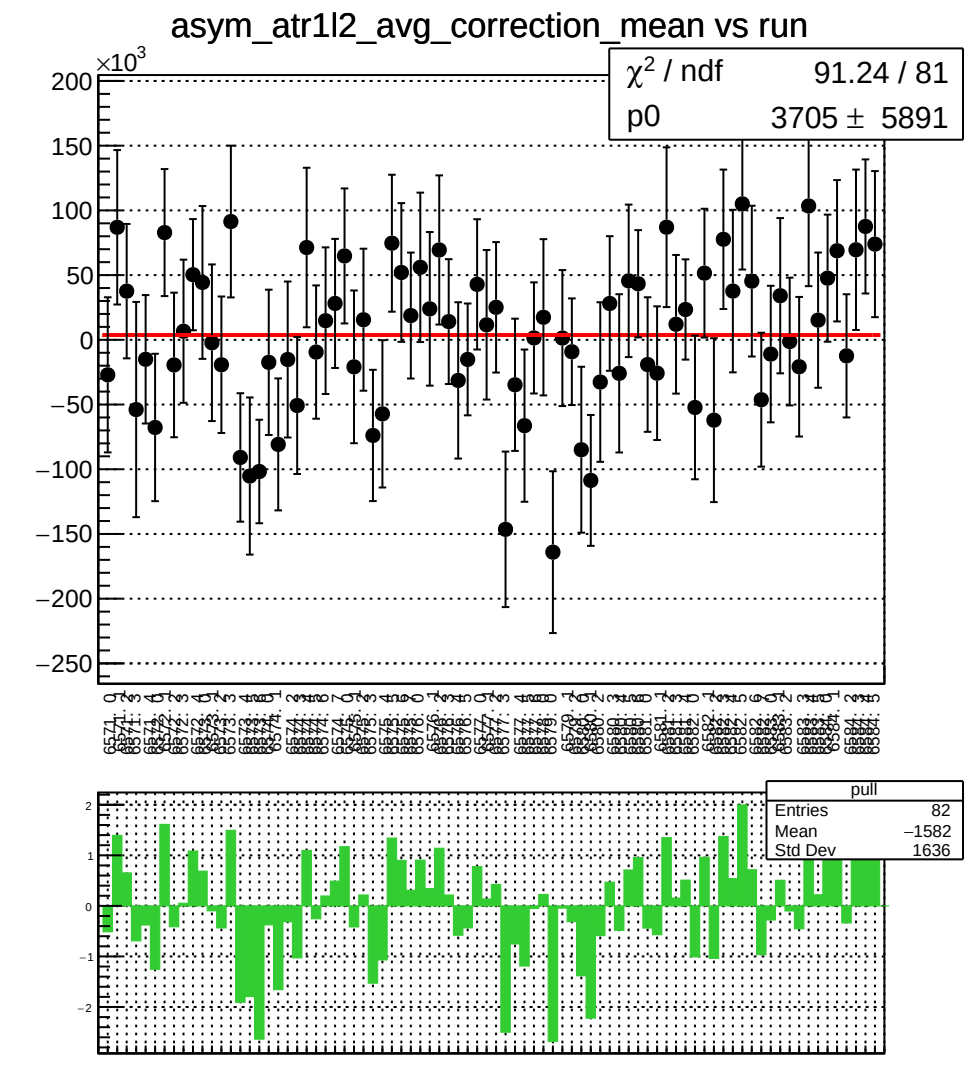

pull1D
Entries 82
Mean −0.007362
Std Dev 0.9821
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

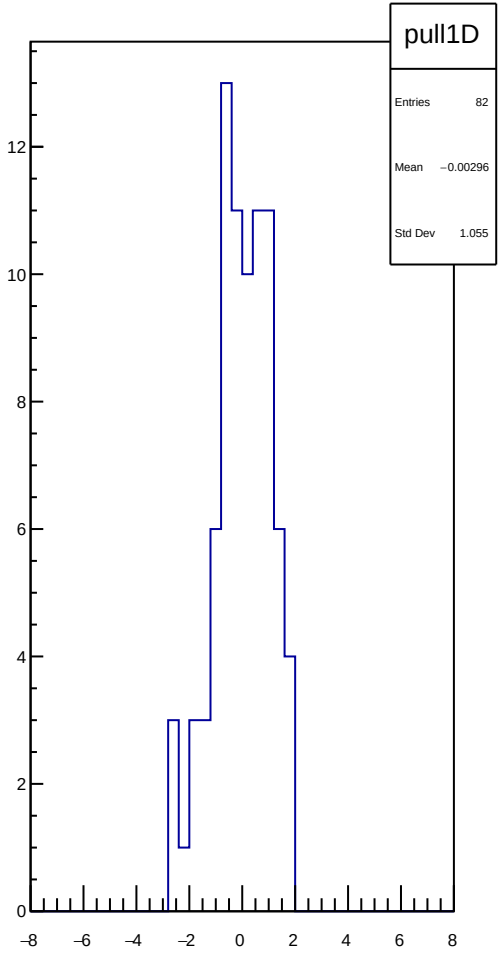

asym_atl1r2_dd_rms vs run
$\chi^2$ / ndf 1.556e+04 / 81
p0 3950 ± 3.144
7000
6500
6000
5500
5000
4500
4000
3500

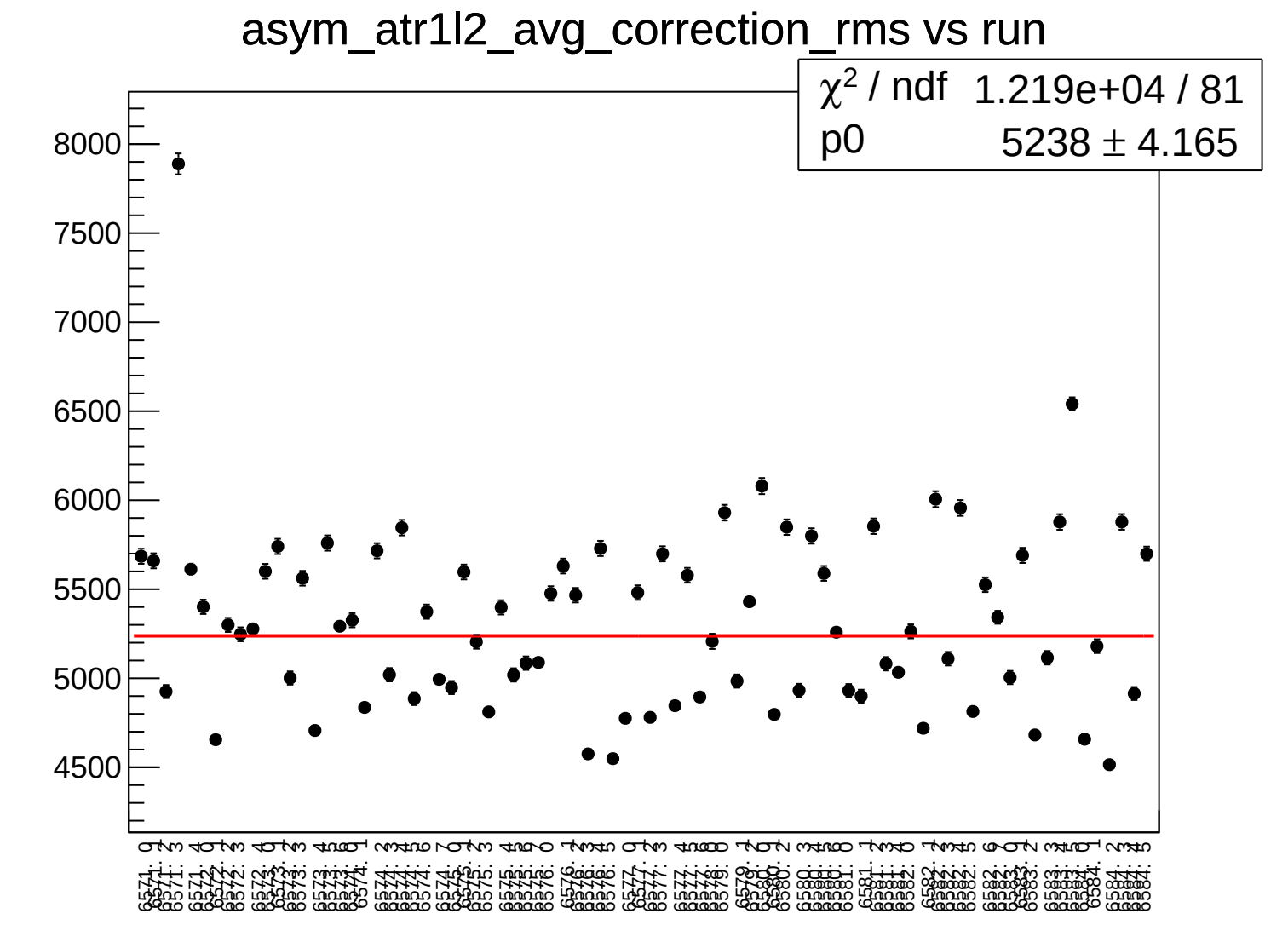

reg_asym_atr1l2_avg_mean vs run
×10^3
χ^2 / ndf 104.5 / 81
p0 2264 ± 2373
100
50
0
−50
−100
pull
Entries 82
Mean 6.549
Std Dev 58.1
3
2
1
0
−1
−2

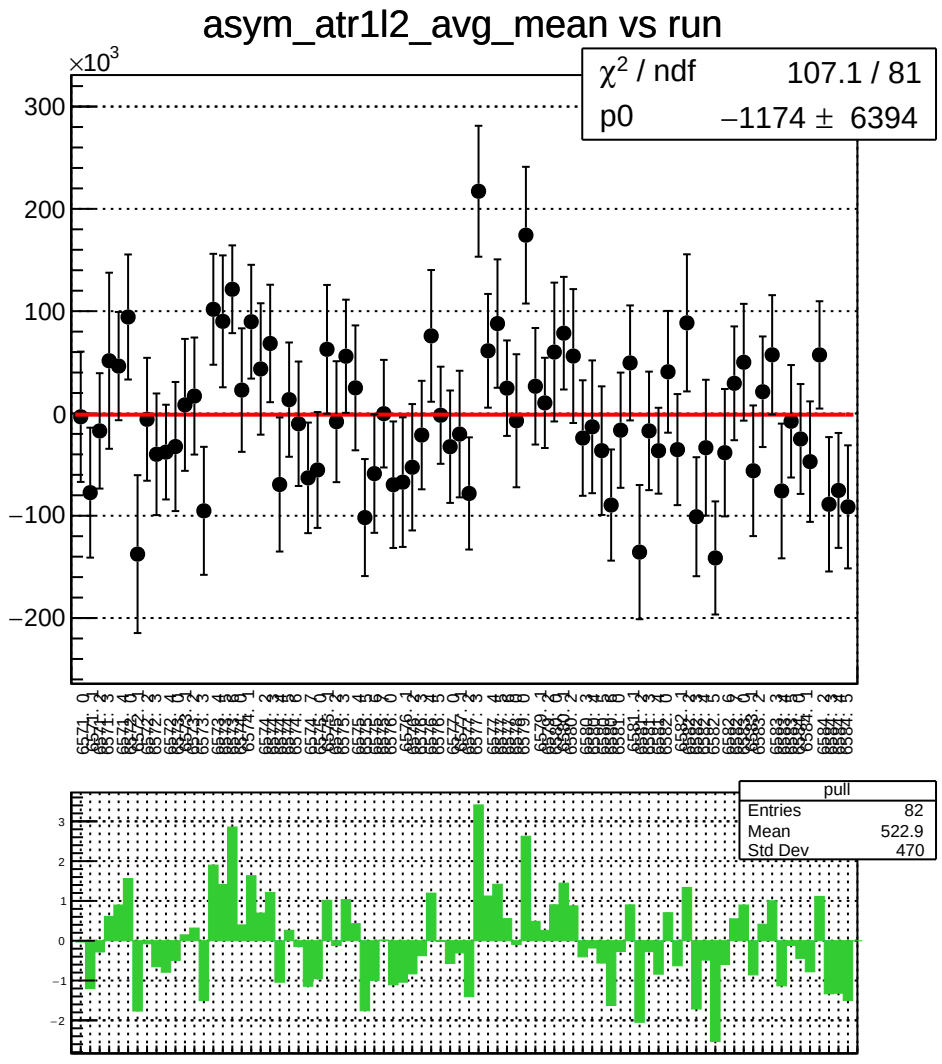

pull1D
Entries 82
Mean −0.01853
Std Dev 1.129
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

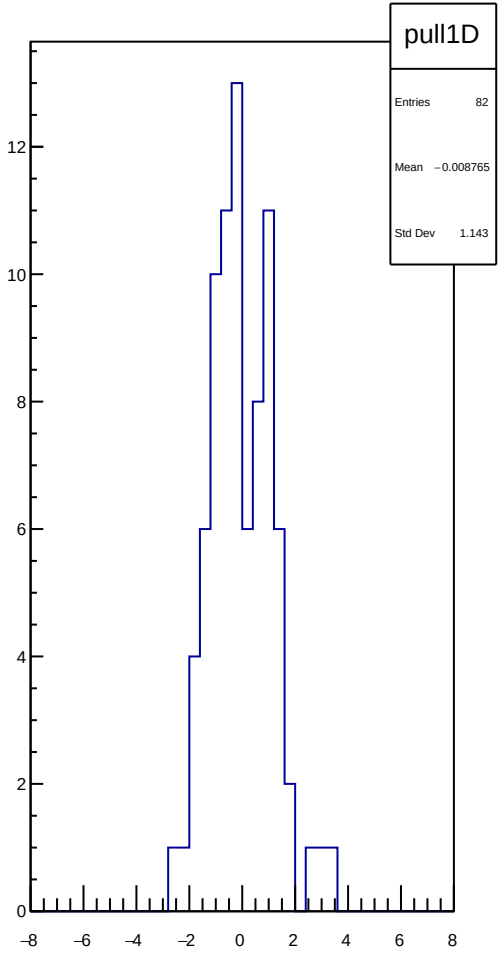

reg_asym_atr1l2_avg_rms vs run
χ² / ndf 1.637e+04 / 81
p0 2107 ± 1.678
6000
5500
5000
4500
4000
3500
3000
2500
2000

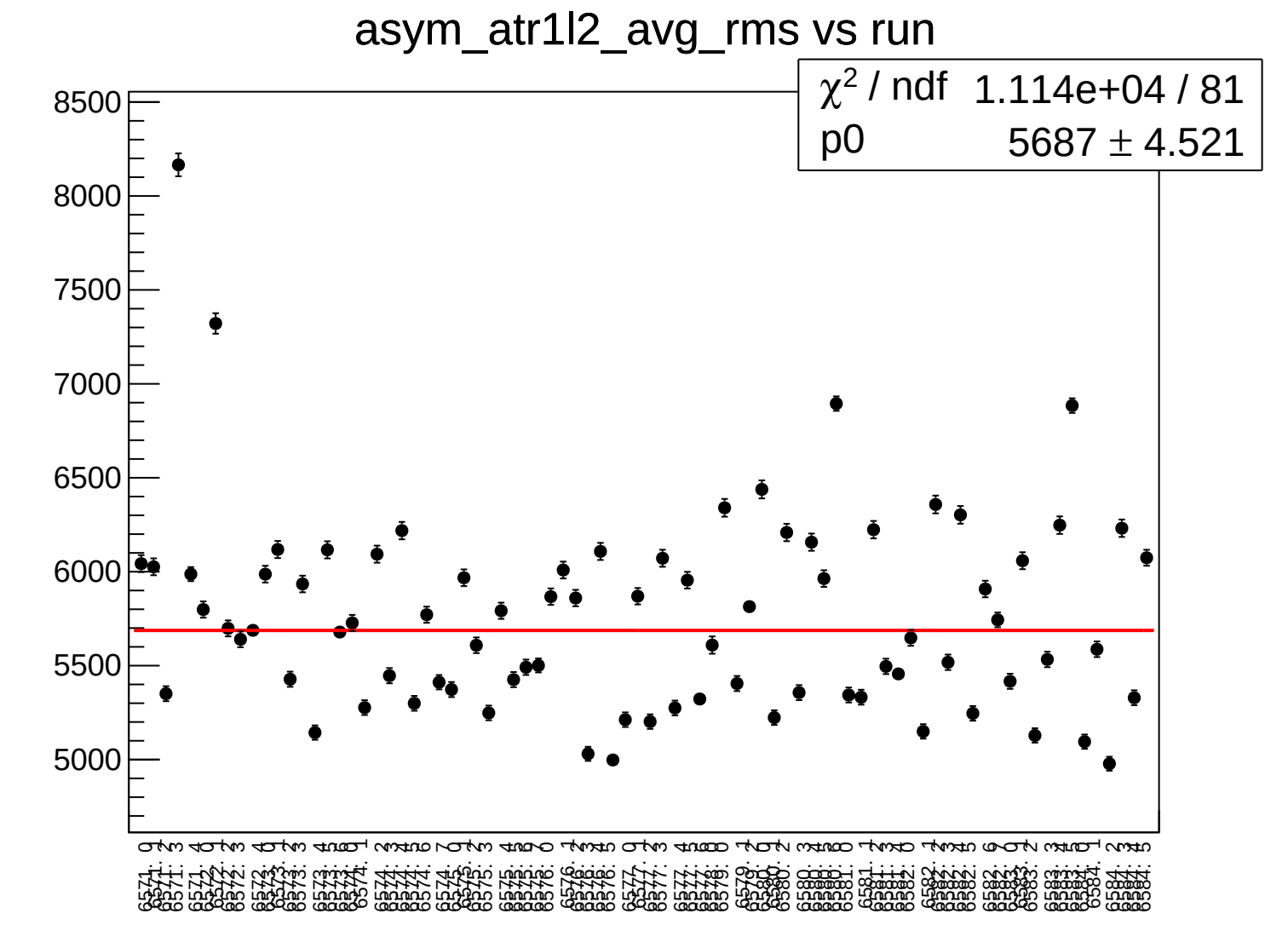

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 91.24 / 81
p0 3705 ± 5891
pull
Entries 82
Mean −1582
Std Dev 1636

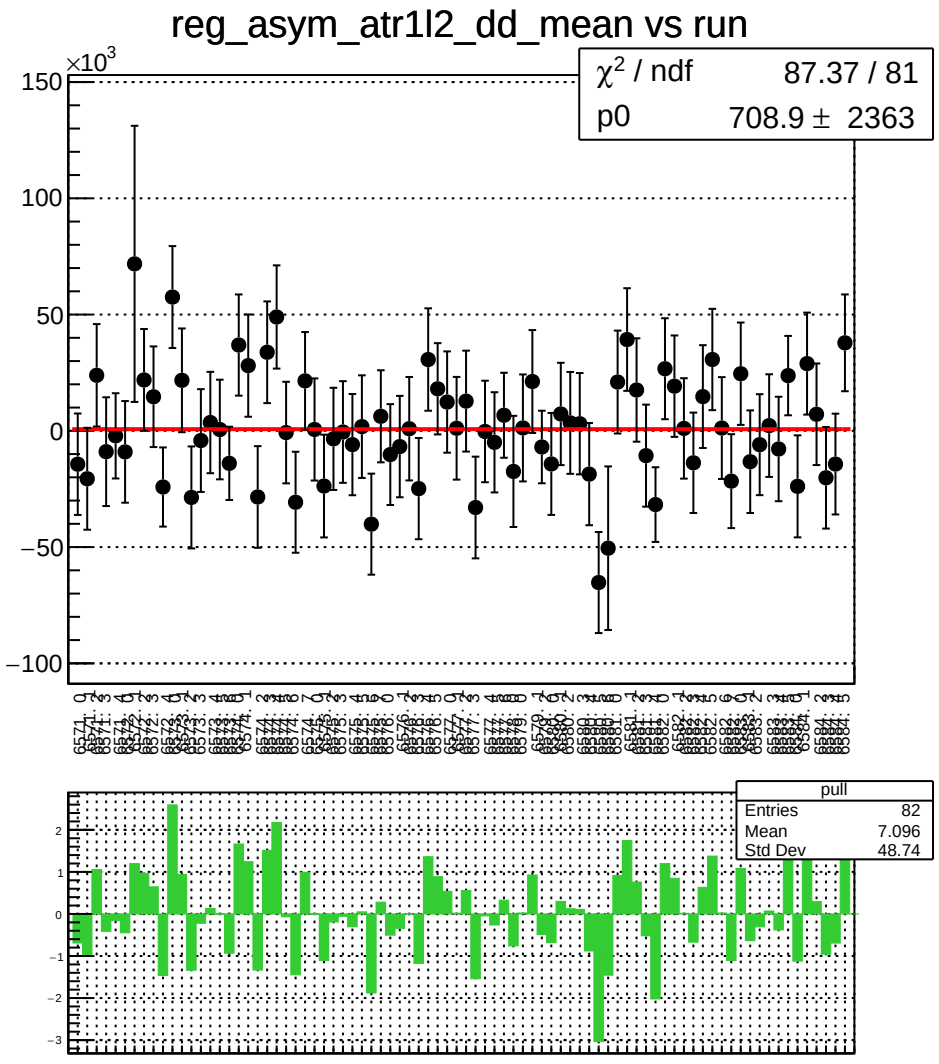

pull1D
Entries 82
Mean −0.00296
Std Dev 1.055

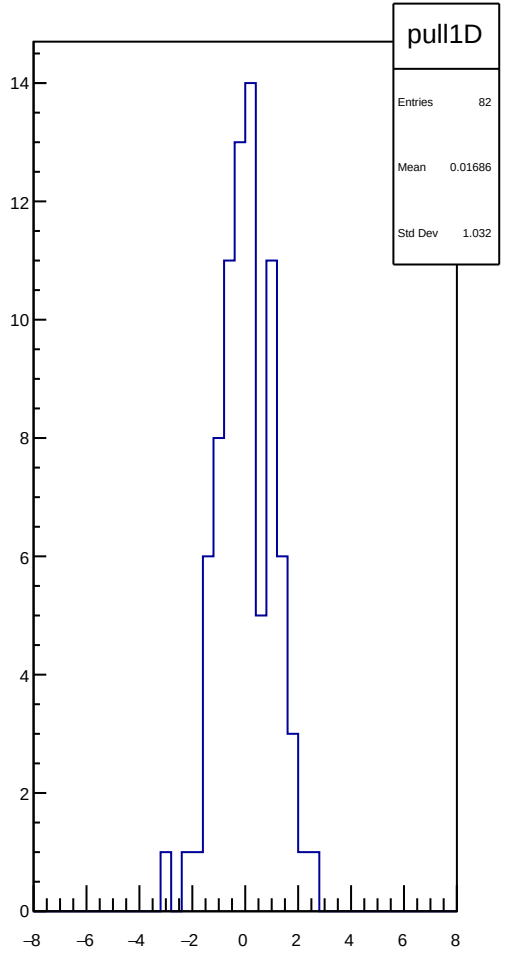

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 1.219e+04 / 81
p0 5238 ± 4.165
8000
7500
7000
6500
6000
5500
5000
4500

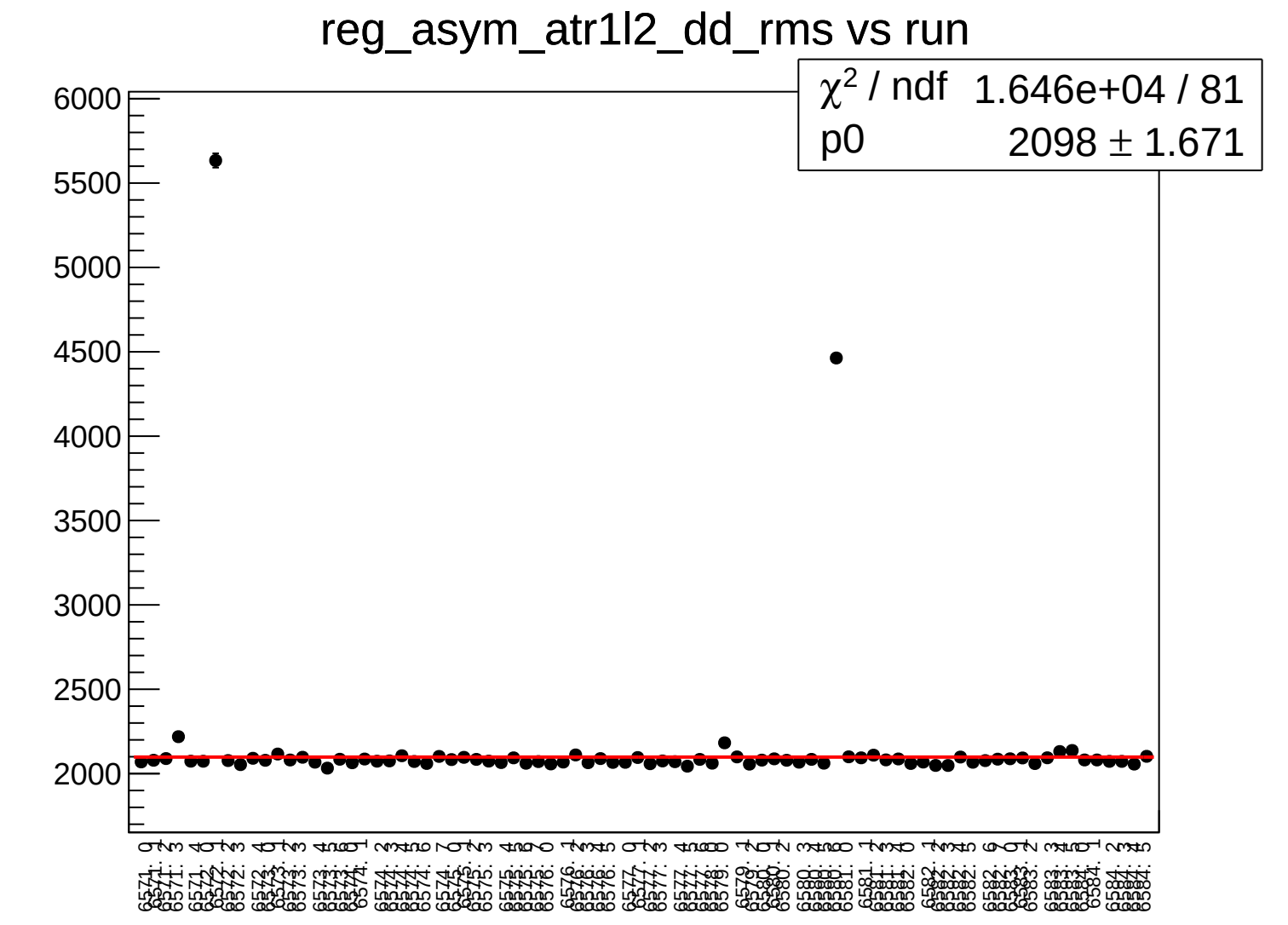

asym_atr1l2_avg_mean vs run
×10^3
χ^2 / ndf 107.1 / 81
p0 −1174 ± 6394
300
200
100
0
−100
−200
pull
Entries 82
Mean 522.9
Std Dev 470
3
2
1
0
−1
−2

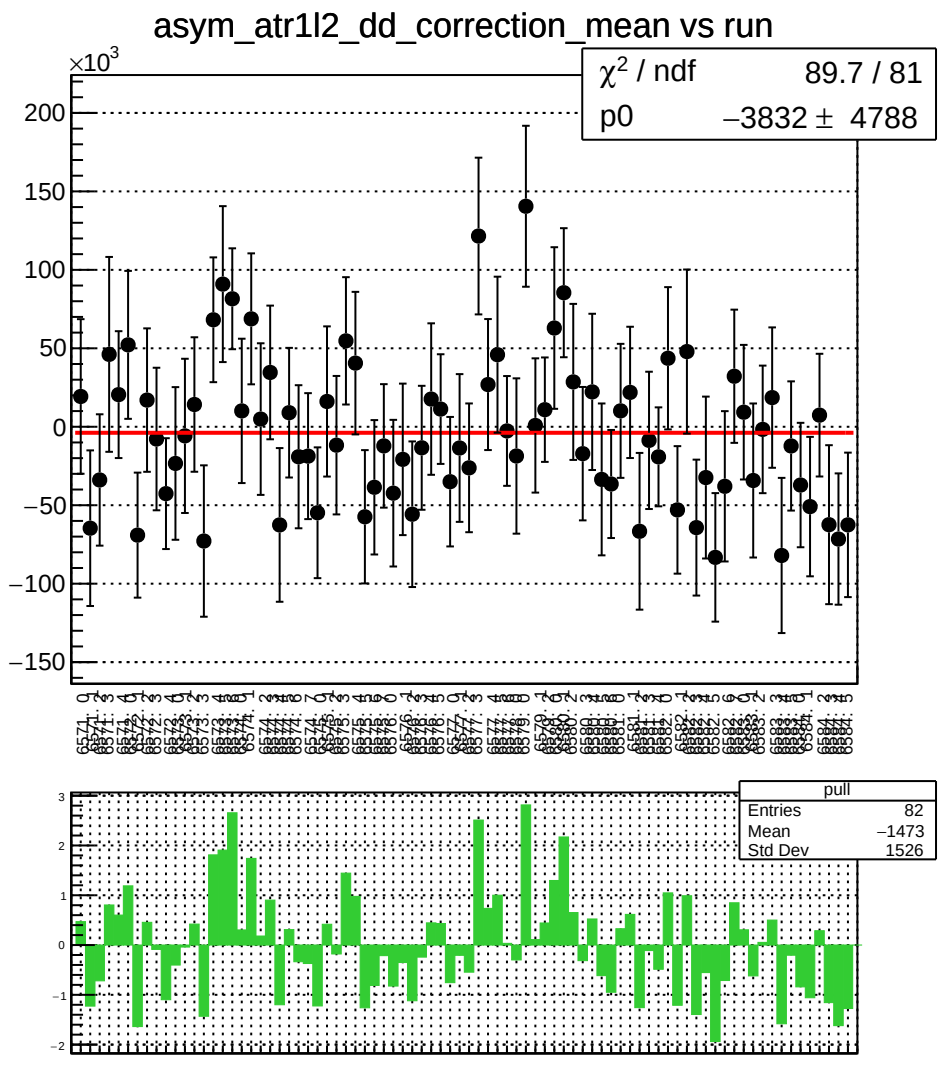

pull1D
Entries 82
Mean −0.008765
Std Dev 1.143
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

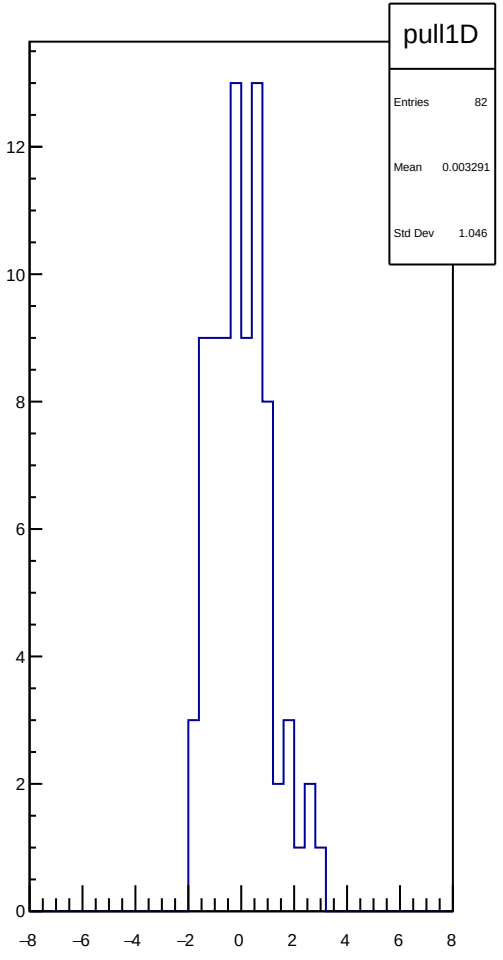

asym_atr1l2_avg_rms vs run
χ² / ndf 1.114e+04 / 81
p0 5687 ± 4.521
8500
8000
7500
7000
6500
6000
5500
5000

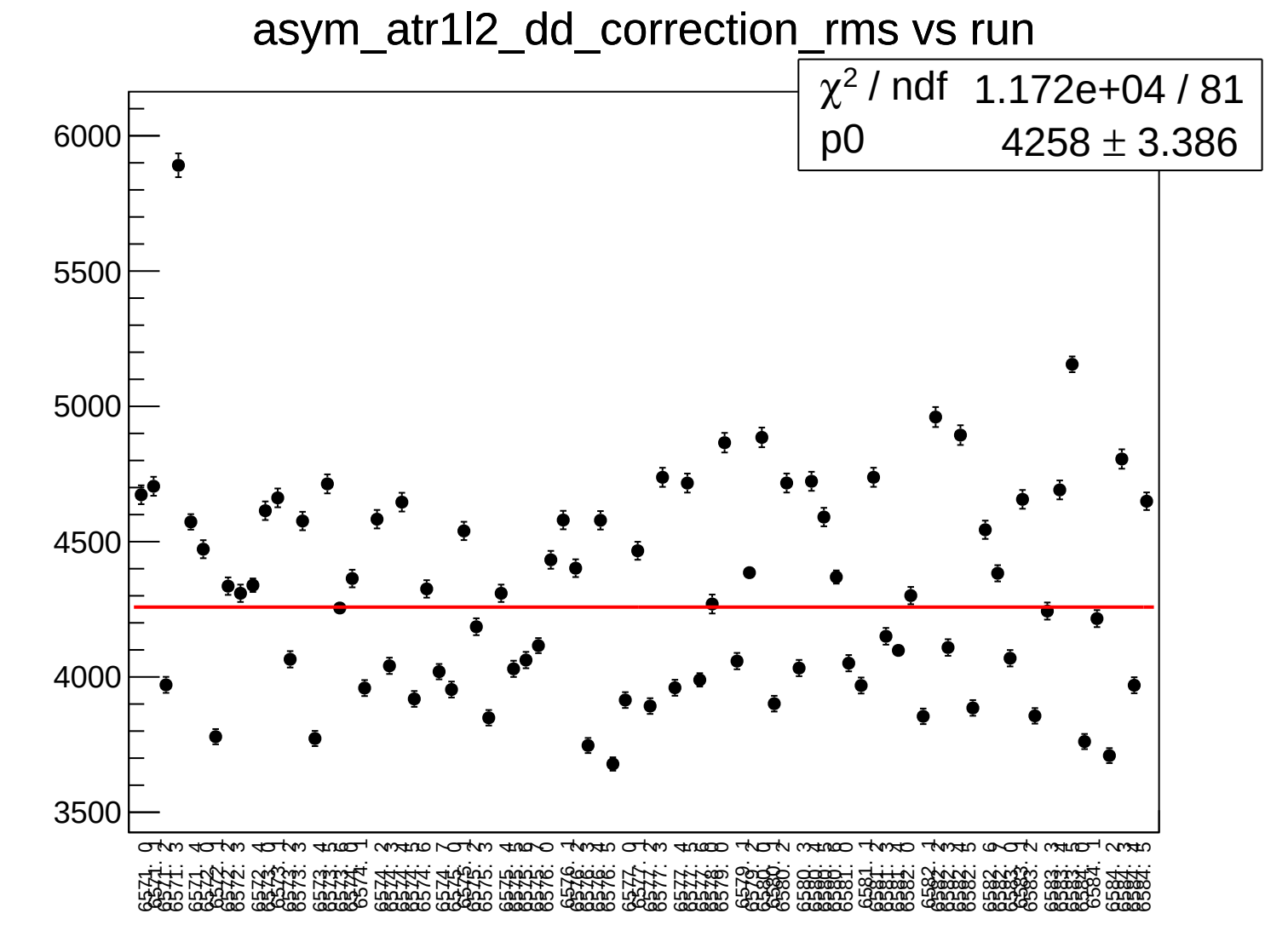

reg_asym_atr1l2_dd_mean vs run
χ² / ndf 87.37 / 81
p0 708.9 ± 2363
×10³
150
100
50
0
−50
−100
pull
Entries 82
Mean 7.096
Std Dev 48.74
2
1
0
−1
−2
−3

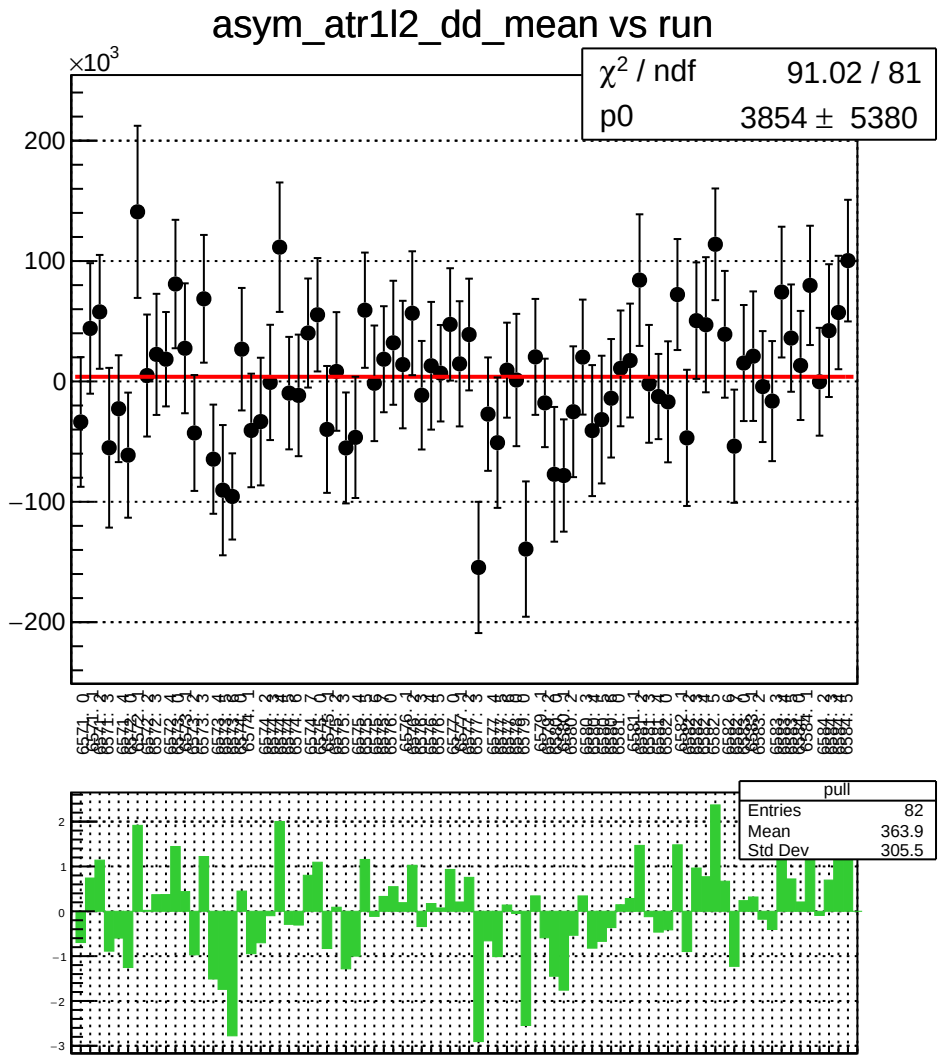

pull1D
Entries 82
Mean 0.01686
Std Dev 1.032
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

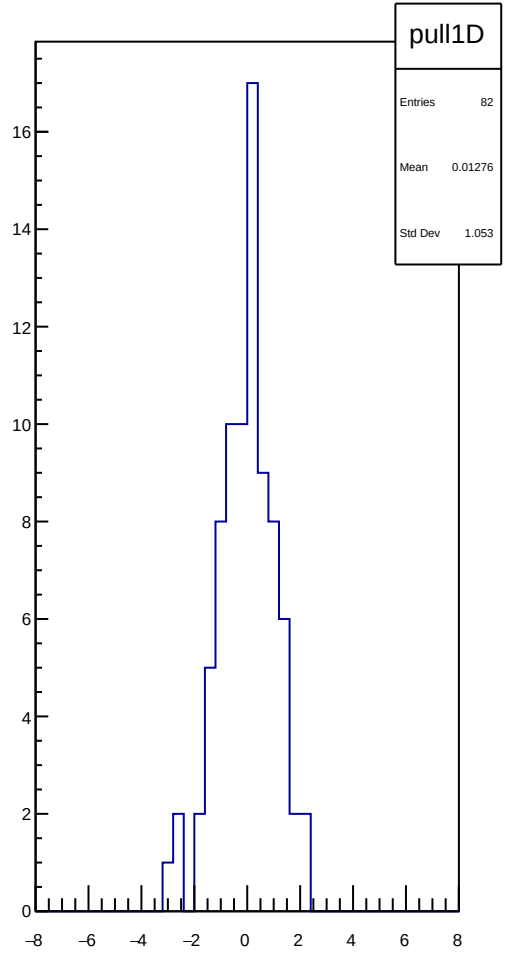

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 1.646e+04 / 81
p0 2098 ± 1.671
6000
5500
5000
4500
4000
3500
3000
2500
2000

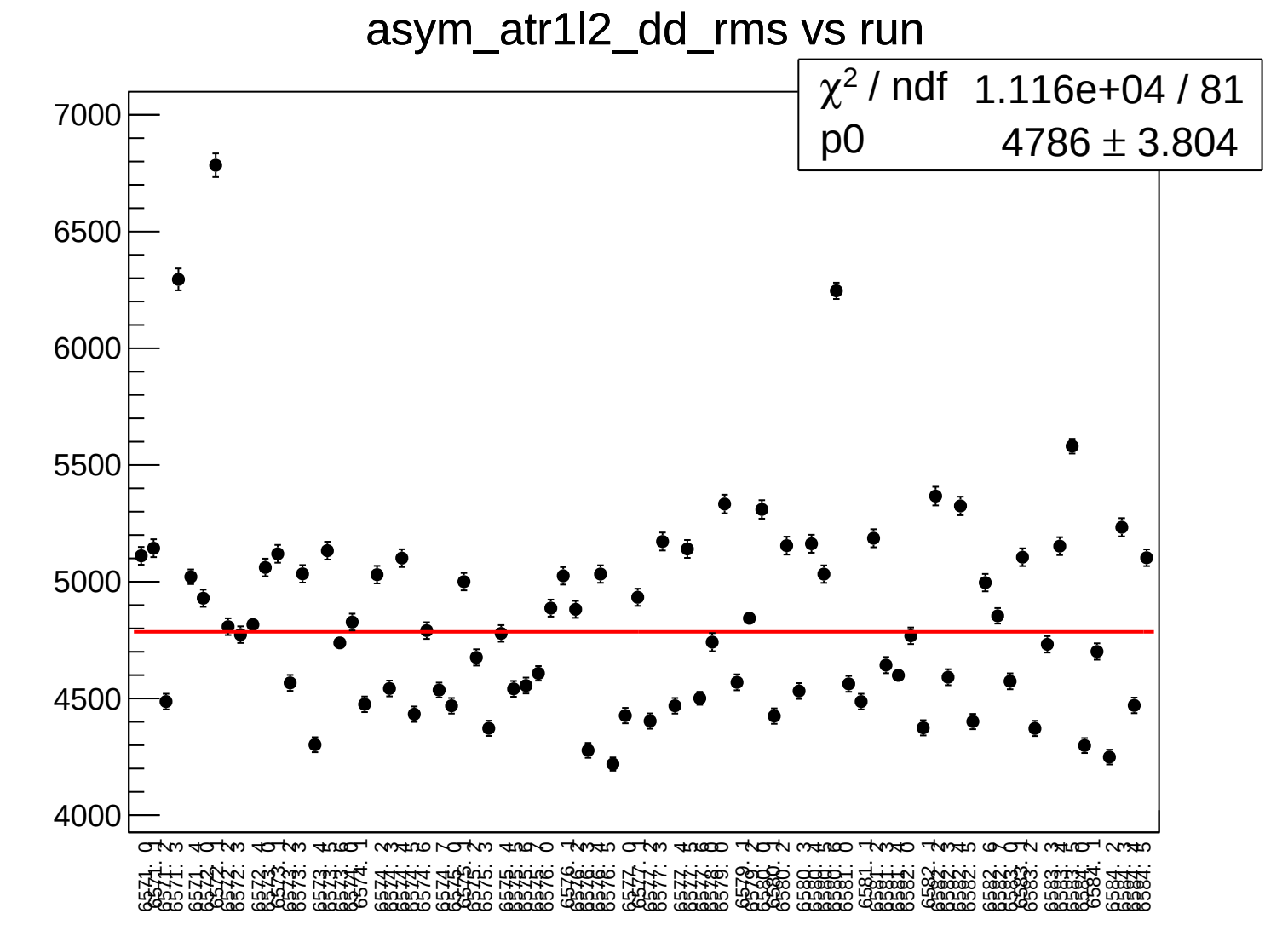

asym_atr1l2_dd_correction_mean vs run
×10^3
χ^2 / ndf 89.7 / 81
p0 −3832 ± 4788
200
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean −1473
Std Dev 1526
3
2
1
0
−1
−2

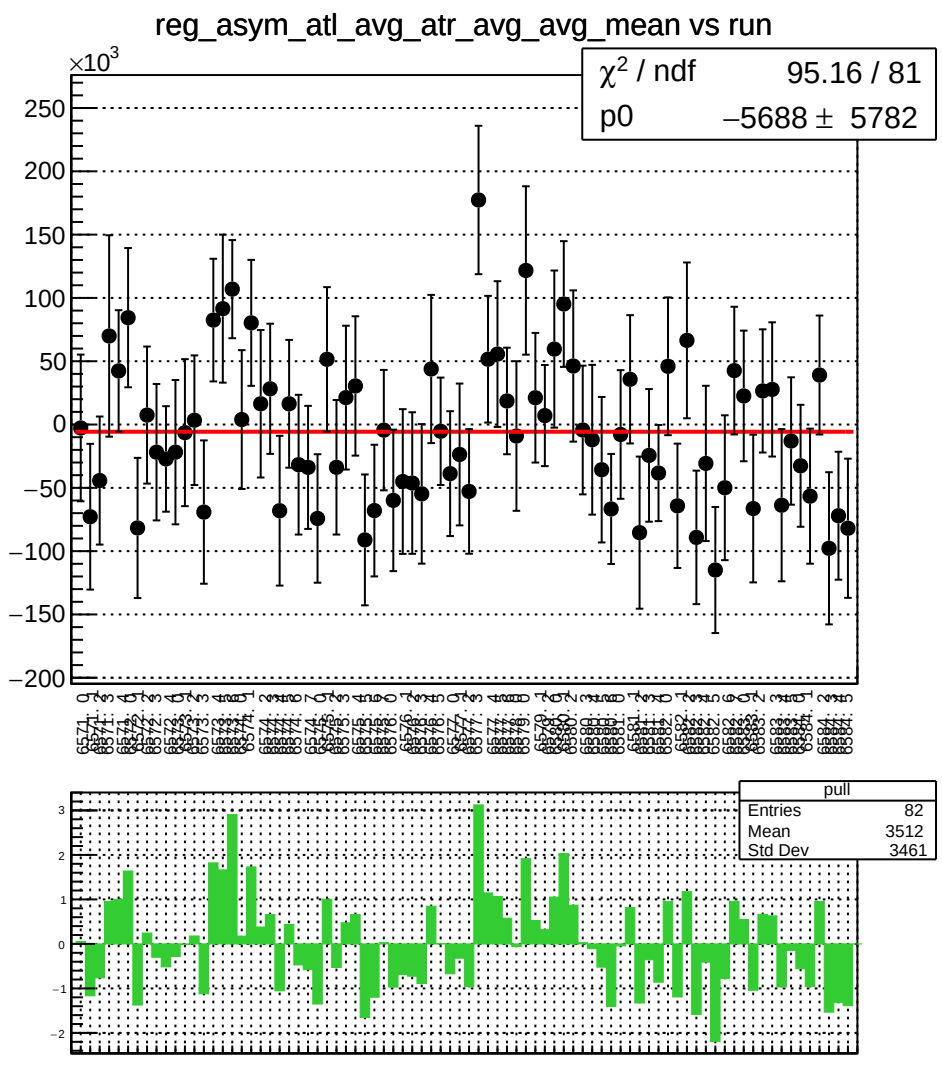

pull1D
Entries 82
Mean 0.003291
Std Dev 1.046
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

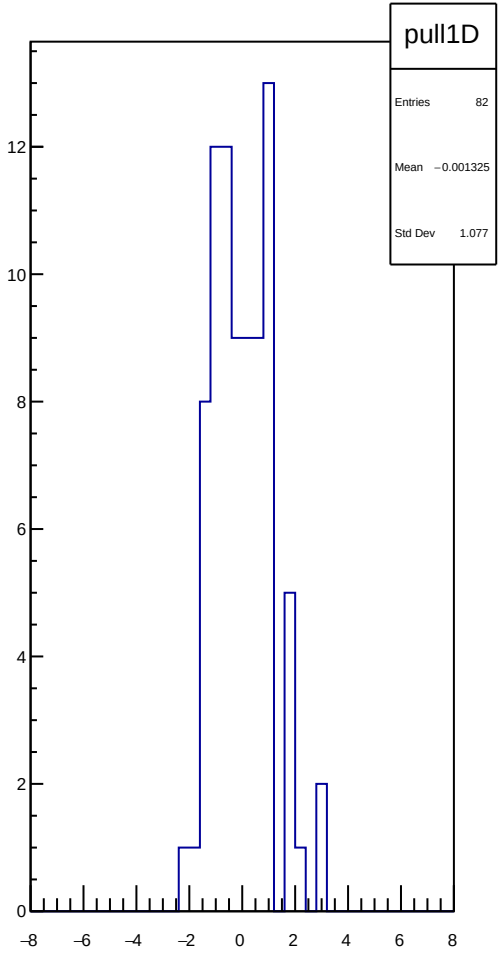

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 1.172e+04 / 81
p0 4258 ± 3.386
6000
5500
5000
4500
4000
3500

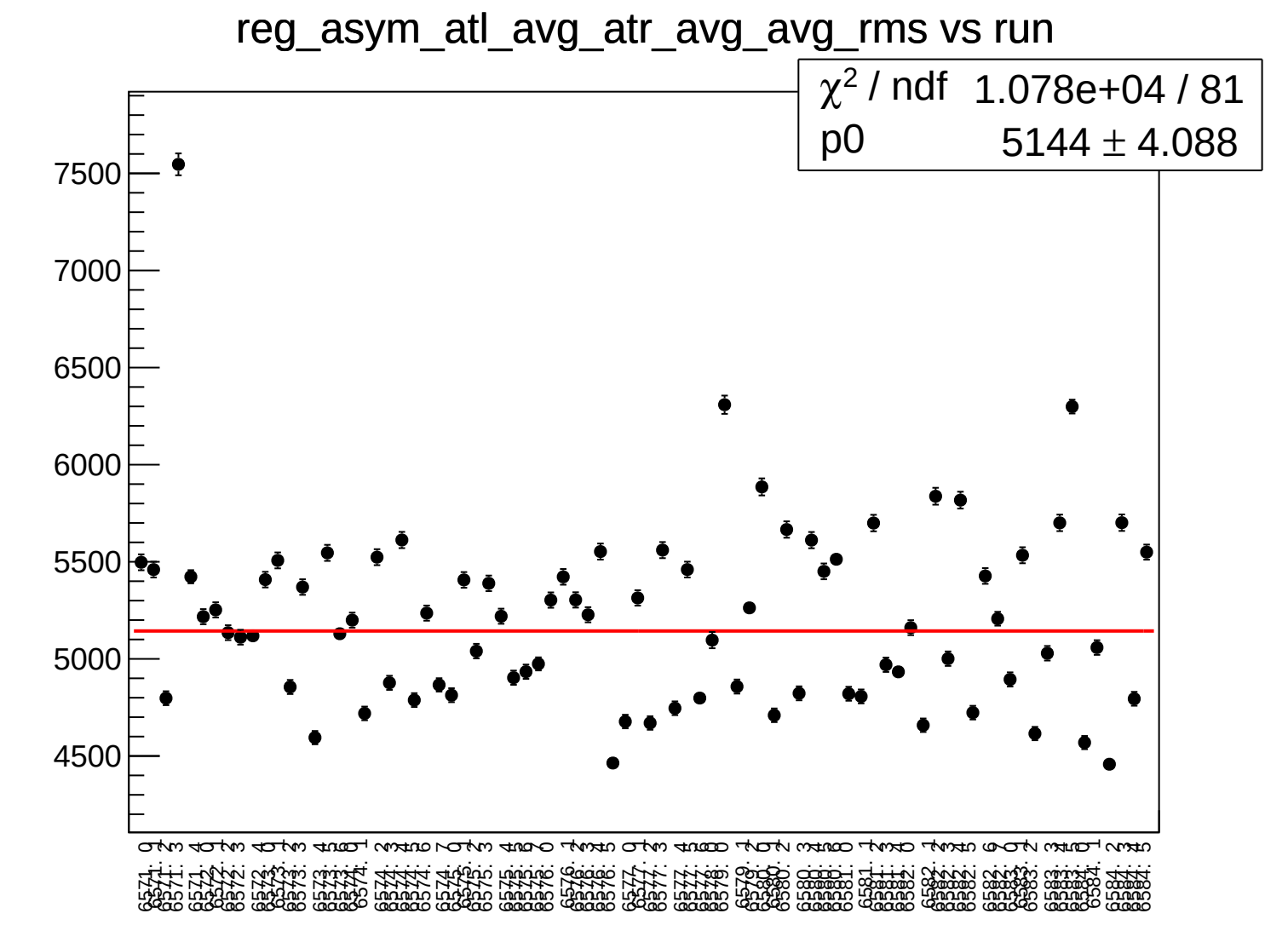

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 91.02 / 81
p0 3854 ± 5380
200
100
0
−100
−200
pull
Entries 82
Mean 363.9
Std Dev 305.5
2
1
0
−1
−2
−3

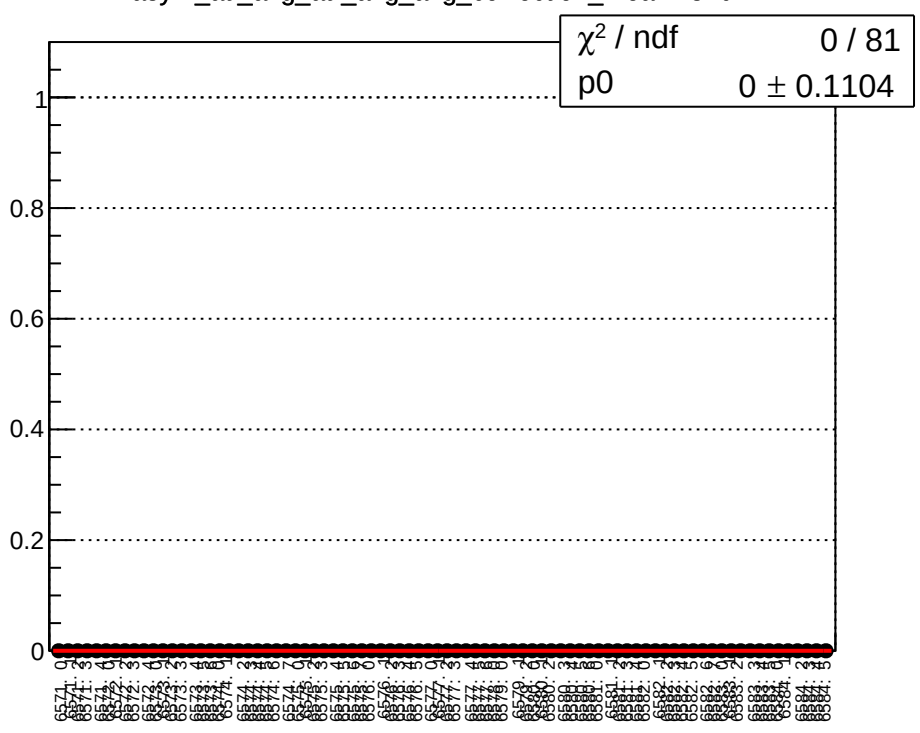

pull1D
Entries 82
Mean 0.01276
Std Dev 1.053
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

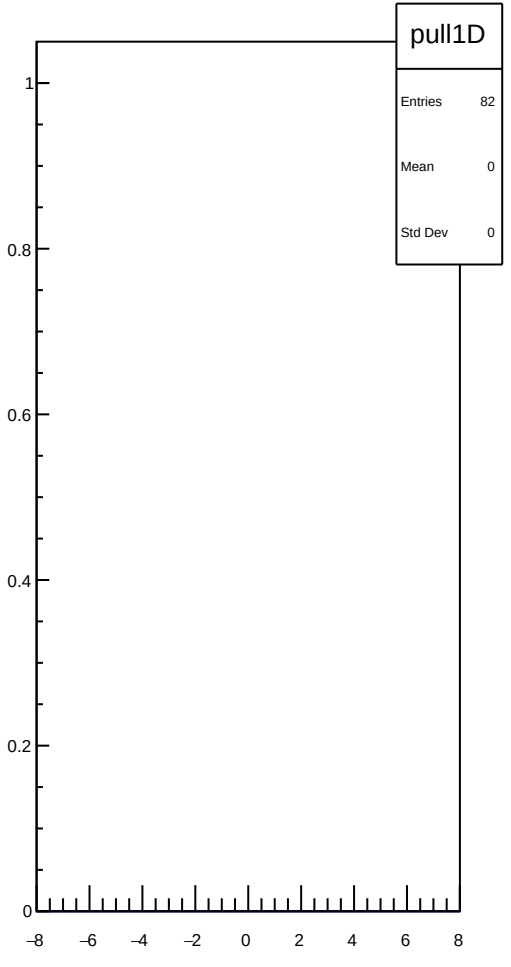

asym_atr1l2_dd_rms vs run
$\chi^2$ / ndf 1.116e+04 / 81
p0 4786 ± 3.804
7000
6500
6000
5500
5000
4500
4000

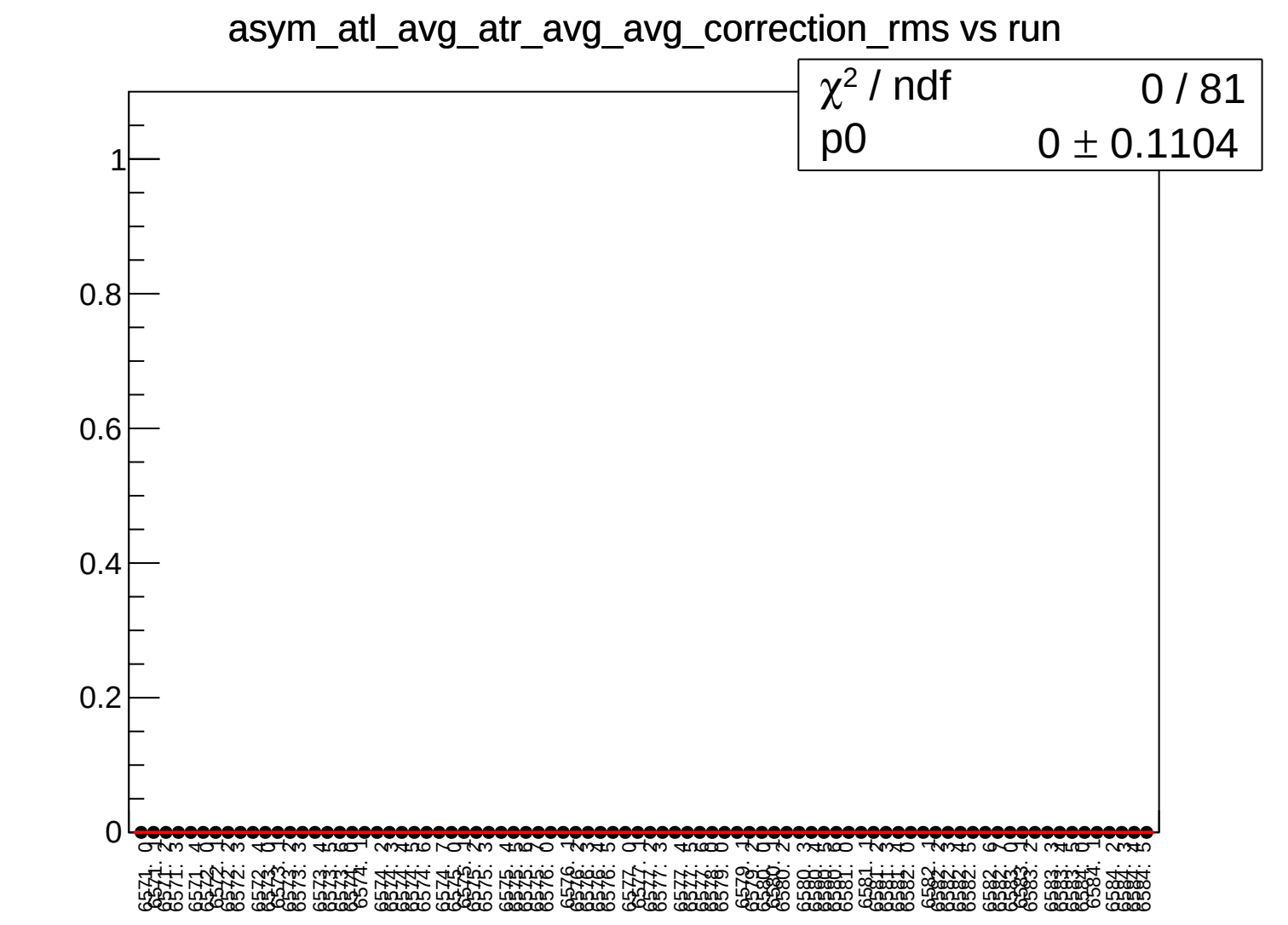

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 95.16 / 81
p0 −5688 ± 5782
pull
Entries 82
Mean 3512
Std Dev 3461

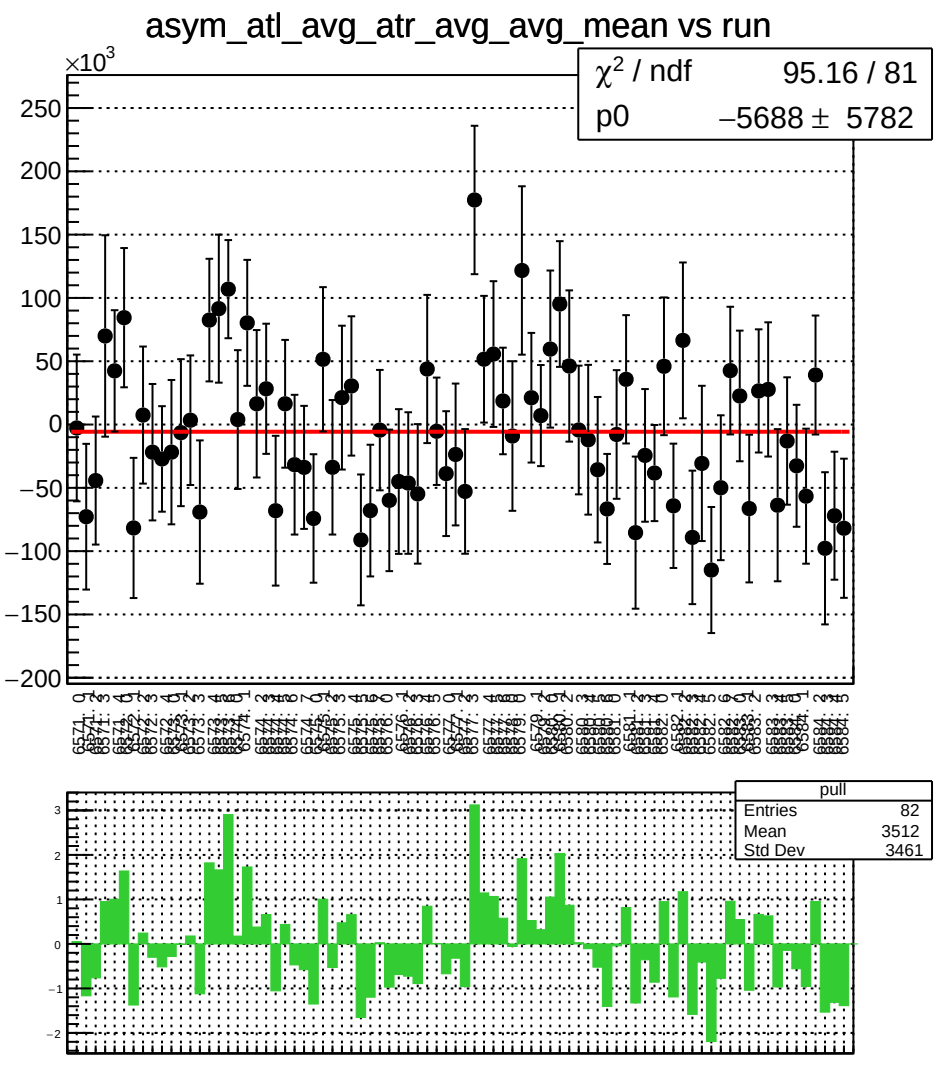

pull1D
Entries 82
Mean −0.001325
Std Dev 1.077

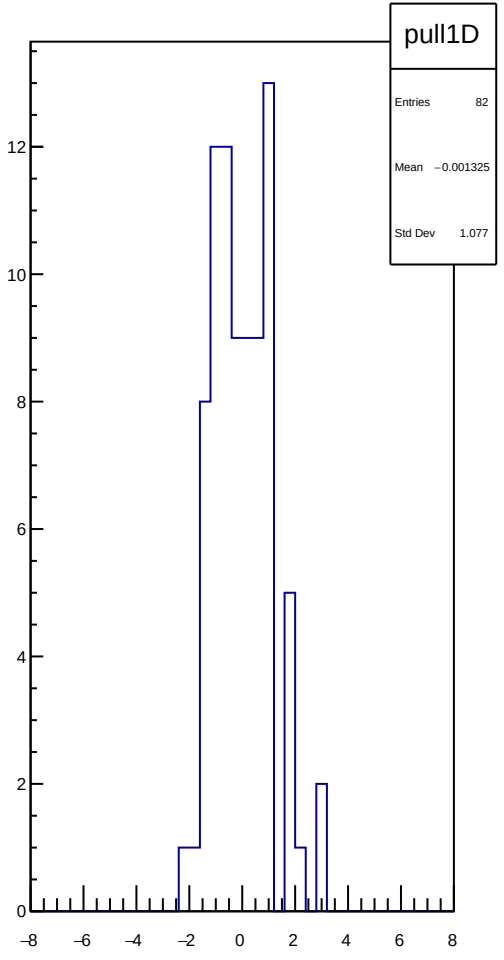

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.078e+04 / 81
p0 5144 ± 4.088
7500
7000
6500
6000
5500
5000
4500

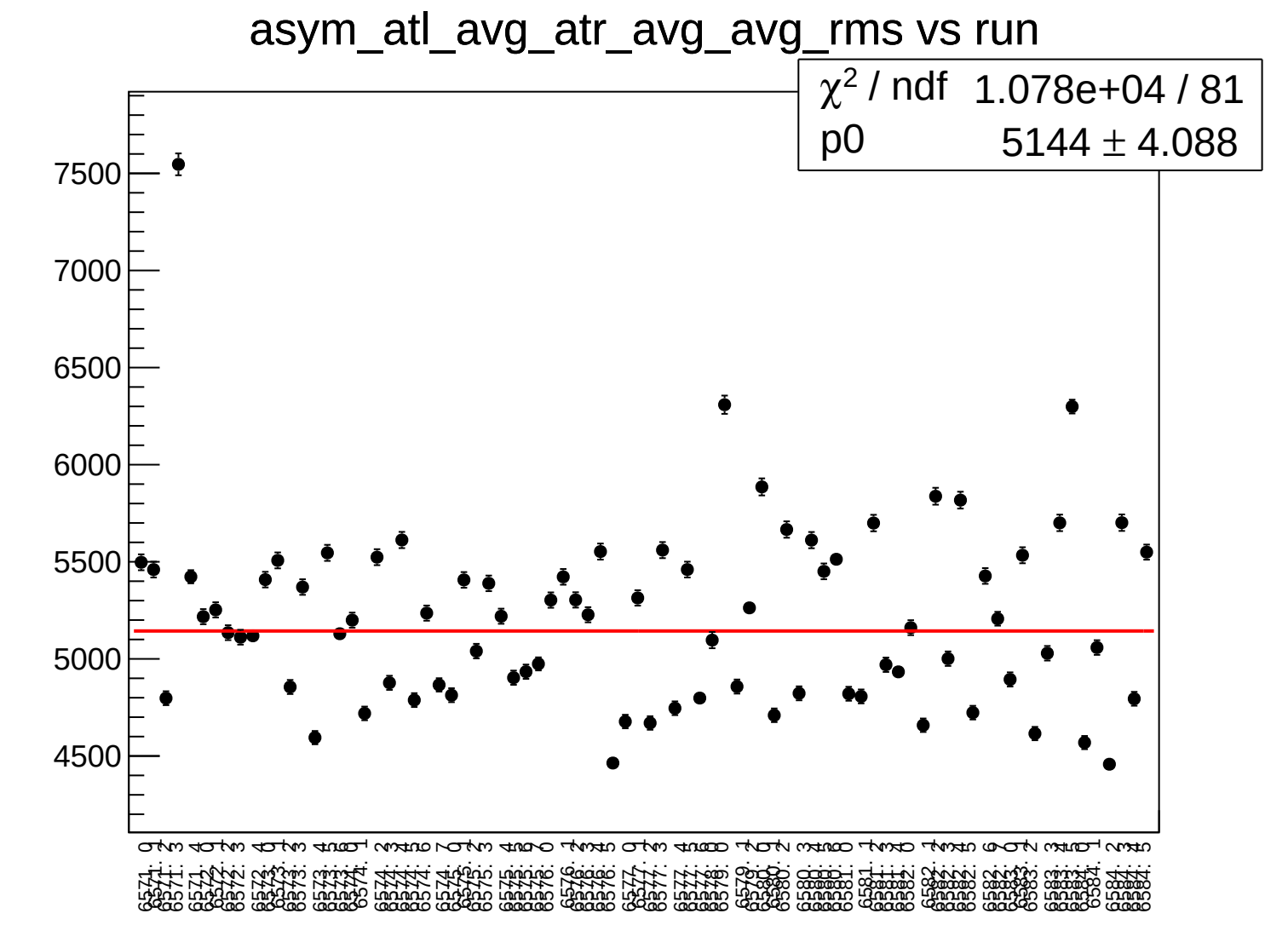

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

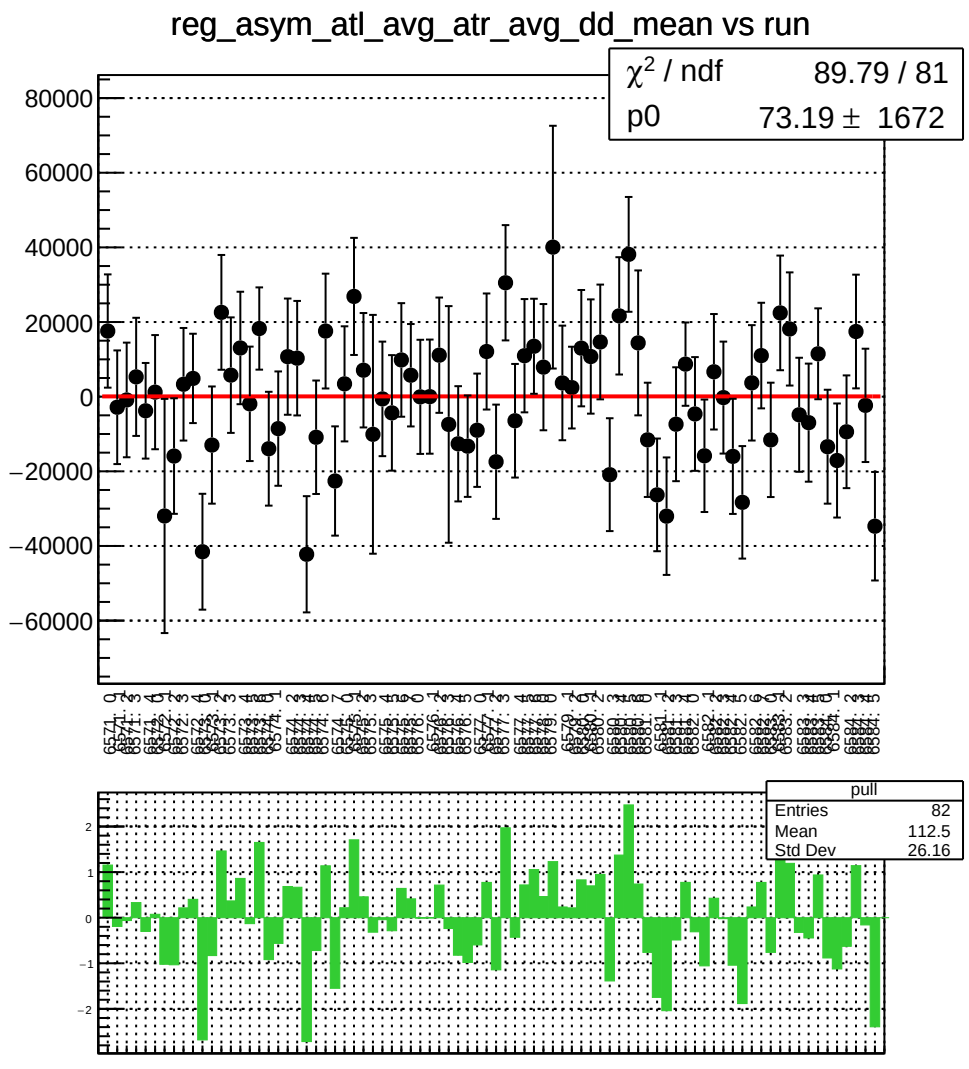

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

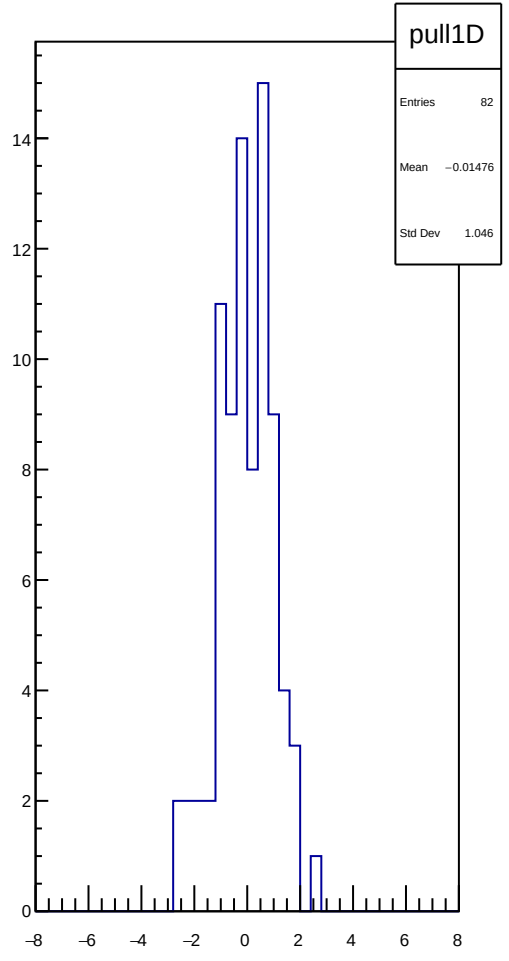

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

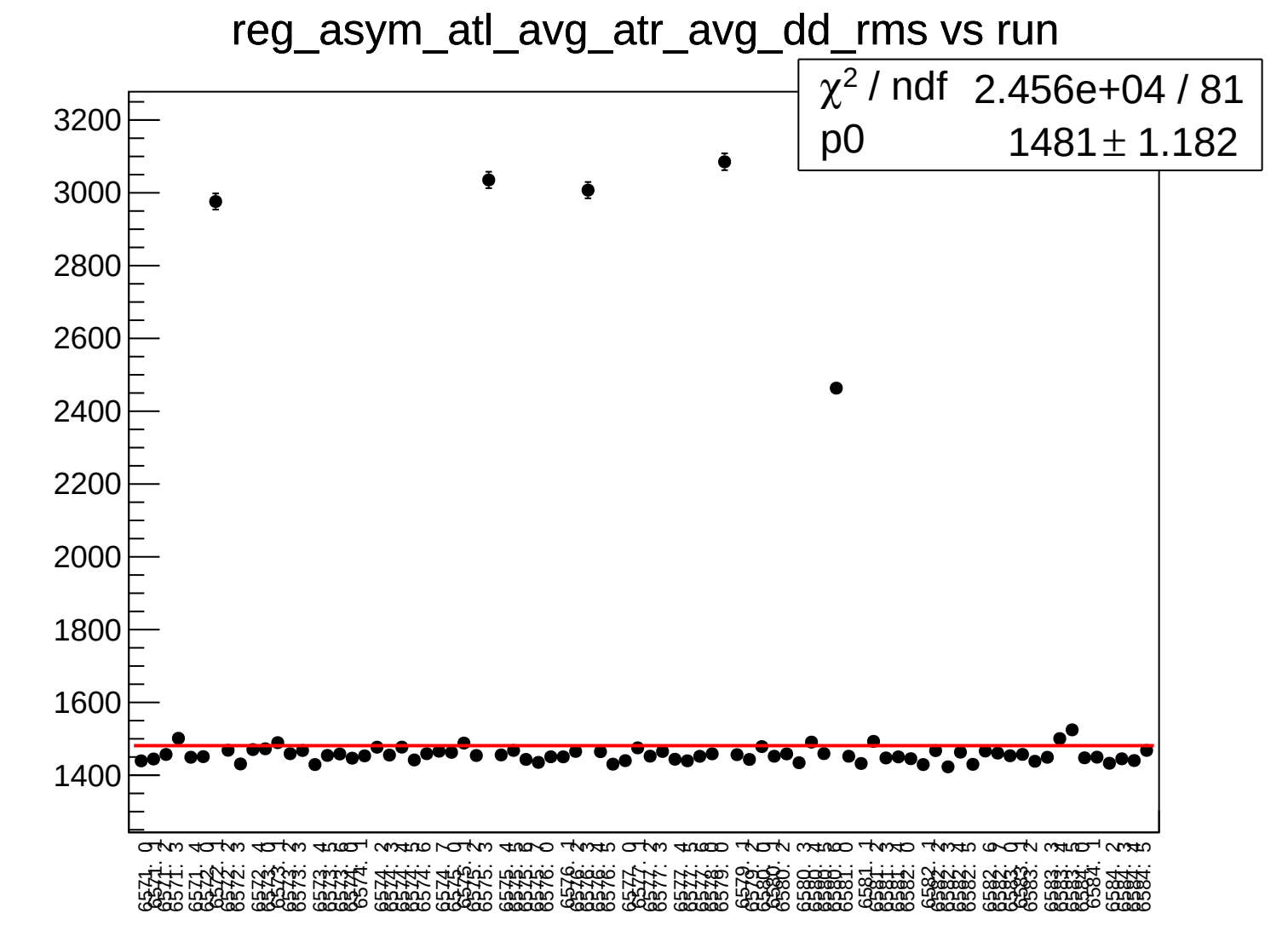

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 95.16 / 81
p0 −5688 ± 5782
pull
Entries 82
Mean 3512
Std Dev 3461

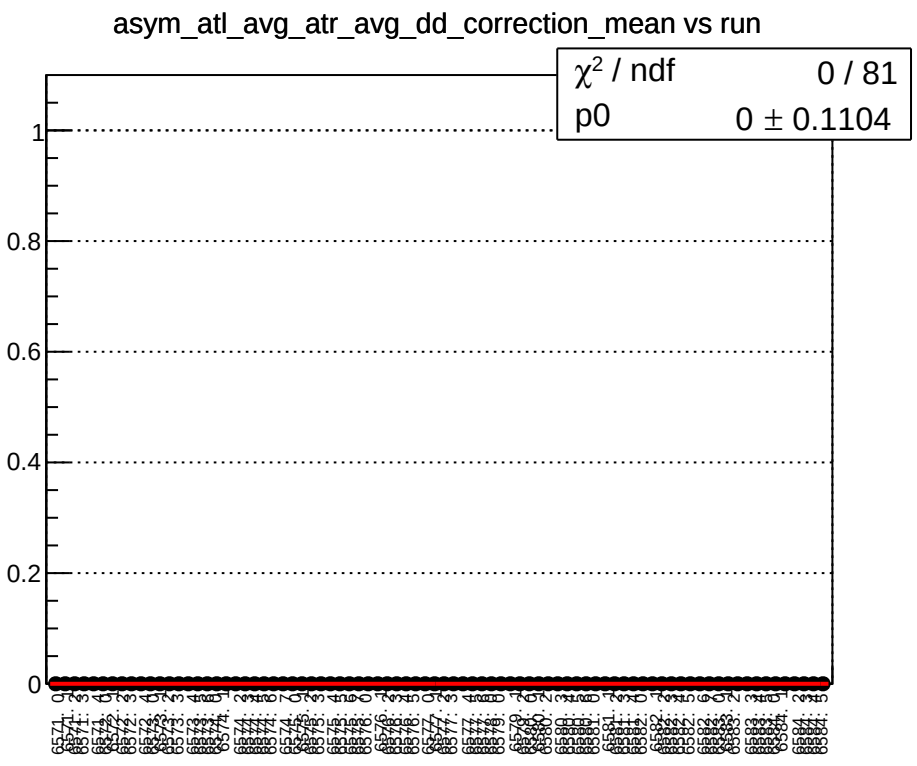

pull1D
Entries 82
Mean −0.001325
Std Dev 1.077

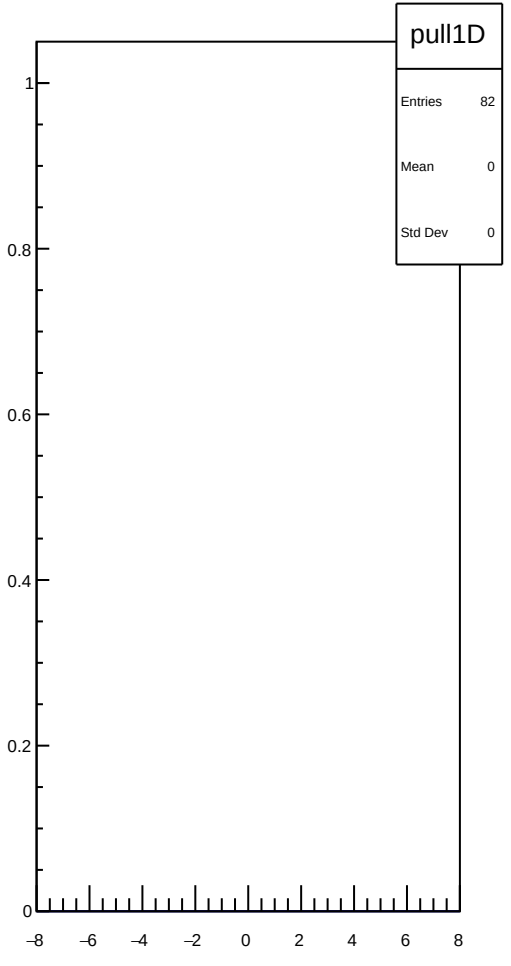

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 1.078e+04 / 81
p0 5144 ± 4.088
7500
7000
6500
6000
5500
5000
4500

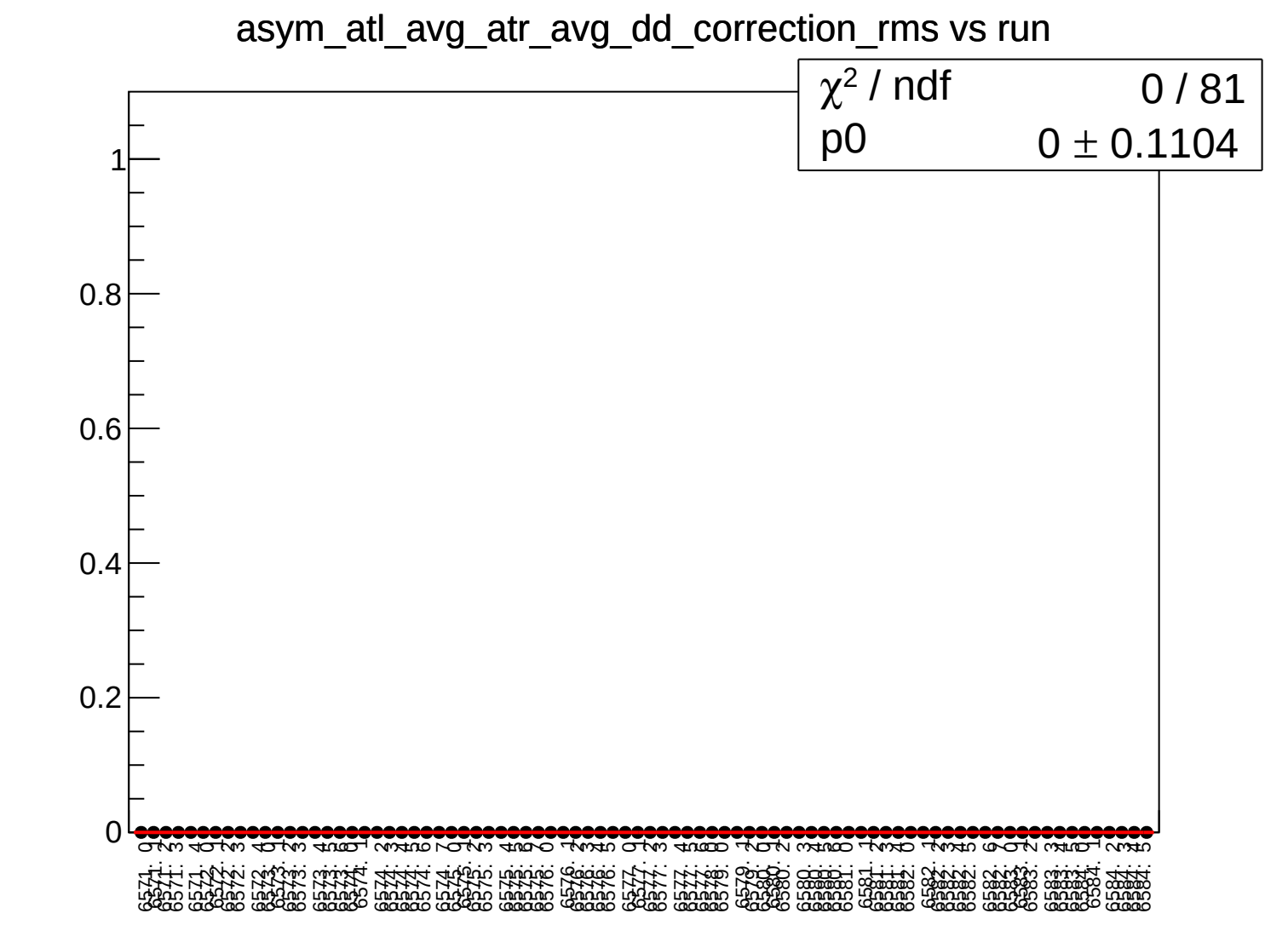

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 89.79 / 81
p0 73.19 ± 1672
pull
Entries 82
Mean 112.5
Std Dev 26.16

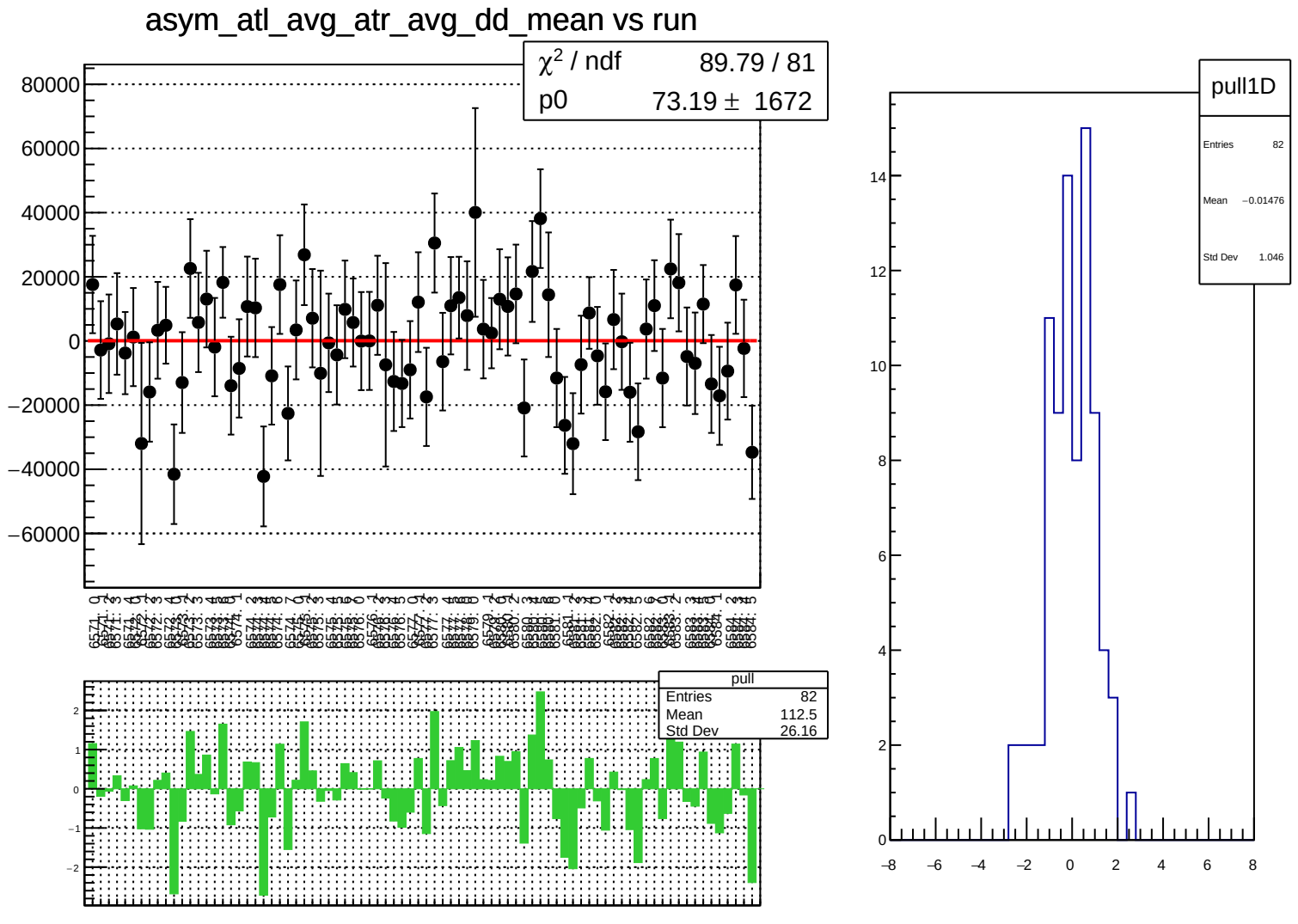

pull1D
Entries 82
Mean −0.01476
Std Dev 1.046

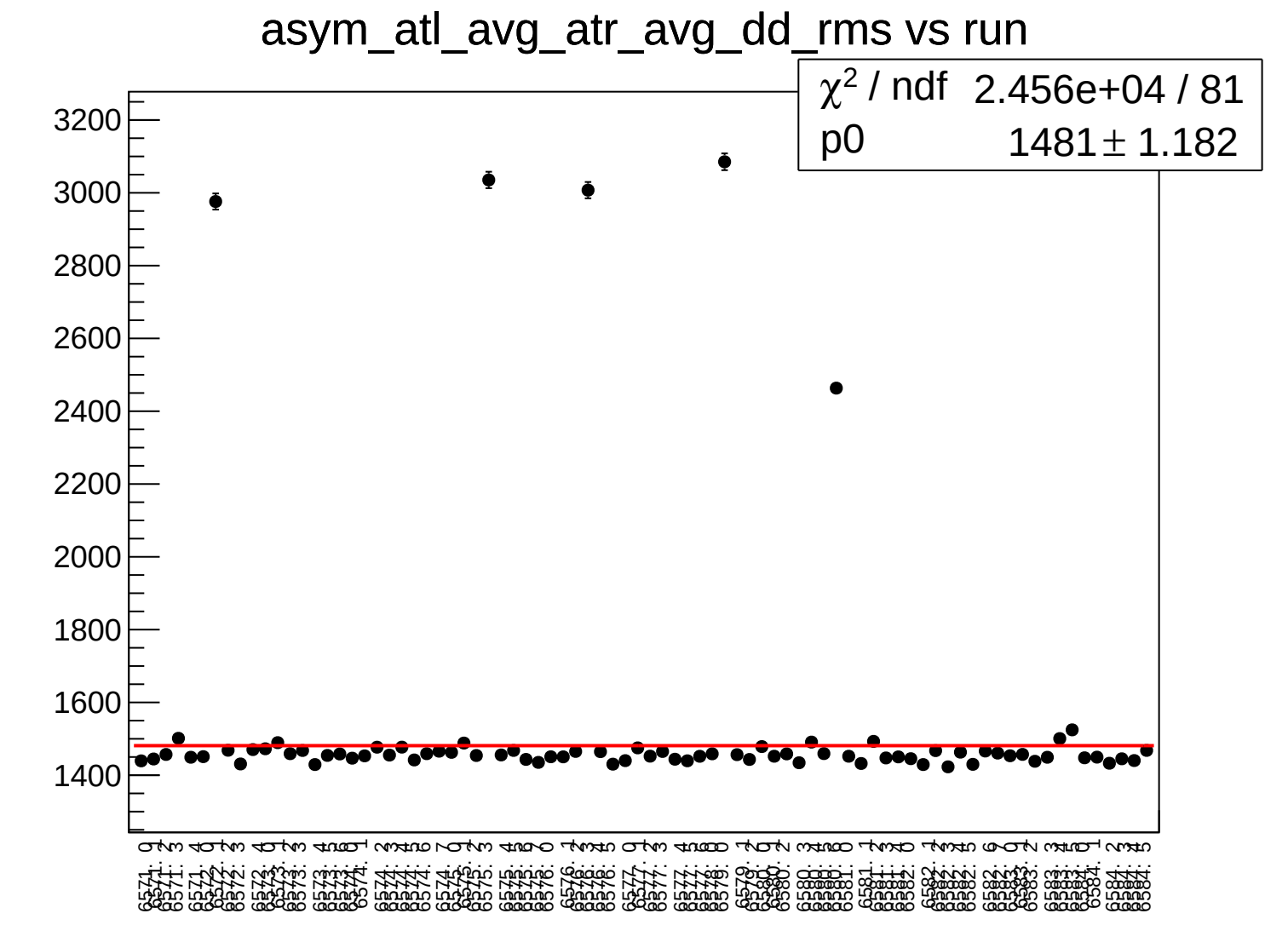

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.456e+04 / 81
p0 1481 ± 1.182
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

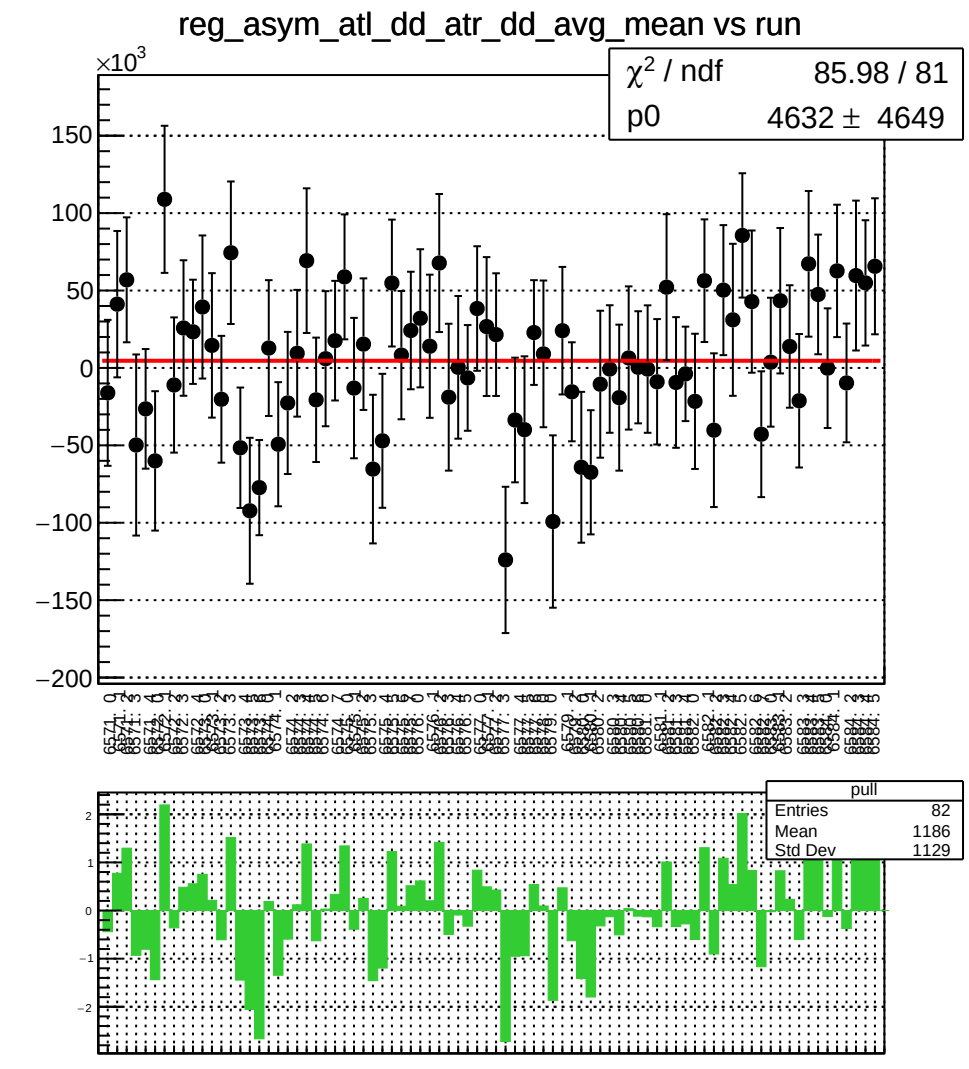

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

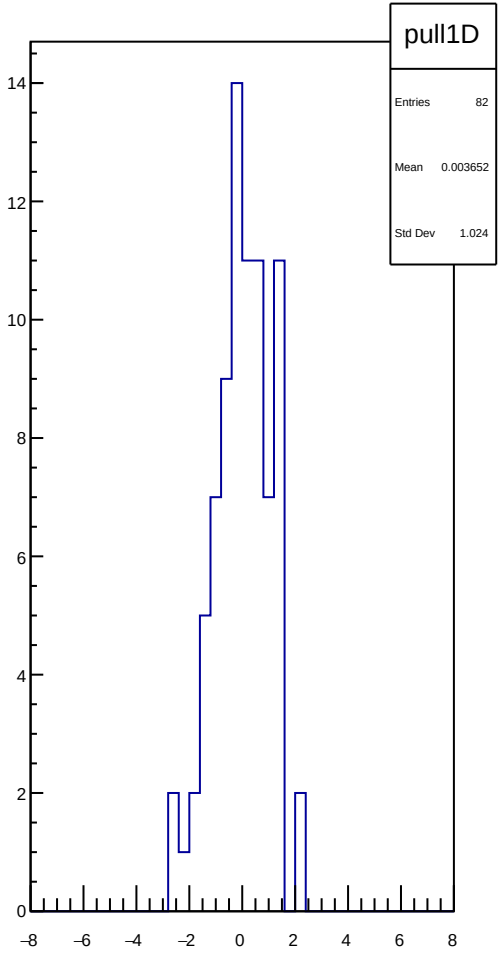

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

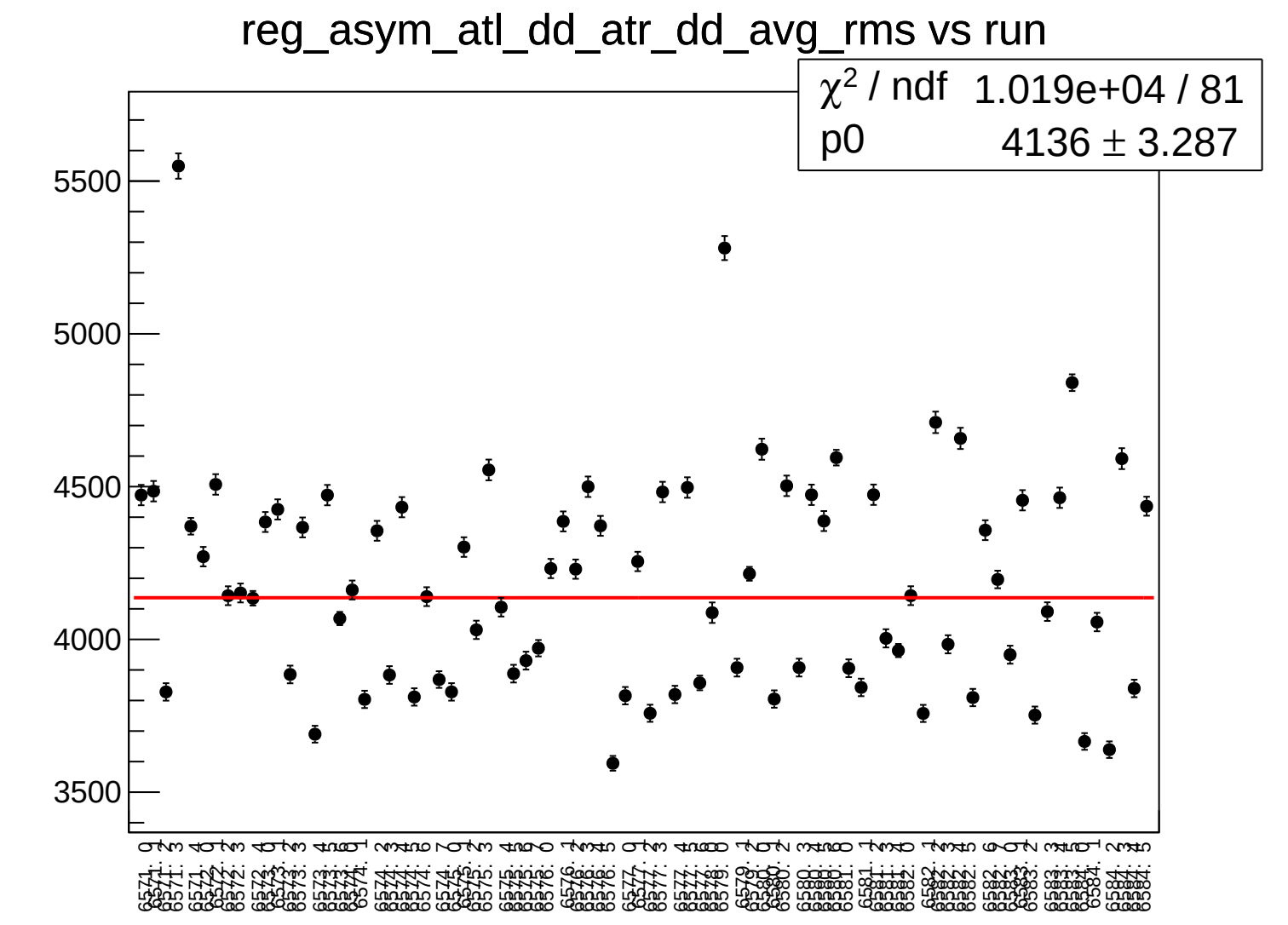

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

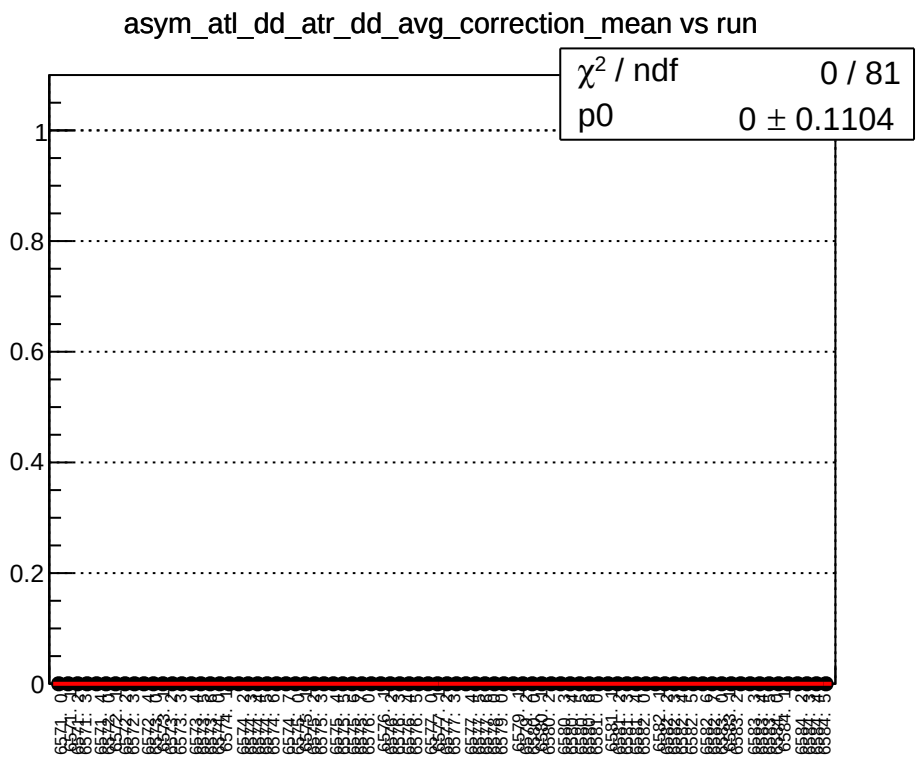

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 89.79 / 81
p0 73.19 ± 1672
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 82
Mean 112.5
Std Dev 26.16
2
1
0
−1
−2
pull1D
Entries 82
Mean −0.01476
Std Dev 1.046
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

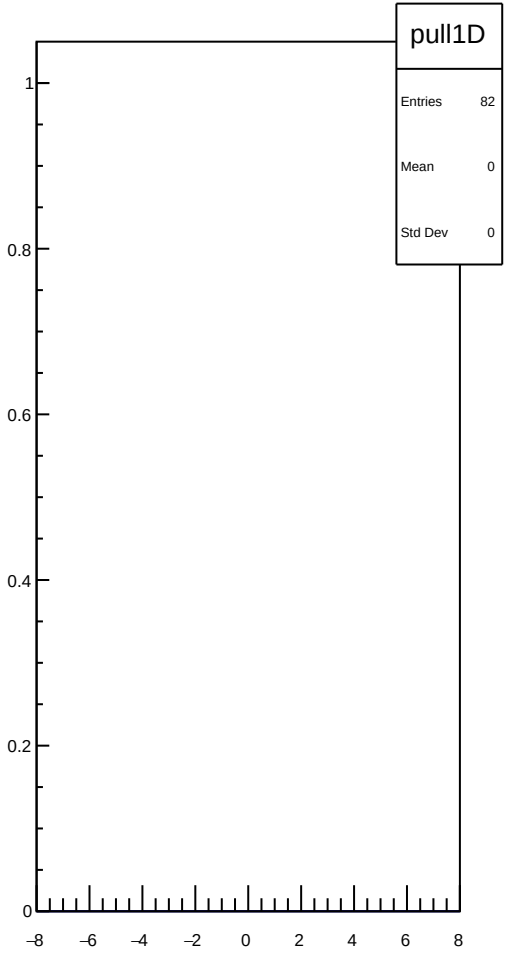

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 2.456e+04 / 81
p0 1481 ± 1.182
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

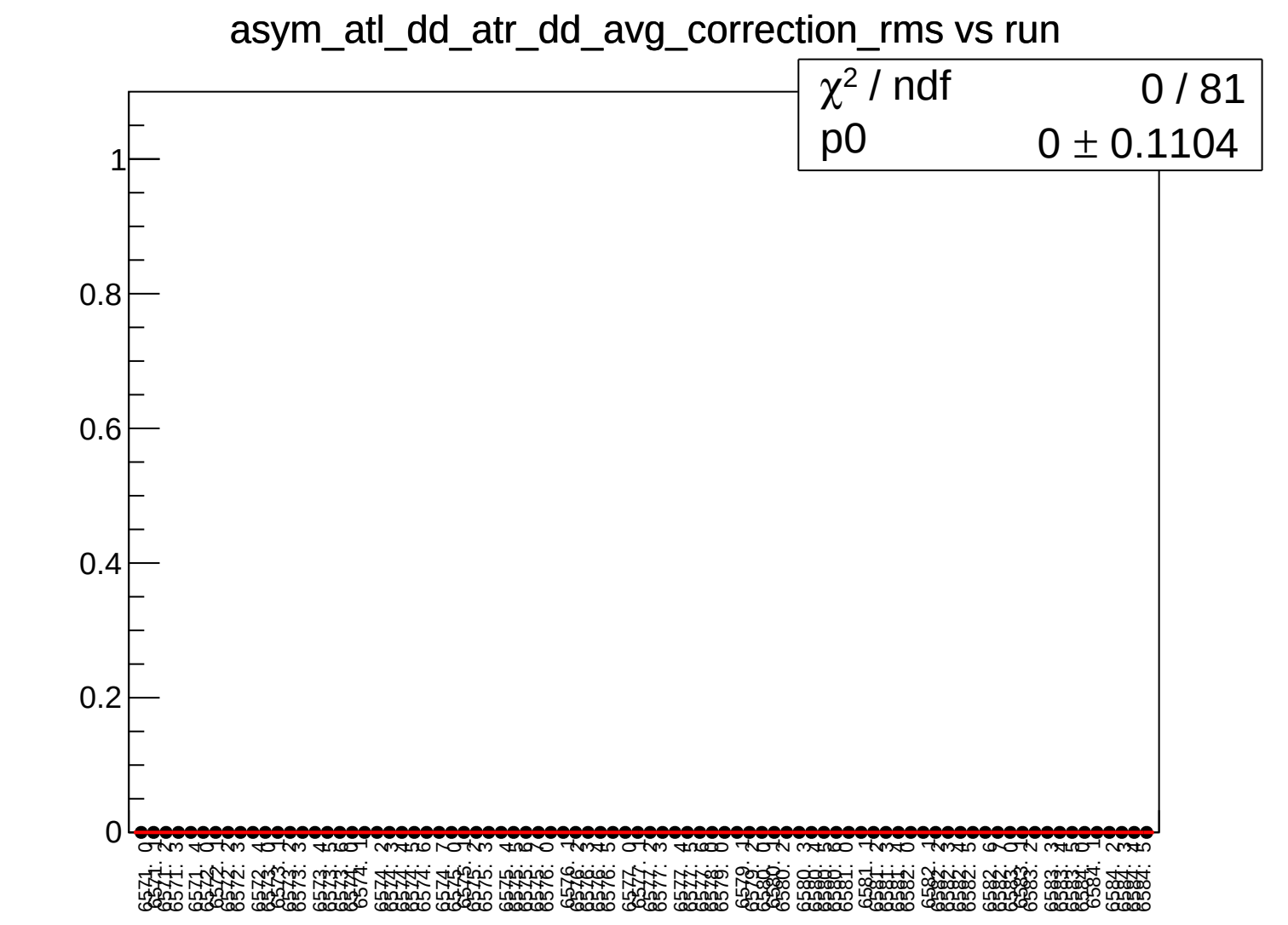

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 85.98 / 81
p0 4632 ± 4649
150
100
50
0
−50
−100
−150
−200
pull
Entries 82
Mean 1186
Std Dev 1129
2
1
0
−1
−2

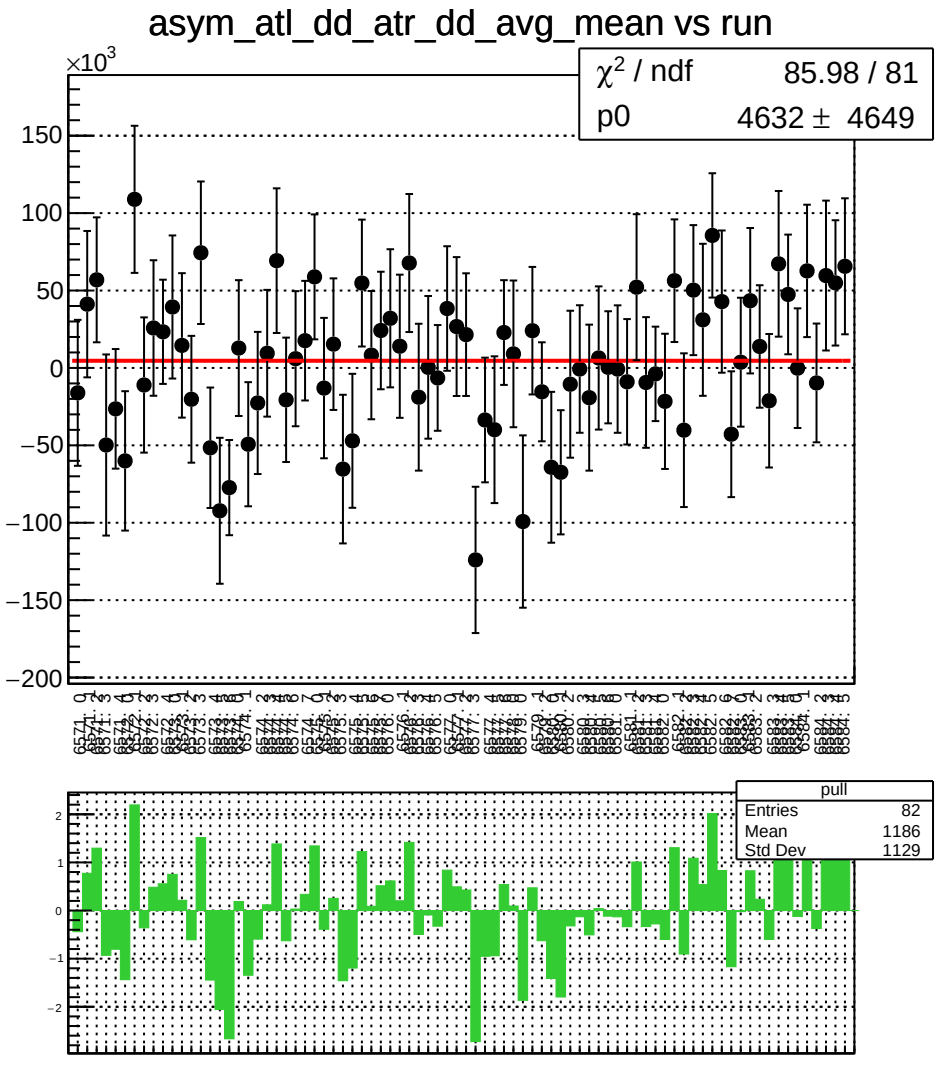

pull1D
Entries 82
Mean 0.003652
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

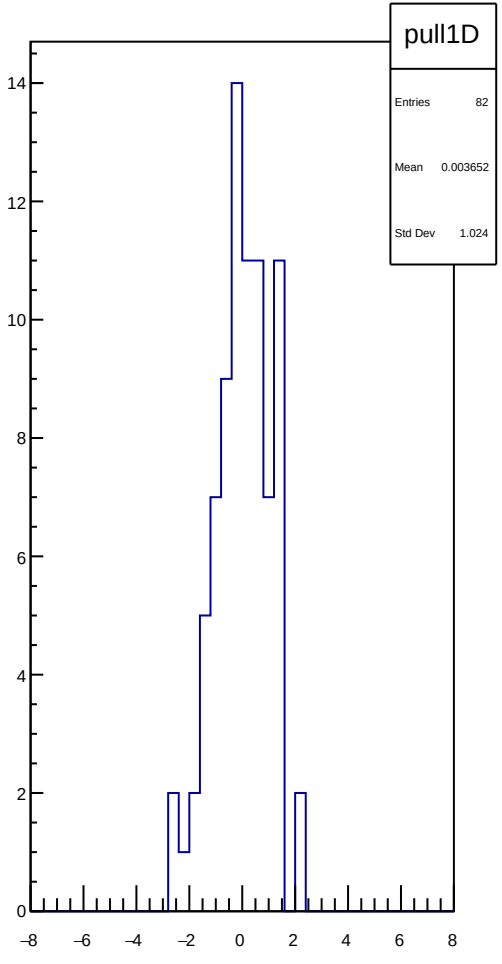

reg_asym_atl_dd_atr_dd_avg_rms vs run
$\chi^2$ / ndf 1.019e+04 / 81
p0 4136 ± 3.287
5500
5000
4500
4000
3500

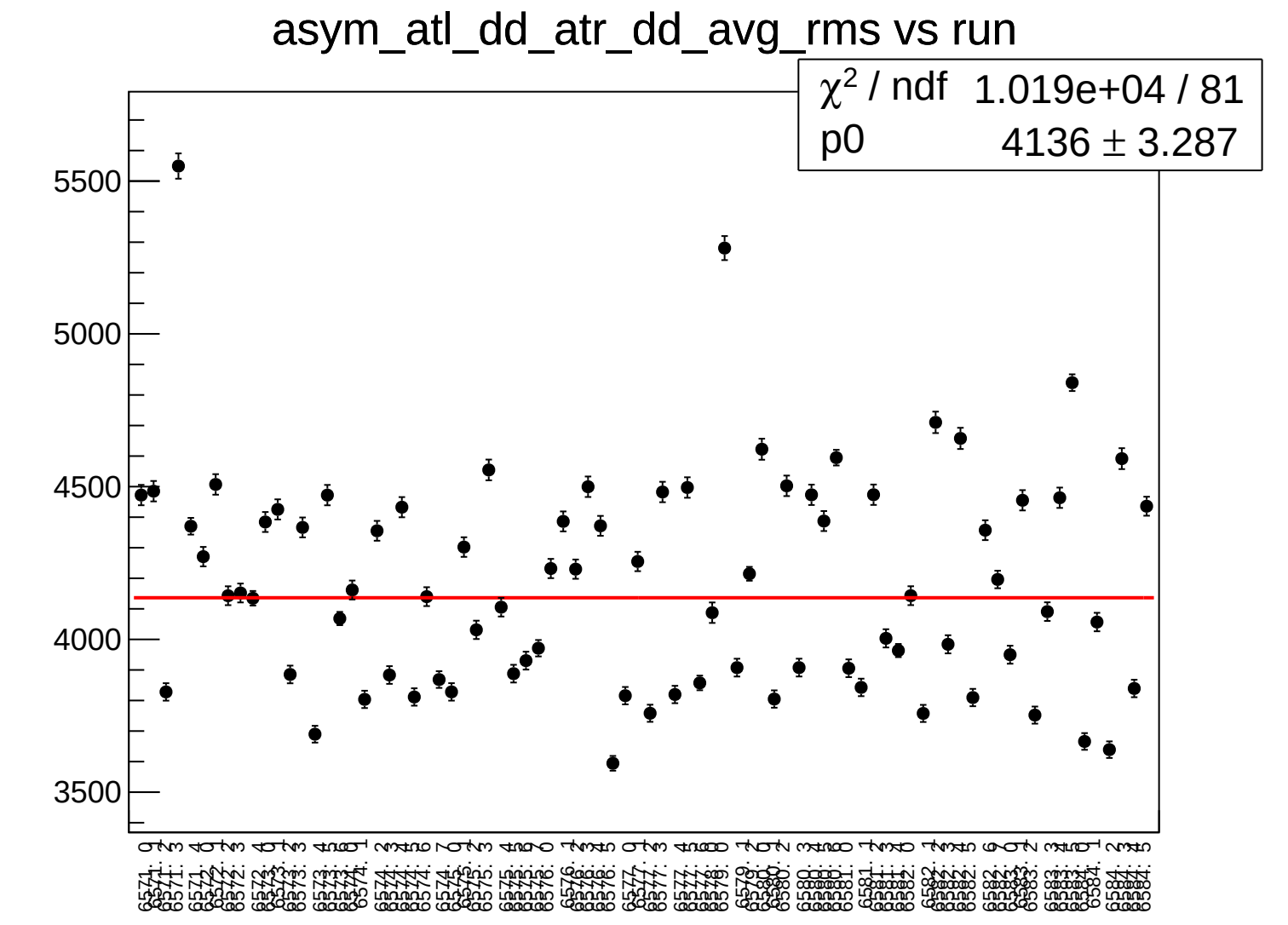

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

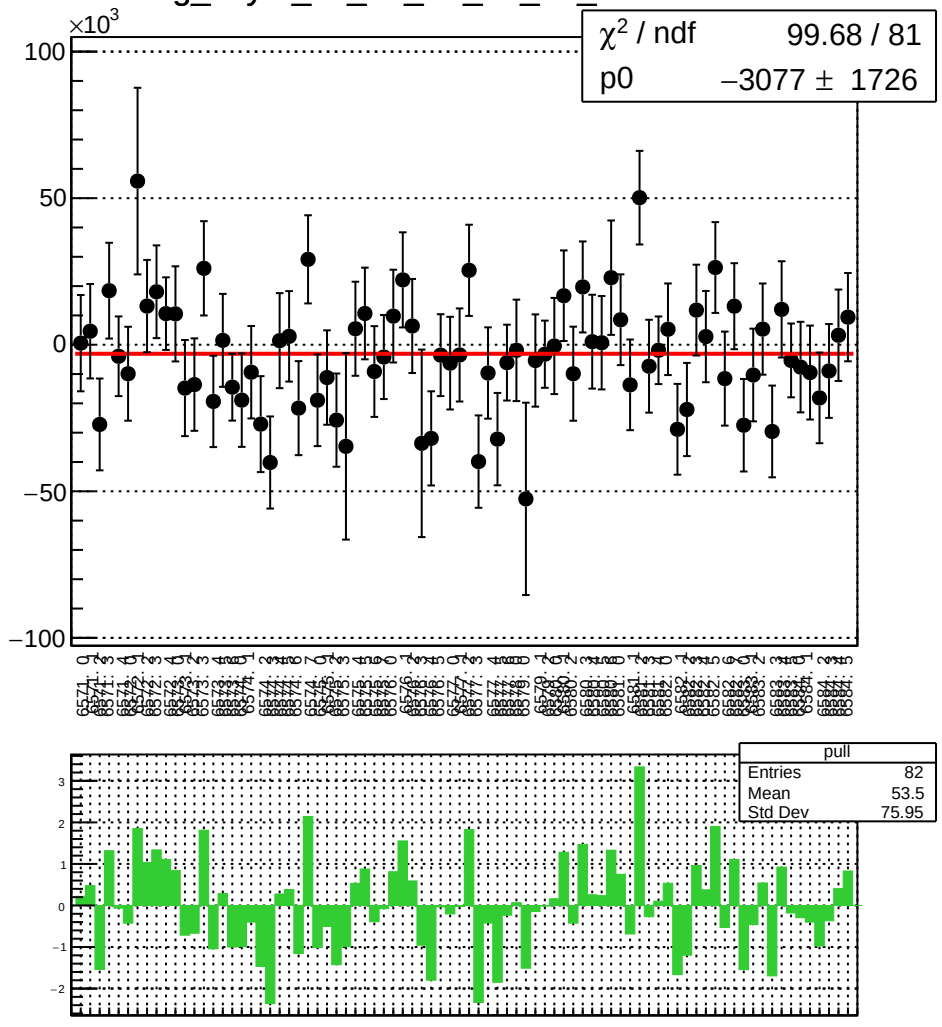

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

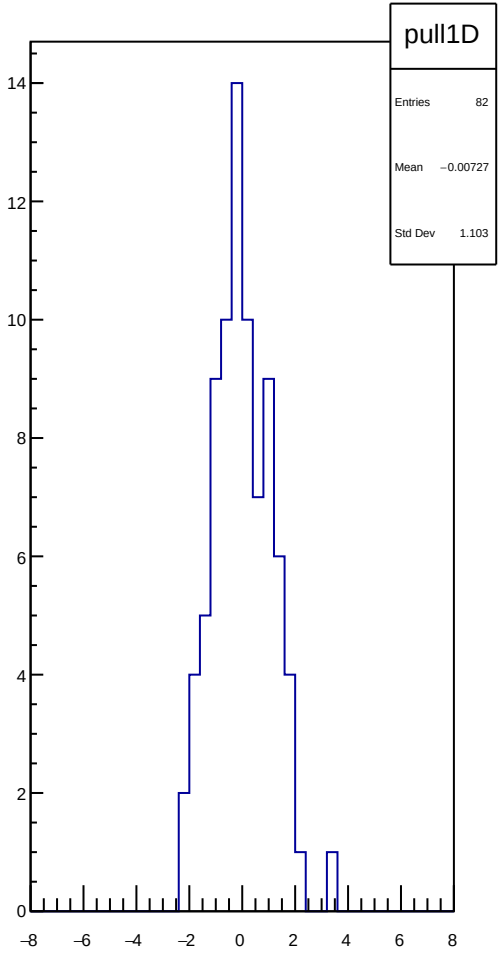

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

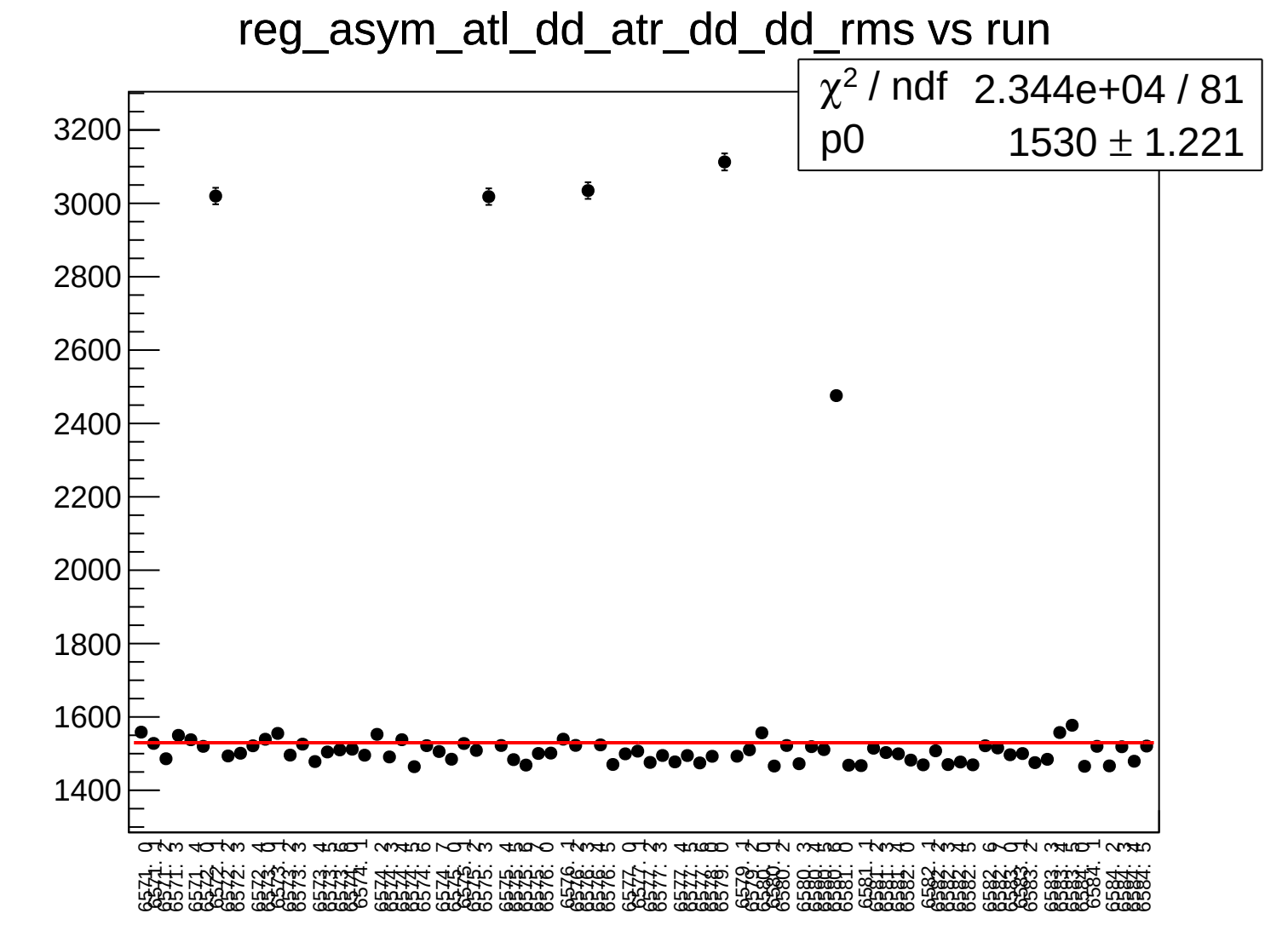

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ^2 / ndf 85.98 / 81
p0 4632 ± 4649
150
100
50
0
−50
−100
−150
−200
pull
Entries 82
Mean 1186
Std Dev 1129
2
1
0
−1
−2

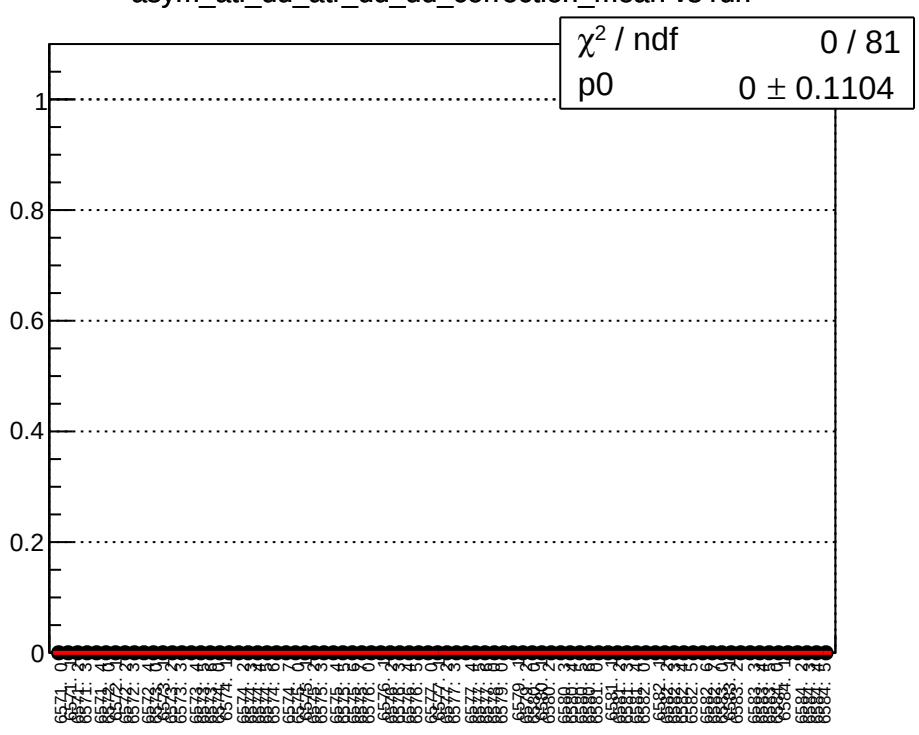

pull1D
Entries 82
Mean 0.003652
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

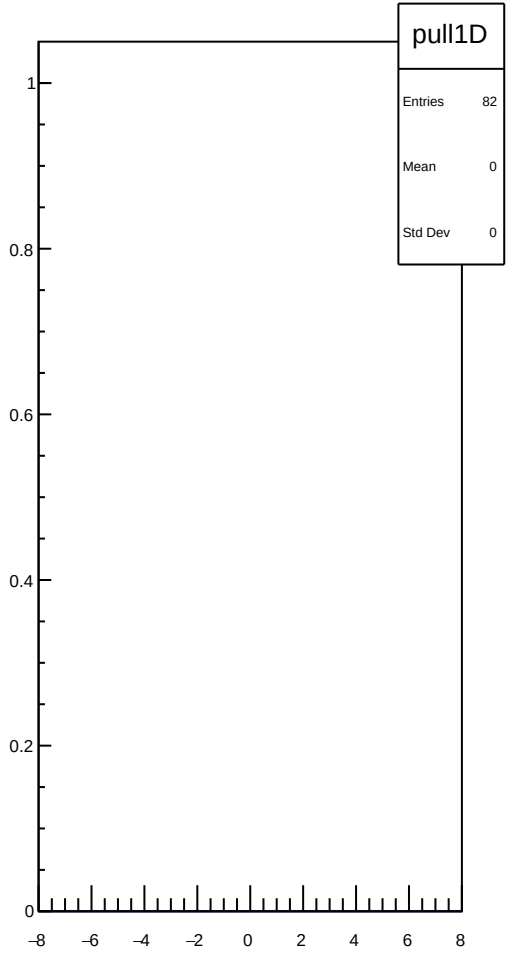

asym_atl_dd_atr_dd_avg_rms vs run
$\chi^2$ / ndf 1.019e+04 / 81
p0 4136 ± 3.287
5500
5000
4500
4000
3500

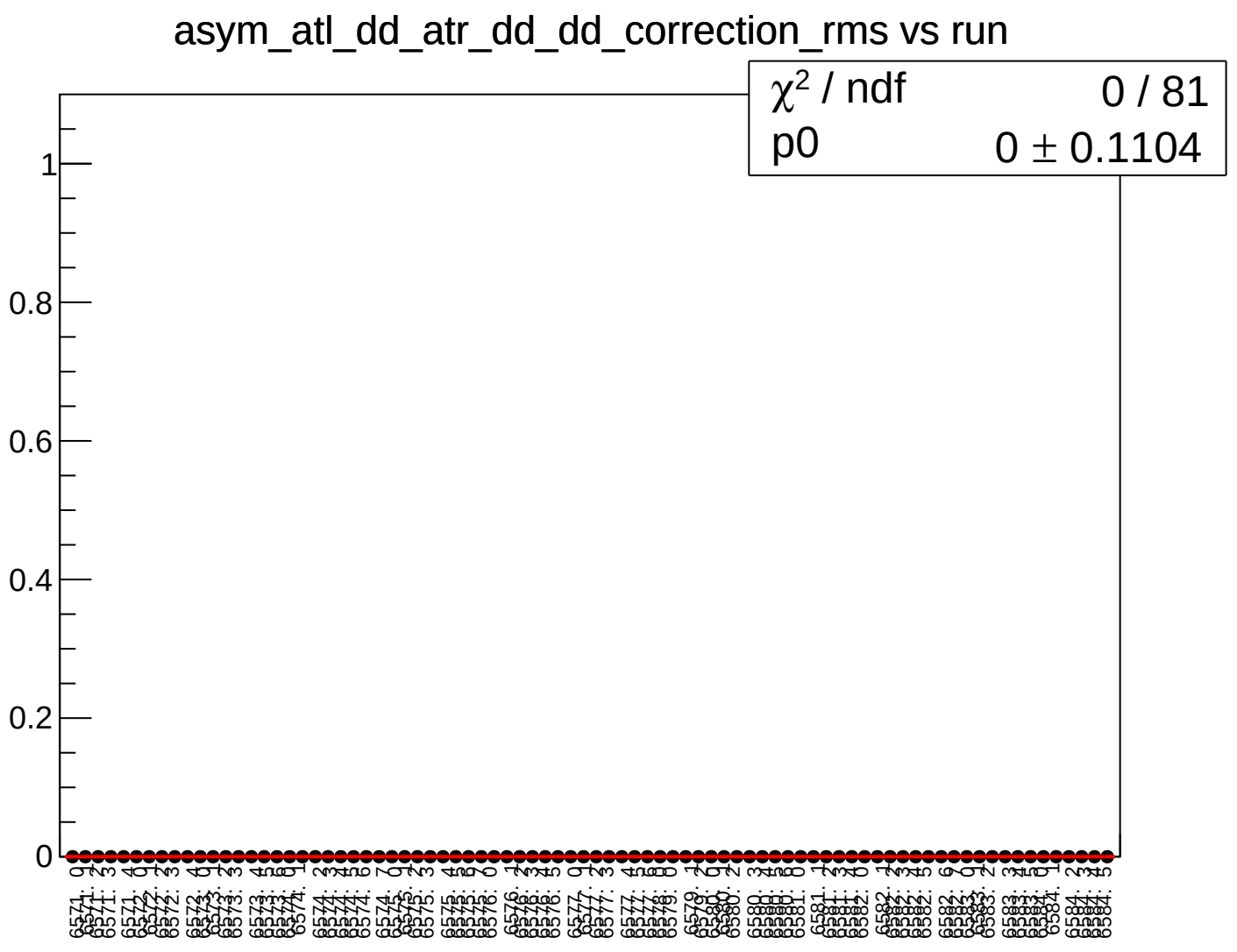

reg_asym_atl_dd_atr_dd_dd_mean vs run
×10^3
χ² / ndf 99.68 / 81
p0 −3077 ± 1726
pull
Entries 82
Mean 53.5
Std Dev 75.95

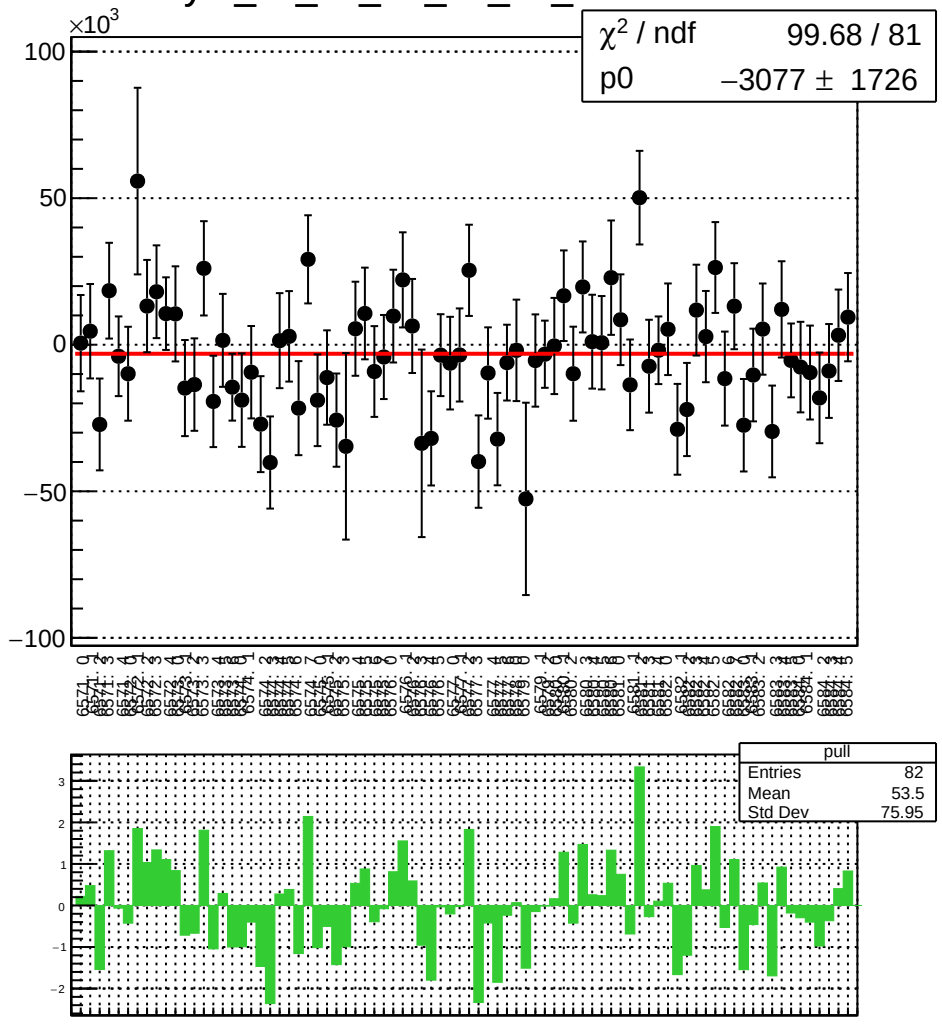

pull1D
Entries 82
Mean −0.00727
Std Dev 1.103

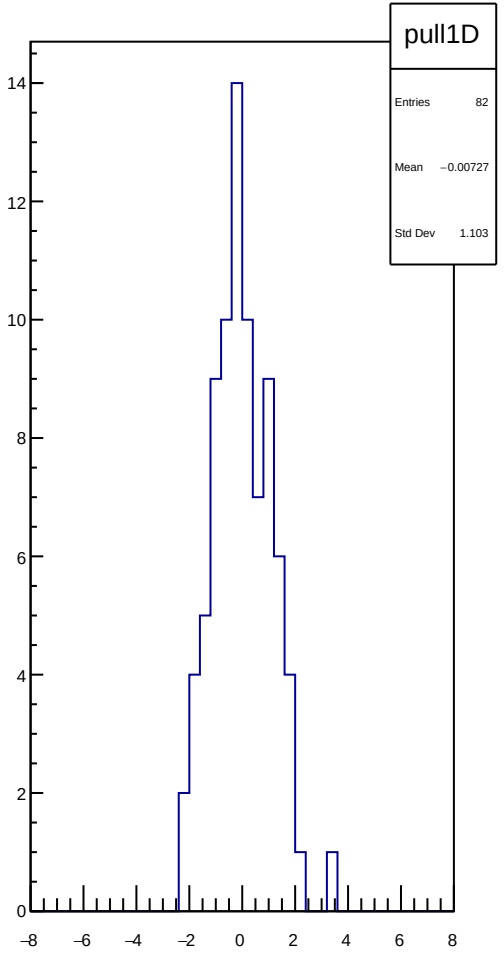

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 2.344e+04 / 81
p0 1530 ± 1.221
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

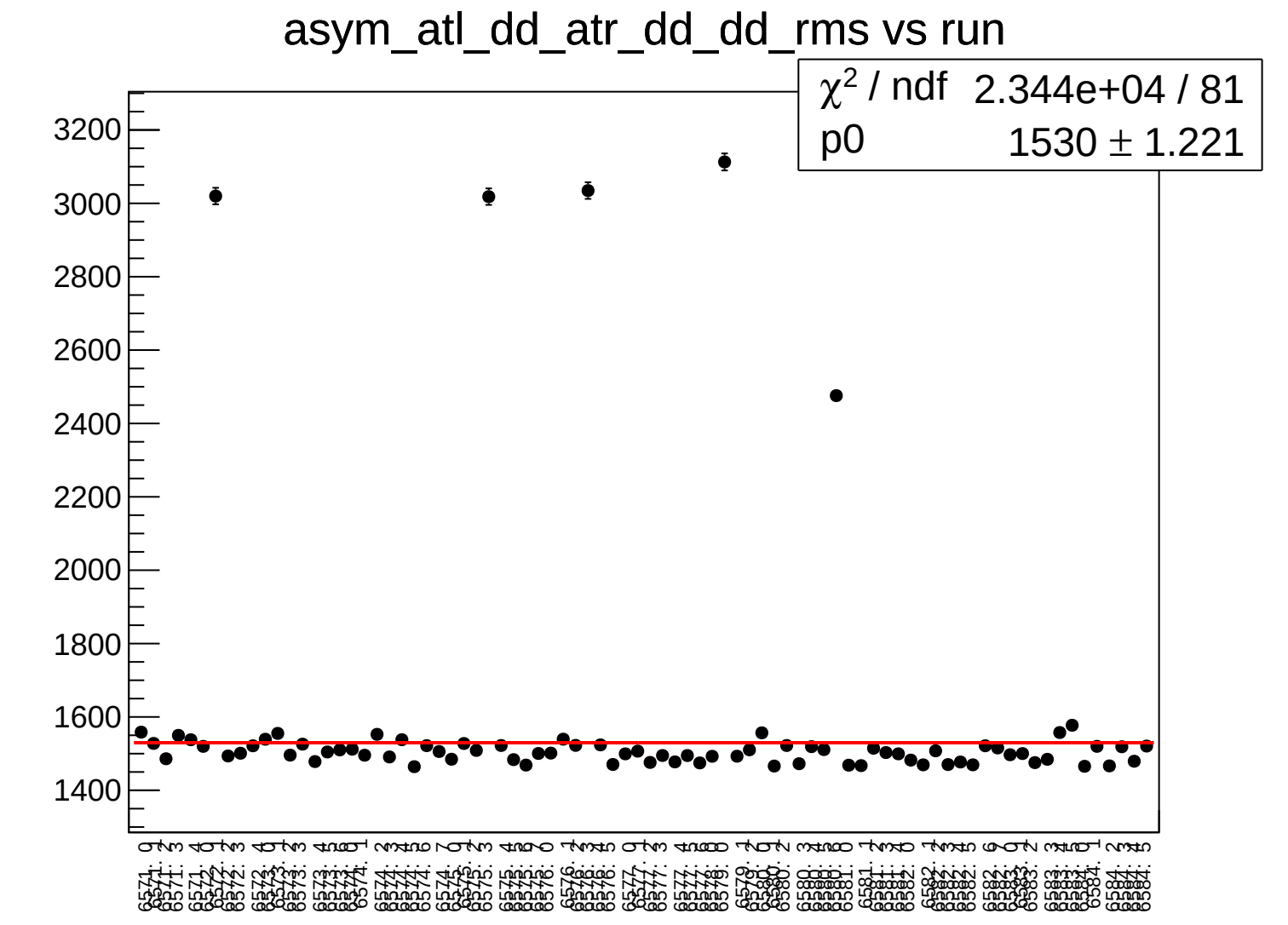

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

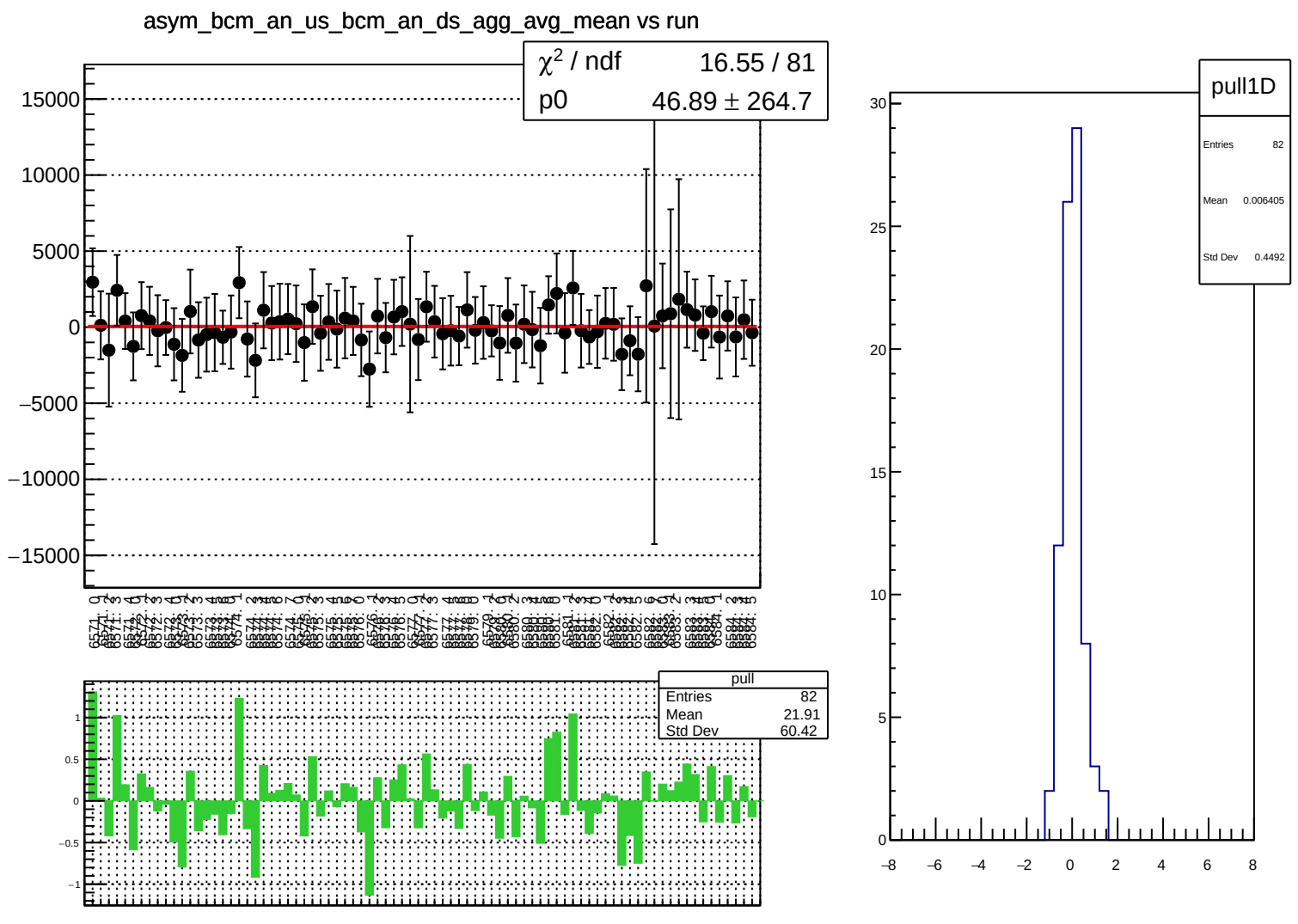

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

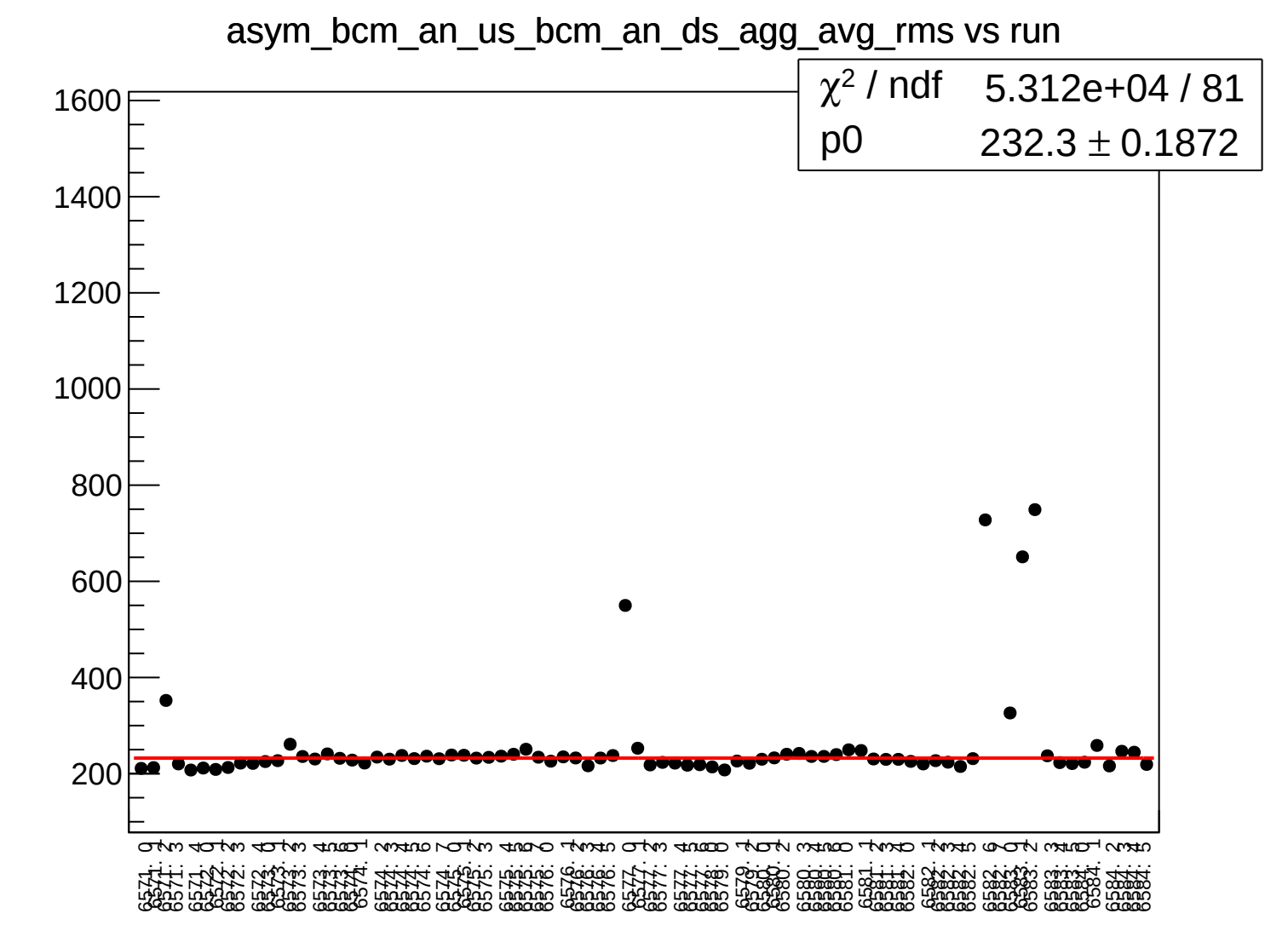

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 81
p0 0 ± 0.1104
1
0.8
0.6
0.4
0.2
0

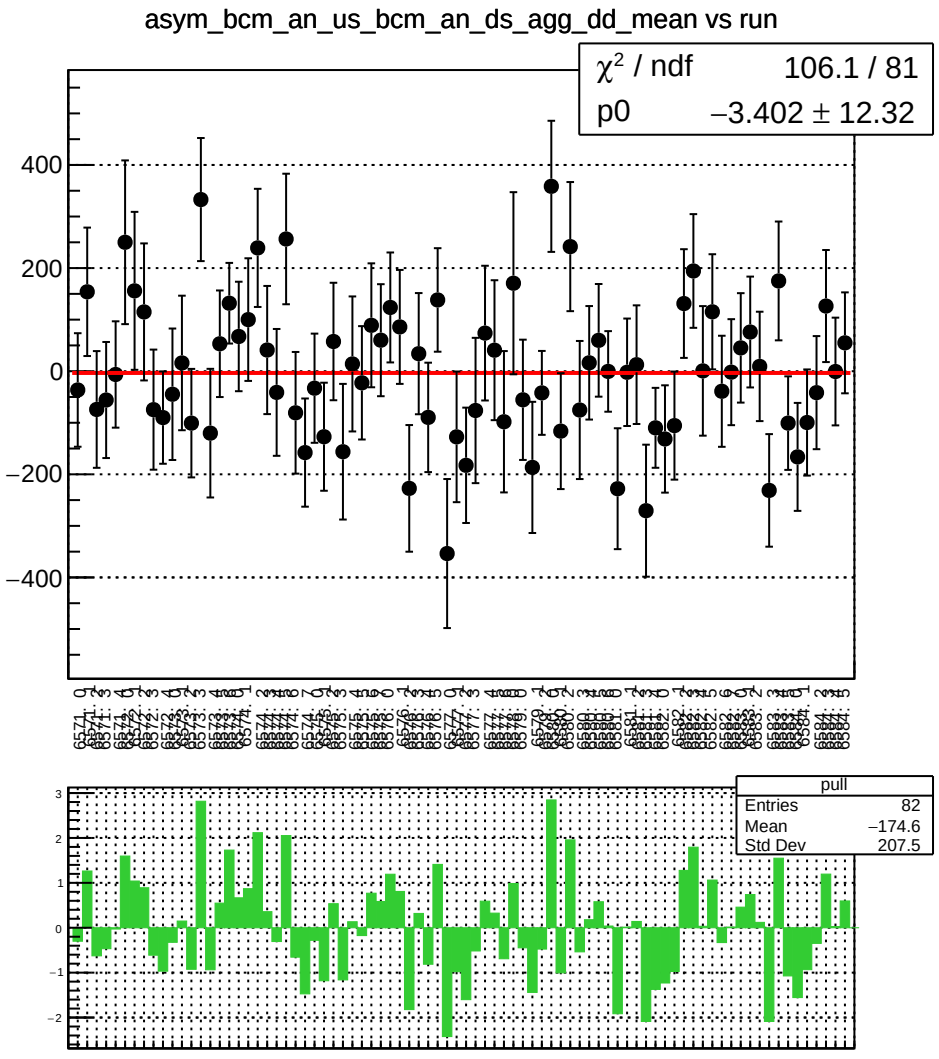

asym_atl_dd_atr_dd_dd_mean vs run
×10^3
χ² / ndf 99.68 / 81
p0 −3077 ± 1726
pull
Entries 82
Mean 53.5
Std Dev 75.95

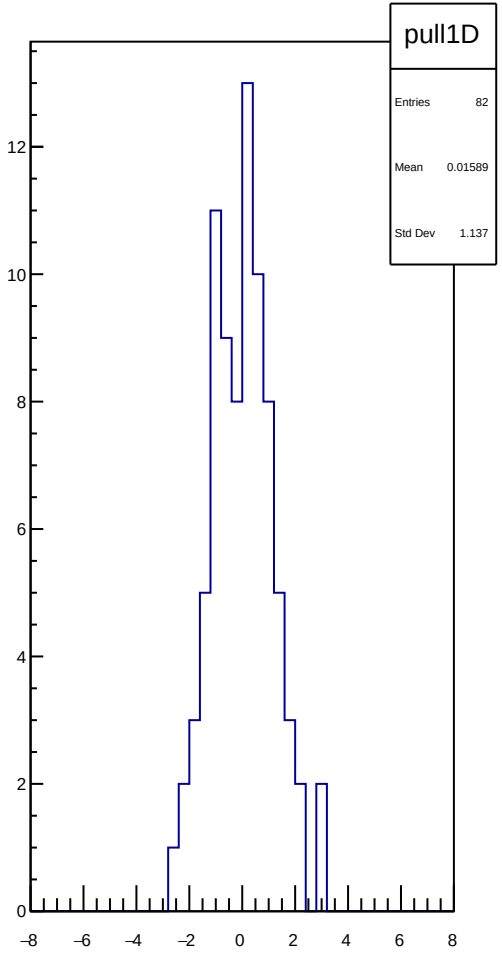

pull1D
Entries 82
Mean −0.00727
Std Dev 1.103

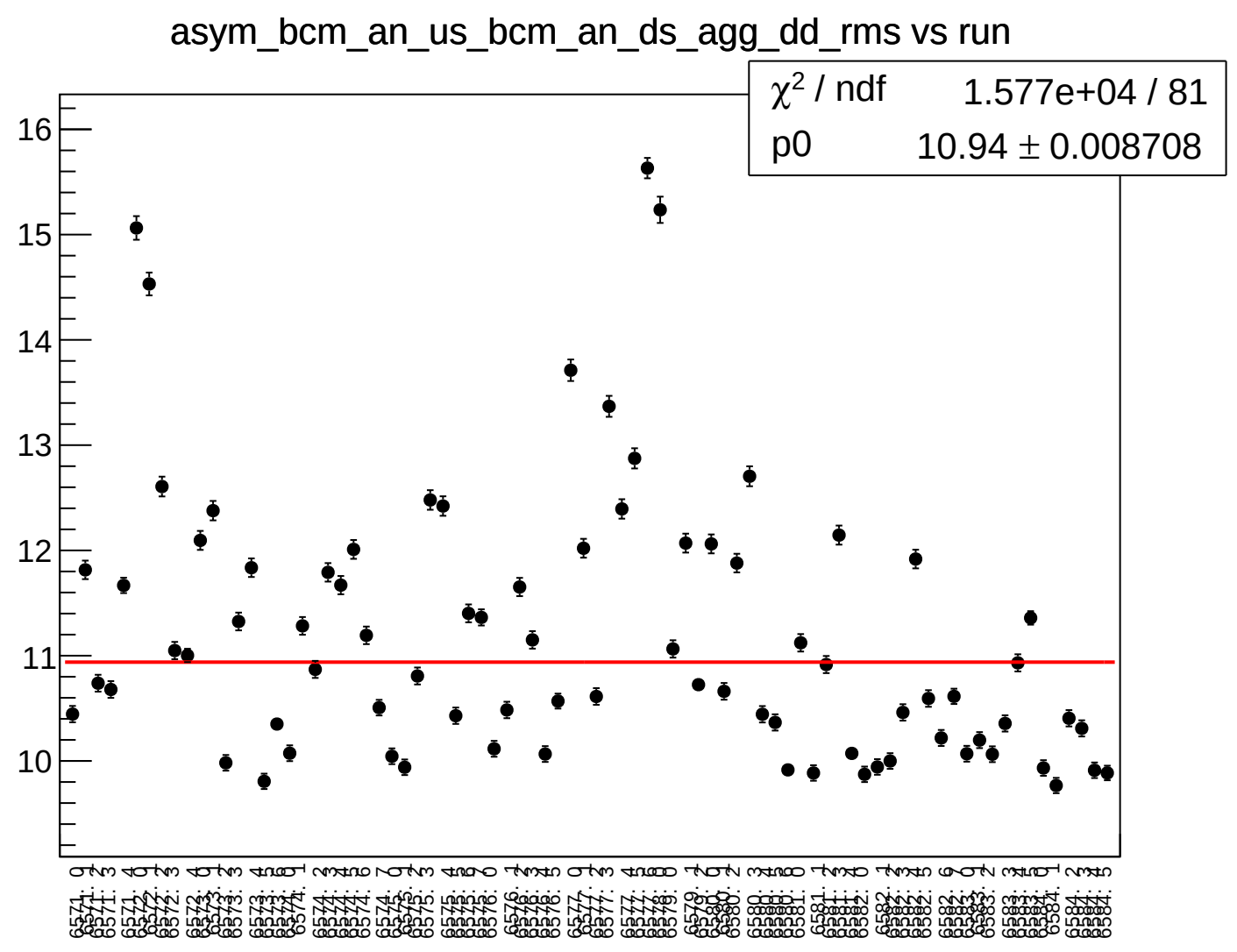

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 2.344e+04 / 81
p0 1530 ± 1.221
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400

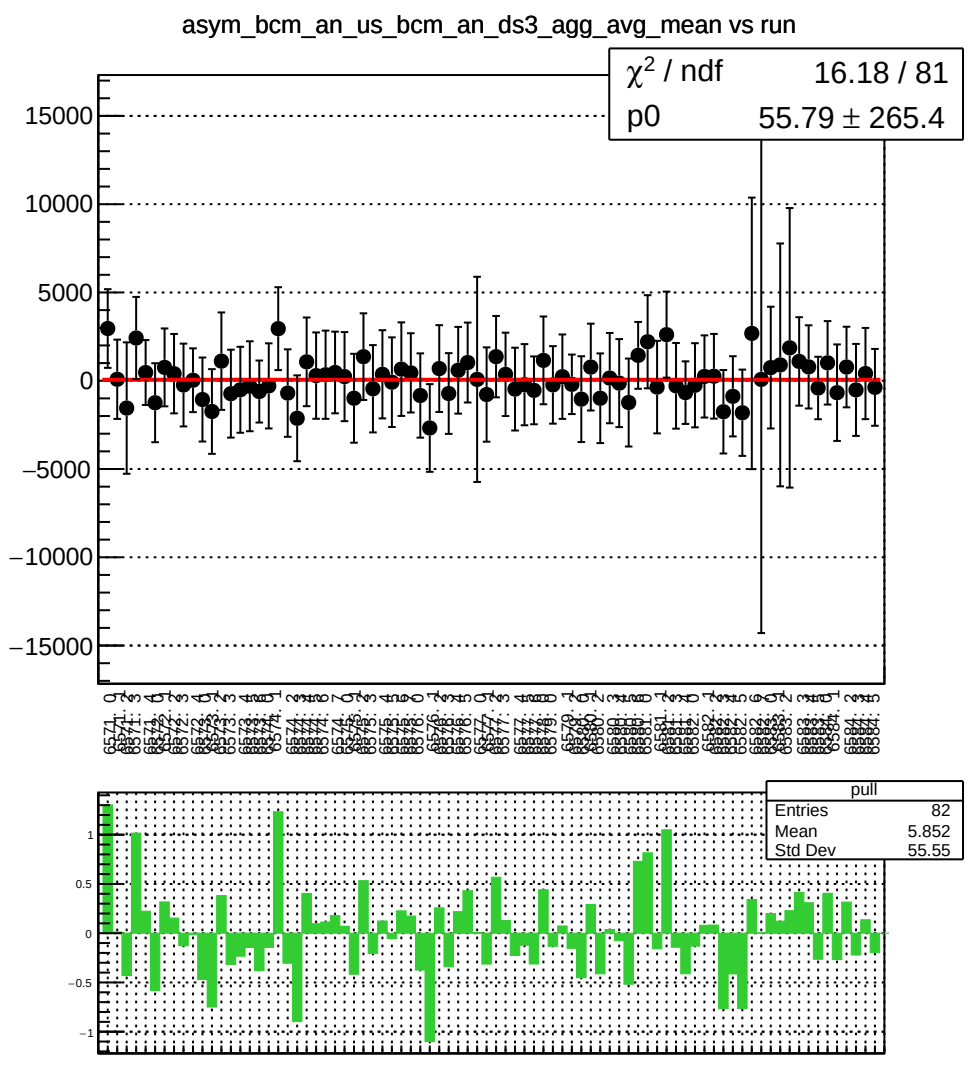

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 16.55 / 81
p0 46.89 ± 264.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 21.91
Std Dev 60.42
1
0.5
0
−0.5
−1
pull1D
Entries 82
Mean 0.006405
Std Dev 0.4492
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

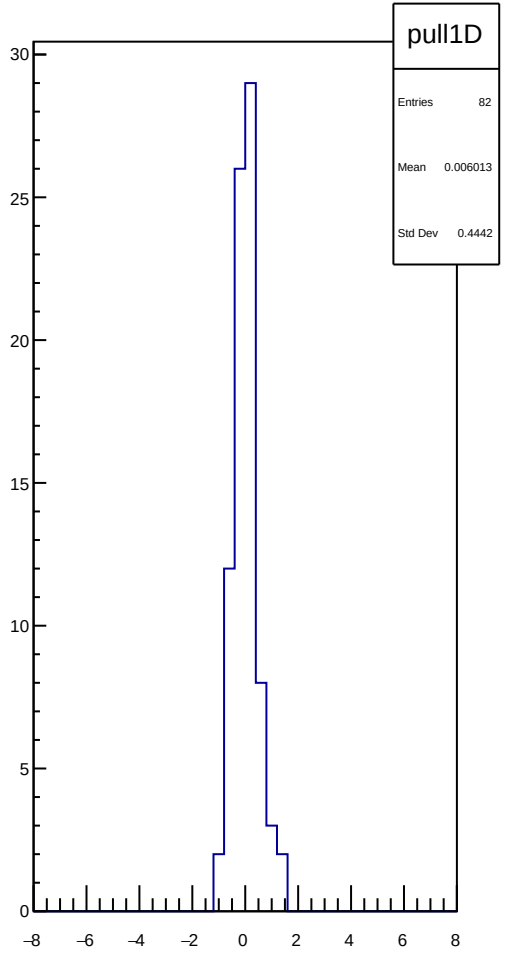

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 5.312e+04 / 81
p0 232.3 ± 0.1872
1600
1400
1200
1000
800
600
400
200

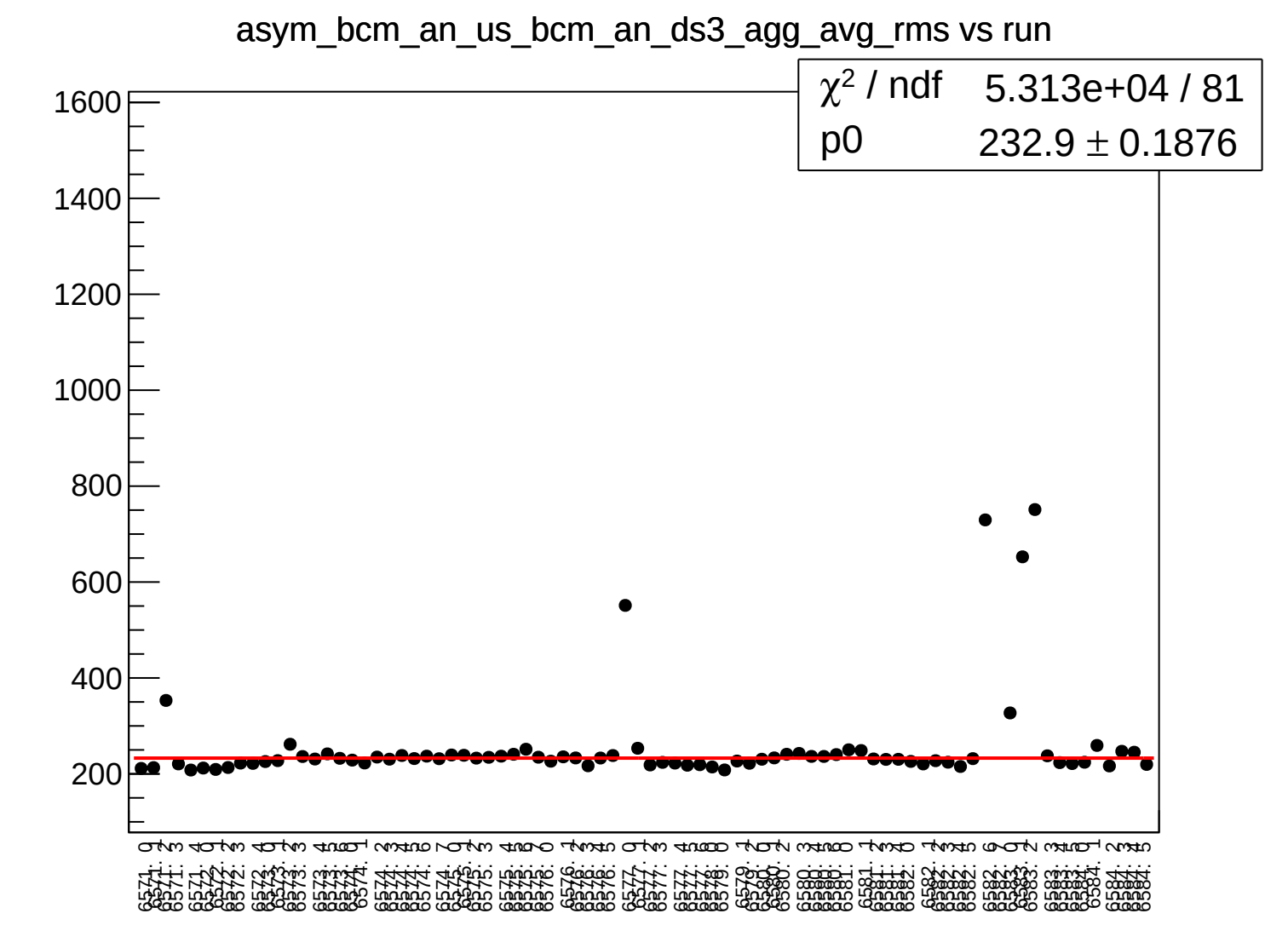

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 106.1 / 81
p0 −3.402 ± 12.32
400
200
0
−200
−400
pull
Entries 82
Mean −174.6
Std Dev 207.5
3
2
1
0
−1
−2

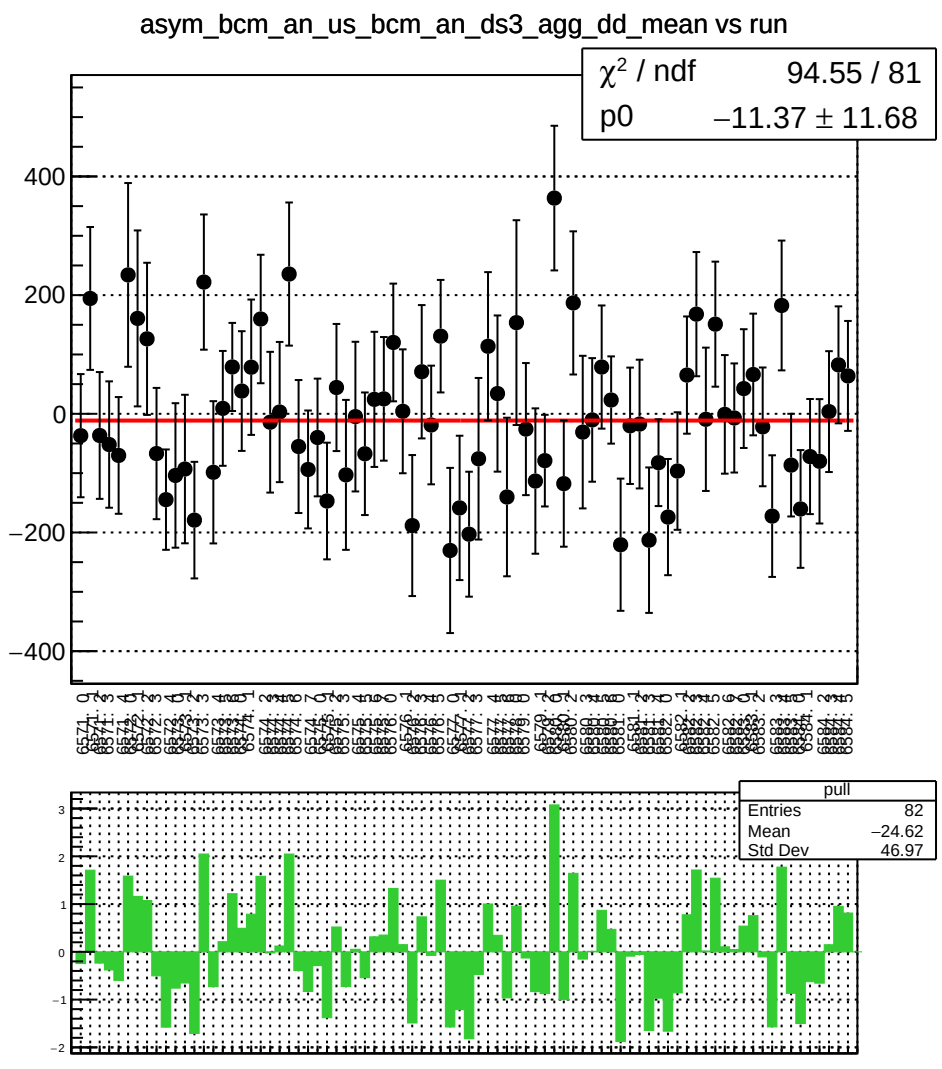

pull1D
Entries 82
Mean 0.01589
Std Dev 1.137
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

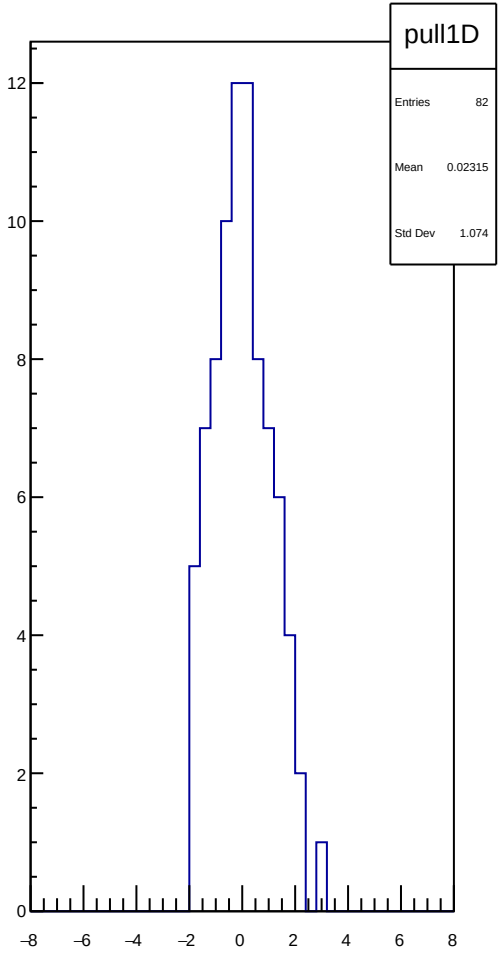

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.577e+04 / 81
p0 10.94 ± 0.008708
16
15
14
13
12
11
10

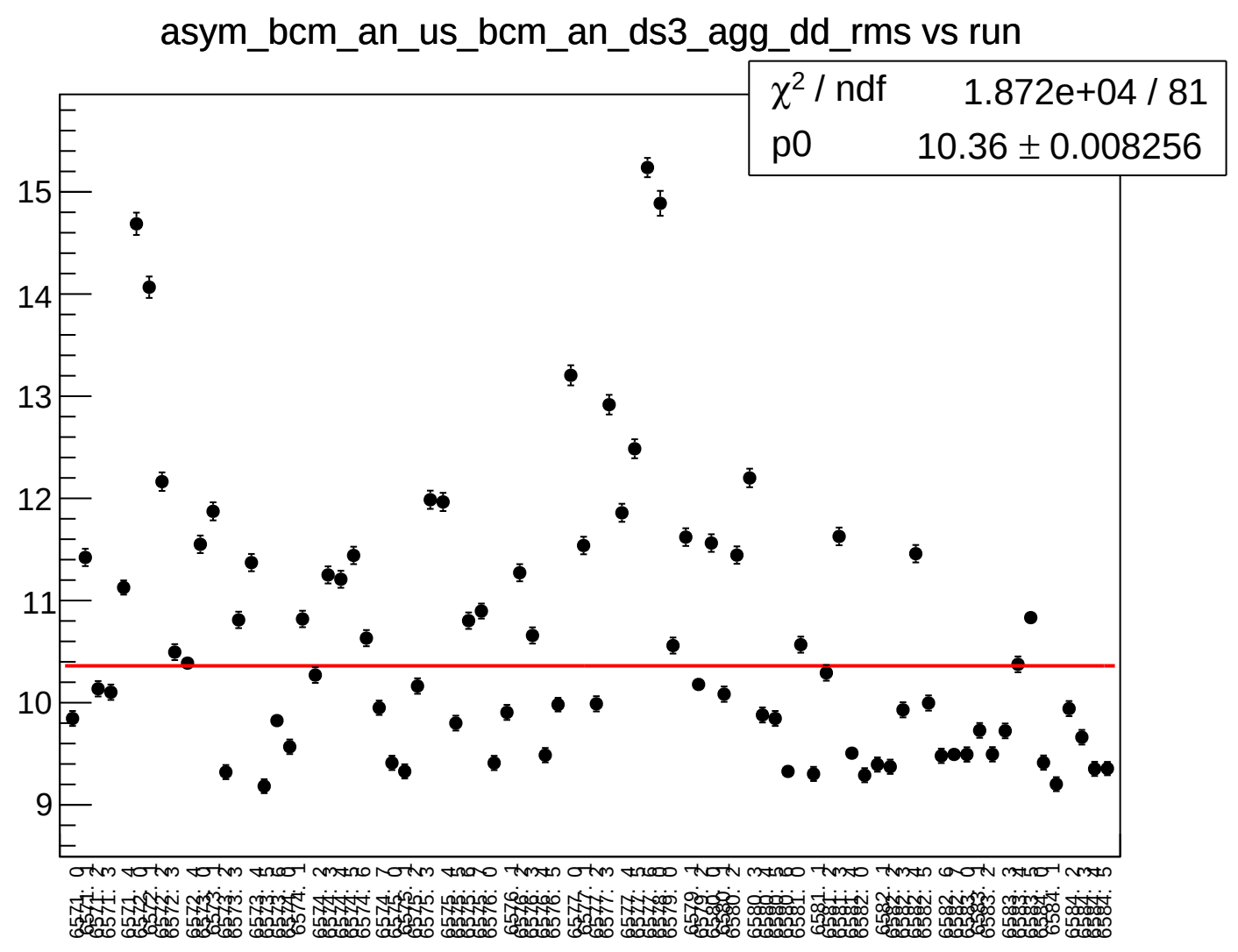

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 16.18 / 81
p0 55.79 ± 265.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 5.852
Std Dev 55.55
1
0.5
0
−0.5
−1

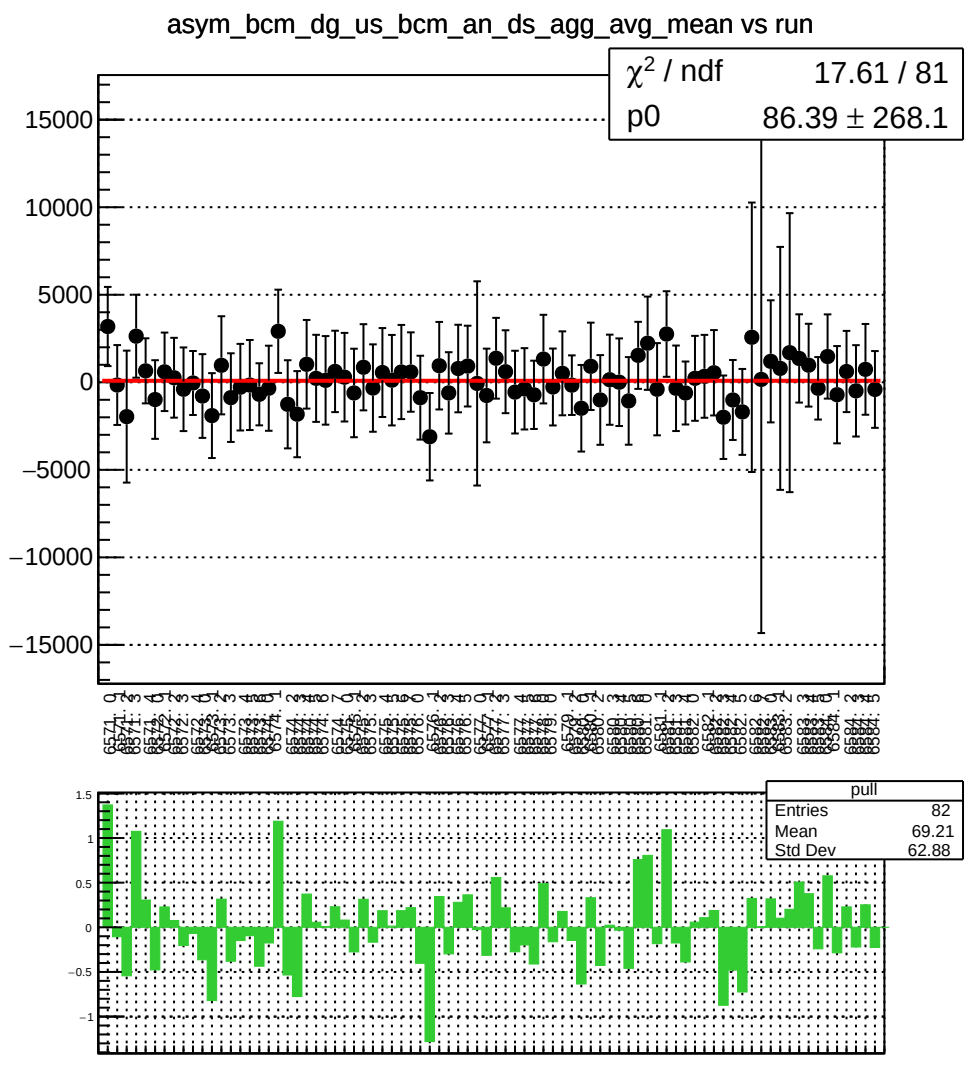

pull1D
Entries 82
Mean 0.006013
Std Dev 0.4442
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

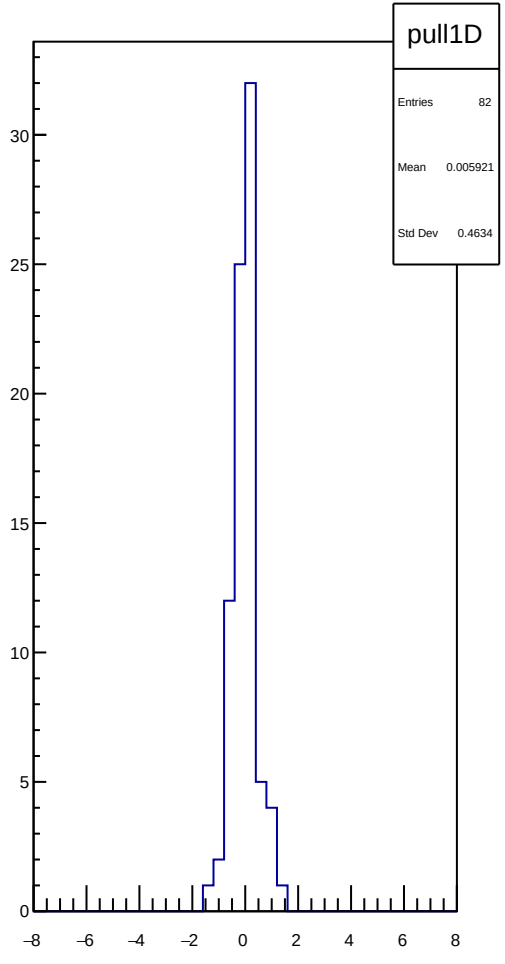

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 5.313e+04 / 81
p0 232.9 ± 0.1876
1600
1400
1200
1000
800
600
400
200

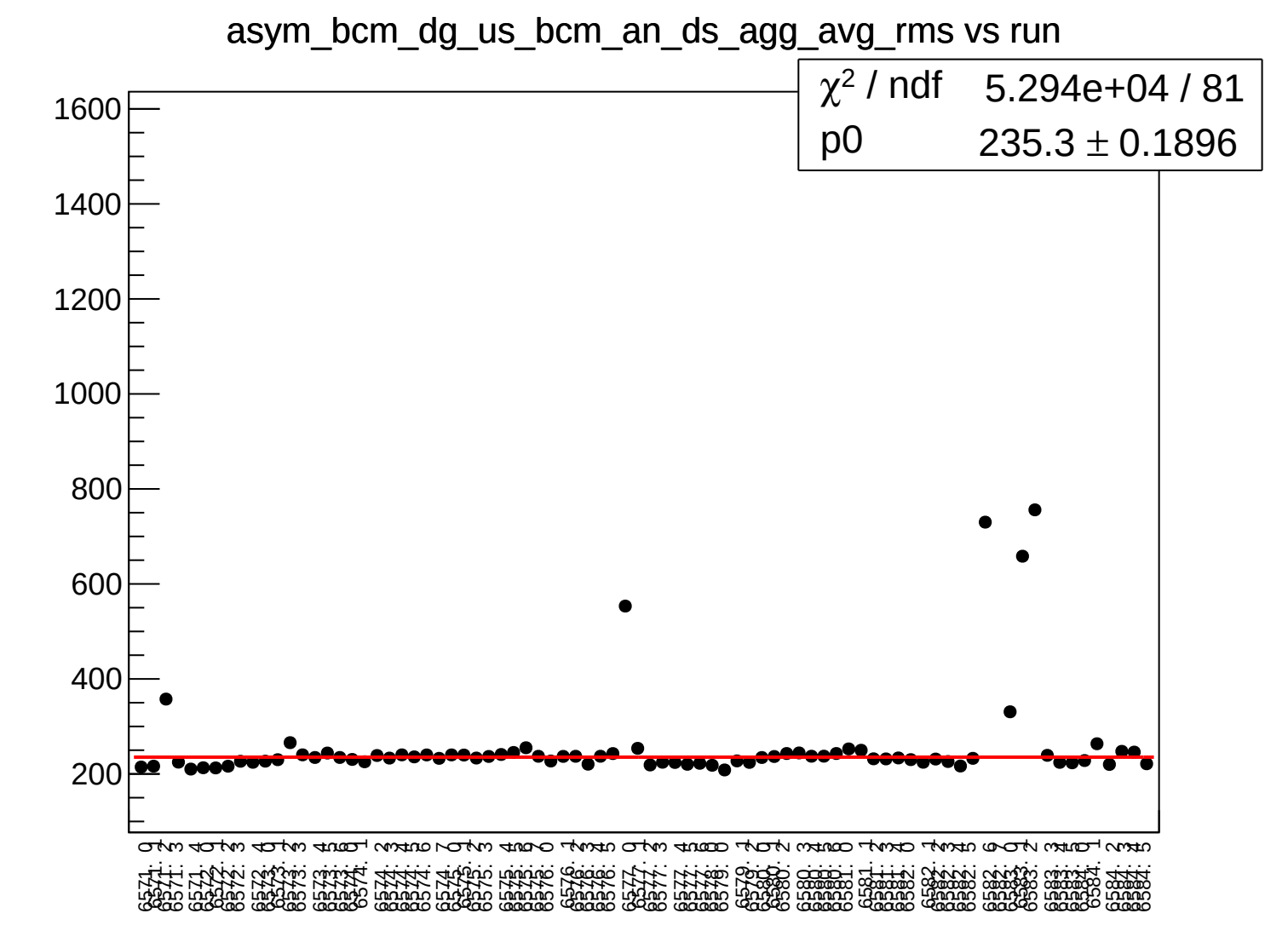

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 94.55 / 81
p0 −11.37 ± 11.68
400
200
0
−200
−400
pull
Entries 82
Mean −24.62
Std Dev 46.97
3
2
1
0
−1
−2

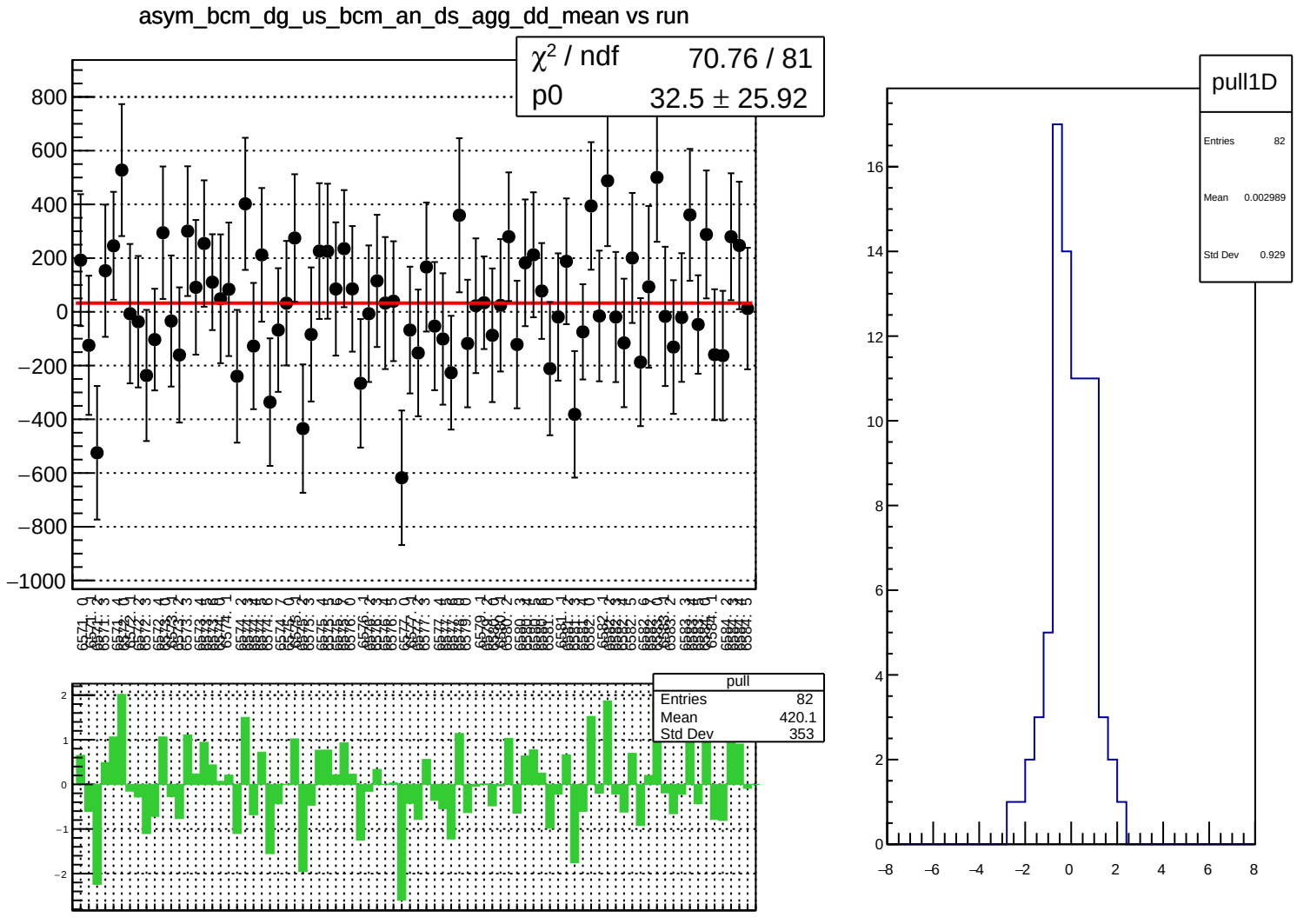

pull1D
Entries 82
Mean 0.02315
Std Dev 1.074
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

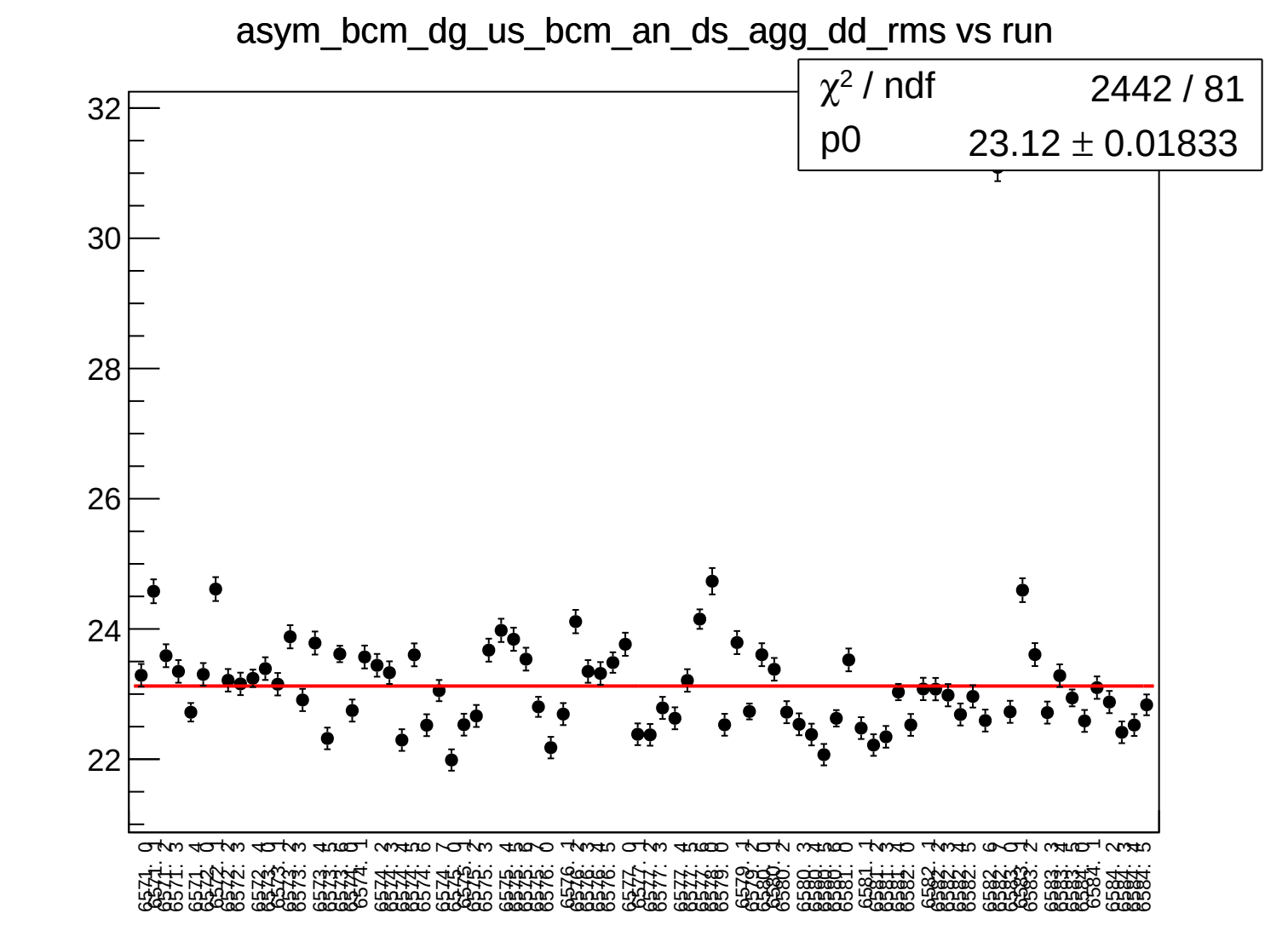

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 1.872e+04 / 81
p0 10.36 ± 0.008256
15
14
13
12
11
10
9

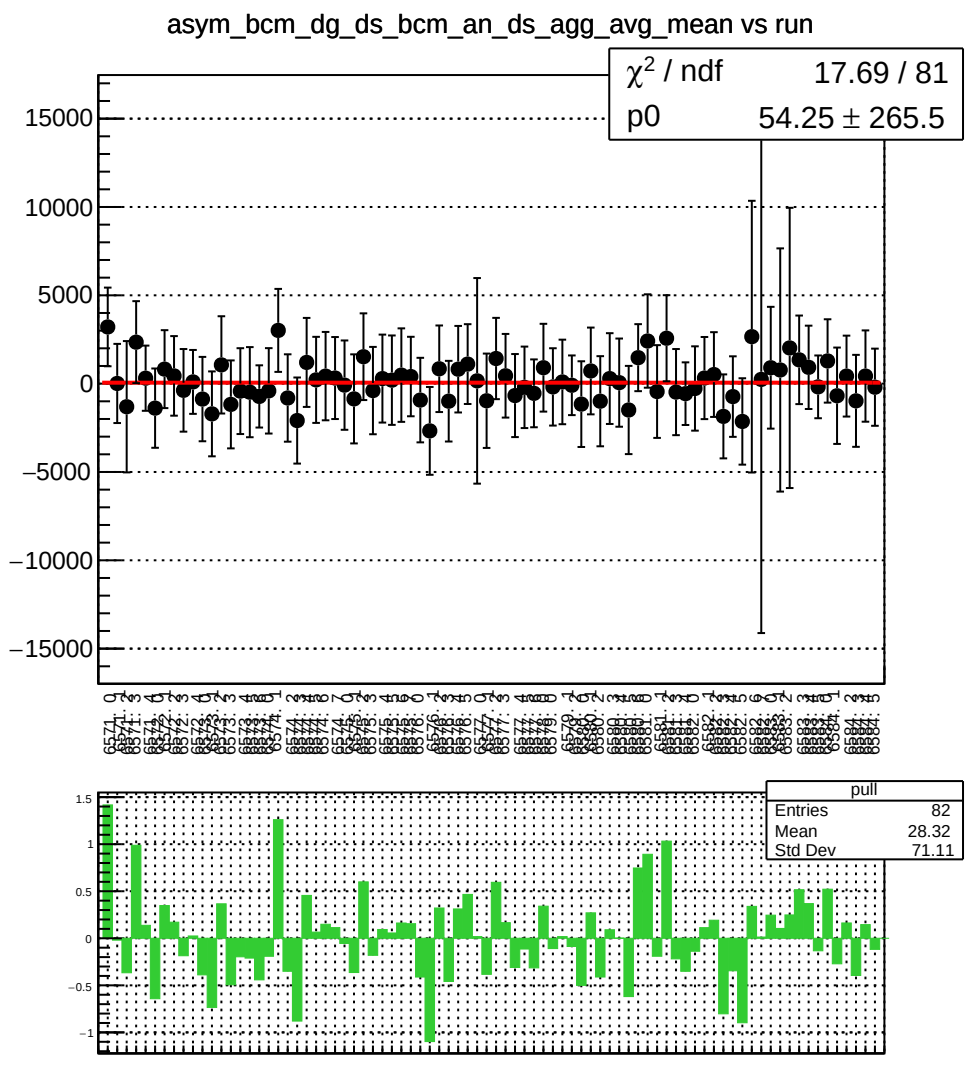

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.61 / 81
p0 86.39 ± 268.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 69.21
Std Dev 62.88
1.5
1
0.5
0
−0.5
−1

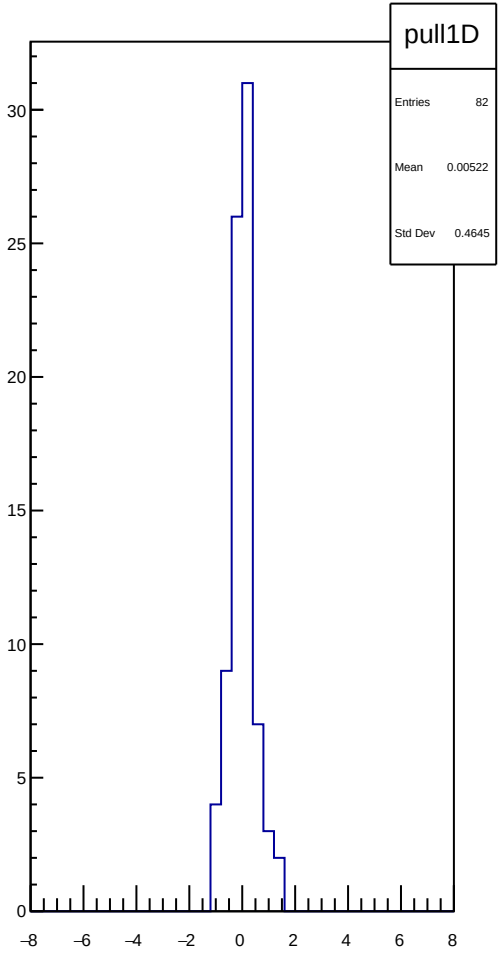

pull1D
Entries 82
Mean 0.005921
Std Dev 0.4634
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

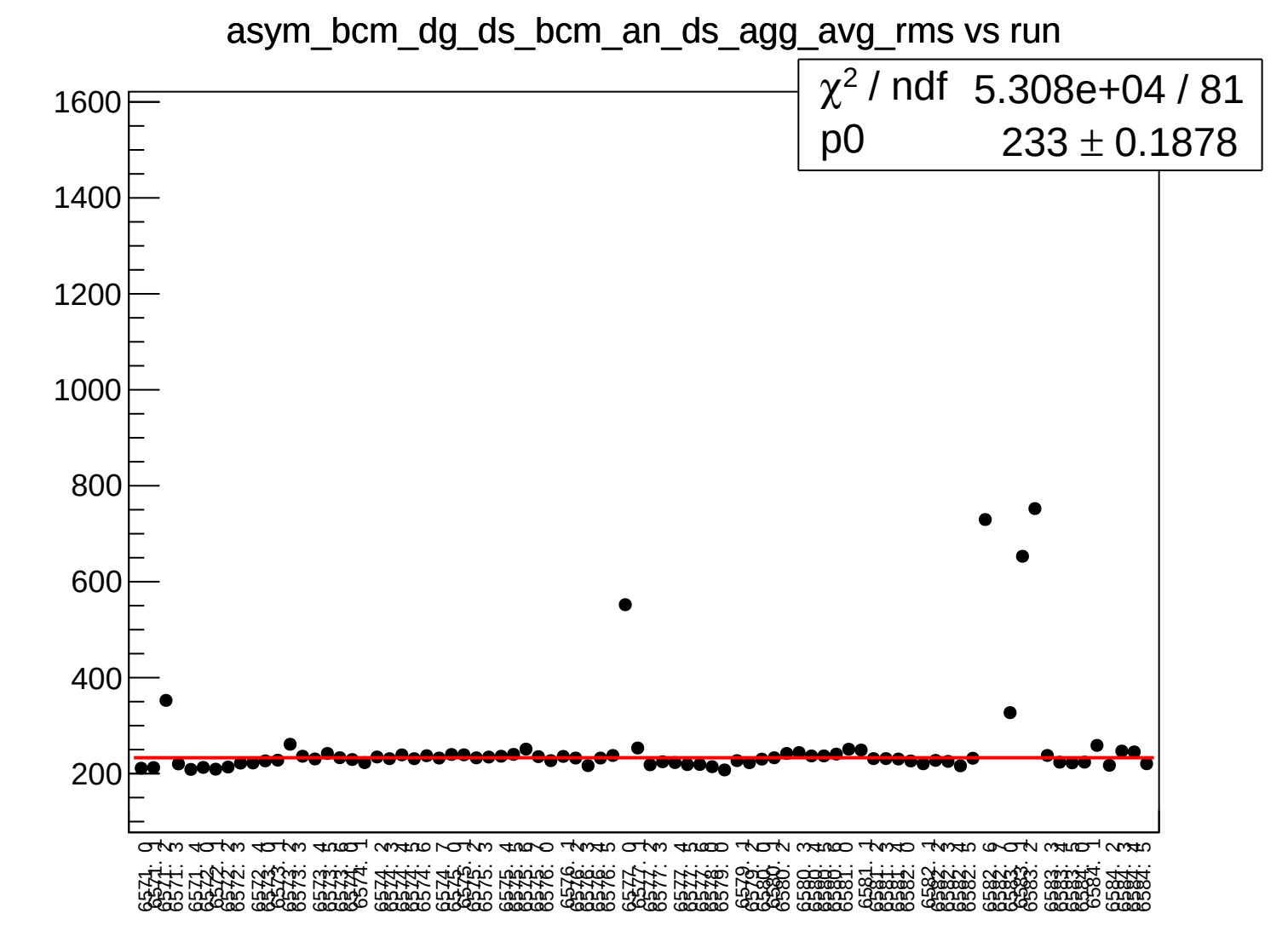

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 5.294e+04 / 81
p0 235.3 ± 0.1896
1600
1400
1200
1000
800
600
400
200

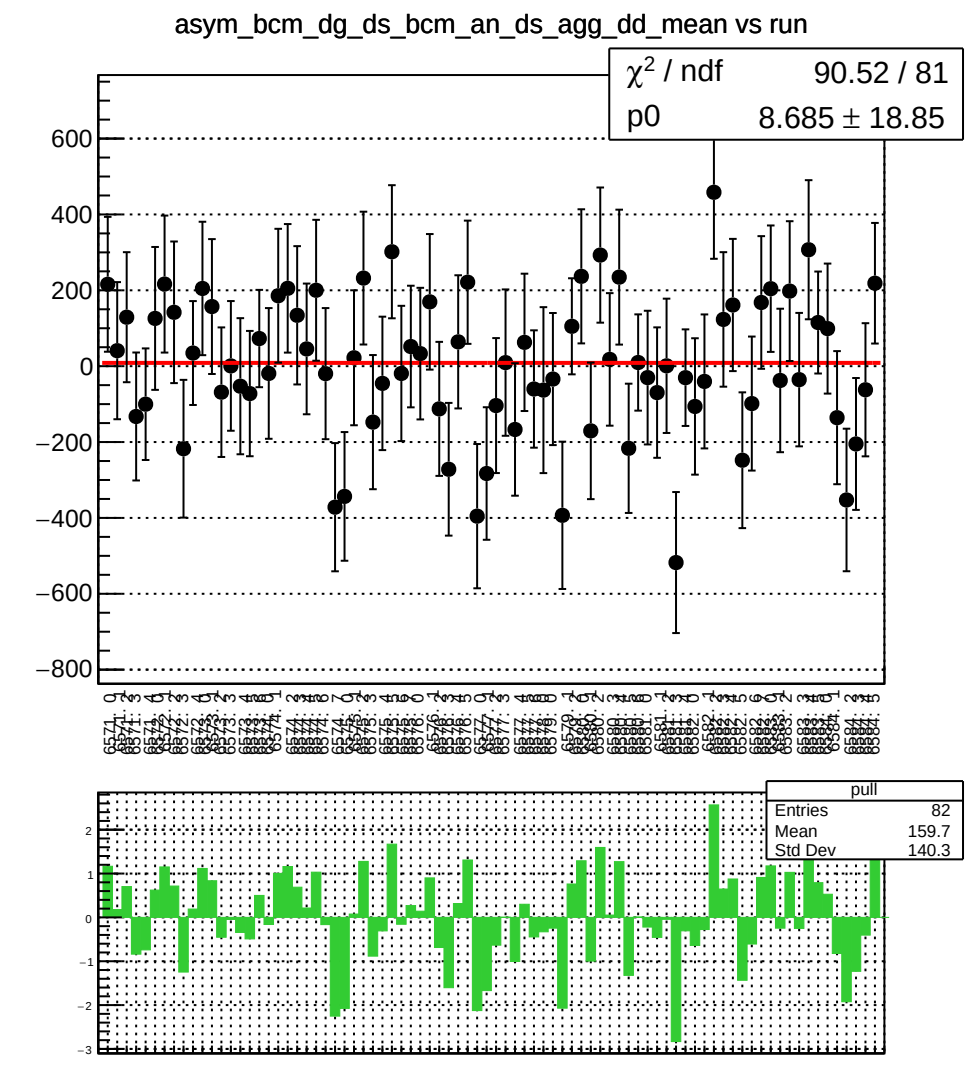

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 70.76 / 81
p0 32.5 ± 25.92
pull
Entries 82
Mean 420.1
Std Dev 353
pull1D
Entries 82
Mean 0.002989
Std Dev 0.929

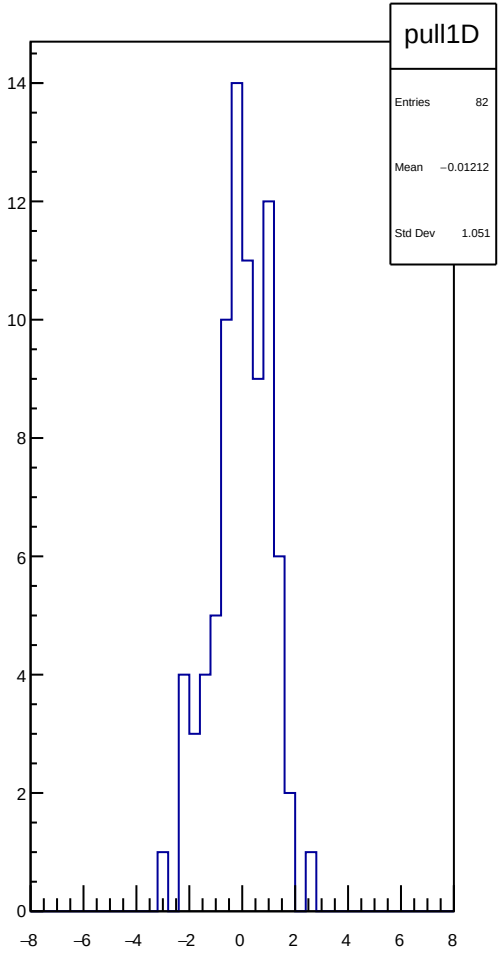

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2442 / 81
p0 23.12 ± 0.01833
32
30
28
26
24
22

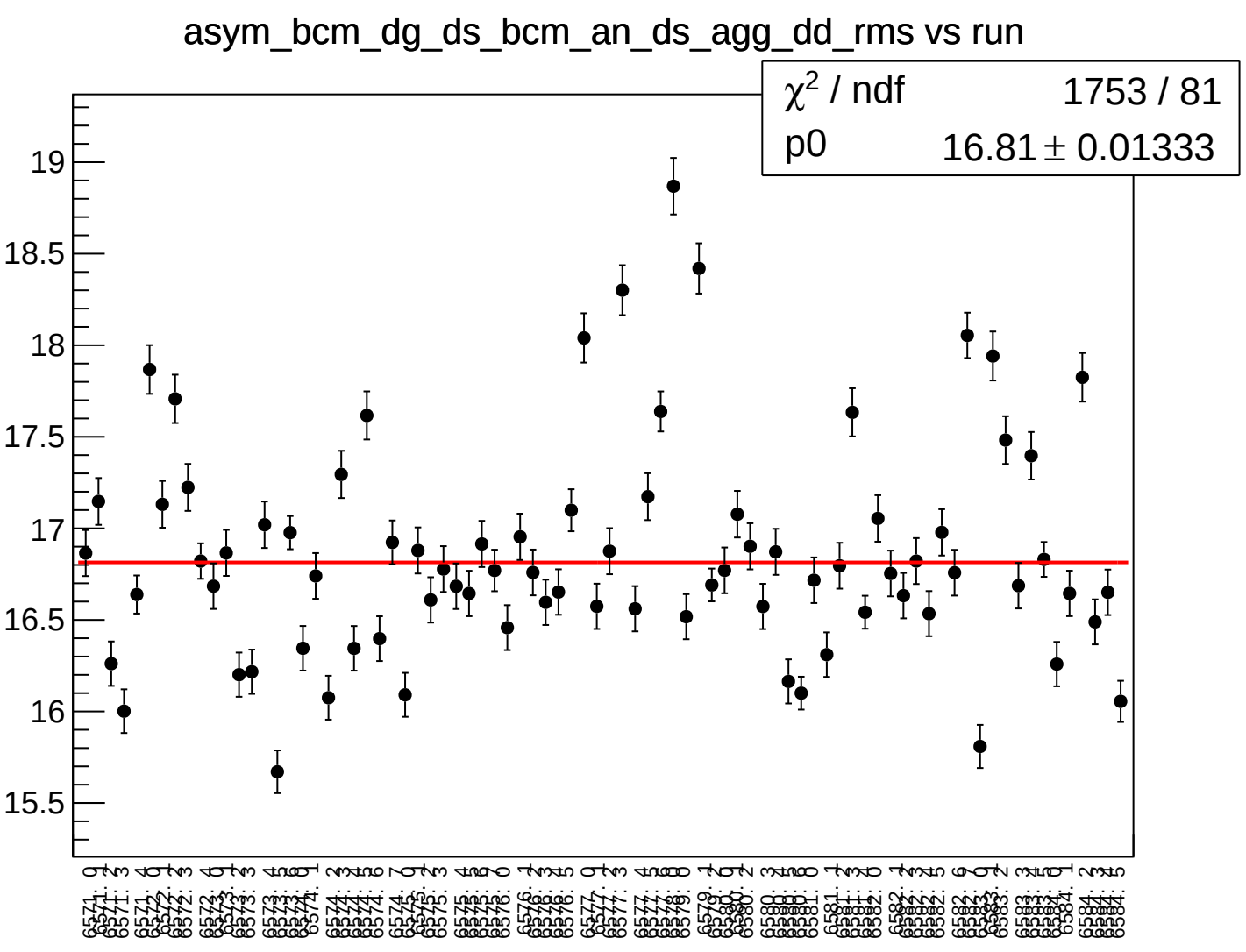

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 17.69 / 81
p0 54.25 ± 265.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 28.32
Std Dev 71.11
1.5
1
0.5
0
−0.5
−1

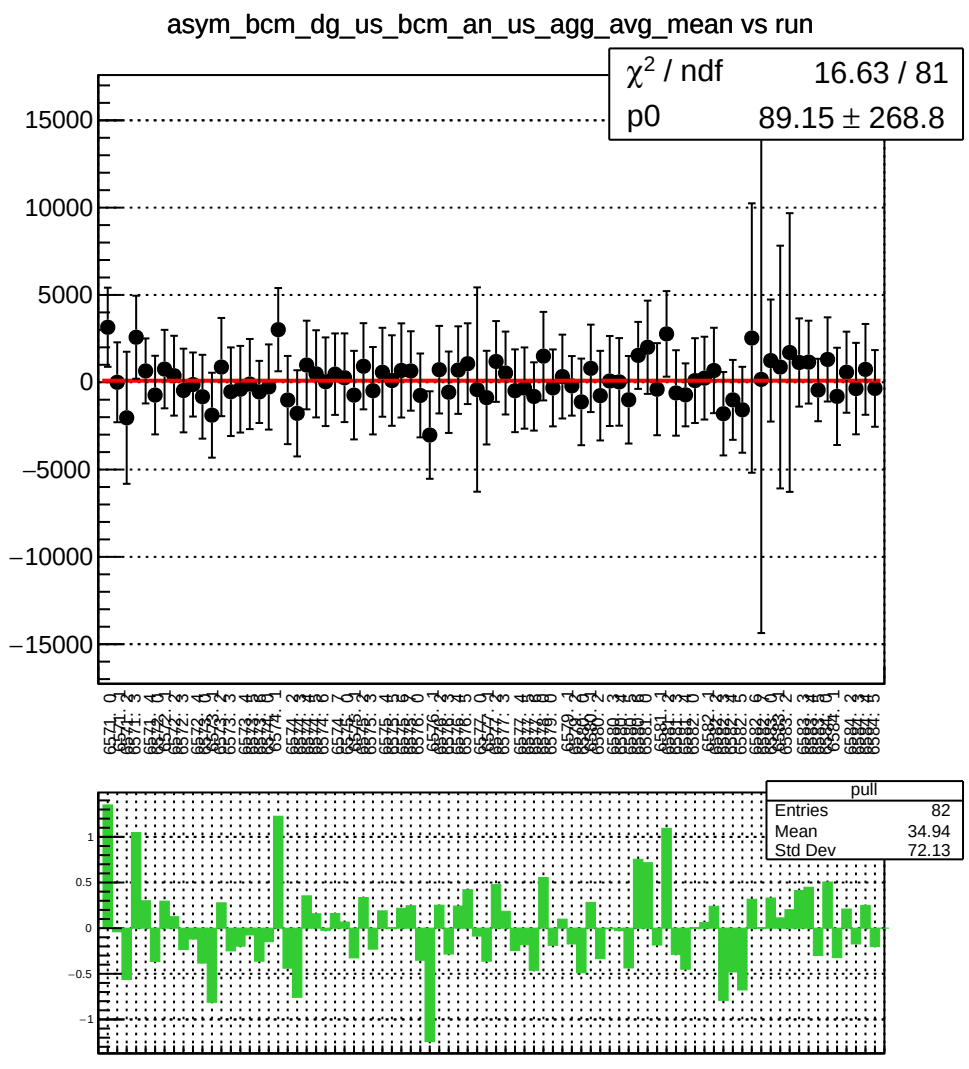

pull1D
Entries 82
Mean 0.00522
Std Dev 0.4645
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

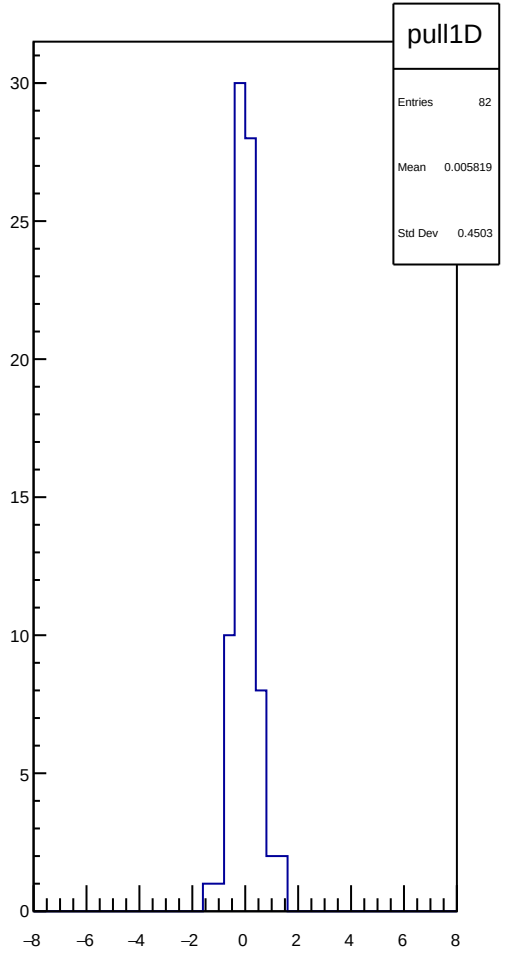

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 5.308e+04 / 81
p0 233 ± 0.1878
1600
1400
1200
1000
800
600
400
200

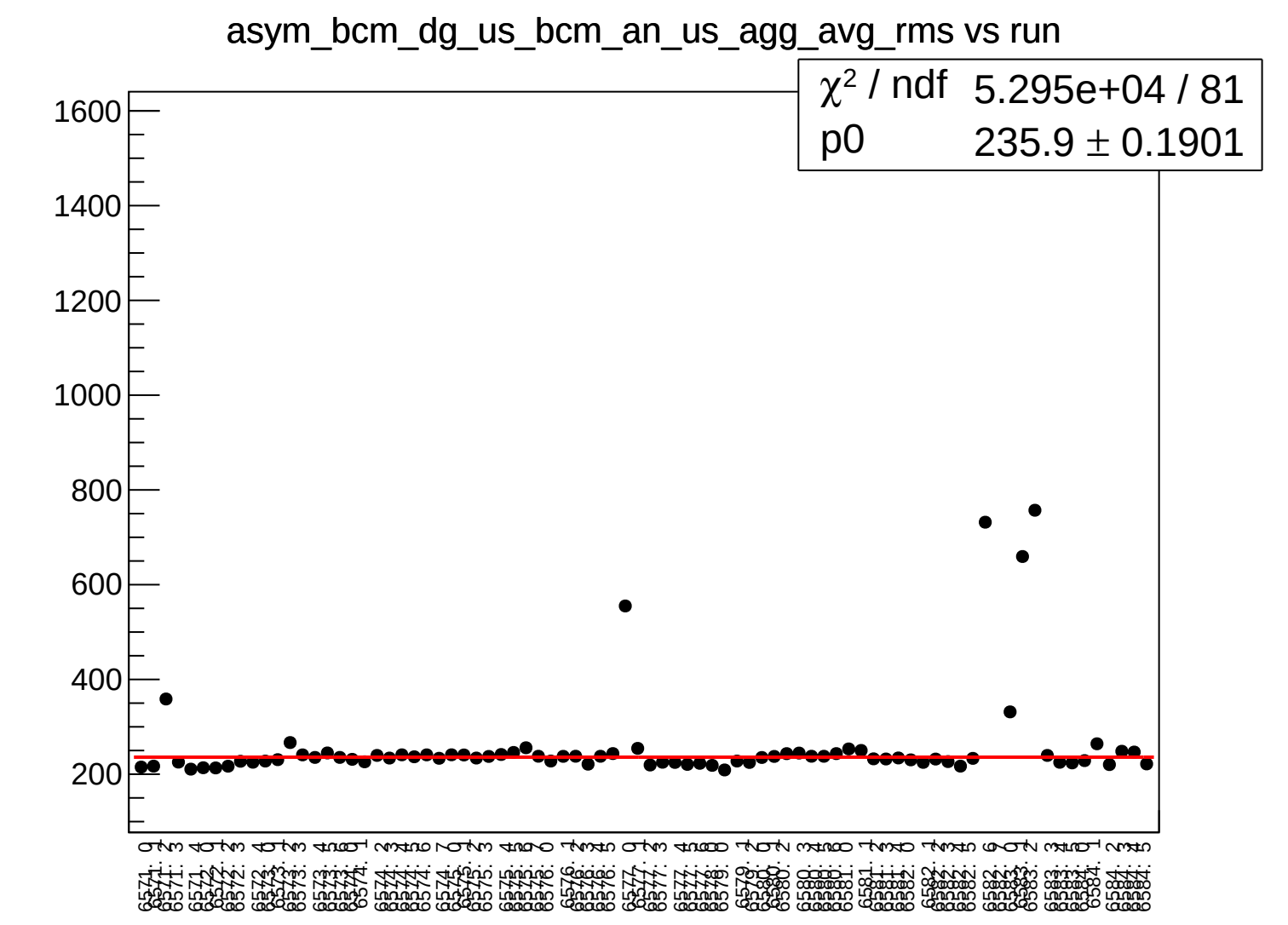

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 90.52 / 81
p0 8.685 ± 18.85
pull
Entries 82
Mean 159.7
Std Dev 140.3

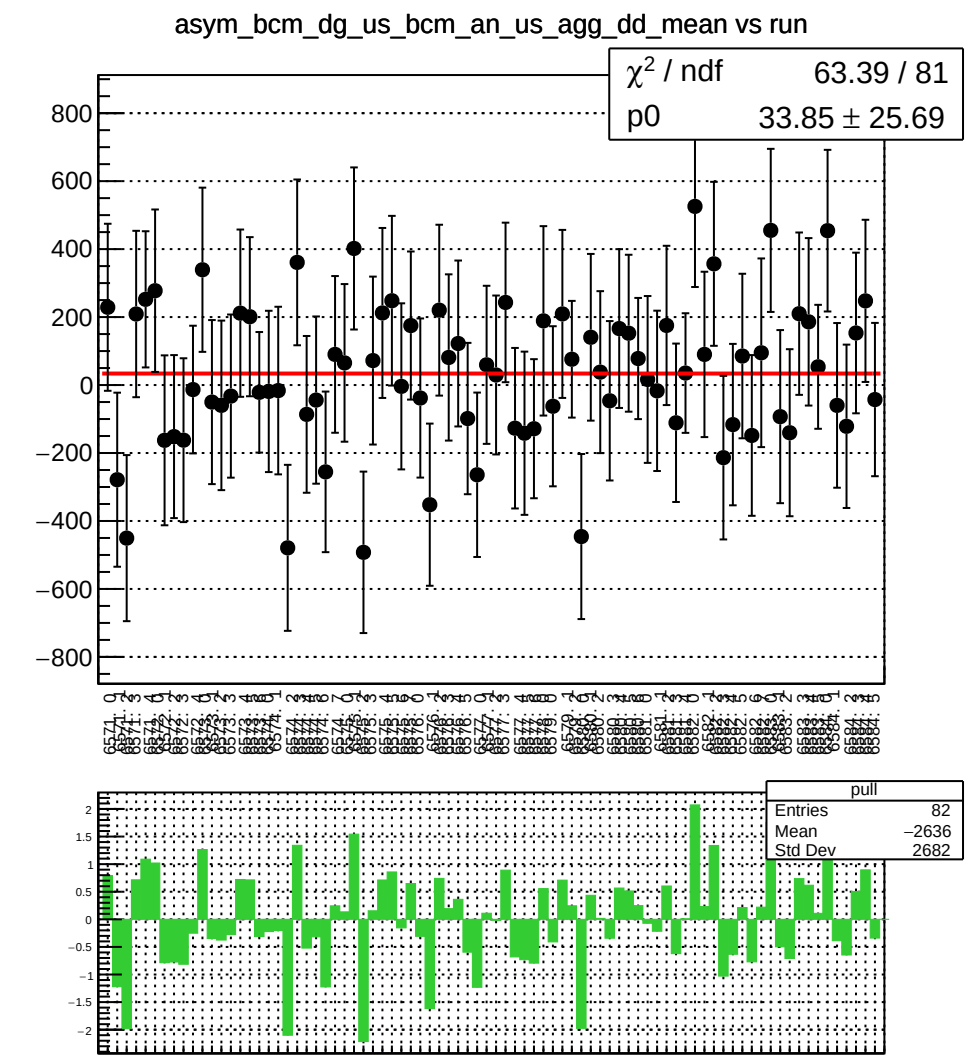

pull1D
Entries 82
Mean −0.01212
Std Dev 1.051

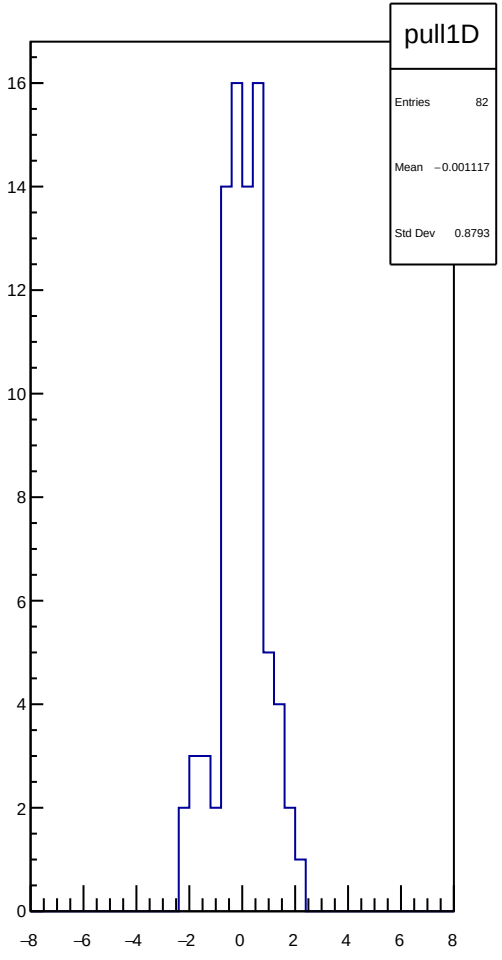

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
$\chi^2$ / ndf 1753 / 81
p0 16.81 ± 0.01333
19
18.5
18
17.5
17
16.5
16
15.5

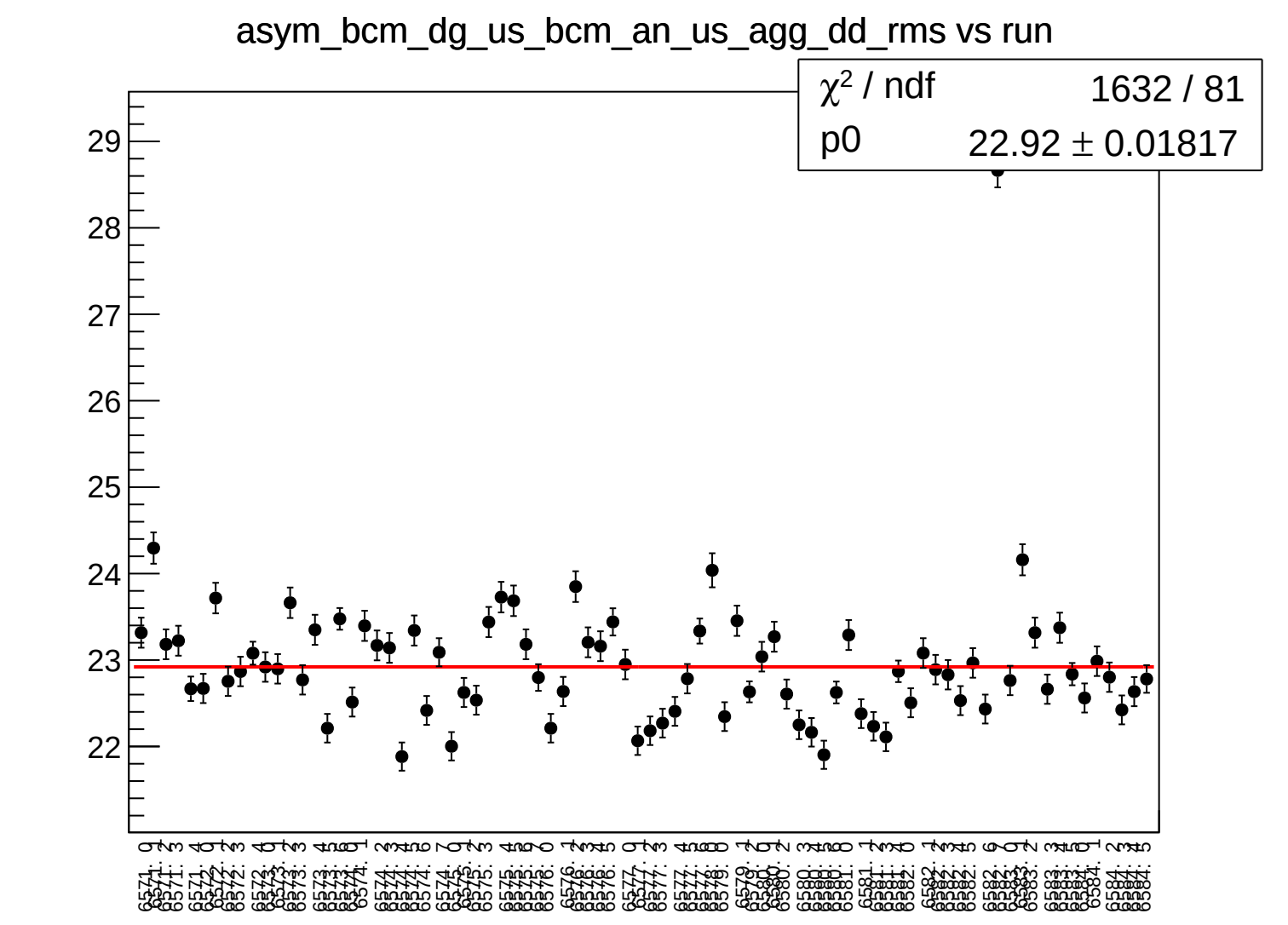

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.63 / 81
p0 89.15 ± 268.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 34.94
Std Dev 72.13
1
0.5
0
−0.5
−1

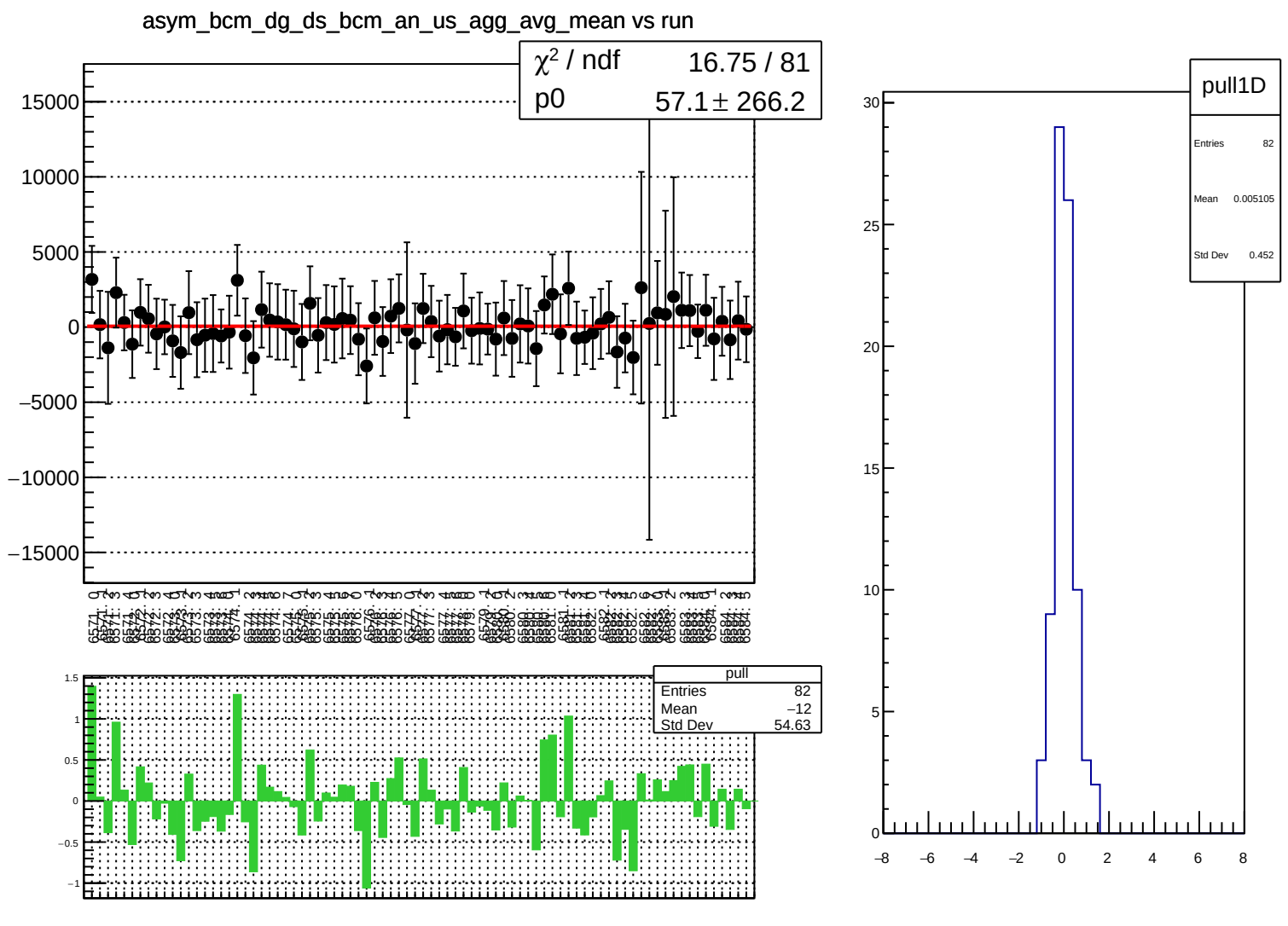

pull1D
Entries 82
Mean 0.005819
Std Dev 0.4503
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

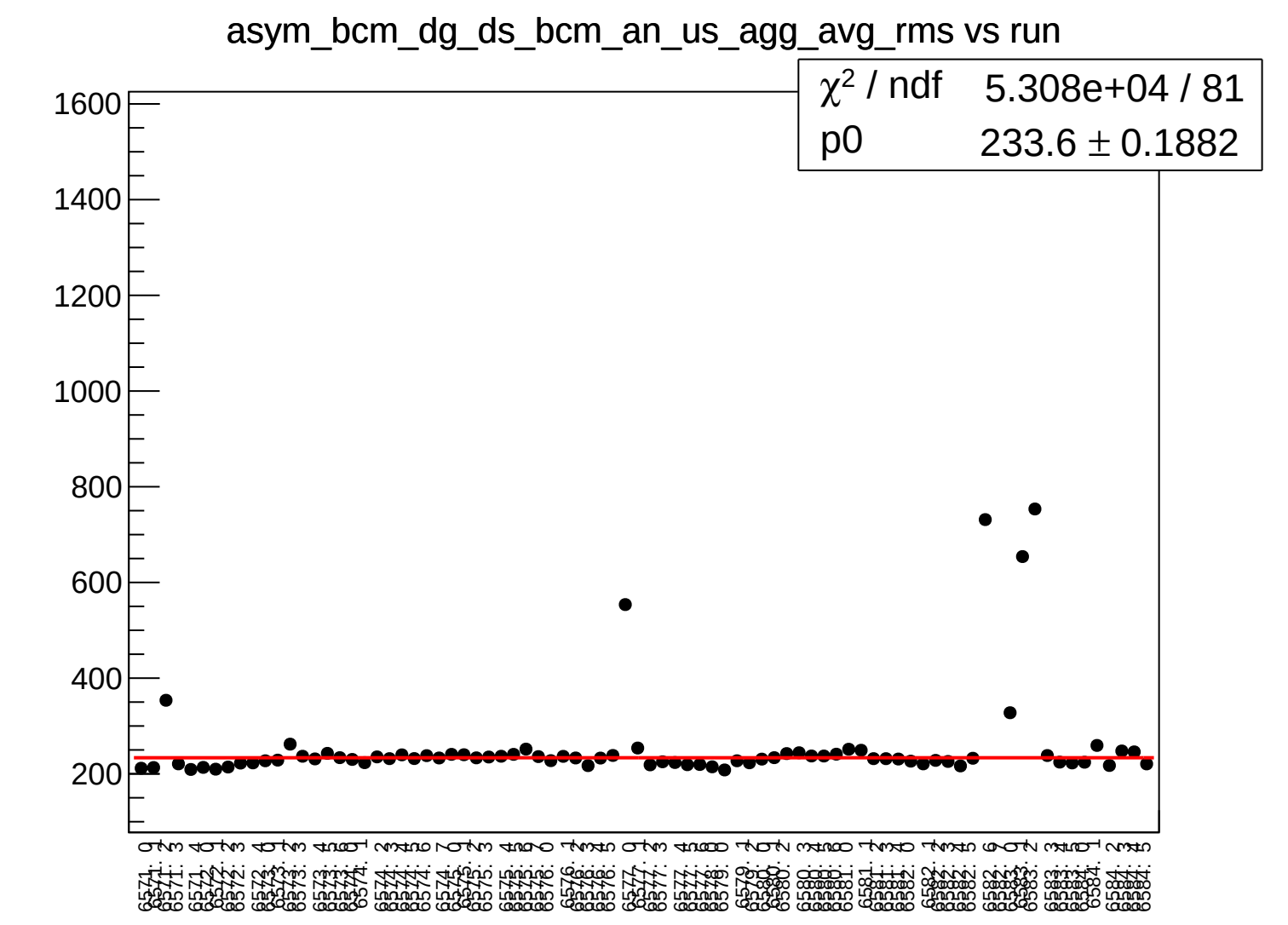

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 5.295e+04 / 81
p0 235.9 ± 0.1901
1600
1400
1200
1000
800
600
400
200

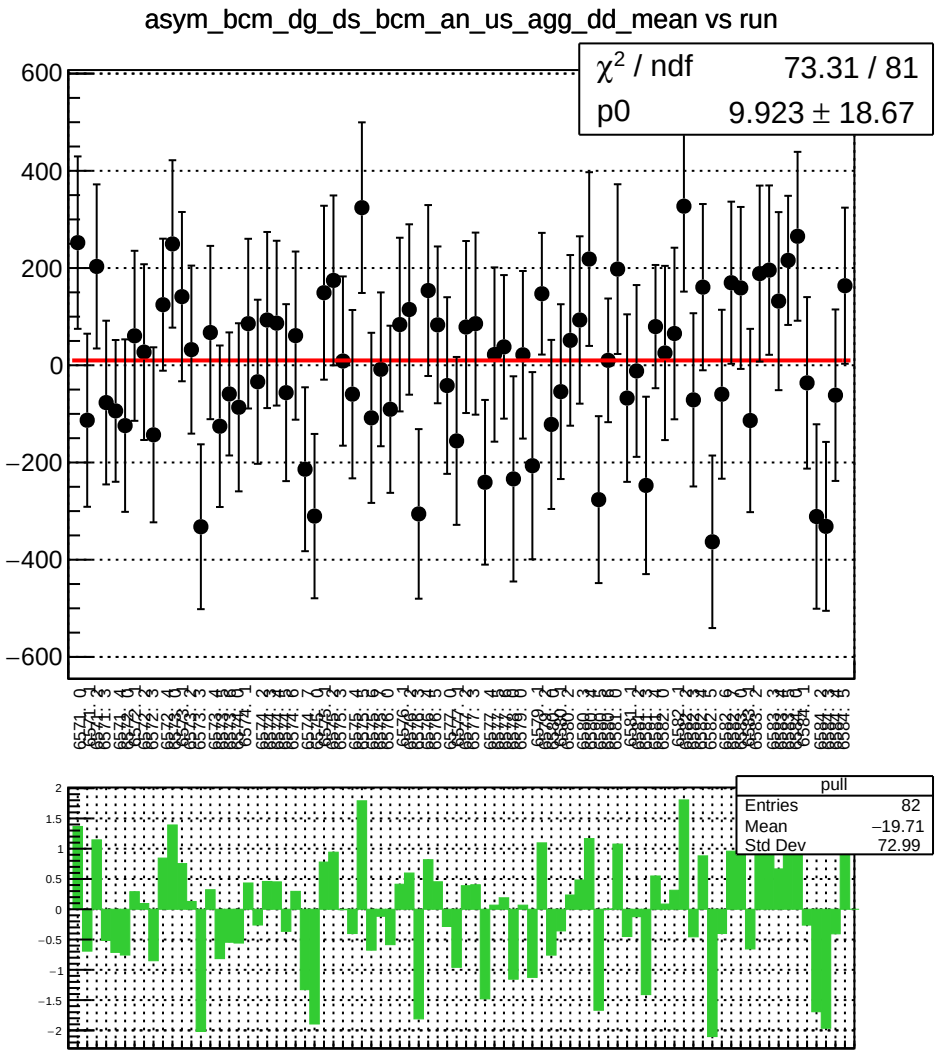

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 63.39 / 81
p0 33.85 ± 25.69
pull
Entries 82
Mean −2636
Std Dev 2682

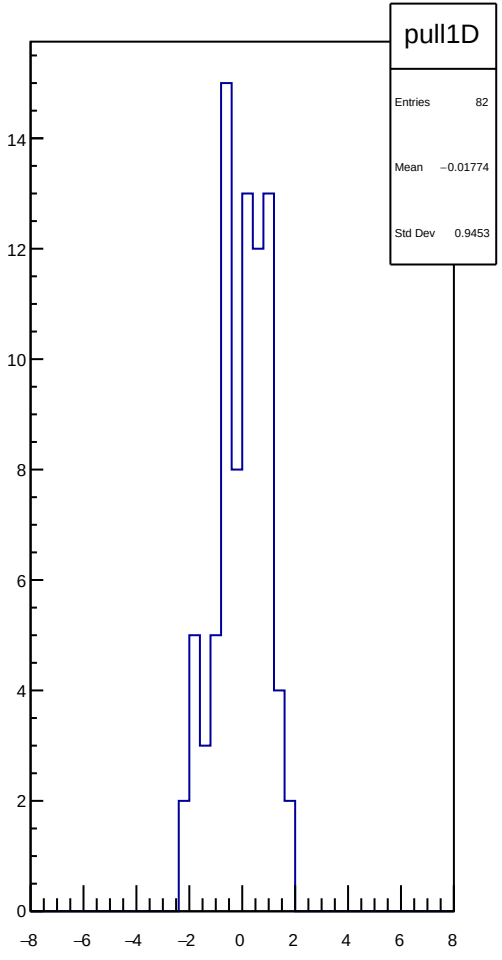

pull1D
Entries 82
Mean −0.001117
Std Dev 0.8793

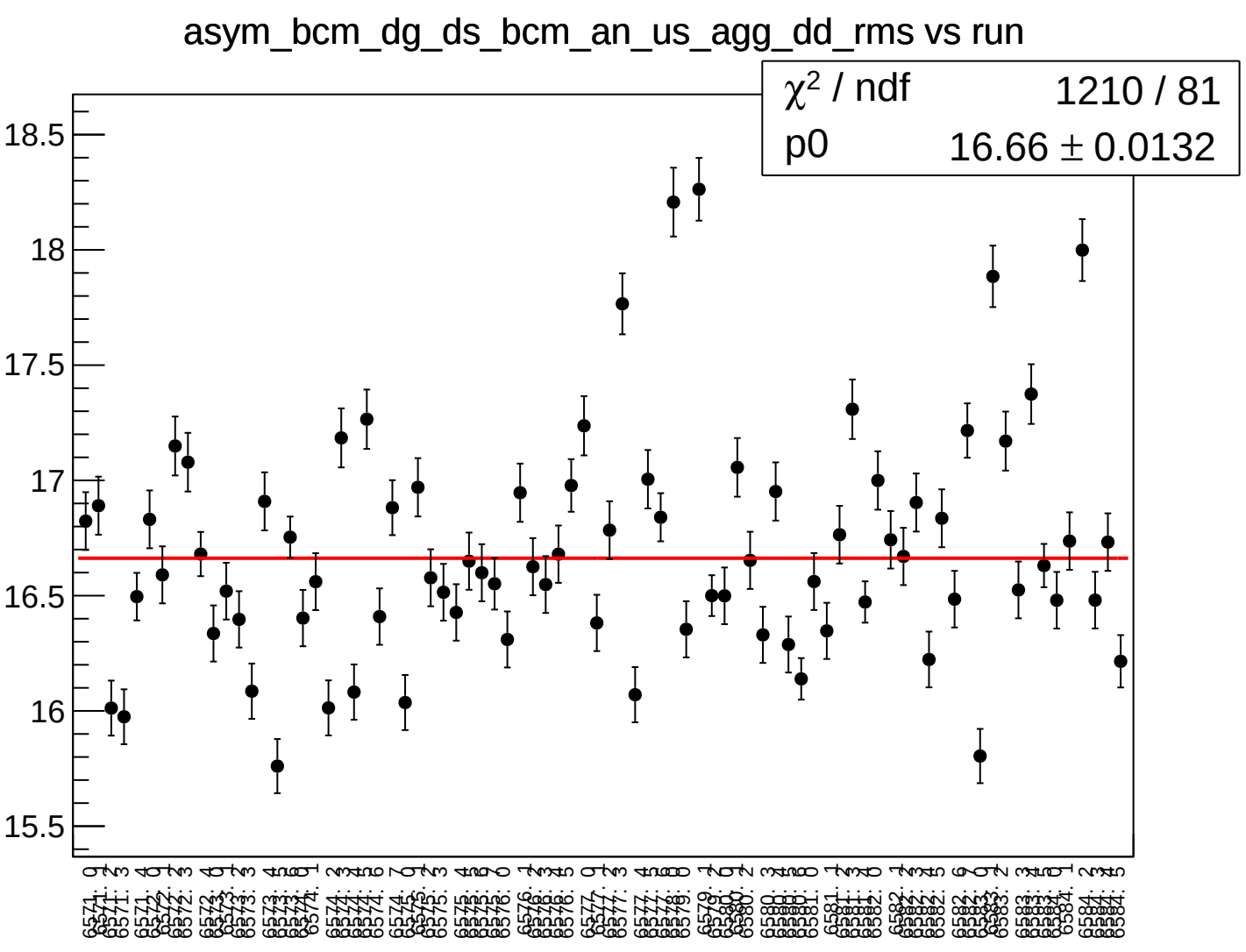

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1632 / 81
p0 22.92 ± 0.01817
29
28
27
26
25
24
23
22

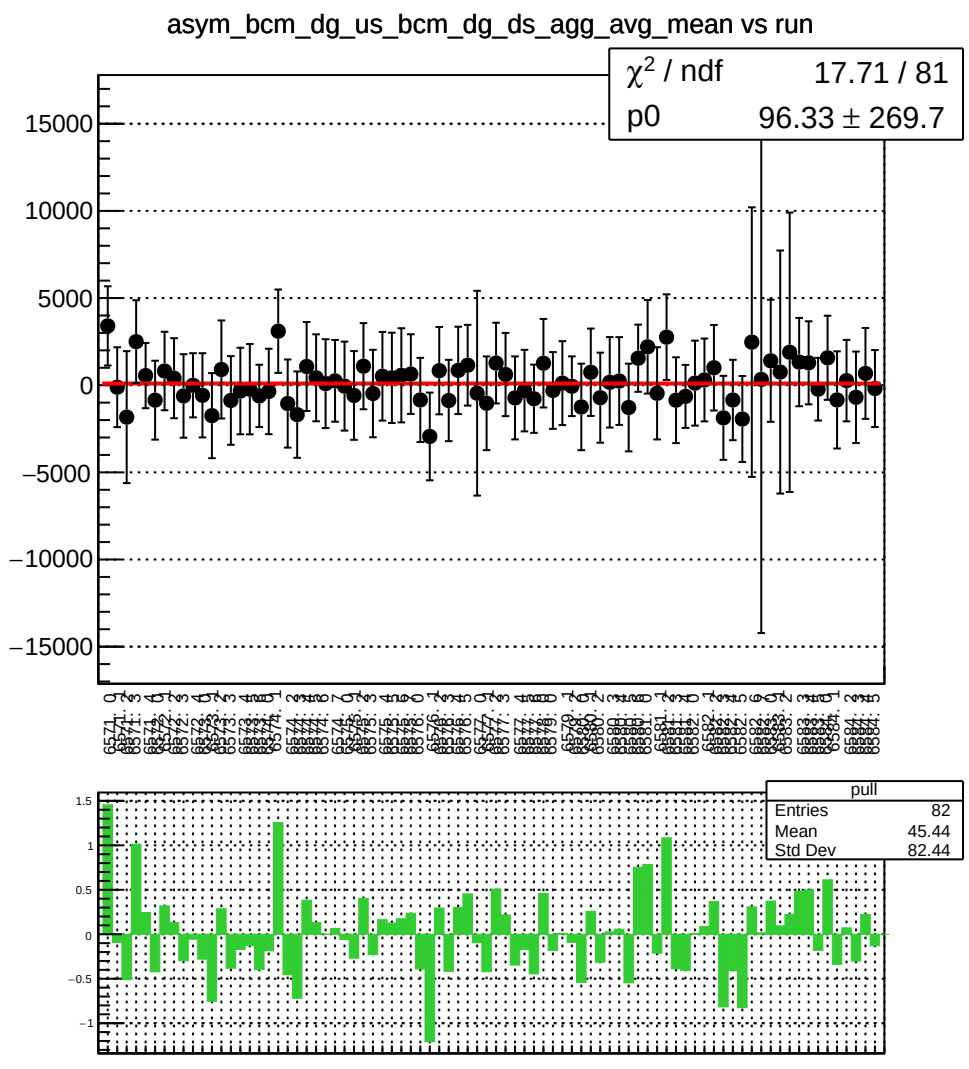

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 16.75 / 81
p0 57.1 ± 266.2
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −12
Std Dev 54.63
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 82
Mean 0.005105
Std Dev 0.452
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

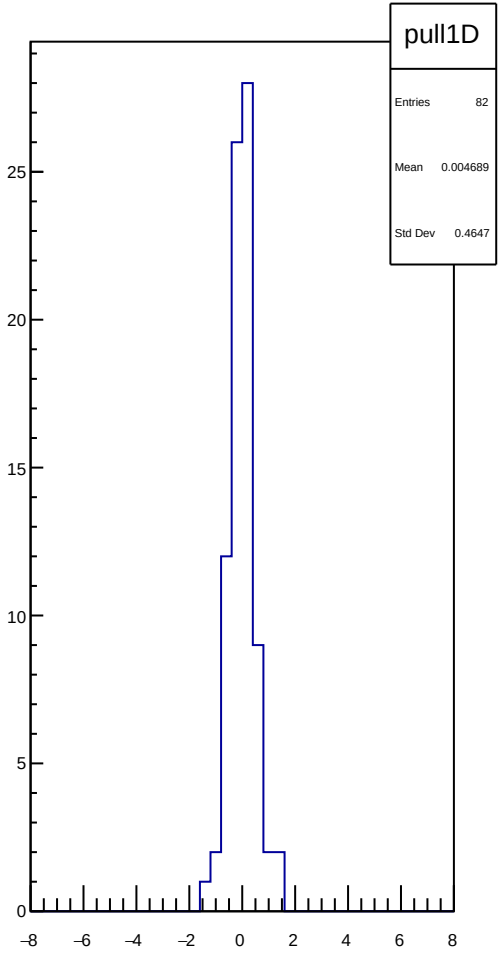

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 5.308e+04 / 81
p0 233.6 ± 0.1882
1600
1400
1200
1000
800
600
400
200

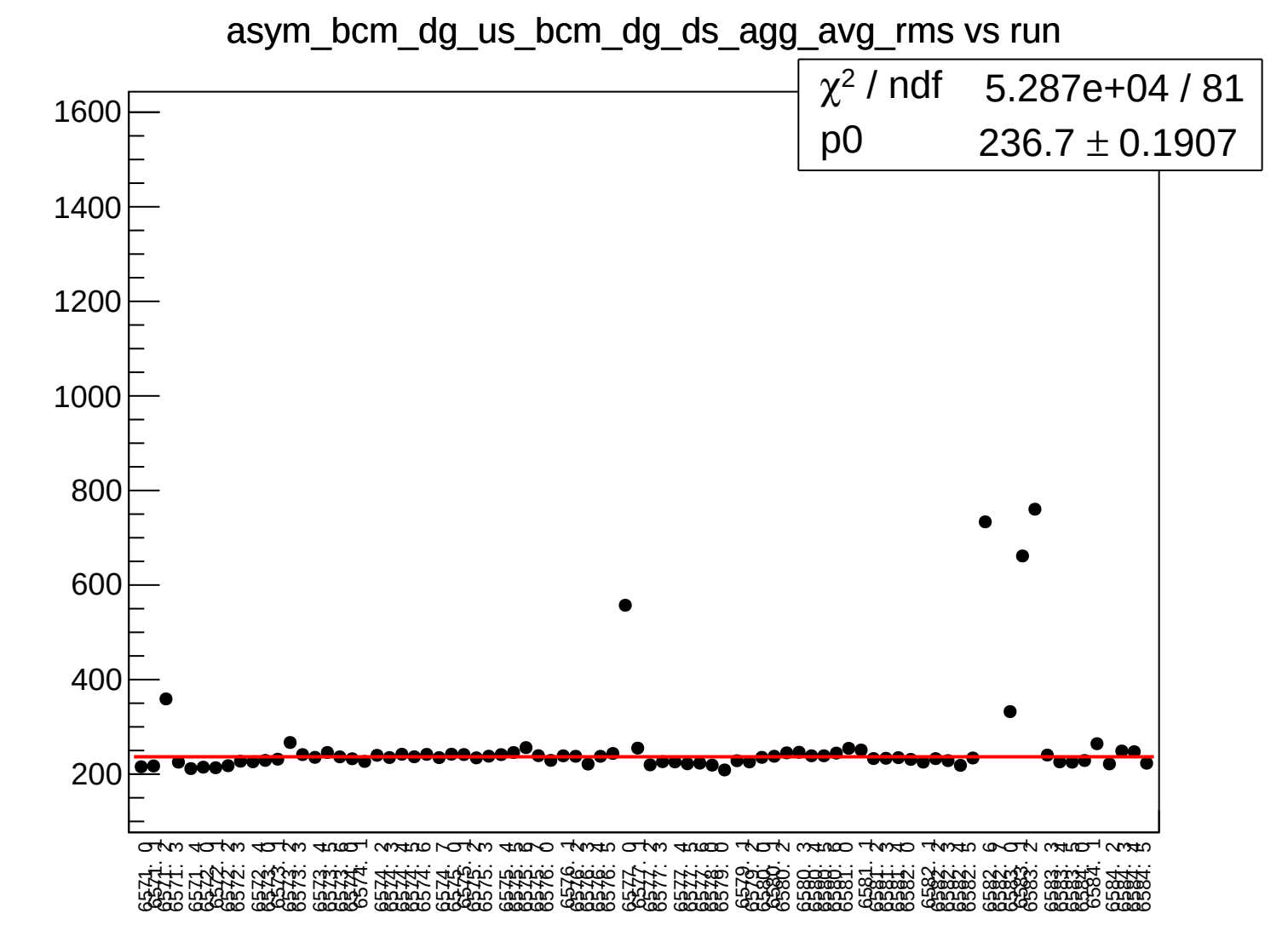

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 73.31 / 81
p0 9.923 ± 18.67
pull
Entries 82
Mean −19.71
Std Dev 72.99

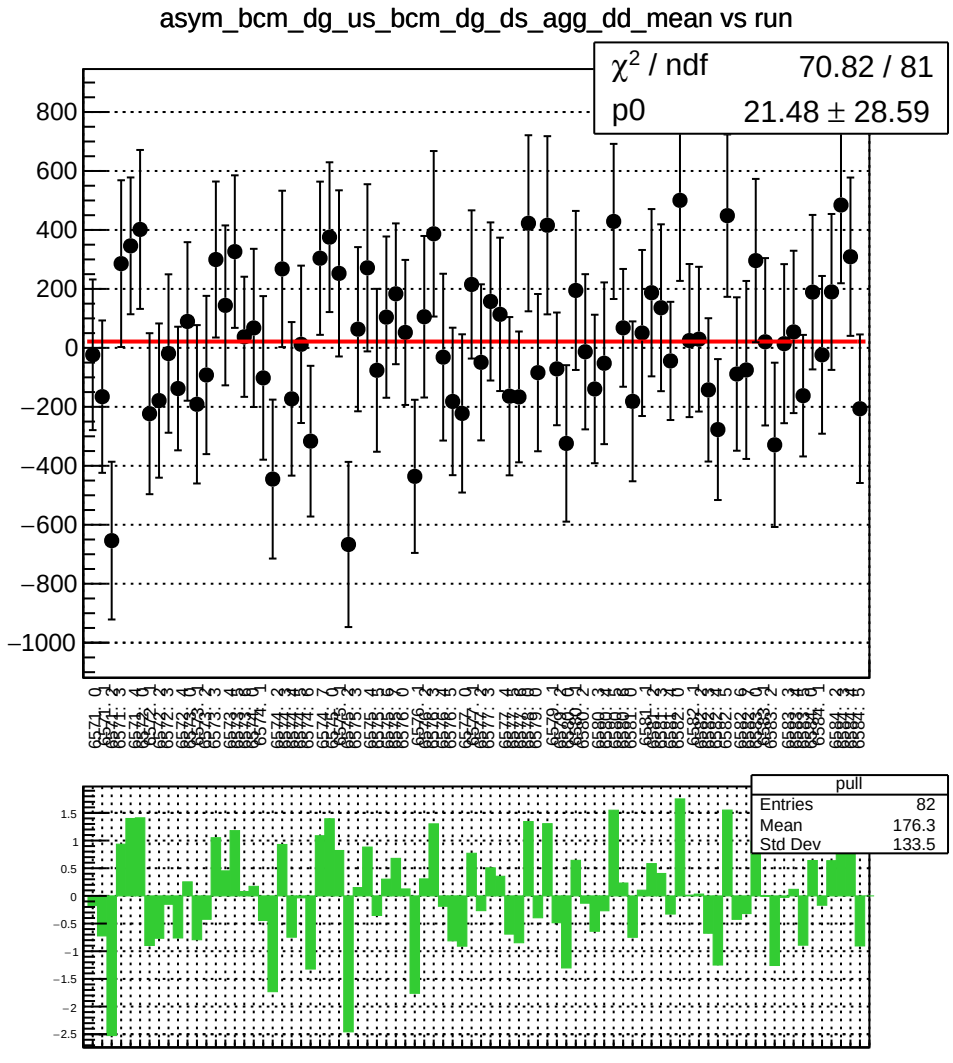

pull1D
Entries 82
Mean −0.01774
Std Dev 0.9453

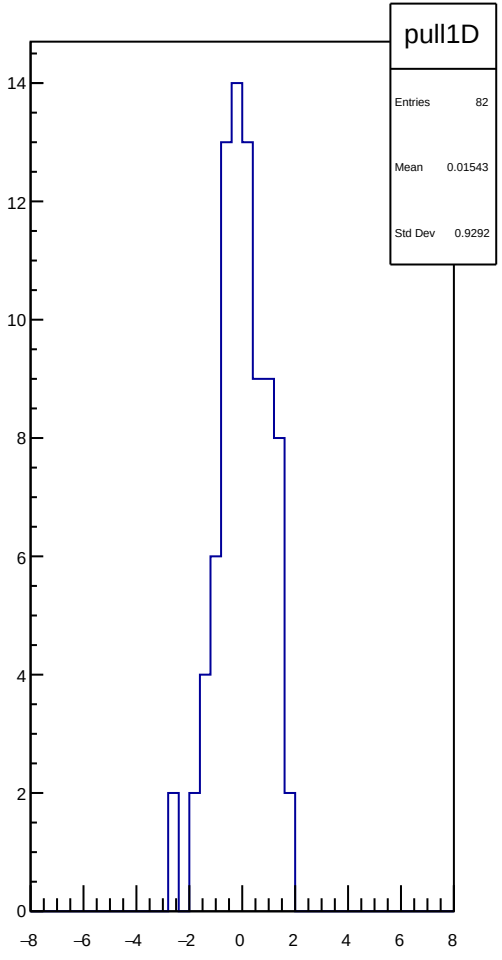

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1210 / 81
p0 16.66 ± 0.0132
18.5
18
17.5
17
16.5
16
15.5

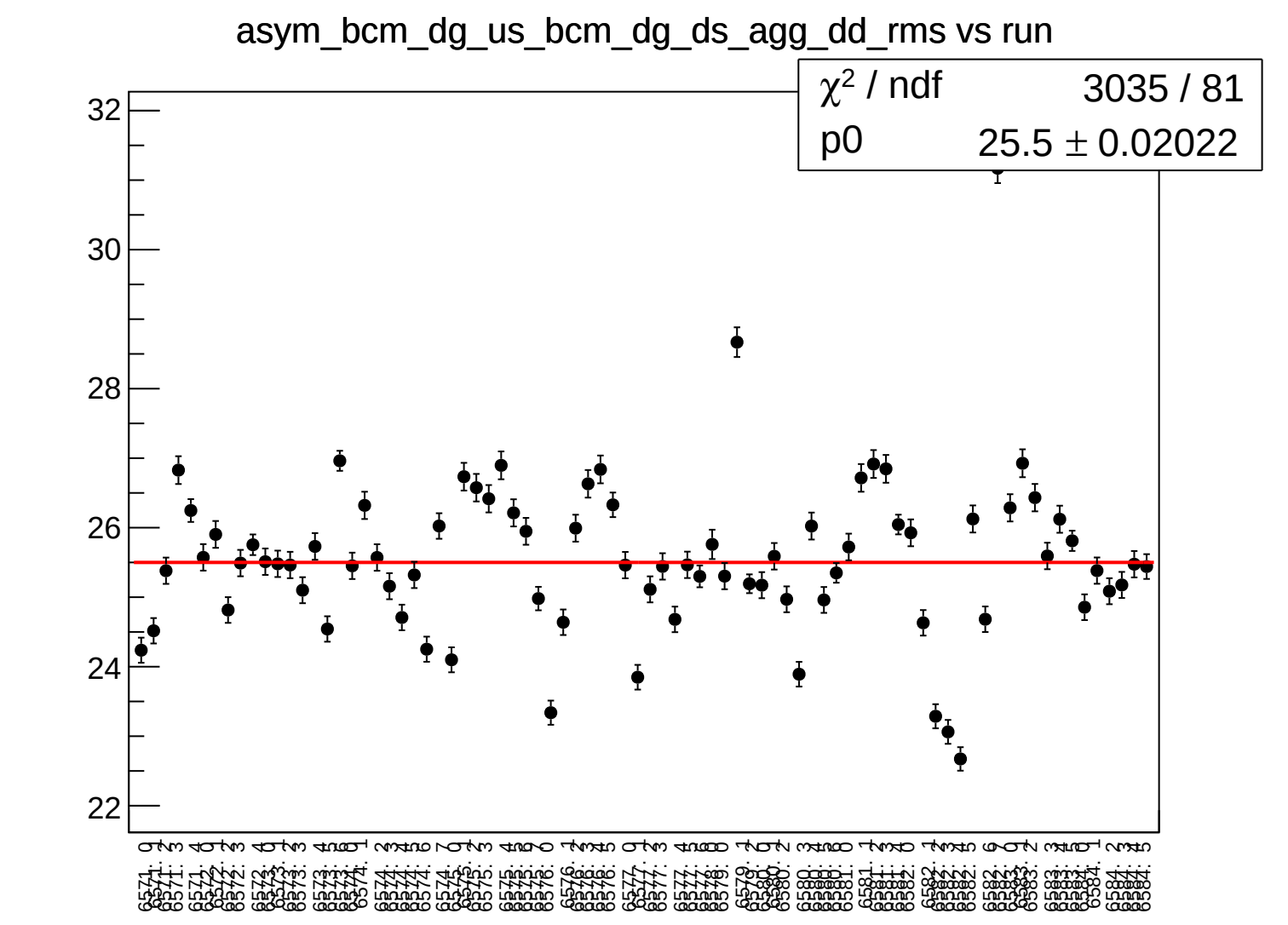

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 17.71 / 81
p0 96.33 ± 269.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 45.44
Std Dev 82.44
1.5
1
0.5
0
−0.5
−1

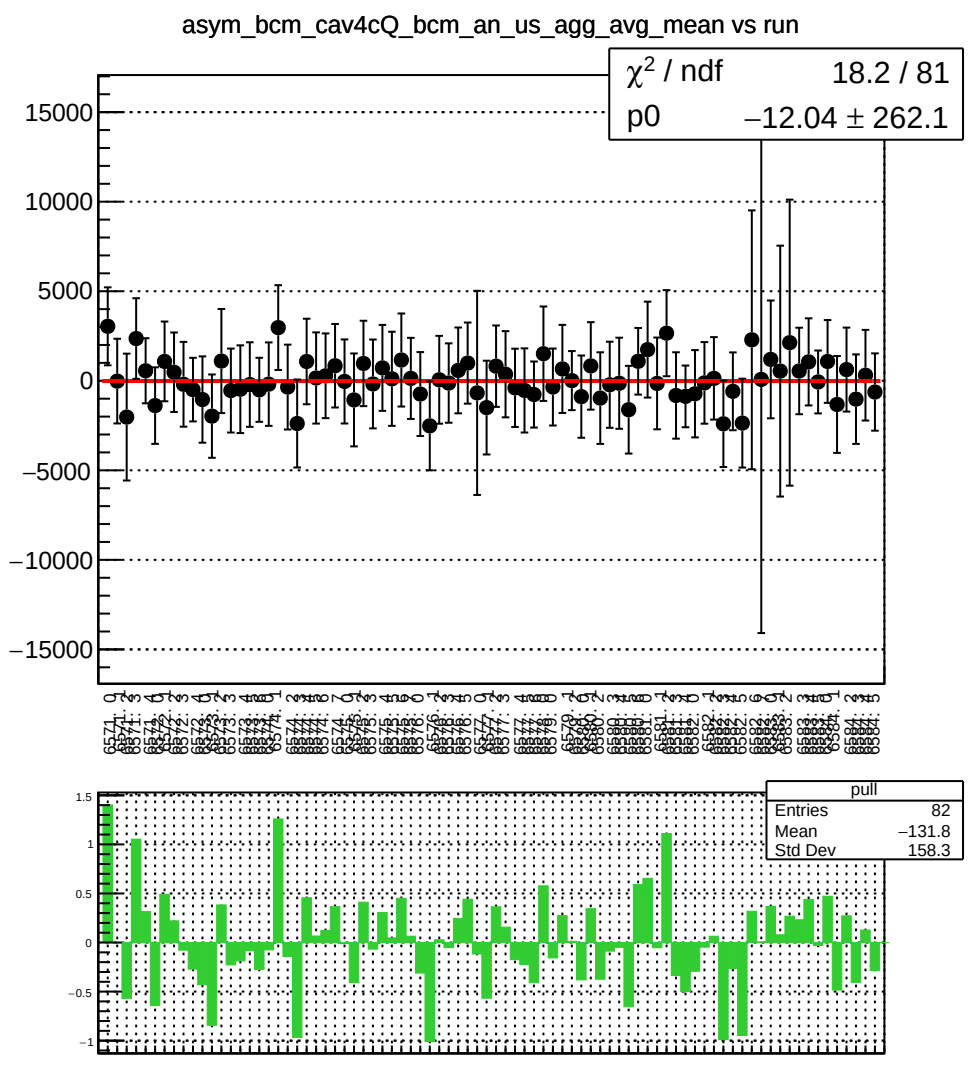

pull1D
Entries 82
Mean 0.004689
Std Dev 0.4647
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

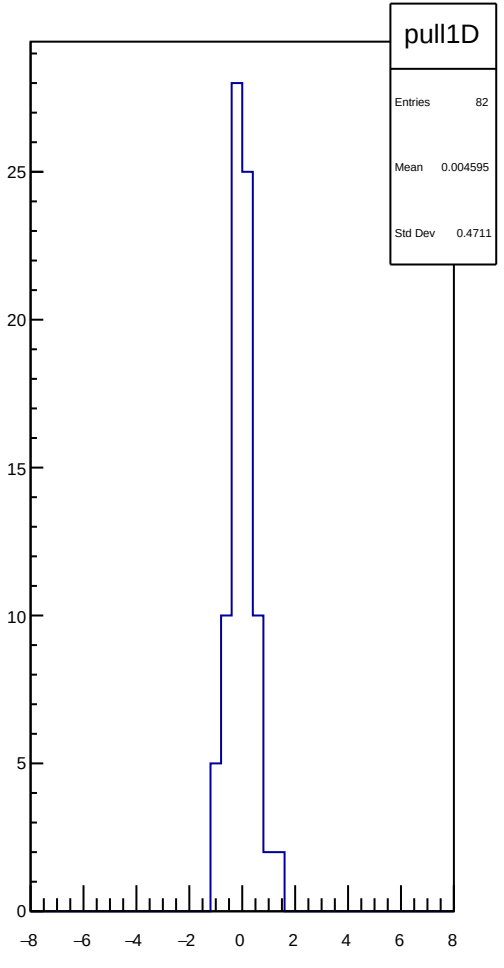

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 5.287e+04 / 81
p0 236.7 ± 0.1907
1600
1400
1200
1000
800
600
400
200

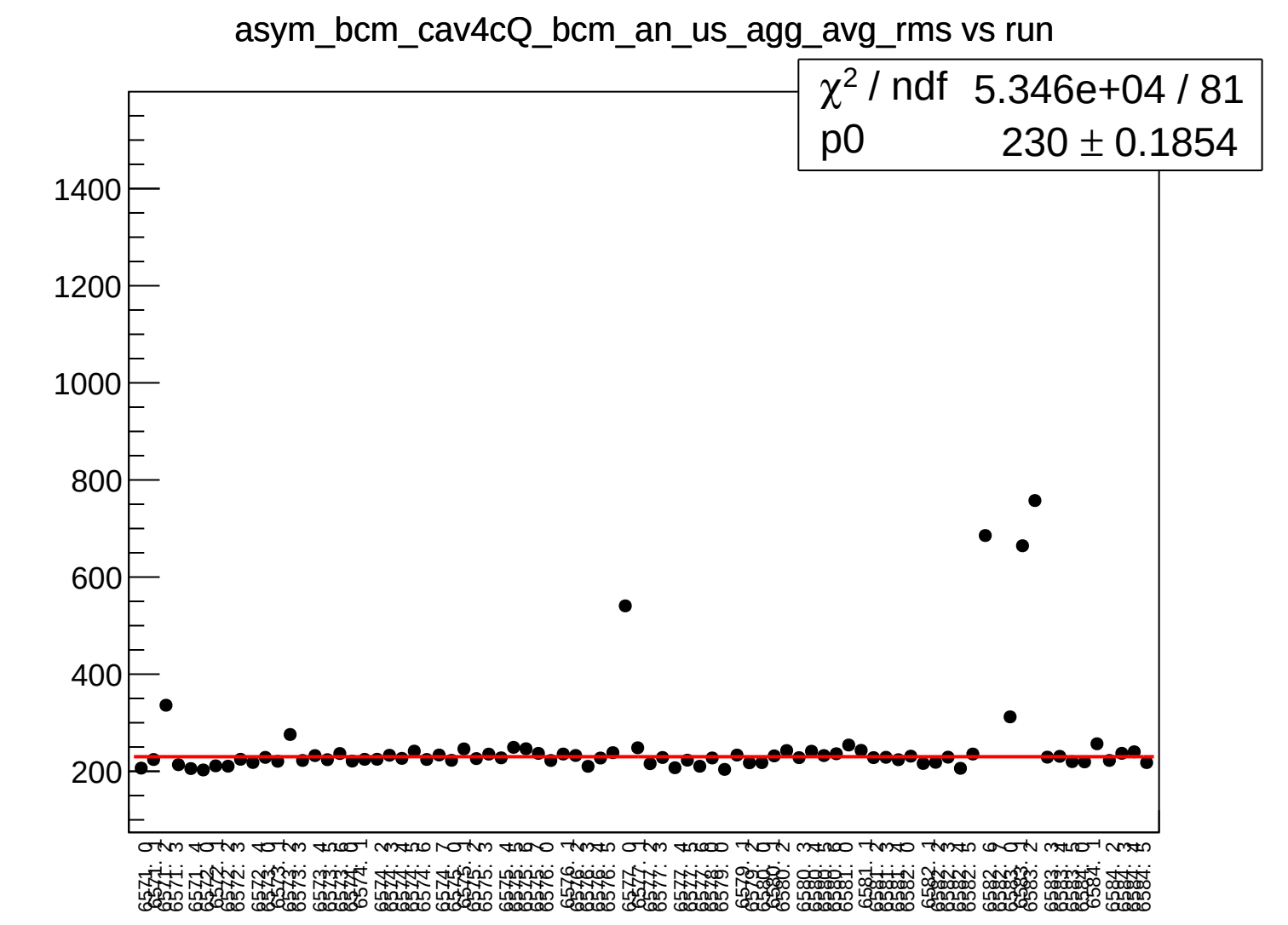

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 70.82 / 81
p0 21.48 ± 28.59
pull
Entries 82
Mean 176.3
Std Dev 133.5

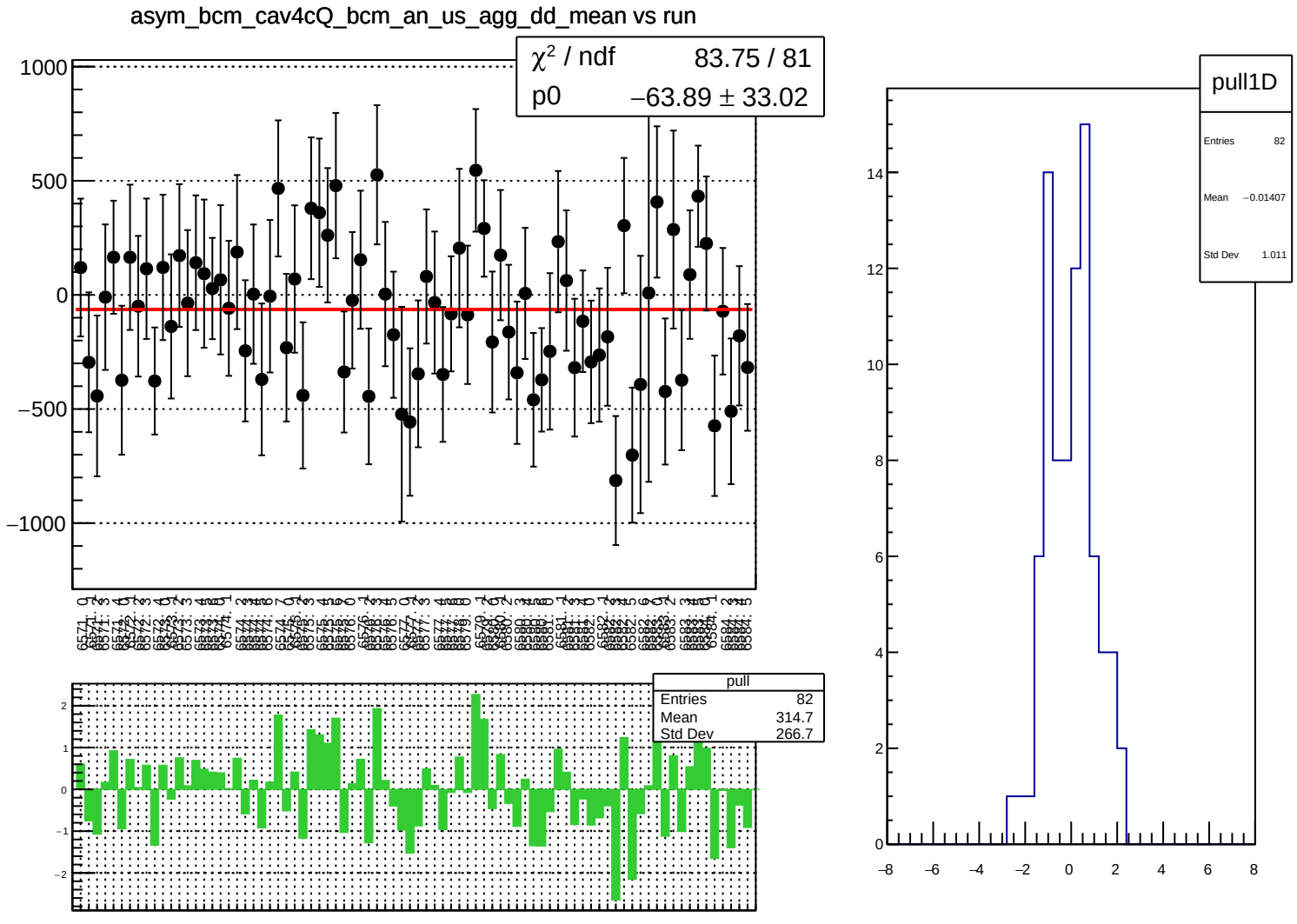

pull1D
Entries 82
Mean 0.01543
Std Dev 0.9292

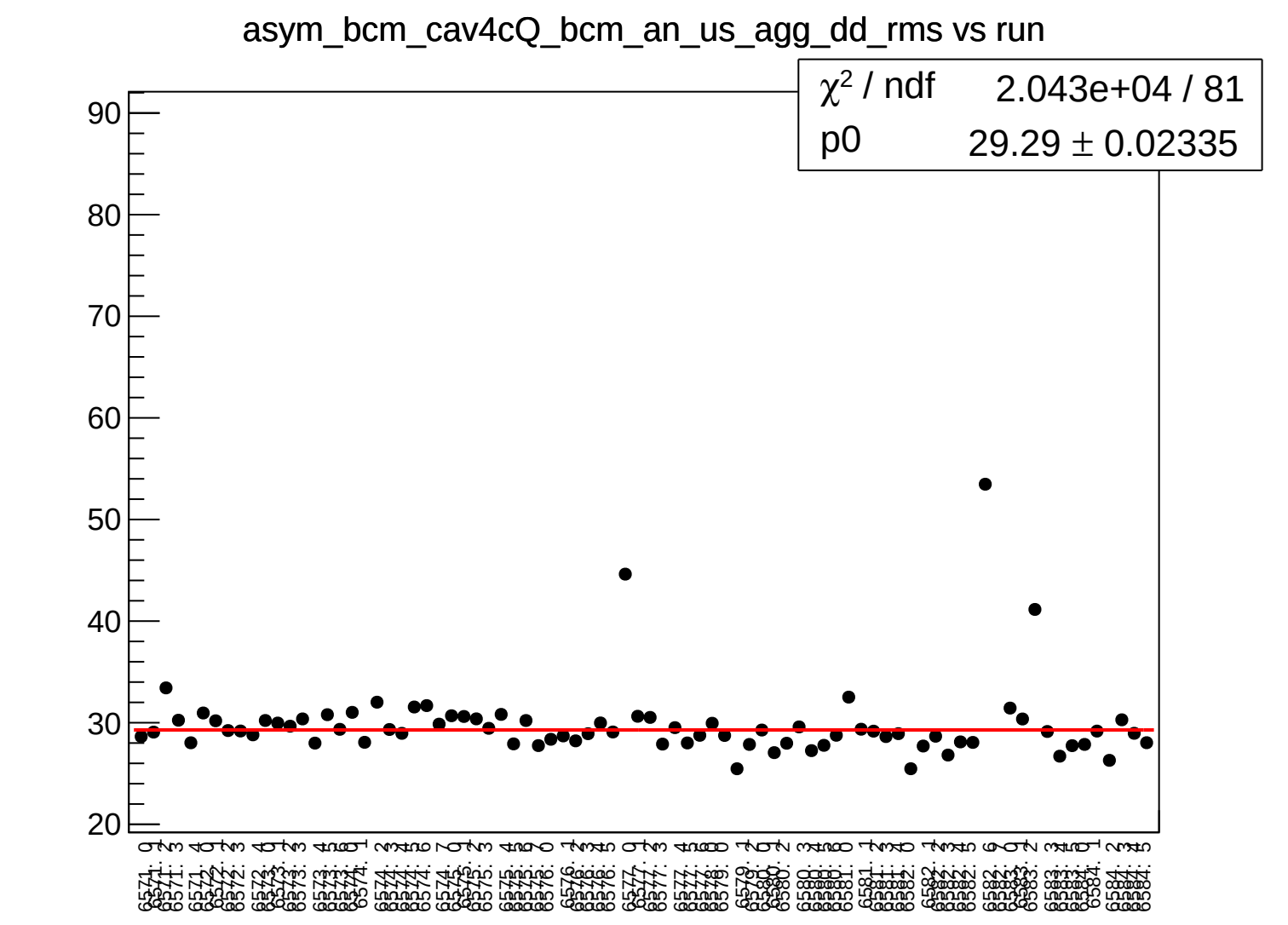

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 3035 / 81
p0 25.5 ± 0.02022
32
30
28
26
24
22

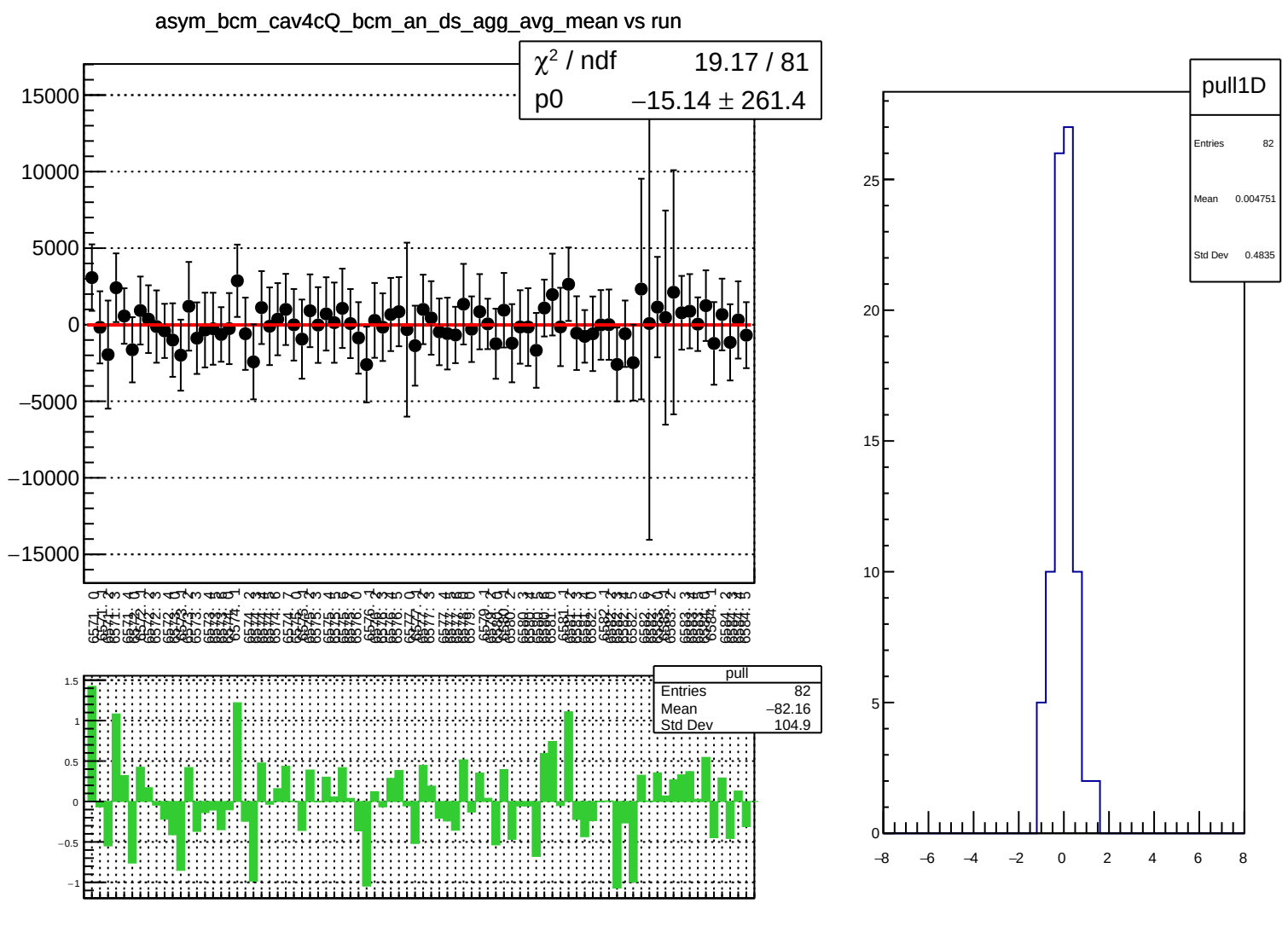

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 18.2 / 81
p0 −12.04 ± 262.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −131.8
Std Dev 158.3
1.5
1
0.5
0
−0.5
−1

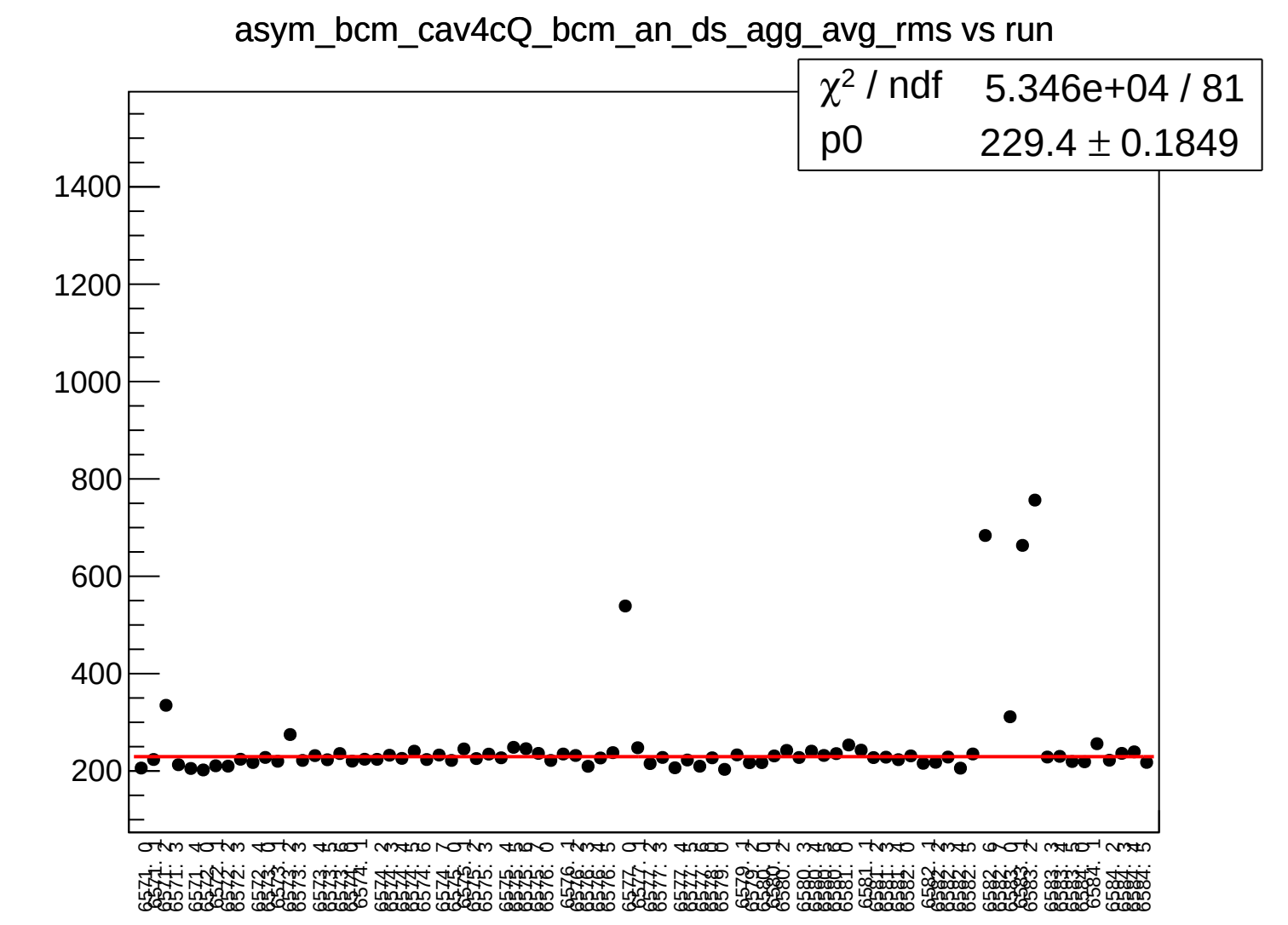

pull1D
Entries 82
Mean 0.004595
Std Dev 0.4711
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

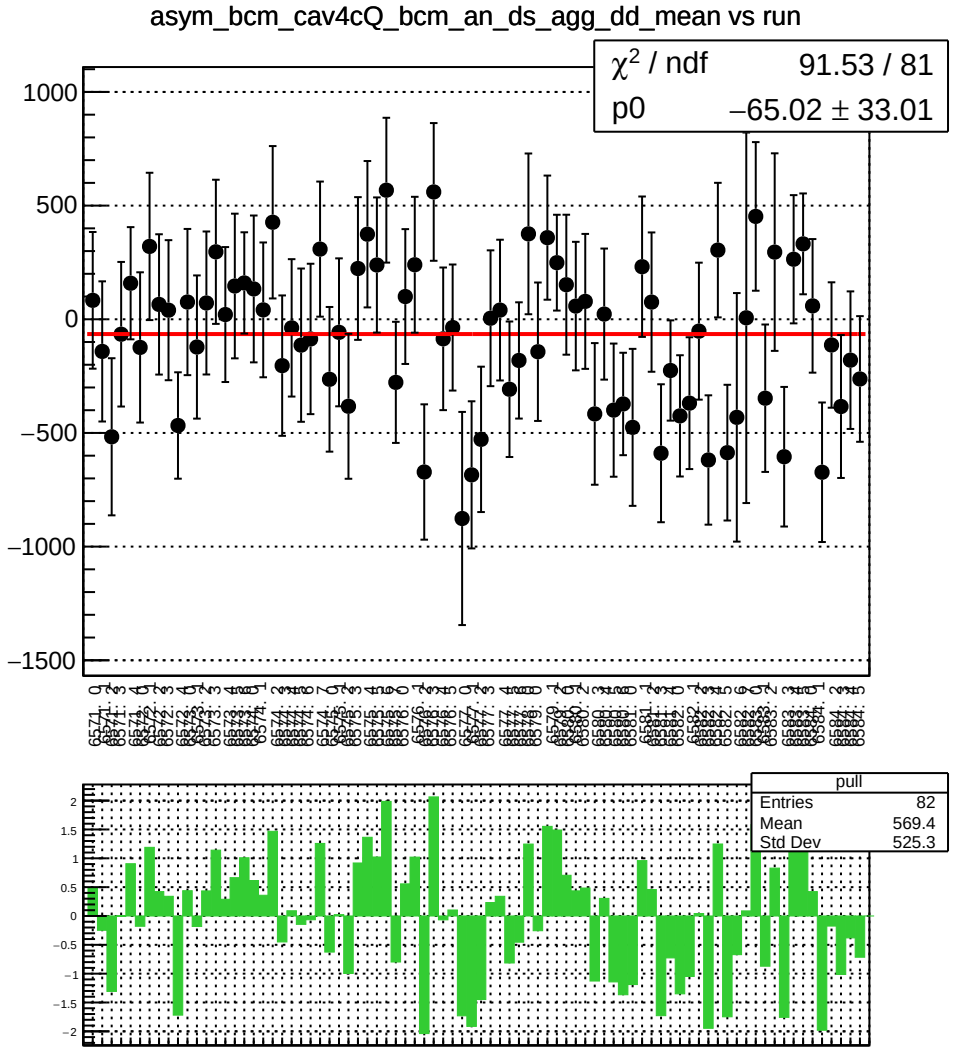

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 5.346e+04 / 81
p0 230 ± 0.1854
1400
1200
1000
800
600
400
200

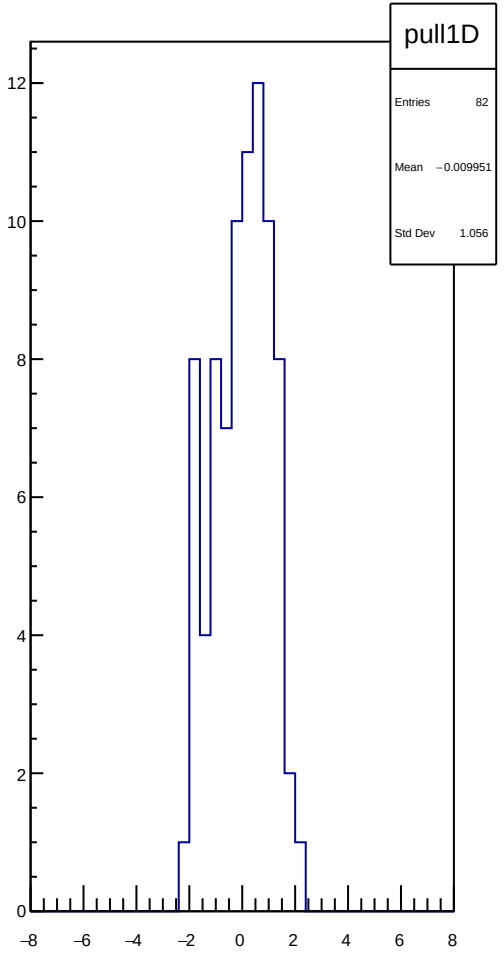

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 83.75 / 81
p0 −63.89 ± 33.02
1000
500
0
−500
−1000
pull
Entries 82
Mean 314.7
Std Dev 266.7
2
1
0
−1
−2
pull1D
Entries 82
Mean −0.01407
Std Dev 1.011
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

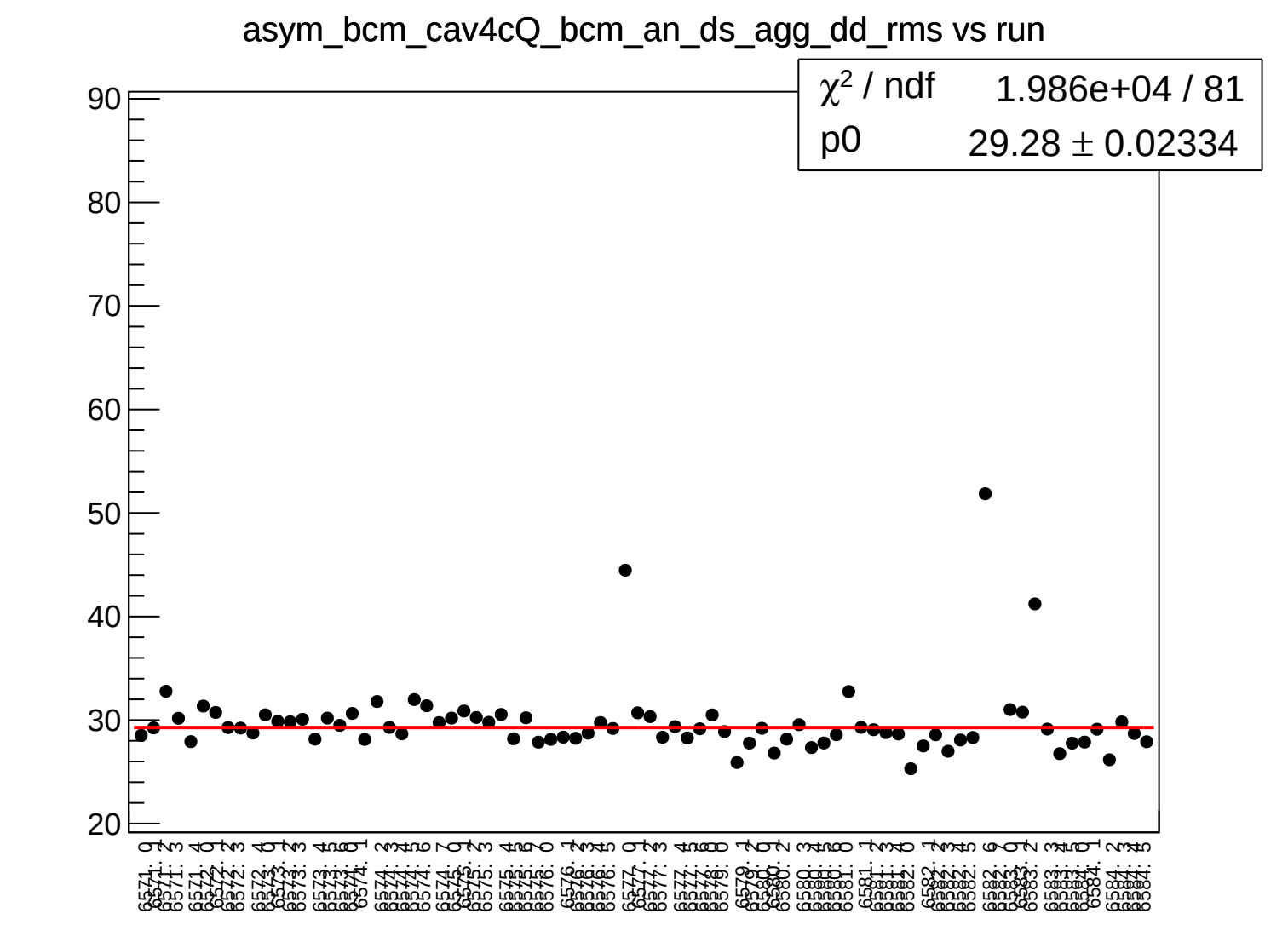

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2.043e+04 / 81
p0 29.29 ± 0.02335
90
80
70
60
50
40
30
20

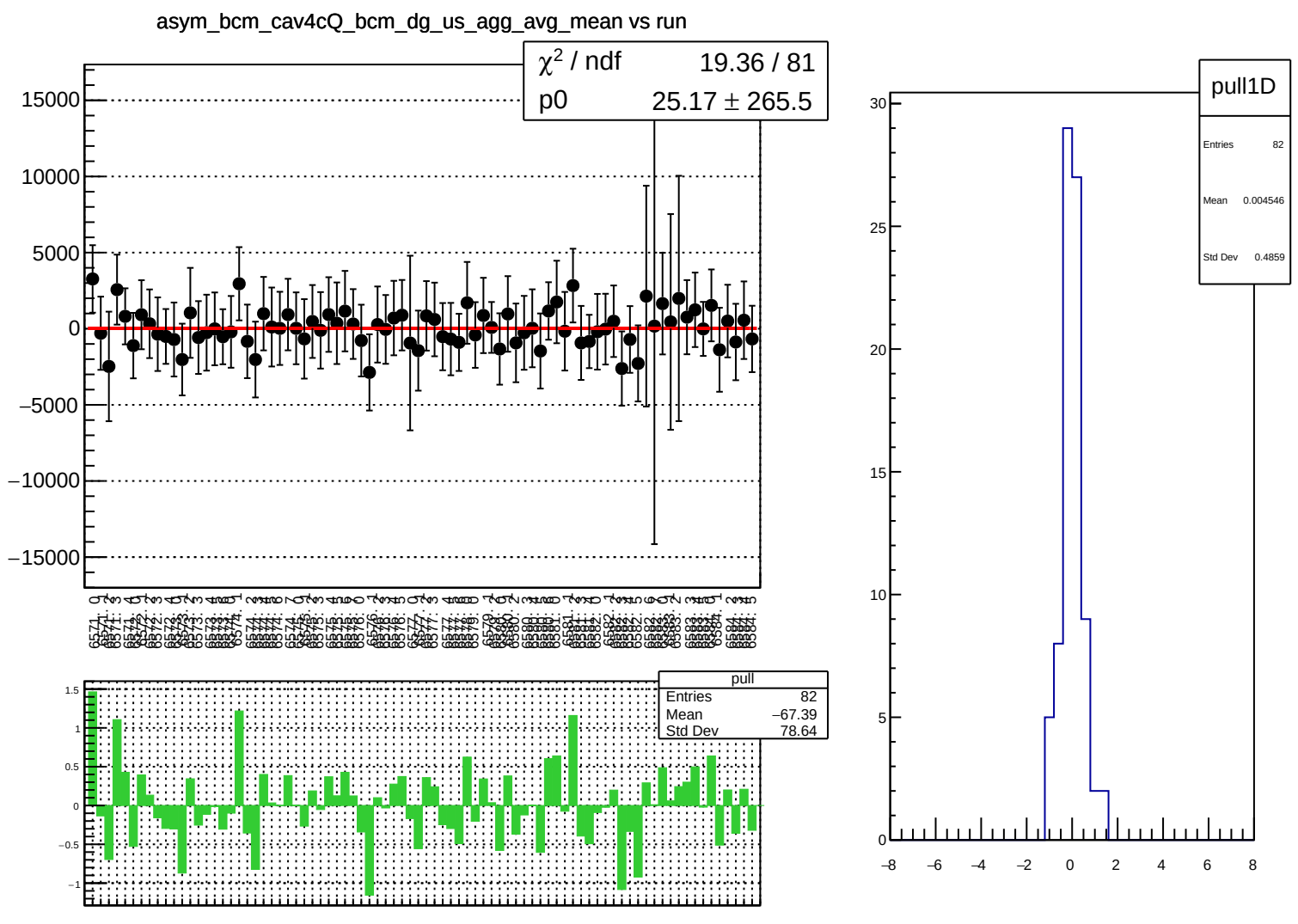

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 19.17 / 81
p0 −15.14 ± 261.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −82.16
Std Dev 104.9
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 82
Mean 0.004751
Std Dev 0.4835
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

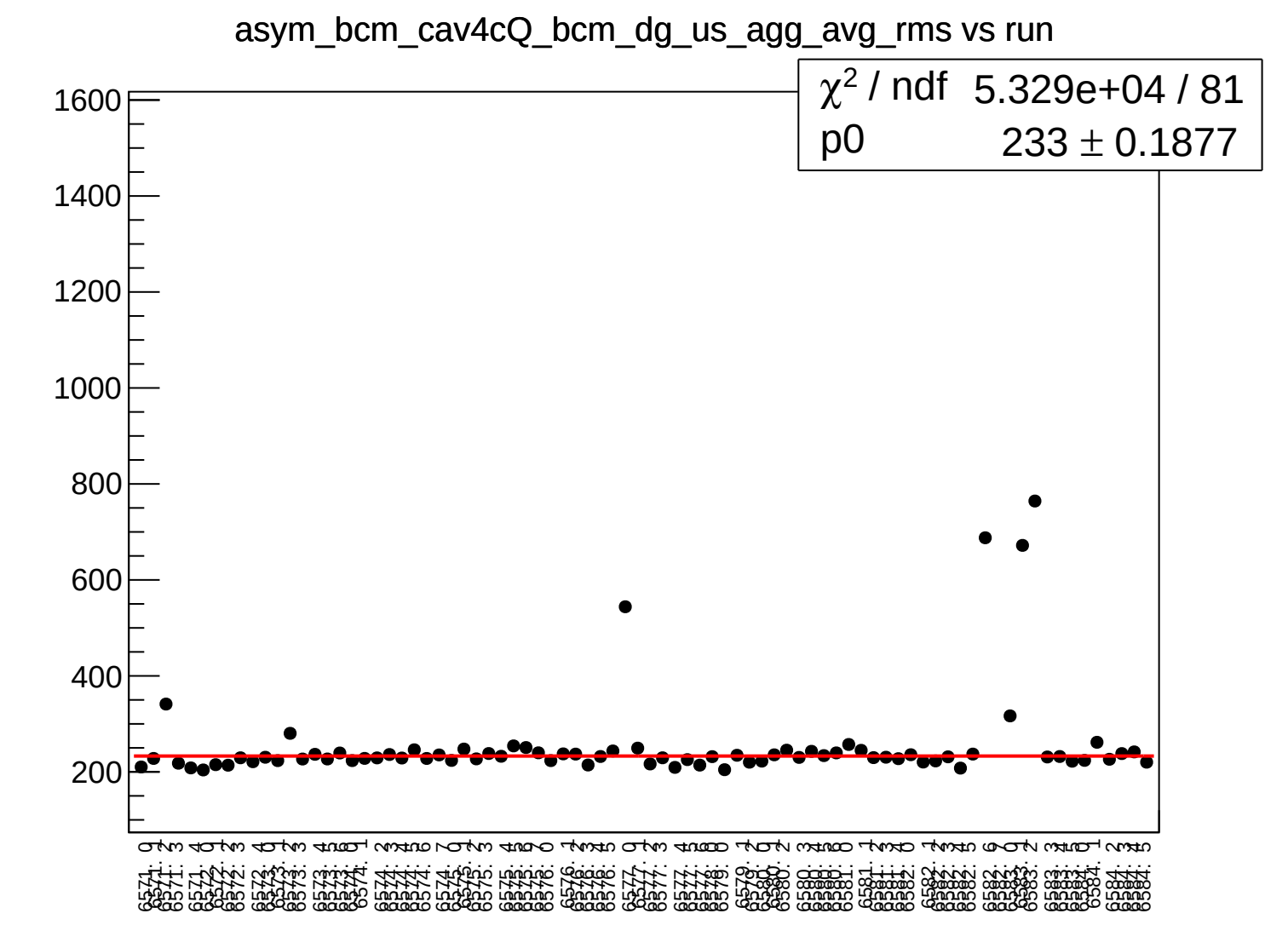

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 5.346e+04 / 81
p0 229.4 ± 0.1849
1400
1200
1000
800
600
400
200

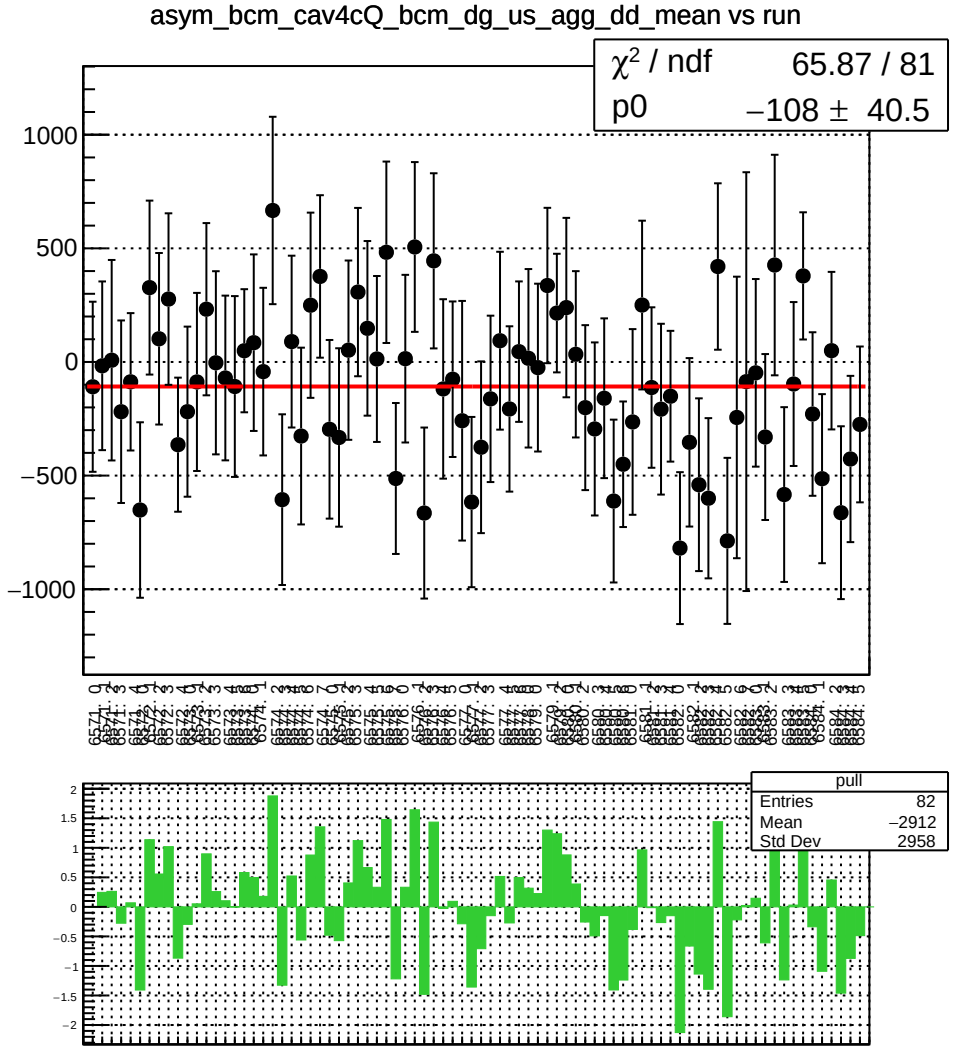

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 91.53 / 81
p0 −65.02 ± 33.01
pull
Entries 82
Mean 569.4
Std Dev 525.3

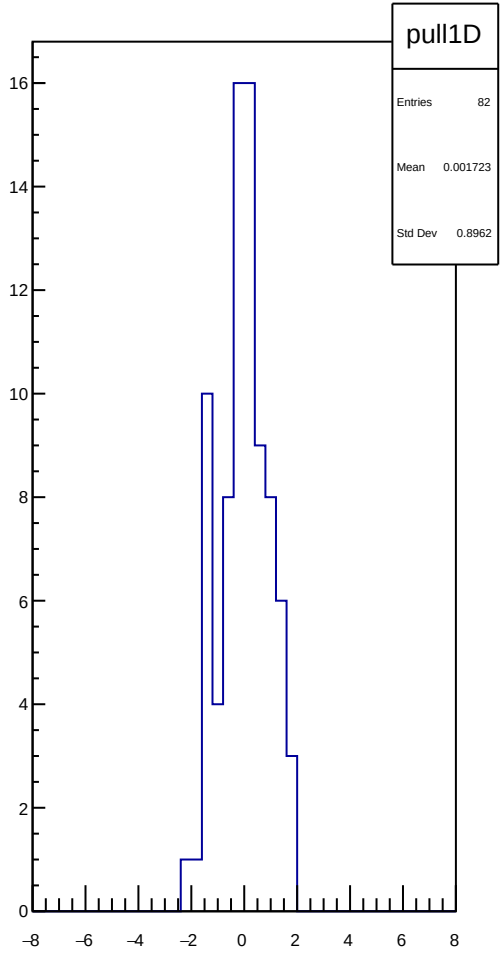

pull1D
Entries 82
Mean −0.009951
Std Dev 1.056

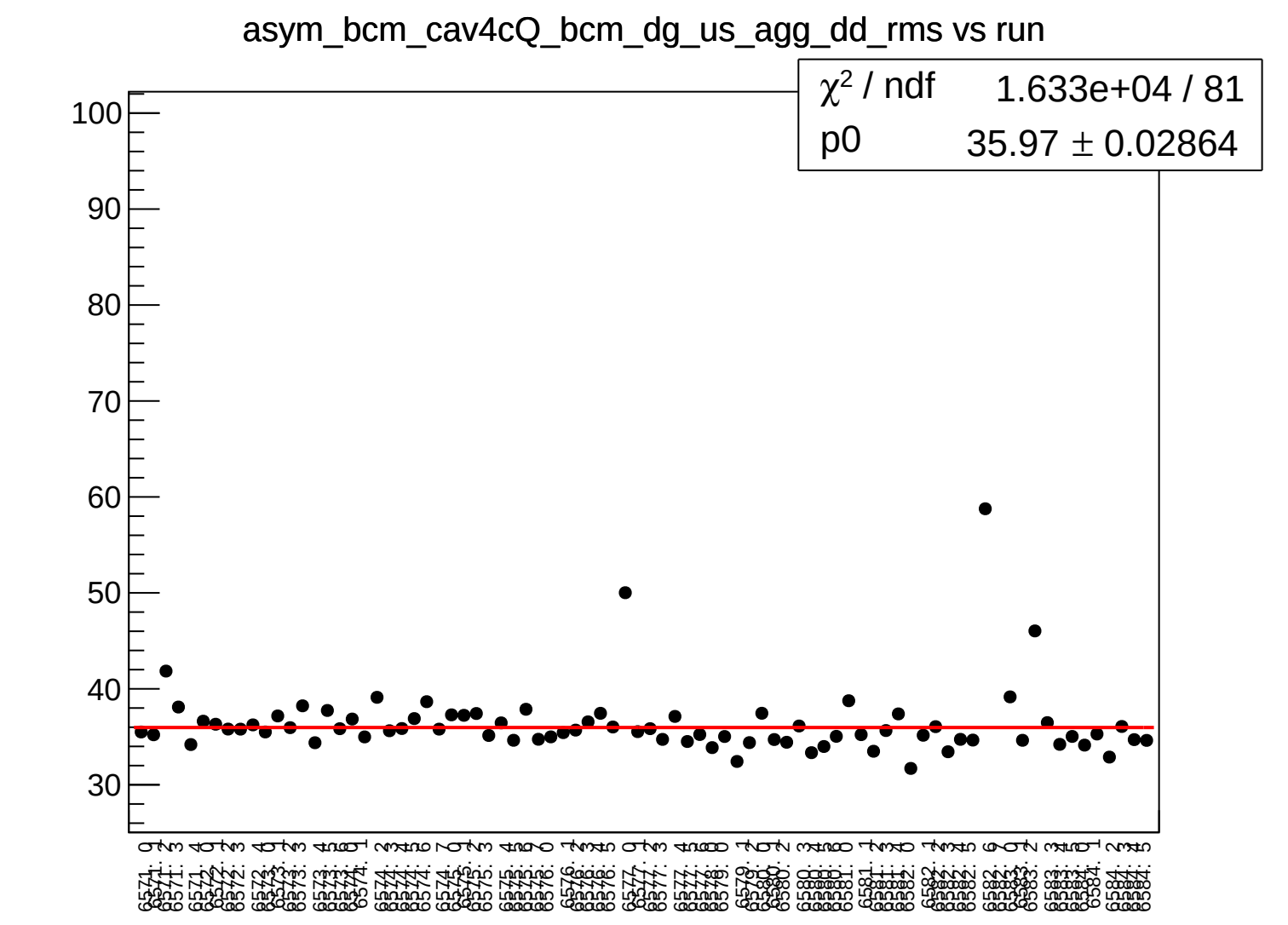

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1.986e+04 / 81
p0 29.28 ± 0.02334
90
80
70
60
50
40
30
20

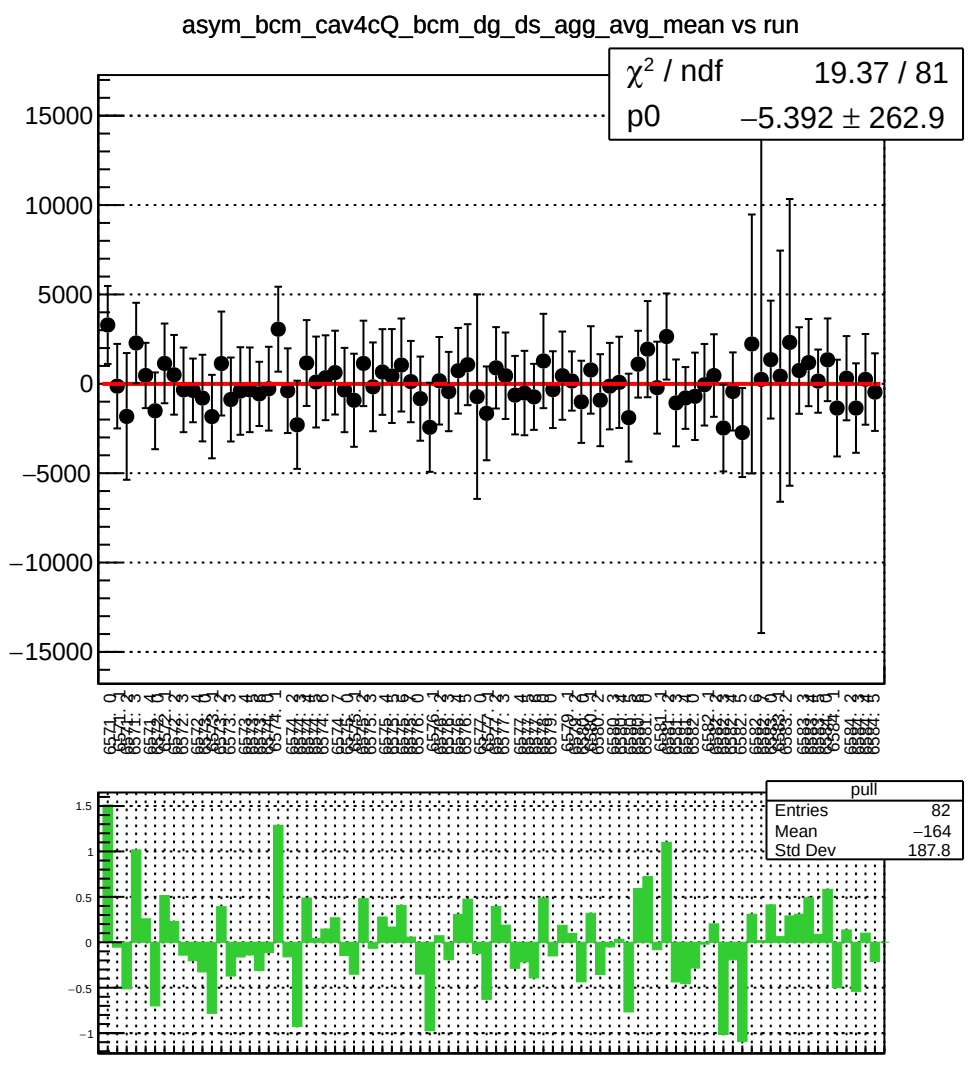

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 19.36 / 81
p0 25.17 ± 265.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −67.39
Std Dev 78.64
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 82
Mean 0.004546
Std Dev 0.4859
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

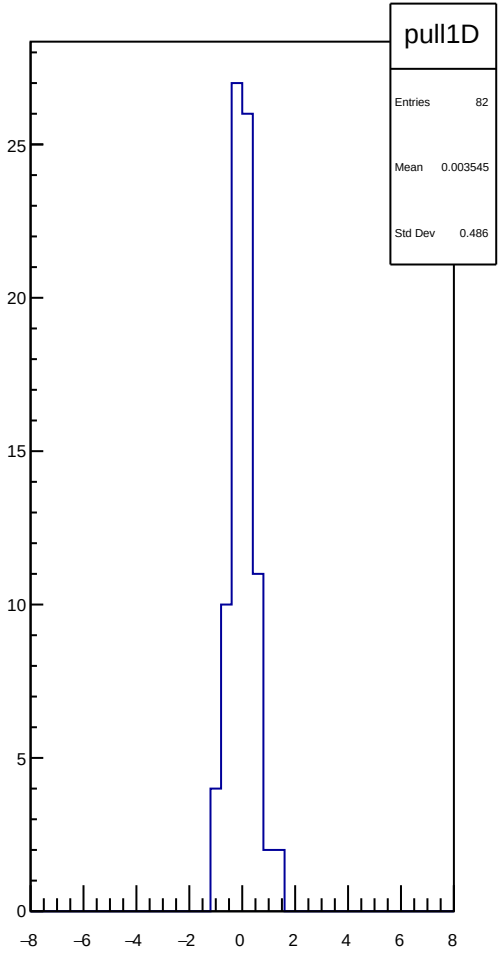

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 5.329e+04 / 81
p0 233 ± 0.1877
1600
1400
1200
1000
800
600
400
200

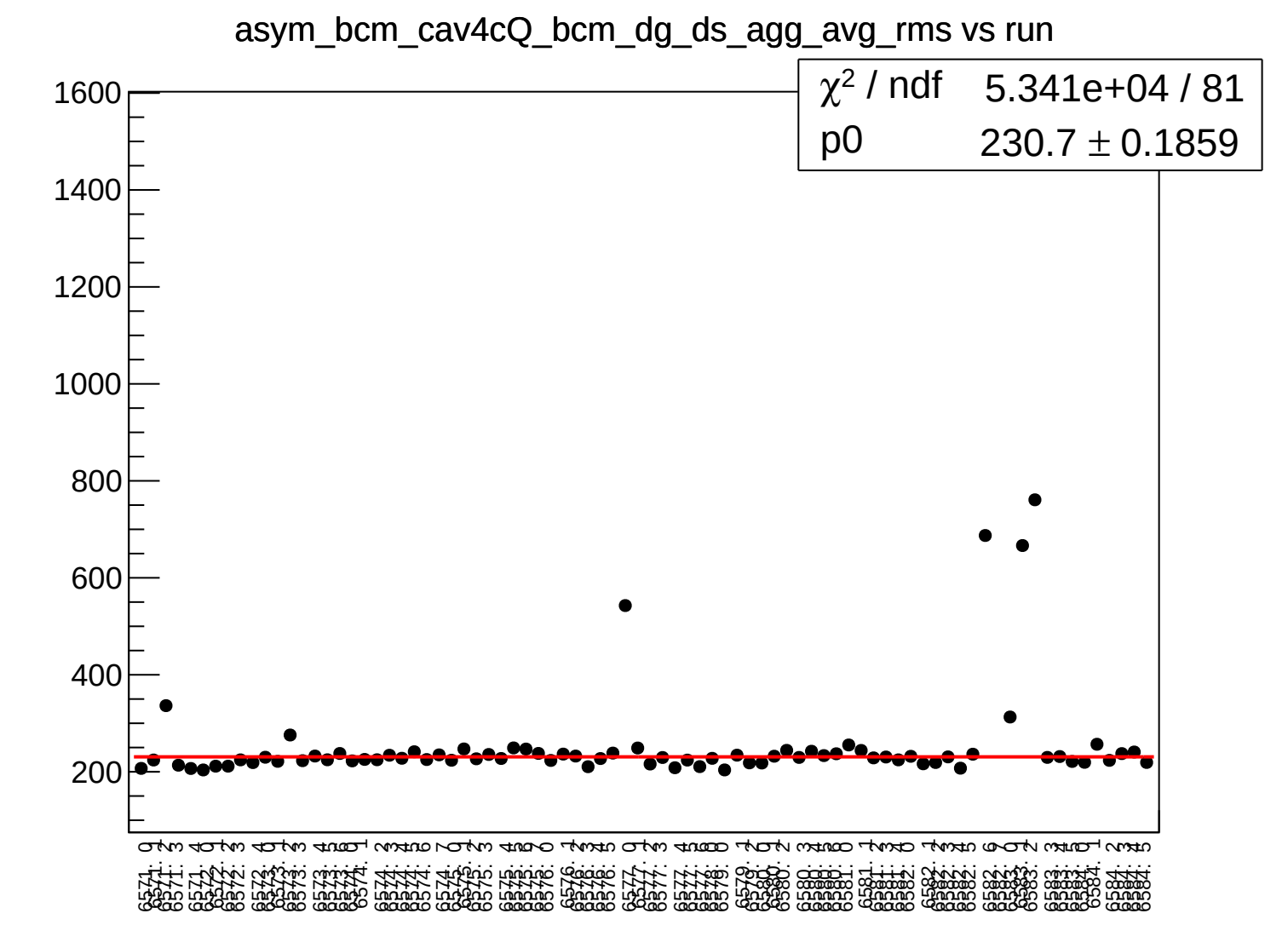

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 65.87 / 81
p0 −108 ± 40.5
1000
500
0
−500
−1000
pull
Entries 82
Mean −2912
Std Dev 2958
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

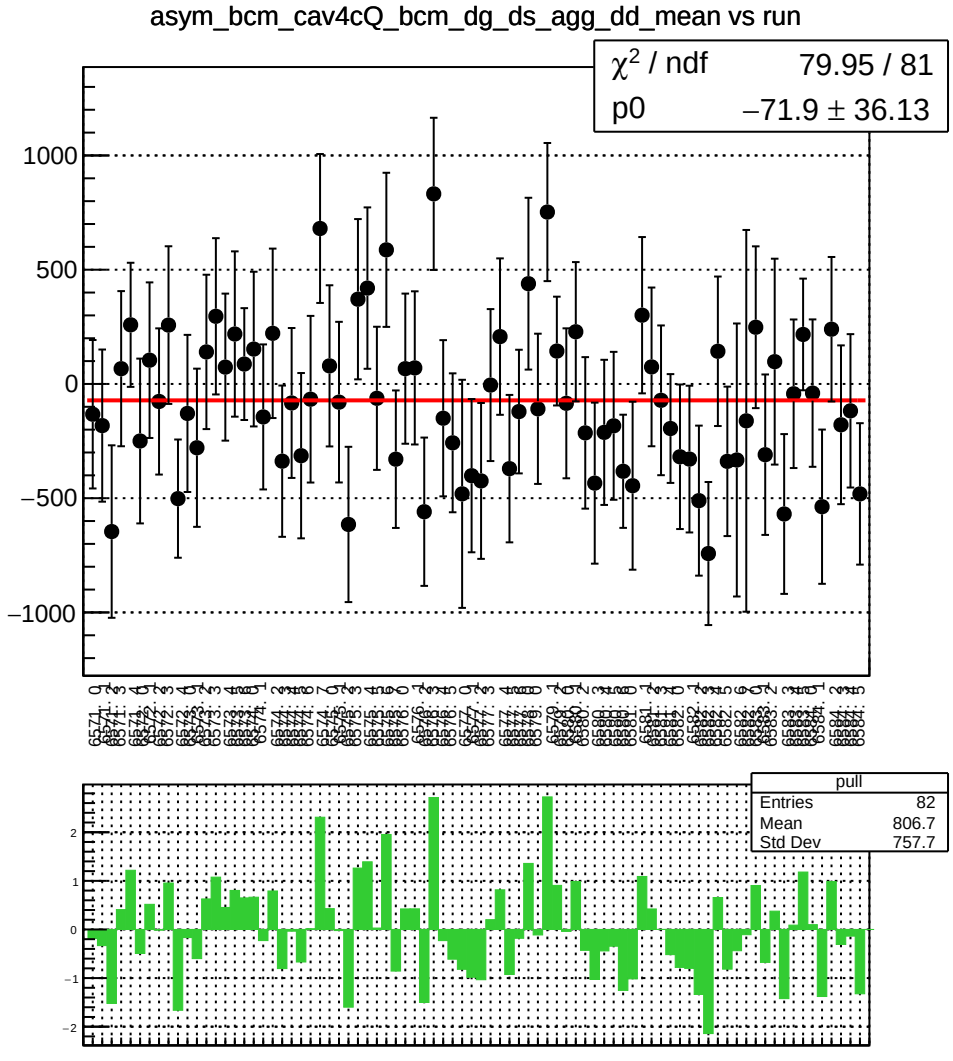

pull1D
Entries 82
Mean 0.001723
Std Dev 0.8962
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

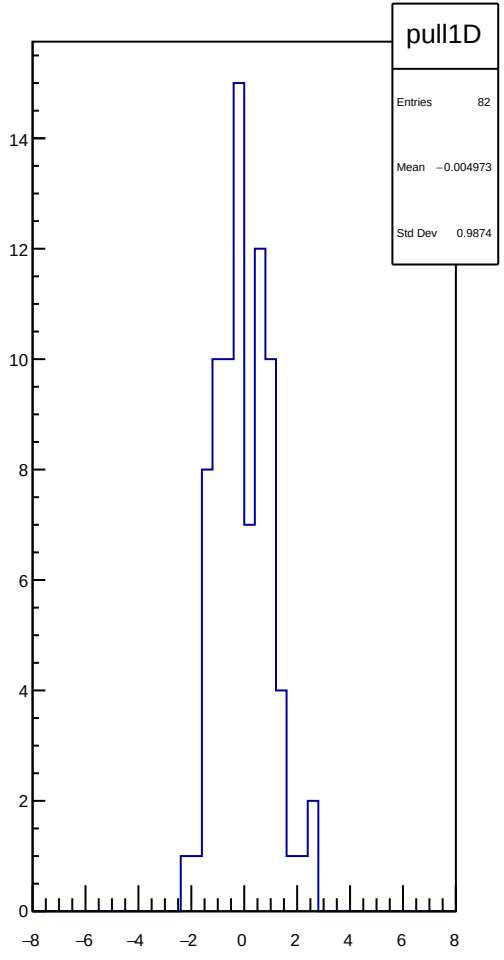

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1.633e+04 / 81
p0 35.97 ± 0.02864
100
90
80
70
60
50
40
30

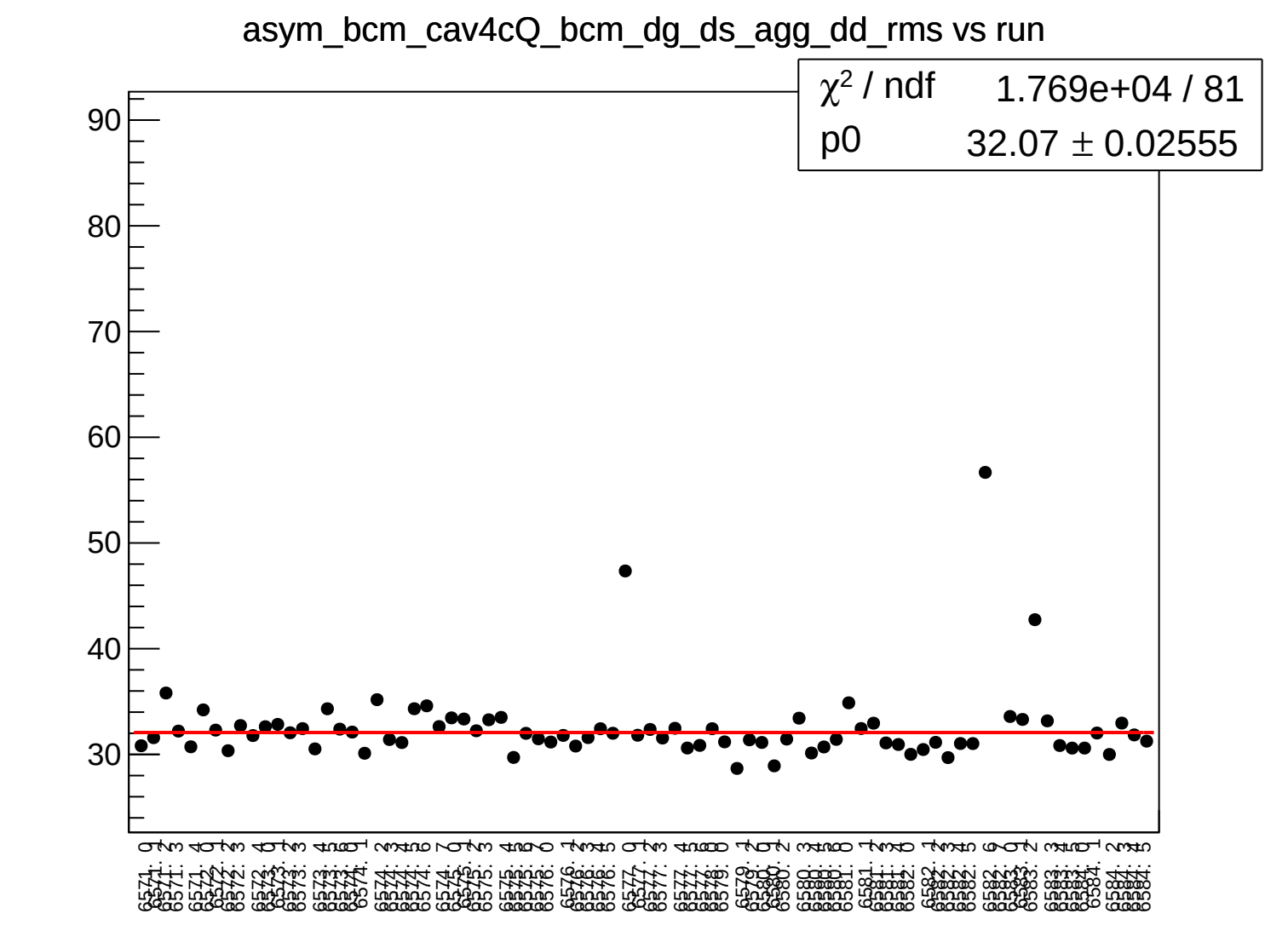

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 19.37 / 81
p0 −5.392 ± 262.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −164
Std Dev 187.8
1.5
1
0.5
0
−0.5
−1

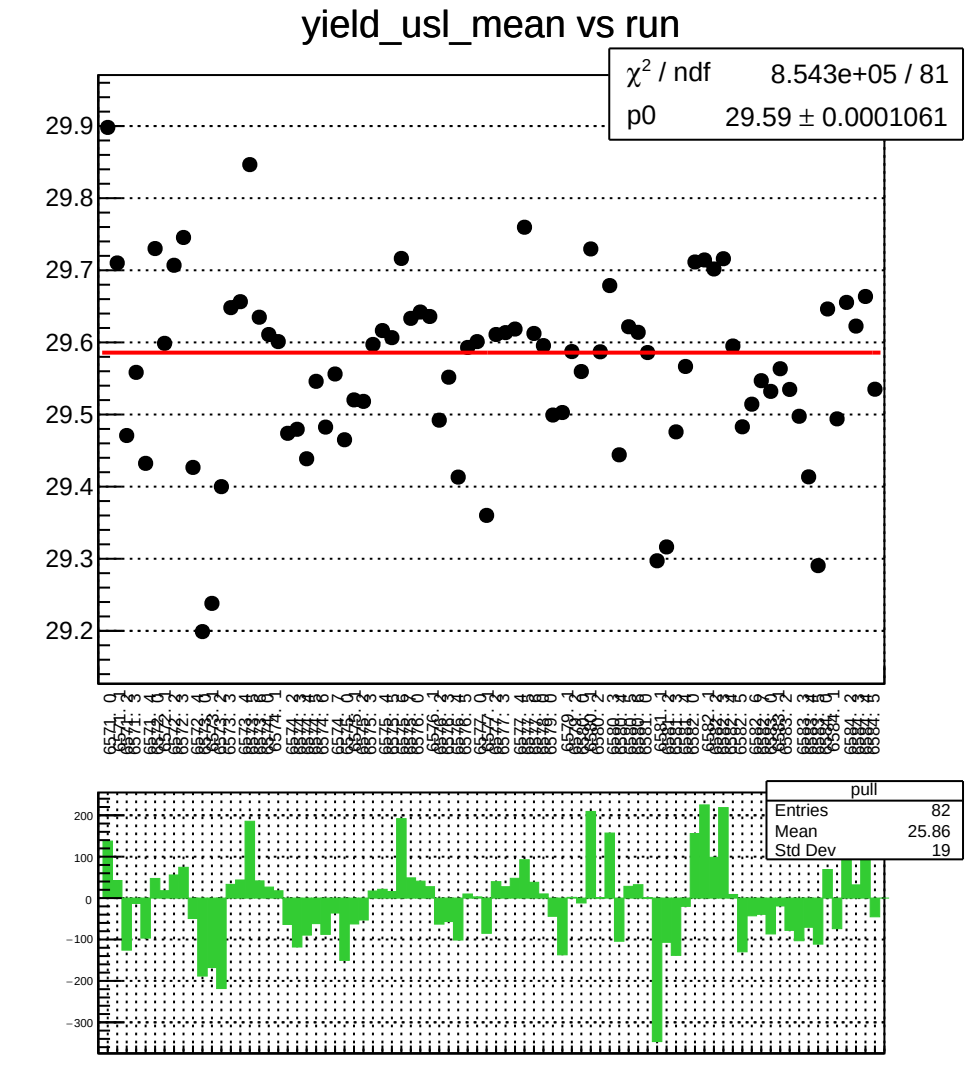

pull1D
Entries 82
Mean 0.003545
Std Dev 0.486
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

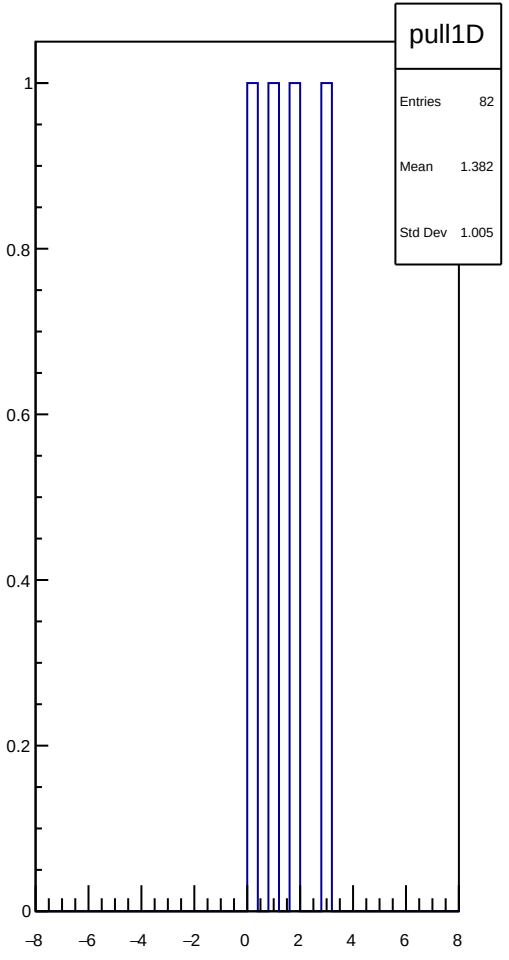

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 5.341e+04 / 81
p0 230.7 ± 0.1859
1600
1400
1200
1000
800
600
400
200

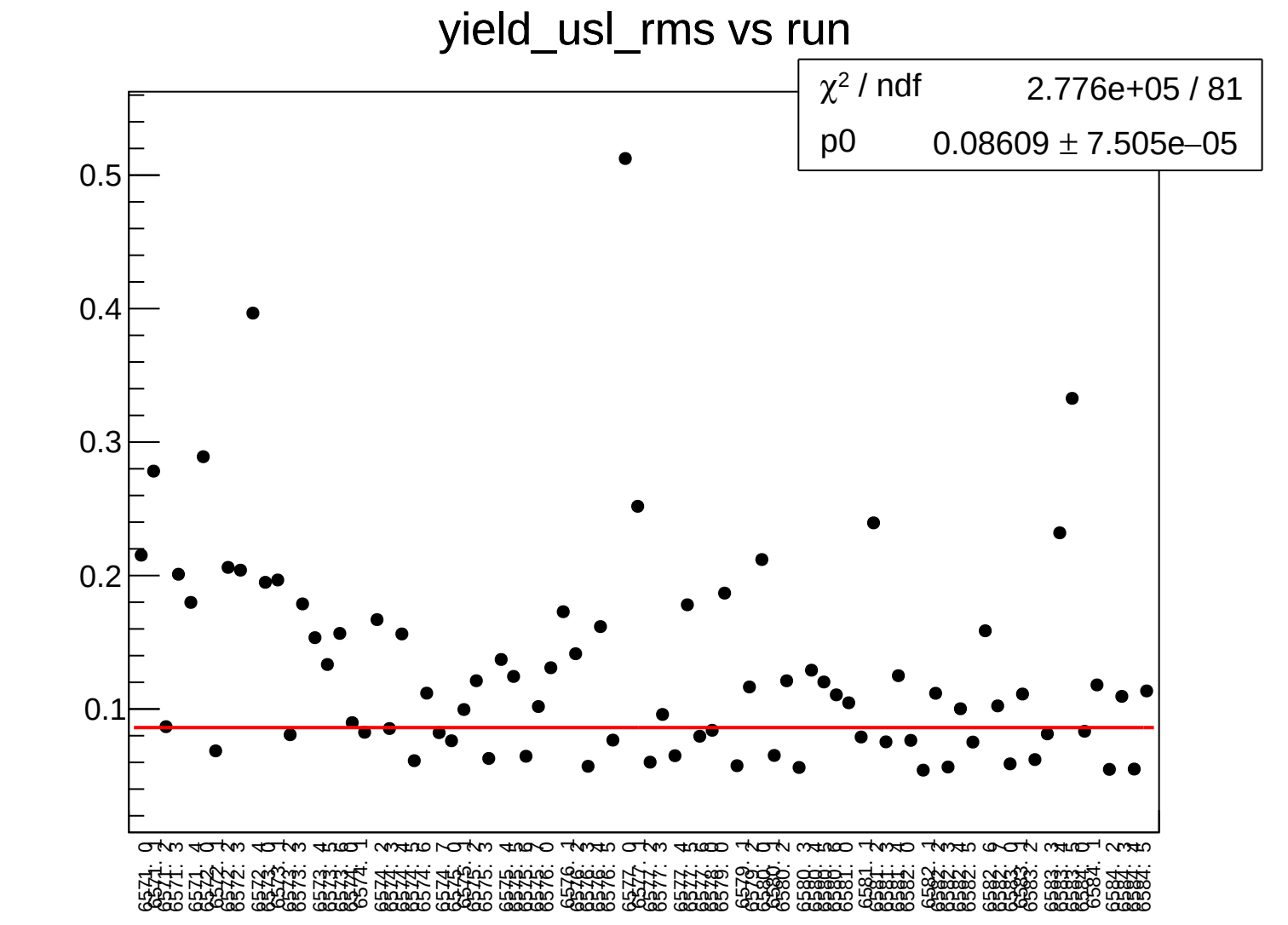

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 79.95 / 81
p0 −71.9 ± 36.13
1000
500
0
−500
−1000
pull
Entries 82
Mean 806.7
Std Dev 757.7
2
1
0
−1
−2

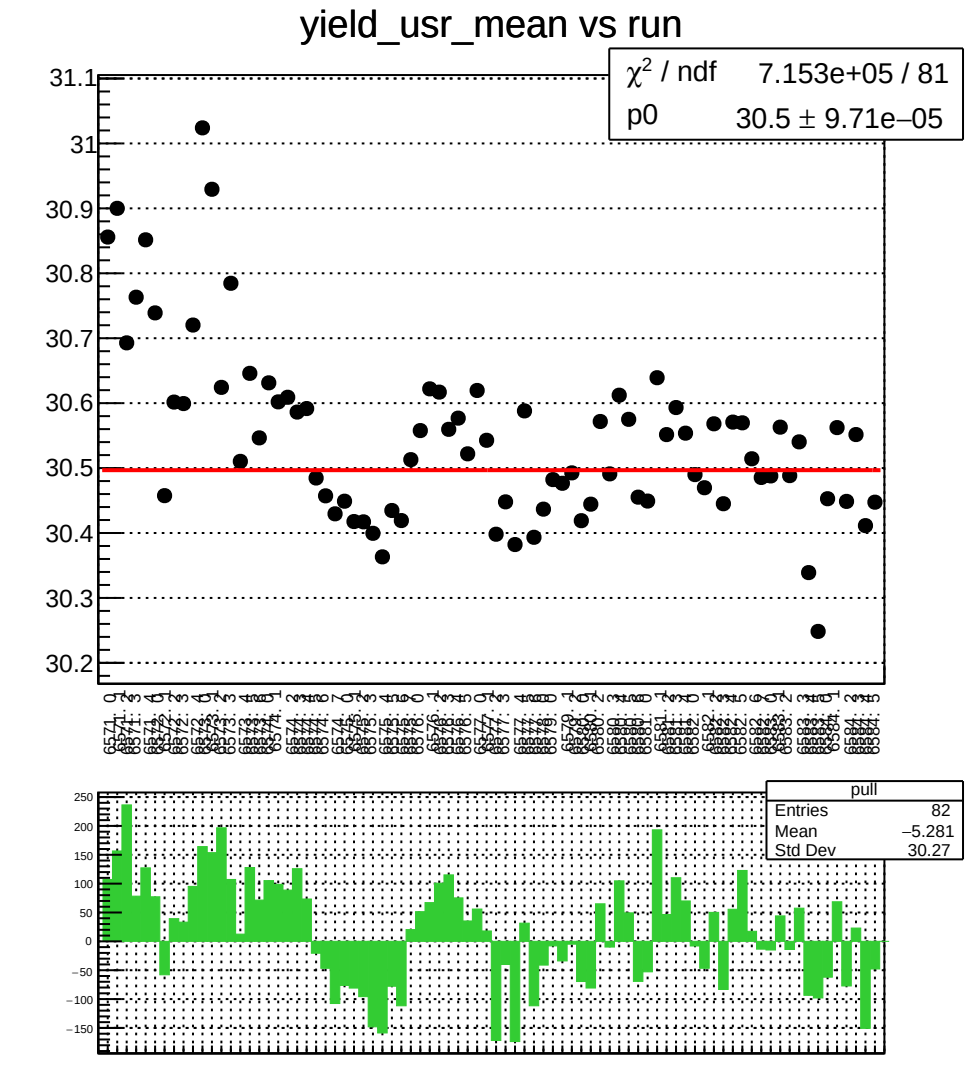

pull1D
Entries 82
Mean −0.004973
Std Dev 0.9874
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

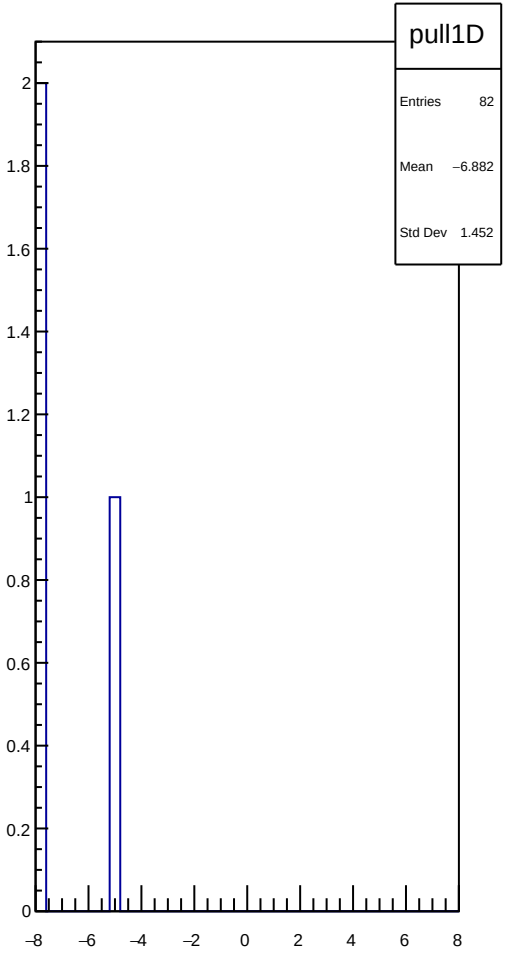

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1.769e+04 / 81
p0 32.07 ± 0.02555
90
80
70
60
50
40
30

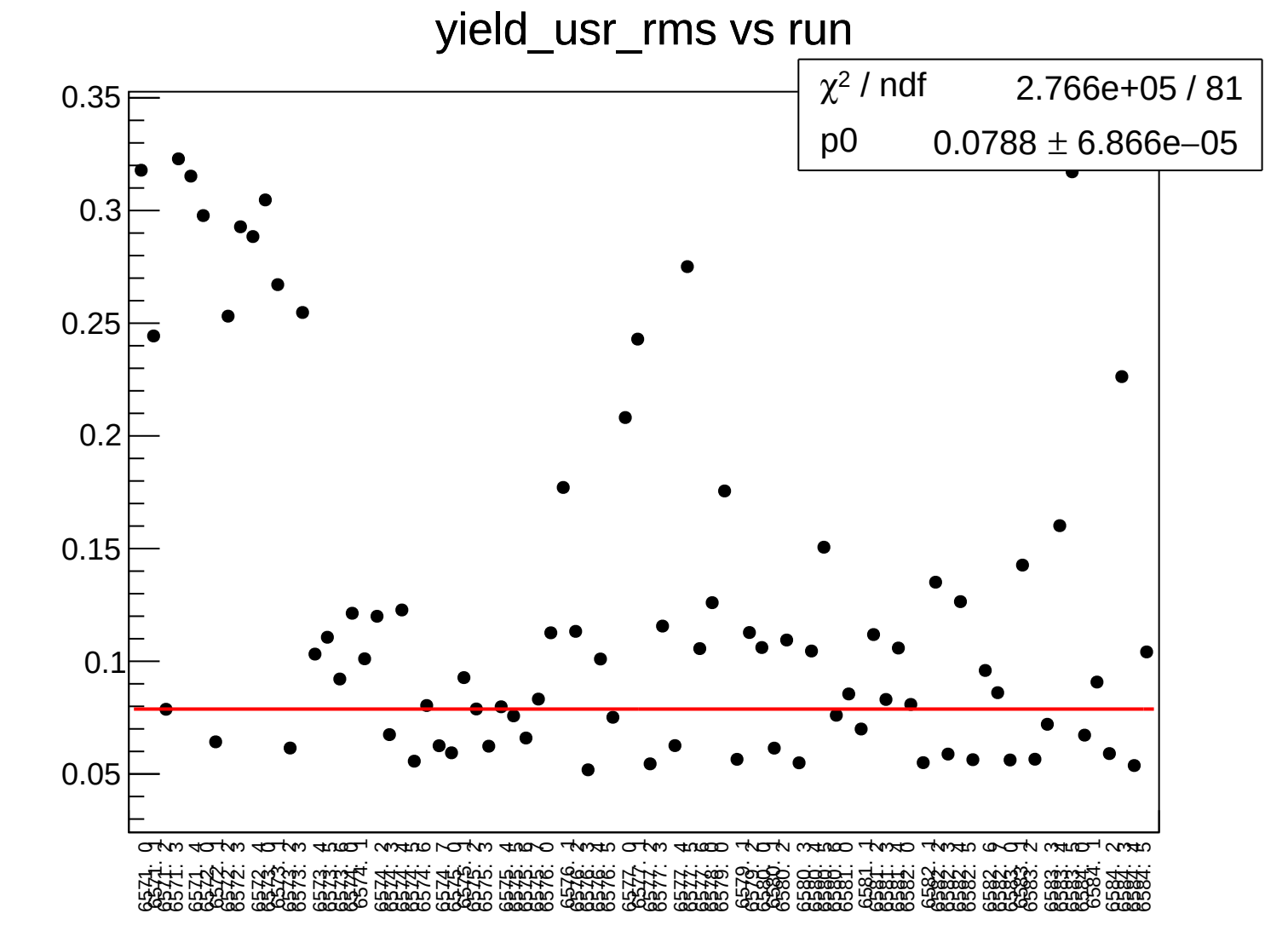

yield_usl_mean vs run
χ² / ndf 8.543e+05 / 81
p0 29.59 ± 0.0001061
29.9
29.8
29.7
29.6
29.5
29.4
29.3
29.2
pull
Entries 82
Mean 25.86
Std Dev 19
200
100
0
−100
−200
−300

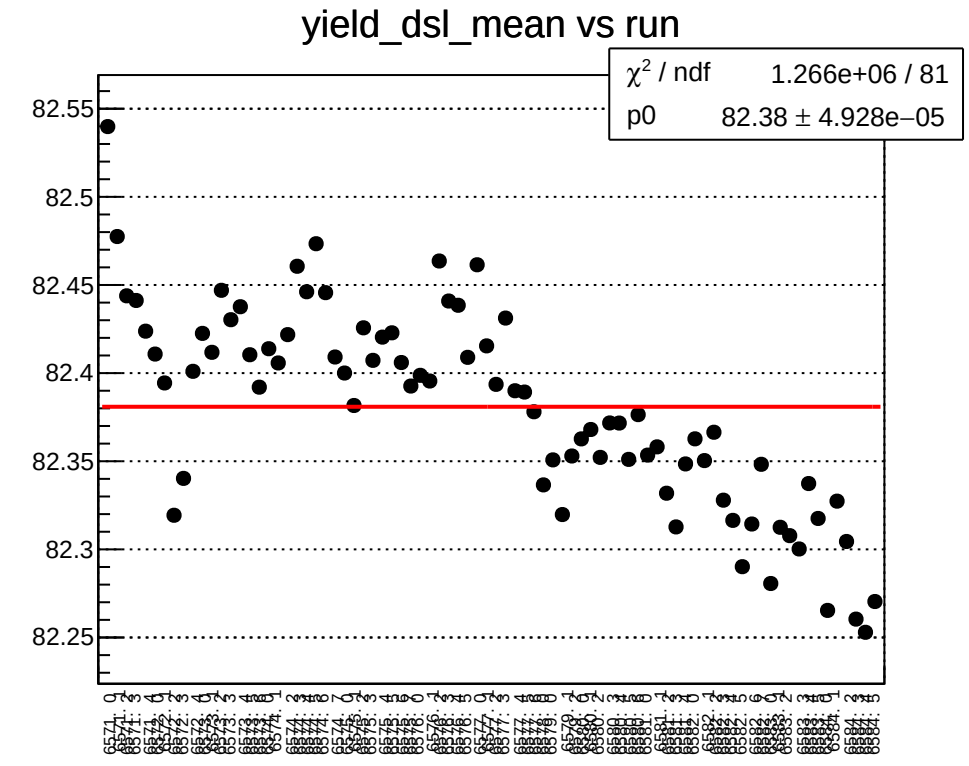

pull1D
Entries 82
Mean 1.382
Std Dev 1.005
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

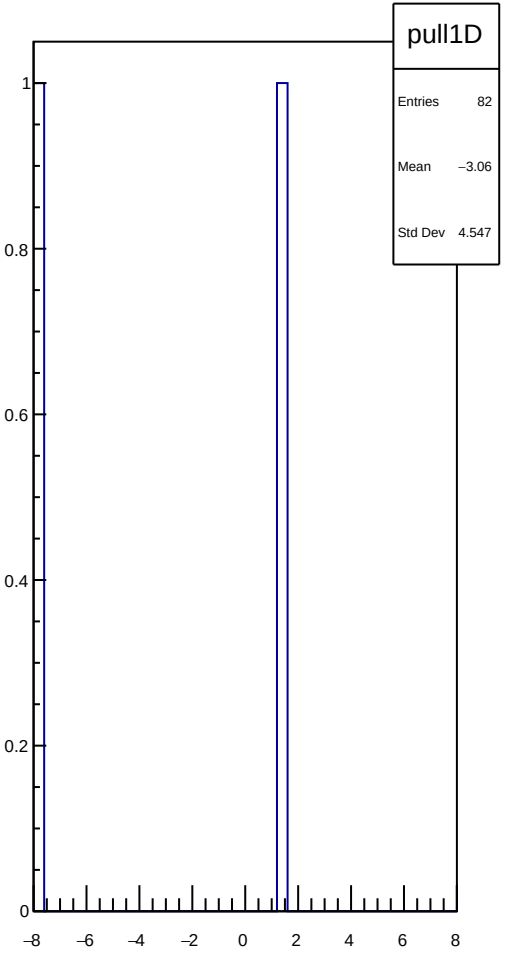

yield_usl_rms vs run
χ² / ndf 2.776e+05 / 81
p0 0.08609 ± 7.505e−05
0.5
0.4
0.3
0.2
0.1

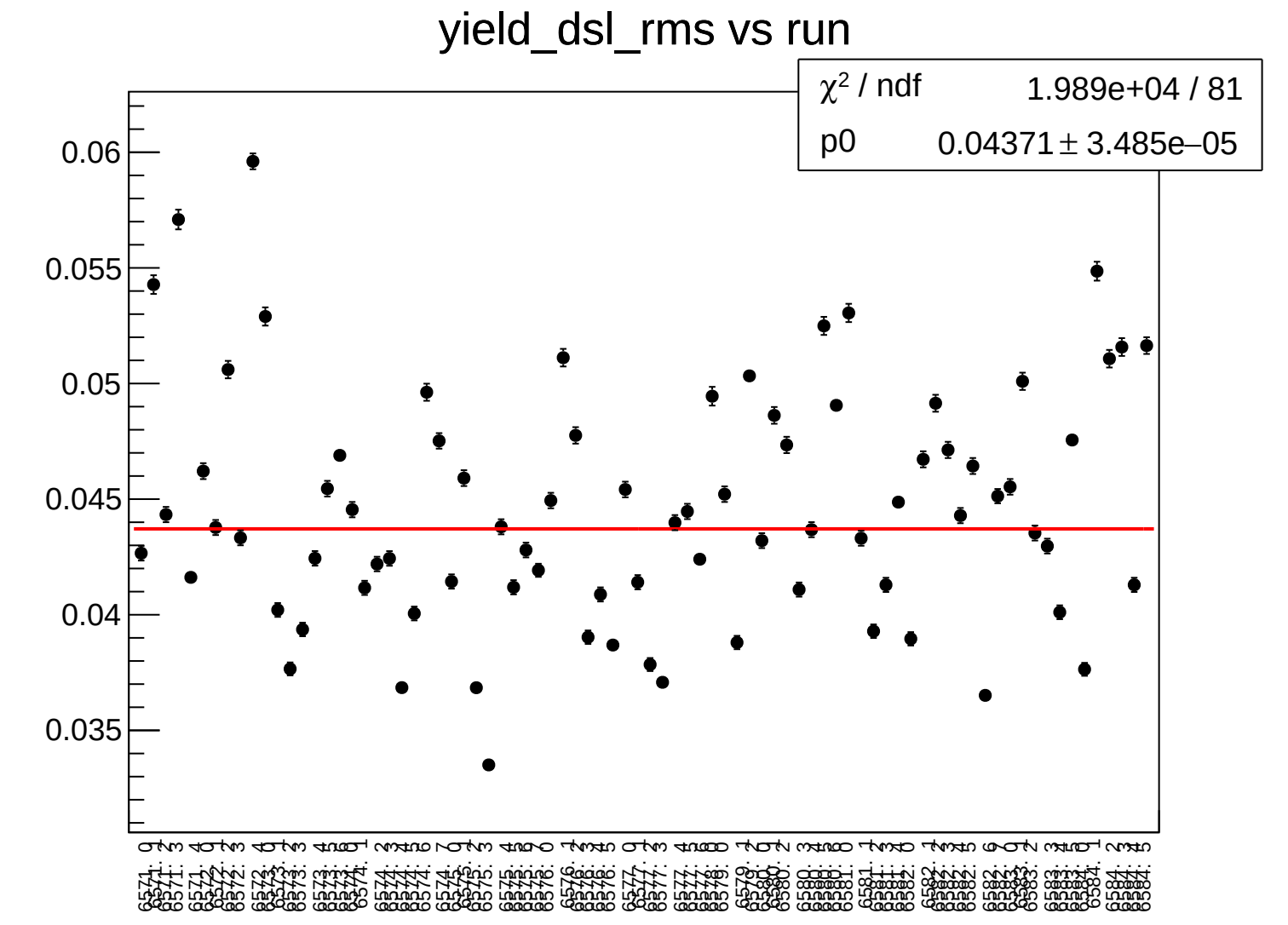

yield_usr_mean vs run
χ² / ndf 7.153e+05 / 81
p0 30.5 ± 9.71e−05
31.1
31
30.9
30.8
30.7
30.6
30.5
30.4
30.3
30.2
pull
Entries 82
Mean −5.281
Std Dev 30.27
250
200
150
100
50
0
−50
−100
−150

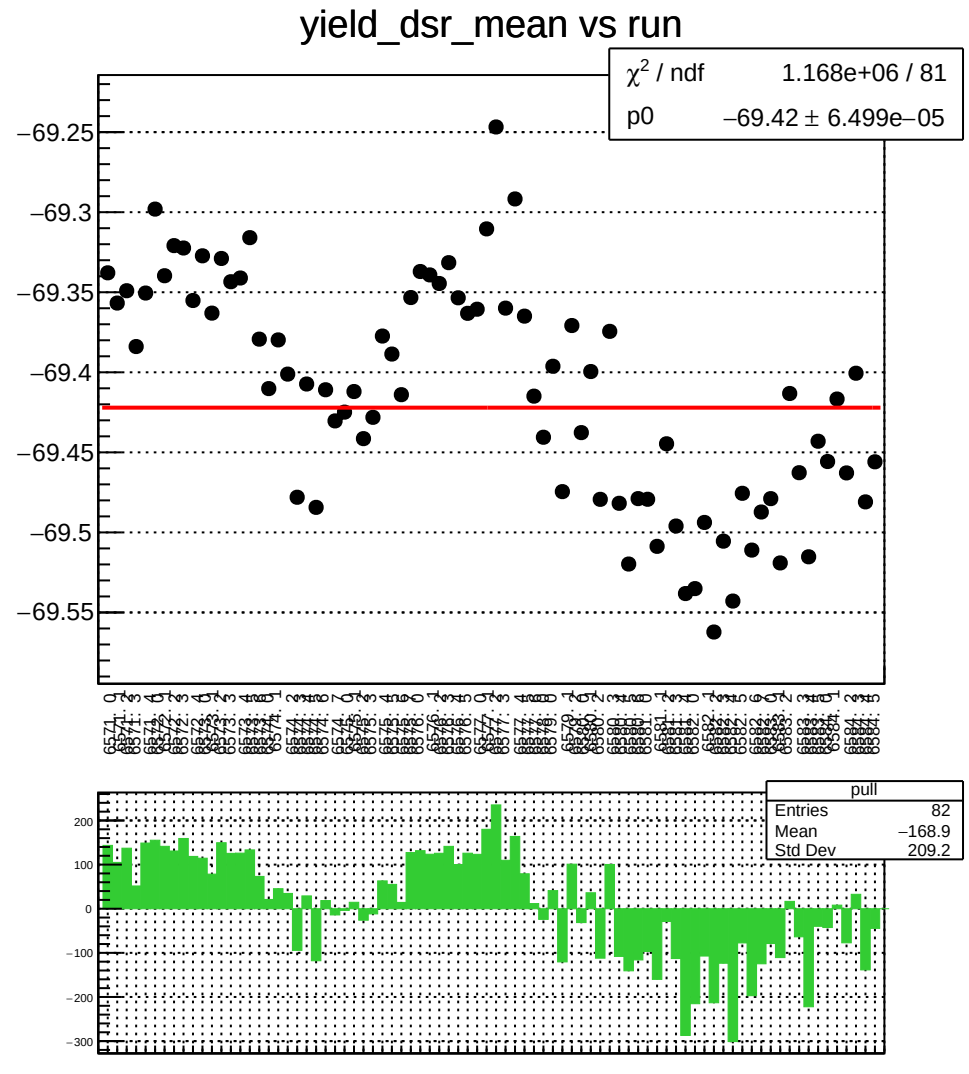

pull1D
Entries 82
Mean −6.882
Std Dev 1.452
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

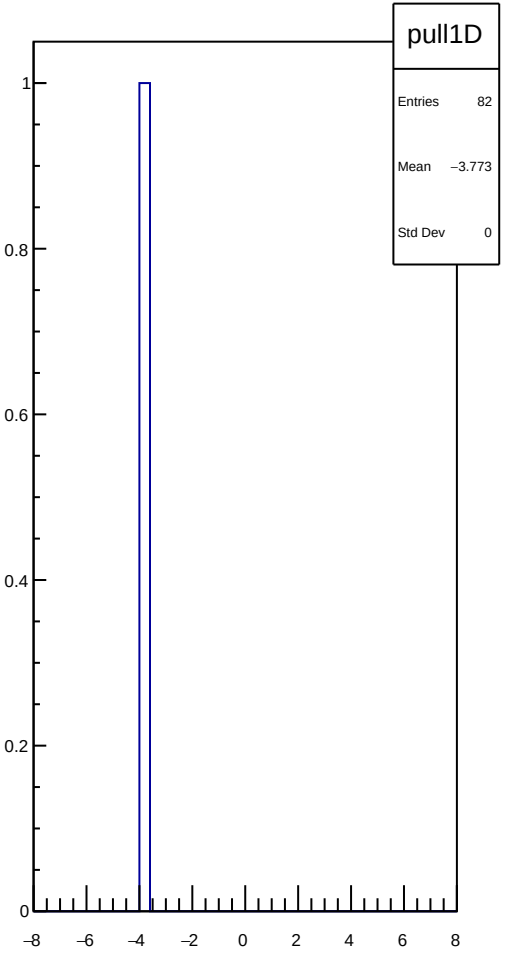

yield_usr_rms vs run
χ² / ndf 2.766e+05 / 81
p0 0.0788 ± 6.866e−05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

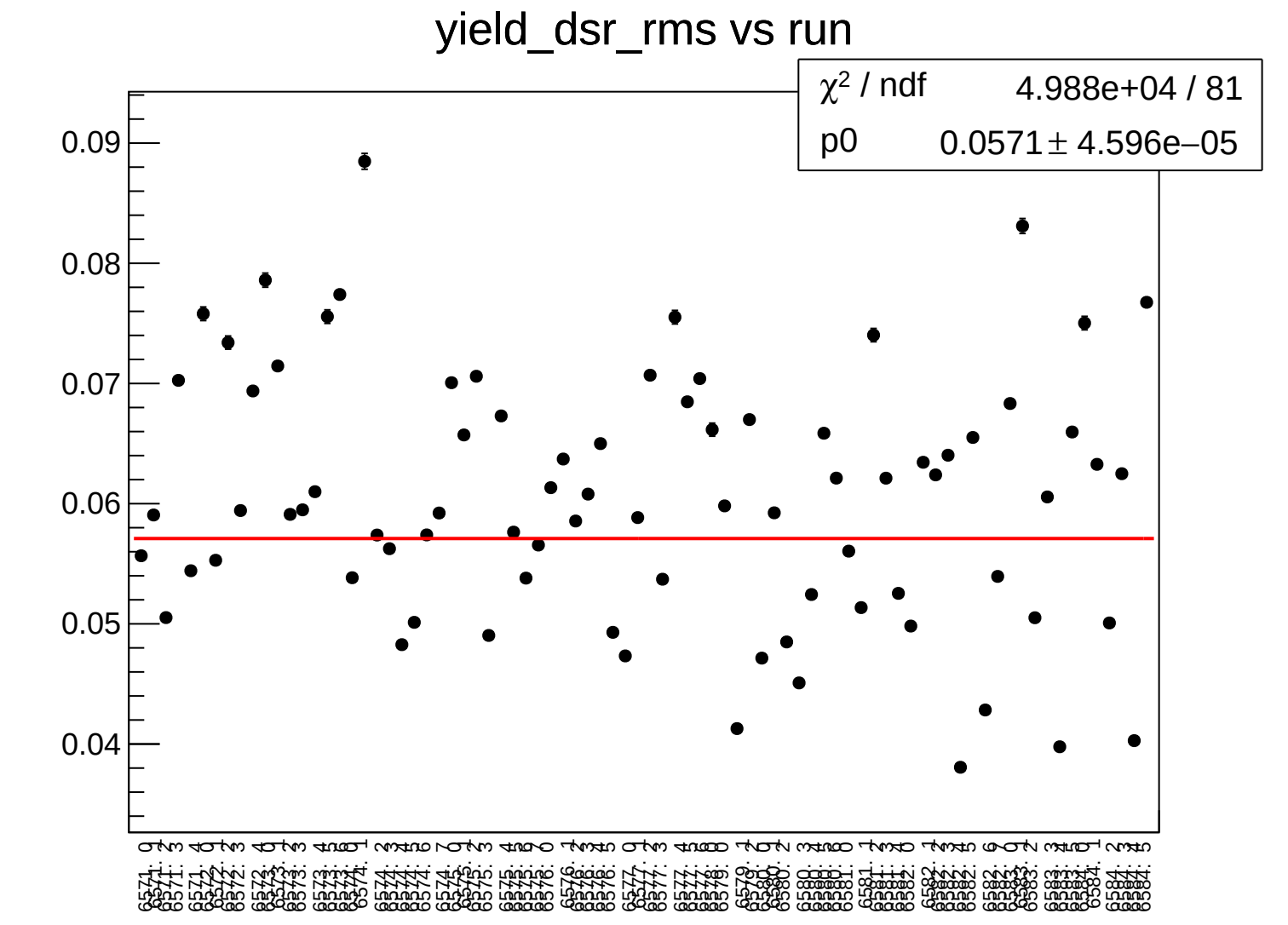

yield_dsl_mean vs run
χ² / ndf 1.266e+06 / 81
p0 82.38 ± 4.928e−05
82.55
82.5
82.45
82.4
82.35
82.3
82.25
pull
Entries 82
Mean 1532
Std Dev 1487
300
200
100
0
−100
−200
−300

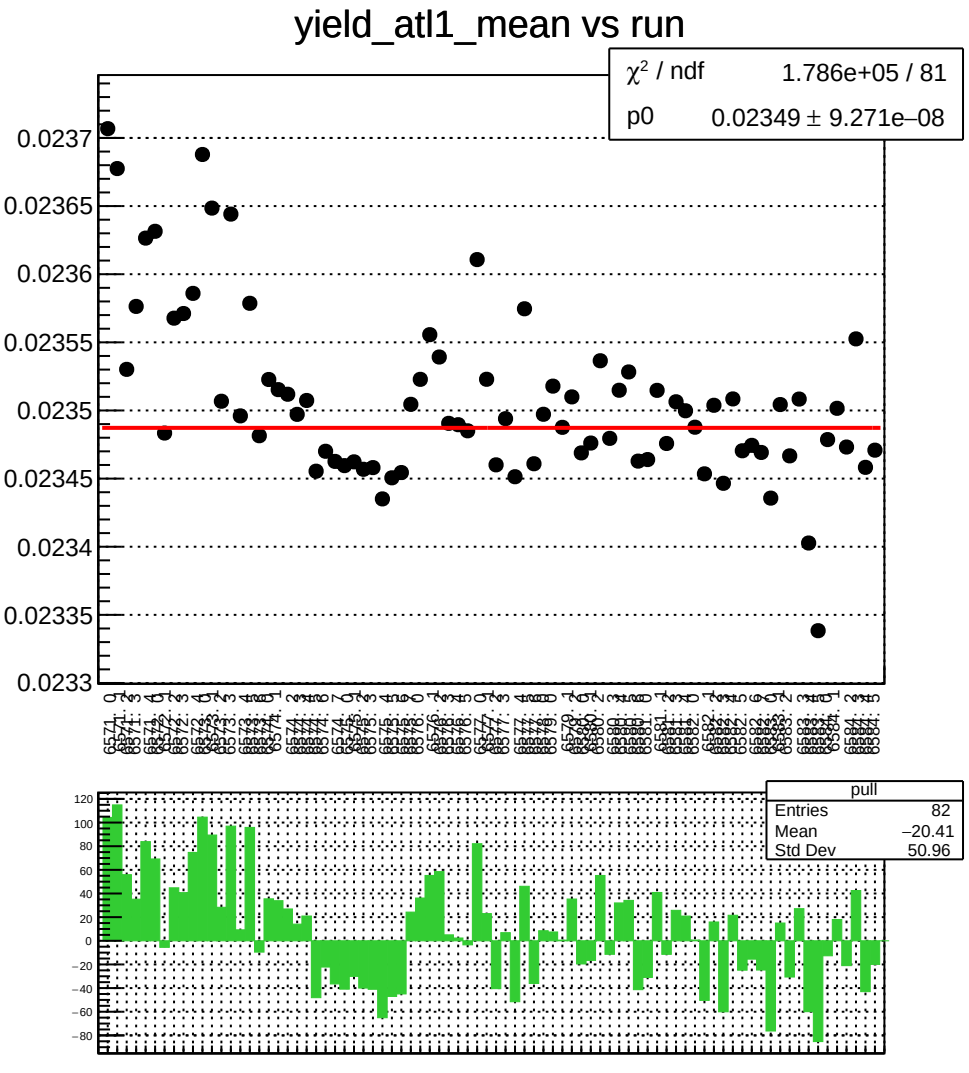

pull1D
Entries 82
Mean −3.06
Std Dev 4.547
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

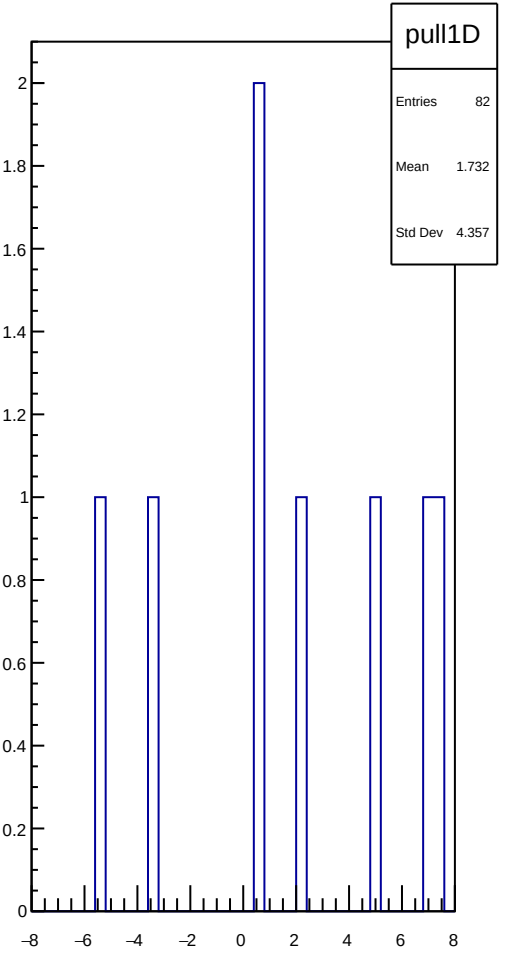

yield_dsl_rms vs run
χ² / ndf 1.989e+04 / 81
p0 0.04371 ± 3.485e–05
0.06
0.055
0.05
0.045
0.04
0.035

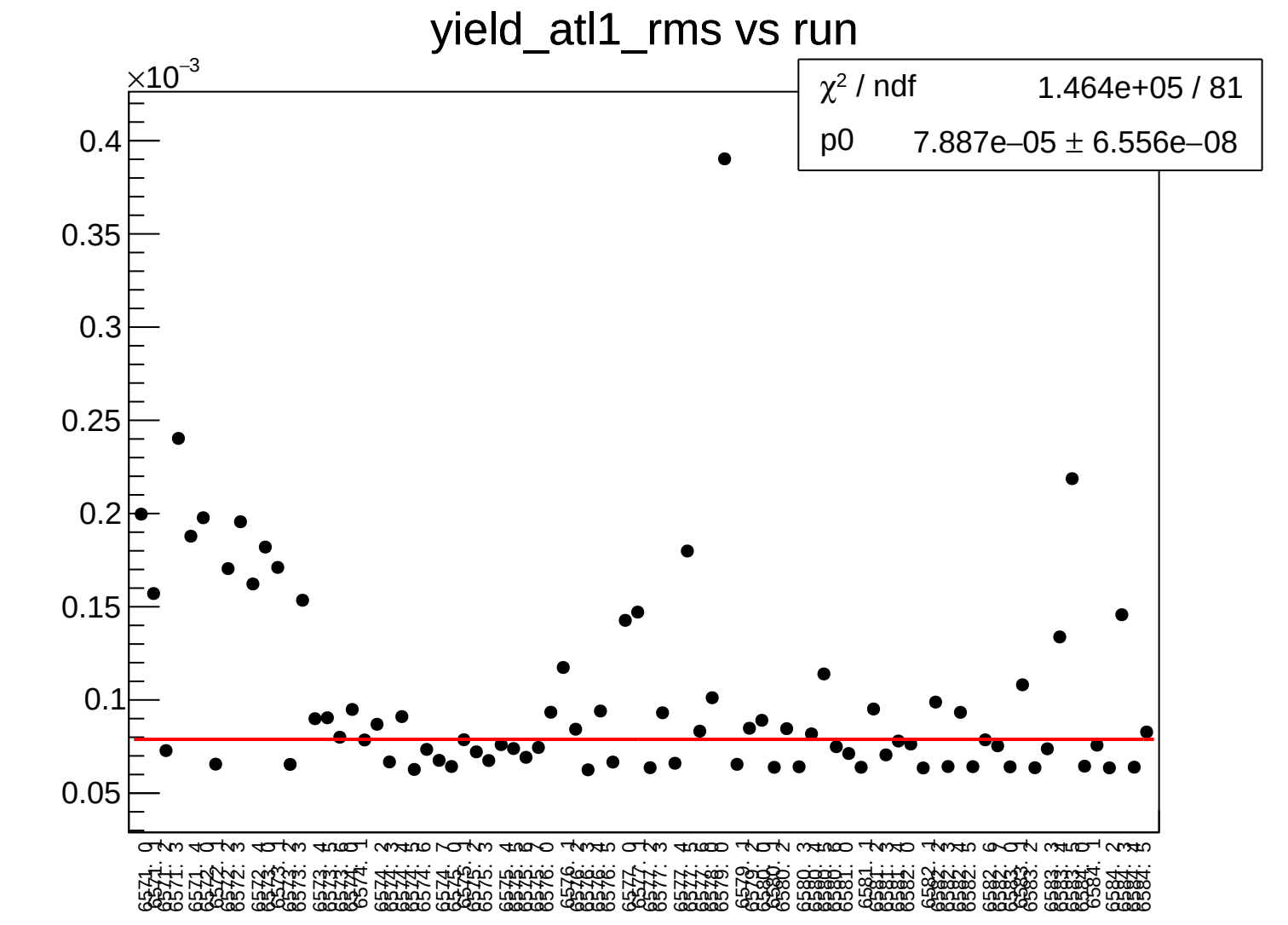

yield_dsr_mean vs run
χ² / ndf 1.168e+06 / 81
p0 −69.42 ± 6.499e−05
−69.25
−69.3
−69.35
−69.4
−69.45
−69.5
−69.55
pull
Entries 82
Mean −168.9
Std Dev 209.2
200
100
0
−100
−200
−300

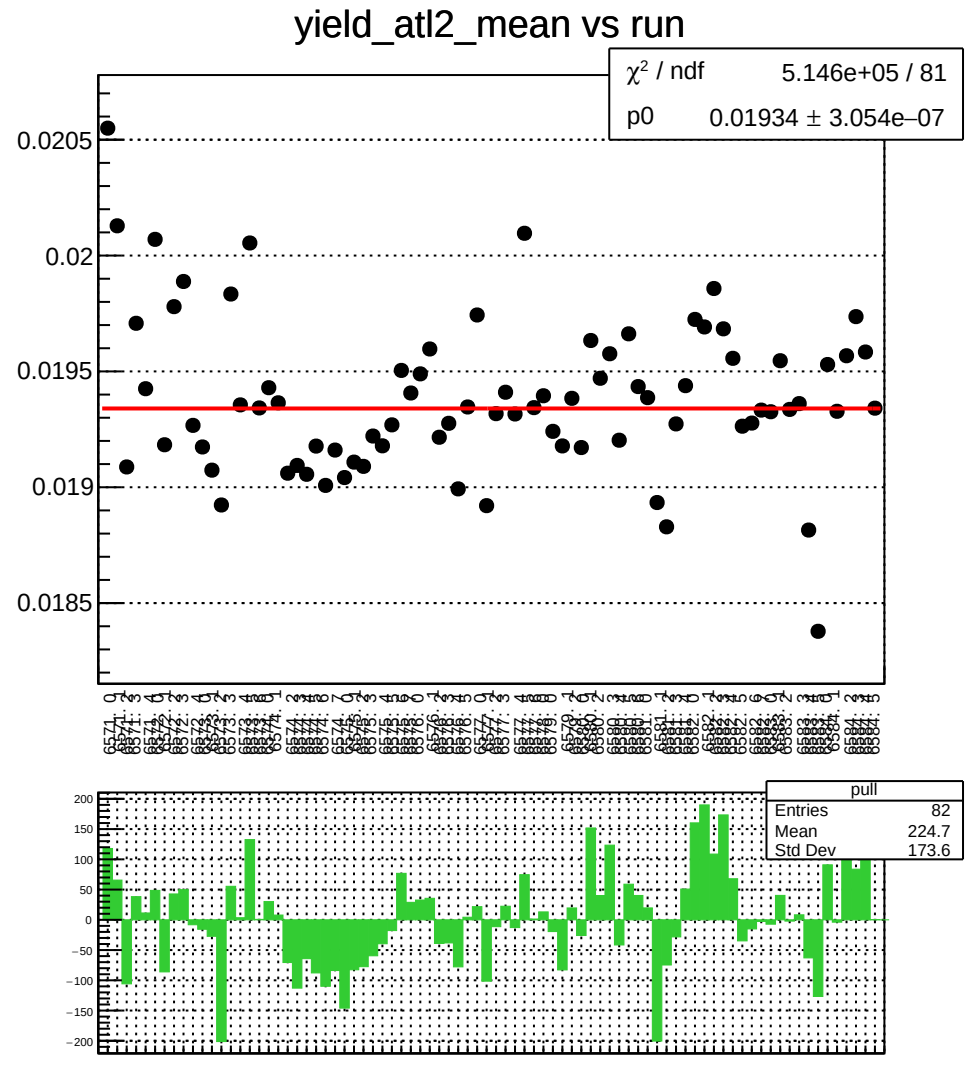

pull1D
Entries 82
Mean −3.773
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

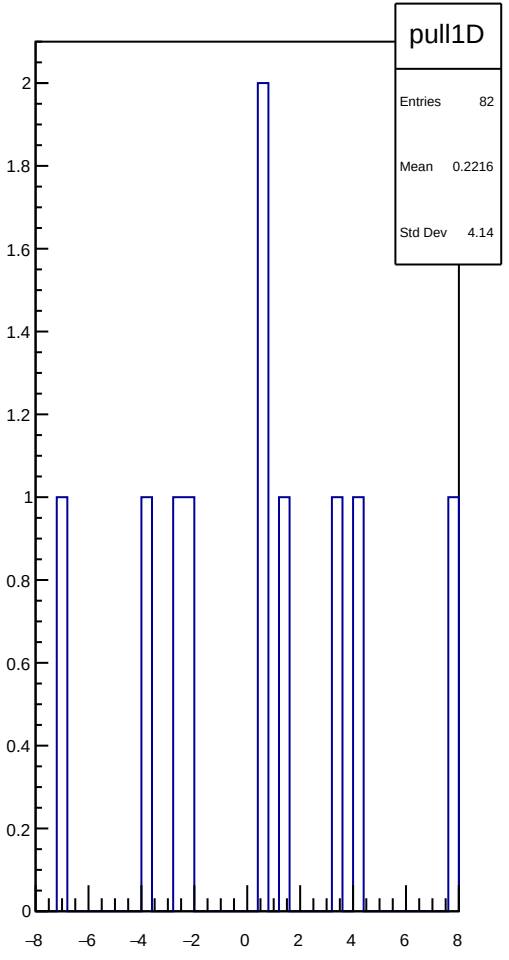

yield_dsr_rms vs run
χ² / ndf 4.988e+04 / 81
p0 0.0571 ± 4.596e−05
0.09
0.08
0.07
0.06
0.05
0.04

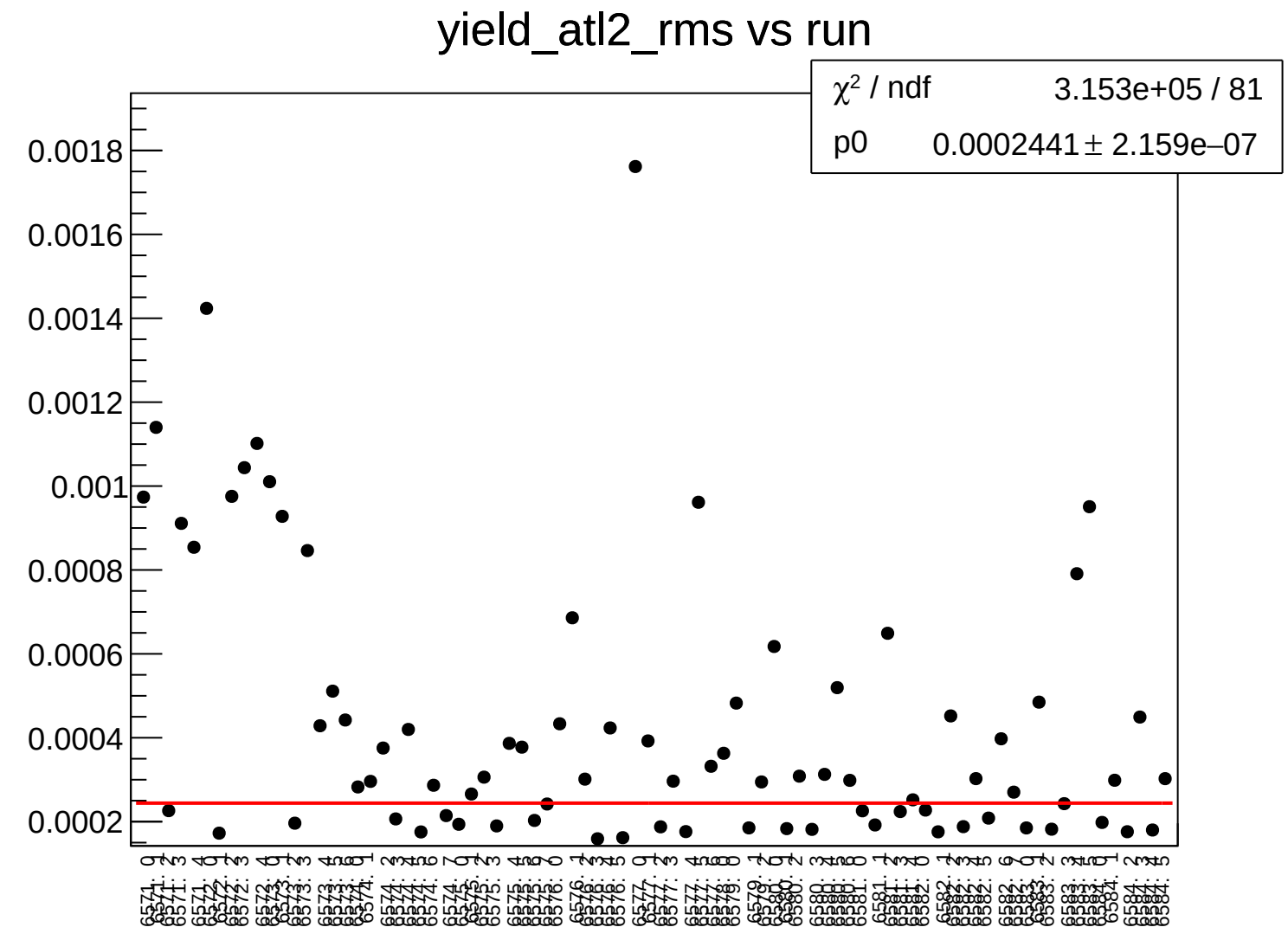

yield_atl1_mean vs run
χ² / ndf 1.786e+05 / 81
p0 0.02349 ± 9.271e−08
0.0237
0.02365
0.0236
0.02355
0.0235
0.02345
0.0234
0.02335
0.0233
pull
Entries 82
Mean −20.41
Std Dev 50.96
120
100
80
60
40
20
0
−20
−40
−60
−80

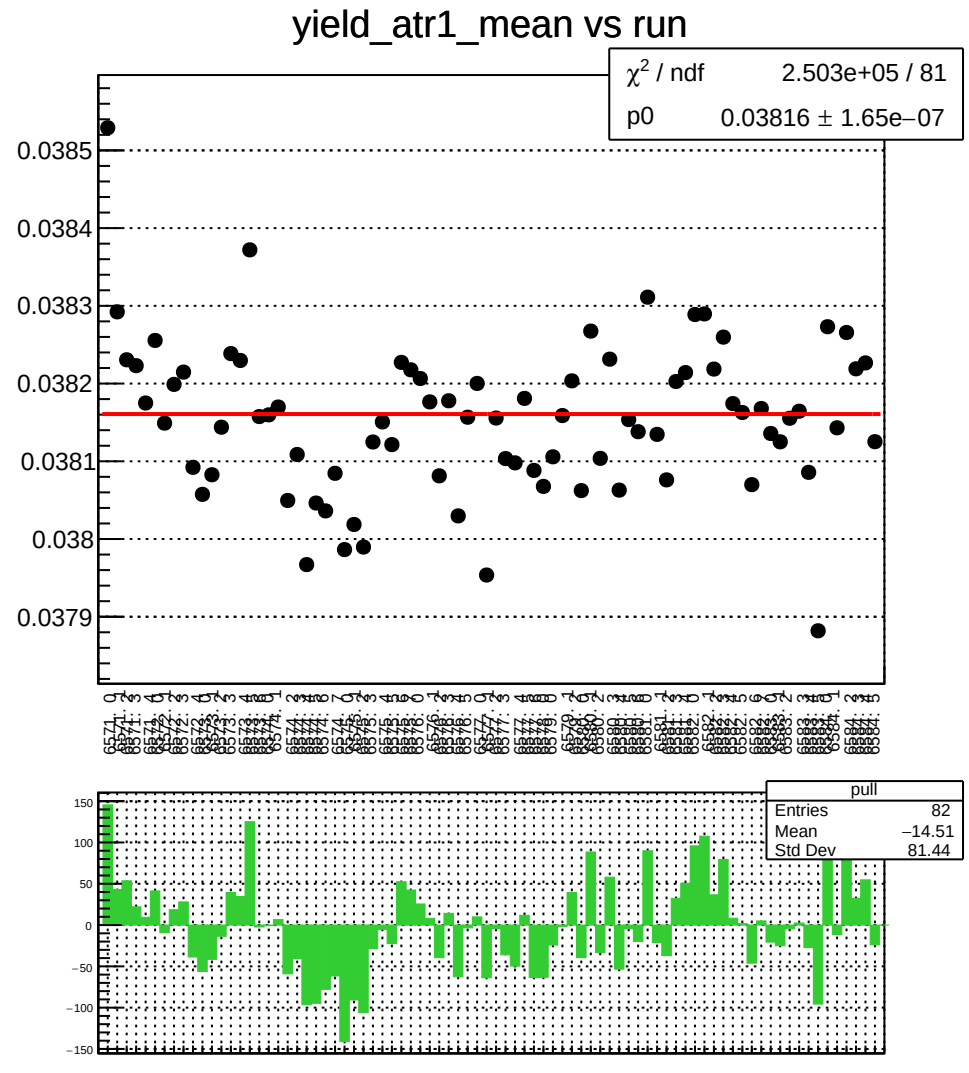

pull1D
Entries 82
Mean 1.732
Std Dev 4.357
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

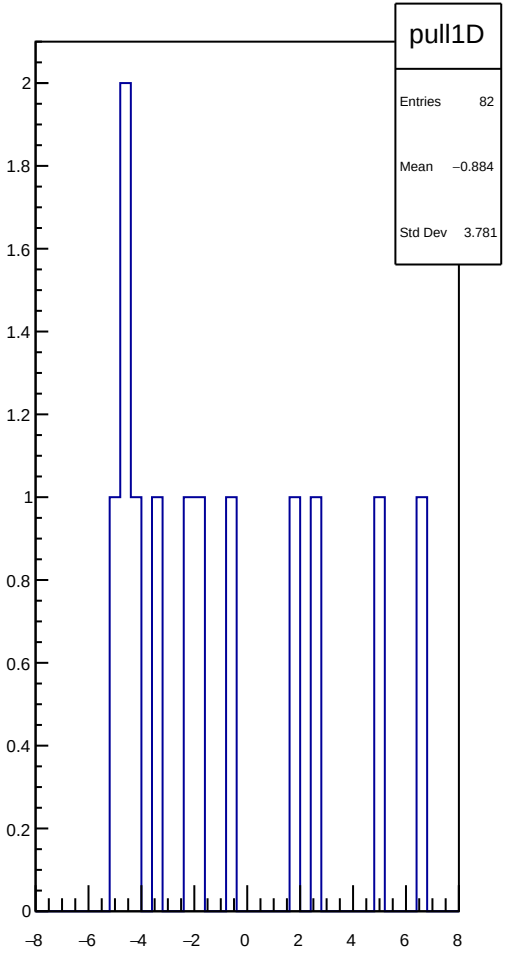

yield_atl1_rms vs run
×10⁻³
χ² / ndf 1.464e+05 / 81
p0 7.887e−05 ± 6.556e−08
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

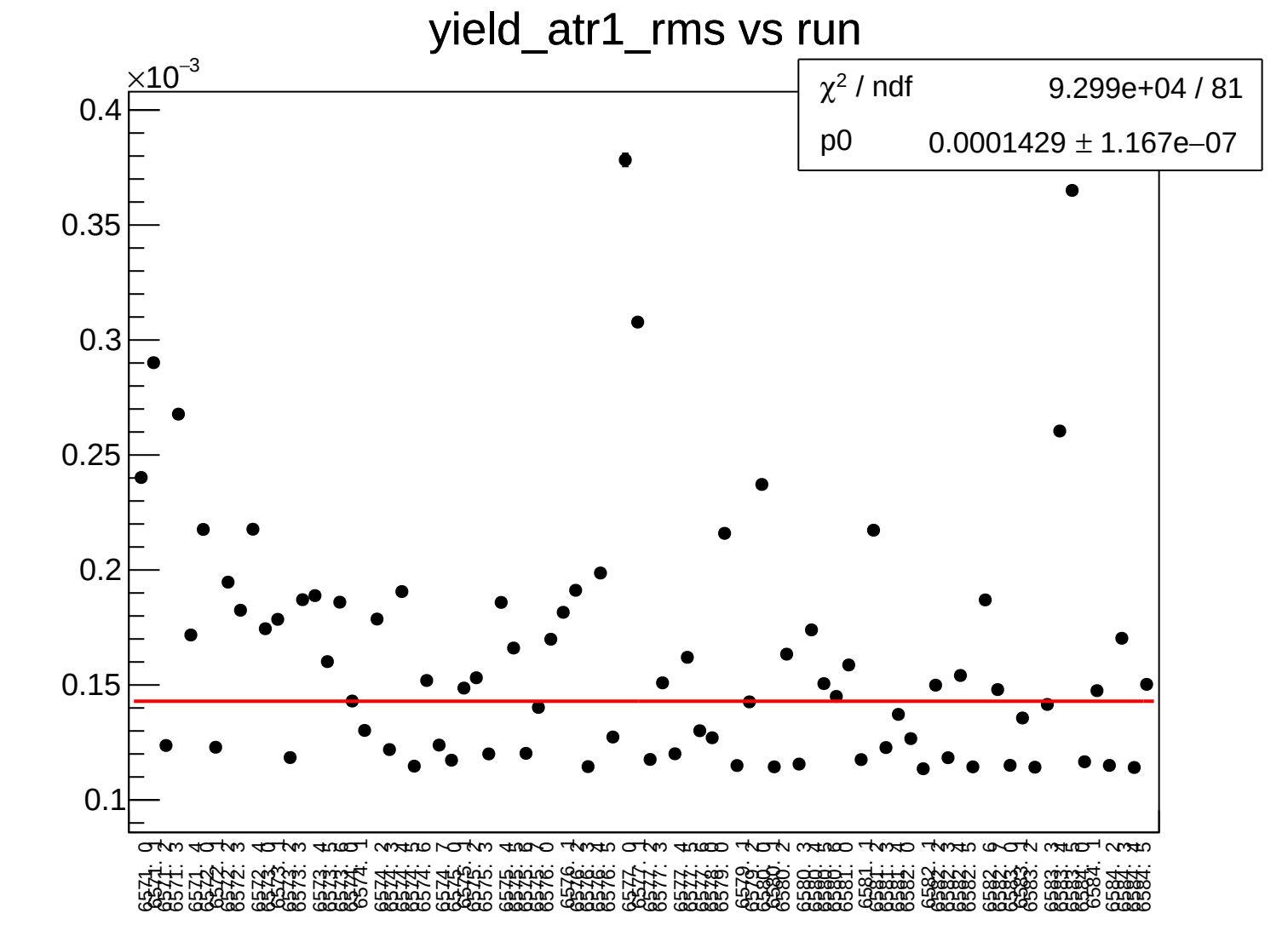

yield_atl2_mean vs run
χ² / ndf 5.146e+05 / 81
p0 0.01934 ± 3.054e−07
0.0205
0.02
0.0195
0.019
0.0185
pull
Entries 82
Mean 224.7
Std Dev 173.6
200
150
100
50
0
−50
−100
−150
−200

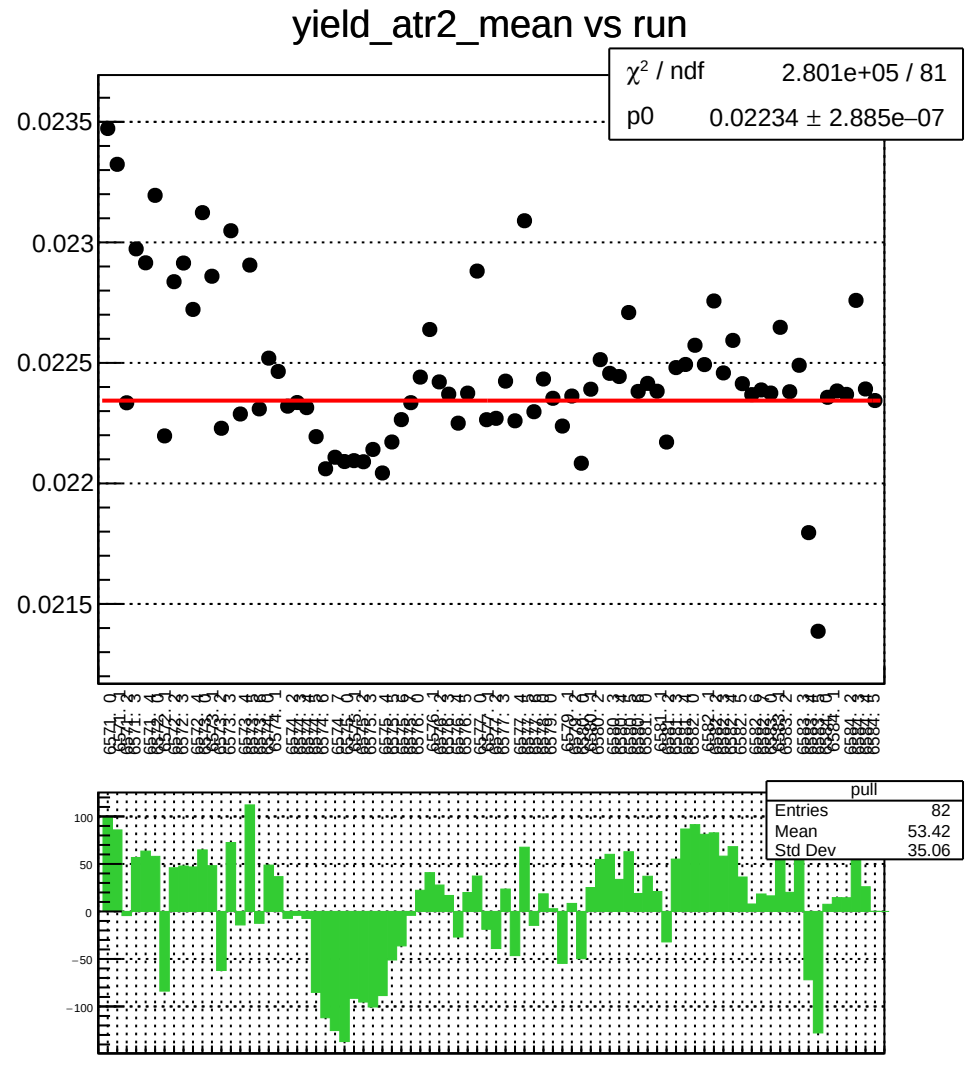

pull1D
Entries 82
Mean 0.2216
Std Dev 4.14
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

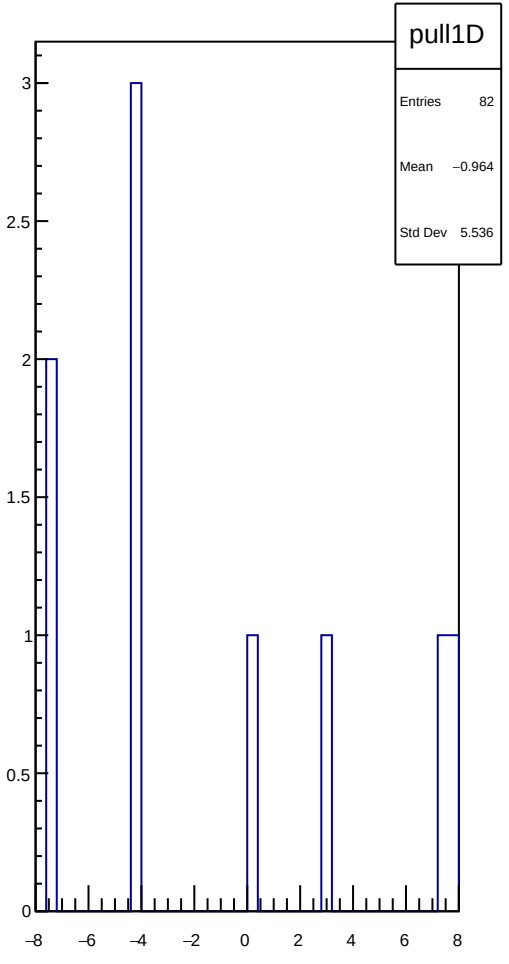

yield_atl2_rms vs run
χ² / ndf 3.153e+05 / 81
p0 0.0002441 ± 2.159e−07
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002

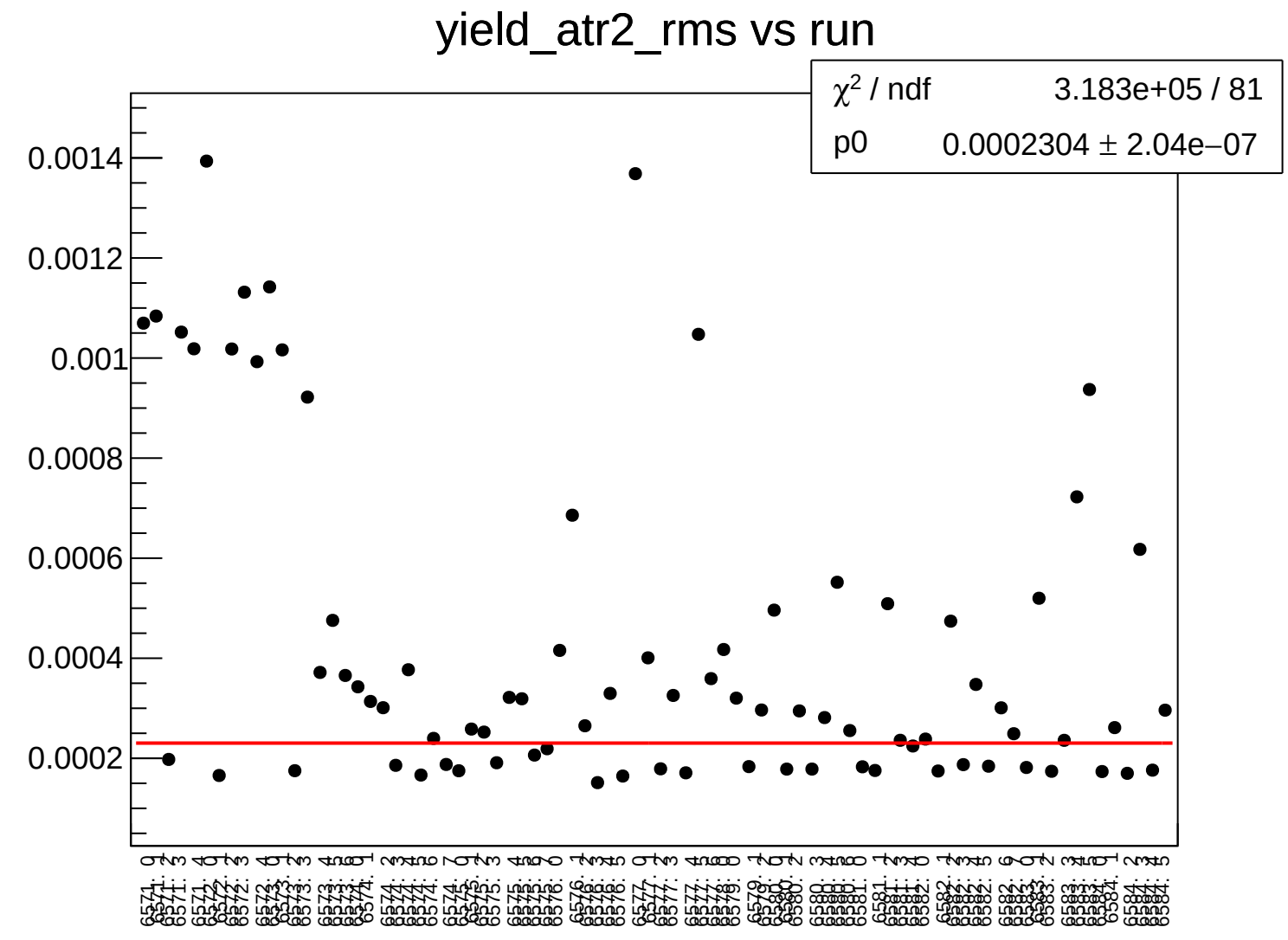

yield_atr1_mean vs run
χ² / ndf 2.503e+05 / 81
p0 0.03816 ± 1.65e−07
0.0385
0.0384
0.0383
0.0382
0.0381
0.038
0.0379
pull
Entries 82
Mean −14.51
Std Dev 81.44
150
100
50
0
−50
−100
−150

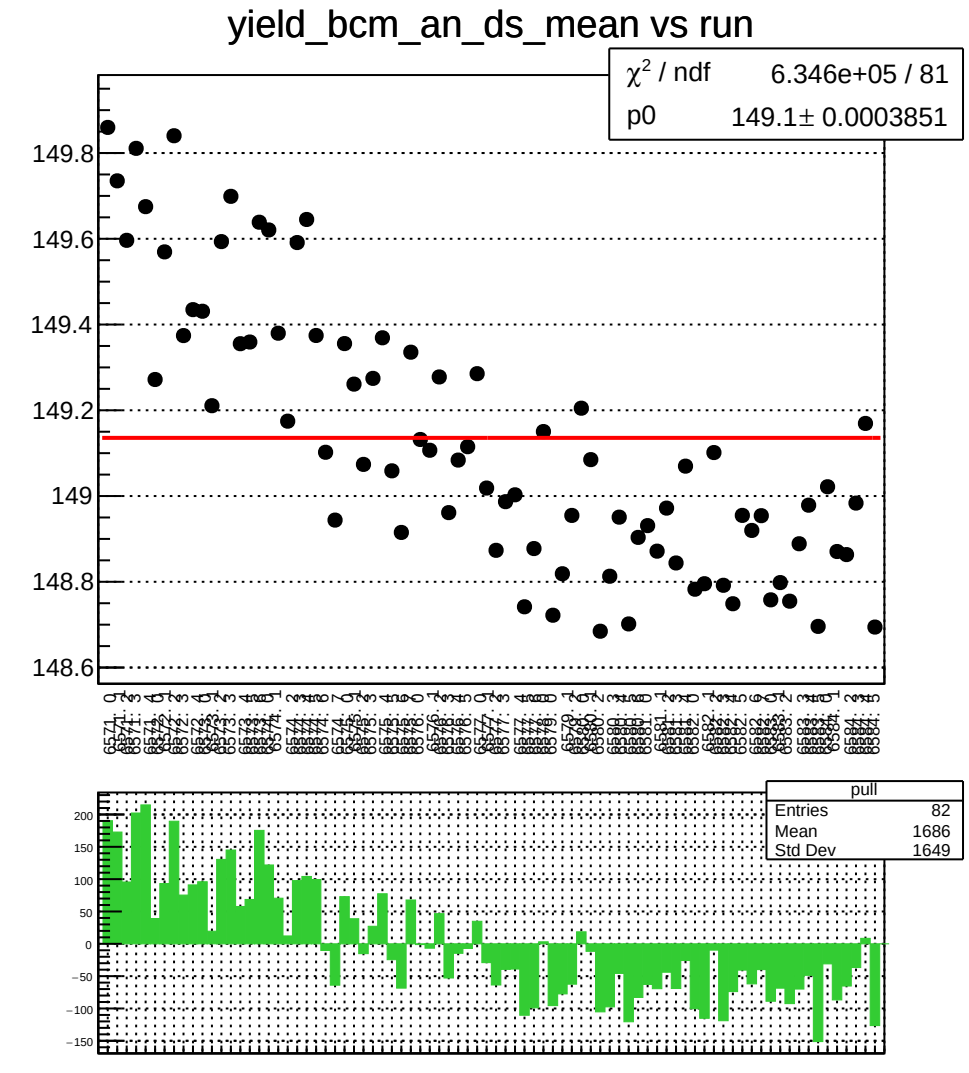

pull1D
Entries 82
Mean −0.884
Std Dev 3.781
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

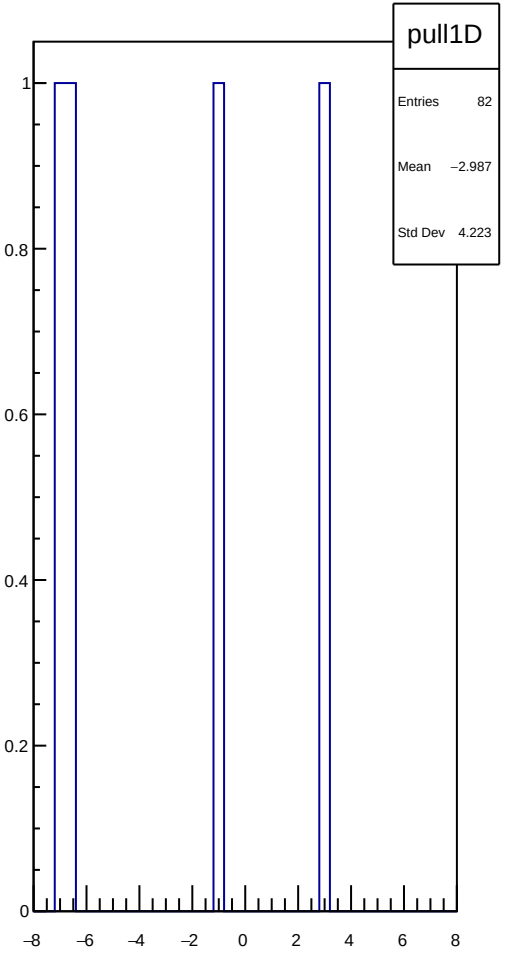

yield_atr1_rms vs run
×10⁻³
χ² / ndf 9.299e+04 / 81
p0 0.0001429 ± 1.167e−07
0.4
0.35
0.3
0.25
0.2
0.15
0.1

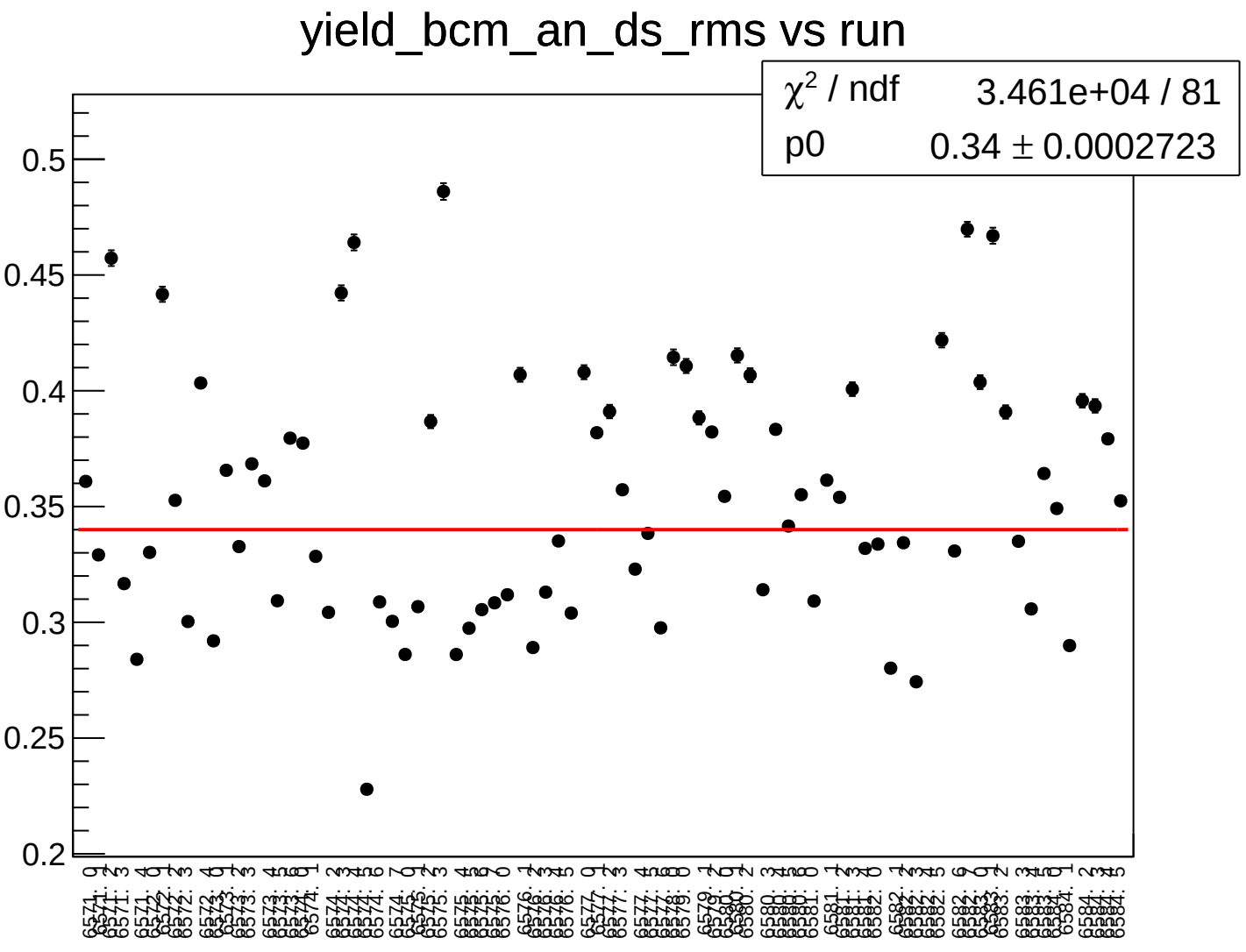

yield_atr2_mean vs run
χ² / ndf 2.801e+05 / 81
p0 0.02234 ± 2.885e−07
0.0235
0.023
0.0225
0.022
0.0215
pull
Entries 82
Mean 53.42
Std Dev 35.06
100
50
0
−50
−100

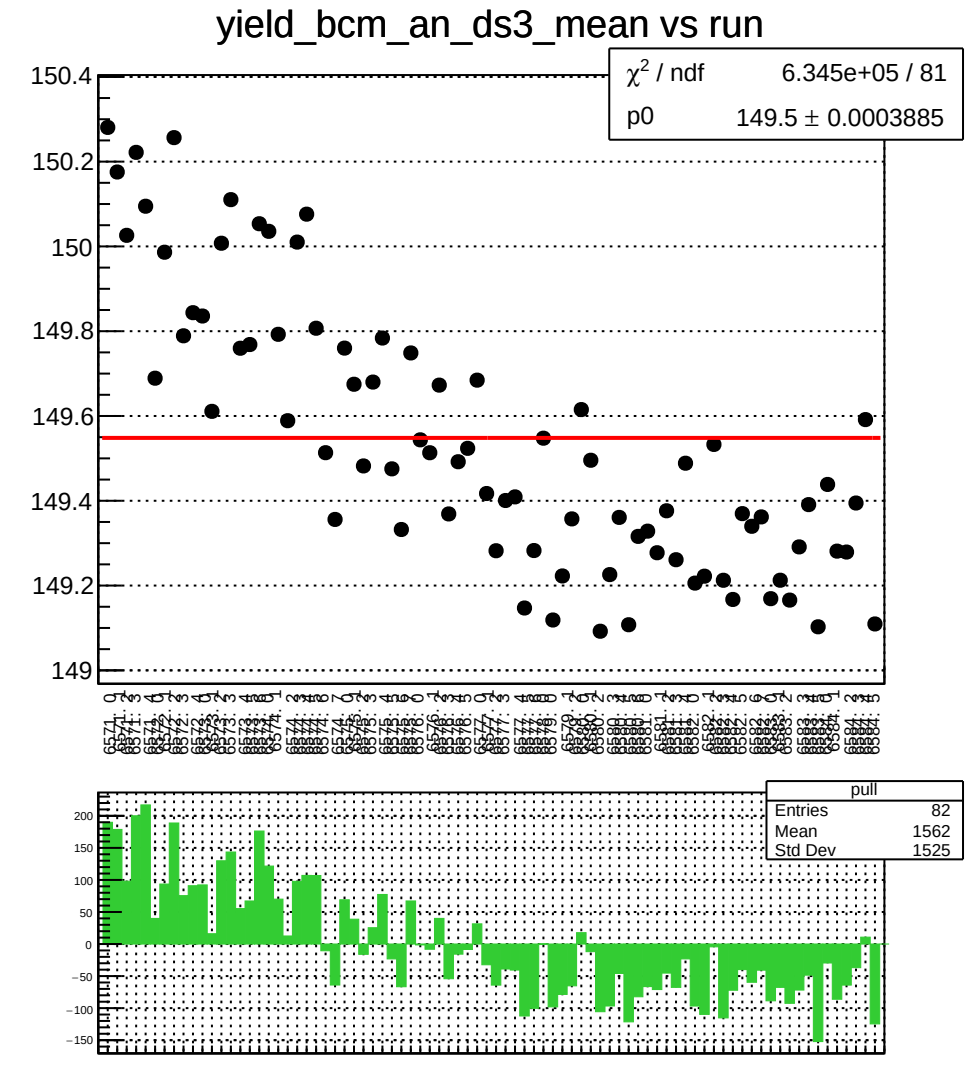

pull1D
Entries 82
Mean −0.964
Std Dev 5.536
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

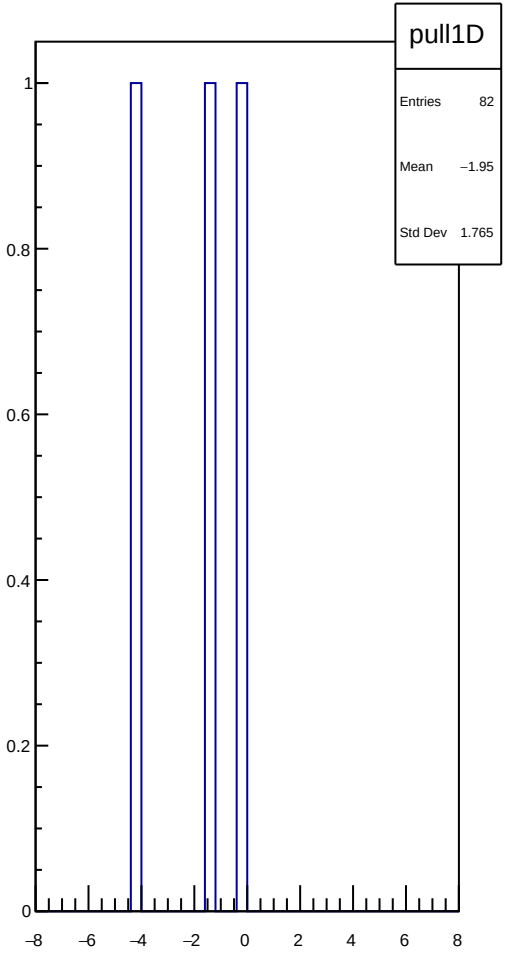

yield_atr2_rms vs run
χ² / ndf 3.183e+05 / 81
p0 0.0002304 ± 2.04e−07
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002

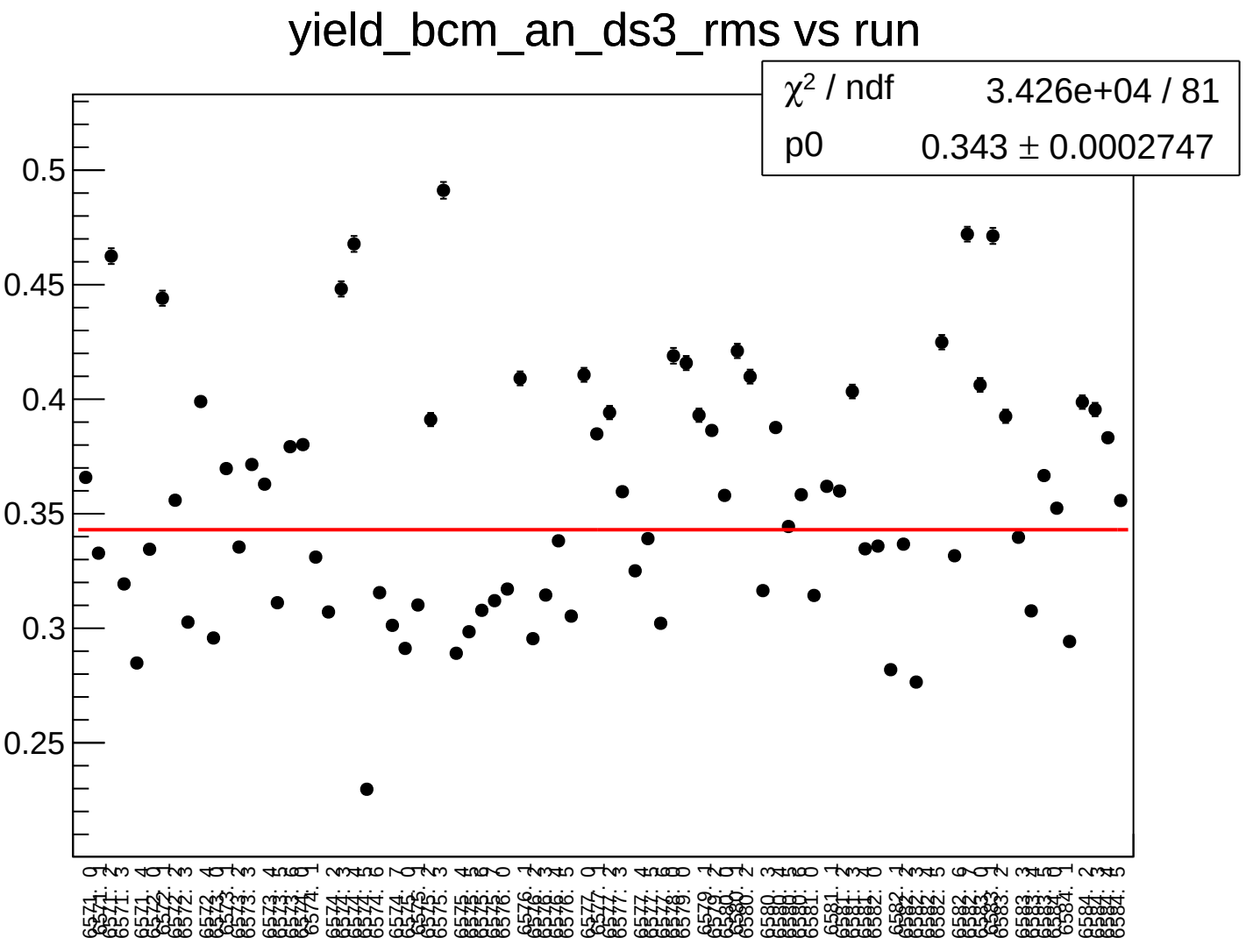

yield_bcm_an_ds_mean vs run
χ² / ndf 6.346e+05 / 81
p0 149.1± 0.0003851
149.8
149.6
149.4
149.2
149
148.8
148.6
pull
Entries 82
Mean 1686
Std Dev 1649
200
150
100
50
0
−50
−100
−150

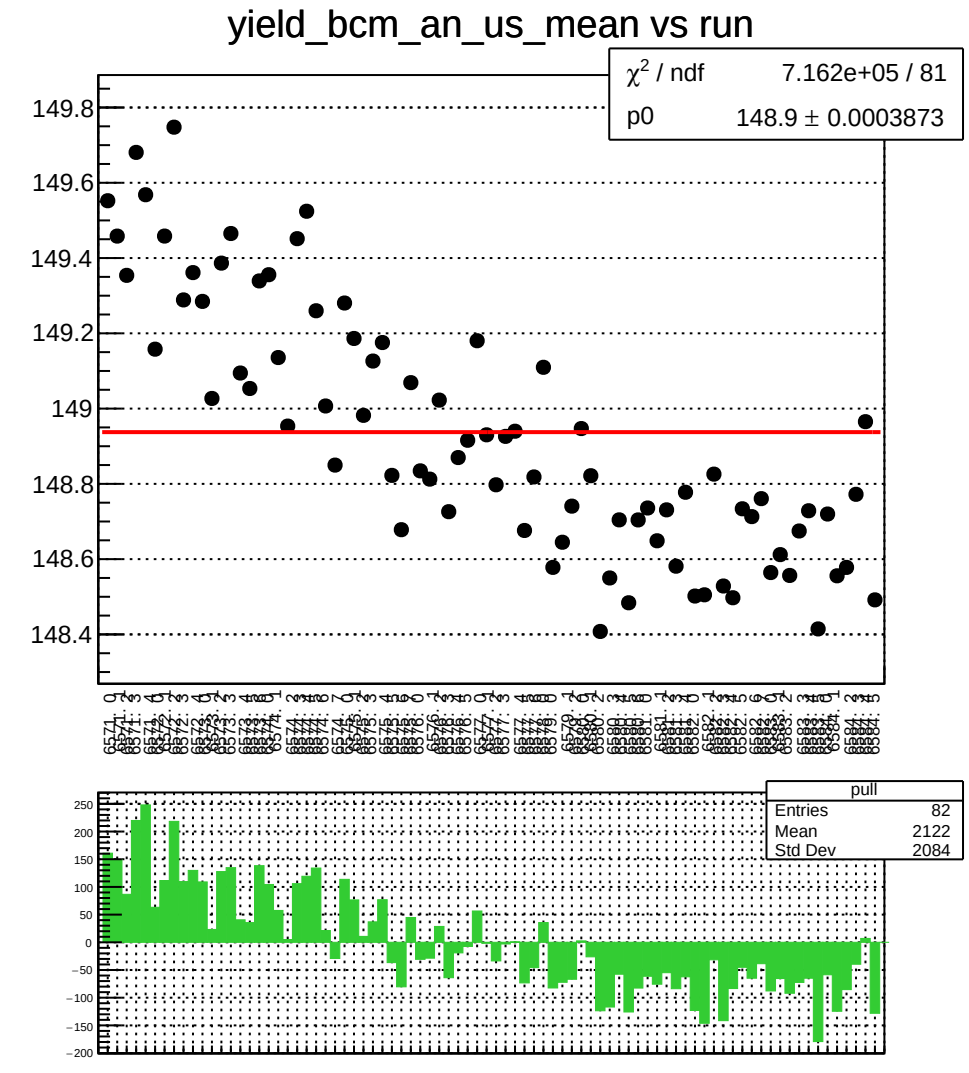

pull1D
Entries 82
Mean −2.987
Std Dev 4.223
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

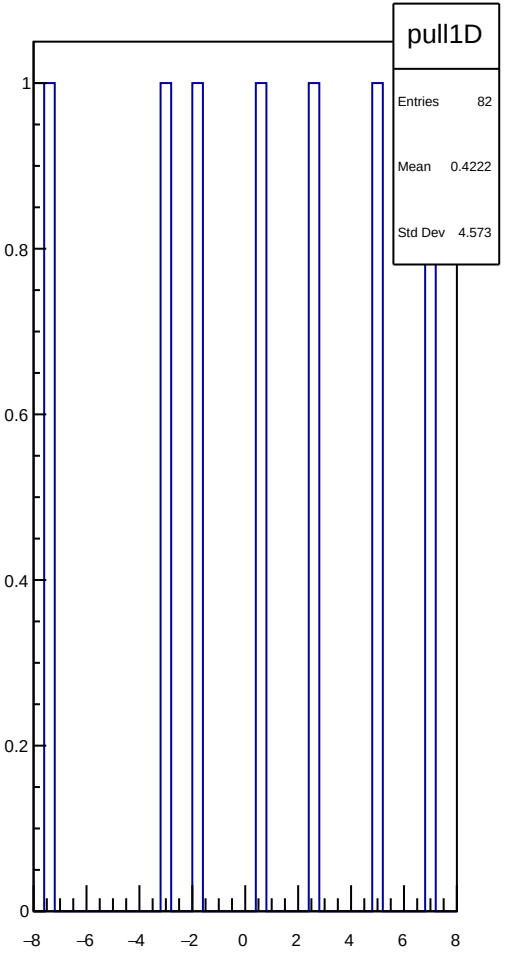

yield_bcm_an_ds_rms vs run
$\chi^2$ / ndf 3.461e+04 / 81
p0 0.34 ± 0.0002723
0.5
0.45
0.4
0.35
0.3
0.25
0.2

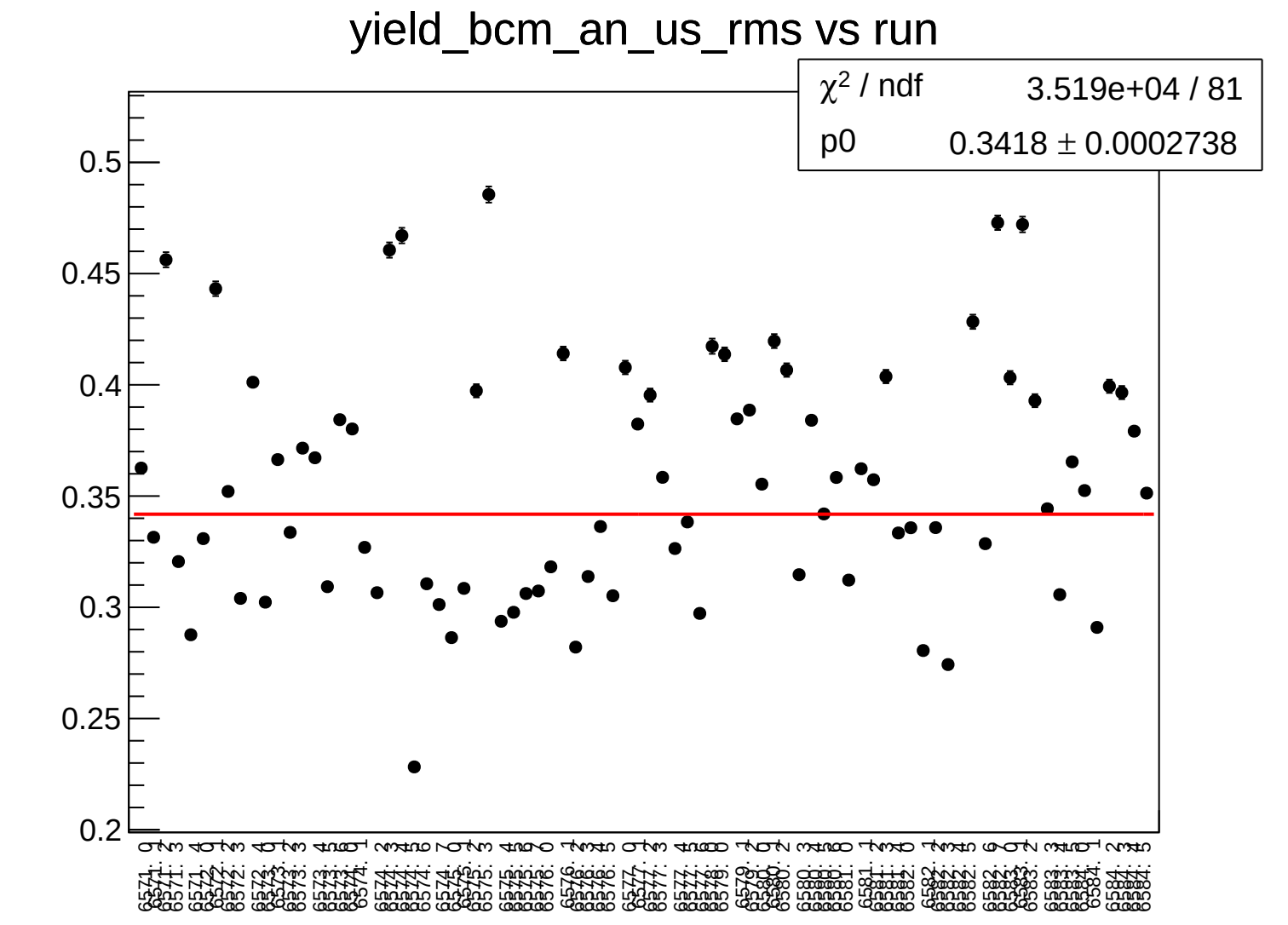

yield_bcm_an_ds3_mean vs run
χ² / ndf 6.345e+05 / 81
p0 149.5 ± 0.0003885
150.4
150.2
150
149.8
149.6
149.4
149.2
149
pull
Entries 82
Mean 1562
Std Dev 1525
200
150
100
50
0
−50
−100
−150

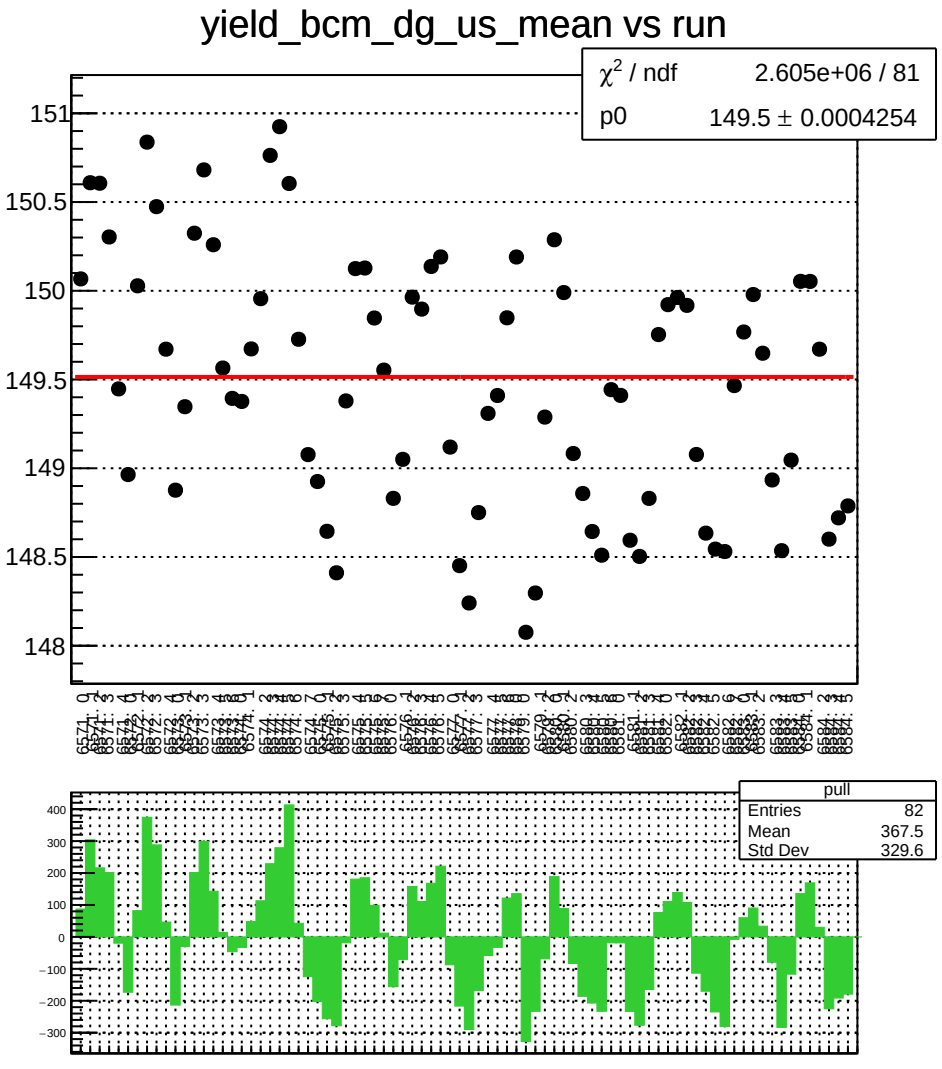

pull1D
Entries 82
Mean −1.95
Std Dev 1.765
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

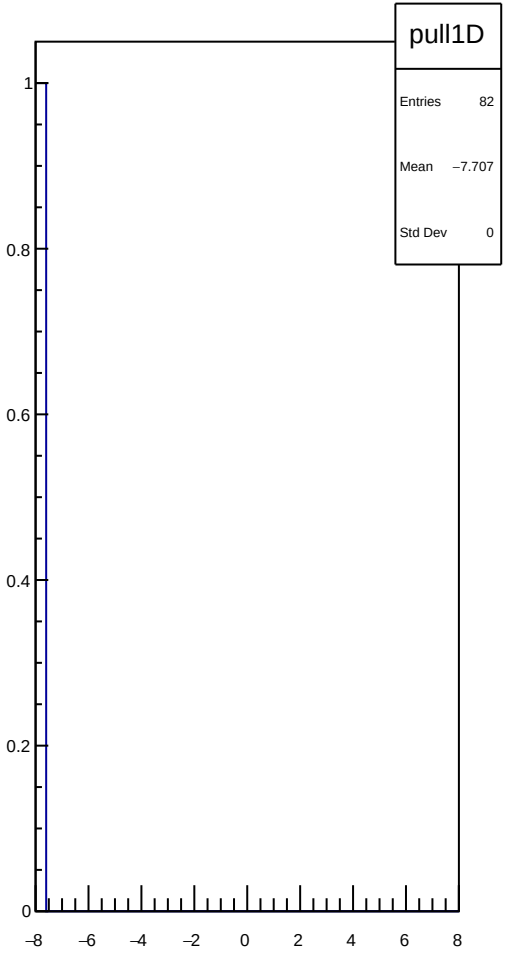

yield_bcm_an_ds3_rms vs run
χ² / ndf 3.426e+04 / 81
p0 0.343 ± 0.0002747
0.5
0.45
0.4
0.35
0.3
0.25

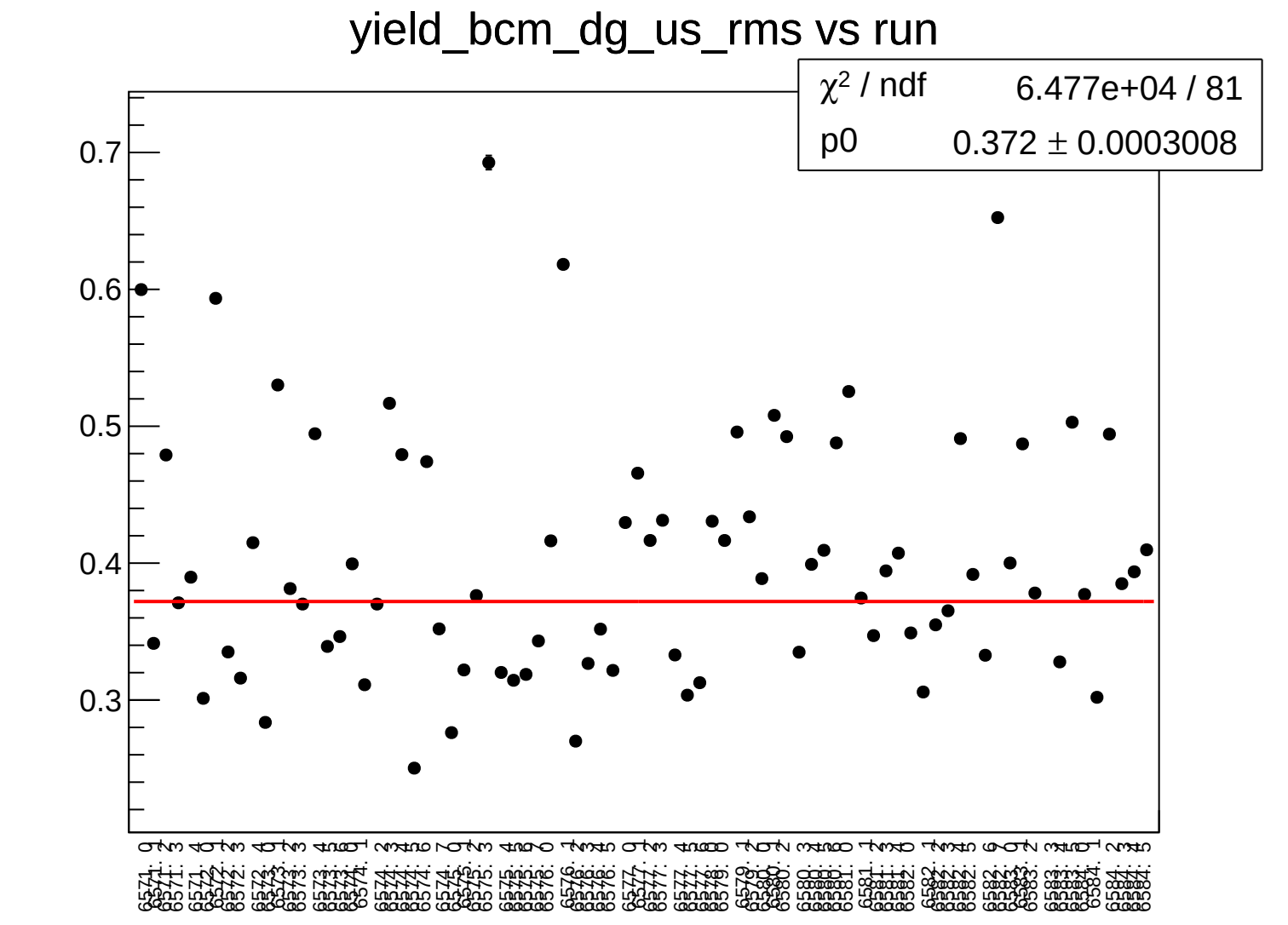

yield_bcm_an_us_mean vs run
χ² / ndf 7.162e+05 / 81
p0 148.9 ± 0.0003873
149.8
149.6
149.4
149.2
149
148.8
148.6
148.4
pull
Entries 82
Mean 2122
Std Dev 2084
250
200
150
100
50
0
−50
−100
−150
−200

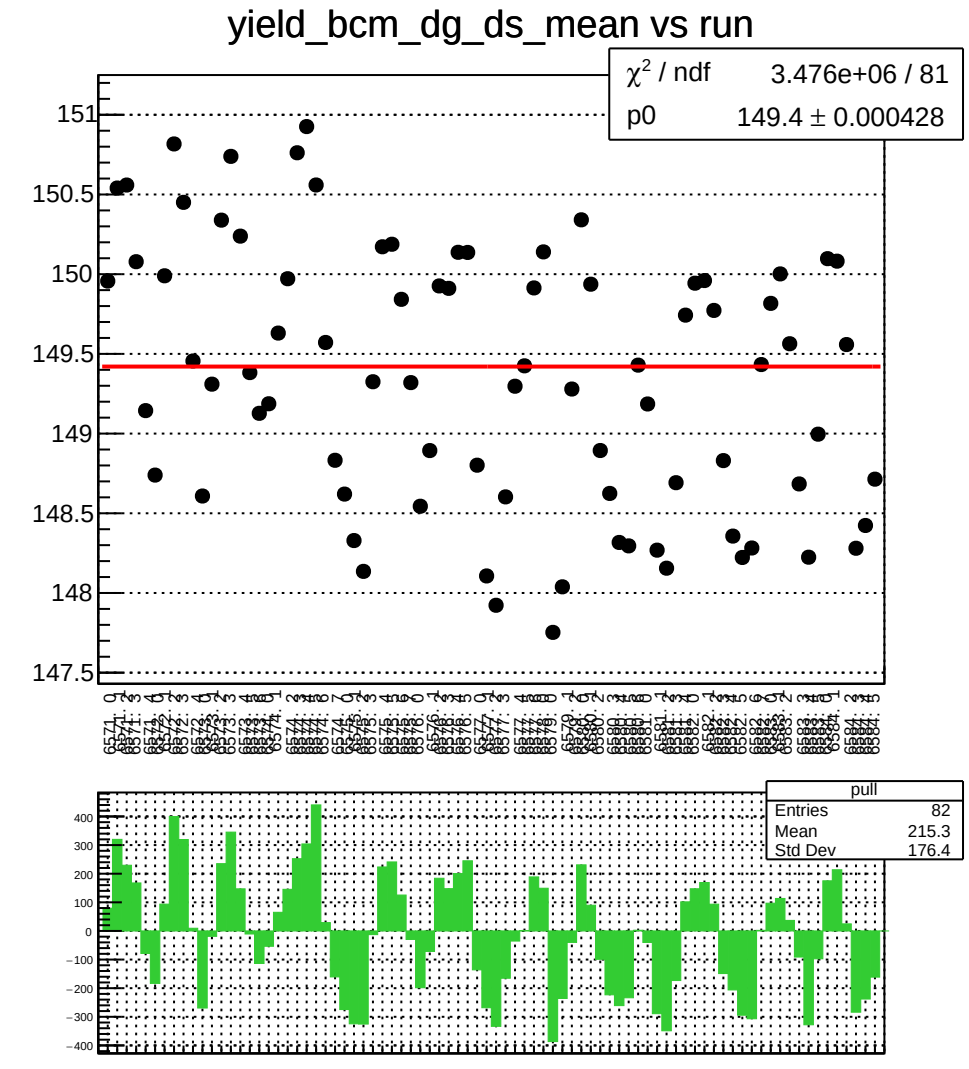

pull1D
Entries 82
Mean 0.4222
Std Dev 4.573
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

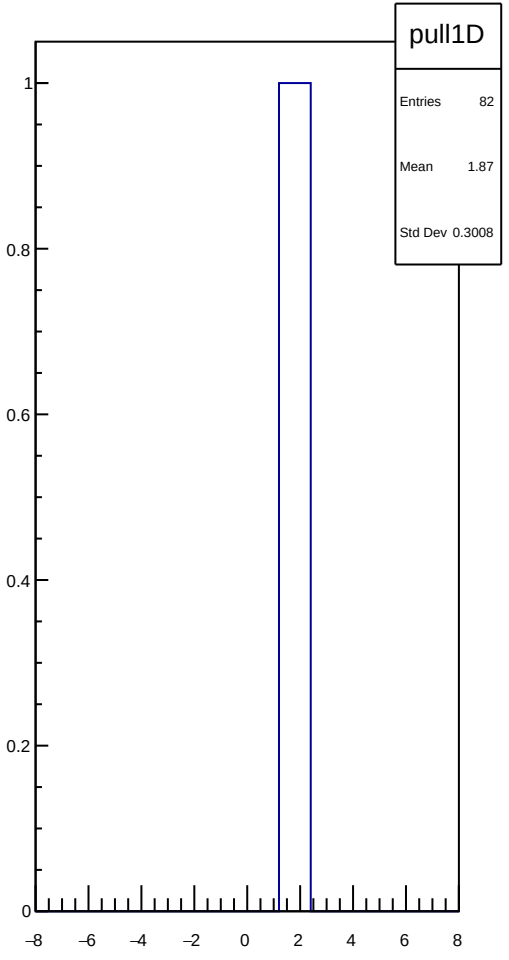

yield_bcm_an_us_rms vs run
χ² / ndf 3.519e+04 / 81
p0 0.3418 ± 0.0002738
0.5
0.45
0.4
0.35
0.3
0.25
0.2

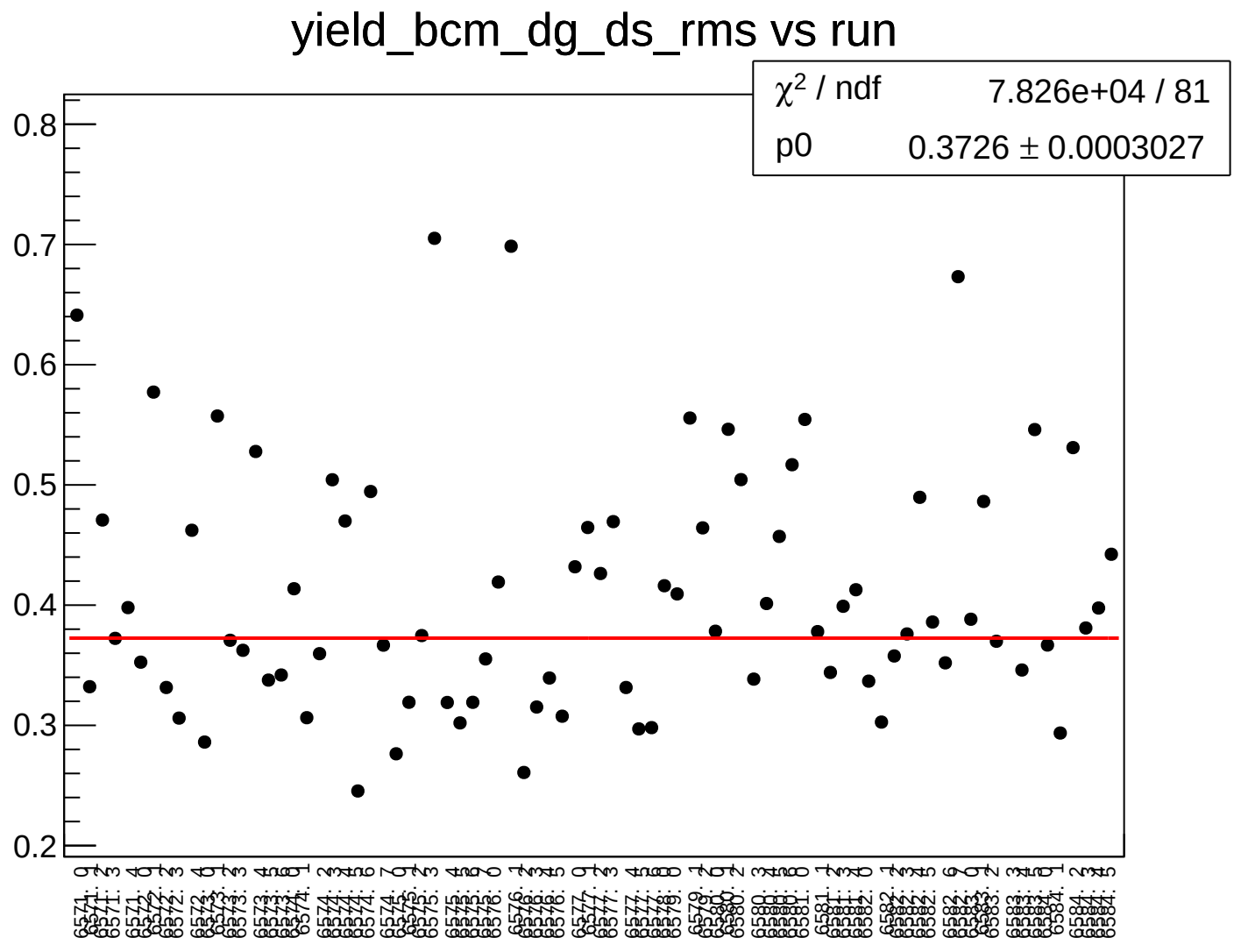

yield_bcm_dg_us_mean vs run
χ² / ndf 2.605e+06 / 81
p0 149.5 ± 0.0004254
151
150.5
150
149.5
149
148.5
148
pull
Entries 82
Mean 367.5
Std Dev 329.6
400
300
200
100
0
−100
−200
−300

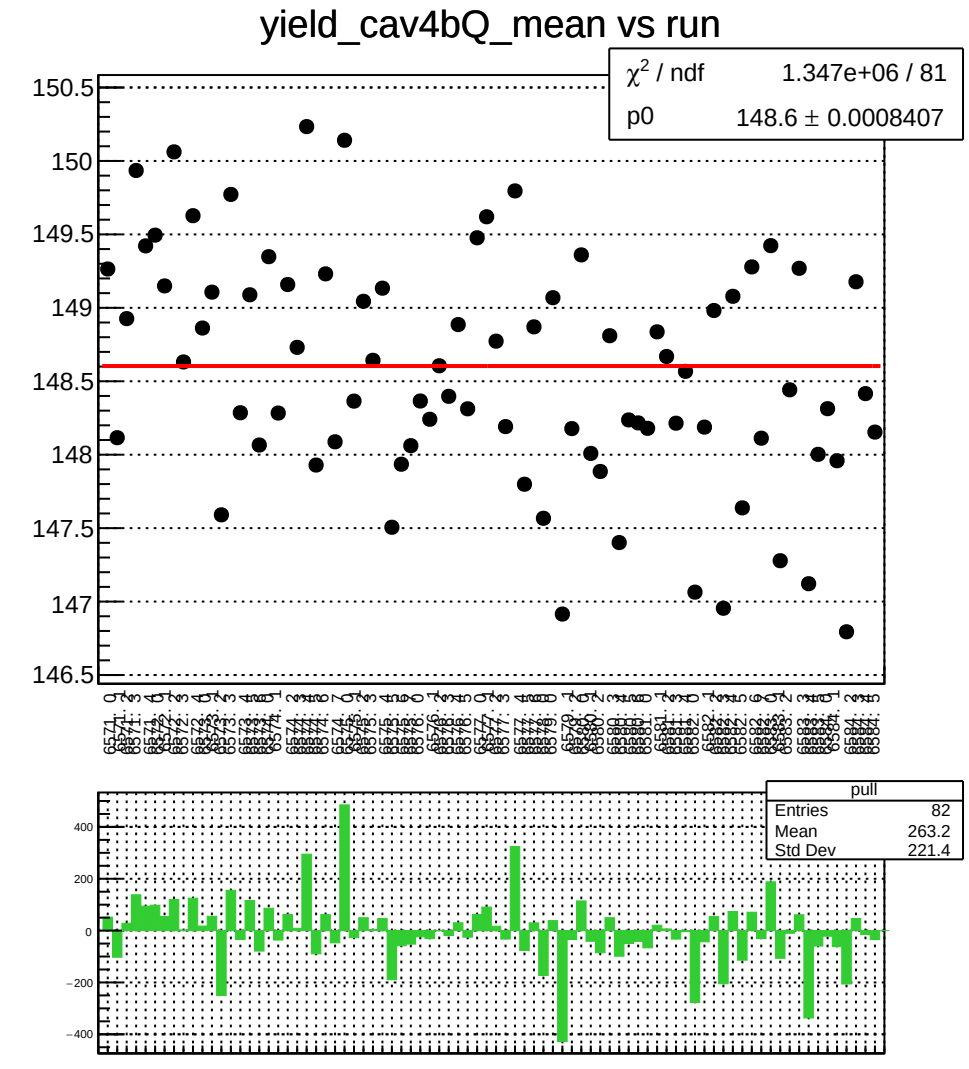

pull1D
Entries 82
Mean −7.707
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

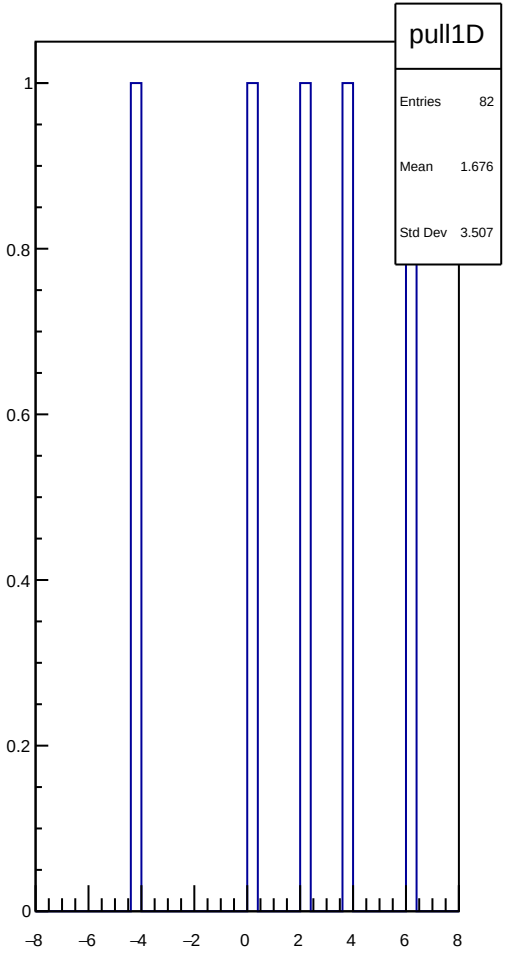

yield_bcm_dg_us_rms vs run
χ² / ndf 6.477e+04 / 81
p0 0.372 ± 0.0003008
0.7
0.6
0.5
0.4
0.3

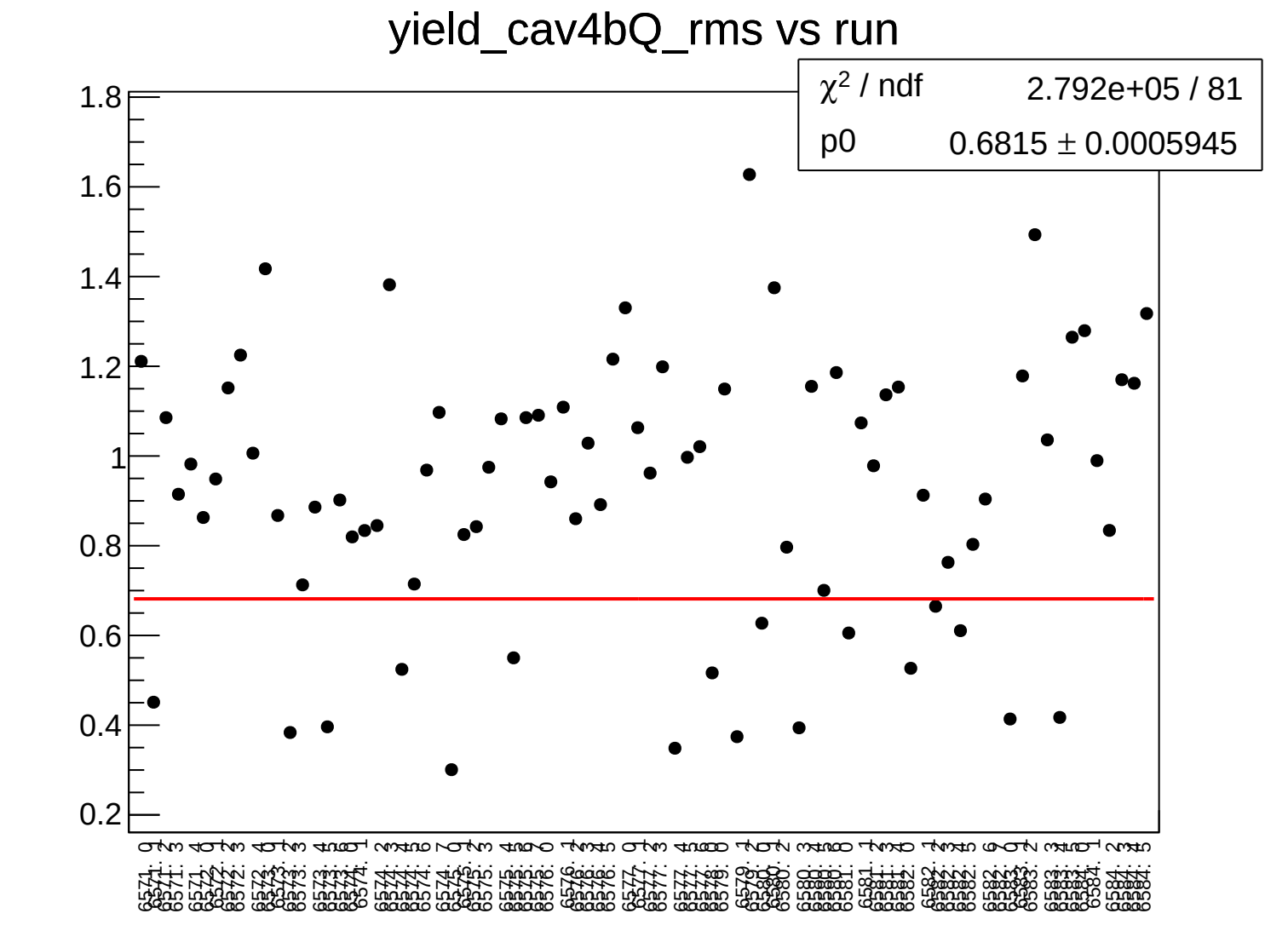

yield_bcm_dg_ds_mean vs run
χ² / ndf 3.476e+06 / 81
p0 149.4 ± 0.000428
151
150.5
150
149.5
149
148.5
148
147.5
pull
Entries 82
Mean 215.3
Std Dev 176.4
400
300
200
100
0
−100
−200
−300
−400

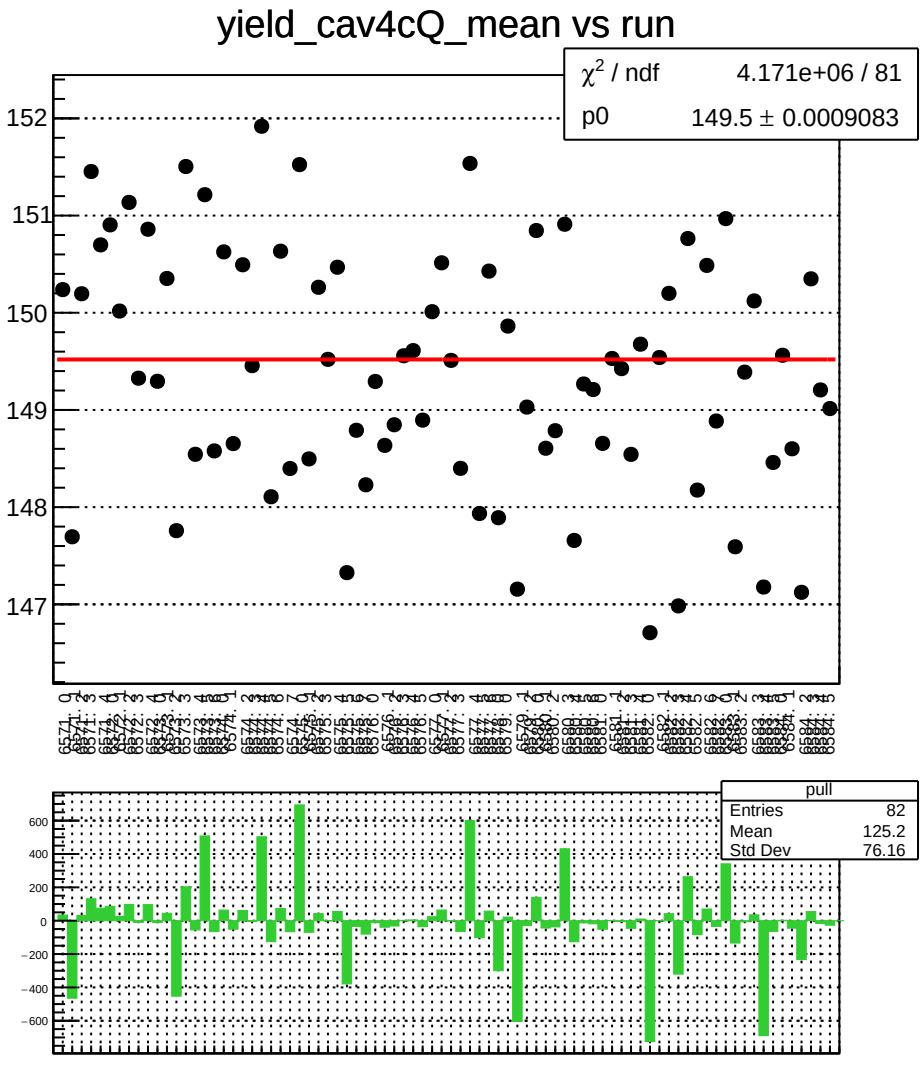

pull1D
Entries 82
Mean 1.87
Std Dev 0.3008
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

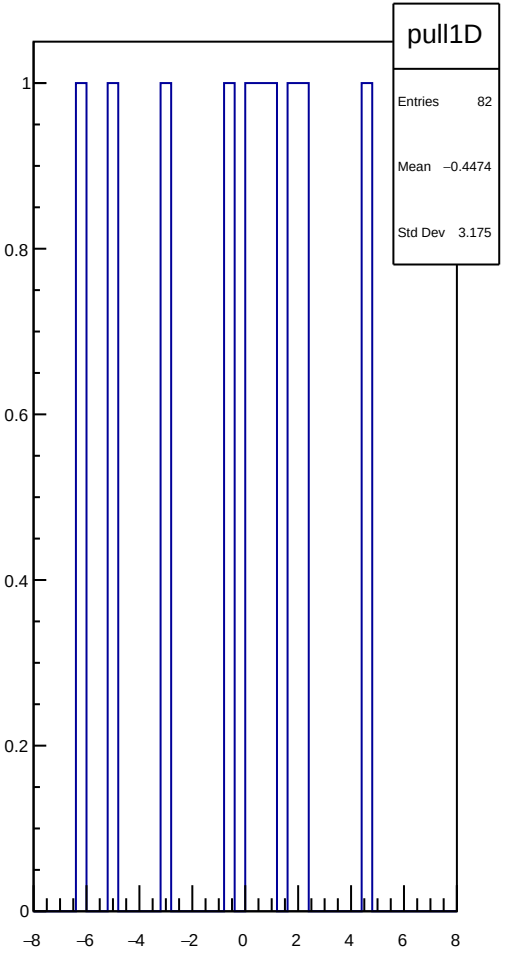

yield_bcm_dg_ds_rms vs run
χ² / ndf 7.826e+04 / 81
p0 0.3726 ± 0.0003027
0.8
0.7
0.6
0.5
0.4
0.3
0.2

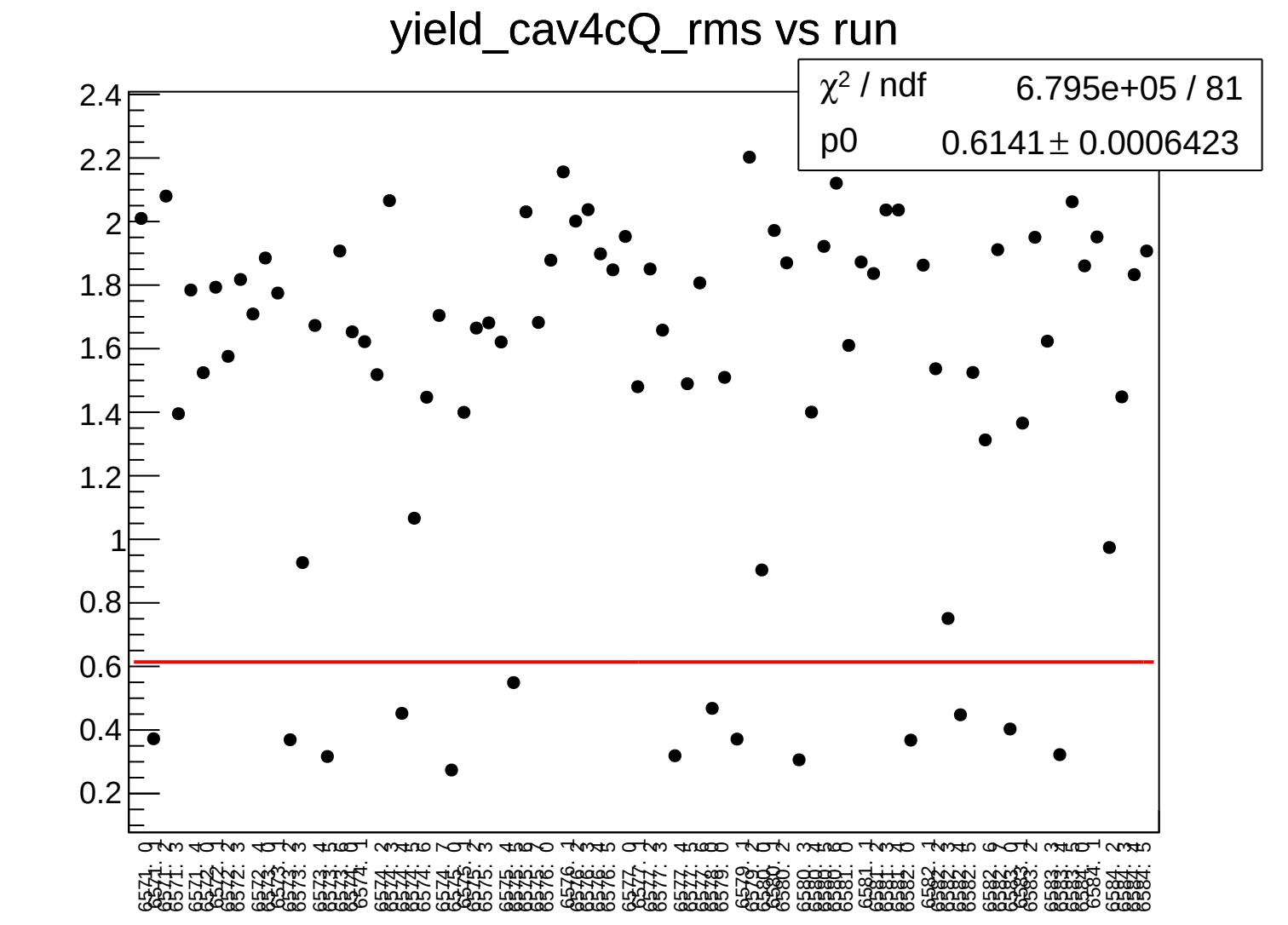

yield_cav4bQ_mean vs run
χ² / ndf 1.347e+06 / 81
p0 148.6 ± 0.0008407
150.5
150
149.5
149
148.5
148
147.5
147
146.5
pull
Entries 82
Mean 263.2
Std Dev 221.4
400
200
0
−200
−400

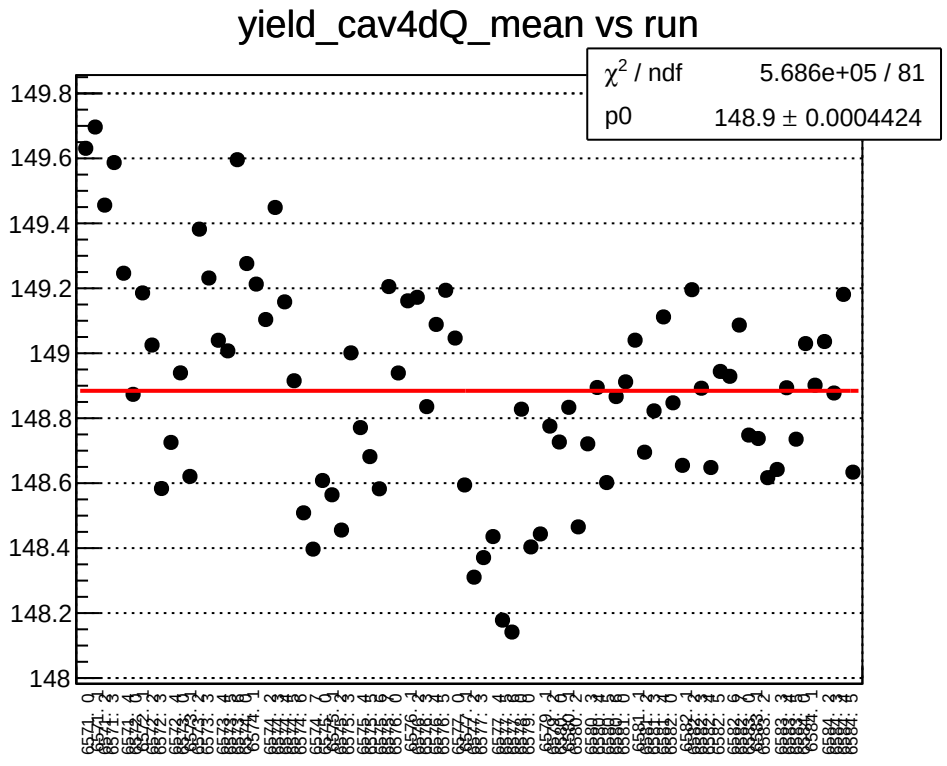

pull1D
Entries 82
Mean 1.676
Std Dev 3.507
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

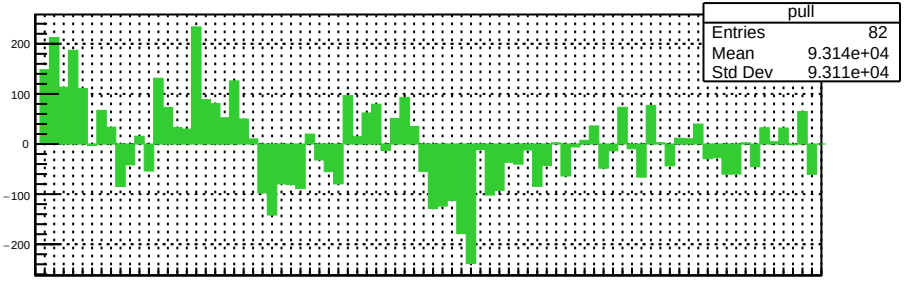

yield_cav4bQ_rms vs run
χ² / ndf 2.792e+05 / 81
p0 0.6815 ± 0.0005945
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

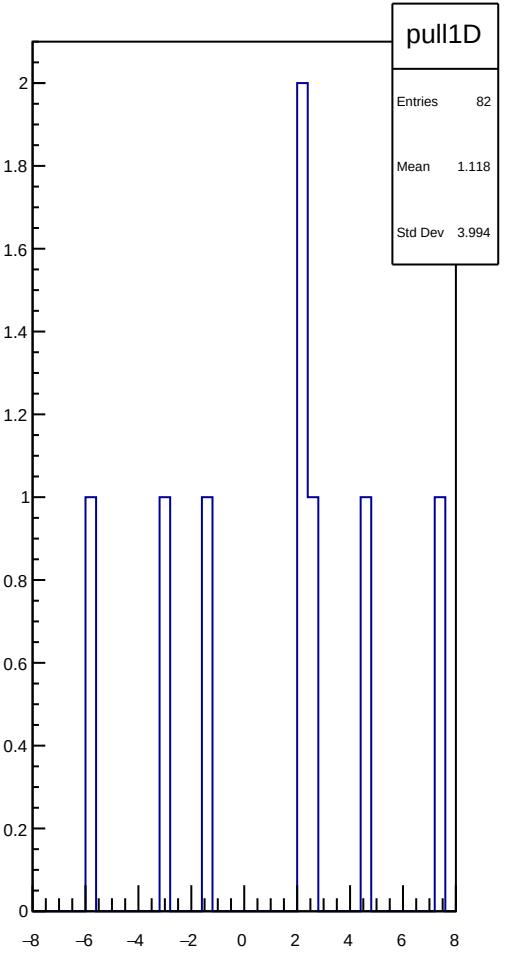

yield_cav4cQ_mean vs run
χ² / ndf 4.171e+06 / 81
p0 149.5 ± 0.0009083
152
151
150
149
148
147
pull
Entries 82
Mean 125.2
Std Dev 76.16
600
400
200
0
−200
−400
−600

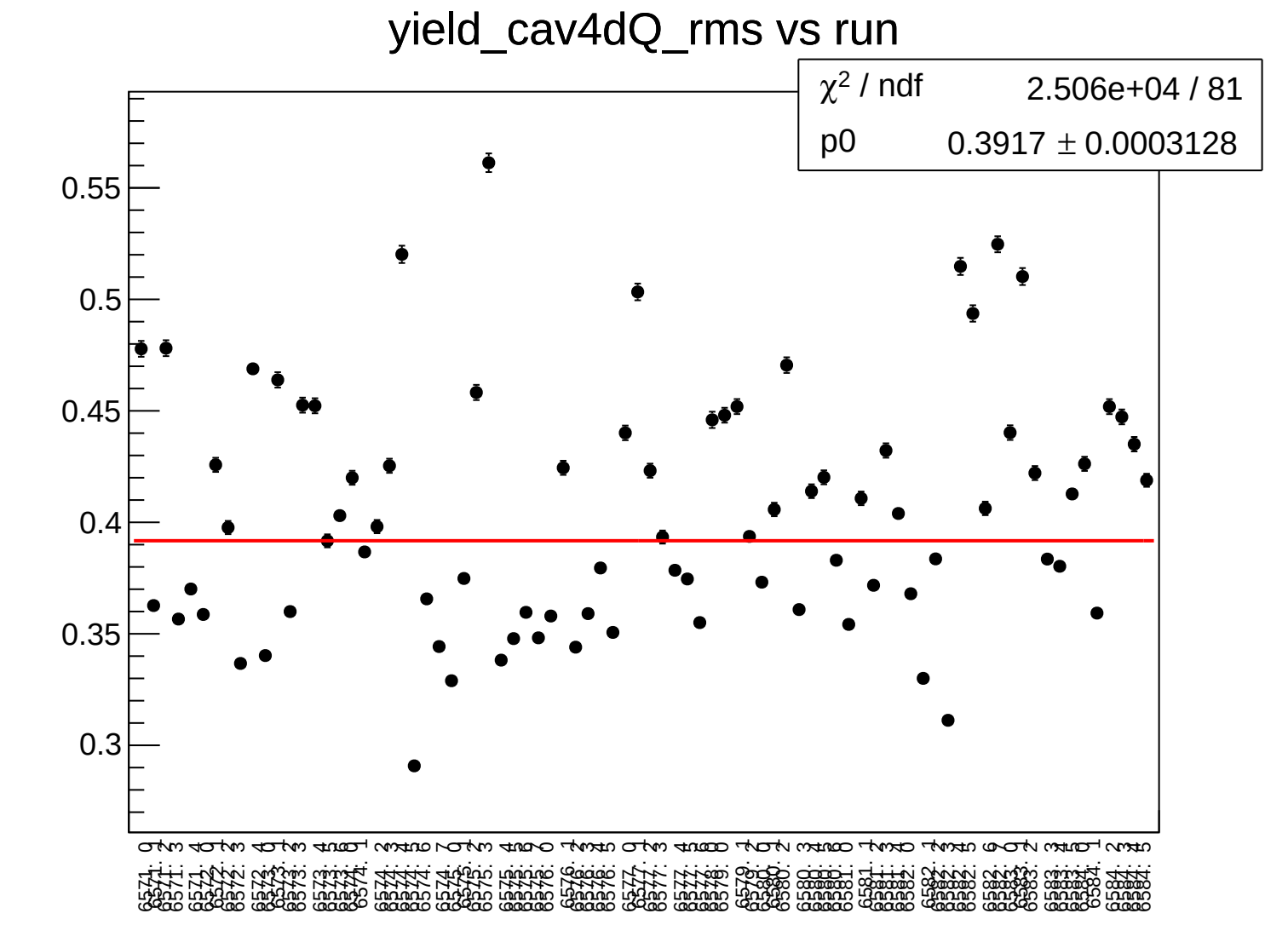

pull1D
Entries 82
Mean −0.4474
Std Dev 3.175
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

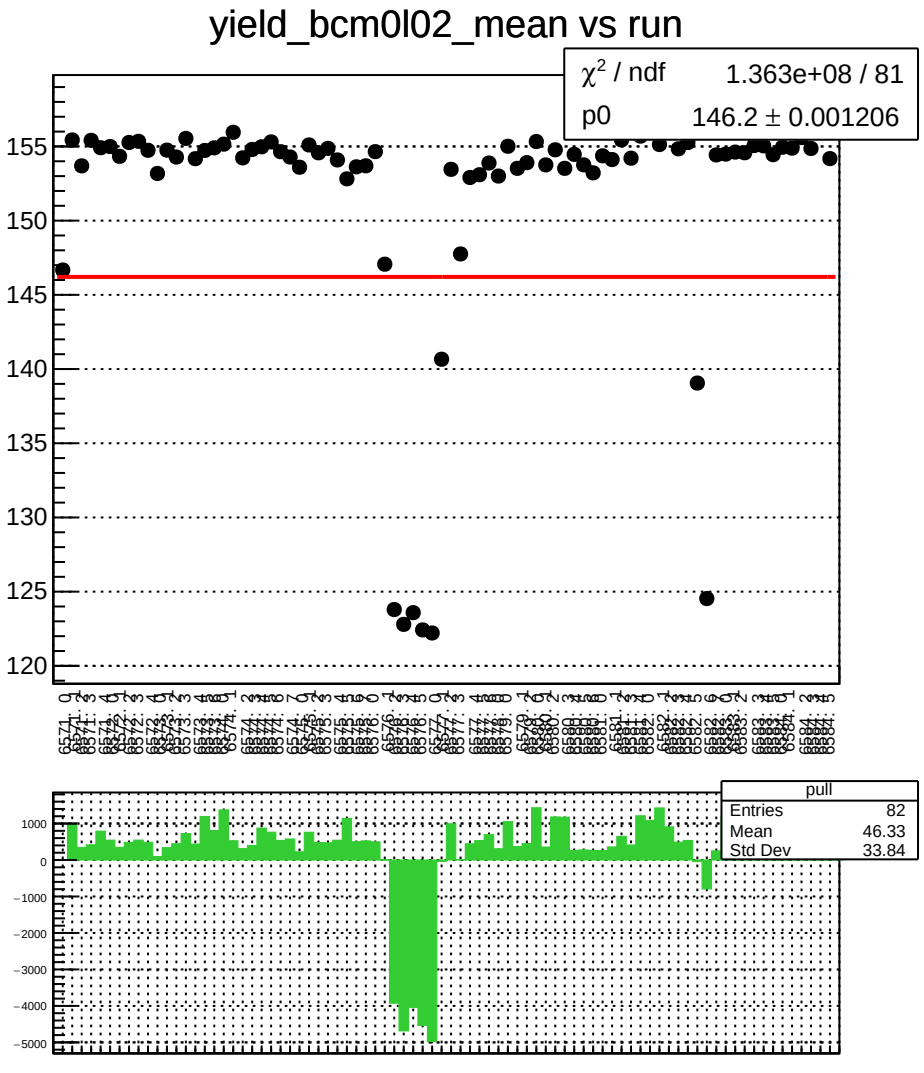

yield_cav4cQ_rms vs run
χ² / ndf 6.795e+05 / 81
p0 0.6141 ± 0.0006423
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

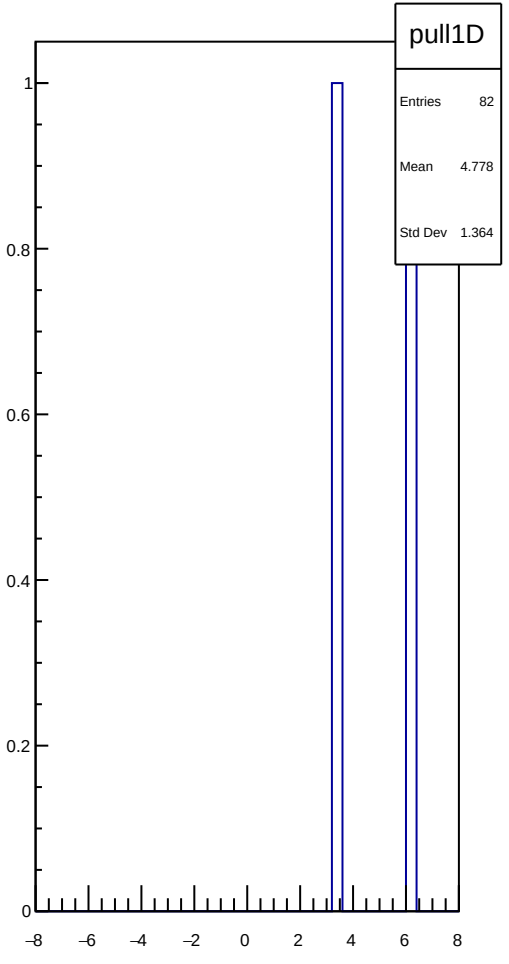

yield_cav4dQ_mean vs run
χ² / ndf 5.686e+05 / 81
p0 148.9 ± 0.0004424
149.8
149.6
149.4
149.2
149
148.8
148.6
148.4
148.2
148

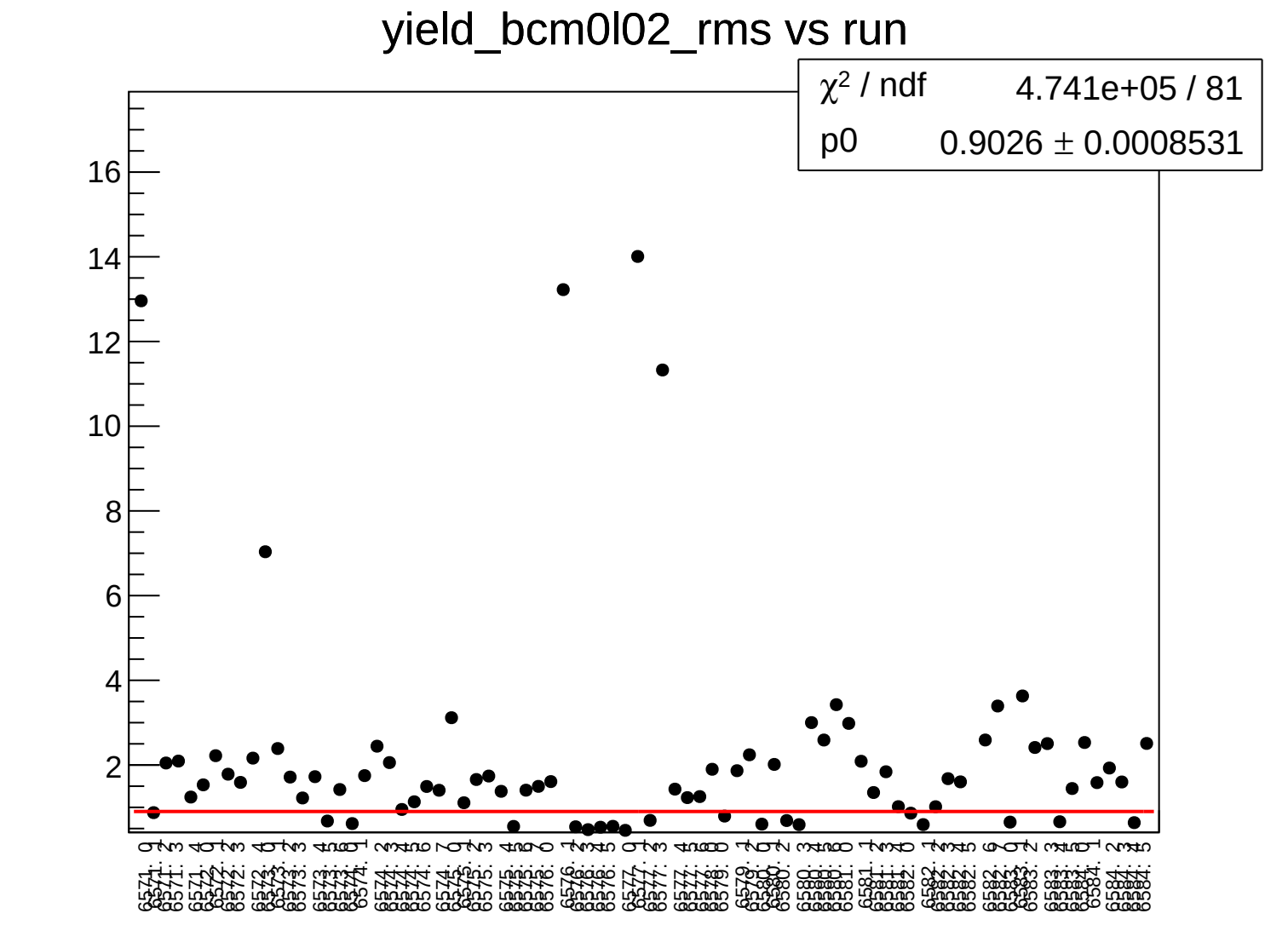

pull
Entries 82
Mean 9.314e+04
Std Dev 9.311e+04
200
100
0
−100
−200

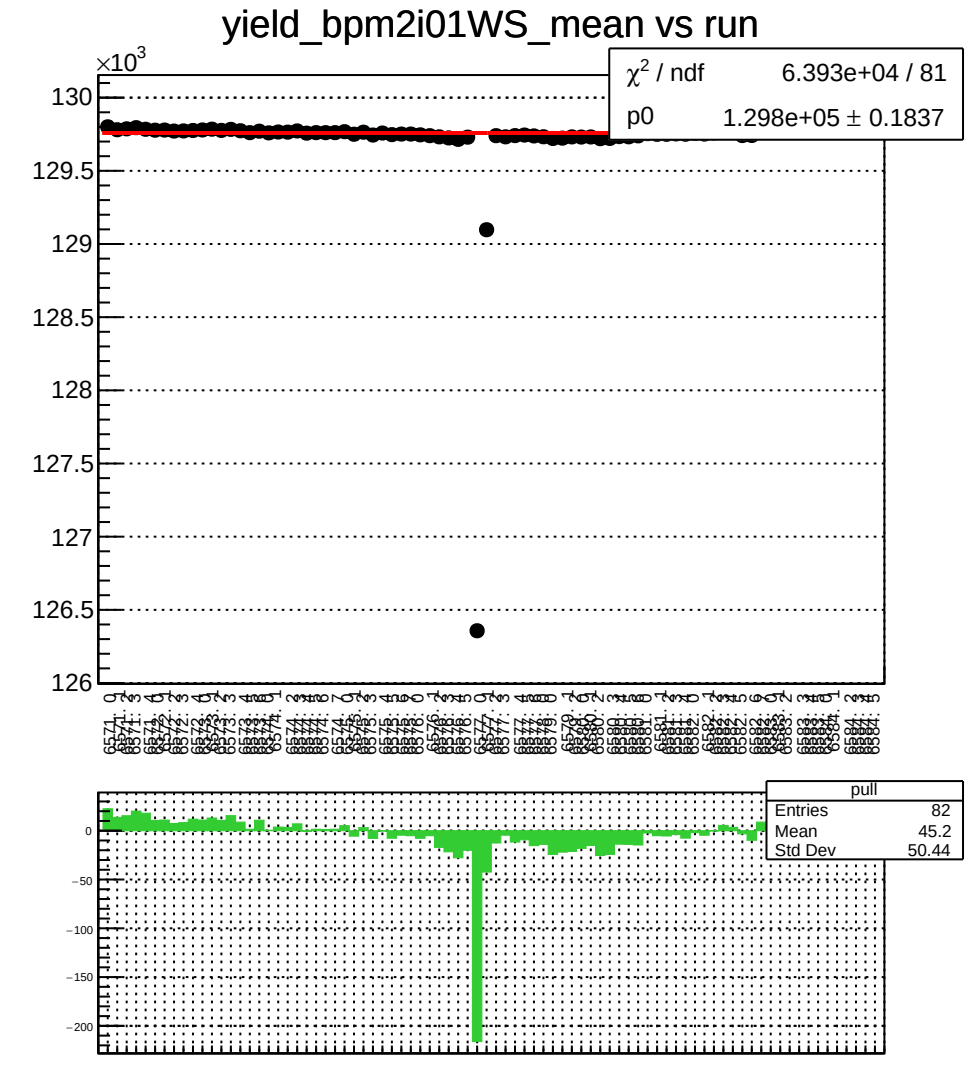

pull1D
Entries 82
Mean 1.118
Std Dev 3.994
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

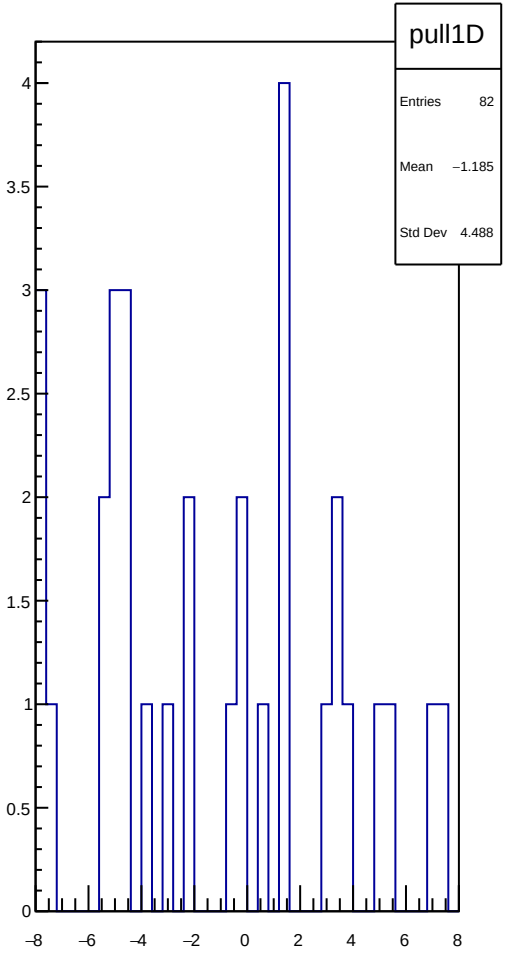

yield_cav4dQ_rms vs run
χ² / ndf 2.506e+04 / 81
p0 0.3917 ± 0.0003128
0.55
0.5
0.45
0.4
0.35
0.3

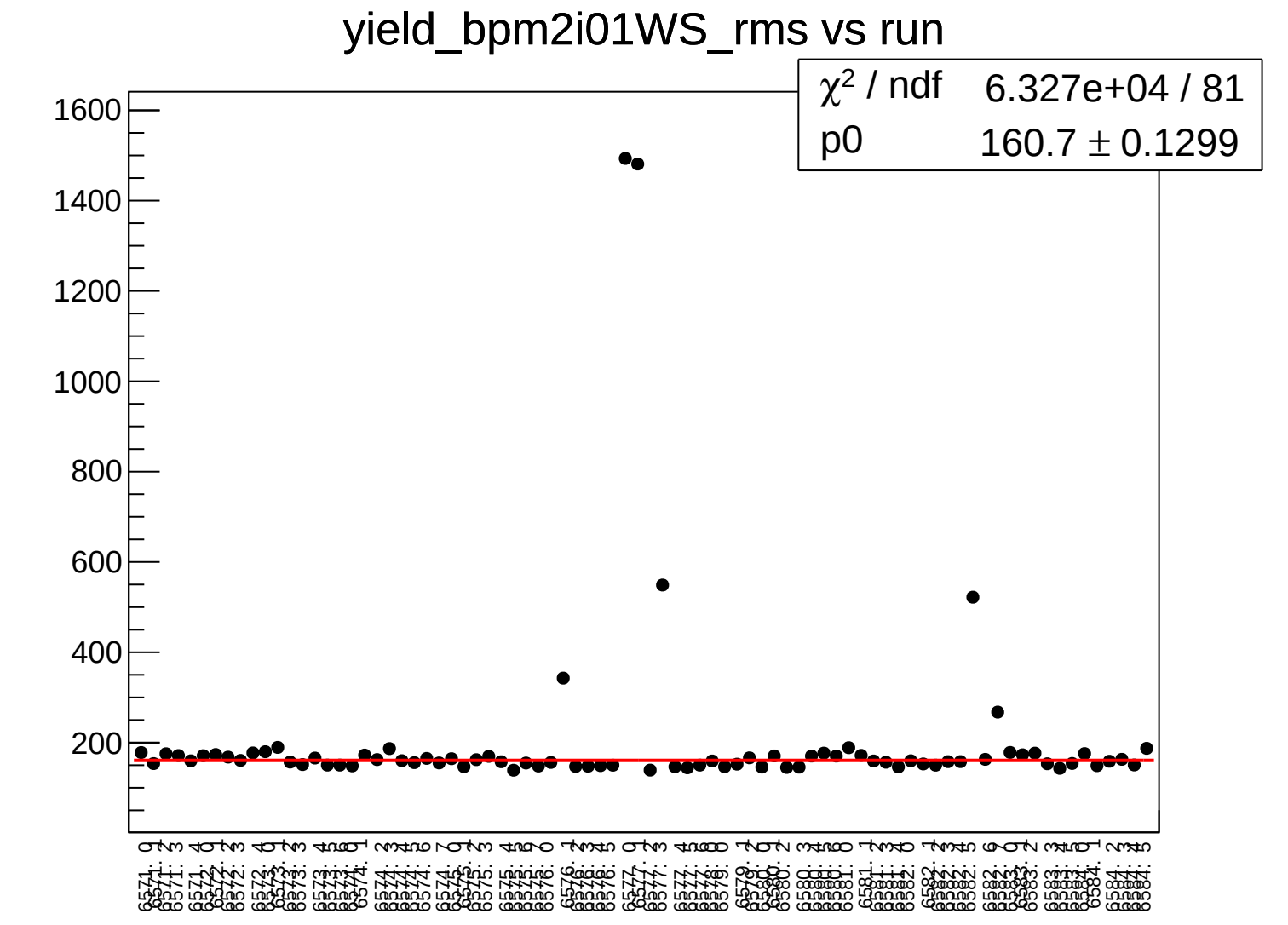

yield_bcm0l02_mean vs run
χ² / ndf 1.363e+08 / 81
p0 146.2 ± 0.001206
155
150
145
140
135
130
125
120
pull
Entries 82
Mean 46.33
Std Dev 33.84
1000
0
−1000
−2000
−3000
−4000
−5000

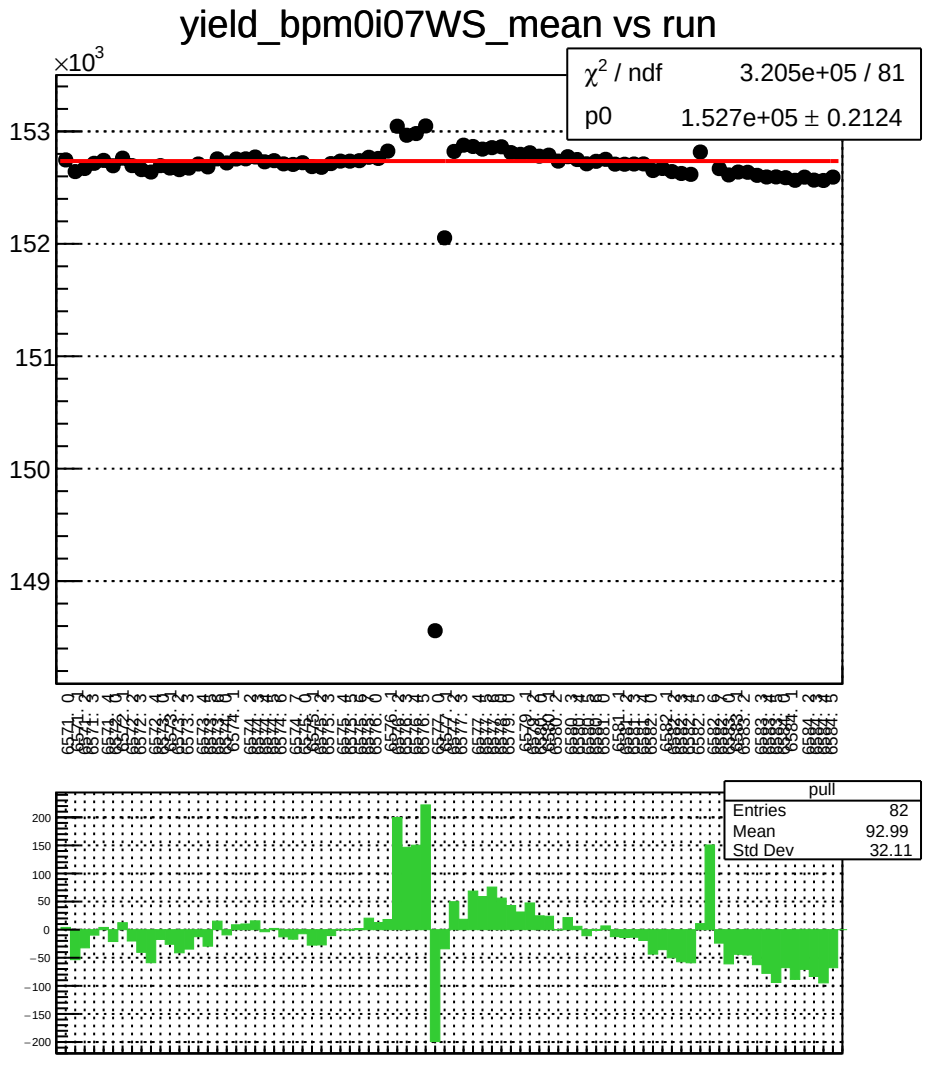

pull1D
Entries 82
Mean 4.778
Std Dev 1.364
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

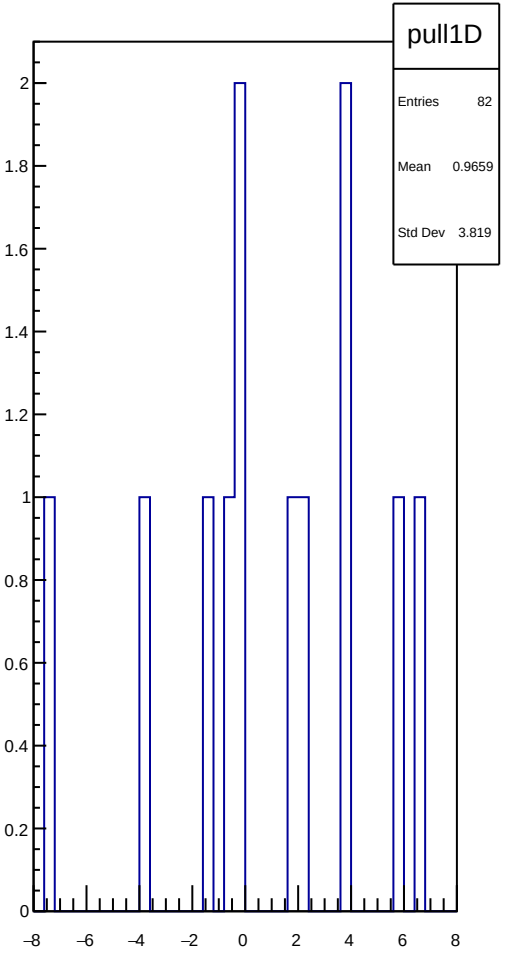

yield_bcm0l02_rms vs run
χ² / ndf 4.741e+05 / 81
p0 0.9026 ± 0.0008531
16
14
12
10
8
6
4
2

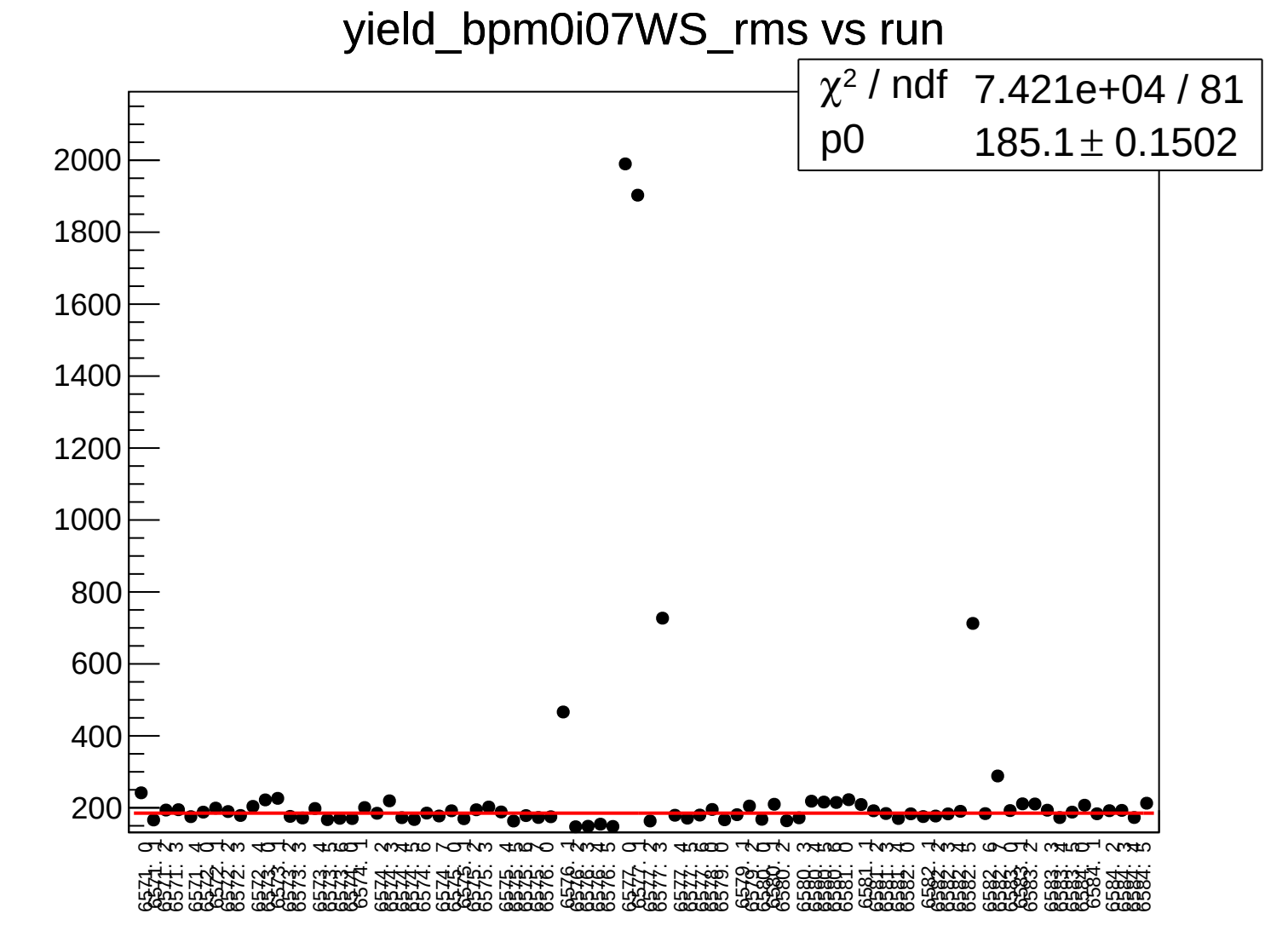

yield_bpm2i01WS_mean vs run
×10^3
130
129.5
129
128.5
128
127.5
127
126.5
126
χ² / ndf 6.393e+04 / 81
p0 1.298e+05 ± 0.1837
pull
Entries 82
Mean 45.2
Std Dev 50.44
0
−50
−100
−150
−200

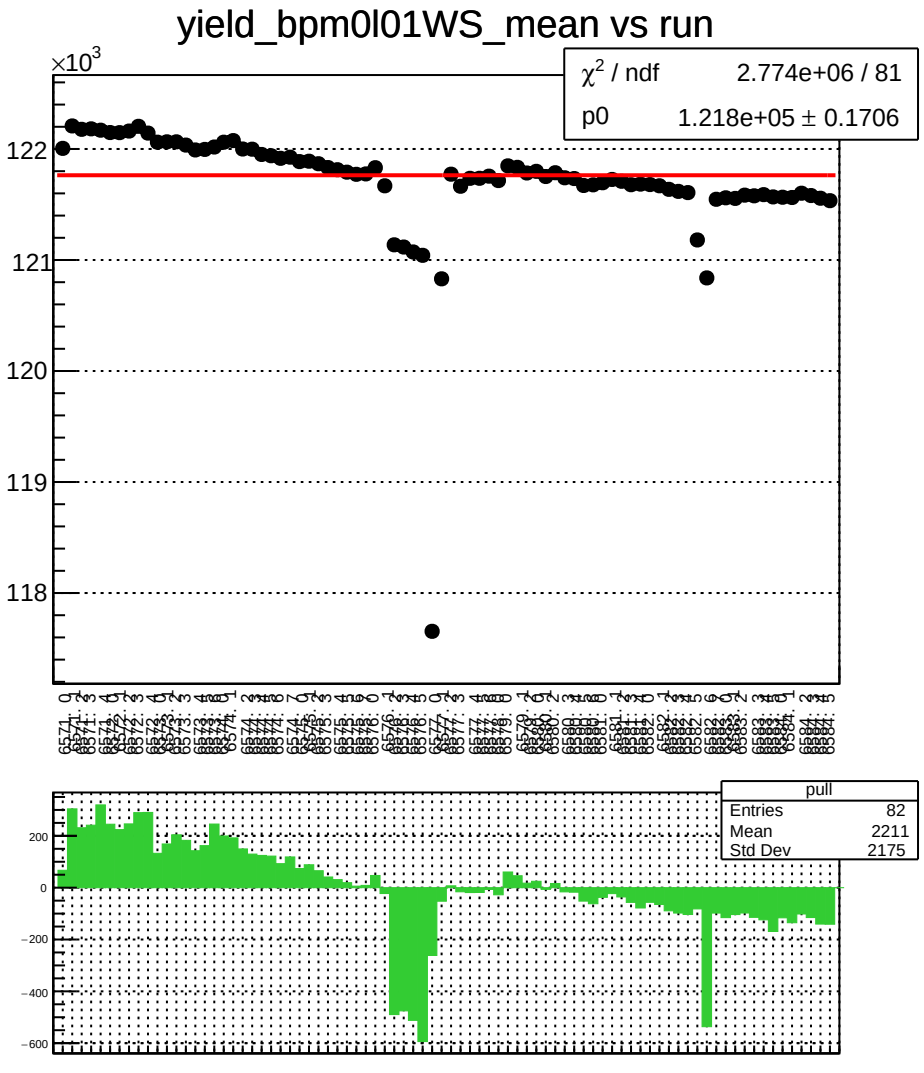

pull1D
Entries 82
Mean −1.185
Std Dev 4.488
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

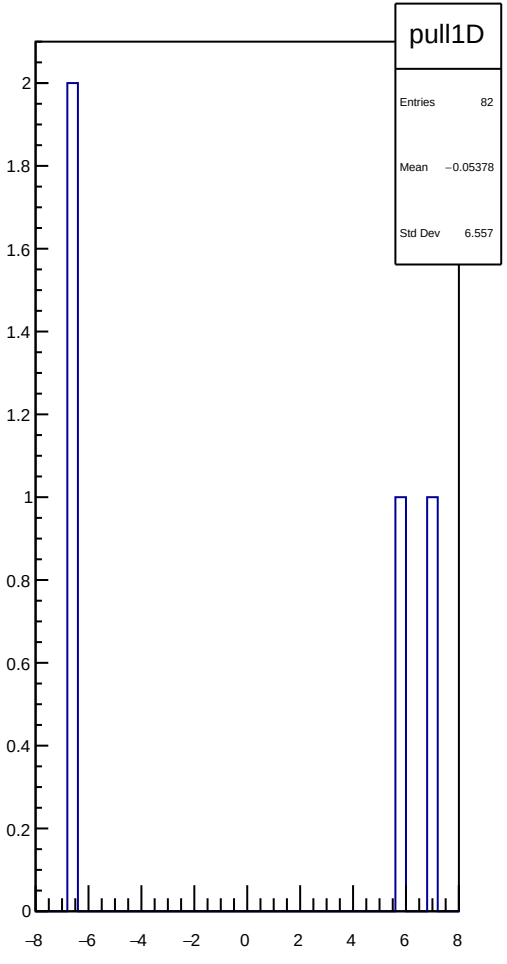

yield_bpm2i01WS_rms vs run
χ² / ndf 6.327e+04 / 81
p0 160.7 ± 0.1299
1600
1400
1200
1000
800
600
400
200

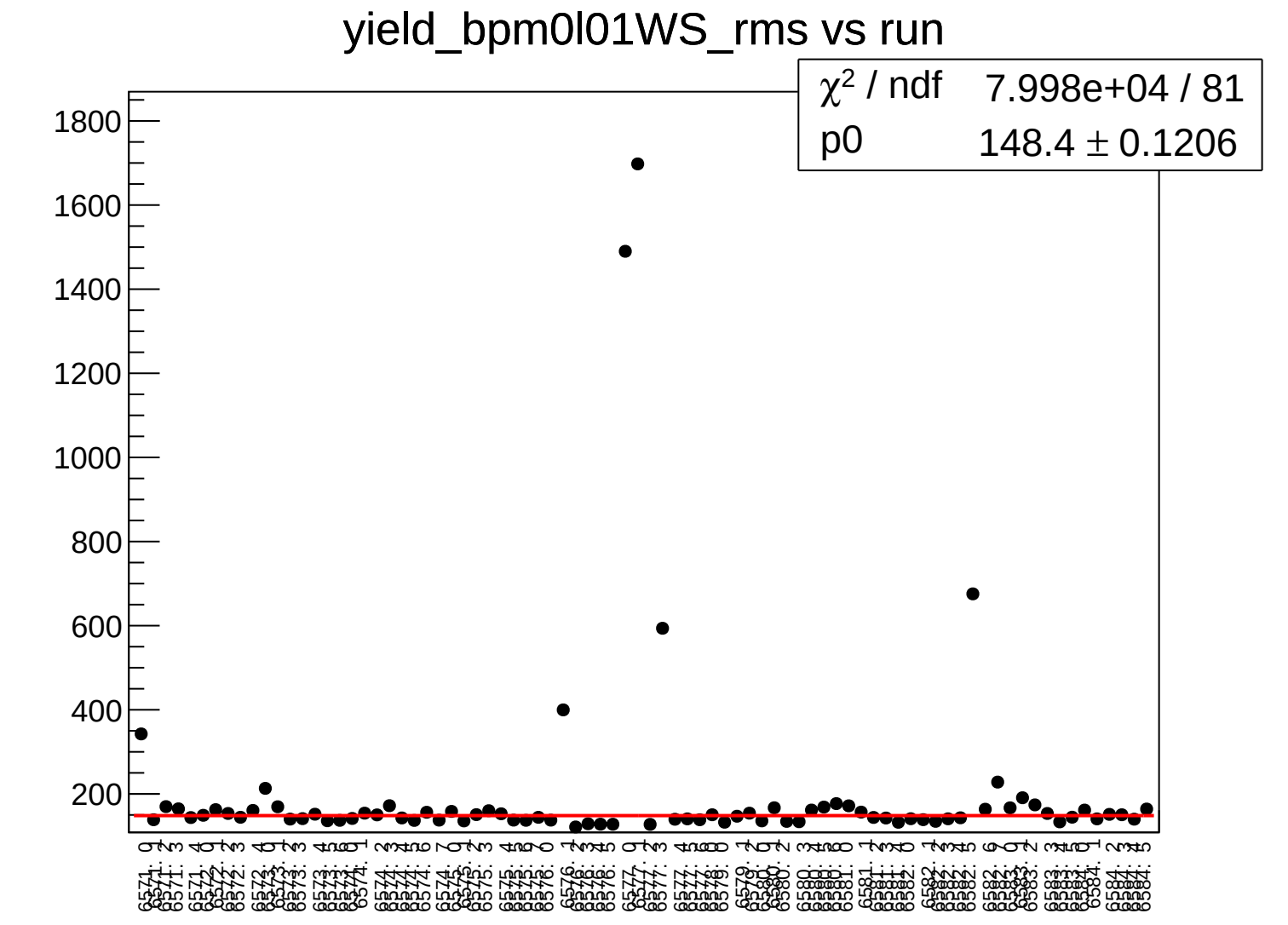

yield_bpm0i07WS_mean vs run
χ² / ndf 3.205e+05 / 81
p0 1.527e+05 ± 0.2124
×10³
153
152
151
150
149
pull
Entries 82
Mean 92.99
Std Dev 32.11
200
150
100
50
0
−50
−100
−150
−200

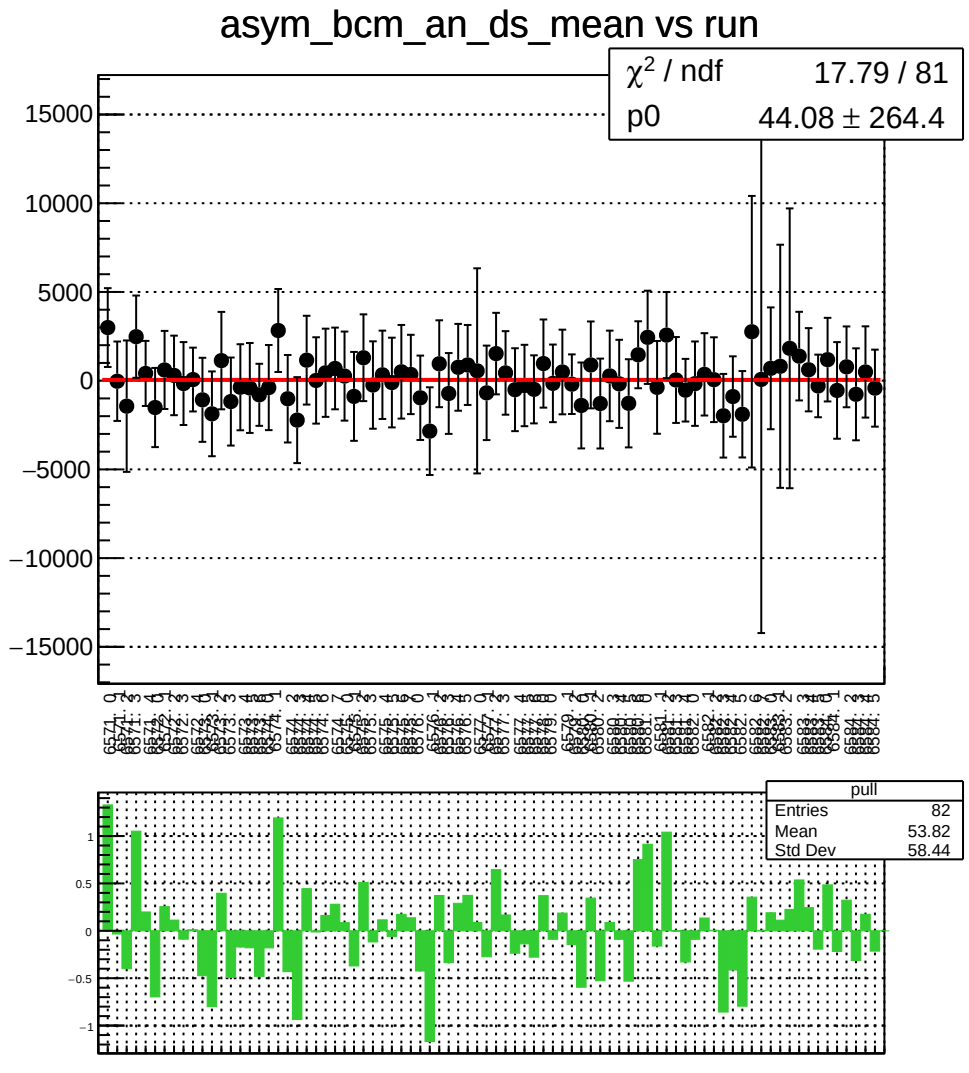

pull1D
Entries 82
Mean 0.9659
Std Dev 3.819
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

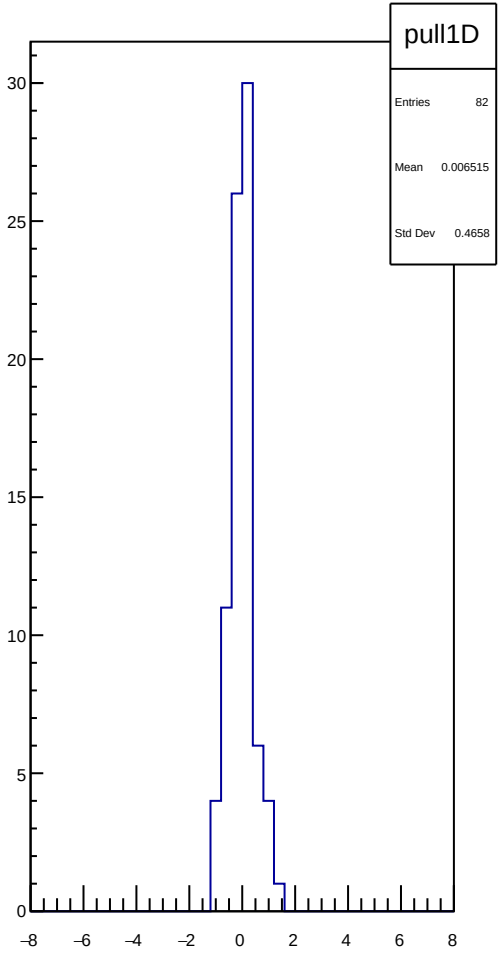

yield_bpm0i07WS_rms vs run
χ² / ndf 7.421e+04 / 81
p0 185.1 ± 0.1502
2000
1800
1600
1400
1200
1000
800
600
400
200

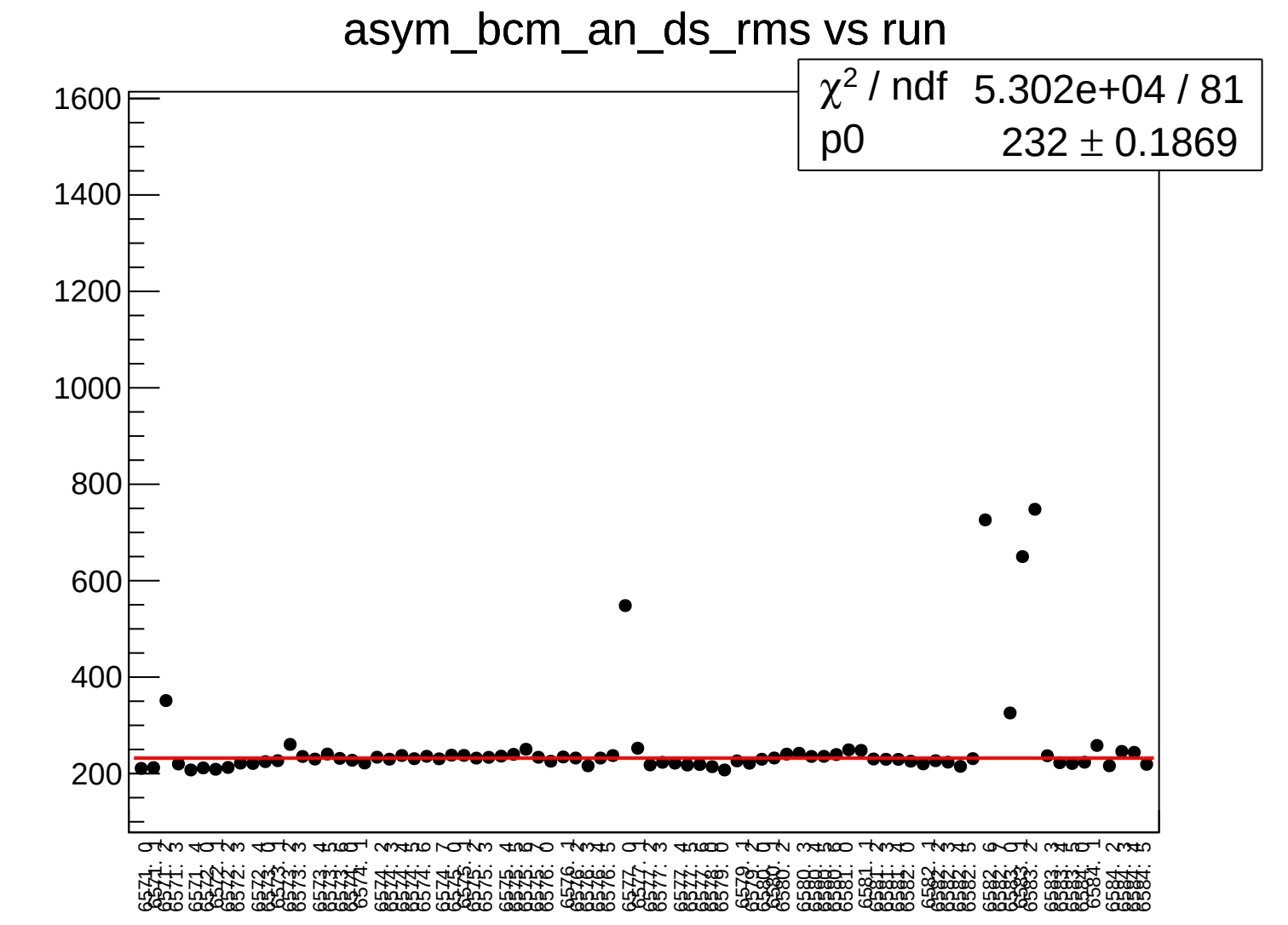

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 2.774e+06 / 81
p0 1.218e+05 ± 0.1706
122
121
120
119
118
pull
Entries 82
Mean 2211
Std Dev 2175
200
0
−200
−400
−600

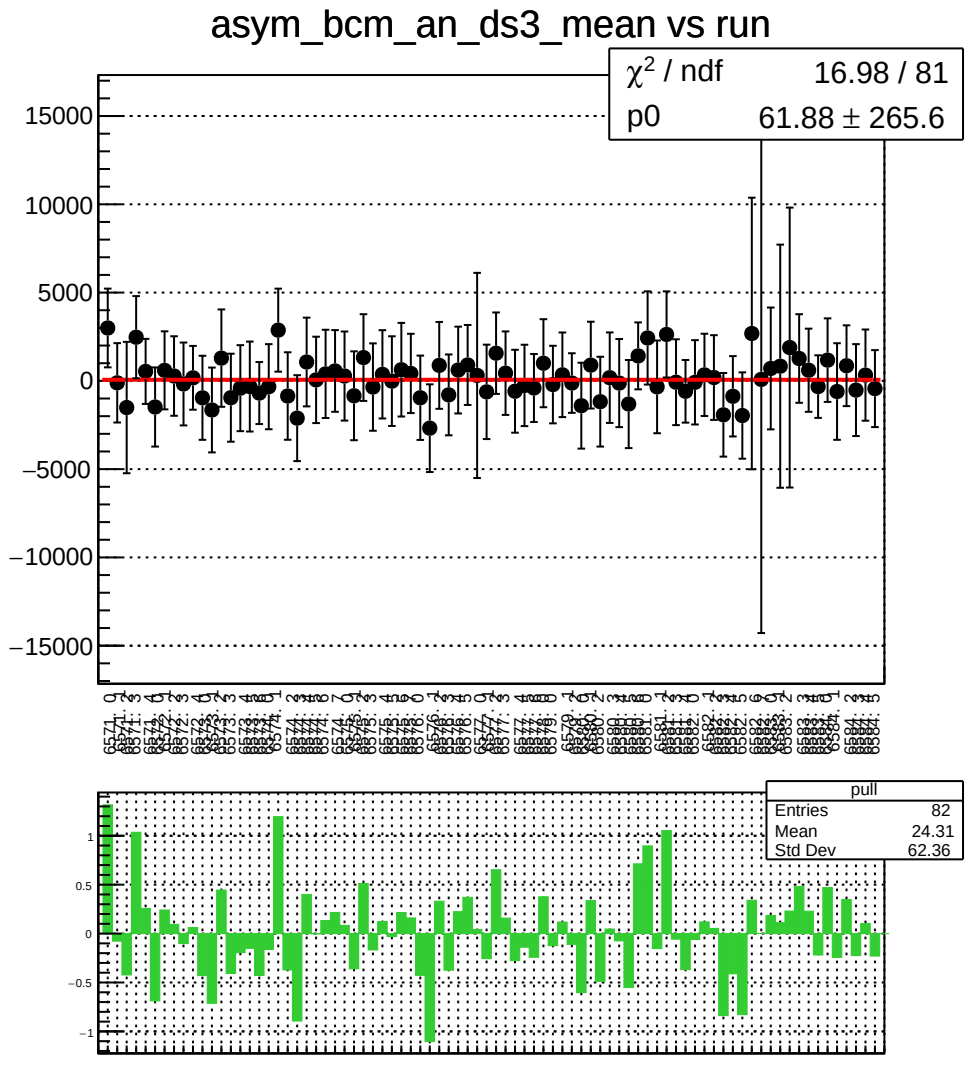

pull1D
Entries 82
Mean −0.05378
Std Dev 6.557
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

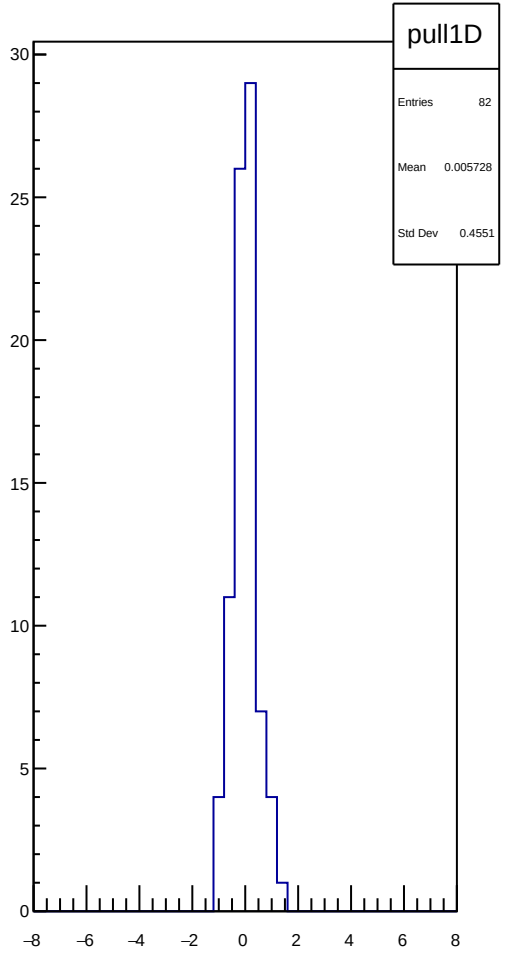

yield_bpm0l01WS_rms vs run
χ² / ndf 7.998e+04 / 81
p0 148.4 ± 0.1206
1800
1600
1400
1200
1000
800
600
400
200

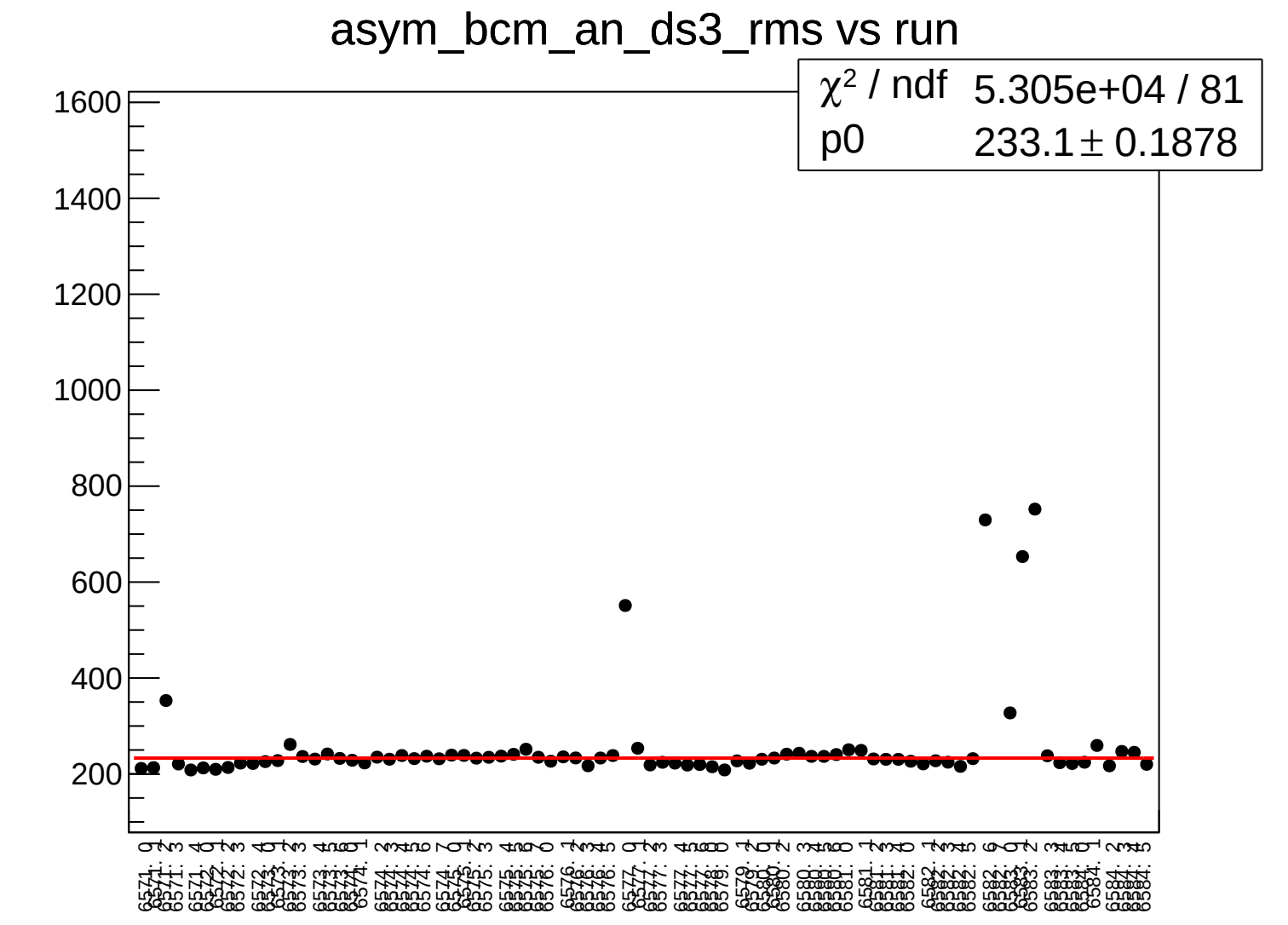

asym_bcm_an_ds_mean vs run
χ² / ndf 17.79 / 81
p0 44.08 ± 264.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 53.82
Std Dev 58.44
1
0.5
0
−0.5
−1

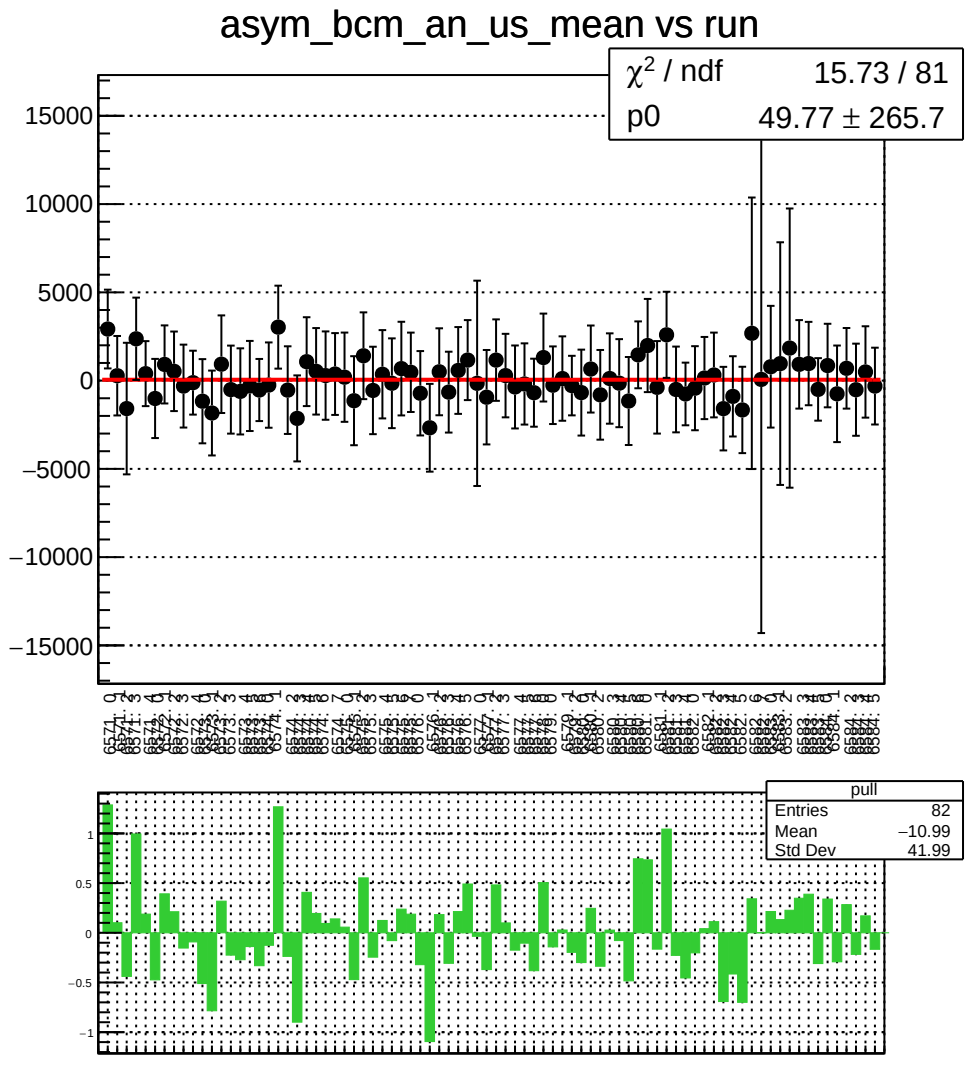

pull1D
Entries 82
Mean 0.006515
Std Dev 0.4658
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

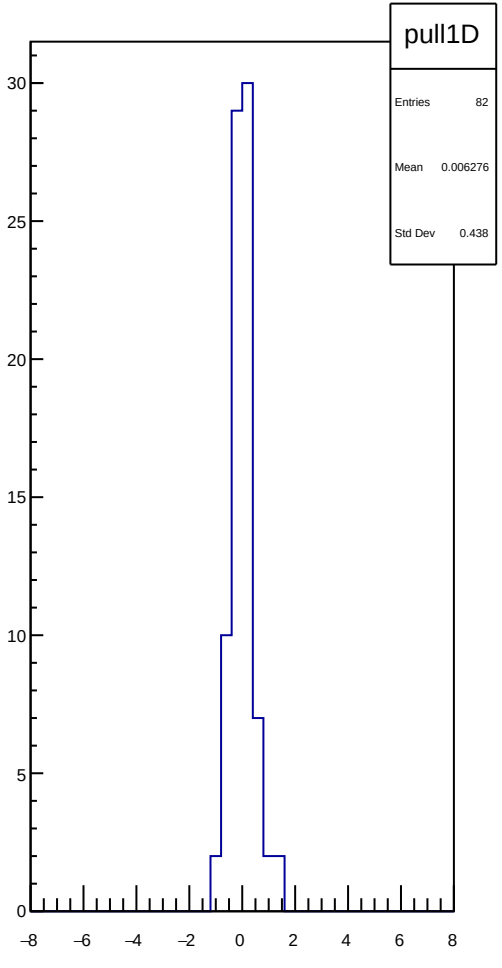

asym_bcm_an_ds_rms vs run
χ² / ndf 5.302e+04 / 81
p0 232 ± 0.1869
1600
1400
1200
1000
800
600
400
200

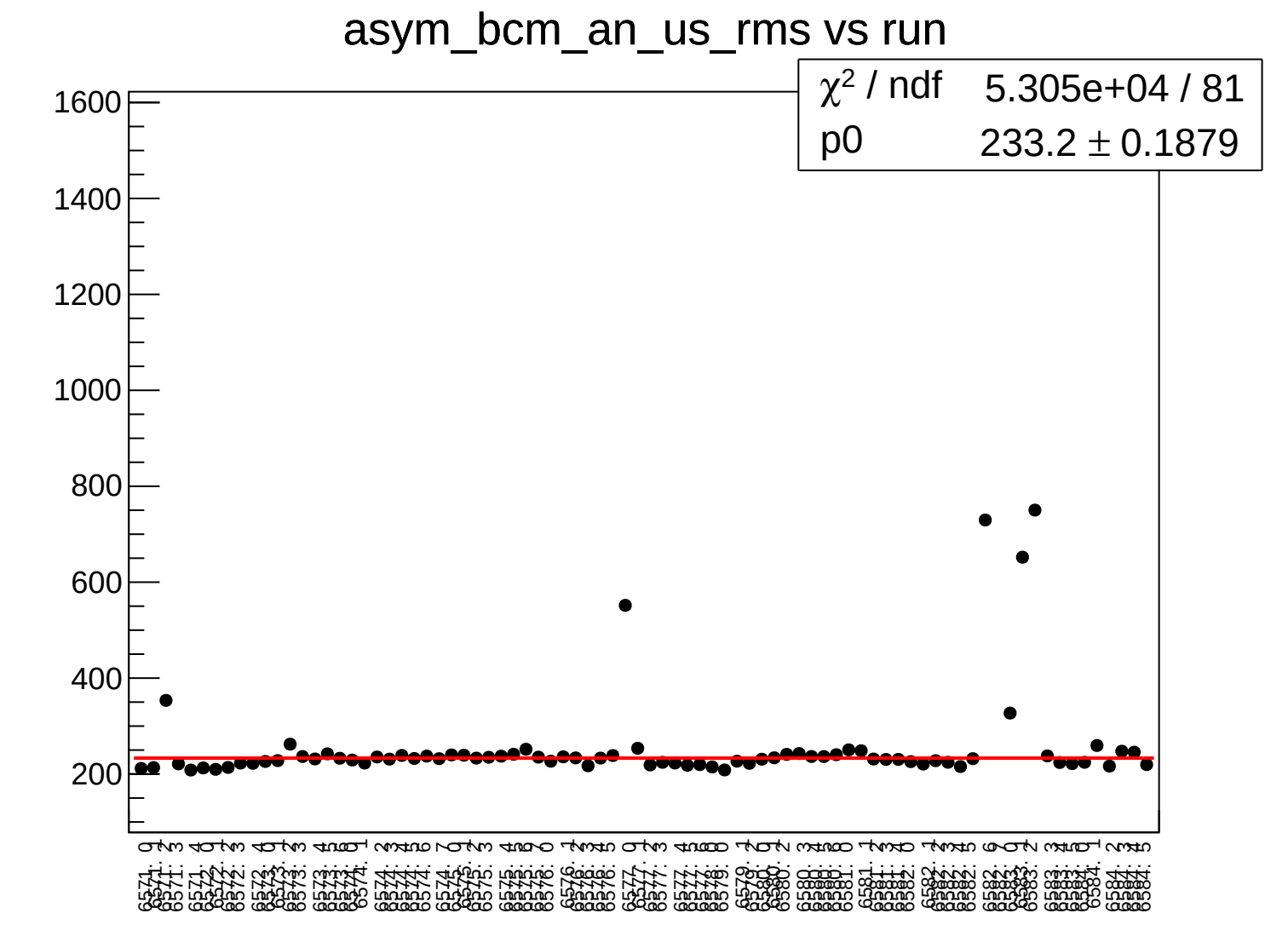

asym_bcm_an_ds3_mean vs run
χ² / ndf 16.98 / 81
p0 61.88 ± 265.6
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 24.31
Std Dev 62.36
1
0.5
0
−0.5
−1

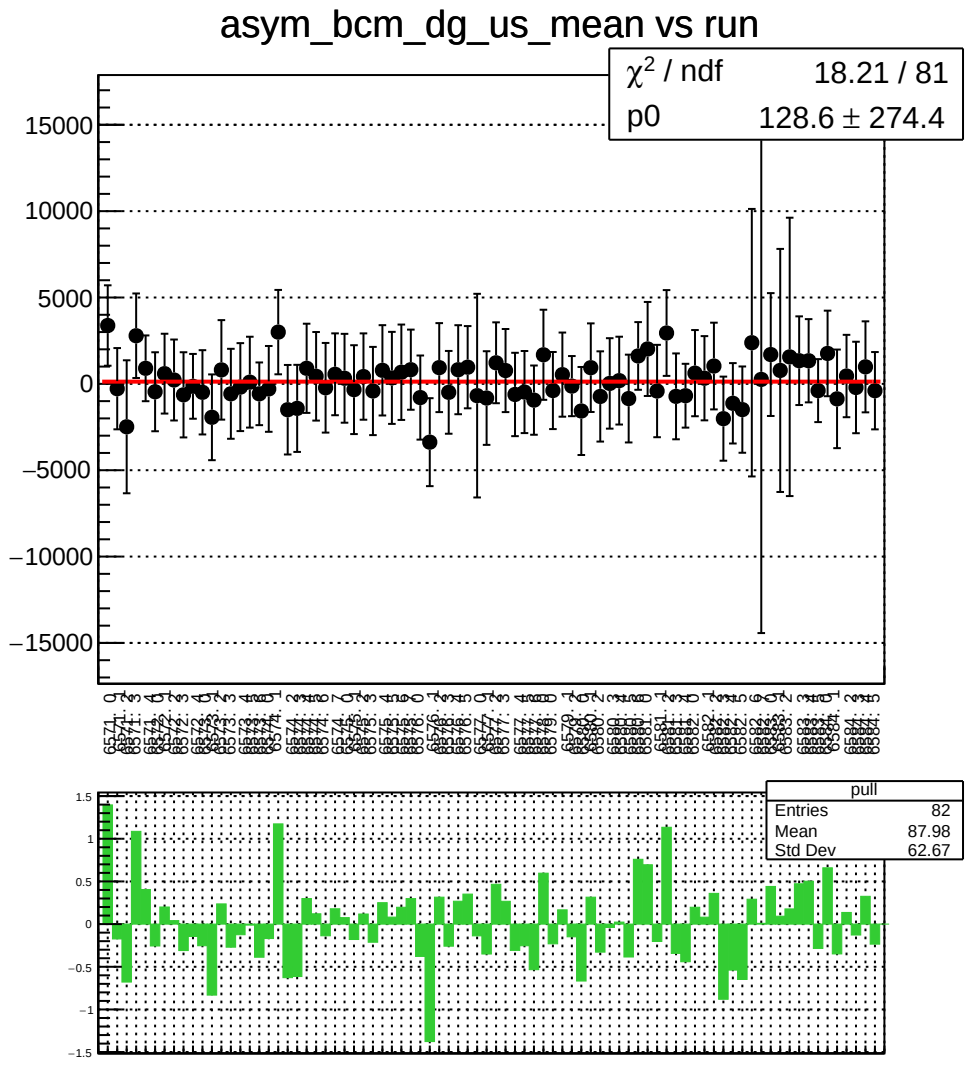

pull1D
Entries 82
Mean 0.005728
Std Dev 0.4551
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

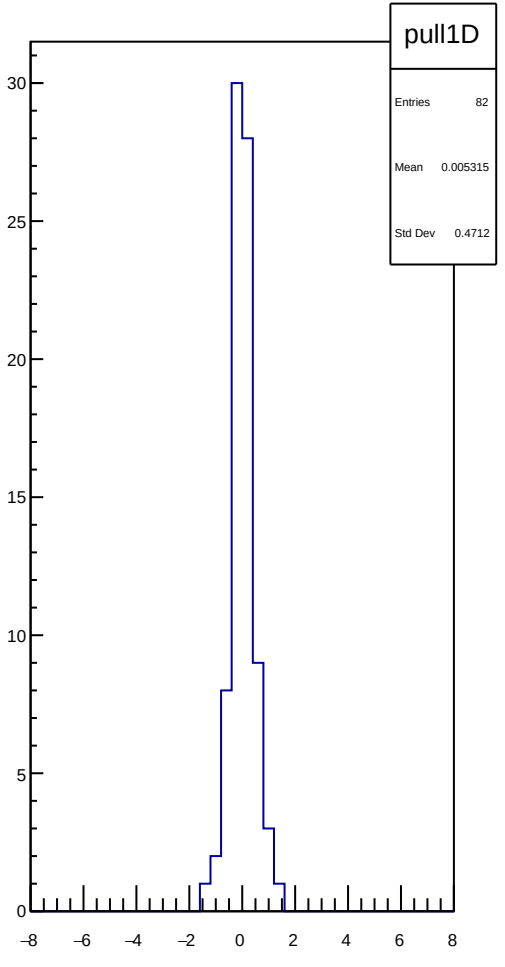

asym_bcm_an_ds3_rms vs run
χ² / ndf 5.305e+04 / 81
p0 233.1 ± 0.1878
1600
1400
1200
1000
800
600
400
200

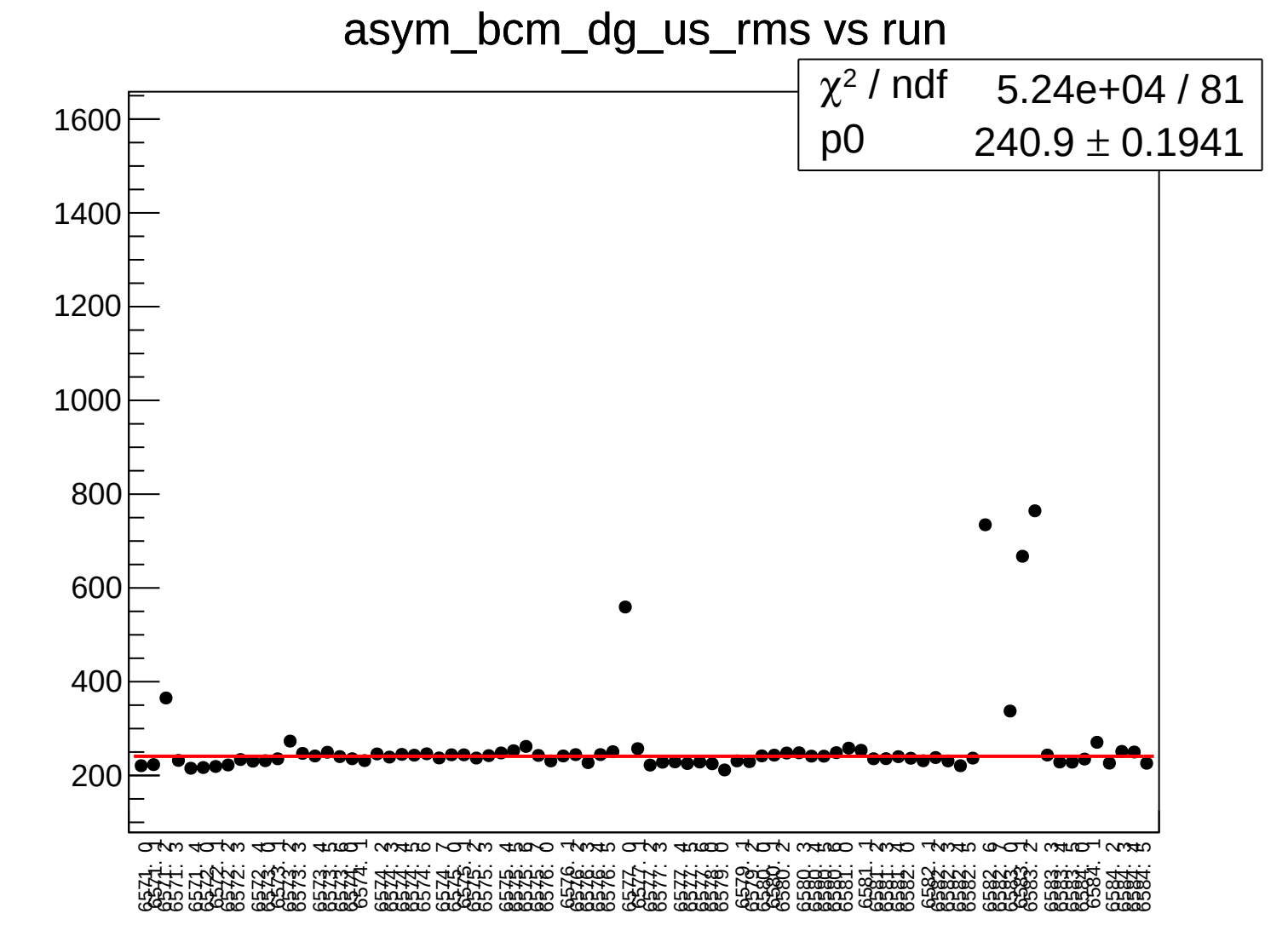

asym_bcm_an_us_mean vs run
χ² / ndf 15.73 / 81
p0 49.77 ± 265.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −10.99
Std Dev 41.99
1
0.5
0
−0.5
−1

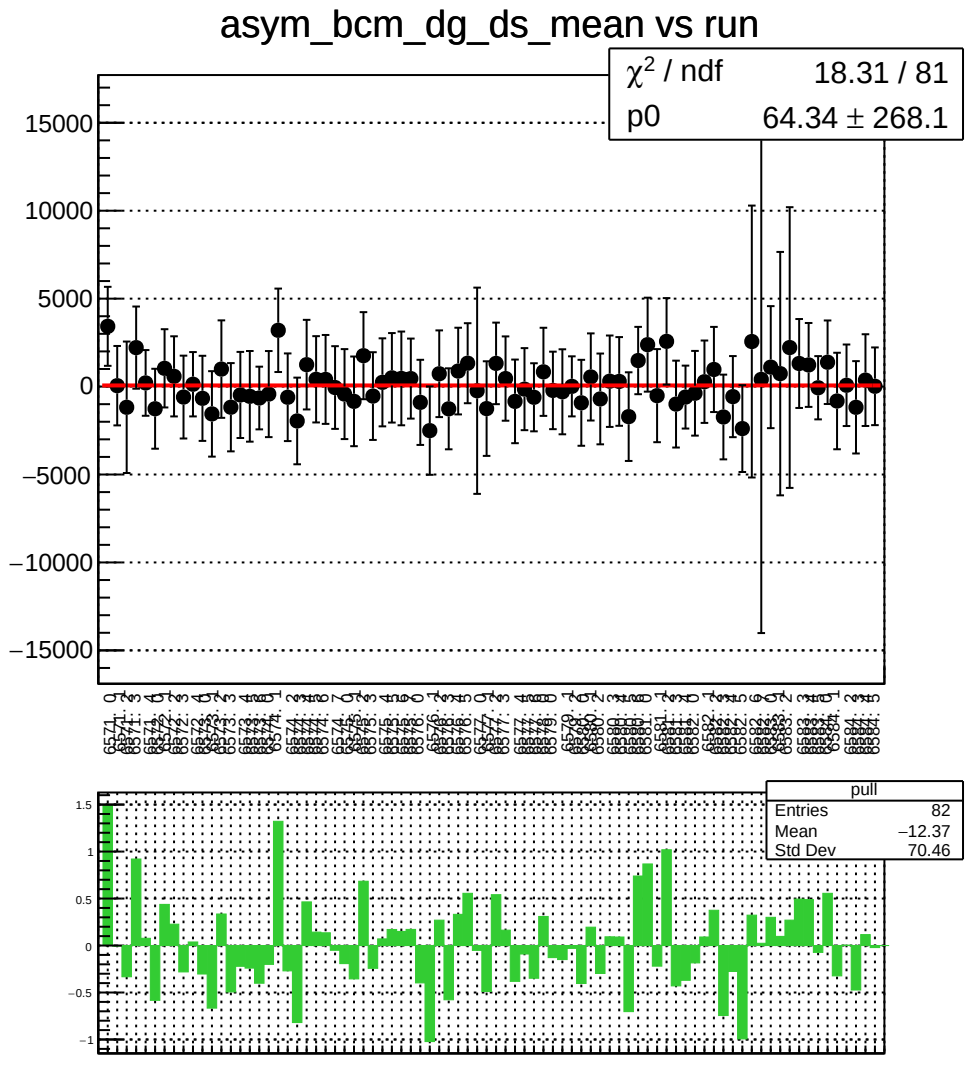

pull1D
Entries 82
Mean 0.006276
Std Dev 0.438
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

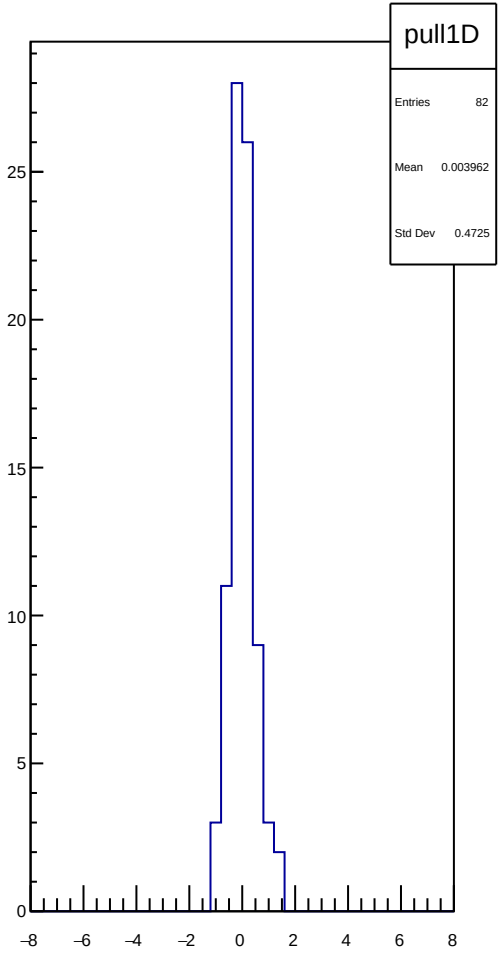

asym_bcm_an_us_rms vs run
χ² / ndf 5.305e+04 / 81
p0 233.2 ± 0.1879
1600
1400
1200
1000
800
600
400
200

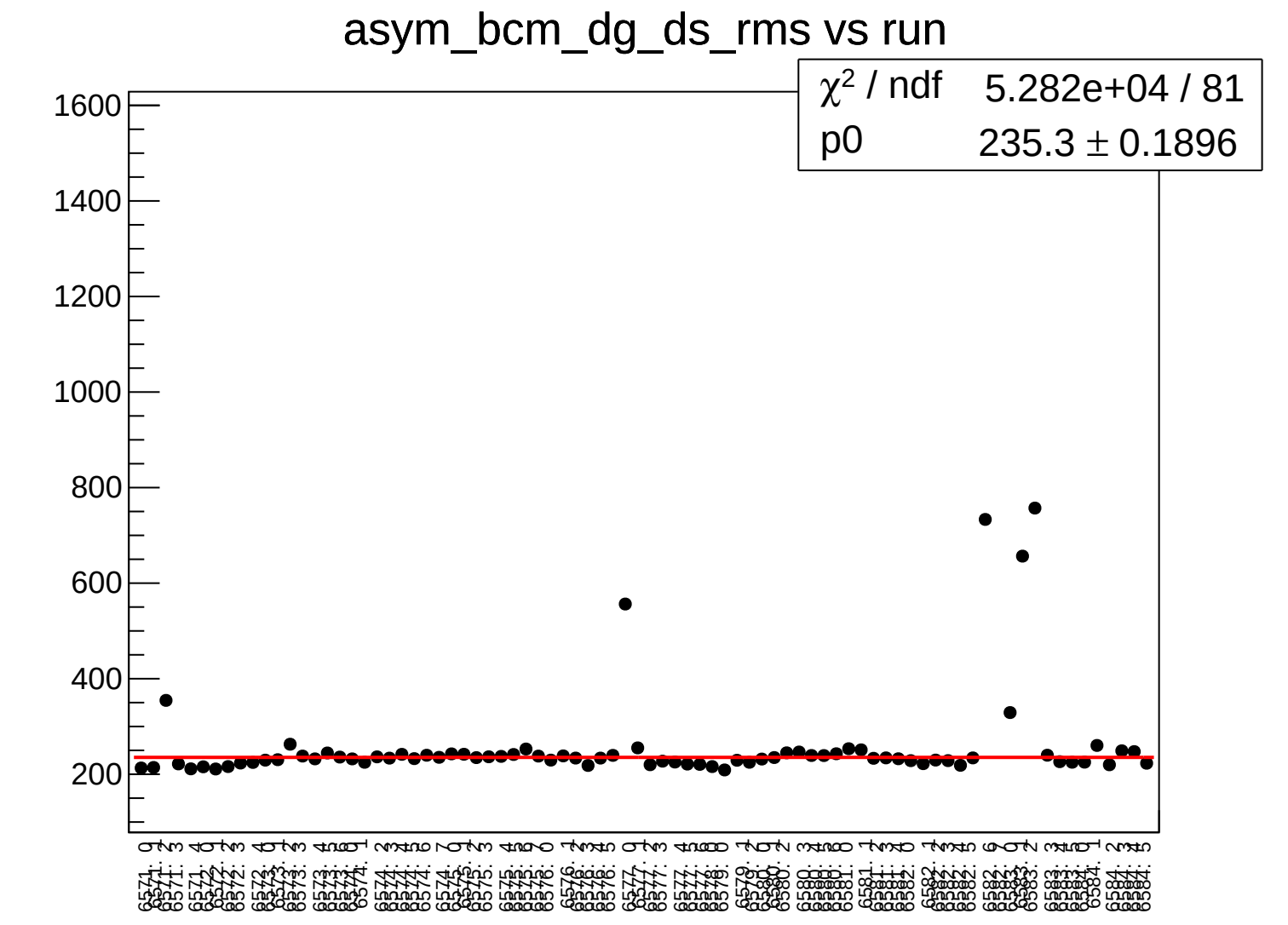

asym_bcm_dg_us_mean vs run
χ² / ndf 18.21 / 81
p0 128.6 ± 274.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 87.98
Std Dev 62.67
1.5
1
0.5
0
−0.5
−1
−1.5

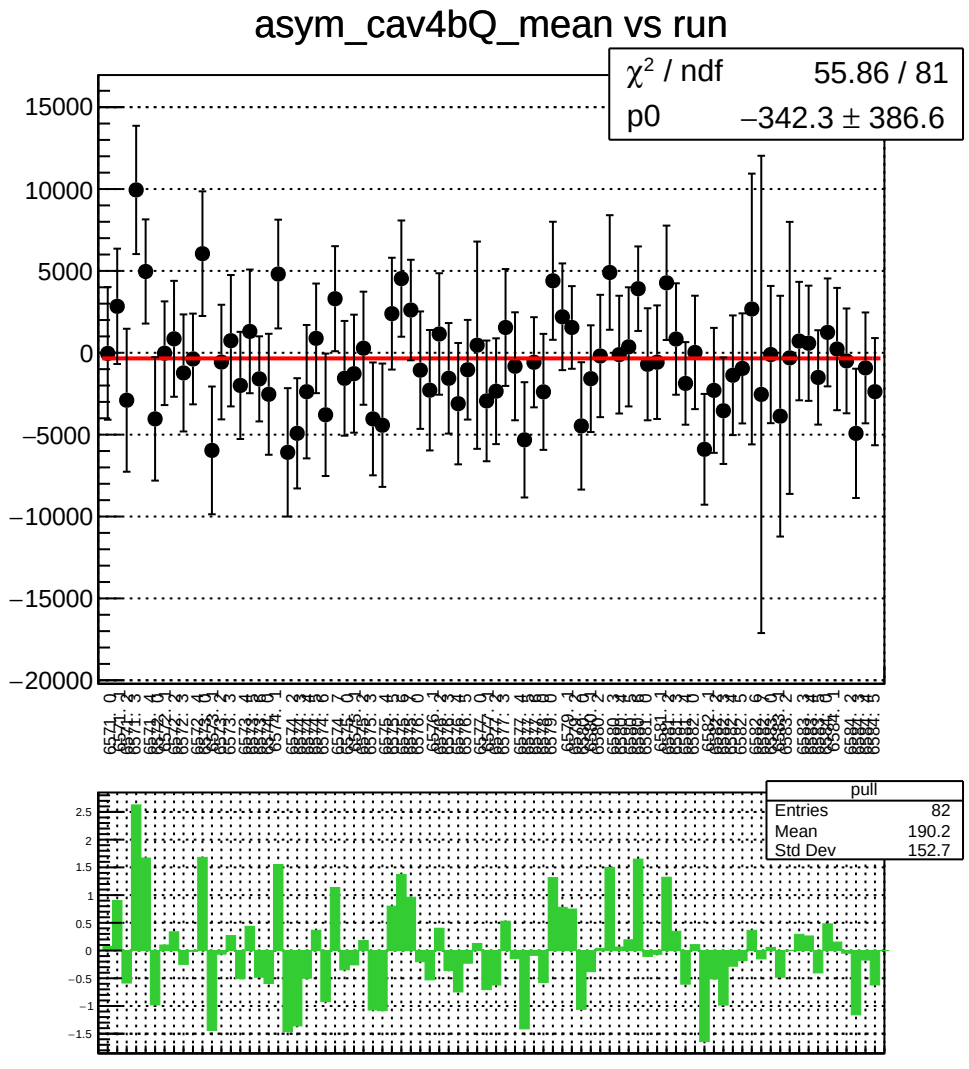

pull1D
Entries 82
Mean 0.005315
Std Dev 0.4712
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

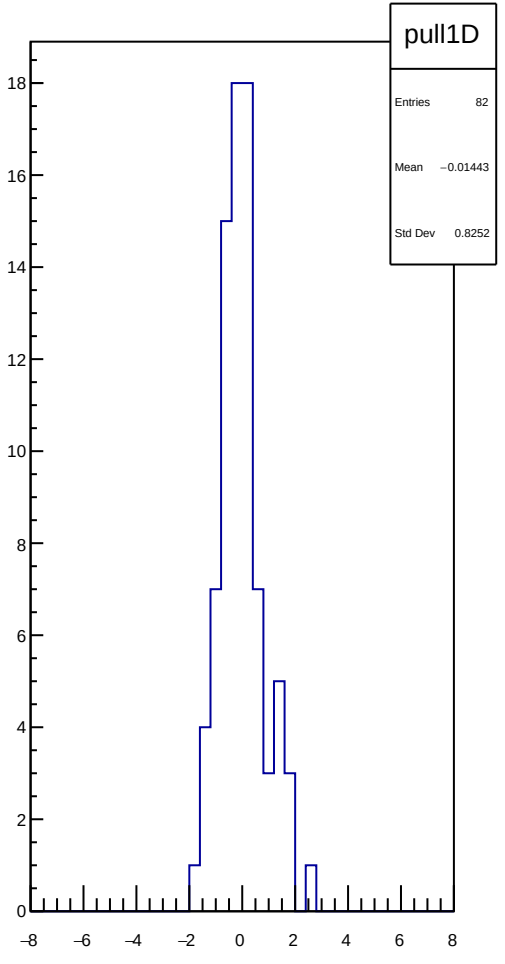

asym_bcm_dg_us_rms vs run
χ² / ndf 5.24e+04 / 81
p0 240.9 ± 0.1941
1600
1400
1200
1000
800
600
400
200

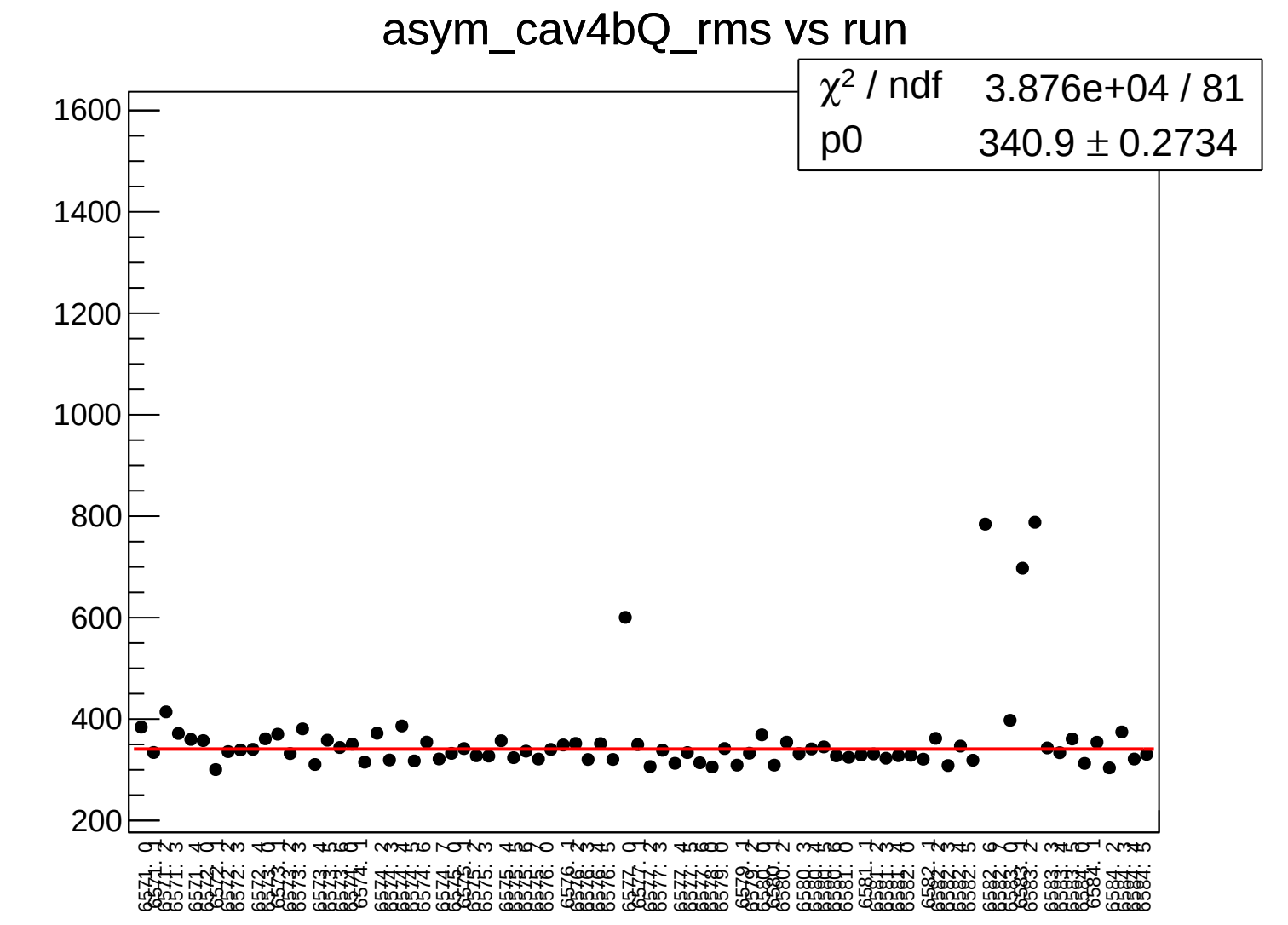

asym_bcm_dg_ds_mean vs run
χ² / ndf 18.31 / 81
p0 64.34 ± 268.1
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −12.37
Std Dev 70.46
1.5
1
0.5
0
−0.5
−1

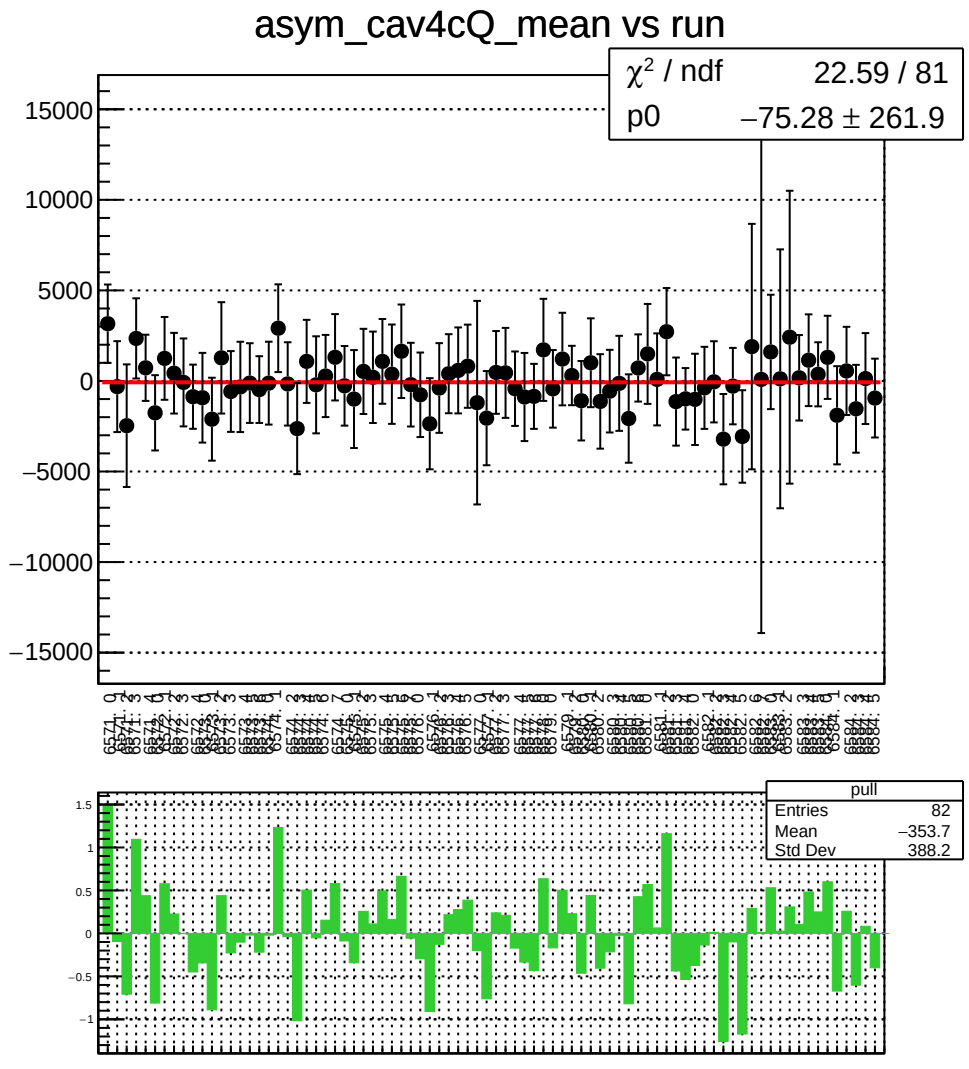

pull1D
Entries 82
Mean 0.003962
Std Dev 0.4725
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

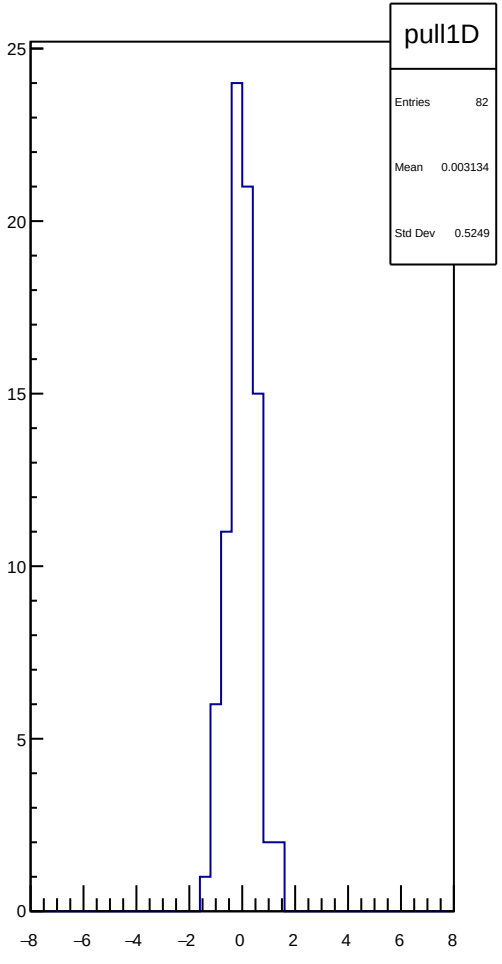

asym_bcm_dg_ds_rms vs run
χ² / ndf 5.282e+04 / 81
p0 235.3 ± 0.1896
1600
1400
1200
1000
800
600
400
200

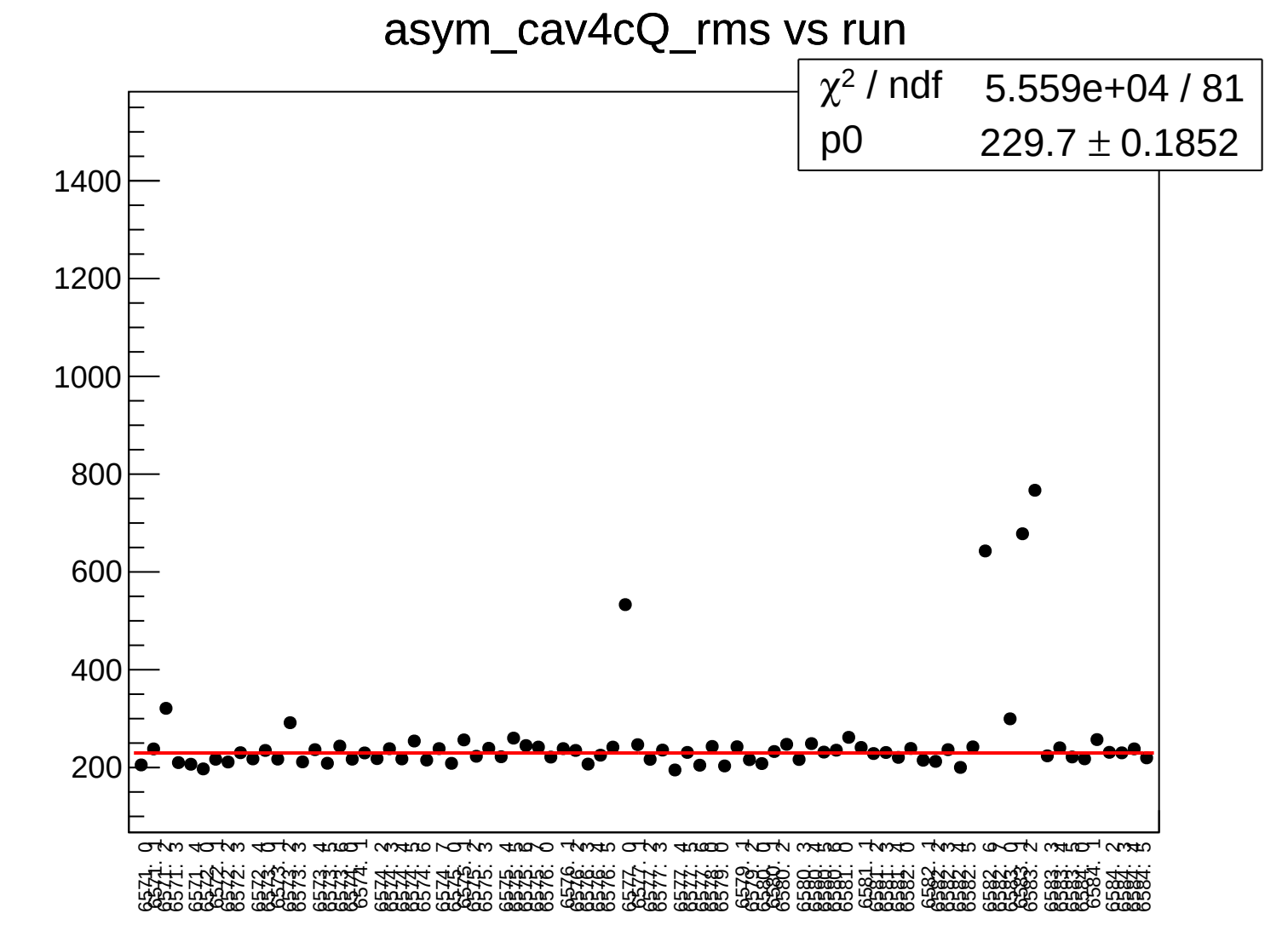

asym_cav4bQ_mean vs run
χ² / ndf 55.86 / 81
p0 −342.3 ± 386.6
pull
Entries 82
Mean 190.2
Std Dev 152.7

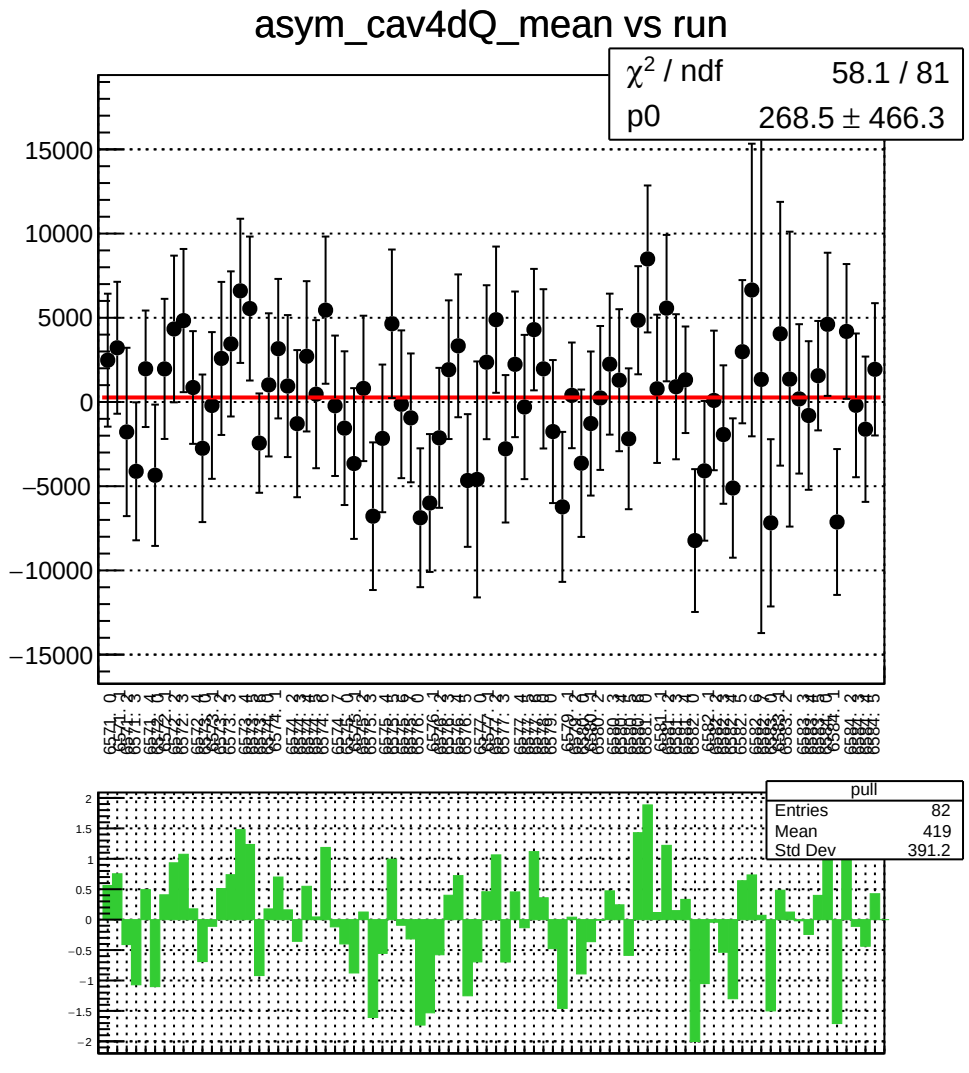

pull1D
Entries 82
Mean −0.01443
Std Dev 0.8252

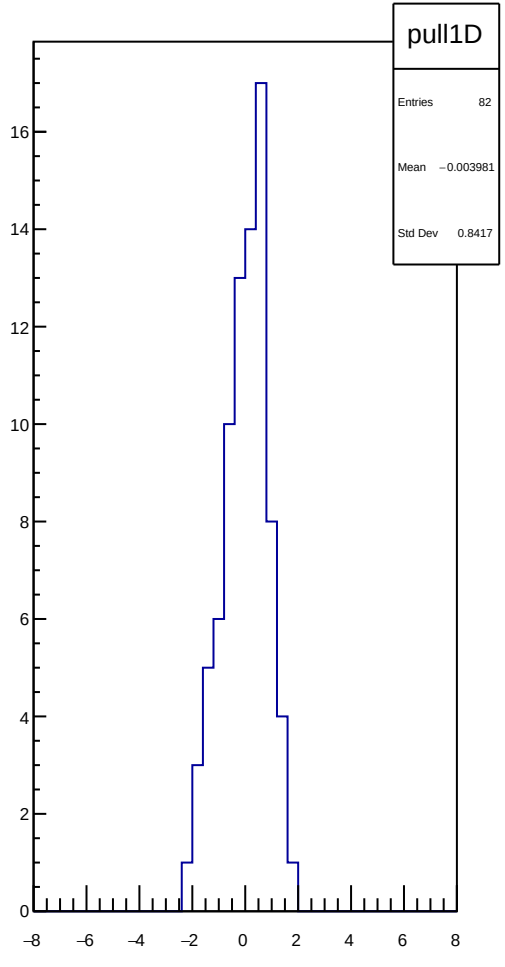

asym_cav4bQ_rms vs run
χ² / ndf 3.876e+04 / 81
p0 340.9 ± 0.2734
1600
1400
1200
1000
800
600
400
200

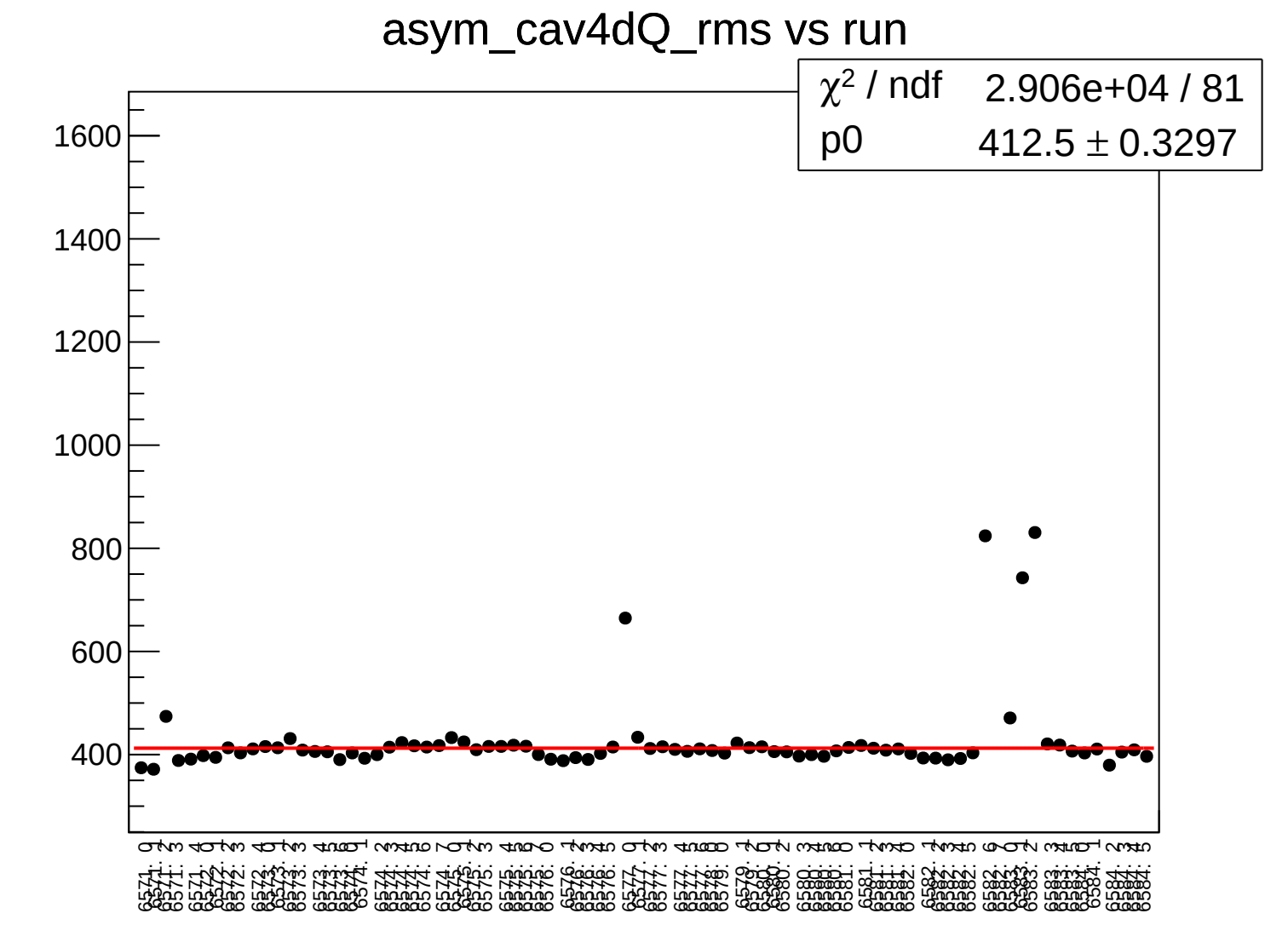

asym_cav4cQ_mean vs run
χ² / ndf 22.59 / 81
p0 −75.28 ± 261.9
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −353.7
Std Dev 388.2
1.5
1
0.5
0
−0.5
−1

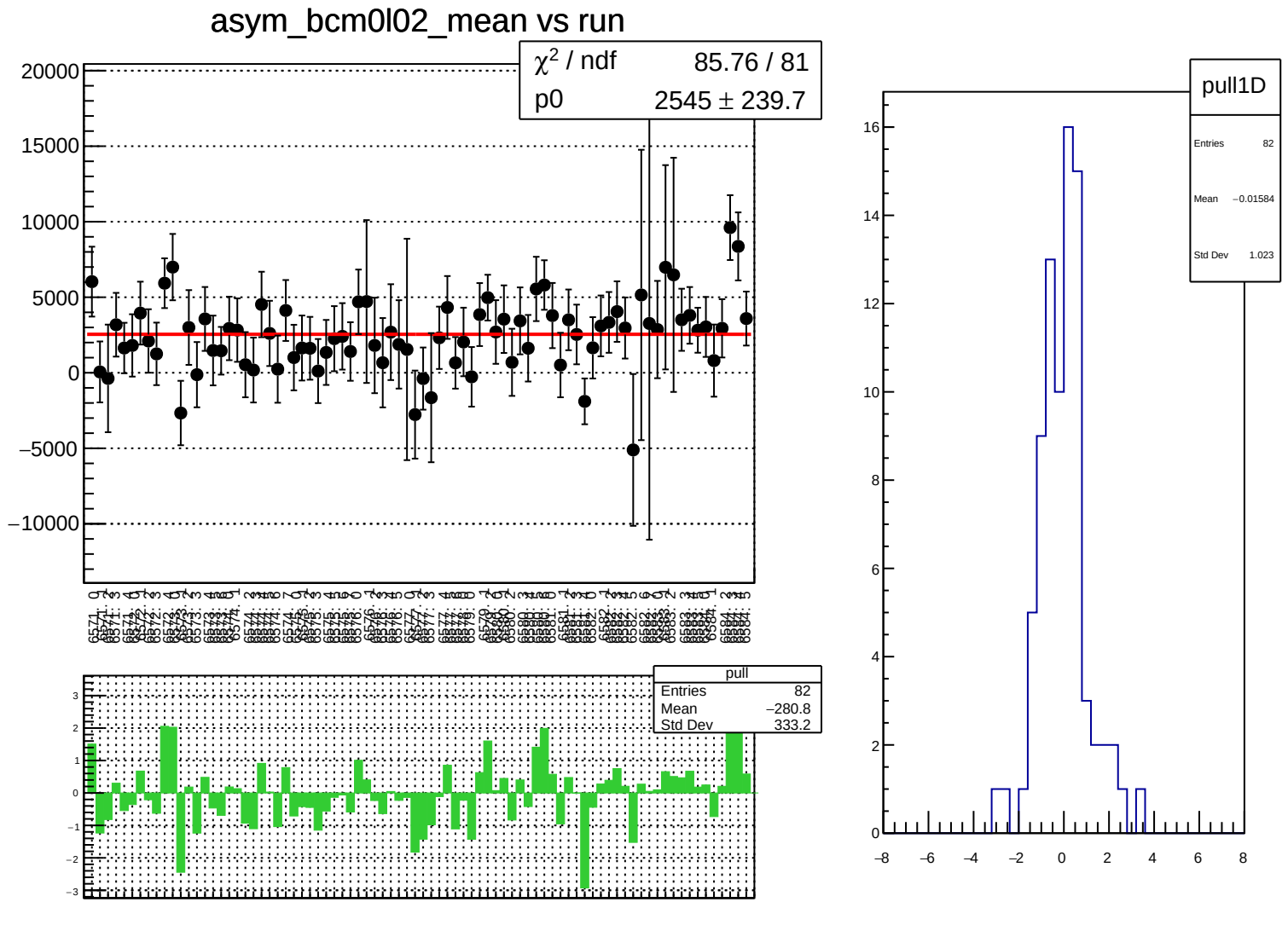

pull1D
Entries 82
Mean 0.003134
Std Dev 0.5249
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

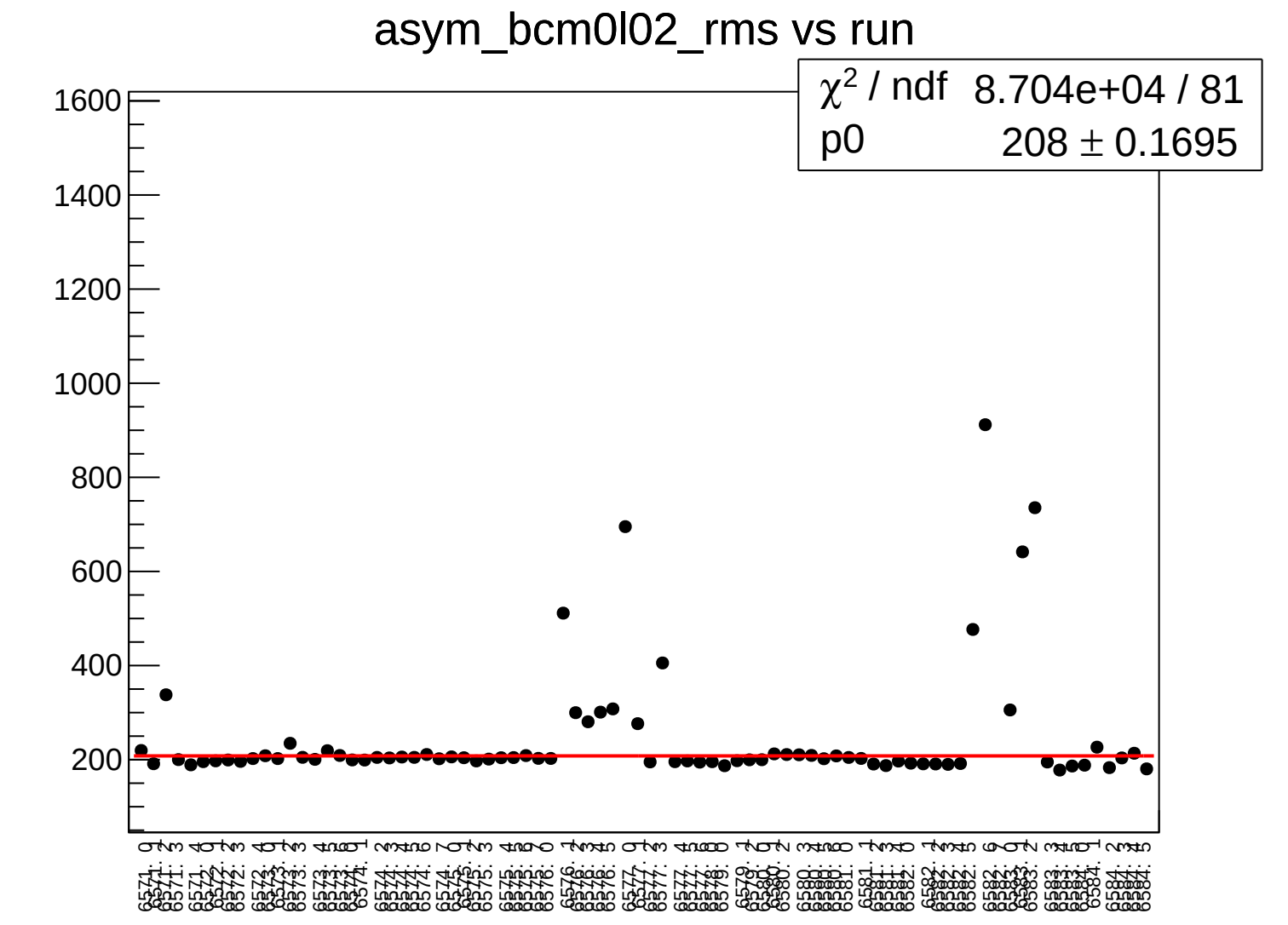

asym_cav4cQ_rms vs run
χ² / ndf 5.559e+04 / 81
p0 229.7 ± 0.1852
1400
1200
1000
800
600
400
200

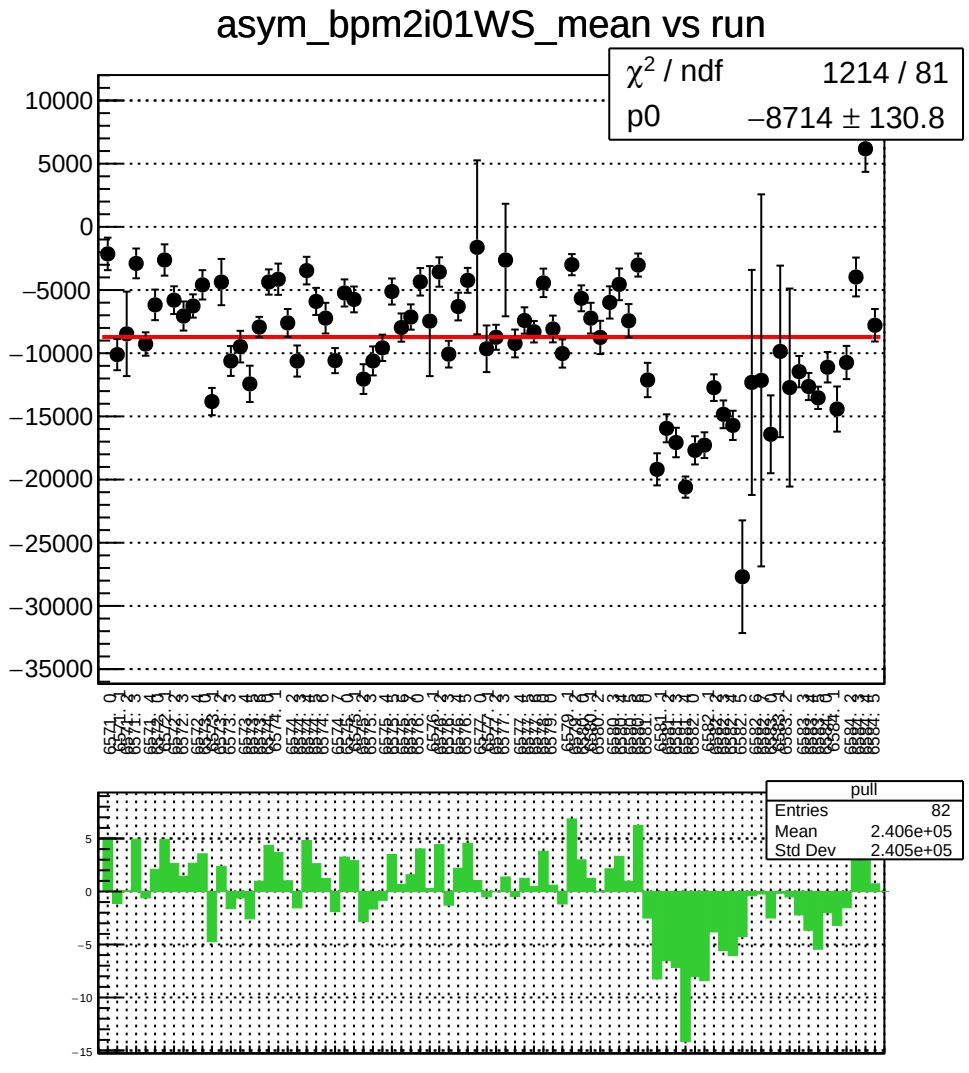

asym_cav4dQ_mean vs run
χ² / ndf 58.1 / 81
p0 268.5 ± 466.3
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 419
Std Dev 391.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

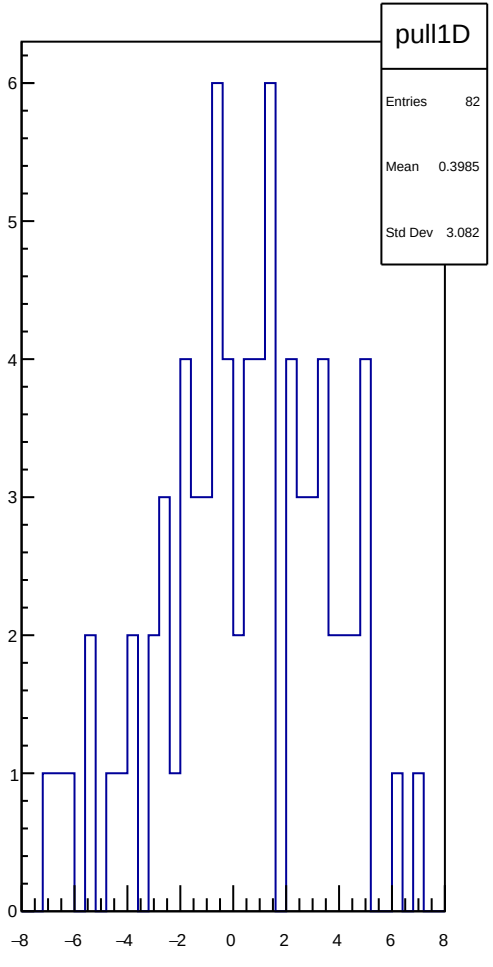

pull1D
Entries 82
Mean −0.003981
Std Dev 0.8417
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

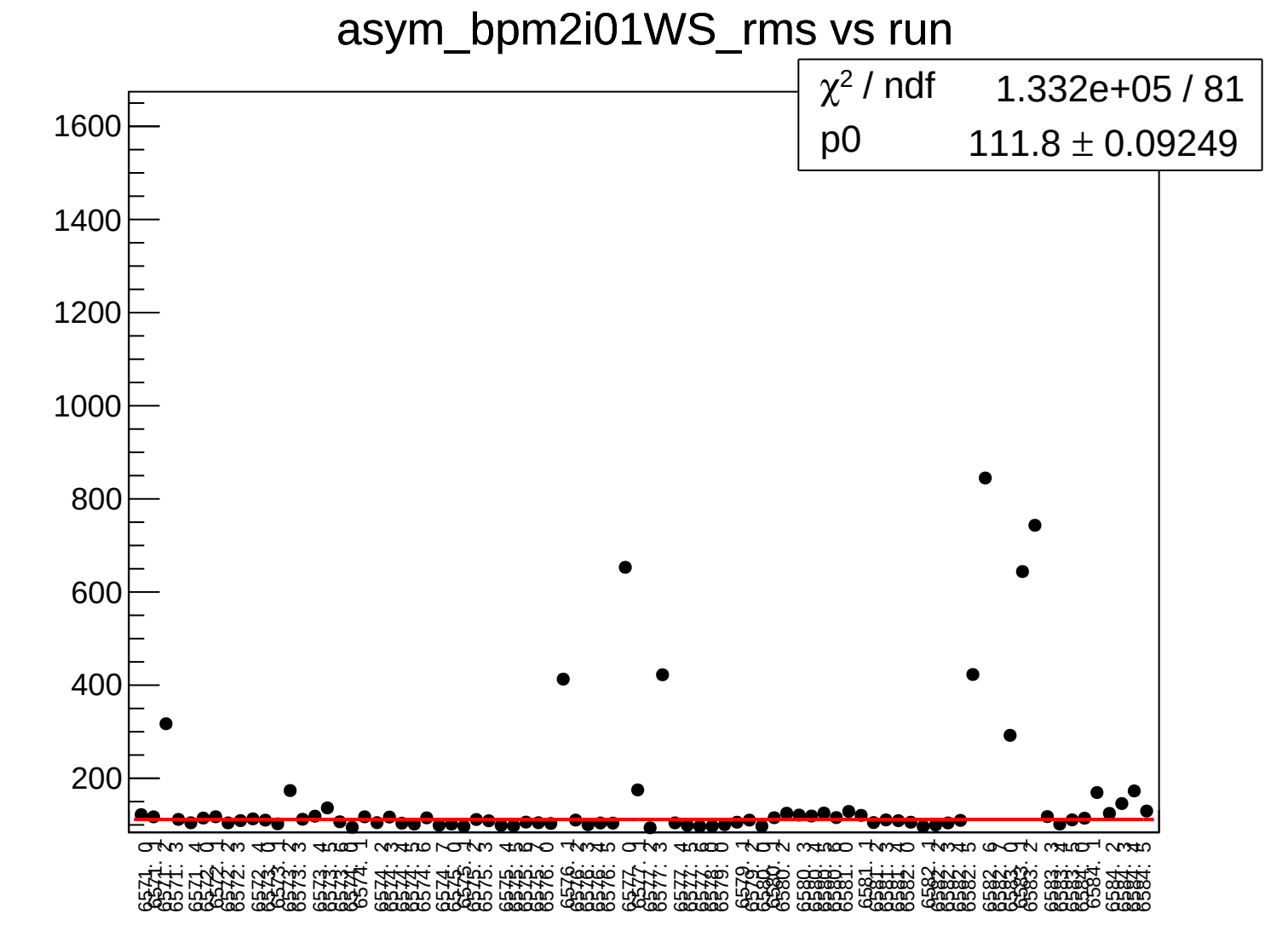

asym_cav4dQ_rms vs run
χ² / ndf 2.906e+04 / 81
p0 412.5 ± 0.3297
1600
1400
1200
1000
800
600
400

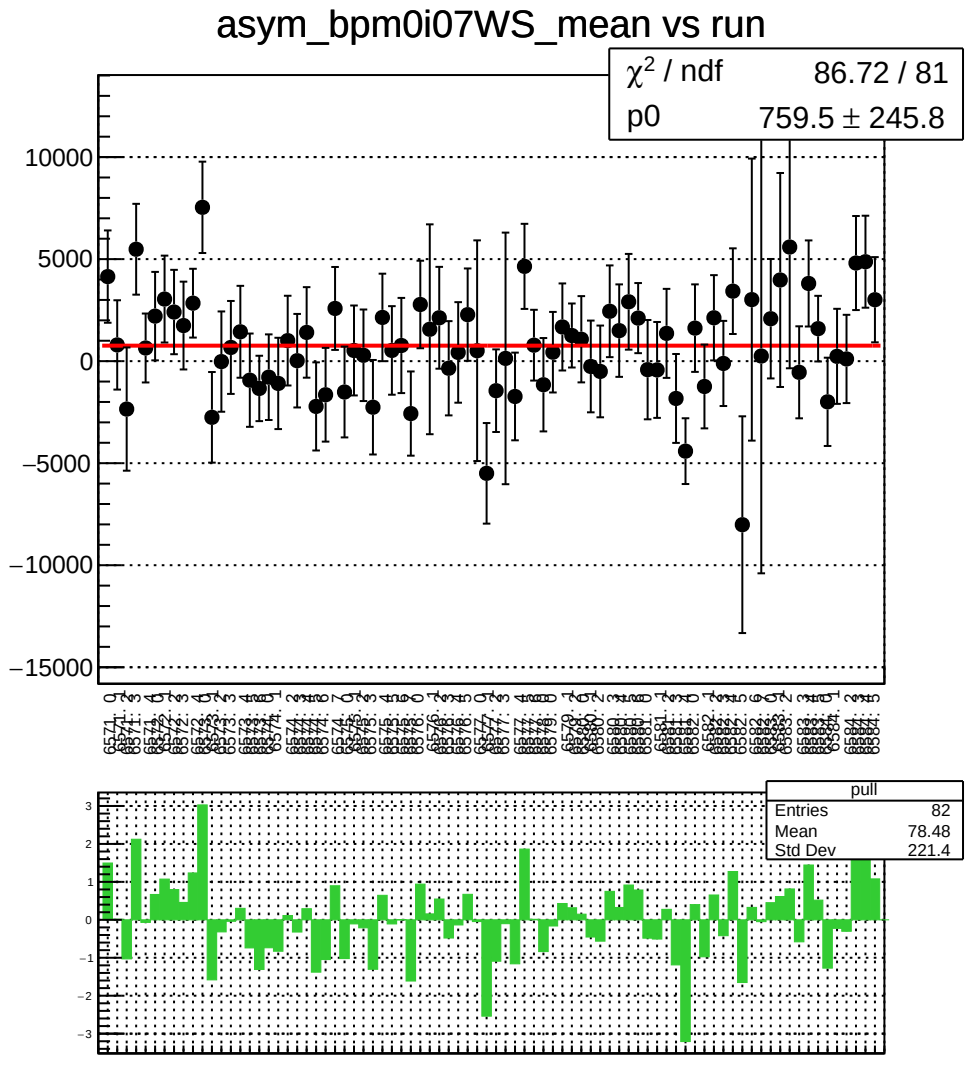

asym_bcm0l02_mean vs run
χ² / ndf 85.76 / 81
p0 2545 ± 239.7
20000
15000
10000
5000
0
−5000
−10000
pull
Entries 82
Mean −280.8
Std Dev 333.2
3
2
1
0
−1
−2
−3
pull1D
Entries 82
Mean −0.01584
Std Dev 1.023
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

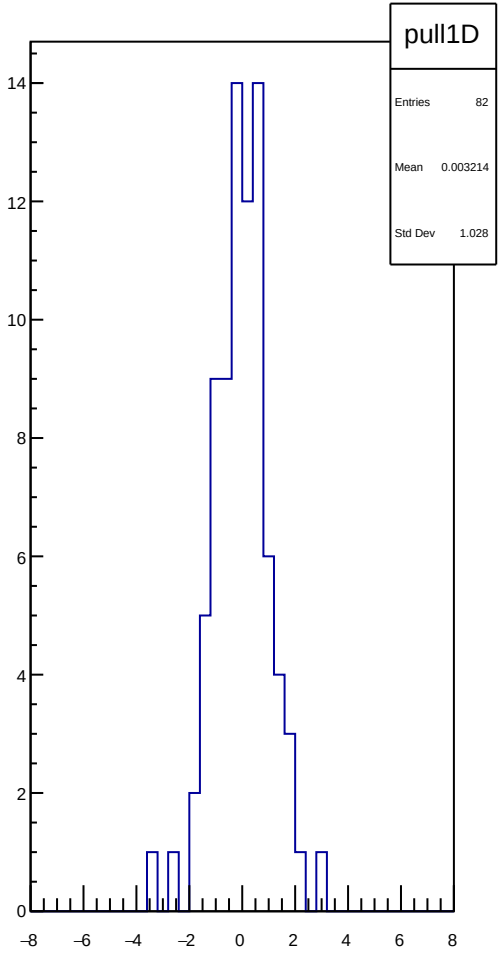

asym_bcm0l02_rms vs run
χ² / ndf 8.704e+04 / 81
p0 208 ± 0.1695
1600
1400
1200
1000
800
600
400
200

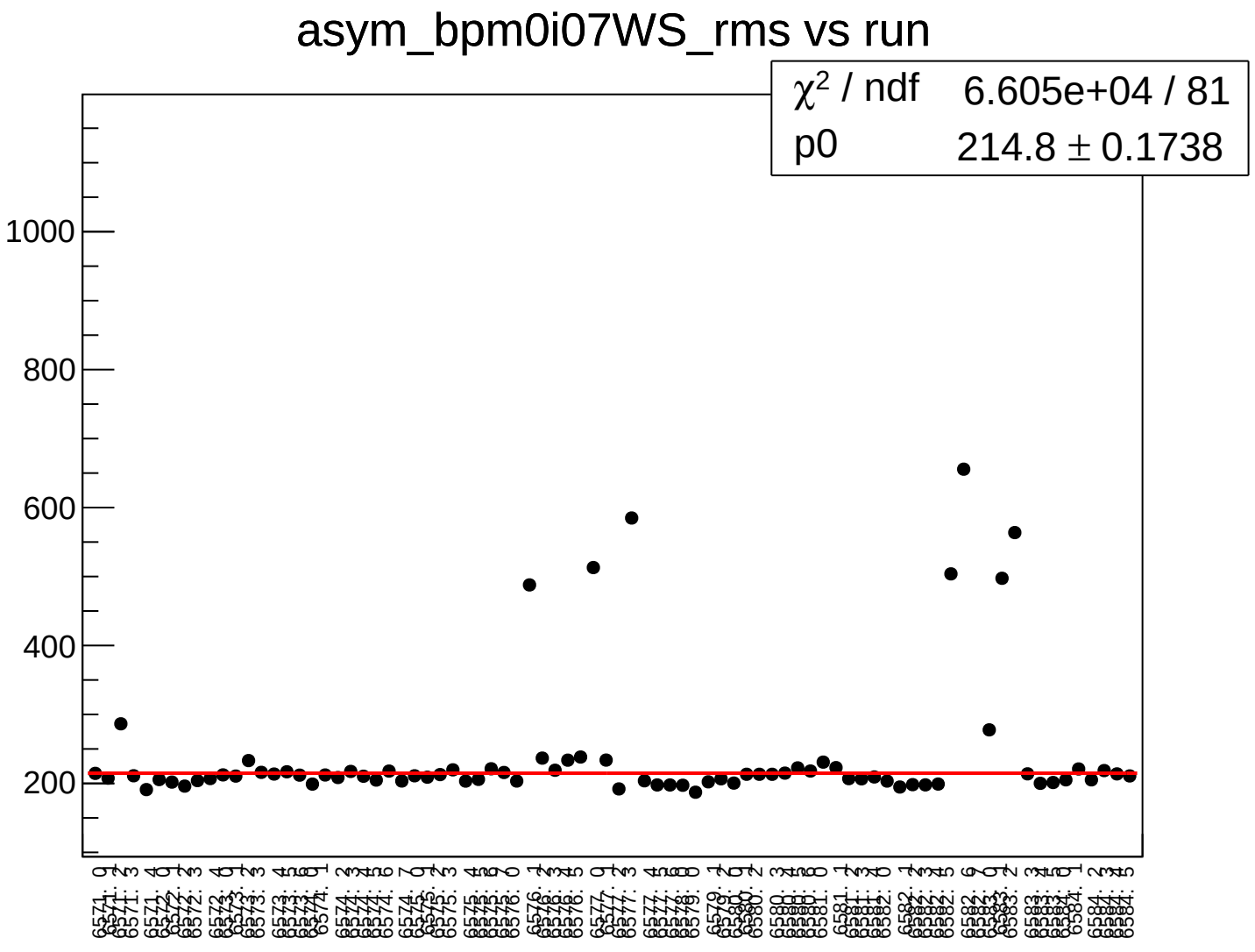

asym_bpm2i01WS_mean vs run
χ² / ndf 1214 / 81
p0 −8714 ± 130.8
pull
Entries 82
Mean 2.406e+05
Std Dev 2.405e+05

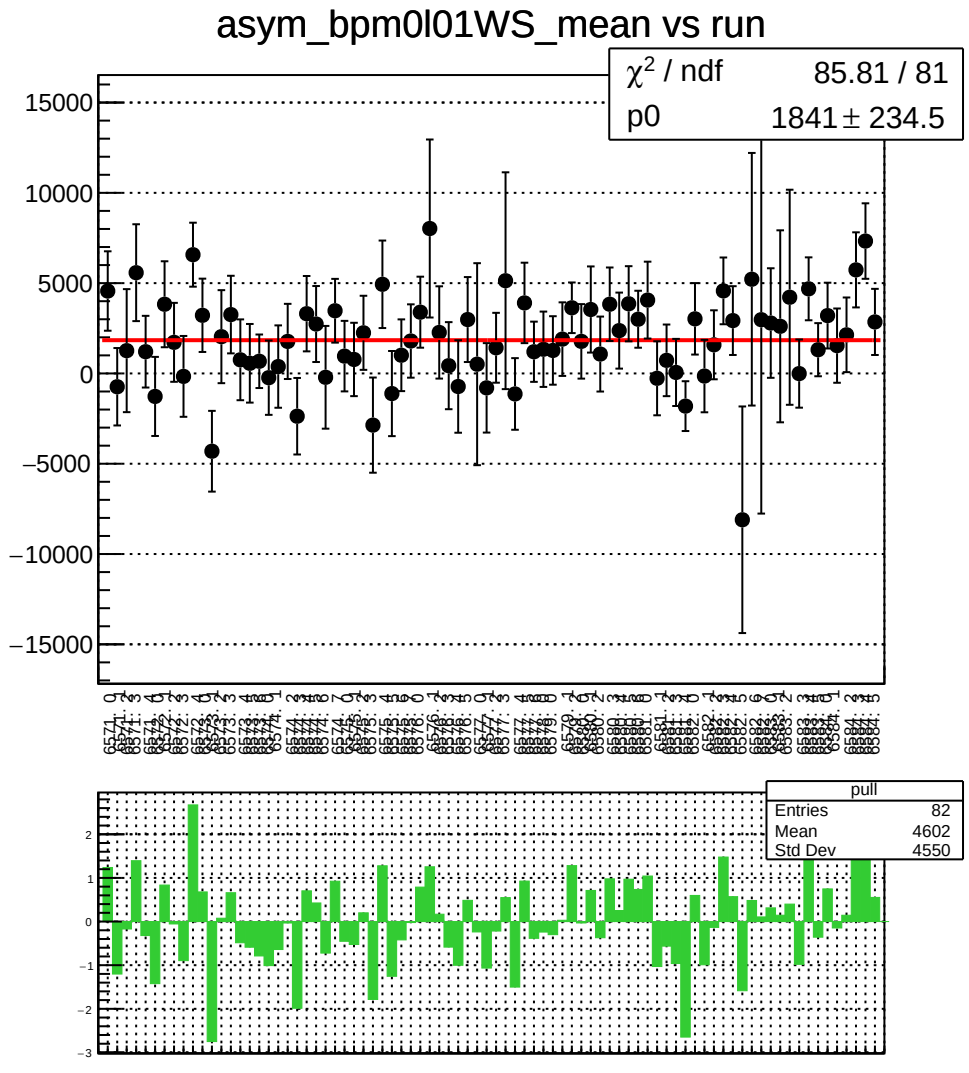

pull1D
Entries 82
Mean 0.3985
Std Dev 3.082

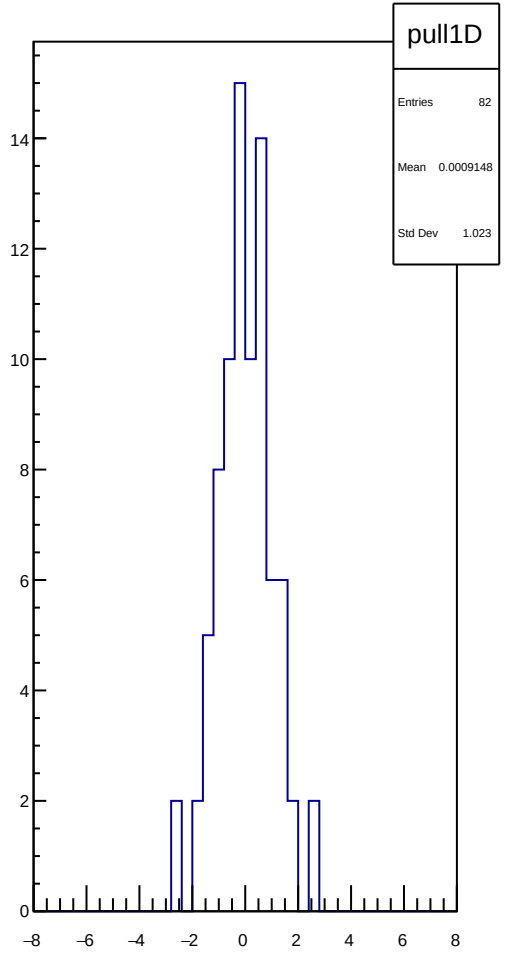

asym_bpm2i01WS_rms vs run
χ² / ndf 1.332e+05 / 81
p0 111.8 ± 0.09249
1600
1400
1200
1000
800
600
400
200

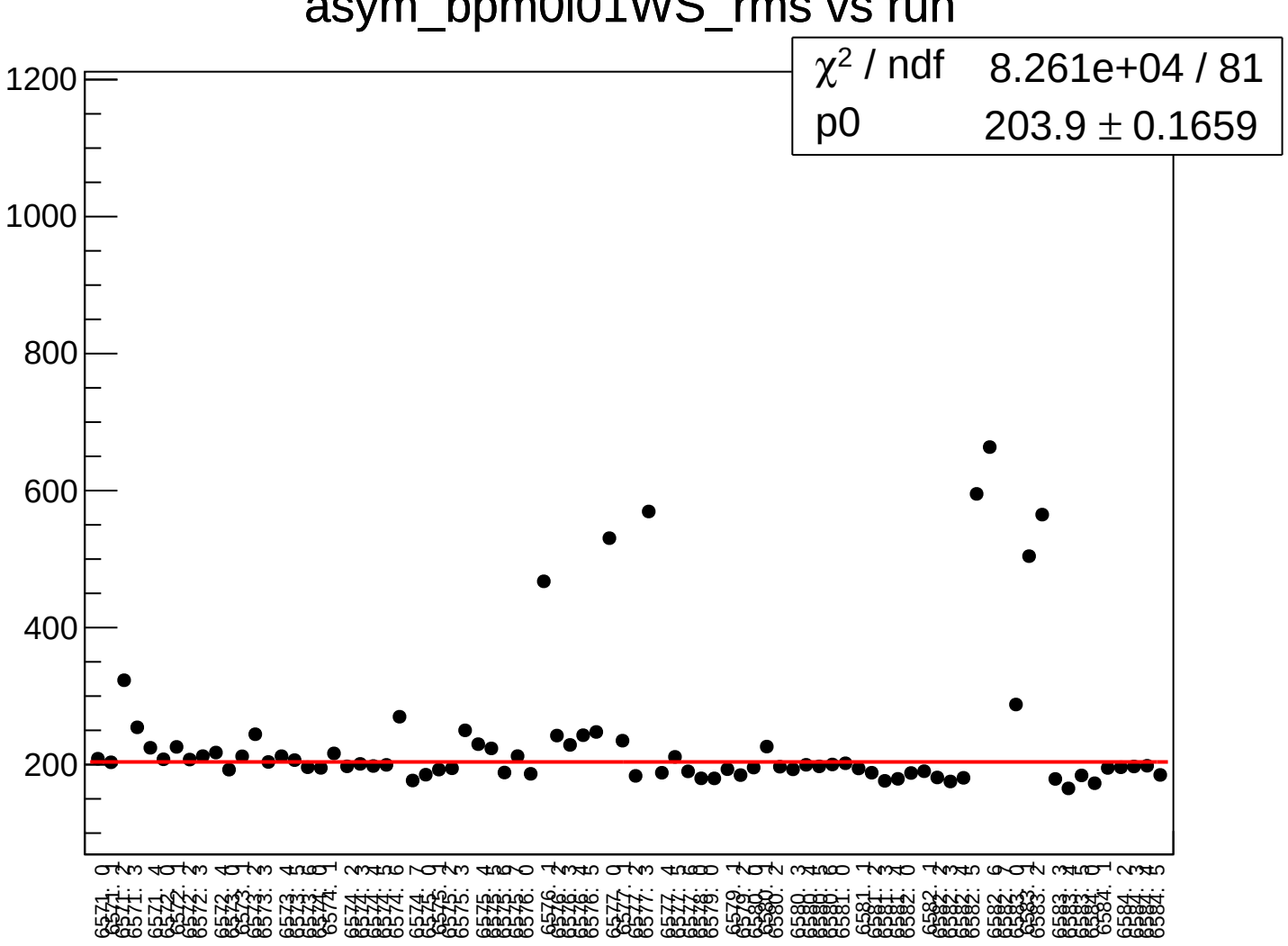

asym_bpm0i07WS_mean vs run
$\chi^2$ / ndf 86.72 / 81
p0 759.5 ± 245.8
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 78.48
Std Dev 221.4
3
2
1
0
−1
−2
−3

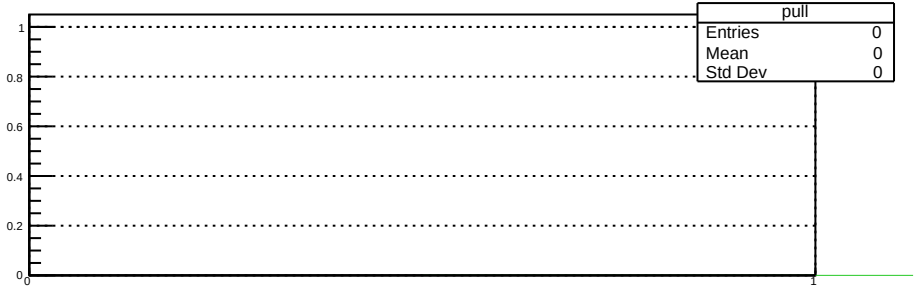

pull1D
Entries 82
Mean 0.003214
Std Dev 1.028
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

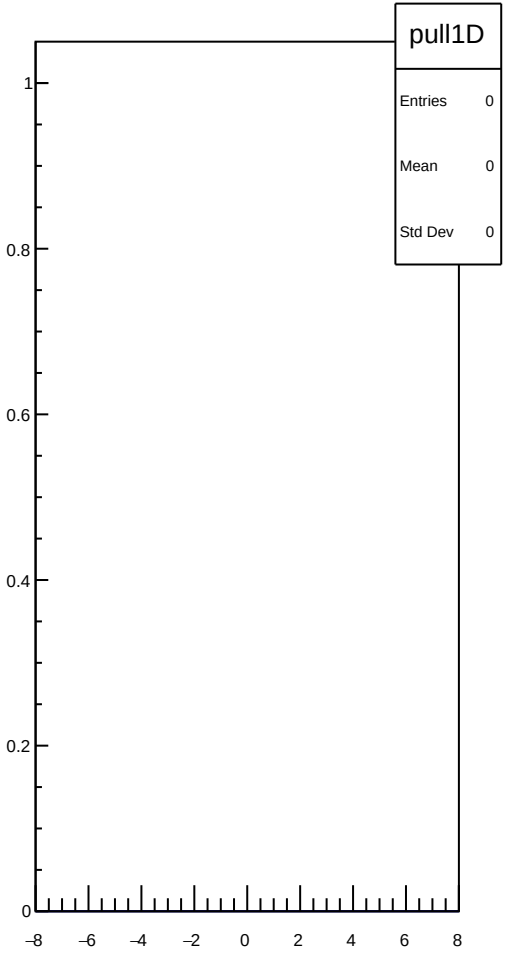

asym_bpm0i07WS_rms vs run
χ² / ndf 6.605e+04 / 81
p0 214.8 ± 0.1738
1000
800
600
400
200

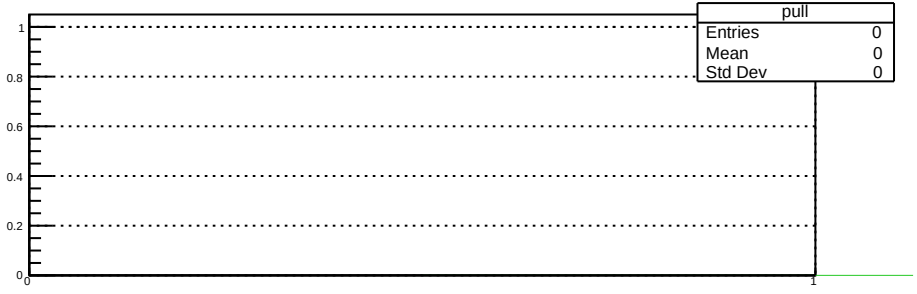

asym_bpm0l01WS_mean vs run
χ² / ndf 85.81 / 81
p0 1841 ± 234.5
pull
Entries 82
Mean 4602
Std Dev 4550

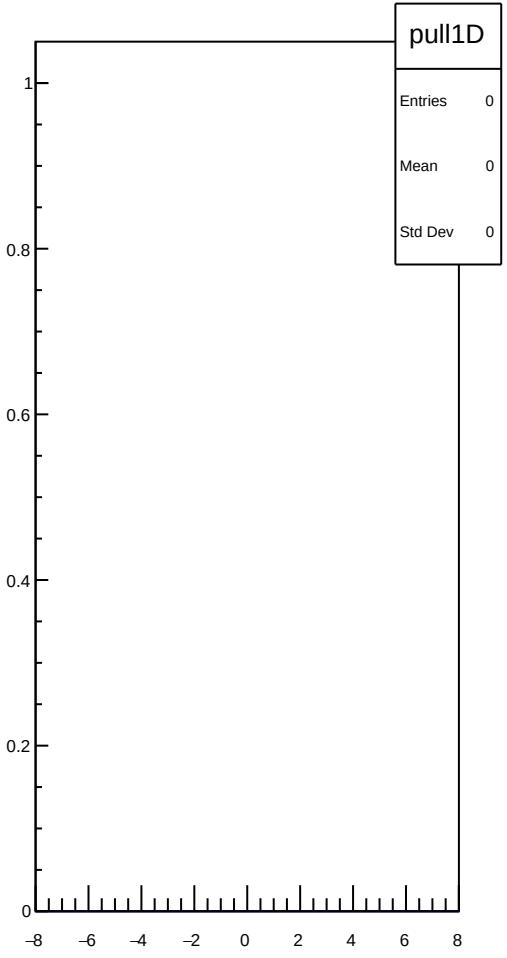

pull1D
Entries 82
Mean 0.0009148
Std Dev 1.023

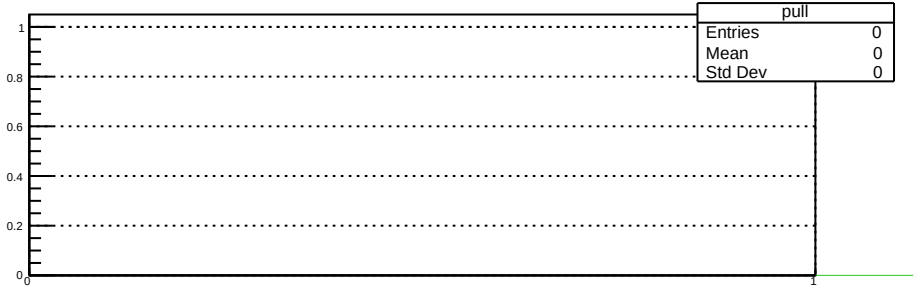

asym_bpm0l01WS_rms vs run
χ² / ndf 8.261e+04 / 81
p0 203.9 ± 0.1659
1200
1000
800
600
400
200

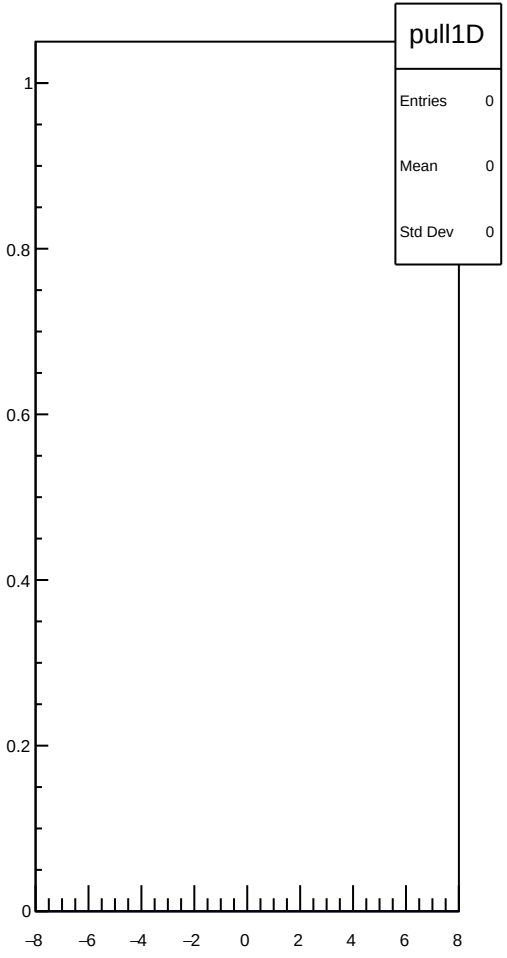

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

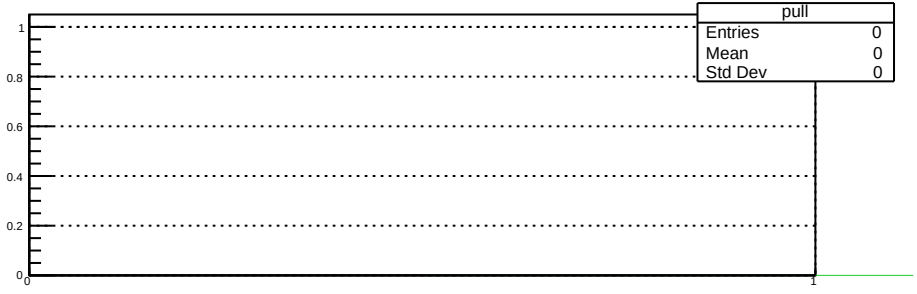

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

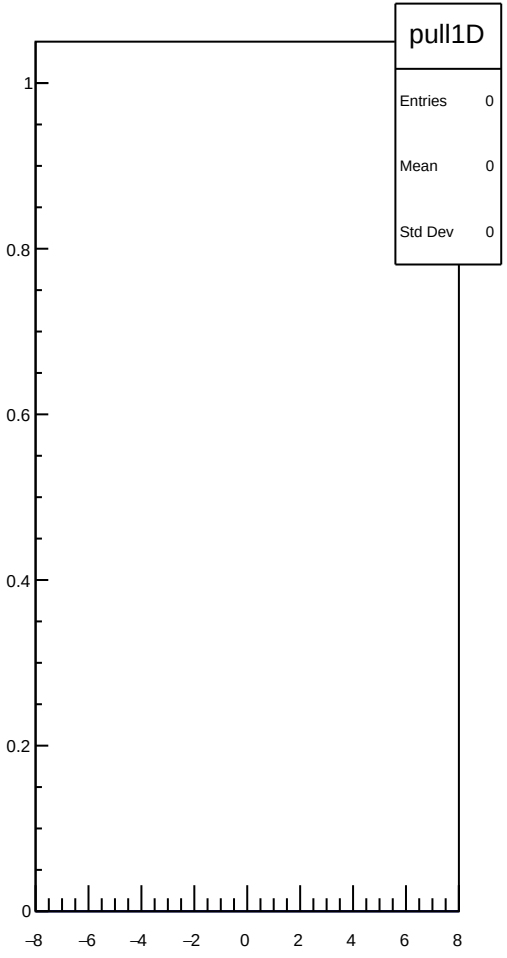

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

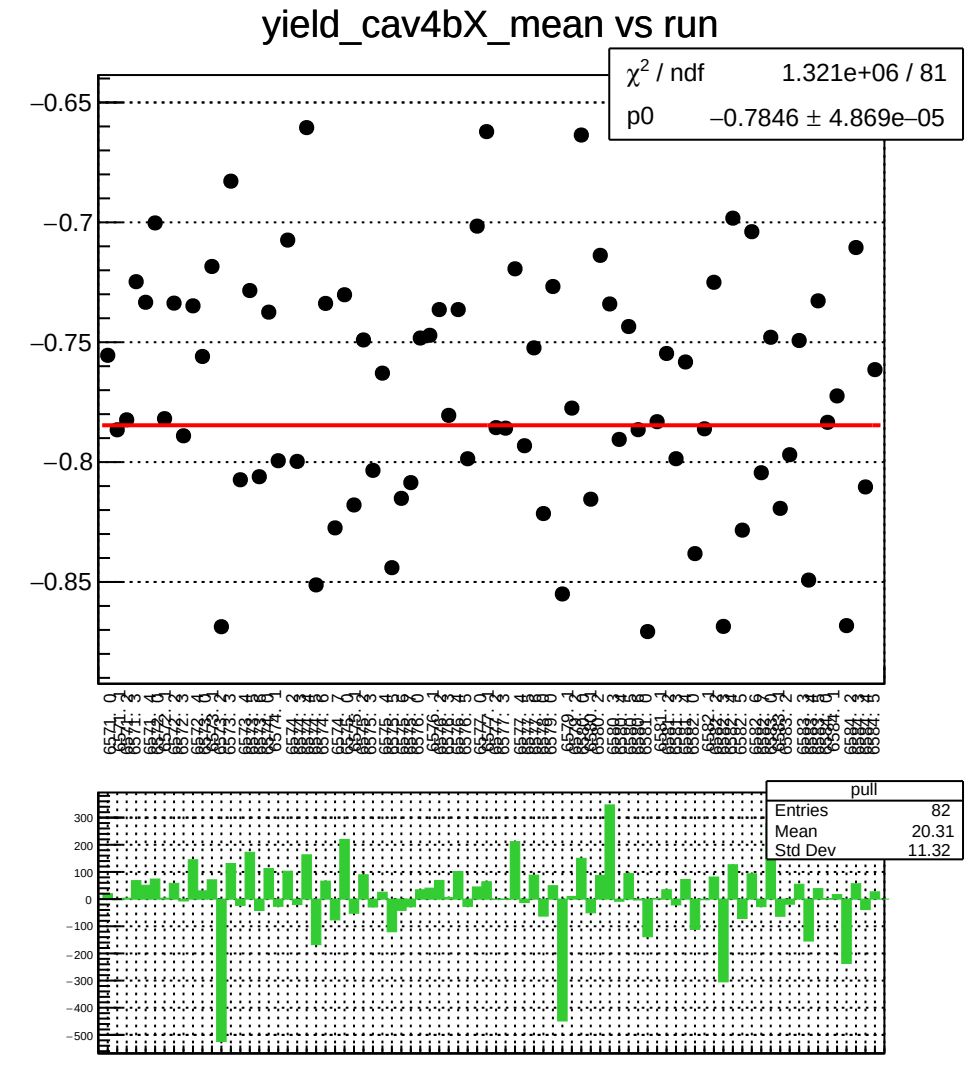

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

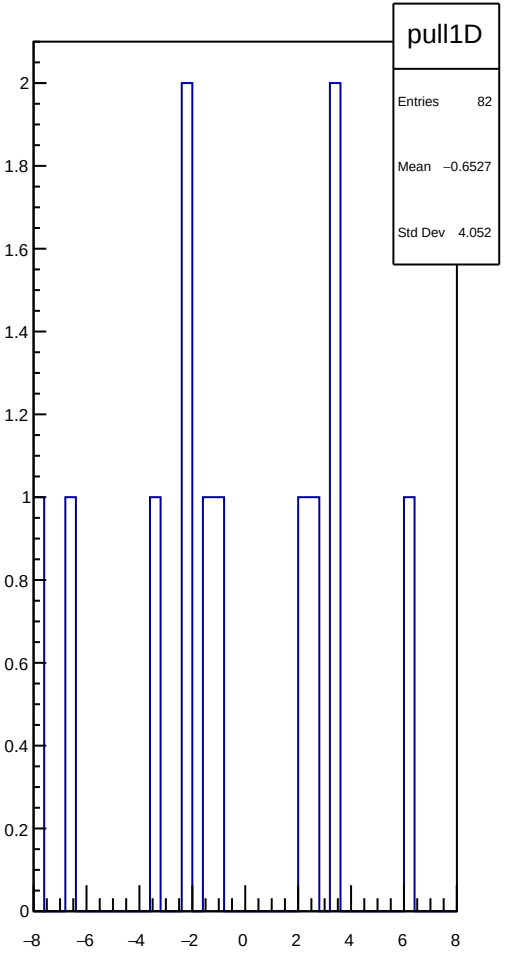

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

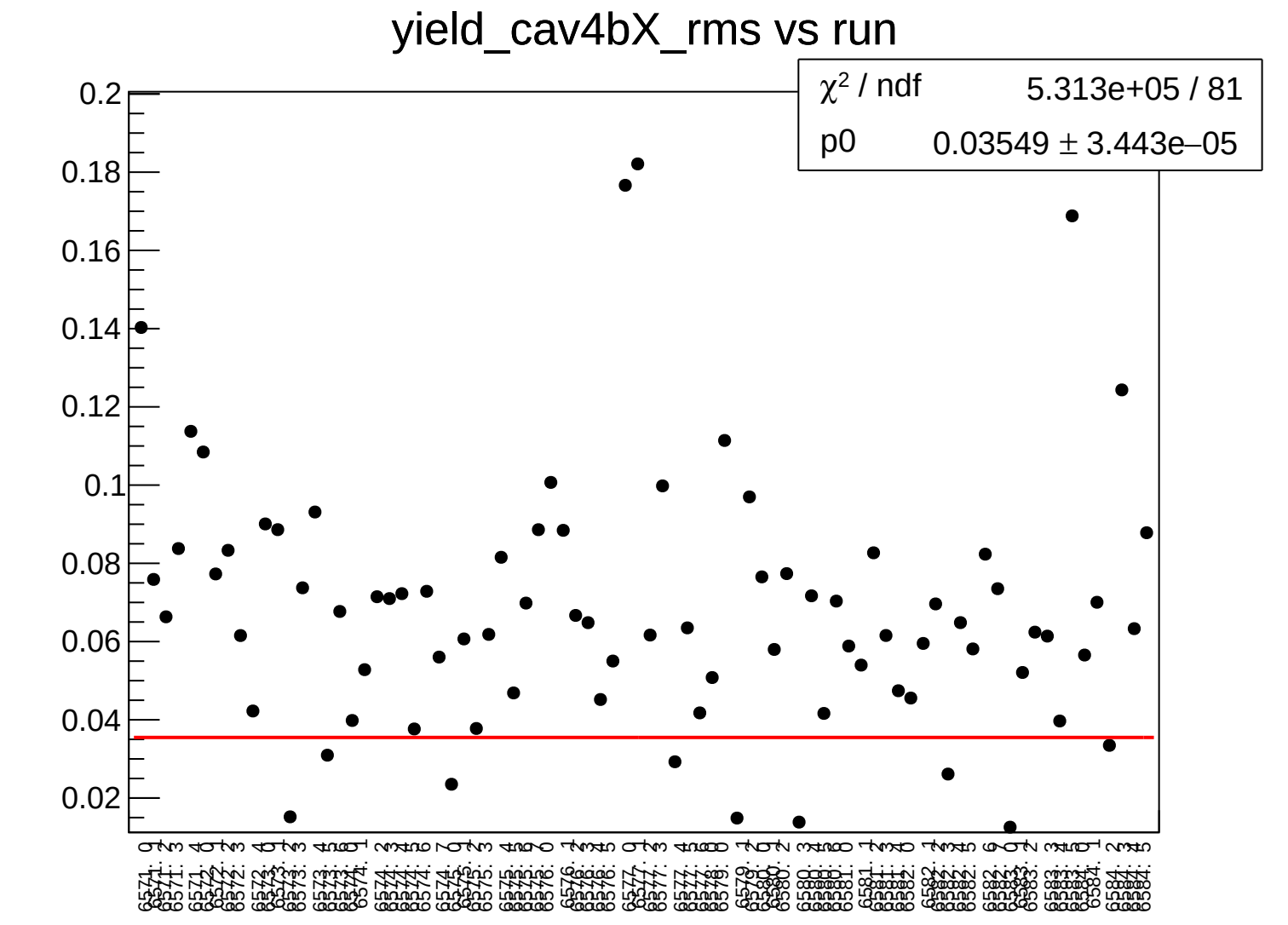

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

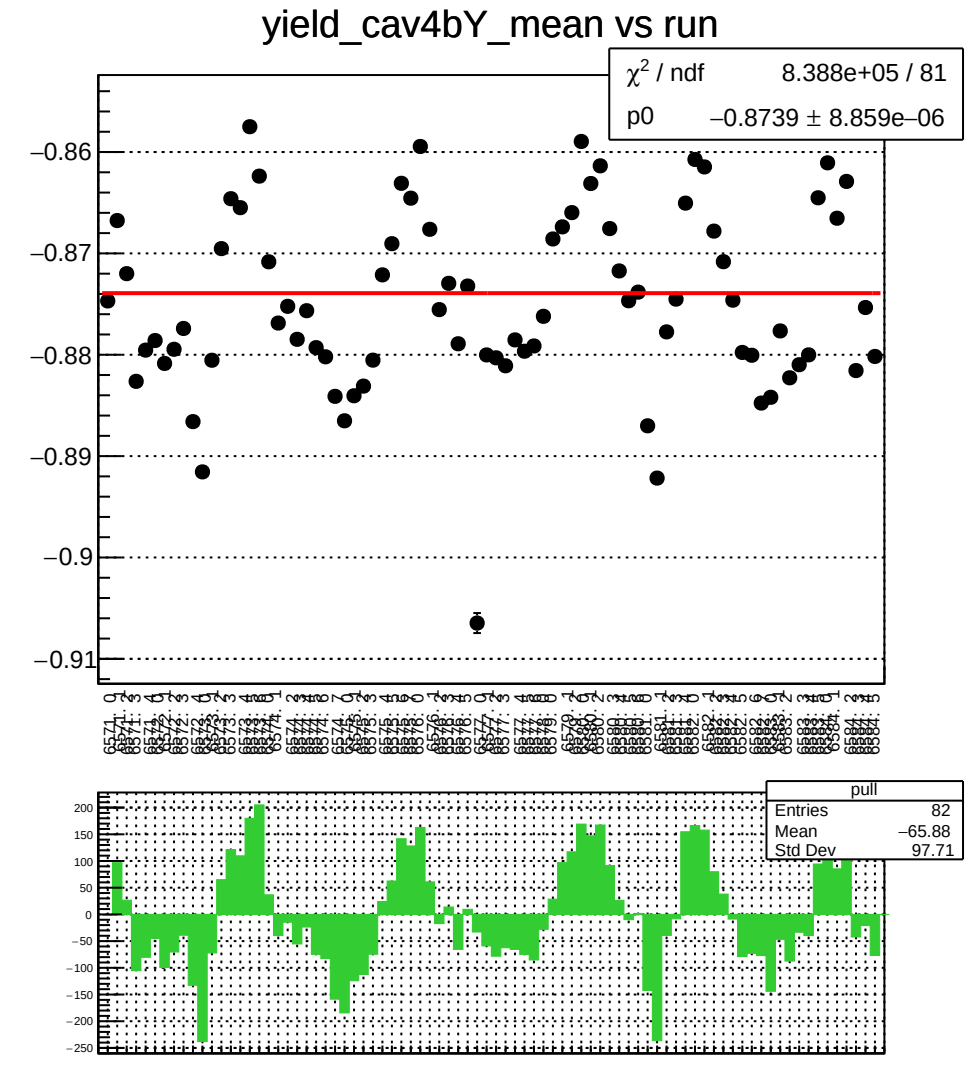

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

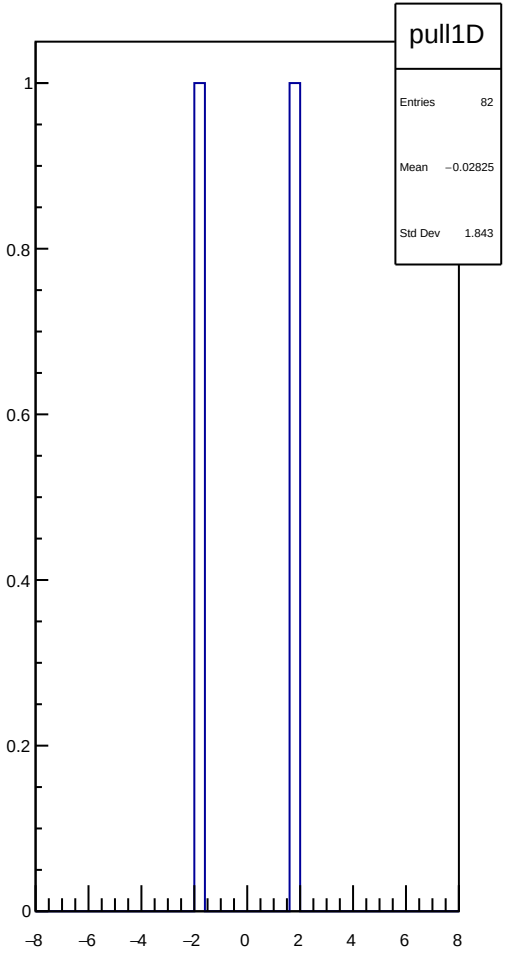

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

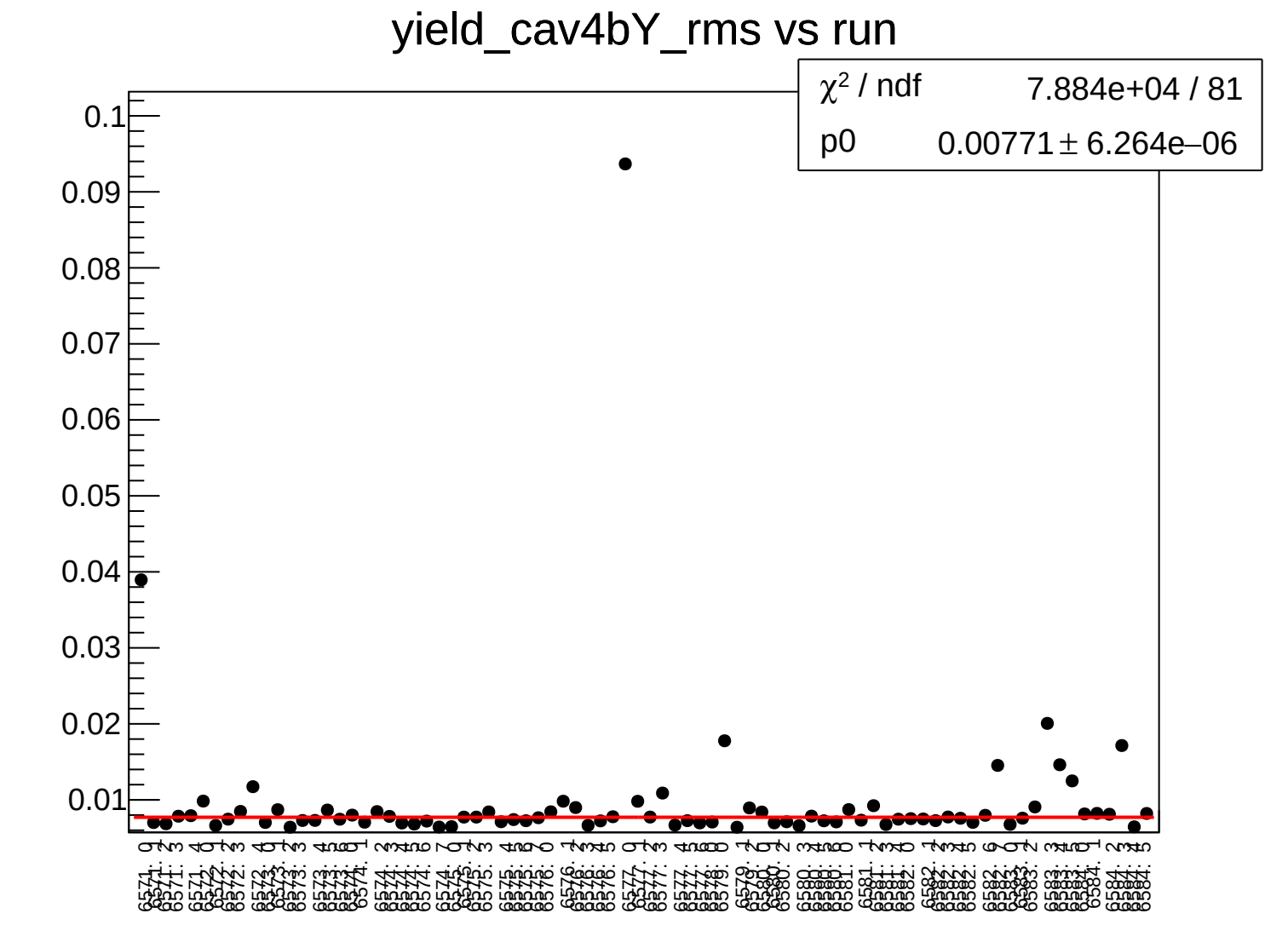

yield_cav4bX_mean vs run
χ² / ndf 1.321e+06 / 81
p0 −0.7846 ± 4.869e−05
−0.65
−0.7
−0.75
−0.8
−0.85
pull
Entries 82
Mean 20.31
Std Dev 11.32
300
200
100
0
−100
−200
−300
−400
−500

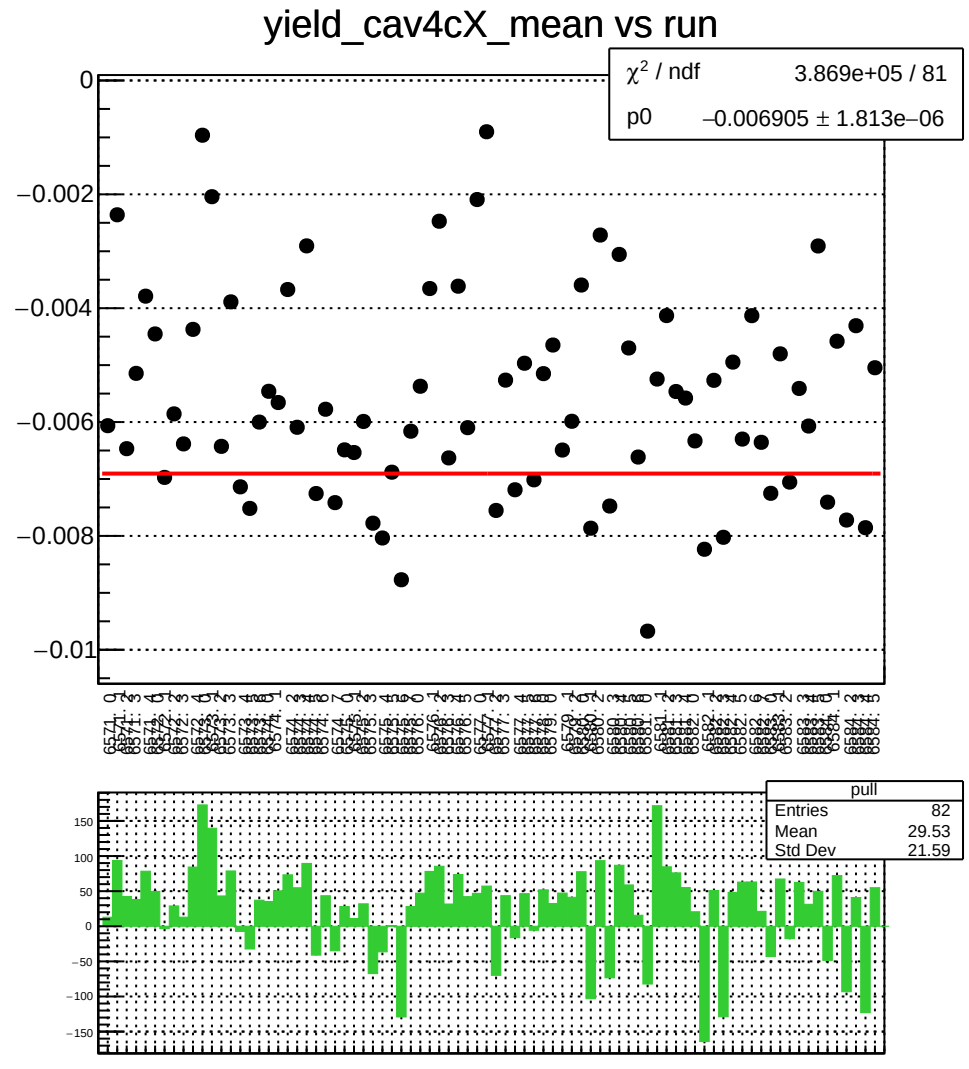

pull1D
Entries 82
Mean −0.6527
Std Dev 4.052
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

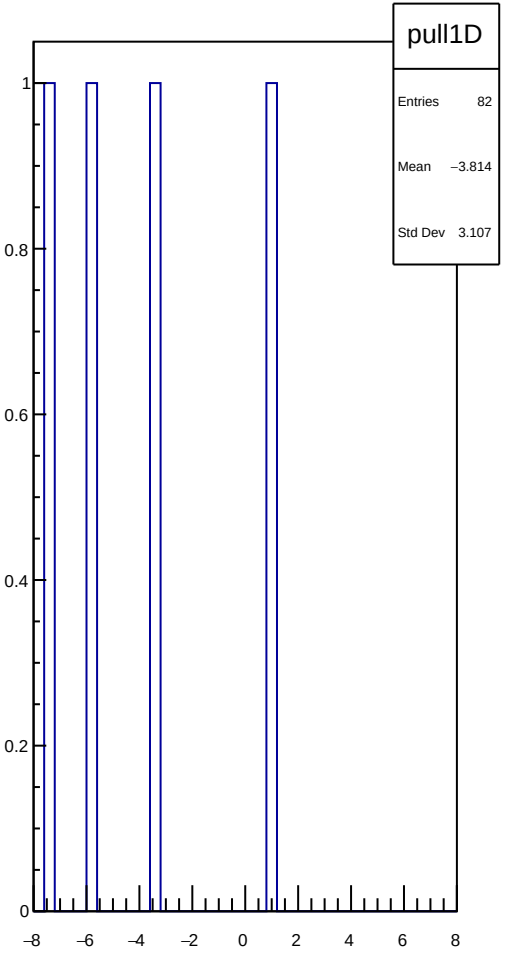

yield_cav4bX_rms vs run
χ² / ndf 5.313e+05 / 81
p0 0.03549 ± 3.443e−05
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

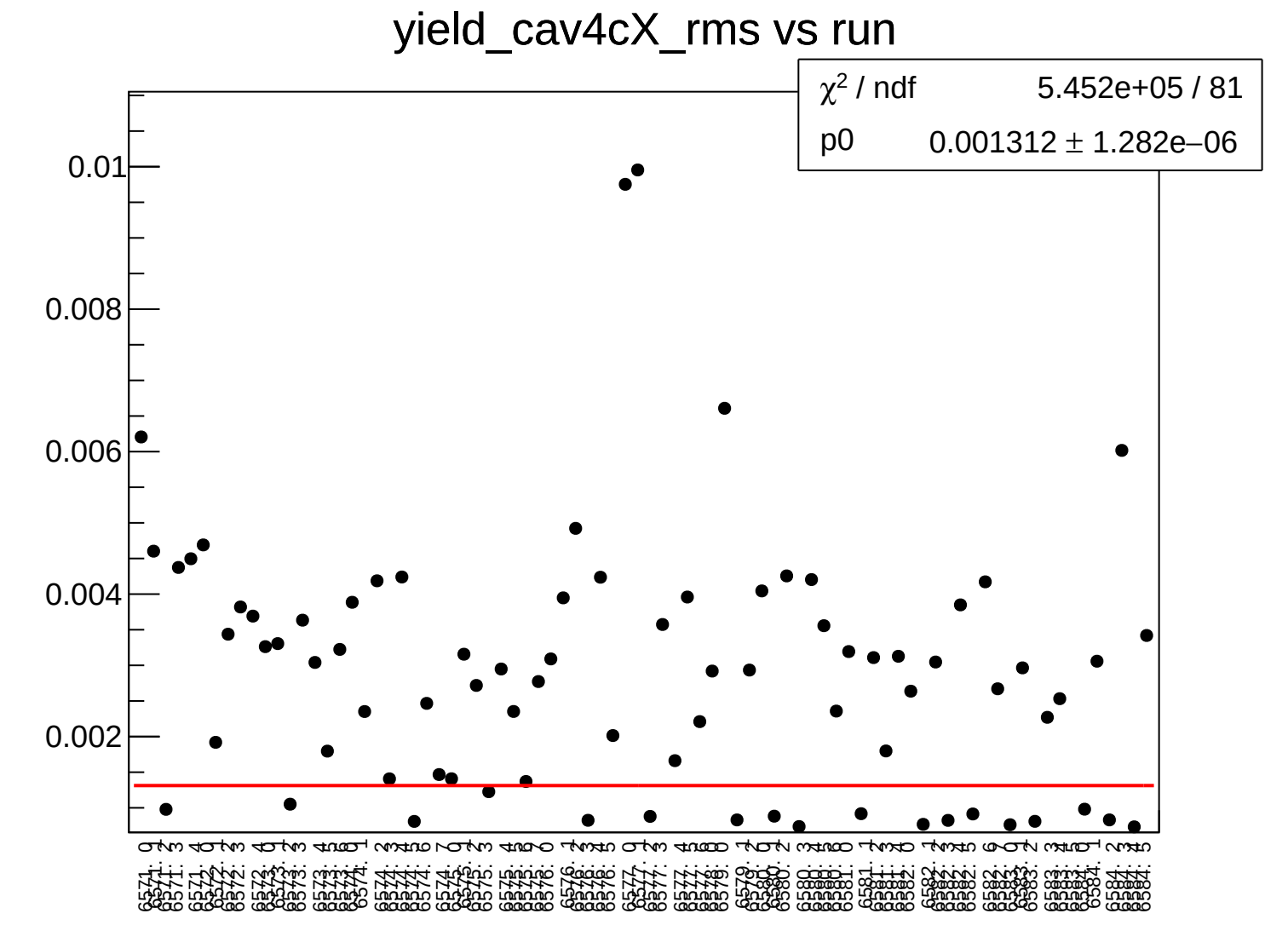

yield_cav4bY_mean vs run
χ² / ndf 8.388e+05 / 81
p0 −0.8739 ± 8.859e−06
−0.86
−0.87
−0.88
−0.89
−0.9
−0.91
pull
Entries 82
Mean −65.88
Std Dev 97.71
200
150
100
50
0
−50
−100
−150
−200
−250

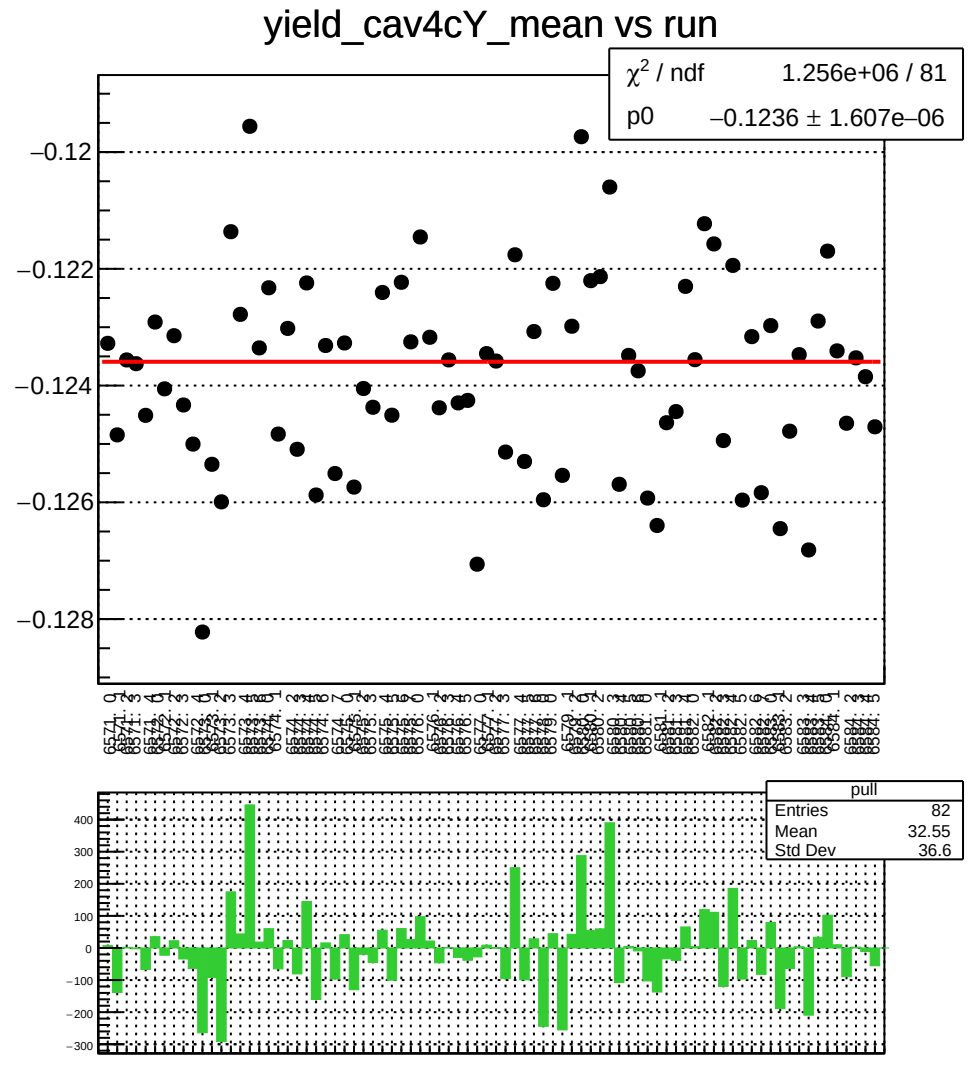

pull1D
Entries 82
Mean −0.02825
Std Dev 1.843
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

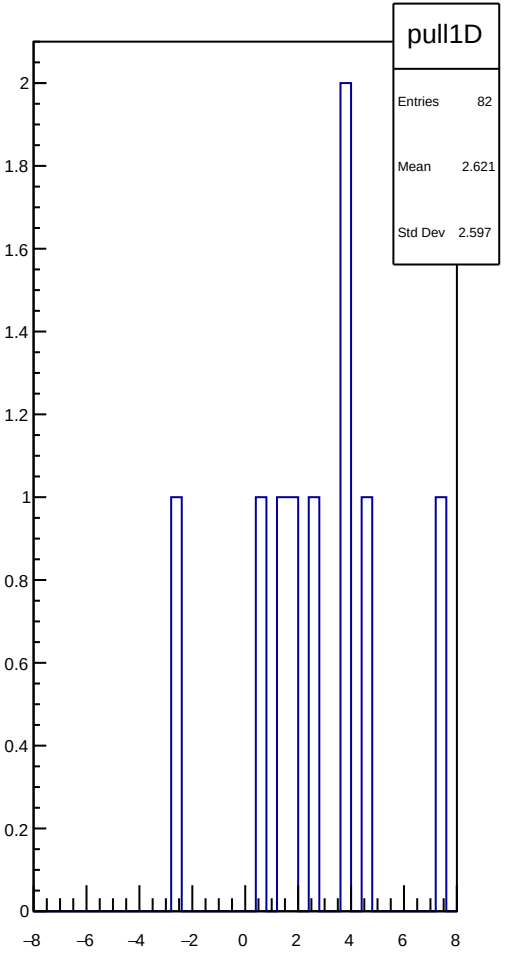

yield_cav4bY_rms vs run
χ² / ndf 7.884e+04 / 81
p0 0.00771 ± 6.264e−06
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

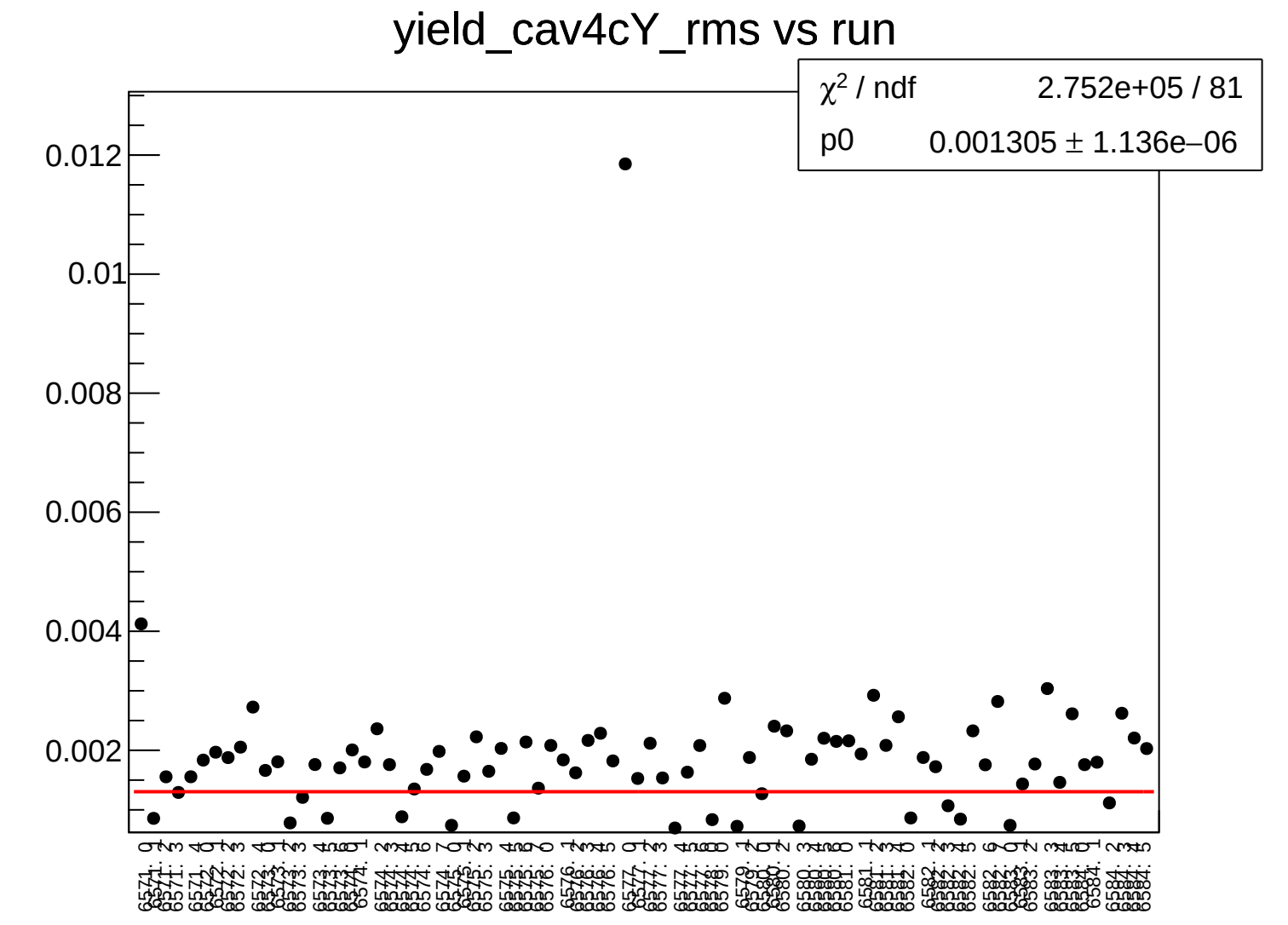

yield_cav4cX_mean vs run
χ² / ndf 3.869e+05 / 81
p0 −0.006905 ± 1.813e−06
0
−0.002
−0.004
−0.006
−0.008
−0.01
pull
Entries 82
Mean 29.53
Std Dev 21.59
150
100
50
0
−50
−100
−150

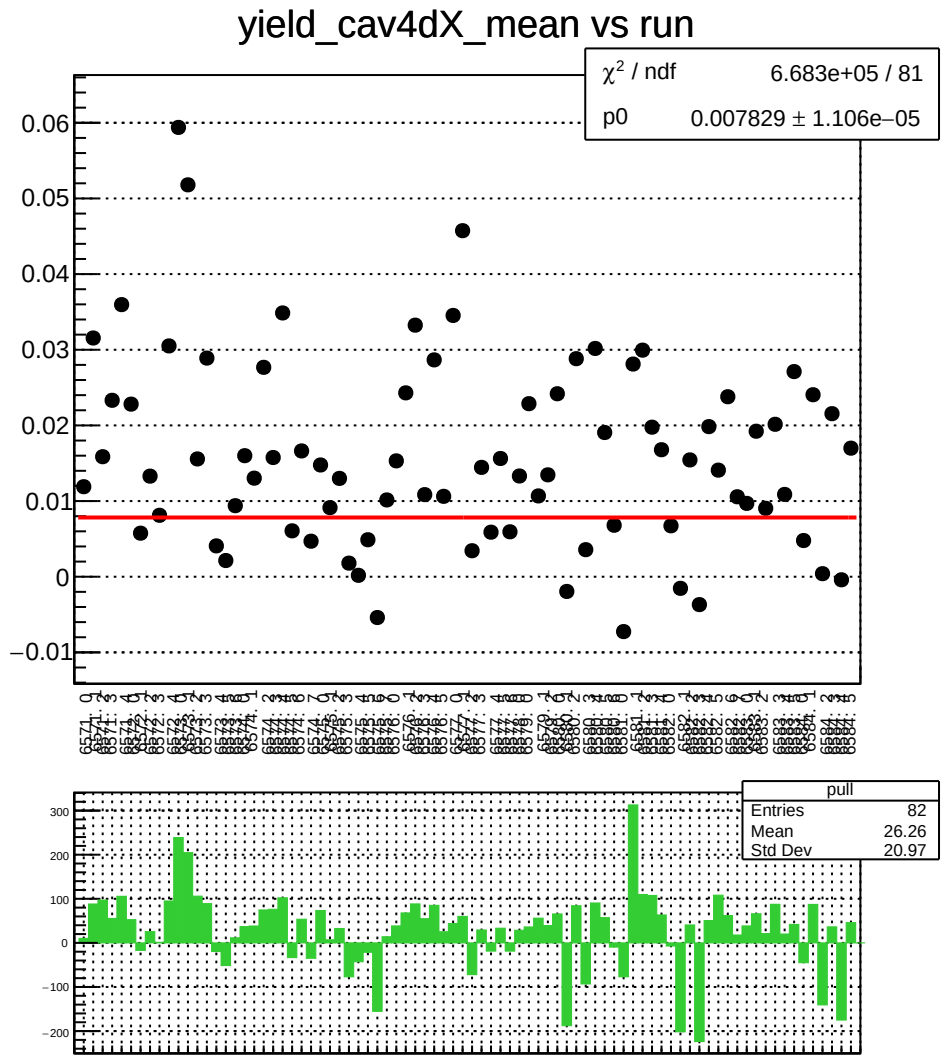

pull1D
Entries 82
Mean −3.814
Std Dev 3.107
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

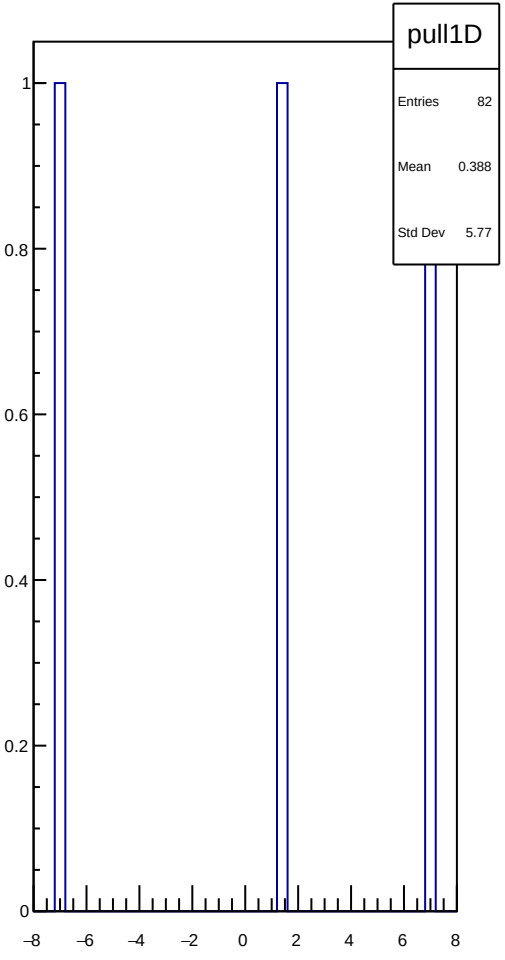

yield_cav4cX_rms vs run
$\chi^2$ / ndf 5.452e+05 / 81
p0 0.001312 ± 1.282e−06
0.01
0.008
0.006
0.004
0.002

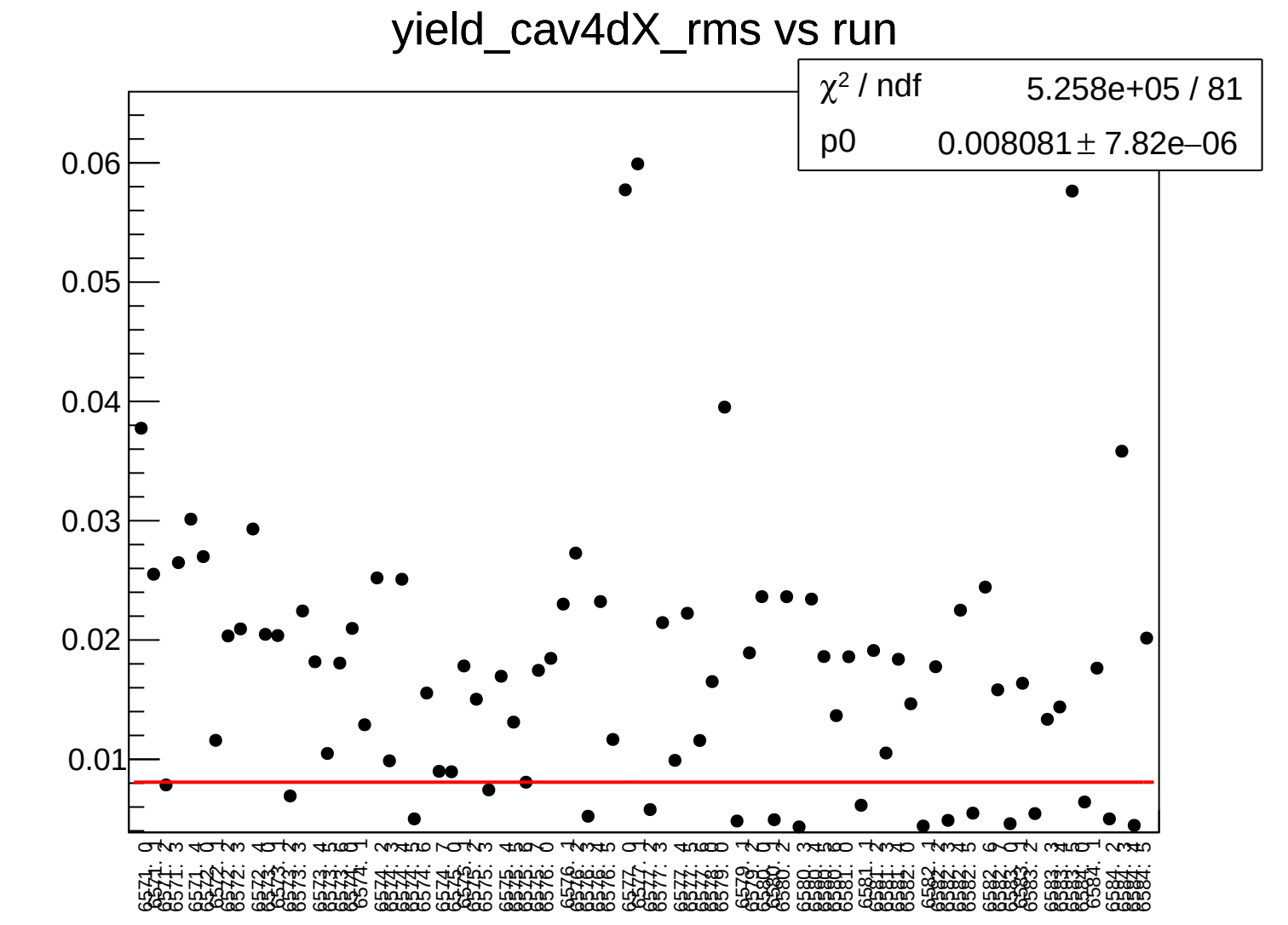

yield_cav4cY_mean vs run
χ² / ndf 1.256e+06 / 81
p0 −0.1236 ± 1.607e−06
−0.12
−0.122
−0.124
−0.126
−0.128
pull
Entries 82
Mean 32.55
Std Dev 36.6
400
300
200
100
0
−100
−200
−300

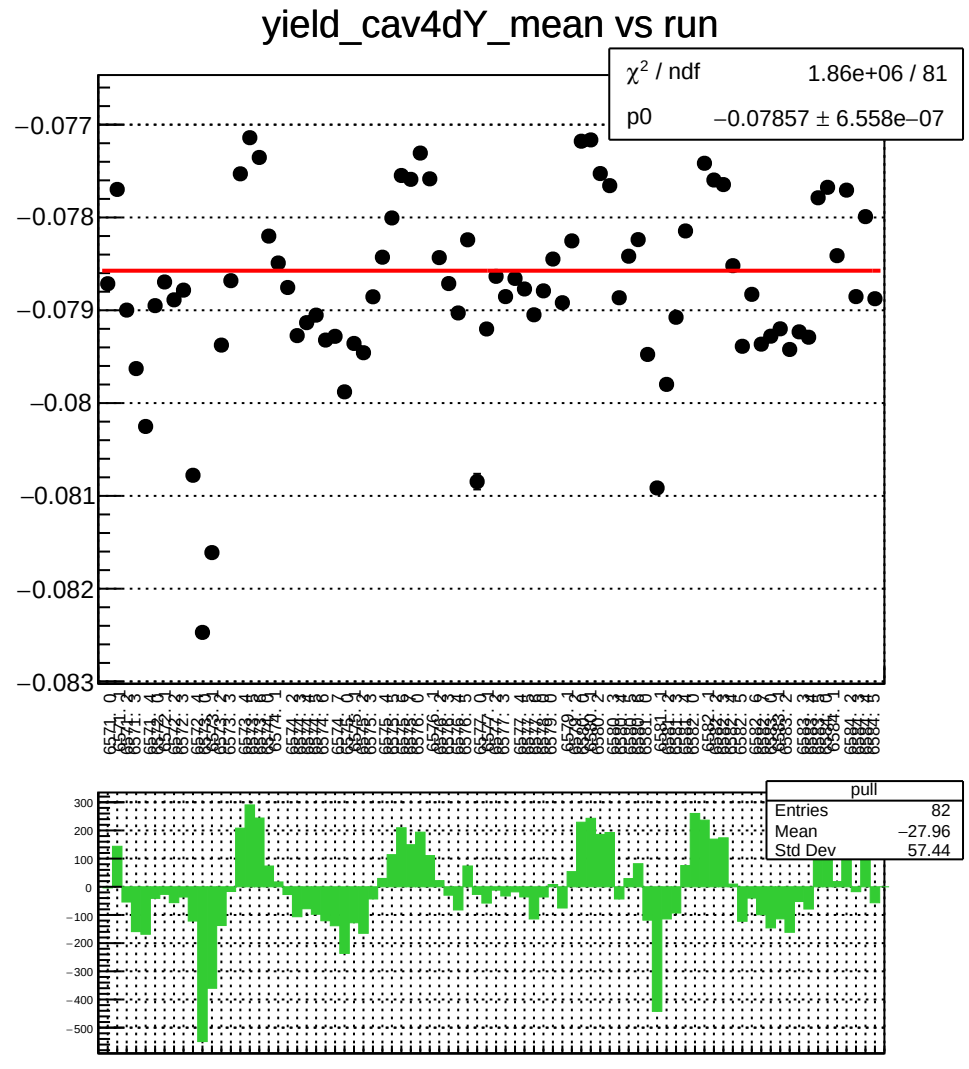

pull1D
Entries 82
Mean 2.621
Std Dev 2.597
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

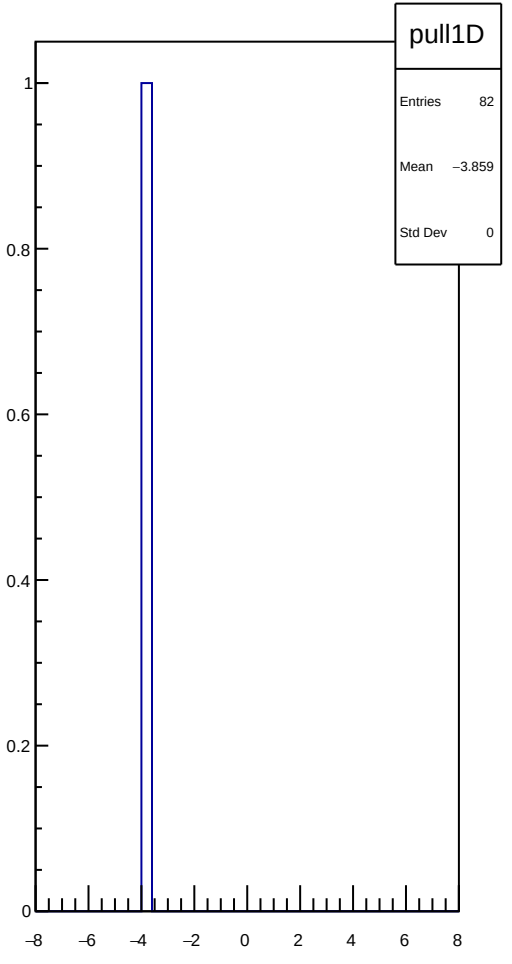

yield_cav4cY_rms vs run
χ² / ndf 2.752e+05 / 81
p0 0.001305 ± 1.136e−06
0.012
0.01
0.008
0.006
0.004
0.002

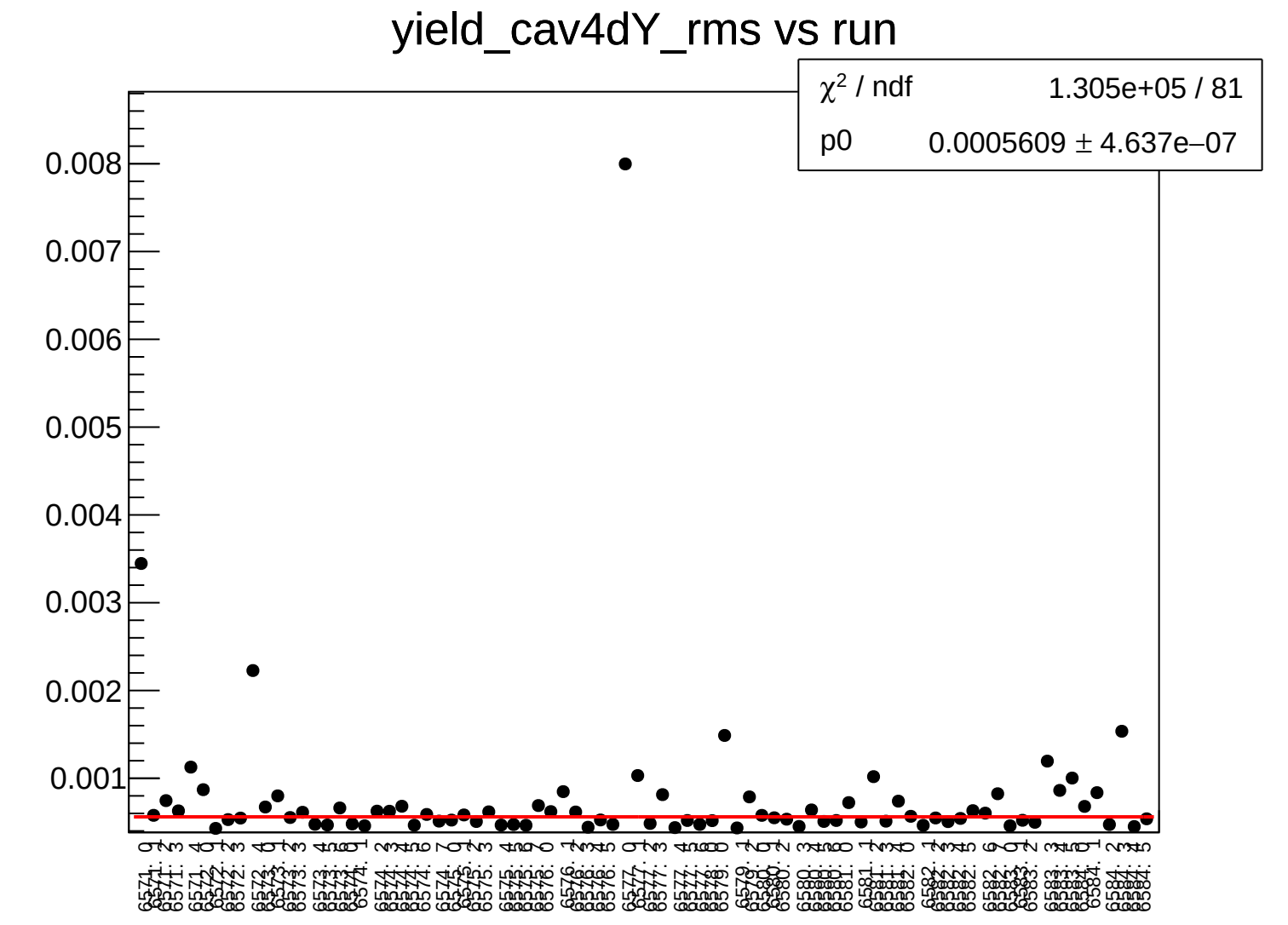

yield_cav4dX_mean vs run
χ² / ndf 6.683e+05 / 81
p0 0.007829 ± 1.106e−05
pull
Entries 82
Mean 26.26
Std Dev 20.97

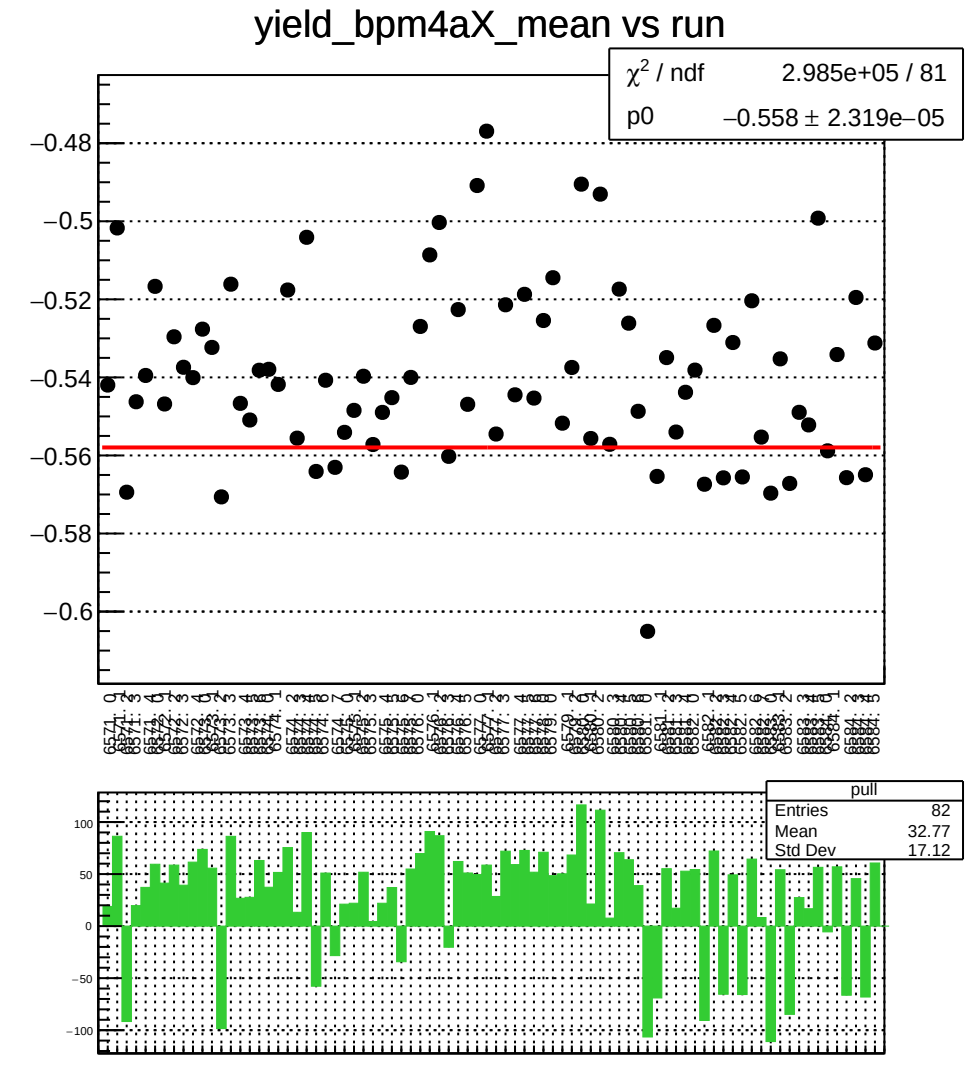

pull1D
Entries 82
Mean 0.388
Std Dev 5.77

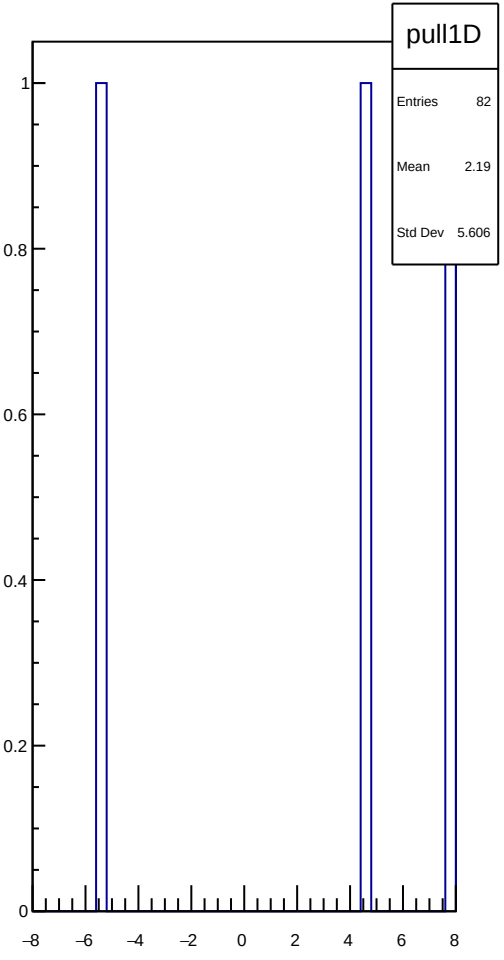

yield_cav4dX_rms vs run
χ² / ndf 5.258e+05 / 81
p0 0.008081 ± 7.82e−06
0.06
0.05
0.04
0.03
0.02
0.01

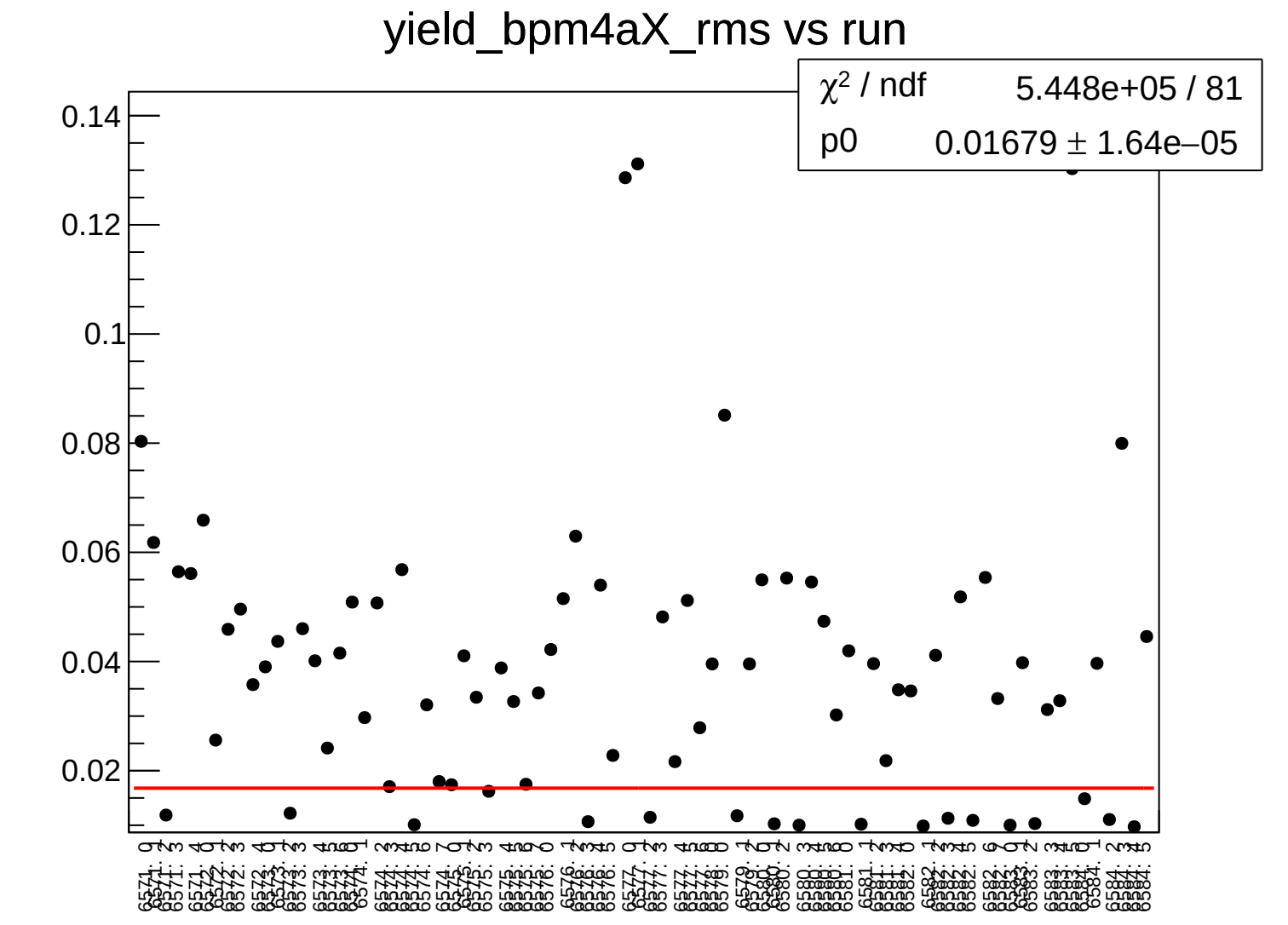

yield_cav4dY_mean vs run
χ² / ndf 1.86e+06 / 81
p0 −0.07857 ± 6.558e−07
−0.077
−0.078
−0.079
−0.08
−0.081
−0.082
−0.083
pull
Entries 82
Mean −27.96
Std Dev 57.44
300
200
100
0
−100
−200
−300
−400
−500

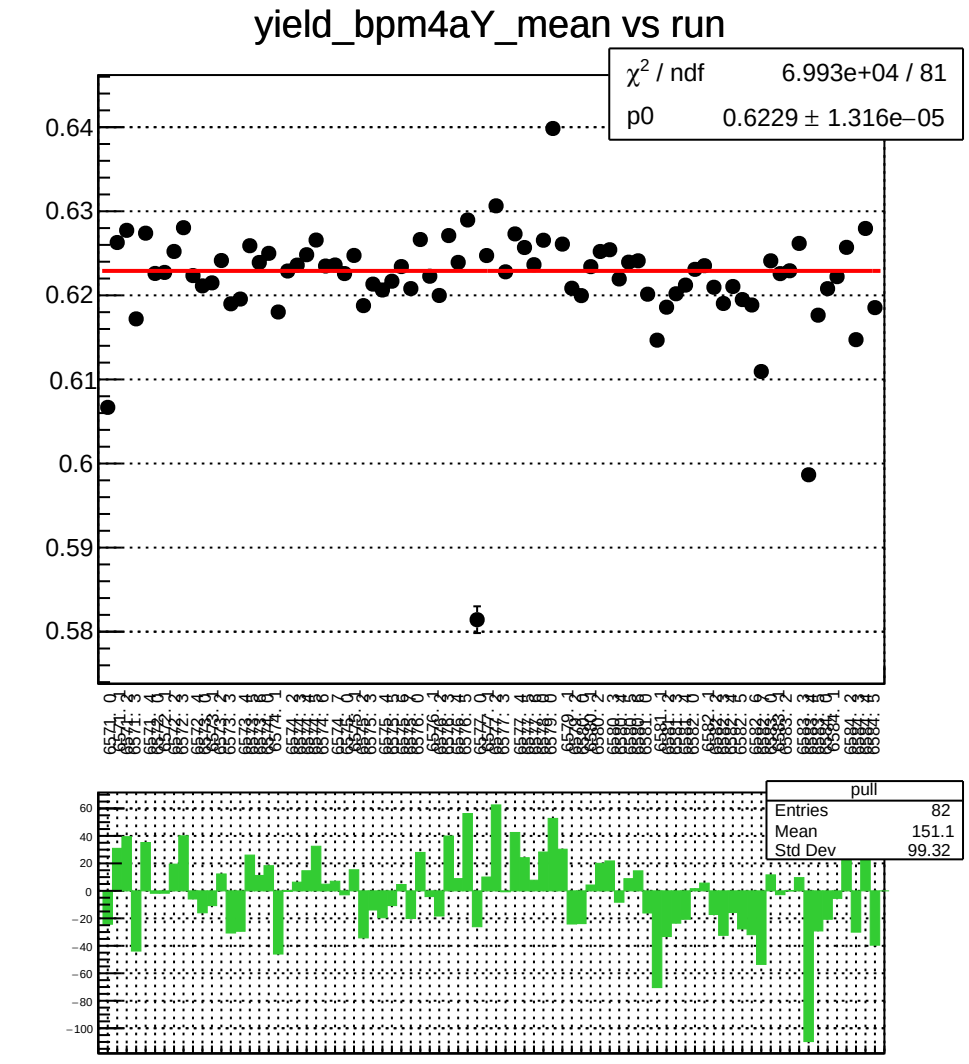

pull1D
Entries 82
Mean −3.859
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

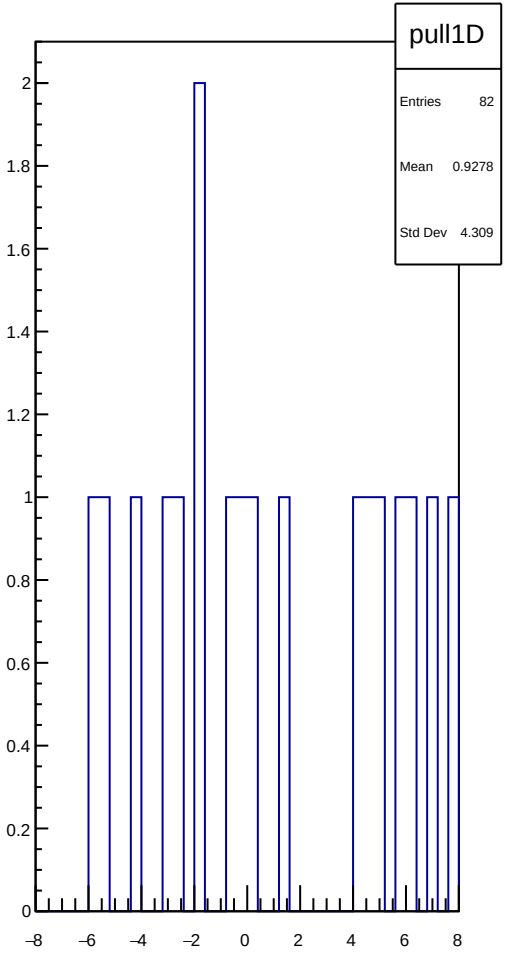

yield_cav4dY_rms vs run
χ² / ndf 1.305e+05 / 81
p0 0.0005609 ± 4.637e−07
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001

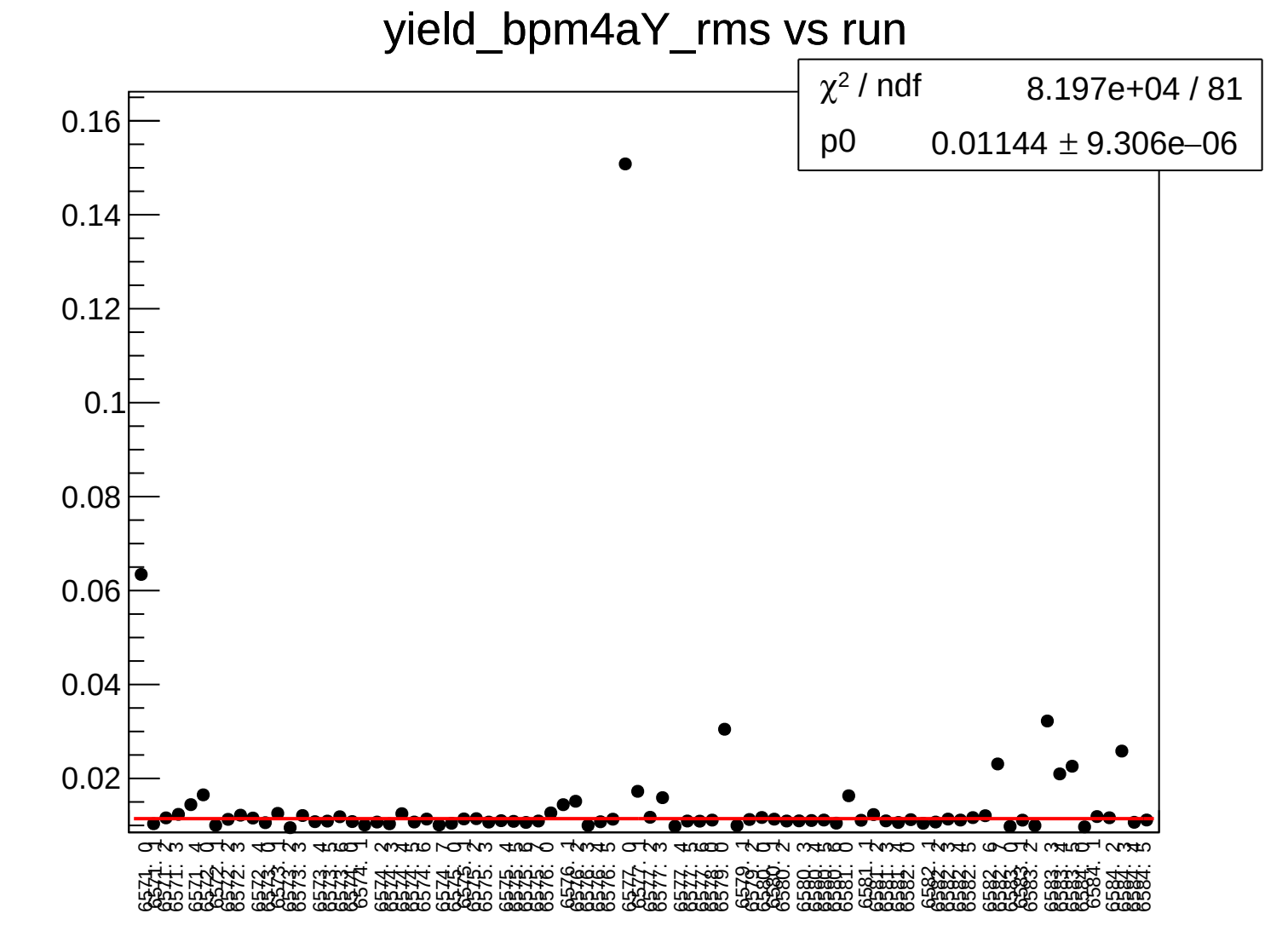

yield_bpm4aX_mean vs run
χ² / ndf 2.985e+05 / 81
p0 −0.558 ± 2.319e−05
−0.48
−0.5
−0.52
−0.54
−0.56
−0.58
−0.6
pull
Entries 82
Mean 32.77
Std Dev 17.12
100
50
0
−50
−100

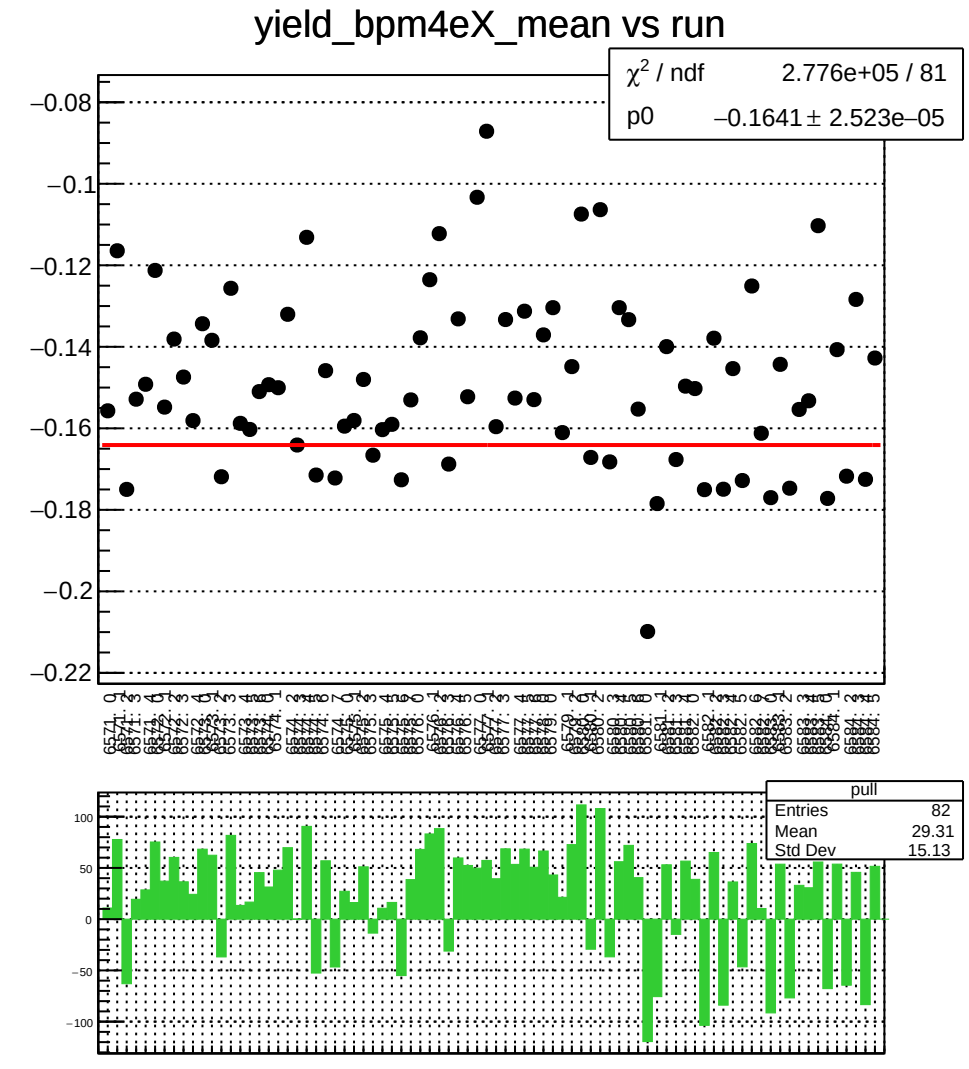

pull1D
Entries 82
Mean 2.19
Std Dev 5.606
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

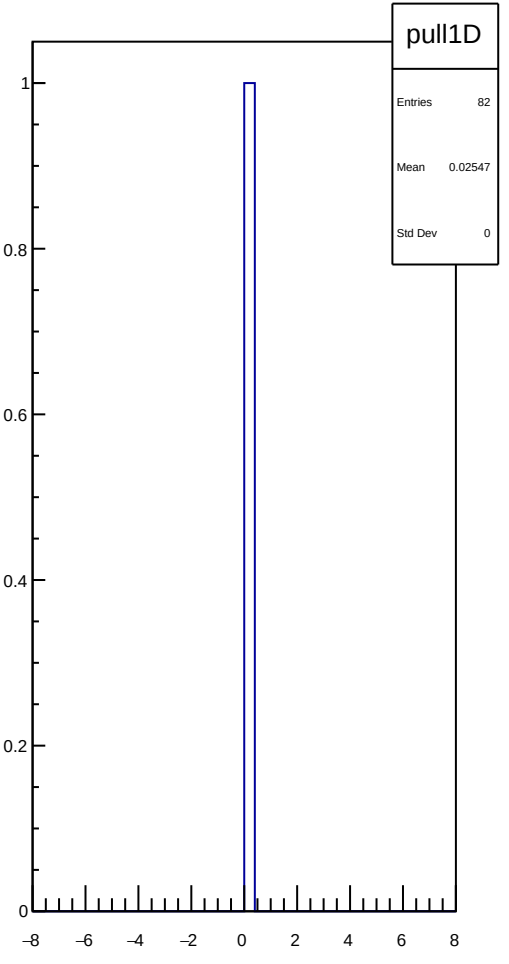

yield_bpm4aX_rms vs run
χ² / ndf 5.448e+05 / 81
p0 0.01679 ± 1.64e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

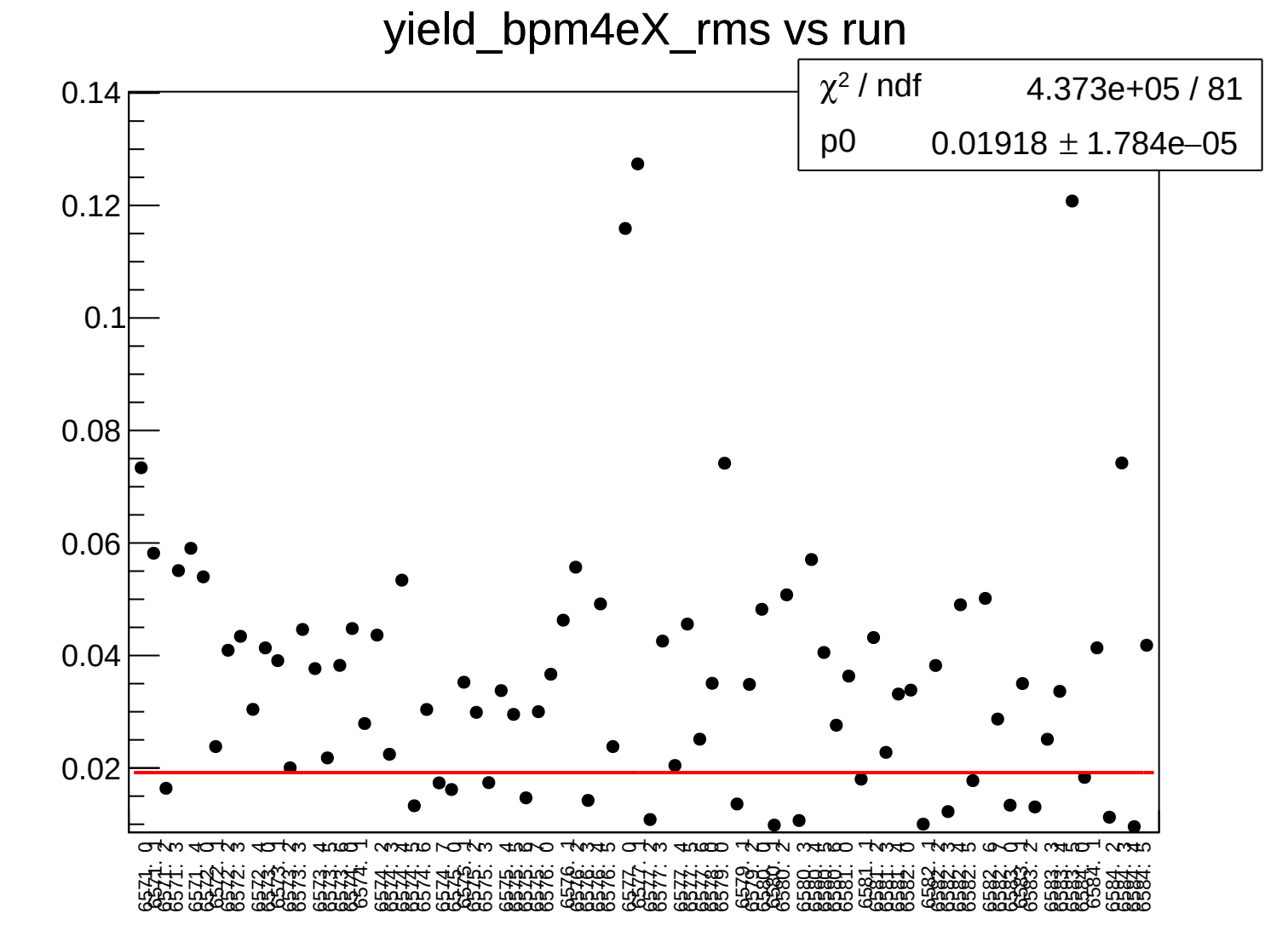

yield_bpm4aY_mean vs run
χ² / ndf 6.993e+04 / 81
p0 0.6229 ± 1.316e−05
0.64
0.63
0.62
0.61
0.6
0.59
0.58
pull
Entries 82
Mean 151.1
Std Dev 99.32
60
40
20
0
−20
−40
−60
−80
−100

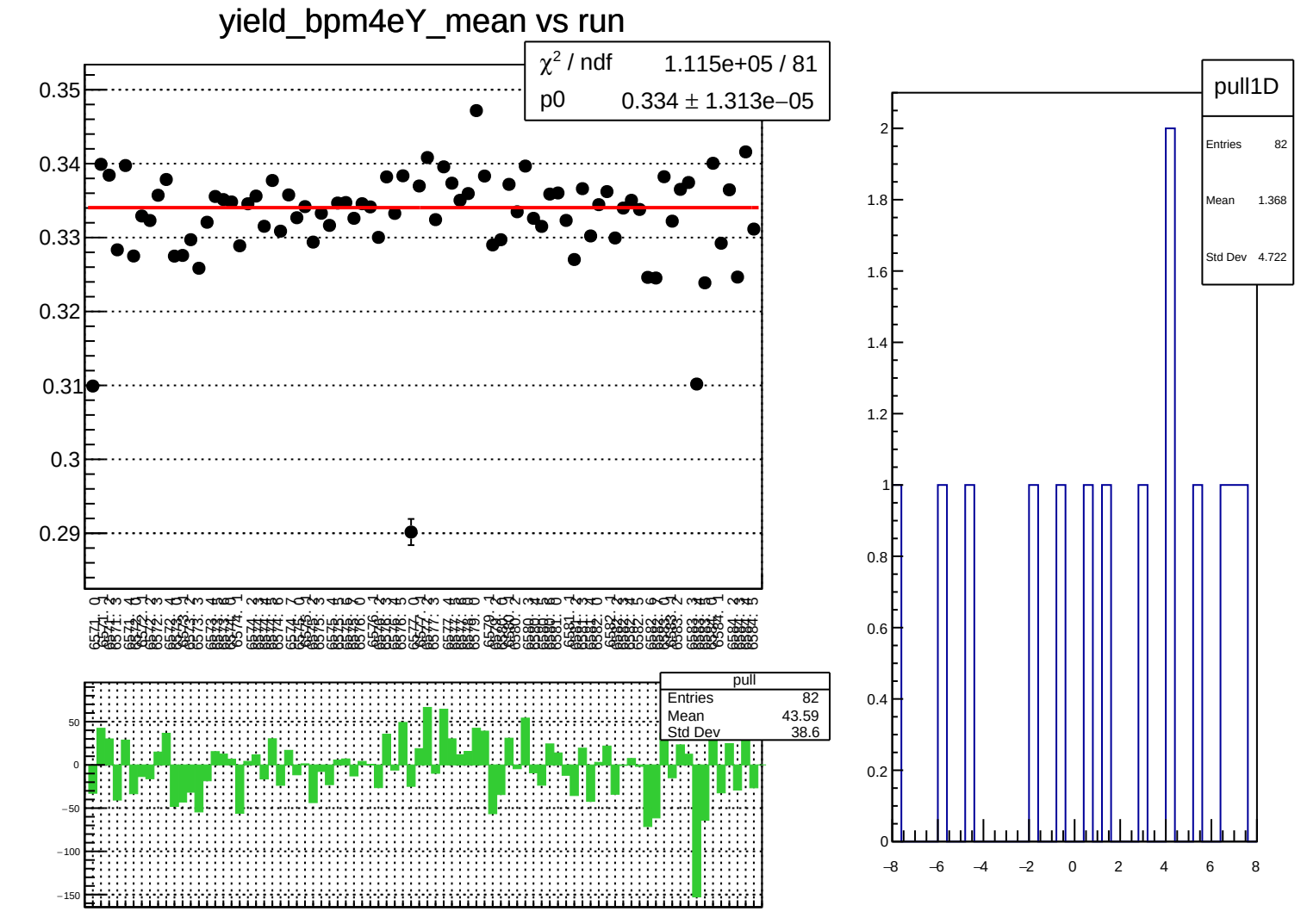

pull1D
Entries 82
Mean 0.9278
Std Dev 4.309
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

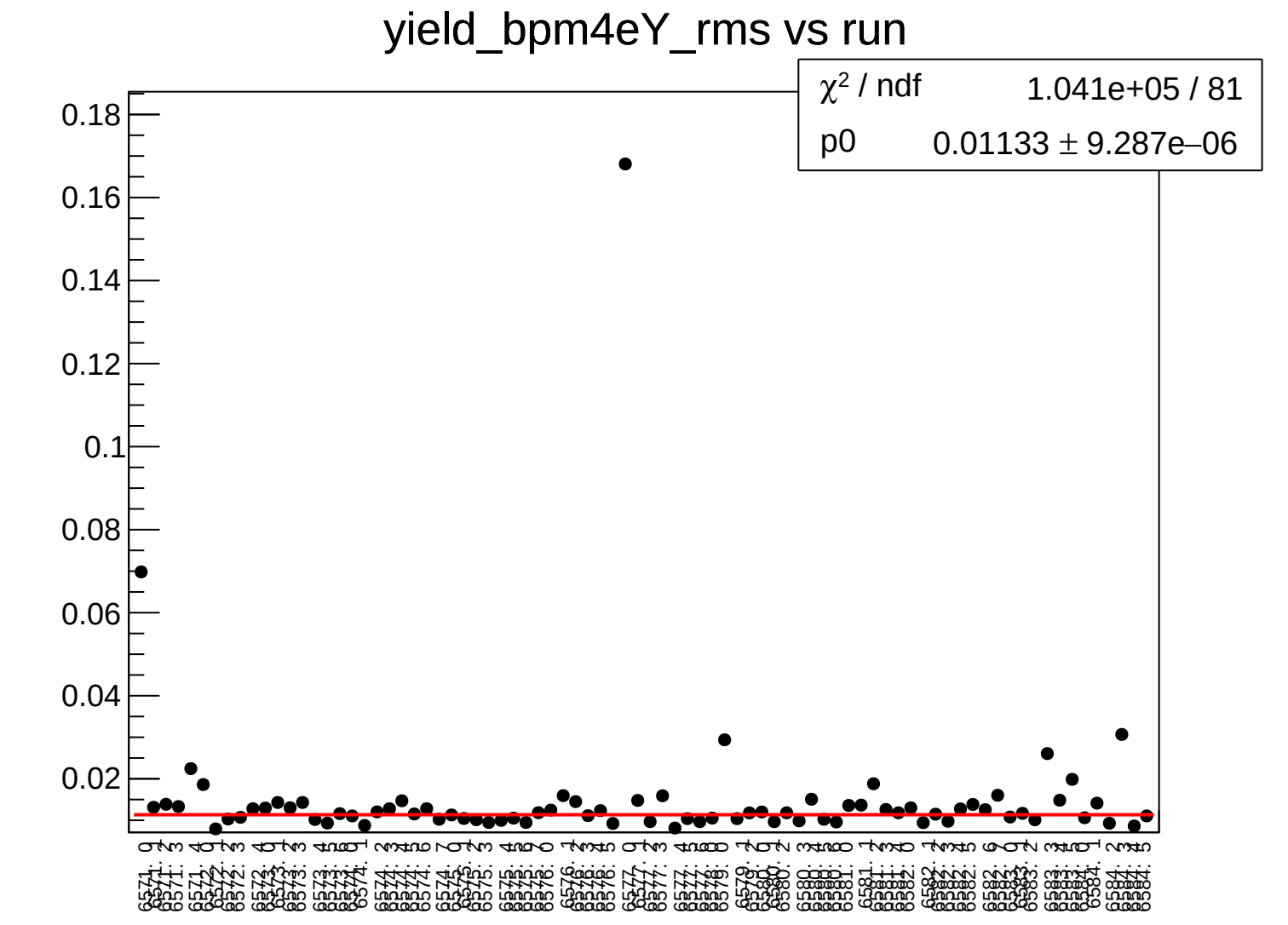

yield_bpm4aY_rms vs run
χ² / ndf 8.197e+04 / 81
p0 0.01144 ± 9.306e–06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

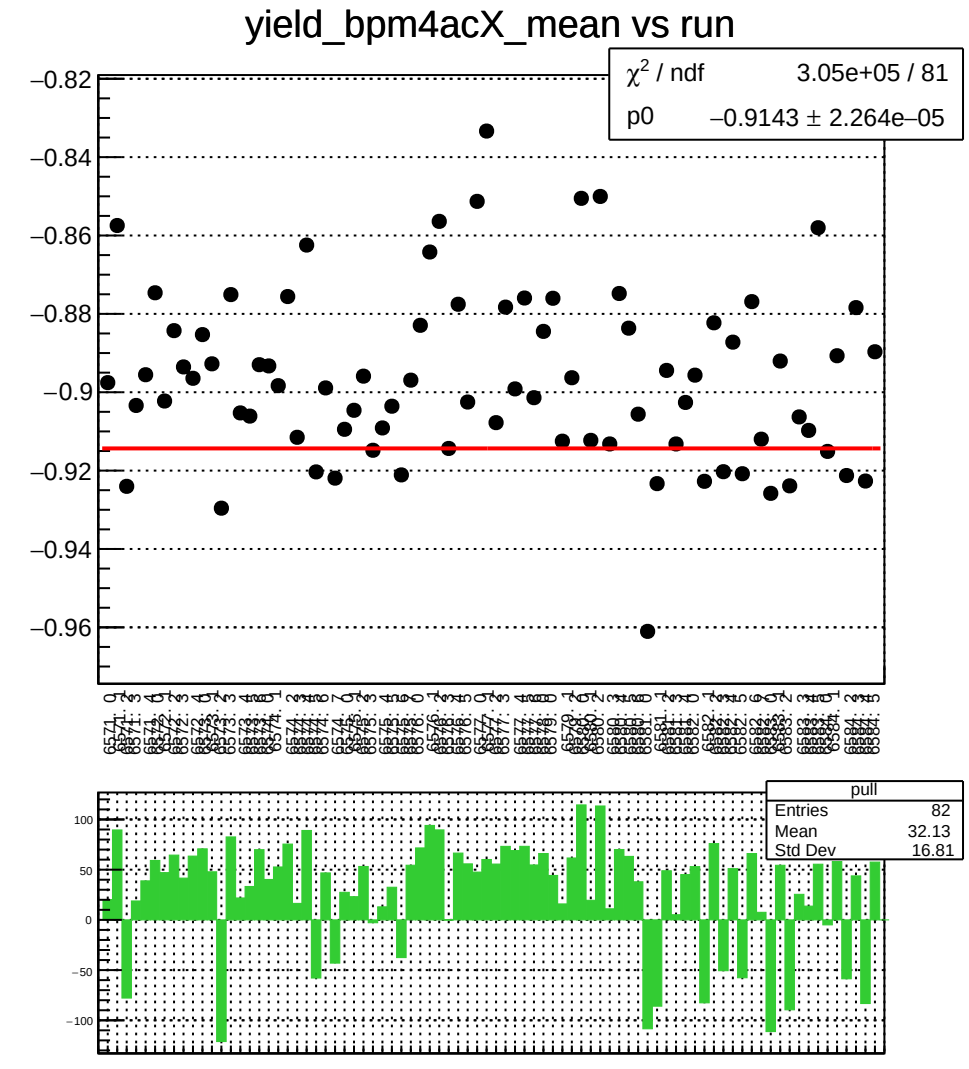

yield_bpm4eX_mean vs run
χ² / ndf 2.776e+05 / 81
p0 −0.1641 ± 2.523e−05
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
−0.2
−0.22
pull
Entries 82
Mean 29.31
Std Dev 15.13
100
50
0
−50
−100

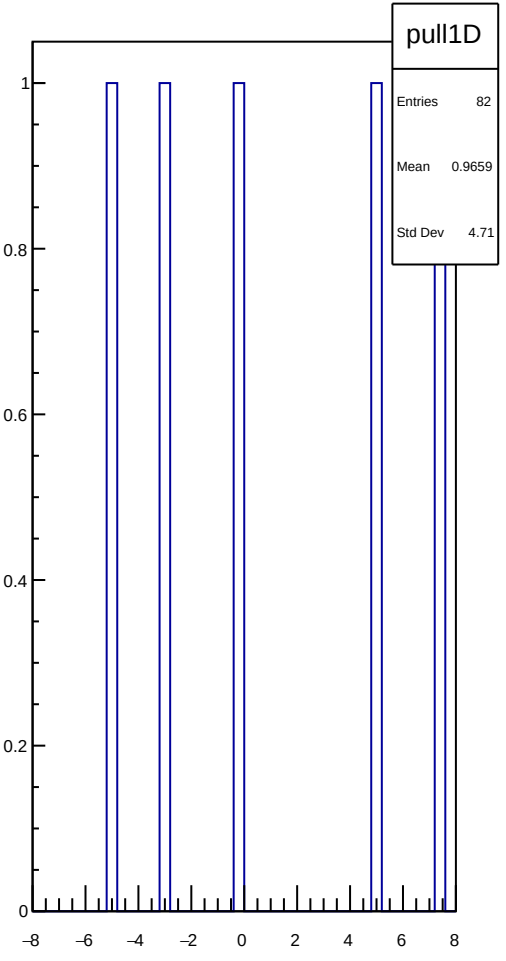

pull1D
Entries 82
Mean 0.02547
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

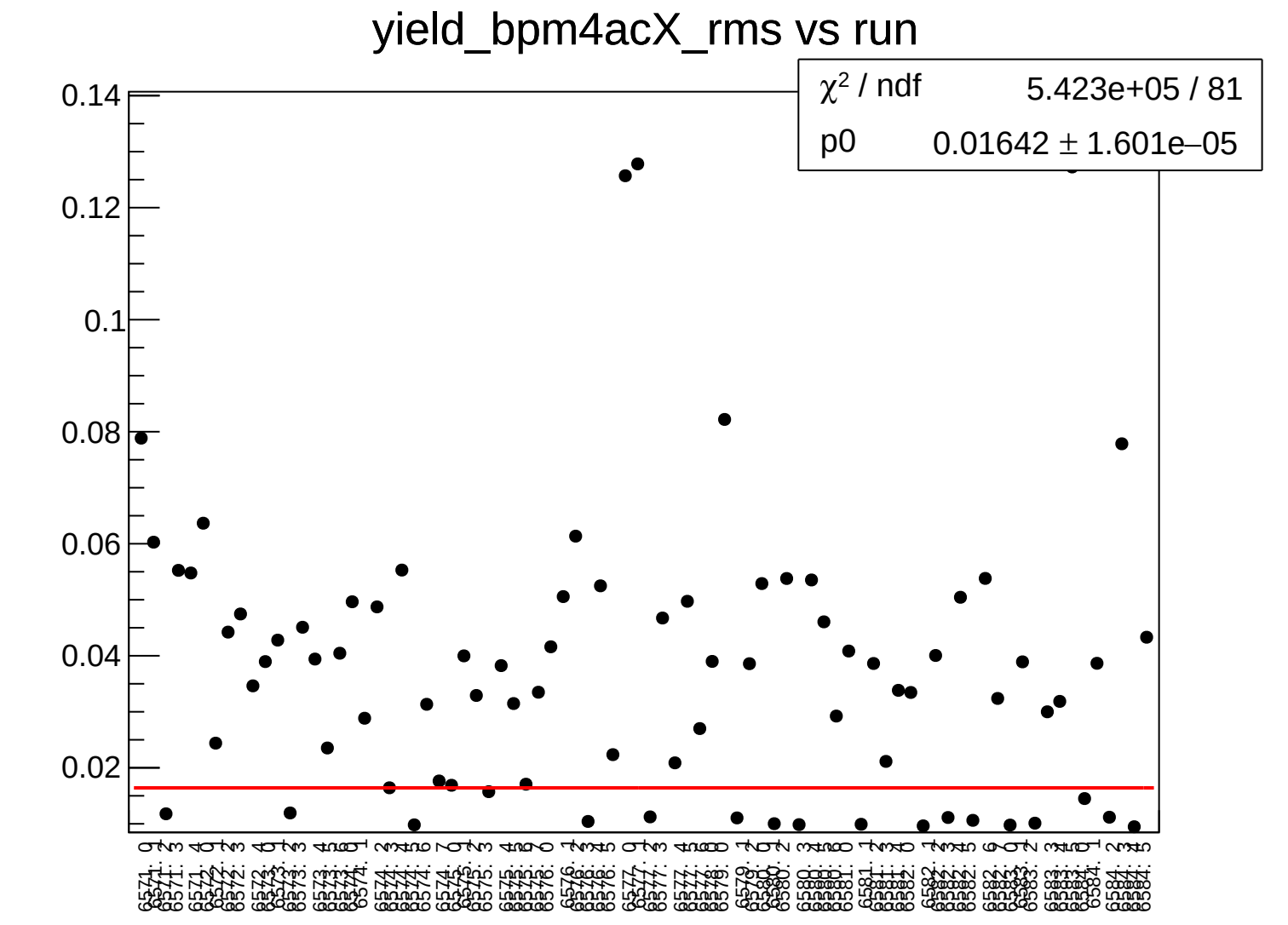

yield_bpm4eX_rms vs run
χ² / ndf 4.373e+05 / 81
p0 0.01918 ± 1.784e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

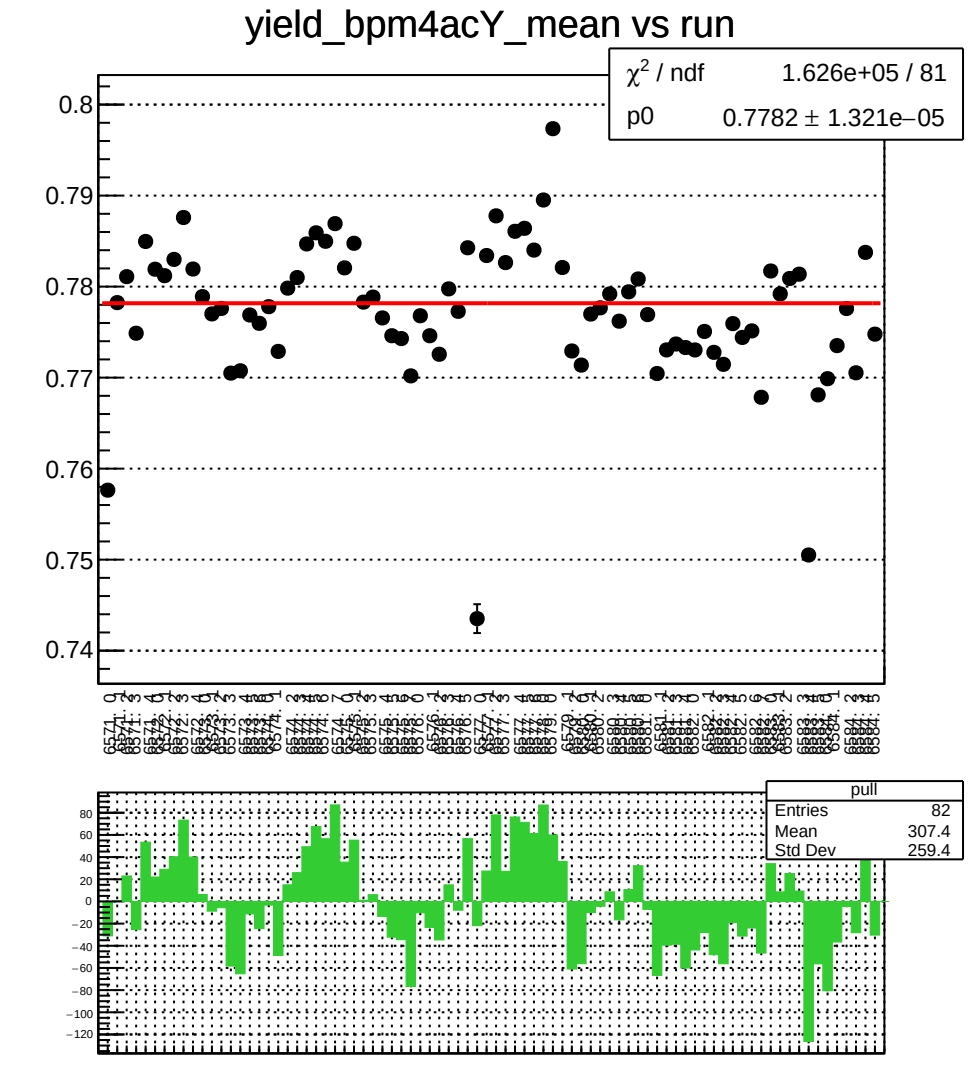

yield_bpm4eY_mean vs run
χ² / ndf 1.115e+05 / 81
p0 0.334 ± 1.313e−05
0.35
0.34
0.33
0.32
0.31
0.3
0.29
pull
Entries 82
Mean 43.59
Std Dev 38.6
50
0
−50
−100
−150
pull1D
Entries 82
Mean 1.368
Std Dev 4.722
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

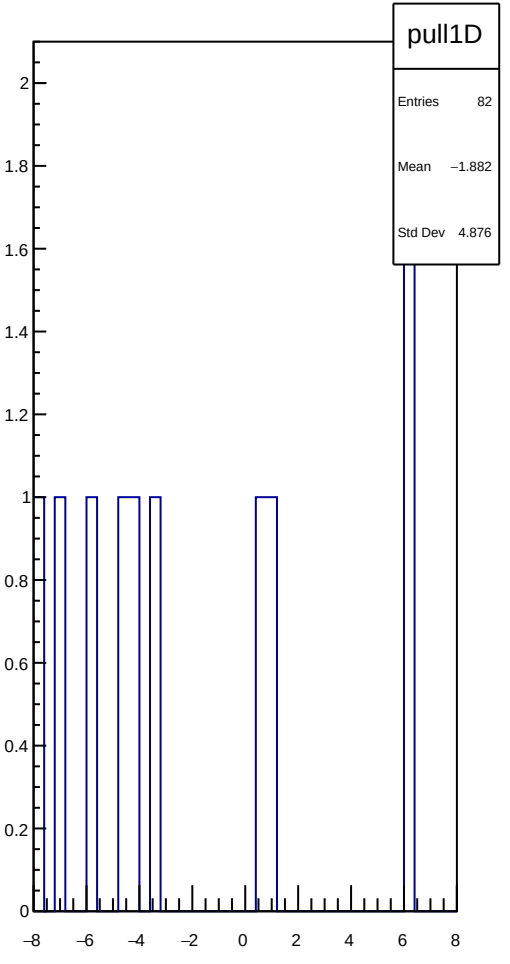

yield_bpm4eY_rms vs run
χ² / ndf 1.041e+05 / 81
p0 0.01133 ± 9.287e–06
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

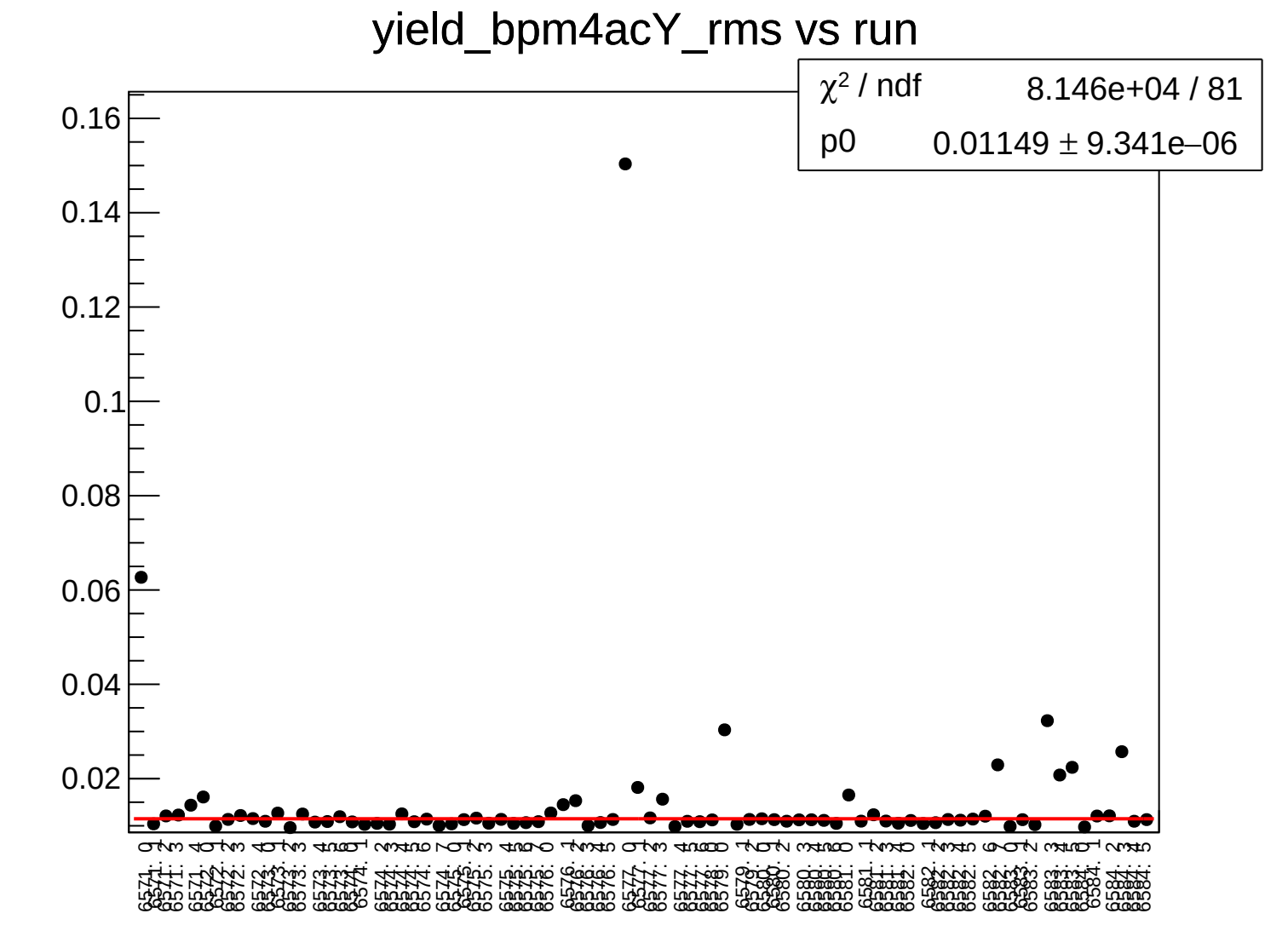

yield_bpm4acX_mean vs run
χ² / ndf 3.05e+05 / 81
p0 −0.9143 ± 2.264e−05
−0.82
−0.84
−0.86
−0.88
−0.9
−0.92
−0.94
−0.96
pull
Entries 82
Mean 32.13
Std Dev 16.81
100
50
0
−50
−100

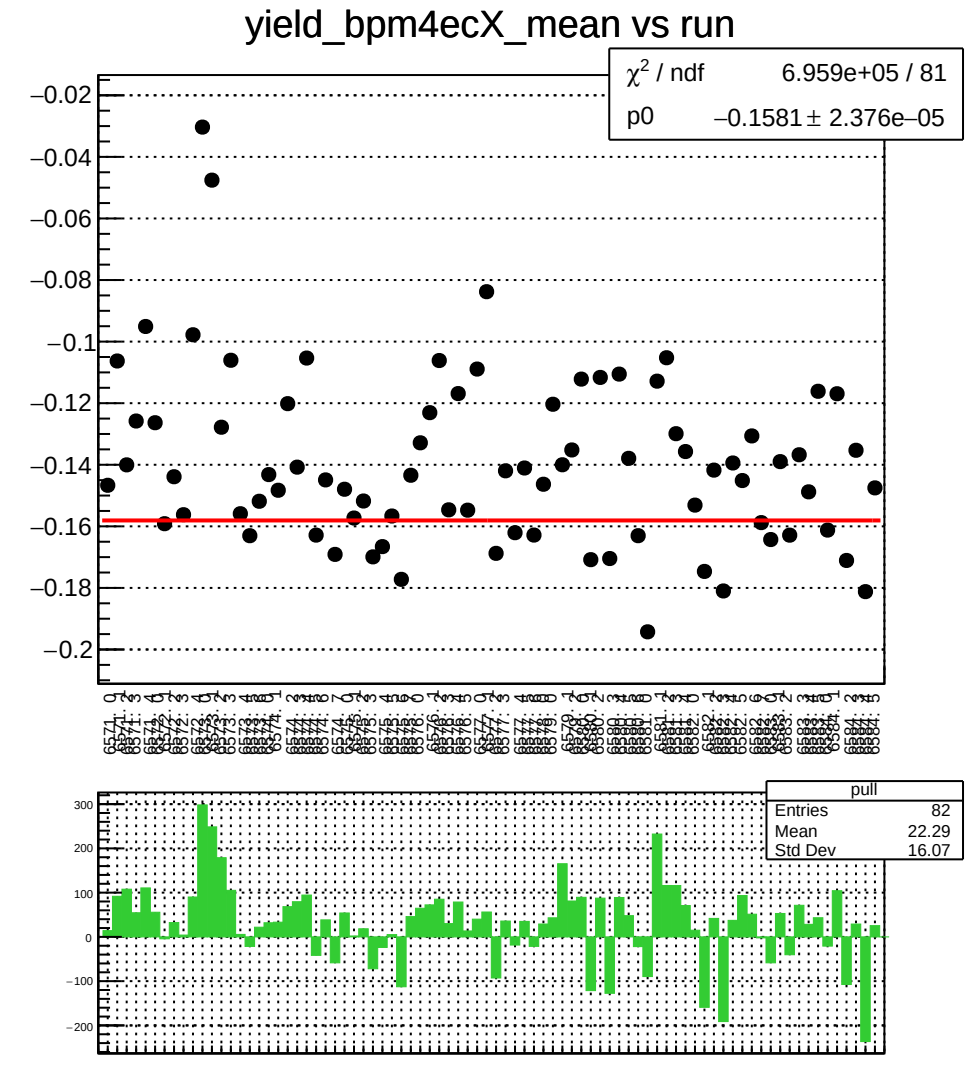

pull1D
Entries 82
Mean 0.9659
Std Dev 4.71
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

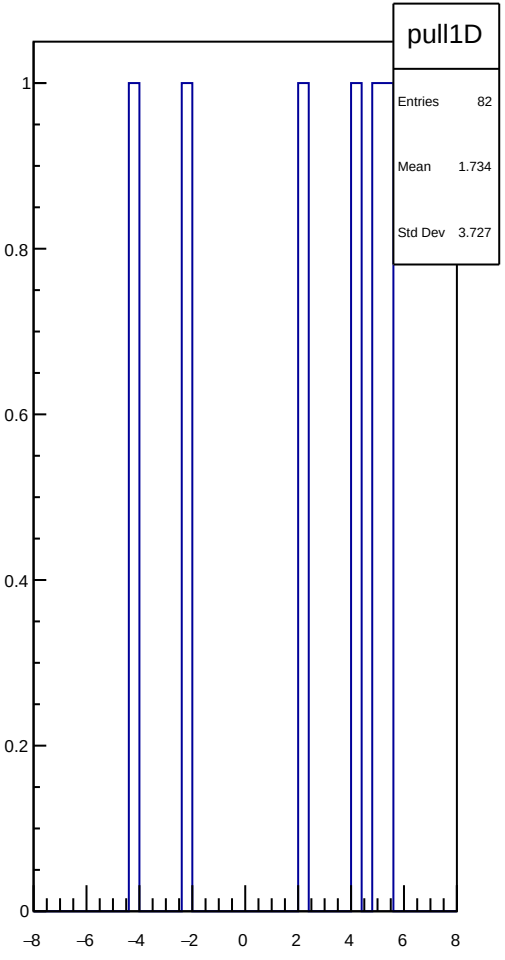

yield_bpm4acX_rms vs run
χ² / ndf 5.423e+05 / 81
p0 0.01642 ± 1.601e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

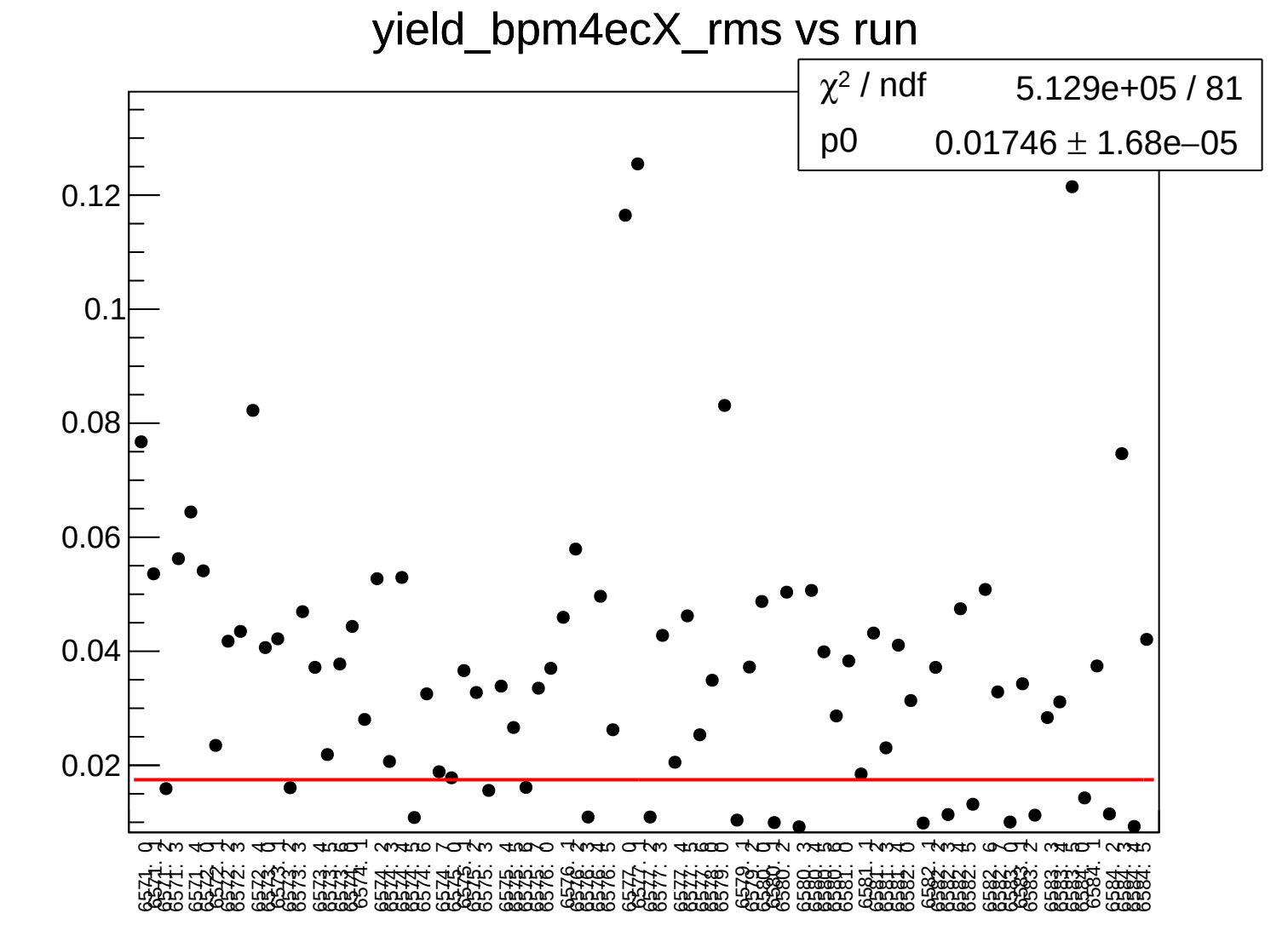

yield_bpm4acY_mean vs run
χ² / ndf 1.626e+05 / 81
p0 0.7782 ± 1.321e−05
pull
Entries 82
Mean 307.4
Std Dev 259.4

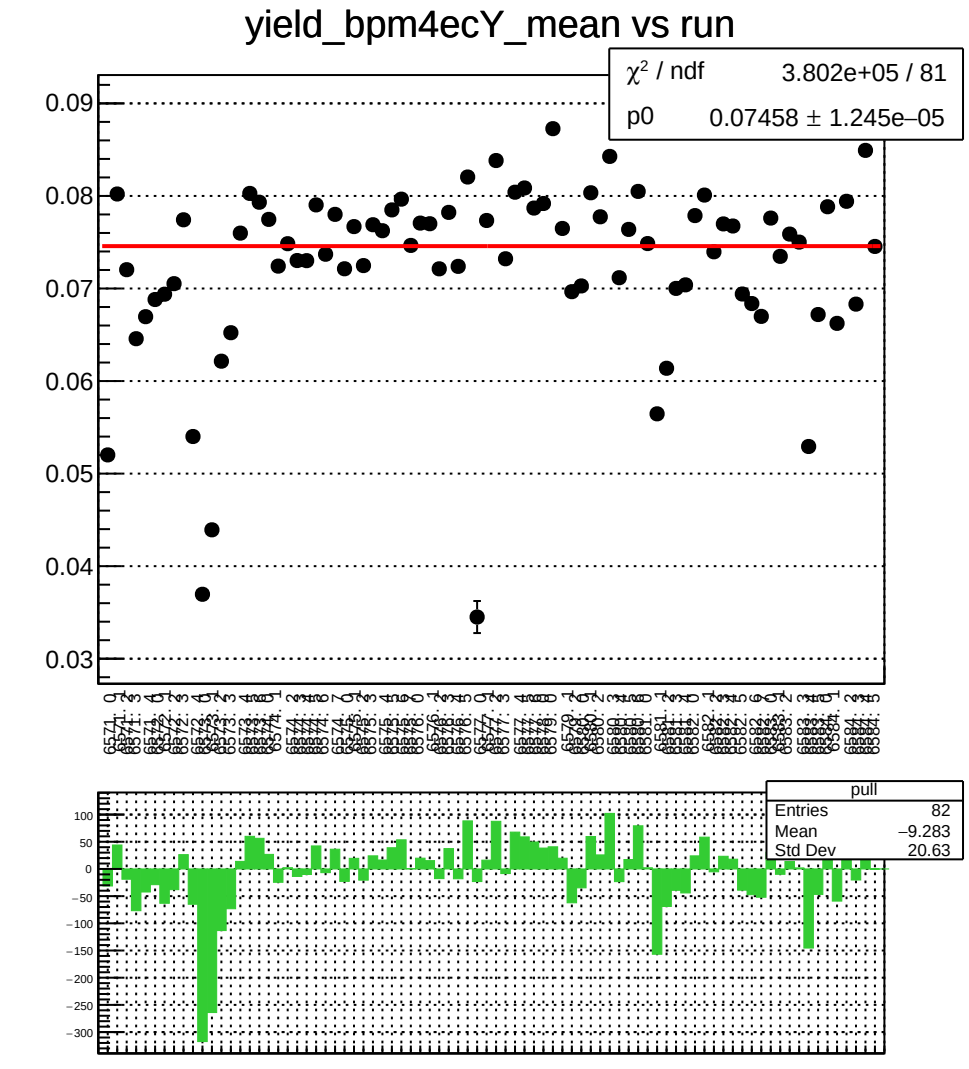

pull1D
Entries 82
Mean −1.882
Std Dev 4.876

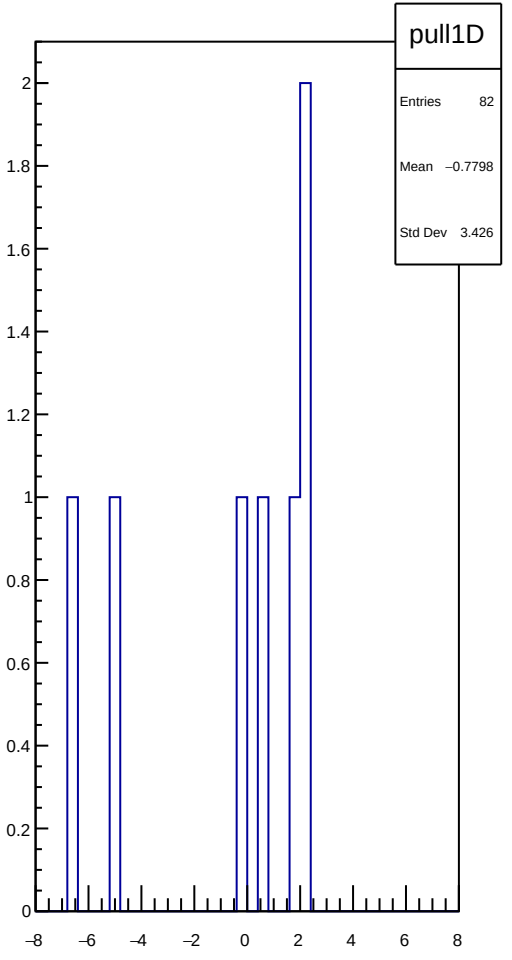

yield_bpm4acY_rms vs run
χ² / ndf 8.146e+04 / 81
p0 0.01149 ± 9.341e–06
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

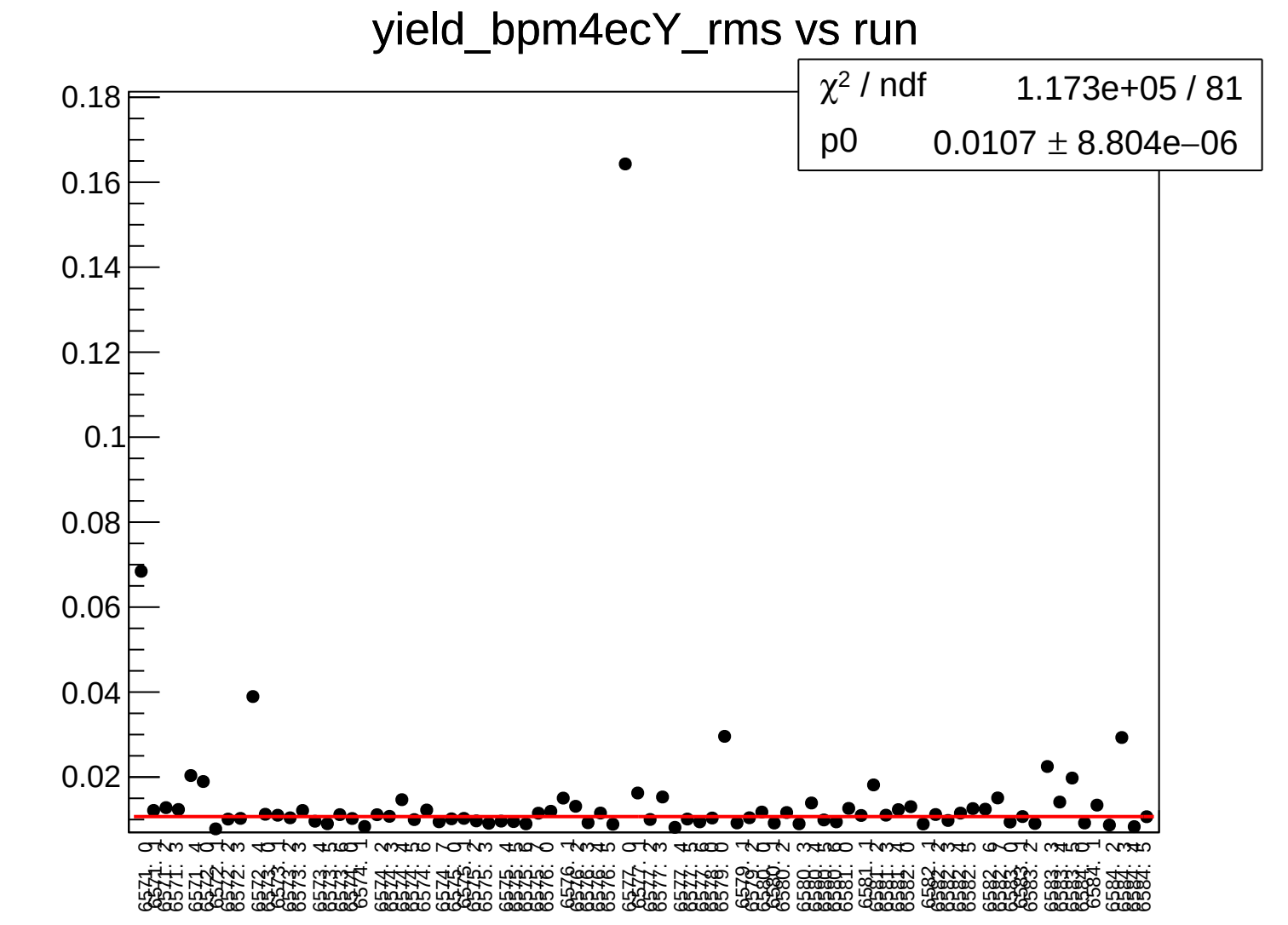

yield_bpm4ecX_mean vs run
χ² / ndf 6.959e+05 / 81
p0 −0.1581 ± 2.376e−05
pull
Entries 82
Mean 22.29
Std Dev 16.07

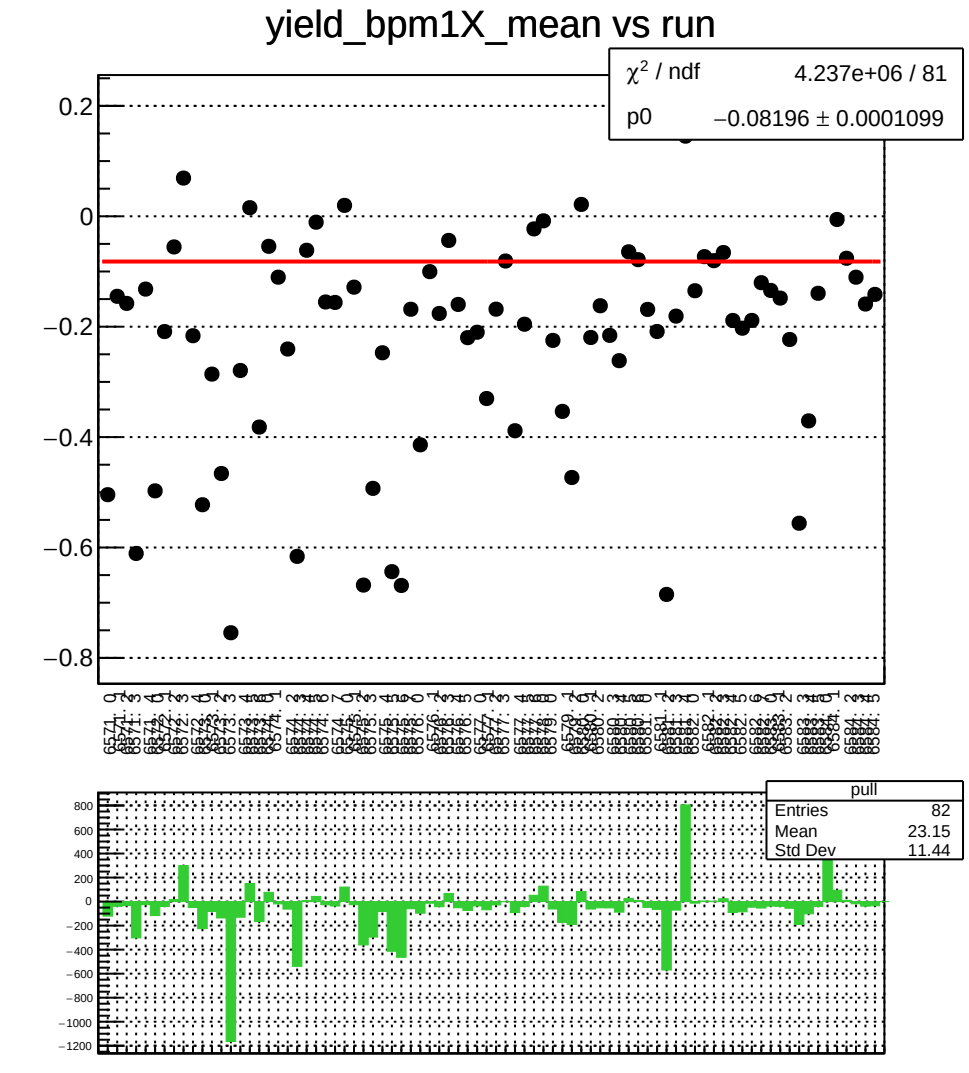

pull1D
Entries 82
Mean 1.734
Std Dev 3.727

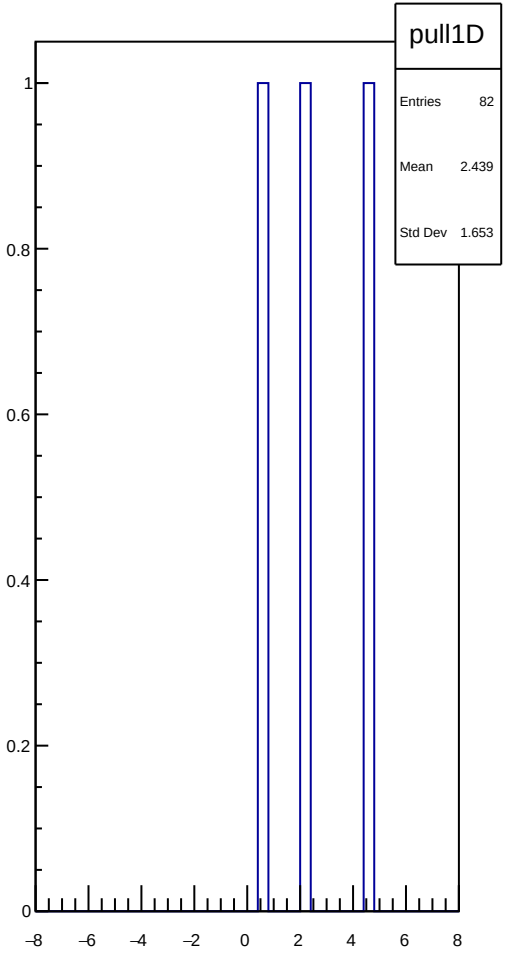

yield_bpm4ecX_rms vs run
χ² / ndf 5.129e+05 / 81
p0 0.01746 ± 1.68e−05
0.12
0.1
0.08
0.06
0.04
0.02

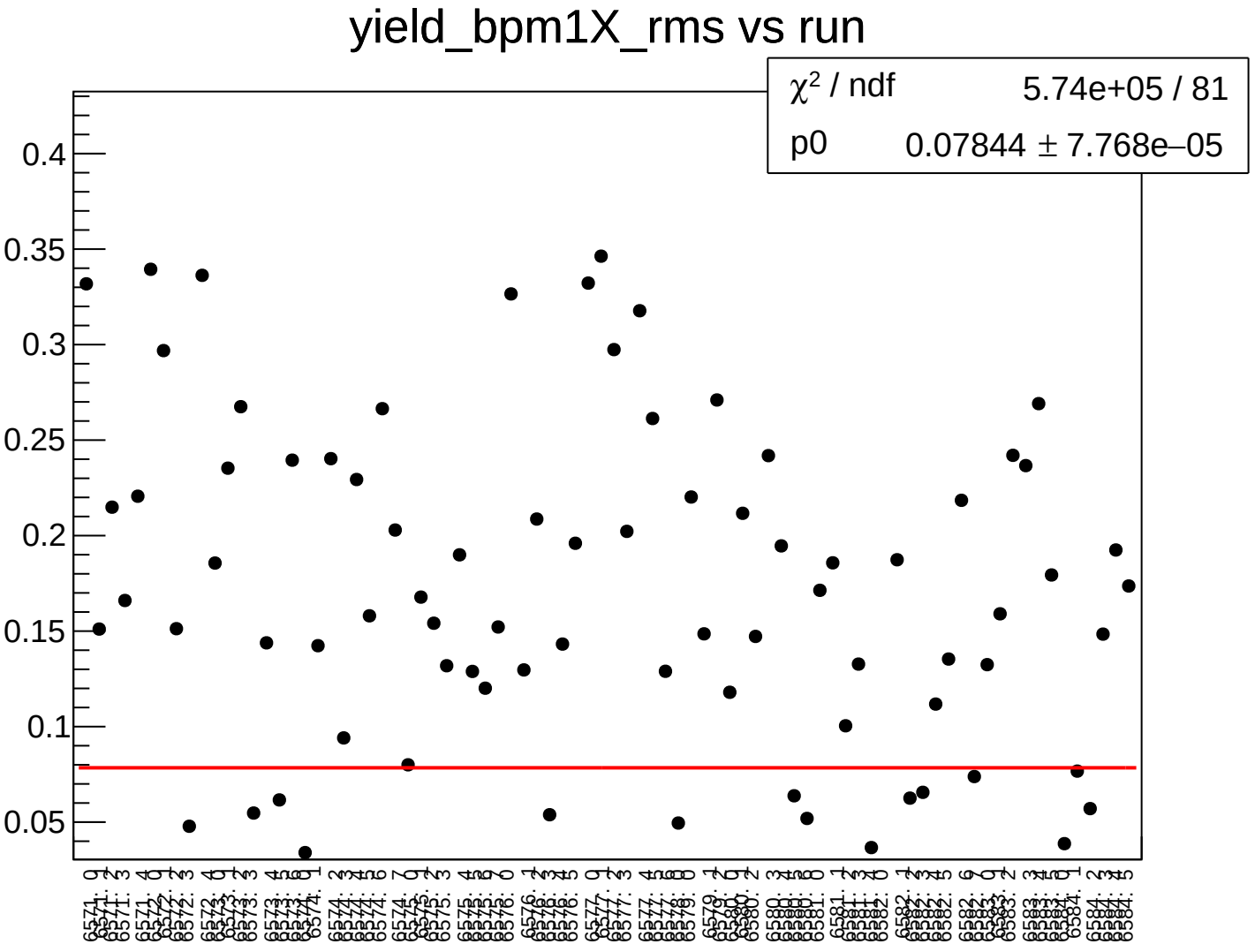

yield_bpm4ecY_mean vs run
χ² / ndf 3.802e+05 / 81
p0 0.07458 ± 1.245e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
pull
Entries 82
Mean −9.283
Std Dev 20.63
100
50
0
−50
−100
−150
−200
−250
−300

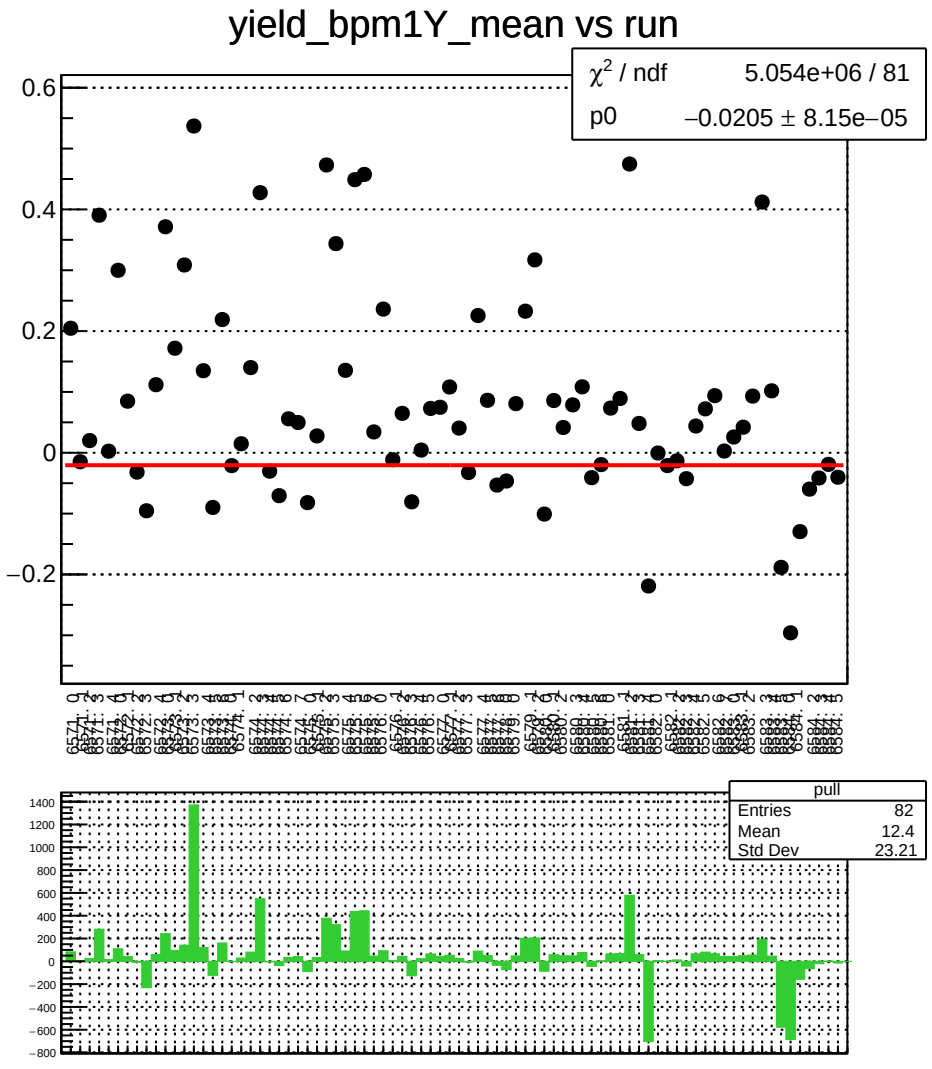

pull1D
Entries 82
Mean −0.7798
Std Dev 3.426
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

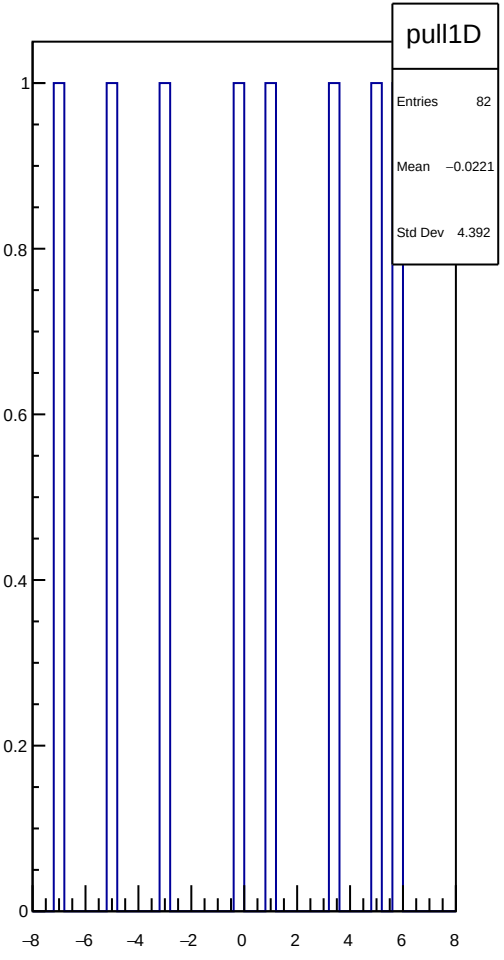

yield_bpm4ecY_rms vs run
χ² / ndf 1.173e+05 / 81
p0 0.0107 ± 8.804e−06
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

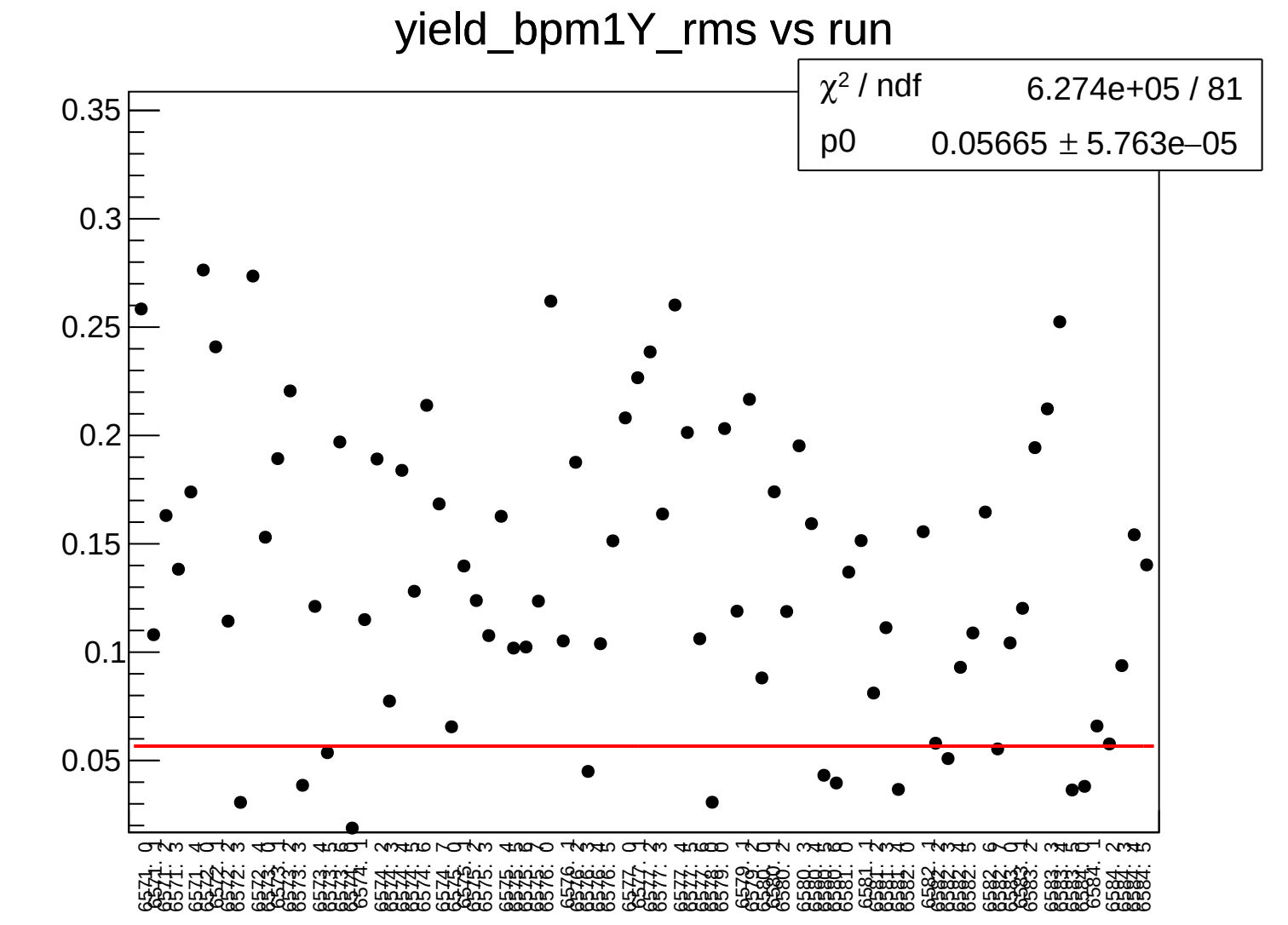

yield_bpm1X_mean vs run
χ² / ndf 4.237e+06 / 81
p0 −0.08196 ± 0.0001099
pull
Entries 82
Mean 23.15
Std Dev 11.44

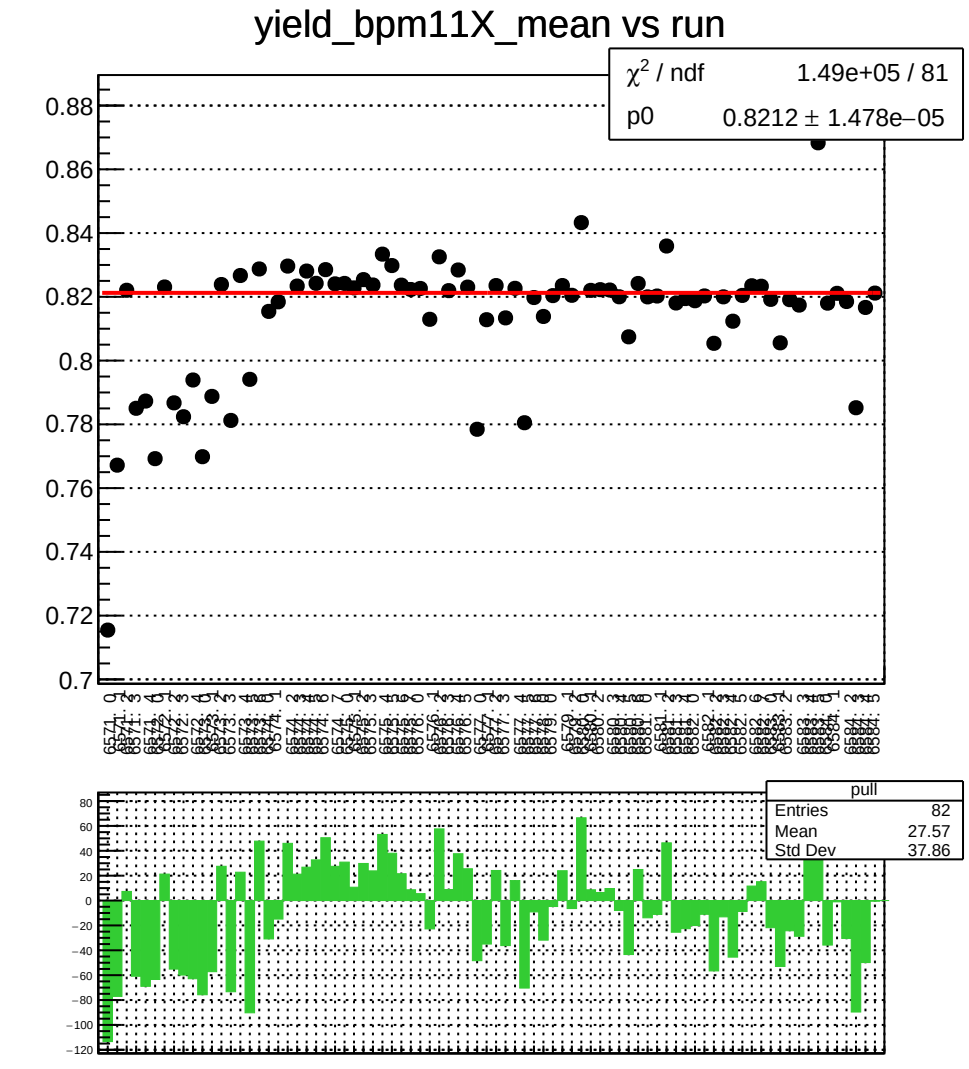

pull1D
Entries 82
Mean 2.439
Std Dev 1.653

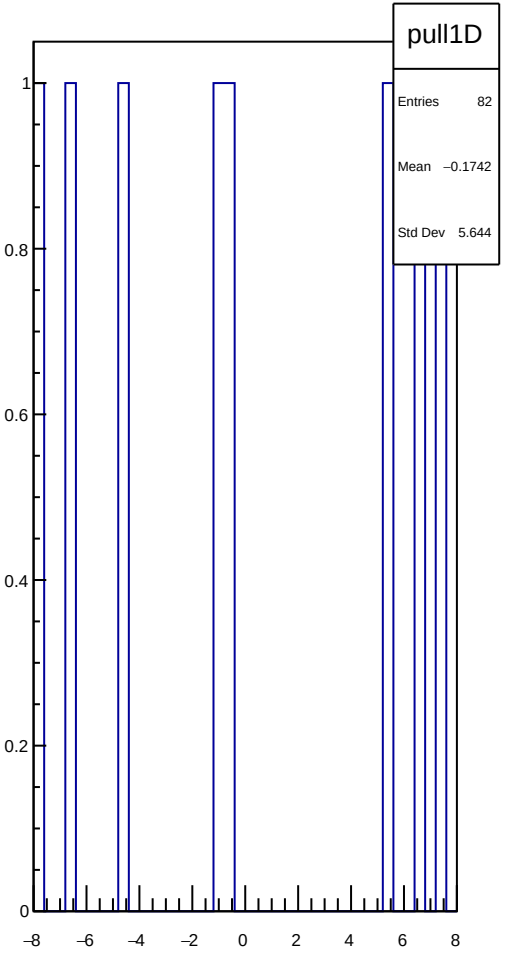

yield_bpm1X_rms vs run
χ² / ndf 5.74e+05 / 81
p0 0.07844 ± 7.768e−05
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

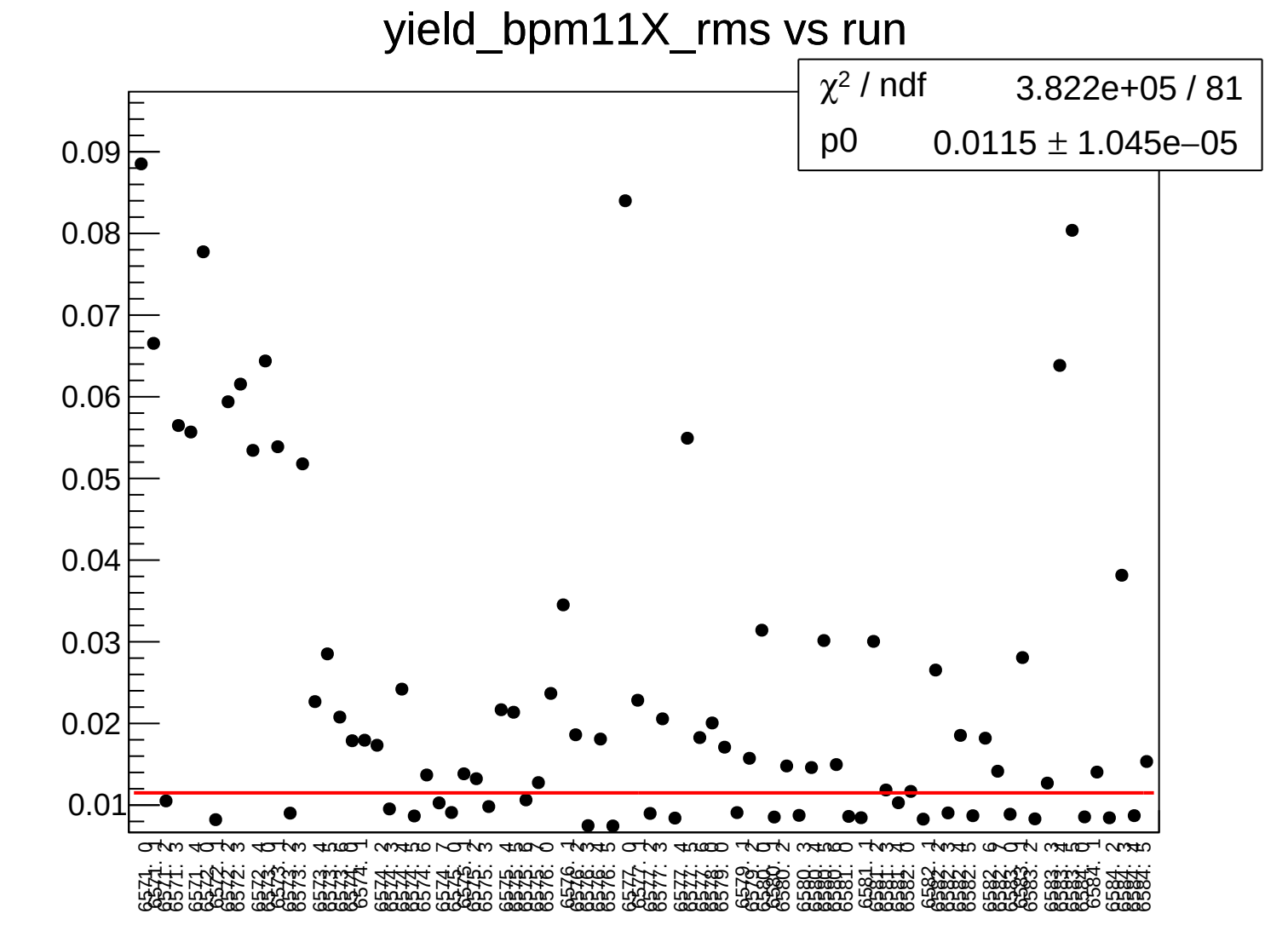

yield_bpm1Y_mean vs run
χ² / ndf 5.054e+06 / 81
p0 −0.0205 ± 8.15e−05
pull
Entries 82
Mean 12.4
Std Dev 23.21

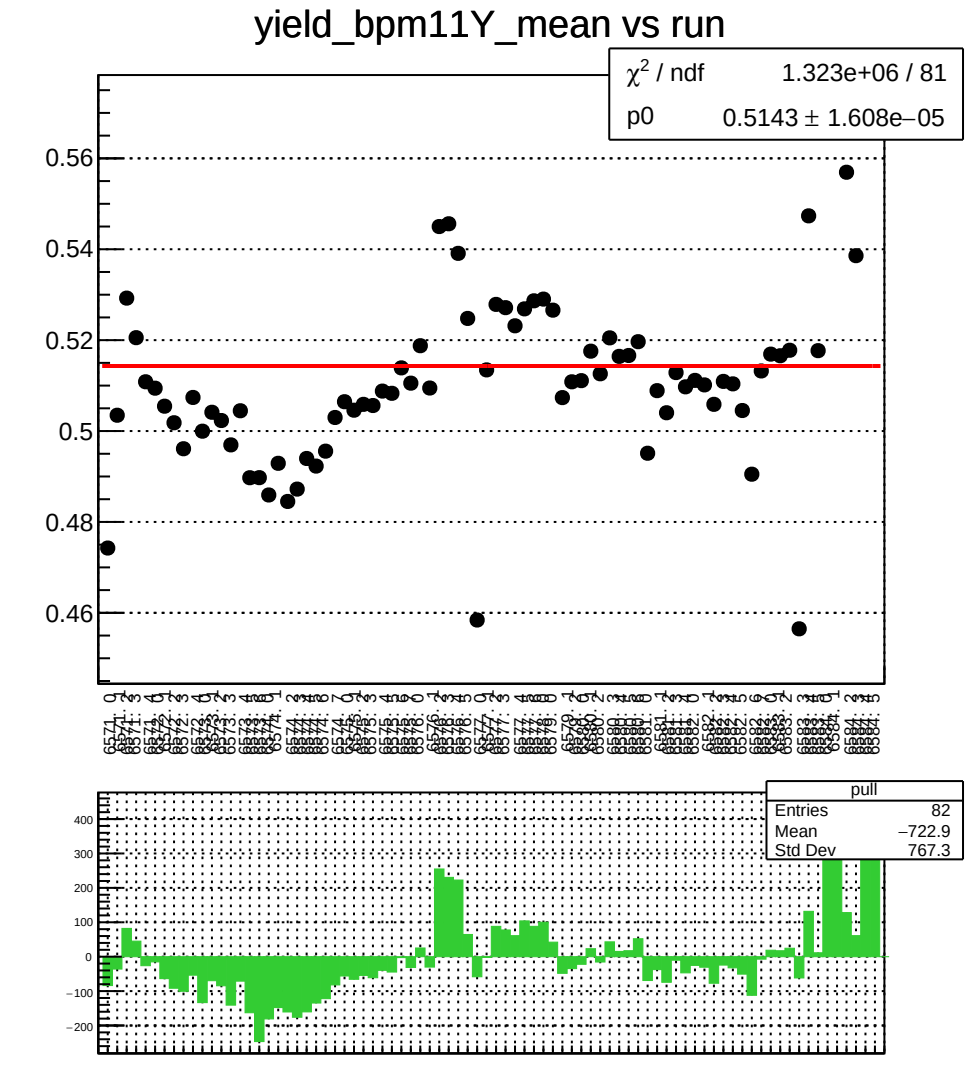

pull1D
Entries 82
Mean −0.0221
Std Dev 4.392

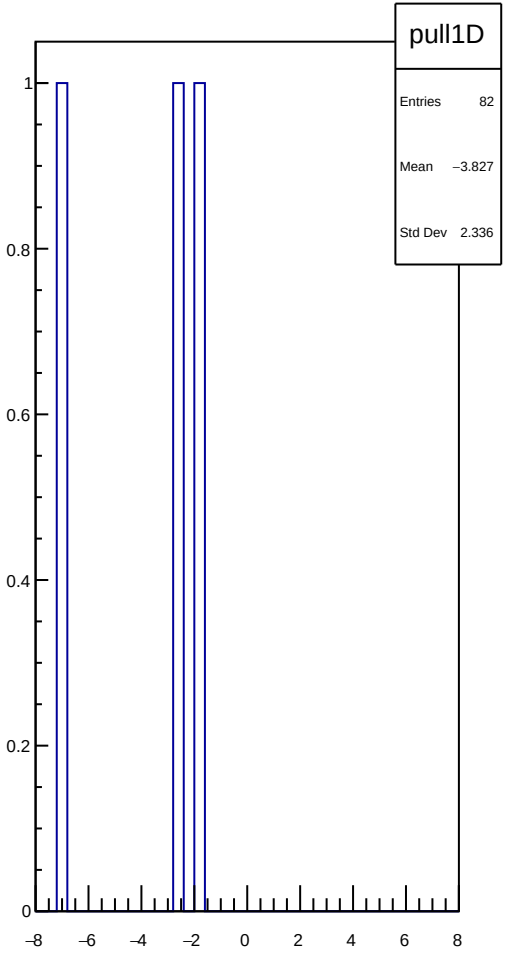

yield_bpm1Y_rms vs run
χ² / ndf 6.274e+05 / 81
p0 0.05665 ± 5.763e–05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

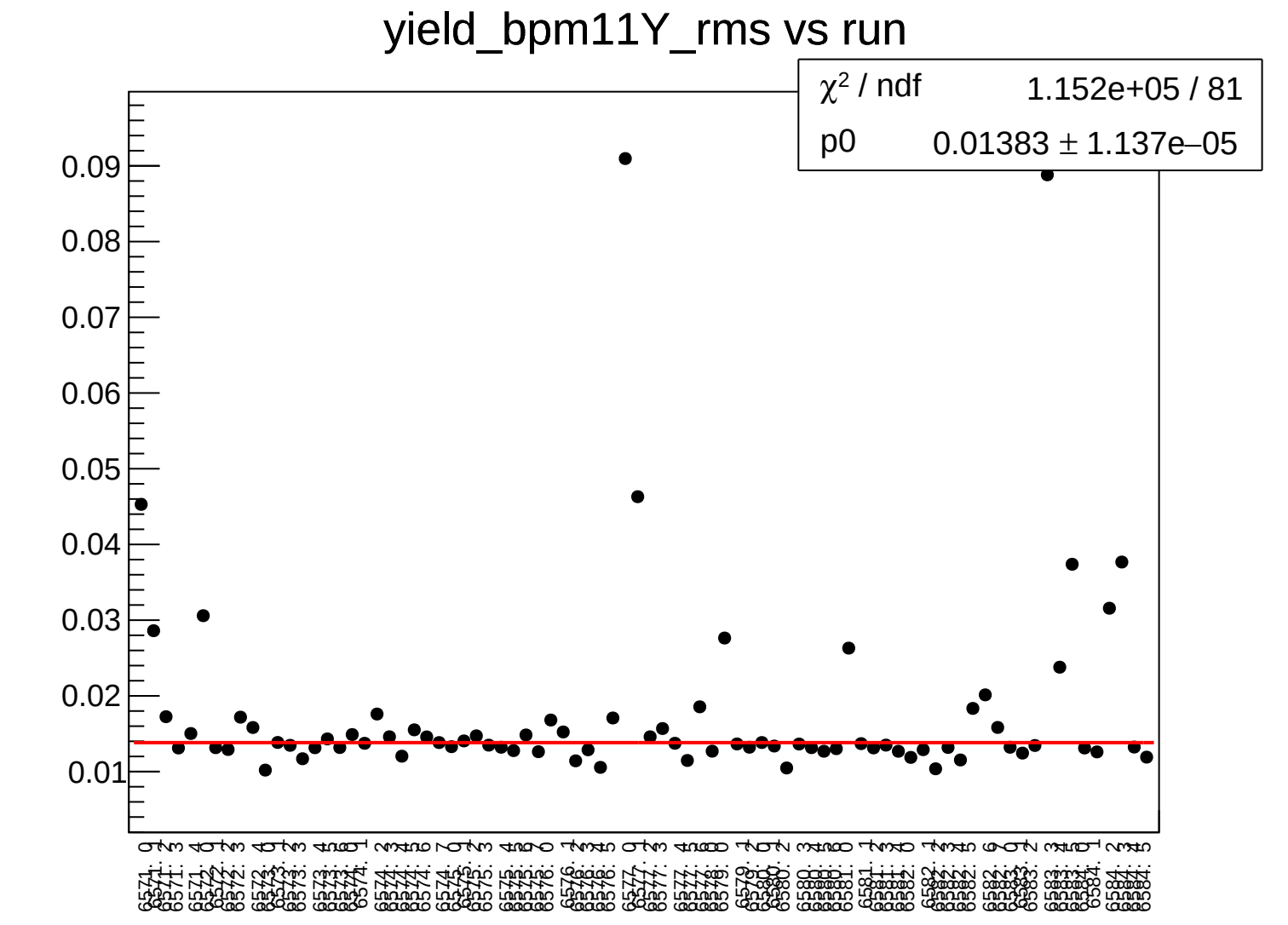

yield_bpm11X_mean vs run
χ² / ndf 1.49e+05 / 81
p0 0.8212 ± 1.478e−05
pull
Entries 82
Mean 27.57
Std Dev 37.86

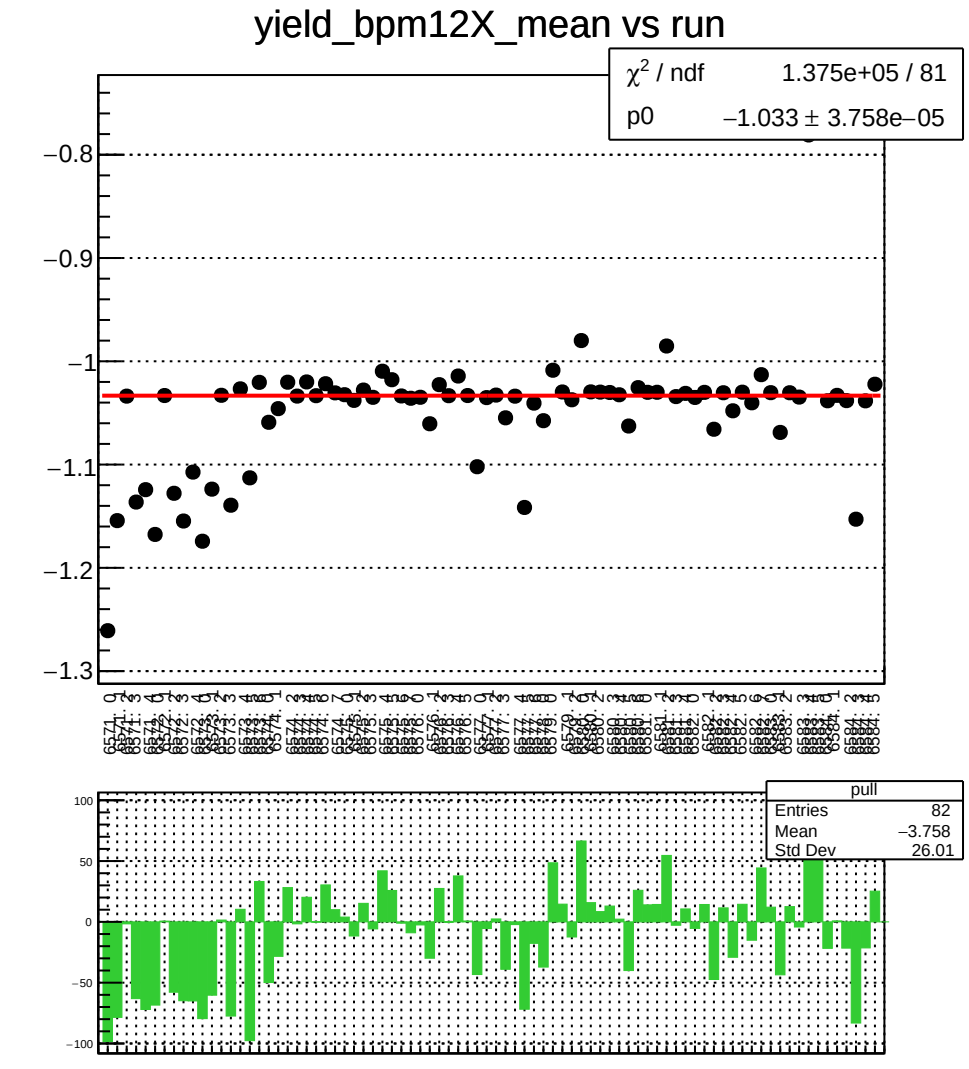

pull1D
Entries 82
Mean −0.1742
Std Dev 5.644

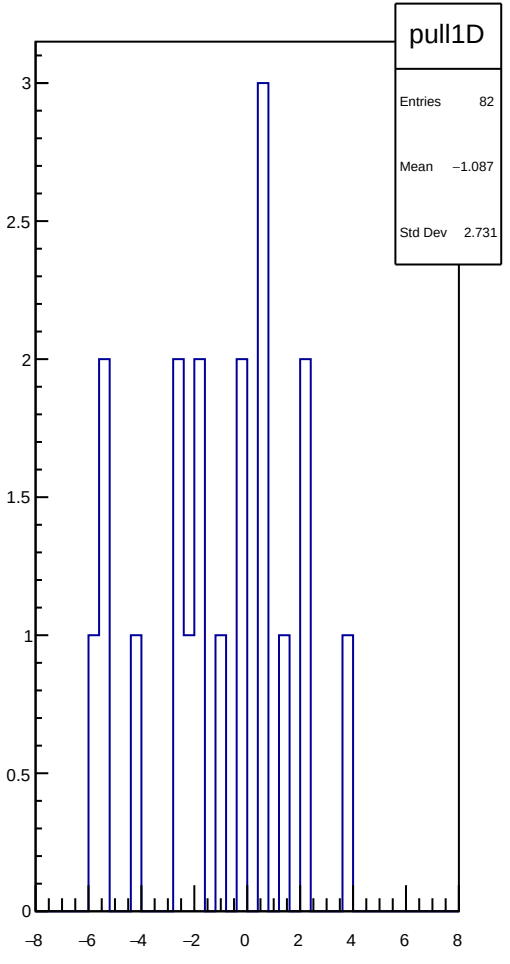

yield_bpm11X_rms vs run
χ² / ndf 3.822e+05 / 81
p0 0.0115 ± 1.045e−05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

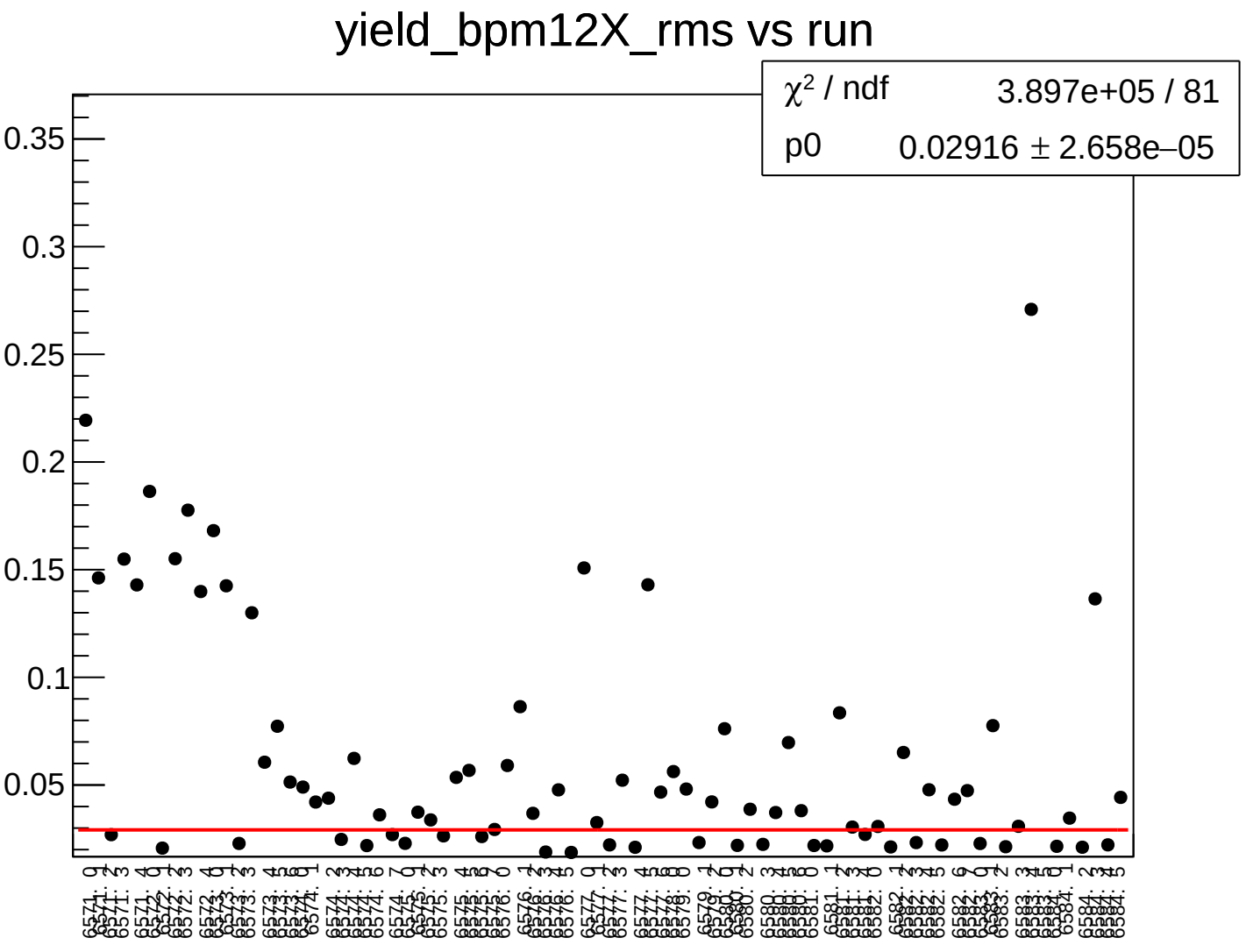

yield_bpm11Y_mean vs run
χ² / ndf 1.323e+06 / 81
p0 0.5143 ± 1.608e−05
0.56
0.54
0.52
0.5
0.48
0.46
pull
Entries 82
Mean −722.9
Std Dev 767.3
400
300
200
100
0
−100
−200

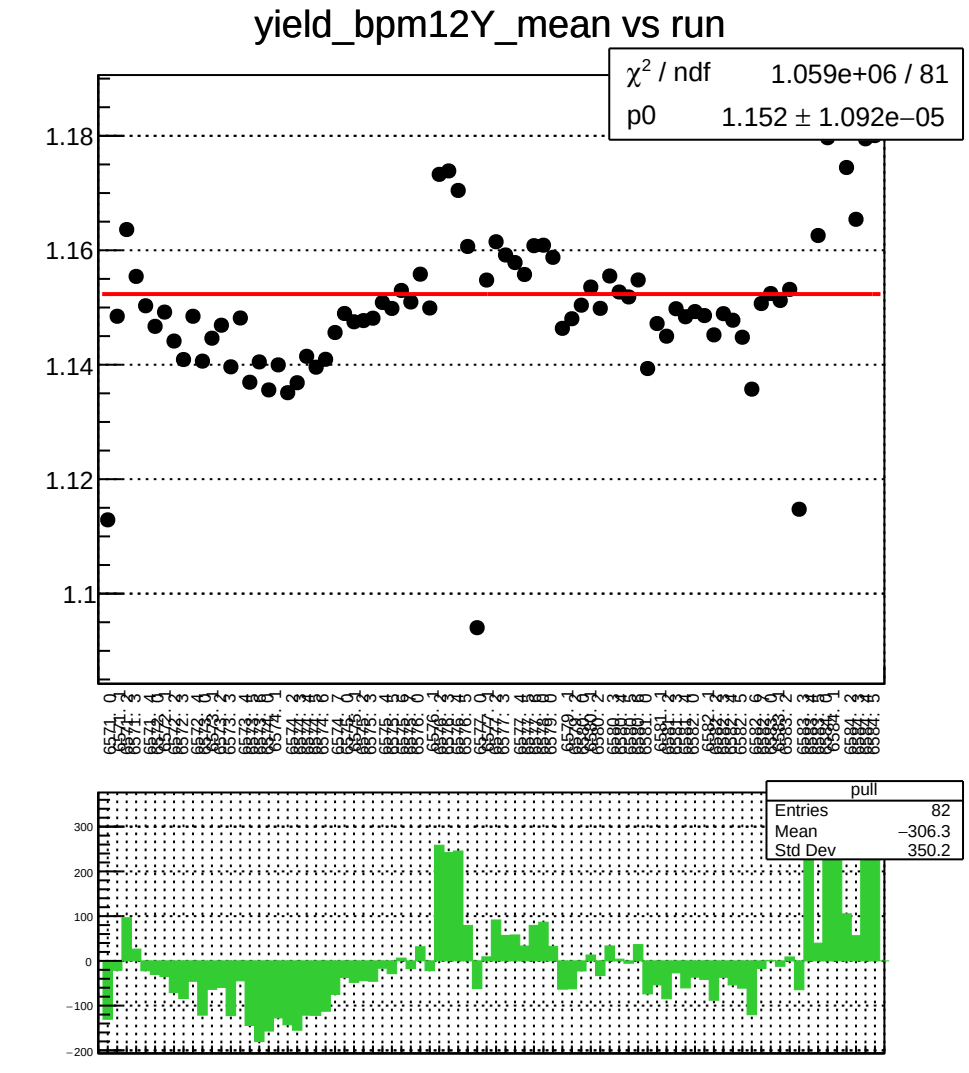

pull1D
Entries 82
Mean −3.827
Std Dev 2.336
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

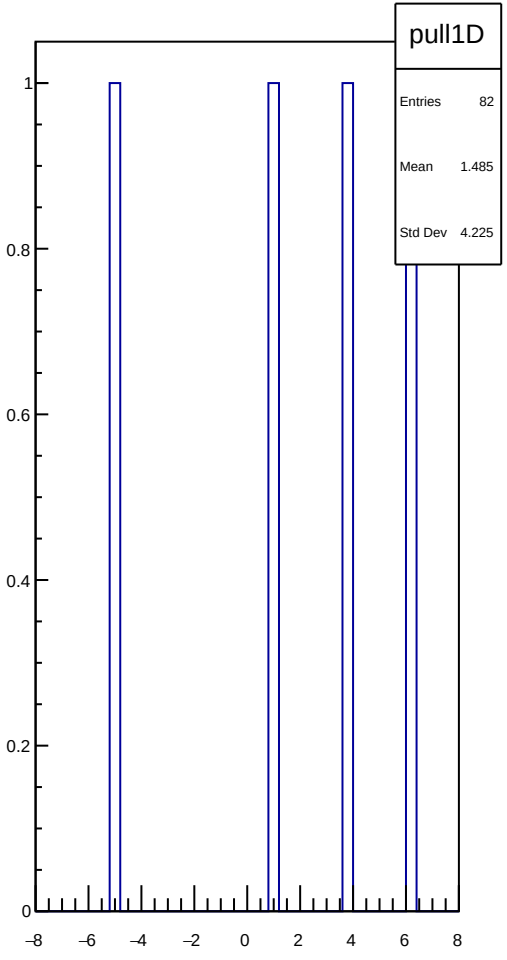

yield_bpm11Y_rms vs run
χ² / ndf 1.152e+05 / 81
p0 0.01383 ± 1.137e–05
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

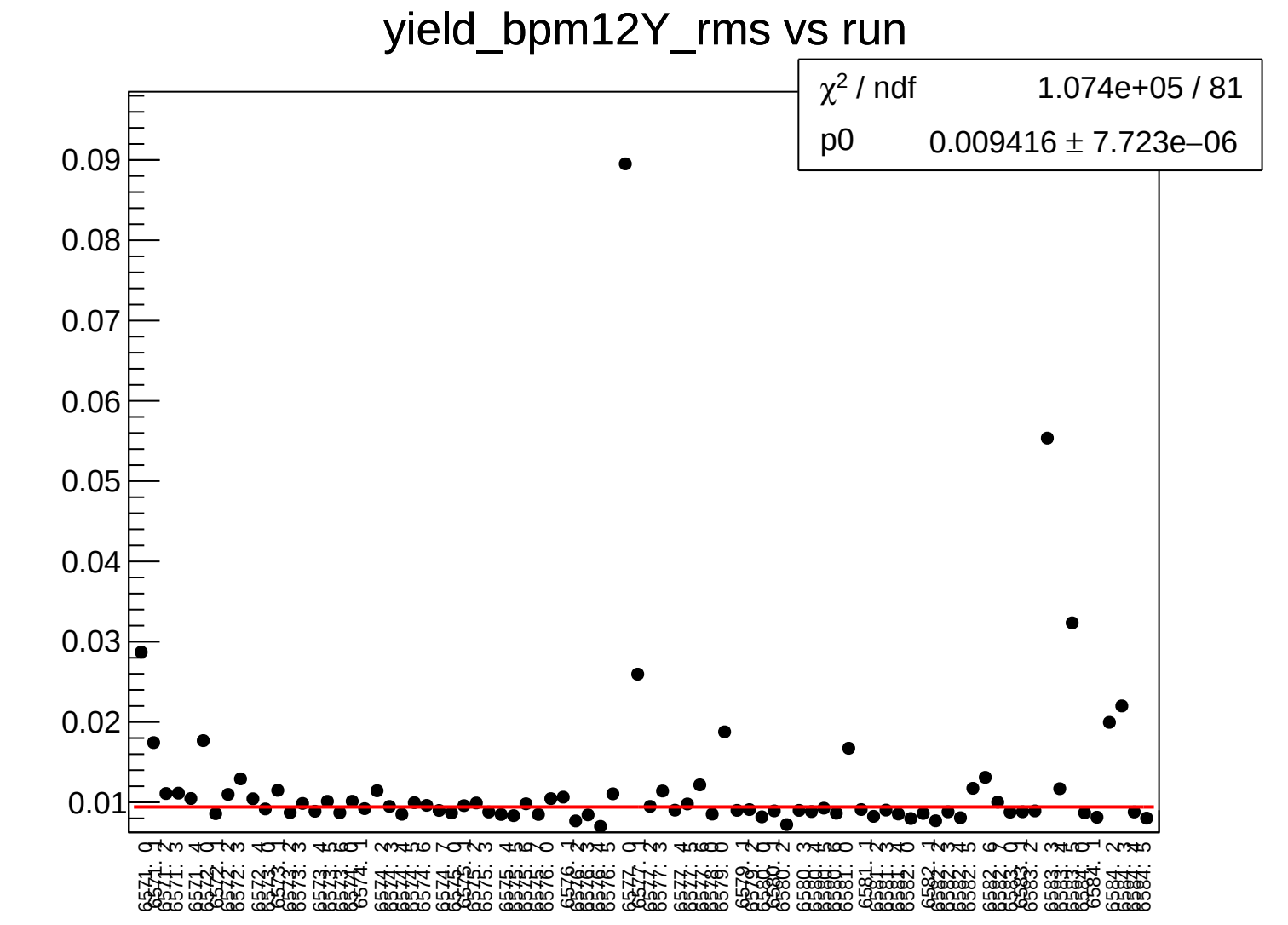

yield_bpm12X_mean vs run
χ² / ndf 1.375e+05 / 81
p0 −1.033 ± 3.758e−05
pull
Entries 82
Mean −3.758
Std Dev 26.01

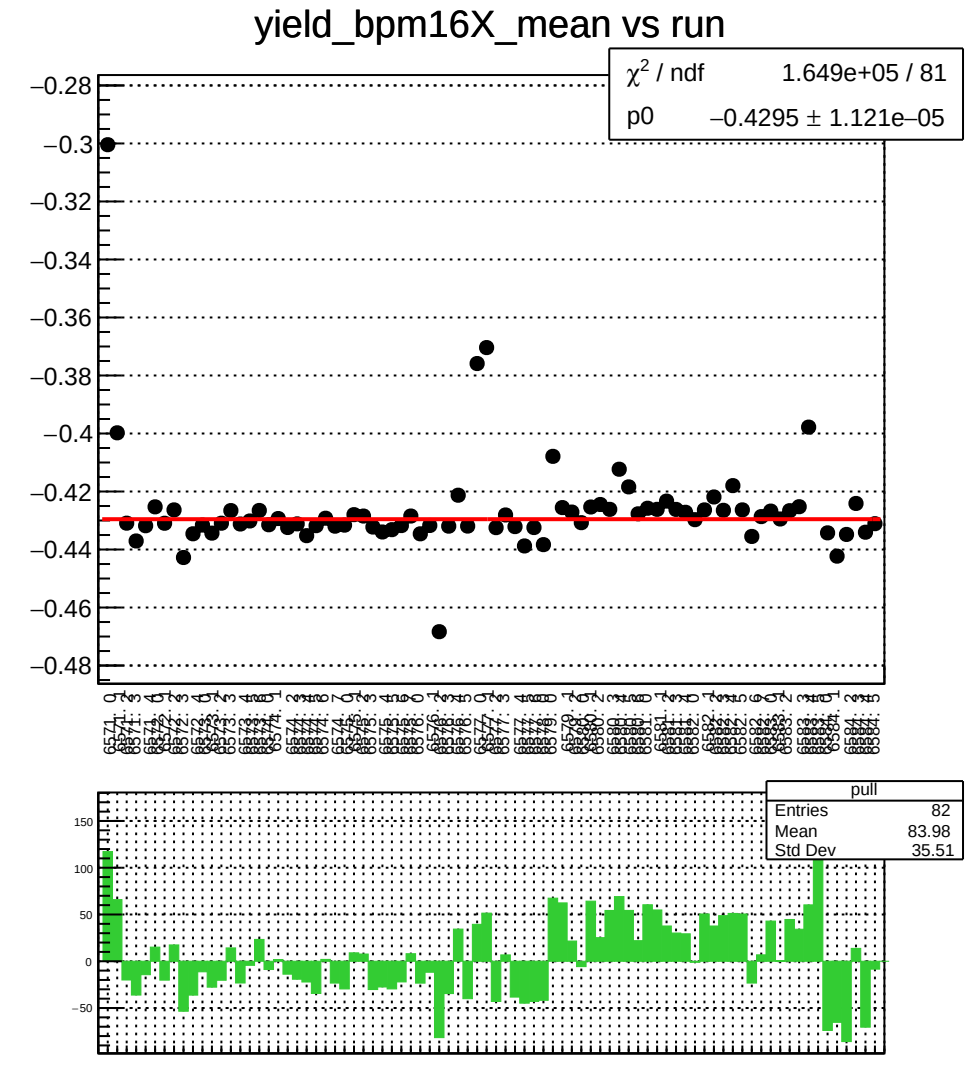

pull1D
Entries 82
Mean −1.087
Std Dev 2.731

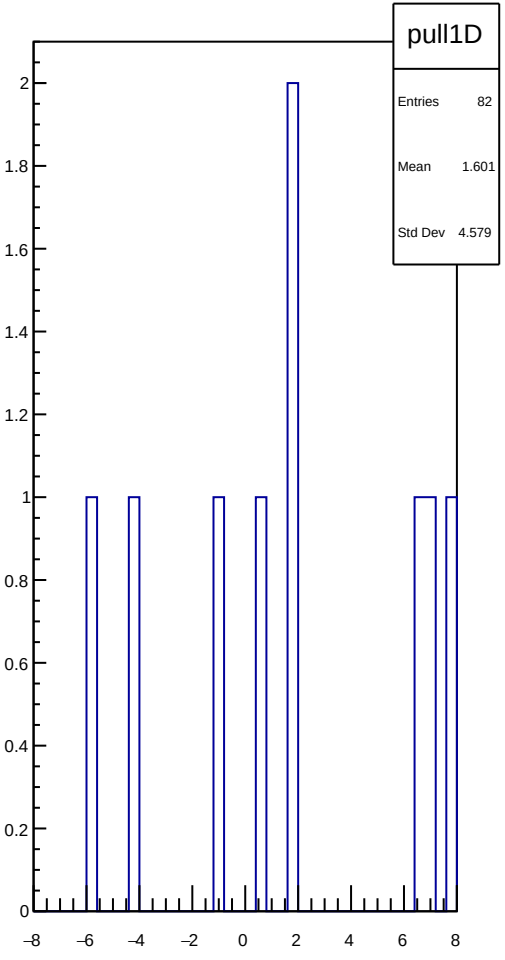

yield_bpm12X_rms vs run
χ² / ndf 3.897e+05 / 81
p0 0.02916 ± 2.658e–05
0.35
0.3
0.25
0.2
0.15
0.1
0.05

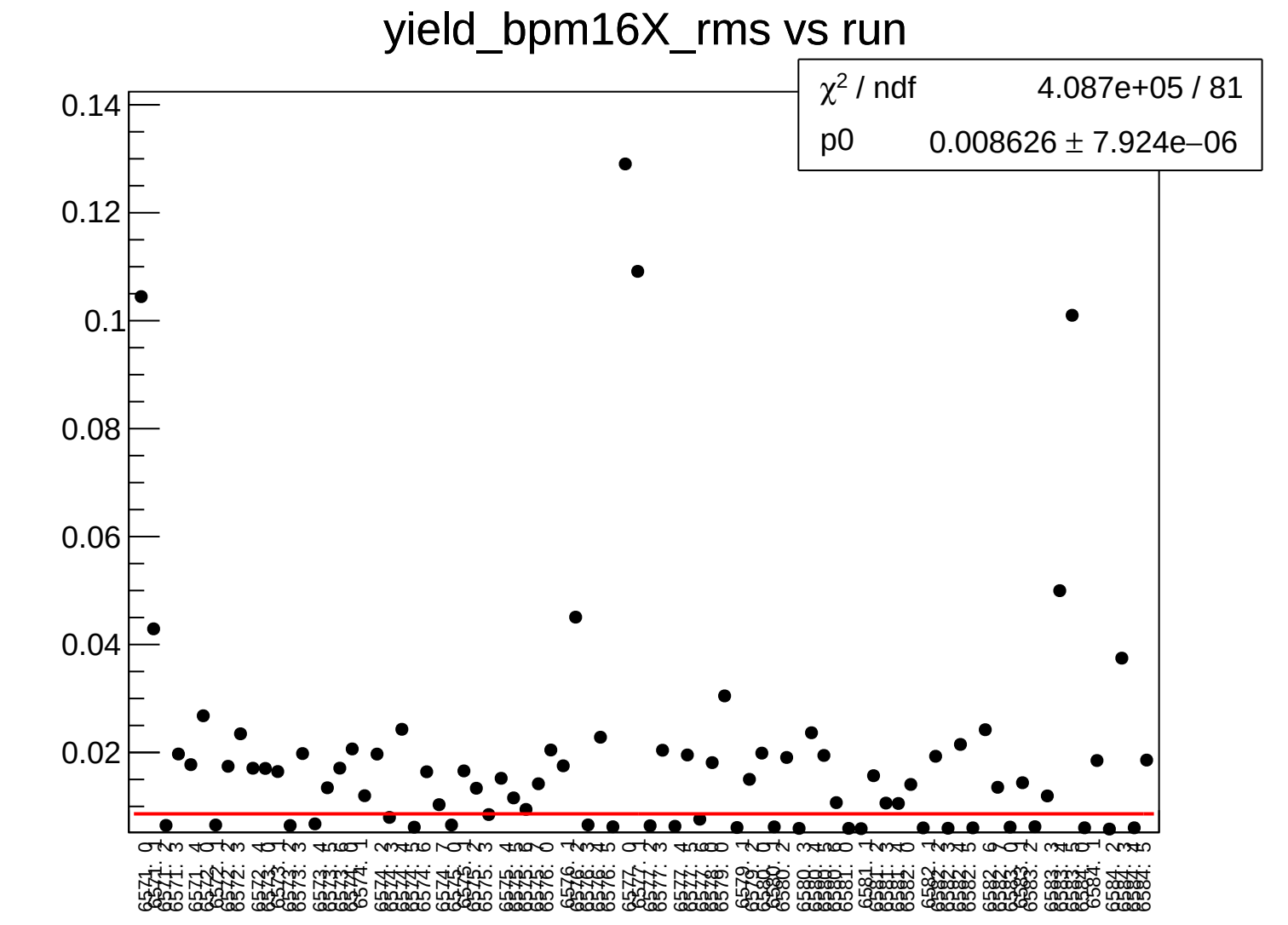

yield_bpm12Y_mean vs run
χ² / ndf 1.059e+06 / 81
p0 1.152 ± 1.092e−05
1.18
1.16
1.14
1.12
1.1
pull
Entries 82
Mean −306.3
Std Dev 350.2
300
200
100
0
−100
−200

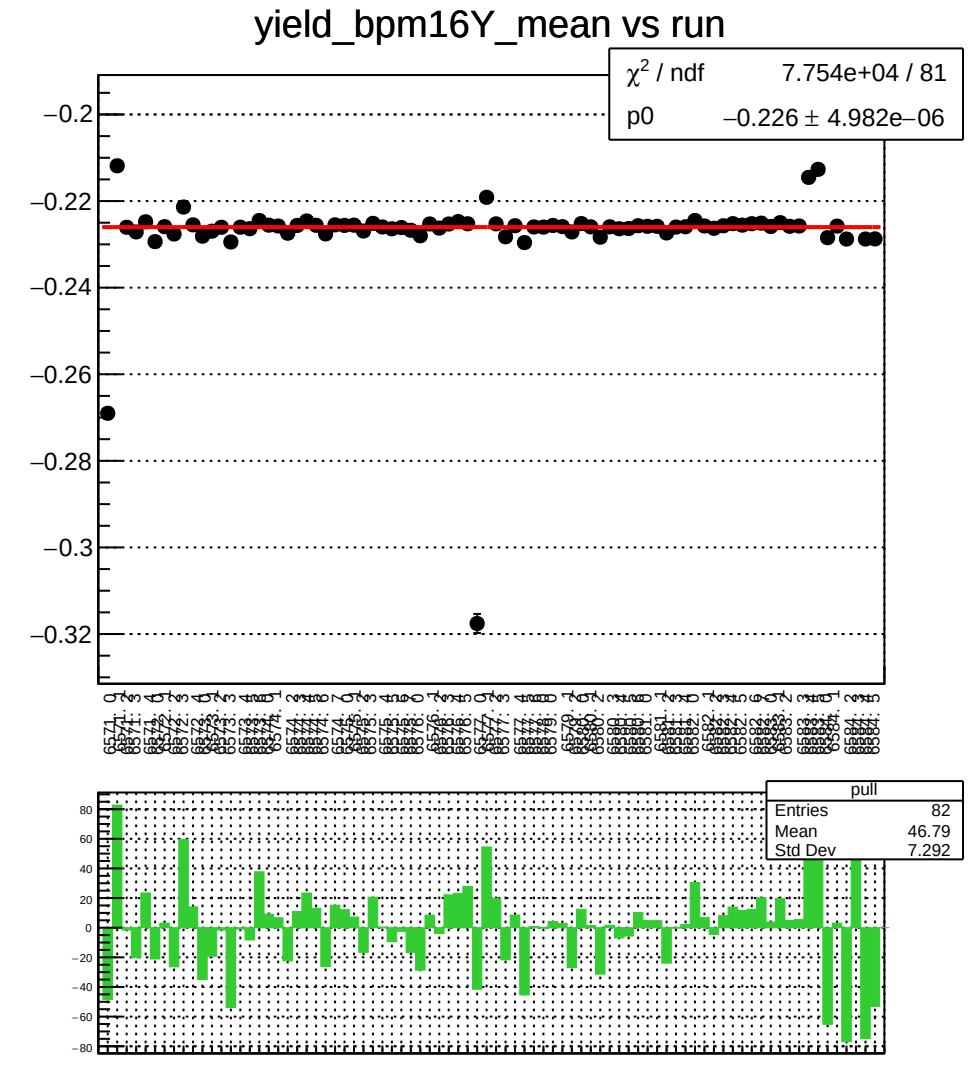

pull1D
Entries 82
Mean 1.485
Std Dev 4.225
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

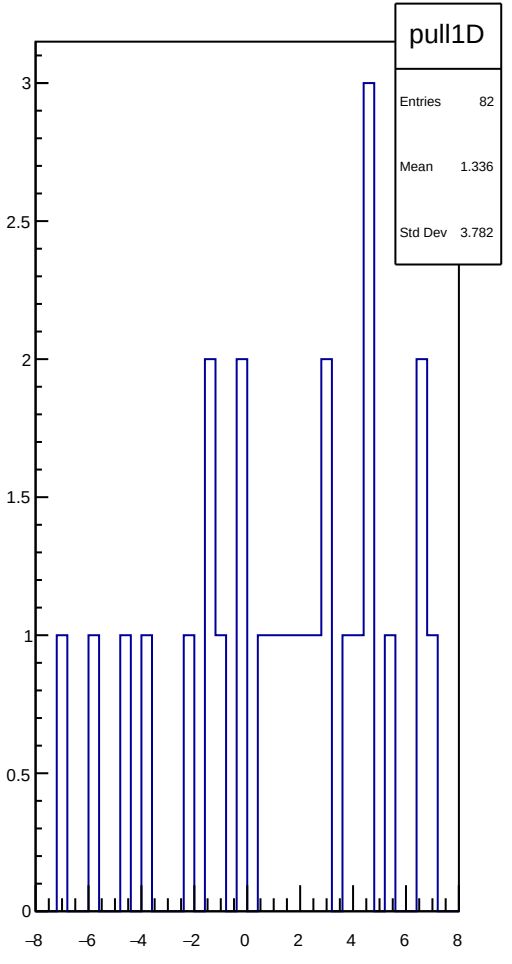

yield_bpm12Y_rms vs run
χ² / ndf 1.074e+05 / 81
p0 0.009416 ± 7.723e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

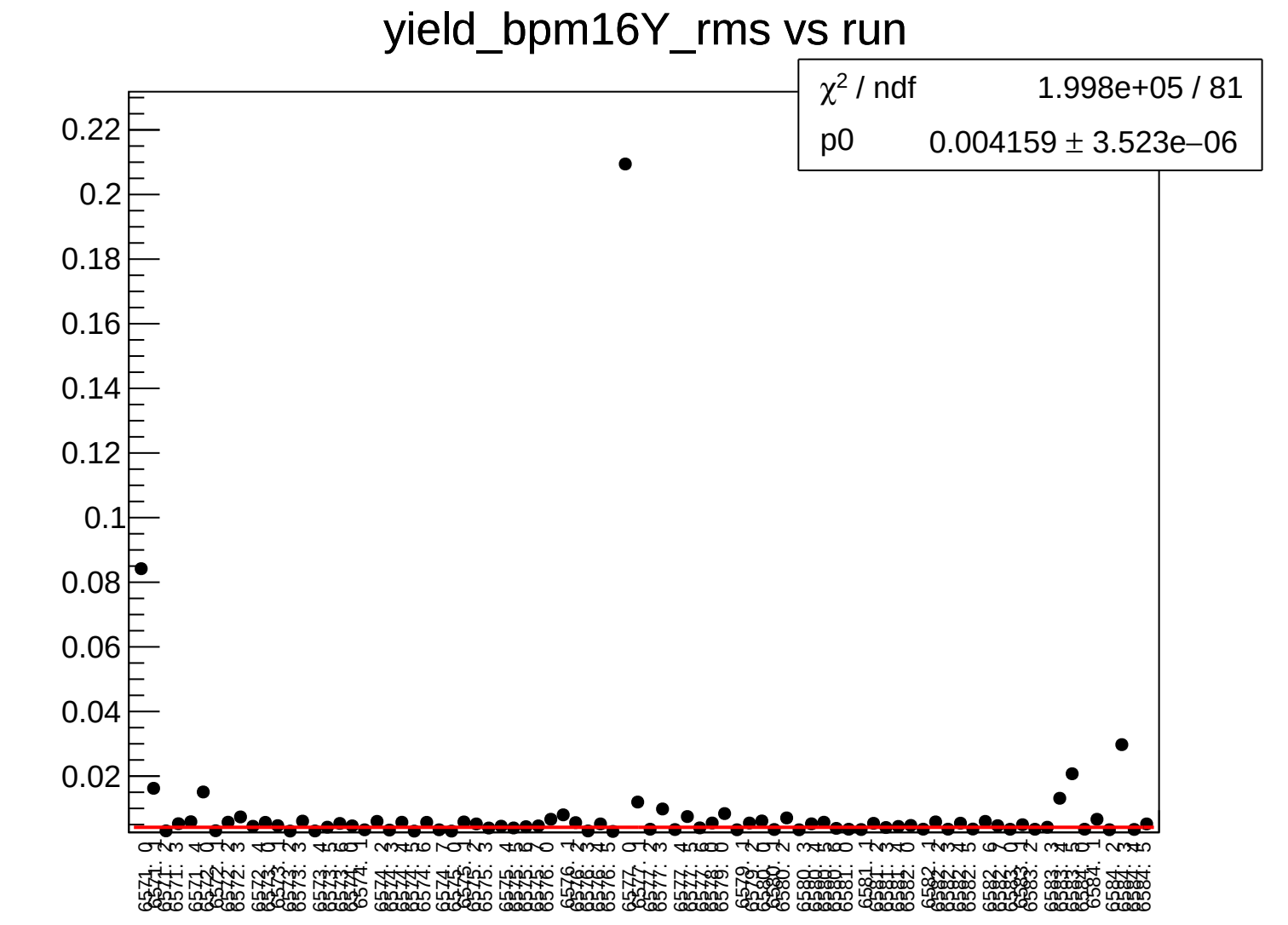

yield_bpm16X_mean vs run
χ² / ndf 1.649e+05 / 81
p0 −0.4295 ± 1.121e−05
pull
Entries 82
Mean 83.98
Std Dev 35.51

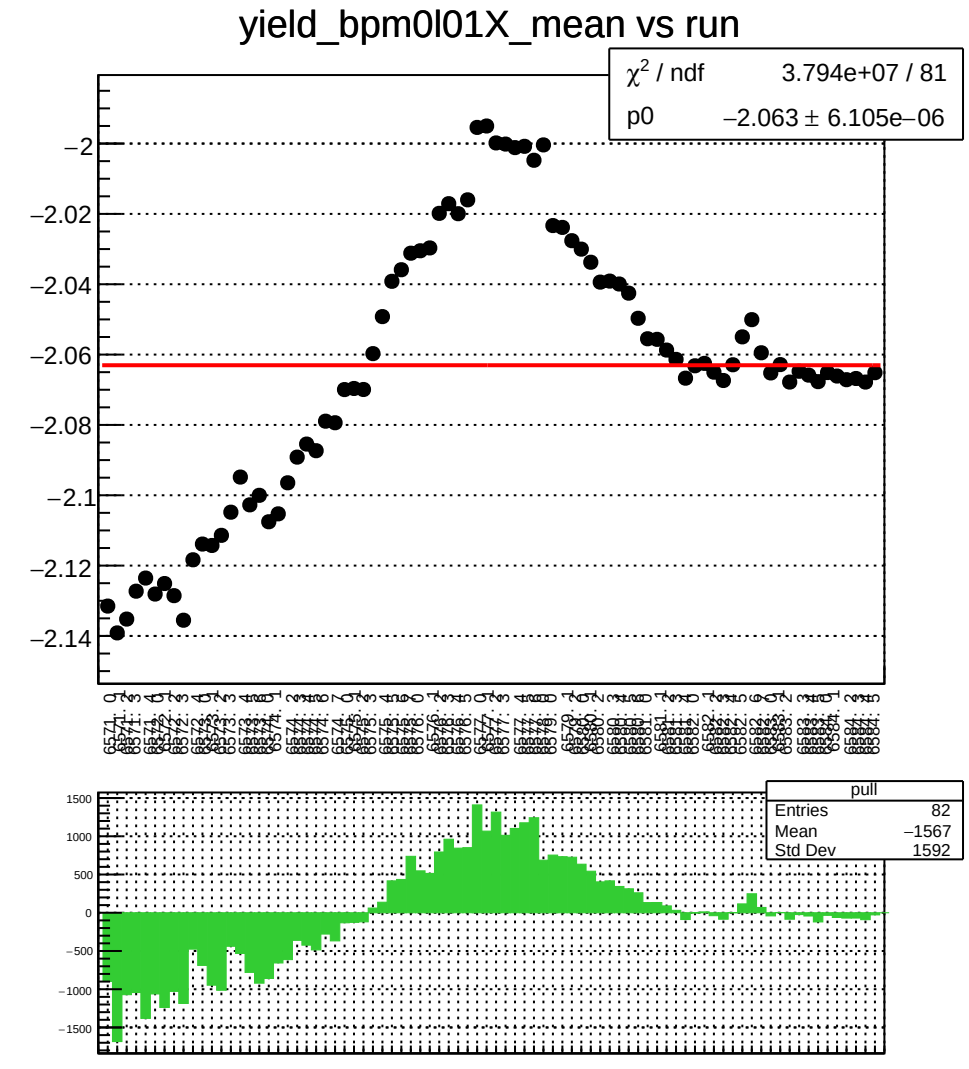

pull1D
Entries 82
Mean 1.601
Std Dev 4.579

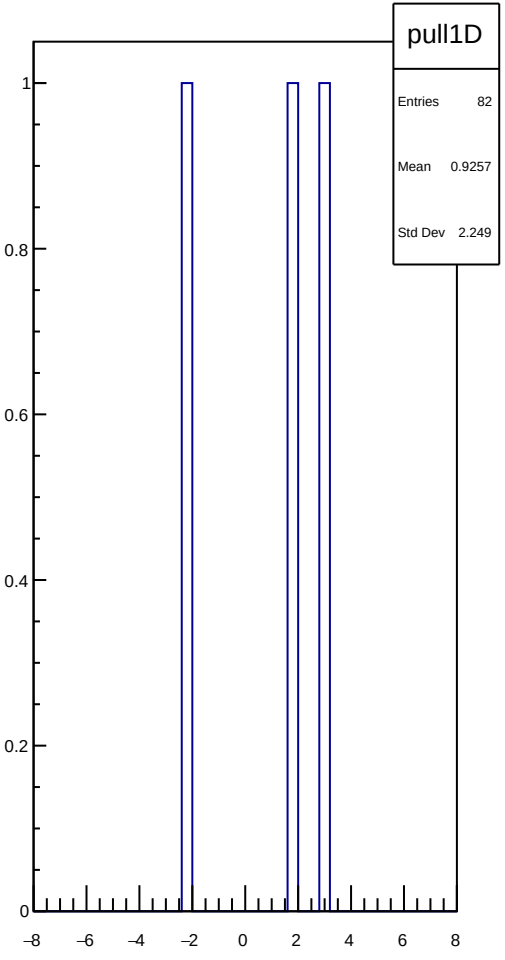

yield_bpm16X_rms vs run
χ² / ndf 4.087e+05 / 81
p0 0.008626 ± 7.924e−06
0.14
0.12
0.1
0.08
0.06
0.04
0.02

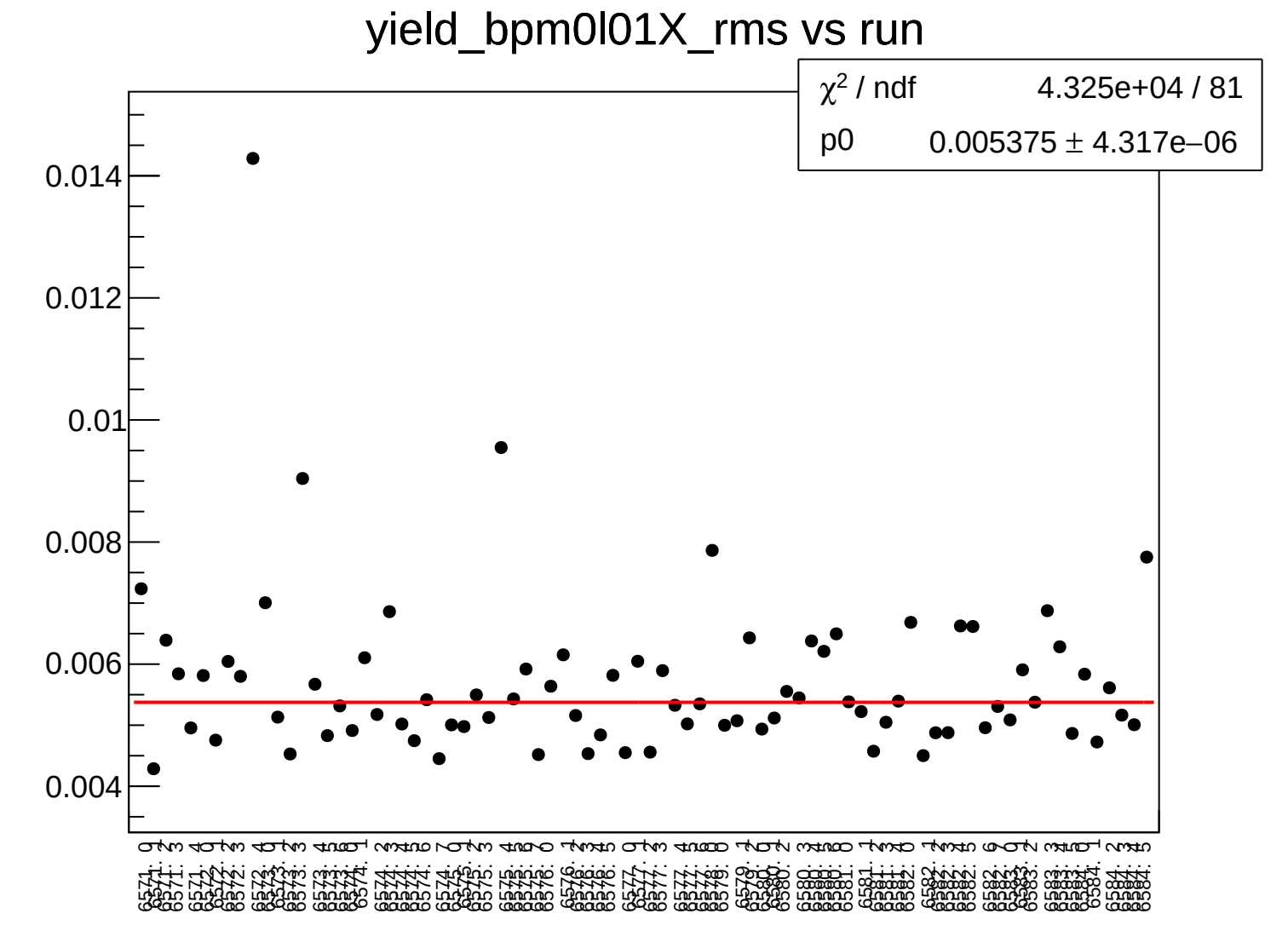

yield_bpm16Y_mean vs run
χ² / ndf 7.754e+04 / 81
p0 −0.226 ± 4.982e−06
−0.2
−0.22
−0.24
−0.26
−0.28
−0.3
−0.32
pull
Entries 82
Mean 46.79
Std Dev 7.292
80
60
40
20
0
−20
−40
−60
−80

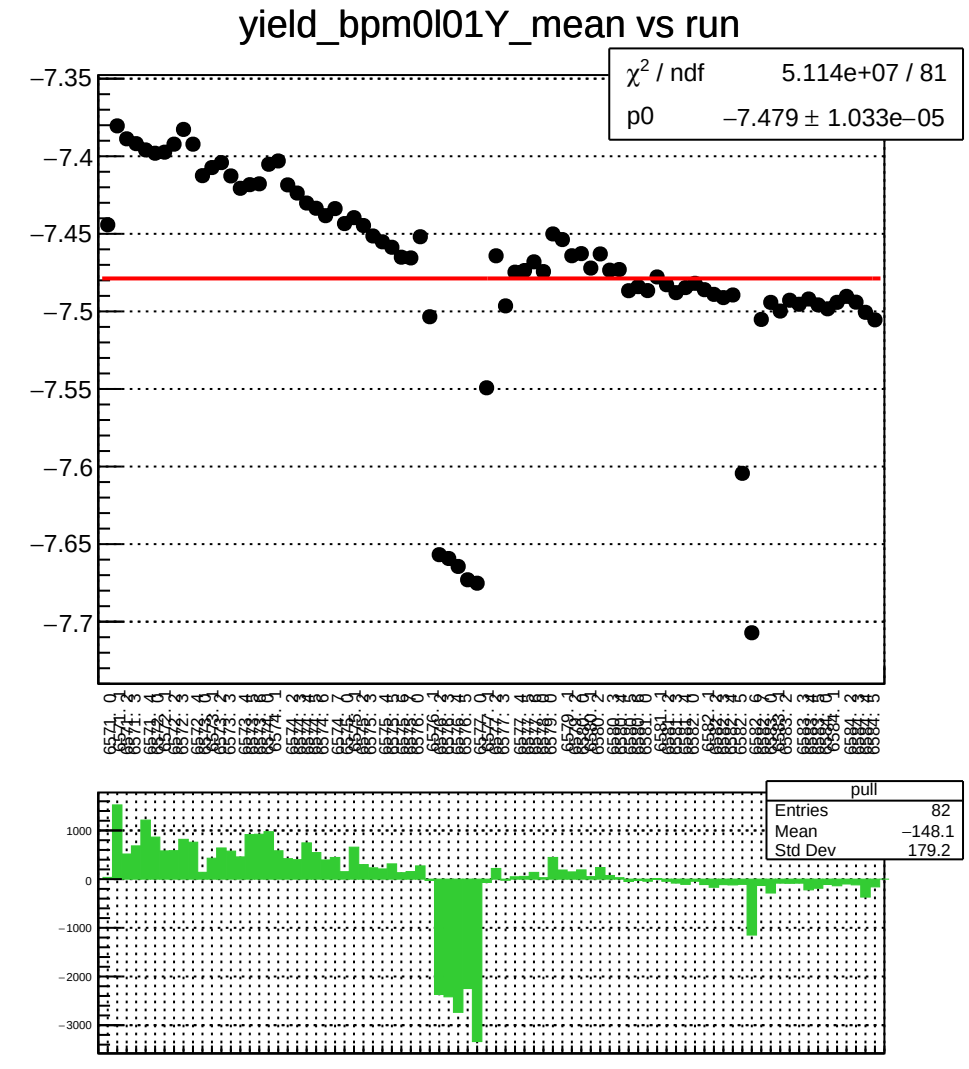

pull1D
Entries 82
Mean 1.336
Std Dev 3.782
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

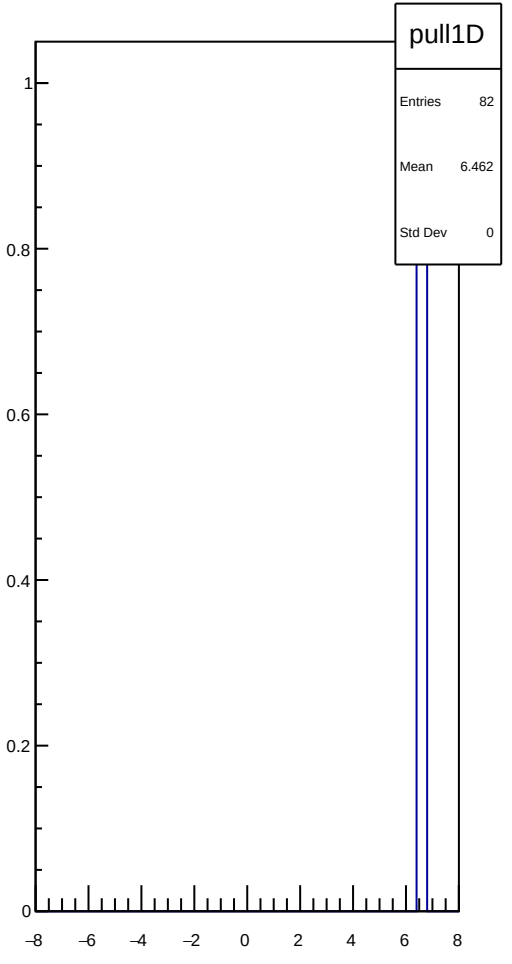

yield_bpm16Y_rms vs run
χ² / ndf 1.998e+05 / 81
p0 0.004159 ± 3.523e−06
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02

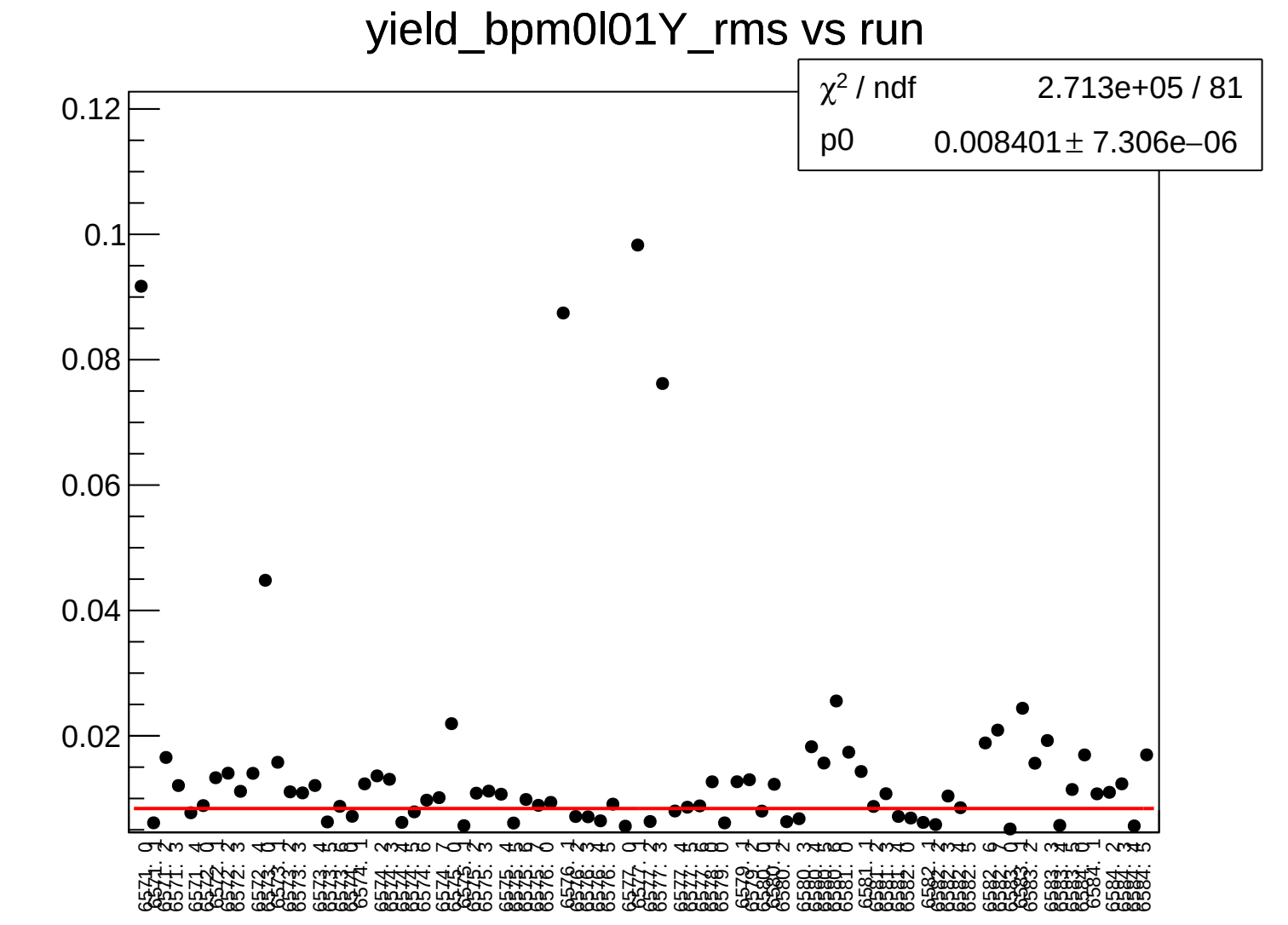

yield_bpm0l01X_mean vs run
χ² / ndf 3.794e+07 / 81
p0 −2.063 ± 6.105e−06
pull
Entries 82
Mean −1567
Std Dev 1592

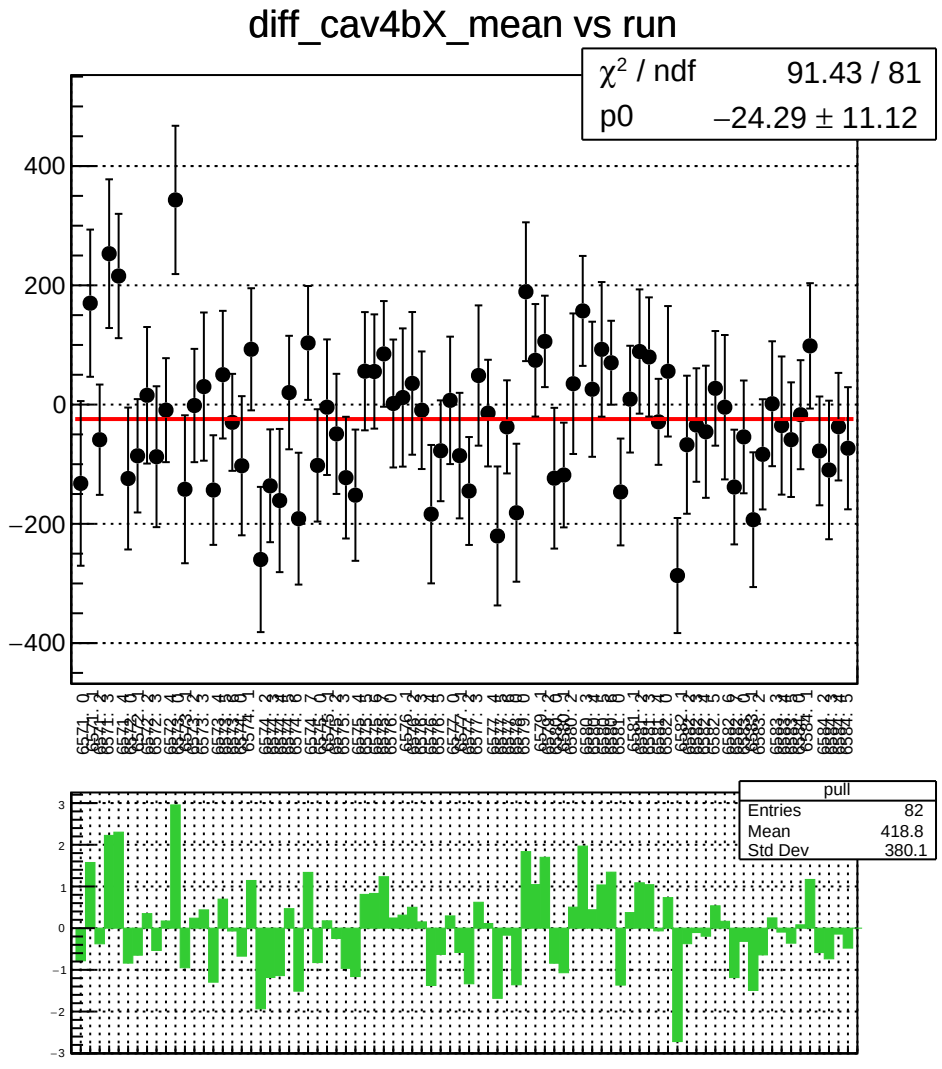

pull1D
Entries 82
Mean 0.9257
Std Dev 2.249

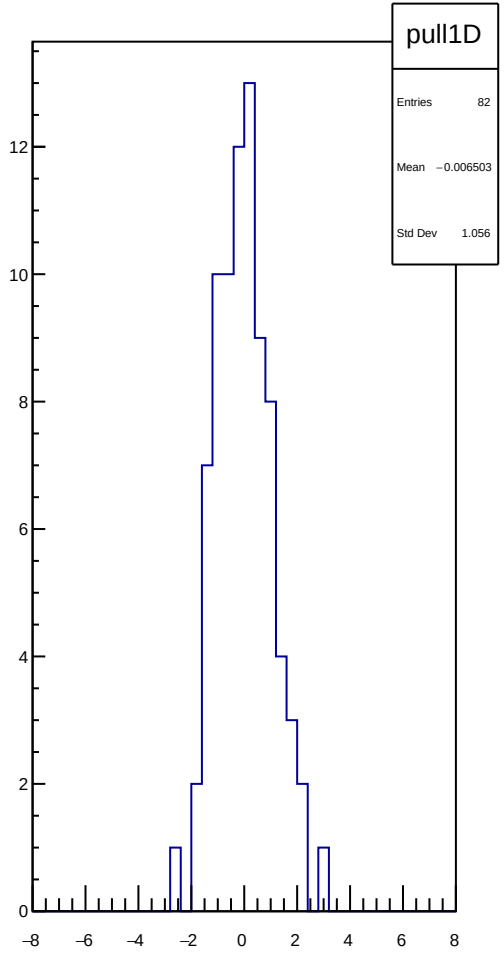

yield_bpm0l01X_rms vs run
χ² / ndf 4.325e+04 / 81
p0 0.005375 ± 4.317e−06
0.014
0.012
0.01
0.008
0.006
0.004

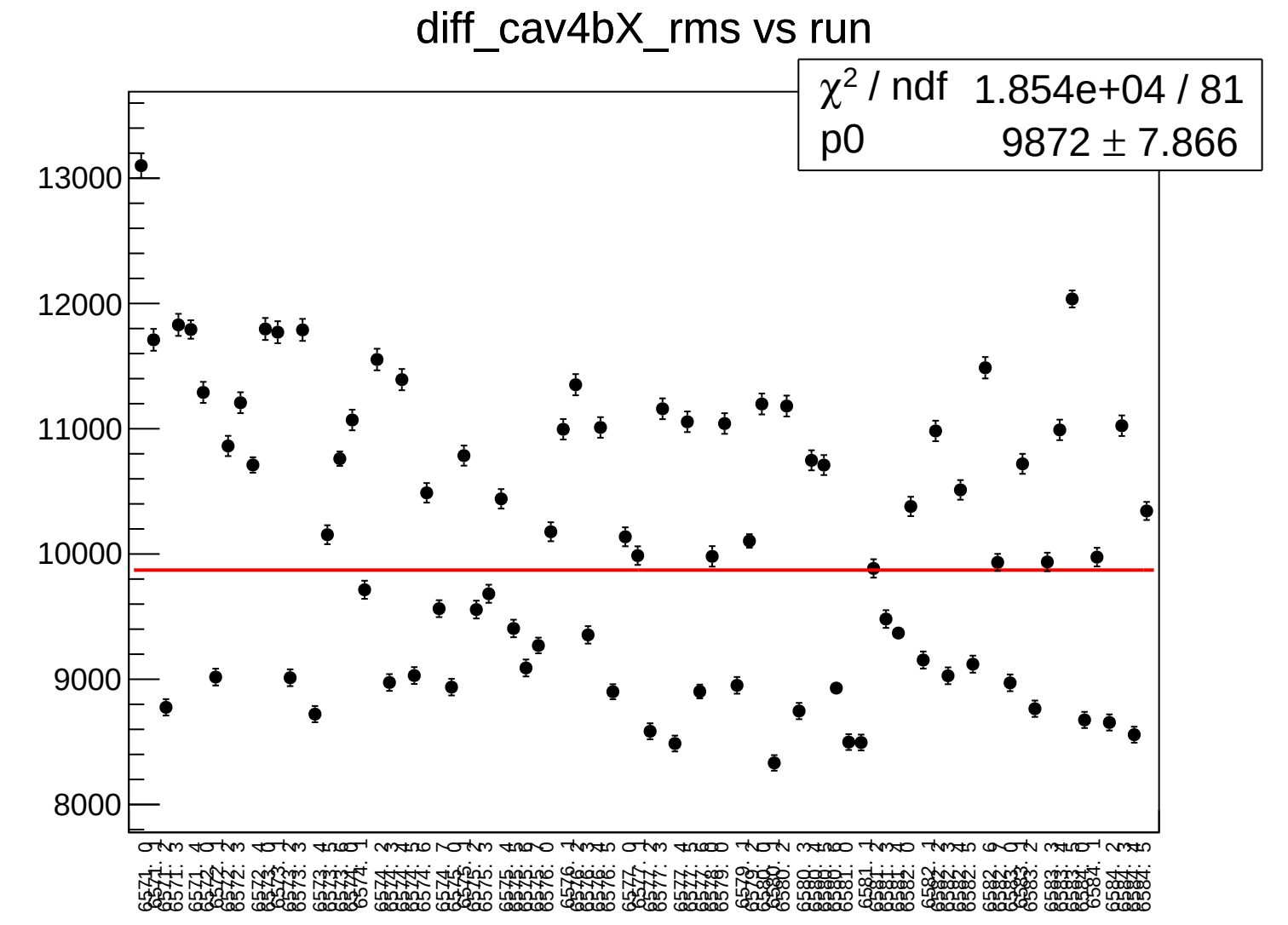

yield_bpm0l01Y_mean vs run
χ² / ndf 5.114e+07 / 81
p0 −7.479 ± 1.033e−05
−7.35
−7.4
−7.45
−7.5
−7.55
−7.6
−7.65
−7.7
pull
Entries 82
Mean −148.1
Std Dev 179.2
1000
0
−1000
−2000
−3000

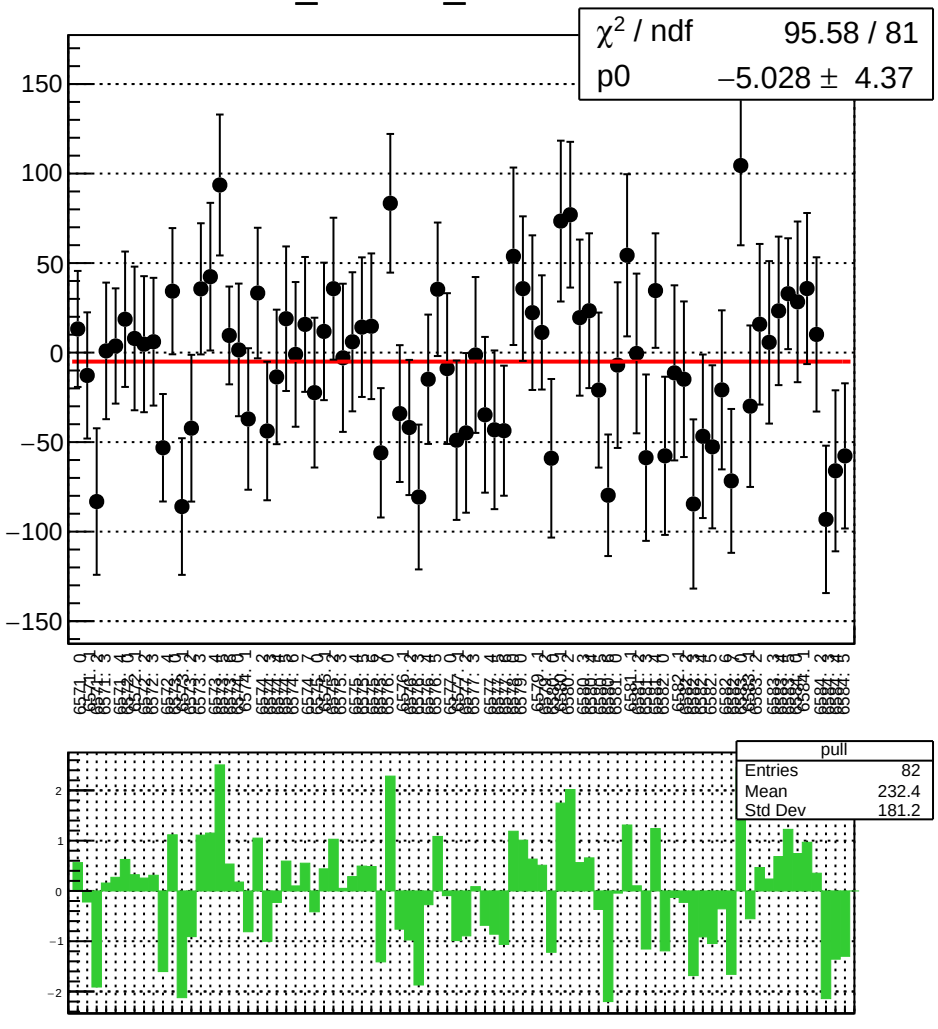

pull1D
Entries 82
Mean 6.462
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

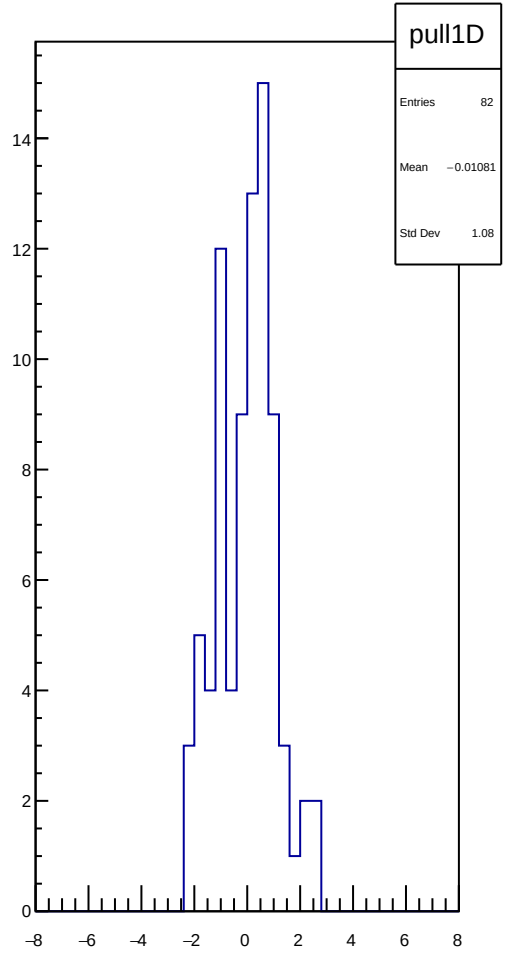

yield_bpm0l01Y_rms vs run
χ² / ndf 2.713e+05 / 81
p0 0.008401 ± 7.306e−06
0.12
0.1
0.08
0.06
0.04
0.02

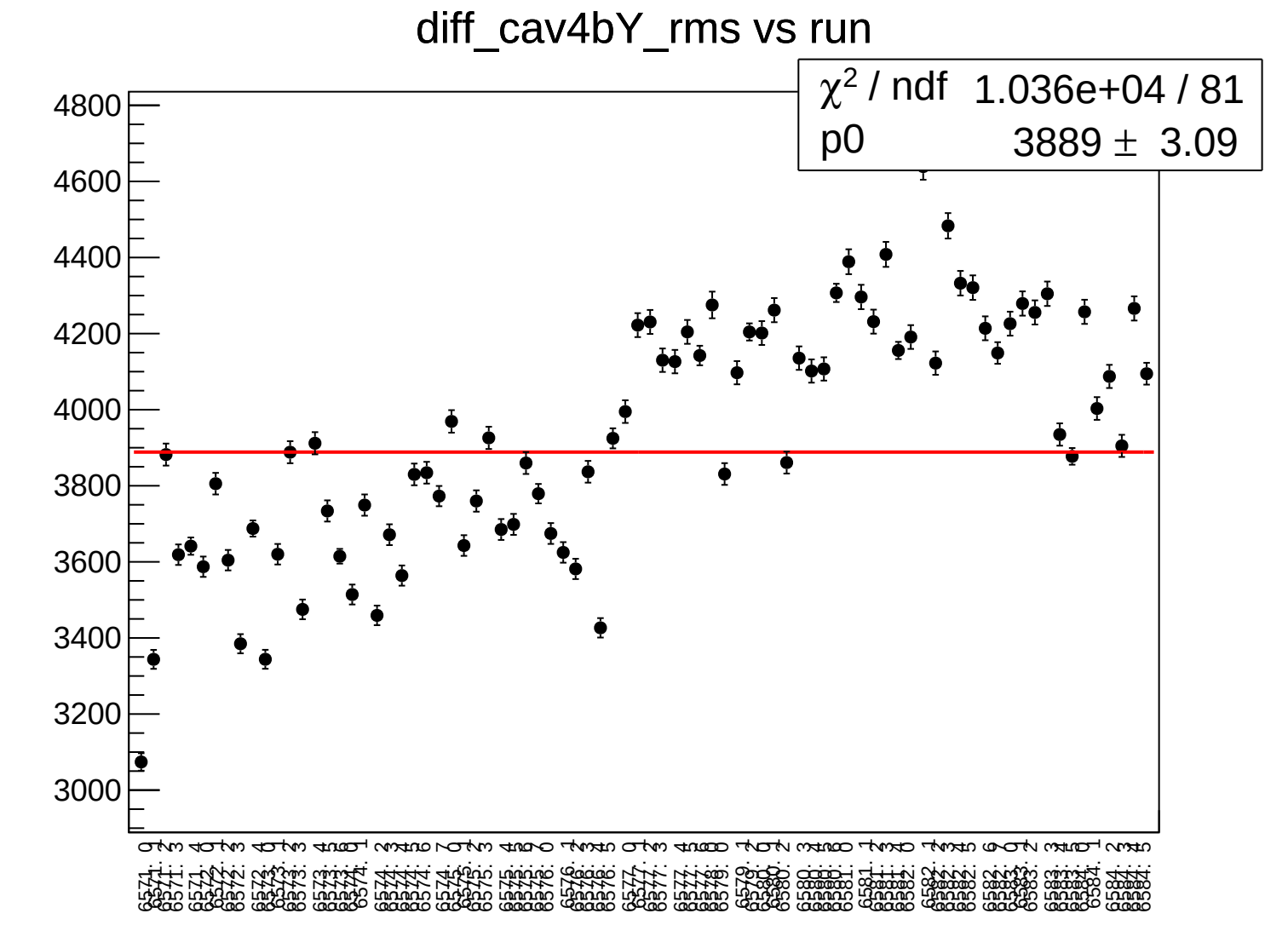

diff_cav4bX_mean vs run
χ² / ndf 91.43 / 81
p0 −24.29 ± 11.12
400
200
0
−200
−400
pull
Entries 82
Mean 418.8
Std Dev 380.1
3
2
1
0
−1
−2
−3

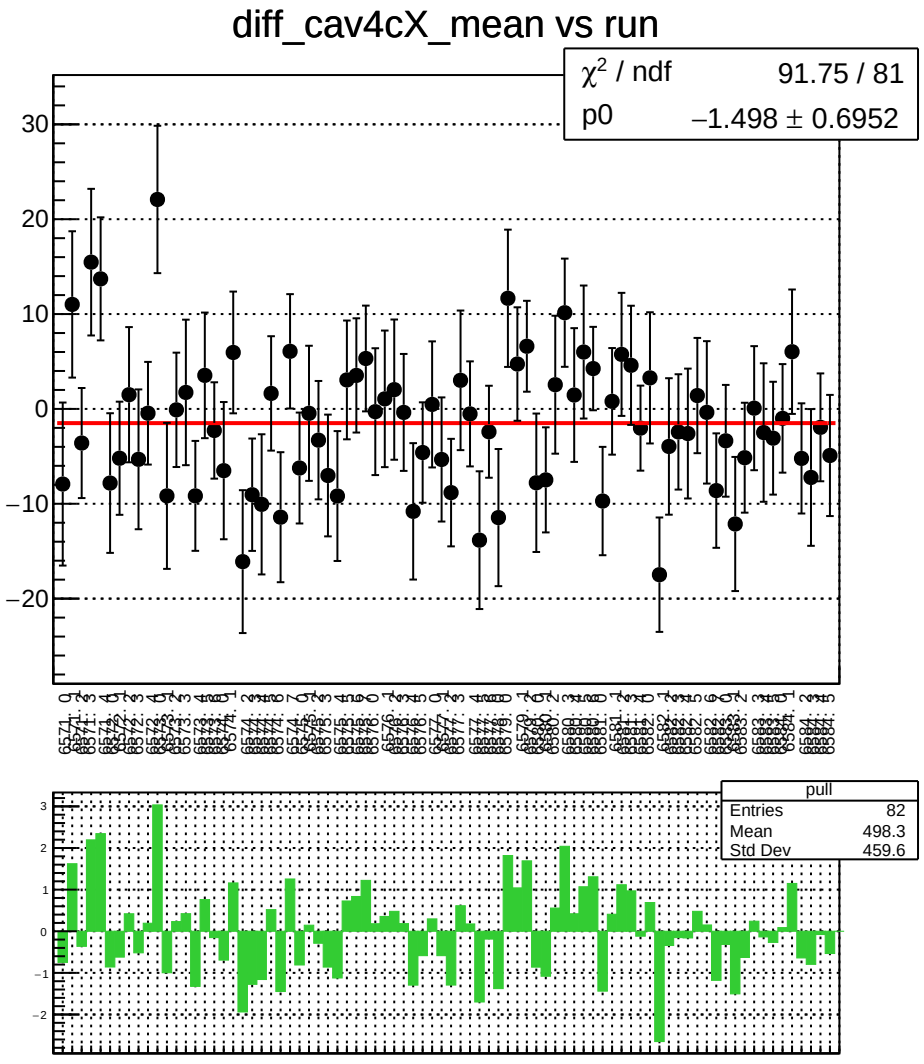

pull1D
Entries 82
Mean −0.006503
Std Dev 1.056
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

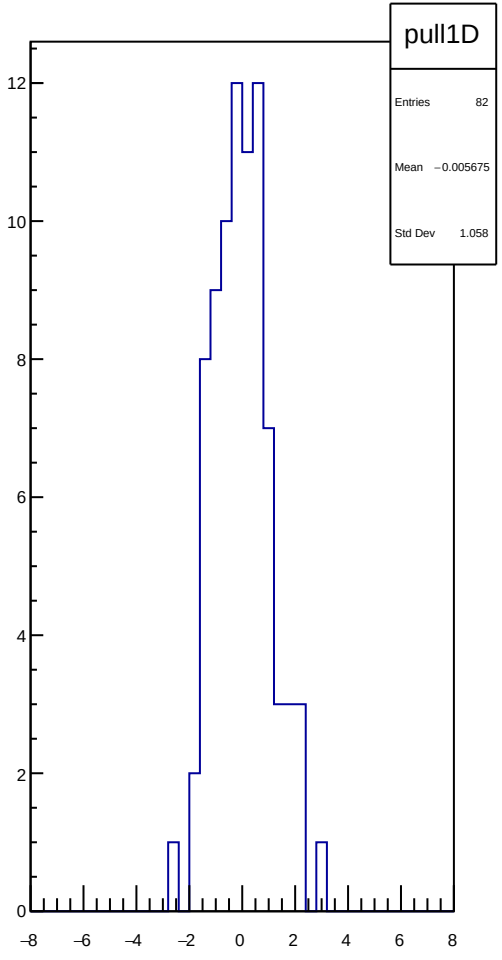

diff_cav4bX_rms vs run
χ² / ndf 1.854e+04 / 81
p0 9872 ± 7.866
13000
12000
11000
10000
9000
8000

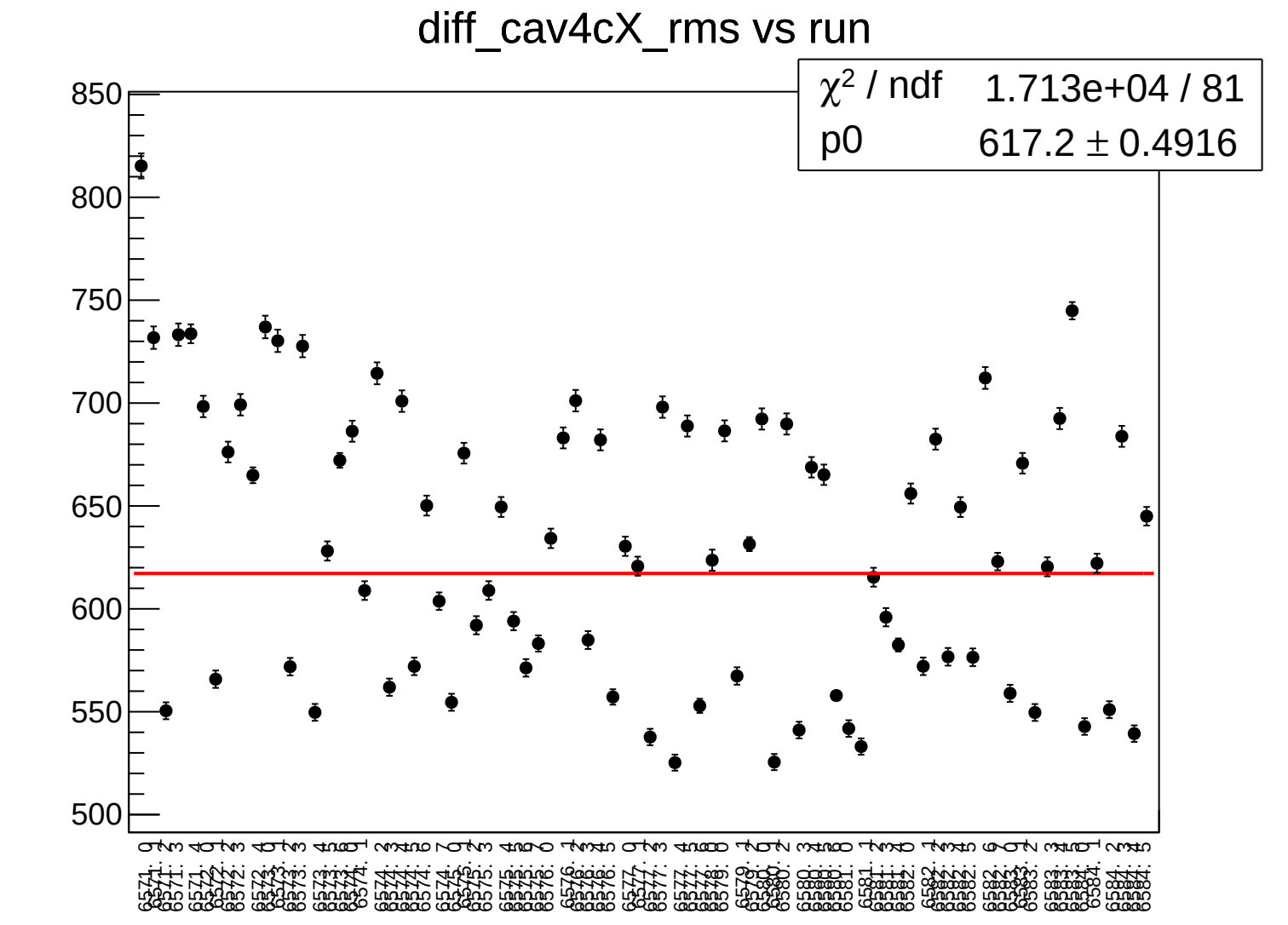

diff_cav4bY_mean vs run
χ² / ndf 95.58 / 81
p0 −5.028 ± 4.37
150
100
50
0
−50
−100
−150
pull
Entries 82
Mean 232.4
Std Dev 181.2
2
1
0
−1
−2

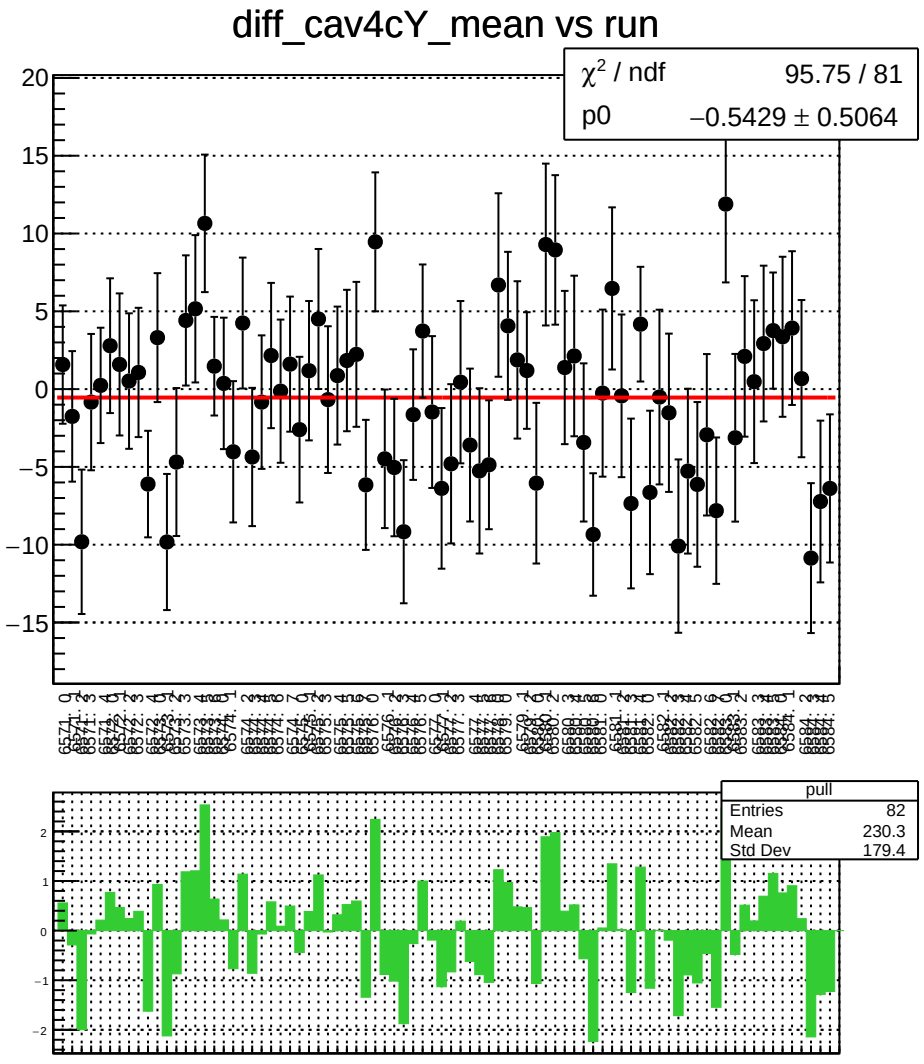

pull1D
Entries 82
Mean −0.01081
Std Dev 1.08
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

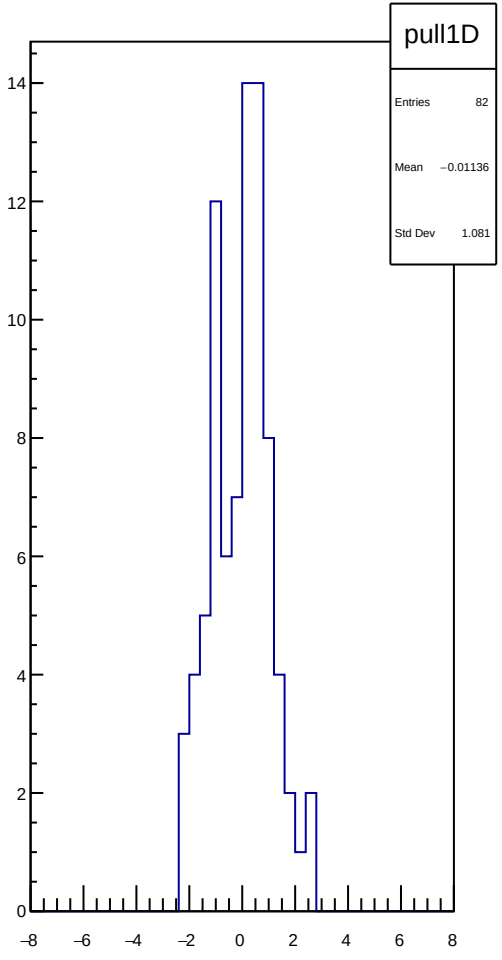

diff_cav4bY_rms vs run
χ² / ndf 1.036e+04 / 81
p0 3889 ± 3.09
4800
4600
4400
4200
4000
3800
3600
3400
3200
3000

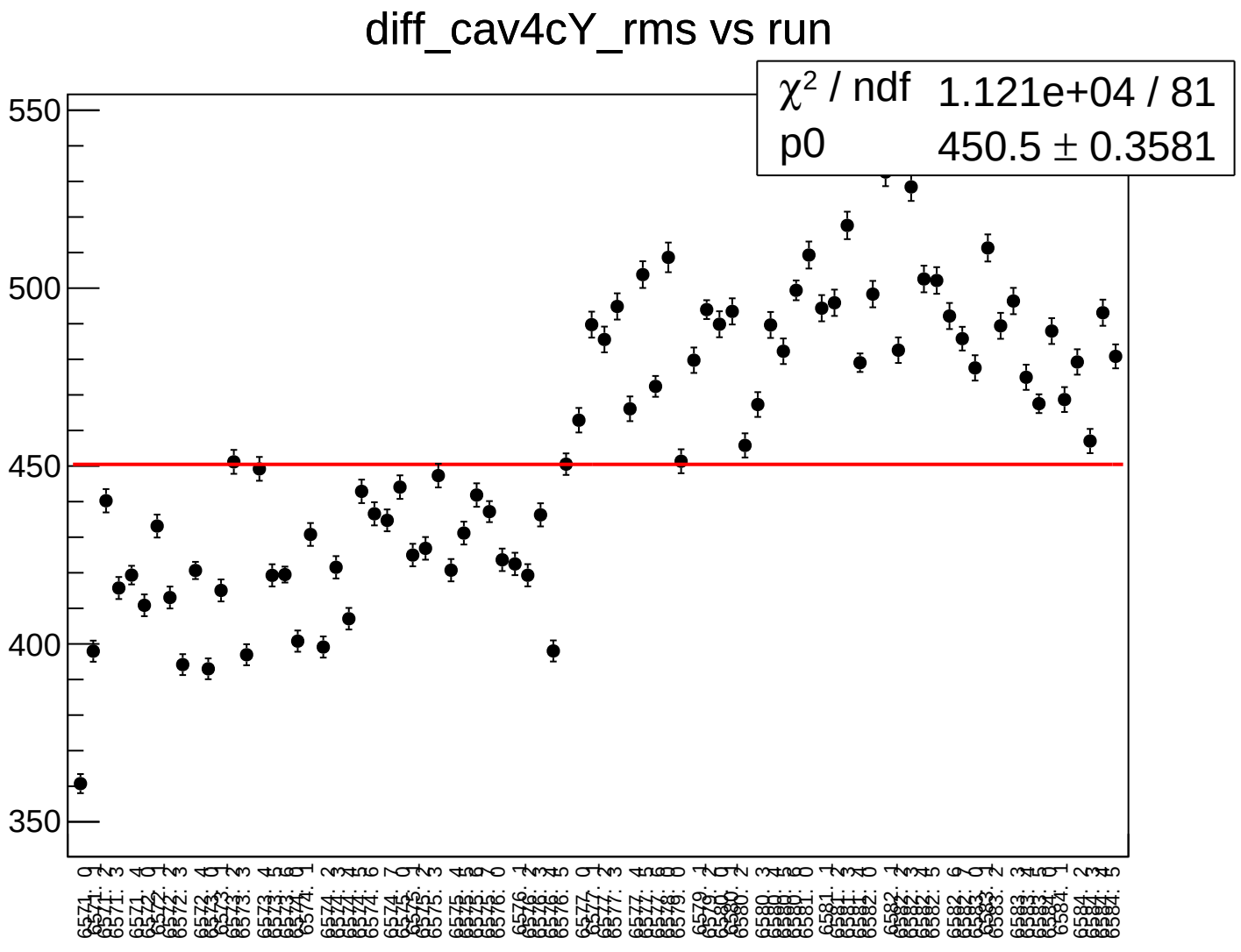

diff_cav4cX_mean vs run
χ² / ndf 91.75 / 81
p0 −1.498 ± 0.6952
pull
Entries 82
Mean 498.3
Std Dev 459.6

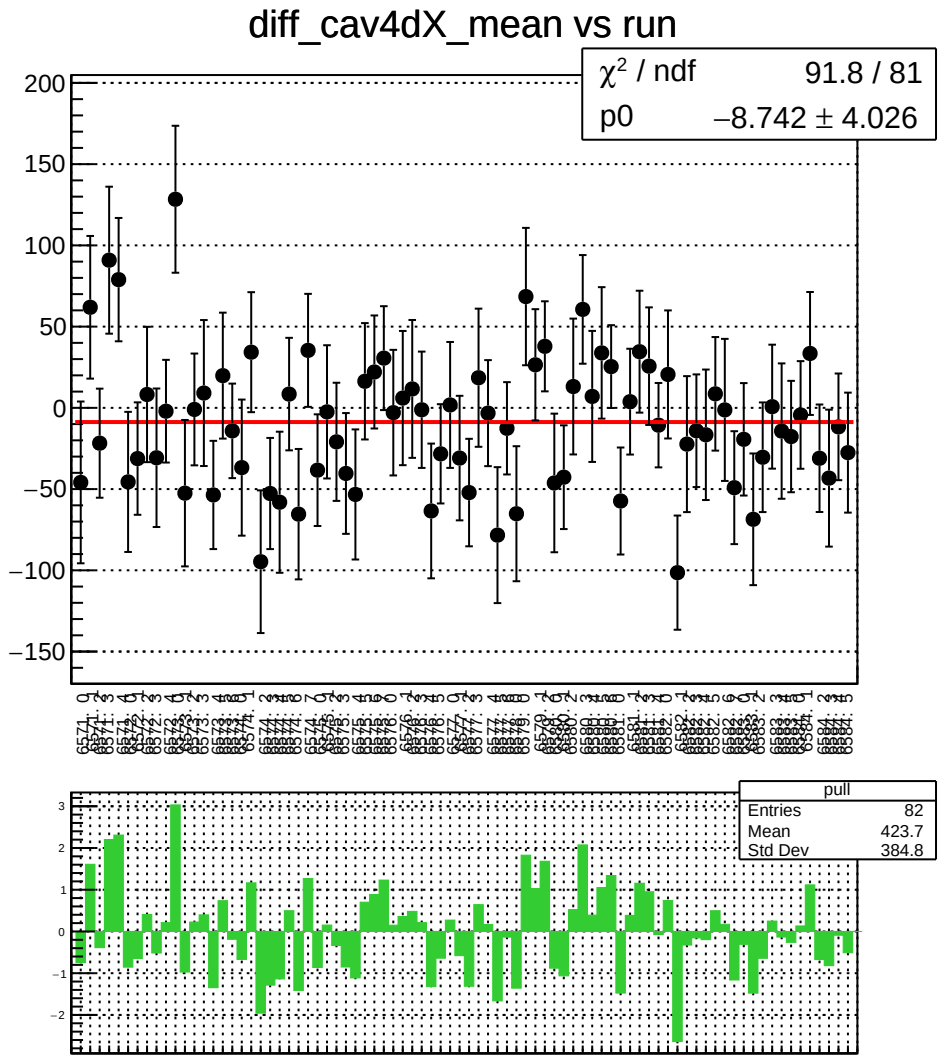

pull1D
Entries 82
Mean −0.005675
Std Dev 1.058

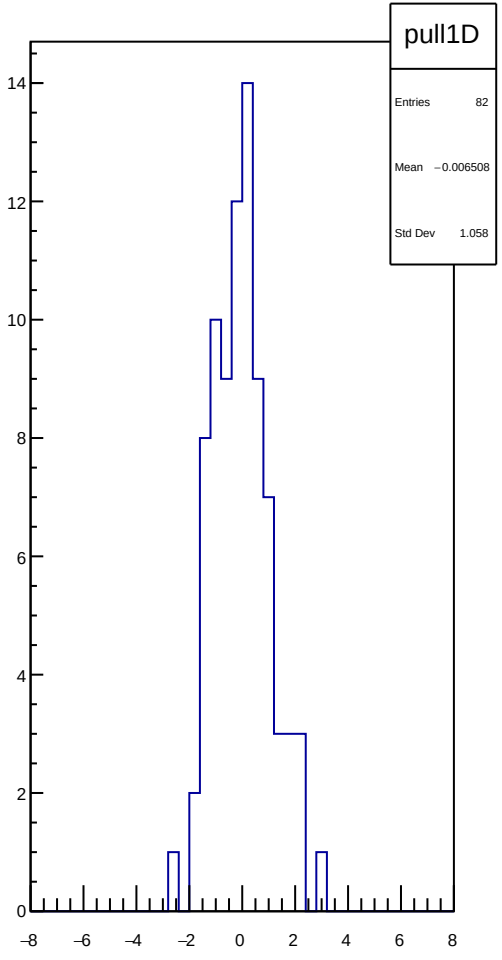

diff_cav4cX_rms vs run
χ² / ndf 1.713e+04 / 81
p0 617.2 ± 0.4916
850
800
750
700
650
600
550
500

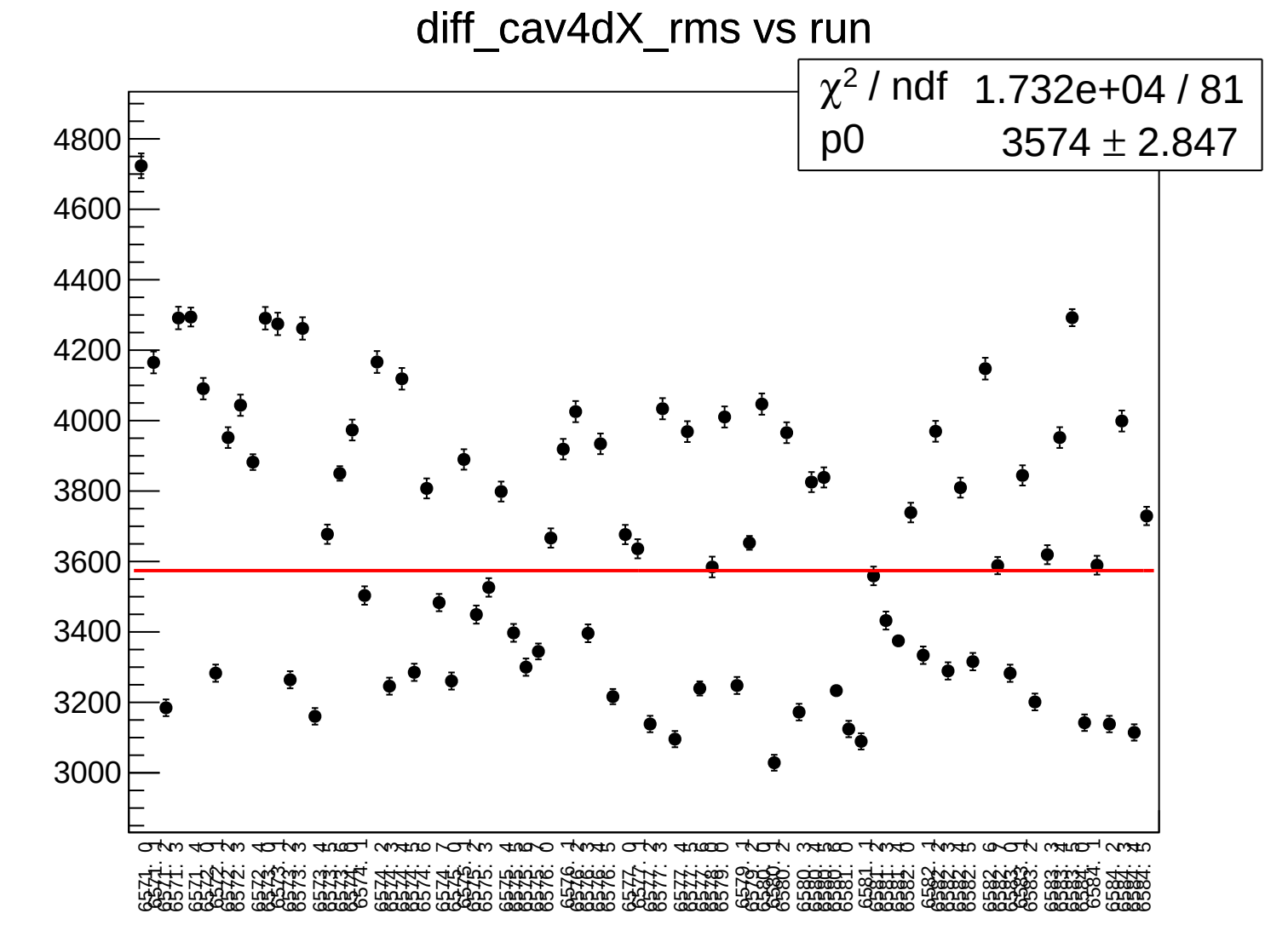

diff_cav4cY_mean vs run
χ² / ndf 95.75 / 81
p0 −0.5429 ± 0.5064
pull
Entries 82
Mean 230.3
Std Dev 179.4

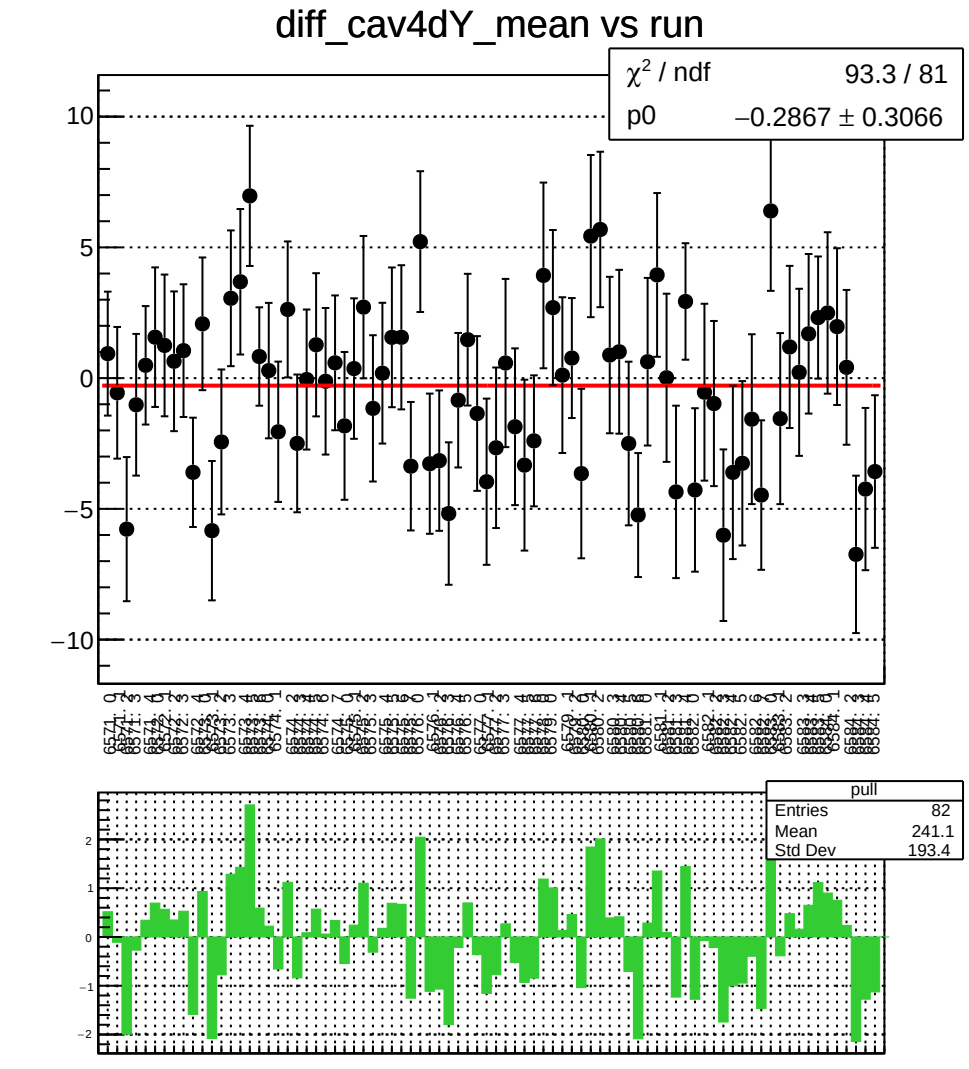

pull1D
Entries 82
Mean −0.01136
Std Dev 1.081

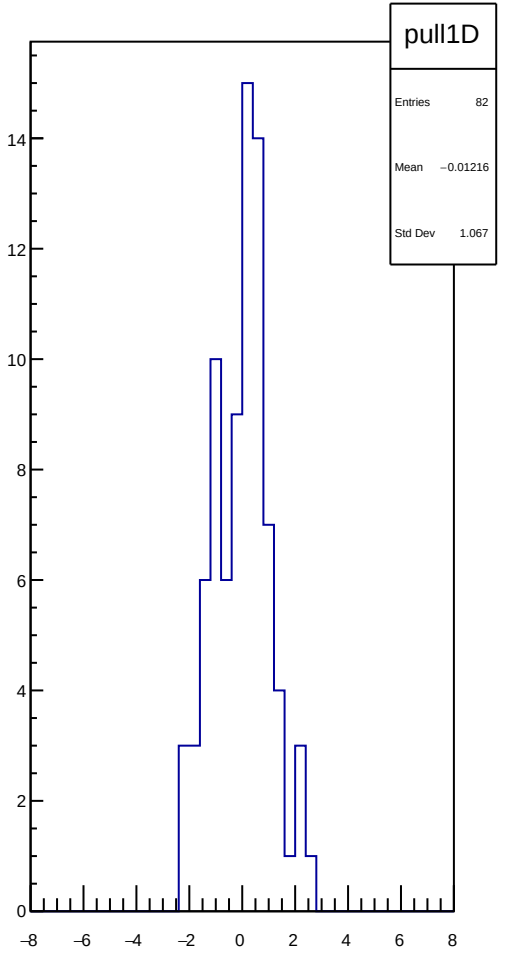

diff_cav4cY_rms vs run
χ² / ndf 1.121e+04 / 81
p0 450.5 ± 0.3581
550
500
450
400
350

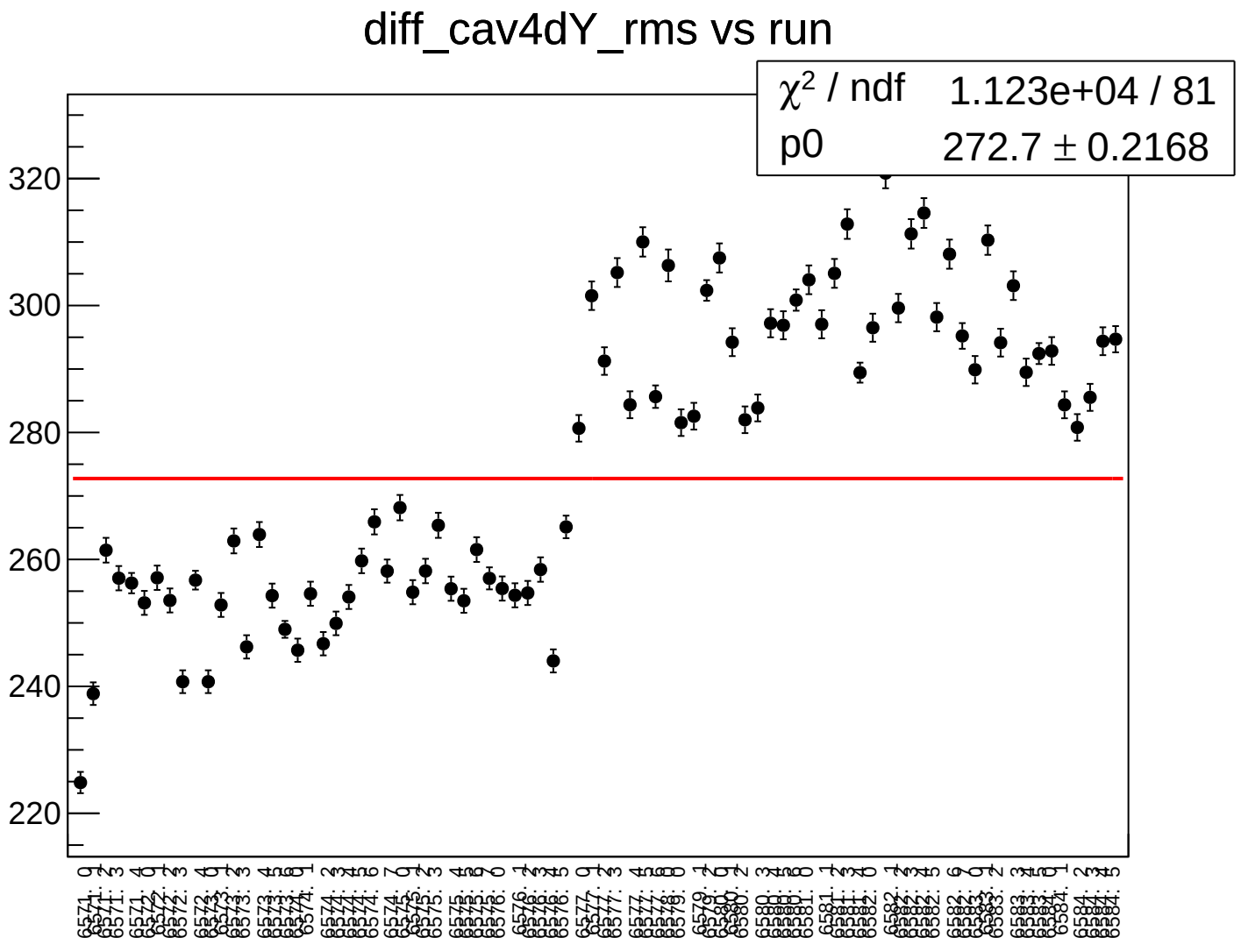

diff_cav4dX_mean vs run
χ² / ndf 91.8 / 81
p0 −8.742 ± 4.026
pull
Entries 82
Mean 423.7
Std Dev 384.8

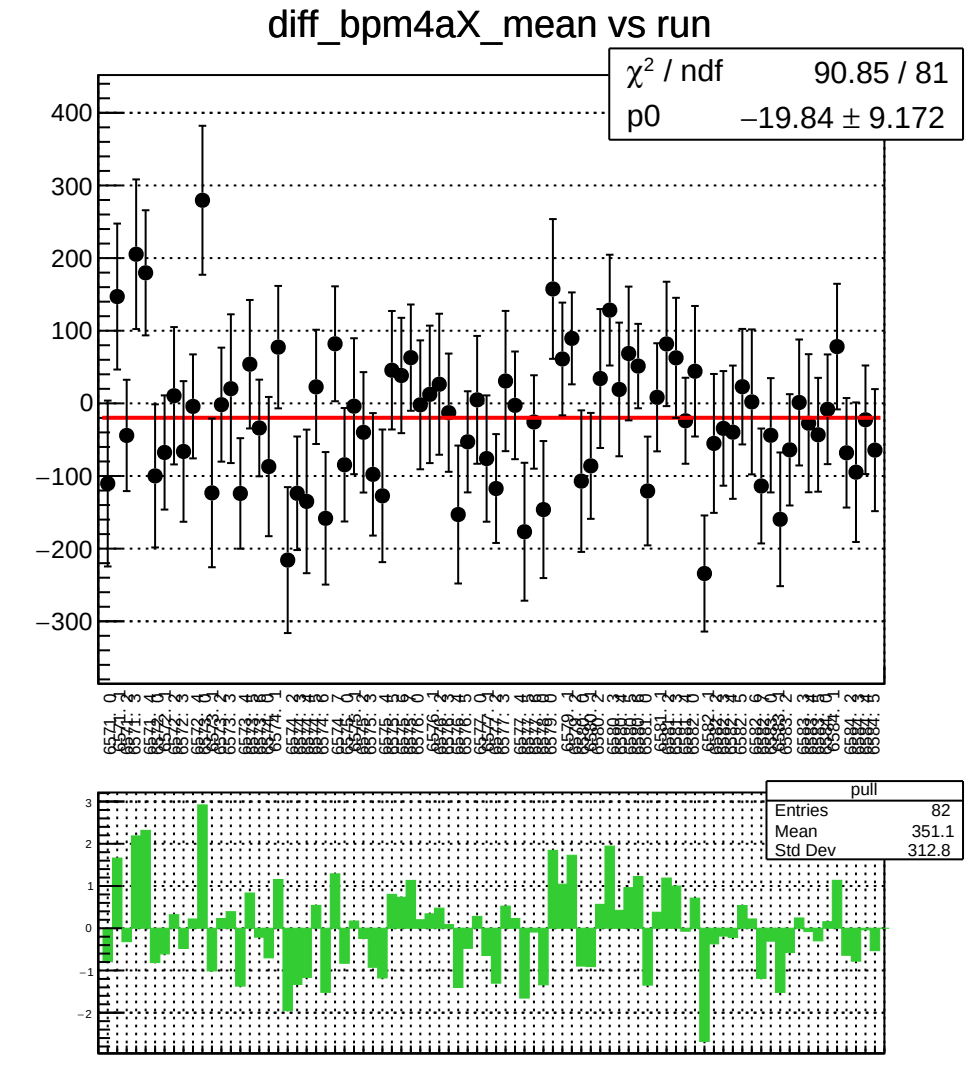

pull1D
Entries 82
Mean −0.006508
Std Dev 1.058

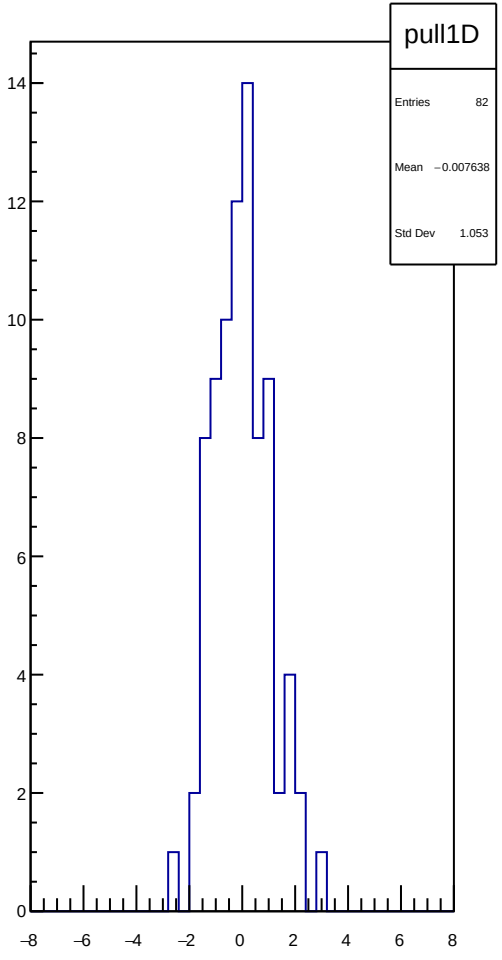

diff_cav4dX_rms vs run
χ² / ndf 1.732e+04 / 81
p0 3574 ± 2.847
4800
4600
4400
4200
4000
3800
3600
3400
3200
3000

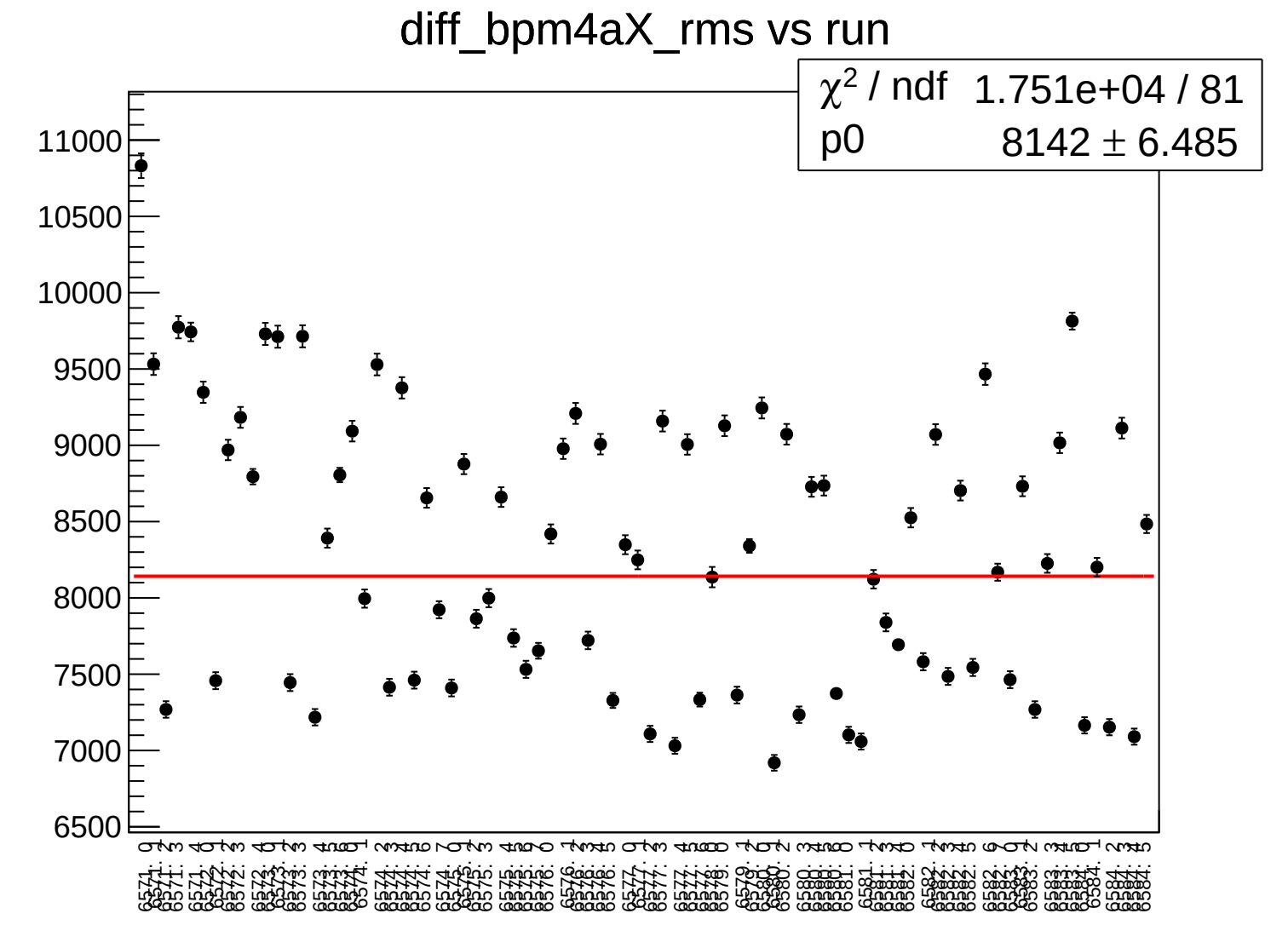

diff_cav4dY_mean vs run
χ² / ndf 93.3 / 81
p0 −0.2867 ± 0.3066
10
5
0
−5
−10
pull
Entries 82
Mean 241.1
Std Dev 193.4
2
1
0
−1
−2

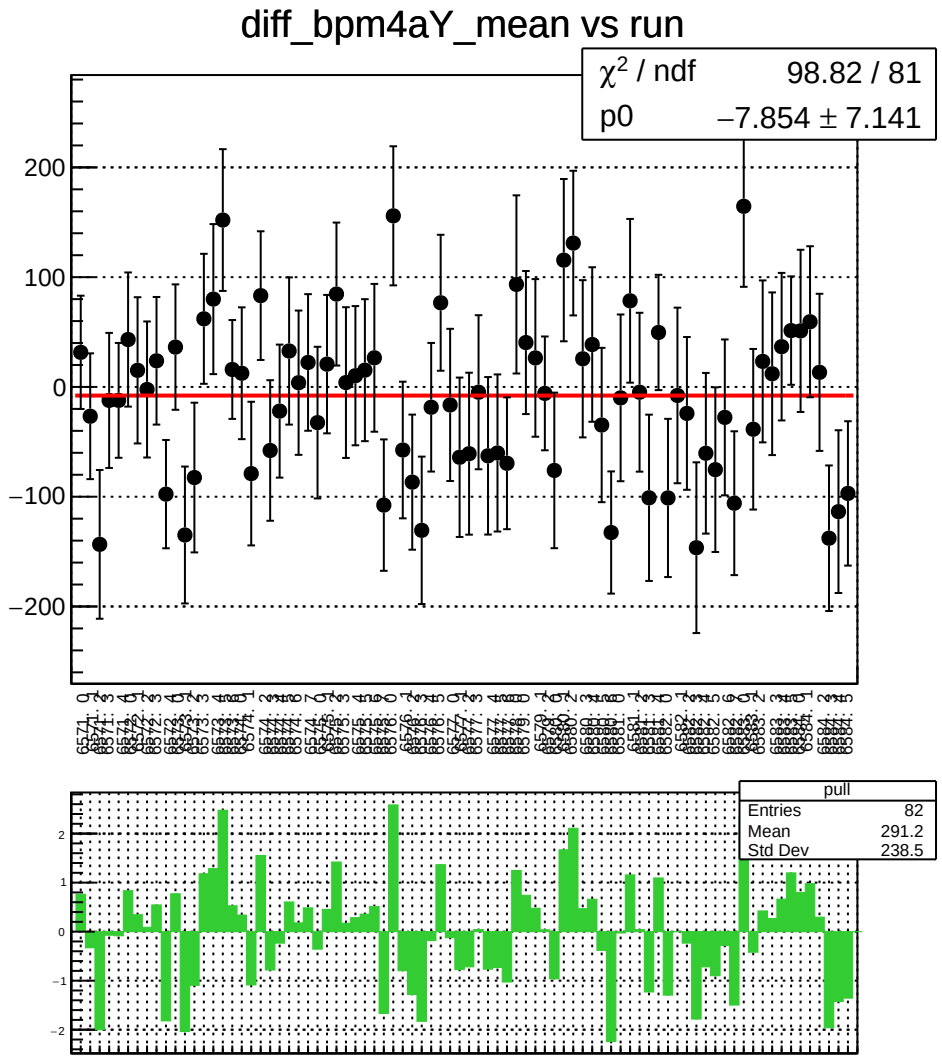

pull1D
Entries 82
Mean −0.01216
Std Dev 1.067
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

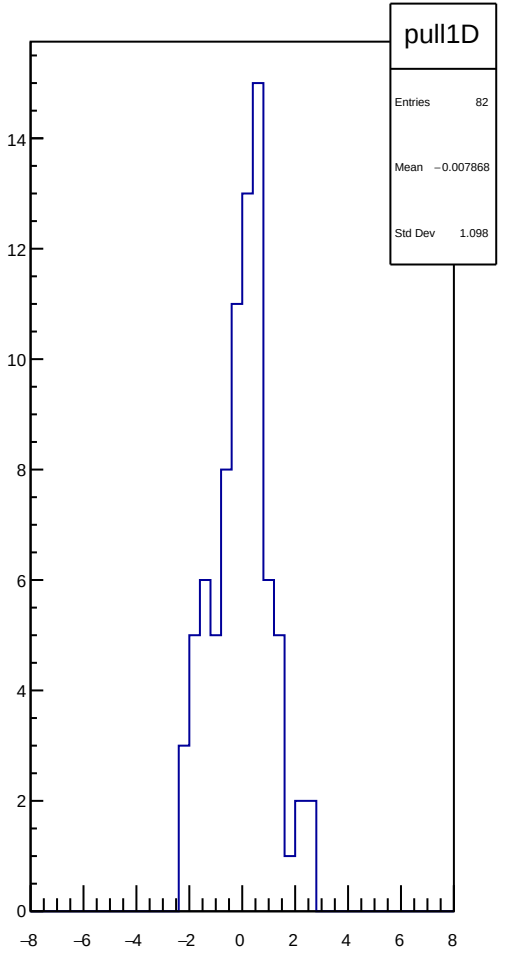

diff_cav4dY_rms vs run
χ² / ndf 1.123e+04 / 81
p0 272.7 ± 0.2168
320
300
280
260
240
220

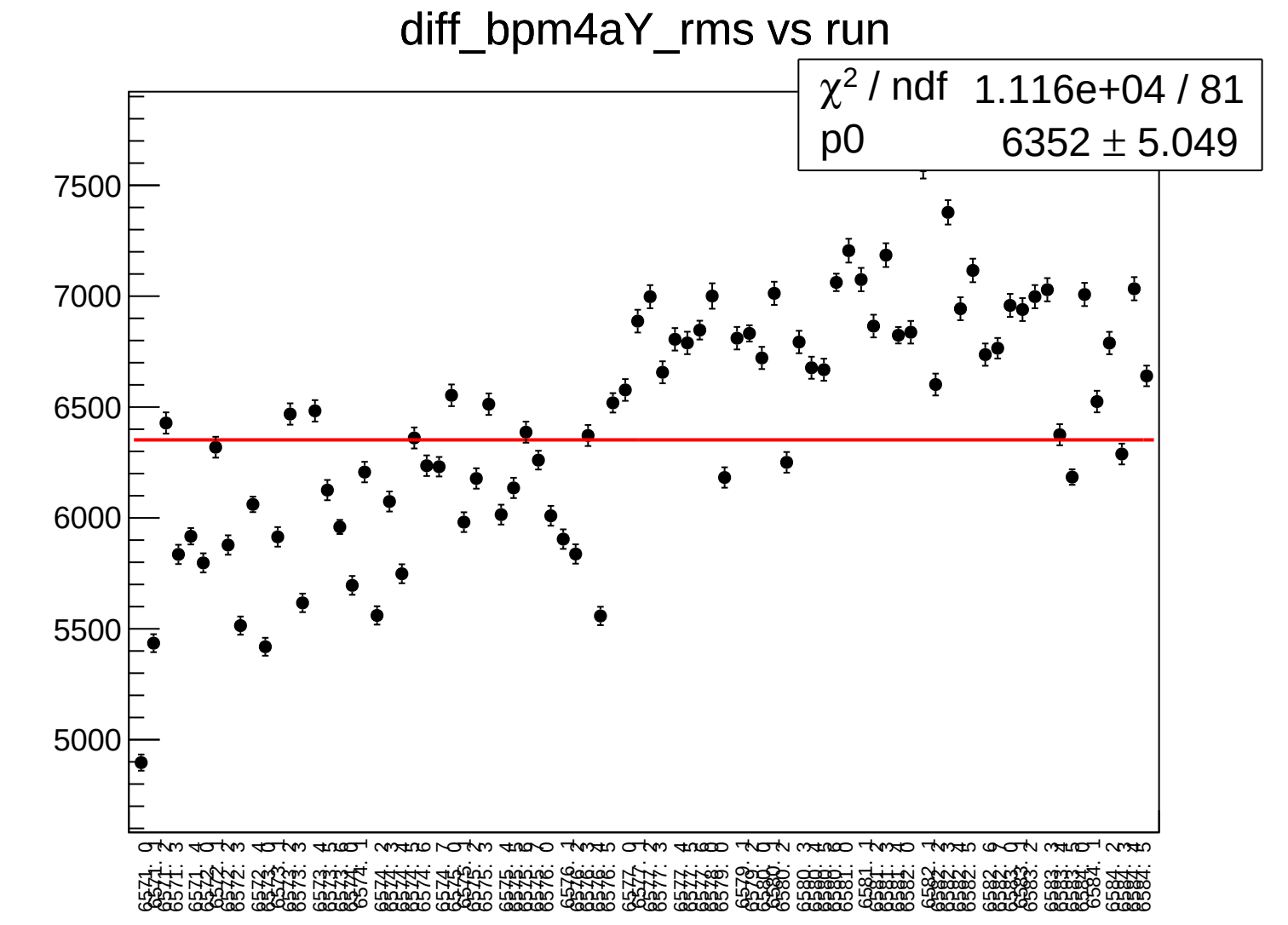

diff_bpm4aX_mean vs run
χ² / ndf 90.85 / 81
p0 −19.84 ± 9.172
pull
Entries 82
Mean 351.1
Std Dev 312.8

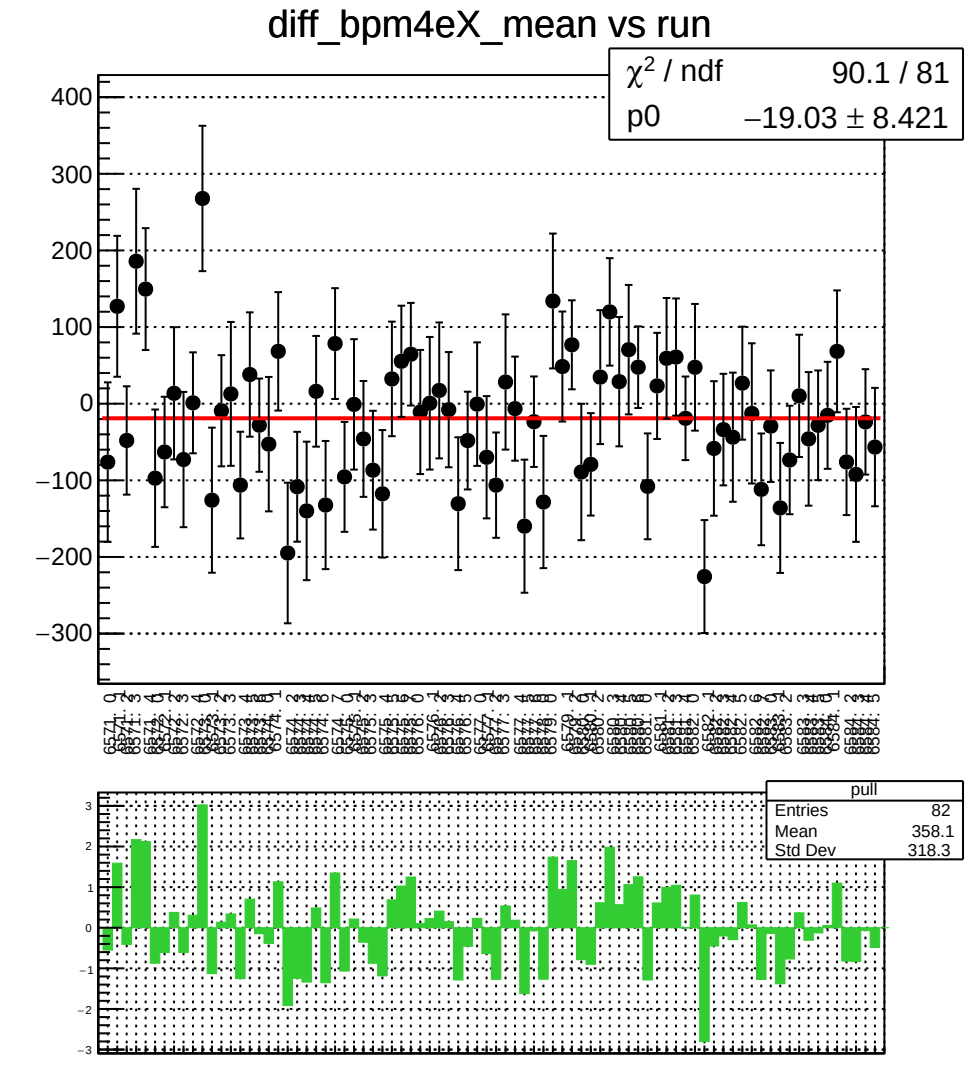

pull1D
Entries 82
Mean −0.007638
Std Dev 1.053

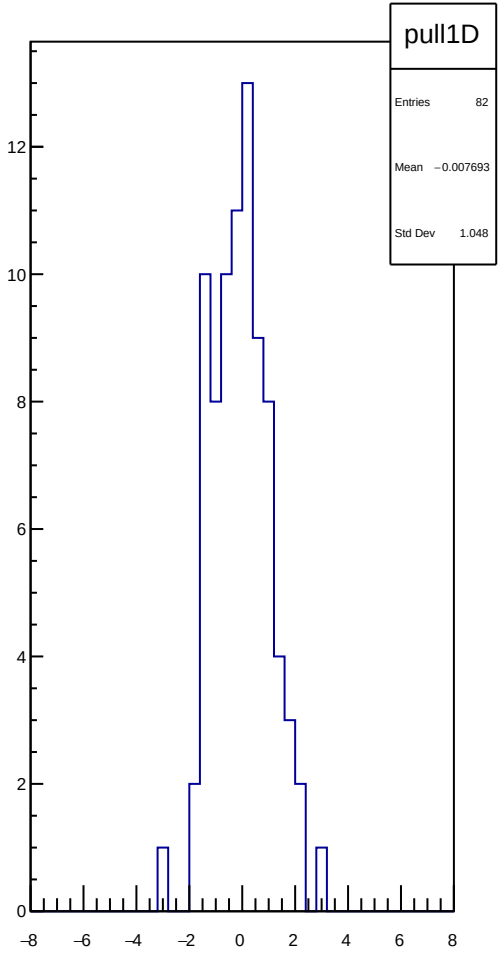

diff_bpm4aX_rms vs run
χ² / ndf 1.751e+04 / 81
p0 8142 ± 6.485
11000
10500
10000
9500
9000
8500
8000
7500
7000
6500

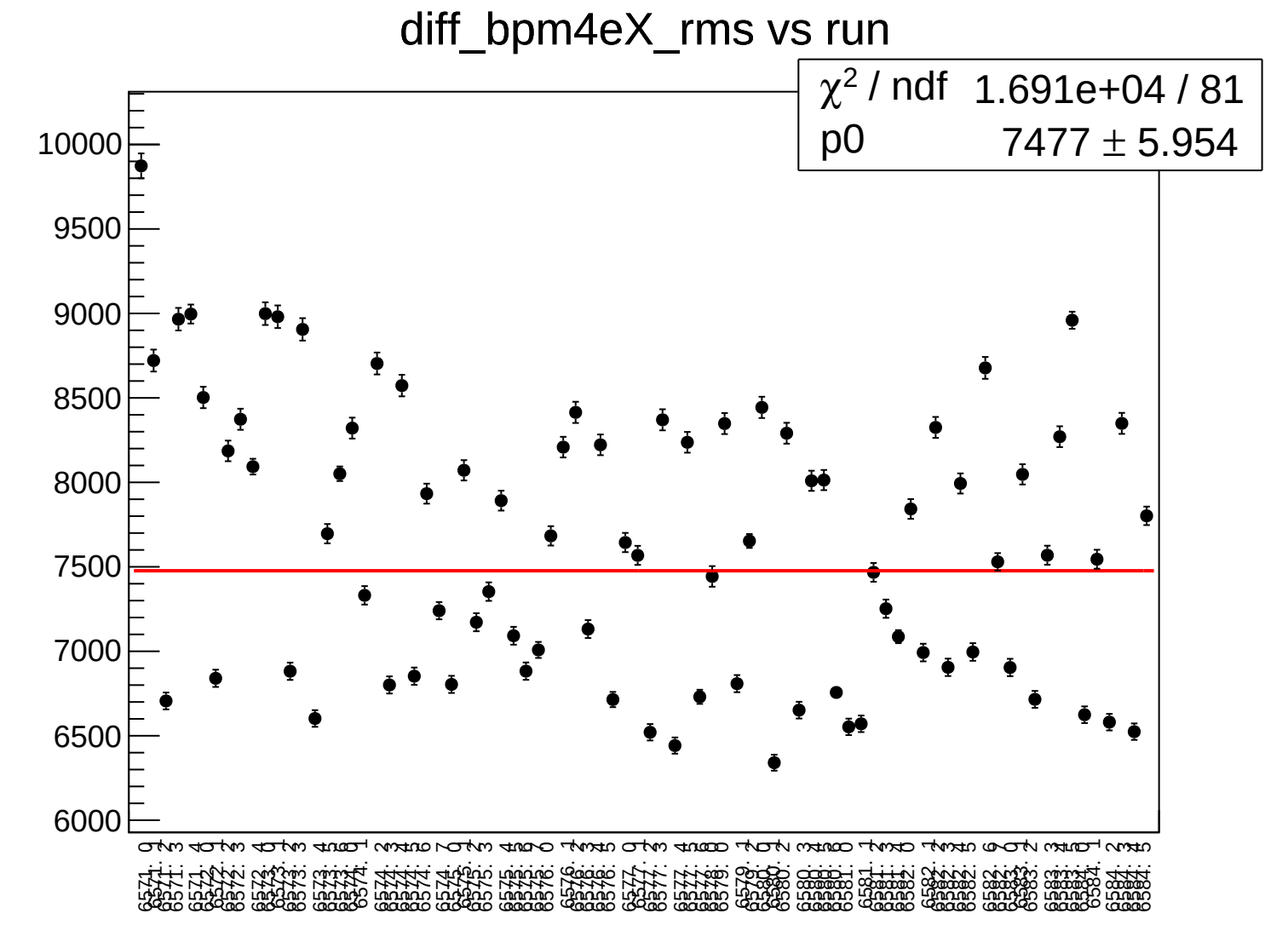

diff_bpm4aY_mean vs run
χ² / ndf 98.82 / 81
p0 −7.854 ± 7.141
200
100
0
−100
−200
pull
Entries 82
Mean 291.2
Std Dev 238.5
2
1
0
−1
−2

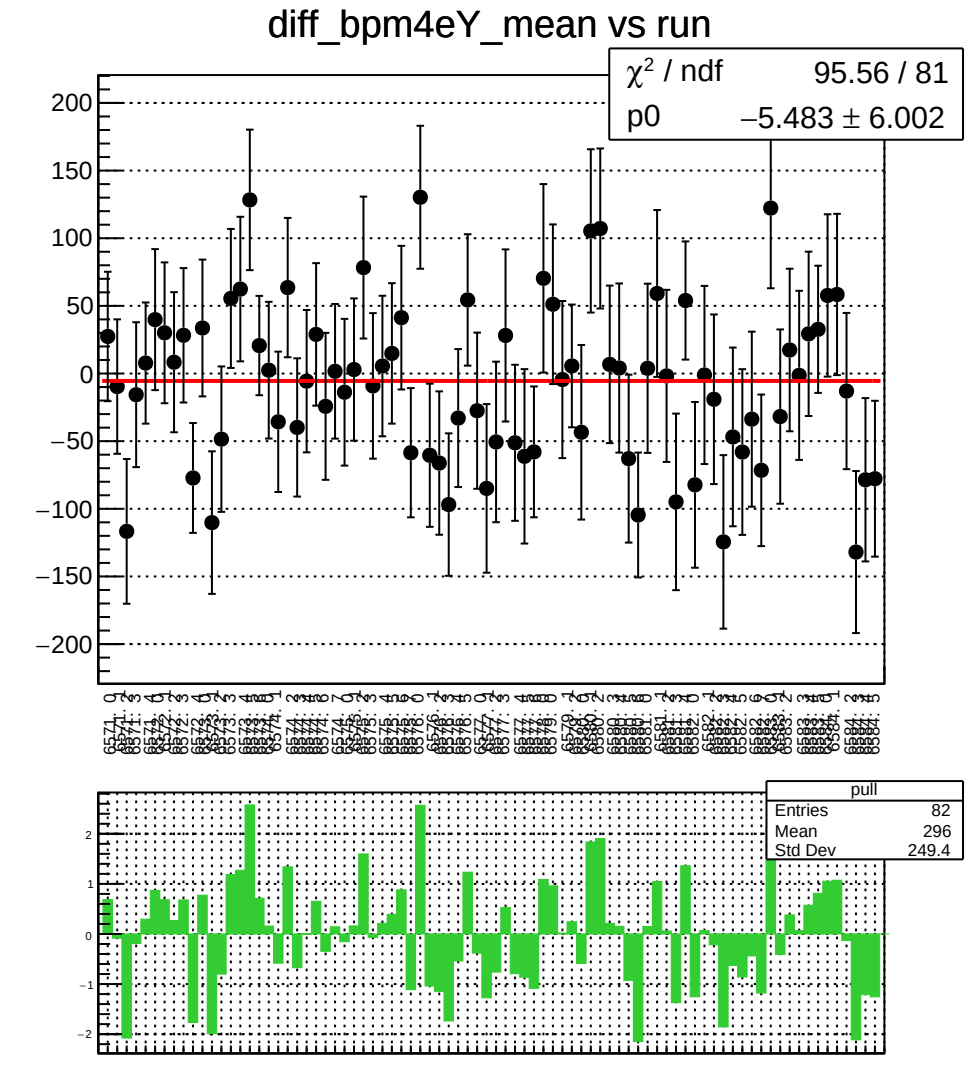

pull1D
Entries 82
Mean −0.007868
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

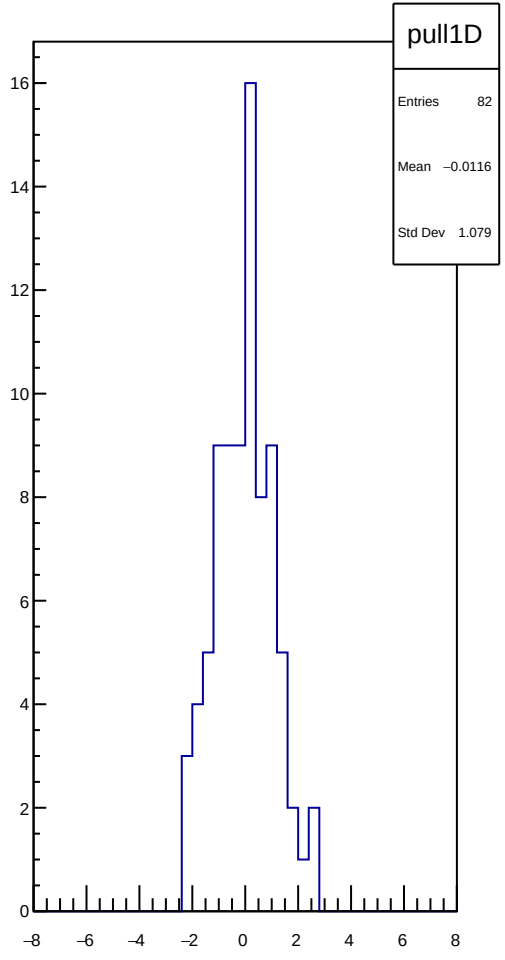

diff_bpm4aY_rms vs run
$\chi^2$ / ndf 1.116e+04 / 81
p0 6352 ± 5.049
7500
7000
6500
6000
5500
5000

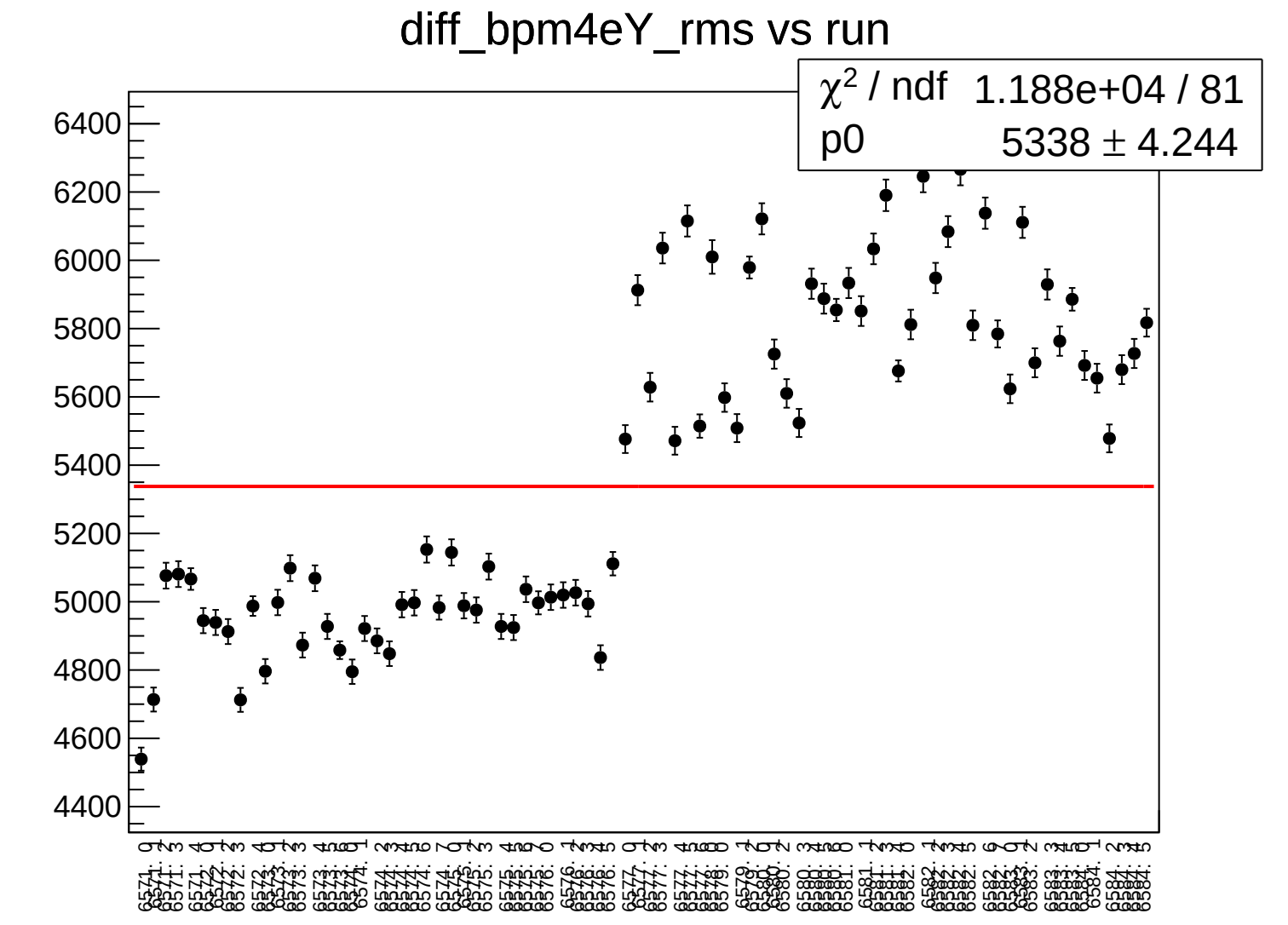

diff_bpm4eX_mean vs run
χ² / ndf 90.1 / 81
p0 −19.03 ± 8.421
pull
Entries 82
Mean 358.1
Std Dev 318.3

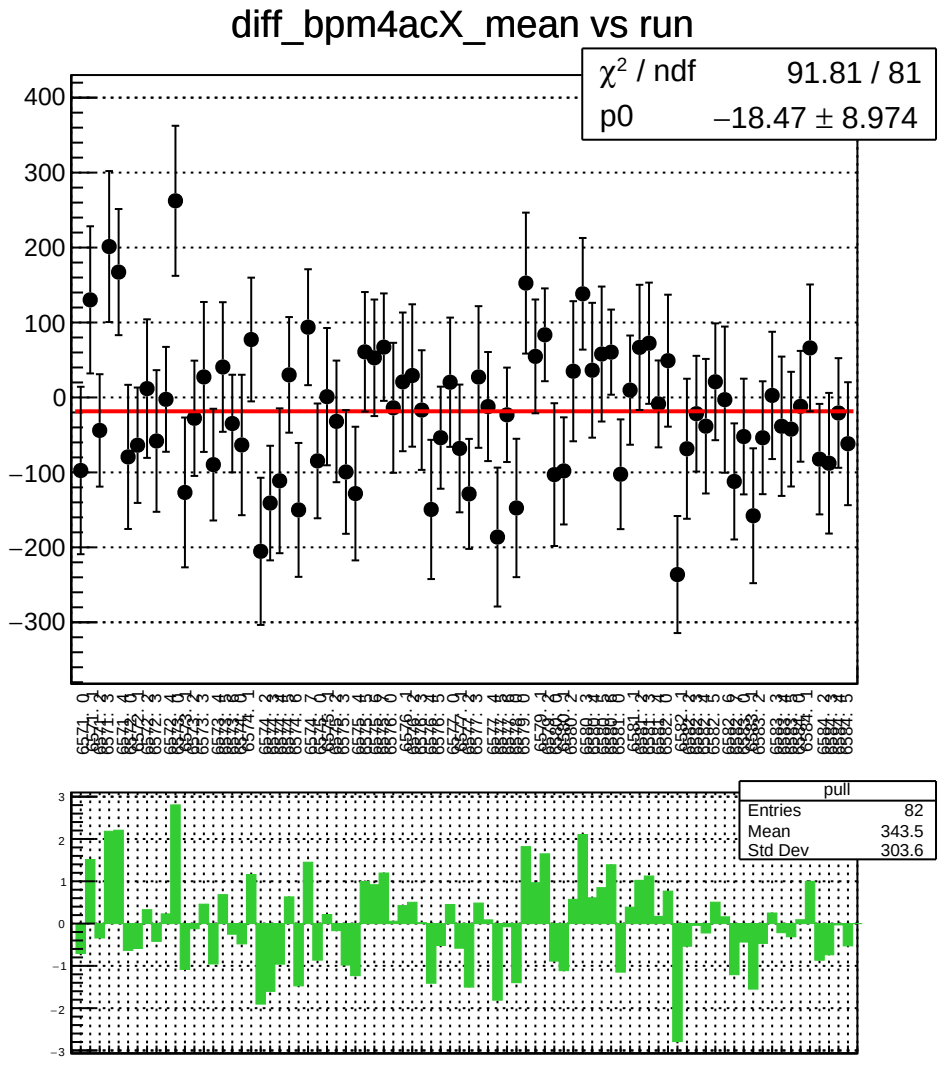

pull1D
Entries 82
Mean −0.007693
Std Dev 1.048

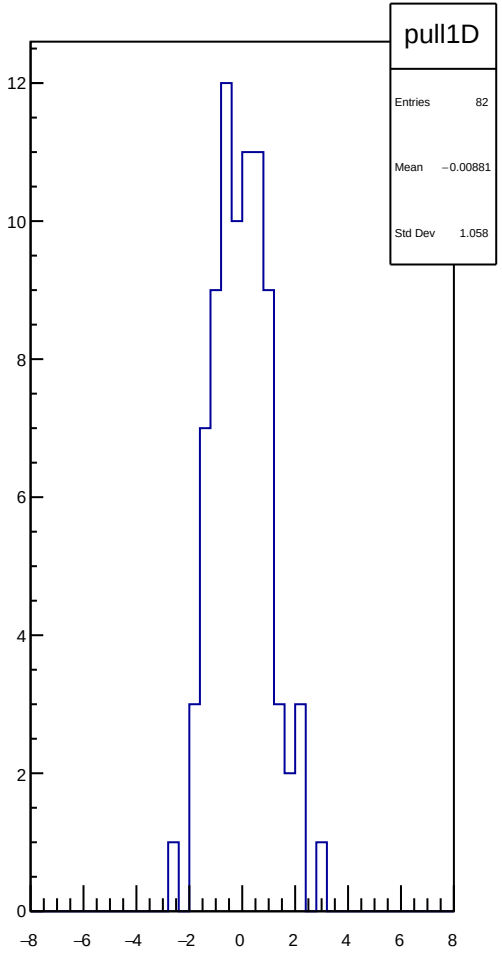

diff_bpm4eX_rms vs run
χ² / ndf 1.691e+04 / 81
p0 7477 ± 5.954
10000
9500
9000
8500
8000
7500
7000
6500
6000

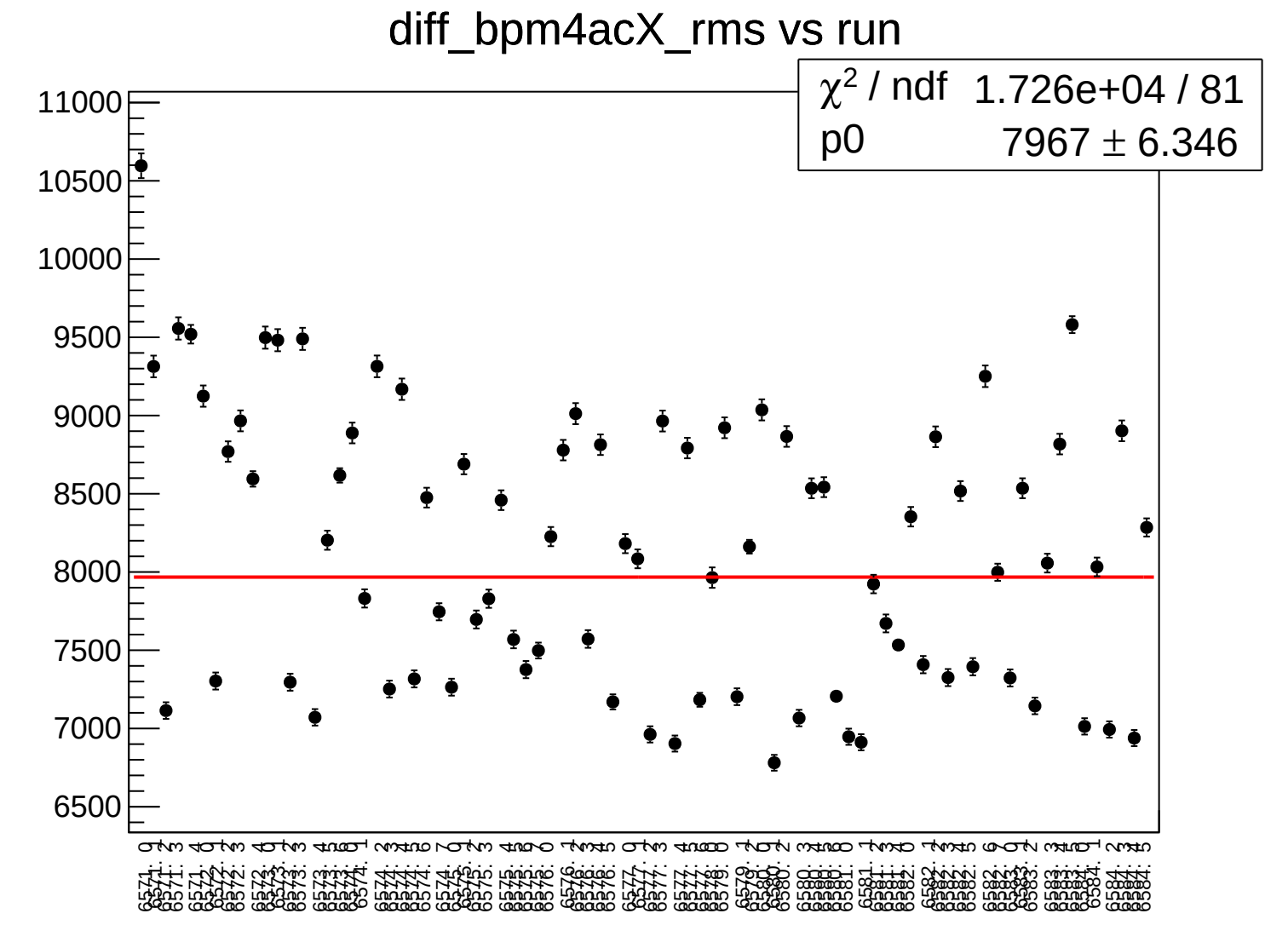

diff_bpm4eY_mean vs run
χ² / ndf 95.56 / 81
p0 −5.483 ± 6.002
200
150
100
50
0
−50
−100
−150
−200
pull
Entries 82
Mean 296
Std Dev 249.4
2
1
0
−1
−2

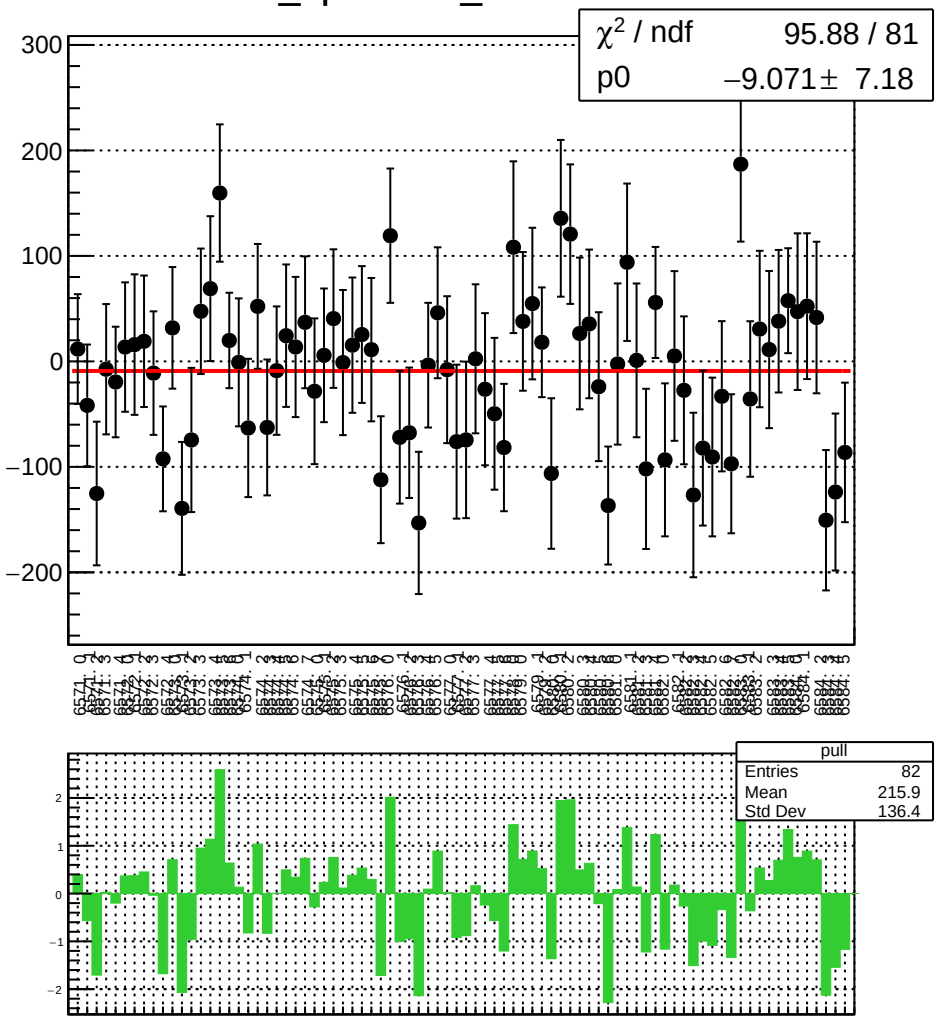

pull1D
Entries 82
Mean −0.0116
Std Dev 1.079
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

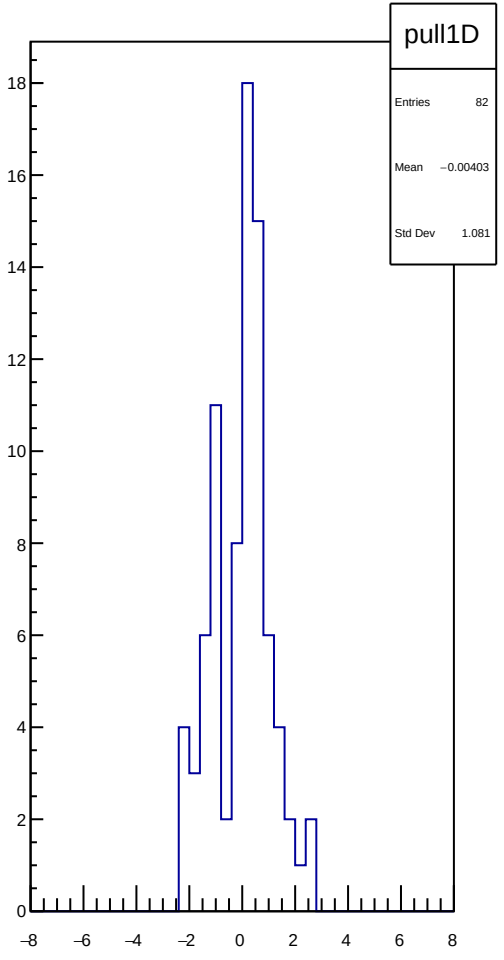

diff_bpm4eY_rms vs run
$\chi^2$ / ndf 1.188e+04 / 81
p0 5338 ± 4.244
6400
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400

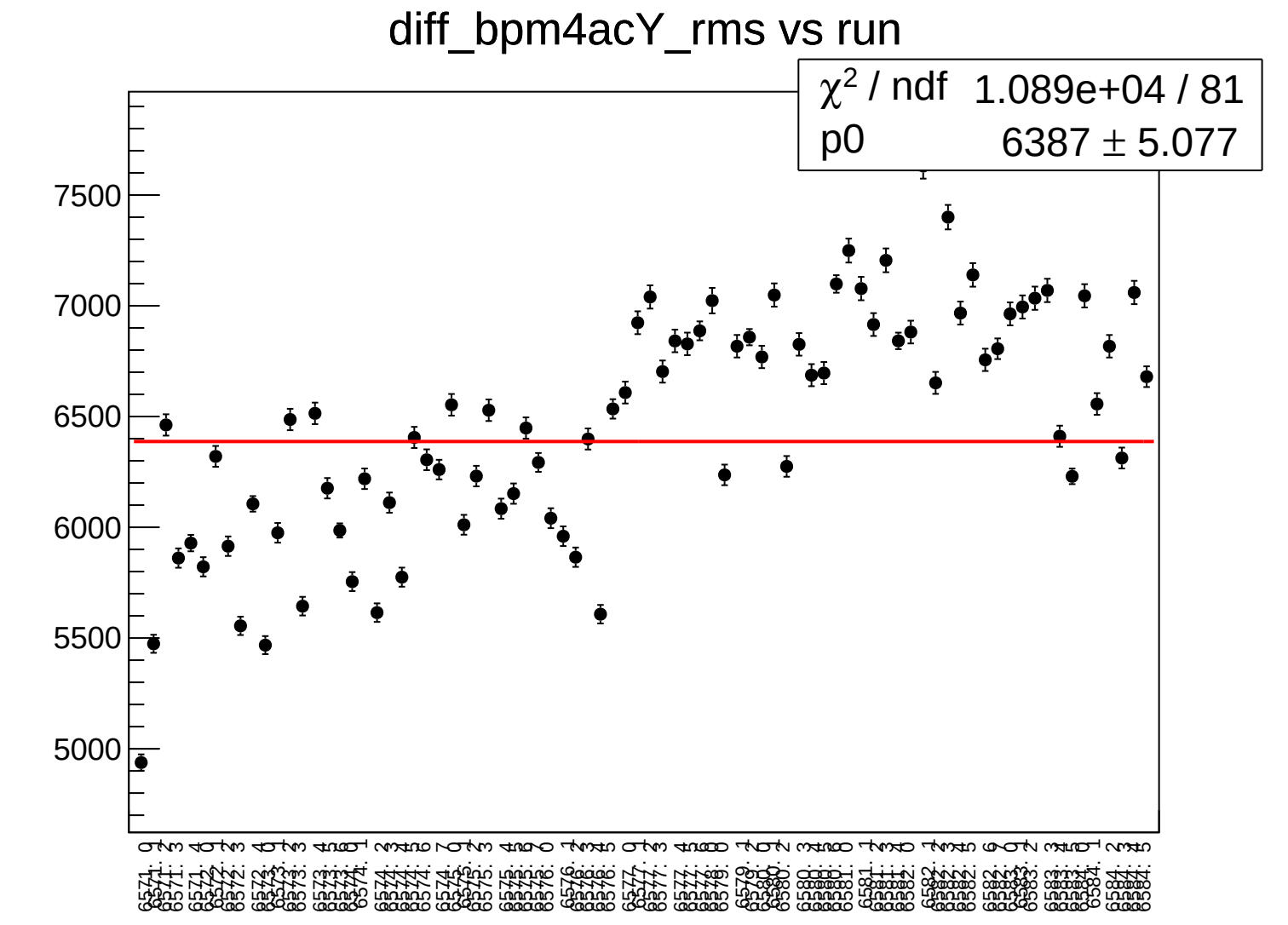

diff_bpm4acX_mean vs run
χ² / ndf 91.81 / 81
p0 −18.47 ± 8.974
pull
Entries 82
Mean 343.5
Std Dev 303.6

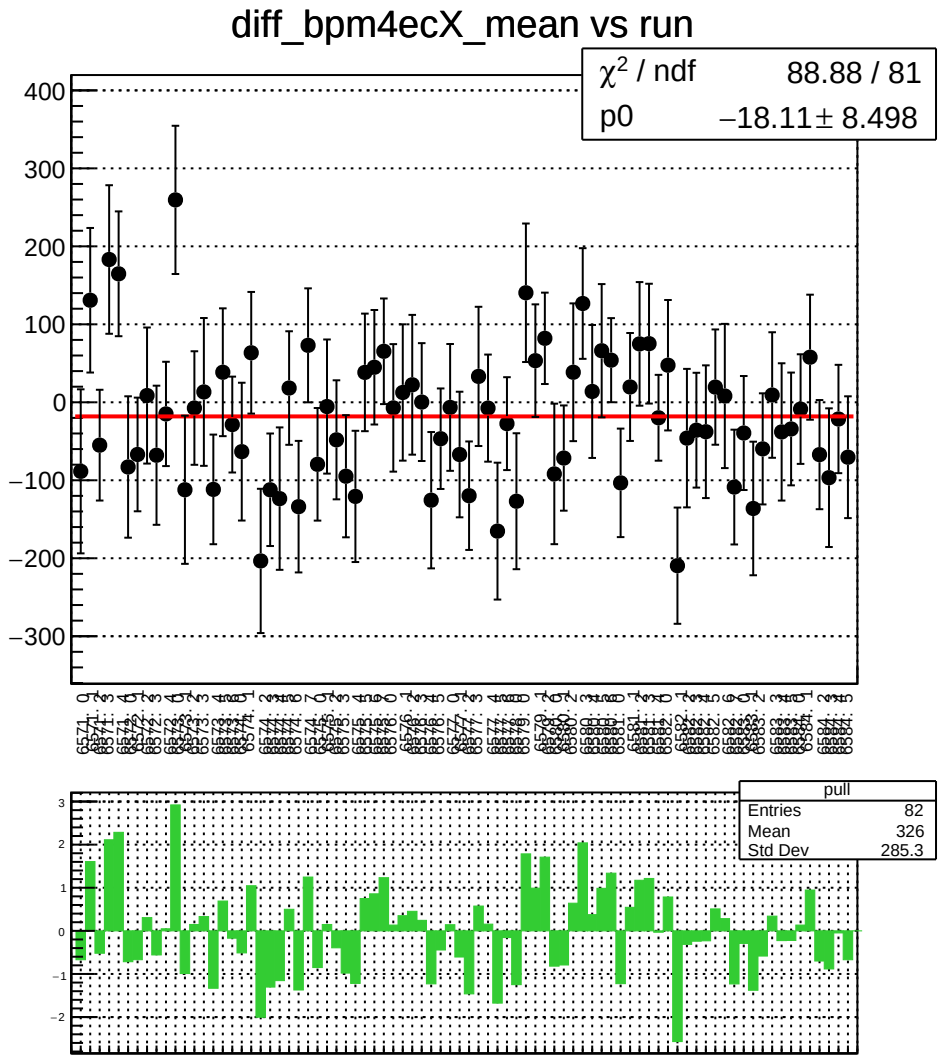

pull1D
Entries 82
Mean −0.00881
Std Dev 1.058

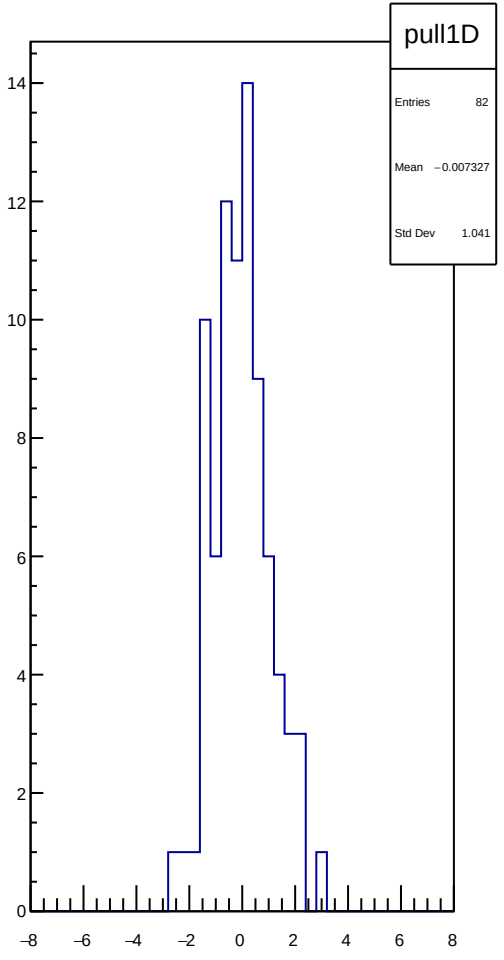

diff_bpm4acX_rms vs run
χ² / ndf 1.726e+04 / 81
p0 7967 ± 6.346
11000
10500
10000
9500
9000
8500
8000
7500
7000
6500

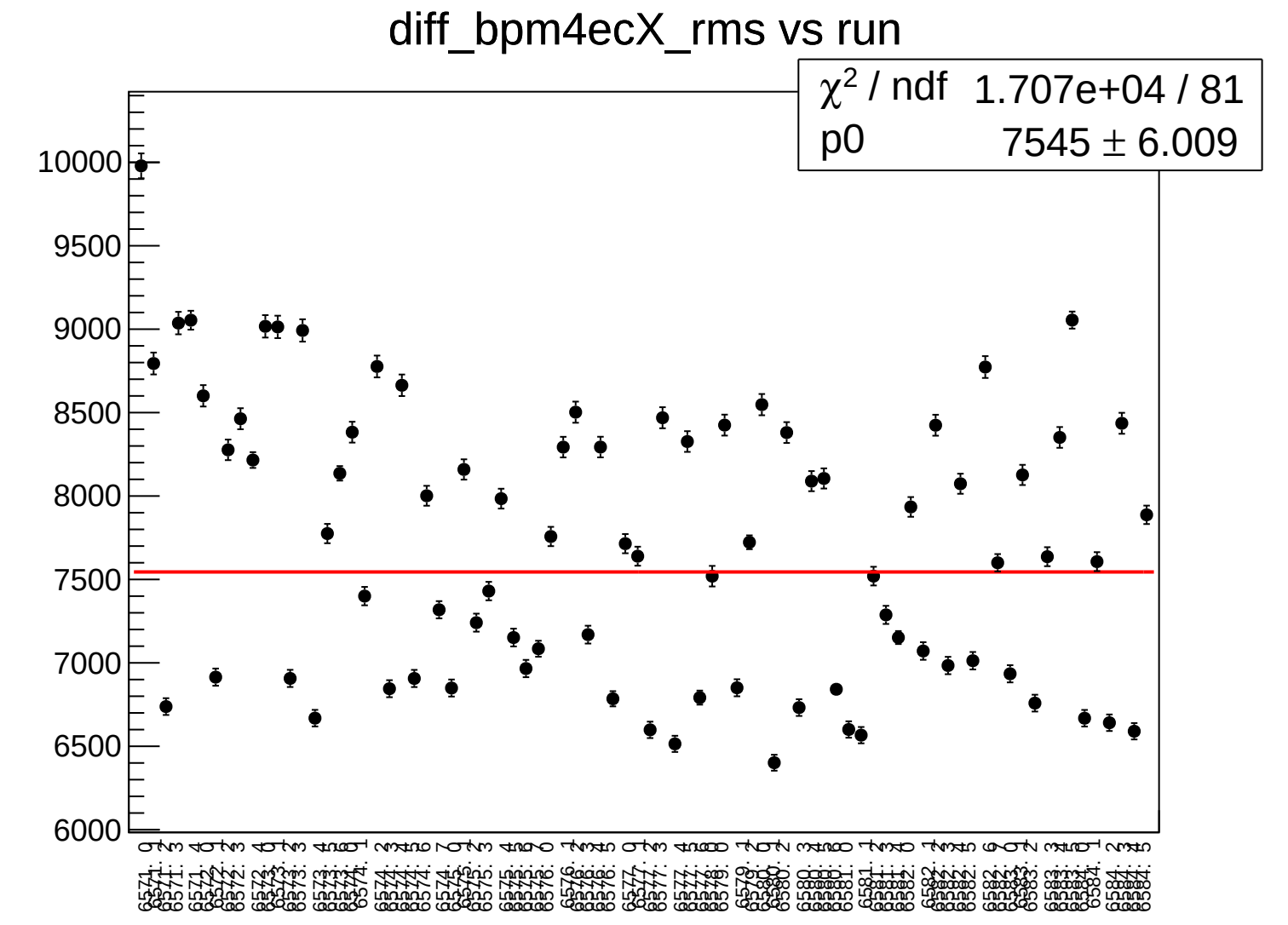

diff_bpm4acY_mean vs run
χ² / ndf 95.88 / 81
p0 −9.071± 7.18
pull
Entries 82
Mean 215.9
Std Dev 136.4

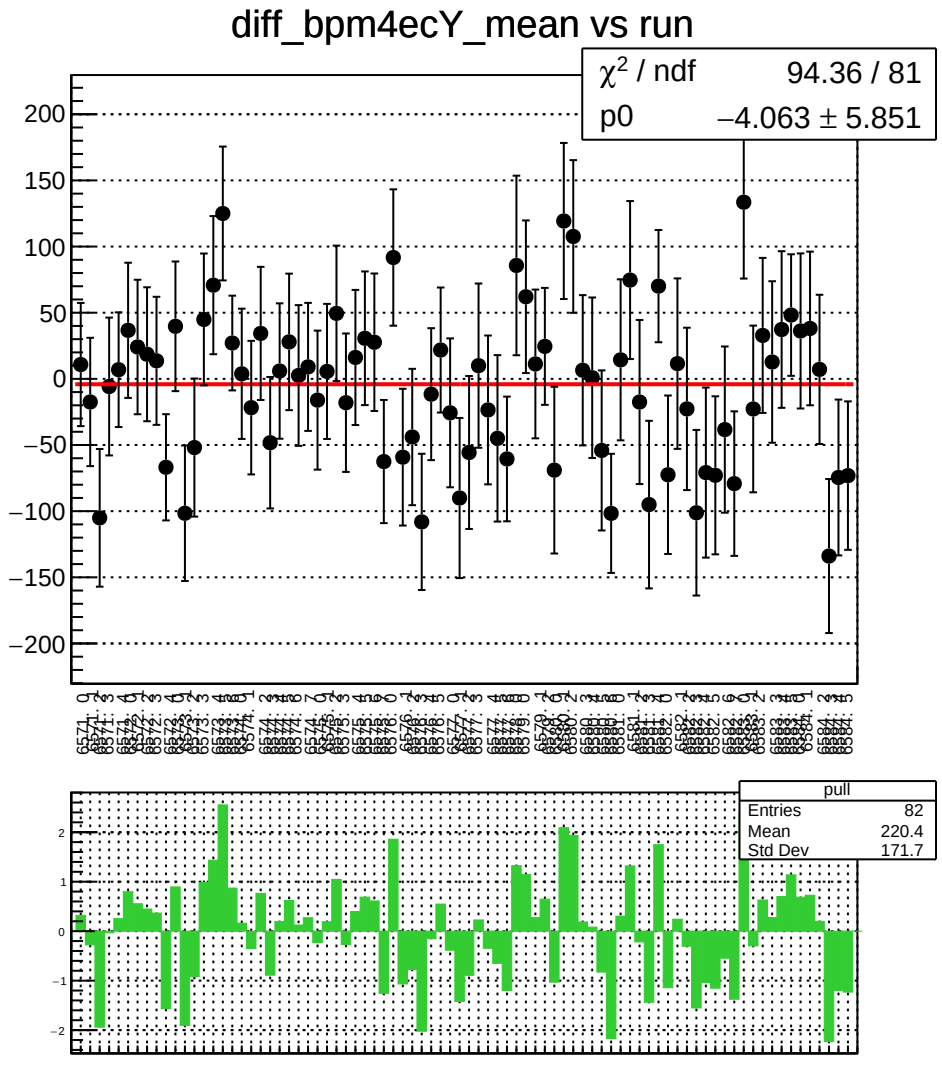

pull1D
Entries 82
Mean −0.00403
Std Dev 1.081

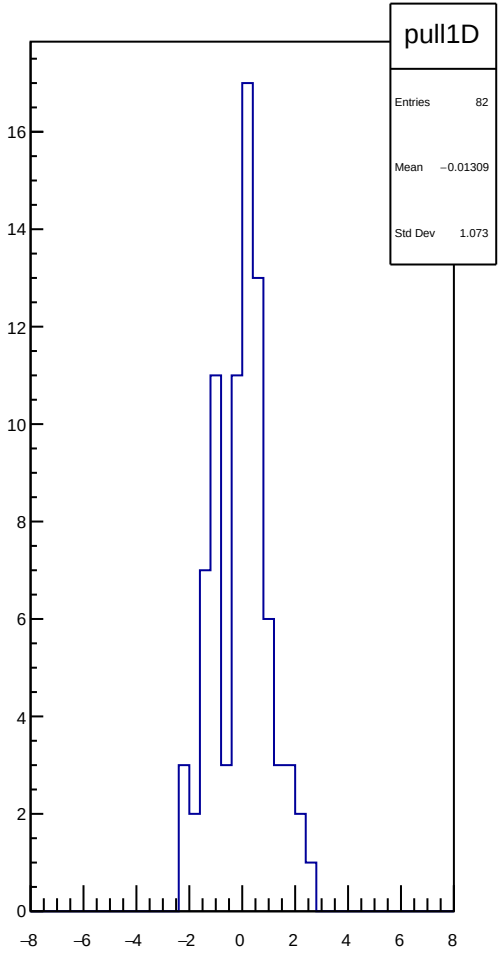

diff_bpm4acY_rms vs run
χ² / ndf 1.089e+04 / 81
p0 6387 ± 5.077
7500
7000
6500
6000
5500
5000

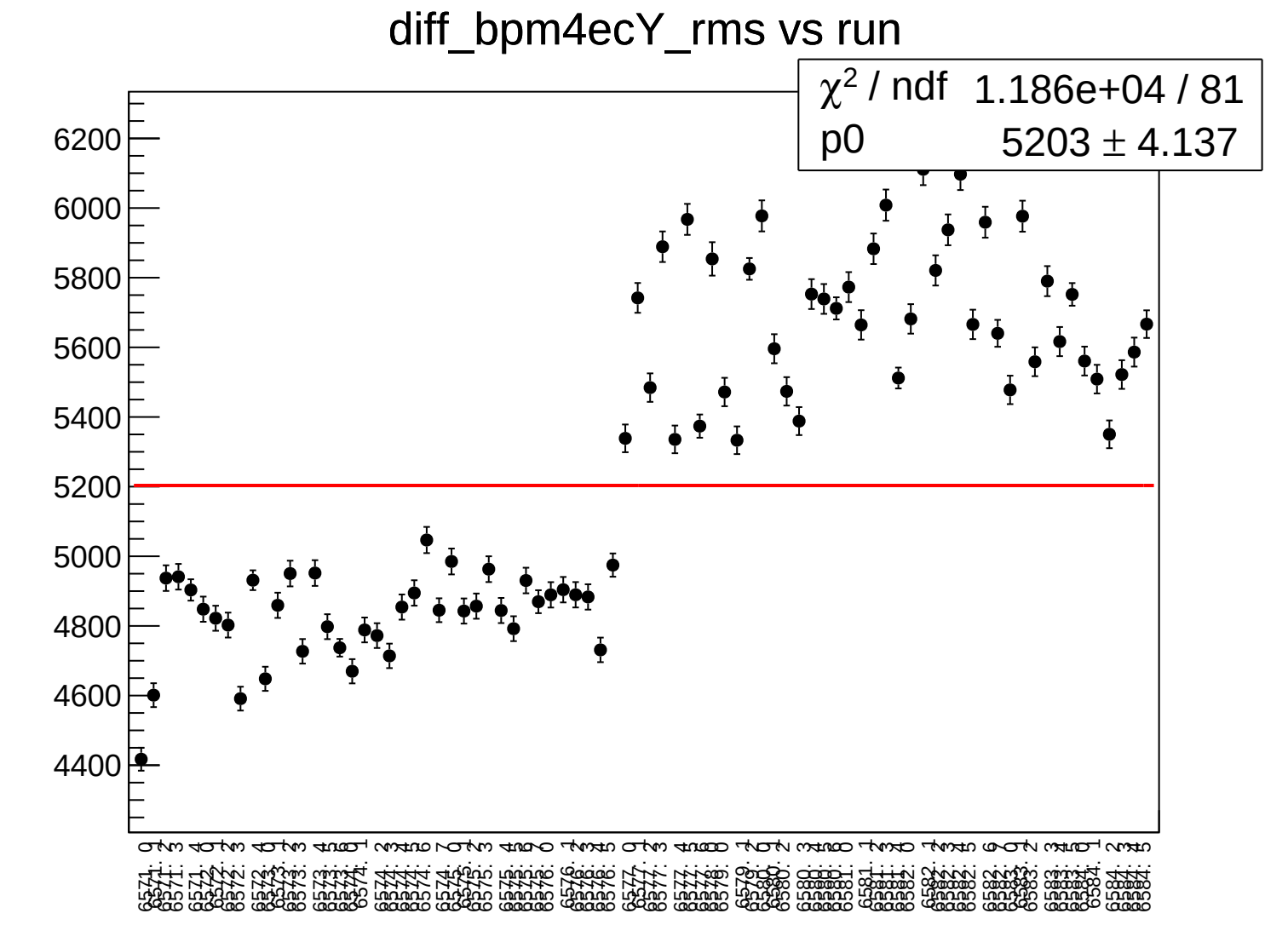

diff_bpm4ecX_mean vs run
χ² / ndf 88.88 / 81
p0 −18.11 ± 8.498
pull
Entries 82
Mean 326
Std Dev 285.3

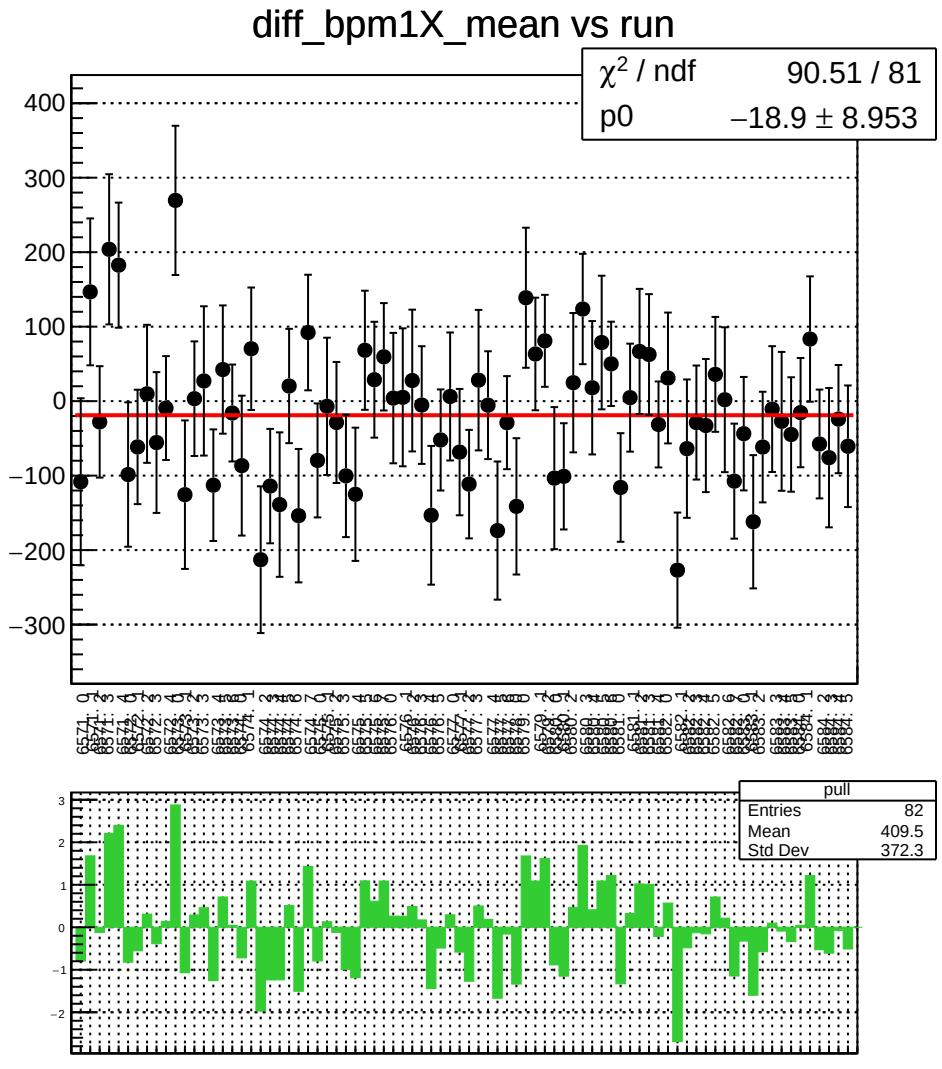

pull1D
Entries 82
Mean −0.007327
Std Dev 1.041

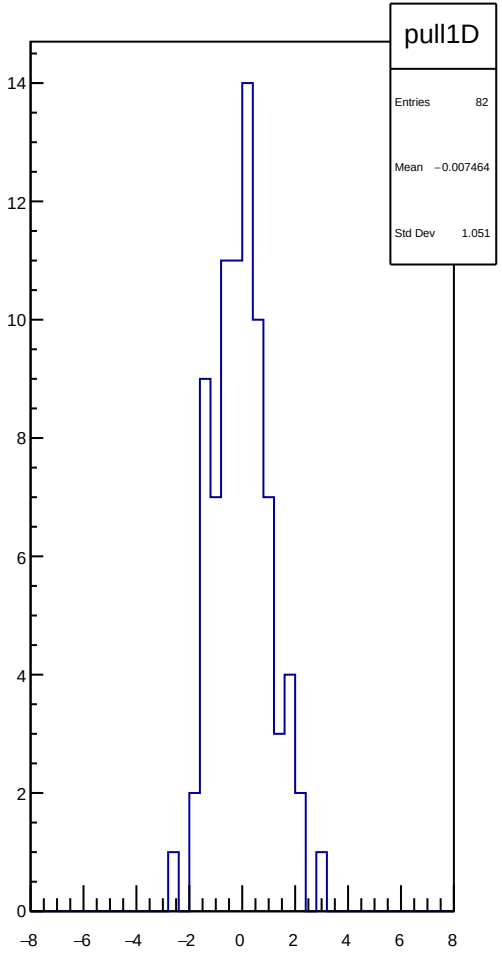

diff_bpm4ecX_rms vs run
χ² / ndf 1.707e+04 / 81
p0 7545 ± 6.009
10000
9500
9000
8500
8000
7500
7000
6500
6000

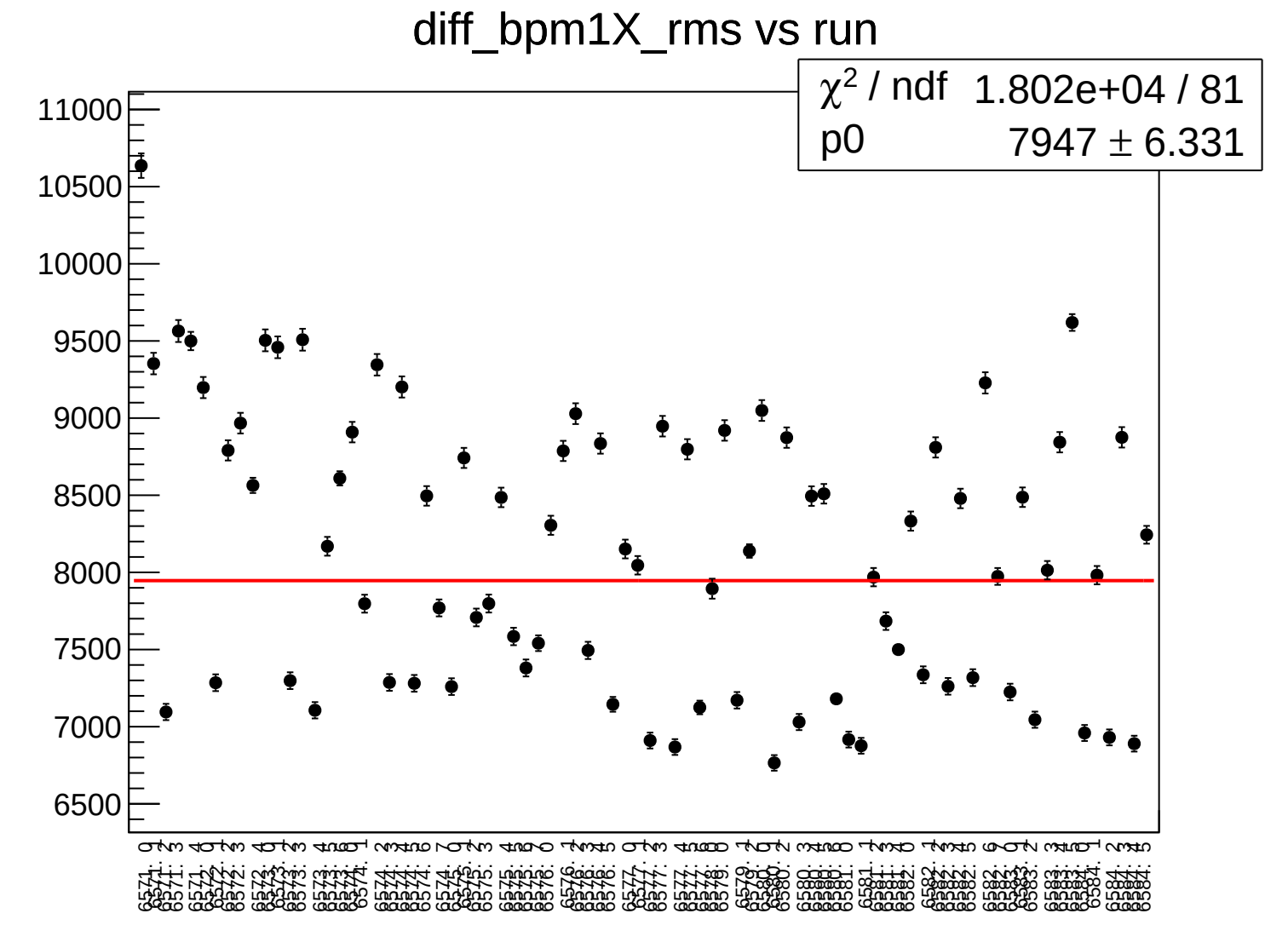

diff_bpm4ecY_mean vs run
χ² / ndf 94.36 / 81
p0 −4.063 ± 5.851
pull
Entries 82
Mean 220.4
Std Dev 171.7

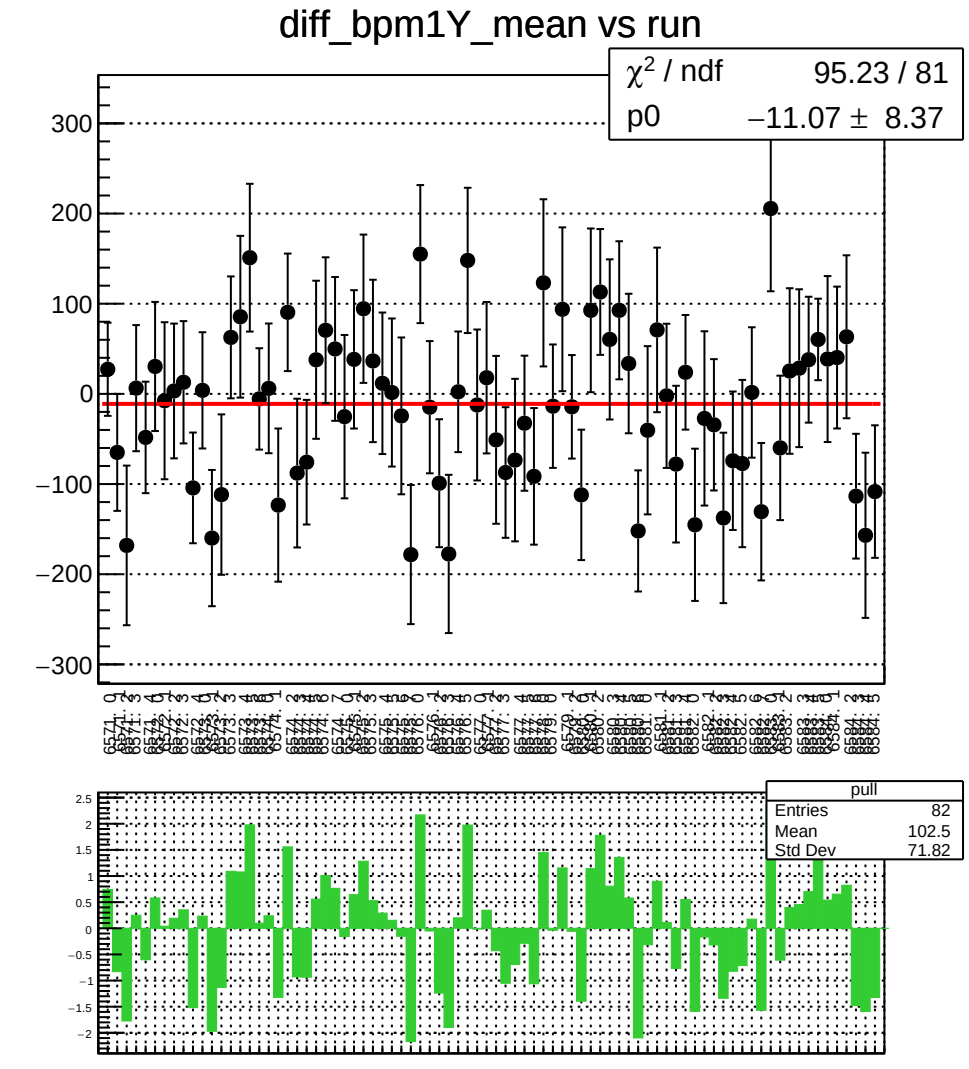

pull1D
Entries 82
Mean −0.01309
Std Dev 1.073

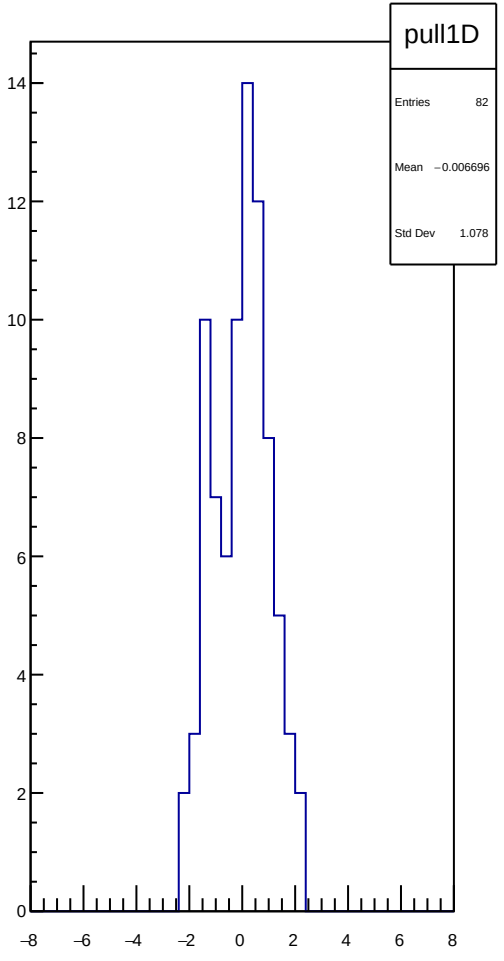

diff_bpm4ecY_rms vs run
χ² / ndf 1.186e+04 / 81
p0 5203 ± 4.137
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400

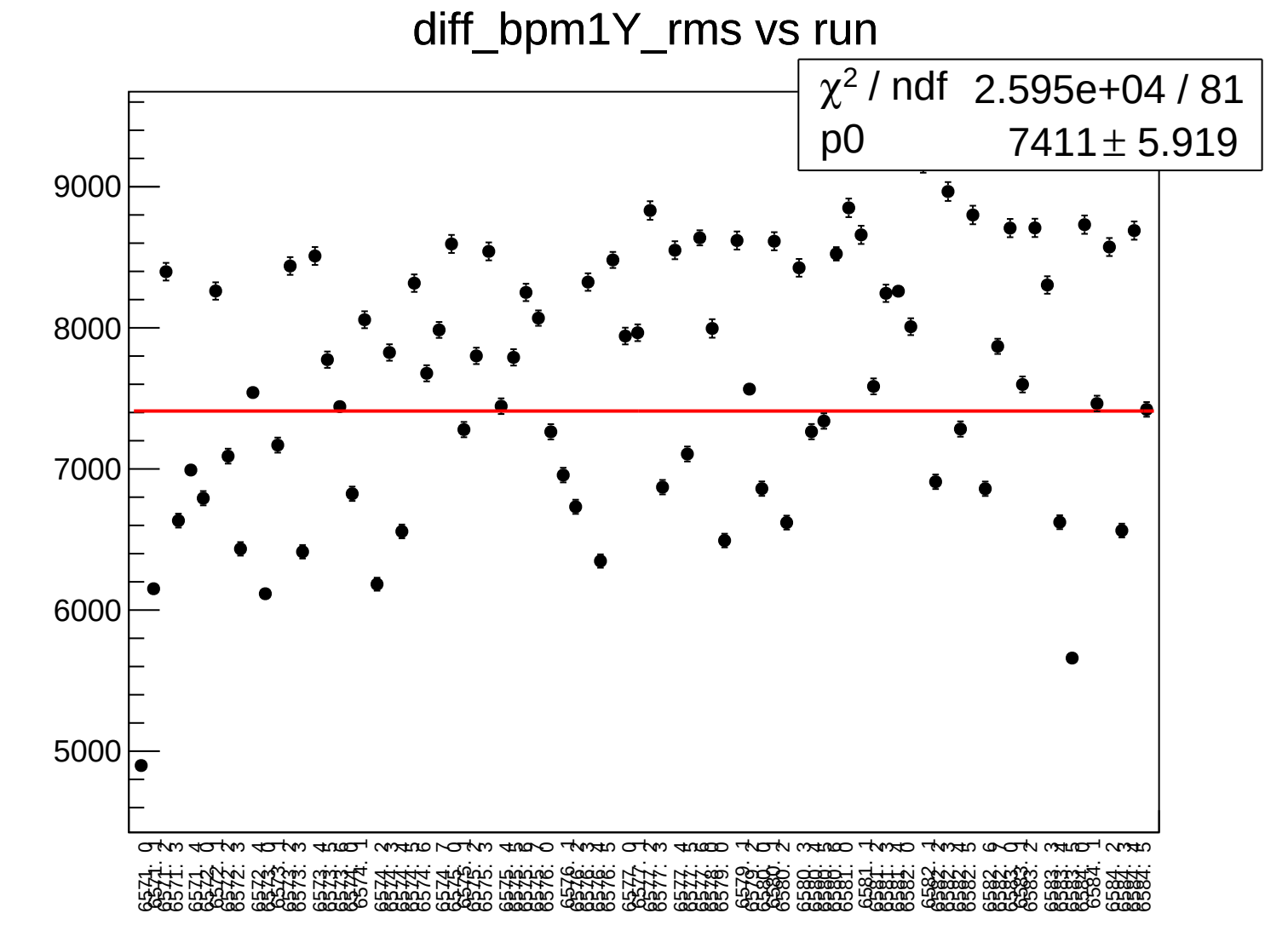

diff_bpm1X_mean vs run
χ² / ndf 90.51 / 81
p0 −18.9 ± 8.953
pull
Entries 82
Mean 409.5
Std Dev 372.3

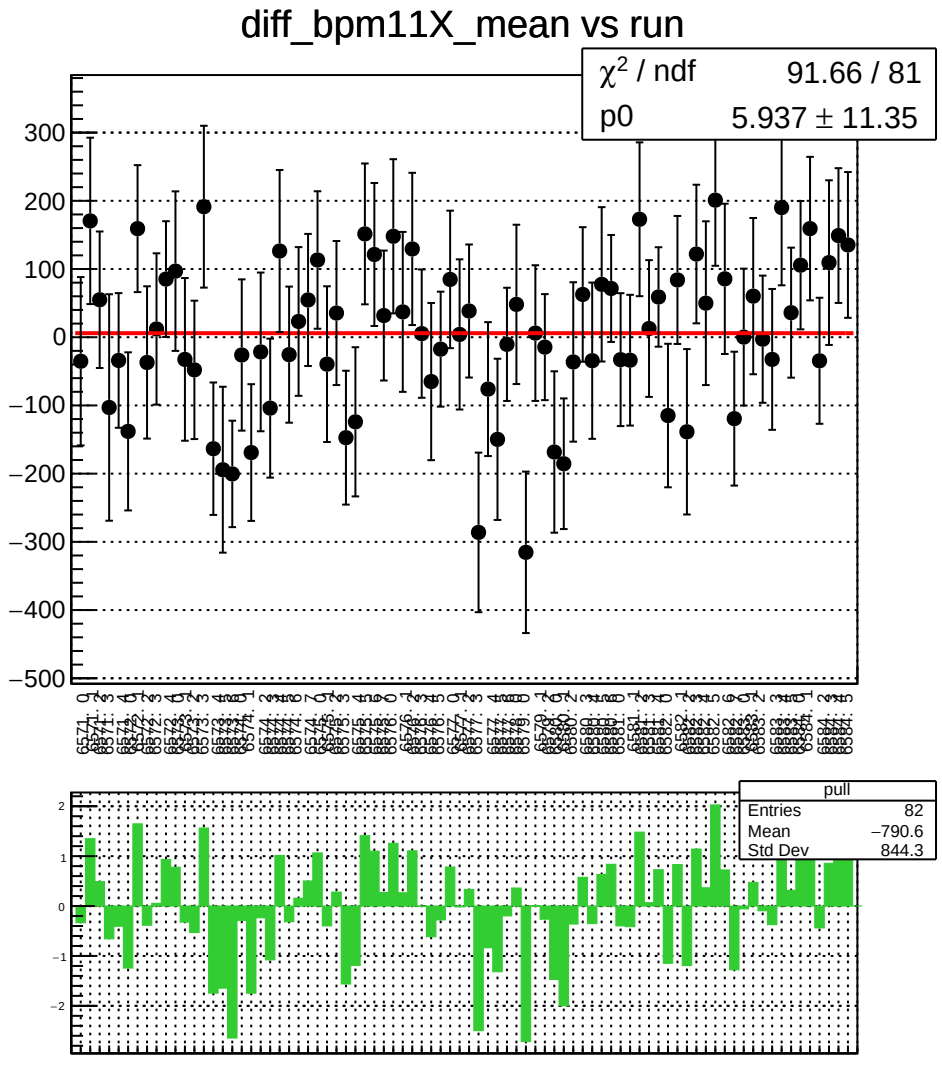

pull1D
Entries 82
Mean −0.007464
Std Dev 1.051

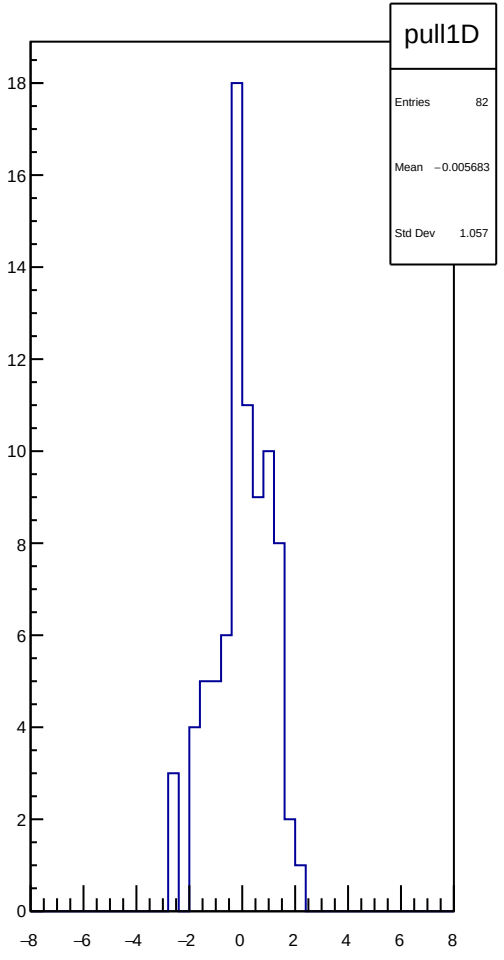

diff_bpm1X_rms vs run
χ² / ndf 1.802e+04 / 81
p0 7947 ± 6.331
11000
10500
10000
9500
9000
8500
8000
7500
7000
6500


diff_bpm1Y_mean vs run
χ² / ndf 95.23 / 81
p0 −11.07 ± 8.37
pull
Entries 82
Mean 102.5
Std Dev 71.82

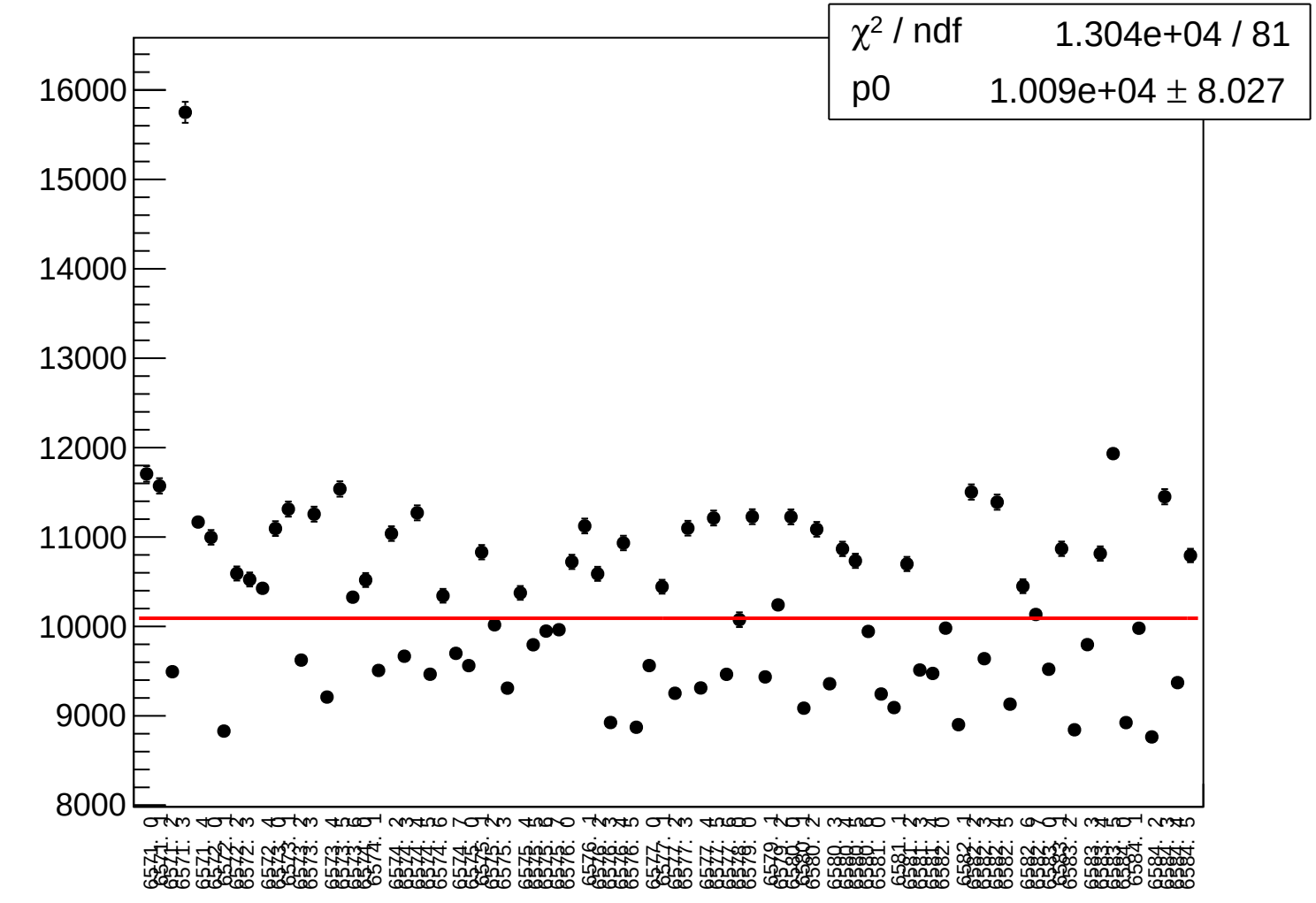

pull1D
Entries 82
Mean −0.006696
Std Dev 1.078

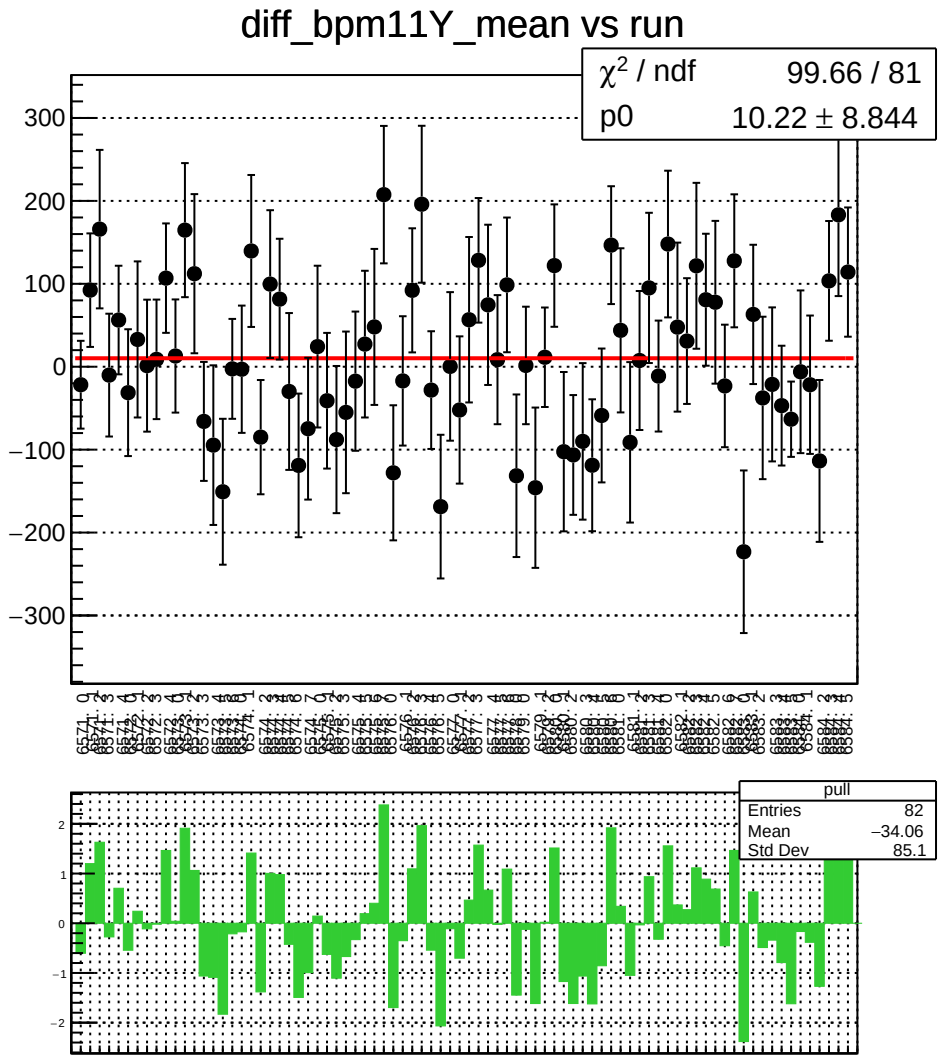

diff_bpm1Y_rms vs run
$\chi^2$ / ndf 2.595e+04 / 81
p0 7411 ± 5.919
9000
8000
7000
6000
5000

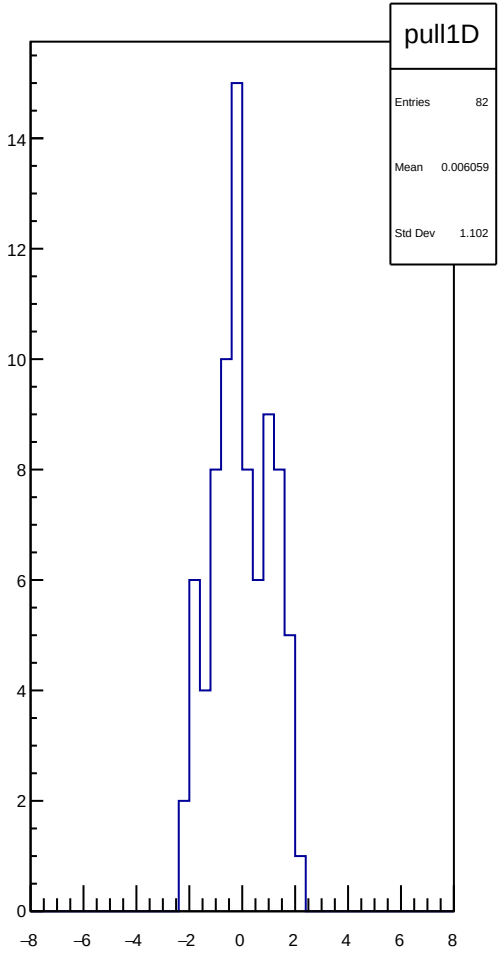

diff_bpm11X_mean vs run
$\chi^2$ / ndf 91.66 / 81
p0 5.937 ± 11.35
pull
Entries 82
Mean −790.6
Std Dev 844.3

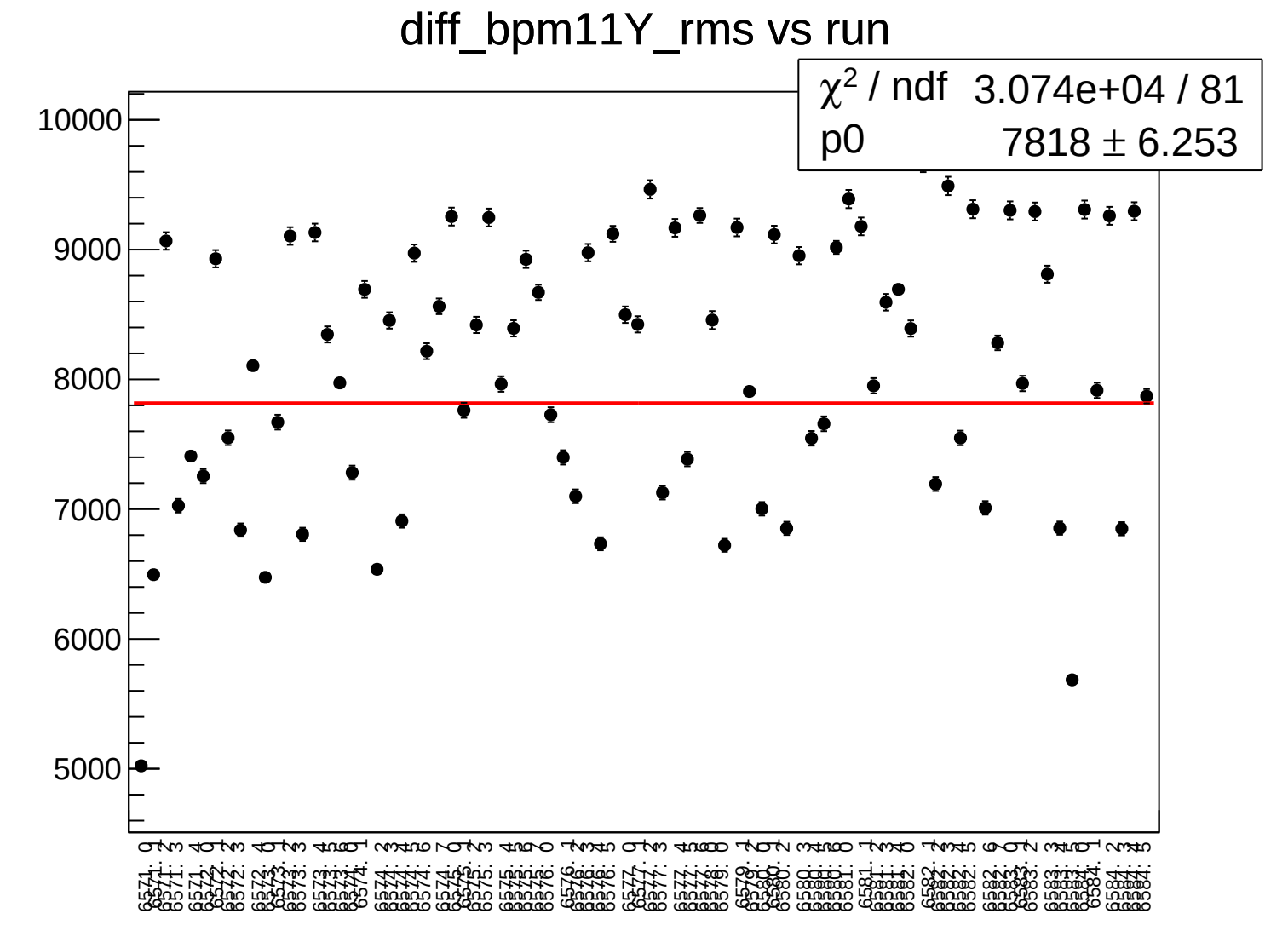

pull1D
Entries 82
Mean −0.005683
Std Dev 1.057

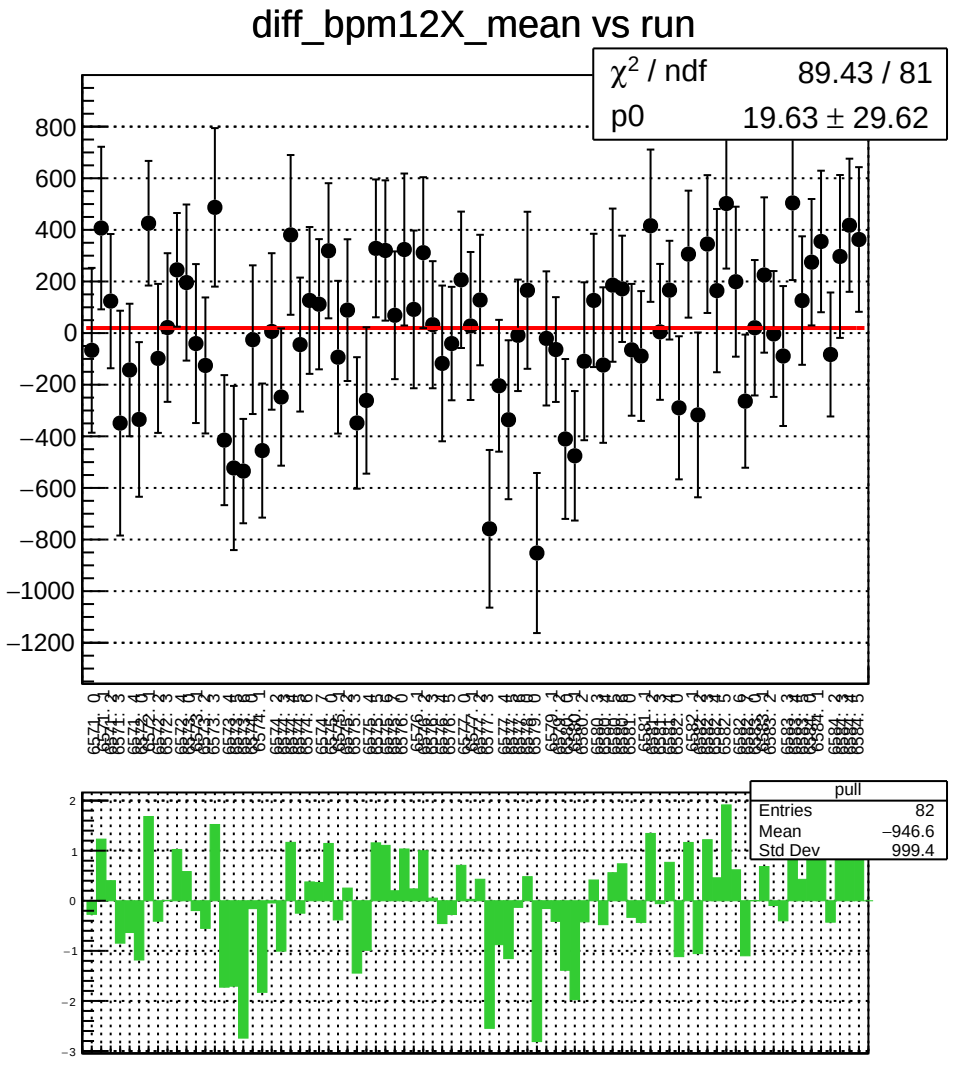
# diff_bpm11X_rms vs run

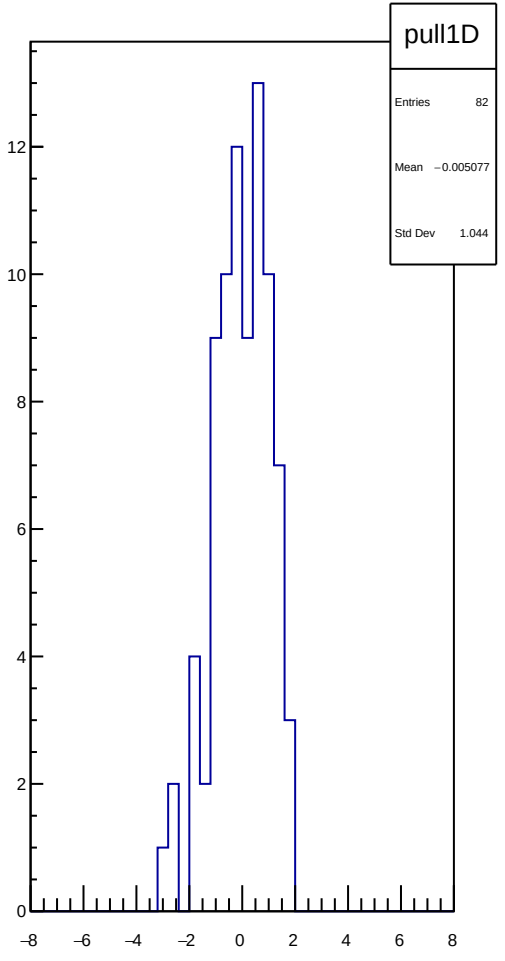



diff_bpm11Y_mean vs run
χ² / ndf 99.66 / 81
p0 10.22 ± 8.844
pull
Entries 82
Mean −34.06
Std Dev 85.1

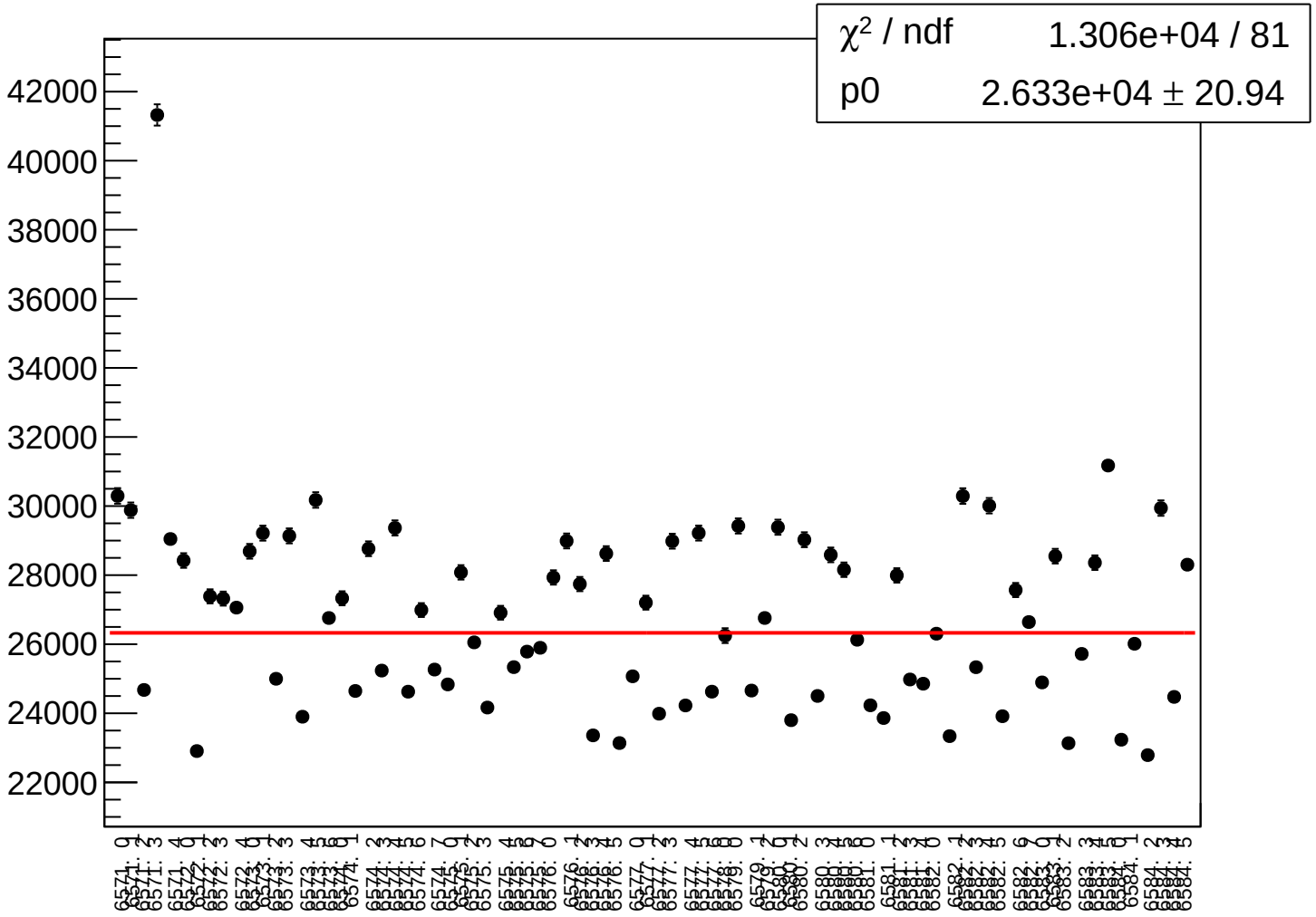

pull1D
Entries 82
Mean 0.006059
Std Dev 1.102

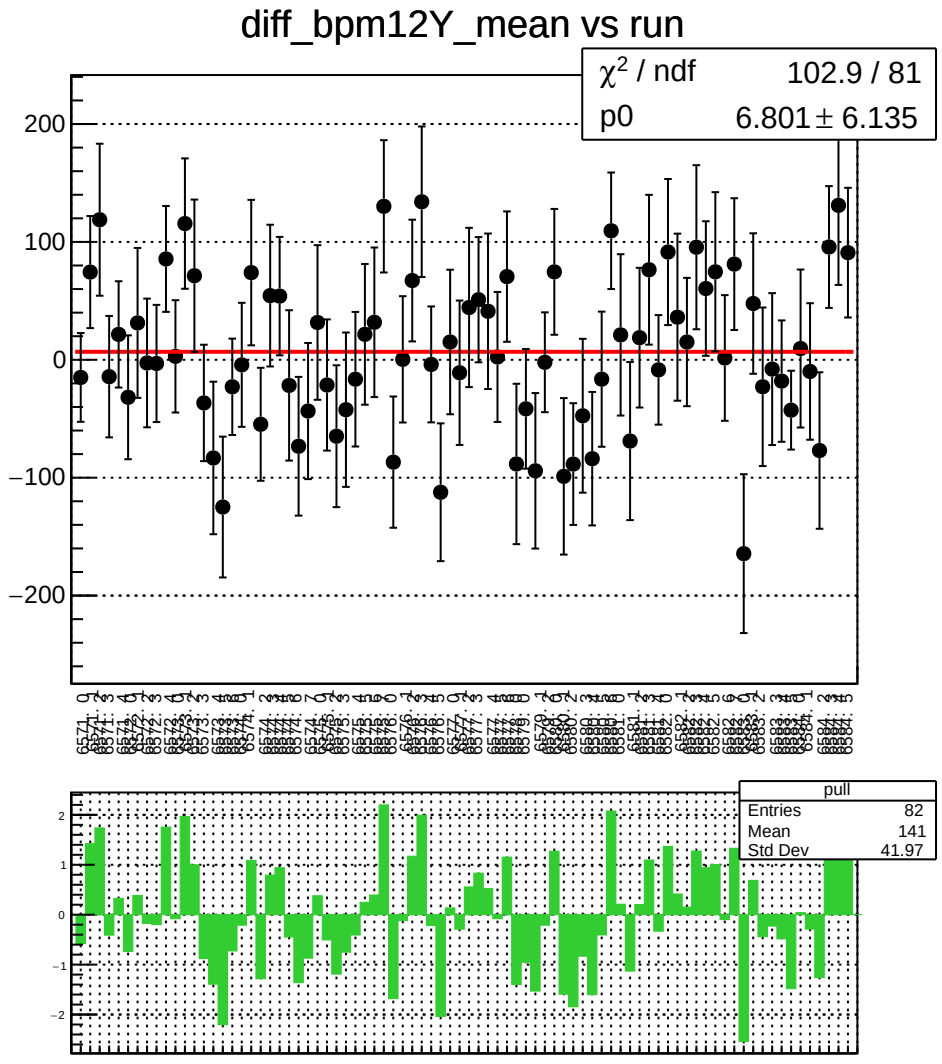

diff_bpm11Y_rms vs run
χ² / ndf 3.074e+04 / 81
p0 7818 ± 6.253
10000
9000
8000
7000
6000
5000

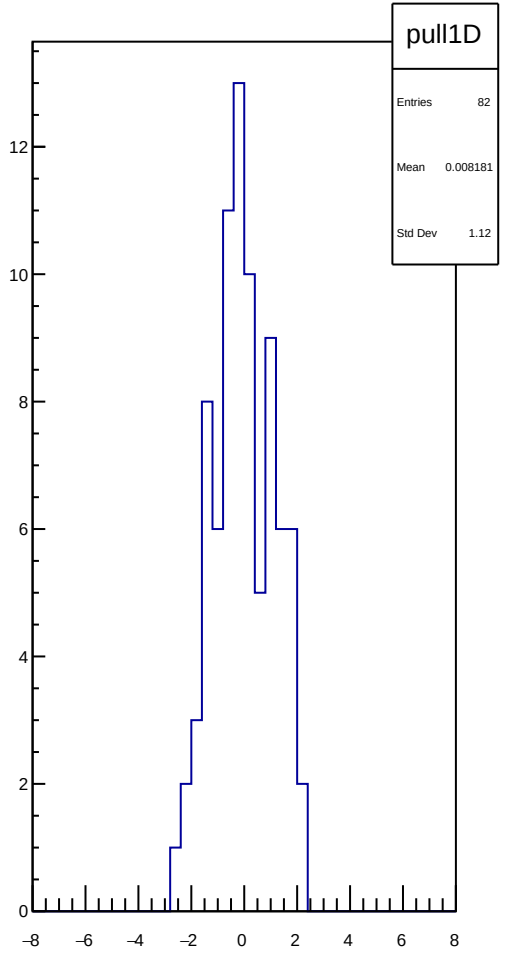

diff_bpm12X_mean vs run
χ² / ndf 89.43 / 81
p0 19.63 ± 29.62
pull
Entries 82
Mean −946.6
Std Dev 999.4

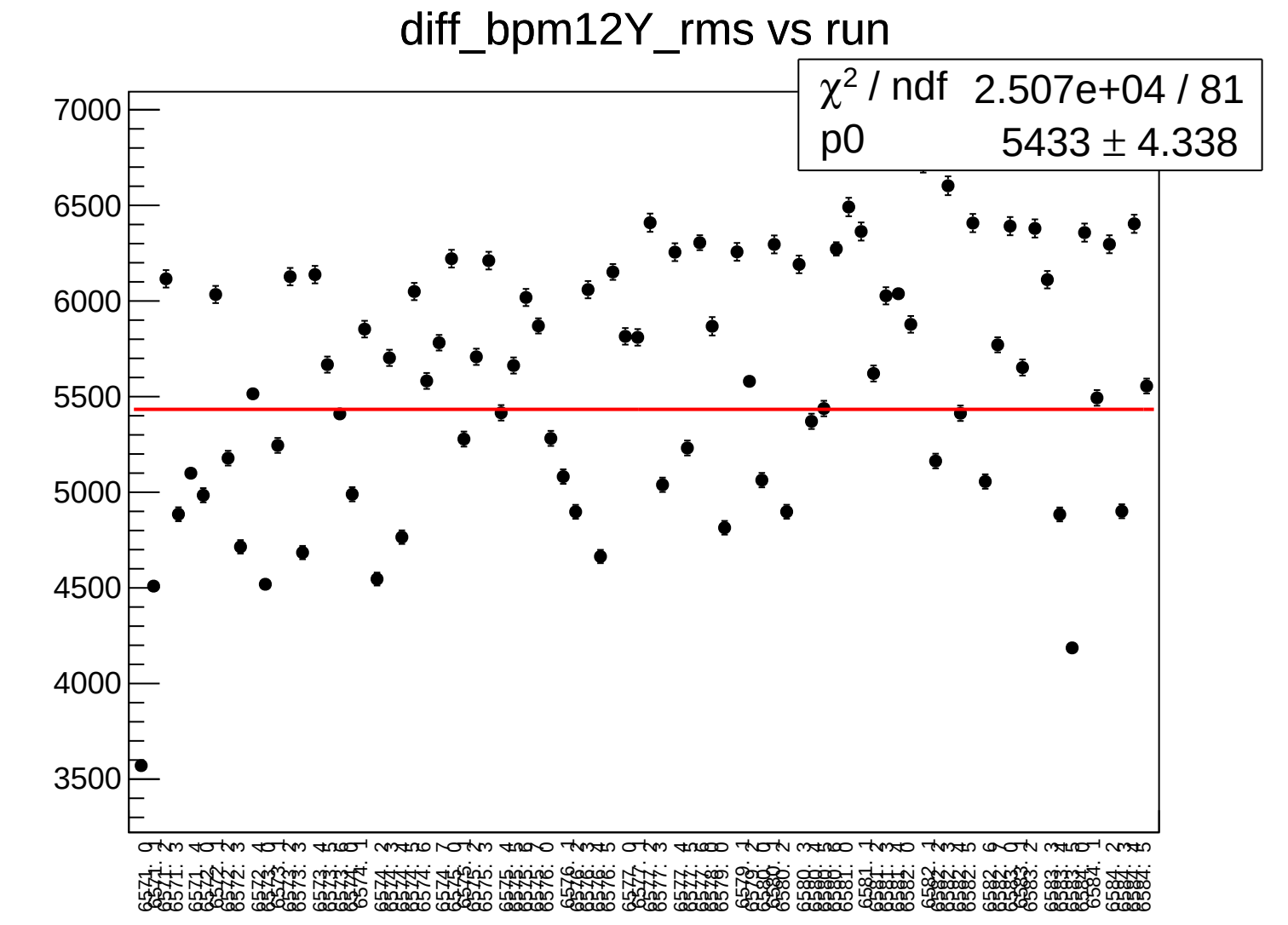

pull1D
Entries 82
Mean −0.005077
Std Dev 1.044

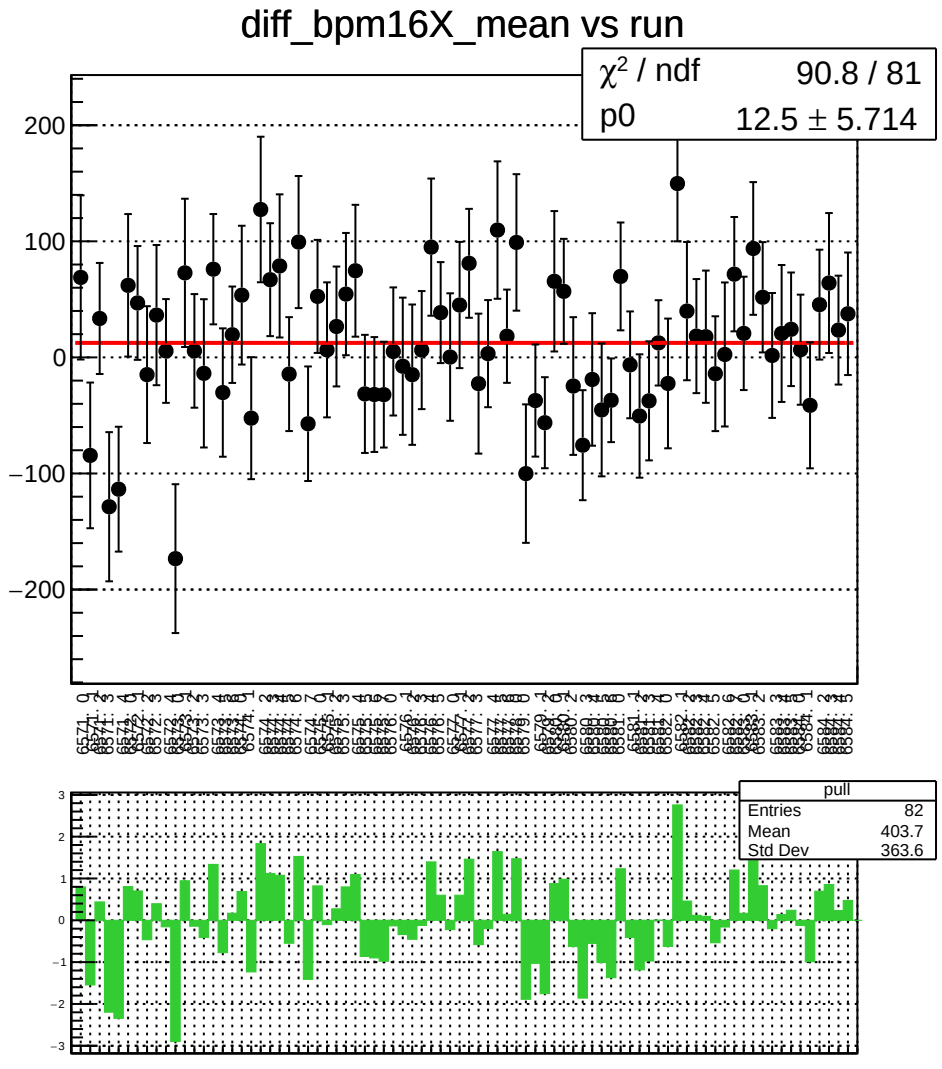
# diff_bpm12X_rms vs run

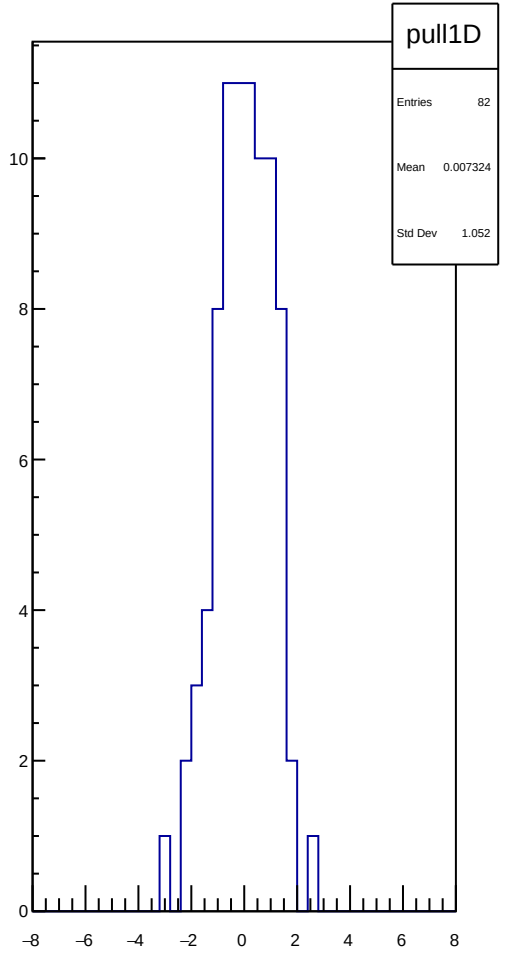


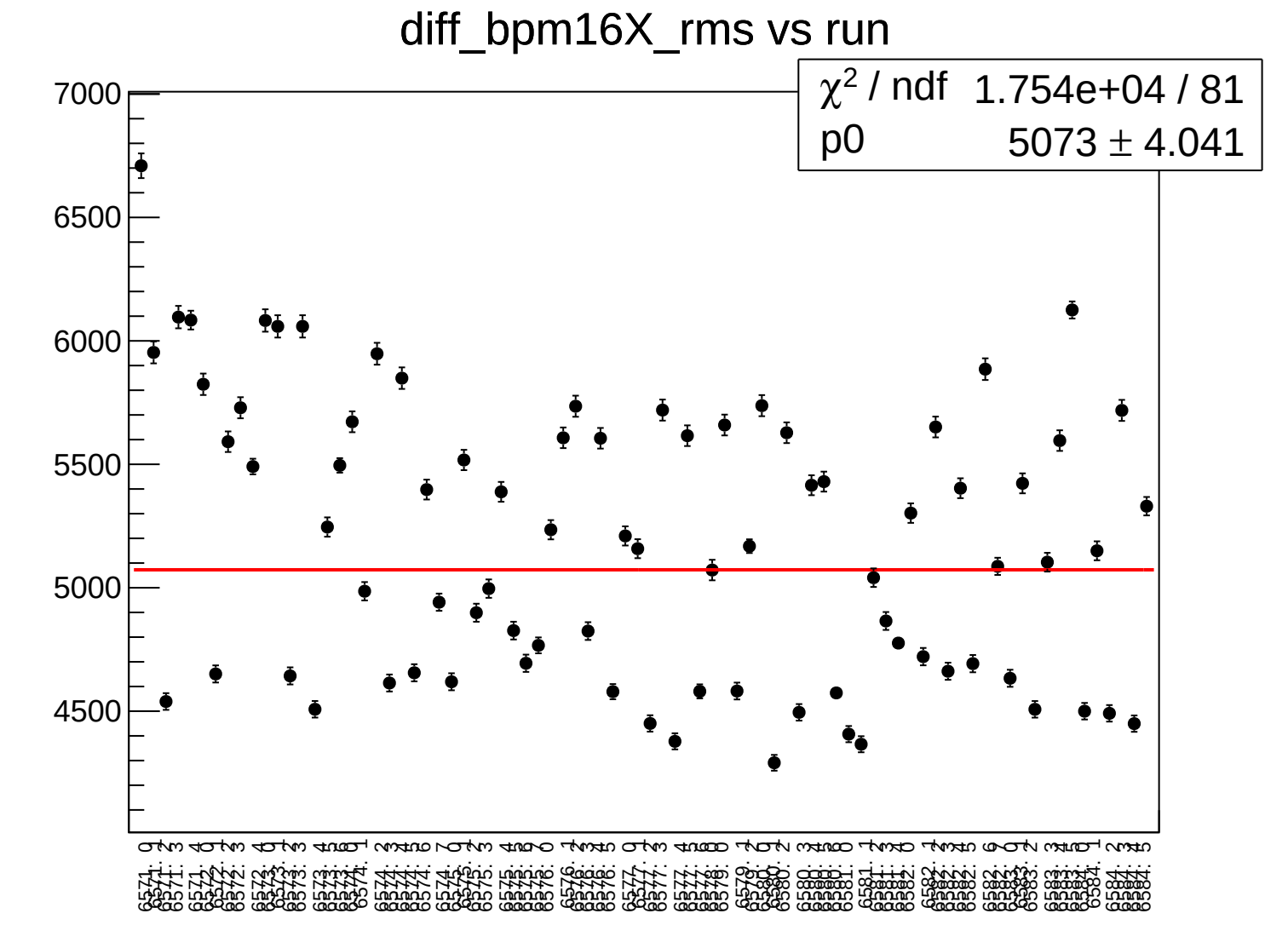

diff_bpm12Y_mean vs run
χ² / ndf 102.9 / 81
p0 6.801 ± 6.135
200
100
0
−100
−200
pull
Entries 82
Mean 141
Std Dev 41.97
2
1
0
−1
−2

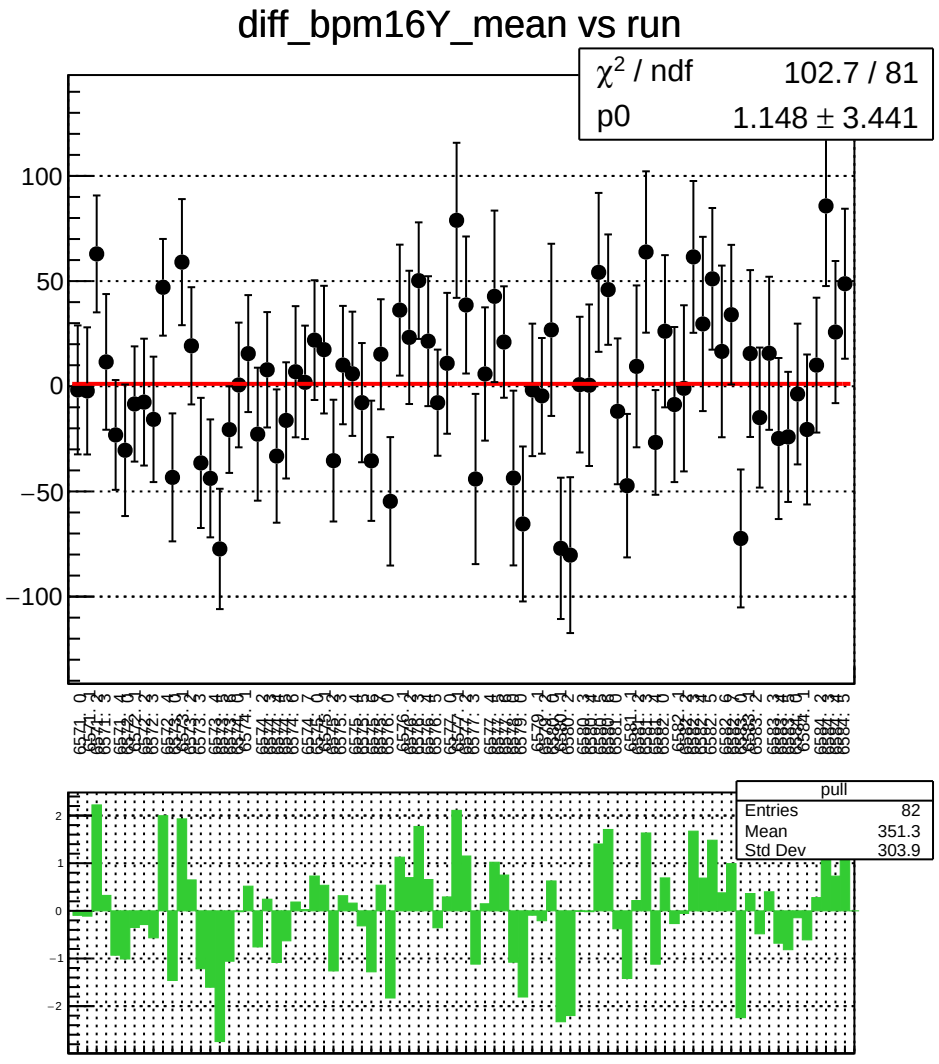

pull1D
Entries 82
Mean 0.008181
Std Dev 1.12
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

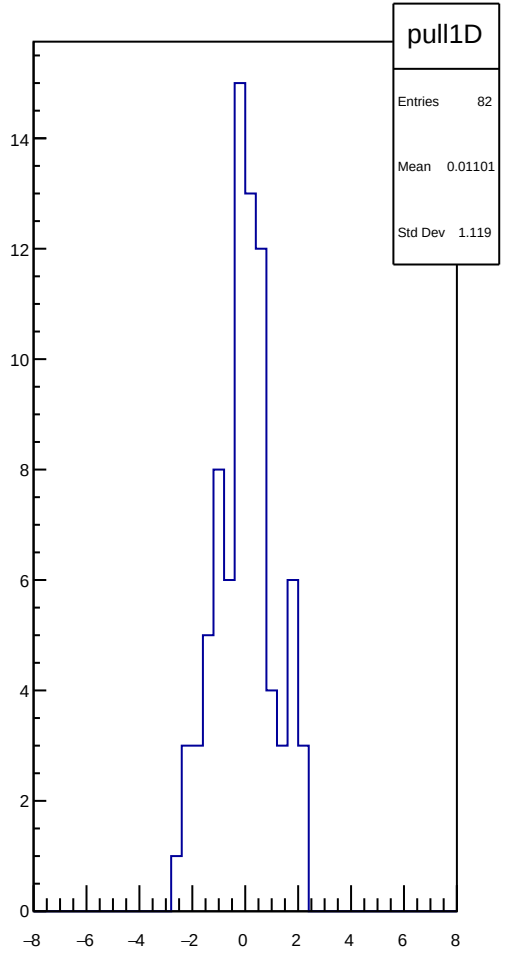

diff_bpm12Y_rms vs run
χ² / ndf 2.507e+04 / 81
p0 5433 ± 4.338
7000
6500
6000
5500
5000
4500
4000
3500

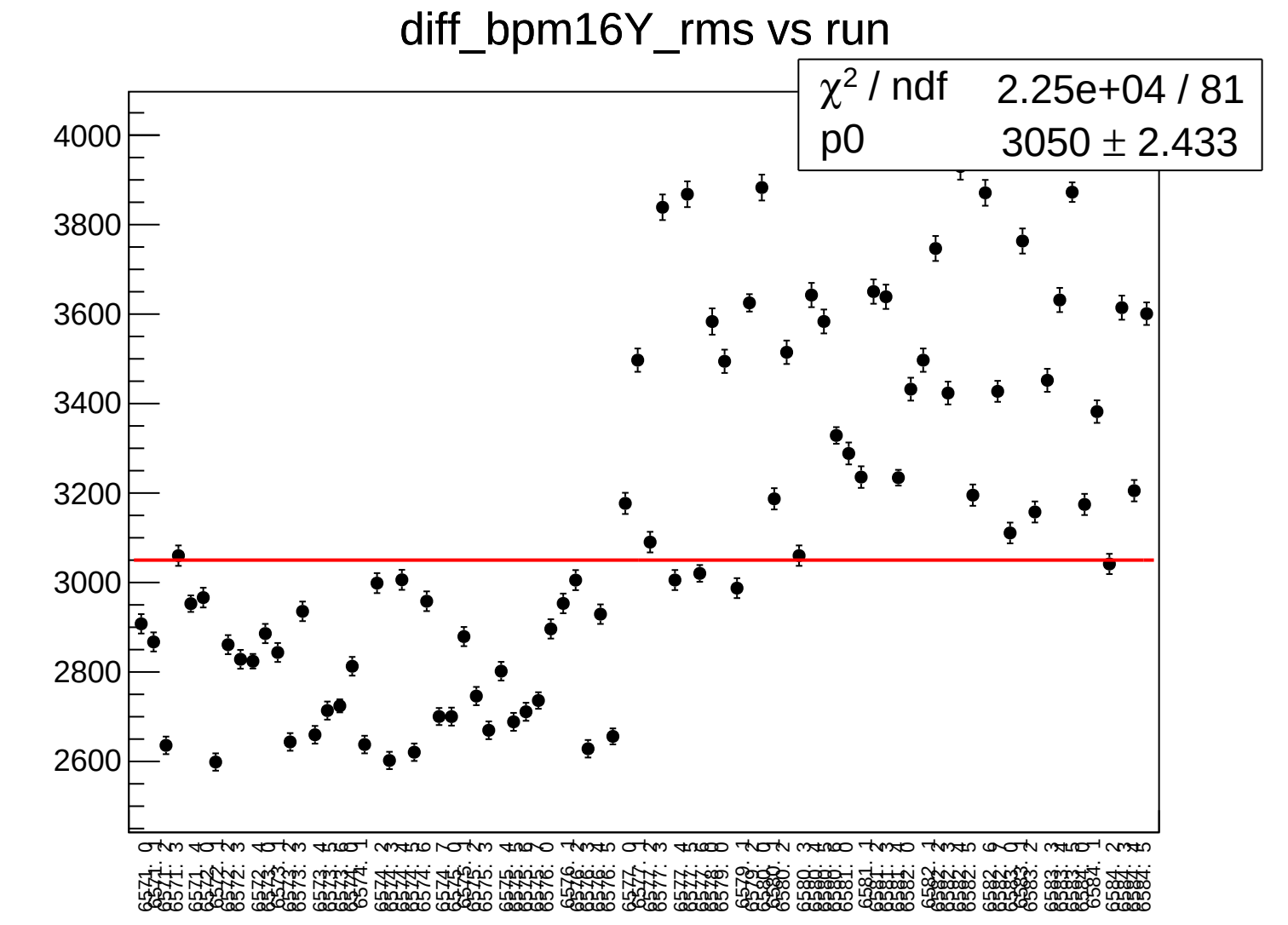

diff_bpm16X_mean vs run
χ² / ndf 90.8 / 81
p0 12.5 ± 5.714
200
100
0
−100
−200
pull
Entries 82
Mean 403.7
Std Dev 363.6
3
2
1
0
−1
−2
−3

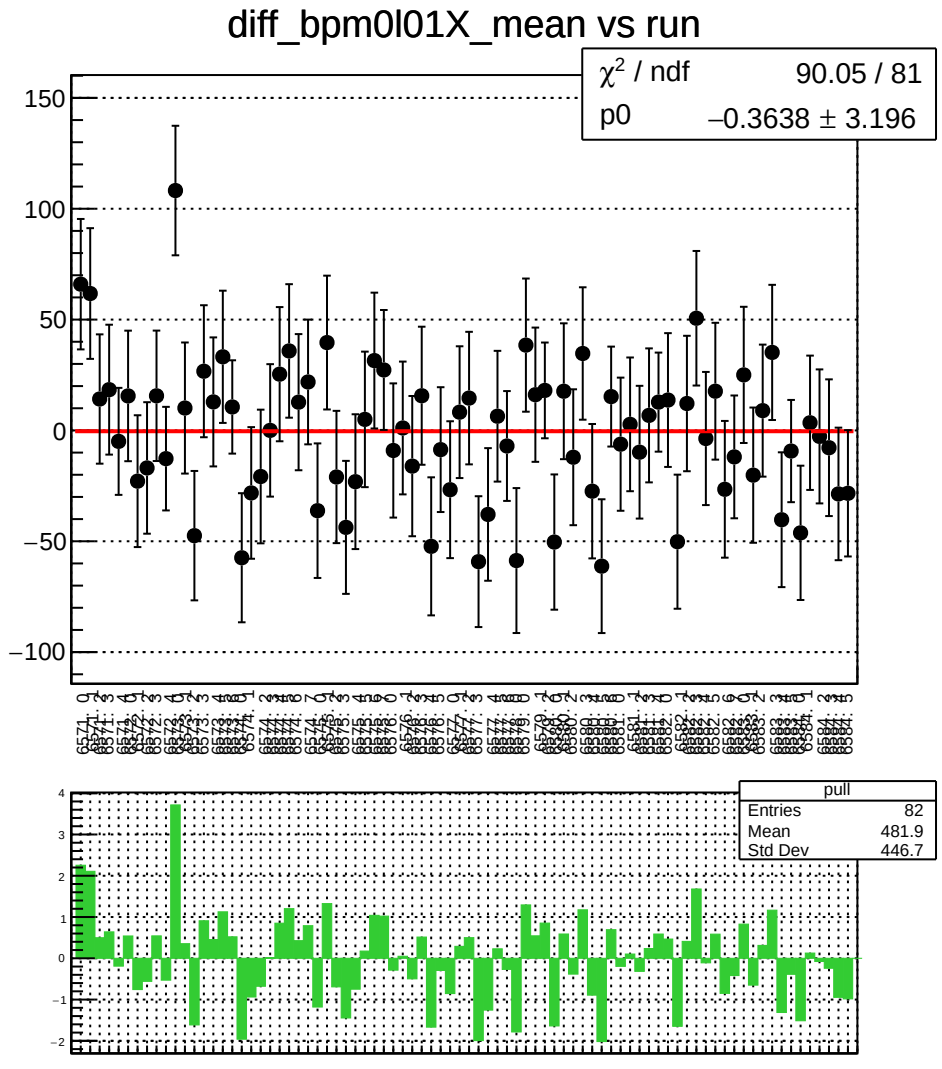

pull1D
Entries 82
Mean 0.007324
Std Dev 1.052
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

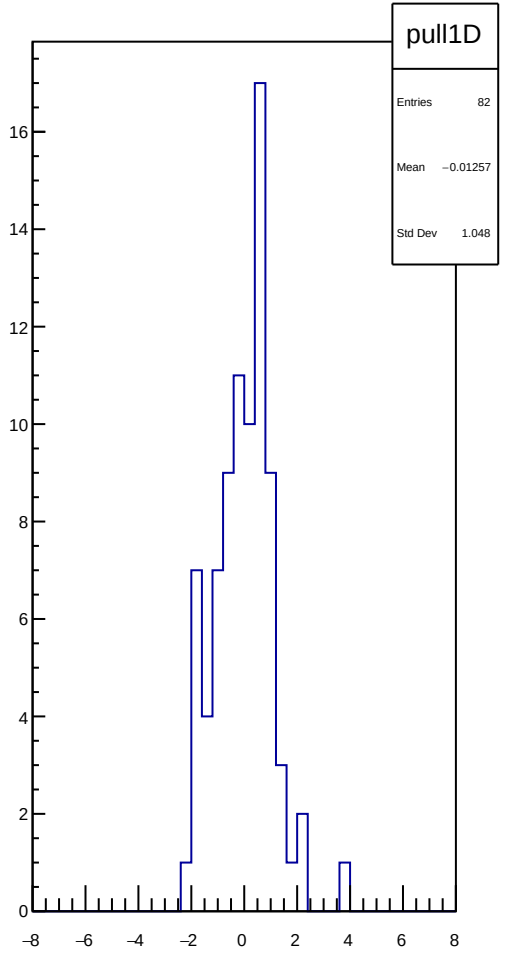

diff_bpm16X_rms vs run
χ² / ndf 1.754e+04 / 81
p0 5073 ± 4.041
7000
6500
6000
5500
5000
4500

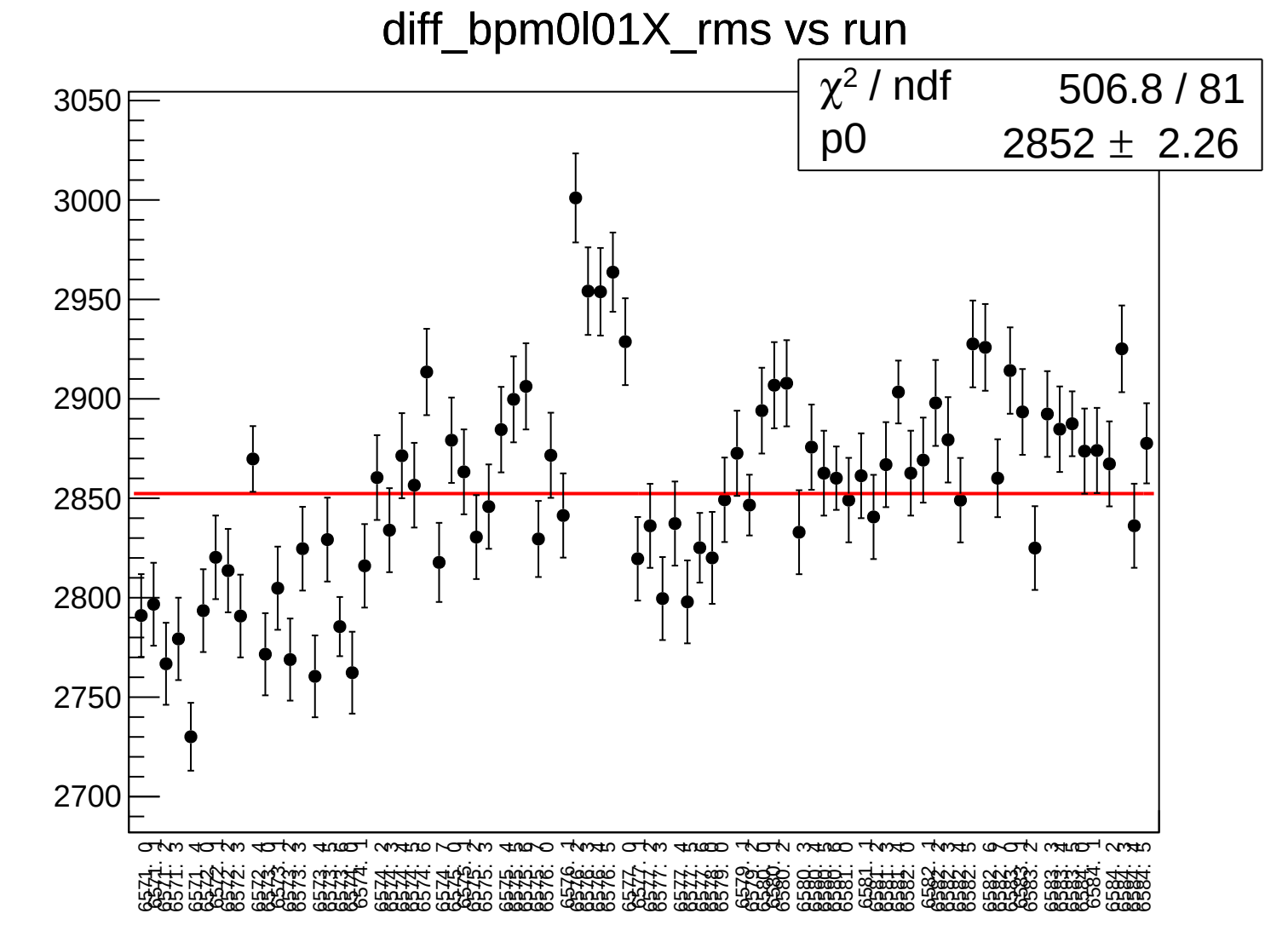

diff_bpm16Y_mean vs run
χ² / ndf 102.7 / 81
p0 1.148 ± 3.441
100
50
0
−50
−100
pull
Entries 82
Mean 351.3
Std Dev 303.9
2
1
0
−1
−2

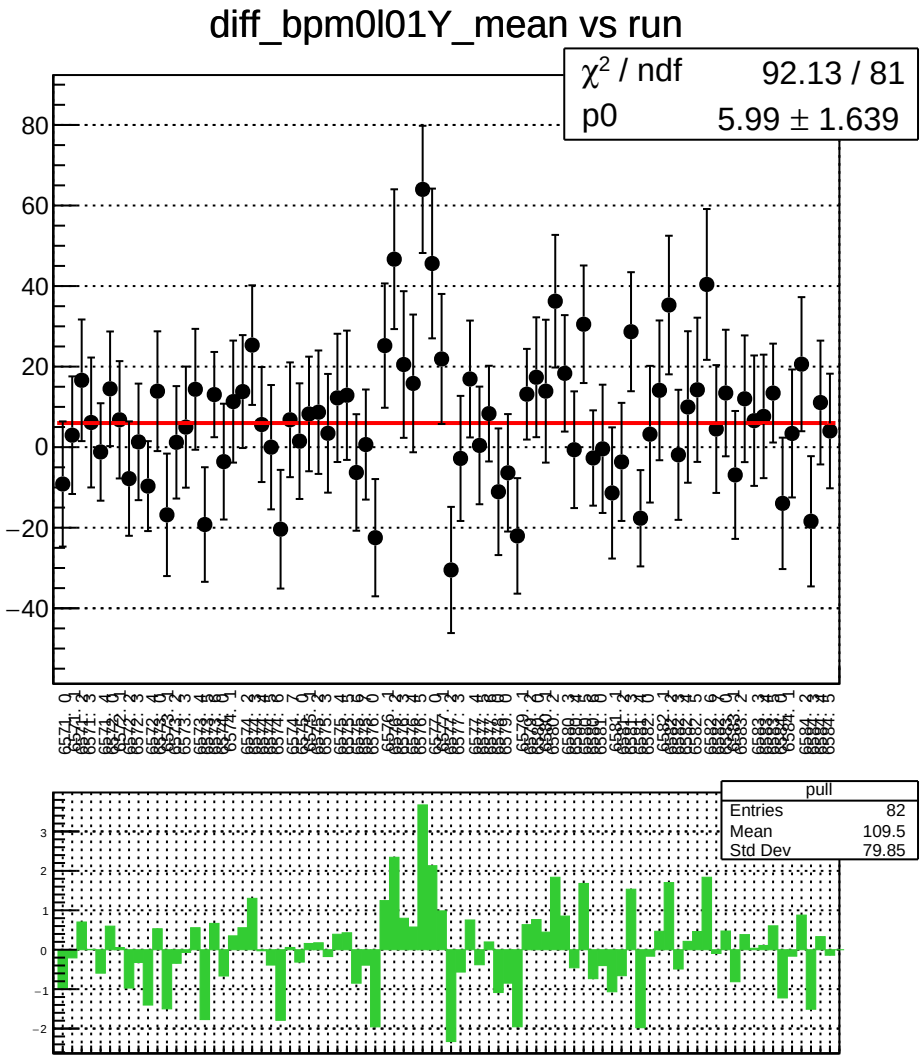

pull1D
Entries 82
Mean 0.01101
Std Dev 1.119
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

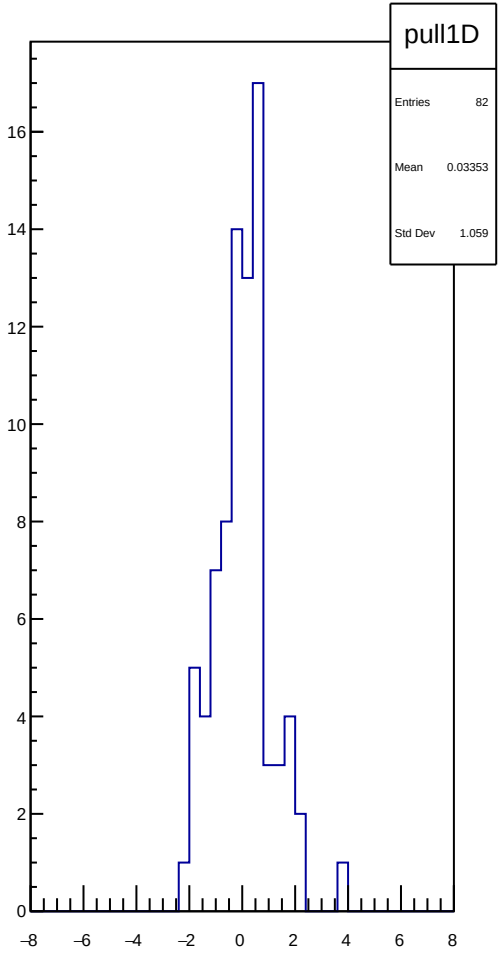

diff_bpm16Y_rms vs run
χ² / ndf 2.25e+04 / 81
p0 3050 ± 2.433
4000
3800
3600
3400
3200
3000
2800
2600

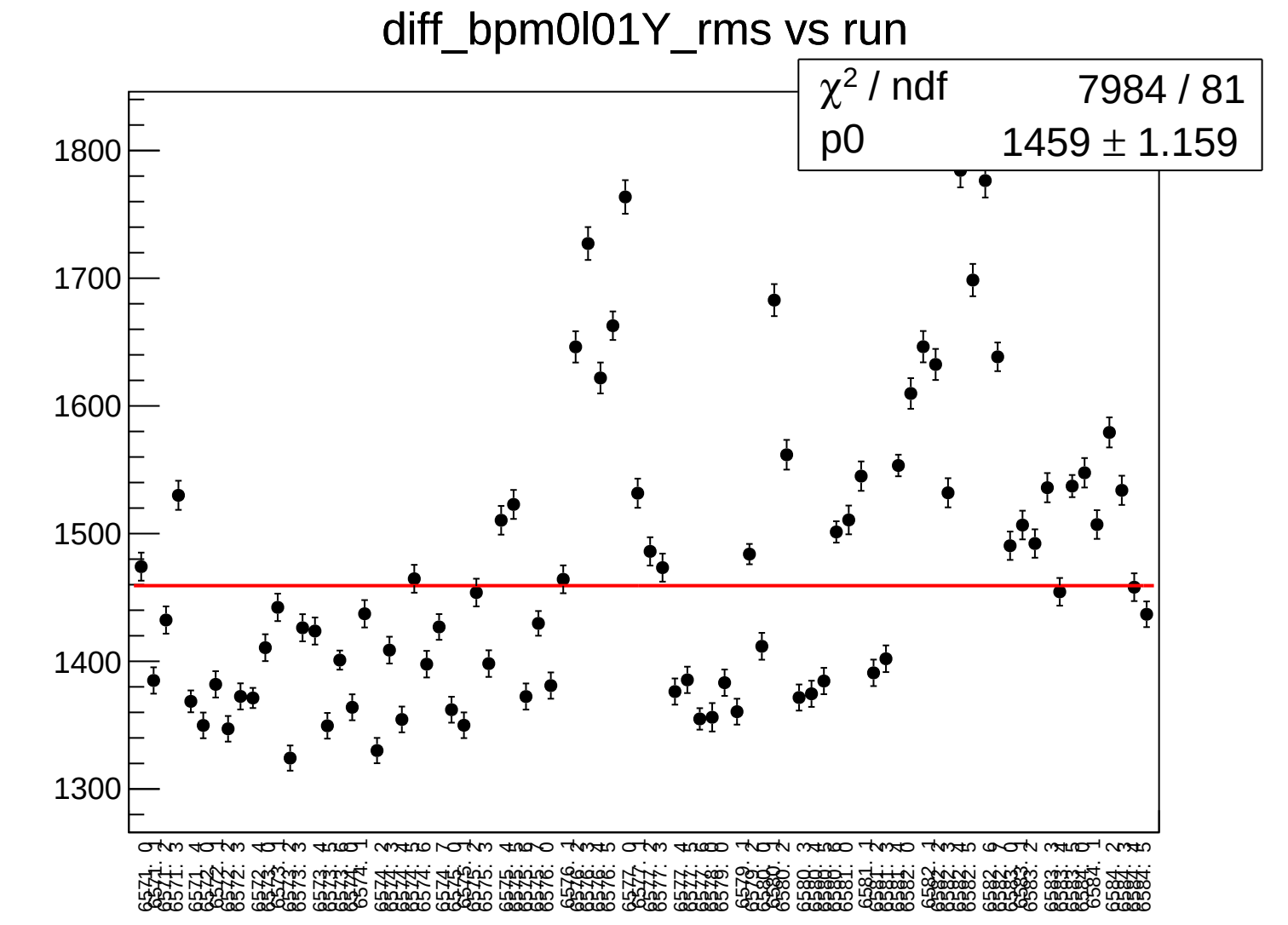

diff_bpm0l01X_mean vs run
χ² / ndf 90.05 / 81
p0 −0.3638 ± 3.196
150
100
50
0
−50
−100
pull
Entries 82
Mean 481.9
Std Dev 446.7
4
3
2
1
0
−1
−2

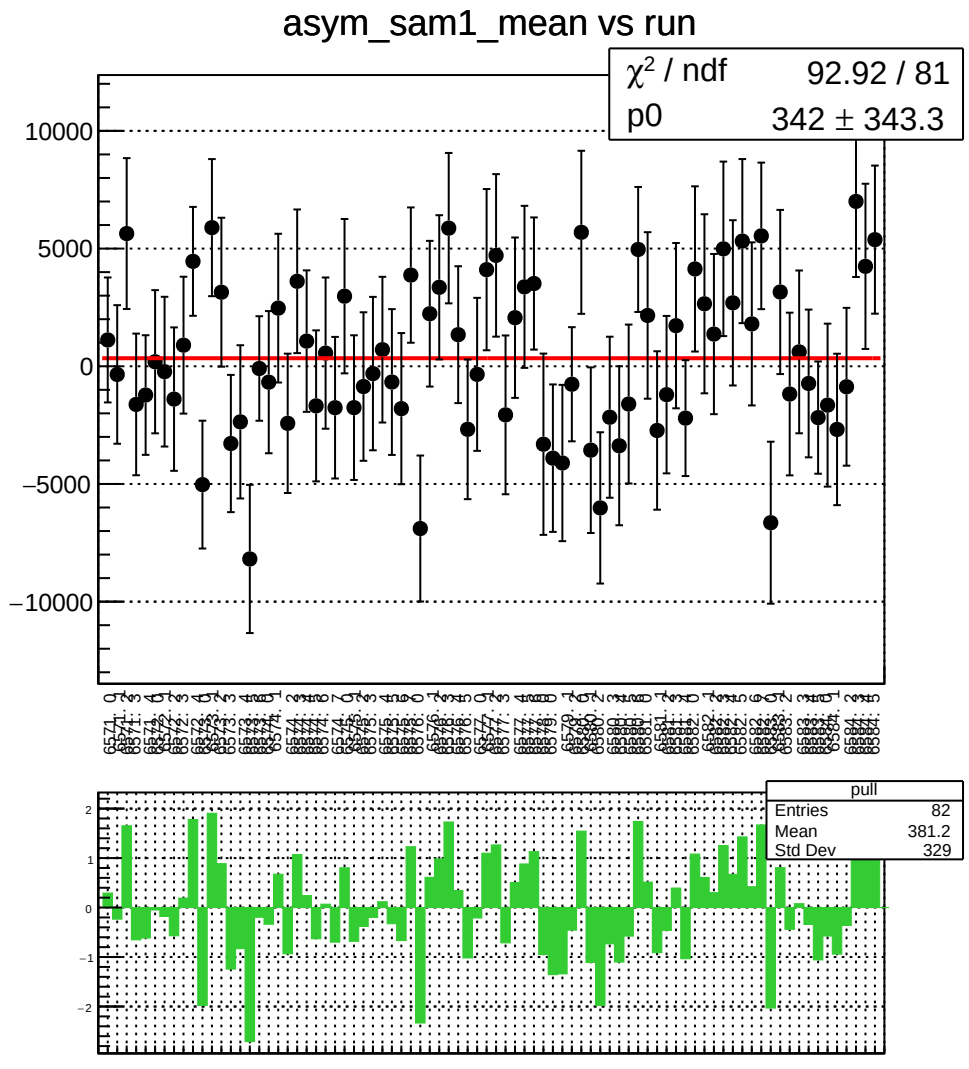

pull1D
Entries 82
Mean −0.01257
Std Dev 1.048
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

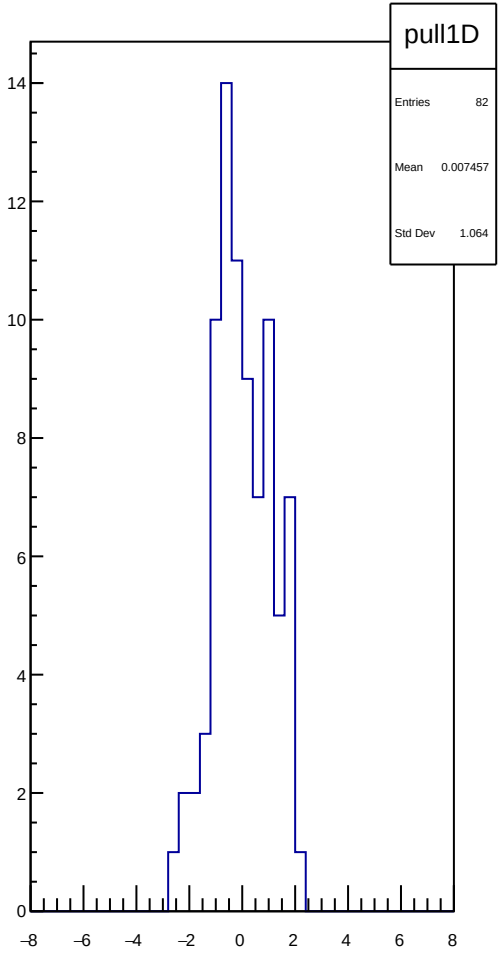

diff_bpm0l01X_rms vs run
χ² / ndf 506.8 / 81
p0 2852 ± 2.26
3050
3000
2950
2900
2850
2800
2750
2700

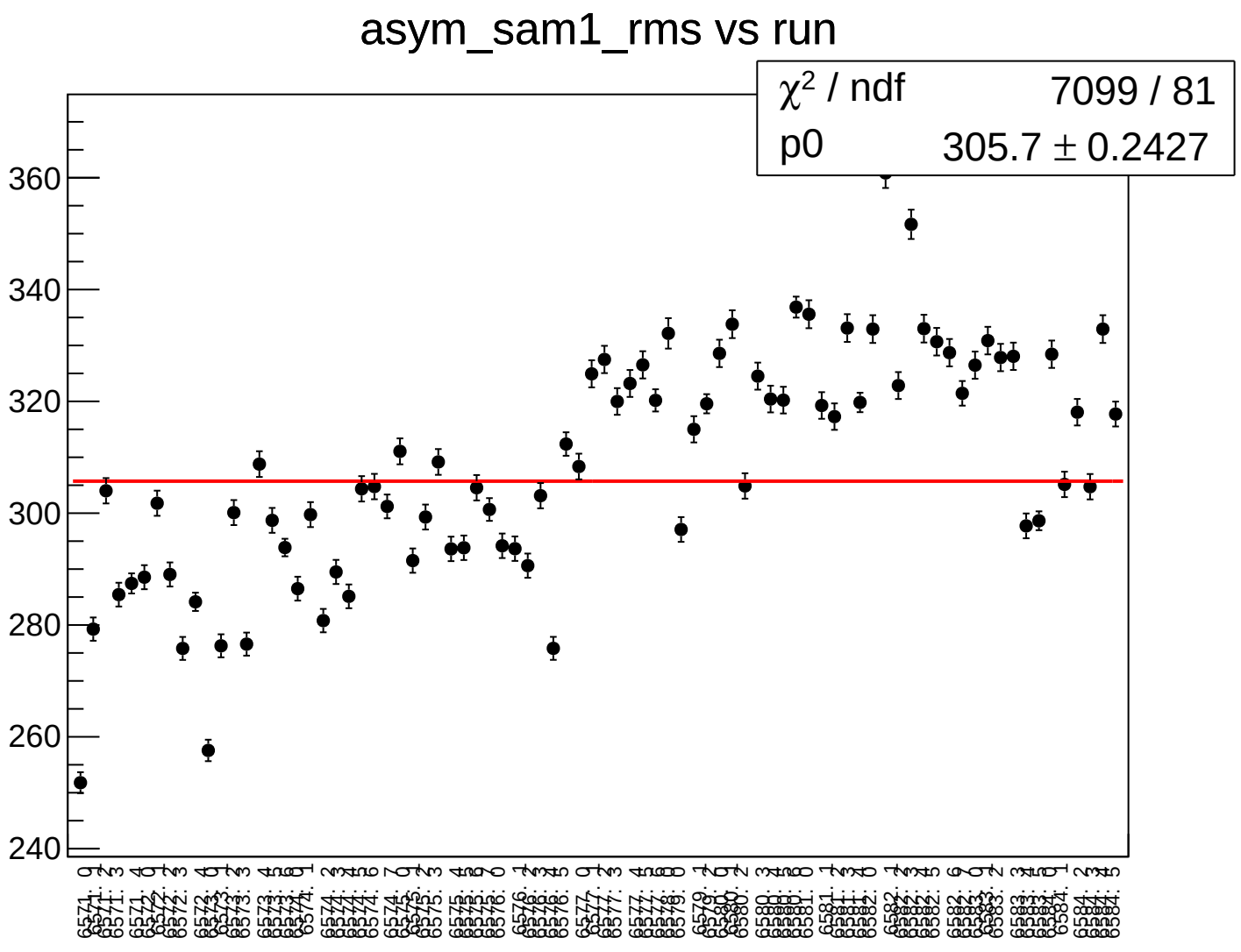

diff_bpm0l01Y_mean vs run
χ² / ndf 92.13 / 81
p0 5.99 ± 1.639
pull
Entries 82
Mean 109.5
Std Dev 79.85

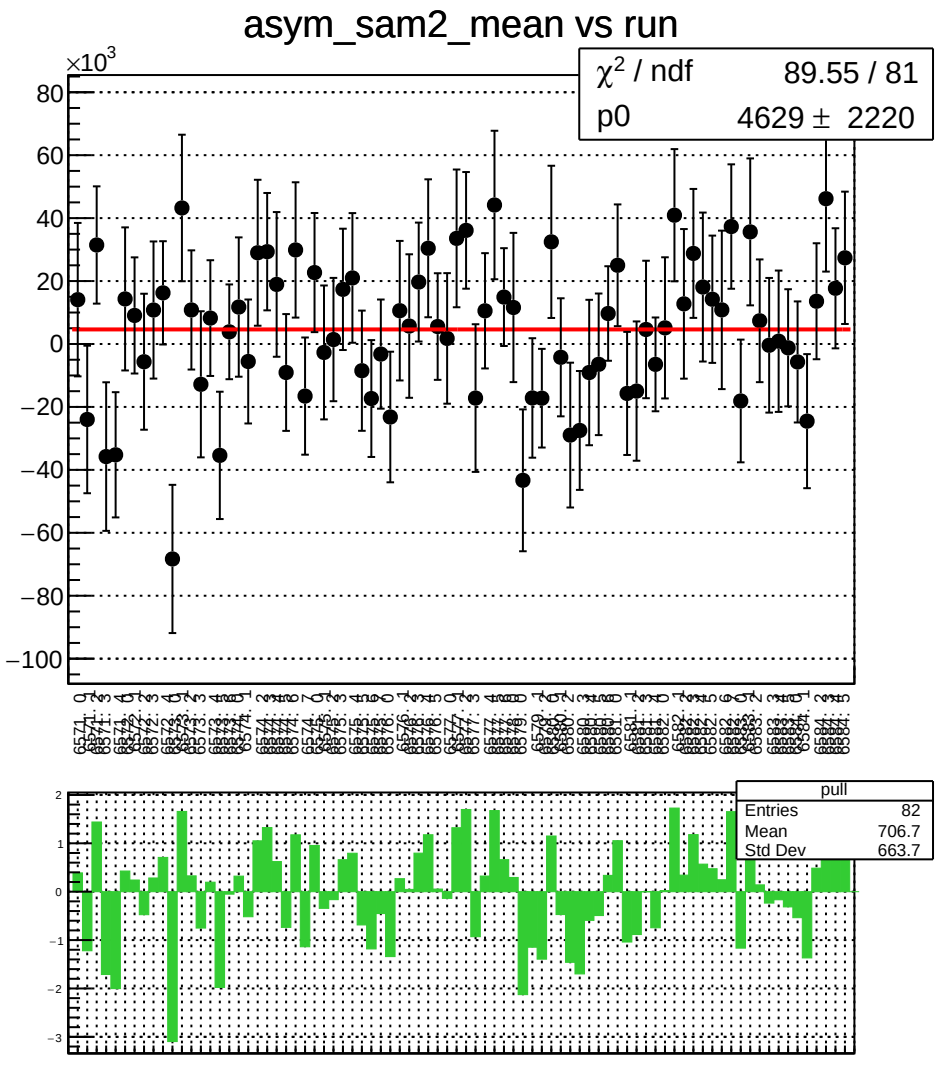

pull1D
Entries 82
Mean 0.03353
Std Dev 1.059

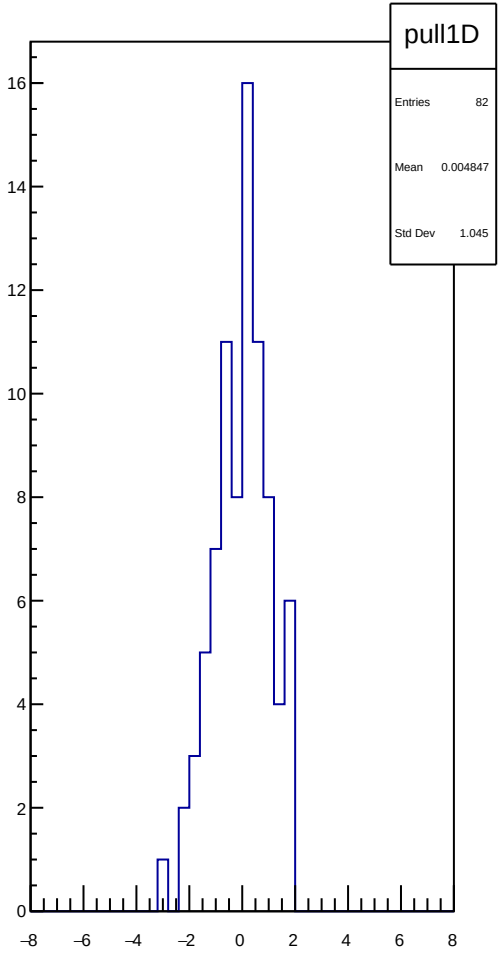

diff_bpm0l01Y_rms vs run
χ² / ndf 7984 / 81
p0 1459 ± 1.159
1800
1700
1600
1500
1400
1300

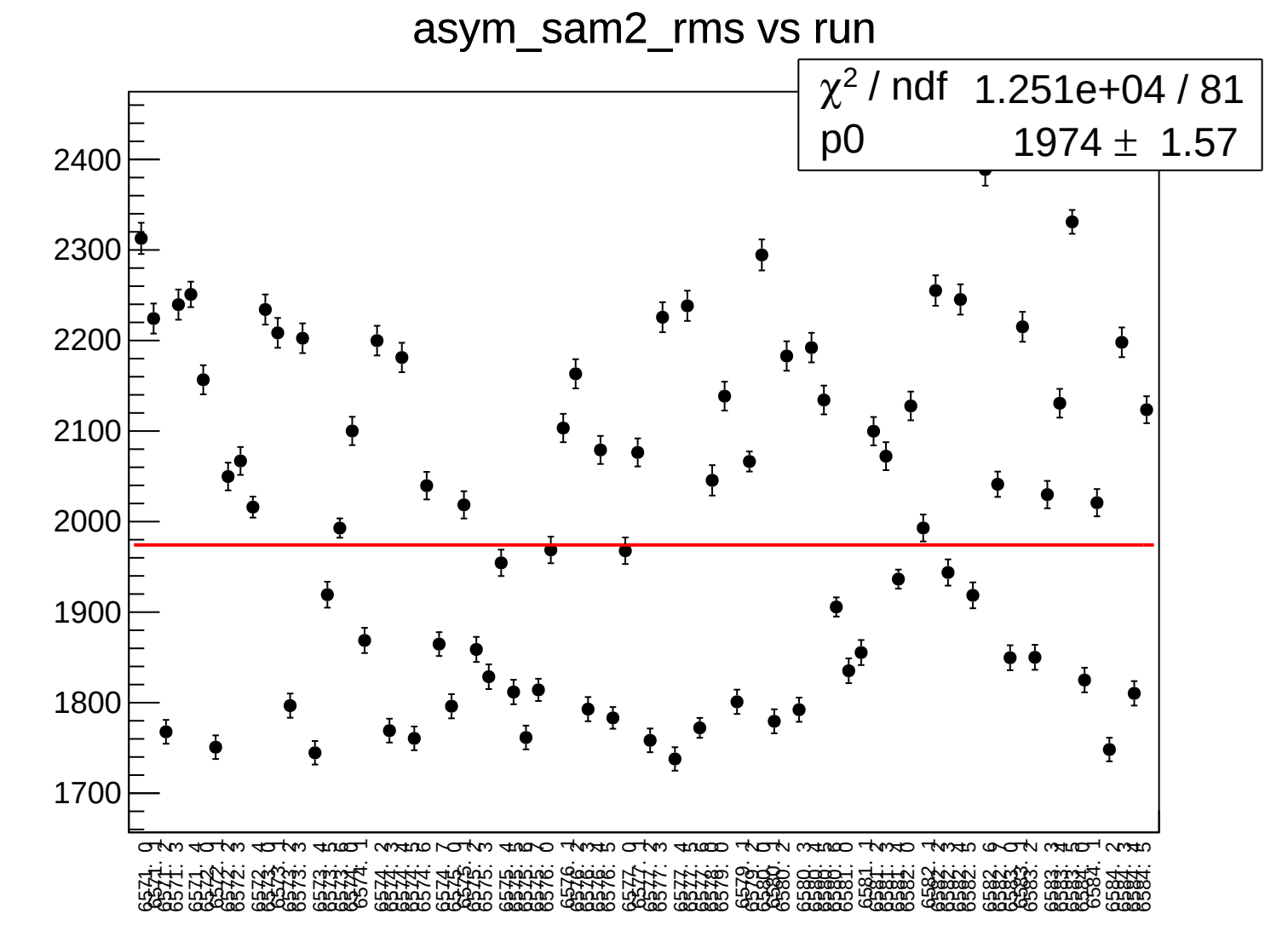

asym_sam1_mean vs run
χ² / ndf 92.92 / 81
p0 342 ± 343.3
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 381.2
Std Dev 329
2
1
0
−1
−2

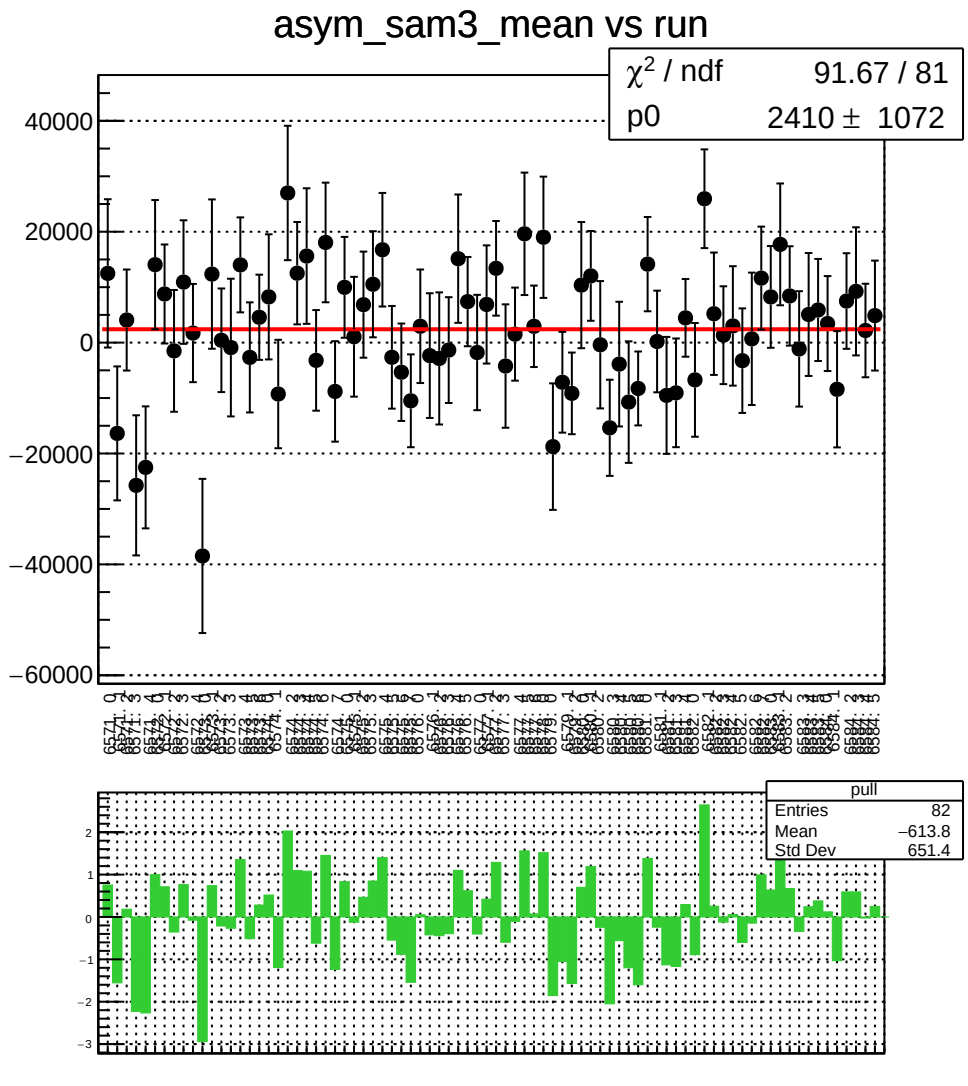

pull1D
Entries 82
Mean 0.007457
Std Dev 1.064
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

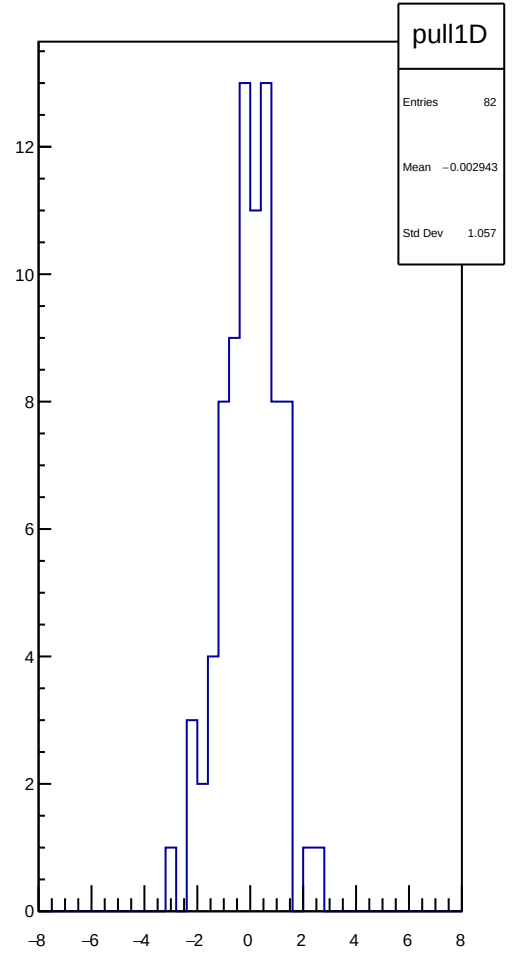

asym_sam1_rms vs run
χ² / ndf 7099 / 81
p0 305.7 ± 0.2427
360
340
320
300
280
260
240

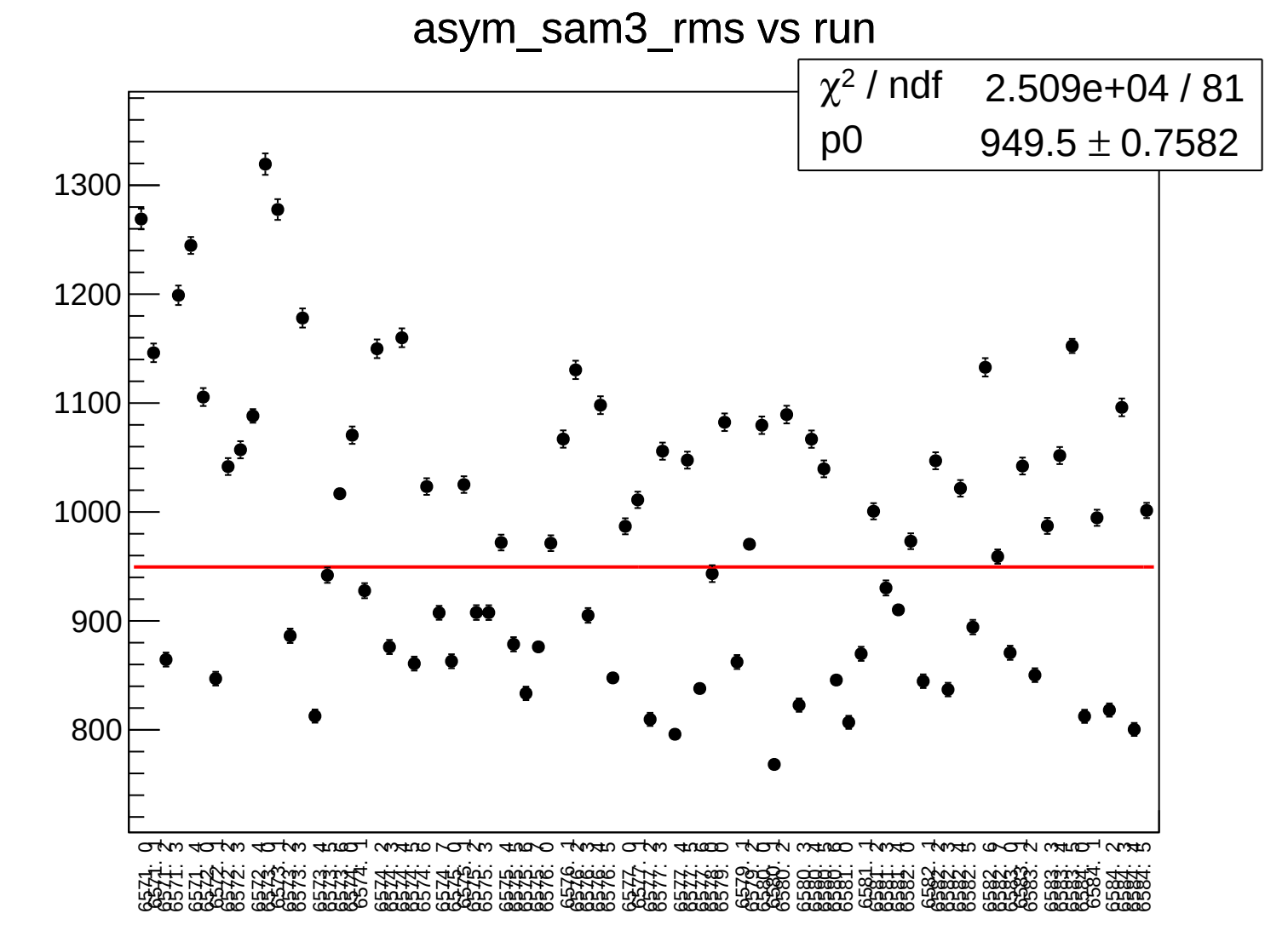

asym_sam2_mean vs run
×10^3
χ^2 / ndf 89.55 / 81
p0 4629 ± 2220
pull
Entries 82
Mean 706.7
Std Dev 663.7

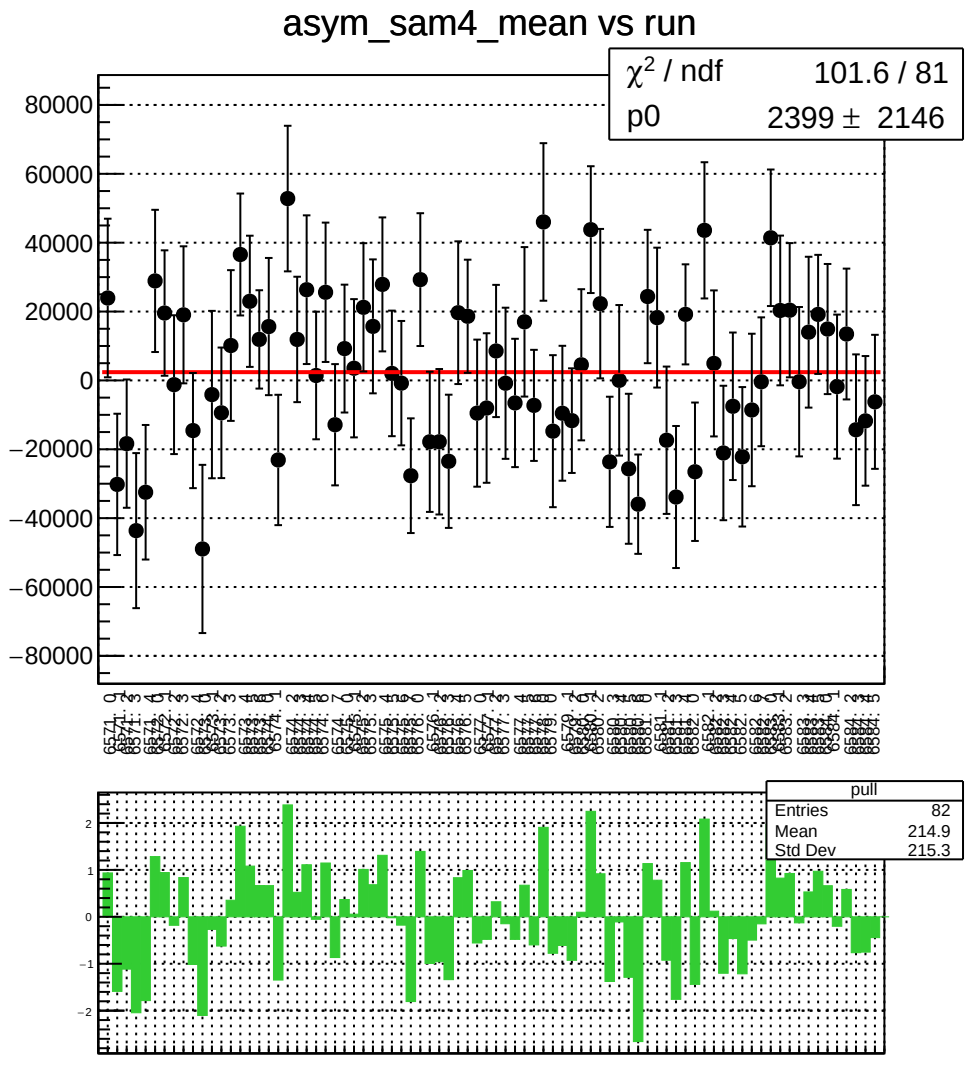

pull1D
Entries 82
Mean 0.004847
Std Dev 1.045

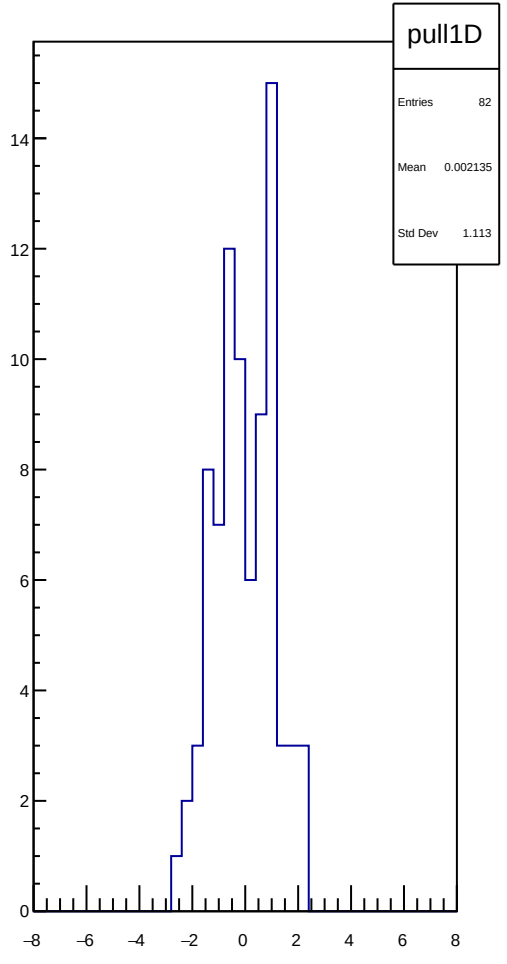

asym_sam2_rms vs run
χ² / ndf 1.251e+04 / 81
p0 1974 ± 1.57
2400
2300
2200
2100
2000
1900
1800
1700

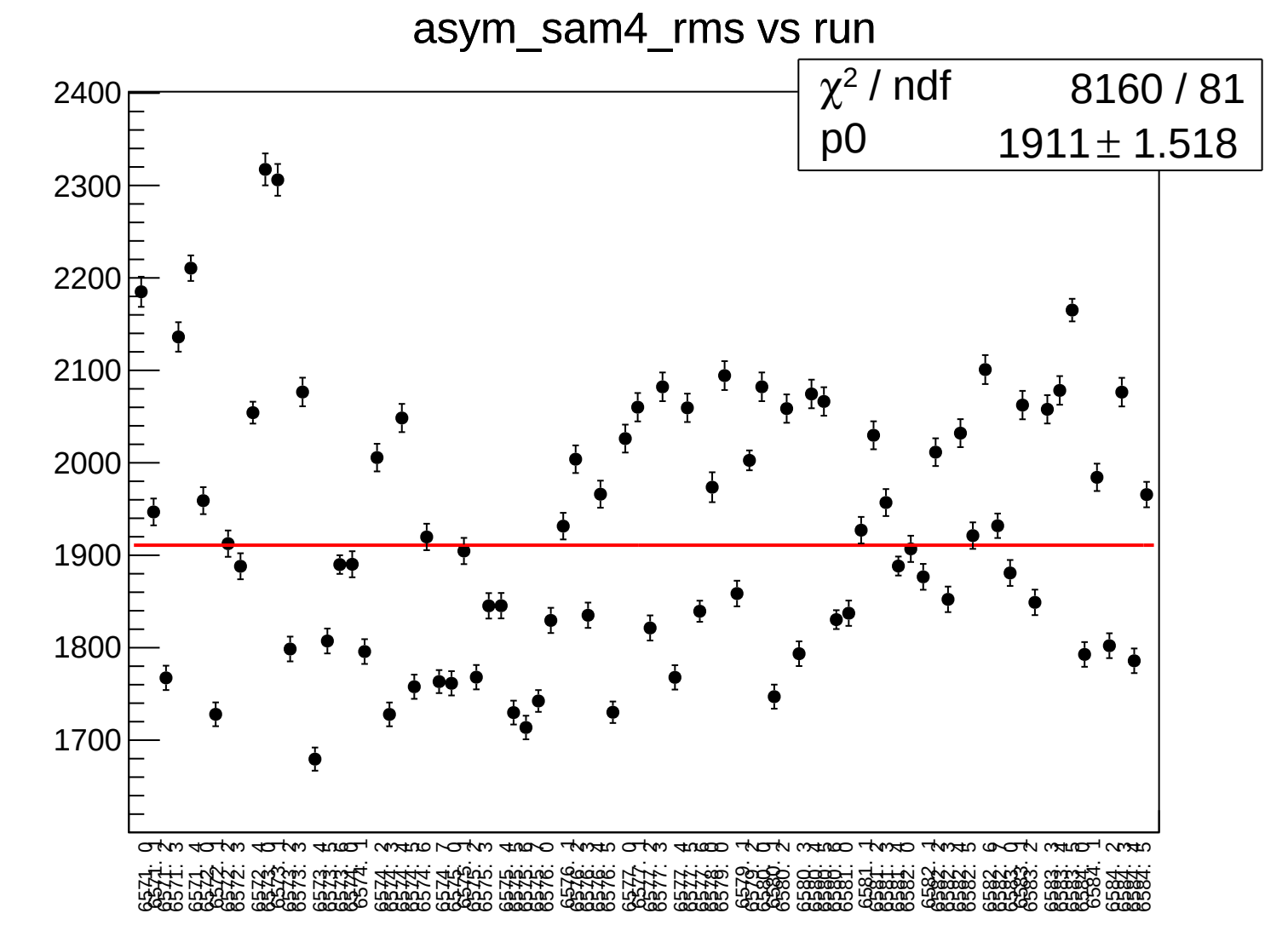

asym_sam3_mean vs run
χ² / ndf 91.67 / 81
p0 2410 ± 1072
40000
20000
0
−20000
−40000
−60000
pull
Entries 82
Mean −613.8
Std Dev 651.4
2
1
0
−1
−2
−3

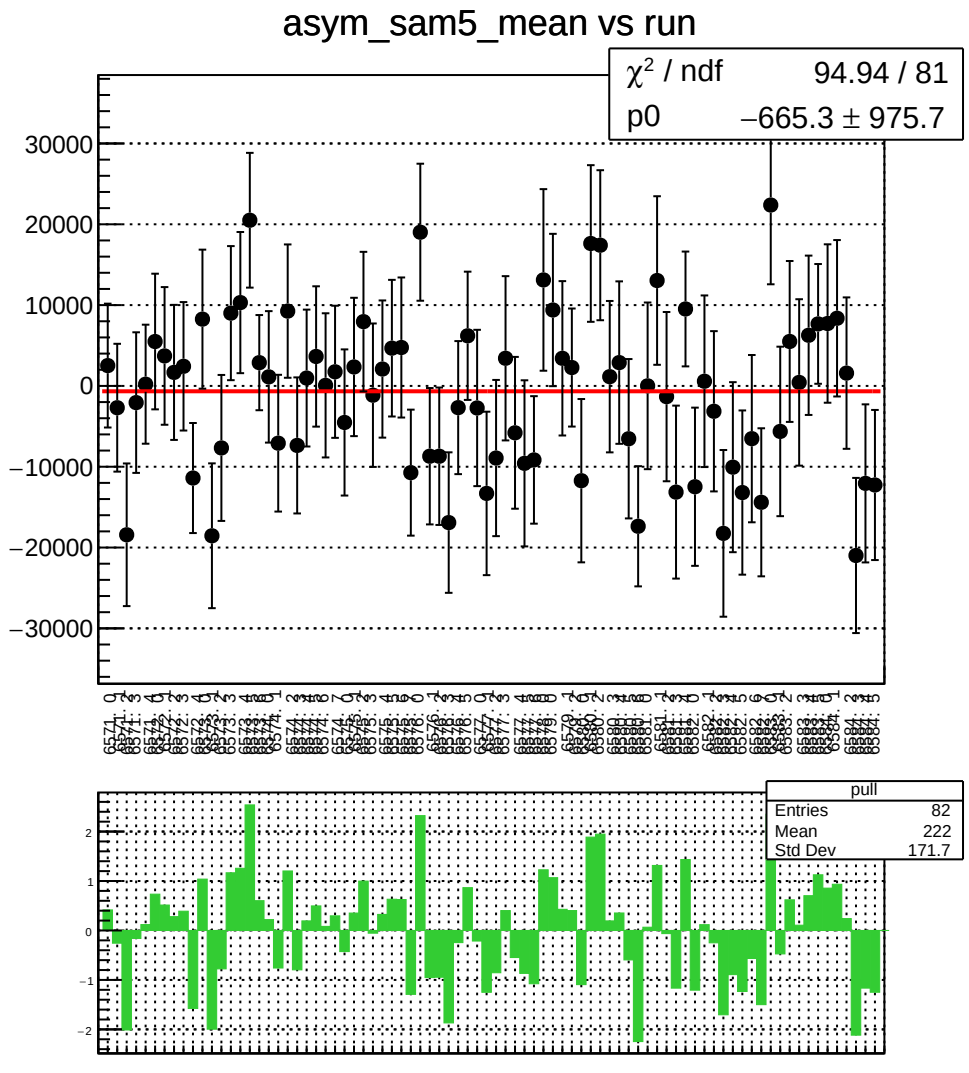

pull1D
Entries 82
Mean −0.002943
Std Dev 1.057
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

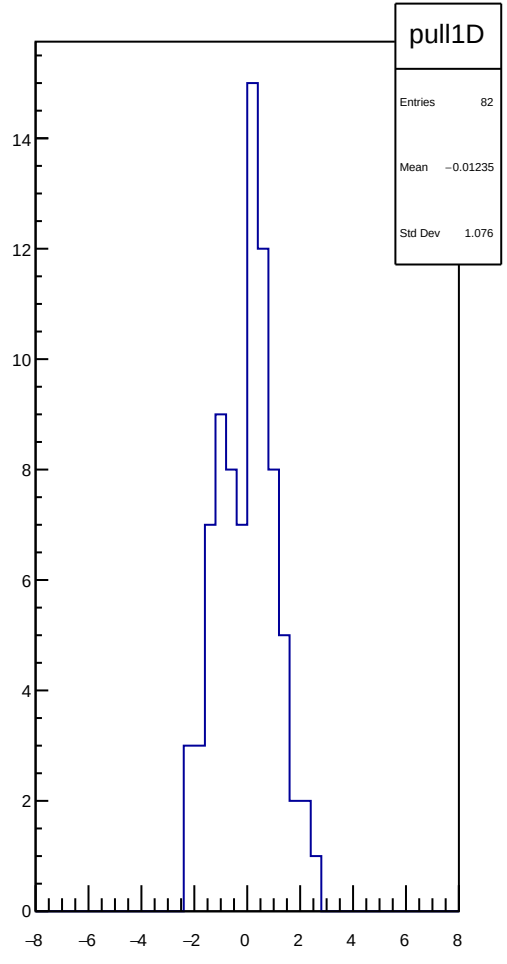

asym_sam3_rms vs run
χ² / ndf 2.509e+04 / 81
p0 949.5 ± 0.7582
1300
1200
1100
1000
900
800

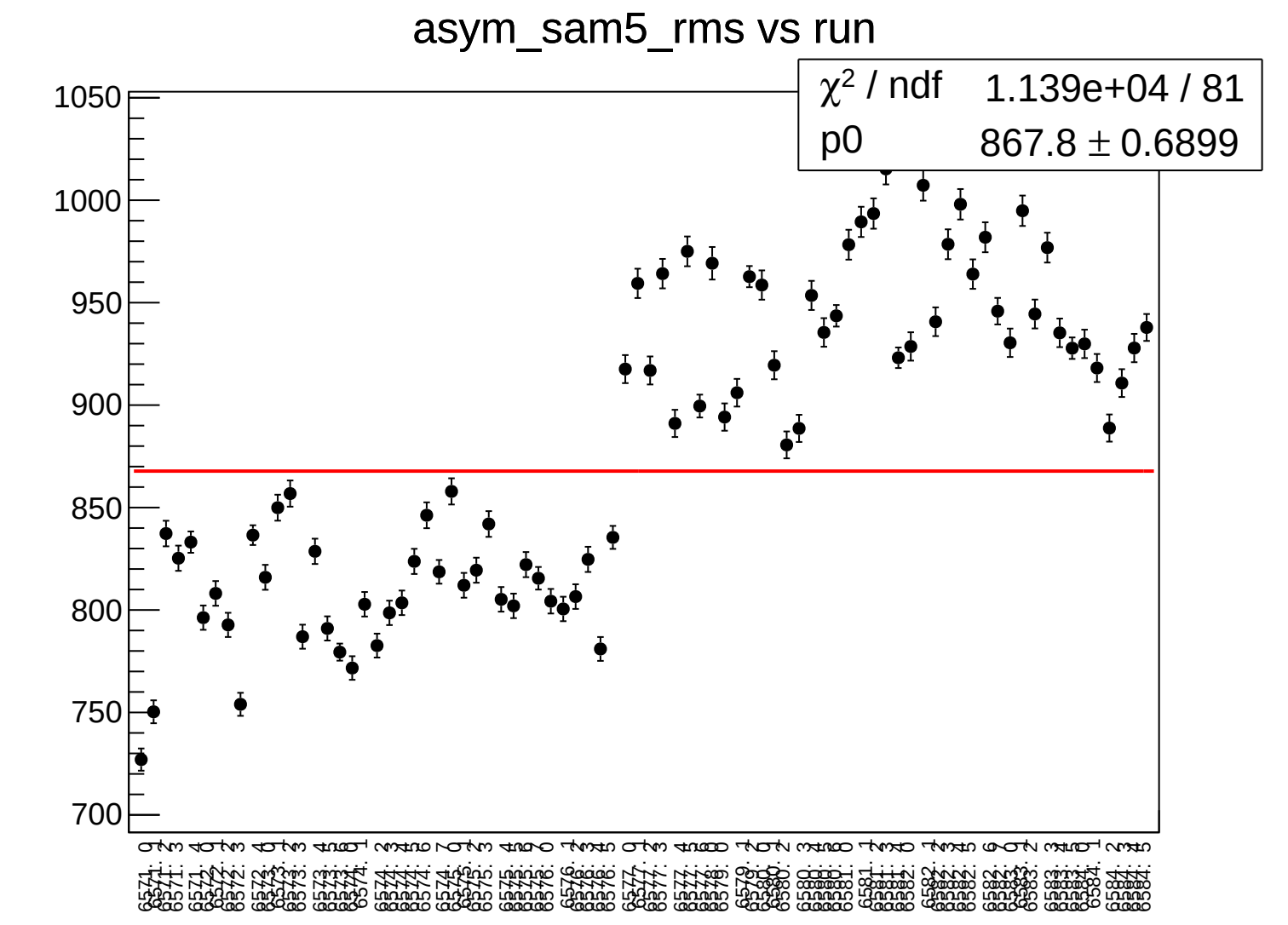

asym_sam4_mean vs run
χ² / ndf 101.6 / 81
p0 2399 ± 2146
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 82
Mean 214.9
Std Dev 215.3
2
1
0
−1
−2

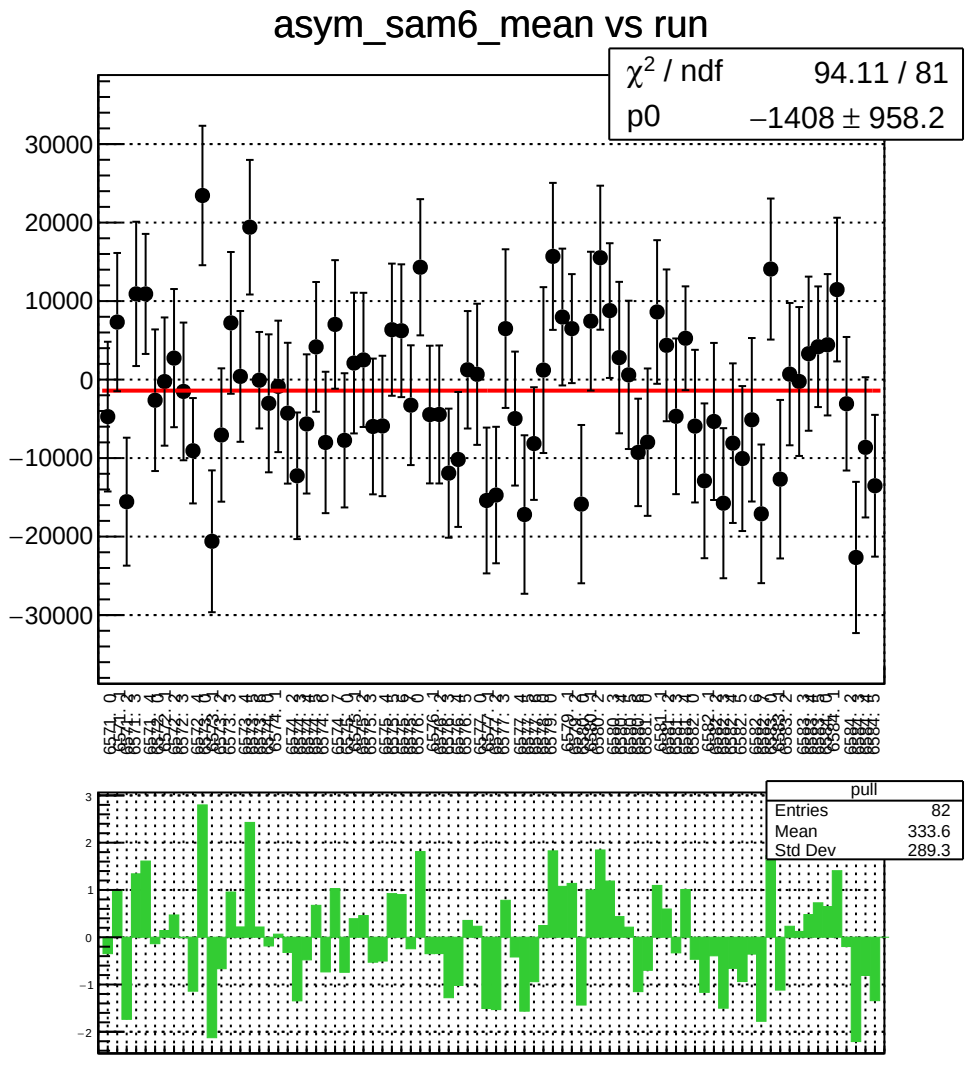

pull1D
Entries 82
Mean 0.002135
Std Dev 1.113
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

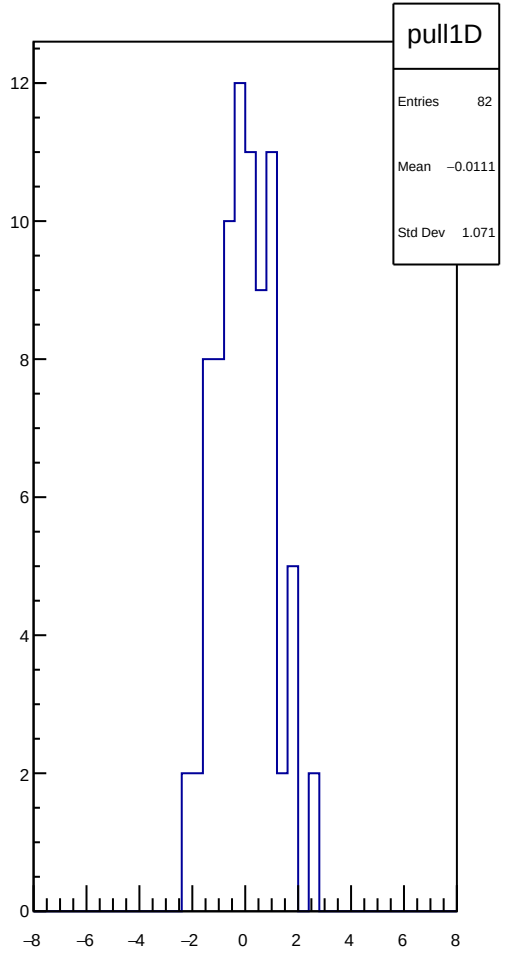

asym_sam4_rms vs run
χ² / ndf 8160 / 81
p0 1911 ± 1.518
2400
2300
2200
2100
2000
1900
1800
1700

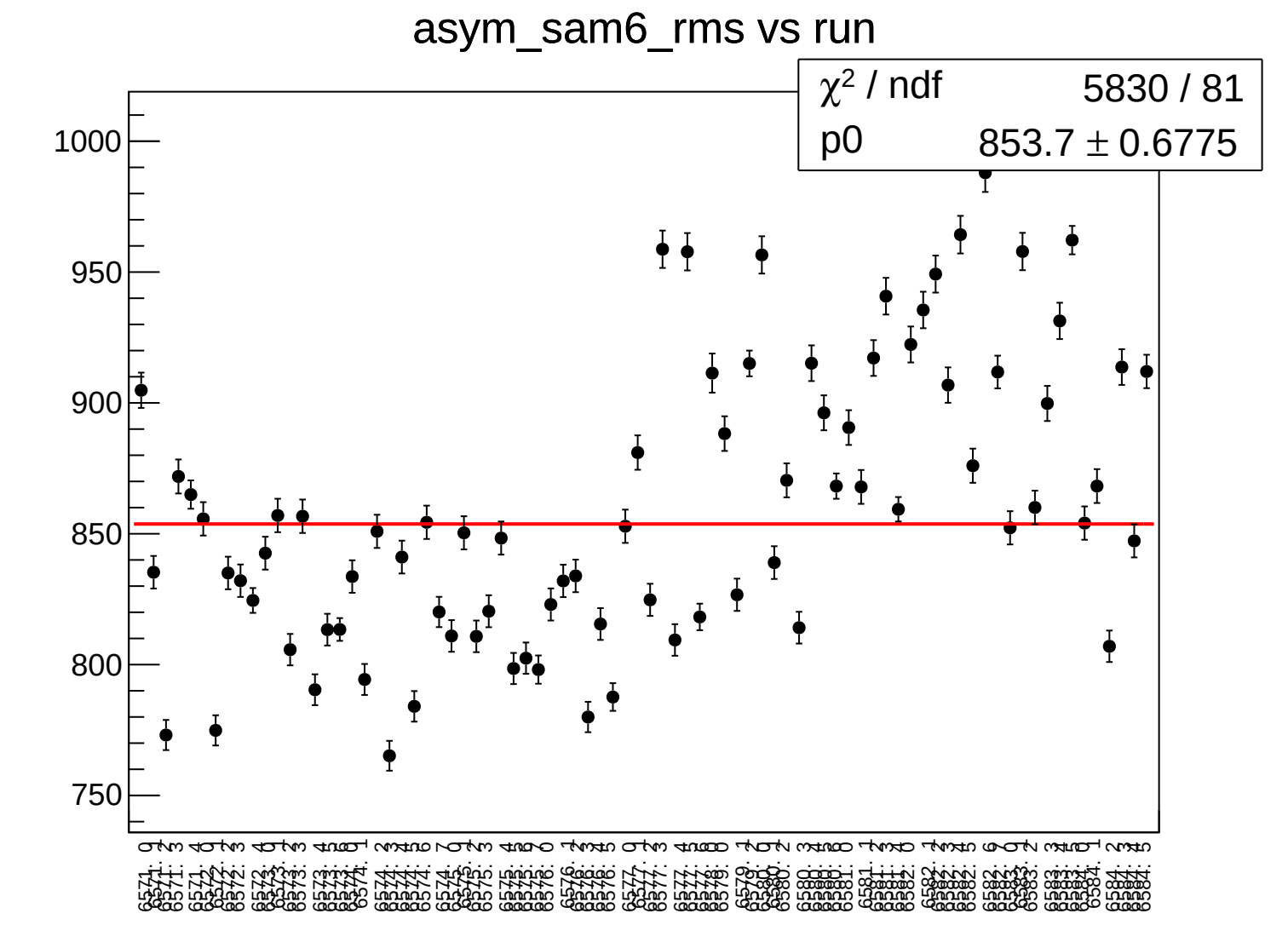

asym_sam5_mean vs run
χ² / ndf 94.94 / 81
p0 −665.3 ± 975.7
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 222
Std Dev 171.7
2
1
0
−1
−2

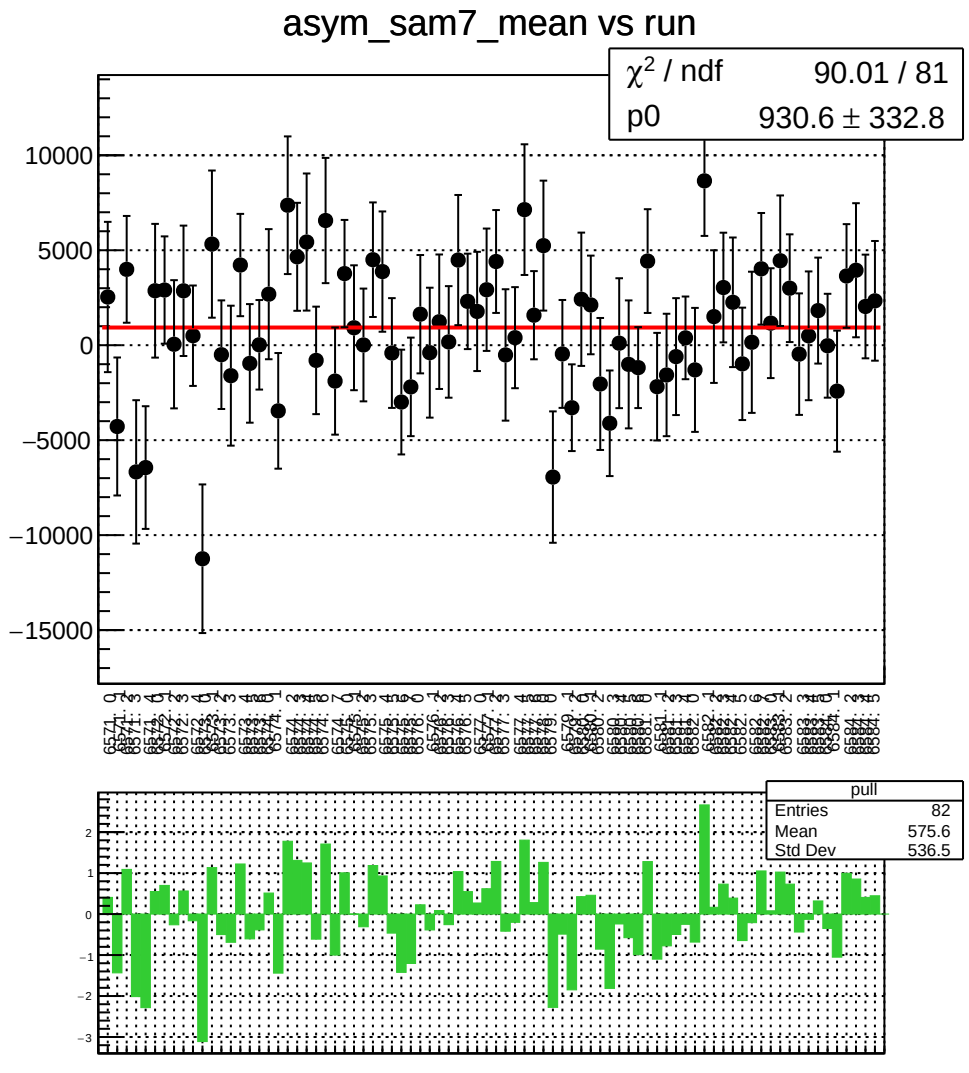

pull1D
Entries 82
Mean −0.01235
Std Dev 1.076
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

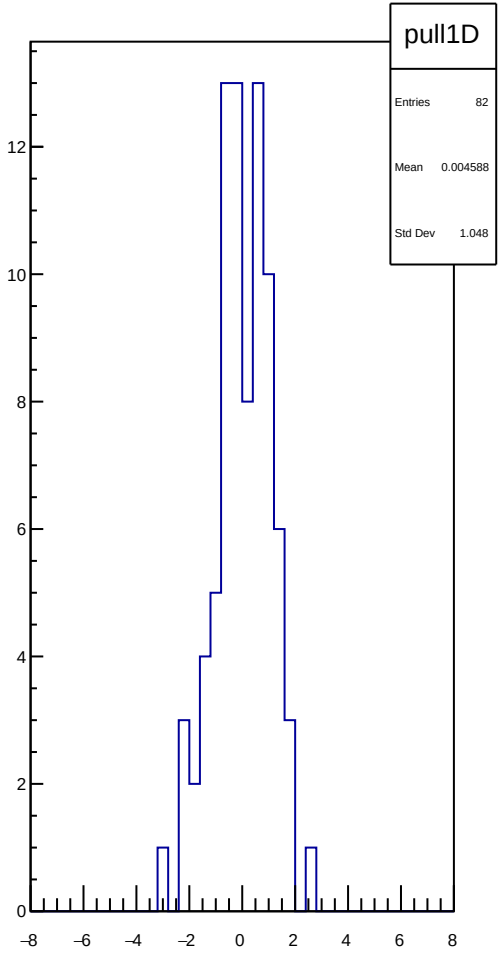

asym_sam5_rms vs run
χ² / ndf 1.139e+04 / 81
p0 867.8 ± 0.6899
1050
1000
950
900
850
800
750
700

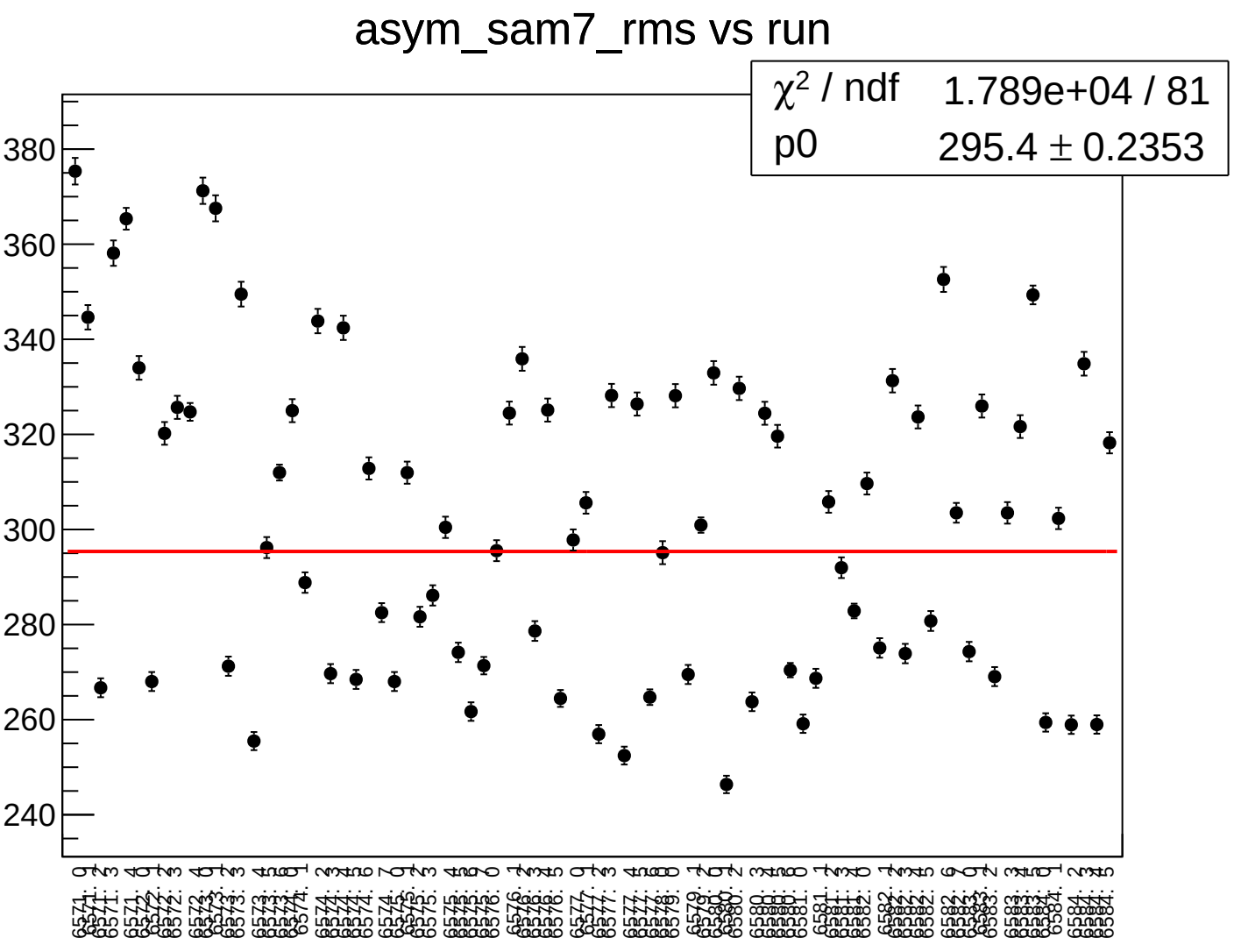

asym_sam6_mean vs run
χ² / ndf 94.11 / 81
p0 −1408 ± 958.2
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 333.6
Std Dev 289.3
3
2
1
0
−1
−2

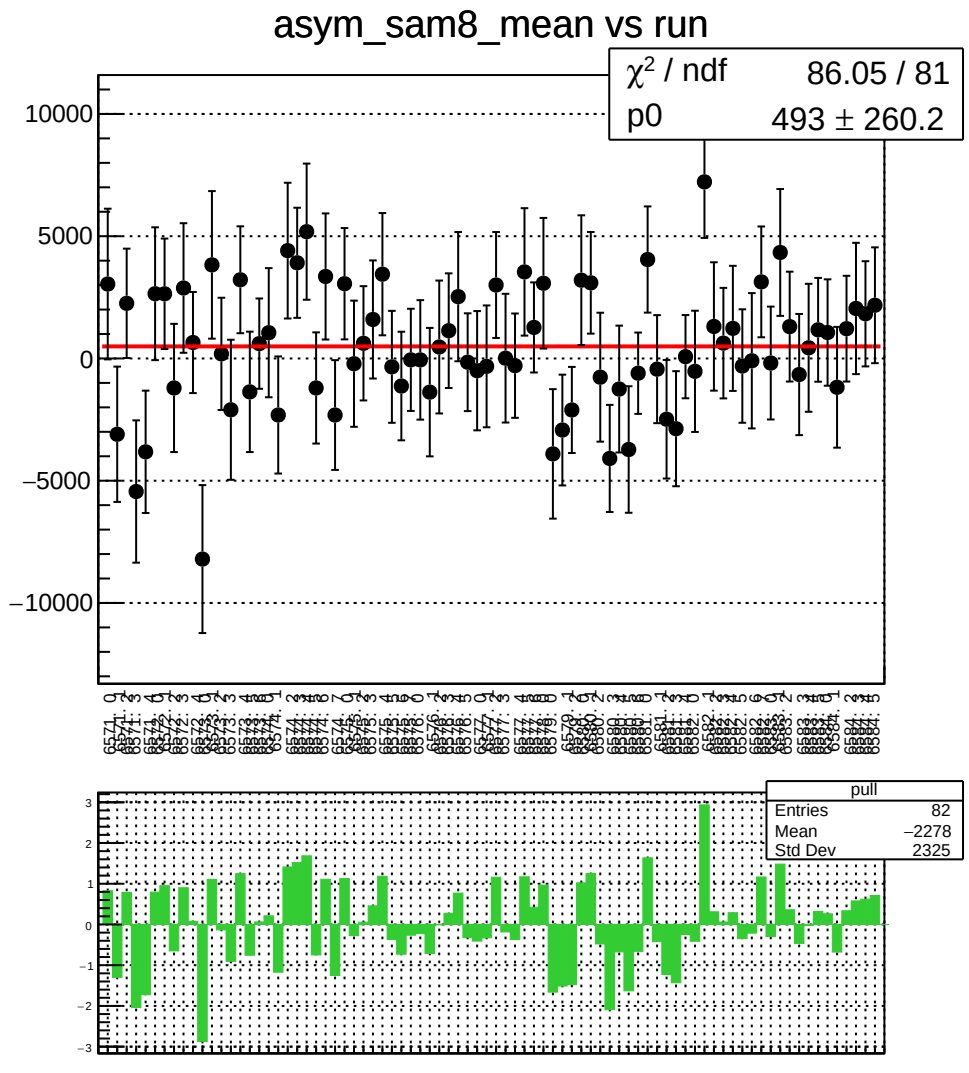

pull1D
Entries 82
Mean −0.0111
Std Dev 1.071
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

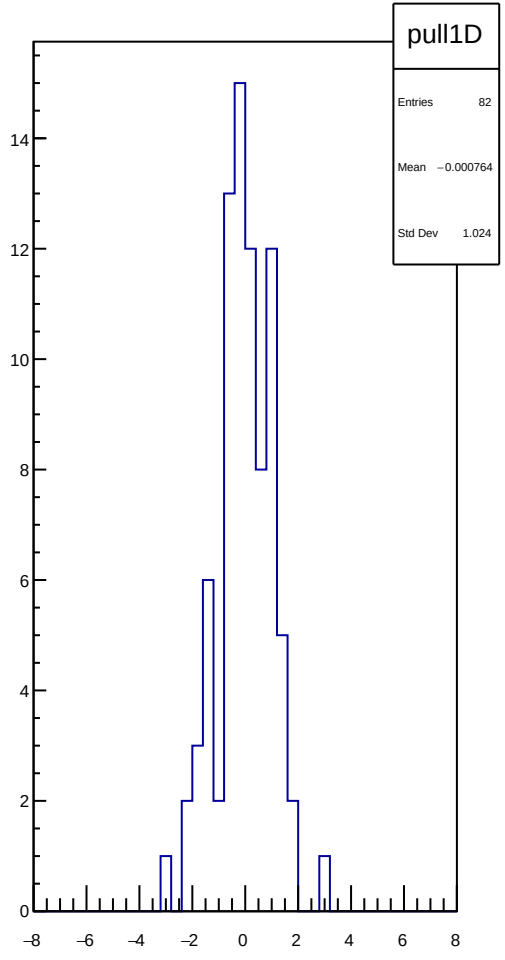

asym_sam6_rms vs run
χ² / ndf 5830 / 81
p0 853.7 ± 0.6775
1000
950
900
850
800
750

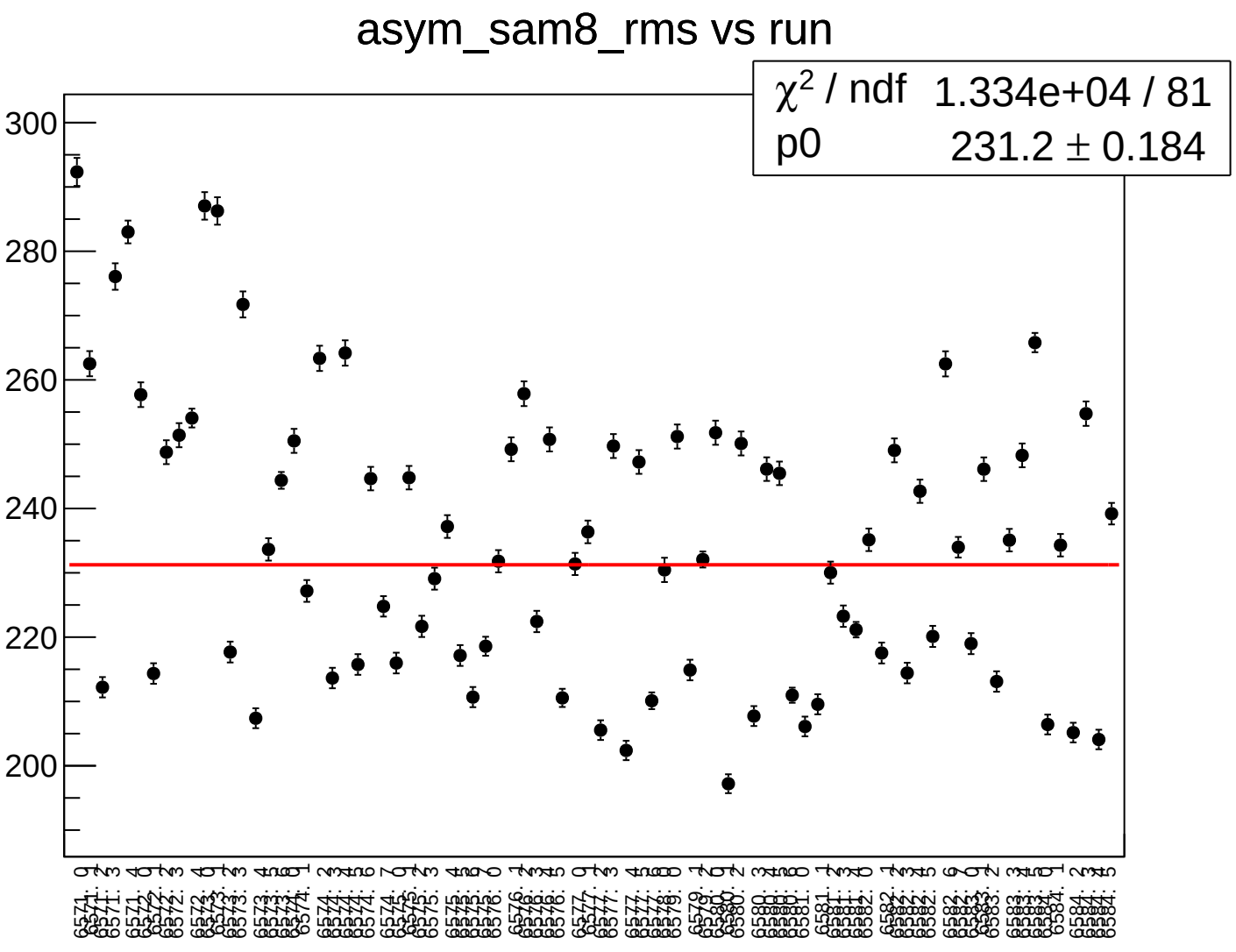

asym_sam7_mean vs run
$\chi^2$ / ndf 90.01 / 81
p0 930.6 ± 332.8
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 575.6
Std Dev 536.5
2
1
0
−1
−2
−3

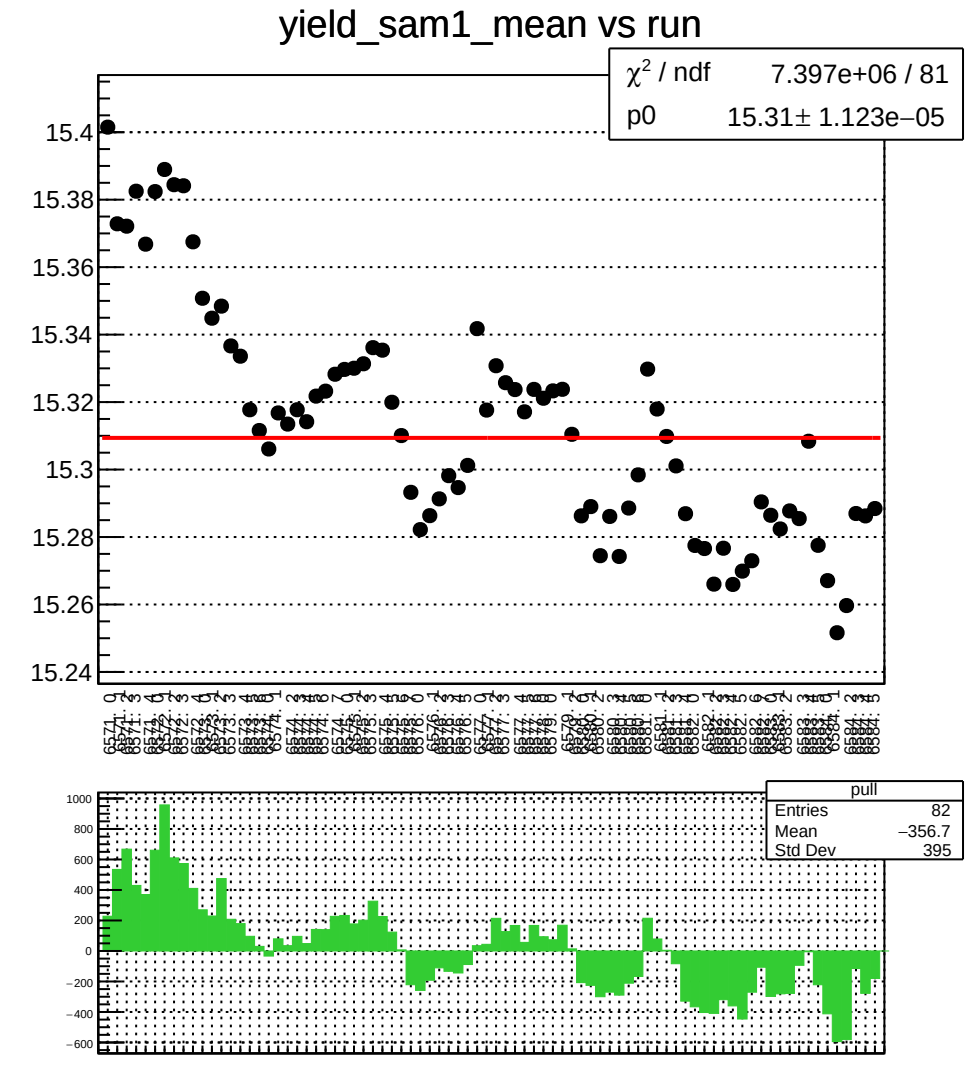

pull1D
Entries 82
Mean 0.004588
Std Dev 1.048
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

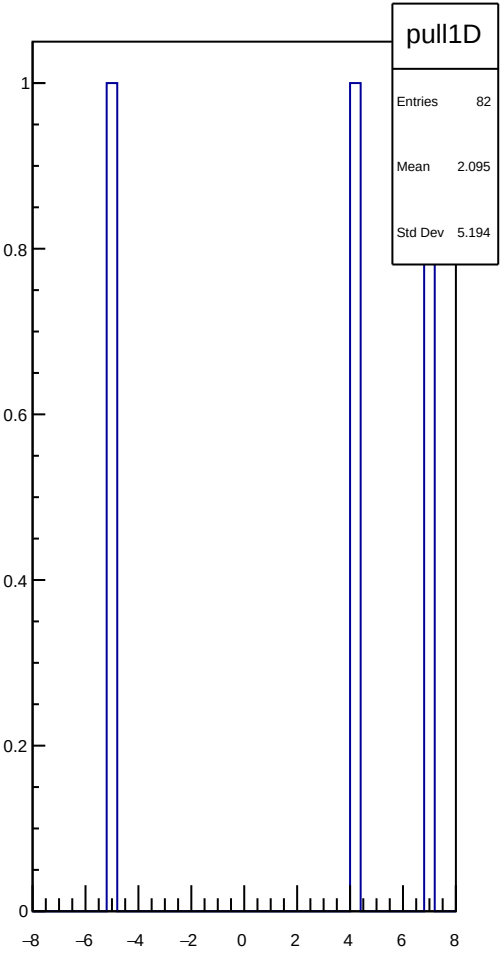

asym_sam7_rms vs run
χ² / ndf 1.789e+04 / 81
p0 295.4 ± 0.2353
380
360
340
320
300
280
260
240

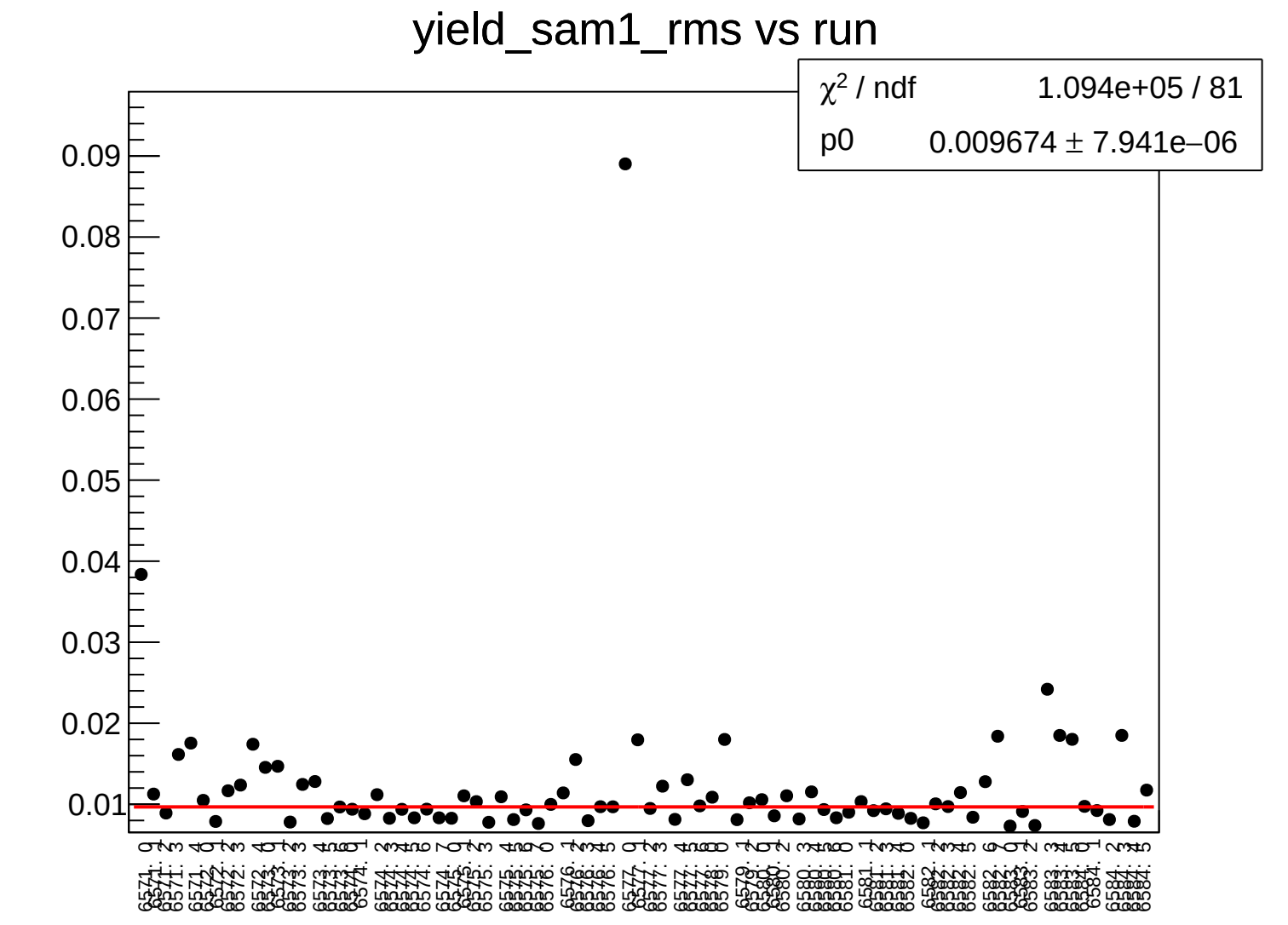

asym_sam8_mean vs run
χ² / ndf 86.05 / 81
p0 493 ± 260.2
10000
5000
0
−5000
−10000
pull
Entries 82
Mean −2278
Std Dev 2325
3
2
1
0
−1
−2
−3

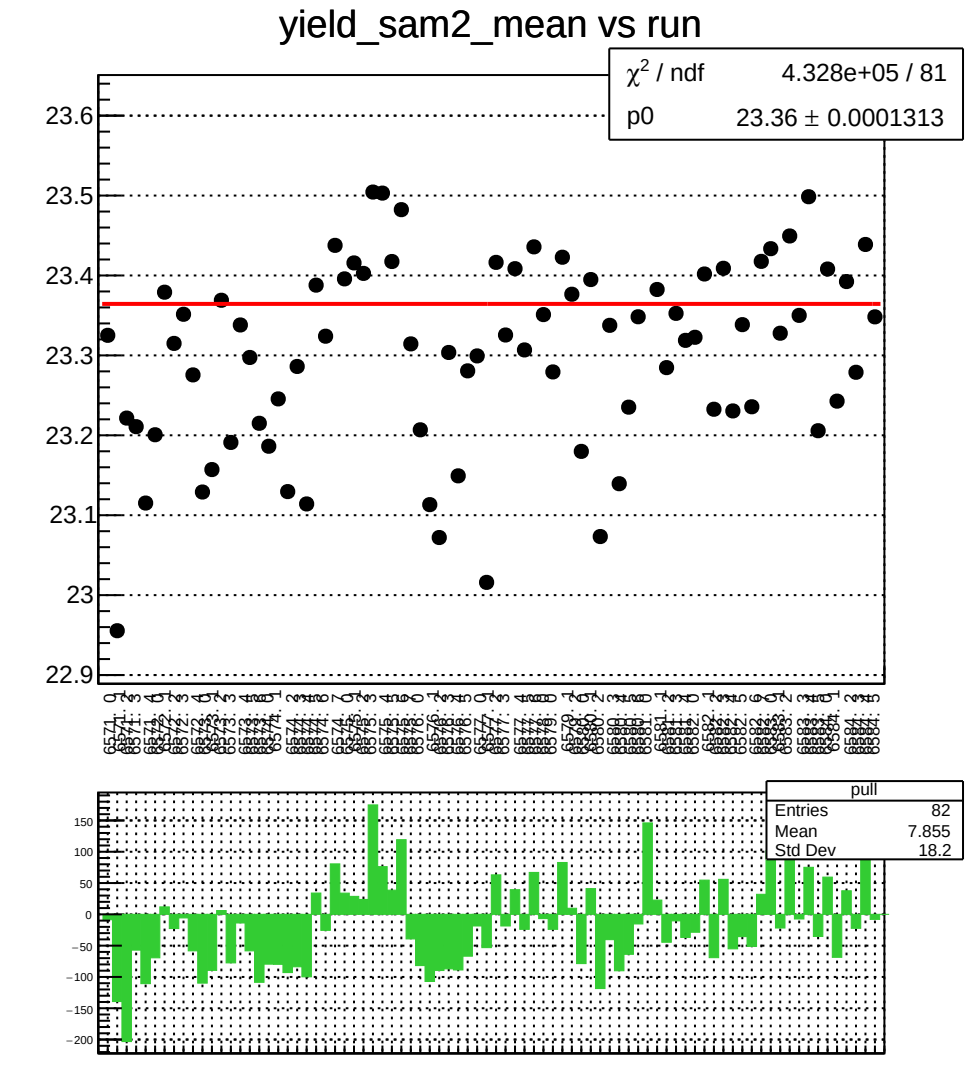

pull1D
Entries 82
Mean −0.000764
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

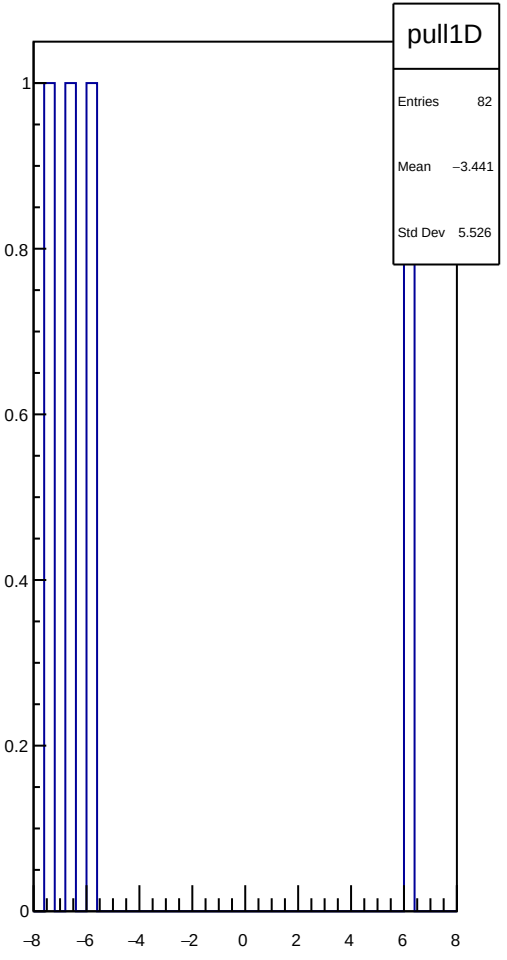

asym_sam8_rms vs run
χ² / ndf 1.334e+04 / 81
p0 231.2 ± 0.184
300
280
260
240
220
200

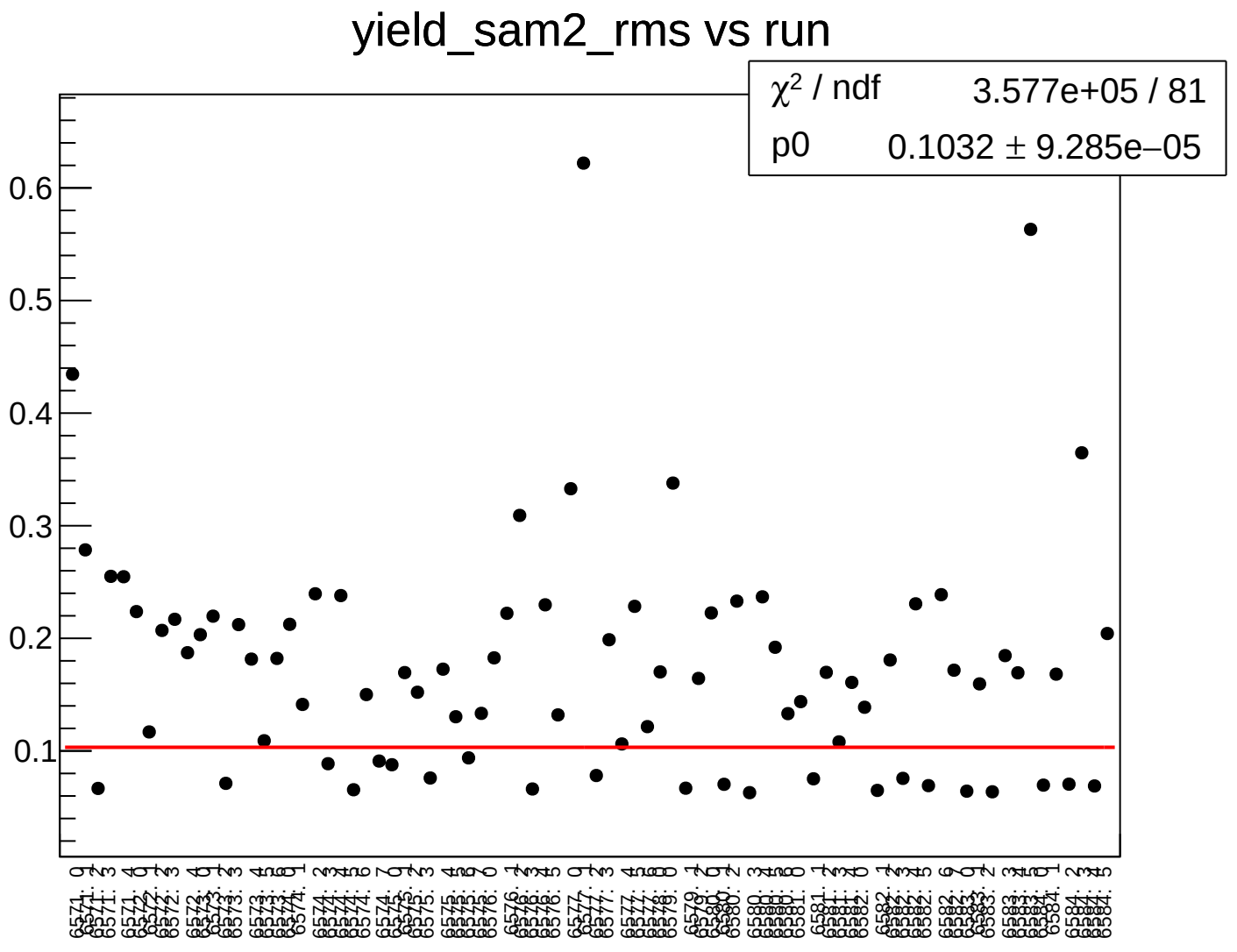

yield_sam1_mean vs run
χ² / ndf 7.397e+06 / 81
p0 15.31± 1.123e−05
15.4
15.38
15.36
15.34
15.32
15.3
15.28
15.26
15.24
pull
Entries 82
Mean −356.7
Std Dev 395
1000
800
600
400
200
0
−200
−400
−600

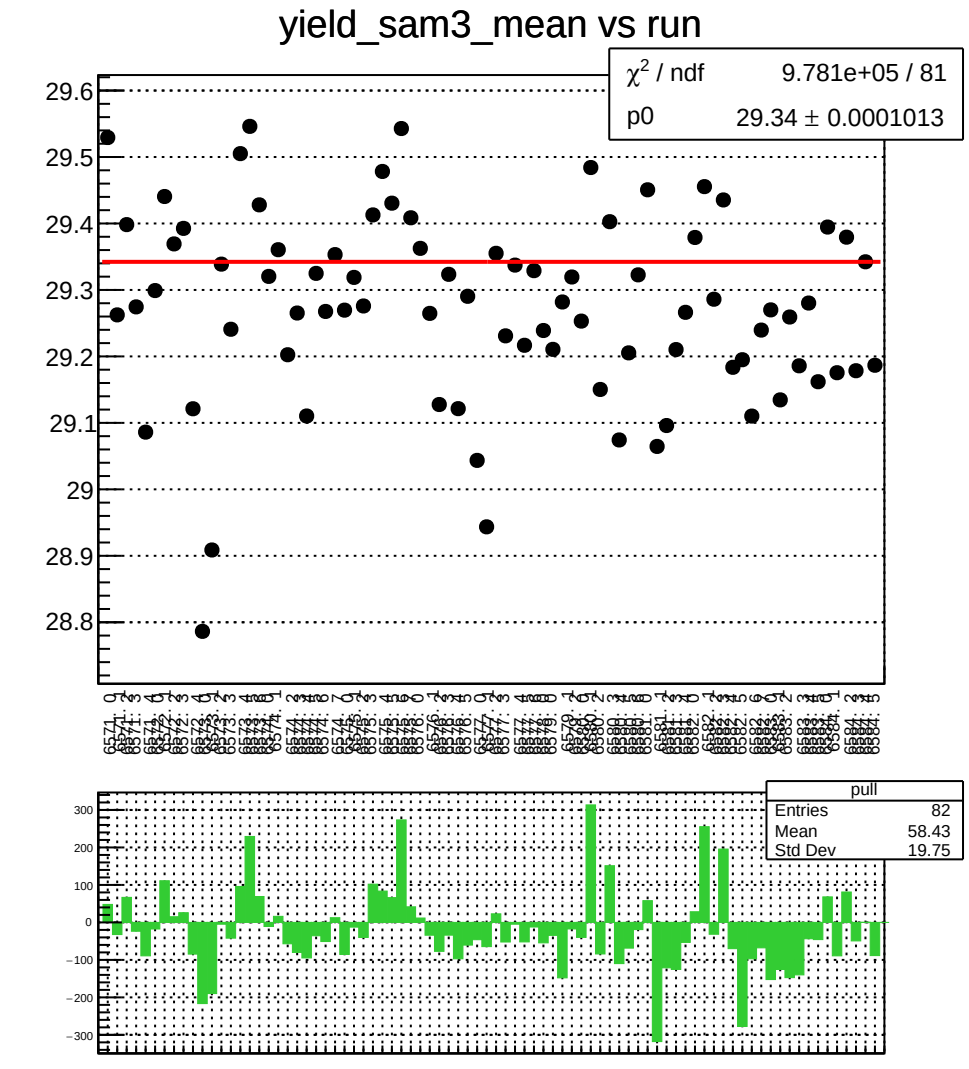

pull1D
Entries 82
Mean 2.095
Std Dev 5.194
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

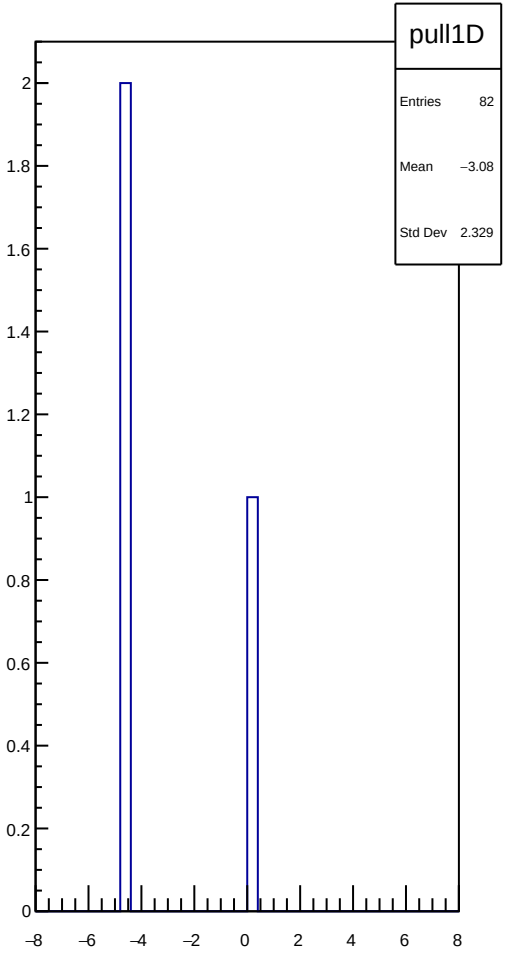

yield_sam1_rms vs run
$\chi^2$ / ndf 1.094e+05 / 81
p0 0.009674 ± 7.941e−06
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

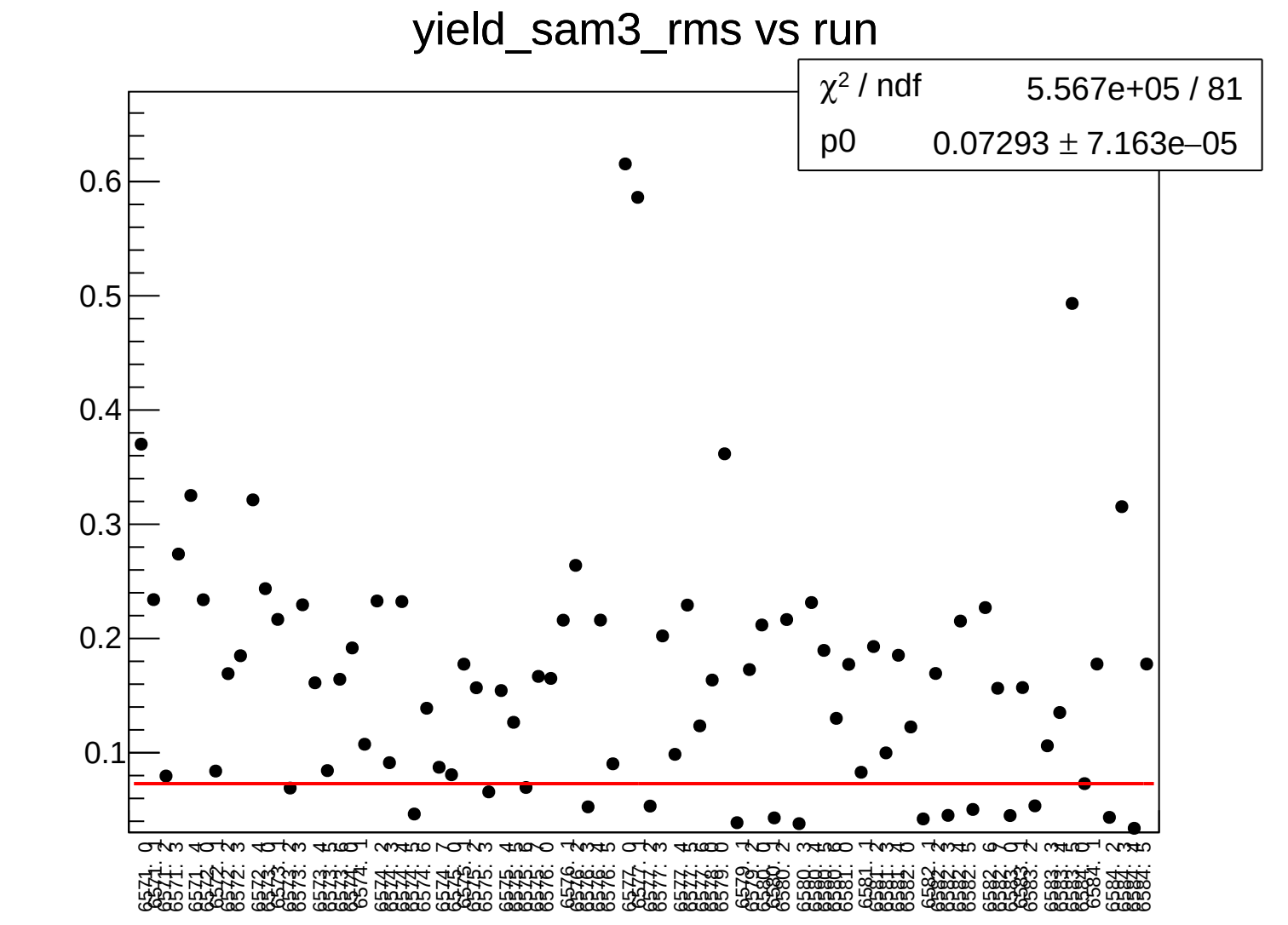

yield_sam2_mean vs run
χ² / ndf 4.328e+05 / 81
p0 23.36 ± 0.0001313
23.6
23.5
23.4
23.3
23.2
23.1
23
22.9
pull
Entries 82
Mean 7.855
Std Dev 18.2
150
100
50
0
−50
−100
−150
−200

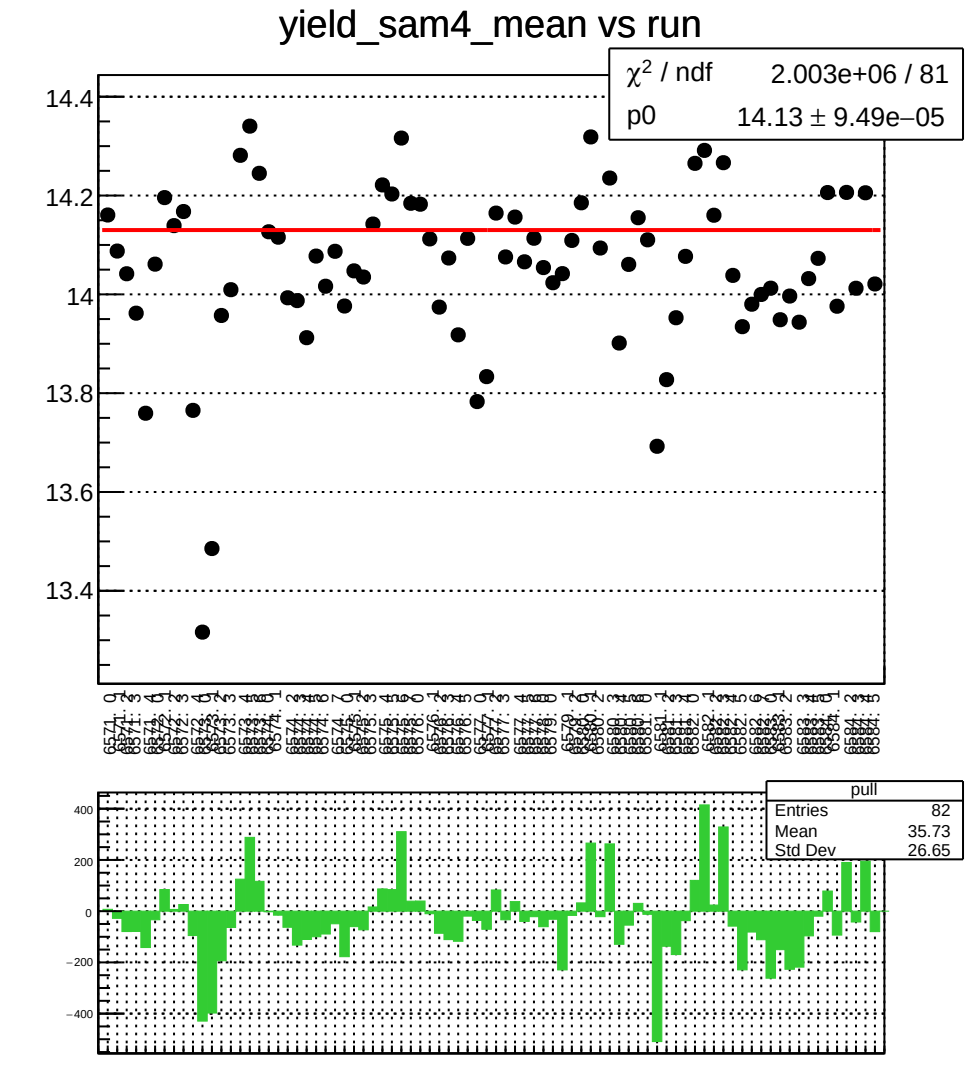

pull1D
Entries 82
Mean −3.441
Std Dev 5.526
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

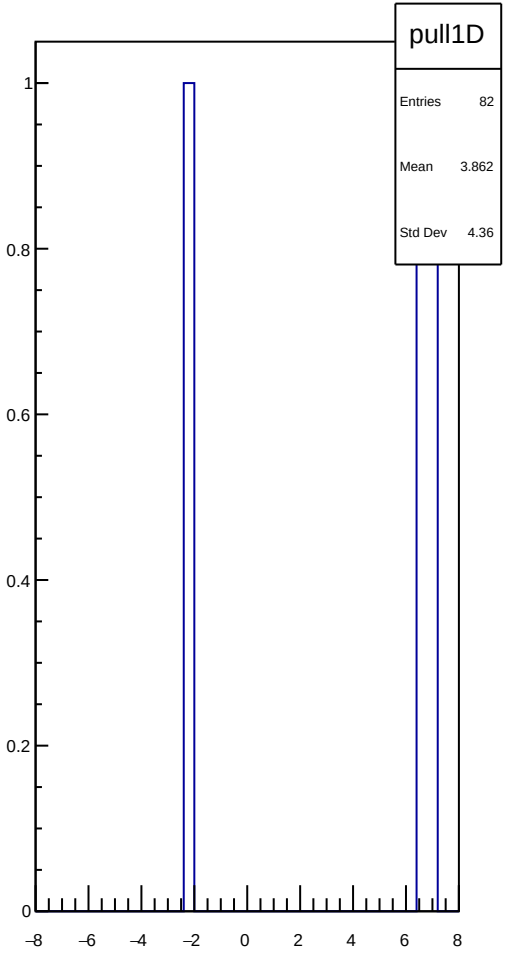

yield_sam2_rms vs run
χ² / ndf 3.577e+05 / 81
p0 0.1032 ± 9.285e−05
0.6
0.5
0.4
0.3
0.2
0.1

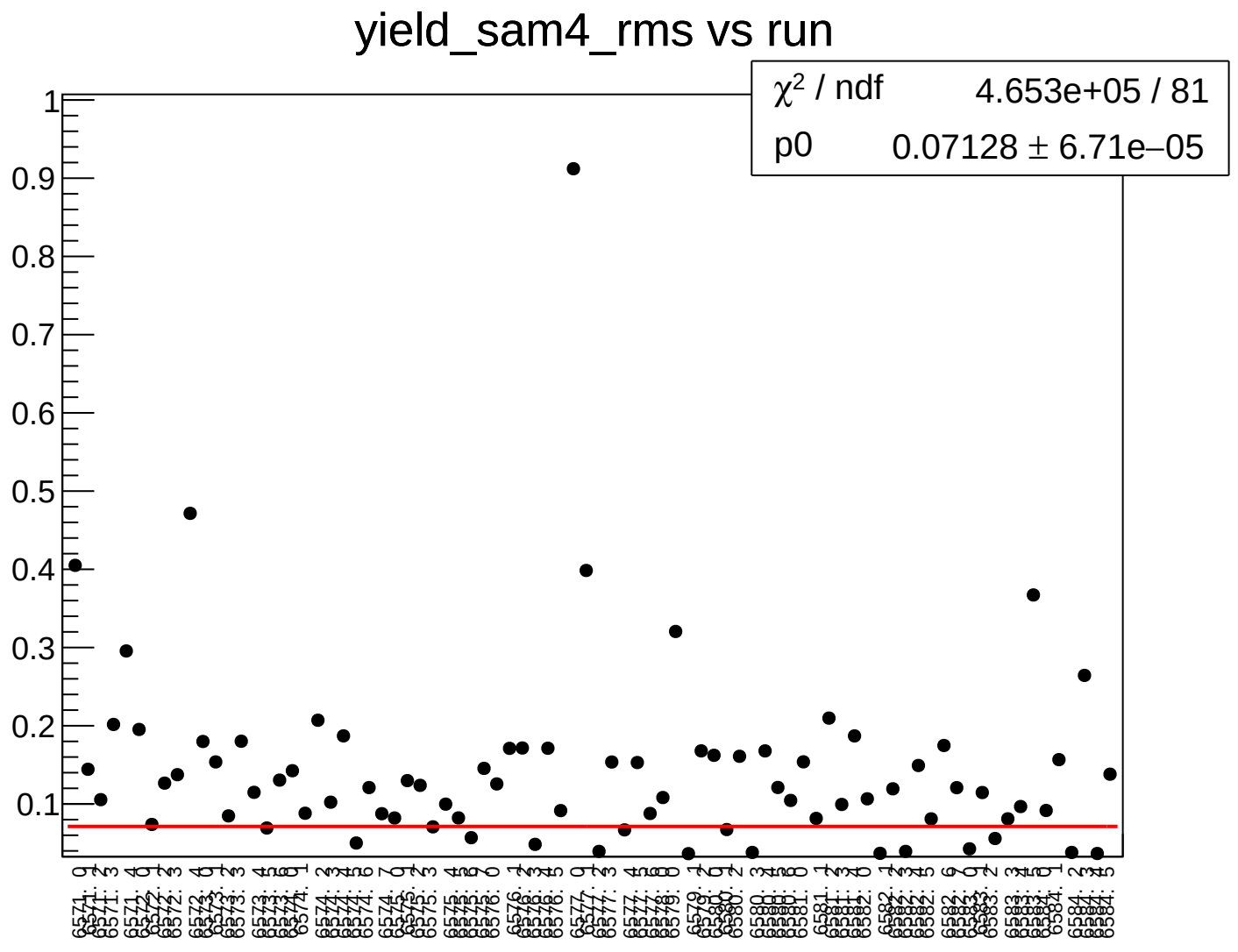

yield_sam3_mean vs run
χ² / ndf 9.781e+05 / 81
p0 29.34 ± 0.0001013
29.6
29.5
29.4
29.3
29.2
29.1
29
28.9
28.8
pull
Entries 82
Mean 58.43
Std Dev 19.75
300
200
100
0
−100
−200
−300

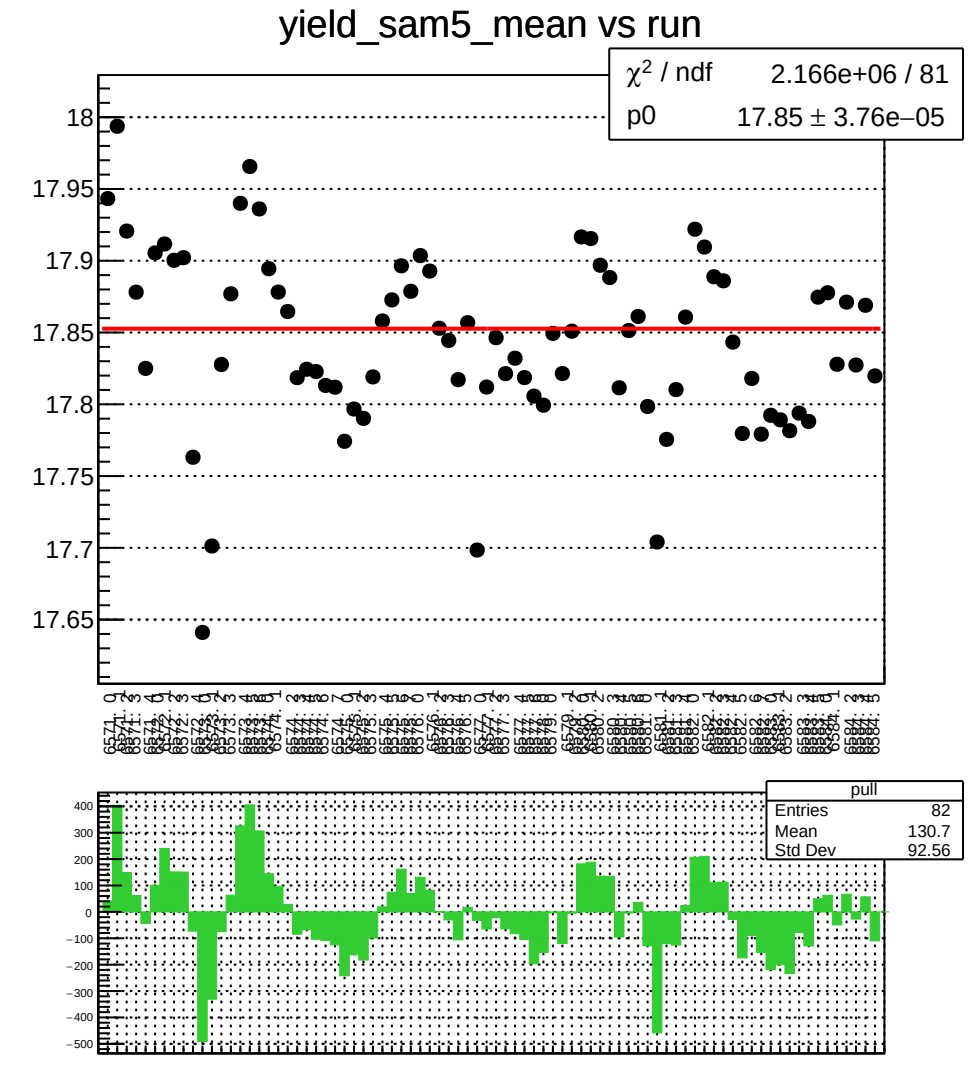

pull1D
Entries 82
Mean −3.08
Std Dev 2.329
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

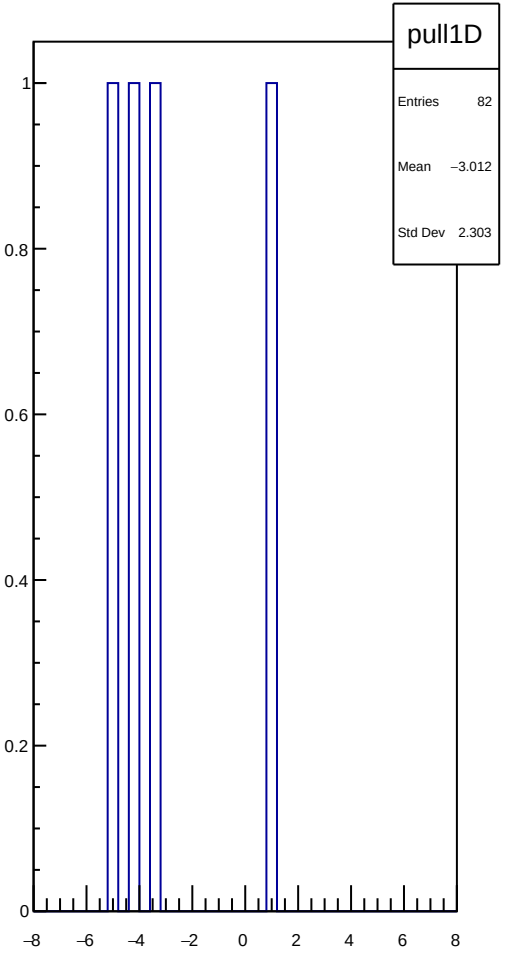

yield_sam3_rms vs run
$\chi^2$ / ndf 5.567e+05 / 81
p0 0.07293 ± 7.163e−05
0.6
0.5
0.4
0.3
0.2
0.1

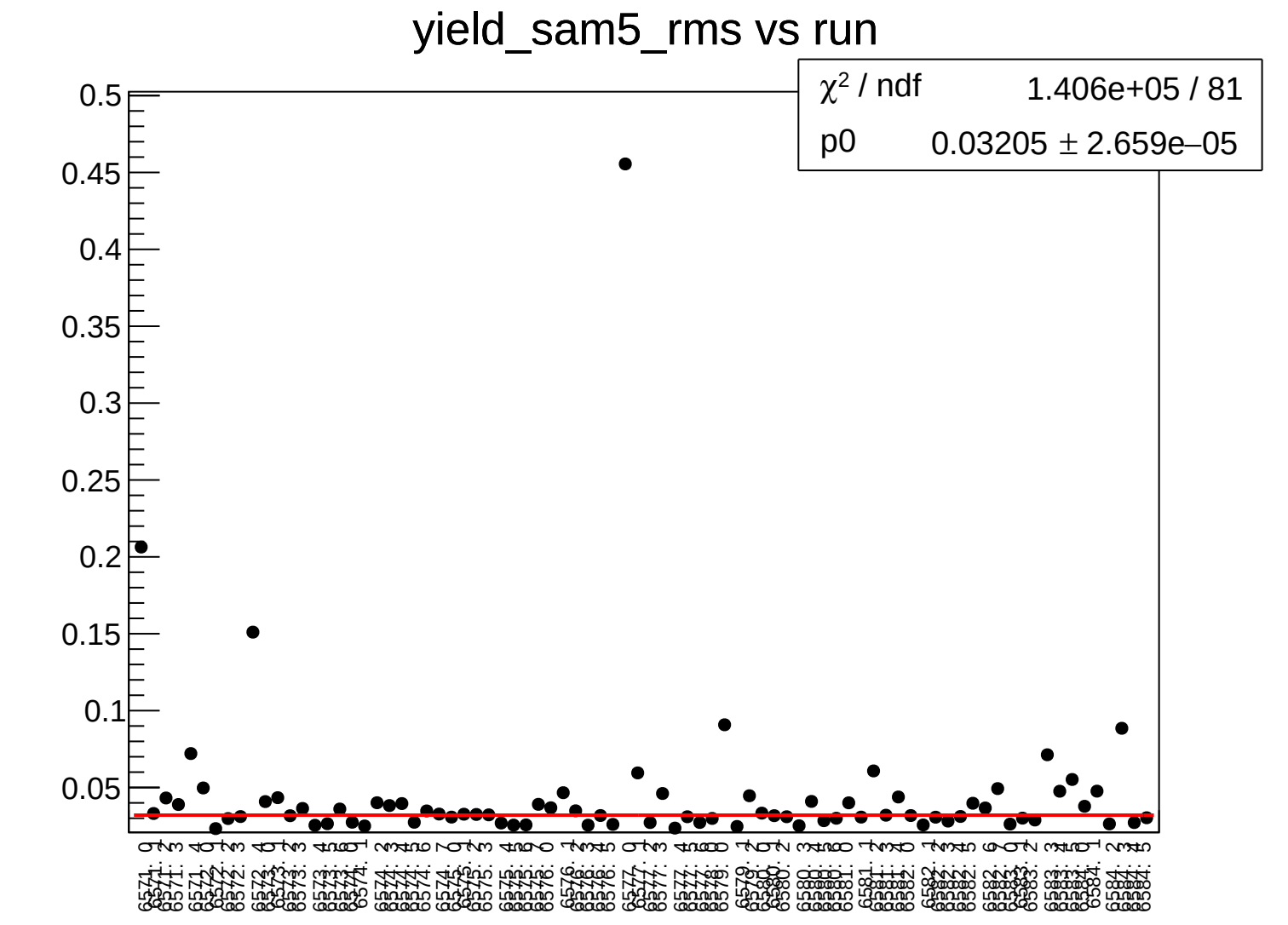

yield_sam4_mean vs run
χ² / ndf 2.003e+06 / 81
p0 14.13 ± 9.49e−05
14.4
14.2
14
13.8
13.6
13.4
pull
Entries 82
Mean 35.73
Std Dev 26.65
400
200
0
−200
−400

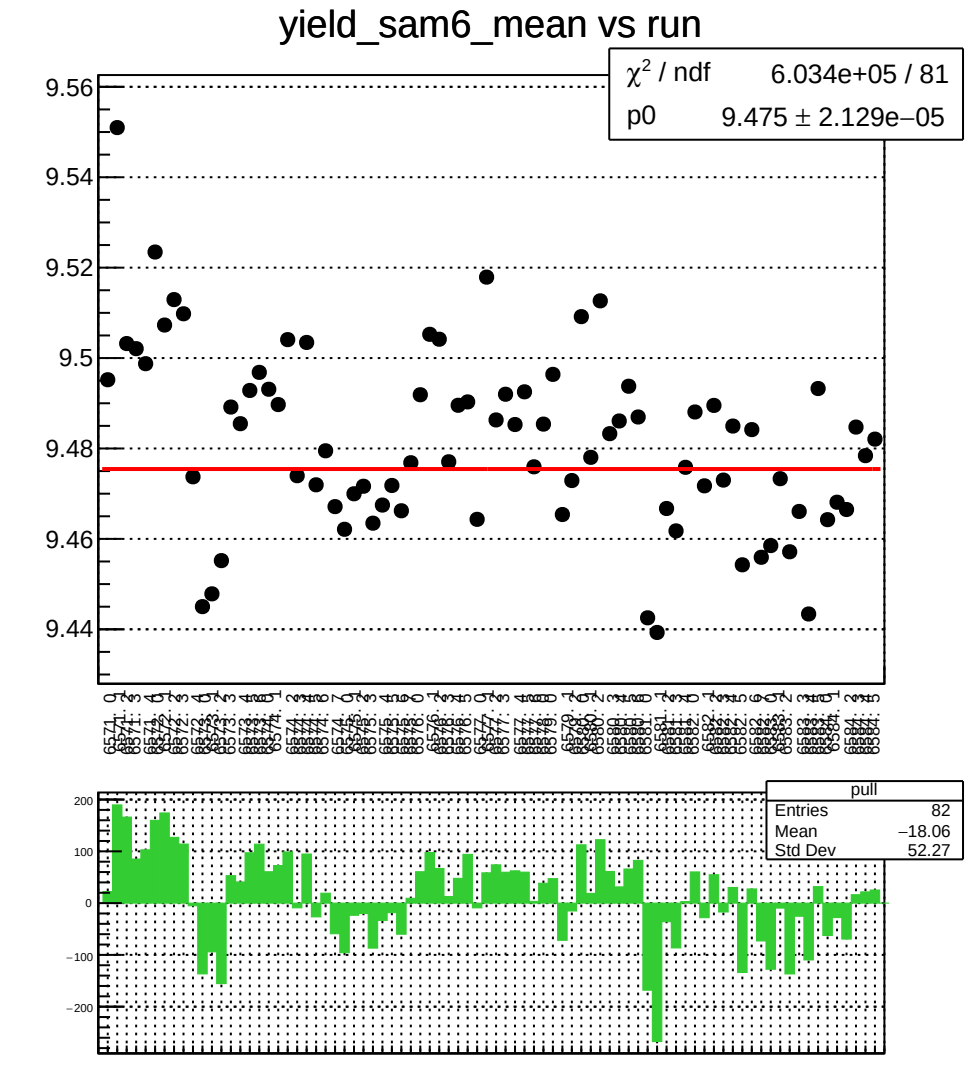

pull1D
Entries 82
Mean 3.862
Std Dev 4.36
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

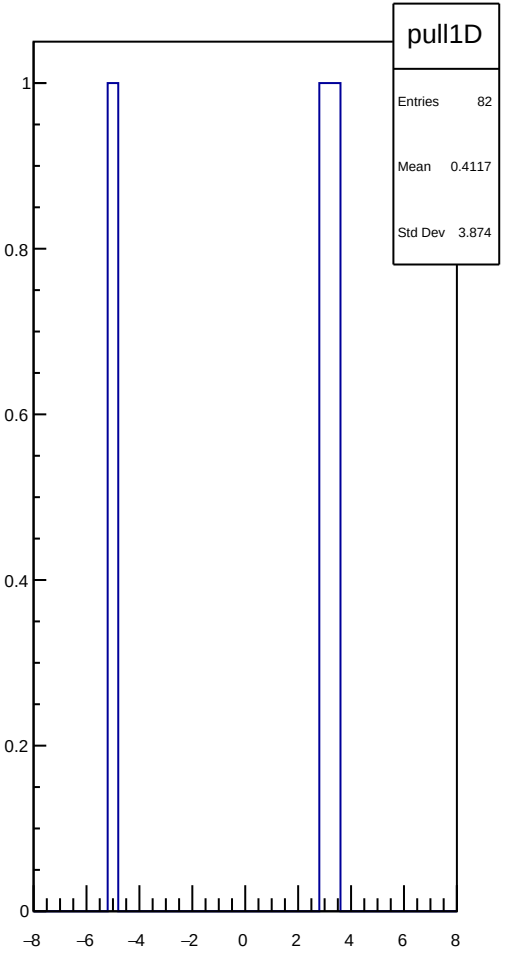

yield_sam4_rms vs run
χ² / ndf 4.653e+05 / 81
p0 0.07128 ± 6.71e−05
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

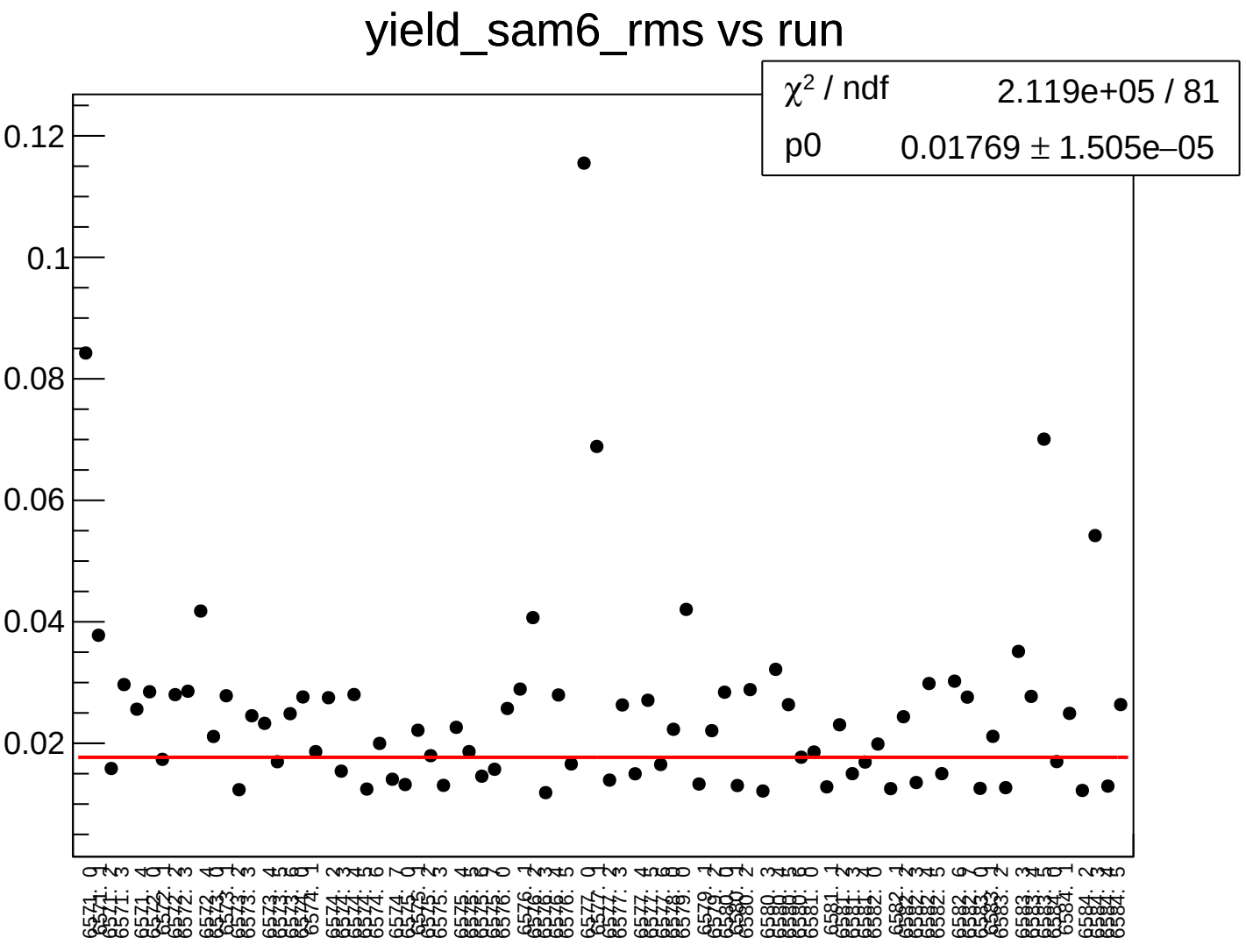

yield_sam5_mean vs run
χ² / ndf 2.166e+06 / 81
p0 17.85 ± 3.76e−05
18
17.95
17.9
17.85
17.8
17.75
17.7
17.65
pull
Entries 82
Mean 130.7
Std Dev 92.56
400
300
200
100
0
−100
−200
−300
−400
−500

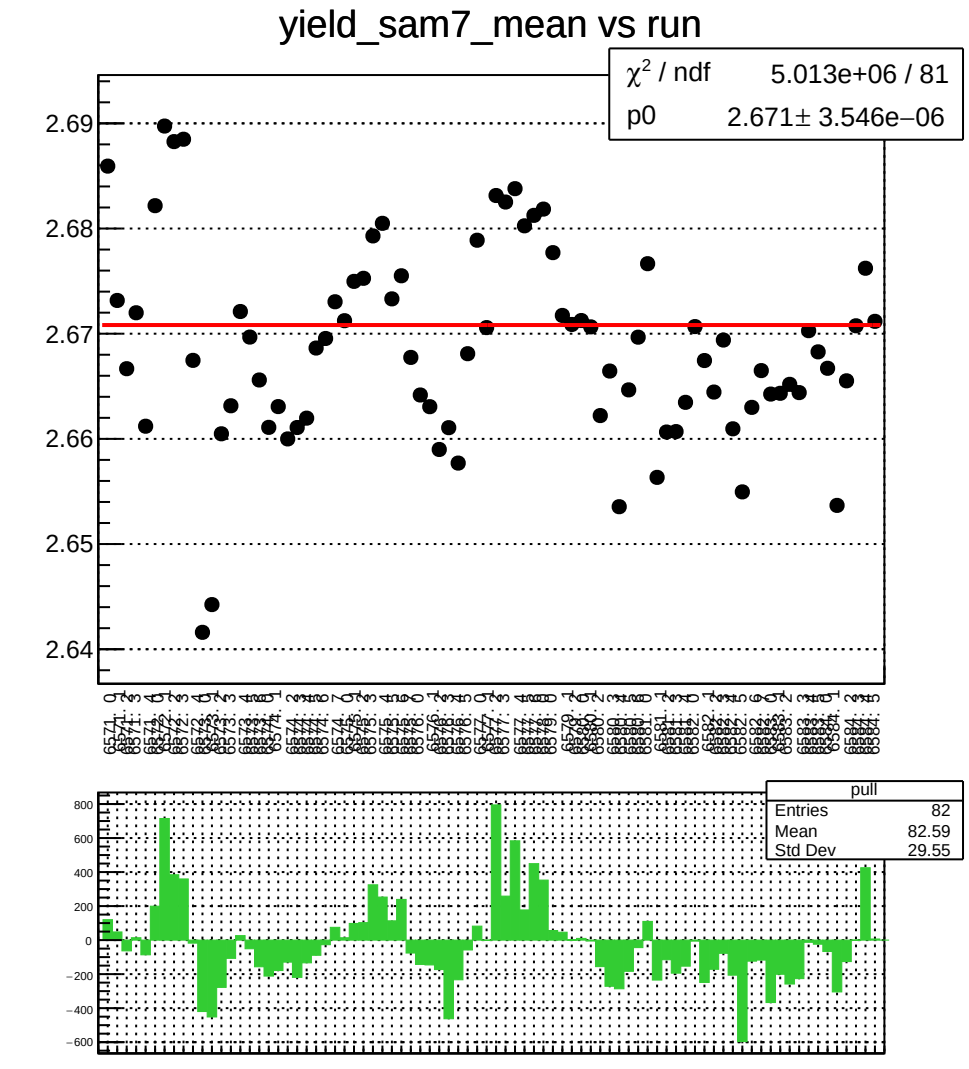

pull1D
Entries 82
Mean −3.012
Std Dev 2.303
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

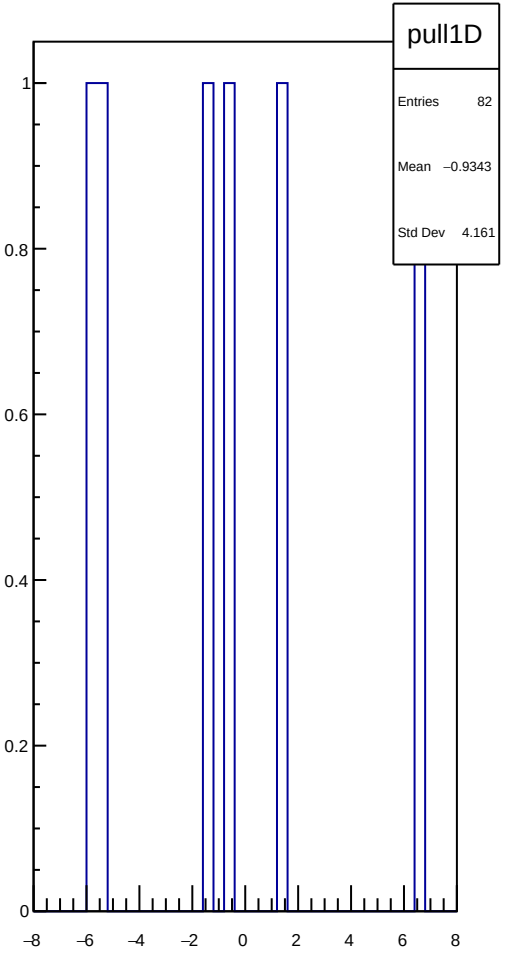

yield_sam5_rms vs run
χ² / ndf 1.406e+05 / 81
p0 0.03205 ± 2.659e−05
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05

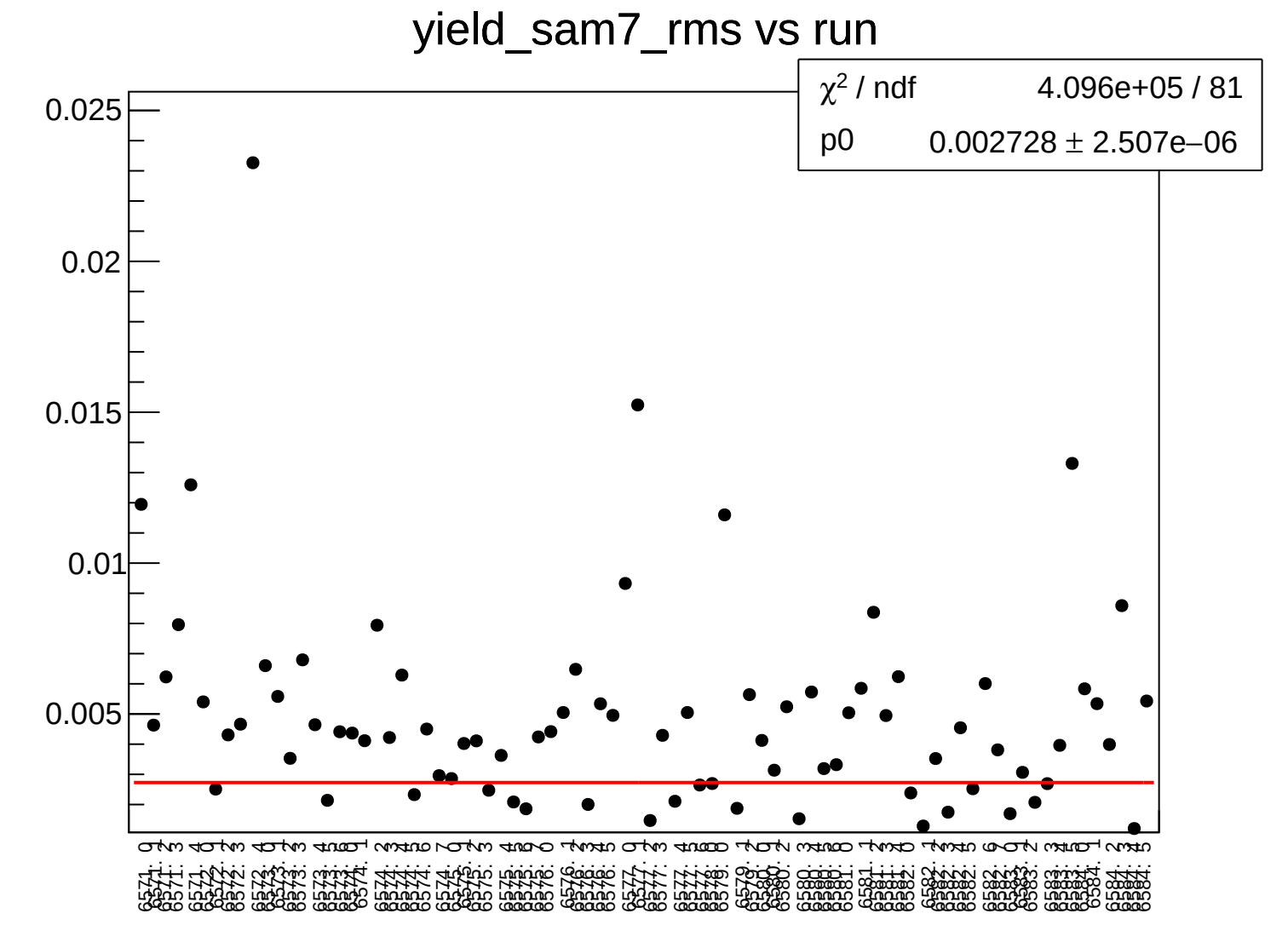

yield_sam6_mean vs run
χ² / ndf 6.034e+05 / 81
p0 9.475 ± 2.129e−05
9.56
9.54
9.52
9.5
9.48
9.46
9.44
pull
Entries 82
Mean −18.06
Std Dev 52.27
200
100
0
−100
−200

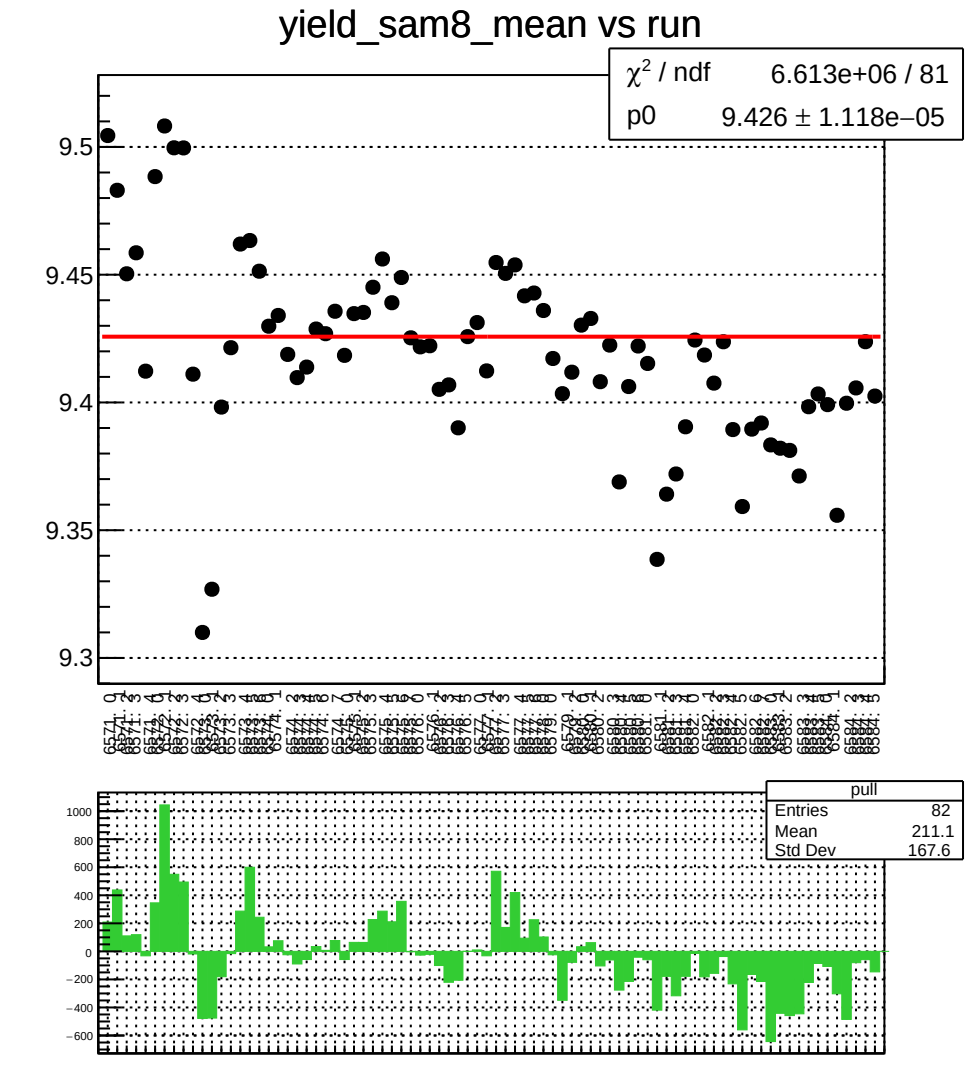

pull1D
Entries 82
Mean 0.4117
Std Dev 3.874
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

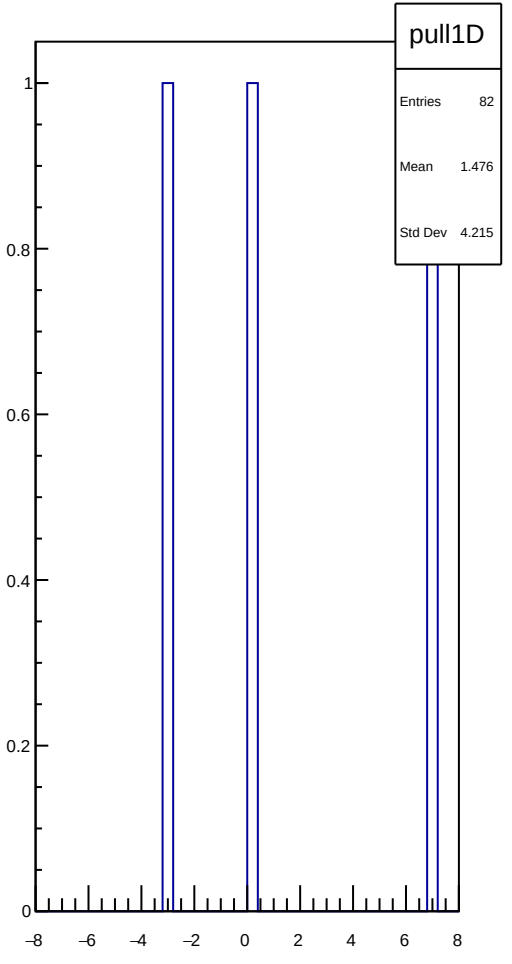

yield_sam6_rms vs run
χ² / ndf 2.119e+05 / 81
p0 0.01769 ± 1.505e−05
0.12
0.1
0.08
0.06
0.04
0.02

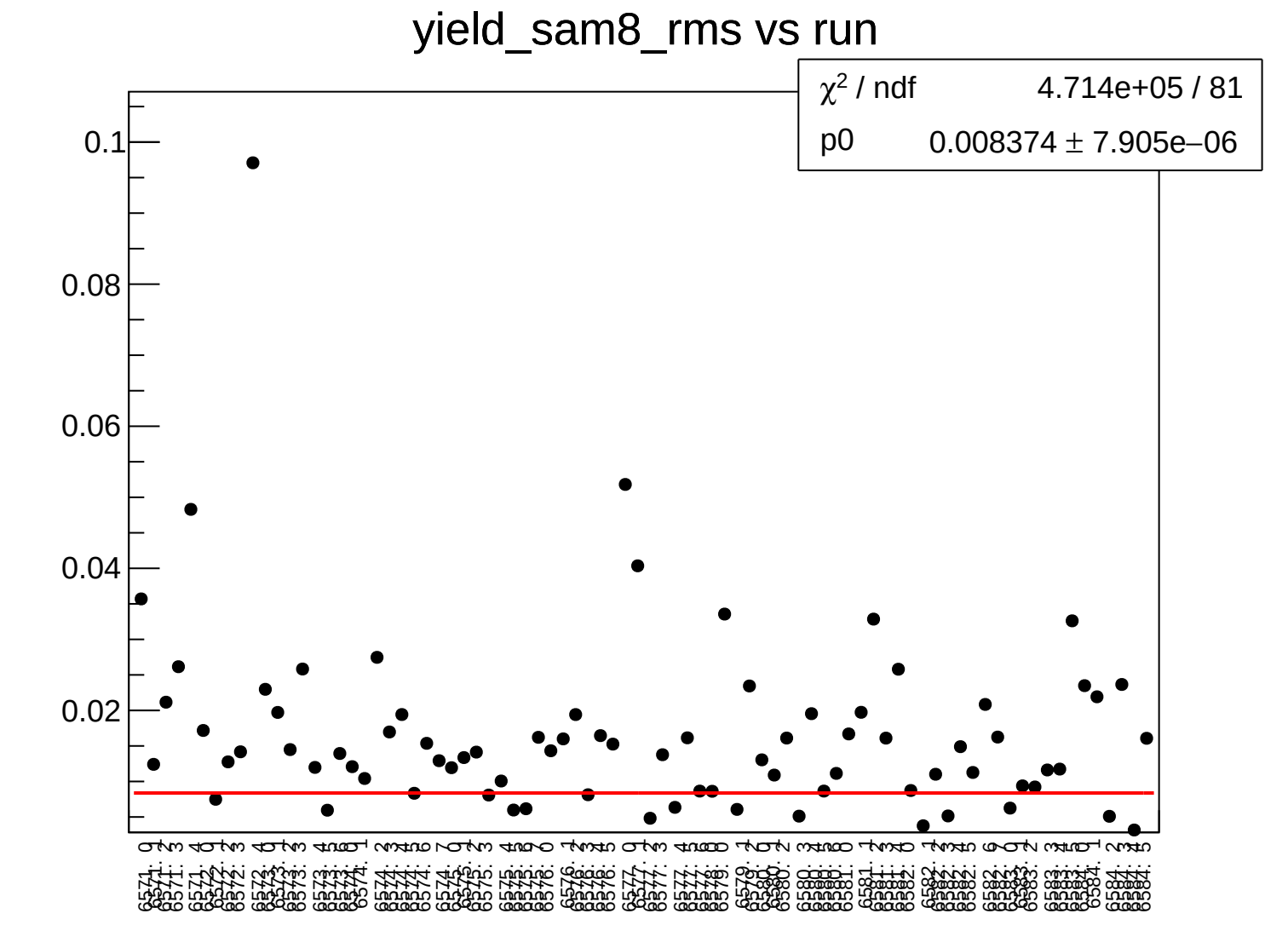

yield_sam7_mean vs run
χ² / ndf 5.013e+06 / 81
p0 2.671± 3.546e−06
2.69
2.68
2.67
2.66
2.65
2.64
pull
Entries 82
Mean 82.59
Std Dev 29.55
800
600
400
200
0
−200
−400
−600

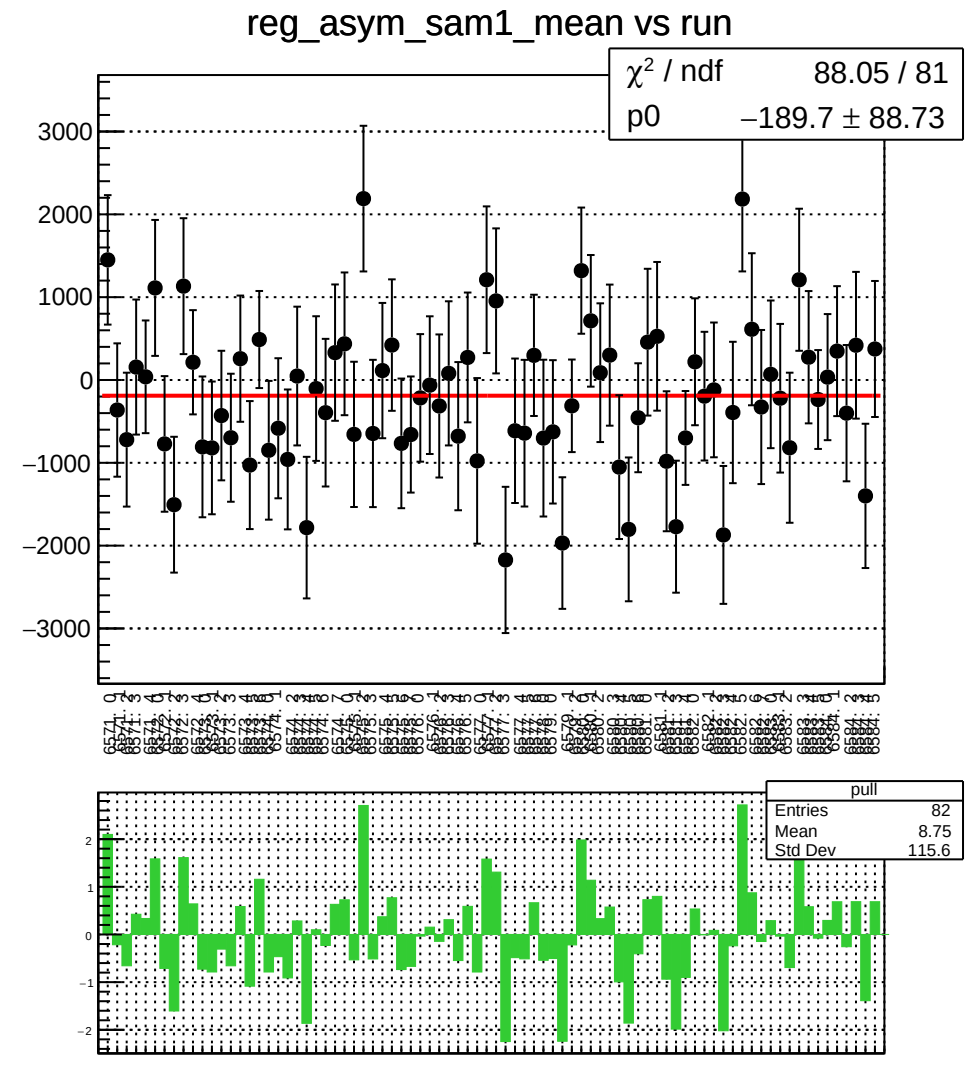

pull1D
Entries 82
Mean −0.9343
Std Dev 4.161
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

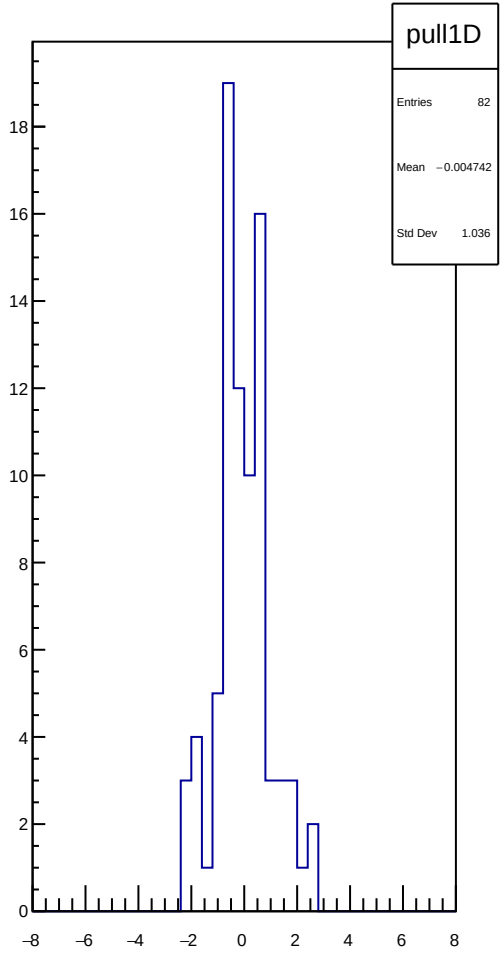

yield_sam7_rms vs run
χ² / ndf 4.096e+05 / 81
p0 0.002728 ± 2.507e−06
0.025
0.02
0.015
0.01
0.005

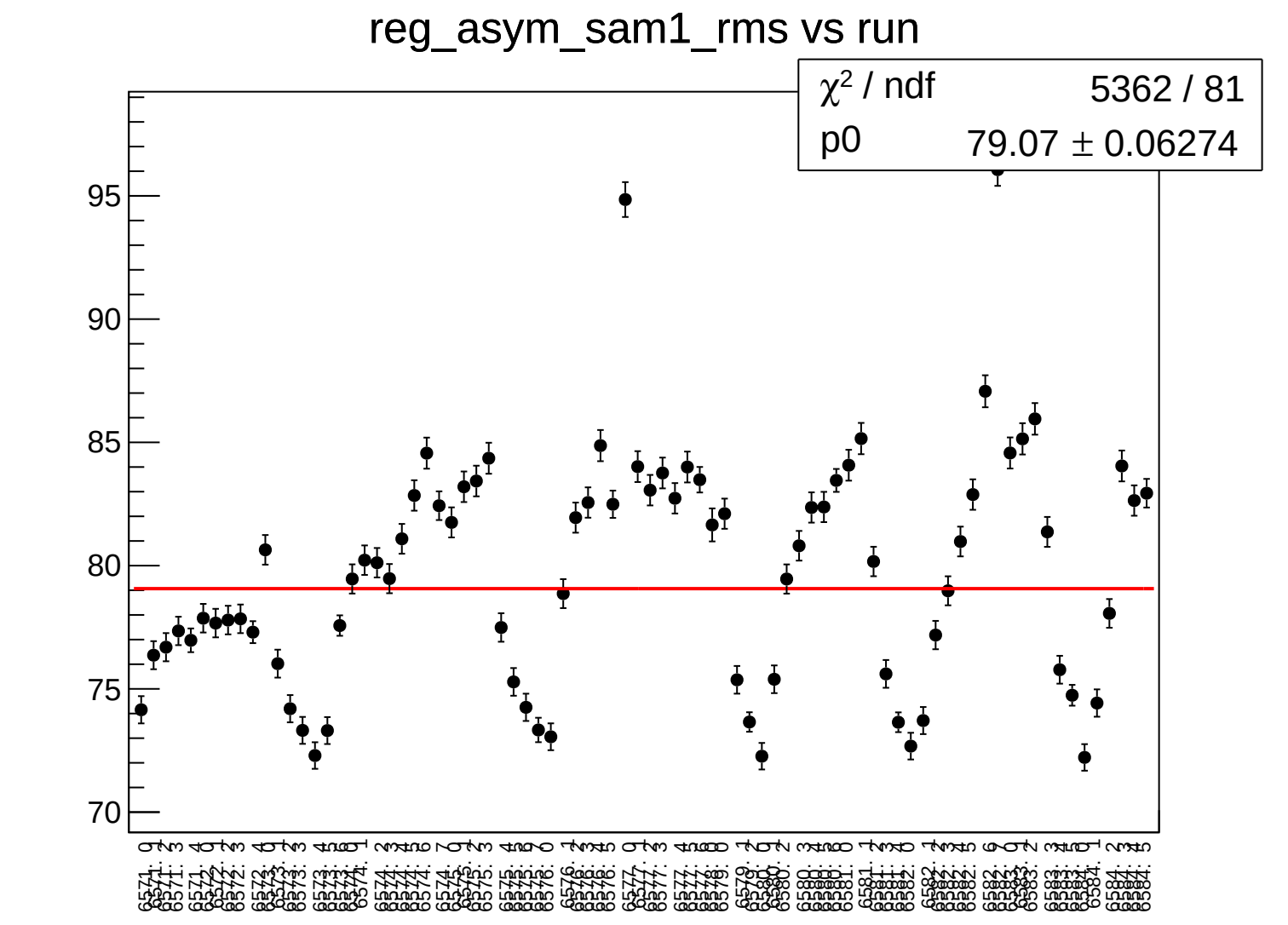

yield_sam8_mean vs run
χ² / ndf 6.613e+06 / 81
p0 9.426 ± 1.118e−05
9.5
9.45
9.4
9.35
9.3
pull
Entries 82
Mean 211.1
Std Dev 167.6
1000
800
600
400
200
0
−200
−400
−600

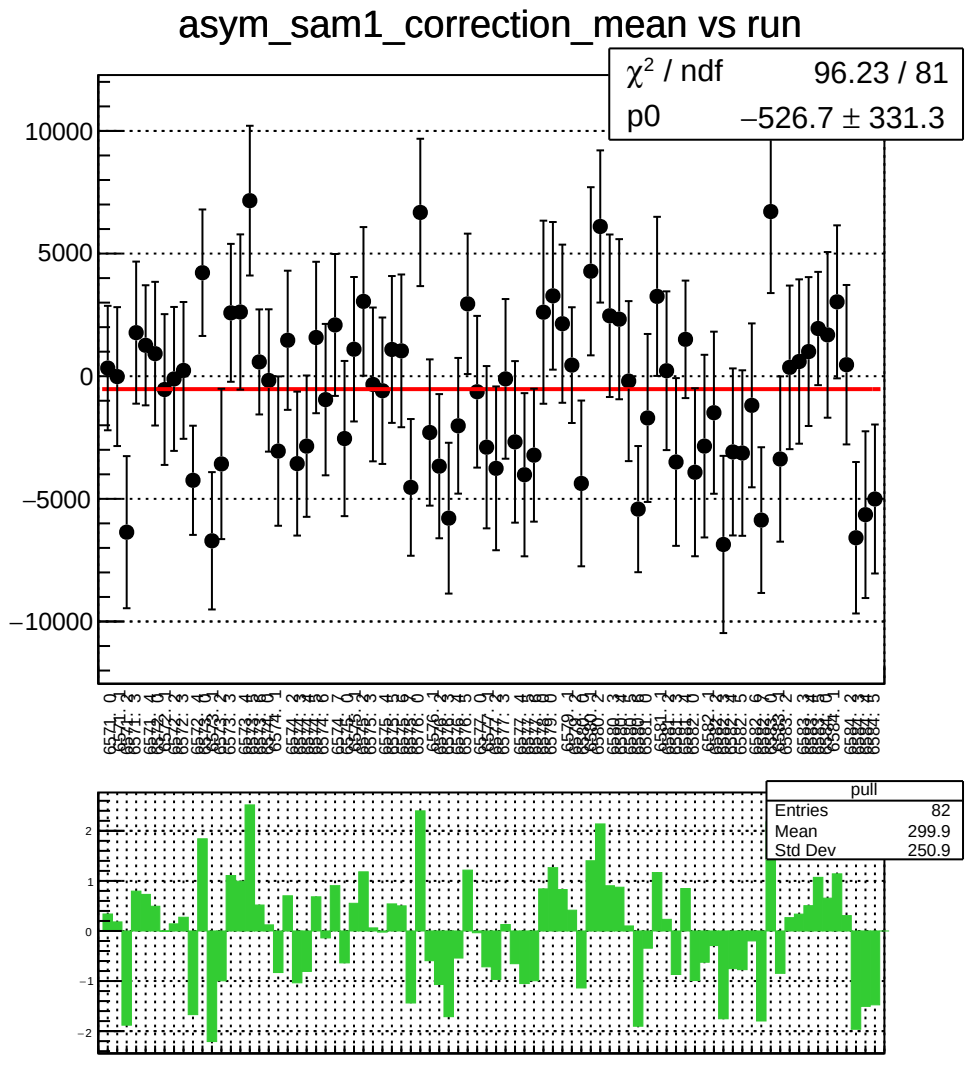

pull1D
Entries 82
Mean 1.476
Std Dev 4.215
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

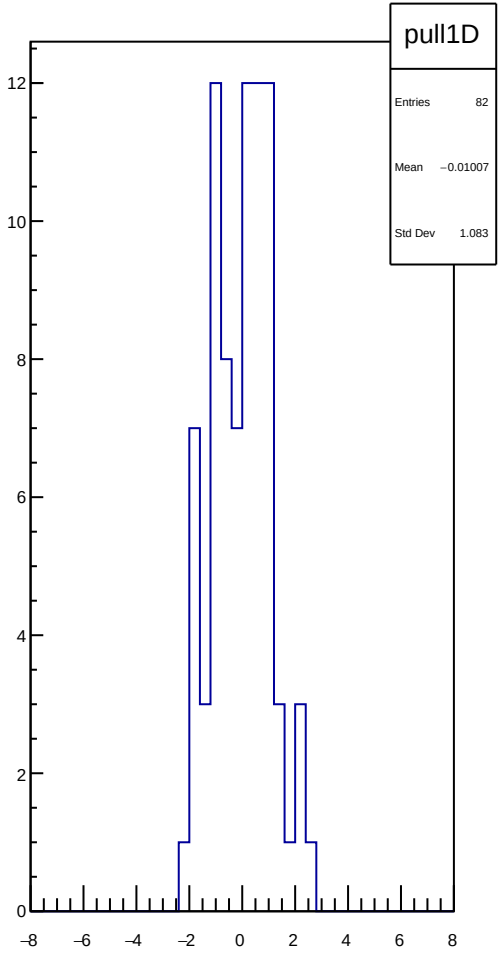

yield_sam8_rms vs run
χ² / ndf 4.714e+05 / 81
p0 0.008374 ± 7.905e−06
0.1
0.08
0.06
0.04
0.02

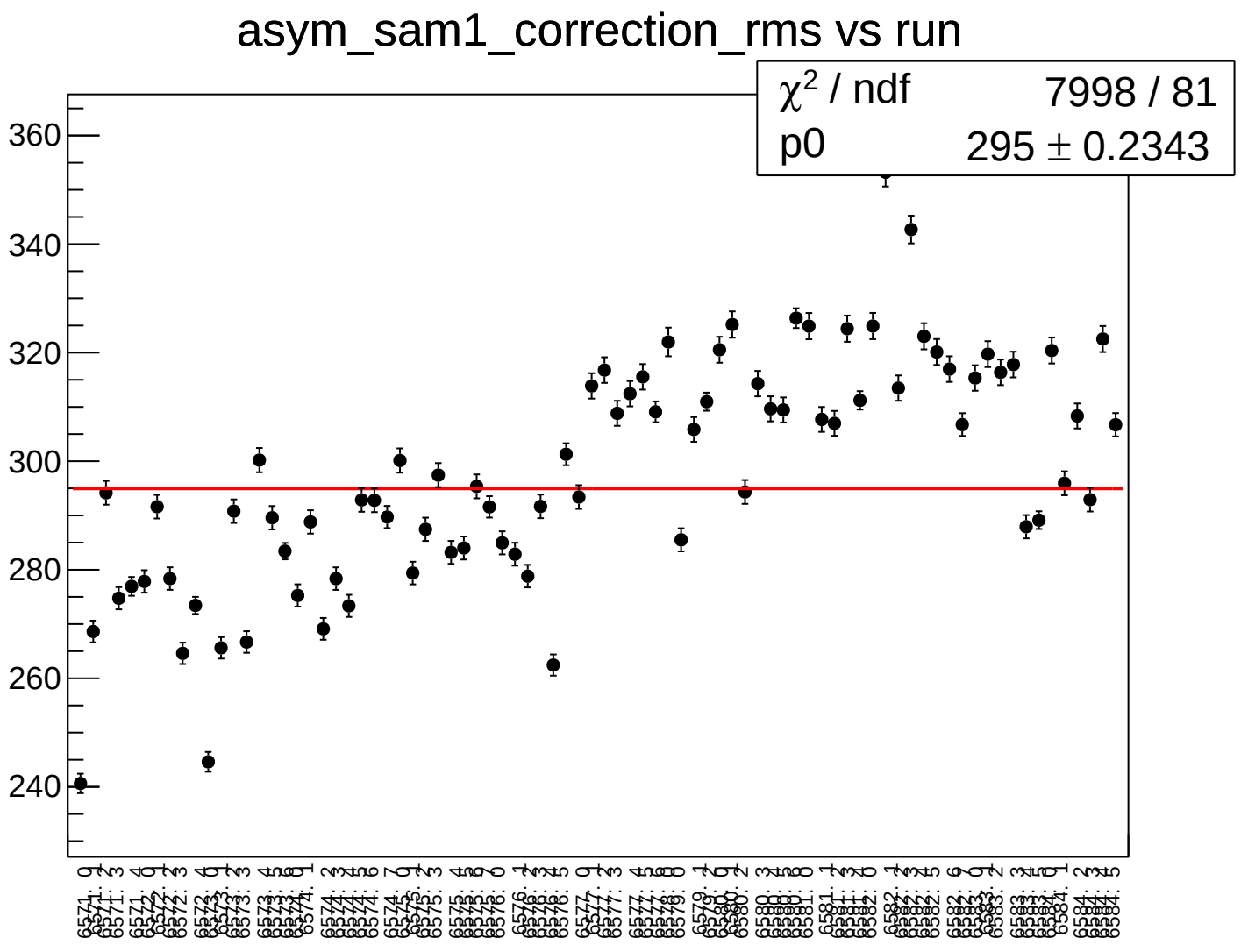

reg_asym_sam1_mean vs run
χ² / ndf 88.05 / 81
p0 −189.7 ± 88.73
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 82
Mean 8.75
Std Dev 115.6
2
1
0
−1
−2

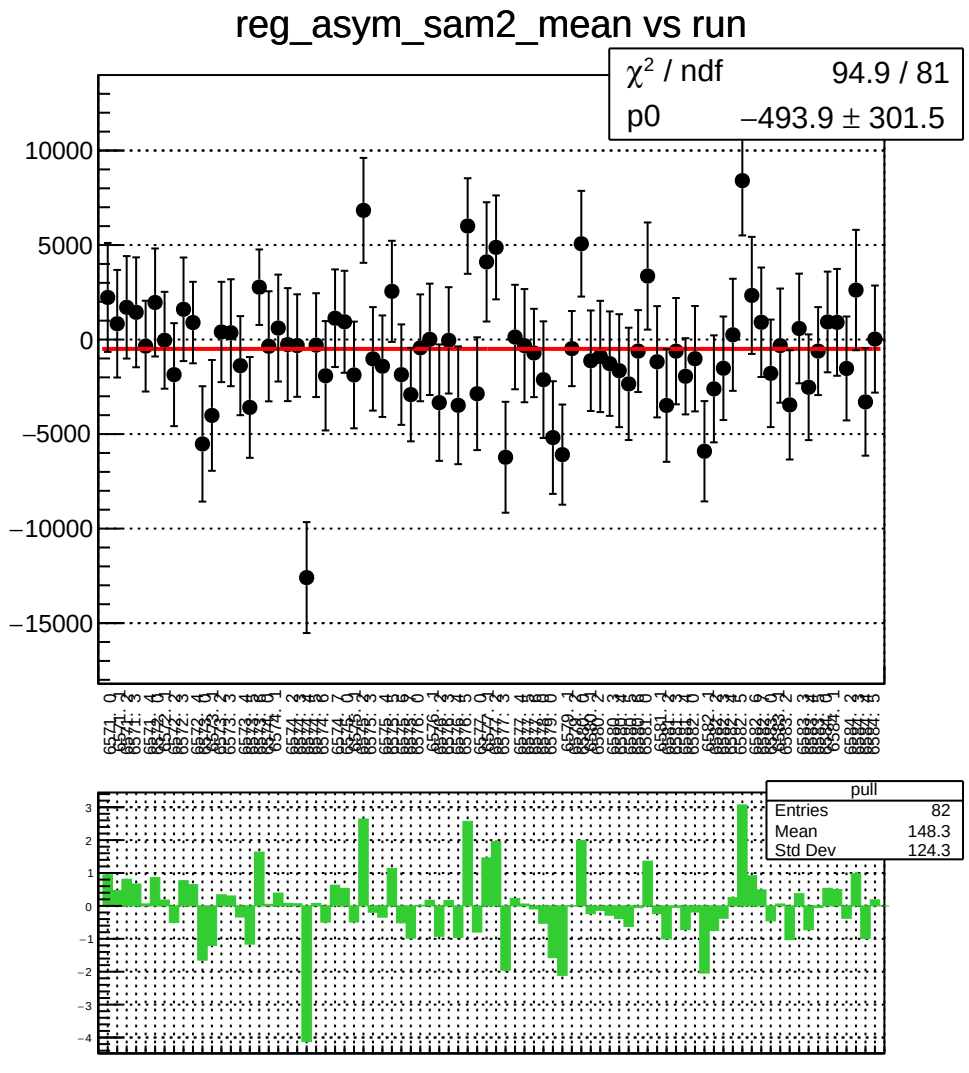

pull1D
Entries 82
Mean −0.004742
Std Dev 1.036
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

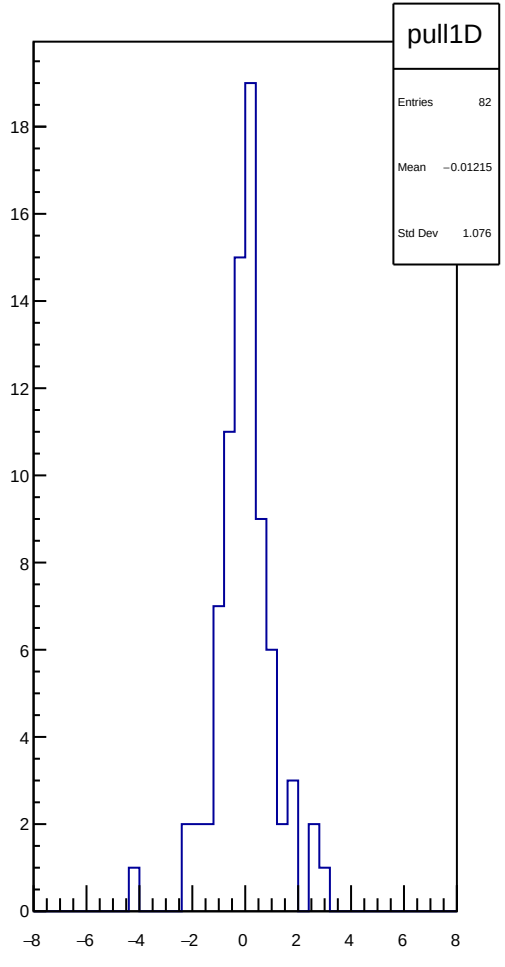

reg_asym_sam1_rms vs run
$\chi^2$ / ndf 5362 / 81
p0 79.07 ± 0.06274
95
90
85
80
75
70

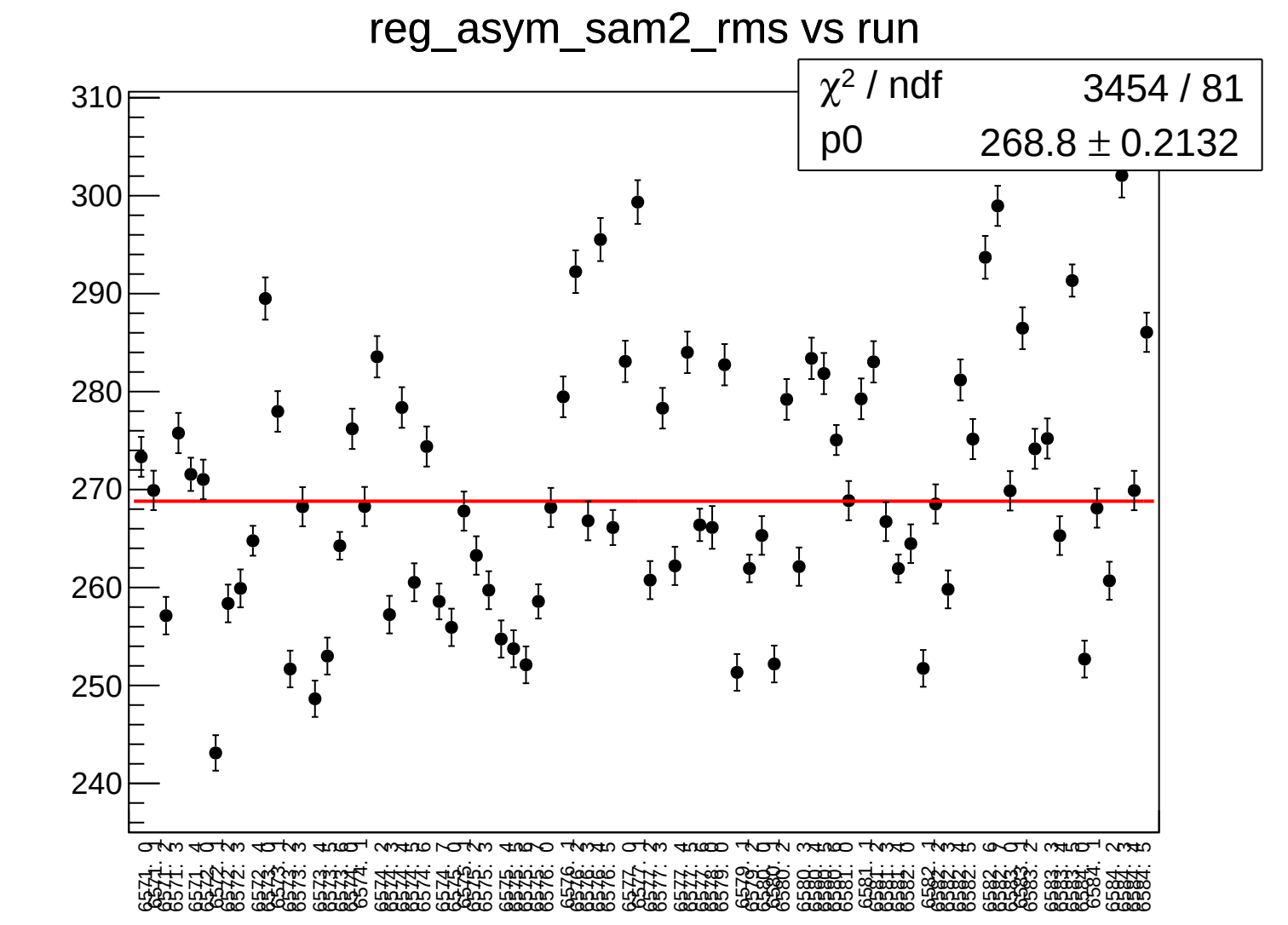

asym_sam1_correction_mean vs run
χ² / ndf 96.23 / 81
p0 −526.7 ± 331.3
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 299.9
Std Dev 250.9
2
1
0
−1
−2

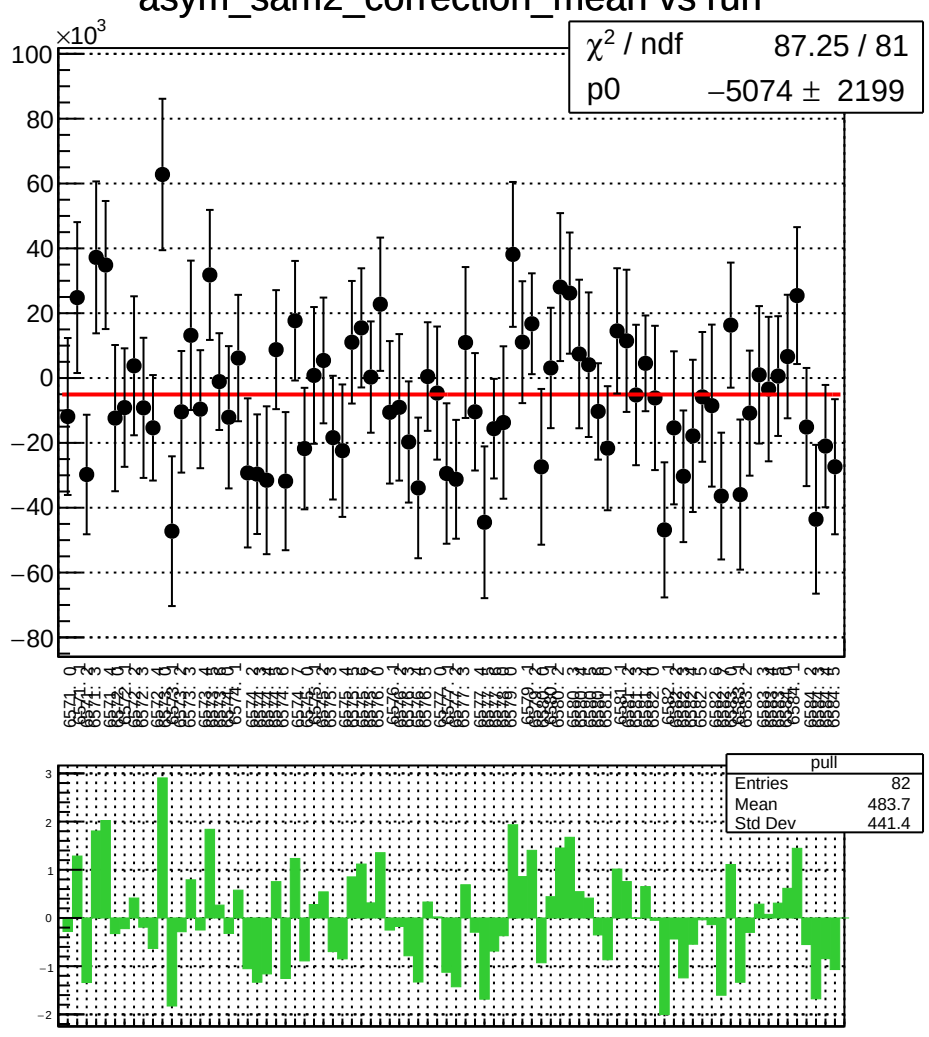

pull1D
Entries 82
Mean −0.01007
Std Dev 1.083
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

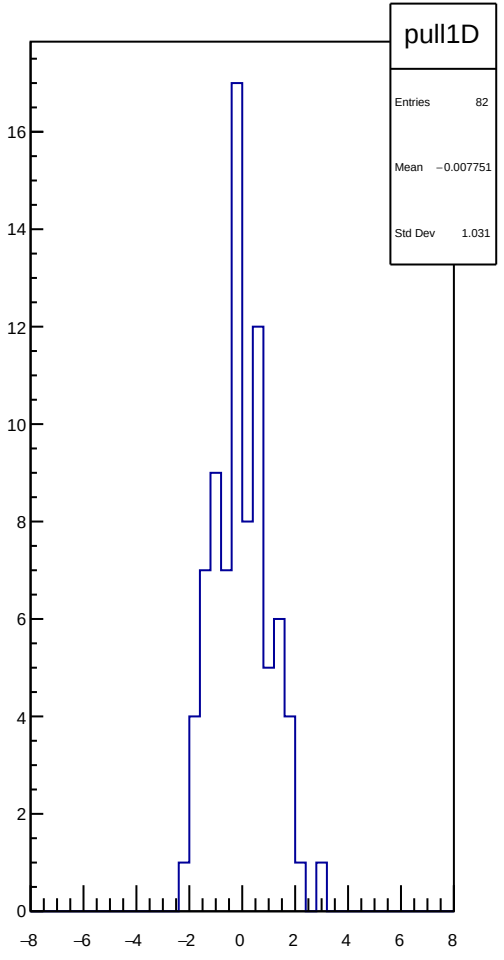

asym_sam1_correction_rms vs run
χ² / ndf 7998 / 81
p0 295 ± 0.2343
360
340
320
300
280
260
240

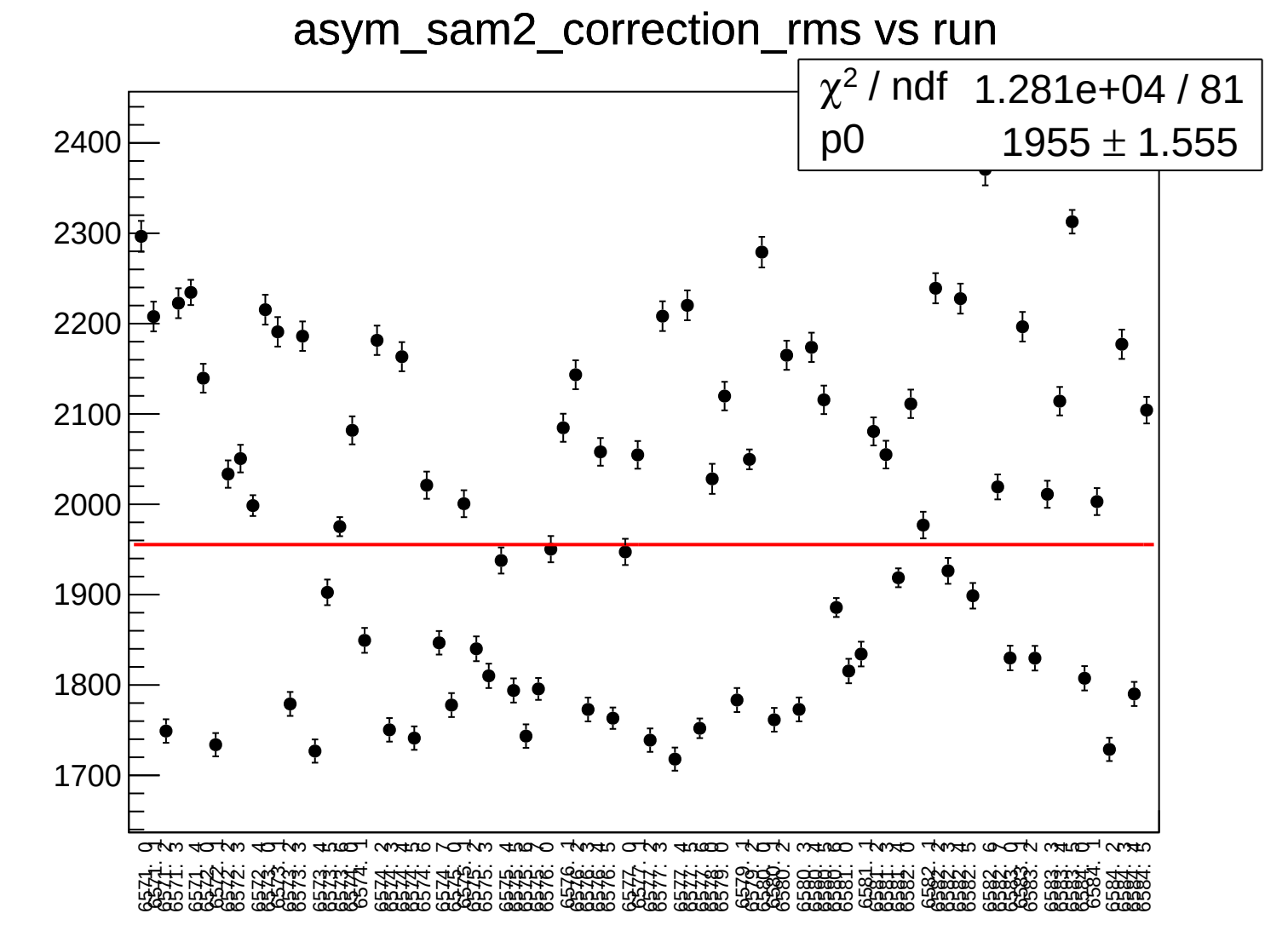

reg_asym_sam2_mean vs run
χ² / ndf 94.9 / 81
p0 −493.9 ± 301.5
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 148.3
Std Dev 124.3
3
2
1
0
−1
−2
−3
−4

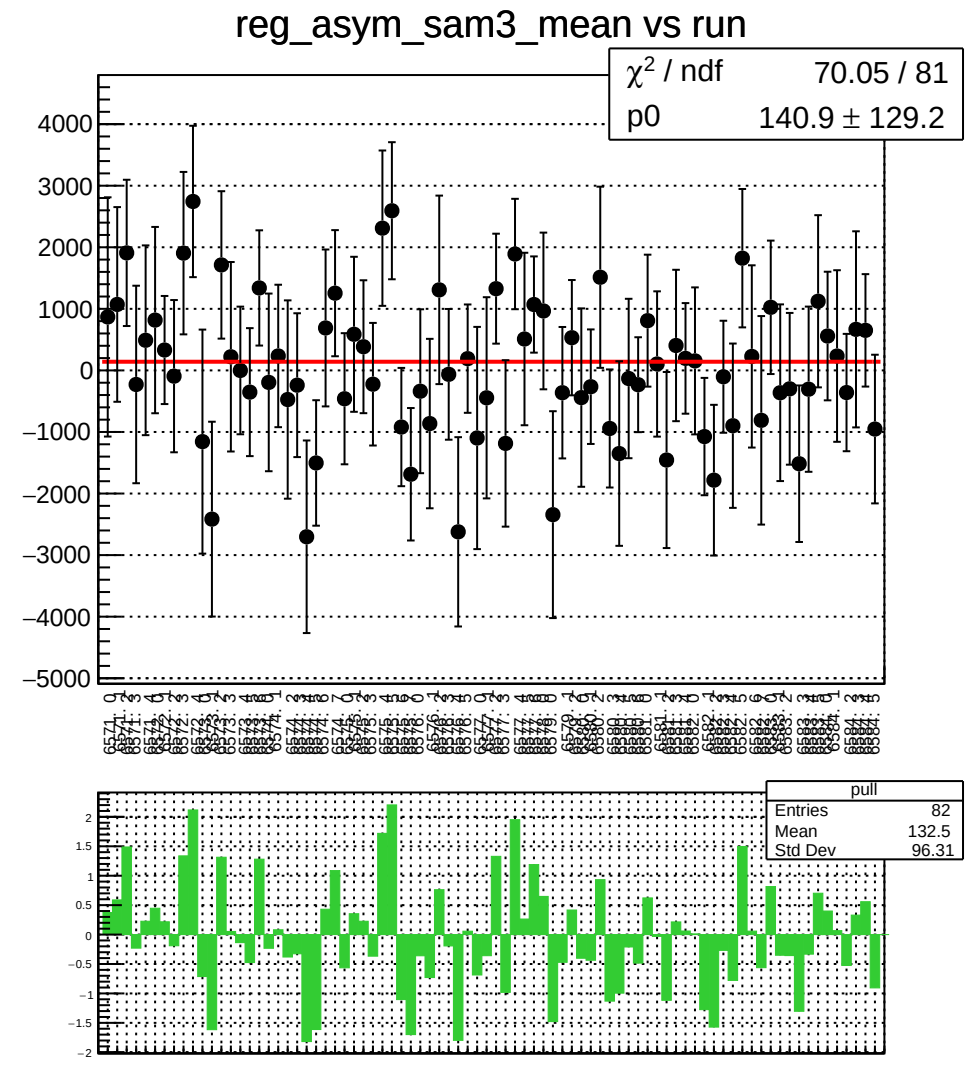

pull1D
Entries 82
Mean −0.01215
Std Dev 1.076
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

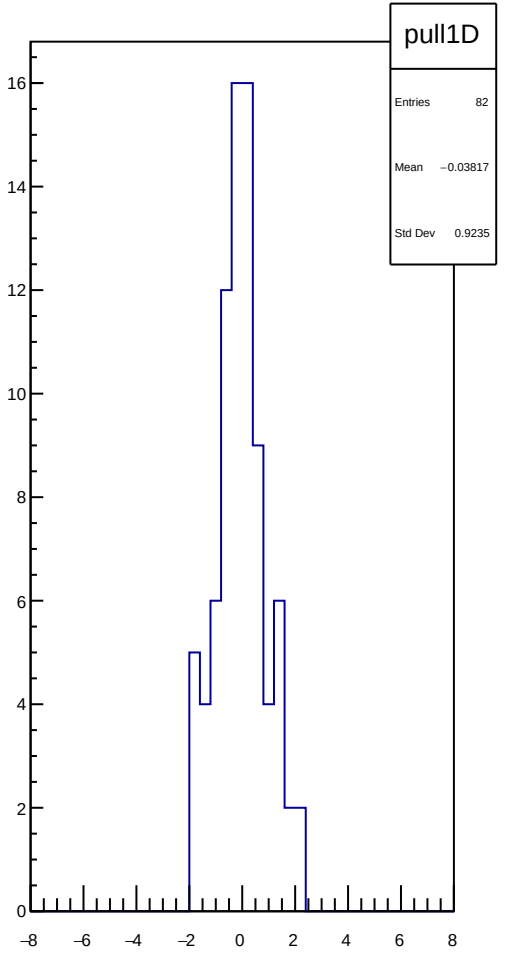

reg_asym_sam2_rms vs run
χ² / ndf 3454 / 81
p0 268.8 ± 0.2132
310
300
290
280
270
260
250
240

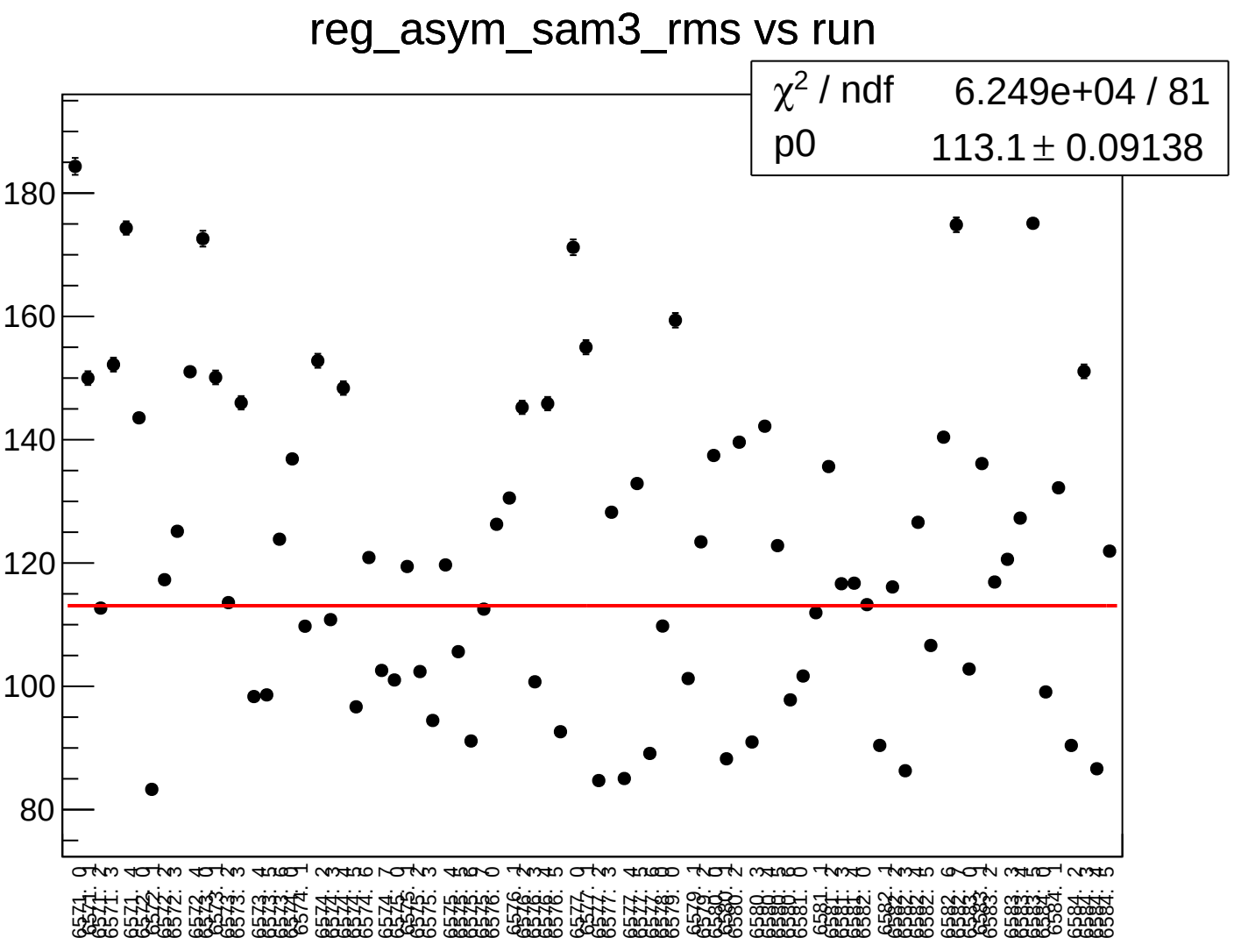

asym_sam2_correction_mean vs run
χ² / ndf 87.25 / 81
p0 −5074 ± 2199
×10³
pull
Entries 82
Mean 483.7
Std Dev 441.4

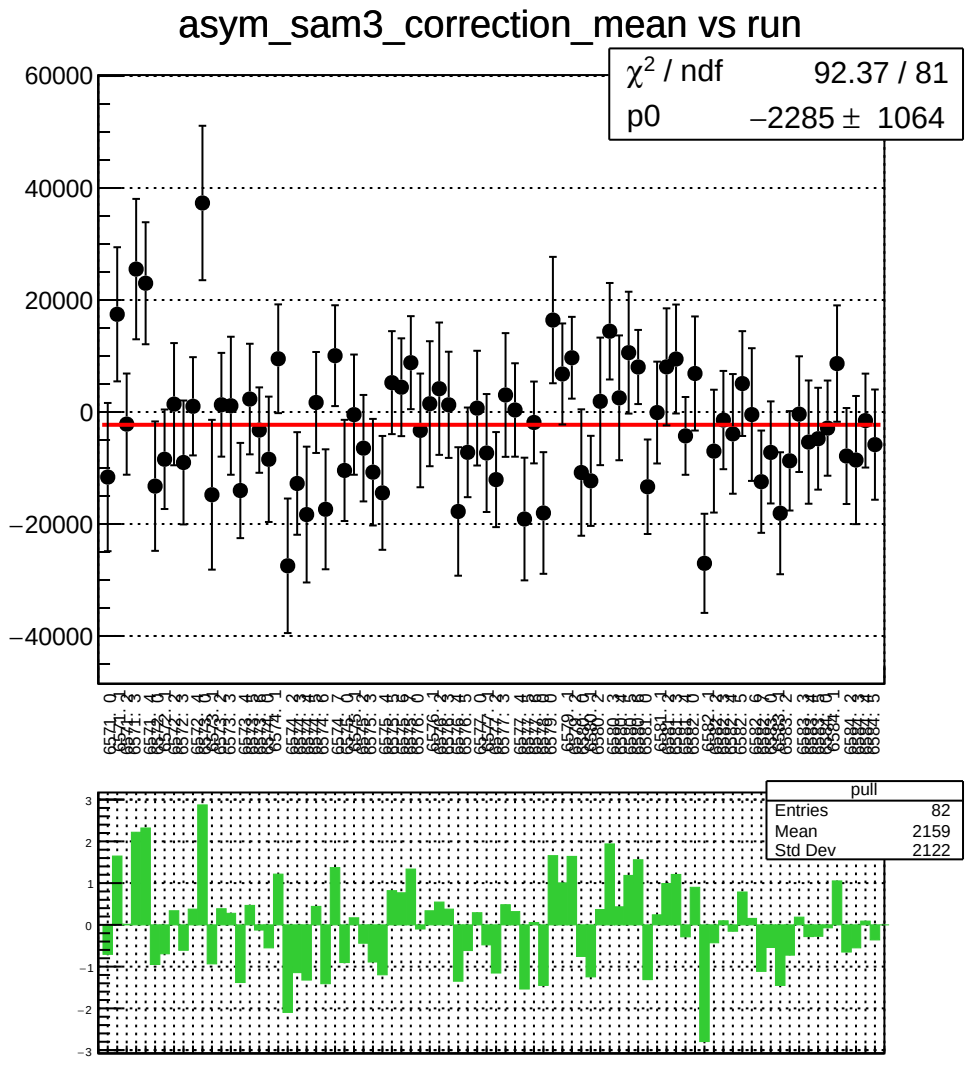

pull1D
Entries 82
Mean −0.007751
Std Dev 1.031

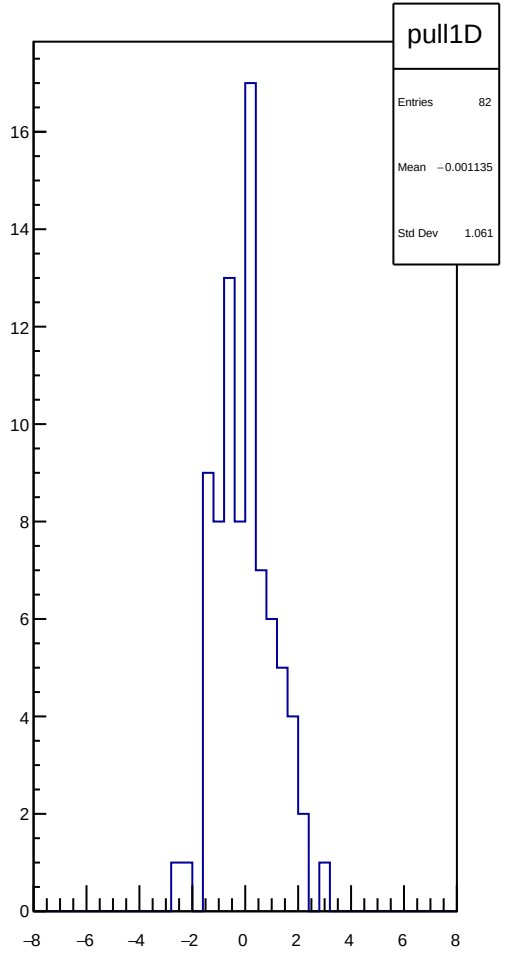

asym_sam2_correction_rms vs run
χ² / ndf 1.281e+04 / 81
p0 1955 ± 1.555
2400
2300
2200
2100
2000
1900
1800
1700

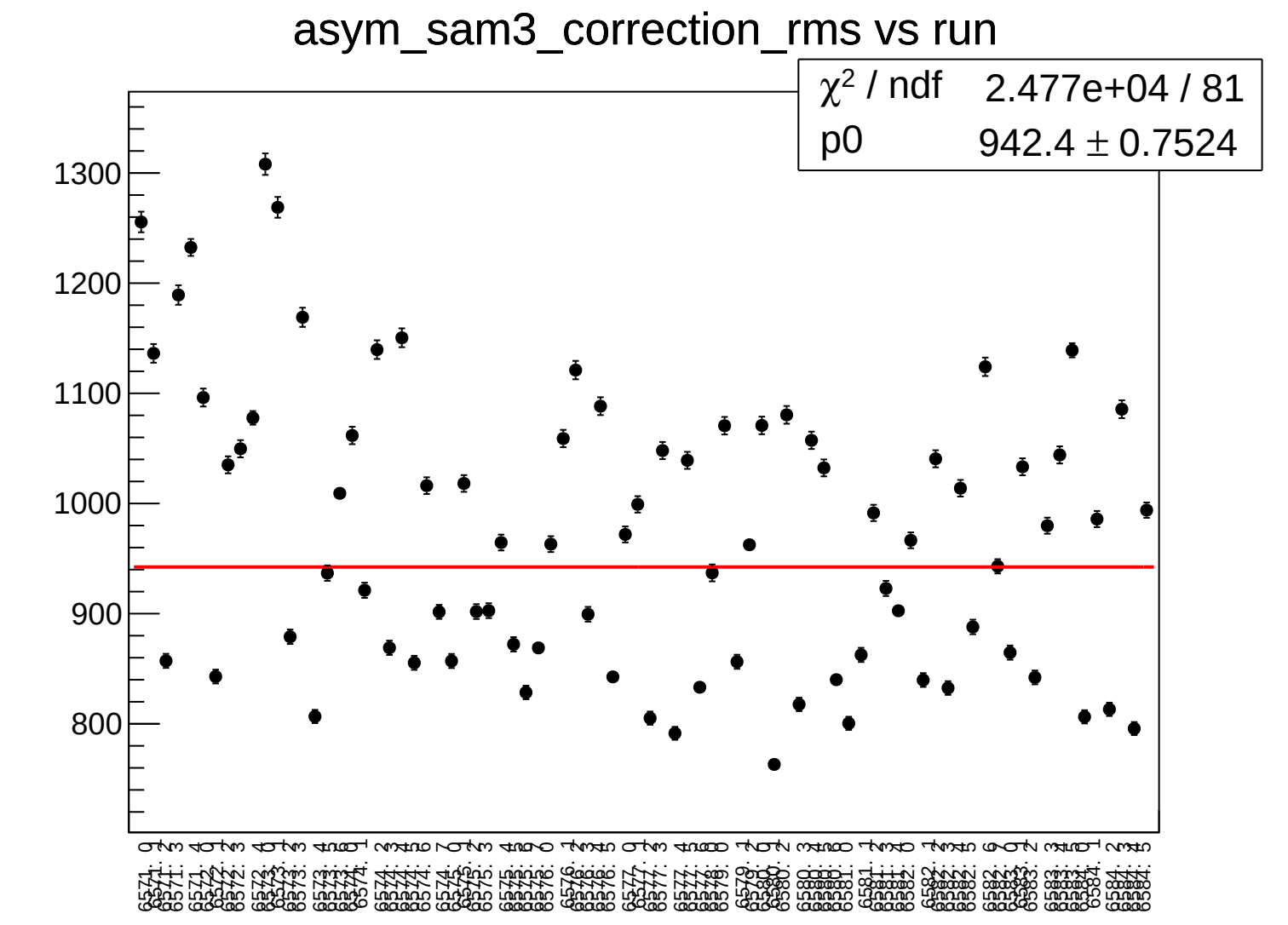

reg_asym_sam3_mean vs run
χ² / ndf 70.05 / 81
p0 140.9 ± 129.2
pull
Entries 82
Mean 132.5
Std Dev 96.31

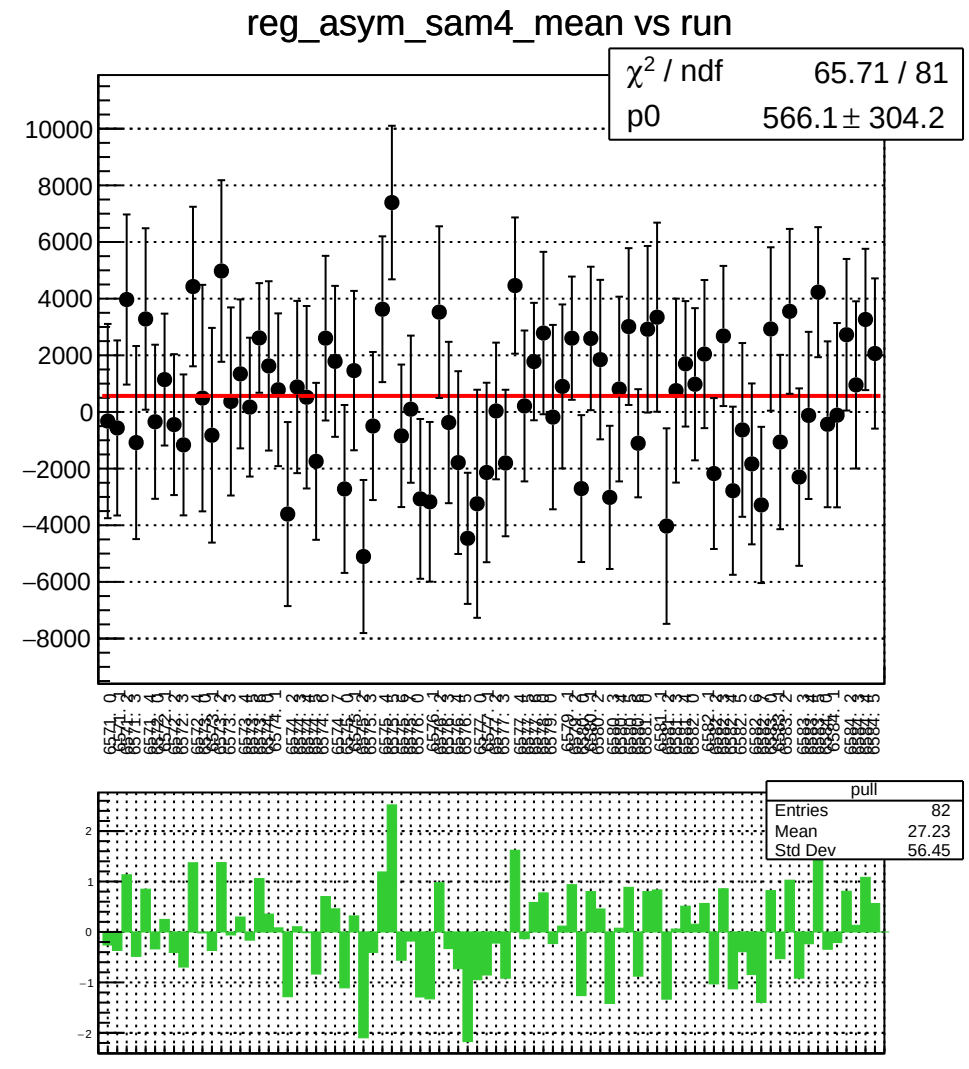

pull1D
Entries 82
Mean −0.03817
Std Dev 0.9235

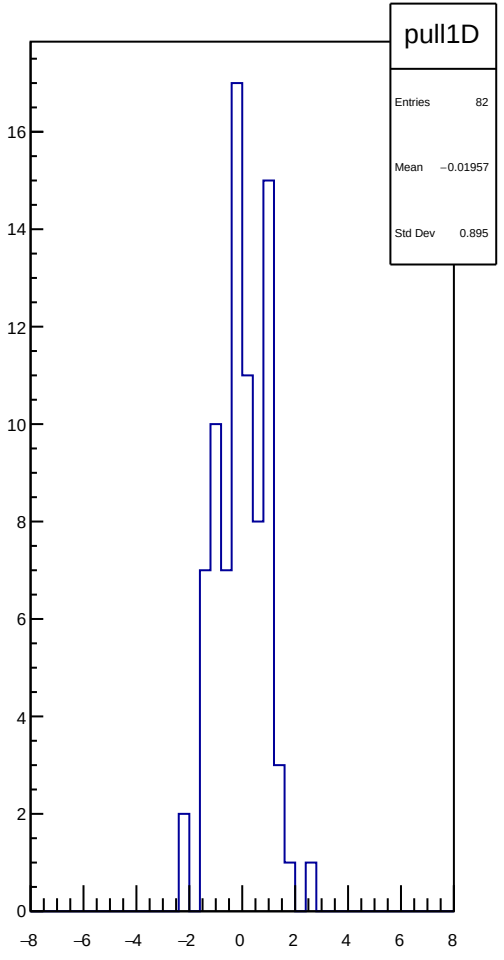

reg_asym_sam3_rms vs run
χ² / ndf 6.249e+04 / 81
p0 113.1 ± 0.09138
180
160
140
120
100
80

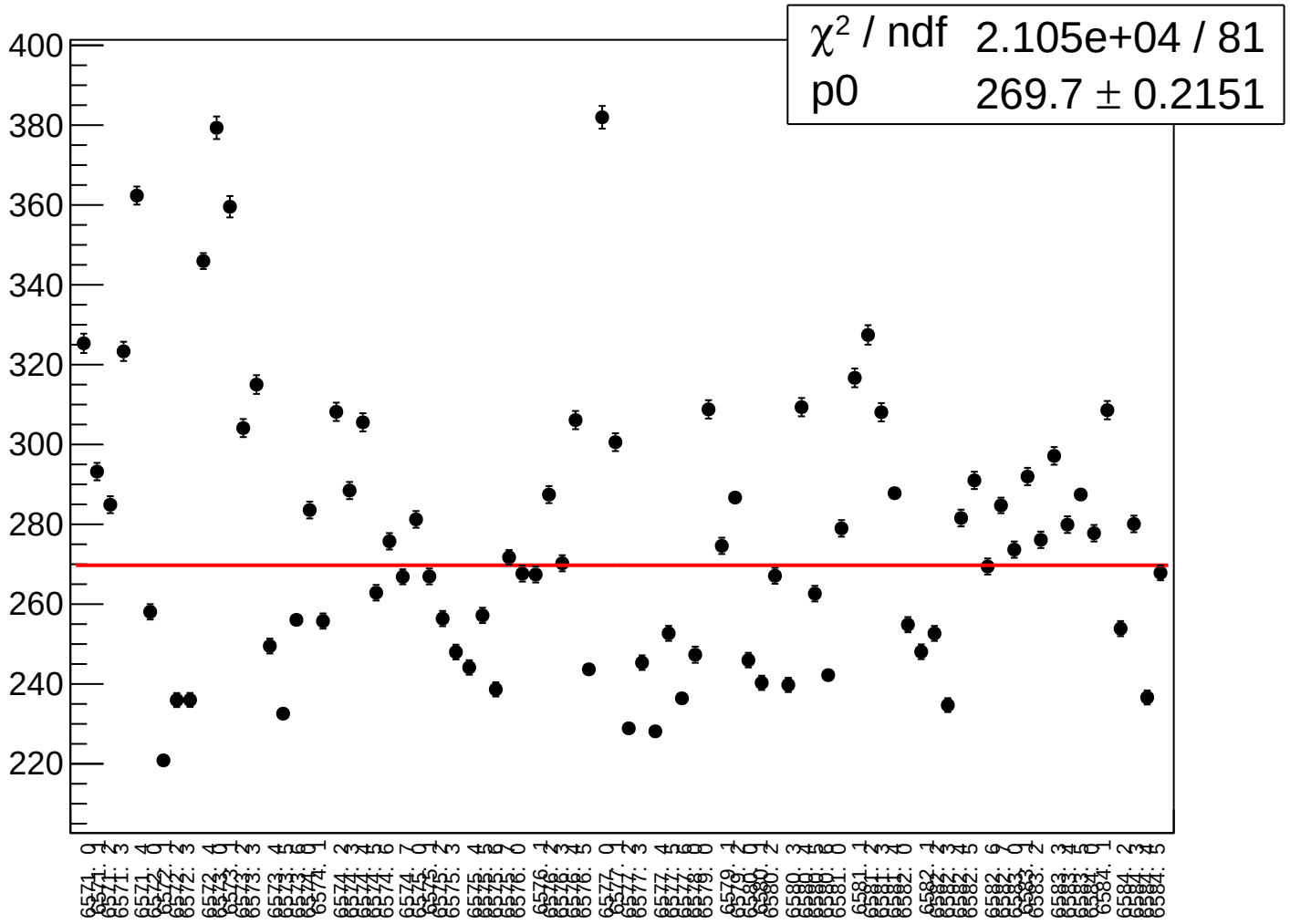

asym_sam3_correction_mean vs run
χ² / ndf 92.37 / 81
p0 −2285 ± 1064
pull
Entries 82
Mean 2159
Std Dev 2122

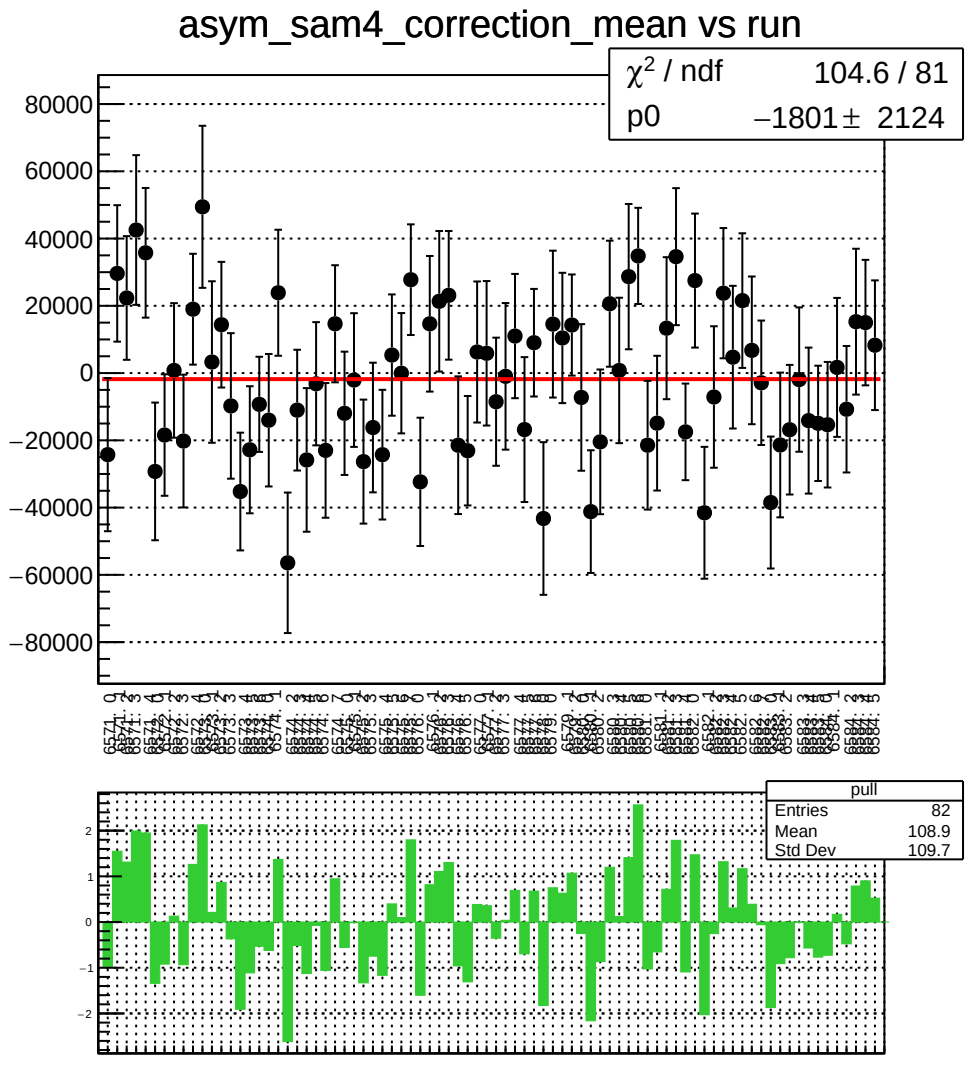

pull1D
Entries 82
Mean −0.001135
Std Dev 1.061

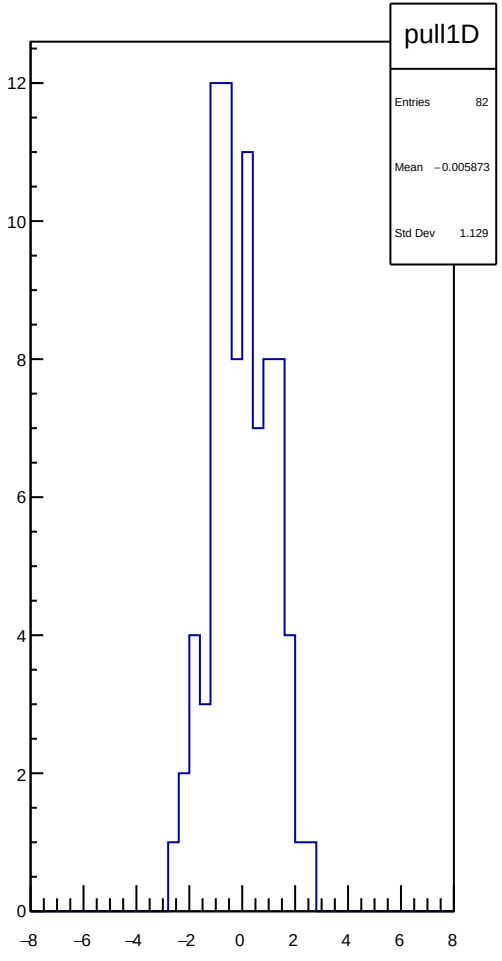

asym_sam3_correction_rms vs run
χ² / ndf 2.477e+04 / 81
p0 942.4 ± 0.7524
1300
1200
1100
1000
900
800

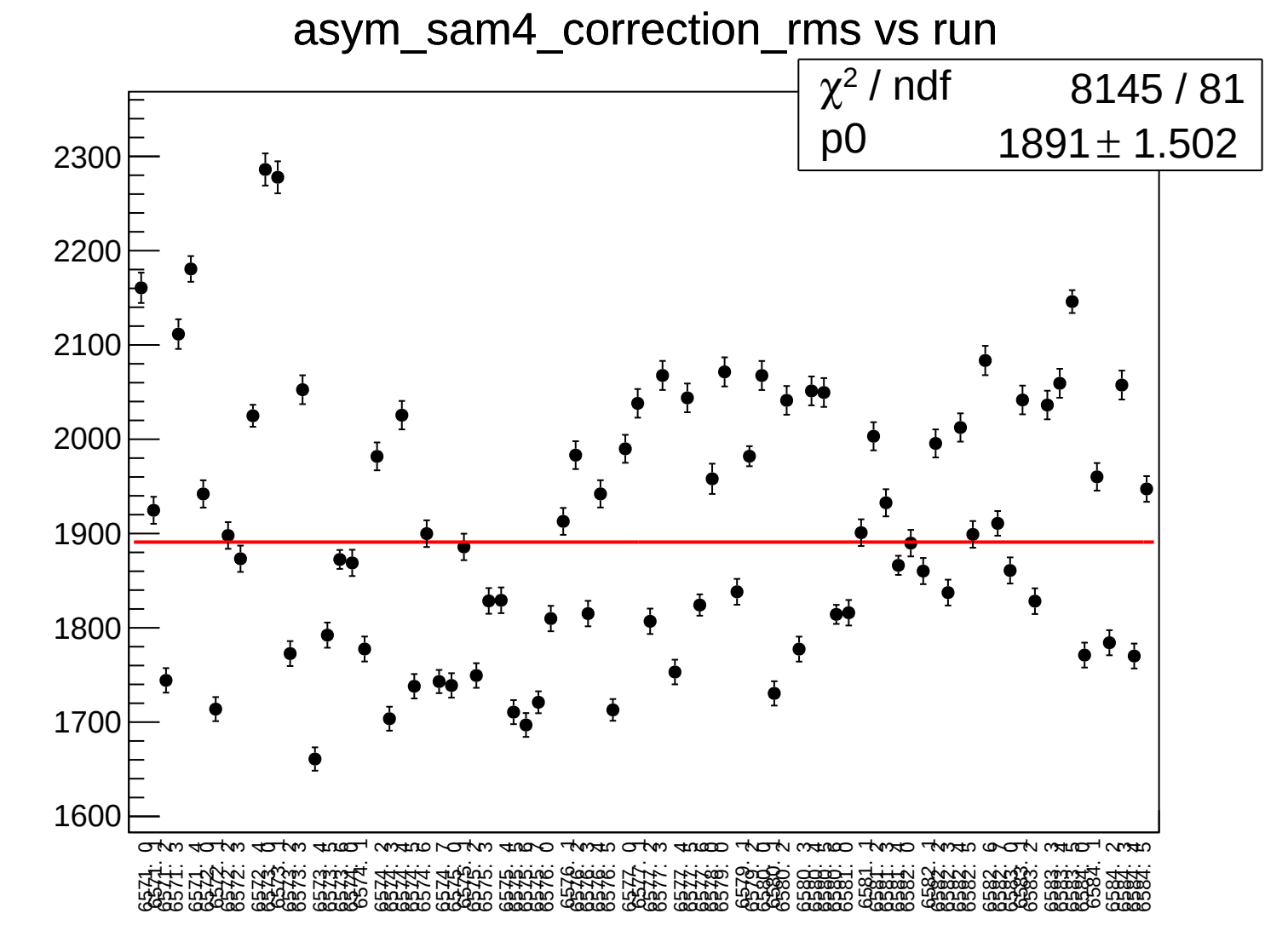

reg_asym_sam4_mean vs run
χ² / ndf 65.71 / 81
p0 566.1 ± 304.2
pull
Entries 82
Mean 27.23
Std Dev 56.45

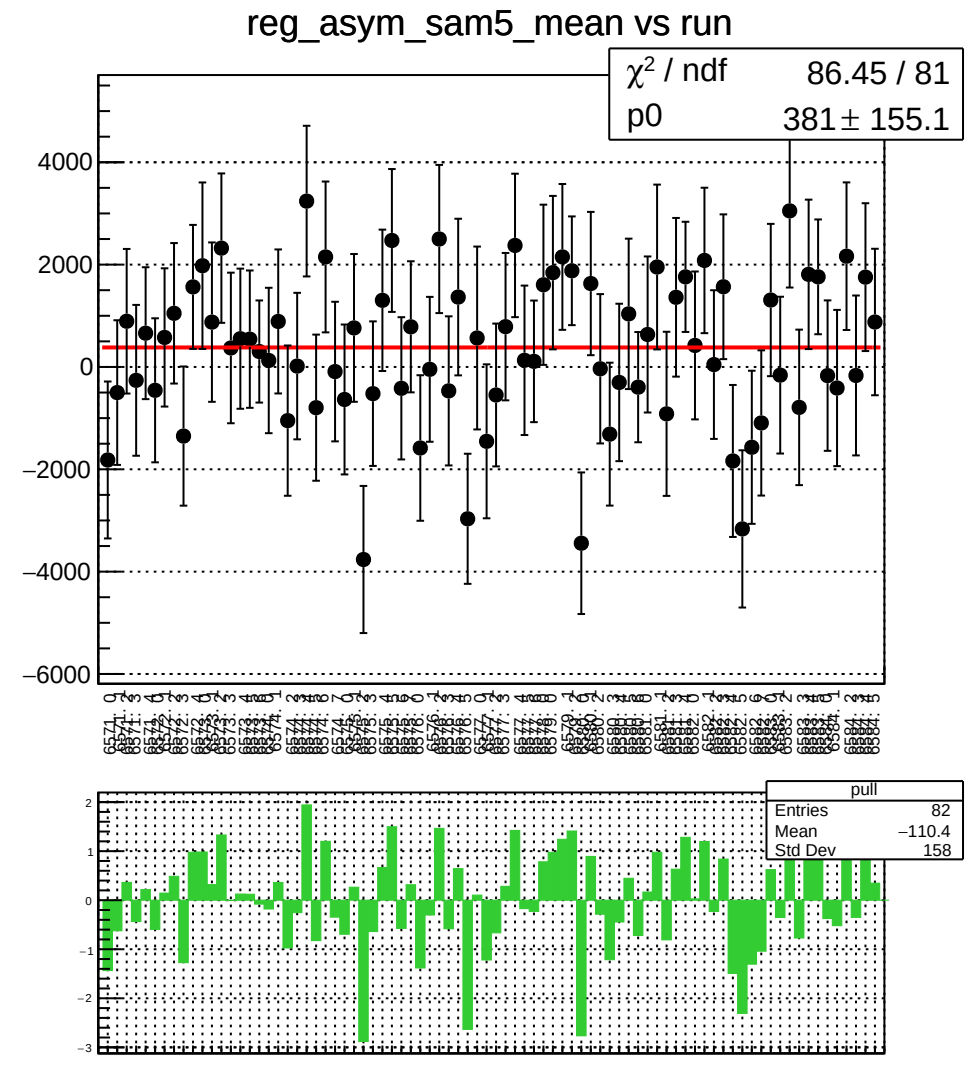

pull1D
Entries 82
Mean −0.01957
Std Dev 0.895

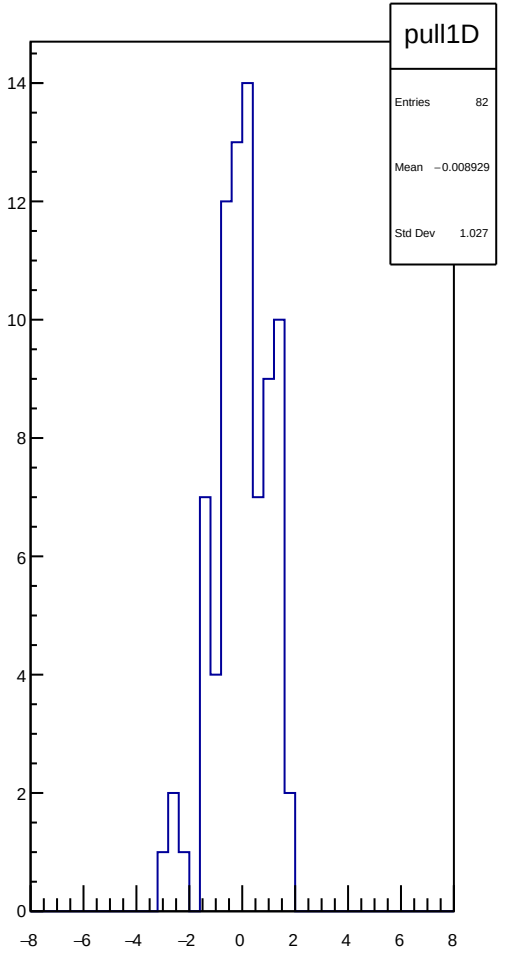

reg_asym_sam4_rms vs run
χ² / ndf 2.105e+04 / 81
p0 269.7 ± 0.2151
400
380
360
340
320
300
280
260
240
220

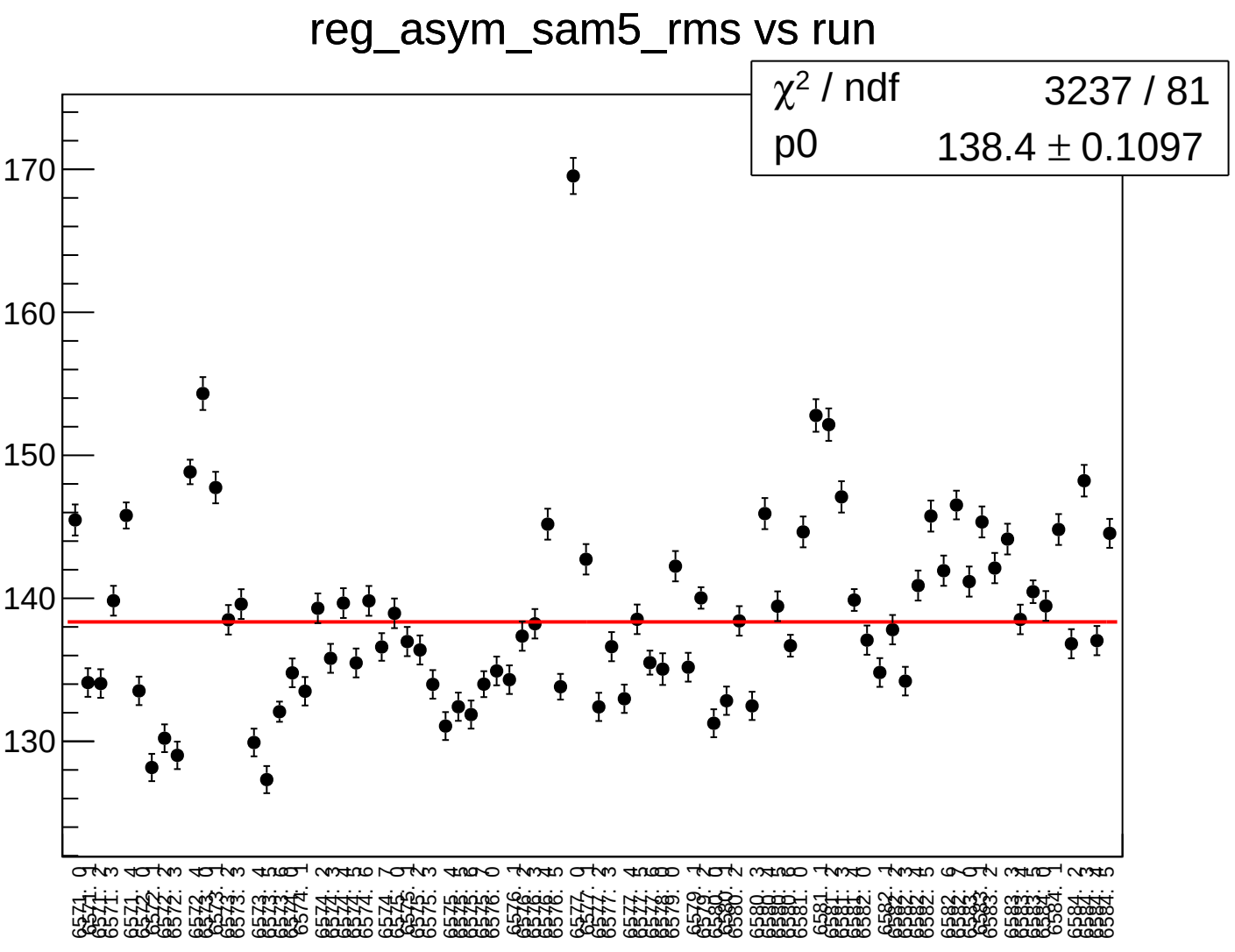

asym_sam4_correction_mean vs run
χ² / ndf 104.6 / 81
p0 −1801 ± 2124
pull
Entries 82
Mean 108.9
Std Dev 109.7

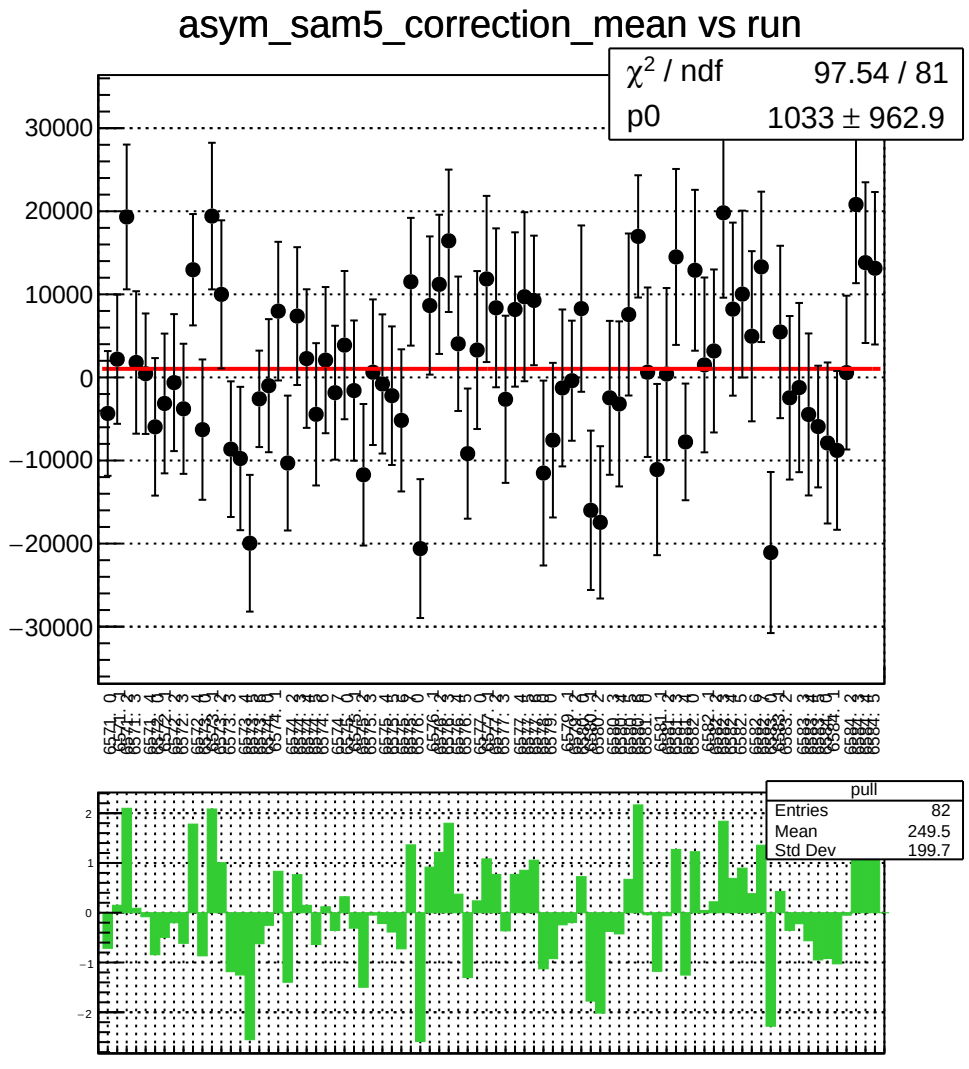

pull1D
Entries 82
Mean −0.005873
Std Dev 1.129

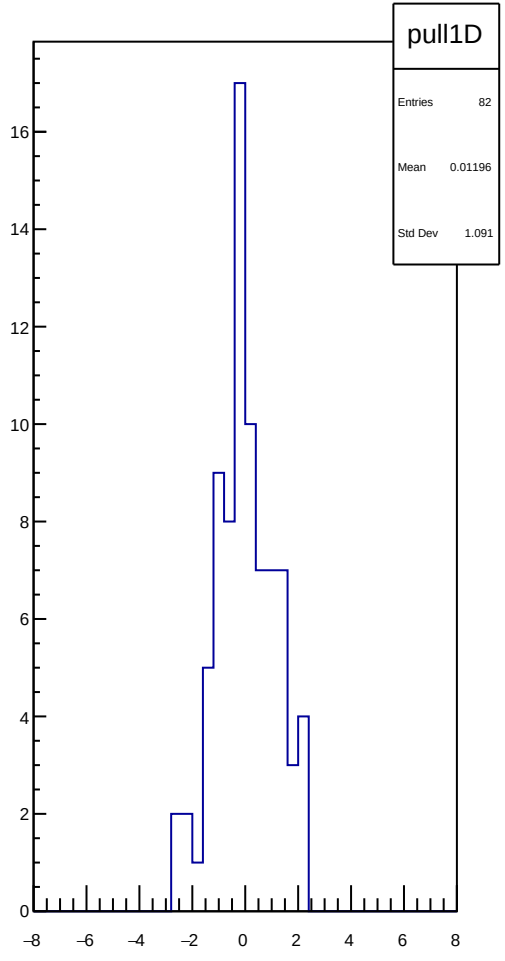

asym_sam4_correction_rms vs run
χ² / ndf 8145 / 81
p0 1891 ± 1.502
2300
2200
2100
2000
1900
1800
1700
1600

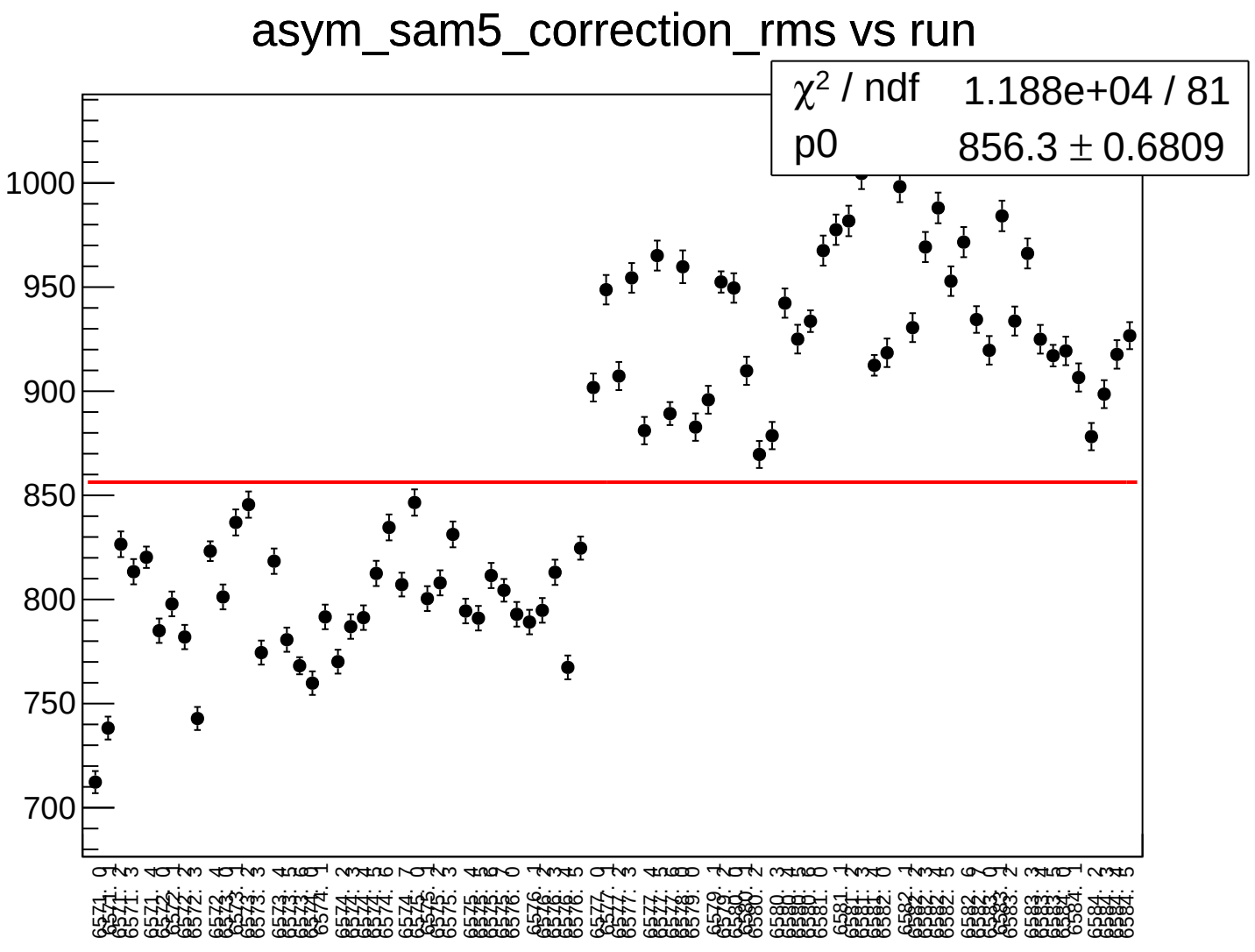

reg_asym_sam5_mean vs run
χ² / ndf 86.45 / 81
p0 381 ± 155.1
4000
2000
0
−2000
−4000
−6000
pull
Entries 82
Mean −110.4
Std Dev 158
2
1
0
−1
−2
−3

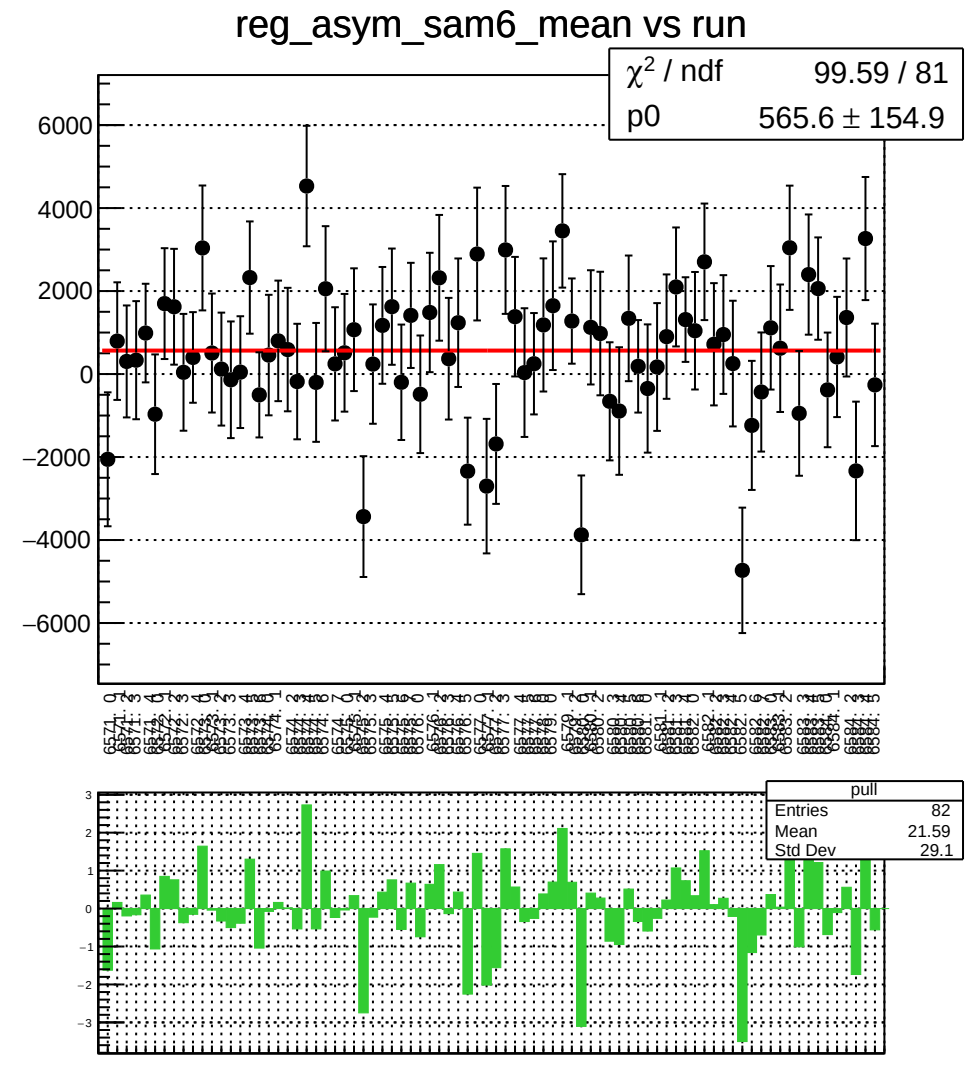

pull1D
Entries 82
Mean −0.008929
Std Dev 1.027
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

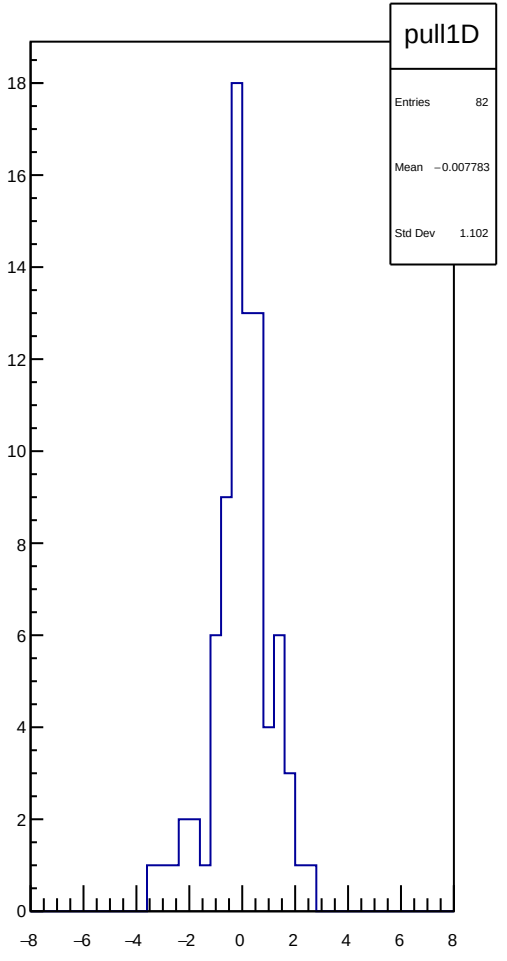

reg_asym_sam5_rms vs run
χ² / ndf 3237 / 81
p0 138.4 ± 0.1097
170
160
150
140
130

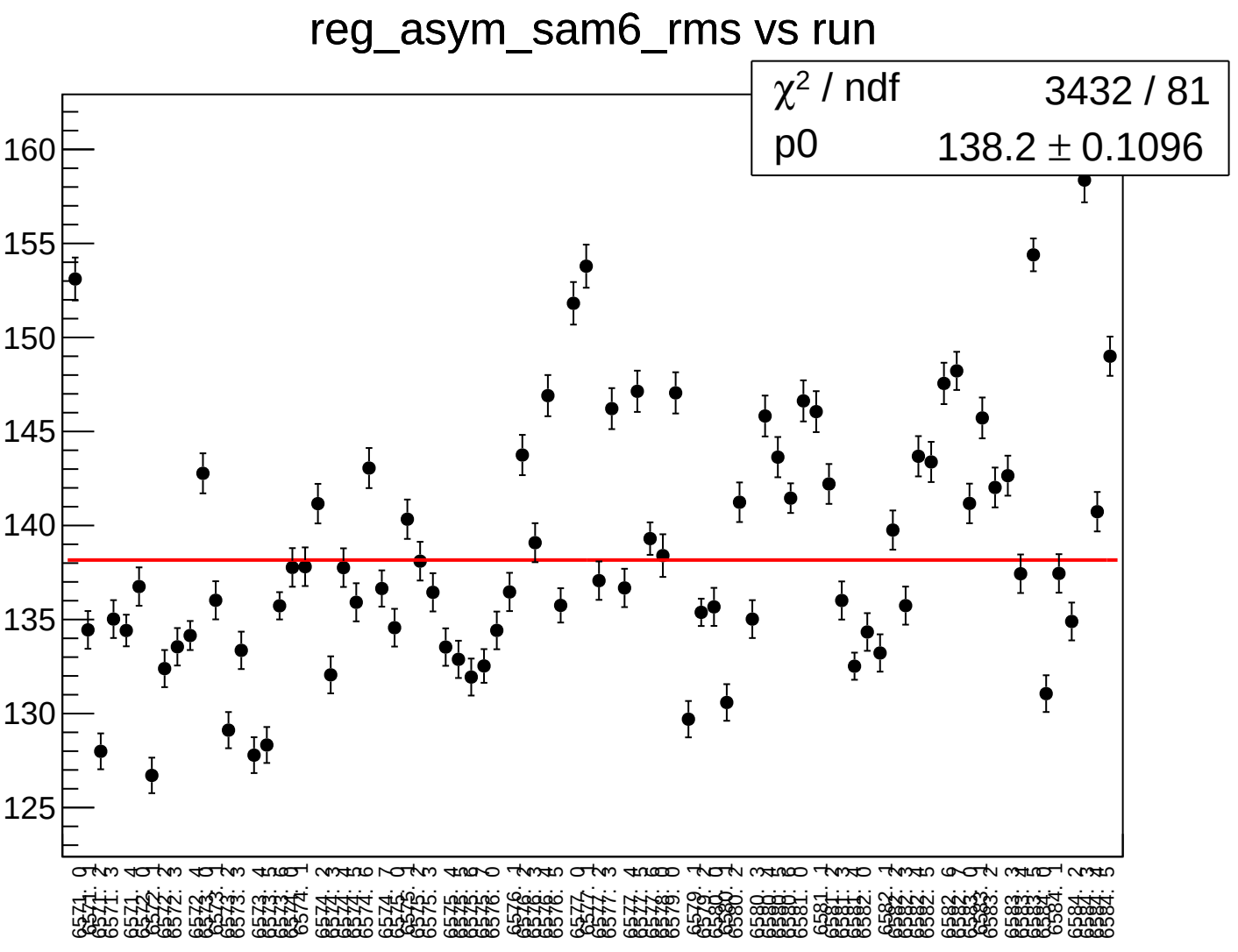

asym_sam5_correction_mean vs run
χ² / ndf 97.54 / 81
p0 1033 ± 962.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 249.5
Std Dev 199.7
2
1
0
−1
−2

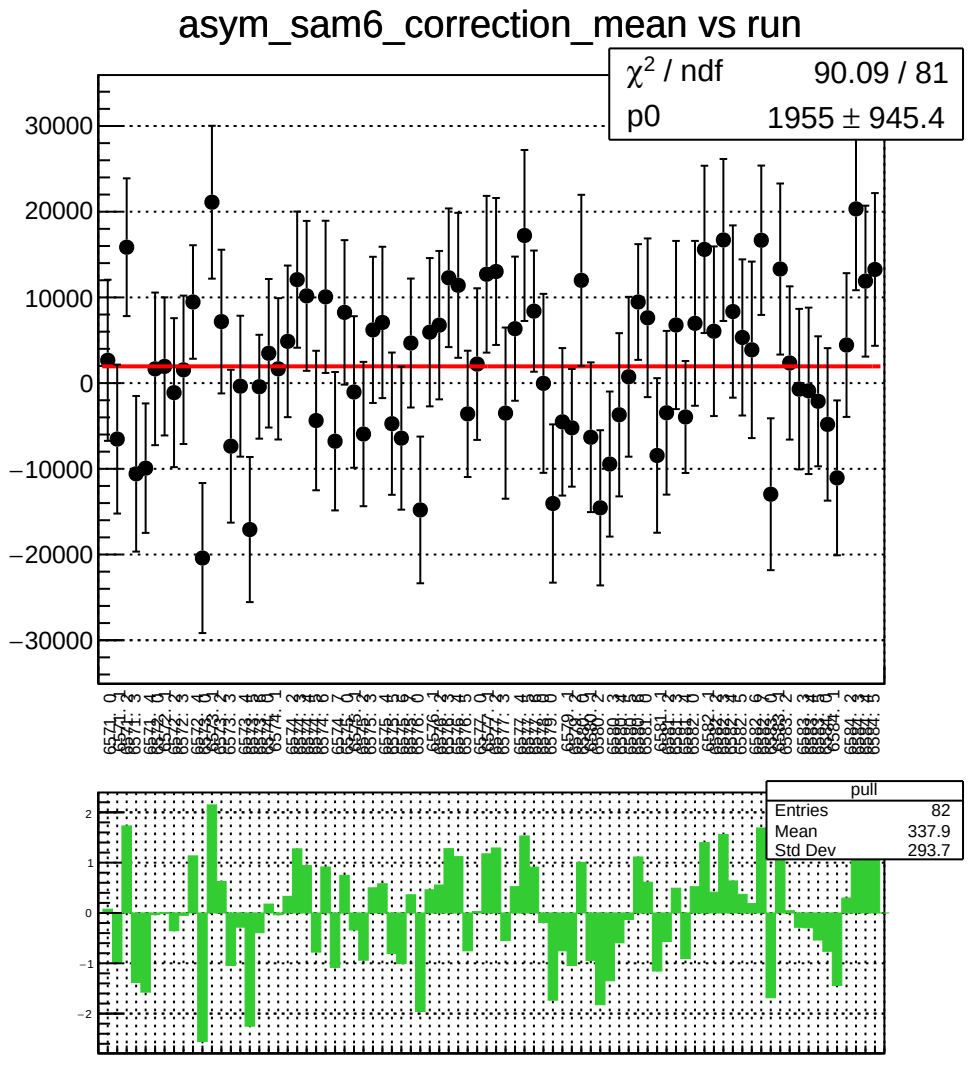

pull1D
Entries 82
Mean 0.01196
Std Dev 1.091
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

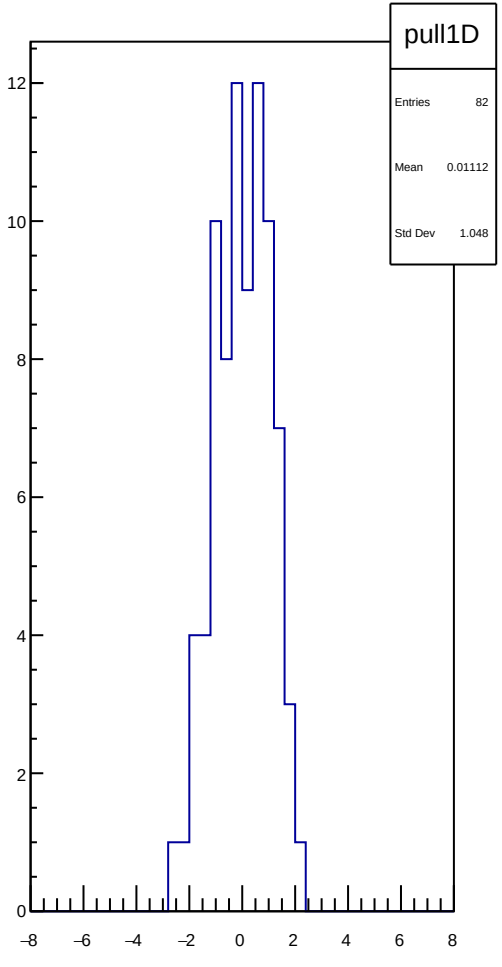

asym_sam5_correction_rms vs run
χ² / ndf 1.188e+04 / 81
p0 856.3 ± 0.6809
1000
950
900
850
800
750
700

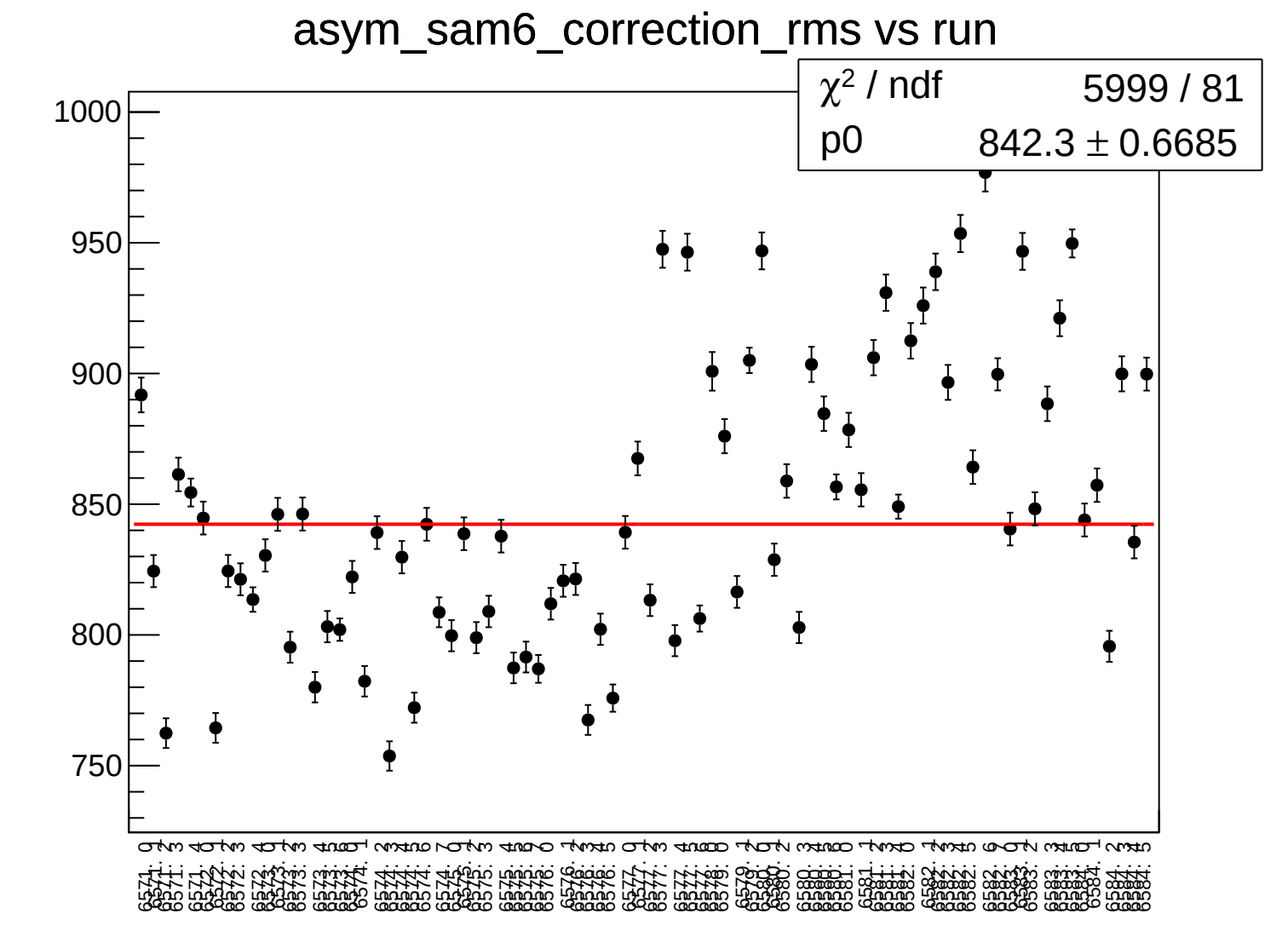

reg_asym_sam6_mean vs run
χ² / ndf 99.59 / 81
p0 565.6 ± 154.9
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 82
Mean 21.59
Std Dev 29.1
3
2
1
0
−1
−2
−3

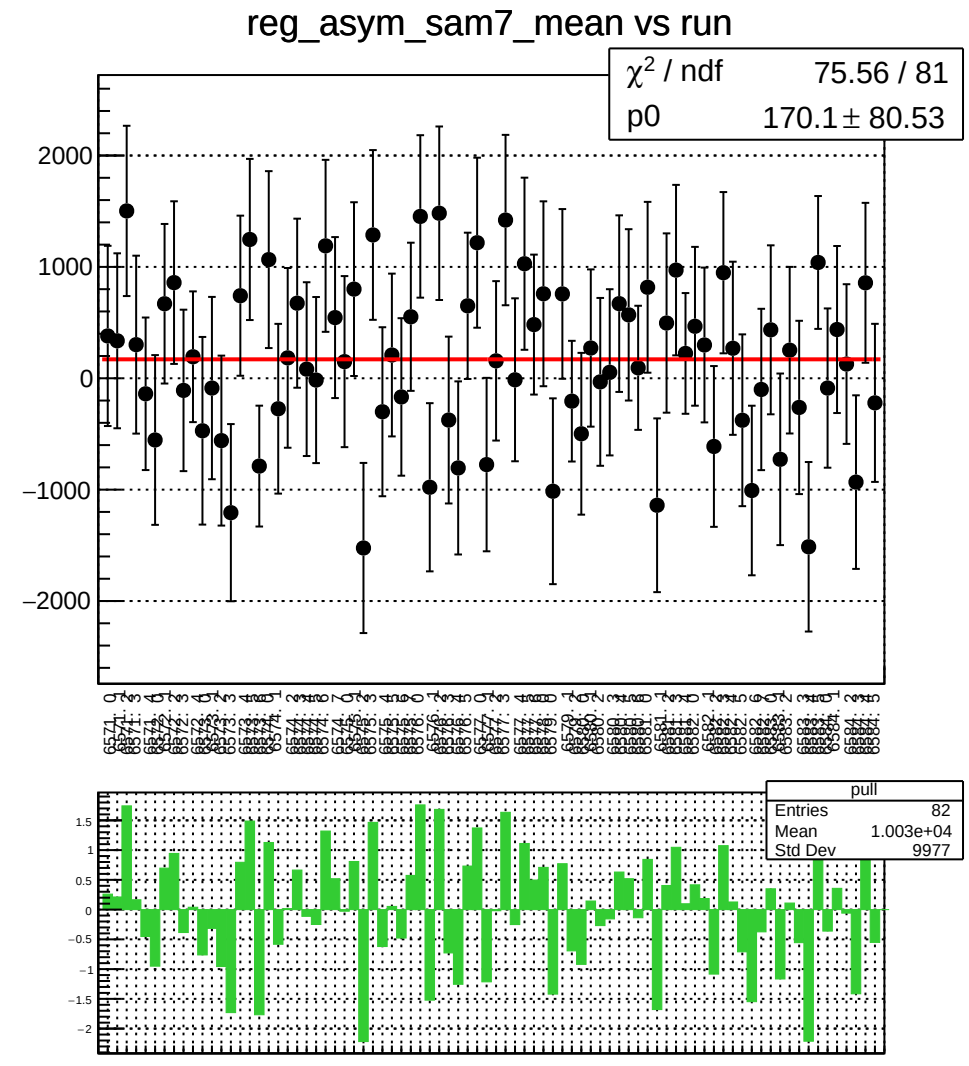

pull1D
Entries 82
Mean −0.007783
Std Dev 1.102
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

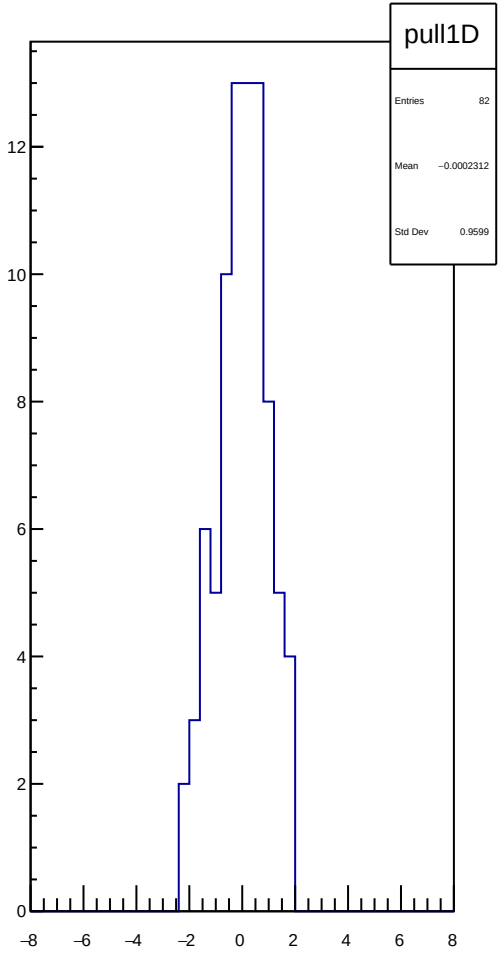

reg_asym_sam6_rms vs run
χ² / ndf 3432 / 81
p0 138.2 ± 0.1096
160
155
150
145
140
135
130
125

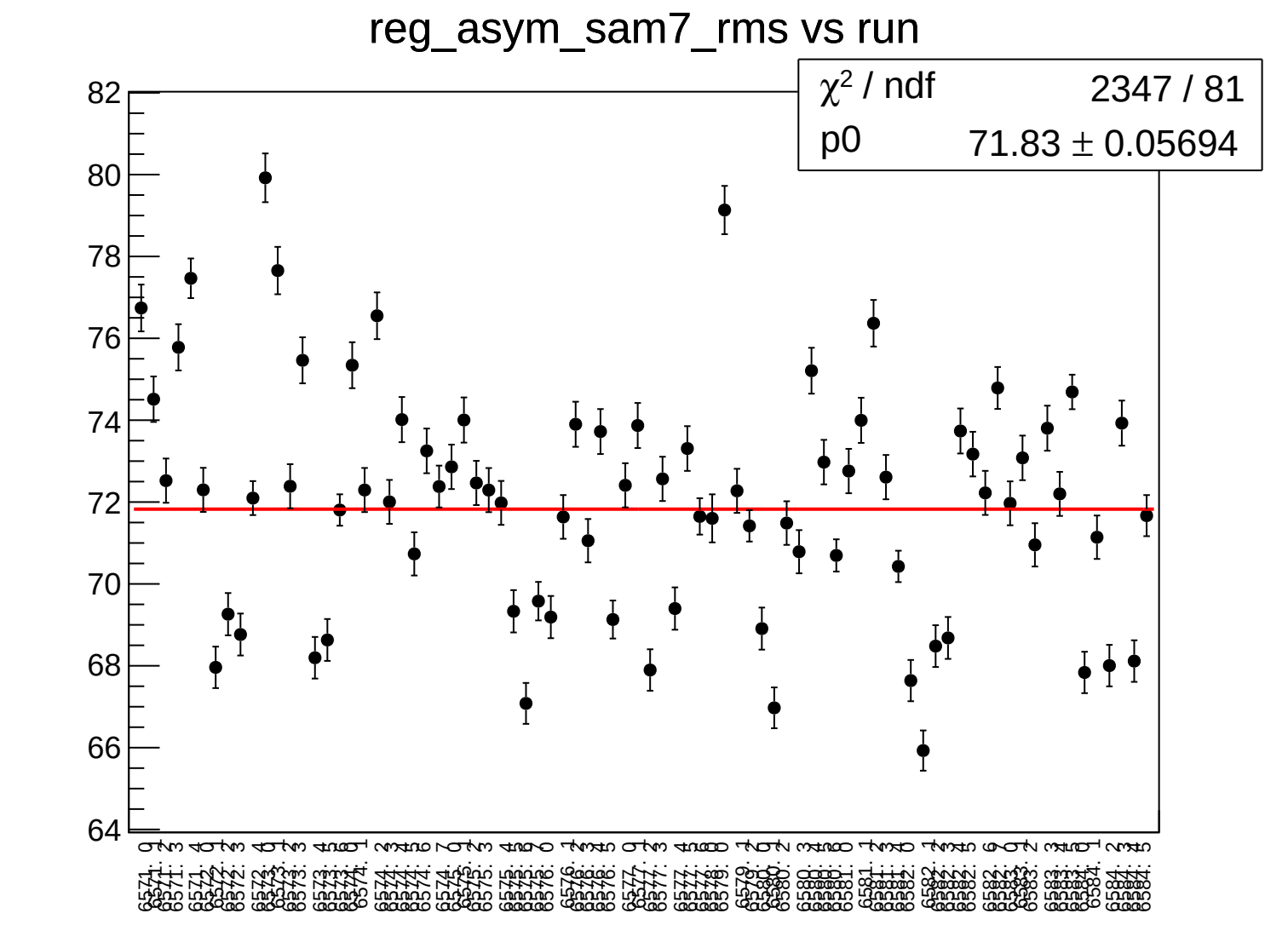

asym_sam6_correction_mean vs run
χ² / ndf 90.09 / 81
p0 1955 ± 945.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 337.9
Std Dev 293.7
2
1
0
−1
−2

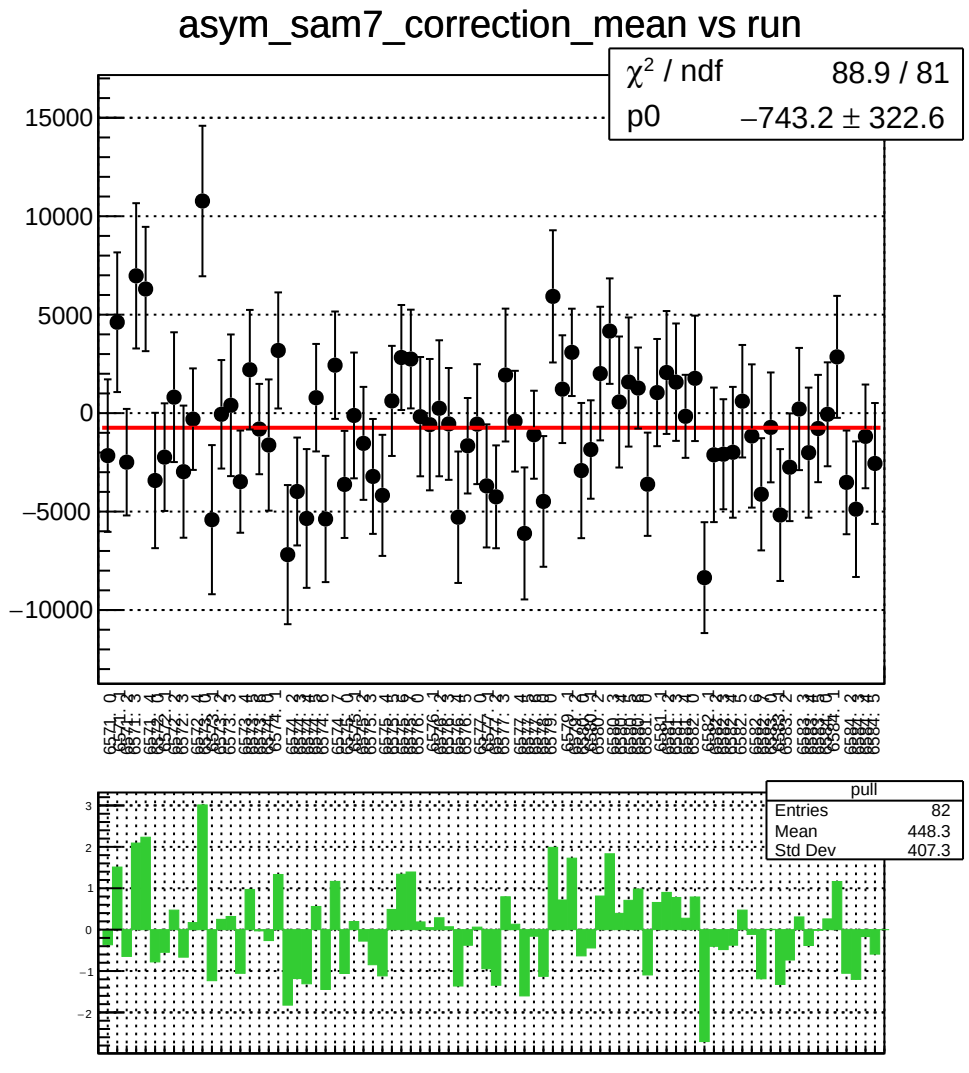

pull1D
Entries 82
Mean 0.01112
Std Dev 1.048
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

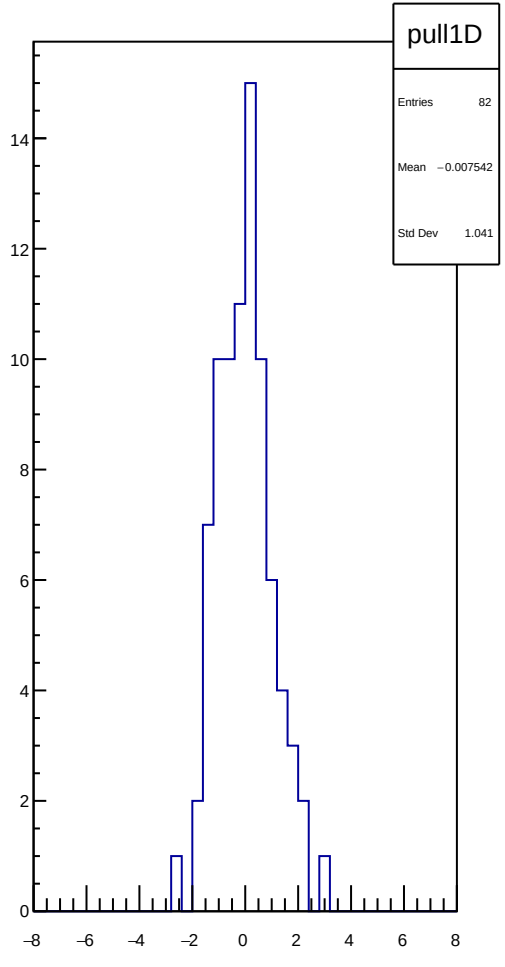

asym_sam6_correction_rms vs run
χ² / ndf 5999 / 81
p0 842.3 ± 0.6685
1000
950
900
850
800
750

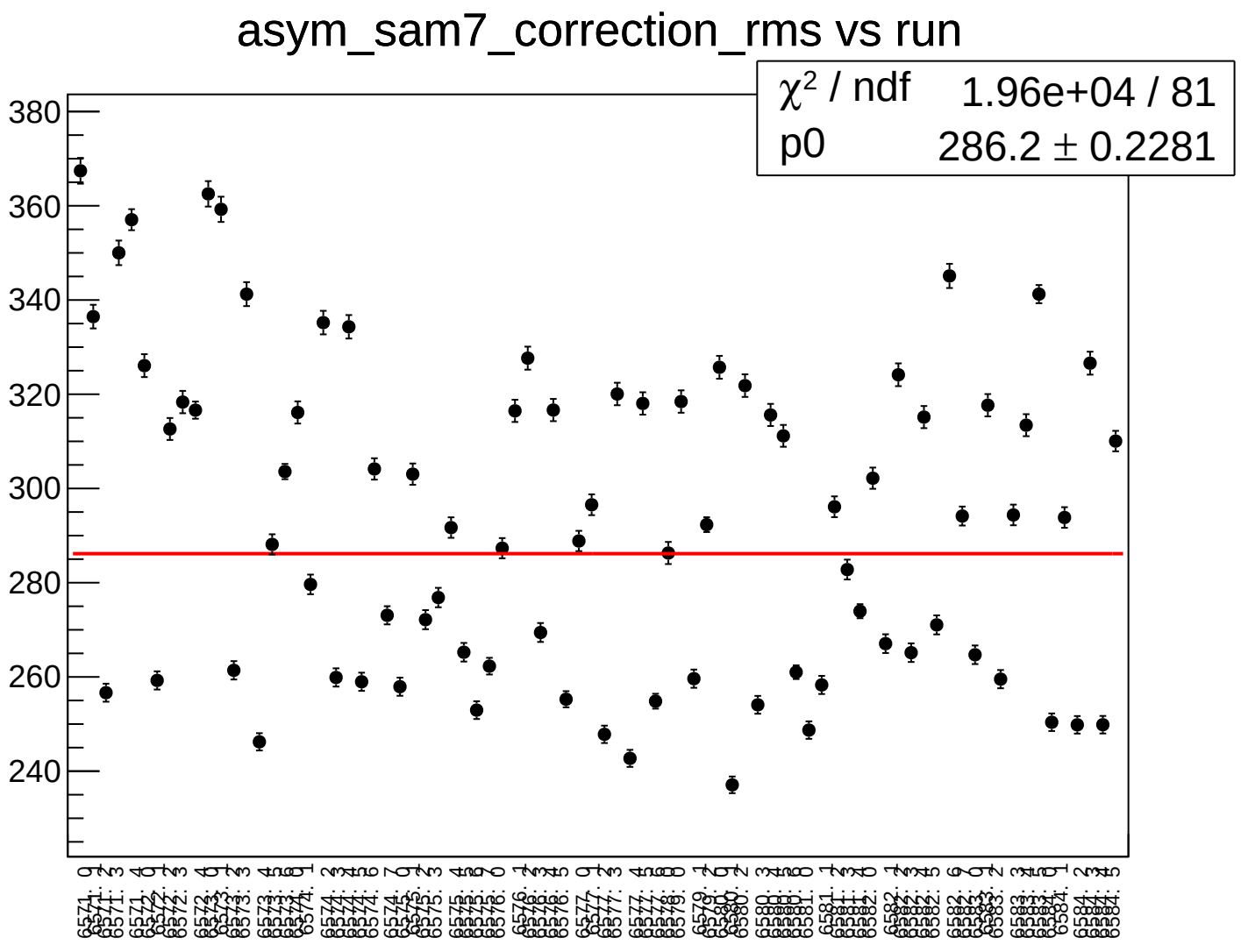

reg_asym_sam7_mean vs run
$\chi^2$ / ndf 75.56 / 81
p0 170.1 ± 80.53
2000
1000
0
−1000
−2000
pull
Entries 82
Mean 1.003e+04
Std Dev 9977
1.5
1
0.5
0
−0.5
−1
−1.5
−2

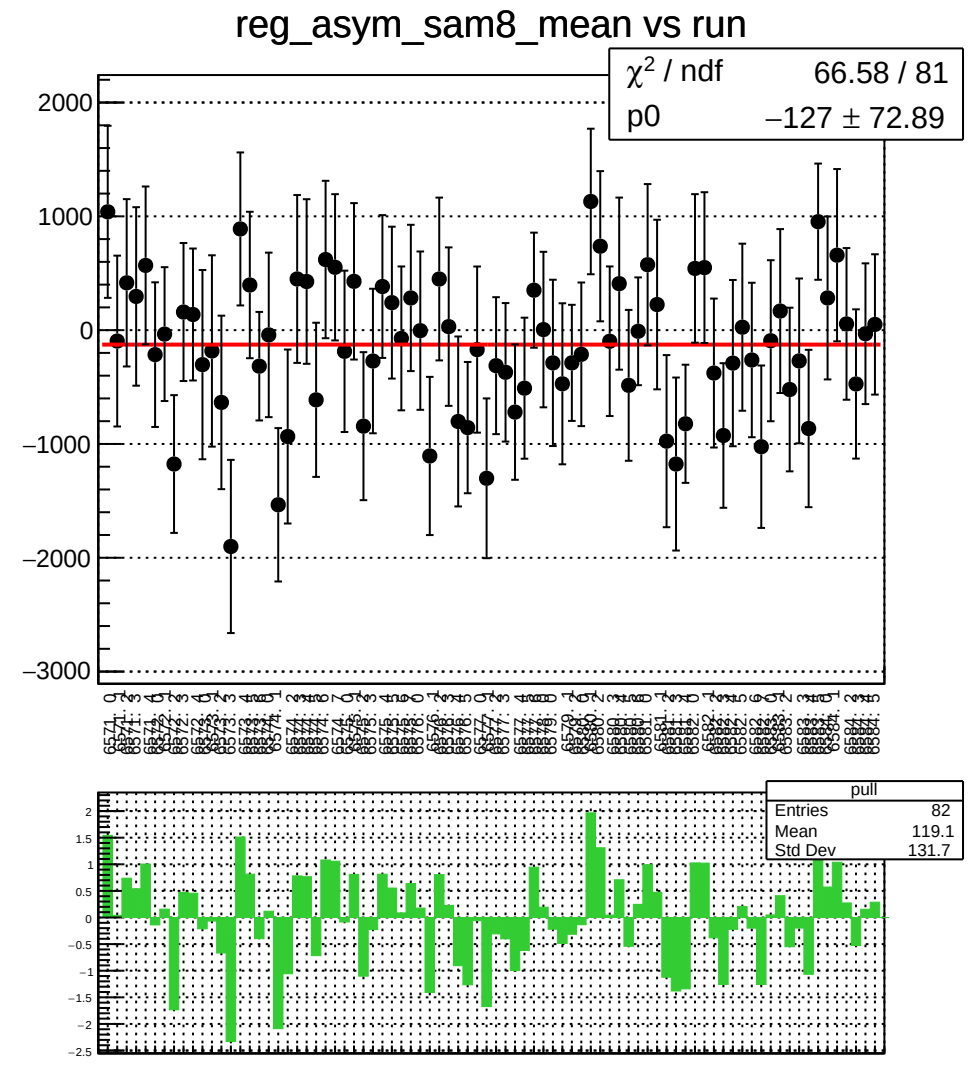

pull1D
Entries 82
Mean −0.0002312
Std Dev 0.9599
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

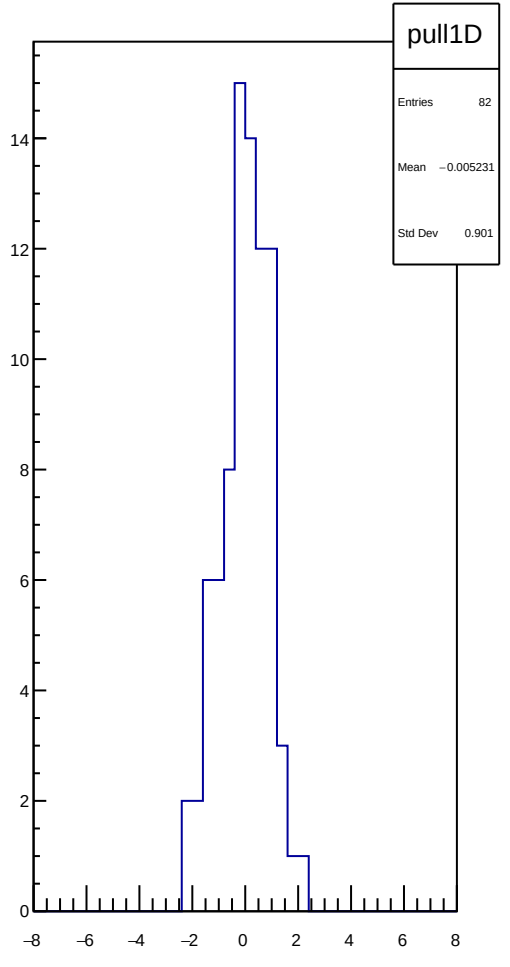

reg_asym_sam7_rms vs run
χ² / ndf 2347 / 81
p0 71.83 ± 0.05694
82
80
78
76
74
72
70
68
66
64


asym_sam7_correction_mean vs run
χ² / ndf 88.9 / 81
p0 −743.2 ± 322.6
15000
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 448.3
Std Dev 407.3
3
2
1
0
−1
−2

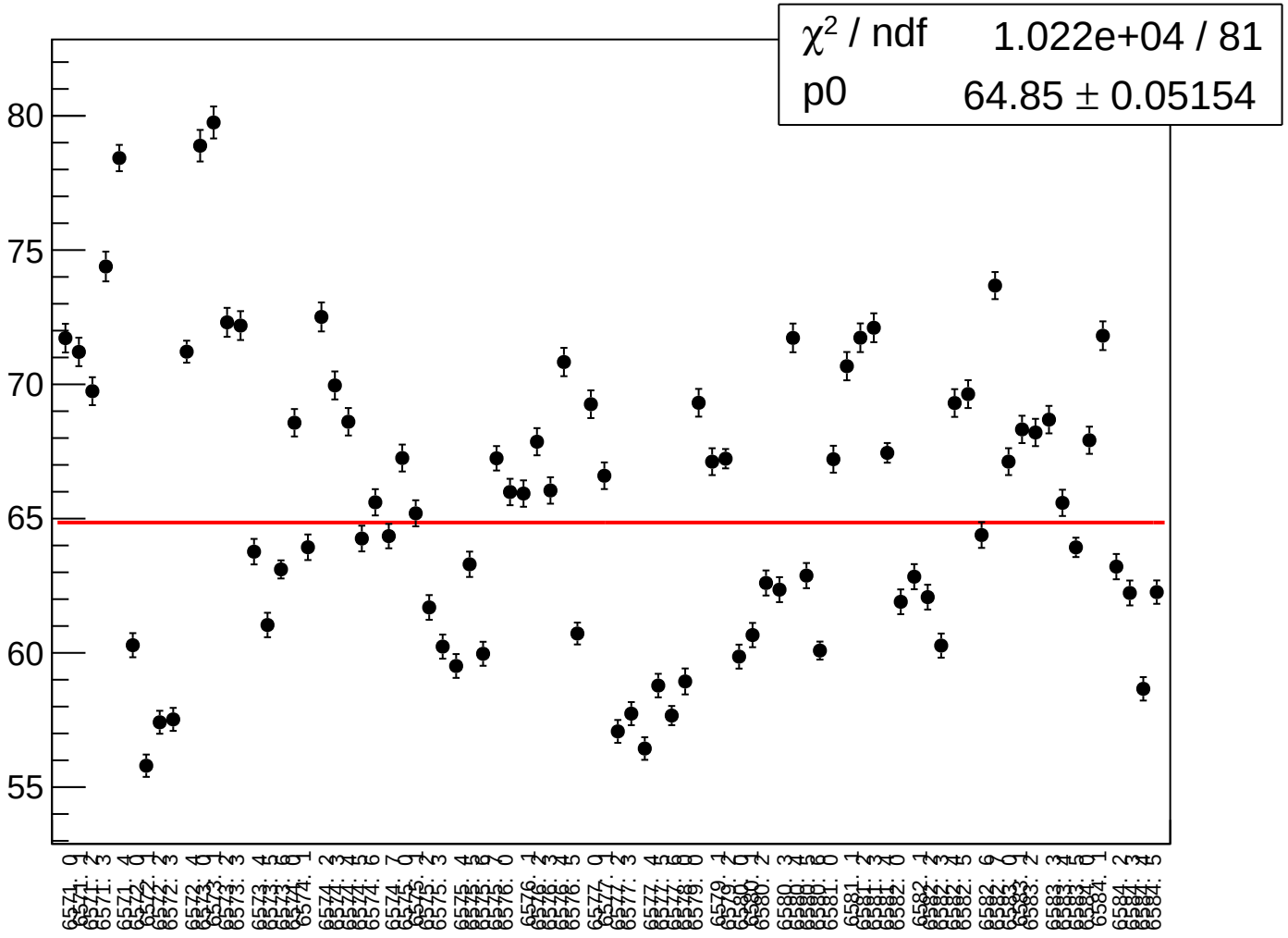

pull1D
Entries 82
Mean −0.007542
Std Dev 1.041
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

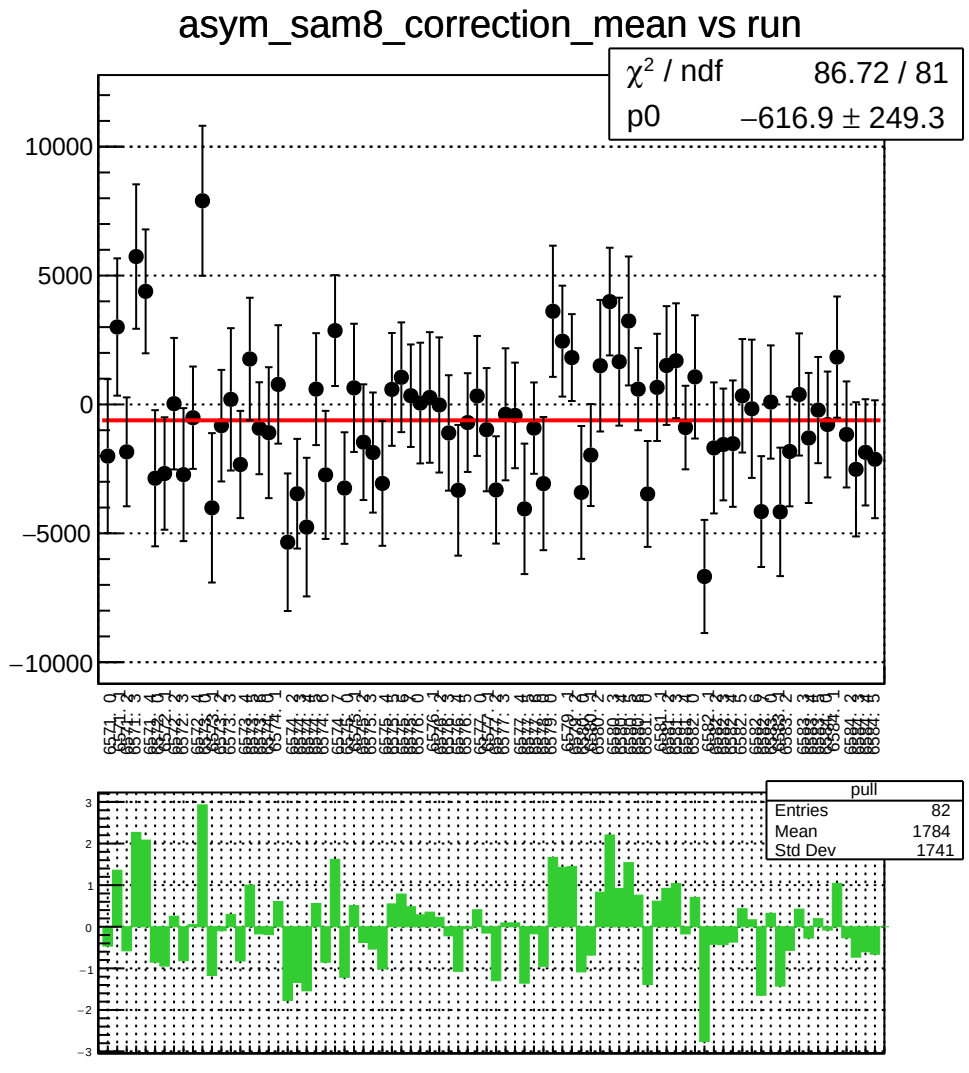

asym_sam7_correction_rms vs run
χ² / ndf 1.96e+04 / 81
p0 286.2 ± 0.2281
380
360
340
320
300
280
260
240

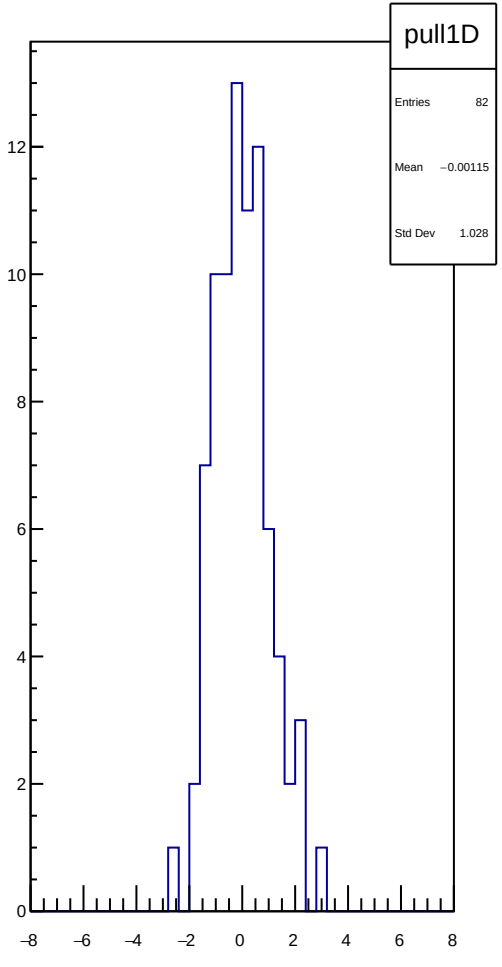

reg_asym_sam8_mean vs run
χ² / ndf 66.58 / 81
p0 −127 ± 72.89
2000
1000
0
−1000
−2000
−3000
pull
Entries 82
Mean 119.1
Std Dev 131.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

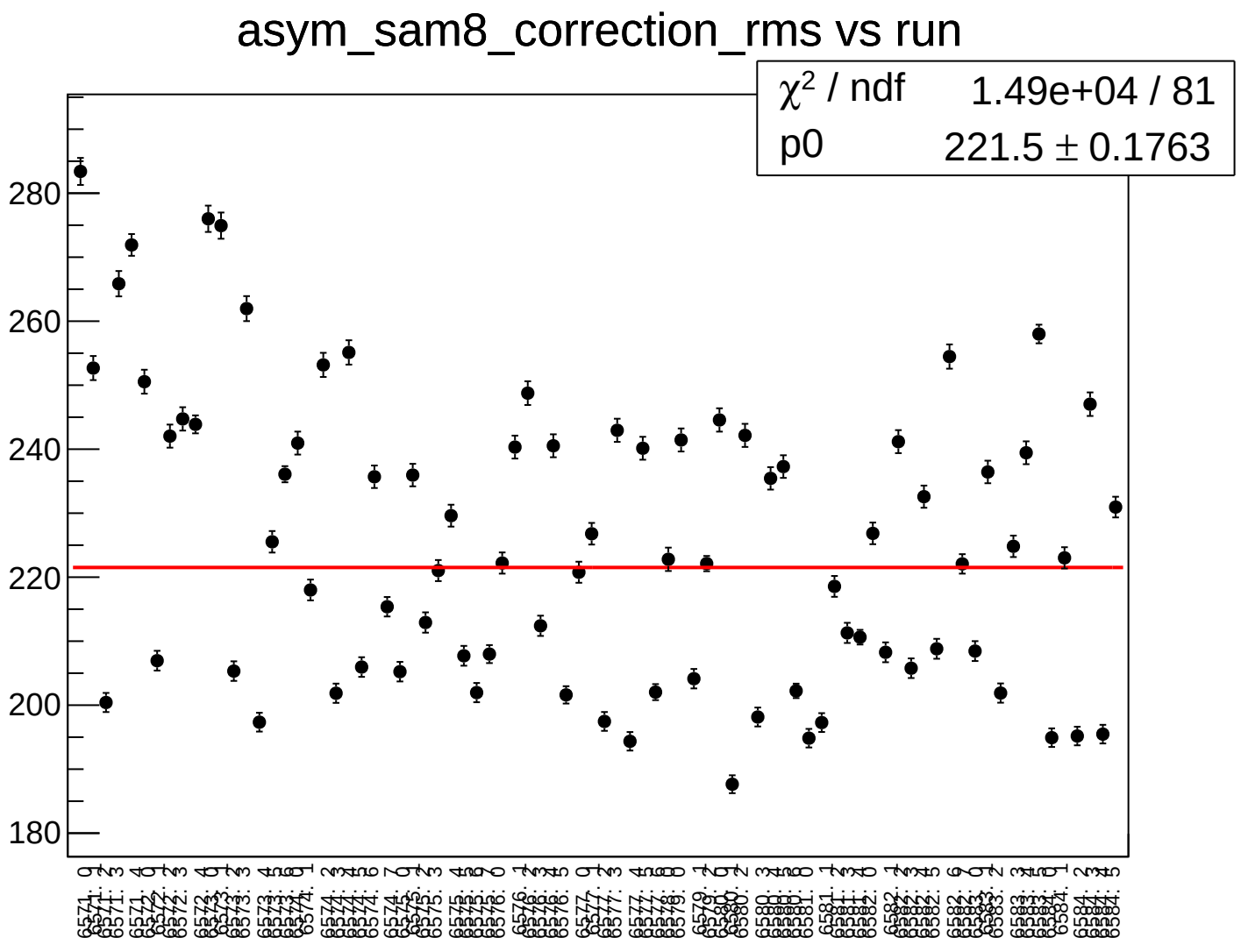

pull1D
Entries 82
Mean −0.005231
Std Dev 0.901
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

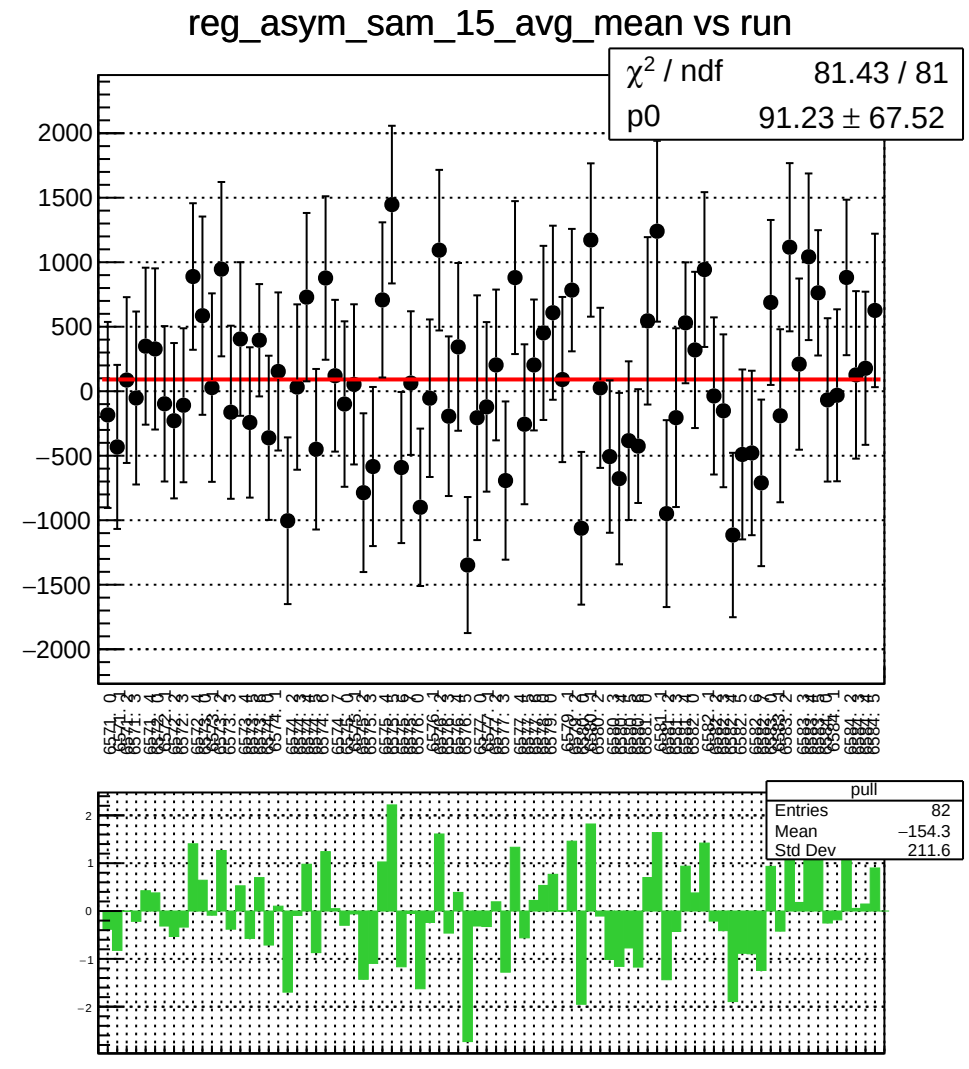
# reg_asym_sam8_rms vs run

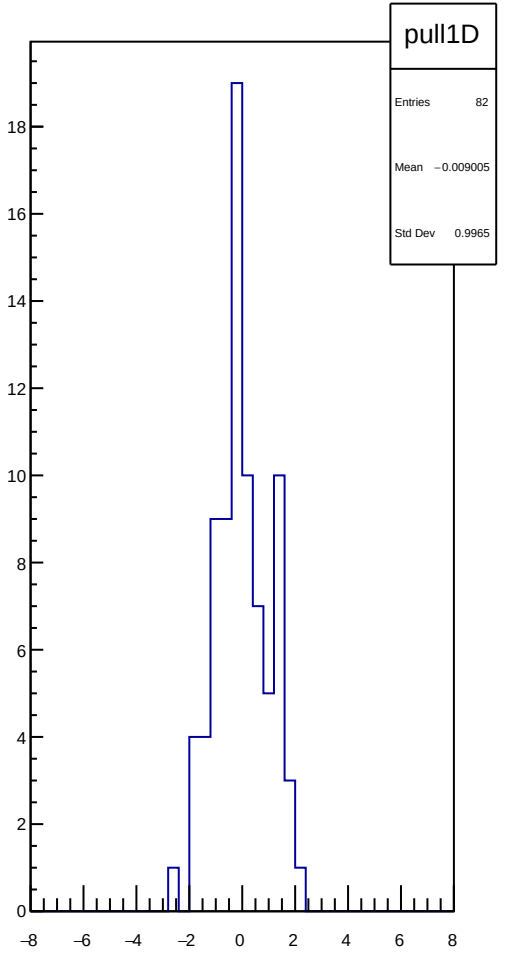



asym_sam8_correction_mean vs run
χ² / ndf 86.72 / 81
p0 −616.9 ± 249.3
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 1784
Std Dev 1741
3
2
1
0
−1
−2
−3

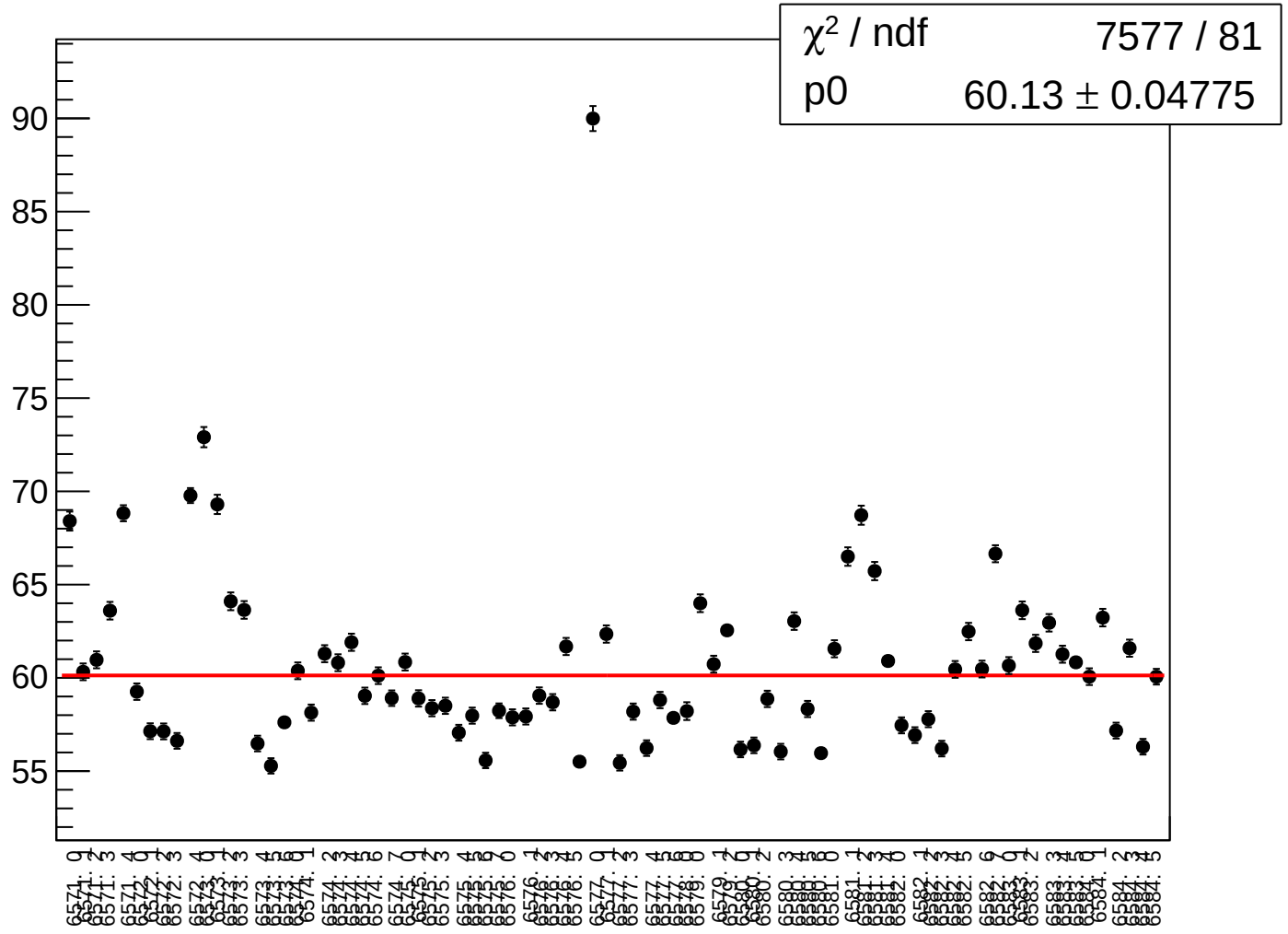

pull1D
Entries 82
Mean −0.00115
Std Dev 1.028
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

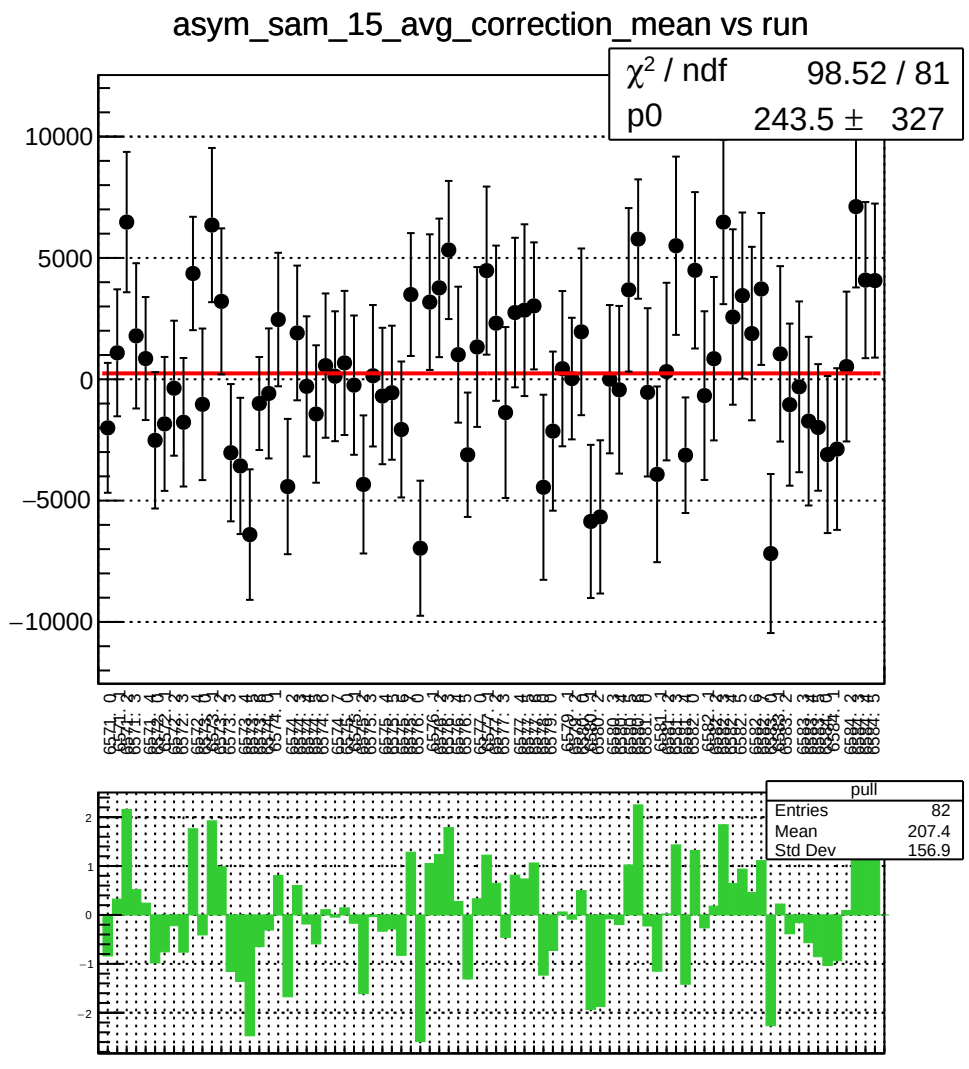

asym_sam8_correction_rms vs run
χ² / ndf 1.49e+04 / 81
p0 221.5 ± 0.1763
280
260
240
220
200
180

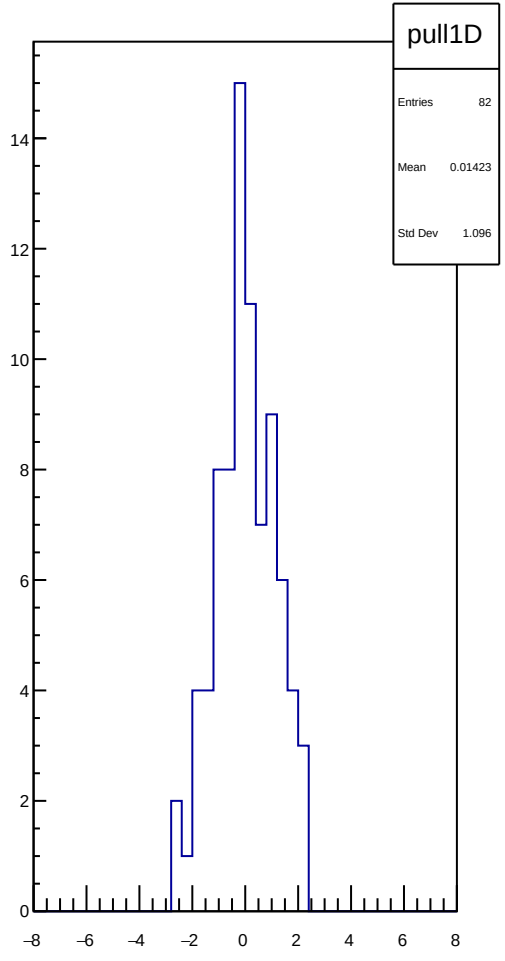

reg_asym_sam_15_avg_mean vs run
χ² / ndf 81.43 / 81
p0 91.23 ± 67.52
pull
Entries 82
Mean −154.3
Std Dev 211.6

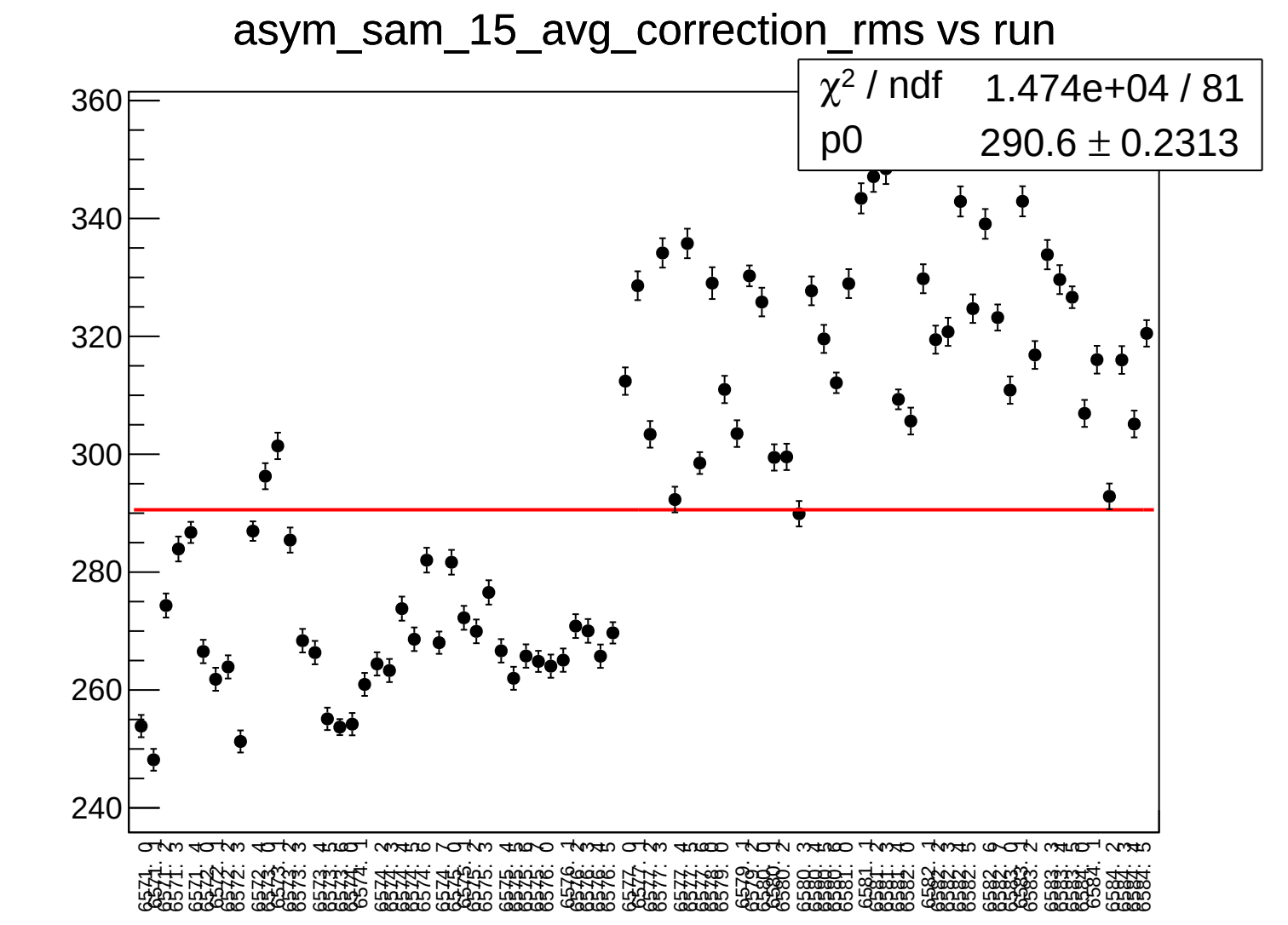

pull1D
Entries 82
Mean −0.009005
Std Dev 0.9965

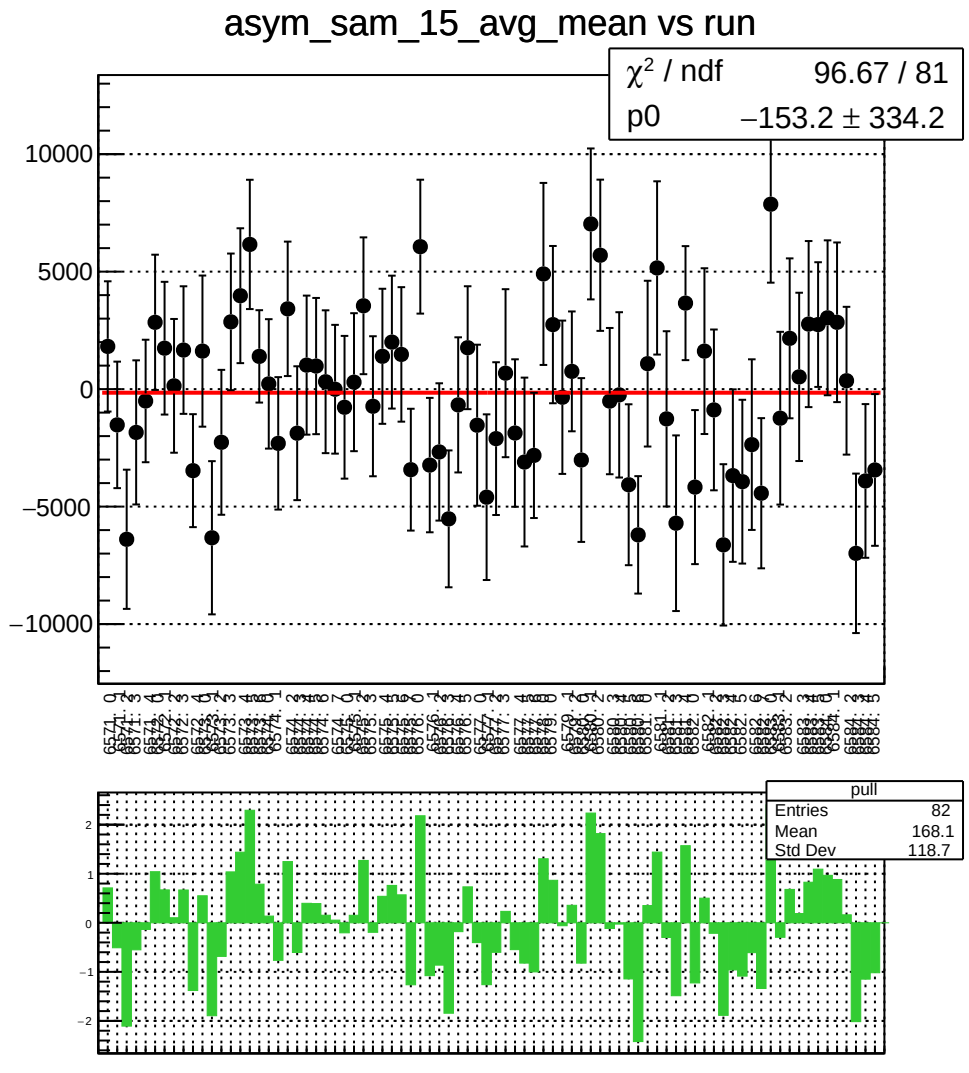
# reg_asym_sam_15_avg_rms vs run

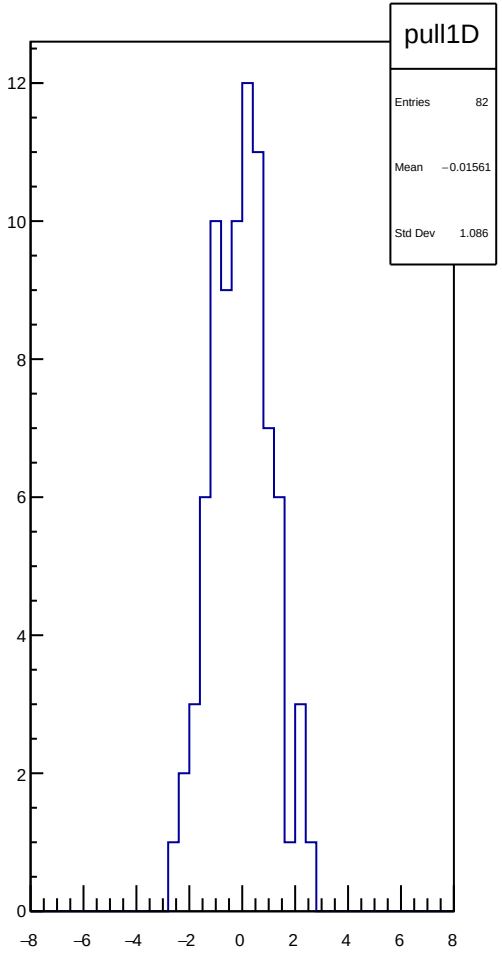


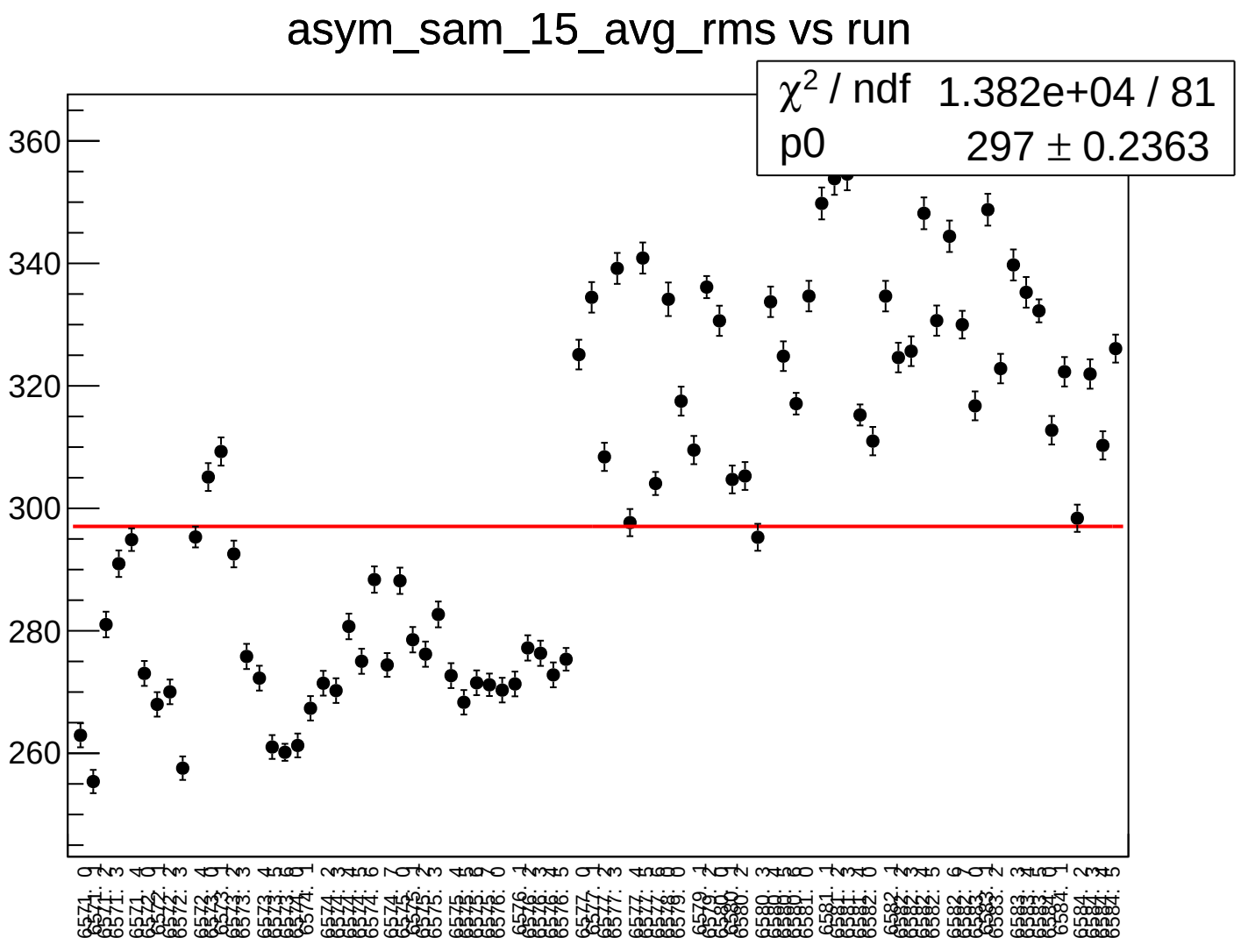

asym_sam_15_avg_correction_mean vs run
χ² / ndf 98.52 / 81
p0 243.5 ± 327
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 207.4
Std Dev 156.9
2
1
0
−1
−2

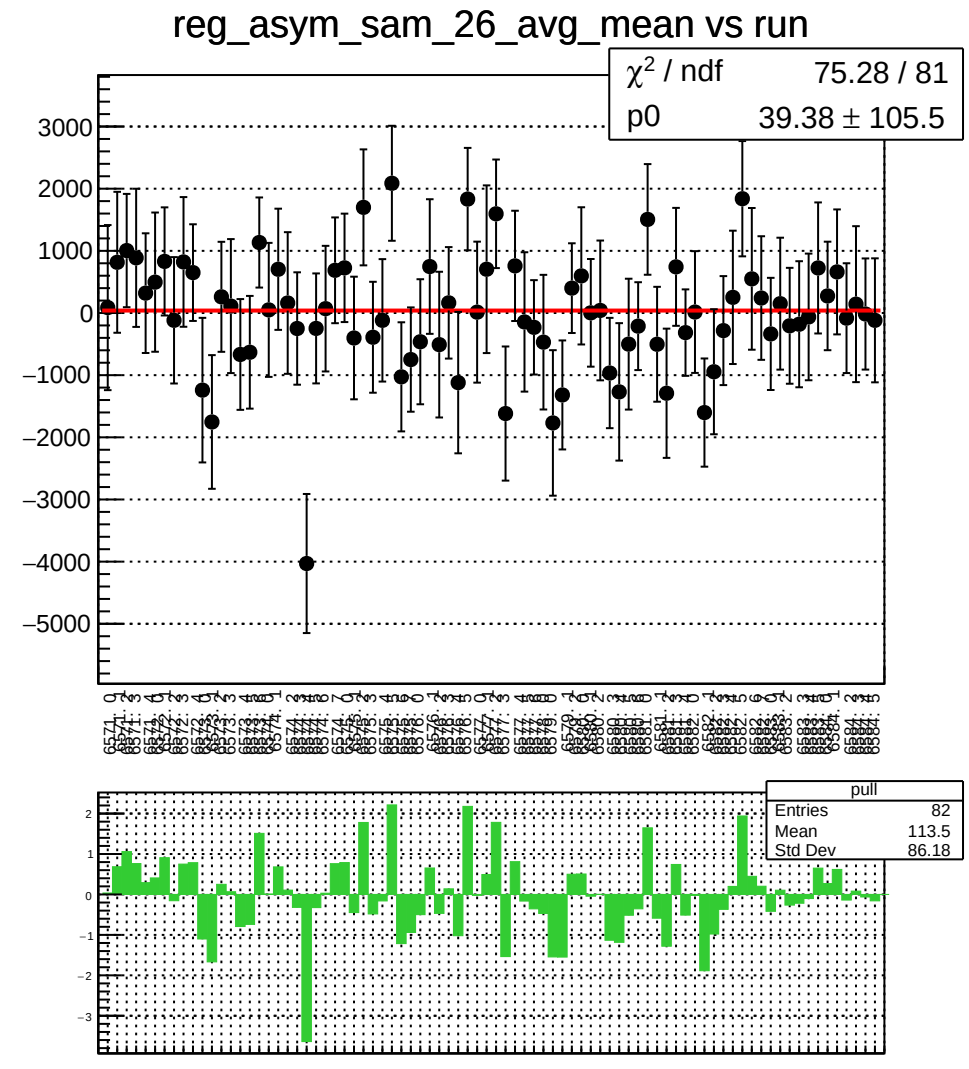

pull1D
Entries 82
Mean 0.01423
Std Dev 1.096
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

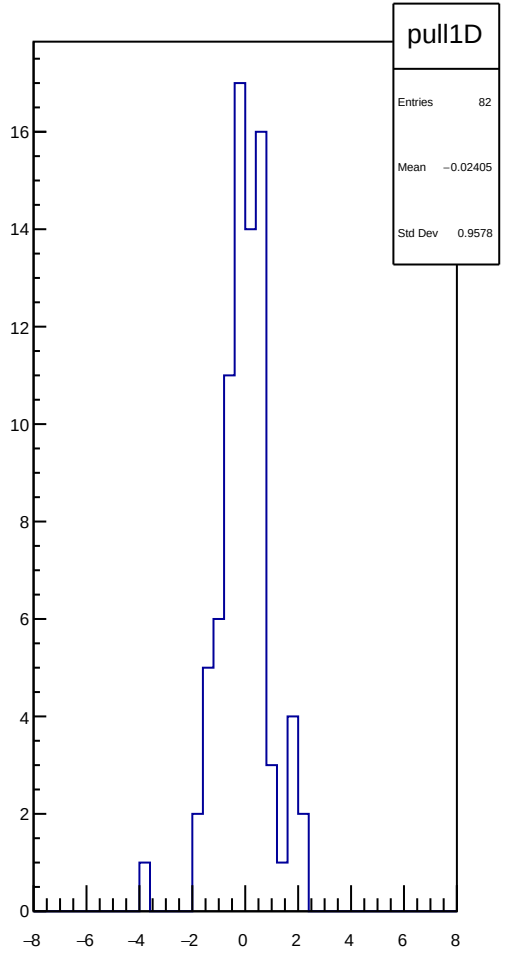

asym_sam_15_avg_correction_rms vs run
χ² / ndf 1.474e+04 / 81
p0 290.6 ± 0.2313
360
340
320
300
280
260
240

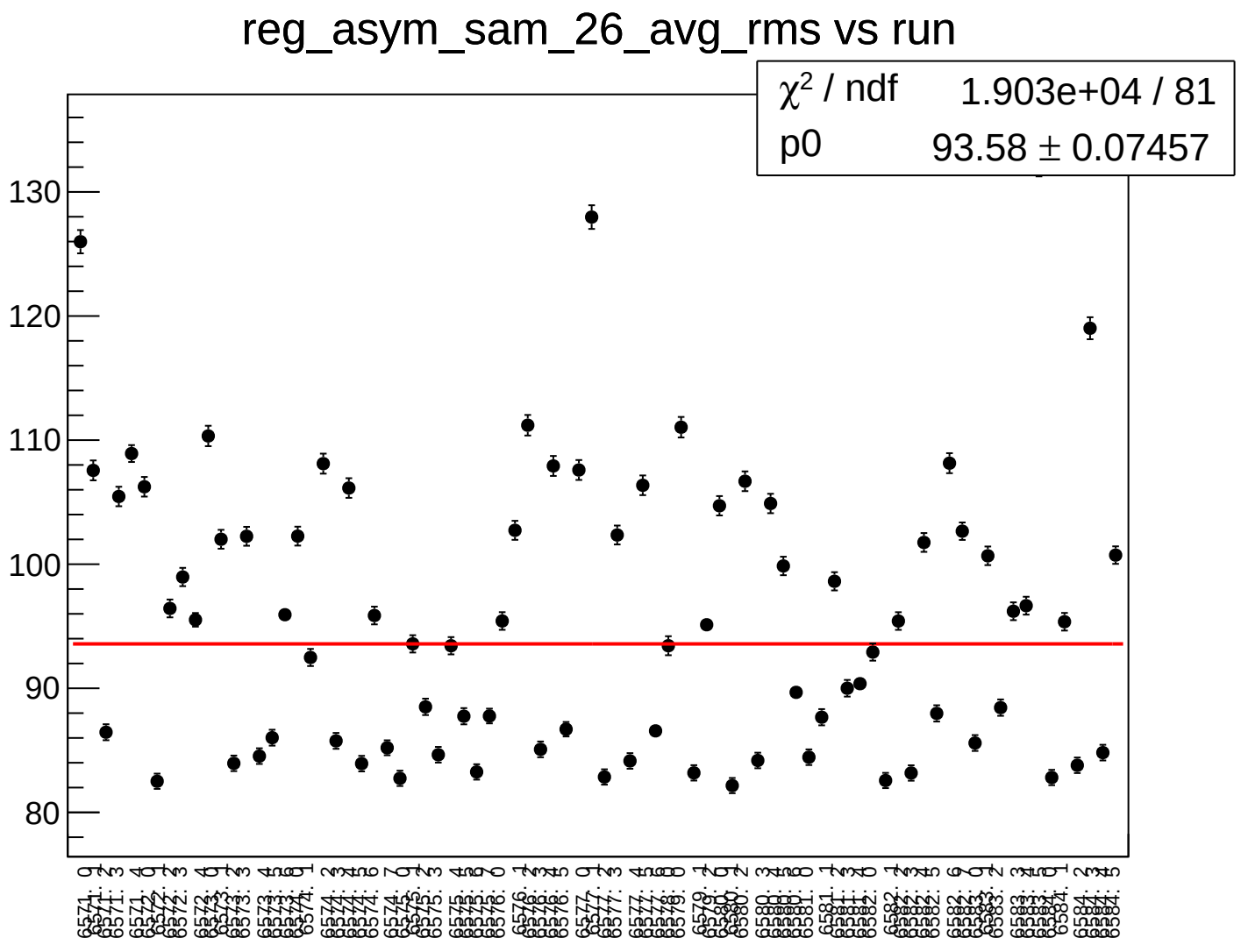

asym_sam_15_avg_mean vs run
χ² / ndf 96.67 / 81
p0 −153.2 ± 334.2
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 168.1
Std Dev 118.7
2
1
0
−1
−2

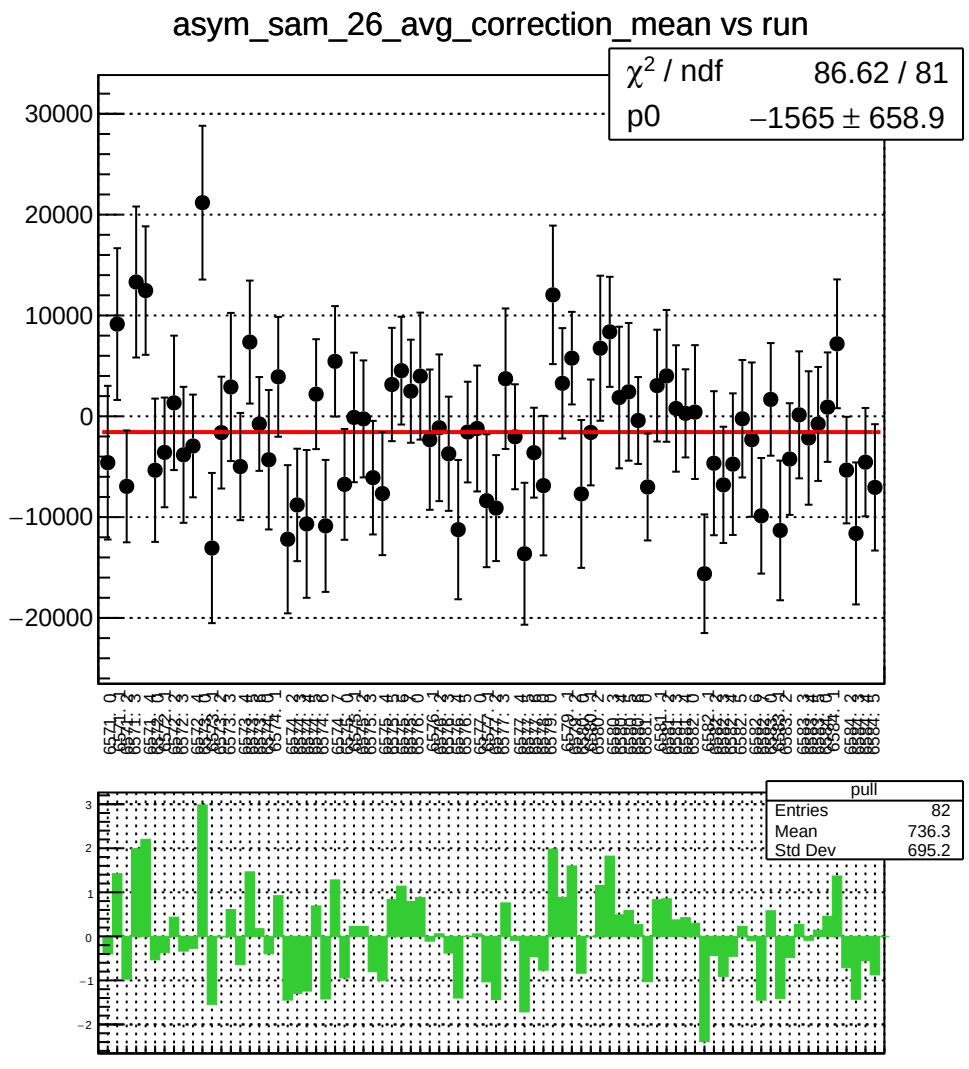

pull1D
Entries 82
Mean −0.01561
Std Dev 1.086
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

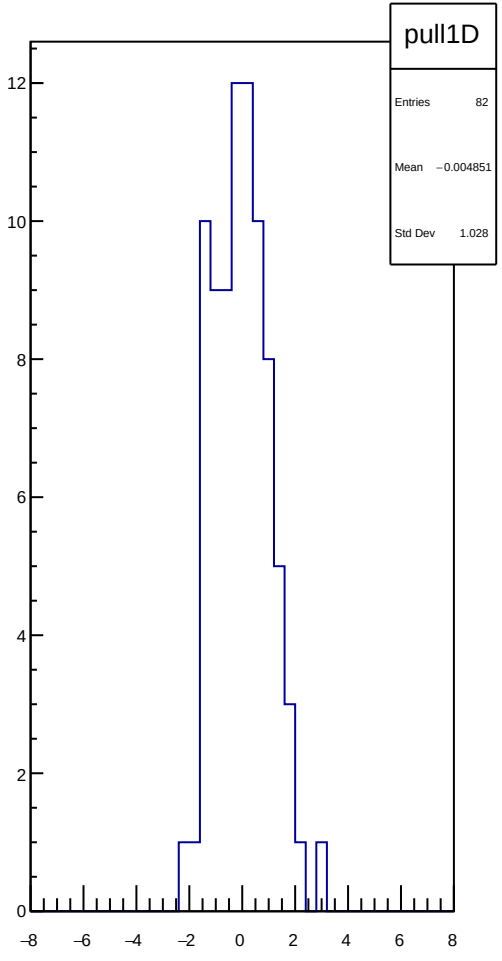

asym_sam_15_avg_rms vs run
χ² / ndf 1.382e+04 / 81
p0 297 ± 0.2363
360
340
320
300
280
260

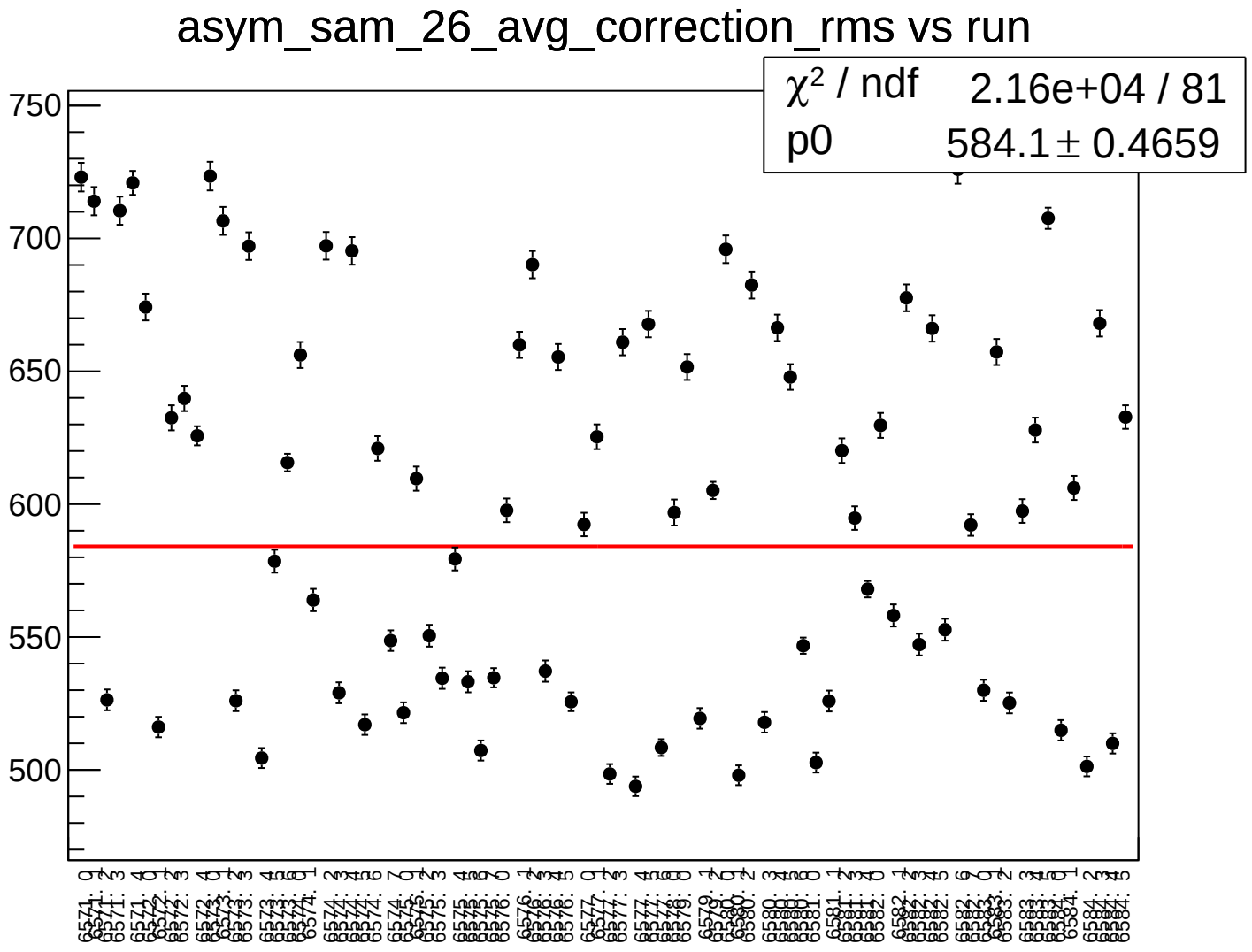

reg_asym_sam_26_avg_mean vs run
χ² / ndf 75.28 / 81
p0 39.38 ± 105.5
pull
Entries 82
Mean 113.5
Std Dev 86.18

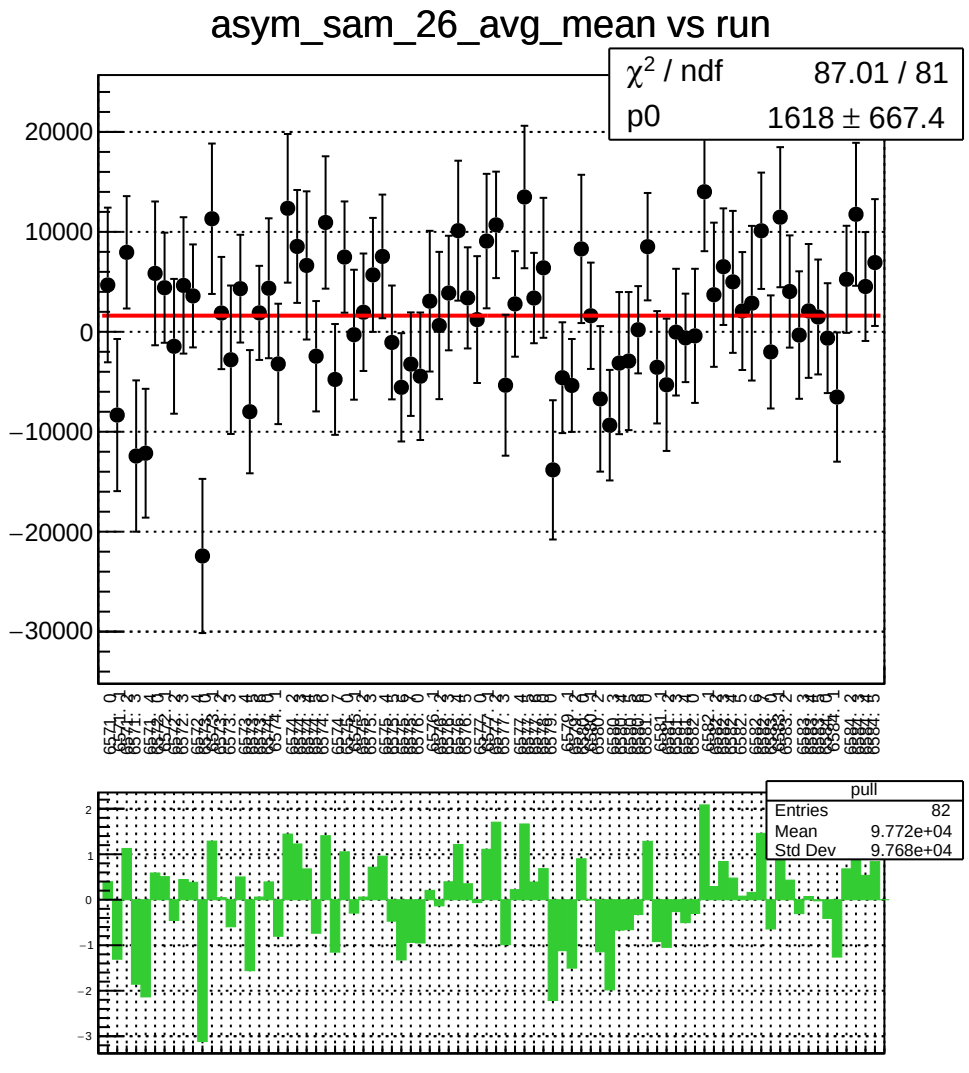

pull1D
Entries 82
Mean −0.02405
Std Dev 0.9578

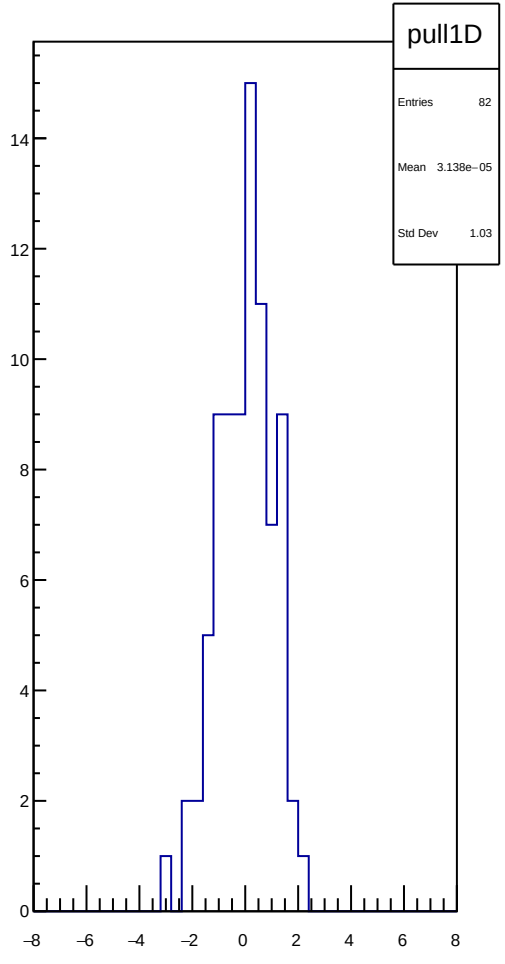

reg_asym_sam_26_avg_rms vs run
χ² / ndf 1.903e+04 / 81
p0 93.58 ± 0.07457
130
120
110
100
90
80

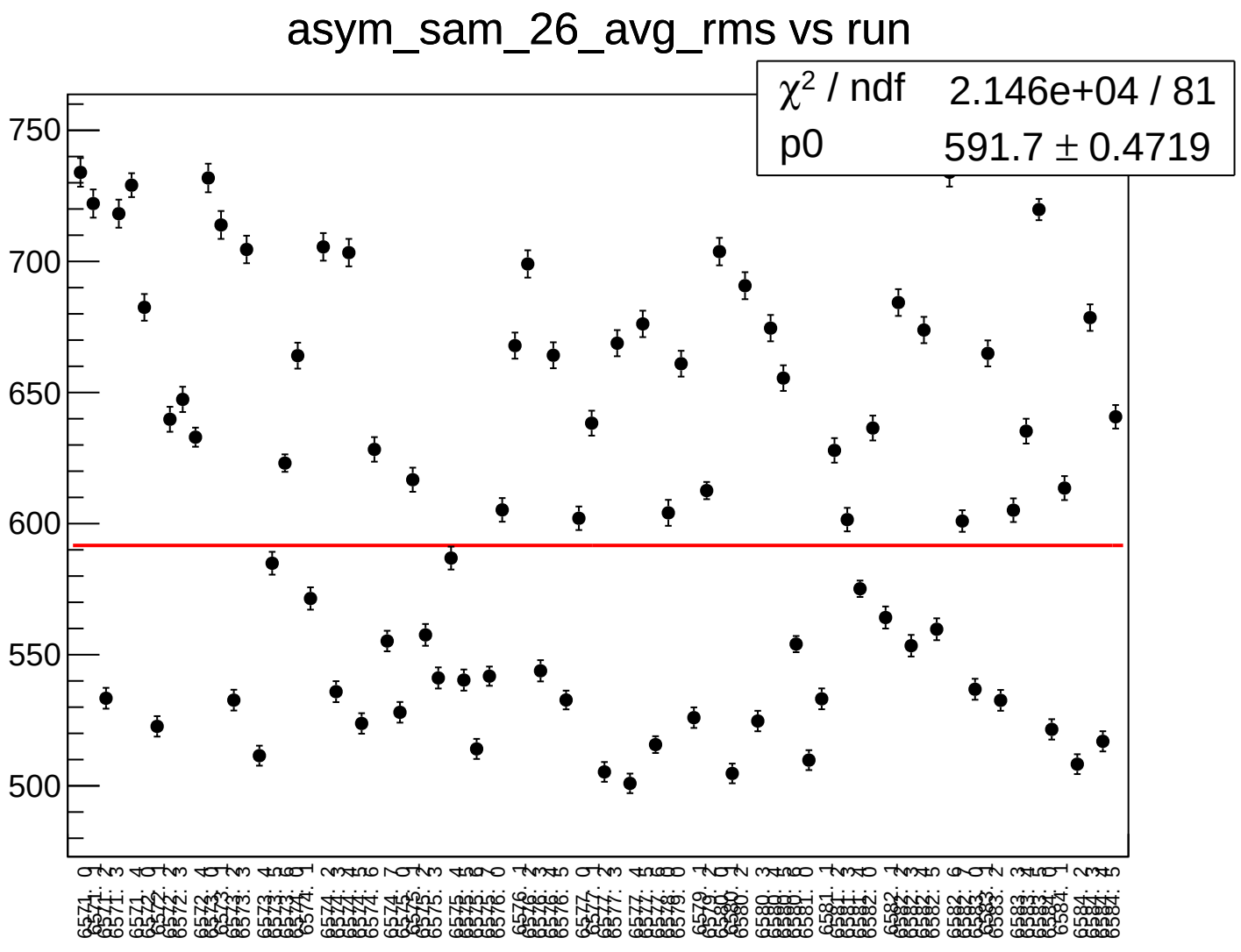

asym_sam_26_avg_correction_mean vs run
χ² / ndf 86.62 / 81
p0 −1565 ± 658.9
30000
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 736.3
Std Dev 695.2
3
2
1
0
−1
−2

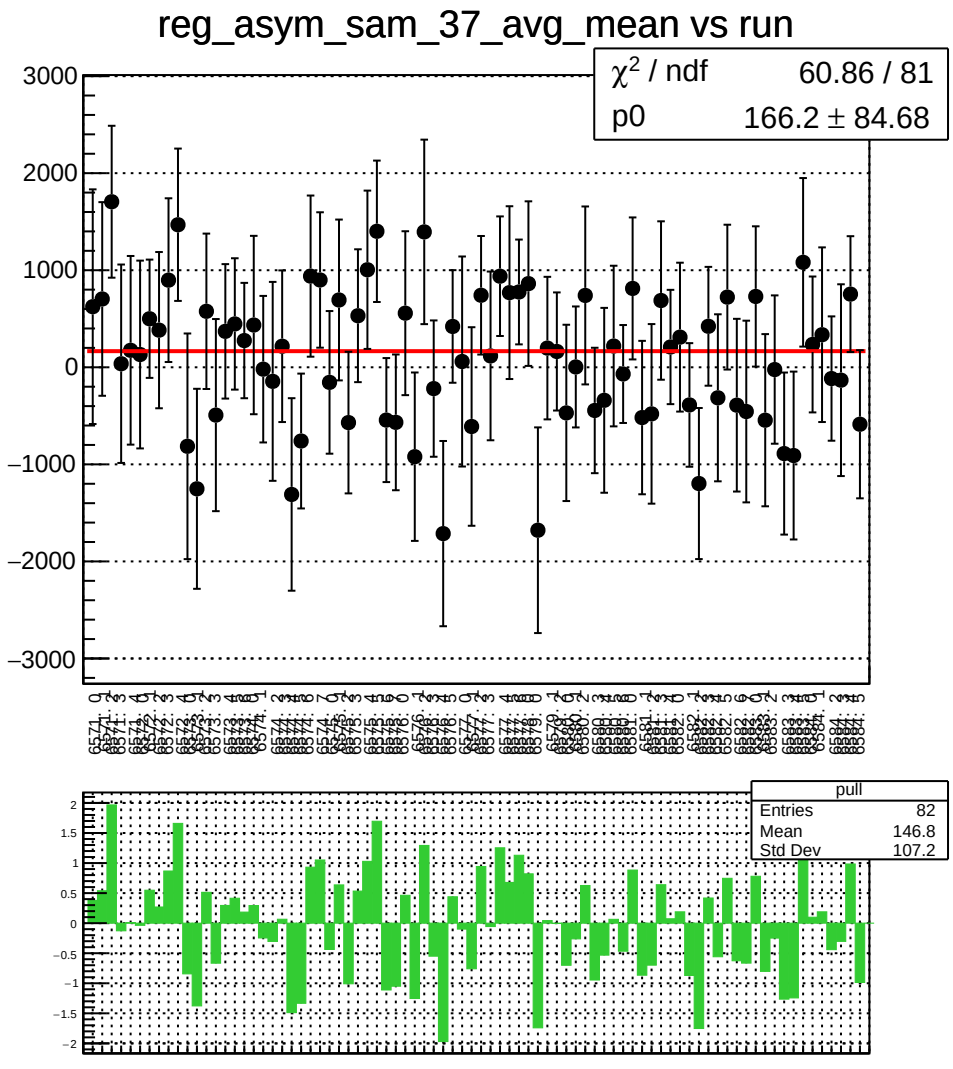

pull1D
Entries 82
Mean −0.004851
Std Dev 1.028
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

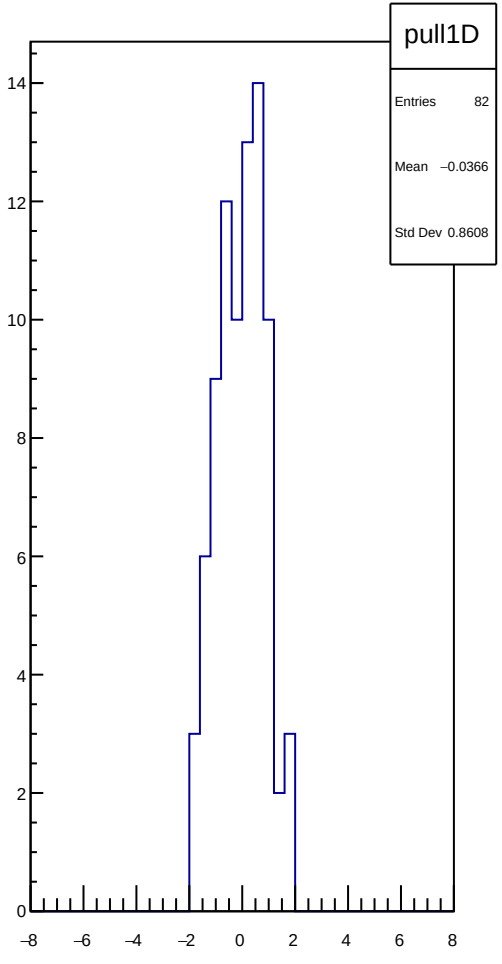

asym_sam_26_avg_correction_rms vs run
χ² / ndf 2.16e+04 / 81
p0 584.1 ± 0.4659
750
700
650
600
550
500

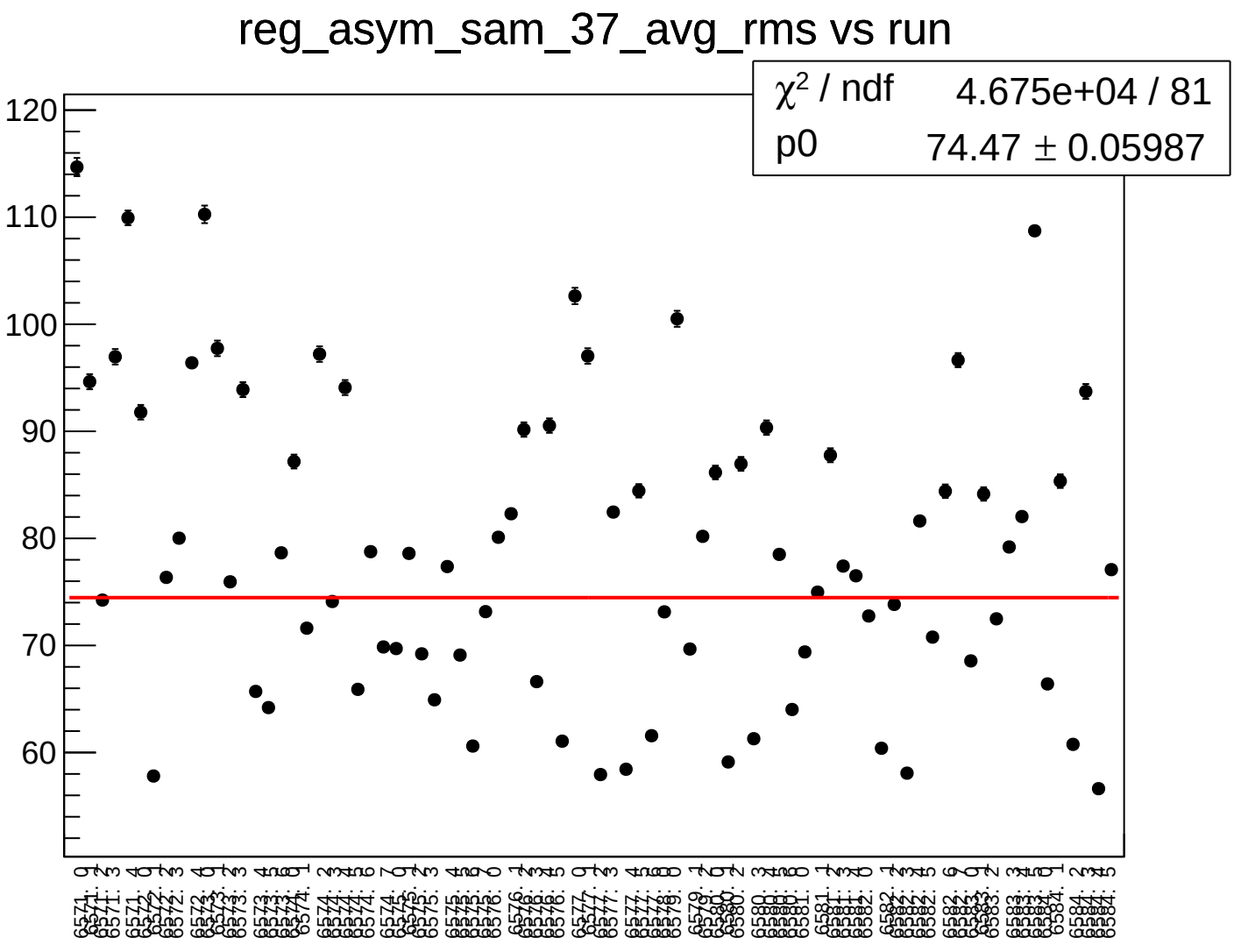

asym_sam_26_avg_mean vs run
χ² / ndf 87.01 / 81
p0 1618 ± 667.4
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 9.772e+04
Std Dev 9.768e+04
2
1
0
−1
−2
−3

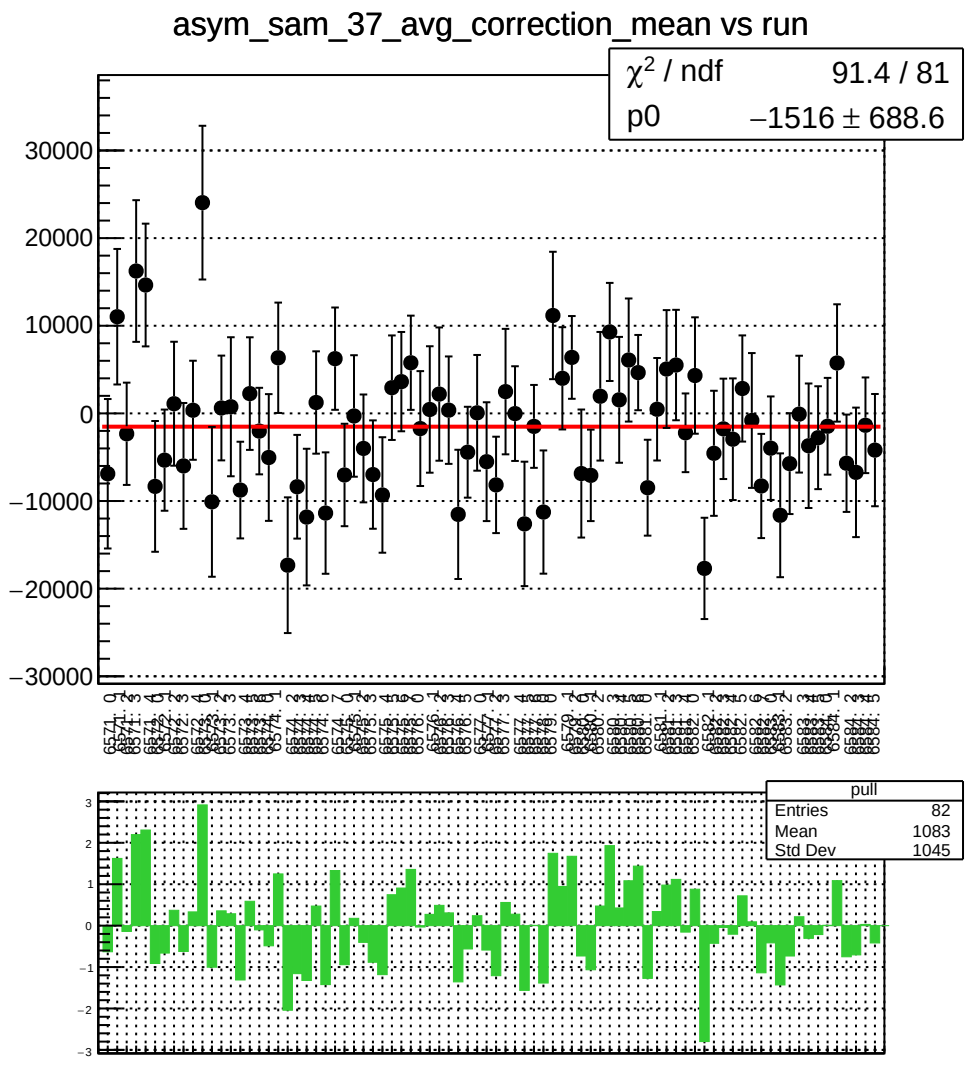

pull1D
Entries 82
Mean 3.138e−05
Std Dev 1.03
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

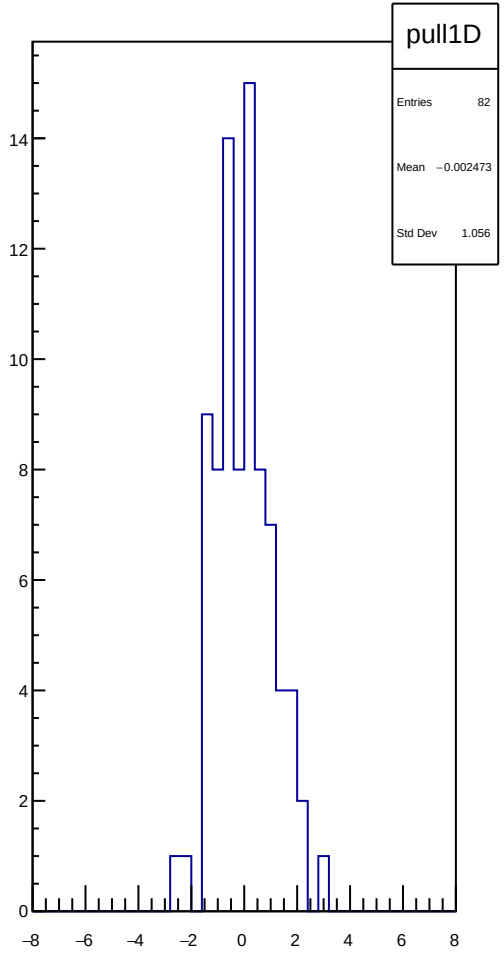

asym_sam_26_avg_rms vs run
χ² / ndf 2.146e+04 / 81
p0 591.7 ± 0.4719
750
700
650
600
550
500

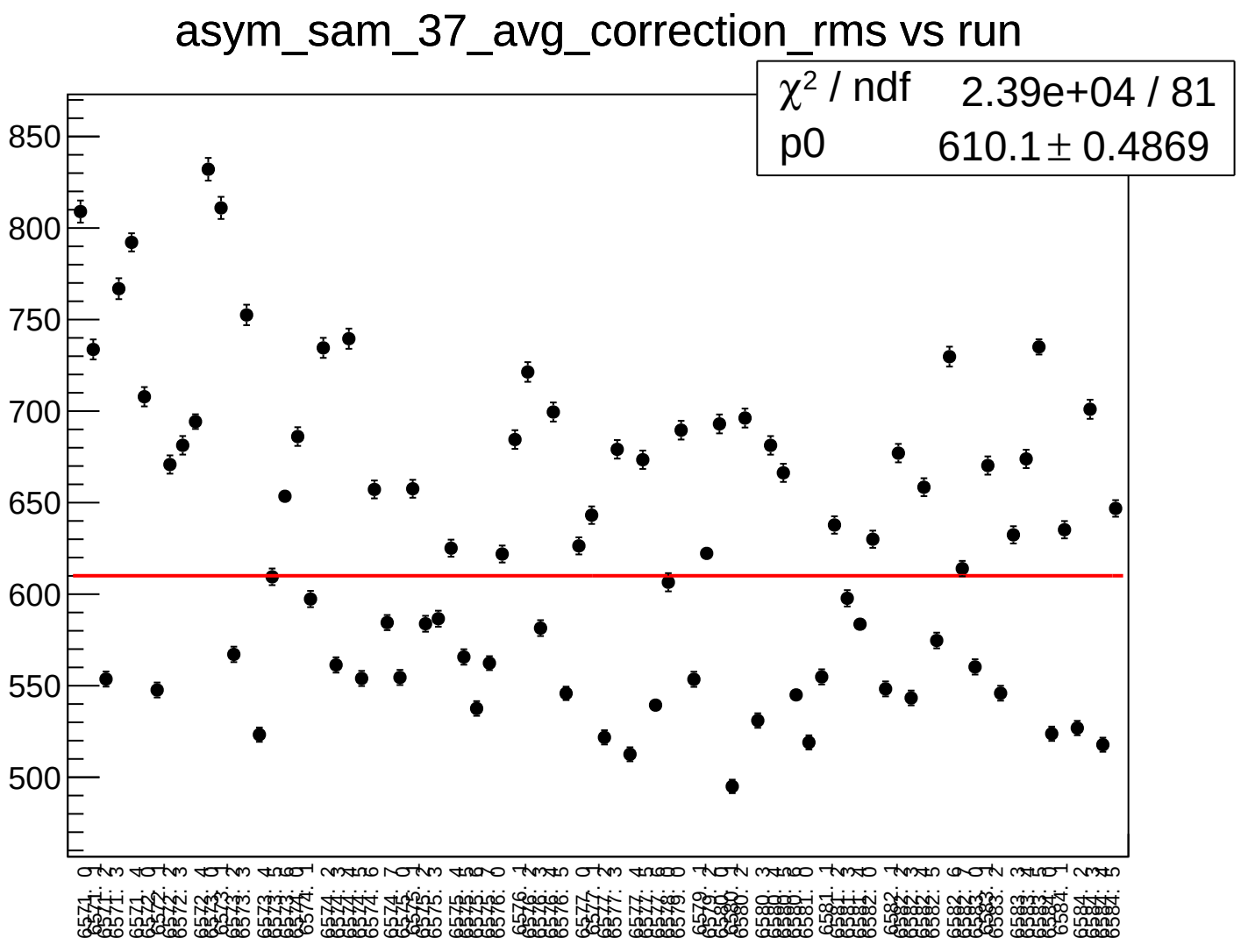

reg_asym_sam_37_avg_mean vs run
χ² / ndf 60.86 / 81
p0 166.2 ± 84.68
pull
Entries 82
Mean 146.8
Std Dev 107.2

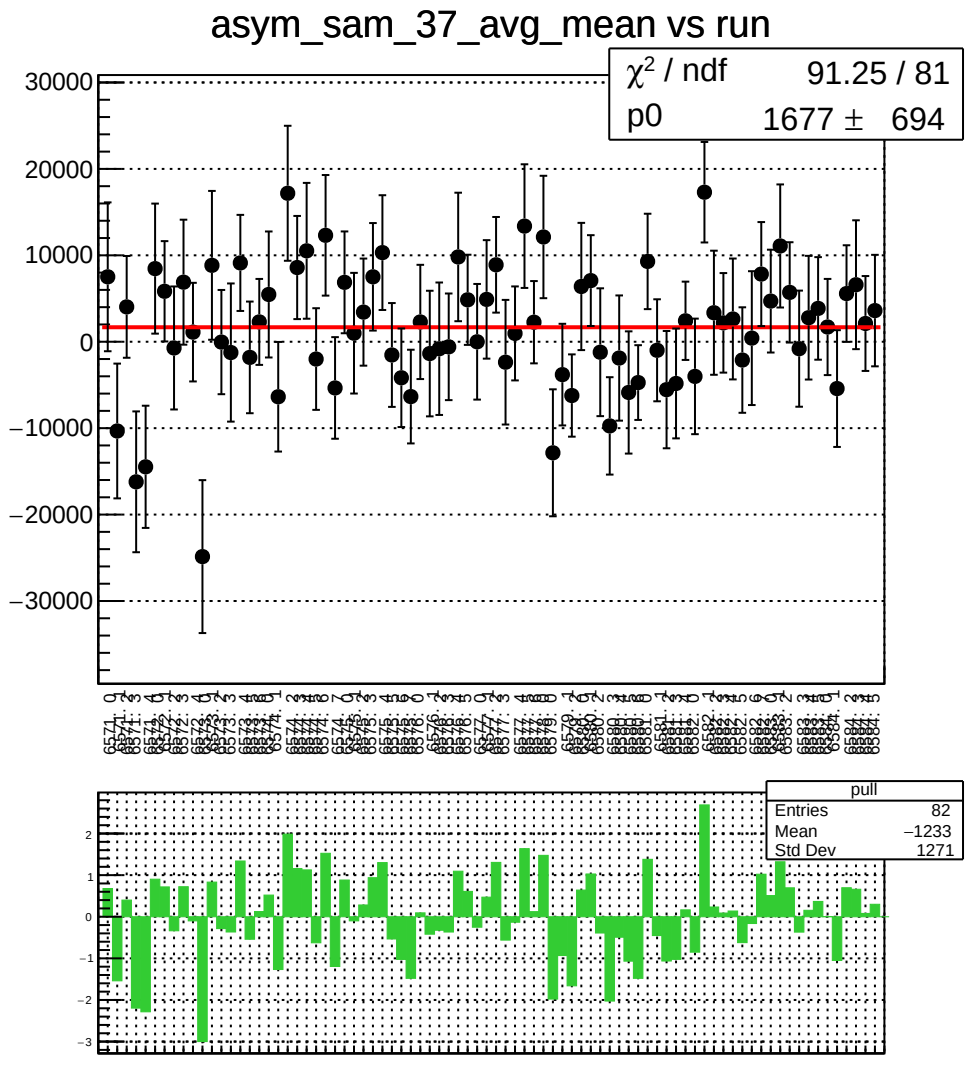

pull1D
Entries 82
Mean −0.0366
Std Dev 0.8608

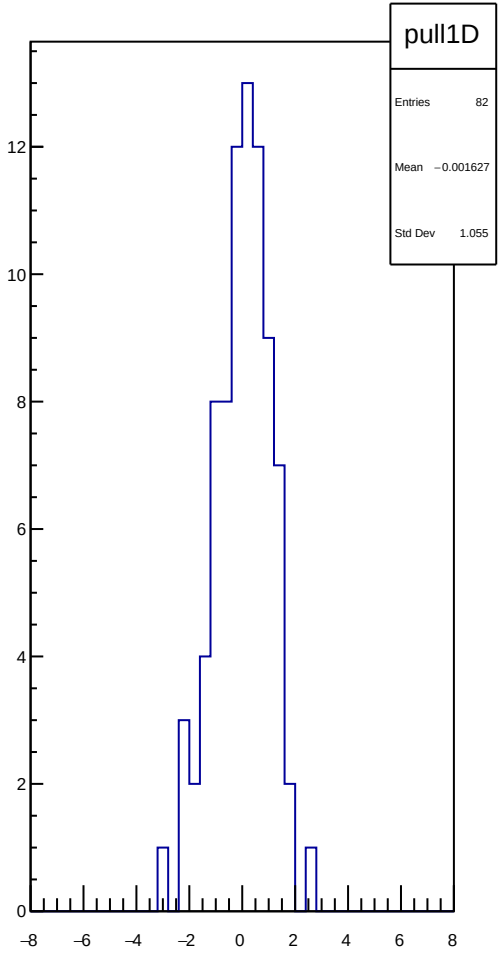

reg_asym_sam_37_avg_rms vs run
χ² / ndf 4.675e+04 / 81
p0 74.47 ± 0.05987
120
110
100
90
80
70
60

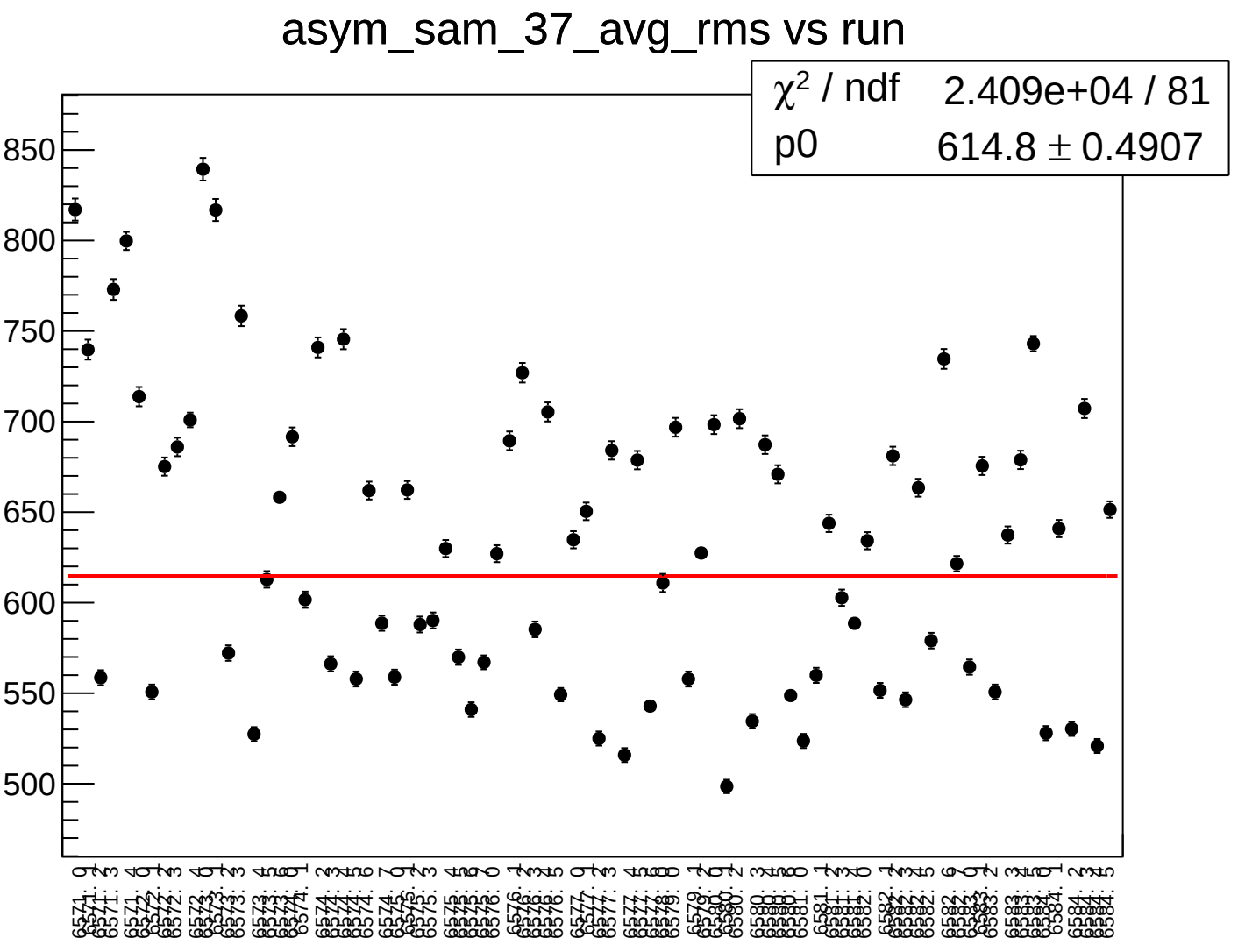

asym_sam_37_avg_correction_mean vs run
χ² / ndf 91.4 / 81
p0 −1516 ± 688.6
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 1083
Std Dev 1045
3
2
1
0
−1
−2
−3

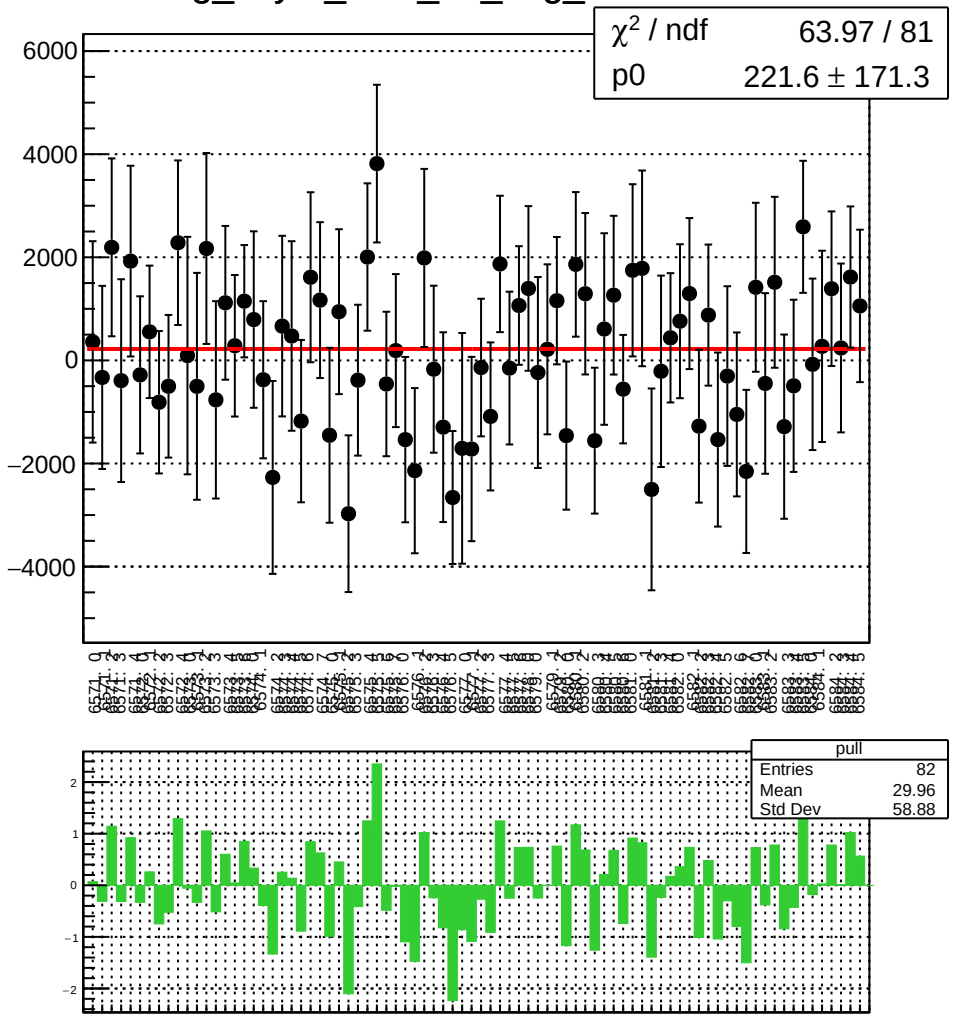

pull1D
Entries 82
Mean −0.002473
Std Dev 1.056
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

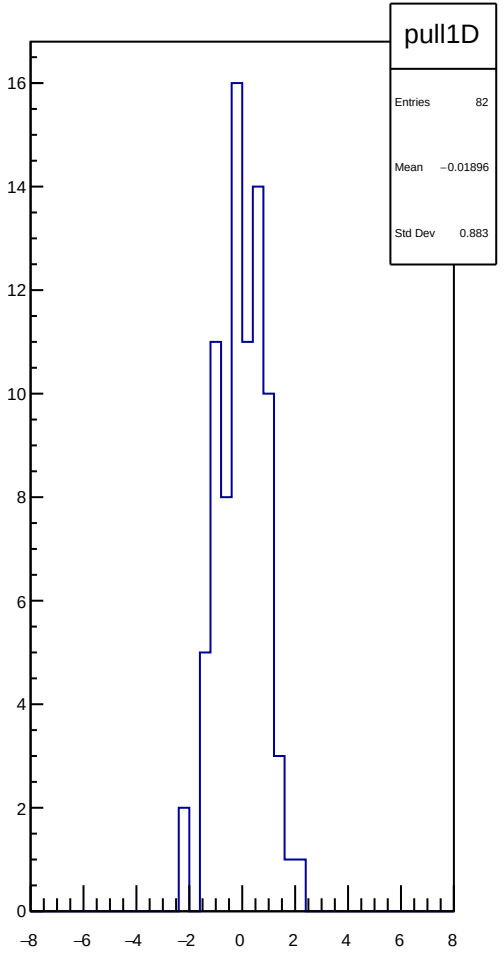

asym_sam_37_avg_correction_rms vs run
χ² / ndf 2.39e+04 / 81
p0 610.1 ± 0.4869
850
800
750
700
650
600
550
500

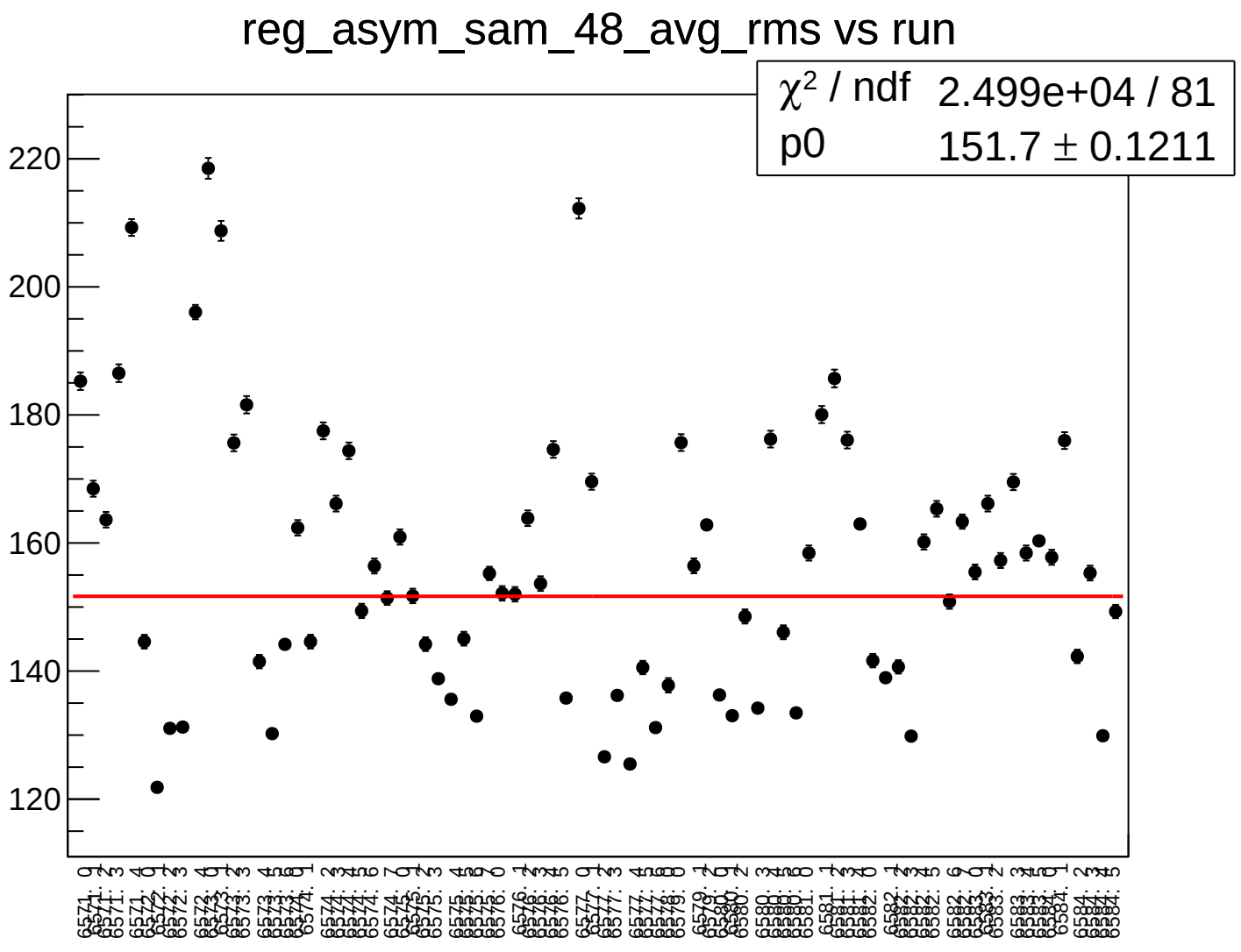

asym_sam_37_avg_mean vs run
χ² / ndf 91.25 / 81
p0 1677 ± 694
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean −1233
Std Dev 1271
2
1
0
−1
−2
−3

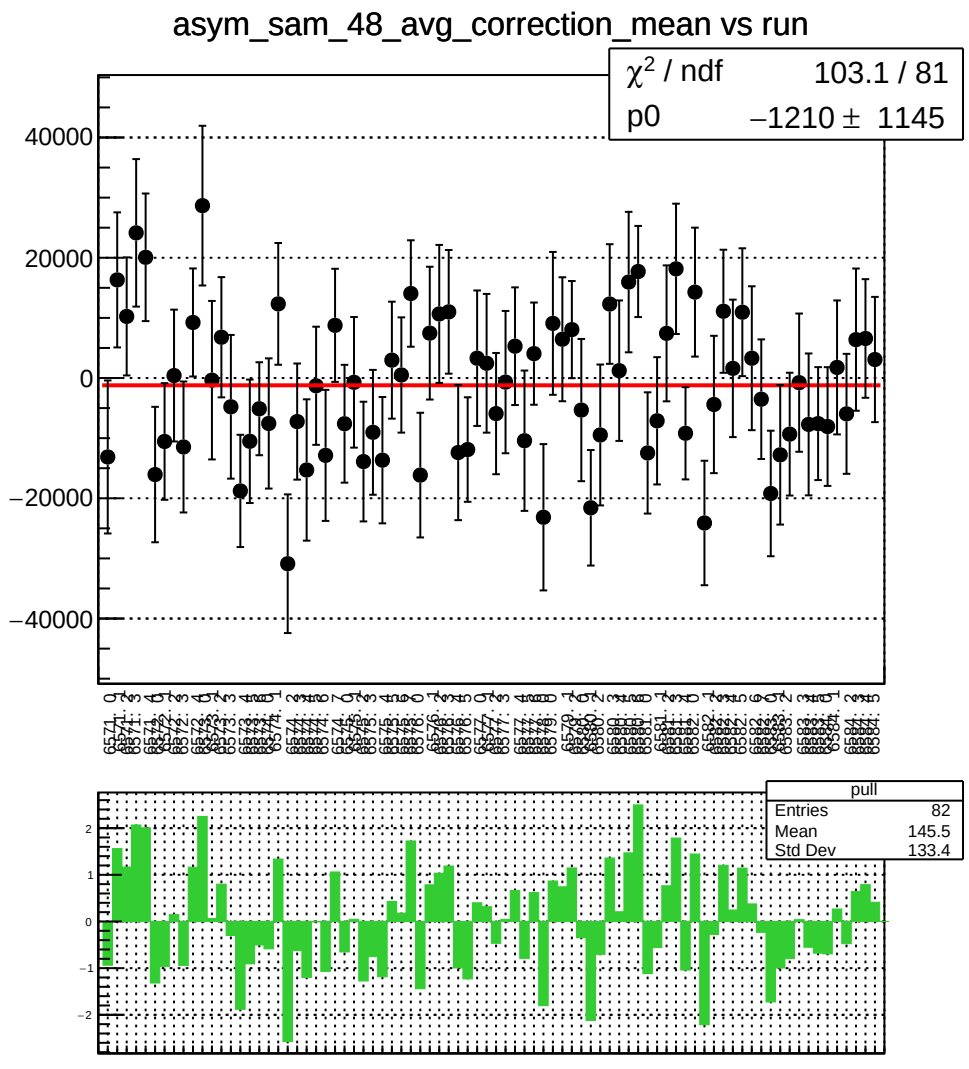

pull1D
Entries 82
Mean −0.001627
Std Dev 1.055
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

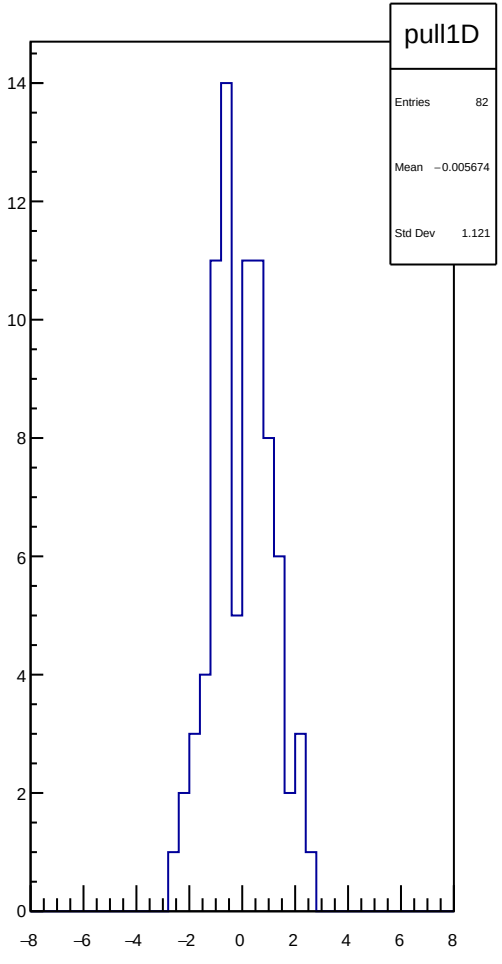

asym_sam_37_avg_rms vs run
χ² / ndf 2.409e+04 / 81
p0 614.8 ± 0.4907
850
800
750
700
650
600
550
500

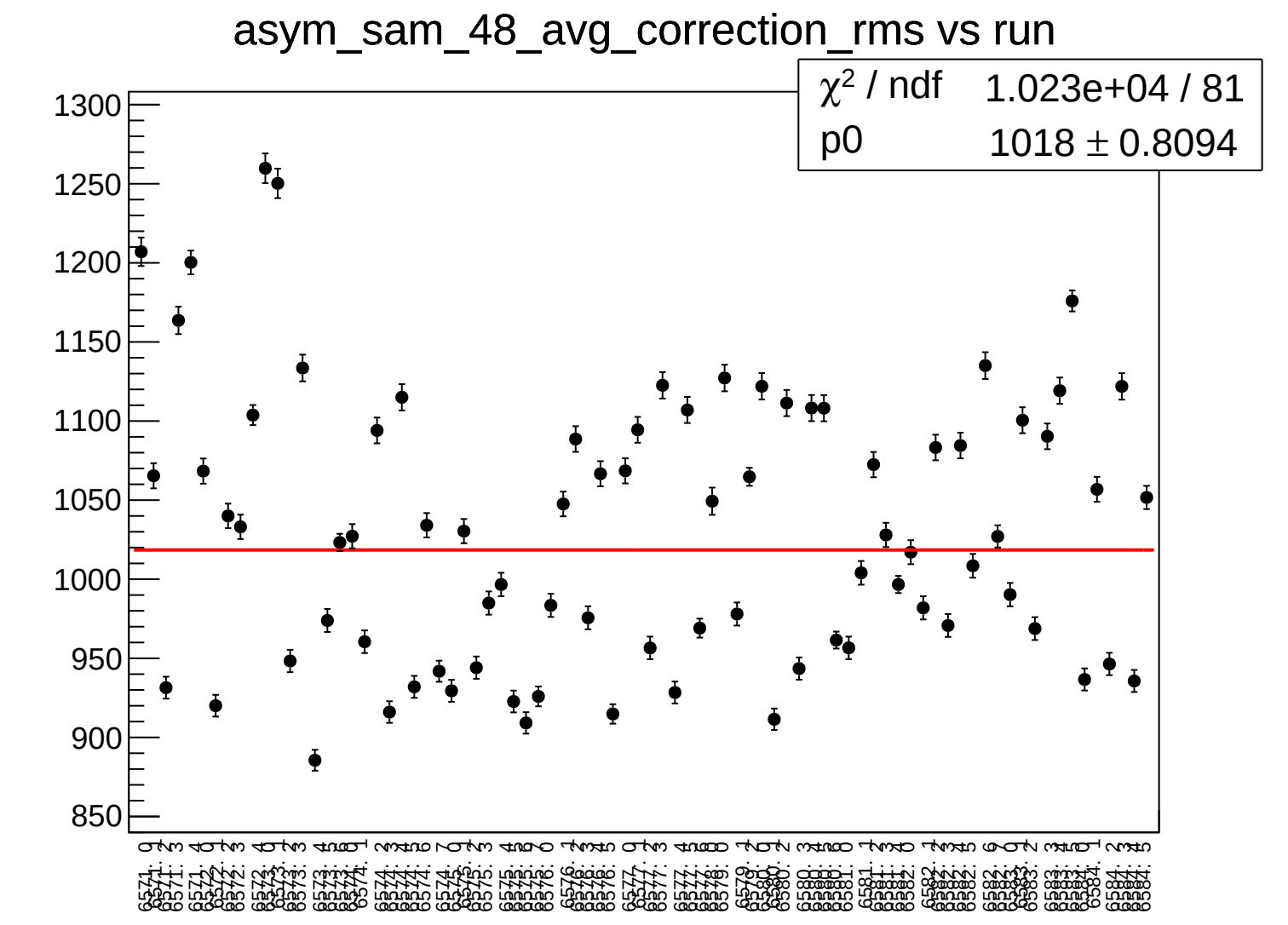

reg_asym_sam_48_avg_mean vs run
χ² / ndf 63.97 / 81
p0 221.6 ± 171.3
pull
Entries 82
Mean 29.96
Std Dev 58.88

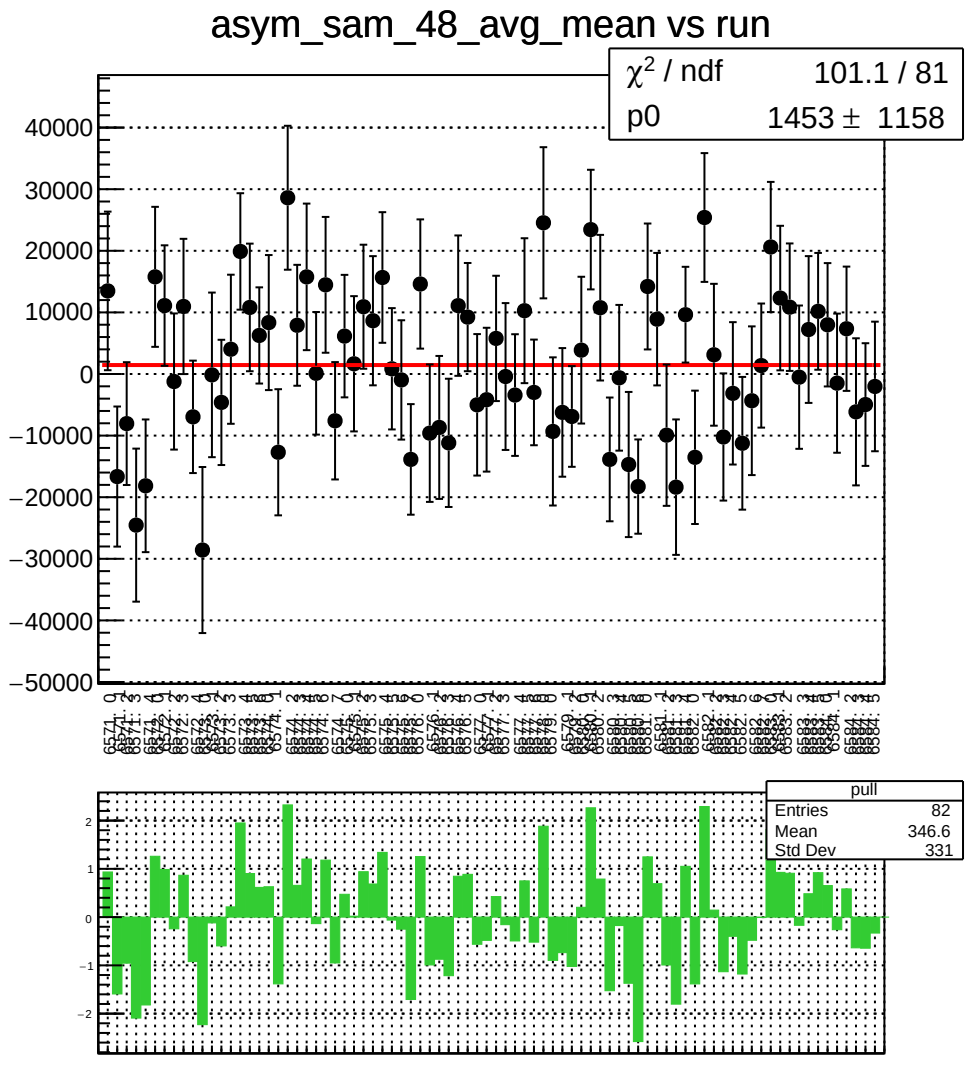

pull1D
Entries 82
Mean −0.01896
Std Dev 0.883

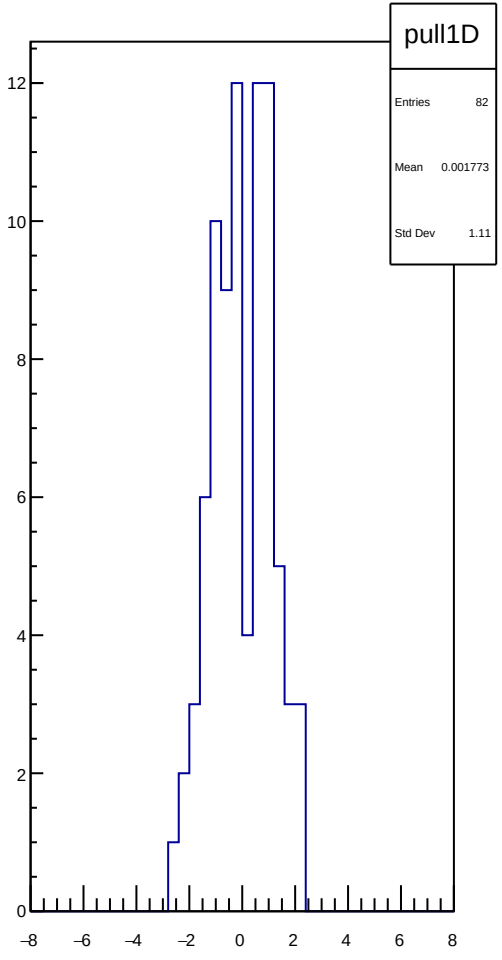

reg_asym_sam_48_avg_rms vs run
χ² / ndf 2.499e+04 / 81
p0 151.7 ± 0.1211
220
200
180
160
140
120

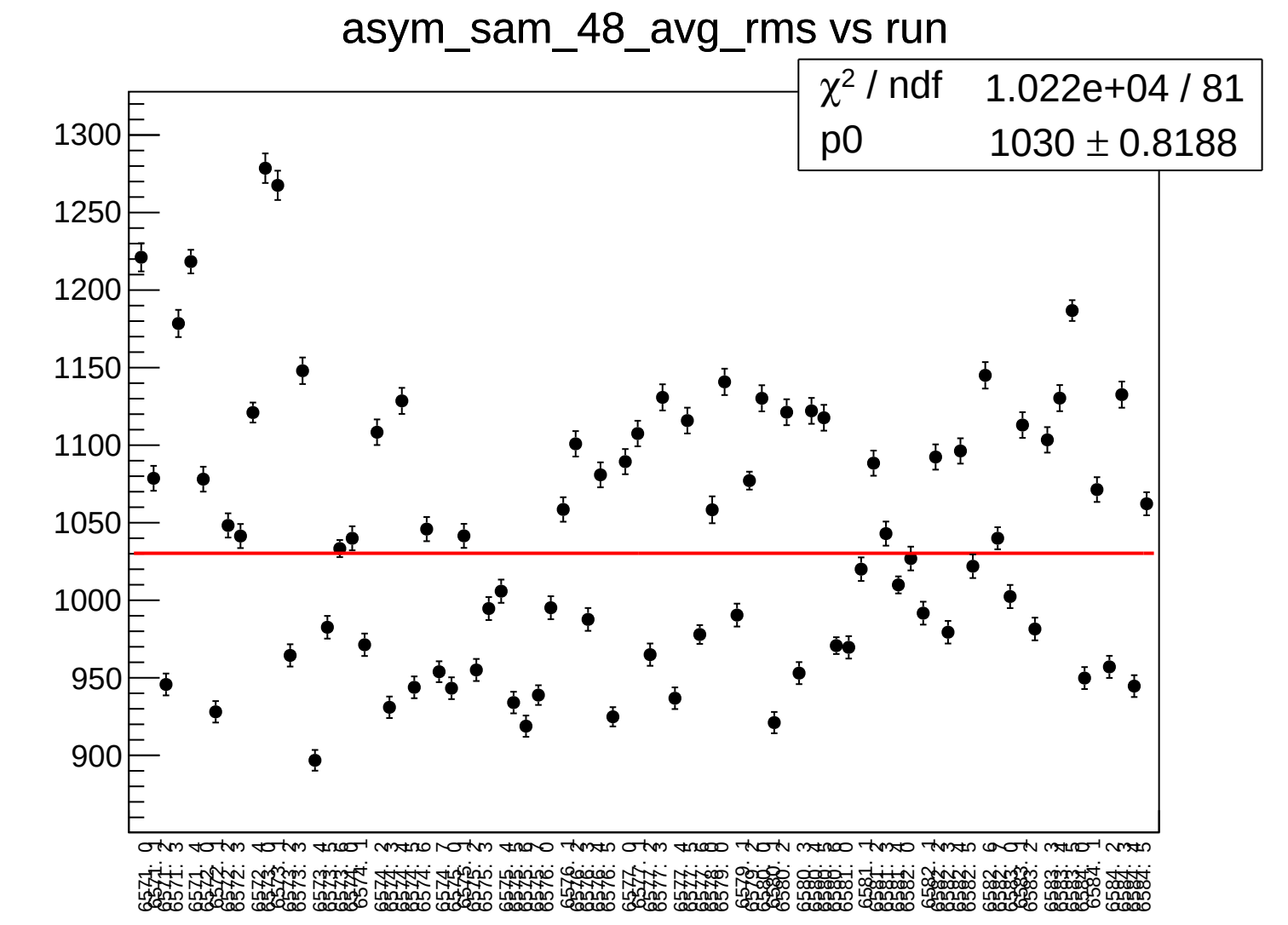

asym_sam_48_avg_correction_mean vs run
χ² / ndf 103.1 / 81
p0 −1210 ± 1145
40000
20000
0
−20000
−40000
pull
Entries 82
Mean 145.5
Std Dev 133.4
2
1
0
−1
−2

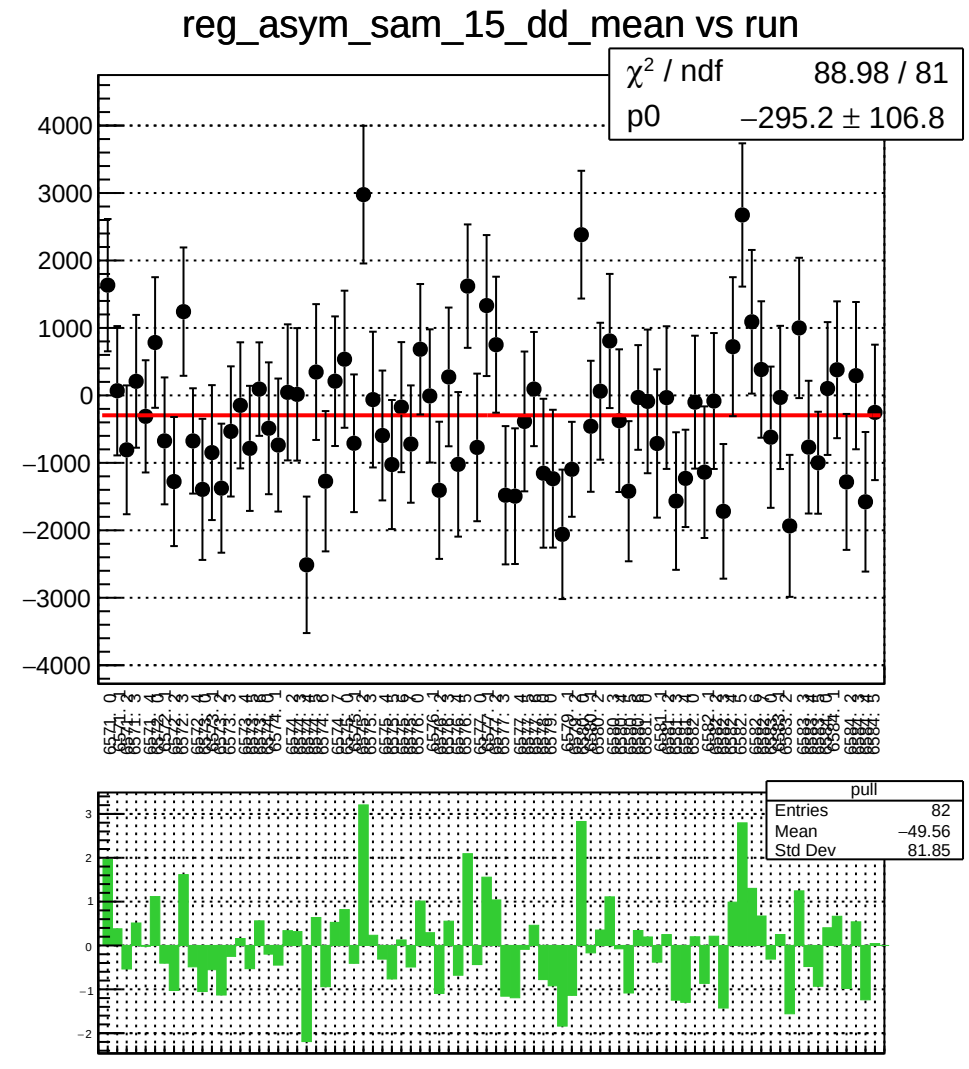

pull1D
Entries 82
Mean −0.005674
Std Dev 1.121
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

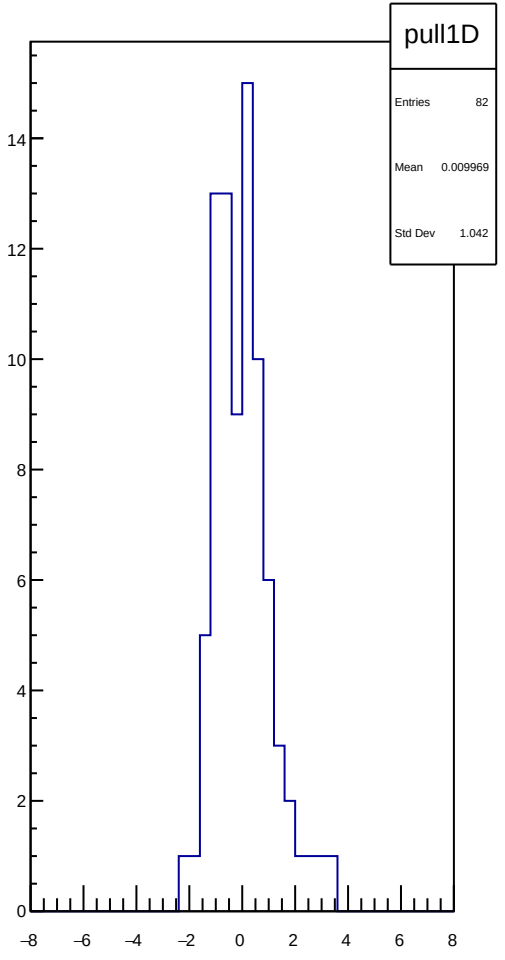

asym_sam_48_avg_correction_rms vs run
χ² / ndf 1.023e+04 / 81
p0 1018 ± 0.8094
1300
1250
1200
1150
1100
1050
1000
950
900
850

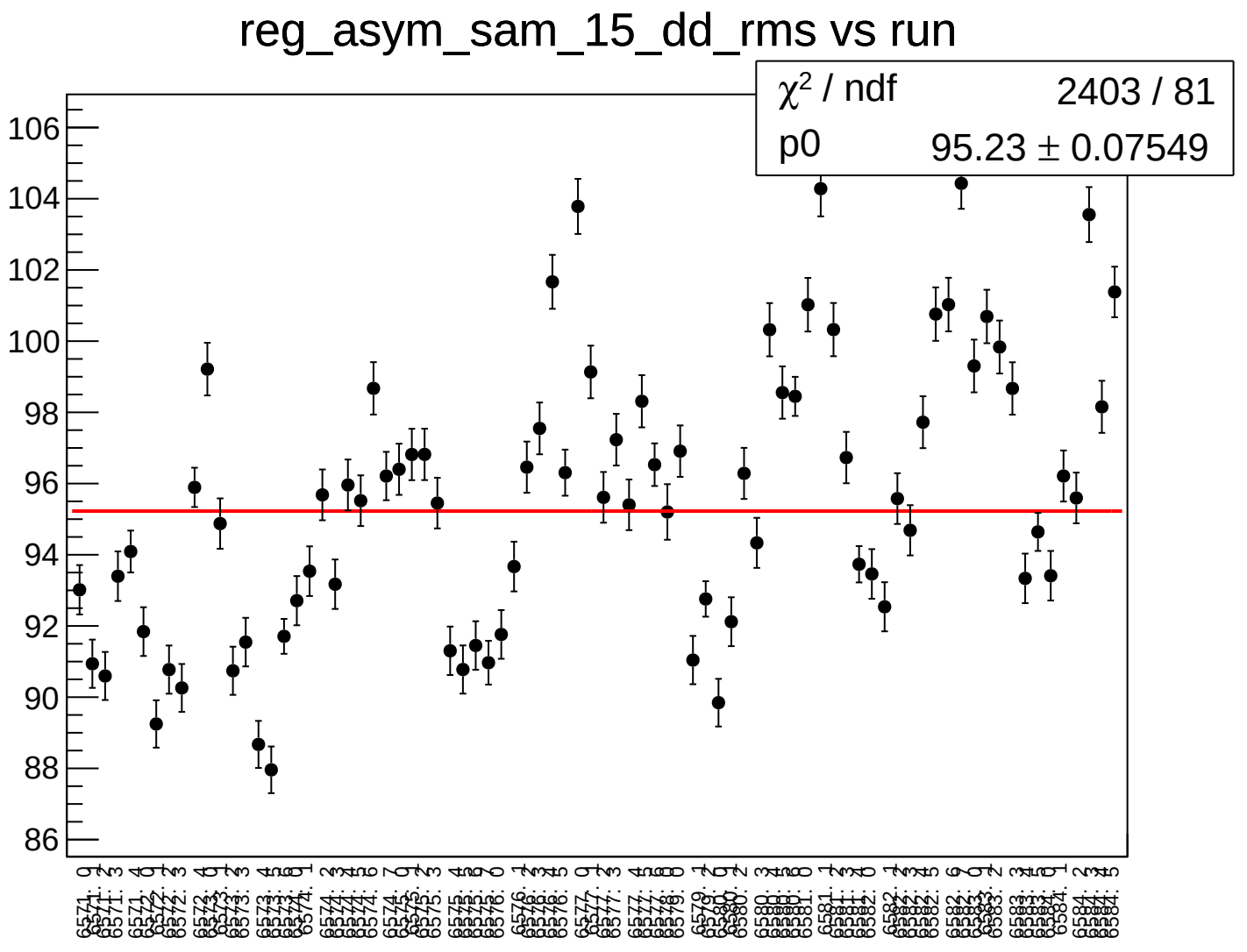

asym_sam_48_avg_mean vs run
χ² / ndf 101.1 / 81
p0 1453 ± 1158
pull
Entries 82
Mean 346.6
Std Dev 331

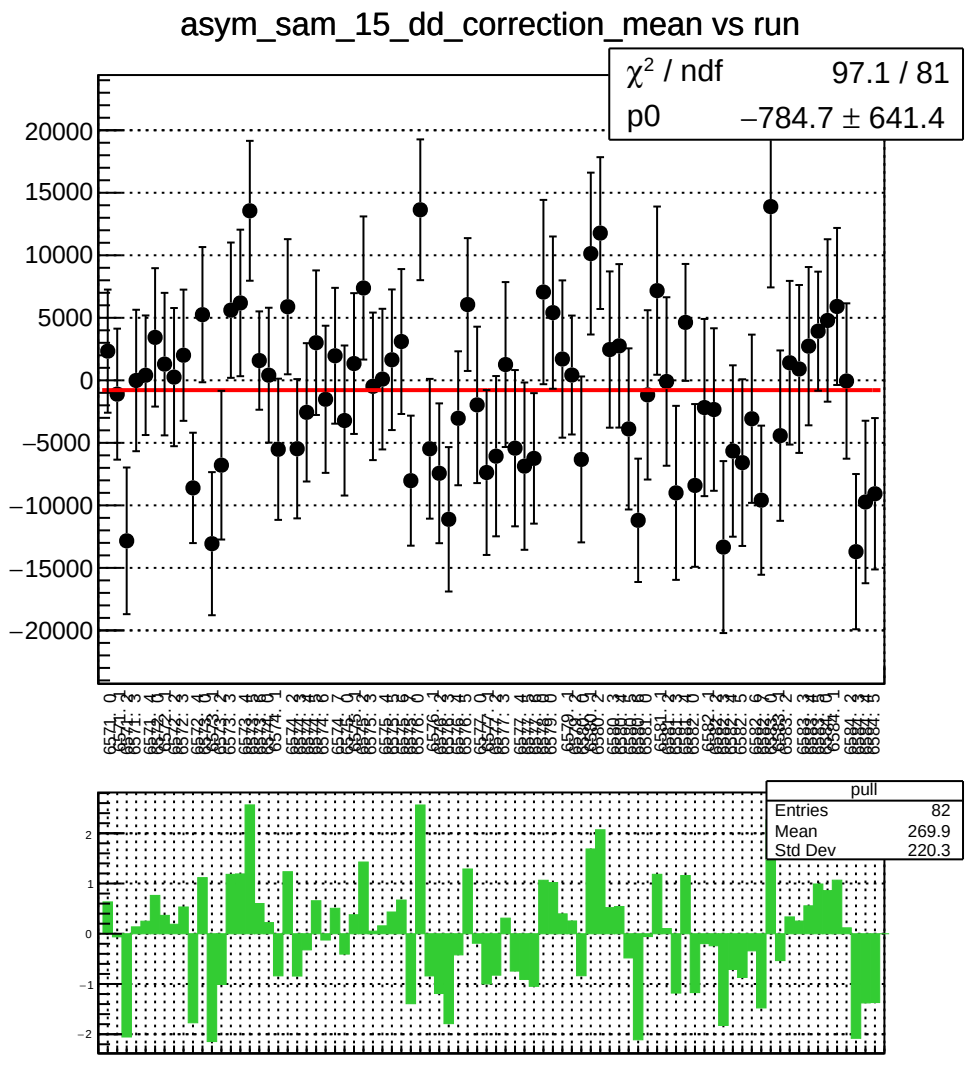

pull1D
Entries 82
Mean 0.001773
Std Dev 1.11

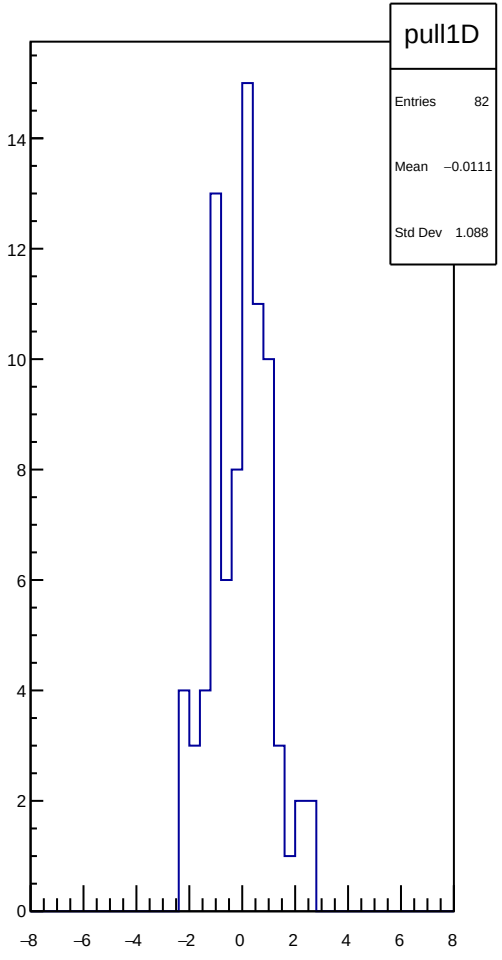

asym_sam_48_avg_rms vs run
χ² / ndf 1.022e+04 / 81
p0 1030 ± 0.8188
1300
1250
1200
1150
1100
1050
1000
950
900

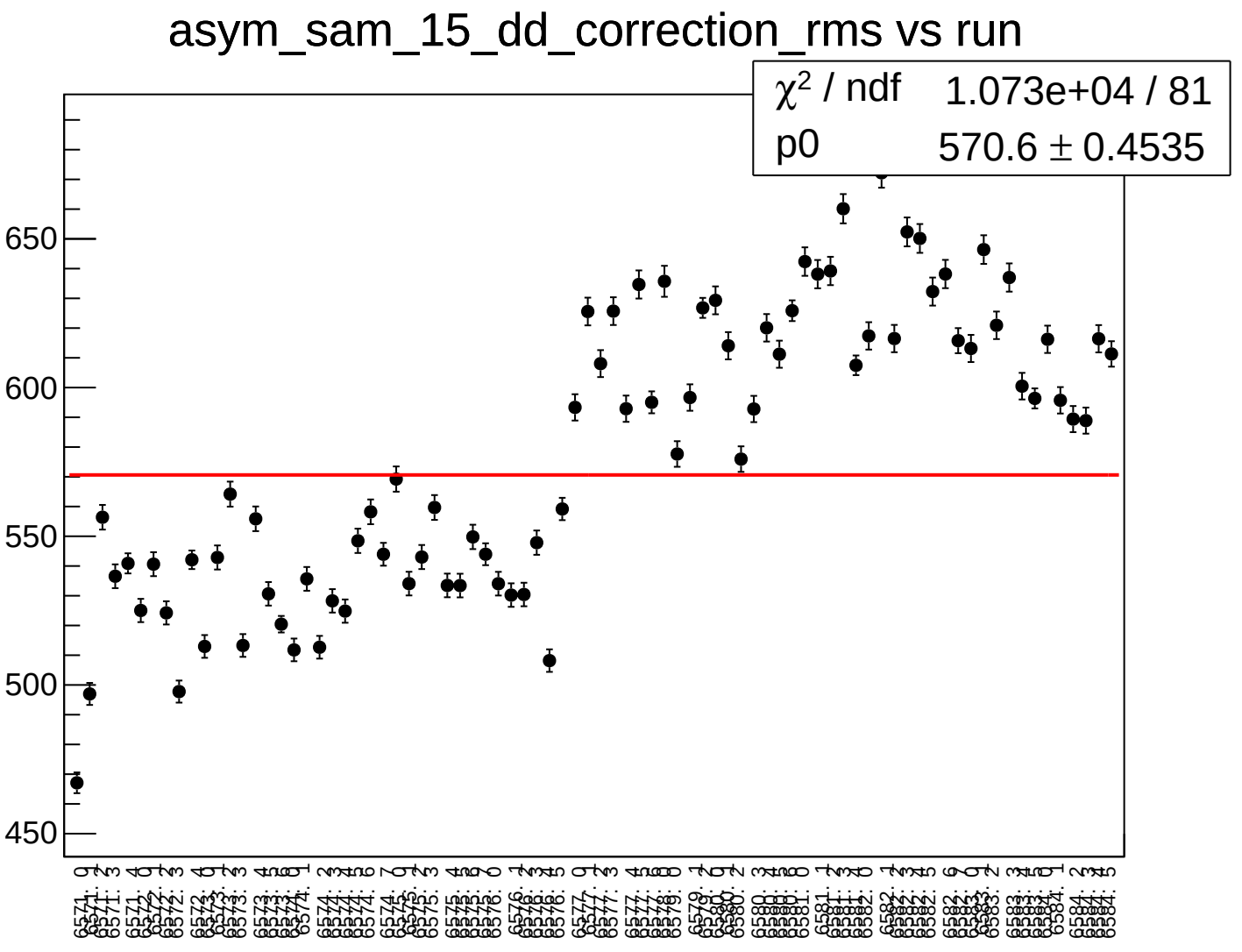

reg_asym_sam_15_dd_mean vs run
χ² / ndf 88.98 / 81
p0 −295.2 ± 106.8
pull
Entries 82
Mean −49.56
Std Dev 81.85

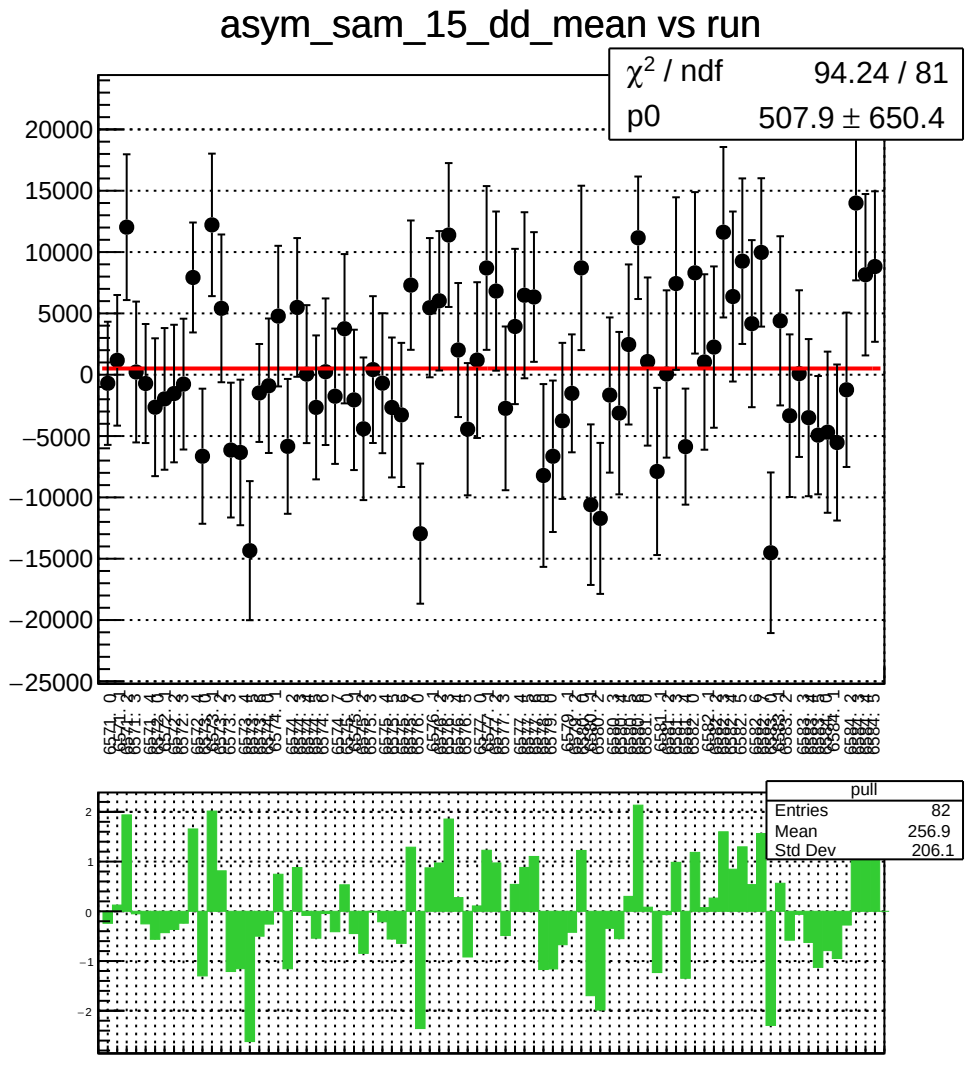

pull1D
Entries 82
Mean 0.009969
Std Dev 1.042

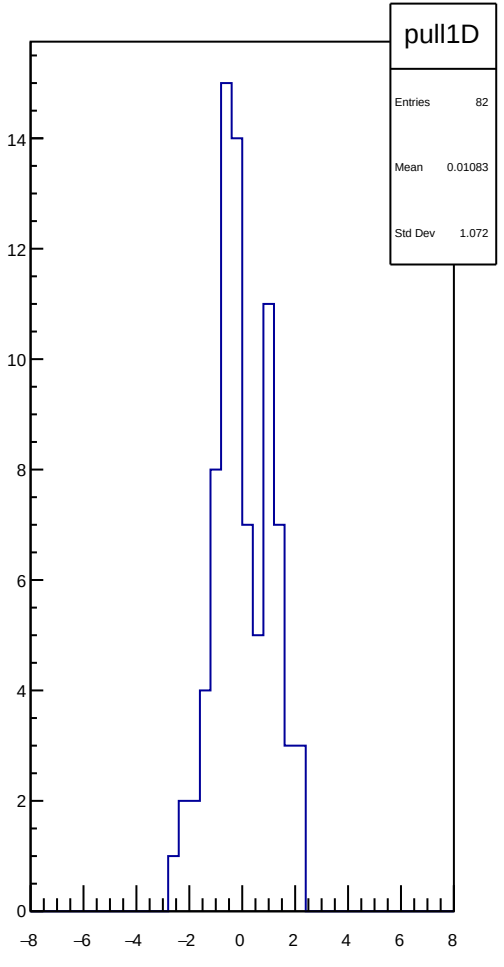

reg_asym_sam_15_dd_rms vs run
χ² / ndf 2403 / 81
p0 95.23 ± 0.07549
106
104
102
100
98
96
94
92
90
88
86

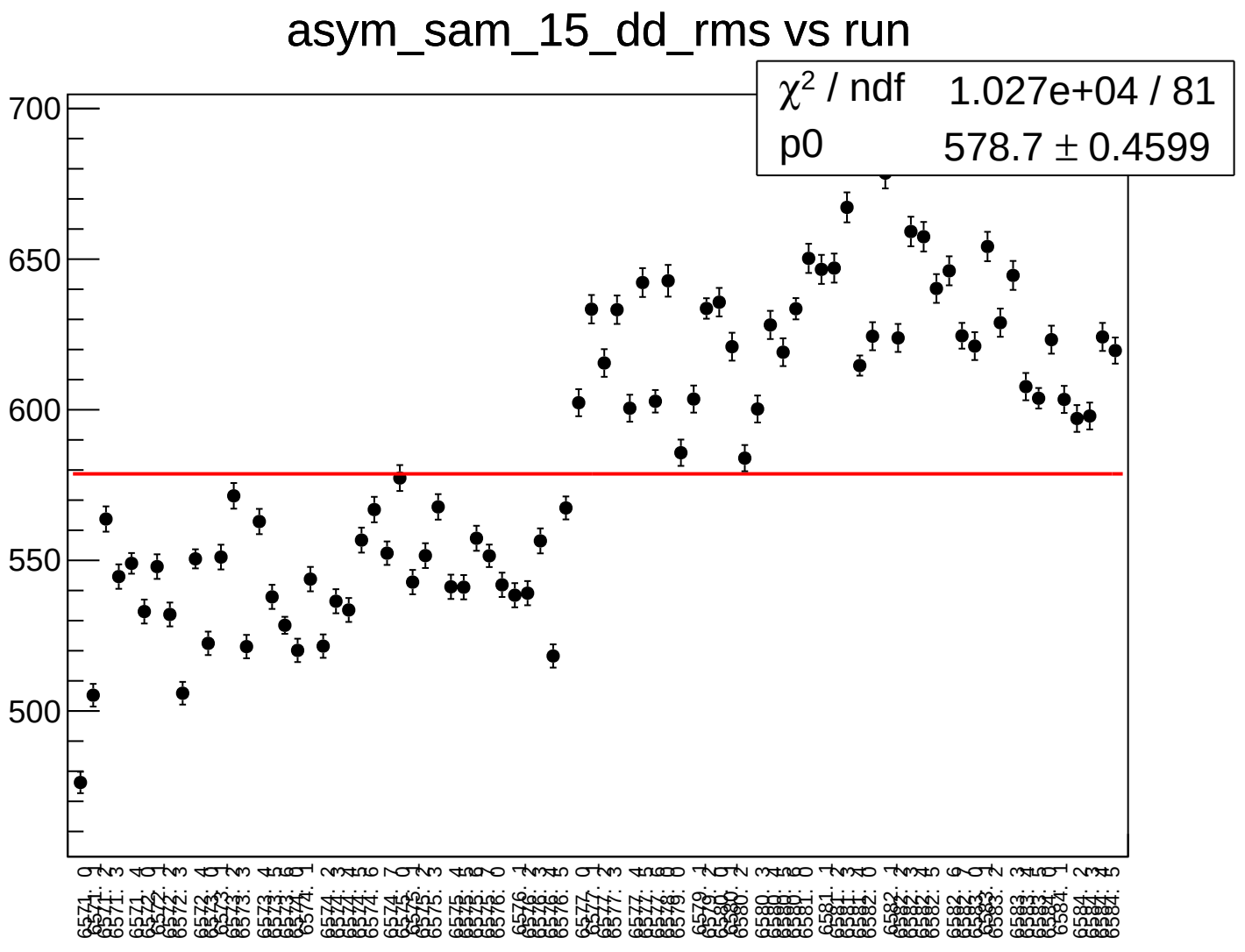

asym_sam_15_dd_correction_mean vs run
χ² / ndf 97.1 / 81
p0 −784.7 ± 641.4
pull
Entries 82
Mean 269.9
Std Dev 220.3

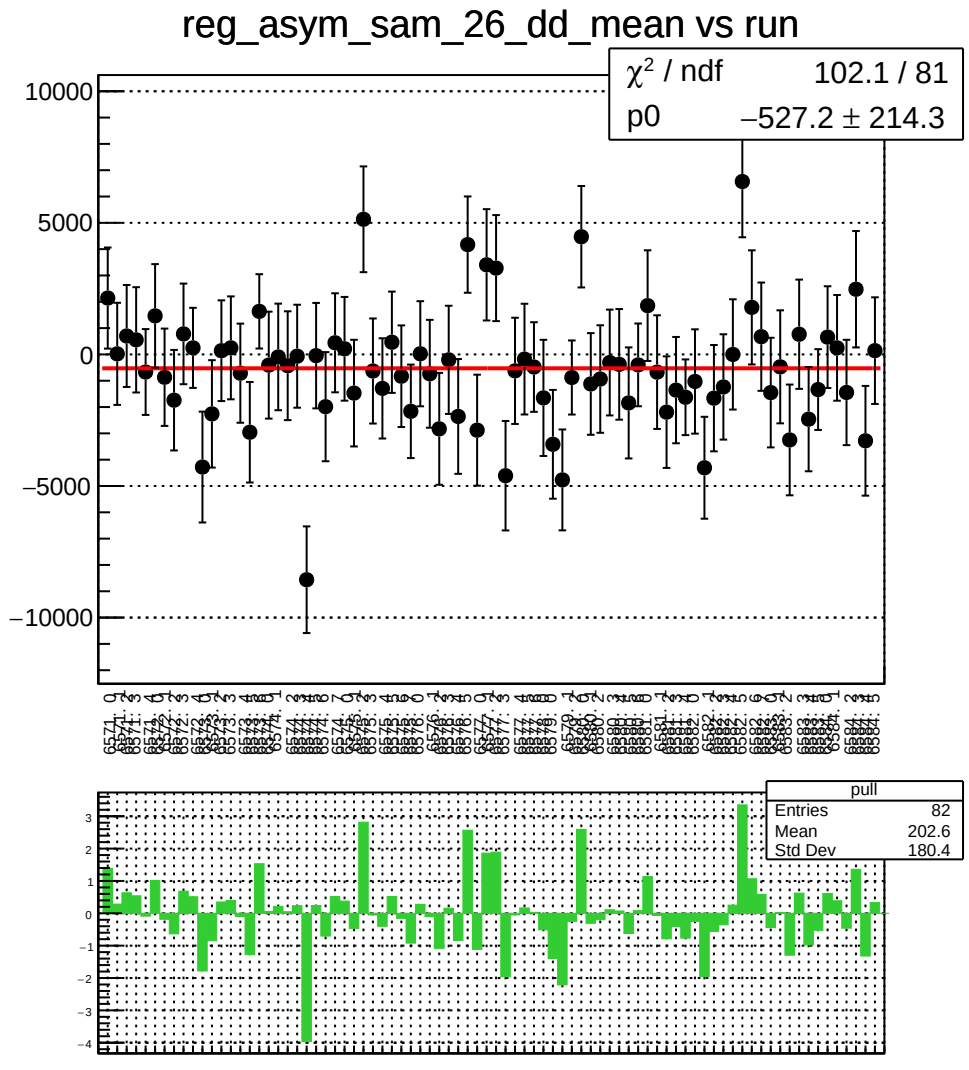

pull1D
Entries 82
Mean −0.0111
Std Dev 1.088

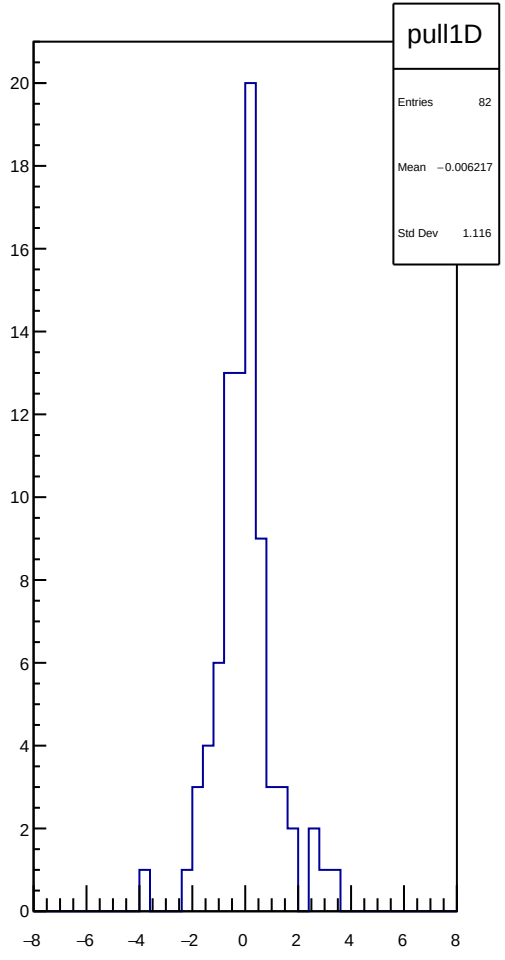

asym_sam_15_dd_correction_rms vs run
χ² / ndf 1.073e+04 / 81
p0 570.6 ± 0.4535
650
600
550
500
450

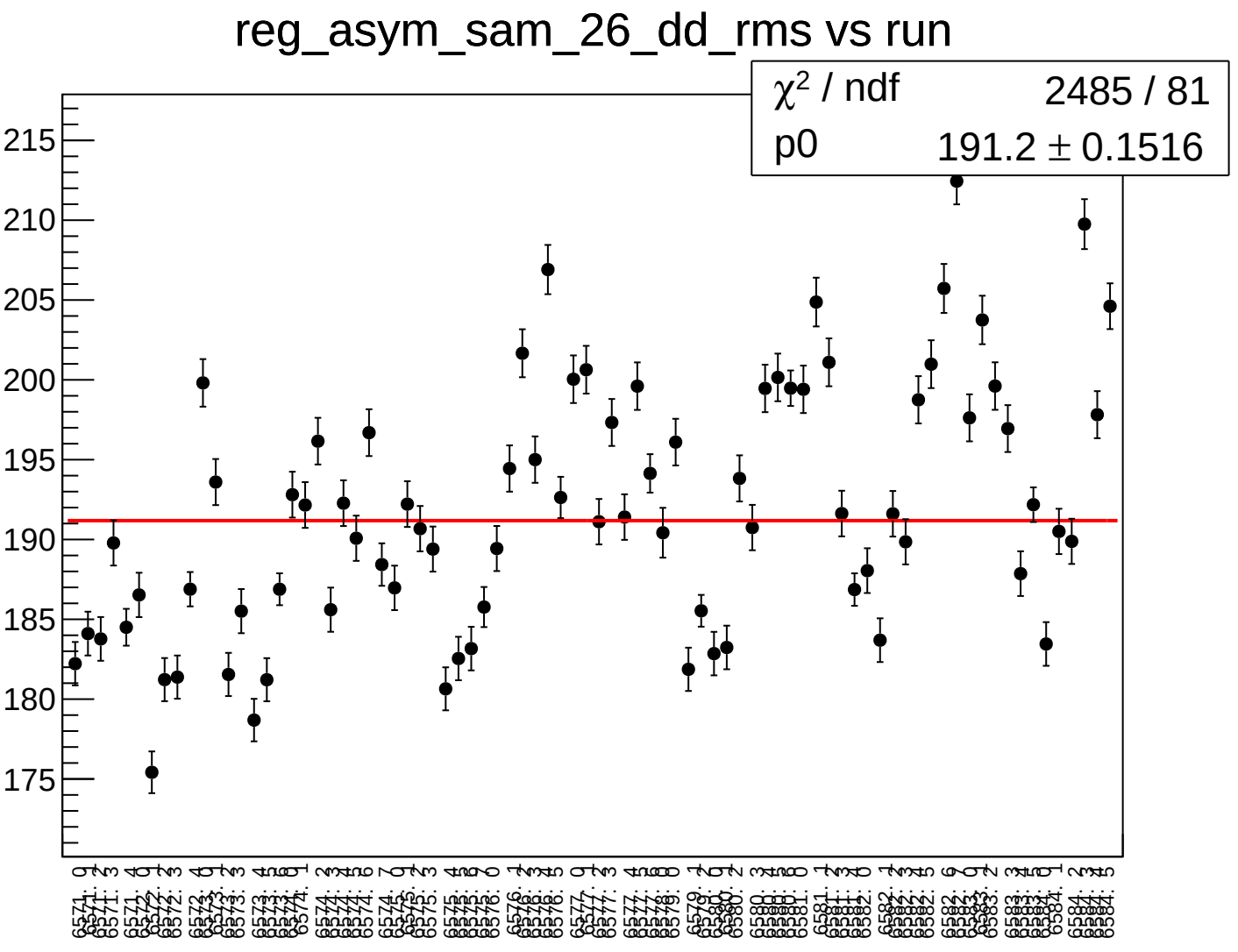

asym_sam_15_dd_mean vs run
χ² / ndf 94.24 / 81
p0 507.9 ± 650.4
pull
Entries 82
Mean 256.9
Std Dev 206.1

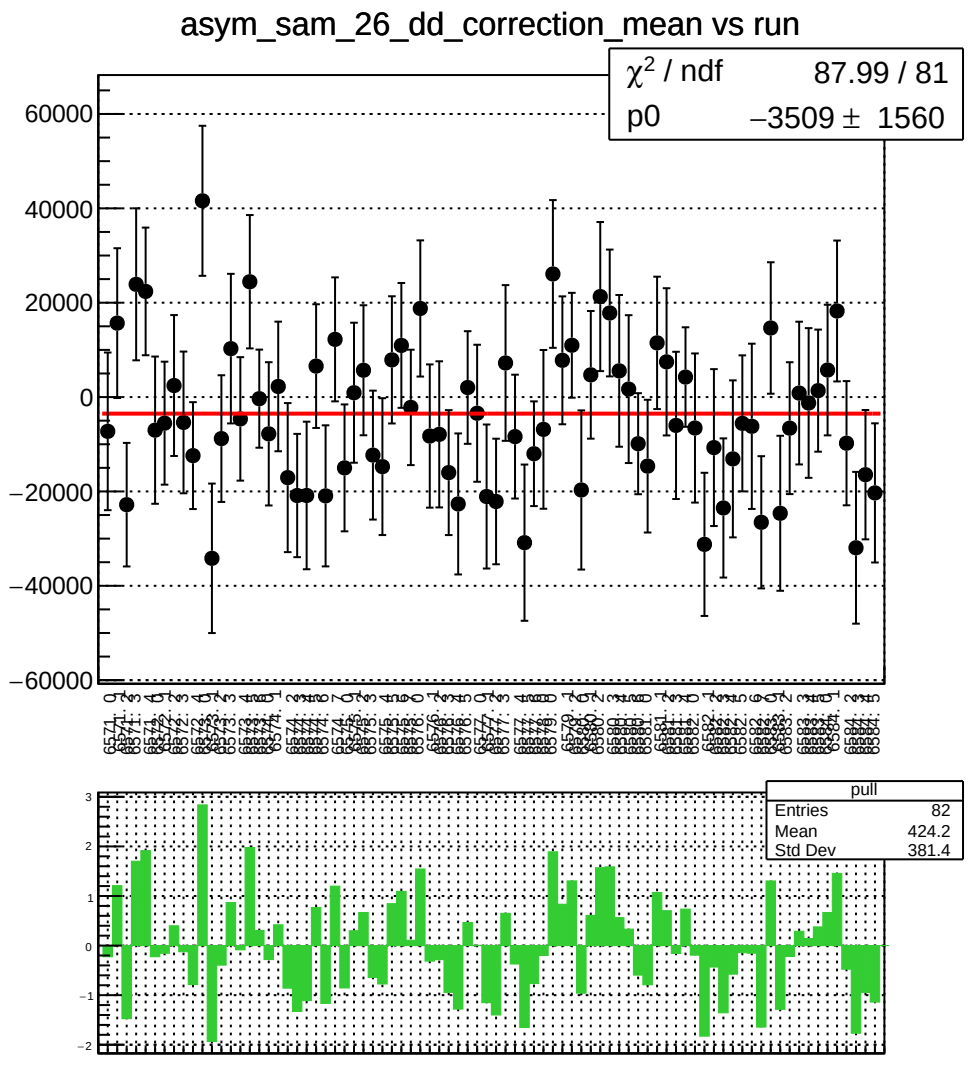

pull1D
Entries 82
Mean 0.01083
Std Dev 1.072

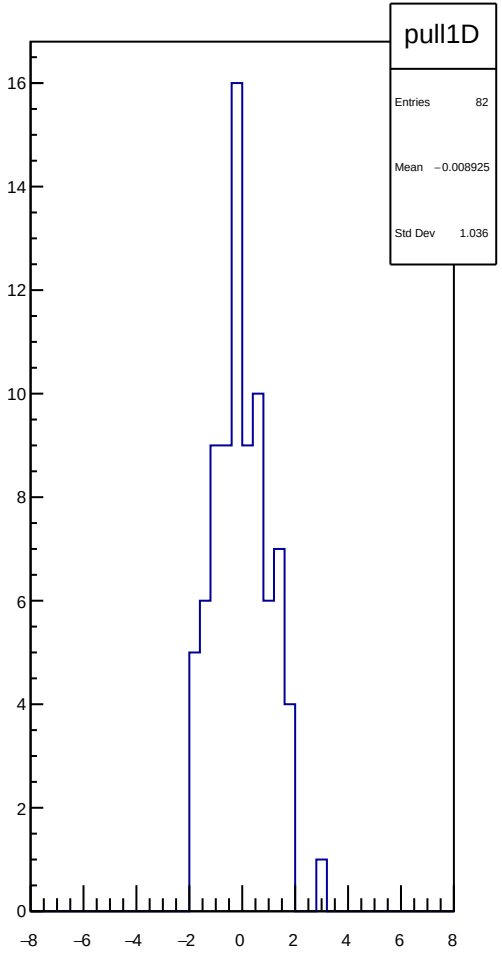

asym_sam_15_dd_rms vs run
χ² / ndf 1.027e+04 / 81
p0 578.7 ± 0.4599
700
650
600
550
500

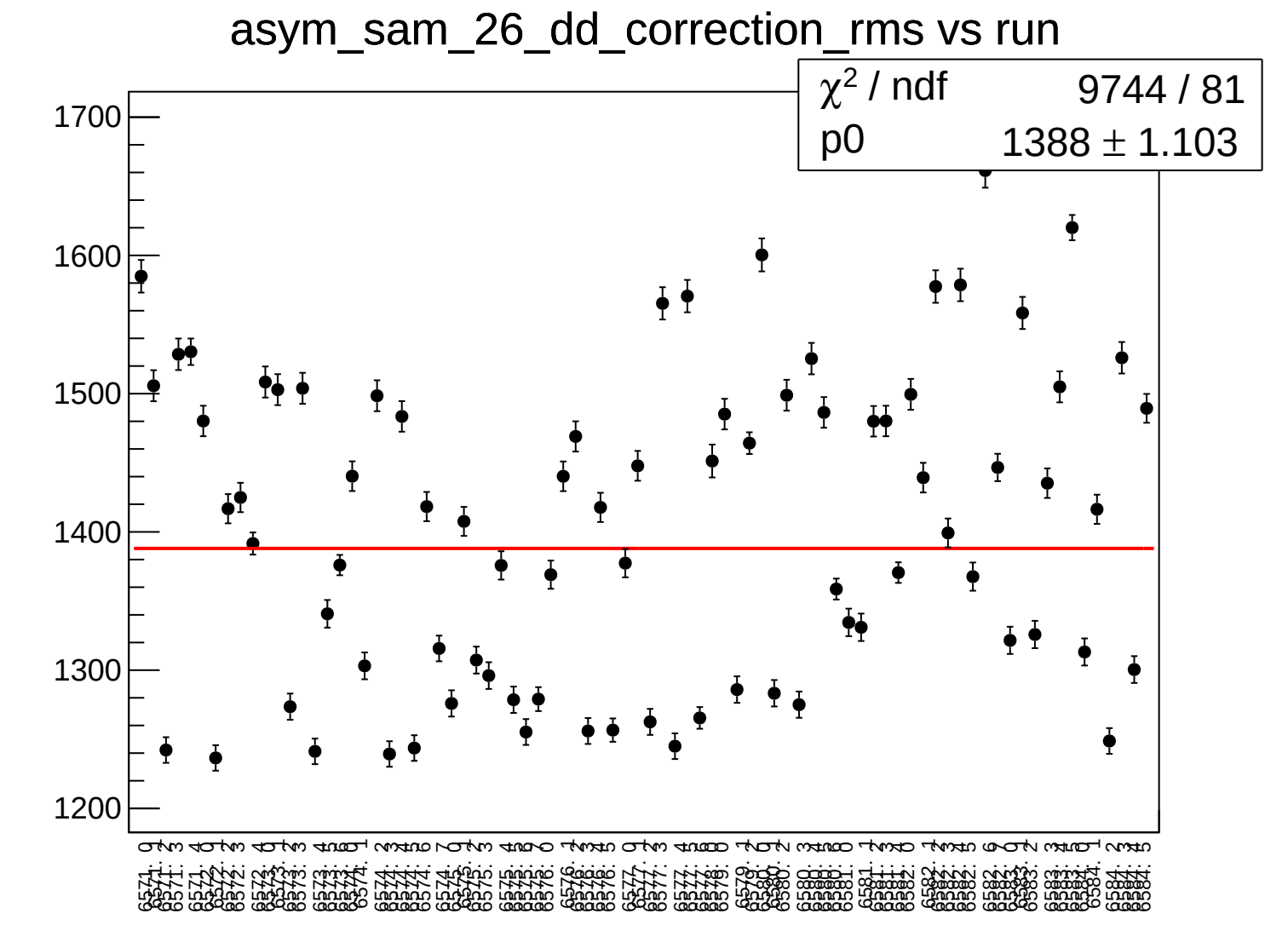

reg_asym_sam_26_dd_mean vs run
χ² / ndf 102.1 / 81
p0 −527.2 ± 214.3
pull
Entries 82
Mean 202.6
Std Dev 180.4

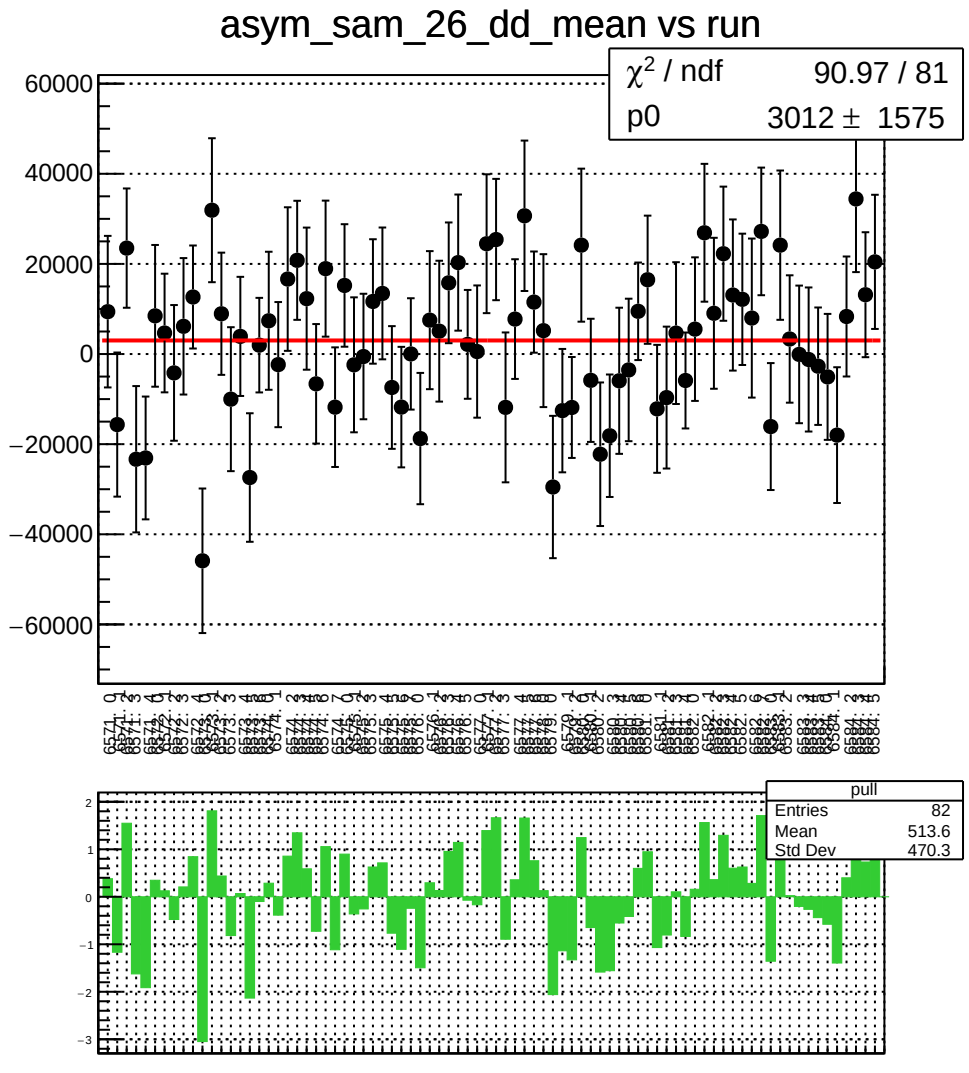

pull1D
Entries 82
Mean −0.006217
Std Dev 1.116

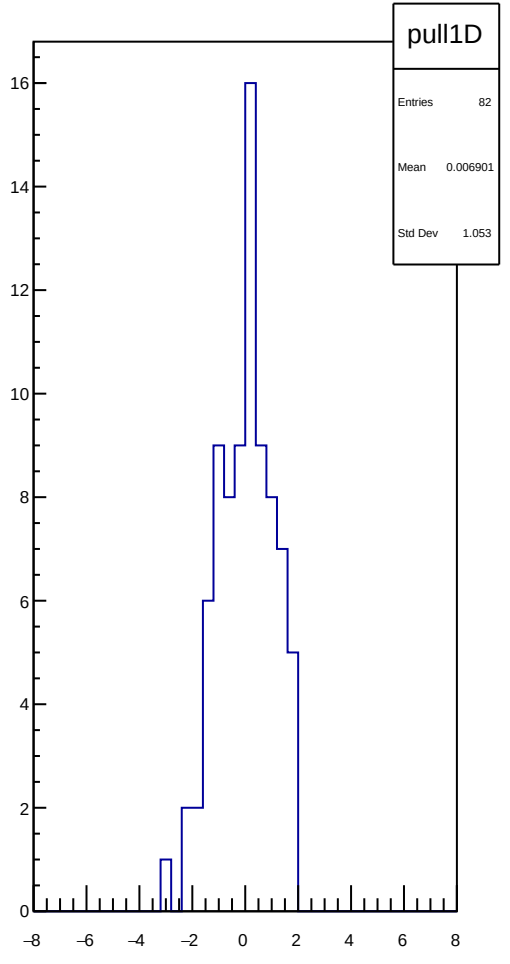

reg_asym_sam_26_dd_rms vs run
χ² / ndf 2485 / 81
p0 191.2 ± 0.1516
215
210
205
200
195
190
185
180
175

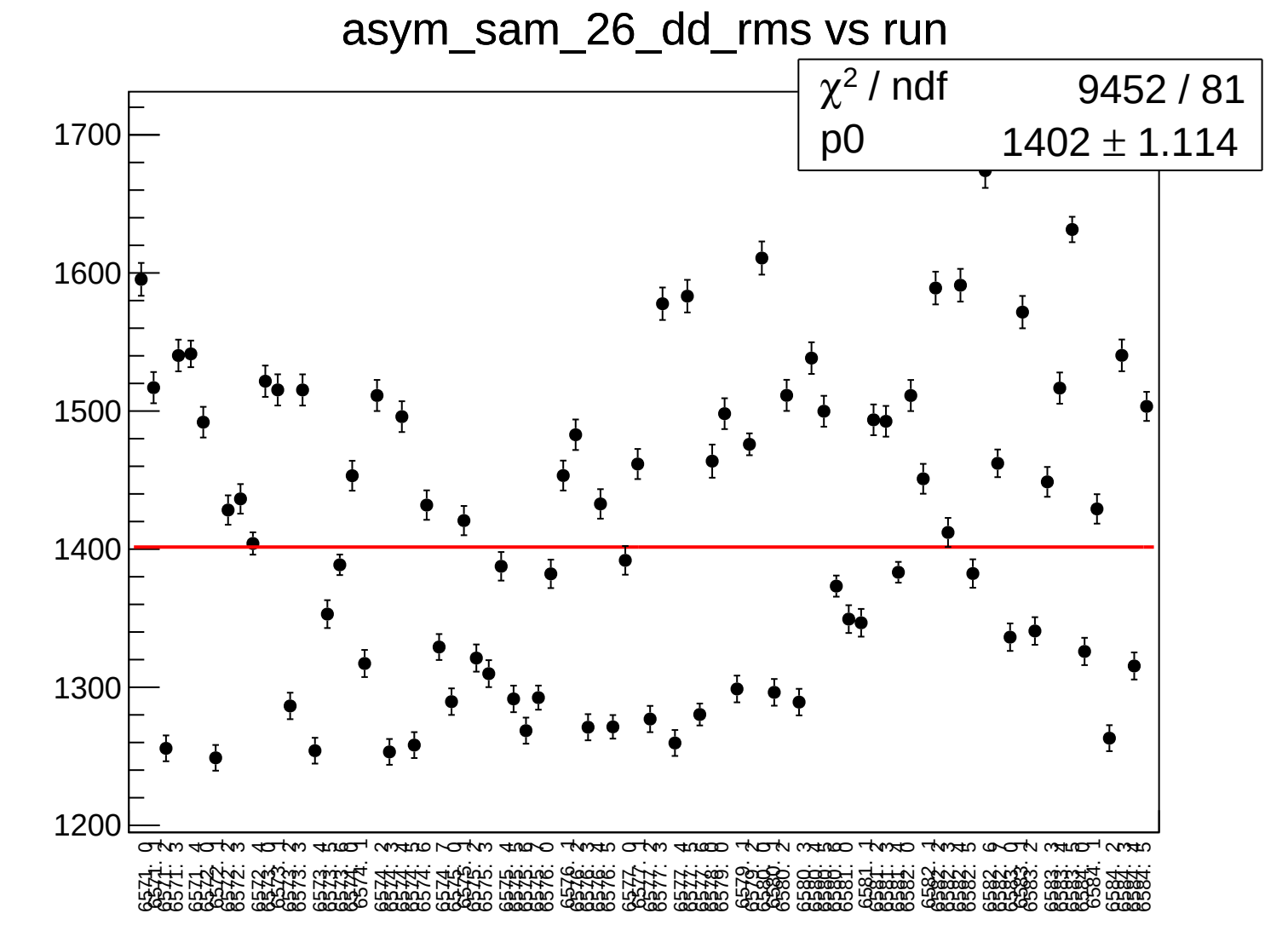

asym_sam_26_dd_correction_mean vs run
χ² / ndf 87.99 / 81
p0 −3509 ± 1560
pull
Entries 82
Mean 424.2
Std Dev 381.4

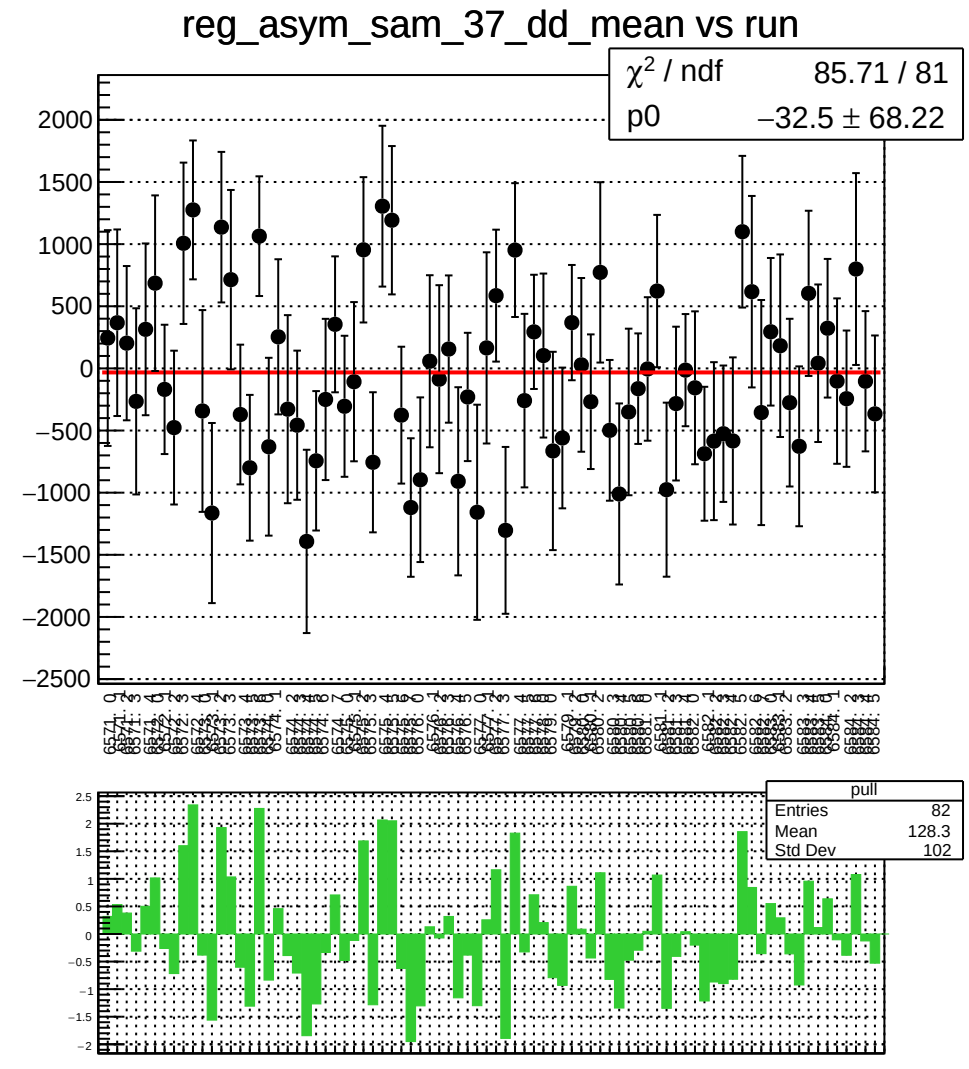

pull1D
Entries 82
Mean −0.008925
Std Dev 1.036

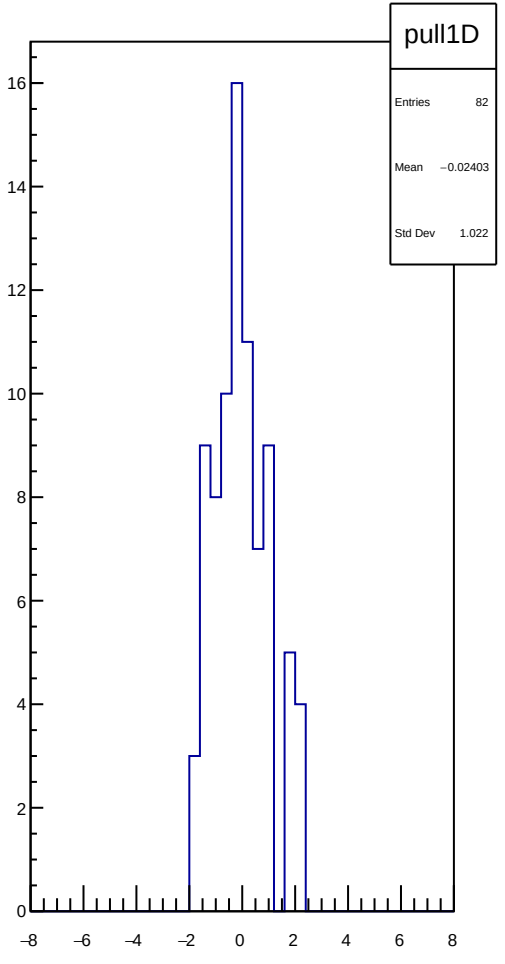

asym_sam_26_dd_correction_rms vs run
χ² / ndf 9744 / 81
p0 1388 ± 1.103
1700
1600
1500
1400
1300
1200

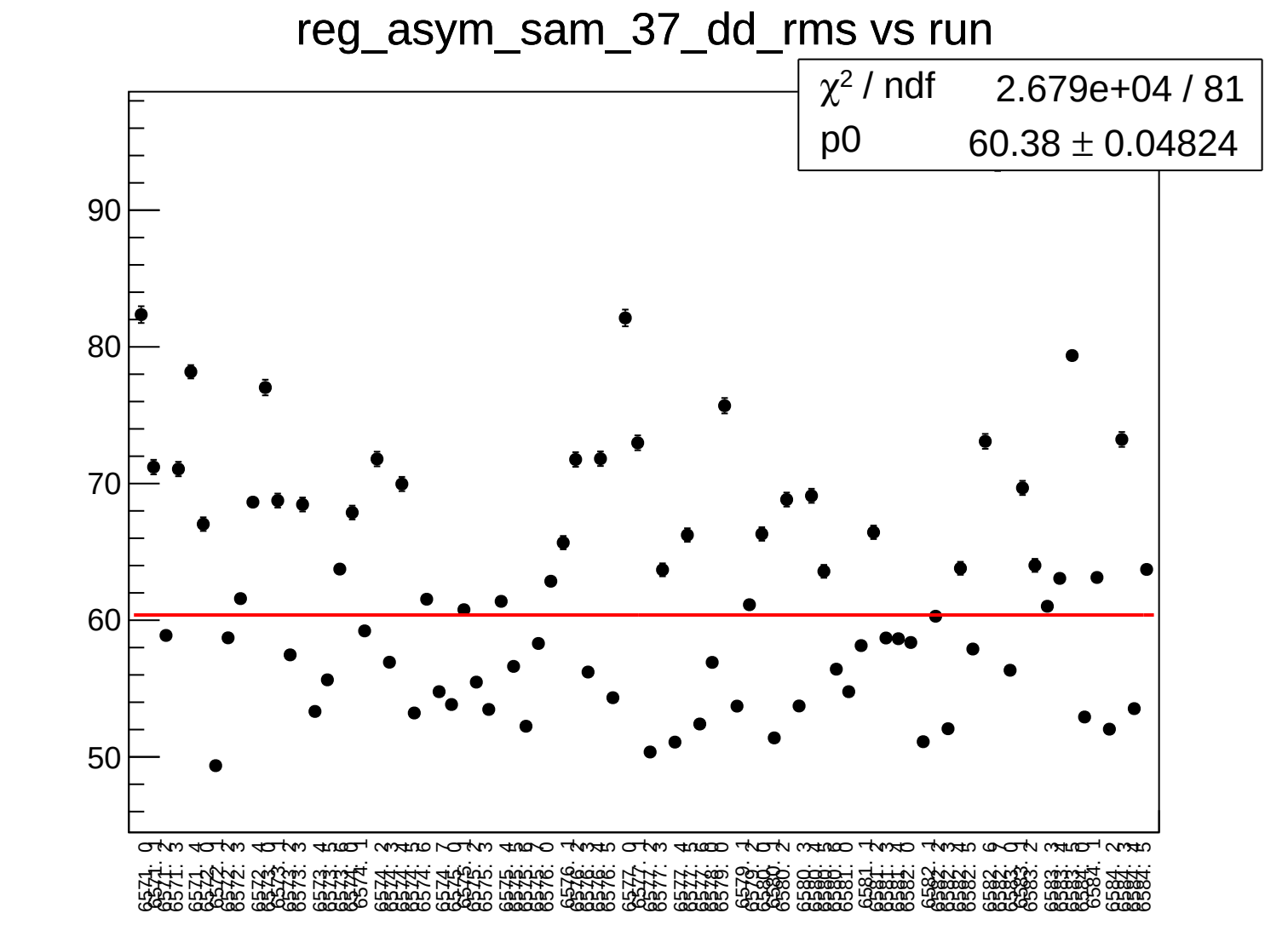

asym_sam_26_dd_mean vs run
χ² / ndf 90.97 / 81
p0 3012 ± 1575
pull
Entries 82
Mean 513.6
Std Dev 470.3

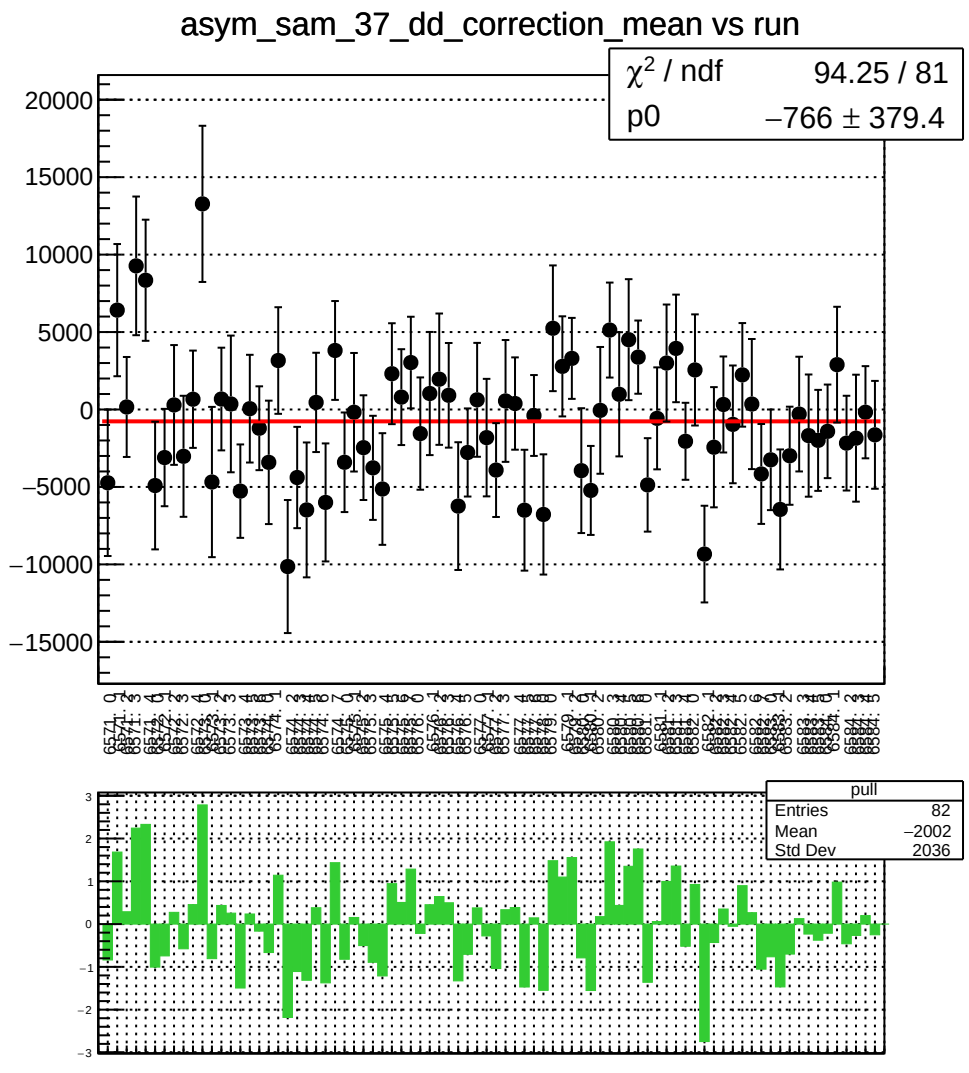

pull1D
Entries 82
Mean 0.006901
Std Dev 1.053

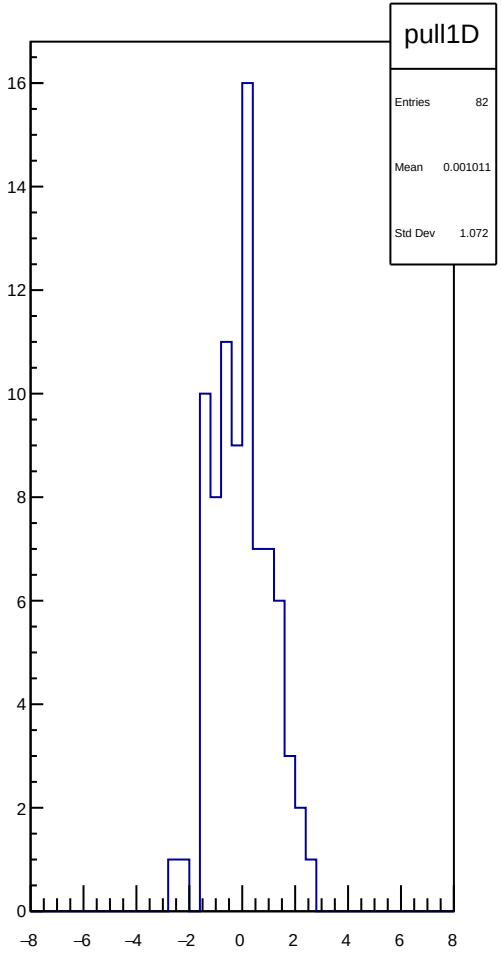

asym_sam_26_dd_rms vs run
χ² / ndf 9452 / 81
p0 1402 ± 1.114
1700
1600
1500
1400
1300
1200

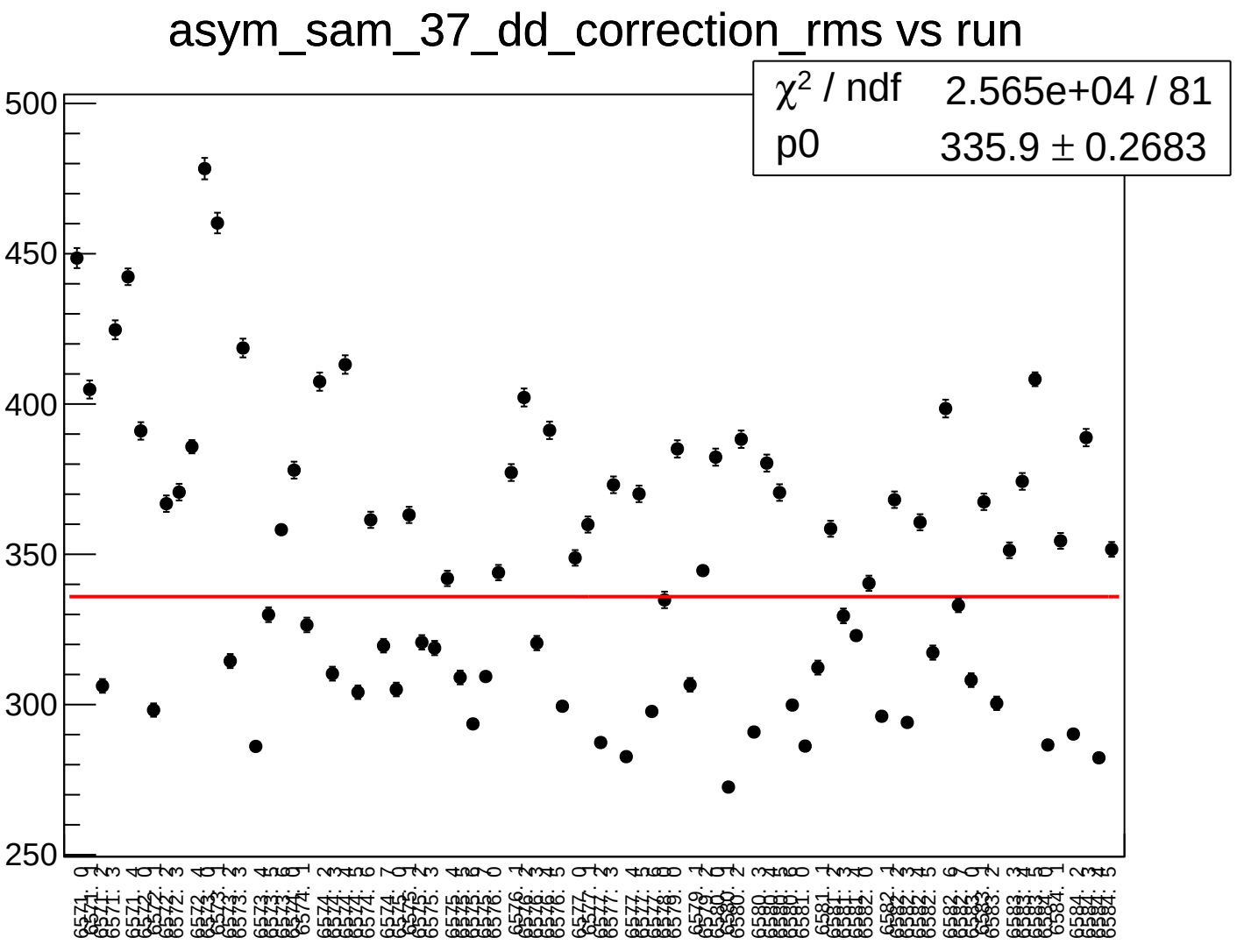

reg_asym_sam_37_dd_mean vs run
χ² / ndf 85.71 / 81
p0 −32.5 ± 68.22
pull
Entries 82
Mean 128.3
Std Dev 102

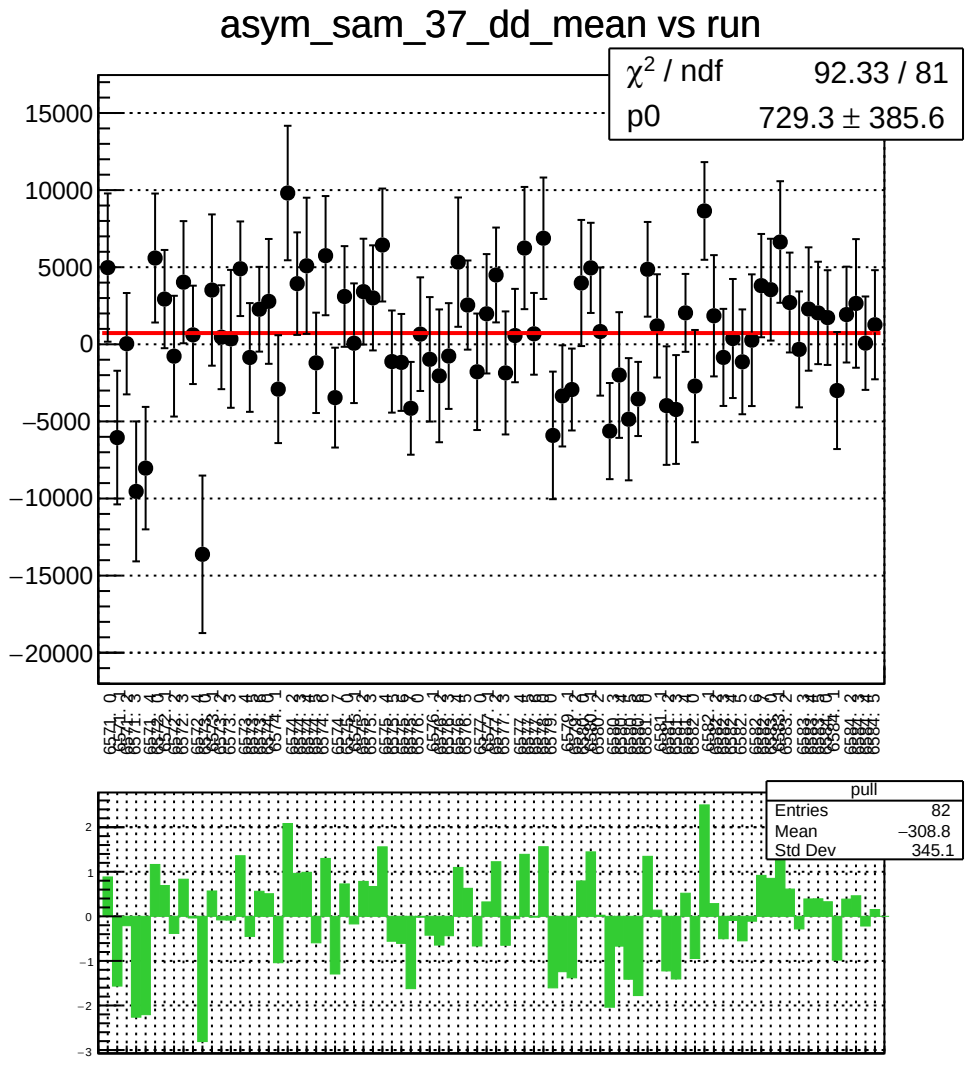

pull1D
Entries 82
Mean −0.02403
Std Dev 1.022

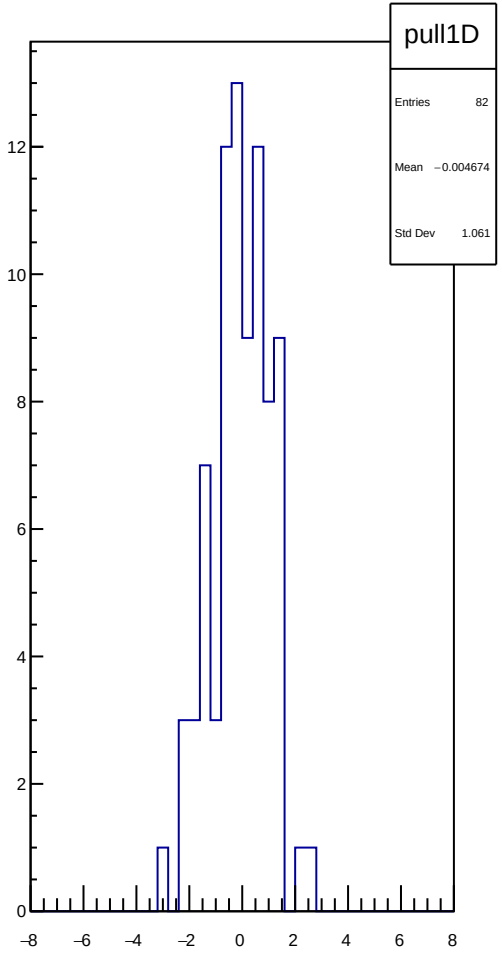

reg_asym_sam_37_dd_rms vs run
χ² / ndf 2.679e+04 / 81
p0 60.38 ± 0.04824
90
80
70
60
50

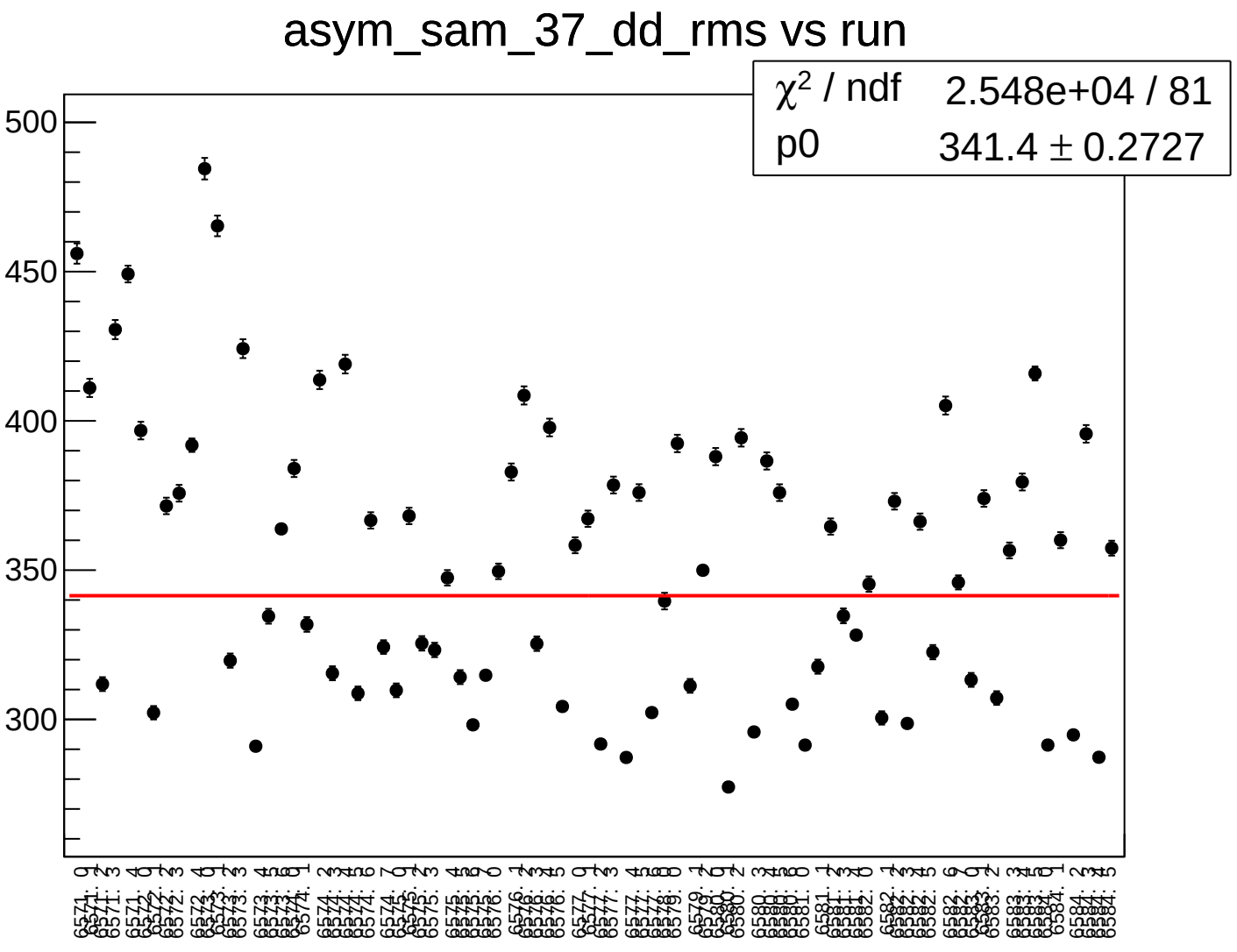

asym_sam_37_dd_correction_mean vs run
χ² / ndf 94.25 / 81
p0 −766 ± 379.4
pull
Entries 82
Mean −2002
Std Dev 2036

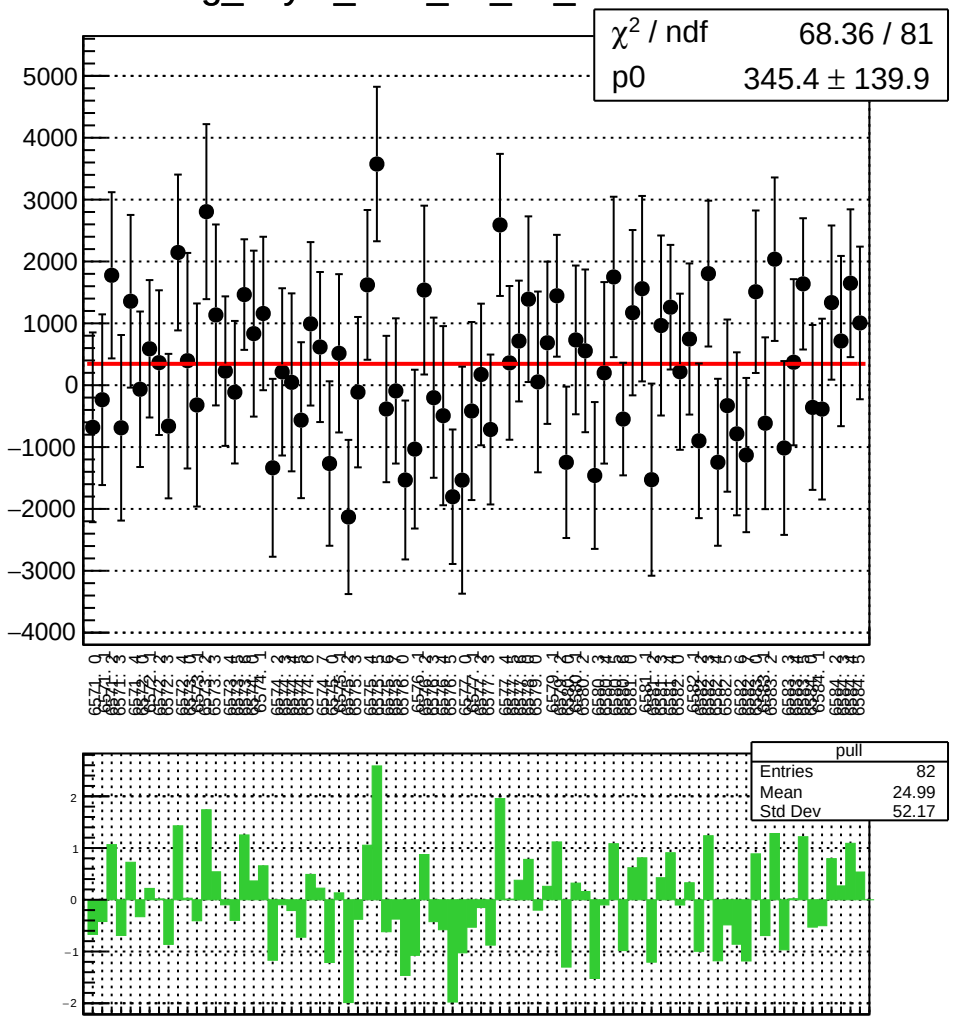

pull1D
Entries 82
Mean 0.001011
Std Dev 1.072

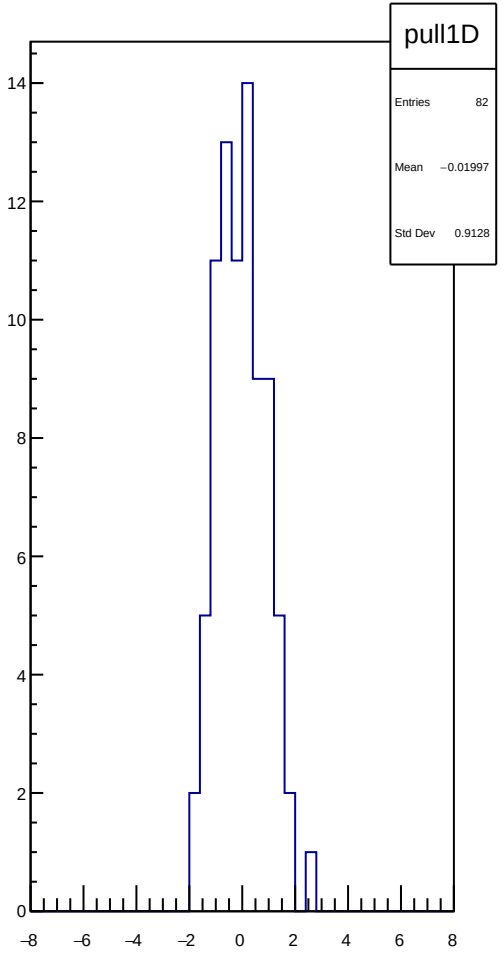

asym_sam_37_dd_correction_rms vs run
χ² / ndf 2.565e+04 / 81
p0 335.9 ± 0.2683
500
450
400
350
300
250

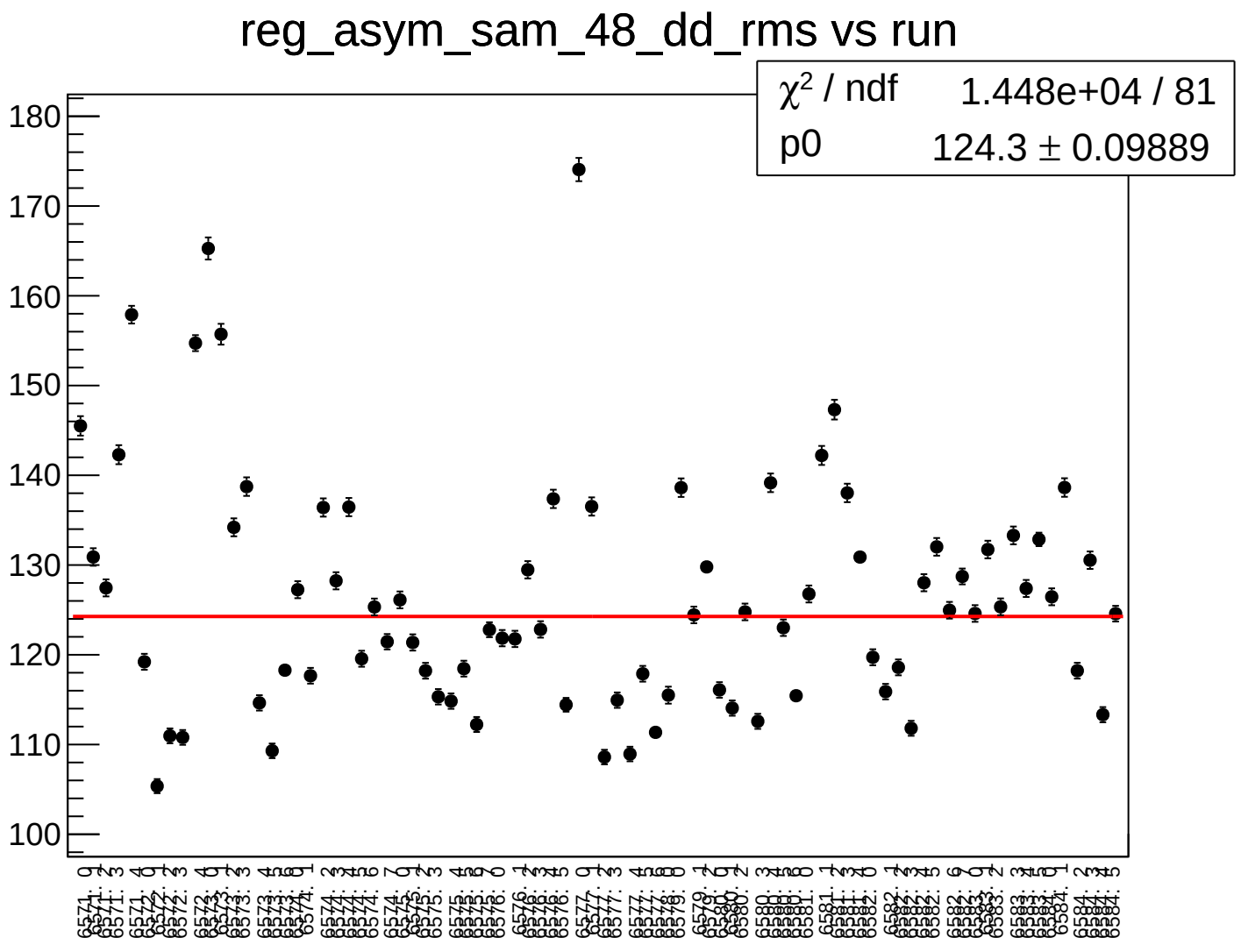

asym_sam_37_dd_mean vs run
χ² / ndf 92.33 / 81
p0 729.3 ± 385.6
pull
Entries 82
Mean −308.8
Std Dev 345.1

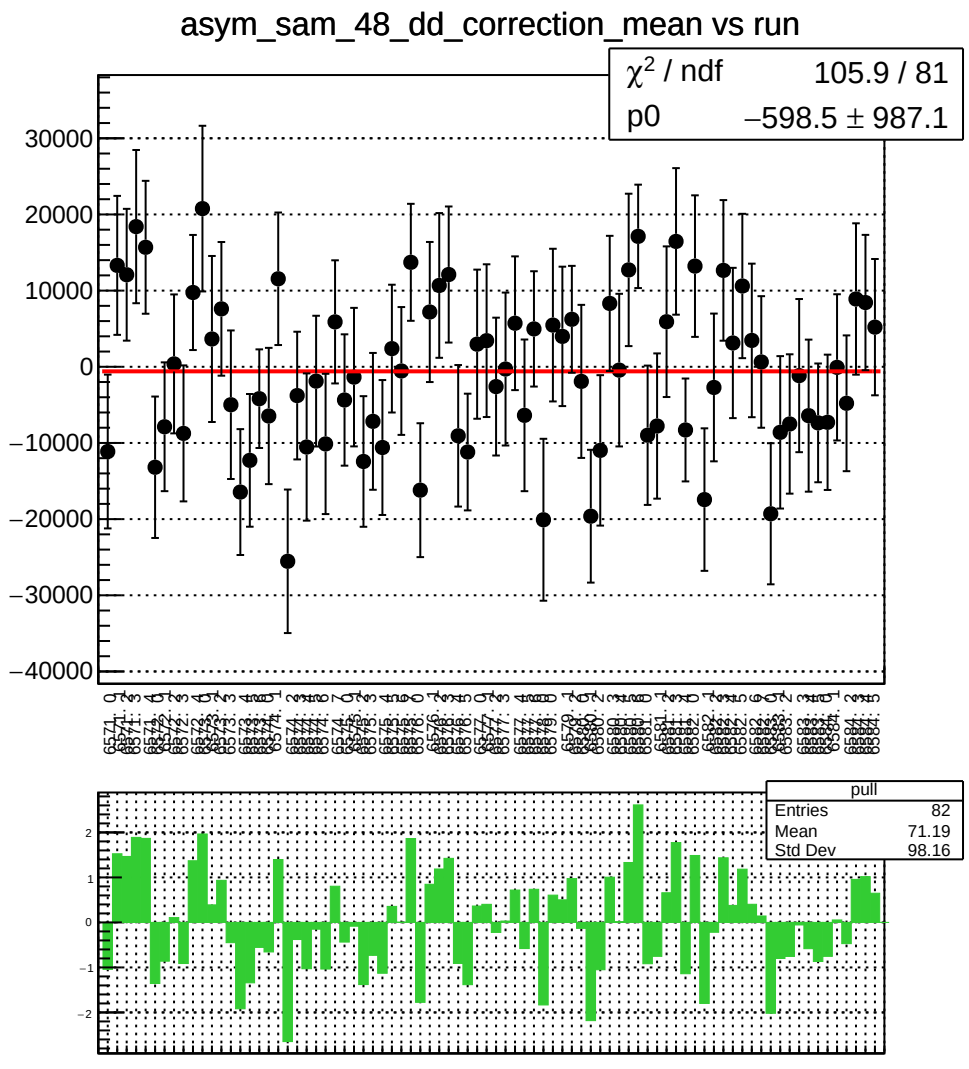

pull1D
Entries 82
Mean −0.004674
Std Dev 1.061

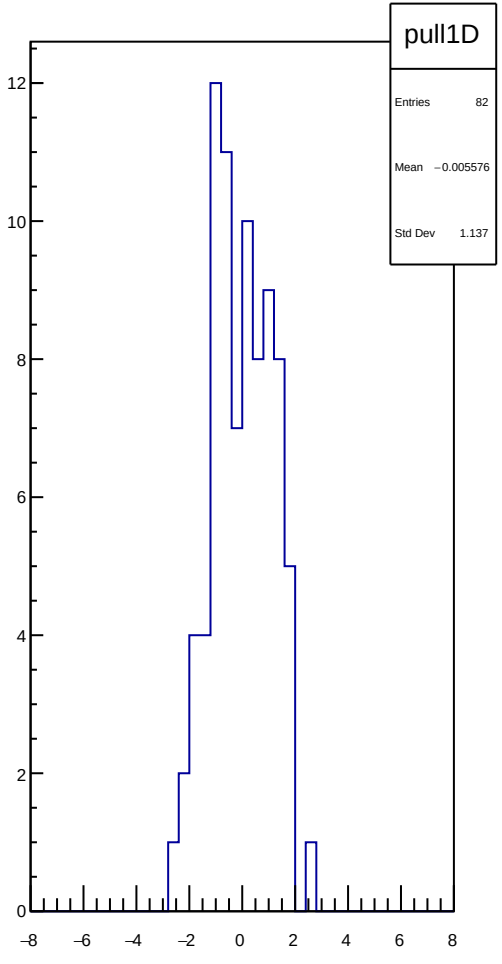

asym_sam_37_dd_rms vs run
χ² / ndf 2.548e+04 / 81
p0 341.4 ± 0.2727
500
450
400
350
300

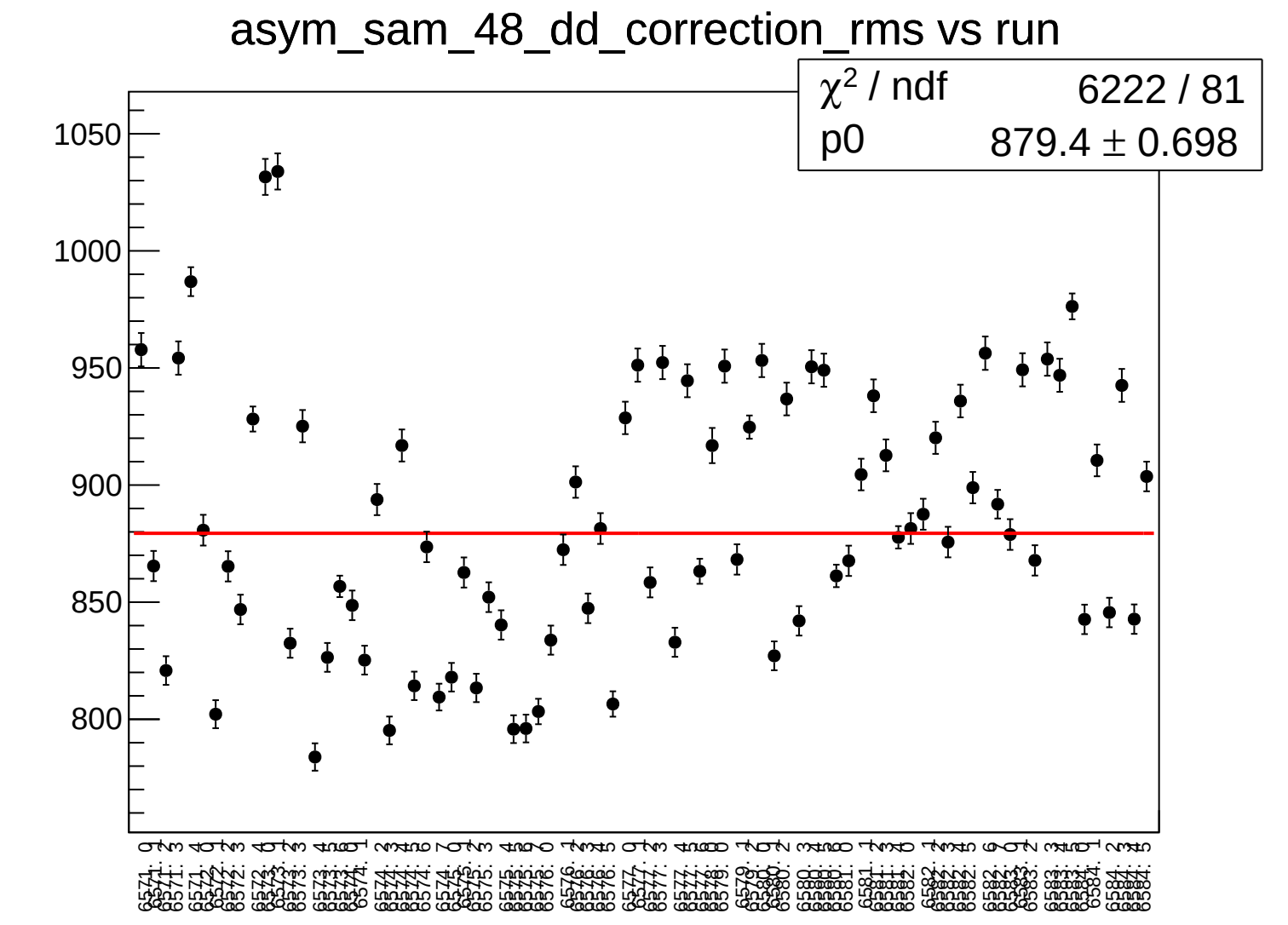

reg_asym_sam_48_dd_mean vs run
χ² / ndf 68.36 / 81
p0 345.4 ± 139.9
pull
Entries 82
Mean 24.99
Std Dev 52.17

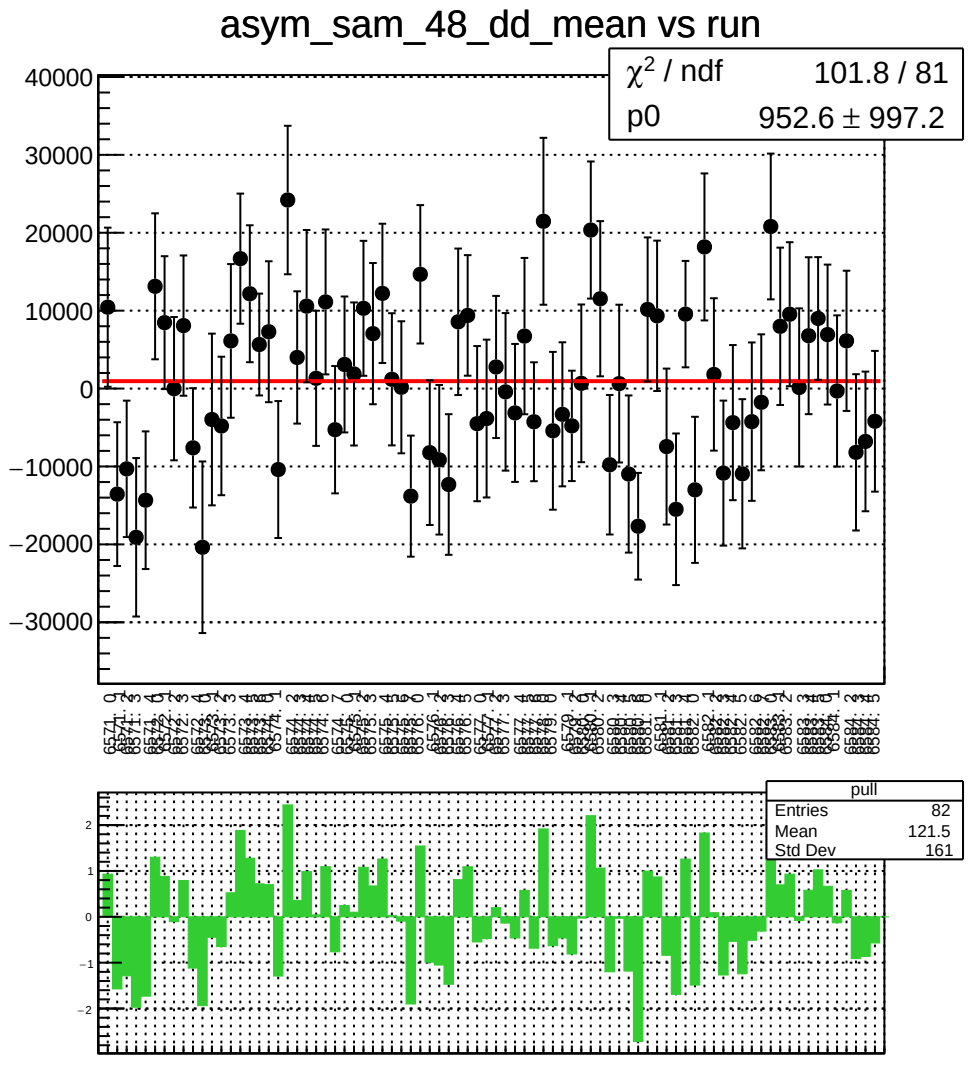

pull1D
Entries 82
Mean −0.01997
Std Dev 0.9128

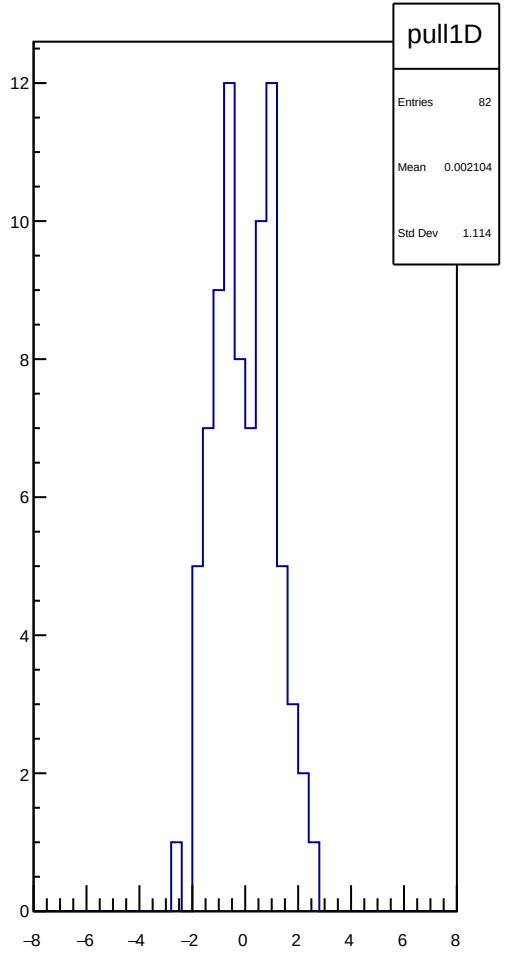

reg_asym_sam_48_dd_rms vs run
χ² / ndf 1.448e+04 / 81
p0 124.3 ± 0.09889
180
170
160
150
140
130
120
110
100

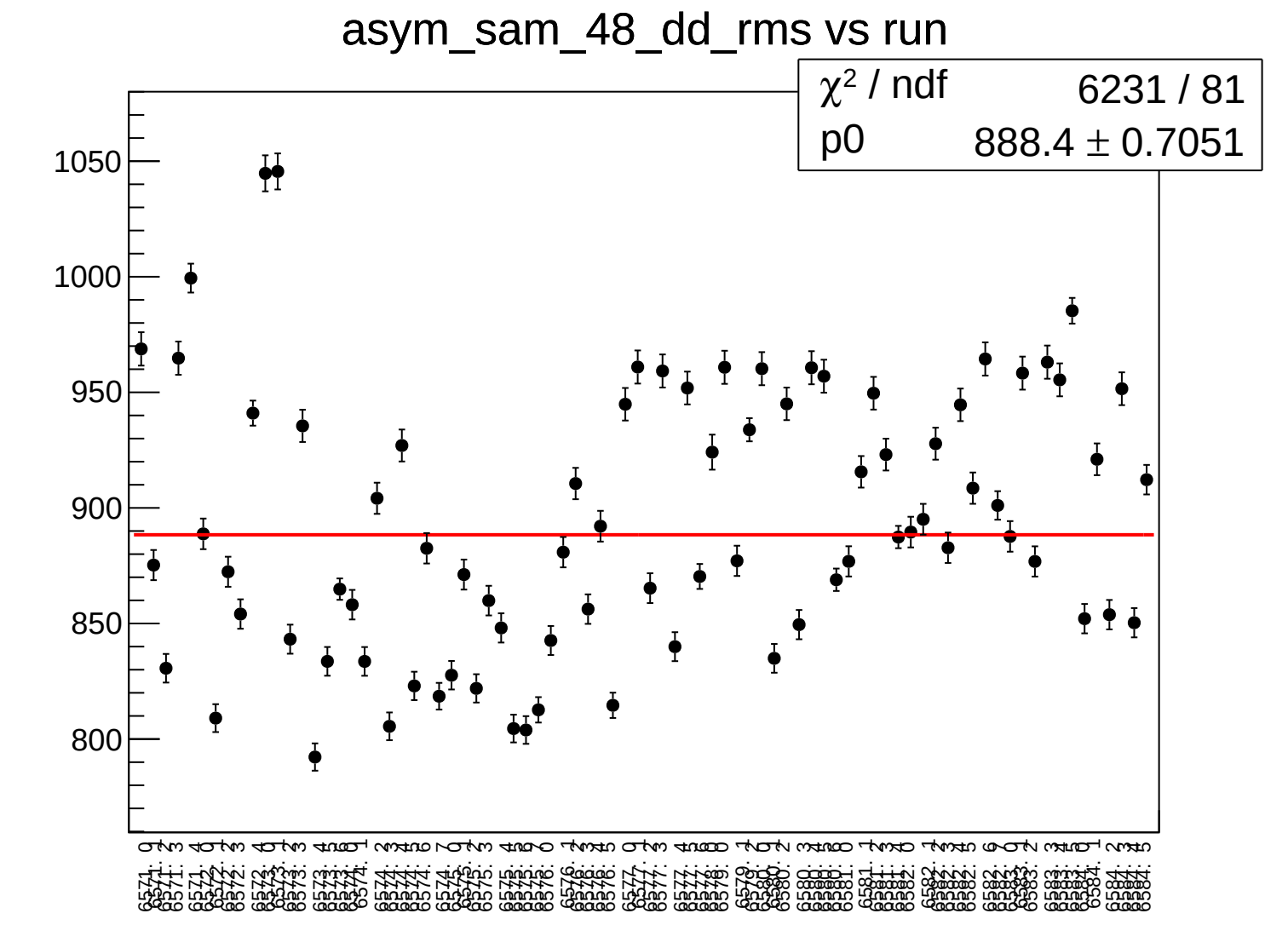

asym_sam_48_dd_correction_mean vs run
χ² / ndf 105.9 / 81
p0 −598.5 ± 987.1
pull
Entries 82
Mean 71.19
Std Dev 98.16

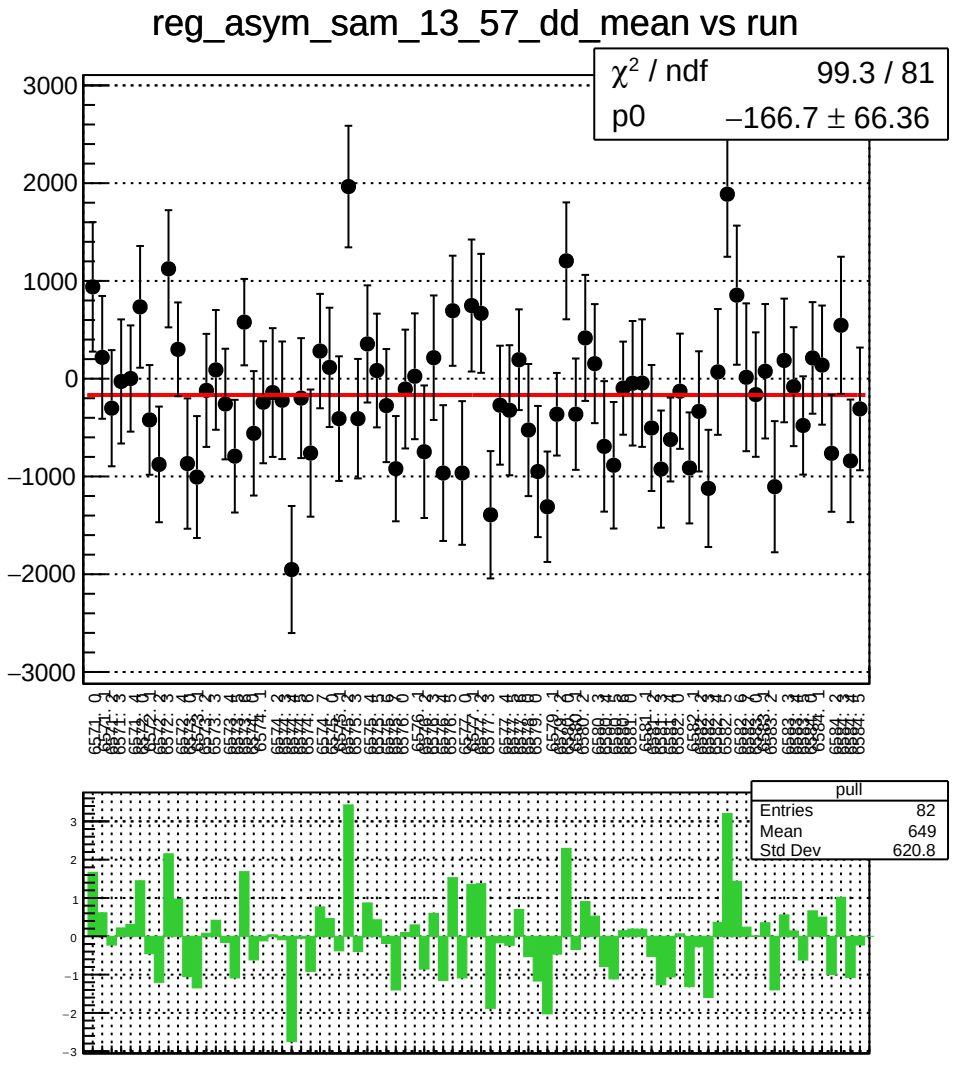

pull1D
Entries 82
Mean −0.005576
Std Dev 1.137

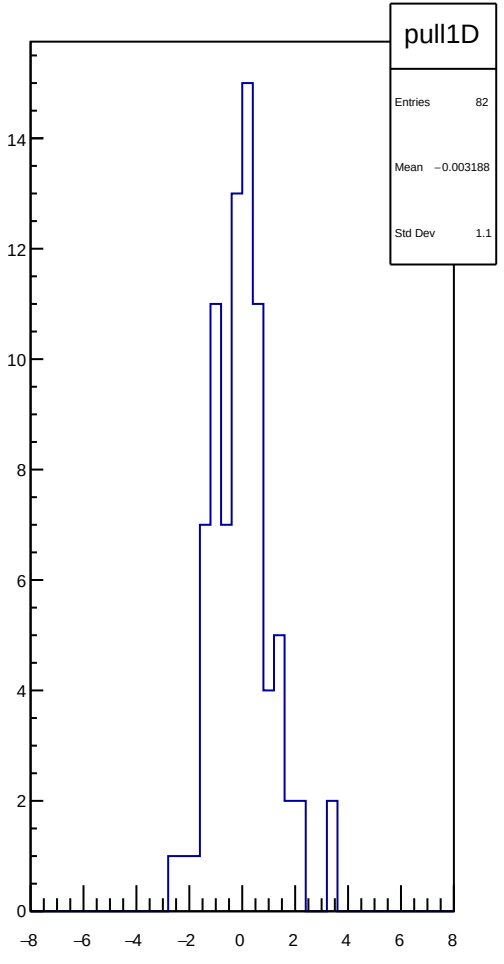

asym_sam_48_dd_correction_rms vs run
χ² / ndf 6222 / 81
p0 879.4 ± 0.698
1050
1000
950
900
850
800

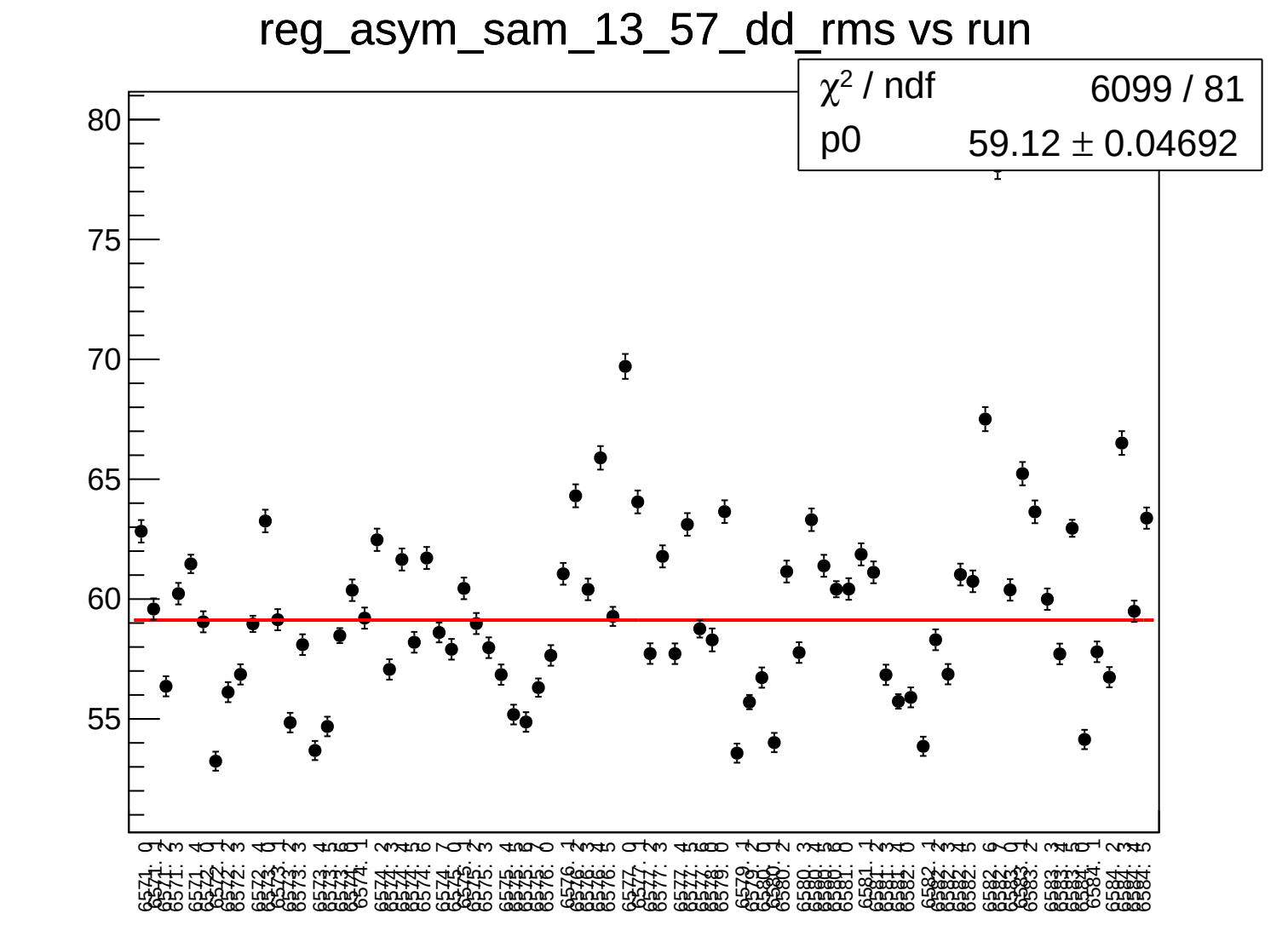

asym_sam_48_dd_mean vs run
χ² / ndf 101.8 / 81
p0 952.6 ± 997.2
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean 121.5
Std Dev 161
2
1
0
−1
−2

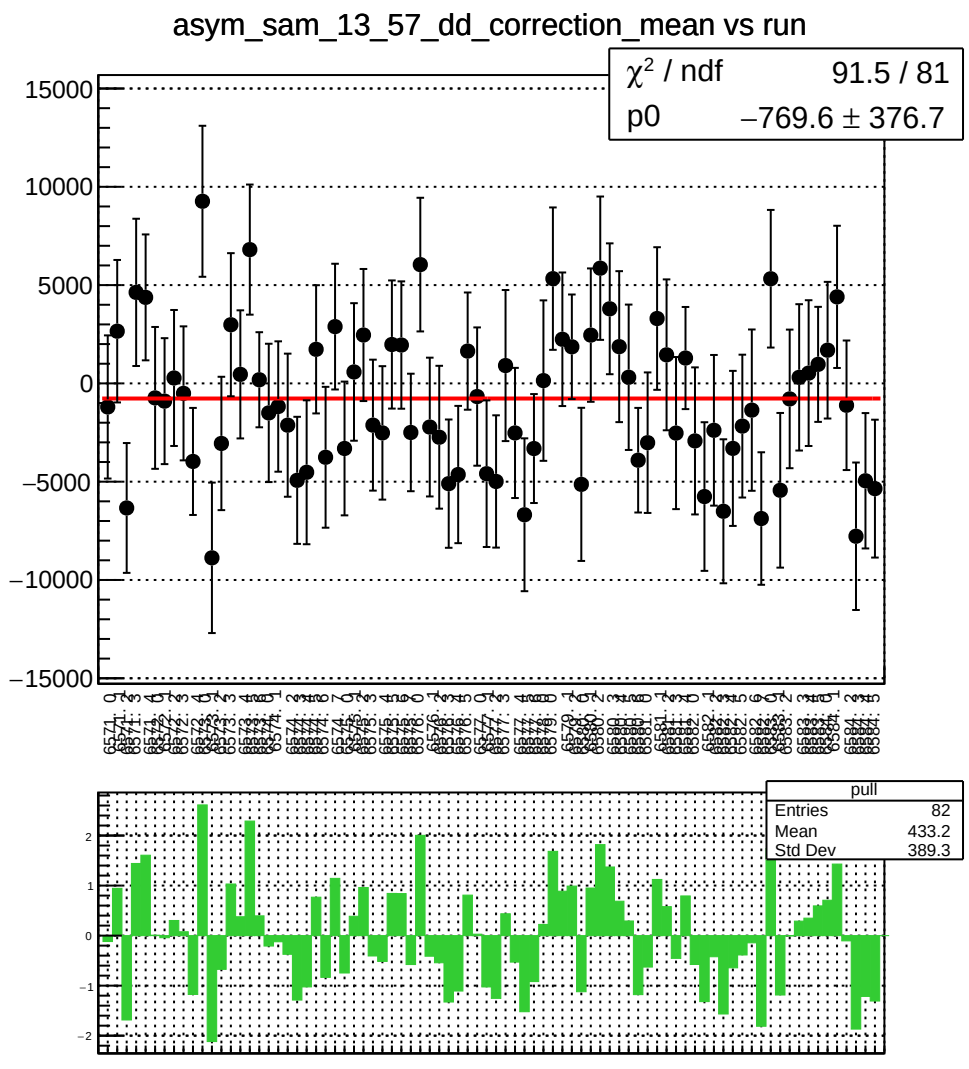

pull1D
Entries 82
Mean 0.002104
Std Dev 1.114
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

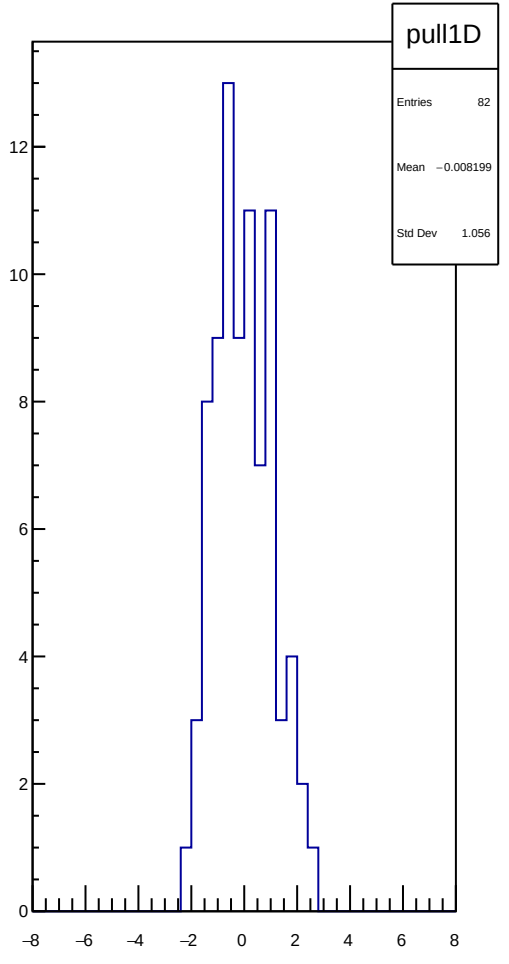

asym_sam_48_dd_rms vs run
χ² / ndf 6231 / 81
p0 888.4 ± 0.7051
1050
1000
950
900
850
800

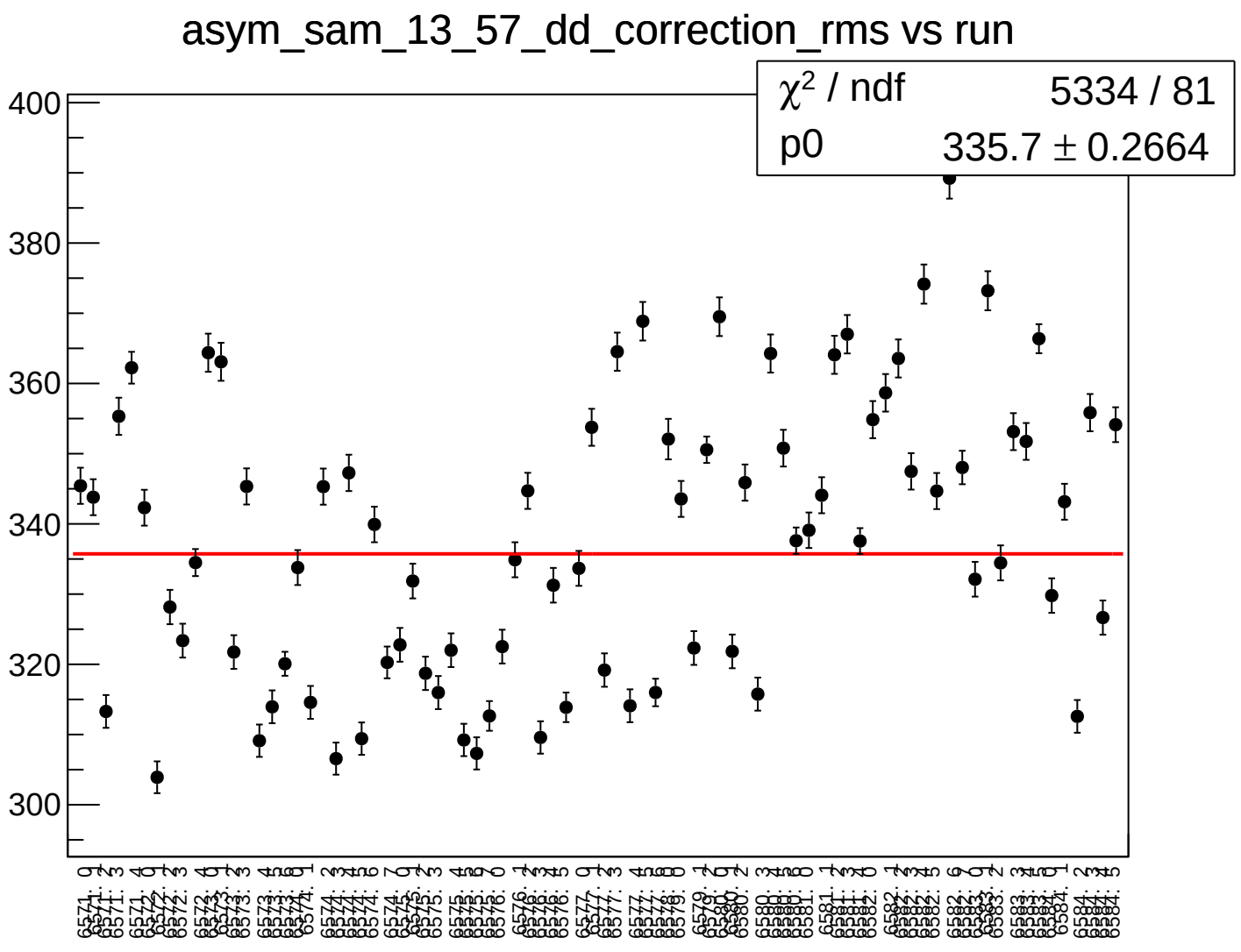

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 99.3 / 81
p0 −166.7 ± 66.36
pull
Entries 82
Mean 649
Std Dev 620.8

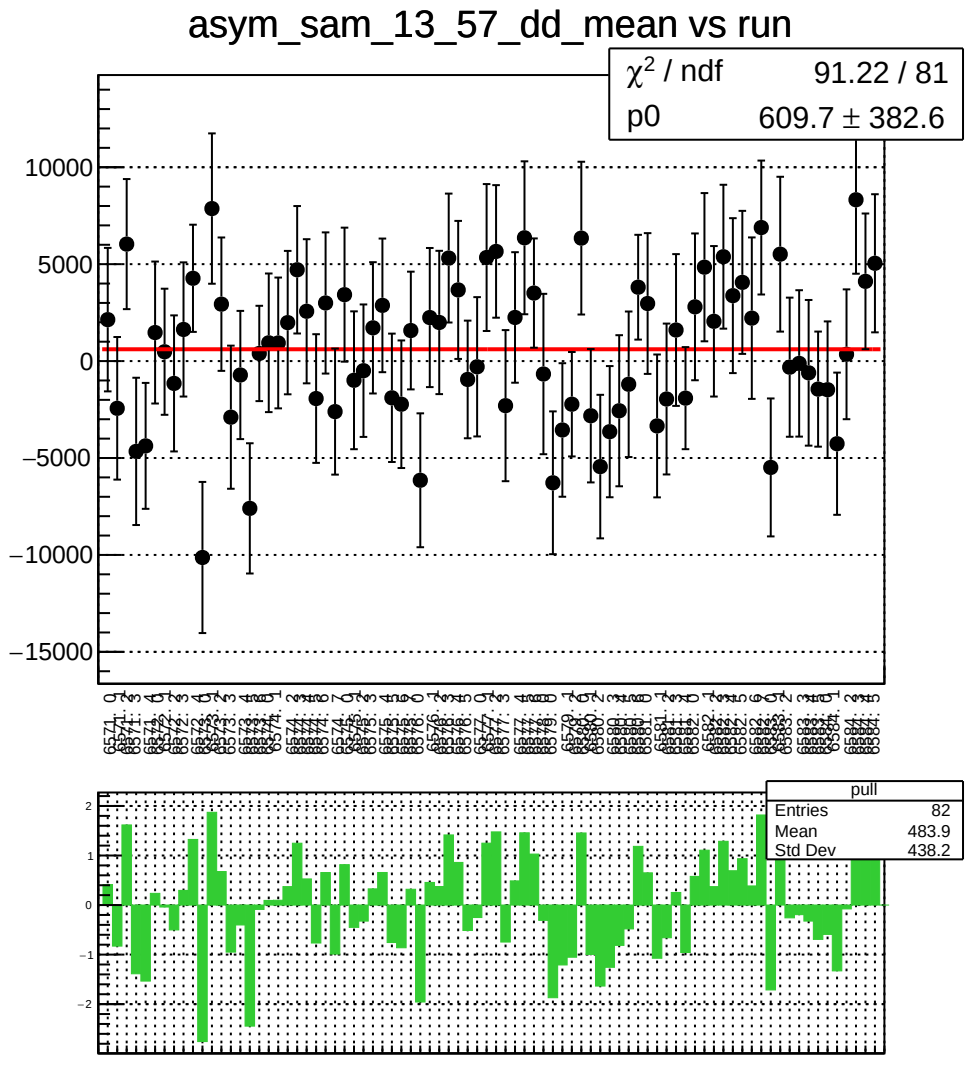

pull1D
Entries 82
Mean −0.003188
Std Dev 1.1

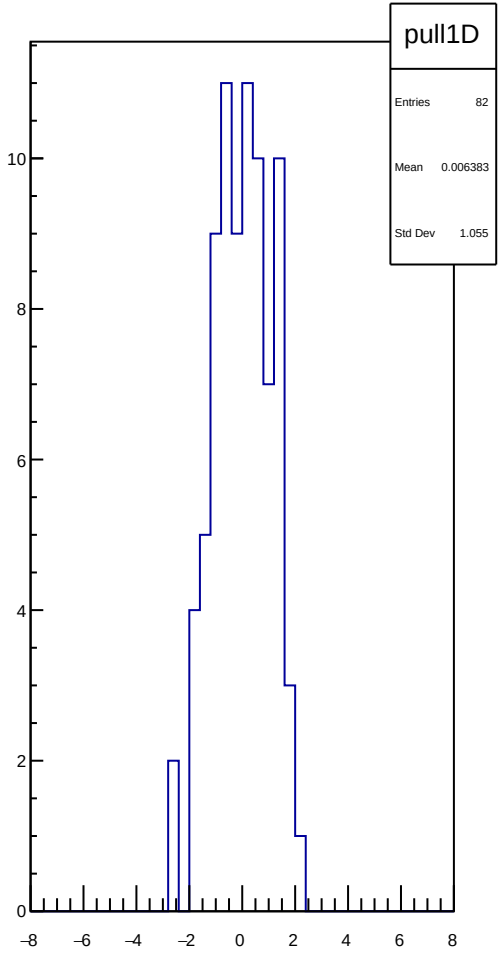

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 6099 / 81
p0 59.12 ± 0.04692
80
75
70
65
60
55

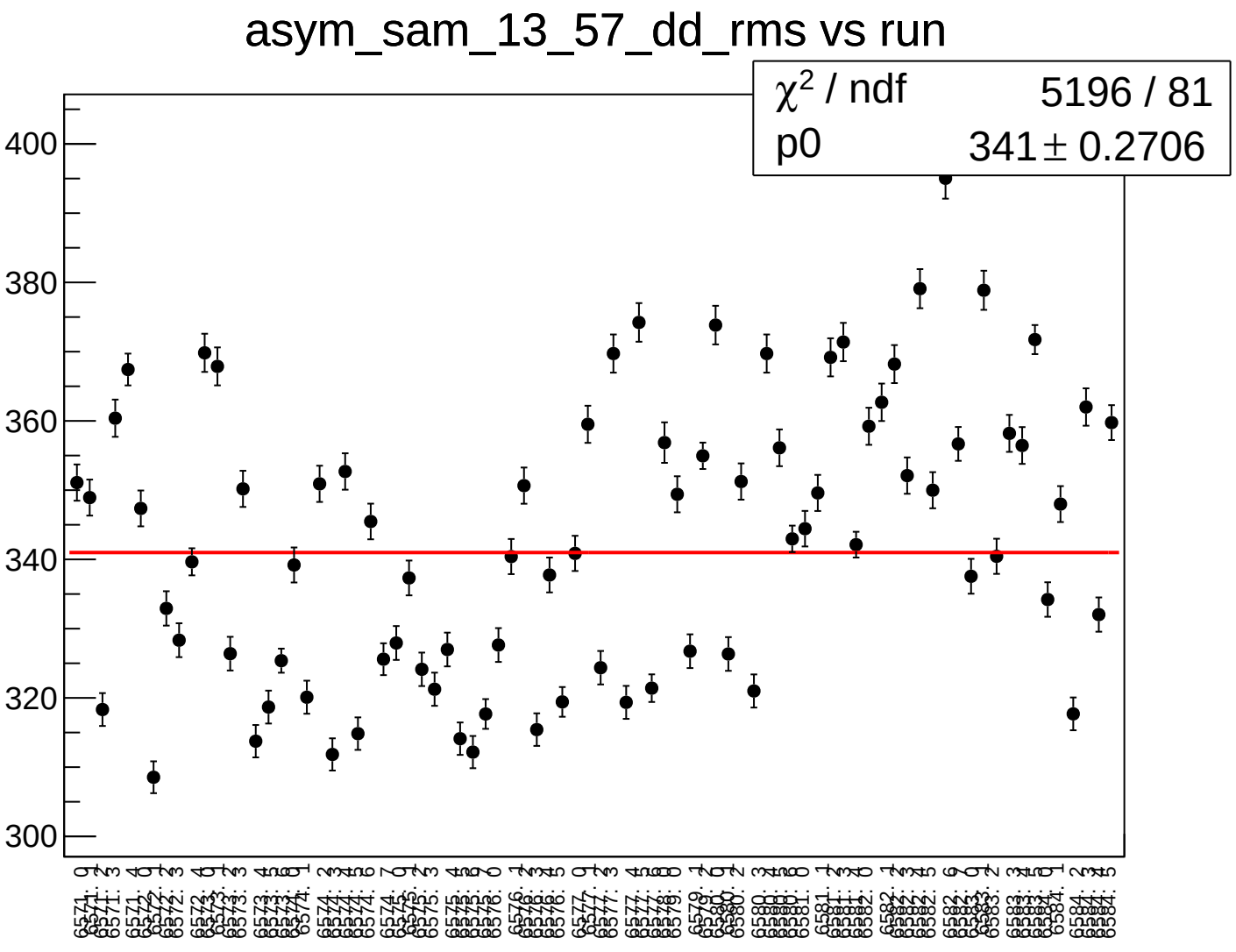

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 91.5 / 81
p0 −769.6 ± 376.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 433.2
Std Dev 389.3
2
1
0
−1
−2

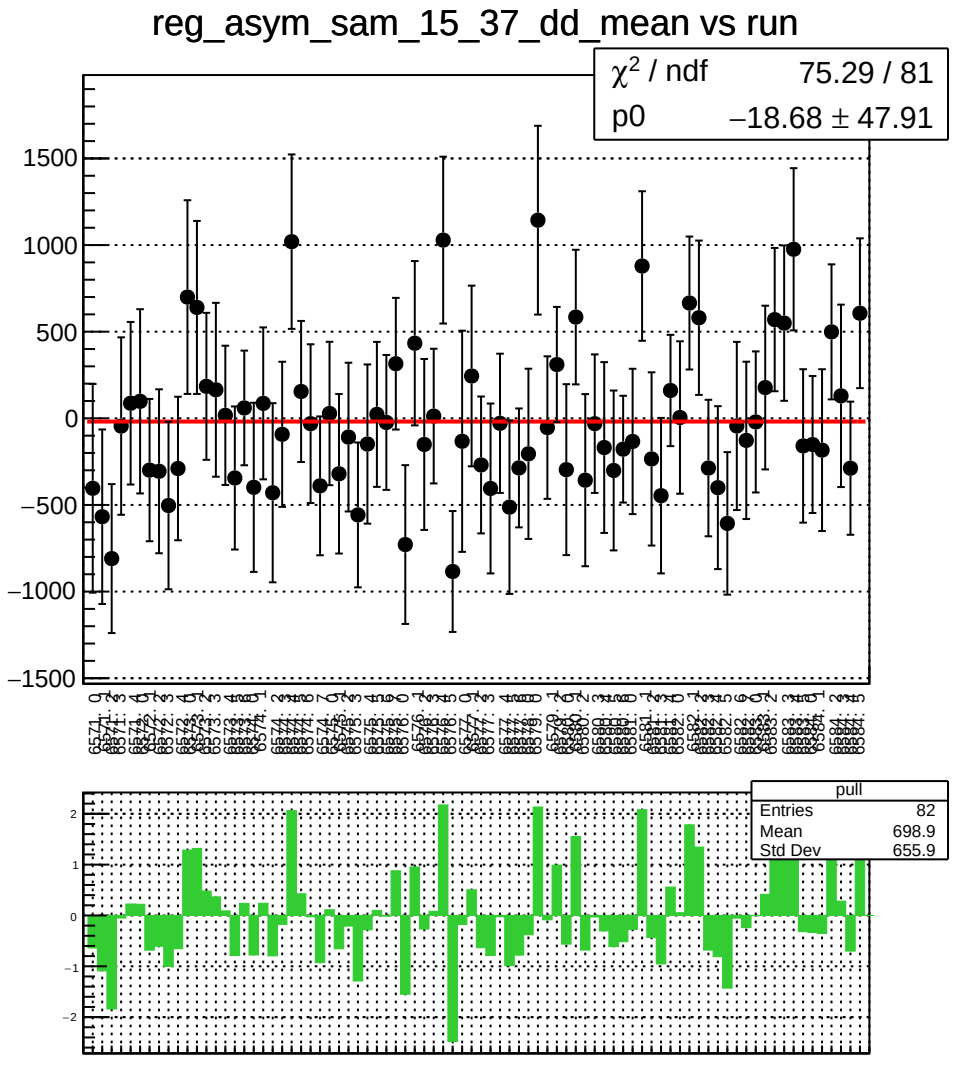

pull1D
Entries 82
Mean −0.008199
Std Dev 1.056
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

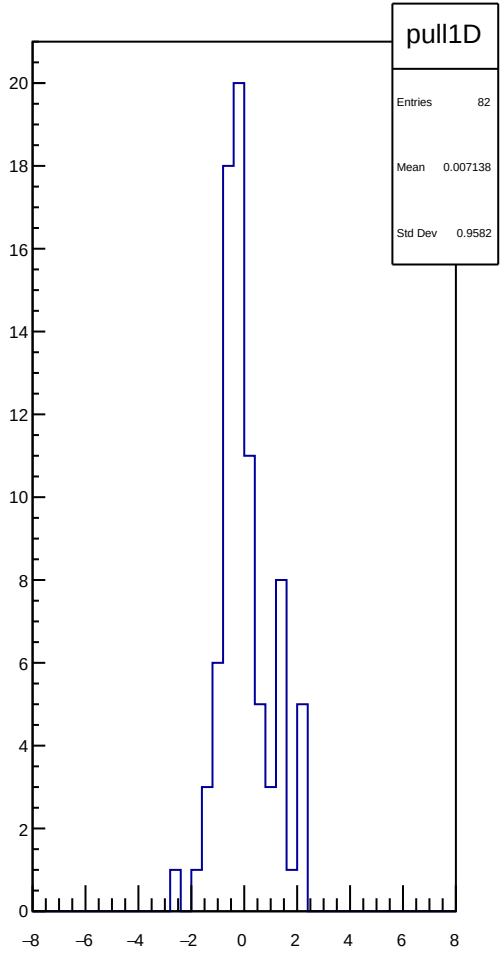

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 5334 / 81
p0 335.7 ± 0.2664
400
380
360
340
320
300


asym_sam_13_57_dd_mean vs run
χ² / ndf 91.22 / 81
p0 609.7 ± 382.6
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 483.9
Std Dev 438.2
2
1
0
−1
−2

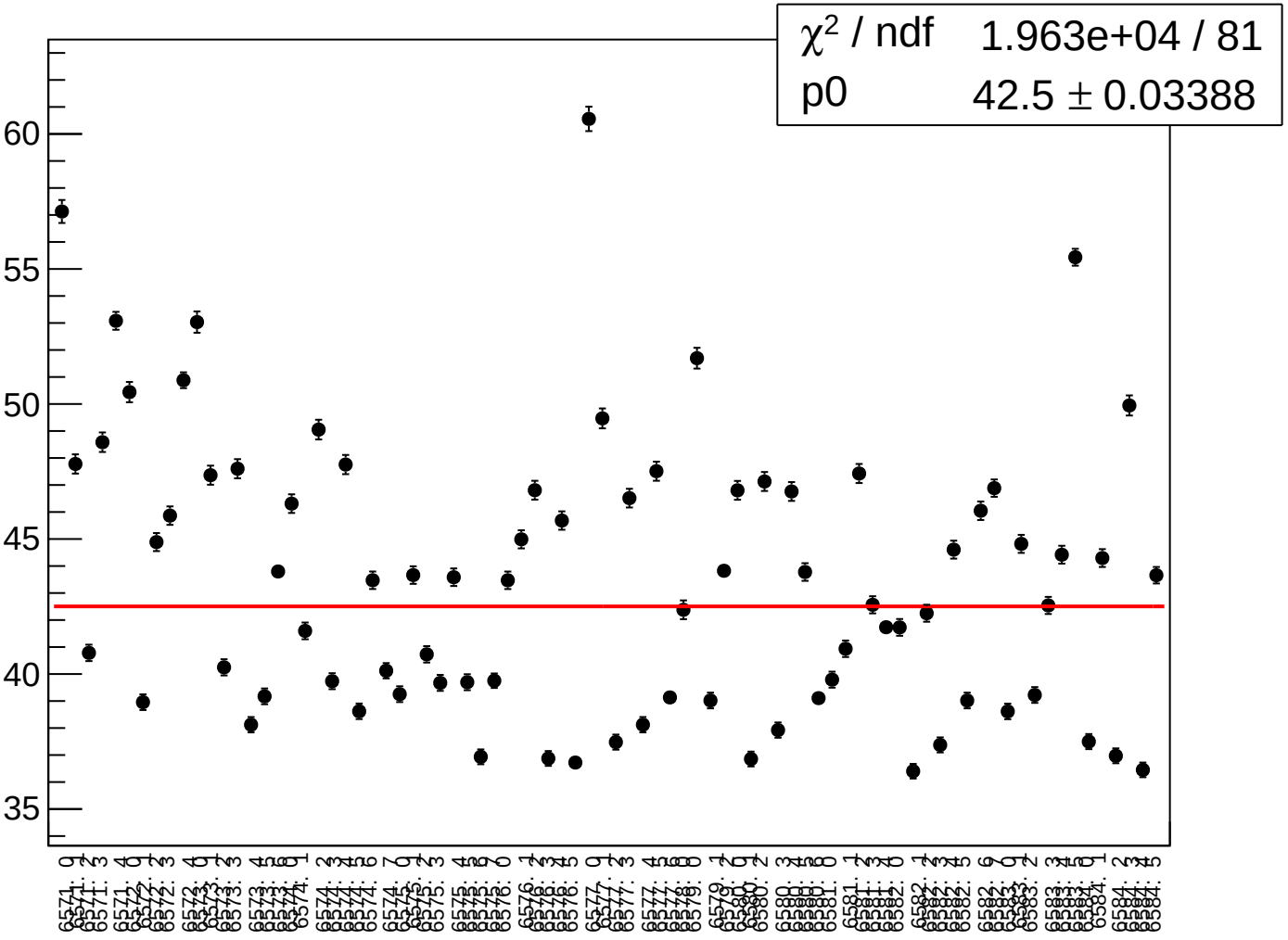

pull1D
Entries 82
Mean 0.006383
Std Dev 1.055
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

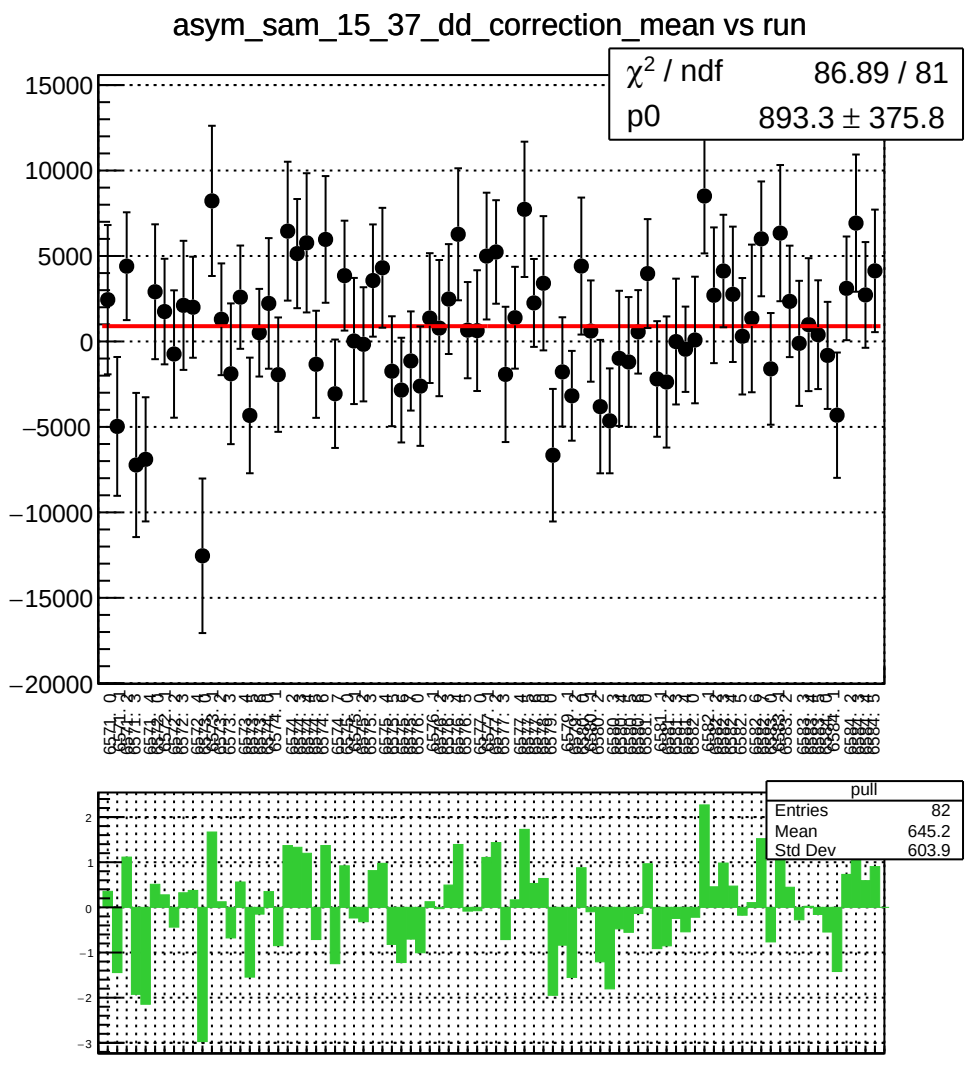

asym_sam_13_57_dd_rms vs run
χ² / ndf 5196 / 81
p0 341 ± 0.2706
400
380
360
340
320
300

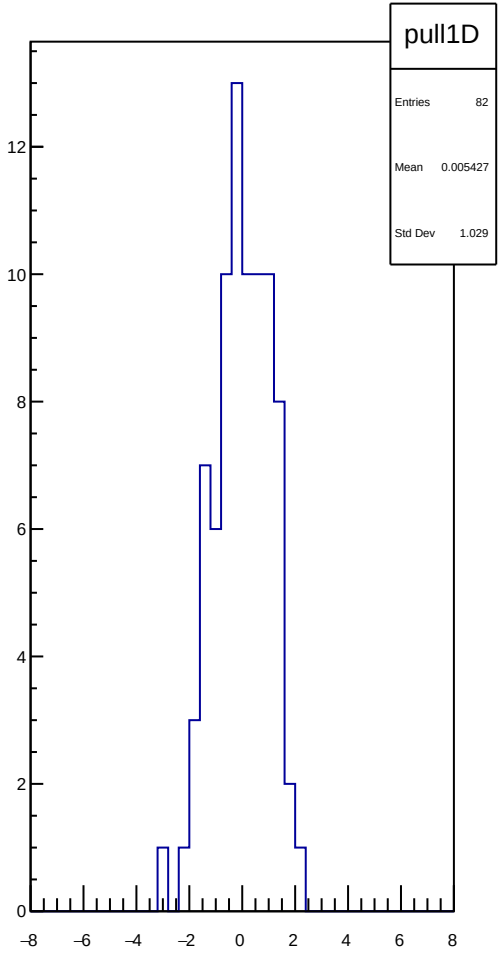

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 75.29 / 81
p0 −18.68 ± 47.91
1500
1000
500
0
−500
−1000
−1500
pull
Entries 82
Mean 698.9
Std Dev 655.9
2
1
0
−1
−2

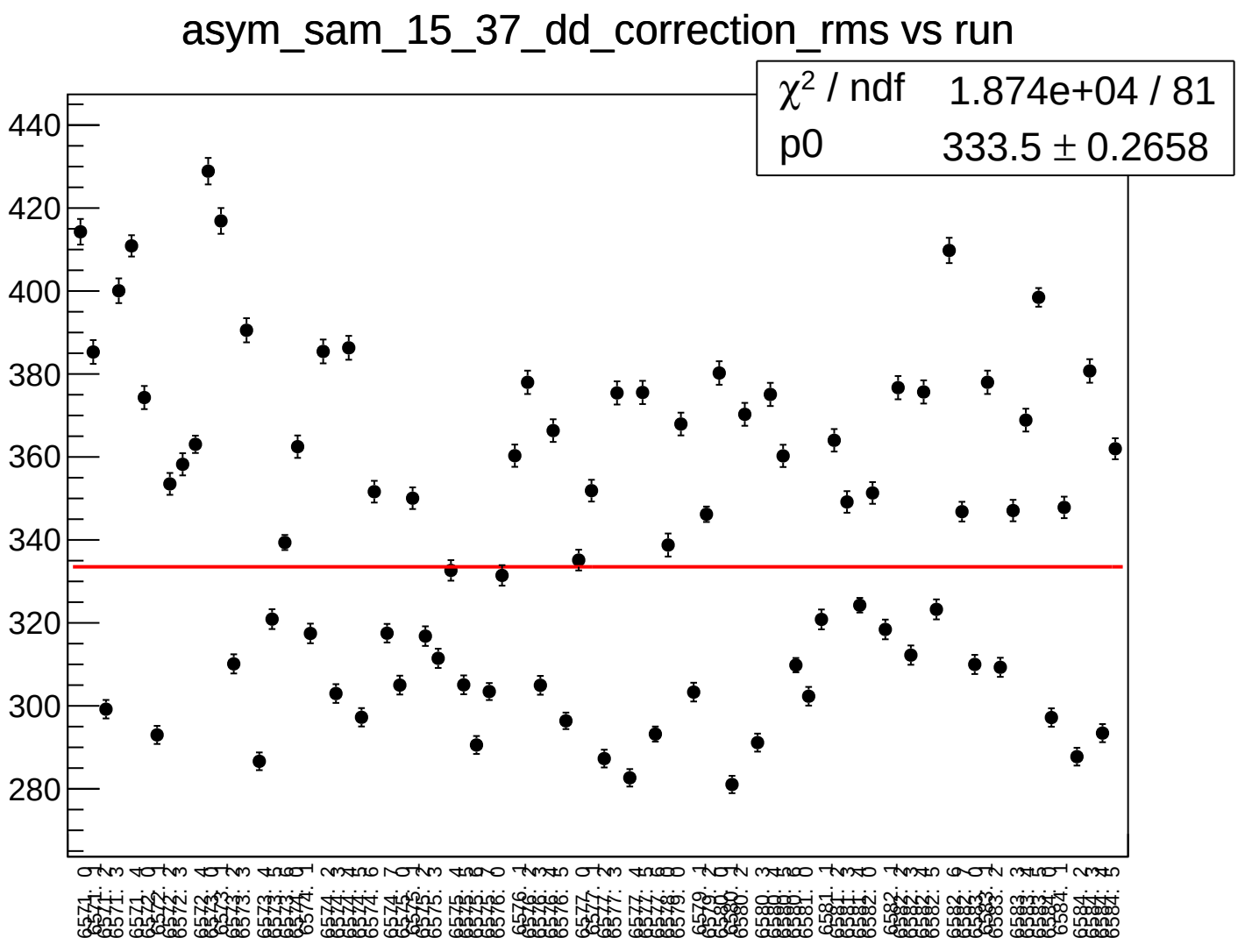

pull1D
Entries 82
Mean 0.007138
Std Dev 0.9582
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

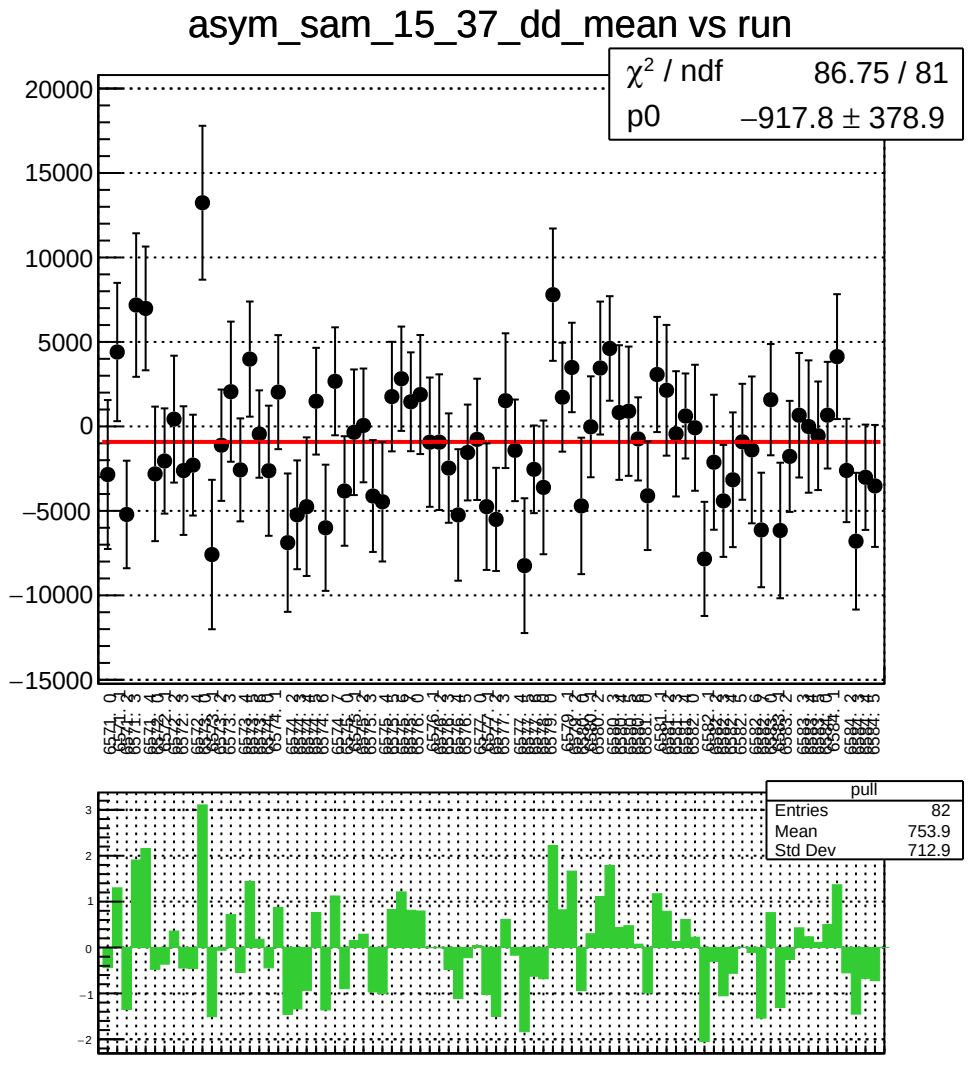
# reg_asym_sam_15_37_dd_rms vs run

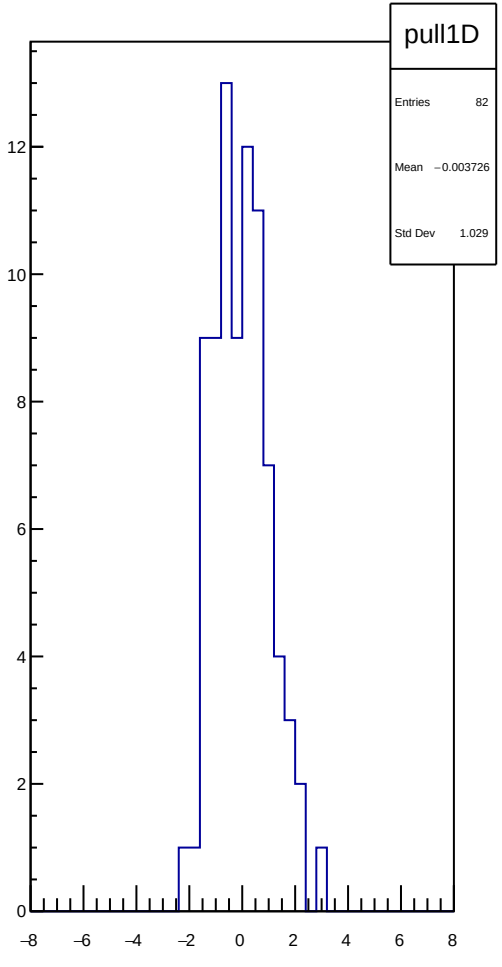


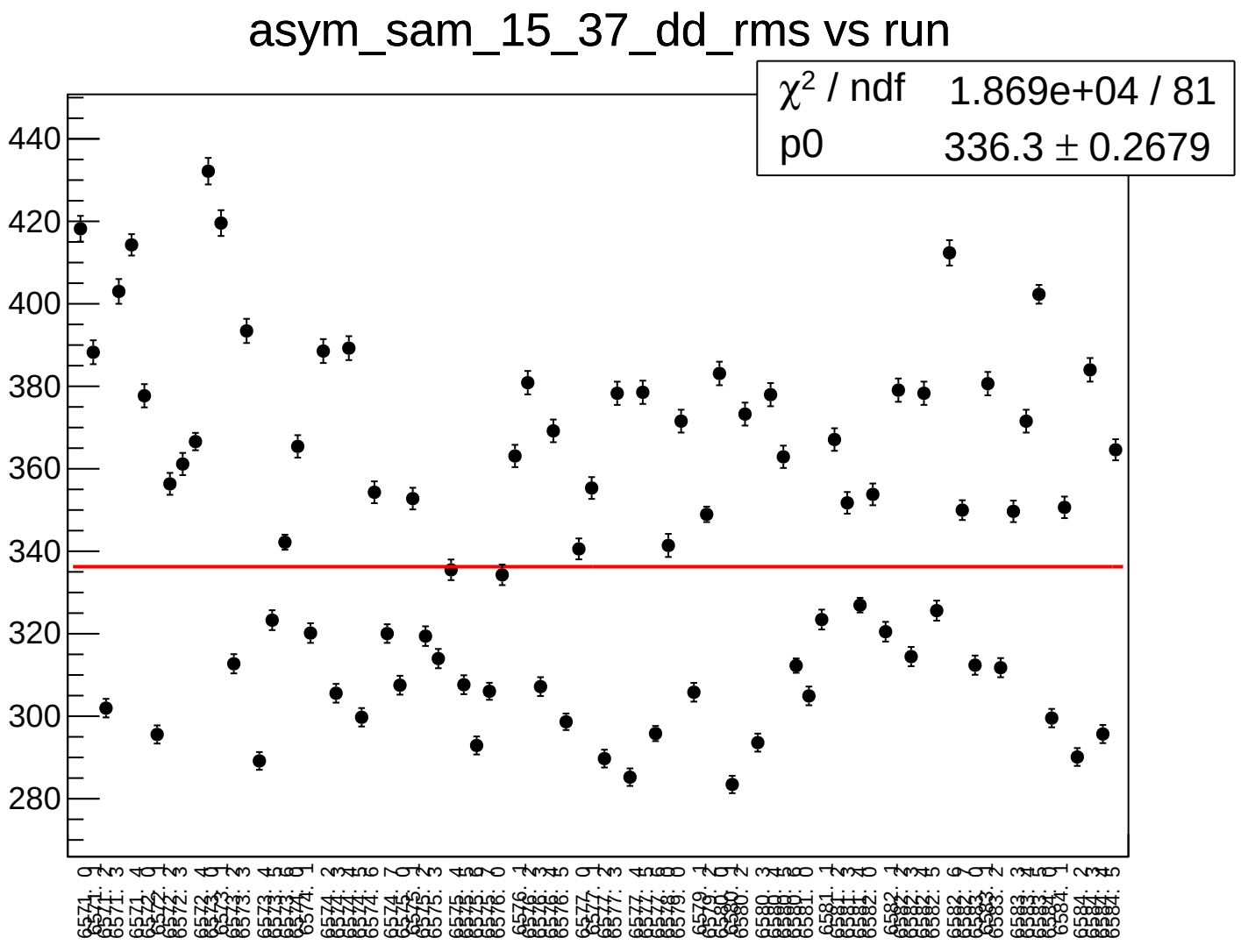

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 86.89 / 81
p0 893.3 ± 375.8
pull
Entries 82
Mean 645.2
Std Dev 603.9

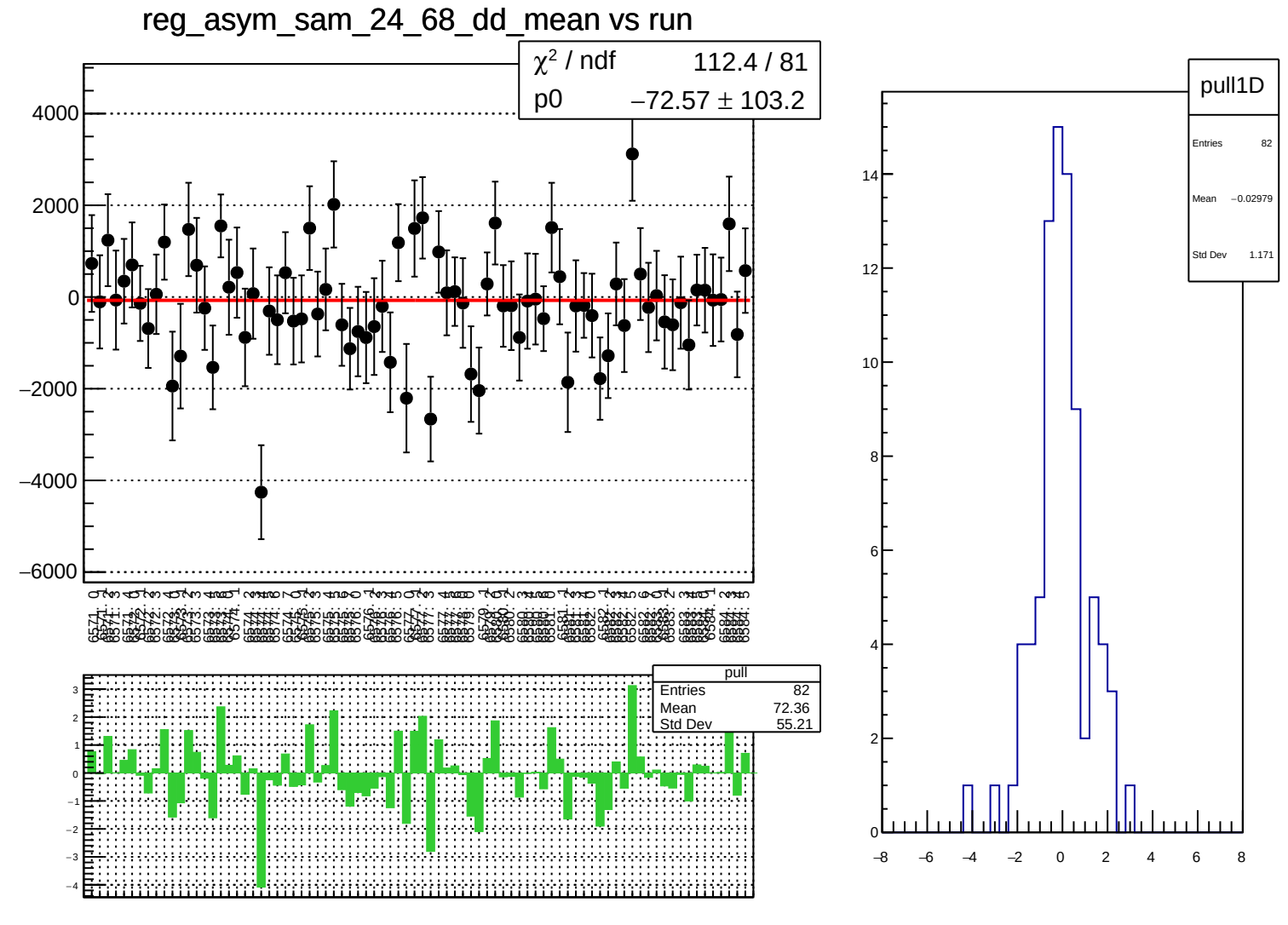

pull1D
Entries 82
Mean 0.005427
Std Dev 1.029

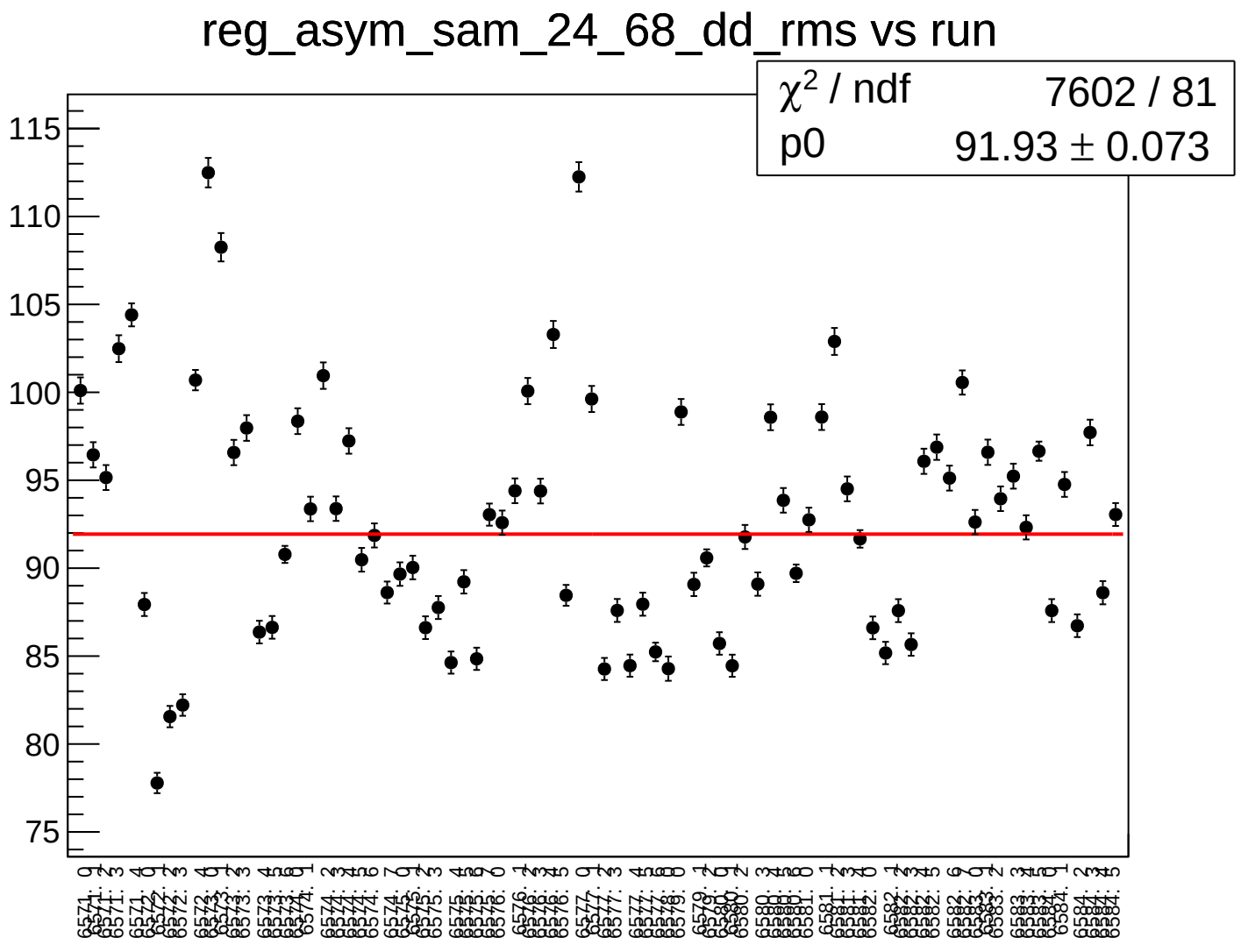

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 1.874e+04 / 81
p0 333.5 ± 0.2658
440
420
400
380
360
340
320
300
280

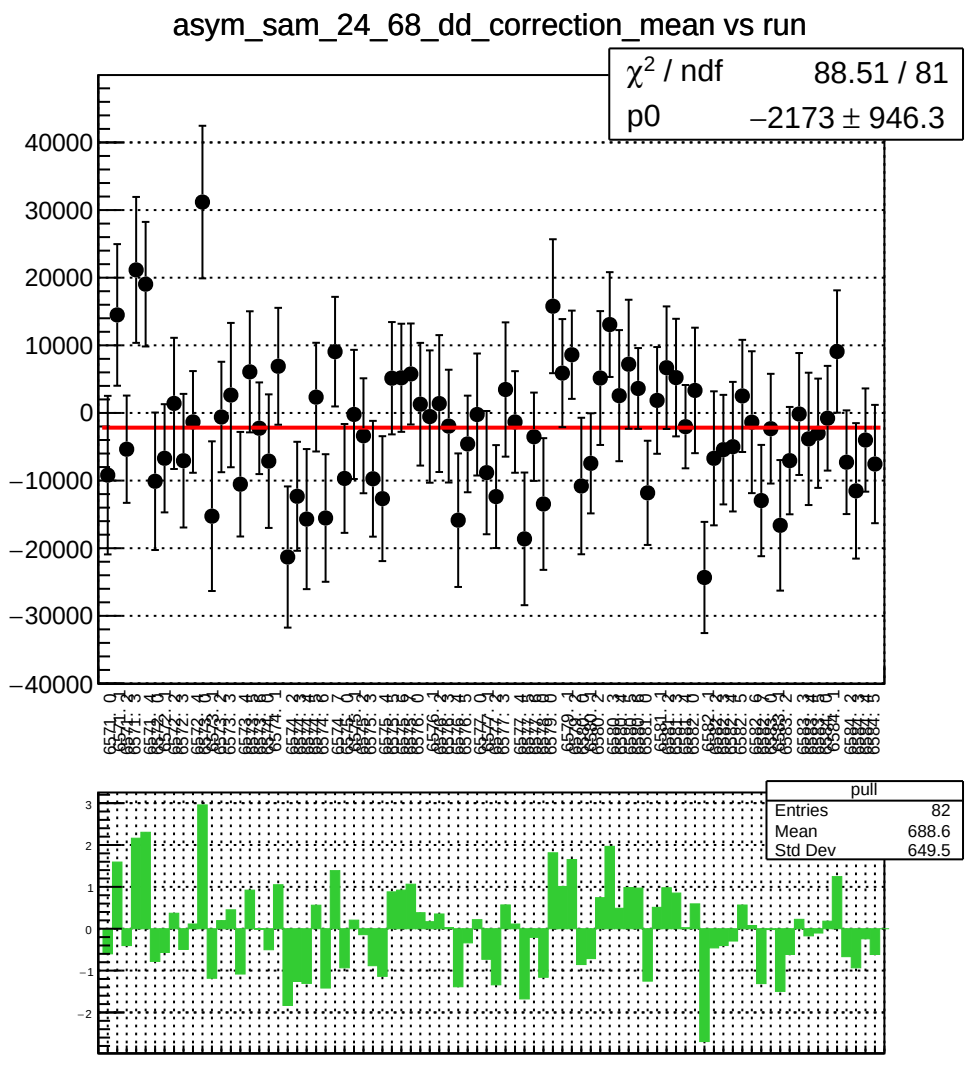

asym_sam_15_37_dd_mean vs run
χ² / ndf 86.75 / 81
p0 −917.8 ± 378.9
pull
Entries 82
Mean 753.9
Std Dev 712.9

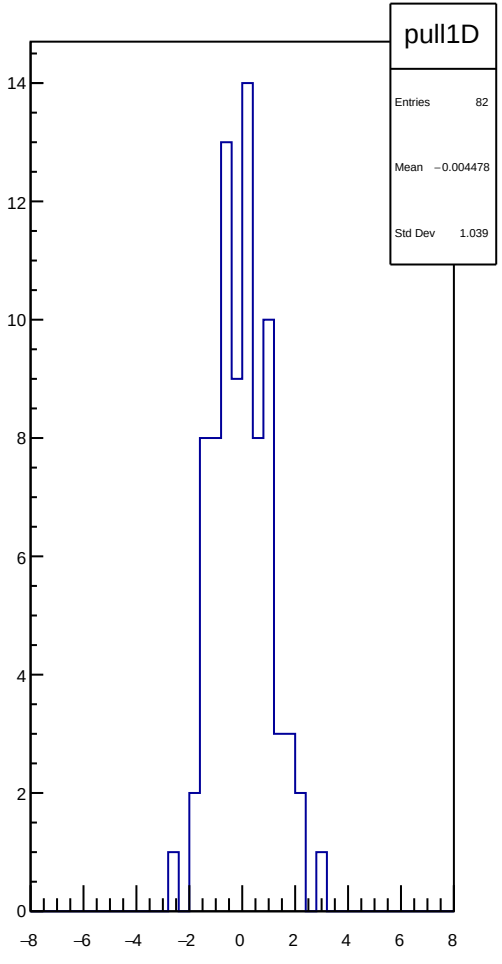

pull1D
Entries 82
Mean −0.003726
Std Dev 1.029

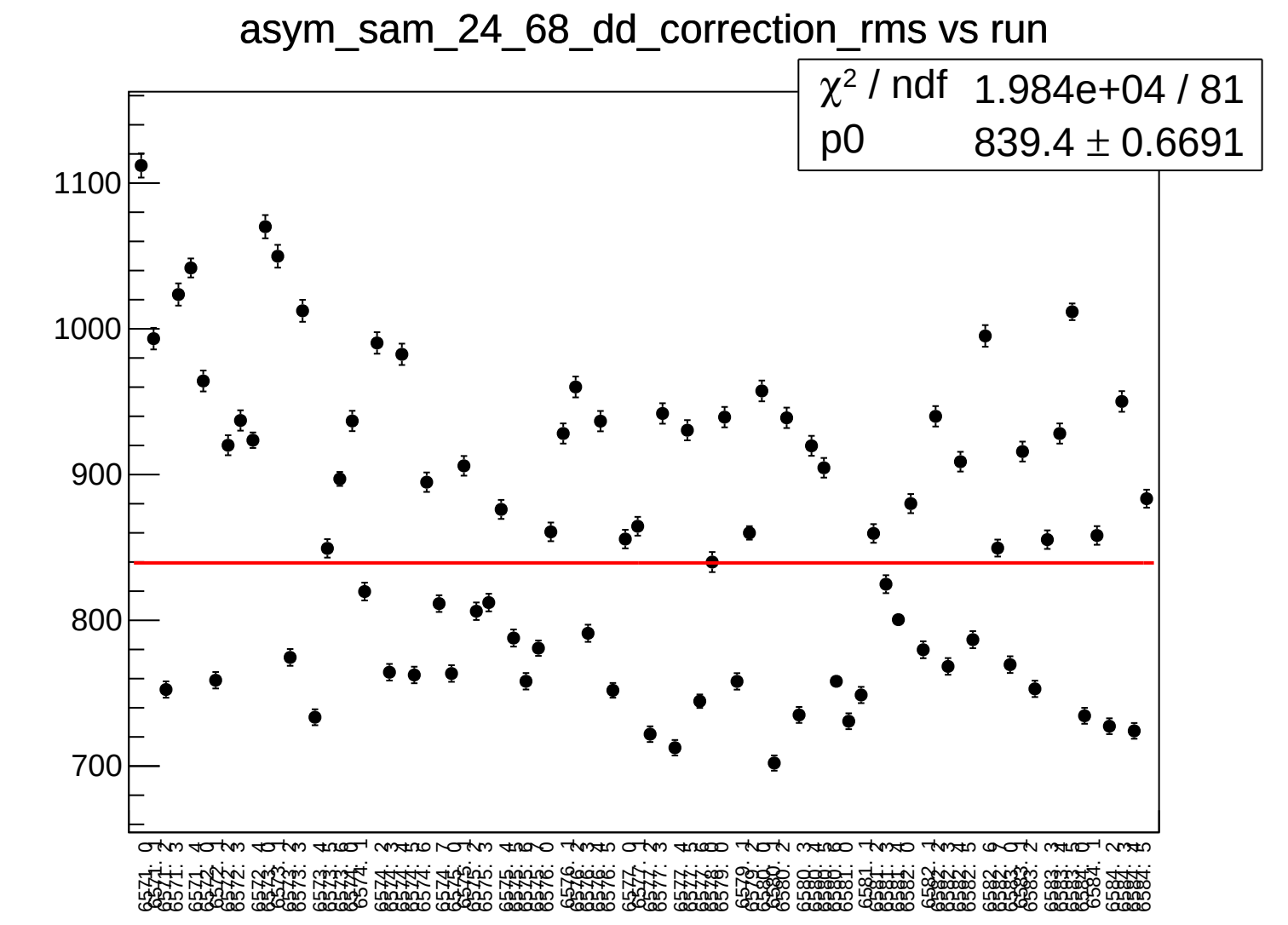

asym_sam_15_37_dd_rms vs run
χ² / ndf 1.869e+04 / 81
p0 336.3 ± 0.2679
440
420
400
380
360
340
320
300
280

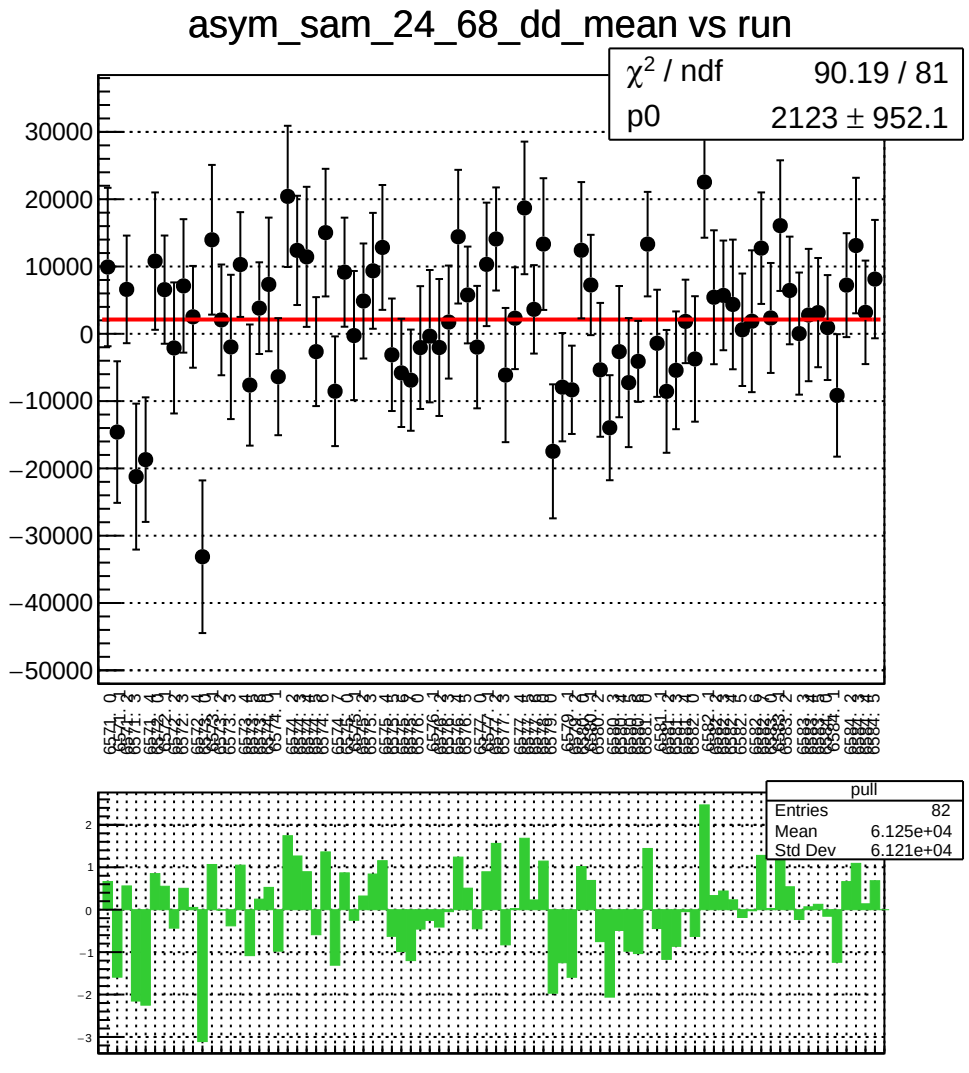

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 112.4 / 81
p0 −72.57 ± 103.2
4000
2000
0
−2000
−4000
−6000
pull
Entries 82
Mean 72.36
Std Dev 55.21
pull1D
Entries 82
Mean −0.02979
Std Dev 1.171

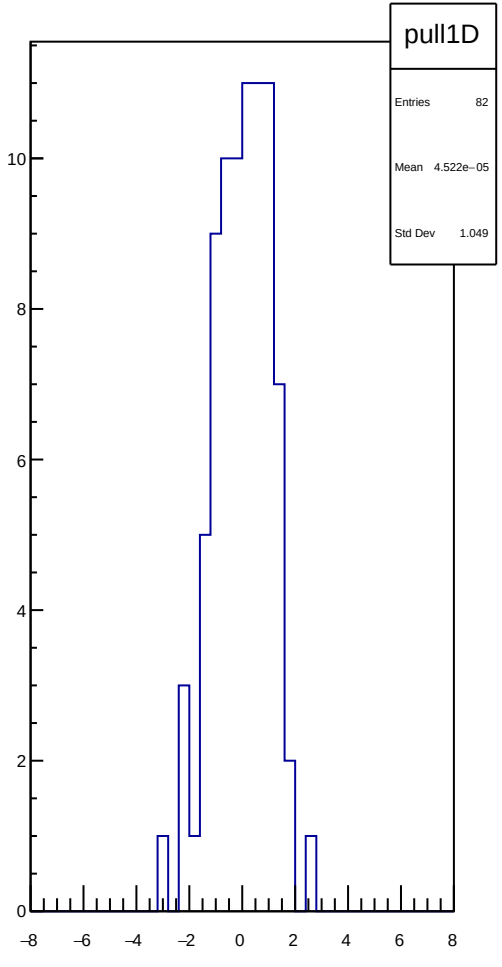

reg_asym_sam_24_68_dd_rms vs run
$\chi^2$ / ndf 7602 / 81
p0 91.93 ± 0.073
115
110
105
100
95
90
85
80
75

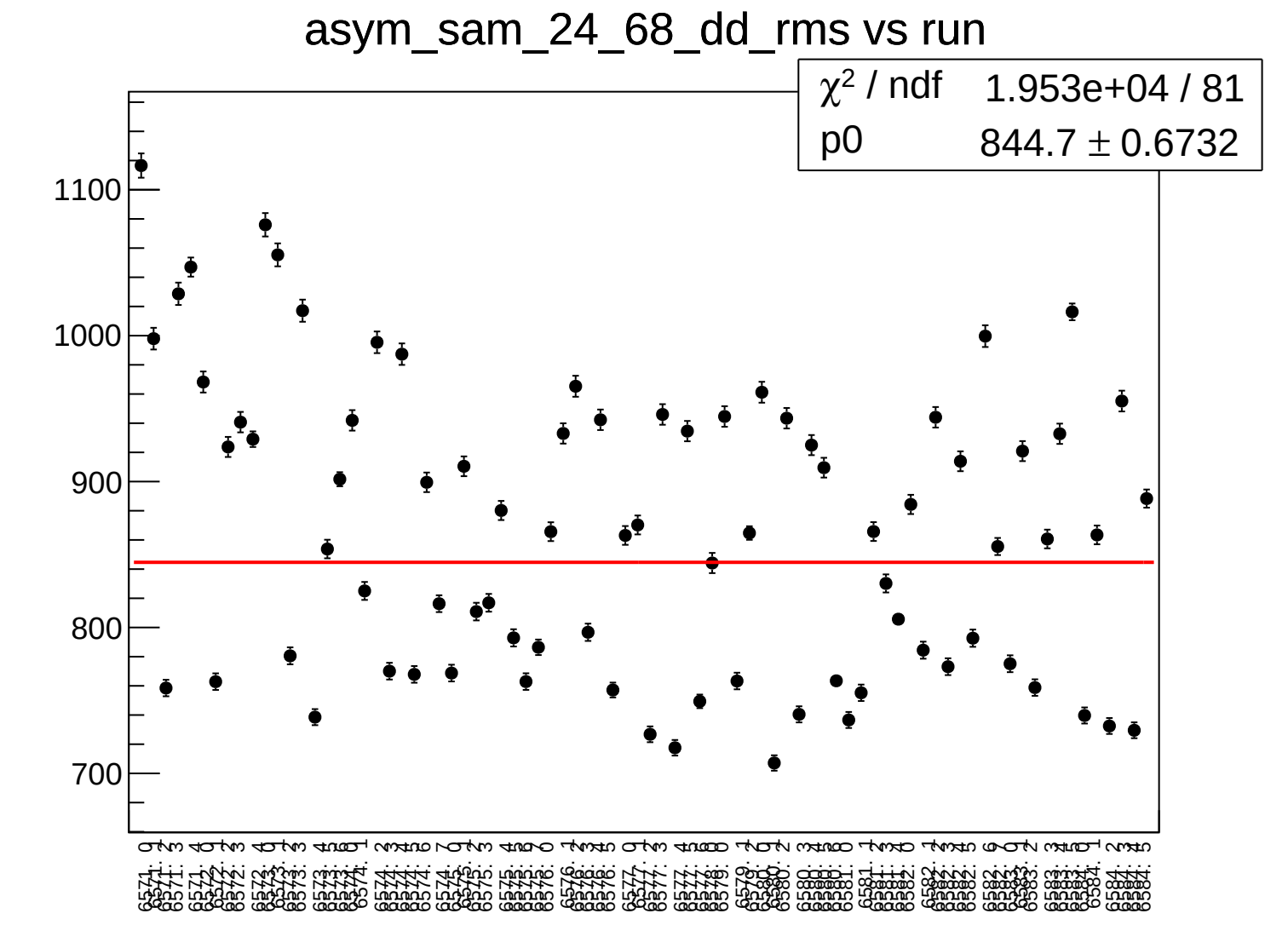

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 88.51 / 81
p0 −2173 ± 946.3
pull
Entries 82
Mean 688.6
Std Dev 649.5

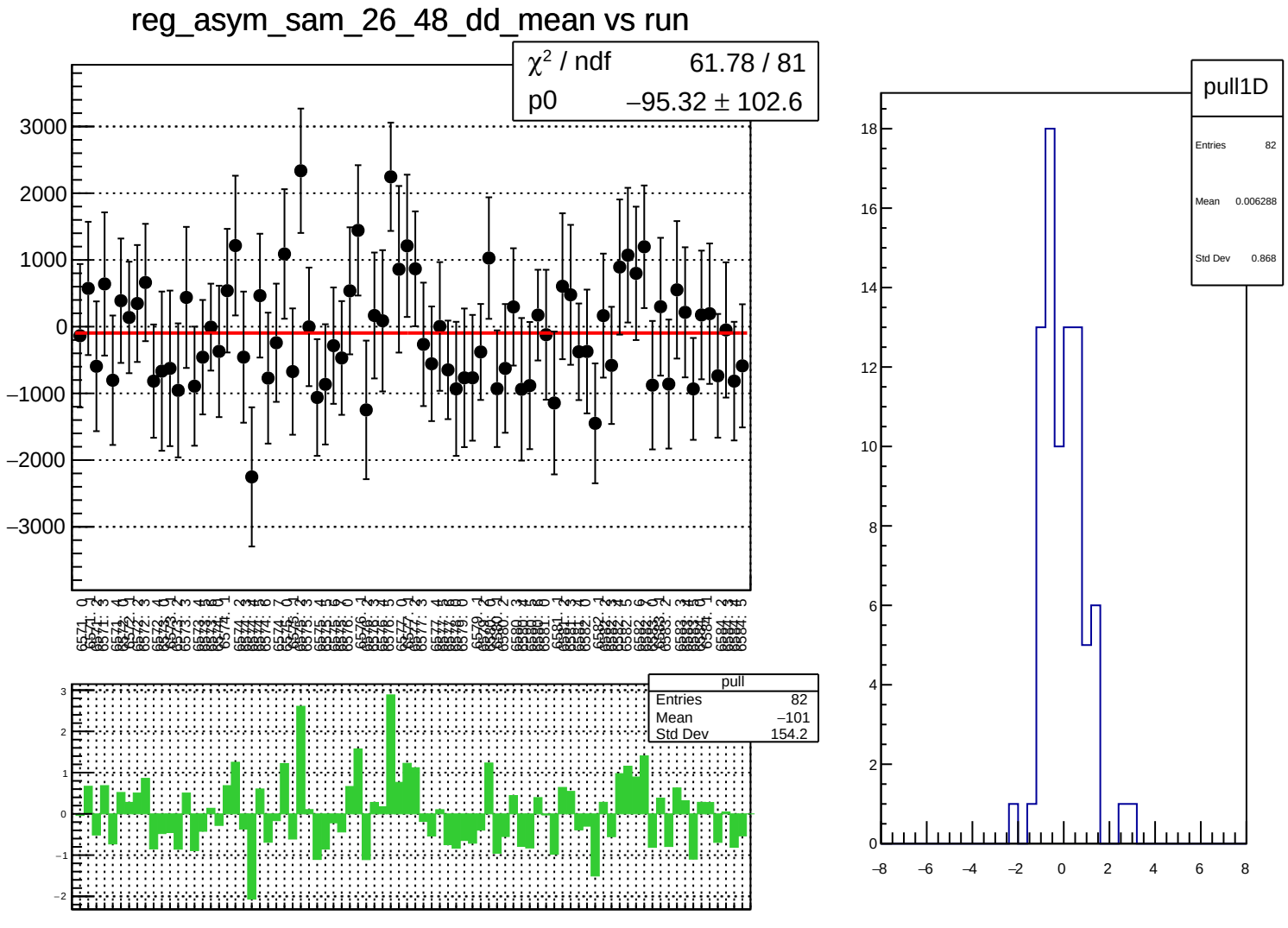

pull1D
Entries 82
Mean −0.004478
Std Dev 1.039

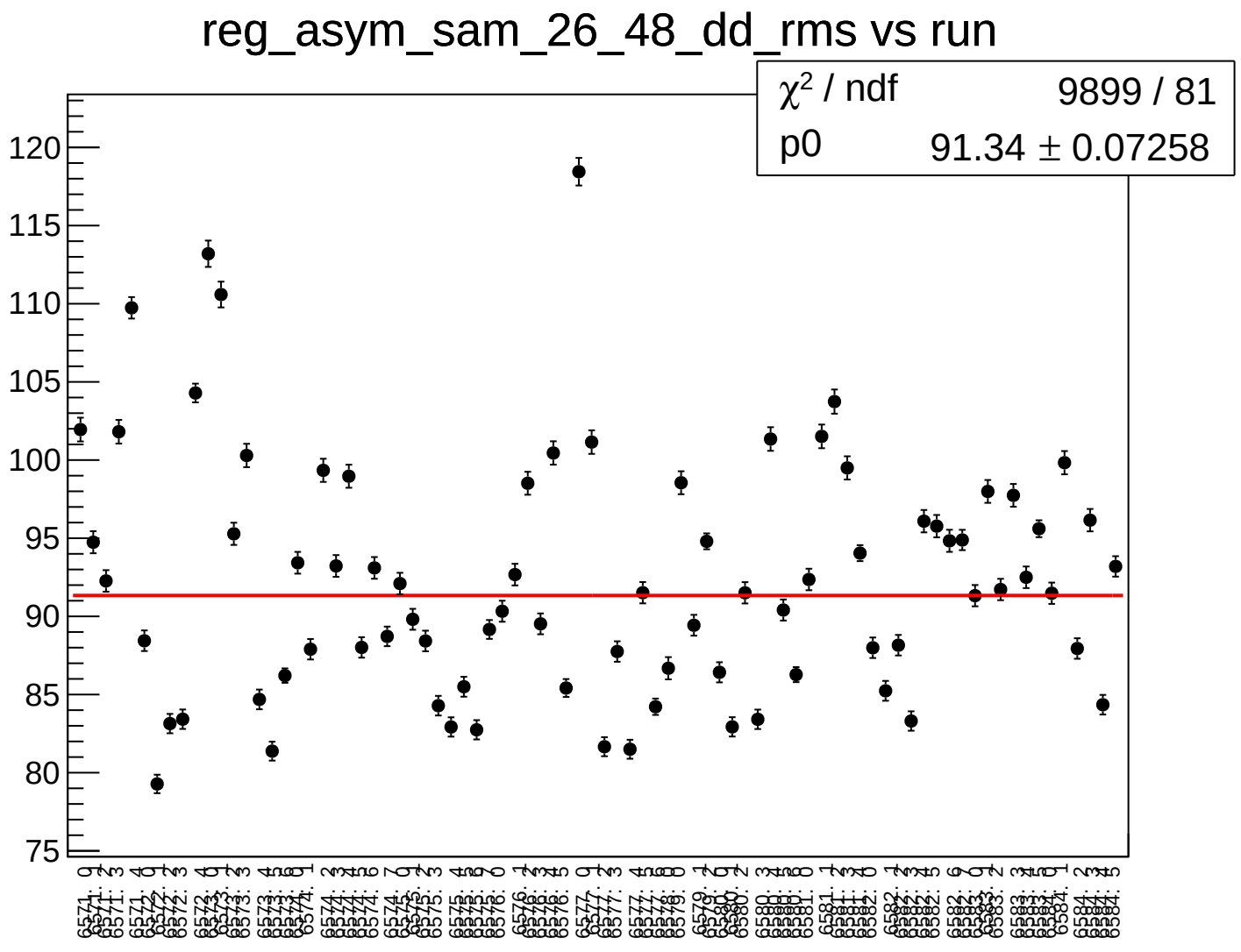

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 1.984e+04 / 81
p0 839.4 ± 0.6691
1100
1000
900
800
700

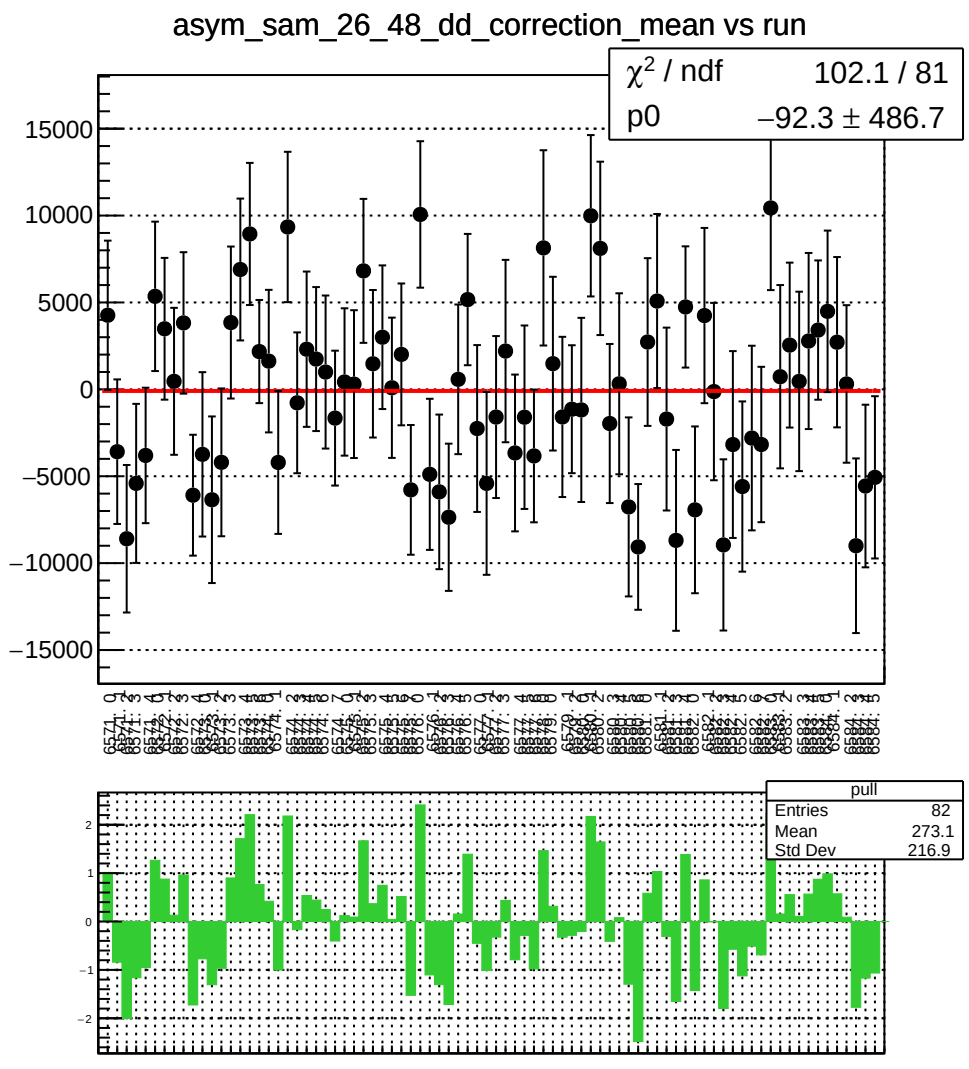

asym_sam_24_68_dd_mean vs run
χ² / ndf 90.19 / 81
p0 2123 ± 952.1
pull
Entries 82
Mean 6.125e+04
Std Dev 6.121e+04

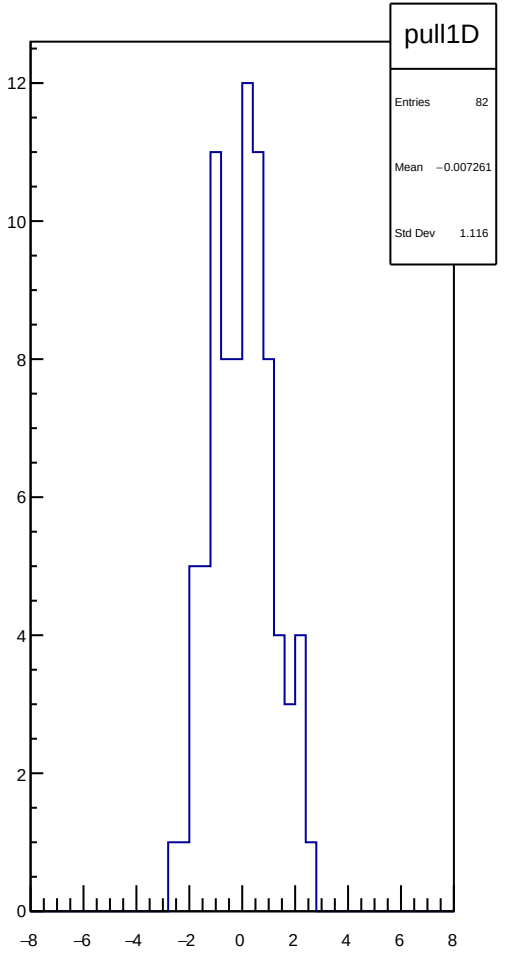

pull1D
Entries 82
Mean 4.522e−05
Std Dev 1.049

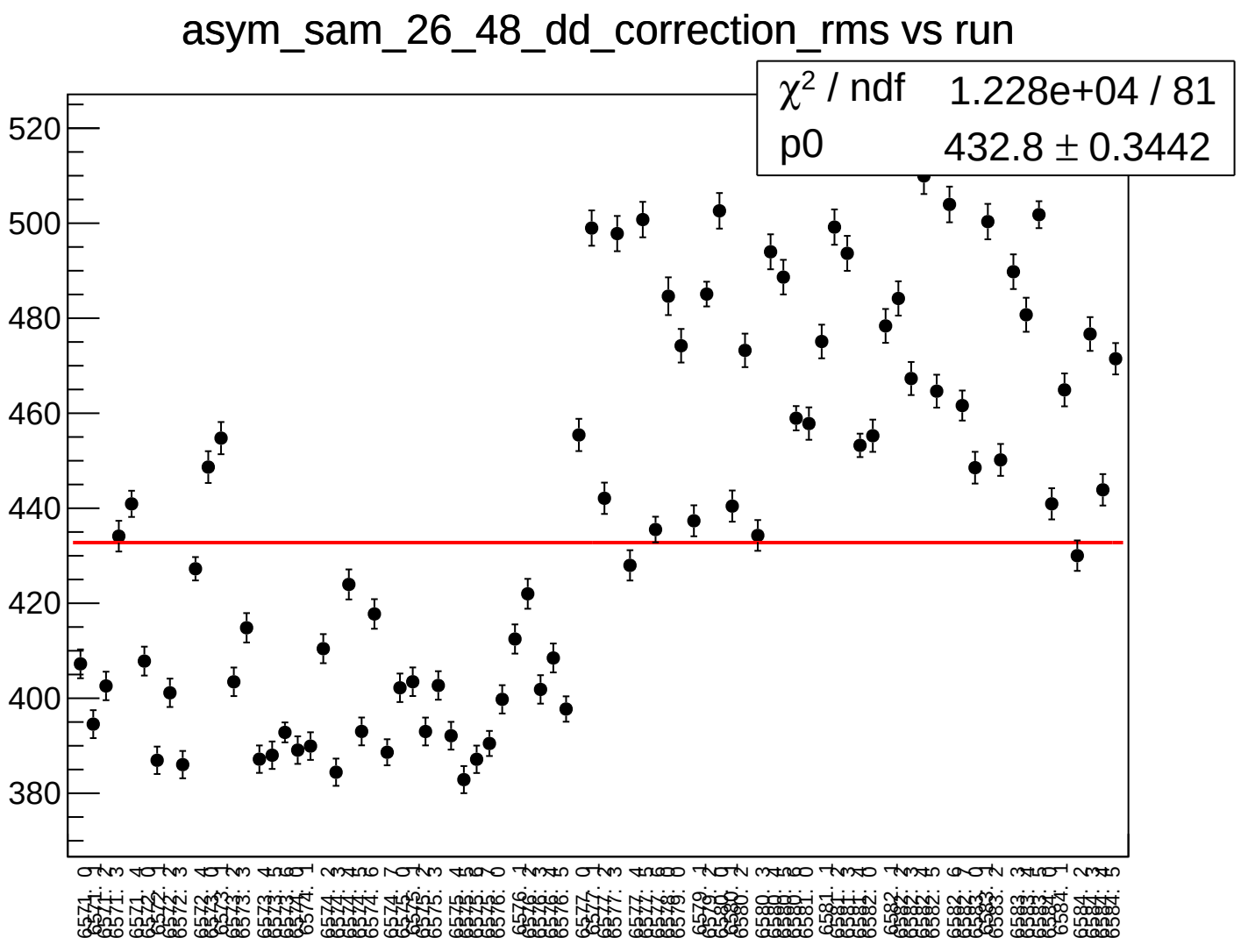

asym_sam_24_68_dd_rms vs run
χ² / ndf 1.953e+04 / 81
p0 844.7 ± 0.6732
1100
1000
900
800
700

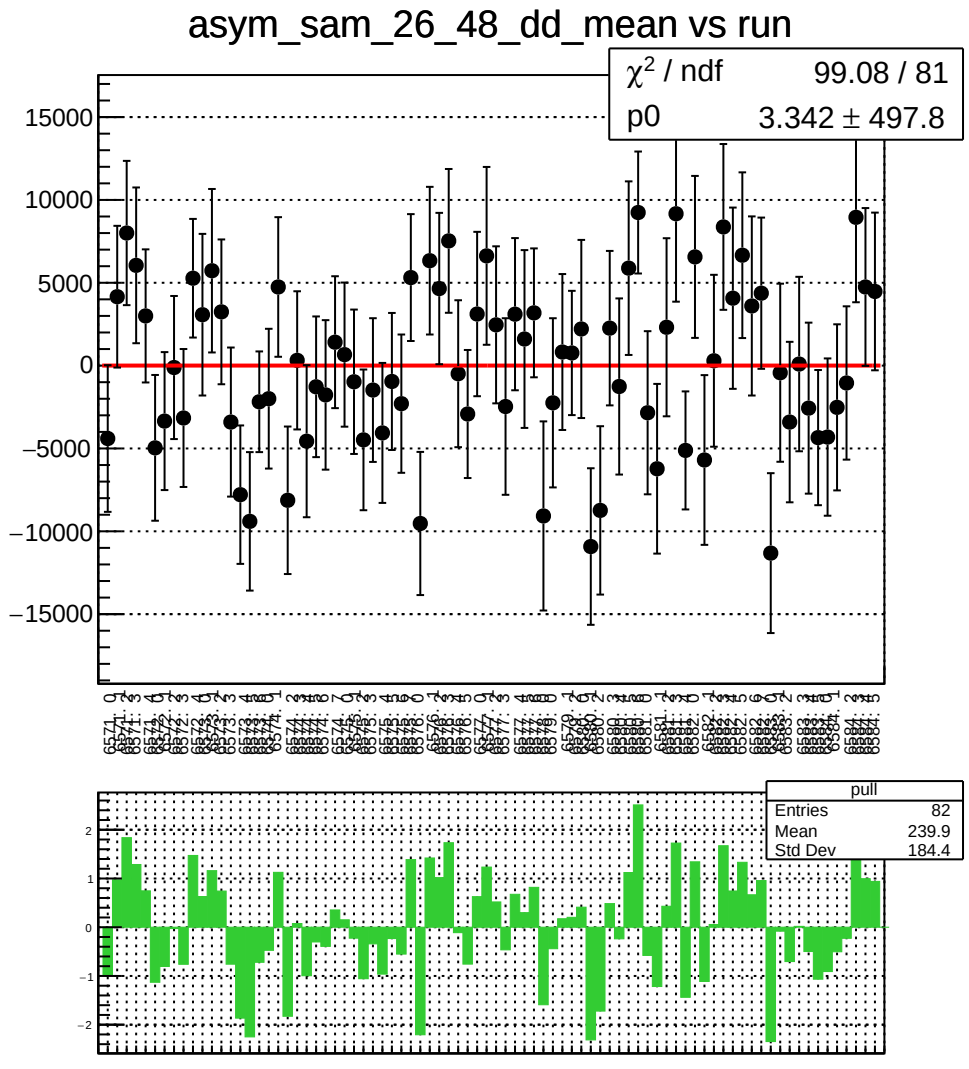

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 61.78 / 81
p0 −95.32 ± 102.6
pull
Entries 82
Mean −101
Std Dev 154.2
pull1D
Entries 82
Mean 0.006288
Std Dev 0.868

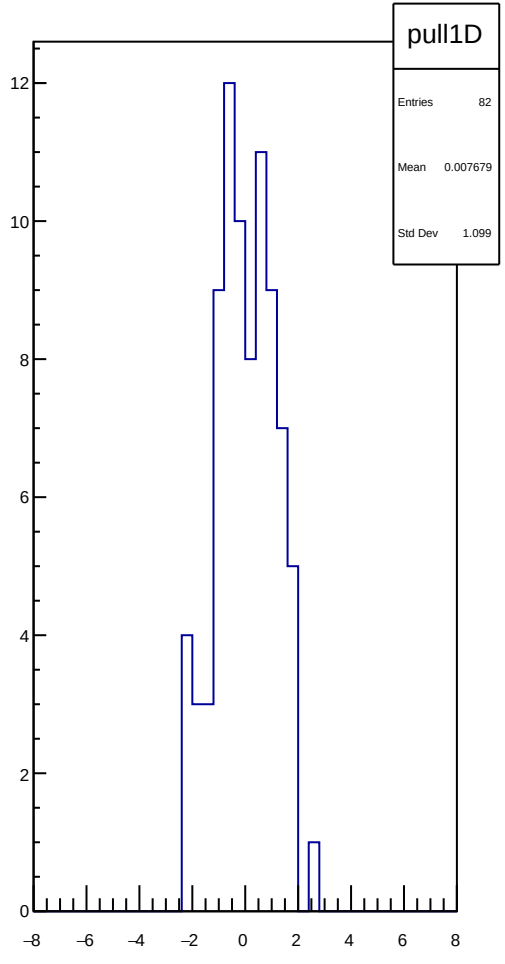

reg_asym_sam_26_48_dd_rms vs run
$\chi^2$ / ndf 9899 / 81
p0 91.34 ± 0.07258
120
115
110
105
100
95
90
85
80
75

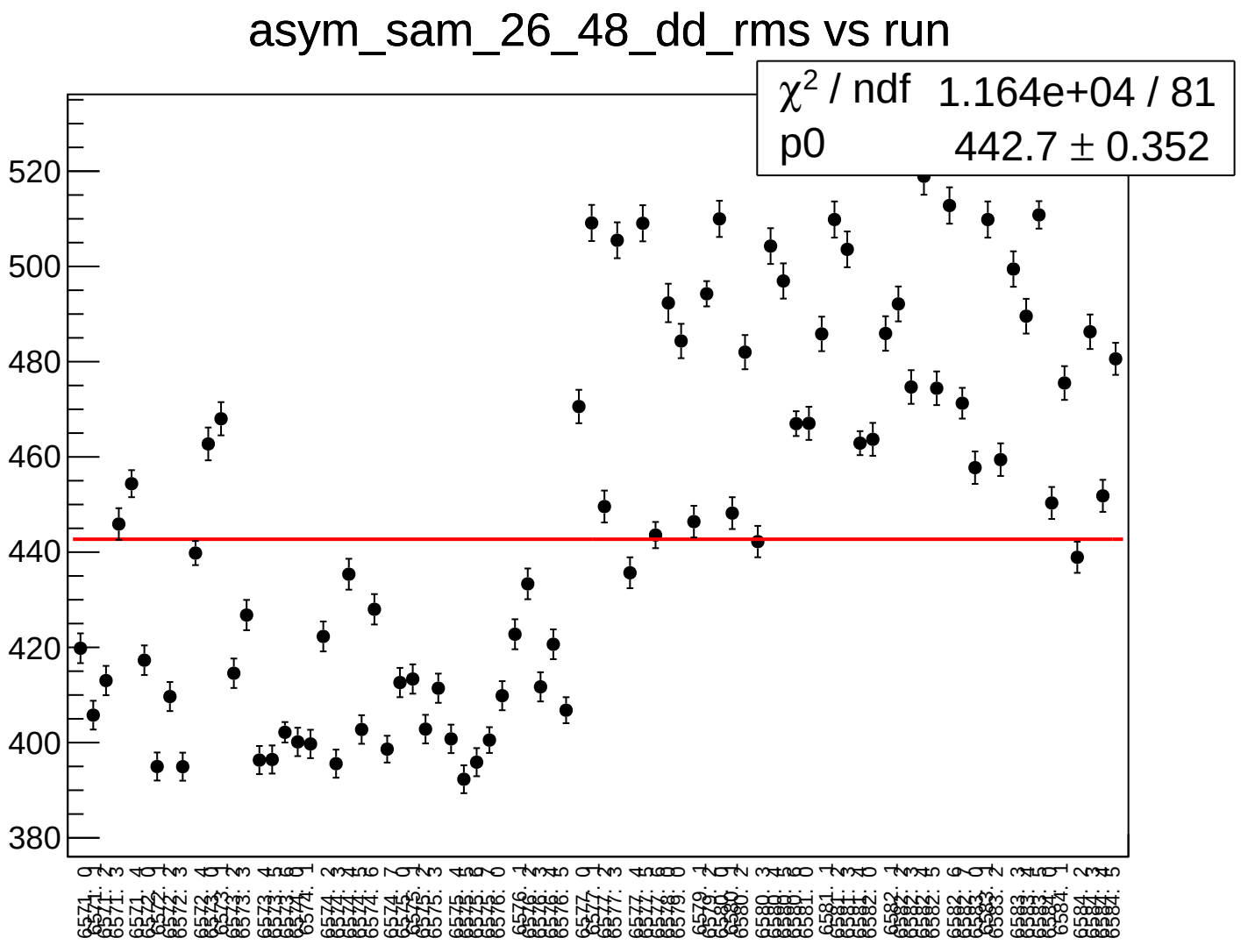

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 102.1 / 81
p0 −92.3 ± 486.7
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 273.1
Std Dev 216.9
2
1
0
−1
−2

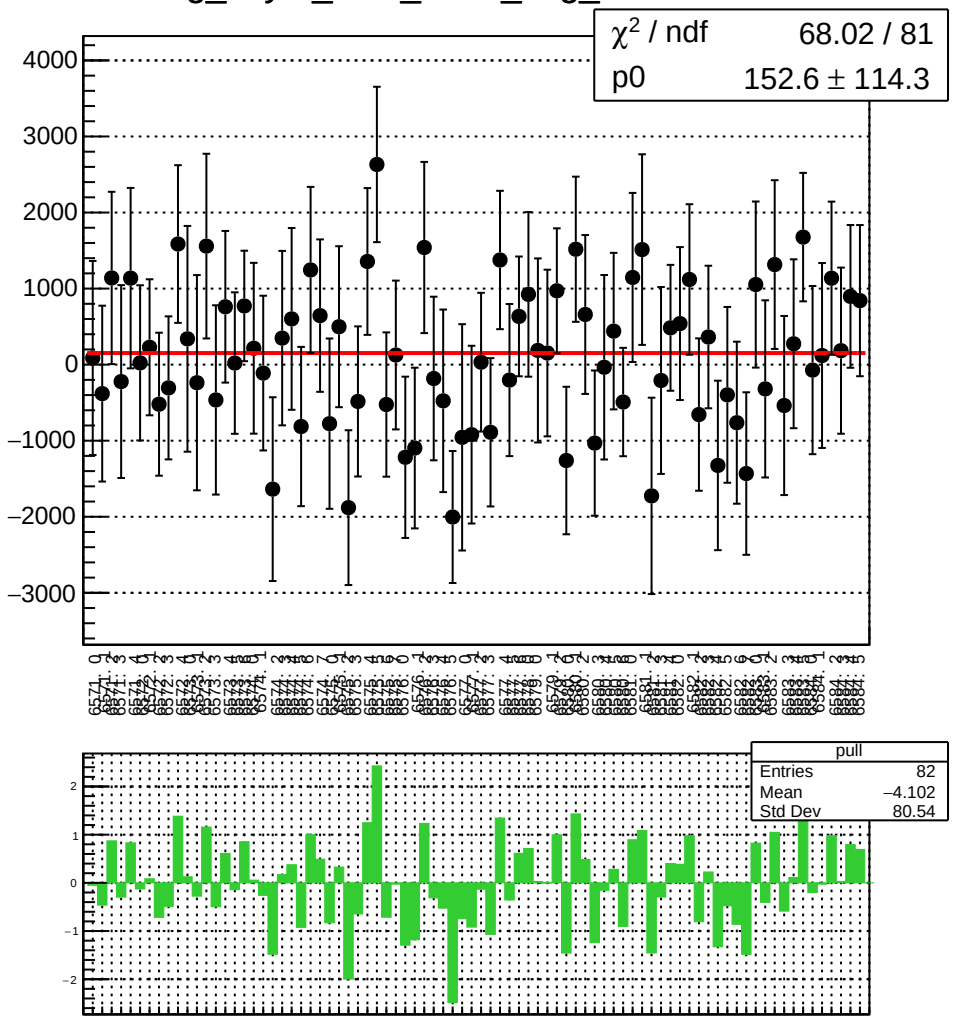

pull1D
Entries 82
Mean −0.007261
Std Dev 1.116
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

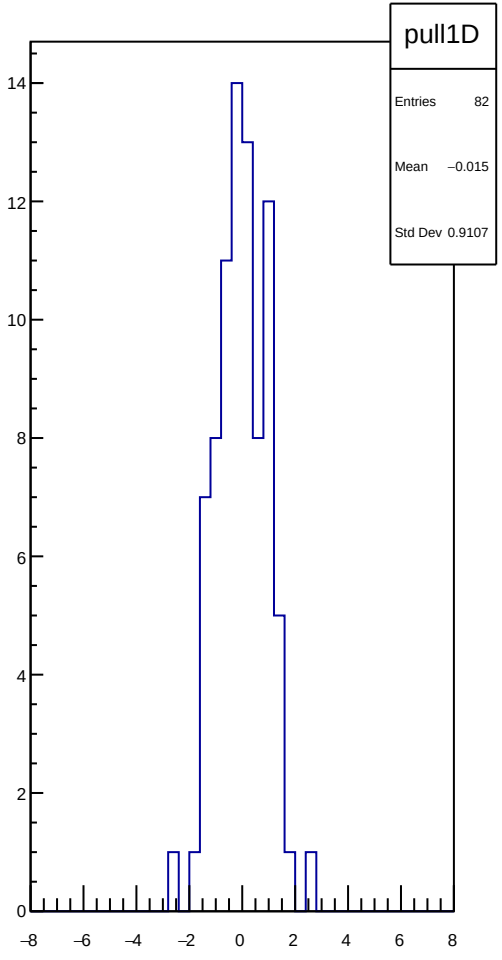

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 1.228e+04 / 81
p0 432.8 ± 0.3442
520
500
480
460
440
420
400
380

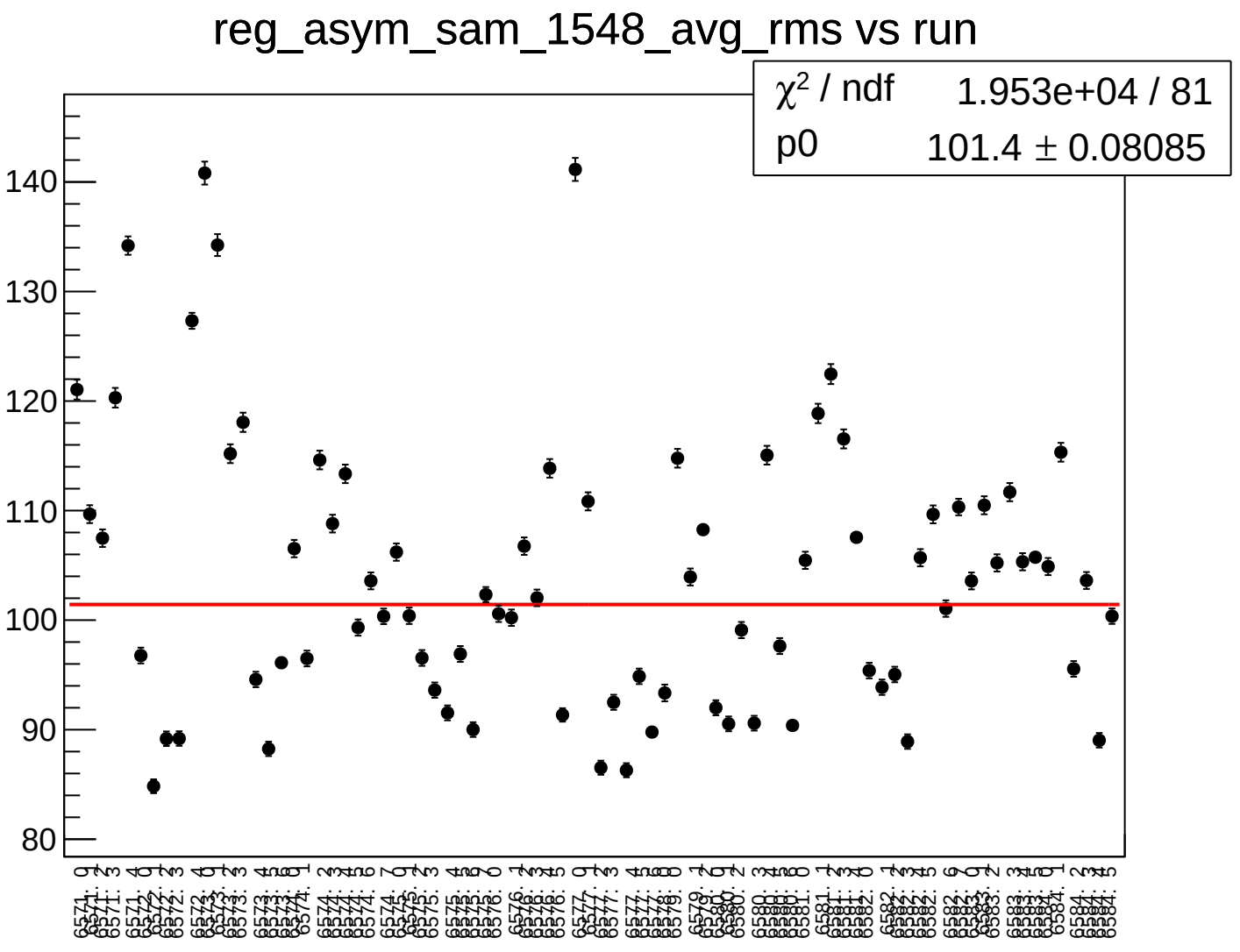

asym_sam_26_48_dd_mean vs run
χ² / ndf 99.08 / 81
p0 3.342 ± 497.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 239.9
Std Dev 184.4
2
1
0
−1
−2

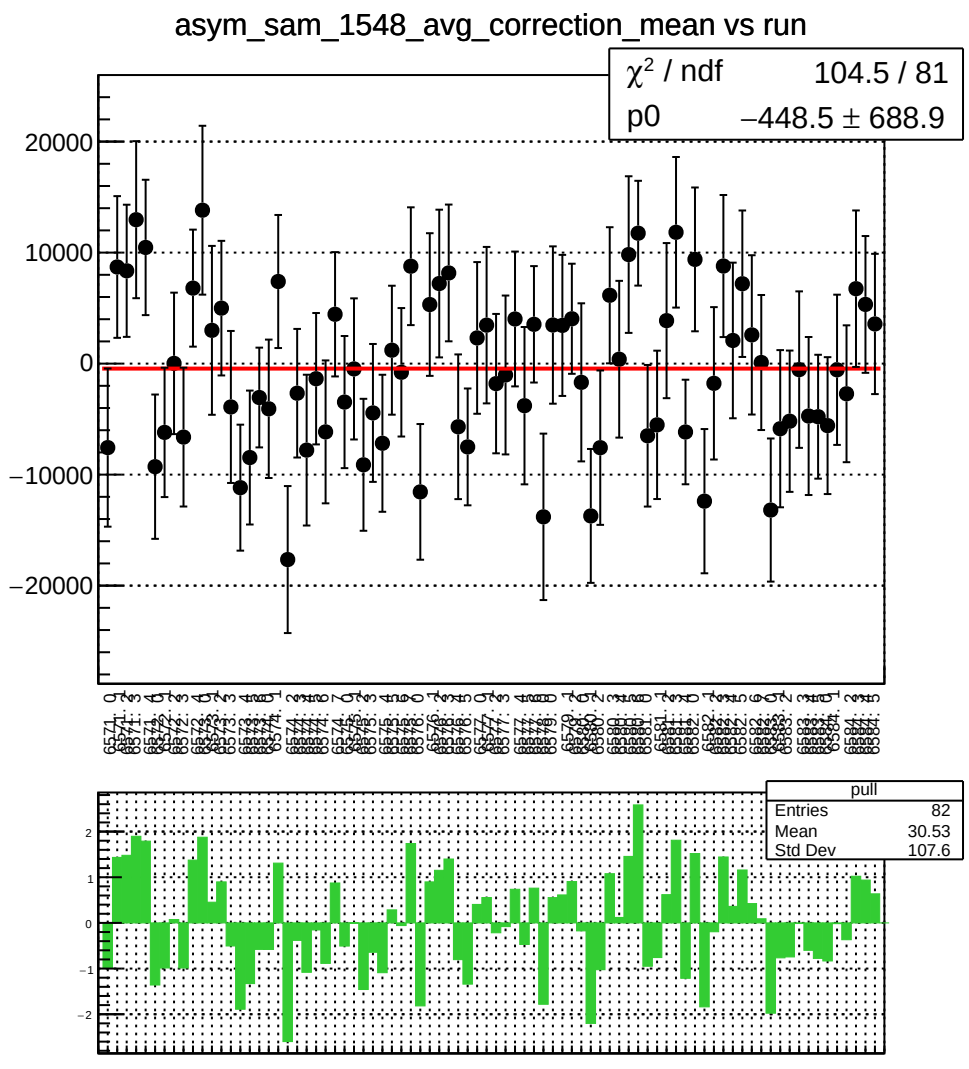

pull1D
Entries 82
Mean 0.007679
Std Dev 1.099
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

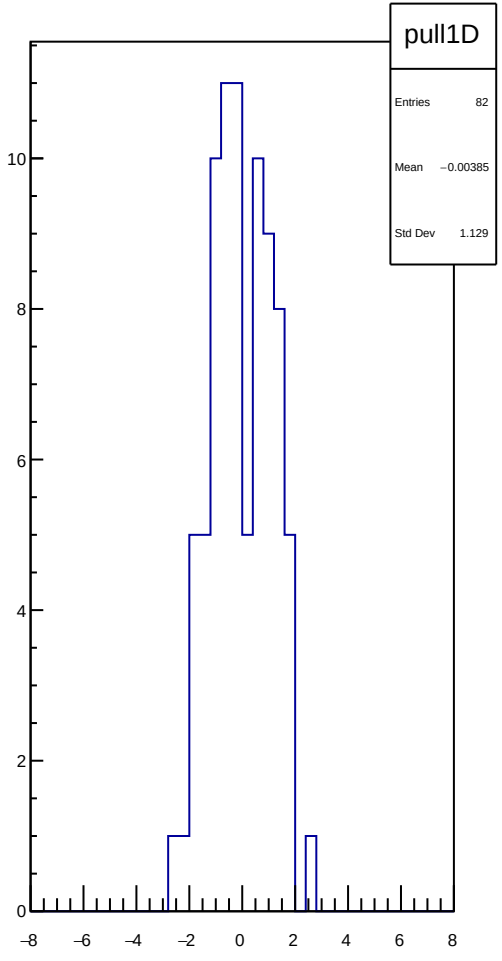

asym_sam_26_48_dd_rms vs run
χ² / ndf 1.164e+04 / 81
p0 442.7 ± 0.352
520
500
480
460
440
420
400
380

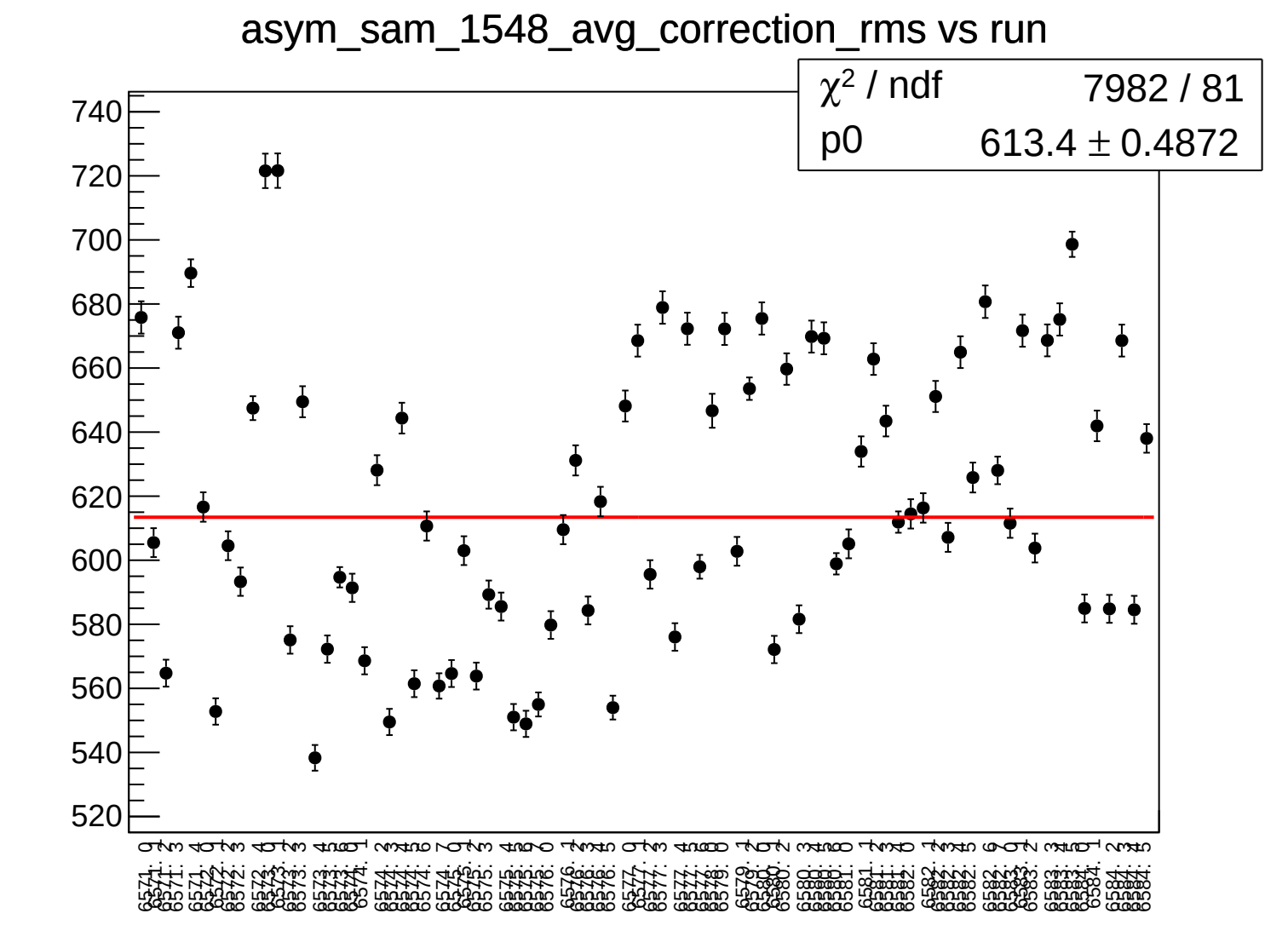

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 68.02 / 81
p0 152.6 ± 114.3
pull
Entries 82
Mean −4.102
Std Dev 80.54

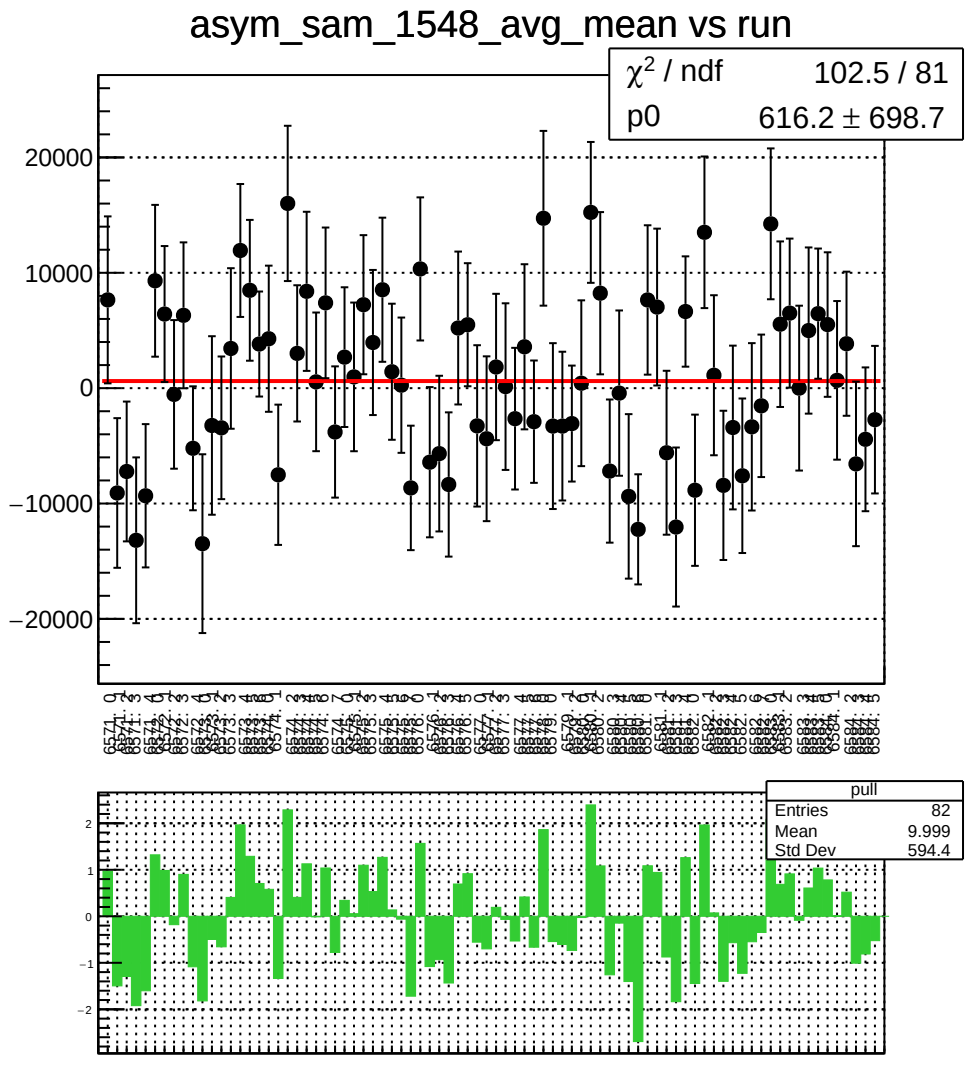

pull1D
Entries 82
Mean −0.015
Std Dev 0.9107

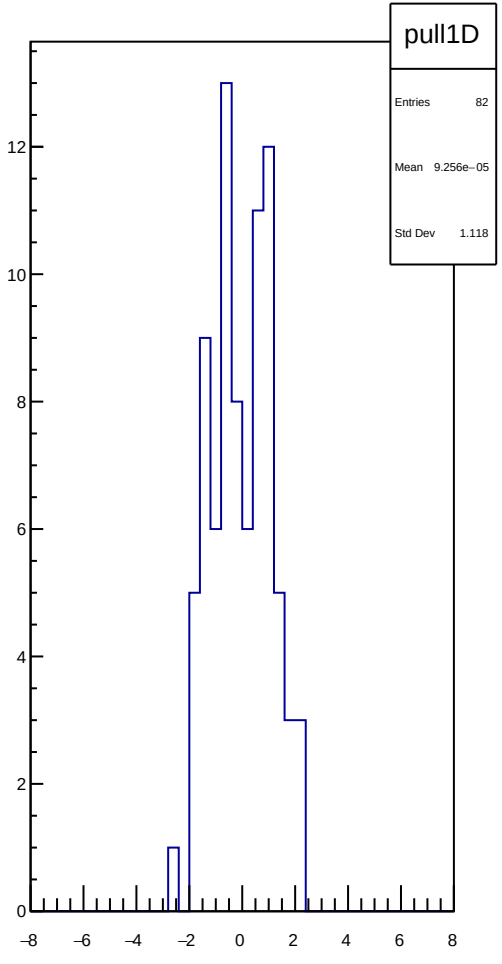

reg_asym_sam_1548_avg_rms vs run
χ² / ndf 1.953e+04 / 81
p0 101.4 ± 0.08085
140
130
120
110
100
90
80

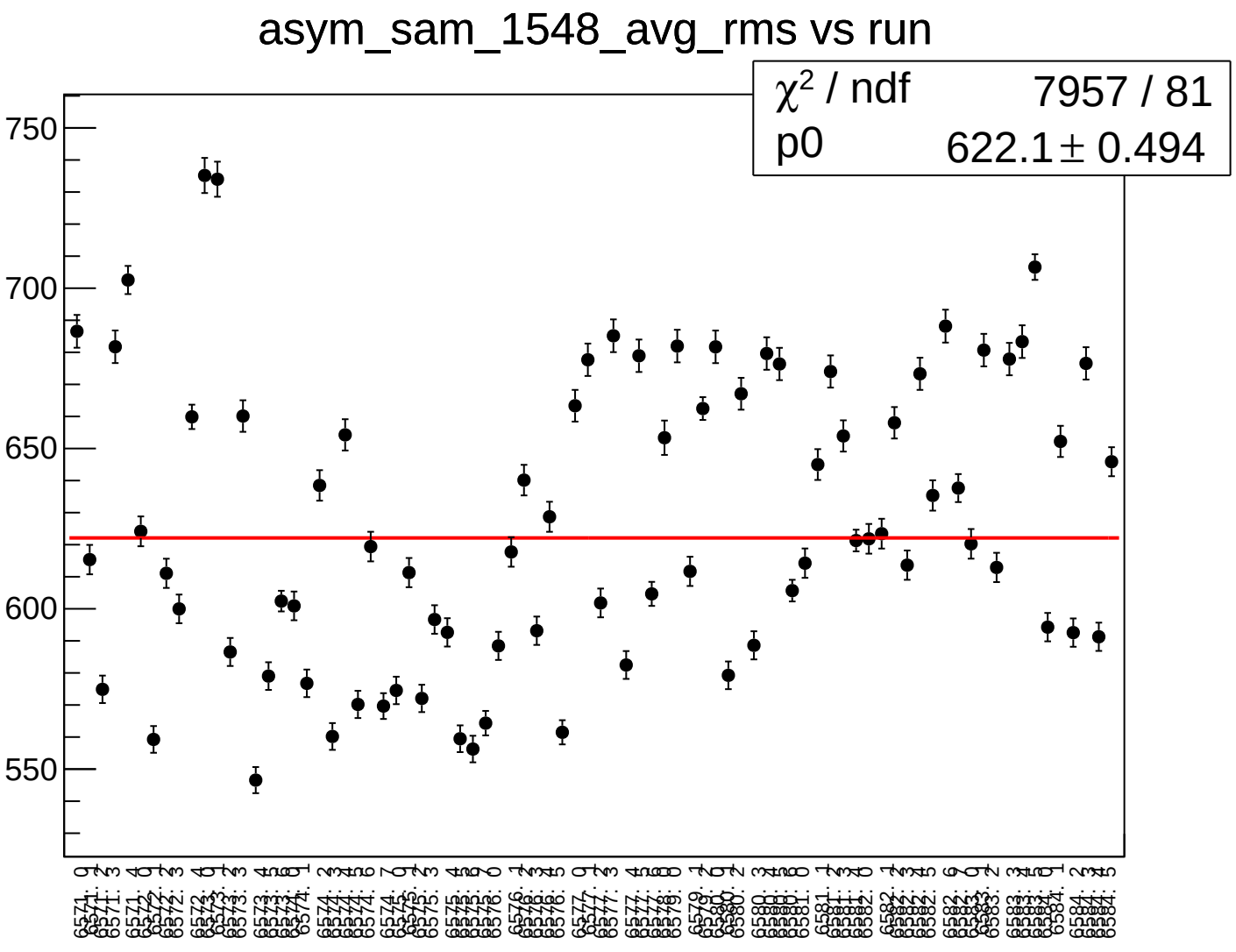

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 104.5 / 81
p0 −448.5 ± 688.9
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 30.53
Std Dev 107.6
2
1
0
−1
−2

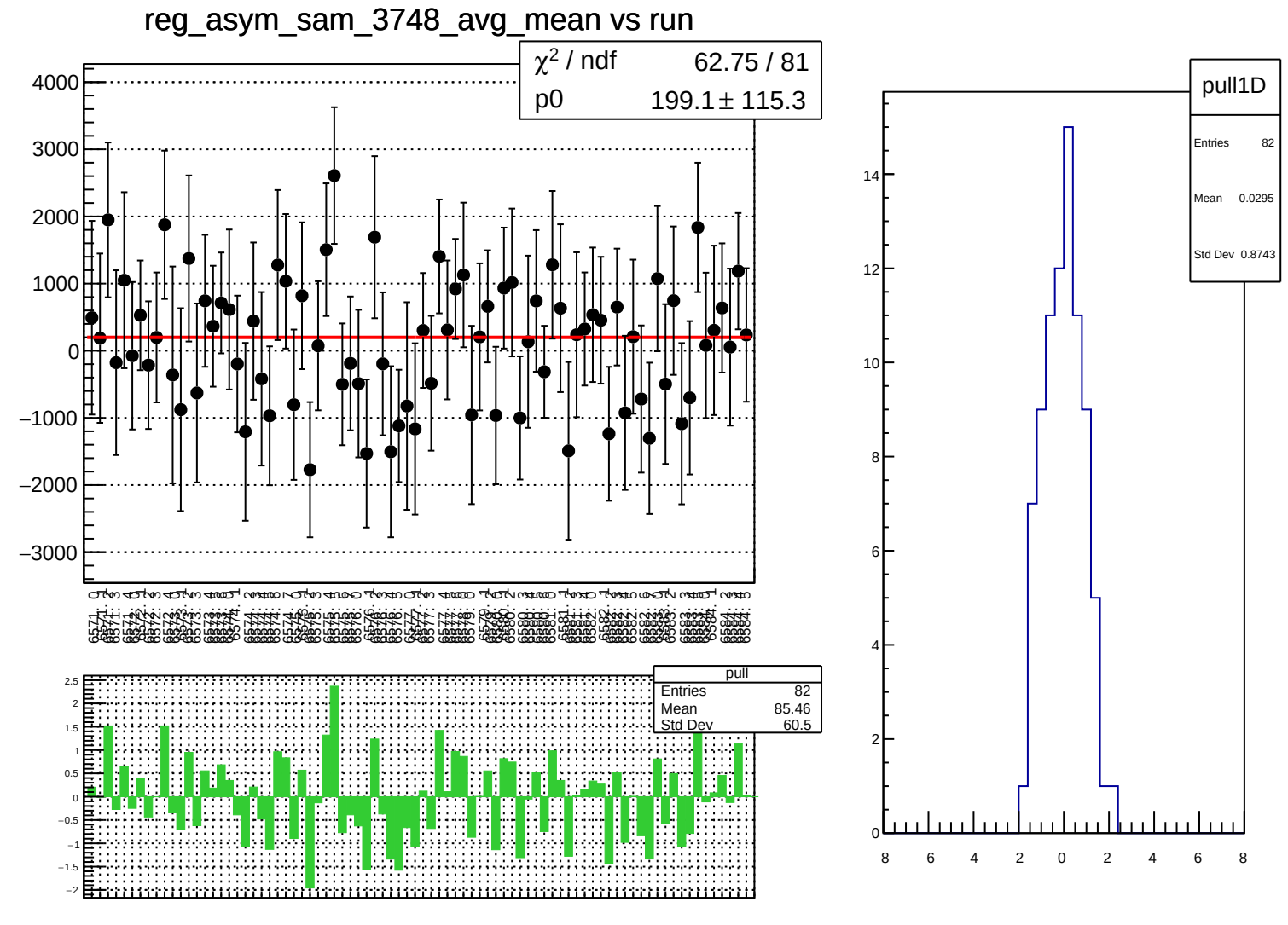

pull1D
Entries 82
Mean −0.00385
Std Dev 1.129
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

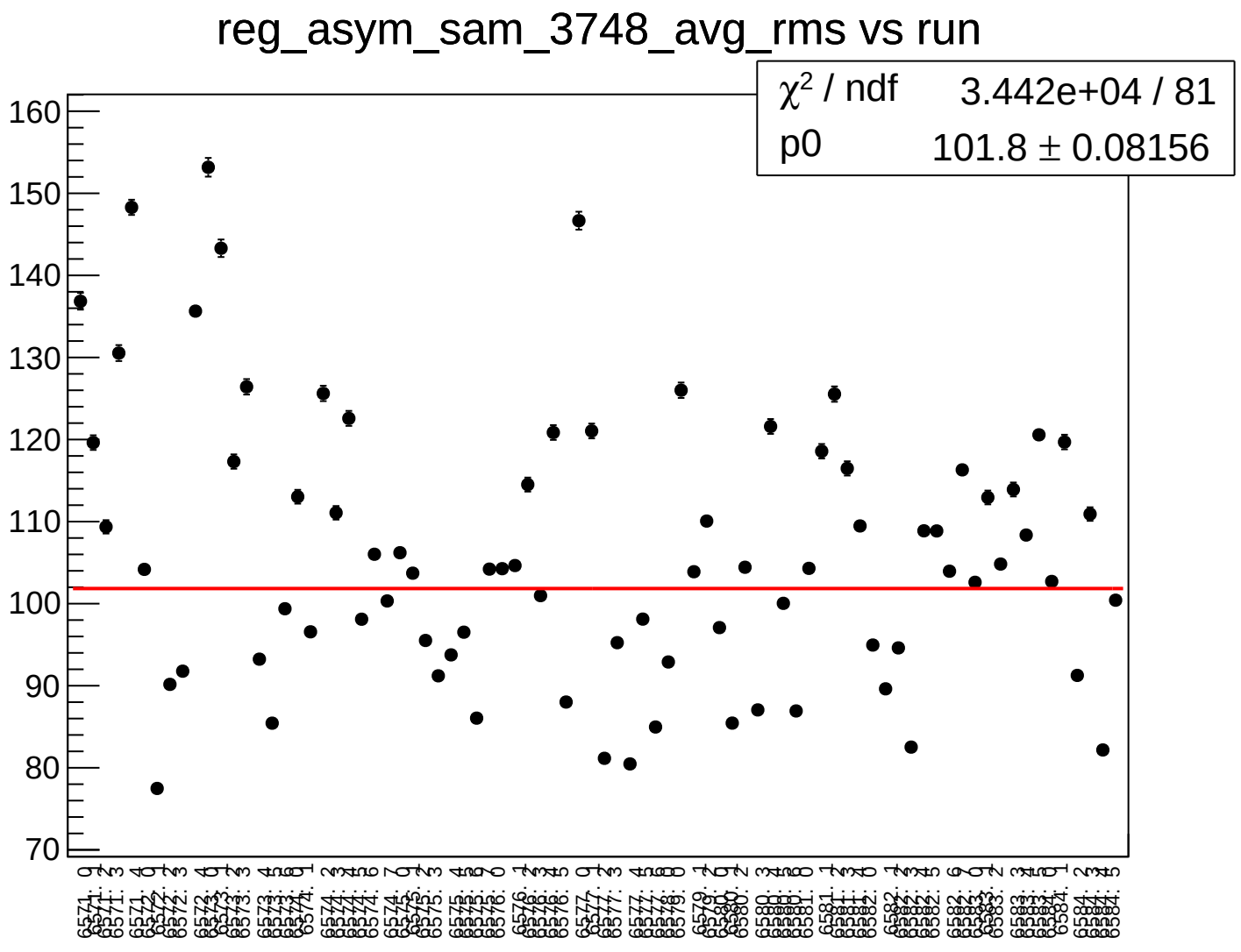

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 7982 / 81
p0 613.4 ± 0.4872
740
720
700
680
660
640
620
600
580
560
540
520

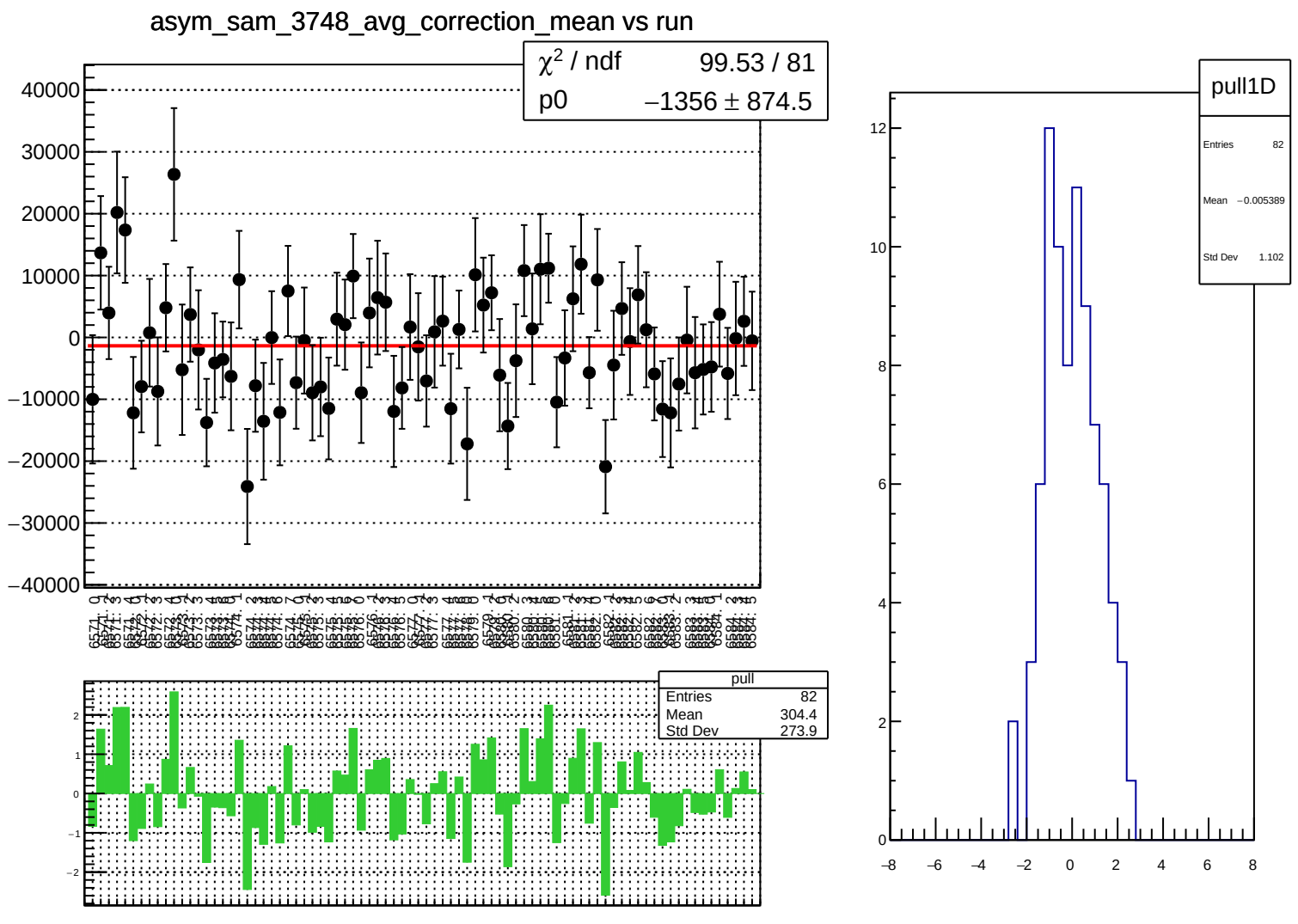

asym_sam_1548_avg_mean vs run
χ² / ndf 102.5 / 81
p0 616.2 ± 698.7
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 9.999
Std Dev 594.4
2
1
0
−1
−2

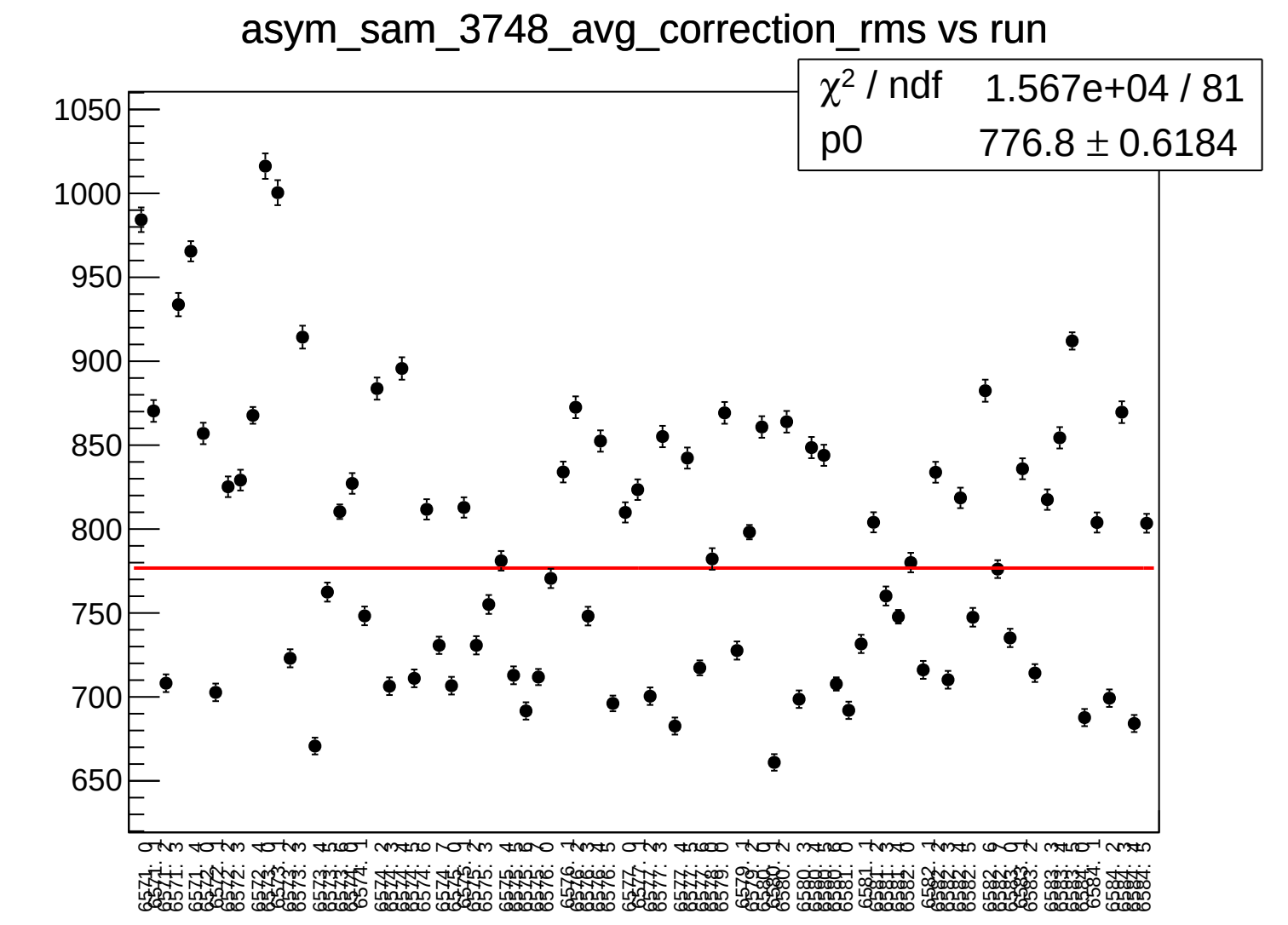

pull1D
Entries 82
Mean 9.256e−05
Std Dev 1.118
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

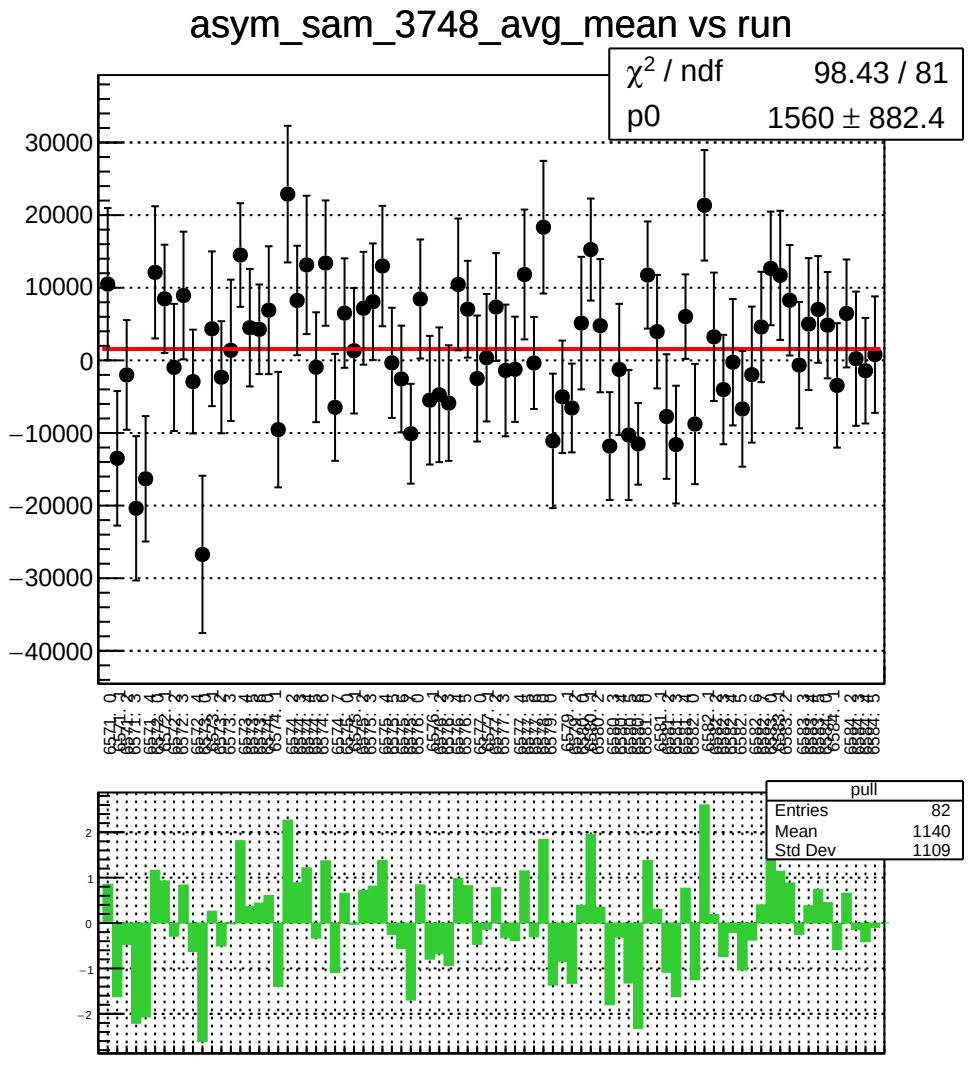

asym_sam_1548_avg_rms vs run
χ² / ndf 7957 / 81
p0 622.1 ± 0.494
750
700
650
600
550

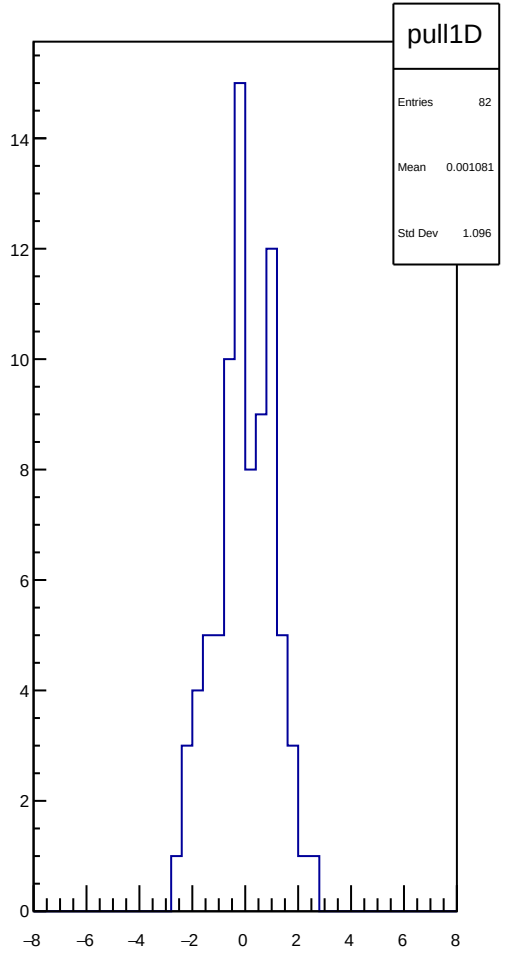

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 62.75 / 81
p0 199.1 ± 115.3
pull
Entries 82
Mean 85.46
Std Dev 60.5
pull1D
Entries 82
Mean −0.0295
Std Dev 0.8743

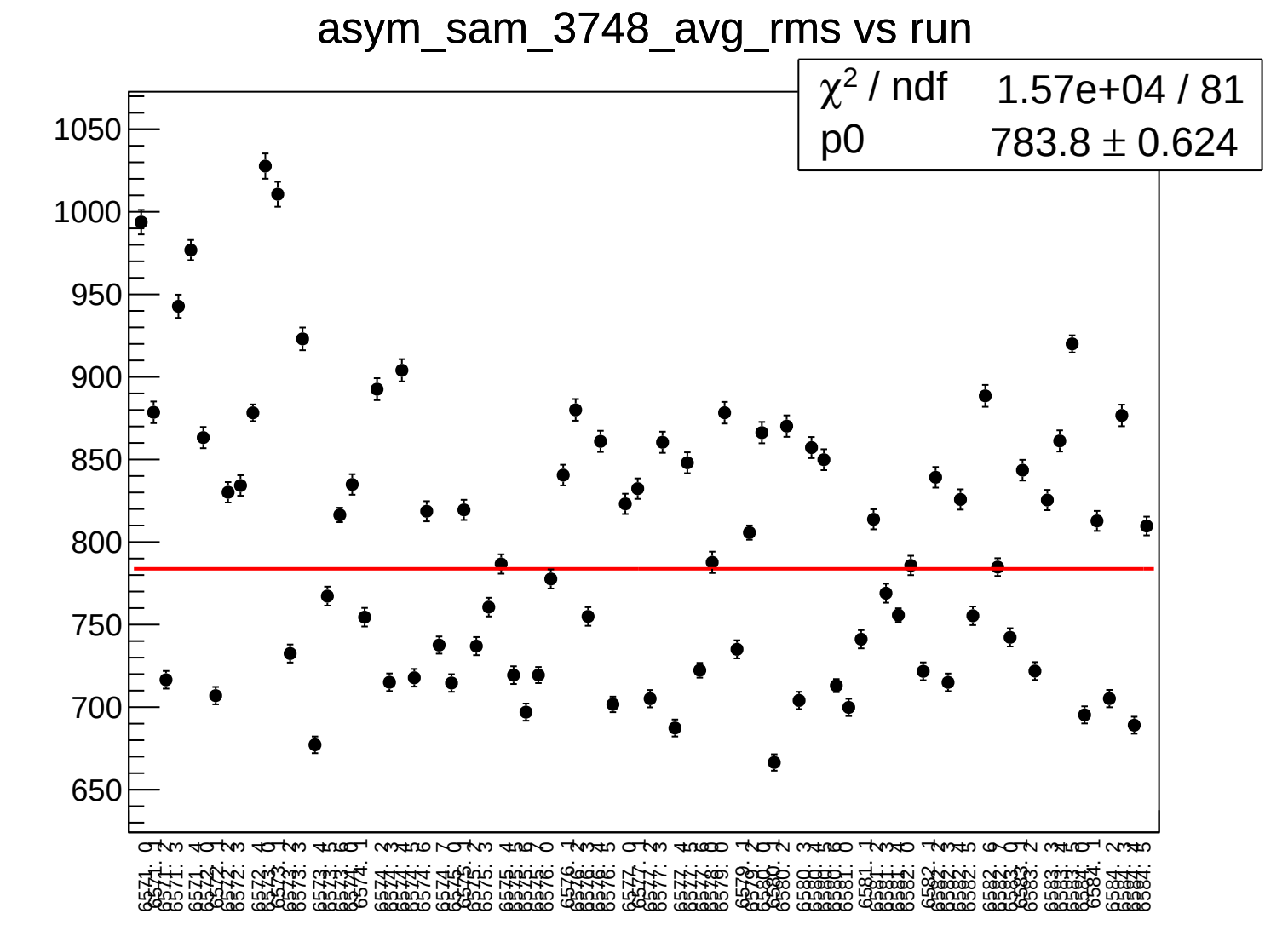

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 3.442e+04 / 81
p0 101.8 ± 0.08156
160
150
140
130
120
110
100
90
80
70

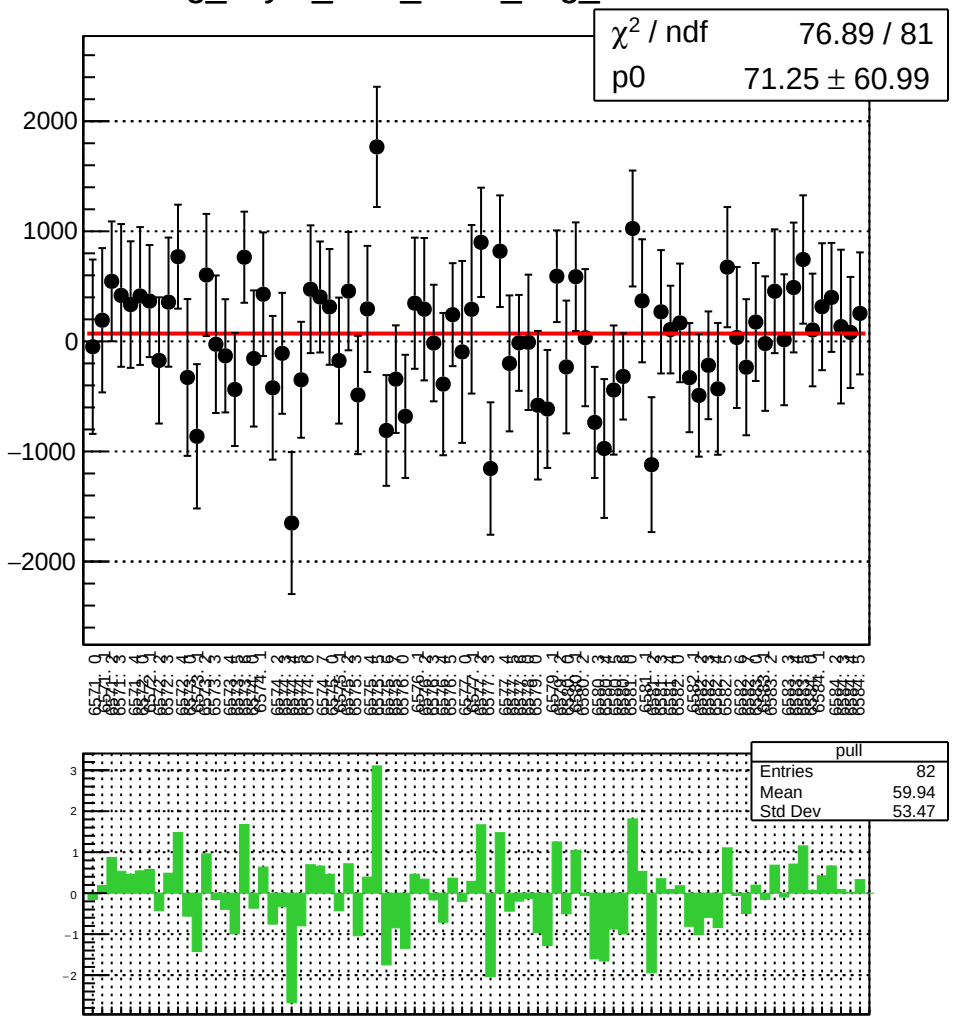

asym_sam_3748_avg_correction_mean vs run
χ² / ndf 99.53 / 81
p0 −1356 ± 874.5
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 82
Mean 304.4
Std Dev 273.9
2
1
0
−1
−2
pull1D
Entries 82
Mean −0.005389
Std Dev 1.102
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

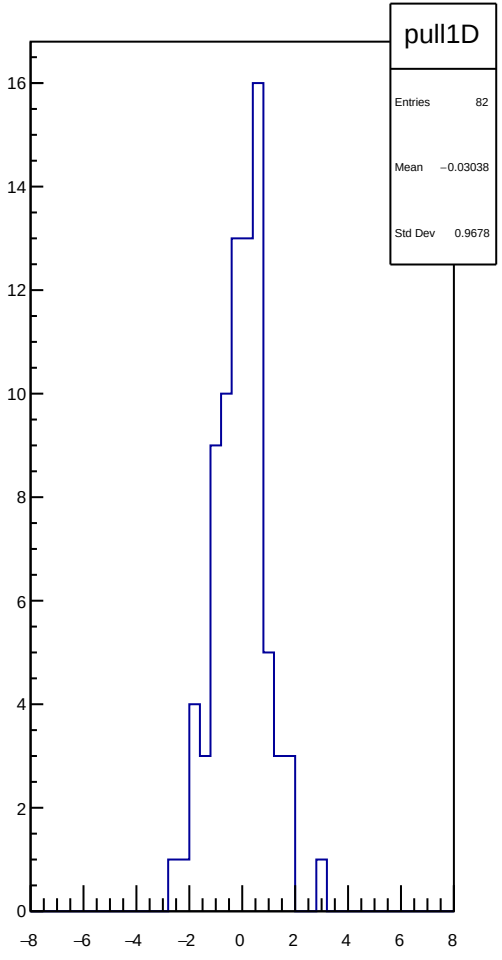

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 1.567e+04 / 81
p0 776.8 ± 0.6184
1050
1000
950
900
850
800
750
700
650

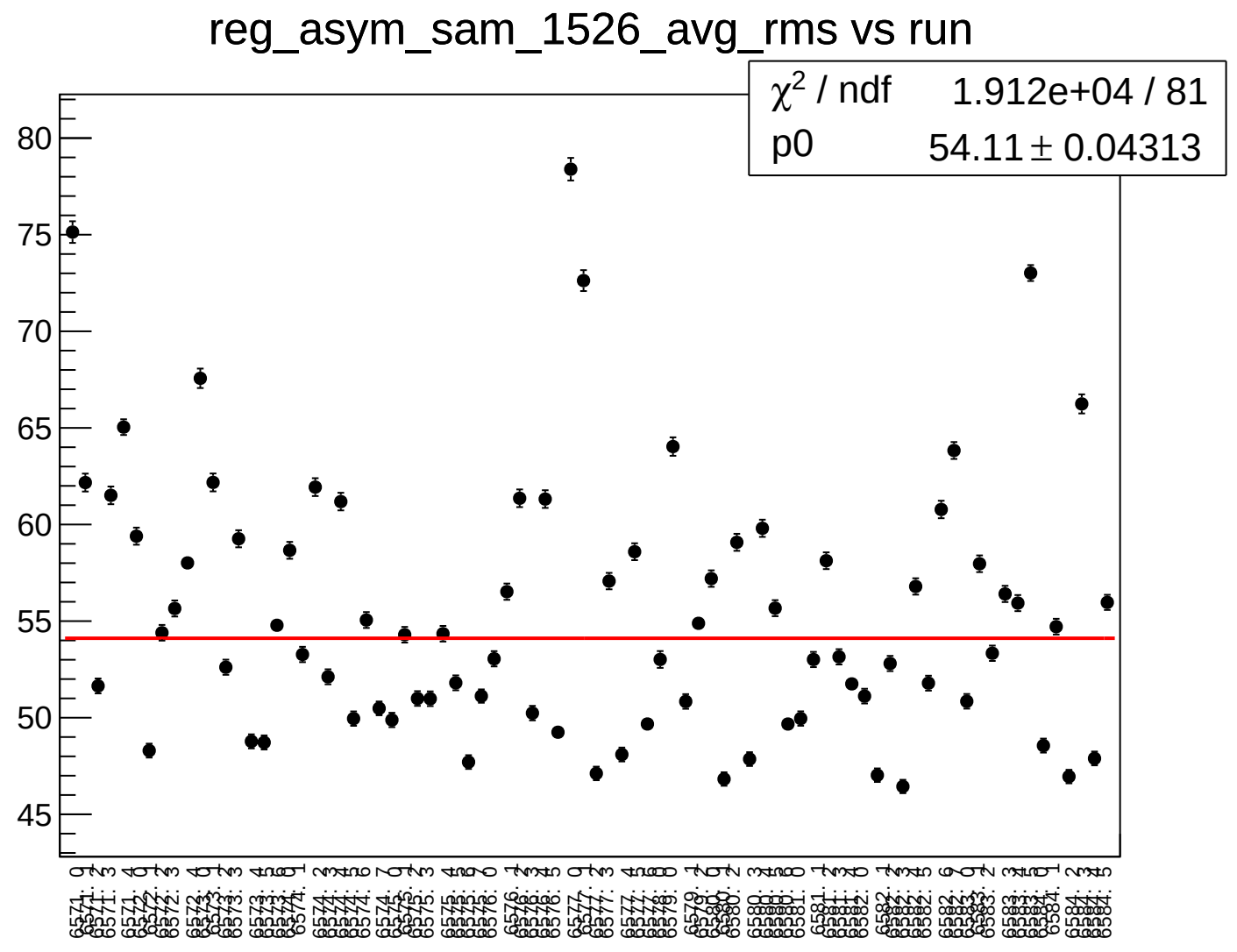

asym_sam_3748_avg_mean vs run
χ² / ndf 98.43 / 81
p0 1560 ± 882.4
30000
20000
10000
0
−10000
−20000
−30000
−40000
pull
Entries 82
Mean 1140
Std Dev 1109
2
1
0
−1
−2

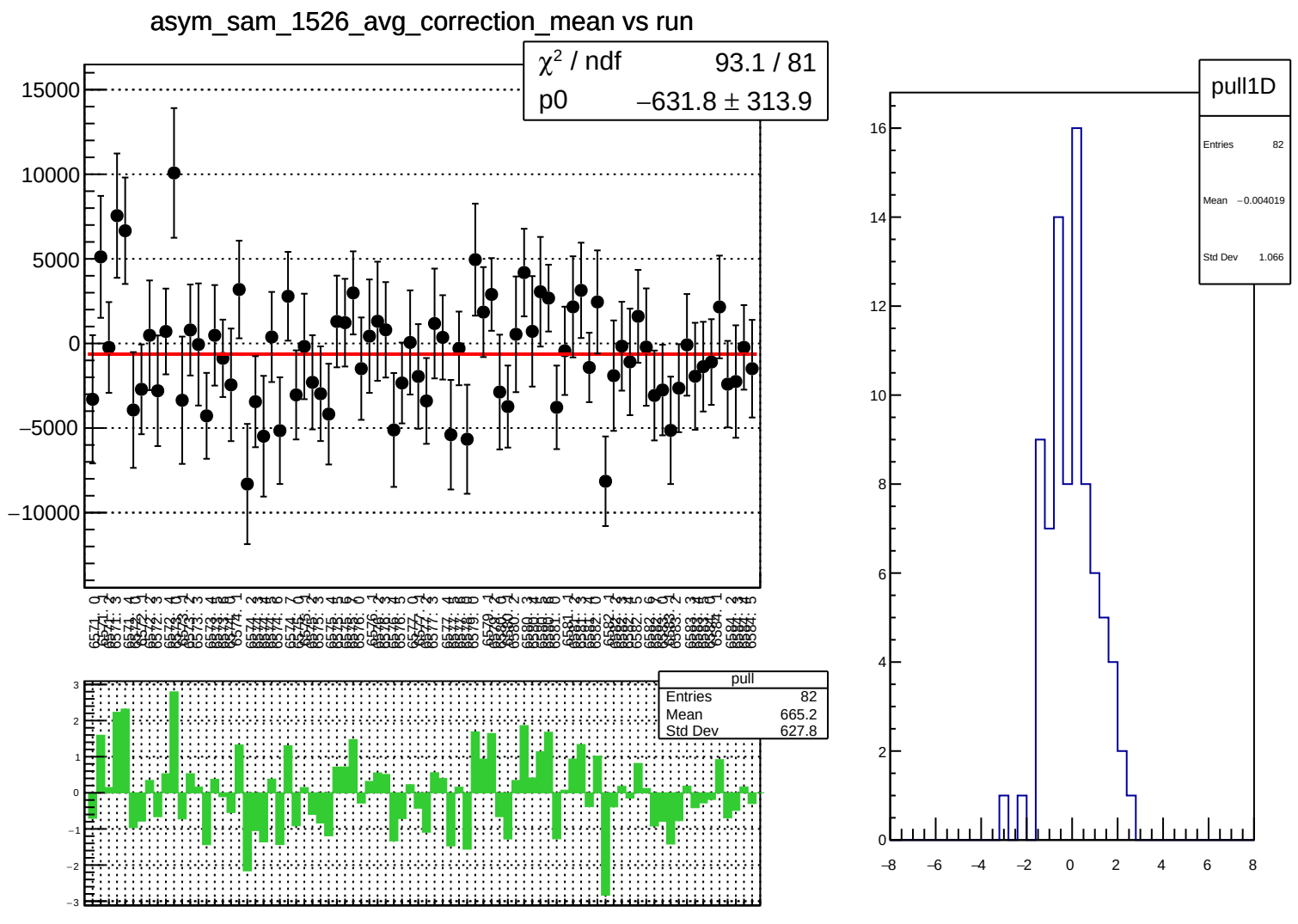

pull1D
Entries 82
Mean 0.001081
Std Dev 1.096
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

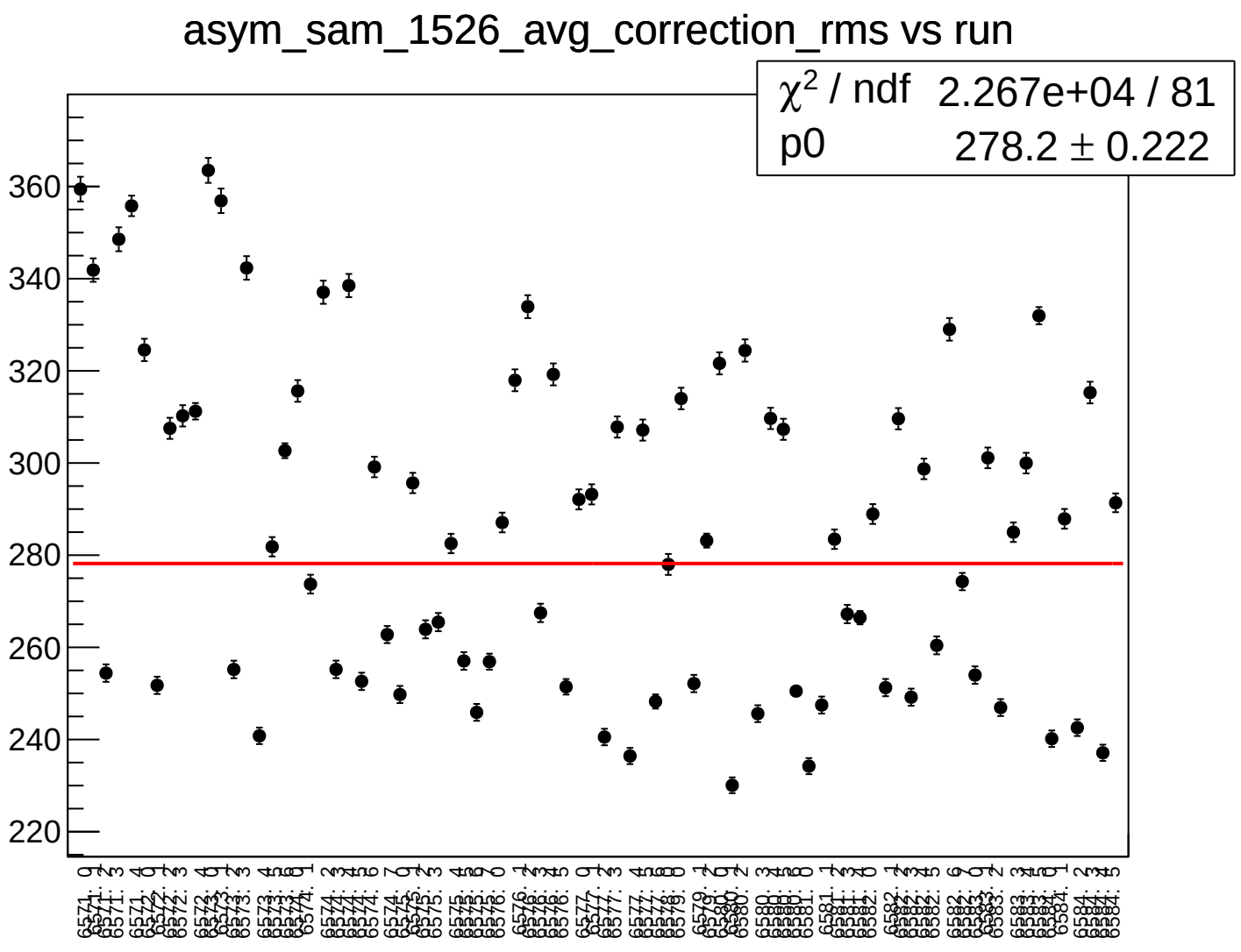

asym_sam_3748_avg_rms vs run
χ² / ndf 1.57e+04 / 81
p0 783.8 ± 0.624
1050
1000
950
900
850
800
750
700
650

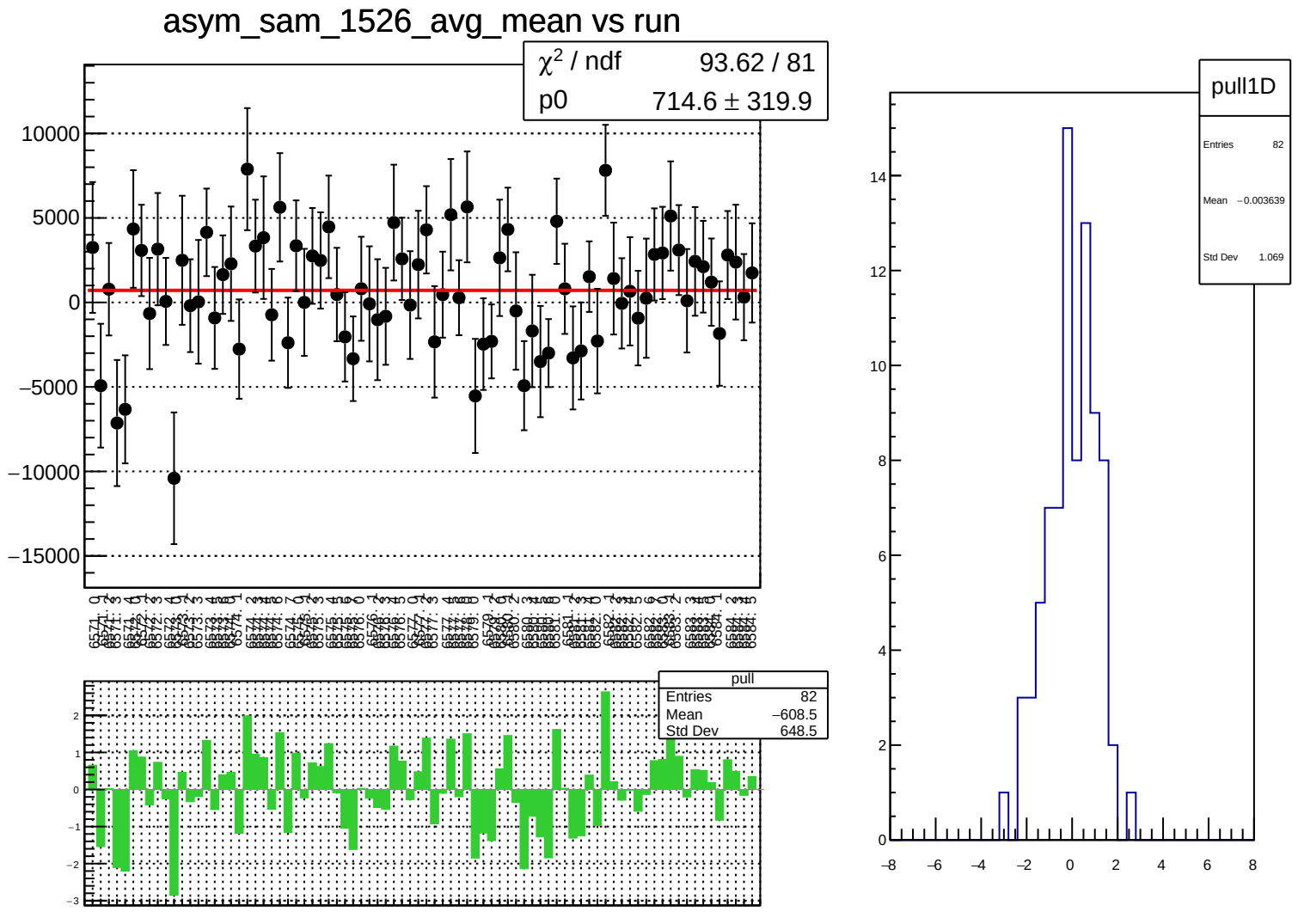

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 76.89 / 81
p0 71.25 ± 60.99
2000
1000
0
−1000
−2000
pull
Entries 82
Mean 59.94
Std Dev 53.47
3
2
1
0
−1
−2

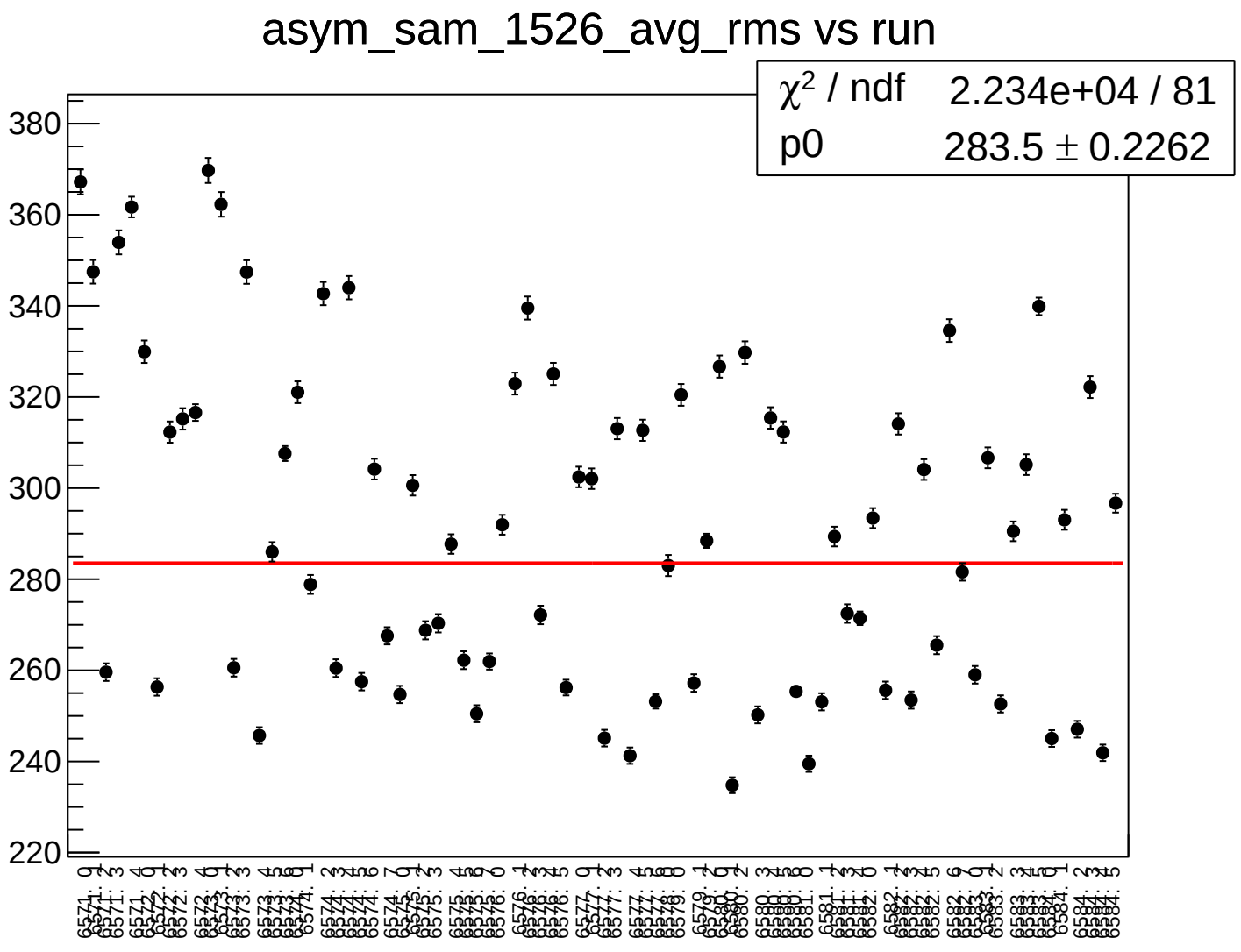

pull1D
Entries 82
Mean −0.03038
Std Dev 0.9678
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

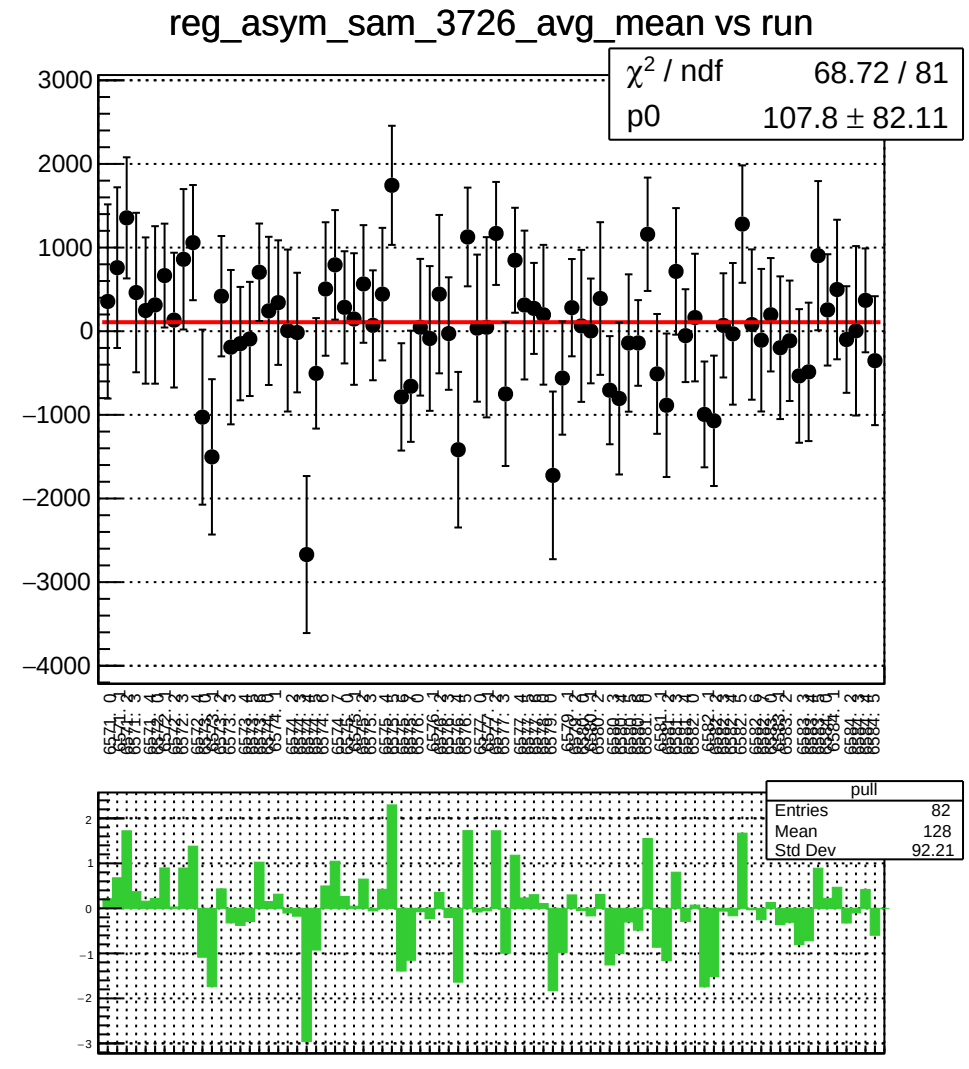

reg_asym_sam_1526_avg_rms vs run
$\chi^2$ / ndf 1.912e+04 / 81
p0 54.11 ± 0.04313
80
75
70
65
60
55
50
45

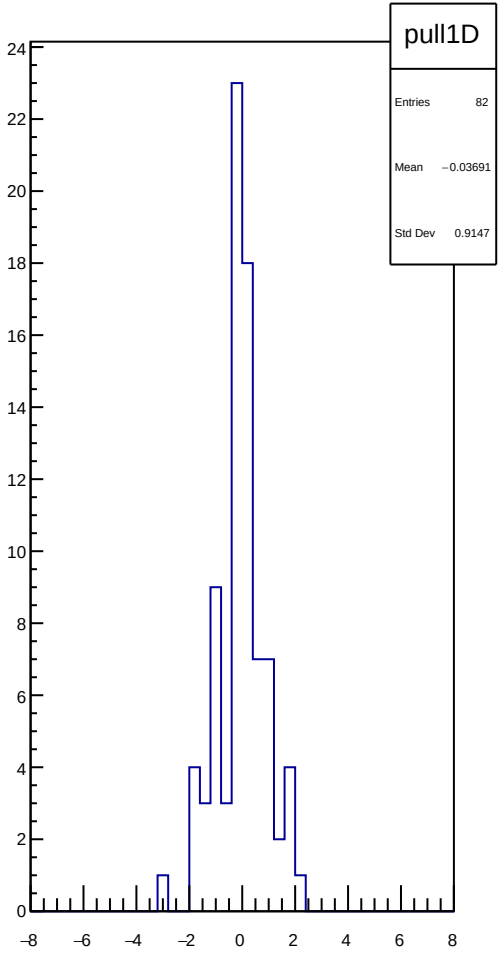

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 93.1 / 81
p0 −631.8 ± 313.9
15000
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 665.2
Std Dev 627.8
pull1D
Entries 82
Mean −0.004019
Std Dev 1.066

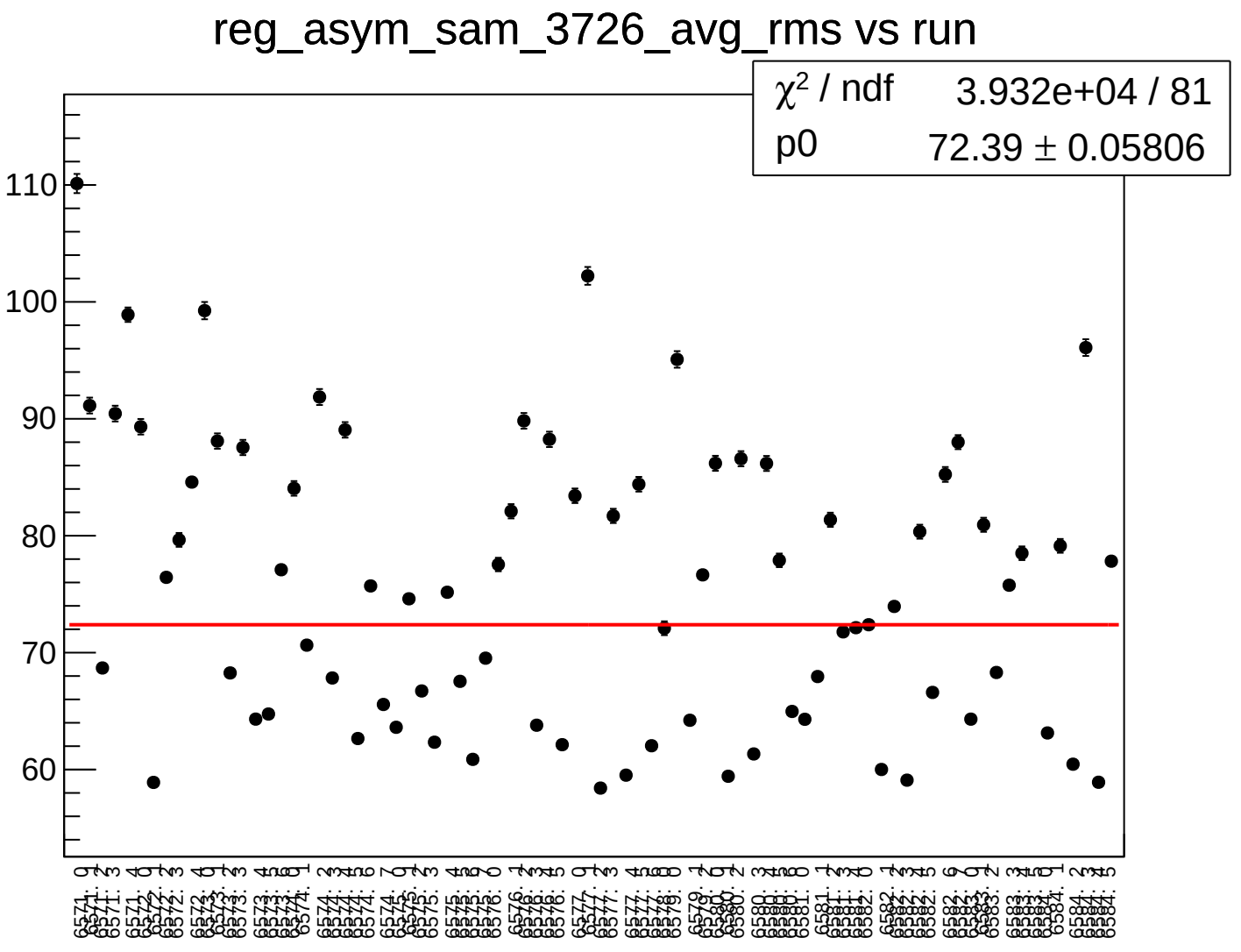

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 2.267e+04 / 81
p0 278.2 ± 0.222
360
340
320
300
280
260
240
220

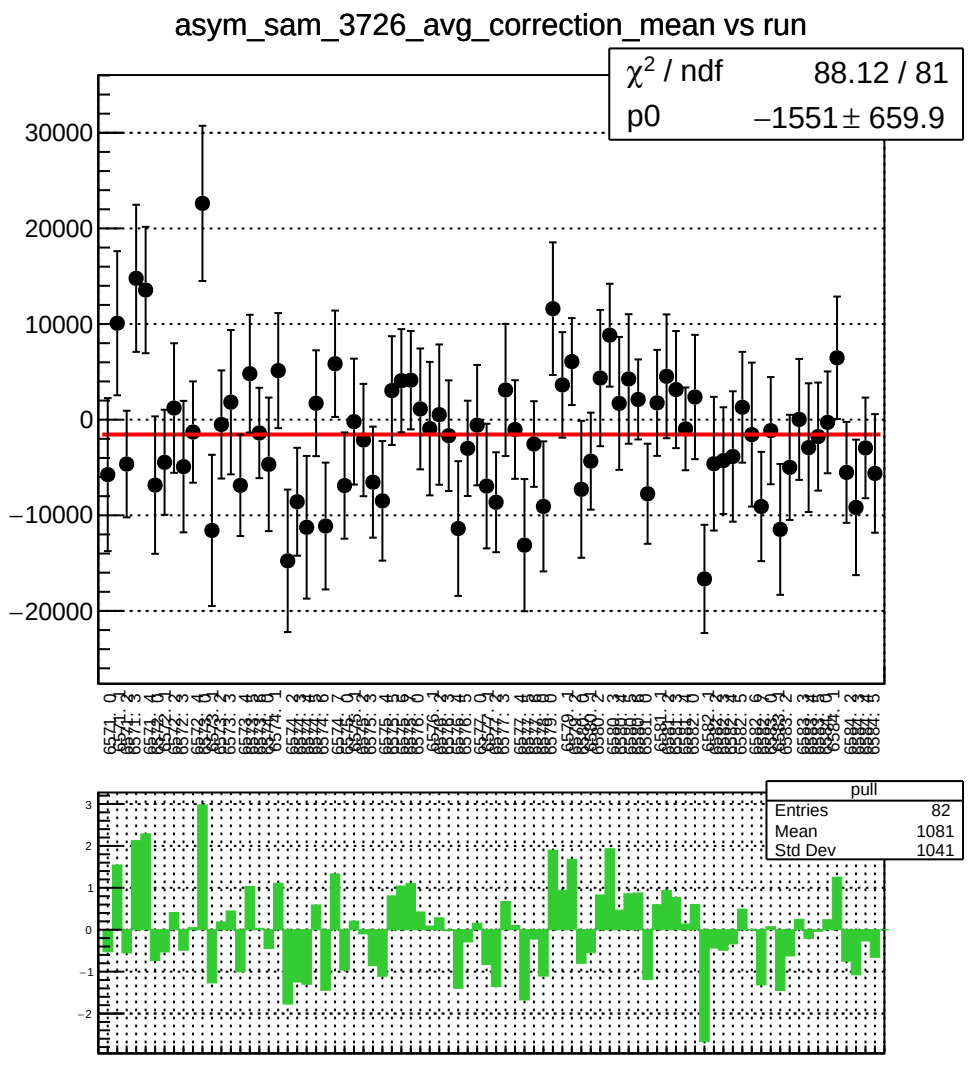

asym_sam_1526_avg_mean vs run
χ² / ndf 93.62 / 81
p0 714.6 ± 319.9
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean −608.5
Std Dev 648.5
2
1
0
−1
−2
−3
pull1D
Entries 82
Mean −0.003639
Std Dev 1.069
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

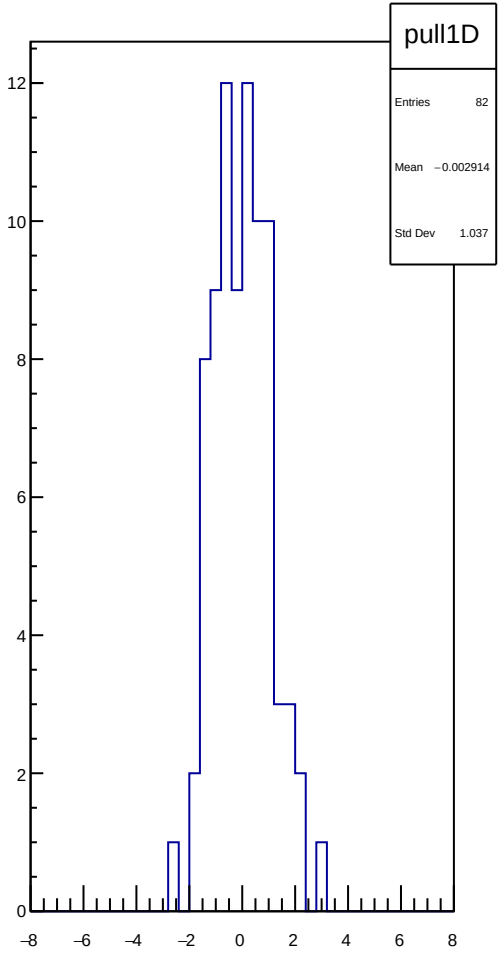

asym_sam_1526_avg_rms vs run
χ² / ndf 2.234e+04 / 81
p0 283.5 ± 0.2262
380
360
340
320
300
280
260
240
220

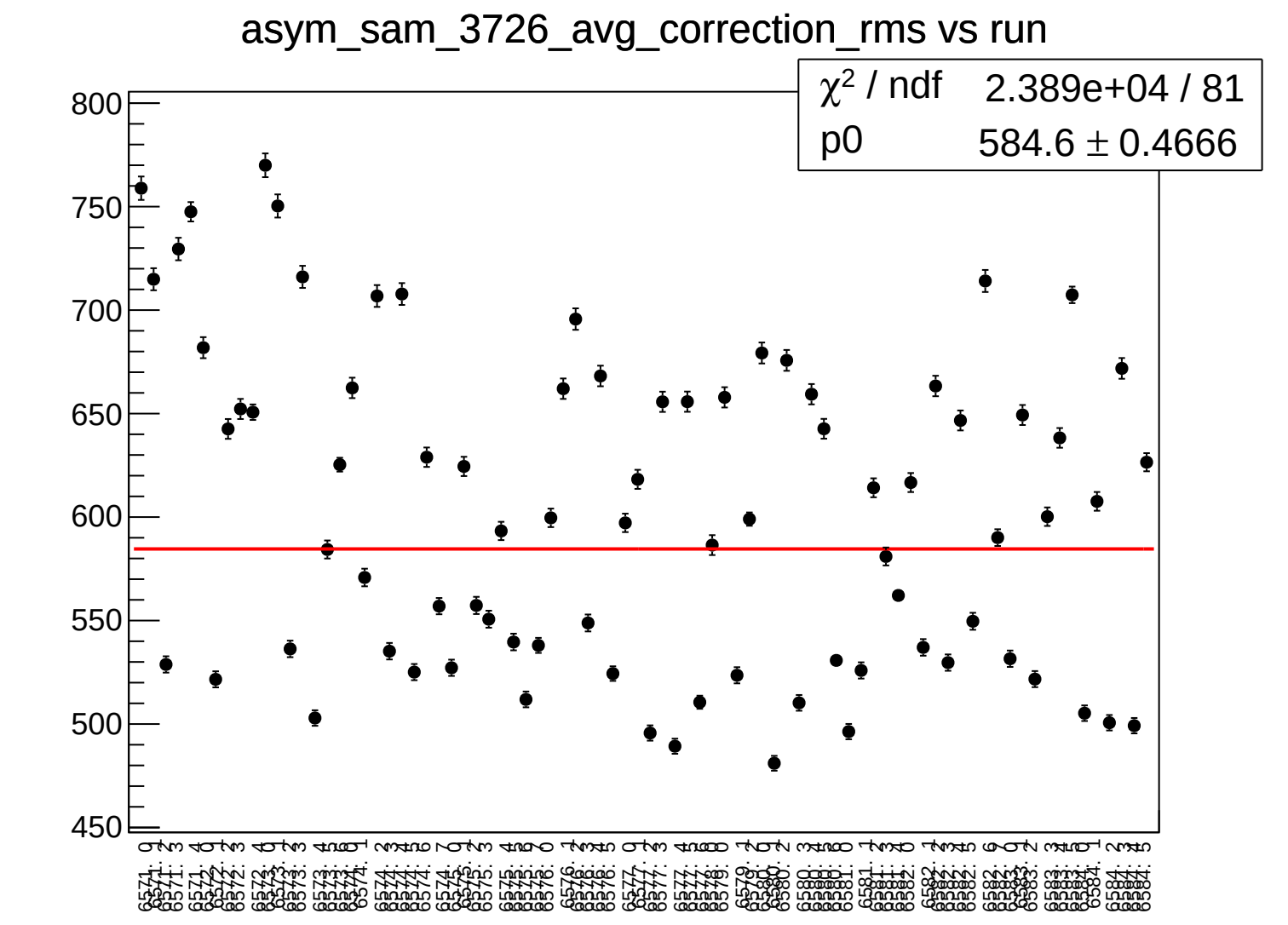

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 68.72 / 81
p0 107.8 ± 82.11
pull
Entries 82
Mean 128
Std Dev 92.21

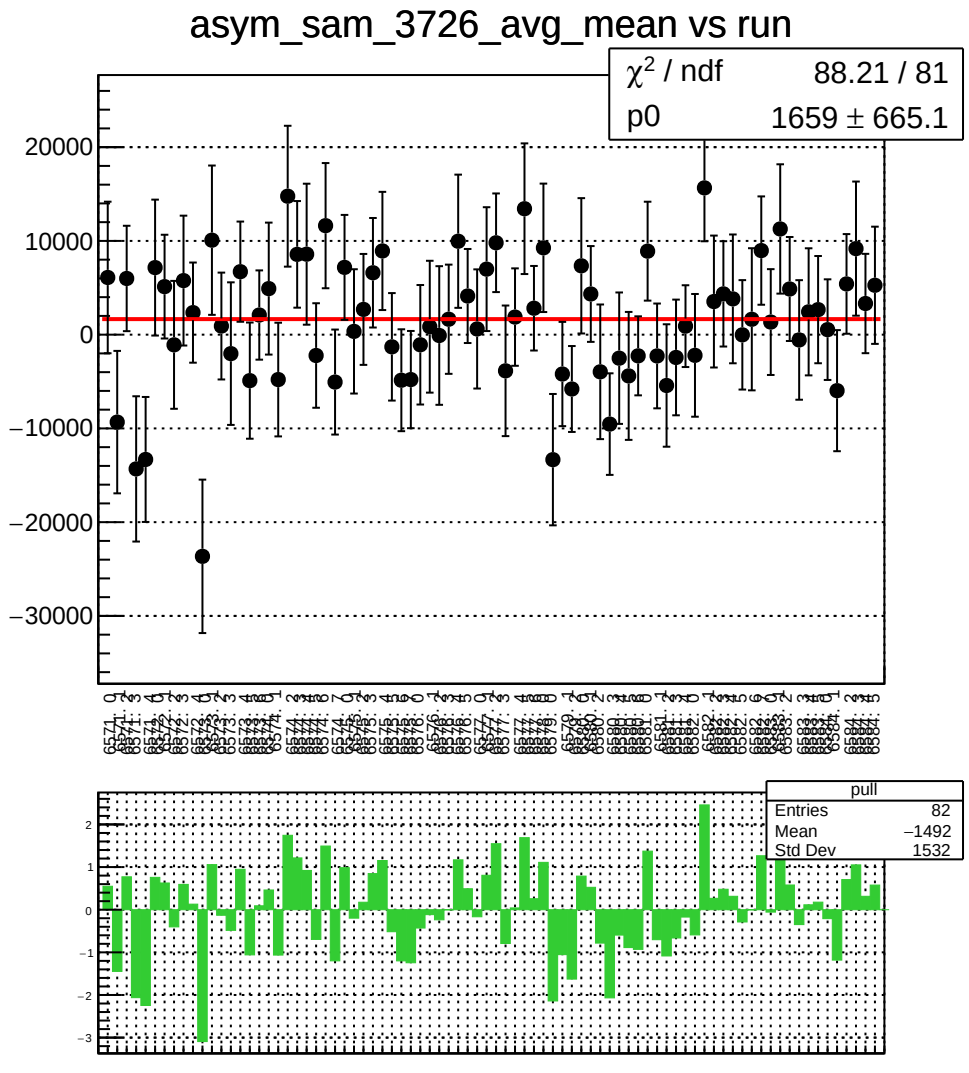

pull1D
Entries 82
Mean −0.03691
Std Dev 0.9147

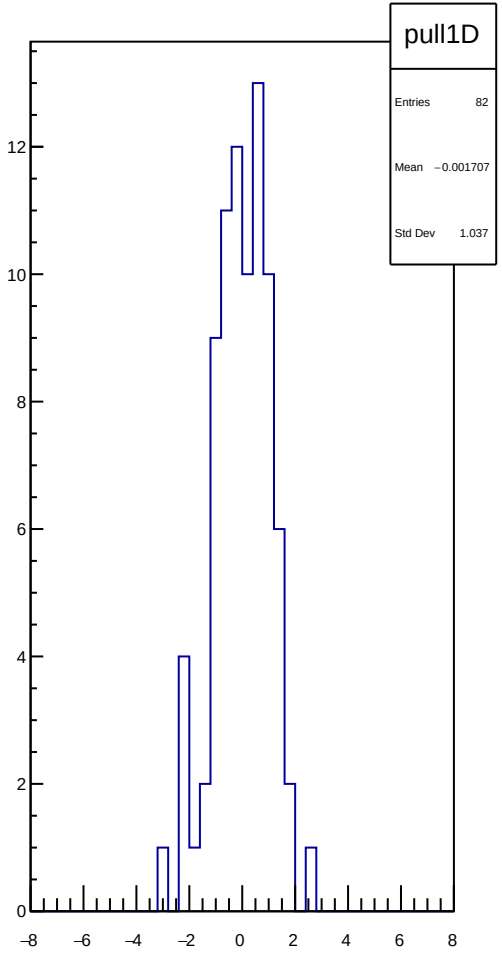

reg_asym_sam_3726_avg_rms vs run
$\chi^2$ / ndf 3.932e+04 / 81
p0 72.39 ± 0.05806
110
100
90
80
70
60

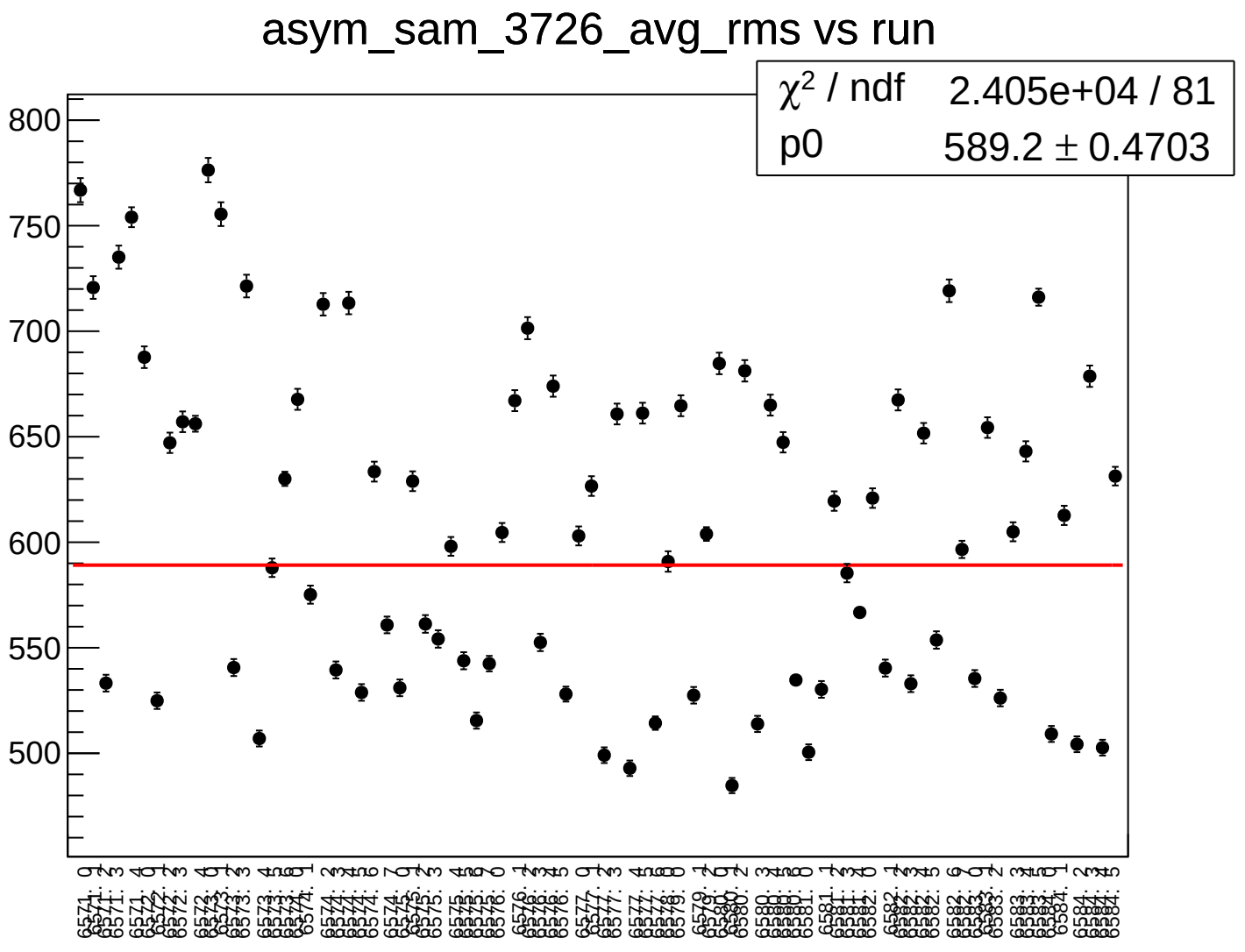

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 88.12 / 81
p0 −1551 ± 659.9
30000
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 1081
Std Dev 1041
3
2
1
0
−1
−2

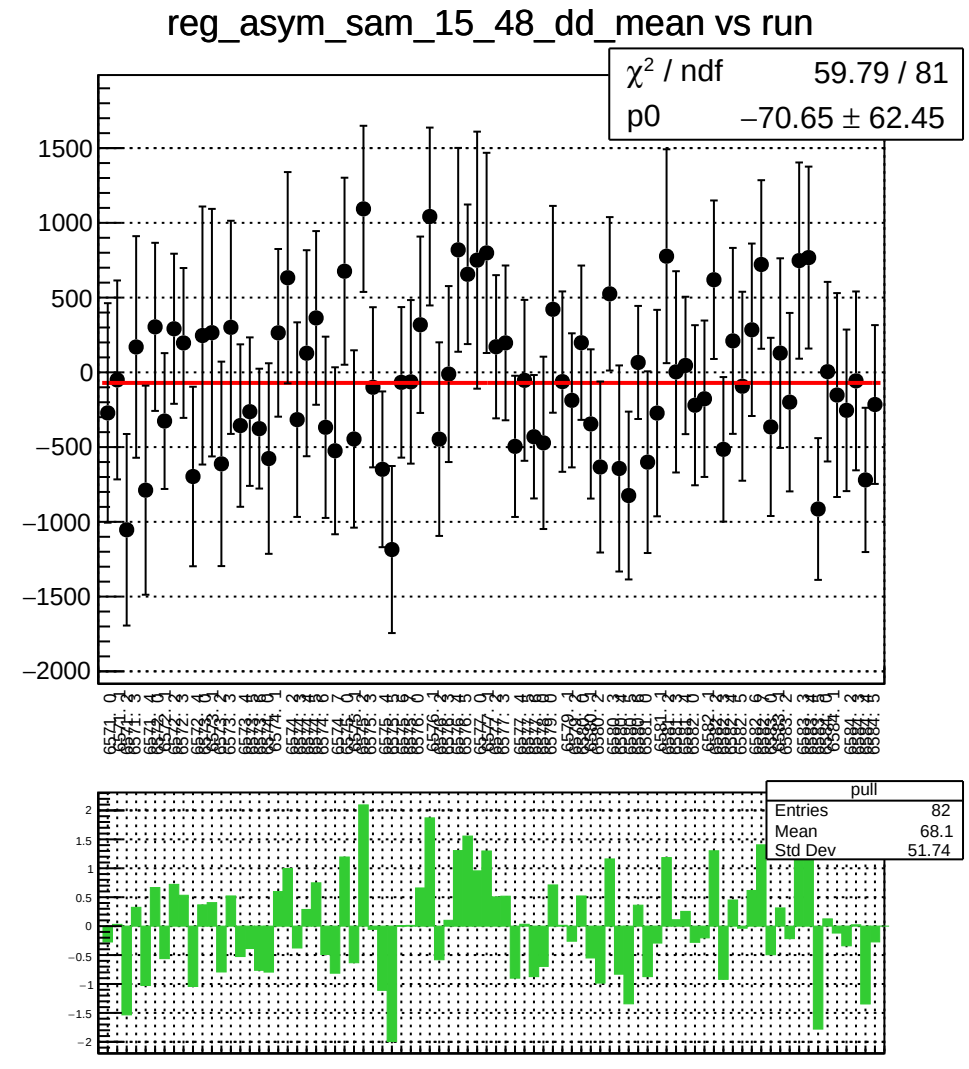

pull1D
Entries 82
Mean −0.002914
Std Dev 1.037
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

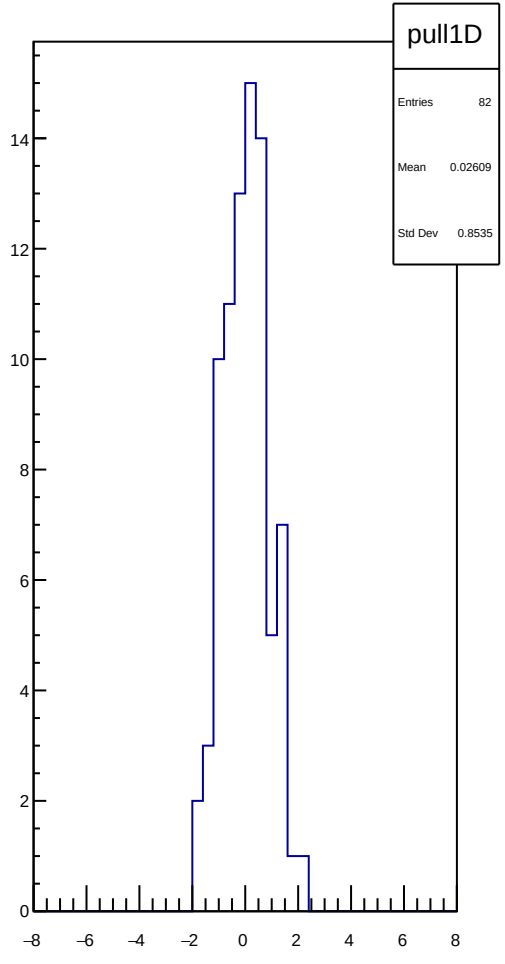

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 2.389e+04 / 81
p0 584.6 ± 0.4666
800
750
700
650
600
550
500
450

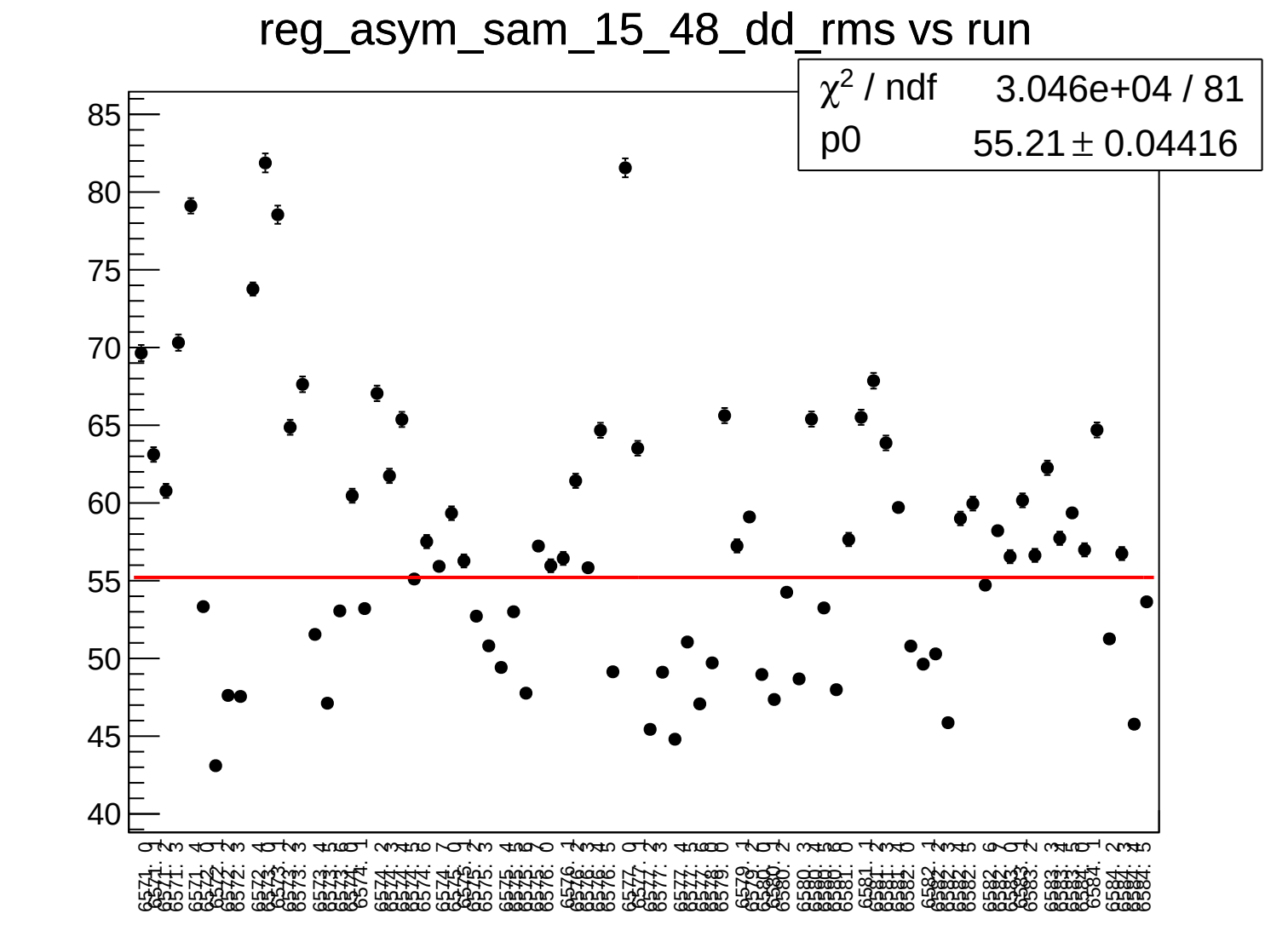

asym_sam_3726_avg_mean vs run
χ² / ndf 88.21 / 81
p0 1659 ± 665.1
20000
10000
0
−10000
−20000
−30000
pull
Entries 82
Mean −1492
Std Dev 1532
2
1
0
−1
−2
−3

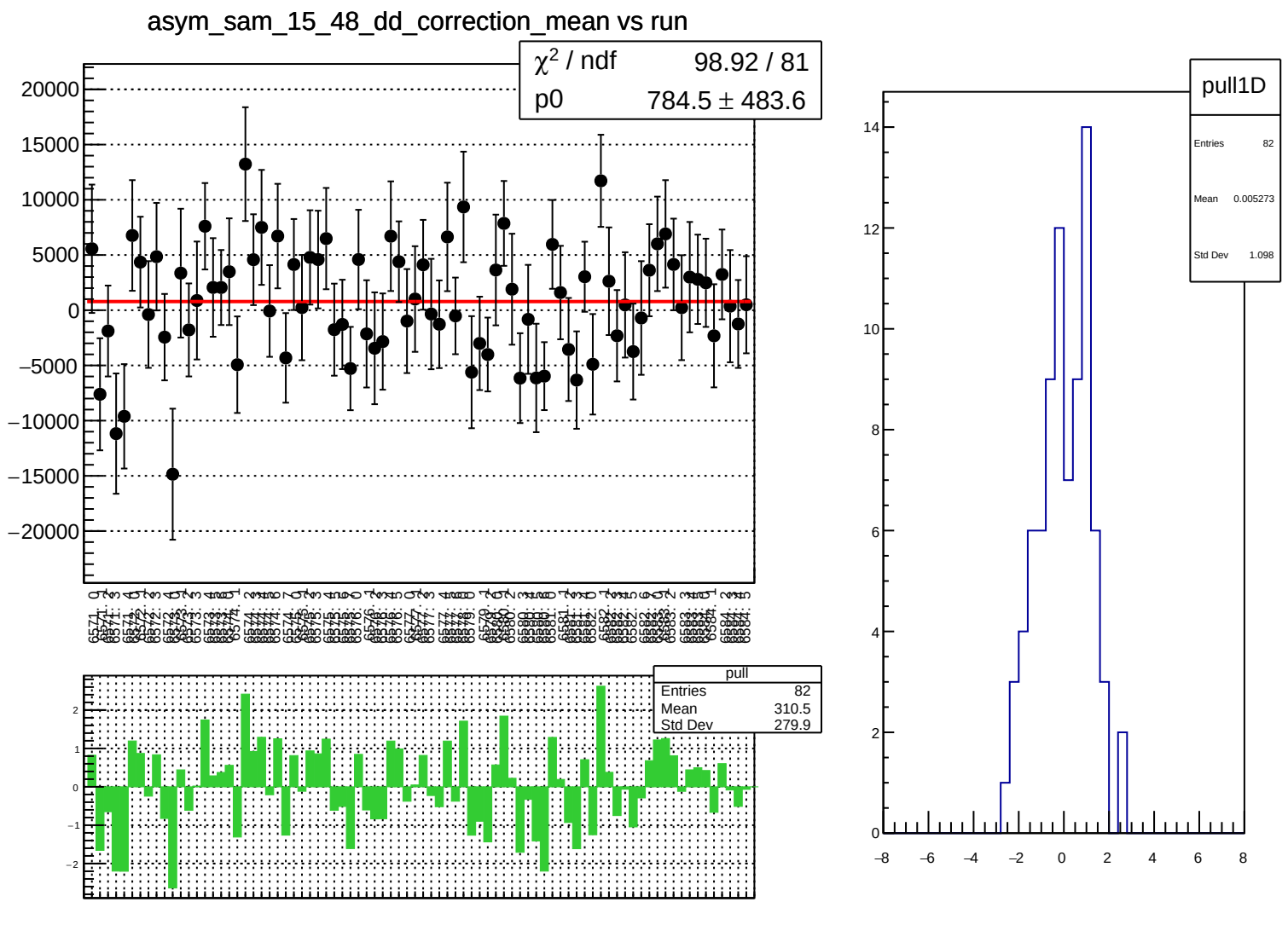

pull1D
Entries 82
Mean −0.001707
Std Dev 1.037
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

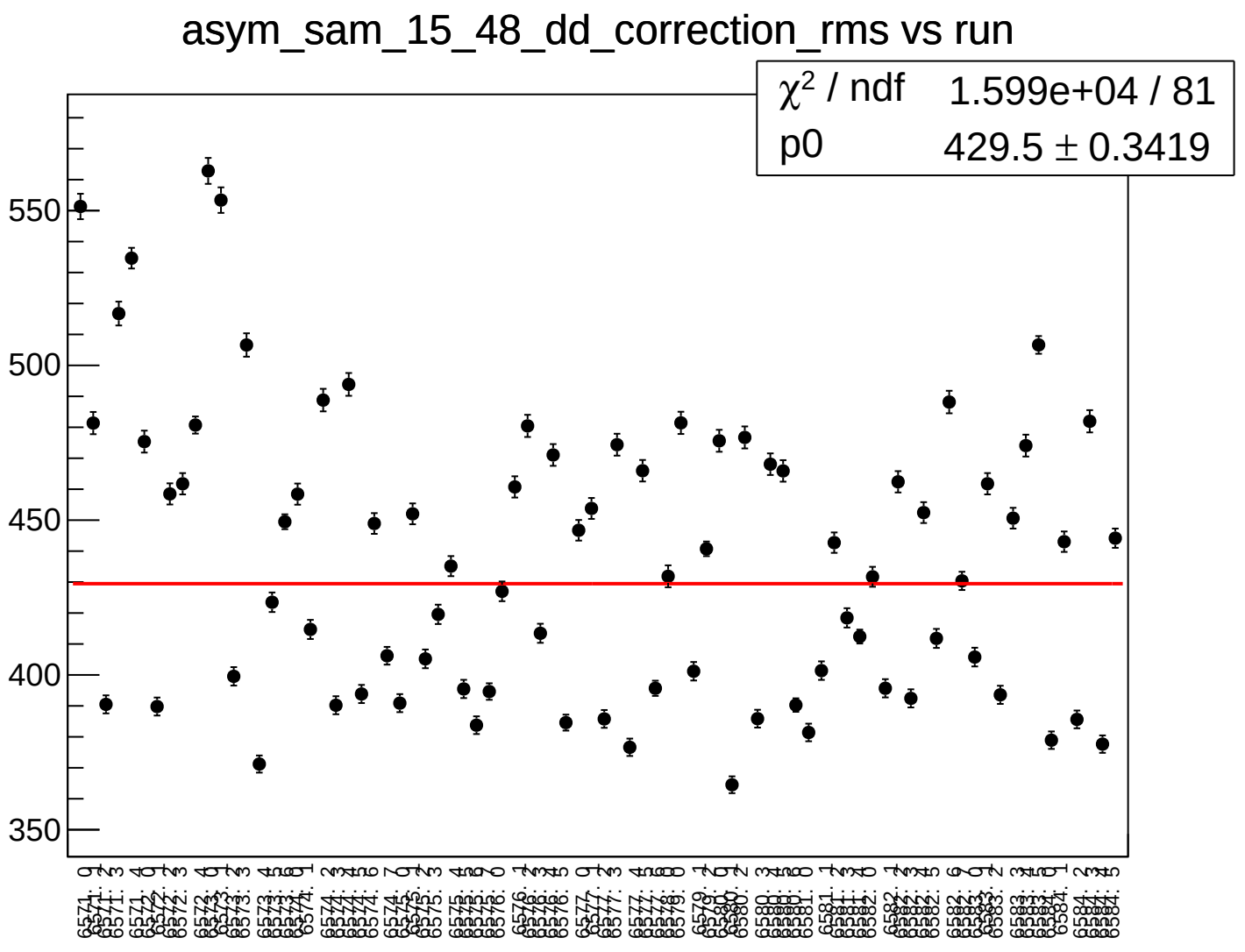

asym_sam_3726_avg_rms vs run
$\chi^2$ / ndf 2.405e+04 / 81
p0 589.2 ± 0.4703
800
750
700
650
600
550
500

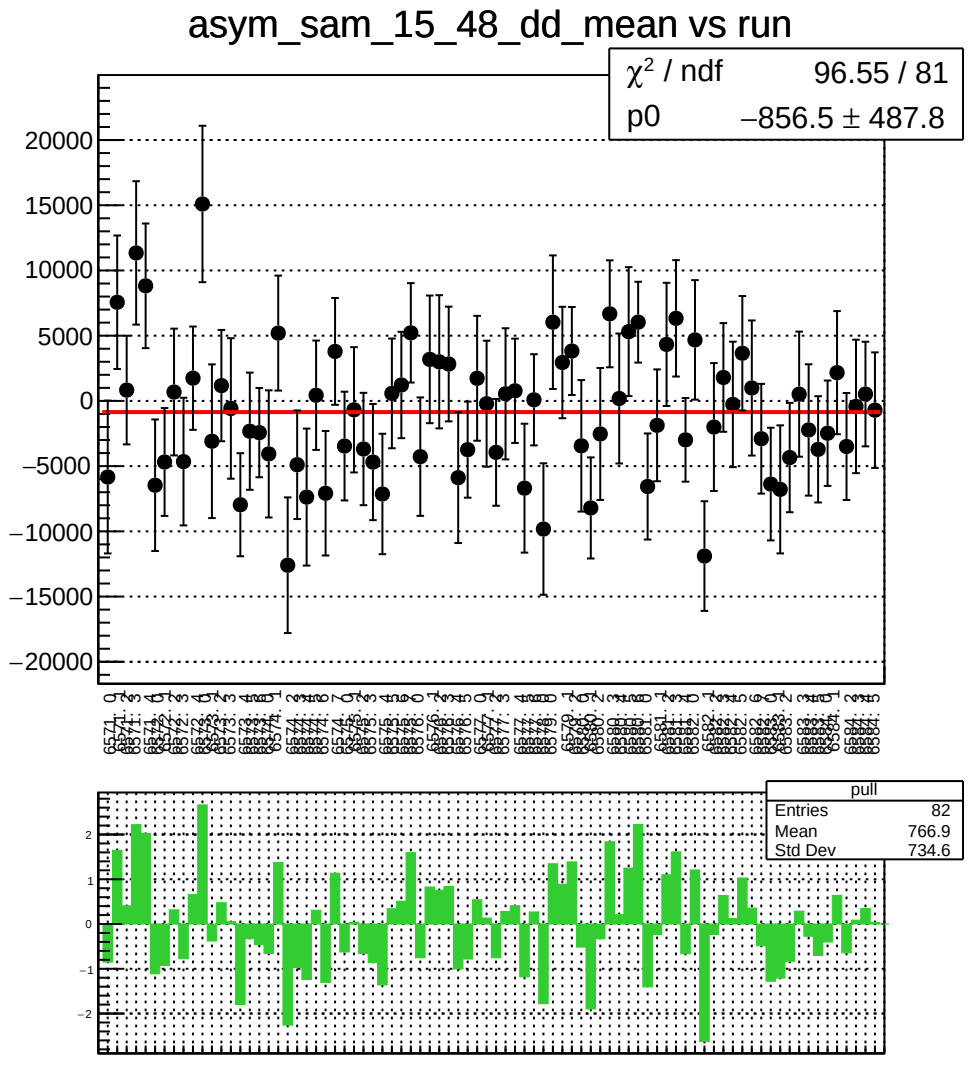

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 59.79 / 81
p0 −70.65 ± 62.45
pull
Entries 82
Mean 68.1
Std Dev 51.74

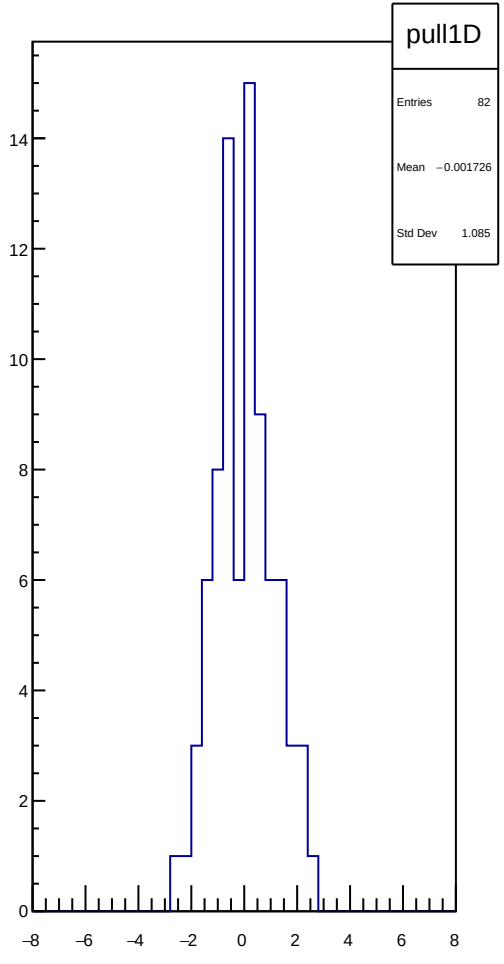

pull1D
Entries 82
Mean 0.02609
Std Dev 0.8535

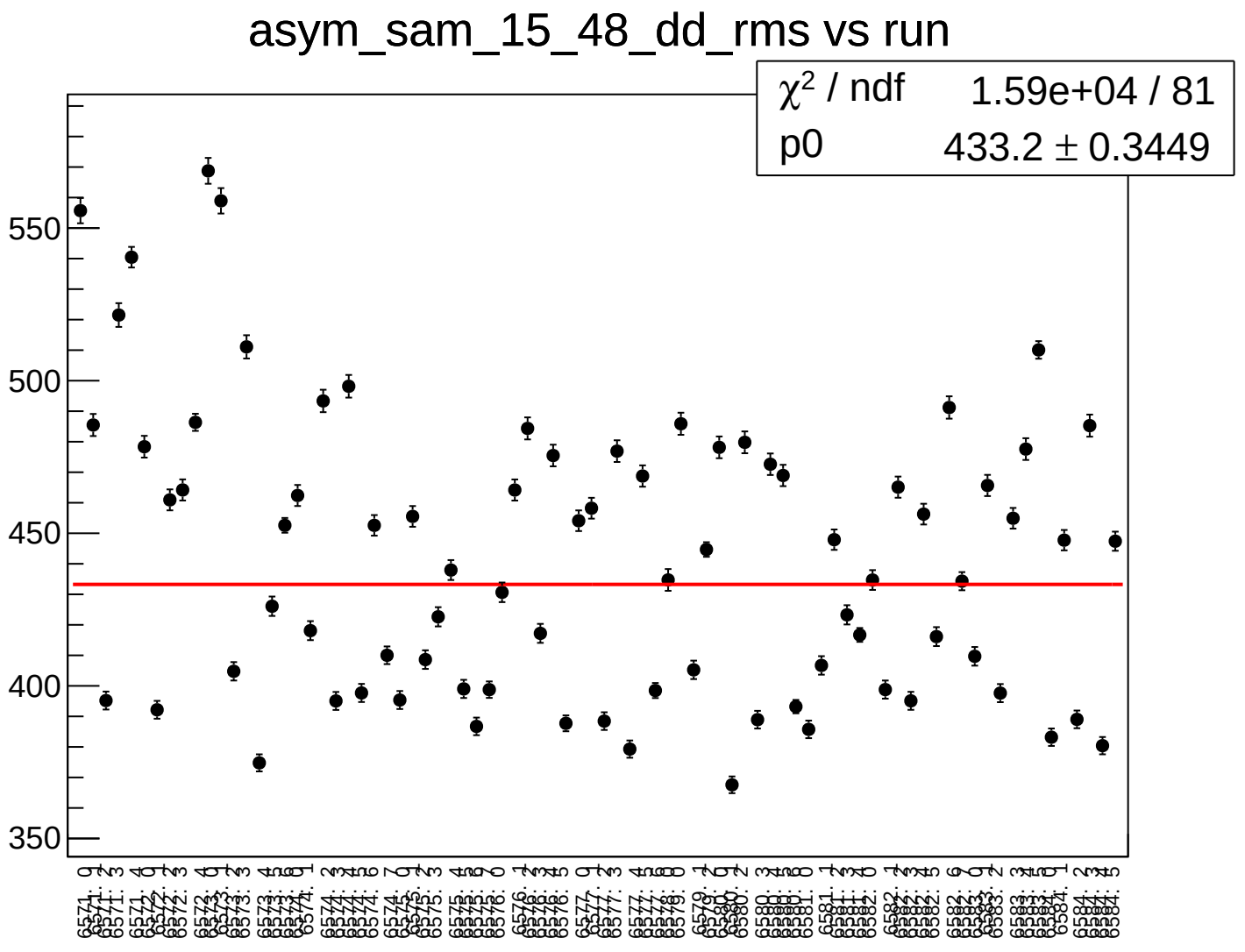

reg_asym_sam_15_48_dd_rms vs run
$\chi^2$ / ndf 3.046e+04 / 81
p0 55.21 ± 0.04416
85
80
75
70
65
60
55
50
45
40

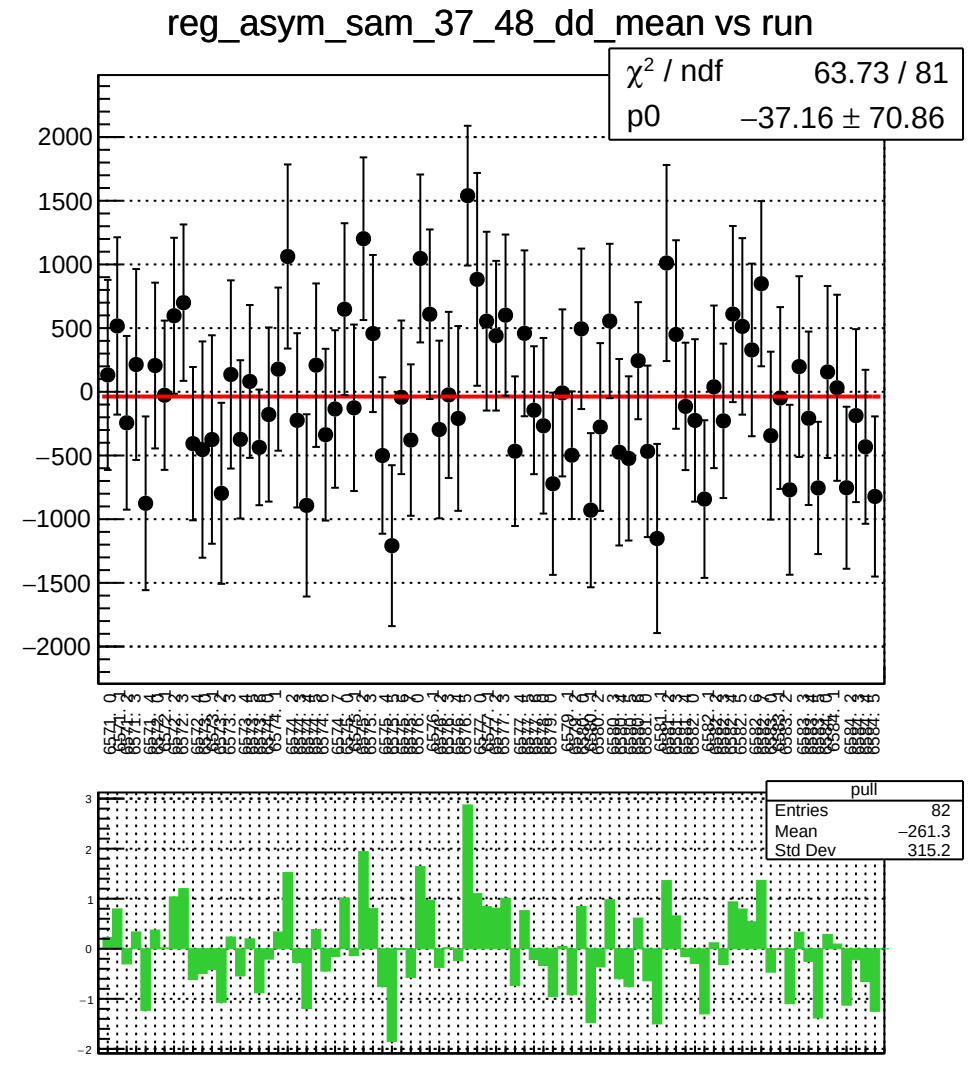

asym_sam_15_48_dd_correction_mean vs run
$\chi^2$ / ndf 98.92 / 81
p0 784.5 ± 483.6
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 82
Mean 310.5
Std Dev 279.9
2
1
0
−1
−2
pull1D
Entries 82
Mean 0.005273
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

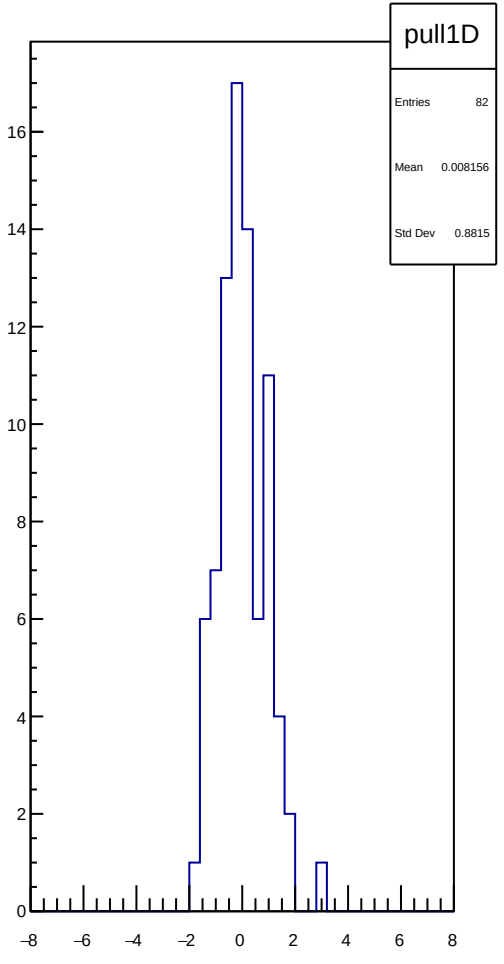

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 1.599e+04 / 81
p0 429.5 ± 0.3419
550
500
450
400
350

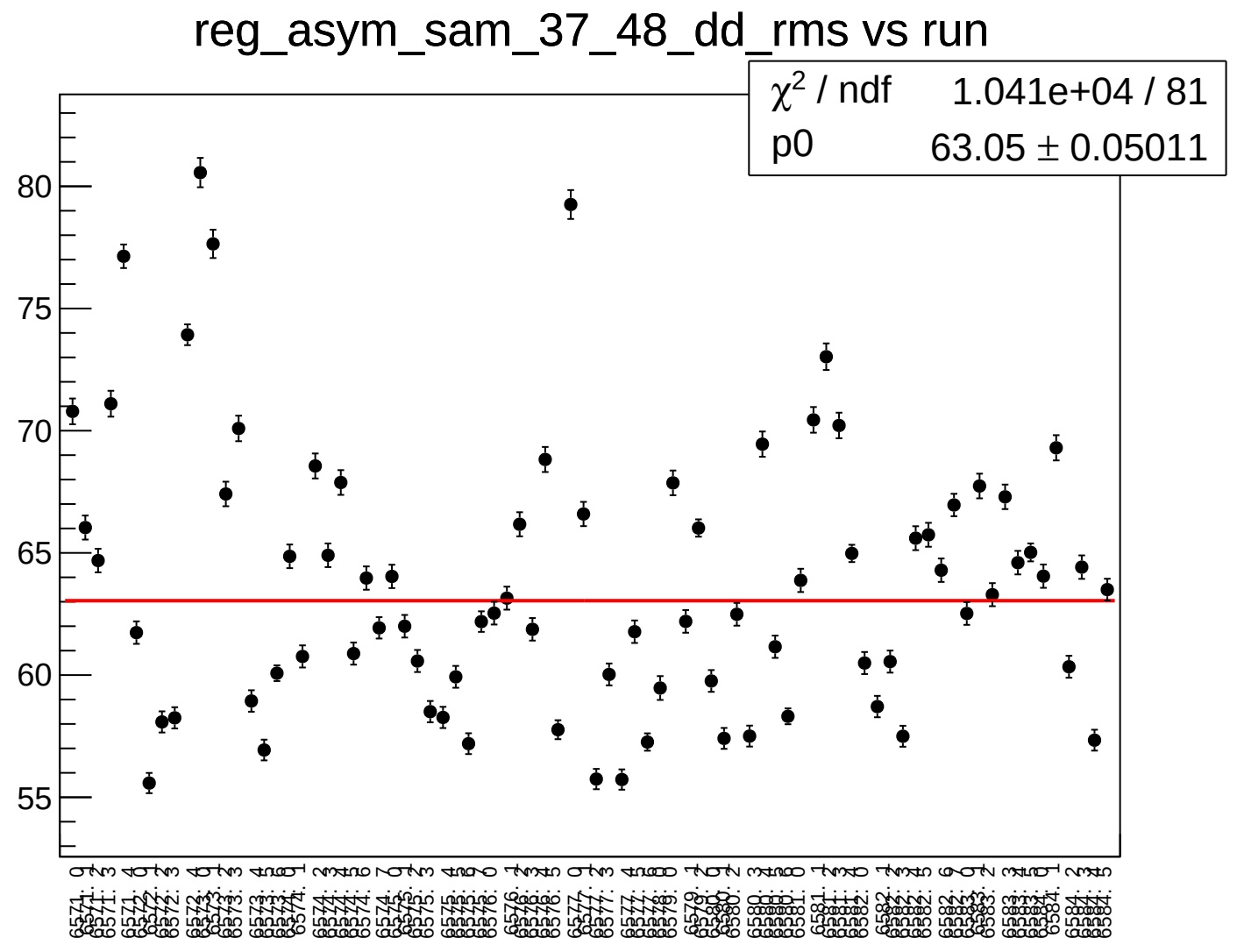

asym_sam_15_48_dd_mean vs run
χ² / ndf 96.55 / 81
p0 −856.5 ± 487.8
pull
Entries 82
Mean 766.9
Std Dev 734.6

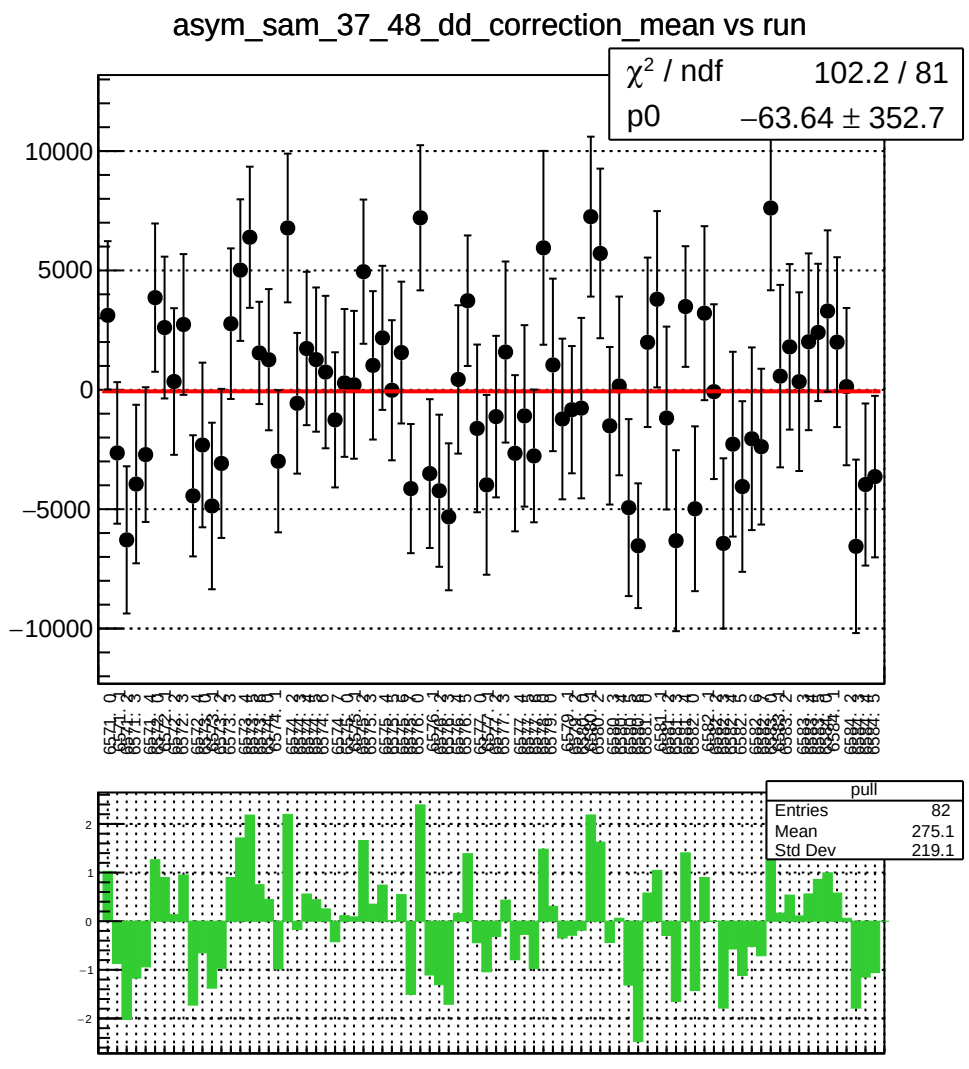

pull1D
Entries 82
Mean −0.001726
Std Dev 1.085

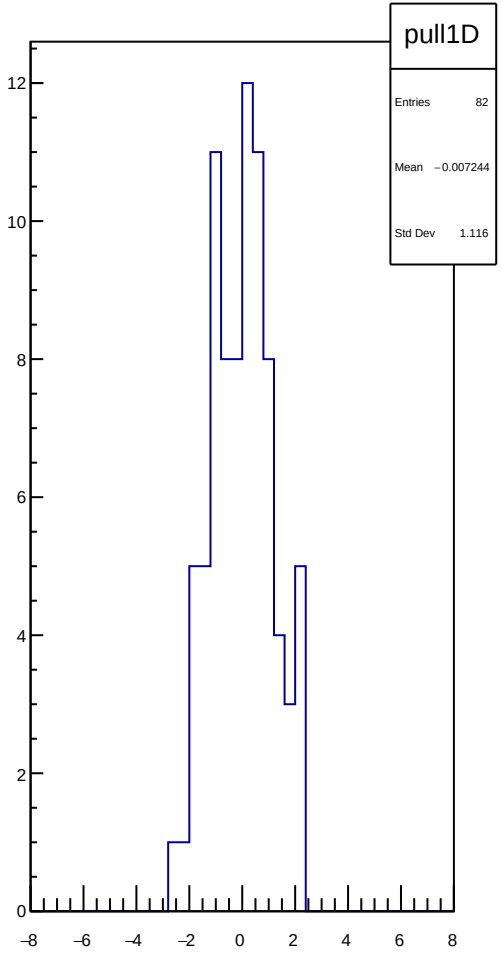

asym_sam_15_48_dd_rms vs run
χ² / ndf 1.59e+04 / 81
p0 433.2 ± 0.3449
550
500
450
400
350

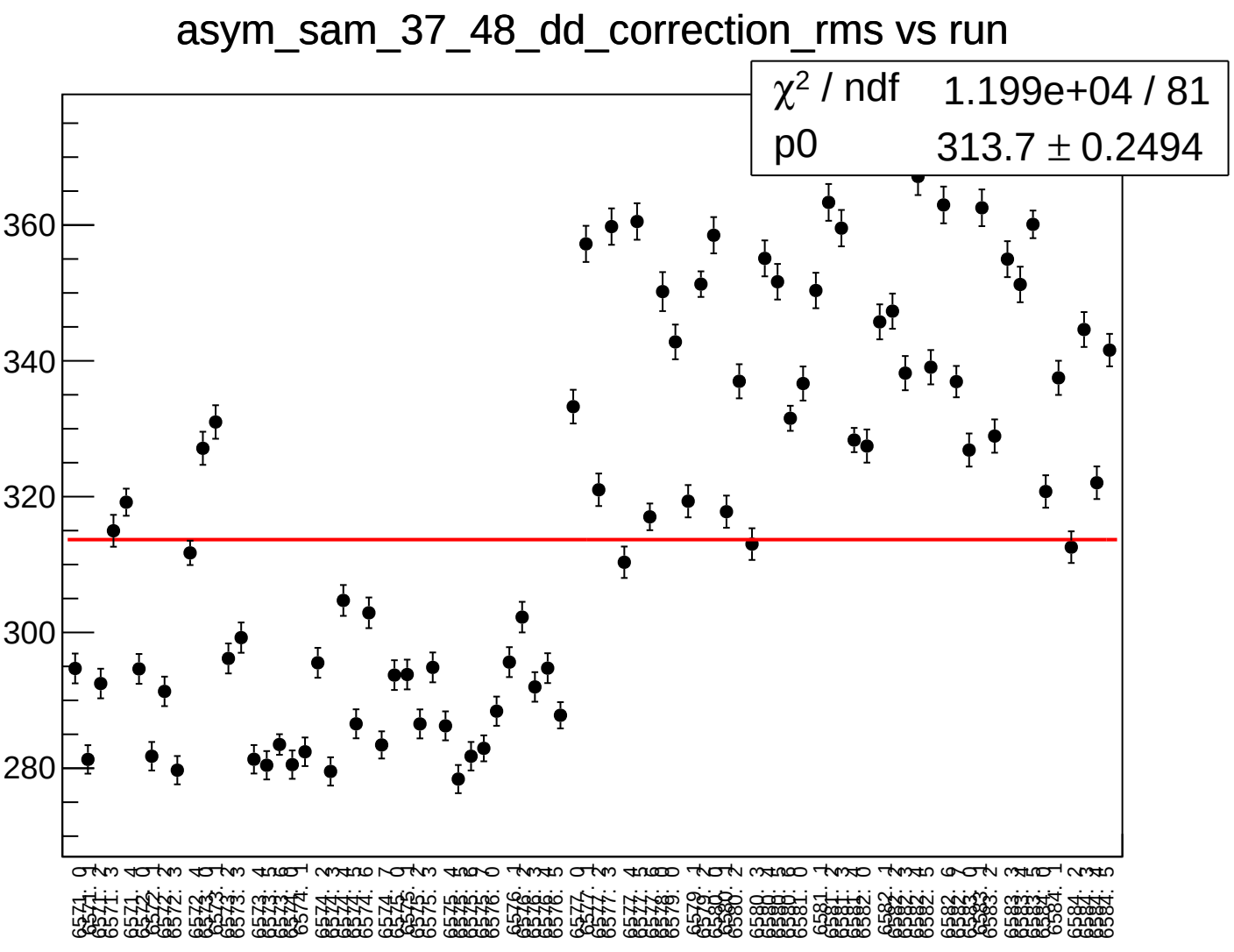

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 63.73 / 81
p0 −37.16 ± 70.86
pull
Entries 82
Mean −261.3
Std Dev 315.2

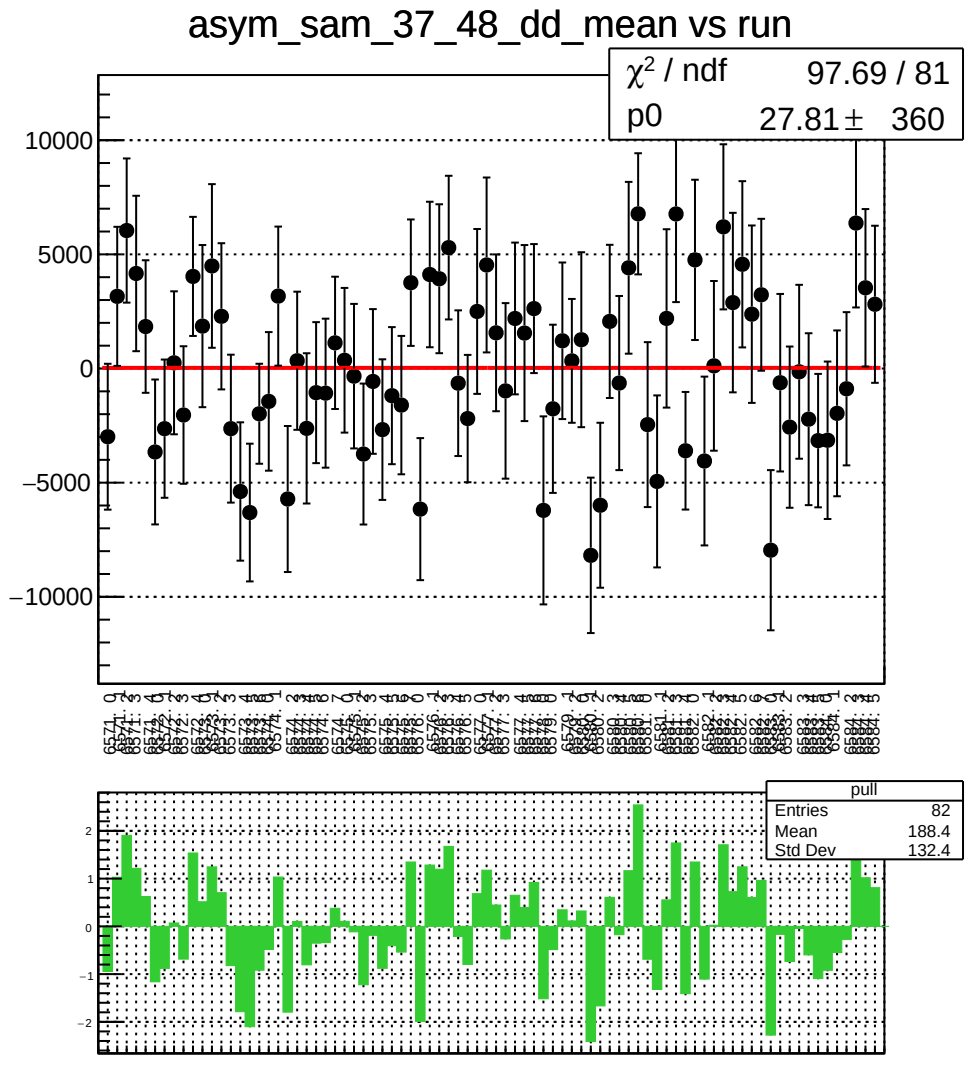

pull1D
Entries 82
Mean 0.008156
Std Dev 0.8815

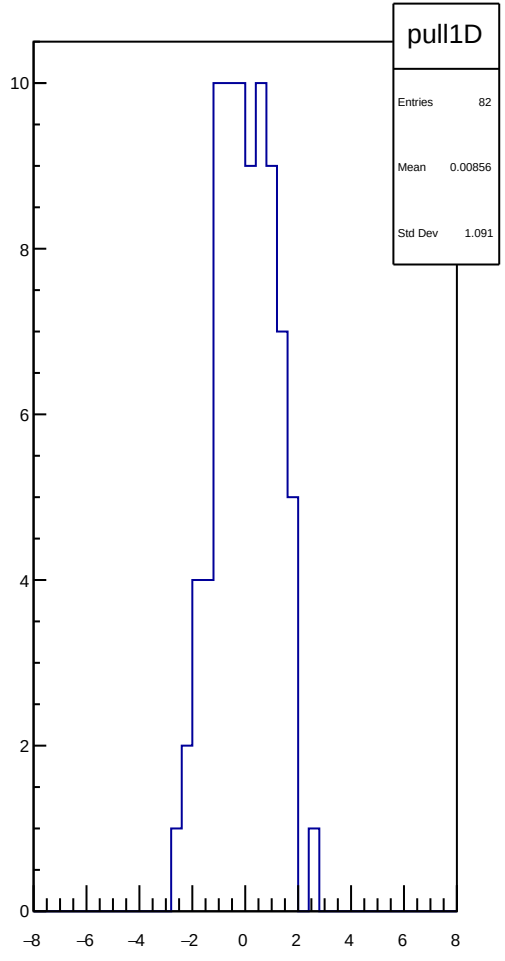

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 1.041e+04 / 81
p0 63.05 ± 0.05011
80
75
70
65
60
55

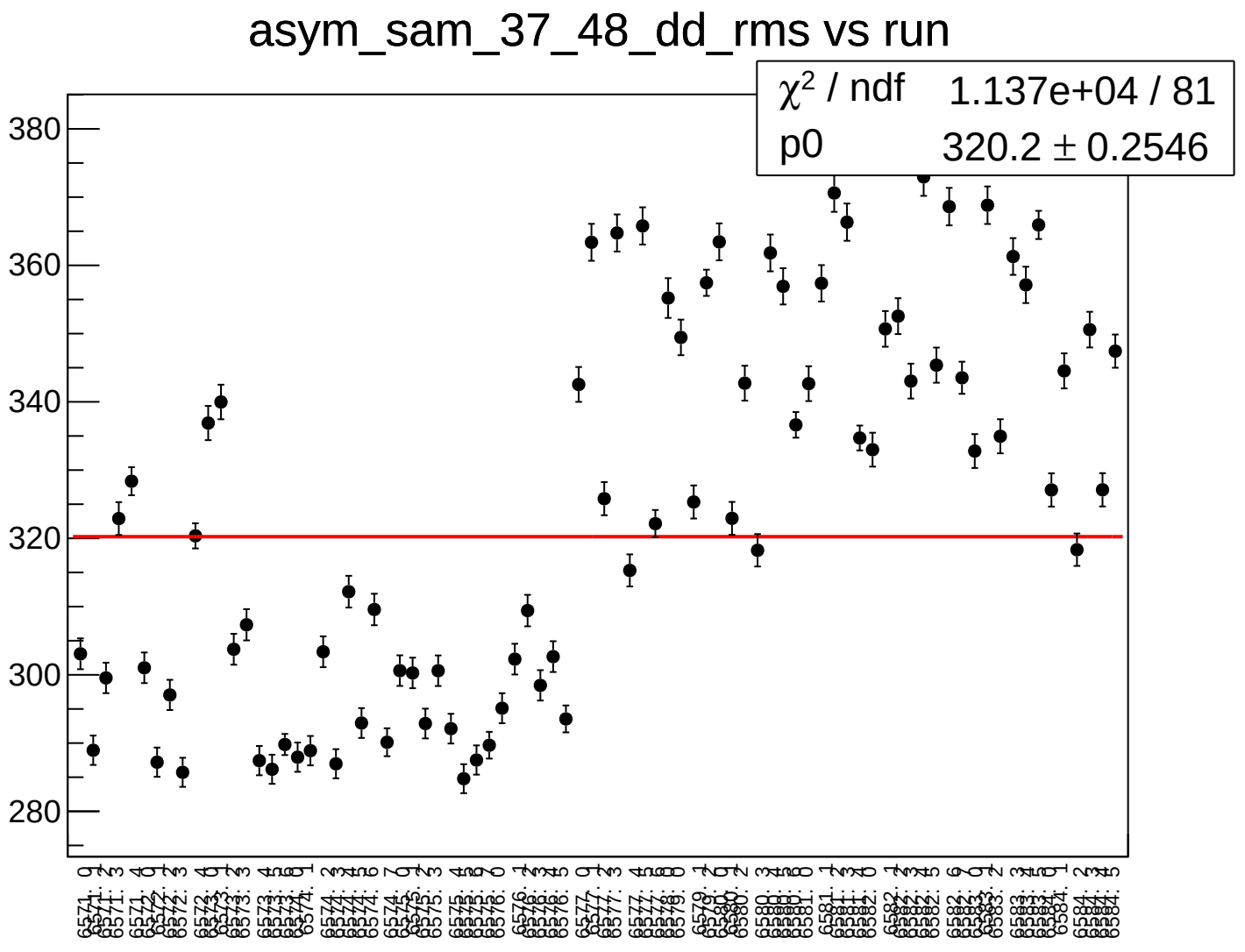

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 102.2 / 81
p0 −63.64 ± 352.7
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 275.1
Std Dev 219.1
2
1
0
−1
−2

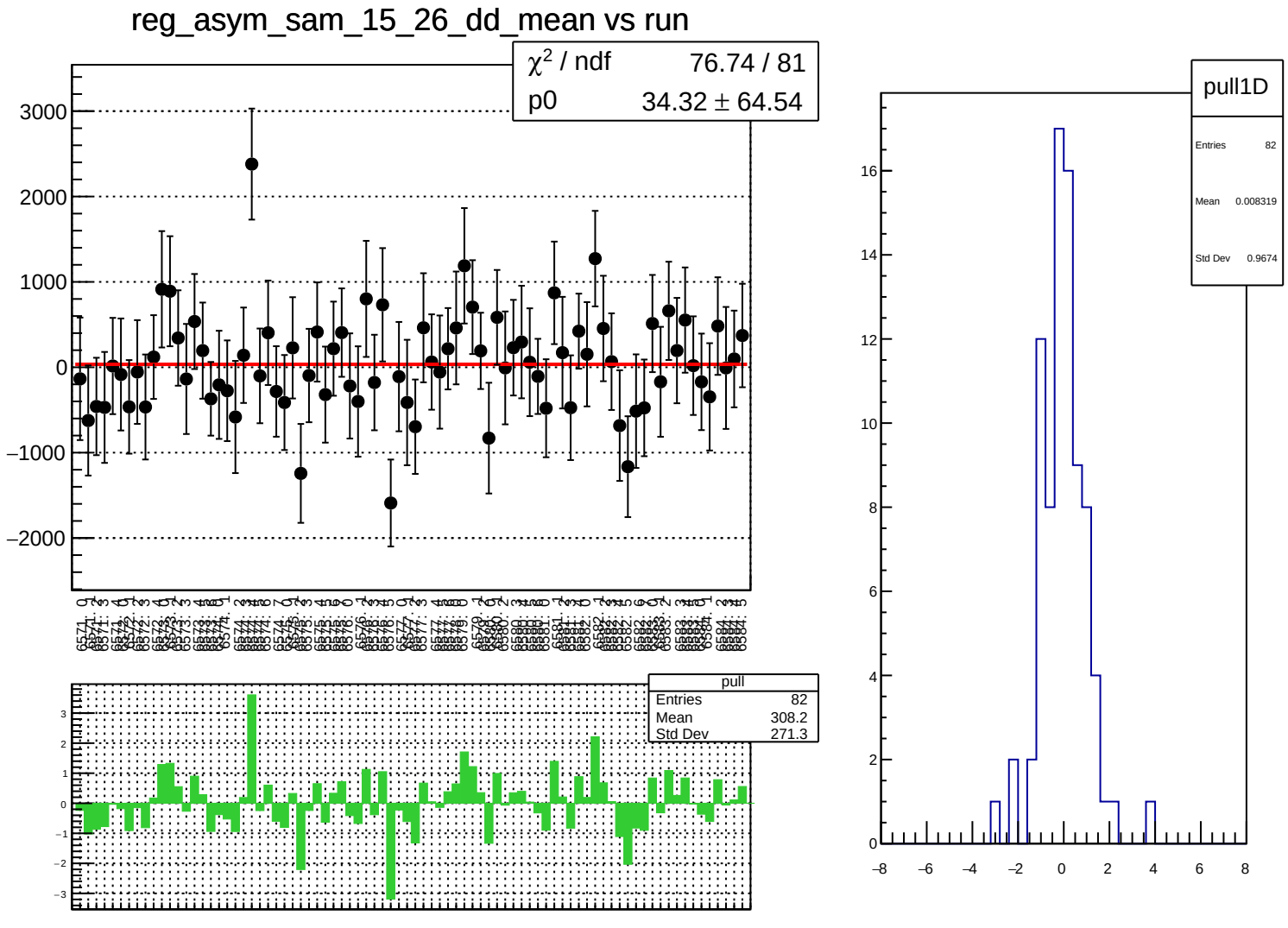

pull1D
Entries 82
Mean −0.007244
Std Dev 1.116
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

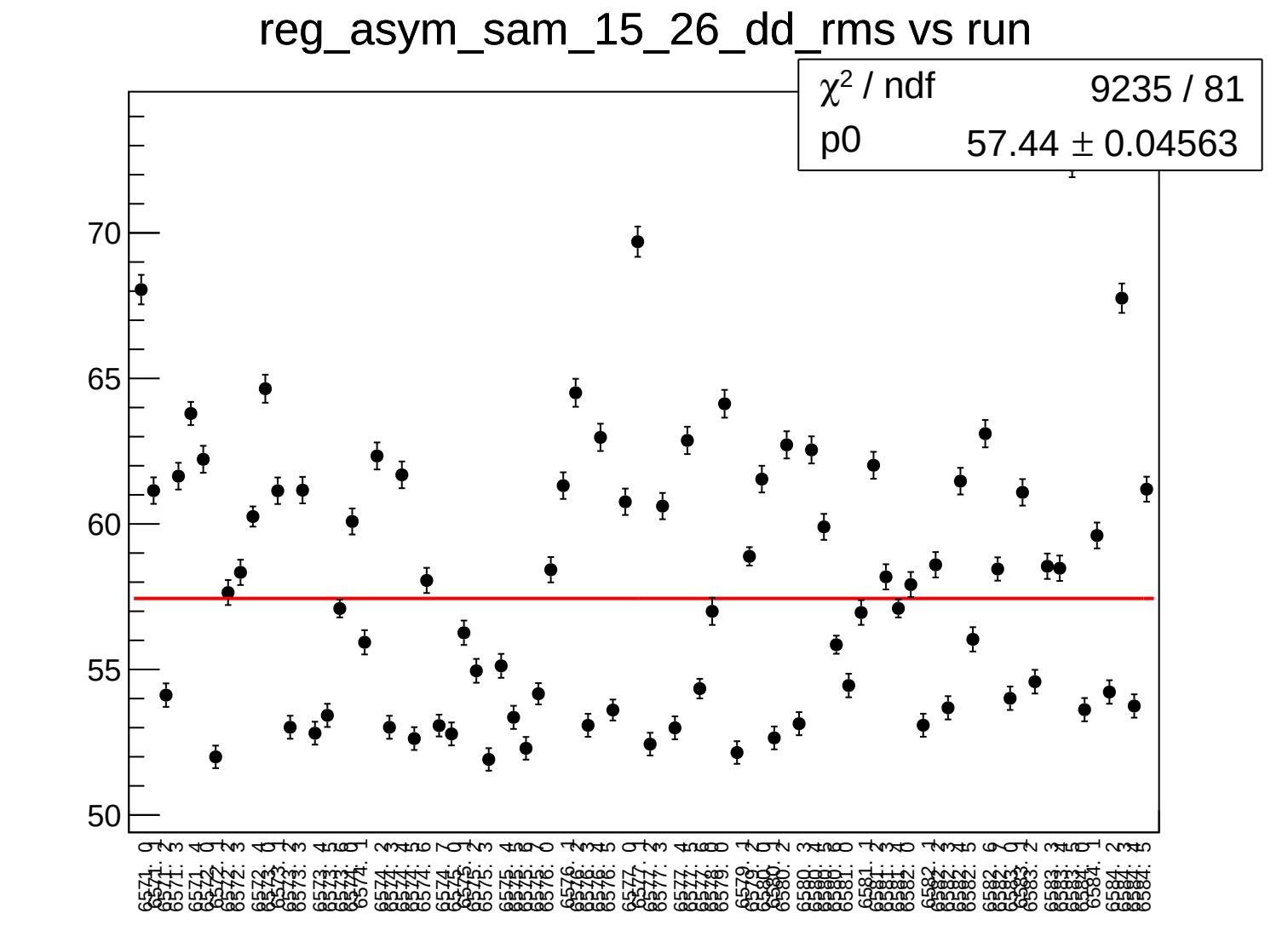

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 1.199e+04 / 81
p0 313.7 ± 0.2494
360
340
320
300
280

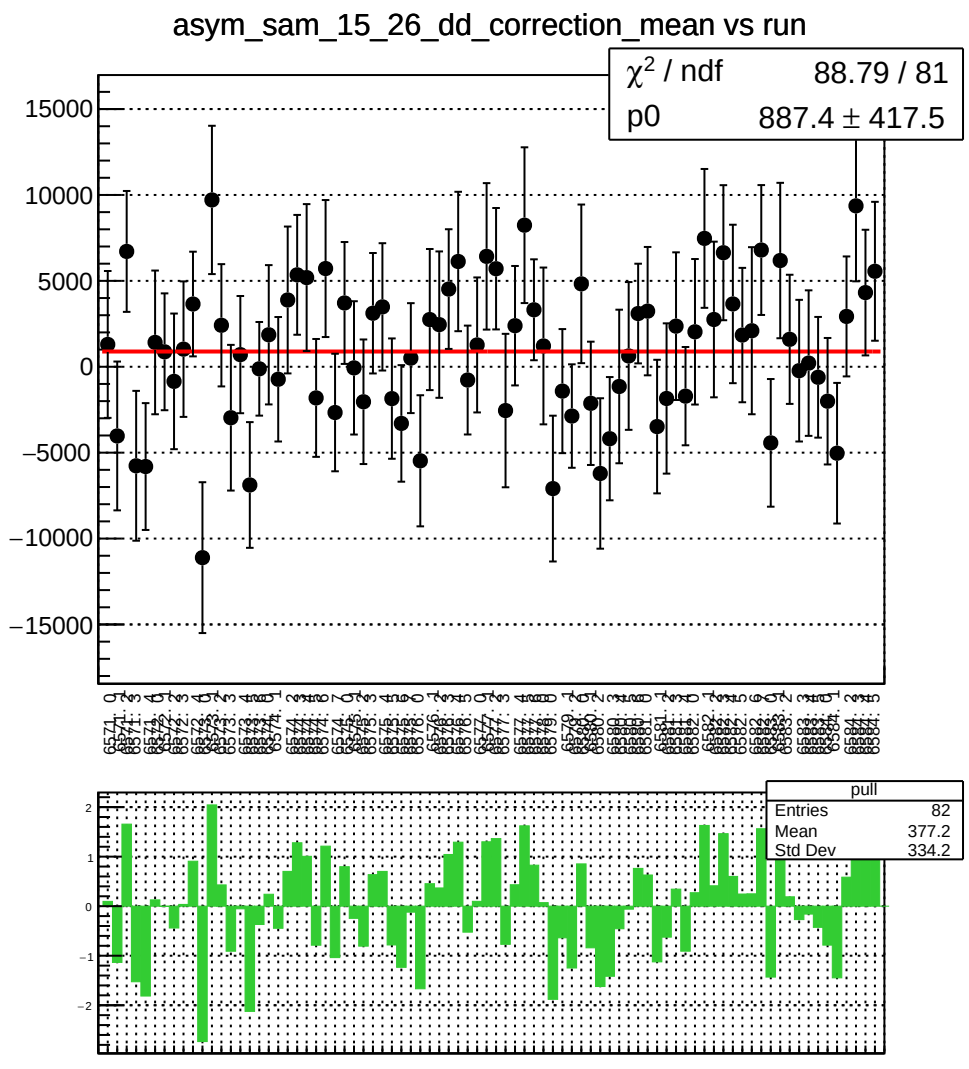

asym_sam_37_48_dd_mean vs run
χ² / ndf 97.69 / 81
p0 27.81 ± 360
10000
5000
0
−5000
−10000
pull
Entries 82
Mean 188.4
Std Dev 132.4
2
1
0
−1
−2

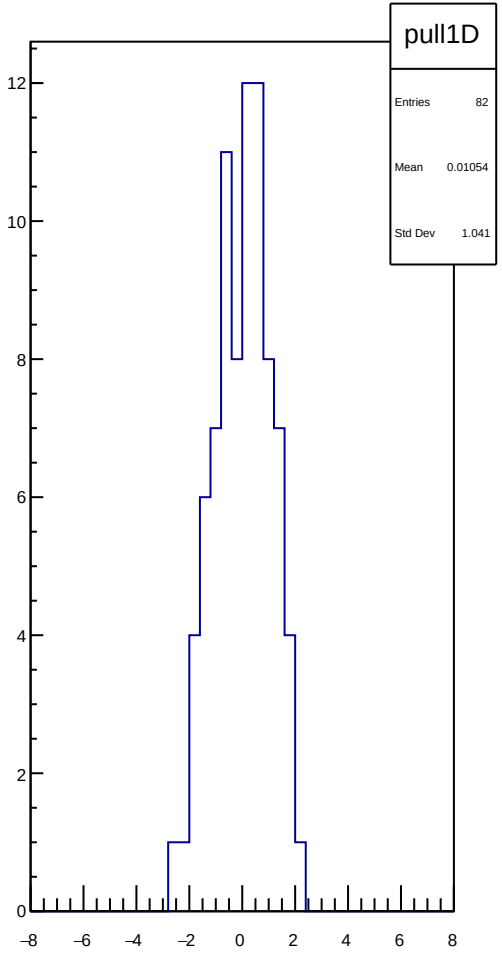

pull1D
Entries 82
Mean 0.00856
Std Dev 1.091
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

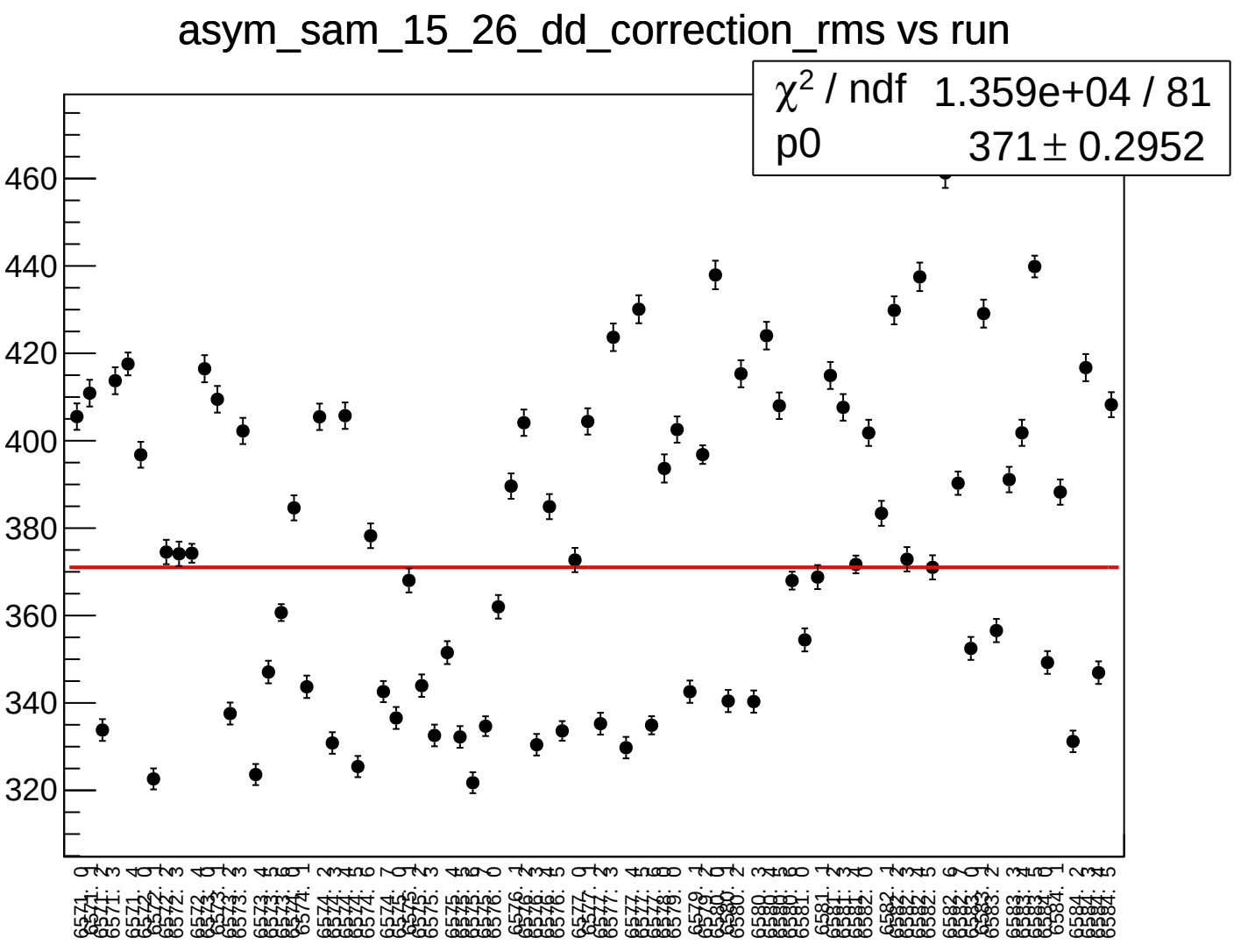

asym_sam_37_48_dd_rms vs run
χ² / ndf 1.137e+04 / 81
p0 320.2 ± 0.2546
380
360
340
320
300
280

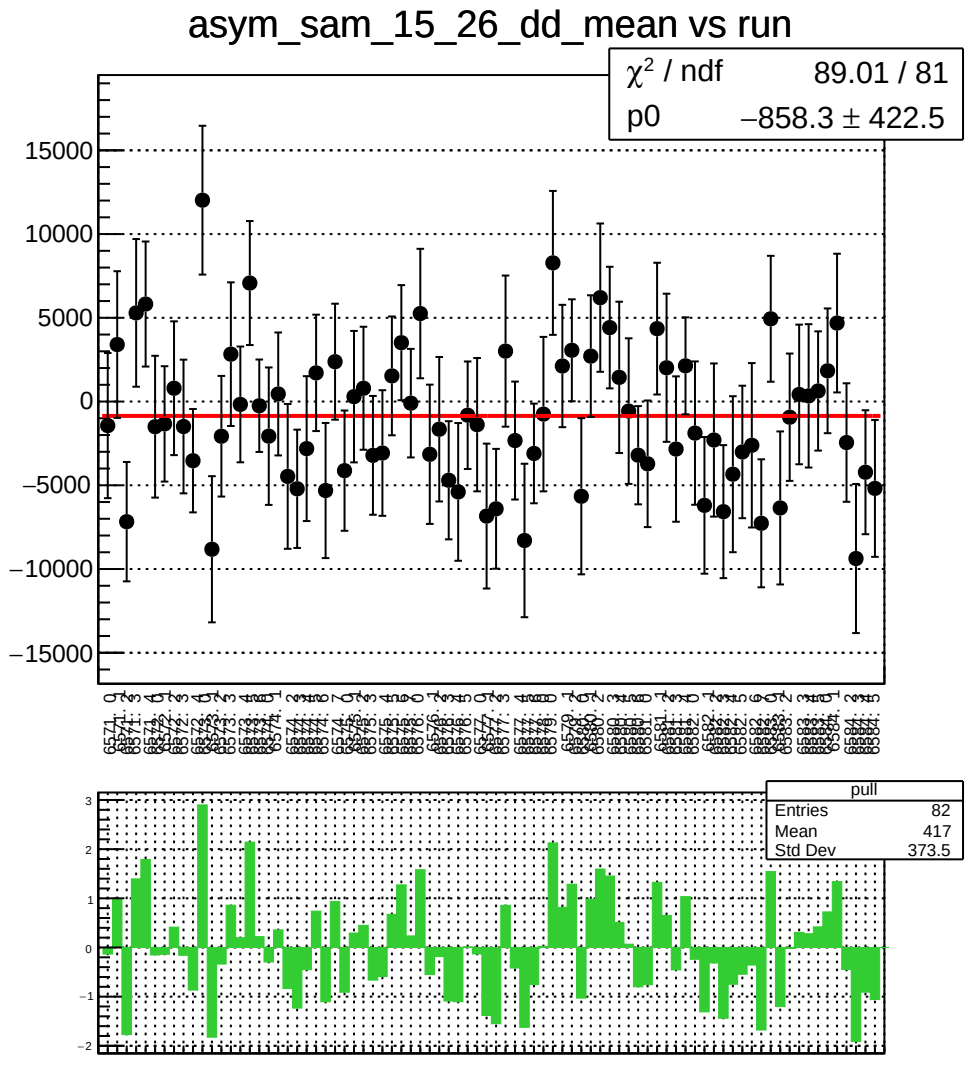

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 76.74 / 81
p0 34.32 ± 64.54
3000
2000
1000
0
−1000
−2000
pull
Entries 82
Mean 308.2
Std Dev 271.3
pull1D
Entries 82
Mean 0.008319
Std Dev 0.9674

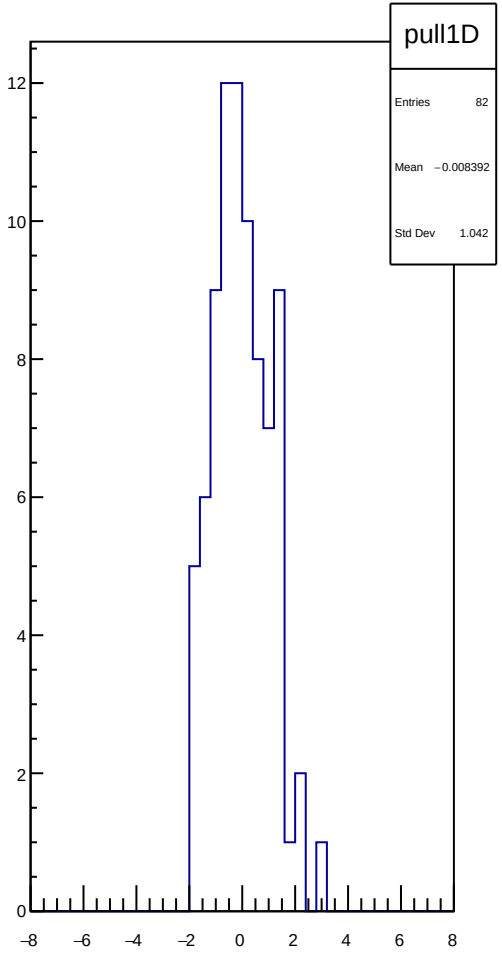

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 9235 / 81
p0 57.44 ± 0.04563
70
65
60
55
50

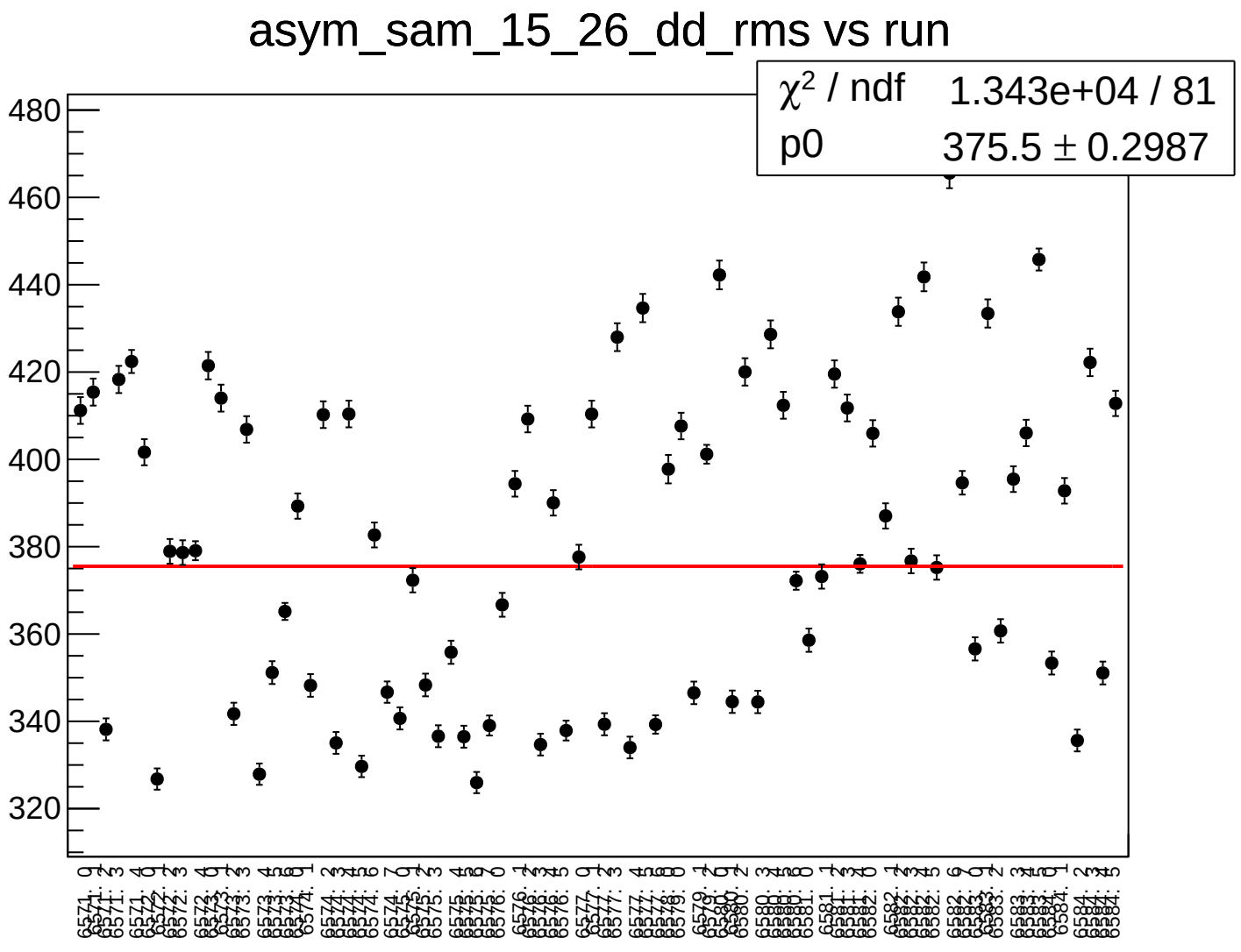

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 88.79 / 81
p0 887.4 ± 417.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 377.2
Std Dev 334.2
2
1
0
−1
−2

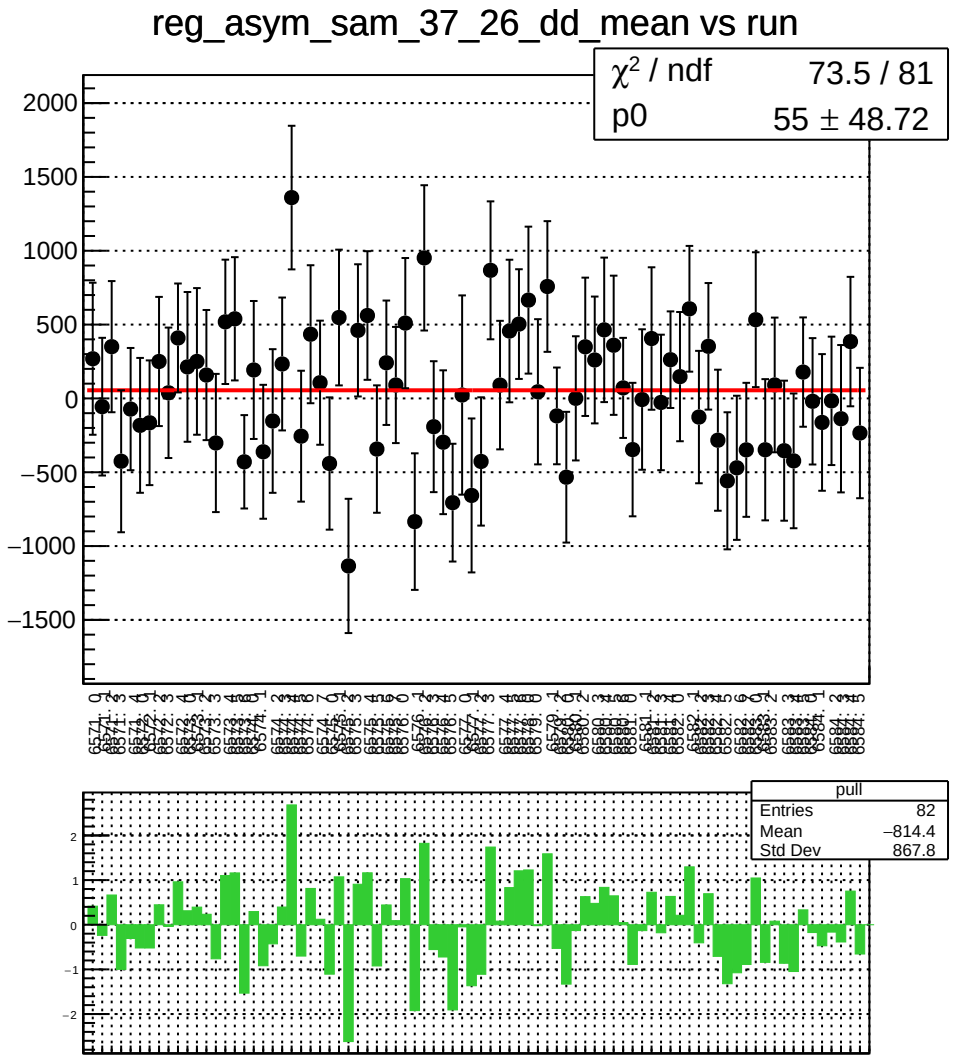

pull1D
Entries 82
Mean 0.01054
Std Dev 1.041
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

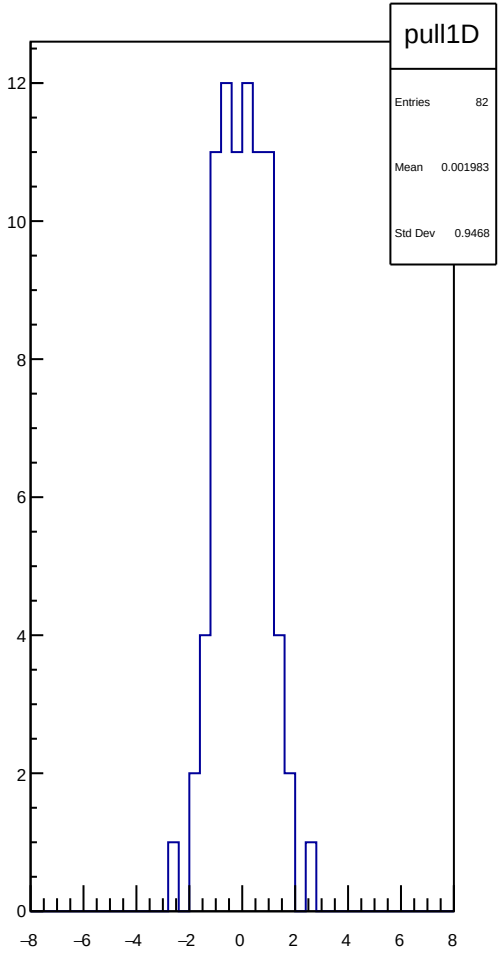

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 1.359e+04 / 81
p0 371 ± 0.2952
460
440
420
400
380
360
340
320

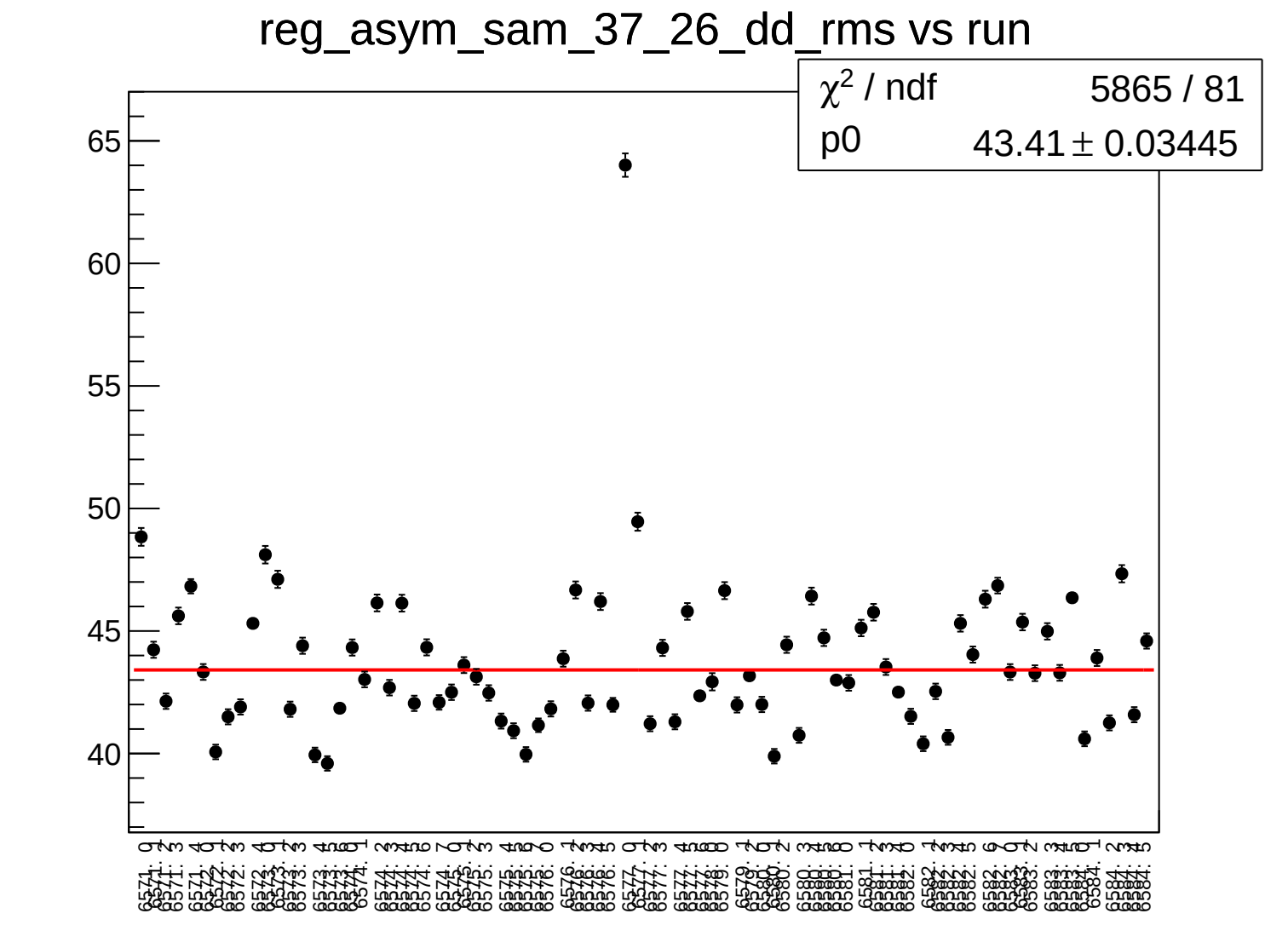

asym_sam_15_26_dd_mean vs run
χ² / ndf 89.01 / 81
p0 −858.3 ± 422.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 417
Std Dev 373.5
3
2
1
0
−1
−2

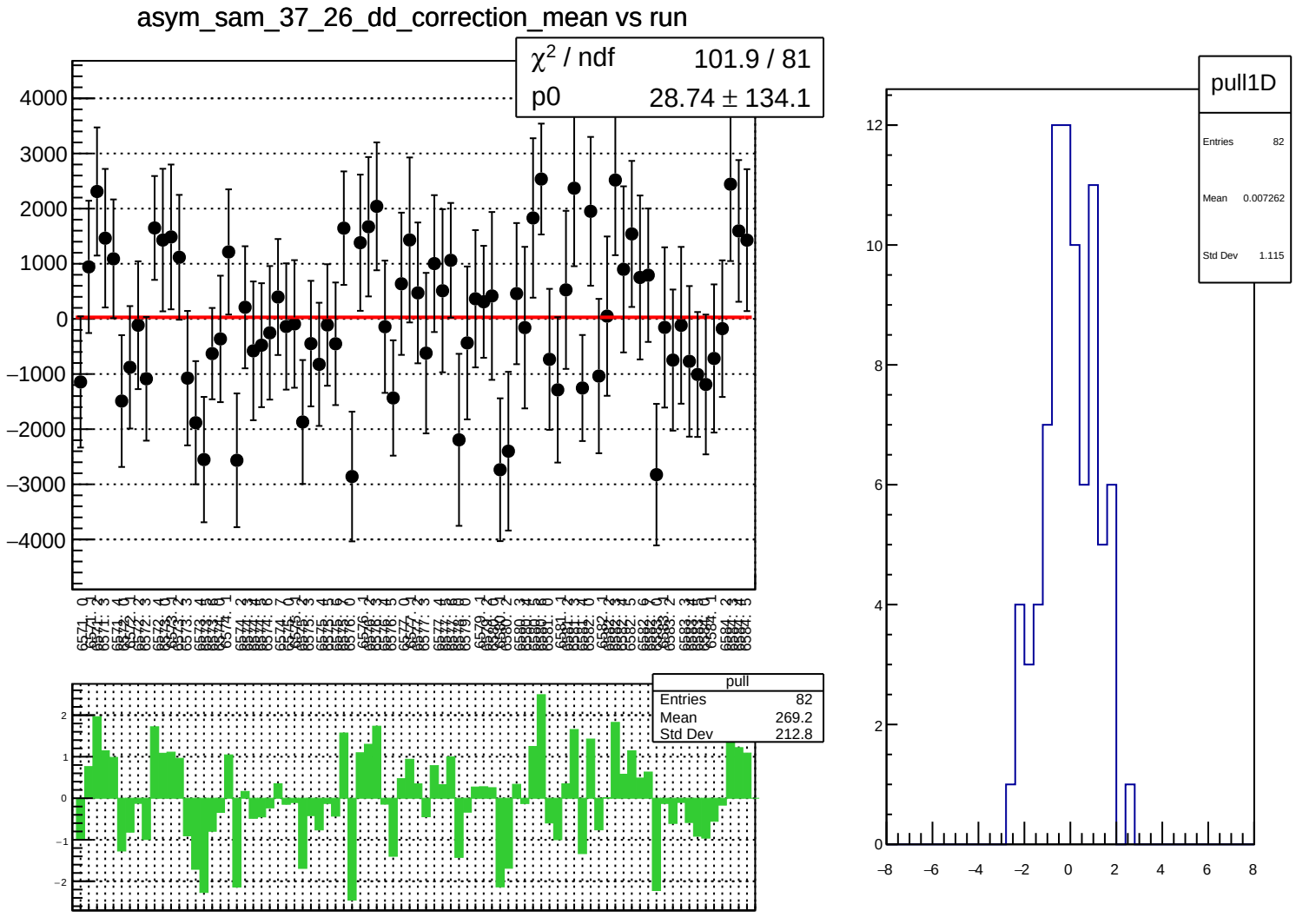

pull1D
Entries 82
Mean −0.008392
Std Dev 1.042
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

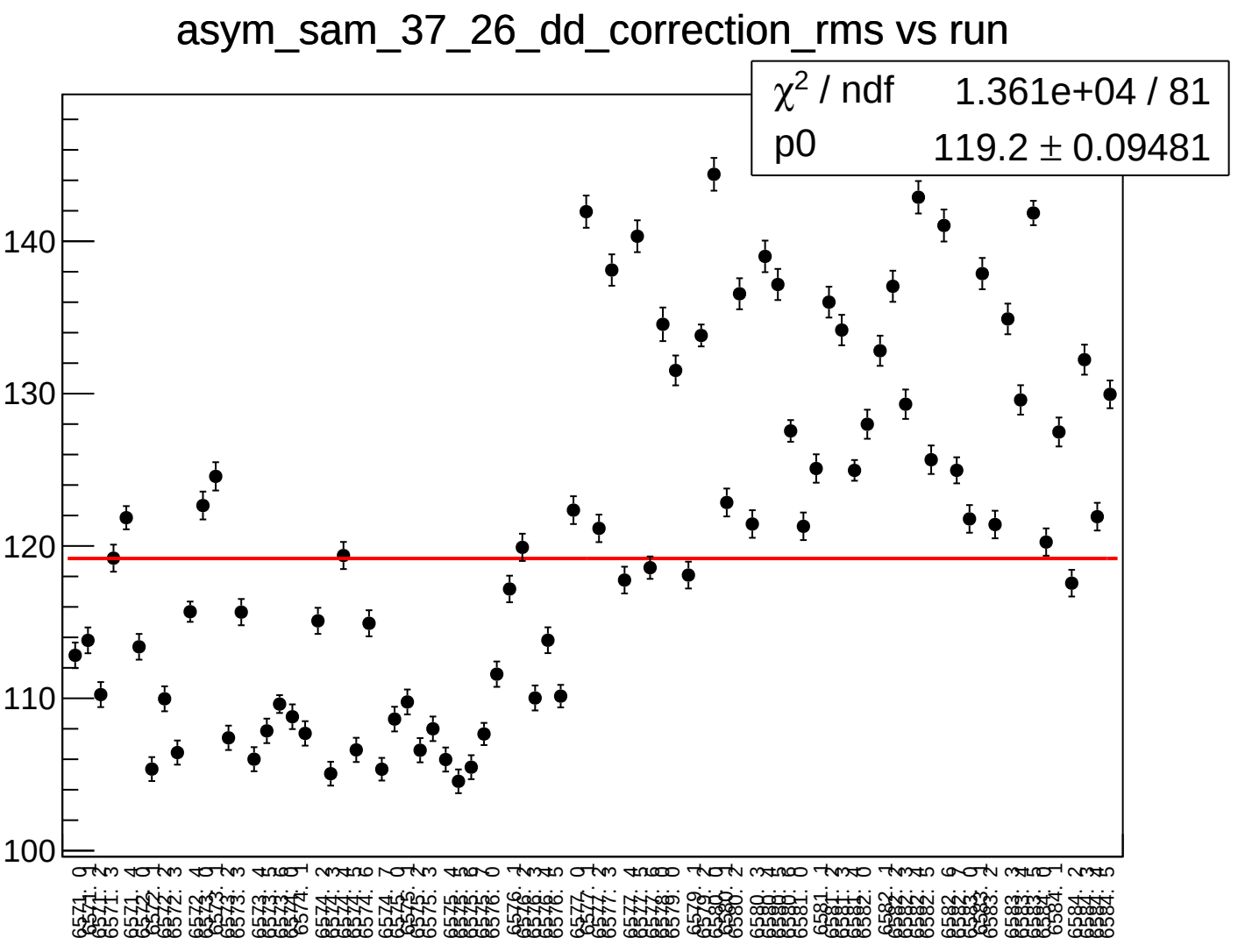

asym_sam_15_26_dd_rms vs run
χ² / ndf 1.343e+04 / 81
p0 375.5 ± 0.2987
480
460
440
420
400
380
360
340
320

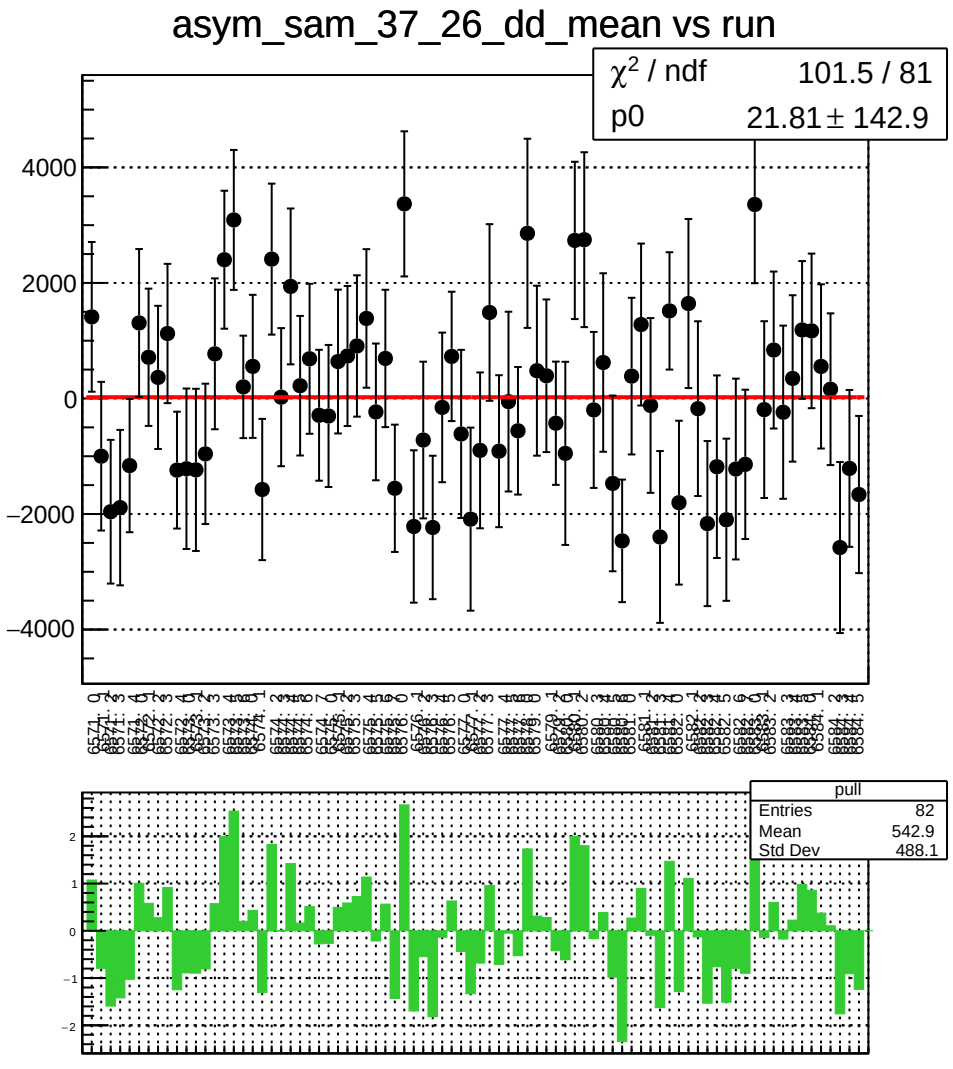

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 73.5 / 81
p0 55 ± 48.72
2000
1500
1000
500
0
−500
−1000
−1500
pull
Entries 82
Mean −814.4
Std Dev 867.8
2
1
0
−1
−2

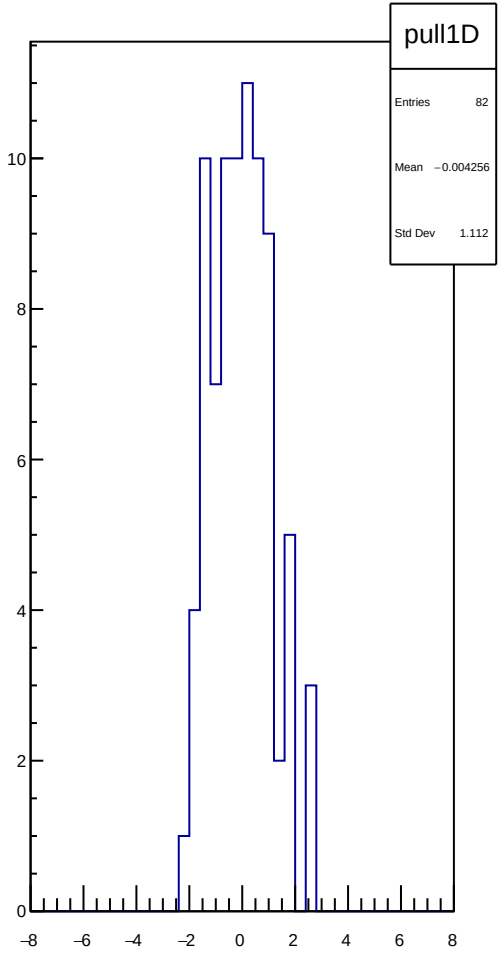

pull1D
Entries 82
Mean 0.001983
Std Dev 0.9468
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

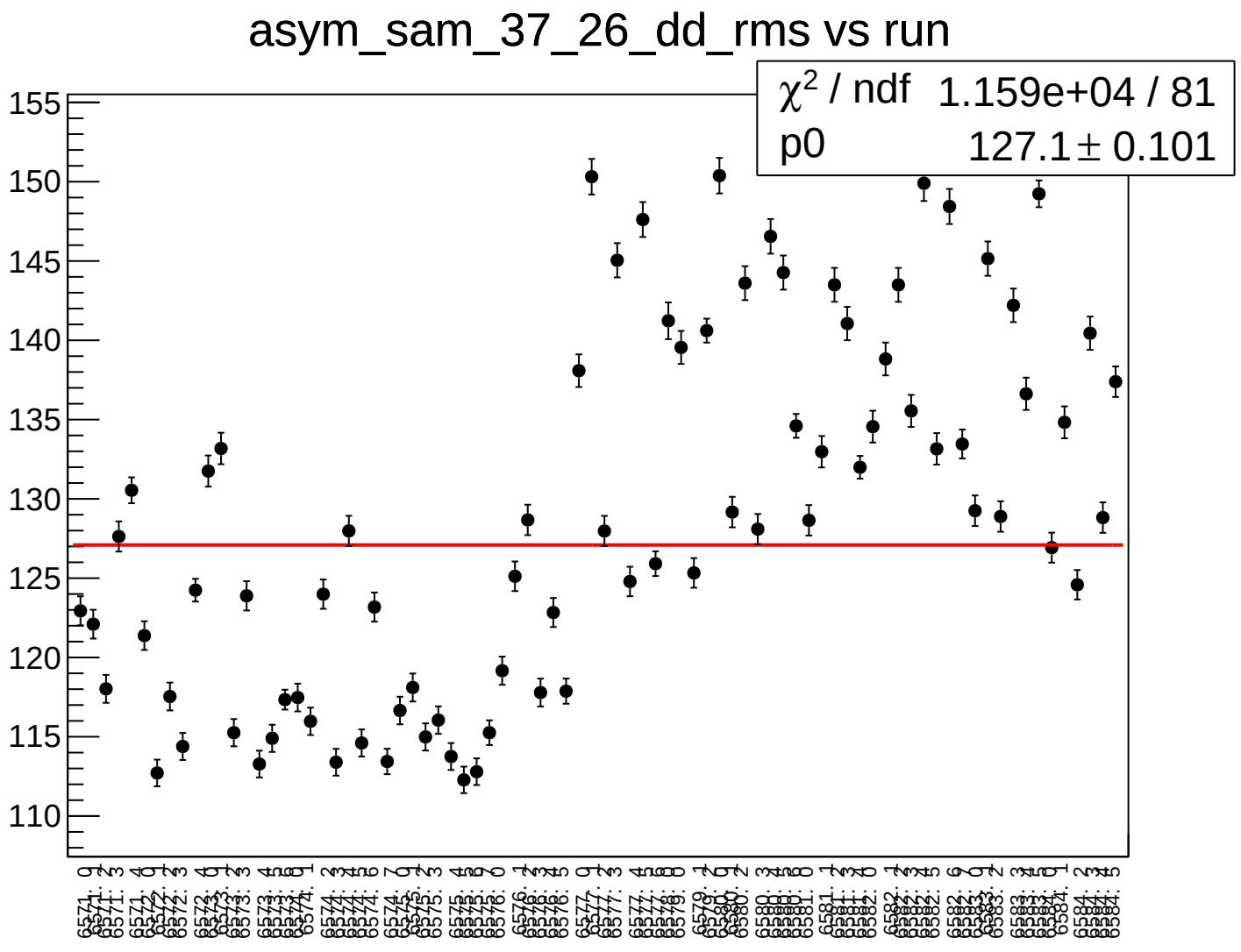

reg_asym_sam_37_26_dd_rms vs run
$\chi^2$ / ndf 5865 / 81
p0 43.41 ± 0.03445
65
60
55
50
45
40

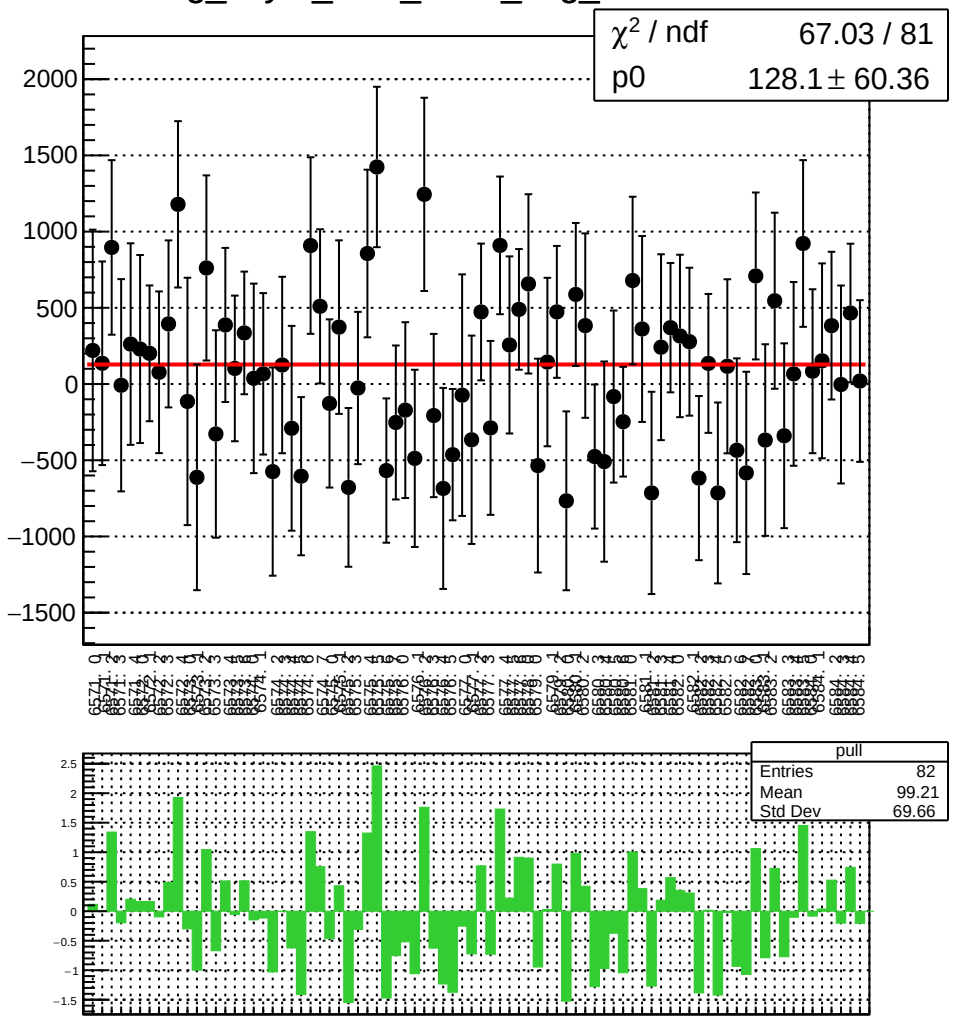

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 101.9 / 81
p0 28.74 ± 134.1
pull
Entries 82
Mean 269.2
Std Dev 212.8
pull1D
Entries 82
Mean 0.007262
Std Dev 1.115

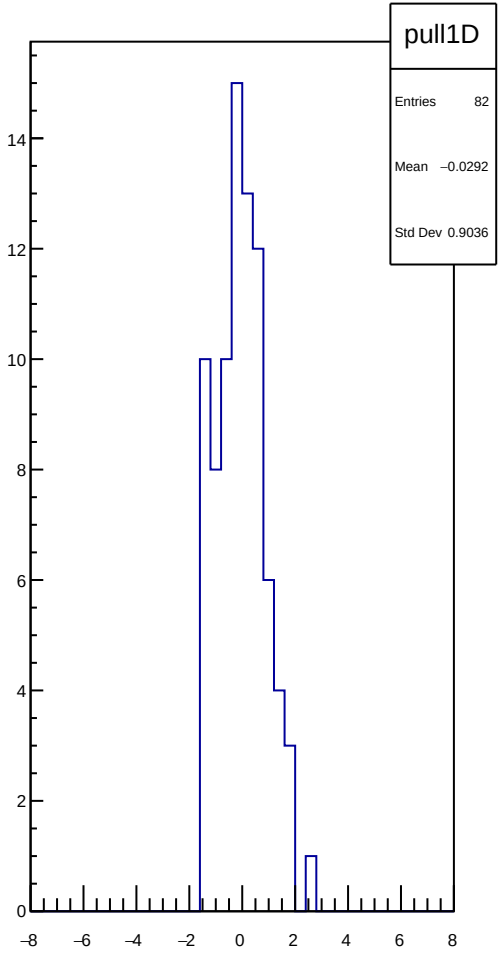

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 1.361e+04 / 81
p0 119.2 ± 0.09481
140
130
120
110
100

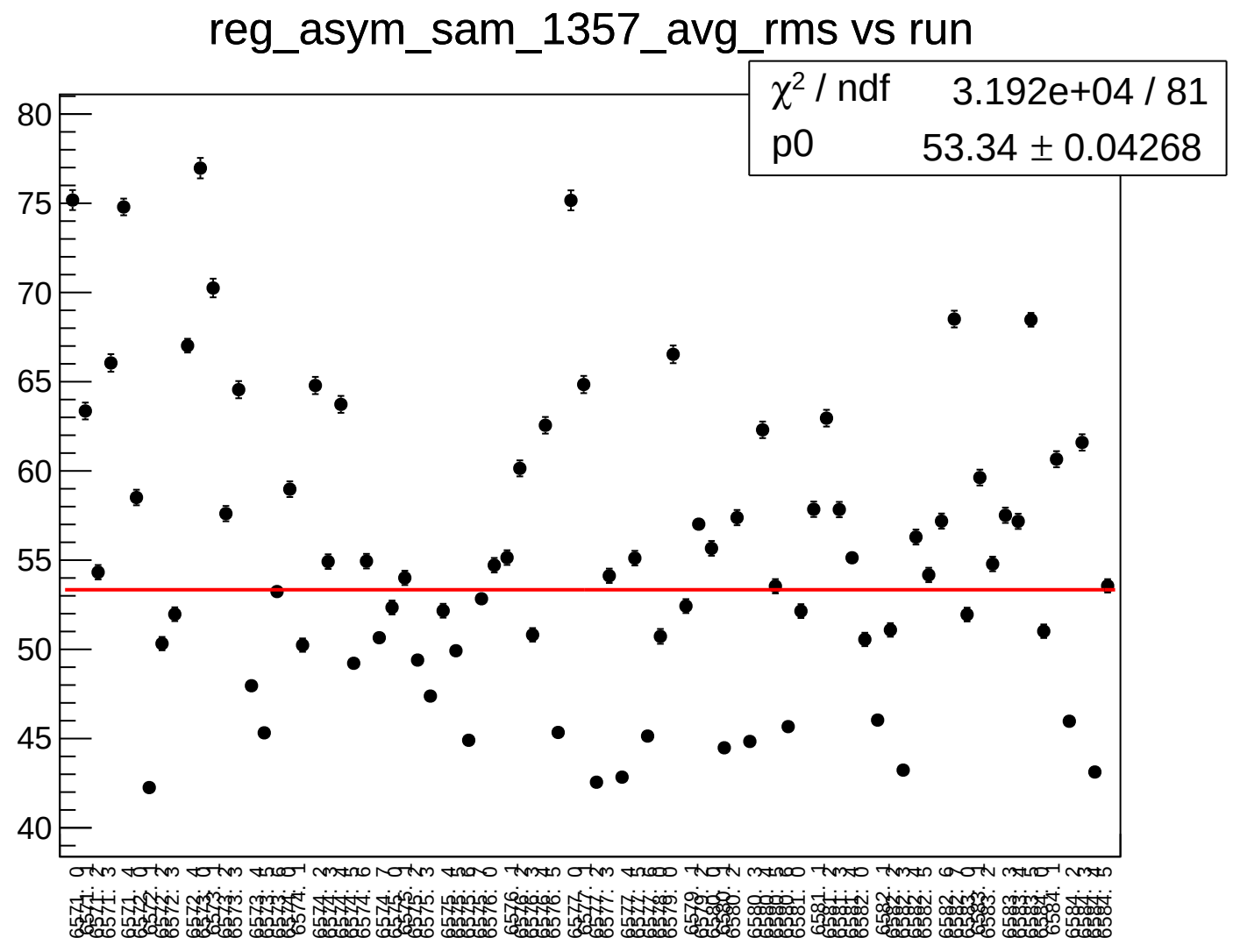

asym_sam_37_26_dd_mean vs run
χ² / ndf 101.5 / 81
p0 21.81 ± 142.9
4000
2000
0
−2000
−4000
pull
Entries 82
Mean 542.9
Std Dev 488.1
2
1
0
−1
−2

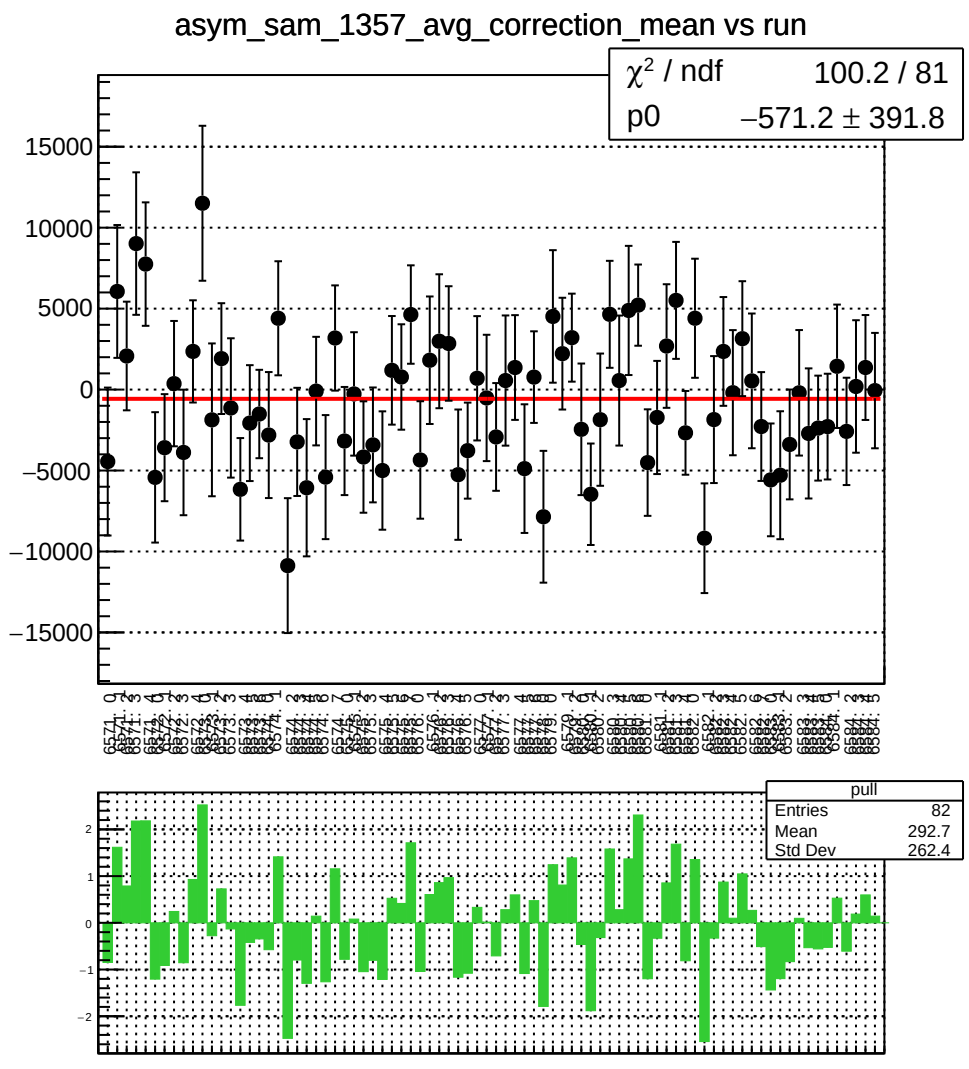

pull1D
Entries 82
Mean −0.004256
Std Dev 1.112
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

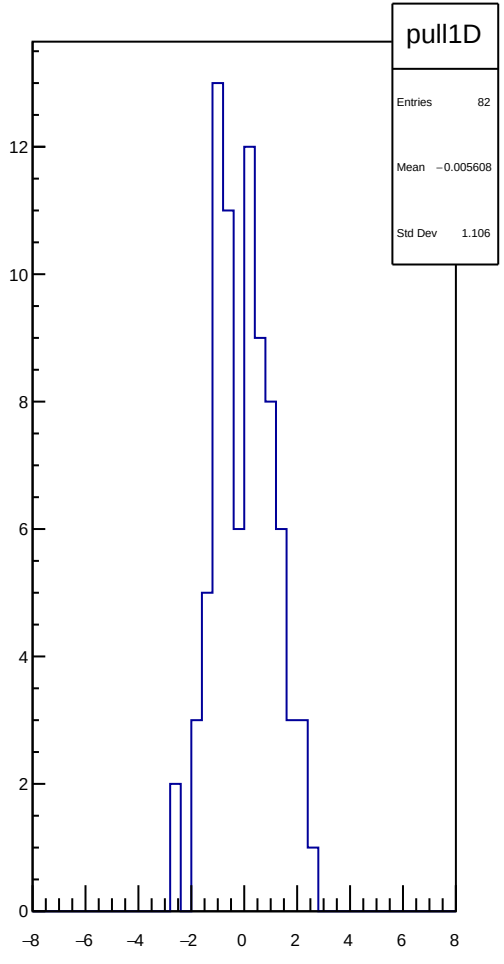

asym_sam_37_26_dd_rms vs run
χ² / ndf 1.159e+04 / 81
p0 127.1 ± 0.101
155
150
145
140
135
130
125
120
115
110

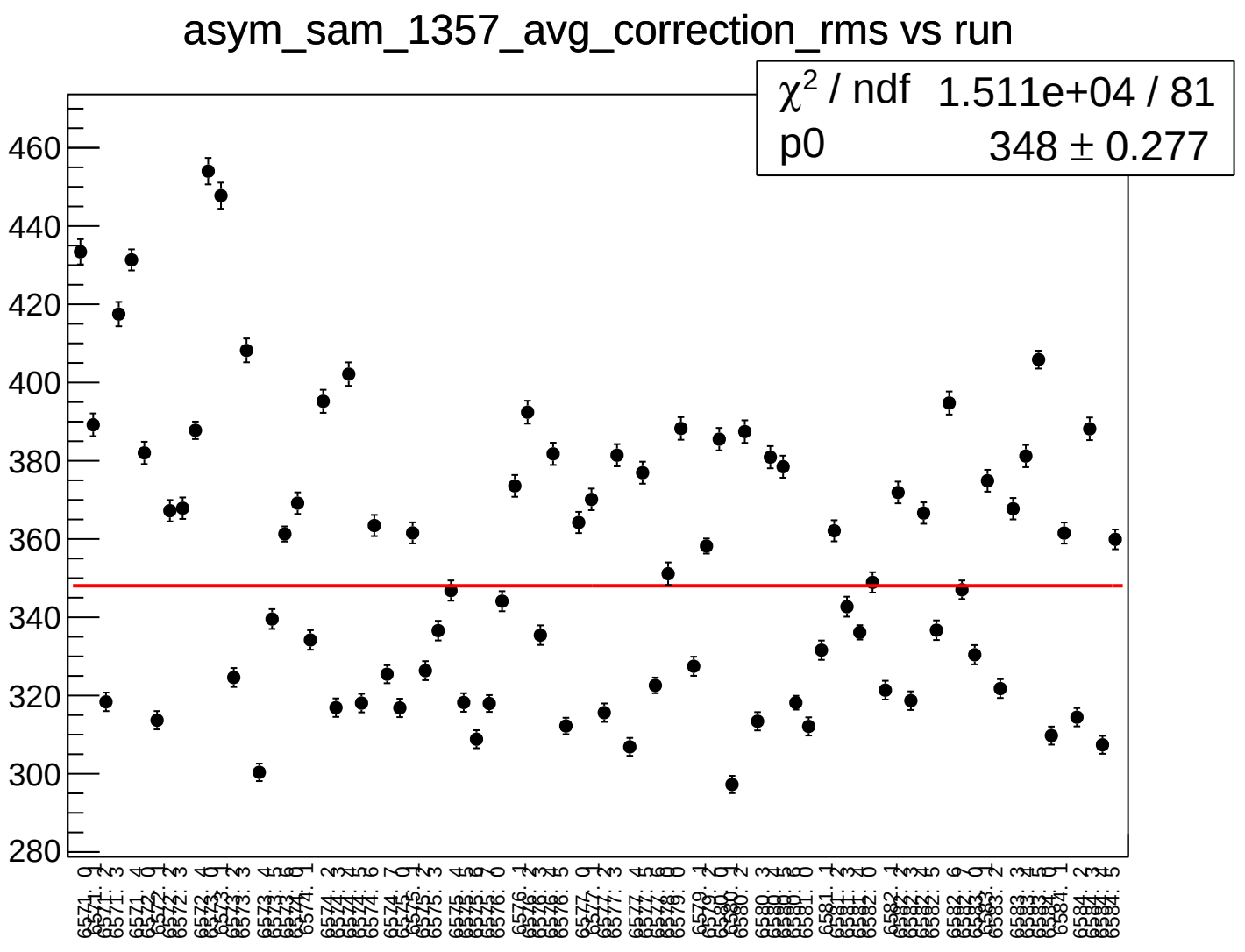

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 67.03 / 81
p0 128.1 ± 60.36
pull
Entries 82
Mean 99.21
Std Dev 69.66

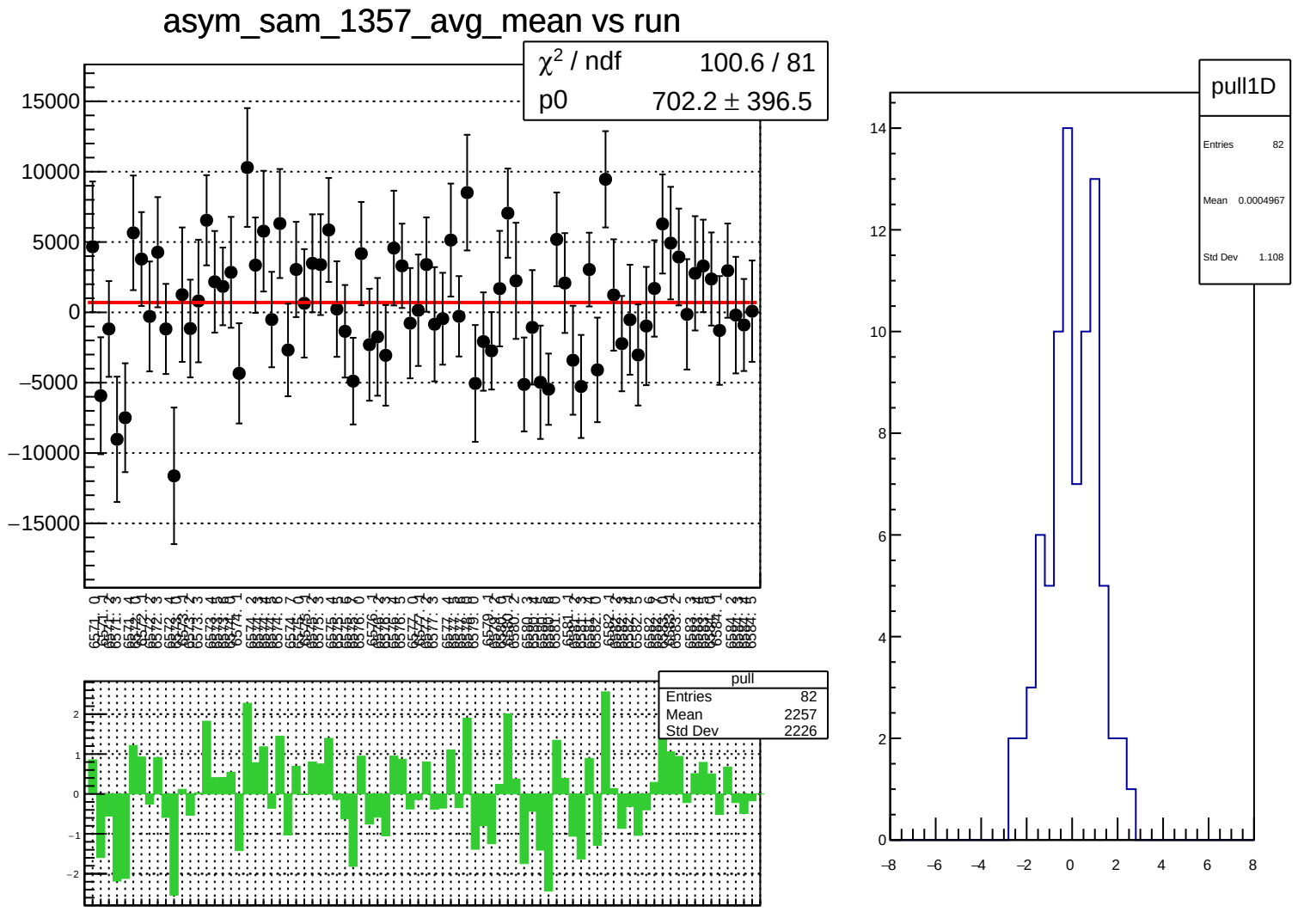

pull1D
Entries 82
Mean −0.0292
Std Dev 0.9036

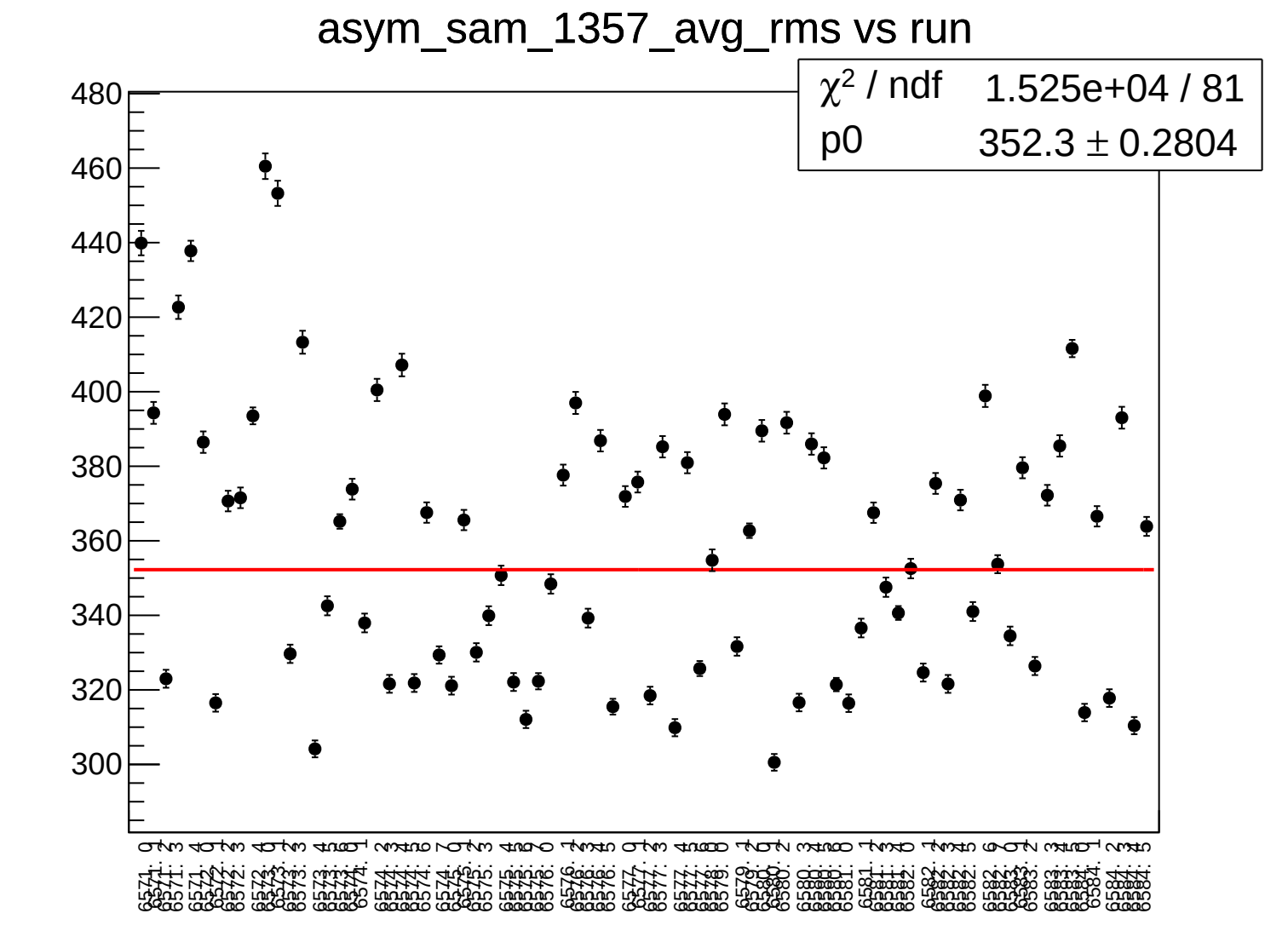

reg_asym_sam_1357_avg_rms vs run
$\chi^2$ / ndf 3.192e+04 / 81
p0 53.34 ± 0.04268
80
75
70
65
60
55
50
45
40

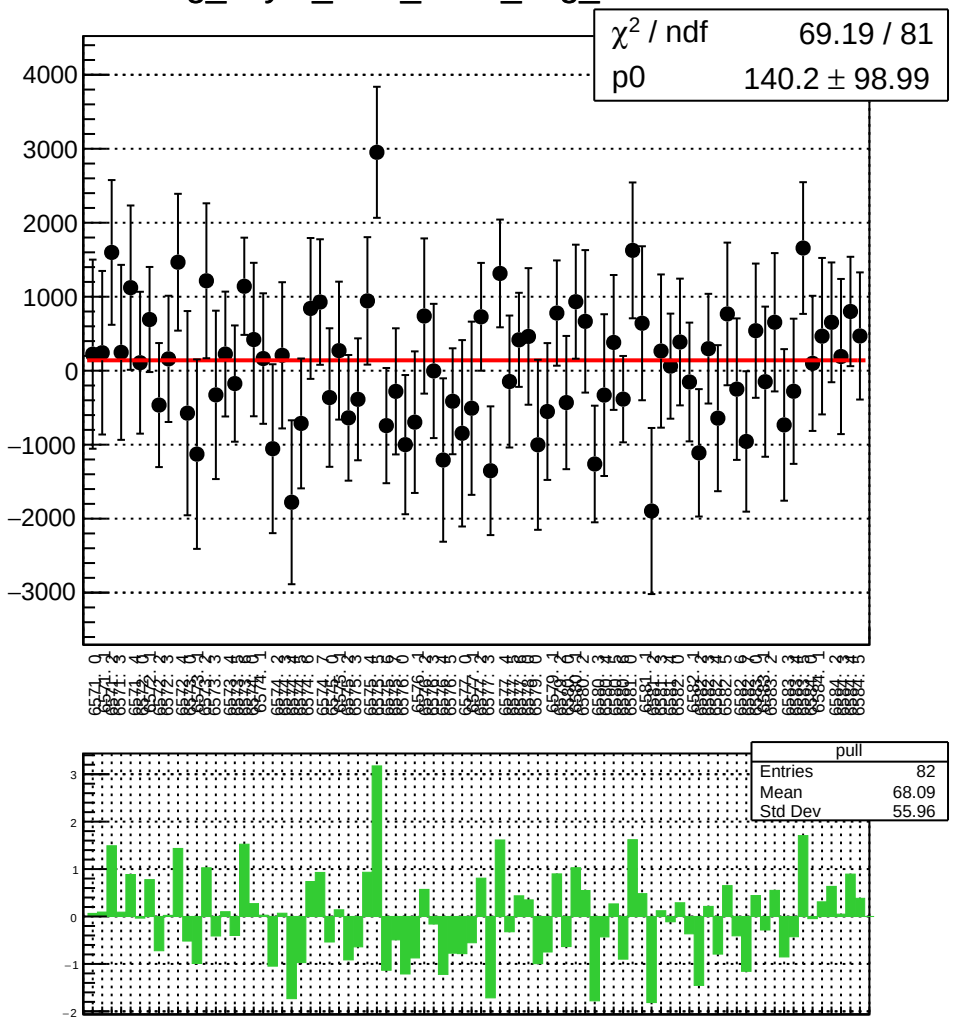

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 100.2 / 81
p0 −571.2 ± 391.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 292.7
Std Dev 262.4
2
1
0
−1
−2

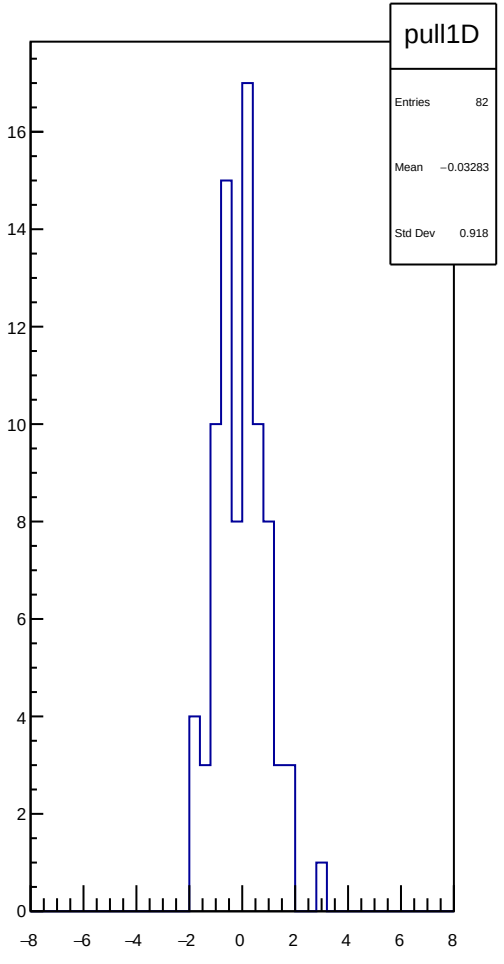

pull1D
Entries 82
Mean −0.005608
Std Dev 1.106
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

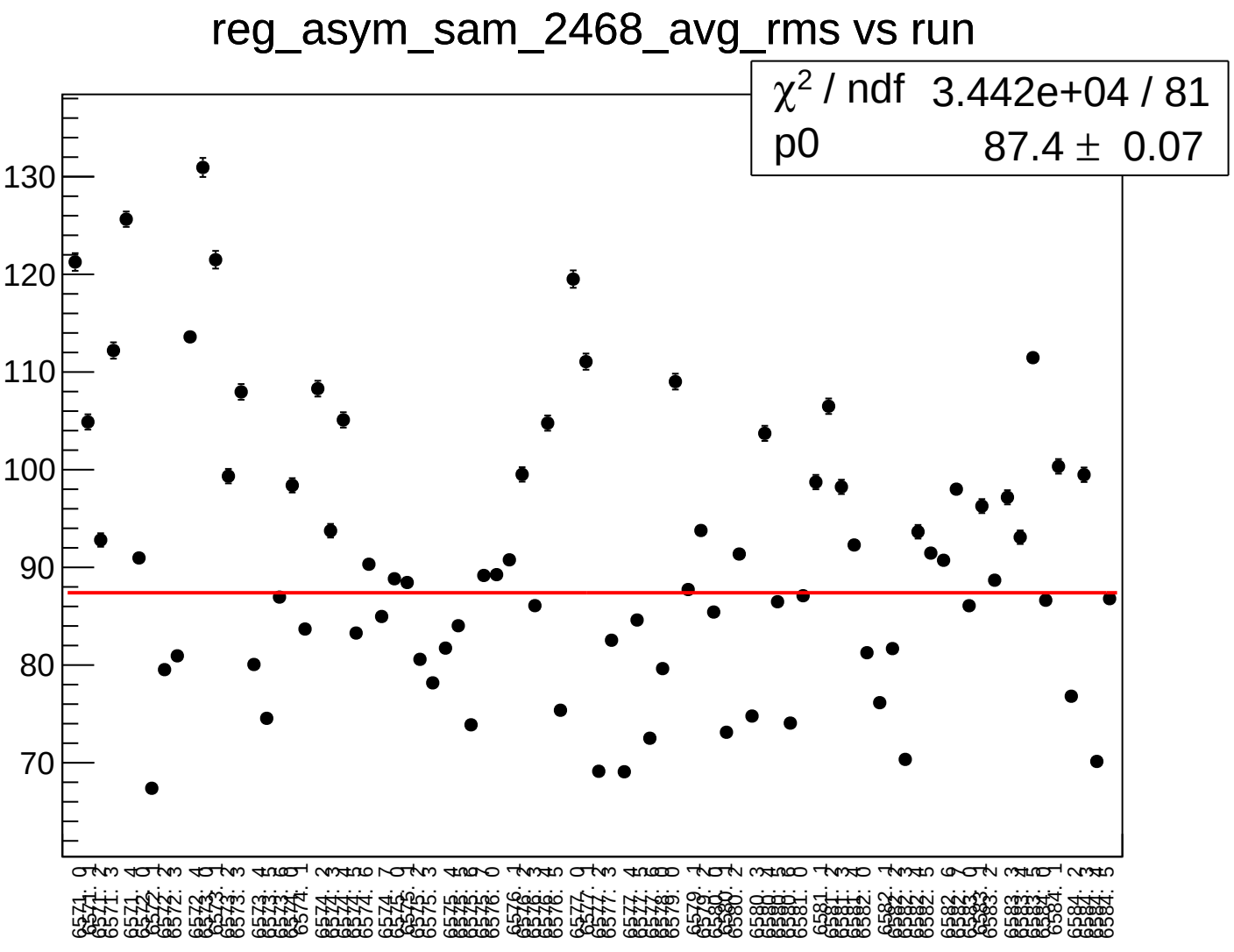

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 1.511e+04 / 81
p0 348 ± 0.277
460
440
420
400
380
360
340
320
300
280

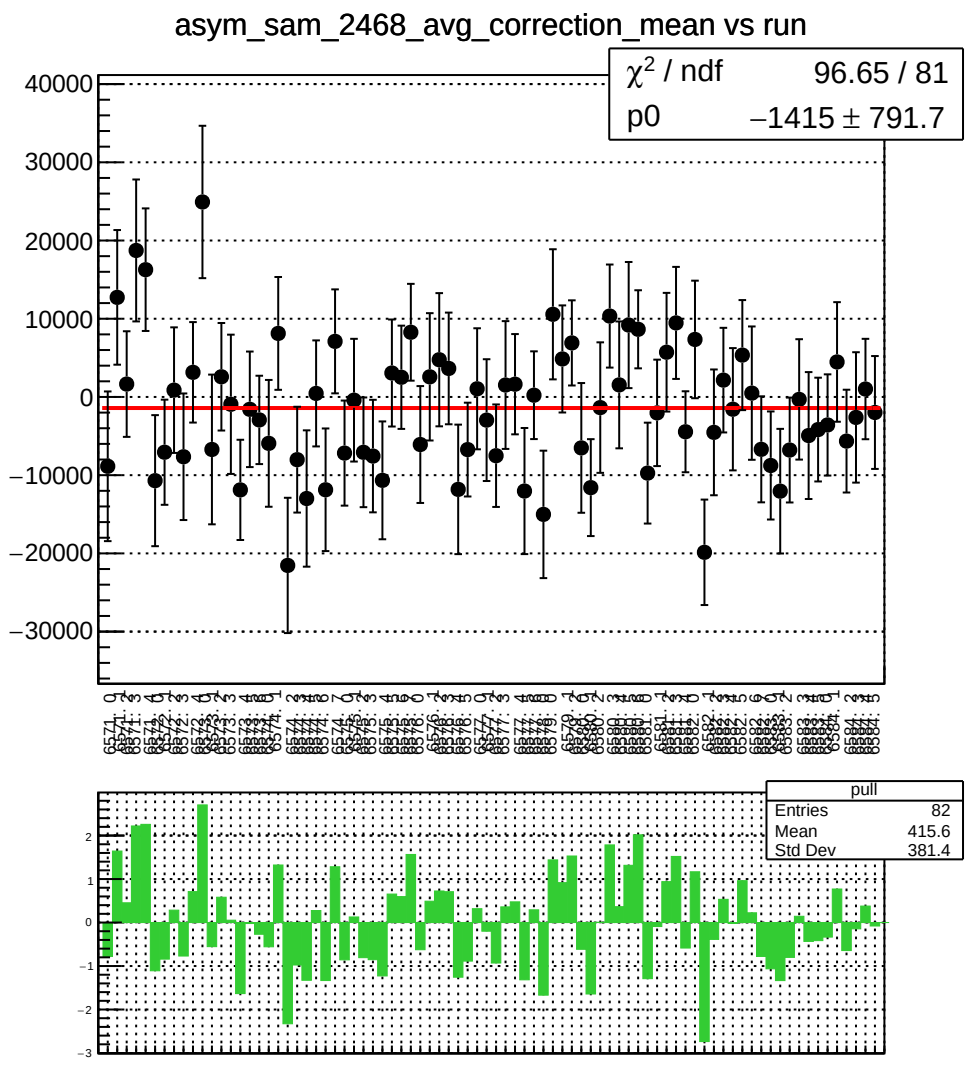

asym_sam_1357_avg_mean vs run
χ² / ndf 100.6 / 81
p0 702.2 ± 396.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 82
Mean 2257
Std Dev 2226
2
1
0
−1
−2
pull1D
Entries 82
Mean 0.0004967
Std Dev 1.108
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

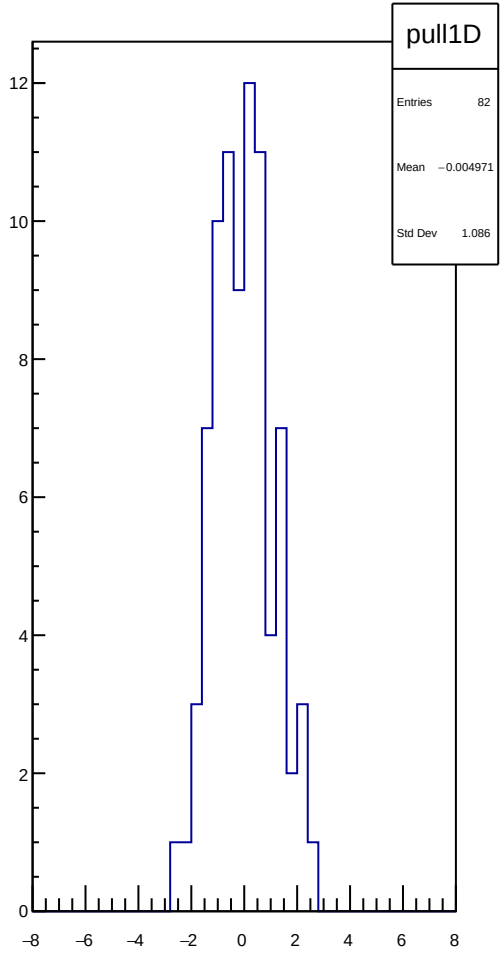

asym_sam_1357_avg_rms vs run
χ² / ndf 1.525e+04 / 81
p0 352.3 ± 0.2804
480
460
440
420
400
380
360
340
320
300

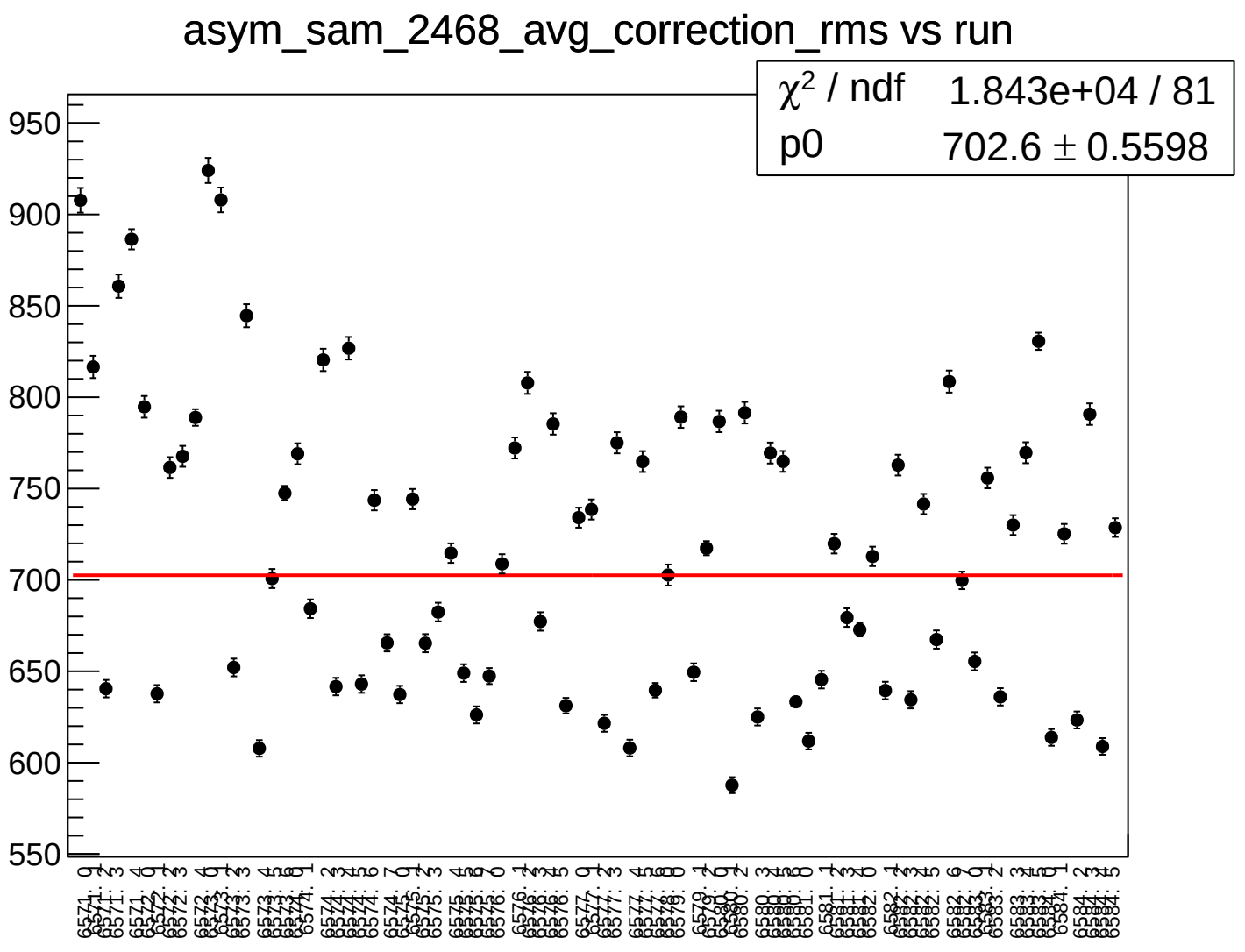

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 69.19 / 81
p0 140.2 ± 98.99
pull
Entries 82
Mean 68.09
Std Dev 55.96

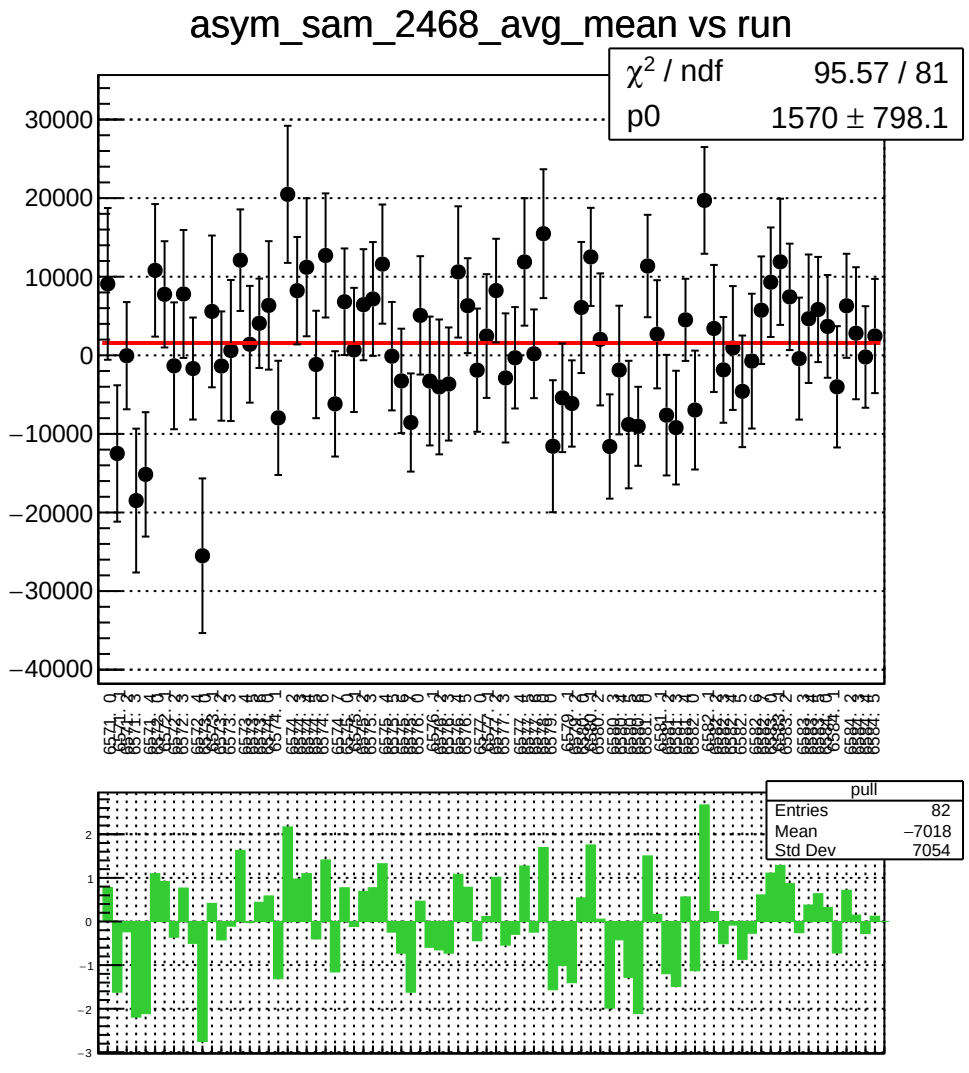

pull1D
Entries 82
Mean −0.03283
Std Dev 0.918

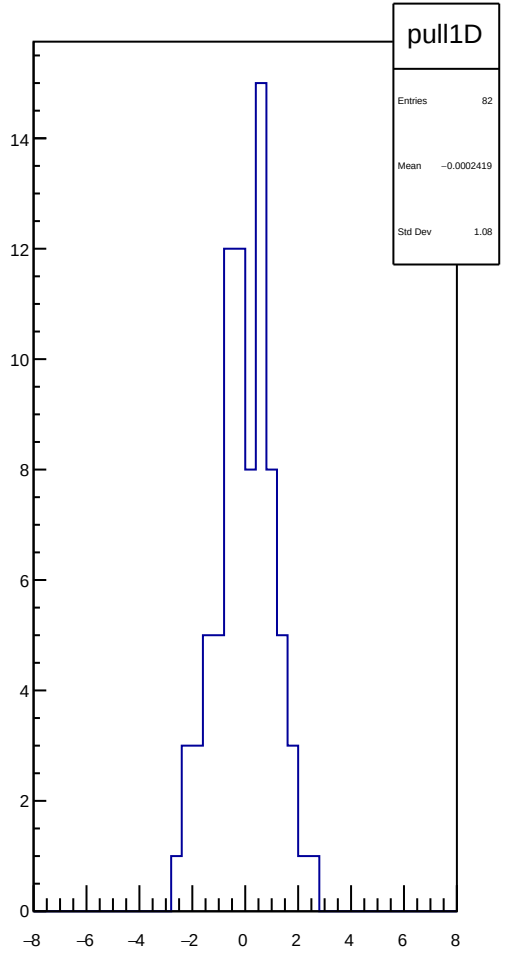

reg_asym_sam_2468_avg_rms vs run
$\chi^2$ / ndf 3.442e+04 / 81
p0 87.4 ± 0.07
130
120
110
100
90
80
70

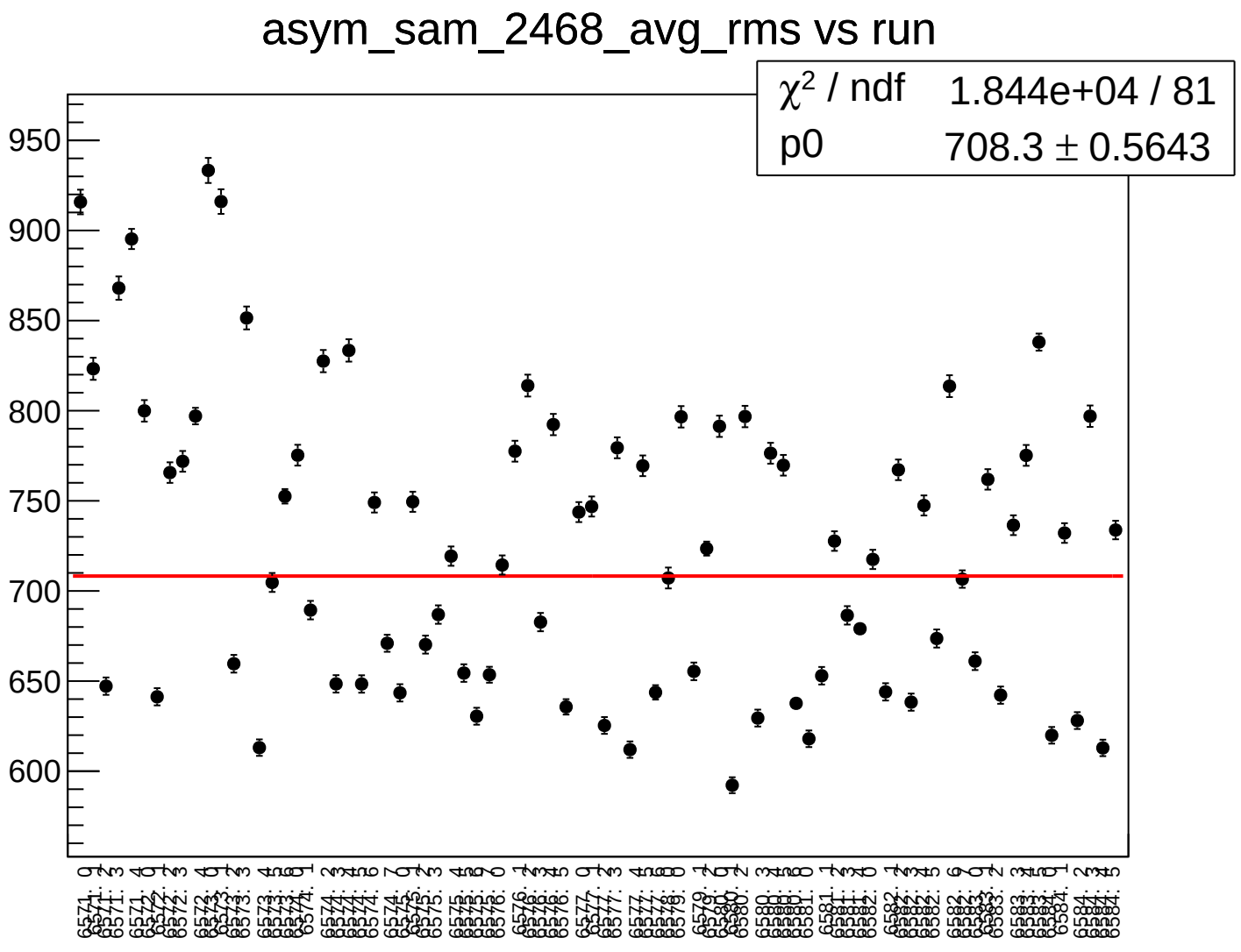

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 96.65 / 81
p0 −1415 ± 791.7
pull
Entries 82
Mean 415.6
Std Dev 381.4

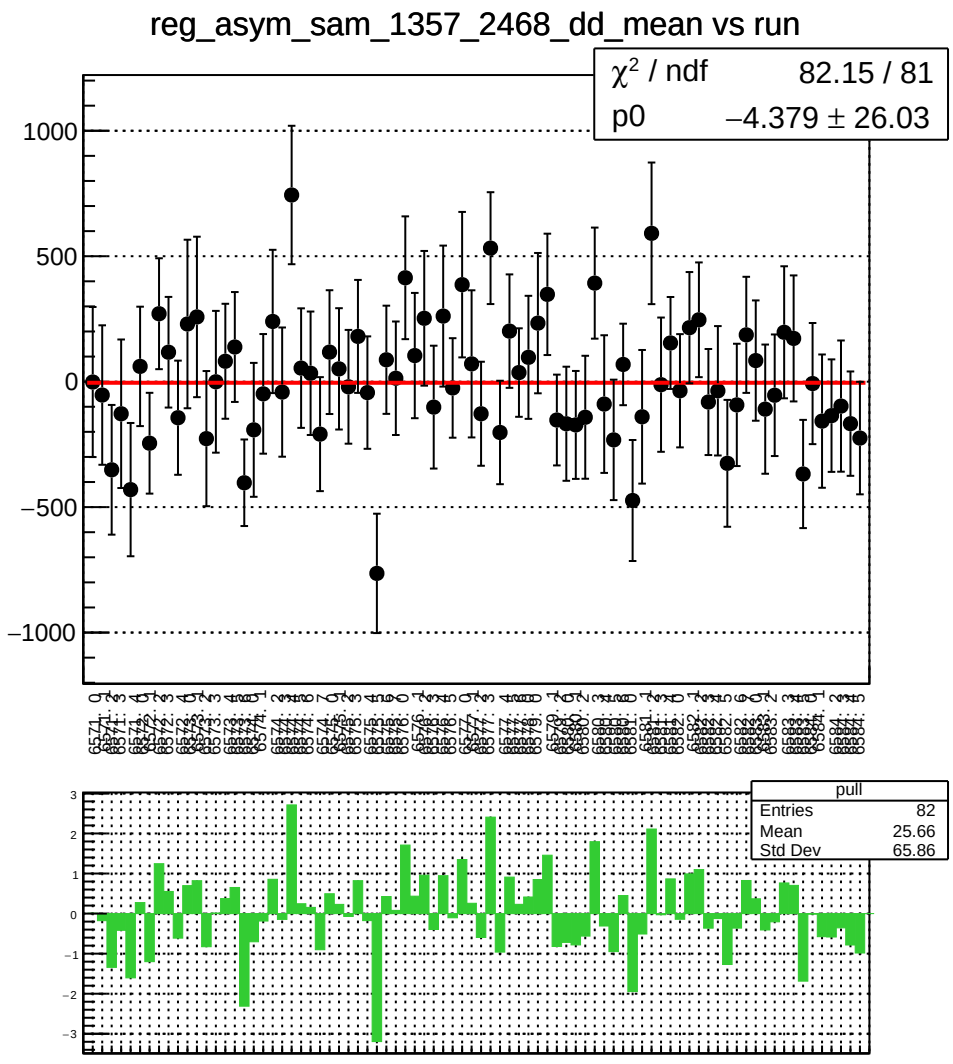

pull1D
Entries 82
Mean −0.004971
Std Dev 1.086

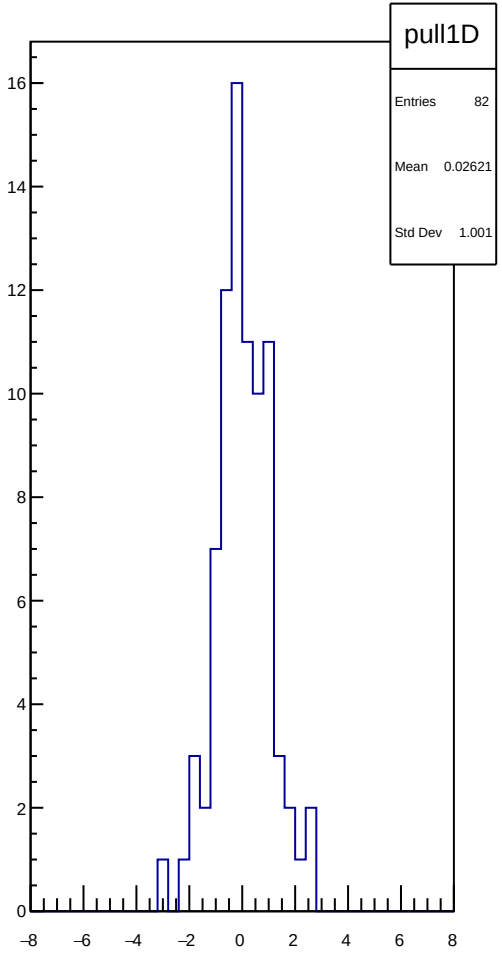

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 1.843e+04 / 81
p0 702.6 ± 0.5598
950
900
850
800
750
700
650
600
550

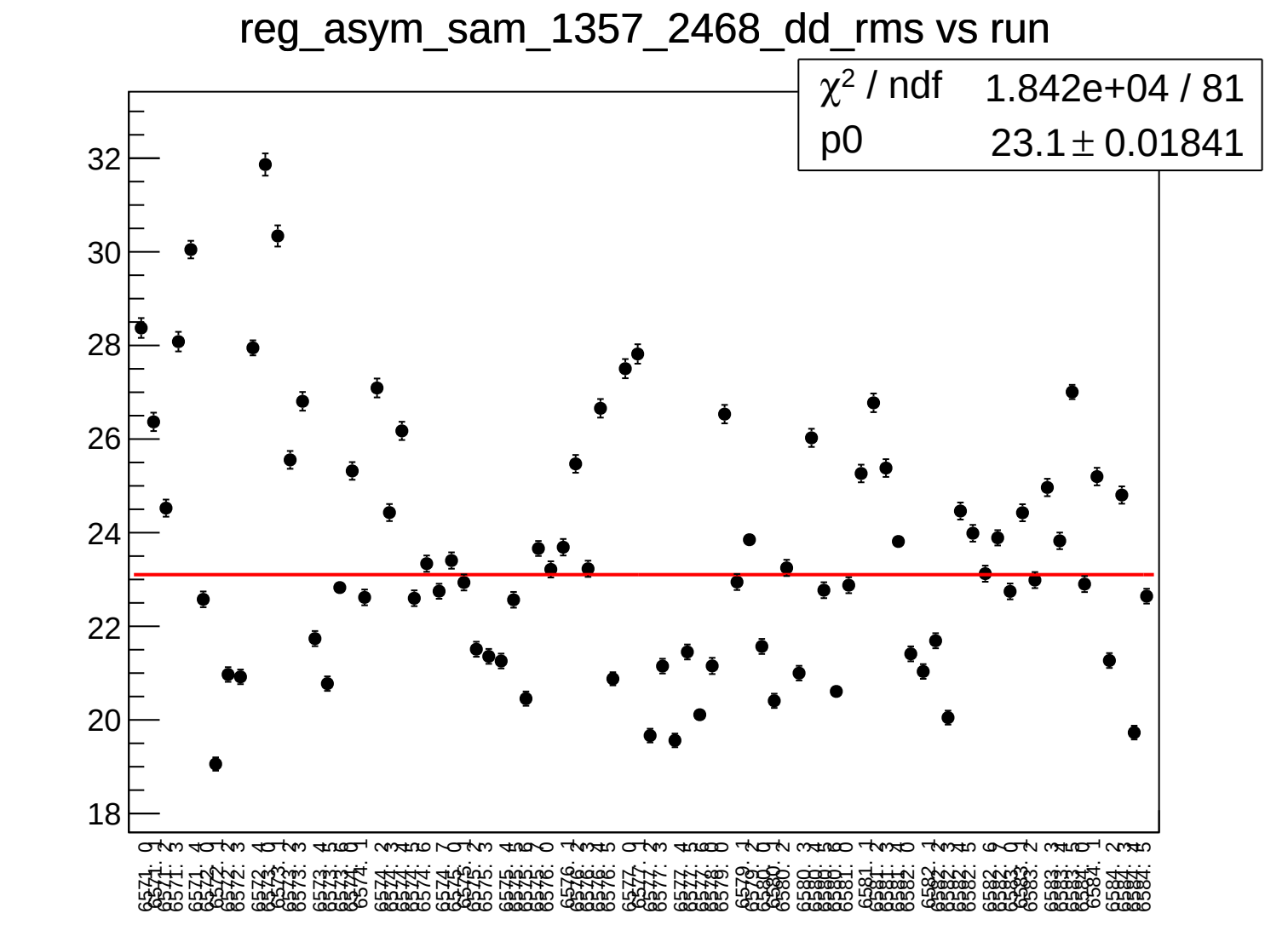

asym_sam_2468_avg_mean vs run
χ² / ndf 95.57 / 81
p0 1570 ± 798.1
pull
Entries 82
Mean −7018
Std Dev 7054

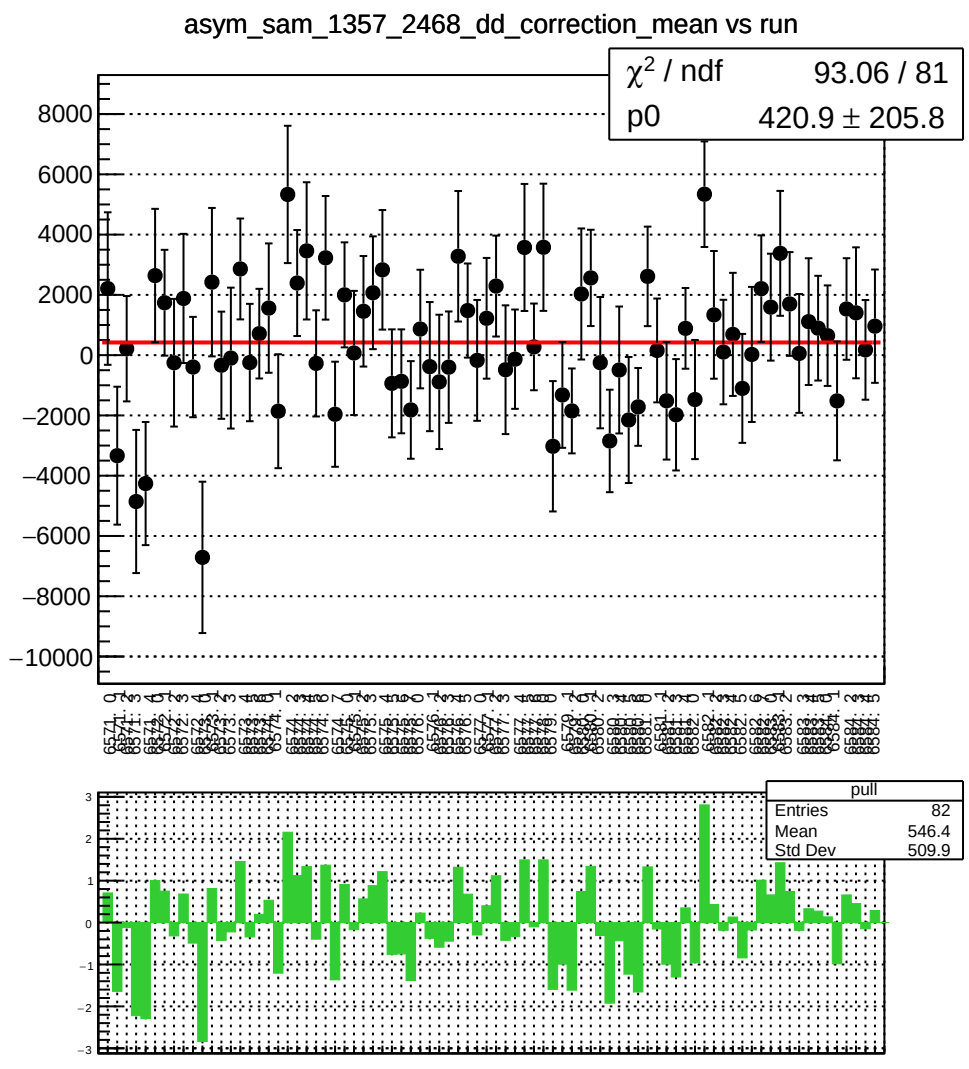

pull1D
Entries 82
Mean −0.0002419
Std Dev 1.08

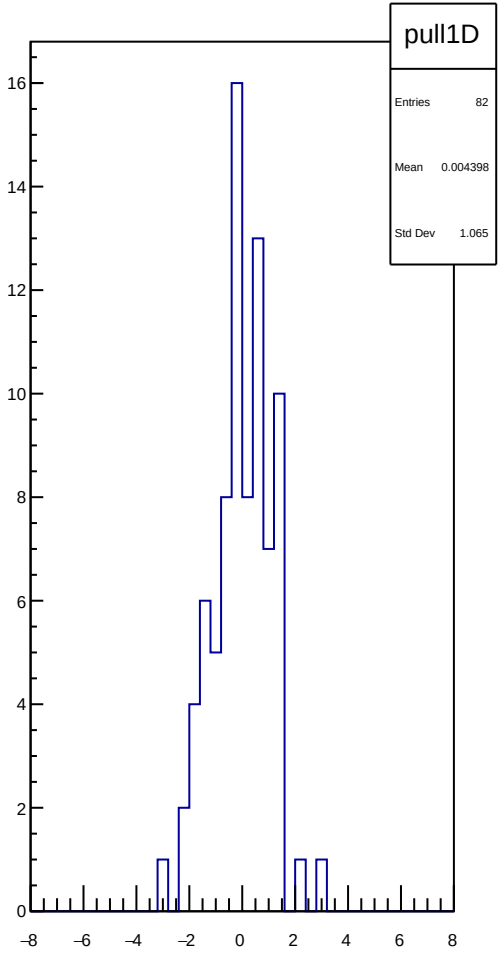

asym_sam_2468_avg_rms vs run
χ² / ndf 1.844e+04 / 81
p0 708.3 ± 0.5643
950
900
850
800
750
700
650
600

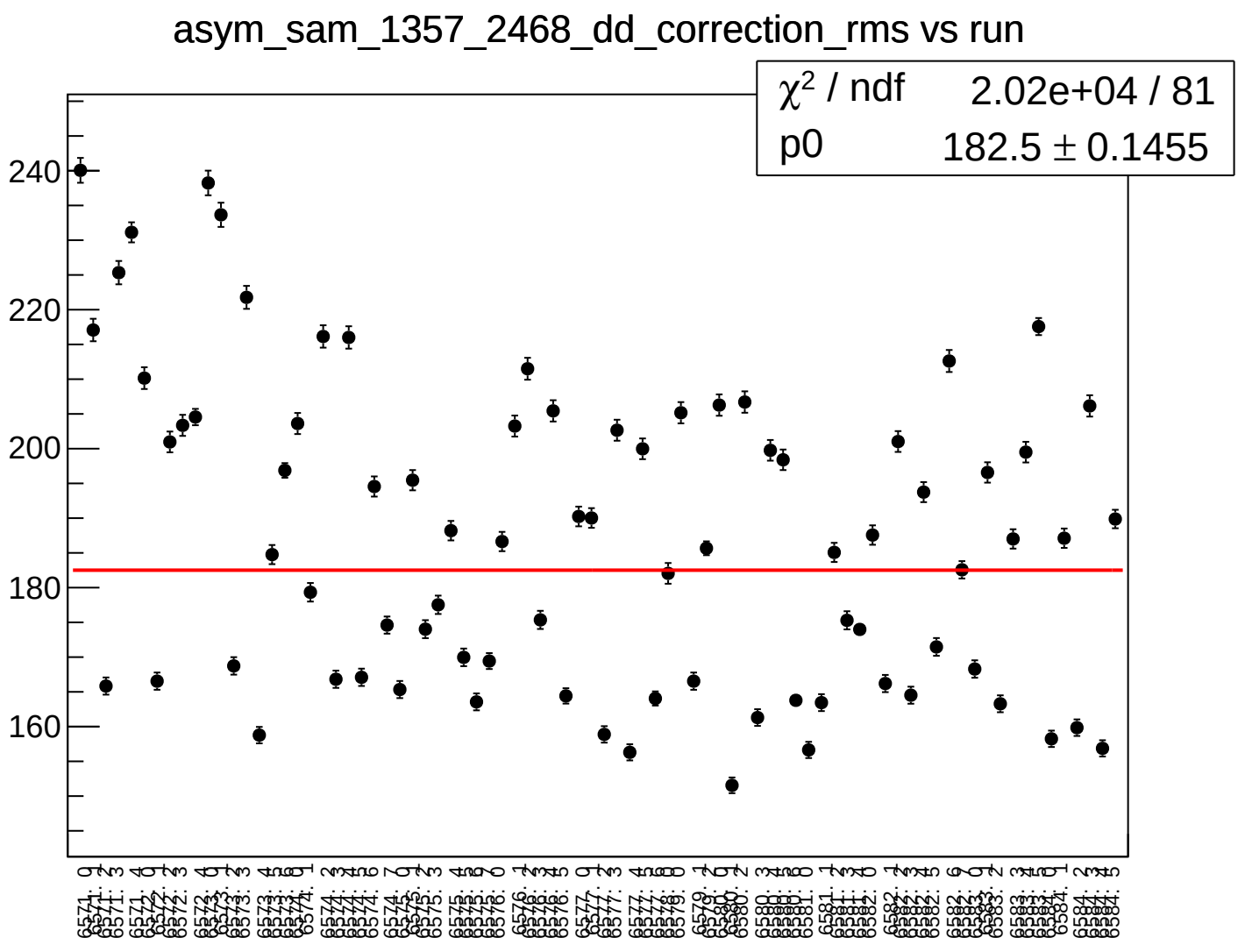

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 82.15 / 81
p0 −4.379 ± 26.03
1000
500
0
−500
−1000
pull
Entries 82
Mean 25.66
Std Dev 65.86
3
2
1
0
−1
−2
−3

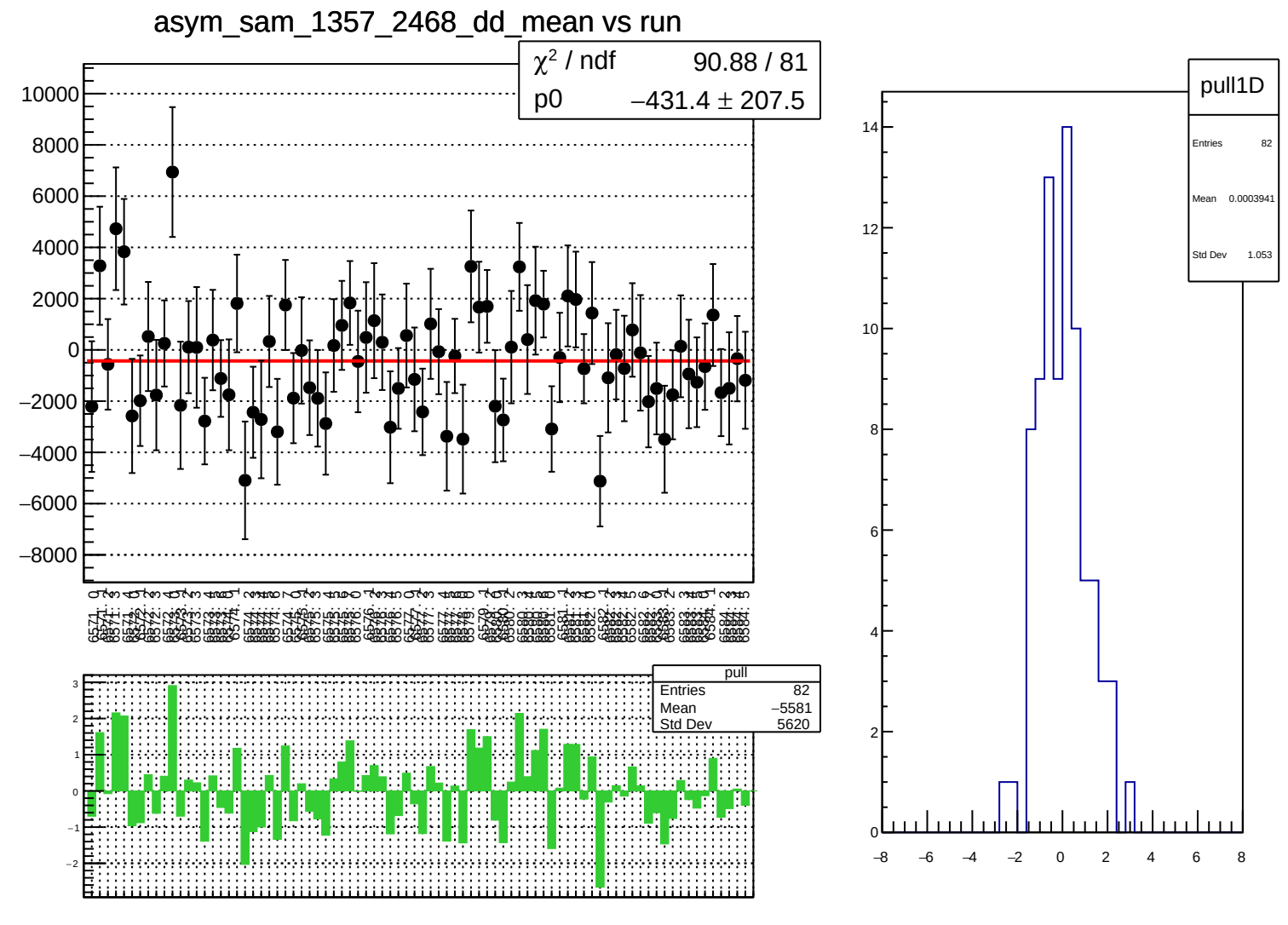

pull1D
Entries 82
Mean 0.02621
Std Dev 1.001
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

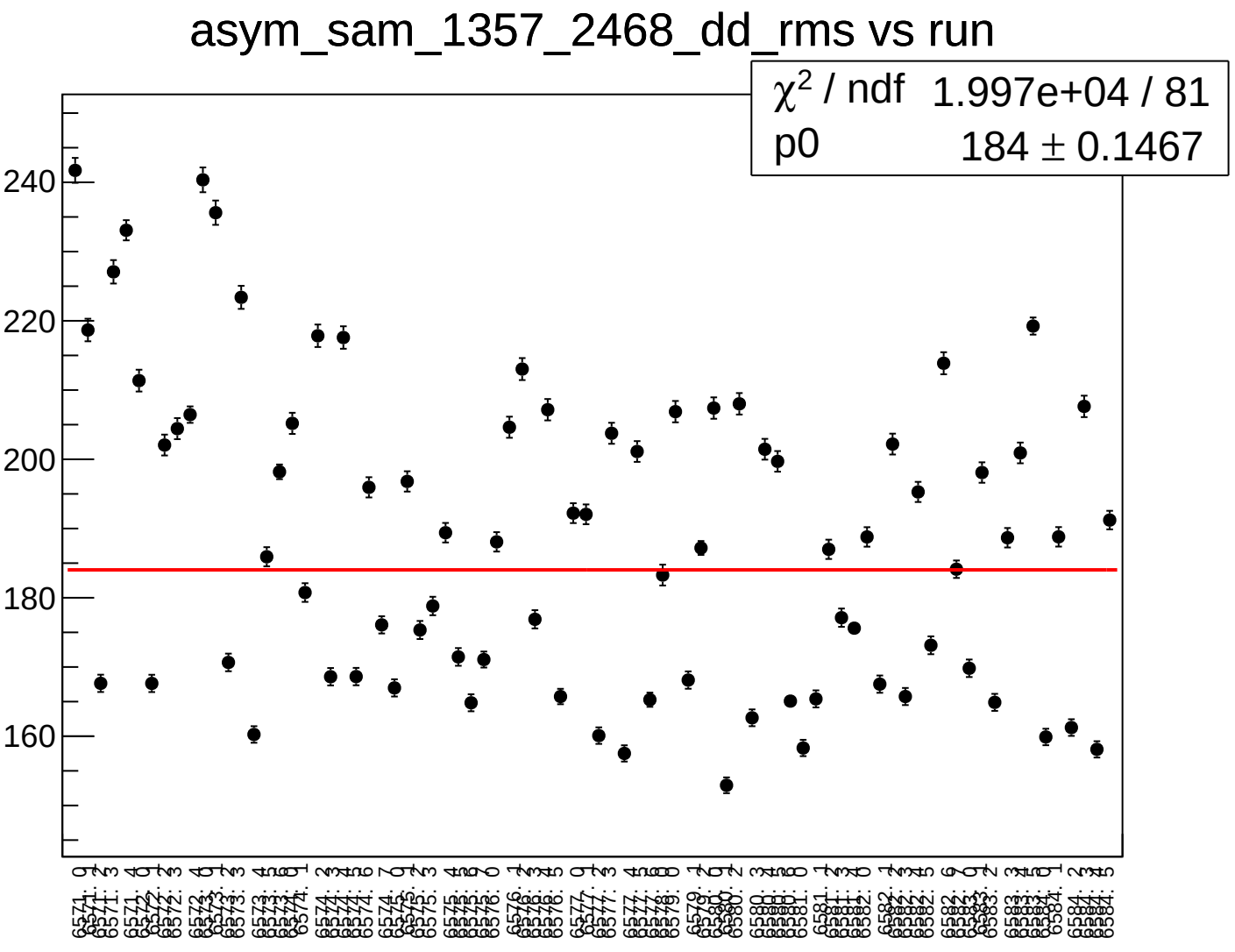

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.842e+04 / 81
p0 23.1 ± 0.01841
32
30
28
26
24
22
20
18

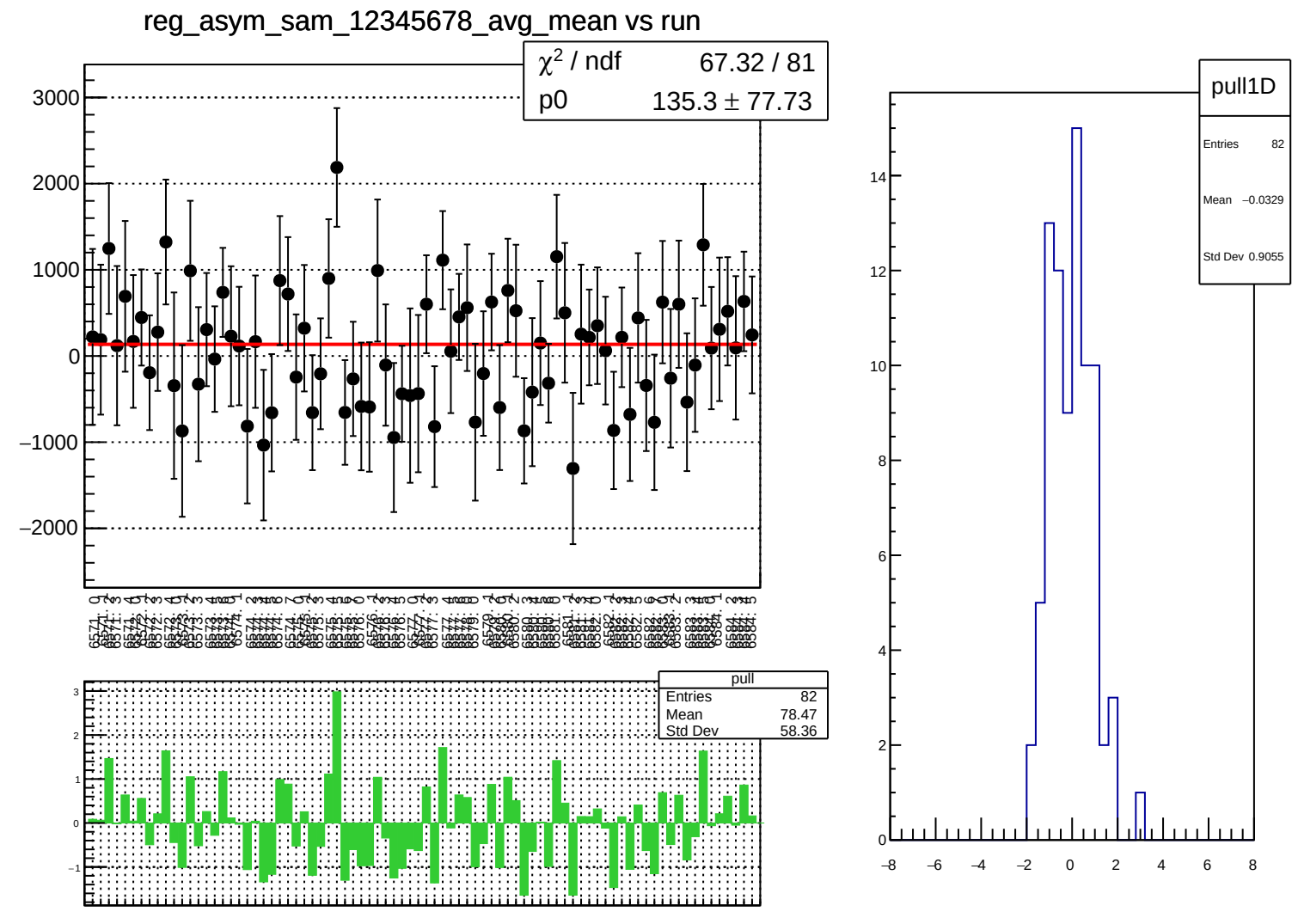

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 93.06 / 81
p0 420.9 ± 205.8
pull
Entries 82
Mean 546.4
Std Dev 509.9

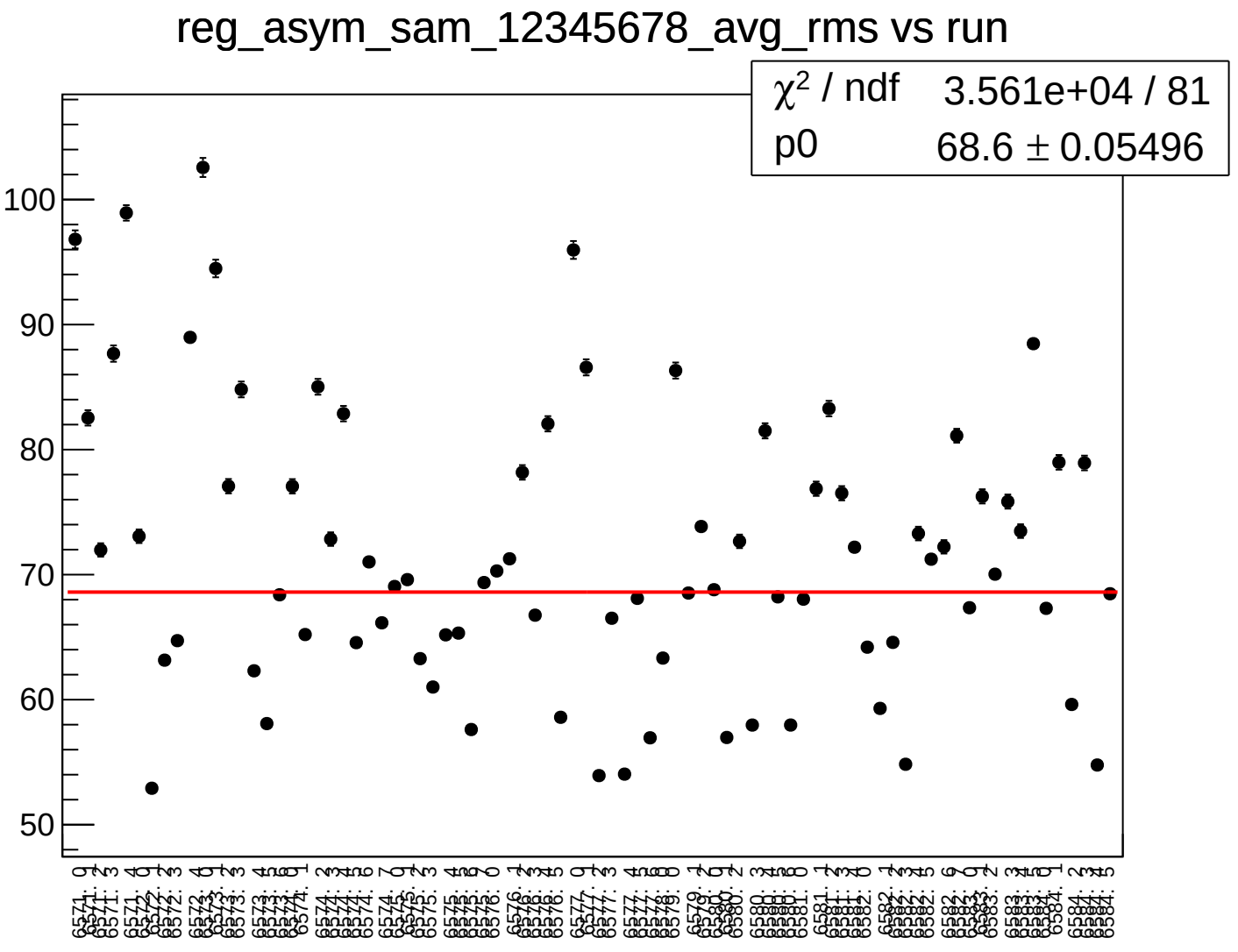

pull1D
Entries 82
Mean 0.004398
Std Dev 1.065

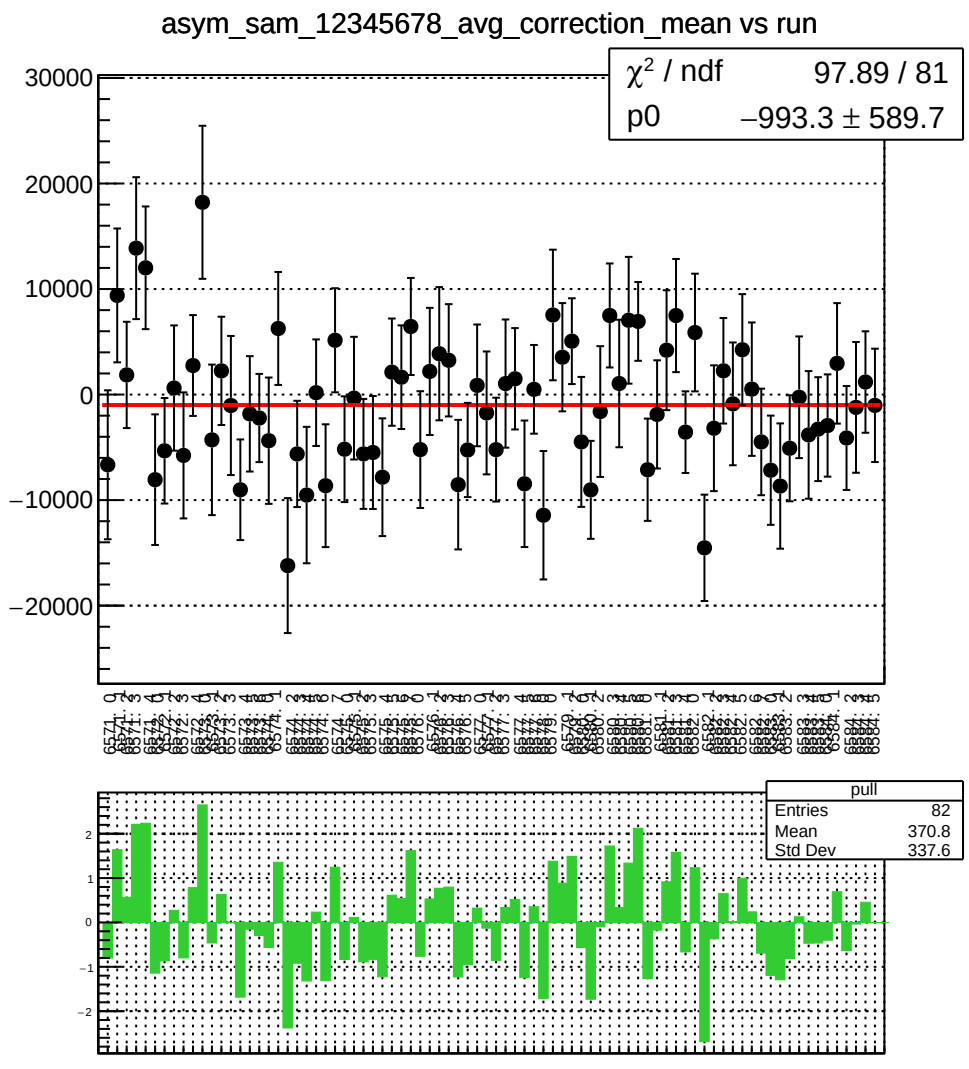

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 2.02e+04 / 81
p0 182.5 ± 0.1455
240
220
200
180
160

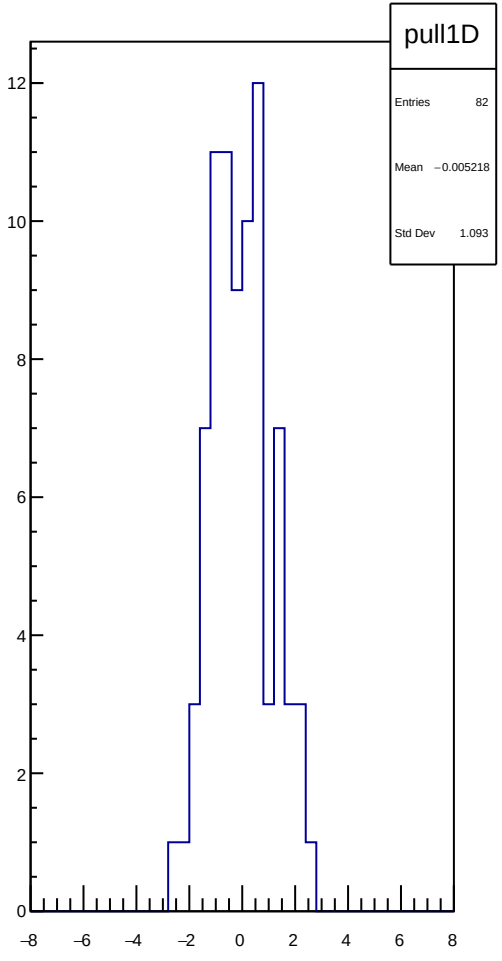

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 90.88 / 81
p0 −431.4 ± 207.5
pull
Entries 82
Mean −5581
Std Dev 5620
pull1D
Entries 82
Mean 0.0003941
Std Dev 1.053

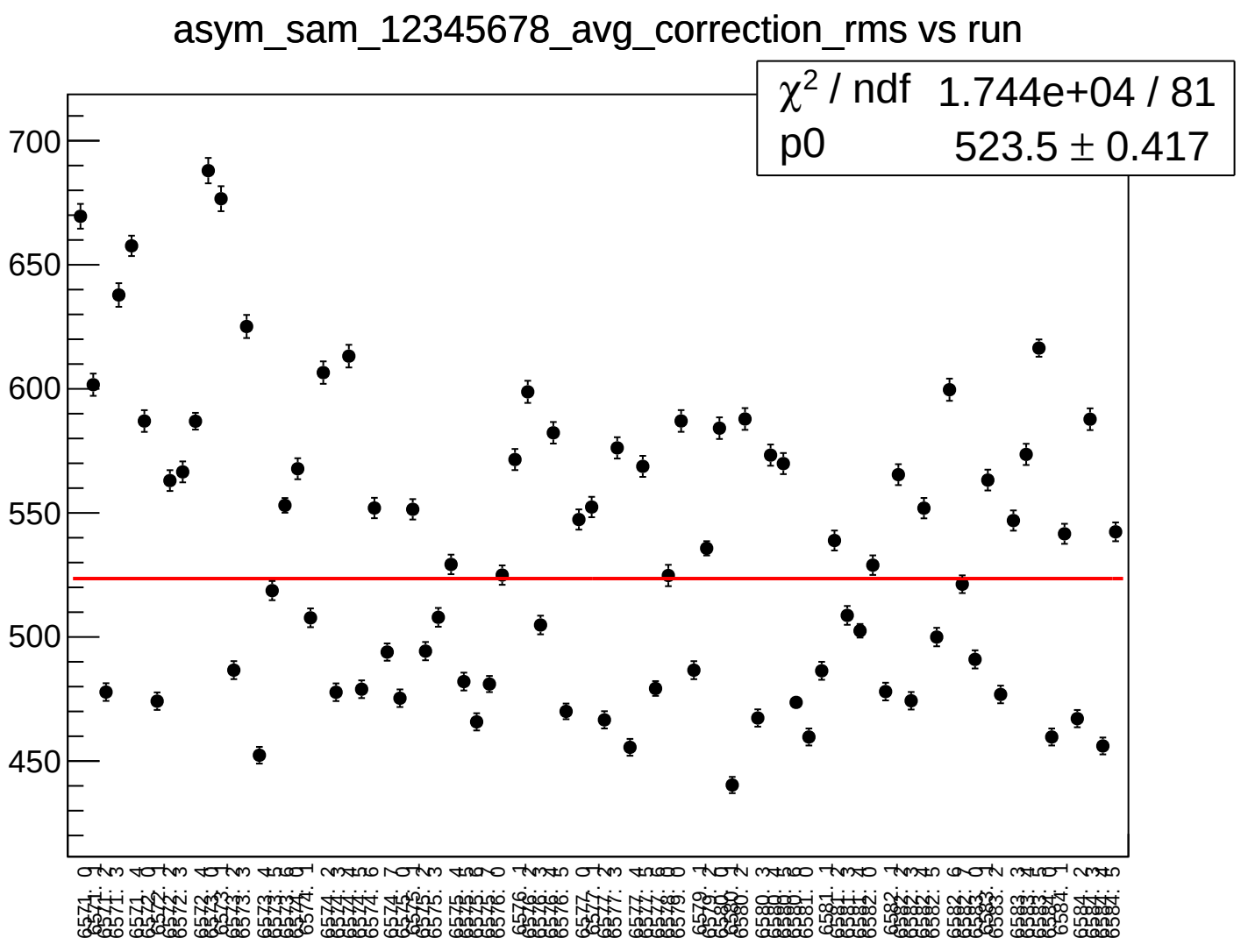

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.997e+04 / 81
p0 184 ± 0.1467
240
220
200
180
160

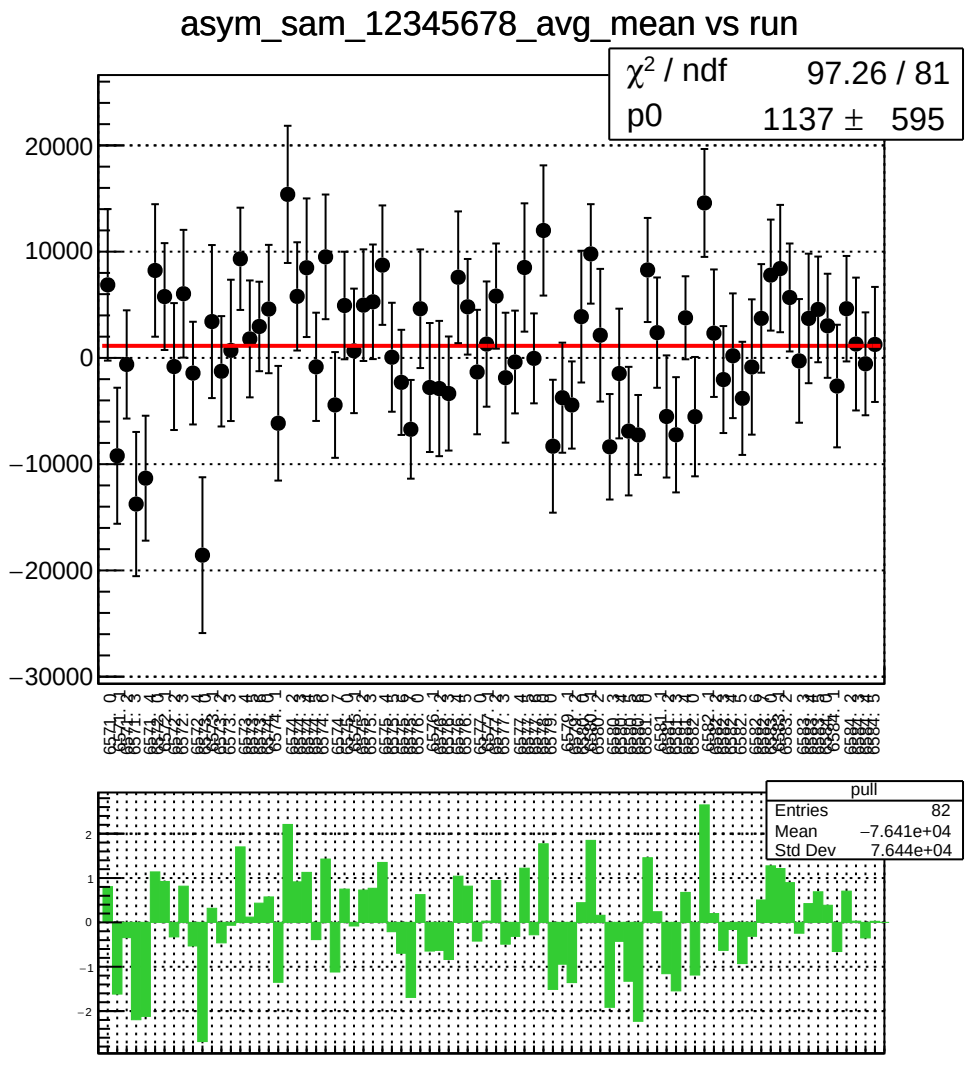

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 67.32 / 81
p0 135.3 ± 77.73
pull
Entries 82
Mean 78.47
Std Dev 58.36
pull1D
Entries 82
Mean −0.0329
Std Dev 0.9055

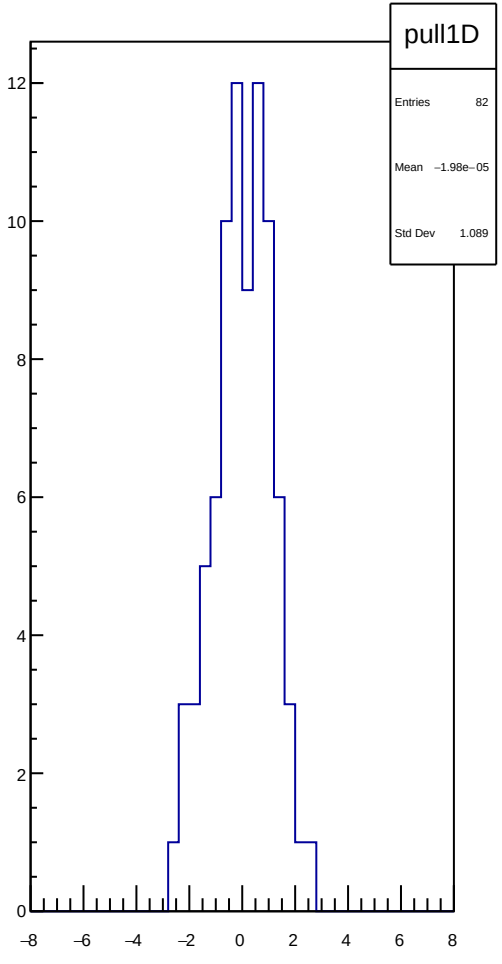

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 3.561e+04 / 81
p0 68.6 ± 0.05496
100
90
80
70
60
50

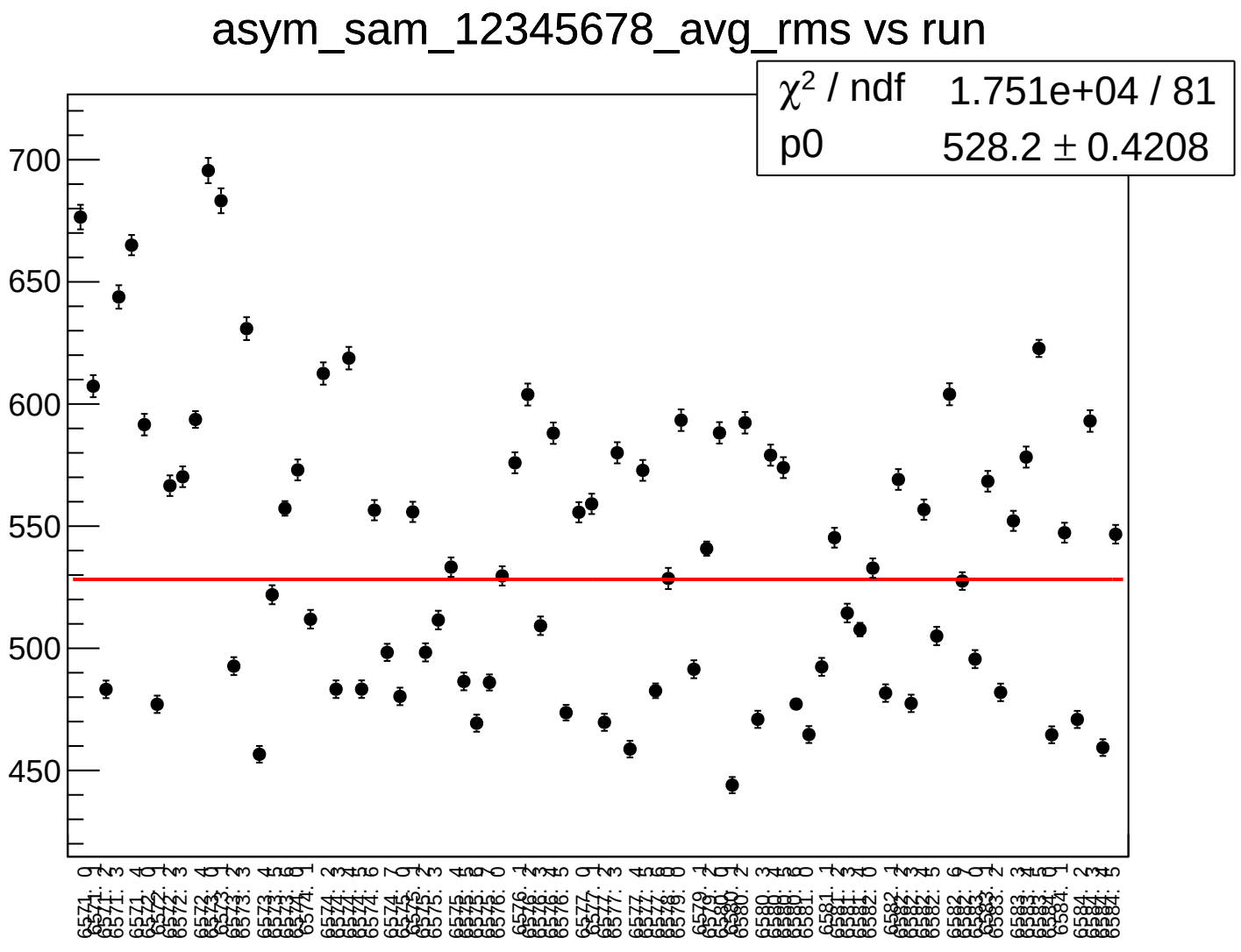

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 97.89 / 81
p0 −993.3 ± 589.7
30000
20000
10000
0
−10000
−20000
pull
Entries 82
Mean 370.8
Std Dev 337.6
2
1
0
−1
−2

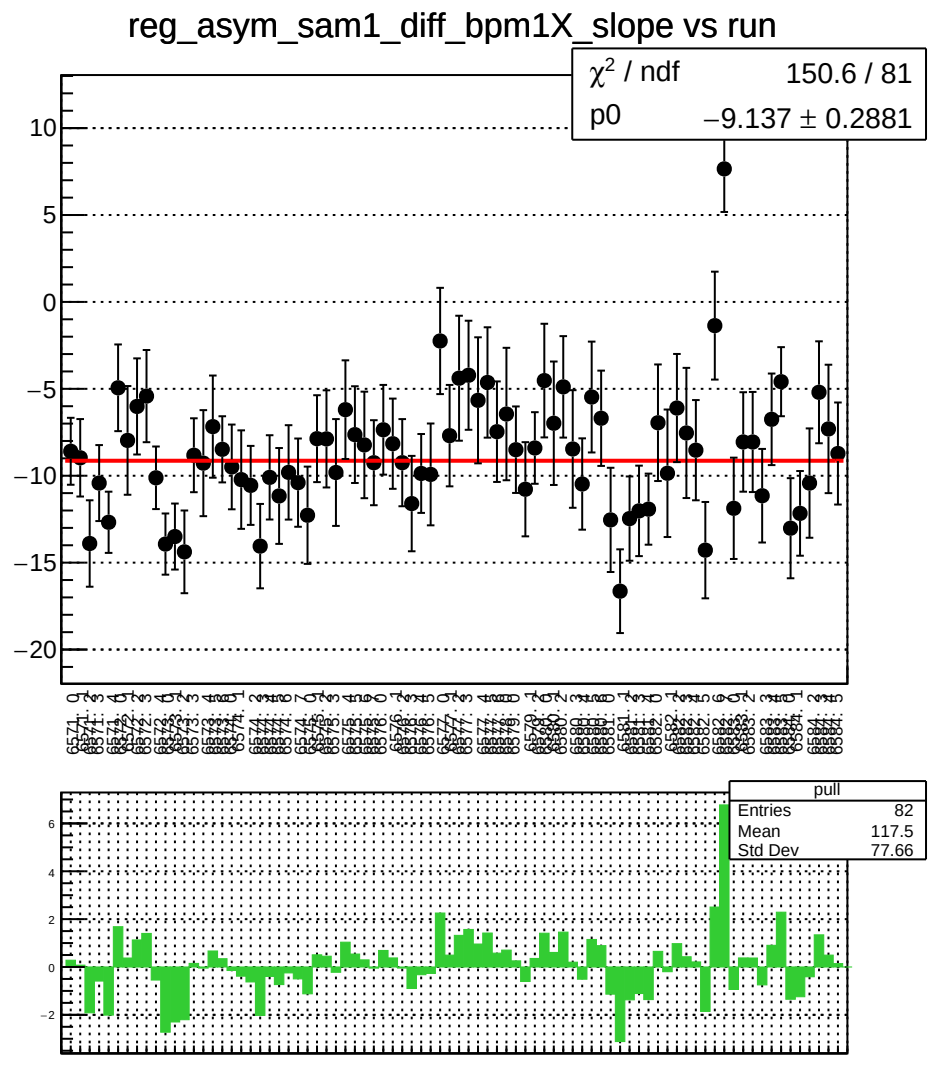

pull1D
Entries 82
Mean −0.005218
Std Dev 1.093
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

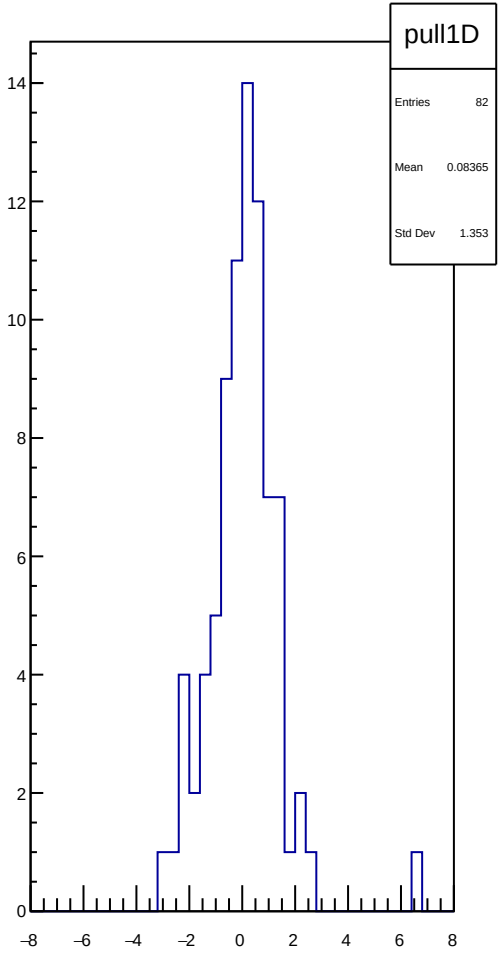

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 1.744e+04 / 81
p0 523.5 ± 0.417
700
650
600
550
500
450

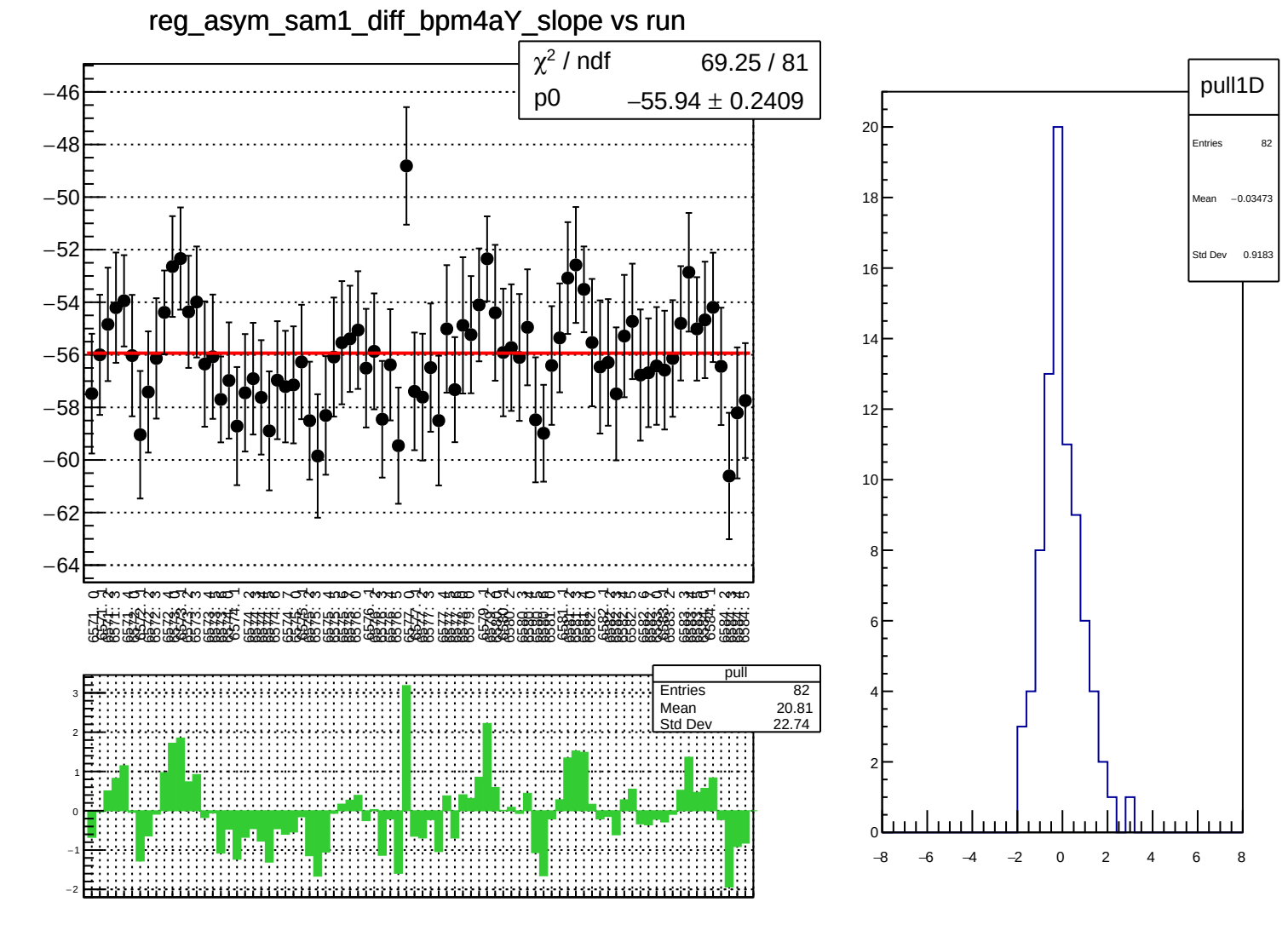

asym_sam_12345678_avg_mean vs run
χ² / ndf 97.26 / 81
p0 1137 ± 595
pull
Entries 82
Mean −7.641e+04
Std Dev 7.644e+04

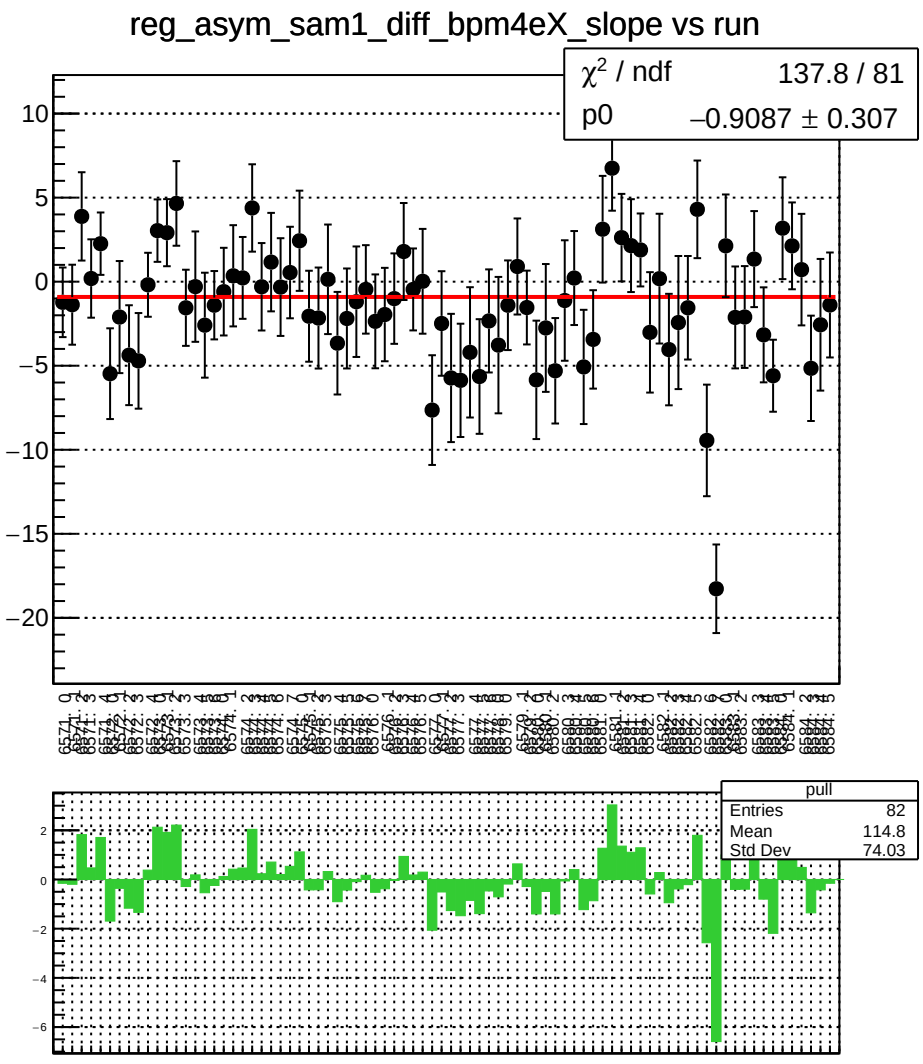

pull1D
Entries 82
Mean −1.98e−05
Std Dev 1.089

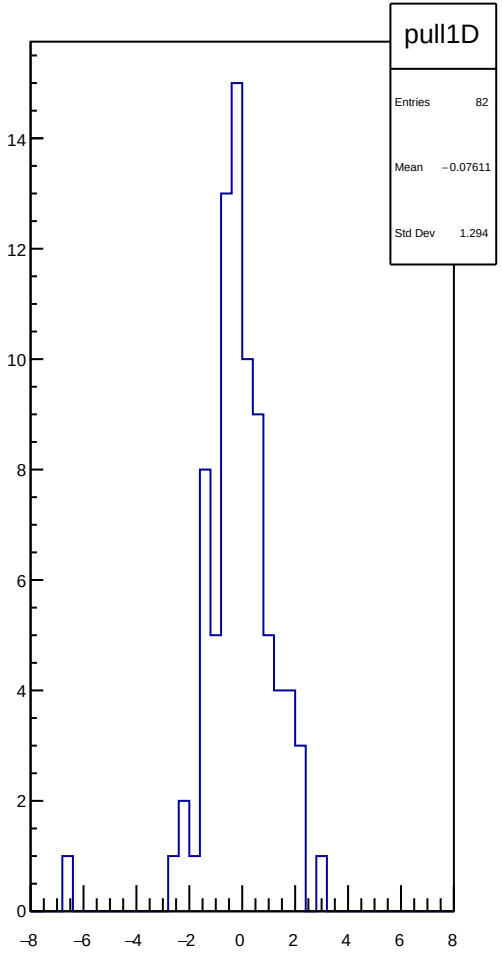

asym_sam_12345678_avg_rms vs run
χ² / ndf 1.751e+04 / 81
p0 528.2 ± 0.4208
700
650
600
550
500
450

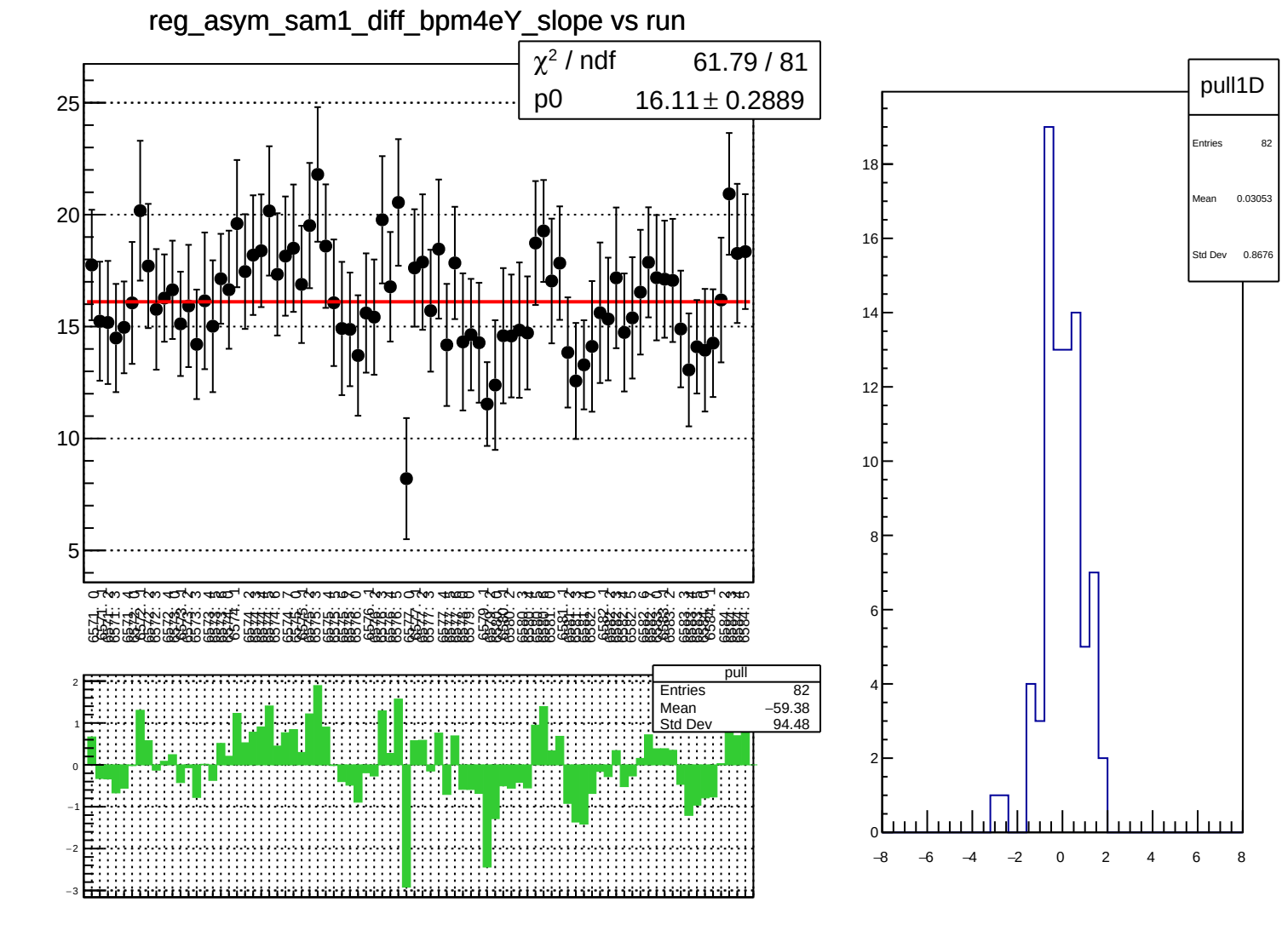

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 150.6 / 81
p0 −9.137 ± 0.2881
pull
Entries 82
Mean 117.5
Std Dev 77.66

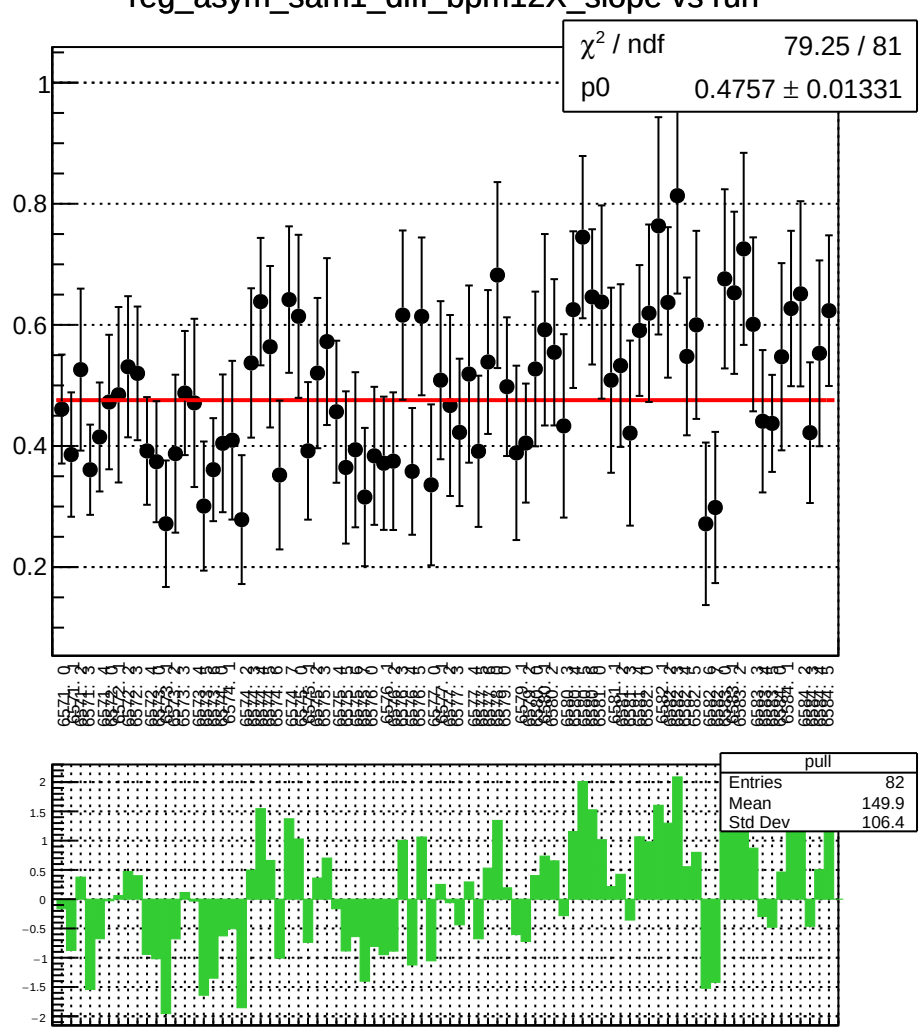

pull1D
Entries 82
Mean 0.08365
Std Dev 1.353

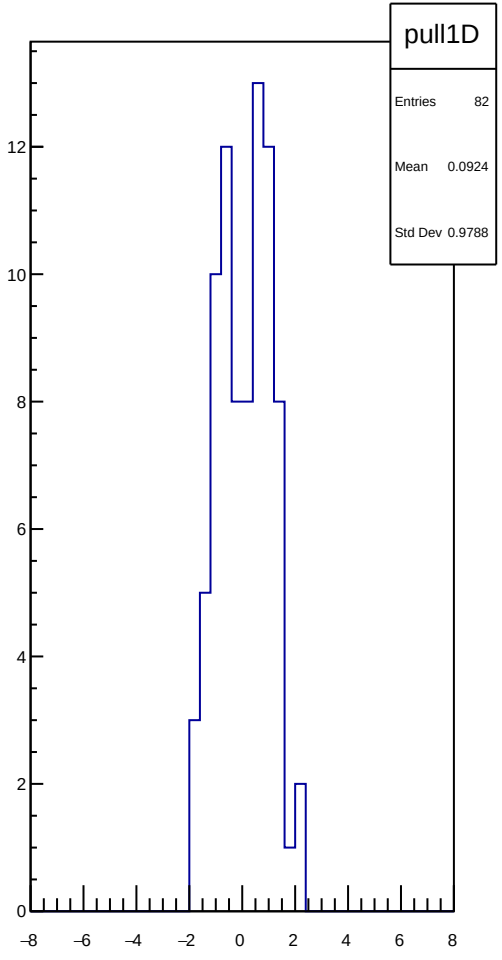

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 69.25 / 81
p0 −55.94 ± 0.2409
pull
Entries 82
Mean 20.81
Std Dev 22.74
pull1D
Entries 82
Mean −0.03473
Std Dev 0.9183

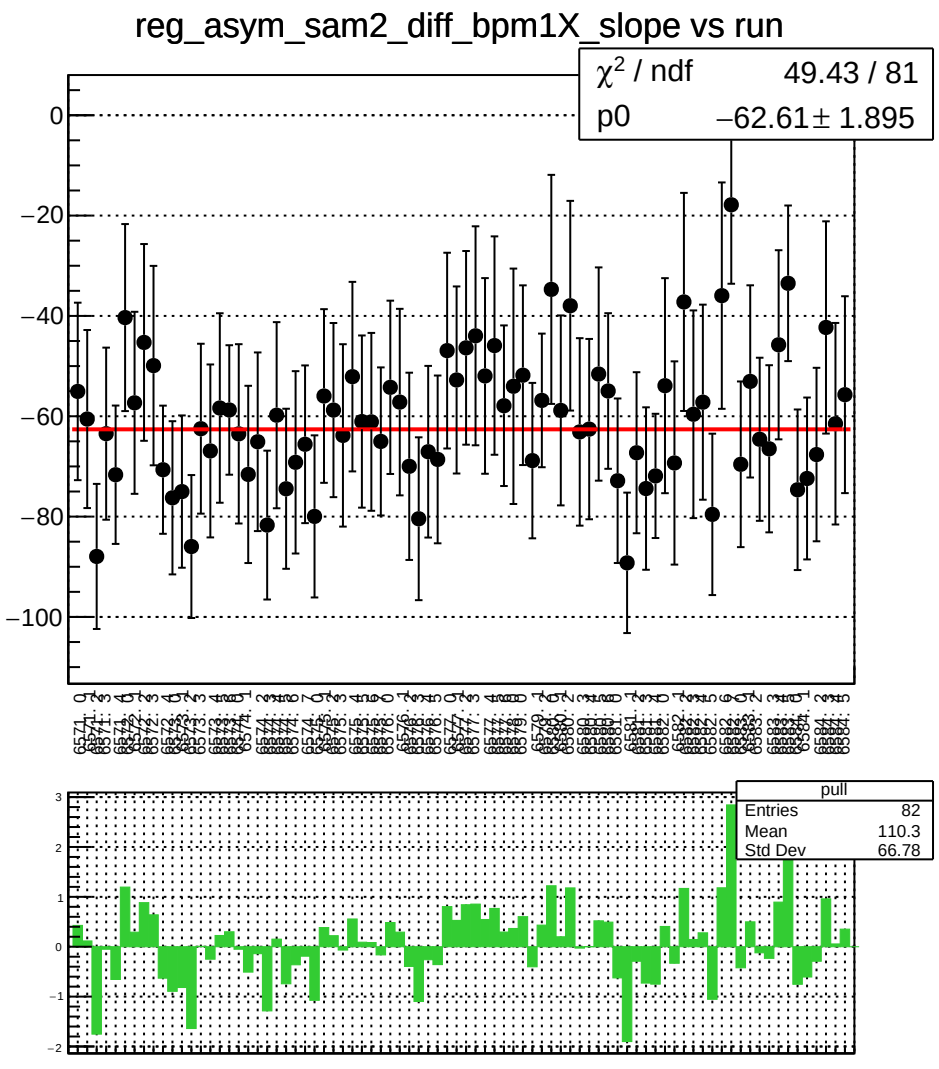

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 137.8 / 81
p0 −0.9087 ± 0.307
pull
Entries 82
Mean 114.8
Std Dev 74.03

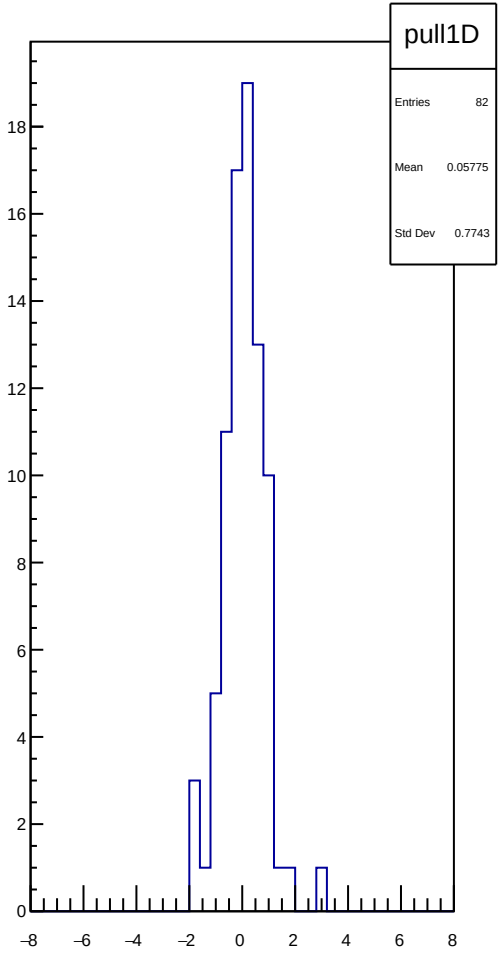

pull1D
Entries 82
Mean −0.07611
Std Dev 1.294

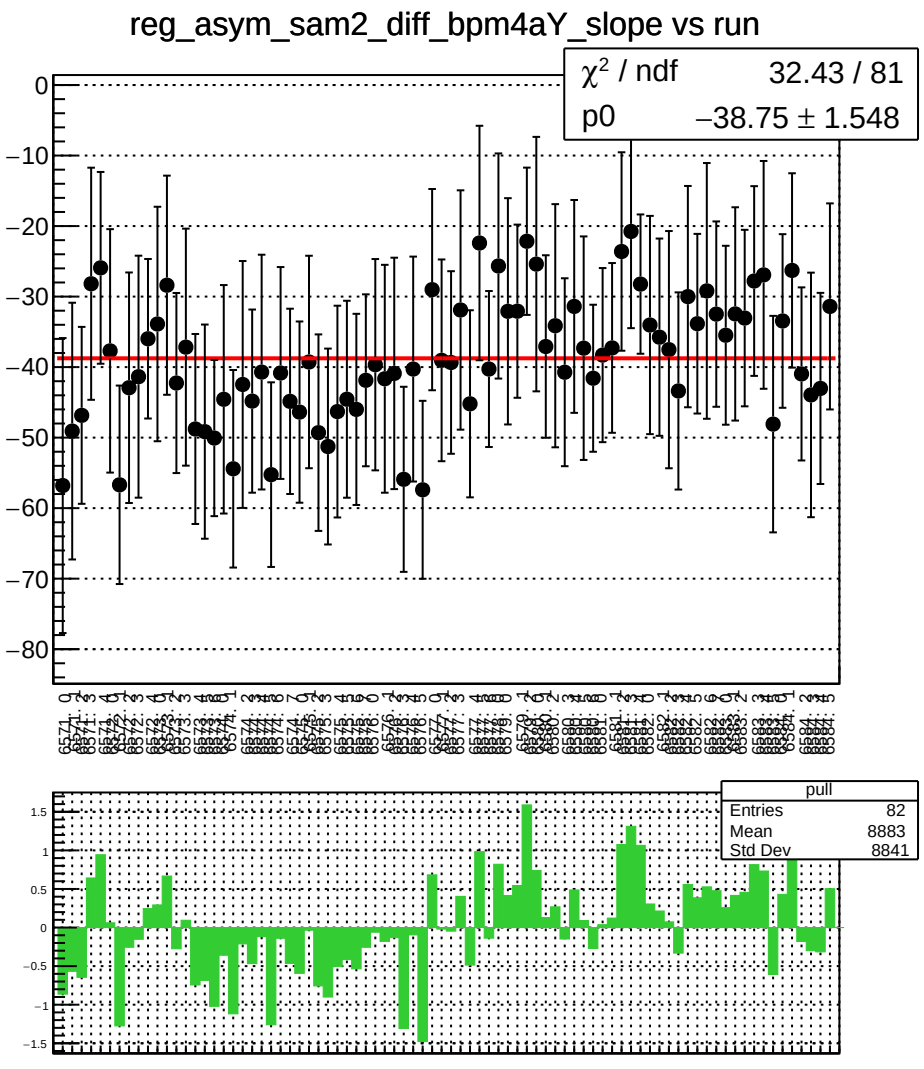

reg_asym_sam1_diff_bpm4eY_slope vs run
$\chi^2$ / ndf 61.79 / 81
p0 16.11 ± 0.2889
pull
Entries 82
Mean −59.38
Std Dev 94.48
pull1D
Entries 82
Mean 0.03053
Std Dev 0.8676

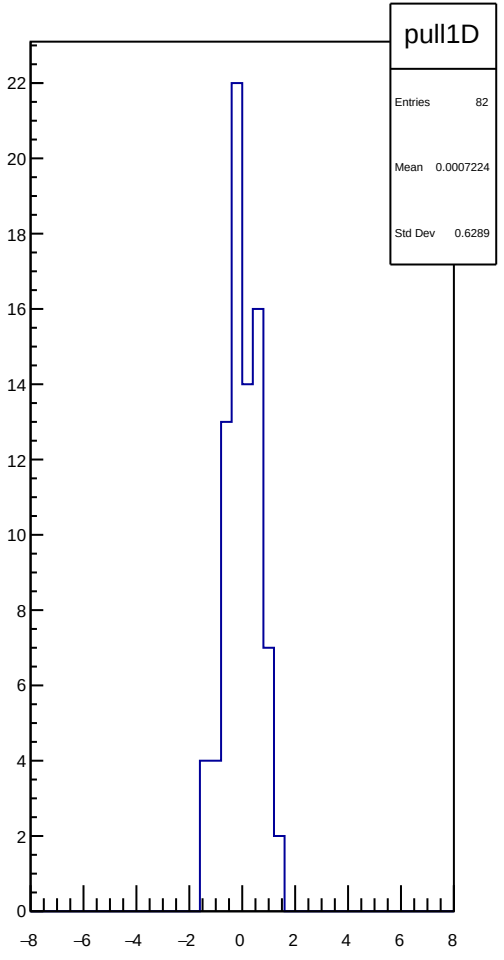

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 79.25 / 81
p0 0.4757 ± 0.01331
pull
Entries 82
Mean 149.9
Std Dev 106.4

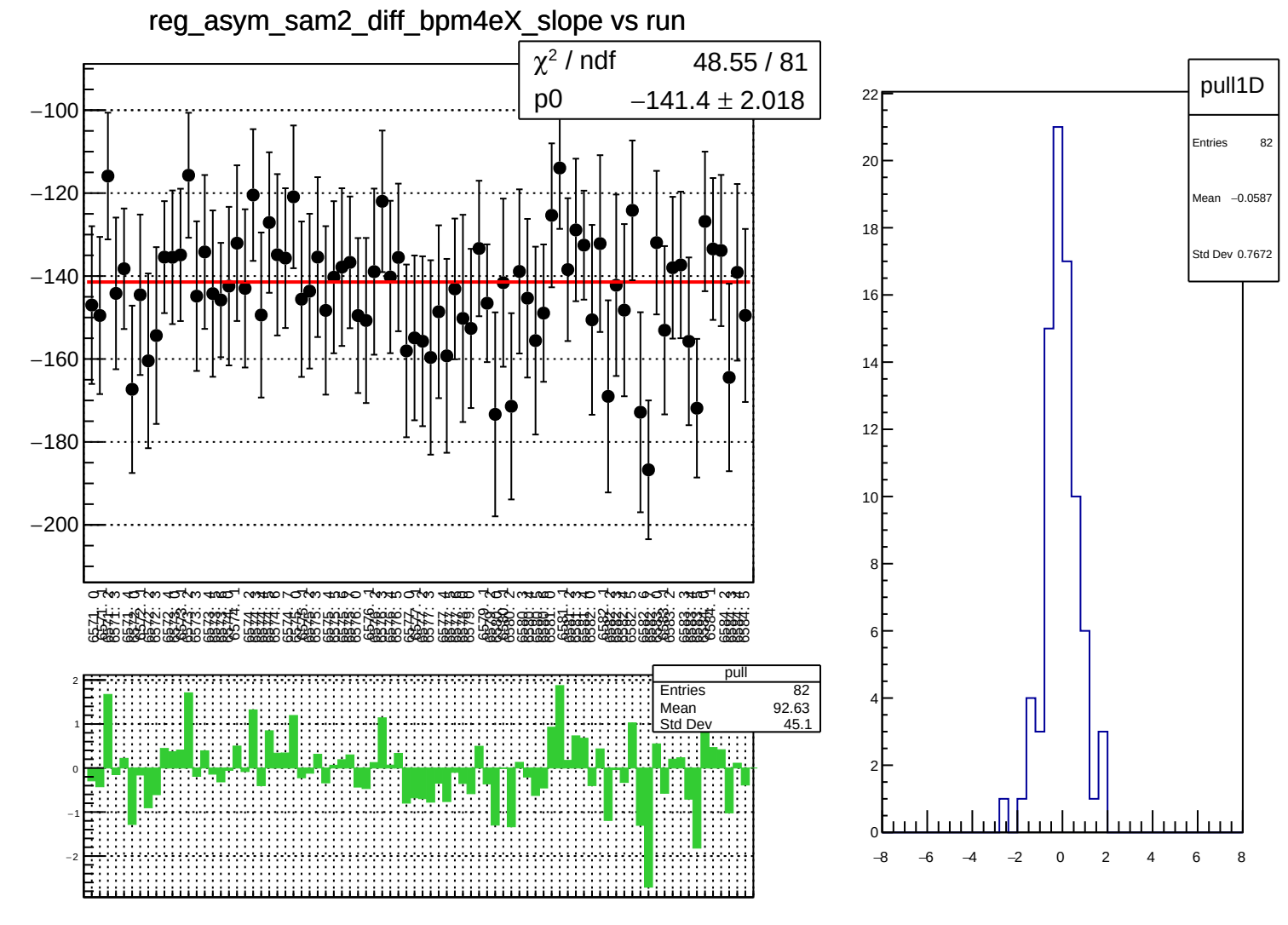

pull1D
Entries 82
Mean 0.0924
Std Dev 0.9788

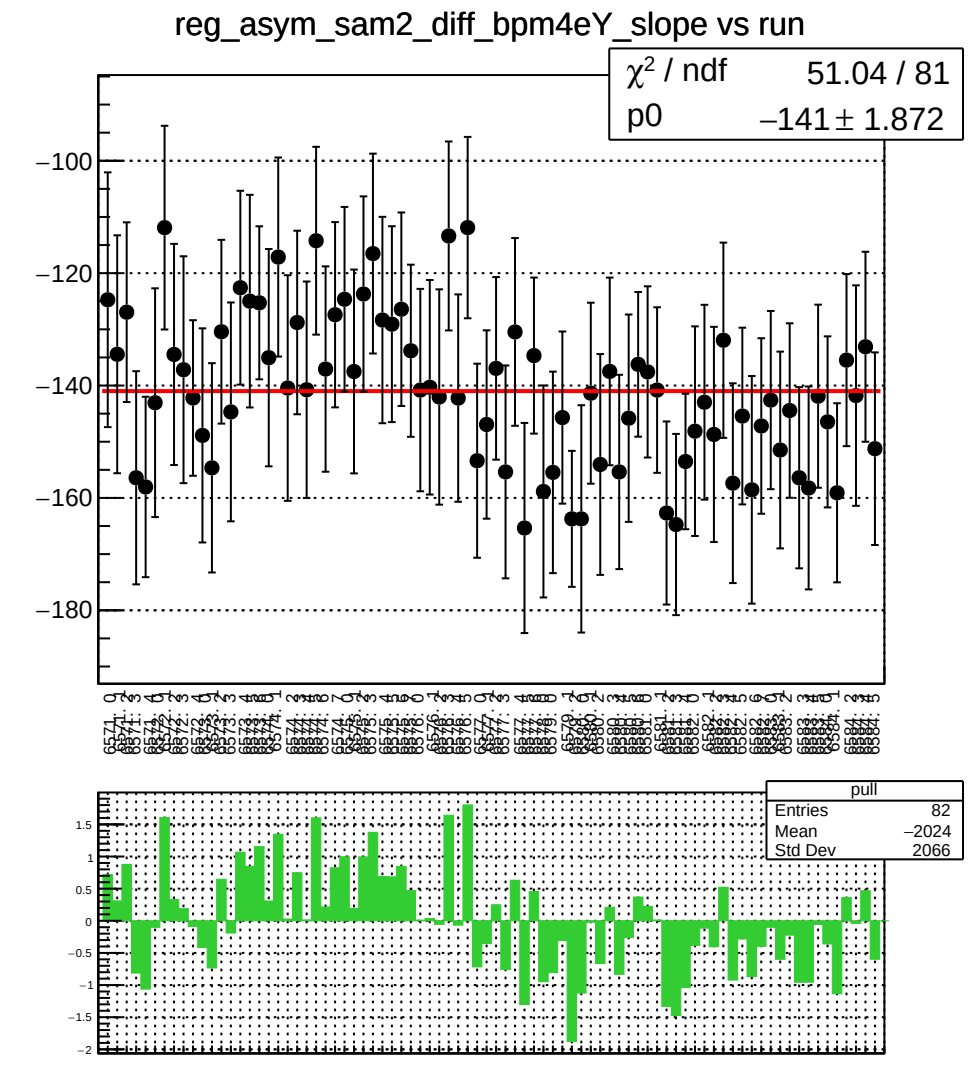

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 49.43 / 81
p0 −62.61 ± 1.895
pull
Entries 82
Mean 110.3
Std Dev 66.78

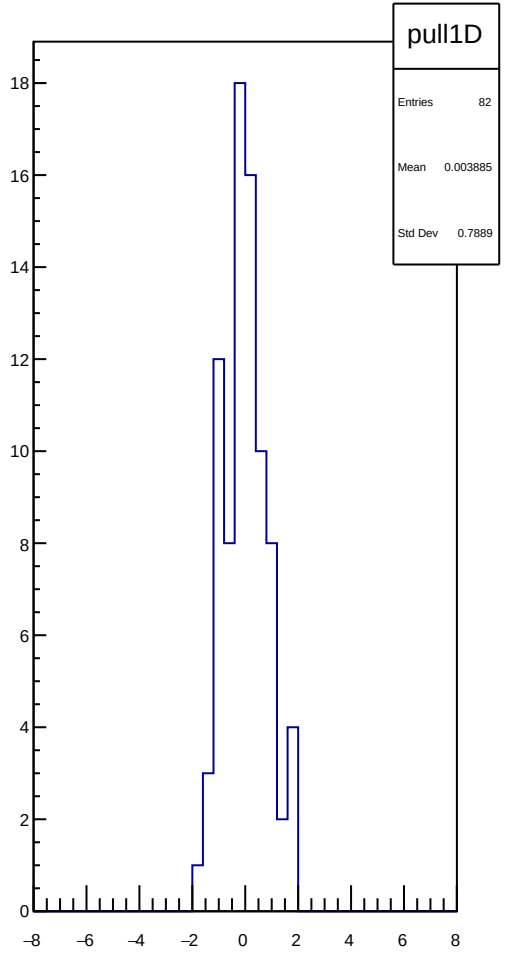

pull1D
Entries 82
Mean 0.05775
Std Dev 0.7743

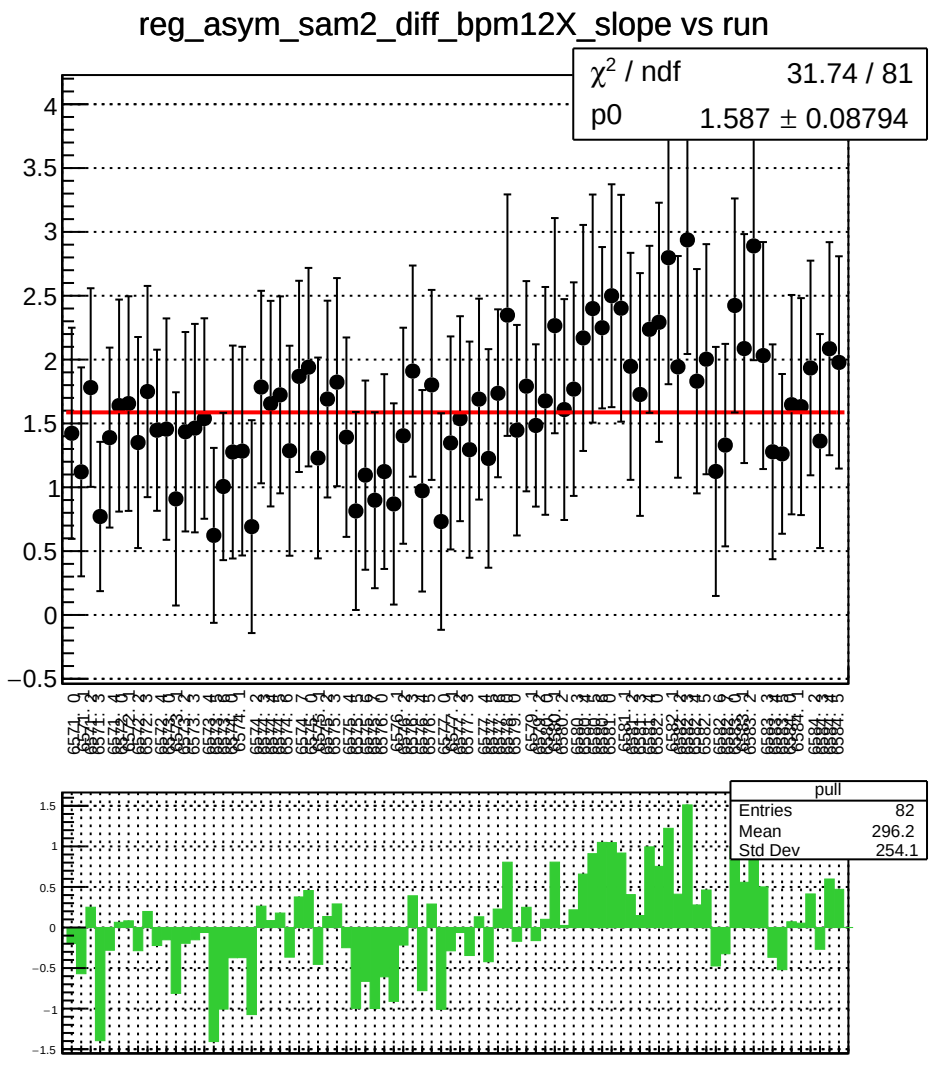

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 32.43 / 81
p0 −38.75 ± 1.548
pull
Entries 82
Mean 8883
Std Dev 8841

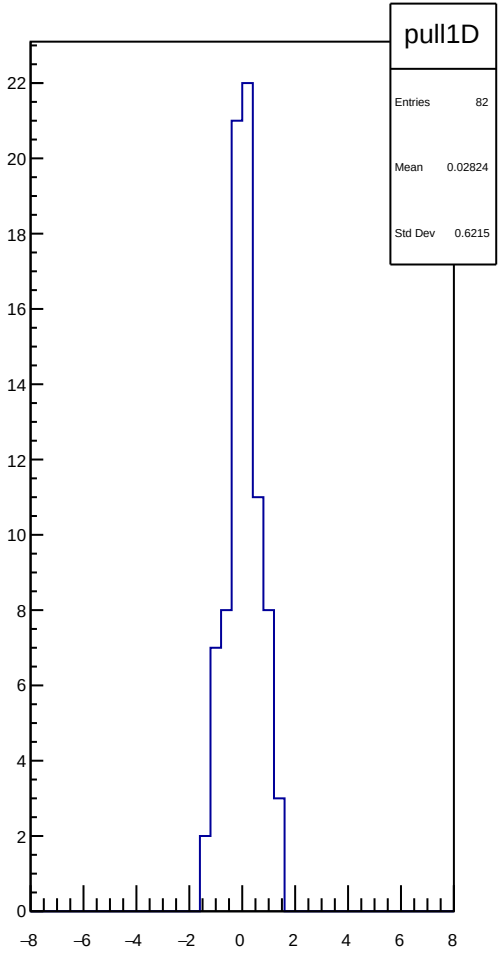

pull1D
Entries 82
Mean 0.0007224
Std Dev 0.6289

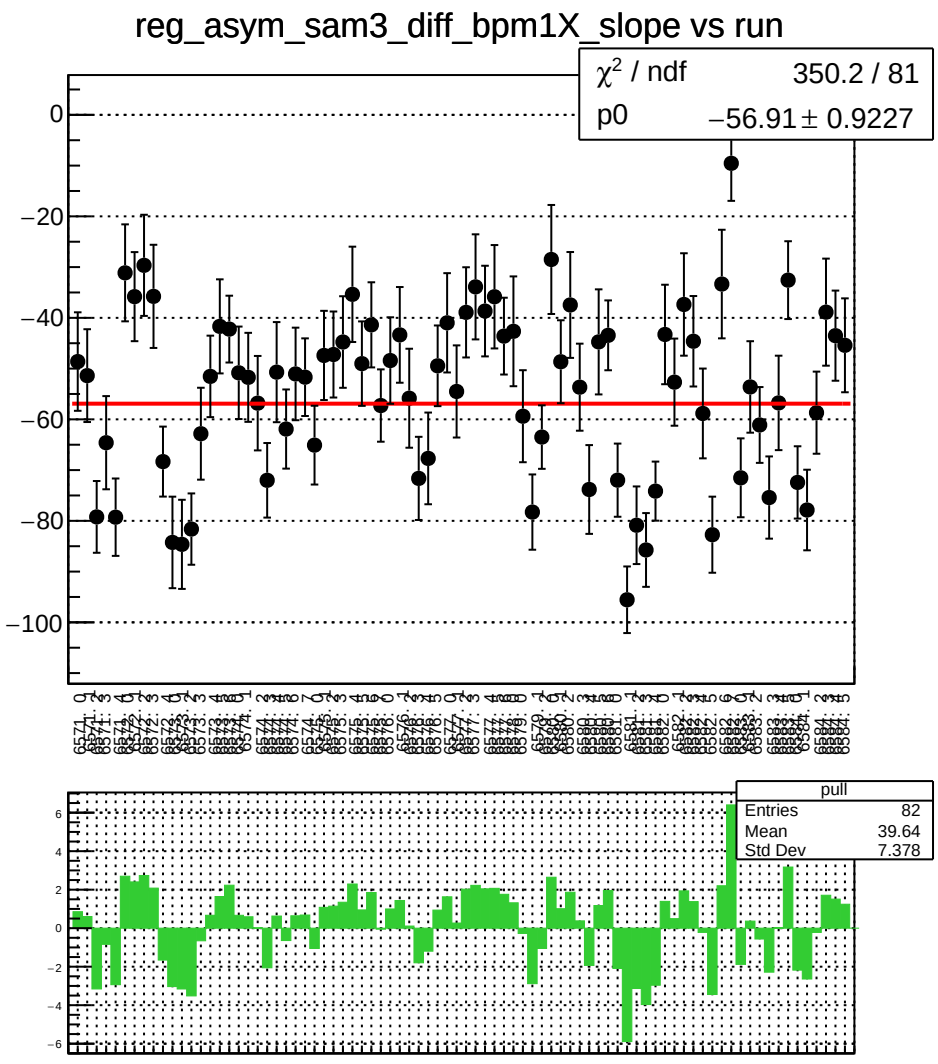

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 48.55 / 81
p0 −141.4 ± 2.018
pull
Entries 82
Mean 92.63
Std Dev 45.1
pull1D
Entries 82
Mean −0.0587
Std Dev 0.7672

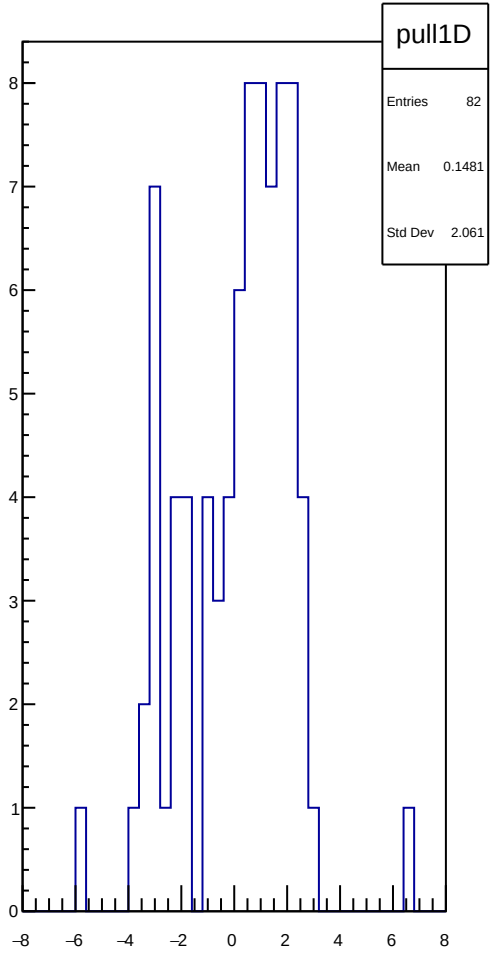

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 51.04 / 81
p0 −141 ± 1.872
−100
−120
−140
−160
−180
pull
Entries 82
Mean −2024
Std Dev 2066
1.5
1
0.5
0
−0.5
−1
−1.5
−2

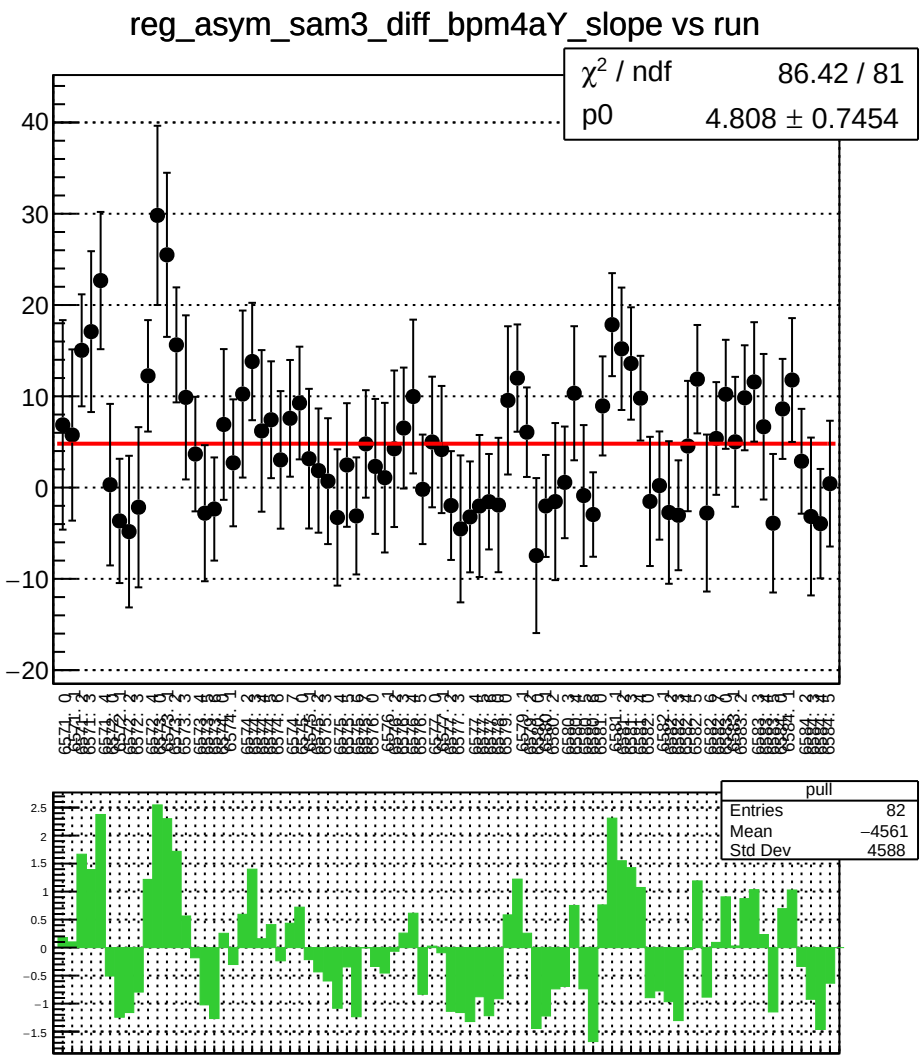

pull1D
Entries 82
Mean 0.003885
Std Dev 0.7889
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

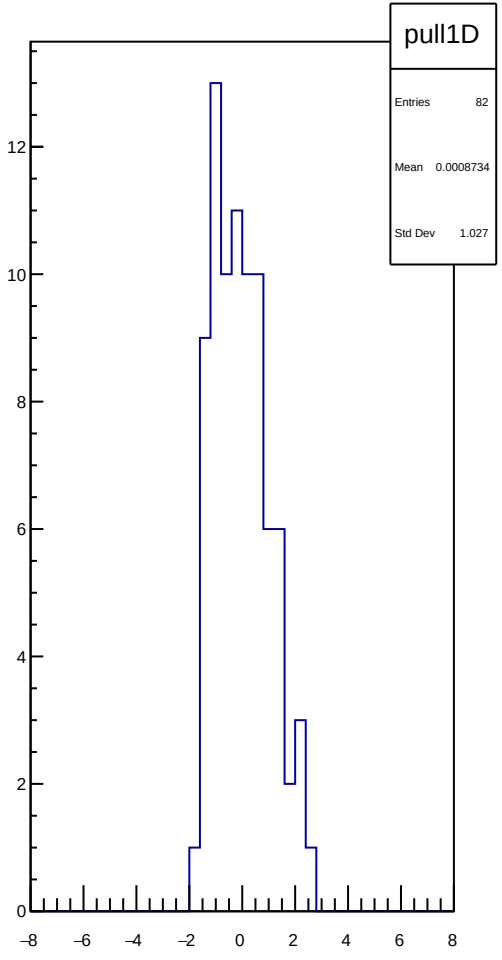

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 31.74 / 81
p0 1.587 ± 0.08794
pull
Entries 82
Mean 296.2
Std Dev 254.1

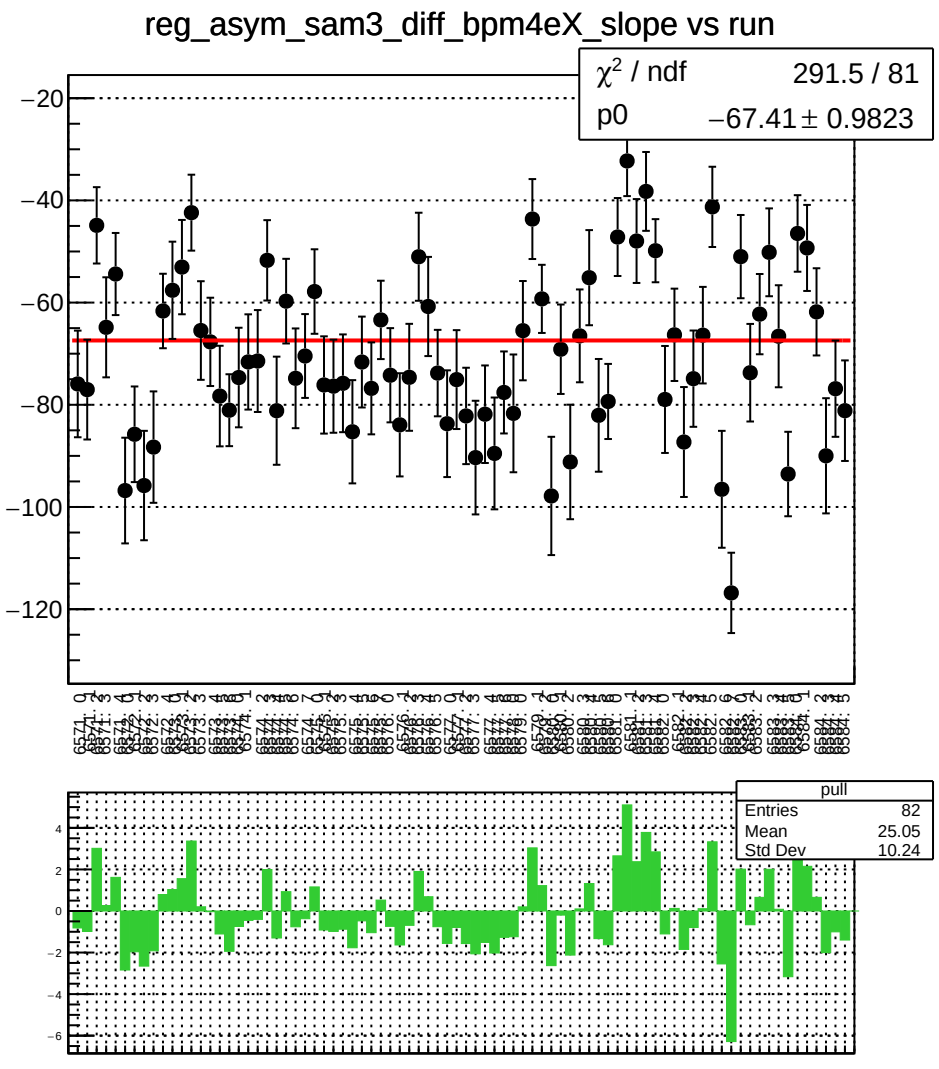

pull1D
Entries 82
Mean 0.02824
Std Dev 0.6215

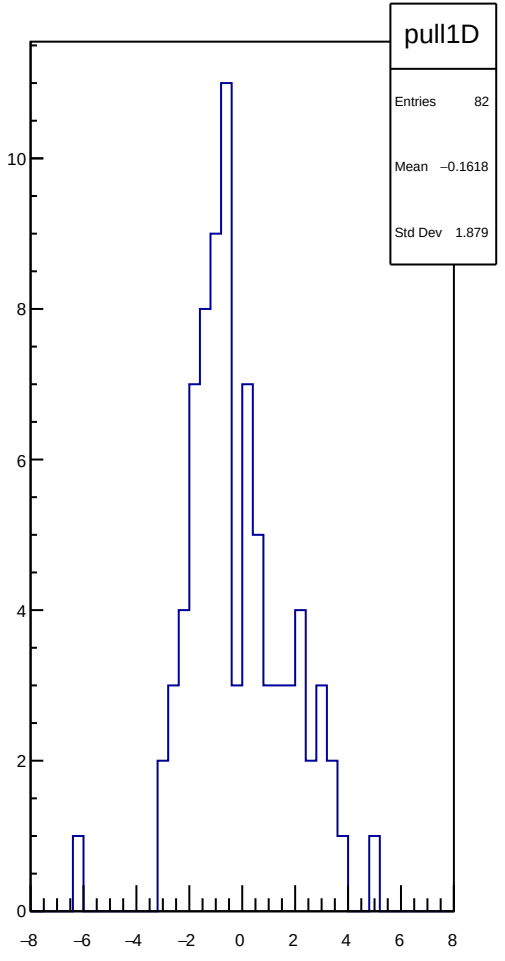

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 350.2 / 81
p0 −56.91 ± 0.9227
pull
Entries 82
Mean 39.64
Std Dev 7.378

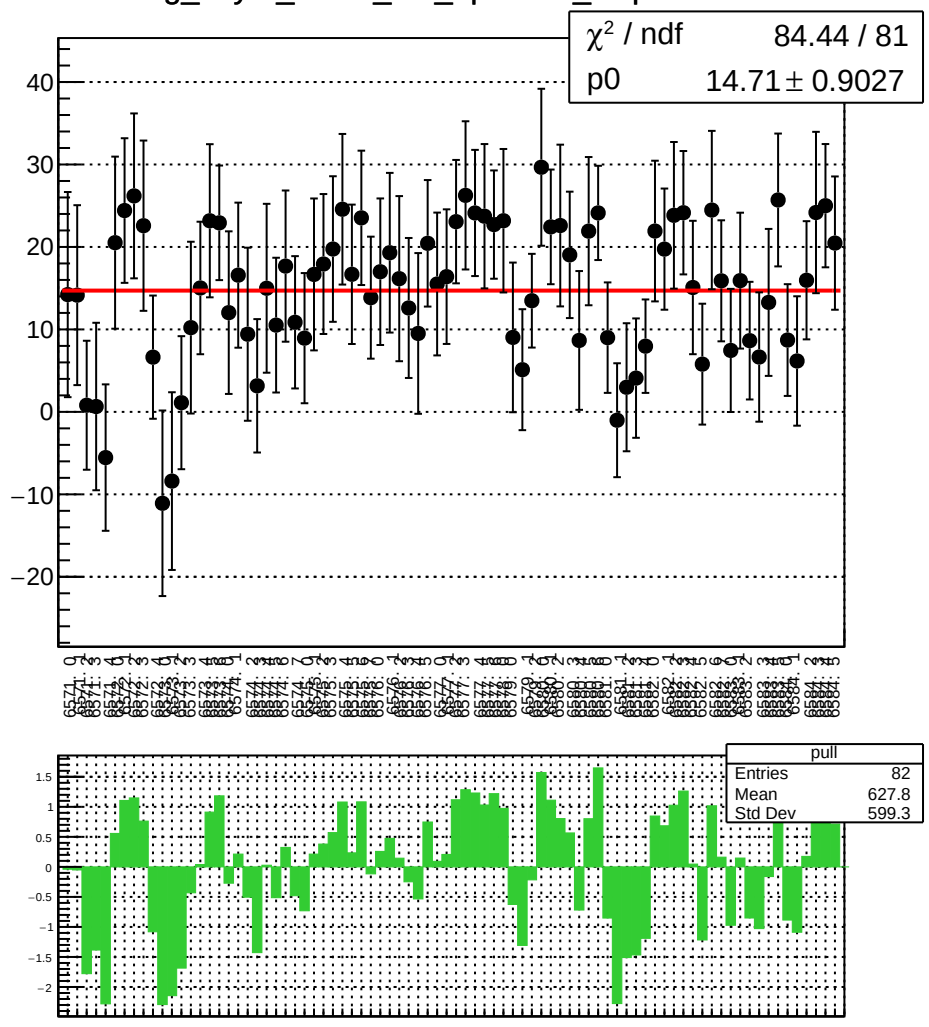

pull1D
Entries 82
Mean 0.1481
Std Dev 2.061

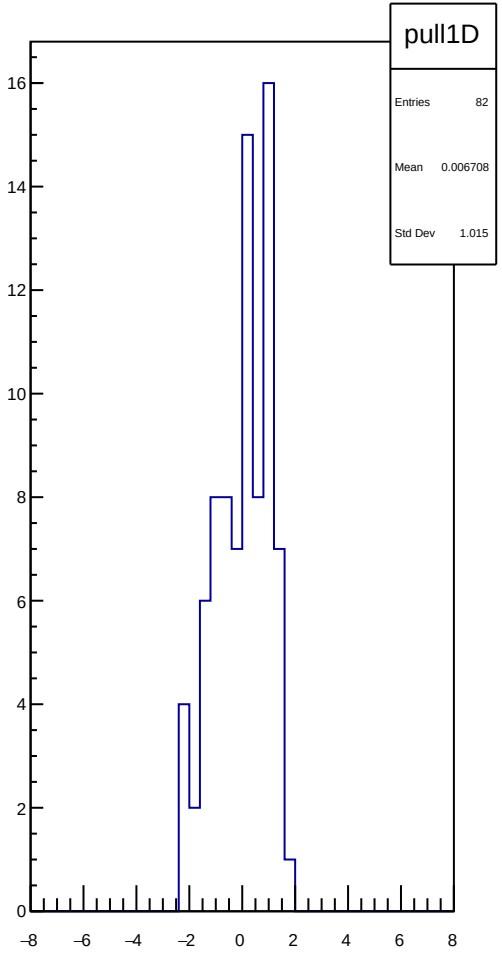

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 86.42 / 81
p0 4.808 ± 0.7454
pull
Entries 82
Mean −4561
Std Dev 4588

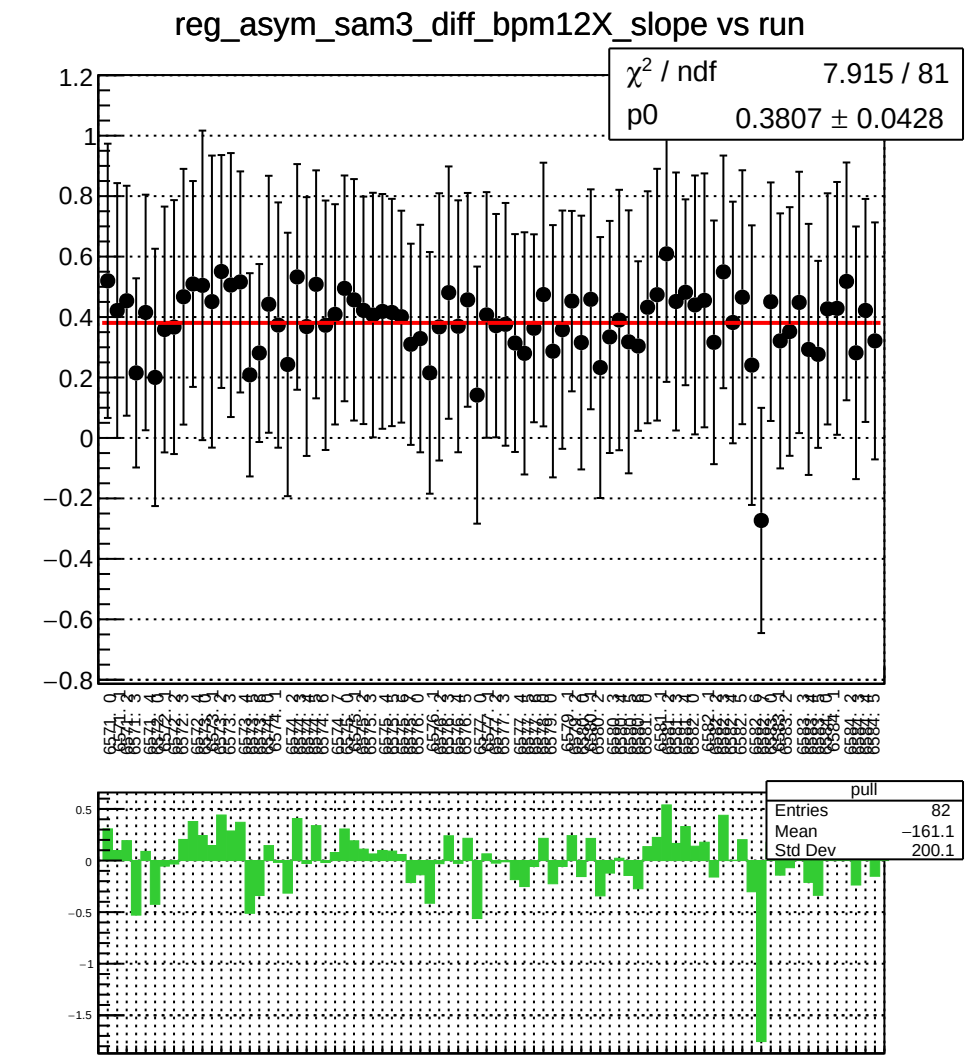

pull1D
Entries 82
Mean 0.0008734
Std Dev 1.027

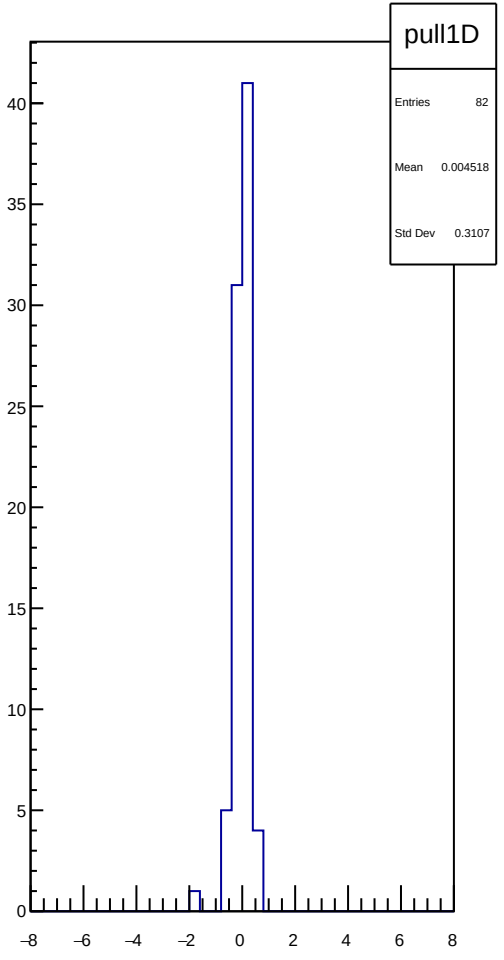

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 291.5 / 81
p0 −67.41 ± 0.9823
pull
Entries 82
Mean 25.05
Std Dev 10.24

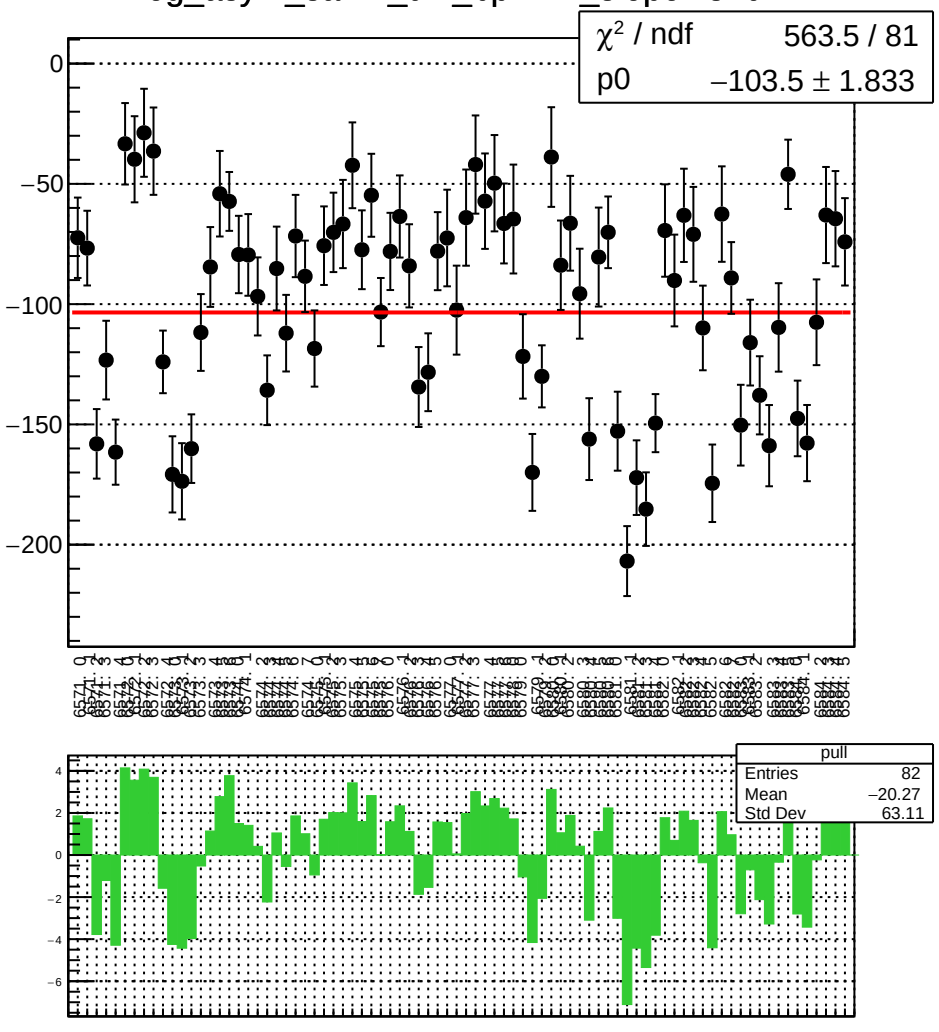

pull1D
Entries 82
Mean −0.1618
Std Dev 1.879

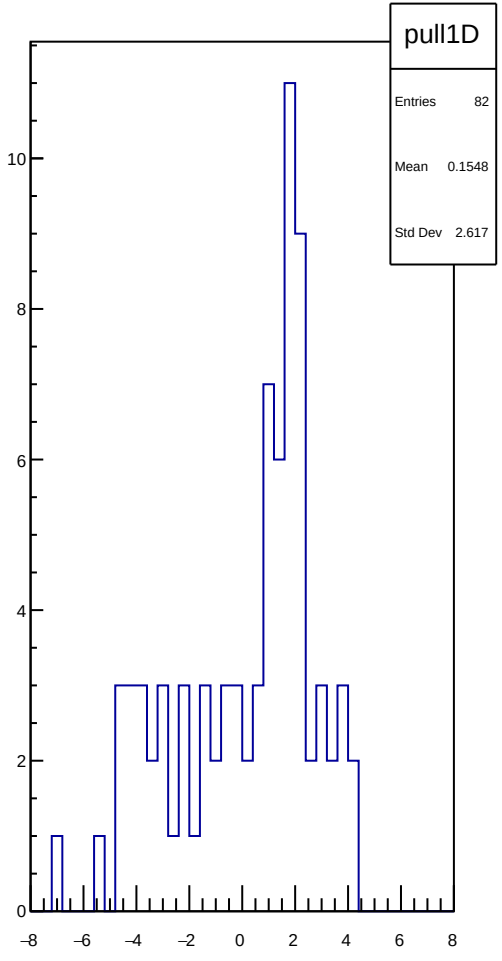

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 84.44 / 81
p0 14.71 ± 0.9027
pull
Entries 82
Mean 627.8
Std Dev 599.3

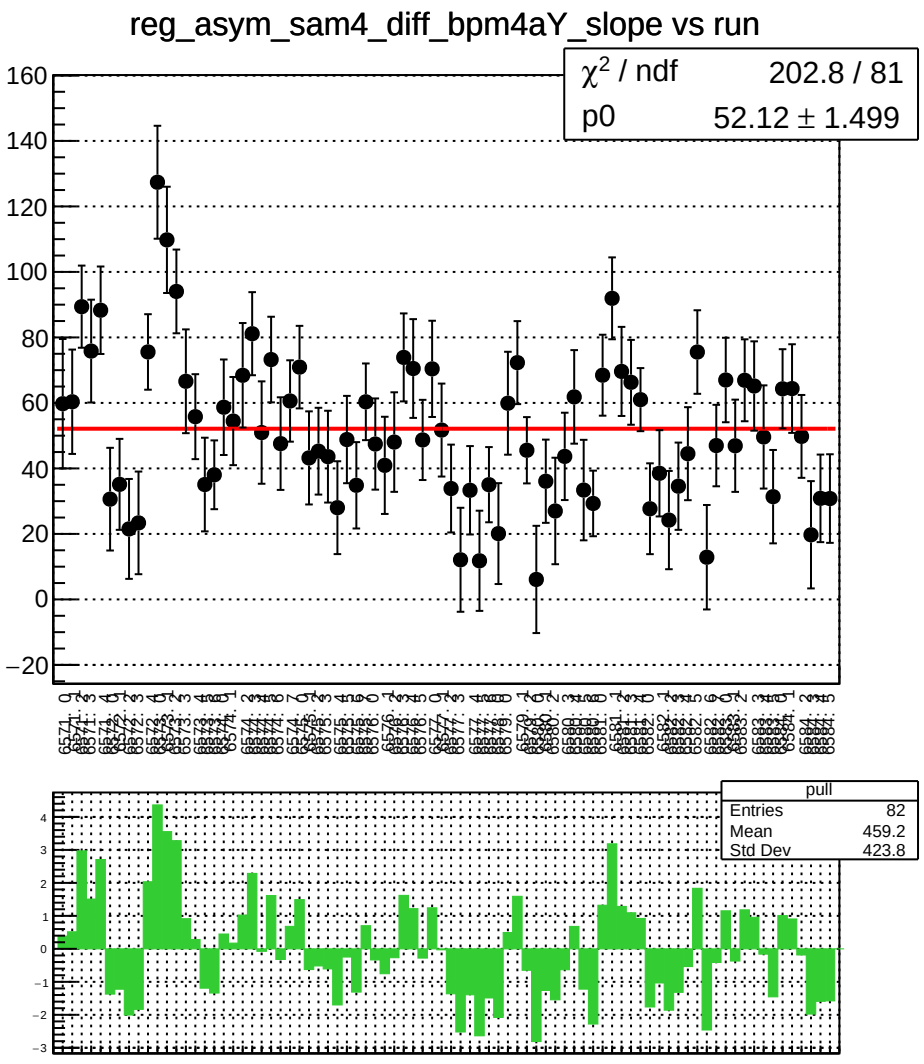

pull1D
Entries 82
Mean 0.006708
Std Dev 1.015

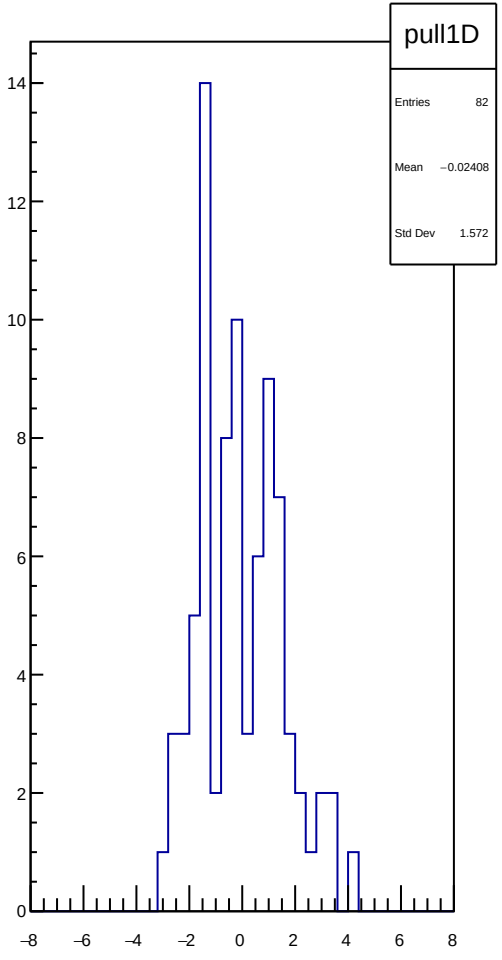

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 7.915 / 81
p0 0.3807 ± 0.0428
pull
Entries 82
Mean −161.1
Std Dev 200.1

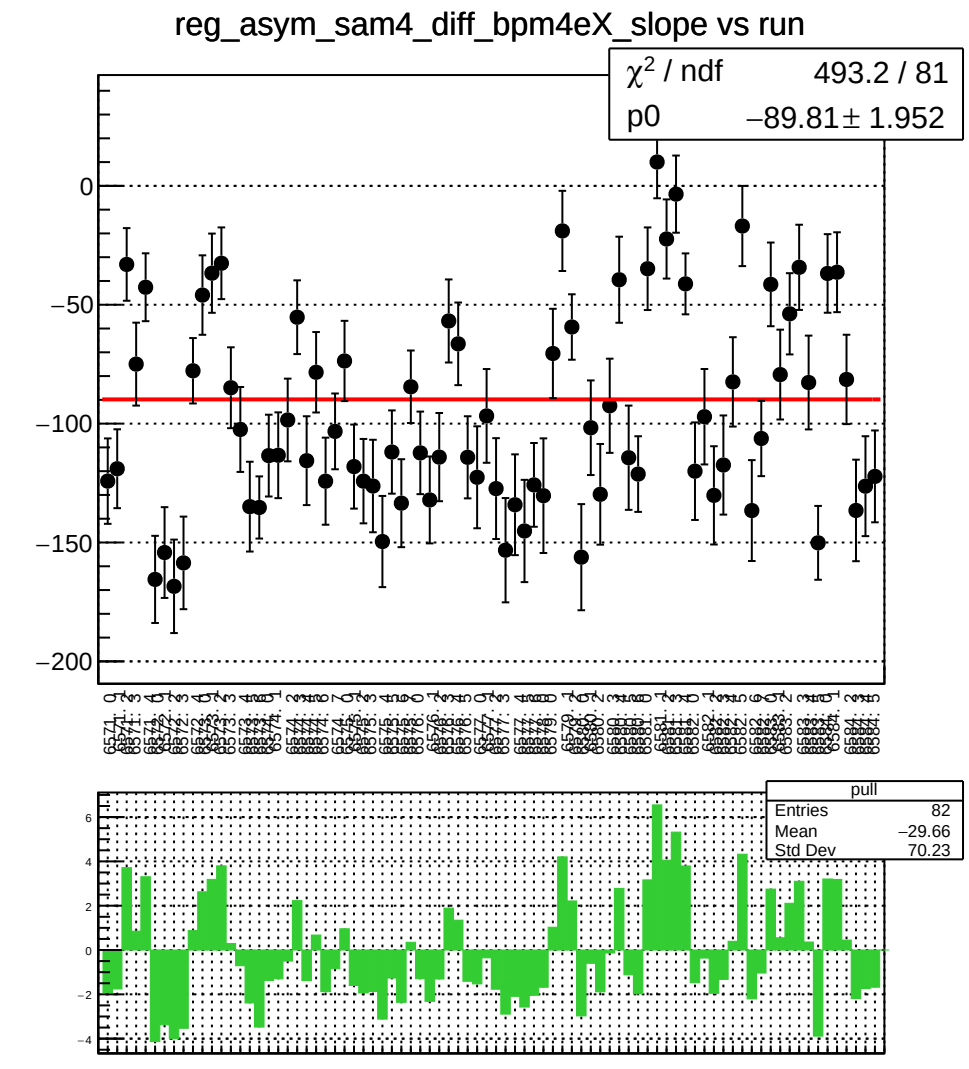

pull1D
Entries 82
Mean 0.004518
Std Dev 0.3107

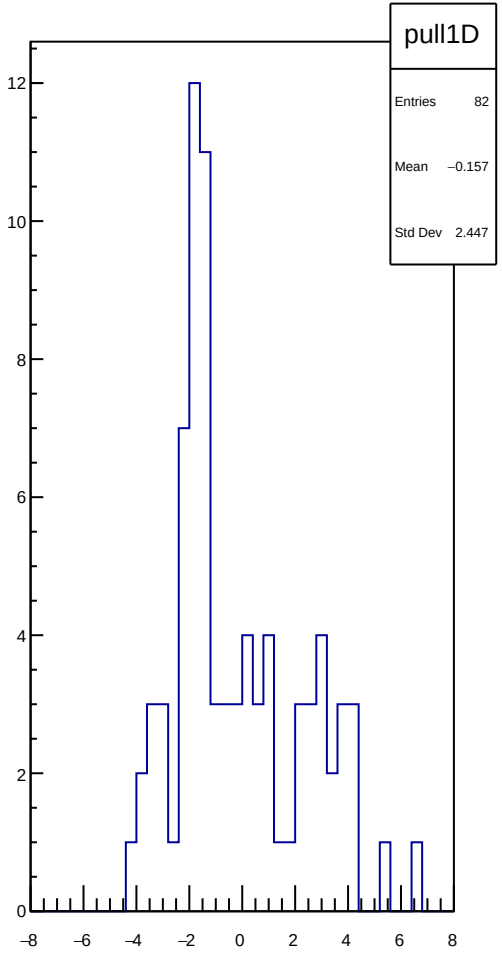

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 563.5 / 81
p0 −103.5 ± 1.833
pull
Entries 82
Mean −20.27
Std Dev 63.11

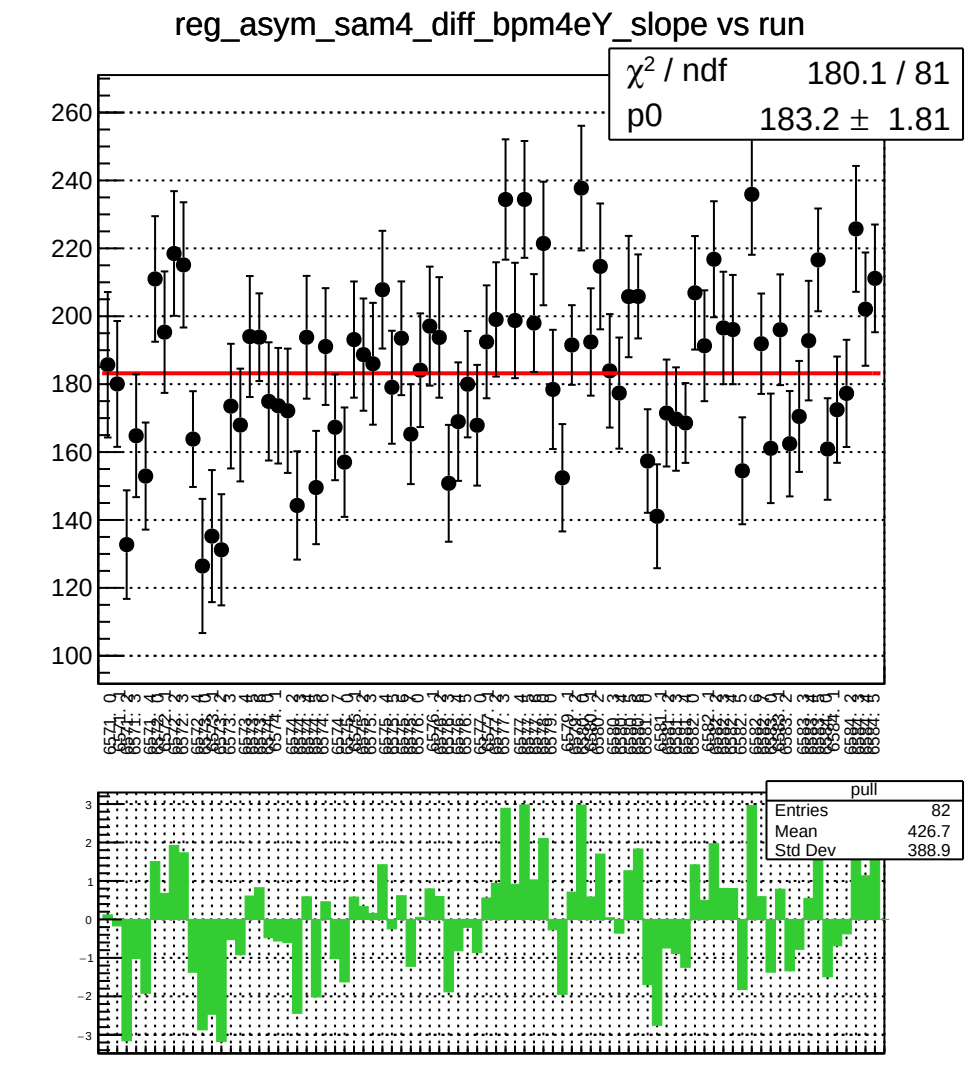

pull1D
Entries 82
Mean 0.1548
Std Dev 2.617

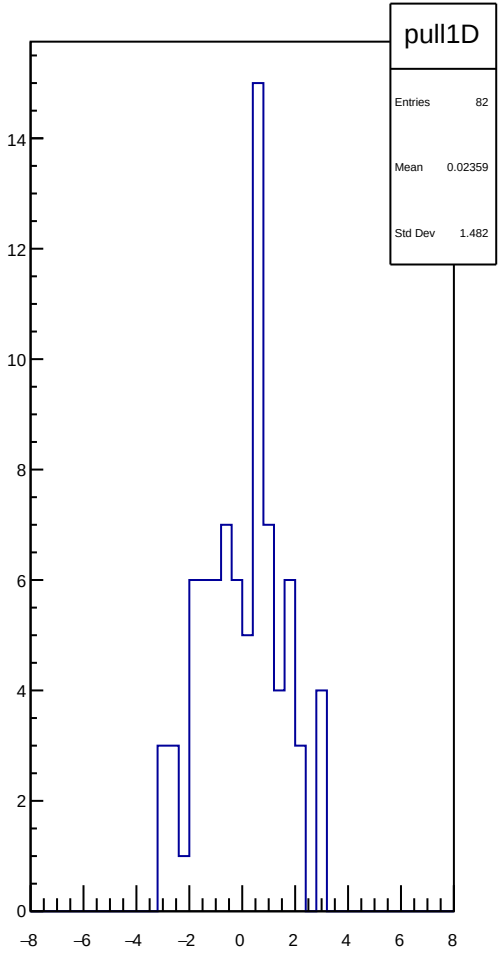

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 202.8 / 81
p0 52.12 ± 1.499
pull
Entries 82
Mean 459.2
Std Dev 423.8

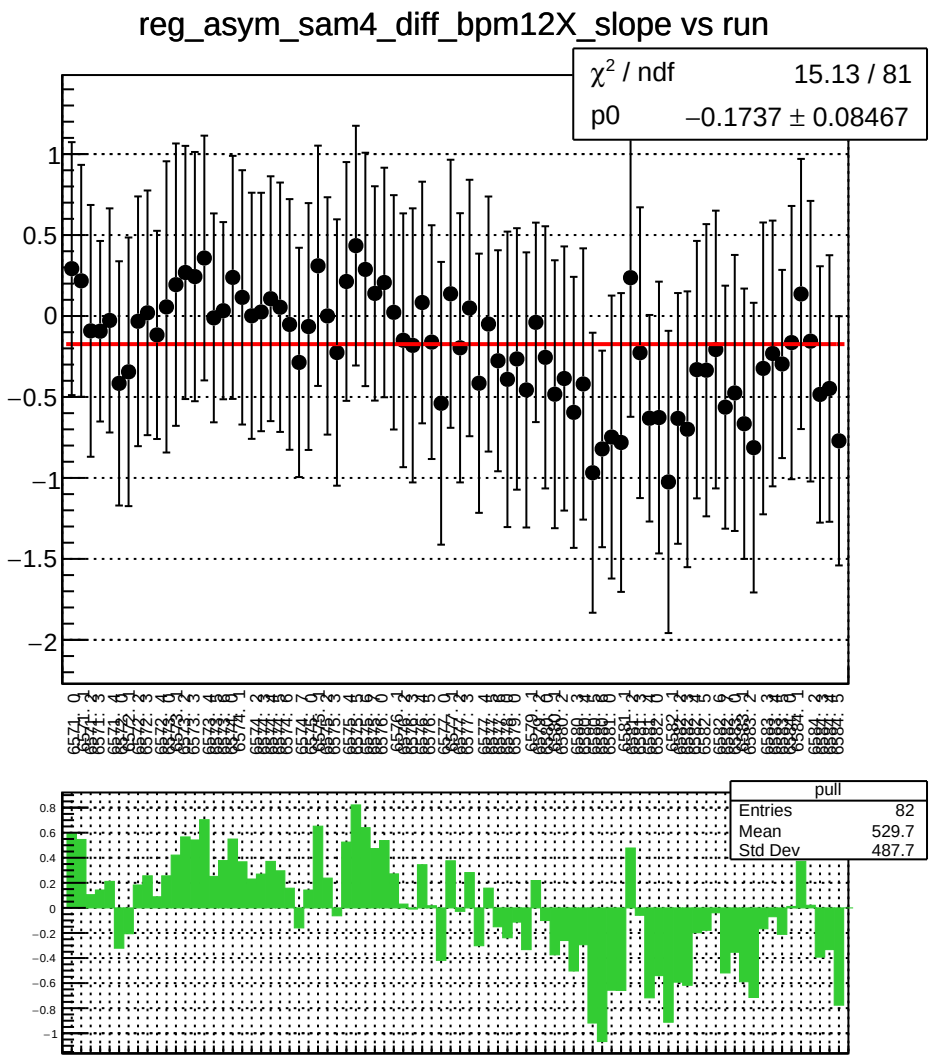

pull1D
Entries 82
Mean −0.02408
Std Dev 1.572

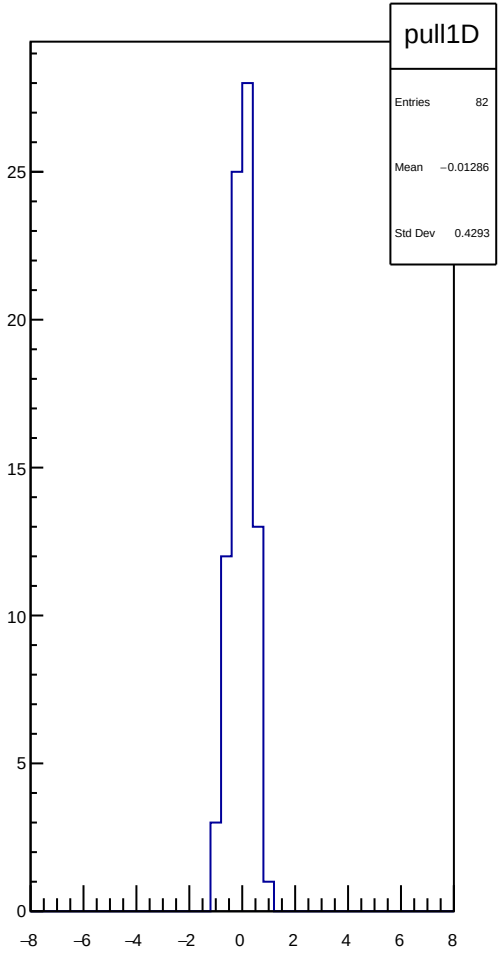

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 493.2 / 81
p0 −89.81 ± 1.952
pull
Entries 82
Mean −29.66
Std Dev 70.23

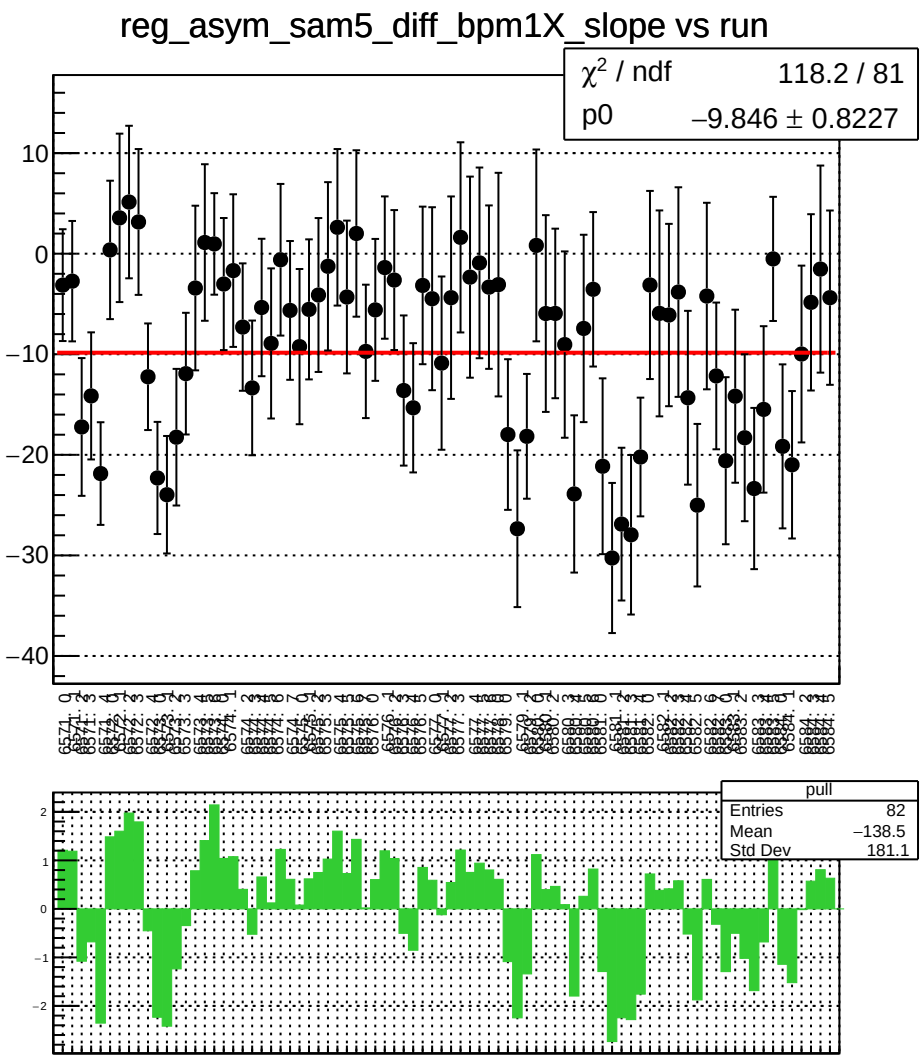

pull1D
Entries 82
Mean −0.157
Std Dev 2.447

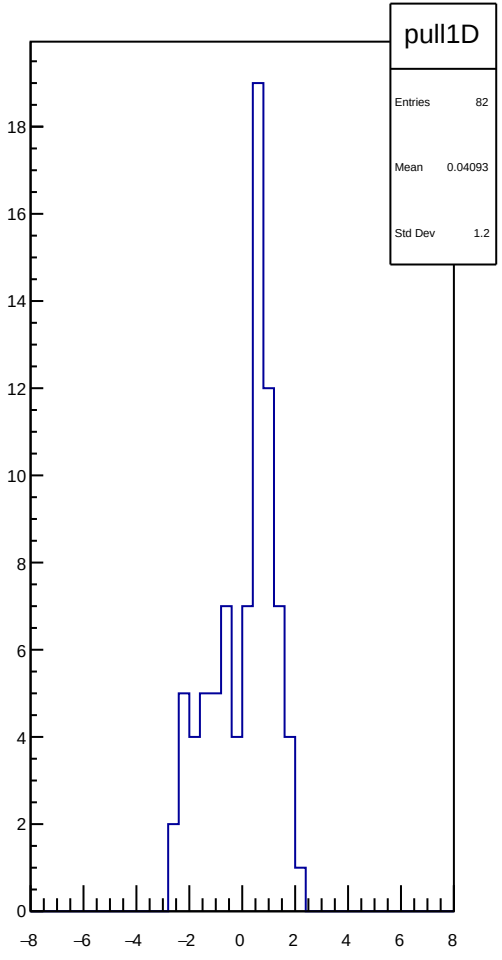

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 180.1 / 81
p0 183.2 ± 1.81
pull
Entries 82
Mean 426.7
Std Dev 388.9

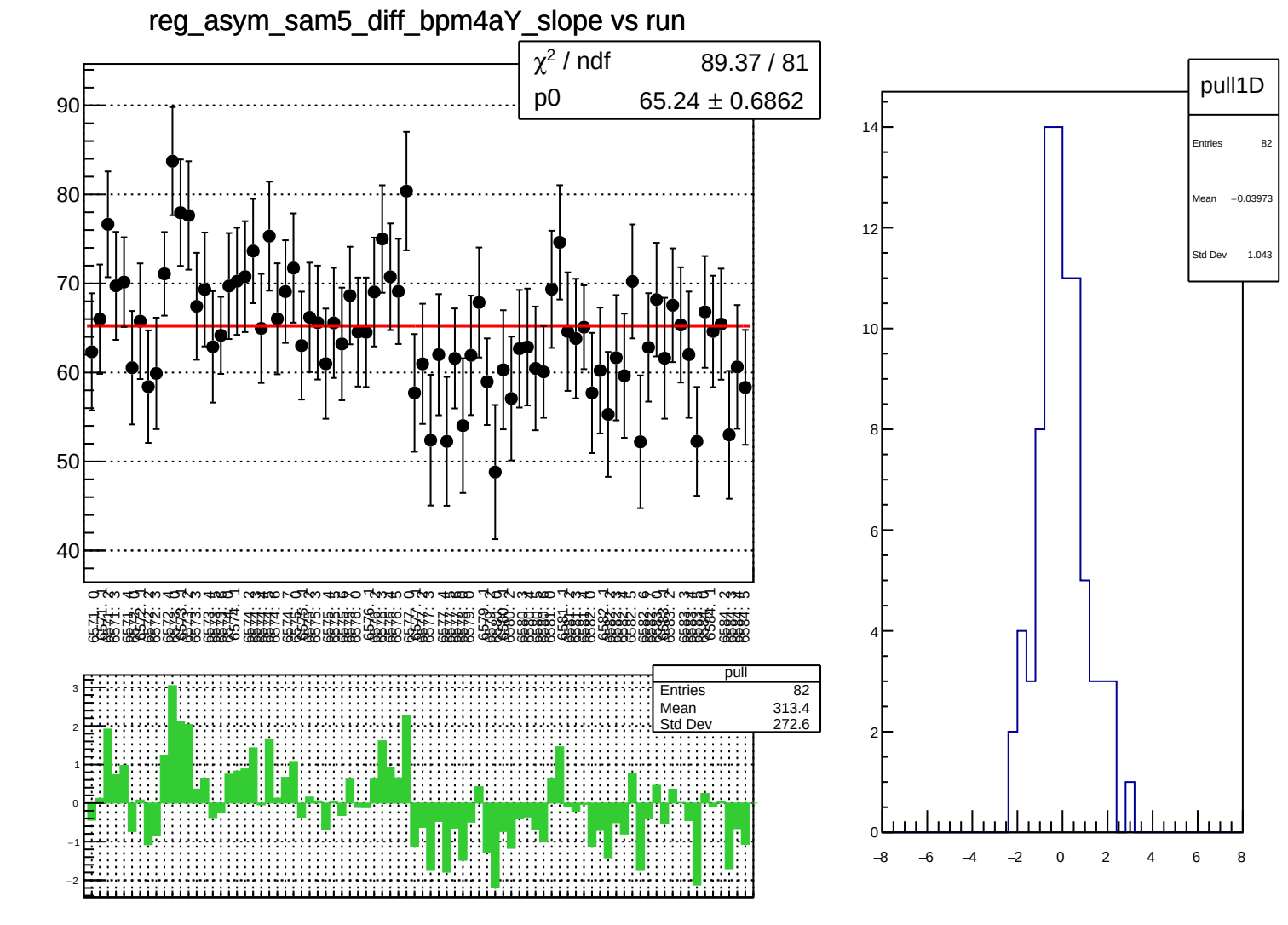

pull1D
Entries 82
Mean 0.02359
Std Dev 1.482

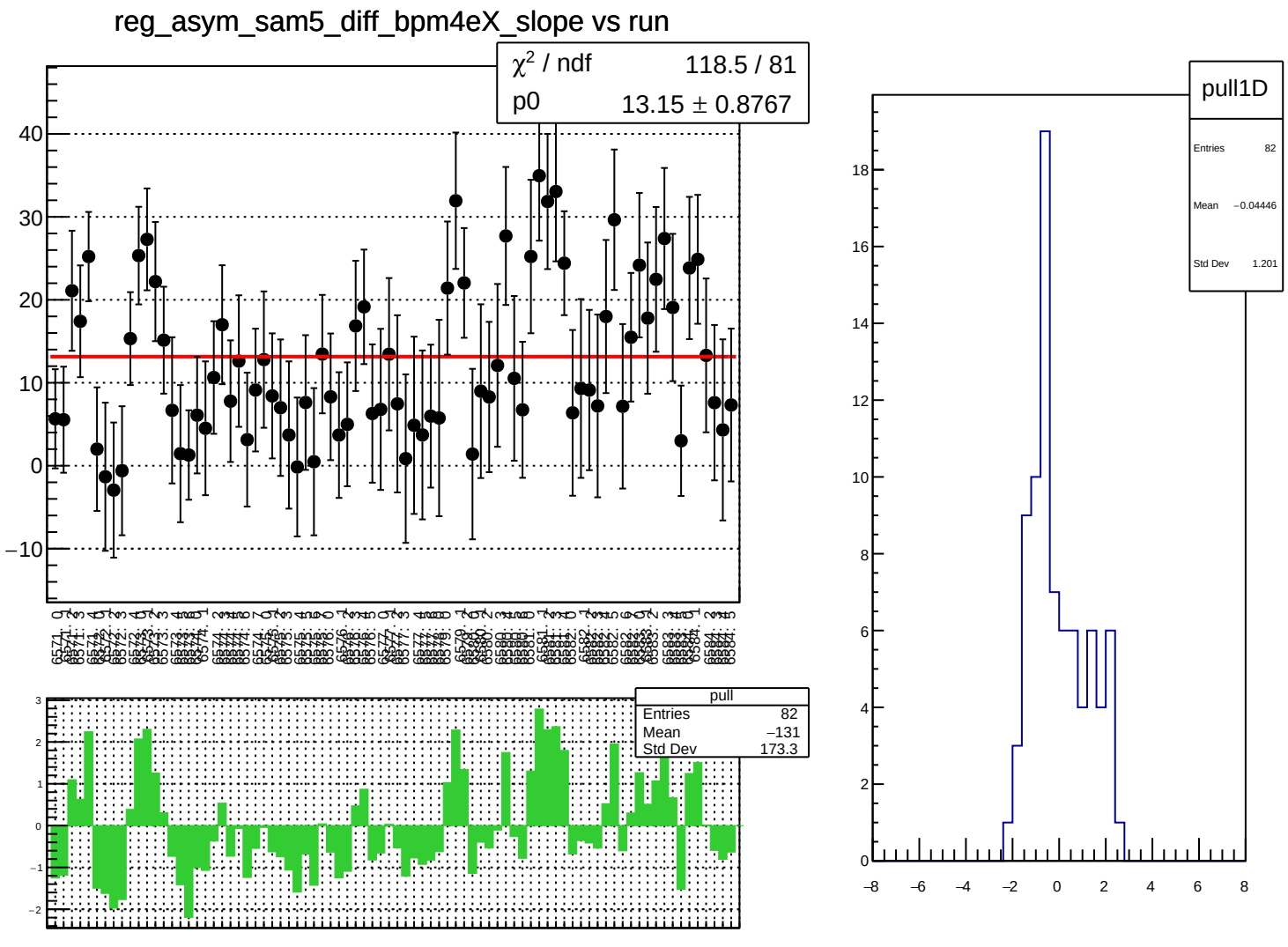

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 15.13 / 81
p0 −0.1737 ± 0.08467
pull
Entries 82
Mean 529.7
Std Dev 487.7

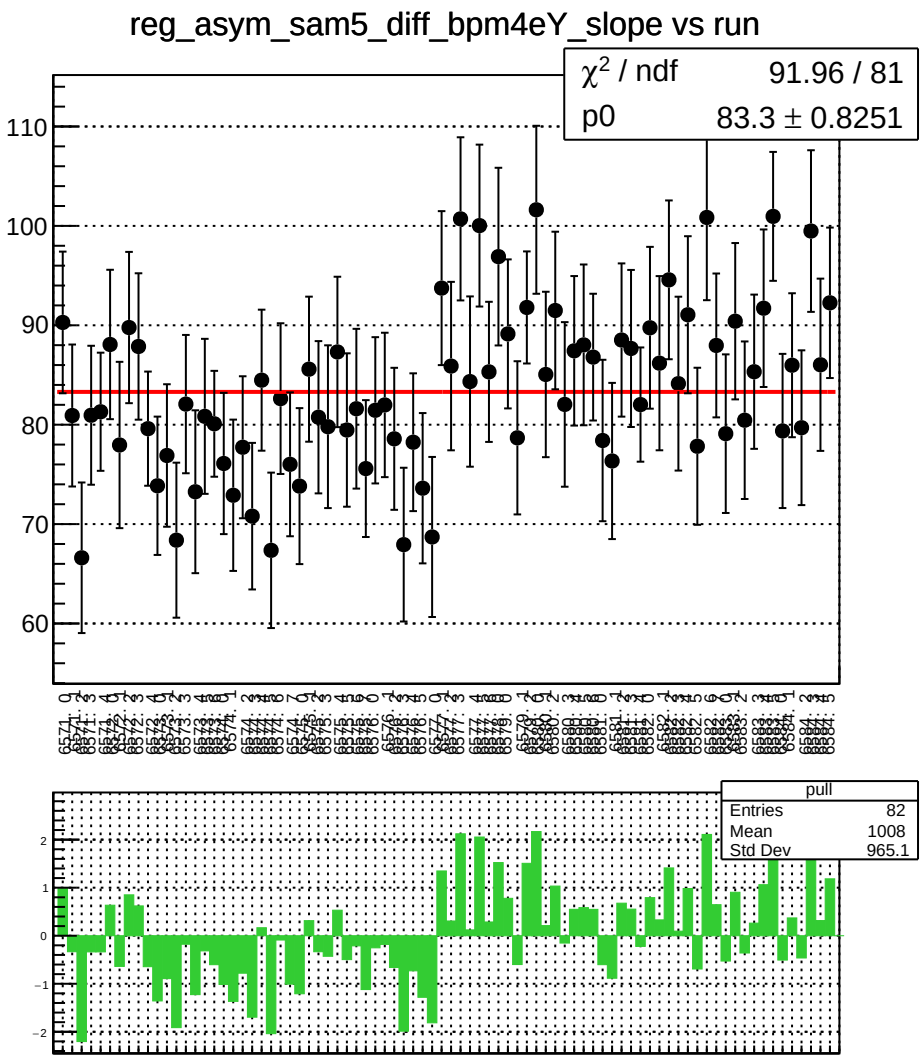

pull1D
Entries 82
Mean −0.01286
Std Dev 0.4293

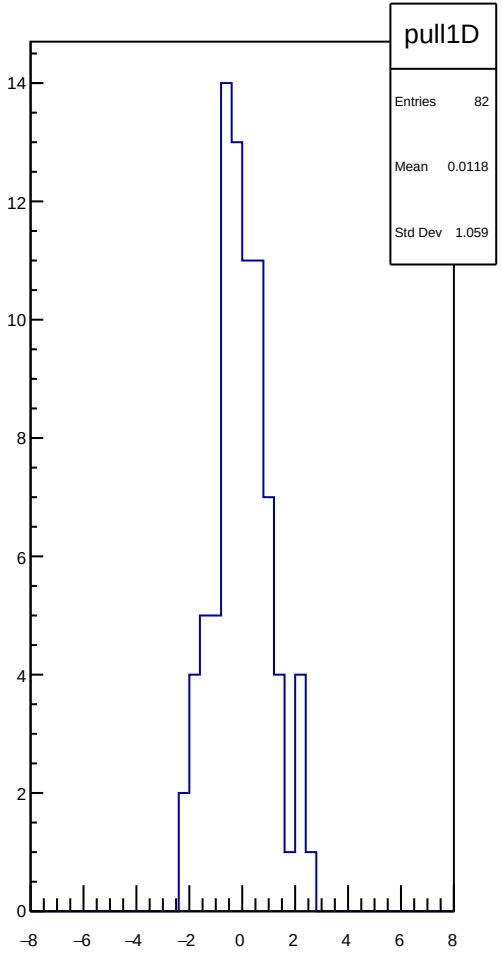

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 118.2 / 81
p0 −9.846 ± 0.8227
pull
Entries 82
Mean −138.5
Std Dev 181.1

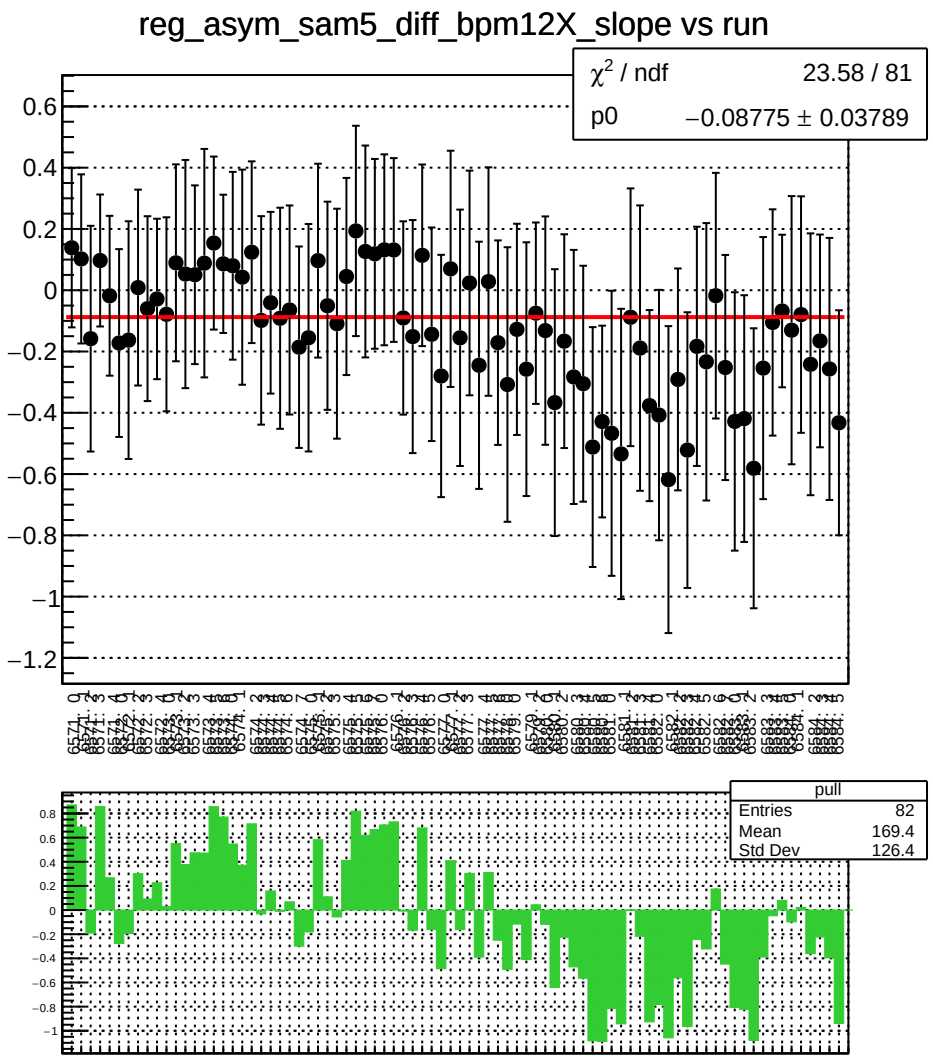

pull1D
Entries 82
Mean 0.04093
Std Dev 1.2

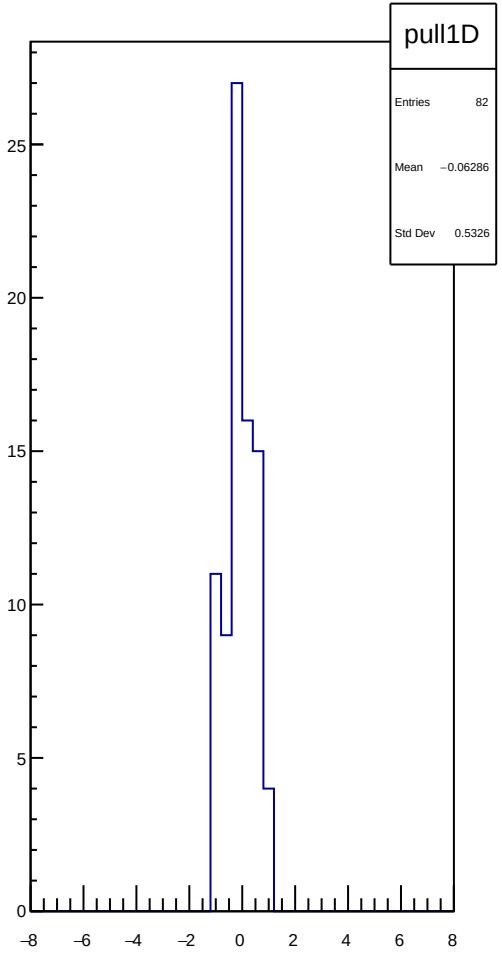

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 89.37 / 81
p0 65.24 ± 0.6862
pull
Entries 82
Mean 313.4
Std Dev 272.6
pull1D
Entries 82
Mean −0.03973
Std Dev 1.043

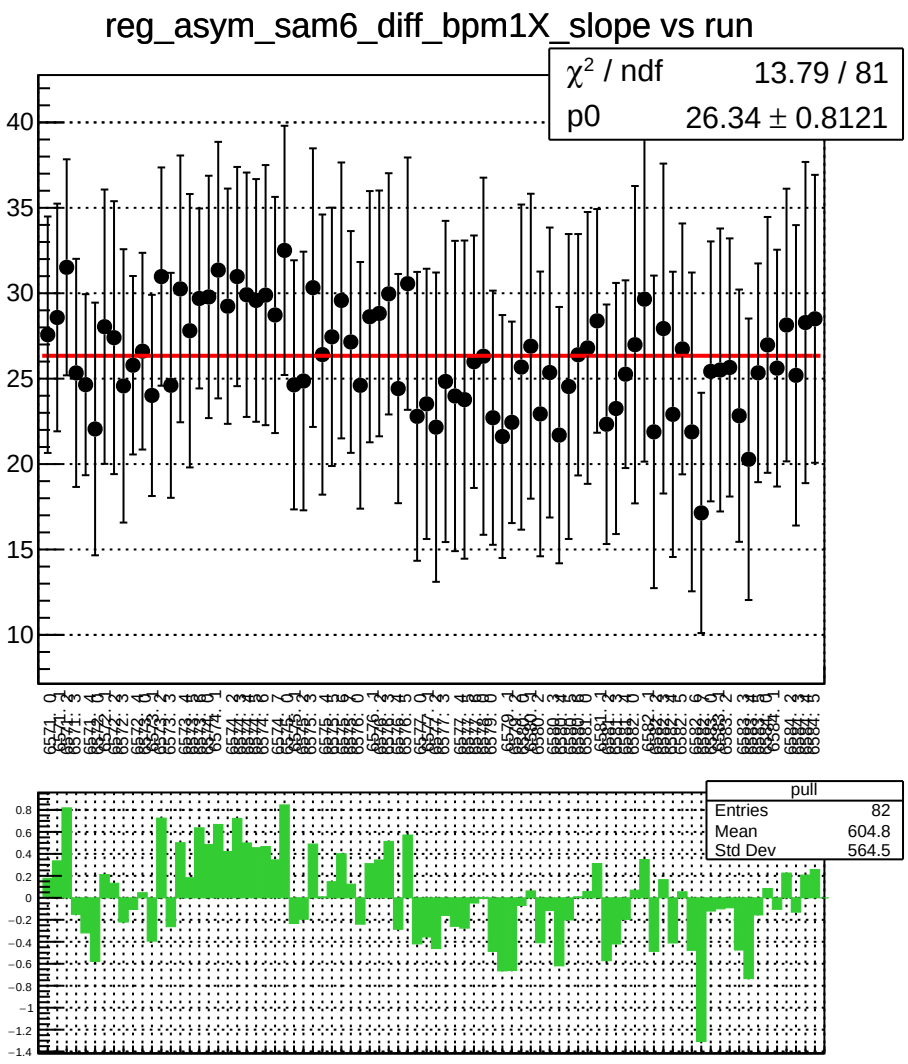

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 118.5 / 81
p0 13.15 ± 0.8767
pull
Entries 82
Mean −131
Std Dev 173.3
pull1D
Entries 82
Mean −0.04446
Std Dev 1.201

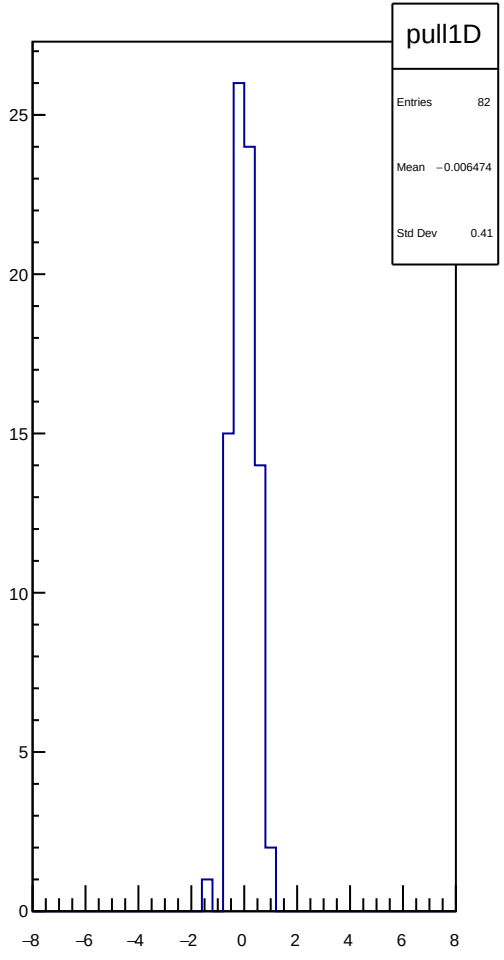

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 91.96 / 81
p0 83.3 ± 0.8251
110
100
90
80
70
60
pull
Entries 82
Mean 1008
Std Dev 965.1
2
1
0
−1
−2

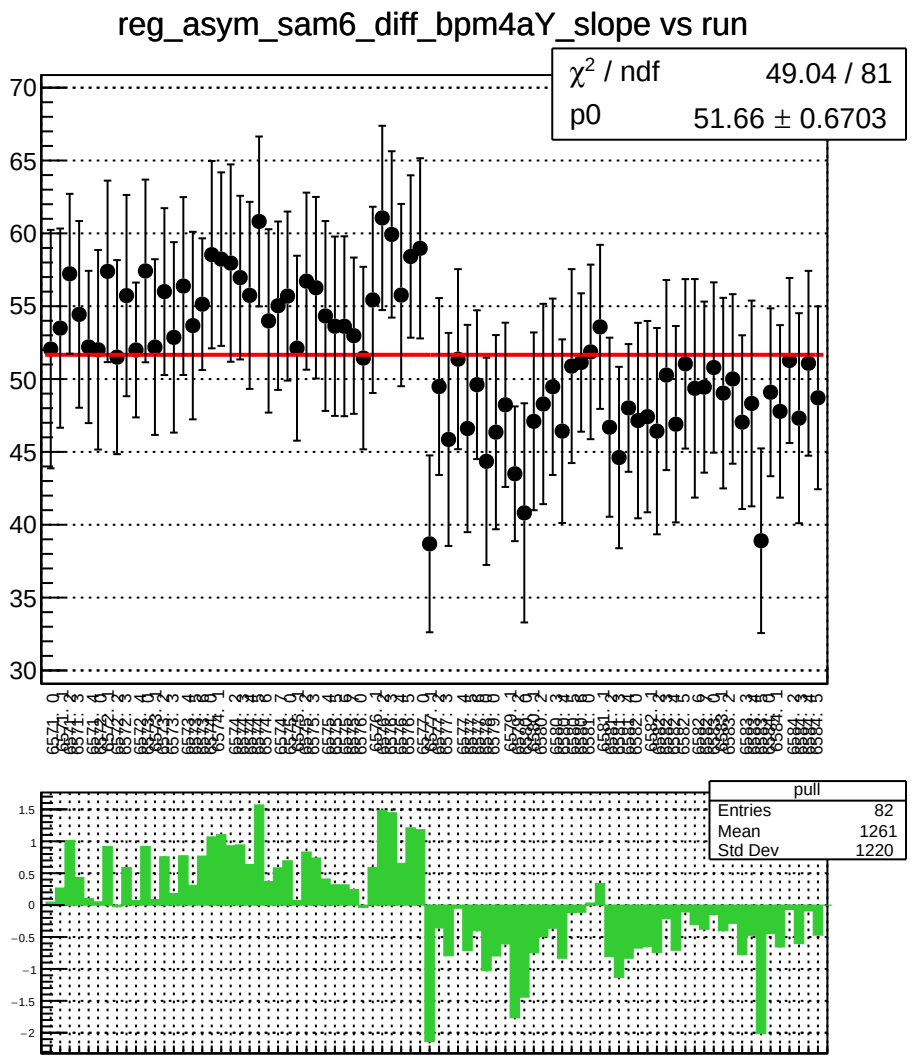

pull1D
Entries 82
Mean 0.0118
Std Dev 1.059
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

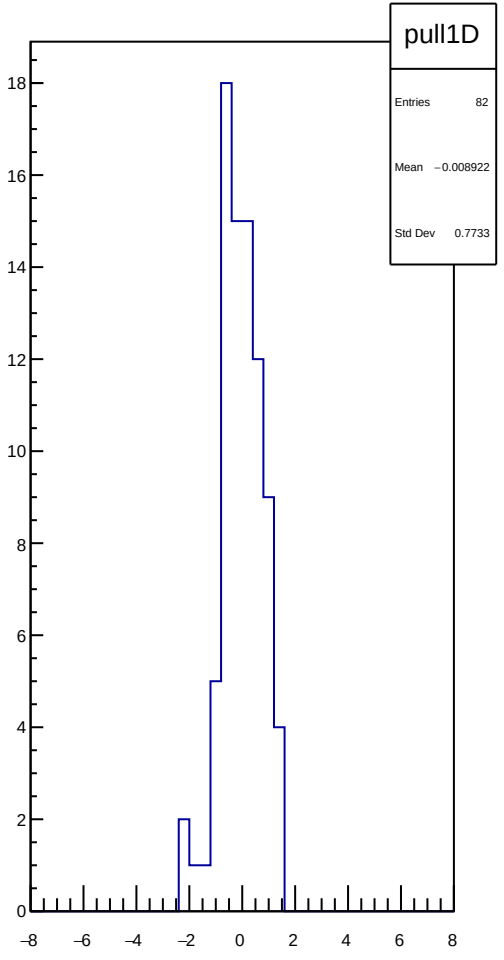

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 23.58 / 81
p0 −0.08775 ± 0.03789
pull
Entries 82
Mean 169.4
Std Dev 126.4

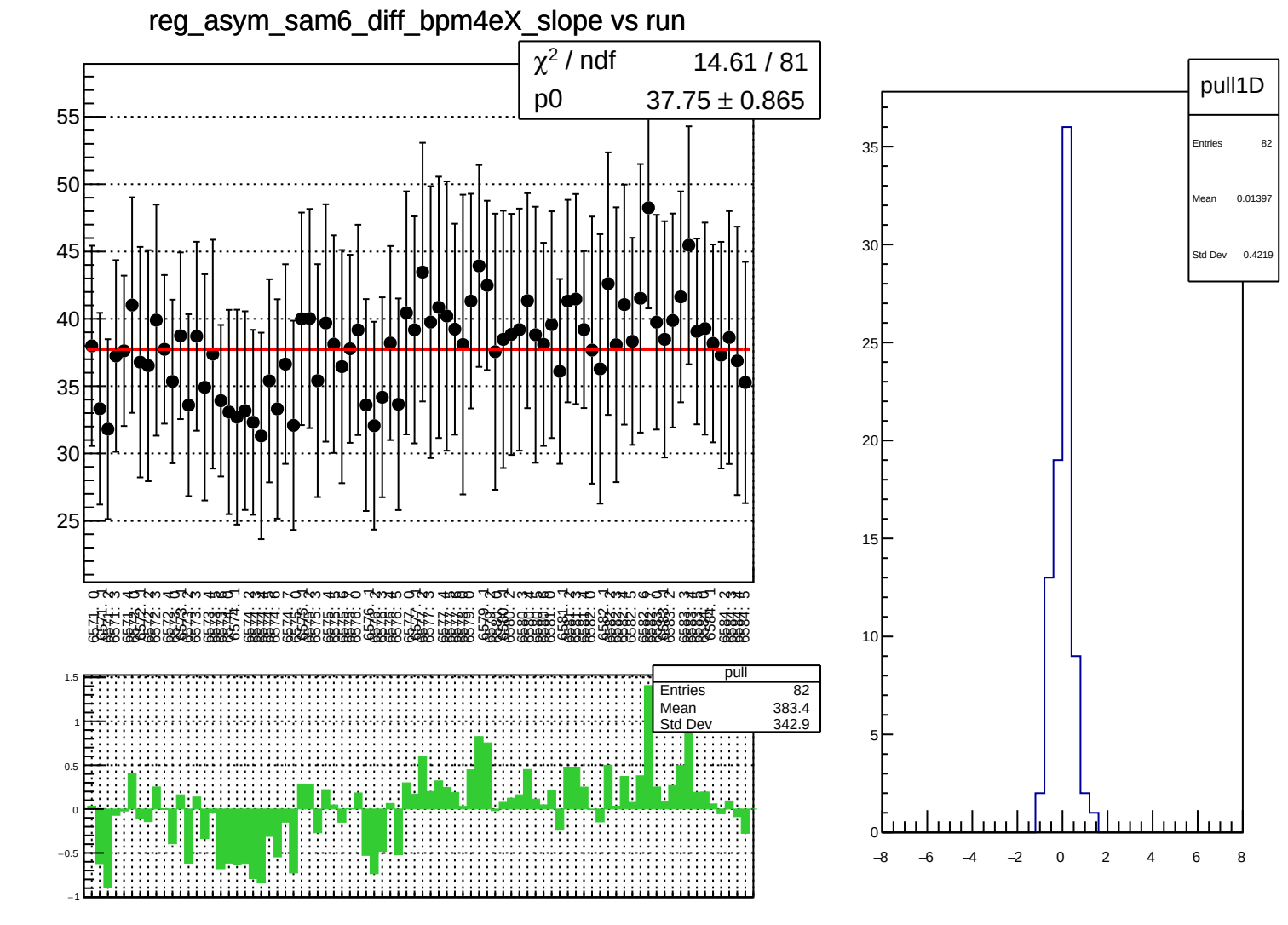

pull1D
Entries 82
Mean −0.06286
Std Dev 0.5326

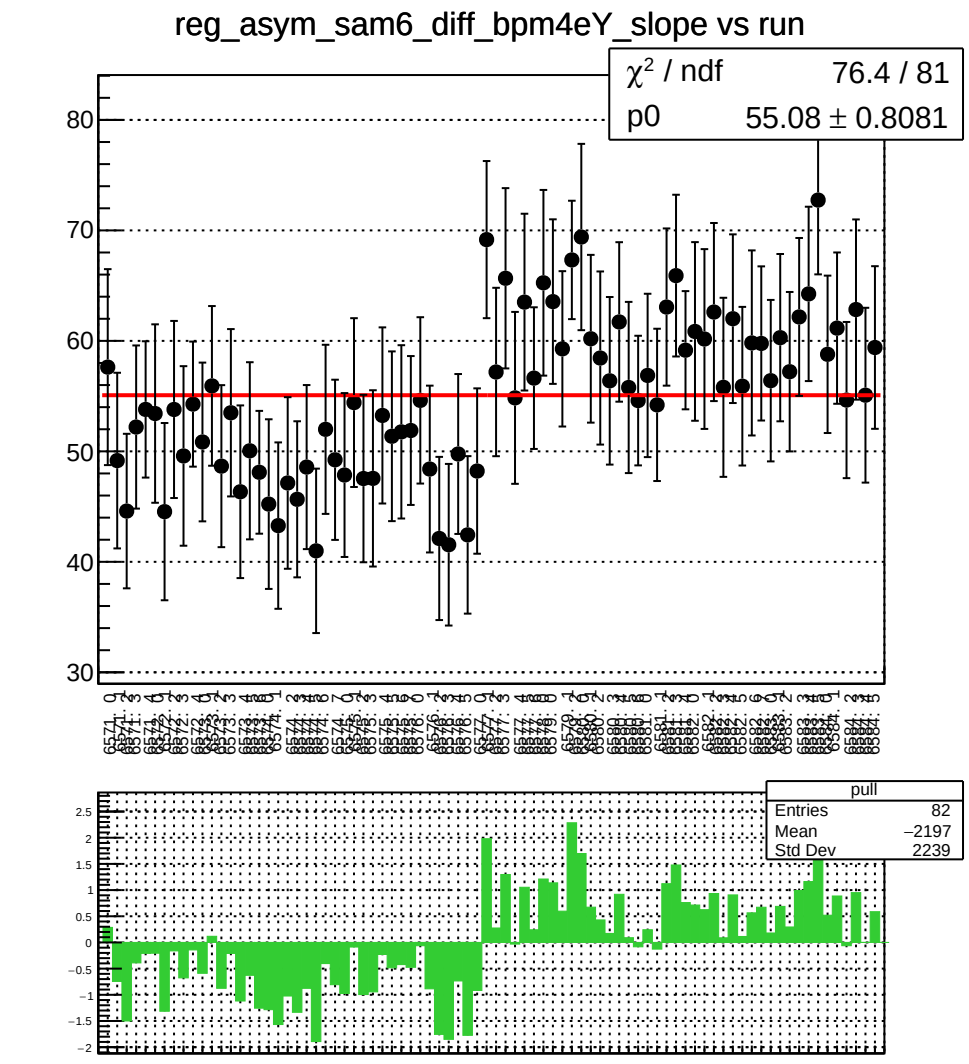

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 13.79 / 81
p0 26.34 ± 0.8121
pull
Entries 82
Mean 604.8
Std Dev 564.5

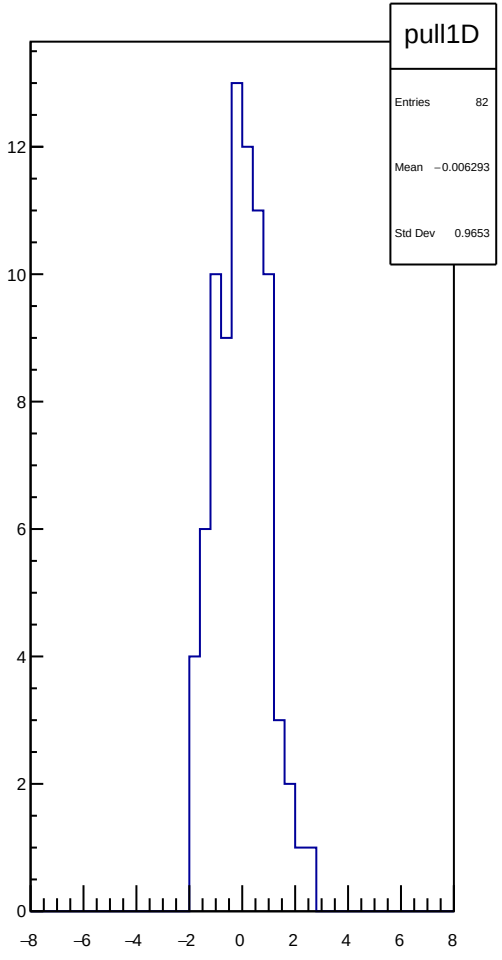

pull1D
Entries 82
Mean −0.006474
Std Dev 0.41

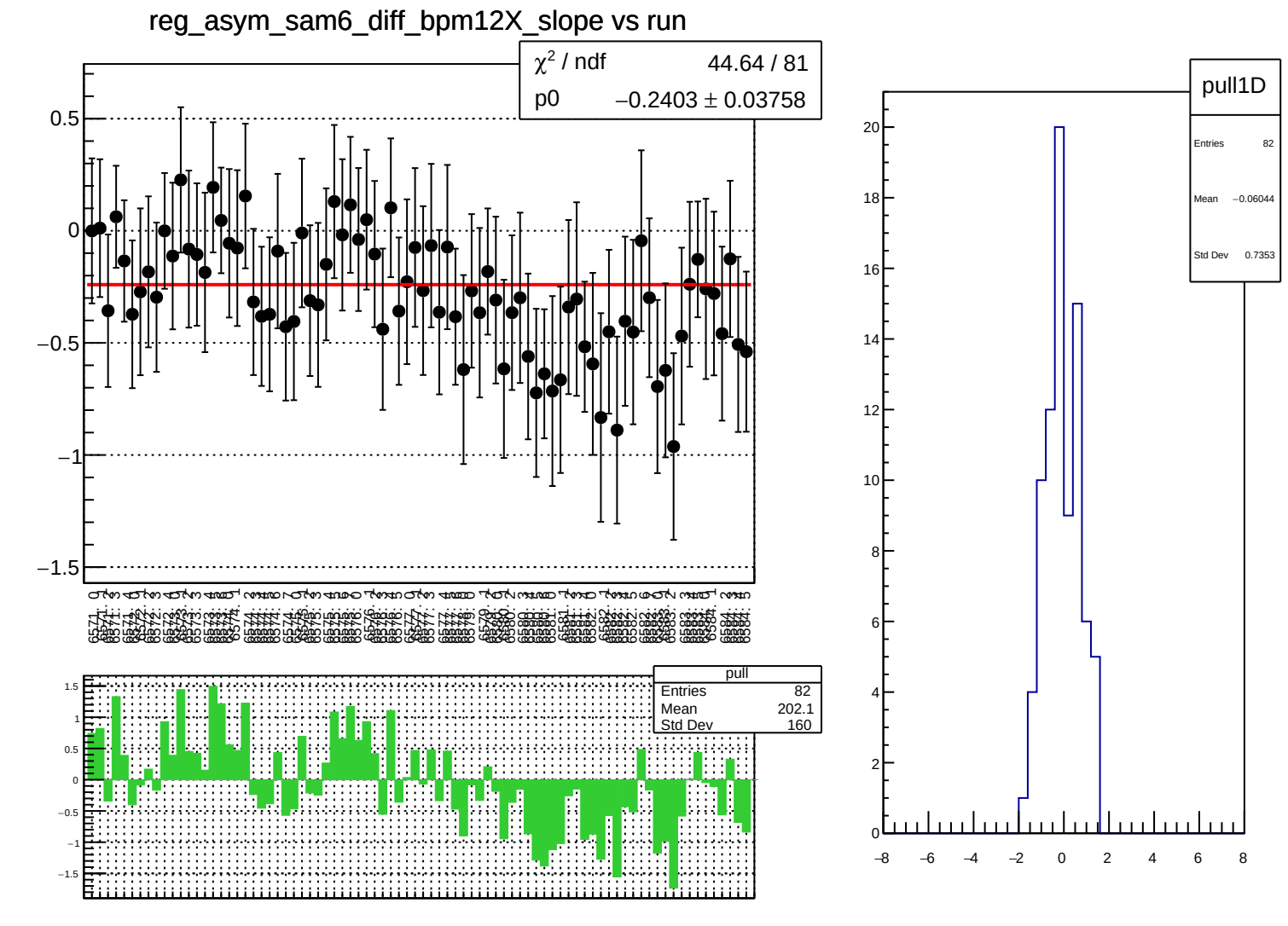

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 49.04 / 81
p0 51.66 ± 0.6703
pull
Entries 82
Mean 1261
Std Dev 1220

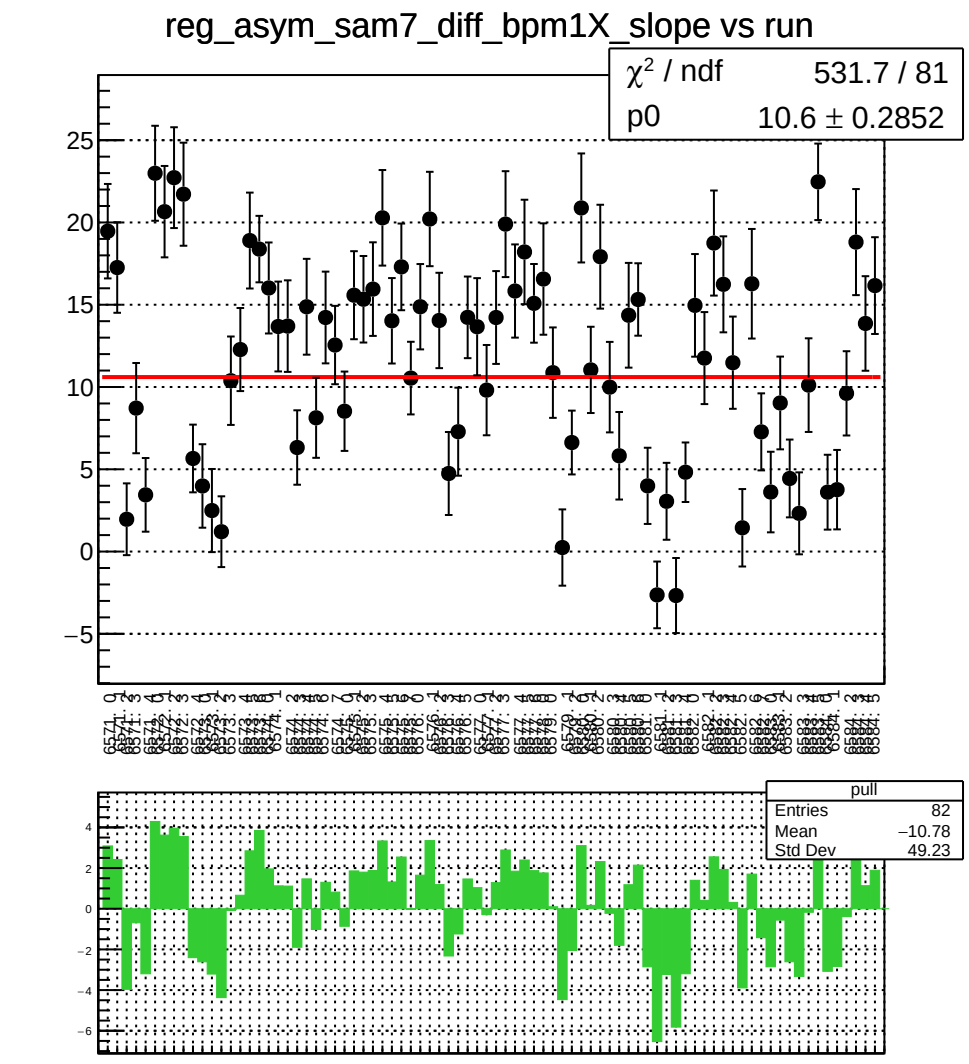

pull1D
Entries 82
Mean −0.008922
Std Dev 0.7733

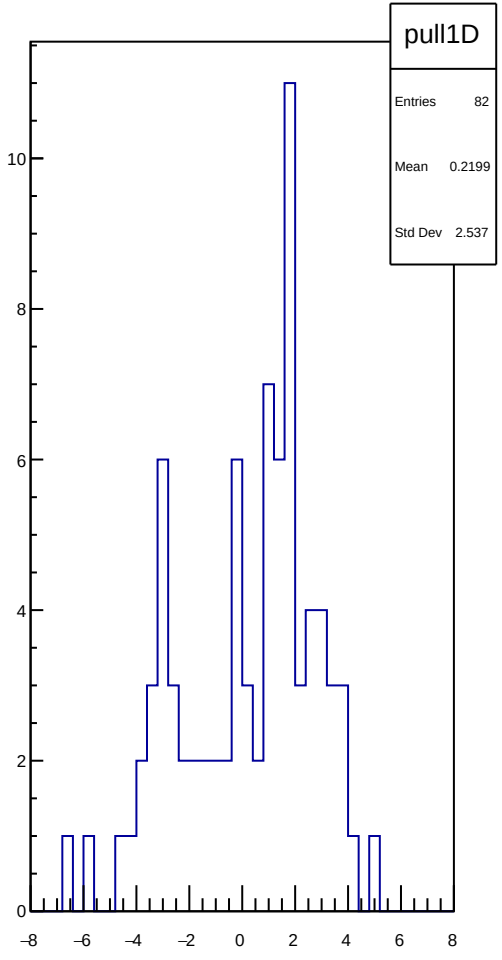

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 14.61 / 81
p0 37.75 ± 0.865
pull
Entries 82
Mean 383.4
Std Dev 342.9
pull1D
Entries 82
Mean 0.01397
Std Dev 0.4219

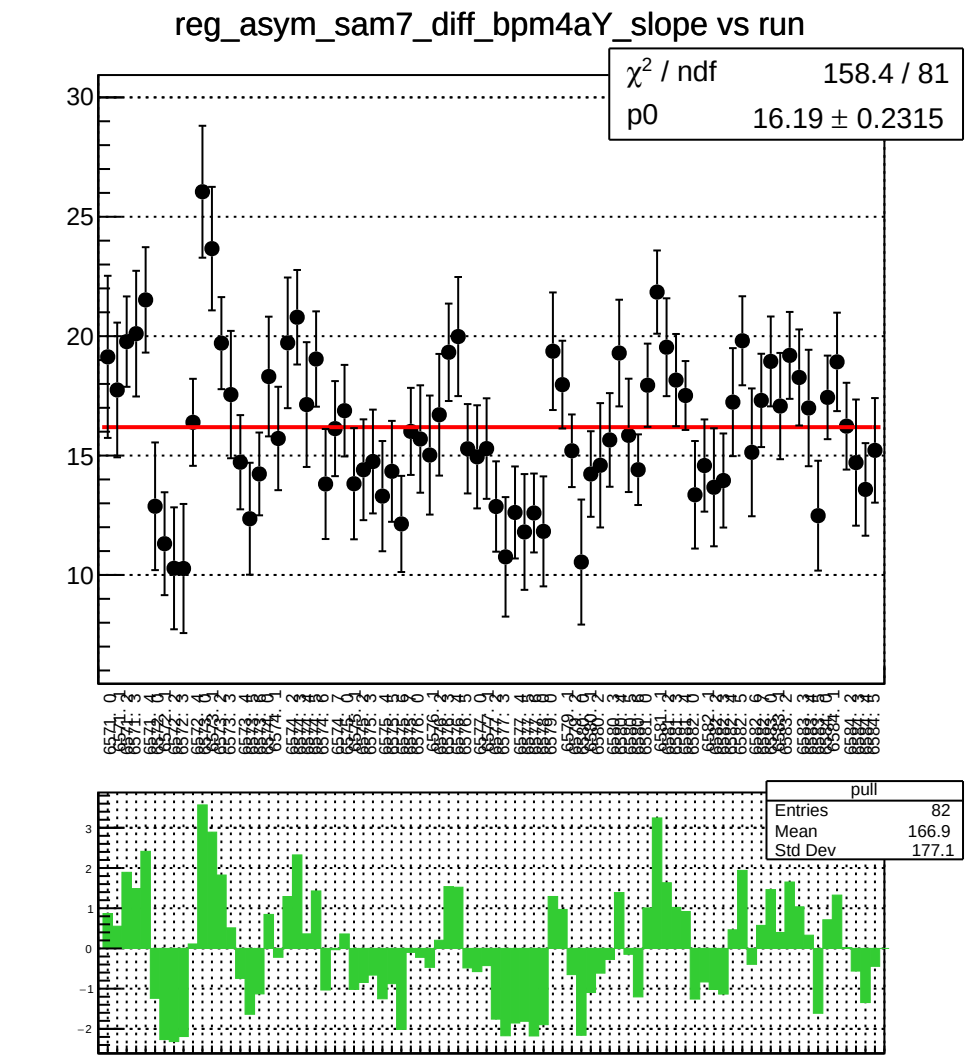

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 76.4 / 81
p0 55.08 ± 0.8081
pull
Entries 82
Mean −2197
Std Dev 2239

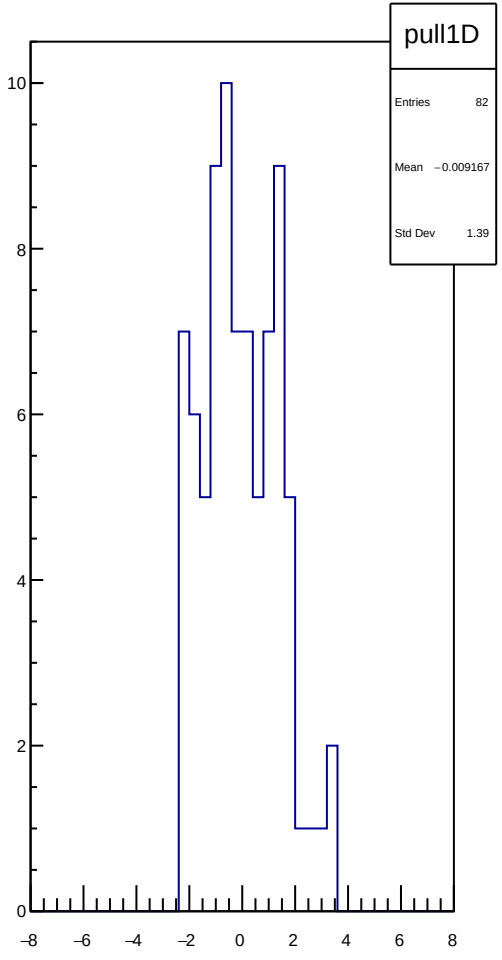

pull1D
Entries 82
Mean −0.006293
Std Dev 0.9653

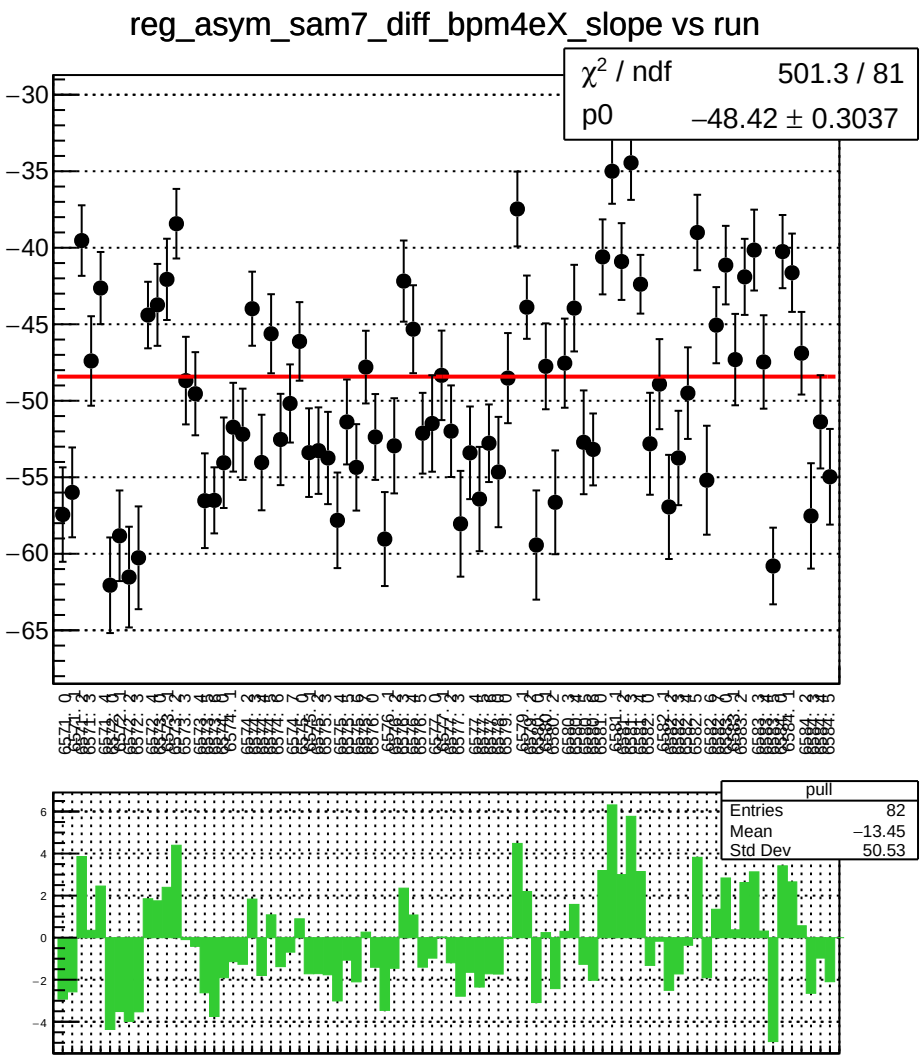

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 44.64 / 81
p0 −0.2403 ± 0.03758
pull
Entries 82
Mean 202.1
Std Dev 160
pull1D
Entries 82
Mean −0.06044
Std Dev 0.7353

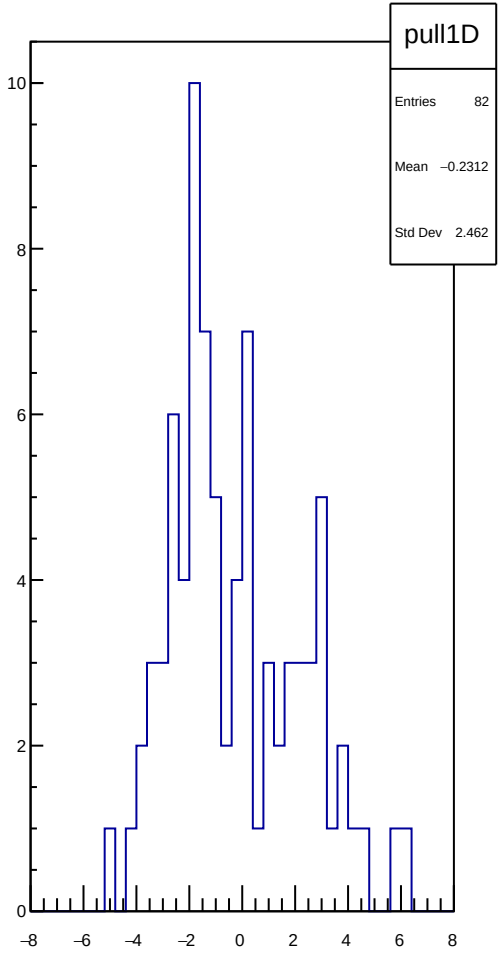

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 531.7 / 81
p0 10.6 ± 0.2852
pull
Entries 82
Mean −10.78
Std Dev 49.23

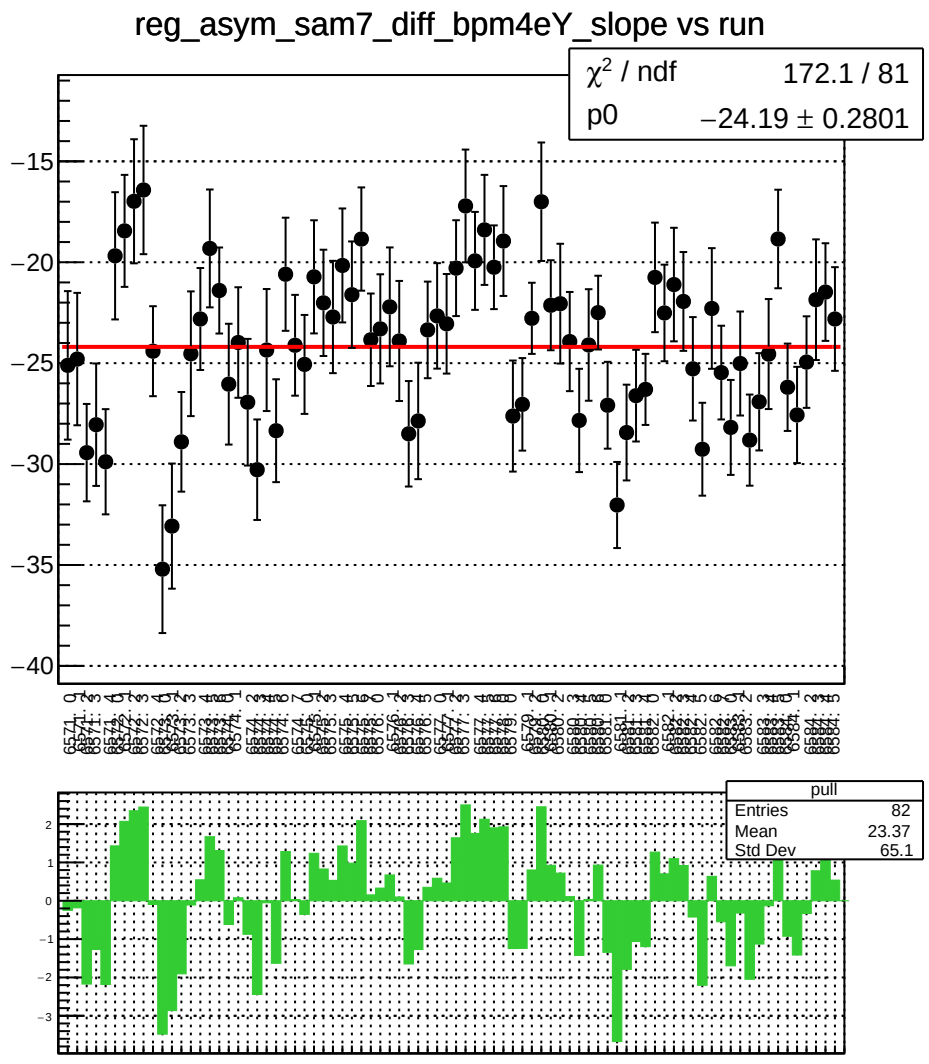

pull1D
Entries 82
Mean 0.2199
Std Dev 2.537

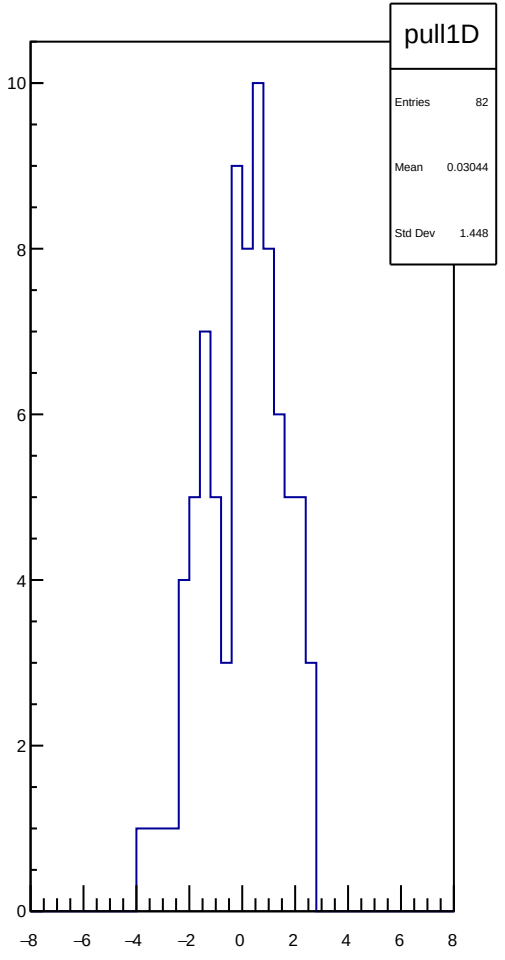

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 158.4 / 81
p0 16.19 ± 0.2315
pull
Entries 82
Mean 166.9
Std Dev 177.1

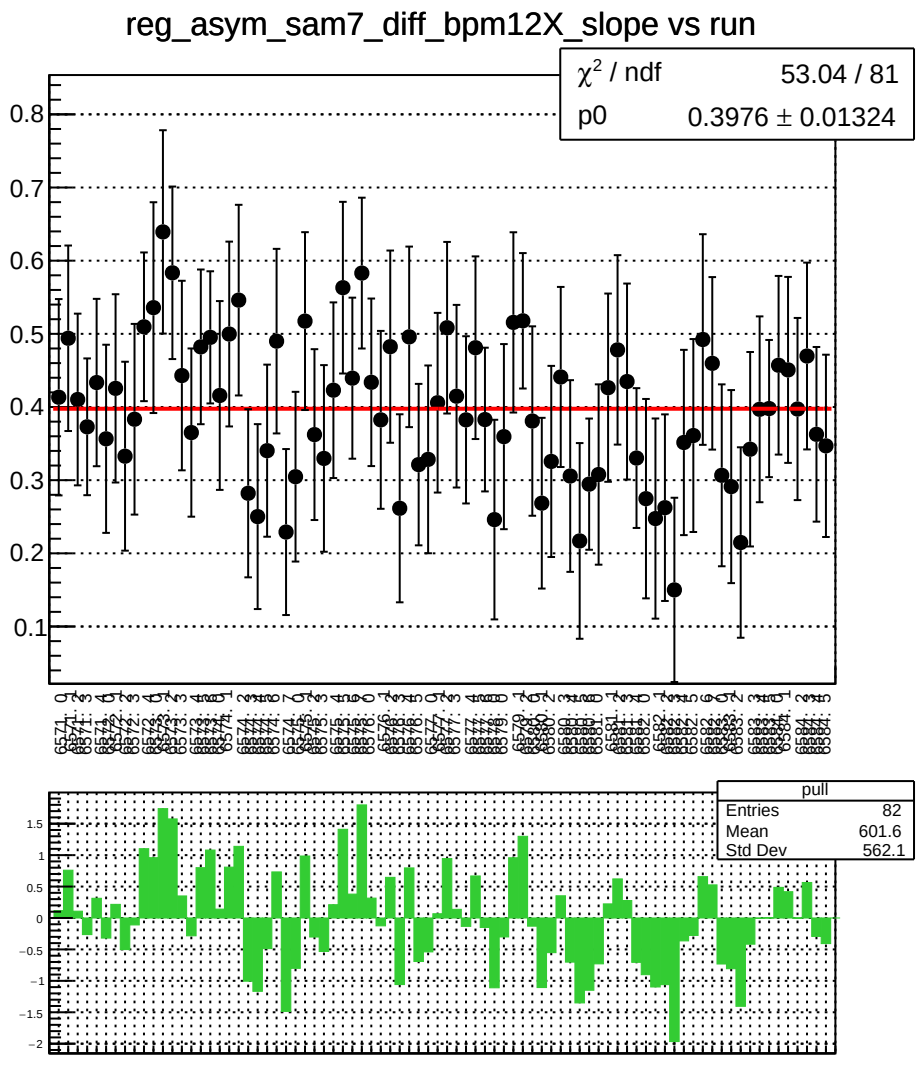

pull1D
Entries 82
Mean −0.009167
Std Dev 1.39

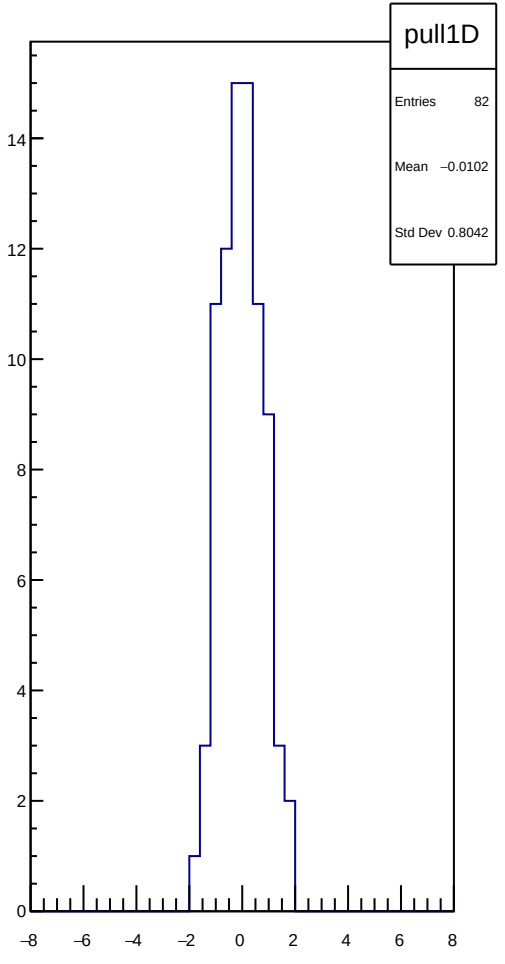

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 501.3 / 81
p0 −48.42 ± 0.3037
pull
Entries 82
Mean −13.45
Std Dev 50.53

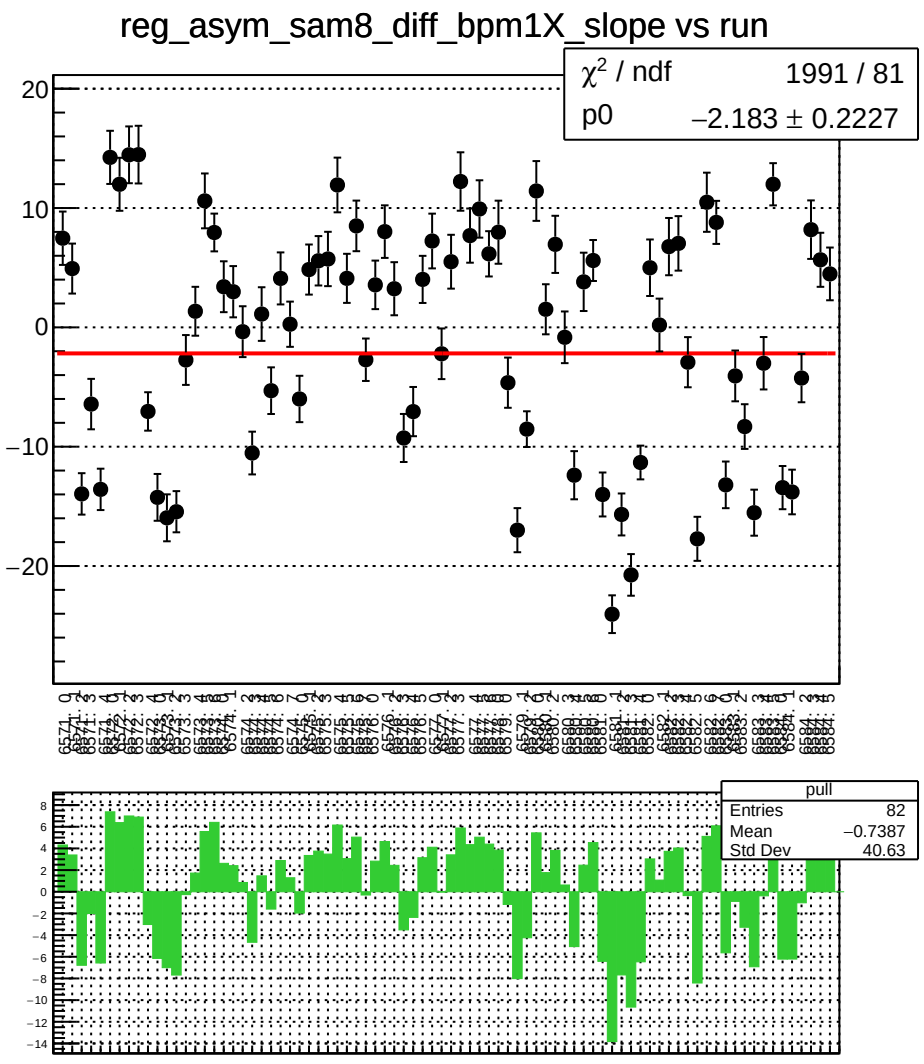

pull1D
Entries 82
Mean −0.2312
Std Dev 2.462

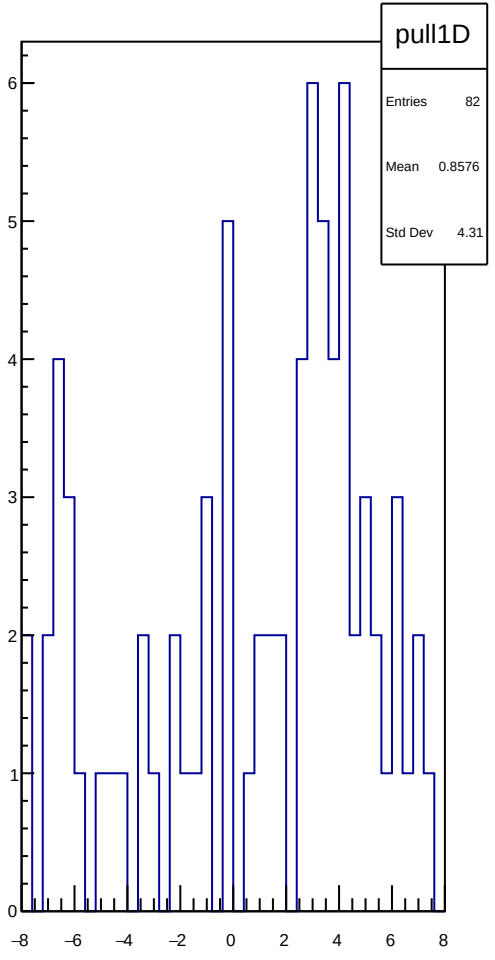

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 172.1 / 81
p0 −24.19 ± 0.2801
pull
Entries 82
Mean 23.37
Std Dev 65.1

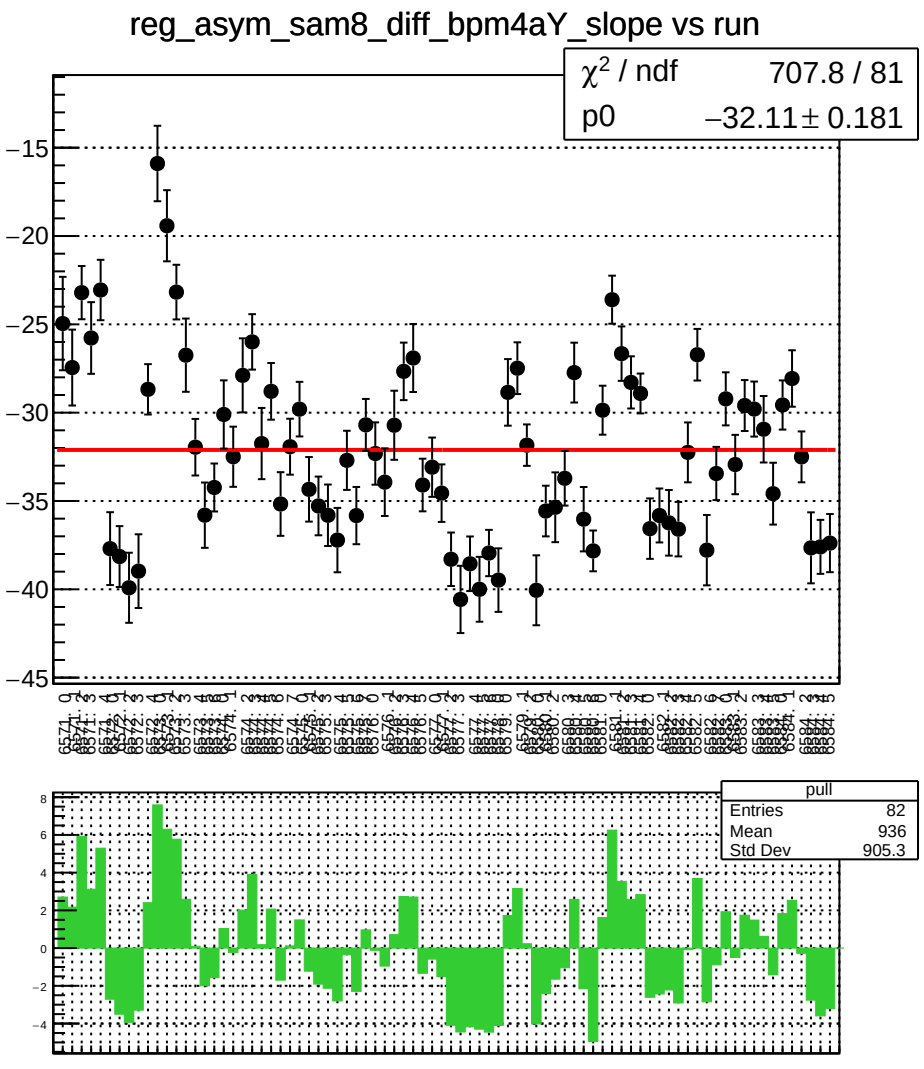

pull1D
Entries 82
Mean 0.03044
Std Dev 1.448

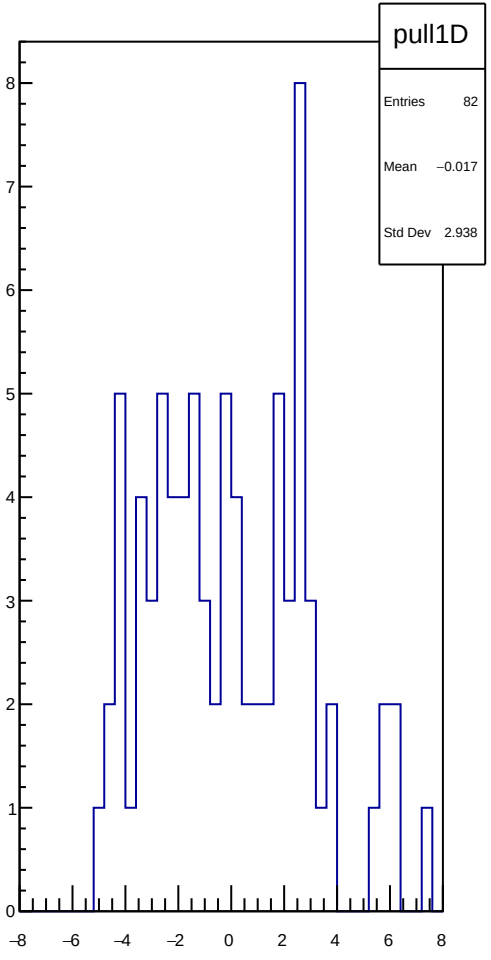

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 53.04 / 81
p0 0.3976 ± 0.01324
pull
Entries 82
Mean 601.6
Std Dev 562.1

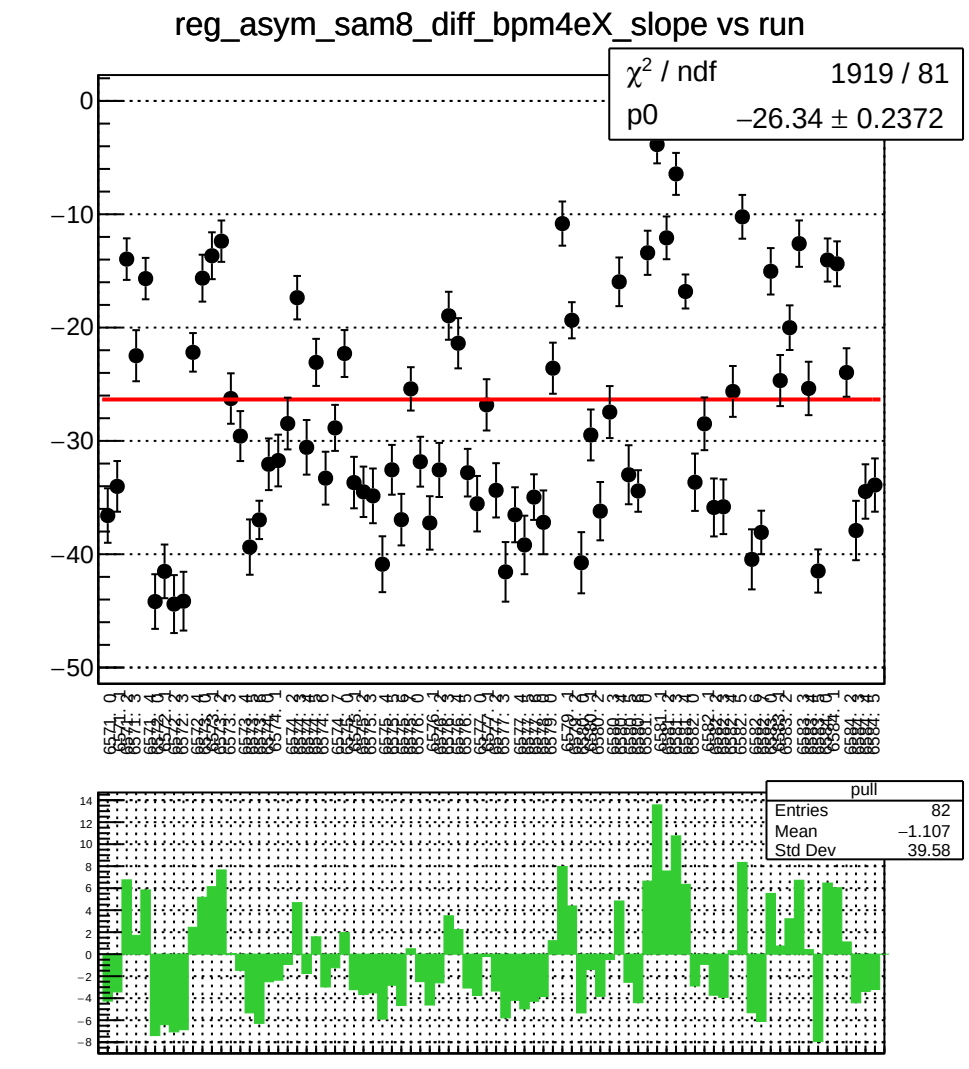

pull1D
Entries 82
Mean −0.0102
Std Dev 0.8042

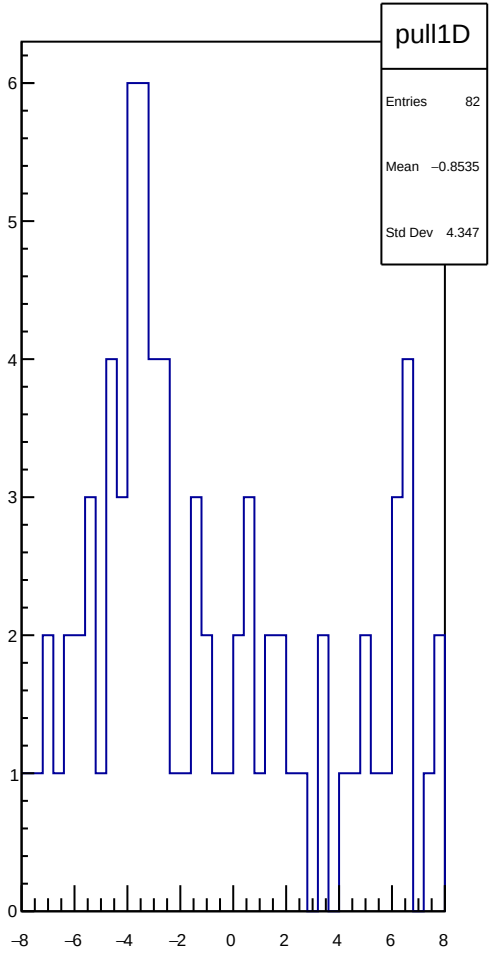

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 1991 / 81
p0 −2.183 ± 0.2227
pull
Entries 82
Mean −0.7387
Std Dev 40.63

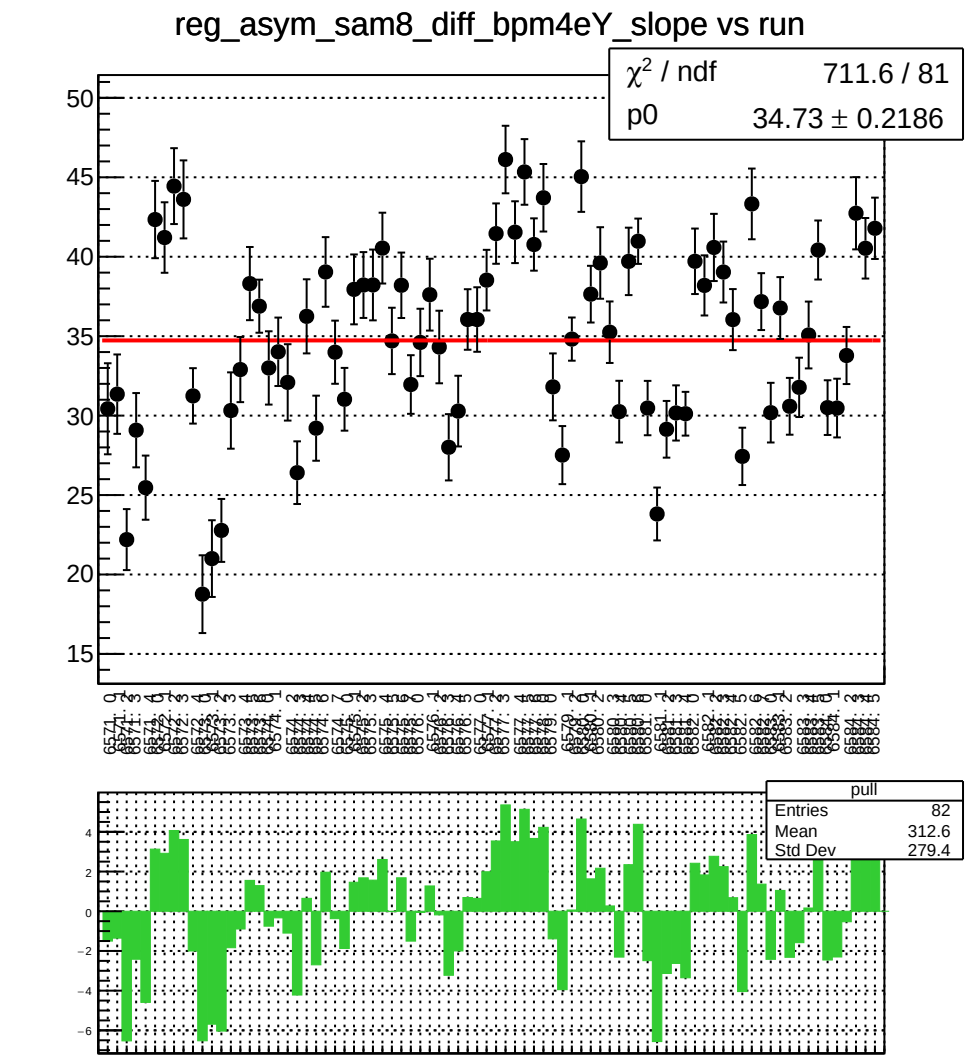

pull1D
Entries 82
Mean 0.8576
Std Dev 4.31

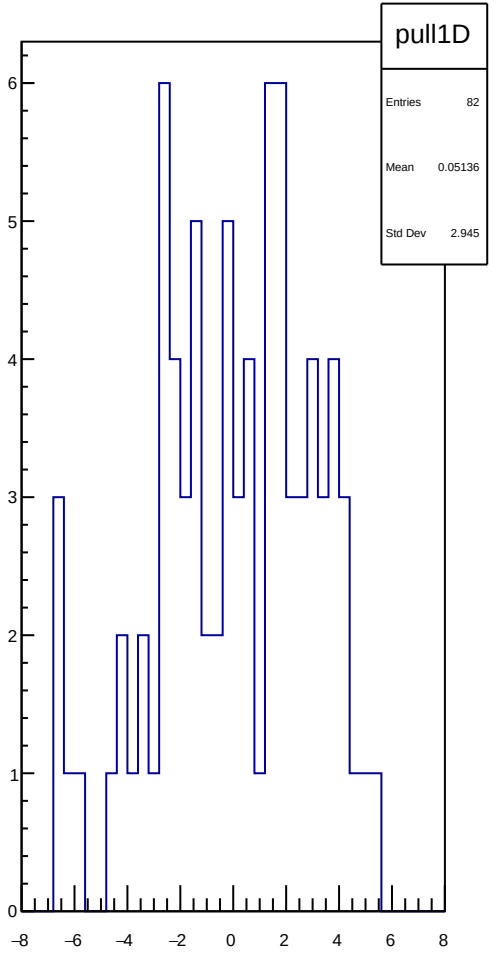

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 707.8 / 81
p0 −32.11 ± 0.181
pull
Entries 82
Mean 936
Std Dev 905.3

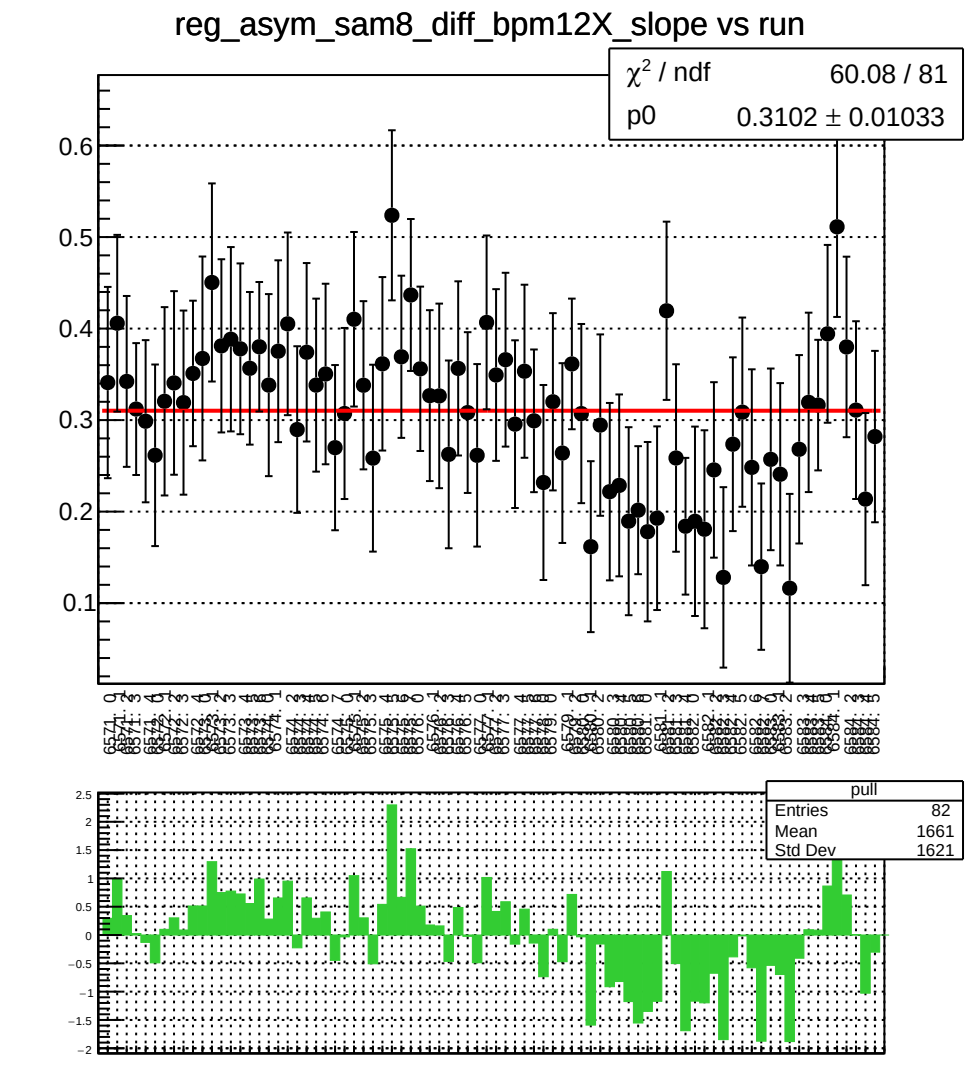

pull1D
Entries 82
Mean −0.017
Std Dev 2.938

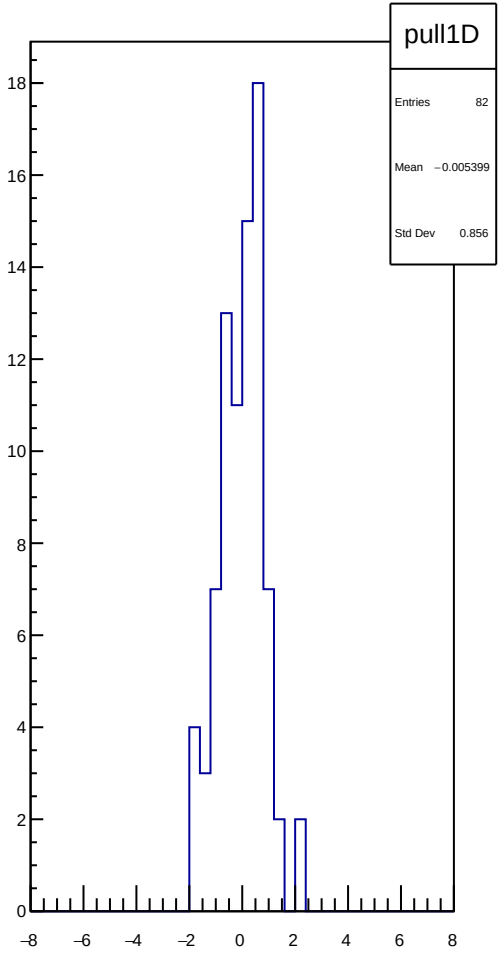

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 1919 / 81
p0 −26.34 ± 0.2372
pull
Entries 82
Mean −1.107
Std Dev 39.58

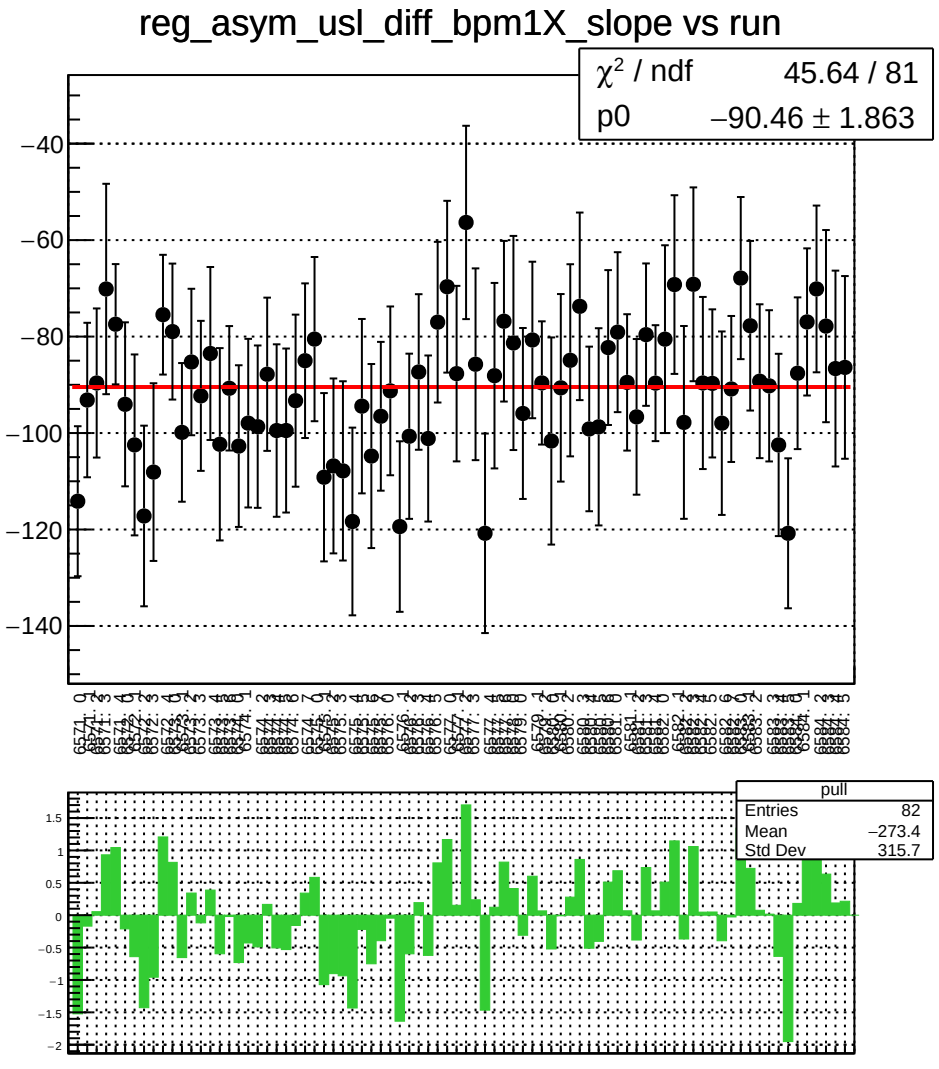

pull1D
Entries 82
Mean −0.8535
Std Dev 4.347

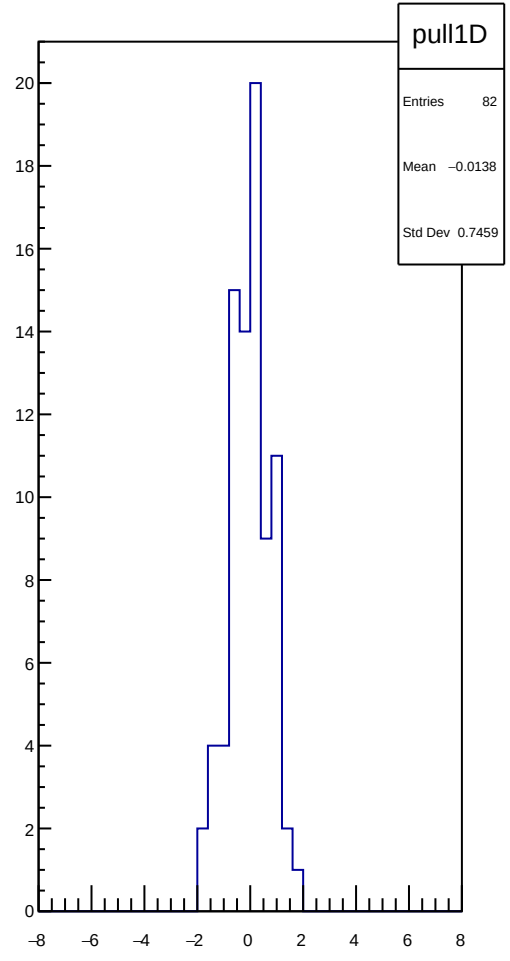

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 711.6 / 81
p0 34.73 ± 0.2186
pull
Entries 82
Mean 312.6
Std Dev 279.4

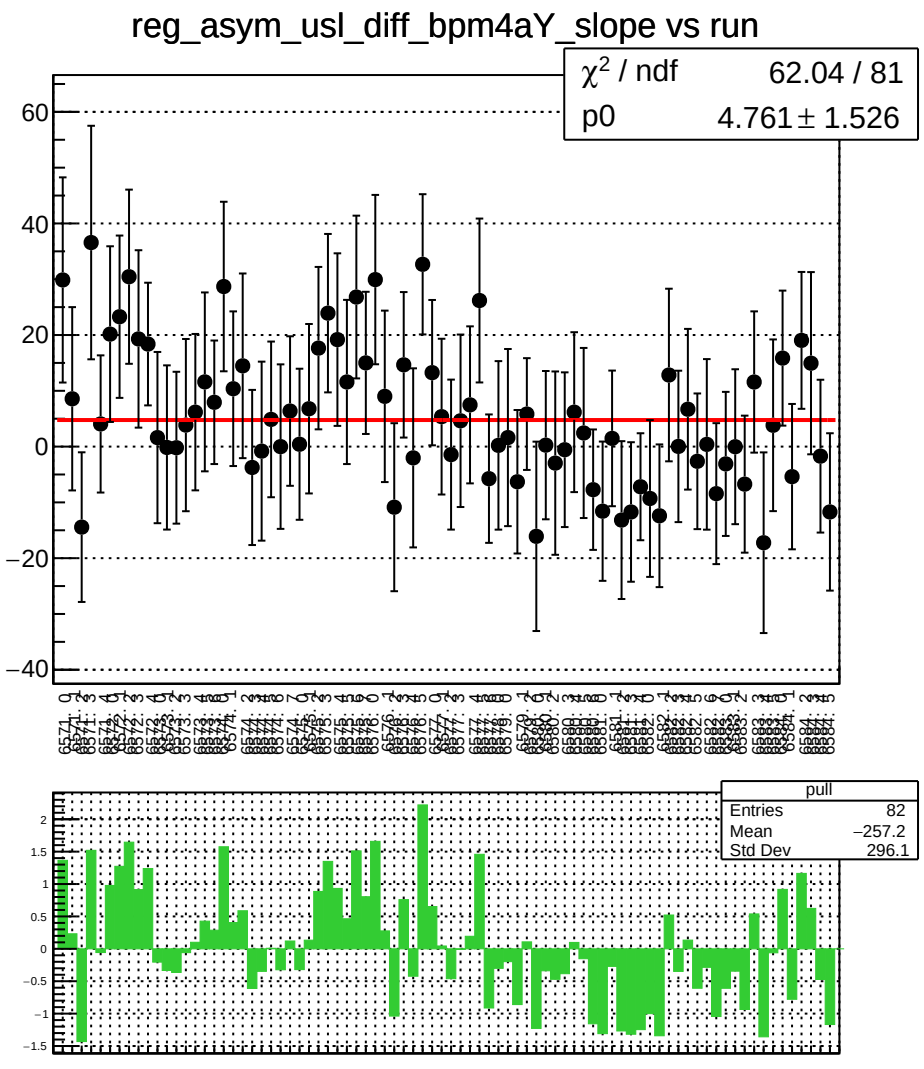

pull1D
Entries 82
Mean 0.05136
Std Dev 2.945

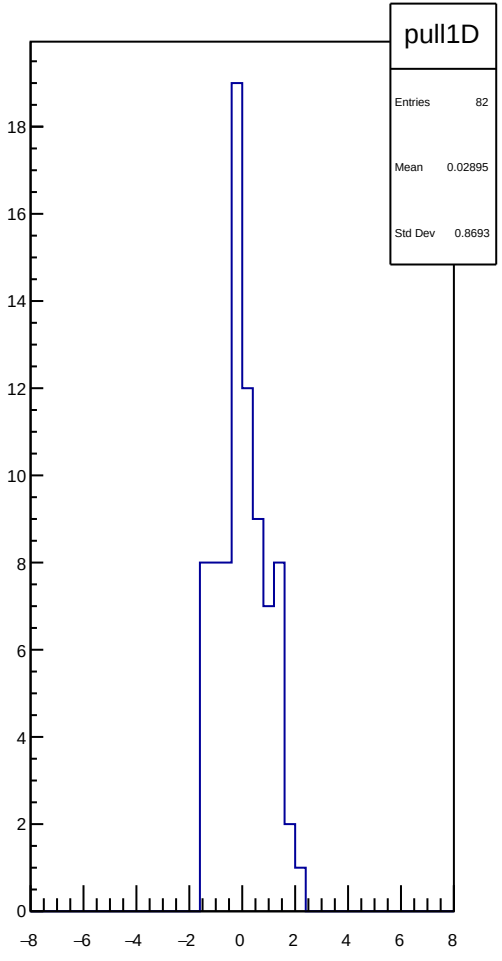

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 60.08 / 81
p0 0.3102 ± 0.01033
pull
Entries 82
Mean 1661
Std Dev 1621

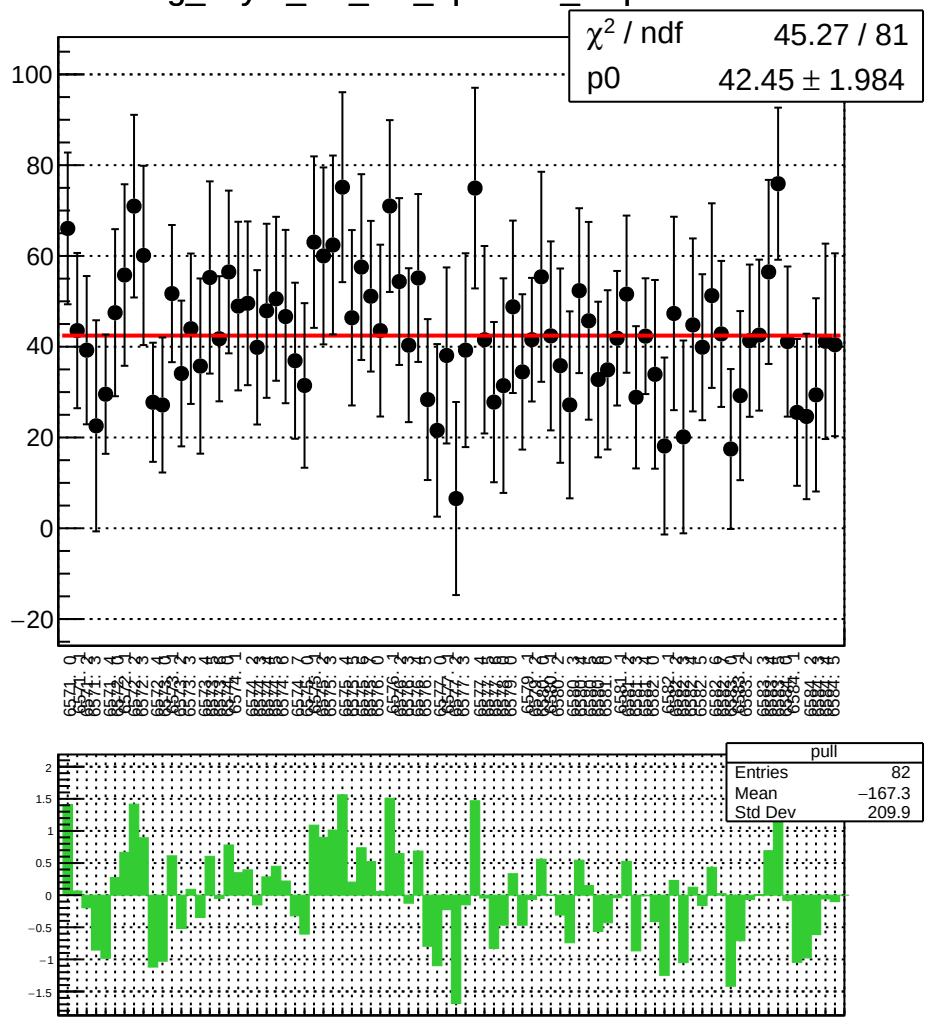

pull1D
Entries 82
Mean −0.005399
Std Dev 0.856

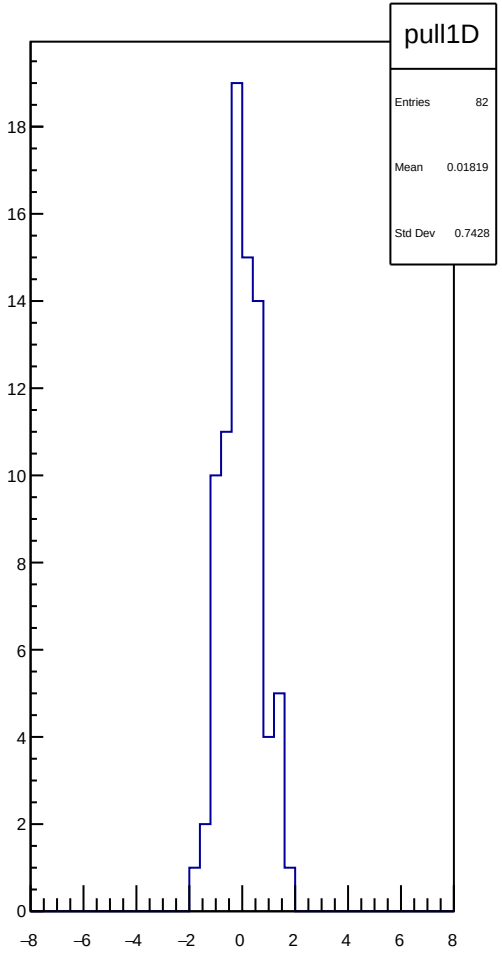

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 45.64 / 81
p0 −90.46 ± 1.863
pull
Entries 82
Mean −273.4
Std Dev 315.7

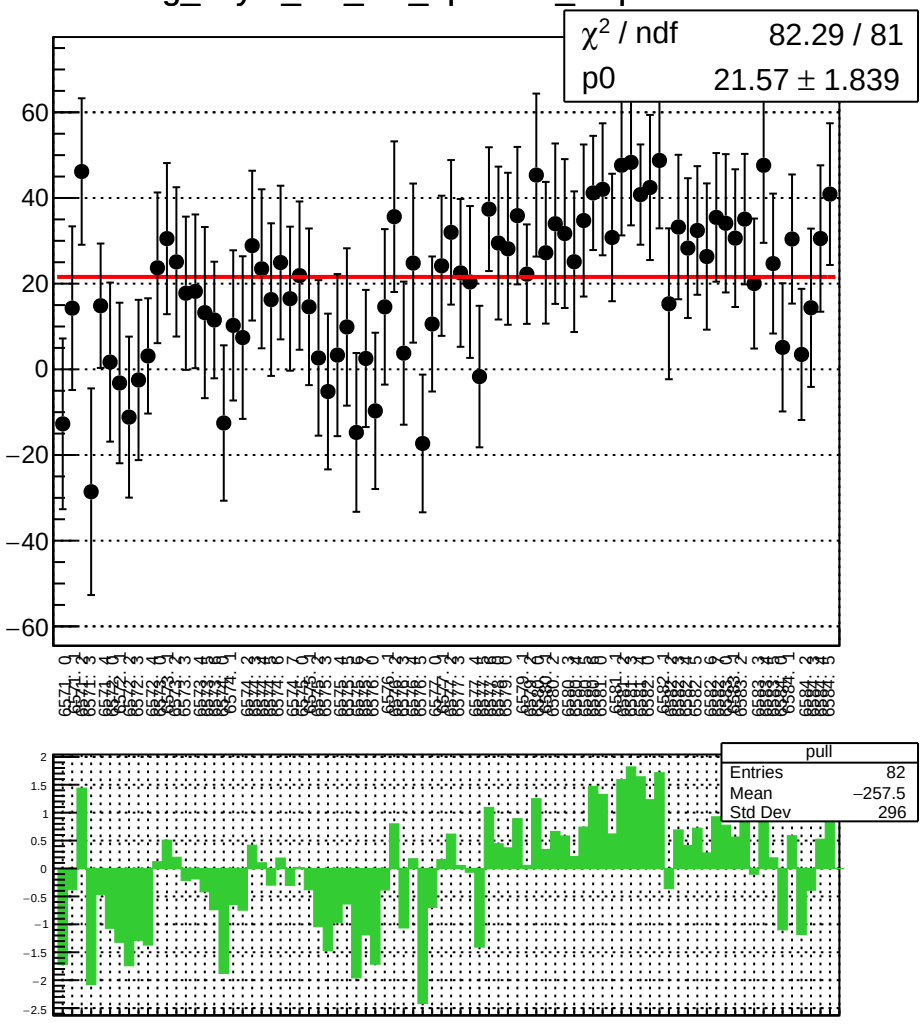

pull1D
Entries 82
Mean −0.0138
Std Dev 0.7459

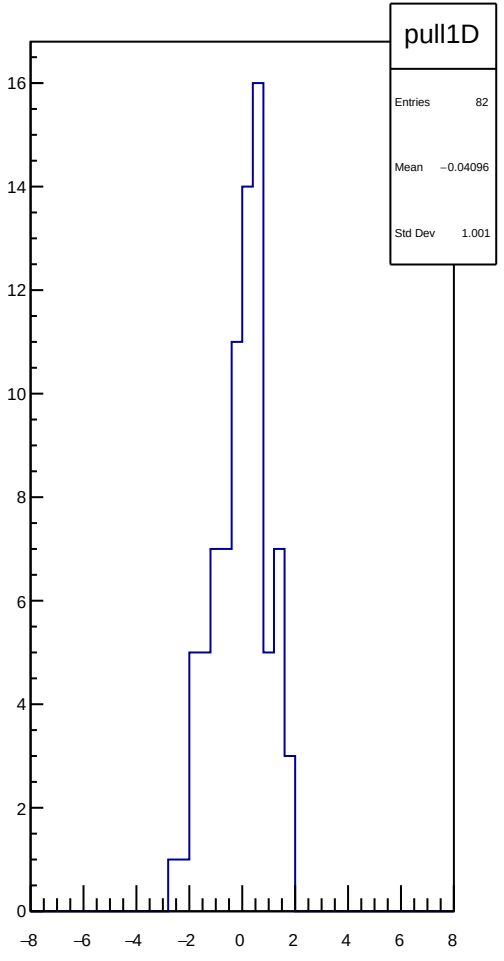

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 62.04 / 81
p0 4.761 ± 1.526
pull
Entries 82
Mean −257.2
Std Dev 296.1

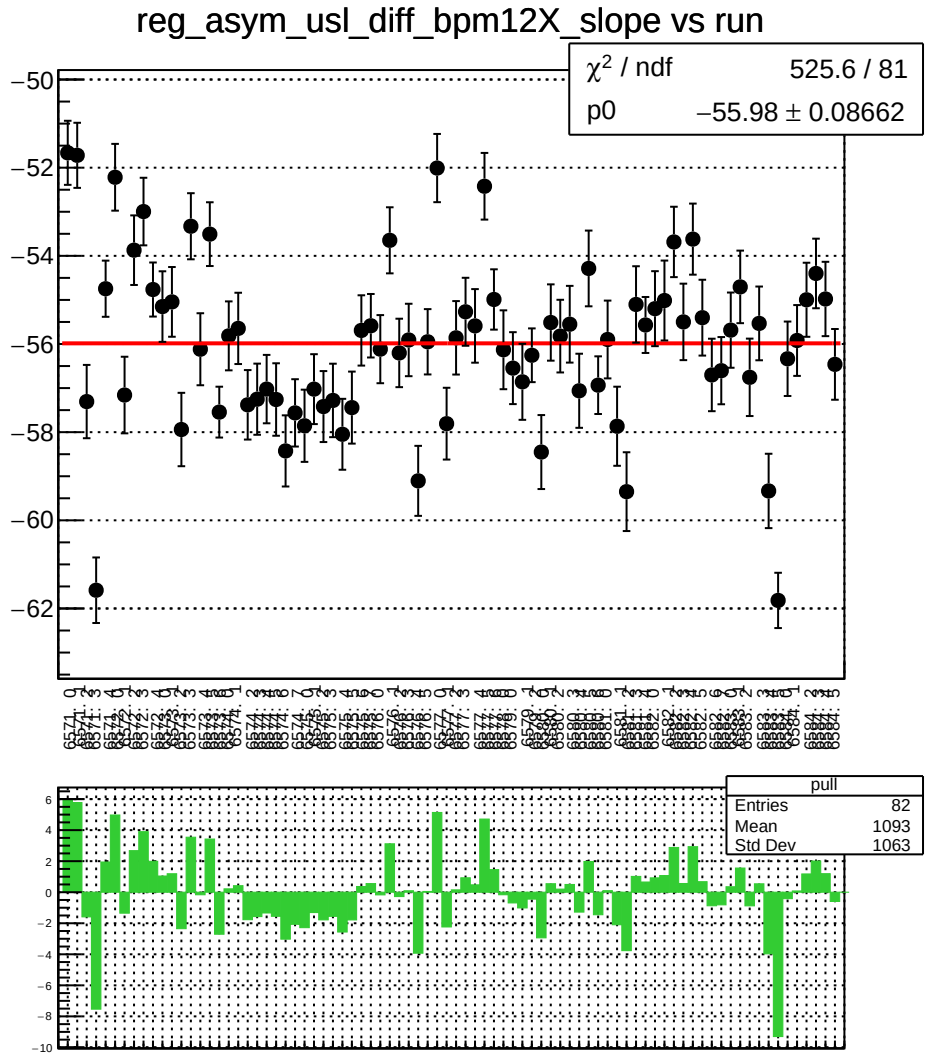

pull1D
Entries 82
Mean 0.02895
Std Dev 0.8693

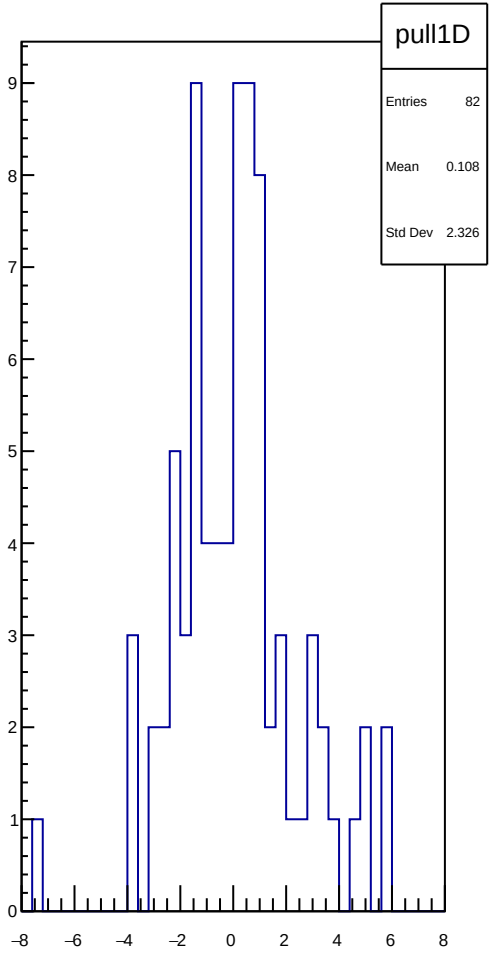

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 45.27 / 81
p0 42.45 ± 1.984
pull
Entries 82
Mean −167.3
Std Dev 209.9

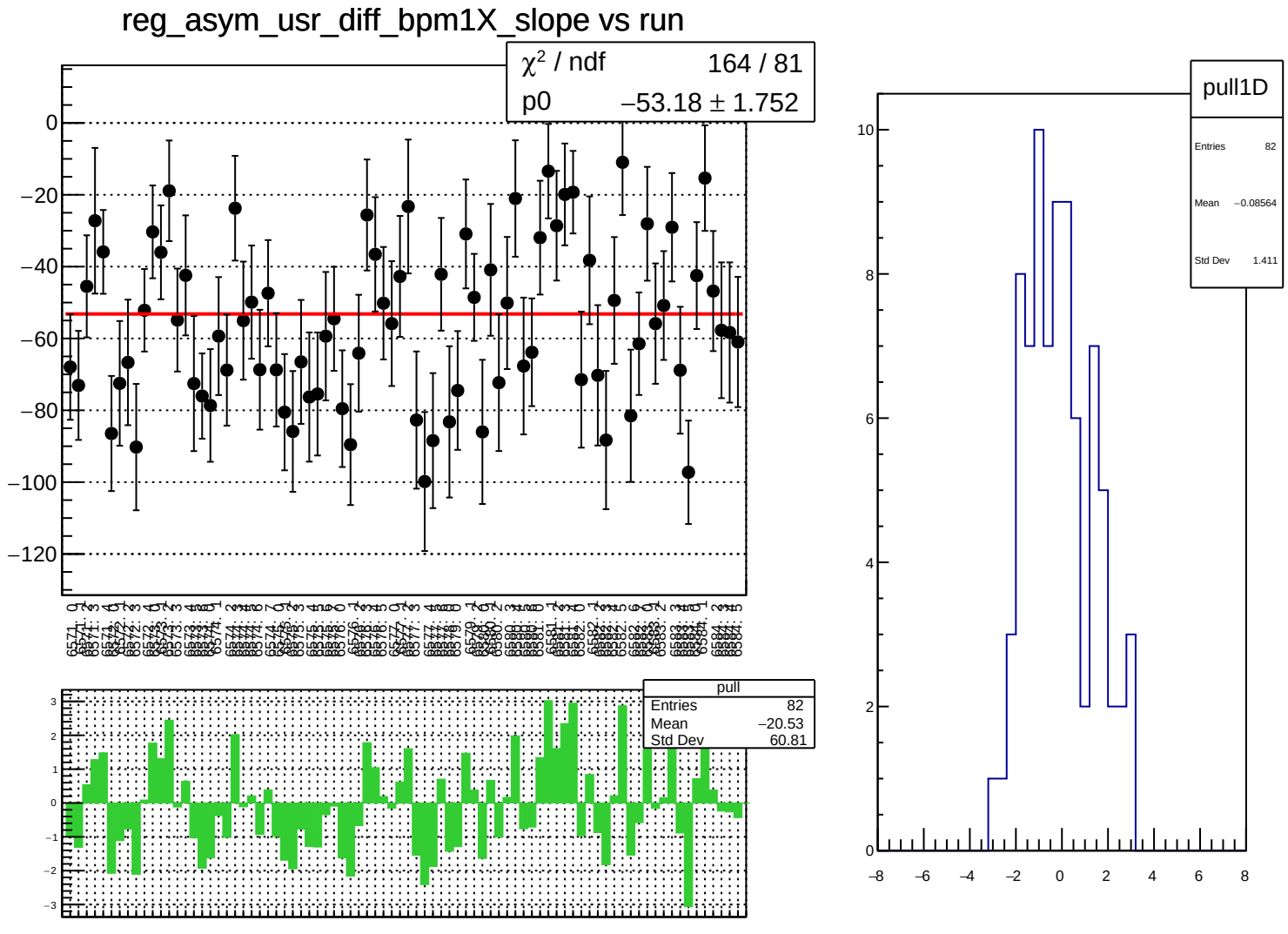

pull1D
Entries 82
Mean 0.01819
Std Dev 0.7428

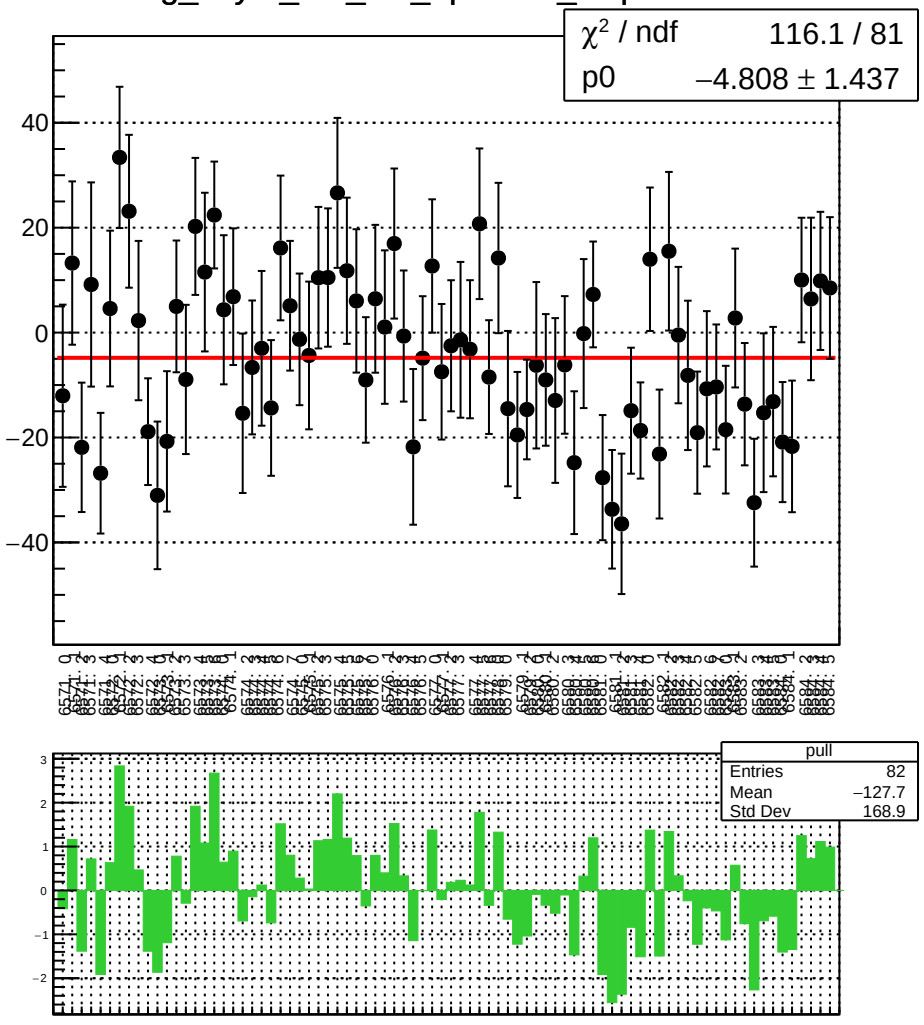

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 82.29 / 81
p0 21.57 ± 1.839
pull
Entries 82
Mean −257.5
Std Dev 296

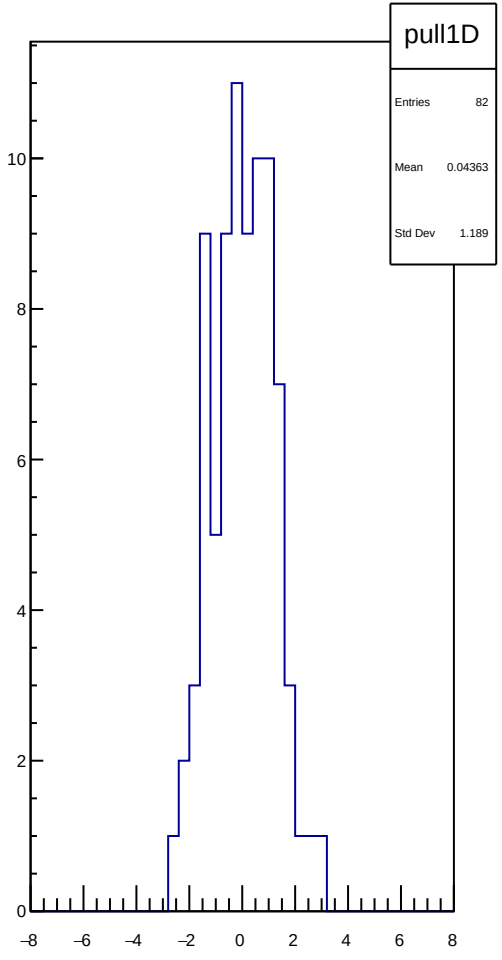

pull1D
Entries 82
Mean −0.04096
Std Dev 1.001

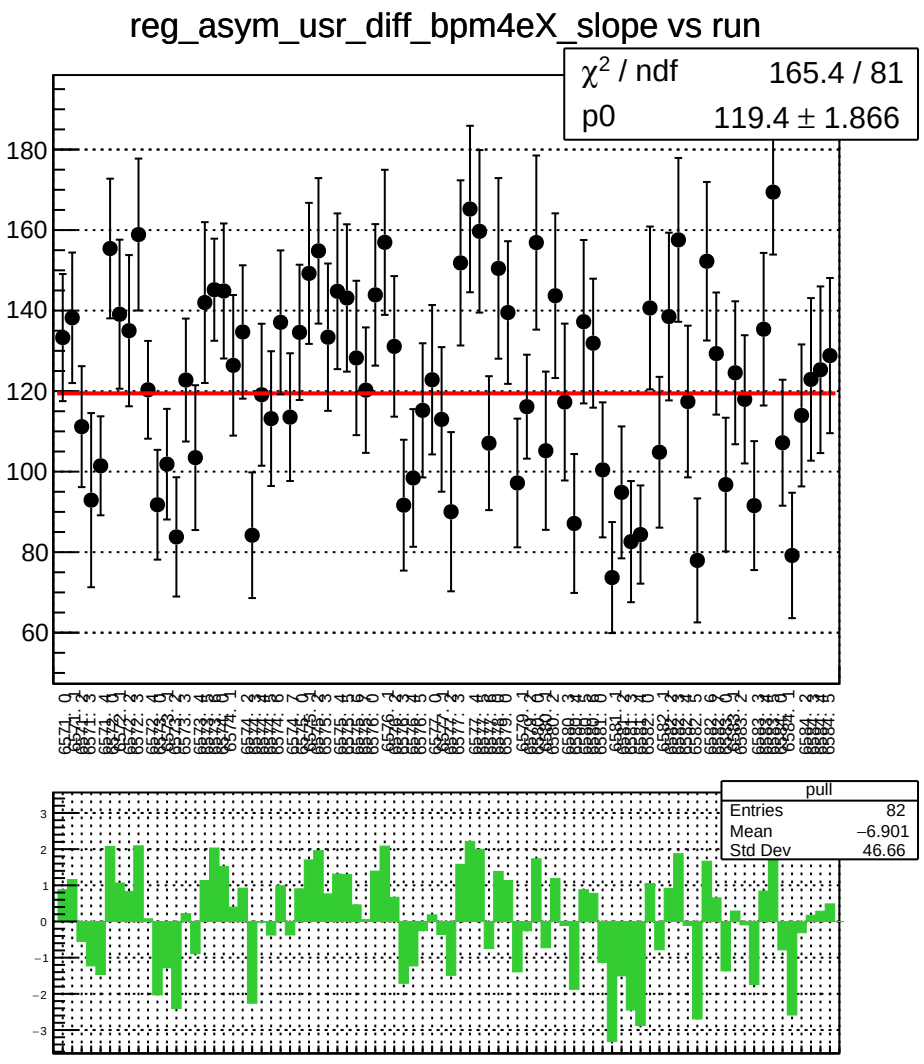

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 525.6 / 81
p0 −55.98 ± 0.08662
pull
Entries 82
Mean 1093
Std Dev 1063

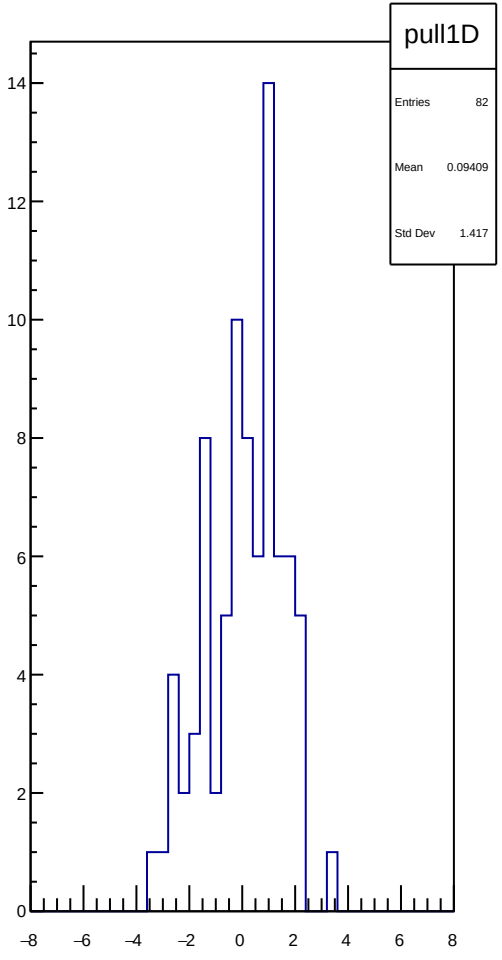

pull1D
Entries 82
Mean 0.108
Std Dev 2.326

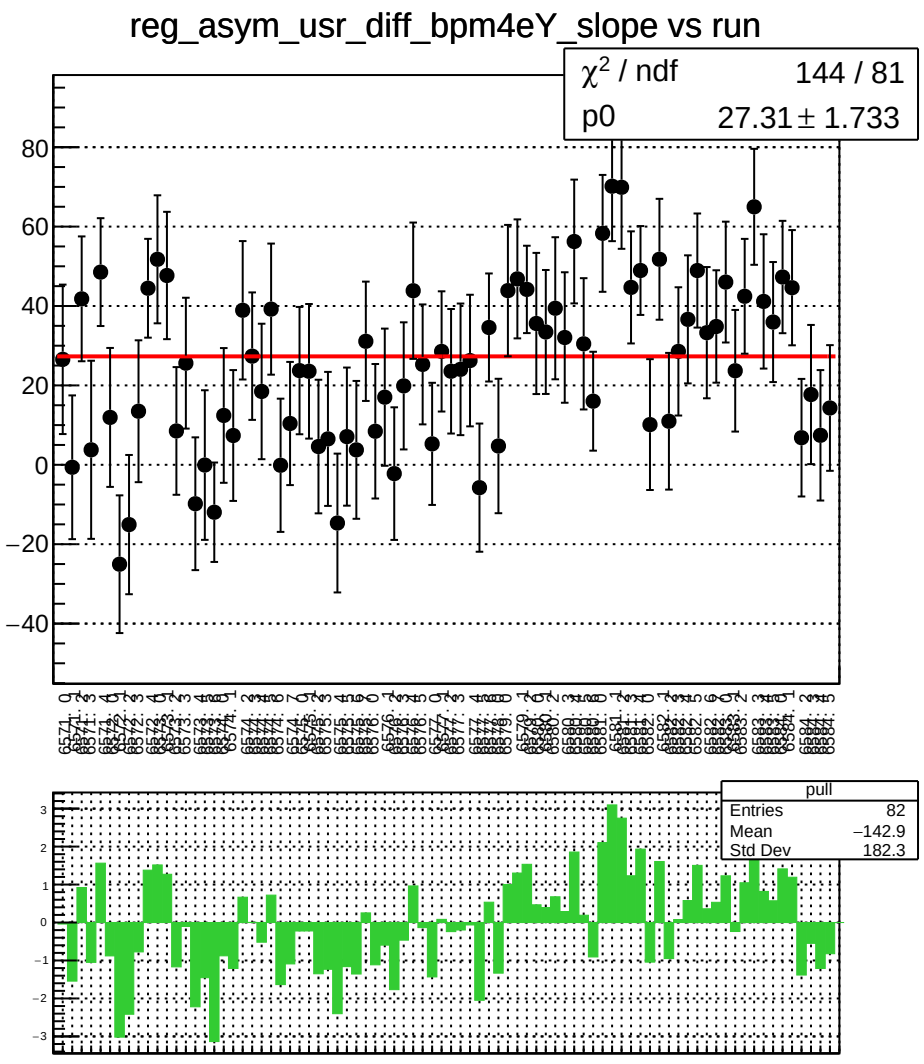

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 164 / 81
p0 −53.18 ± 1.752
pull
Entries 82
Mean −20.53
Std Dev 60.81
pull1D
Entries 82
Mean −0.08564
Std Dev 1.411

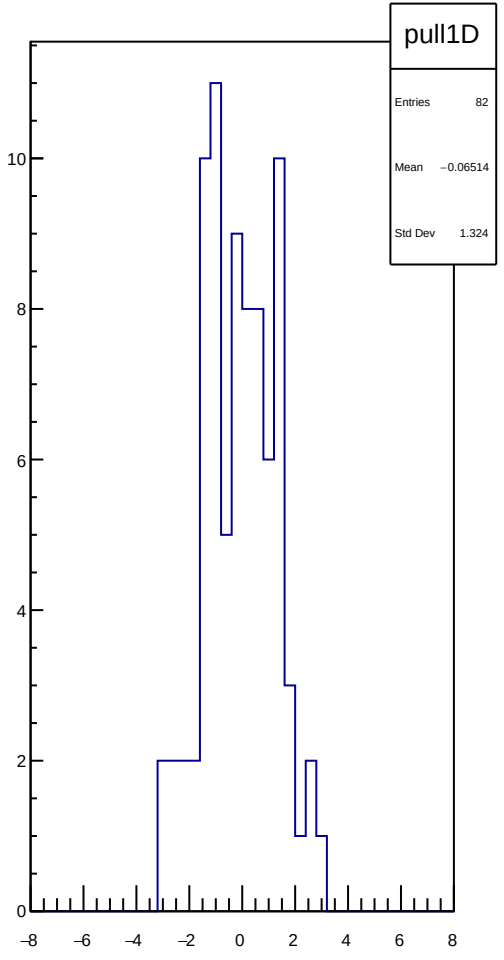

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 116.1 / 81
p0 −4.808 ± 1.437
pull
Entries 82
Mean −127.7
Std Dev 168.9

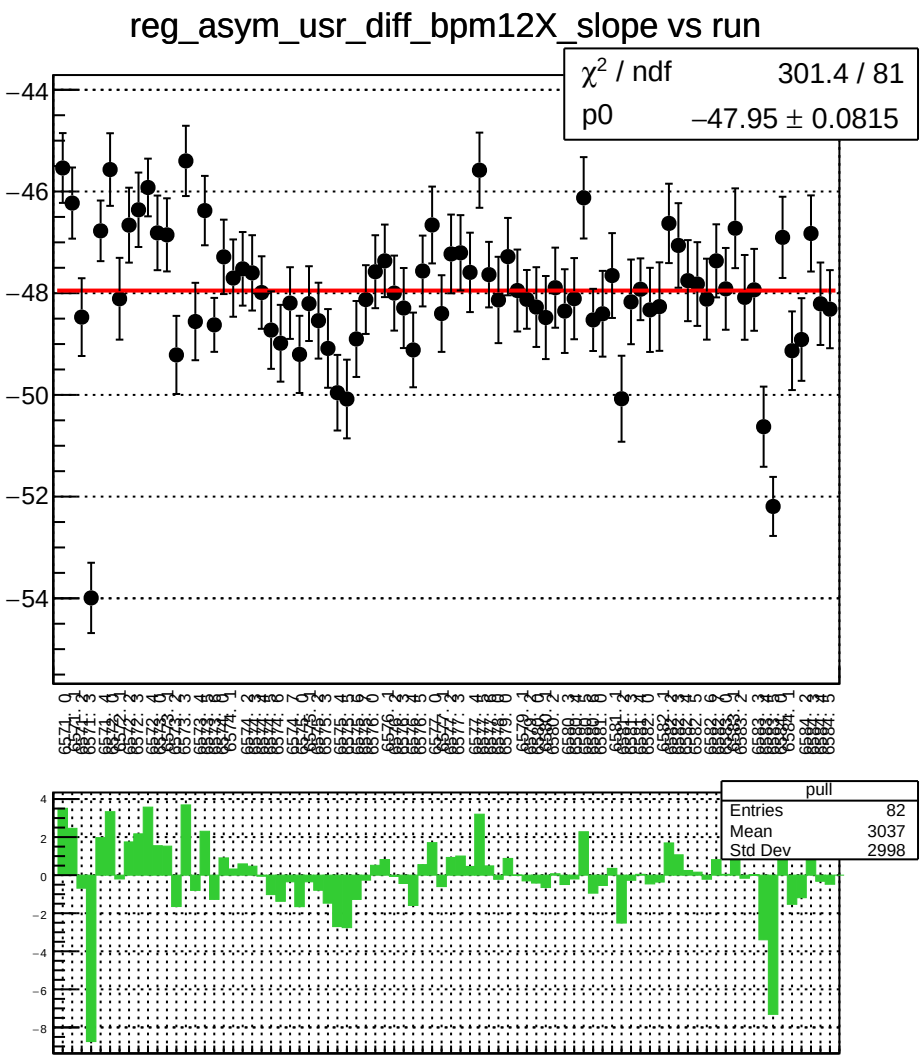

pull1D
Entries 82
Mean 0.04363
Std Dev 1.189

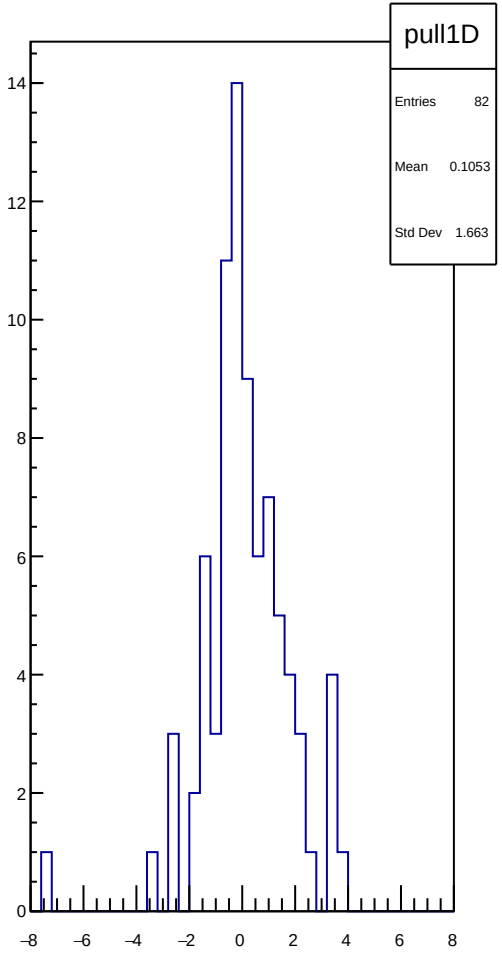

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 165.4 / 81
p0 119.4 ± 1.866
pull
Entries 82
Mean −6.901
Std Dev 46.66

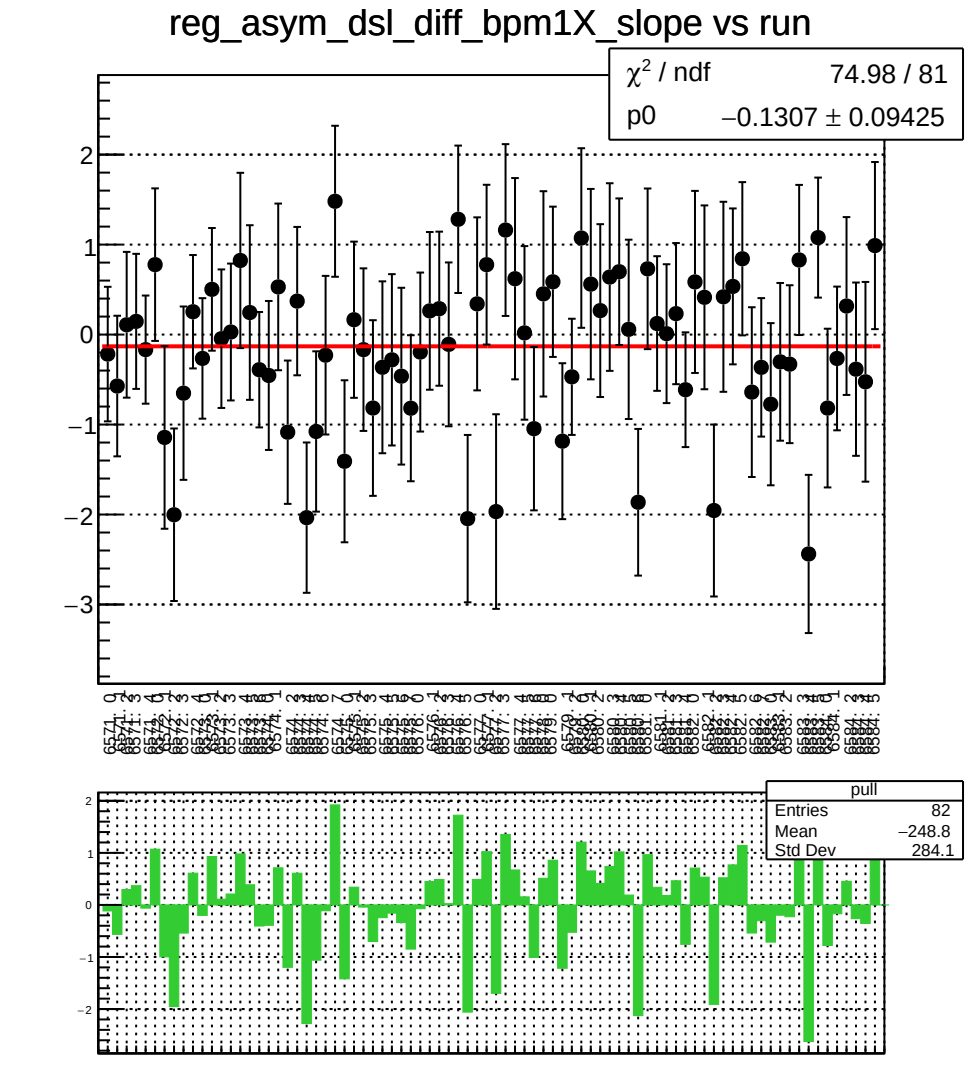

pull1D
Entries 82
Mean 0.09409
Std Dev 1.417

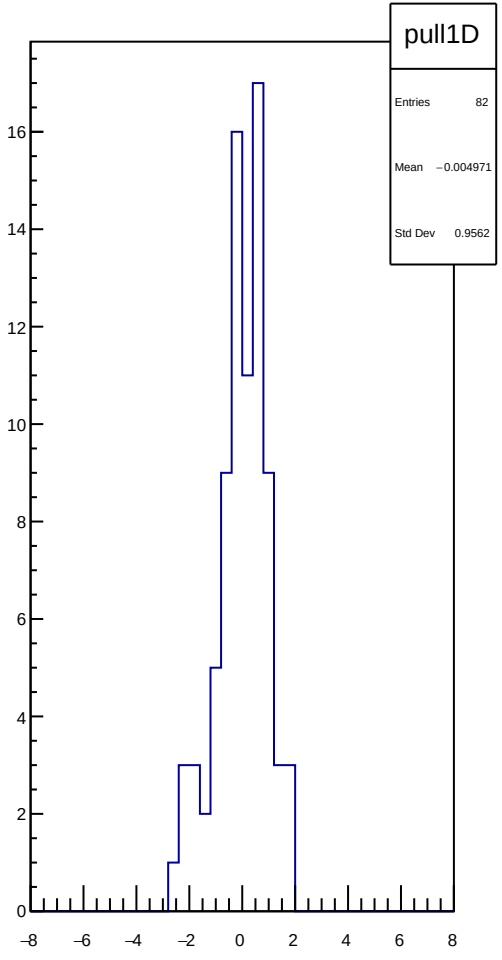

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 144 / 81
p0 27.31 ± 1.733
pull
Entries 82
Mean −142.9
Std Dev 182.3

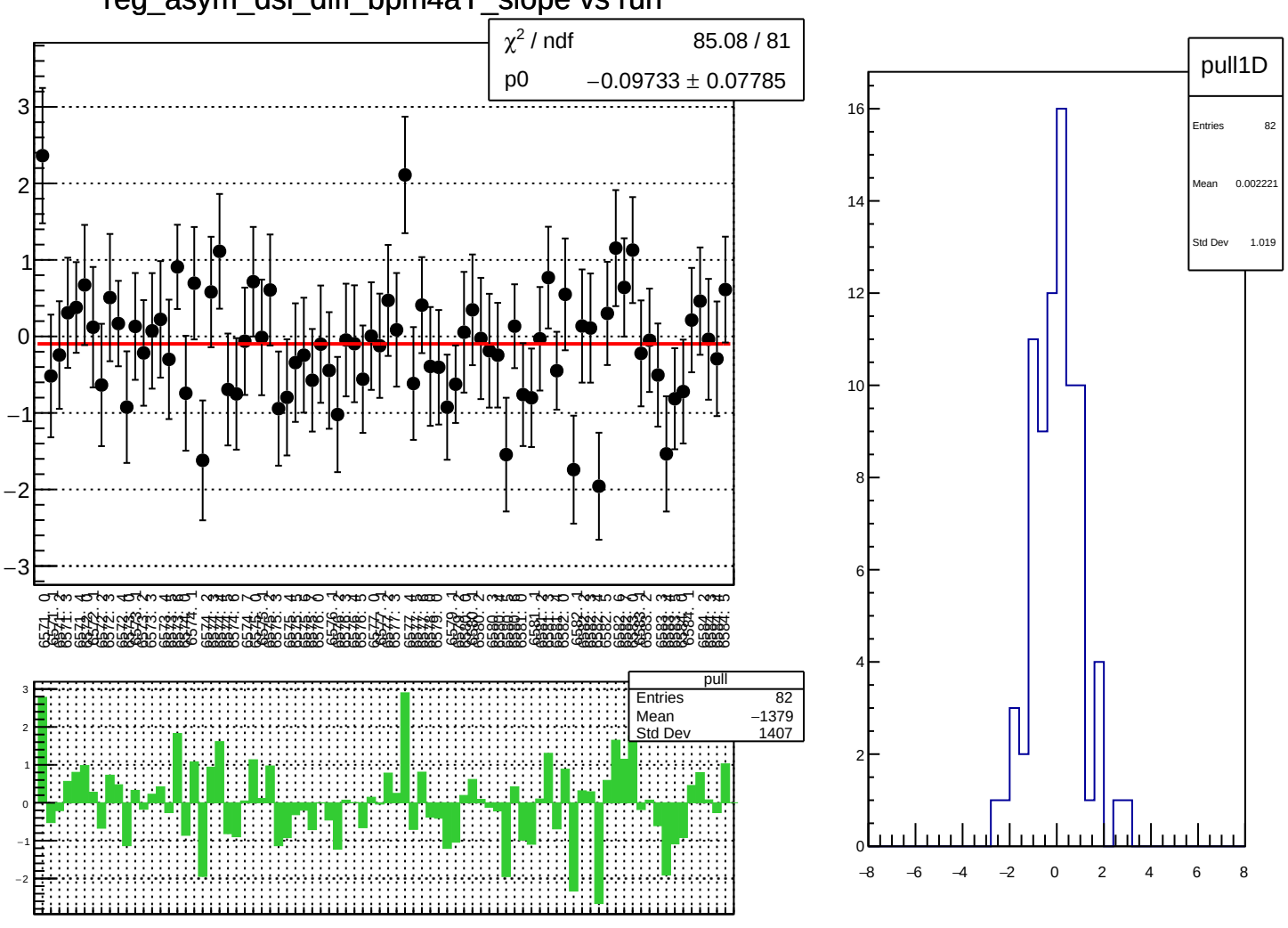

pull1D
Entries 82
Mean −0.06514
Std Dev 1.324

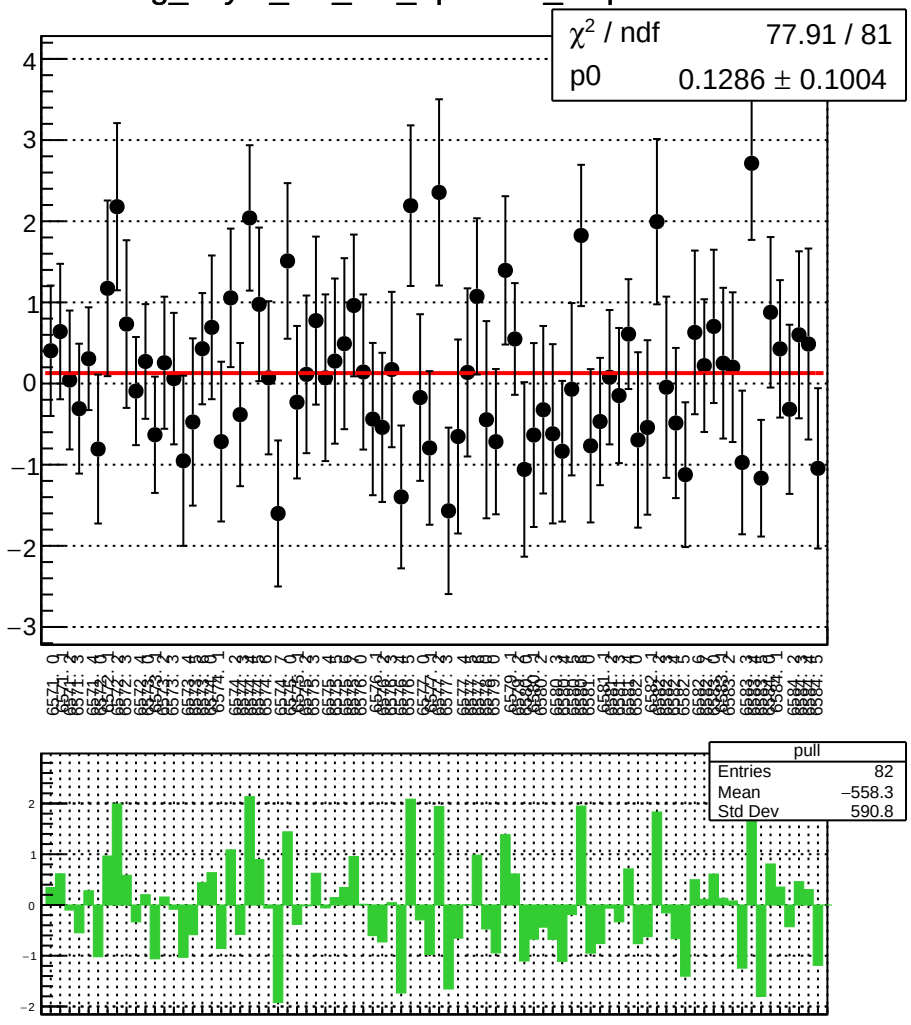

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 301.4 / 81
p0 −47.95 ± 0.0815
pull
Entries 82
Mean 3037
Std Dev 2998

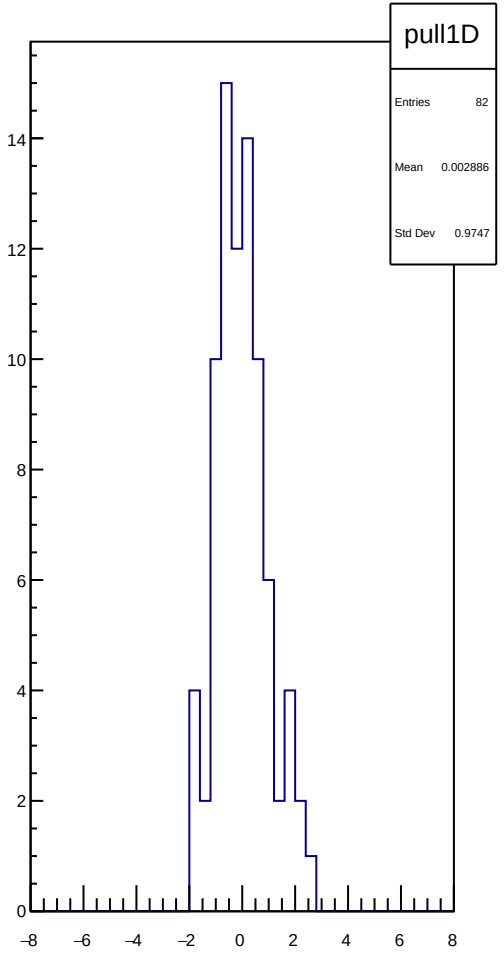

pull1D
Entries 82
Mean 0.1053
Std Dev 1.663

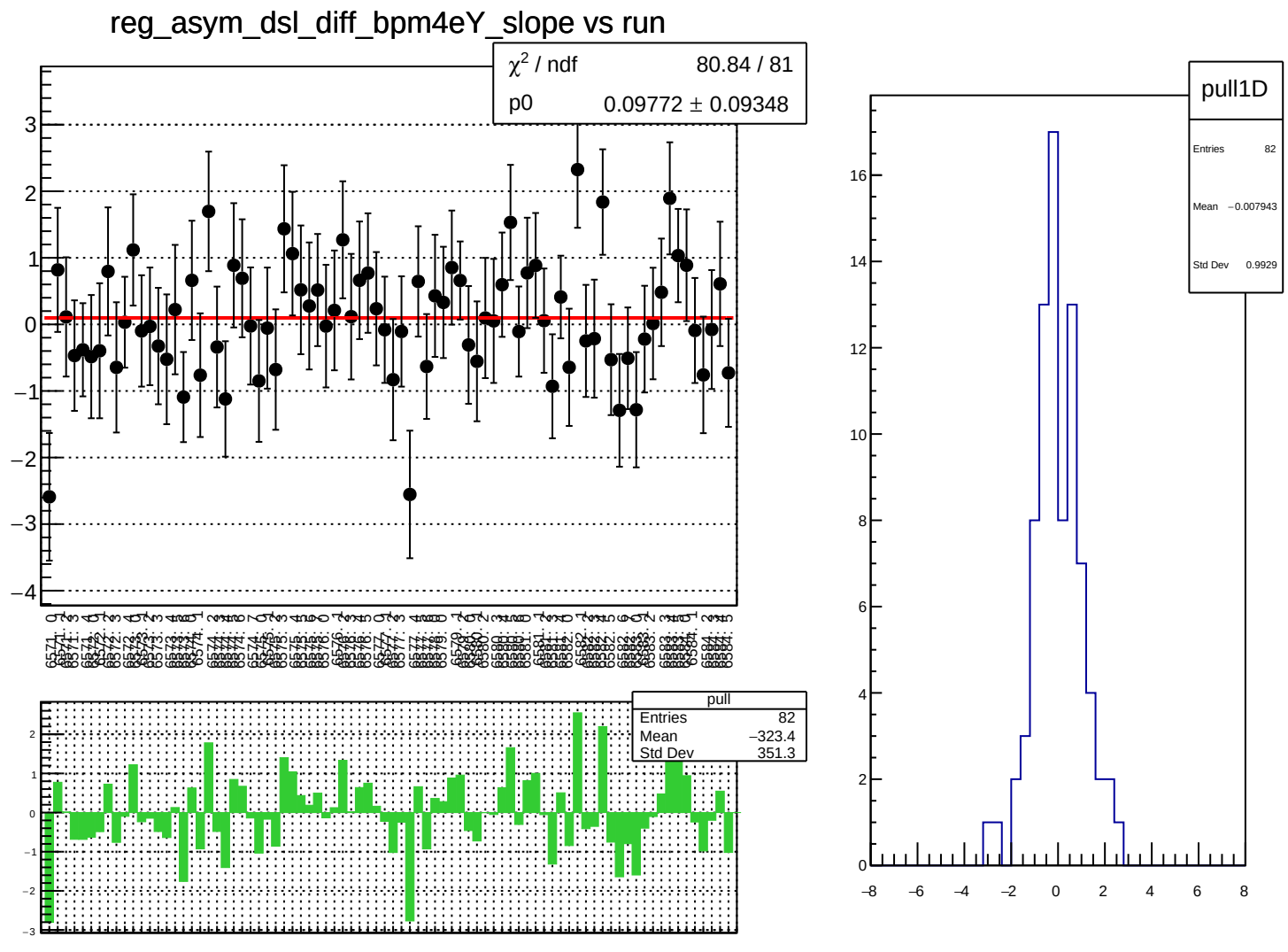

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 74.98 / 81
p0 −0.1307 ± 0.09425
pull
Entries 82
Mean −248.8
Std Dev 284.1

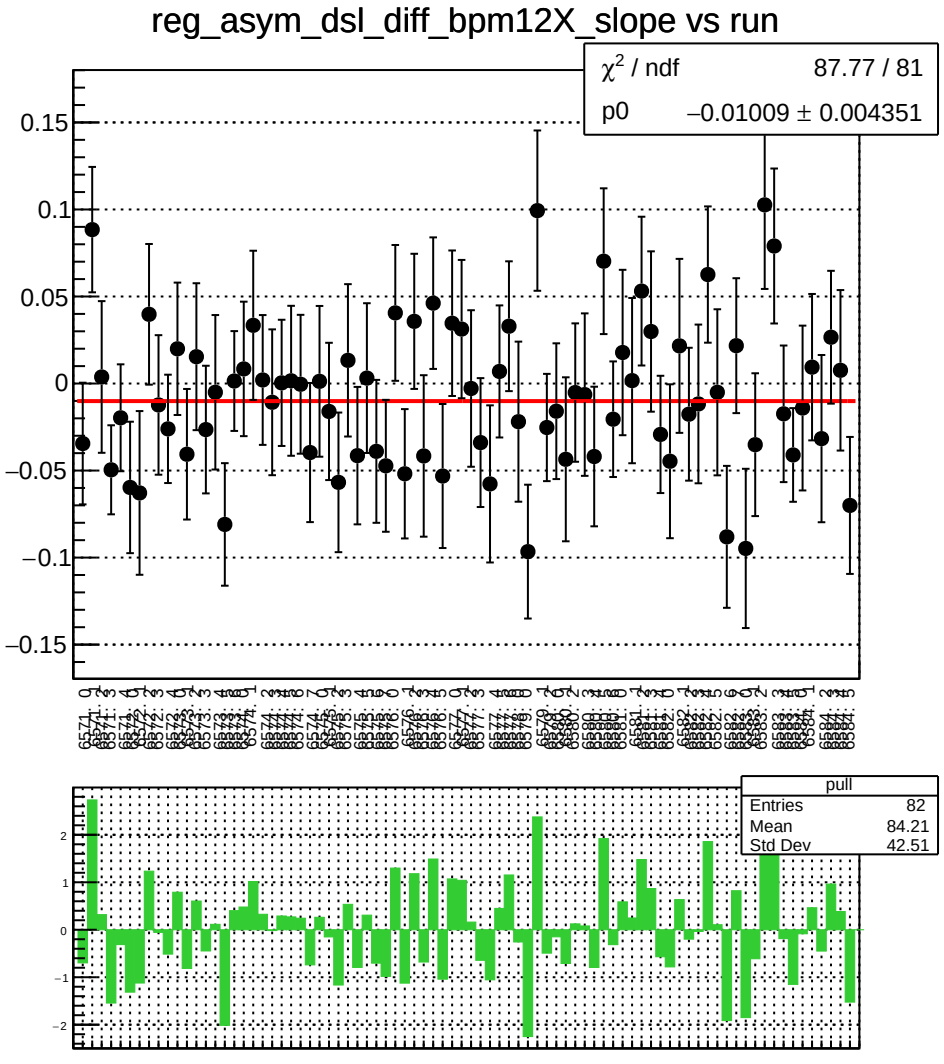

pull1D
Entries 82
Mean −0.004971
Std Dev 0.9562

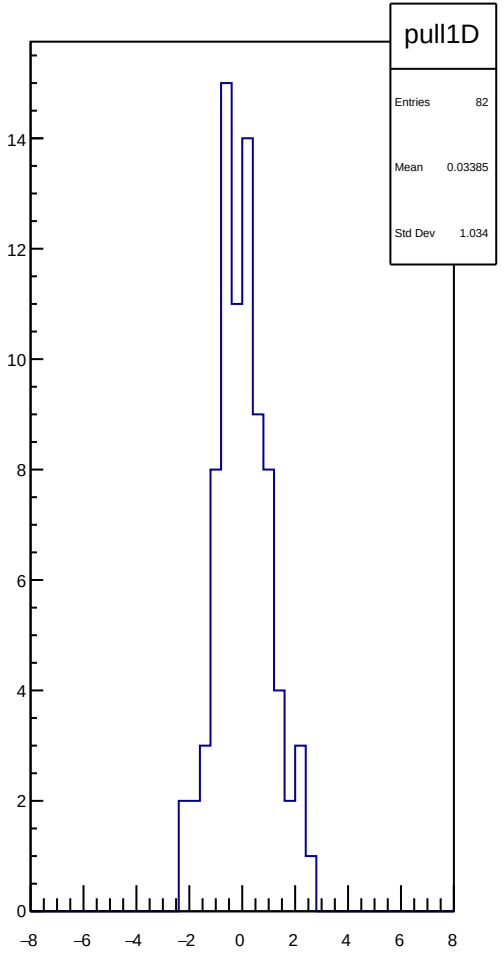

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 85.08 / 81
p0 −0.09733 ± 0.07785
pull
Entries 82
Mean −1379
Std Dev 1407
pull1D
Entries 82
Mean 0.002221
Std Dev 1.019

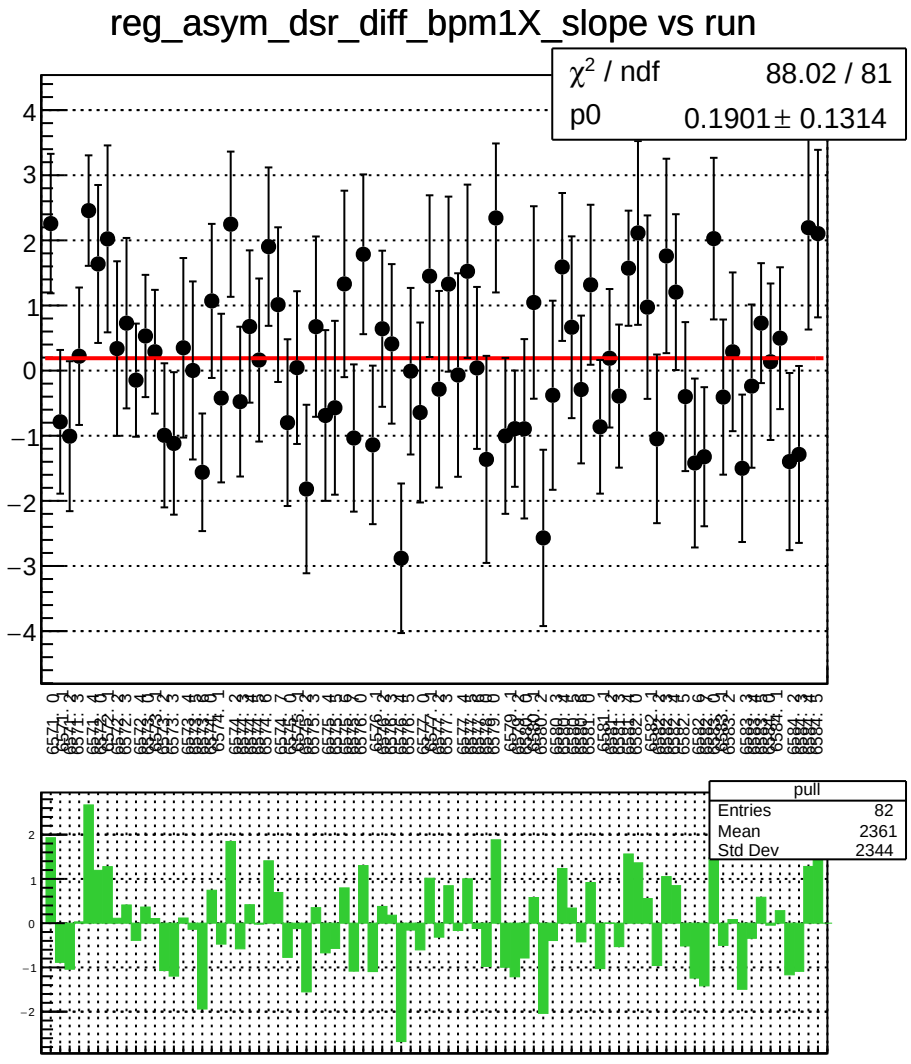

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 77.91 / 81
p0 0.1286 ± 0.1004
pull
Entries 82
Mean −558.3
Std Dev 590.8

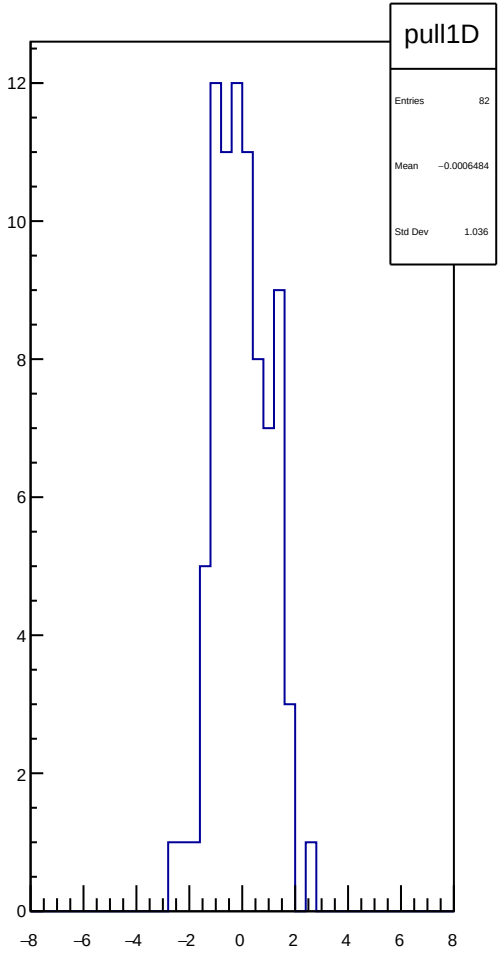

pull1D
Entries 82
Mean 0.002886
Std Dev 0.9747

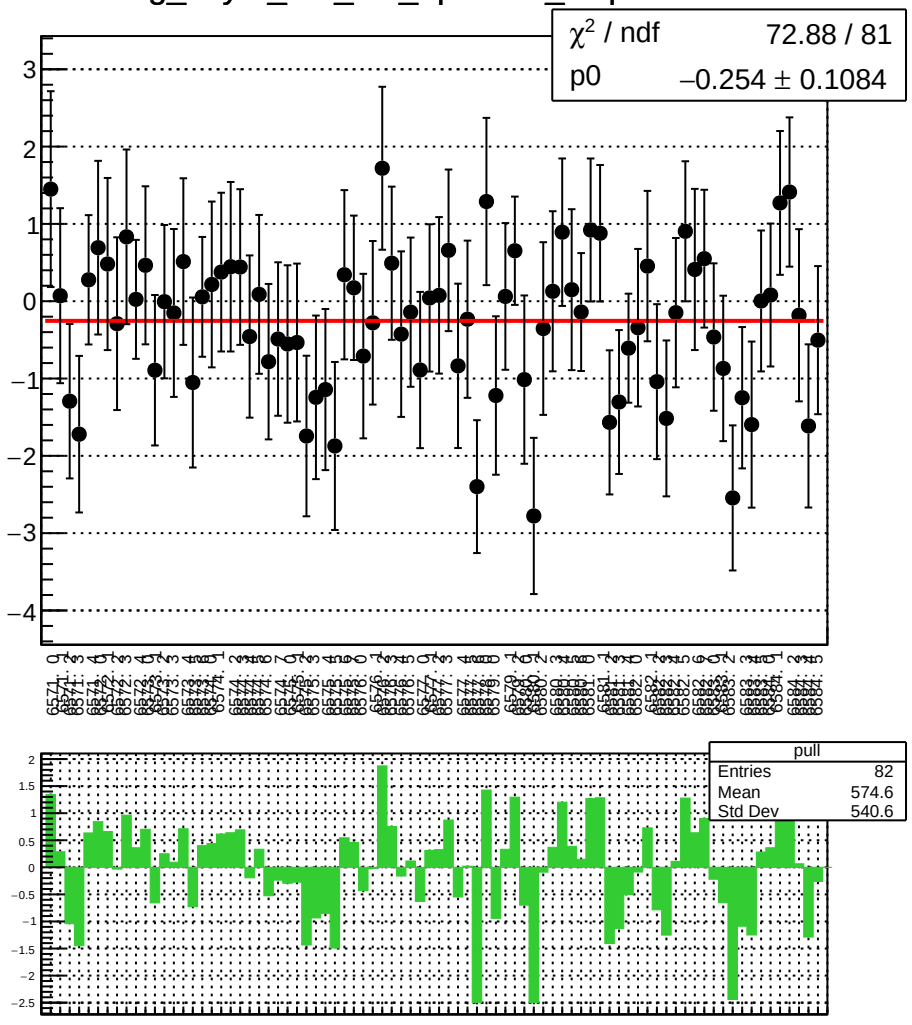

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 80.84 / 81
p0 0.09772 ± 0.09348
pull
Entries 82
Mean −323.4
Std Dev 351.3
pull1D
Entries 82
Mean −0.007943
Std Dev 0.9929

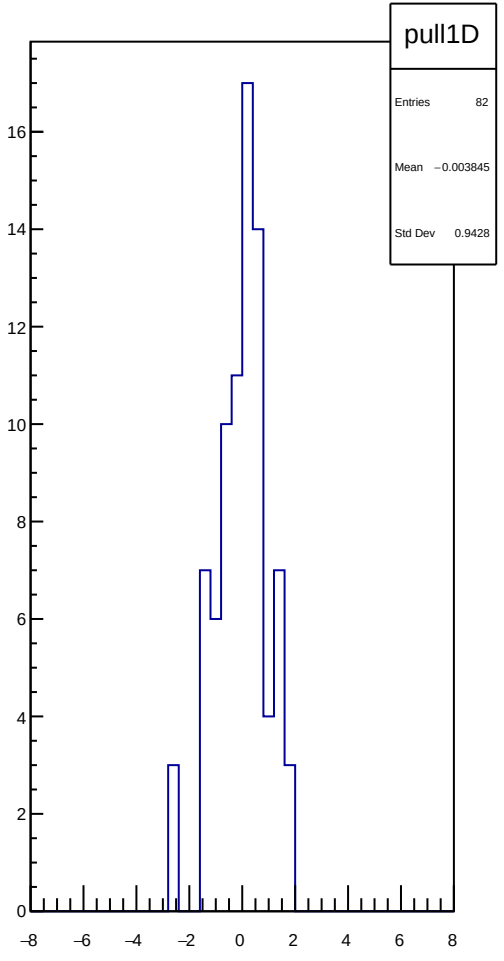

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 87.77 / 81
p0 −0.01009 ± 0.004351
pull
Entries 82
Mean 84.21
Std Dev 42.51

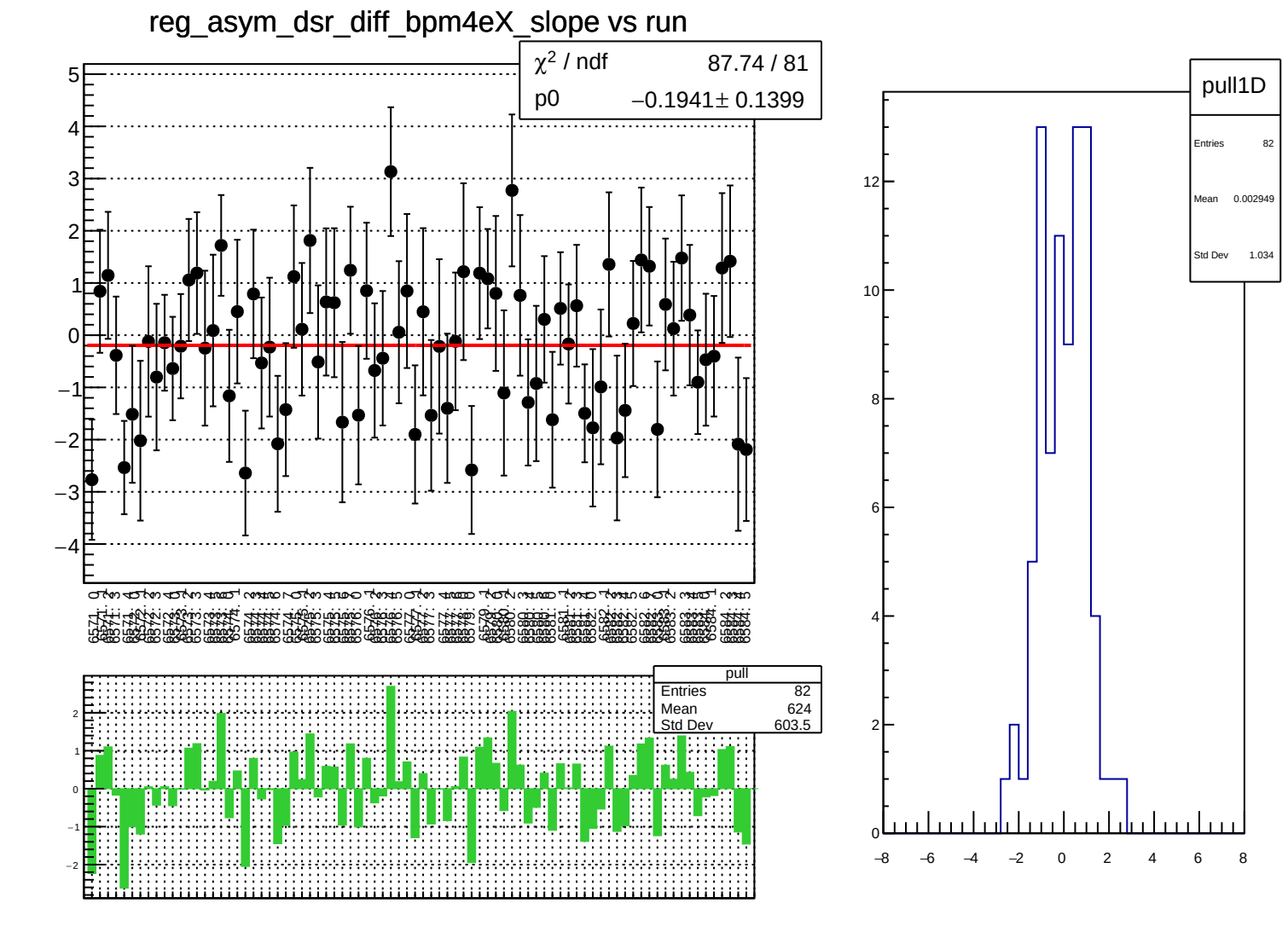

pull1D
Entries 82
Mean 0.03385
Std Dev 1.034

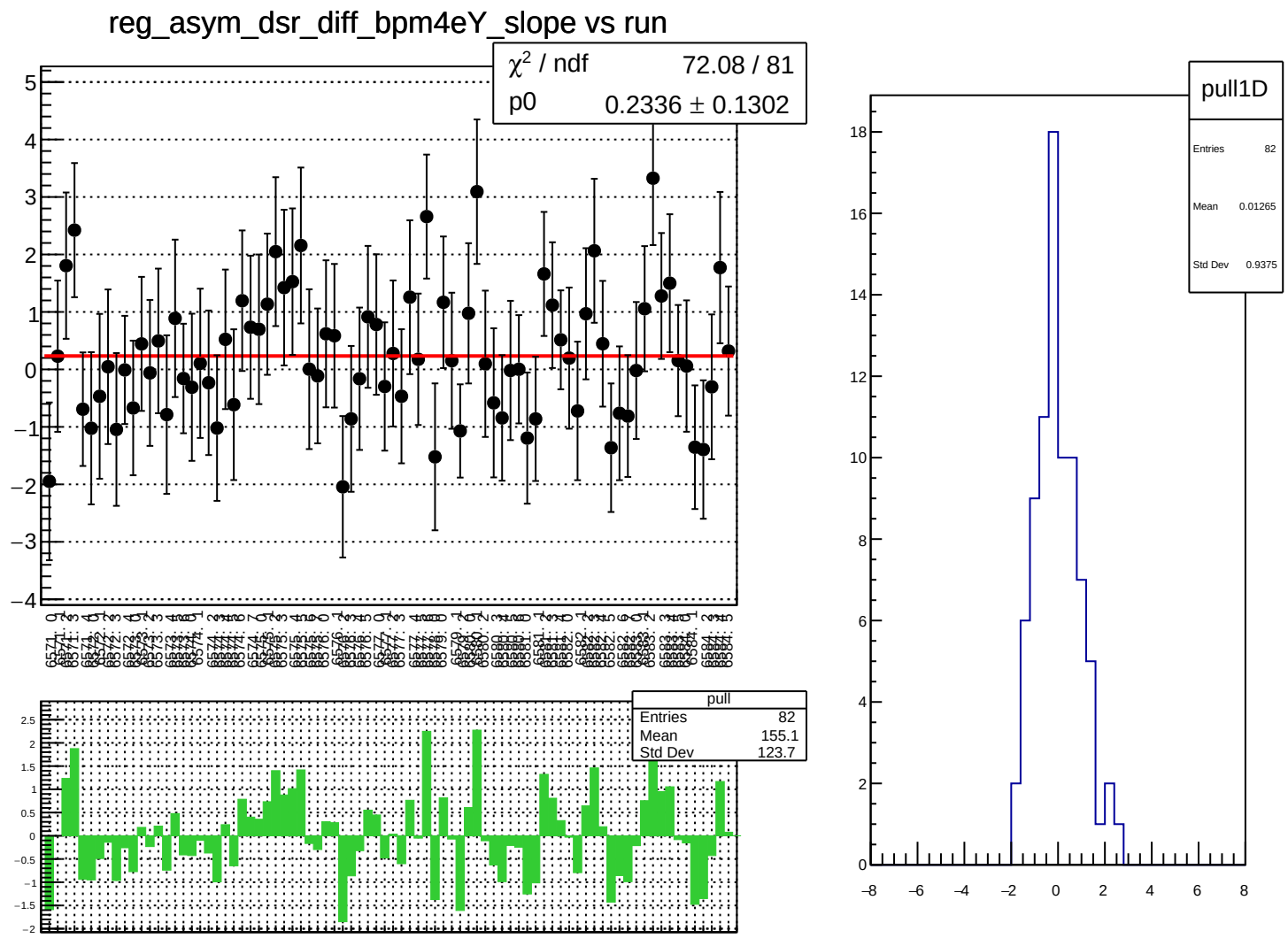

reg_asym_dsr_diff_bpm1X_slope vs run
χ² / ndf 88.02 / 81
p0 0.1901 ± 0.1314
pull
Entries 82
Mean 2361
Std Dev 2344

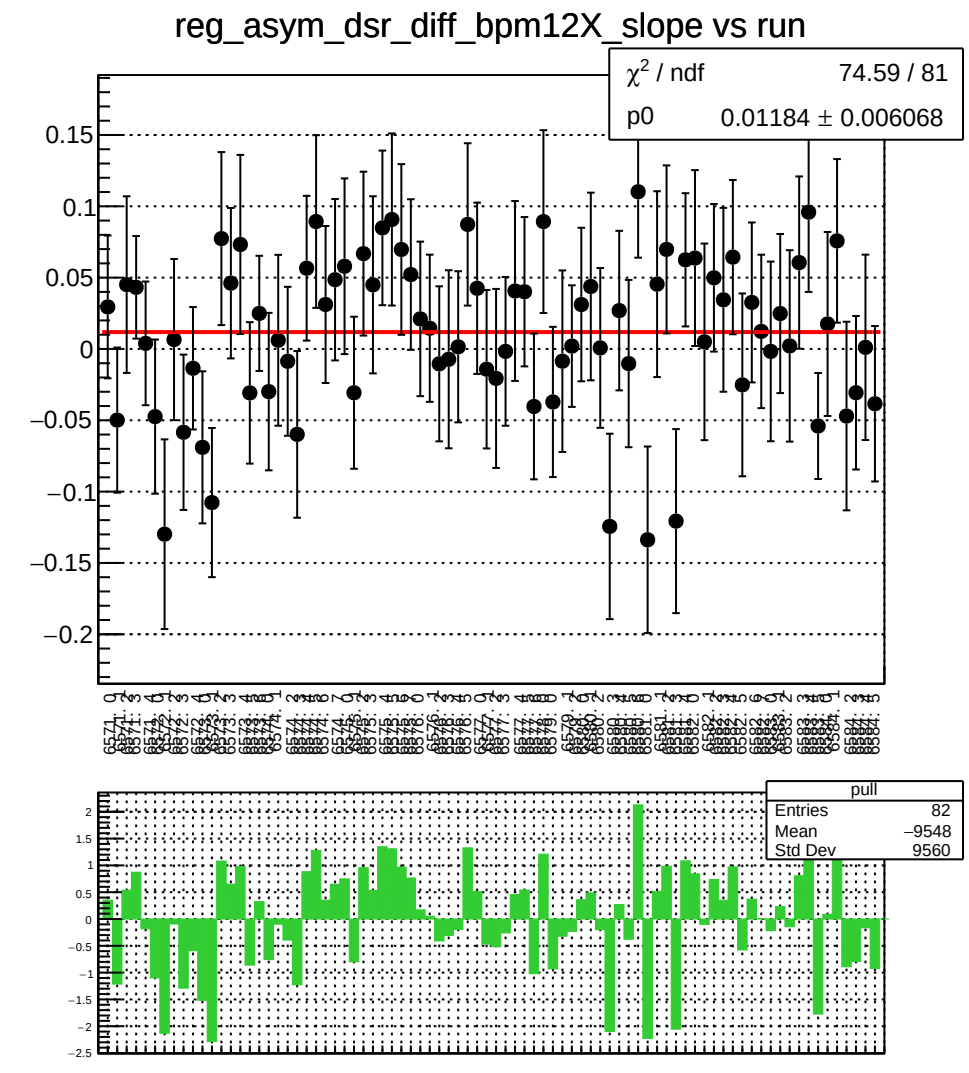

pull1D
Entries 82
Mean −0.0006484
Std Dev 1.036

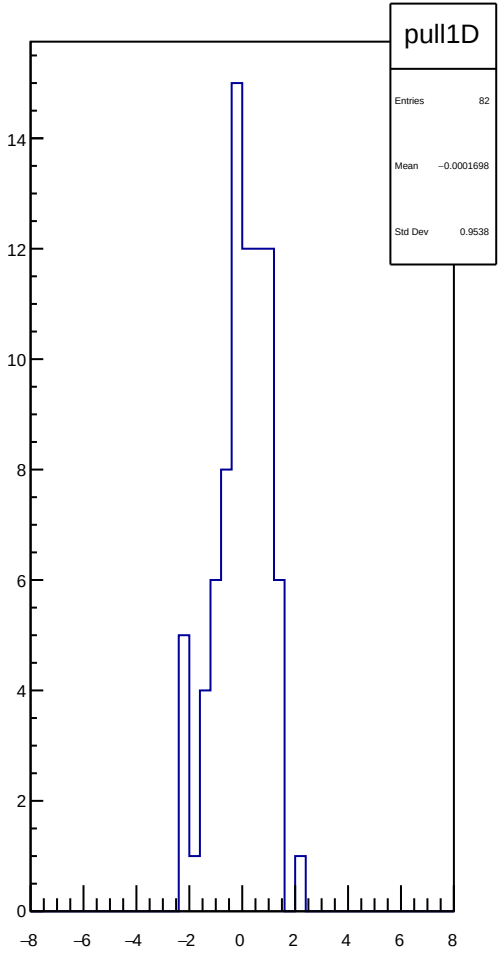

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 72.88 / 81
p0 −0.254 ± 0.1084
pull
Entries 82
Mean 574.6
Std Dev 540.6

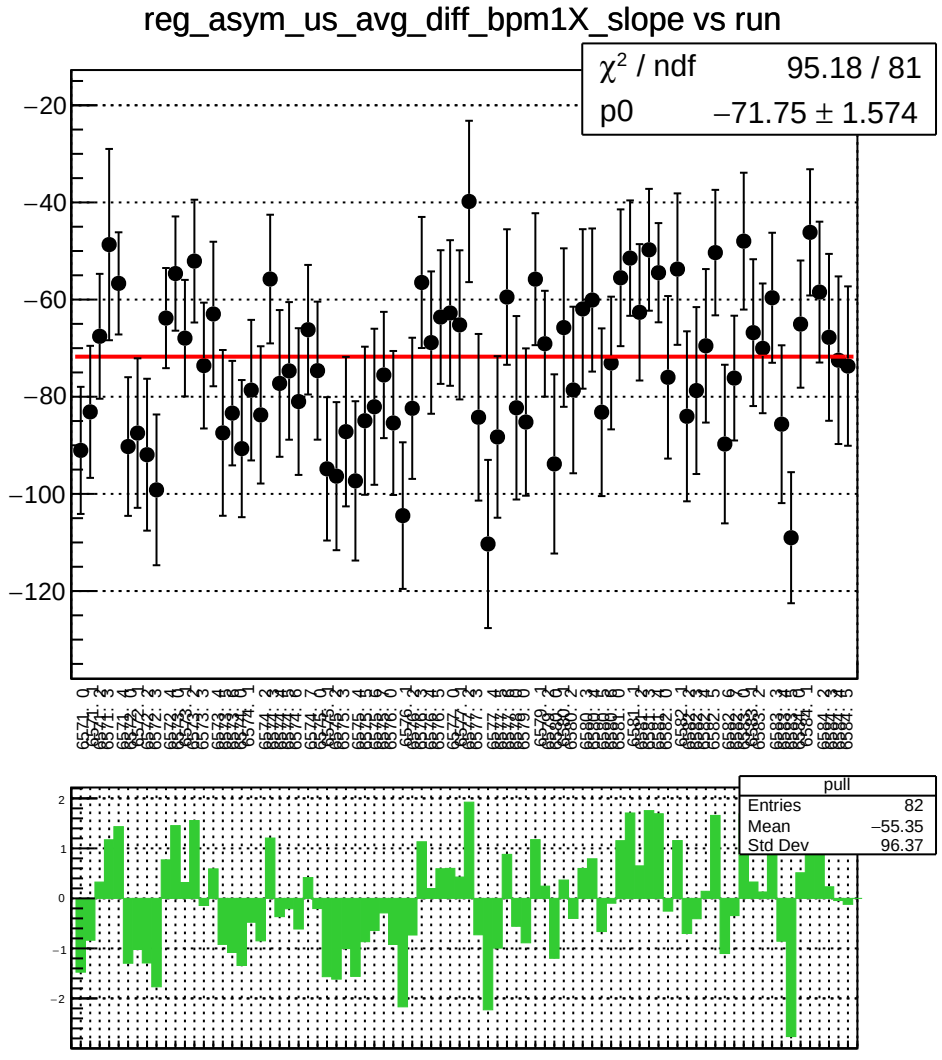

pull1D
Entries 82
Mean −0.003845
Std Dev 0.9428

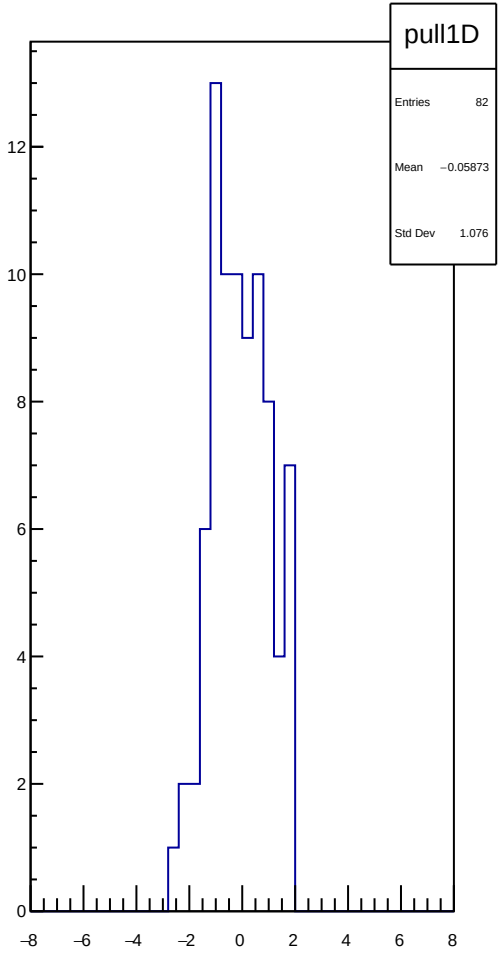

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 87.74 / 81
p0 −0.1941± 0.1399
pull
Entries 82
Mean 624
Std Dev 603.5
pull1D
Entries 82
Mean 0.002949
Std Dev 1.034

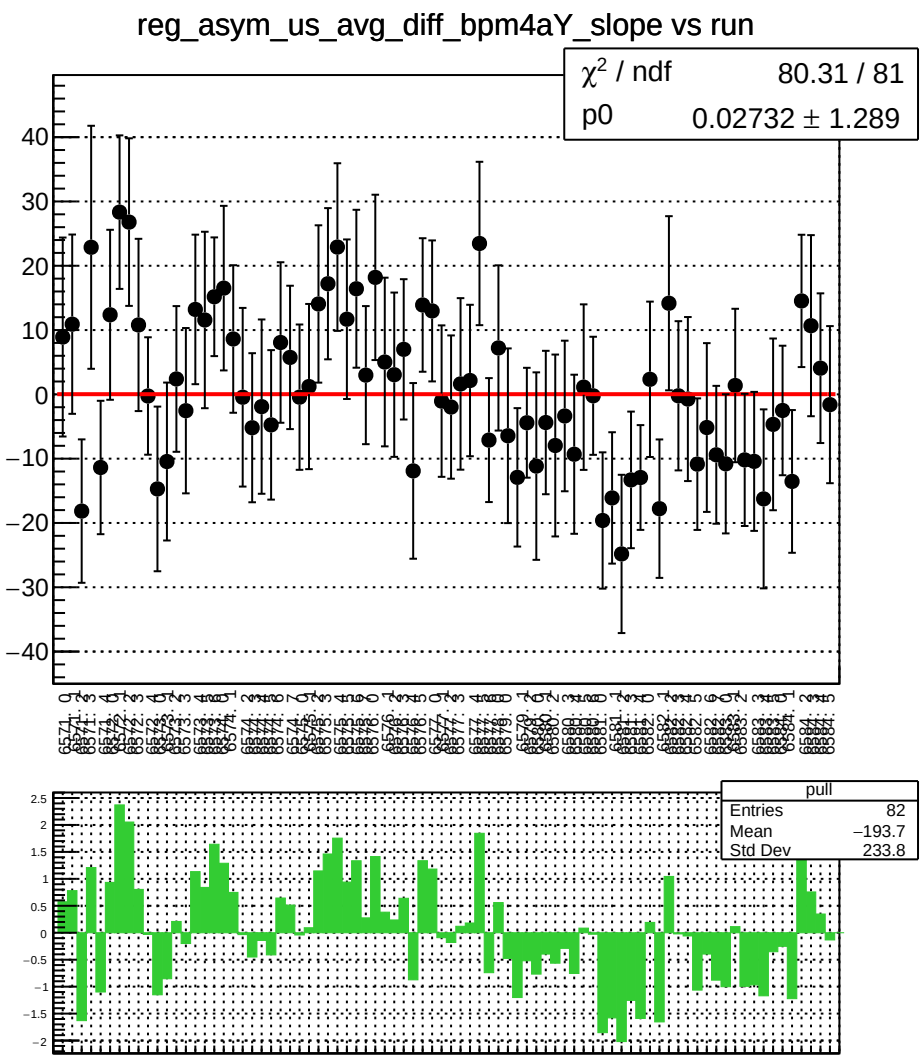

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 72.08 / 81
p0 0.2336 ± 0.1302
pull
Entries 82
Mean 155.1
Std Dev 123.7
pull1D
Entries 82
Mean 0.01265
Std Dev 0.9375

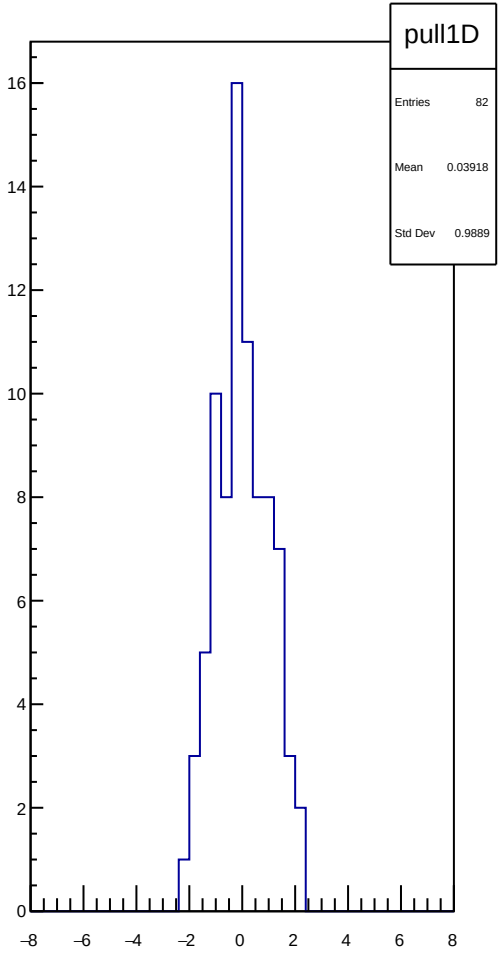

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 74.59 / 81
p0 0.01184 ± 0.006068
pull
Entries 82
Mean −9548
Std Dev 9560

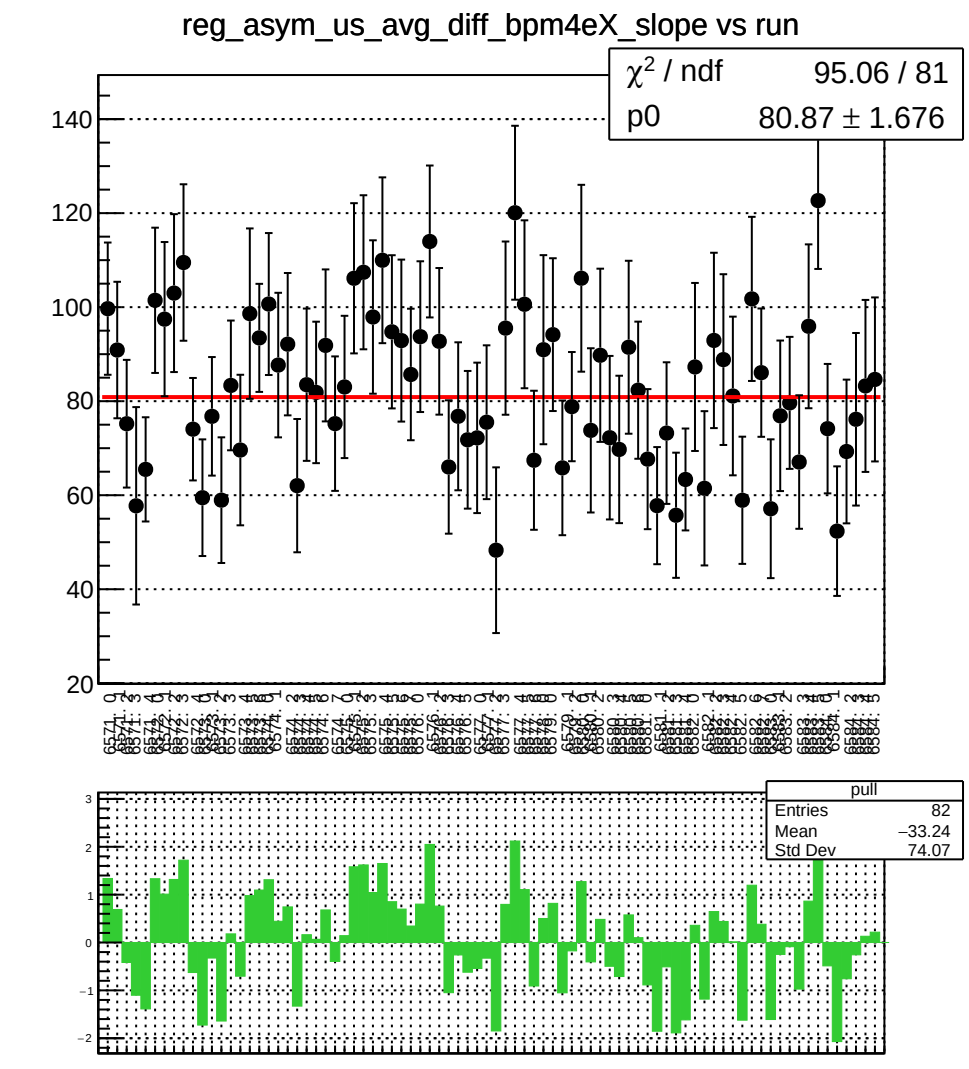

pull1D
Entries 82
Mean −0.0001698
Std Dev 0.9538

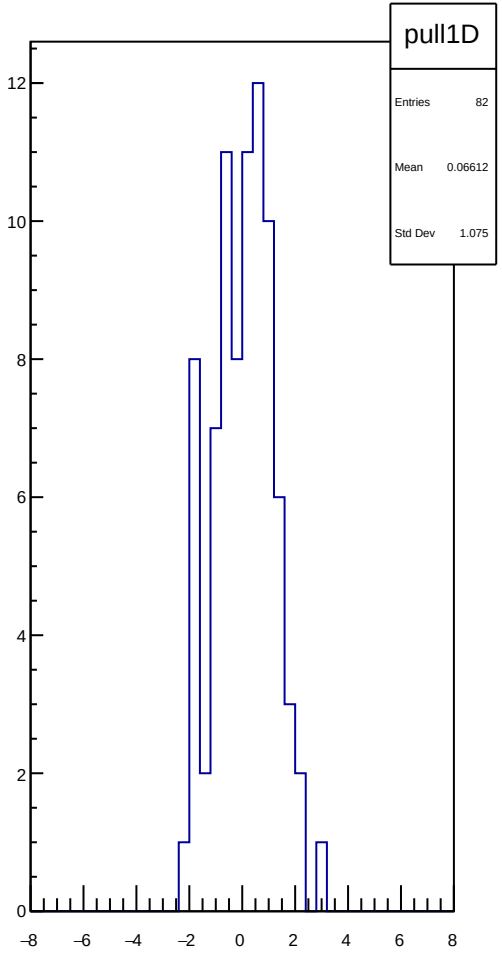

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 95.18 / 81
p0 −71.75 ± 1.574
−20
−40
−60
−80
−100
−120
pull
Entries 82
Mean −55.35
Std Dev 96.37
2
1
0
−1
−2

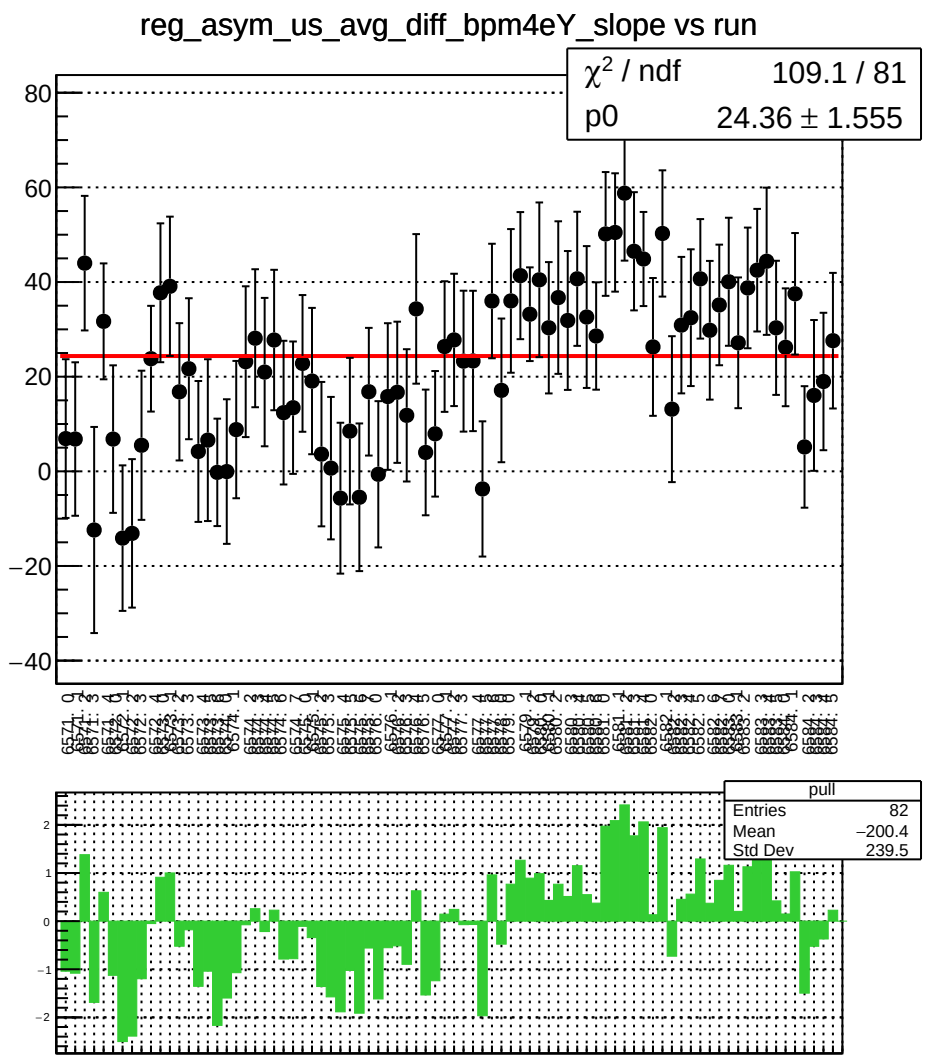

pull1D
Entries 82
Mean −0.05873
Std Dev 1.076
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

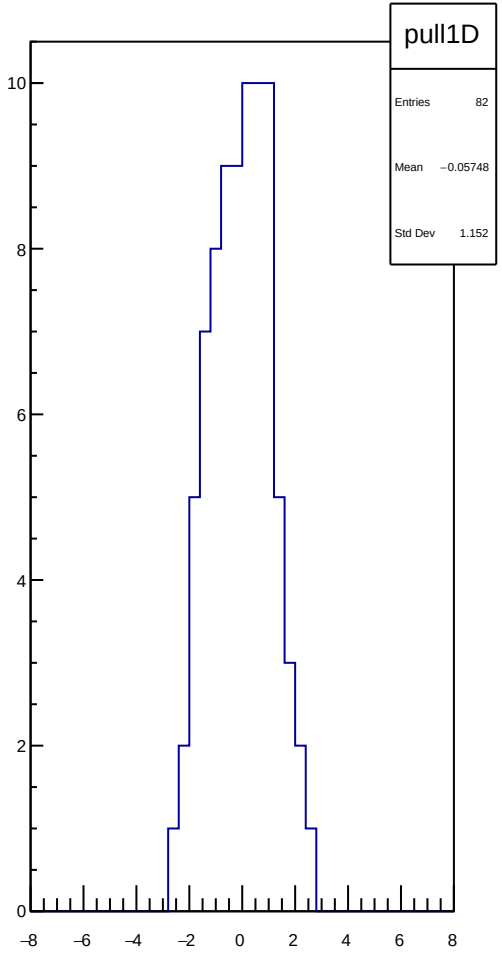

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 80.31 / 81
p0 0.02732 ± 1.289
pull
Entries 82
Mean −193.7
Std Dev 233.8

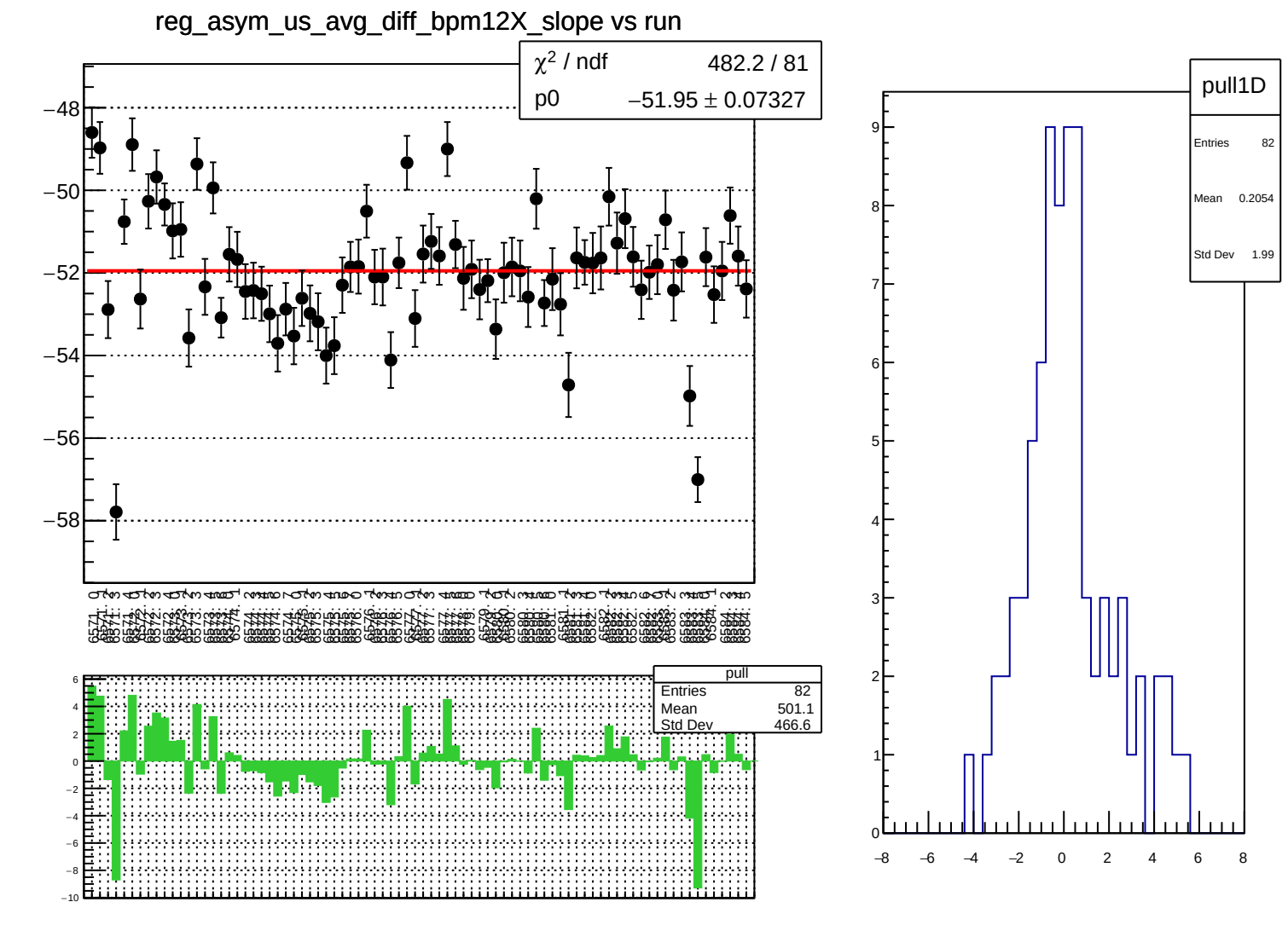

pull1D
Entries 82
Mean 0.03918
Std Dev 0.9889

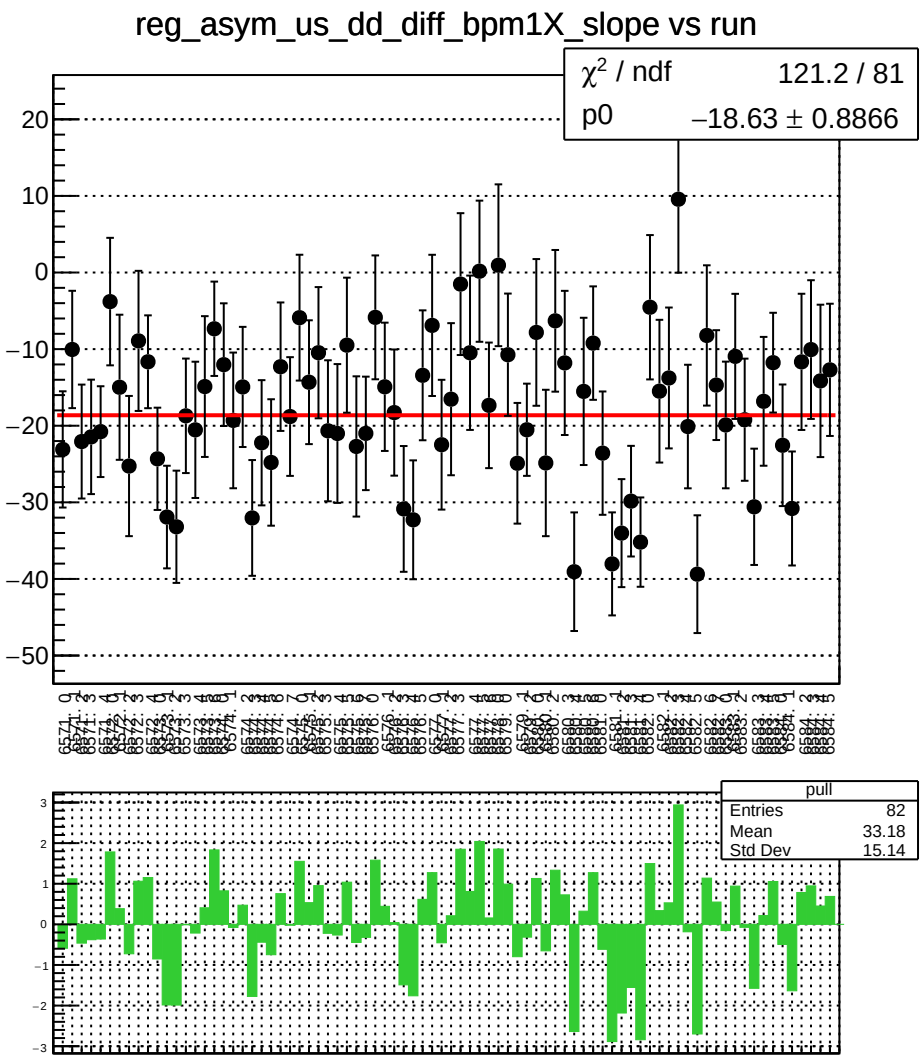

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 95.06 / 81
p0 80.87 ± 1.676
pull
Entries 82
Mean −33.24
Std Dev 74.07

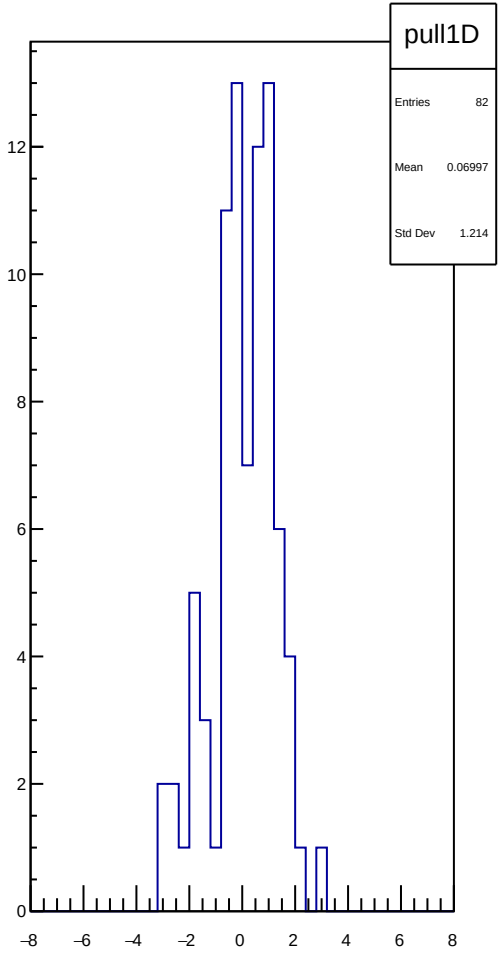

pull1D
Entries 82
Mean 0.06612
Std Dev 1.075

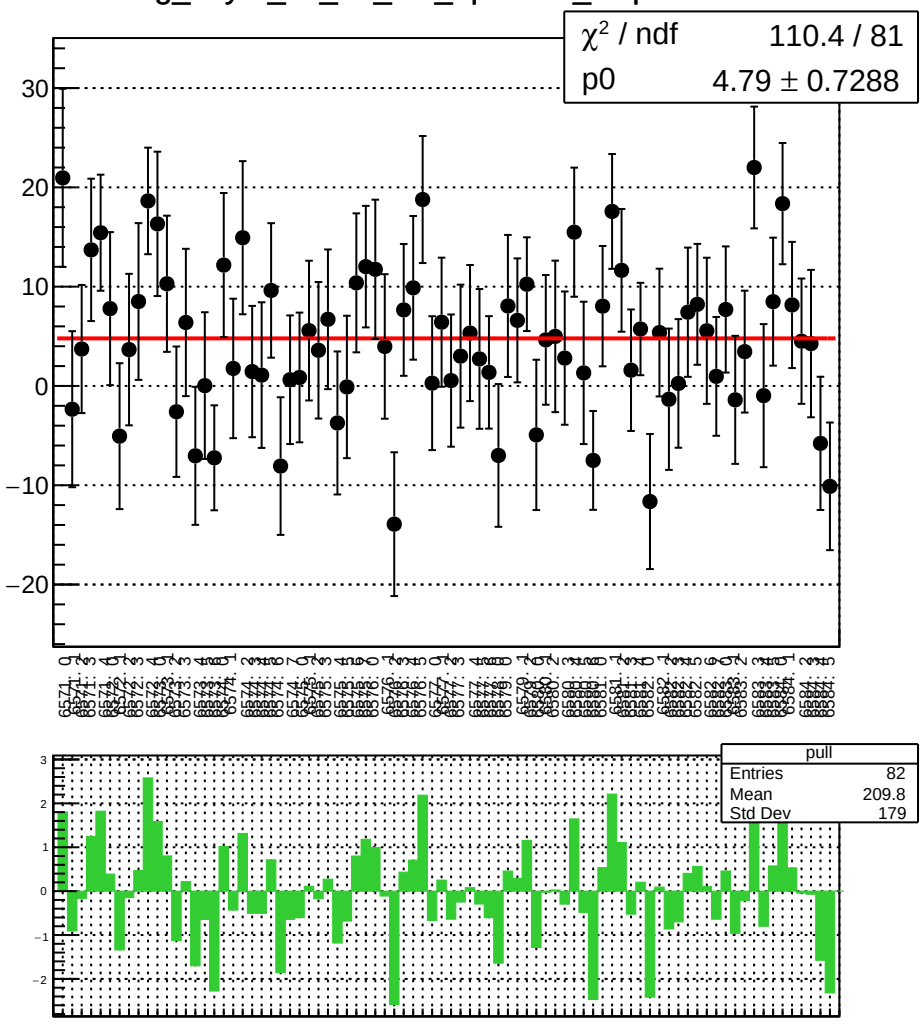

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 109.1 / 81
p0 24.36 ± 1.555
pull
Entries 82
Mean −200.4
Std Dev 239.5

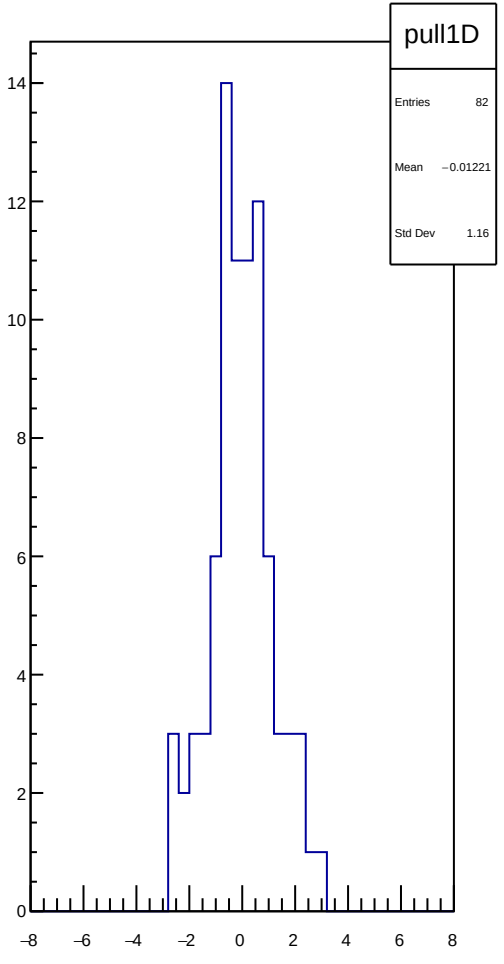

pull1D
Entries 82
Mean −0.05748
Std Dev 1.152

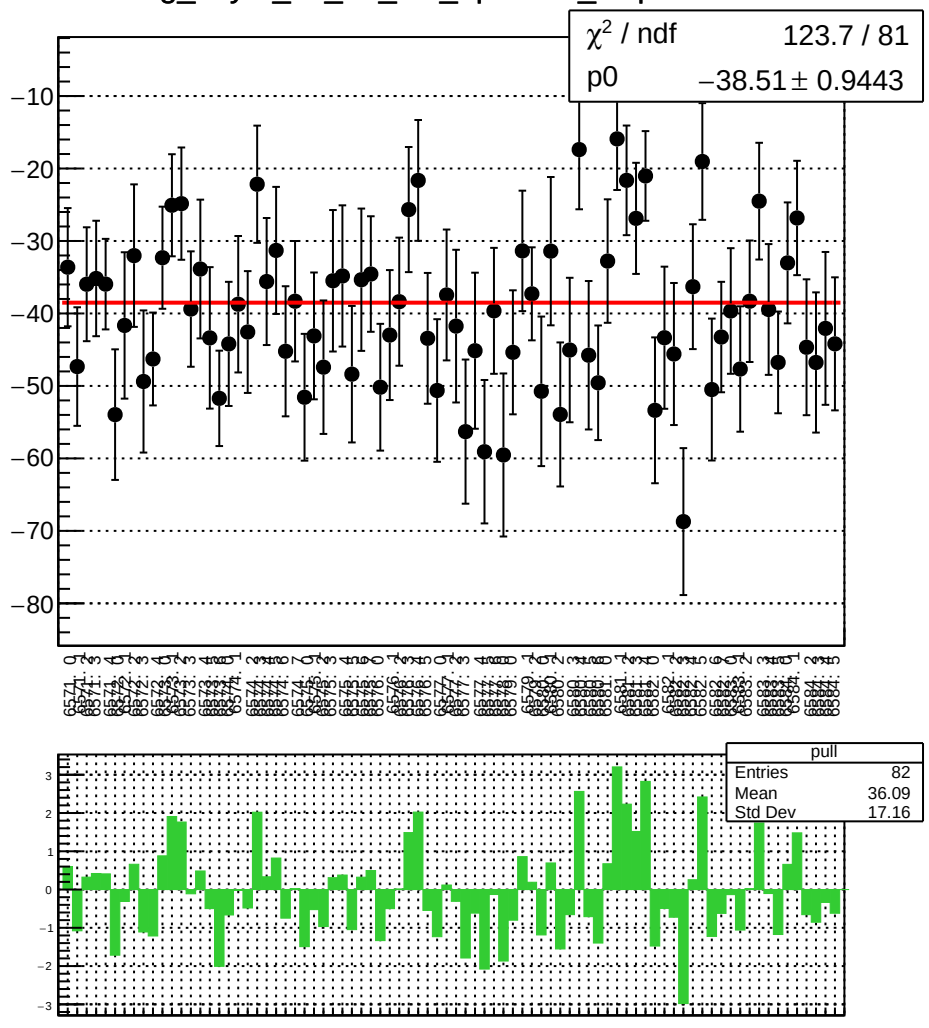

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 482.2 / 81
p0 −51.95 ± 0.07327
pull
Entries 82
Mean 501.1
Std Dev 466.6
pull1D
Entries 82
Mean 0.2054
Std Dev 1.99

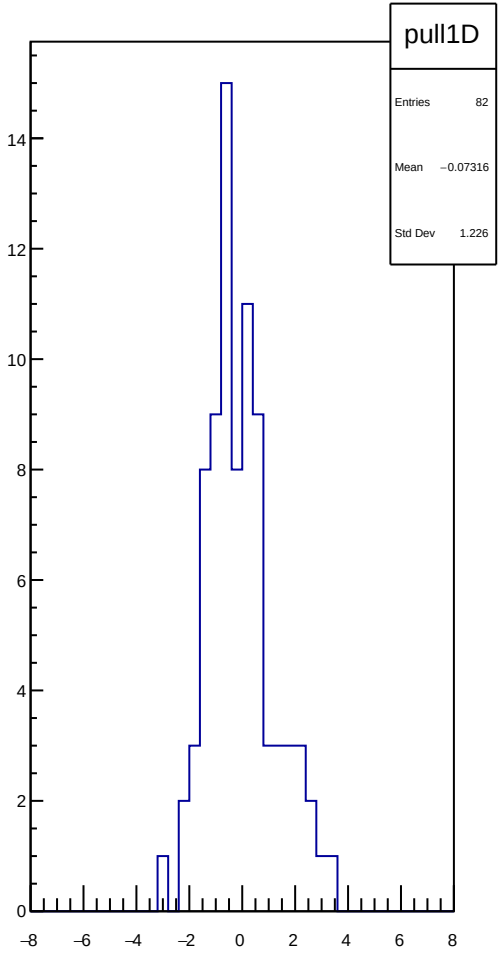

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 121.2 / 81
p0 −18.63 ± 0.8866
pull
Entries 82
Mean 33.18
Std Dev 15.14

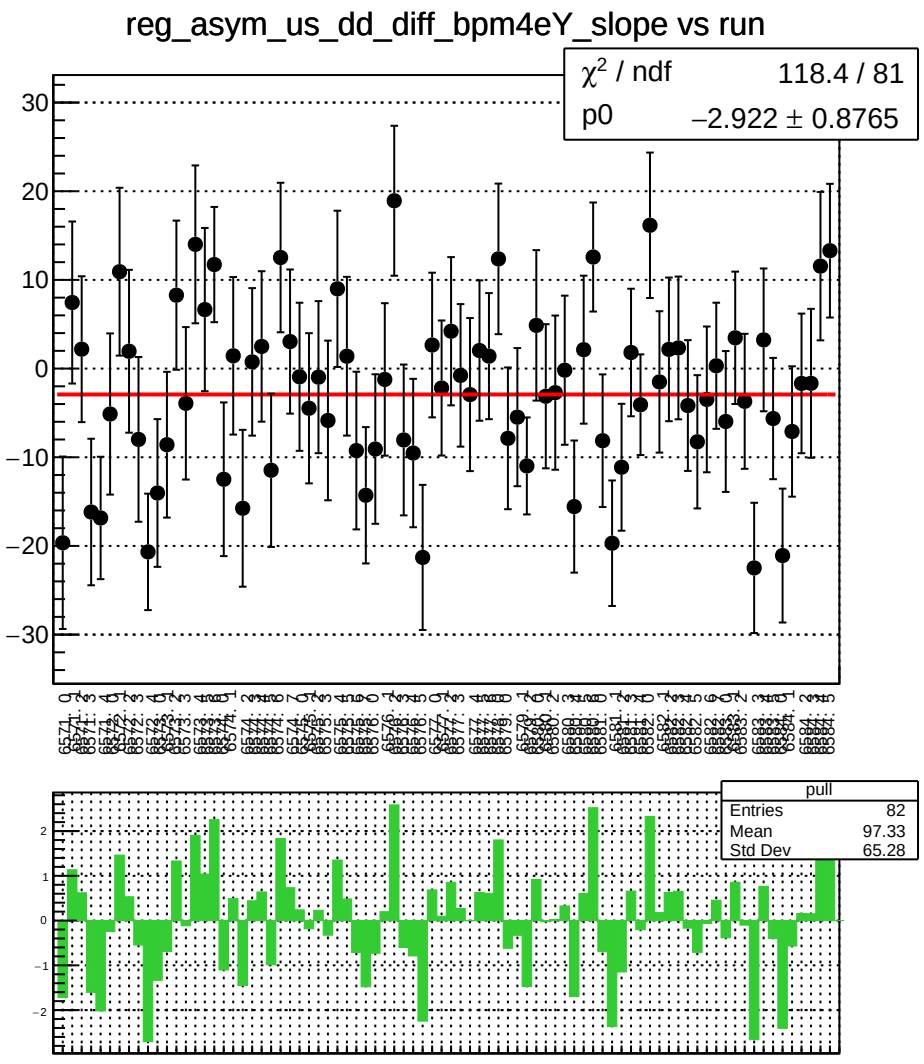

pull1D
Entries 82
Mean 0.06997
Std Dev 1.214

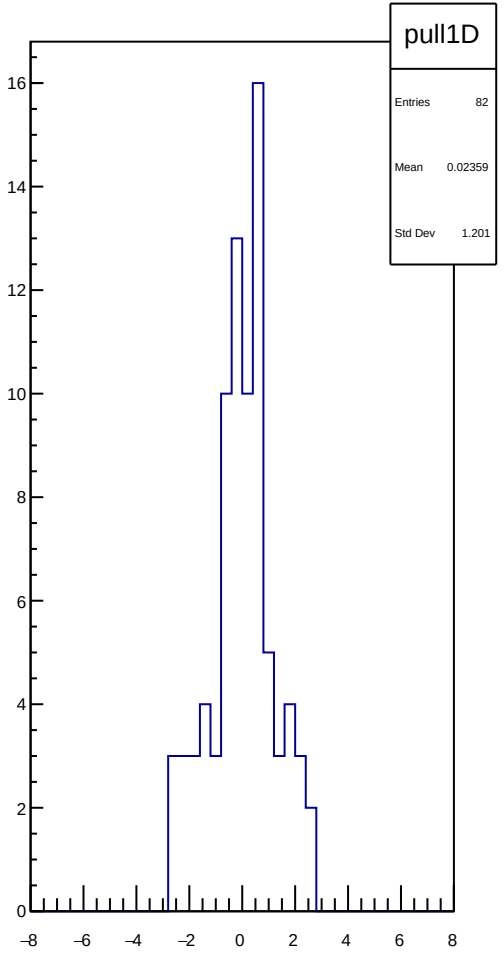

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 110.4 / 81
p0 4.79 ± 0.7288
pull
Entries 82
Mean 209.8
Std Dev 179

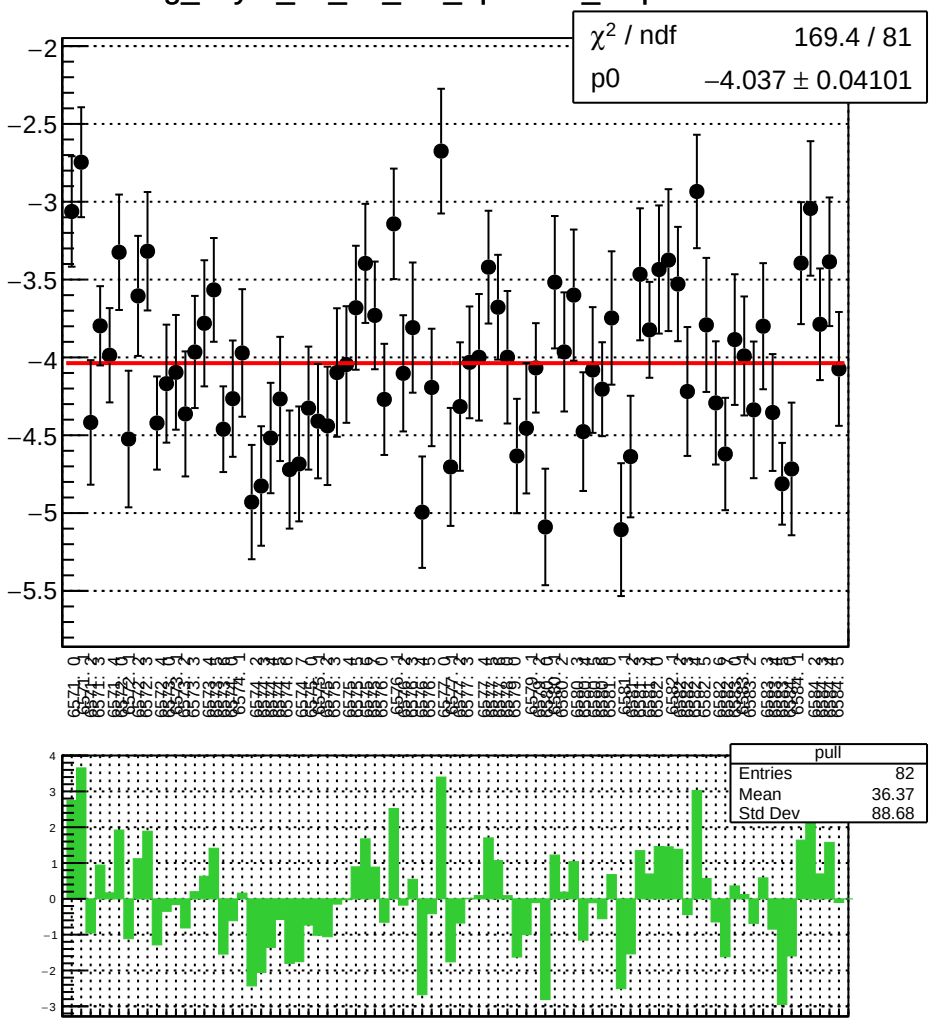

pull1D
Entries 82
Mean −0.01221
Std Dev 1.16

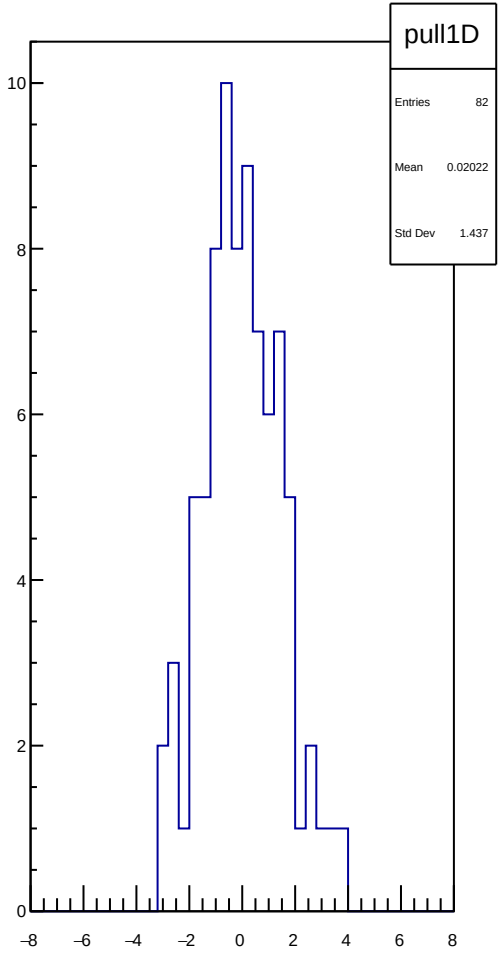

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 123.7 / 81
p0 −38.51 ± 0.9443
pull
Entries 82
Mean 36.09
Std Dev 17.16

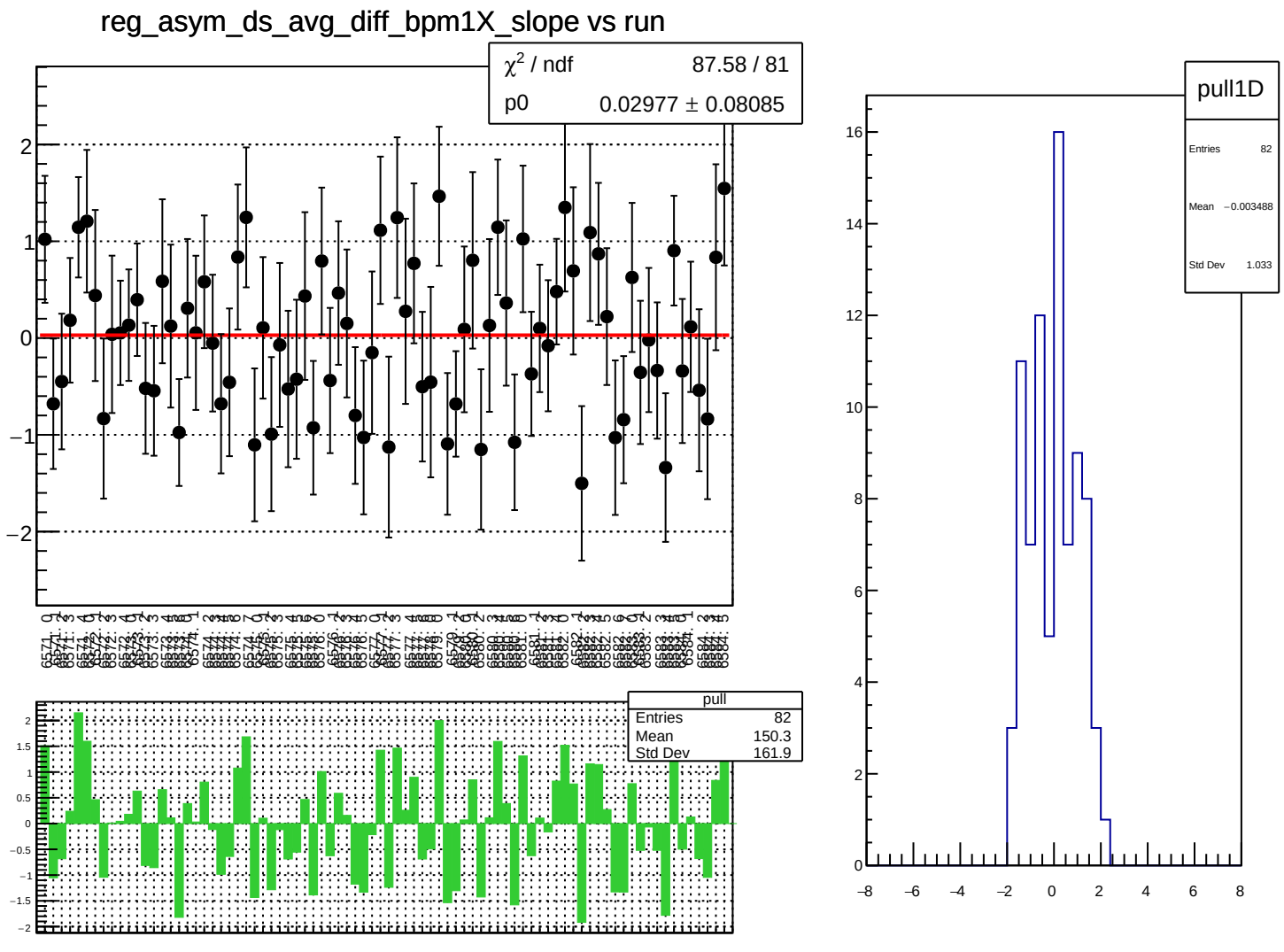

pull1D
Entries 82
Mean −0.07316
Std Dev 1.226

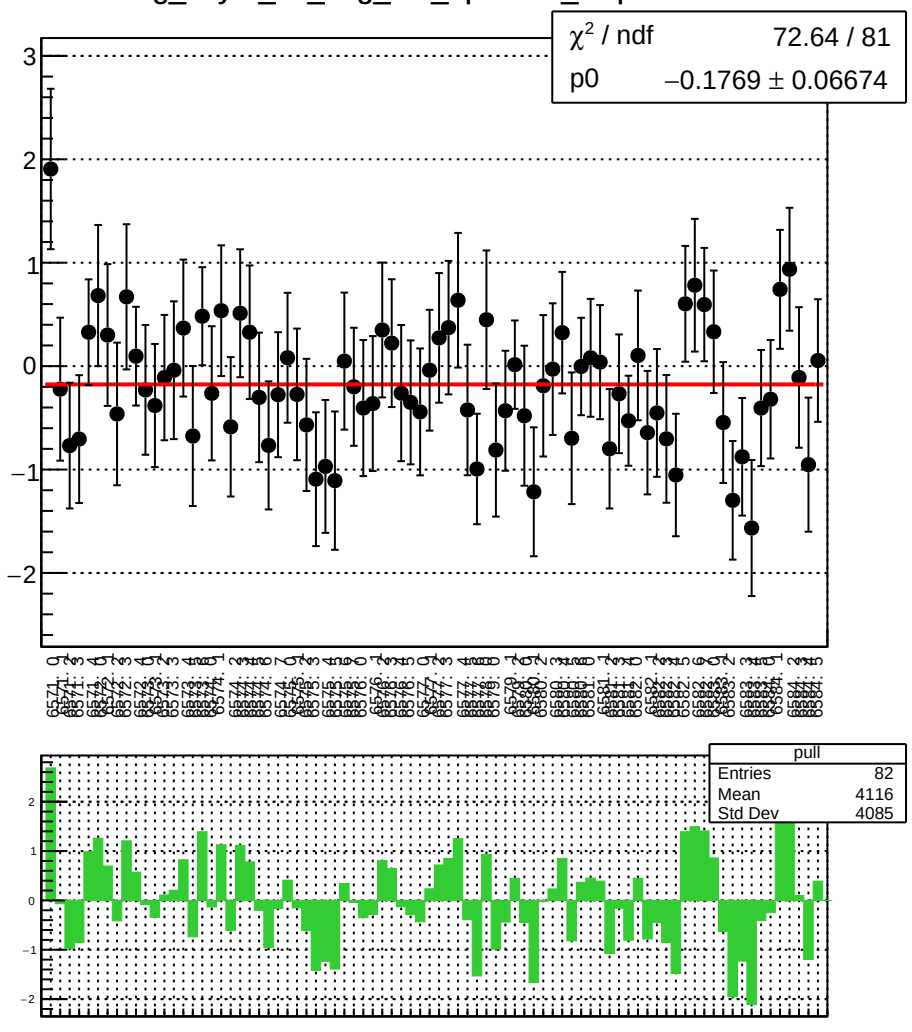

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 118.4 / 81
p0 −2.922 ± 0.8765
pull
Entries 82
Mean 97.33
Std Dev 65.28

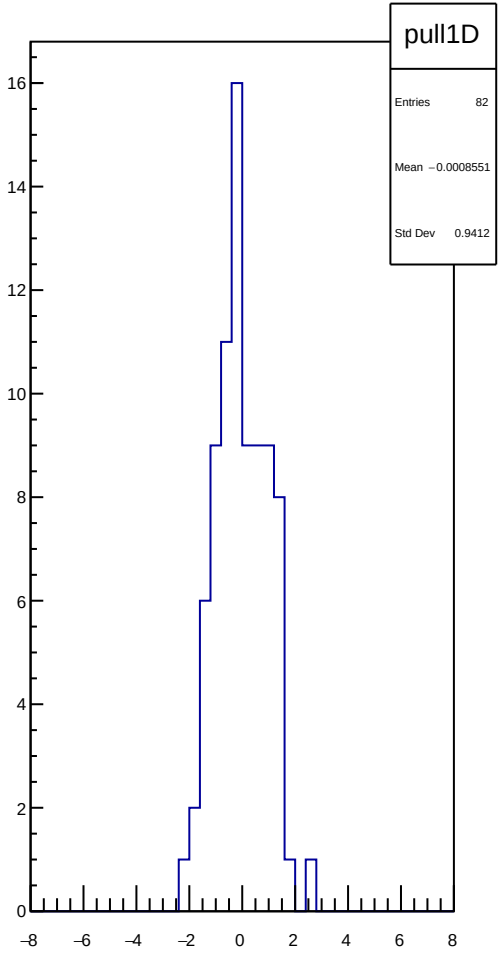

pull1D
Entries 82
Mean 0.02359
Std Dev 1.201

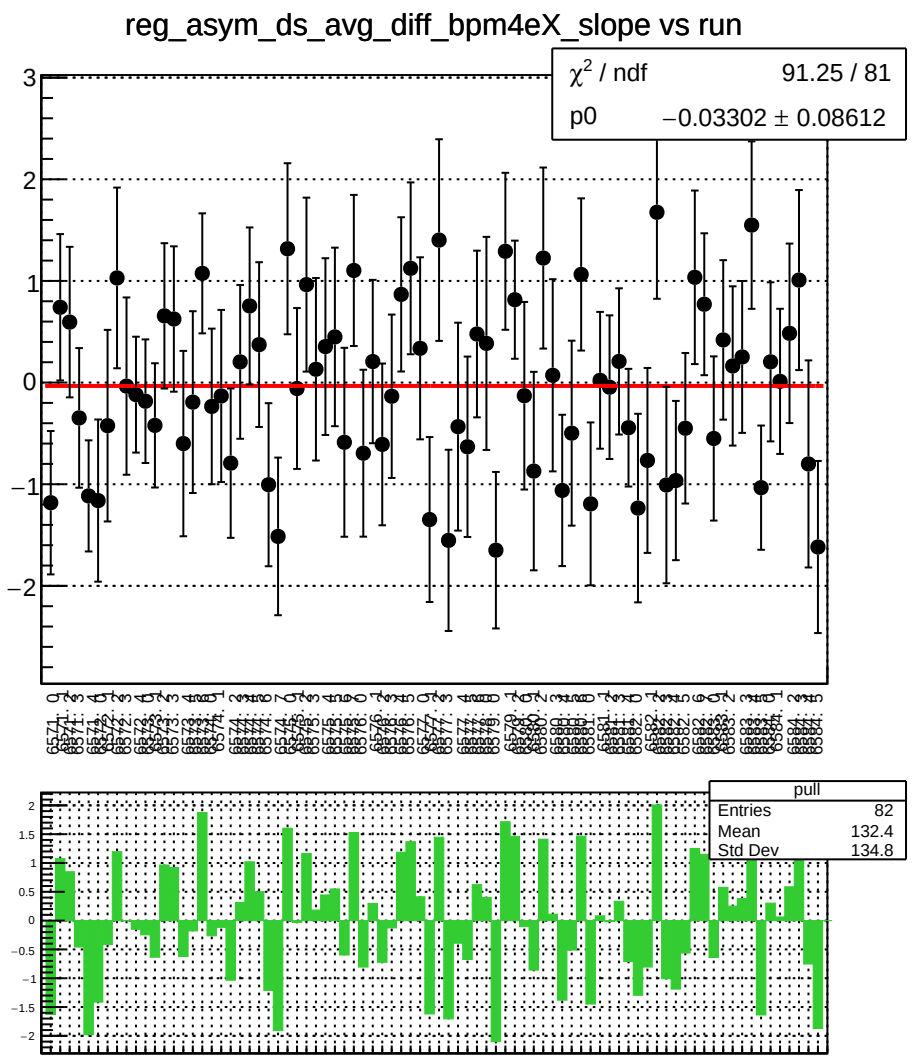

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 169.4 / 81
p0 −4.037 ± 0.04101
pull
Entries 82
Mean 36.37
Std Dev 88.68

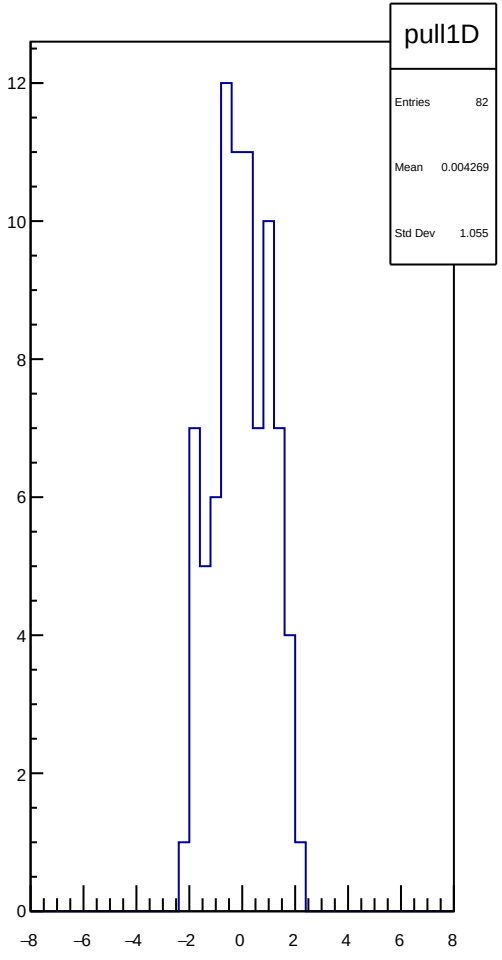

pull1D
Entries 82
Mean 0.02022
Std Dev 1.437

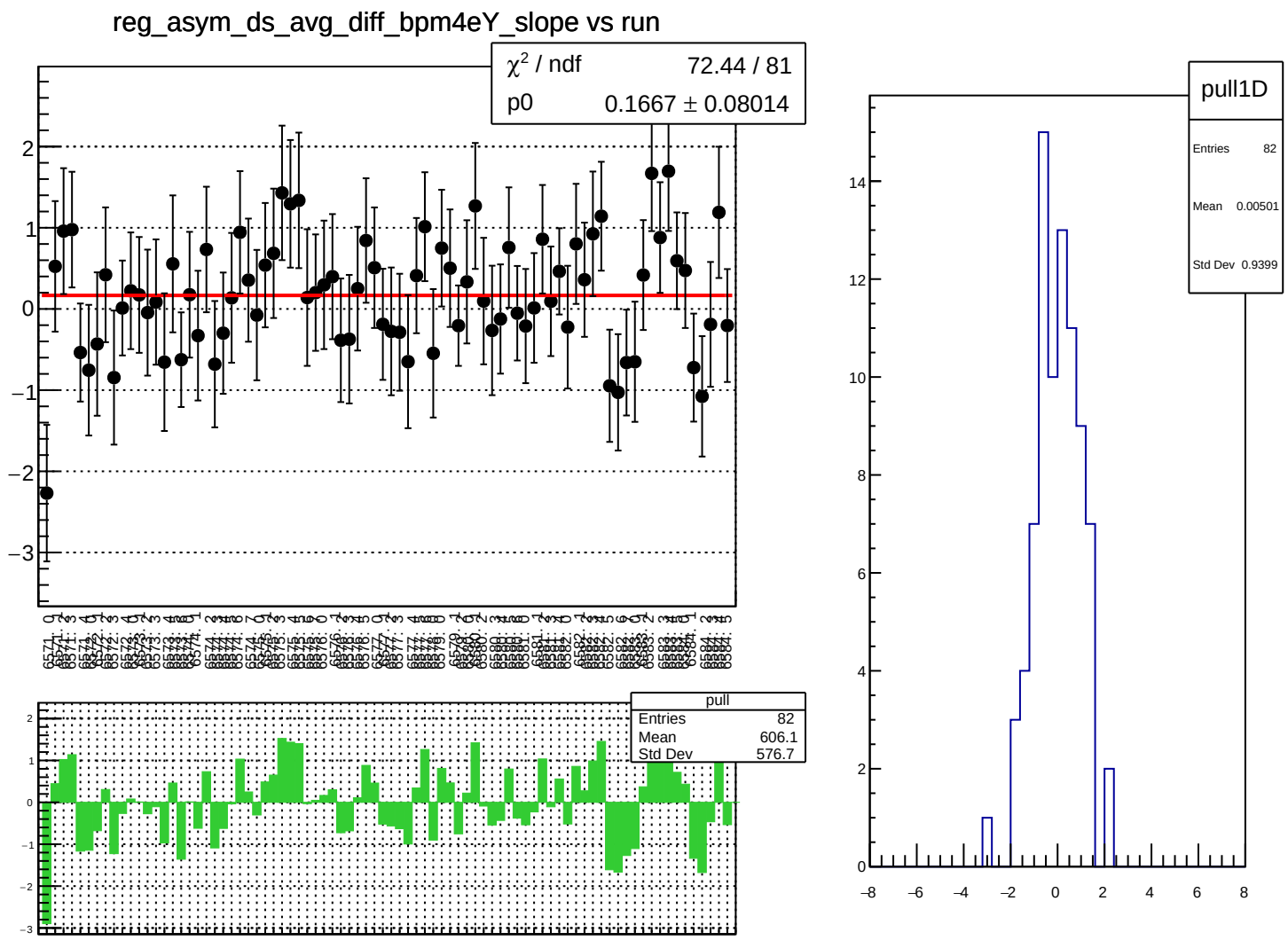

reg_asym_ds_avg_diff_bpm1X_slope vs run
χ² / ndf 87.58 / 81
p0 0.02977 ± 0.08085
pull
Entries 82
Mean 150.3
Std Dev 161.9
pull1D
Entries 82
Mean −0.003488
Std Dev 1.033

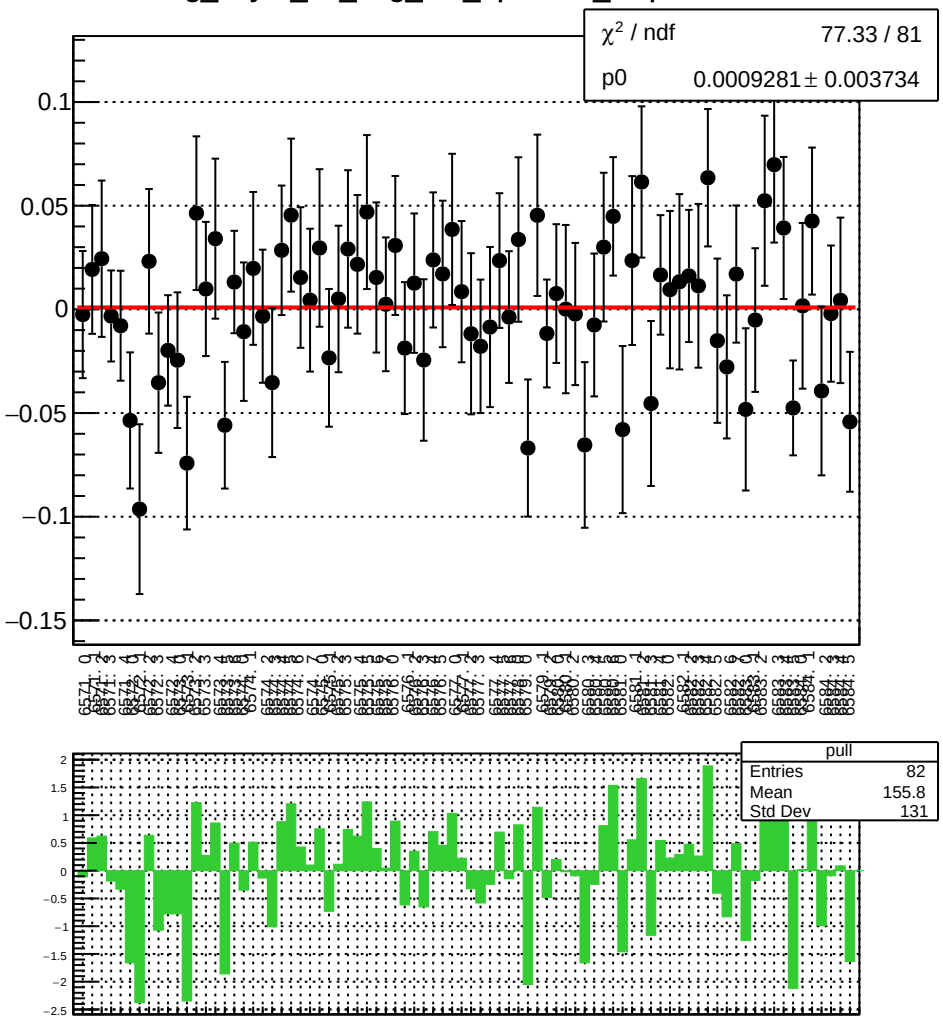

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 72.64 / 81
p0 −0.1769 ± 0.06674
pull
Entries 82
Mean 4116
Std Dev 4085

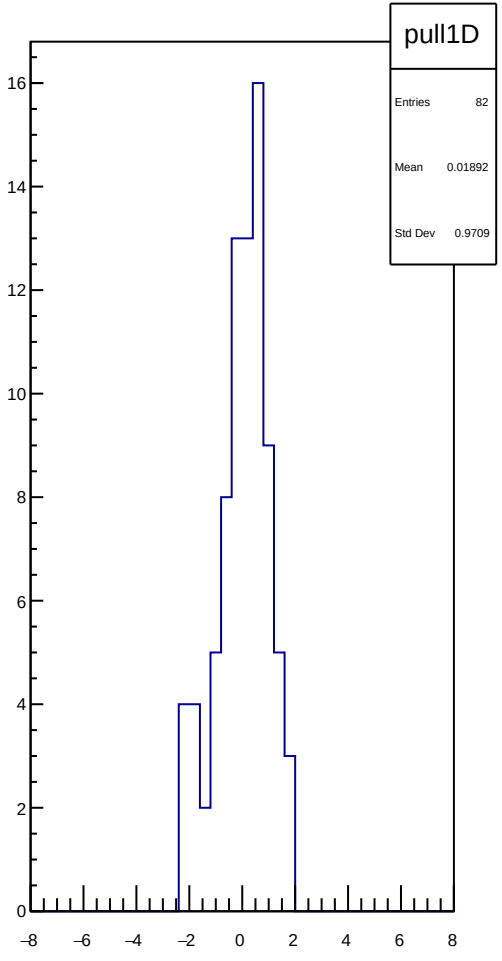

pull1D
Entries 82
Mean −0.0008551
Std Dev 0.9412

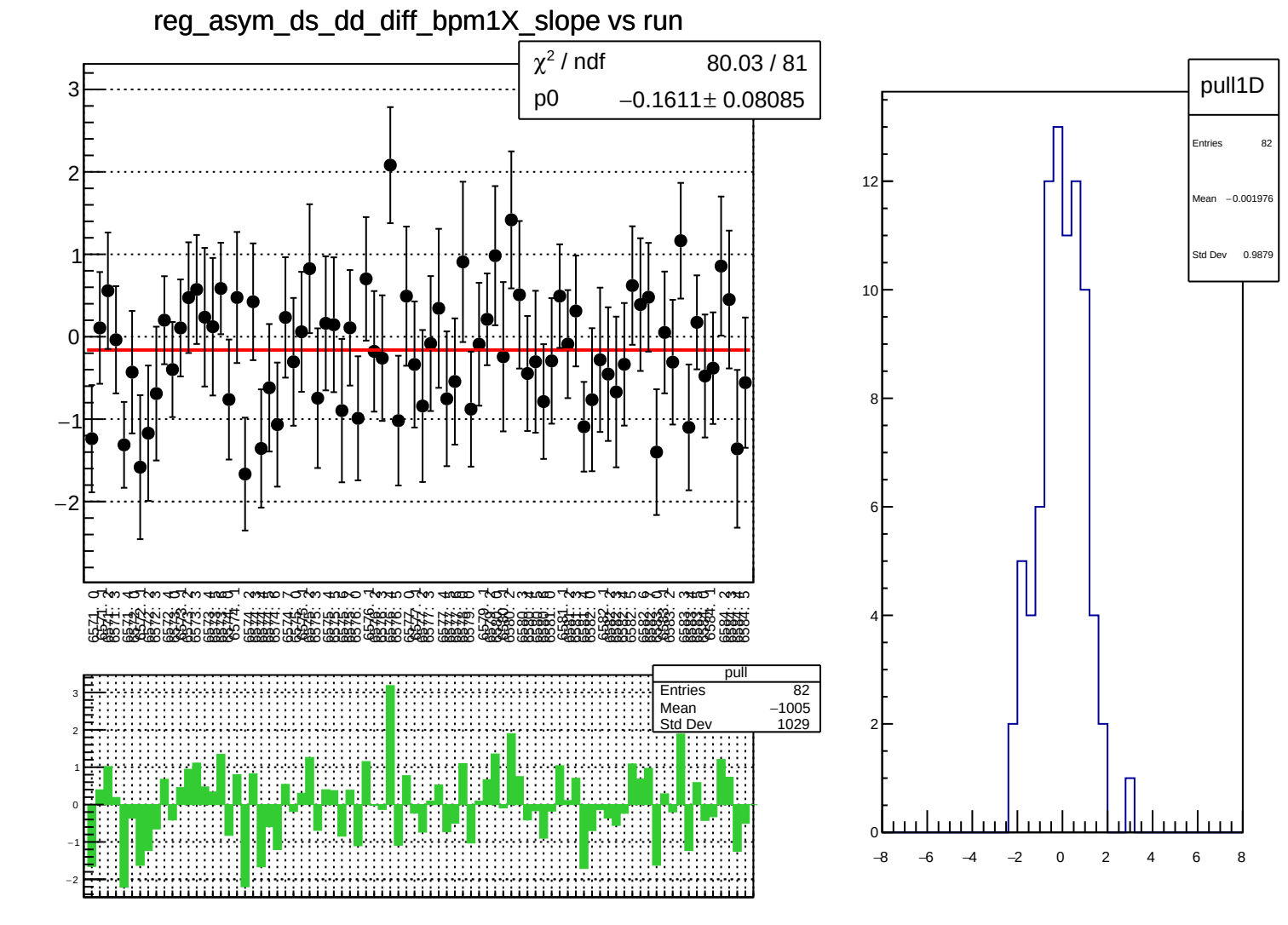

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 91.25 / 81
p0 −0.03302 ± 0.08612
pull
Entries 82
Mean 132.4
Std Dev 134.8

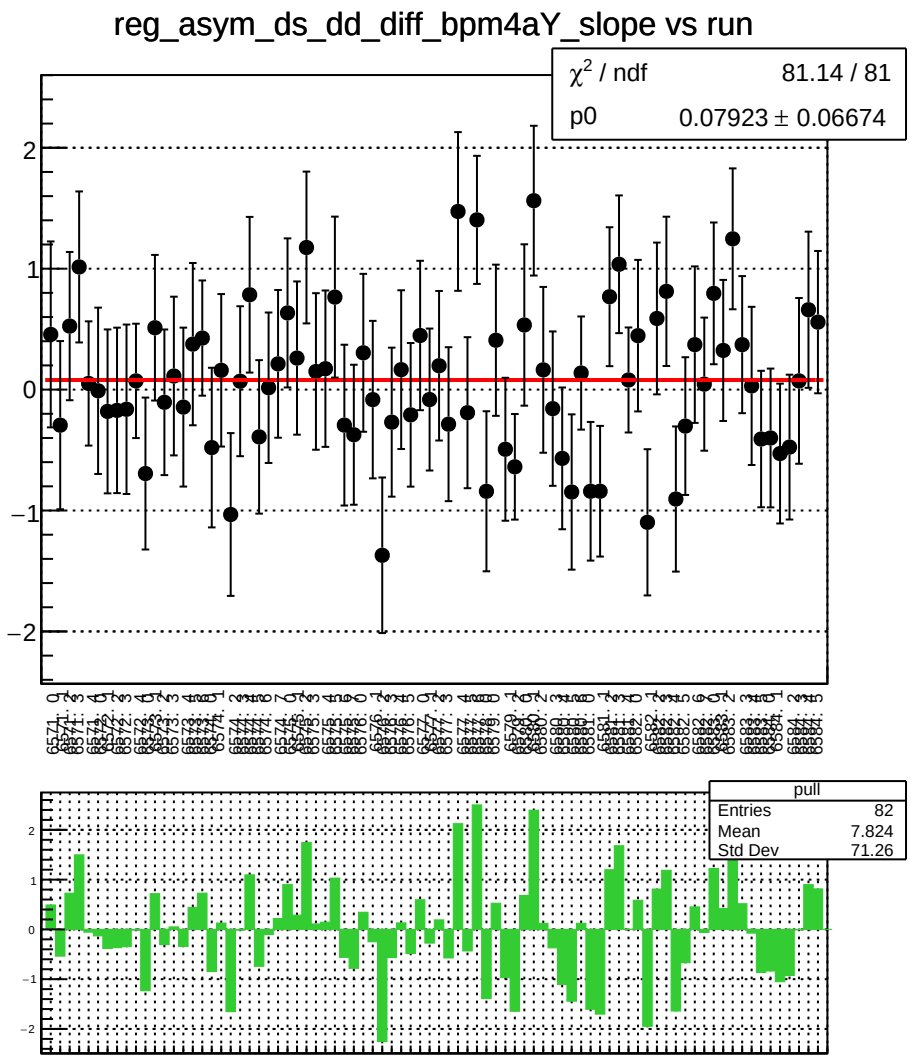

pull1D
Entries 82
Mean 0.004269
Std Dev 1.055

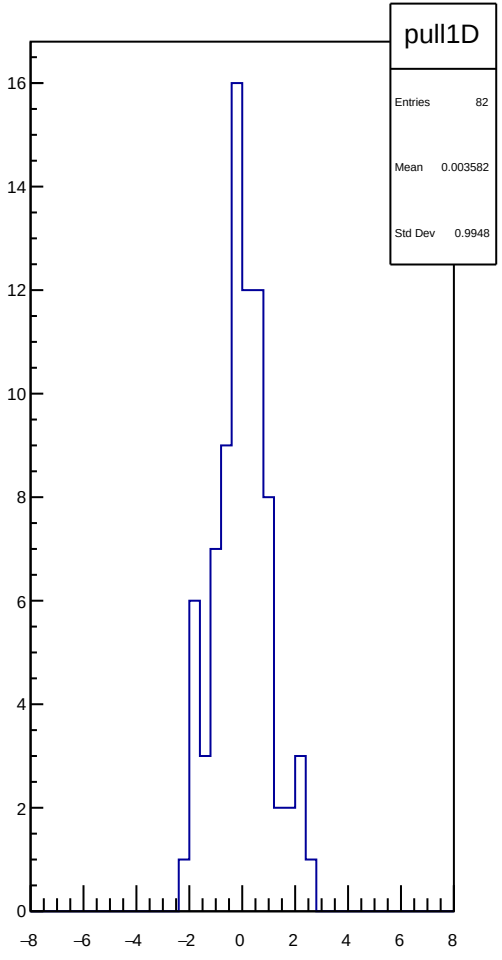

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 72.44 / 81
p0 0.1667 ± 0.08014
pull
Entries 82
Mean 606.1
Std Dev 576.7
pull1D
Entries 82
Mean 0.00501
Std Dev 0.9399

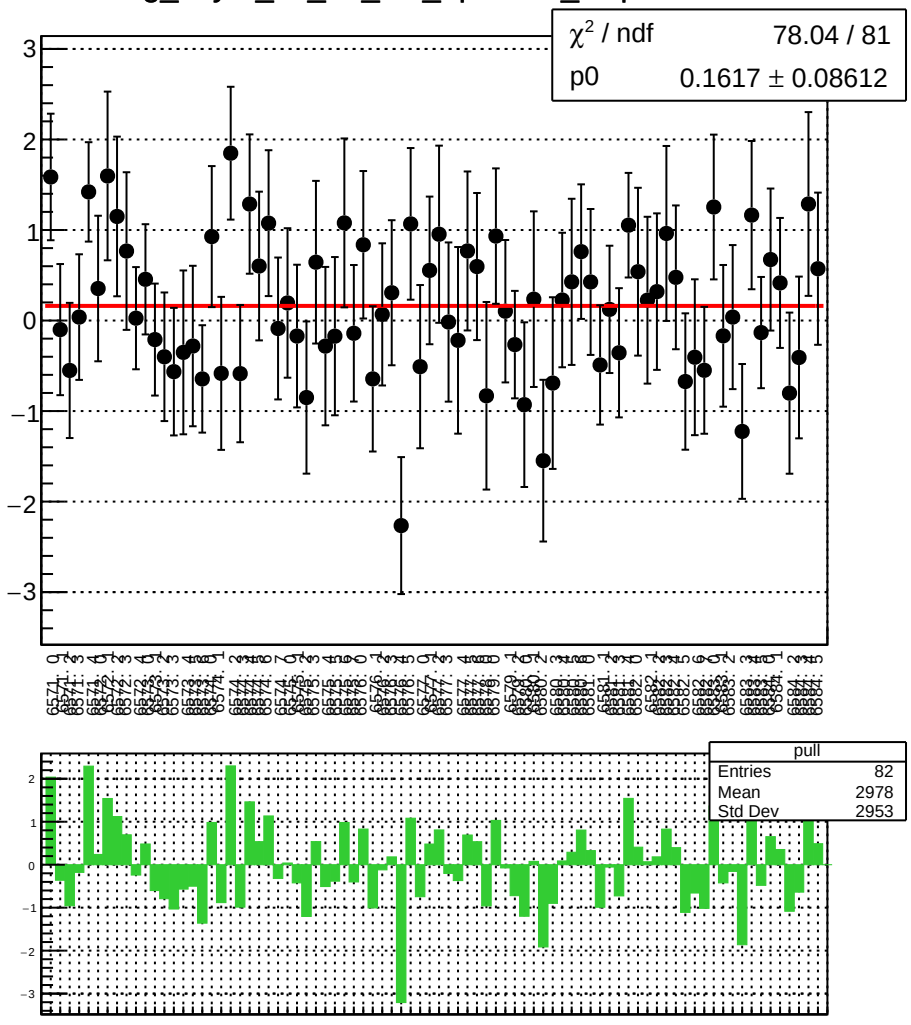

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 77.33 / 81
p0 0.0009281 ± 0.003734
pull
Entries 82
Mean 155.8
Std Dev 131

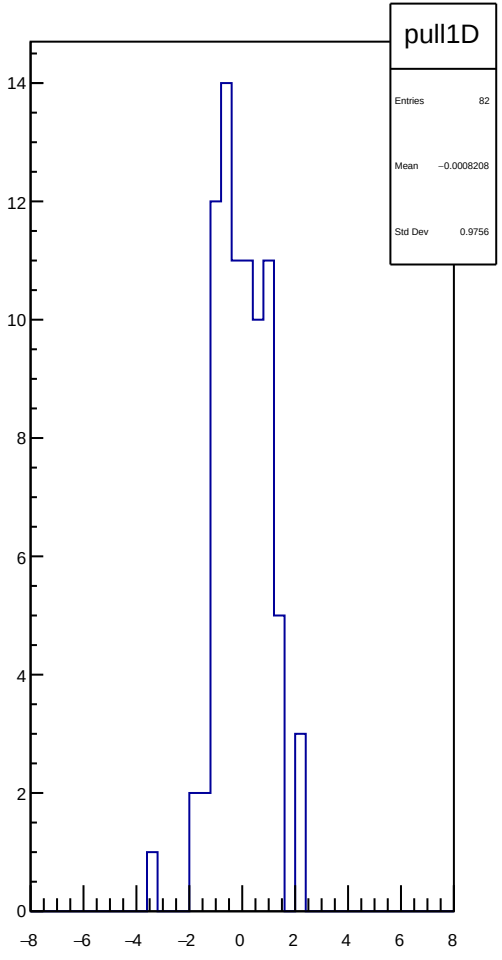

pull1D
Entries 82
Mean 0.01892
Std Dev 0.9709

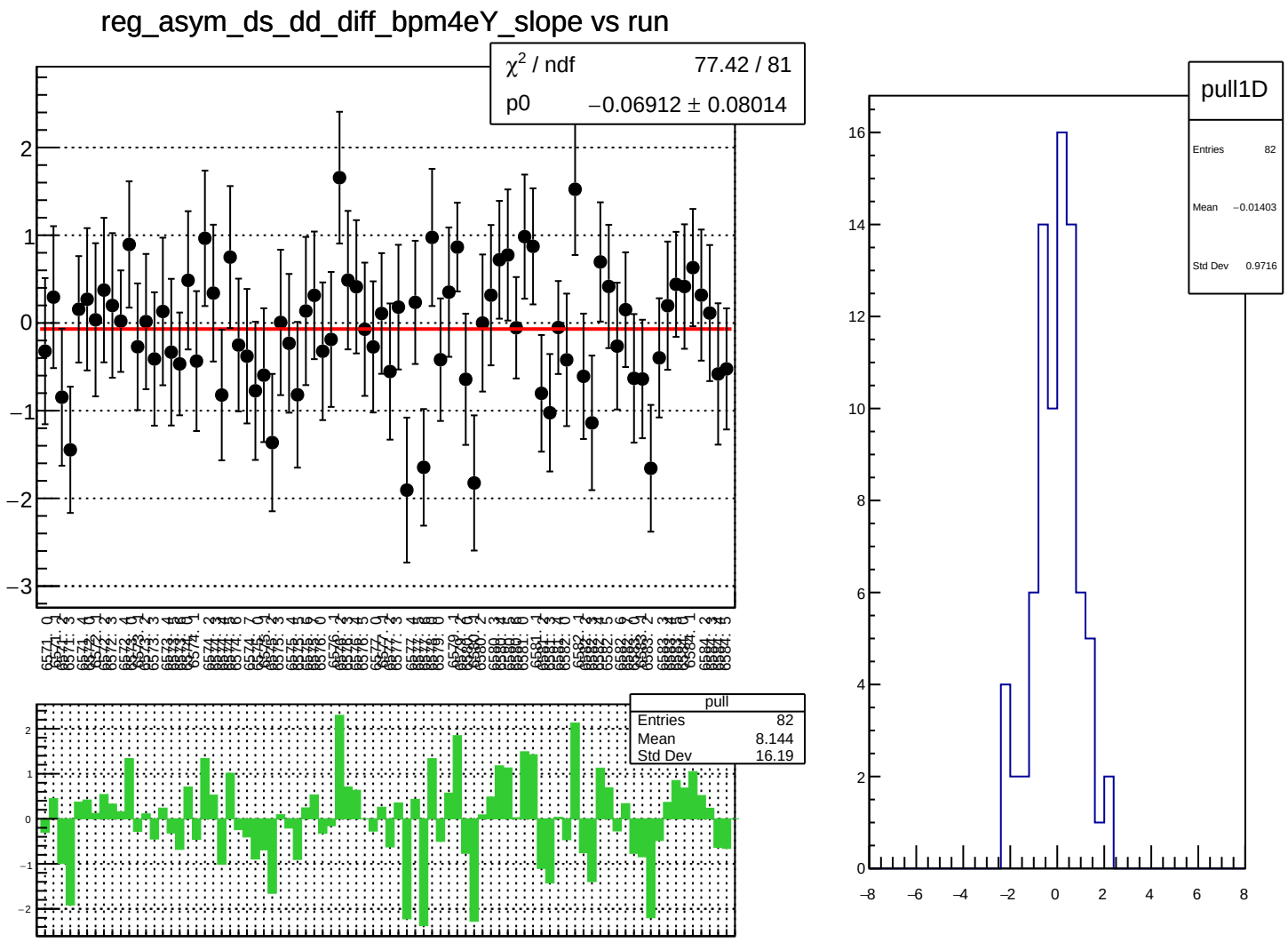

reg_asym_ds_dd_diff_bpm1X_slope vs run
χ² / ndf 80.03 / 81
p0 −0.1611± 0.08085
pull
Entries 82
Mean −1005
Std Dev 1029
pull1D
Entries 82
Mean −0.001976
Std Dev 0.9879

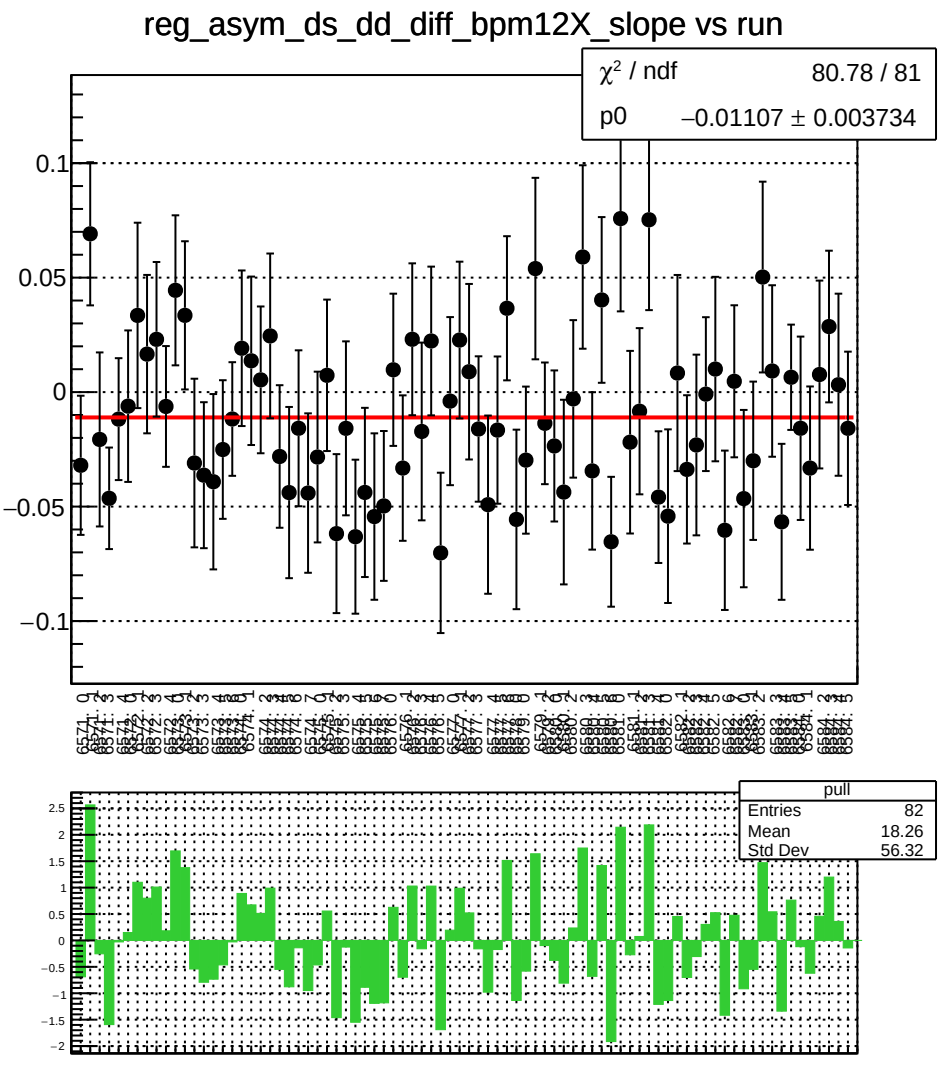

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 81.14 / 81
p0 0.07923 ± 0.06674
pull
Entries 82
Mean 7.824
Std Dev 71.26

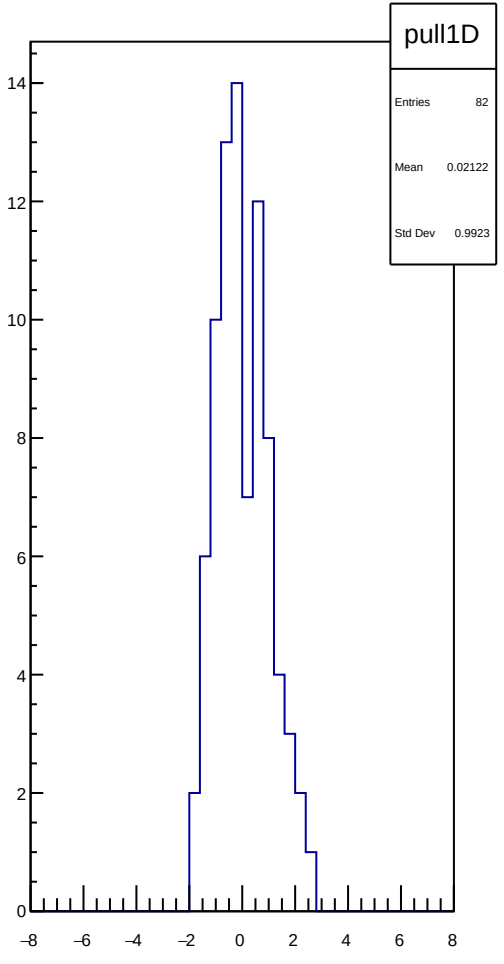

pull1D
Entries 82
Mean 0.003582
Std Dev 0.9948

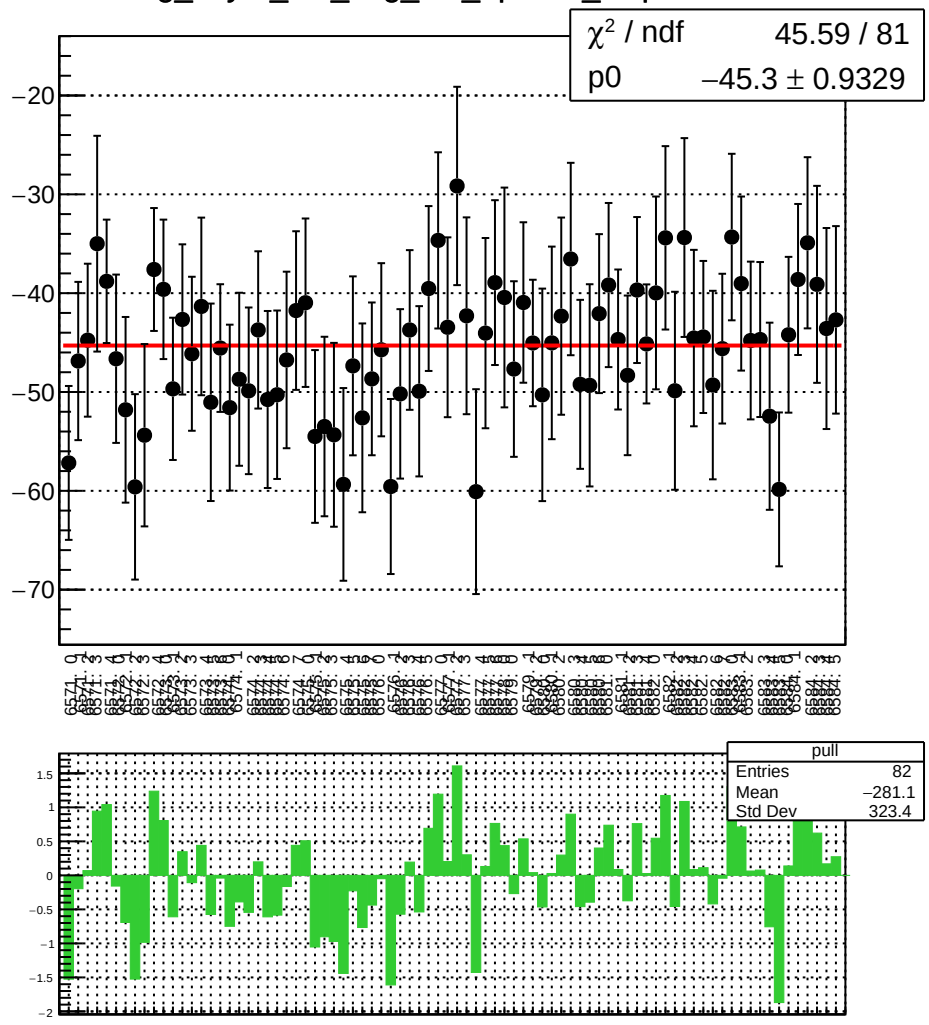

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 78.04 / 81
p0 0.1617 ± 0.08612
pull
Entries 82
Mean 2978
Std Dev 2953

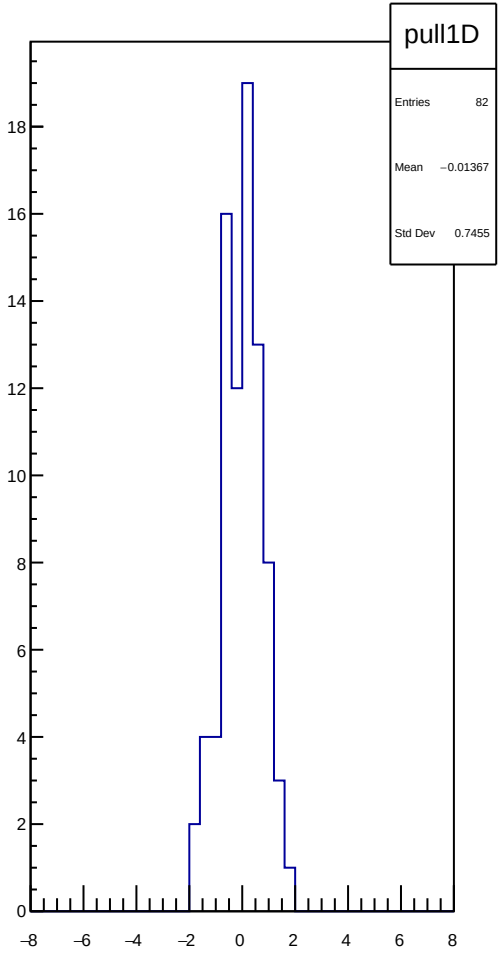

pull1D
Entries 82
Mean −0.0008208
Std Dev 0.9756

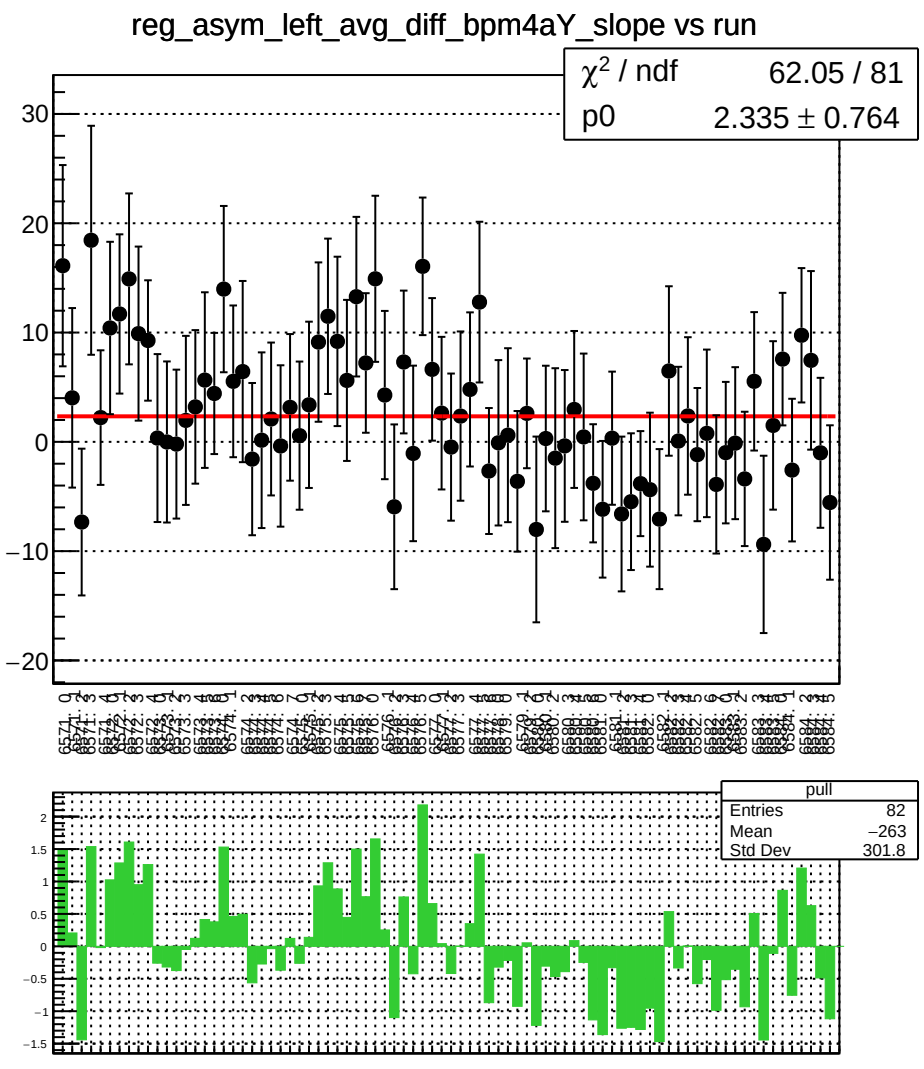

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 77.42 / 81
p0 −0.06912 ± 0.08014
pull
Entries 82
Mean 8.144
Std Dev 16.19
pull1D
Entries 82
Mean −0.01403
Std Dev 0.9716

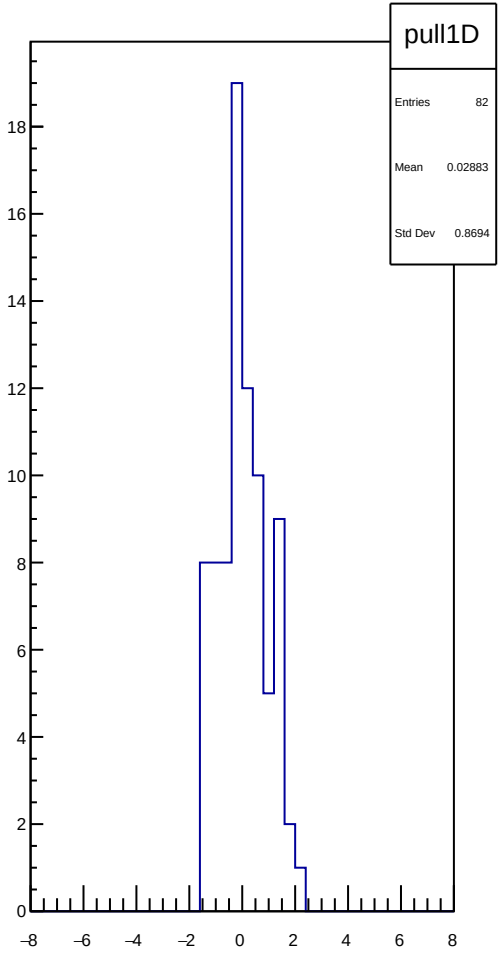

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 80.78 / 81
p0 −0.01107 ± 0.003734
pull
Entries 82
Mean 18.26
Std Dev 56.32

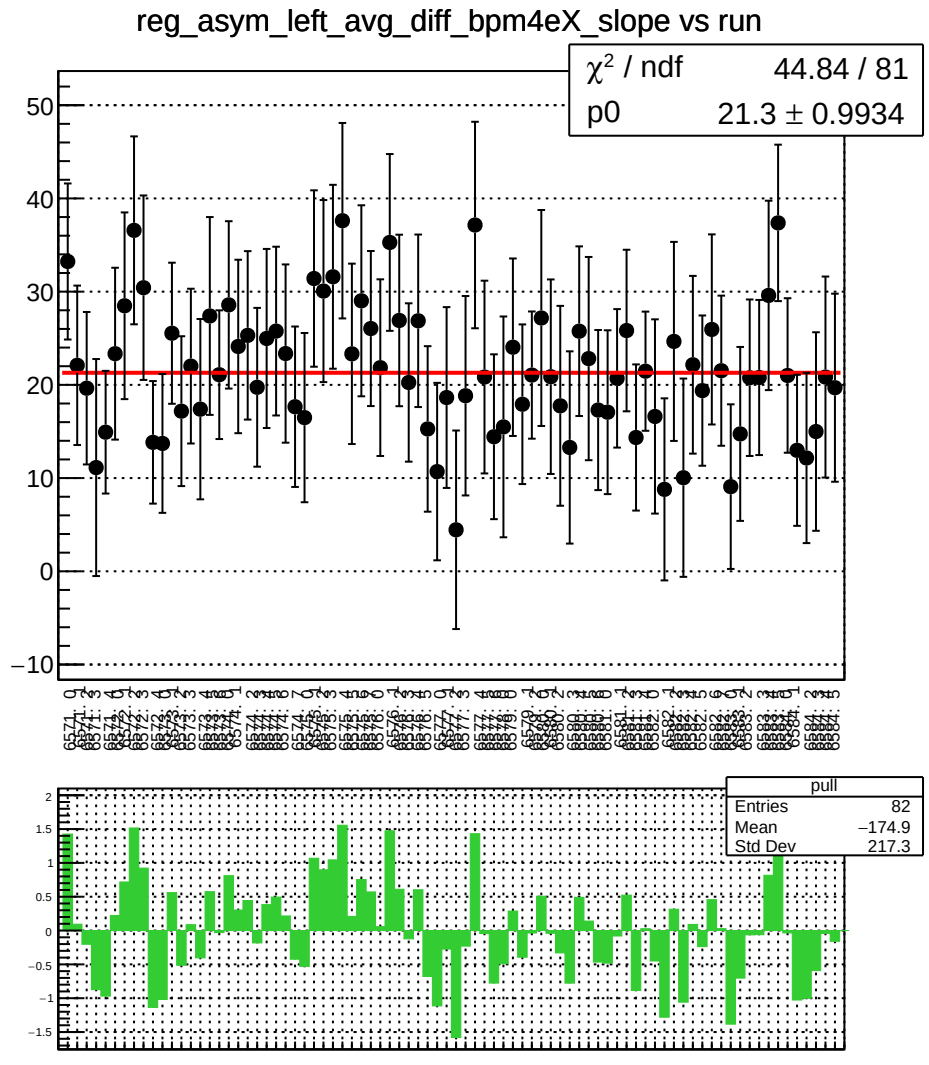

pull1D
Entries 82
Mean 0.02122
Std Dev 0.9923

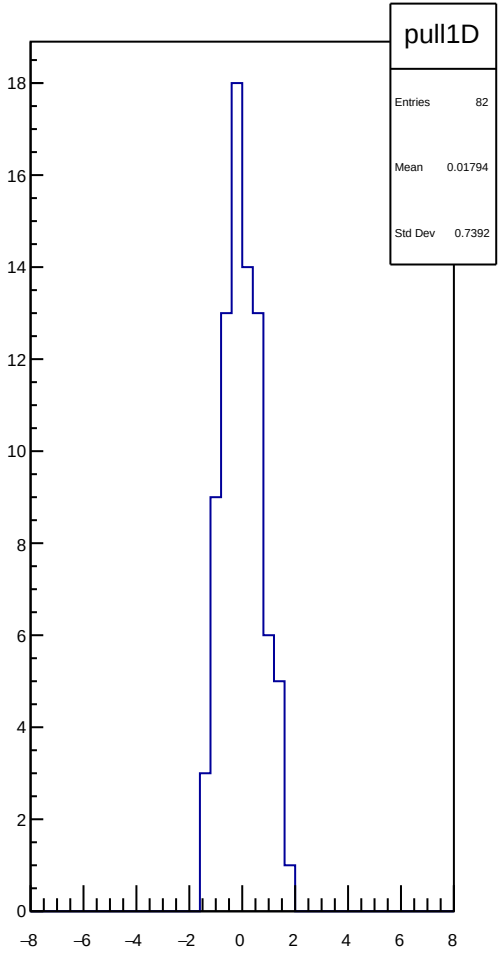

reg_asym_left_avg_diff_bpm1X_slope vs run
χ² / ndf 45.59 / 81
p0 −45.3 ± 0.9329
pull
Entries 82
Mean −281.1
Std Dev 323.4

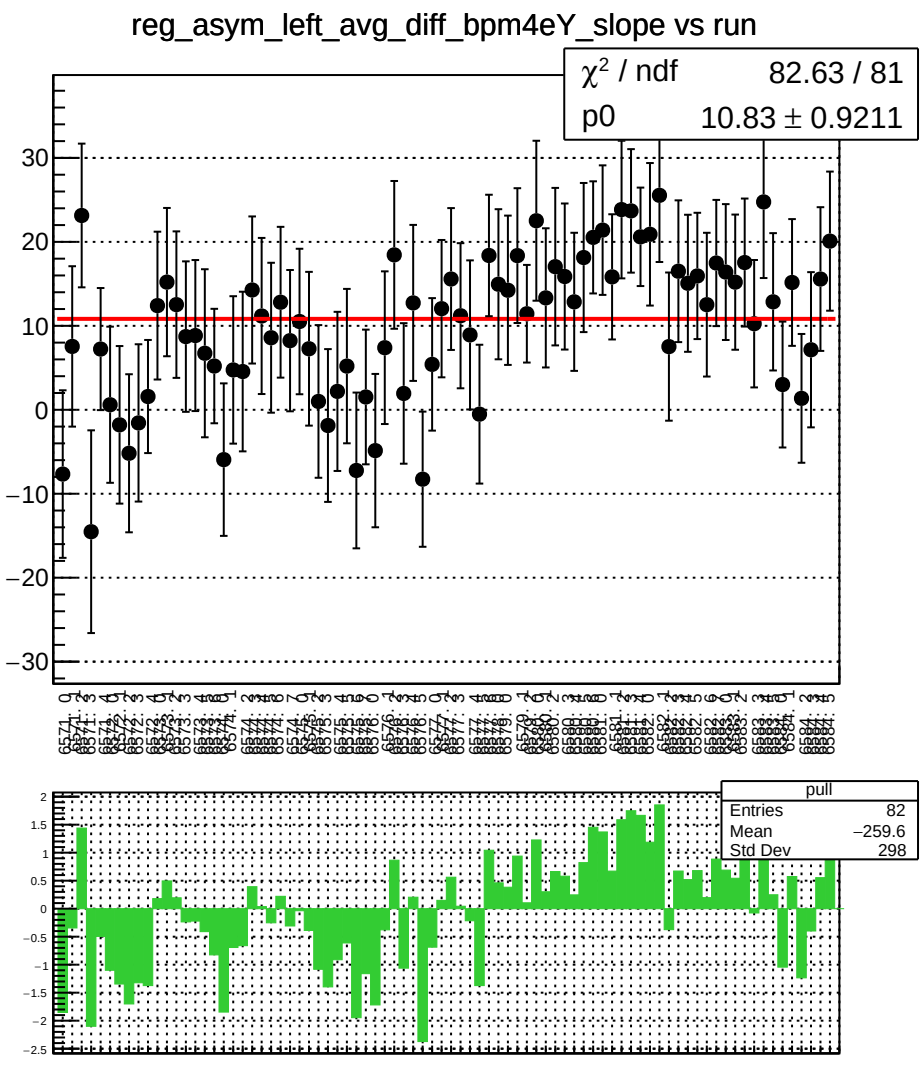

pull1D
Entries 82
Mean −0.01367
Std Dev 0.7455

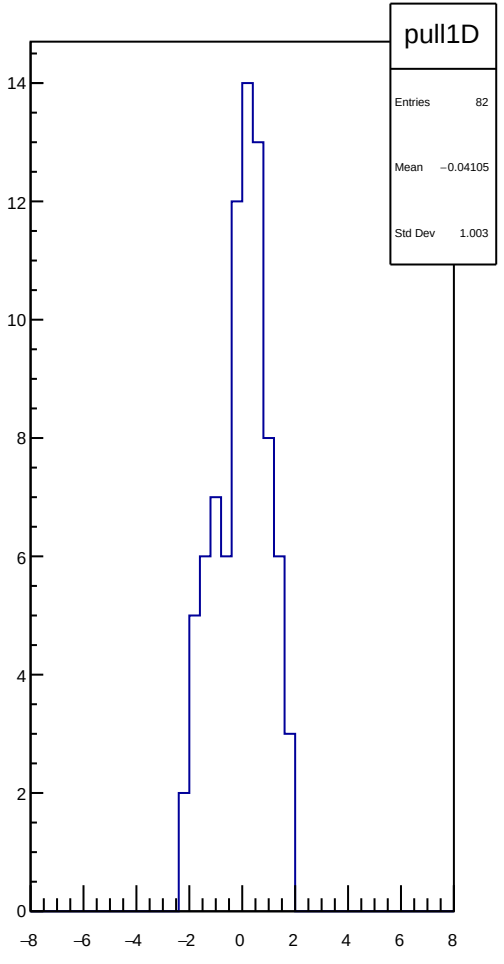

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 62.05 / 81
p0 2.335 ± 0.764
pull
Entries 82
Mean −263
Std Dev 301.8

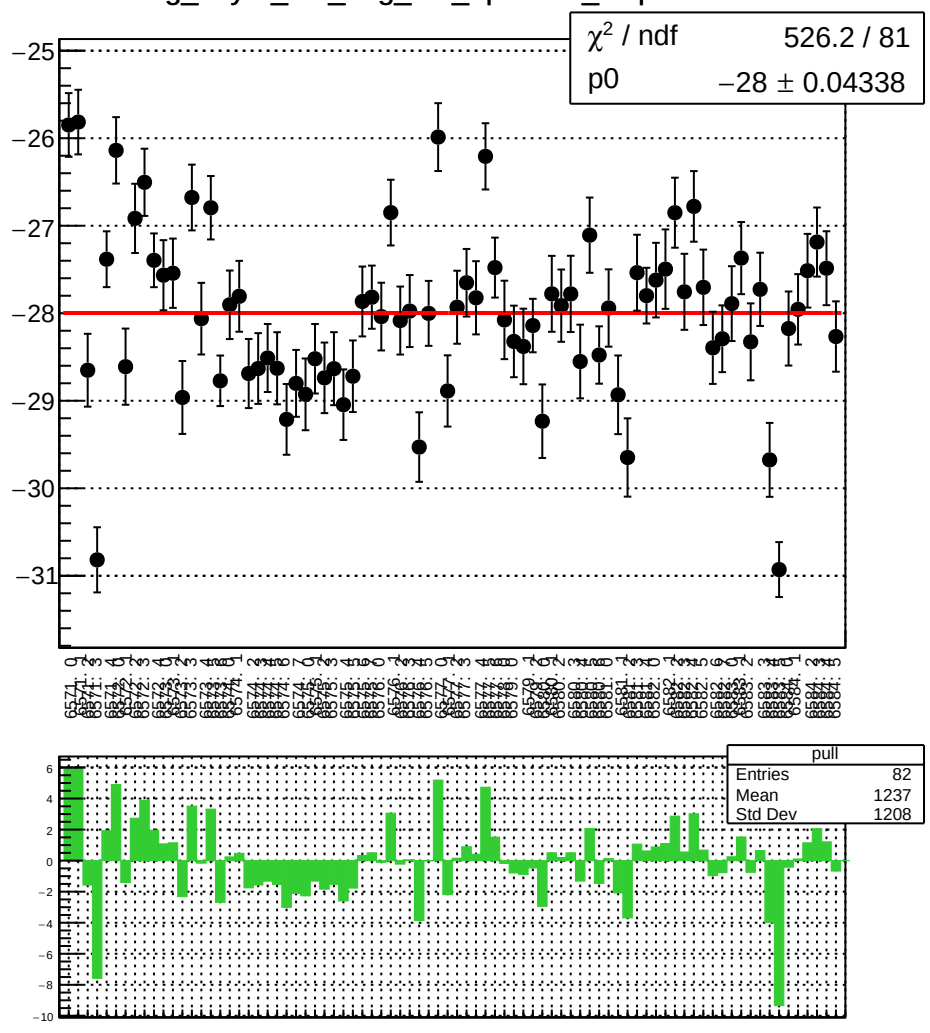

pull1D
Entries 82
Mean 0.02883
Std Dev 0.8694

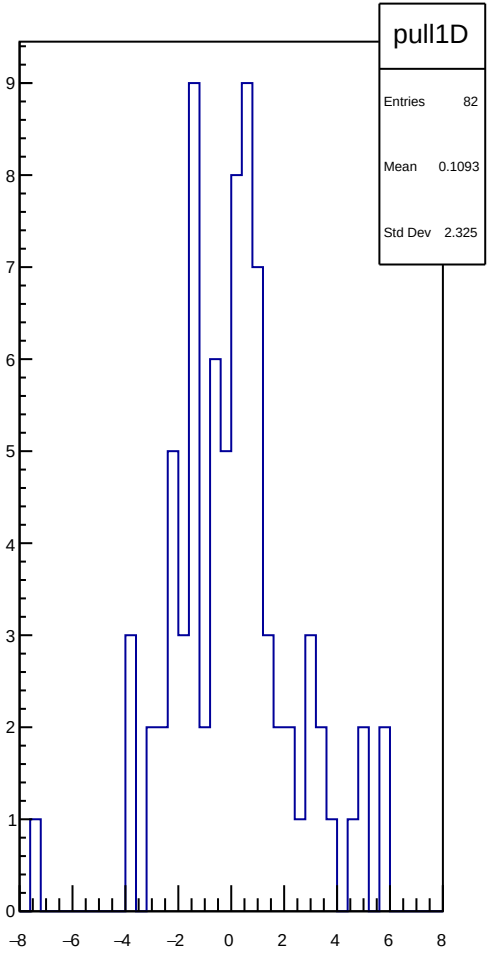

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 44.84 / 81
p0 21.3 ± 0.9934
pull
Entries 82
Mean −174.9
Std Dev 217.3

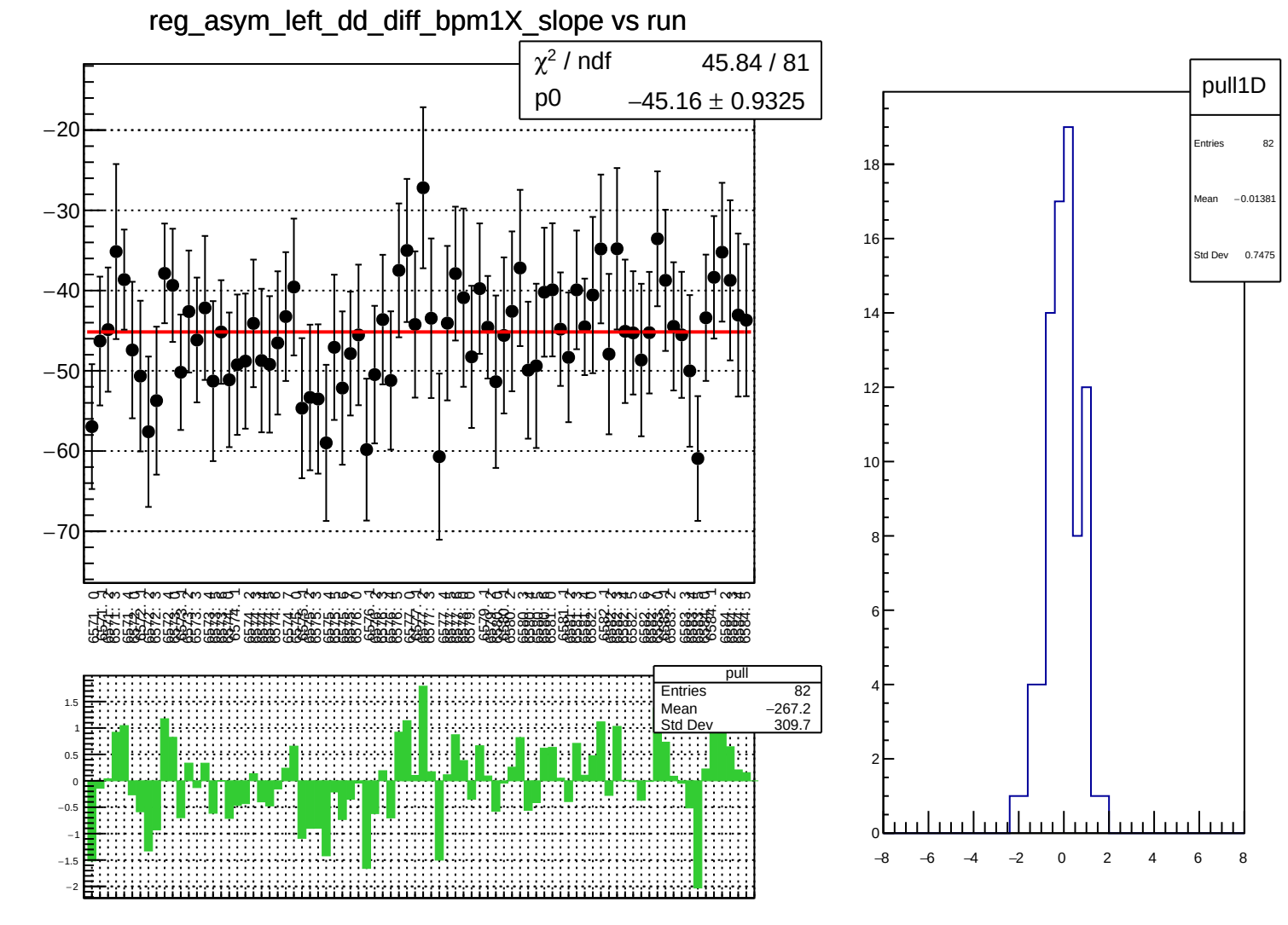

pull1D
Entries 82
Mean 0.01794
Std Dev 0.7392

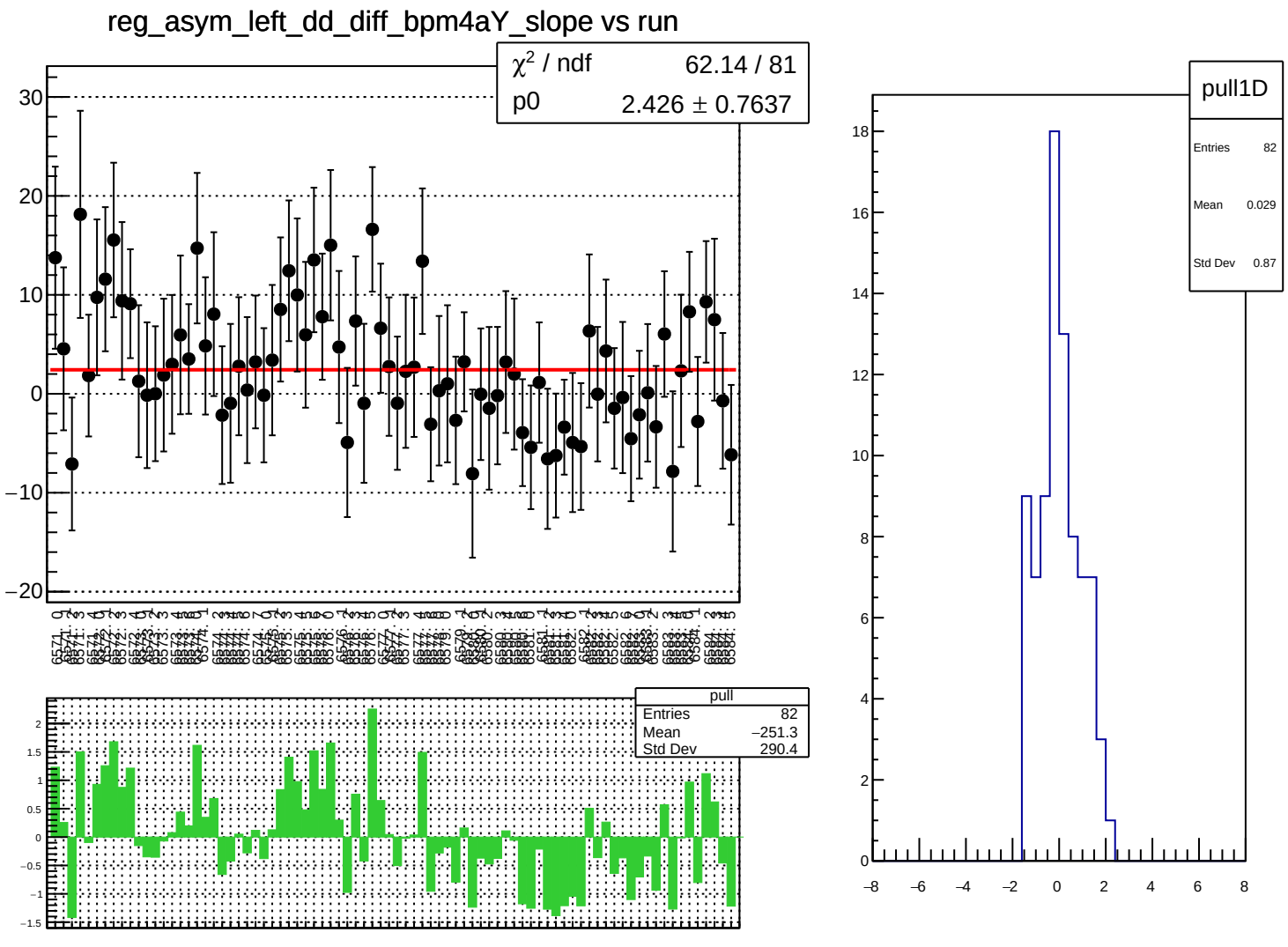

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 82.63 / 81
p0 10.83 ± 0.9211
pull
Entries 82
Mean −259.6
Std Dev 298

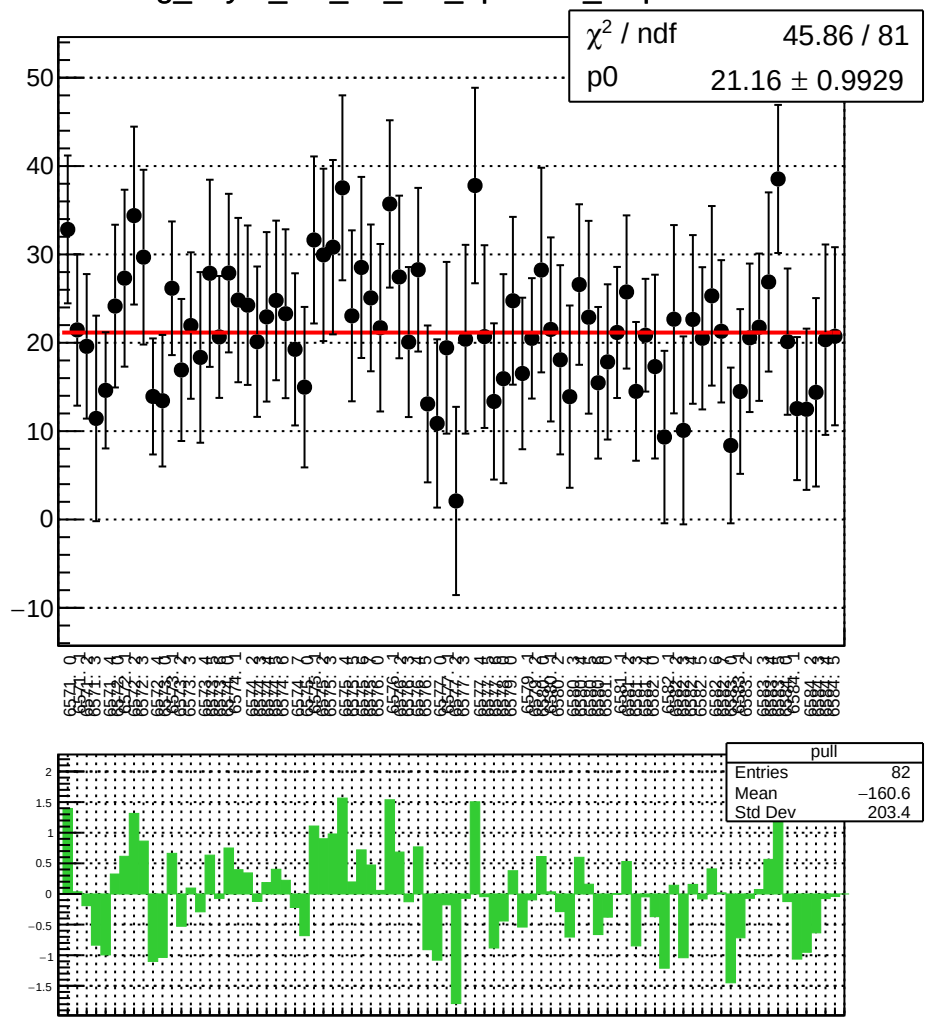

pull1D
Entries 82
Mean −0.04105
Std Dev 1.003

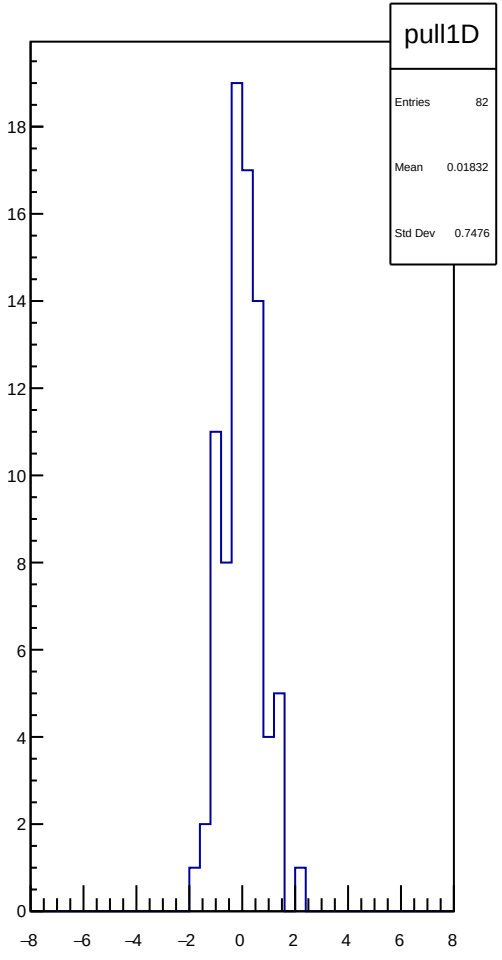

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 526.2 / 81
p0 −28 ± 0.04338
pull
Entries 82
Mean 1237
Std Dev 1208

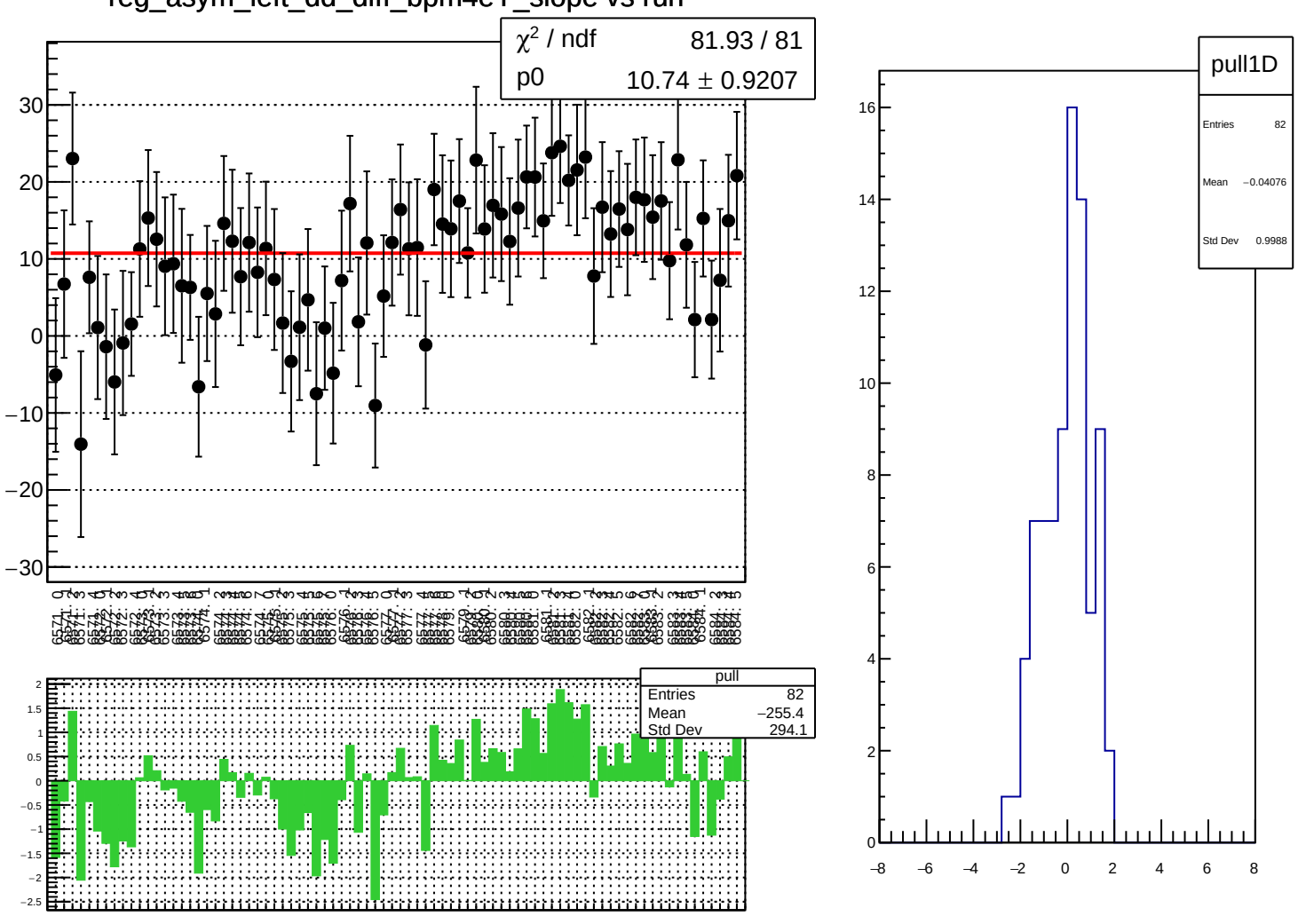

pull1D
Entries 82
Mean 0.1093
Std Dev 2.325

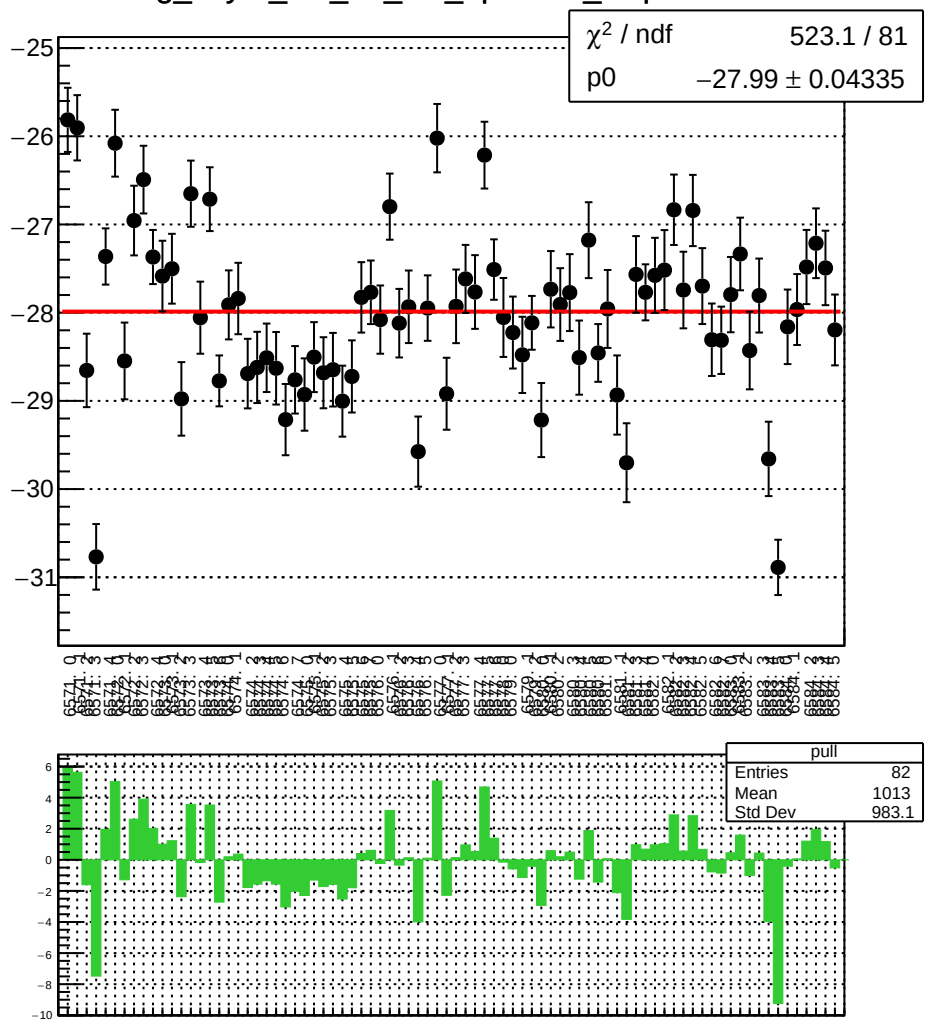

reg_asym_left_dd_diff_bpm1X_slope vs run
χ² / ndf 45.84 / 81
p0 −45.16 ± 0.9325
pull
Entries 82
Mean −267.2
Std Dev 309.7
pull1D
Entries 82
Mean −0.01381
Std Dev 0.7475

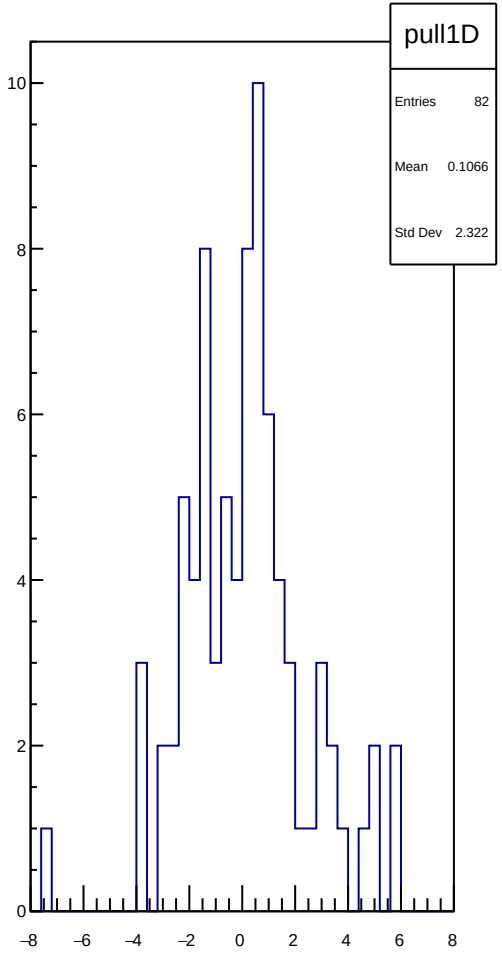

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 62.14 / 81
p0 2.426 ± 0.7637
pull
Entries 82
Mean −251.3
Std Dev 290.4
pull1D
Entries 82
Mean 0.029
Std Dev 0.87

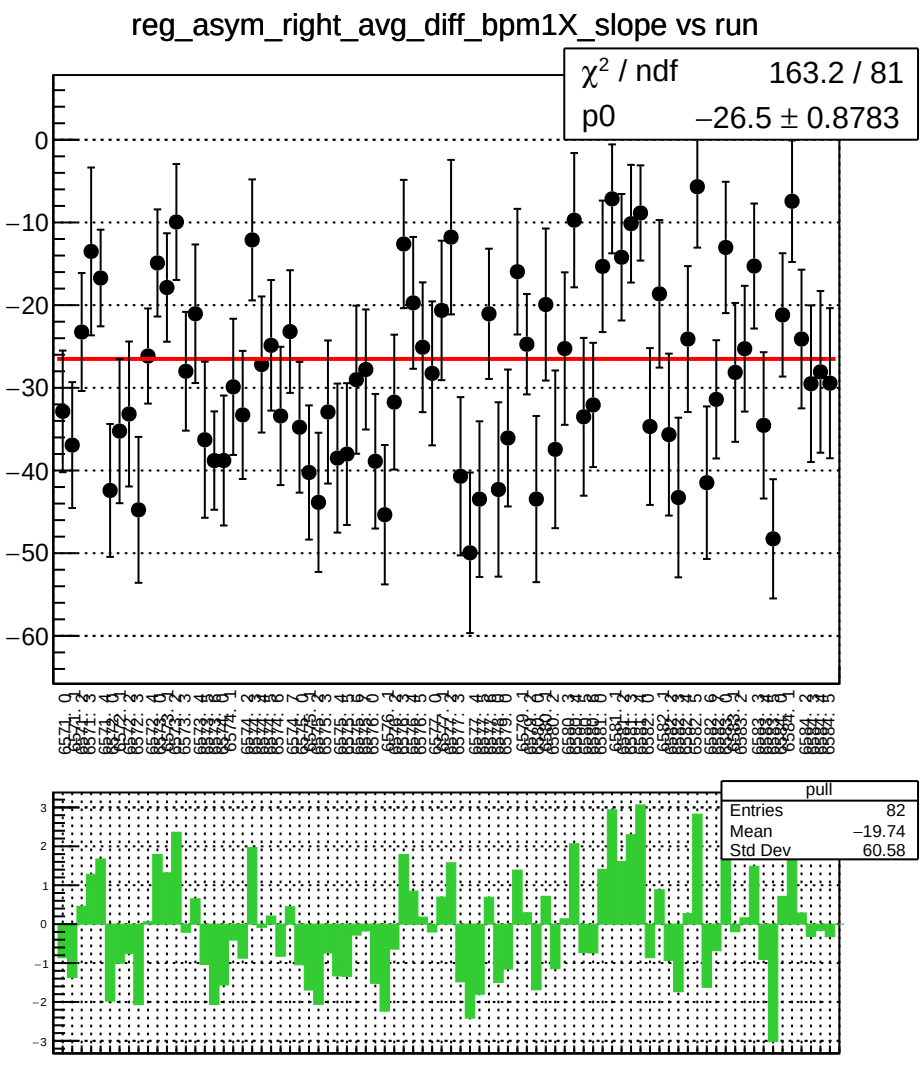

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 45.86 / 81
p0 21.16 ± 0.9929
pull
Entries 82
Mean −160.6
Std Dev 203.4

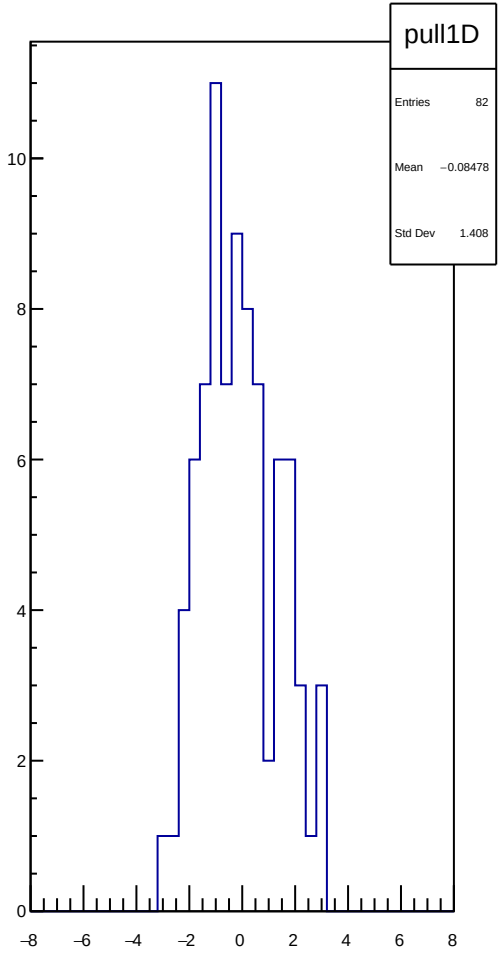

pull1D
Entries 82
Mean 0.01832
Std Dev 0.7476

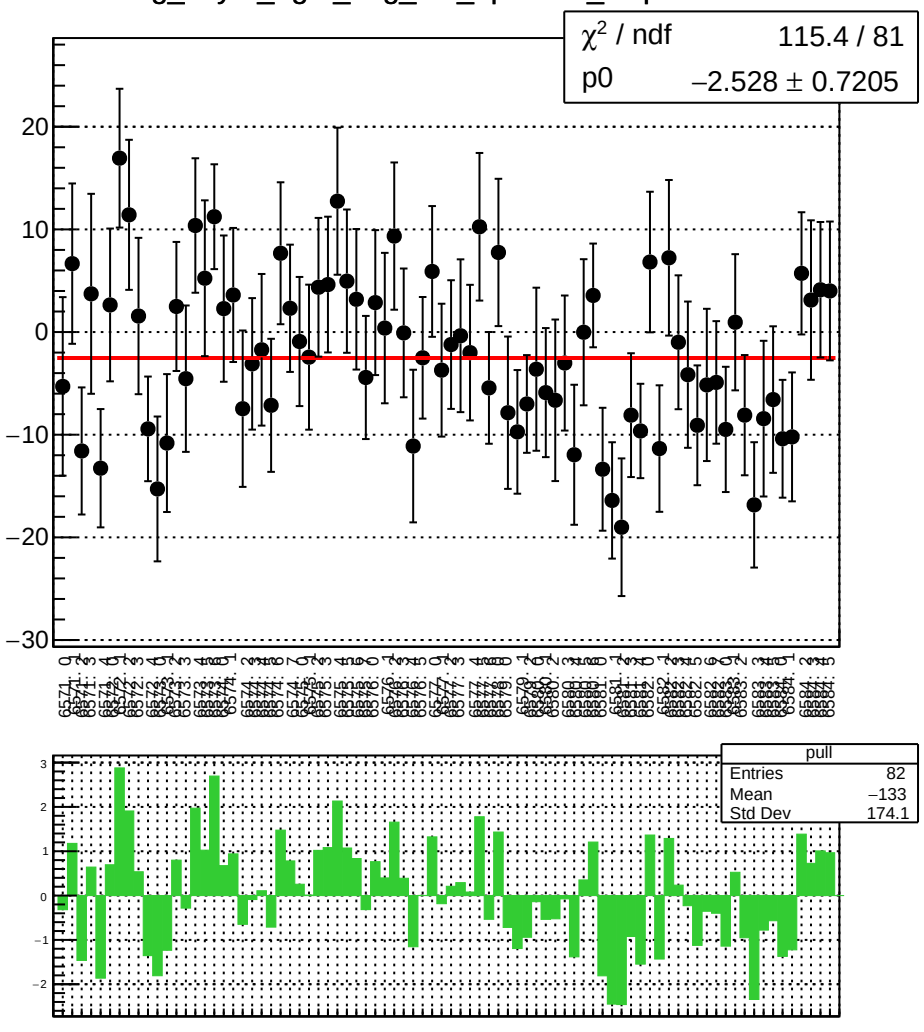

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 81.93 / 81
p0 10.74 ± 0.9207
pull
Entries 82
Mean −255.4
Std Dev 294.1
pull1D
Entries 82
Mean −0.04076
Std Dev 0.9988

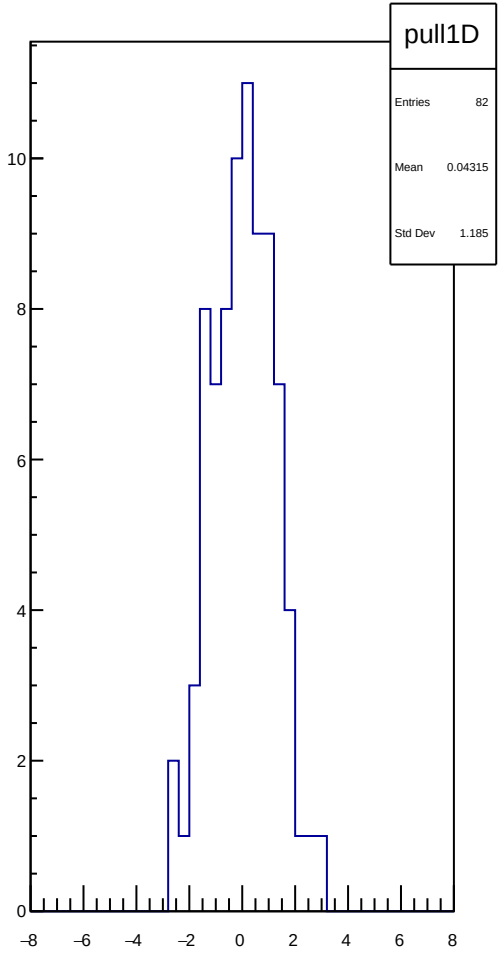

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 523.1 / 81
p0 −27.99 ± 0.04335
pull
Entries 82
Mean 1013
Std Dev 983.1

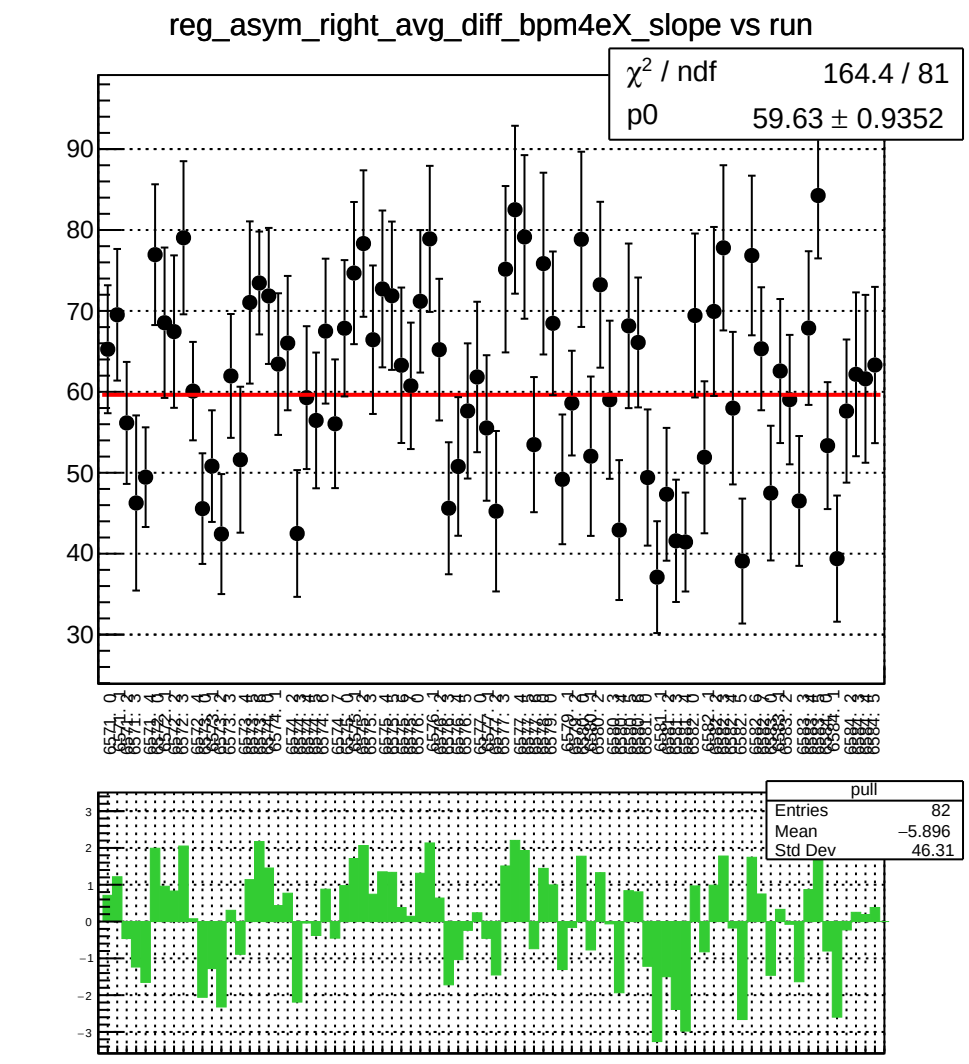

pull1D
Entries 82
Mean 0.1066
Std Dev 2.322

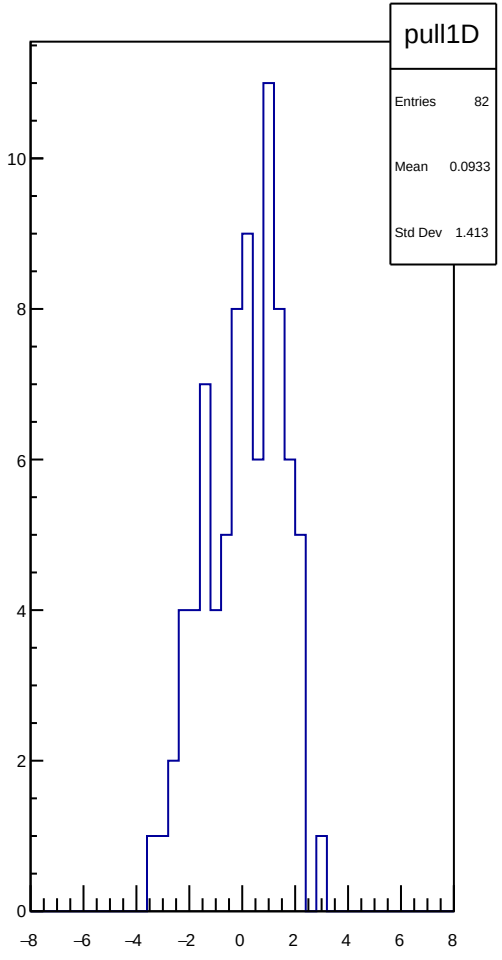

reg_asym_right_avg_diff_bpm1X_slope vs run
χ² / ndf 163.2 / 81
p0 −26.5 ± 0.8783
pull
Entries 82
Mean −19.74
Std Dev 60.58

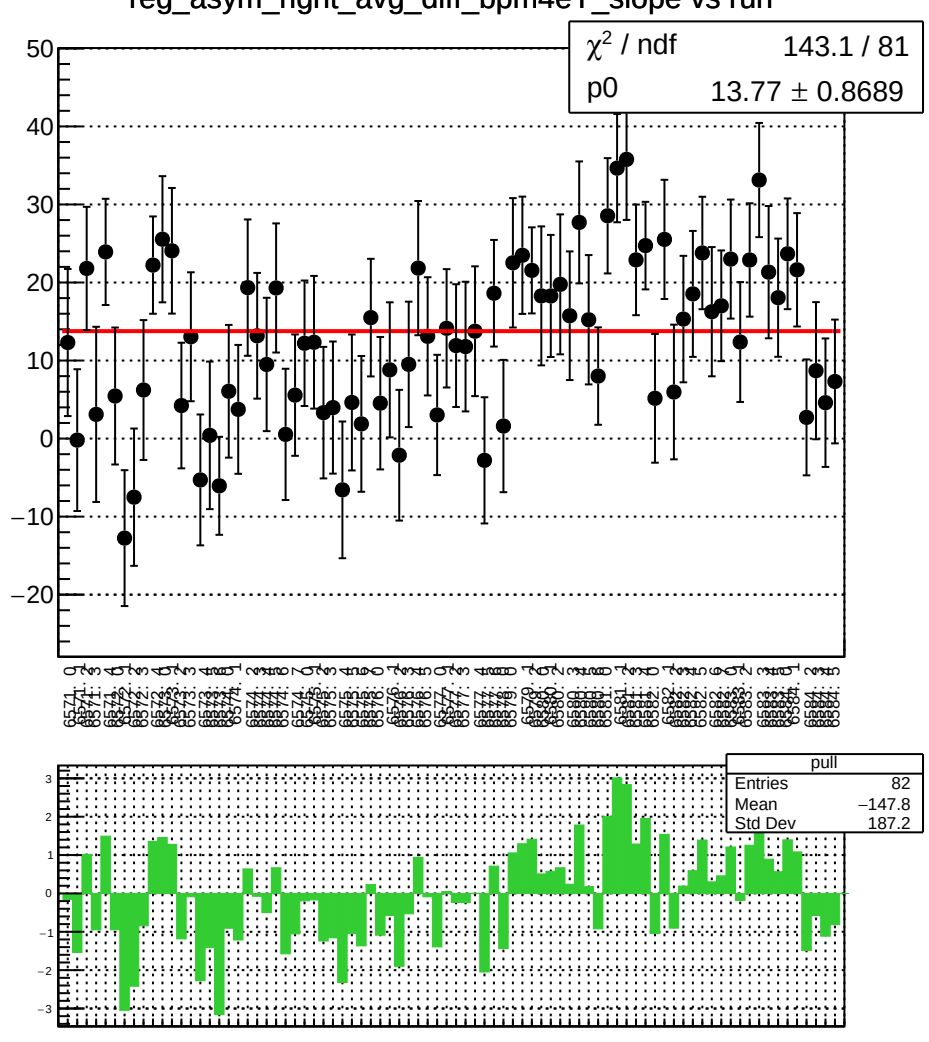

pull1D
Entries 82
Mean −0.08478
Std Dev 1.408

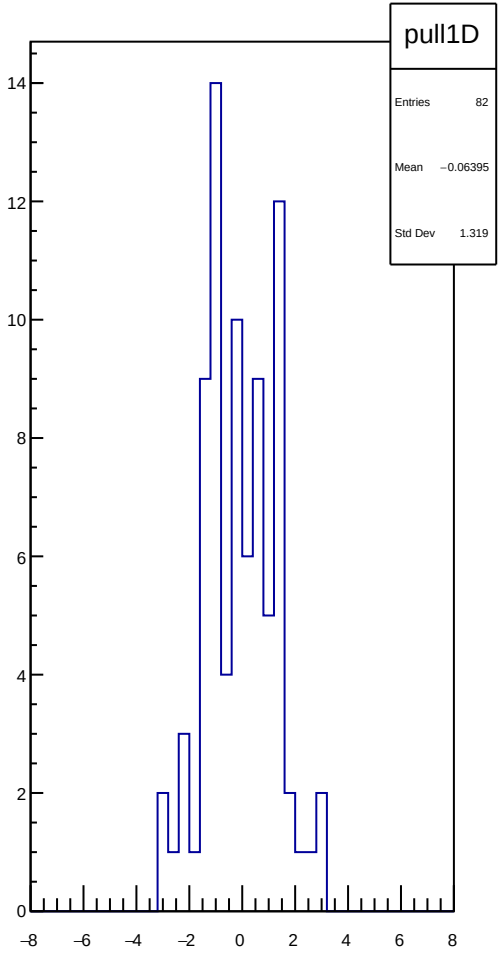

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 115.4 / 81
p0 −2.528 ± 0.7205
pull
Entries 82
Mean −133
Std Dev 174.1

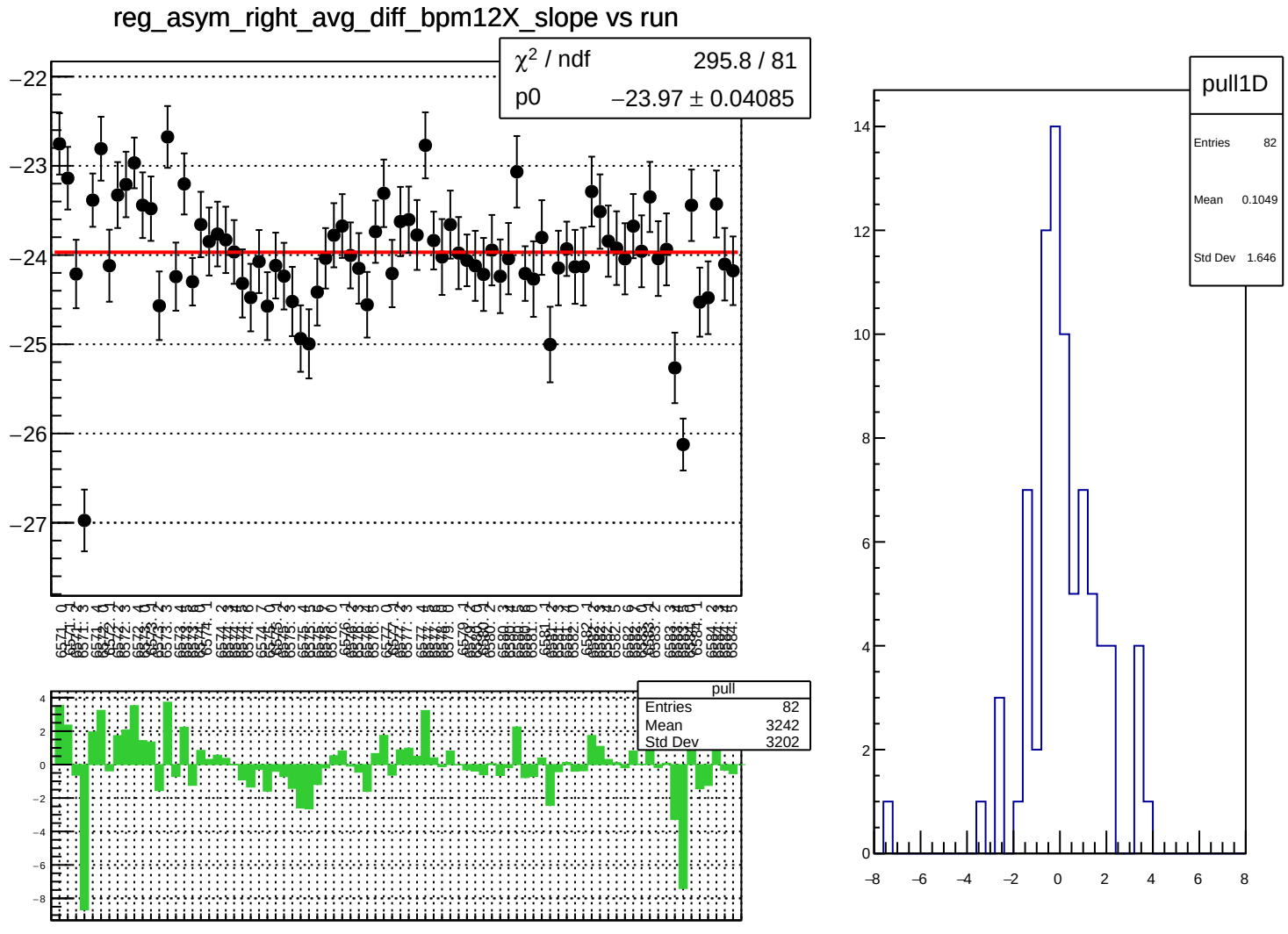

pull1D
Entries 82
Mean 0.04315
Std Dev 1.185

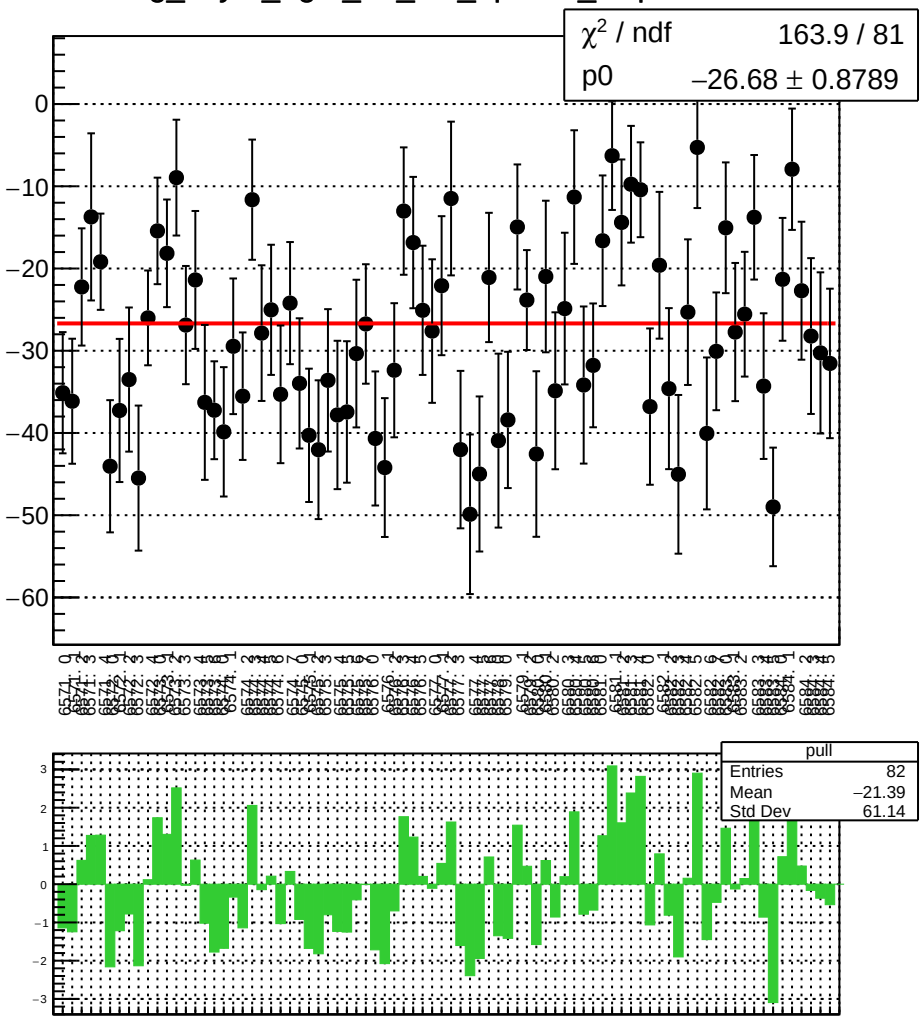

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 164.4 / 81
p0 59.63 ± 0.9352
pull
Entries 82
Mean −5.896
Std Dev 46.31

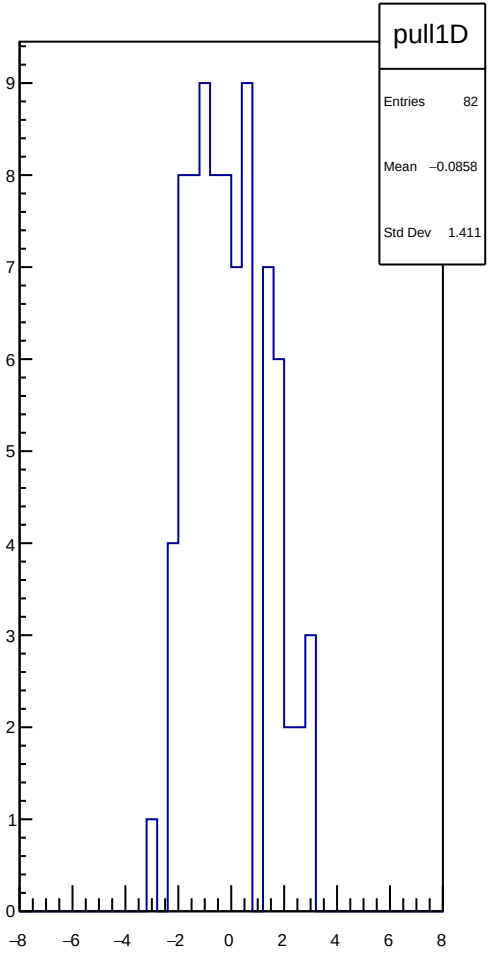

pull1D
Entries 82
Mean 0.0933
Std Dev 1.413

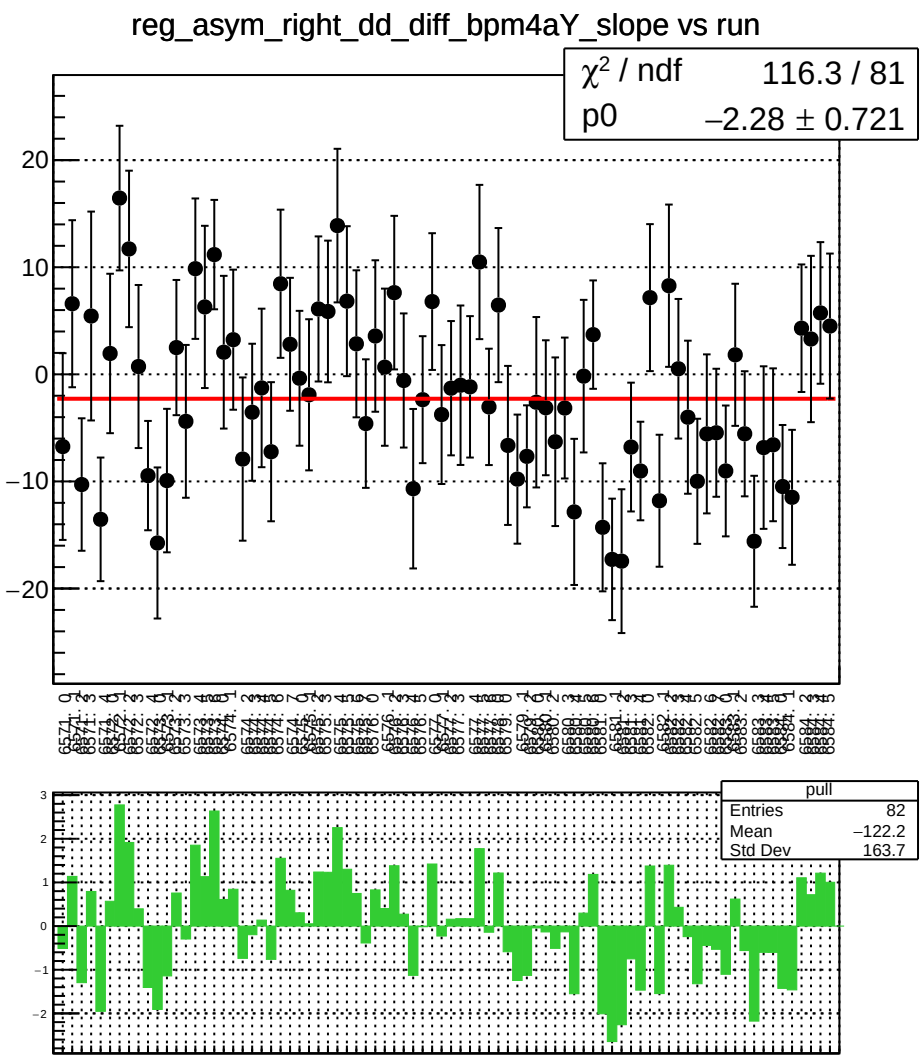

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 143.1 / 81
p0 13.77 ± 0.8689
pull
Entries 82
Mean −147.8
Std Dev 187.2

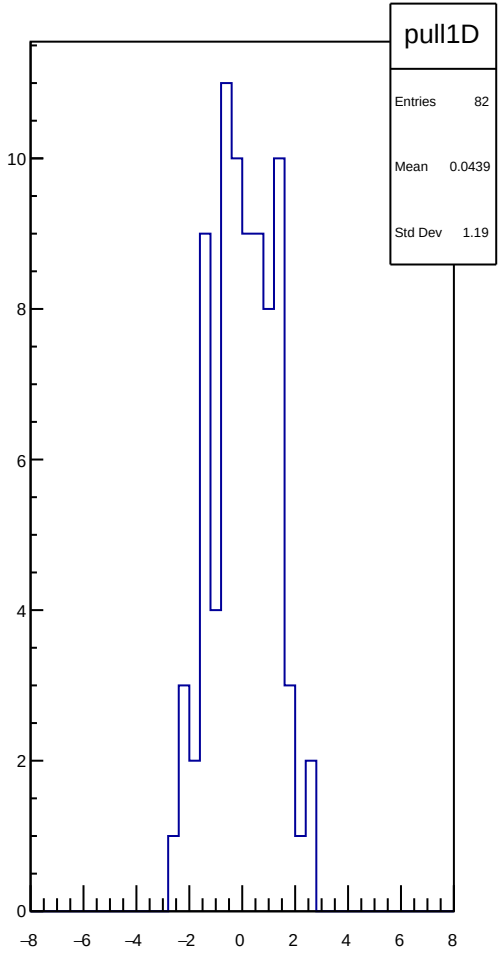

pull1D
Entries 82
Mean −0.06395
Std Dev 1.319

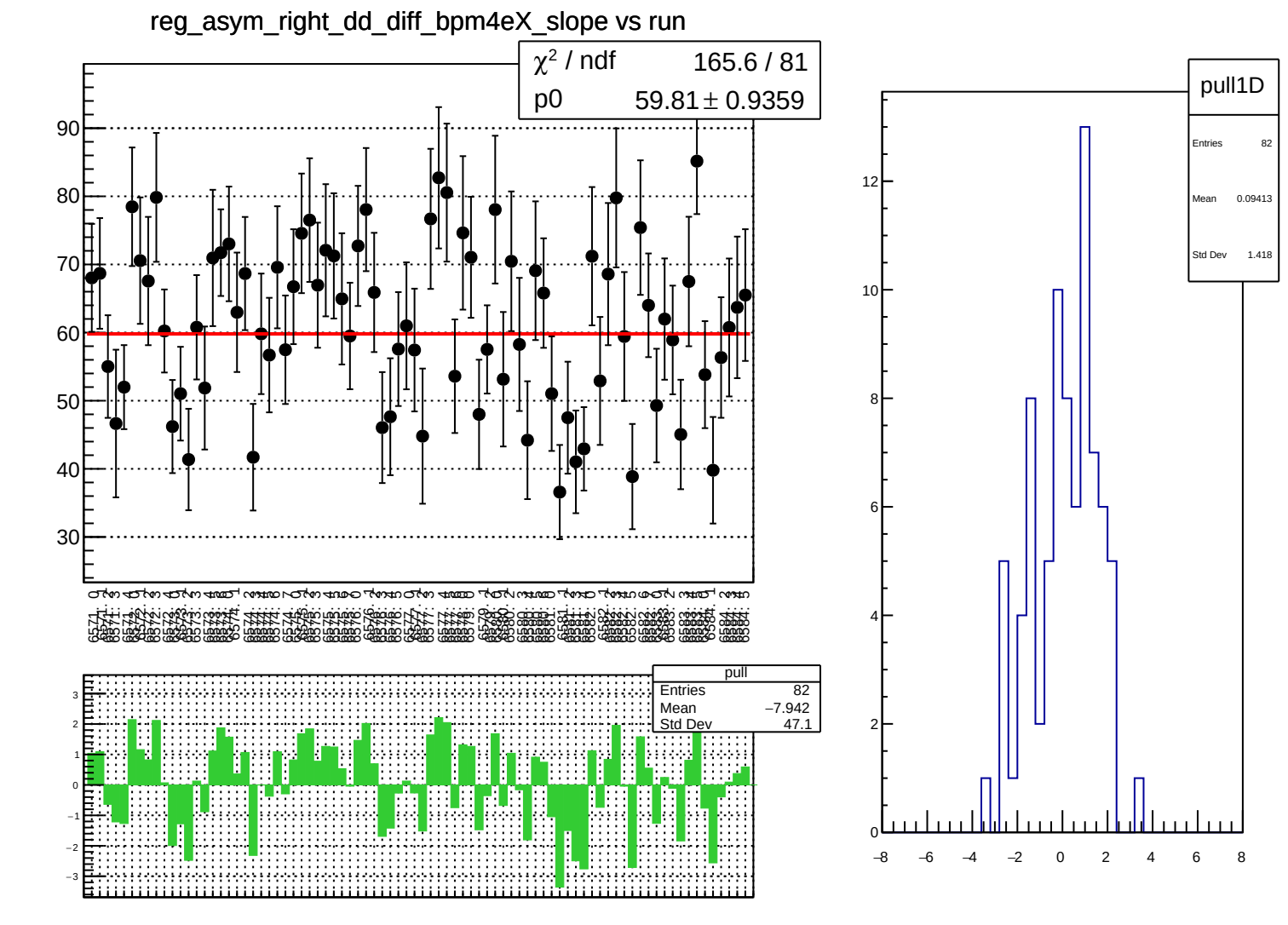

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 295.8 / 81
p0 −23.97 ± 0.04085
−22
−23
−24
−25
−26
−27
pull
Entries 82
Mean 3242
Std Dev 3202
pull1D
Entries 82
Mean 0.1049
Std Dev 1.646

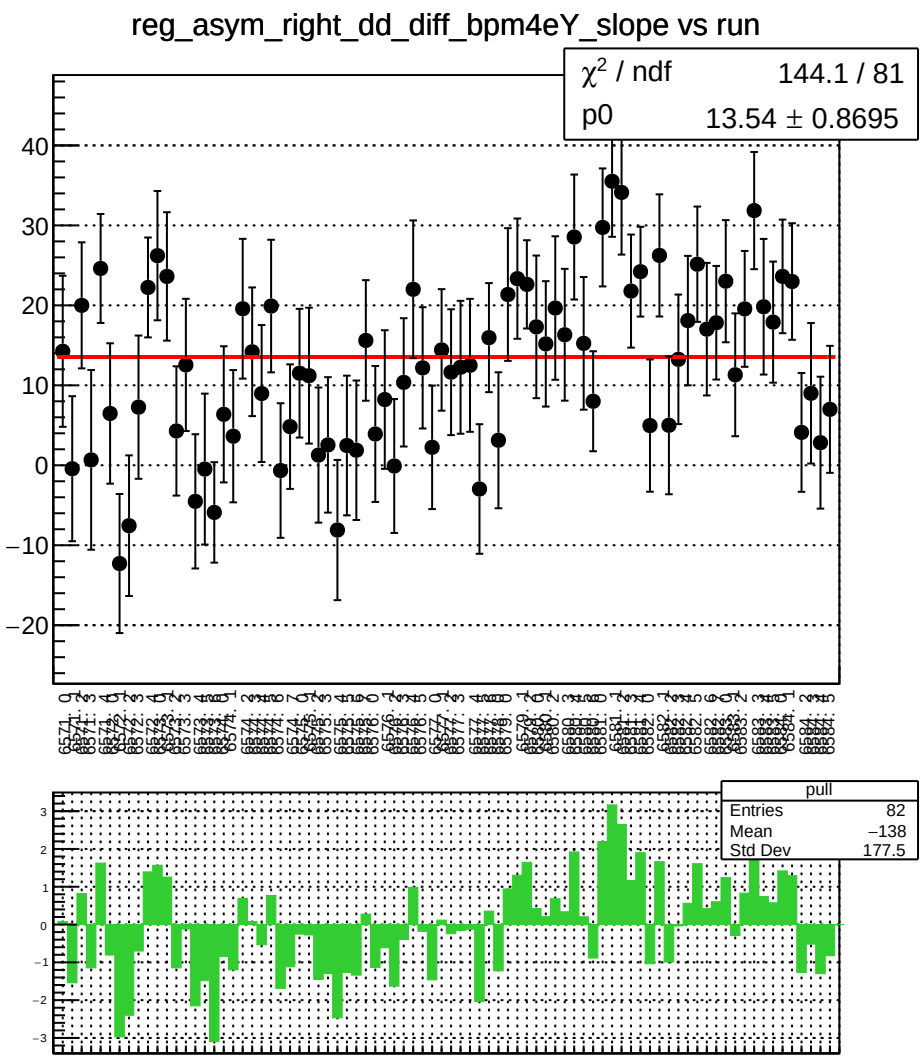

reg_asym_right_dd_diff_bpm1X_slope vs run
χ² / ndf 163.9 / 81
p0 −26.68 ± 0.8789
pull
Entries 82
Mean −21.39
Std Dev 61.14

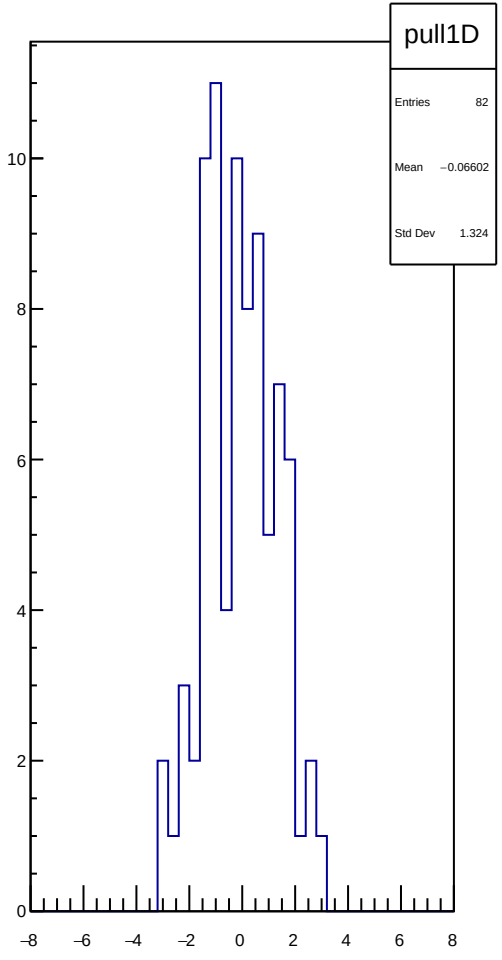

pull1D
Entries 82
Mean −0.0858
Std Dev 1.411

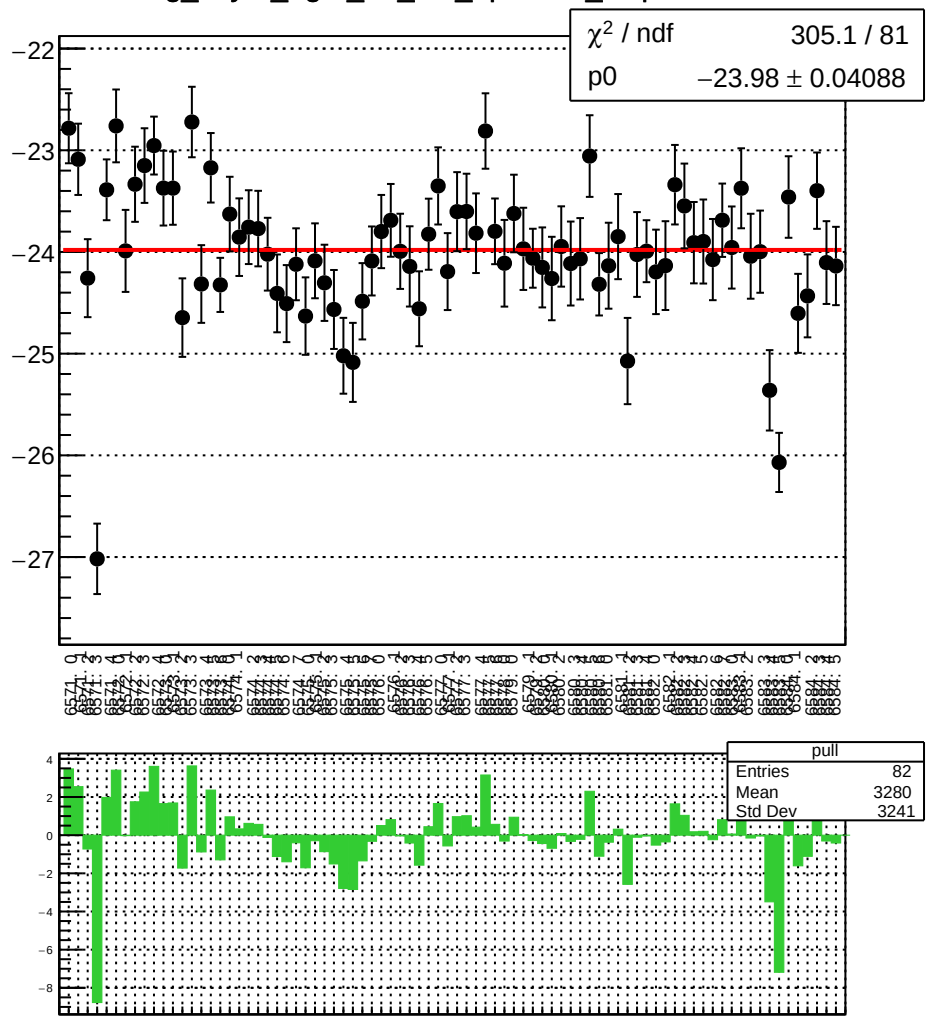

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 116.3 / 81
p0 −2.28 ± 0.721
20
10
0
−10
−20
pull
Entries 82
Mean −122.2
Std Dev 163.7
3
2
1
0
−1
−2

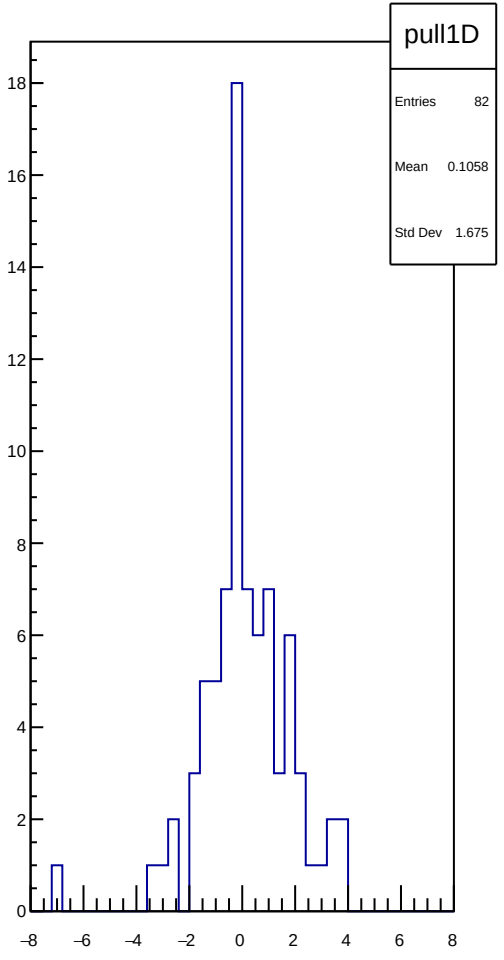

pull1D
Entries 82
Mean 0.0439
Std Dev 1.19
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

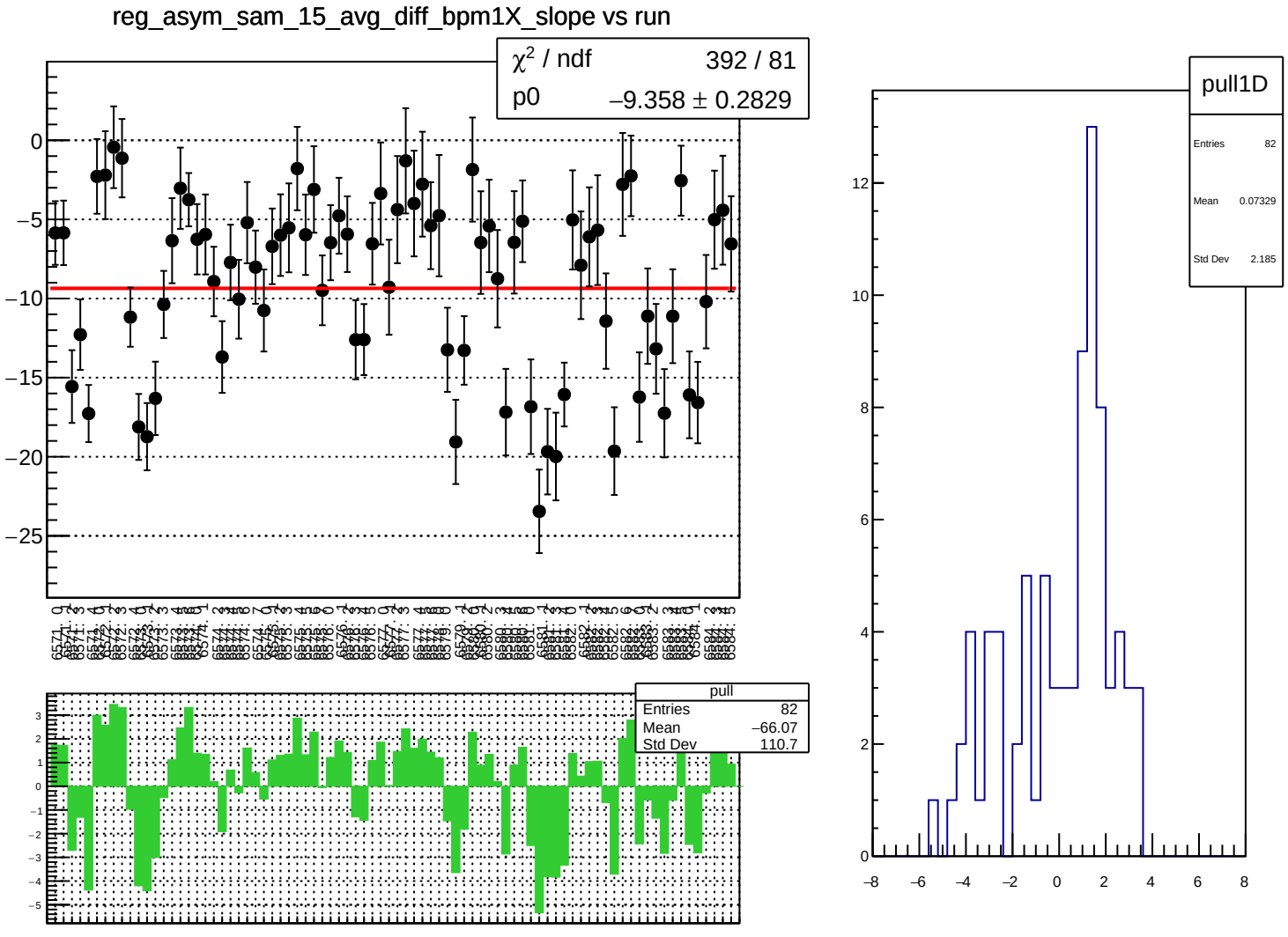

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 165.6 / 81
p0 59.81 ± 0.9359
pull
Entries 82
Mean −7.942
Std Dev 47.1
pull1D
Entries 82
Mean 0.09413
Std Dev 1.418

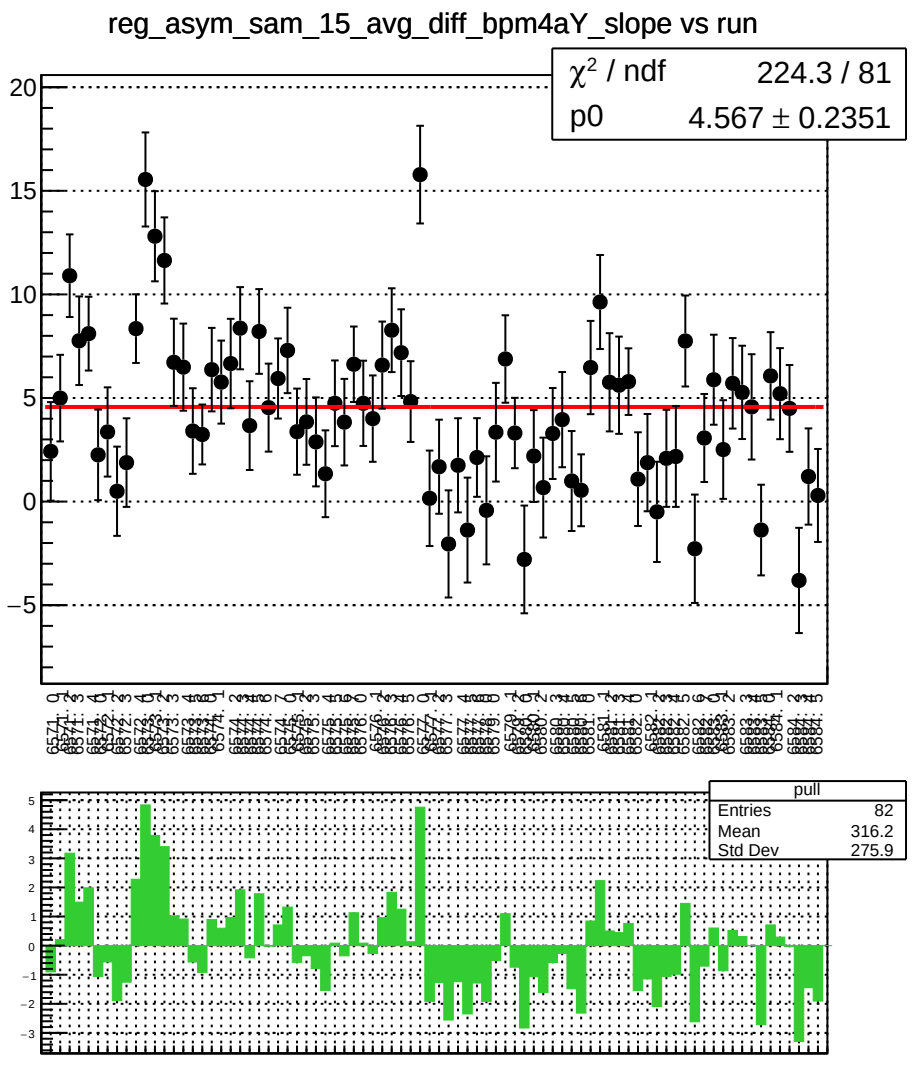

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 144.1 / 81
p0 13.54 ± 0.8695
pull
Entries 82
Mean −138
Std Dev 177.5

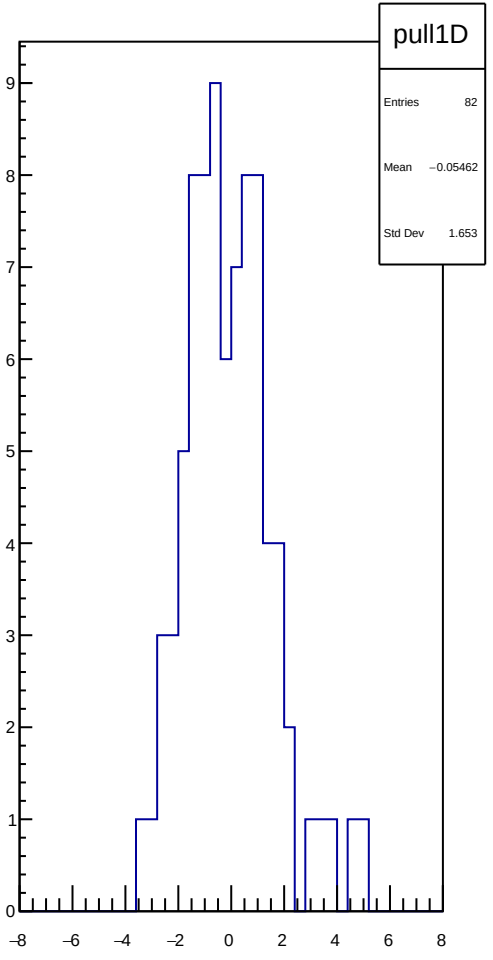

pull1D
Entries 82
Mean −0.06602
Std Dev 1.324

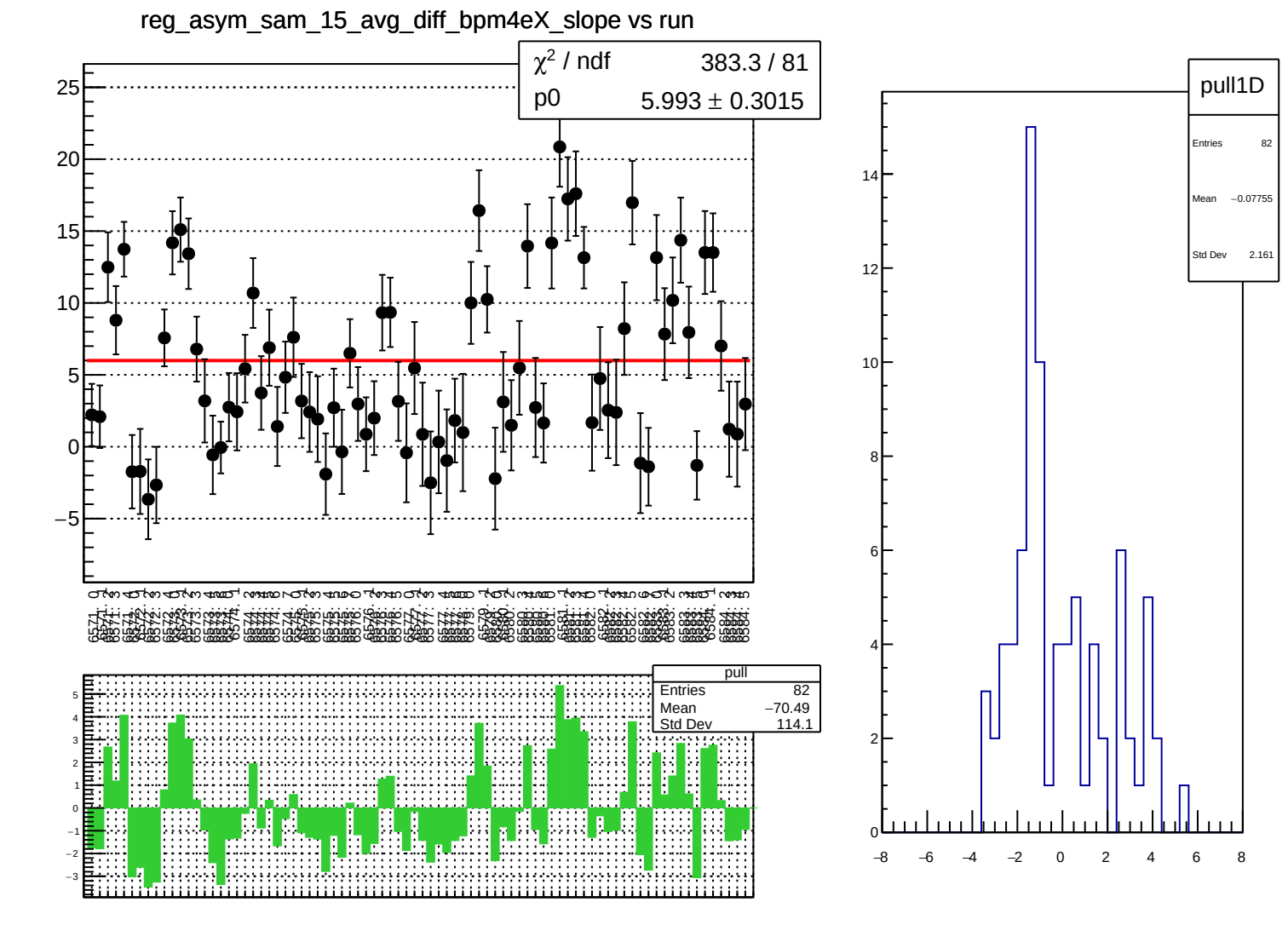

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 305.1 / 81
p0 −23.98 ± 0.04088
pull
Entries 82
Mean 3280
Std Dev 3241

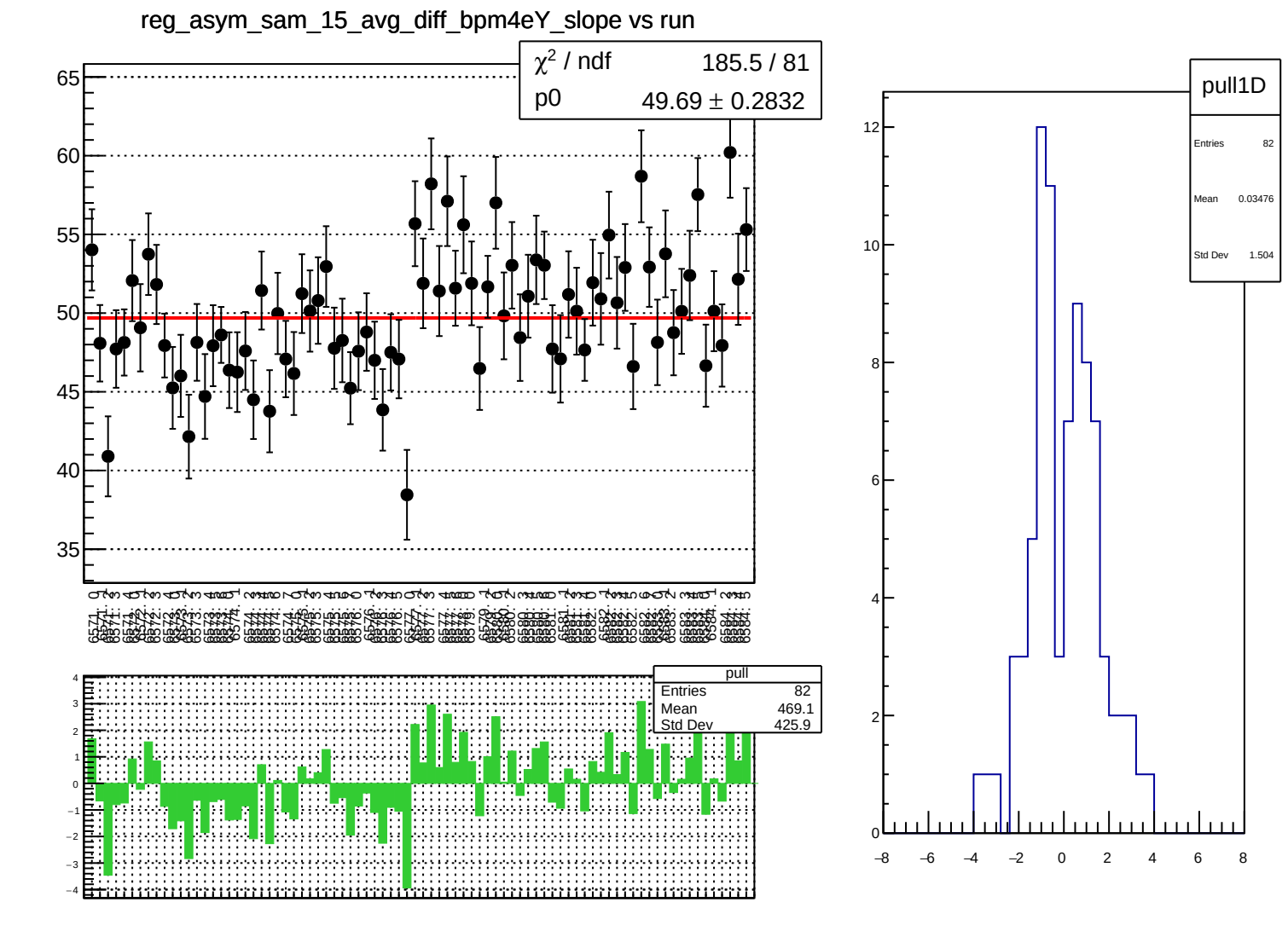

pull1D
Entries 82
Mean 0.1058
Std Dev 1.675

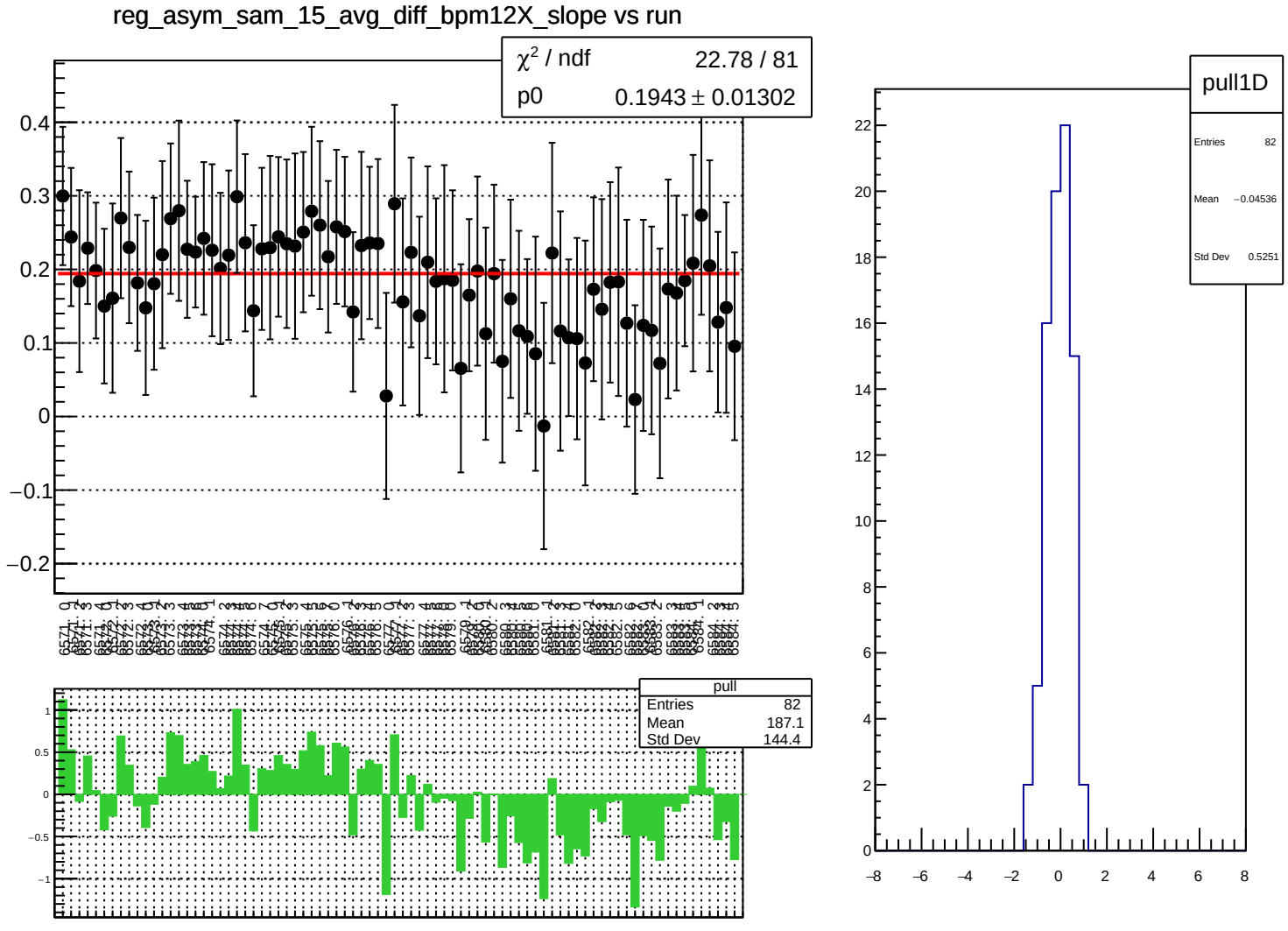

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 392 / 81
p0 −9.358 ± 0.2829
pull
Entries 82
Mean −66.07
Std Dev 110.7
pull1D
Entries 82
Mean 0.07329
Std Dev 2.185

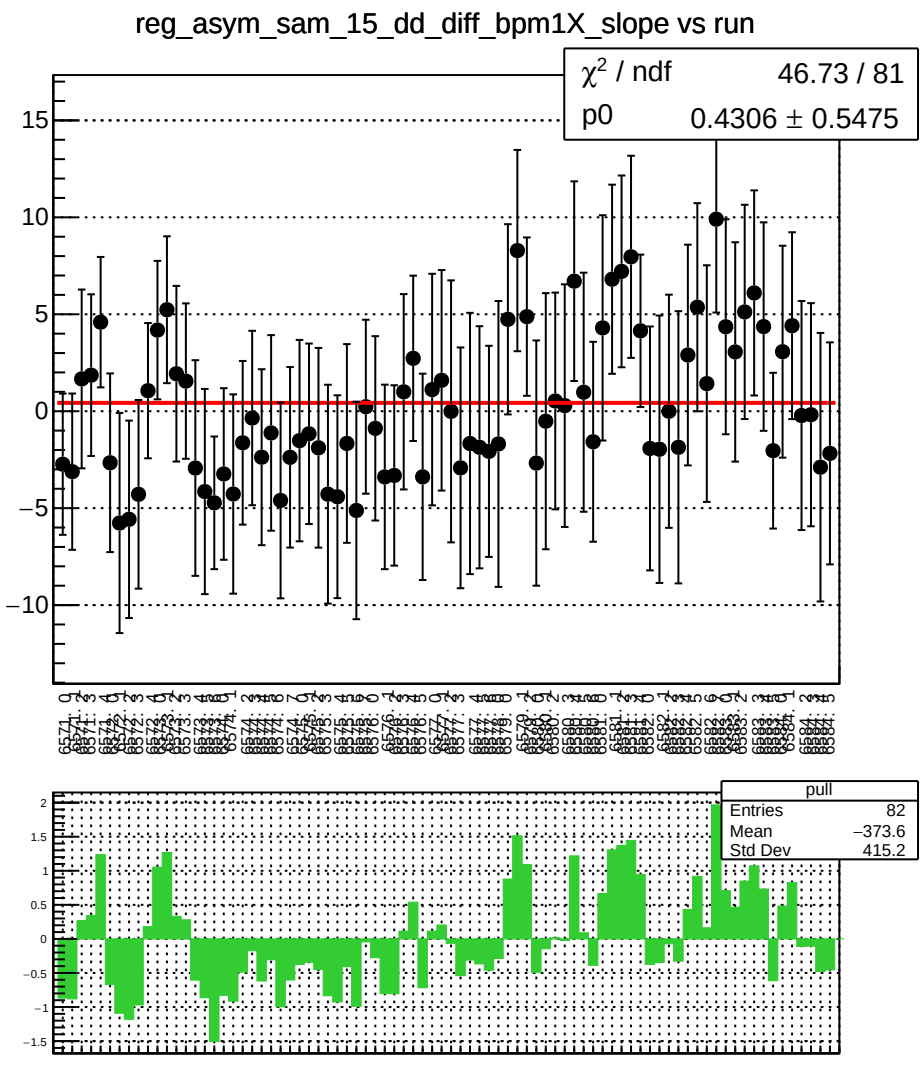

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 224.3 / 81
p0 4.567 ± 0.2351
pull
Entries 82
Mean 316.2
Std Dev 275.9

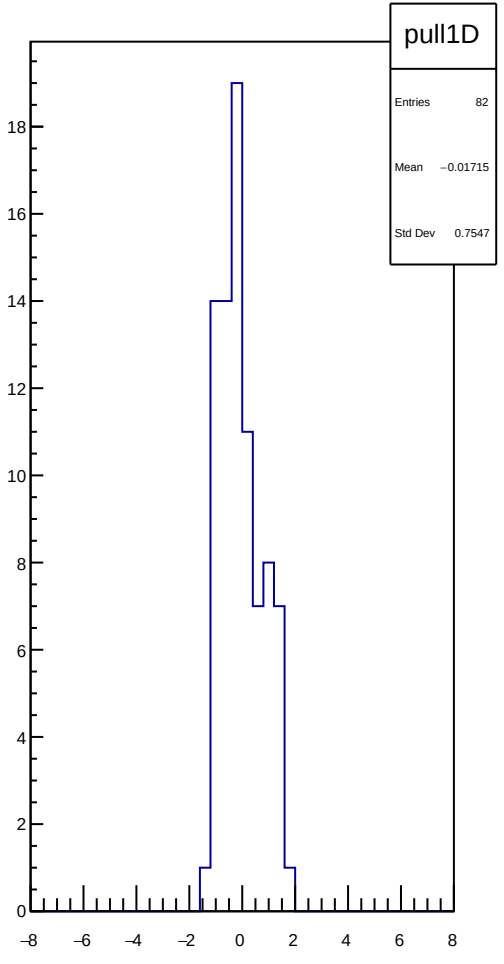

pull1D
Entries 82
Mean −0.05462
Std Dev 1.653

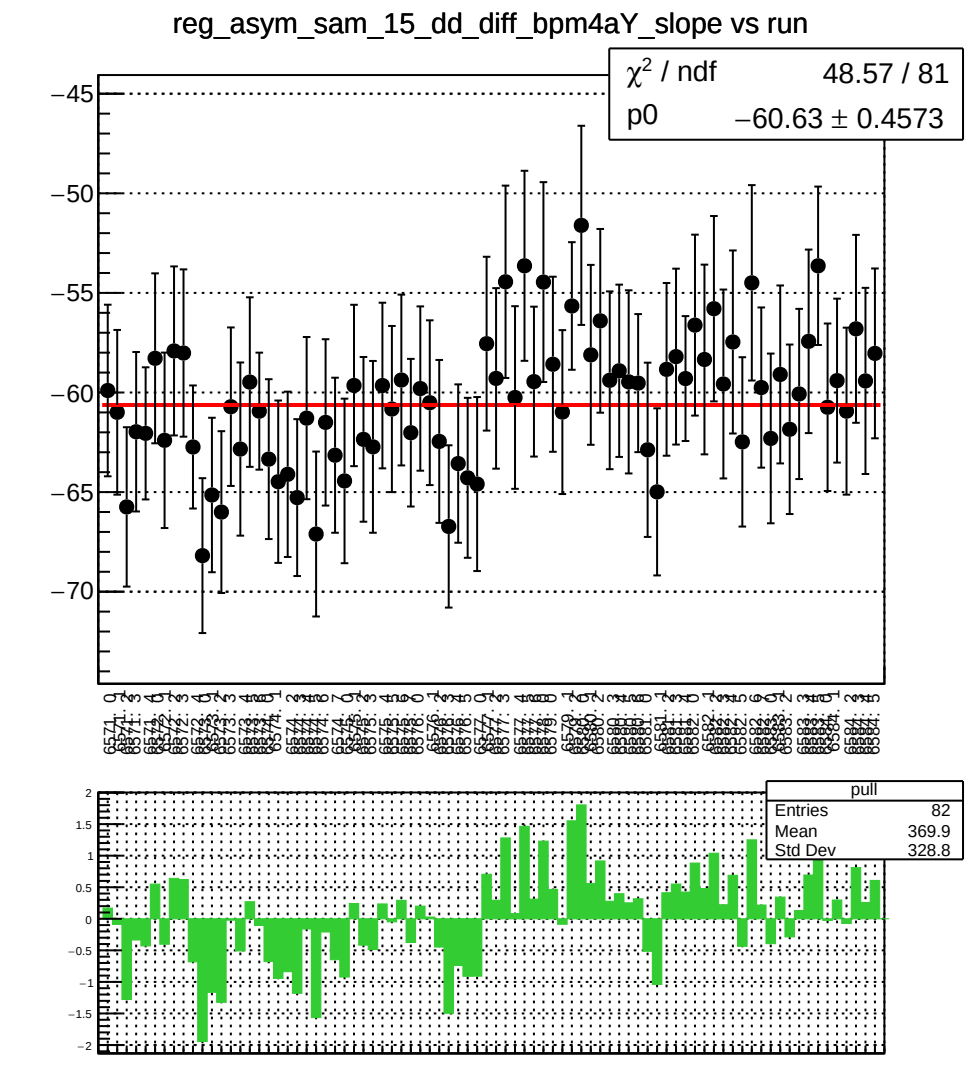

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 383.3 / 81
p0 5.993 ± 0.3015
pull
Entries 82
Mean −70.49
Std Dev 114.1
pull1D
Entries 82
Mean −0.07755
Std Dev 2.161

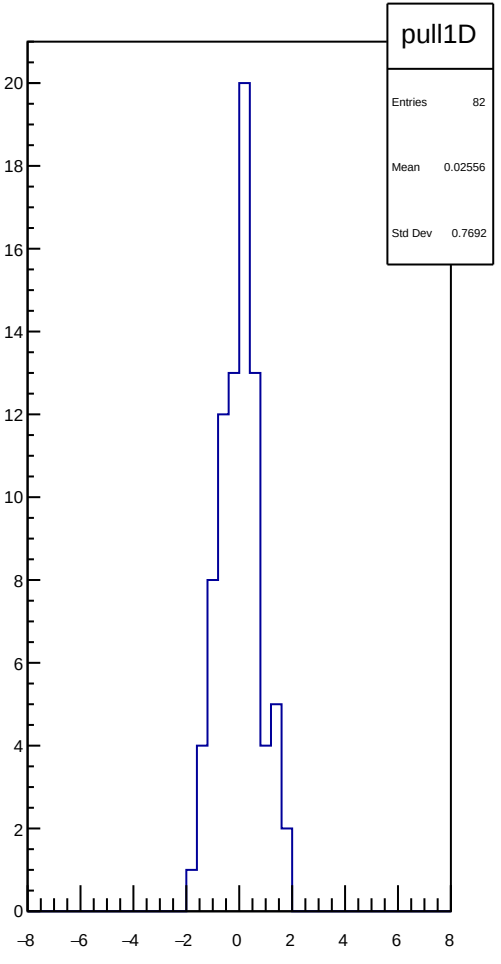

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 185.5 / 81
p0 49.69 ± 0.2832
pull
Entries 82
Mean 469.1
Std Dev 425.9
pull1D
Entries 82
Mean 0.03476
Std Dev 1.504

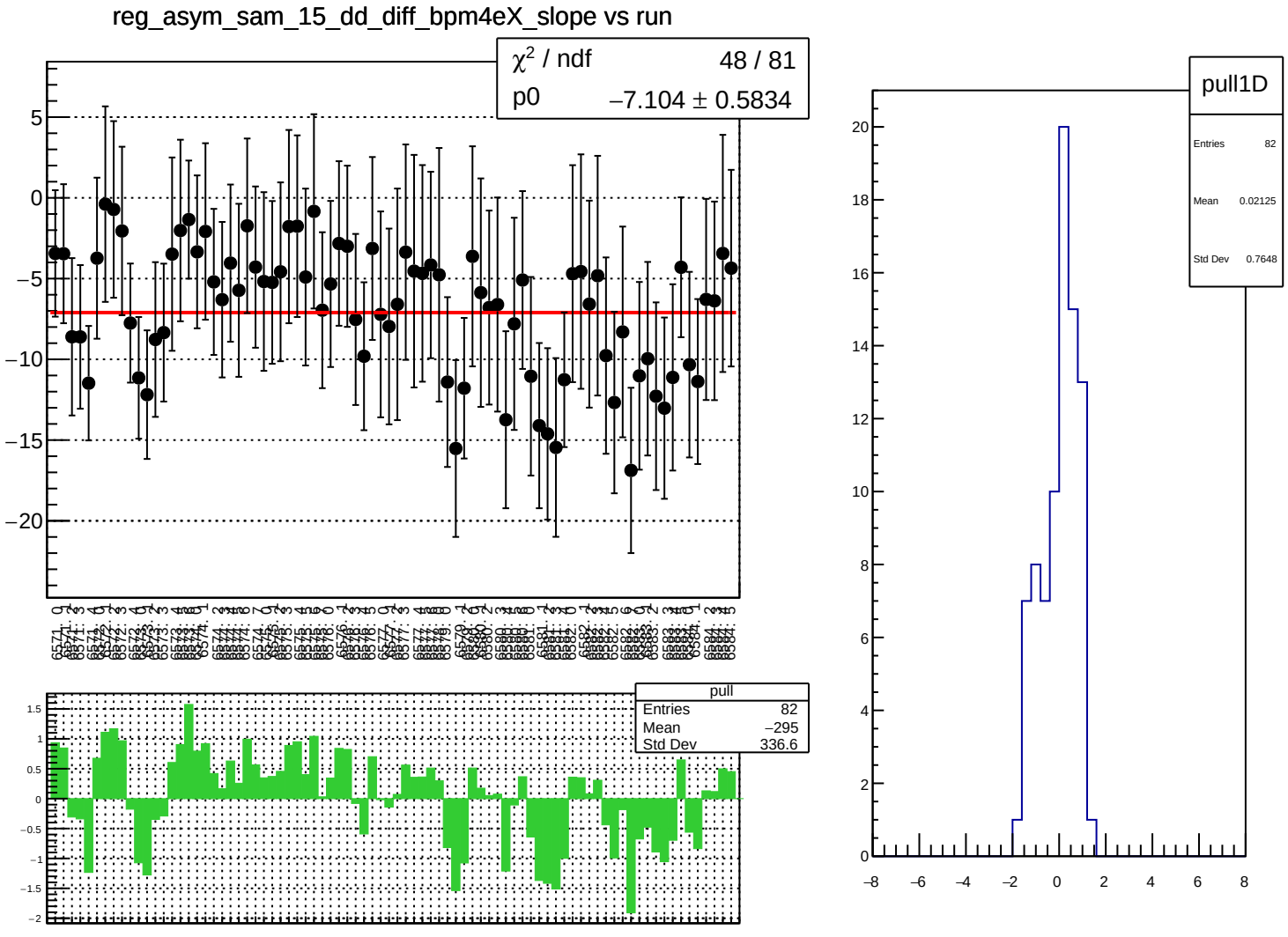

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 22.78 / 81
p0 0.1943 ± 0.01302
pull
Entries 82
Mean 187.1
Std Dev 144.4
pull1D
Entries 82
Mean −0.04536
Std Dev 0.5251

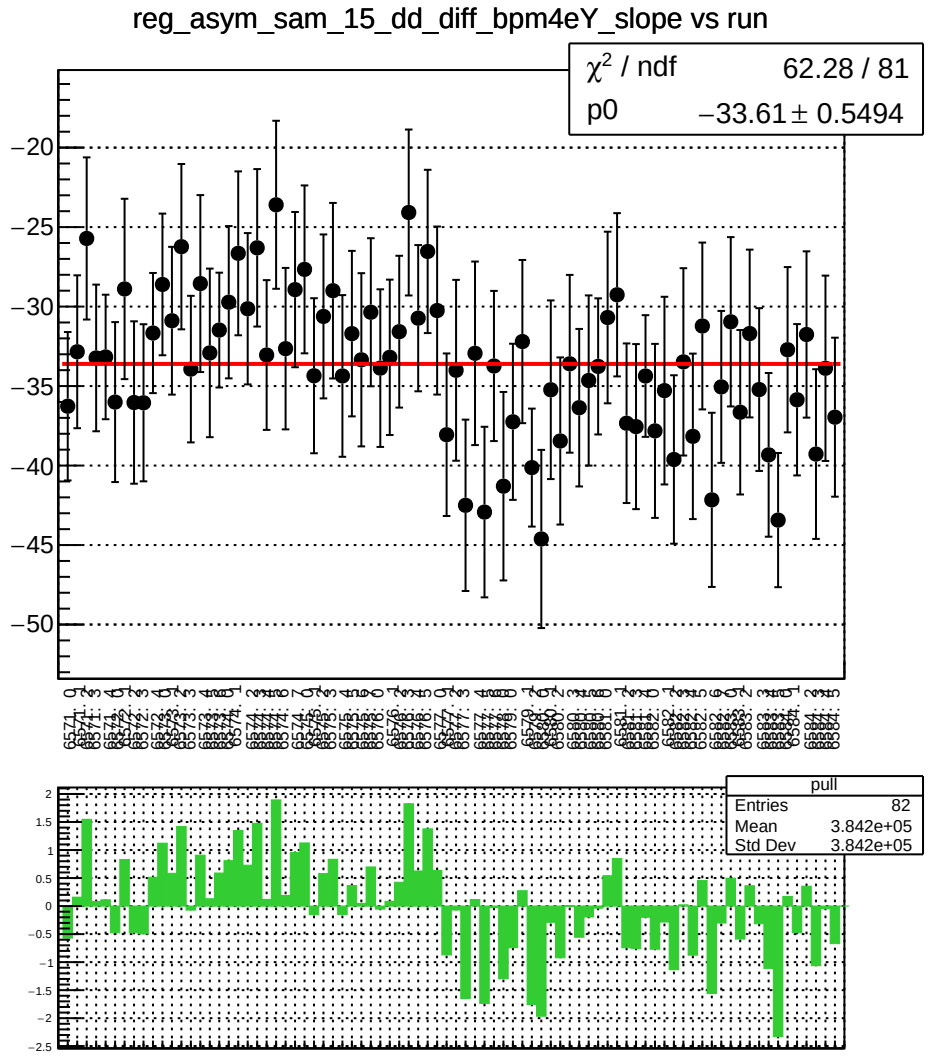

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 46.73 / 81
p0 0.4306 ± 0.5475
pull
Entries 82
Mean −373.6
Std Dev 415.2

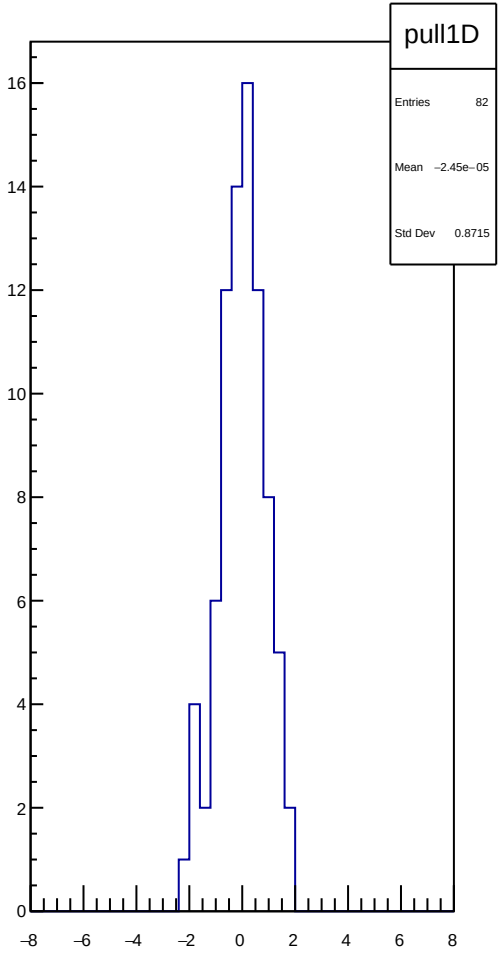

pull1D
Entries 82
Mean −0.01715
Std Dev 0.7547

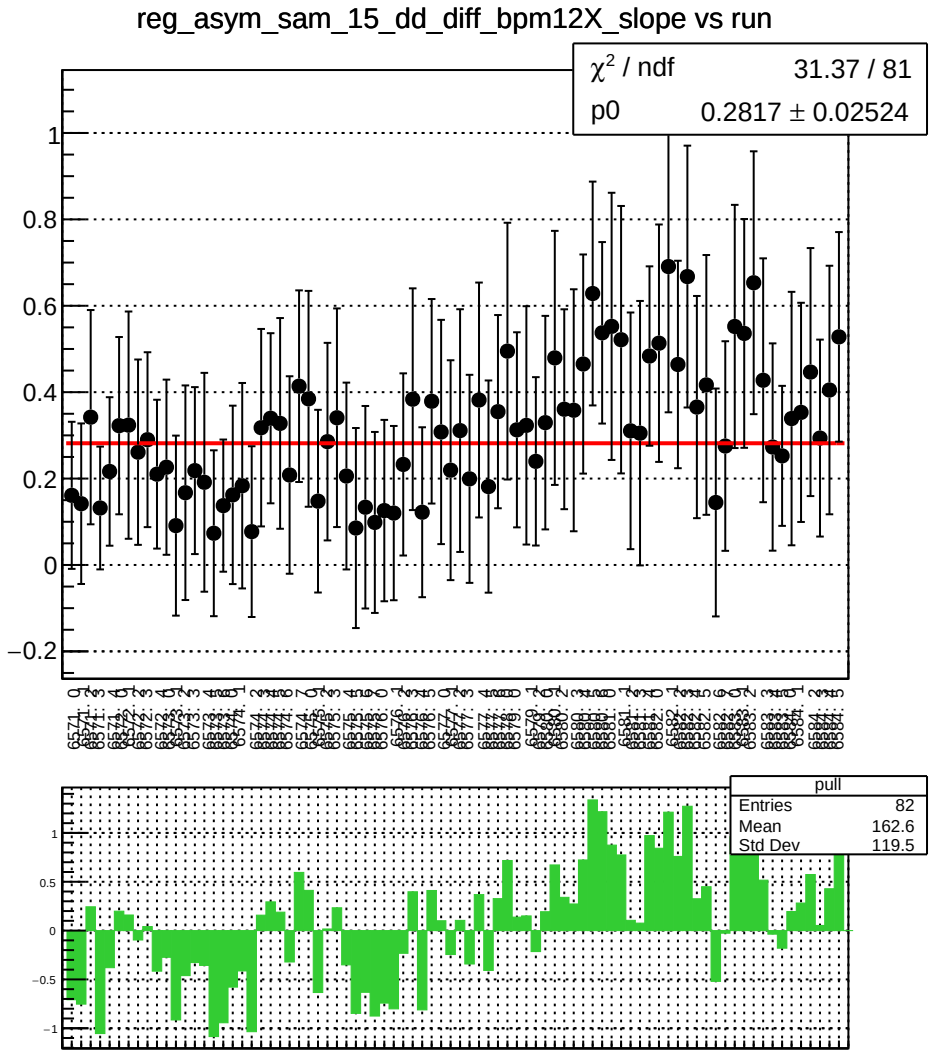

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 48.57 / 81
p0 −60.63 ± 0.4573
pull
Entries 82
Mean 369.9
Std Dev 328.8

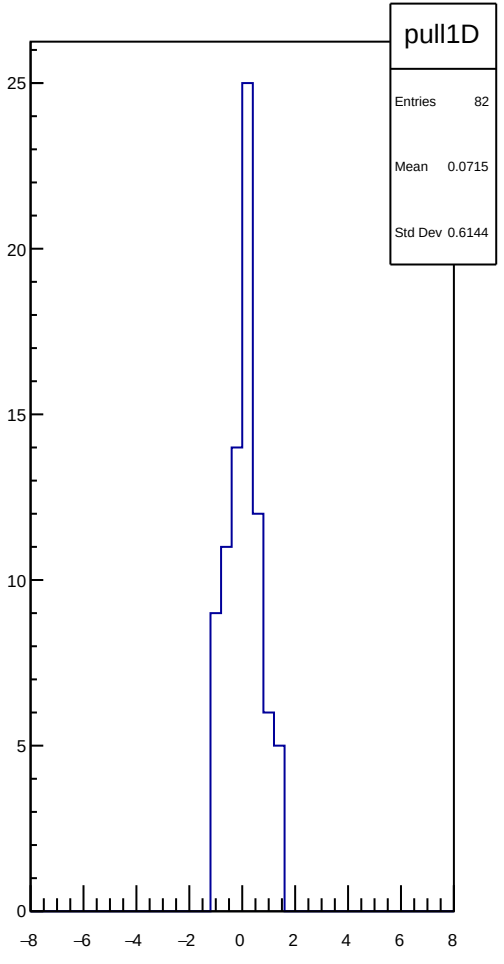

pull1D
Entries 82
Mean 0.02556
Std Dev 0.7692

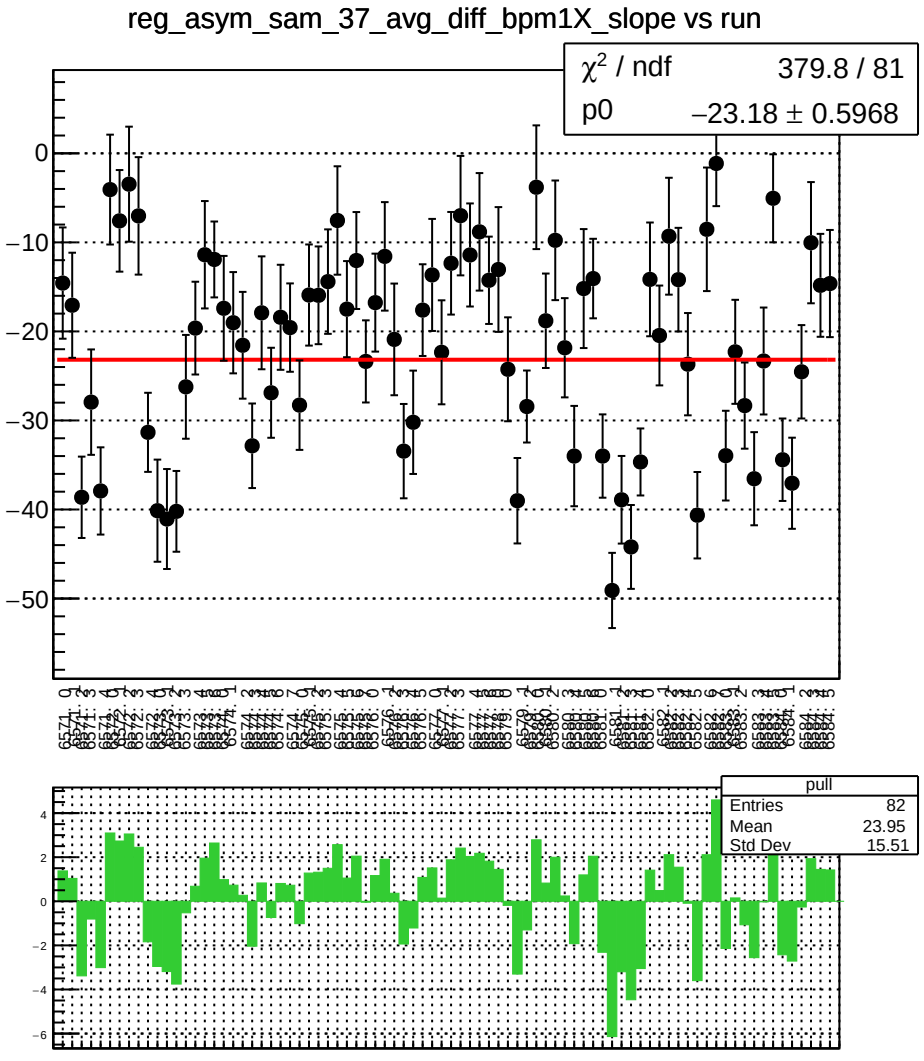

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 48 / 81
p0 −7.104 ± 0.5834
pull
Entries 82
Mean −295
Std Dev 336.6
pull1D
Entries 82
Mean 0.02125
Std Dev 0.7648

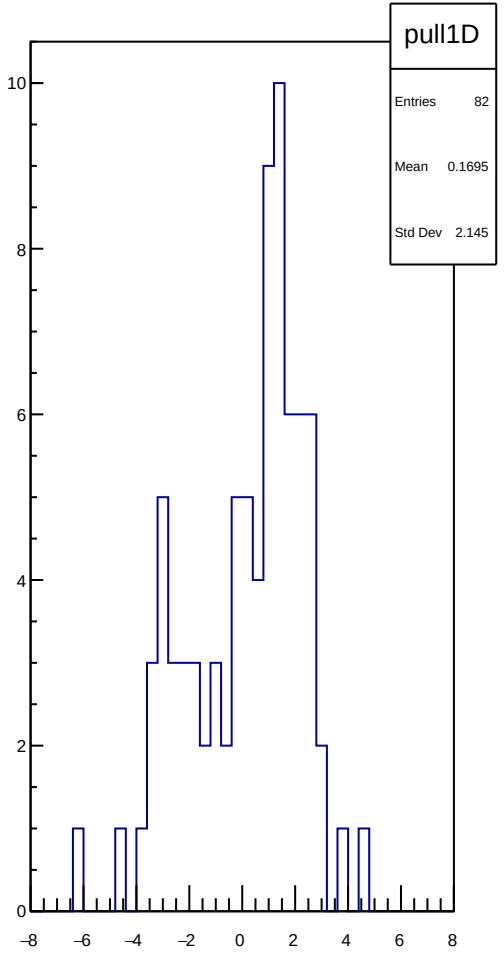

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 62.28 / 81
p0 −33.61 ± 0.5494
pull
Entries 82
Mean 3.842e+05
Std Dev 3.842e+05

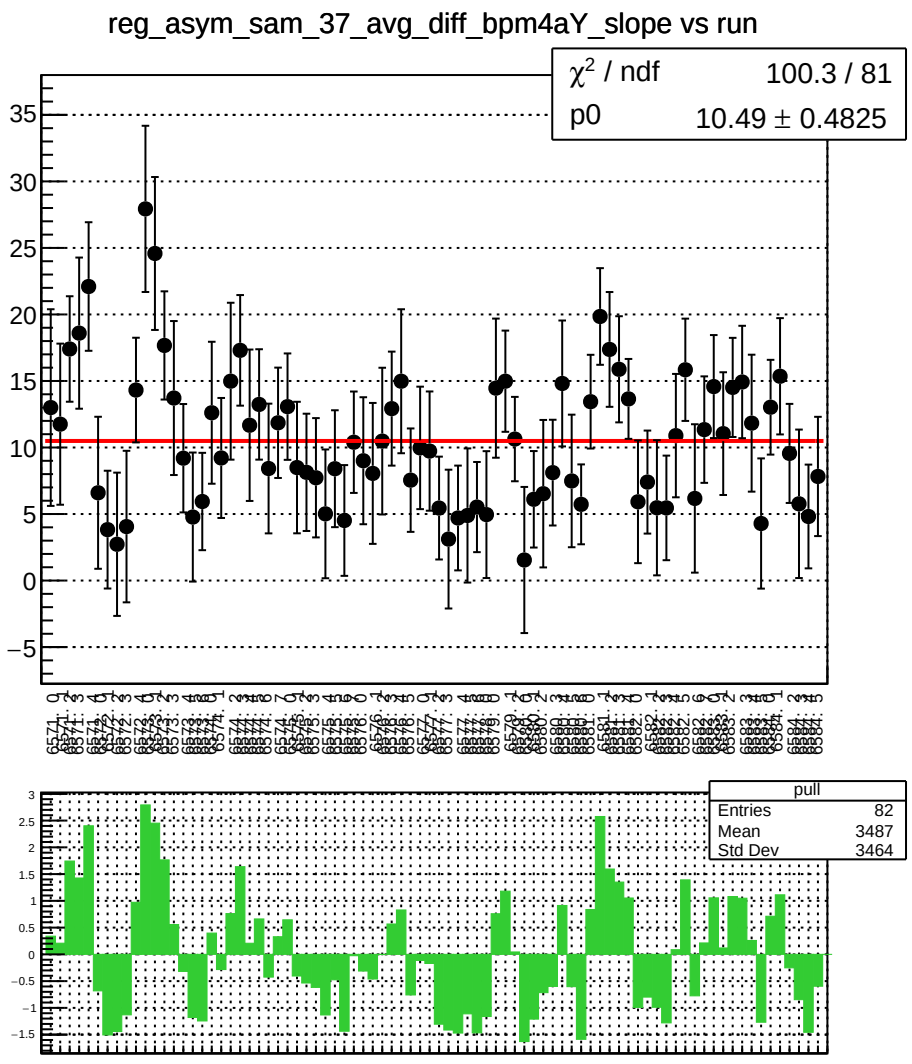

pull1D
Entries 82
Mean −2.45e−05
Std Dev 0.8715

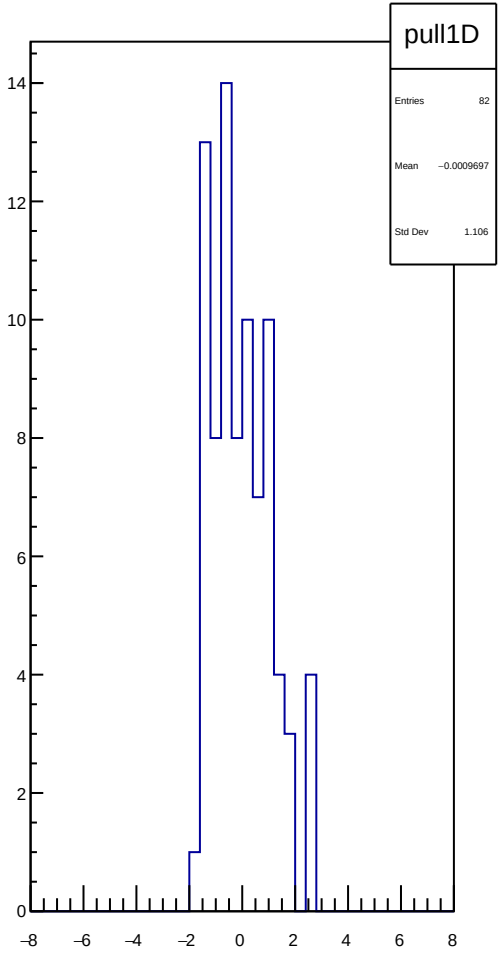

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 31.37 / 81
p0 0.2817 ± 0.02524
pull
Entries 82
Mean 162.6
Std Dev 119.5

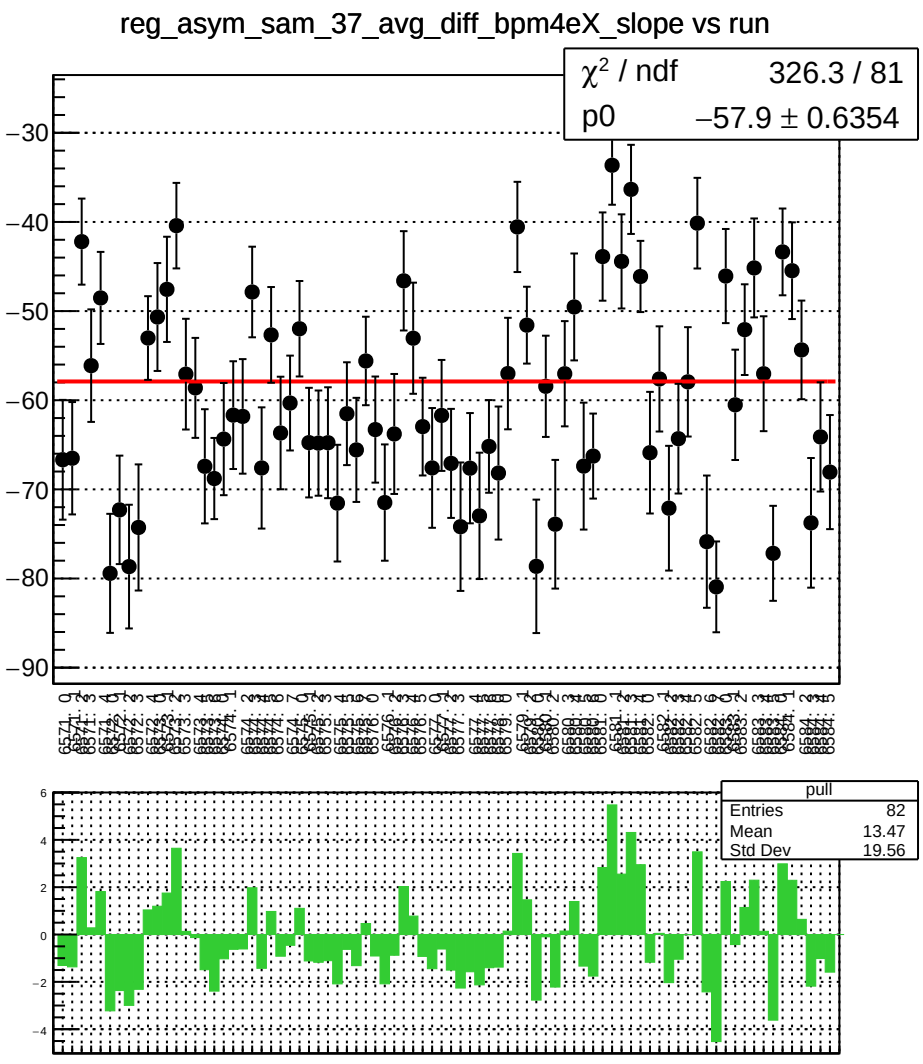

pull1D
Entries 82
Mean 0.0715
Std Dev 0.6144

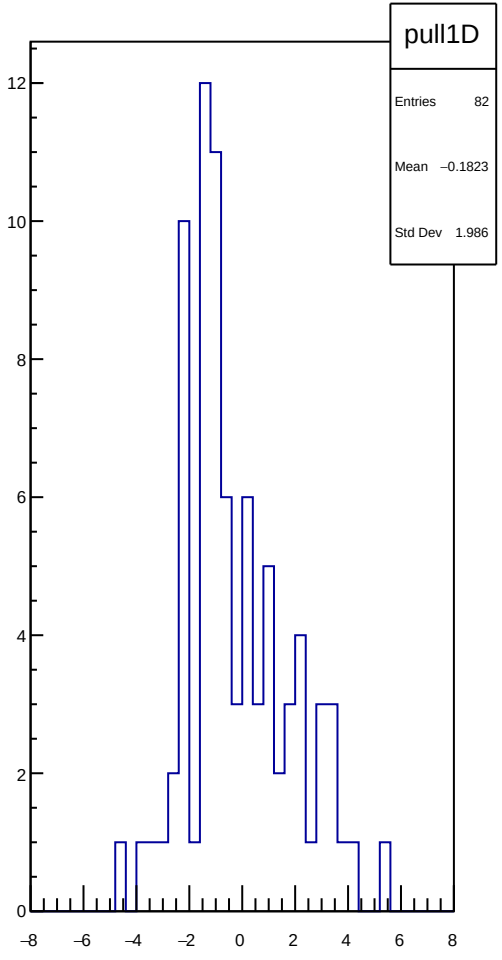

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 379.8 / 81
p0 −23.18 ± 0.5968
pull
Entries 82
Mean 23.95
Std Dev 15.51

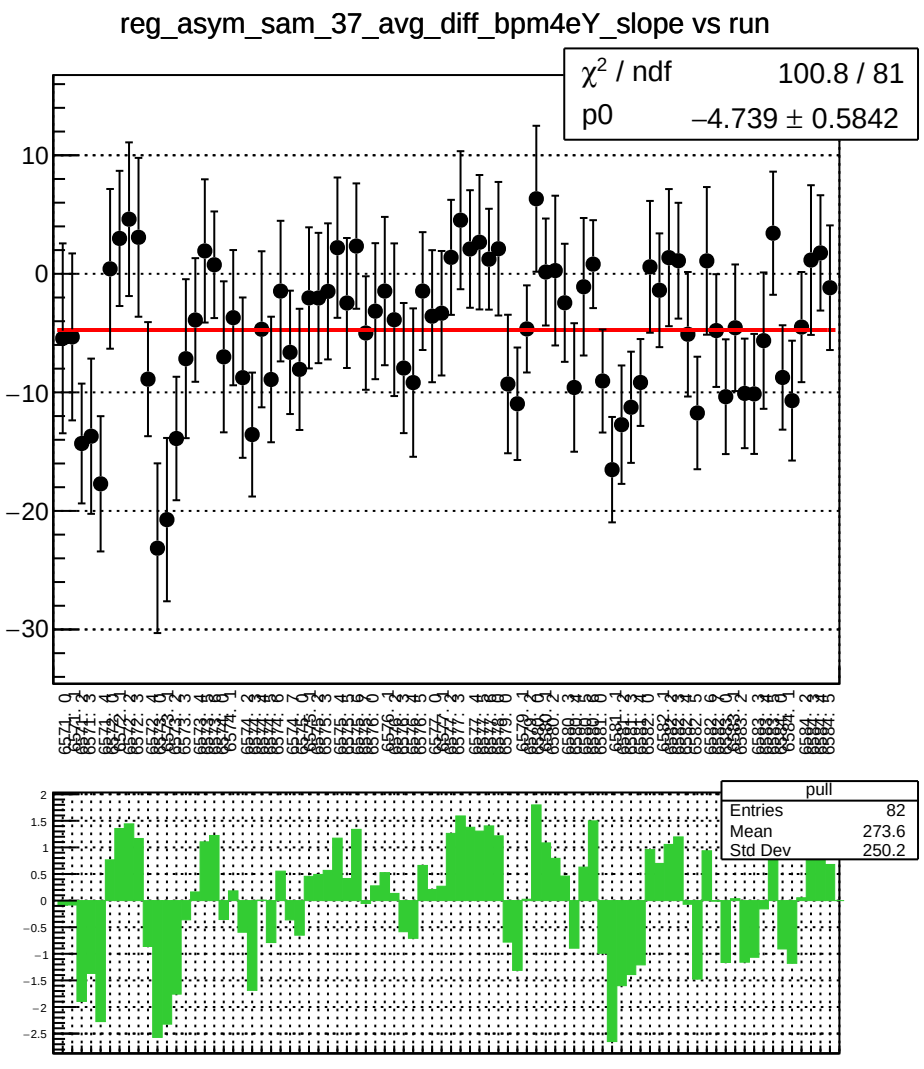

pull1D
Entries 82
Mean 0.1695
Std Dev 2.145

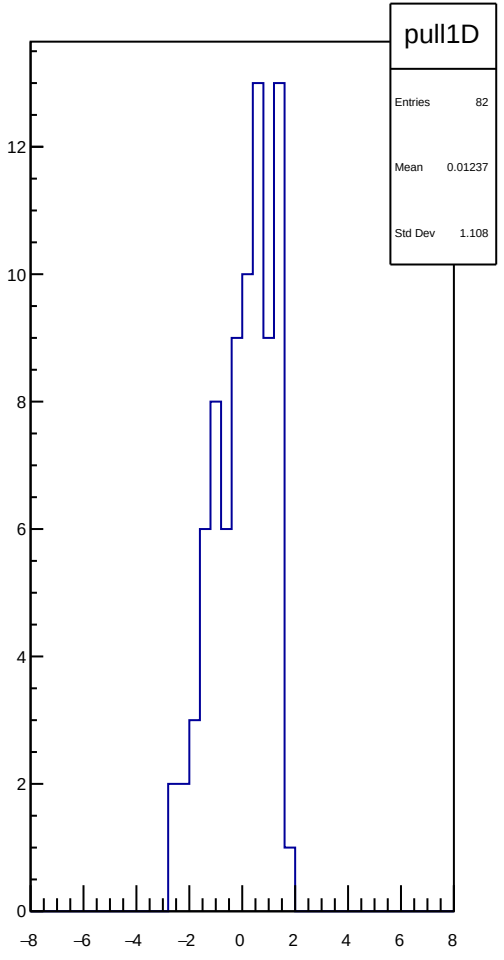

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 100.3 / 81
p0 10.49 ± 0.4825
pull
Entries 82
Mean 3487
Std Dev 3464

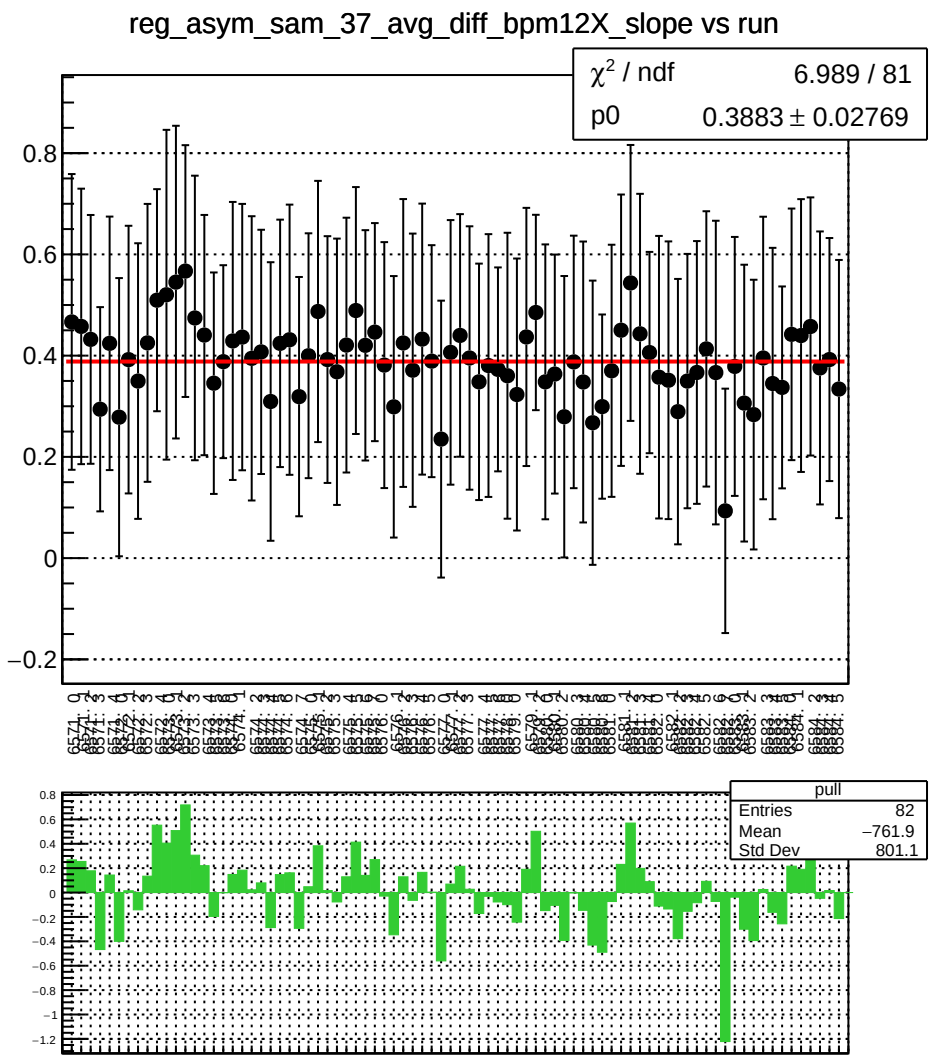

pull1D
Entries 82
Mean −0.0009697
Std Dev 1.106

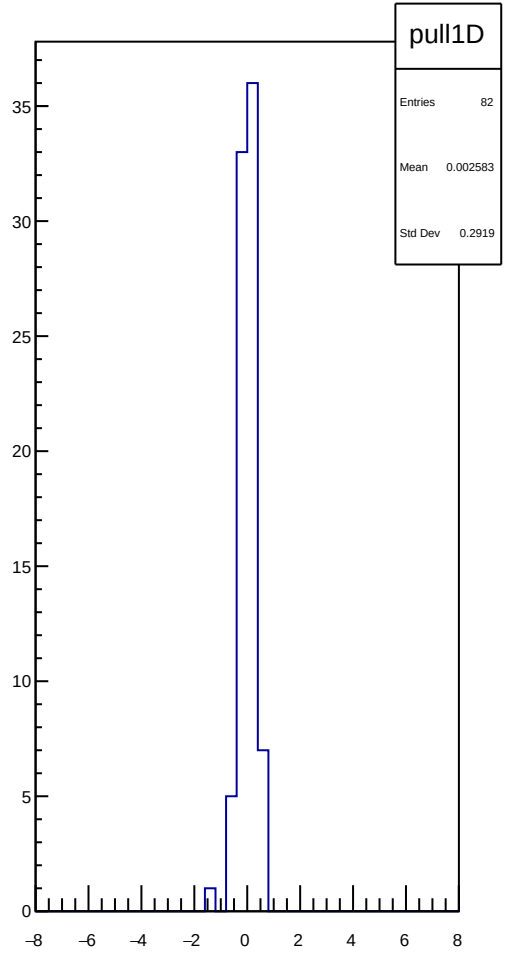

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 326.3 / 81
p0 −57.9 ± 0.6354
pull
Entries 82
Mean 13.47
Std Dev 19.56

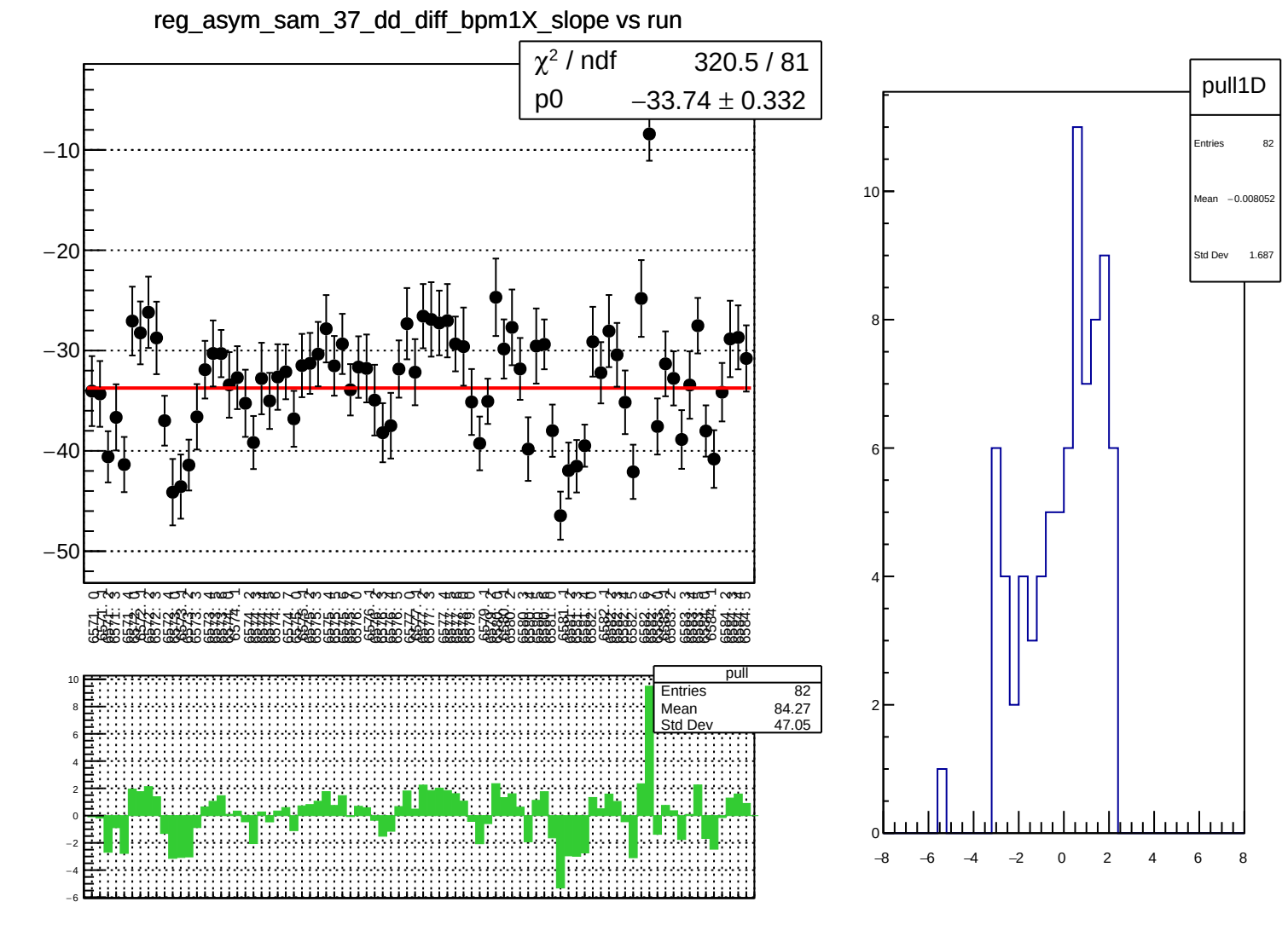

pull1D
Entries 82
Mean −0.1823
Std Dev 1.986

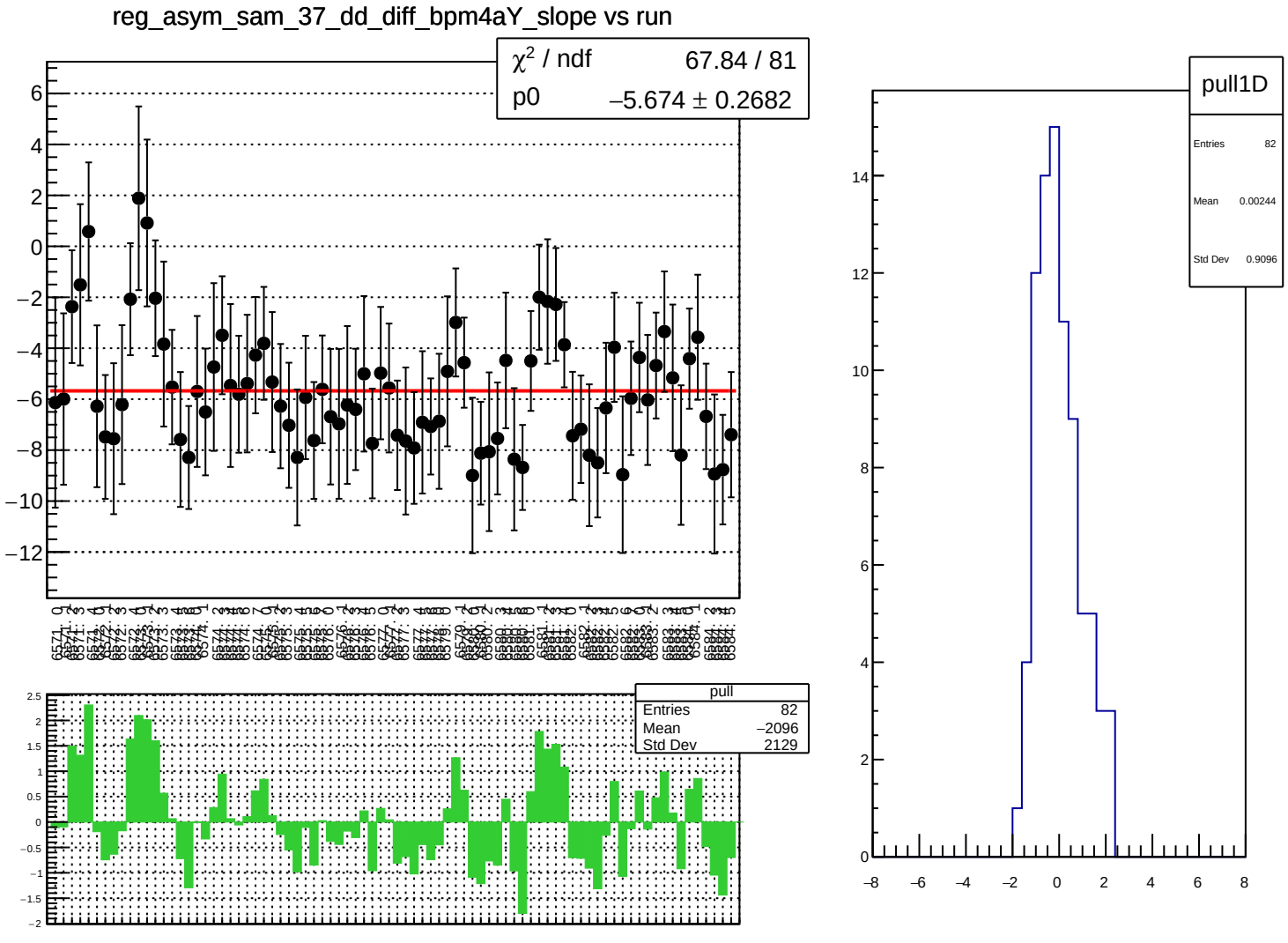

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 100.8 / 81
p0 −4.739 ± 0.5842
pull
Entries 82
Mean 273.6
Std Dev 250.2

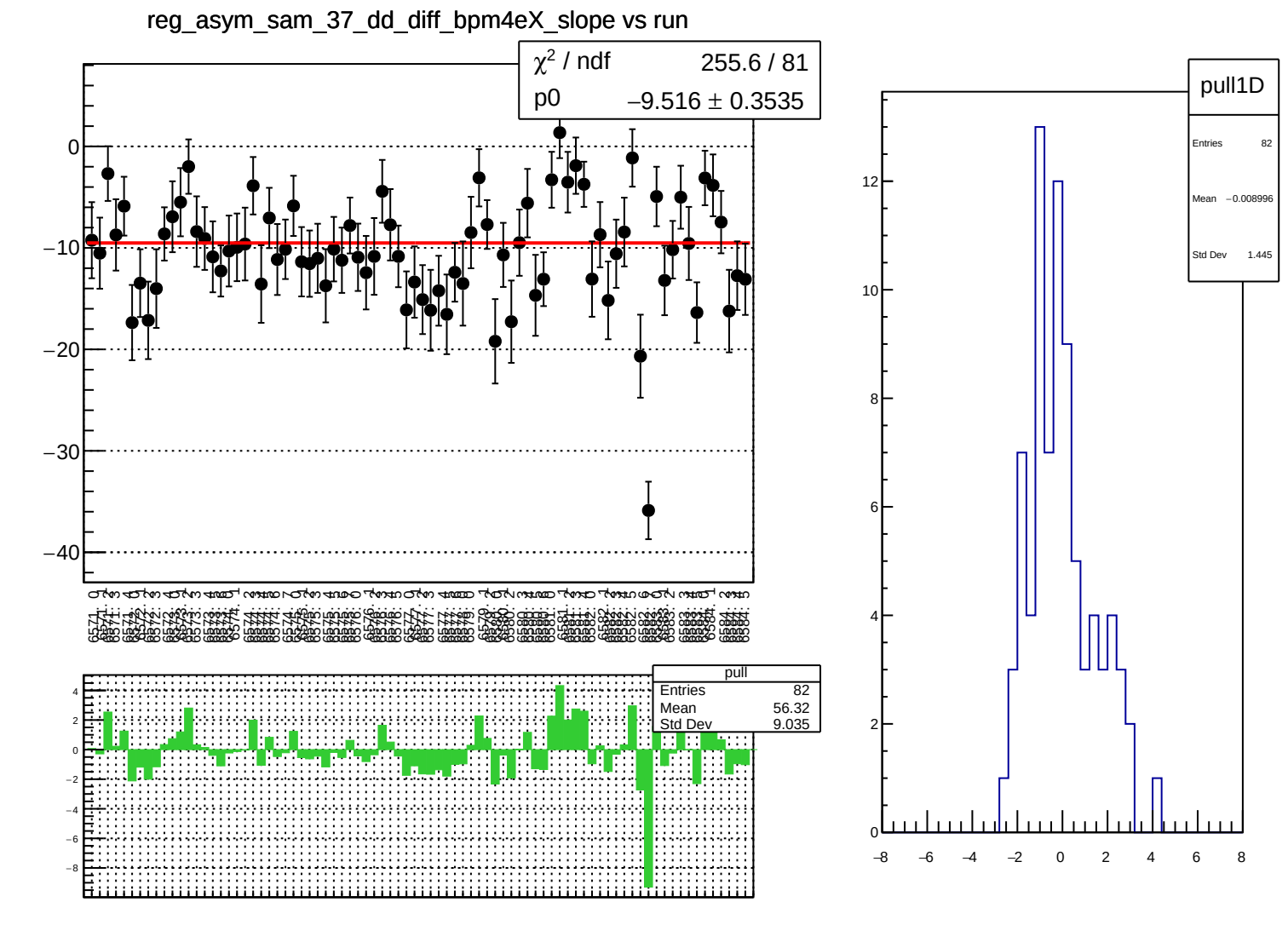

pull1D
Entries 82
Mean 0.01237
Std Dev 1.108

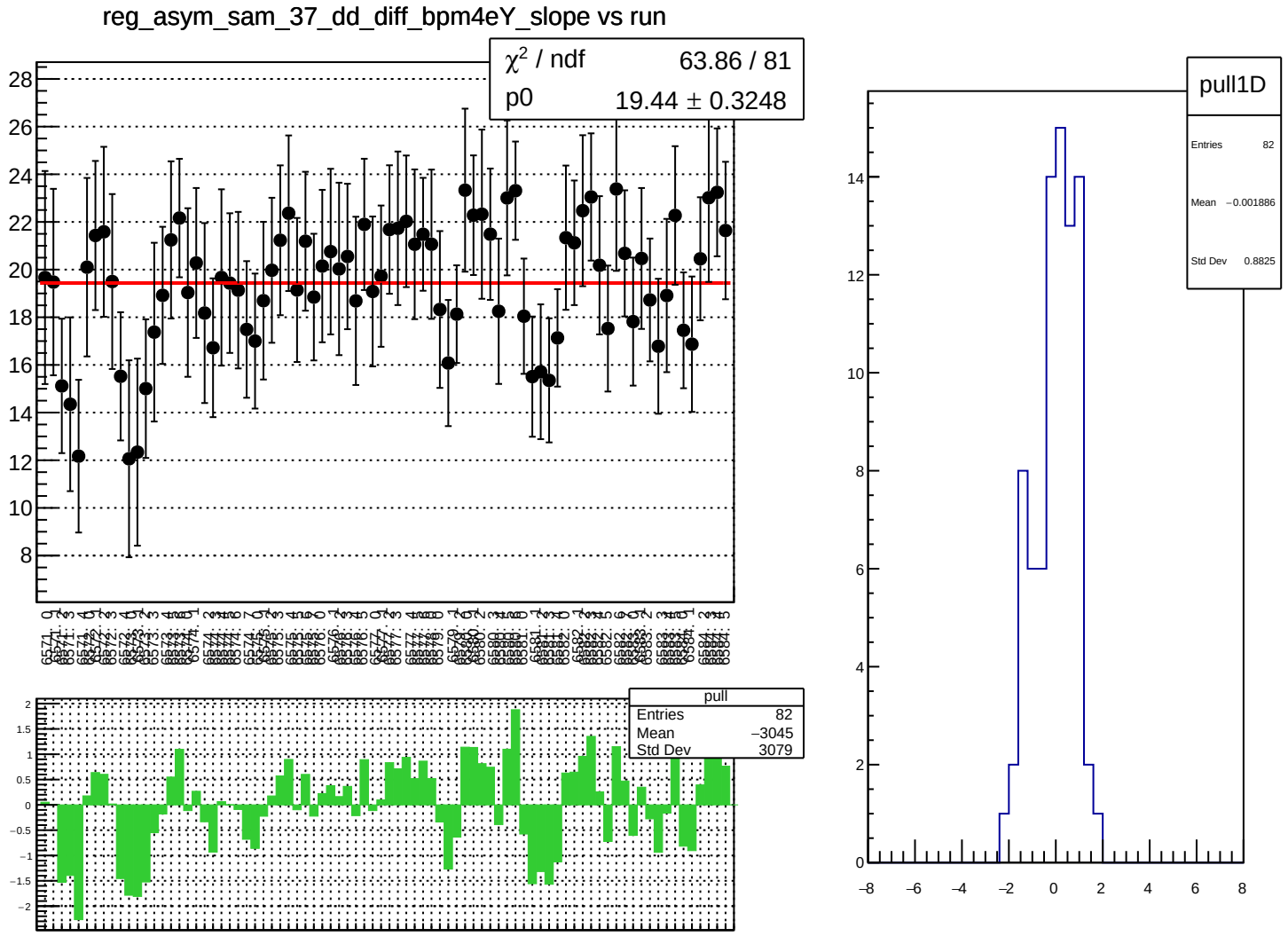

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 6.989 / 81
p0 0.3883 ± 0.02769
pull
Entries 82
Mean −761.9
Std Dev 801.1

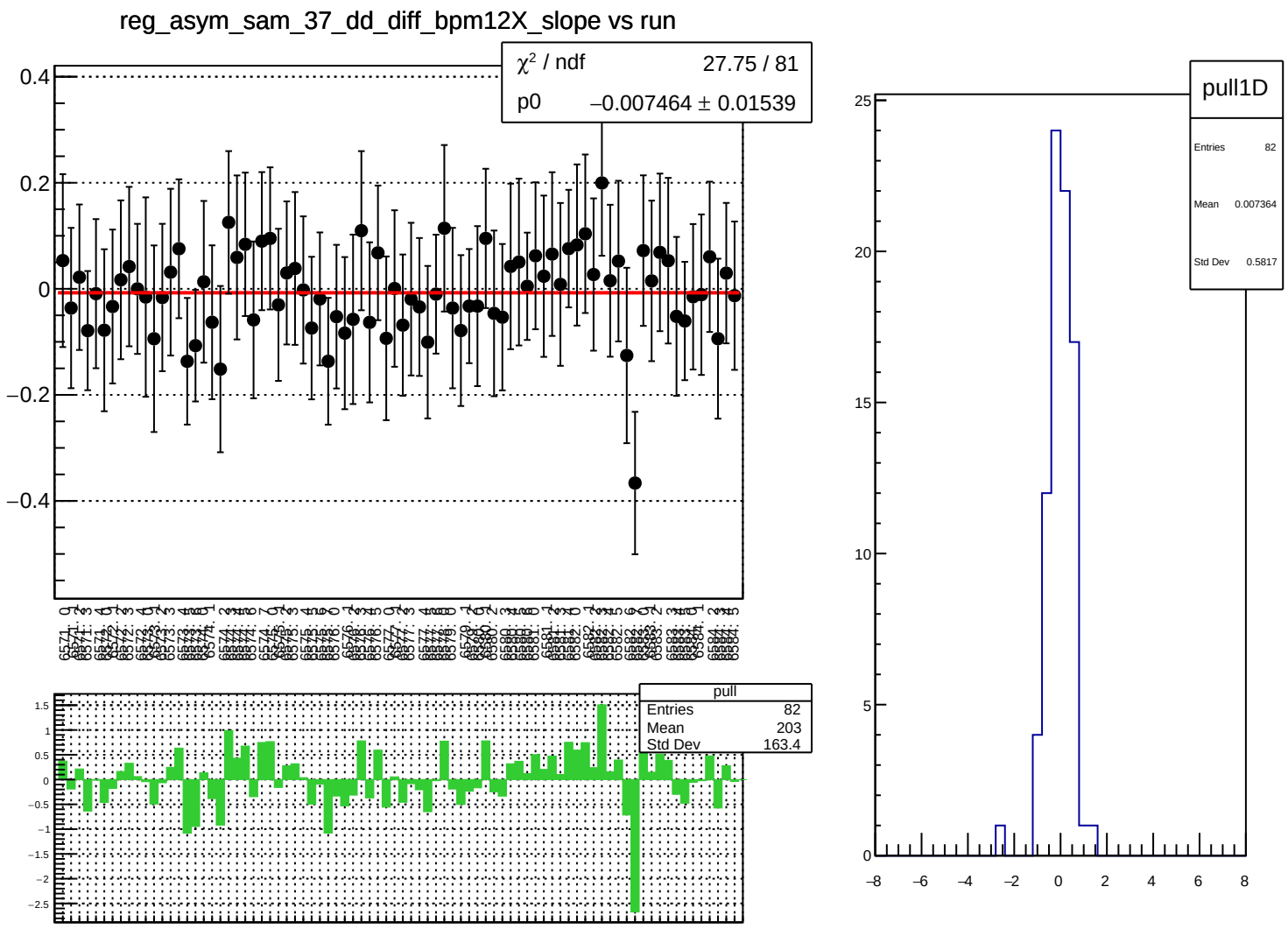

pull1D
Entries 82
Mean 0.002583
Std Dev 0.2919

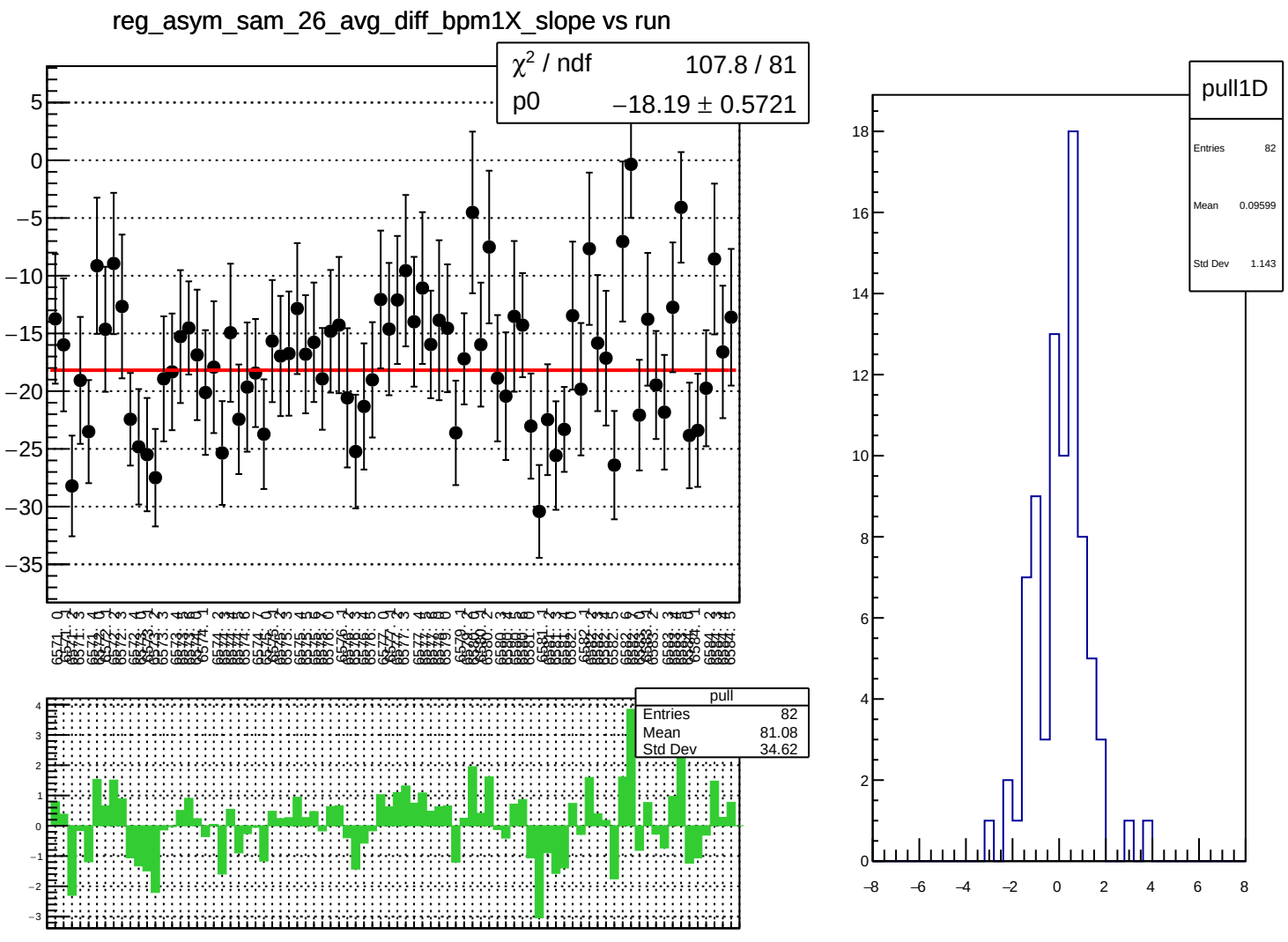

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 320.5 / 81
p0 −33.74 ± 0.332
pull
Entries 82
Mean 84.27
Std Dev 47.05
pull1D
Entries 82
Mean −0.008052
Std Dev 1.687

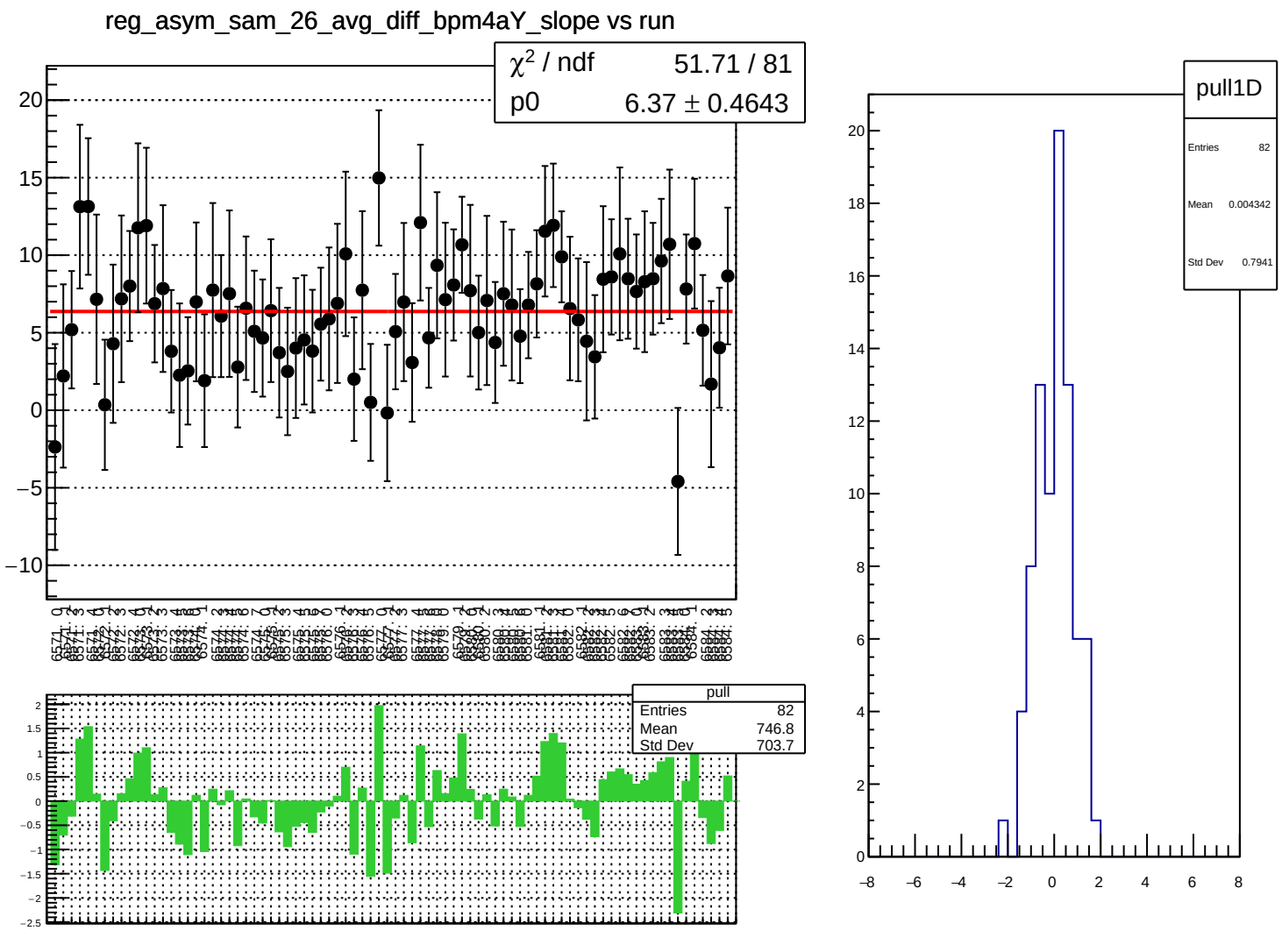

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 67.84 / 81
p0 −5.674 ± 0.2682
pull
Entries 82
Mean −2096
Std Dev 2129
pull1D
Entries 82
Mean 0.00244
Std Dev 0.9096

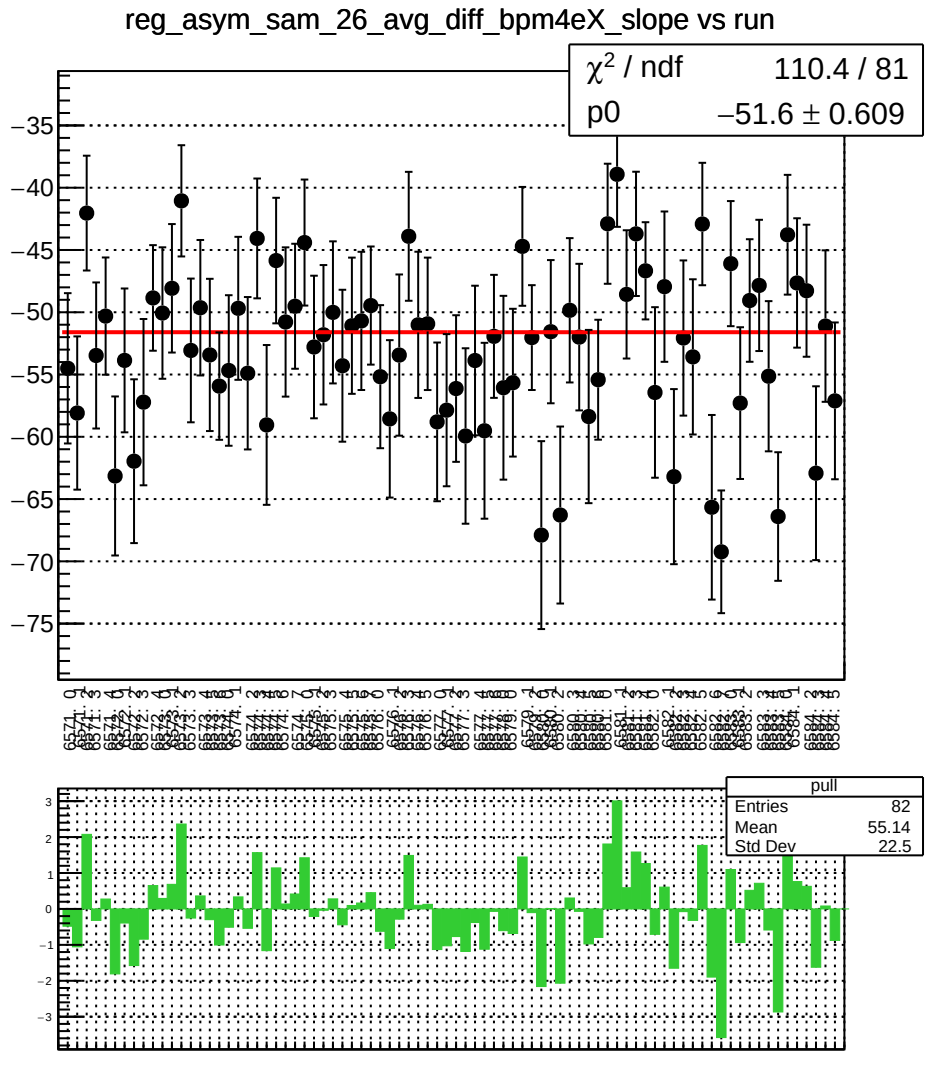

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 255.6 / 81
p0 −9.516 ± 0.3535
pull
Entries 82
Mean 56.32
Std Dev 9.035
pull1D
Entries 82
Mean −0.008996
Std Dev 1.445

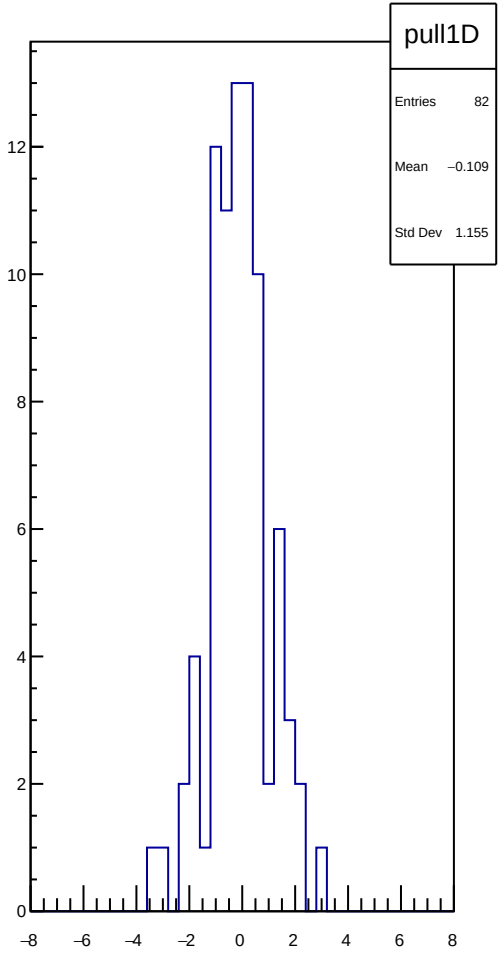

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 63.86 / 81
p0 19.44 ± 0.3248
pull
Entries 82
Mean −3045
Std Dev 3079
pull1D
Entries 82
Mean −0.001886
Std Dev 0.8825

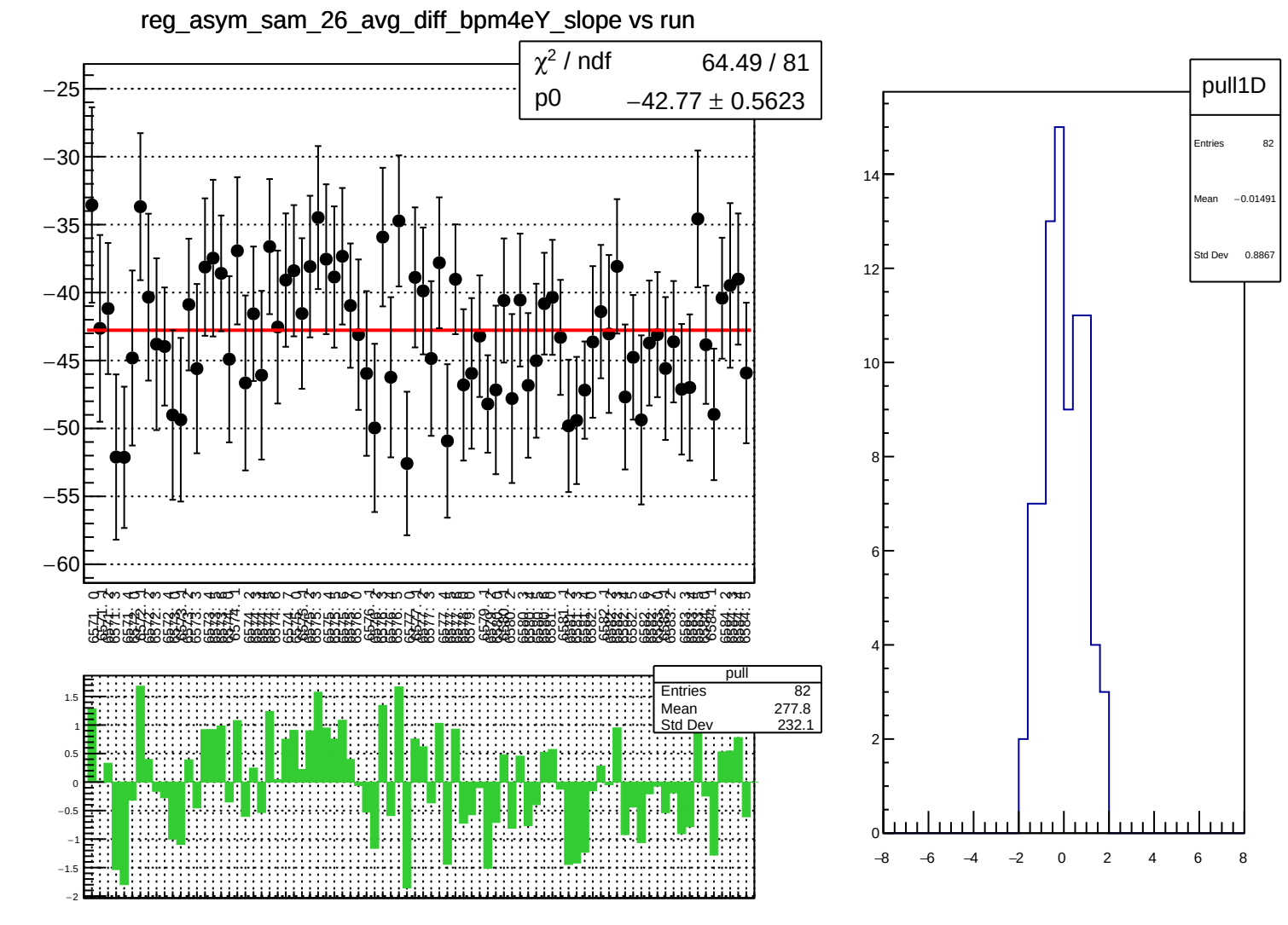

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 27.75 / 81
p0 −0.007464 ± 0.01539
pull
Entries 82
Mean 203
Std Dev 163.4
pull1D
Entries 82
Mean 0.007364
Std Dev 0.5817

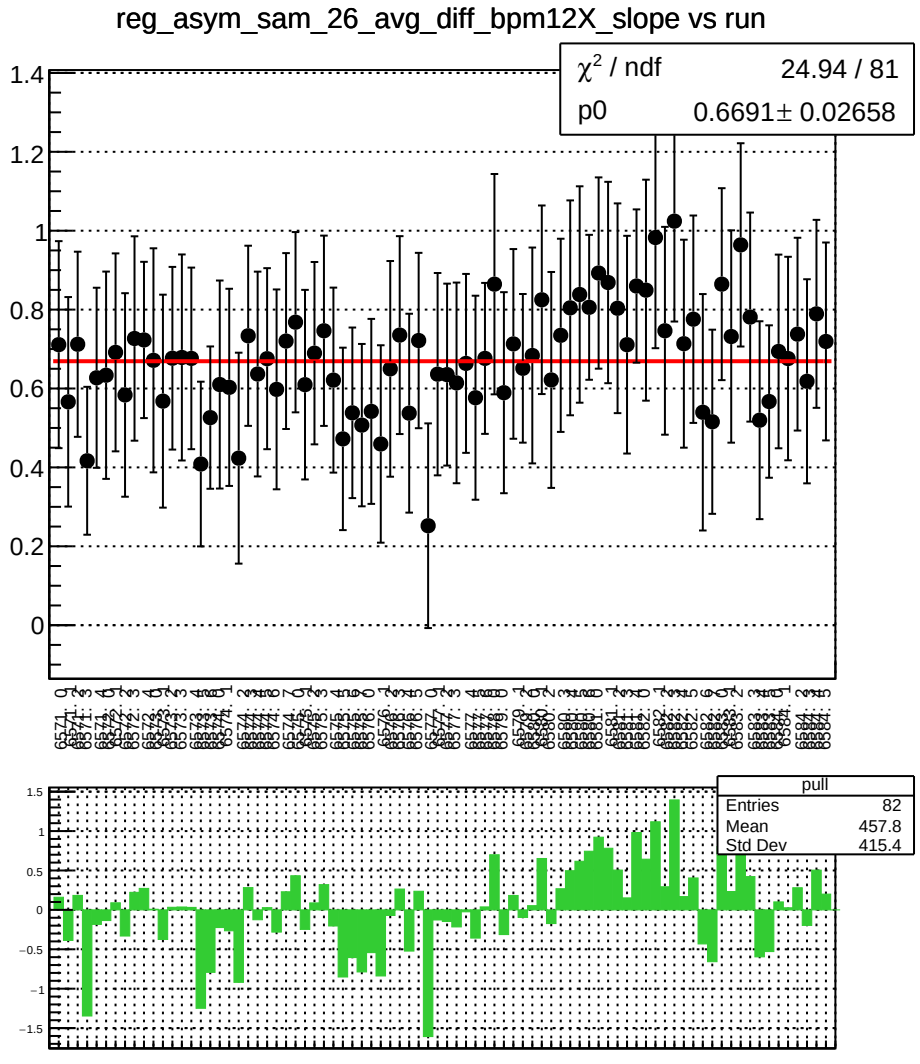

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 107.8 / 81
p0 −18.19 ± 0.5721
pull
Entries 82
Mean 81.08
Std Dev 34.62
pull1D
Entries 82
Mean 0.09599
Std Dev 1.143

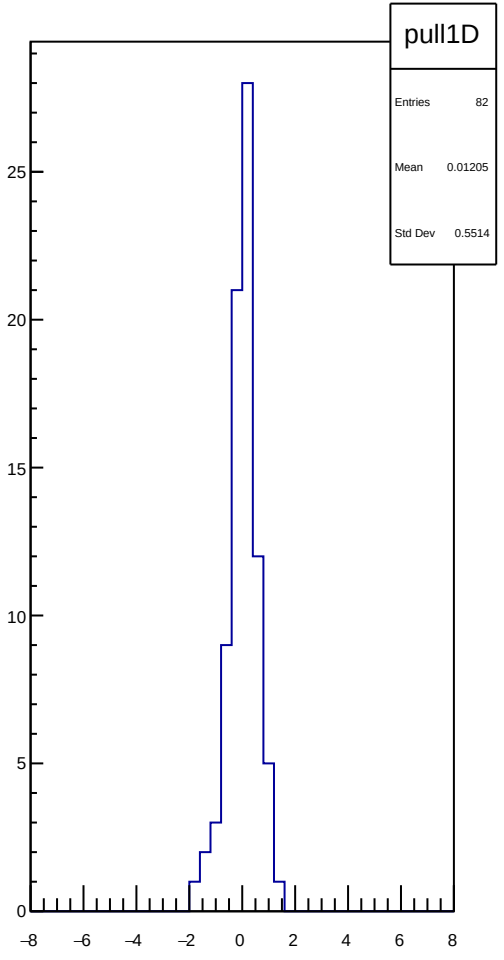

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 51.71 / 81
p0 6.37 ± 0.4643
pull
Entries 82
Mean 746.8
Std Dev 703.7
pull1D
Entries 82
Mean 0.004342
Std Dev 0.7941

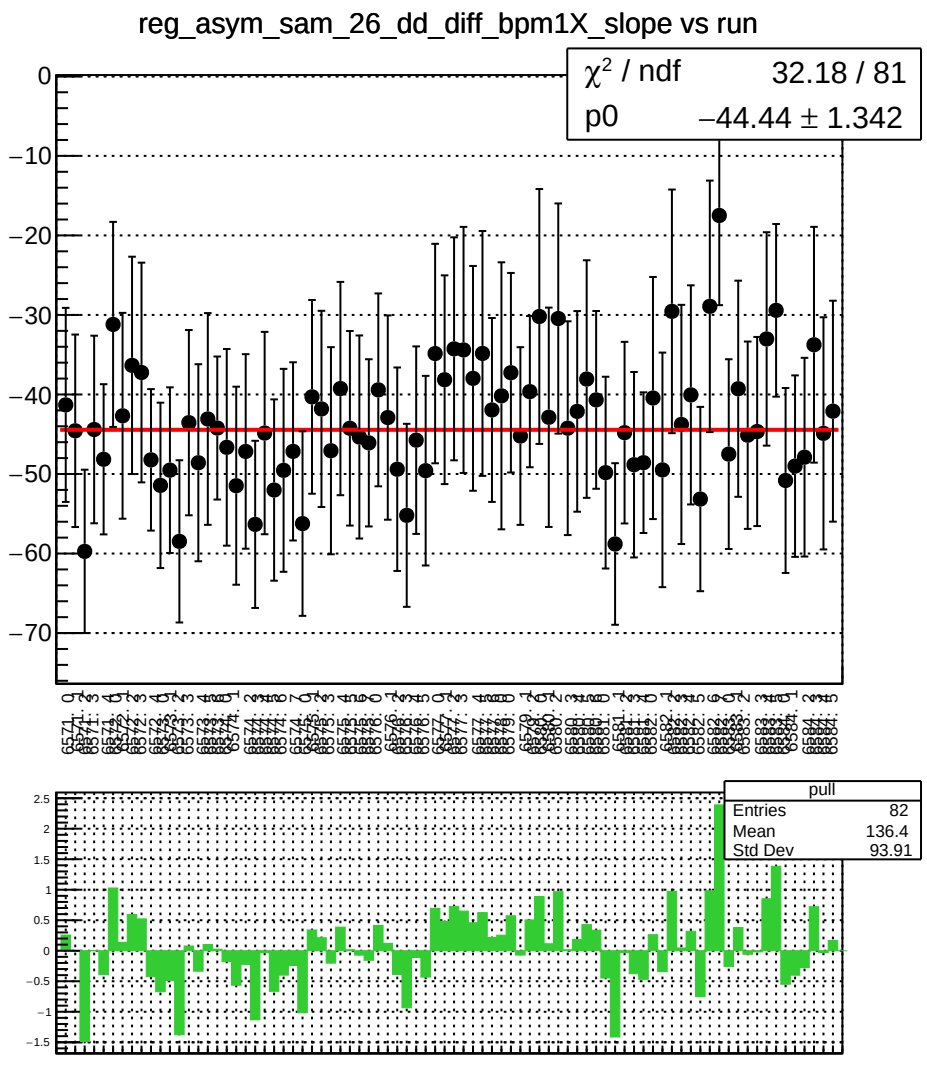

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 110.4 / 81
p0 −51.6 ± 0.609
pull
Entries 82
Mean 55.14
Std Dev 22.5

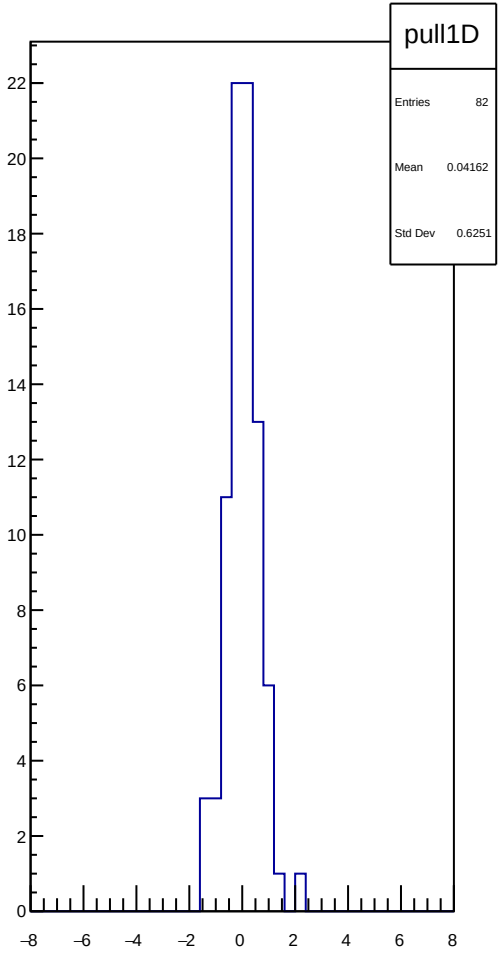

pull1D
Entries 82
Mean −0.109
Std Dev 1.155

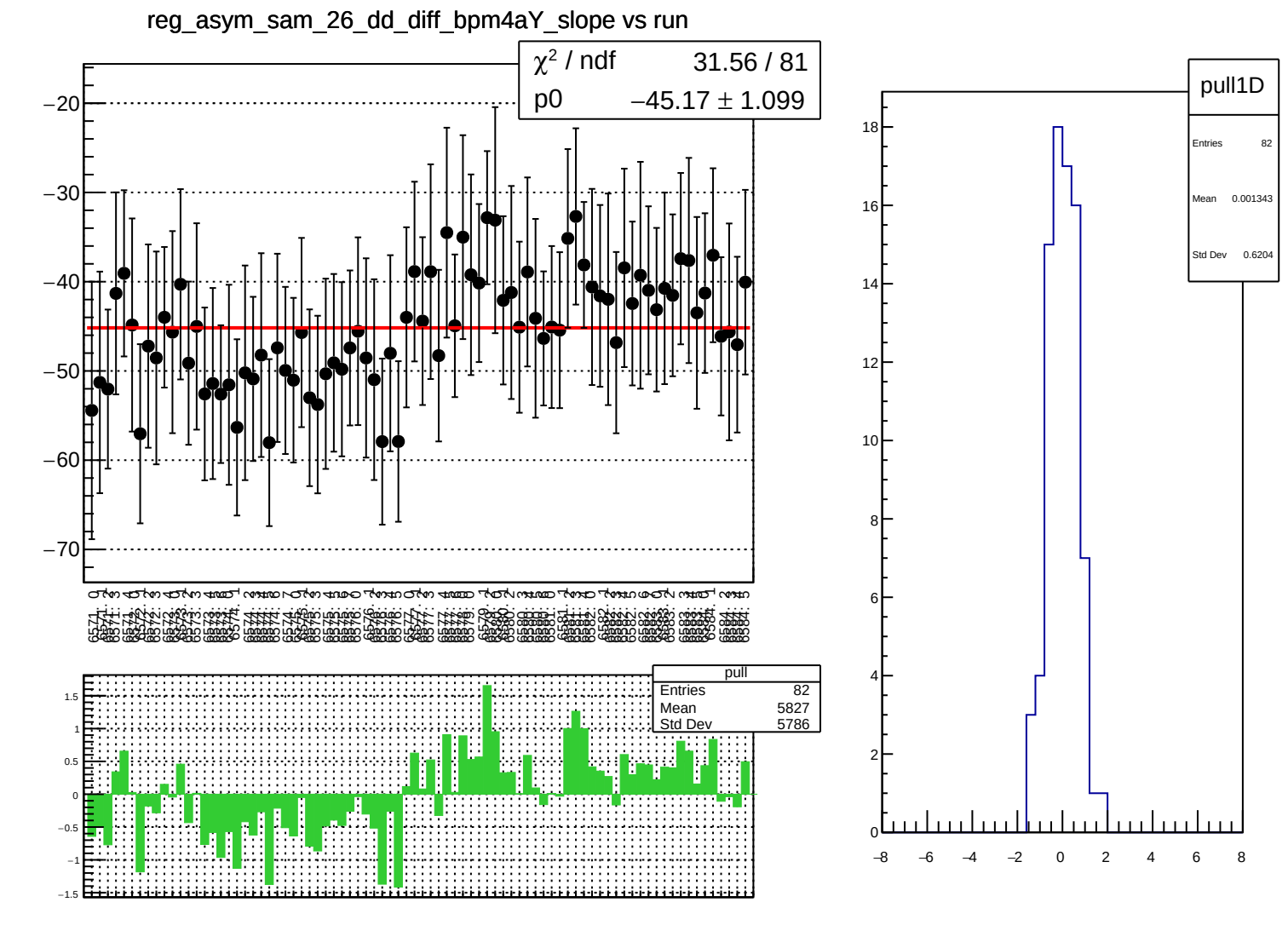

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 64.49 / 81
p0 −42.77 ± 0.5623
pull
Entries 82
Mean 277.8
Std Dev 232.1
pull1D
Entries 82
Mean −0.01491
Std Dev 0.8867

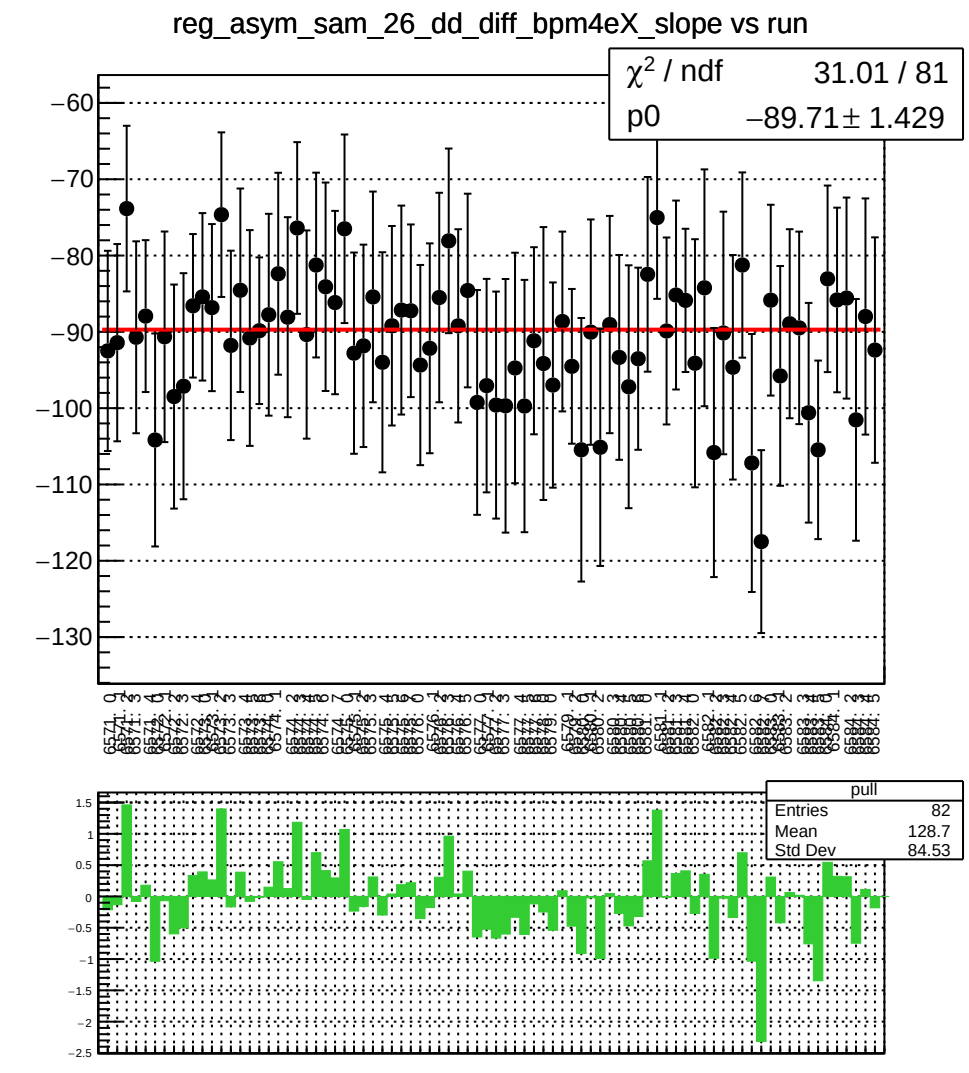

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 24.94 / 81
p0 0.6691 ± 0.02658
pull
Entries 82
Mean 457.8
Std Dev 415.4

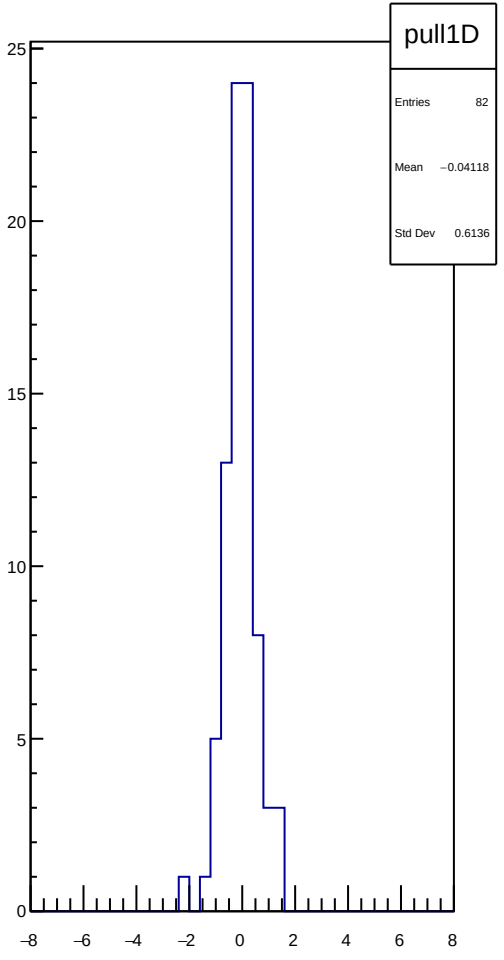

pull1D
Entries 82
Mean 0.01205
Std Dev 0.5514

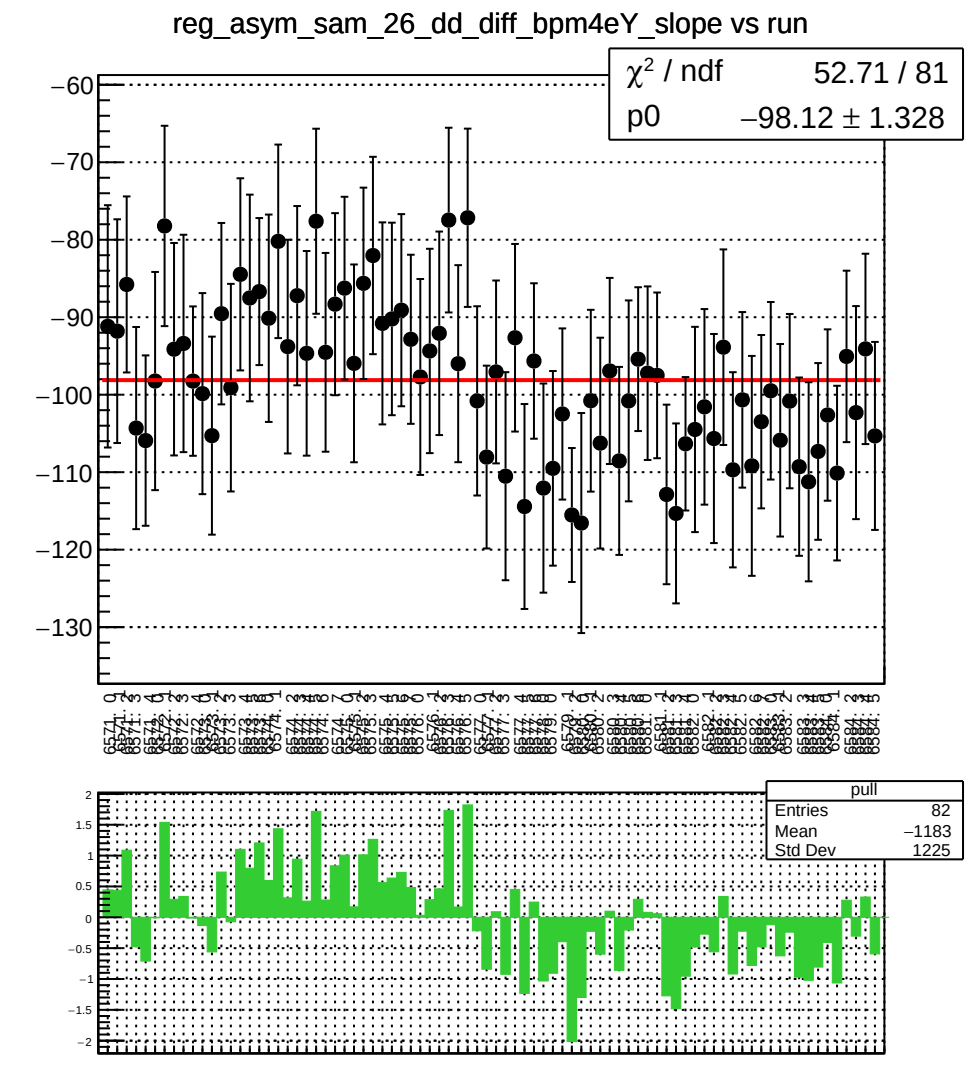

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 32.18 / 81
p0 −44.44 ± 1.342
pull
Entries 82
Mean 136.4
Std Dev 93.91

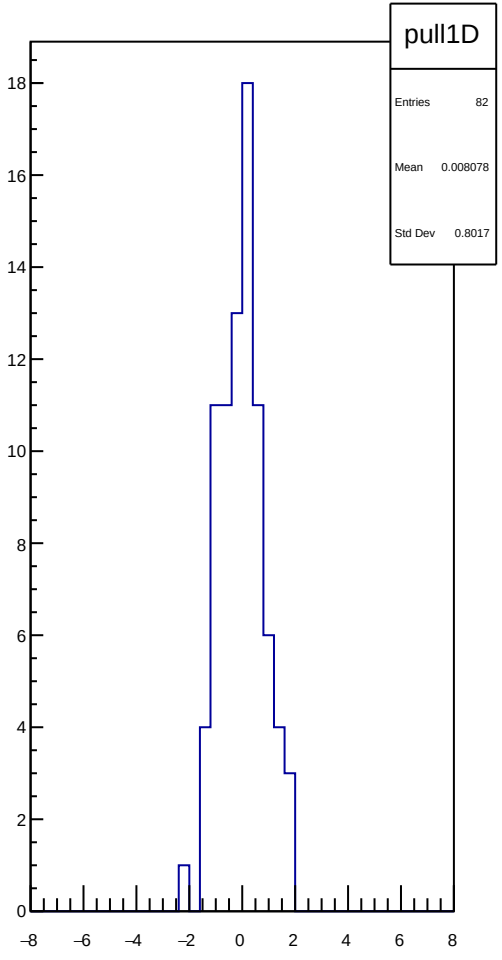

pull1D
Entries 82
Mean 0.04162
Std Dev 0.6251

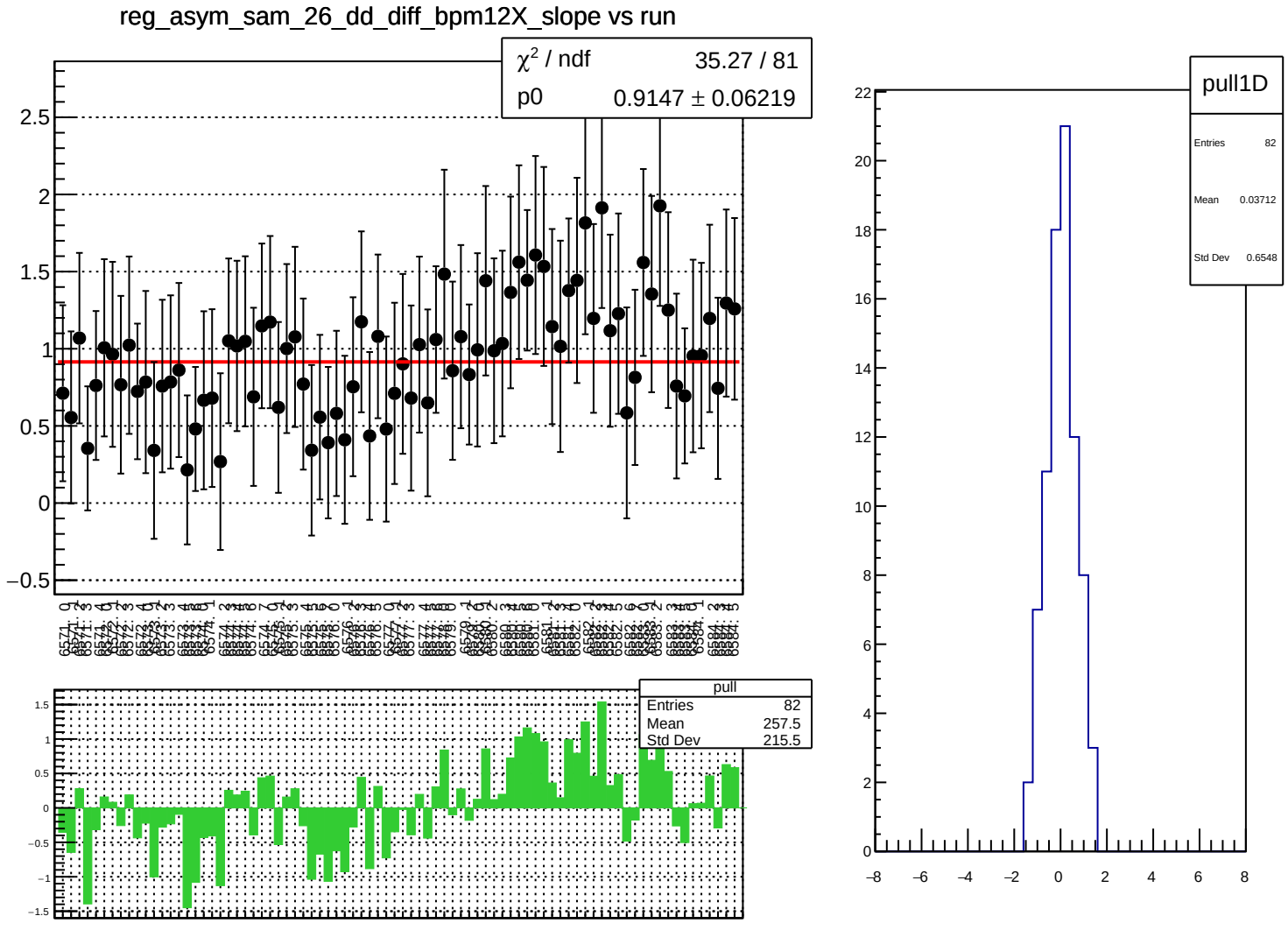

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 31.56 / 81
p0 −45.17 ± 1.099
pull
Entries 82
Mean 5827
Std Dev 5786
pull1D
Entries 82
Mean 0.001343
Std Dev 0.6204

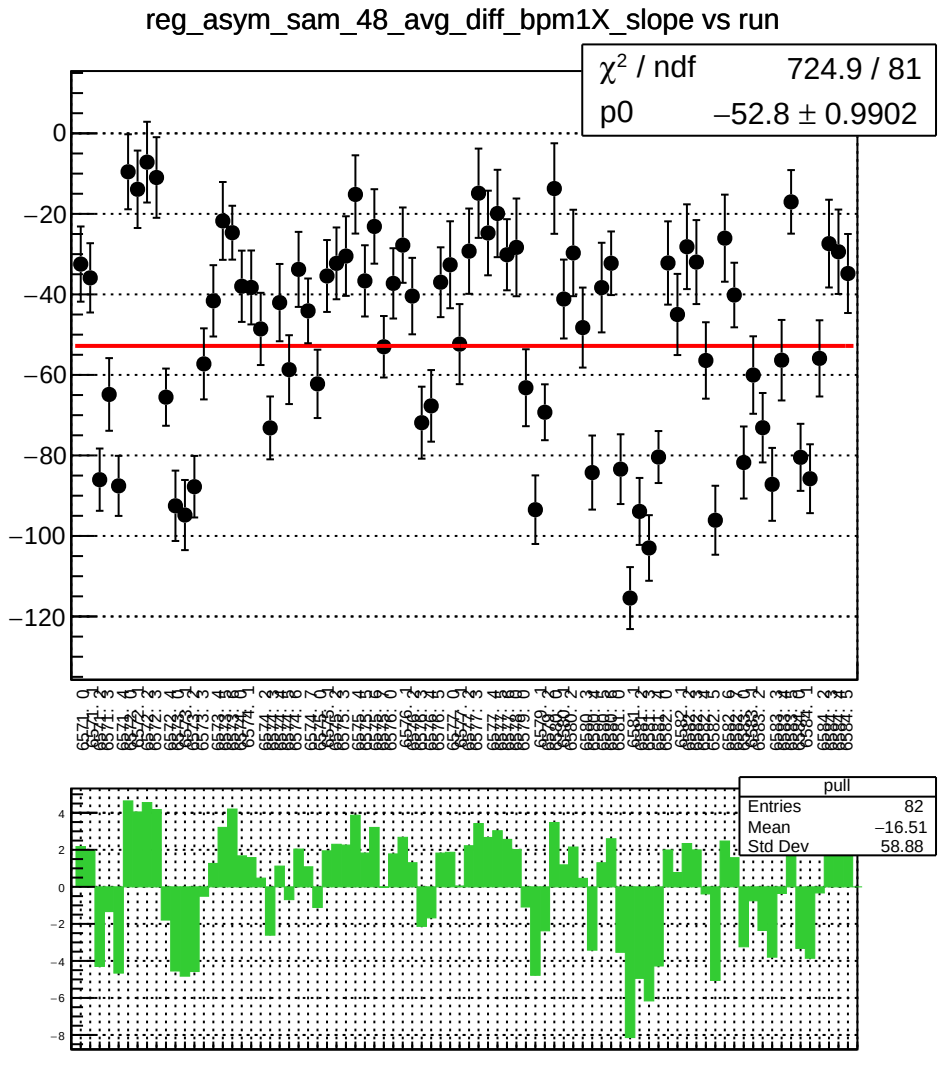

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 31.01 / 81
p0 −89.71± 1.429
pull
Entries 82
Mean 128.7
Std Dev 84.53

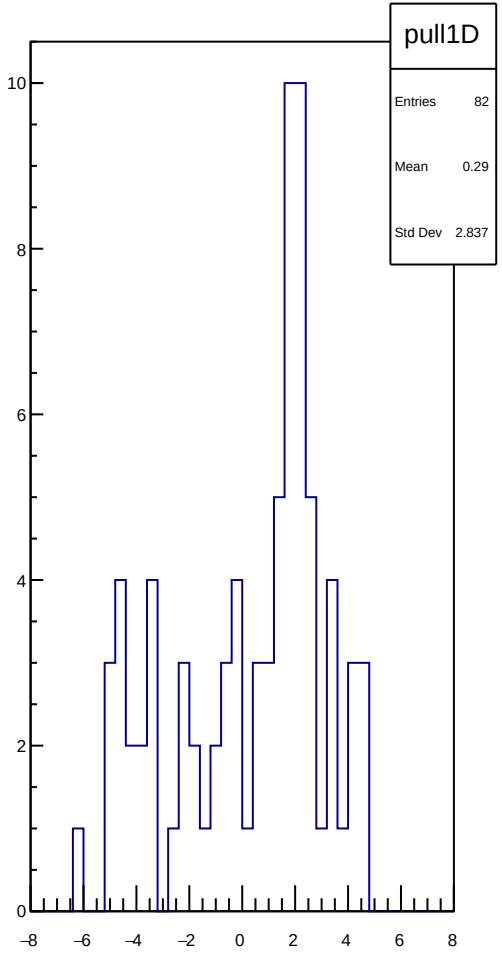

pull1D
Entries 82
Mean −0.04118
Std Dev 0.6136

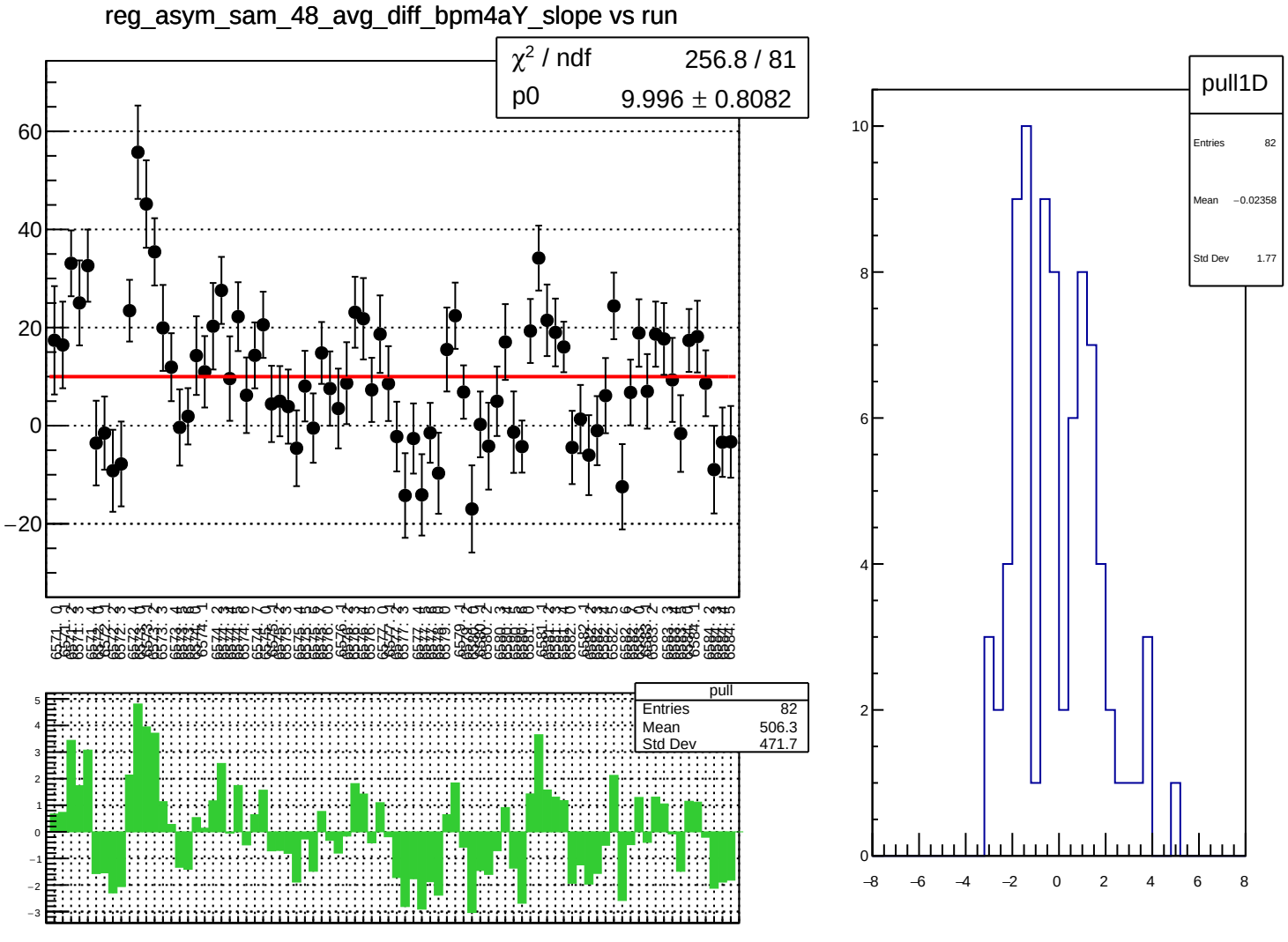

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 52.71 / 81
p0 −98.12 ± 1.328
pull
Entries 82
Mean −1183
Std Dev 1225

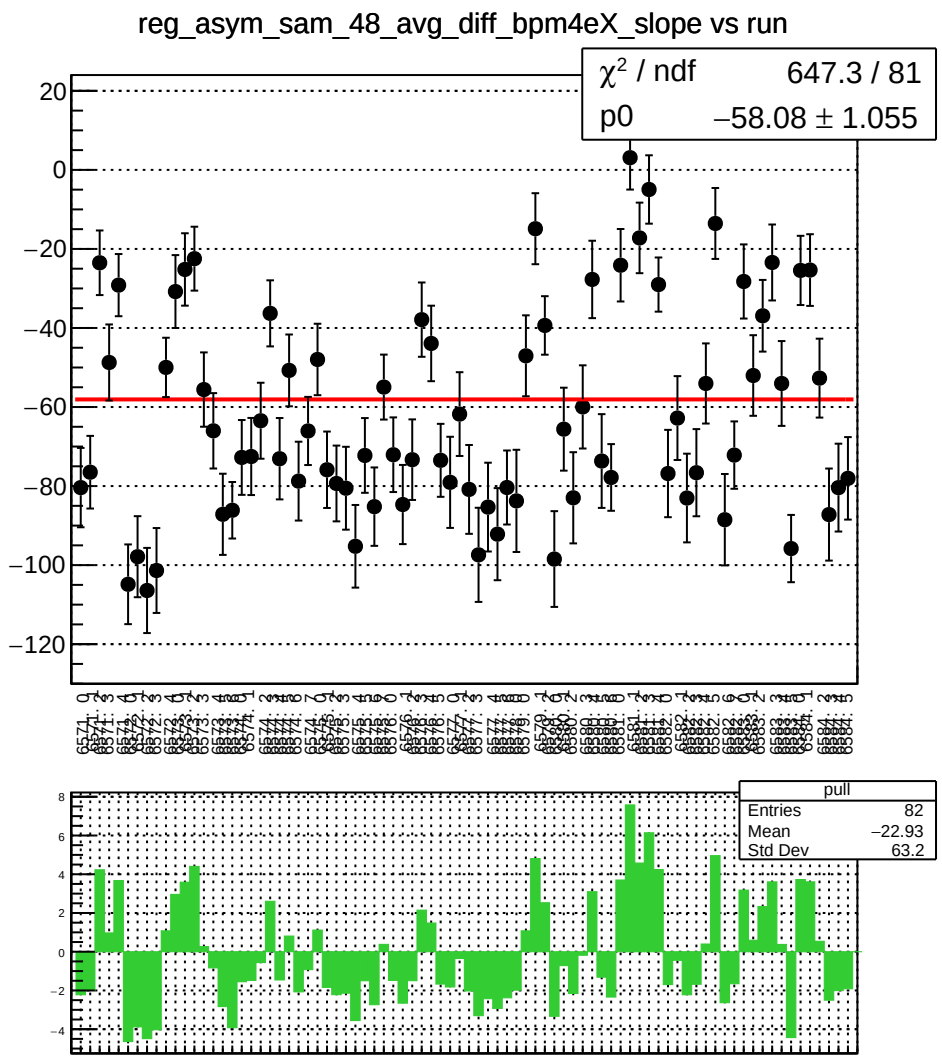

pull1D
Entries 82
Mean 0.008078
Std Dev 0.8017

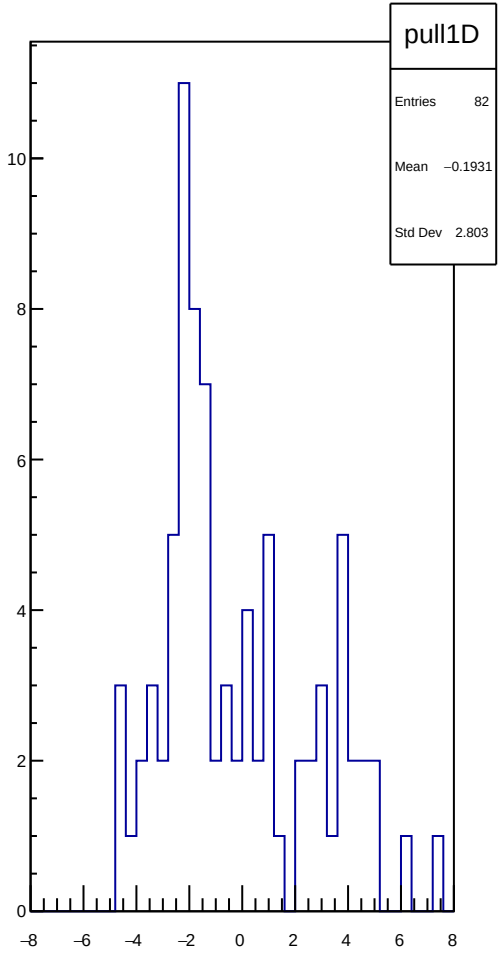

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 35.27 / 81
p0 0.9147 ± 0.06219
pull
Entries 82
Mean 257.5
Std Dev 215.5
pull1D
Entries 82
Mean 0.03712
Std Dev 0.6548

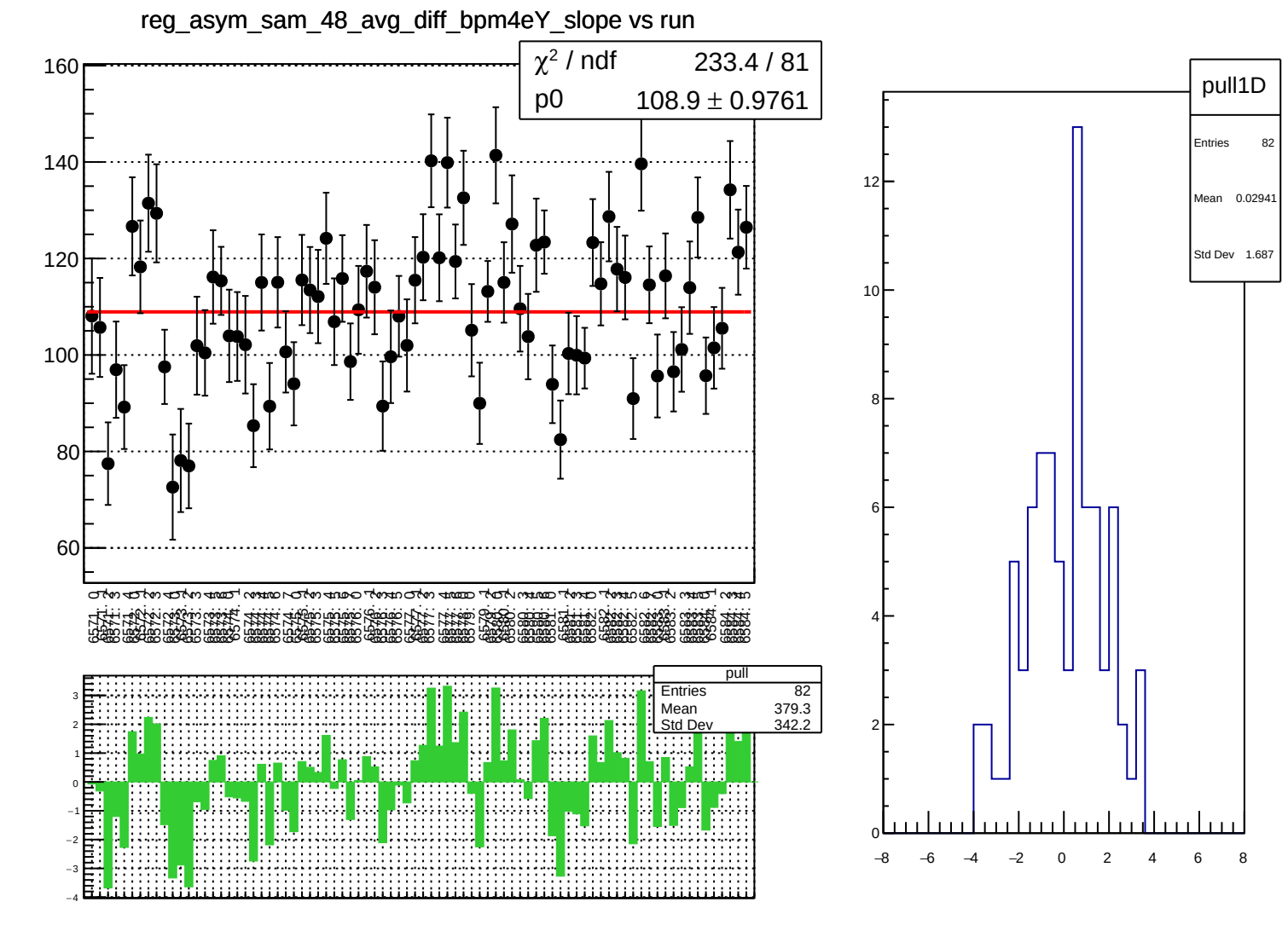

reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 724.9 / 81
p0 −52.8 ± 0.9902
pull
Entries 82
Mean −16.51
Std Dev 58.88

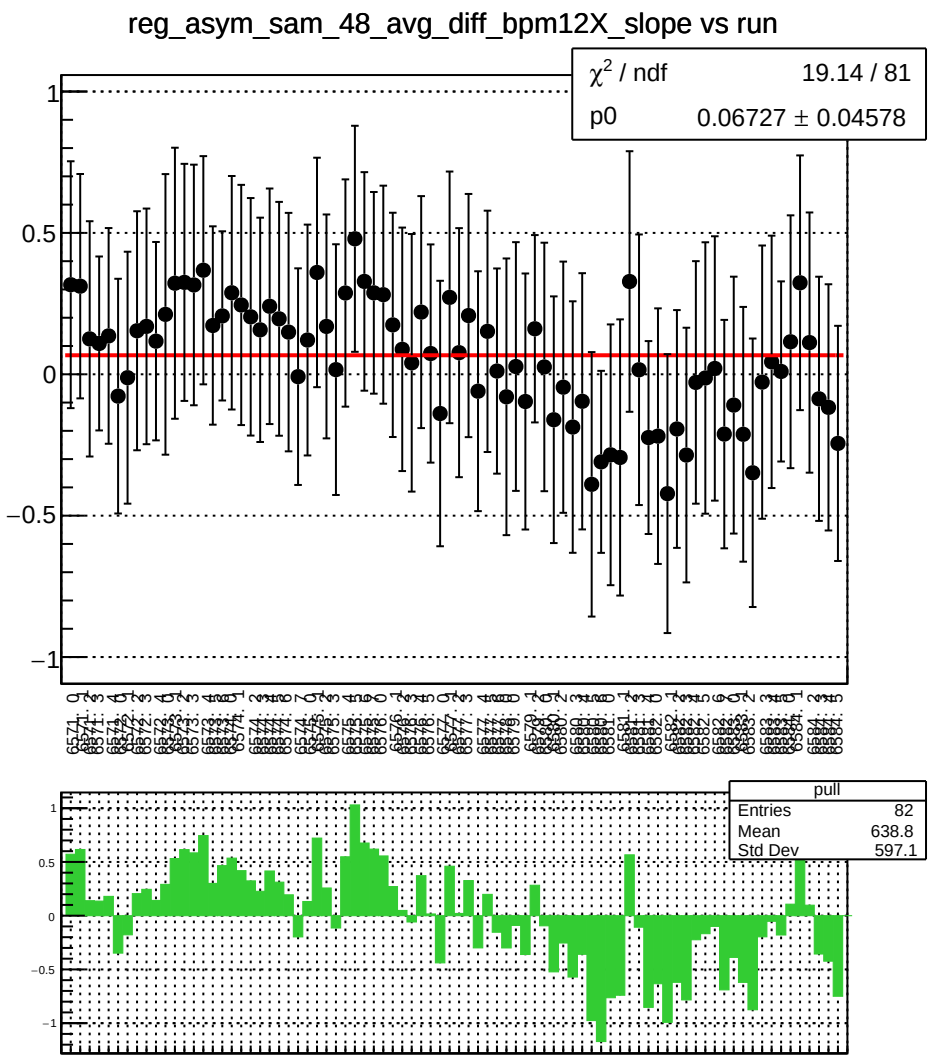

pull1D
Entries 82
Mean 0.29
Std Dev 2.837

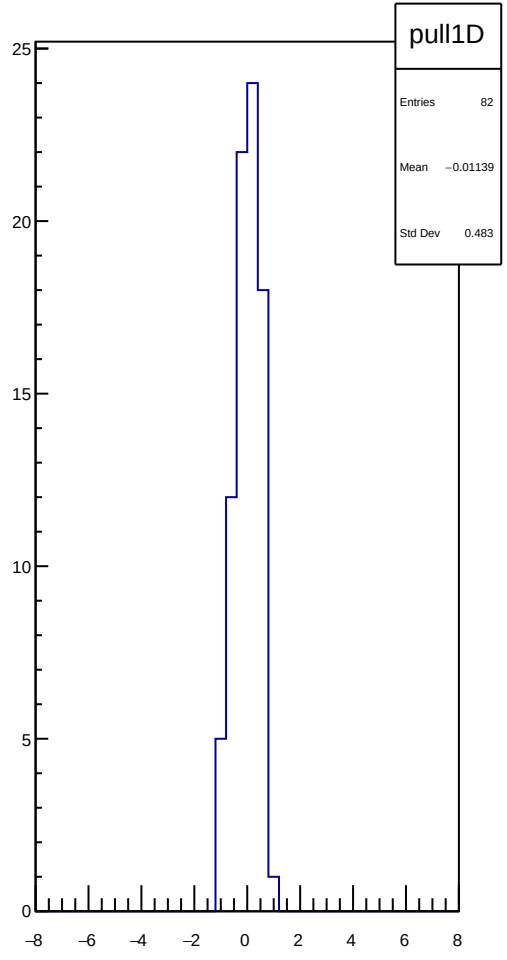

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 256.8 / 81
p0 9.996 ± 0.8082
pull
Entries 82
Mean 506.3
Std Dev 471.7
pull1D
Entries 82
Mean −0.02358
Std Dev 1.77

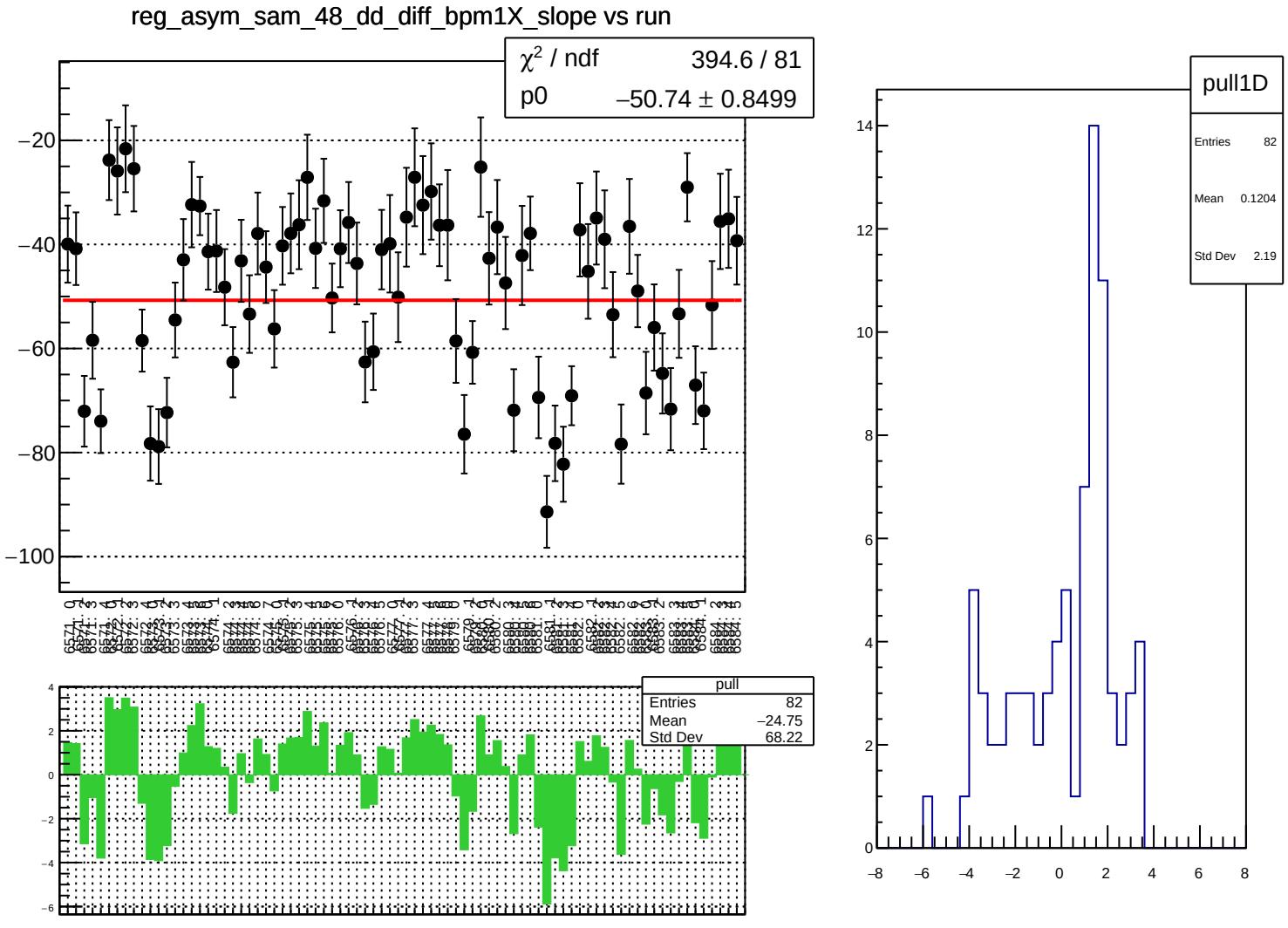

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 647.3 / 81
p0 −58.08 ± 1.055
pull
Entries 82
Mean −22.93
Std Dev 63.2

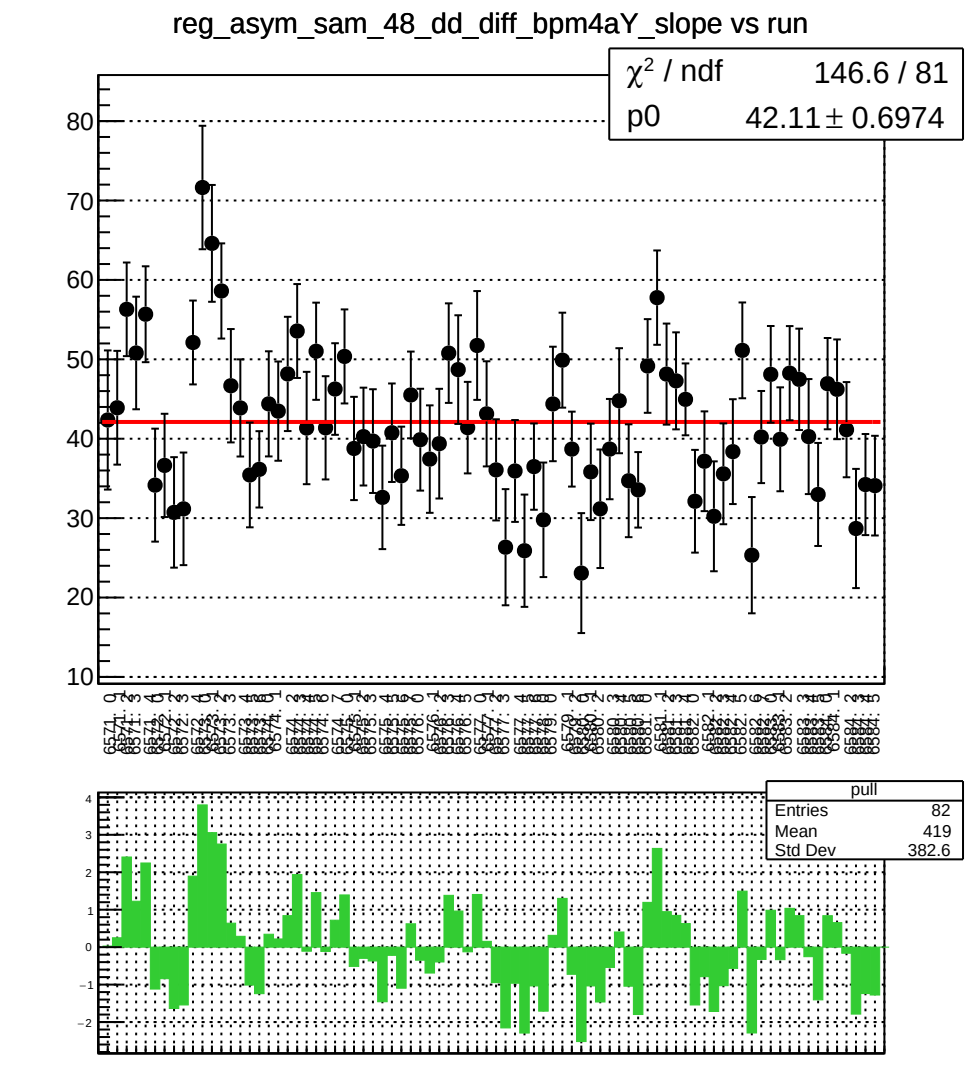

pull1D
Entries 82
Mean −0.1931
Std Dev 2.803

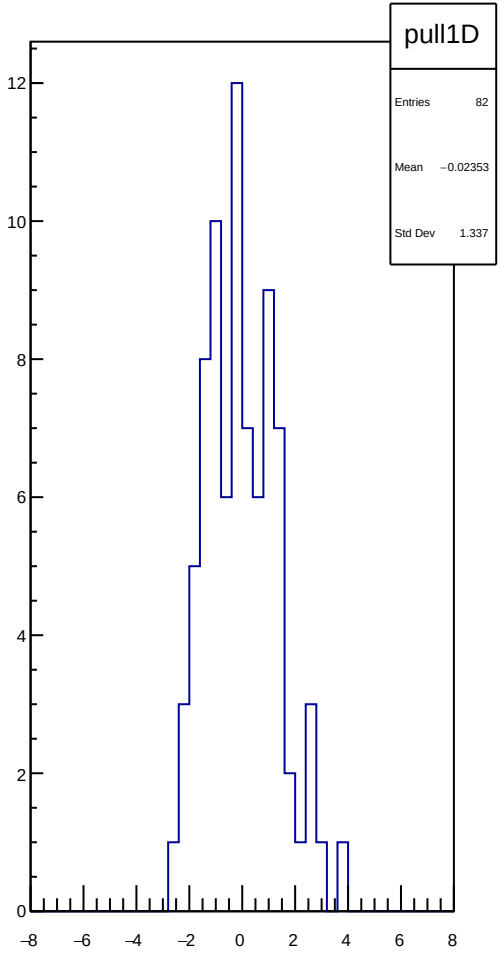

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 233.4 / 81
p0 108.9 ± 0.9761
160
140
120
100
80
60
pull
Entries 82
Mean 379.3
Std Dev 342.2
3
2
1
0
−1
−2
−3
−4
pull1D
Entries 82
Mean 0.02941
Std Dev 1.687
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

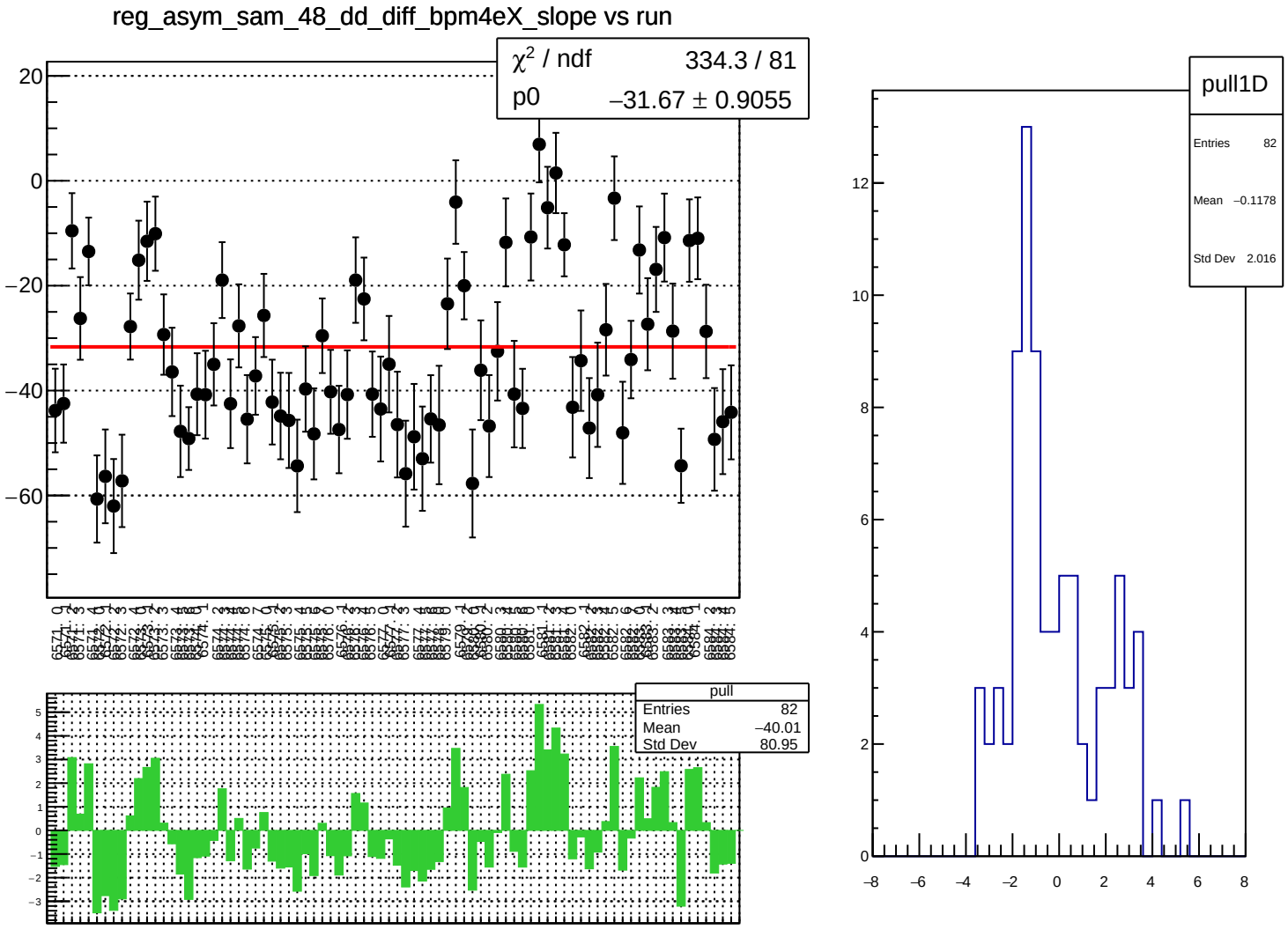

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 19.14 / 81
p0 0.06727 ± 0.04578
pull
Entries 82
Mean 638.8
Std Dev 597.1

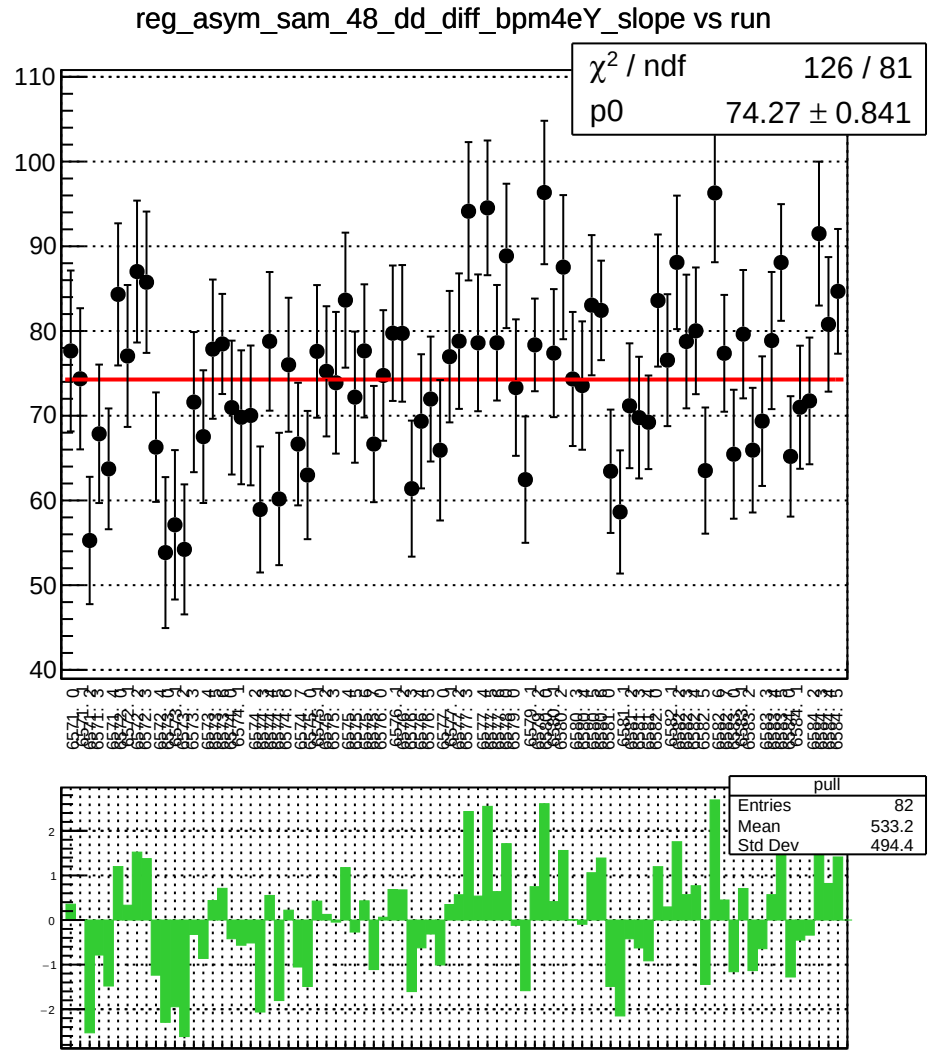

pull1D
Entries 82
Mean −0.01139
Std Dev 0.483

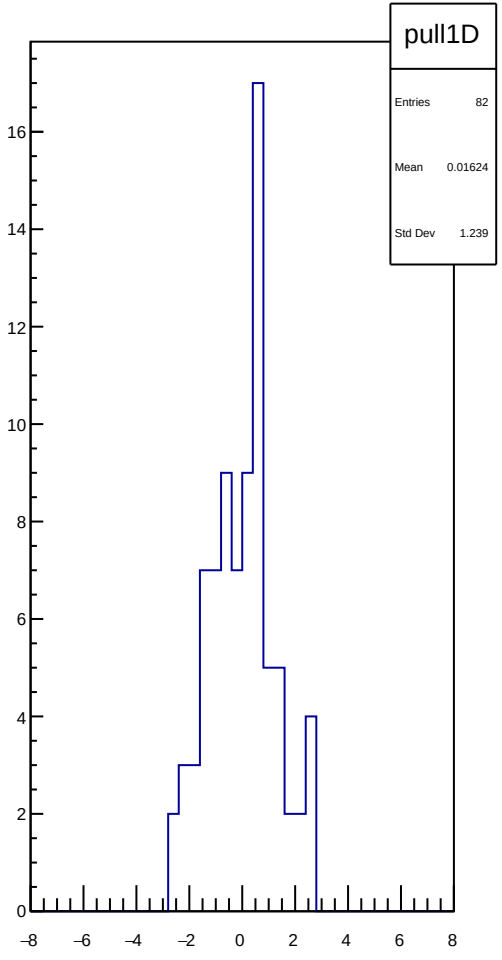

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 394.6 / 81
p0 −50.74 ± 0.8499
pull
Entries 82
Mean −24.75
Std Dev 68.22
pull1D
Entries 82
Mean 0.1204
Std Dev 2.19

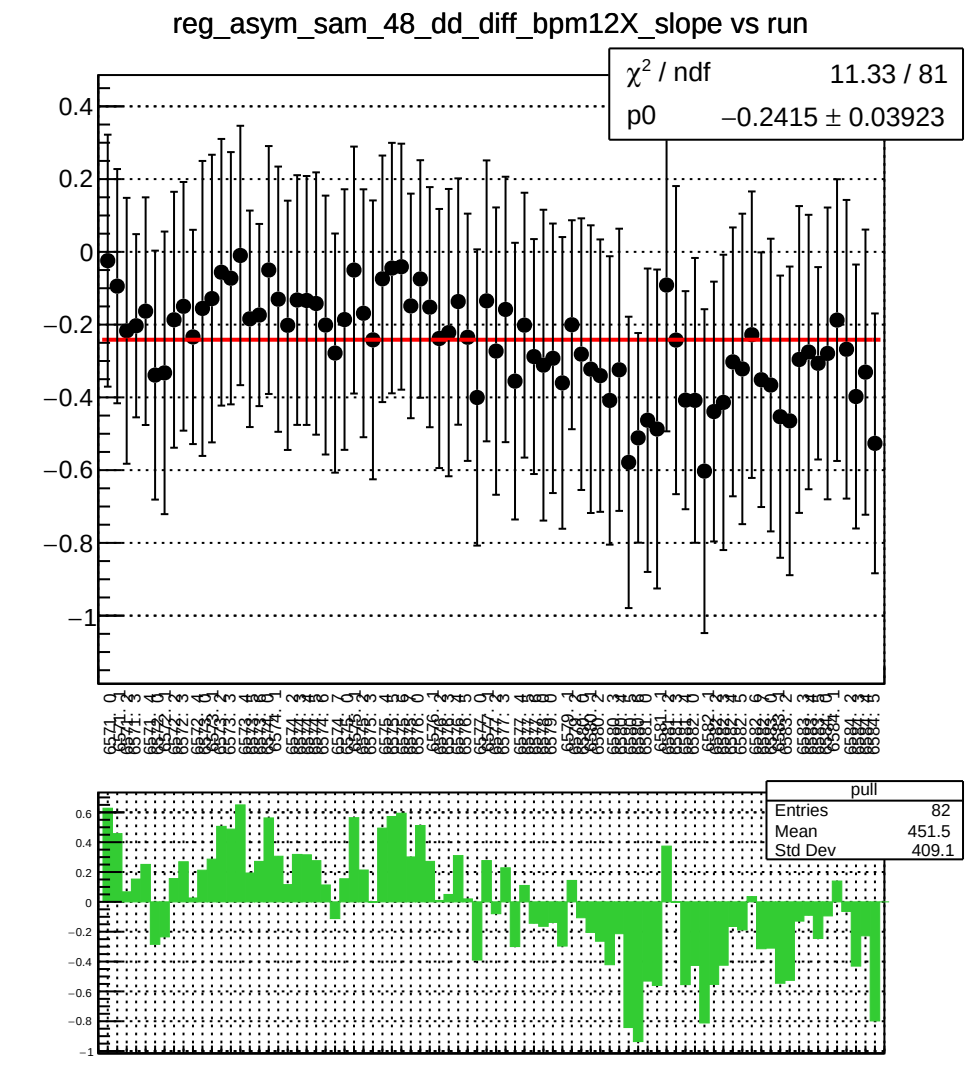

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 146.6 / 81
p0 42.11 ± 0.6974
pull
Entries 82
Mean 419
Std Dev 382.6

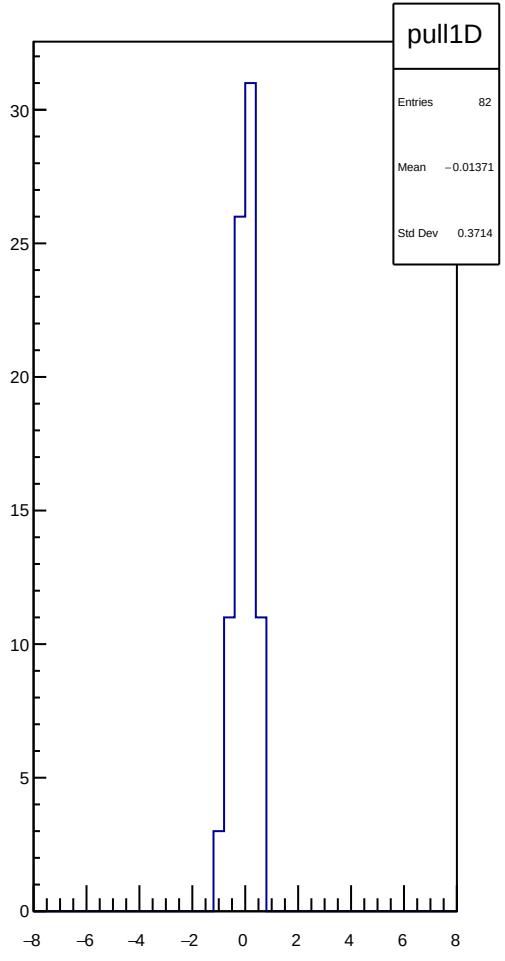

pull1D
Entries 82
Mean −0.02353
Std Dev 1.337

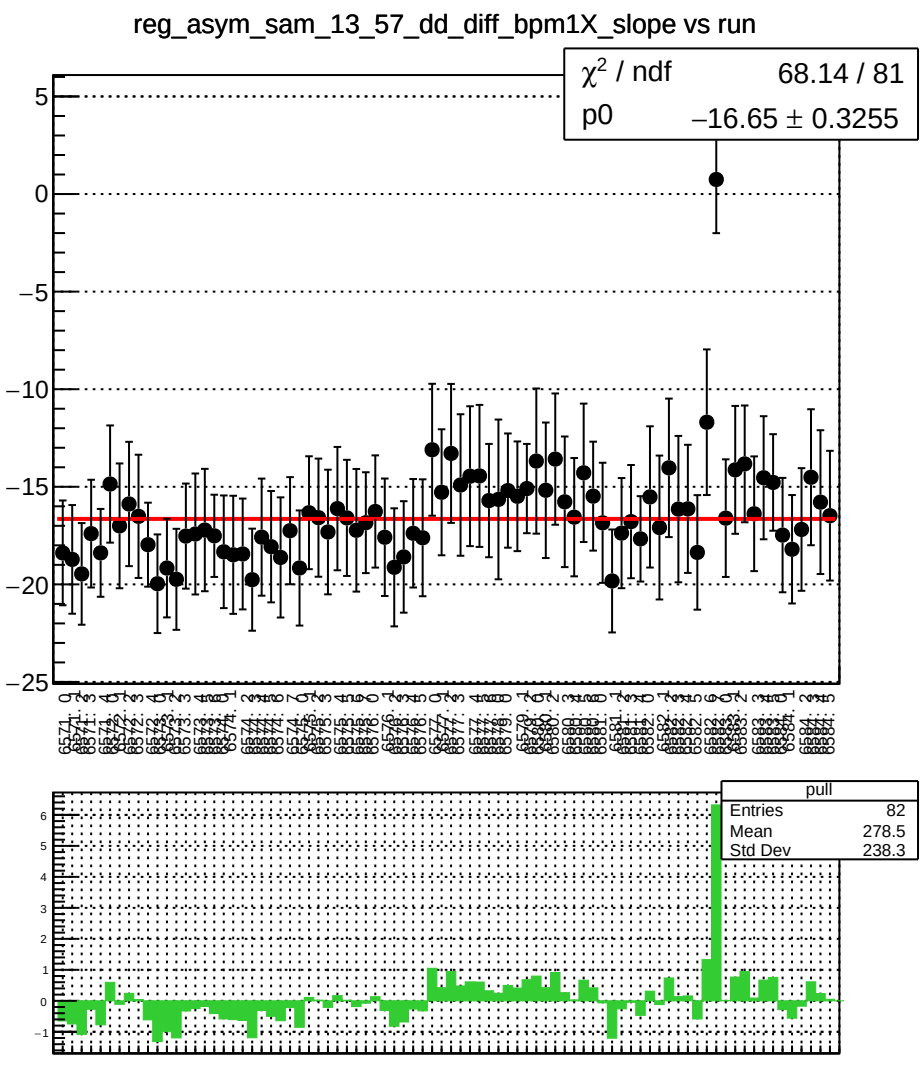

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 334.3 / 81
p0 −31.67 ± 0.9055
pull
Entries 82
Mean −40.01
Std Dev 80.95
pull1D
Entries 82
Mean −0.1178
Std Dev 2.016

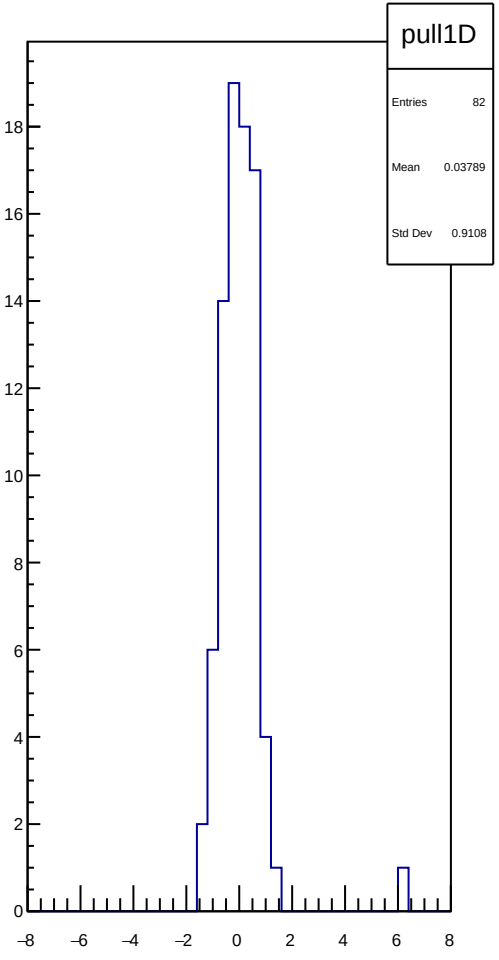

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 126 / 81
p0 74.27 ± 0.841
pull
Entries 82
Mean 533.2
Std Dev 494.4

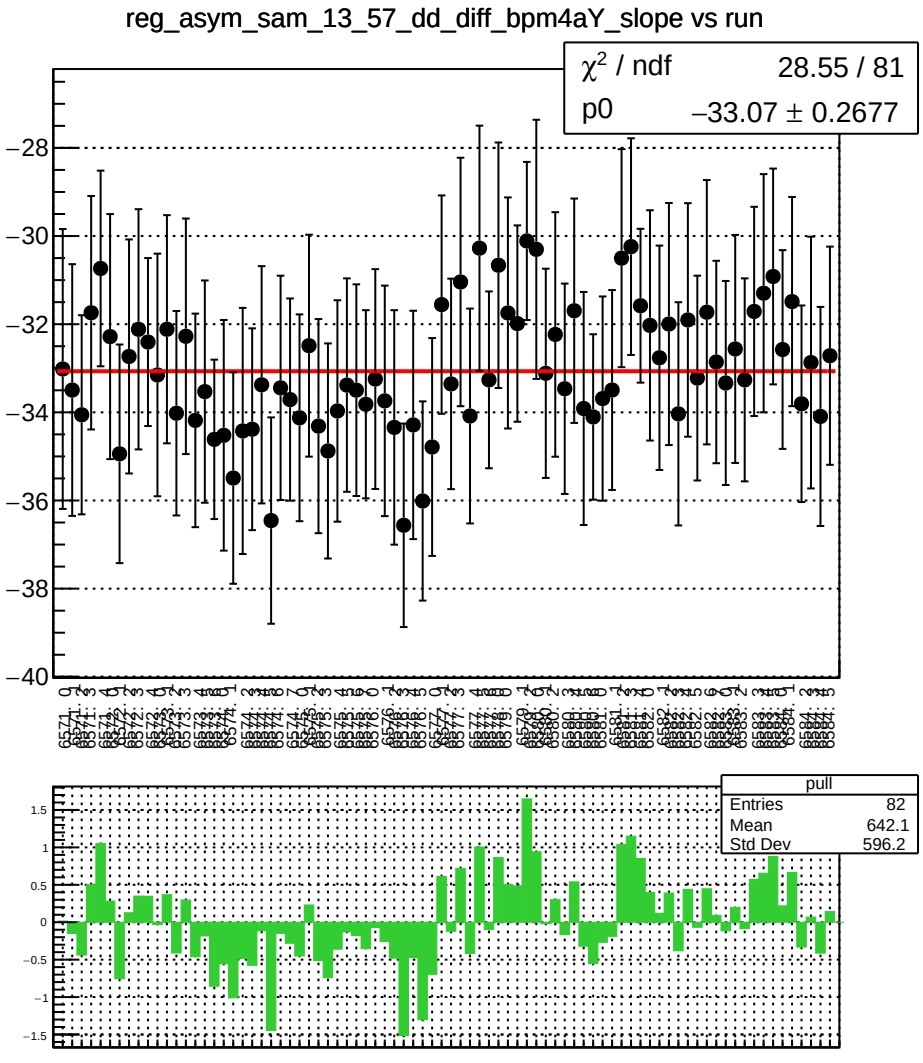

pull1D
Entries 82
Mean 0.01624
Std Dev 1.239

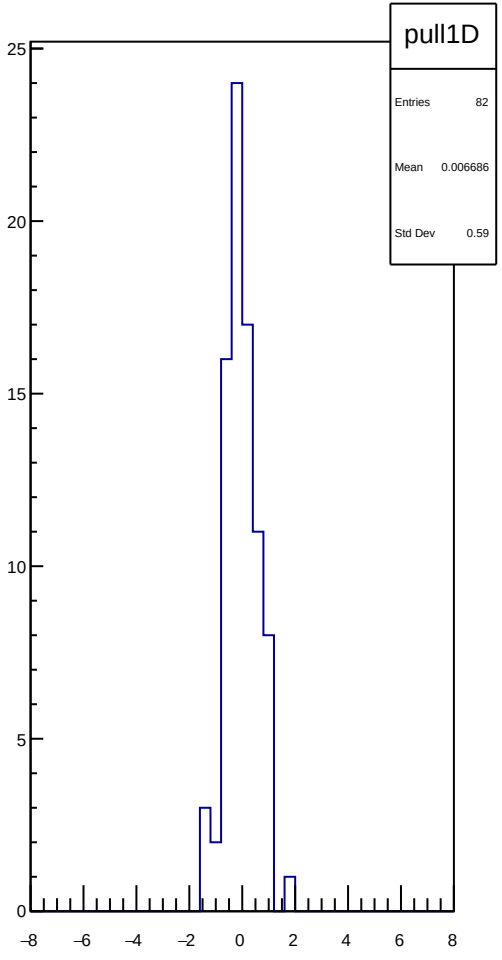

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 11.33 / 81
p0 −0.2415 ± 0.03923
pull
Entries 82
Mean 451.5
Std Dev 409.1

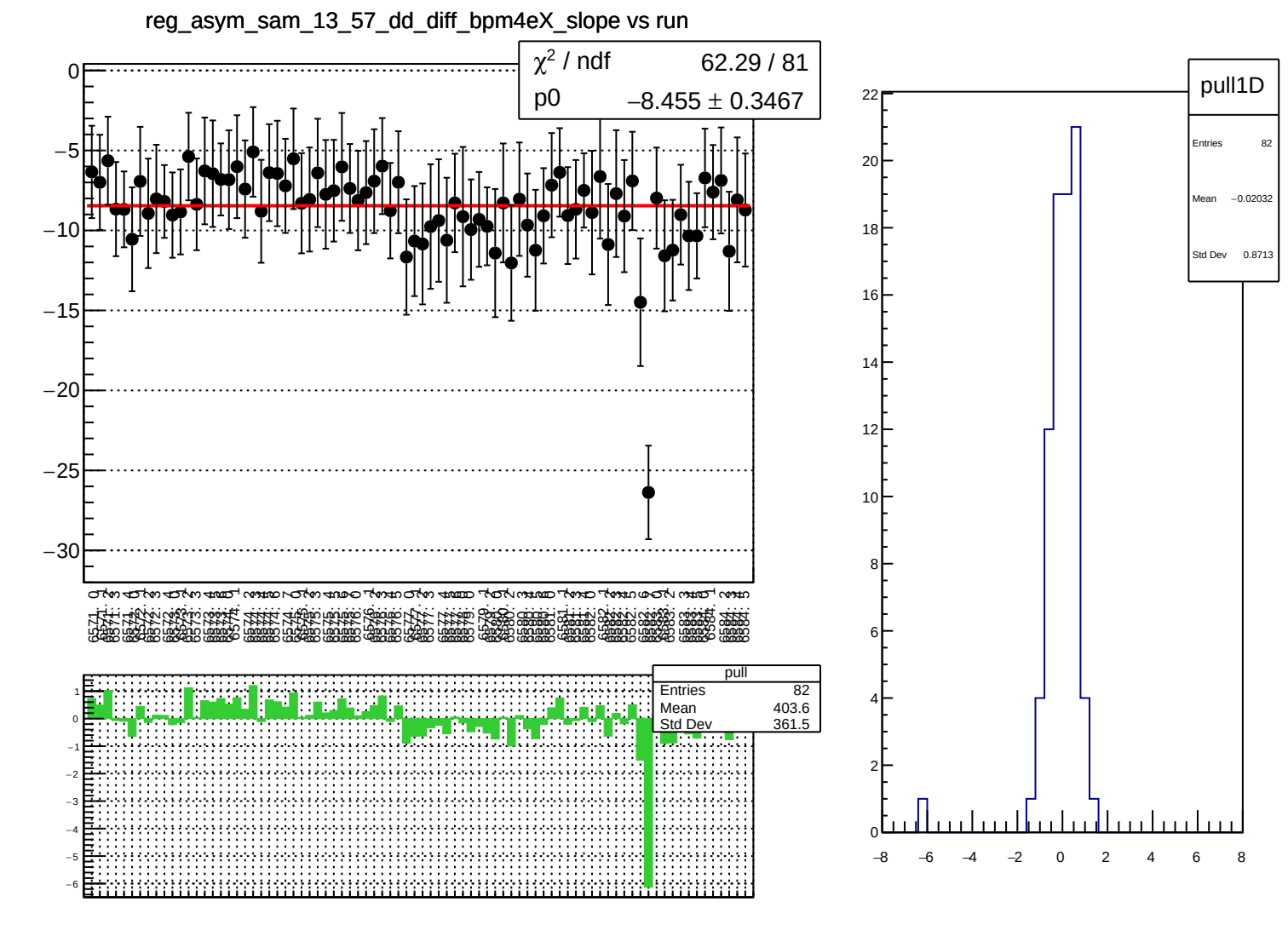

pull1D
Entries 82
Mean −0.01371
Std Dev 0.3714

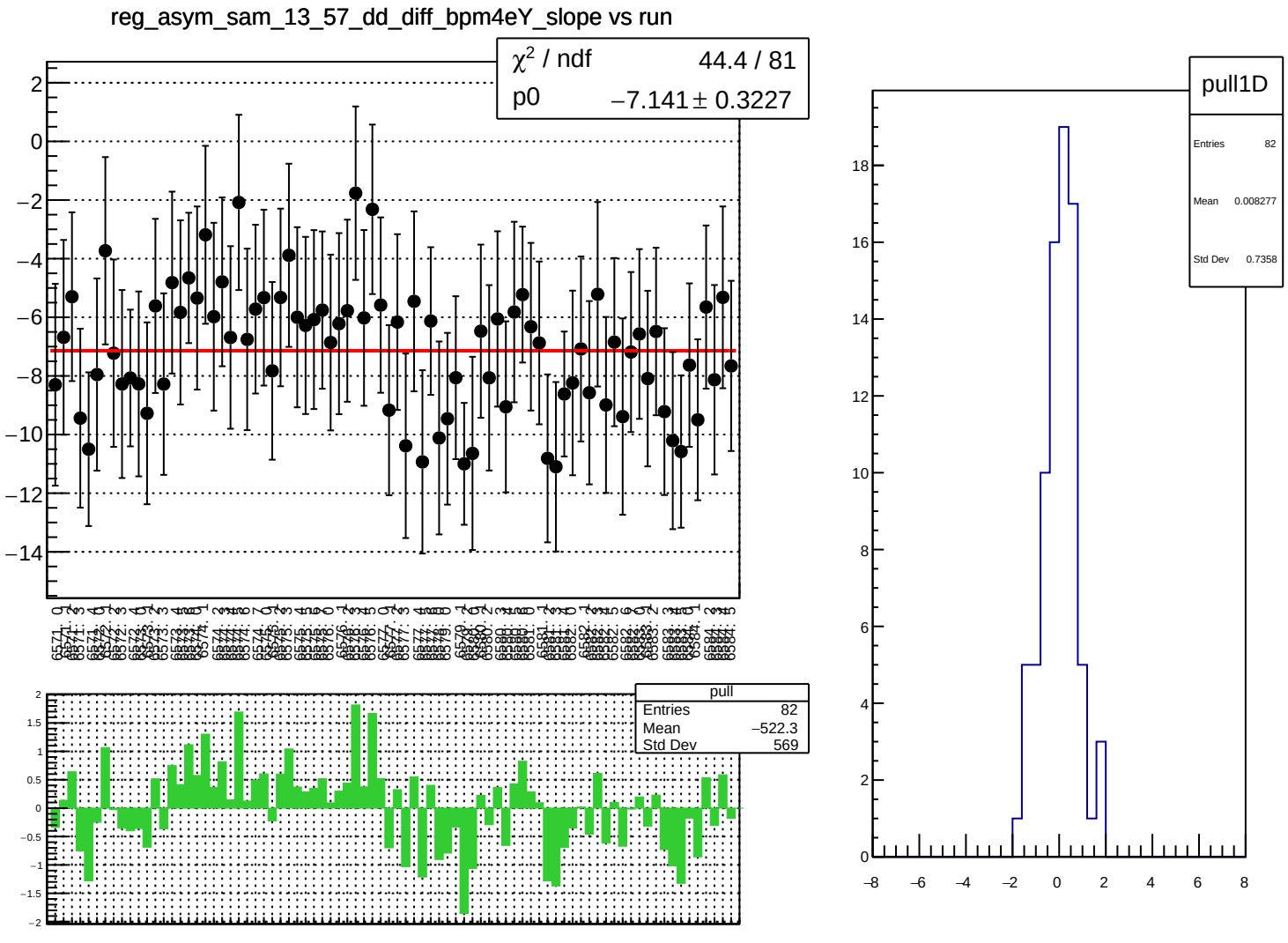

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 68.14 / 81
p0 −16.65 ± 0.3255
pull
Entries 82
Mean 278.5
Std Dev 238.3

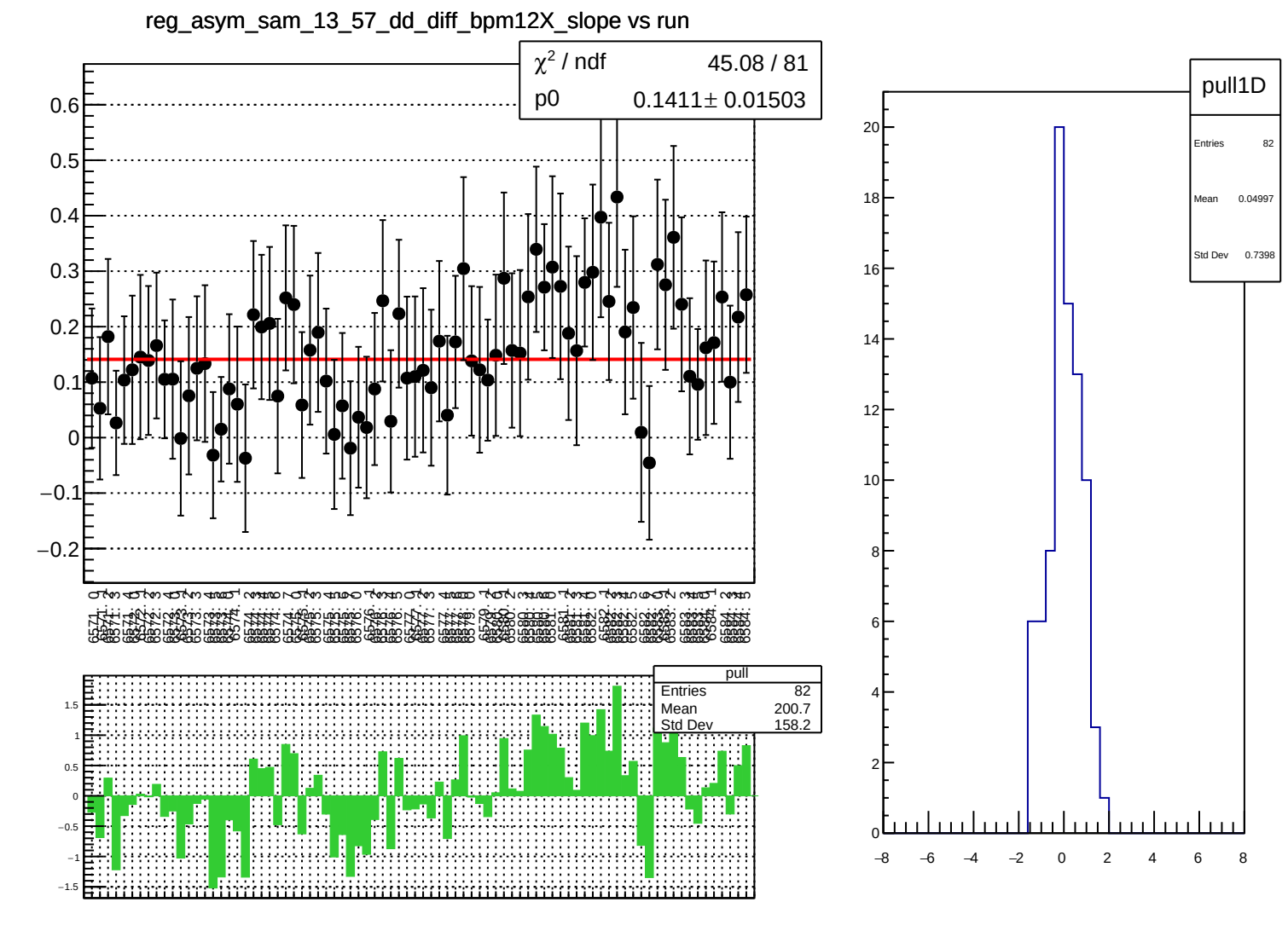

pull1D
Entries 82
Mean 0.03789
Std Dev 0.9108

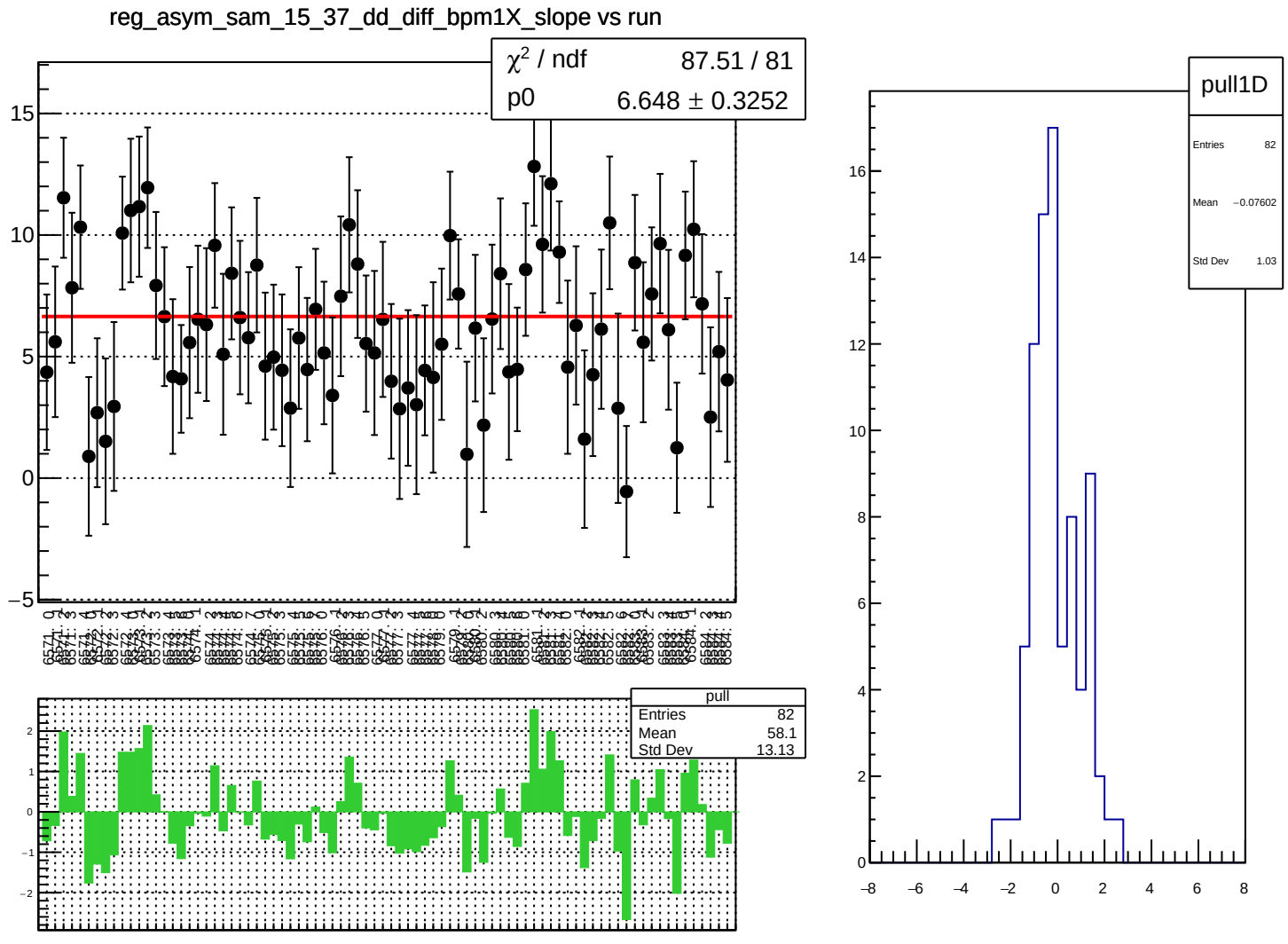

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 28.55 / 81
p0 −33.07 ± 0.2677
pull
Entries 82
Mean 642.1
Std Dev 596.2

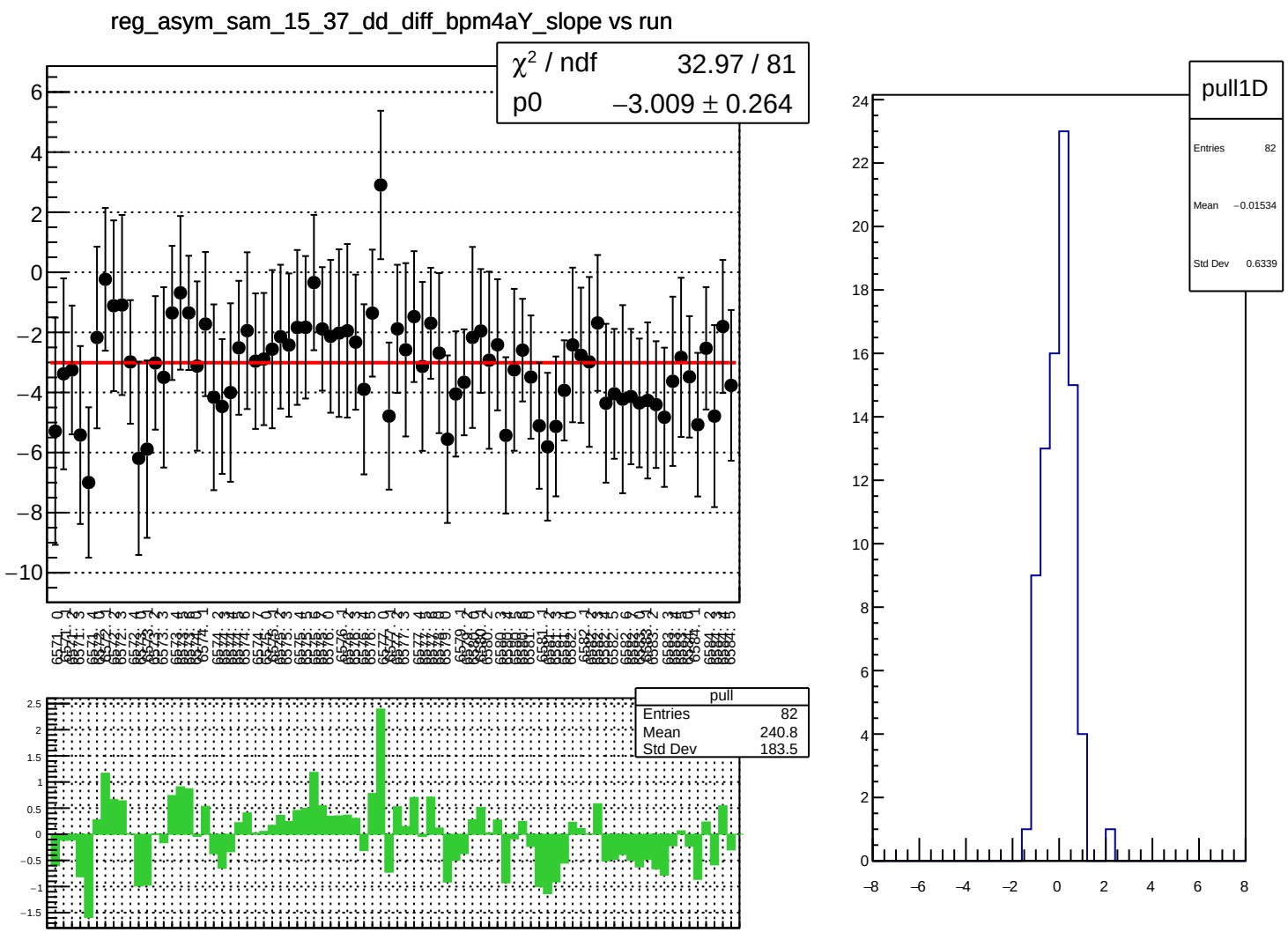

pull1D
Entries 82
Mean 0.006686
Std Dev 0.59

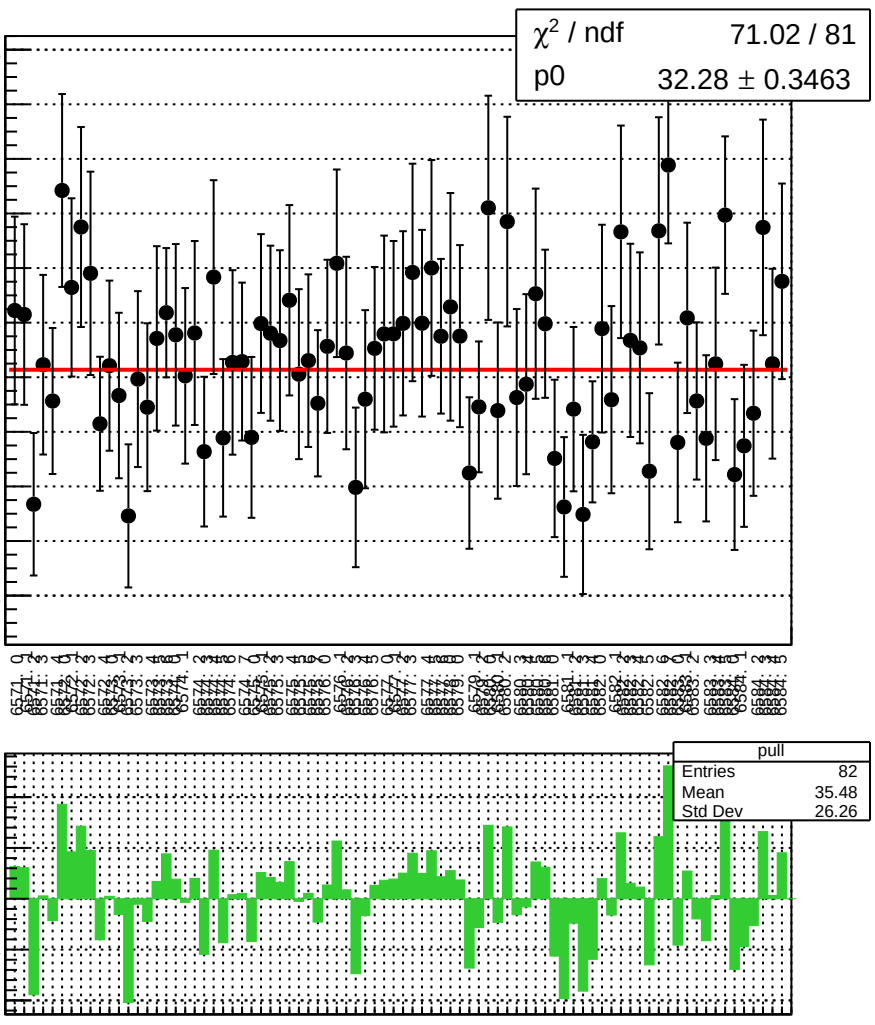

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 62.29 / 81
p0 −8.455 ± 0.3467
pull
Entries 82
Mean 403.6
Std Dev 361.5
pull1D
Entries 82
Mean −0.02032
Std Dev 0.8713

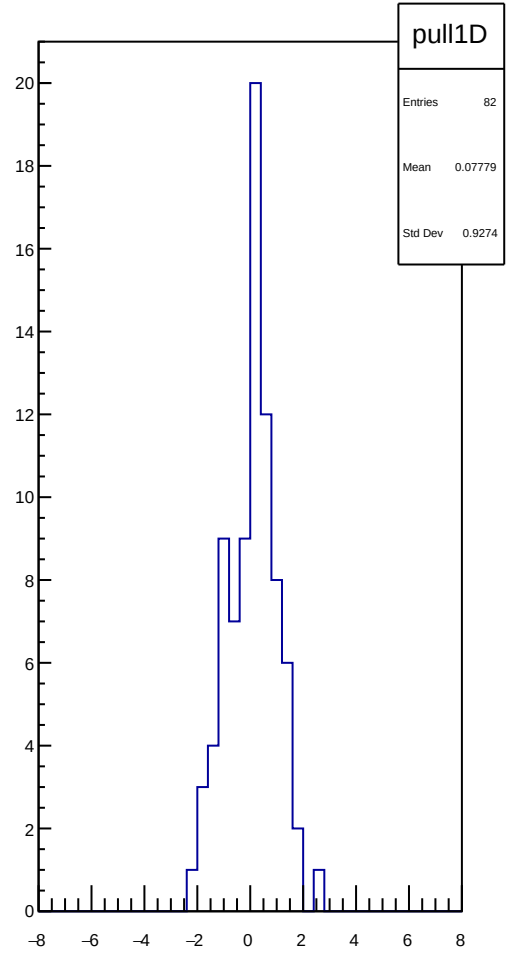

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 44.4 / 81
p0 −7.141 ± 0.3227
pull
Entries 82
Mean −522.3
Std Dev 569
pull1D
Entries 82
Mean 0.008277
Std Dev 0.7358

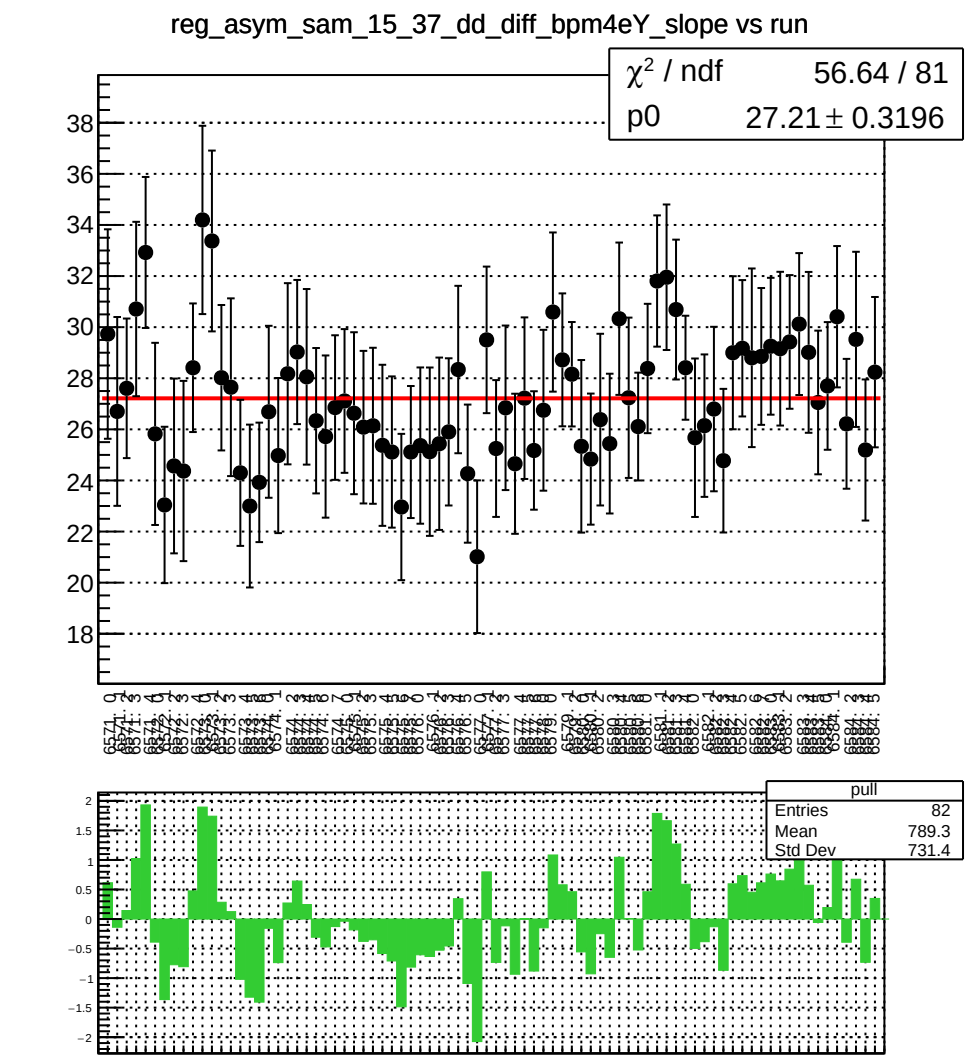

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 45.08 / 81
p0 0.1411± 0.01503
pull
Entries 82
Mean 200.7
Std Dev 158.2
pull1D
Entries 82
Mean 0.04997
Std Dev 0.7398

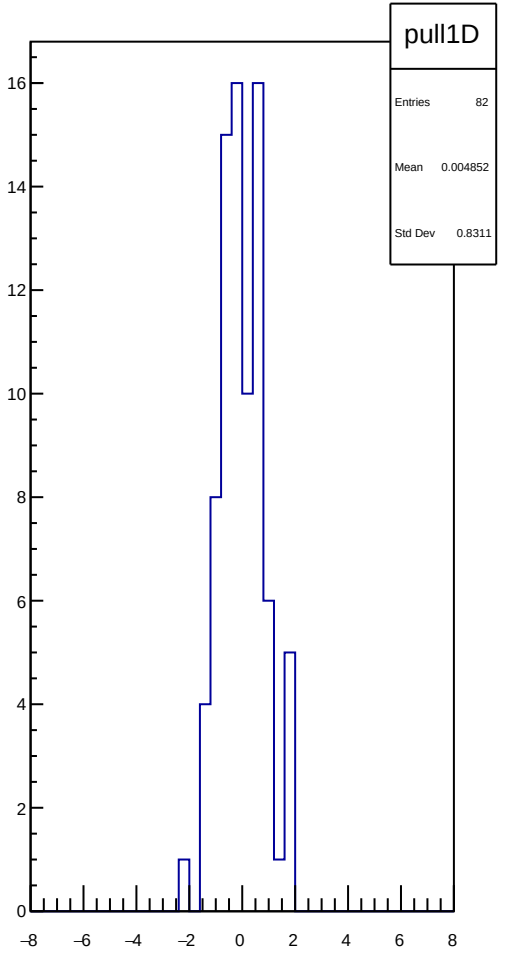

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 87.51 / 81
p0 6.648 ± 0.3252
pull
Entries 82
Mean 58.1
Std Dev 13.13
pull1D
Entries 82
Mean −0.07602
Std Dev 1.03

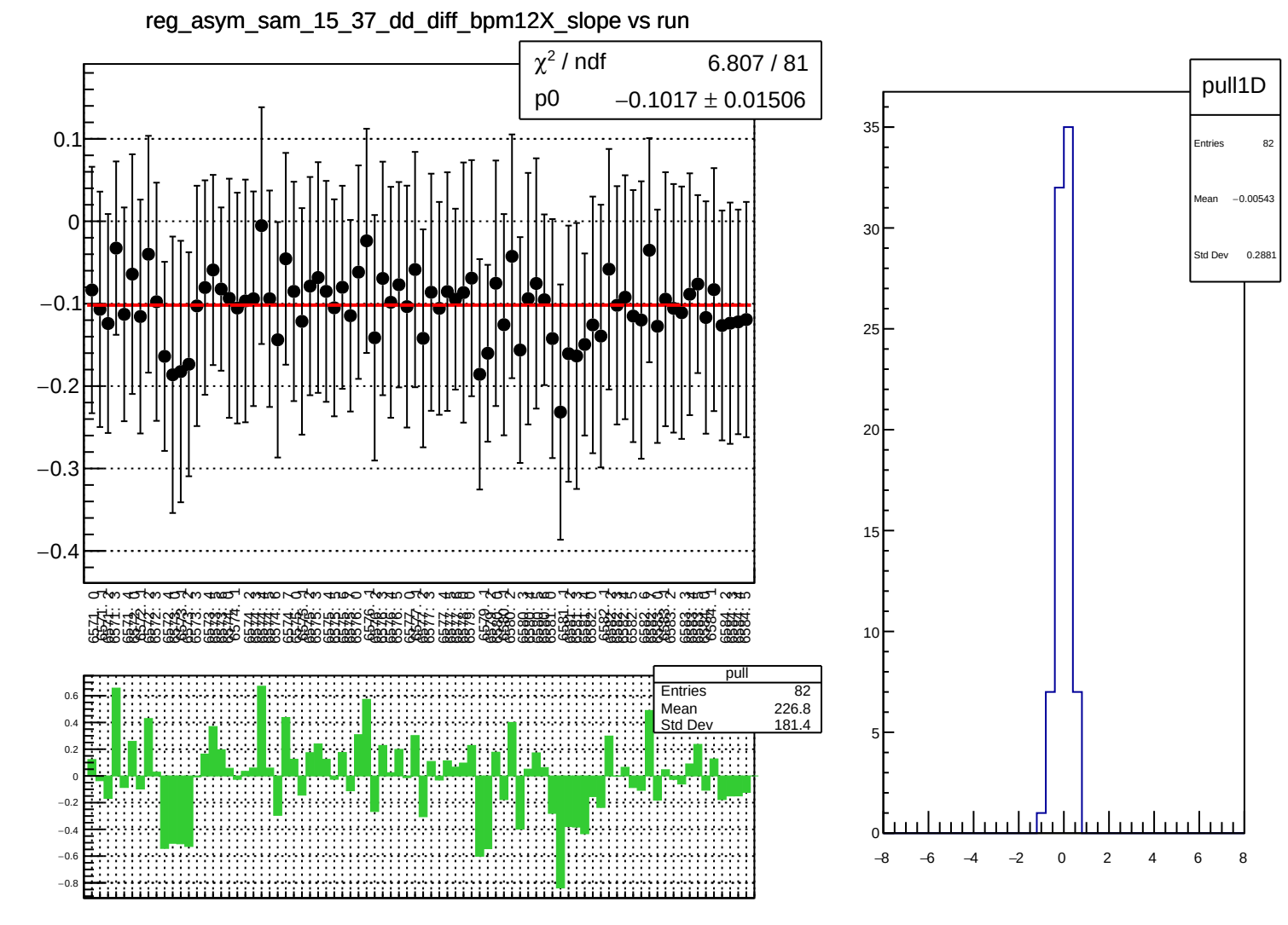

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 32.97 / 81
p0 −3.009 ± 0.264
pull
Entries 82
Mean 240.8
Std Dev 183.5
pull1D
Entries 82
Mean −0.01534
Std Dev 0.6339

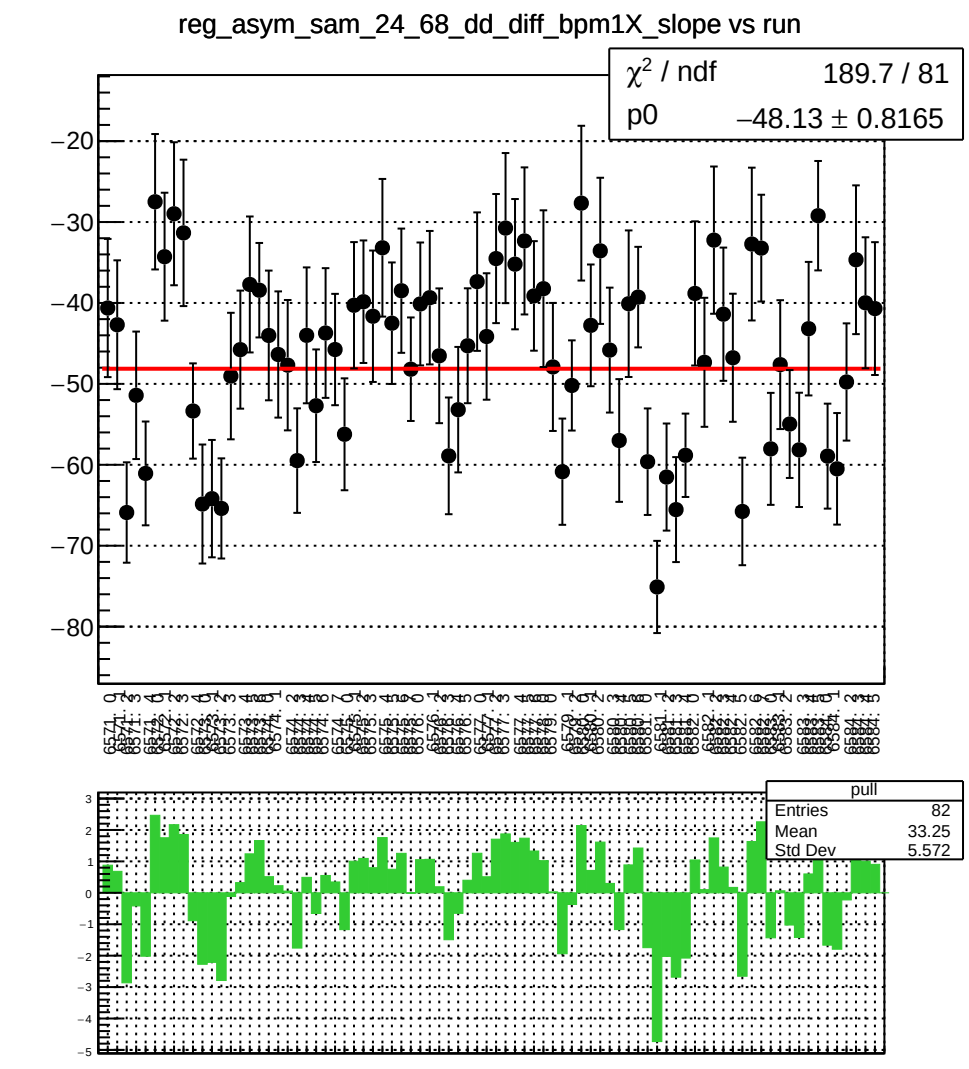

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 71.02 / 81
p0 32.28 ± 0.3463
pull
Entries 82
Mean 35.48
Std Dev 26.26

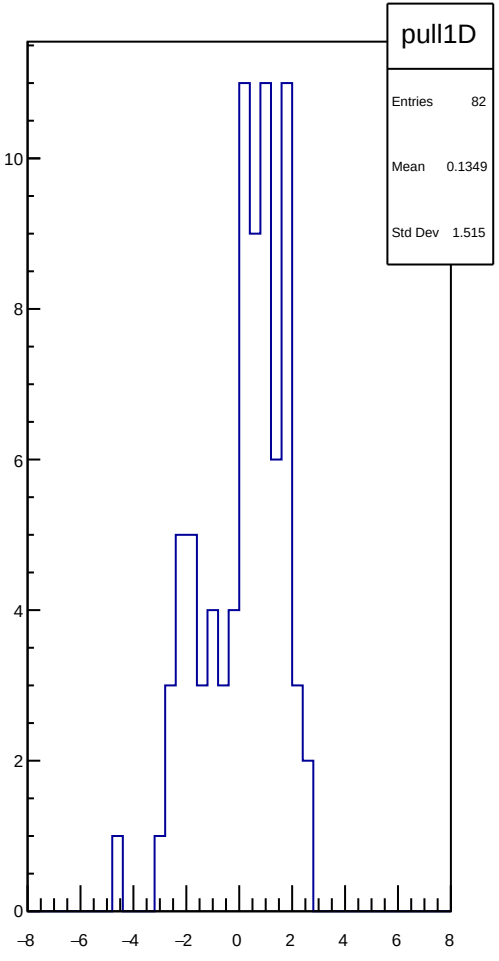

pull1D
Entries 82
Mean 0.07779
Std Dev 0.9274

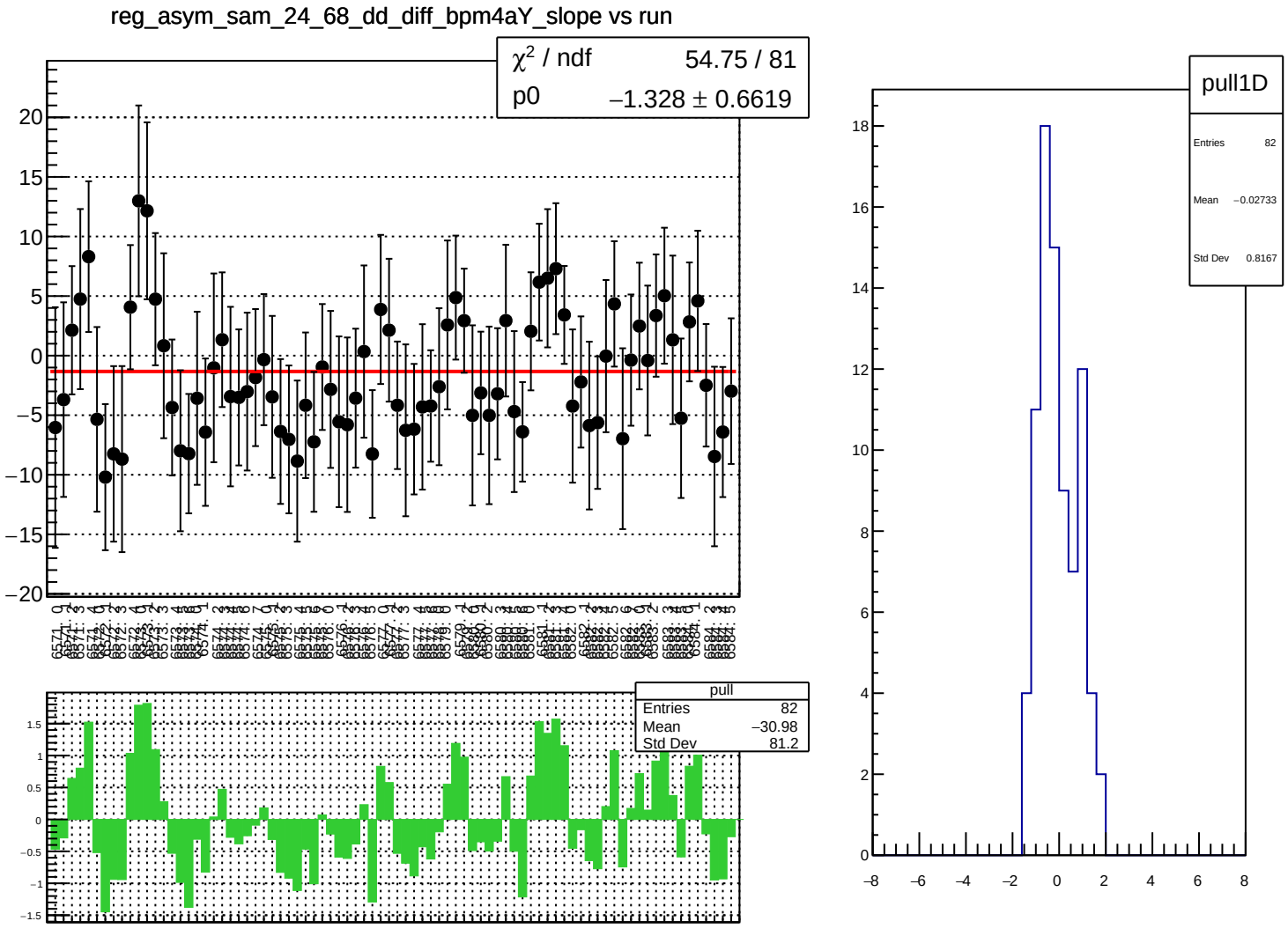

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 56.64 / 81
p0 27.21 ± 0.3196
pull
Entries 82
Mean 789.3
Std Dev 731.4

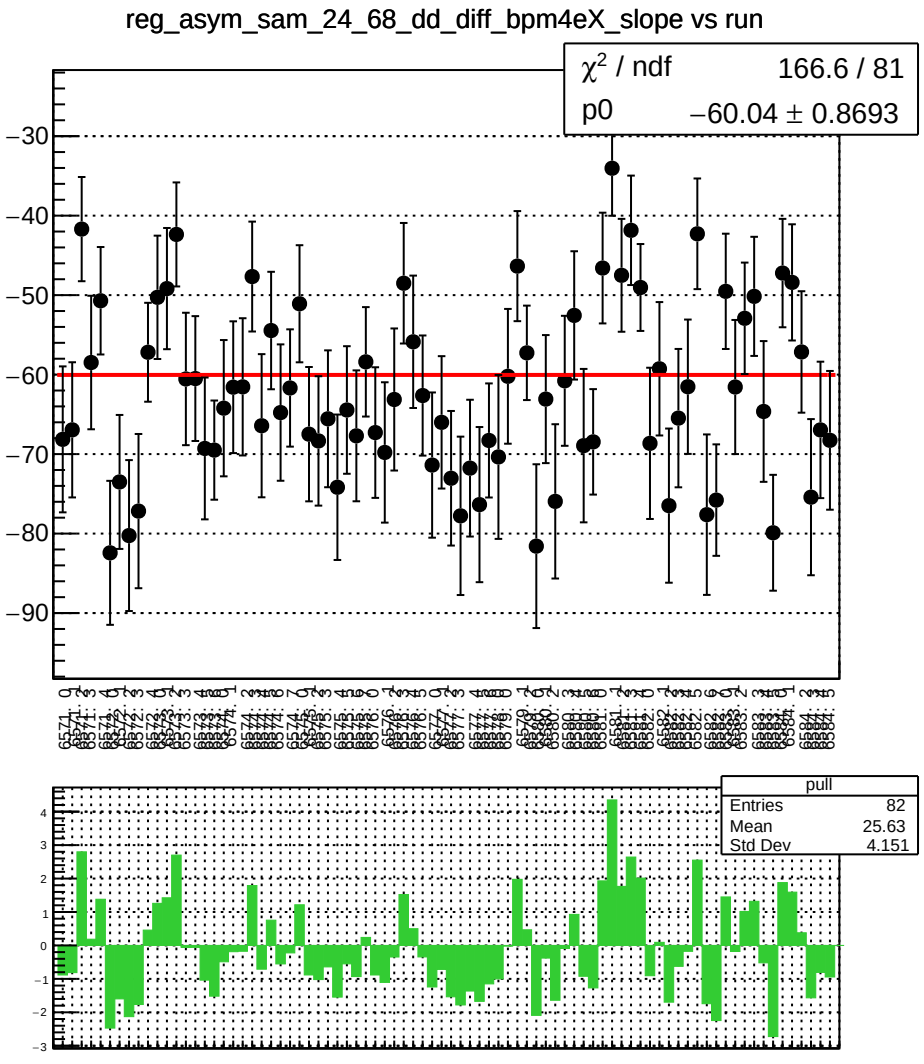

pull1D
Entries 82
Mean 0.004852
Std Dev 0.8311

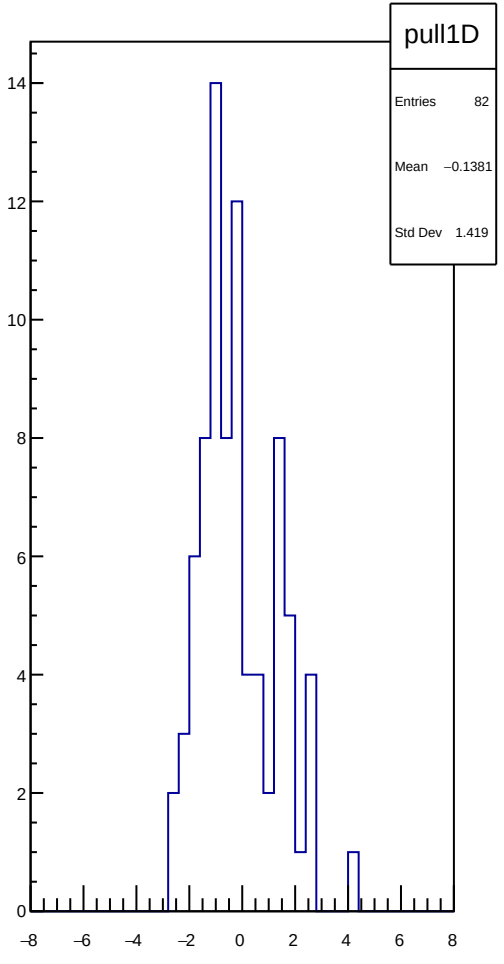

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 6.807 / 81
p0 −0.1017 ± 0.01506
pull
Entries 82
Mean 226.8
Std Dev 181.4
pull1D
Entries 82
Mean −0.00543
Std Dev 0.2881

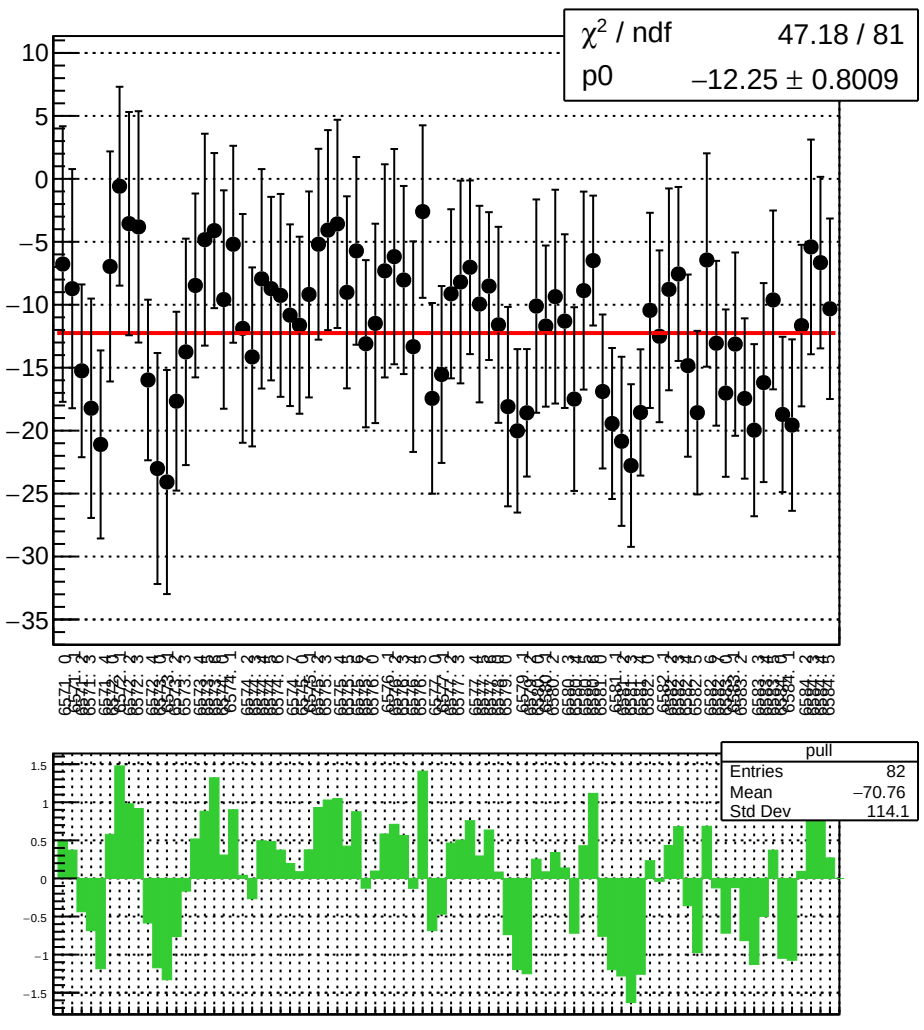

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 189.7 / 81
p0 −48.13 ± 0.8165
pull
Entries 82
Mean 33.25
Std Dev 5.572

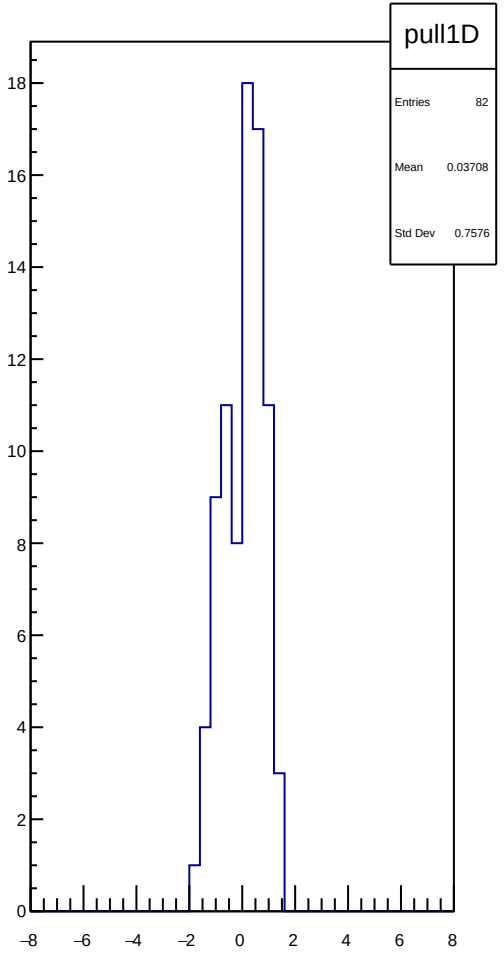

pull1D
Entries 82
Mean 0.1349
Std Dev 1.515

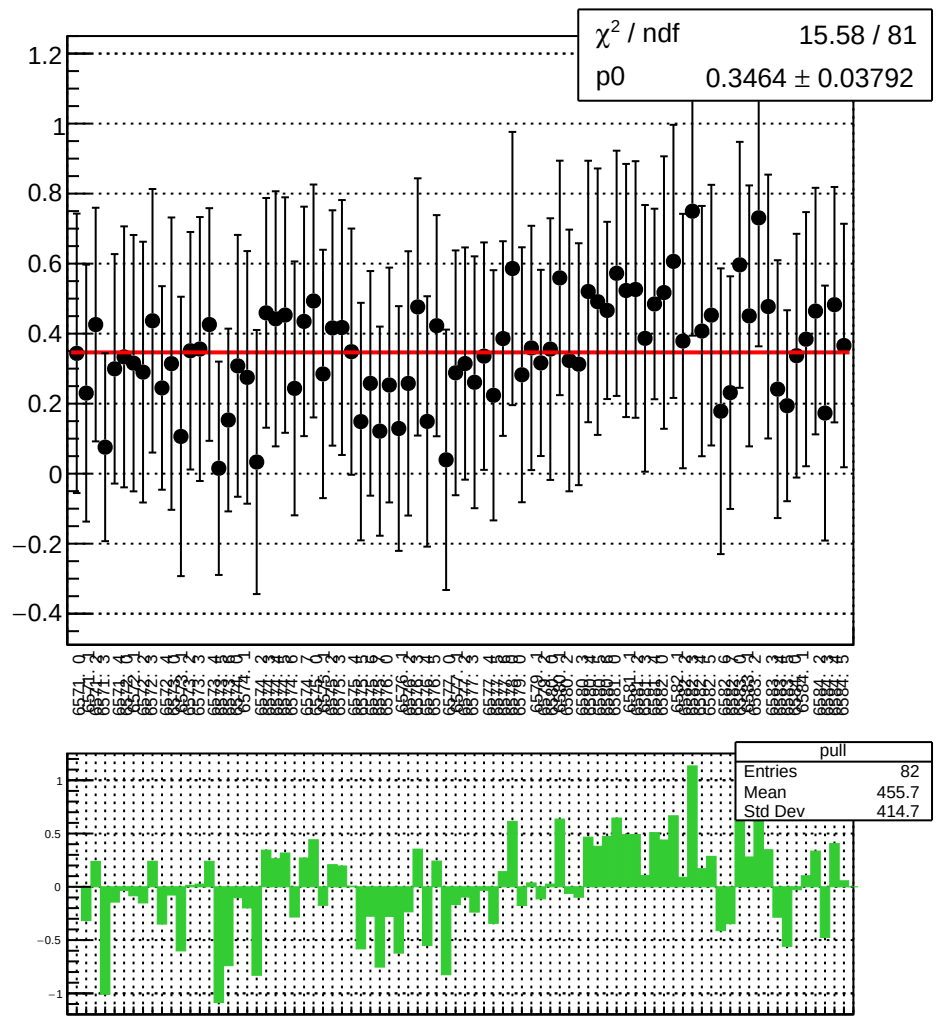

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 54.75 / 81
p0 −1.328 ± 0.6619
pull
Entries 82
Mean −30.98
Std Dev 81.2
pull1D
Entries 82
Mean −0.02733
Std Dev 0.8167

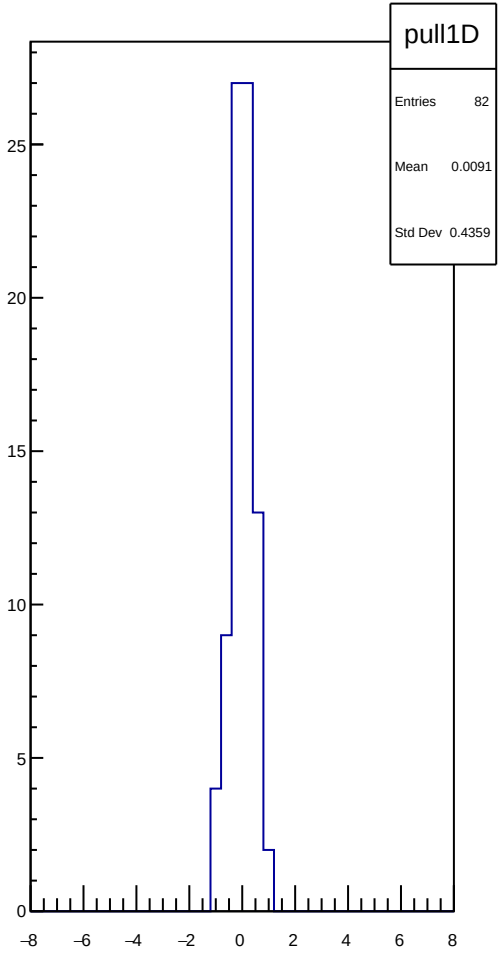

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 166.6 / 81
p0 −60.04 ± 0.8693
pull
Entries 82
Mean 25.63
Std Dev 4.151

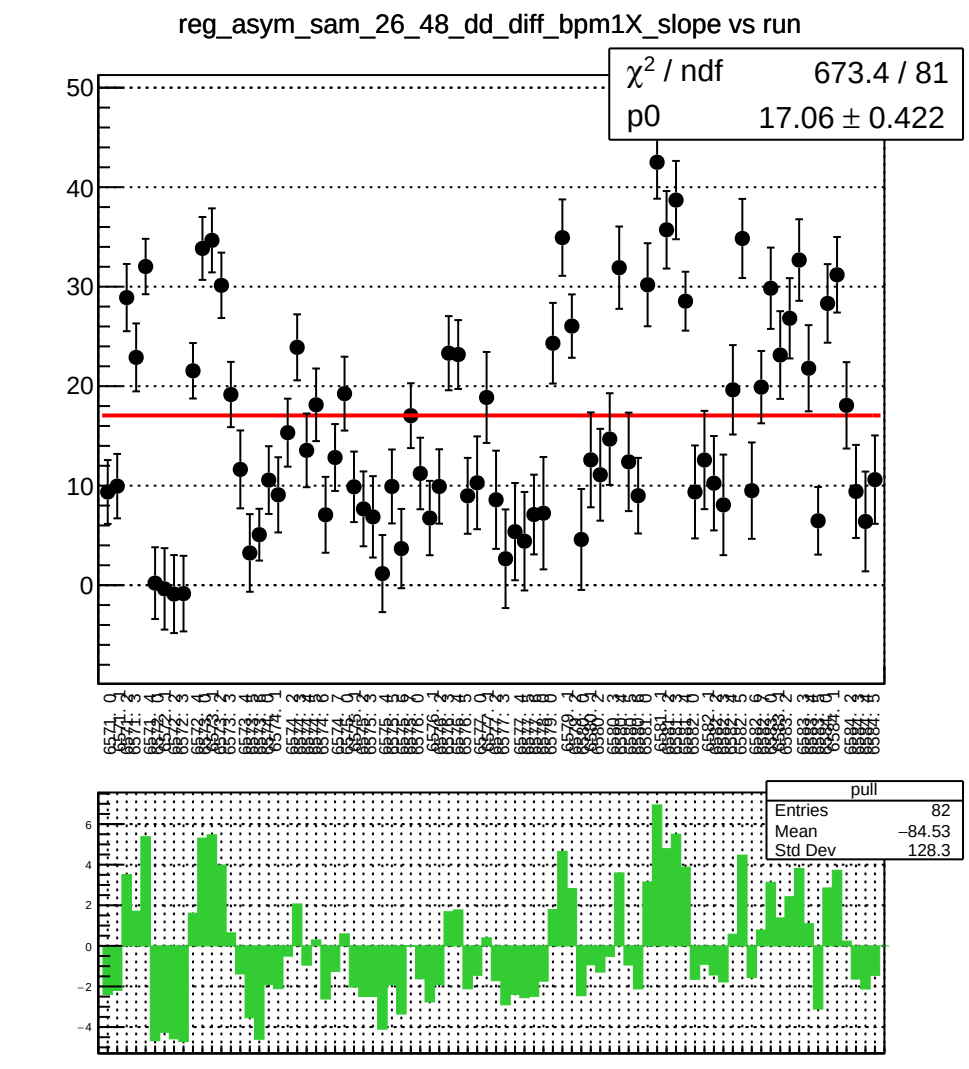

pull1D
Entries 82
Mean −0.1381
Std Dev 1.419

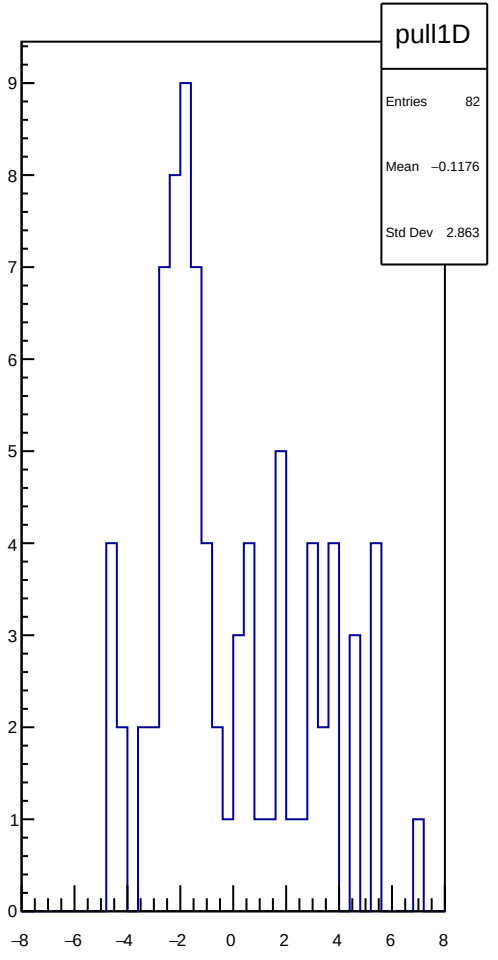

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 47.18 / 81
p0 −12.25 ± 0.8009
pull
Entries 82
Mean −70.76
Std Dev 114.1

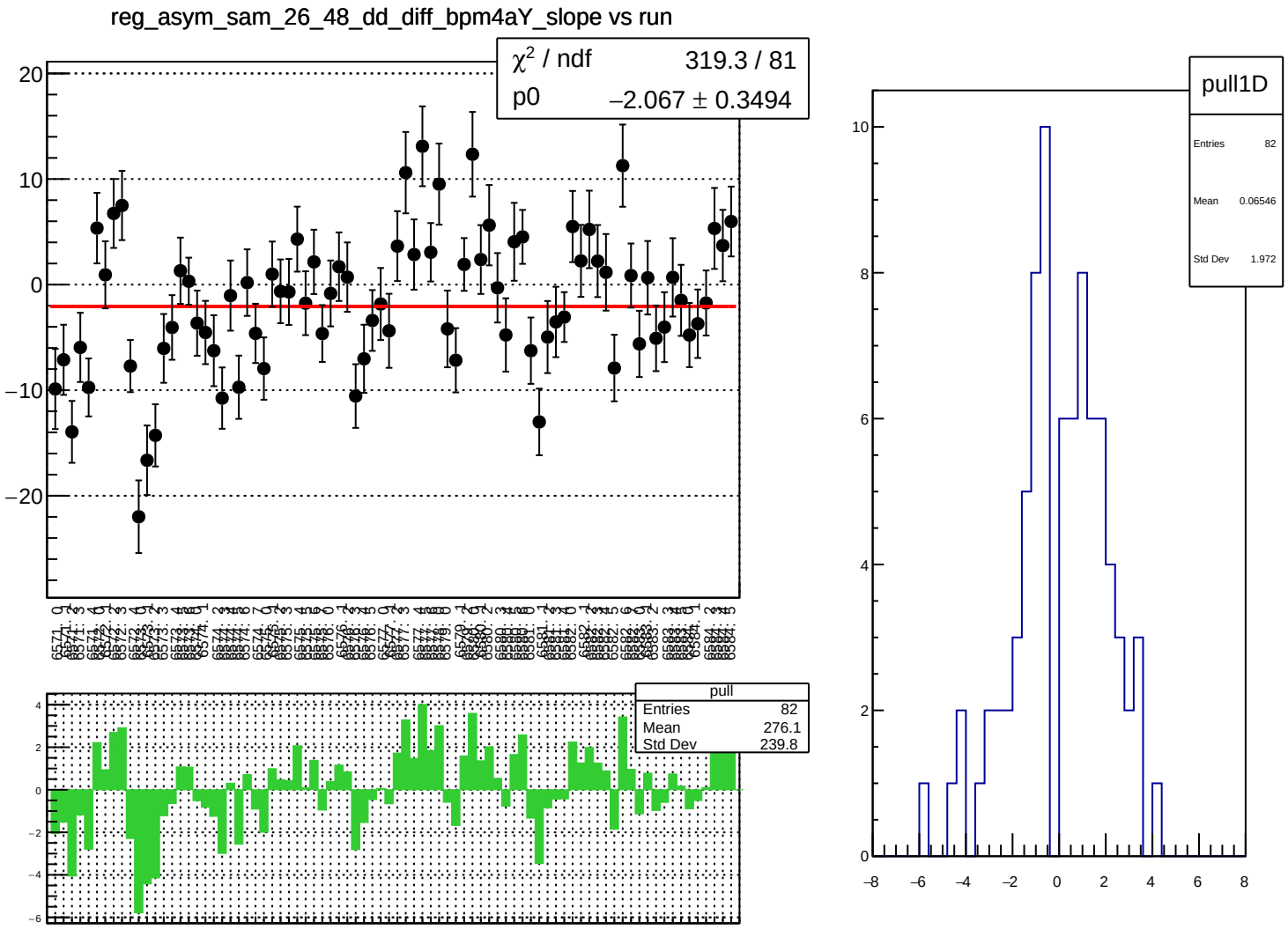

pull1D
Entries 82
Mean 0.03708
Std Dev 0.7576

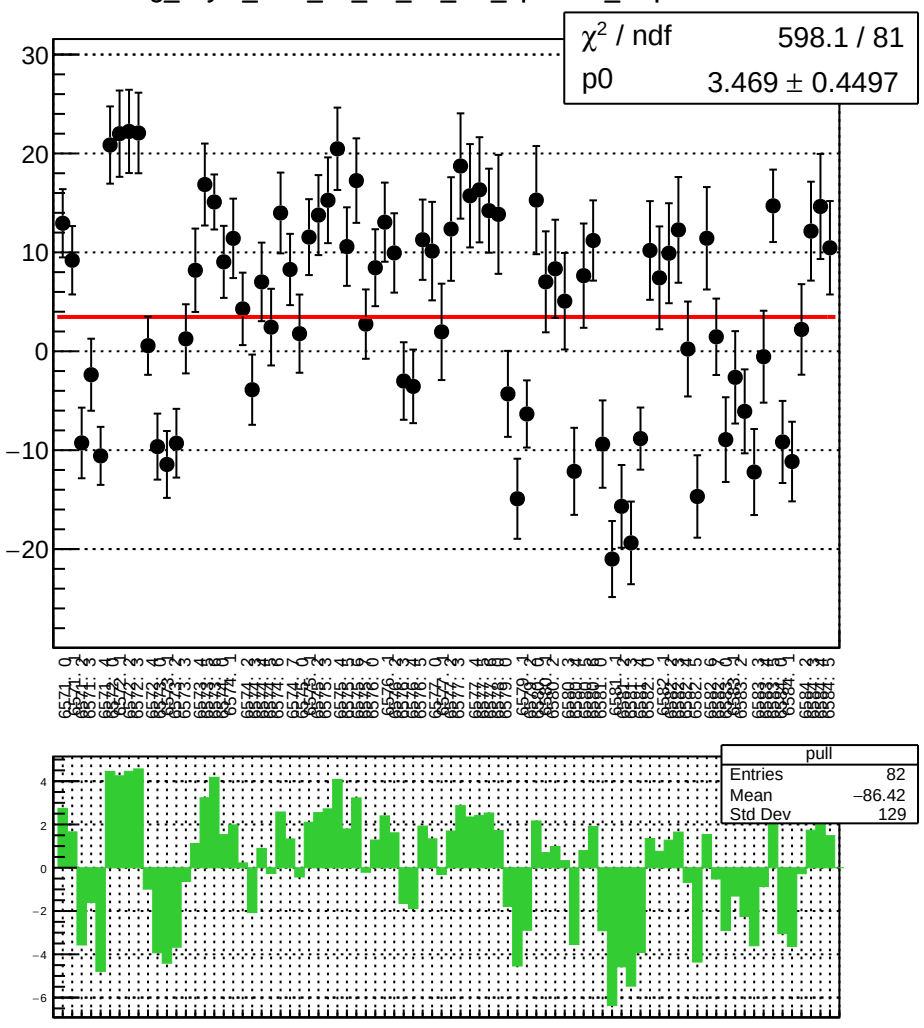

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 15.58 / 81
p0 0.3464 ± 0.03792
pull
Entries 82
Mean 455.7
Std Dev 414.7

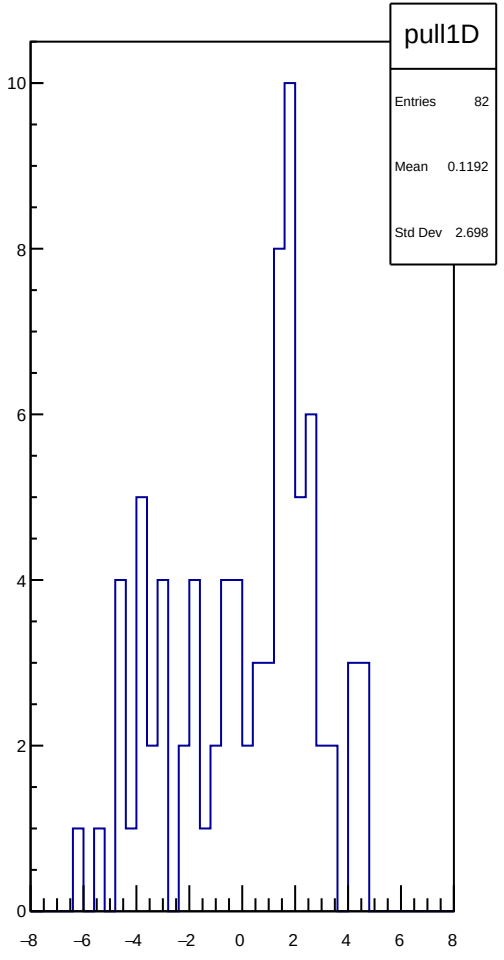

pull1D
Entries 82
Mean 0.0091
Std Dev 0.4359

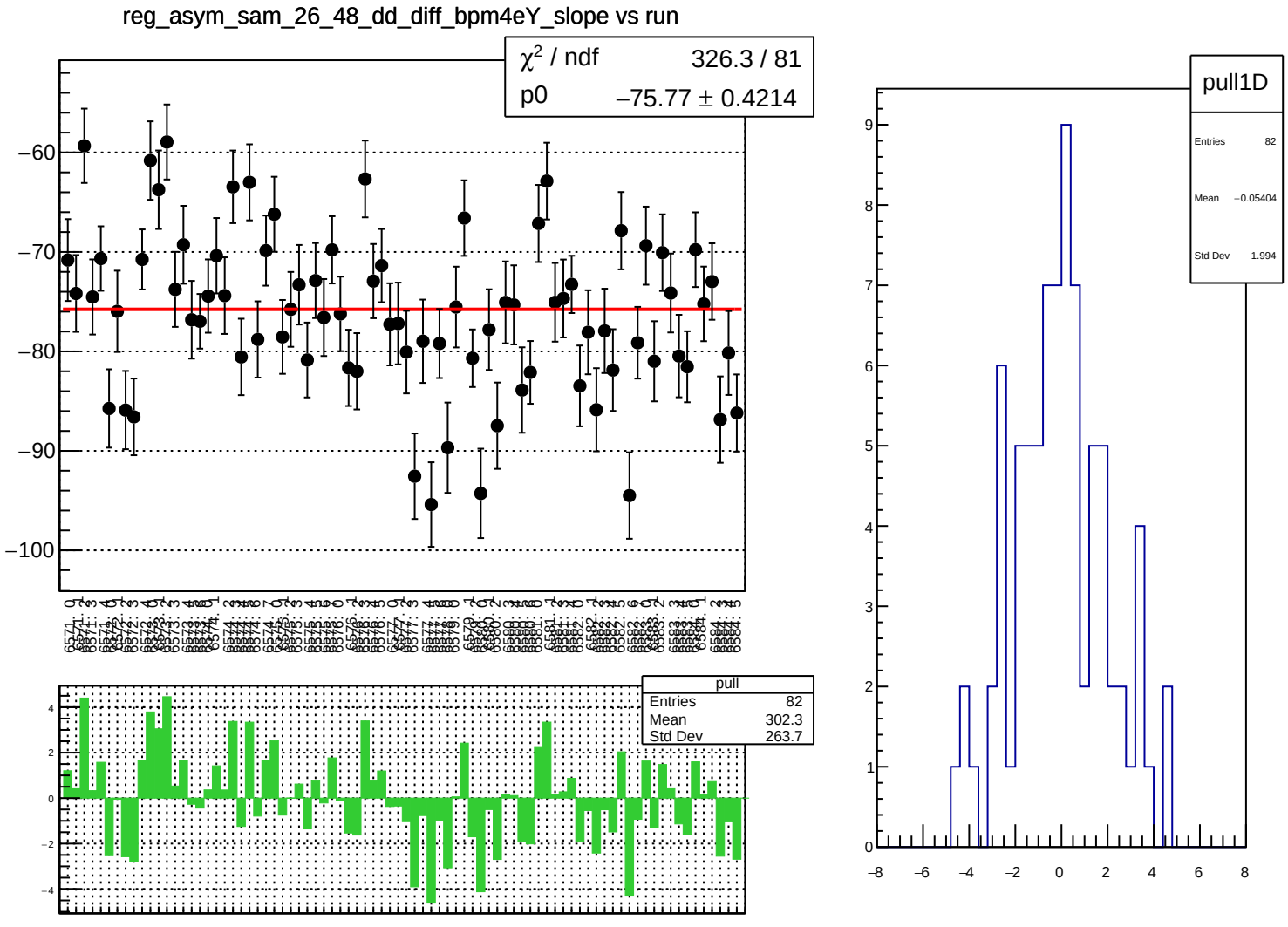

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 673.4 / 81
p0 17.06 ± 0.422
pull
Entries 82
Mean −84.53
Std Dev 128.3

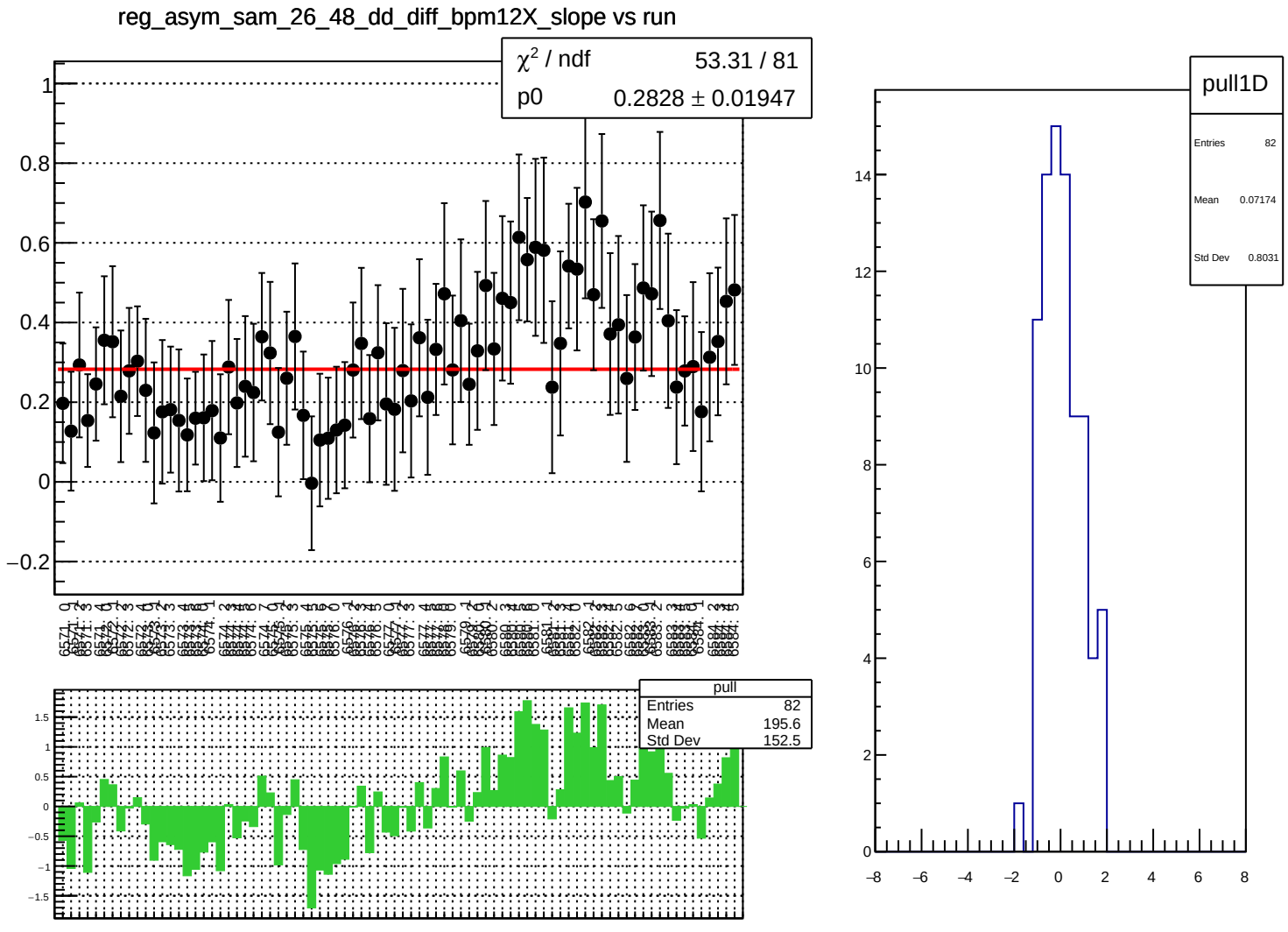

pull1D
Entries 82
Mean −0.1176
Std Dev 2.863

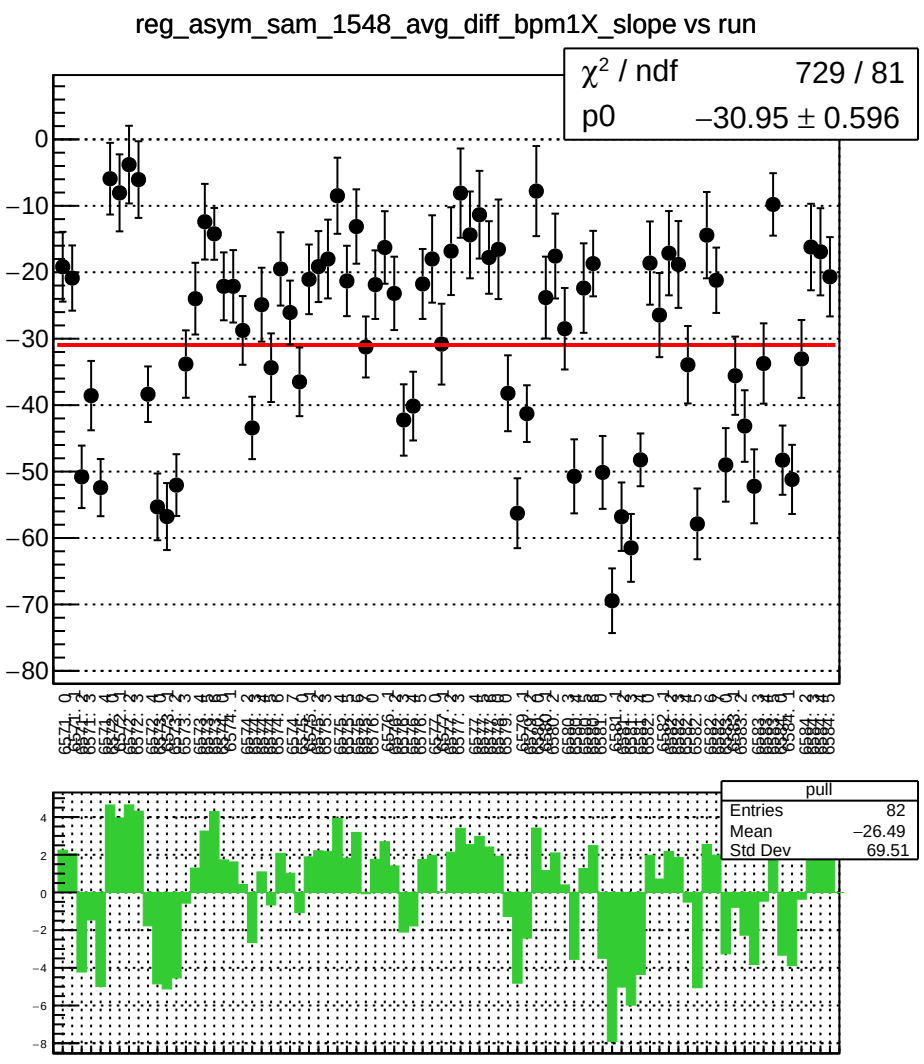

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 319.3 / 81
p0 −2.067 ± 0.3494
pull
Entries 82
Mean 276.1
Std Dev 239.8
pull1D
Entries 82
Mean 0.06546
Std Dev 1.972

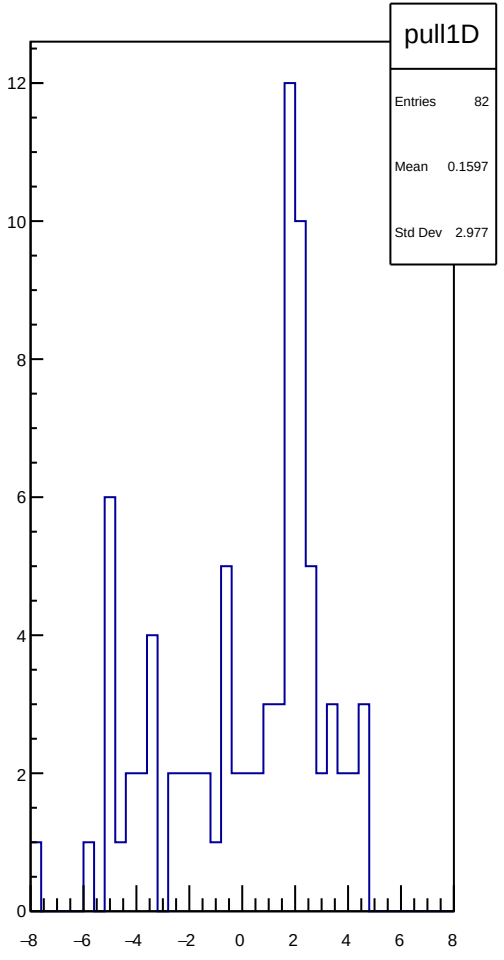

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 598.1 / 81
p0 3.469 ± 0.4497
pull
Entries 82
Mean −86.42
Std Dev 129

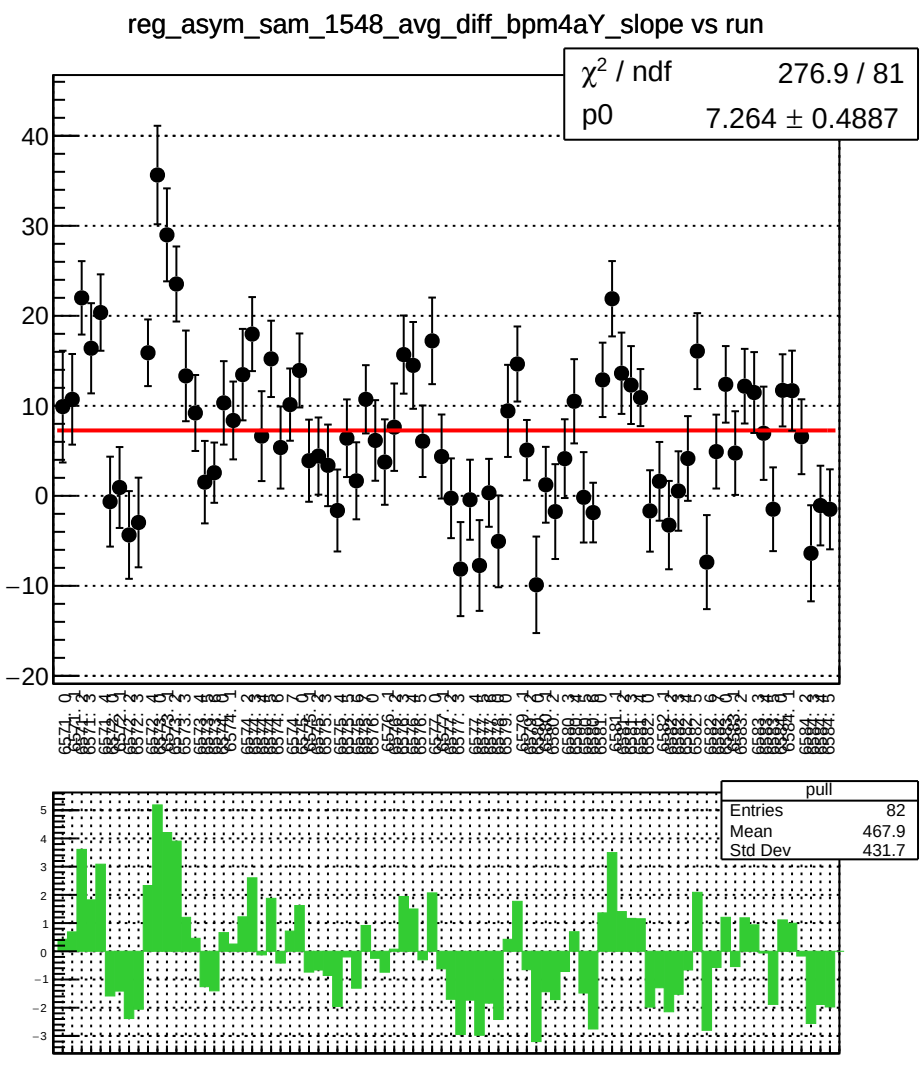

pull1D
Entries 82
Mean 0.1192
Std Dev 2.698

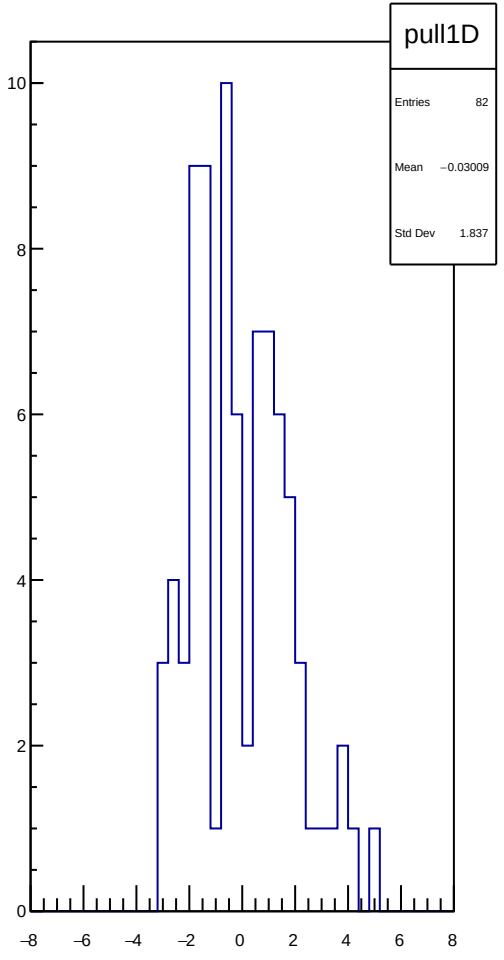

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 326.3 / 81
p0 −75.77 ± 0.4214
−60
−70
−80
−90
−100
pull
Entries 82
Mean 302.3
Std Dev 263.7
4
2
0
−2
−4
pull1D
Entries 82
Mean −0.05404
Std Dev 1.994
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

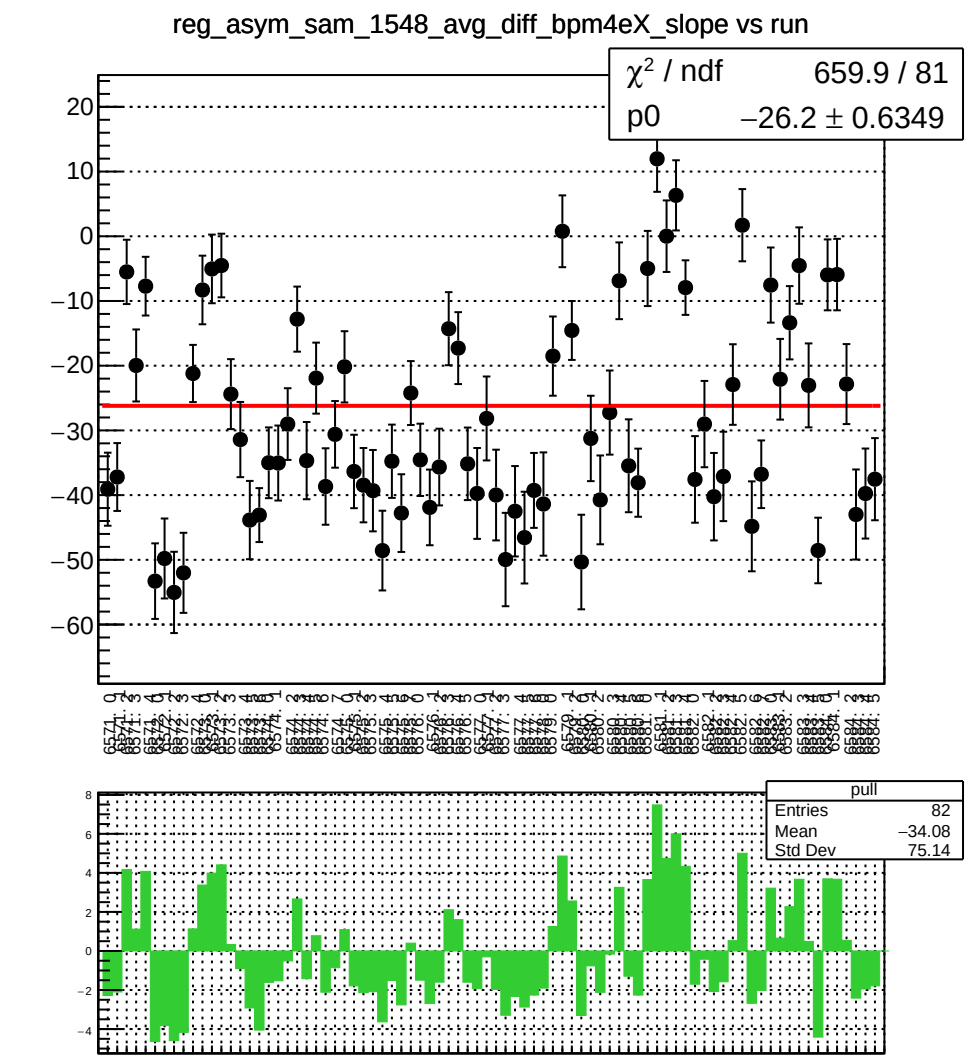

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 53.31 / 81
p0 0.2828 ± 0.01947
pull
Entries 82
Mean 195.6
Std Dev 152.5
pull1D
Entries 82
Mean 0.07174
Std Dev 0.8031

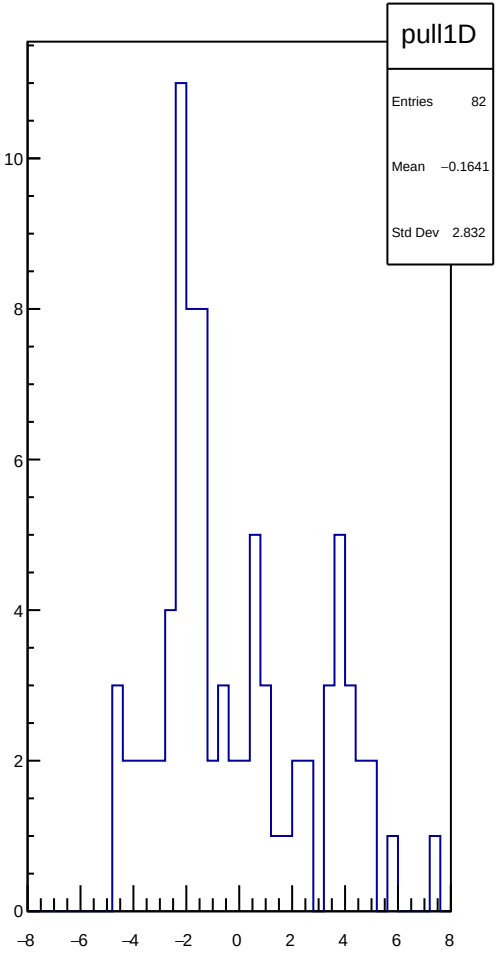

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 729 / 81
p0 −30.95 ± 0.596
pull
Entries 82
Mean −26.49
Std Dev 69.51

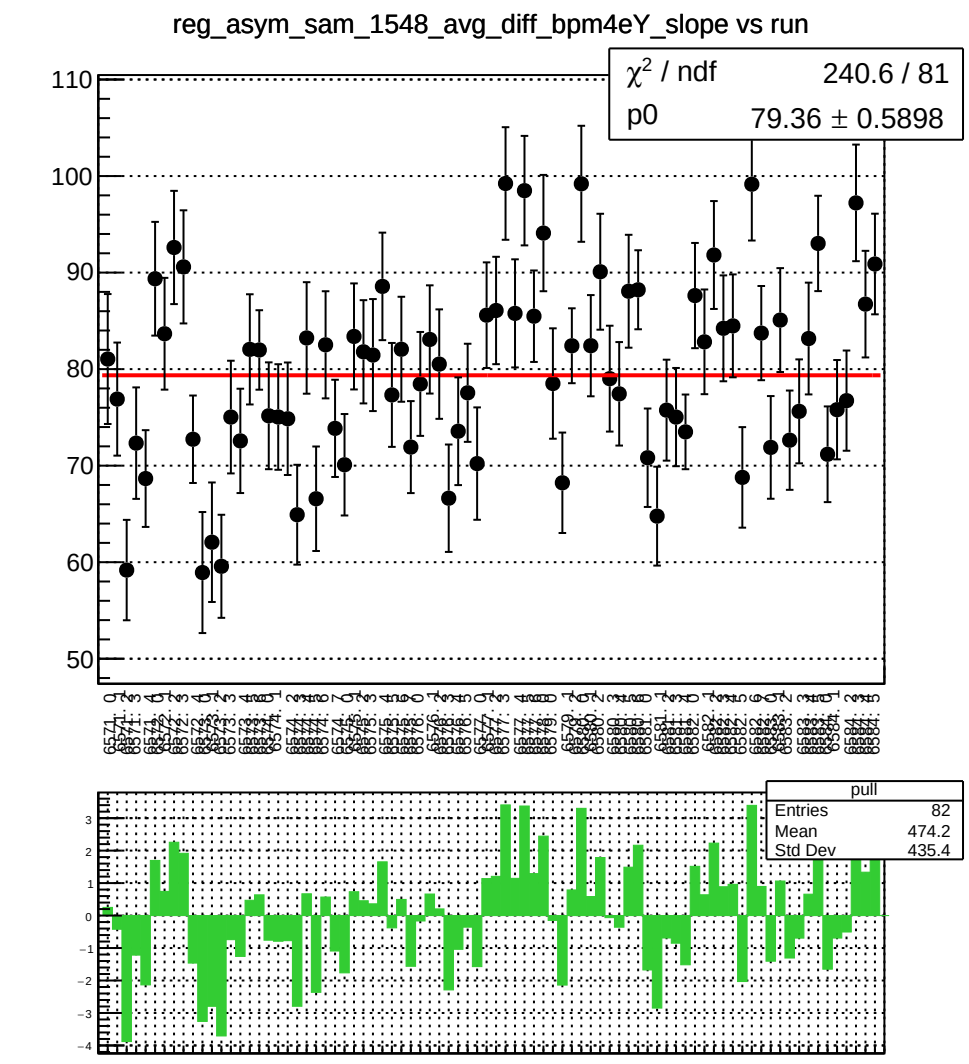

pull1D
Entries 82
Mean 0.1597
Std Dev 2.977

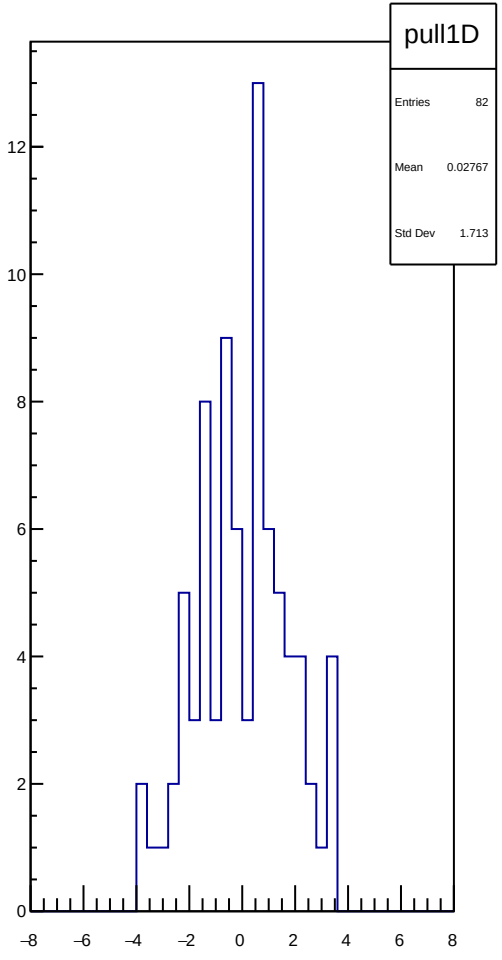

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 276.9 / 81
p0 7.264 ± 0.4887
pull
Entries 82
Mean 467.9
Std Dev 431.7

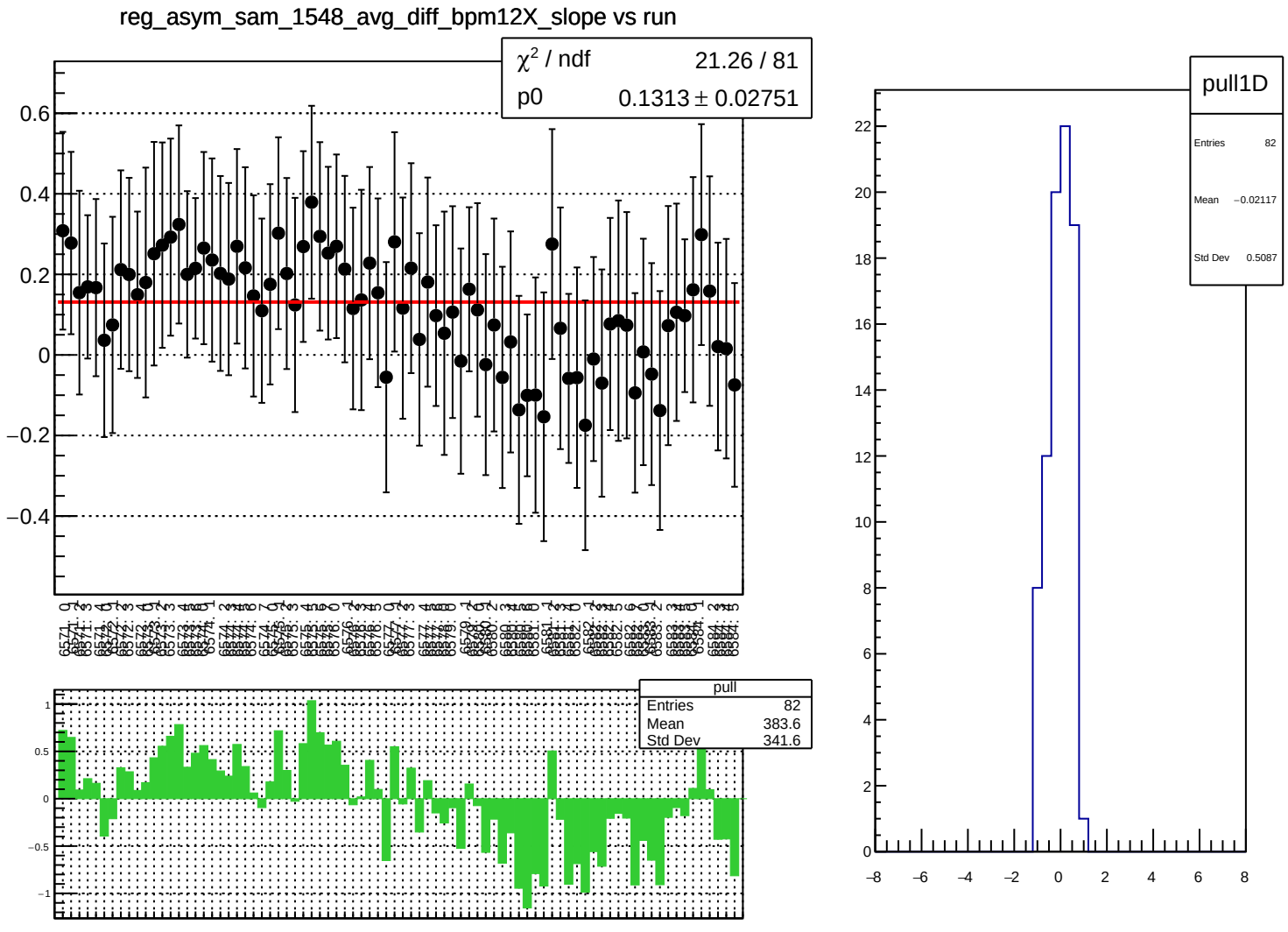

pull1D
Entries 82
Mean −0.03009
Std Dev 1.837

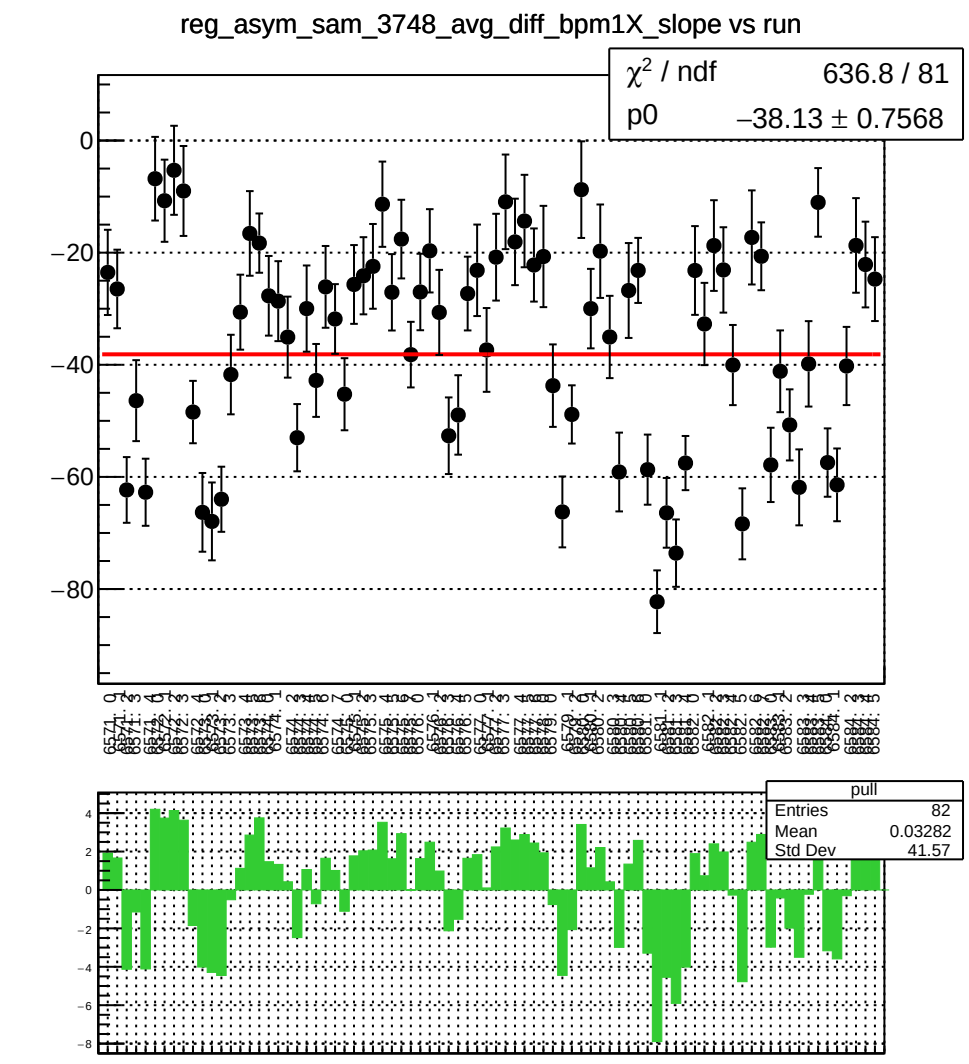

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 659.9 / 81
p0 −26.2 ± 0.6349
pull
Entries 82
Mean −34.08
Std Dev 75.14

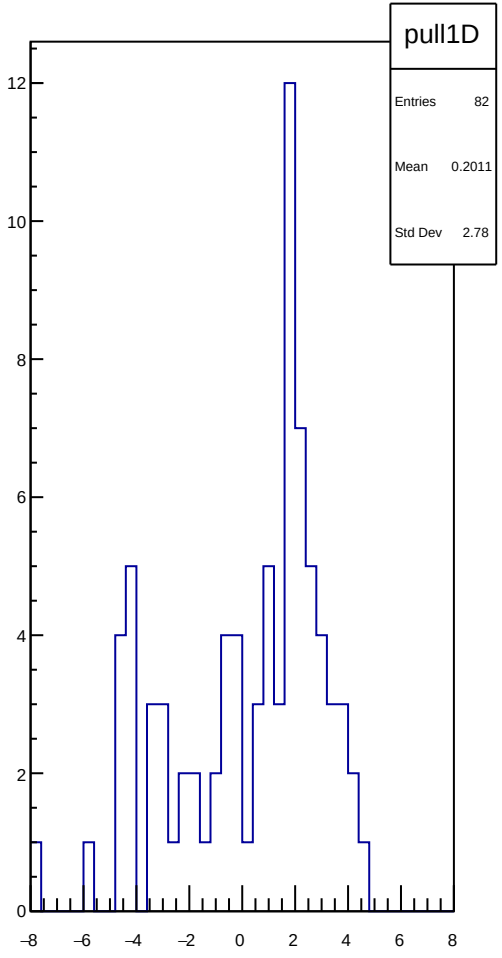

pull1D
Entries 82
Mean −0.1641
Std Dev 2.832

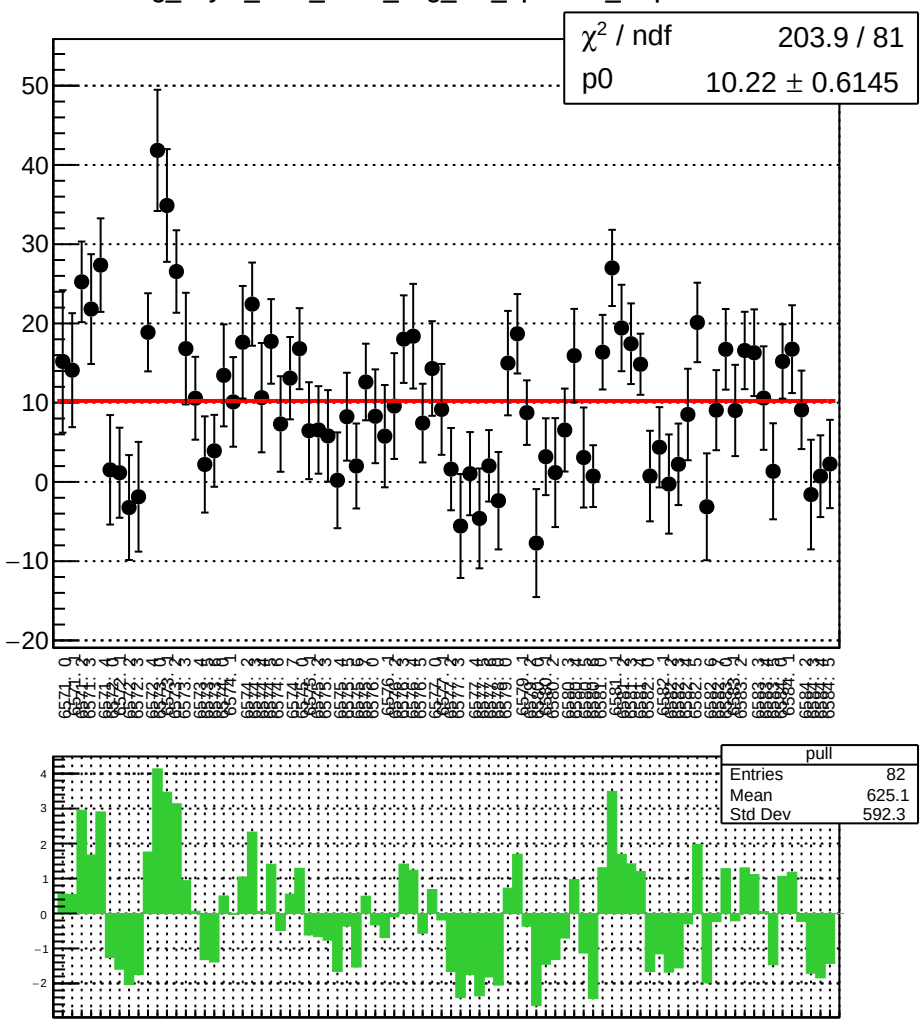

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 240.6 / 81
p0 79.36 ± 0.5898
pull
Entries 82
Mean 474.2
Std Dev 435.4

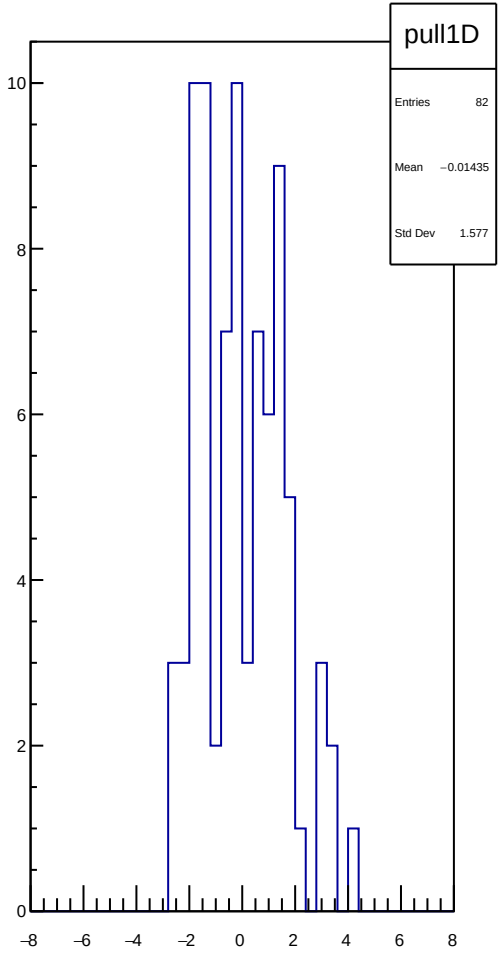

pull1D
Entries 82
Mean 0.02767
Std Dev 1.713

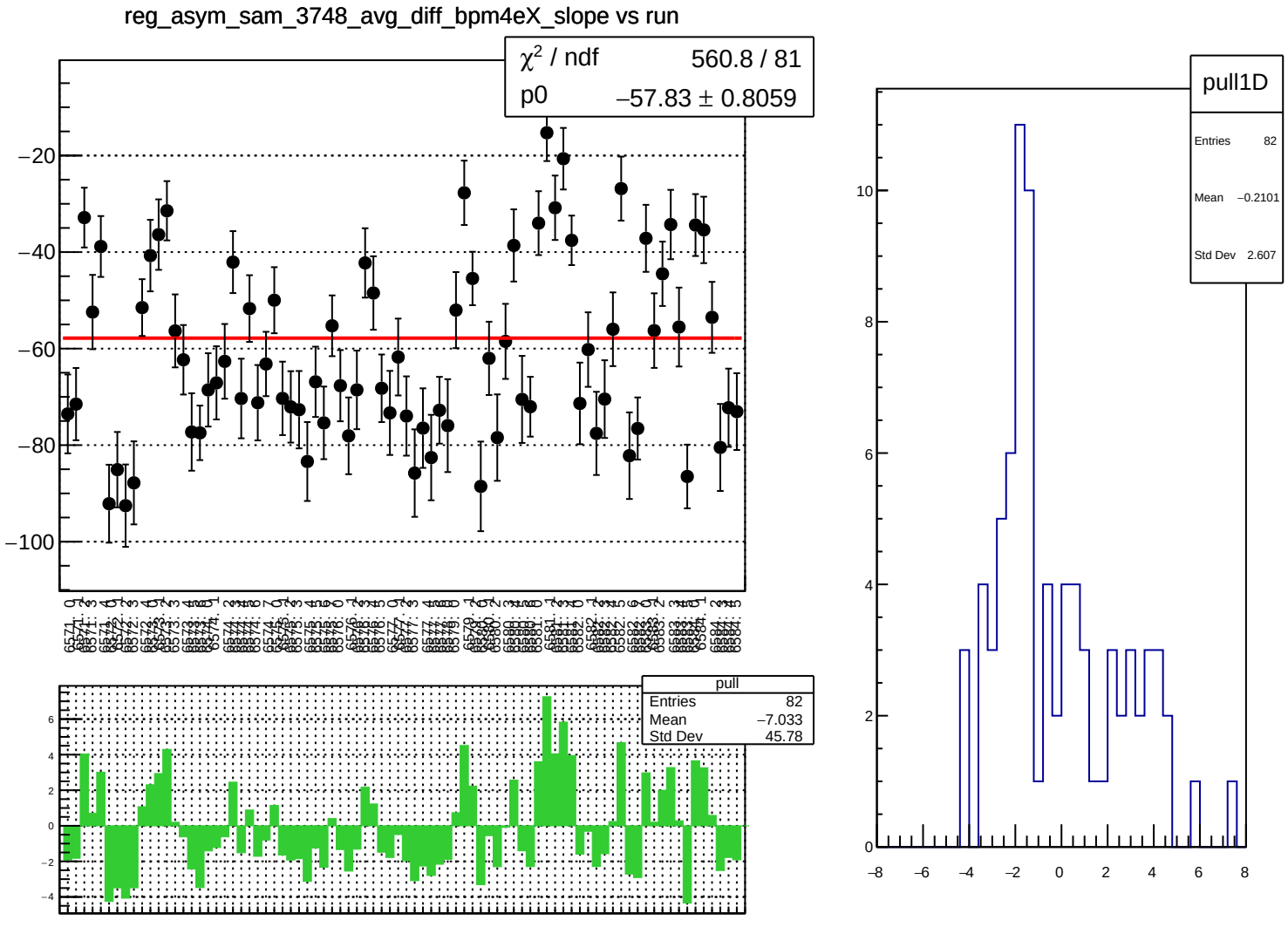

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 21.26 / 81
p0 0.1313 ± 0.02751
pull
Entries 82
Mean 383.6
Std Dev 341.6
pull1D
Entries 82
Mean −0.02117
Std Dev 0.5087

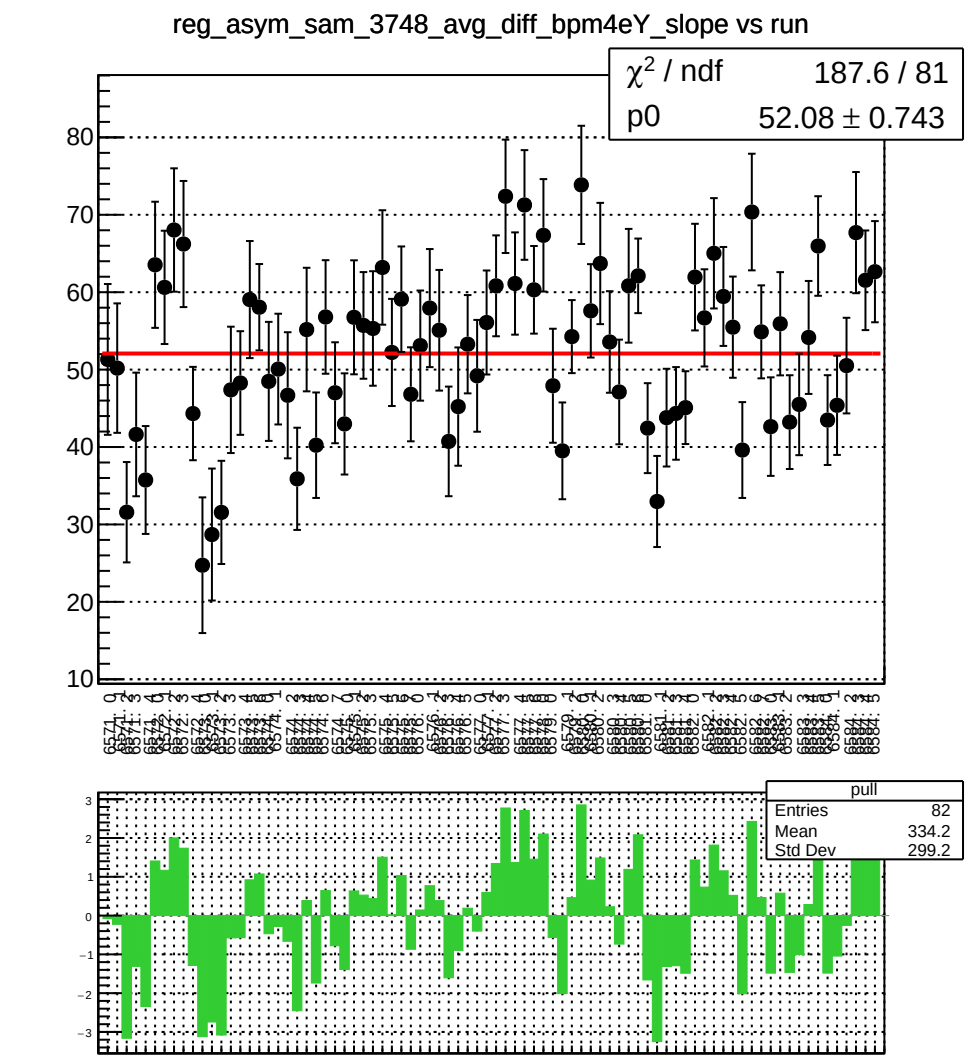

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 636.8 / 81
p0 −38.13 ± 0.7568
pull
Entries 82
Mean 0.03282
Std Dev 41.57

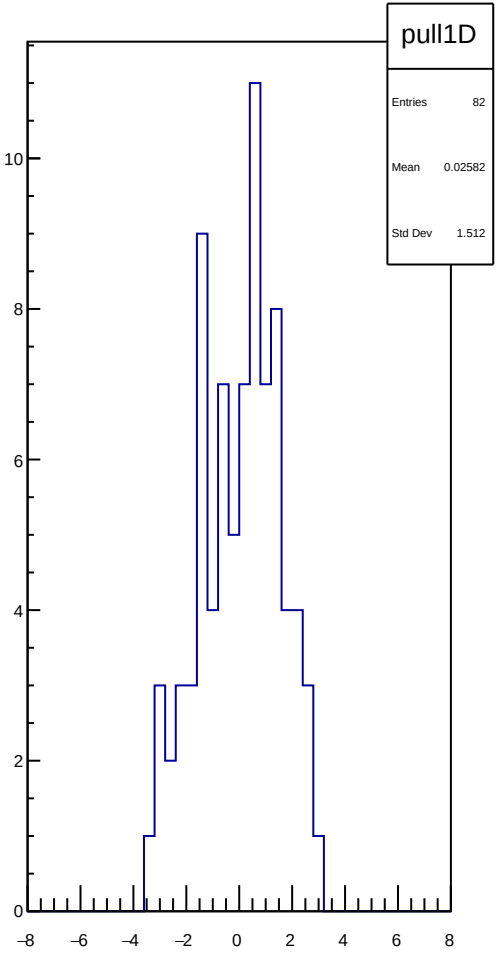

pull1D
Entries 82
Mean 0.2011
Std Dev 2.78

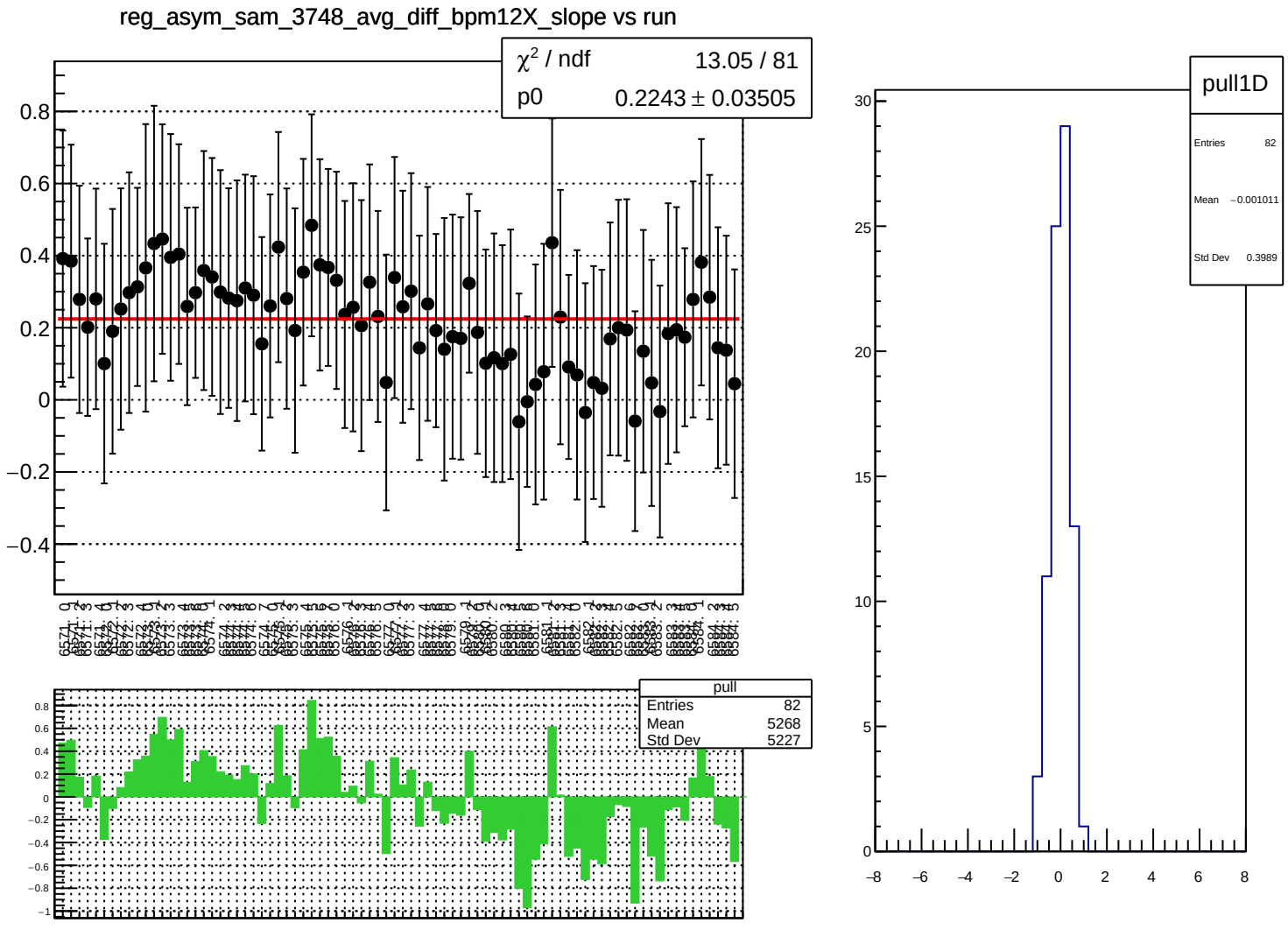

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 203.9 / 81
p0 10.22 ± 0.6145
pull
Entries 82
Mean 625.1
Std Dev 592.3

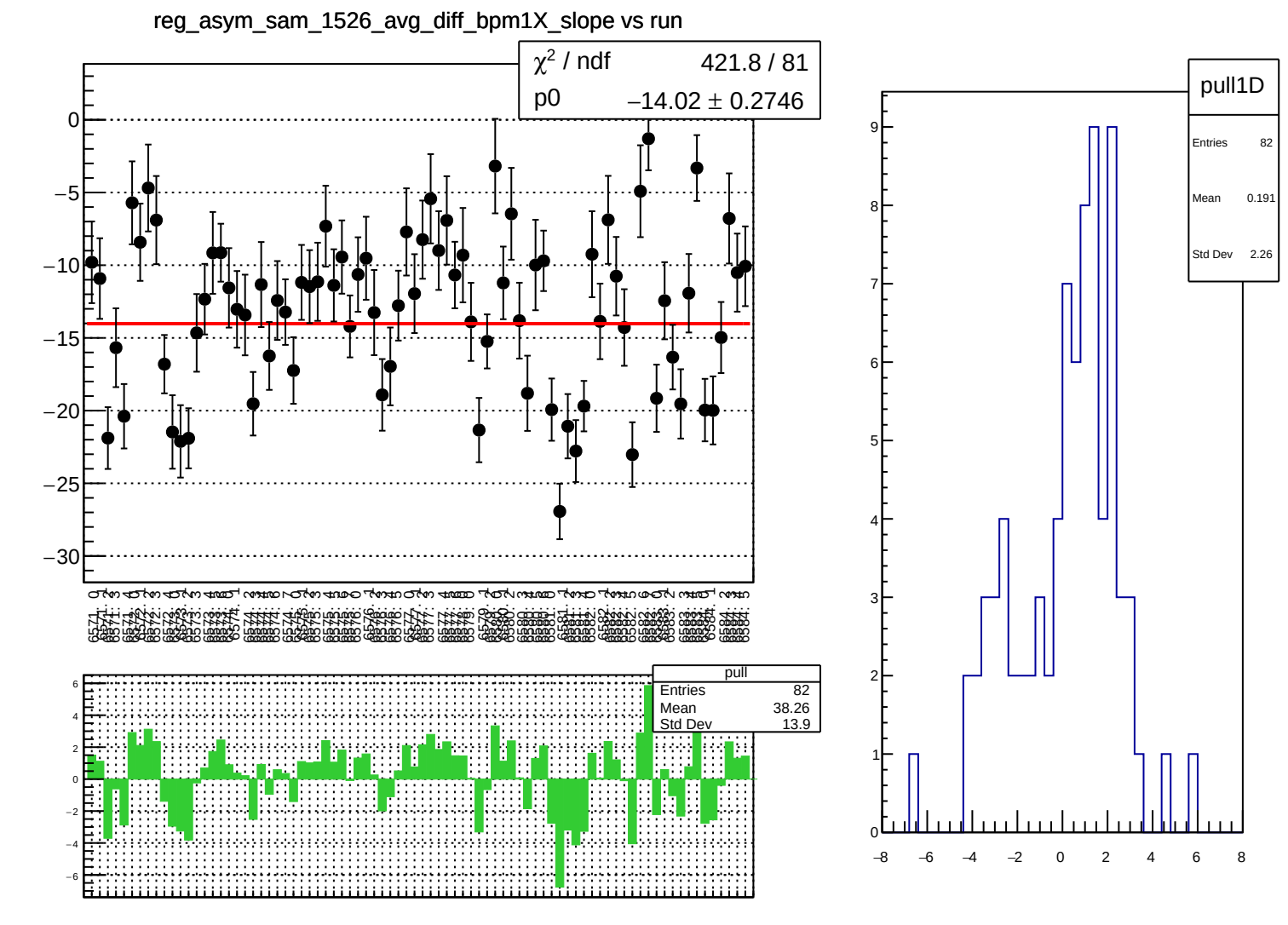

pull1D
Entries 82
Mean −0.01435
Std Dev 1.577

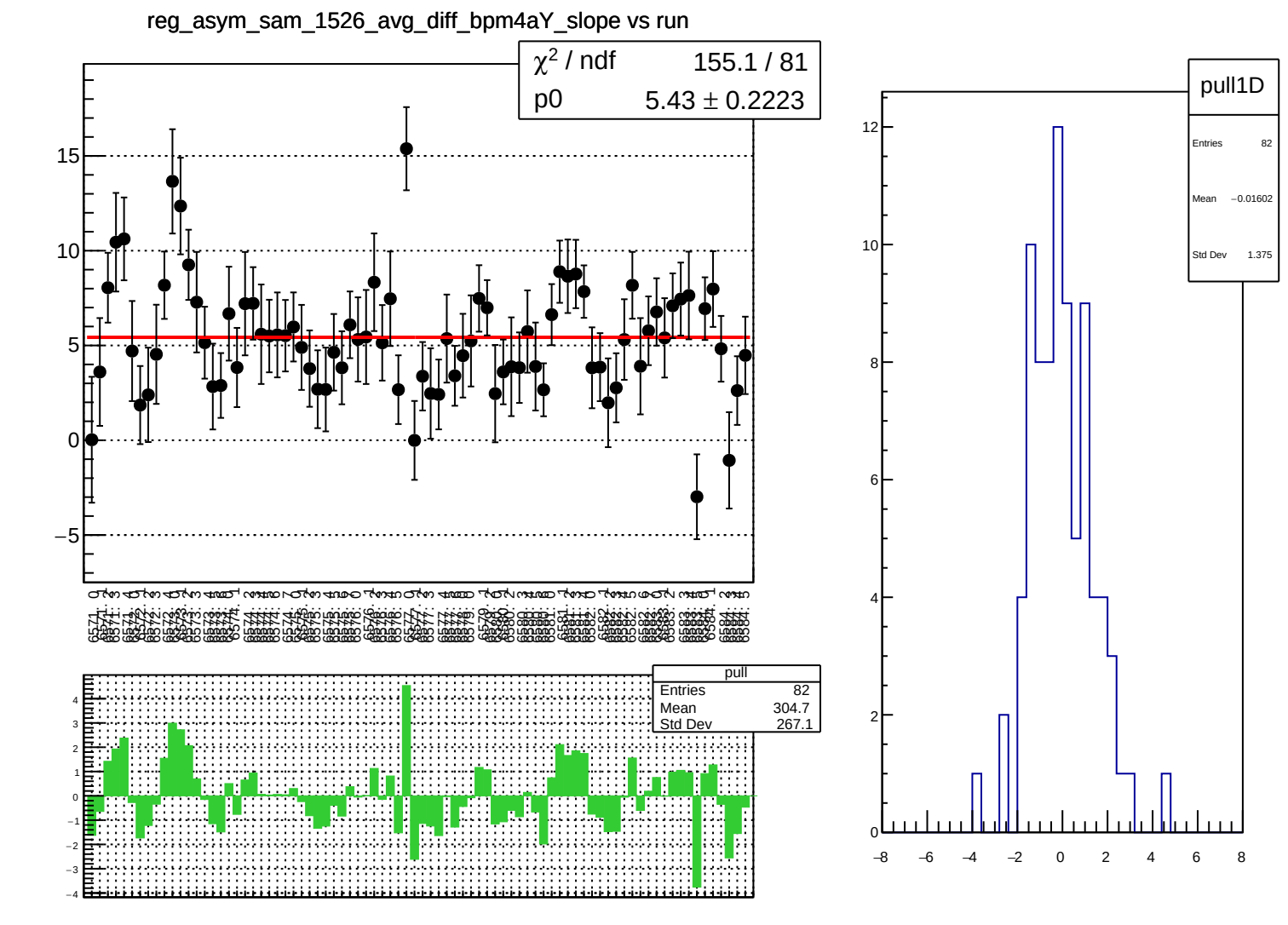

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 560.8 / 81
p0 −57.83 ± 0.8059
−20
−40
−60
−80
−100
pull
Entries 82
Mean −7.033
Std Dev 45.78
6
4
2
0
−2
−4
pull1D
Entries 82
Mean −0.2101
Std Dev 2.607
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

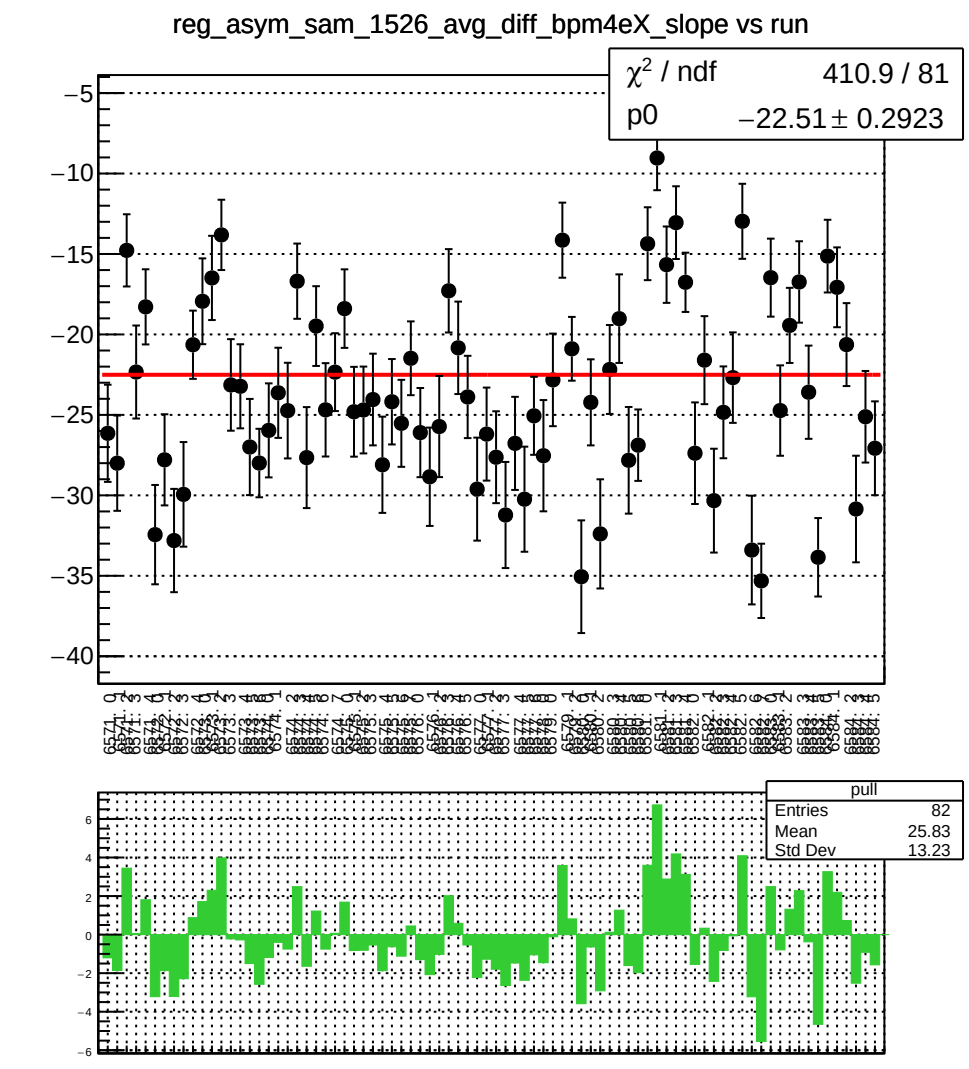

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 187.6 / 81
p0 52.08 ± 0.743
pull
Entries 82
Mean 334.2
Std Dev 299.2

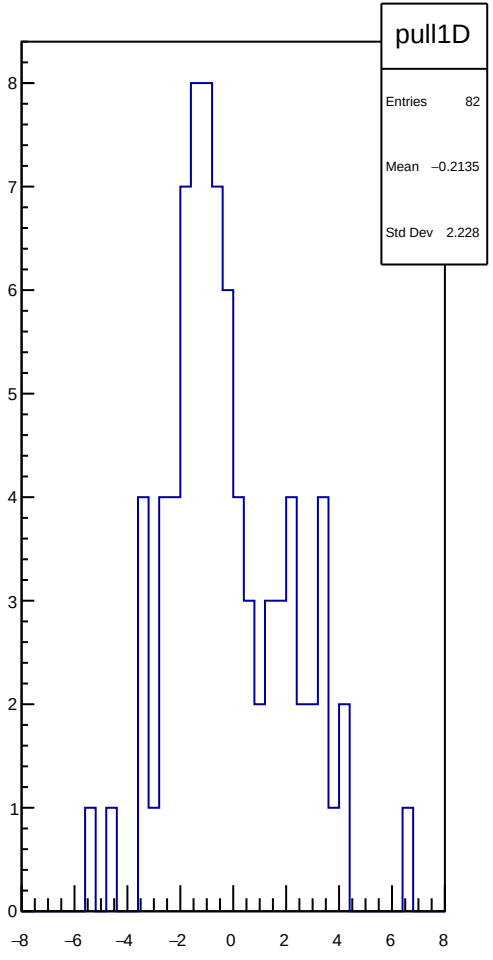

pull1D
Entries 82
Mean 0.02582
Std Dev 1.512

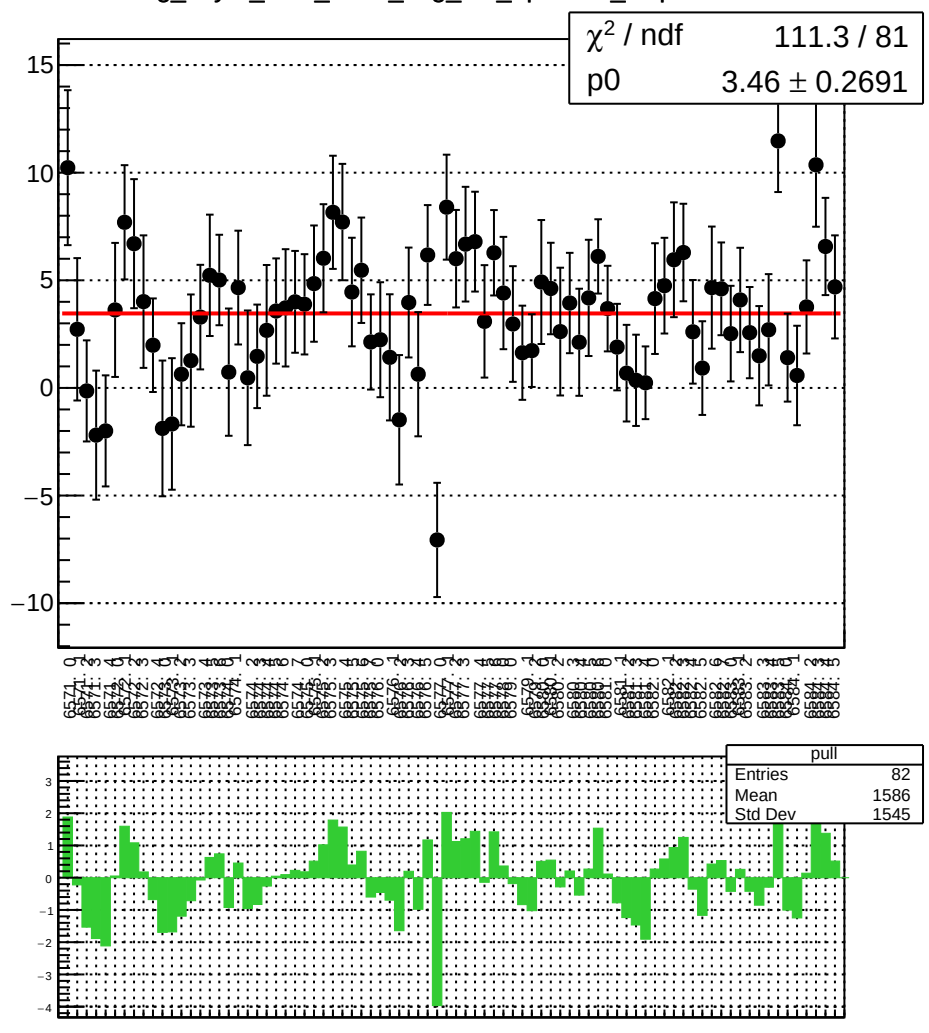

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 13.05 / 81
p0 0.2243 ± 0.03505
pull
Entries 82
Mean 5268
Std Dev 5227
pull1D
Entries 82
Mean −0.001011
Std Dev 0.3989

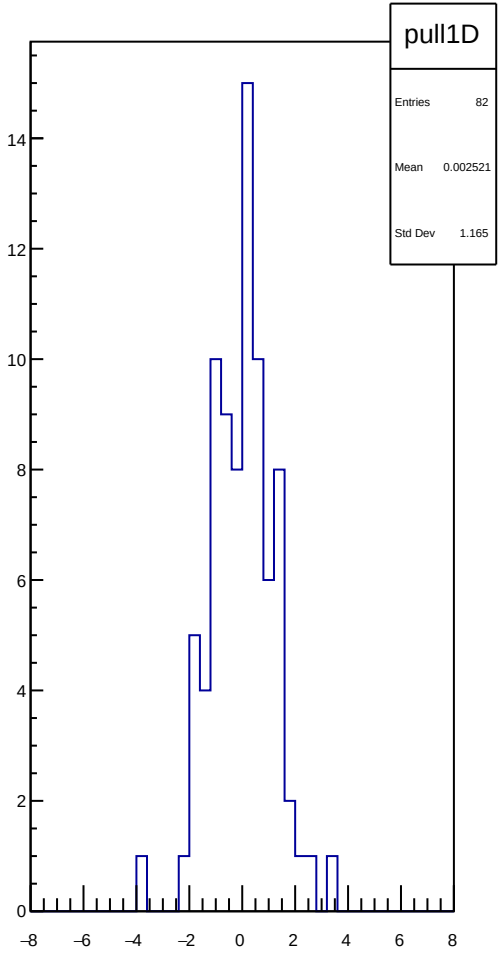

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 421.8 / 81
p0 −14.02 ± 0.2746
pull
Entries 82
Mean 38.26
Std Dev 13.9
pull1D
Entries 82
Mean 0.191
Std Dev 2.26

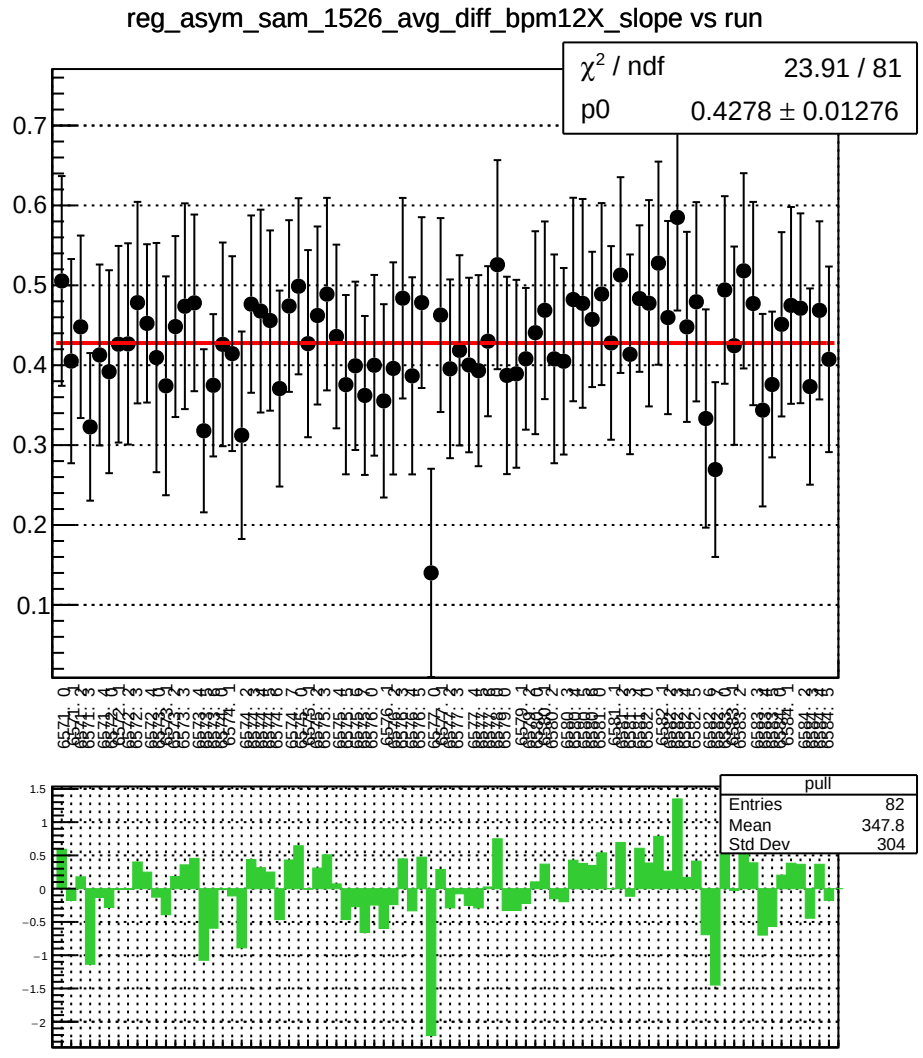

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 155.1 / 81
p0 5.43 ± 0.2223
pull
Entries 82
Mean 304.7
Std Dev 267.1
pull1D
Entries 82
Mean −0.01602
Std Dev 1.375

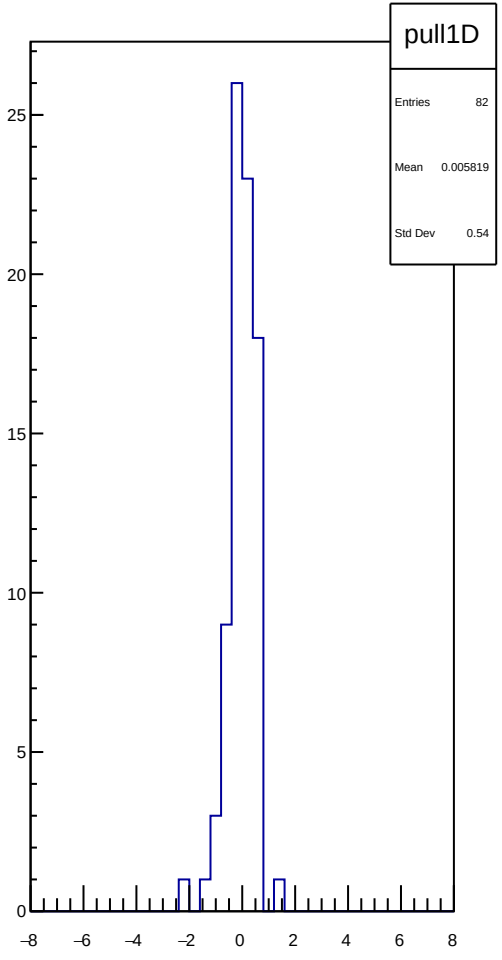

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 410.9 / 81
p0 −22.51 ± 0.2923
pull
Entries 82
Mean 25.83
Std Dev 13.23

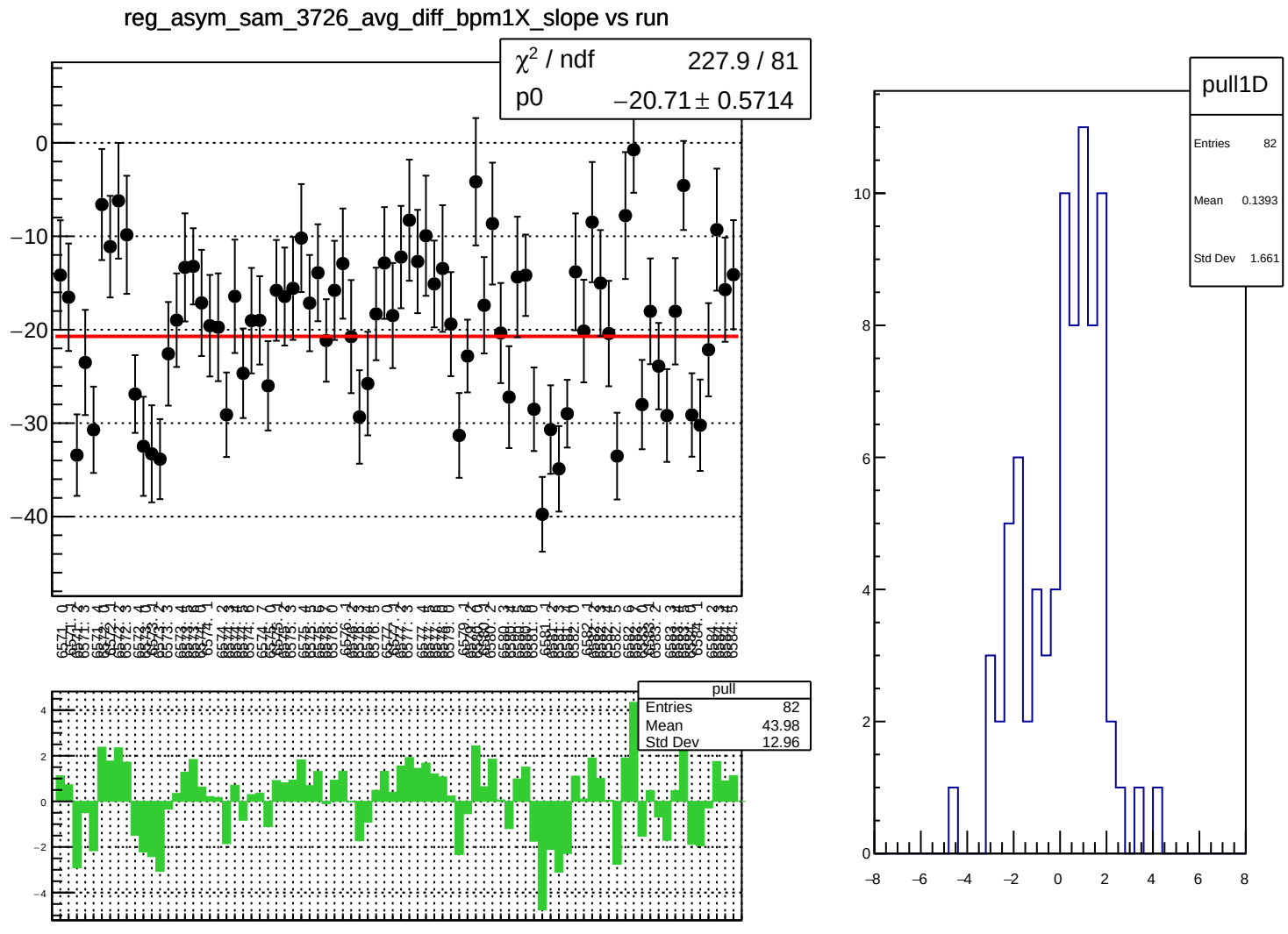

pull1D
Entries 82
Mean −0.2135
Std Dev 2.228

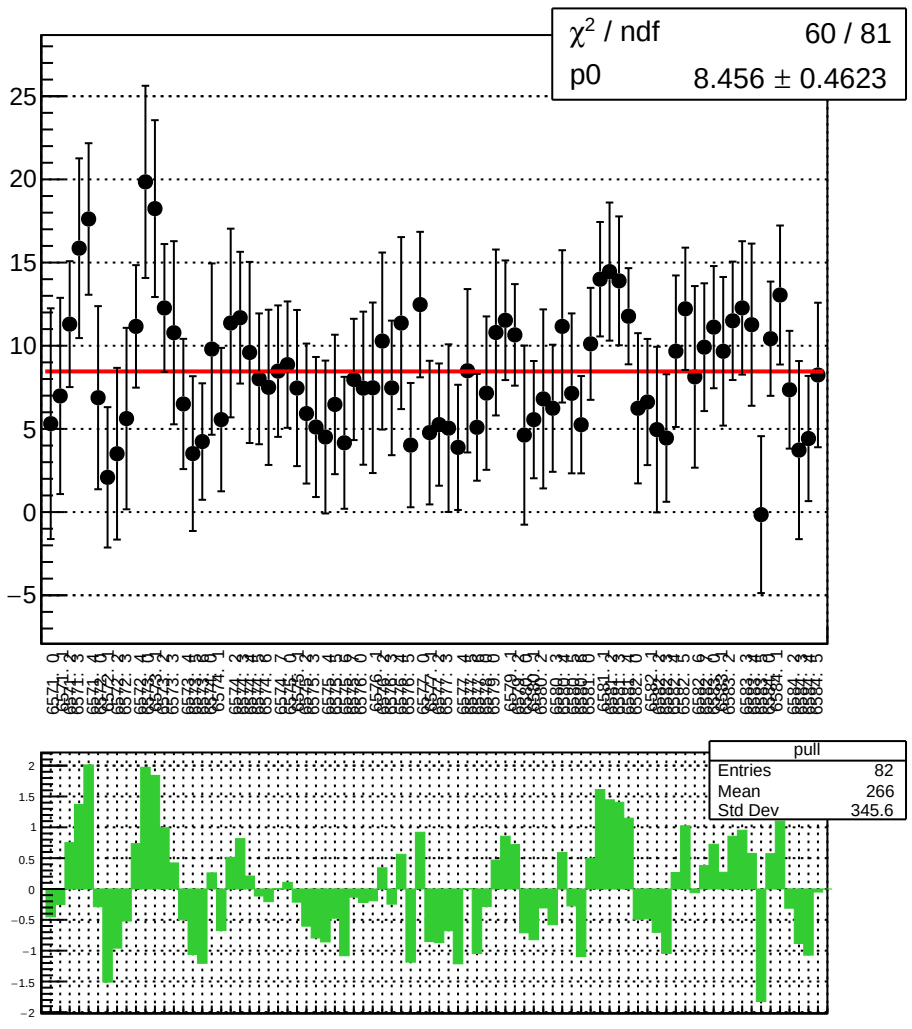

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 111.3 / 81
p0 3.46 ± 0.2691
pull
Entries 82
Mean 1586
Std Dev 1545

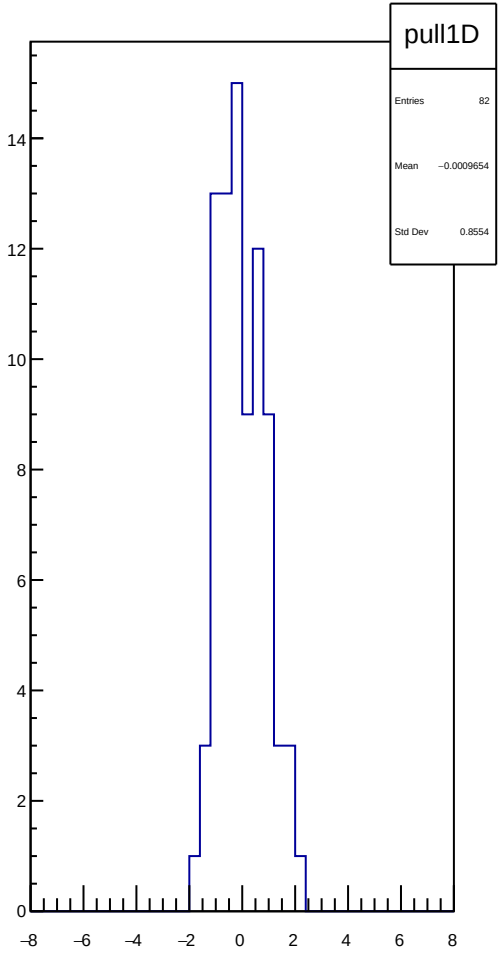

pull1D
Entries 82
Mean 0.002521
Std Dev 1.165

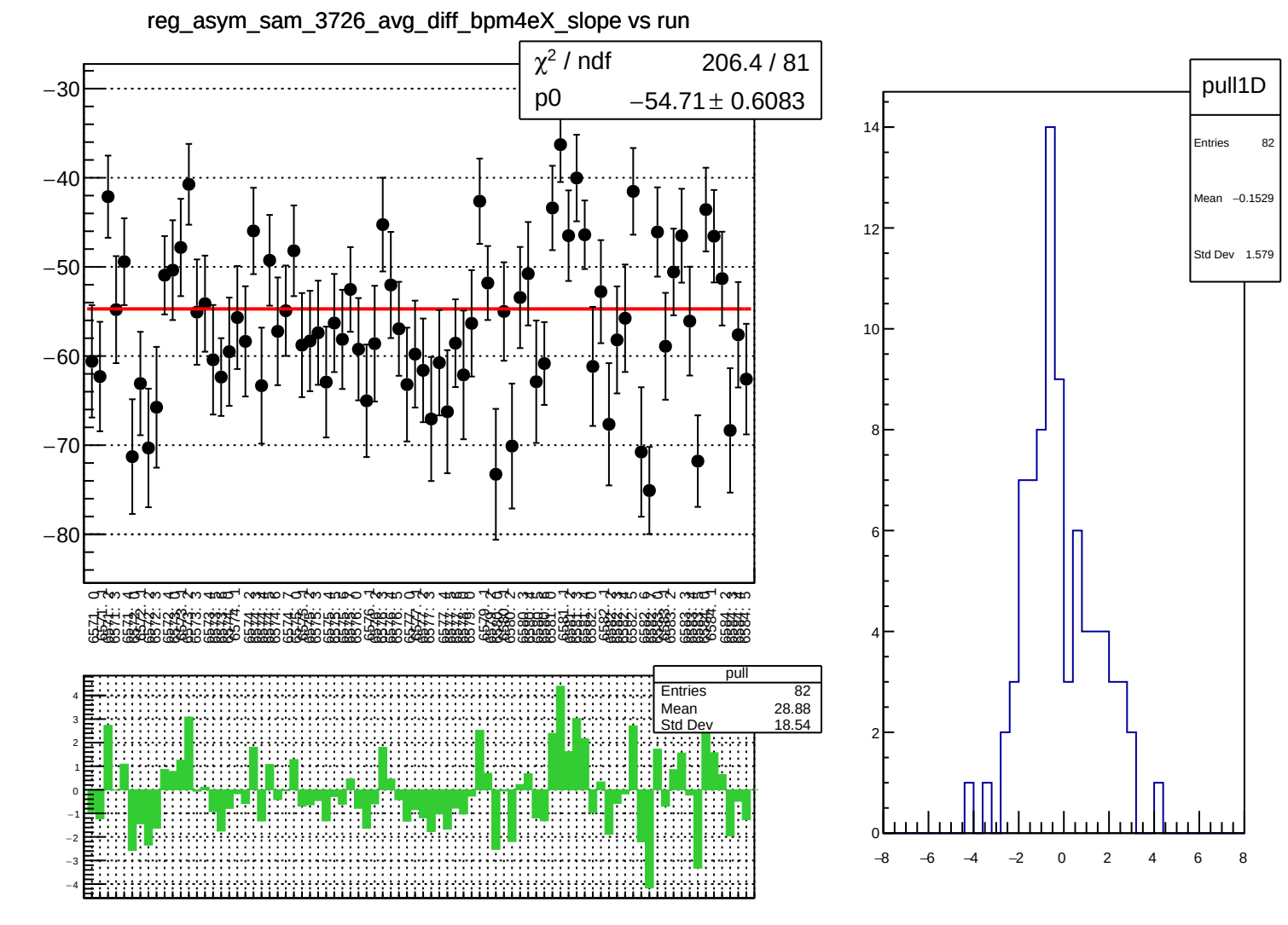

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 23.91 / 81
p0 0.4278 ± 0.01276
pull
Entries 82
Mean 347.8
Std Dev 304

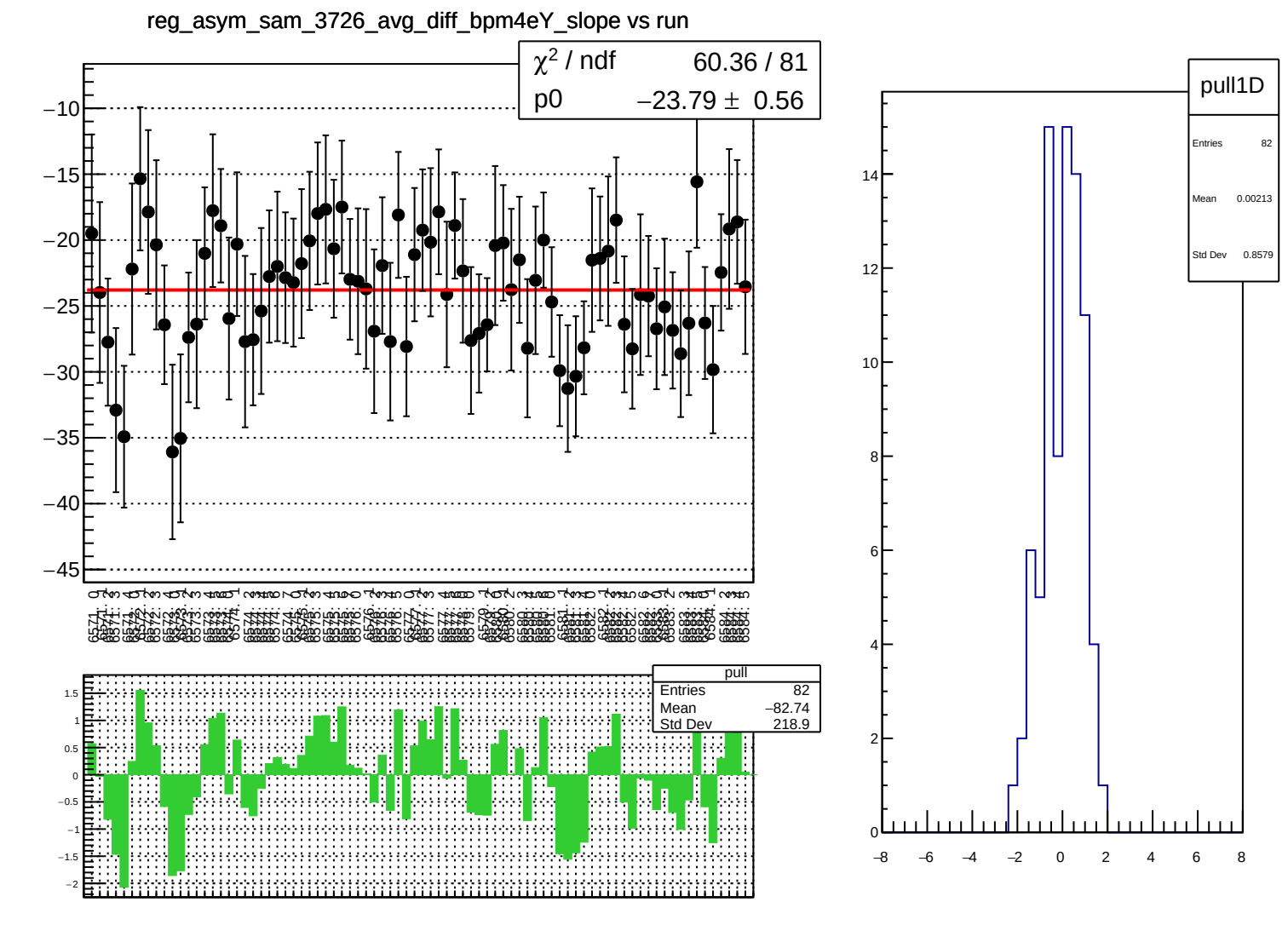

pull1D
Entries 82
Mean 0.005819
Std Dev 0.54

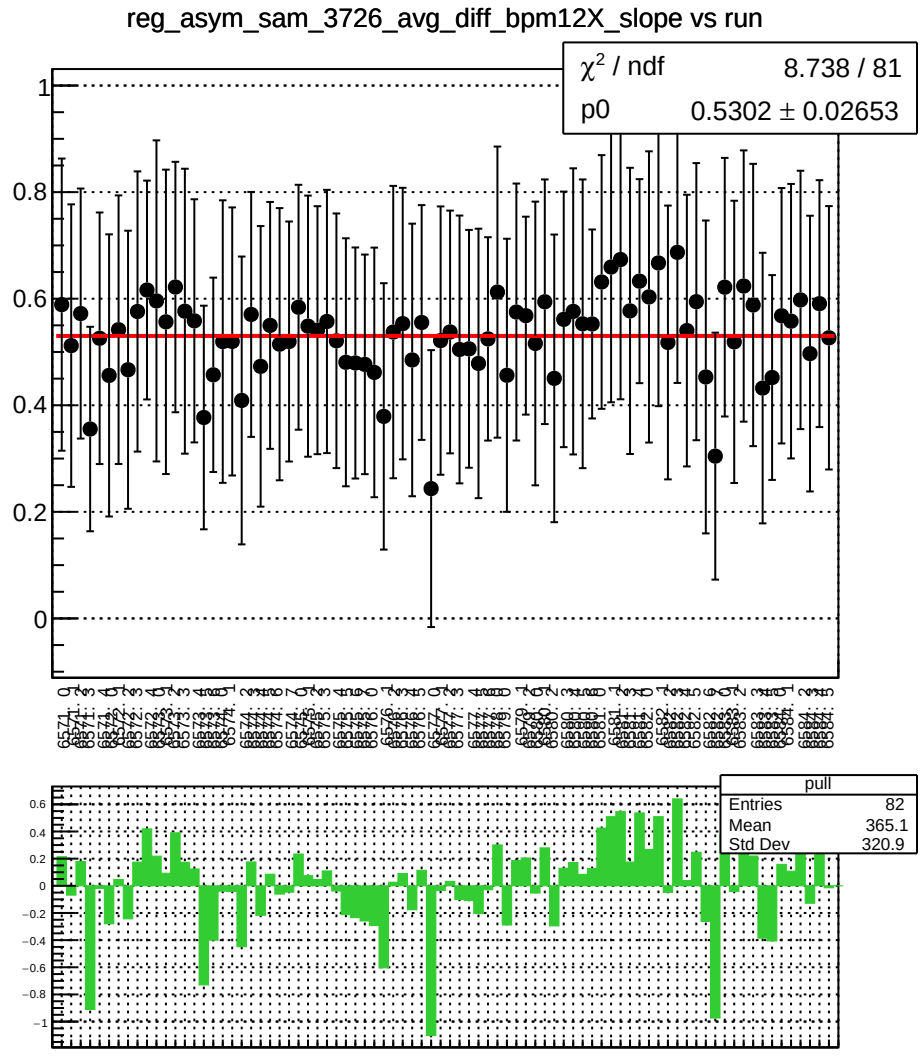

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 227.9 / 81
p0 −20.71 ± 0.5714
pull
Entries 82
Mean 43.98
Std Dev 12.96
pull1D
Entries 82
Mean 0.1393
Std Dev 1.661

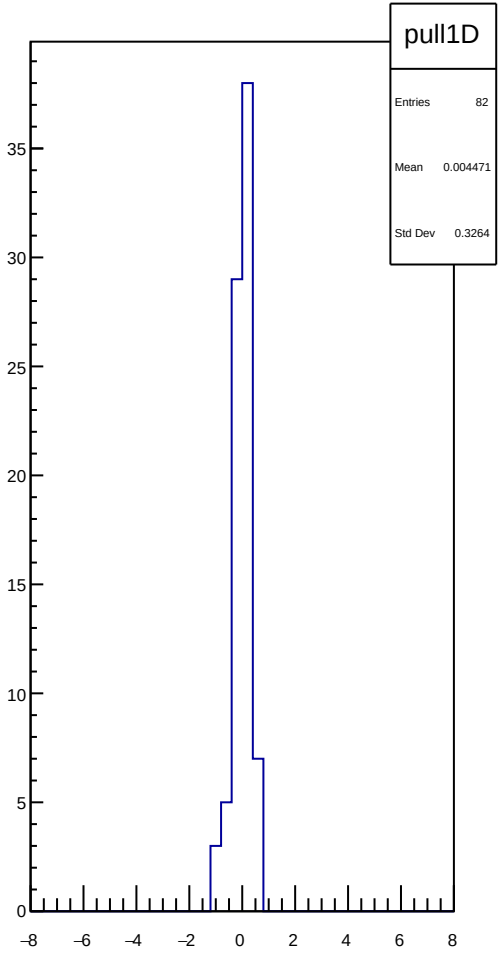

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 60 / 81
p0 8.456 ± 0.4623
pull
Entries 82
Mean 266
Std Dev 345.6

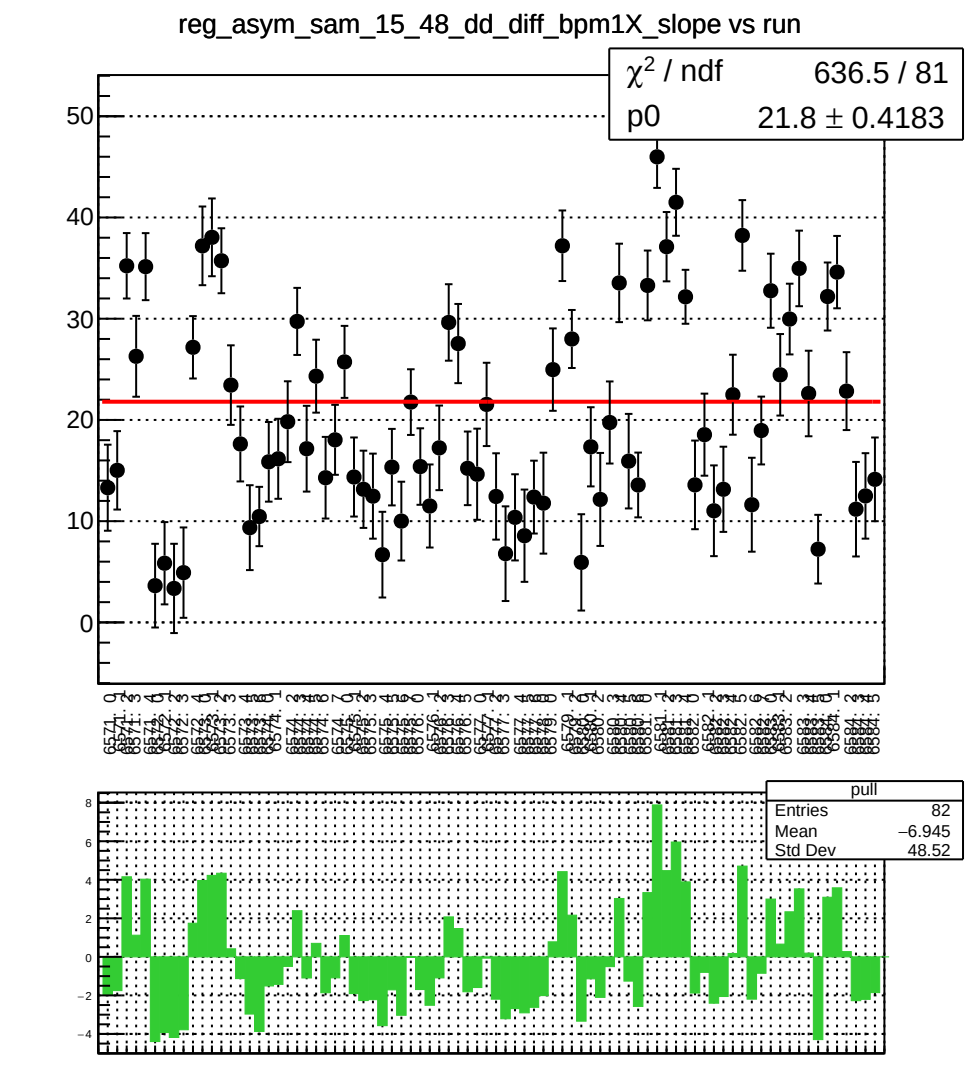

pull1D
Entries 82
Mean −0.0009654
Std Dev 0.8554

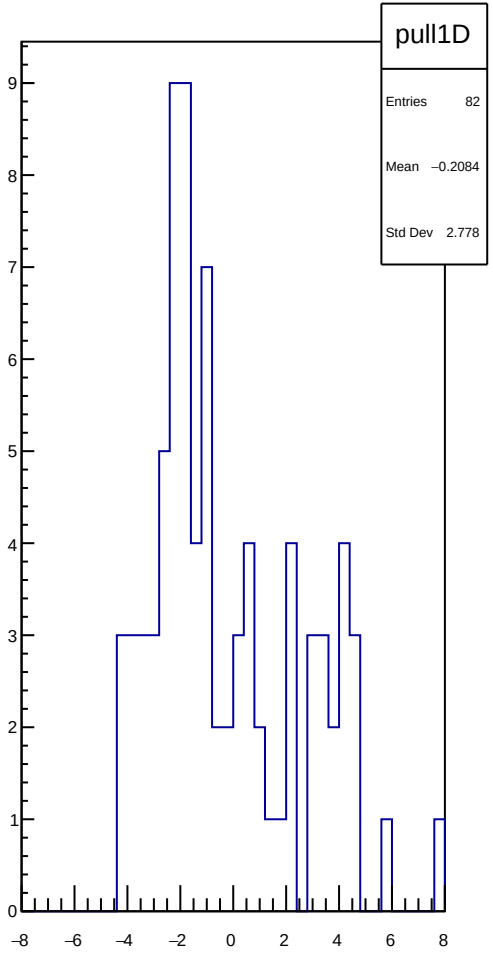

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 206.4 / 81
p0 −54.71 ± 0.6083
pull
Entries 82
Mean 28.88
Std Dev 18.54
pull1D
Entries 82
Mean −0.1529
Std Dev 1.579

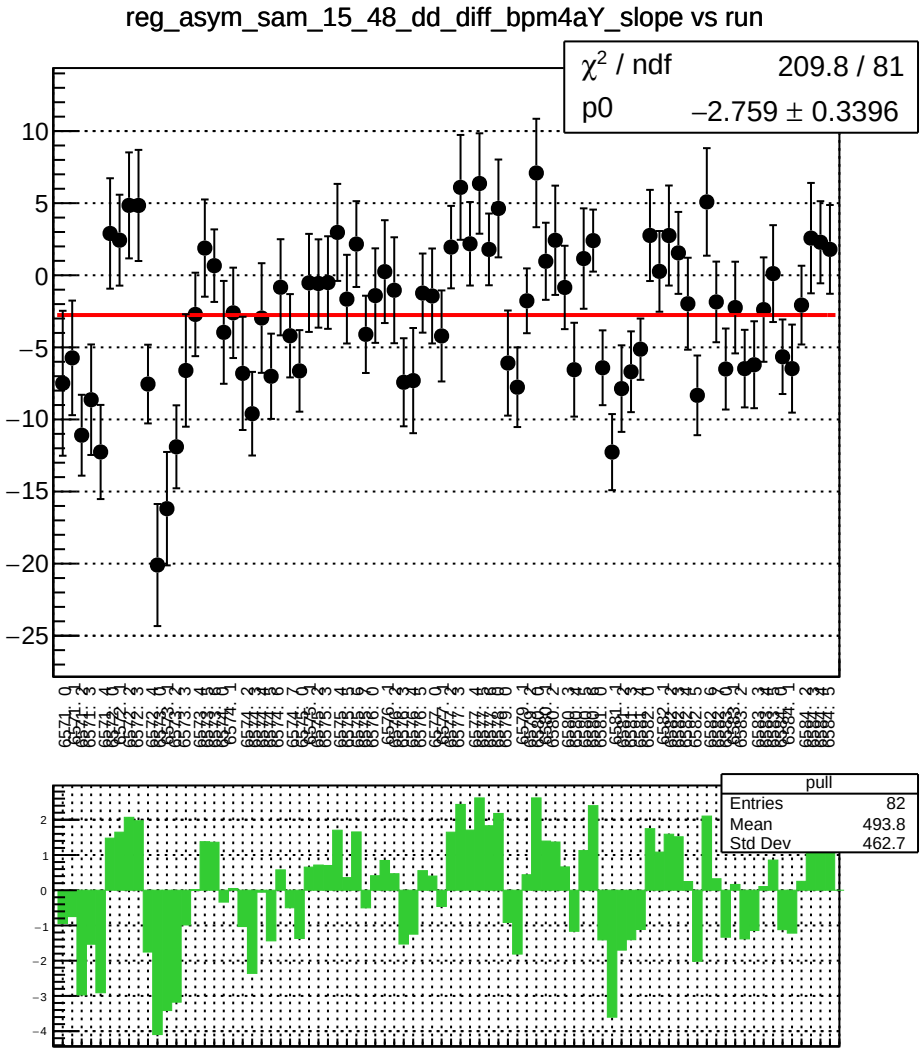

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 60.36 / 81
p0 −23.79 ± 0.56
pull
Entries 82
Mean −82.74
Std Dev 218.9
pull1D
Entries 82
Mean 0.00213
Std Dev 0.8579

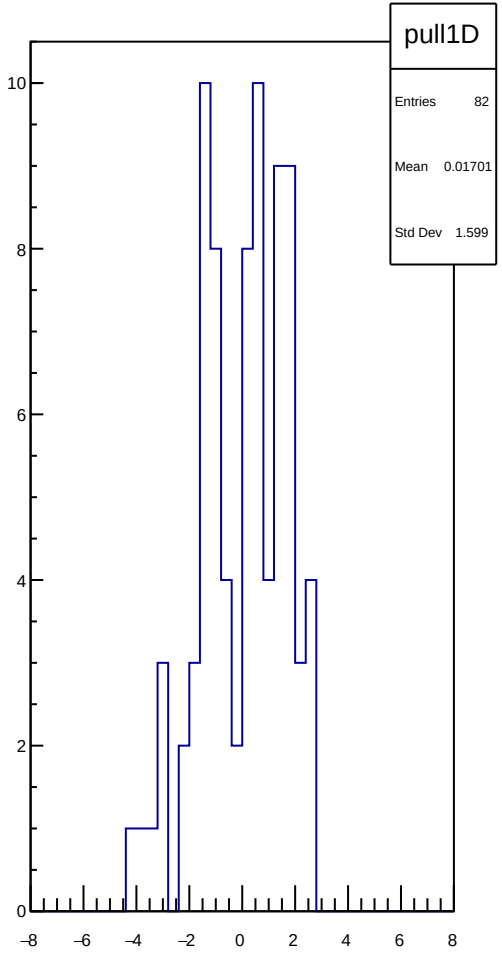

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 8.738 / 81
p0 0.5302 ± 0.02653
pull
Entries 82
Mean 365.1
Std Dev 320.9

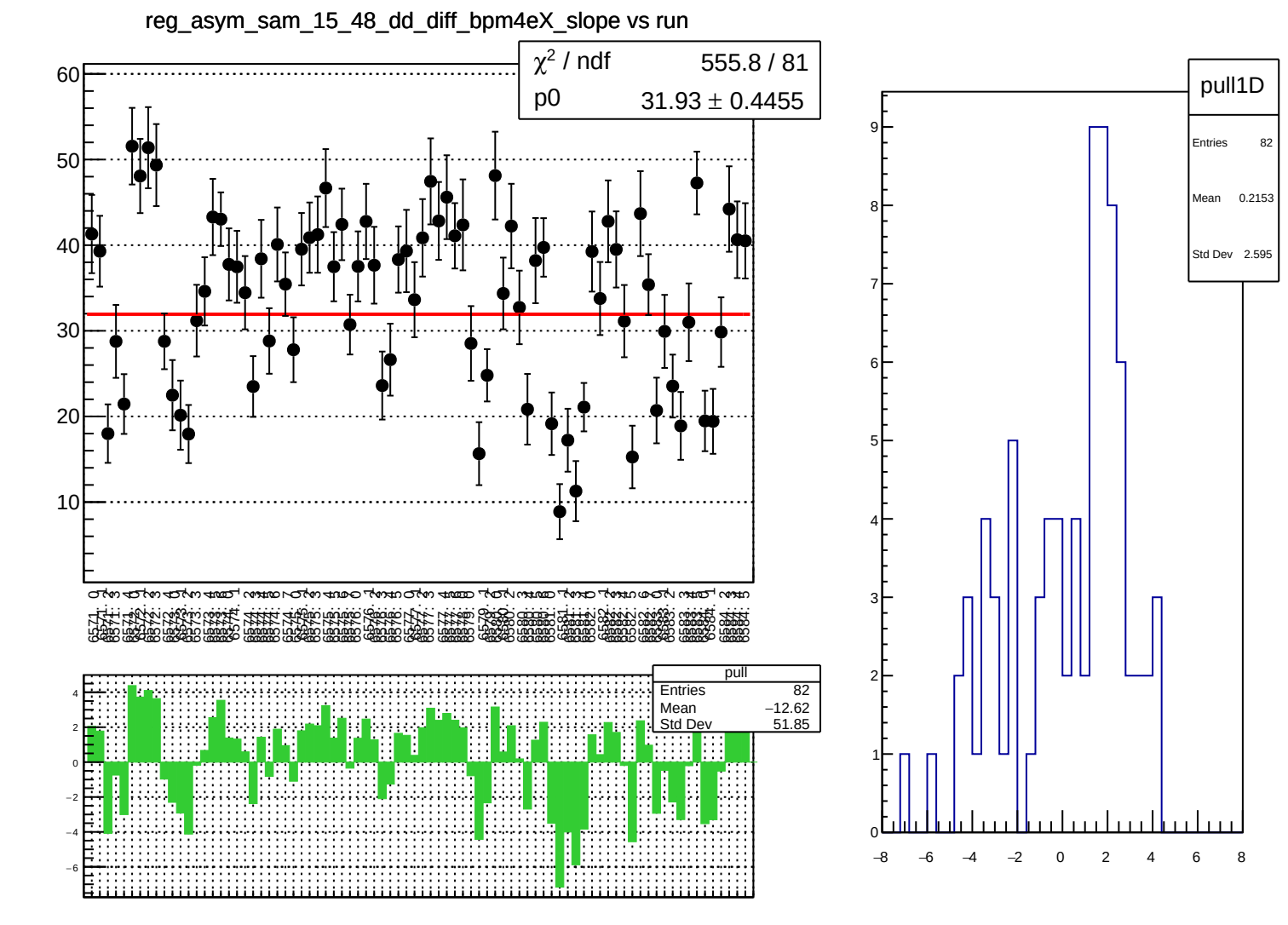

pull1D
Entries 82
Mean 0.004471
Std Dev 0.3264

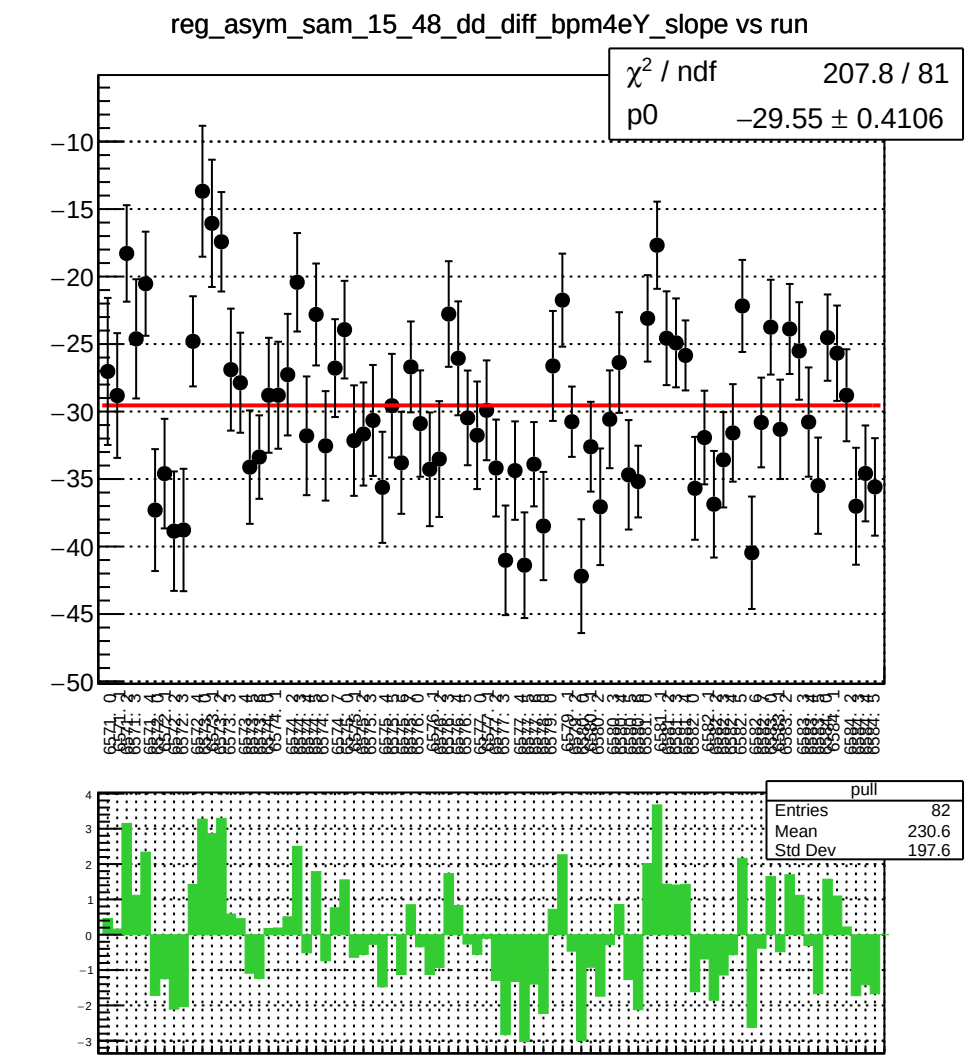

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 636.5 / 81
p0 21.8 ± 0.4183
pull
Entries 82
Mean −6.945
Std Dev 48.52

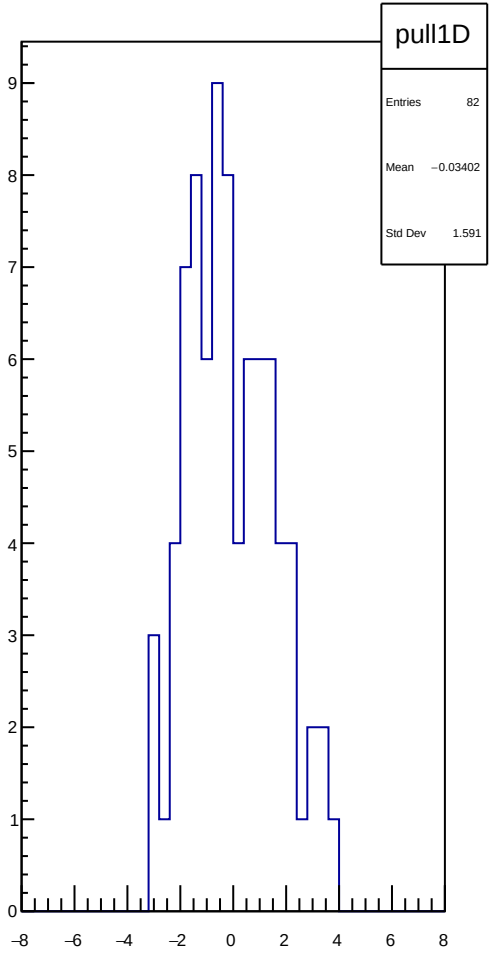

pull1D
Entries 82
Mean −0.2084
Std Dev 2.778

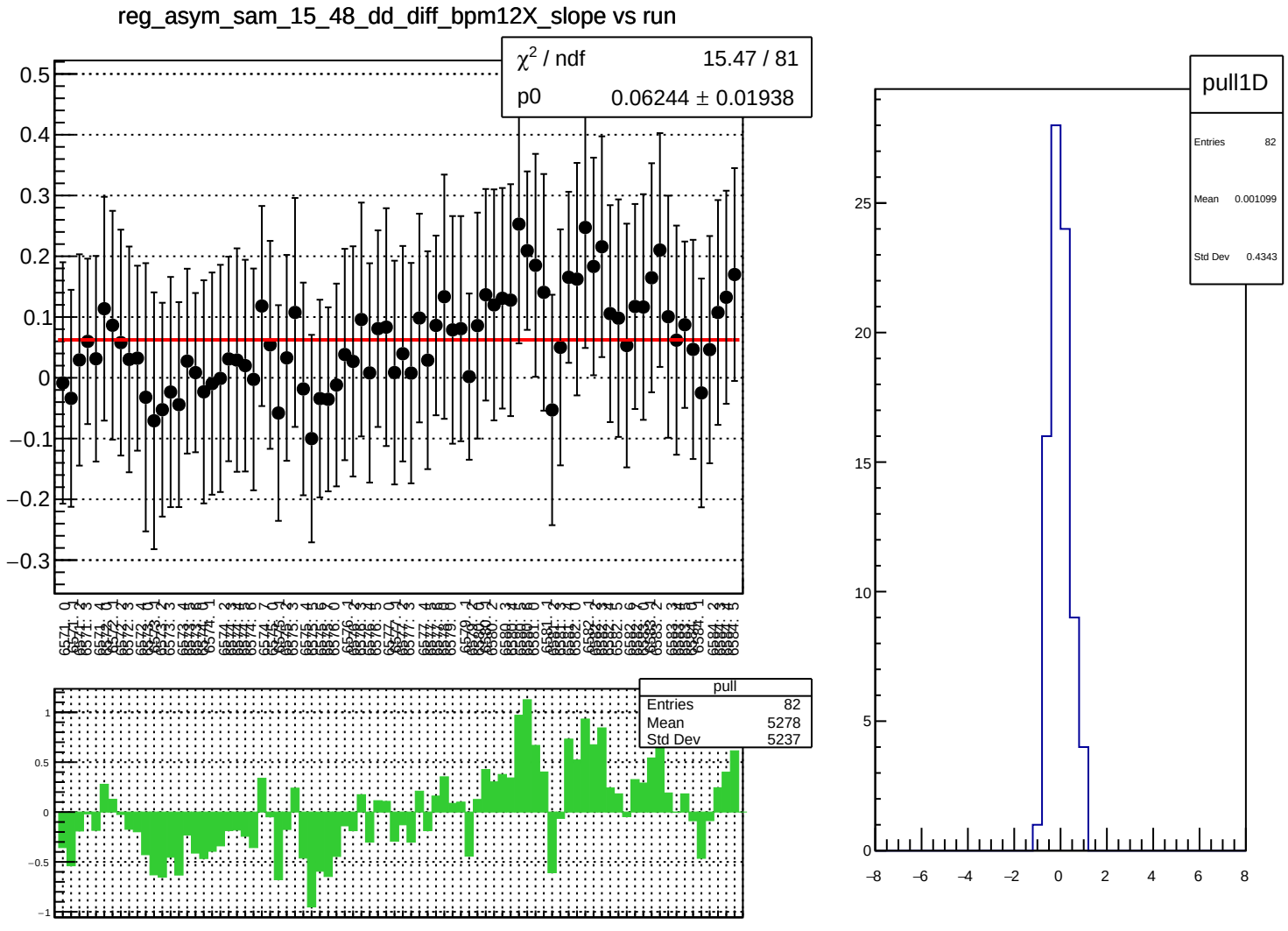

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 209.8 / 81
p0 −2.759 ± 0.3396
pull
Entries 82
Mean 493.8
Std Dev 462.7

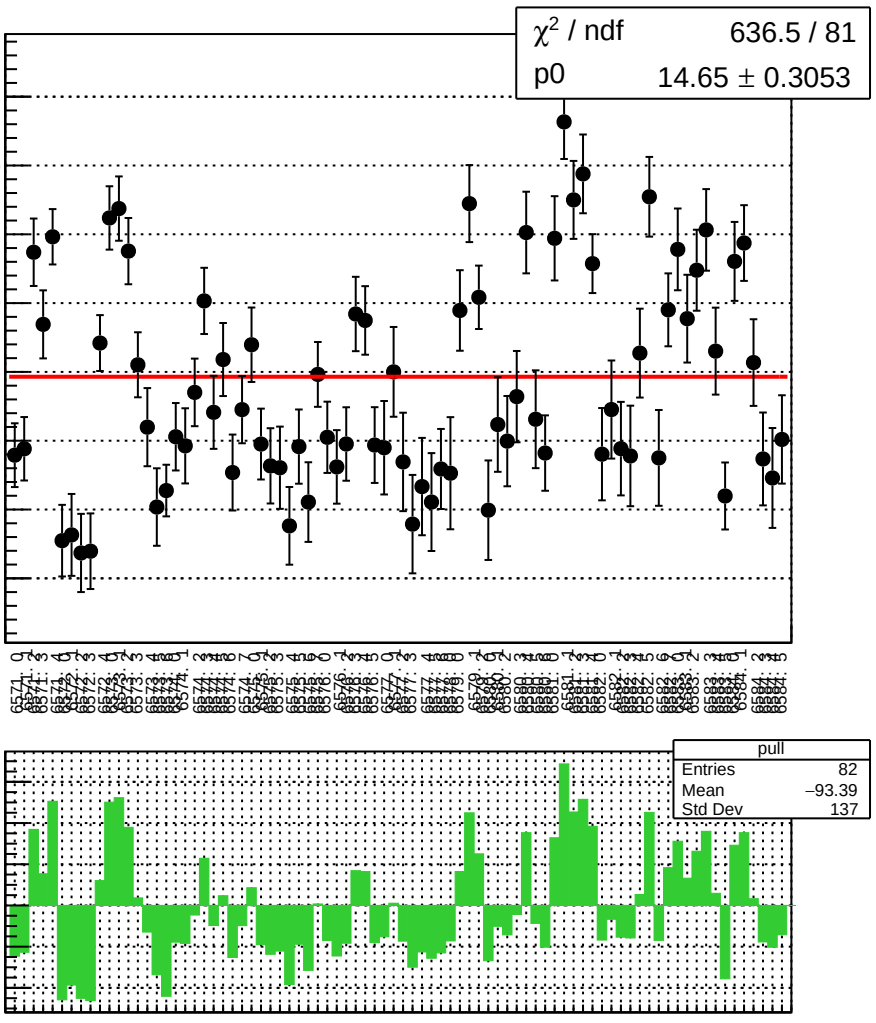

pull1D
Entries 82
Mean 0.01701
Std Dev 1.599

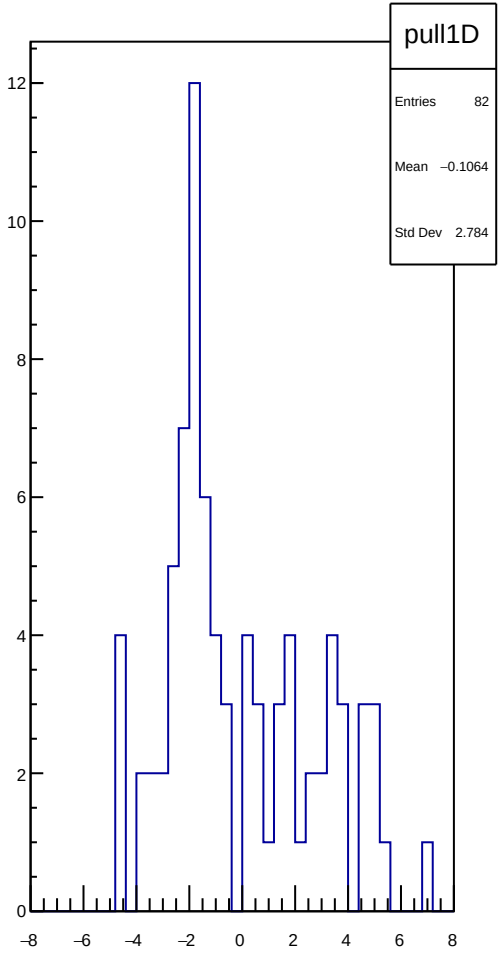

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 555.8 / 81
p0 31.93 ± 0.4455
pull
Entries 82
Mean −12.62
Std Dev 51.85
pull1D
Entries 82
Mean 0.2153
Std Dev 2.595

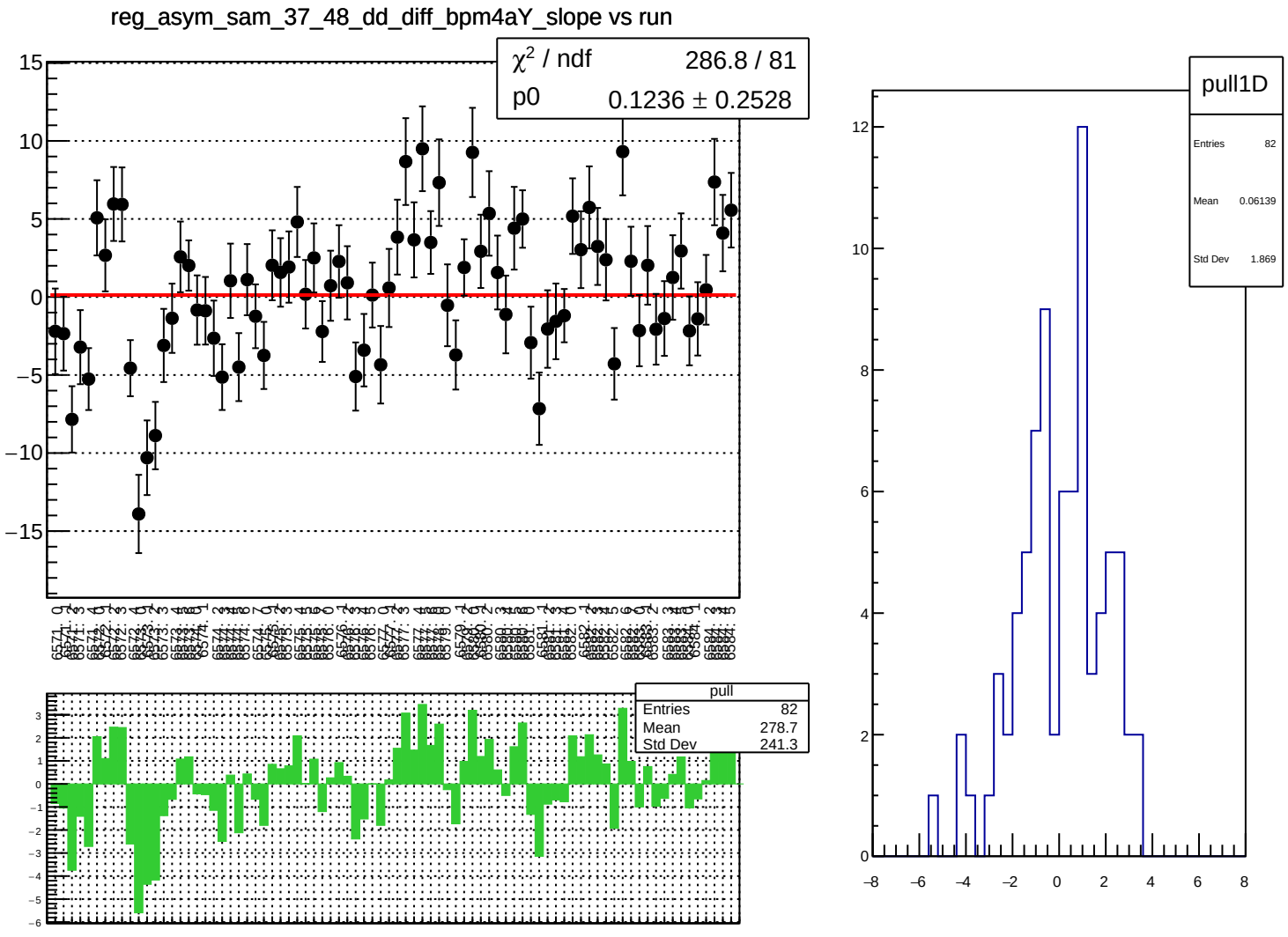

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 207.8 / 81
p0 −29.55 ± 0.4106
pull
Entries 82
Mean 230.6
Std Dev 197.6

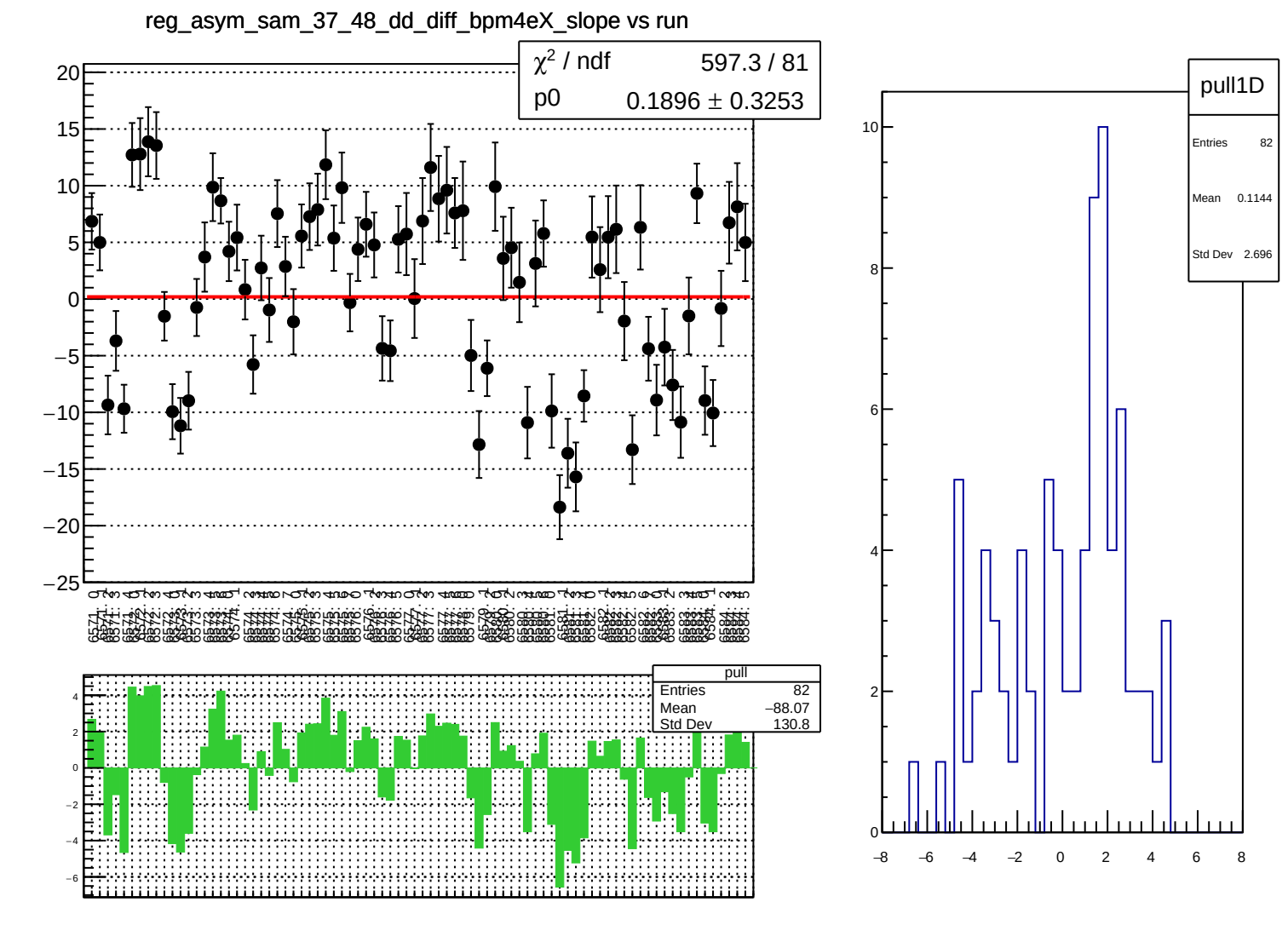

pull1D
Entries 82
Mean −0.03402
Std Dev 1.591

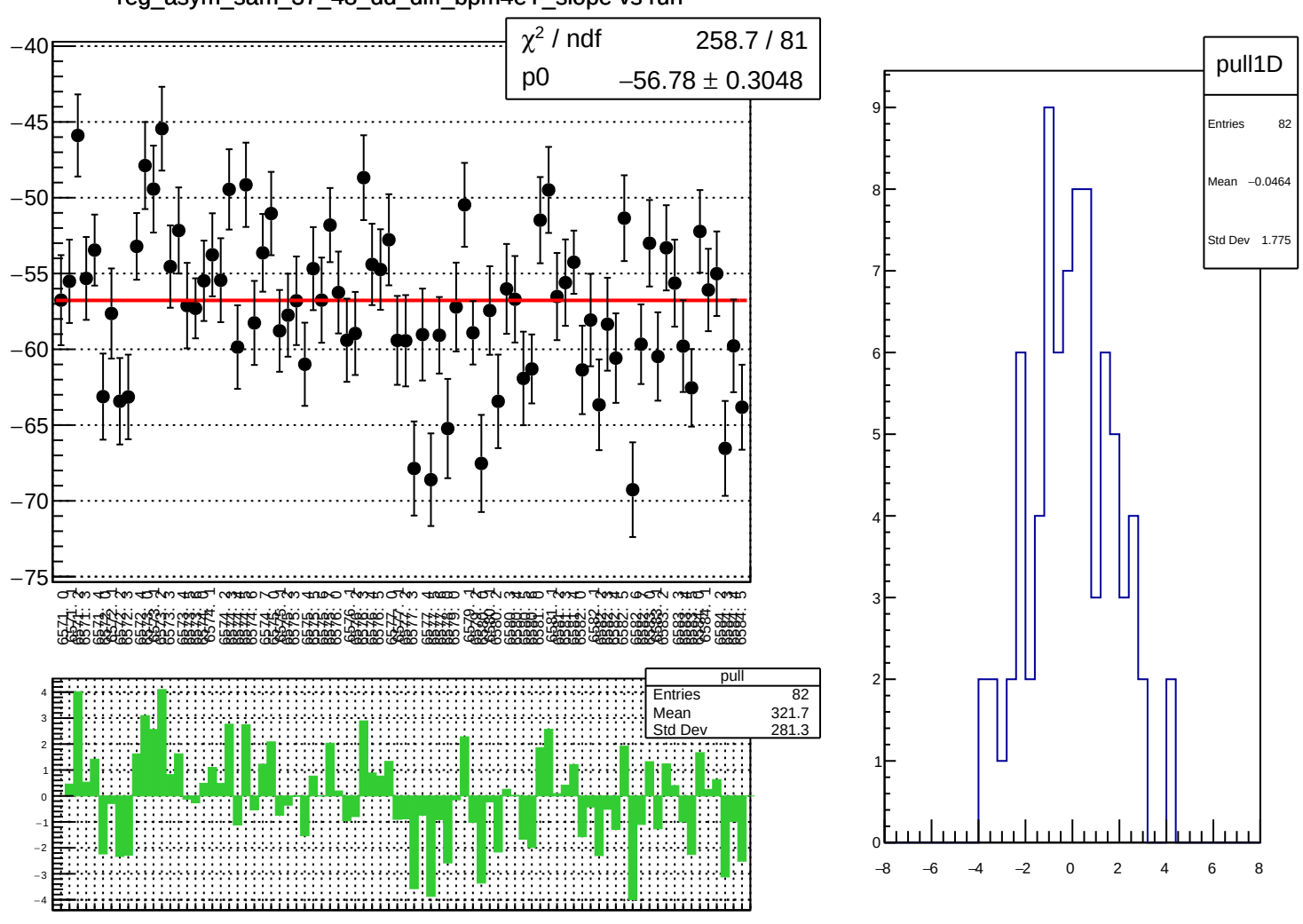

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 15.47 / 81
p0 0.06244 ± 0.01938
pull
Entries 82
Mean 5278
Std Dev 5237
pull1D
Entries 82
Mean 0.001099
Std Dev 0.4343

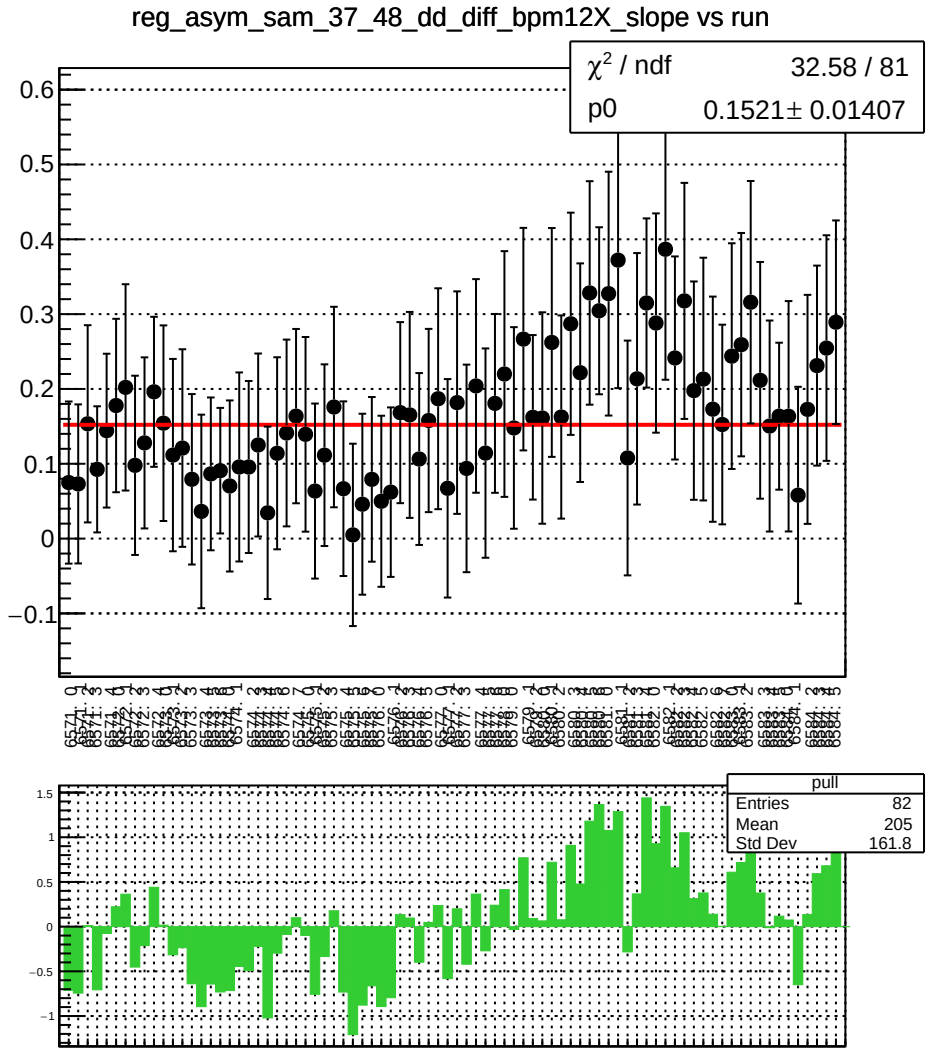

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 636.5 / 81
p0 14.65 ± 0.3053
pull
Entries 82
Mean −93.39
Std Dev 137

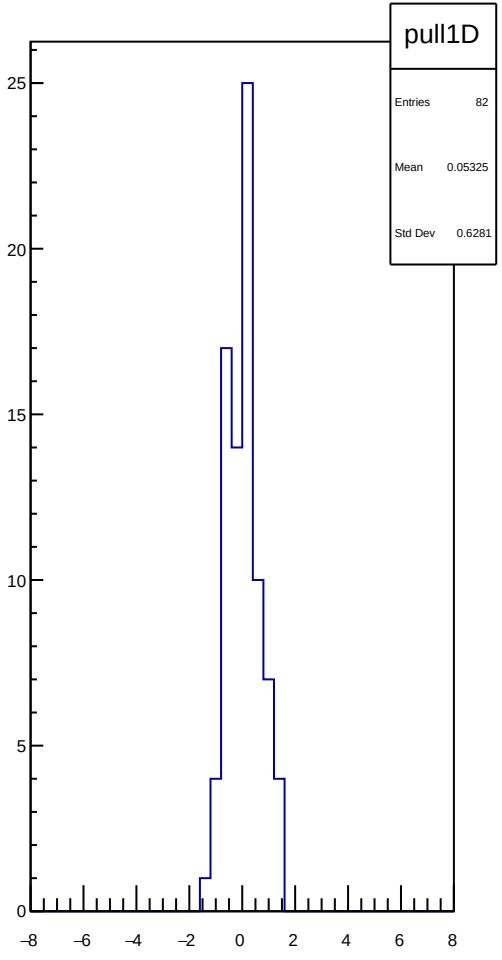

pull1D
Entries 82
Mean −0.1064
Std Dev 2.784

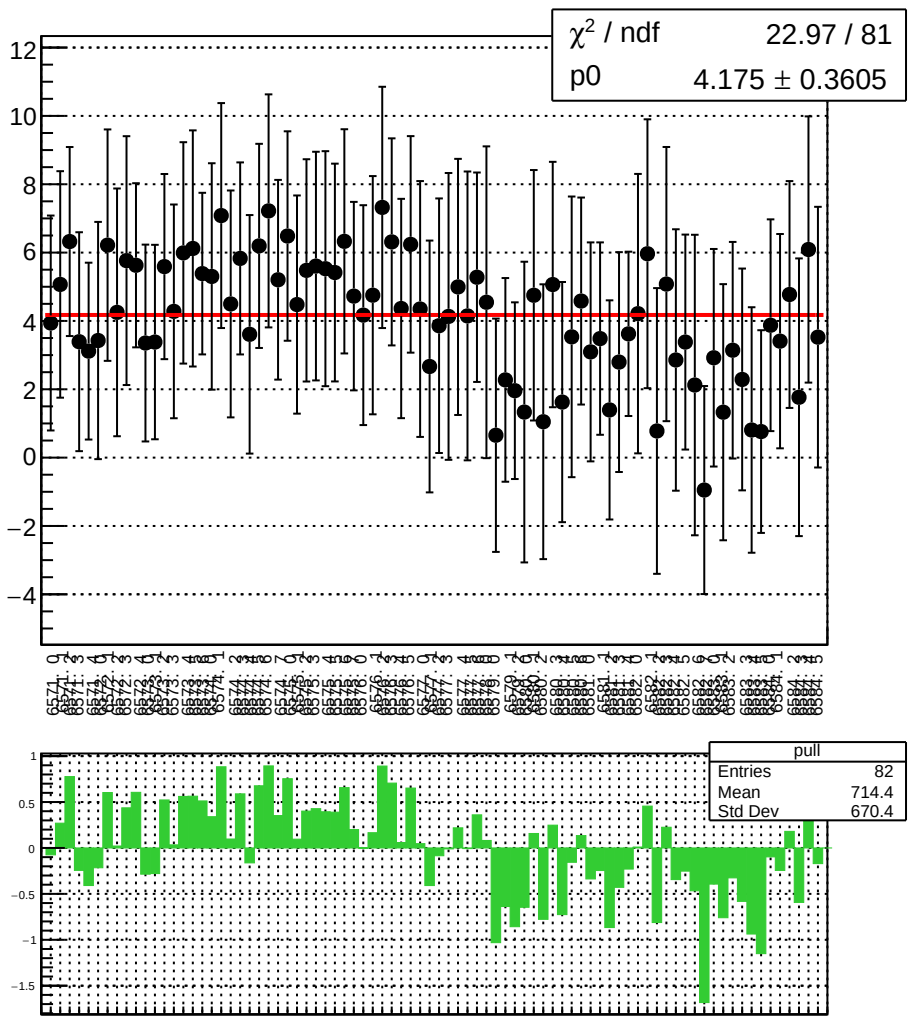

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 286.8 / 81
p0 0.1236 ± 0.2528
pull
Entries 82
Mean 278.7
Std Dev 241.3
pull1D
Entries 82
Mean 0.06139
Std Dev 1.869

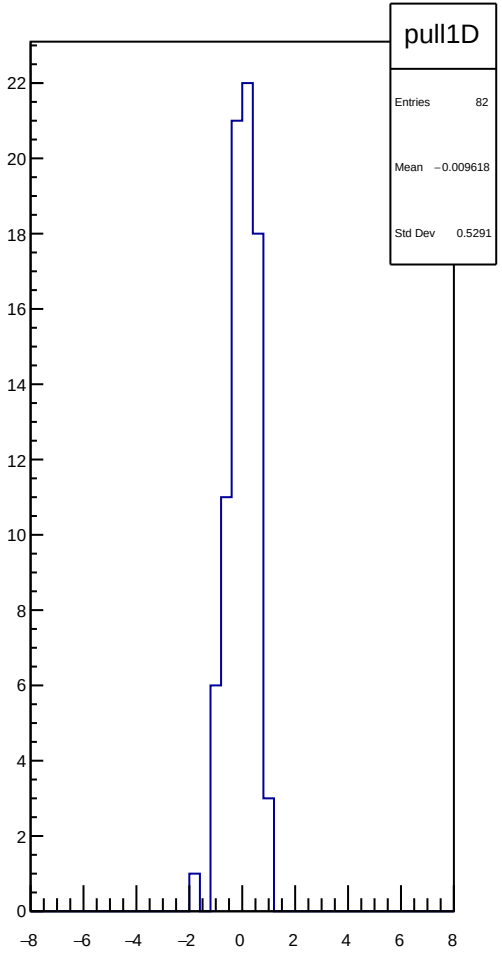

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 597.3 / 81
p0 0.1896 ± 0.3253
pull
Entries 82
Mean −88.07
Std Dev 130.8
pull1D
Entries 82
Mean 0.1144
Std Dev 2.696

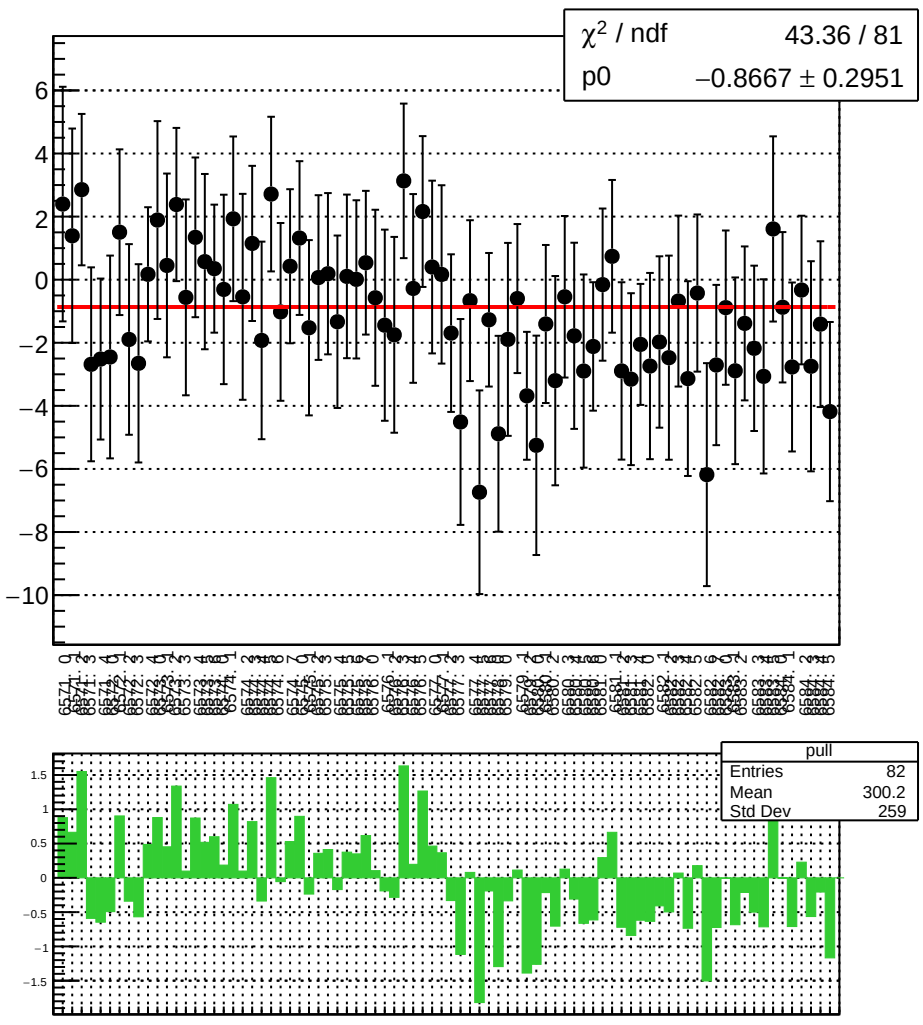

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 258.7 / 81
p0 −56.78 ± 0.3048
pull
Entries 82
Mean 321.7
Std Dev 281.3
pull1D
Entries 82
Mean −0.0464
Std Dev 1.775

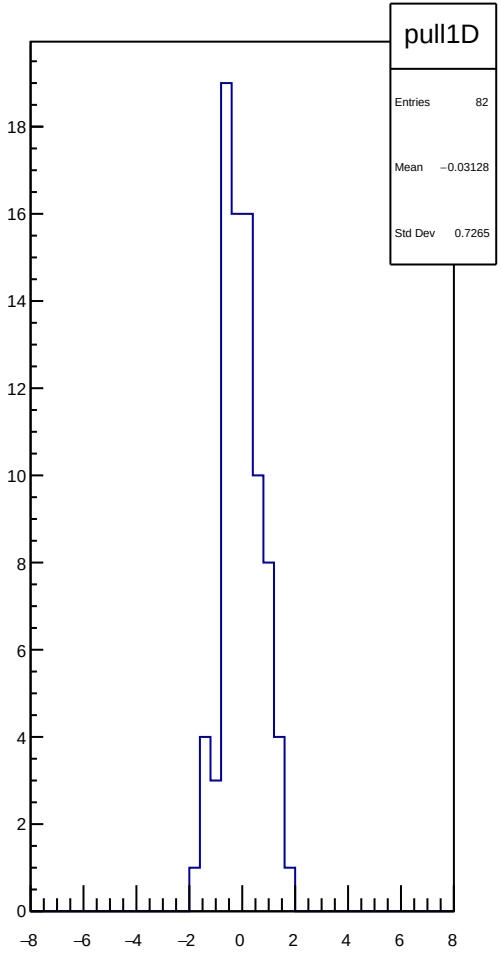

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 32.58 / 81
p0 0.1521± 0.01407
pull
Entries 82
Mean 205
Std Dev 161.8

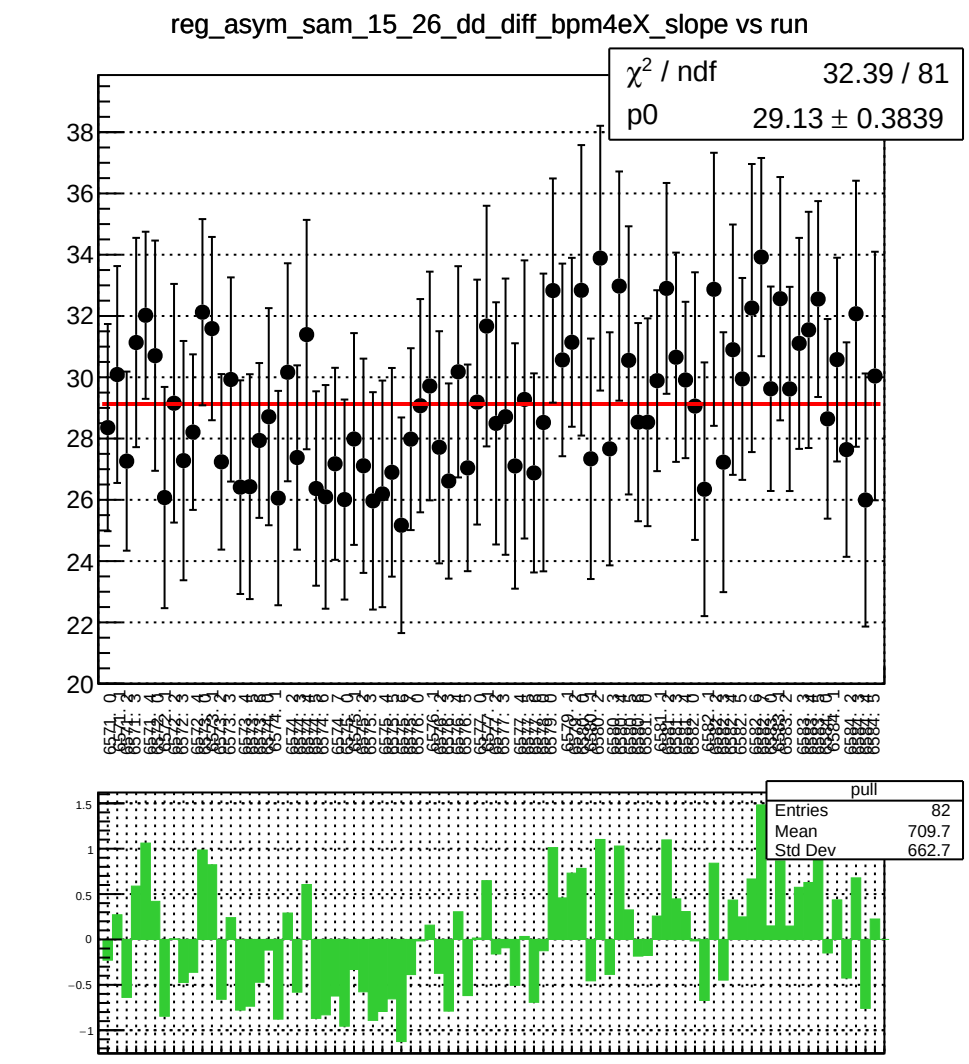

pull1D
Entries 82
Mean 0.05325
Std Dev 0.6281

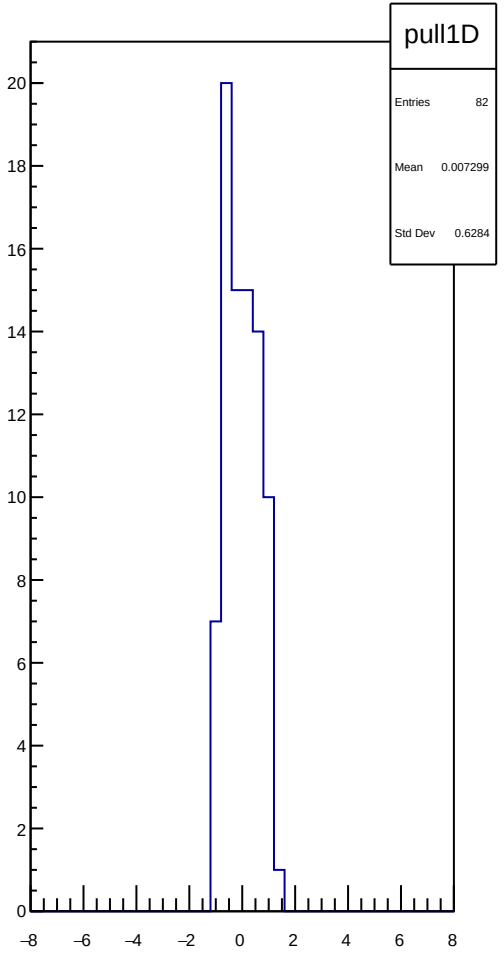

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 22.97 / 81
p0 4.175 ± 0.3605
pull
Entries 82
Mean 714.4
Std Dev 670.4

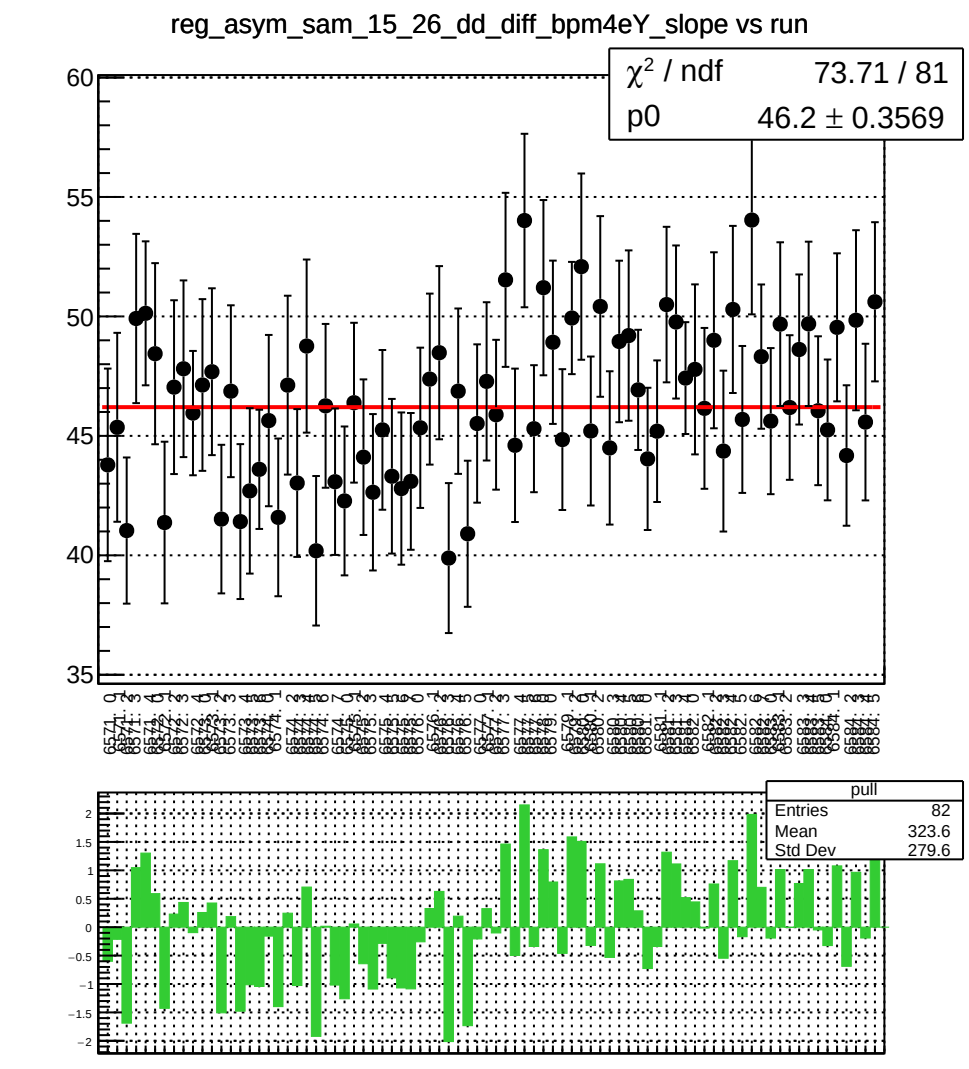

pull1D
Entries 82
Mean −0.009618
Std Dev 0.5291

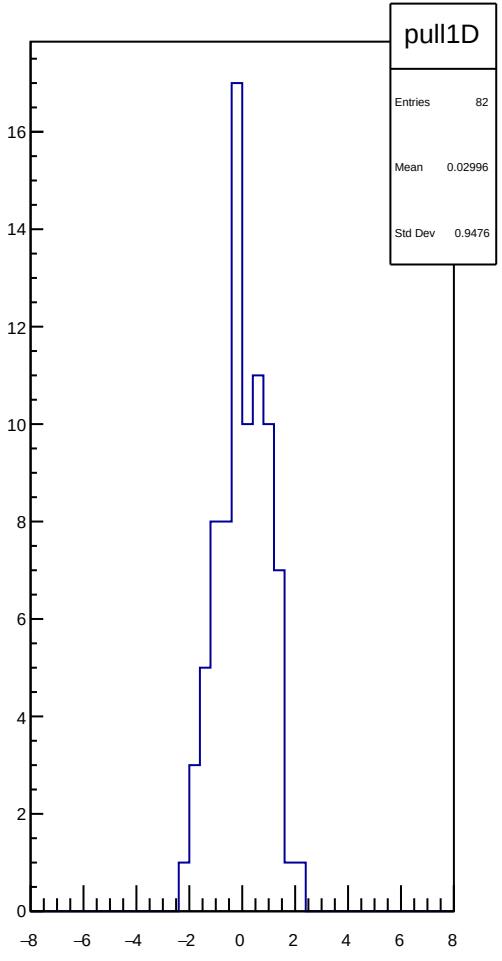

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 43.36 / 81
p0 −0.8667 ± 0.2951
pull
Entries 82
Mean 300.2
Std Dev 259

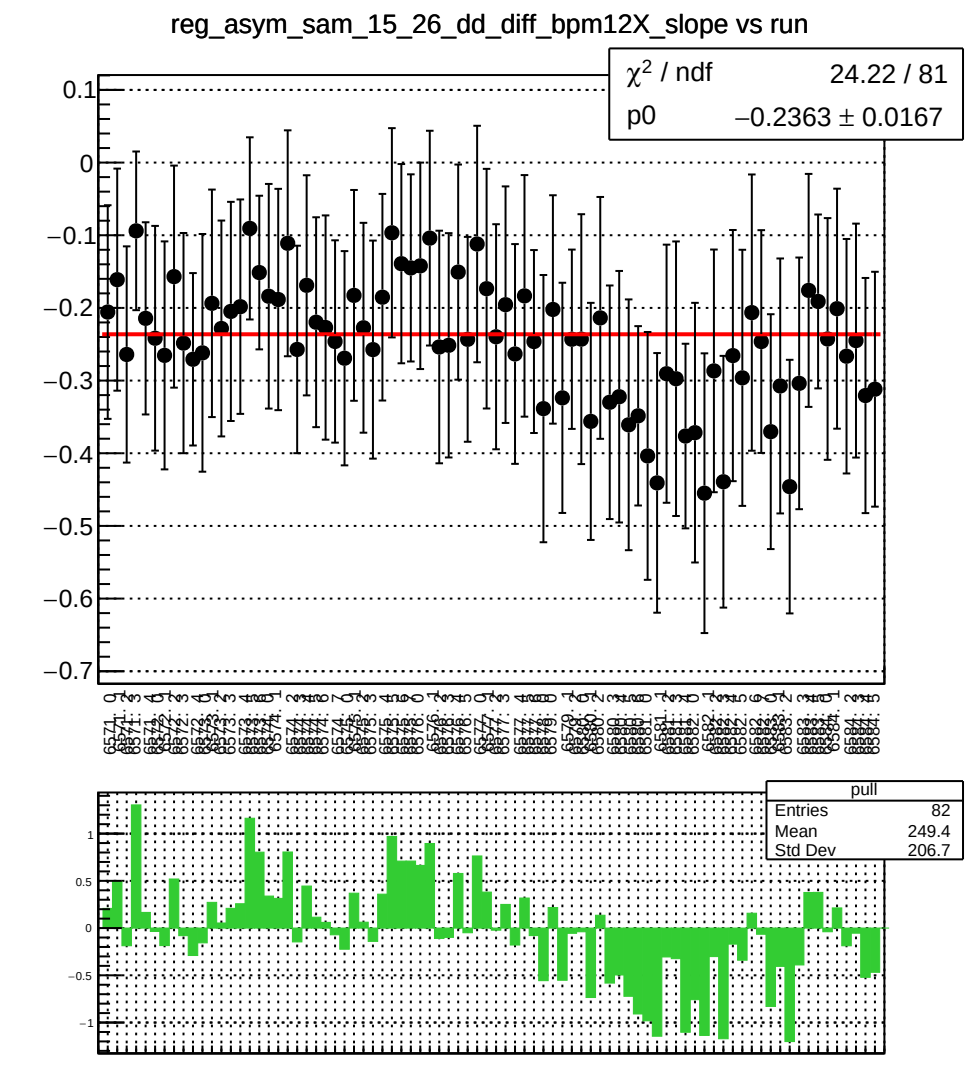

pull1D
Entries 82
Mean −0.03128
Std Dev 0.7265

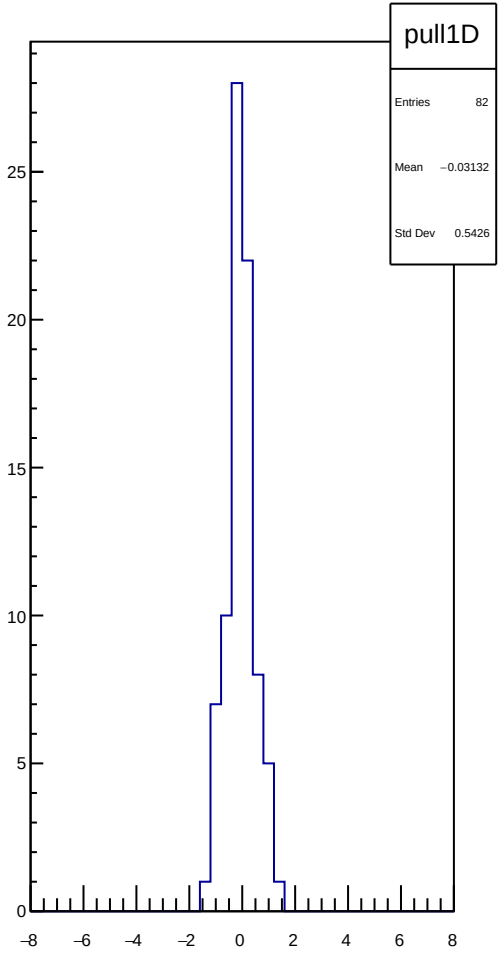

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 32.39 / 81
p0 29.13 ± 0.3839
pull
Entries 82
Mean 709.7
Std Dev 662.7

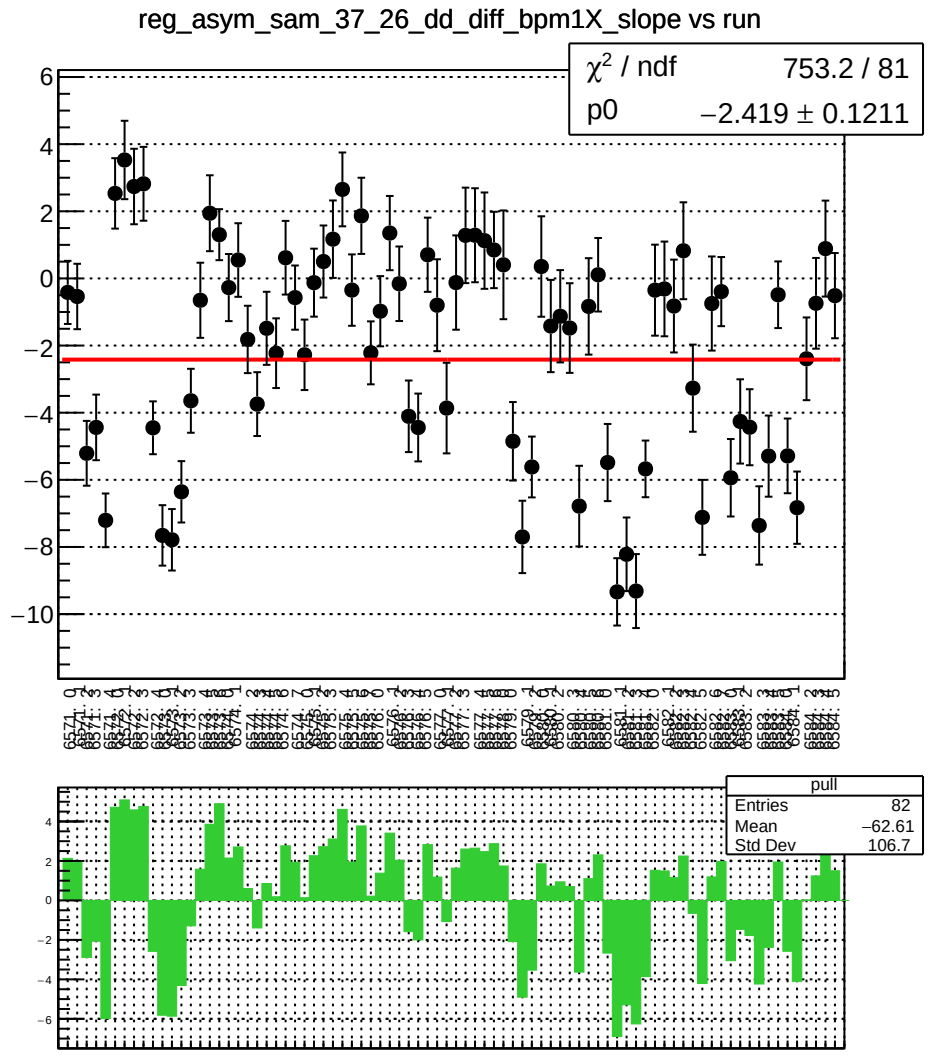

pull1D
Entries 82
Mean 0.007299
Std Dev 0.6284

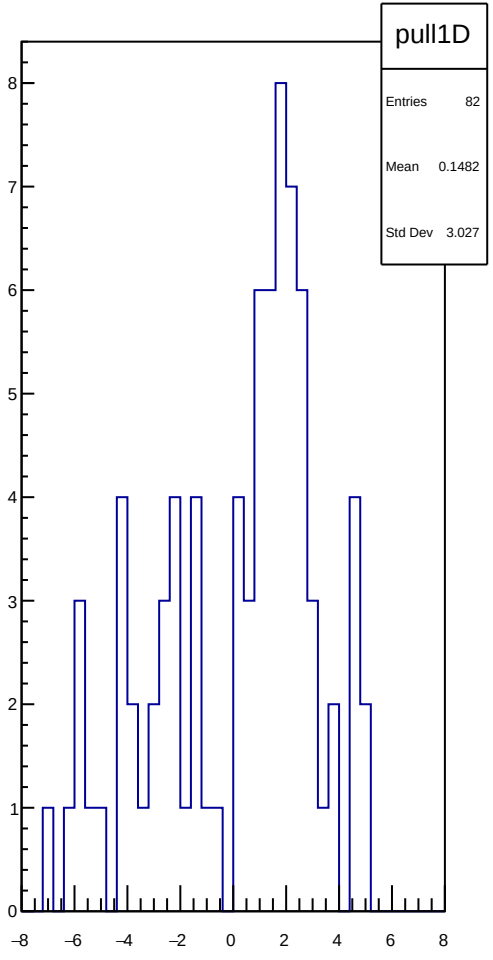

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 73.71 / 81
p0 46.2 ± 0.3569
pull
Entries 82
Mean 323.6
Std Dev 279.6

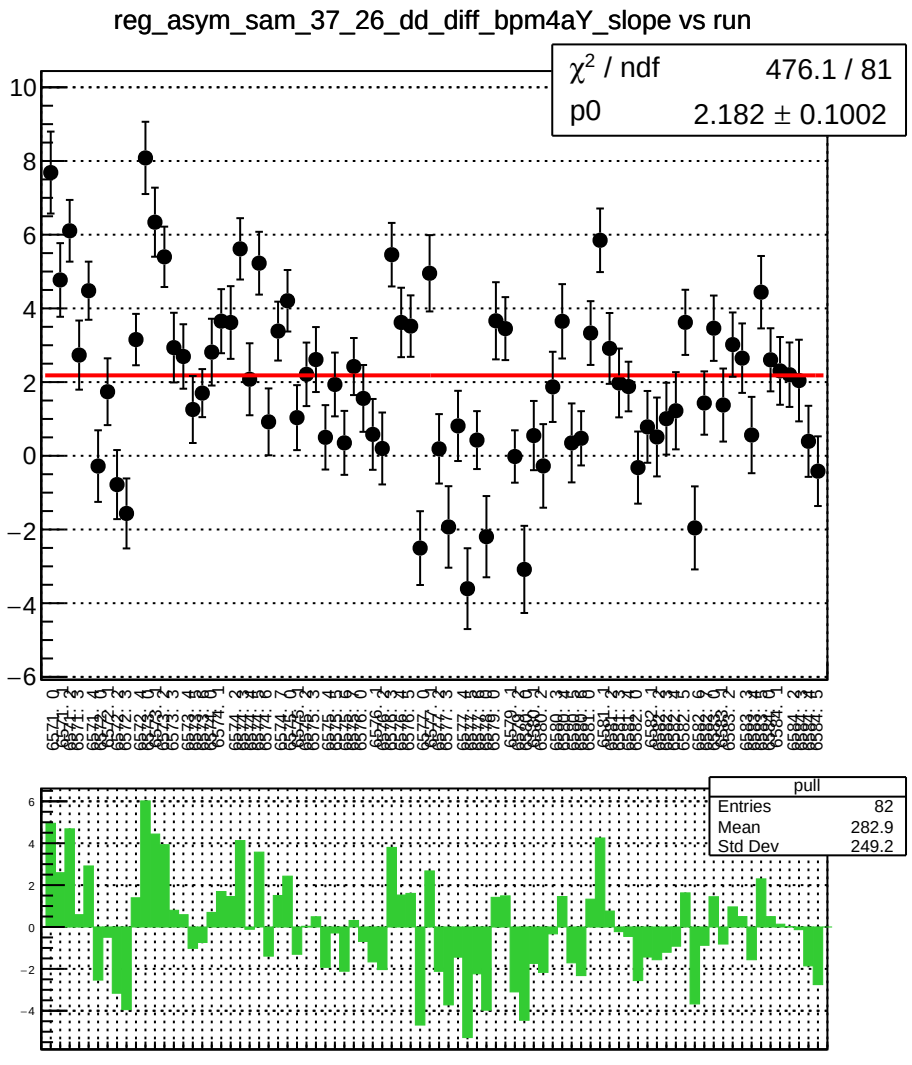

pull1D
Entries 82
Mean 0.02996
Std Dev 0.9476

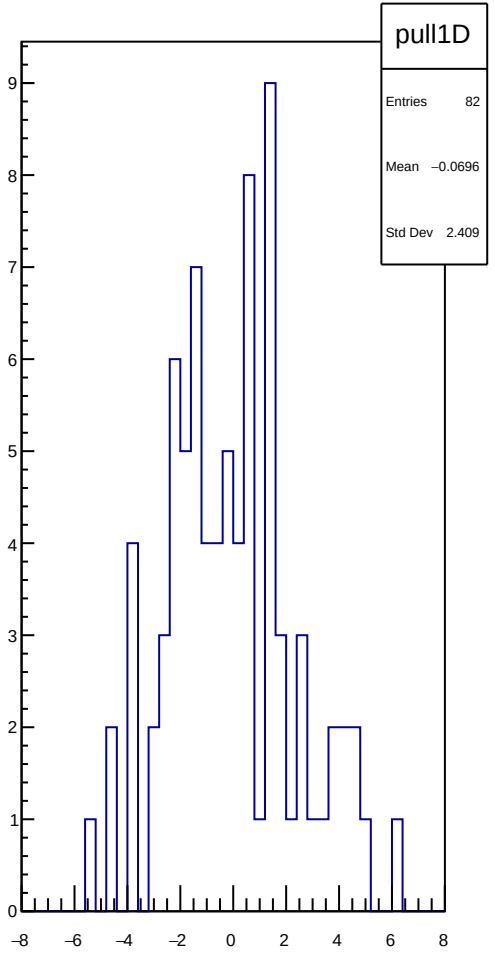

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 24.22 / 81
p0 −0.2363 ± 0.0167
pull
Entries 82
Mean 249.4
Std Dev 206.7

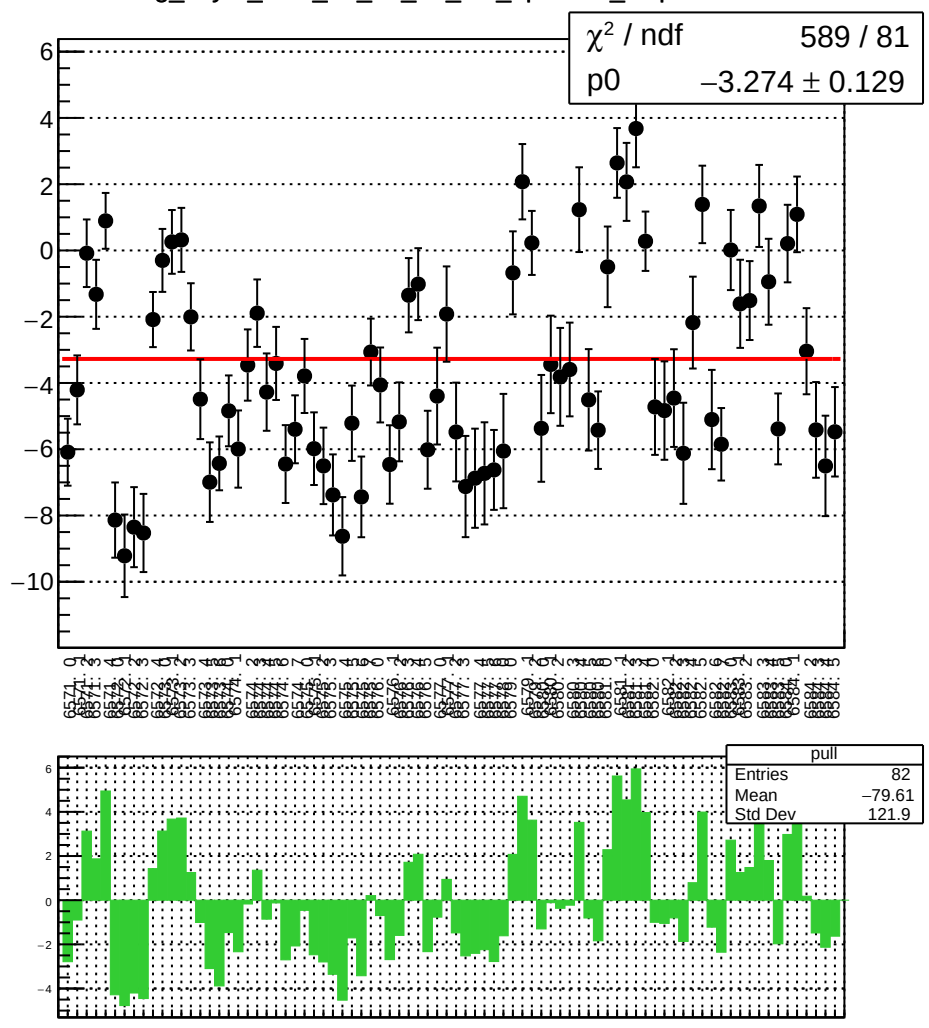

pull1D
Entries 82
Mean −0.03132
Std Dev 0.5426

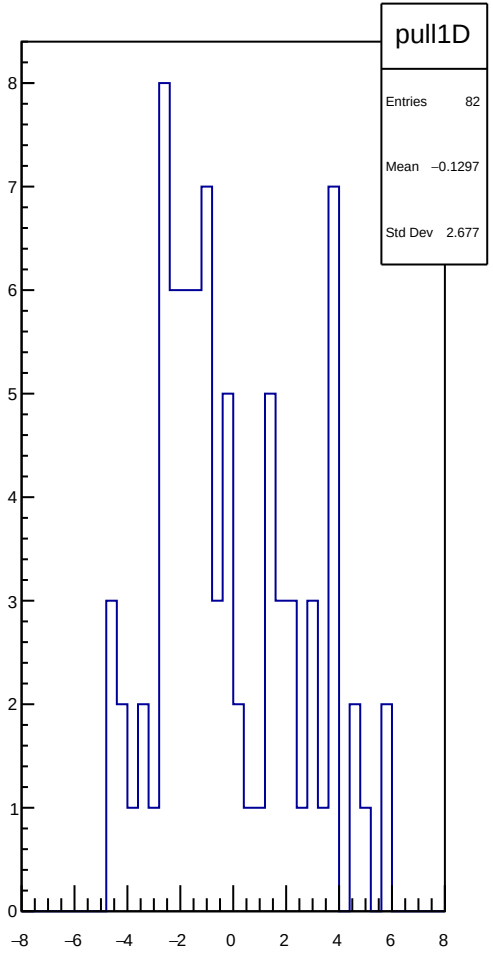

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 753.2 / 81
p0 −2.419 ± 0.1211
pull
Entries 82
Mean −62.61
Std Dev 106.7

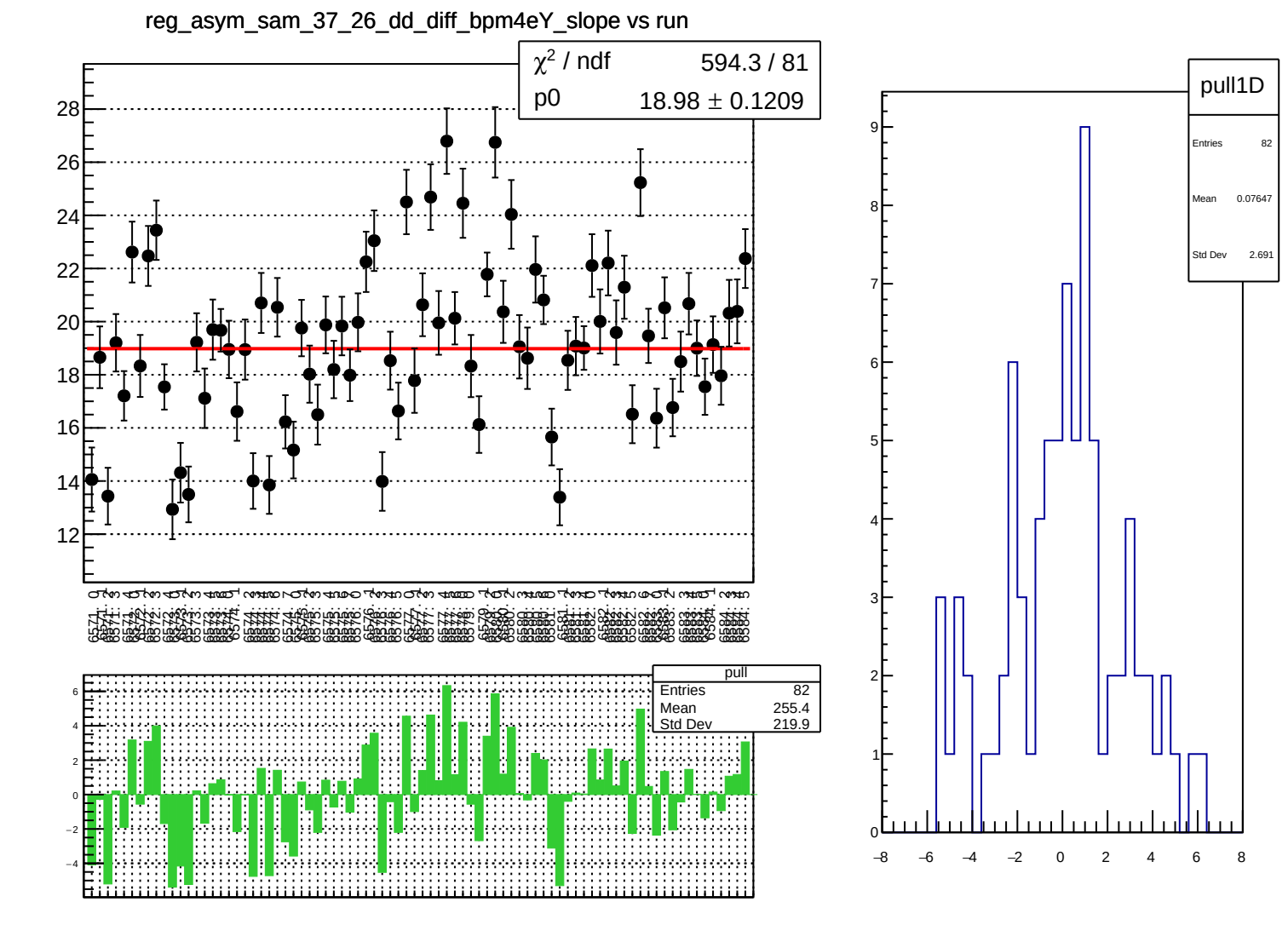

pull1D
Entries 82
Mean 0.1482
Std Dev 3.027

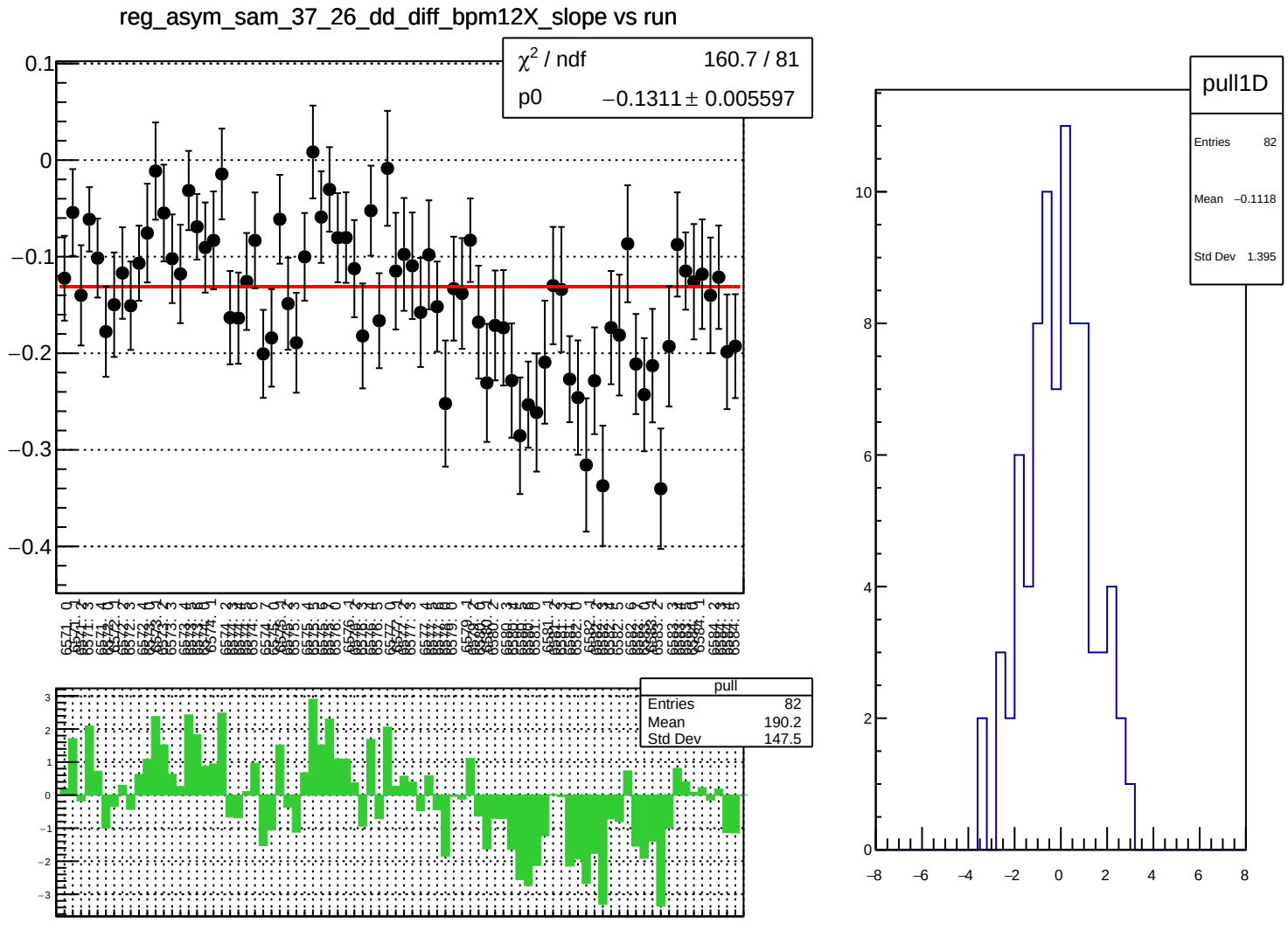

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 476.1 / 81
p0 2.182 ± 0.1002
pull
Entries 82
Mean 282.9
Std Dev 249.2

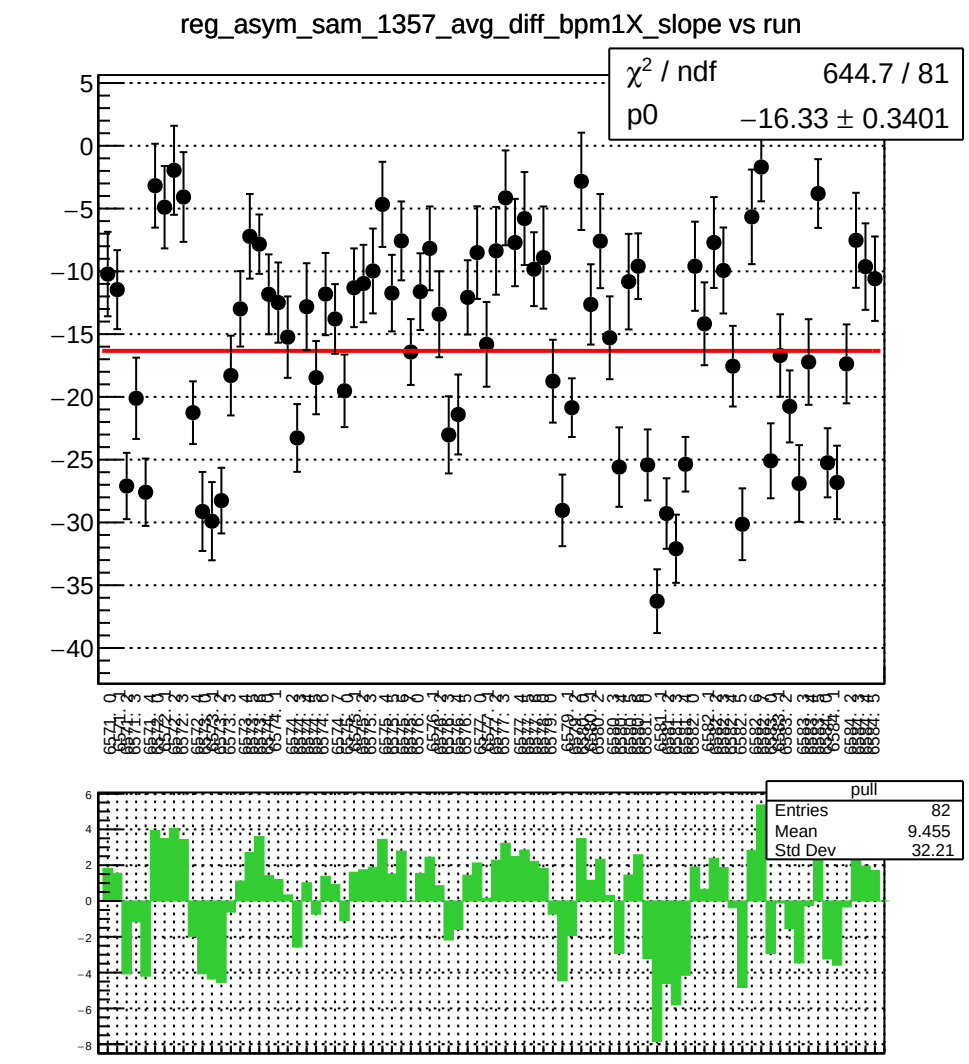

pull1D
Entries 82
Mean −0.0696
Std Dev 2.409

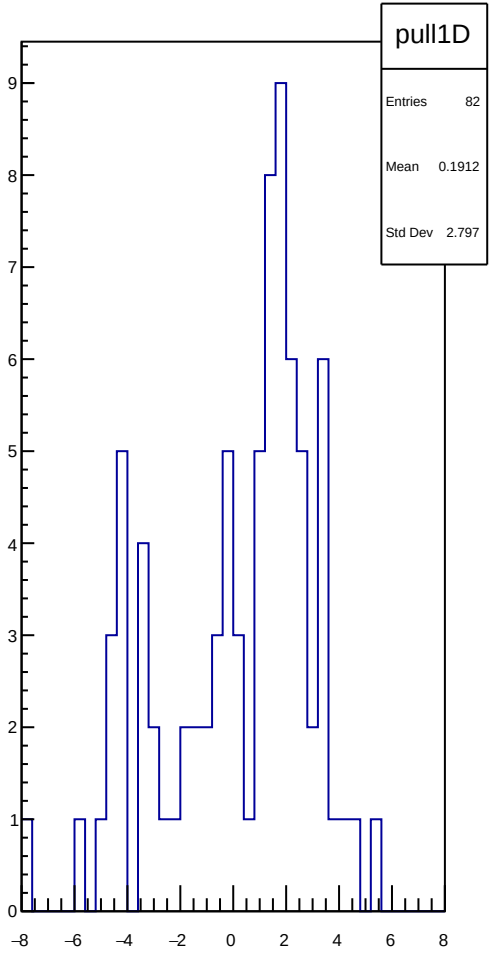

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 589 / 81
p0 −3.274 ± 0.129
pull
Entries 82
Mean −79.61
Std Dev 121.9

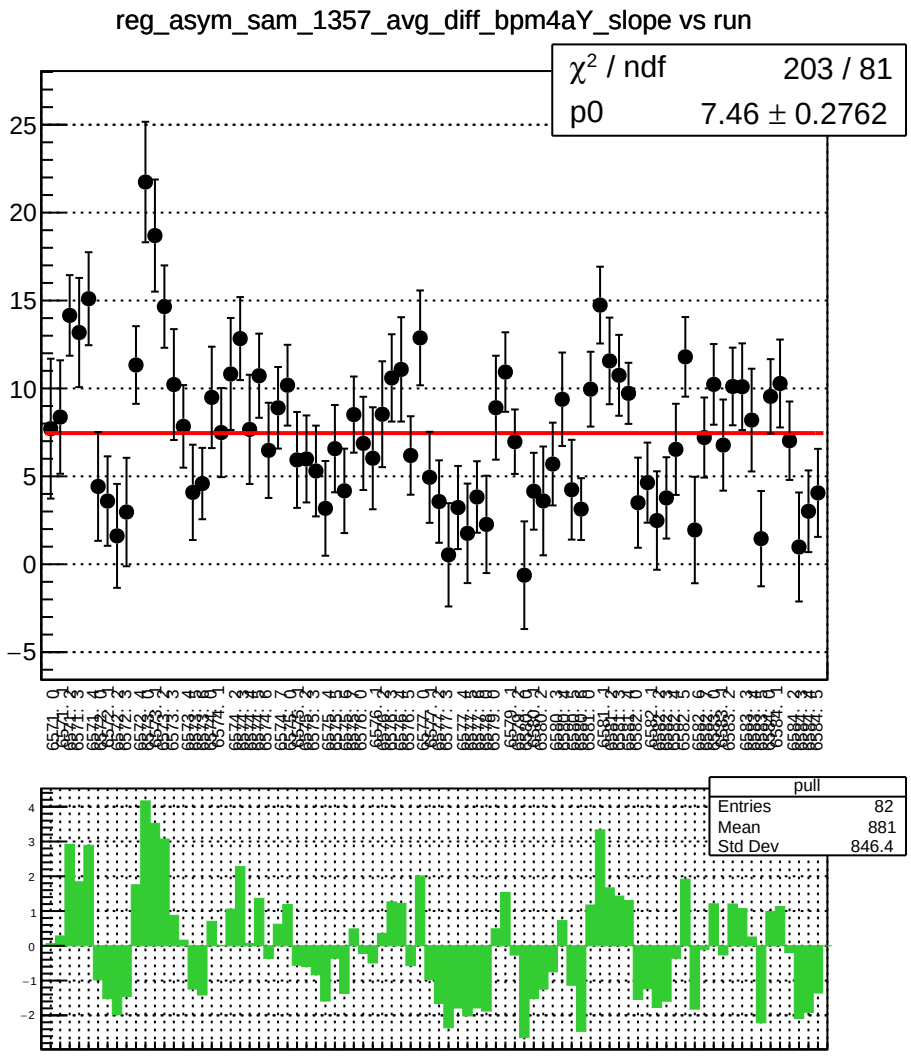

pull1D
Entries 82
Mean −0.1297
Std Dev 2.677

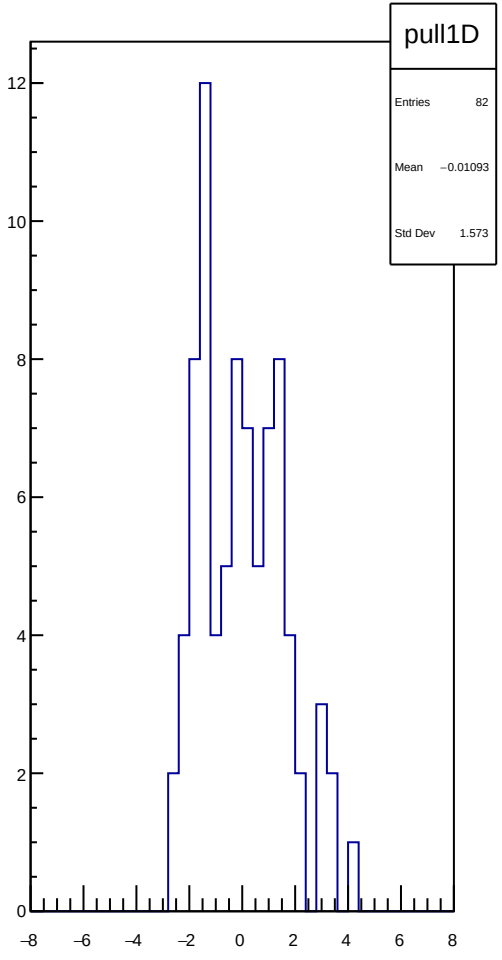

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 594.3 / 81
p0 18.98 ± 0.1209
pull
Entries 82
Mean 255.4
Std Dev 219.9
pull1D
Entries 82
Mean 0.07647
Std Dev 2.691

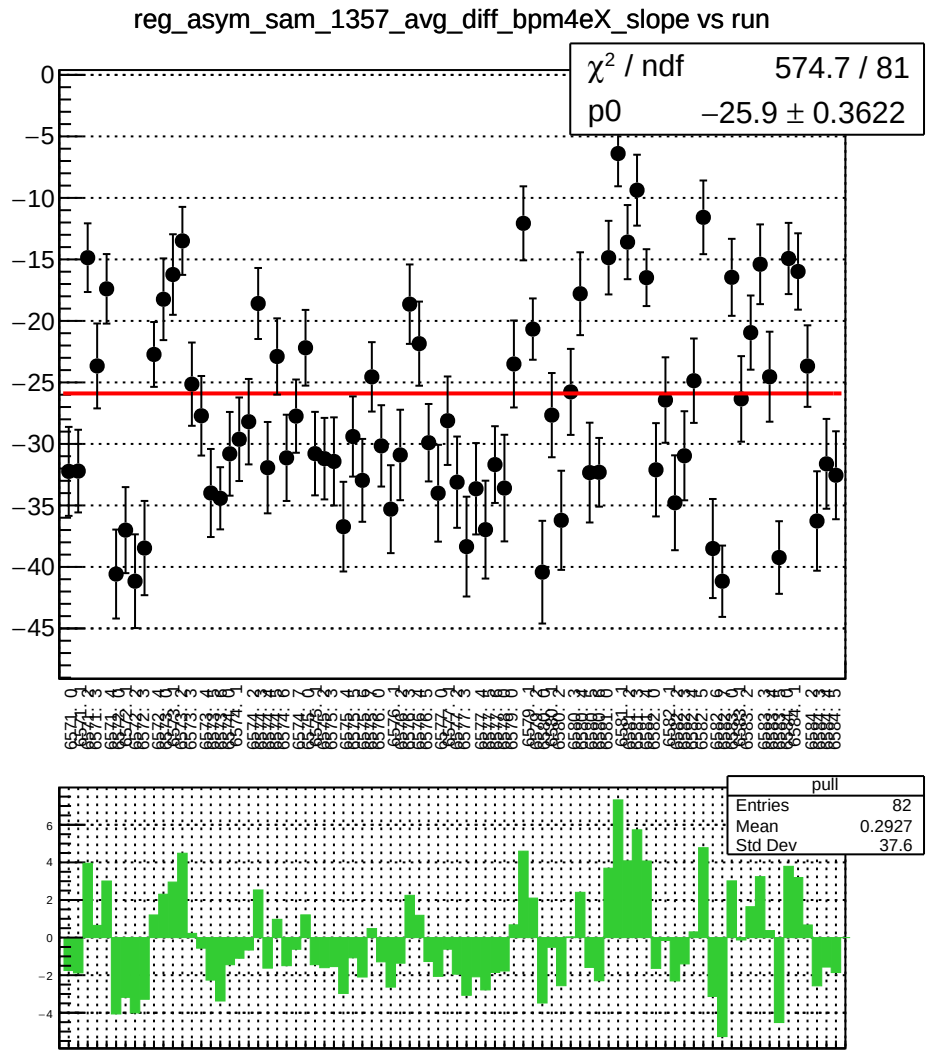

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 160.7 / 81
p0 −0.1311 ± 0.005597
pull
Entries 82
Mean 190.2
Std Dev 147.5
pull1D
Entries 82
Mean −0.1118
Std Dev 1.395

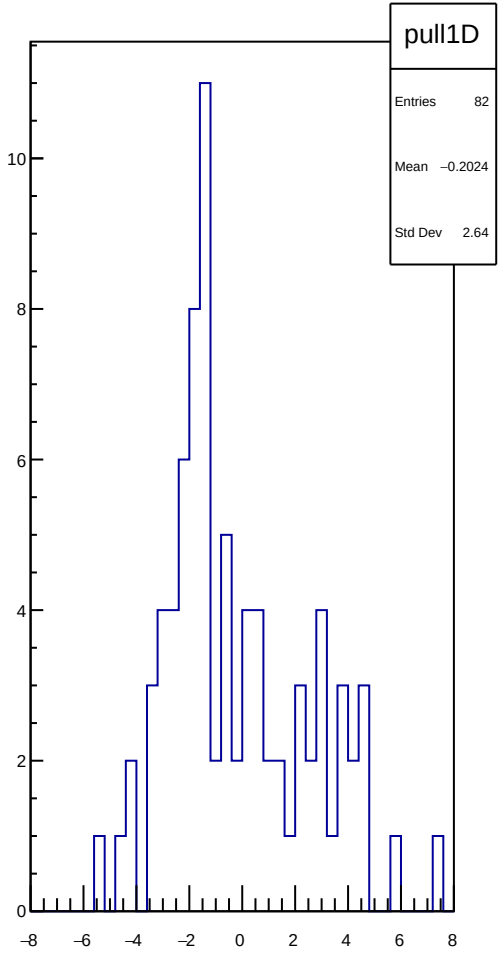

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 644.7 / 81
p0 −16.33 ± 0.3401
pull
Entries 82
Mean 9.455
Std Dev 32.21

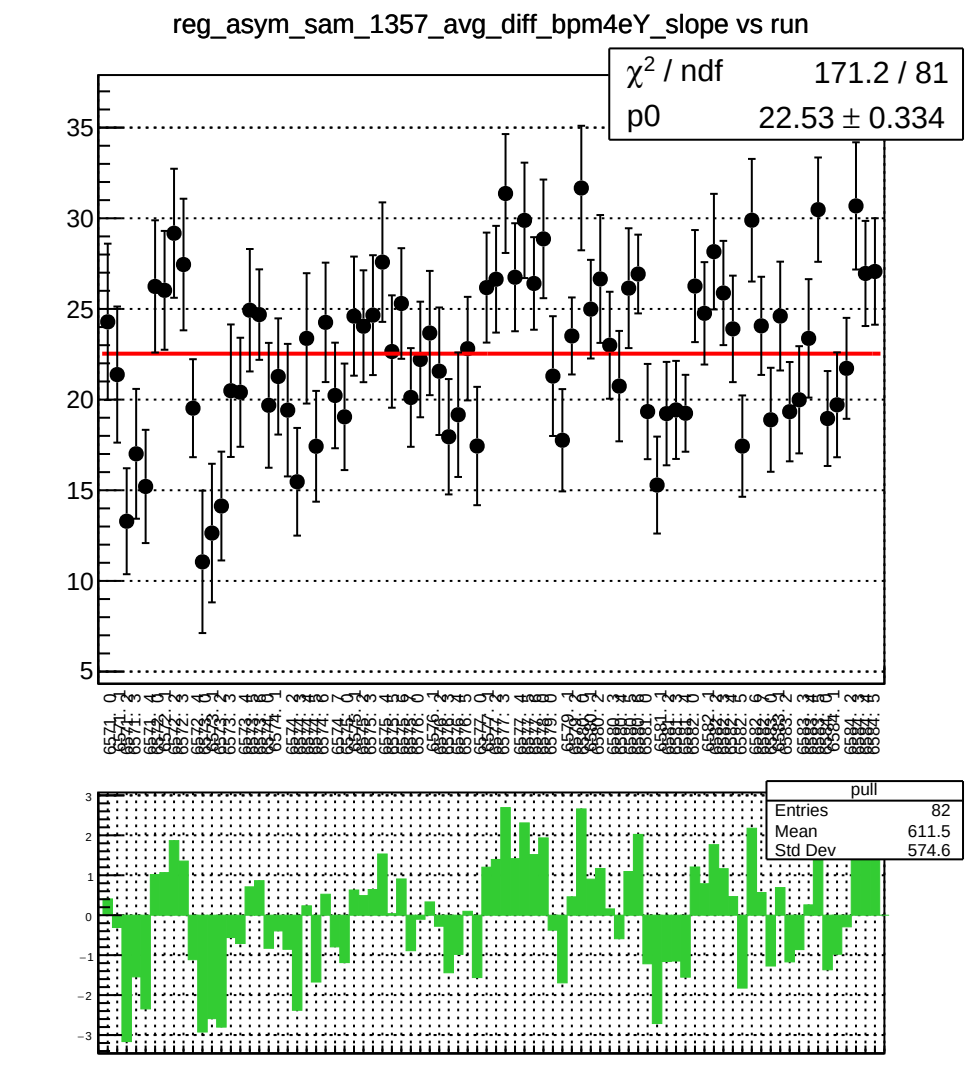

pull1D
Entries 82
Mean 0.1912
Std Dev 2.797

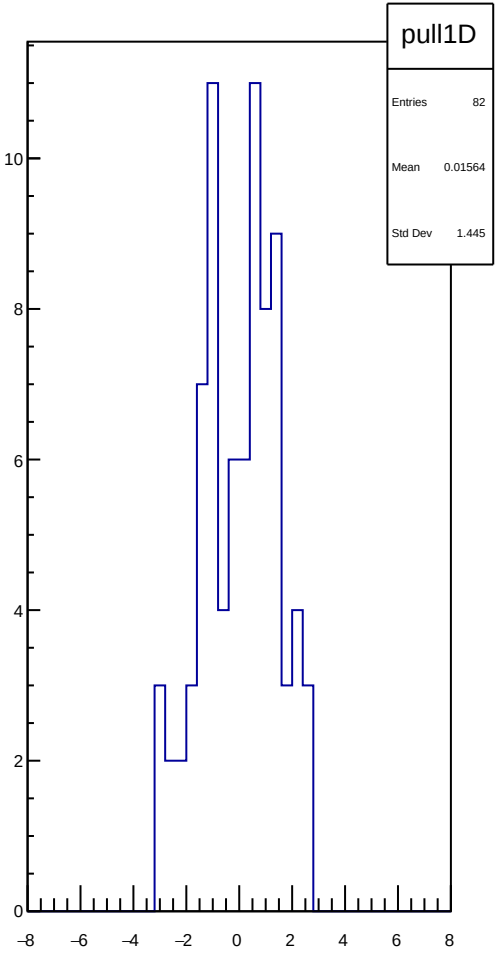

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 203 / 81
p0 7.46 ± 0.2762
pull
Entries 82
Mean 881
Std Dev 846.4

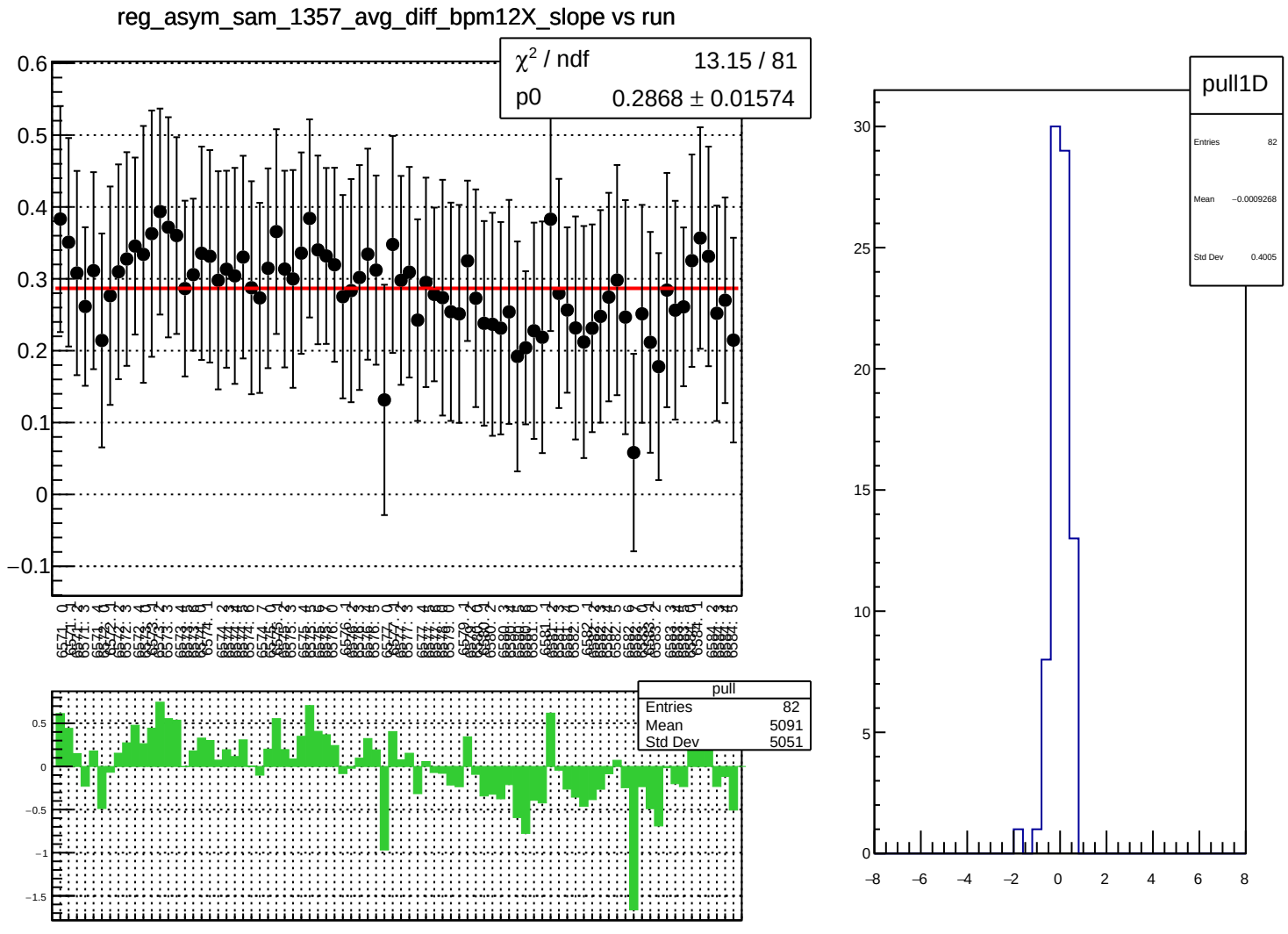

pull1D
Entries 82
Mean −0.01093
Std Dev 1.573

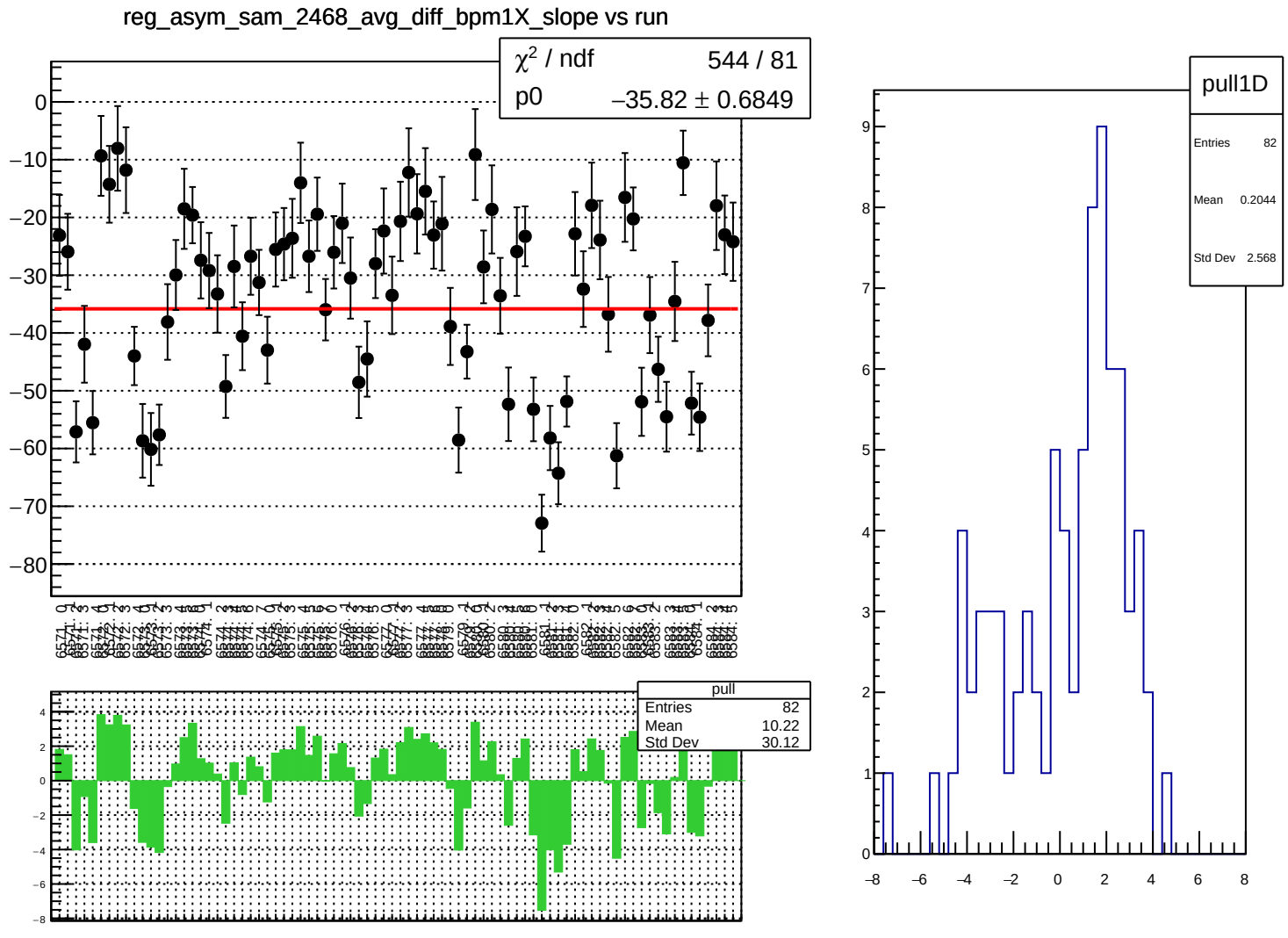

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 574.7 / 81
p0 −25.9 ± 0.3622
pull
Entries 82
Mean 0.2927
Std Dev 37.6

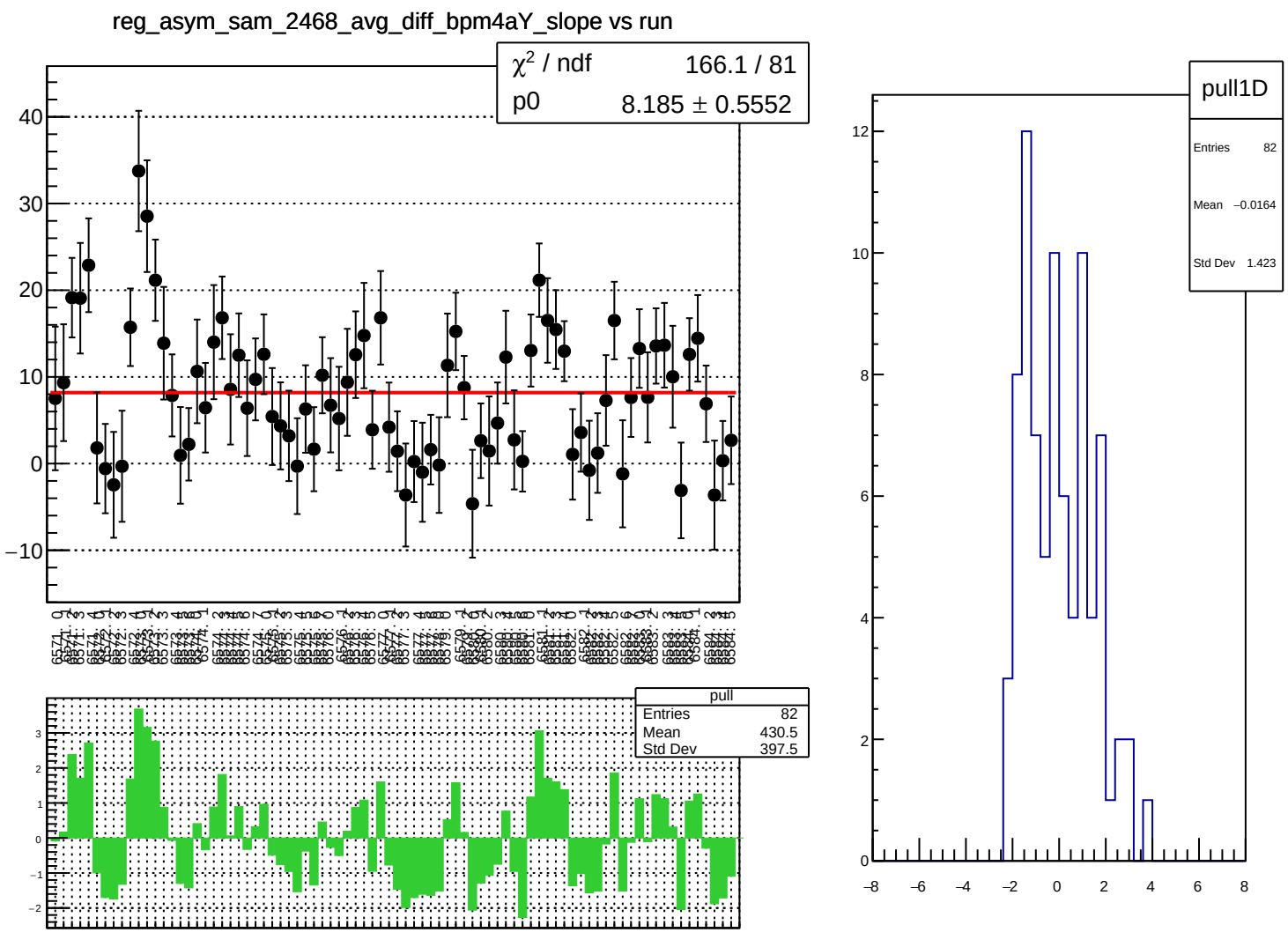

pull1D
Entries 82
Mean −0.2024
Std Dev 2.64

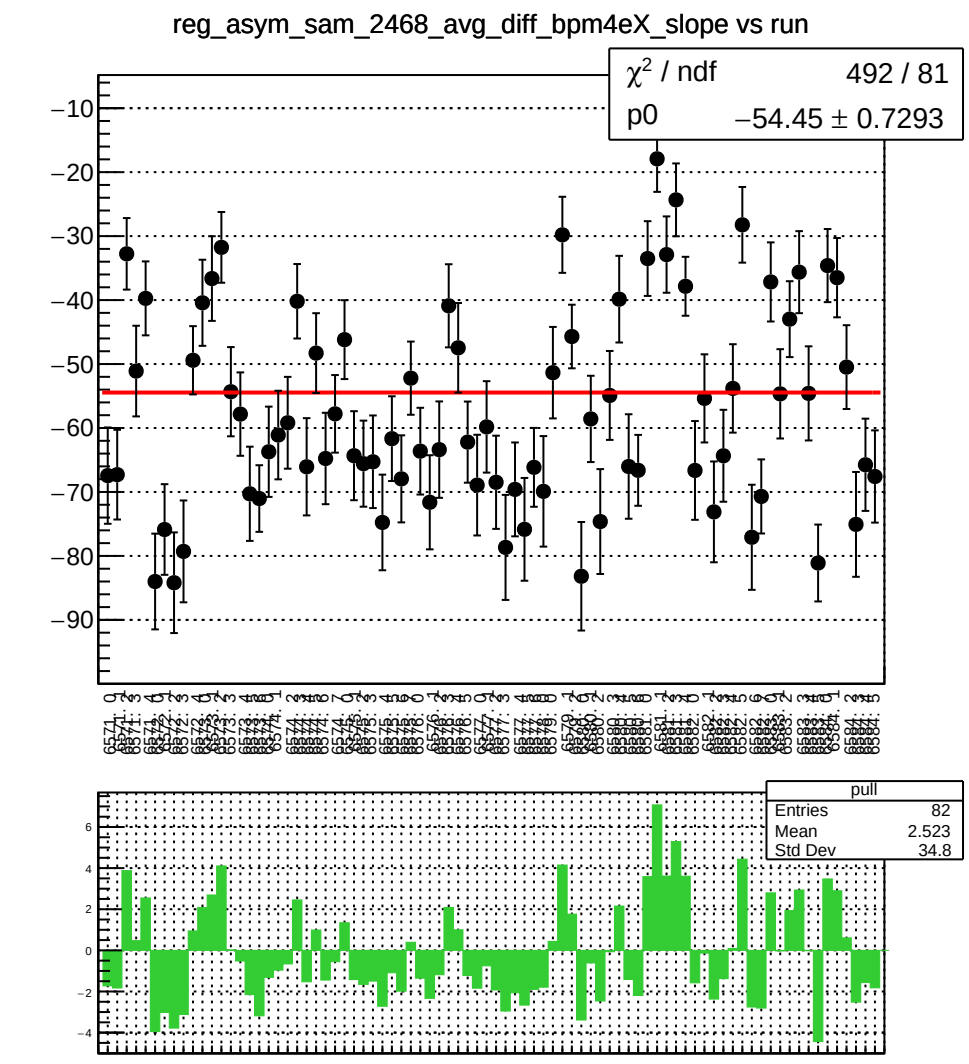

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 171.2 / 81
p0 22.53 ± 0.334
pull
Entries 82
Mean 611.5
Std Dev 574.6

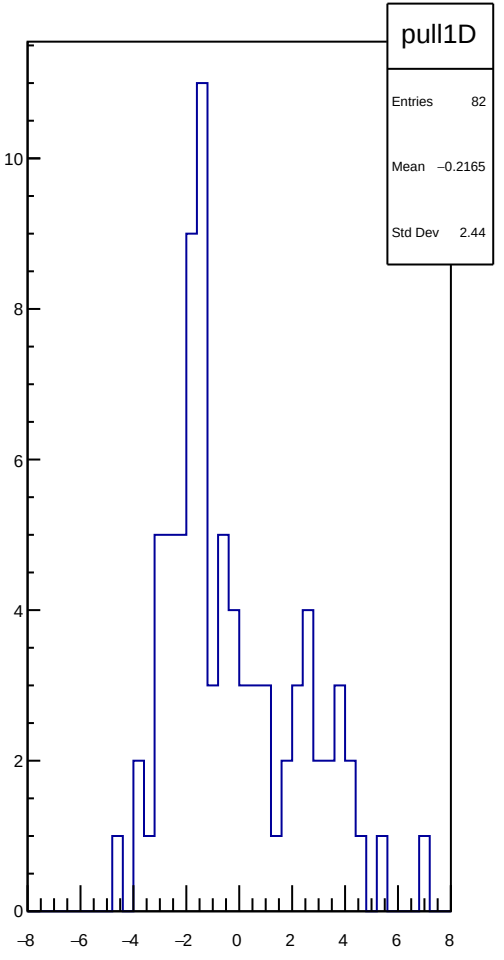

pull1D
Entries 82
Mean 0.01564
Std Dev 1.445

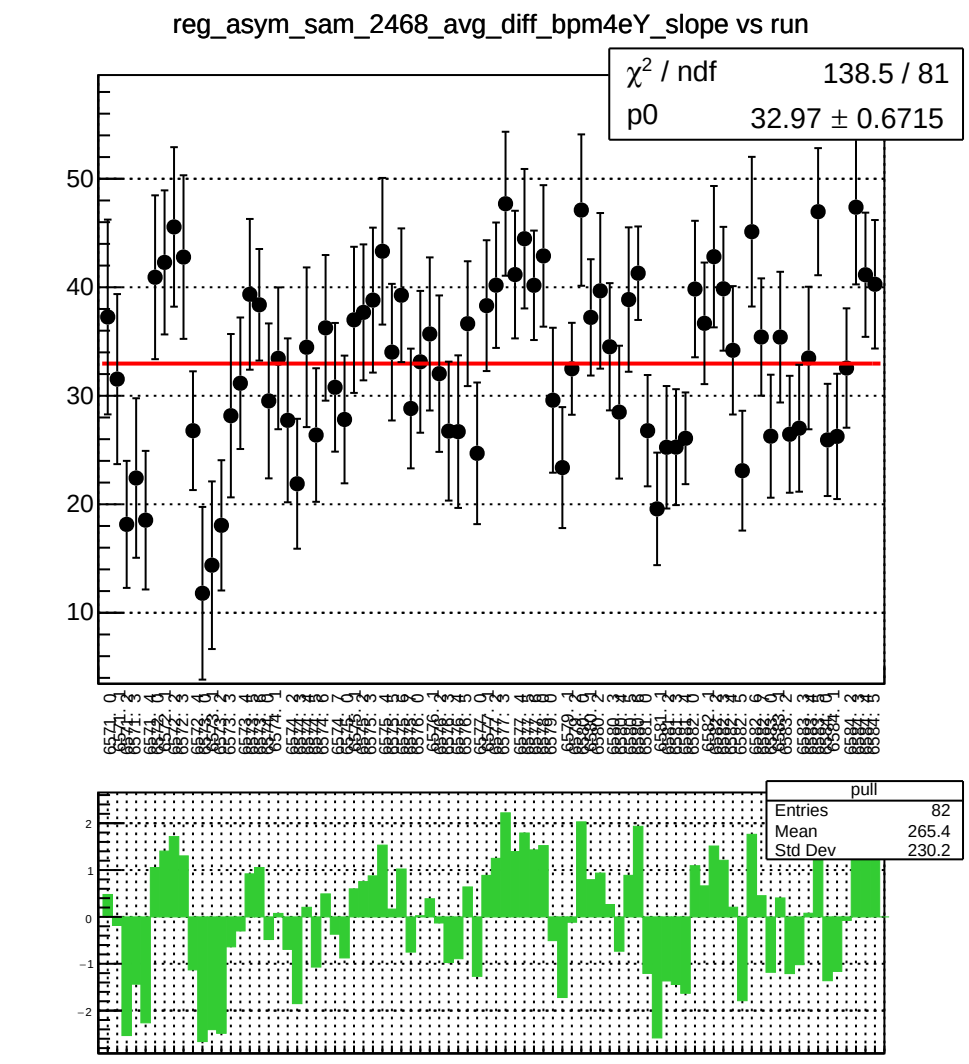

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 13.15 / 81
p0 0.2868 ± 0.01574
pull
Entries 82
Mean 5091
Std Dev 5051
pull1D
Entries 82
Mean −0.0009268
Std Dev 0.4005

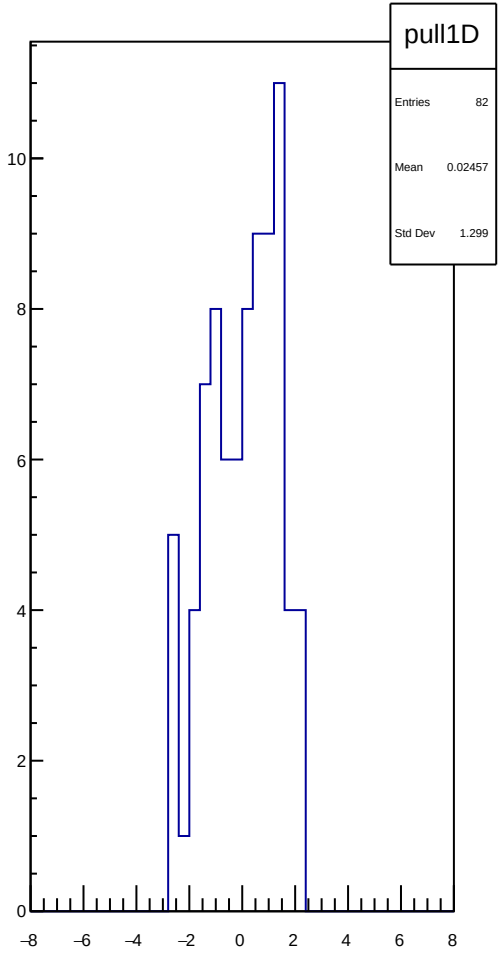

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 544 / 81
p0 −35.82 ± 0.6849
pull
Entries 82
Mean 10.22
Std Dev 30.12
pull1D
Entries 82
Mean 0.2044
Std Dev 2.568

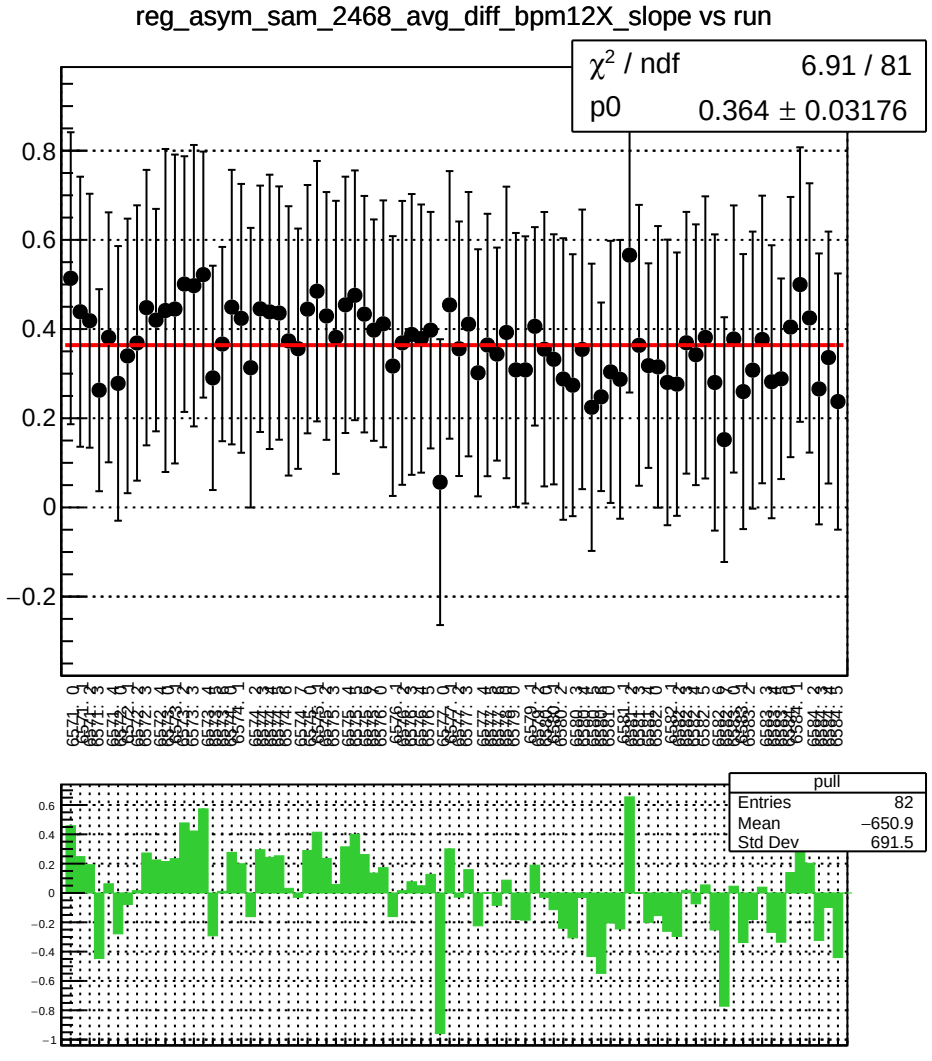

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 166.1 / 81
p0 8.185 ± 0.5552
pull
Entries 82
Mean 430.5
Std Dev 397.5
pull1D
Entries 82
Mean −0.0164
Std Dev 1.423

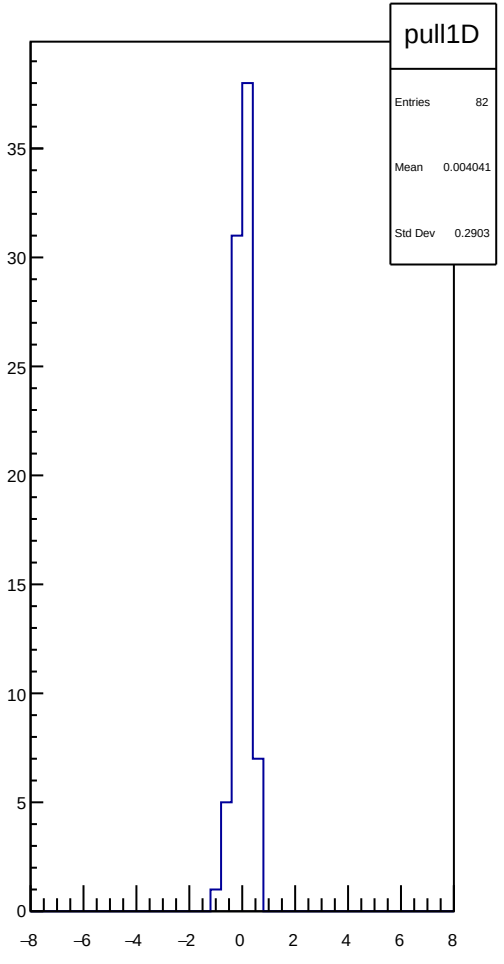

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 492 / 81
p0 −54.45 ± 0.7293
pull
Entries 82
Mean 2.523
Std Dev 34.8

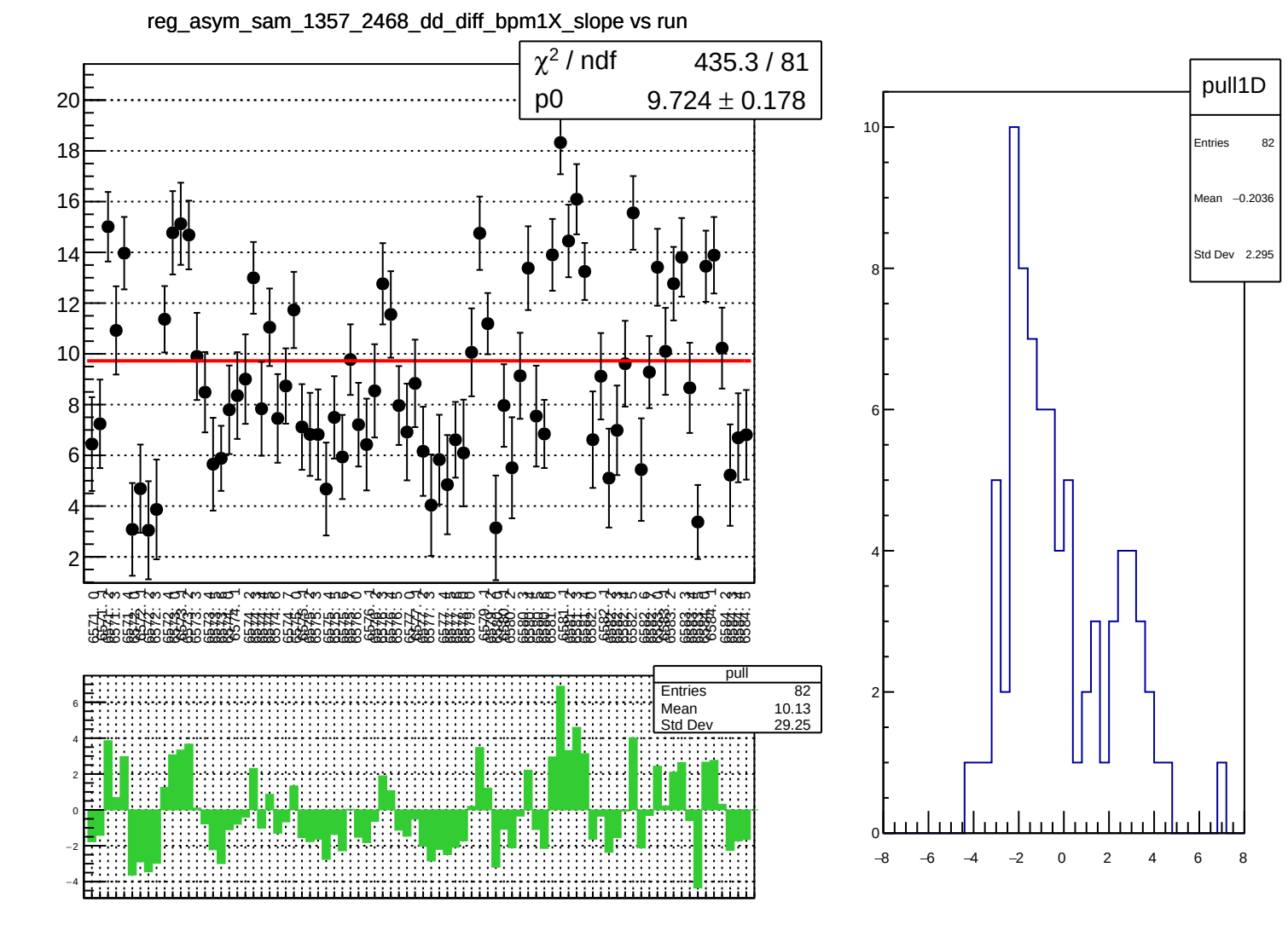

pull1D
Entries 82
Mean −0.2165
Std Dev 2.44

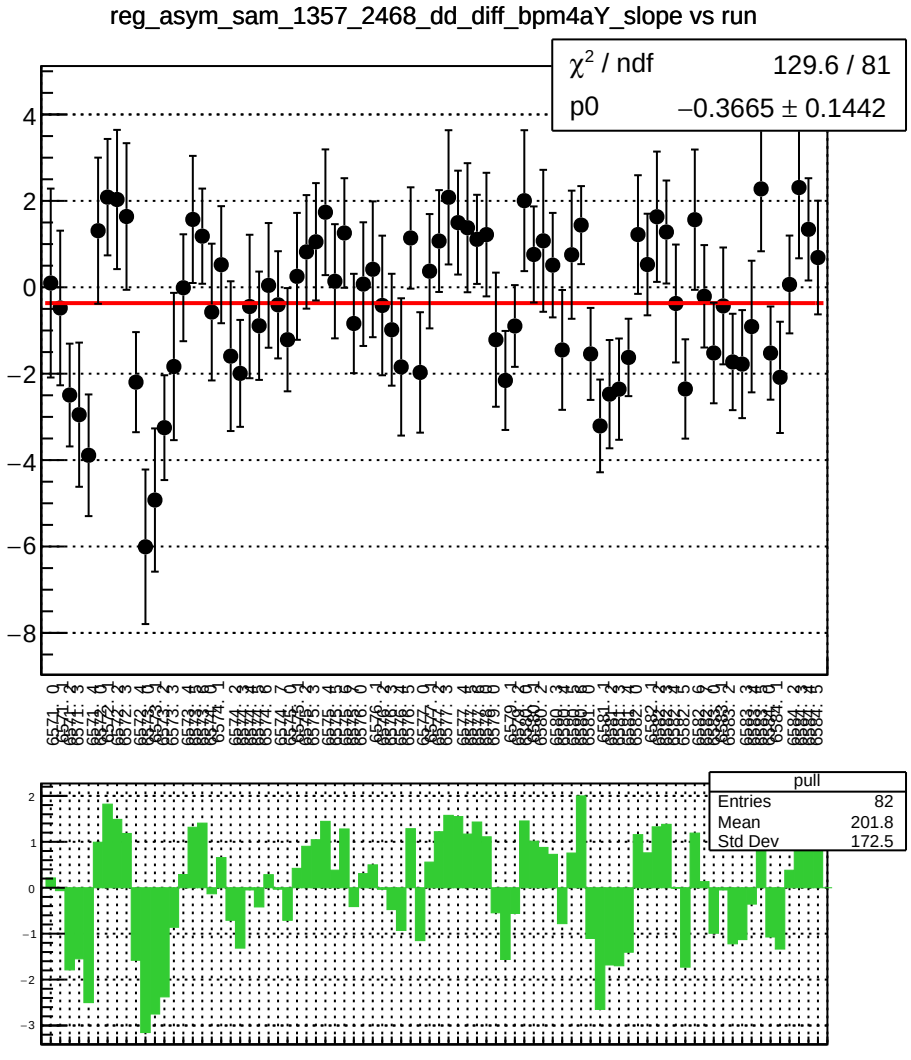

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 138.5 / 81
p0 32.97 ± 0.6715
pull
Entries 82
Mean 265.4
Std Dev 230.2

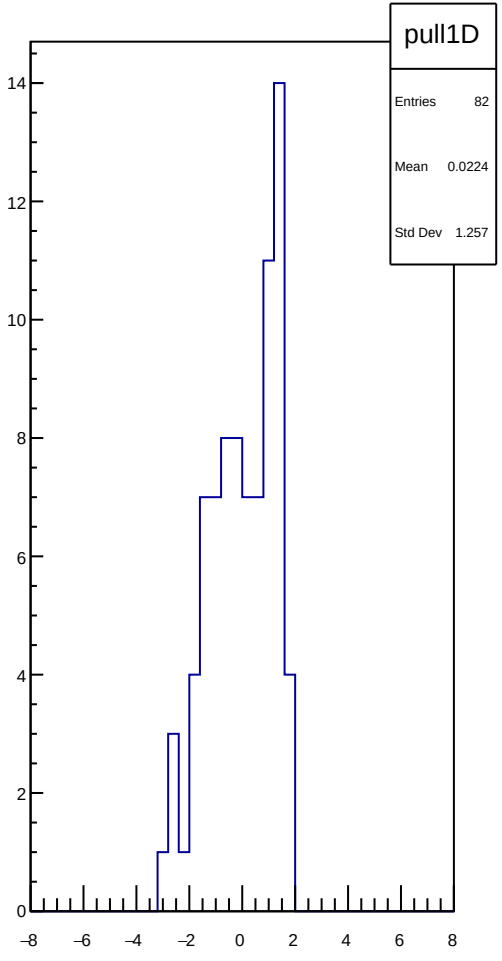

pull1D
Entries 82
Mean 0.02457
Std Dev 1.299

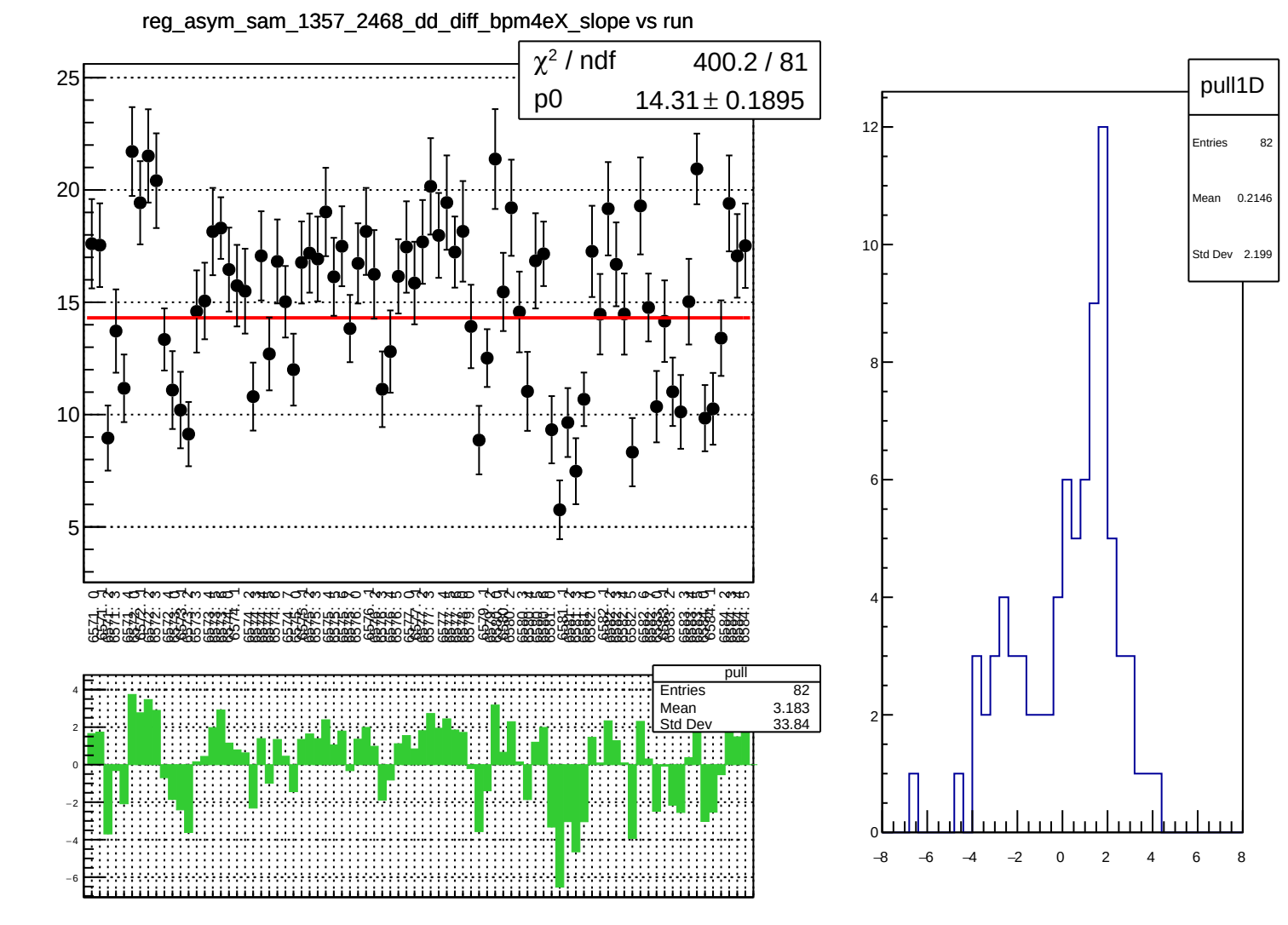

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 6.91 / 81
p0 0.364 ± 0.03176
pull
Entries 82
Mean −650.9
Std Dev 691.5

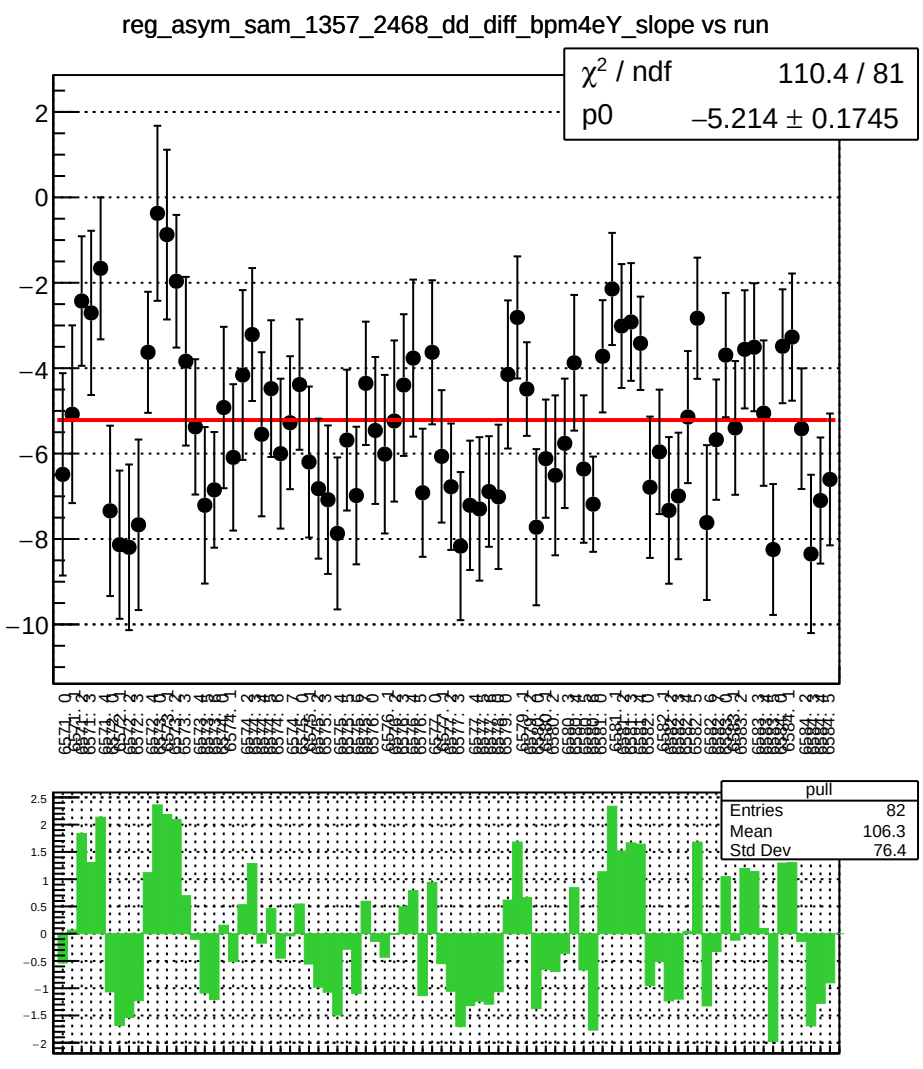

pull1D
Entries 82
Mean 0.004041
Std Dev 0.2903

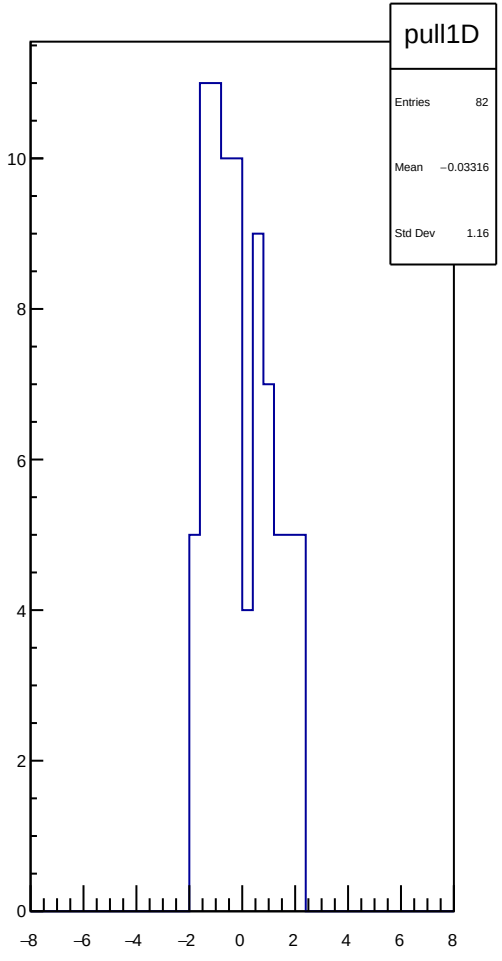

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 435.3 / 81
p0 9.724 ± 0.178
pull
Entries 82
Mean 10.13
Std Dev 29.25
pull1D
Entries 82
Mean −0.2036
Std Dev 2.295

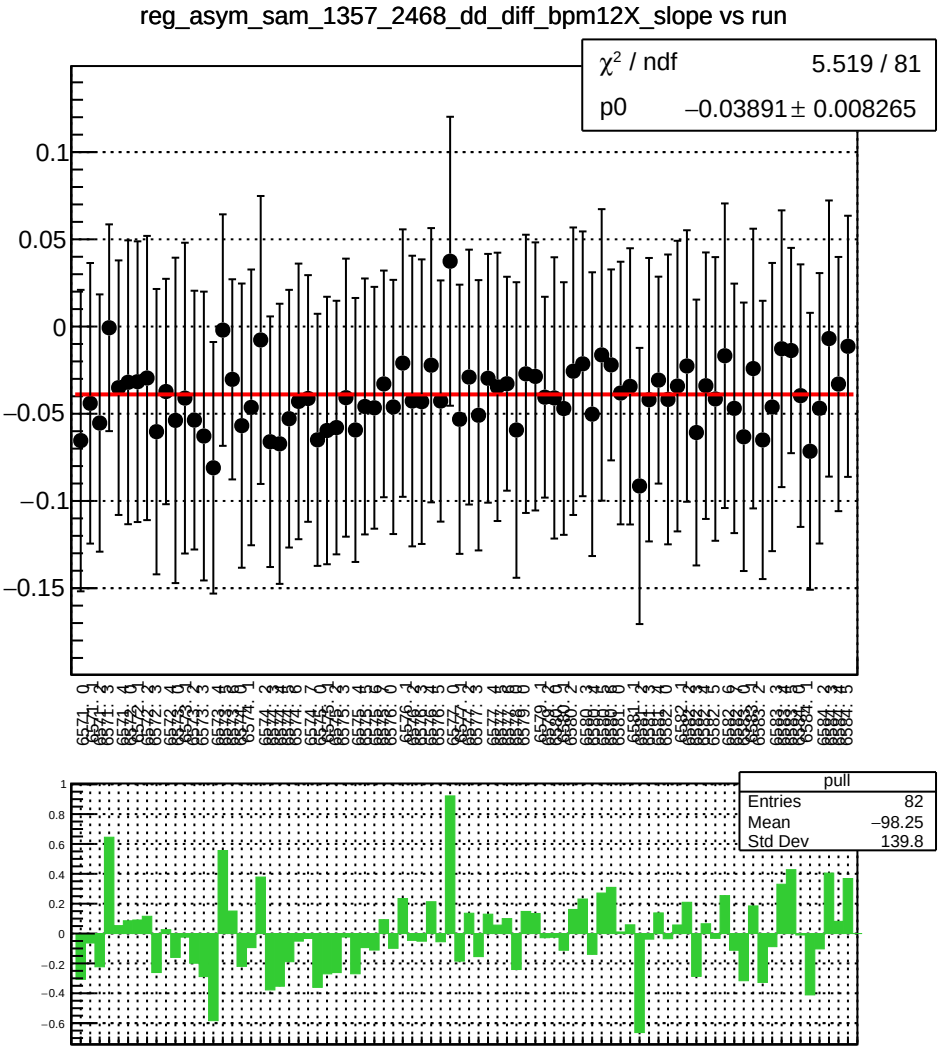

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 129.6 / 81
p0 −0.3665 ± 0.1442
pull
Entries 82
Mean 201.8
Std Dev 172.5

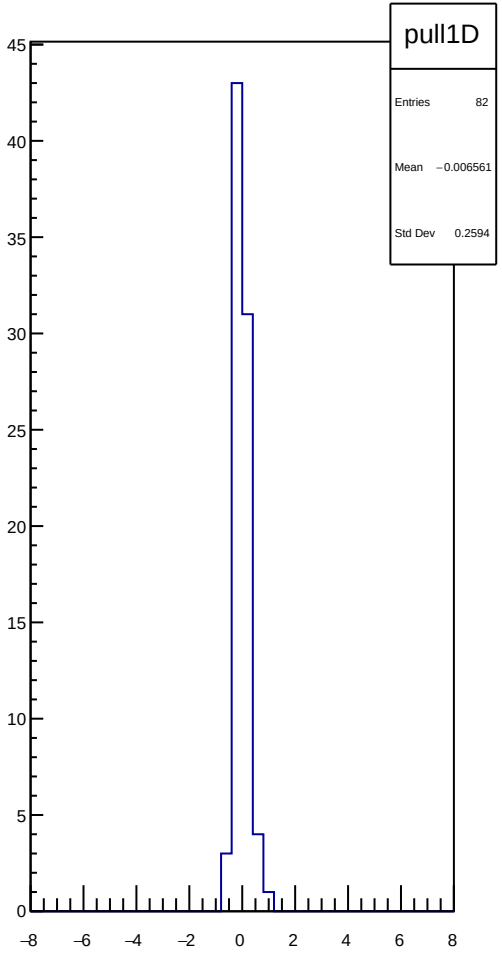

pull1D
Entries 82
Mean 0.0224
Std Dev 1.257

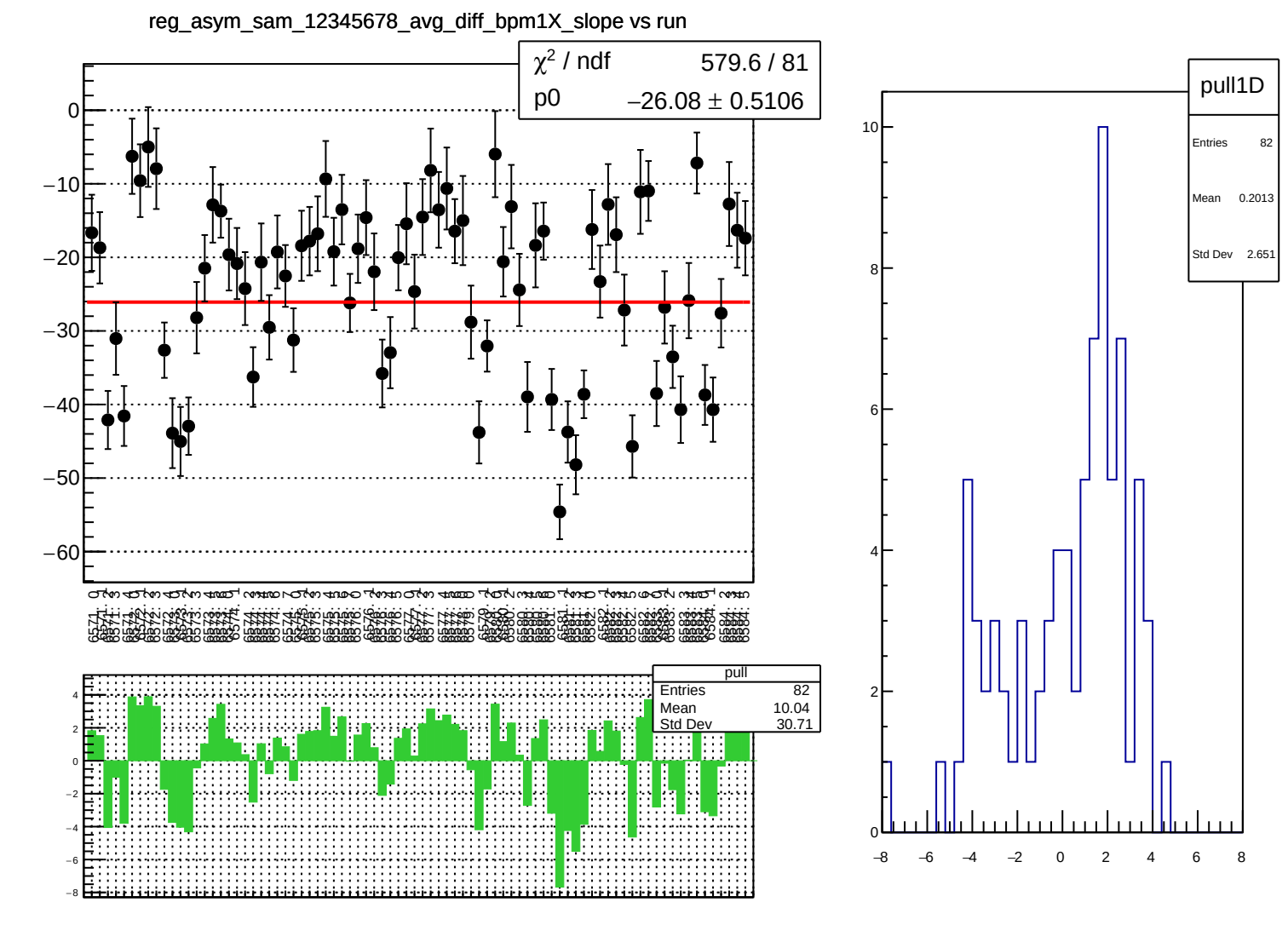

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 400.2 / 81
p0 14.31 ± 0.1895
pull
Entries 82
Mean 3.183
Std Dev 33.84
pull1D
Entries 82
Mean 0.2146
Std Dev 2.199

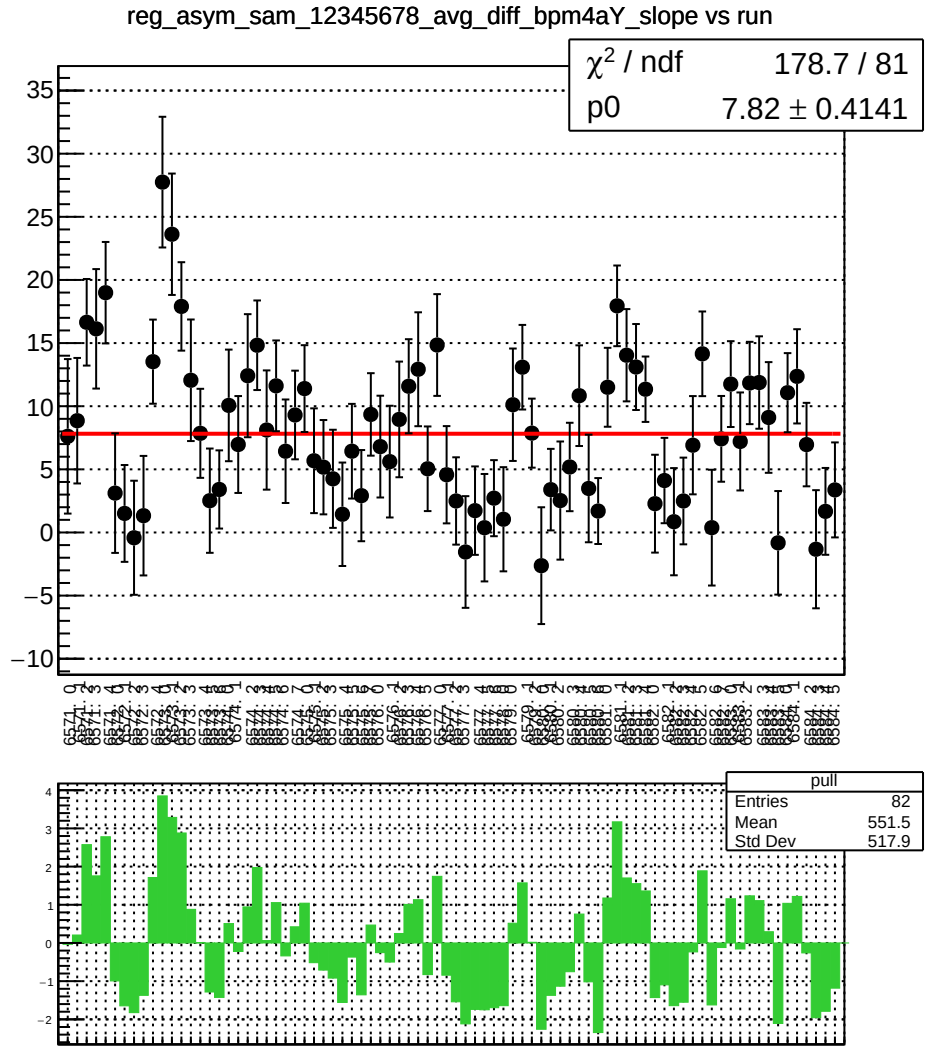

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 110.4 / 81
p0 −5.214 ± 0.1745
pull
Entries 82
Mean 106.3
Std Dev 76.4

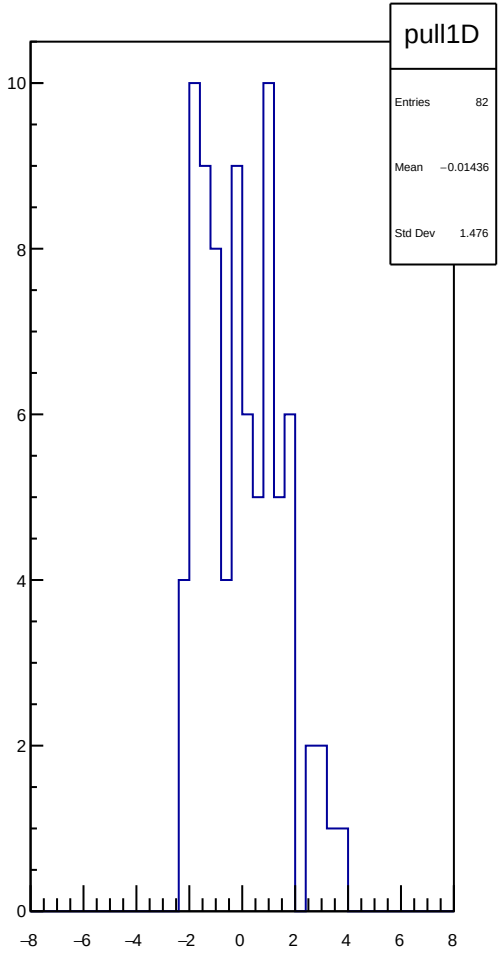

pull1D
Entries 82
Mean −0.03316
Std Dev 1.16

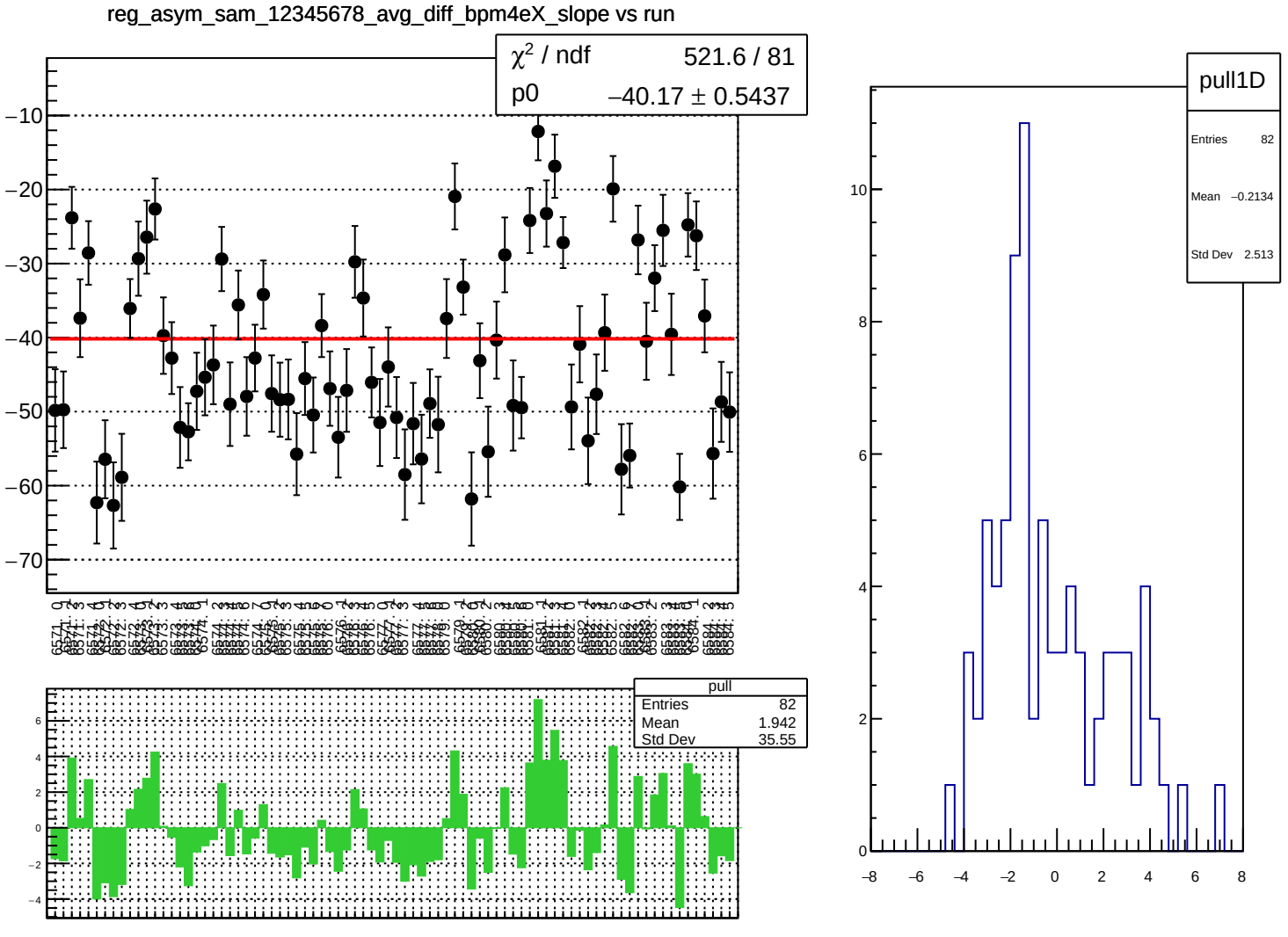

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 5.519 / 81
p0 −0.03891 ± 0.008265
pull
Entries 82
Mean −98.25
Std Dev 139.8

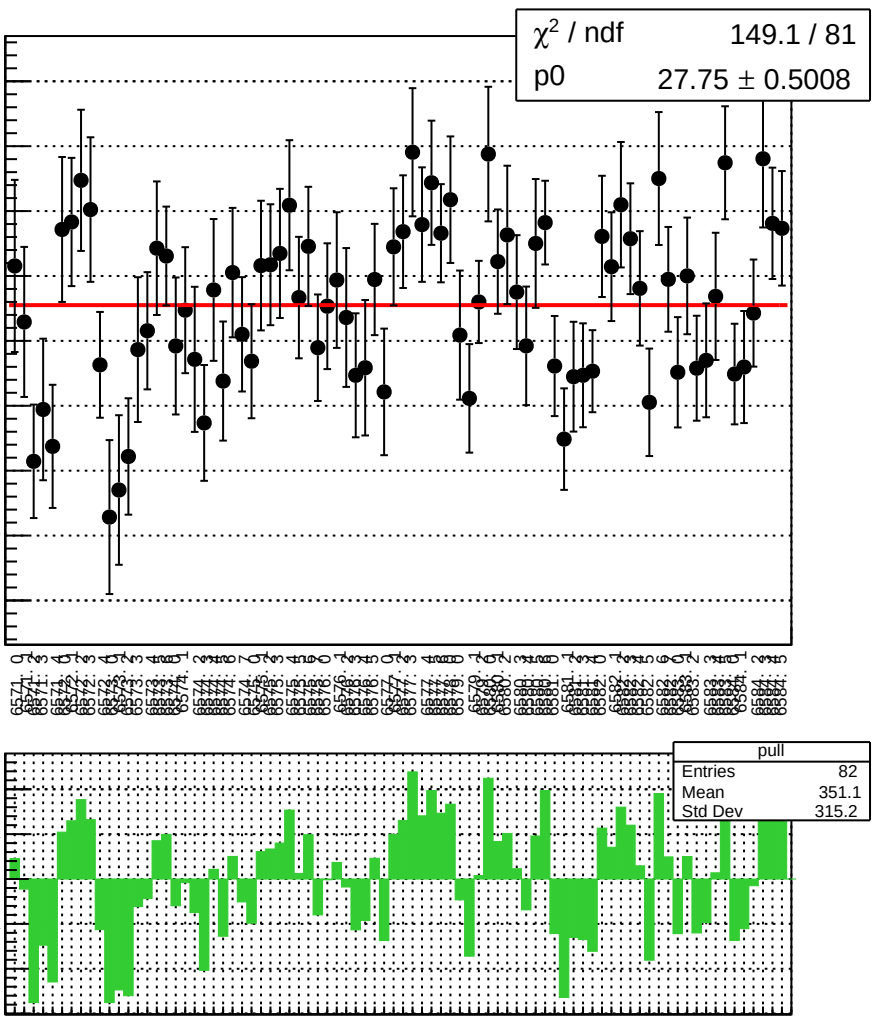

pull1D
Entries 82
Mean −0.006561
Std Dev 0.2594

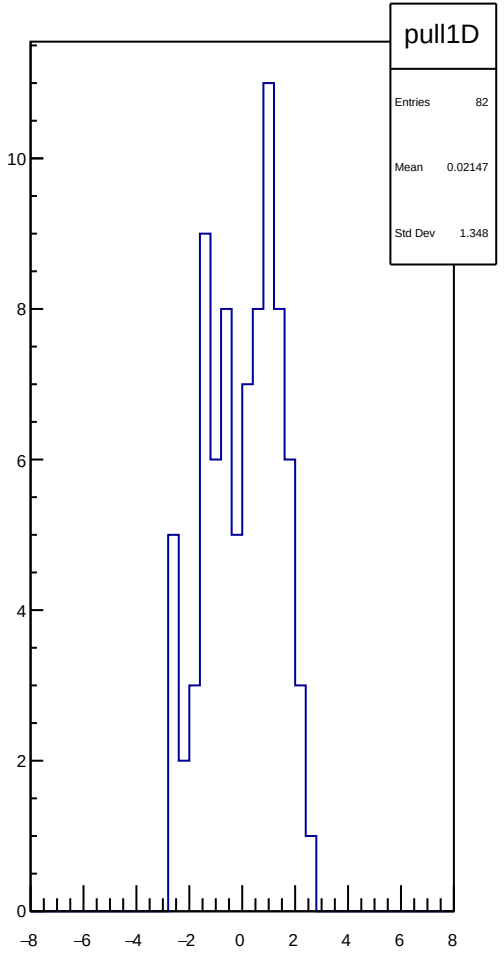

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 579.6 / 81
p0 −26.08 ± 0.5106
pull
Entries 82
Mean 10.04
Std Dev 30.71
pull1D
Entries 82
Mean 0.2013
Std Dev 2.651

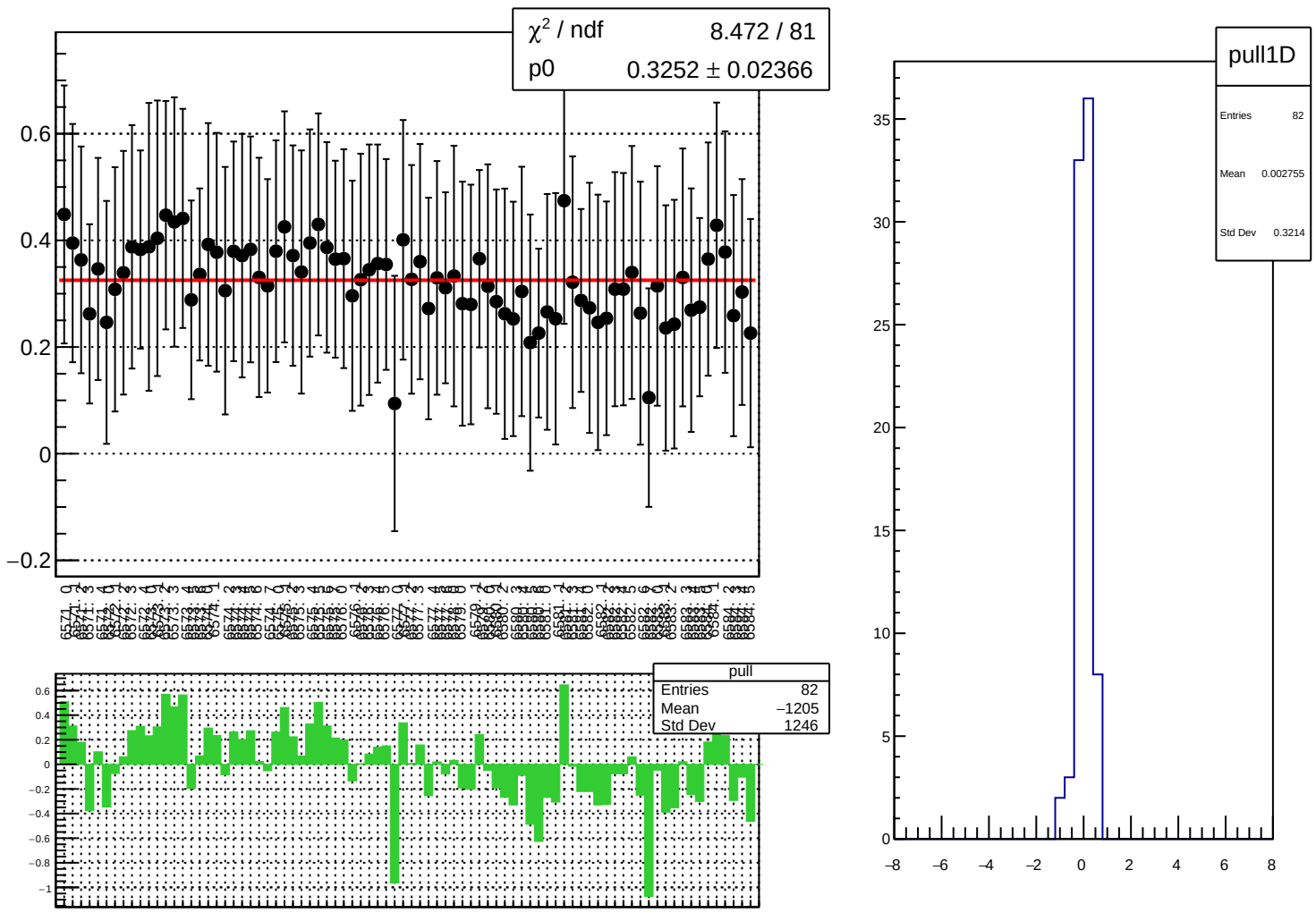

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 178.7 / 81
p0 7.82 ± 0.4141
pull
Entries 82
Mean 551.5
Std Dev 517.9

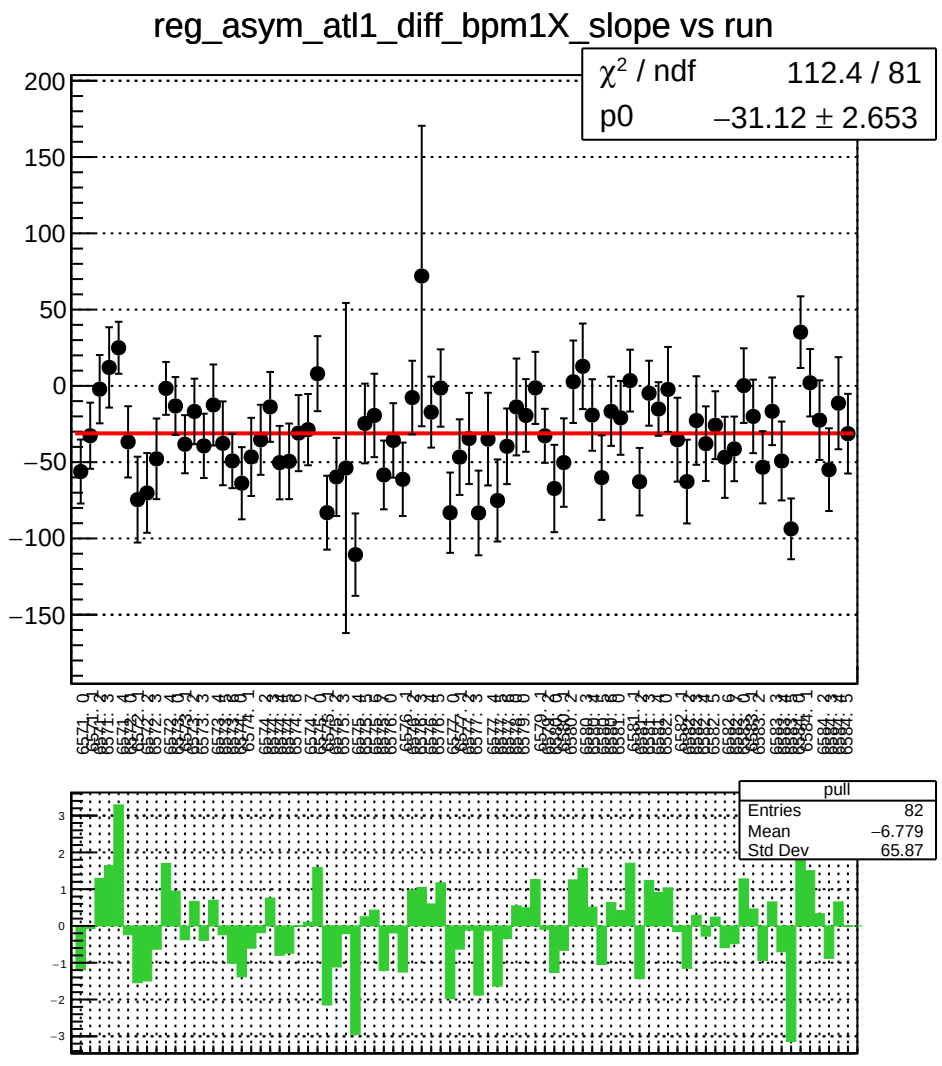

pull1D
Entries 82
Mean −0.01436
Std Dev 1.476

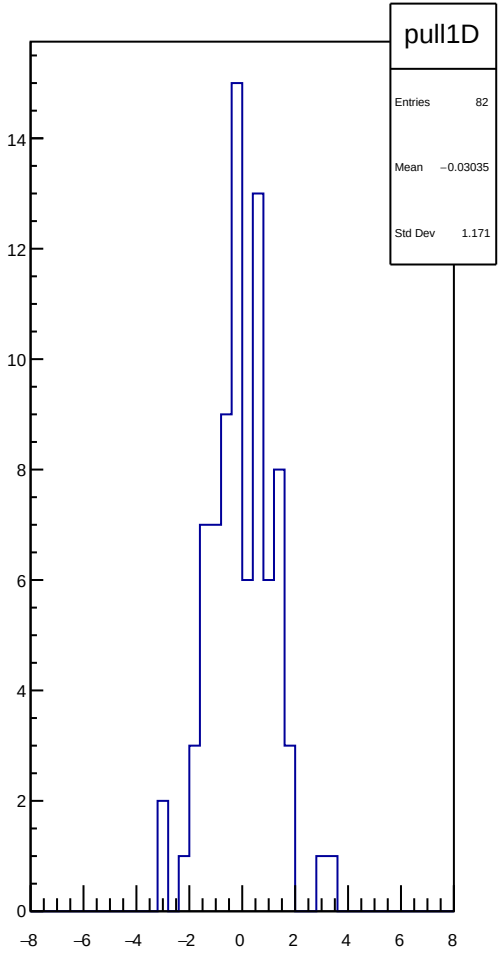

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 521.6 / 81
p0 −40.17 ± 0.5437
pull
Entries 82
Mean 1.942
Std Dev 35.55
pull1D
Entries 82
Mean −0.2134
Std Dev 2.513

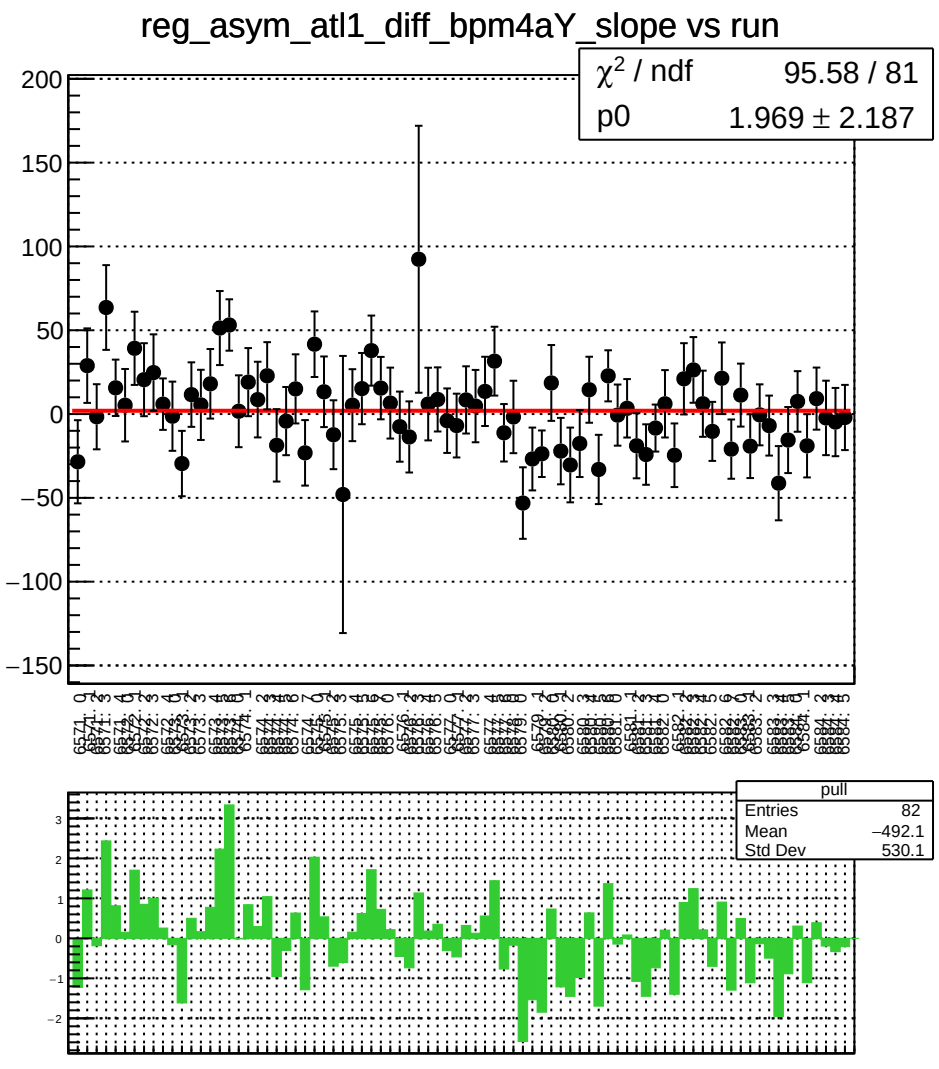

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 149.1 / 81
p0 27.75 ± 0.5008
pull
Entries 82
Mean 351.1
Std Dev 315.2

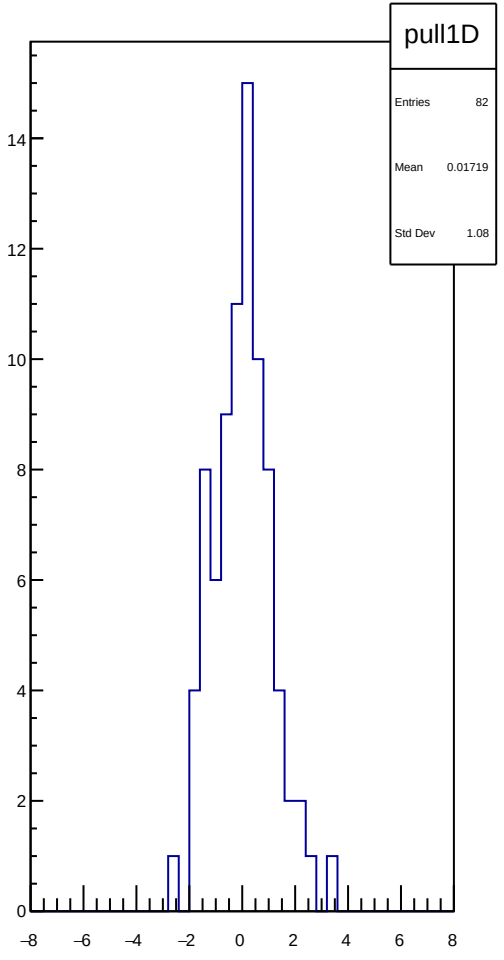

pull1D
Entries 82
Mean 0.02147
Std Dev 1.348

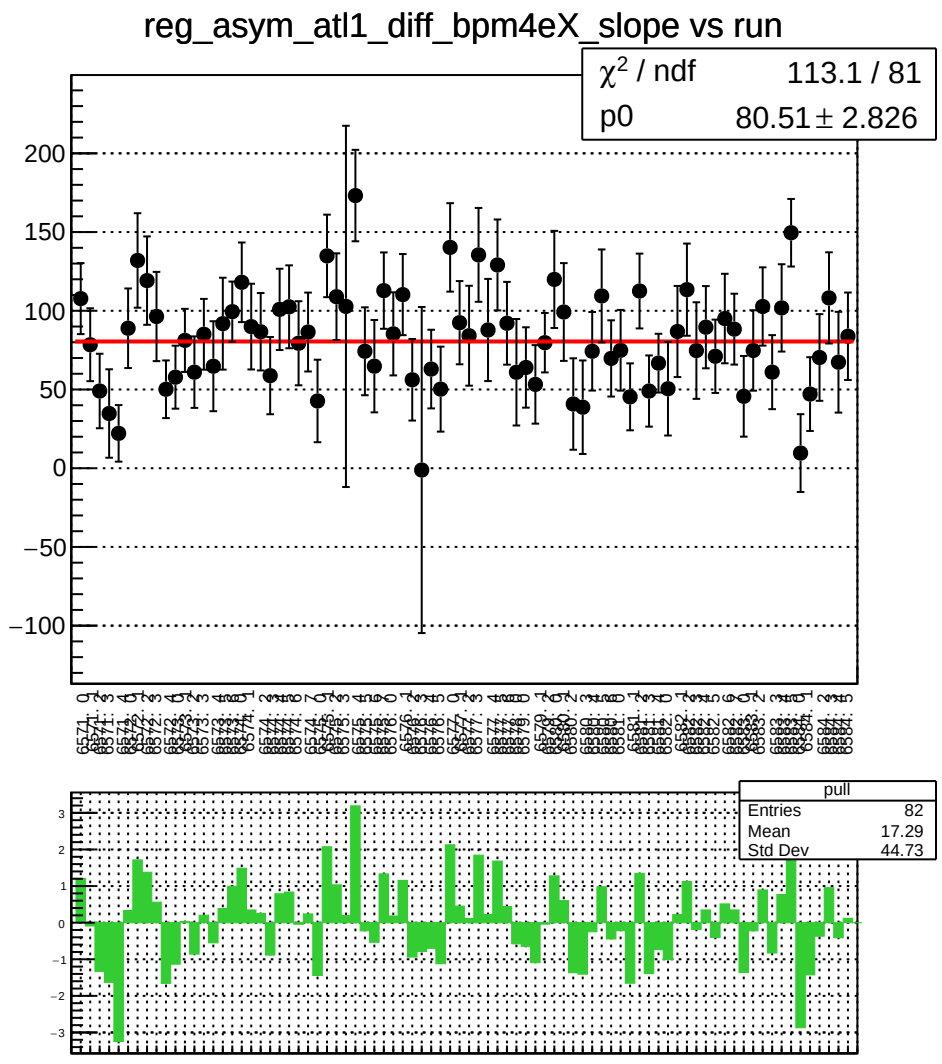

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 8.472 / 81
p0 0.3252 ± 0.02366
pull
Entries 82
Mean −1205
Std Dev 1246
pull1D
Entries 82
Mean 0.002755
Std Dev 0.3214

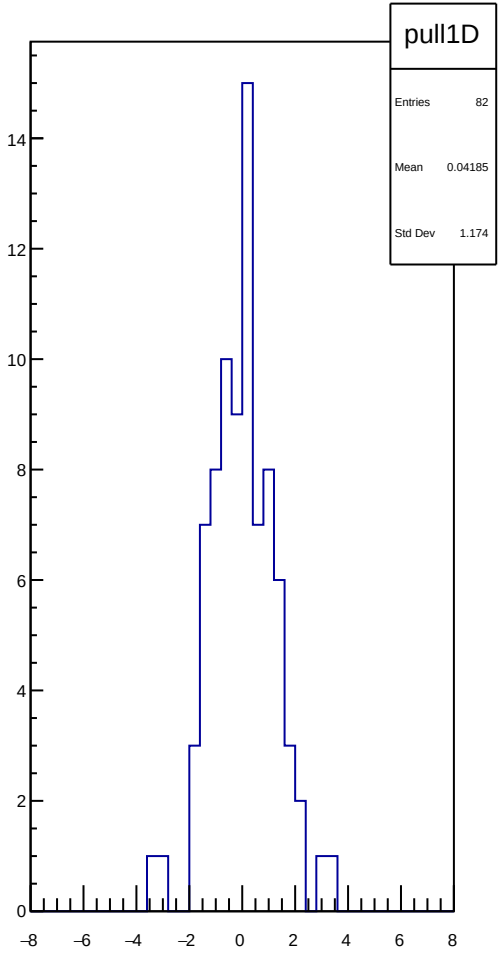

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 112.4 / 81
p0 −31.12 ± 2.653
pull
Entries 82
Mean −6.779
Std Dev 65.87

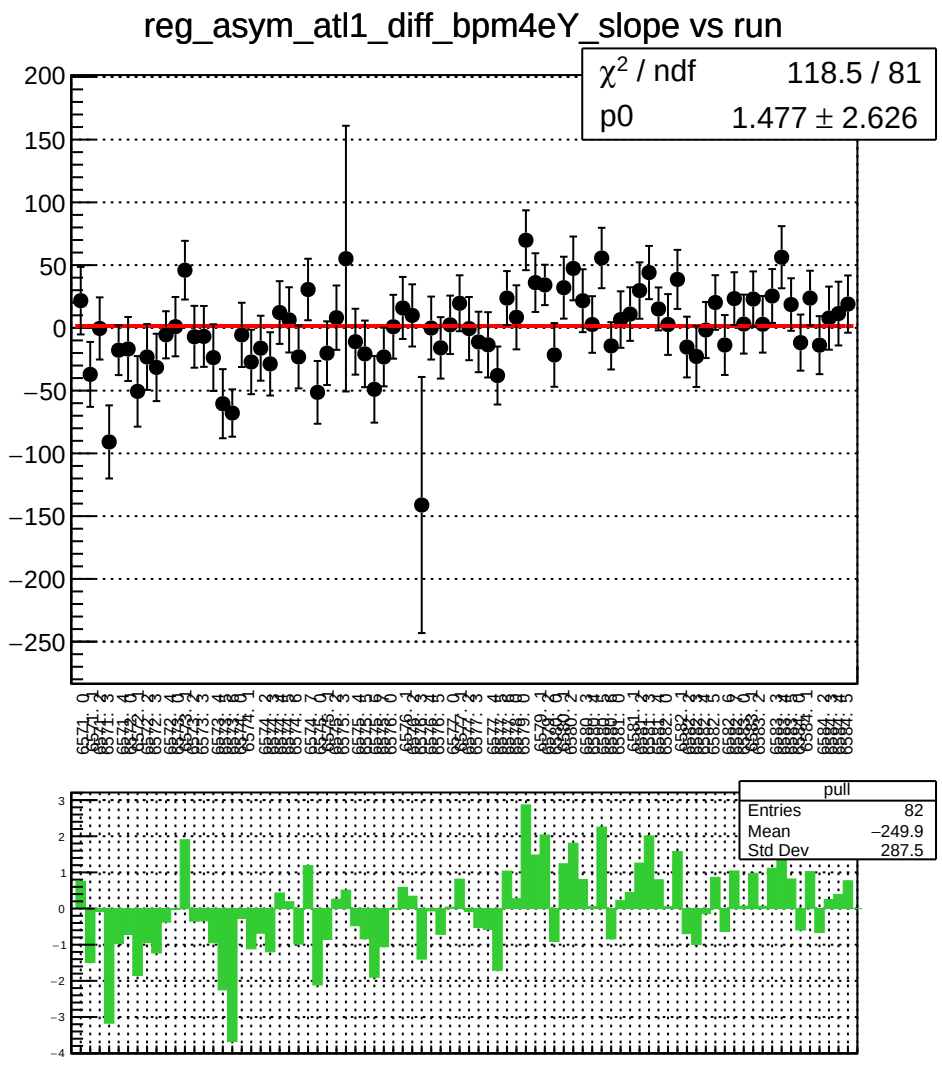

pull1D
Entries 82
Mean −0.03035
Std Dev 1.171

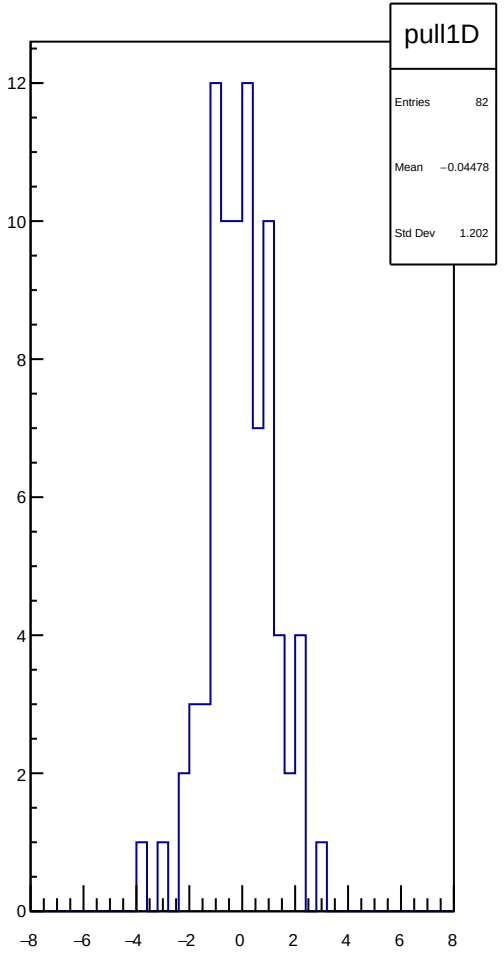

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 95.58 / 81
p0 1.969 ± 2.187
pull
Entries 82
Mean −492.1
Std Dev 530.1

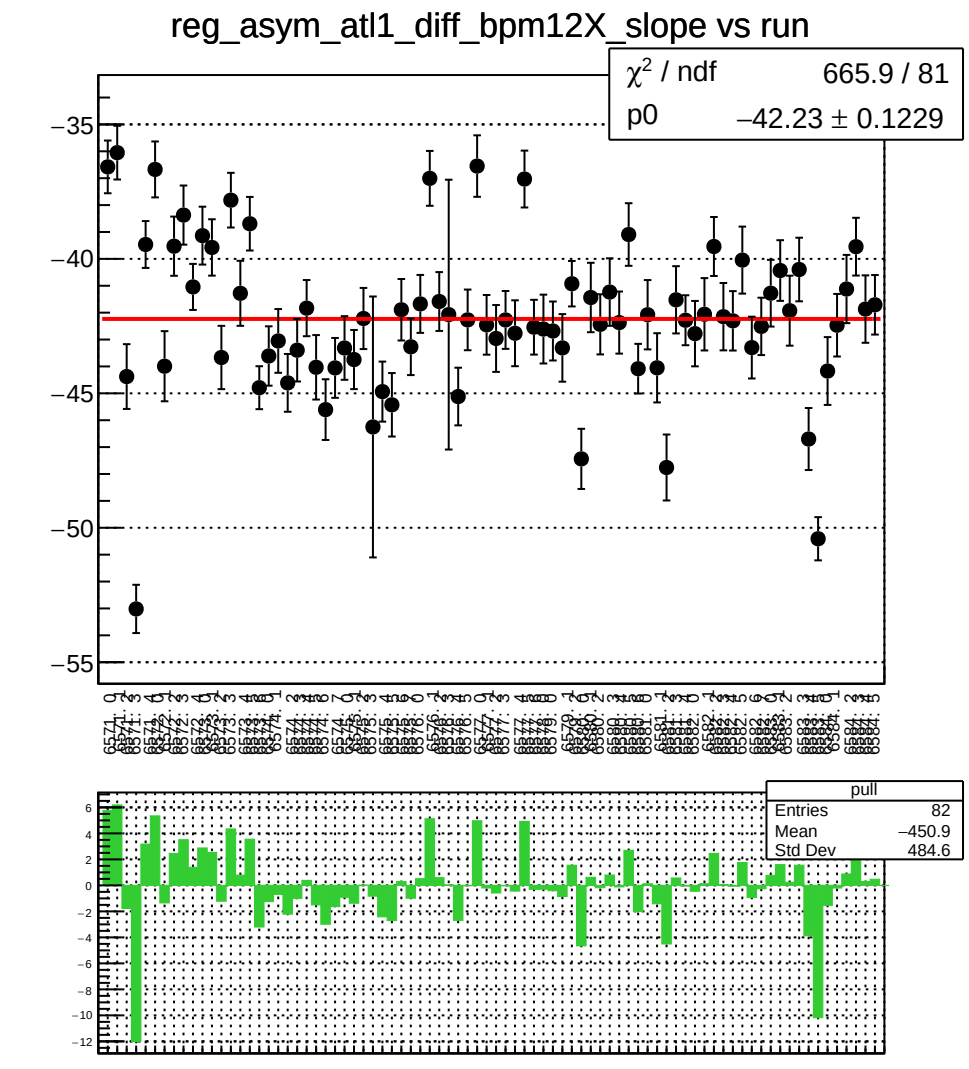

pull1D
Entries 82
Mean 0.01719
Std Dev 1.08

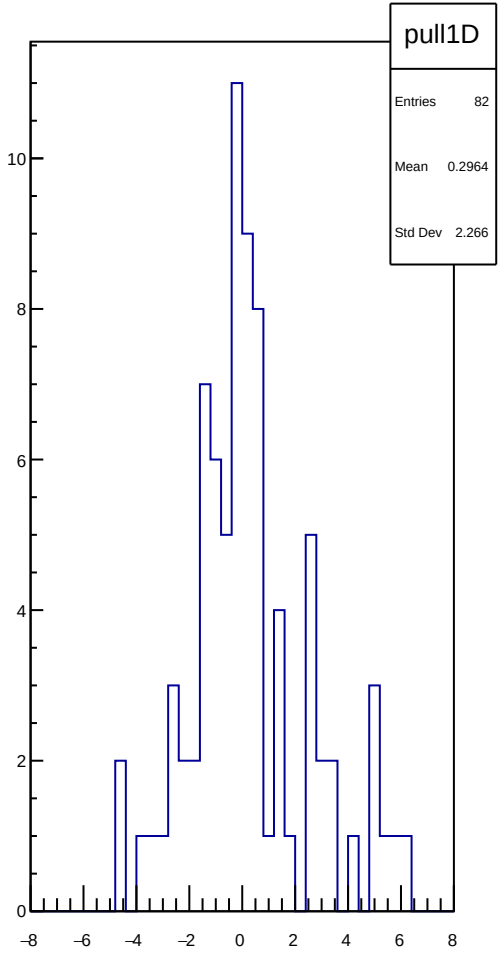

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 113.1 / 81
p0 80.51 ± 2.826
pull
Entries 82
Mean 17.29
Std Dev 44.73

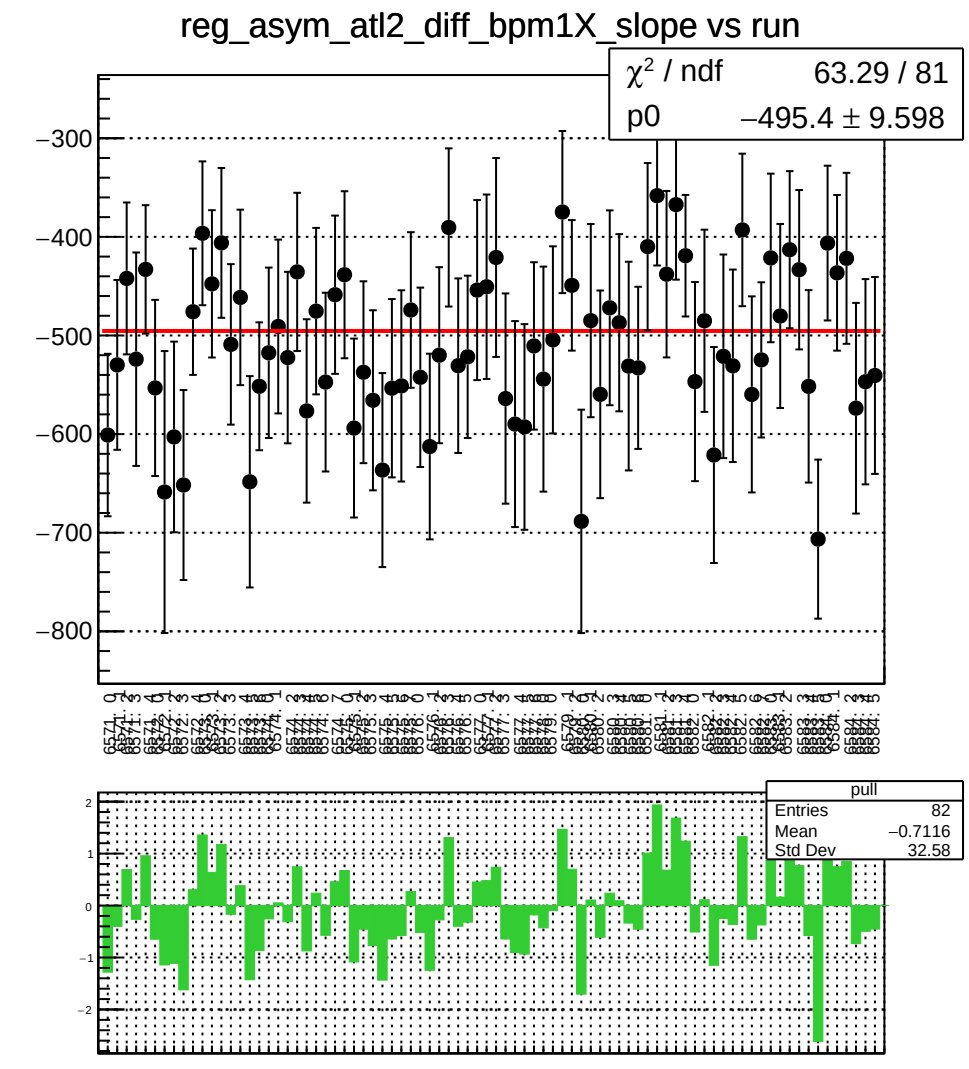

pull1D
Entries 82
Mean 0.04185
Std Dev 1.174

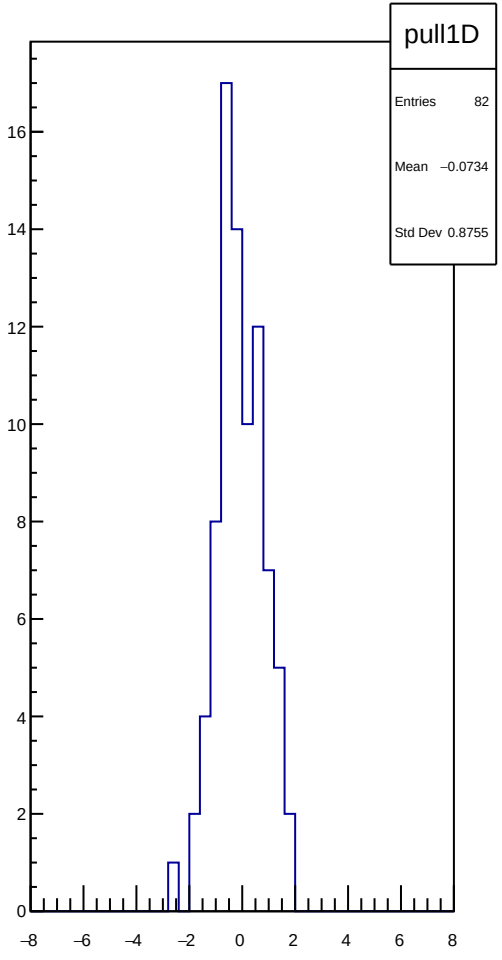

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 118.5 / 81
p0 1.477 ± 2.626
pull
Entries 82
Mean −249.9
Std Dev 287.5

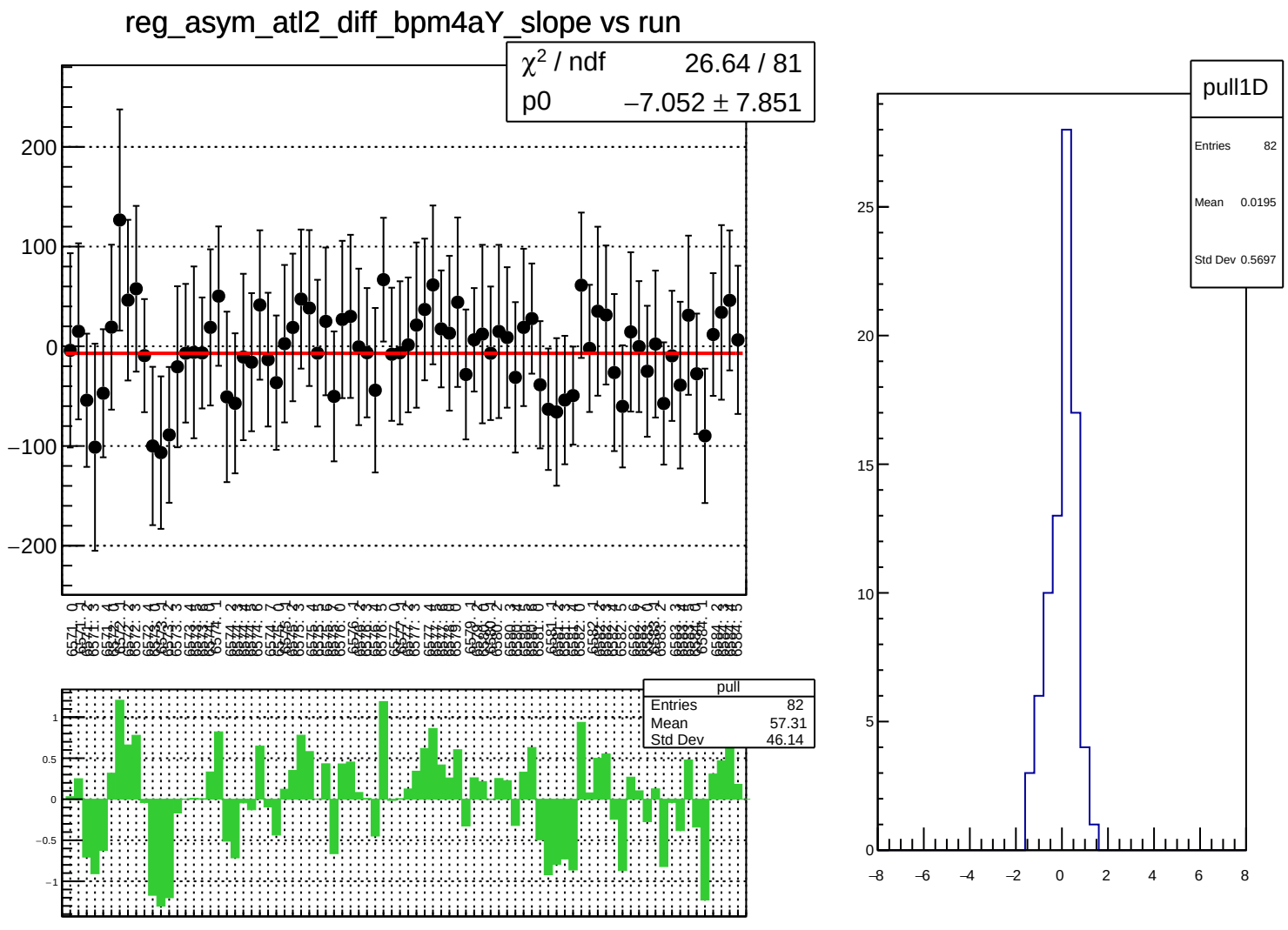

pull1D
Entries 82
Mean −0.04478
Std Dev 1.202

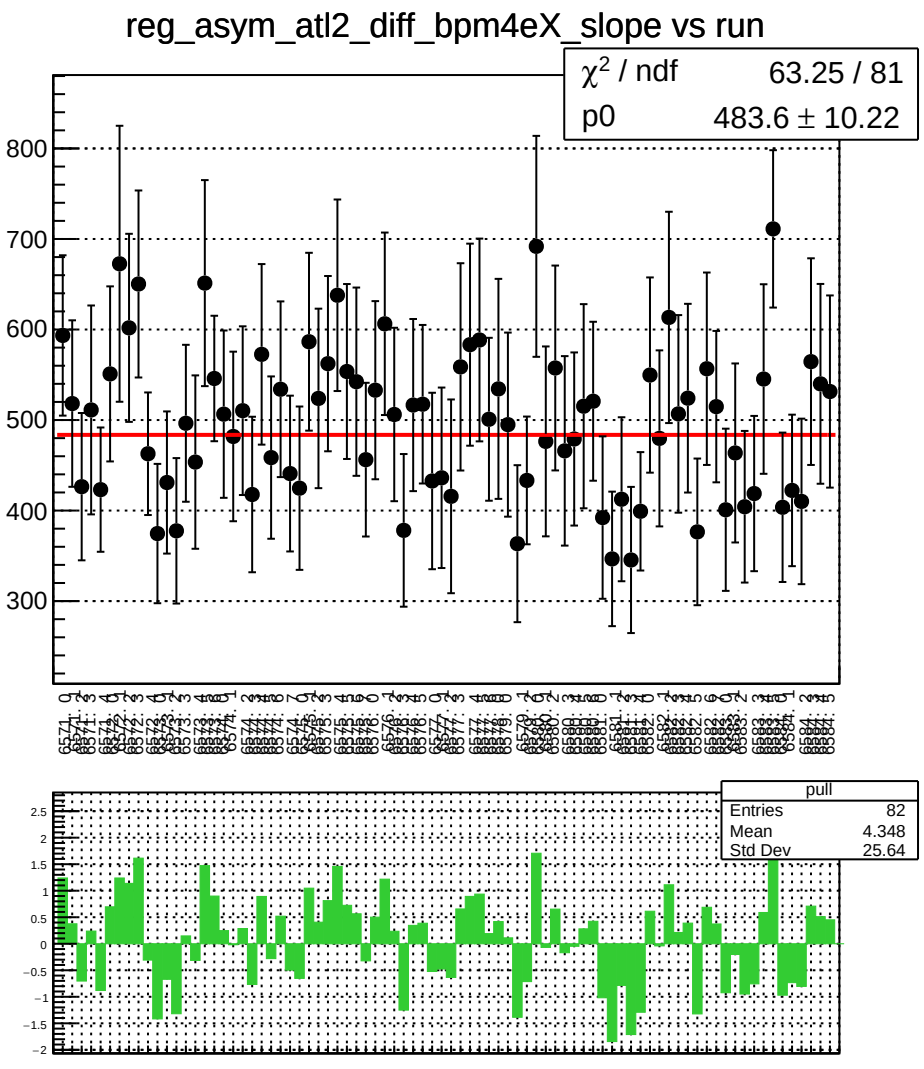

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 665.9 / 81
p0 −42.23 ± 0.1229
pull
Entries 82
Mean −450.9
Std Dev 484.6

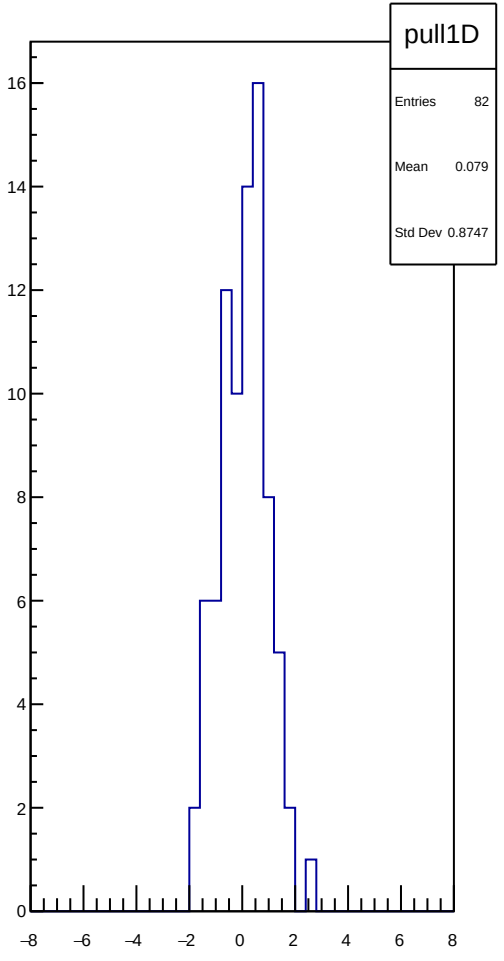

pull1D
Entries 82
Mean 0.2964
Std Dev 2.266

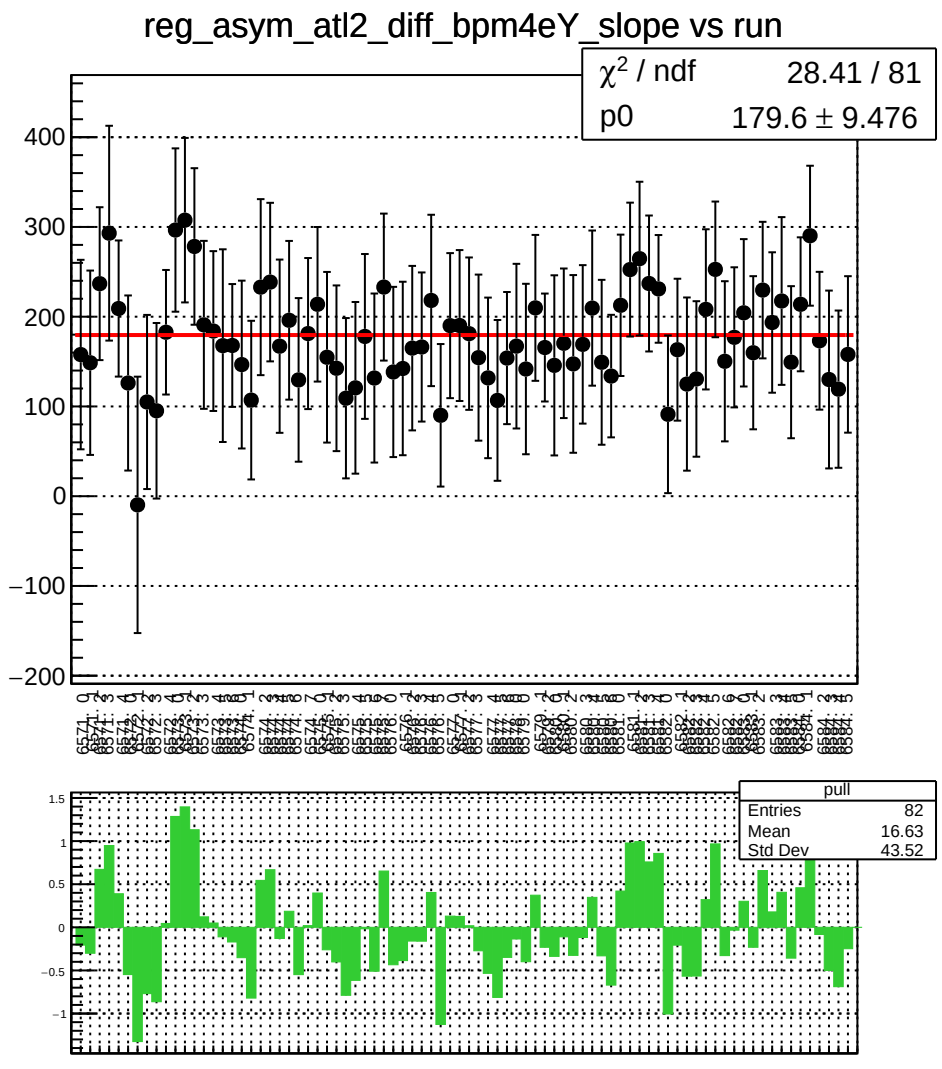

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 63.29 / 81
p0 −495.4 ± 9.598
pull
Entries 82
Mean −0.7116
Std Dev 32.58

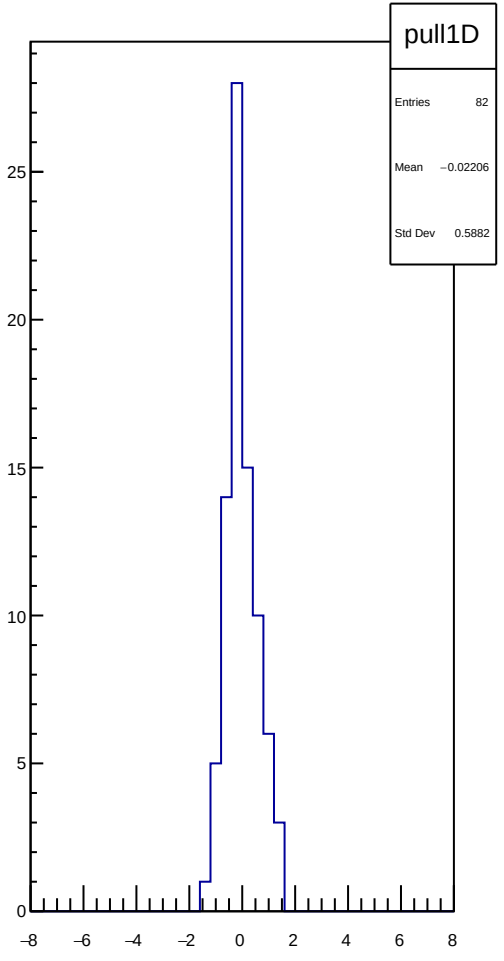

pull1D
Entries 82
Mean −0.0734
Std Dev 0.8755

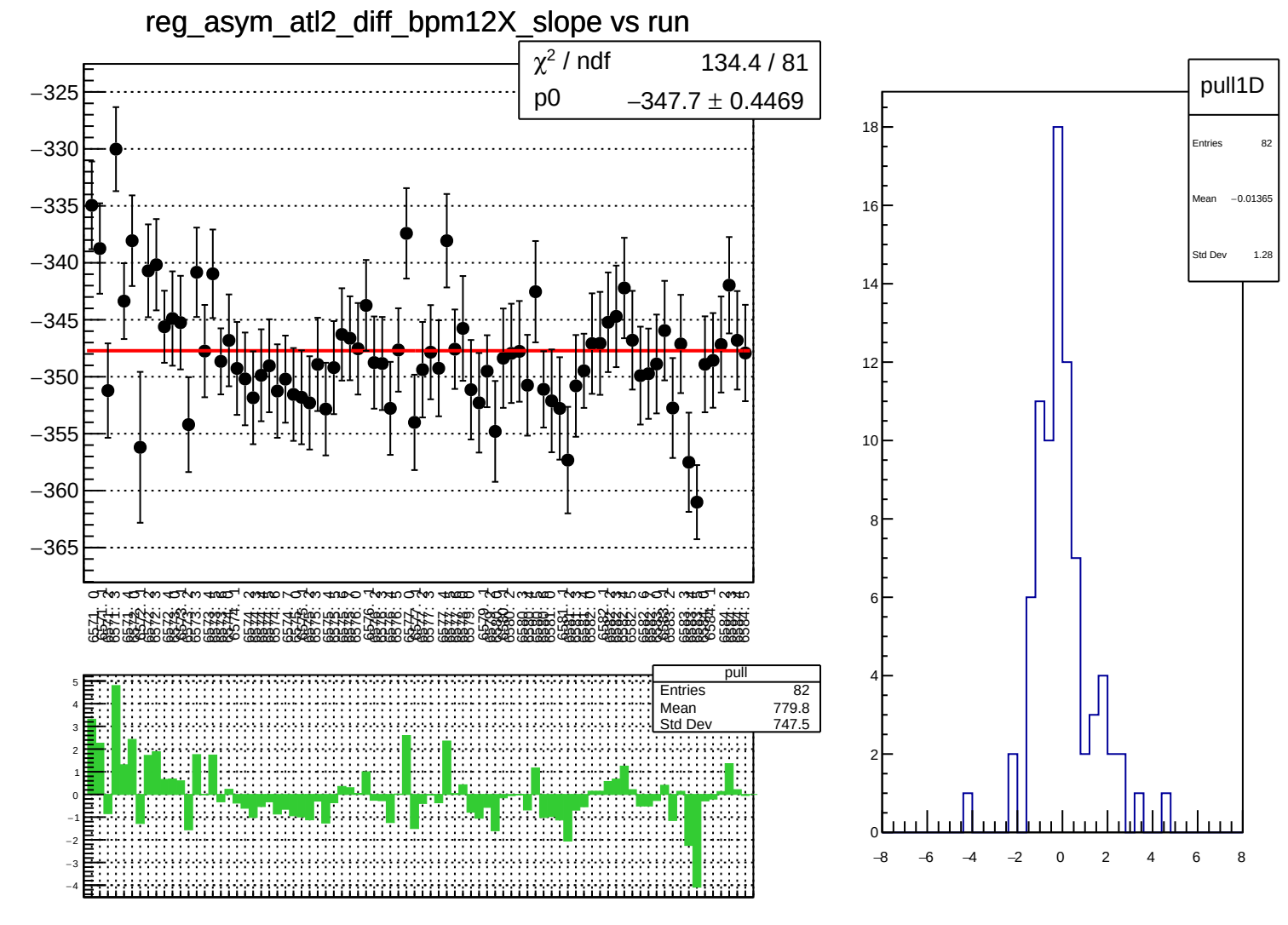

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 26.64 / 81
p0 −7.052 ± 7.851
200
100
0
−100
−200
pull
Entries 82
Mean 57.31
Std Dev 46.14
1
0.5
0
−0.5
−1
pull1D
Entries 82
Mean 0.0195
Std Dev 0.5697
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

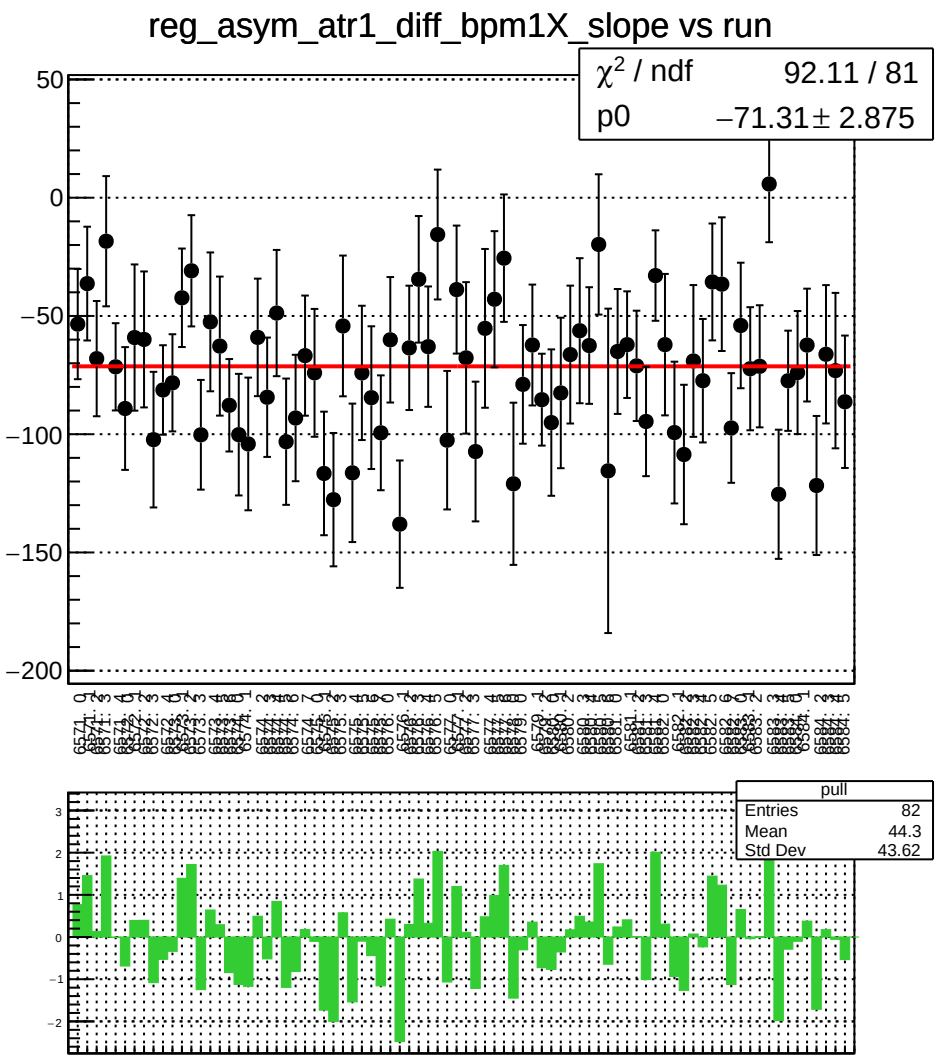

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 63.25 / 81
p0 483.6 ± 10.22
800
700
600
500
400
300
pull
Entries 82
Mean 4.348
Std Dev 25.64
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

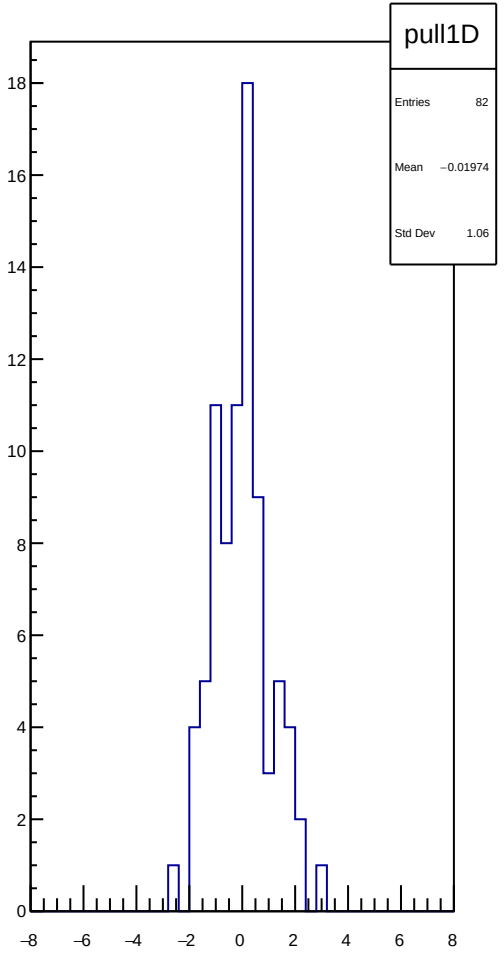

pull1D
Entries 82
Mean 0.079
Std Dev 0.8747
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

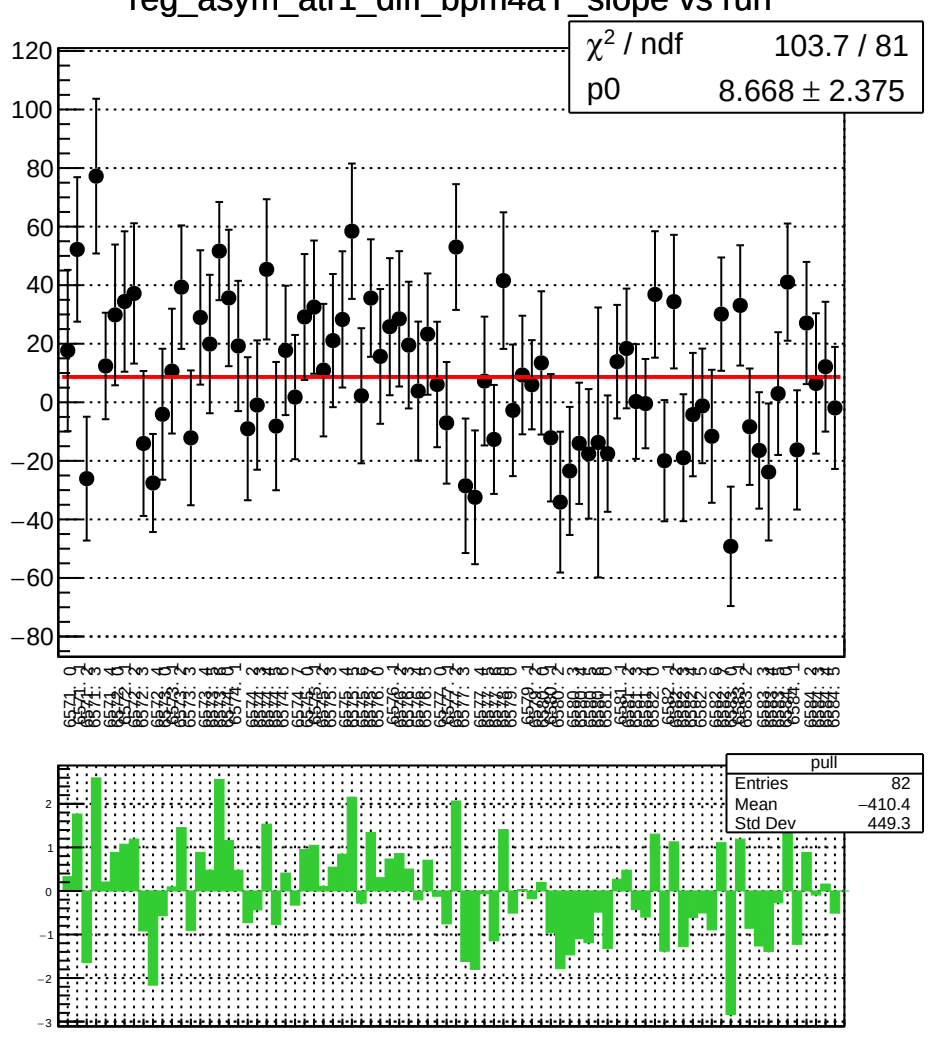

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 28.41 / 81
p0 179.6 ± 9.476
400
300
200
100
0
−100
−200
pull
Entries 82
Mean 16.63
Std Dev 43.52
1.5
1
0.5
0
−0.5
−1

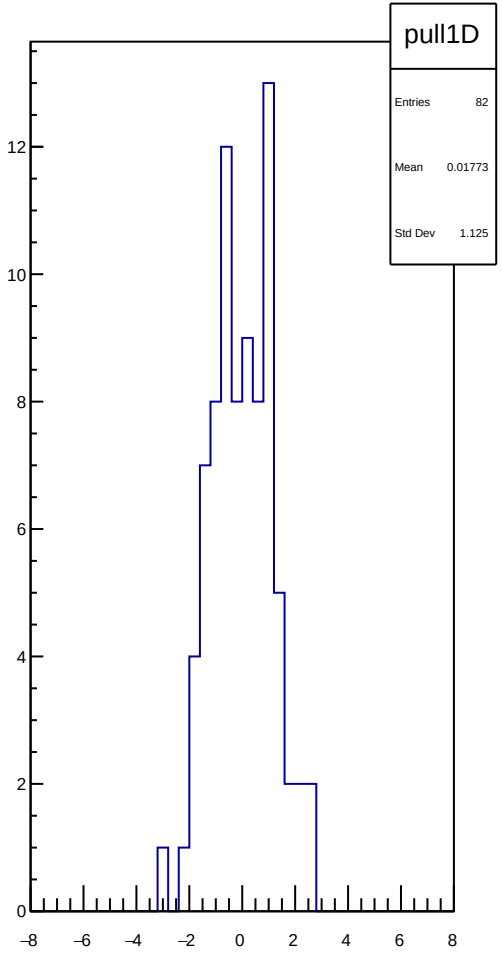

pull1D
Entries 82
Mean −0.02206
Std Dev 0.5882
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

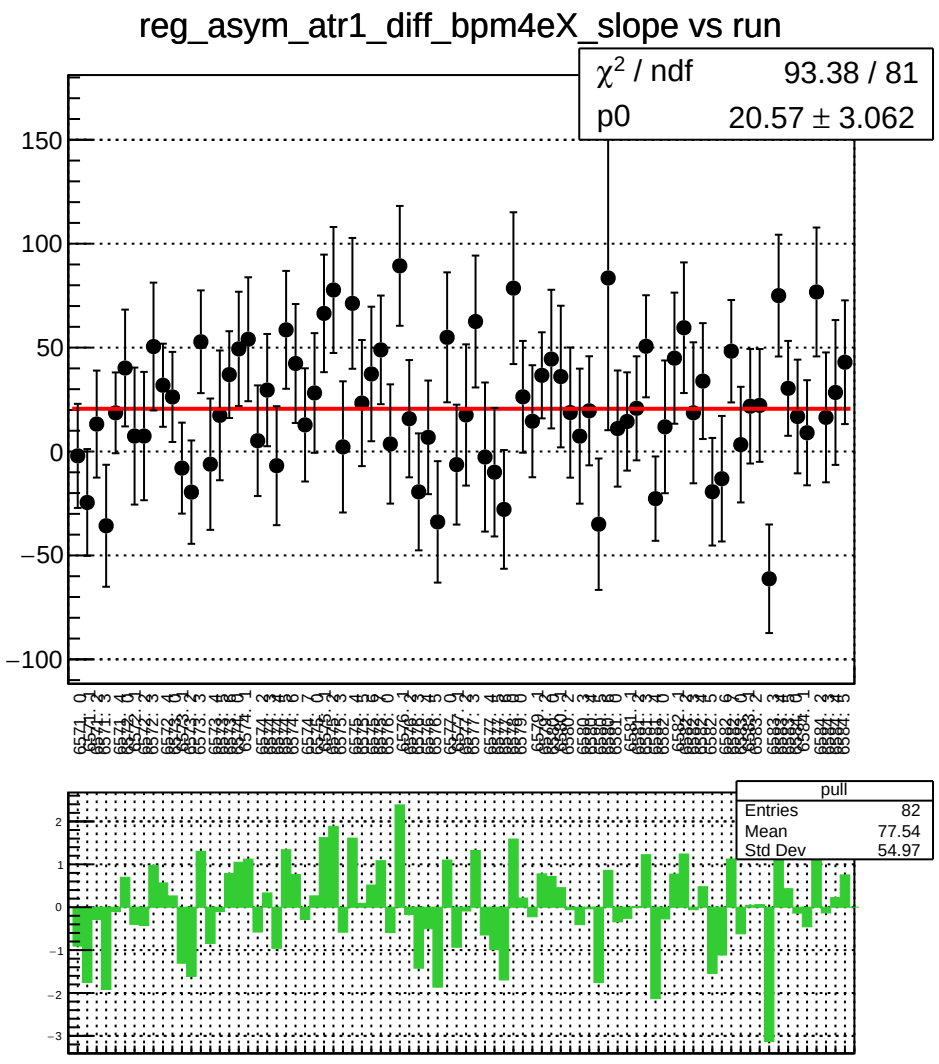

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 134.4 / 81
p0 −347.7 ± 0.4469
pull
Entries 82
Mean 779.8
Std Dev 747.5
pull1D
Entries 82
Mean −0.01365
Std Dev 1.28

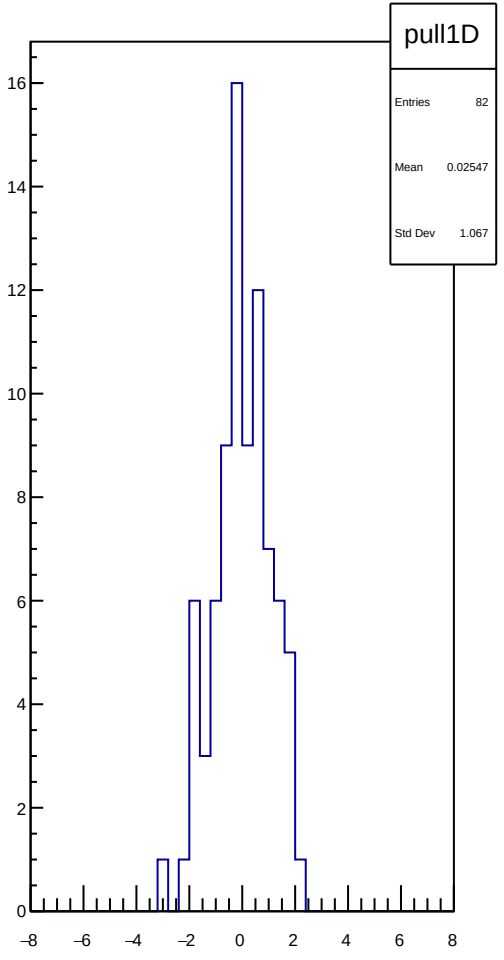

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 92.11 / 81
p0 −71.31± 2.875
pull
Entries 82
Mean 44.3
Std Dev 43.62

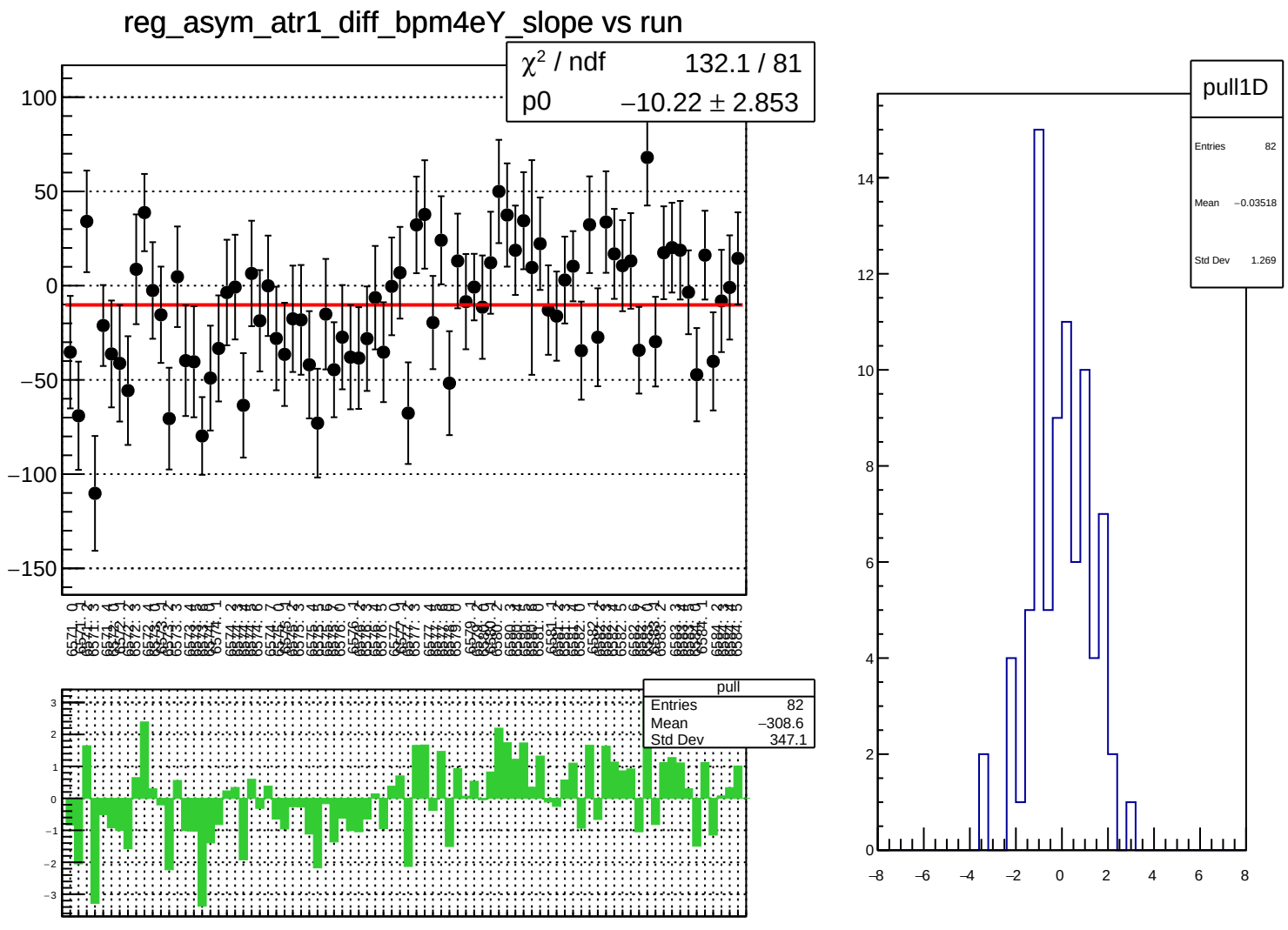

pull1D
Entries 82
Mean −0.01974
Std Dev 1.06

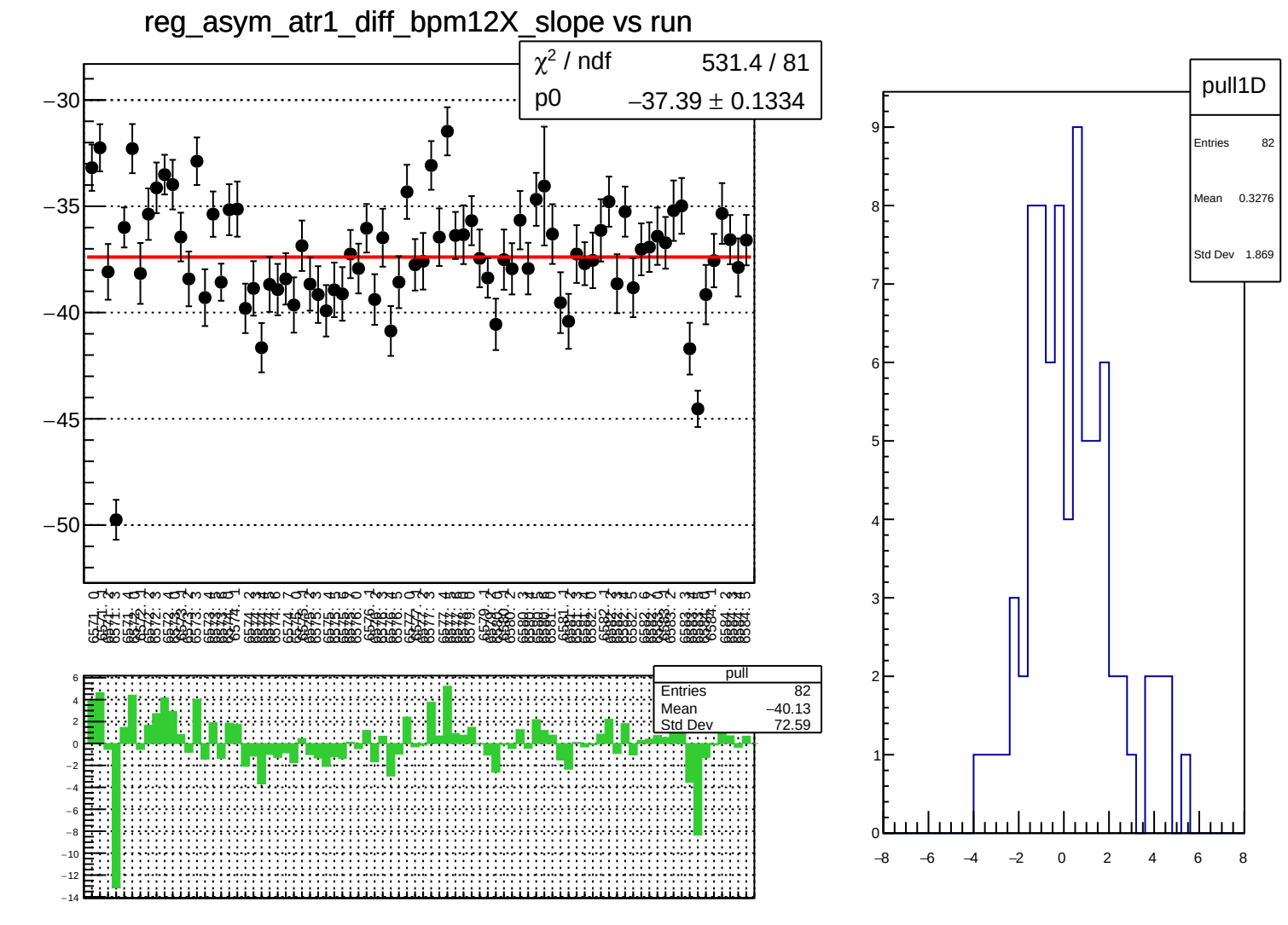

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 103.7 / 81
p0 8.668 ± 2.375
pull
Entries 82
Mean −410.4
Std Dev 449.3

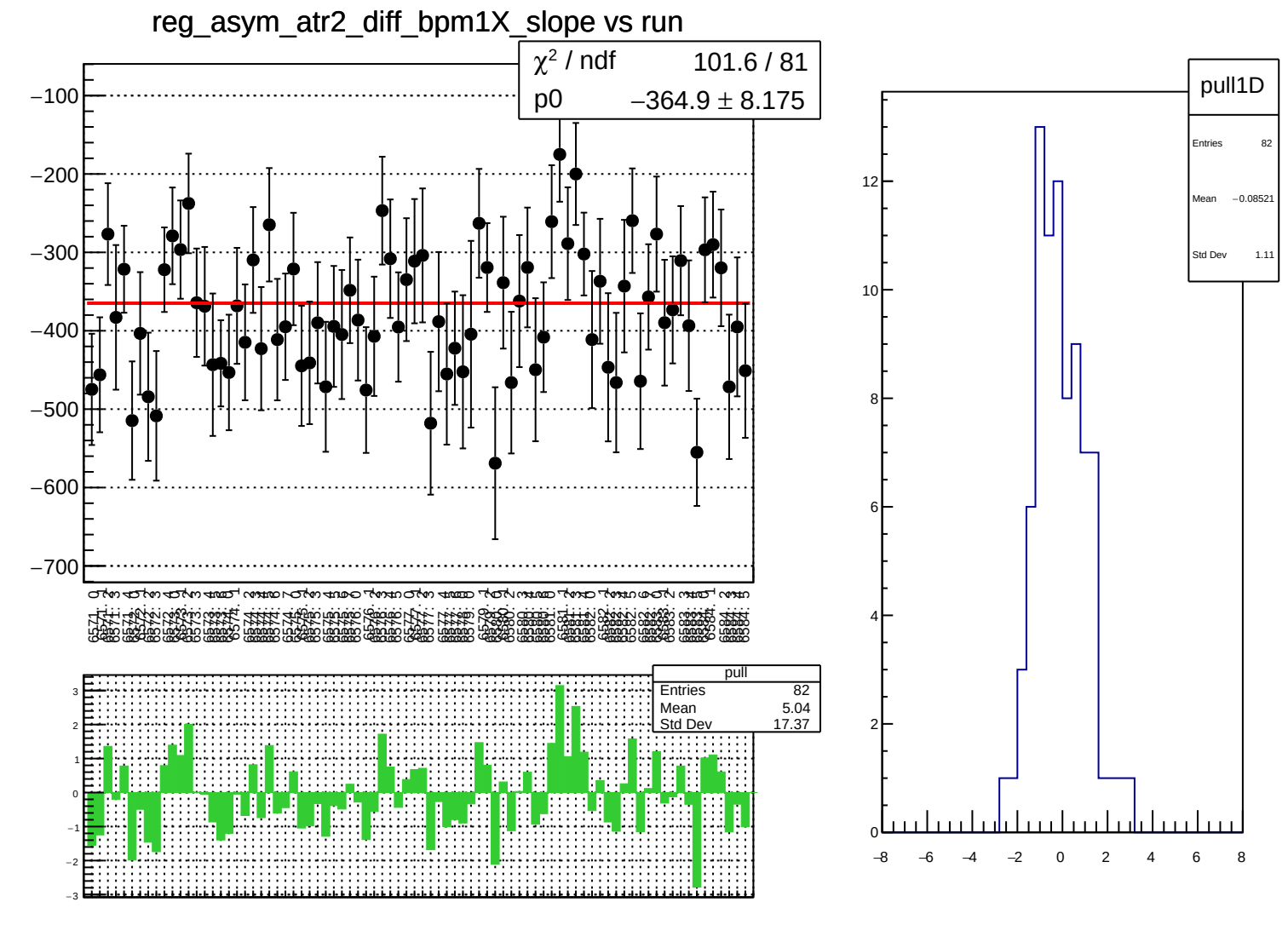

pull1D
Entries 82
Mean 0.01773
Std Dev 1.125

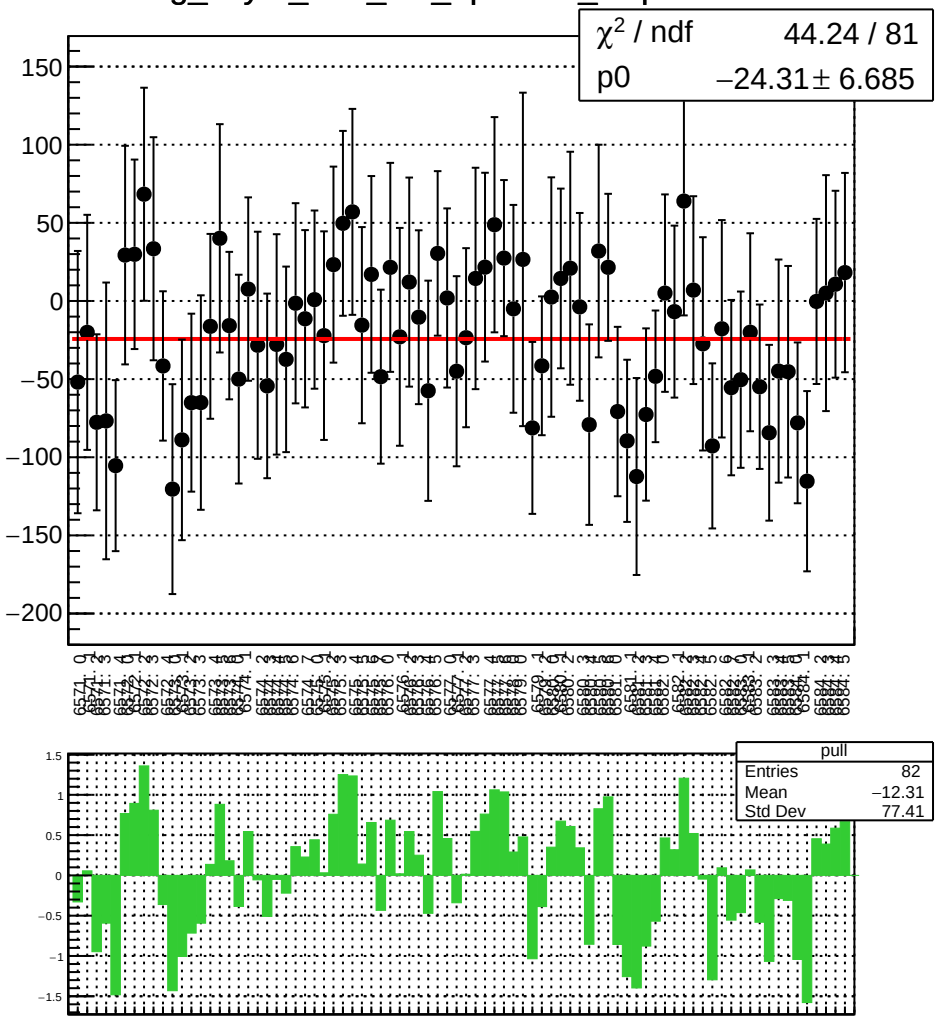

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 93.38 / 81
p0 20.57 ± 3.062
150
100
50
0
−50
−100
pull
Entries 82
Mean 77.54
Std Dev 54.97
2
1
0
−1
−2
−3

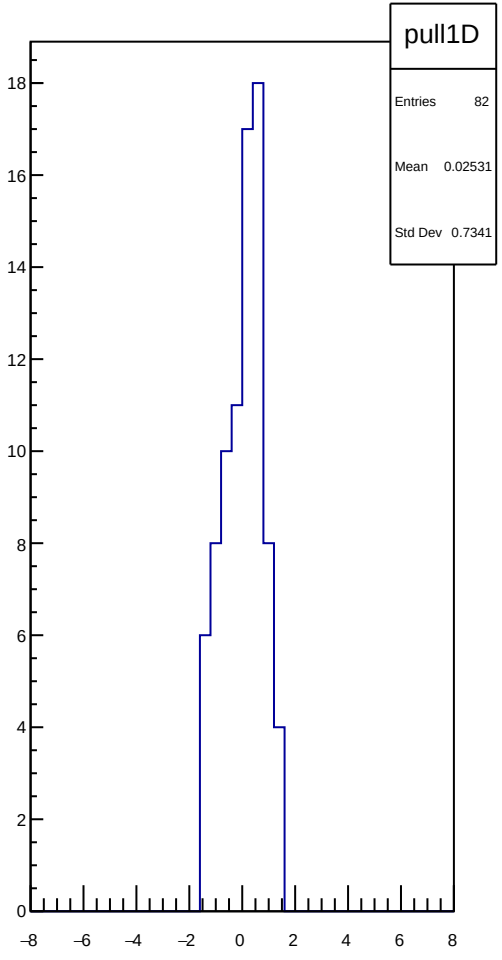

pull1D
Entries 82
Mean 0.02547
Std Dev 1.067
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

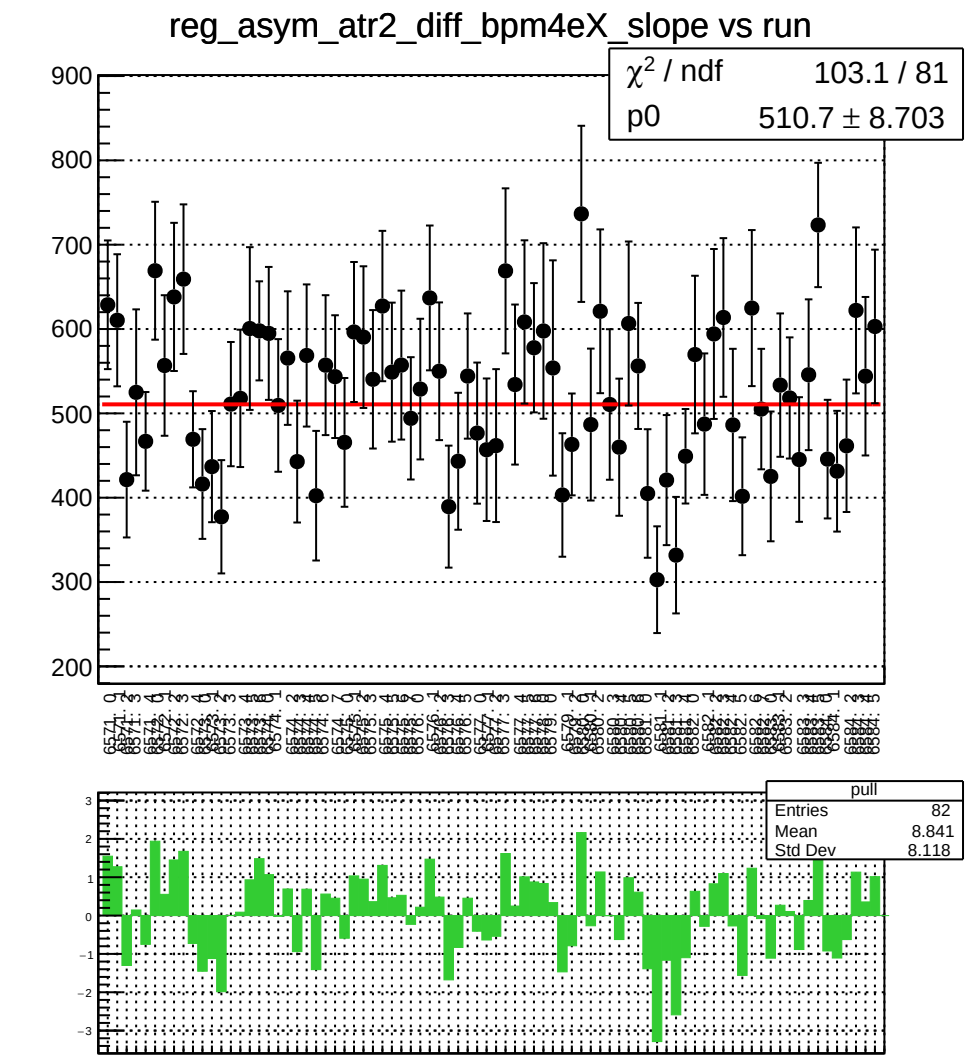

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 132.1 / 81
p0 −10.22 ± 2.853
pull
Entries 82
Mean −308.6
Std Dev 347.1
pull1D
Entries 82
Mean −0.03518
Std Dev 1.269

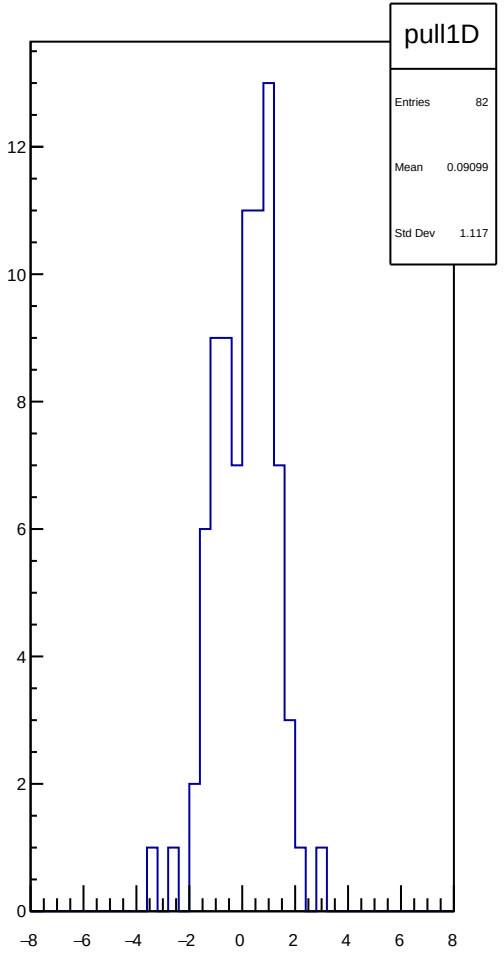

reg_asym_atr1_diff_bpm12X_slope vs run
$\chi^2$ / ndf 531.4 / 81
p0 −37.39 ± 0.1334
pull
Entries 82
Mean −40.13
Std Dev 72.59
pull1D
Entries 82
Mean 0.3276
Std Dev 1.869

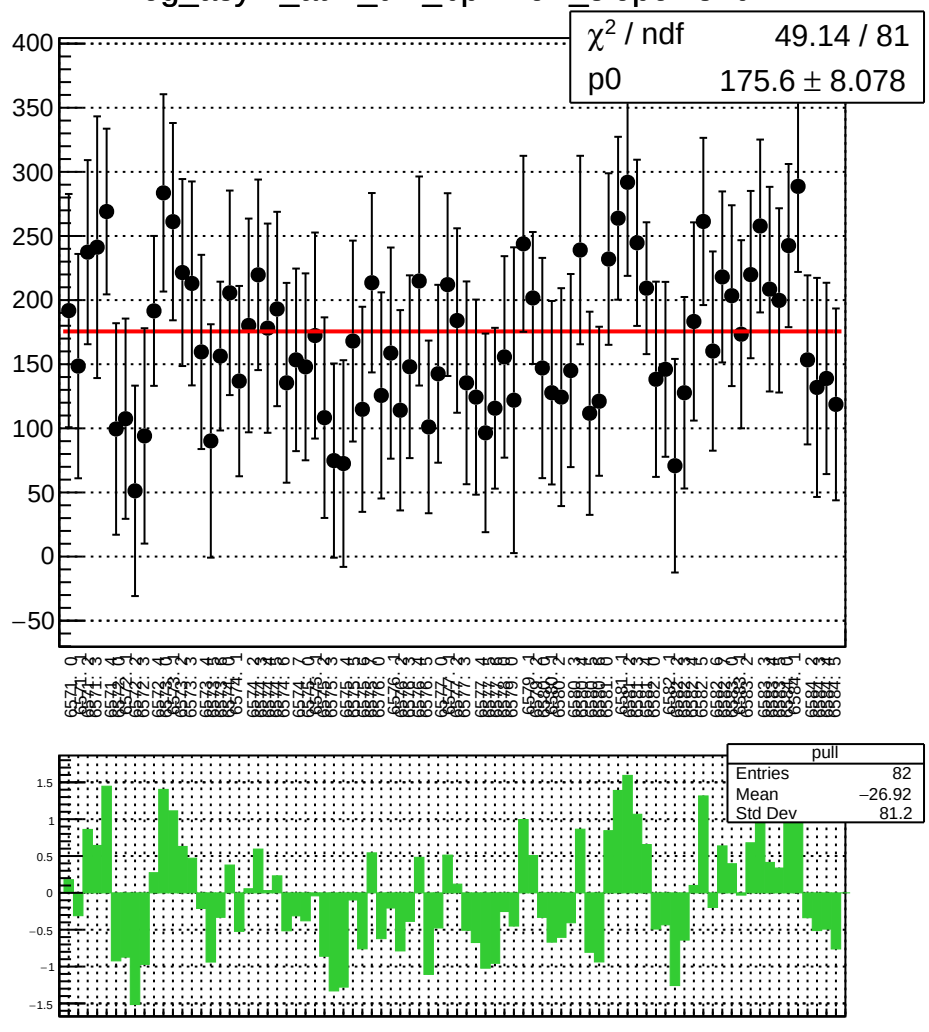

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 101.6 / 81
p0 −364.9 ± 8.175
pull
Entries 82
Mean 5.04
Std Dev 17.37
pull1D
Entries 82
Mean −0.08521
Std Dev 1.11

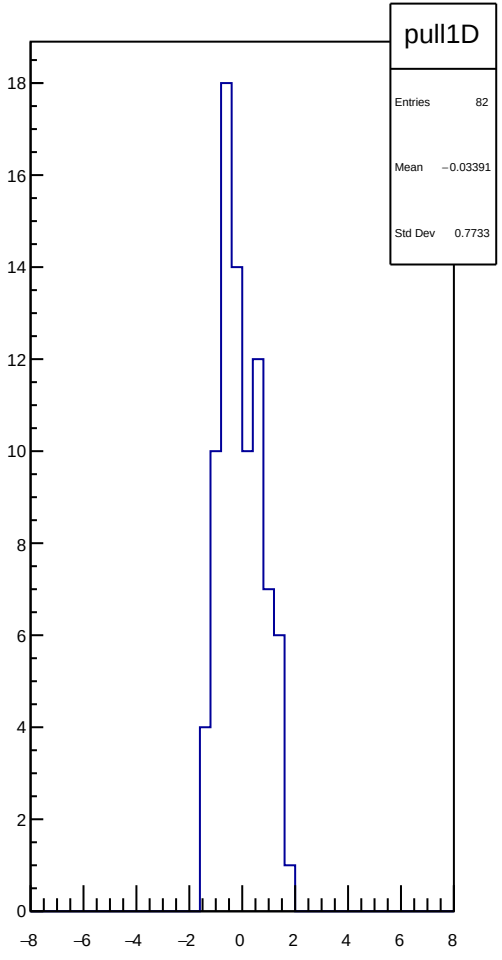

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 44.24 / 81
p0 −24.31 ± 6.685
150
100
50
0
−50
−100
−150
−200
pull
Entries 82
Mean −12.31
Std Dev 77.41
1.5
1
0.5
0
−0.5
−1
−1.5

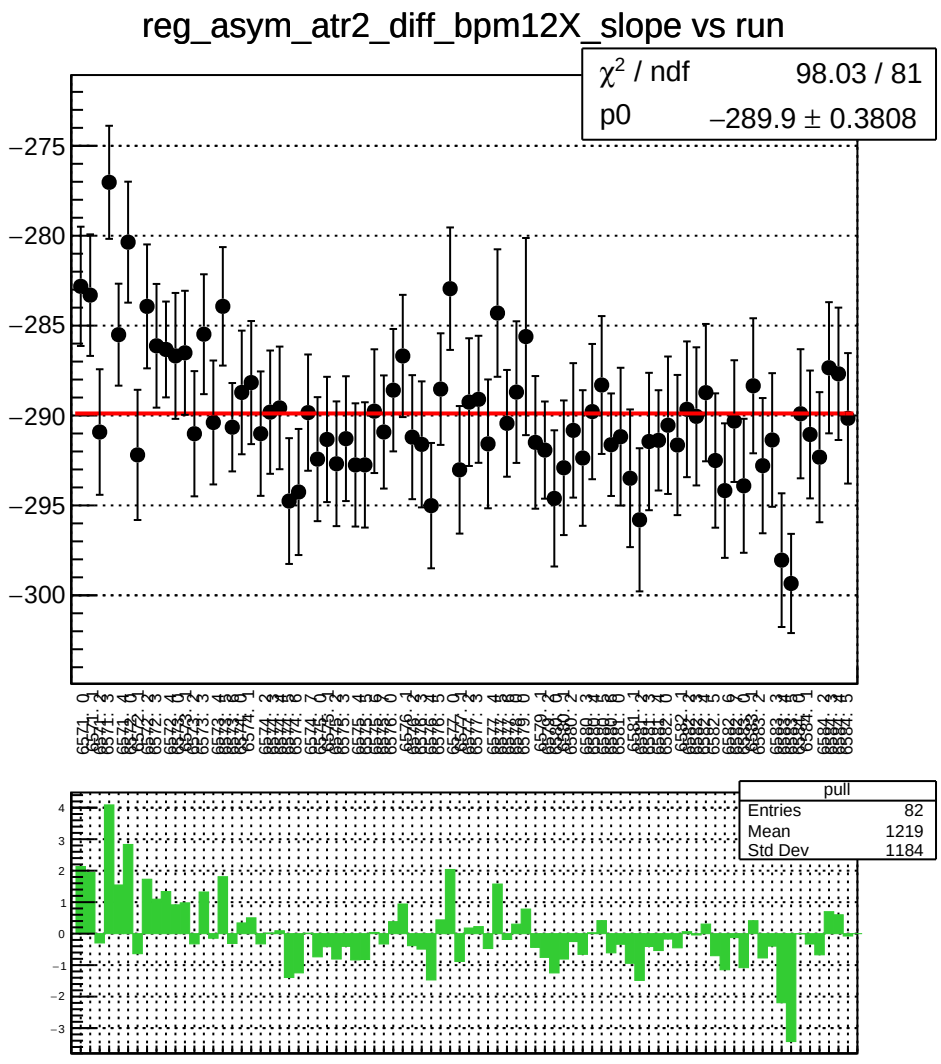

pull1D
Entries 82
Mean 0.02531
Std Dev 0.7341
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

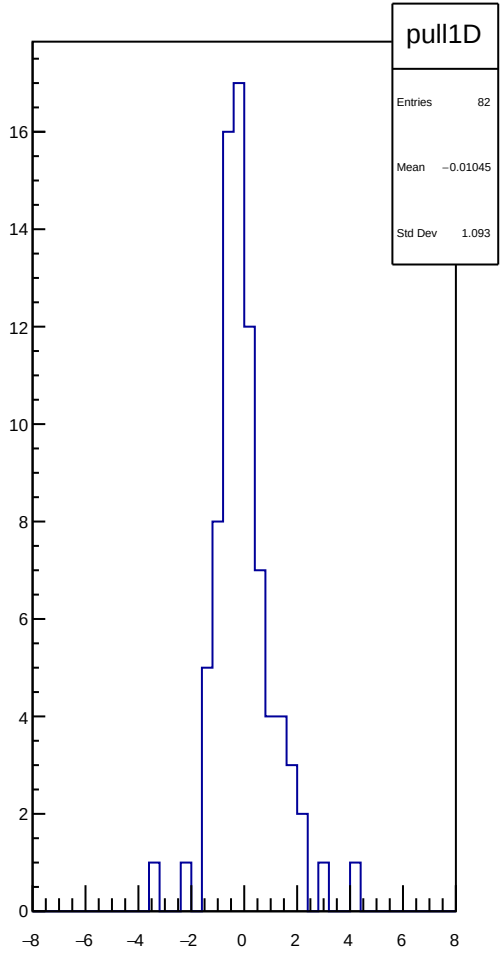

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 103.1 / 81
p0 510.7 ± 8.703
pull
Entries 82
Mean 8.841
Std Dev 8.118

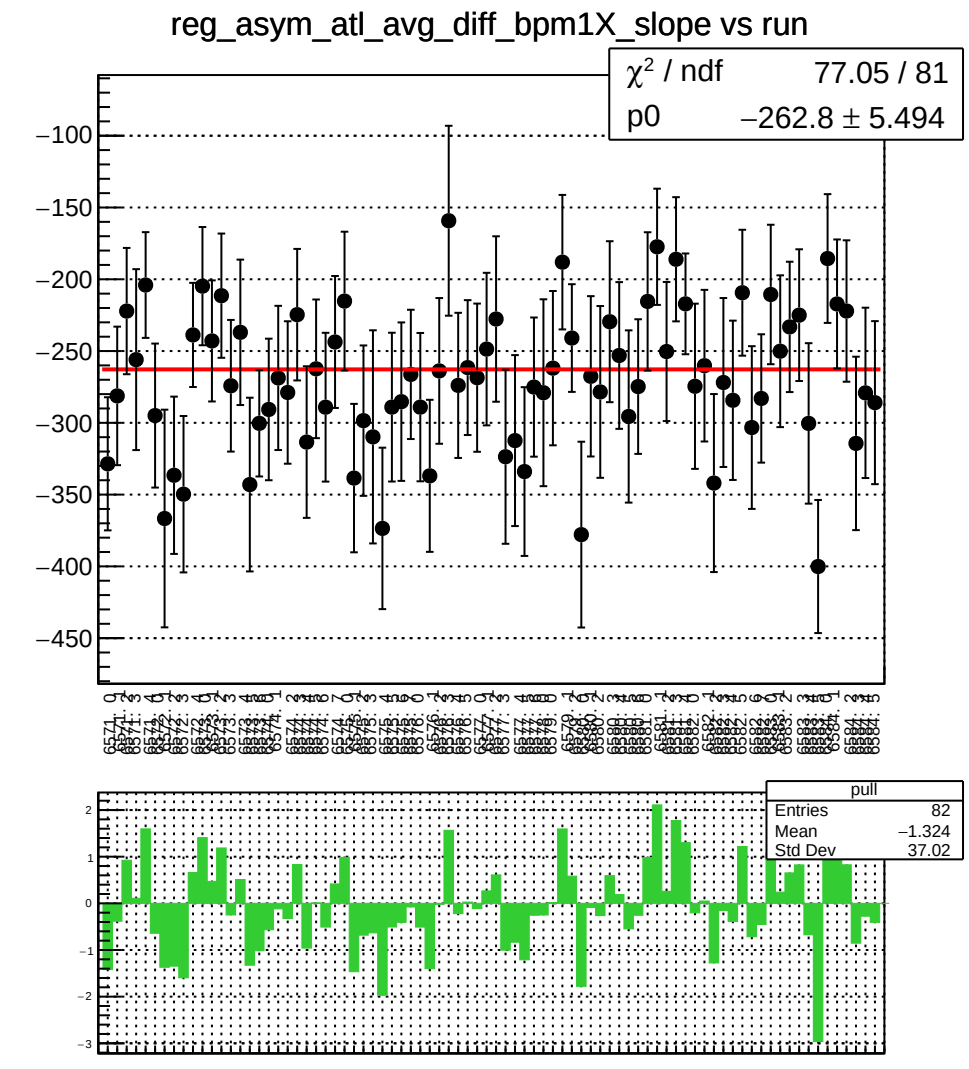

pull1D
Entries 82
Mean 0.09099
Std Dev 1.117

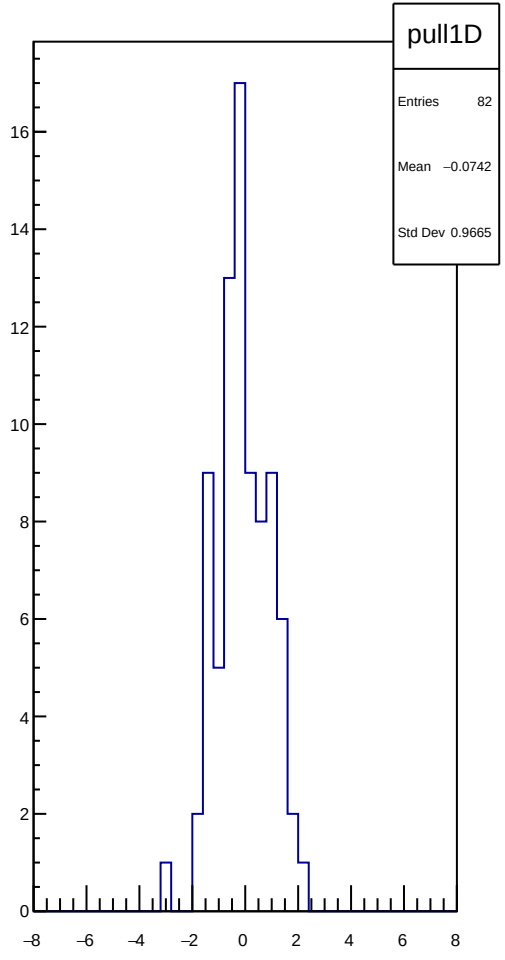

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 49.14 / 81
p0 175.6 ± 8.078
pull
Entries 82
Mean −26.92
Std Dev 81.2

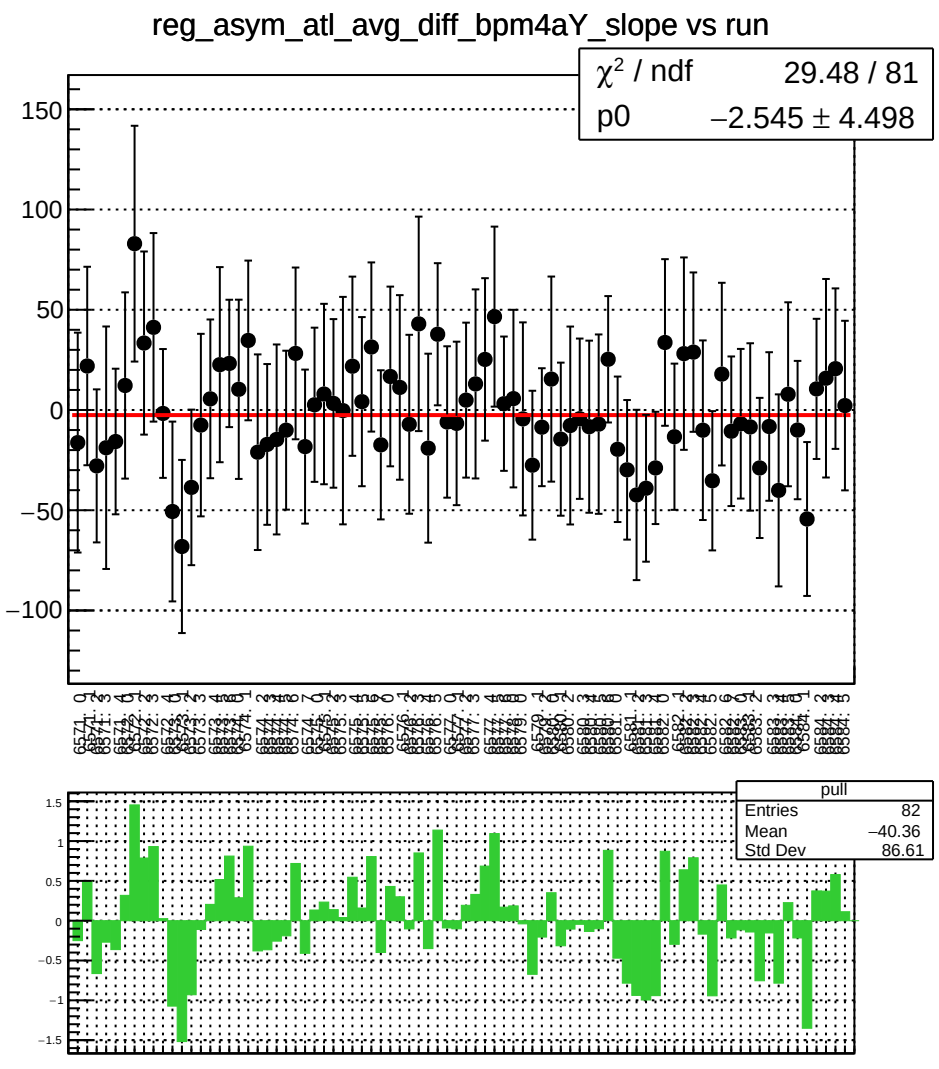

pull1D
Entries 82
Mean −0.03391
Std Dev 0.7733

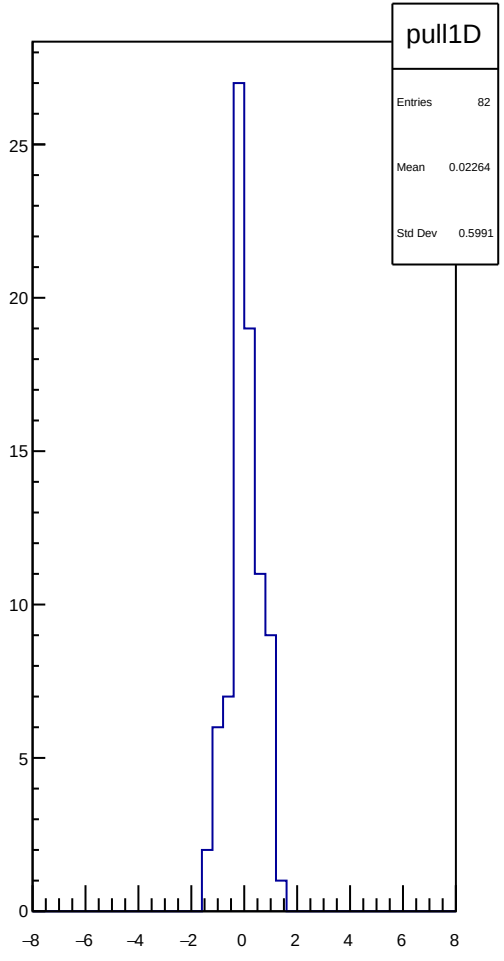

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 98.03 / 81
p0 −289.9 ± 0.3808
pull
Entries 82
Mean 1219
Std Dev 1184

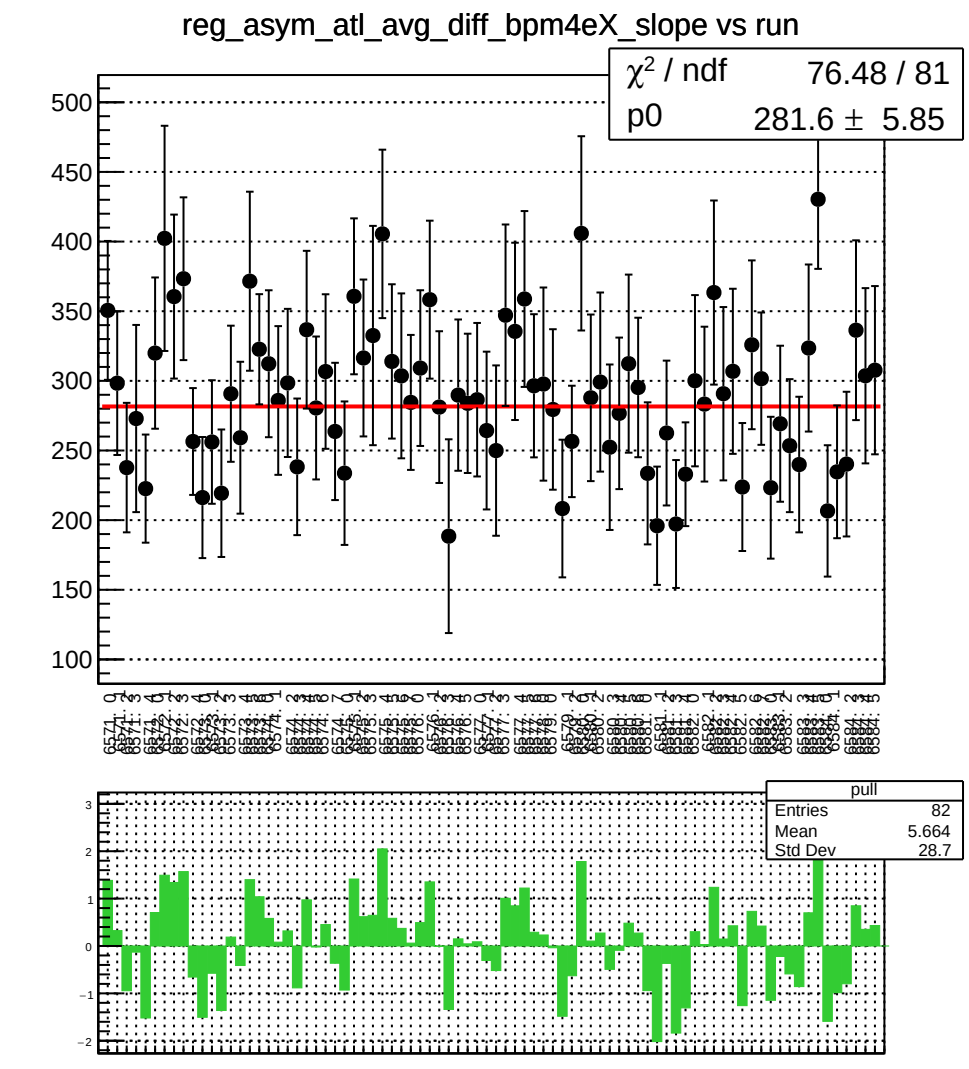

pull1D
Entries 82
Mean −0.01045
Std Dev 1.093

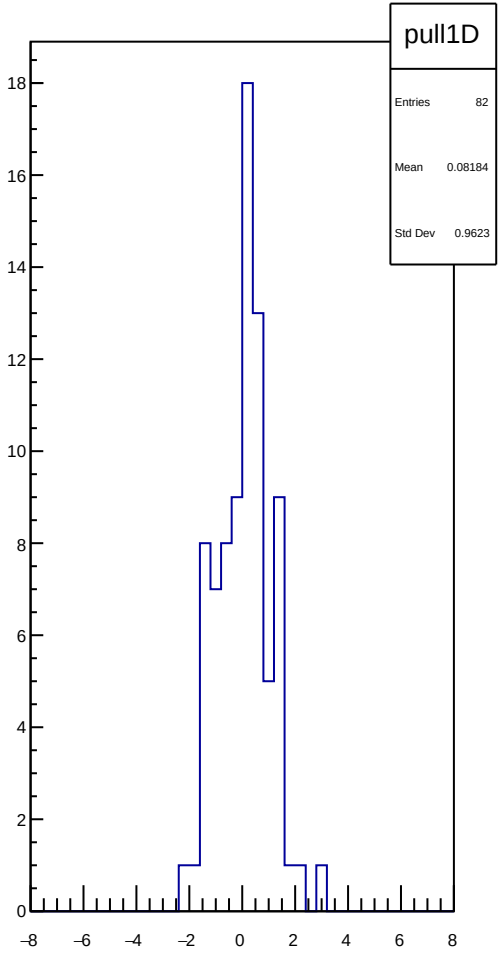

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 77.05 / 81
p0 −262.8 ± 5.494
pull
Entries 82
Mean −1.324
Std Dev 37.02

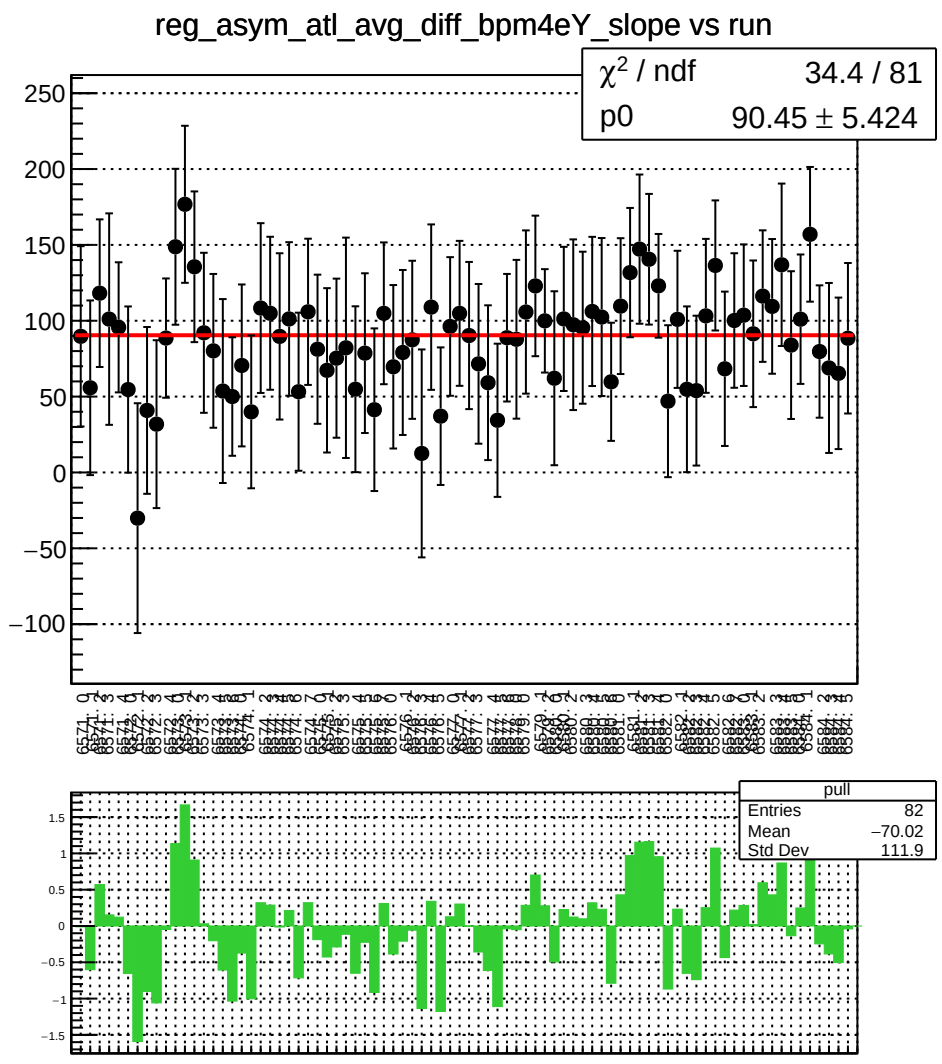

pull1D
Entries 82
Mean −0.0742
Std Dev 0.9665

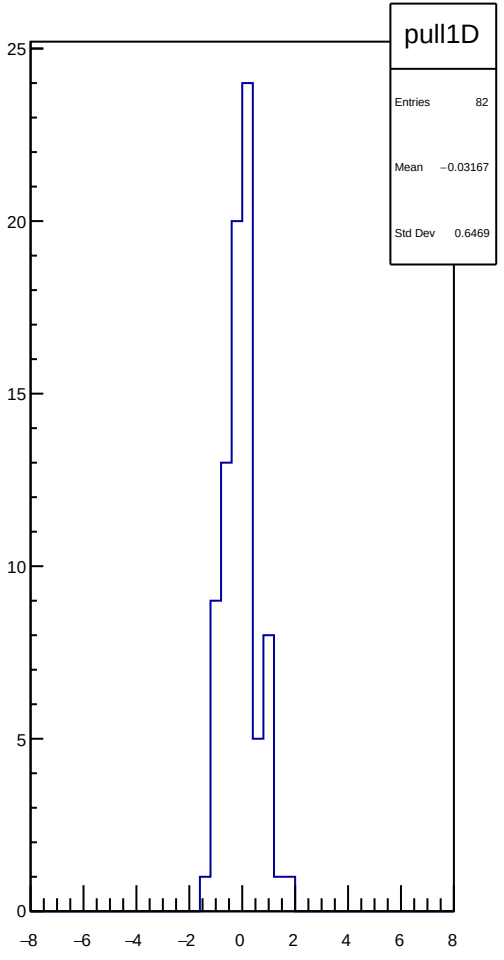

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 29.48 / 81
p0 −2.545 ± 4.498
150
100
50
0
−50
−100
pull
Entries 82
Mean −40.36
Std Dev 86.61
1.5
1
0.5
0
−0.5
−1
−1.5

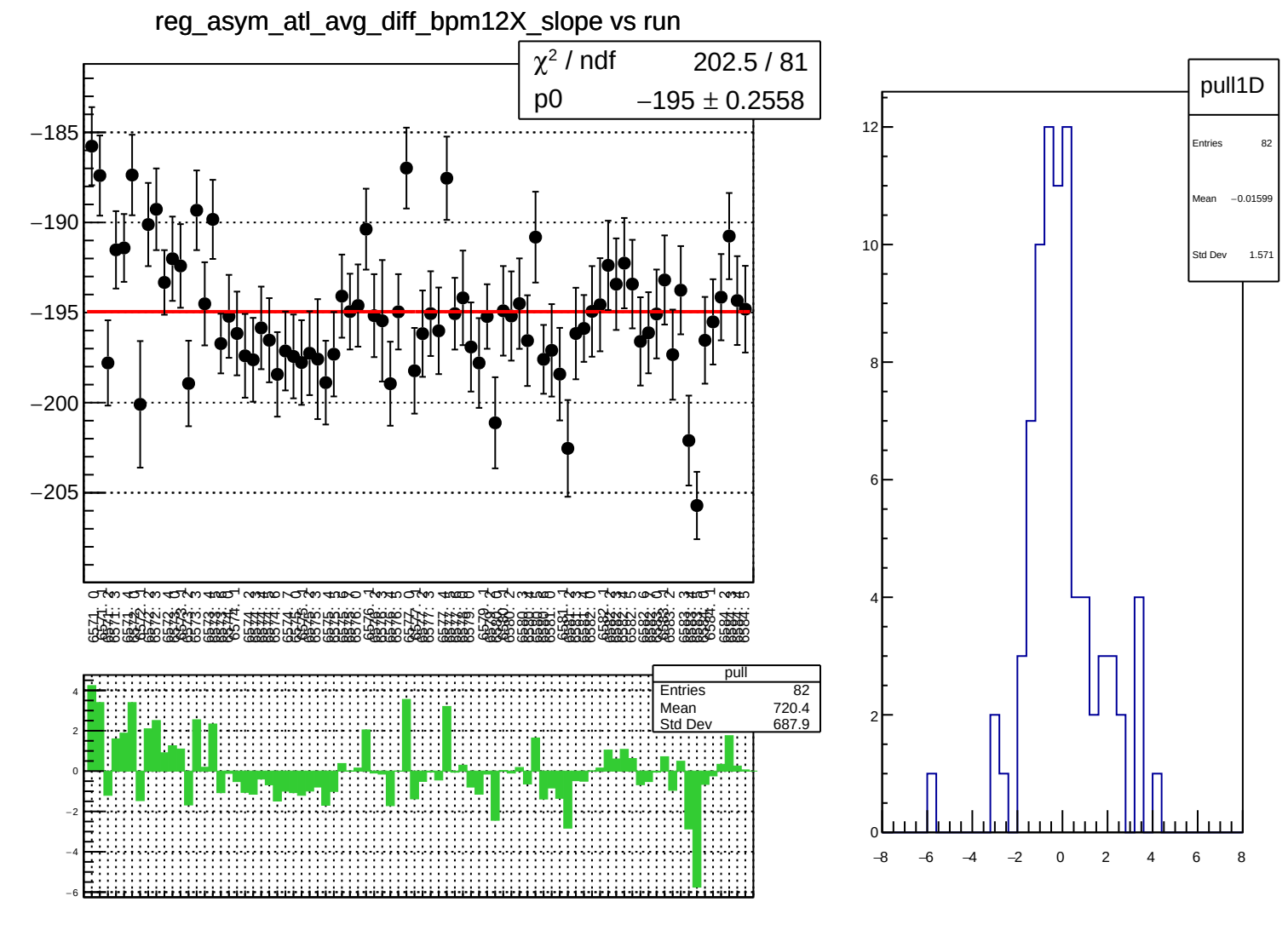

pull1D
Entries 82
Mean 0.02264
Std Dev 0.5991
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

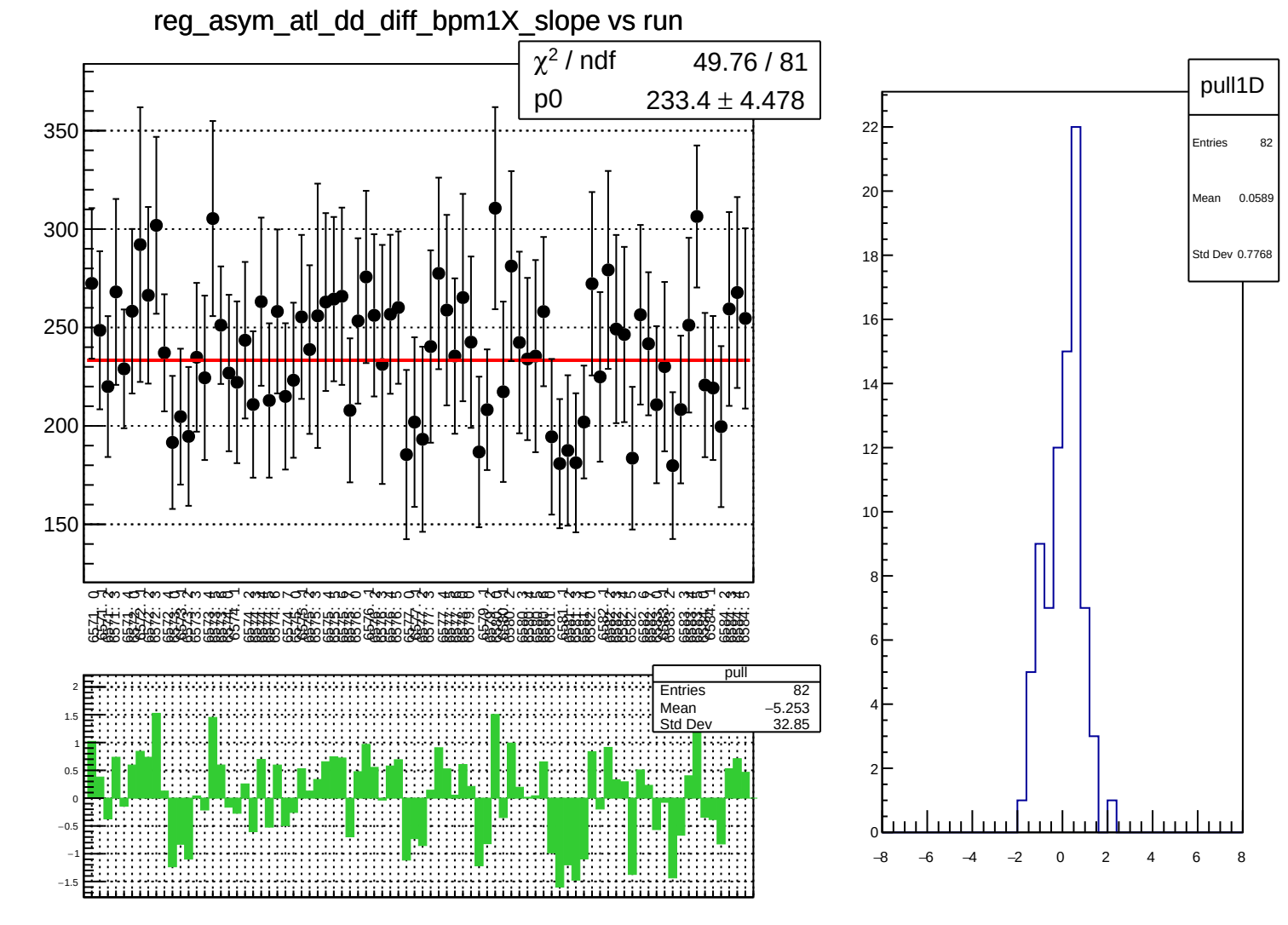

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 76.48 / 81
p0 281.6 ± 5.85
pull
Entries 82
Mean 5.664
Std Dev 28.7

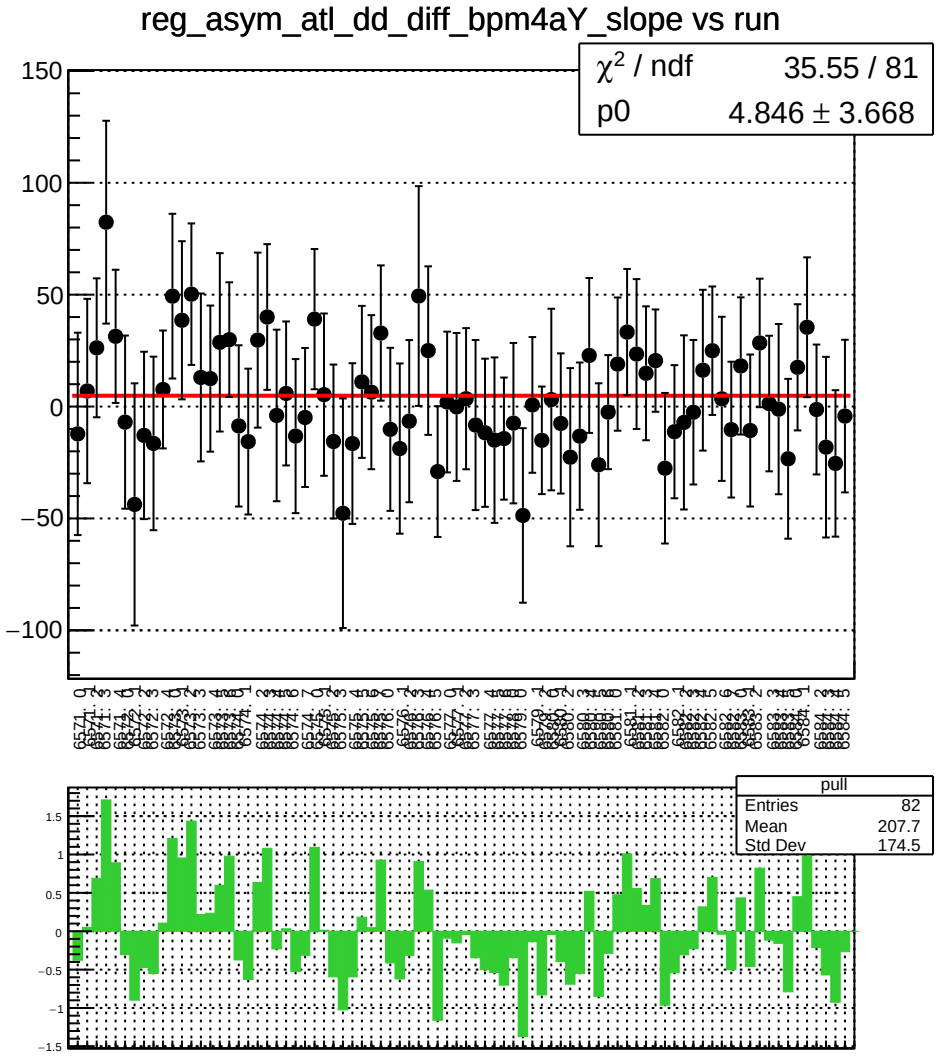

pull1D
Entries 82
Mean 0.08184
Std Dev 0.9623

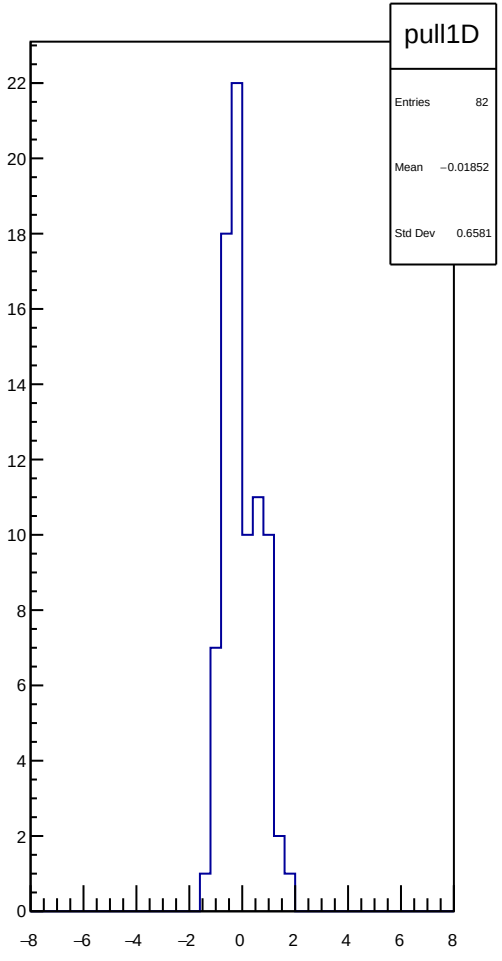

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 34.4 / 81
p0 90.45 ± 5.424
pull
Entries 82
Mean −70.02
Std Dev 111.9

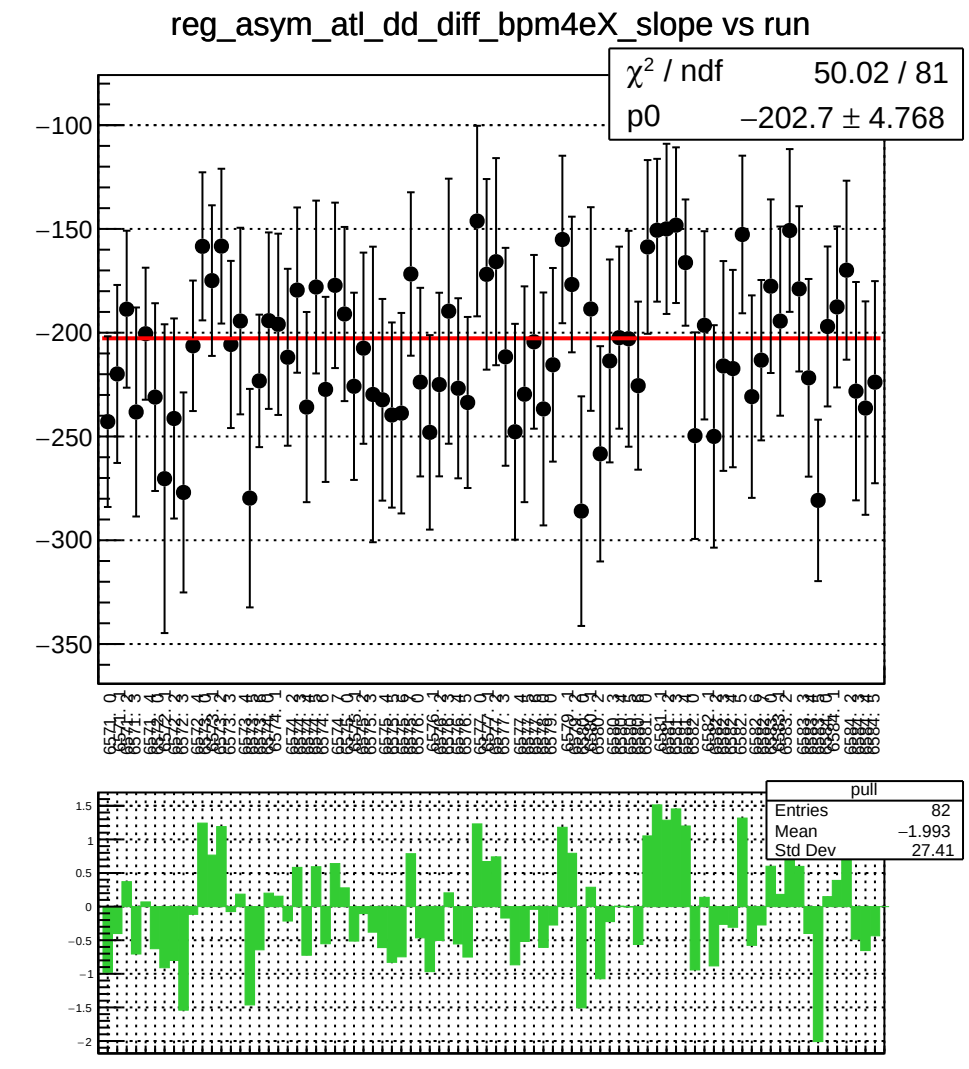

pull1D
Entries 82
Mean −0.03167
Std Dev 0.6469

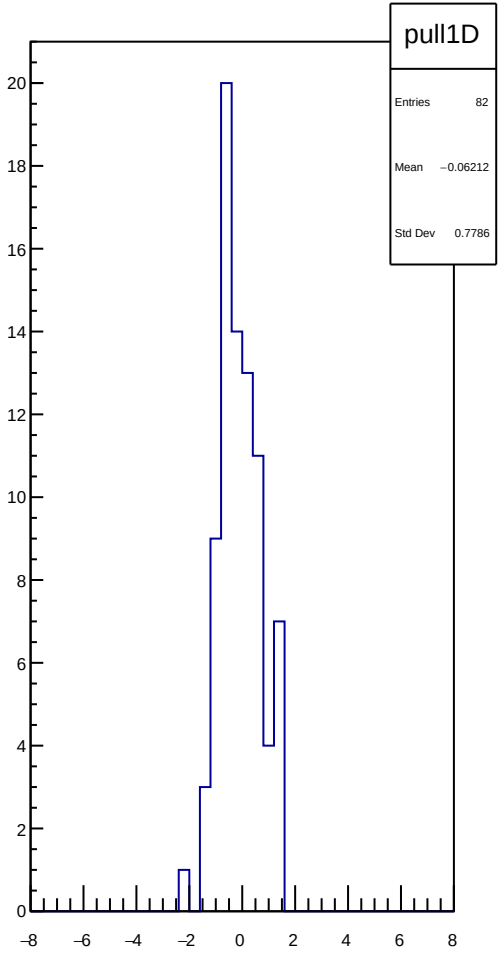

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 202.5 / 81
p0 −195 ± 0.2558
−185
−190
−195
−200
−205
pull
Entries 82
Mean 720.4
Std Dev 687.9
pull1D
Entries 82
Mean −0.01599
Std Dev 1.571

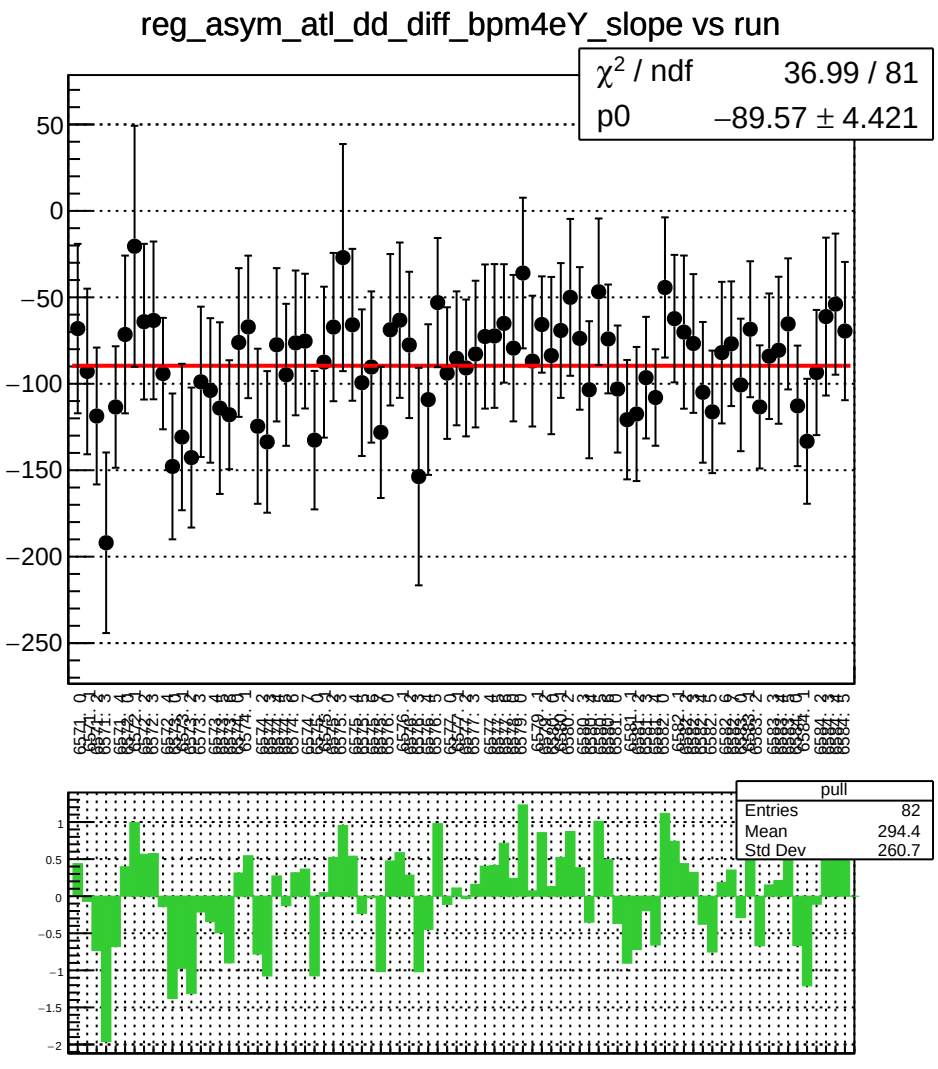

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 49.76 / 81
p0 233.4 ± 4.478
350
300
250
200
150
pull
Entries 82
Mean −5.253
Std Dev 32.85
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 82
Mean 0.0589
Std Dev 0.7768
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

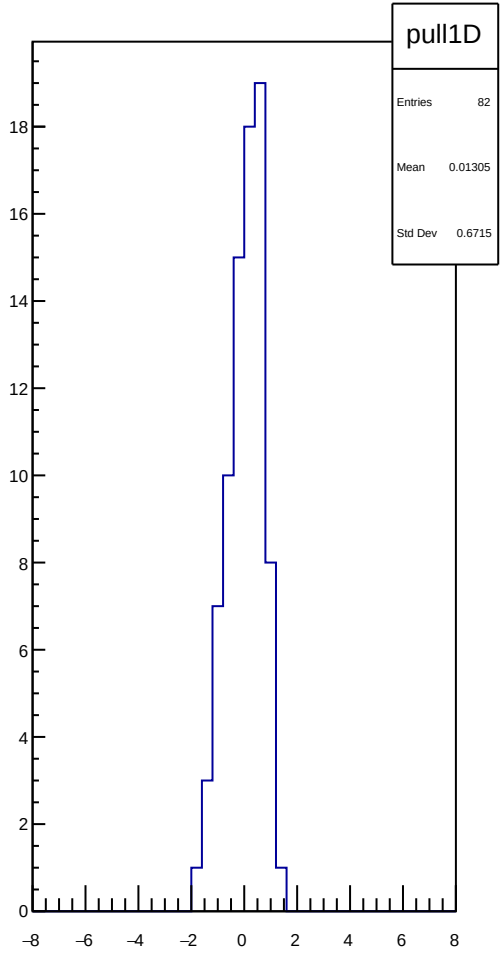

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 35.55 / 81
p0 4.846 ± 3.668
150
100
50
0
−50
−100
pull
Entries 82
Mean 207.7
Std Dev 174.5
1.5
1
0.5
0
−0.5
−1
−1.5

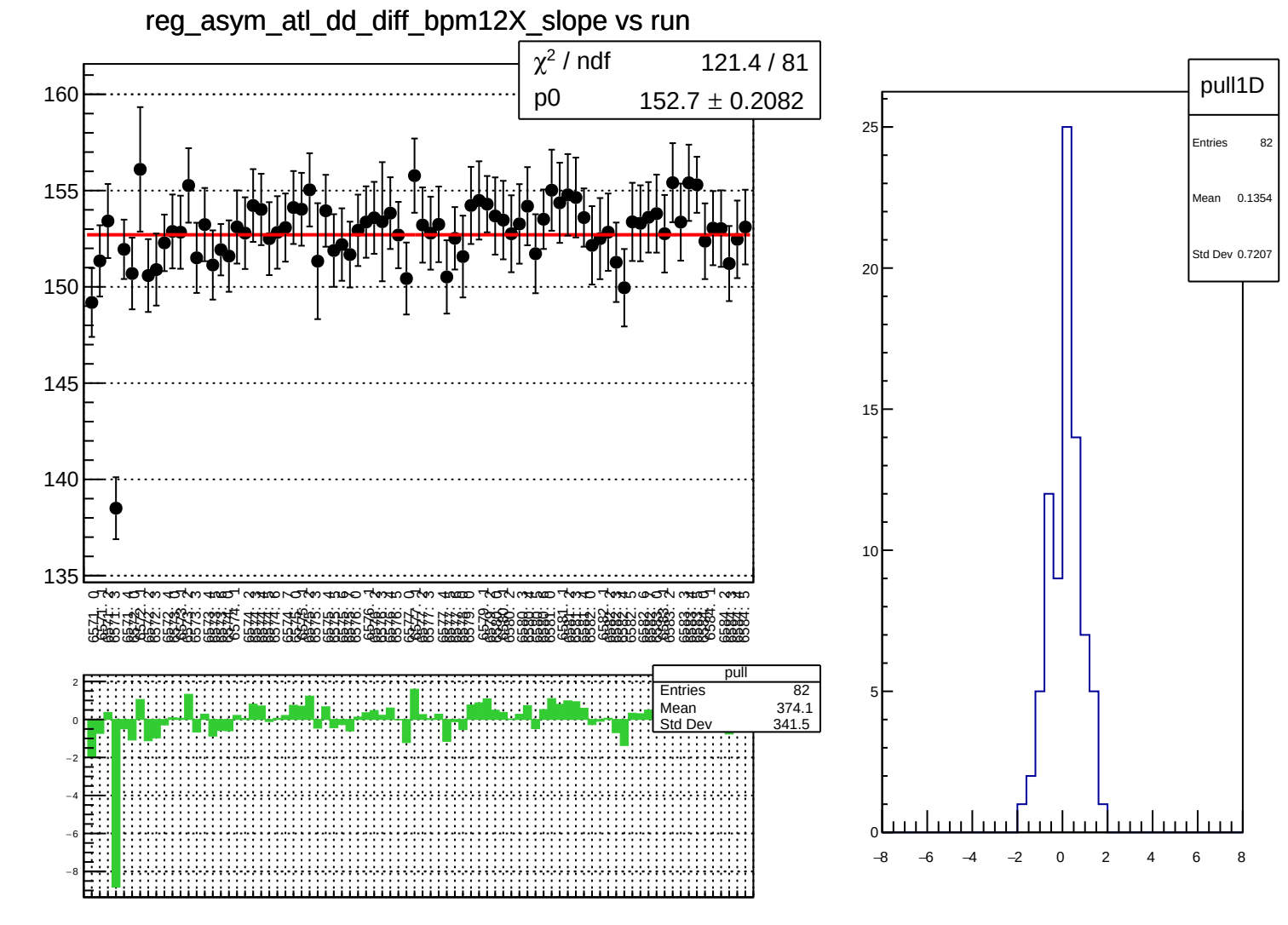

pull1D
Entries 82
Mean −0.01852
Std Dev 0.6581
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

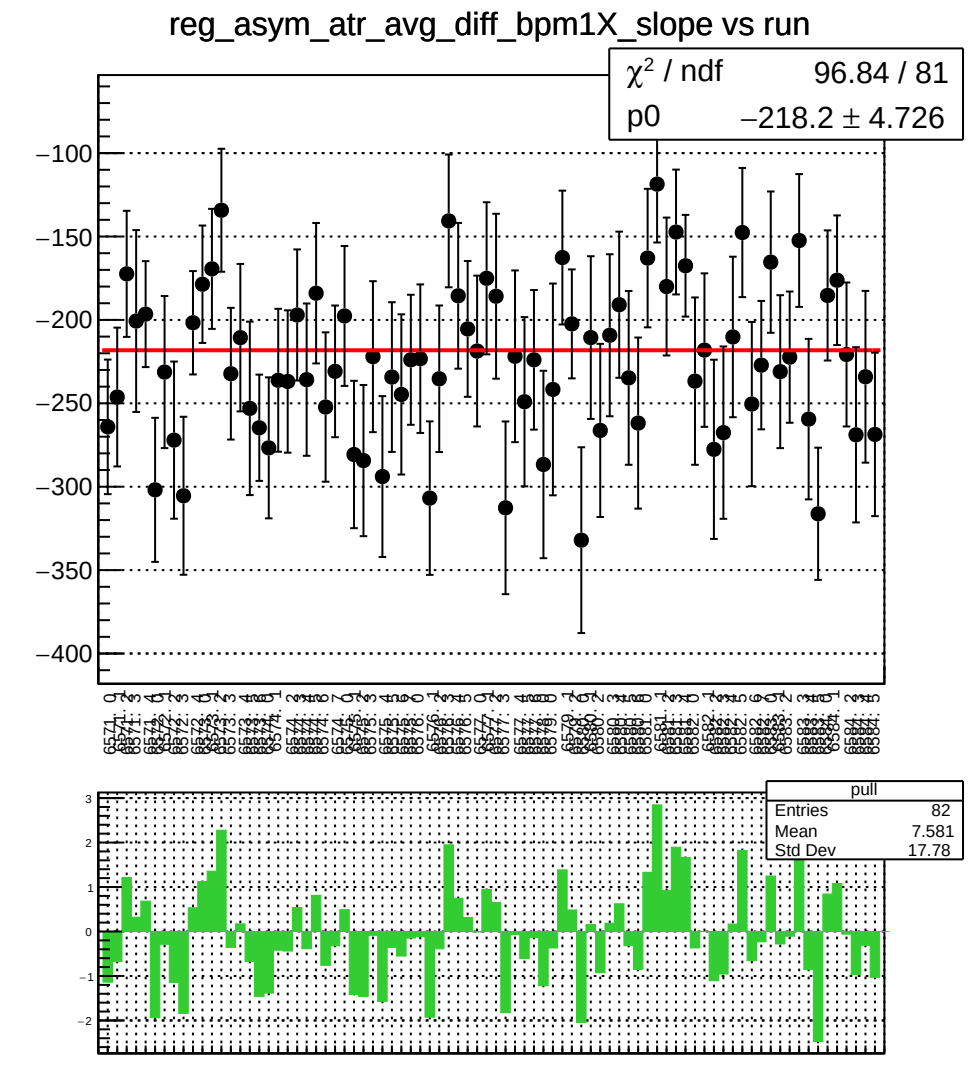

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 50.02 / 81
p0 −202.7 ± 4.768
pull
Entries 82
Mean −1.993
Std Dev 27.41

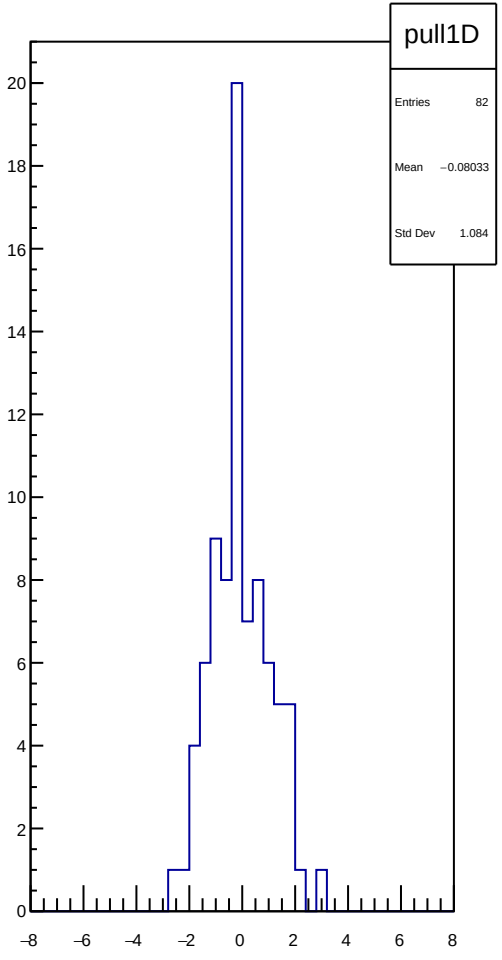

pull1D
Entries 82
Mean −0.06212
Std Dev 0.7786

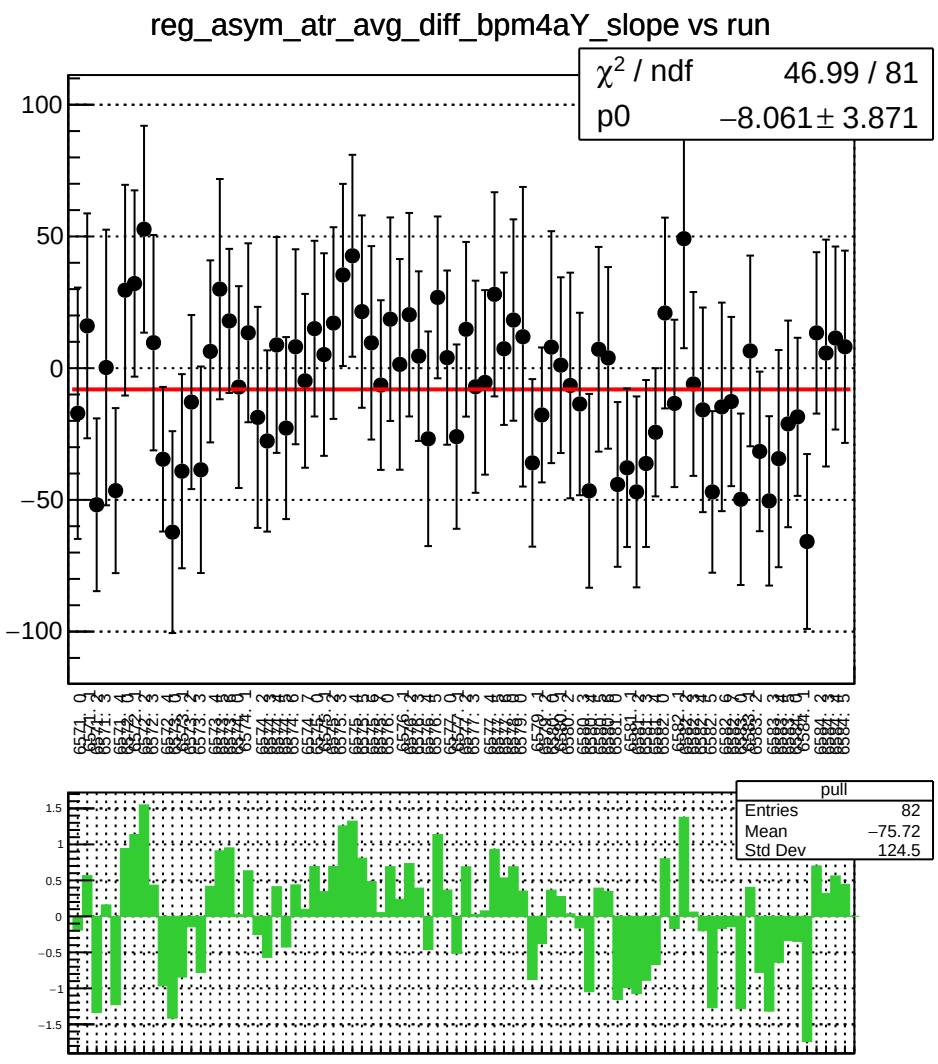

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 36.99 / 81
p0 −89.57 ± 4.421
pull
Entries 82
Mean 294.4
Std Dev 260.7

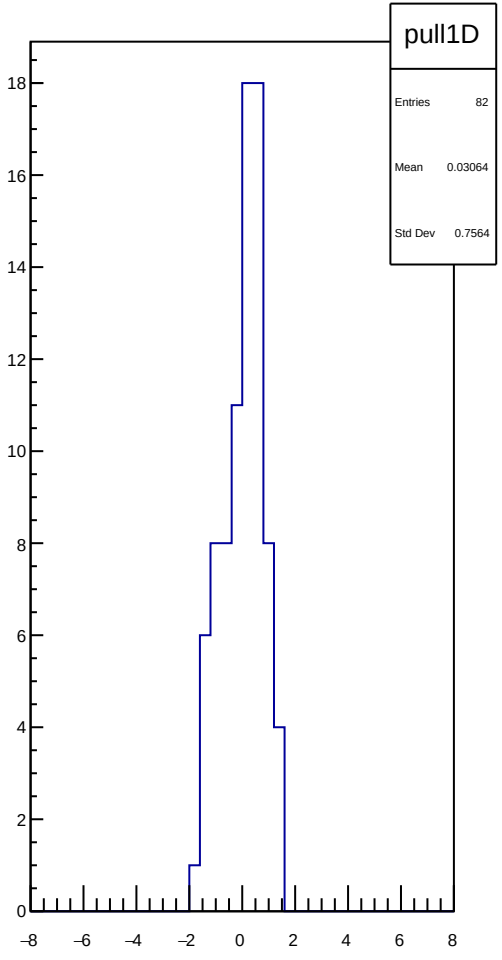

pull1D
Entries 82
Mean 0.01305
Std Dev 0.6715

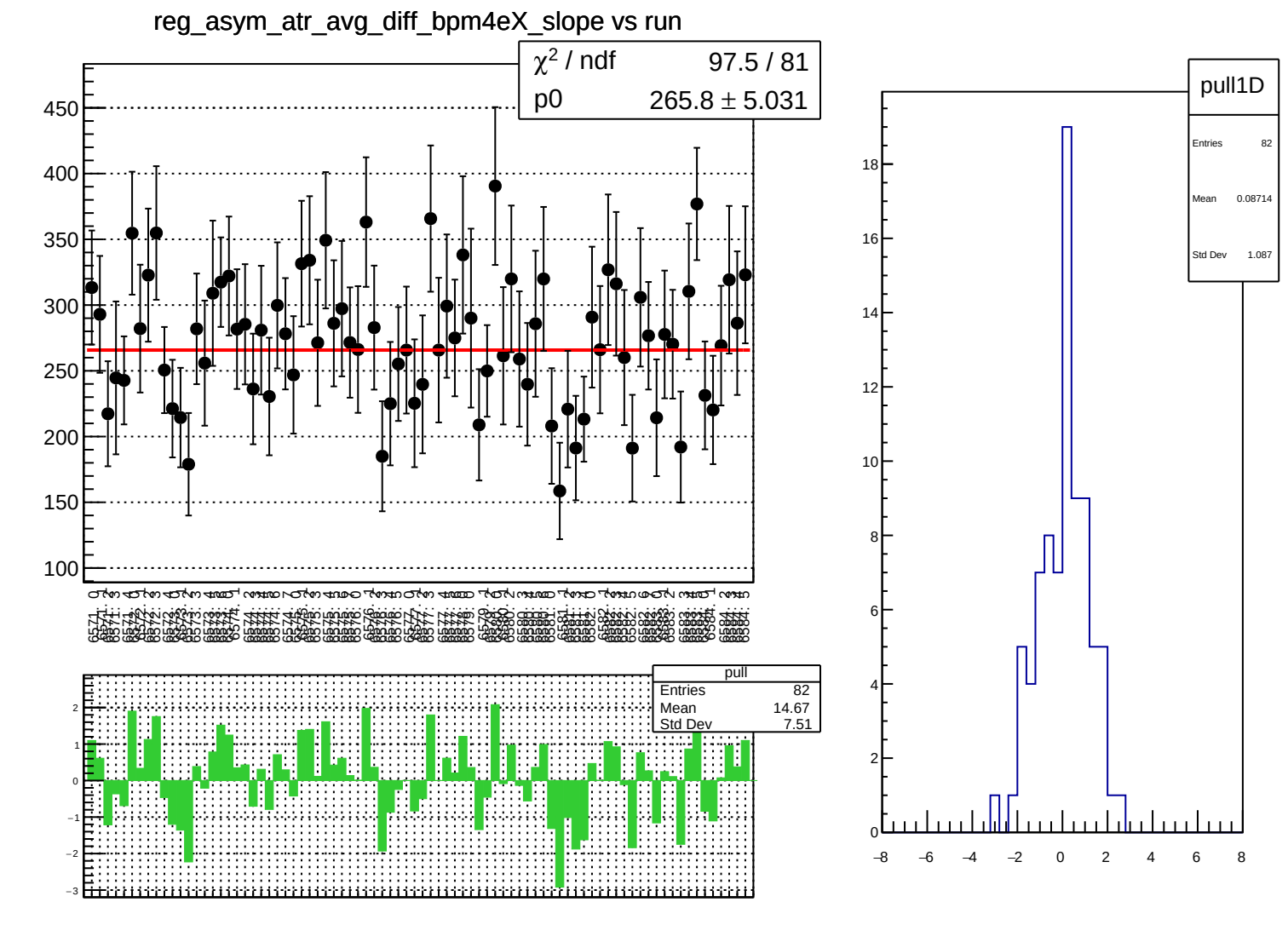

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 121.4 / 81
p0 152.7 ± 0.2082
160
155
150
145
140
135
pull
Entries 82
Mean 374.1
Std Dev 341.5
2
0
−2
−4
−6
−8
pull1D
Entries 82
Mean 0.1354
Std Dev 0.7207
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

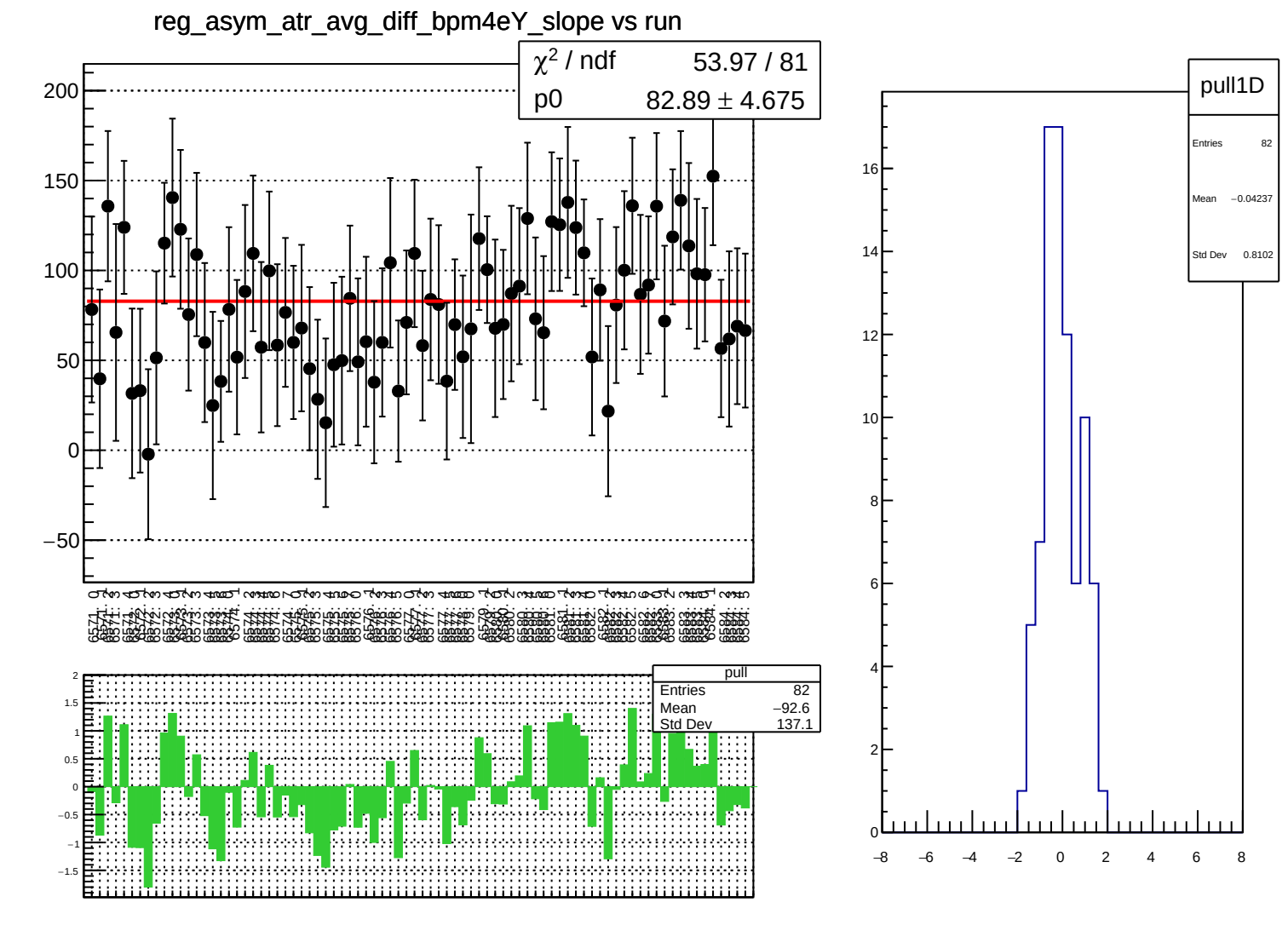

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 96.84 / 81
p0 −218.2 ± 4.726
pull
Entries 82
Mean 7.581
Std Dev 17.78

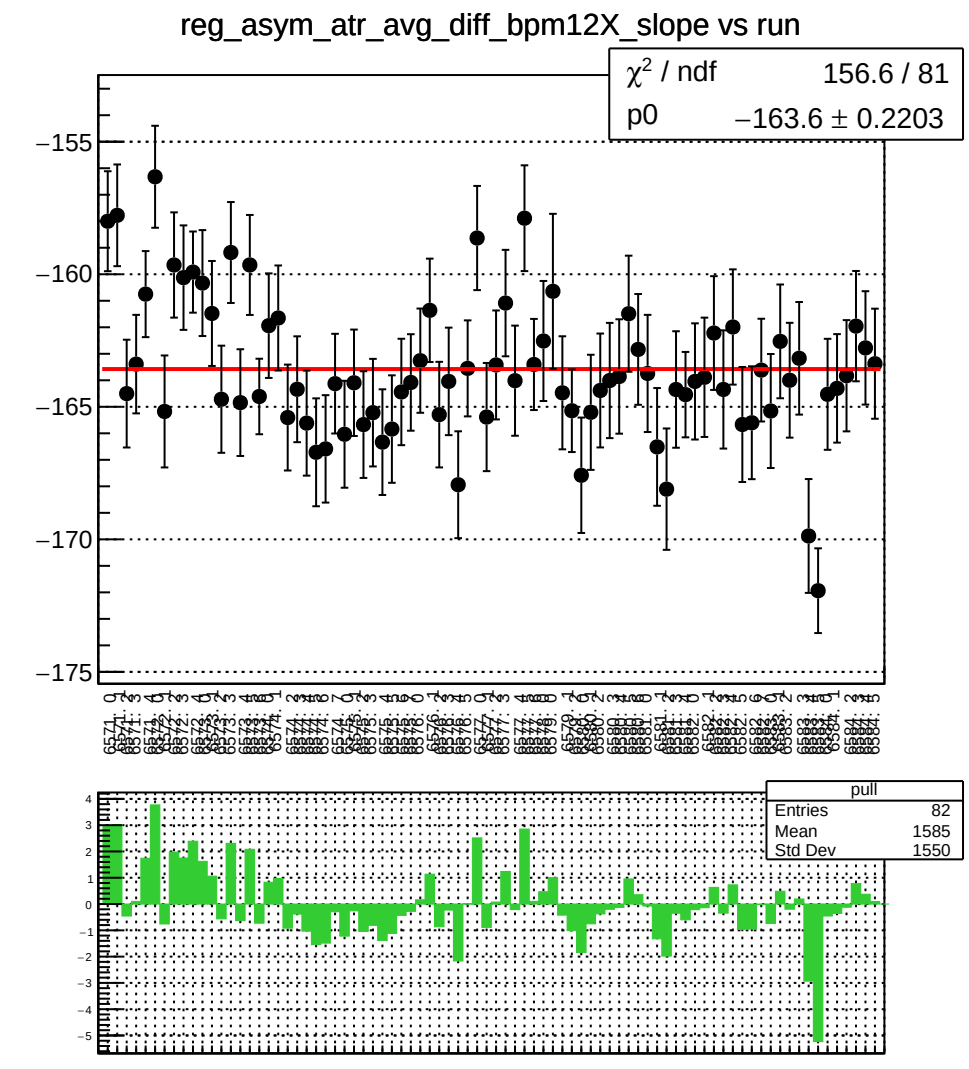

pull1D
Entries 82
Mean −0.08033
Std Dev 1.084

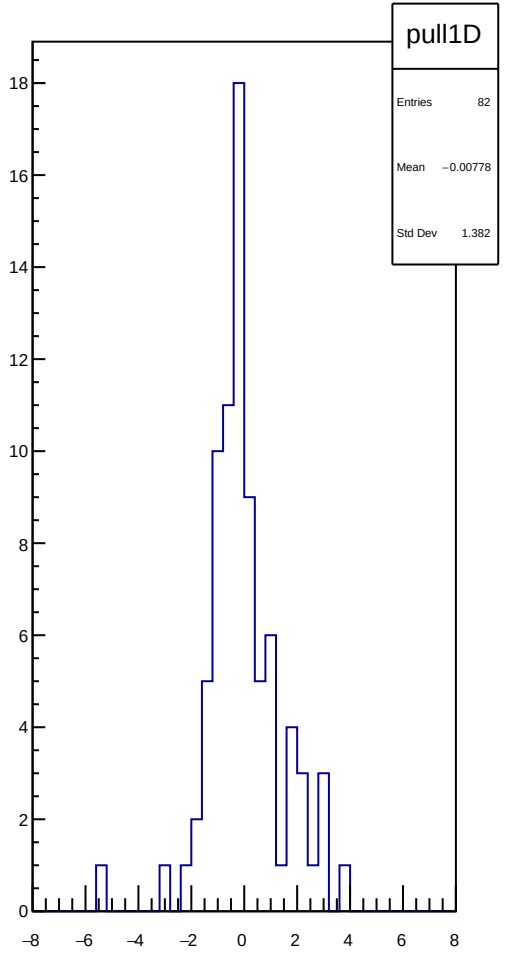

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 46.99 / 81
p0 −8.061 ± 3.871
pull
Entries 82
Mean −75.72
Std Dev 124.5

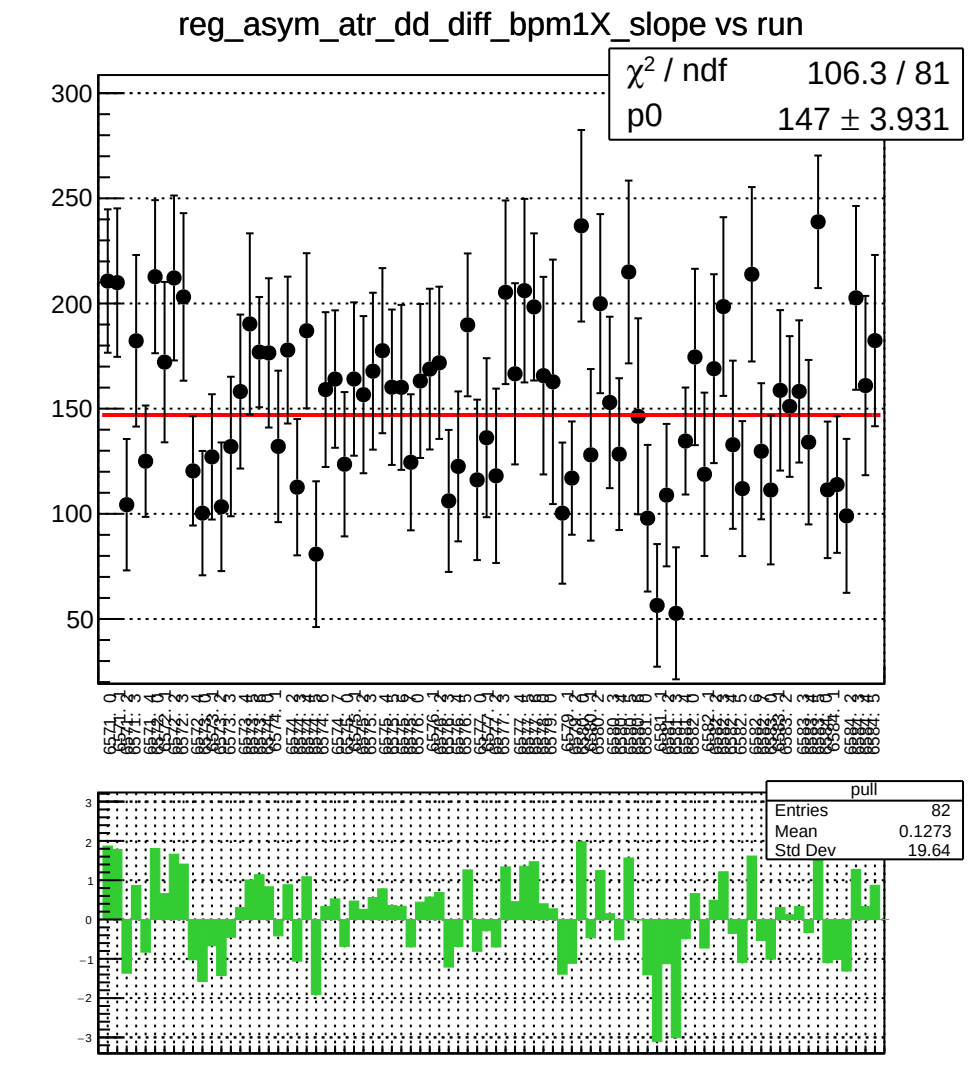

pull1D
Entries 82
Mean 0.03064
Std Dev 0.7564

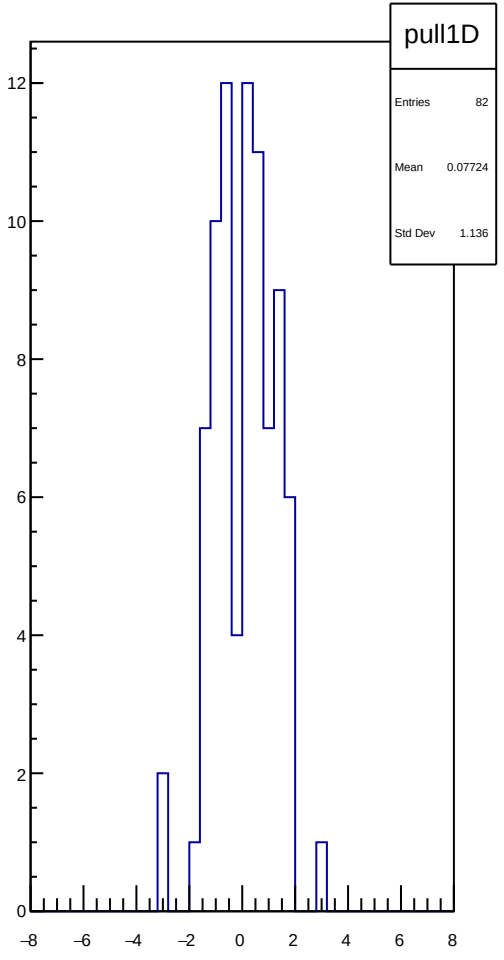

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 97.5 / 81
p0 265.8 ± 5.031
pull
Entries 82
Mean 14.67
Std Dev 7.51
pull1D
Entries 82
Mean 0.08714
Std Dev 1.087

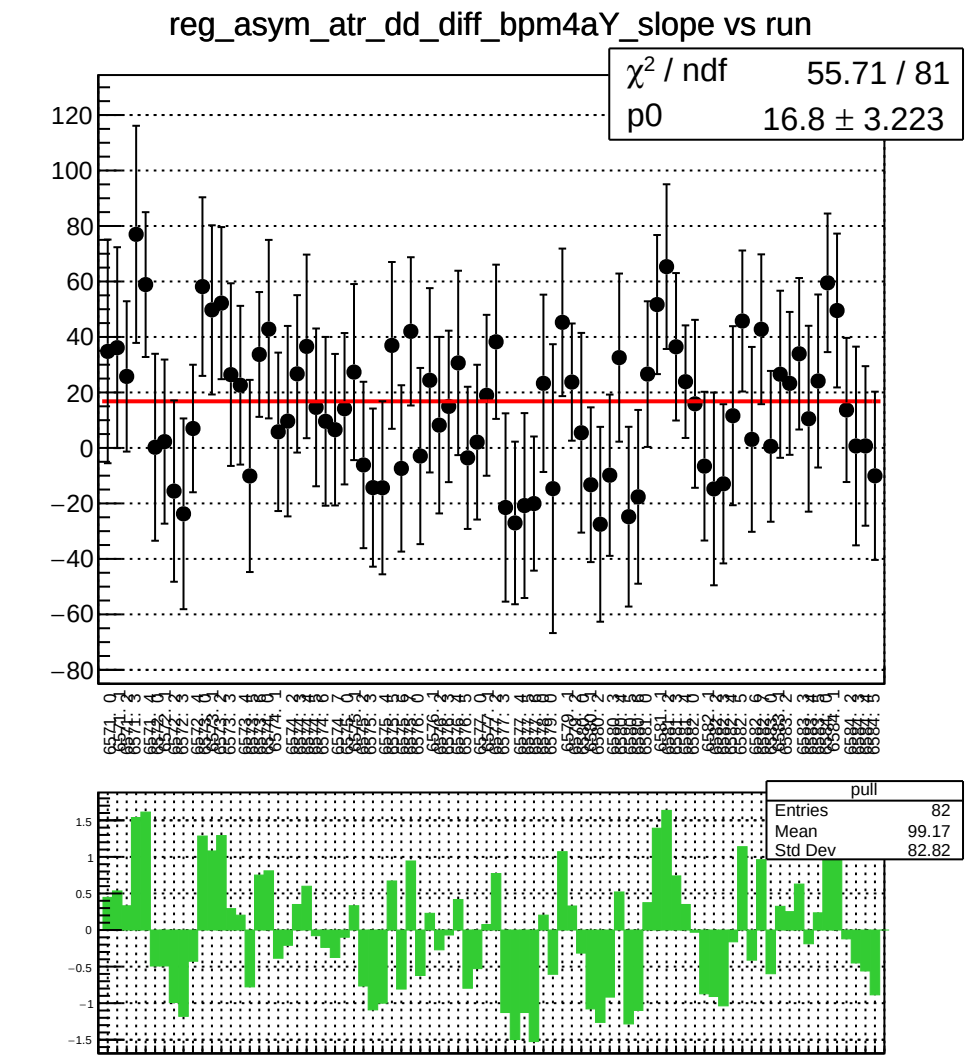

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 53.97 / 81
p0 82.89 ± 4.675
pull
Entries 82
Mean −92.6
Std Dev 137.1
pull1D
Entries 82
Mean −0.04237
Std Dev 0.8102

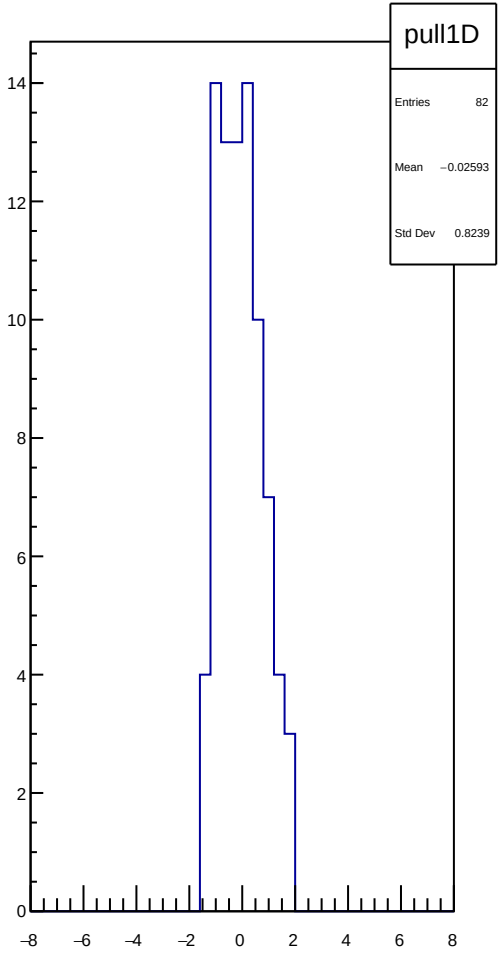

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 156.6 / 81
p0 −163.6 ± 0.2203
−155
−160
−165
−170
−175
pull
Entries 82
Mean 1585
Std Dev 1550
4
3
2
1
0
−1
−2
−3
−4
−5

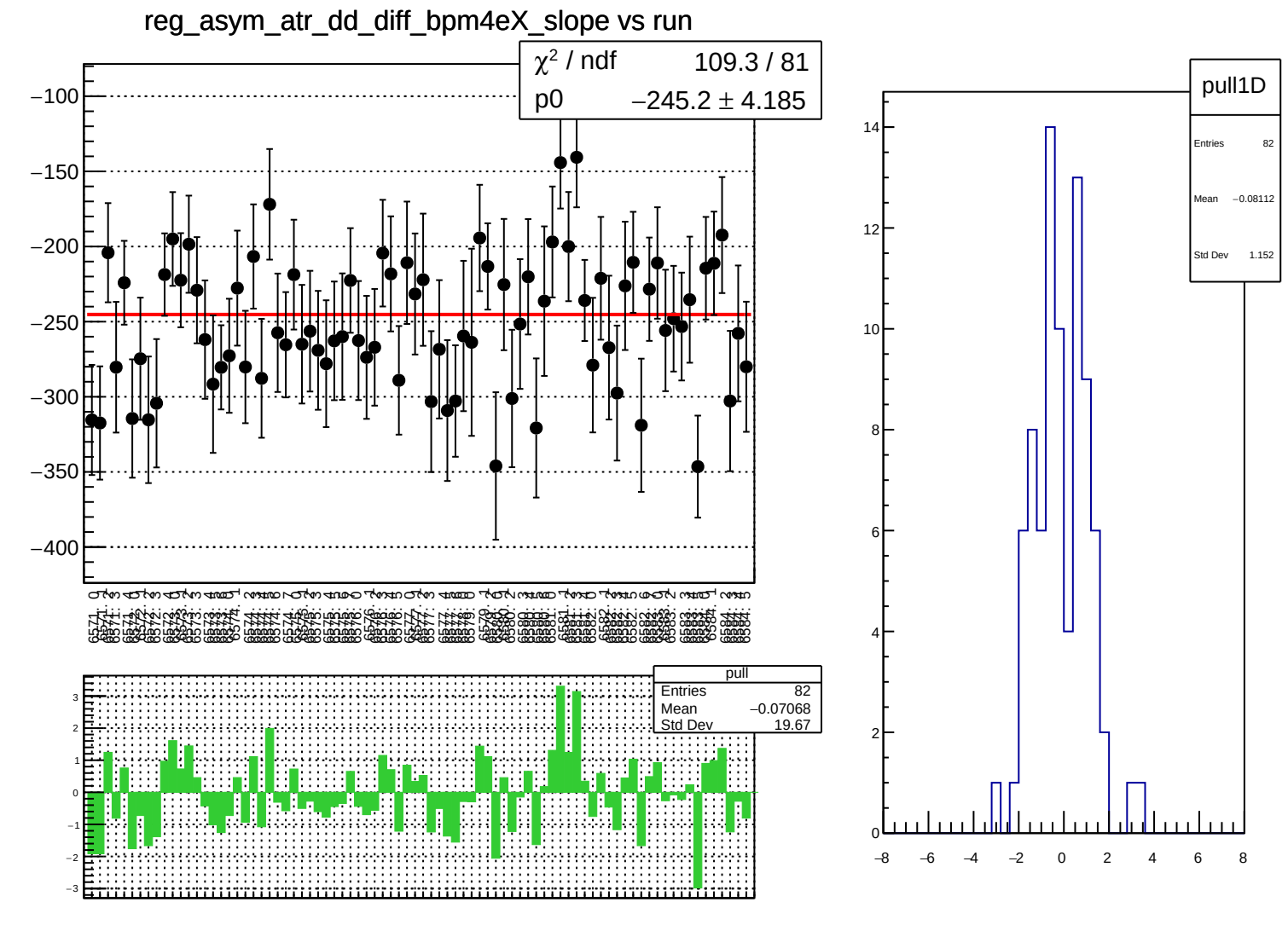

pull1D
Entries 82
Mean −0.00778
Std Dev 1.382
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

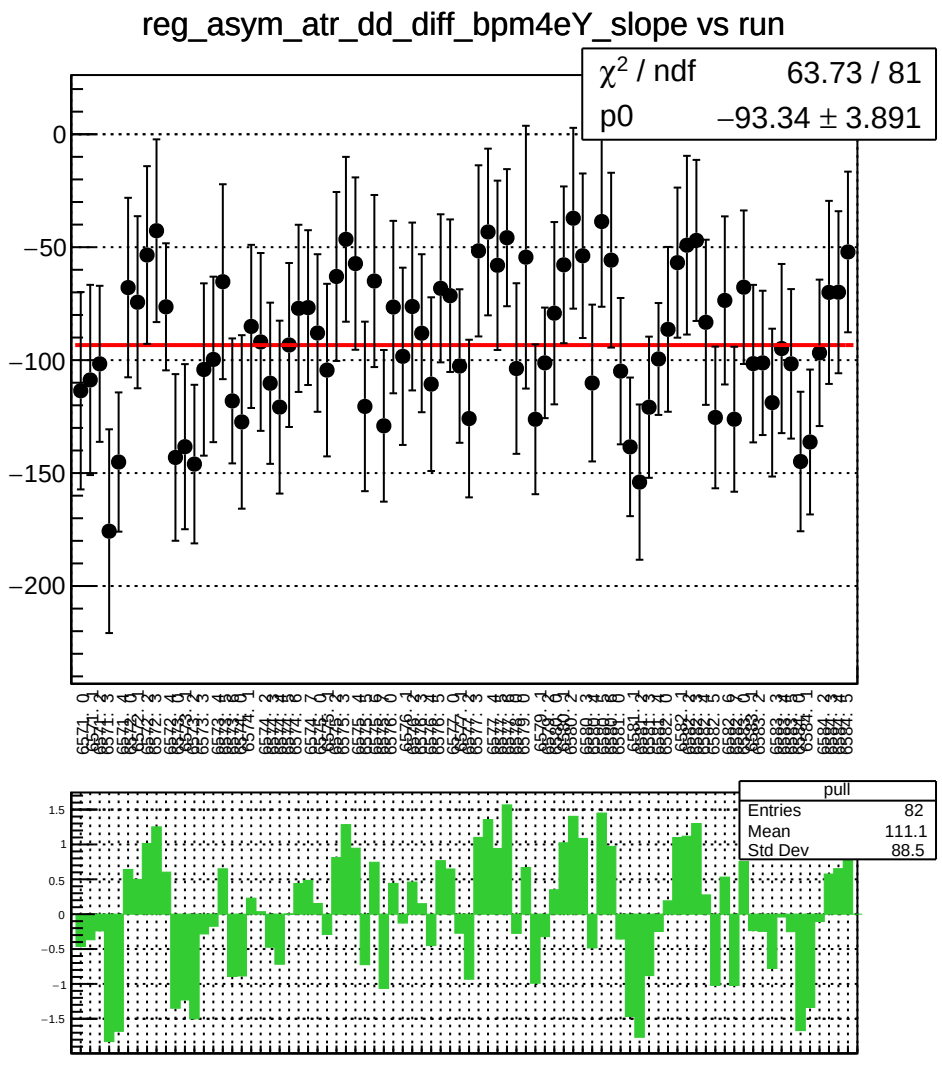

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 106.3 / 81
p0 147 ± 3.931
300
250
200
150
100
50
pull
Entries 82
Mean 0.1273
Std Dev 19.64
3
2
1
0
−1
−2
−3

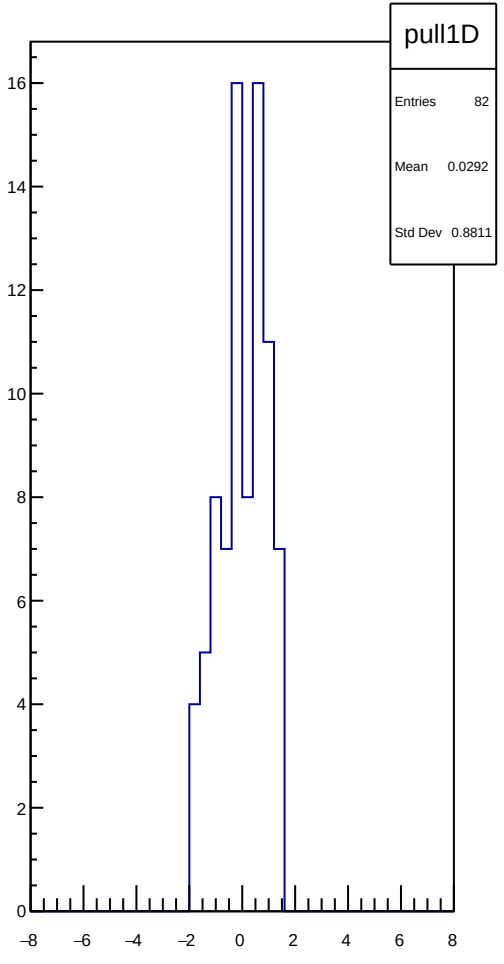

pull1D
Entries 82
Mean 0.07724
Std Dev 1.136
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

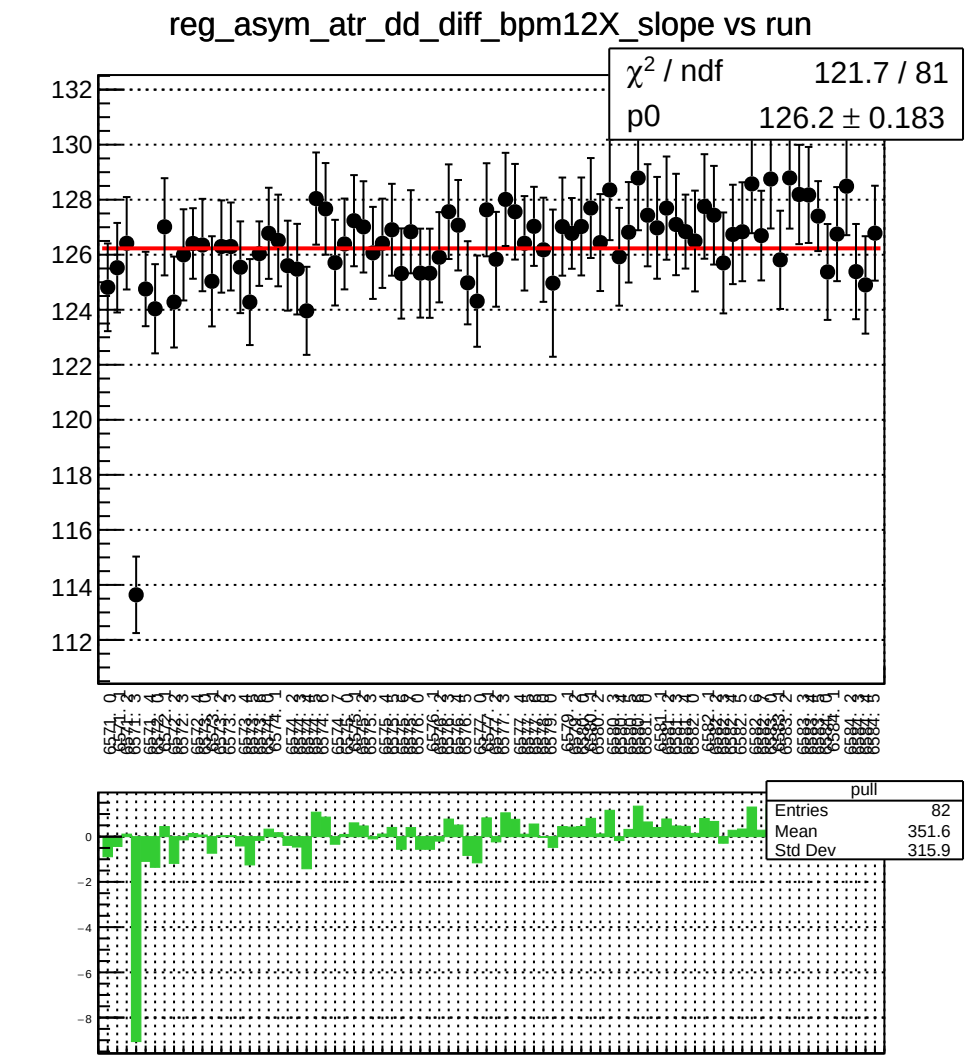

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 55.71 / 81
p0 16.8 ± 3.223
pull
Entries 82
Mean 99.17
Std Dev 82.82

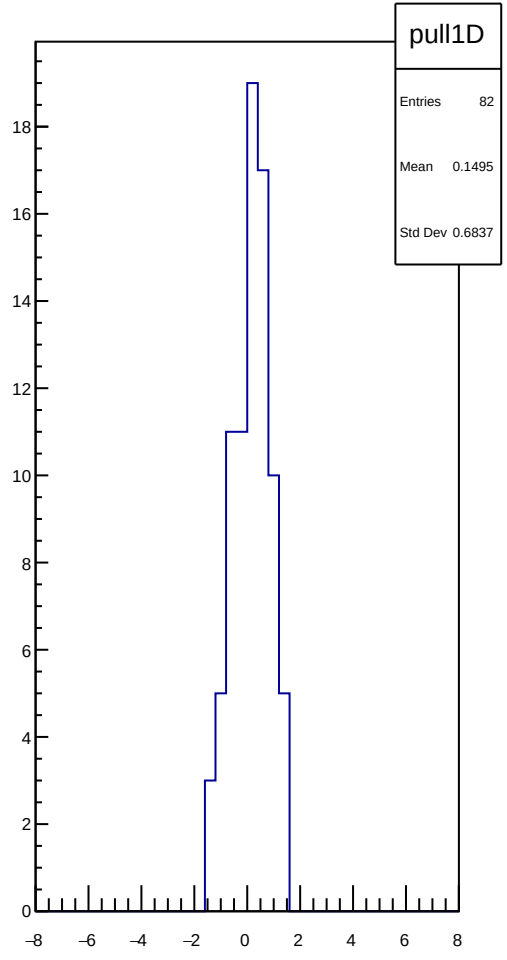

pull1D
Entries 82
Mean −0.02593
Std Dev 0.8239

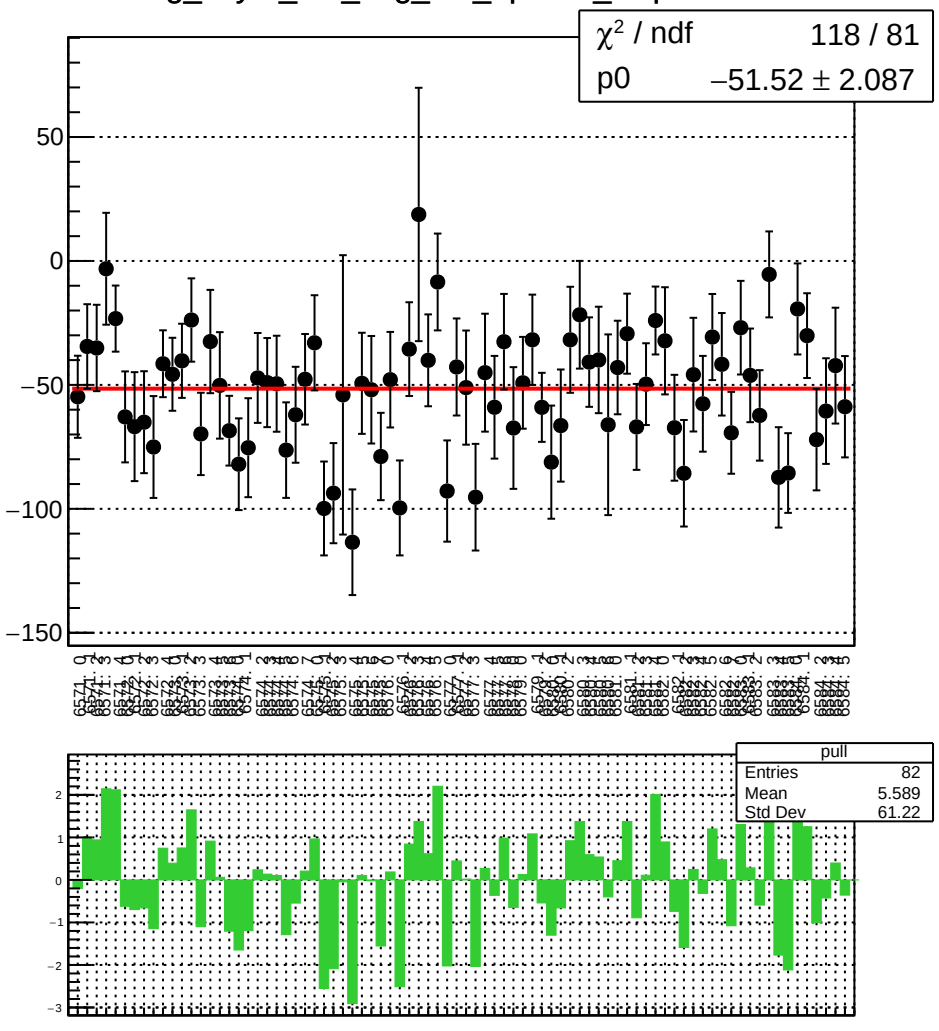

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 109.3 / 81
p0 −245.2 ± 4.185
pull
Entries 82
Mean −0.07068
Std Dev 19.67
pull1D
Entries 82
Mean −0.08112
Std Dev 1.152

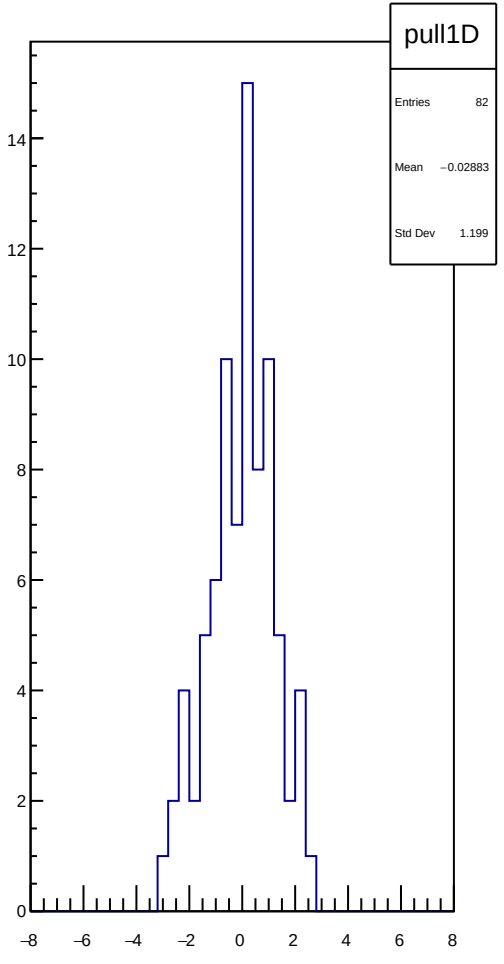

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 63.73 / 81
p0 −93.34 ± 3.891
0
−50
−100
−150
−200
pull
Entries 82
Mean 111.1
Std Dev 88.5
1.5
1
0.5
0
−0.5
−1
−1.5

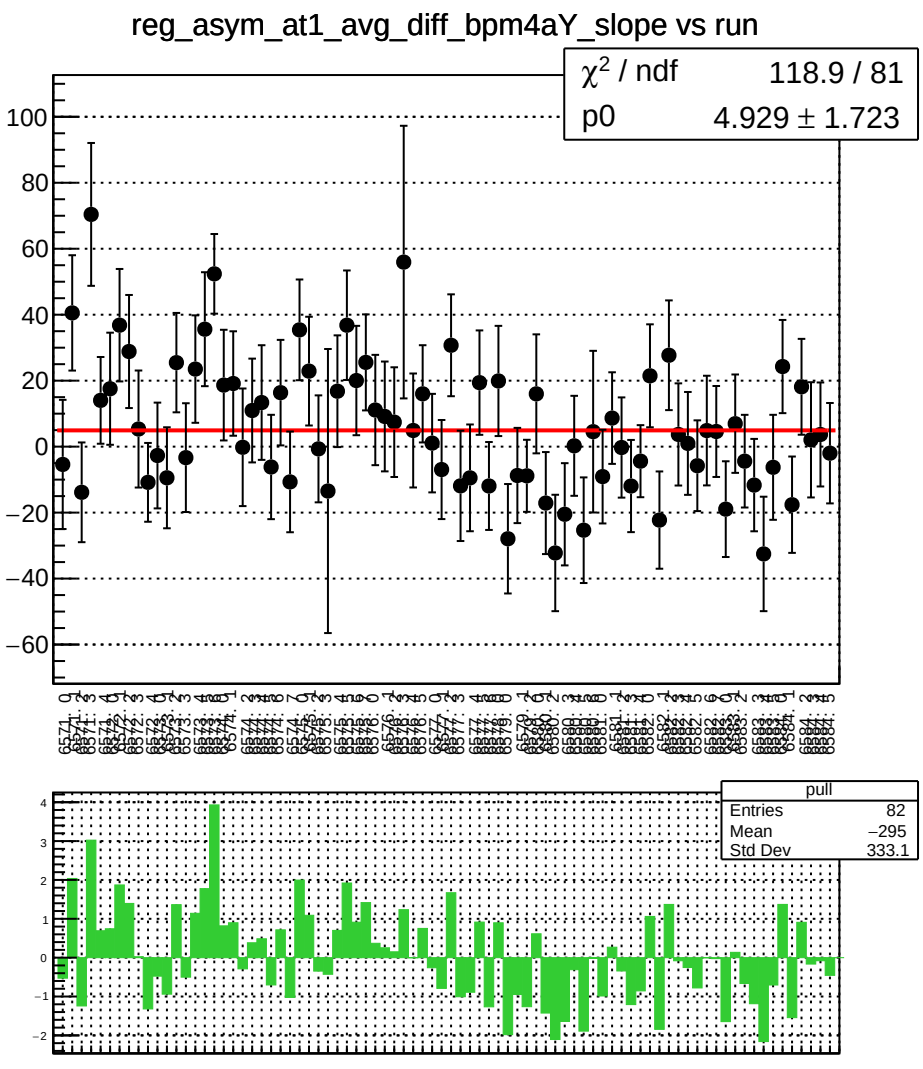

pull1D
Entries 82
Mean 0.0292
Std Dev 0.8811
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

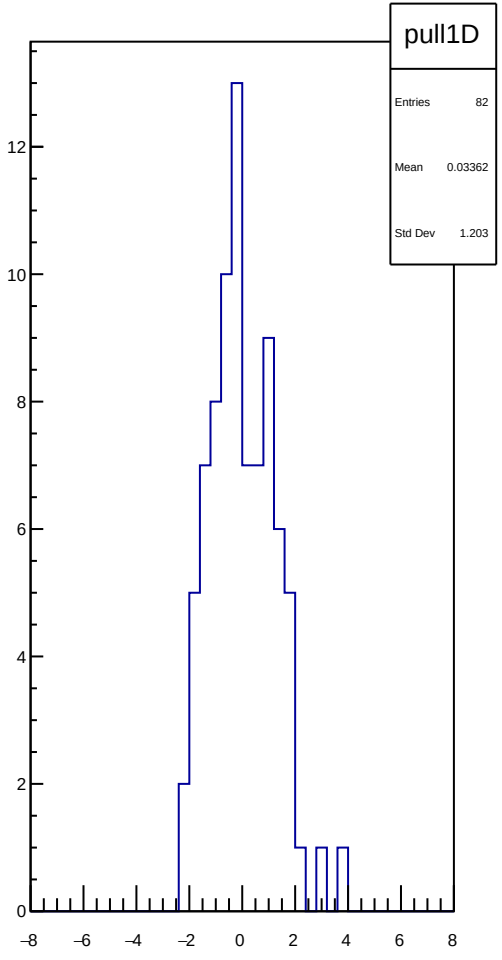

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 121.7 / 81
p0 126.2 ± 0.183
pull
Entries 82
Mean 351.6
Std Dev 315.9

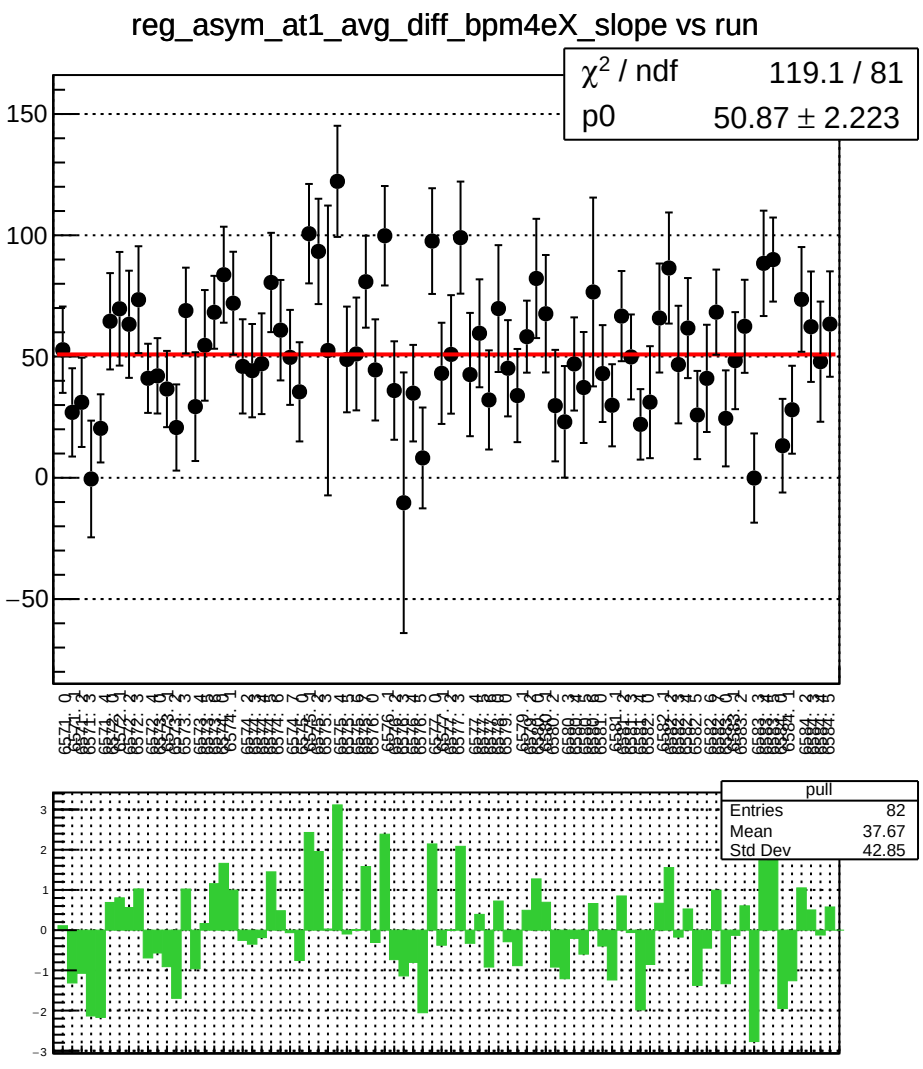

pull1D
Entries 82
Mean 0.1495
Std Dev 0.6837

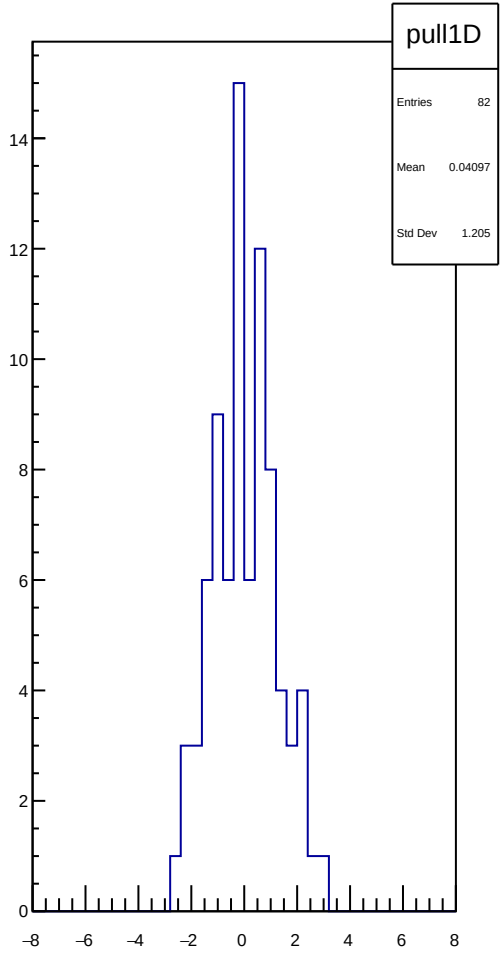

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 118 / 81
p0 −51.52 ± 2.087
pull
Entries 82
Mean 5.589
Std Dev 61.22

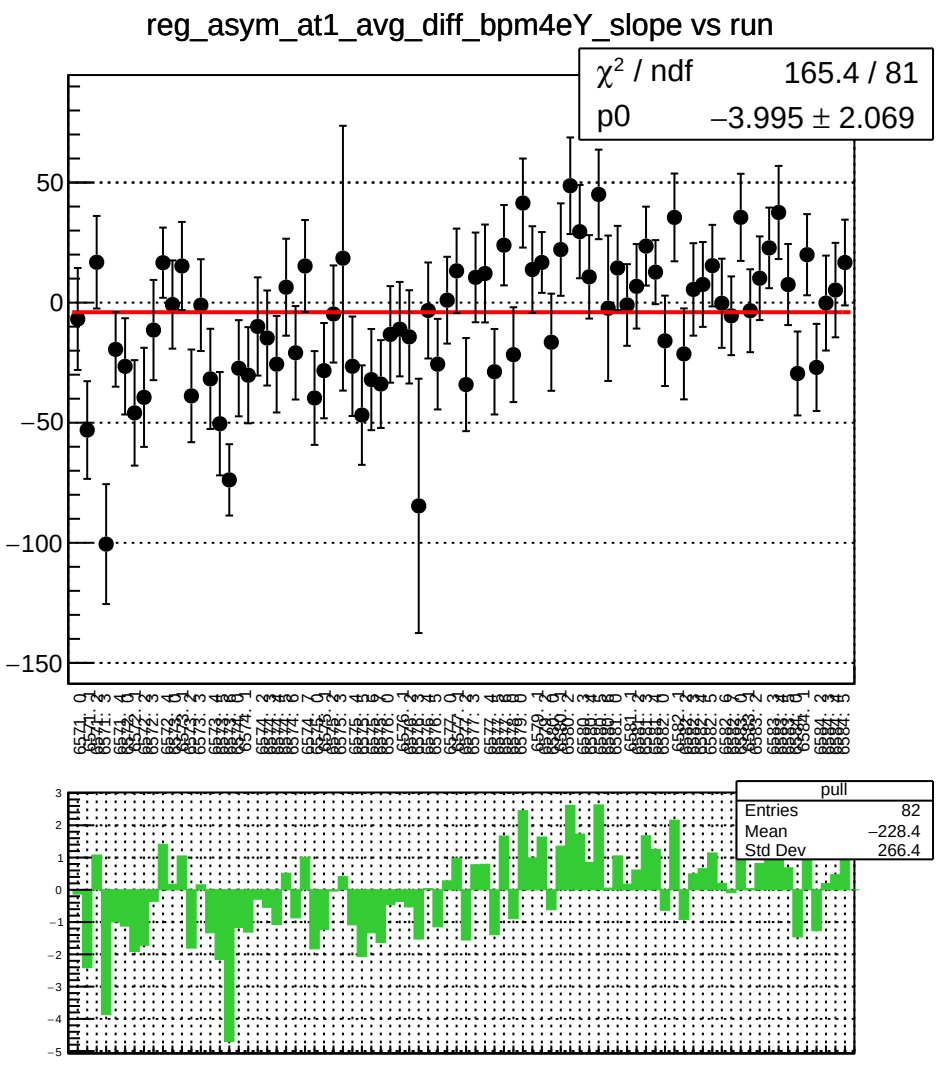

pull1D
Entries 82
Mean −0.02883
Std Dev 1.199

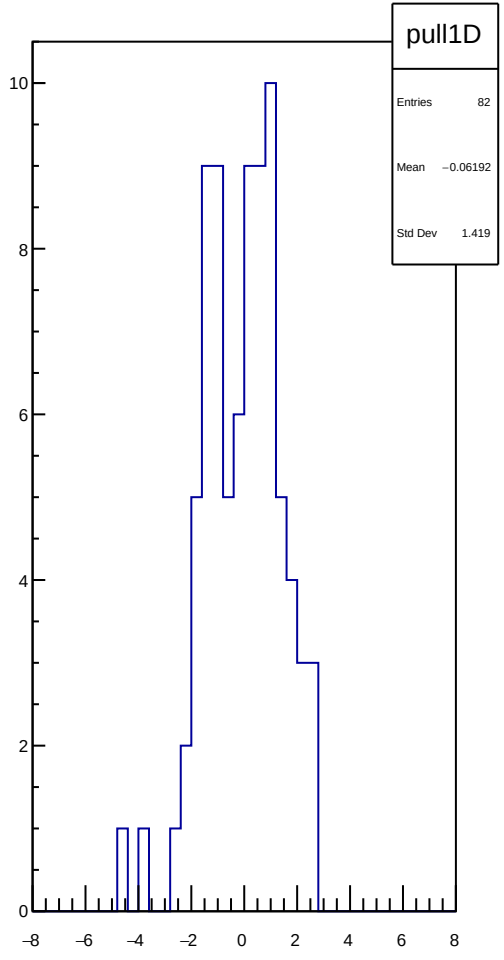

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 118.9 / 81
p0 4.929 ± 1.723
pull
Entries 82
Mean −295
Std Dev 333.1

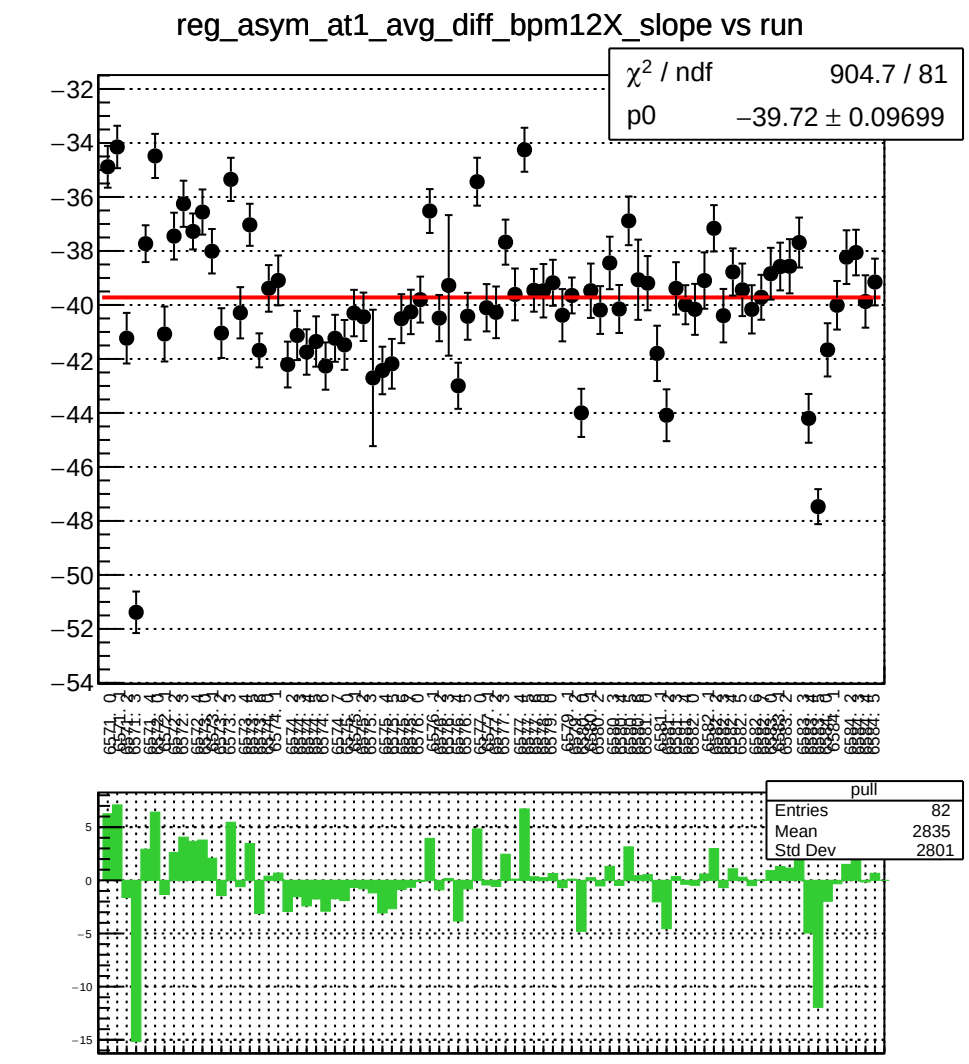

pull1D
Entries 82
Mean 0.03362
Std Dev 1.203

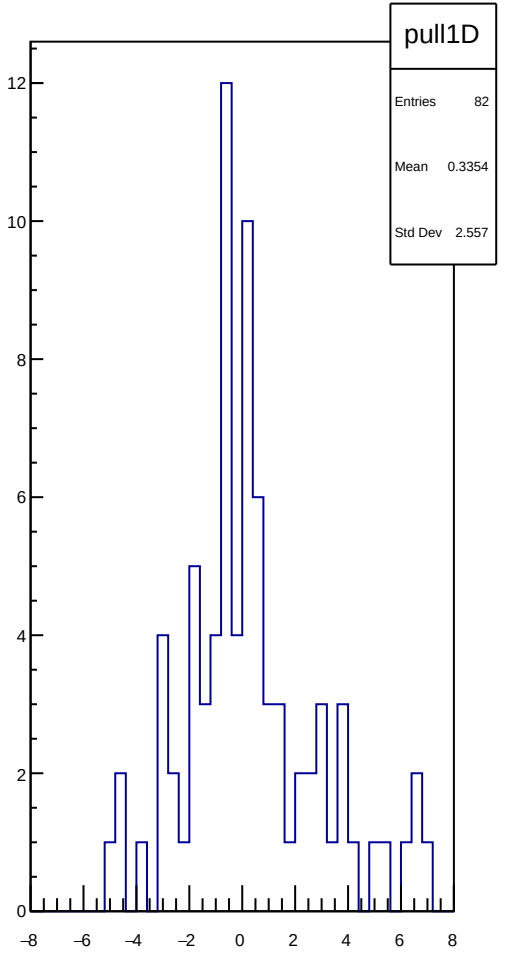

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 119.1 / 81
p0 50.87 ± 2.223
150
100
50
0
−50
pull
Entries 82
Mean 37.67
Std Dev 42.85
3
2
1
0
−1
−2
−3

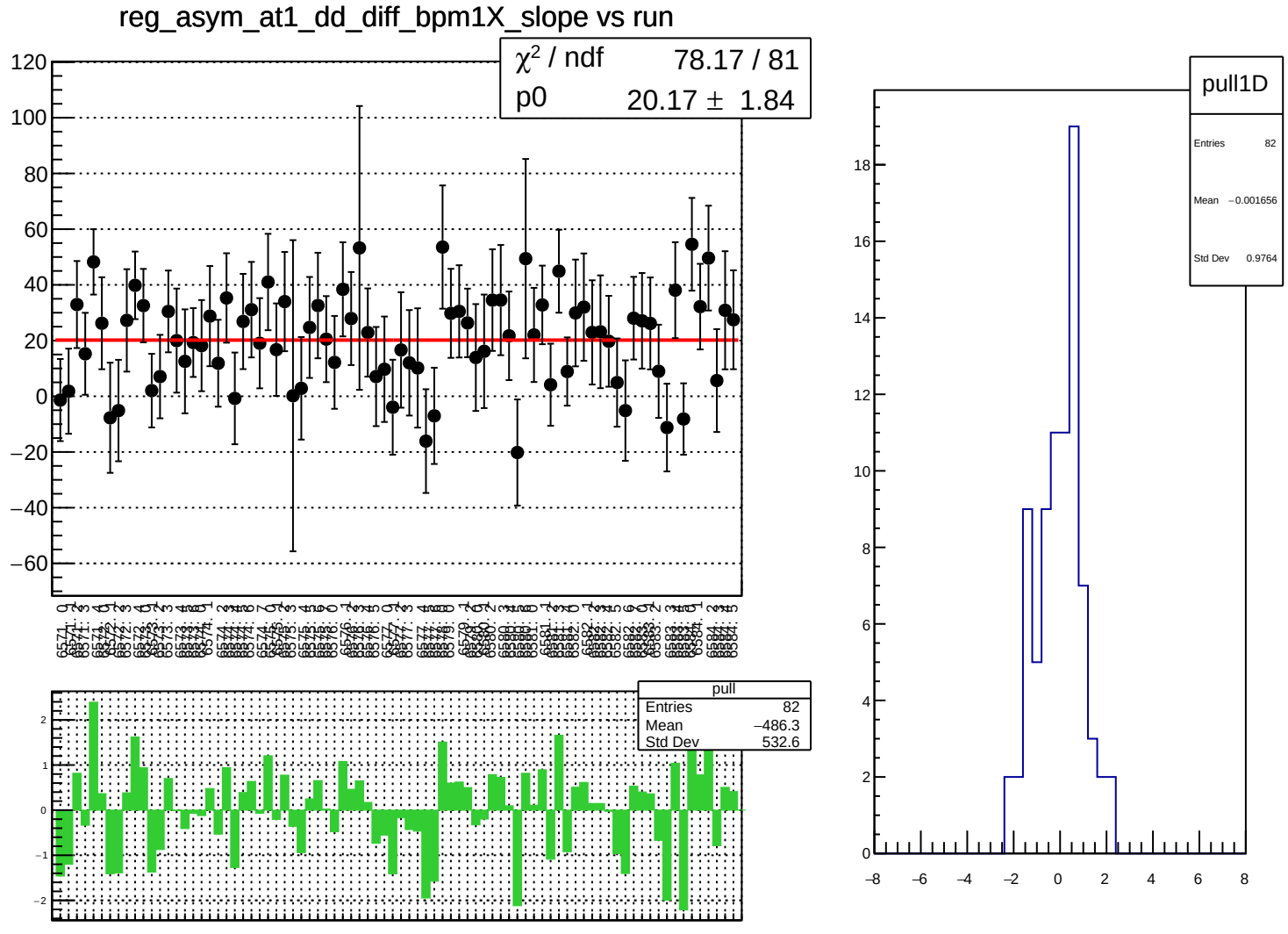

pull1D
Entries 82
Mean 0.04097
Std Dev 1.205
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

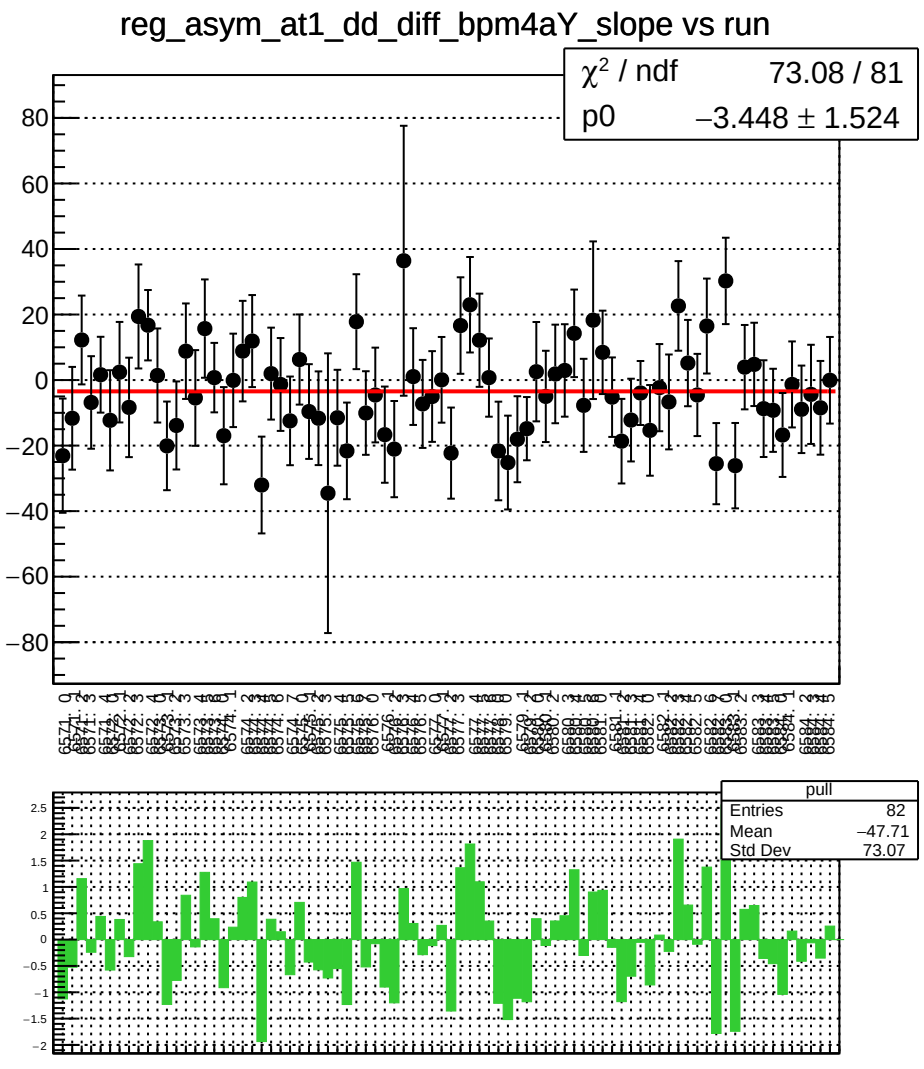

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 165.4 / 81
p0 −3.995 ± 2.069
50
0
−50
−100
−150
pull
Entries 82
Mean −228.4
Std Dev 266.4
3
2
1
0
−1
−2
−3
−4
−5

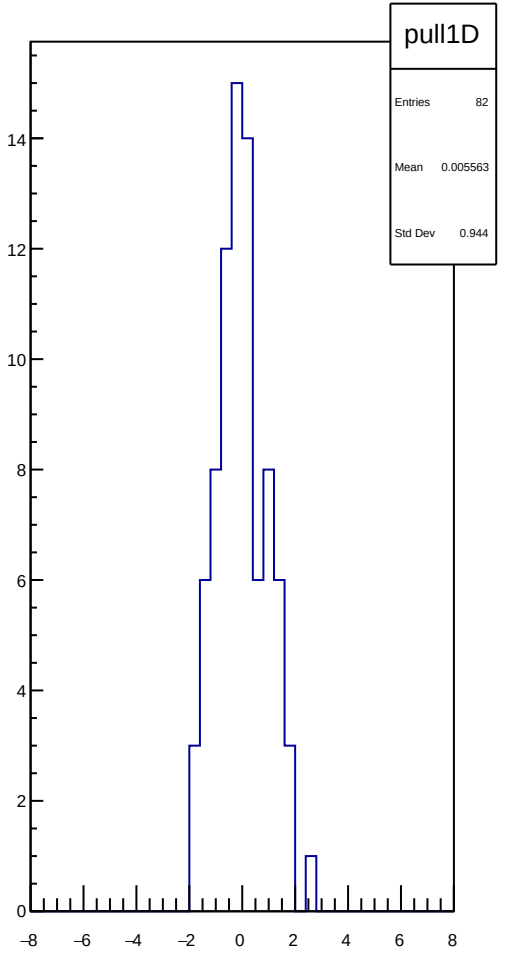

pull1D
Entries 82
Mean −0.06192
Std Dev 1.419
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

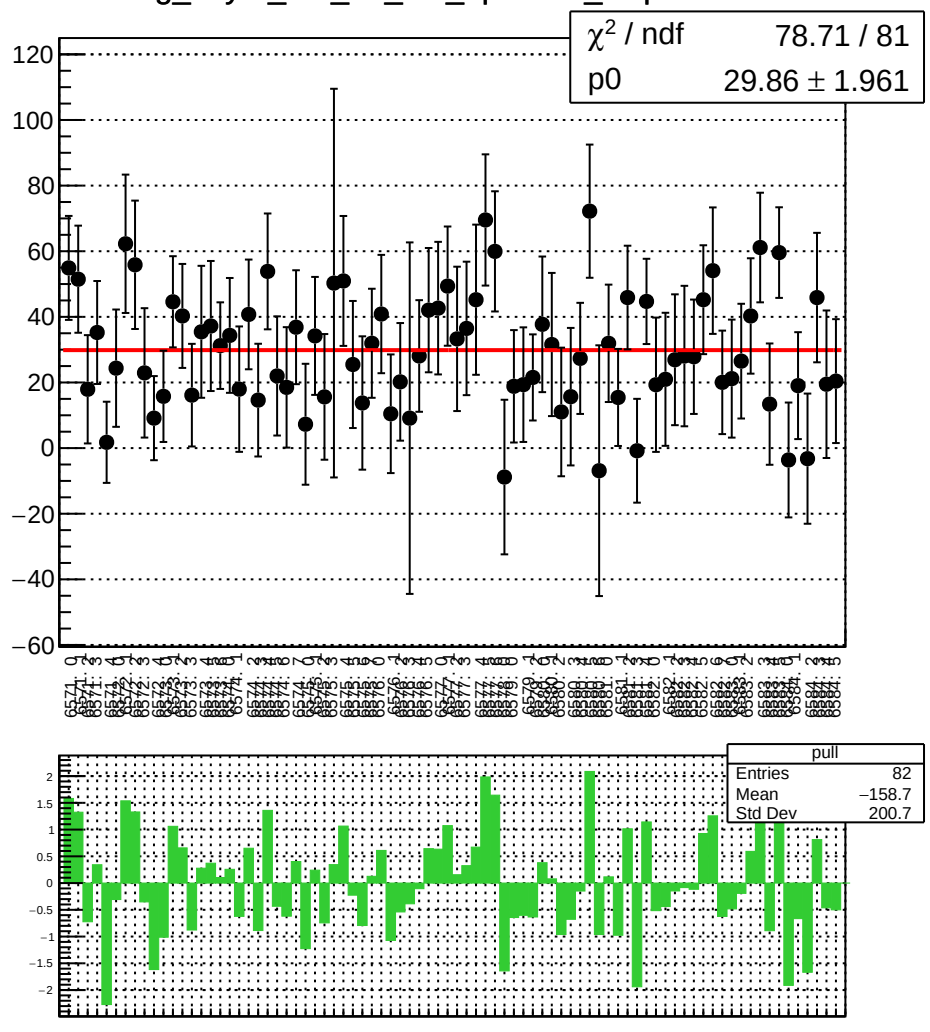

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 904.7 / 81
p0 −39.72 ± 0.09699
pull
Entries 82
Mean 2835
Std Dev 2801

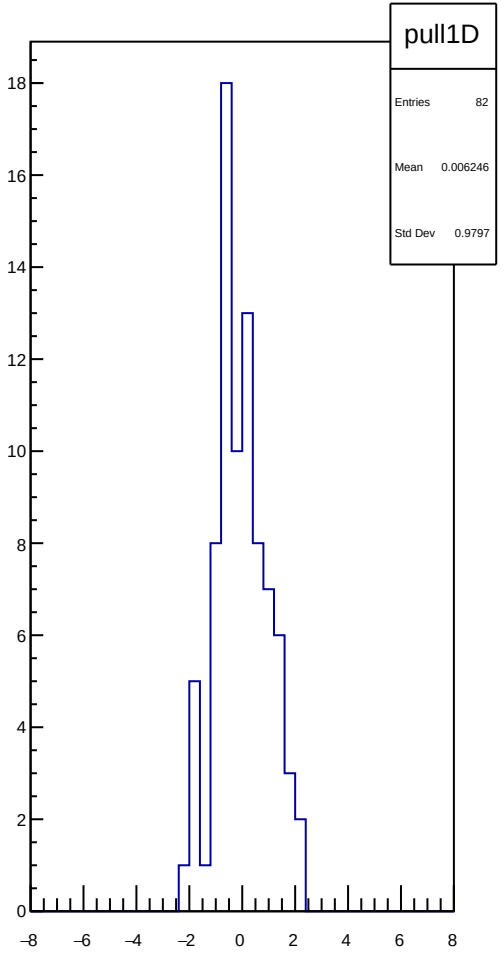

pull1D
Entries 82
Mean 0.3354
Std Dev 2.557

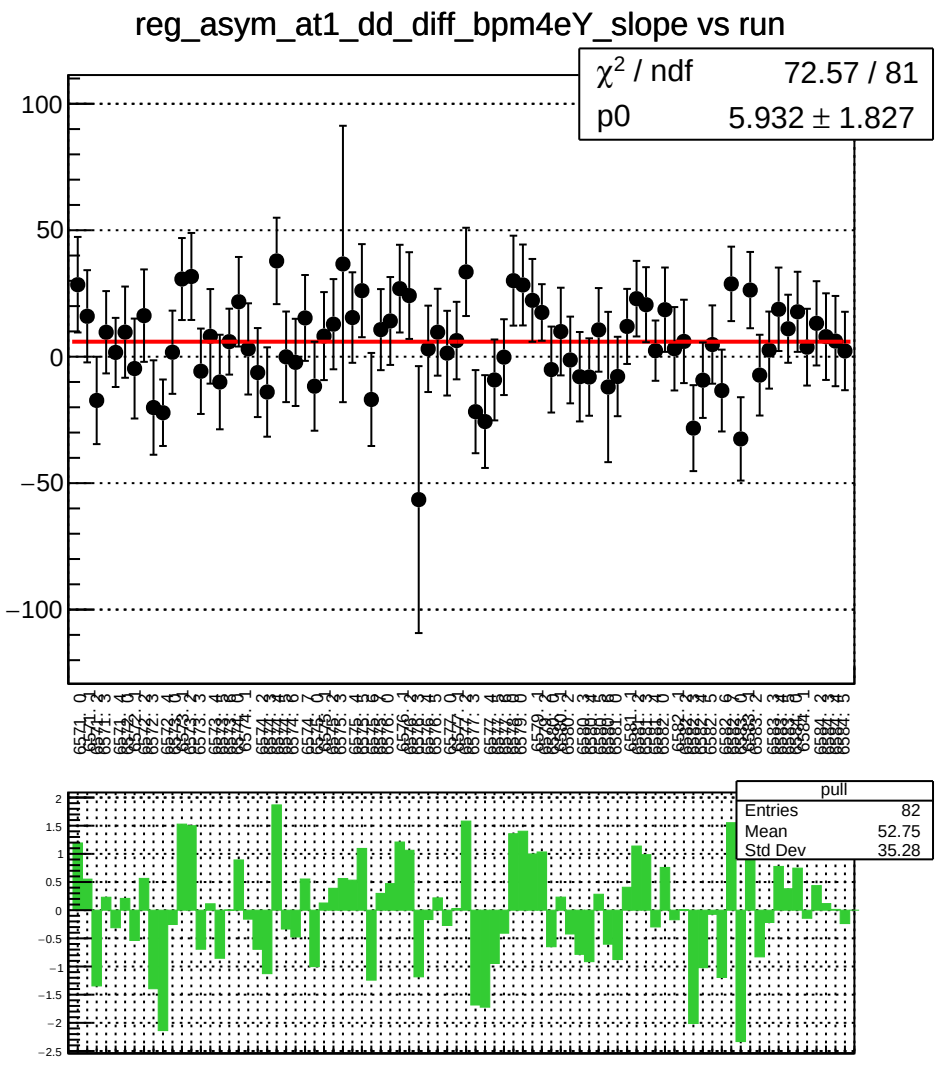

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 78.17 / 81
p0 20.17 ± 1.84
pull
Entries 82
Mean −486.3
Std Dev 532.6
pull1D
Entries 82
Mean −0.001656
Std Dev 0.9764

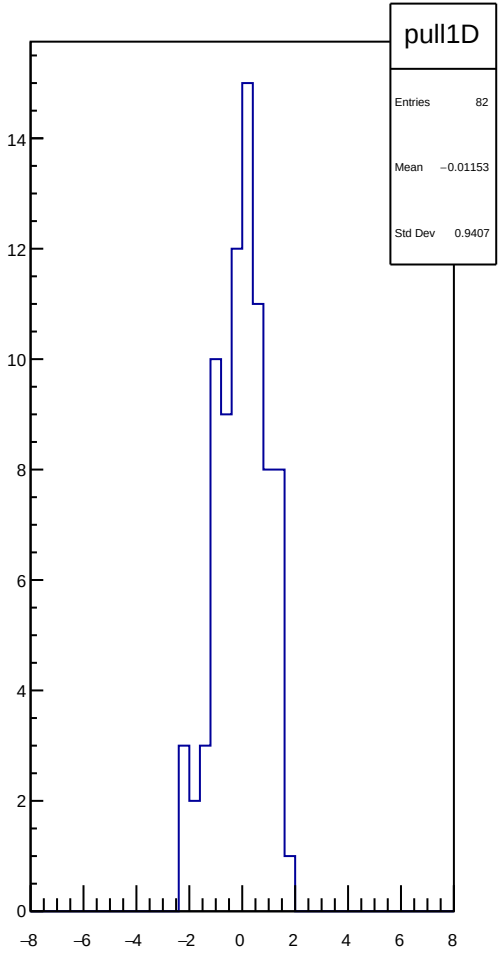

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 73.08 / 81
p0 −3.448 ± 1.524
pull
Entries 82
Mean −47.71
Std Dev 73.07

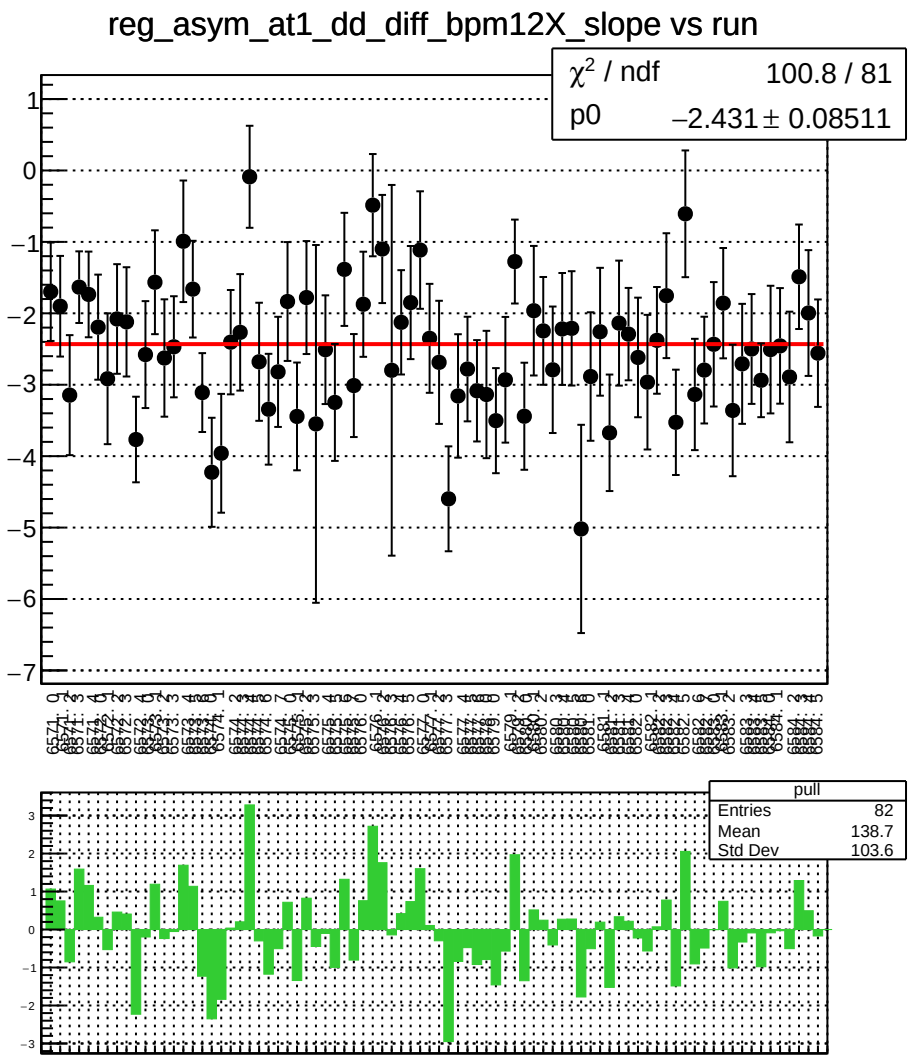

pull1D
Entries 82
Mean 0.005563
Std Dev 0.944

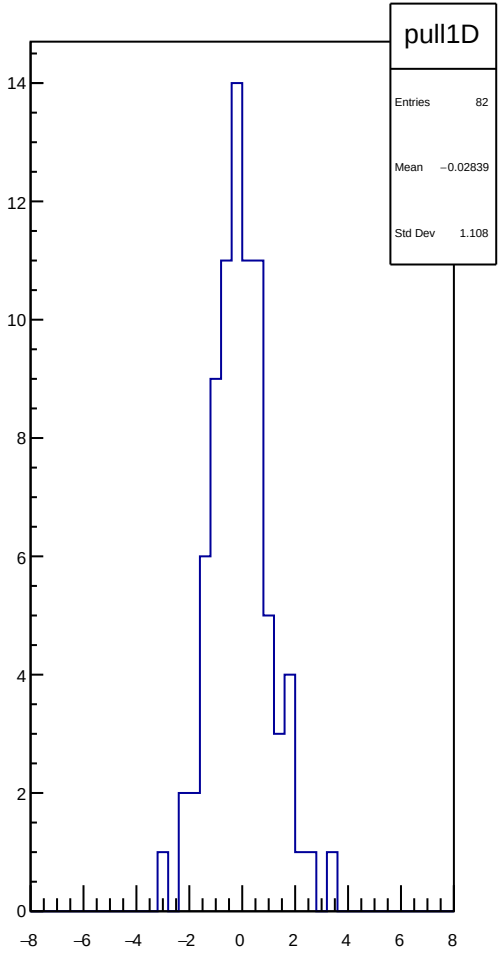

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 78.71 / 81
p0 29.86 ± 1.961
pull
Entries 82
Mean −158.7
Std Dev 200.7

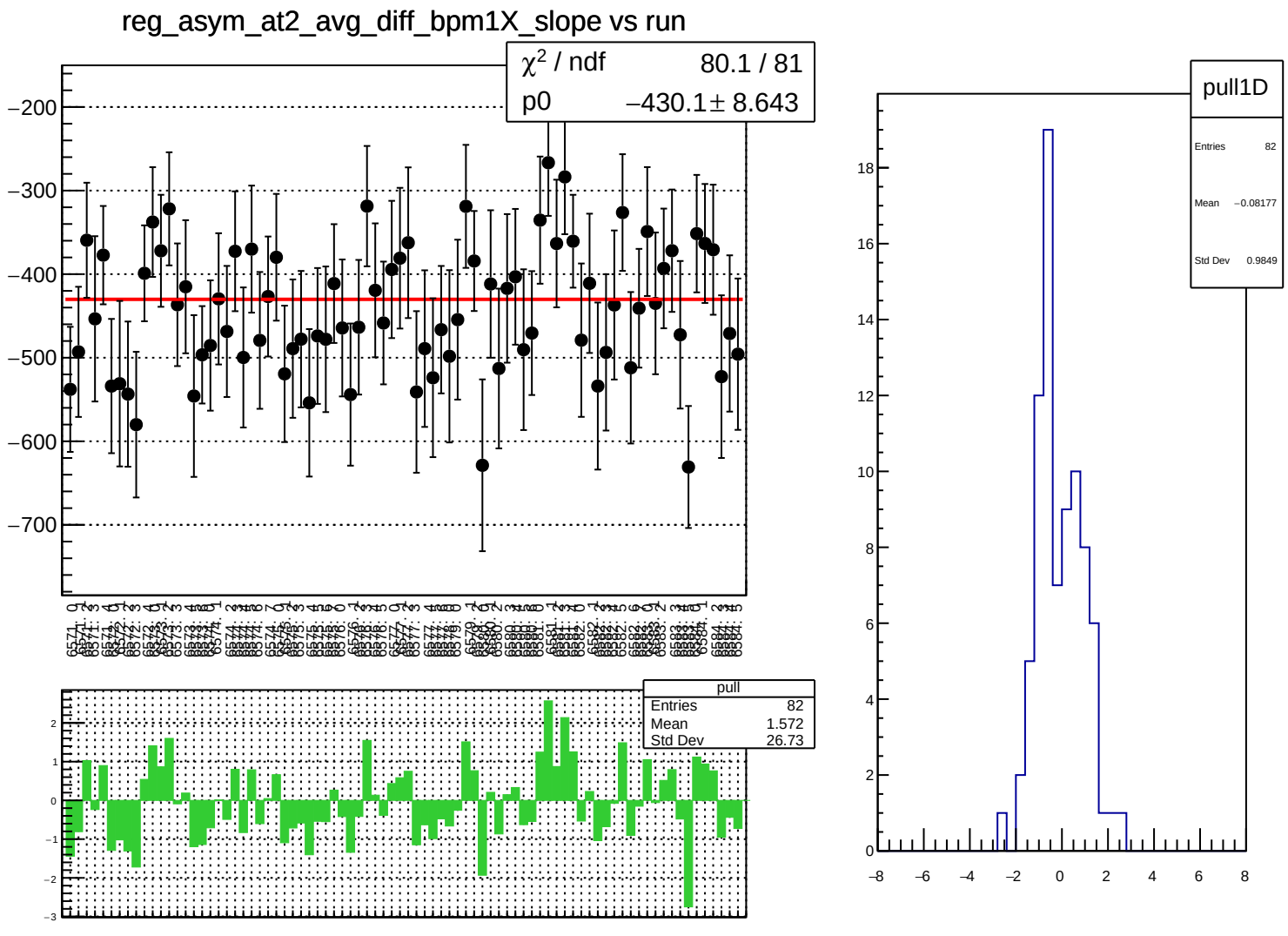

pull1D
Entries 82
Mean 0.006246
Std Dev 0.9797

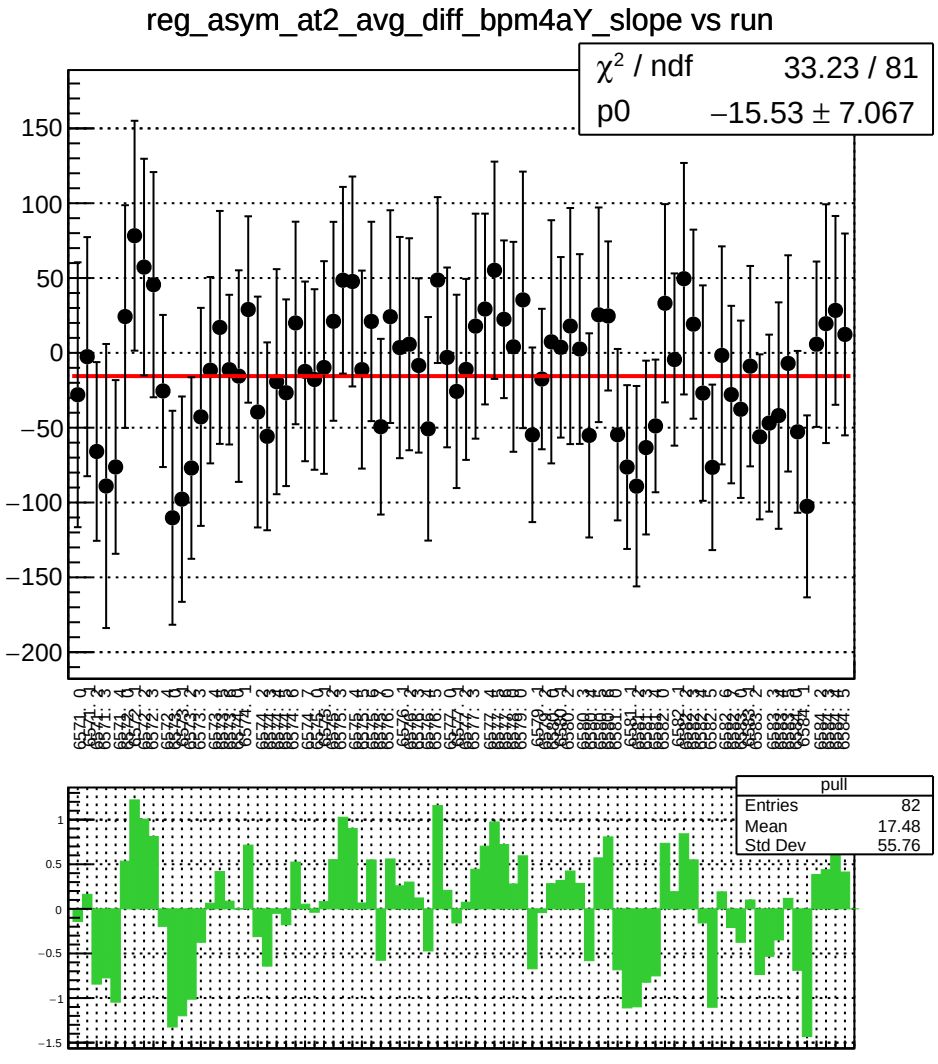

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 72.57 / 81
p0 5.932 ± 1.827
pull
Entries 82
Mean 52.75
Std Dev 35.28

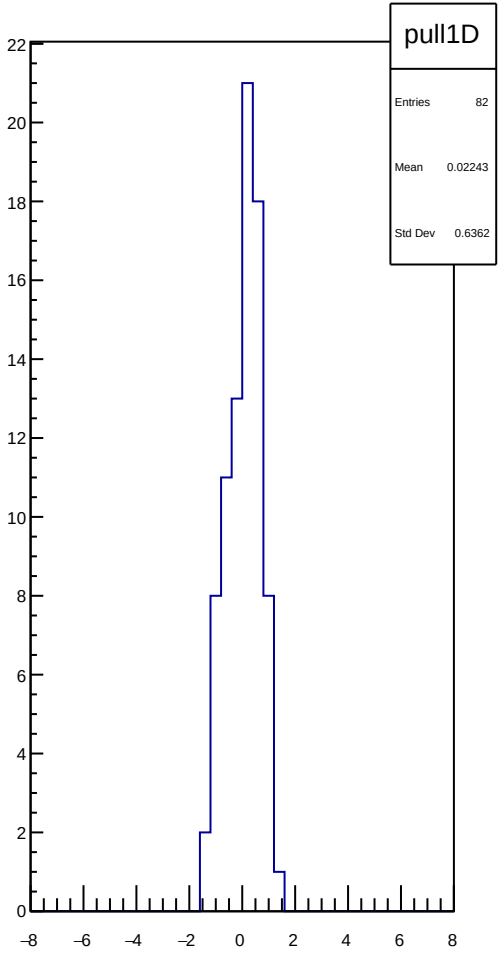

pull1D
Entries 82
Mean −0.01153
Std Dev 0.9407

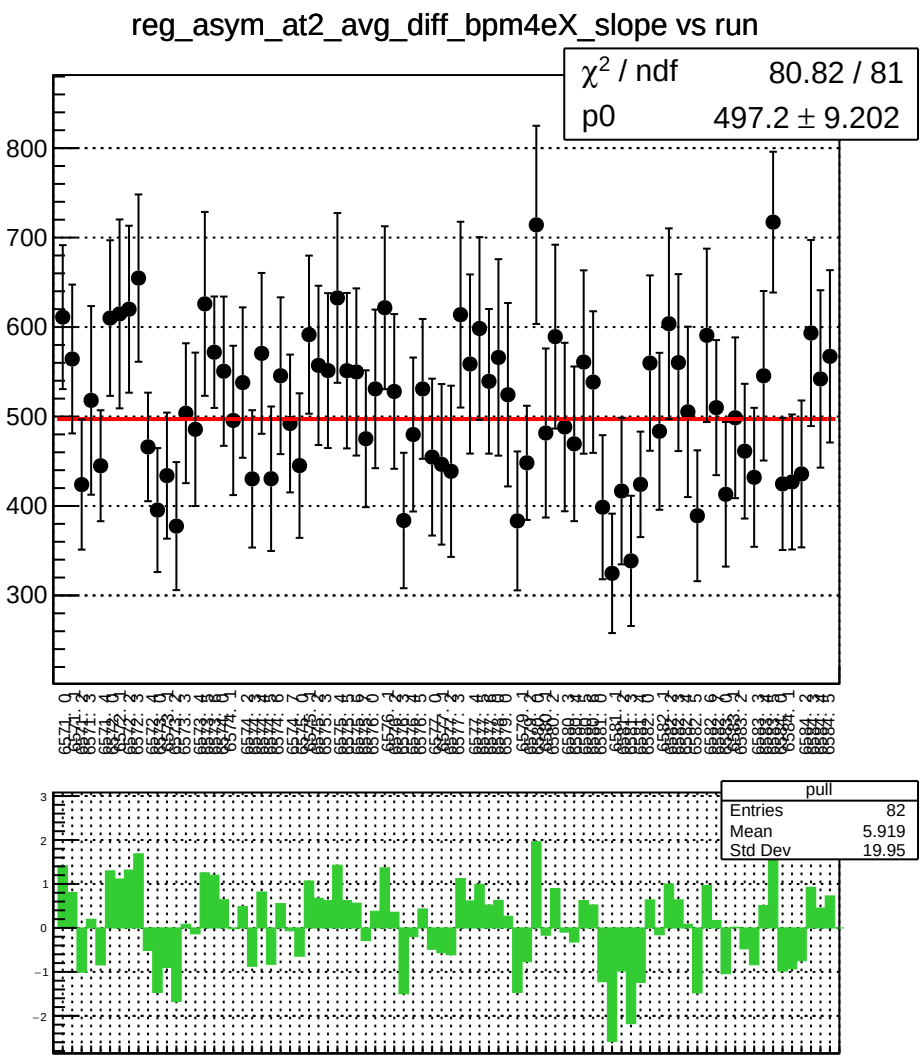

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 100.8 / 81
p0 −2.431 ± 0.08511
pull
Entries 82
Mean 138.7
Std Dev 103.6

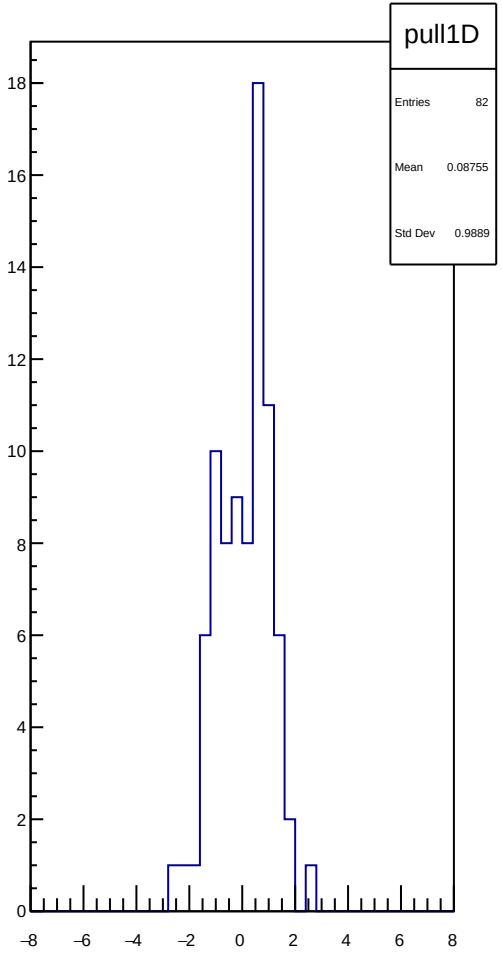

pull1D
Entries 82
Mean −0.02839
Std Dev 1.108

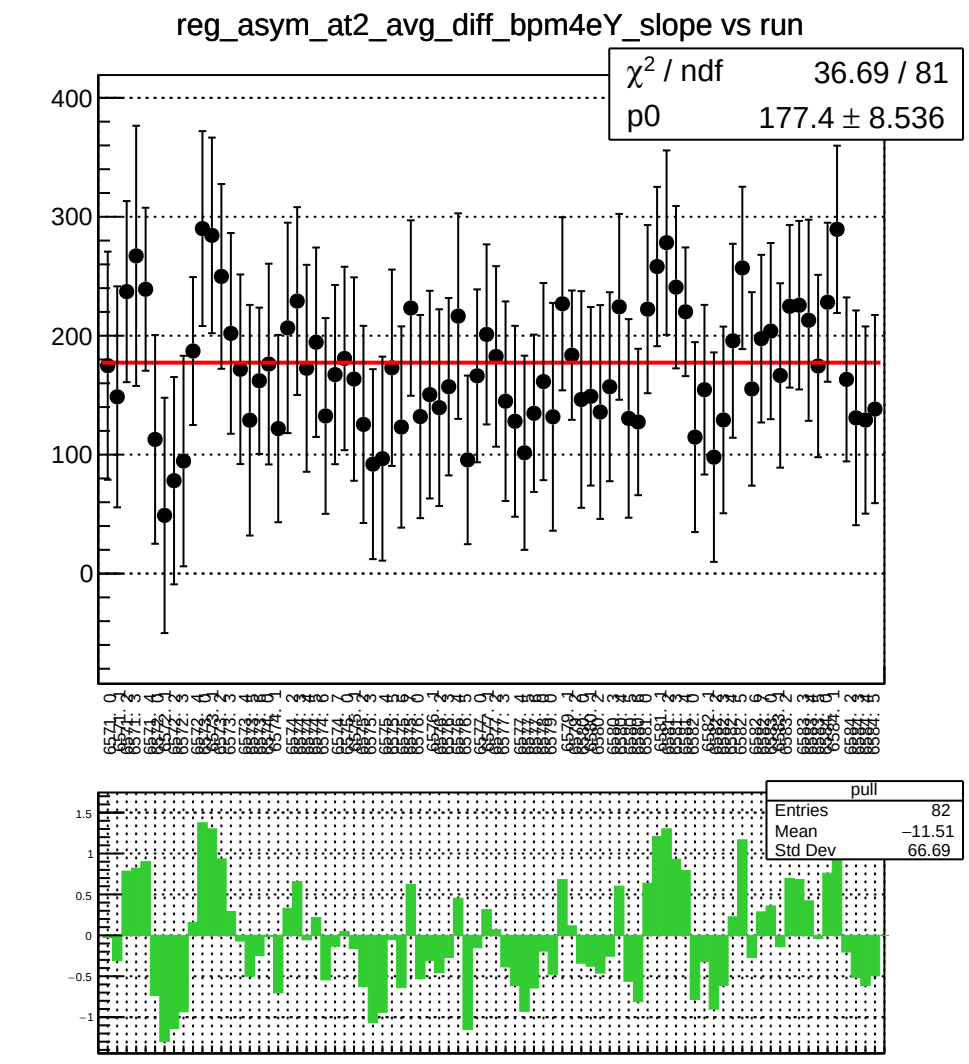

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 80.1 / 81
p0 −430.1 ± 8.643
−200
−300
−400
−500
−600
−700
pull
Entries 82
Mean 1.572
Std Dev 26.73
2
1
0
−1
−2
−3
pull1D
Entries 82
Mean −0.08177
Std Dev 0.9849
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

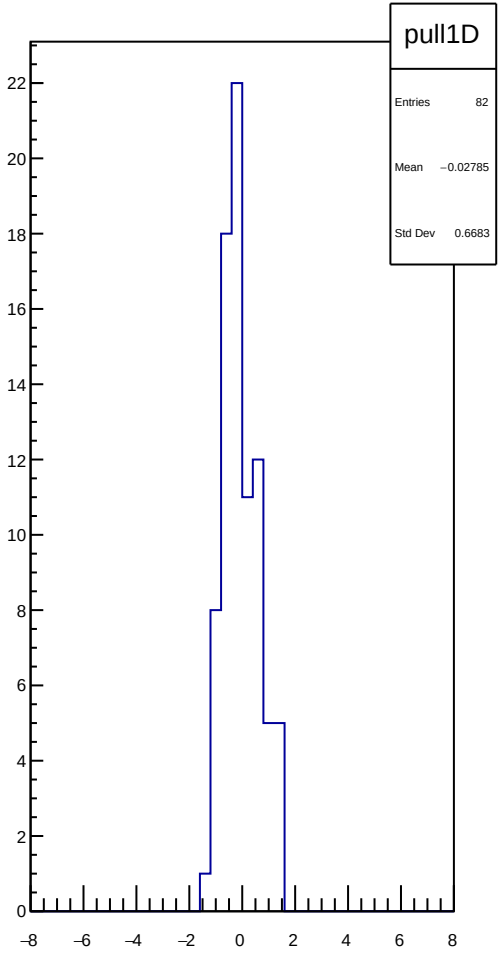

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 33.23 / 81
p0 −15.53 ± 7.067
pull
Entries 82
Mean 17.48
Std Dev 55.76

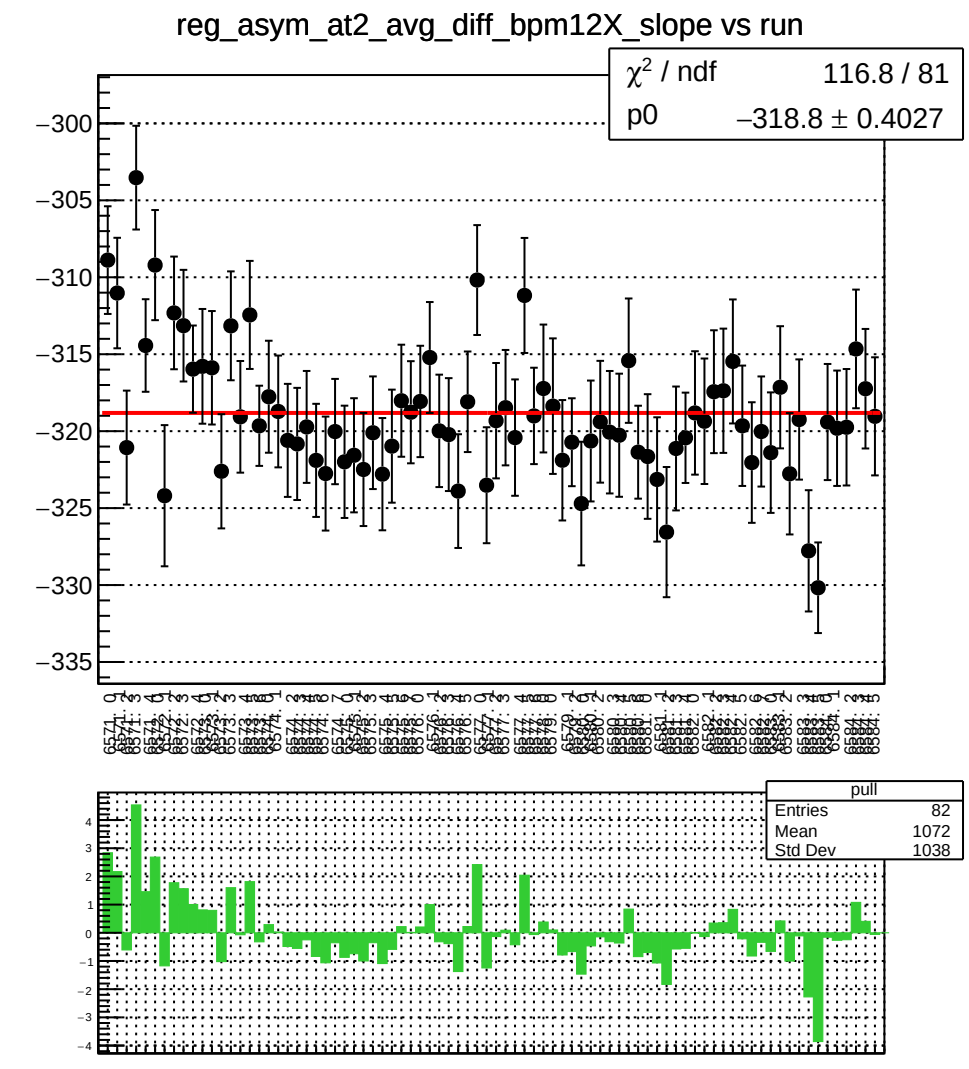

pull1D
Entries 82
Mean 0.02243
Std Dev 0.6362

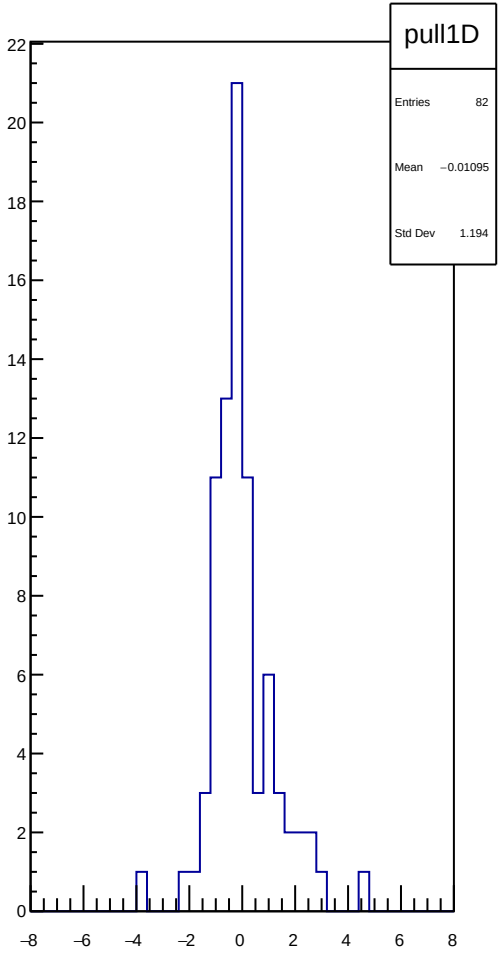

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 80.82 / 81
p0 497.2 ± 9.202
800
700
600
500
400
300
pull
Entries 82
Mean 5.919
Std Dev 19.95
3
2
1
0
−1
−2

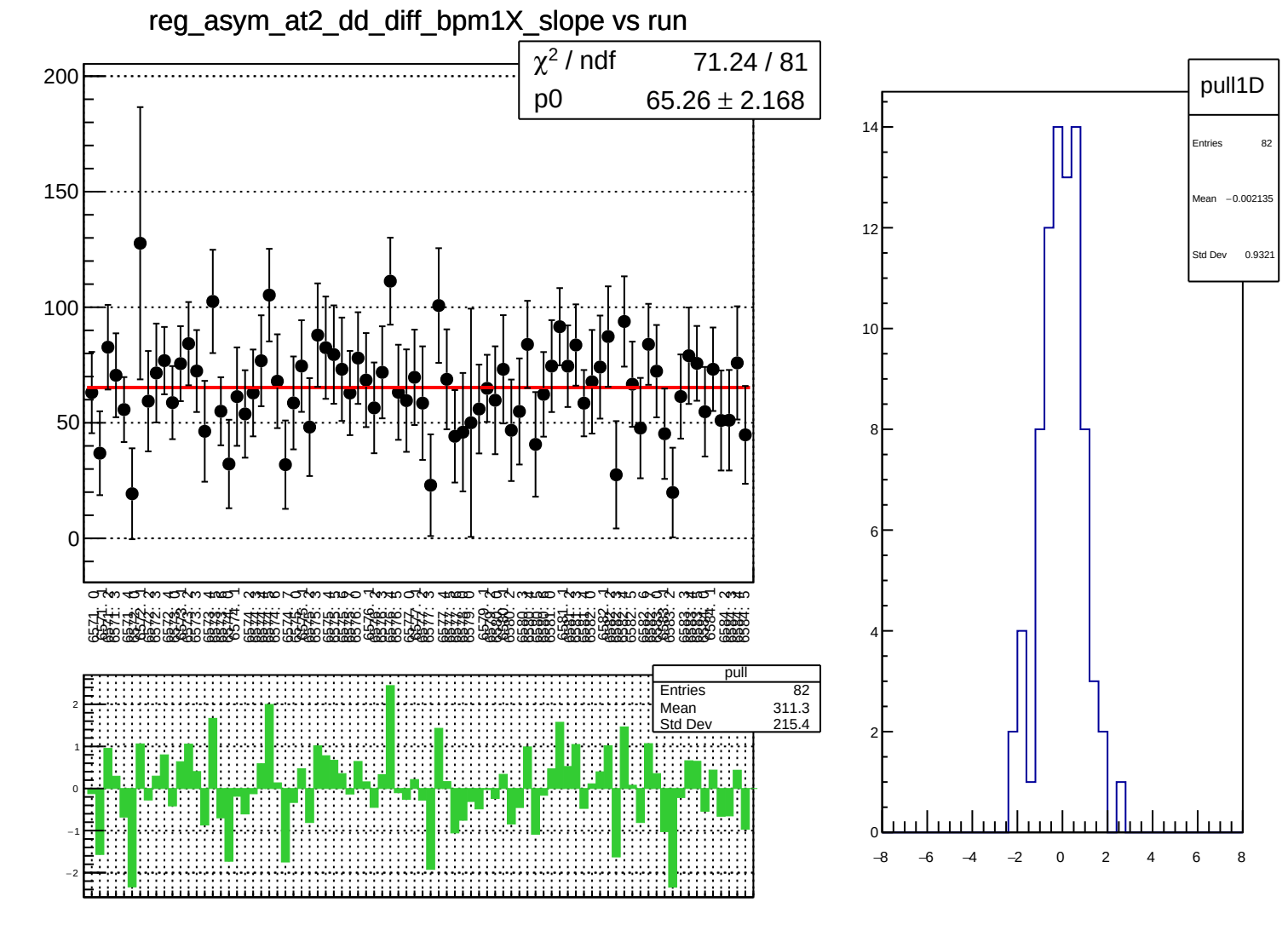

pull1D
Entries 82
Mean 0.08755
Std Dev 0.9889
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

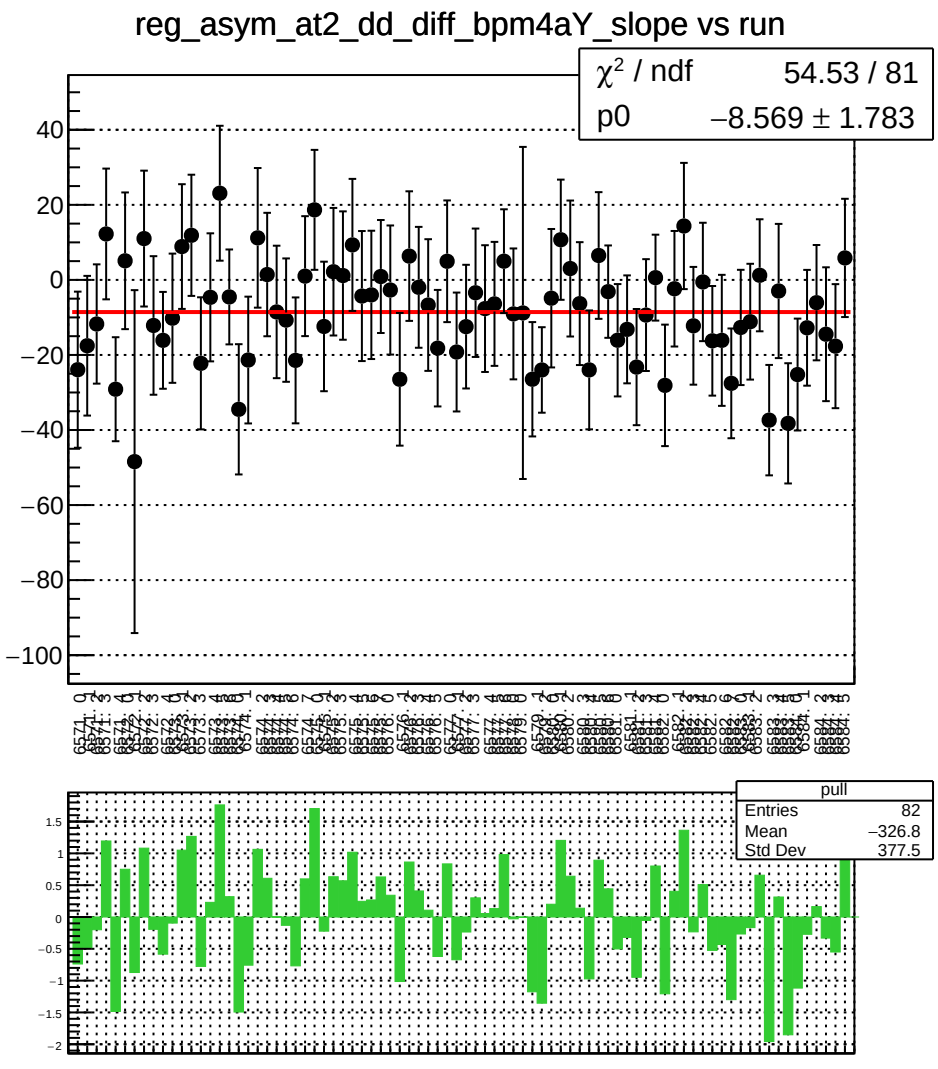

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 36.69 / 81
p0 177.4 ± 8.536
pull
Entries 82
Mean −11.51
Std Dev 66.69

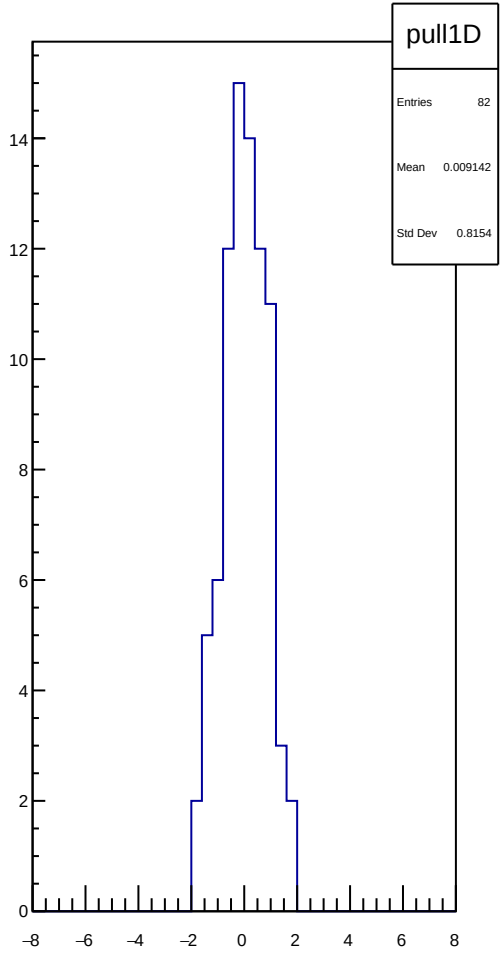

pull1D
Entries 82
Mean −0.02785
Std Dev 0.6683

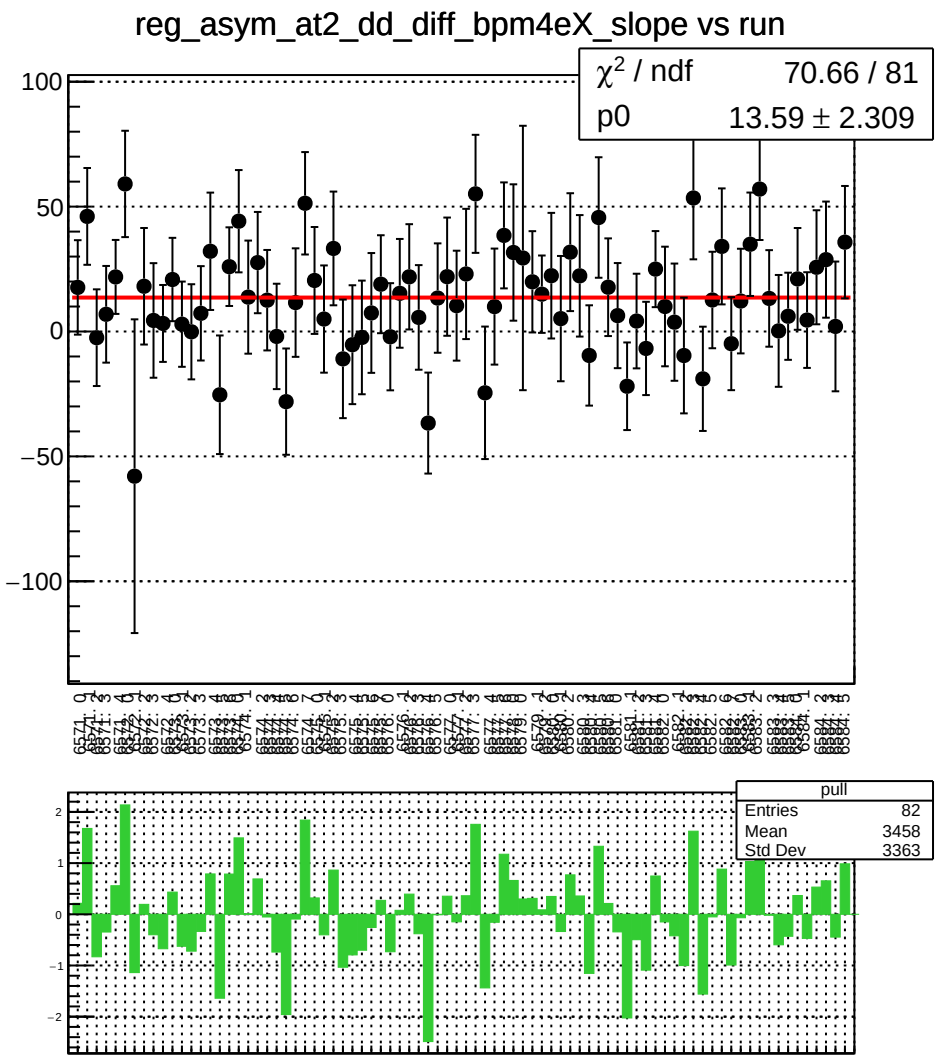

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 116.8 / 81
p0 −318.8 ± 0.4027
pull
Entries 82
Mean 1072
Std Dev 1038

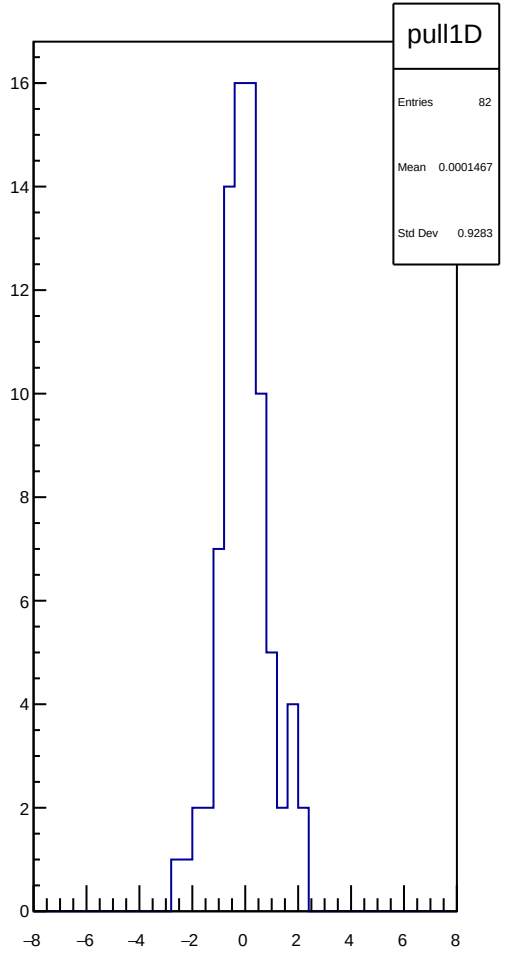

pull1D
Entries 82
Mean −0.01095
Std Dev 1.194

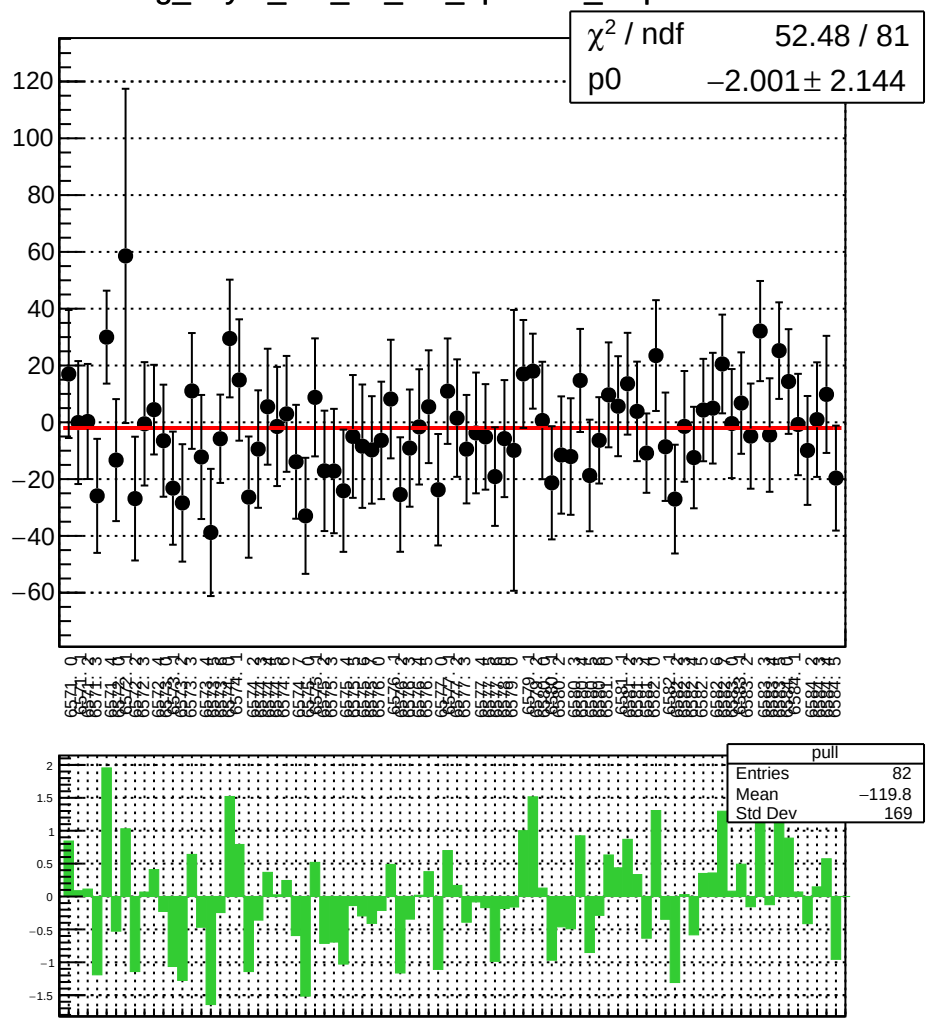

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 71.24 / 81
p0 65.26 ± 2.168
pull
Entries 82
Mean 311.3
Std Dev 215.4
pull1D
Entries 82
Mean −0.002135
Std Dev 0.9321

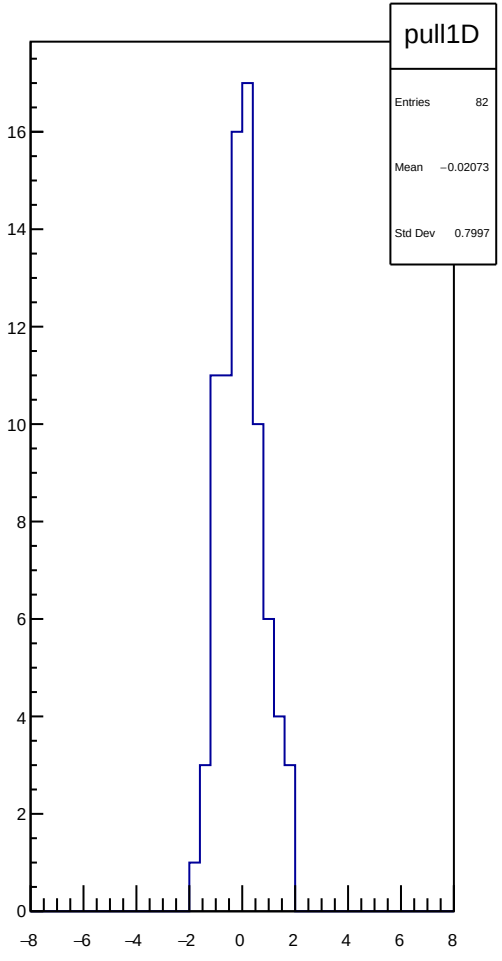

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 54.53 / 81
p0 −8.569 ± 1.783
pull
Entries 82
Mean −326.8
Std Dev 377.5

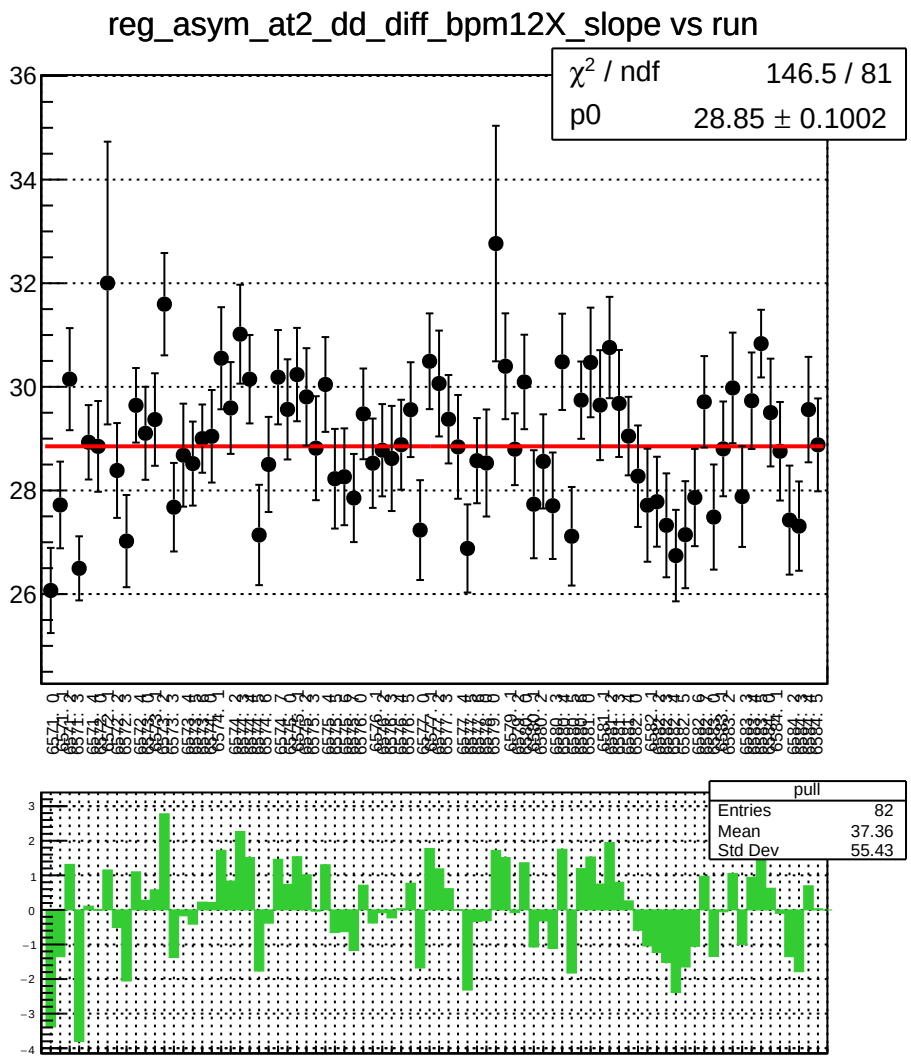

pull1D
Entries 82
Mean 0.009142
Std Dev 0.8154

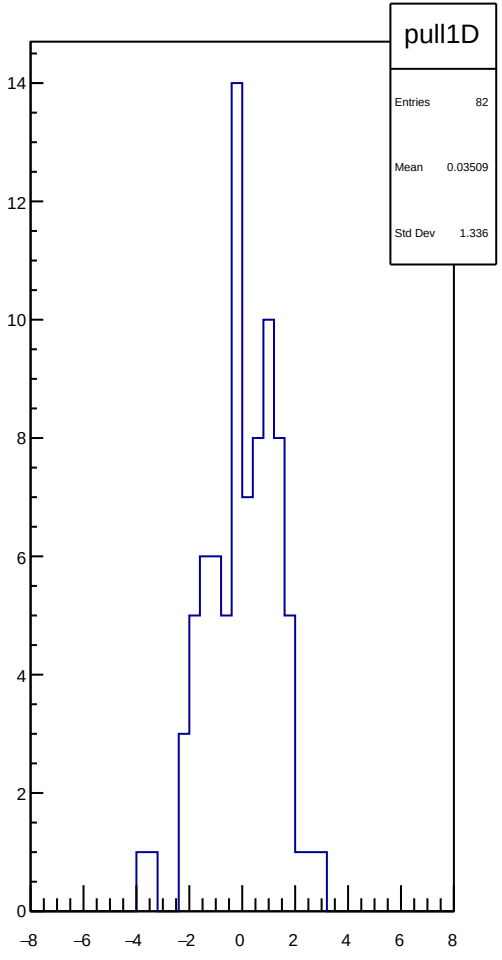

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 70.66 / 81
p0 13.59 ± 2.309
100
50
0
−50
−100
pull
Entries 82
Mean 3458
Std Dev 3363
2
1
0
−1
−2

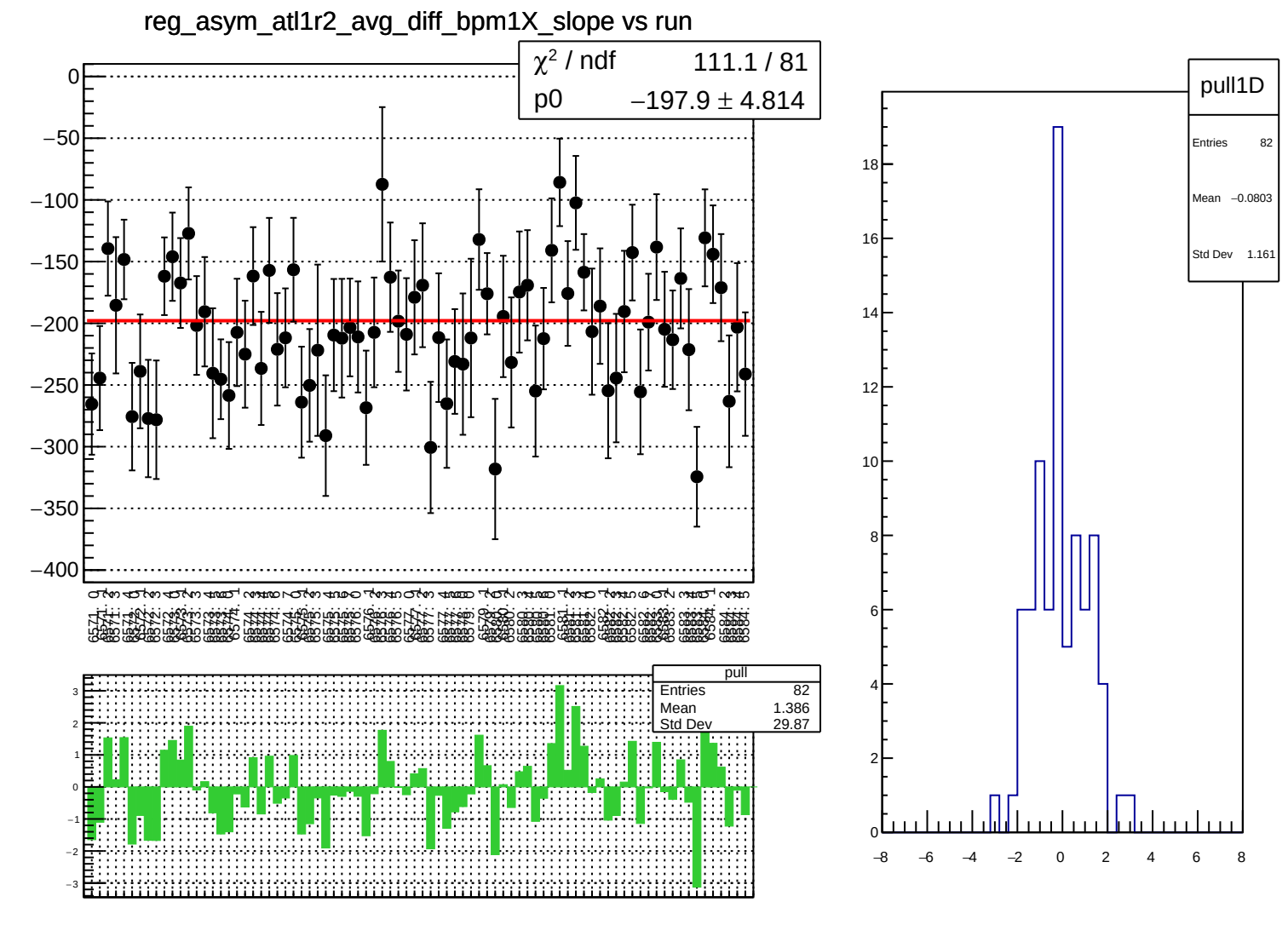

pull1D
Entries 82
Mean 0.0001467
Std Dev 0.9283
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

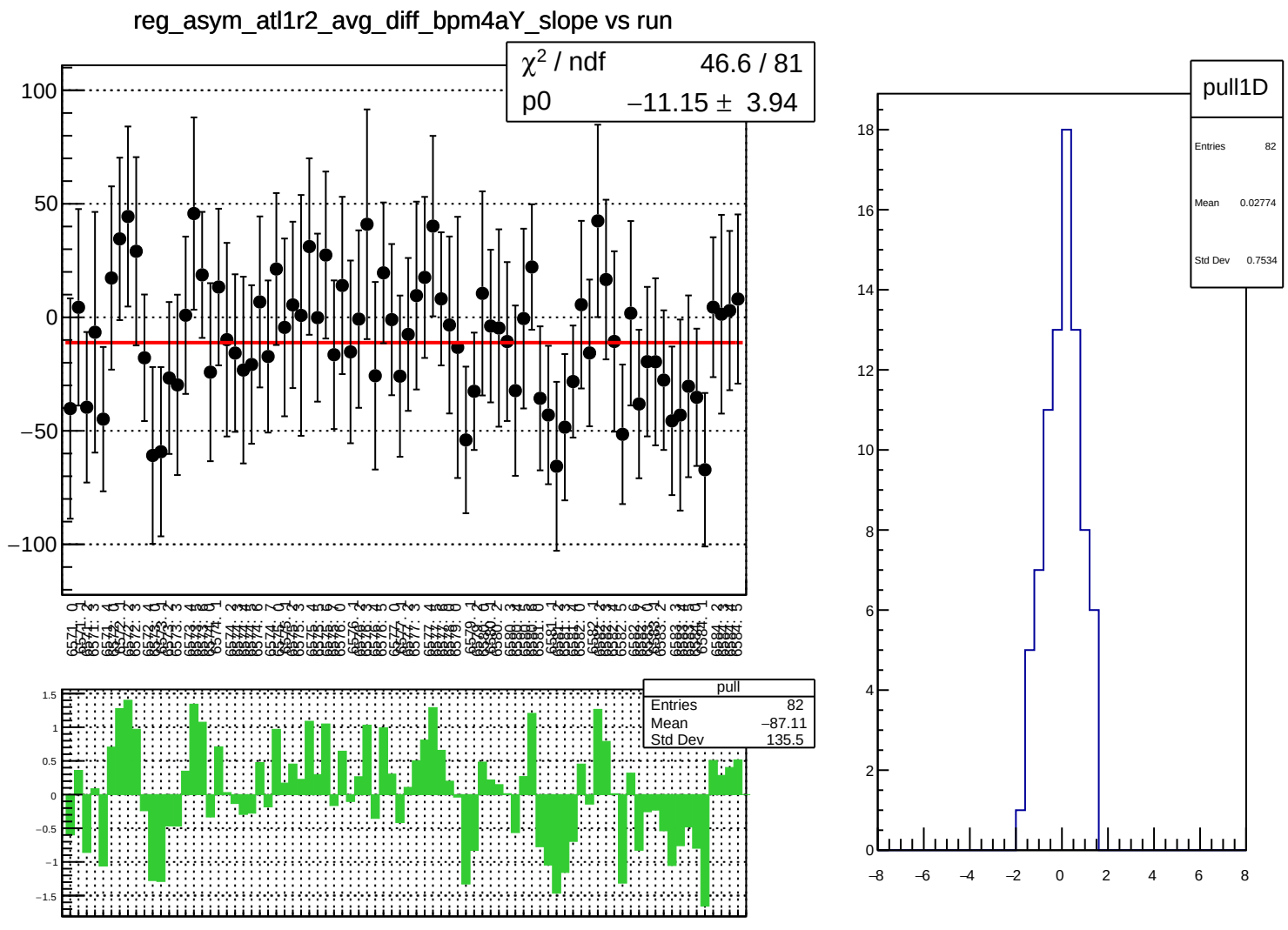

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 52.48 / 81
p0 −2.001 ± 2.144
pull
Entries 82
Mean −119.8
Std Dev 169

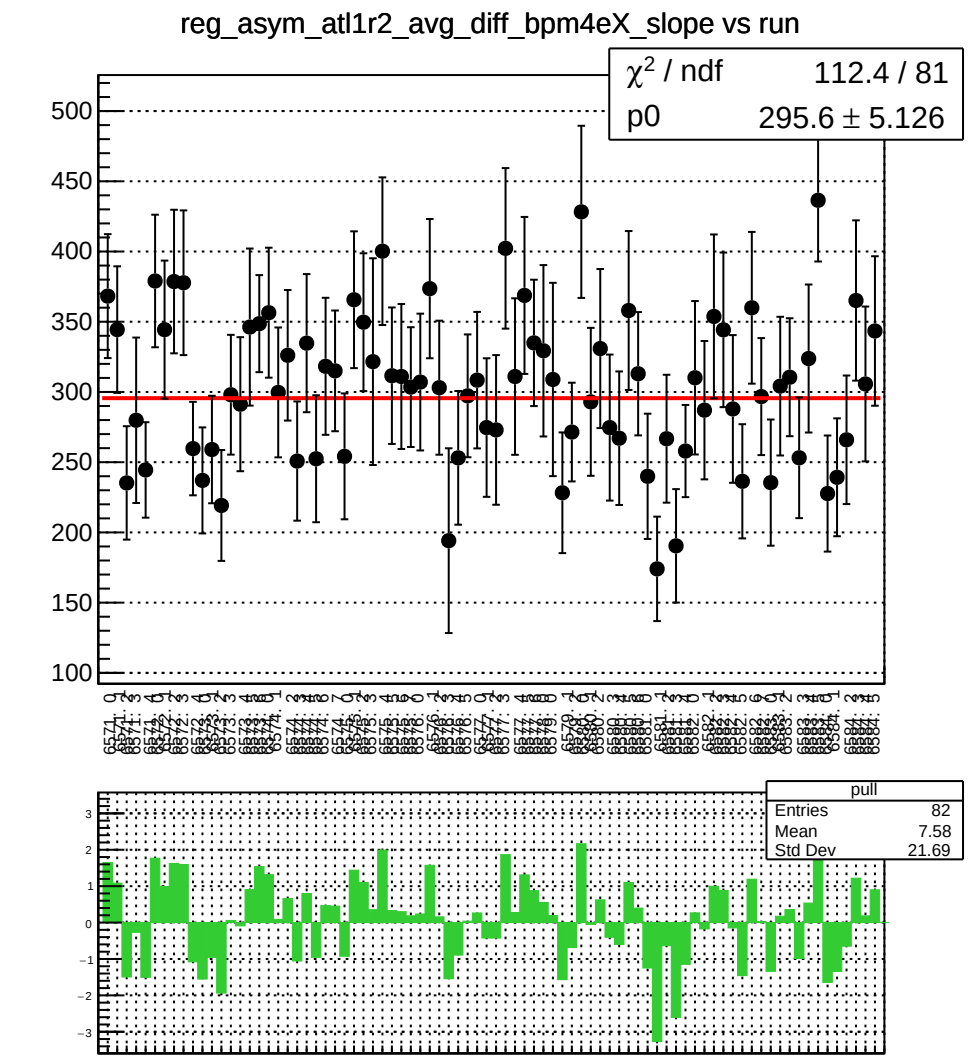

pull1D
Entries 82
Mean −0.02073
Std Dev 0.7997

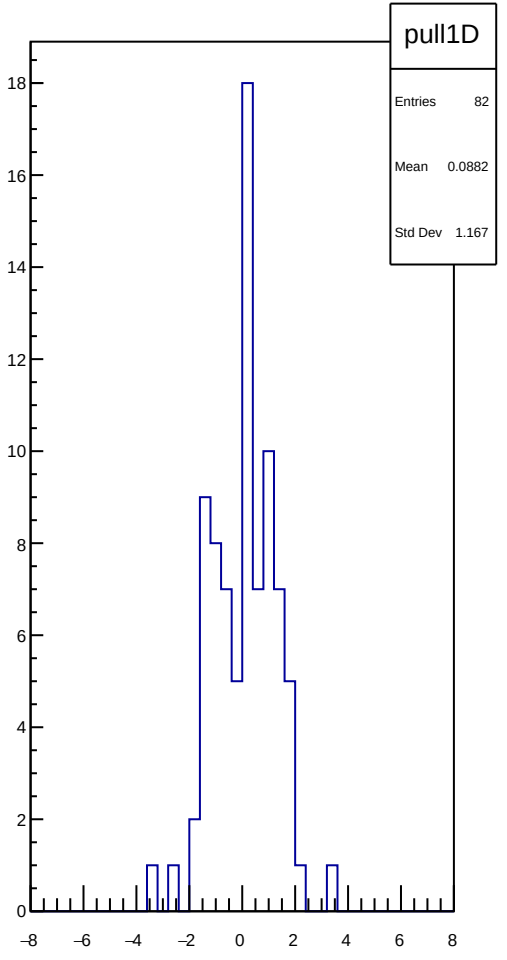

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 146.5 / 81
p0 28.85 ± 0.1002
pull
Entries 82
Mean 37.36
Std Dev 55.43

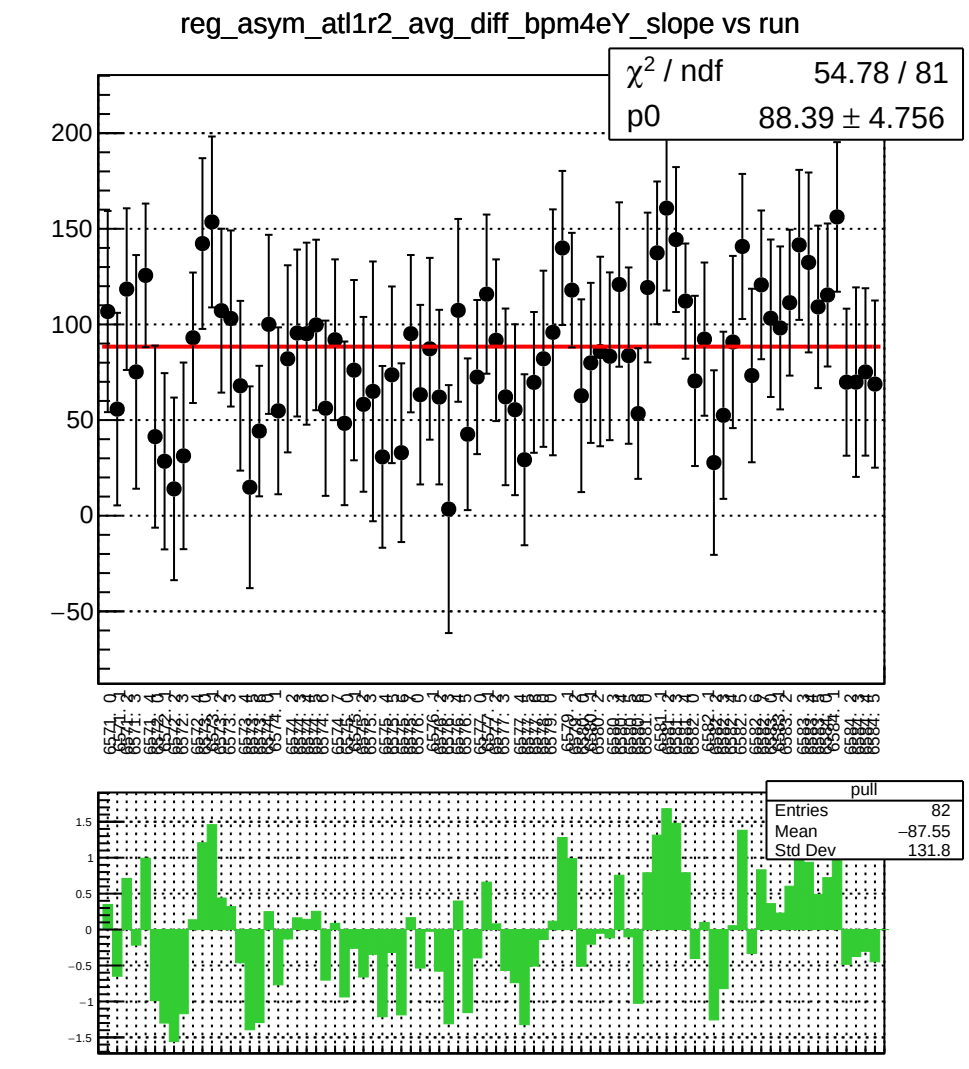

pull1D
Entries 82
Mean 0.03509
Std Dev 1.336

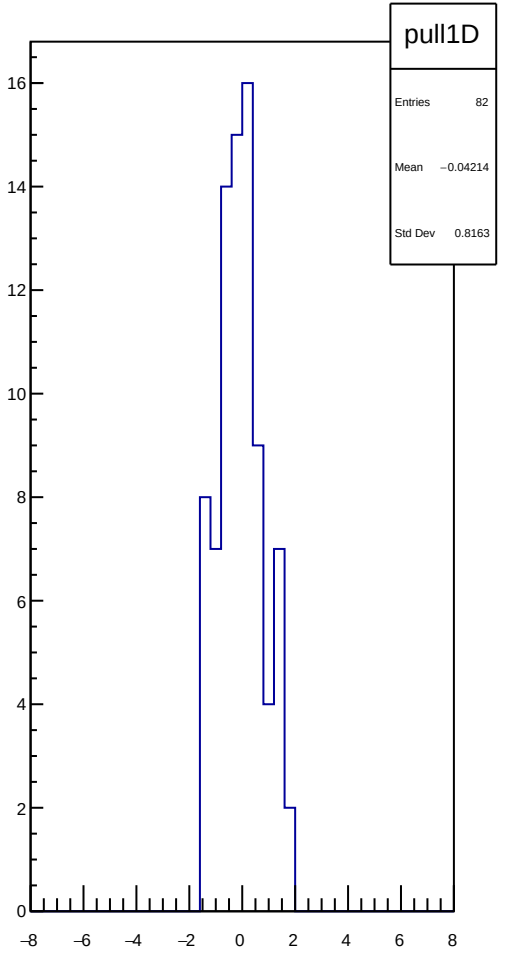

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 111.1 / 81
p0 −197.9 ± 4.814
pull
Entries 82
Mean 1.386
Std Dev 29.87
pull1D
Entries 82
Mean −0.0803
Std Dev 1.161

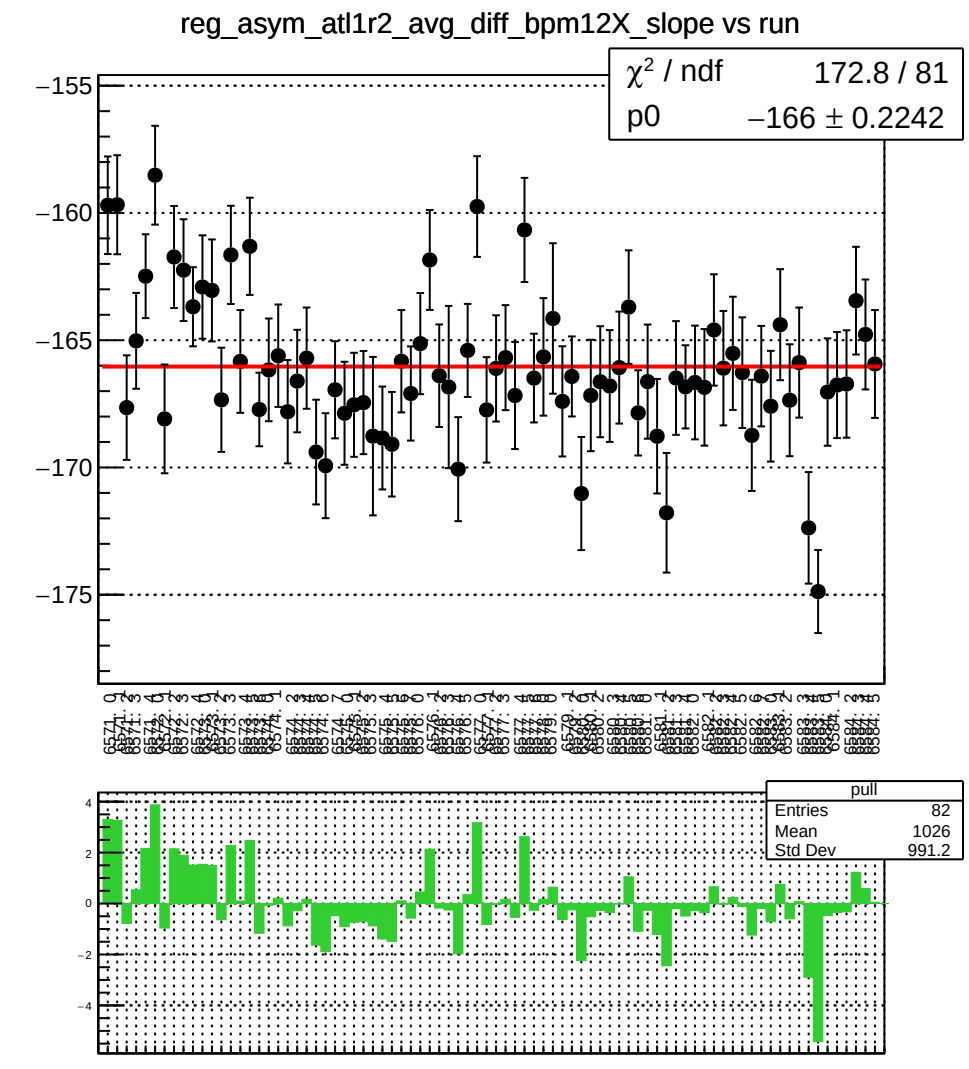

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 46.6 / 81
p0 −11.15 ± 3.94
100
50
0
−50
−100
pull
Entries 82
Mean −87.11
Std Dev 135.5
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 82
Mean 0.02774
Std Dev 0.7534
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

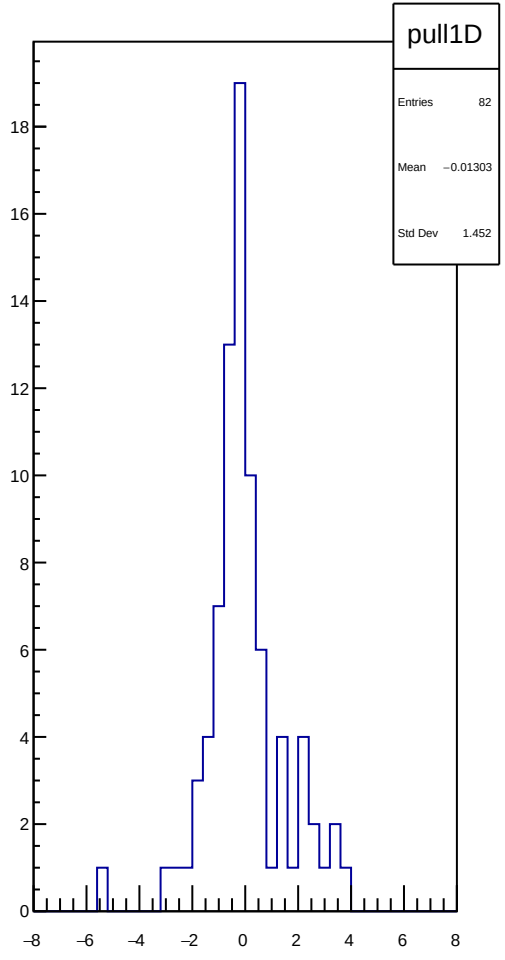

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 112.4 / 81
p0 295.6 ± 5.126
pull
Entries 82
Mean 7.58
Std Dev 21.69

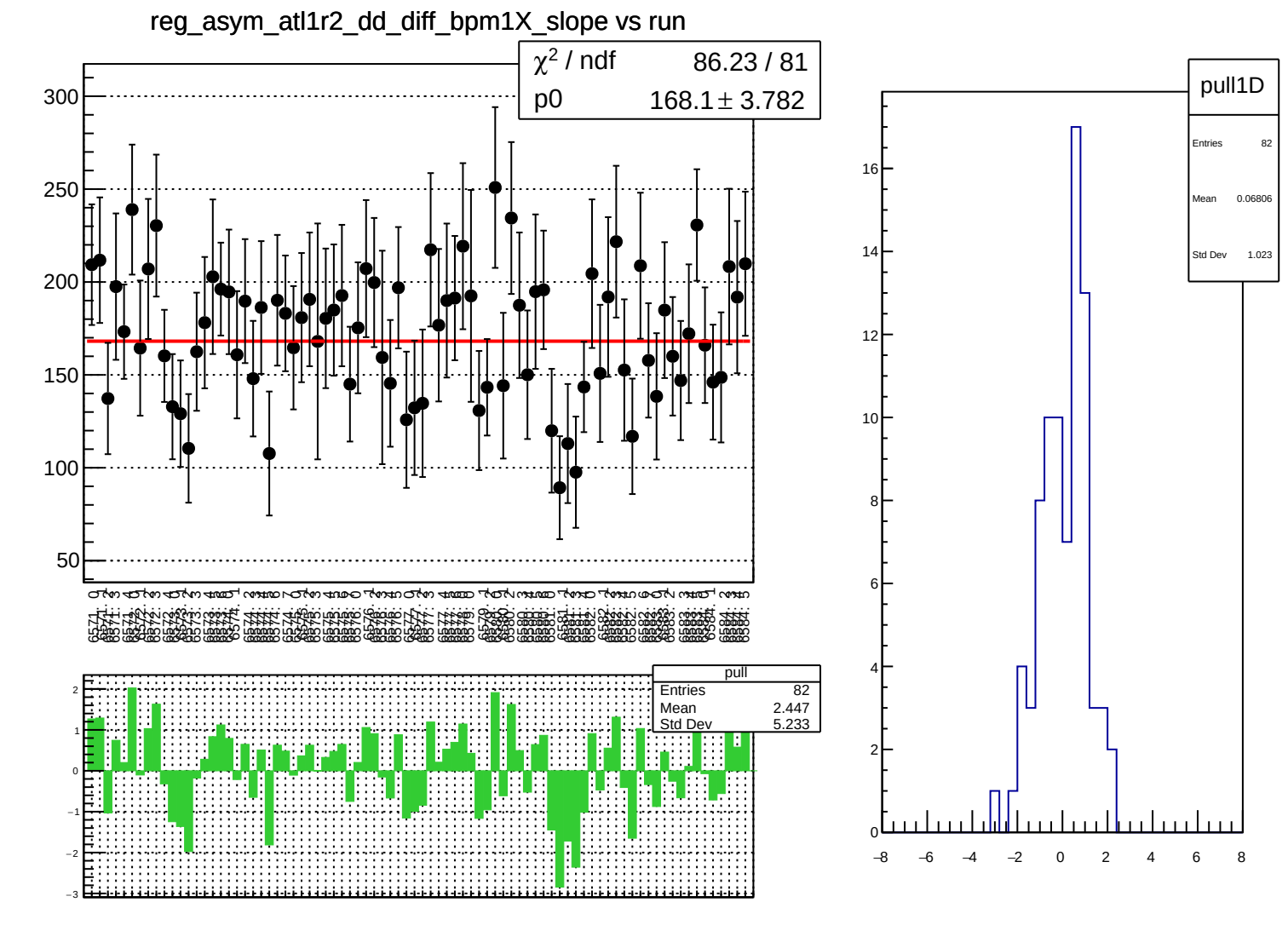

pull1D
Entries 82
Mean 0.0882
Std Dev 1.167

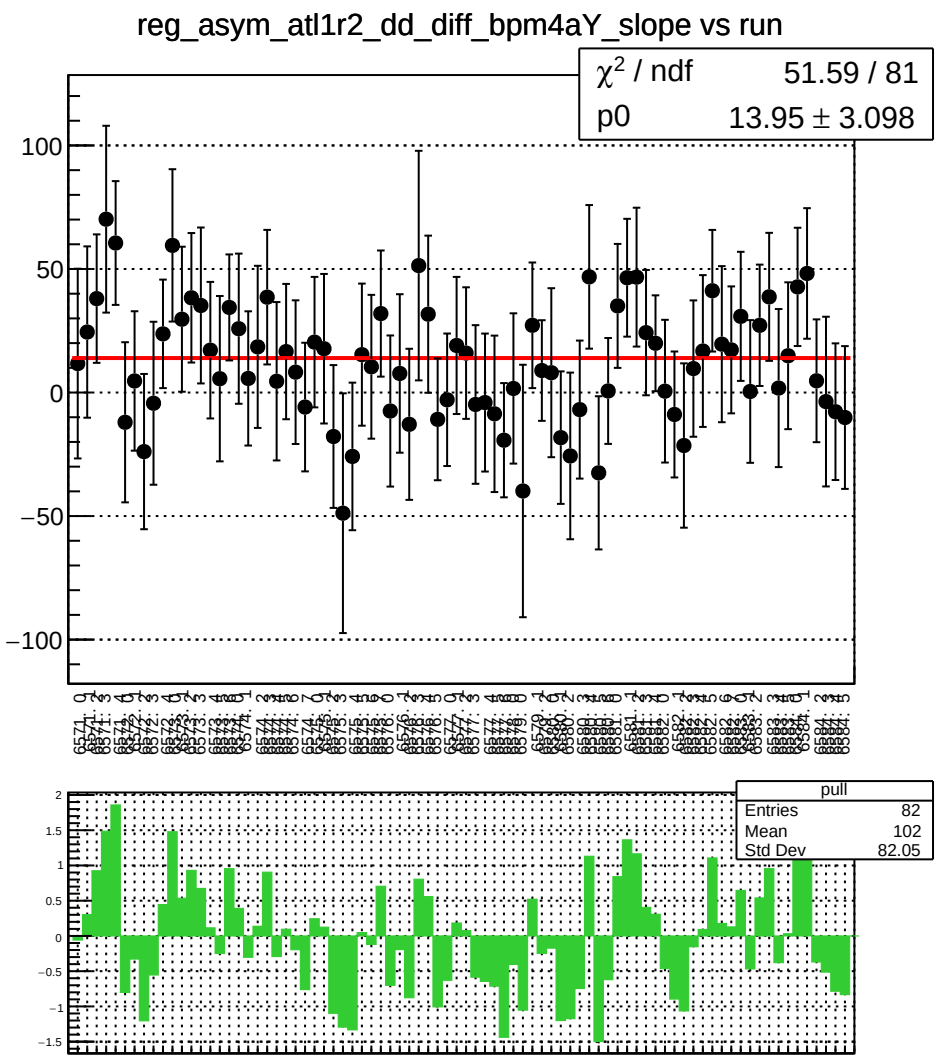

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 54.78 / 81
p0 88.39 ± 4.756
200
150
100
50
0
−50
pull
Entries 82
Mean −87.55
Std Dev 131.8
1.5
1
0.5
0
−0.5
−1
−1.5

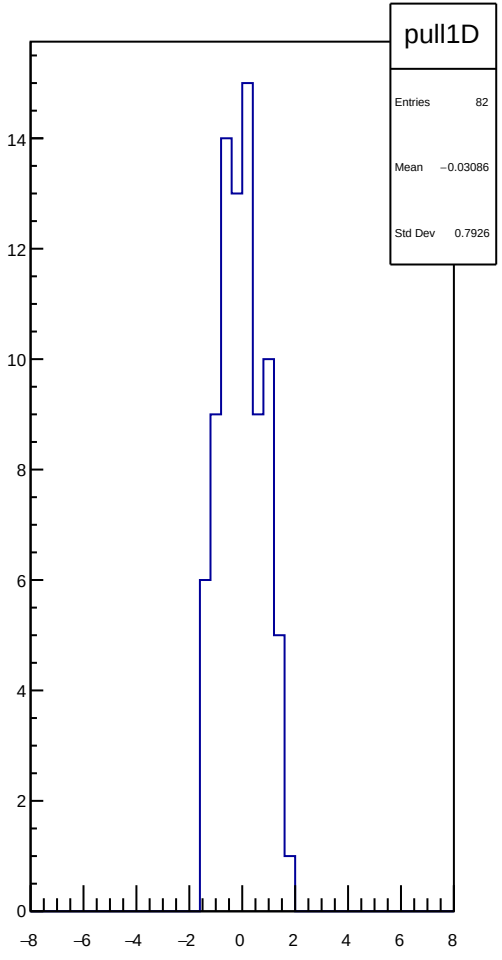

pull1D
Entries 82
Mean −0.04214
Std Dev 0.8163
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

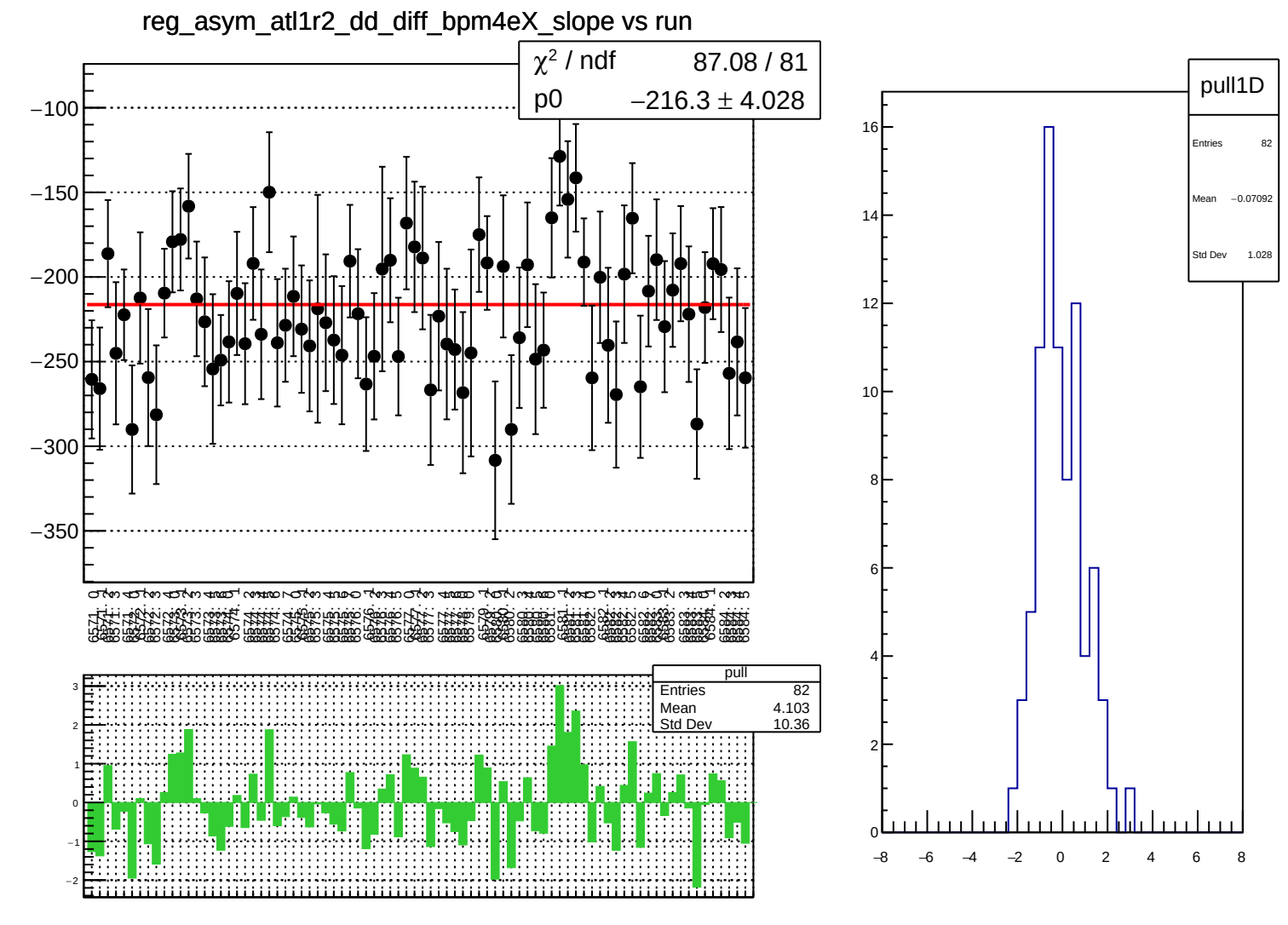

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 172.8 / 81
p0 −166 ± 0.2242
−155
−160
−165
−170
−175
pull
Entries 82
Mean 1026
Std Dev 991.2
4
2
0
−2
−4

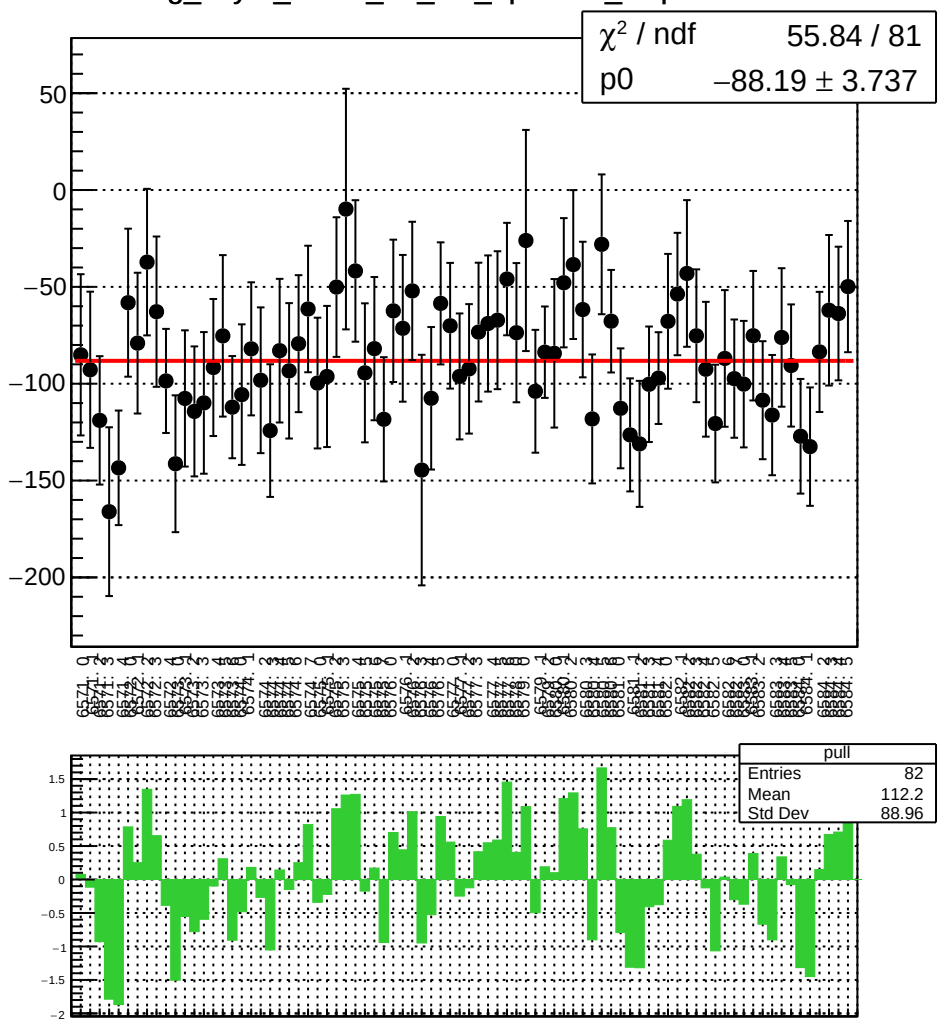

pull1D
Entries 82
Mean −0.01303
Std Dev 1.452
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

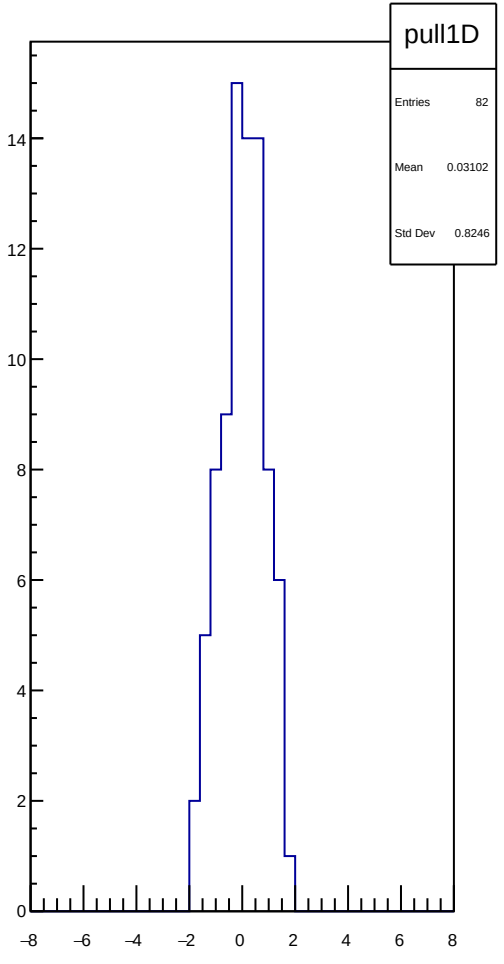

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 86.23 / 81
p0 168.1 ± 3.782
pull
Entries 82
Mean 2.447
Std Dev 5.233
pull1D
Entries 82
Mean 0.06806
Std Dev 1.023

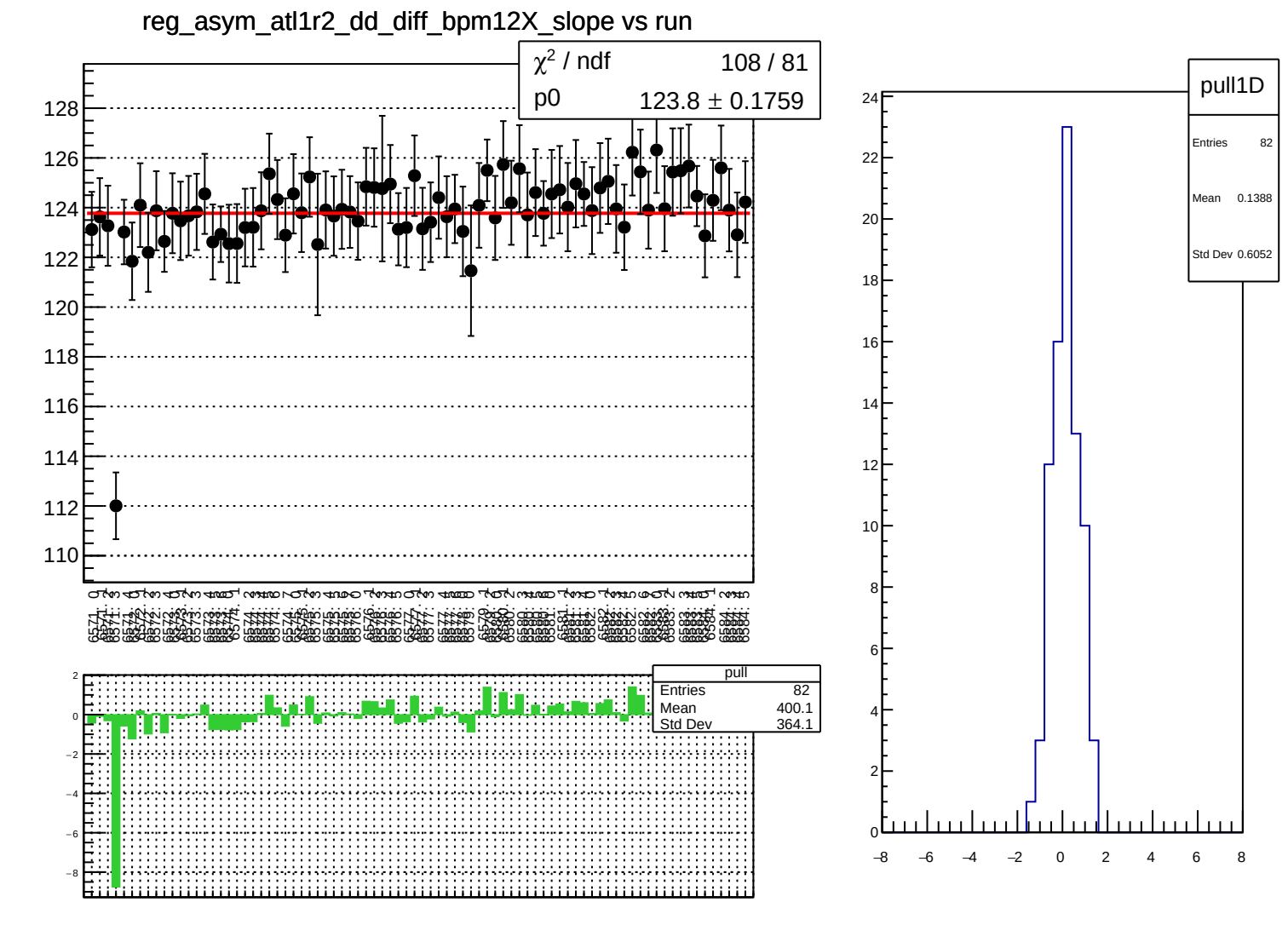

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 51.59 / 81
p0 13.95 ± 3.098
pull
Entries 82
Mean 102
Std Dev 82.05

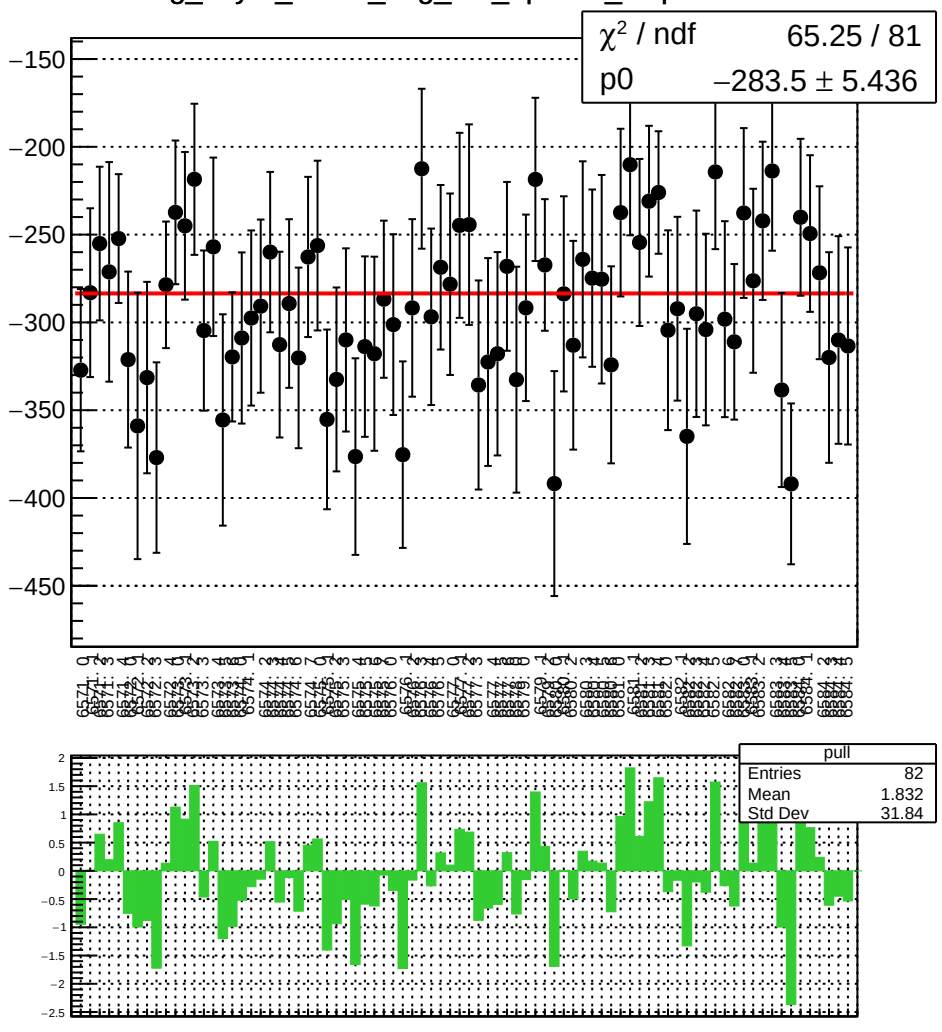

pull1D
Entries 82
Mean −0.03086
Std Dev 0.7926

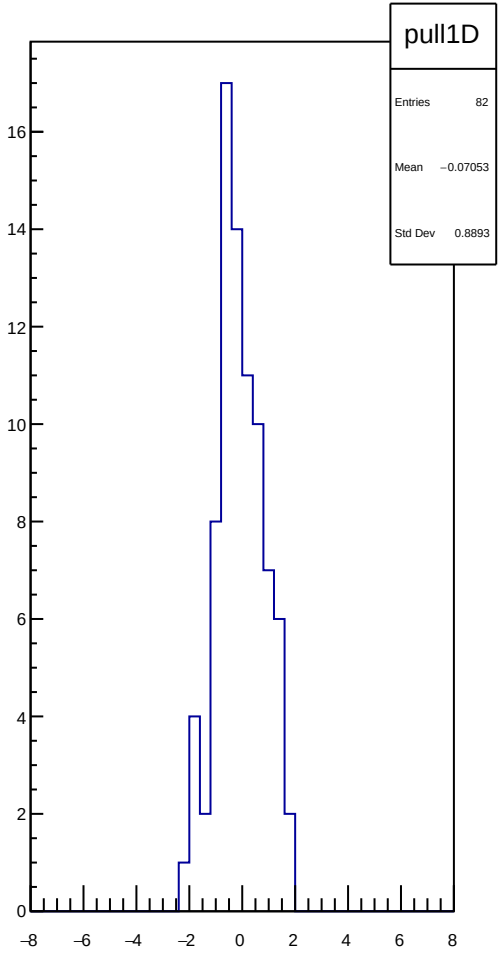

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 87.08 / 81
p0 −216.3 ± 4.028
pull
Entries 82
Mean 4.103
Std Dev 10.36
pull1D
Entries 82
Mean −0.07092
Std Dev 1.028

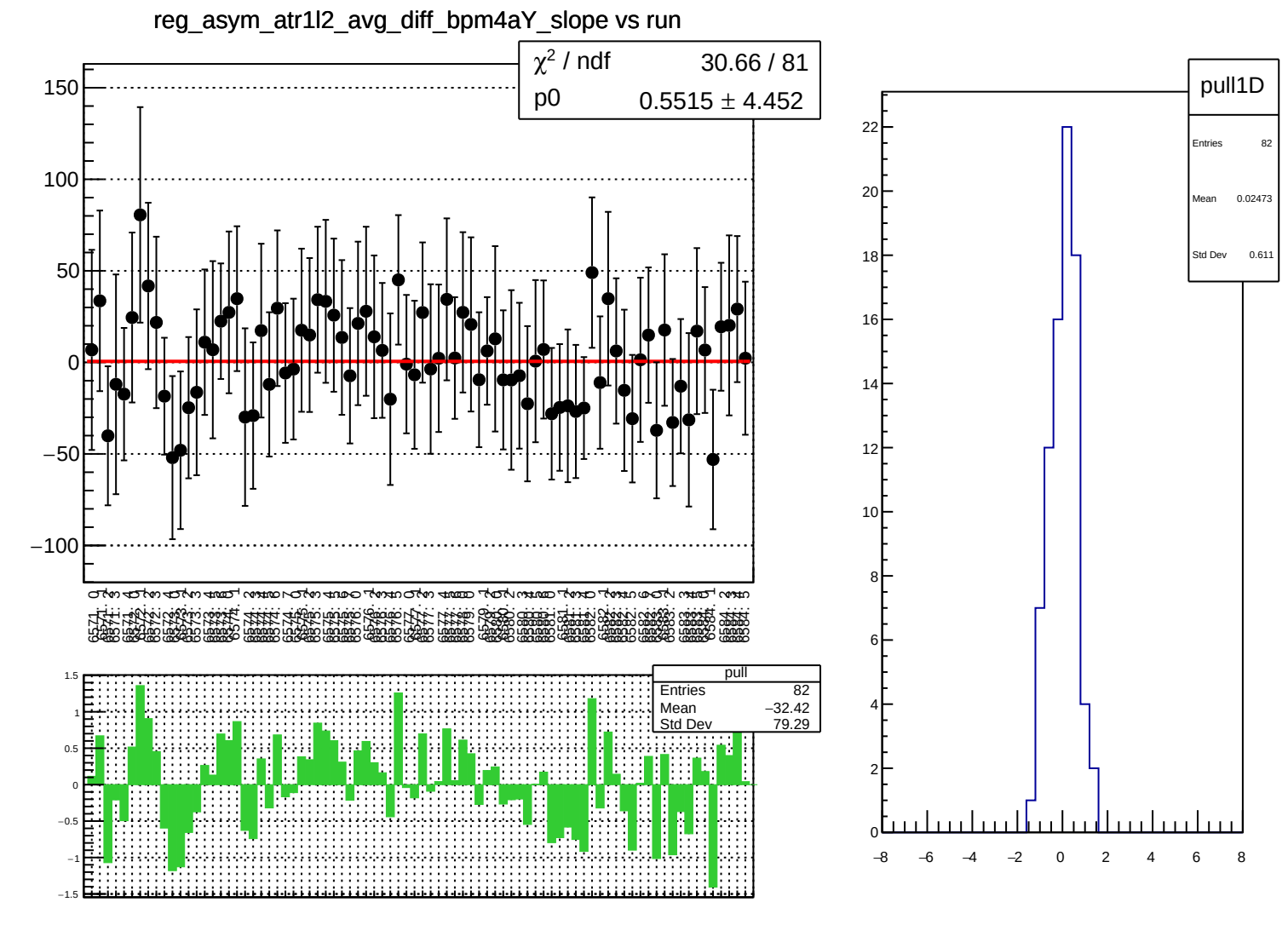

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 55.84 / 81
p0 −88.19 ± 3.737
pull
Entries 82
Mean 112.2
Std Dev 88.96

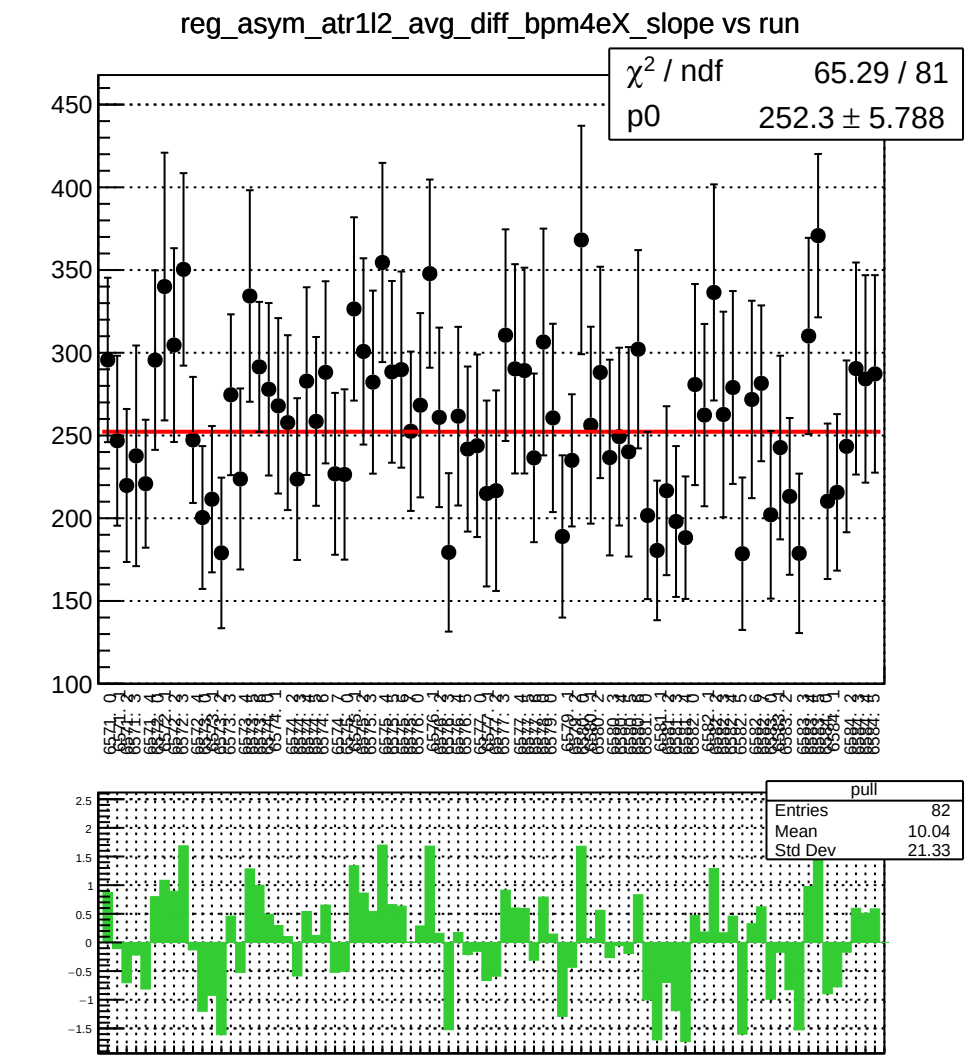

pull1D
Entries 82
Mean 0.03102
Std Dev 0.8246

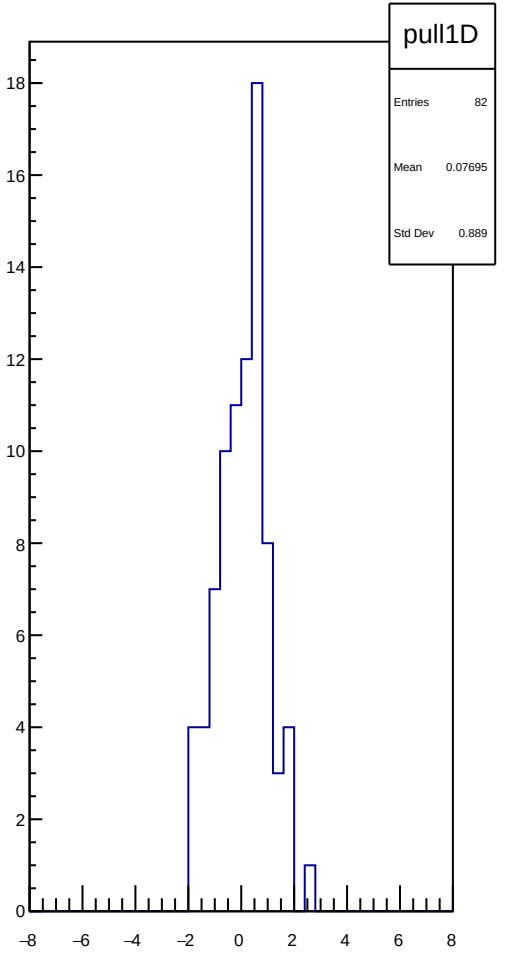

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 108 / 81
p0 123.8 ± 0.1759
pull
Entries 82
Mean 400.1
Std Dev 364.1
pull1D
Entries 82
Mean 0.1388
Std Dev 0.6052

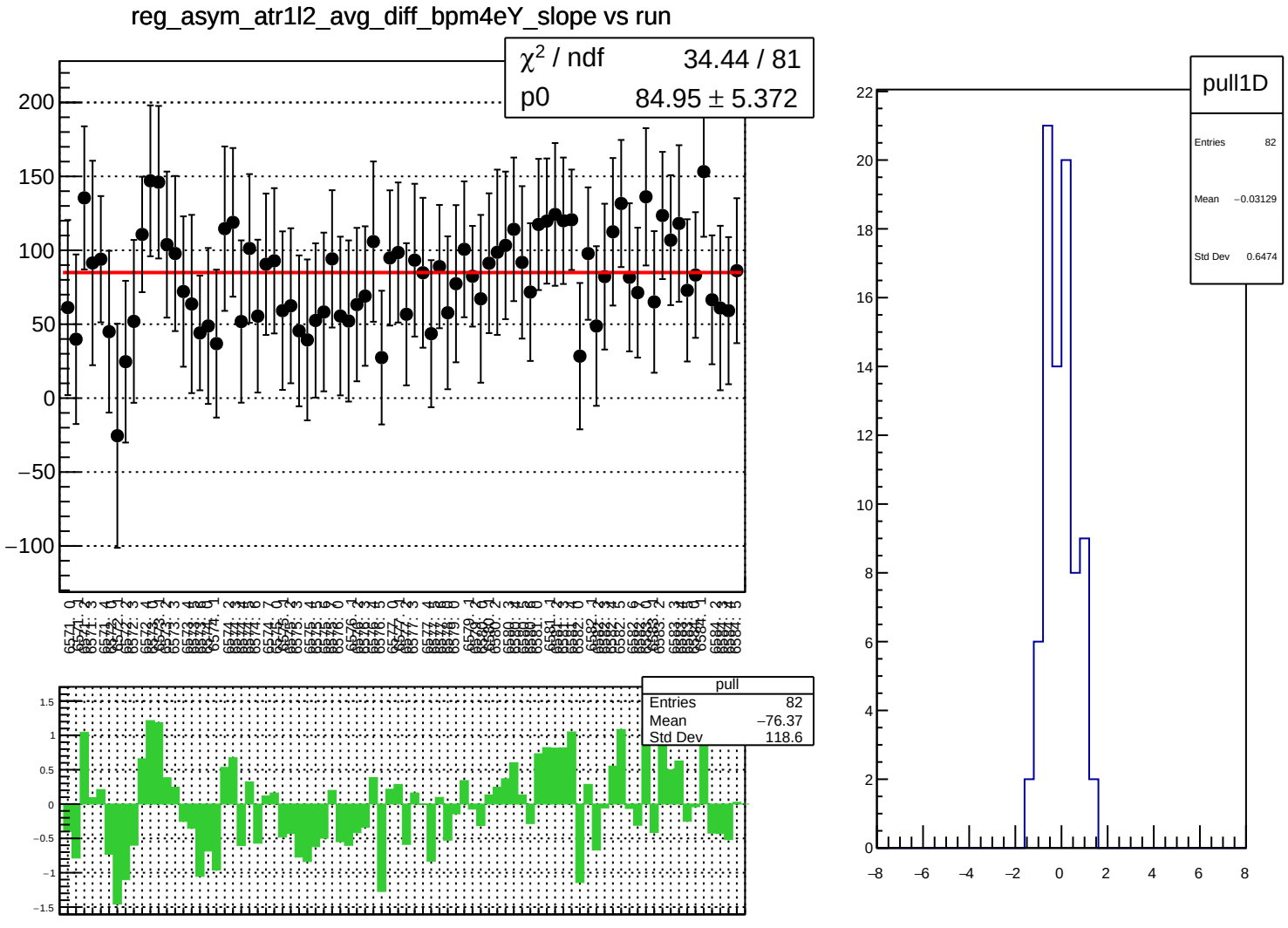

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 65.25 / 81
p0 −283.5 ± 5.436
pull
Entries 82
Mean 1.832
Std Dev 31.84

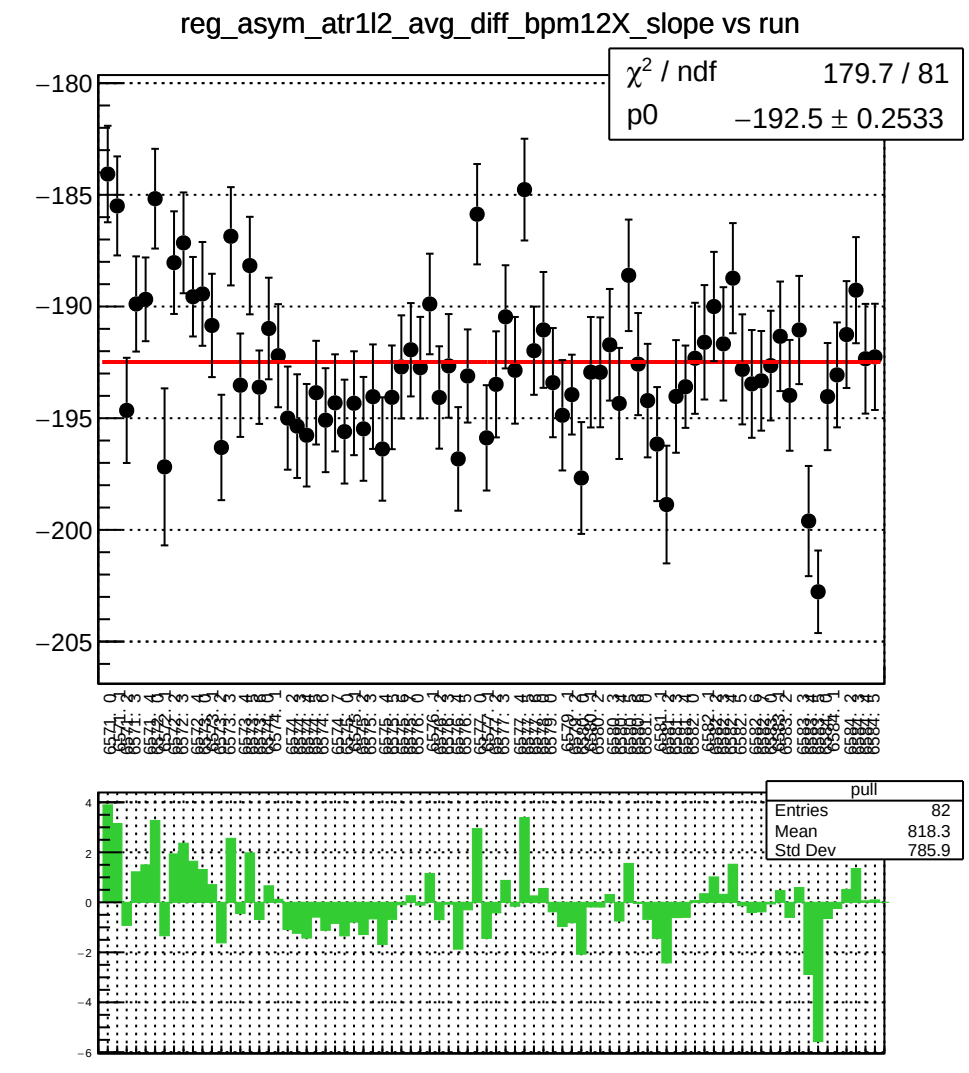

pull1D
Entries 82
Mean −0.07053
Std Dev 0.8893

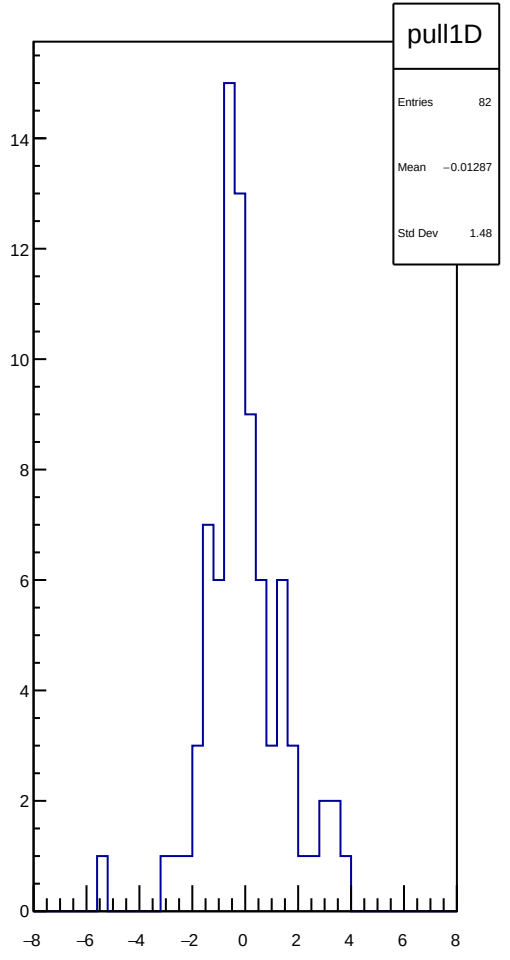

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 30.66 / 81
p0 0.5515 ± 4.452
150
100
50
0
−50
−100
pull
Entries 82
Mean −32.42
Std Dev 79.29
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 82
Mean 0.02473
Std Dev 0.611
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

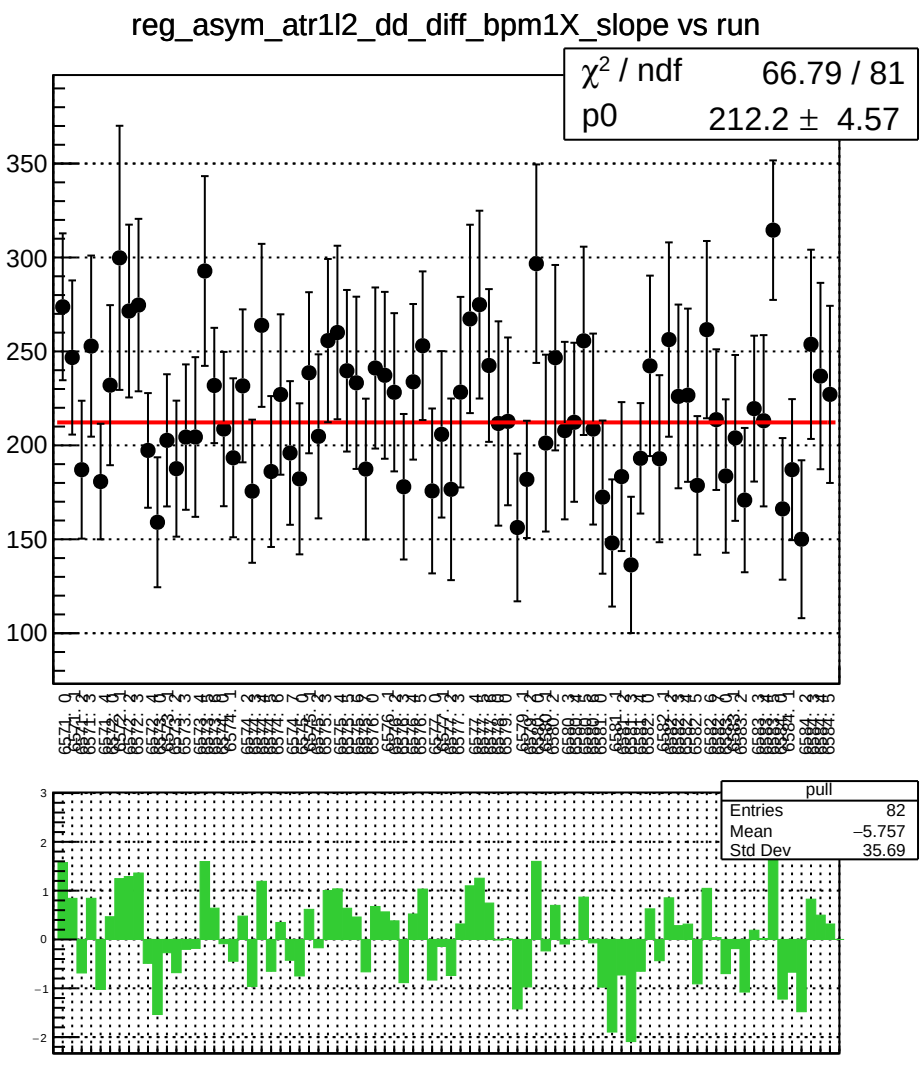

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 65.29 / 81
p0 252.3 ± 5.788
pull
Entries 82
Mean 10.04
Std Dev 21.33

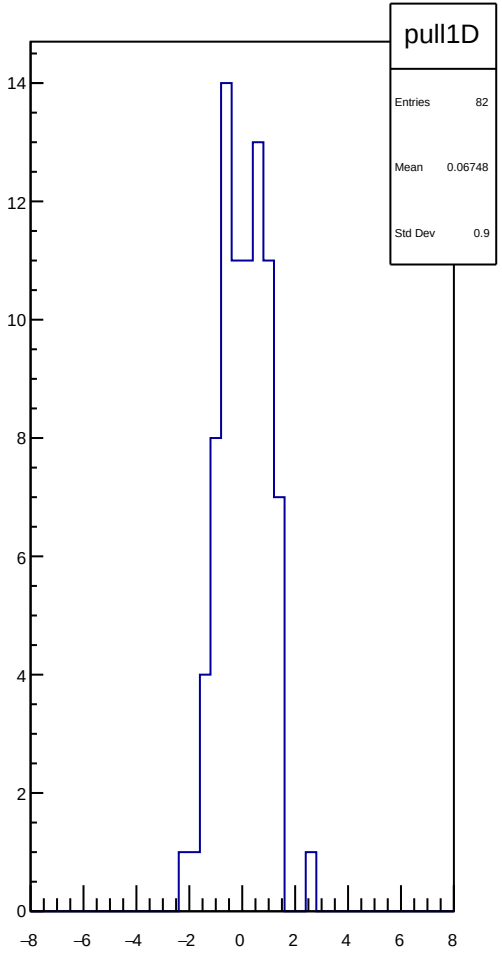

pull1D
Entries 82
Mean 0.07695
Std Dev 0.889

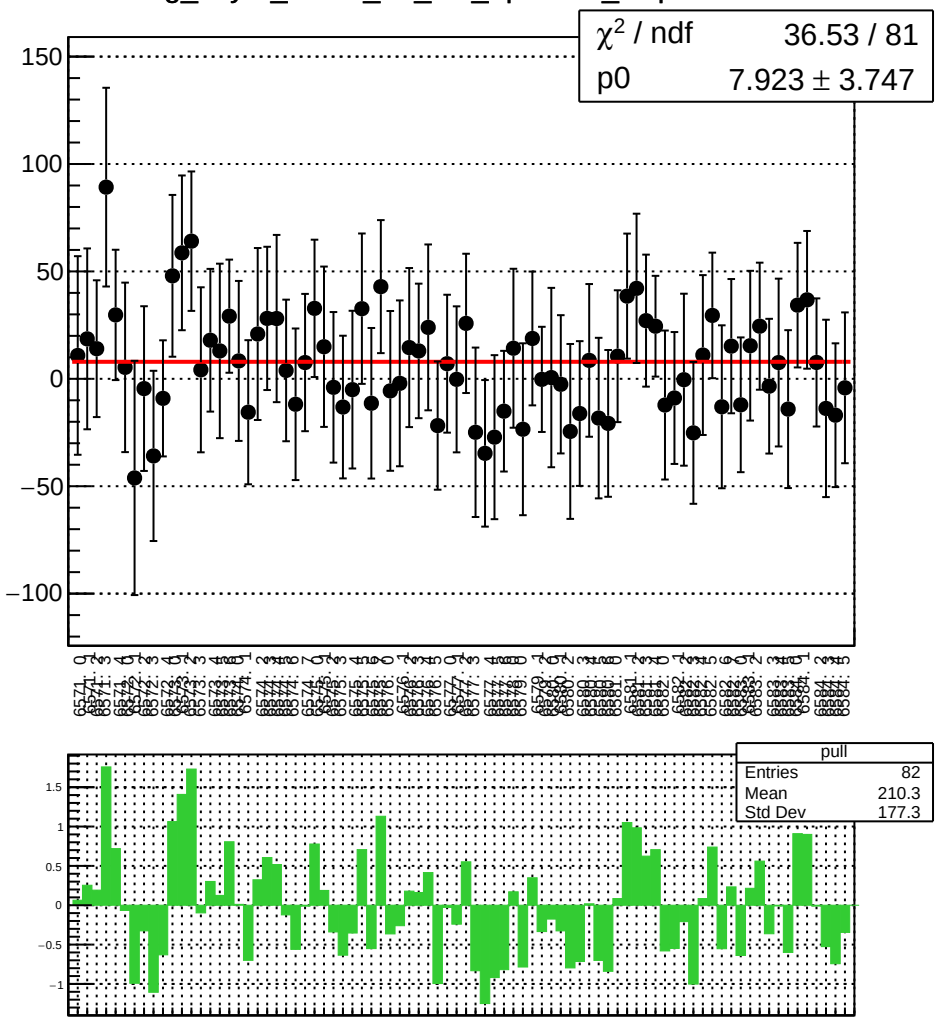

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 34.44 / 81
p0 84.95 ± 5.372
pull
Entries 82
Mean −76.37
Std Dev 118.6
pull1D
Entries 82
Mean −0.03129
Std Dev 0.6474

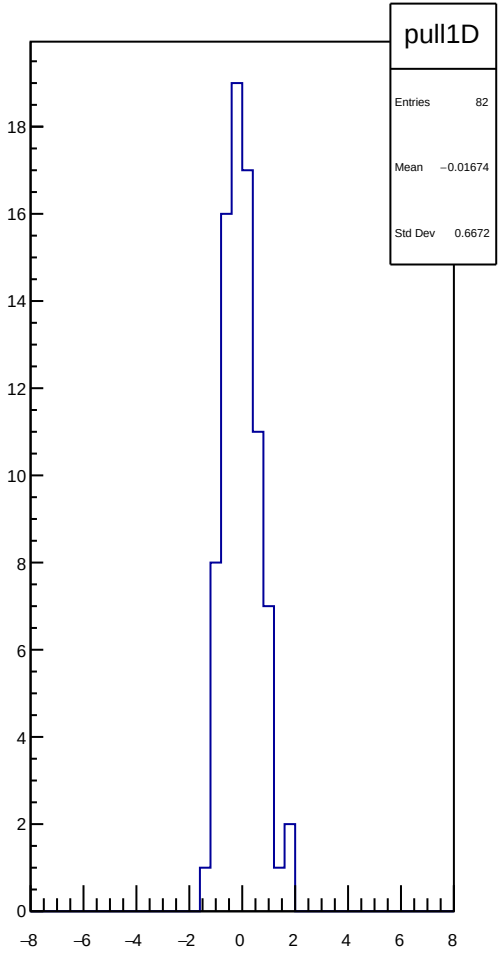

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 179.7 / 81
p0 −192.5 ± 0.2533
−180
−185
−190
−195
−200
−205
pull
Entries 82
Mean 818.3
Std Dev 785.9
4
2
0
−2
−4
−6

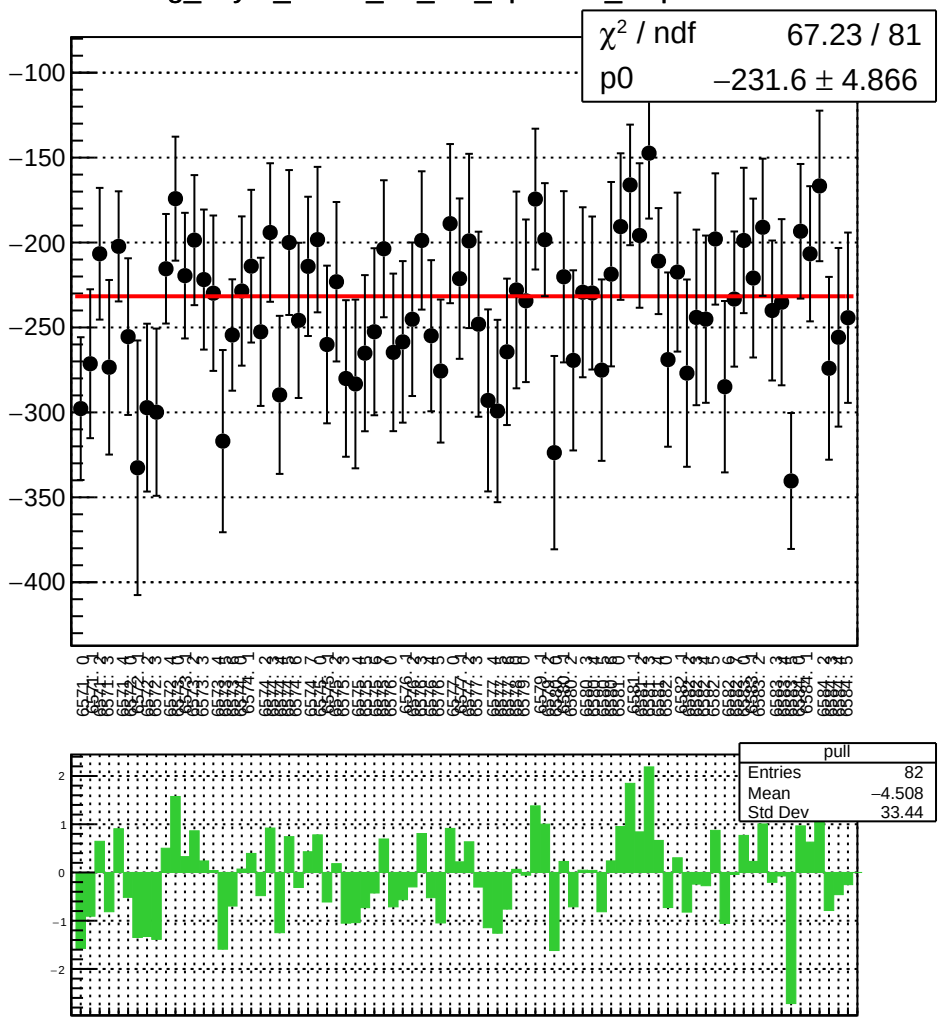

pull1D
Entries 82
Mean −0.01287
Std Dev 1.48
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

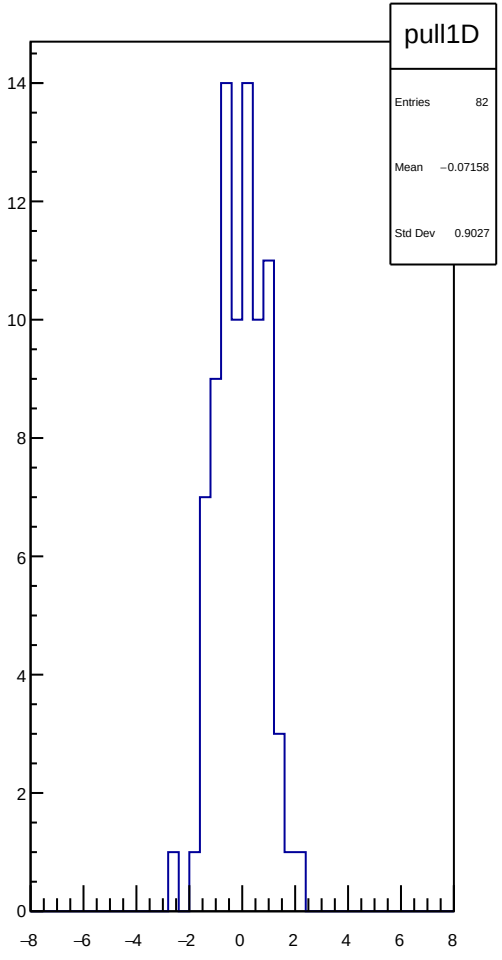

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 66.79 / 81
p0 212.2 ± 4.57
350
300
250
200
150
100
pull
Entries 82
Mean −5.757
Std Dev 35.69
3
2
1
0
−1
−2

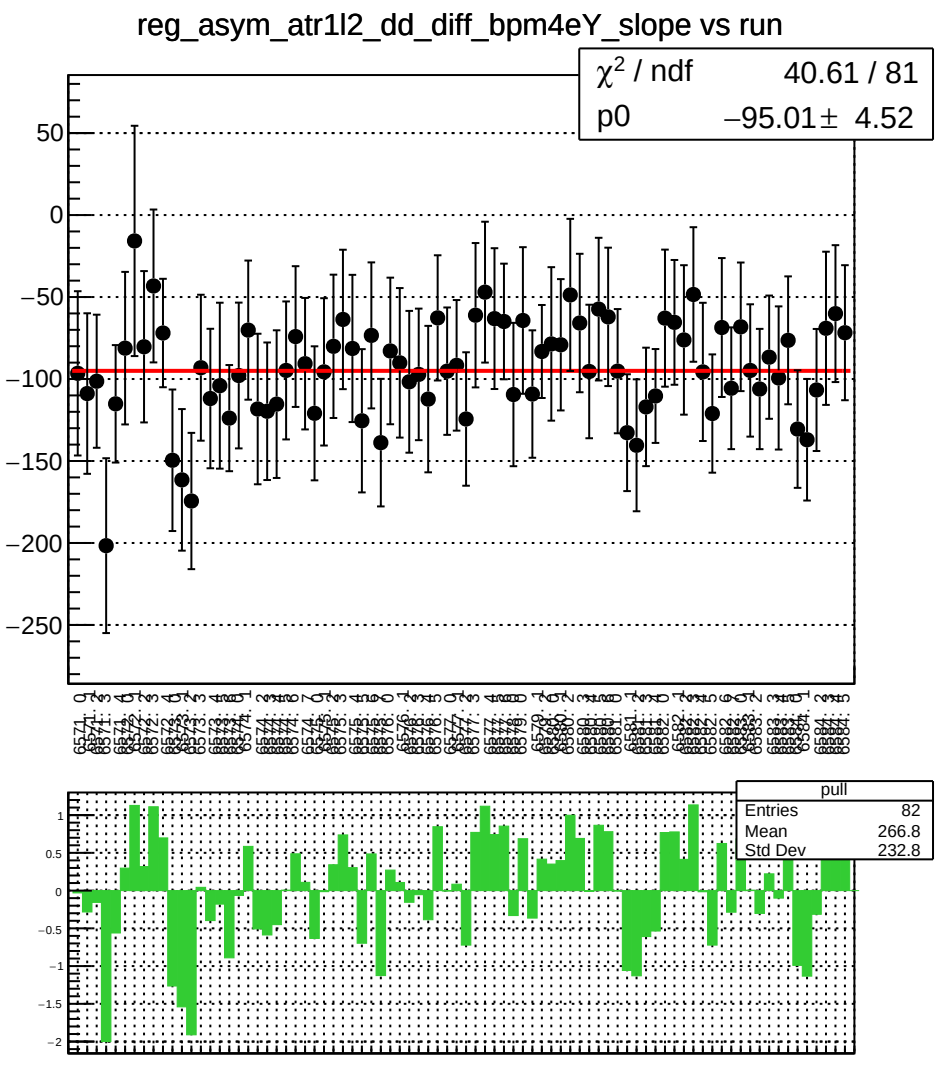

pull1D
Entries 82
Mean 0.06748
Std Dev 0.9
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

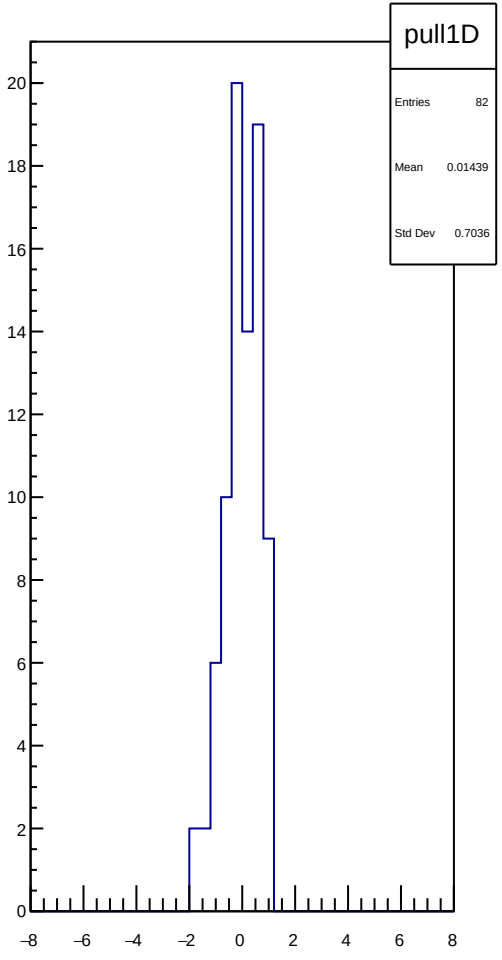

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 36.53 / 81
p0 7.923 ± 3.747
150
100
50
0
−50
−100
pull
Entries 82
Mean 210.3
Std Dev 177.3
1.5
1
0.5
0
−0.5
−1

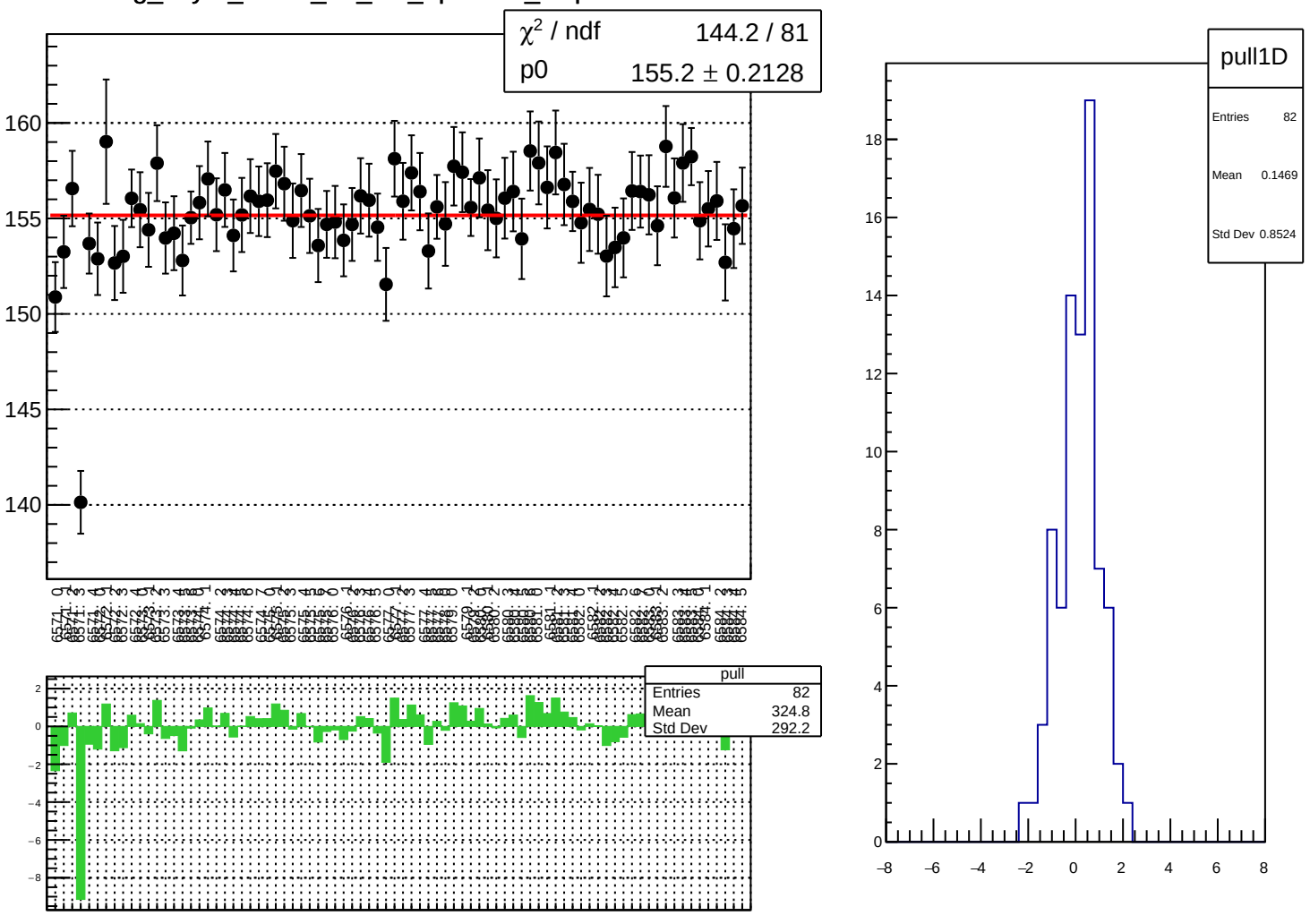

pull1D
Entries 82
Mean −0.01674
Std Dev 0.6672
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

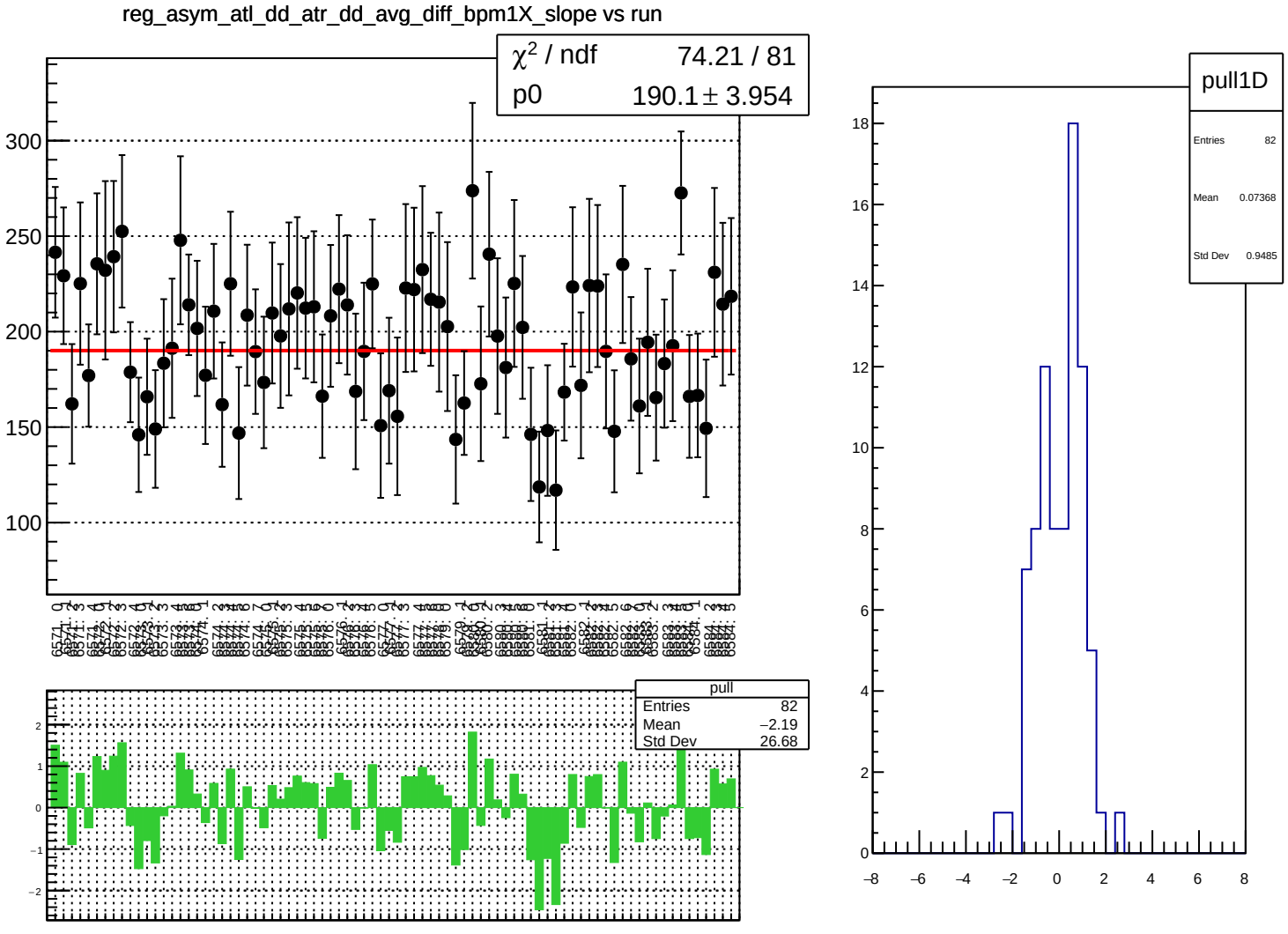

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 67.23 / 81
p0 −231.6 ± 4.866
−100
−150
−200
−250
−300
−350
−400
pull
Entries 82
Mean −4.508
Std Dev 33.44
2
1
0
−1
−2

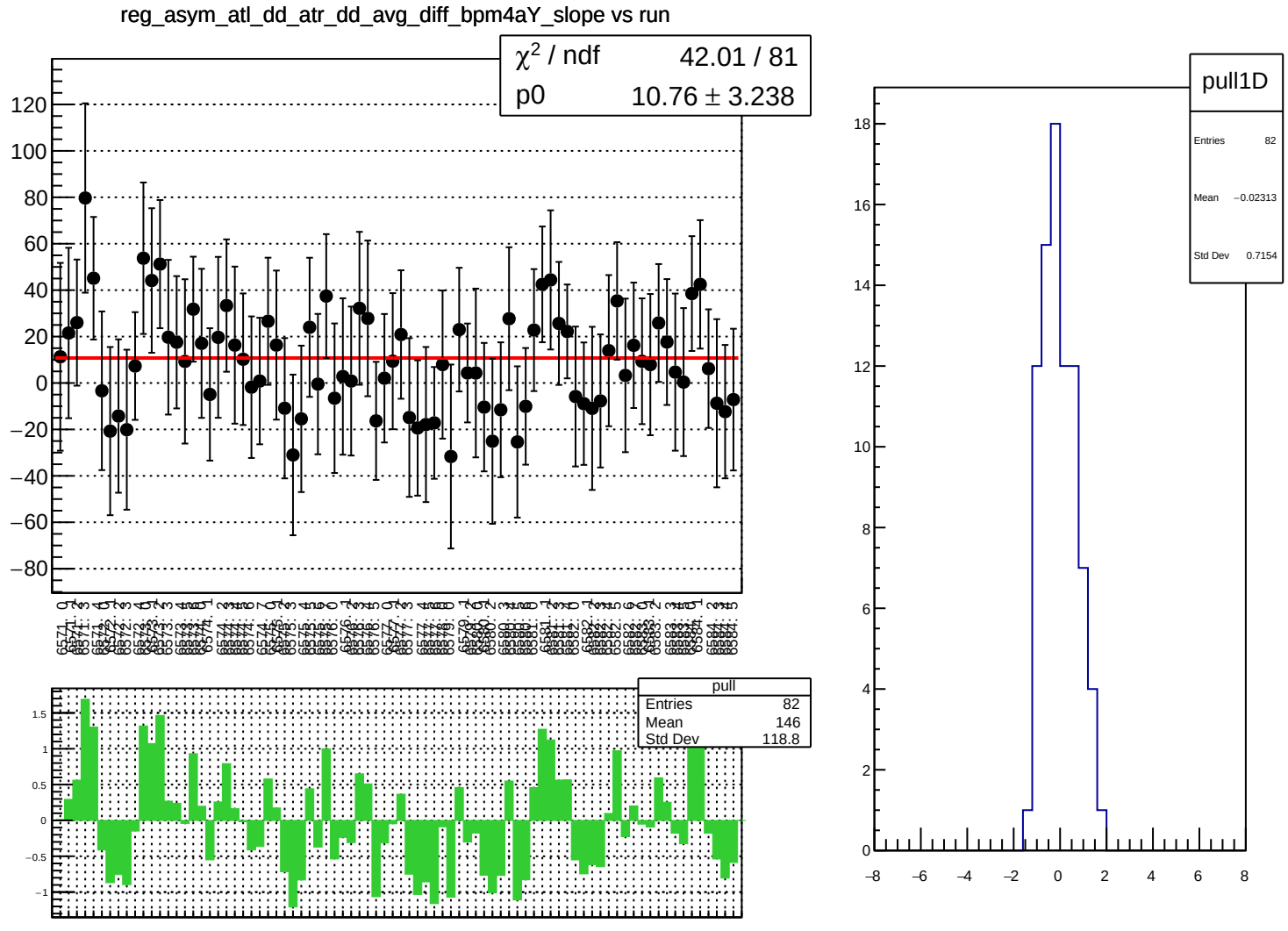

pull1D
Entries 82
Mean −0.07158
Std Dev 0.9027
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

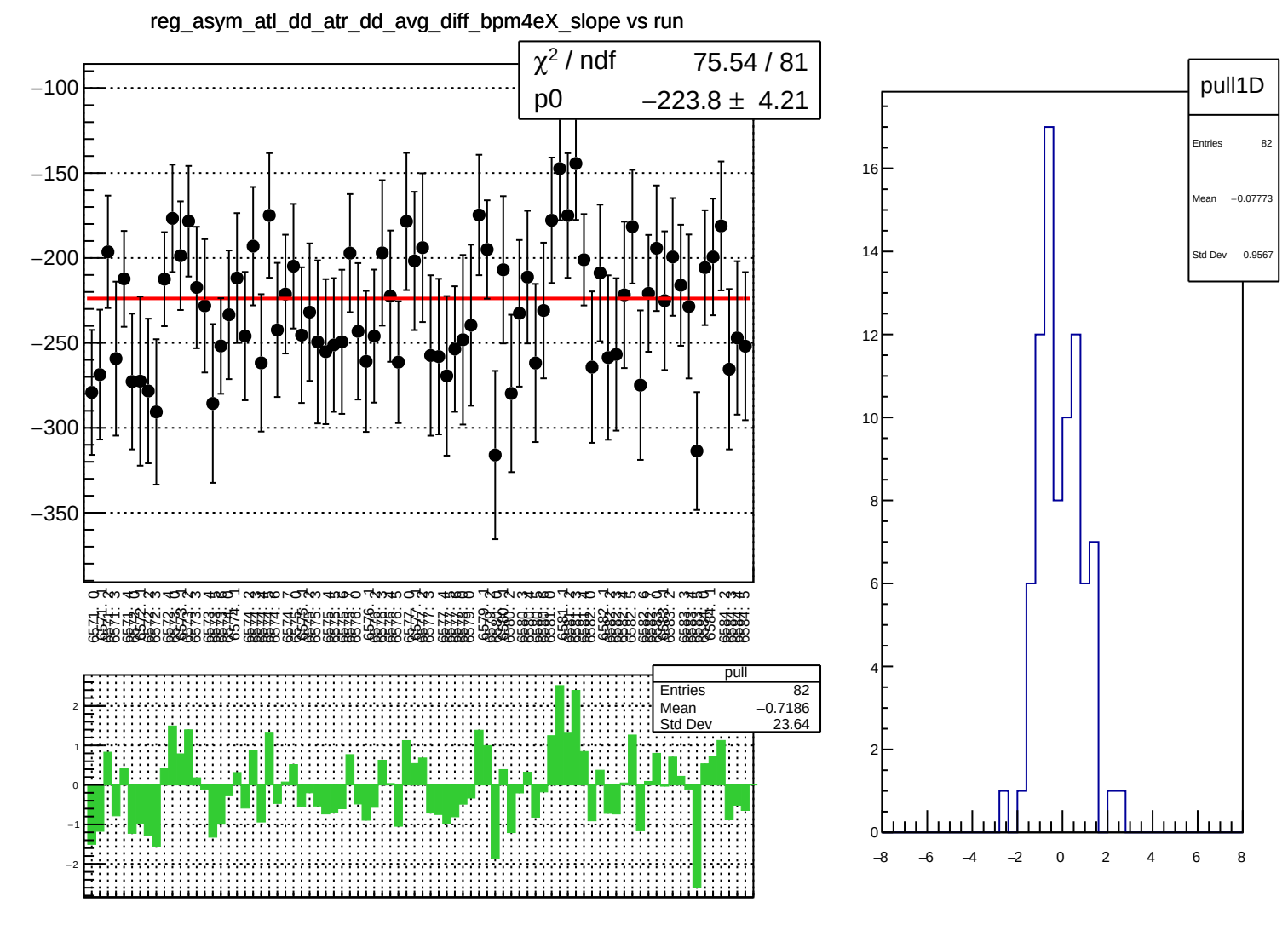

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 40.61 / 81
p0 −95.01± 4.52
pull
Entries 82
Mean 266.8
Std Dev 232.8

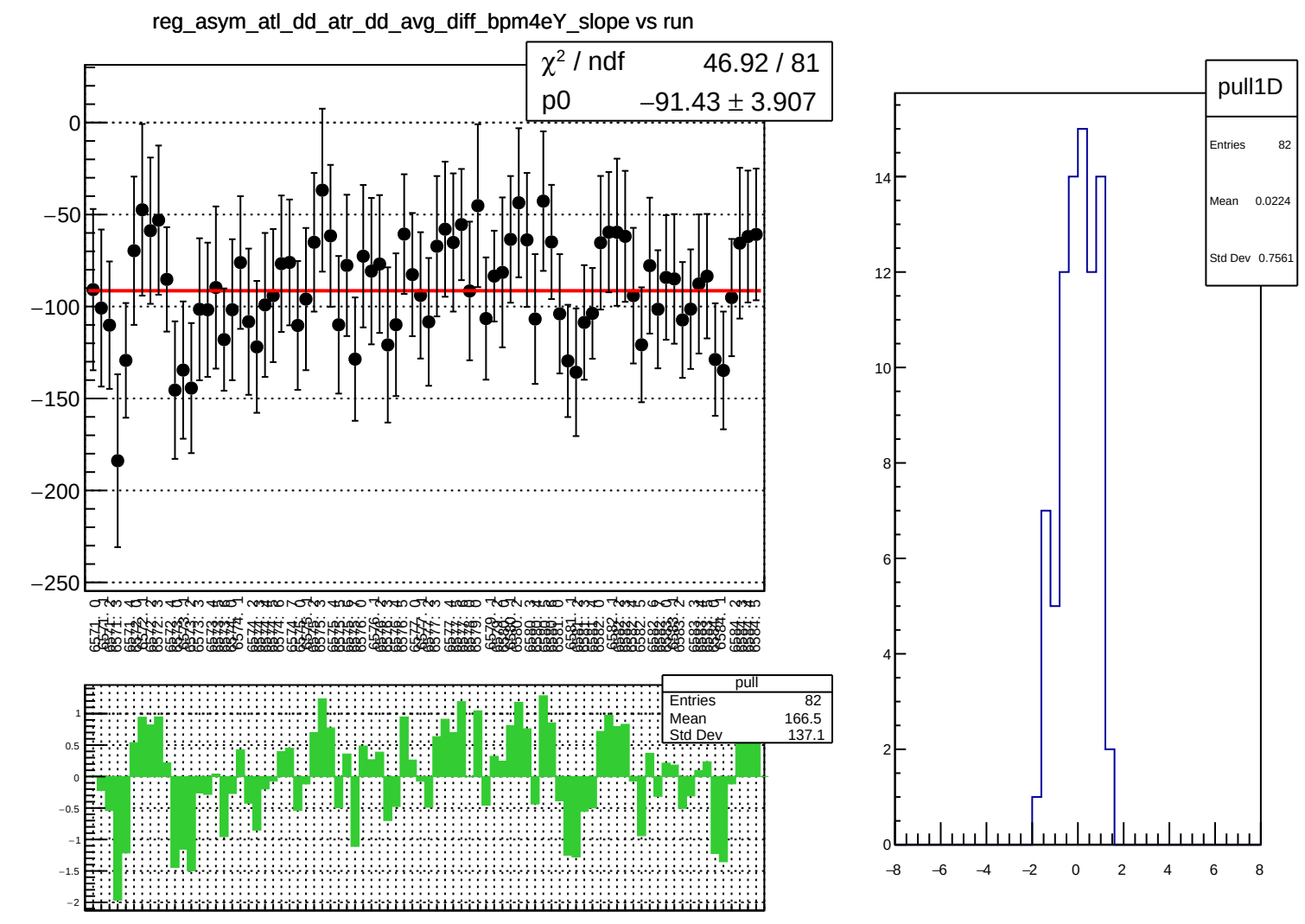

pull1D
Entries 82
Mean 0.01439
Std Dev 0.7036

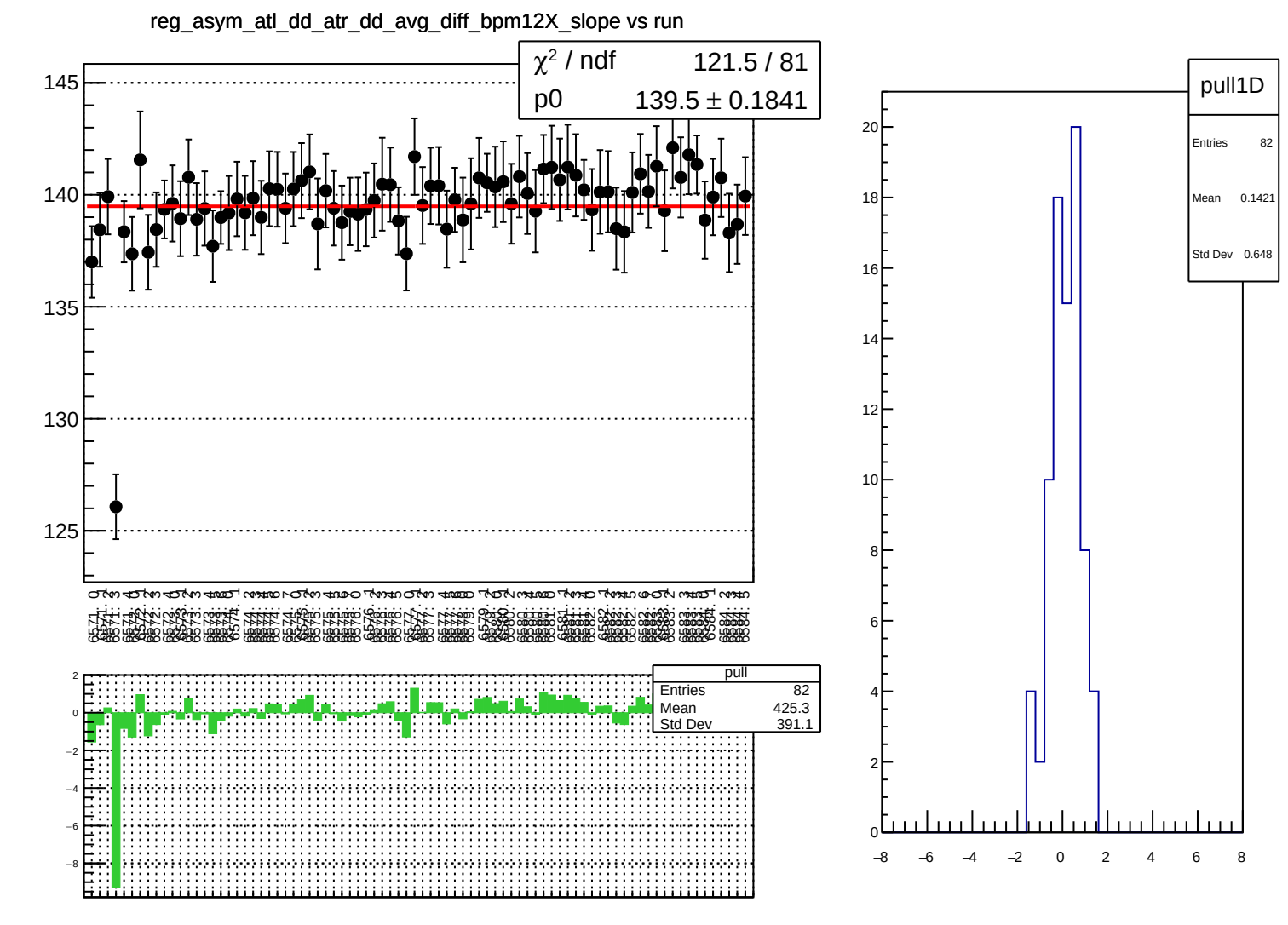

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 144.2 / 81
p0 155.2 ± 0.2128
160
155
150
145
140
pull
Entries 82
Mean 324.8
Std Dev 292.2
2
0
−2
−4
−6
−8
pull1D
Entries 82
Mean 0.1469
Std Dev 0.8524
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

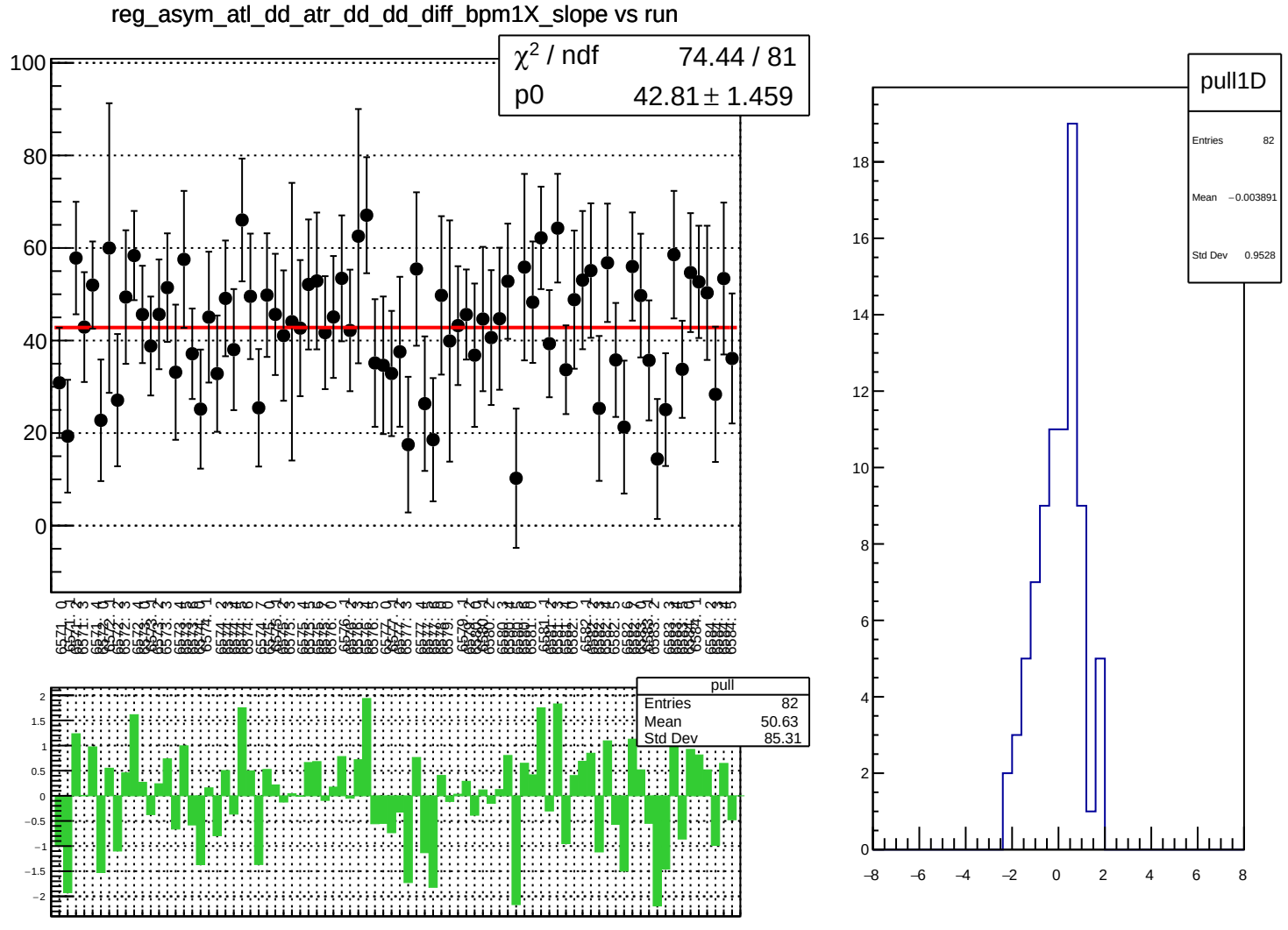

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 74.21 / 81
p0 190.1 ± 3.954
300
250
200
150
100
pull
Entries 82
Mean −2.19
Std Dev 26.68
2
1
0
−1
−2
pull1D
Entries 82
Mean 0.07368
Std Dev 0.9485
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

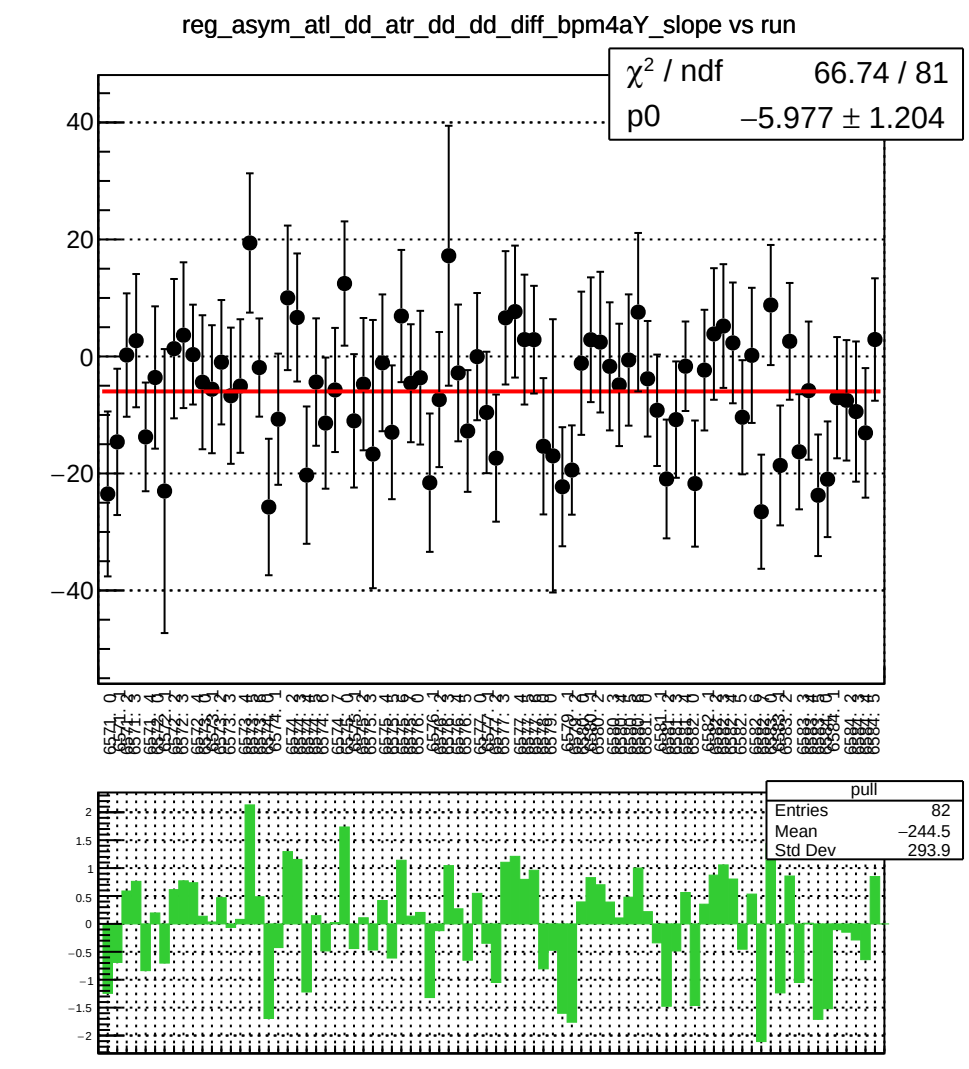

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 42.01 / 81
p0 10.76 ± 3.238
pull
Entries 82
Mean 146
Std Dev 118.8
pull1D
Entries 82
Mean −0.02313
Std Dev 0.7154

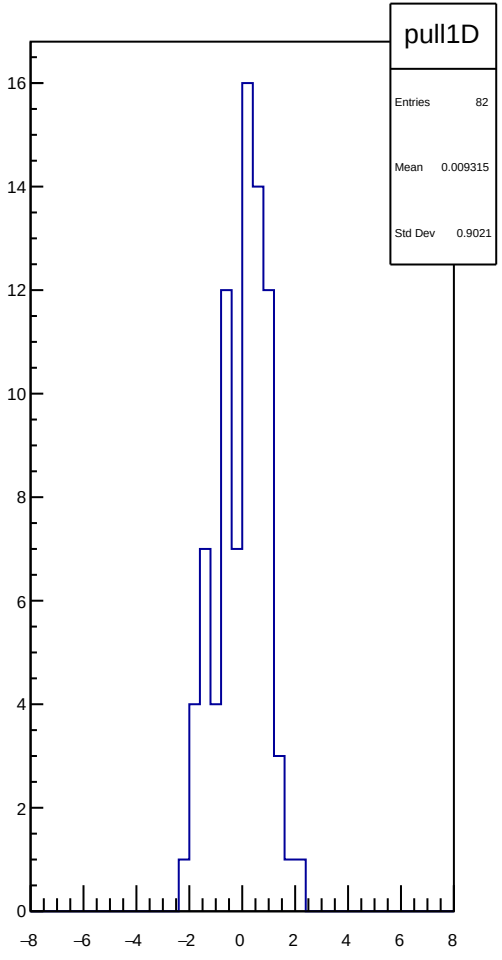

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 75.54 / 81
p0 −223.8 ± 4.21
−100
−150
−200
−250
−300
−350
pull
Entries 82
Mean −0.7186
Std Dev 23.64
2
1
0
−1
−2
pull1D
Entries 82
Mean −0.07773
Std Dev 0.9567
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

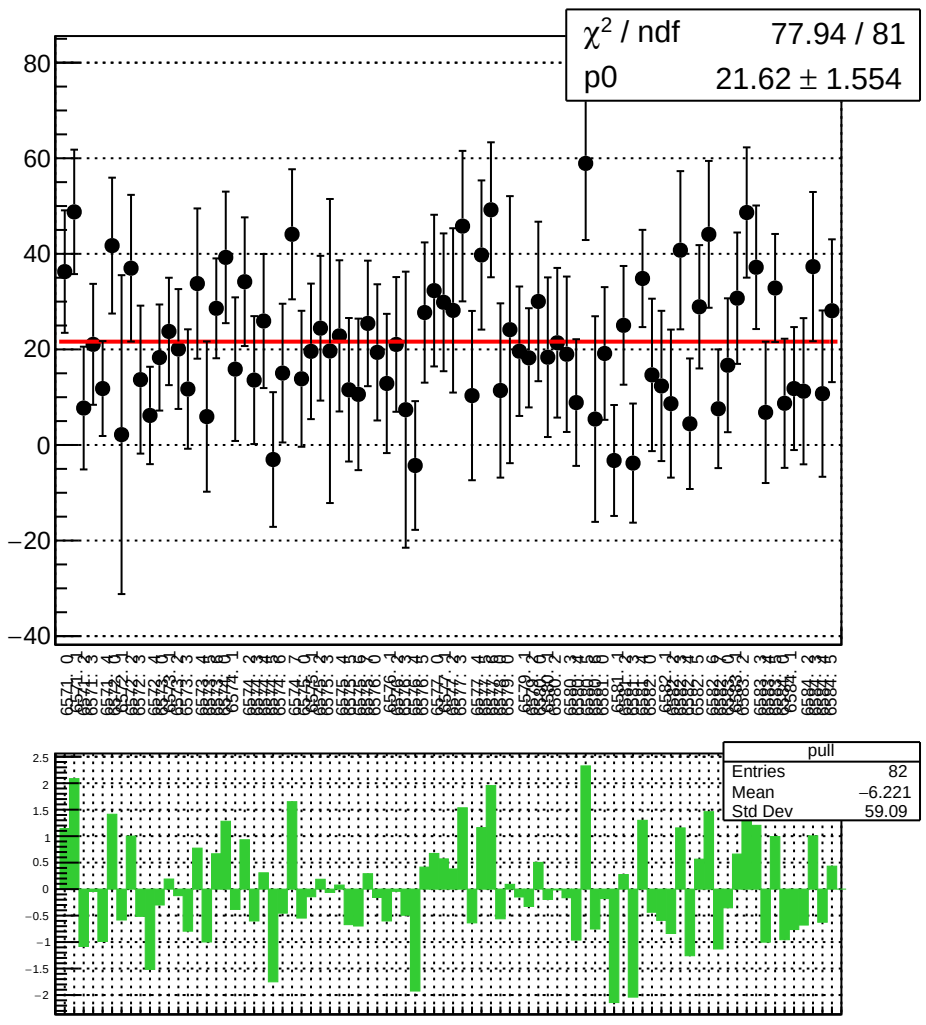

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 46.92 / 81
p0 −91.43 ± 3.907
pull
Entries 82
Mean 166.5
Std Dev 137.1
pull1D
Entries 82
Mean 0.0224
Std Dev 0.7561

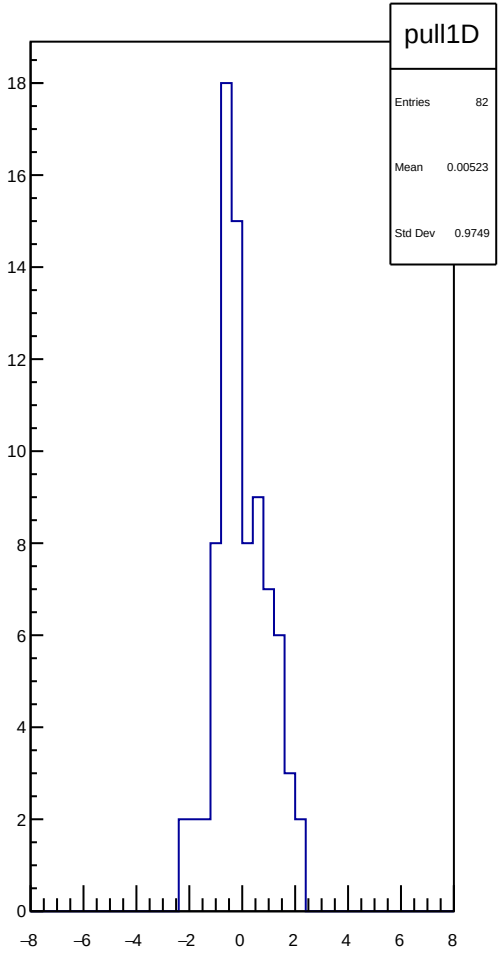

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 121.5 / 81
p0 139.5 ± 0.1841
145
140
135
130
125
pull
Entries 82
Mean 425.3
Std Dev 391.1
2
0
−2
−4
−6
−8
pull1D
Entries 82
Mean 0.1421
Std Dev 0.648
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

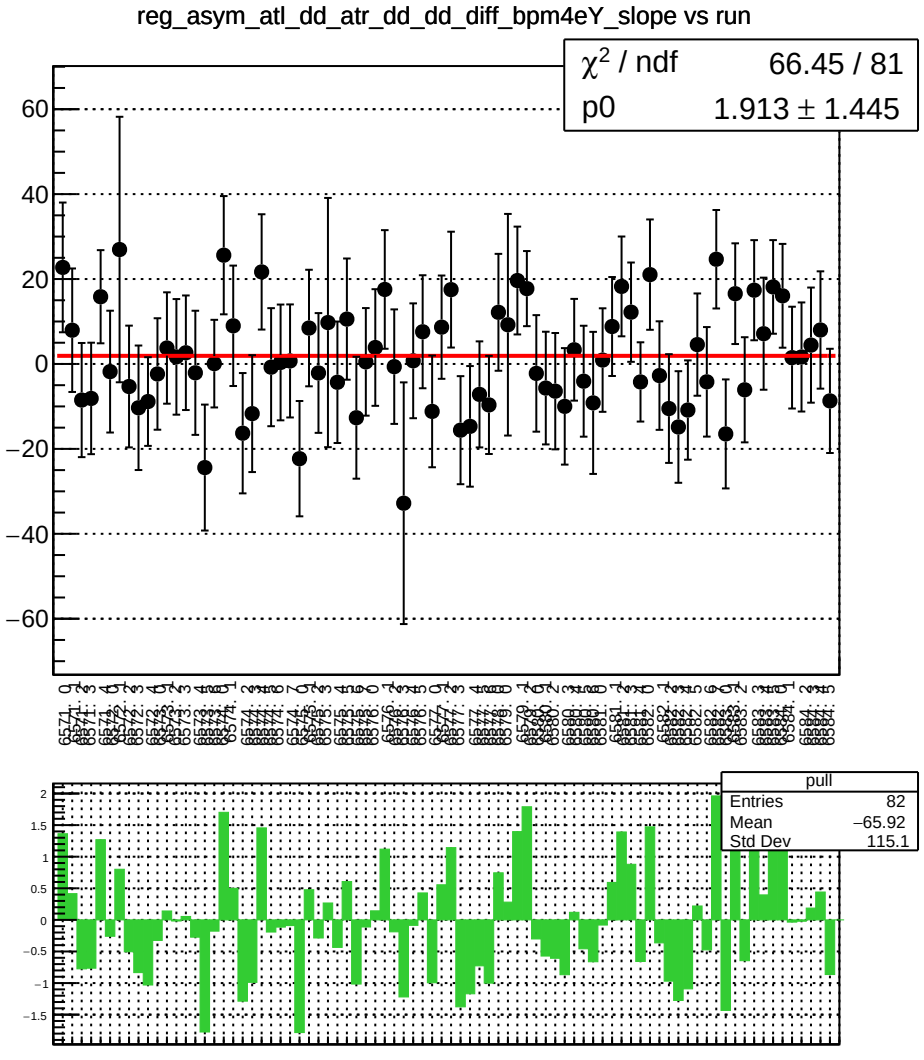

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 74.44 / 81
p0 42.81 ± 1.459
pull
Entries 82
Mean 50.63
Std Dev 85.31
pull1D
Entries 82
Mean −0.003891
Std Dev 0.9528

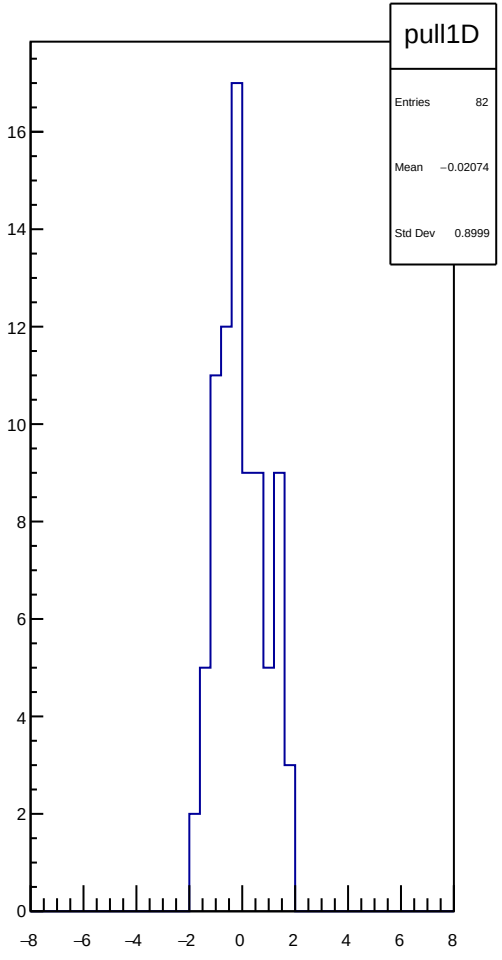

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 66.74 / 81
p0 −5.977 ± 1.204
pull
Entries 82
Mean −244.5
Std Dev 293.9

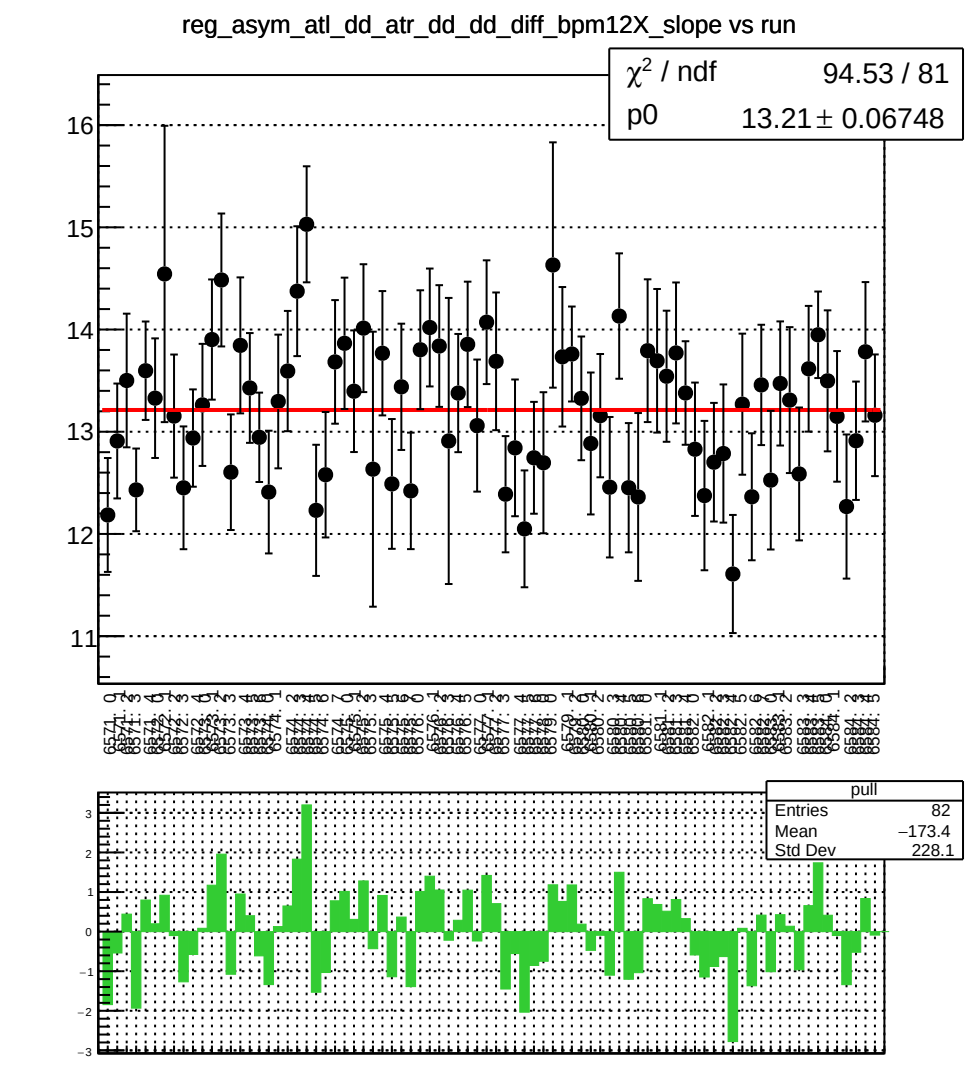

pull1D
Entries 82
Mean 0.009315
Std Dev 0.9021

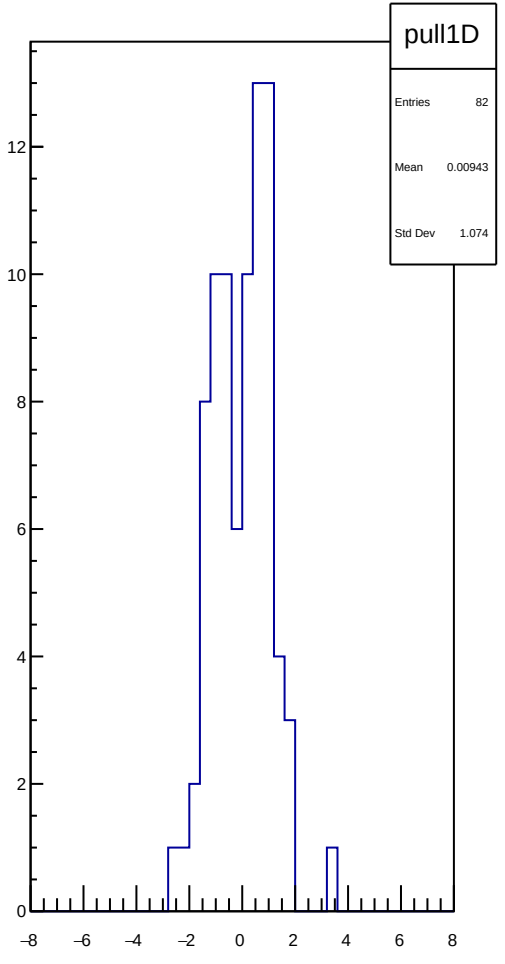

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 77.94 / 81
p0 21.62 ± 1.554
pull
Entries 82
Mean −6.221
Std Dev 59.09

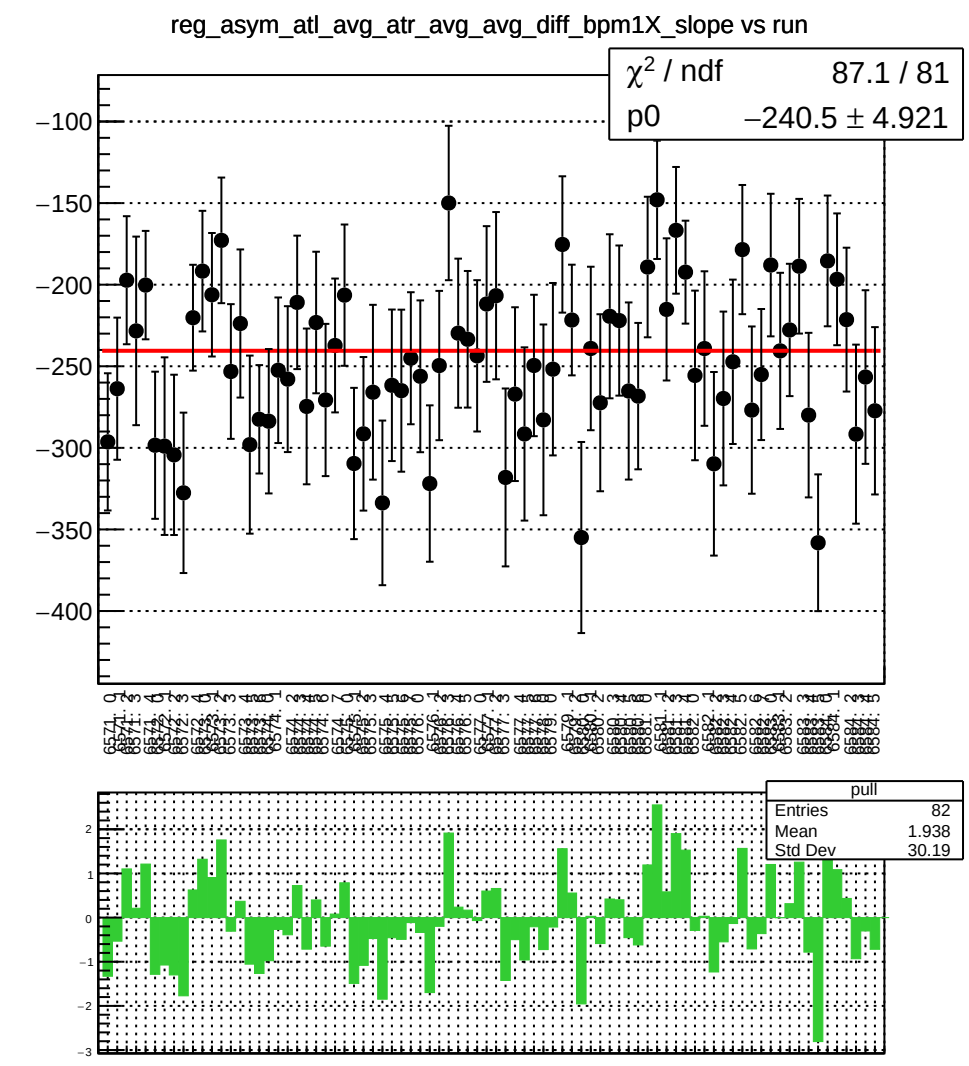

pull1D
Entries 82
Mean 0.00523
Std Dev 0.9749

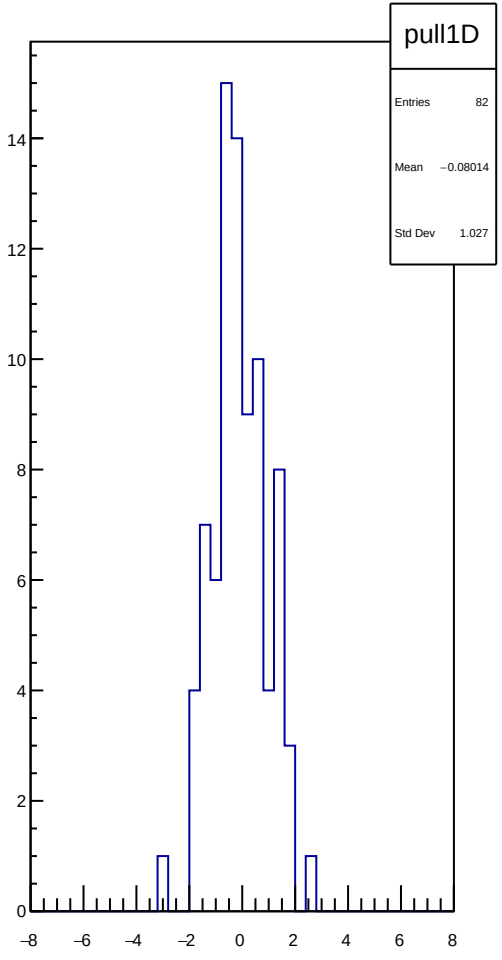

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 66.45 / 81
p0 1.913 ± 1.445
pull
Entries 82
Mean −65.92
Std Dev 115.1

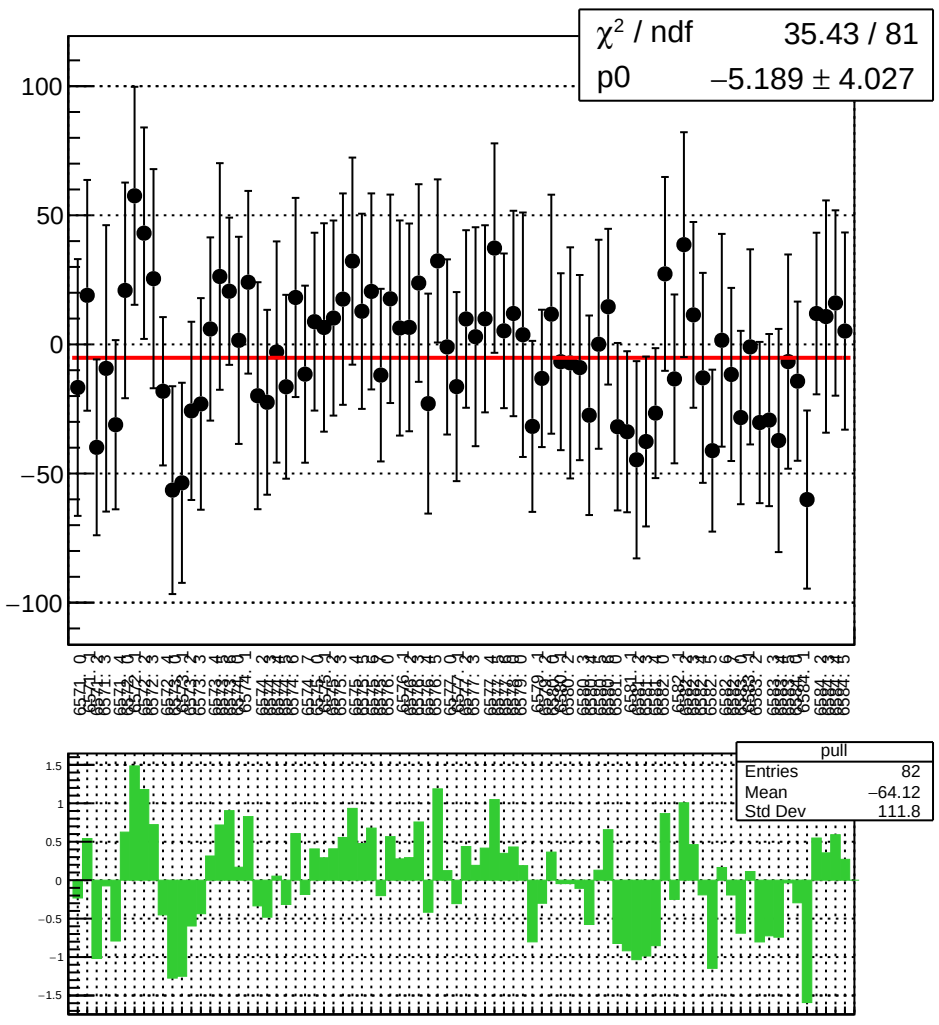

pull1D
Entries 82
Mean −0.02074
Std Dev 0.8999

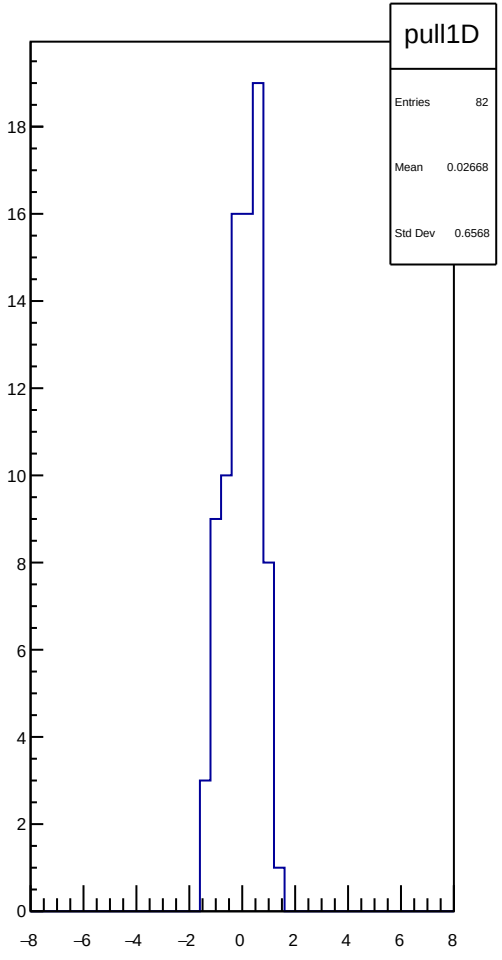

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 94.53 / 81
p0 13.21 ± 0.06748
pull
Entries 82
Mean −173.4
Std Dev 228.1

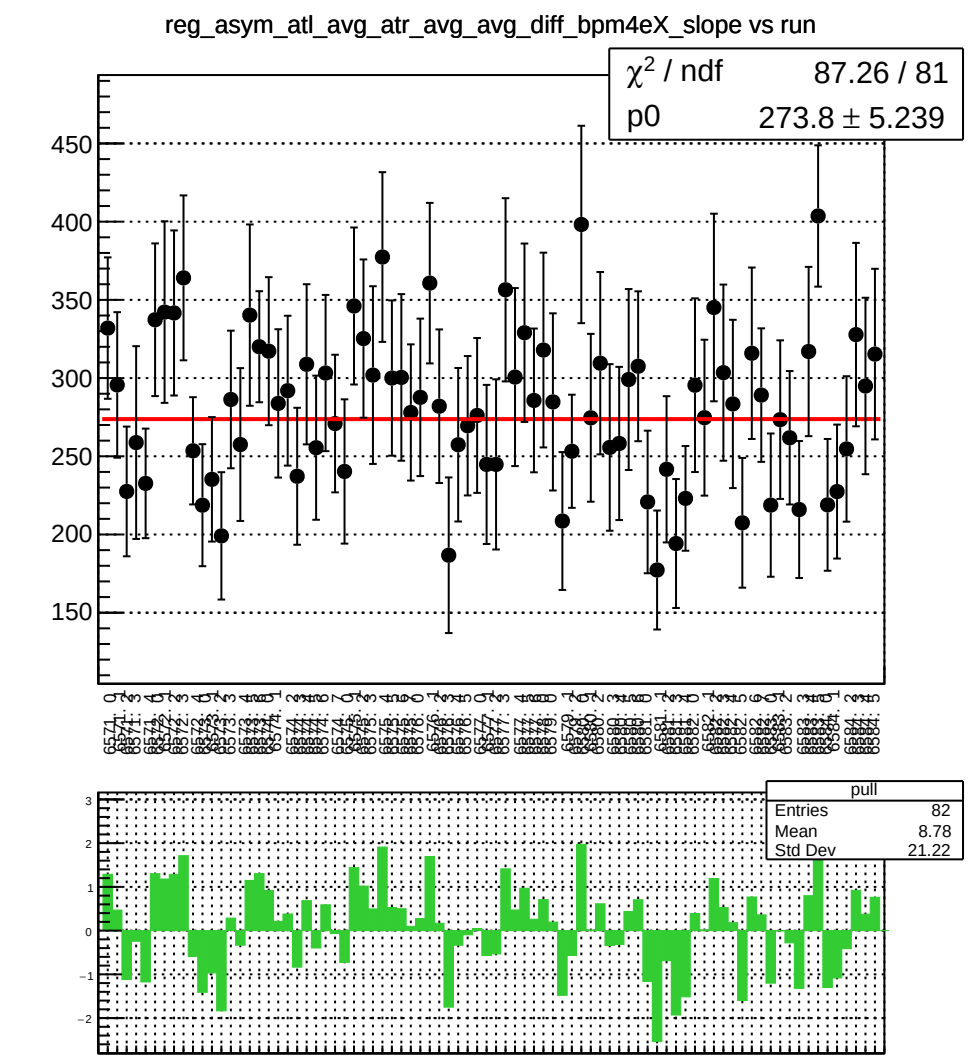

pull1D
Entries 82
Mean 0.00943
Std Dev 1.074

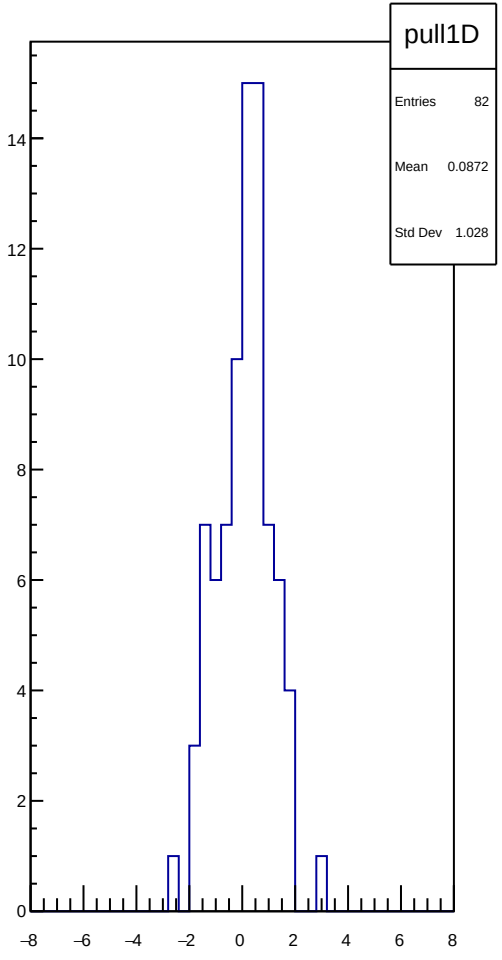

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 87.1 / 81
p0 −240.5 ± 4.921
pull
Entries 82
Mean 1.938
Std Dev 30.19

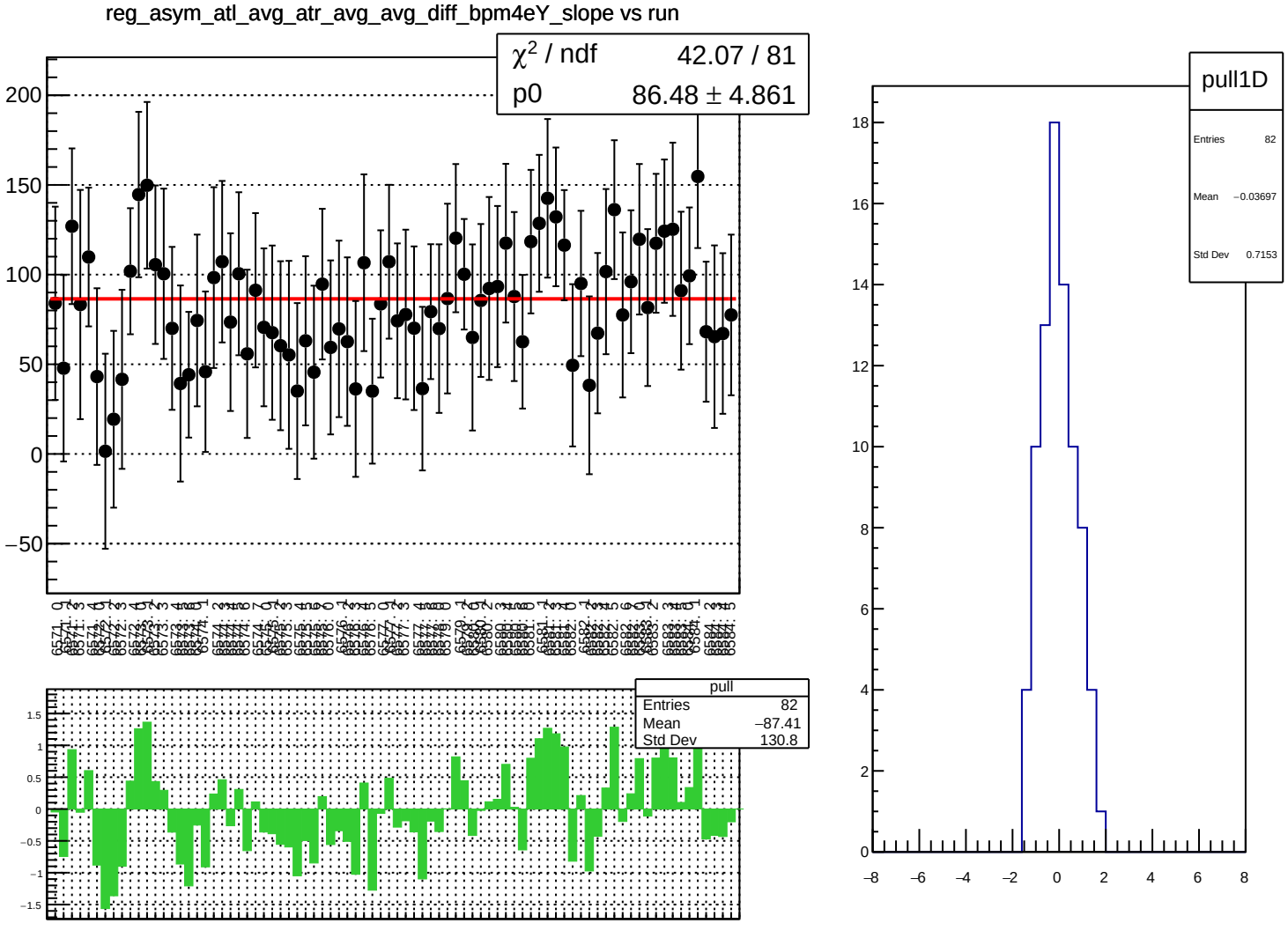

pull1D
Entries 82
Mean −0.08014
Std Dev 1.027

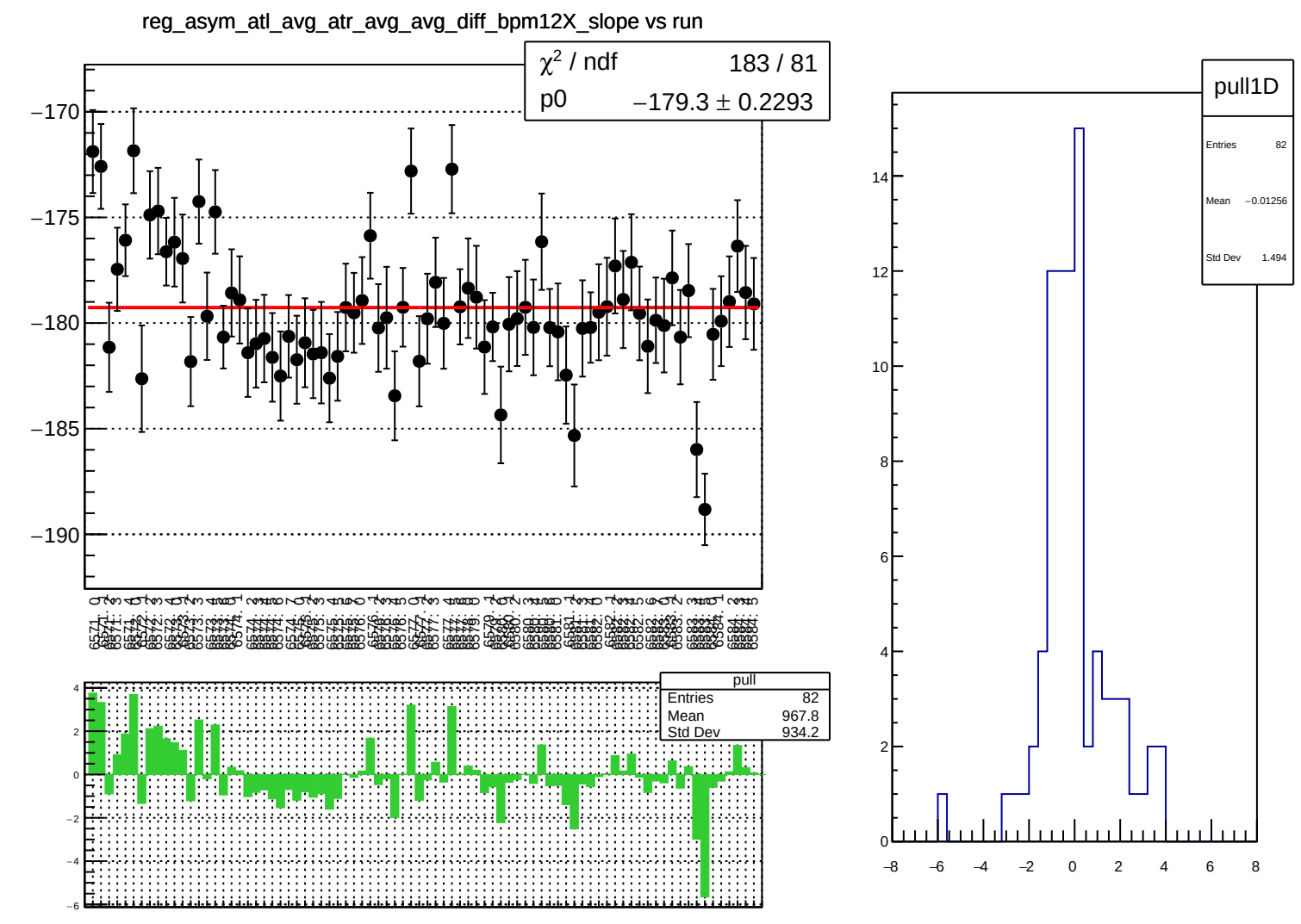

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 35.43 / 81
p0 −5.189 ± 4.027
100
50
0
−50
−100
pull
Entries 82
Mean −64.12
Std Dev 111.8
1.5
1
0.5
0
−0.5
−1
−1.5

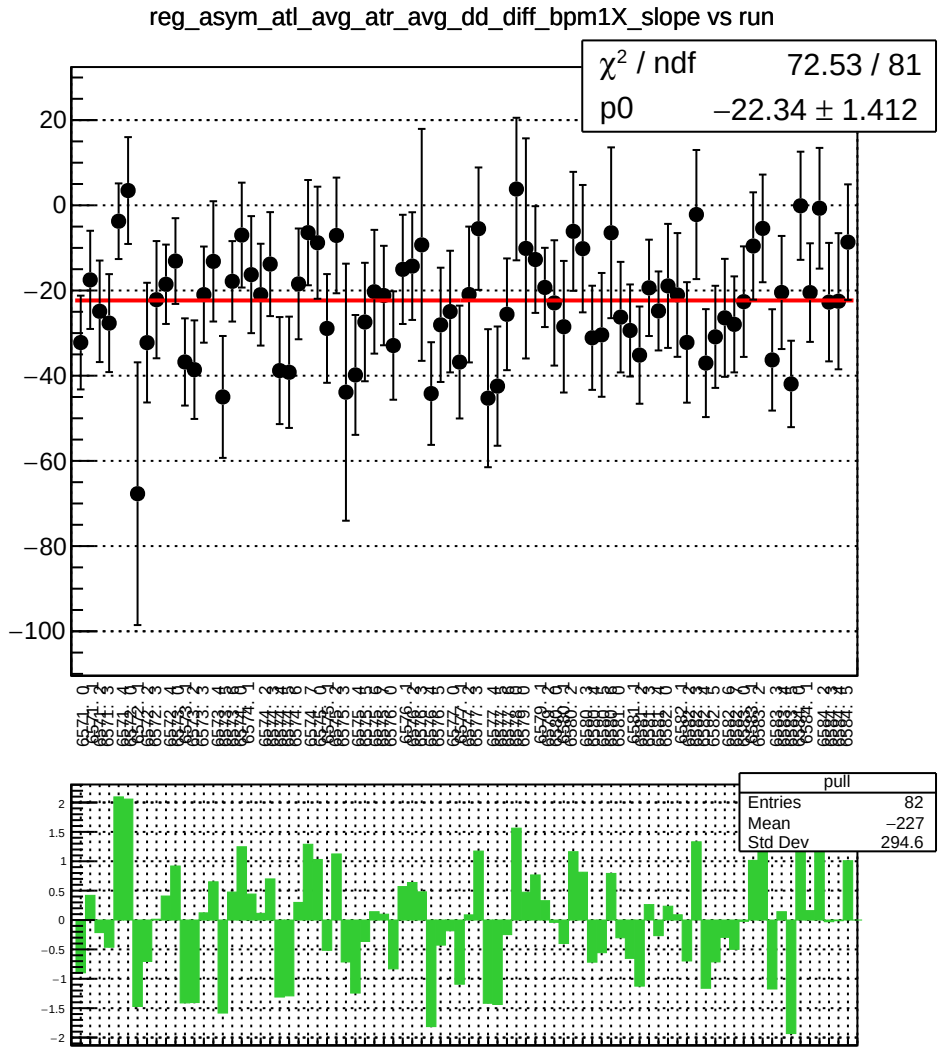

pull1D
Entries 82
Mean 0.02668
Std Dev 0.6568
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

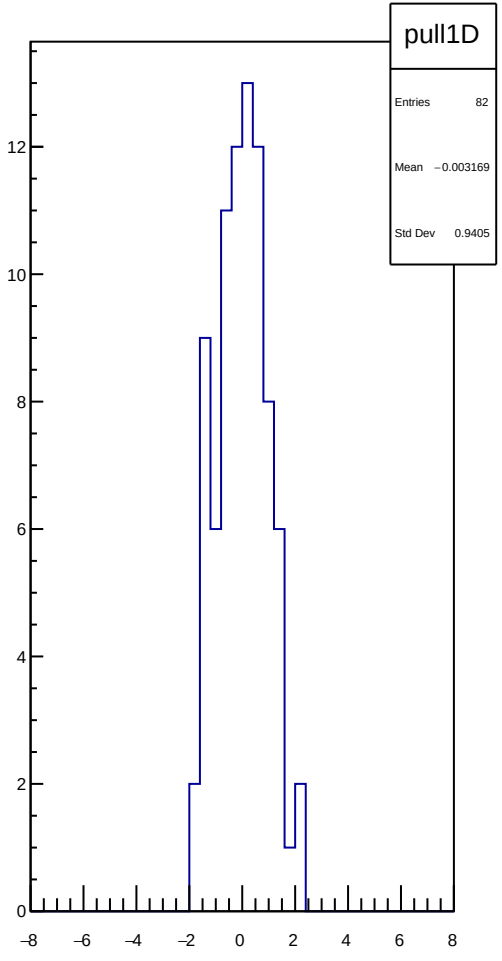

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 87.26 / 81
p0 273.8 ± 5.239
pull
Entries 82
Mean 8.78
Std Dev 21.22

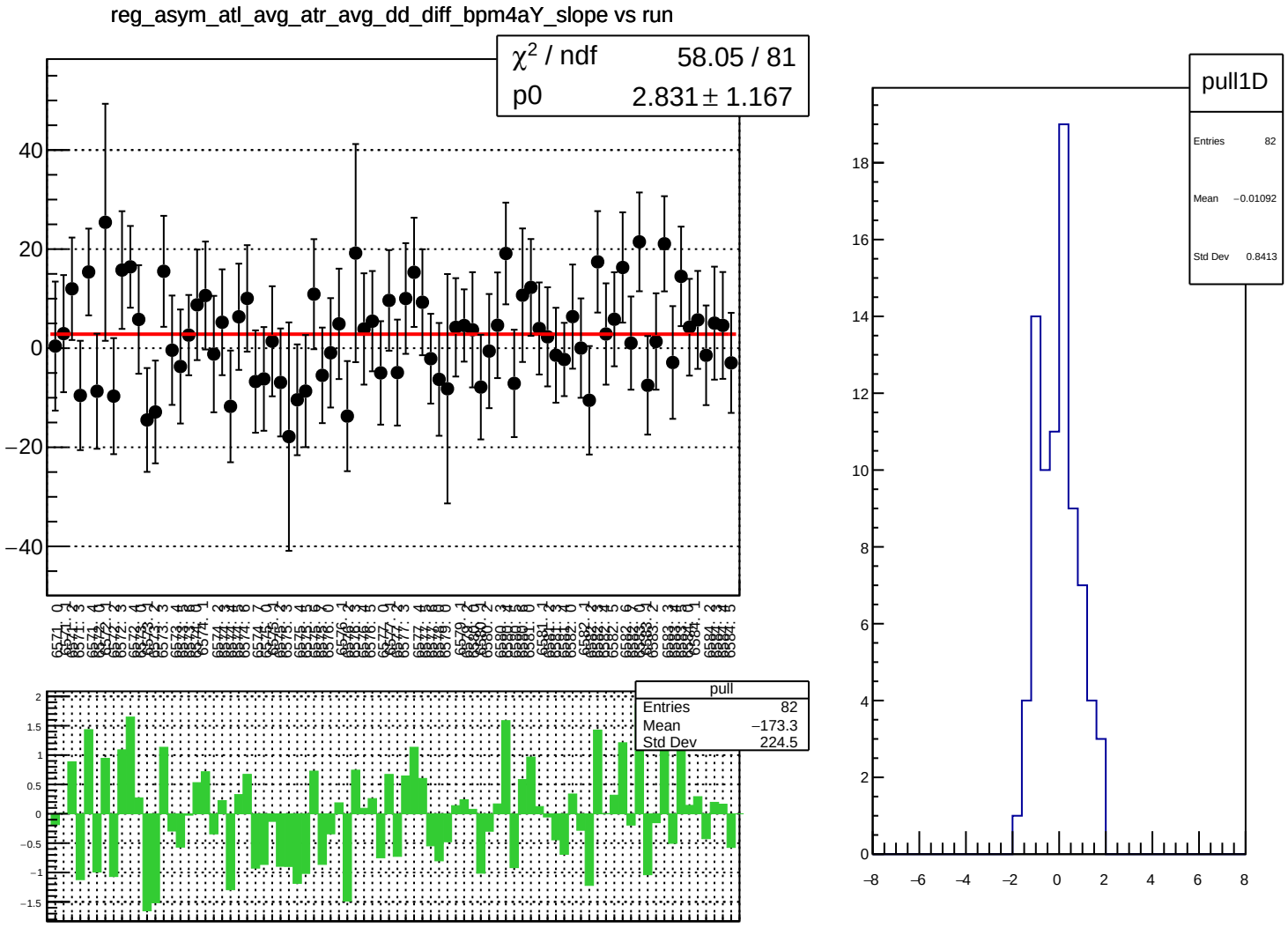

pull1D
Entries 82
Mean 0.0872
Std Dev 1.028

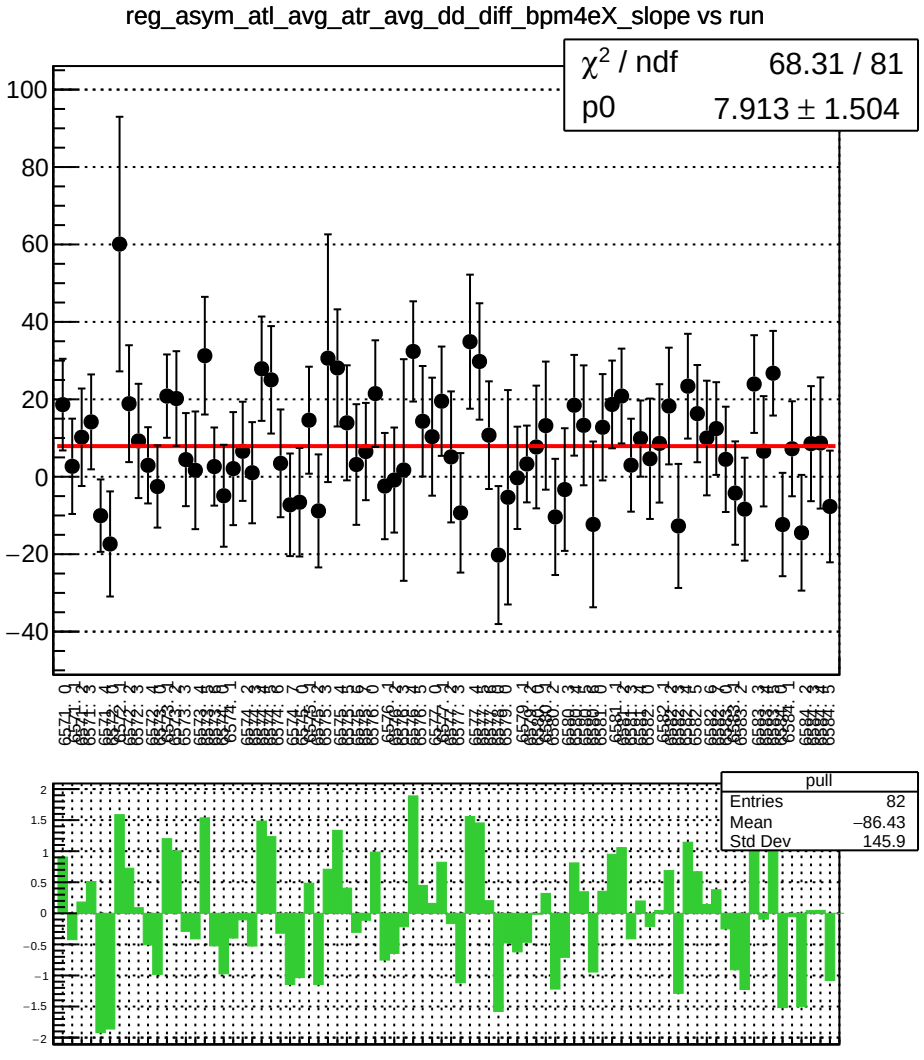

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 42.07 / 81
p0 86.48 ± 4.861
200
150
100
50
0
−50
pull
Entries 82
Mean −87.41
Std Dev 130.8
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 82
Mean −0.03697
Std Dev 0.7153
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

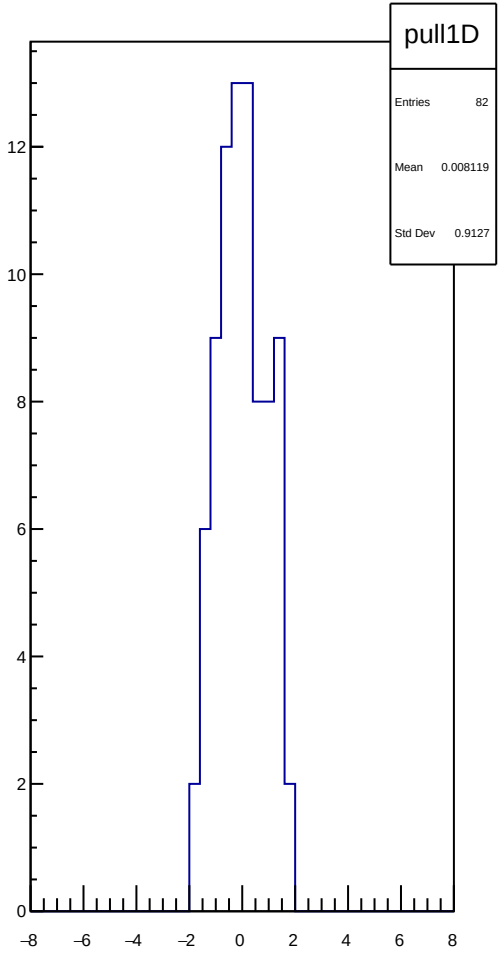

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 183 / 81
p0 −179.3 ± 0.2293
−170
−175
−180
−185
−190
pull
Entries 82
Mean 967.8
Std Dev 934.2
pull1D
Entries 82
Mean −0.01256
Std Dev 1.494

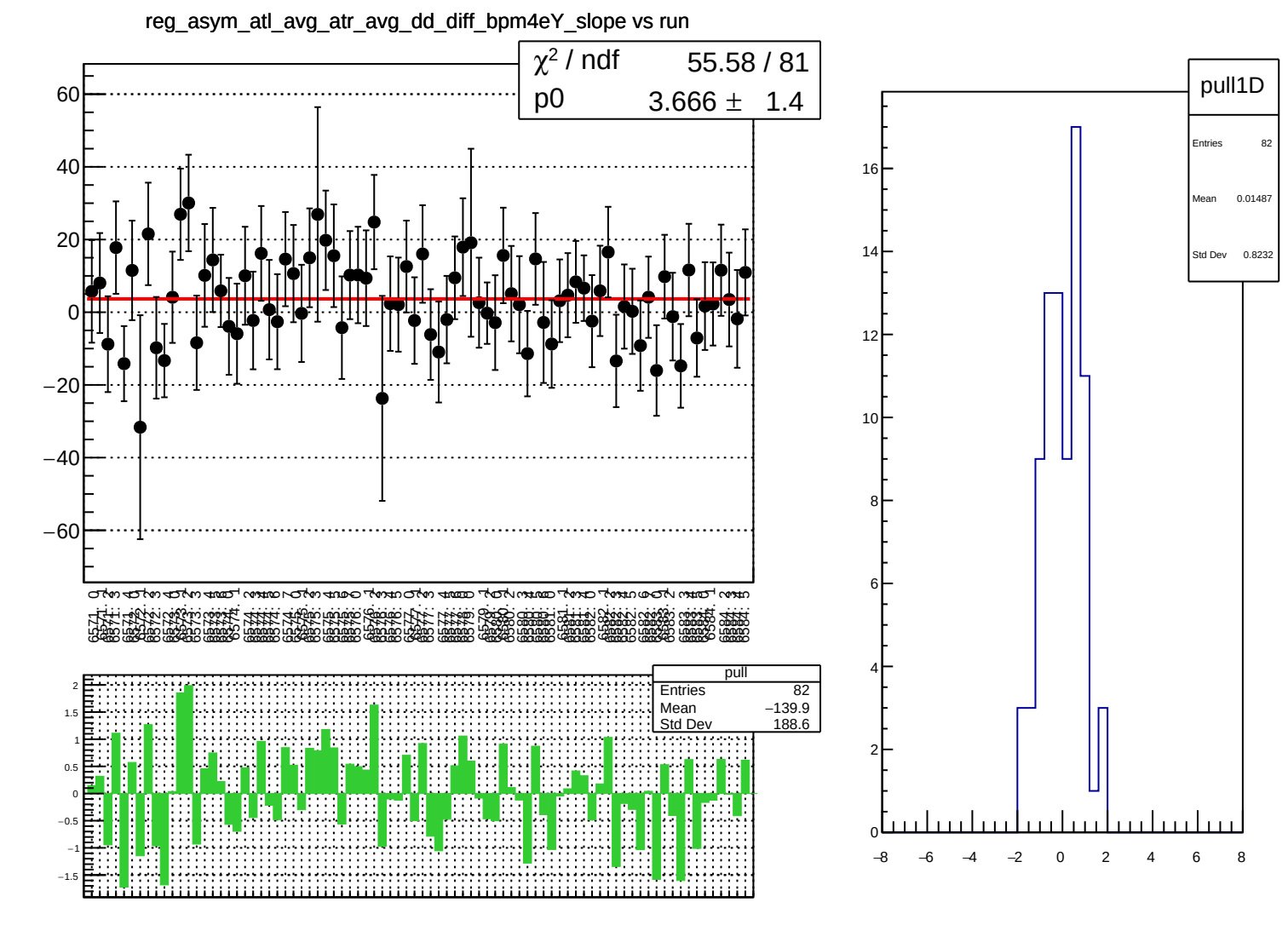

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 72.53 / 81
p0 −22.34 ± 1.412
pull
Entries 82
Mean −227
Std Dev 294.6

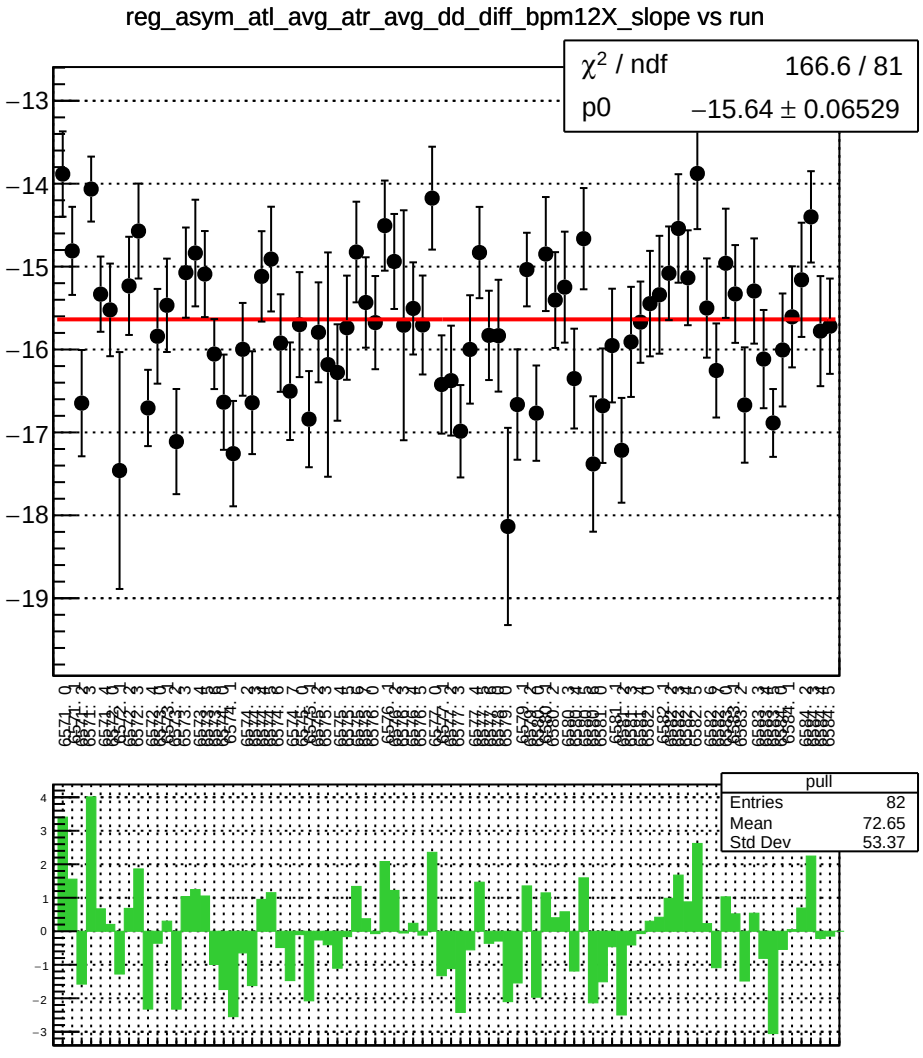

pull1D
Entries 82
Mean −0.003169
Std Dev 0.9405

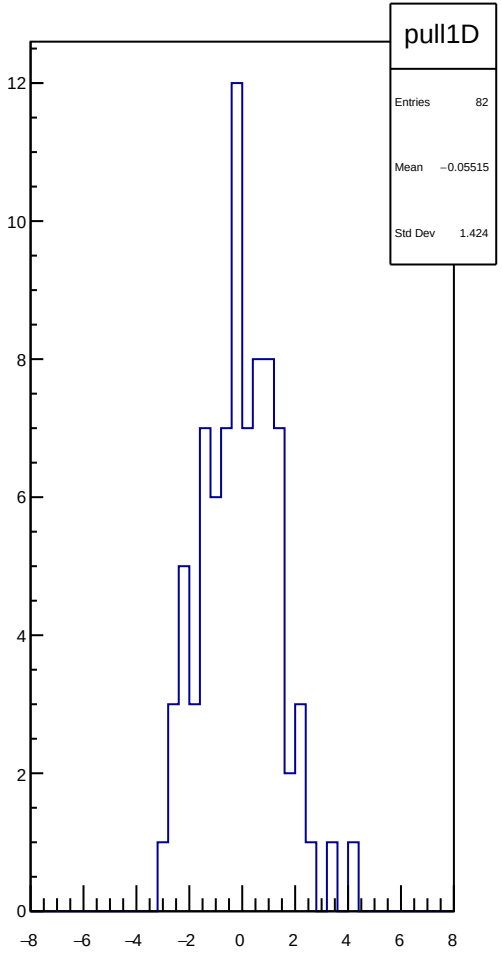

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 58.05 / 81
p0 2.831 ± 1.167
40
20
0
−20
−40
pull
Entries 82
Mean −173.3
Std Dev 224.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 82
Mean −0.01092
Std Dev 0.8413
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

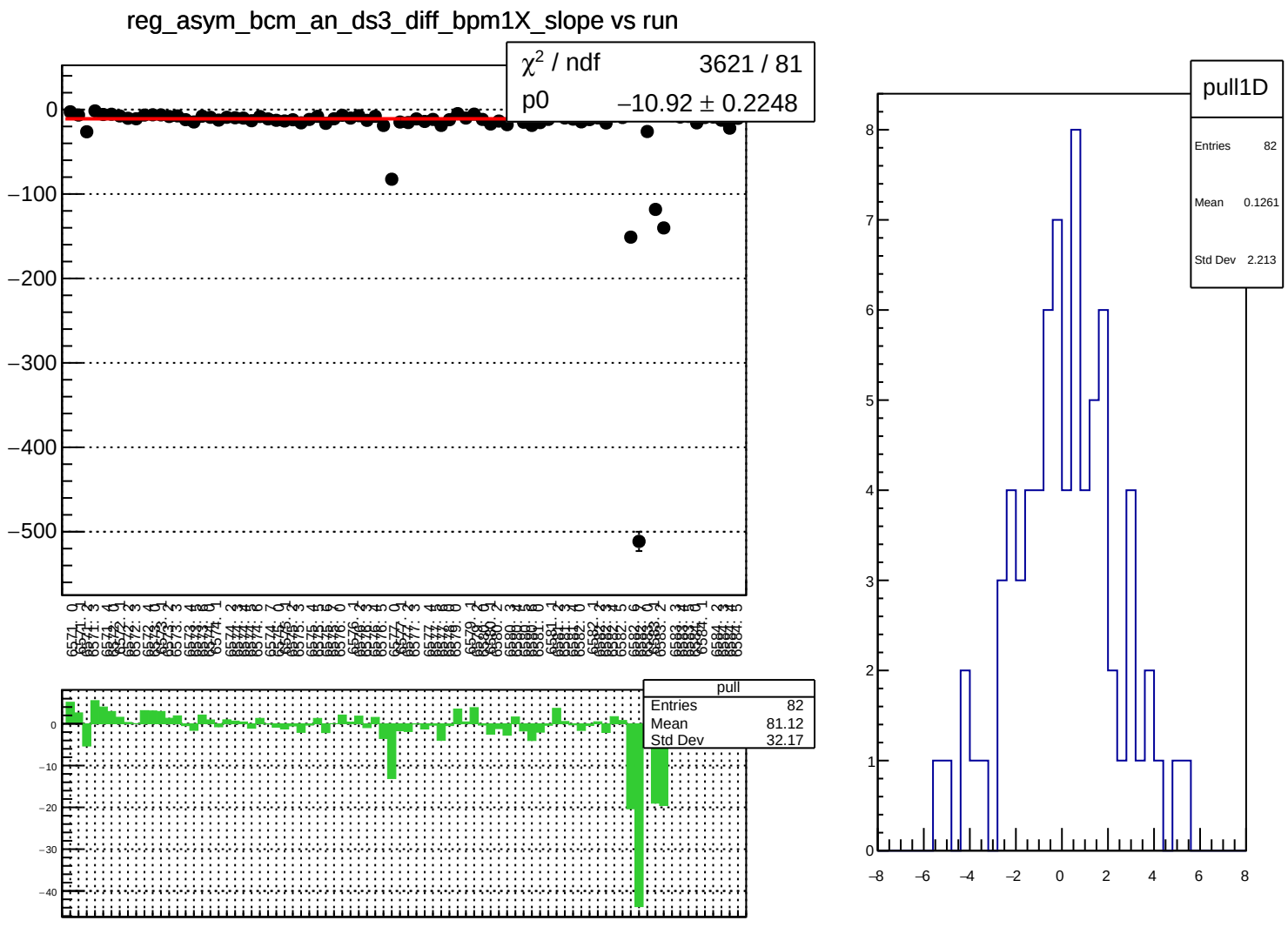

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 68.31 / 81
p0 7.913 ± 1.504
pull
Entries 82
Mean −86.43
Std Dev 145.9

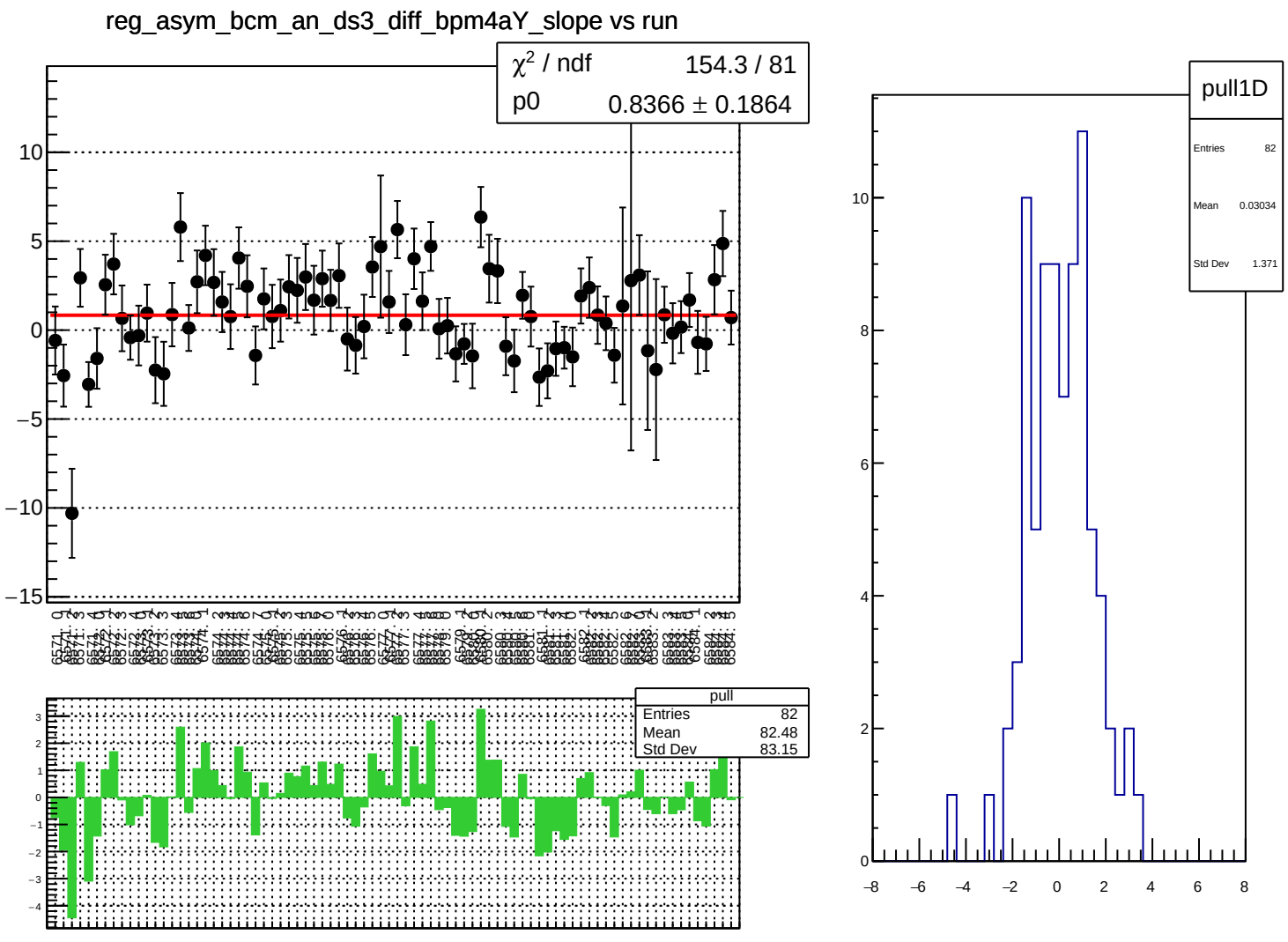

pull1D
Entries 82
Mean 0.008119
Std Dev 0.9127

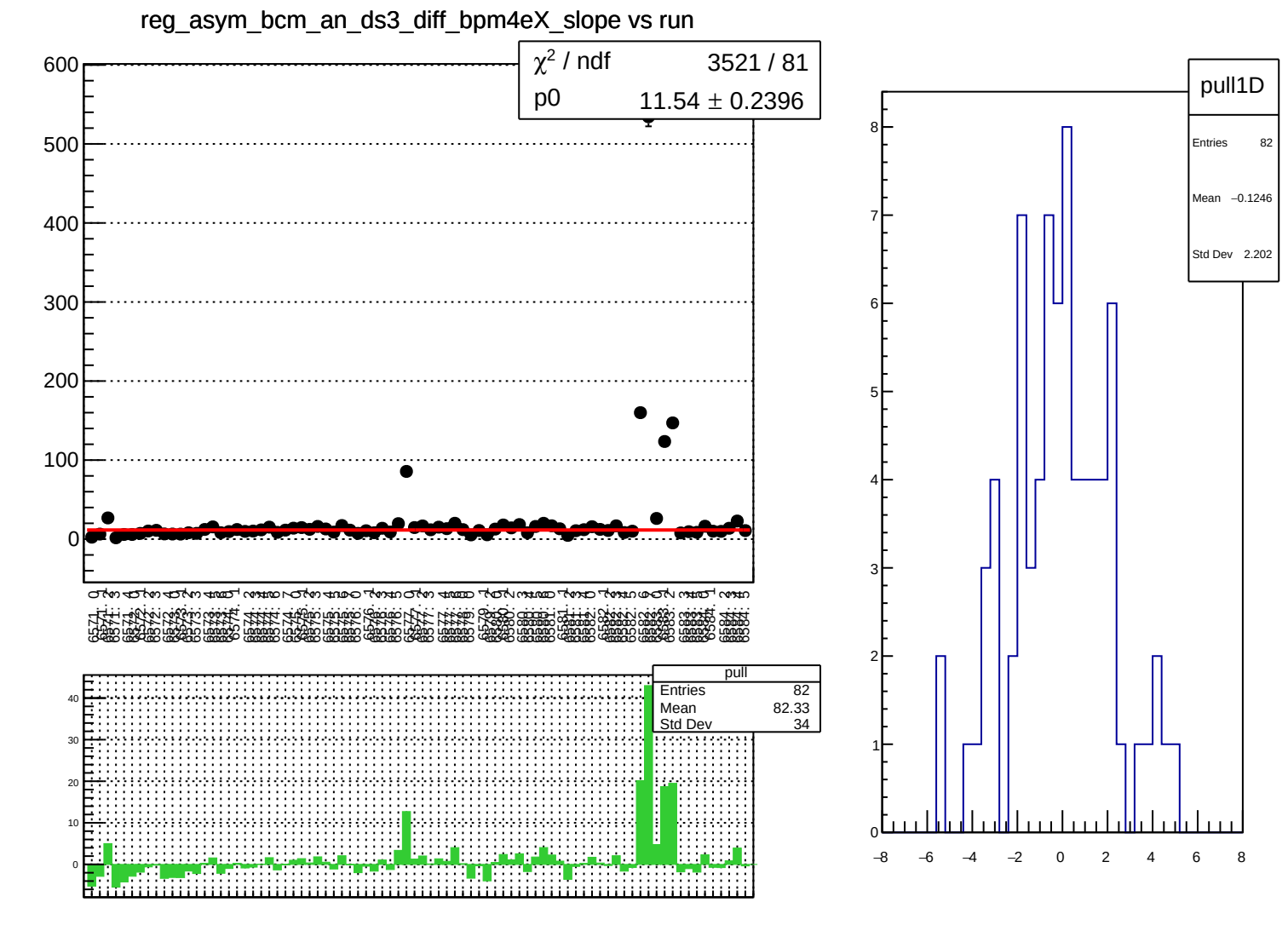

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 55.58 / 81
p0 3.666 ± 1.4
pull
Entries 82
Mean −139.9
Std Dev 188.6
pull1D
Entries 82
Mean 0.01487
Std Dev 0.8232

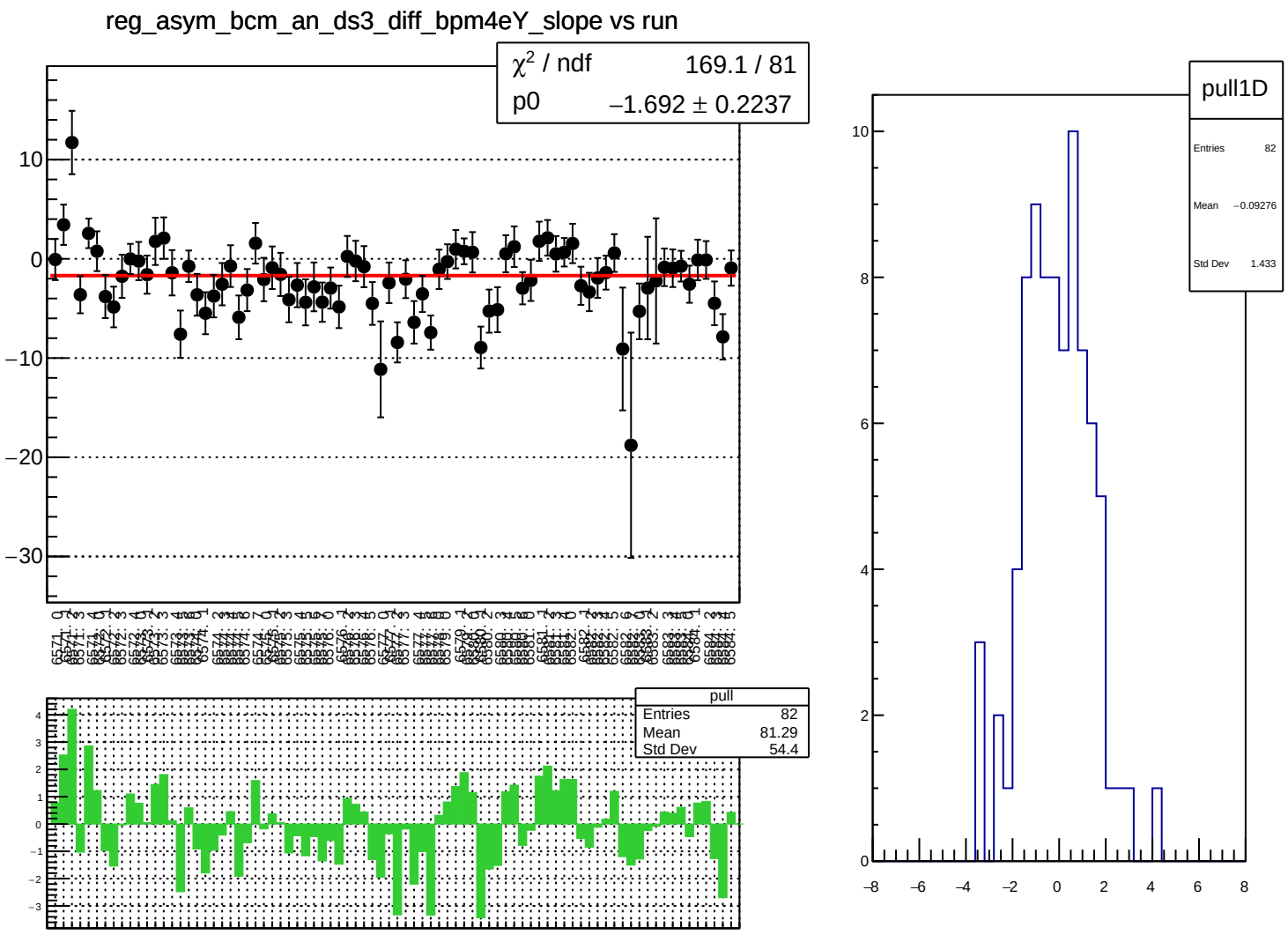

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 166.6 / 81
p0 −15.64 ± 0.06529
pull
Entries 82
Mean 72.65
Std Dev 53.37

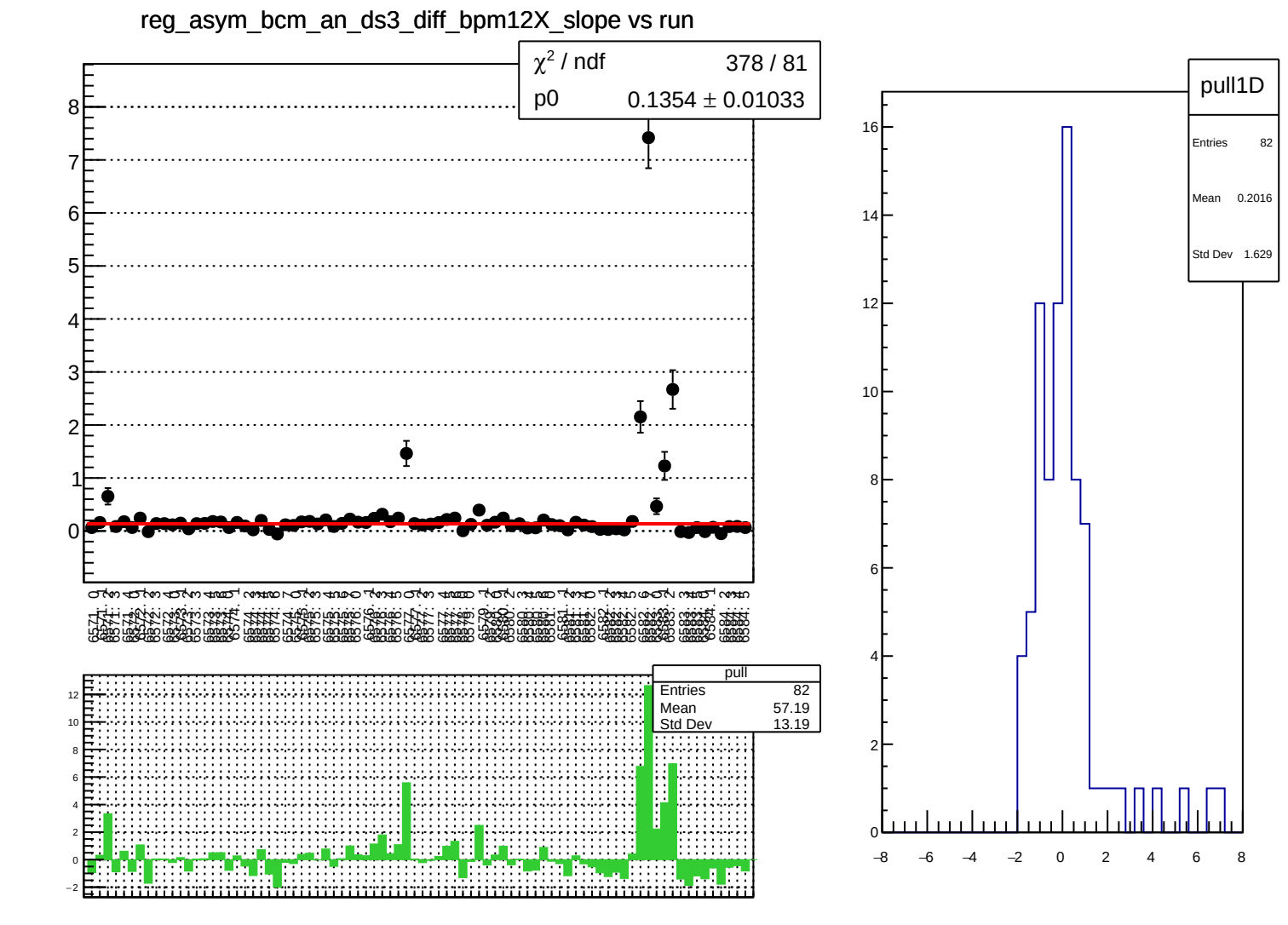

pull1D
Entries 82
Mean −0.05515
Std Dev 1.424

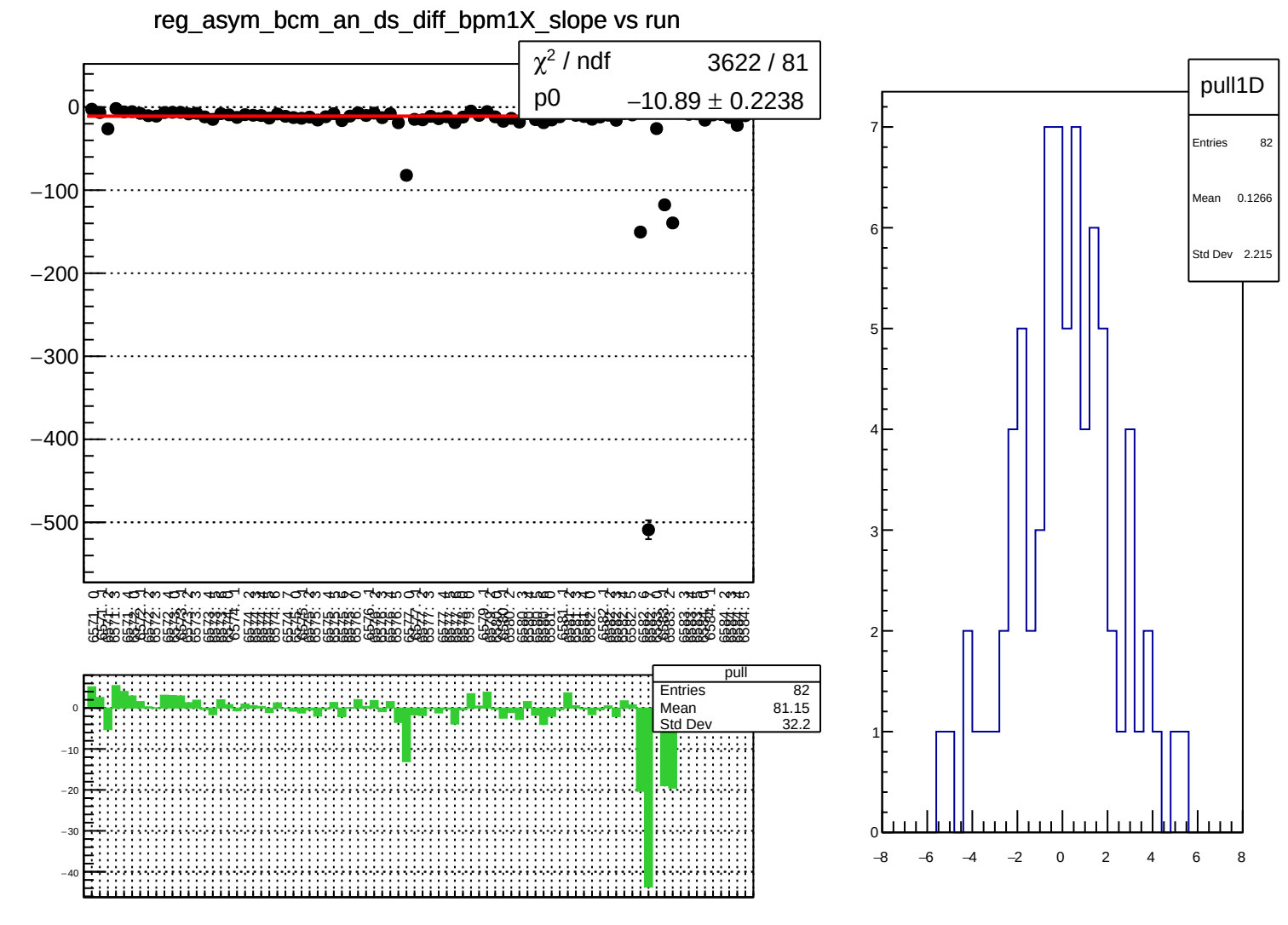

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 3621 / 81
p0 −10.92 ± 0.2248
pull
Entries 82
Mean 81.12
Std Dev 32.17
pull1D
Entries 82
Mean 0.1261
Std Dev 2.213

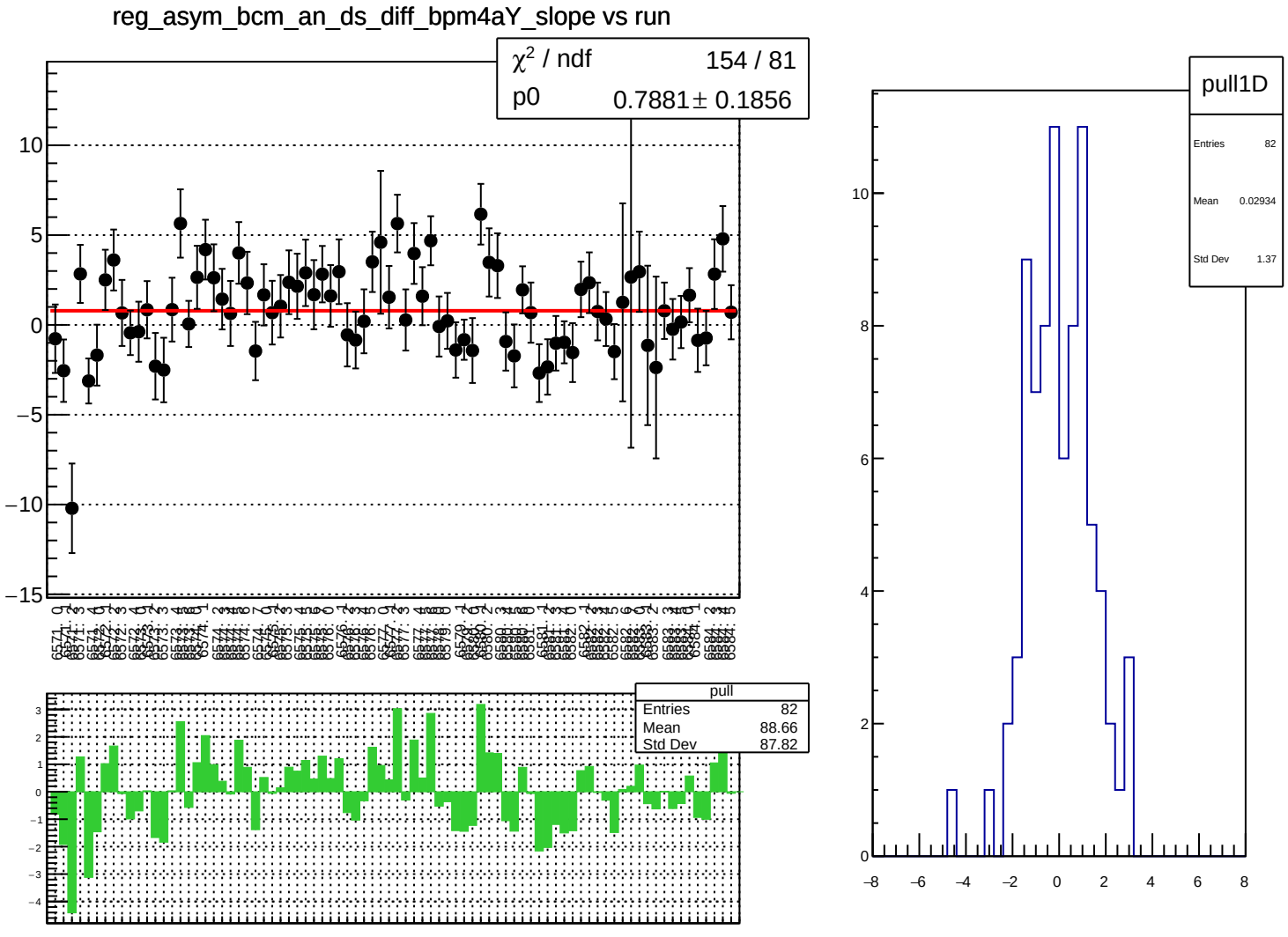

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 154.3 / 81
p0 0.8366 ± 0.1864
pull
Entries 82
Mean 82.48
Std Dev 83.15
pull1D
Entries 82
Mean 0.03034
Std Dev 1.371

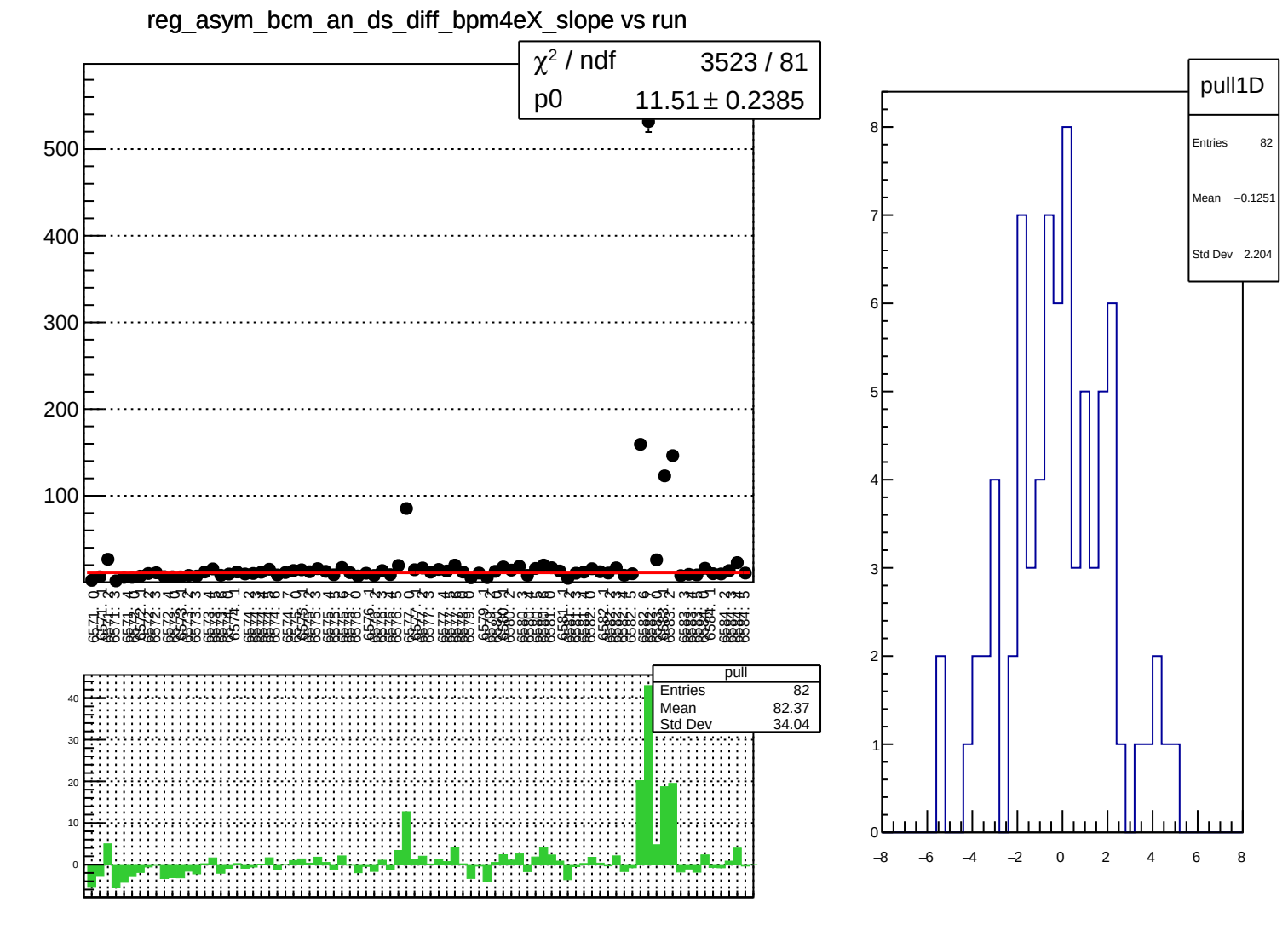

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 3521 / 81
p0 11.54 ± 0.2396
pull
Entries 82
Mean 82.33
Std Dev 34
pull1D
Entries 82
Mean −0.1246
Std Dev 2.202

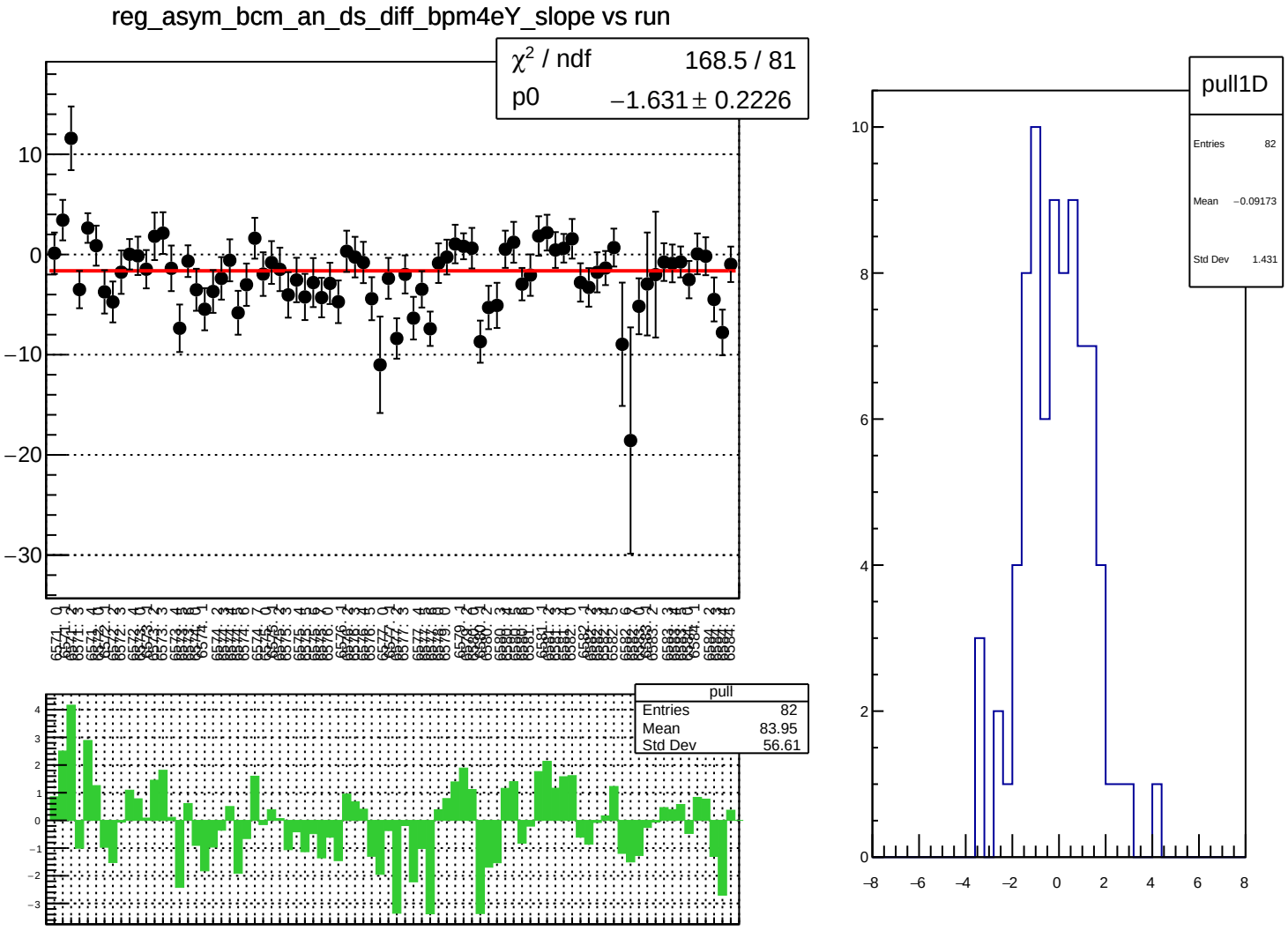

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 169.1 / 81
p0 −1.692 ± 0.2237
pull
Entries 82
Mean 81.29
Std Dev 54.4
pull1D
Entries 82
Mean −0.09276
Std Dev 1.433

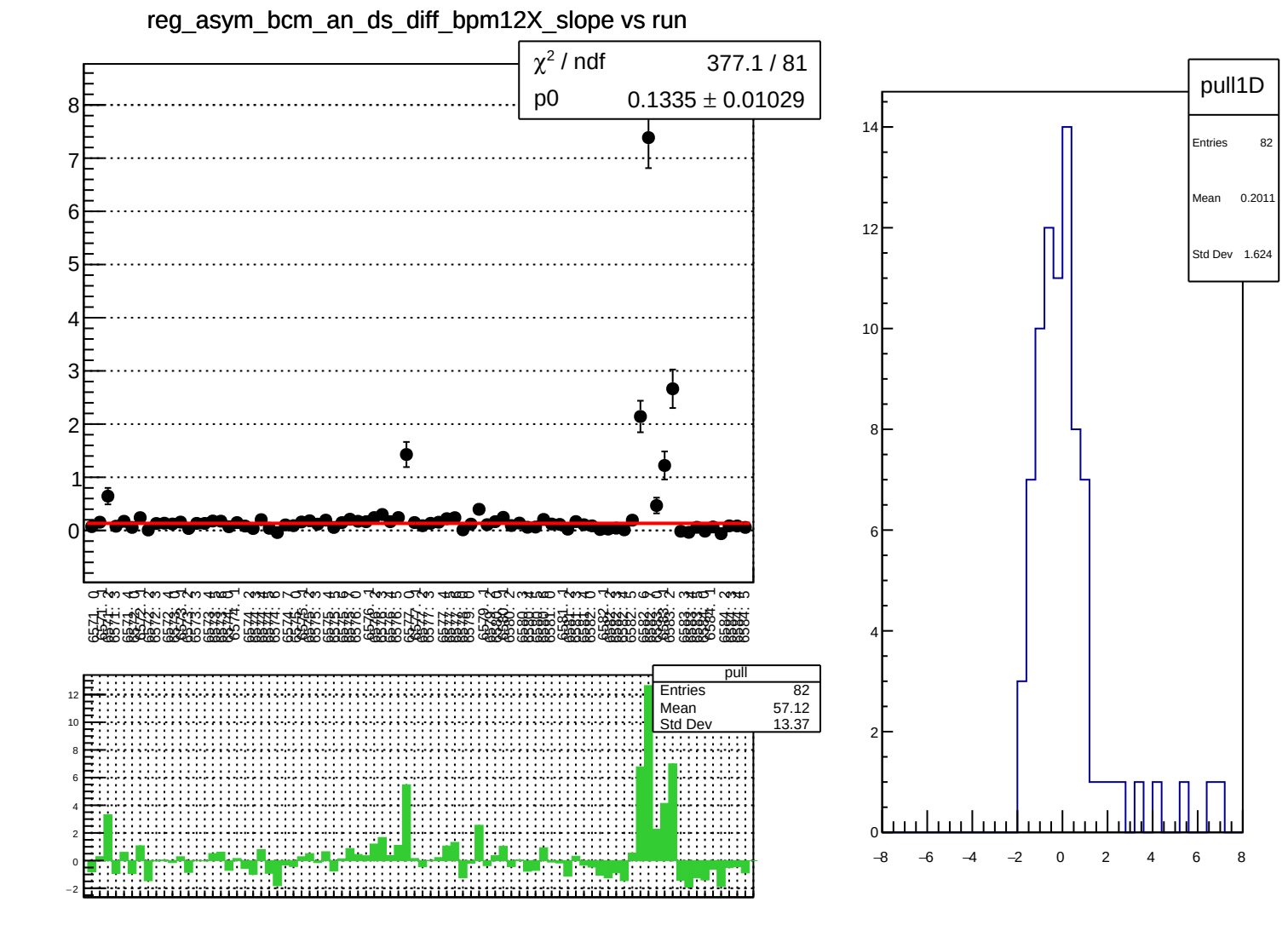

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 378 / 81
p0 0.1354 ± 0.01033
pull
Entries 82
Mean 57.19
Std Dev 13.19
pull1D
Entries 82
Mean 0.2016
Std Dev 1.629

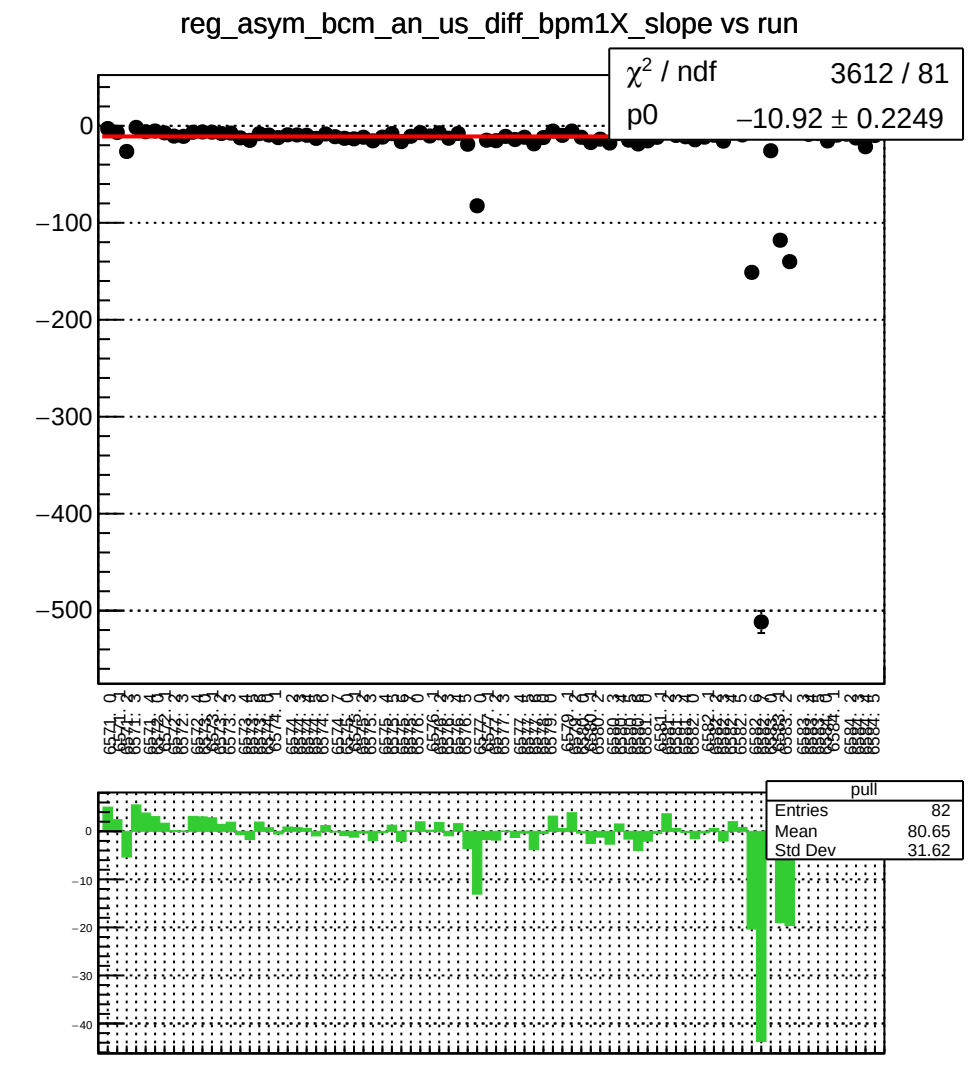

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 3622 / 81
p0 −10.89 ± 0.2238
pull
Entries 82
Mean 81.15
Std Dev 32.2
pull1D
Entries 82
Mean 0.1266
Std Dev 2.215

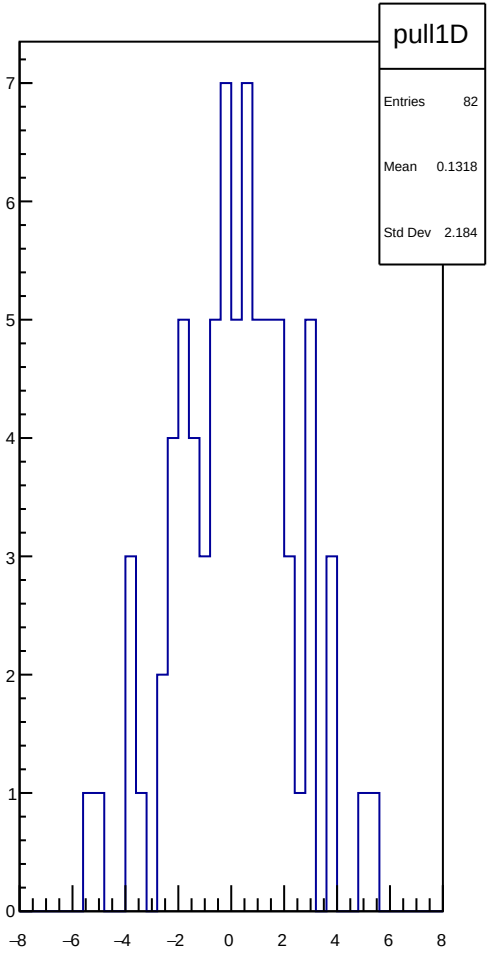

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 154 / 81
p0 0.7881± 0.1856
pull
Entries 82
Mean 88.66
Std Dev 87.82
pull1D
Entries 82
Mean 0.02934
Std Dev 1.37

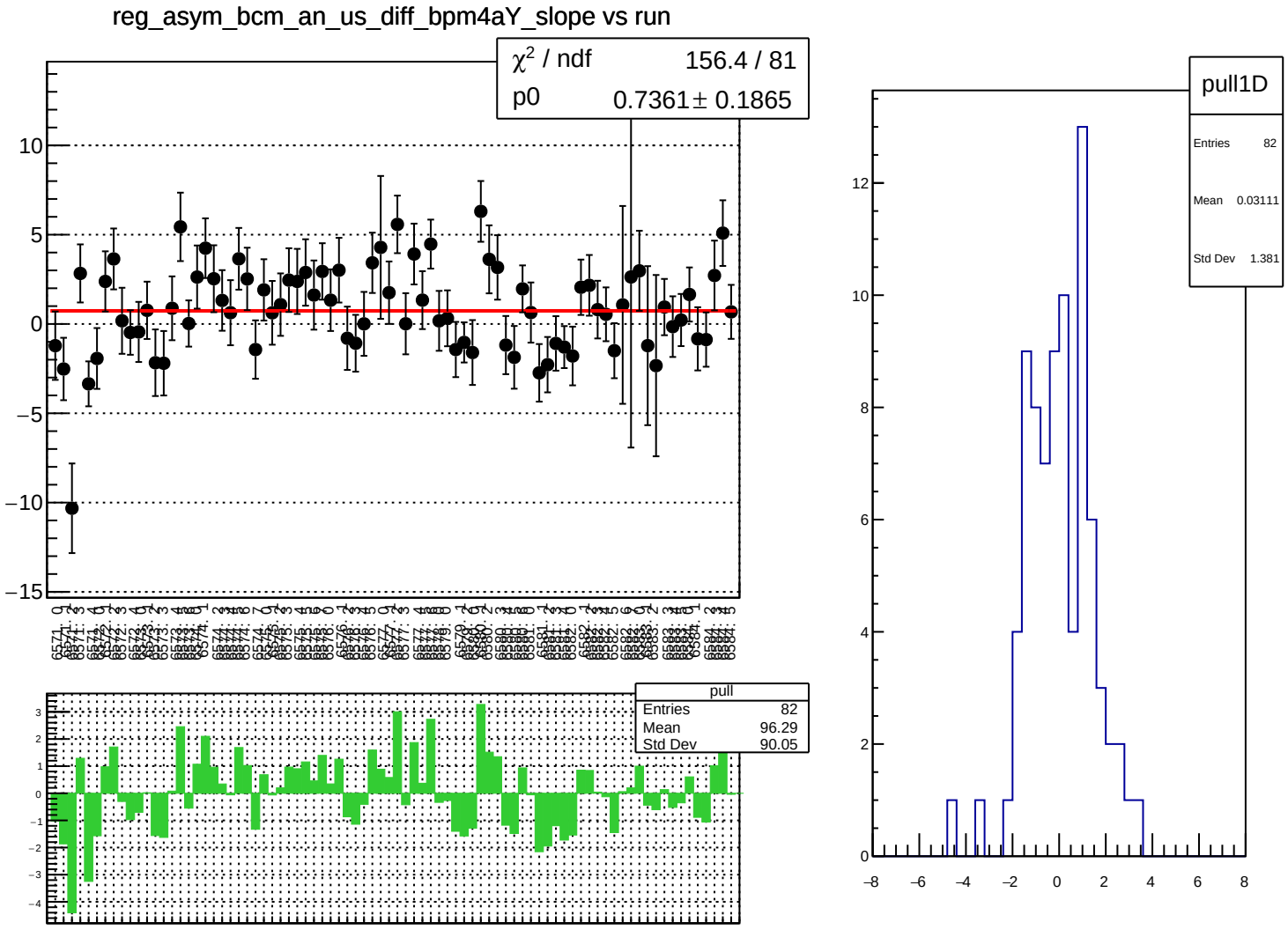

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 3523 / 81
p0 11.51 ± 0.2385
pull
Entries 82
Mean 82.37
Std Dev 34.04
pull1D
Entries 82
Mean −0.1251
Std Dev 2.204

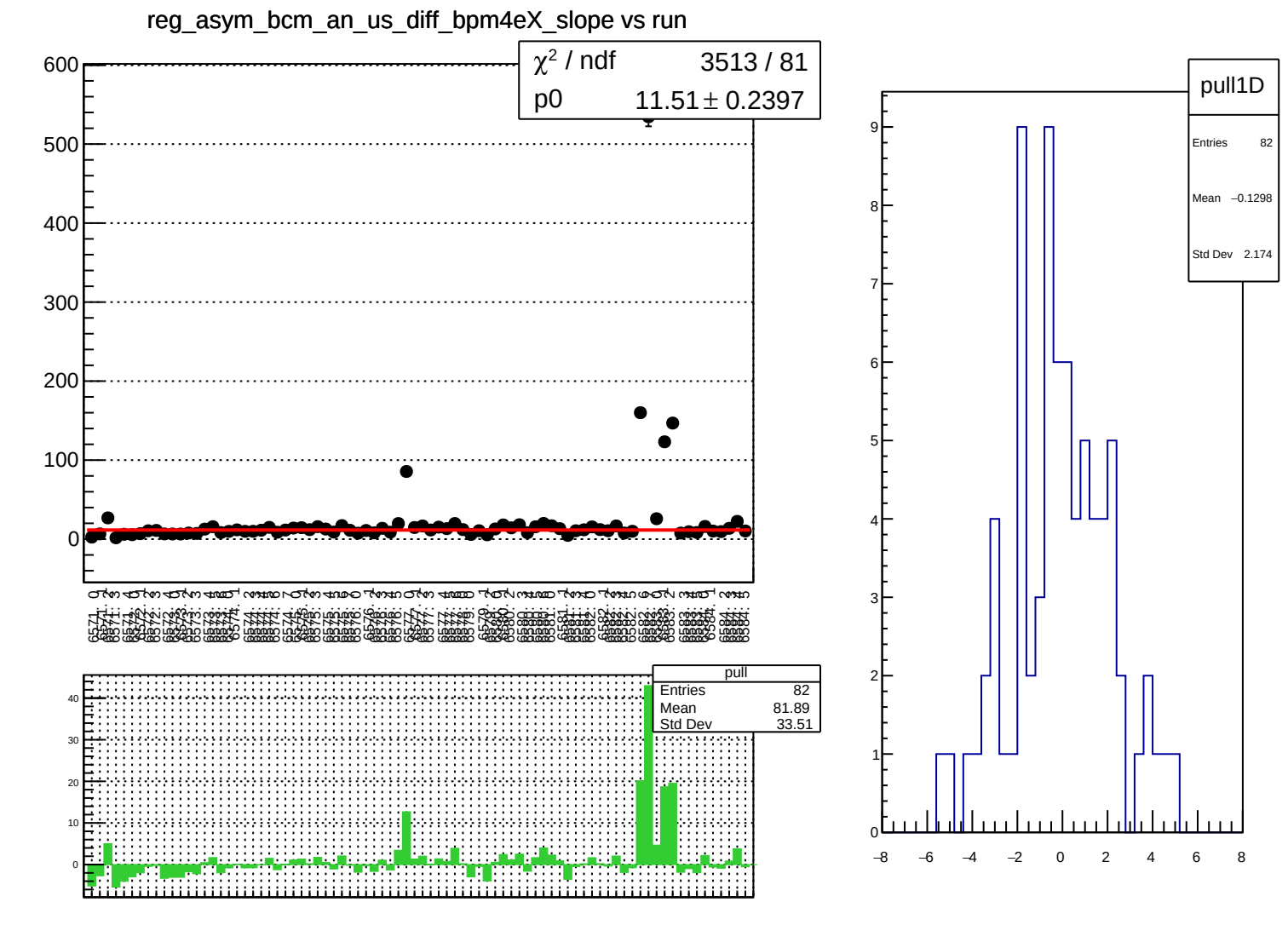

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 168.5 / 81
p0 −1.631 ± 0.2226
pull
Entries 82
Mean 83.95
Std Dev 56.61
pull1D
Entries 82
Mean −0.09173
Std Dev 1.431

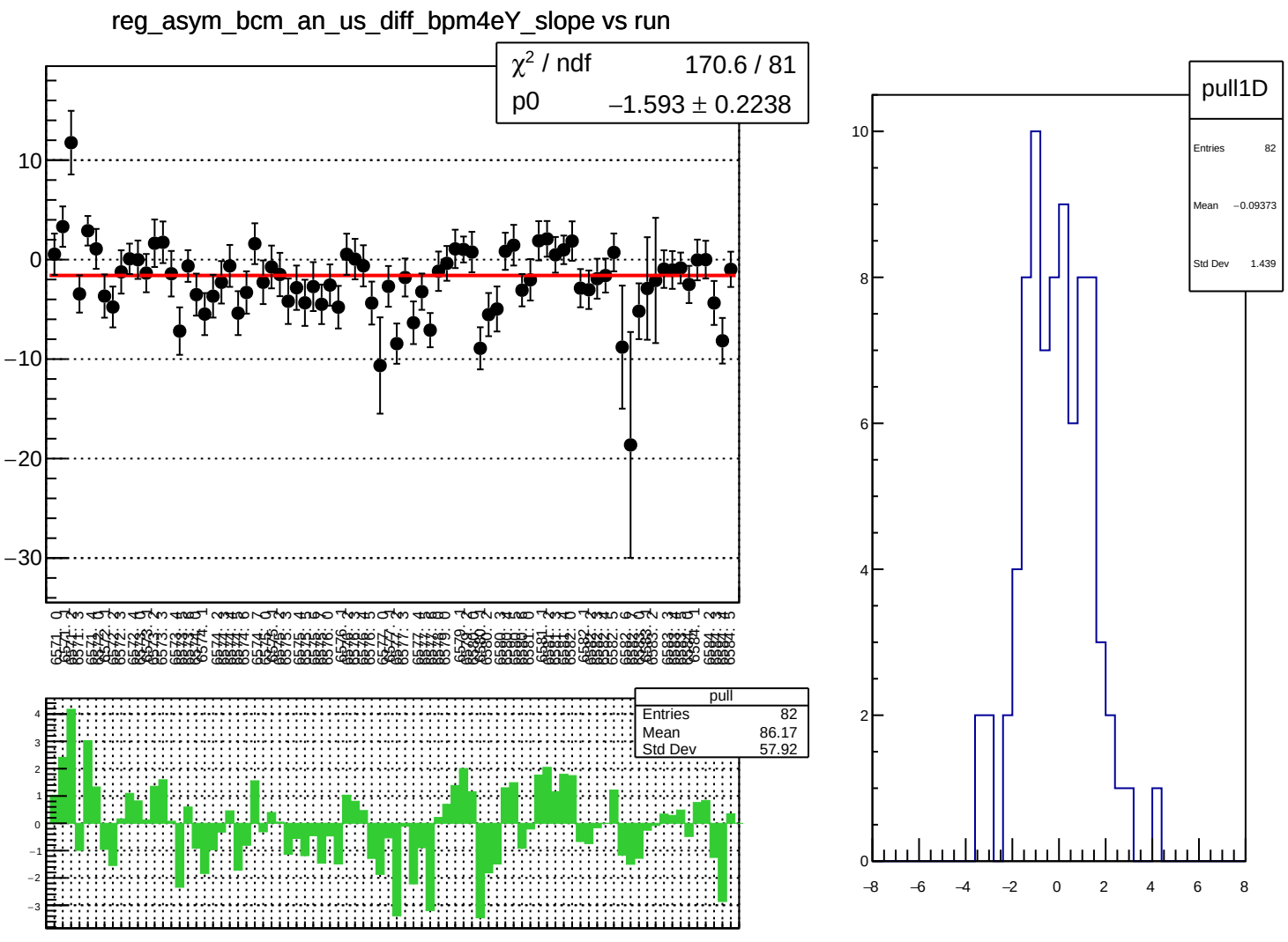

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 377.1 / 81
p0 0.1335 ± 0.01029
pull
Entries 82
Mean 57.12
Std Dev 13.37
pull1D
Entries 82
Mean 0.2011
Std Dev 1.624

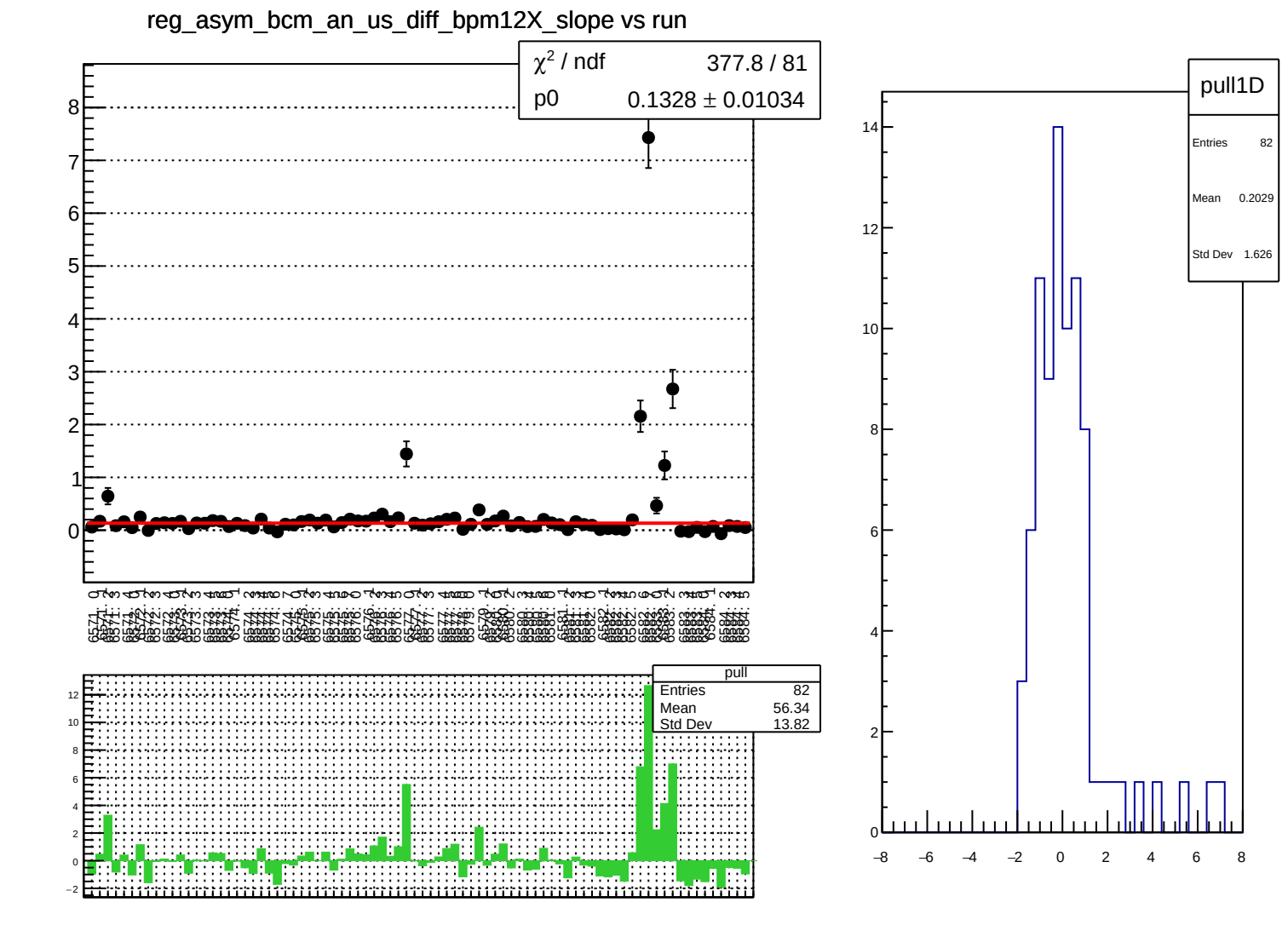

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 3612 / 81
p0 −10.92 ± 0.2249
pull
Entries 82
Mean 80.65
Std Dev 31.62

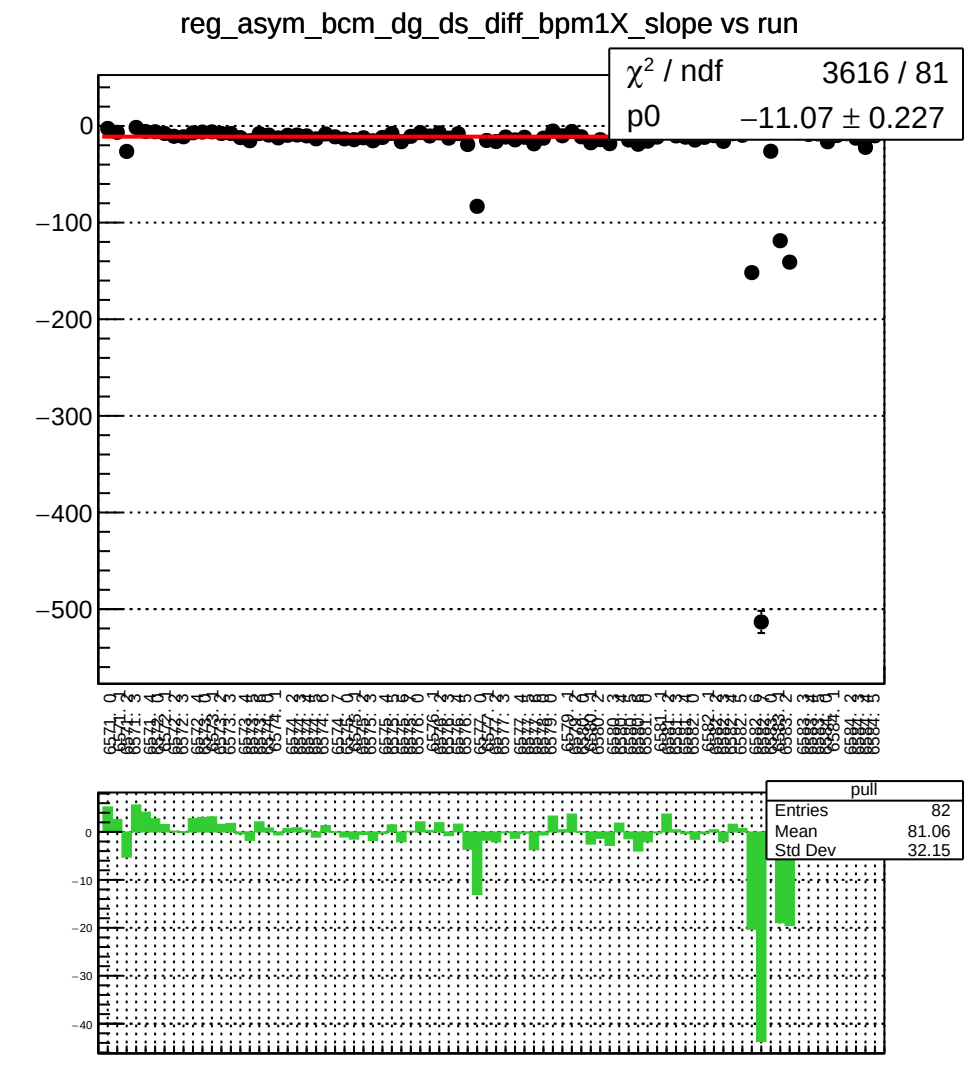

pull1D
Entries 82
Mean 0.1318
Std Dev 2.184

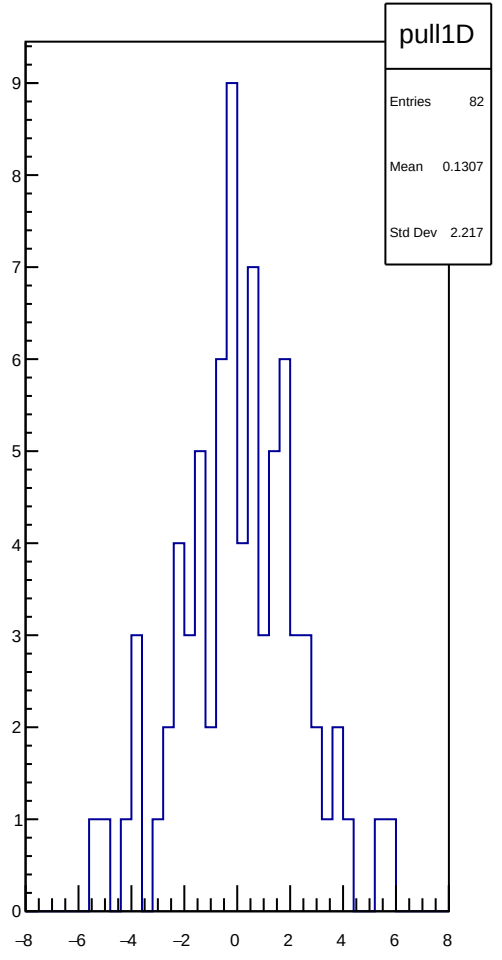

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 156.4 / 81
p0 0.7361± 0.1865
pull
Entries 82
Mean 96.29
Std Dev 90.05
pull1D
Entries 82
Mean 0.03111
Std Dev 1.381

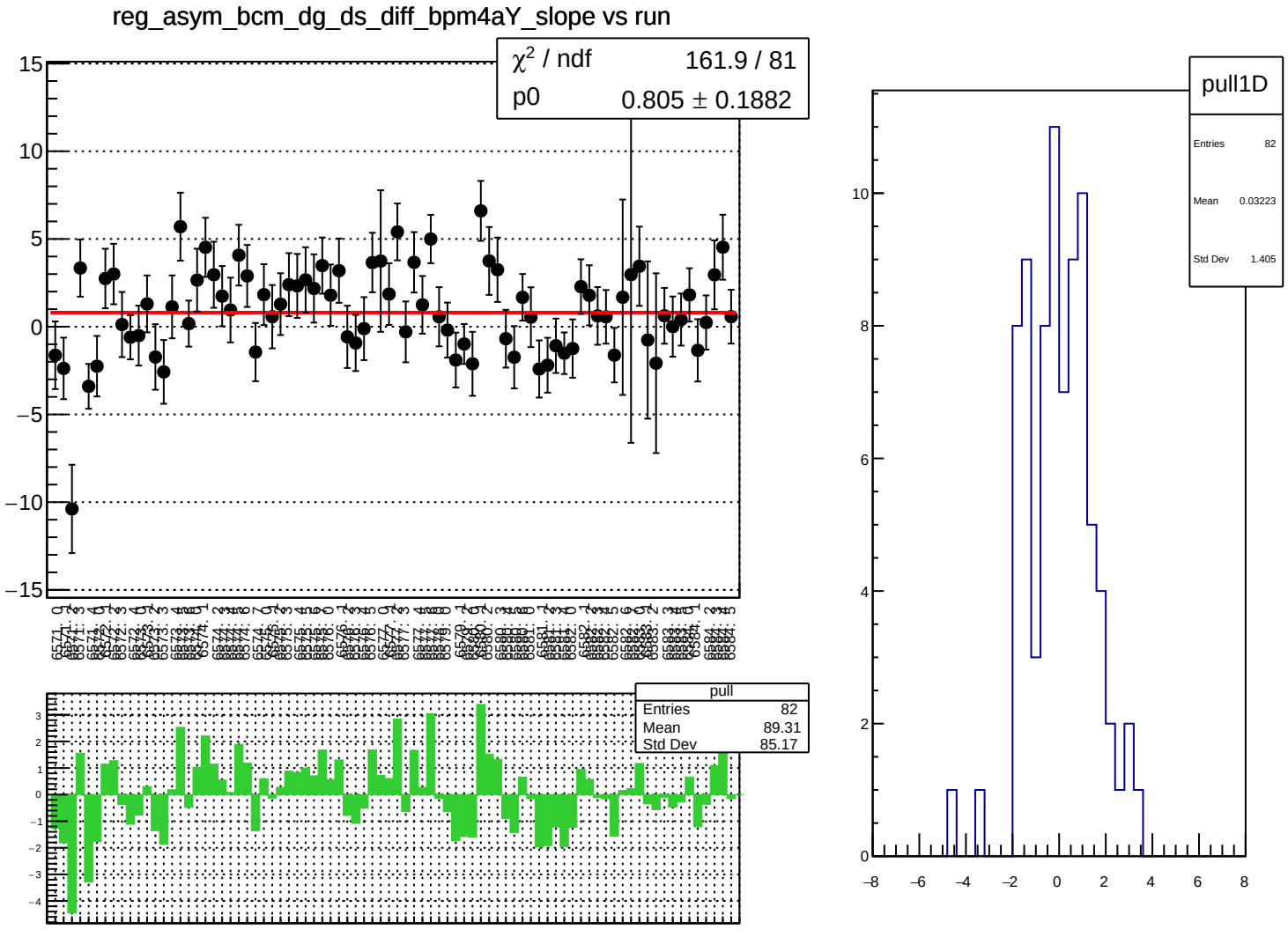

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 3513 / 81
p0 11.51 ± 0.2397
pull
Entries 82
Mean 81.89
Std Dev 33.51
pull1D
Entries 82
Mean −0.1298
Std Dev 2.174

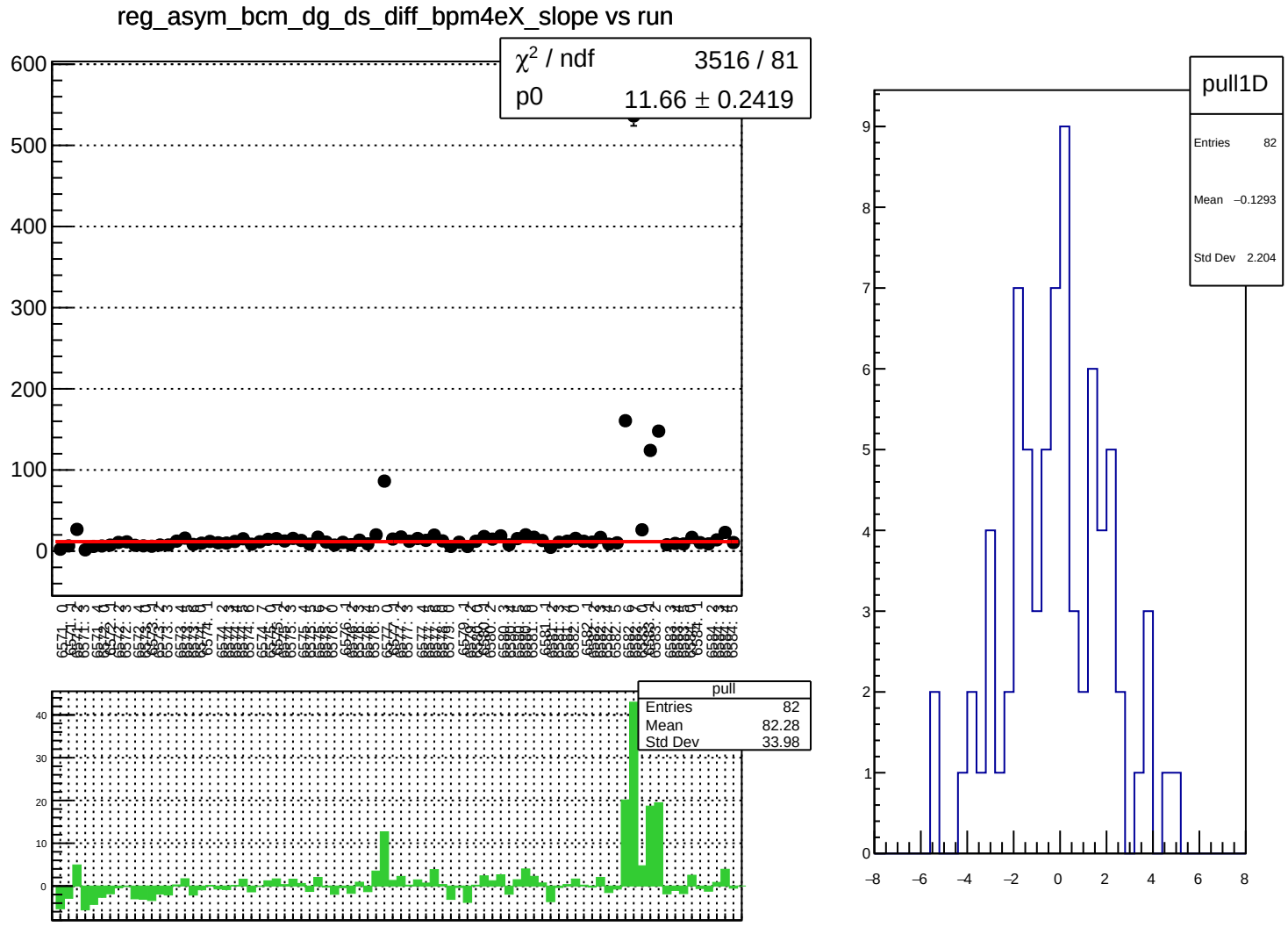

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 170.6 / 81
p0 −1.593 ± 0.2238
pull
Entries 82
Mean 86.17
Std Dev 57.92
pull1D
Entries 82
Mean −0.09373
Std Dev 1.439

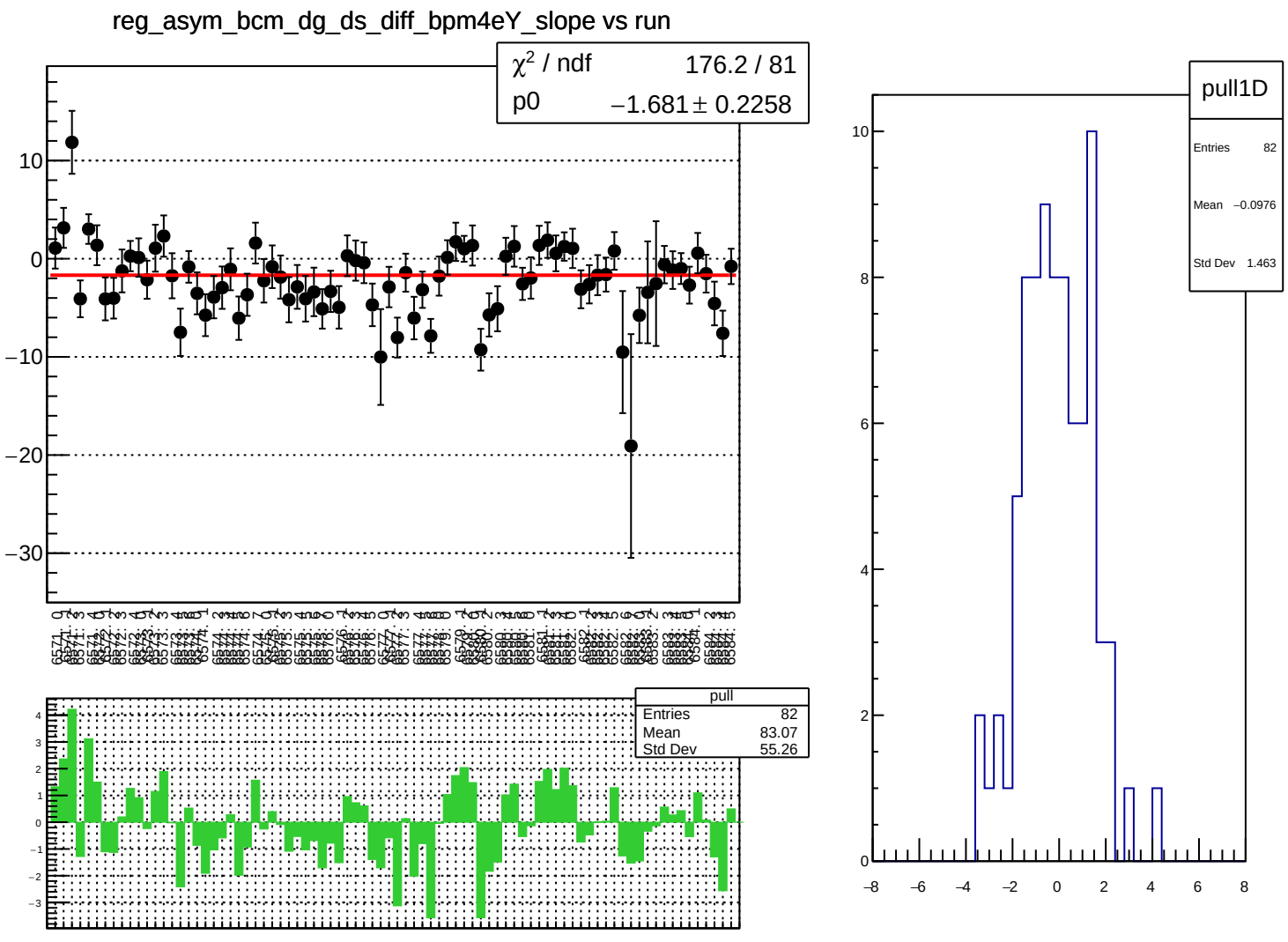

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 377.8 / 81
p0 0.1328 ± 0.01034
pull
Entries 82
Mean 56.34
Std Dev 13.82
pull1D
Entries 82
Mean 0.2029
Std Dev 1.626

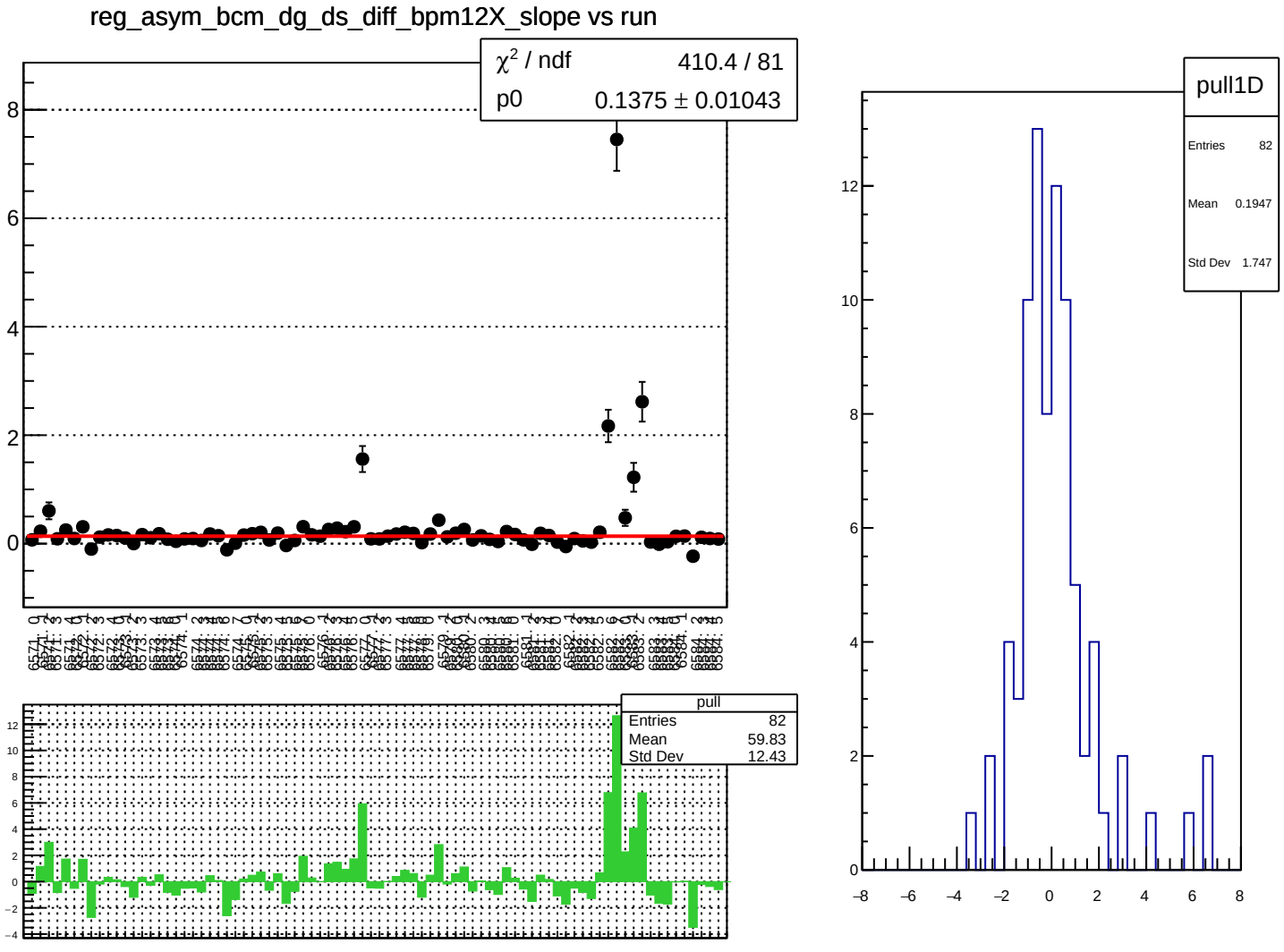

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 3616 / 81
p0 −11.07 ± 0.227
pull
Entries 82
Mean 81.06
Std Dev 32.15

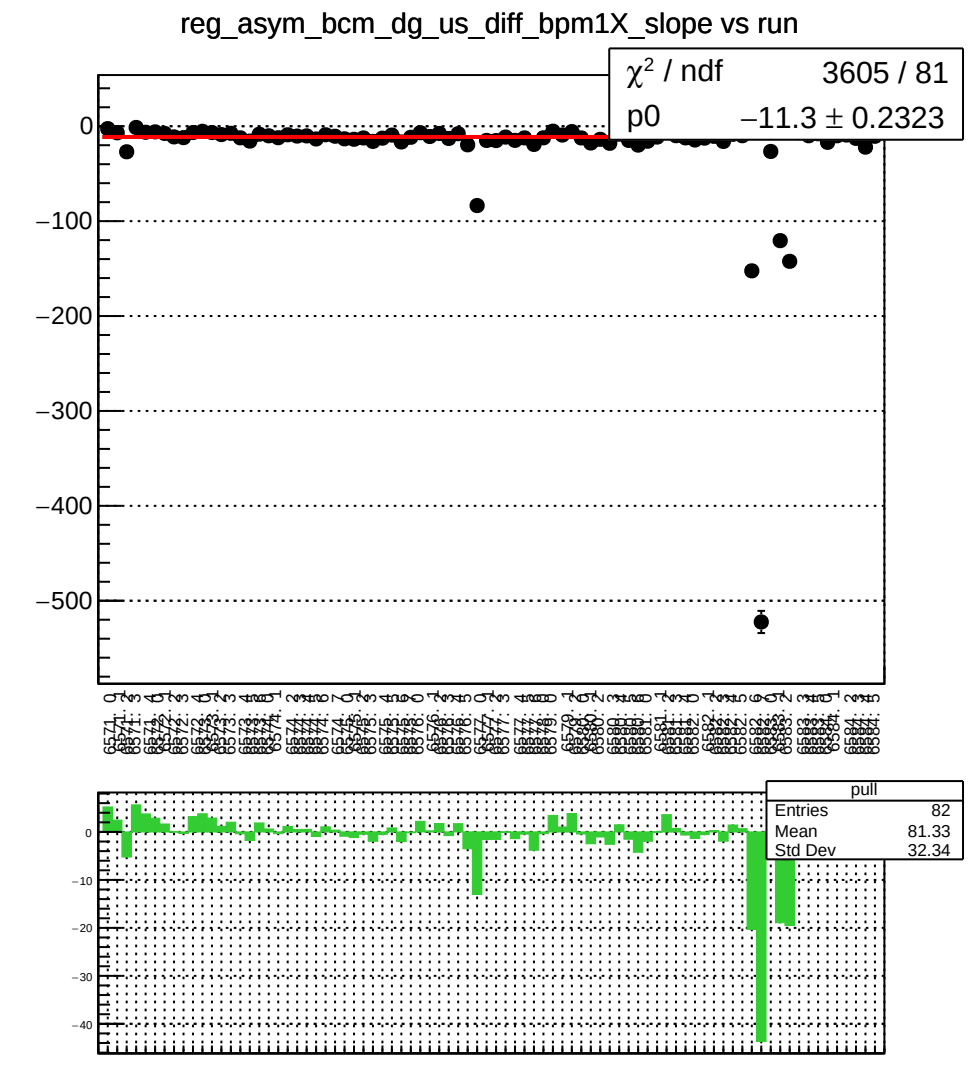

pull1D
Entries 82
Mean 0.1307
Std Dev 2.217

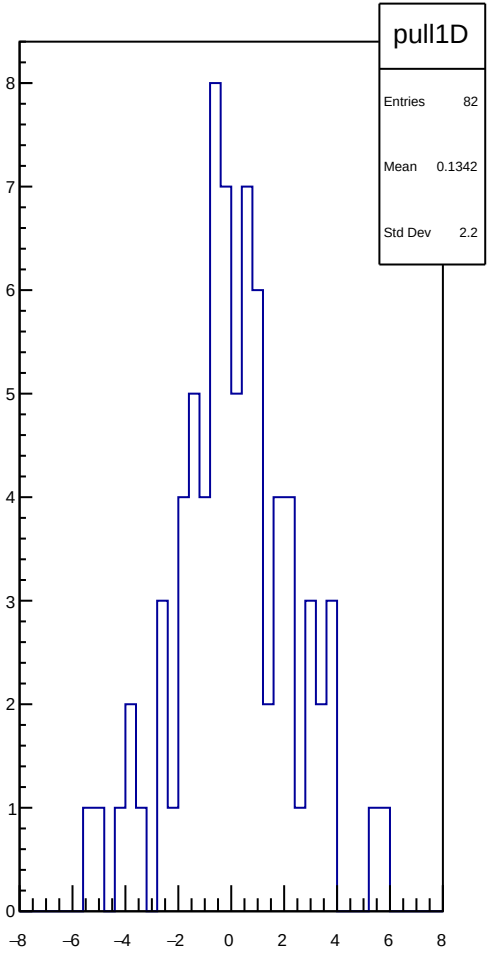

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 161.9 / 81
p0 0.805 ± 0.1882
pull
Entries 82
Mean 89.31
Std Dev 85.17
pull1D
Entries 82
Mean 0.03223
Std Dev 1.405

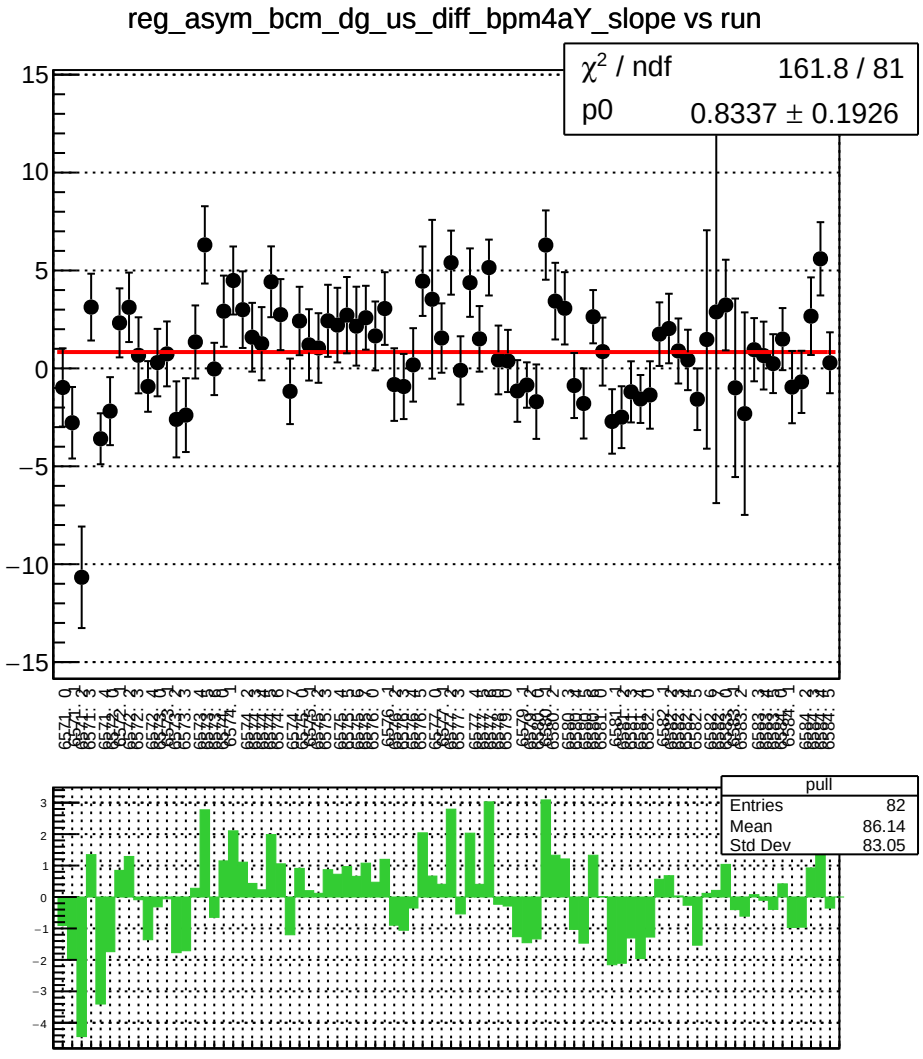

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 3516 / 81
p0 11.66 ± 0.2419
pull
Entries 82
Mean 82.28
Std Dev 33.98
pull1D
Entries 82
Mean −0.1293
Std Dev 2.204

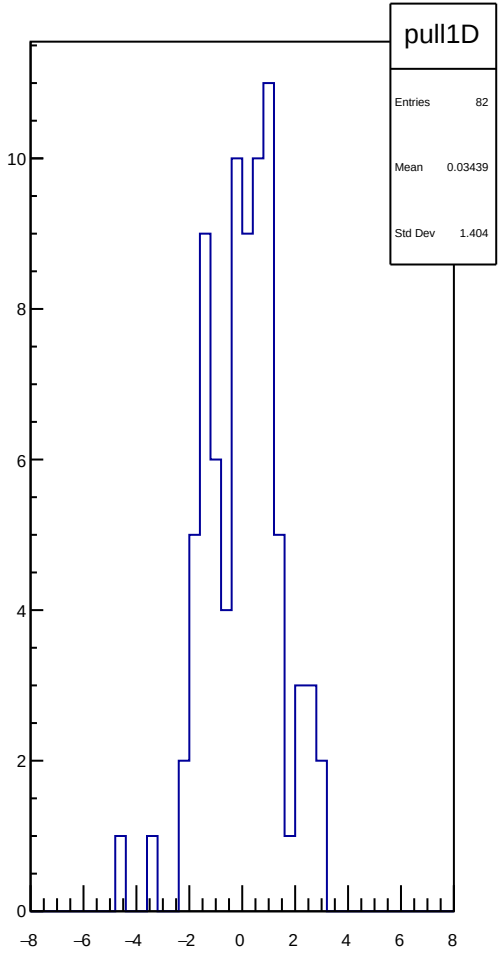

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 176.2 / 81
p0 −1.681 ± 0.2258
pull
Entries 82
Mean 83.07
Std Dev 55.26
pull1D
Entries 82
Mean −0.0976
Std Dev 1.463

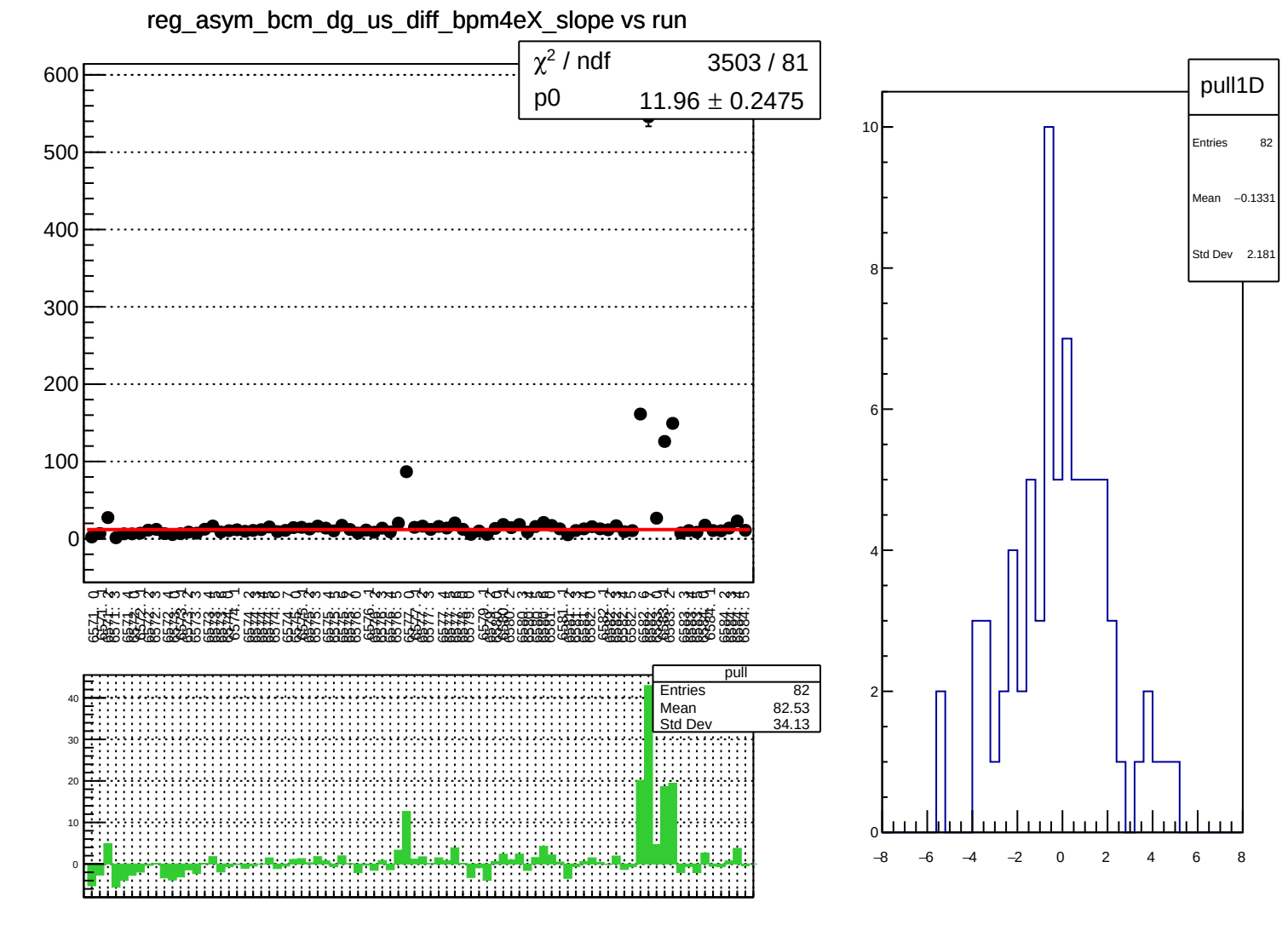

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 410.4 / 81
p0 0.1375 ± 0.01043
pull
Entries 82
Mean 59.83
Std Dev 12.43
pull1D
Entries 82
Mean 0.1947
Std Dev 1.747

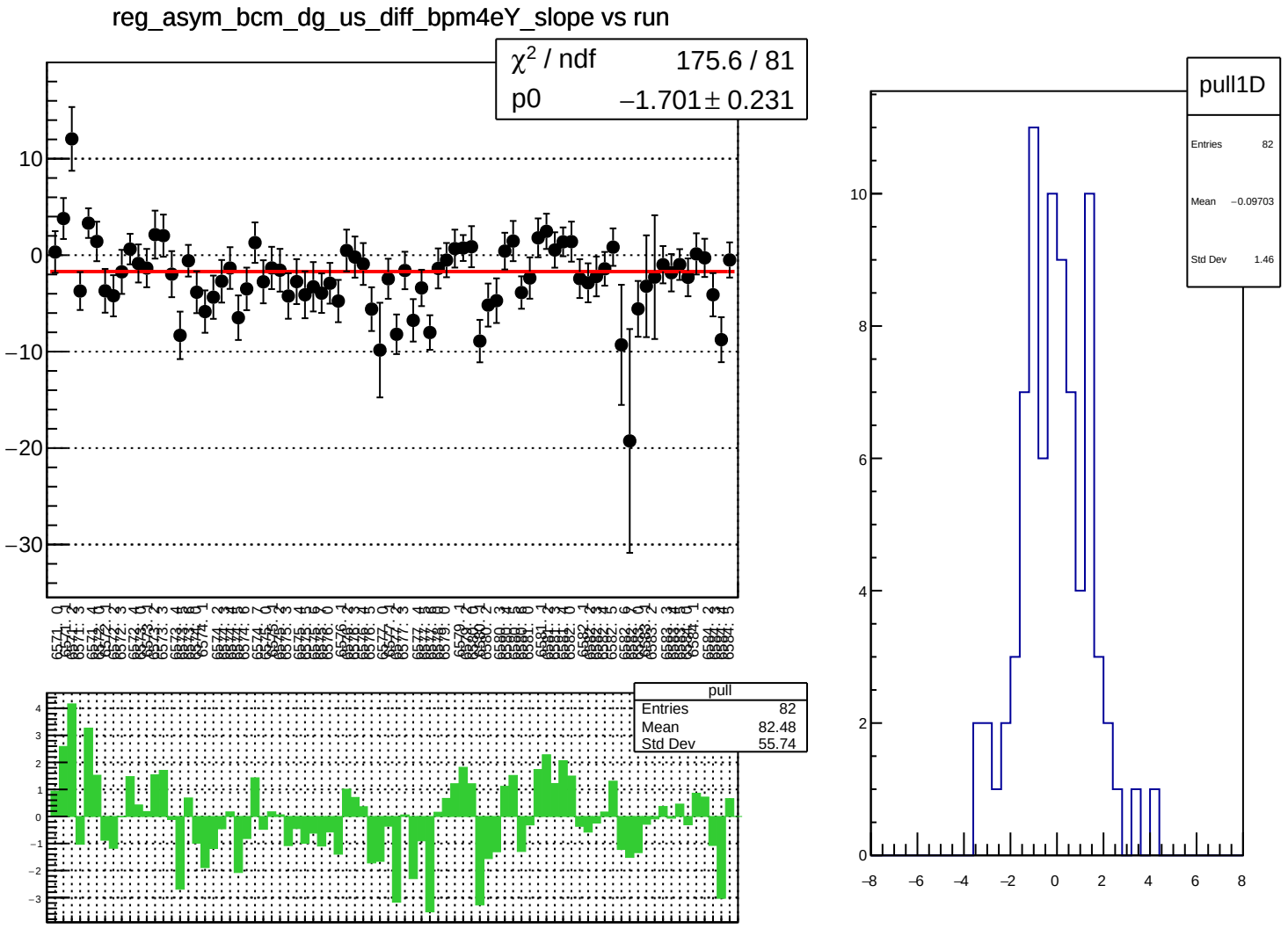

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 3605 / 81
p0 −11.3 ± 0.2323
0
−100
−200
−300
−400
−500
pull
Entries 82
Mean 81.33
Std Dev 32.34
0
−10
−20
−30
−40

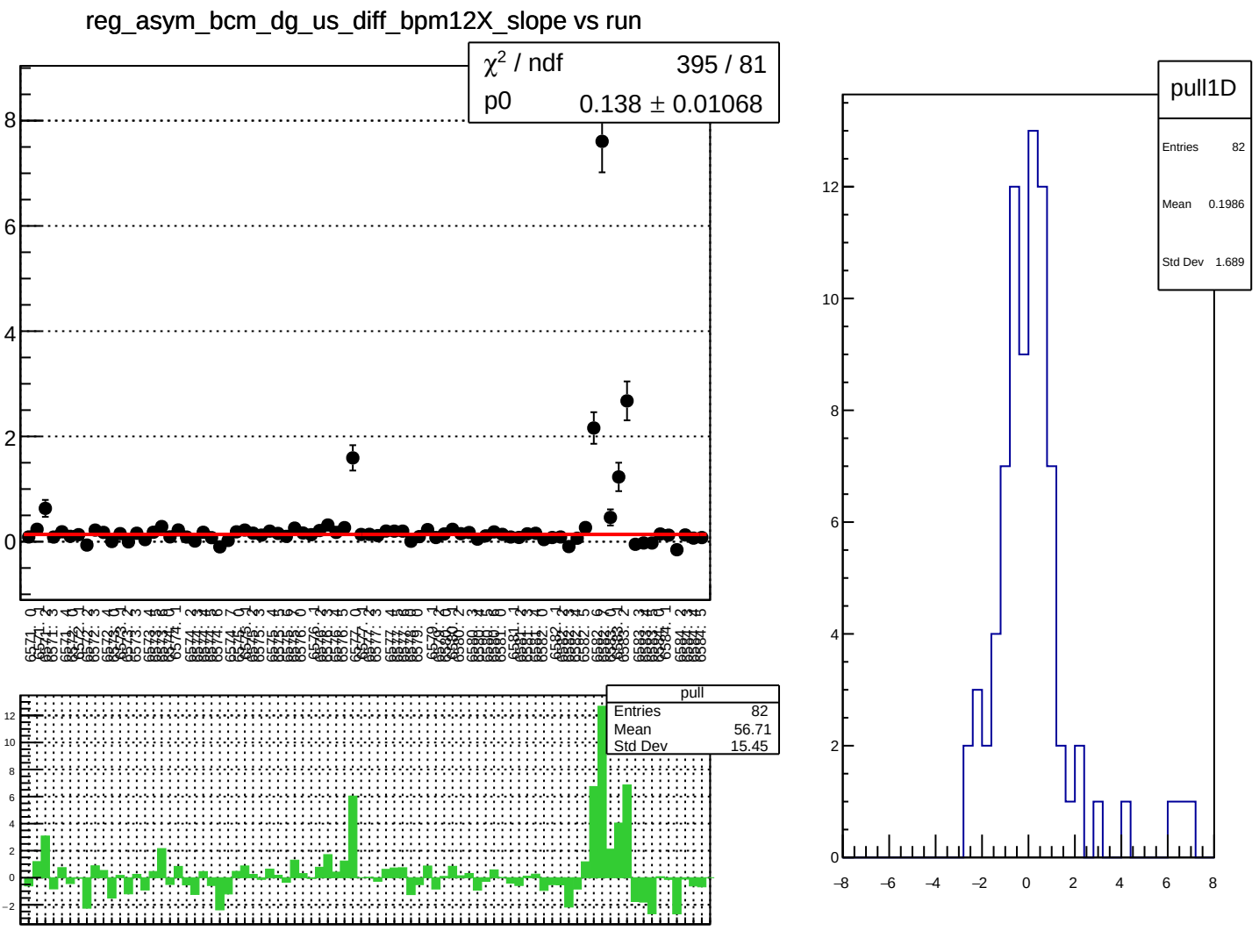

pull1D
Entries 82
Mean 0.1342
Std Dev 2.2
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

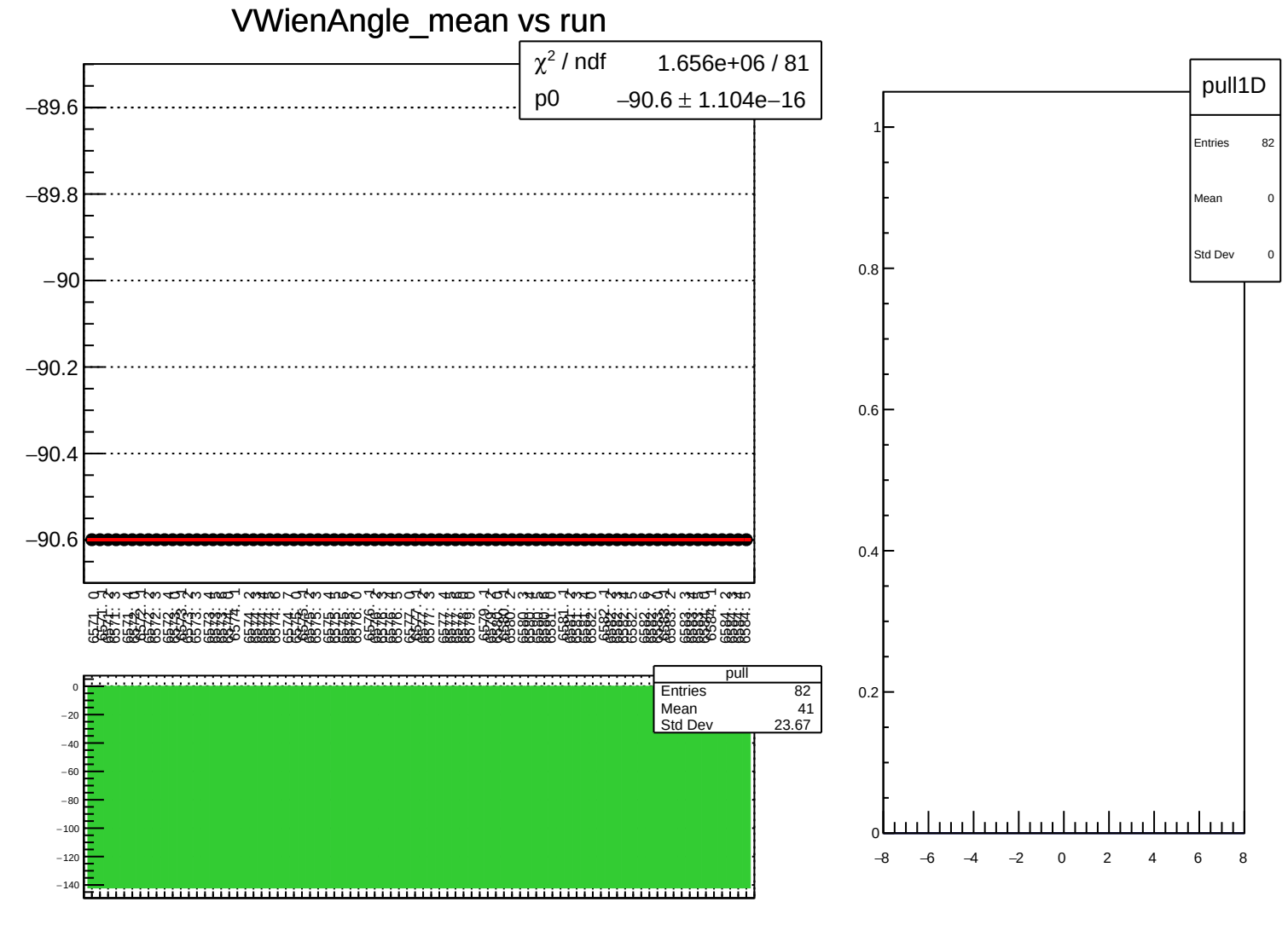

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 161.8 / 81
p0 0.8337 ± 0.1926
pull
Entries 82
Mean 86.14
Std Dev 83.05

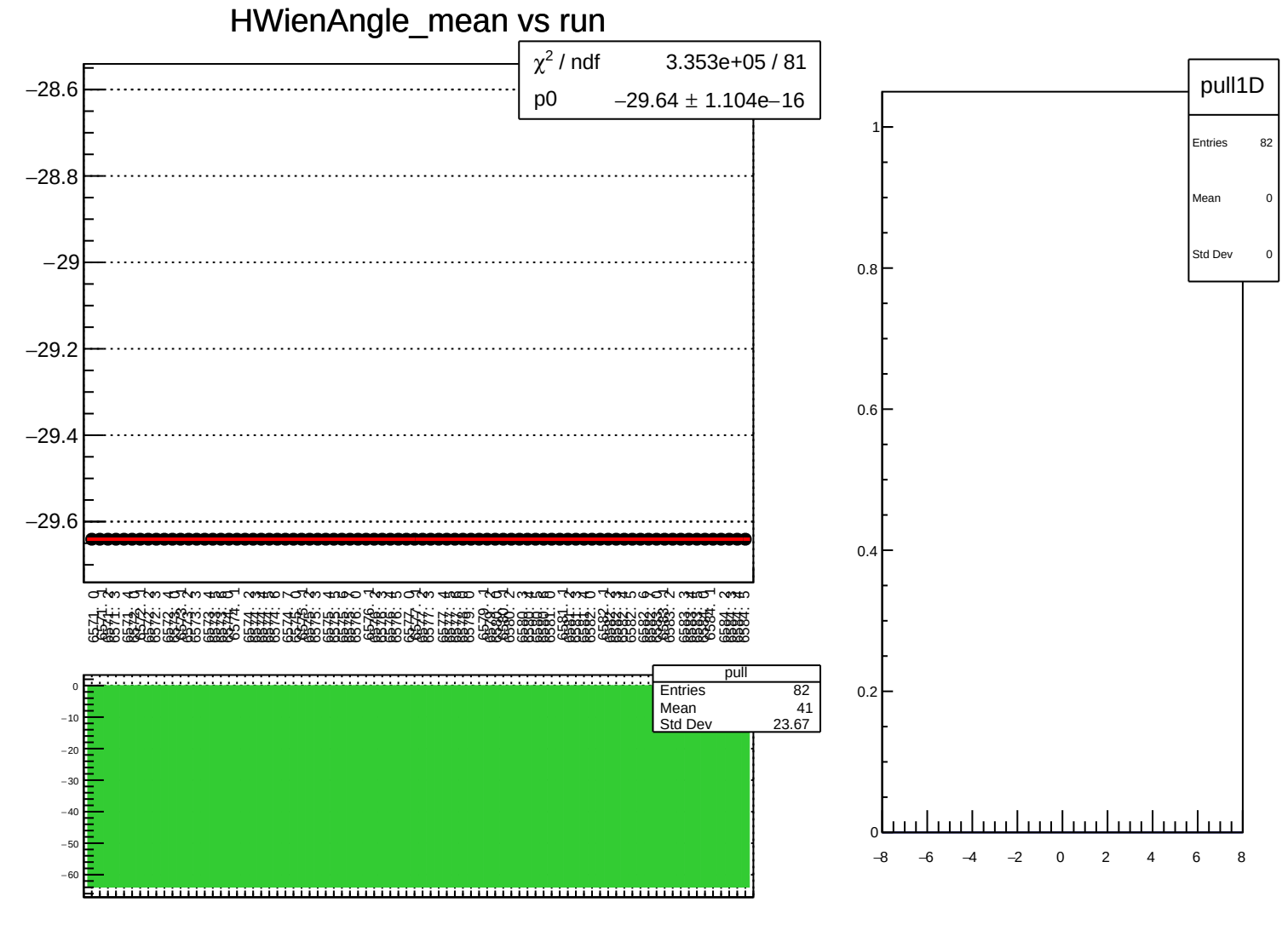

pull1D
Entries 82
Mean 0.03439
Std Dev 1.404

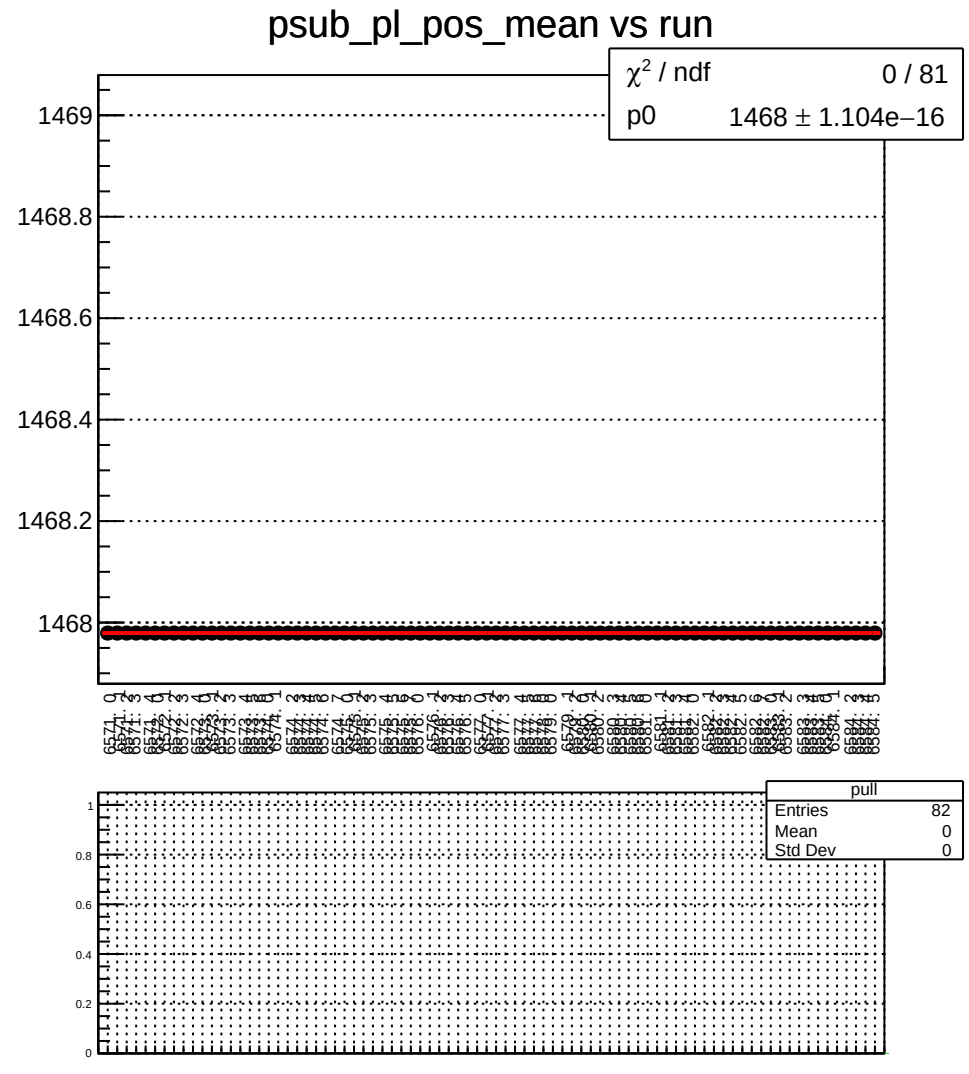

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 3503 / 81
p0 11.96 ± 0.2475
pull
Entries 82
Mean 82.53
Std Dev 34.13
pull1D
Entries 82
Mean −0.1331
Std Dev 2.181

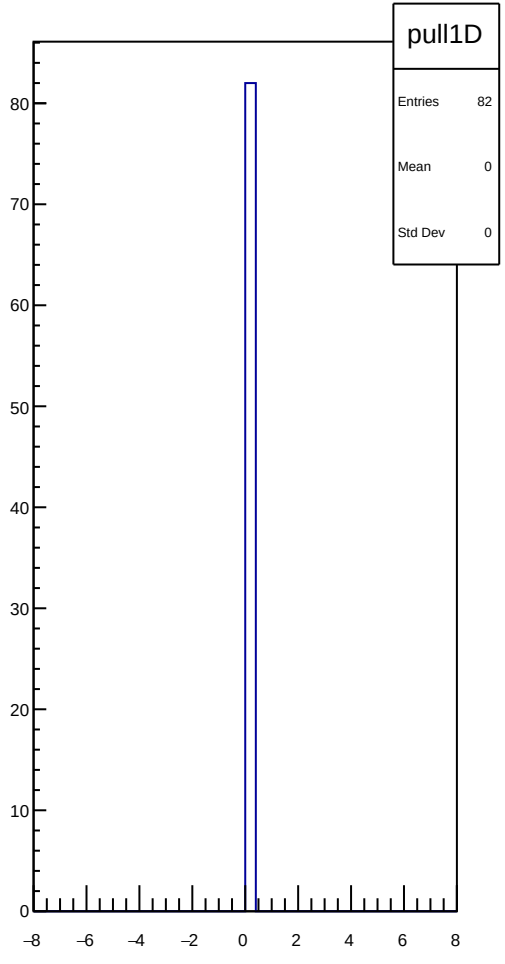

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 175.6 / 81
p0 −1.701 ± 0.231
pull
Entries 82
Mean 82.48
Std Dev 55.74
pull1D
Entries 82
Mean −0.09703
Std Dev 1.46

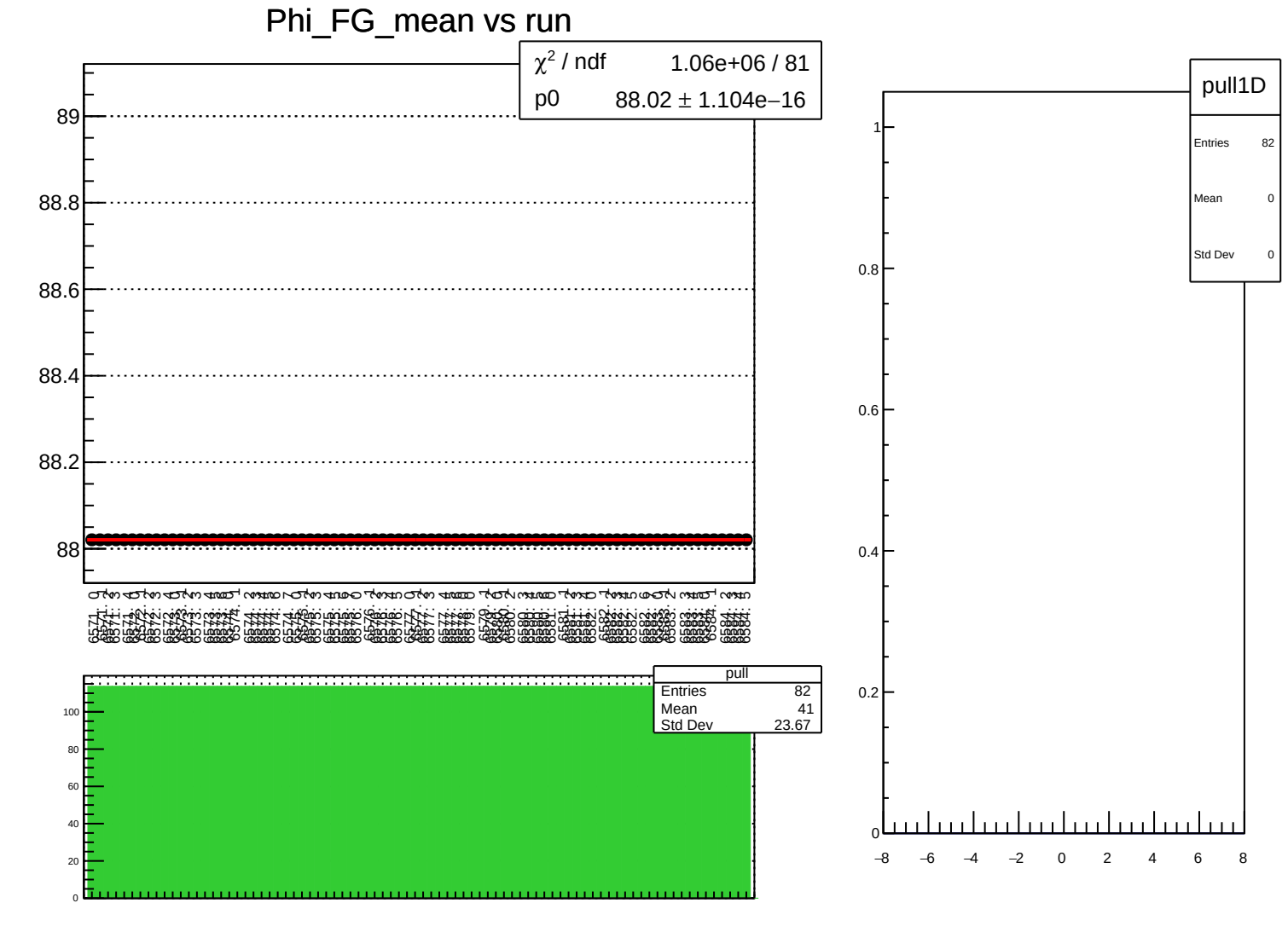

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 395 / 81
p0 0.138 ± 0.01068
pull
Entries 82
Mean 56.71
Std Dev 15.45
pull1D
Entries 82
Mean 0.1986
Std Dev 1.689

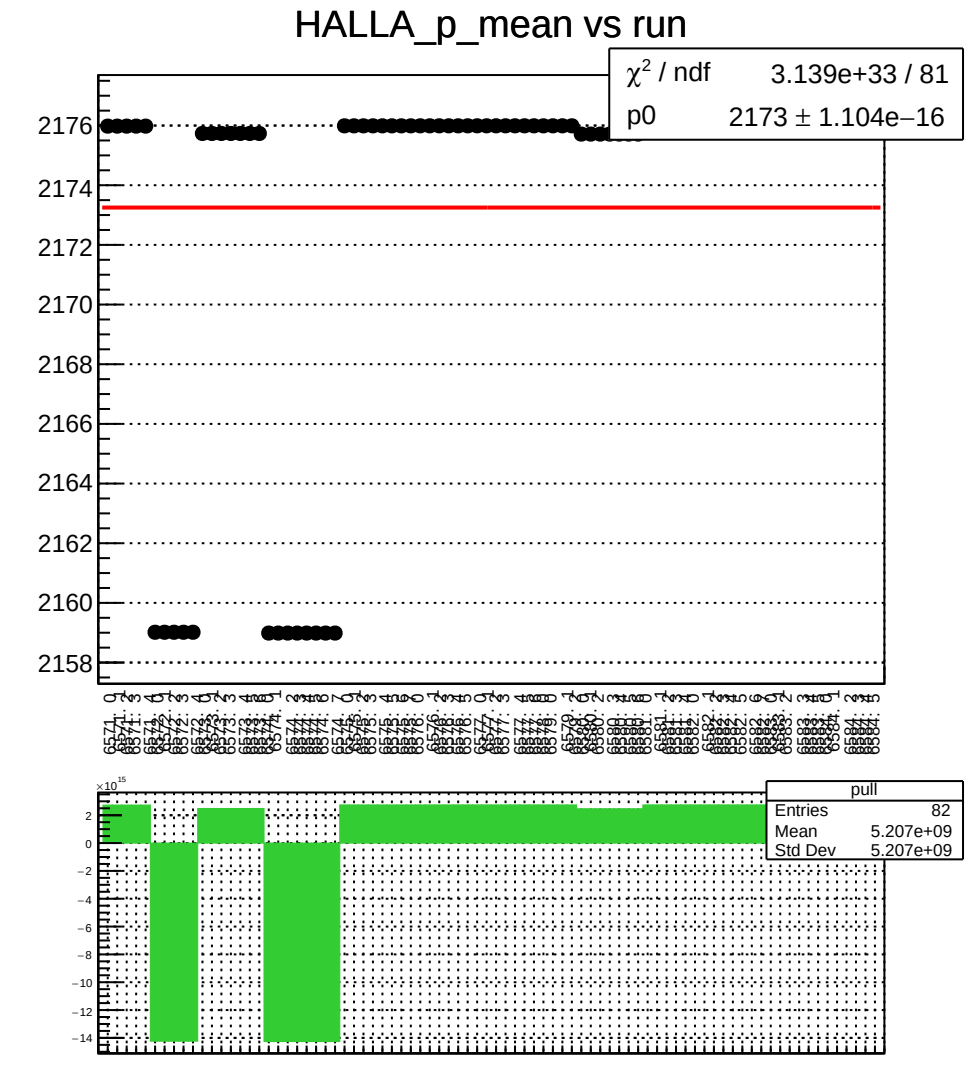

VWienAngle_mean vs run
χ² / ndf 1.656e+06 / 81
p0 −90.6 ± 1.104e−16
−89.6
−89.8
−90
−90.2
−90.4
−90.6
pull
Entries 82
Mean 41
Std Dev 23.67
0
−20
−40
−60
−80
−100
−120
−140
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

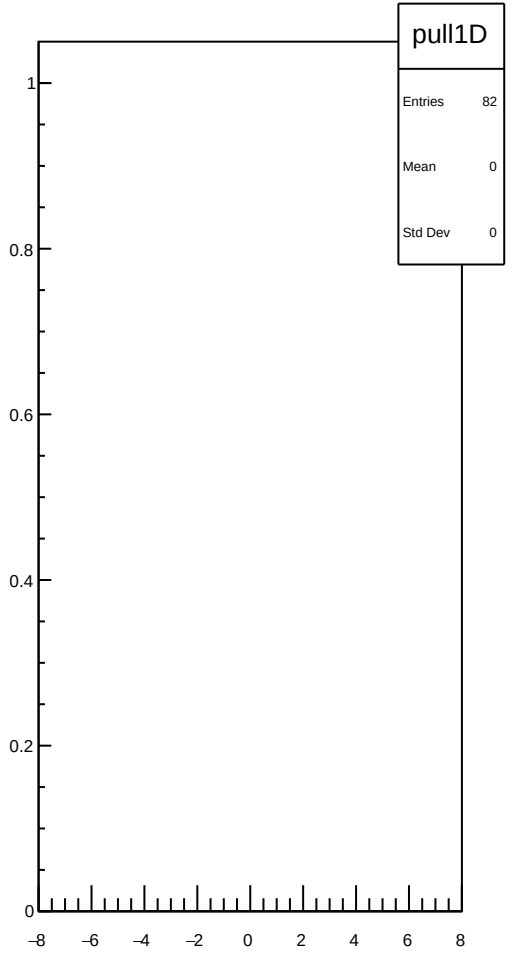

HWienAngle_mean vs run
χ² / ndf 3.353e+05 / 81
p0 −29.64 ± 1.104e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 82
Mean 41
Std Dev 23.67
0
−10
−20
−30
−40
−50
−60
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

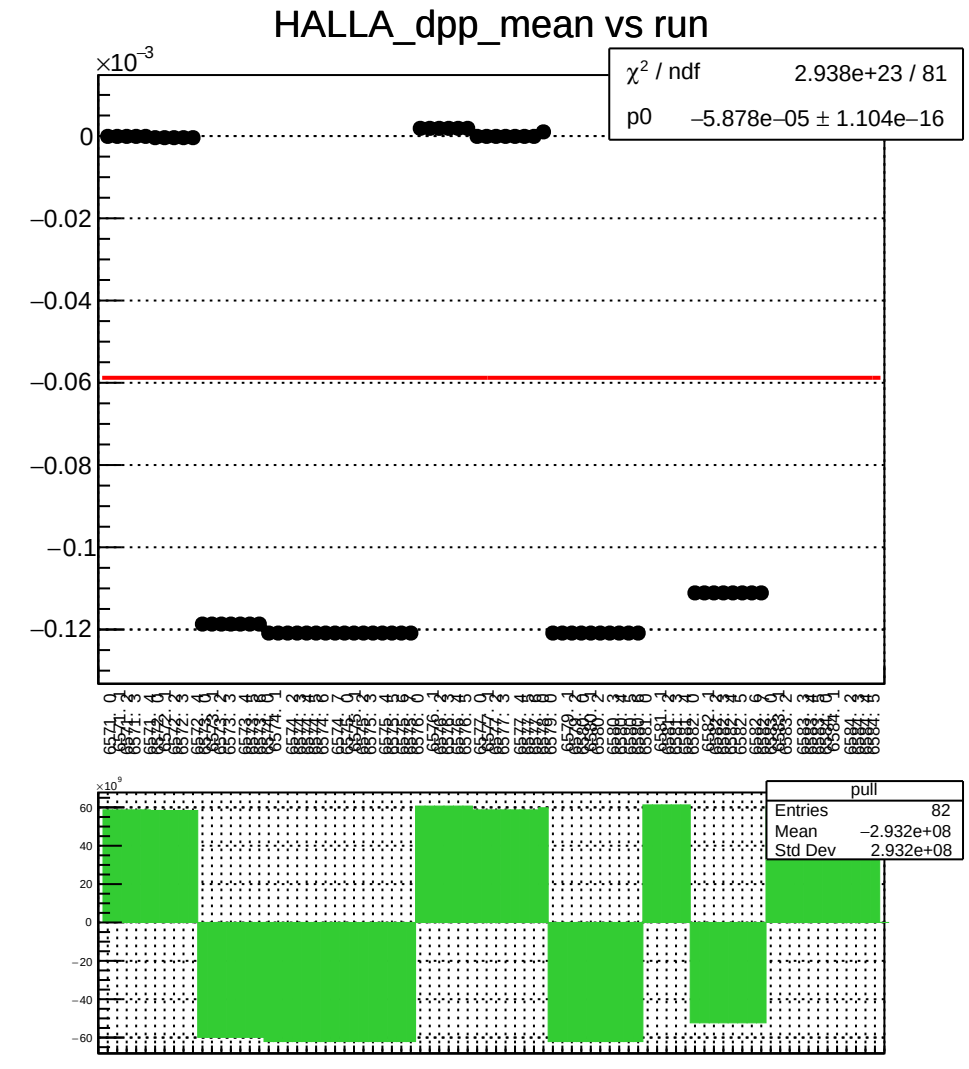

psub_pl_pos_mean vs run
χ² / ndf 0 / 81
p0 1468 ± 1.104e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
pull
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

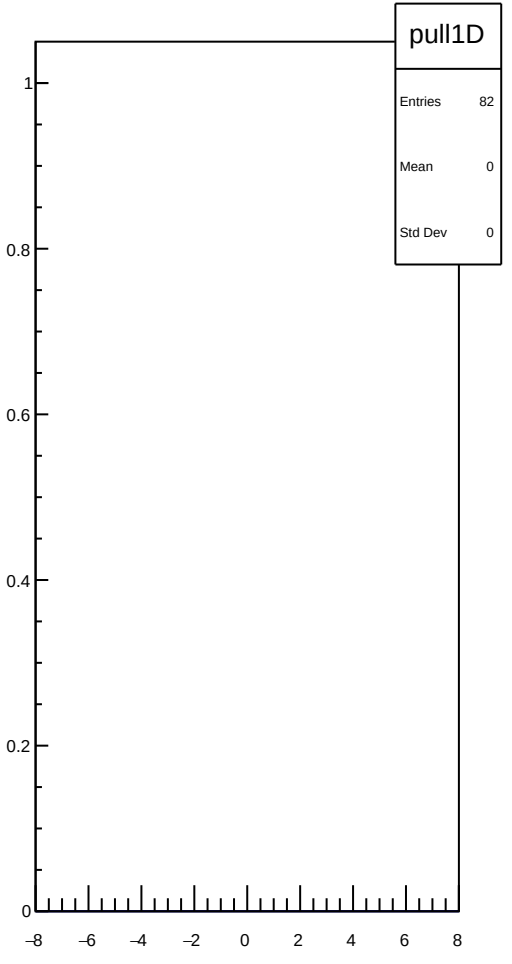

pull1D
Entries 82
Mean 0
Std Dev 0
80
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

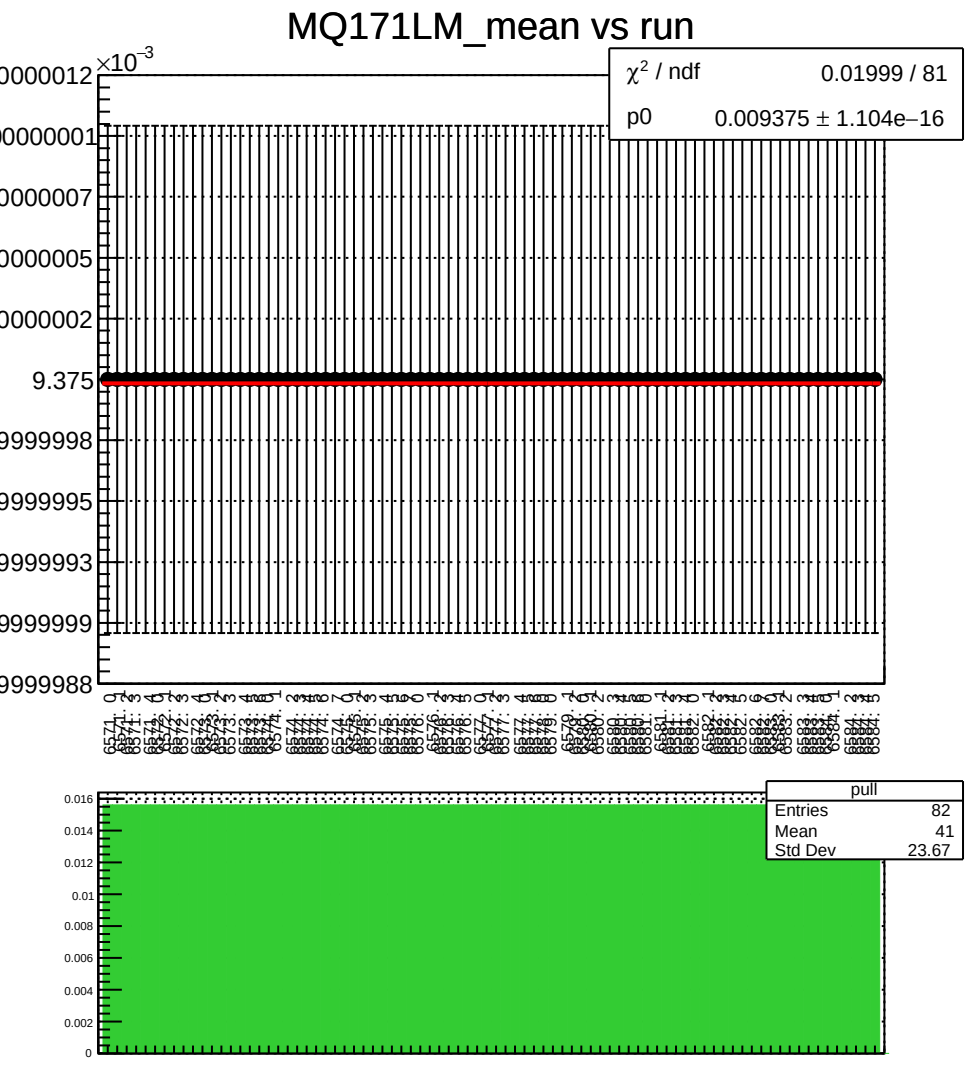

Phi_FG_mean vs run
χ² / ndf 1.06e+06 / 81
p0 88.02 ± 1.104e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 82
Mean 41
Std Dev 23.67
100
80
60
40
20
0
pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

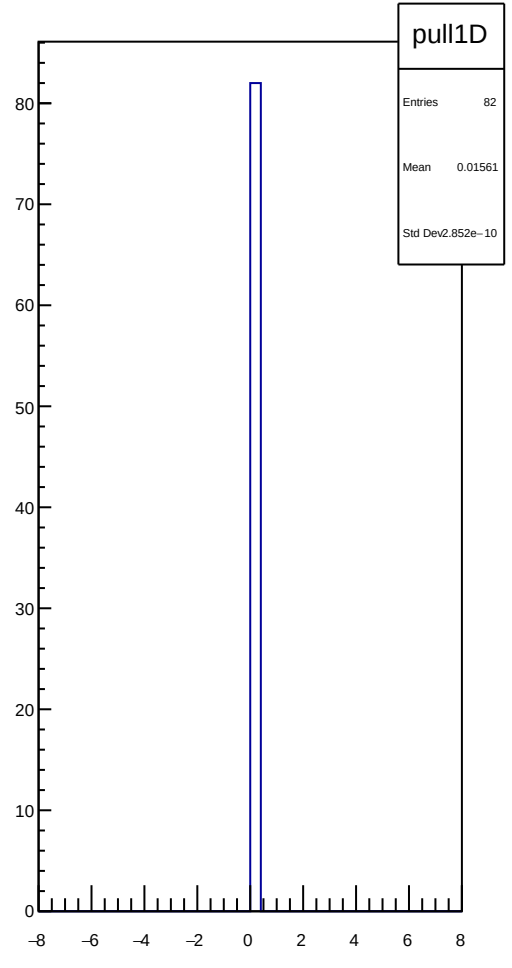

HALLA_p_mean vs run
χ² / ndf 3.139e+33 / 81
p0 2173 ± 1.104e−16
2176
2174
2172
2170
2168
2166
2164
2162
2160
2158
pull
Entries 82
Mean 5.207e+09
Std Dev 5.207e+09
×10¹⁵
2
0
−2
−4
−6
−8
−10
−12
−14

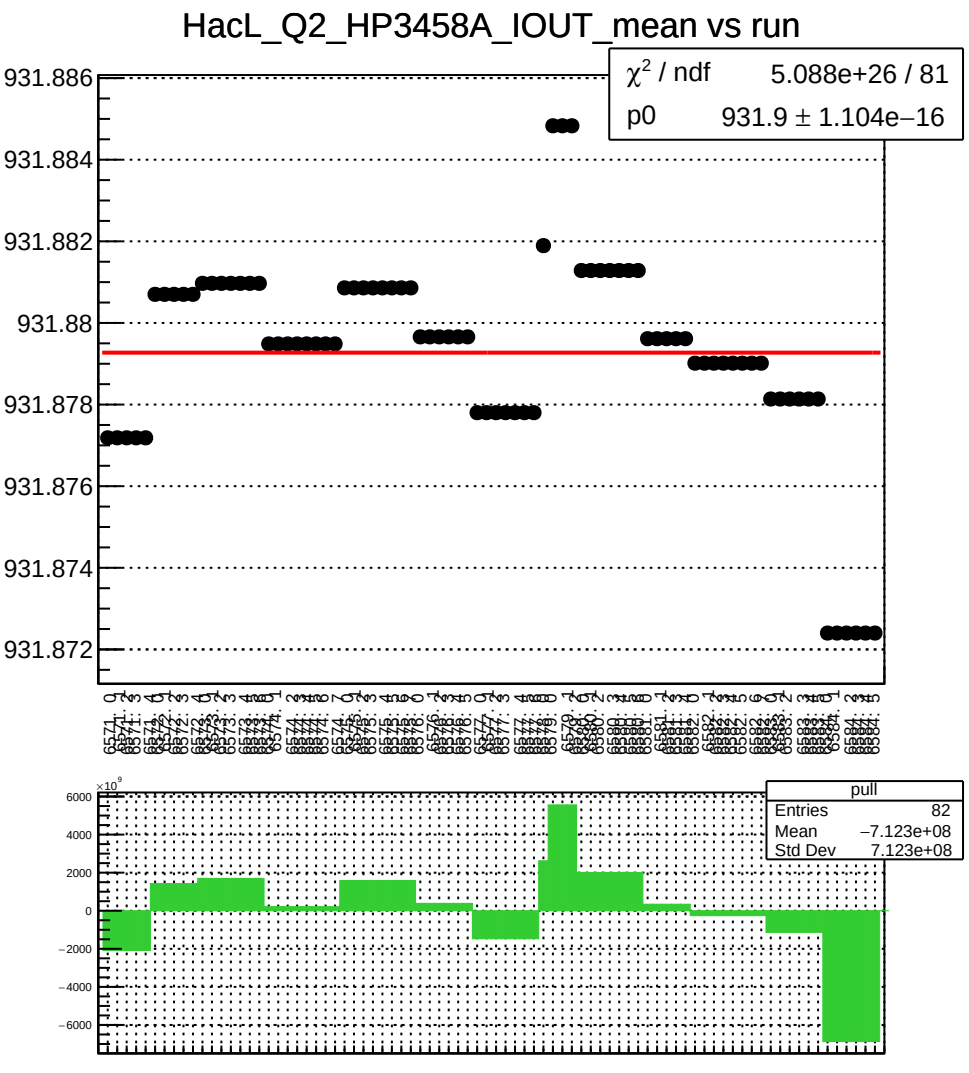

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

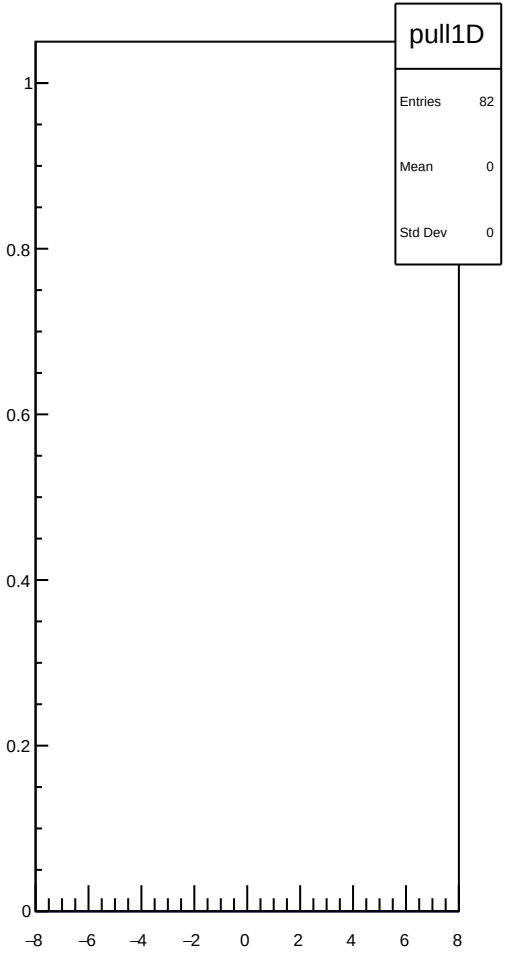

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 2.938e+23 / 81
p0 −5.878e−05 ± 1.104e−16
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
×10⁹
pull
Entries 82
Mean −2.932e+08
Std Dev 2.932e+08
60
40
20
0
−20
−40
−60

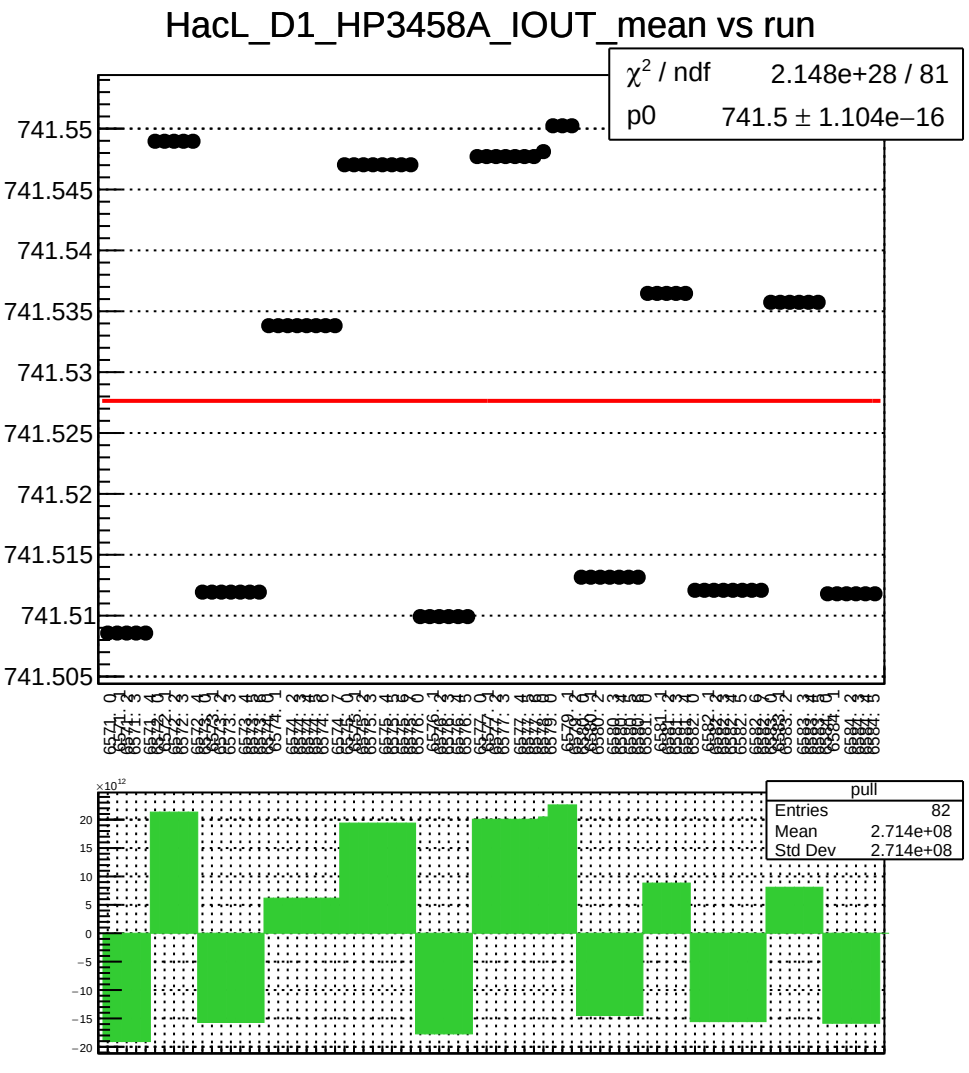

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

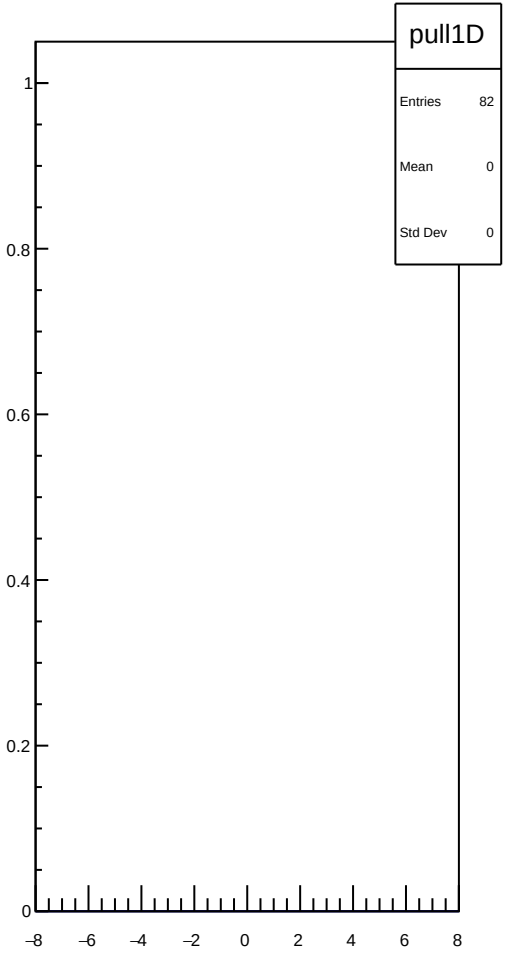

MQ171LM_mean vs run
χ² / ndf 0.01999 / 81
p0 0.009375 ± 1.104e−16
×10⁻³
pull
Entries 82
Mean 41
Std Dev 23.67

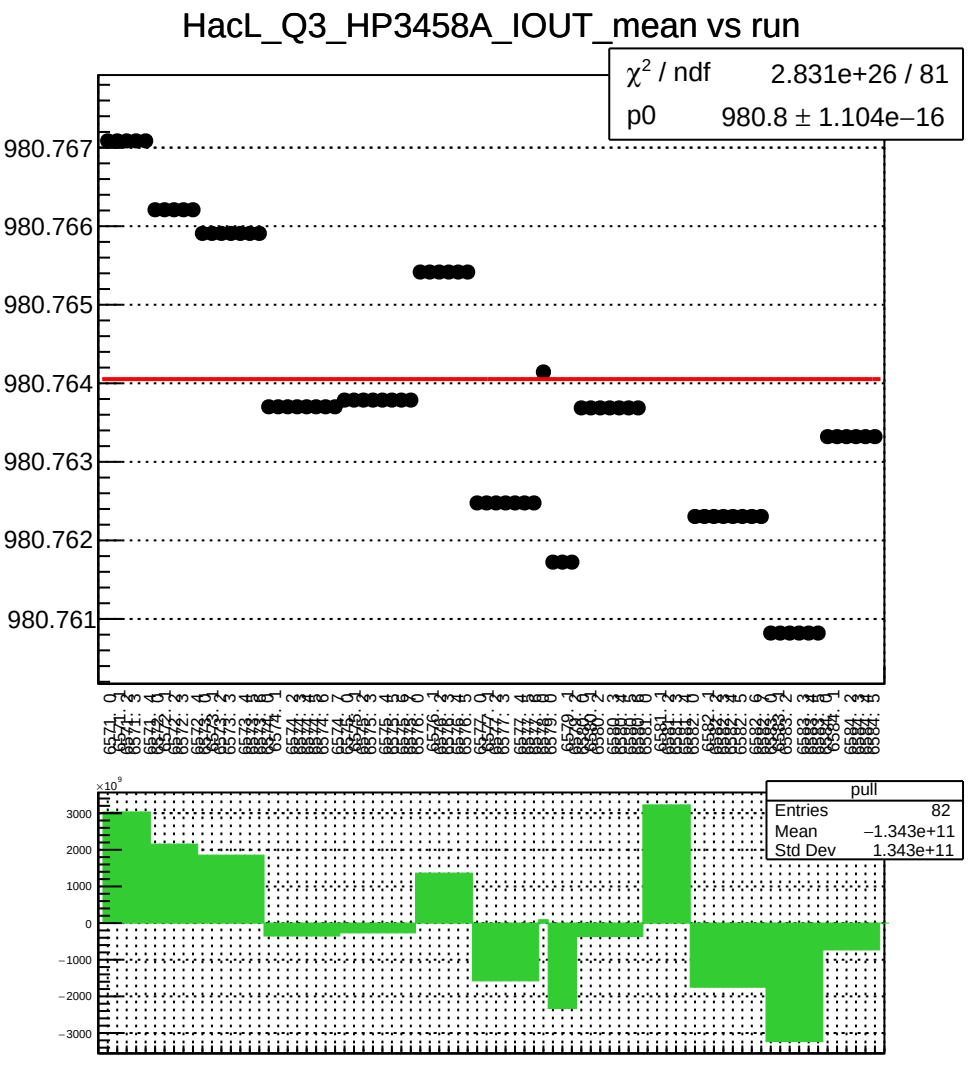

pull1D
Entries 82
Mean 0.01561
Std Dev 2.852e−10

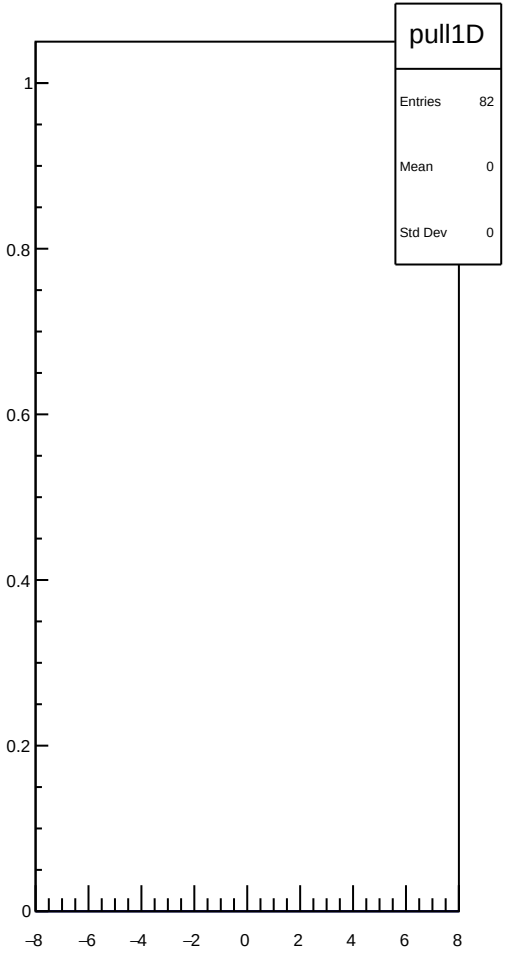

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 5.088e+26 / 81
p0 931.9 ± 1.104e−16
931.886
931.884
931.882
931.88
931.878
931.876
931.874
931.872
pull
Entries 82
Mean −7.123e+08
Std Dev 7.123e+08
×10⁹
6000
4000
2000
0
−2000
−4000
−6000

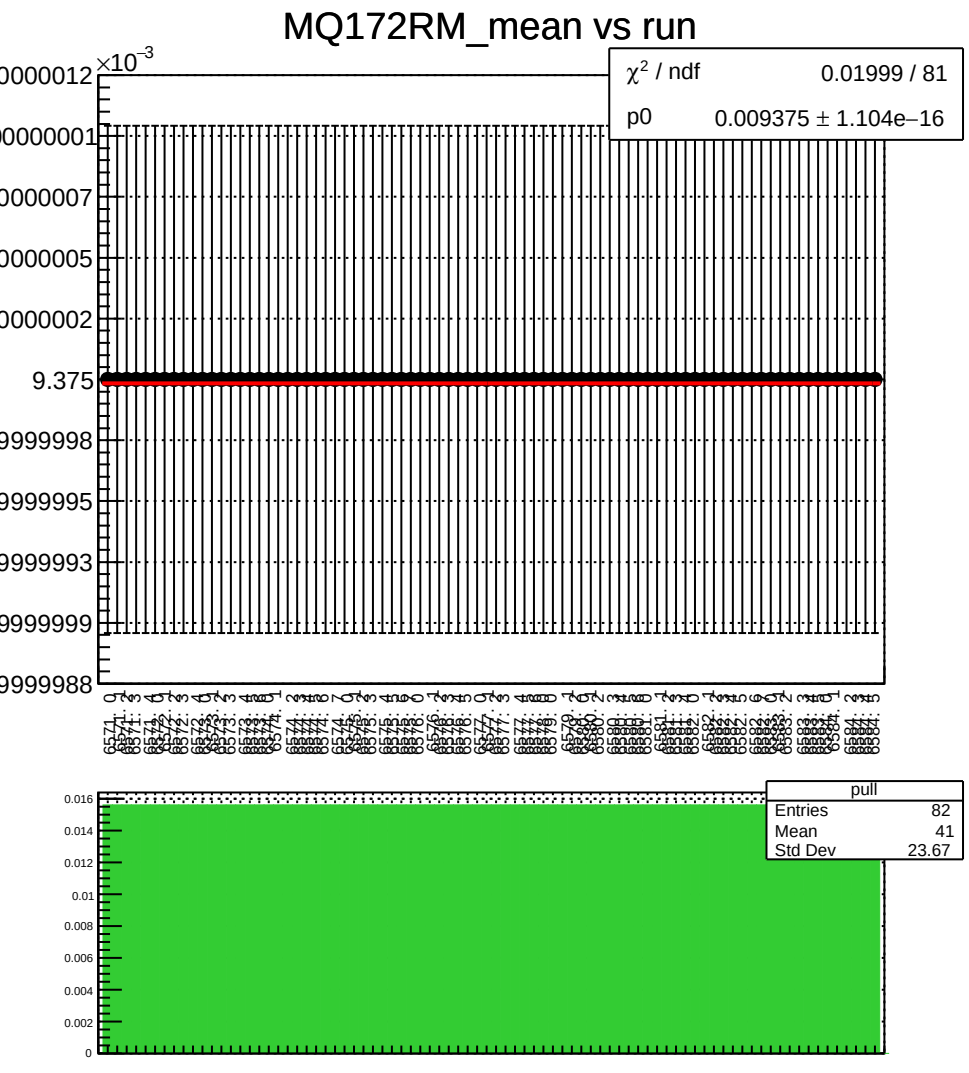

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

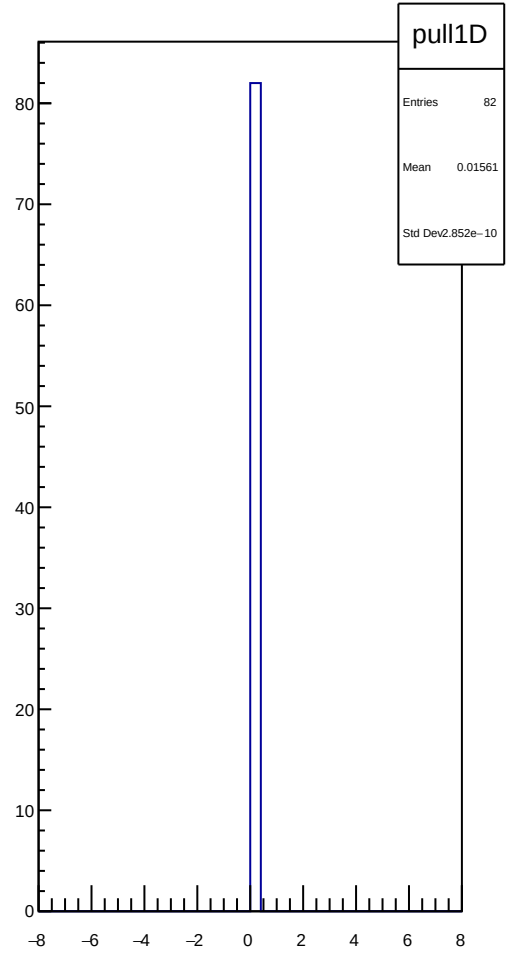

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 2.148e+28 / 81
p0 741.5 ± 1.104e−16
741.55
741.545
741.54
741.535
741.53
741.525
741.52
741.515
741.51
741.505
pull
Entries 82
Mean 2.714e+08
Std Dev 2.714e+08
×10¹²
20
15
10
5
0
−5
−10
−15
−20

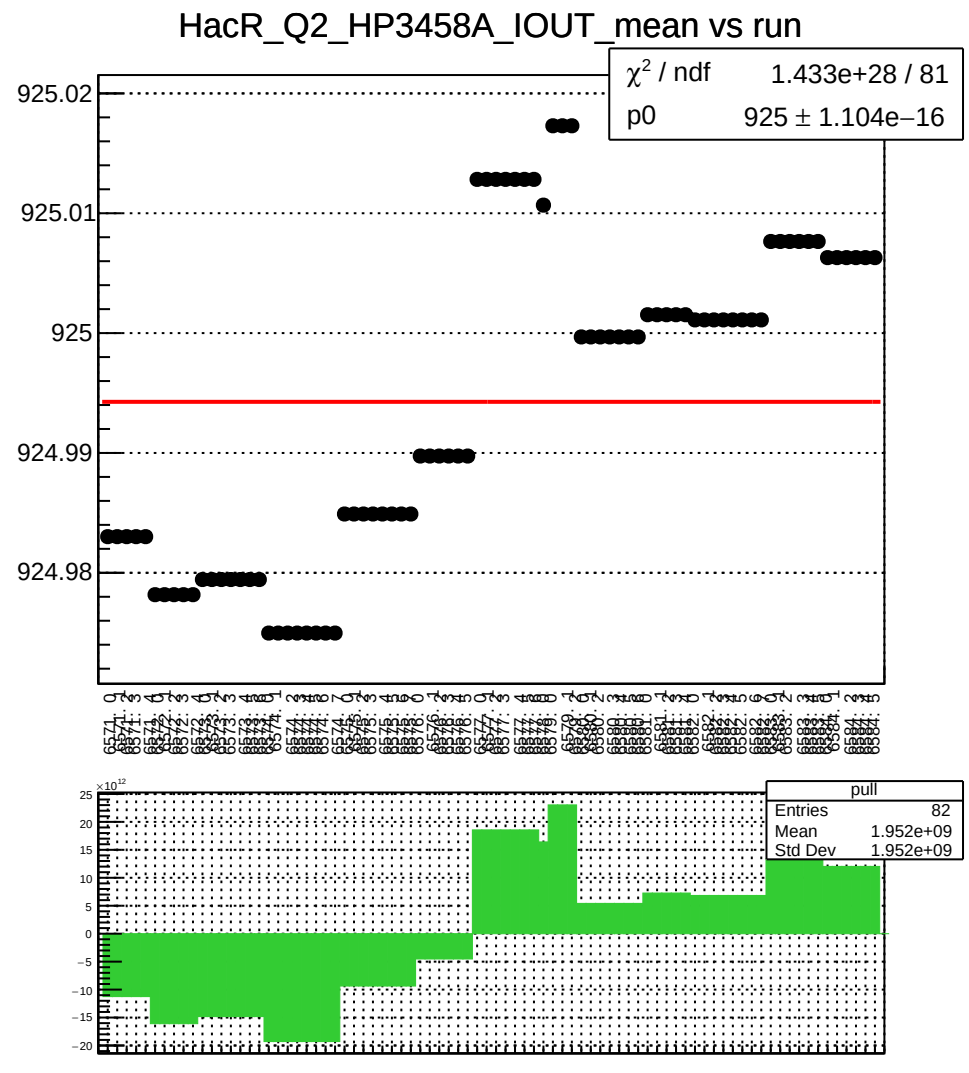

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

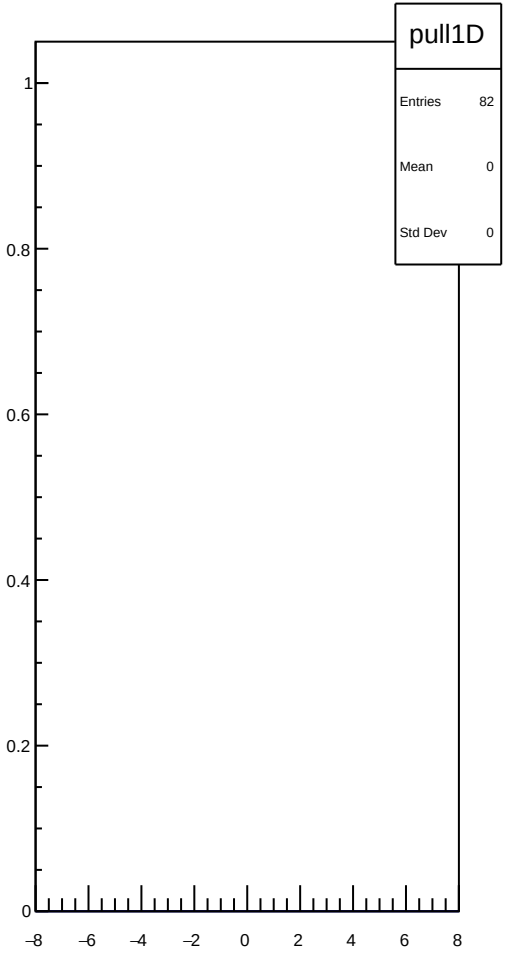

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.831e+26 / 81
p0 980.8 ± 1.104e−16
980.767
980.766
980.765
980.764
980.763
980.762
980.761
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 82
Mean −1.343e+11
Std Dev 1.343e+11

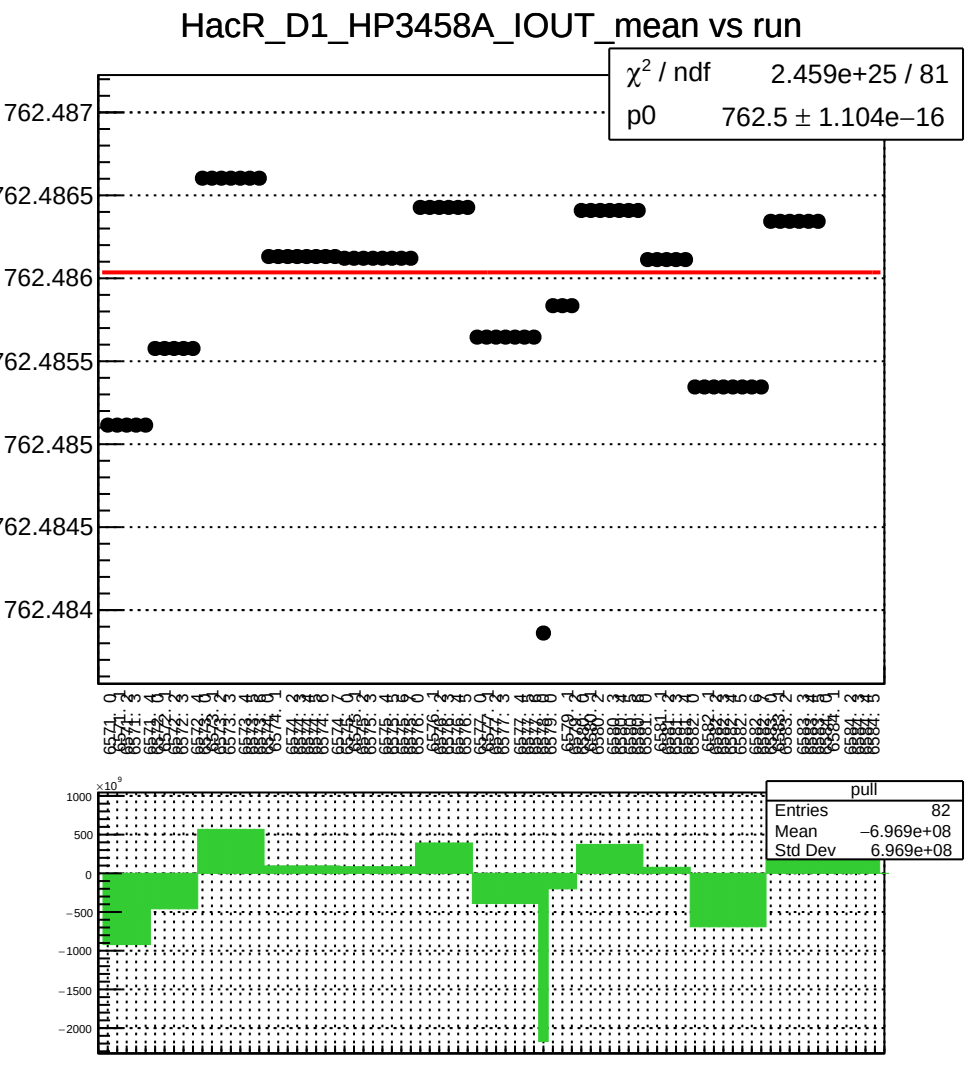

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

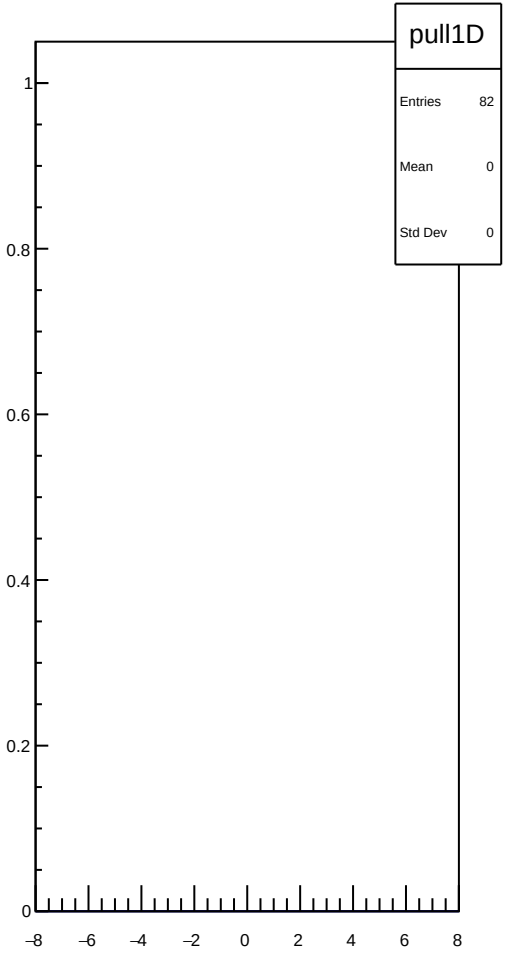

MQ172RM_mean vs run
×10⁻³
χ² / ndf 0.01999 / 81
p0 0.009375 ± 1.104e−16
9.375
pull
Entries 82
Mean 41
Std Dev 23.67

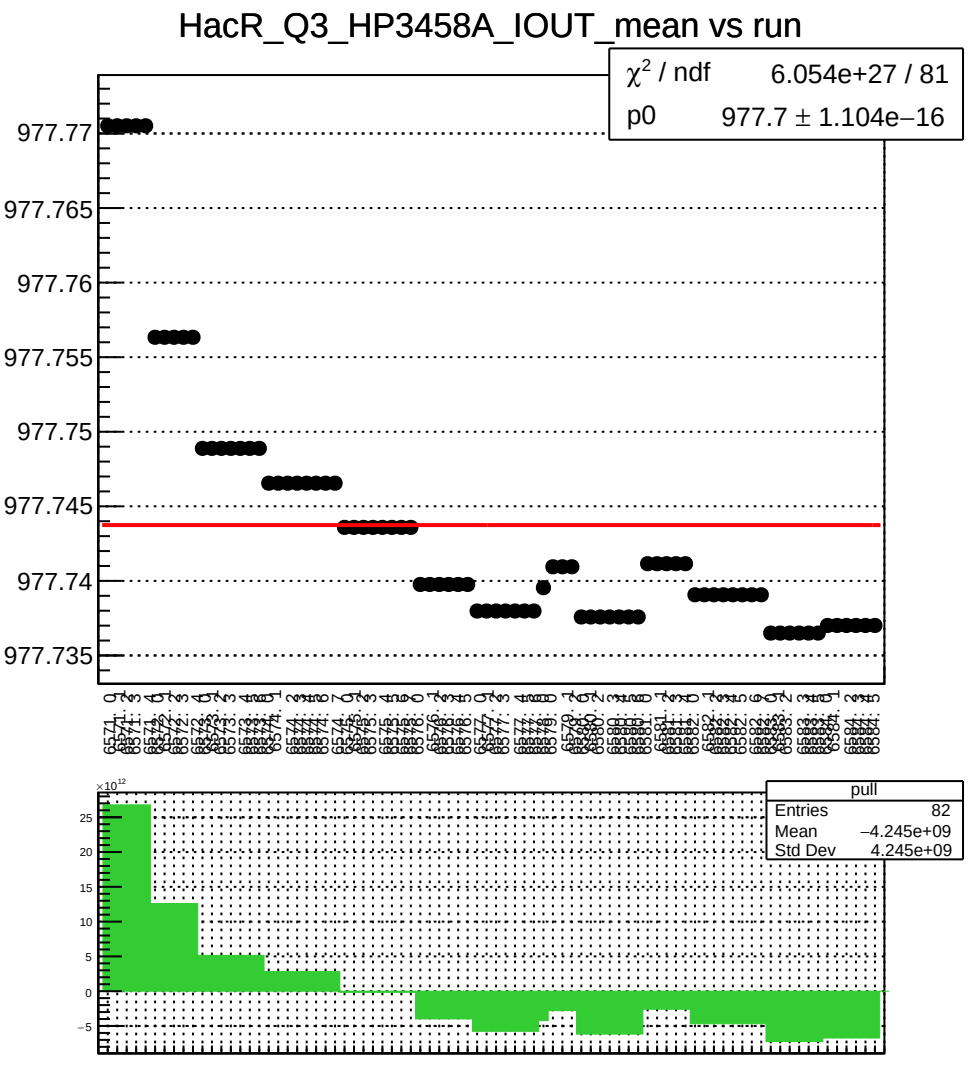

pull1D
Entries 82
Mean 0.01561
Std Dev 2.852e−10

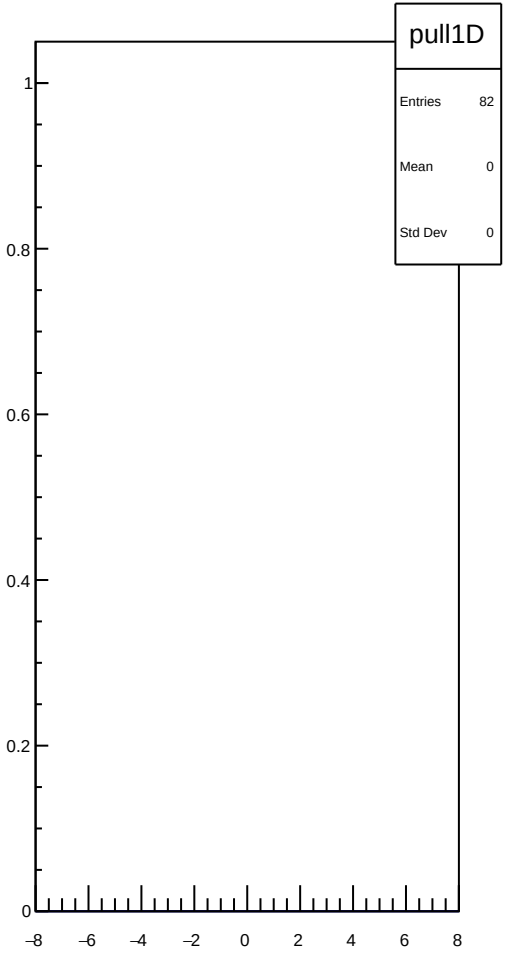

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 1.433e+28 / 81
p0 925 ± 1.104e−16
925.02
925.01
925
924.99
924.98
pull
Entries 82
Mean 1.952e+09
Std Dev 1.952e+09

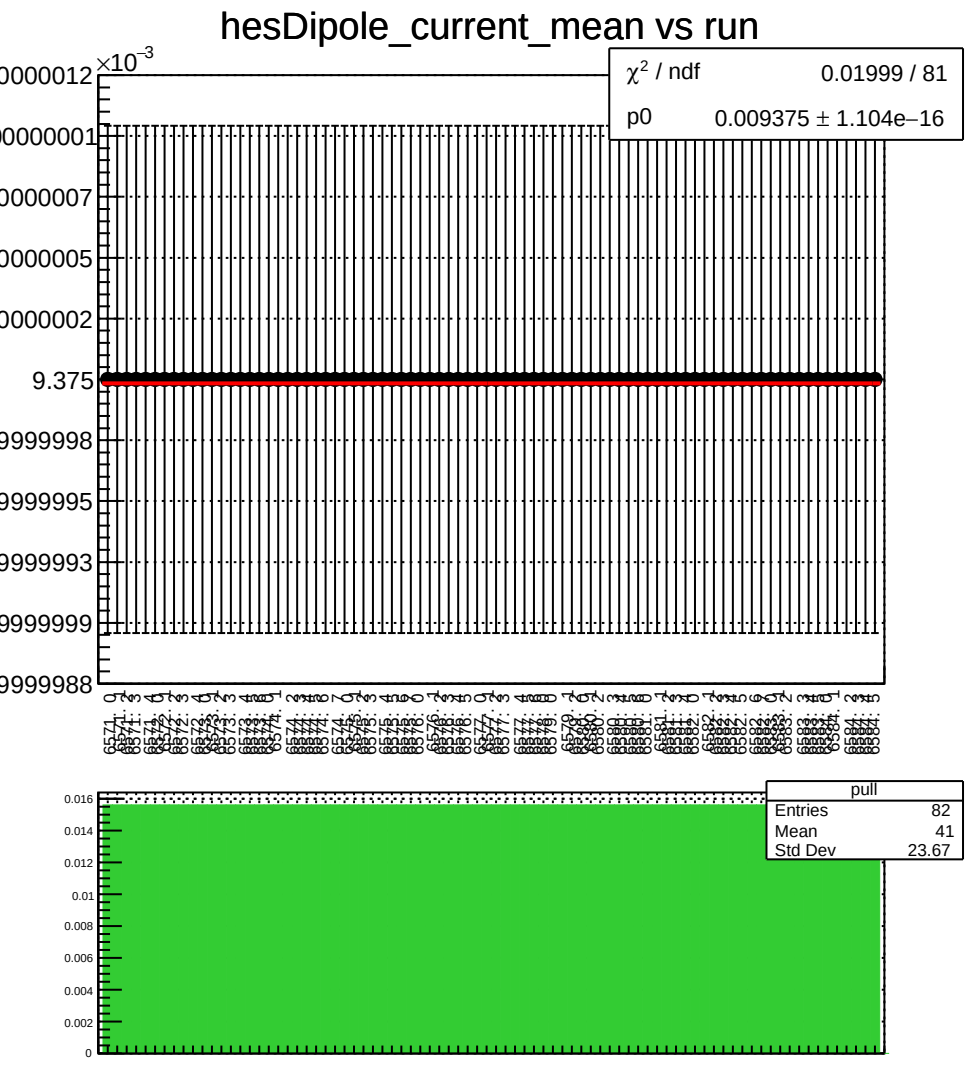

pull1D
Entries 82
Mean 0
Std Dev 0

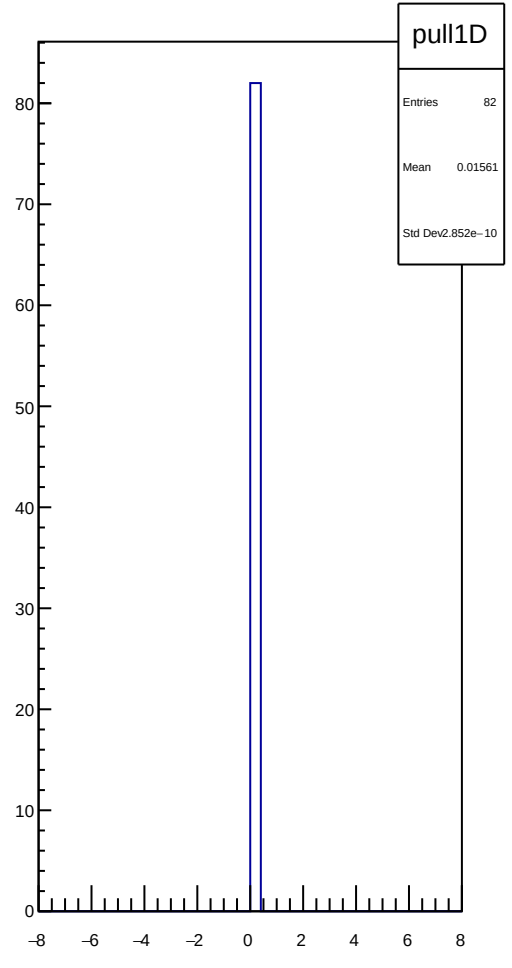

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 2.459e+25 / 81
p0 762.5 ± 1.104e−16
762.487
762.4865
762.486
762.4855
762.485
762.4845
762.484
pull
Entries 82
Mean −6.969e+08
Std Dev 6.969e+08
×10⁹
1000
500
0
−500
−1000
−1500
−2000

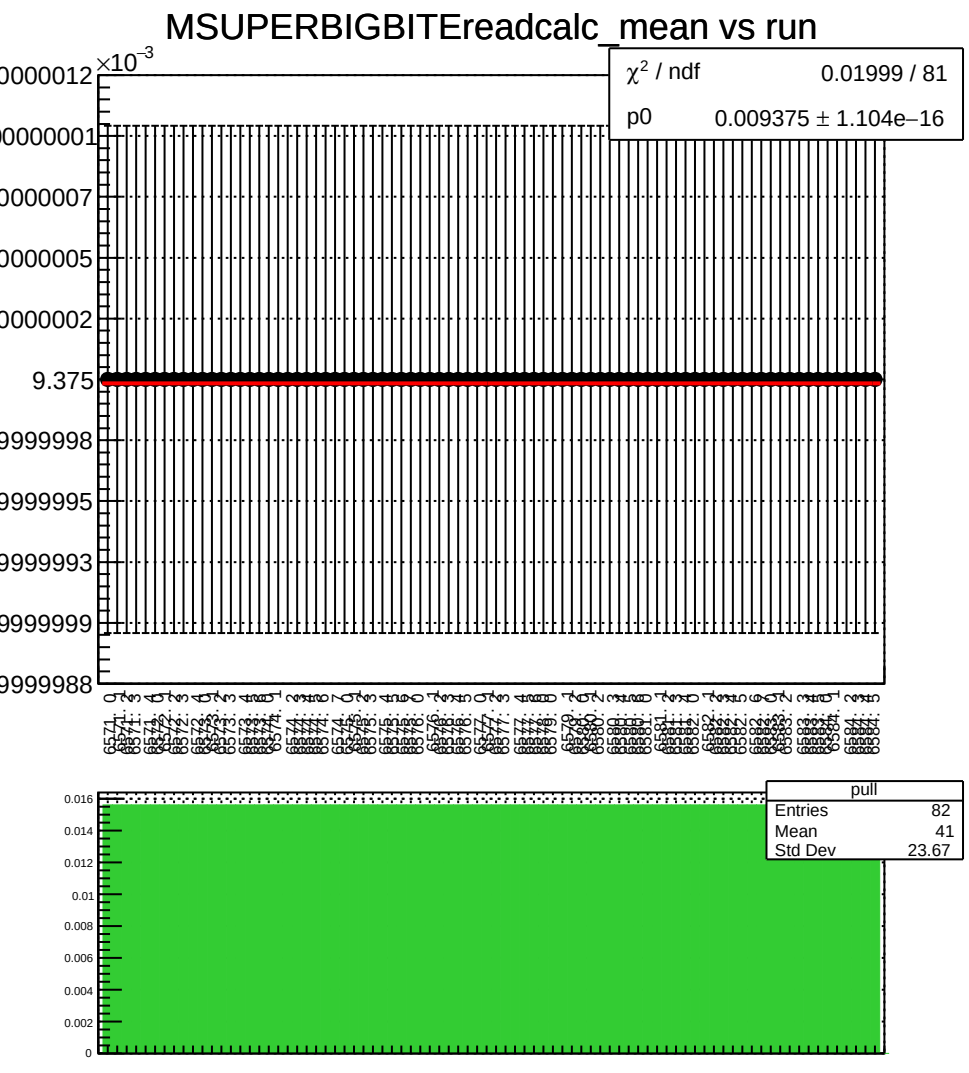

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

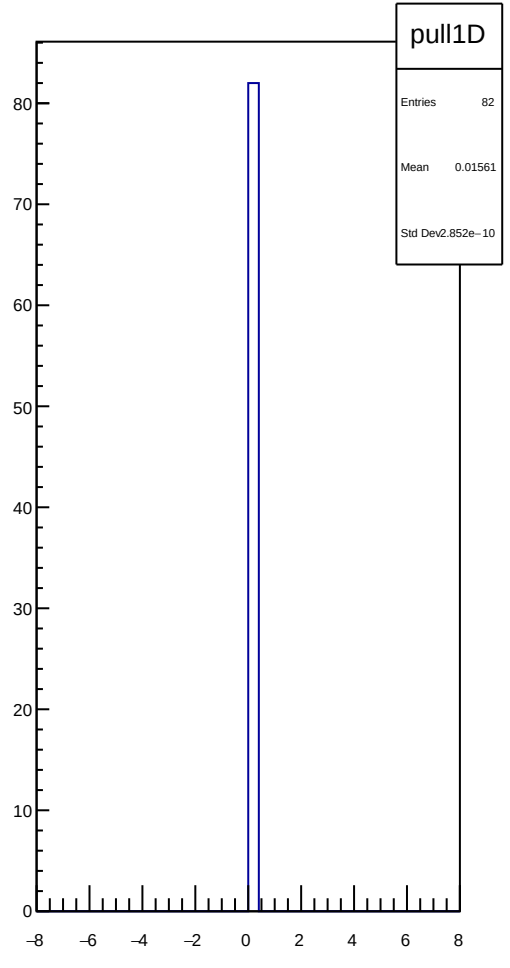

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 6.054e+27 / 81
p0 977.7 ± 1.104e−16
977.77
977.765
977.76
977.755
977.75
977.745
977.74
977.735
pull
Entries 82
Mean −4.245e+09
Std Dev 4.245e+09
×10¹²
25
20
15
10
5
0
−5

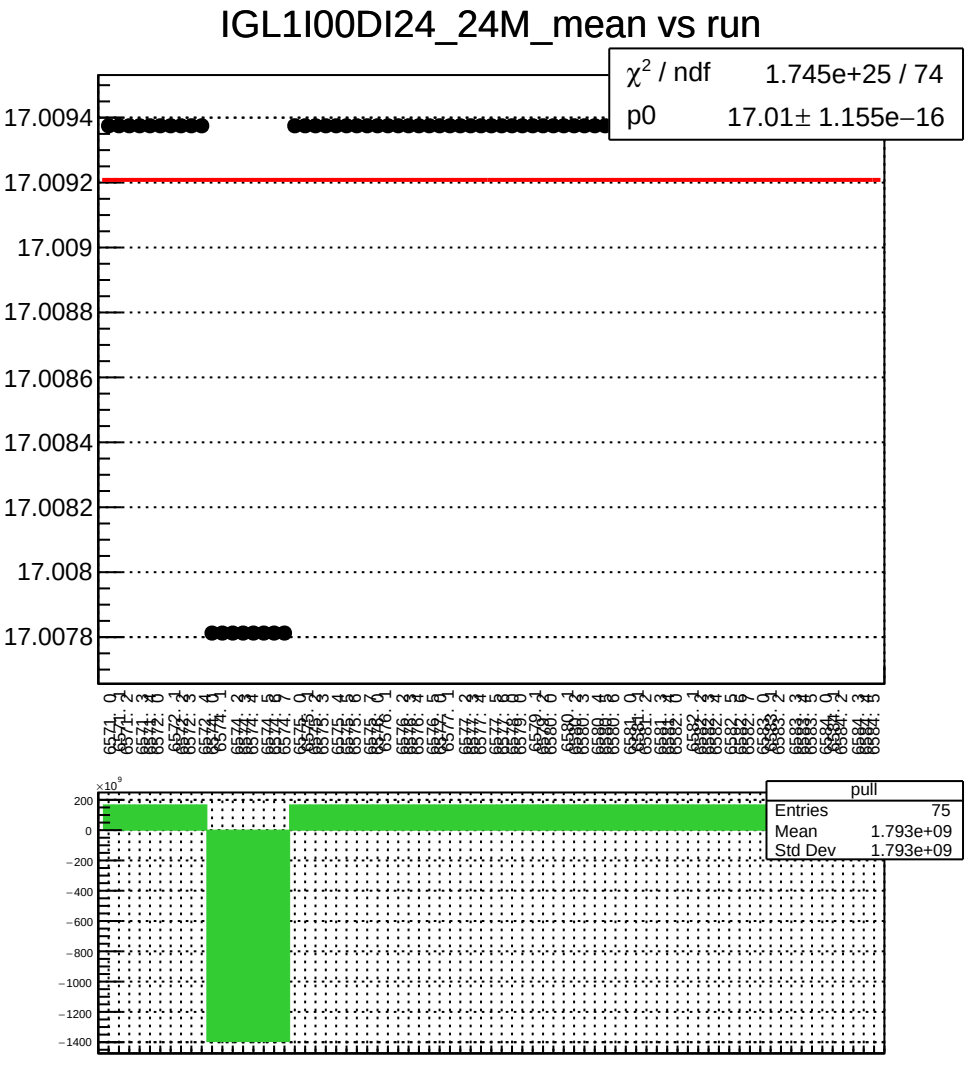

pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

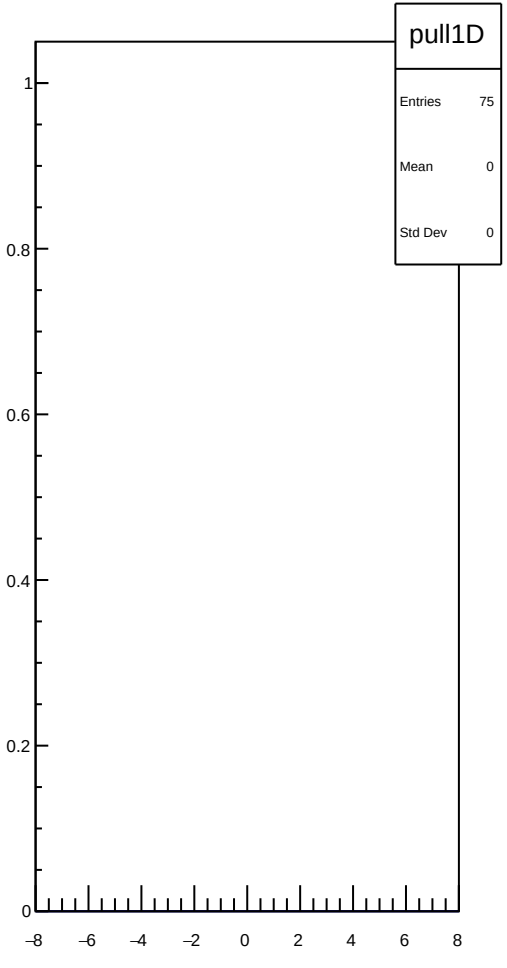

hesDipole_current_mean vs run
χ² / ndf 0.01999 / 81
p0 0.009375 ± 1.104e−16
×10⁻³
pull
Entries 82
Mean 41
Std Dev 23.67

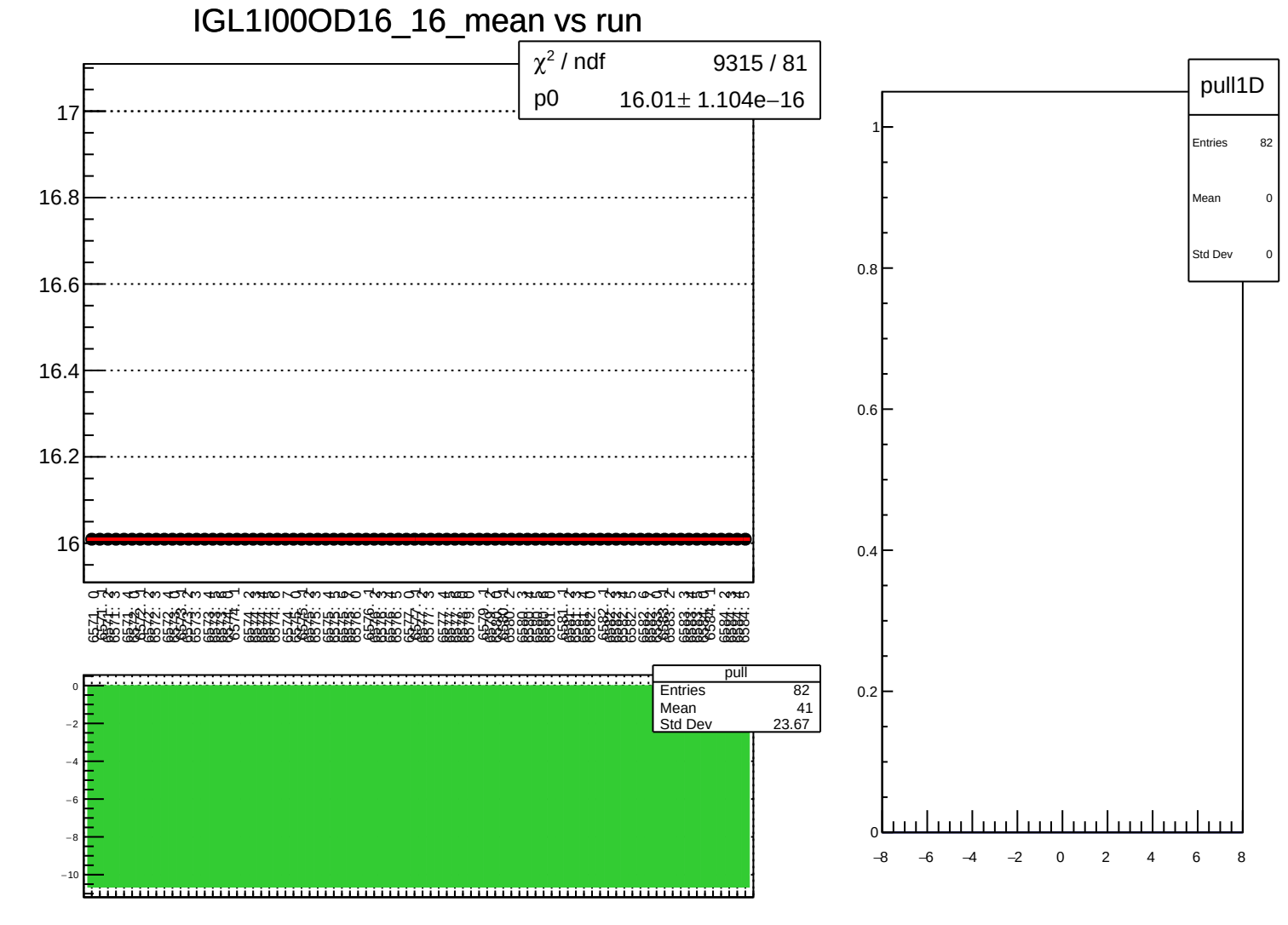

pull1D
Entries 82
Mean 0.01561
Std Dev 2.852e−10

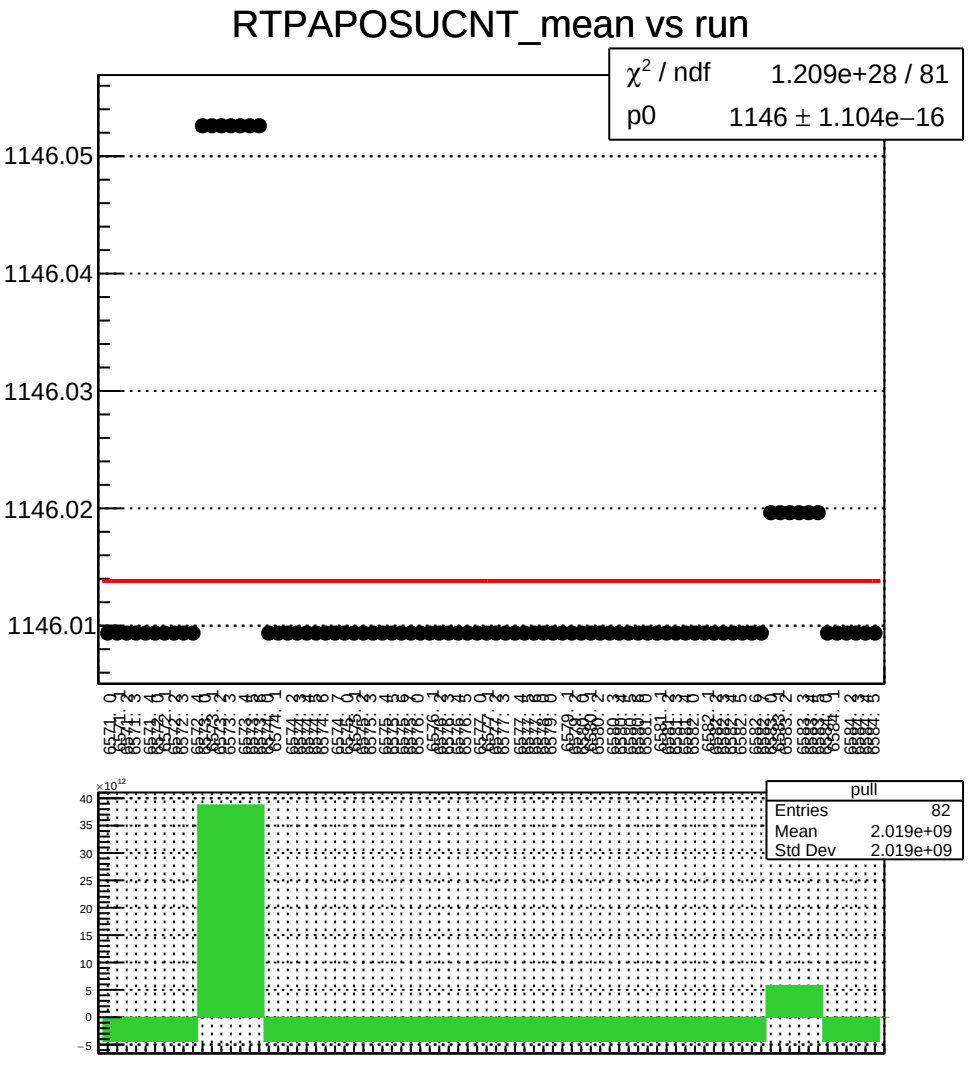

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.01999 / 81
p0 0.009375 ± 1.104e−16
×10⁻³
9.375
pull
Entries 82
Mean 41
Std Dev 23.67

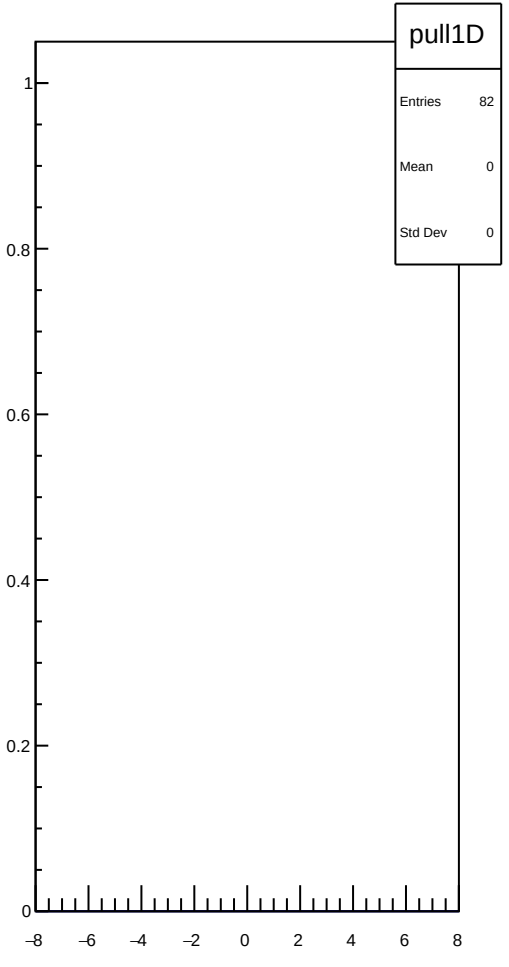

pull1D
Entries 82
Mean 0.01561
Std Dev 2.852e−10

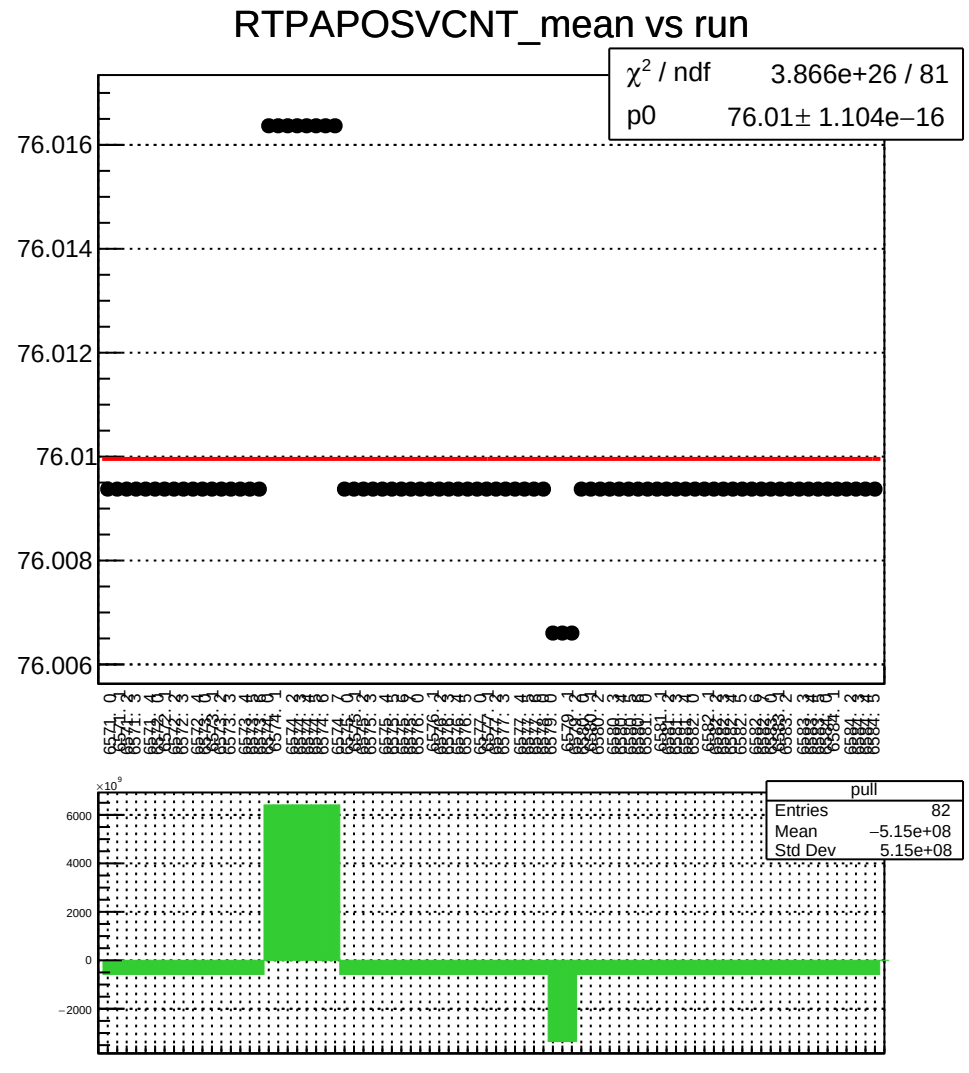

IGL1I00DI24_24M_mean vs run
χ² / ndf 1.745e+25 / 74
p0 17.01± 1.155e−16
17.0094
17.0092
17.009
17.0088
17.0086
17.0084
17.0082
17.008
17.0078
pull
Entries 75
Mean 1.793e+09
Std Dev 1.793e+09
×10⁹
200
0
−200
−400
−600
−800
−1000
−1200
−1400

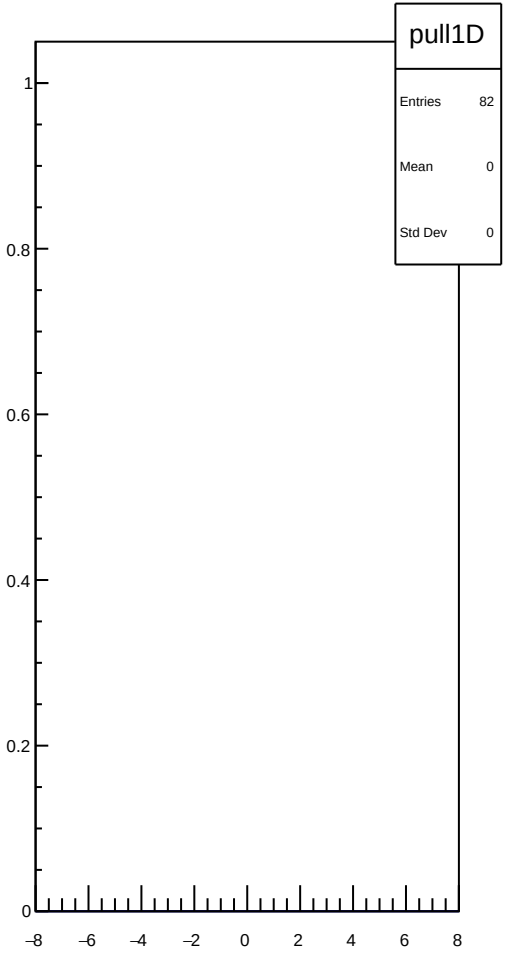

pull1D
Entries 75
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 9315 / 81
p0 16.01± 1.104e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 82
Mean 41
Std Dev 23.67
0
−2
−4
−6
−8
−10
pull1D
Entries 82
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 1.209e+28 / 81
p0 1146 ± 1.104e−16
1146.05
1146.04
1146.03
1146.02
1146.01
×10¹²
40
35
30
25
20
15
10
5
0
−5
pull
Entries 82
Mean 2.019e+09
Std Dev 2.019e+09


pull1D
Entries 82
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 3.866e+26 / 81
p0 76.01± 1.104e−16
76.016
76.014
76.012
76.01
76.008
76.006
pull
Entries 82
Mean −5.15e+08
Std Dev 5.15e+08
×10⁹
6000
4000
2000
0
−2000


pull1D
Entries 82
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8