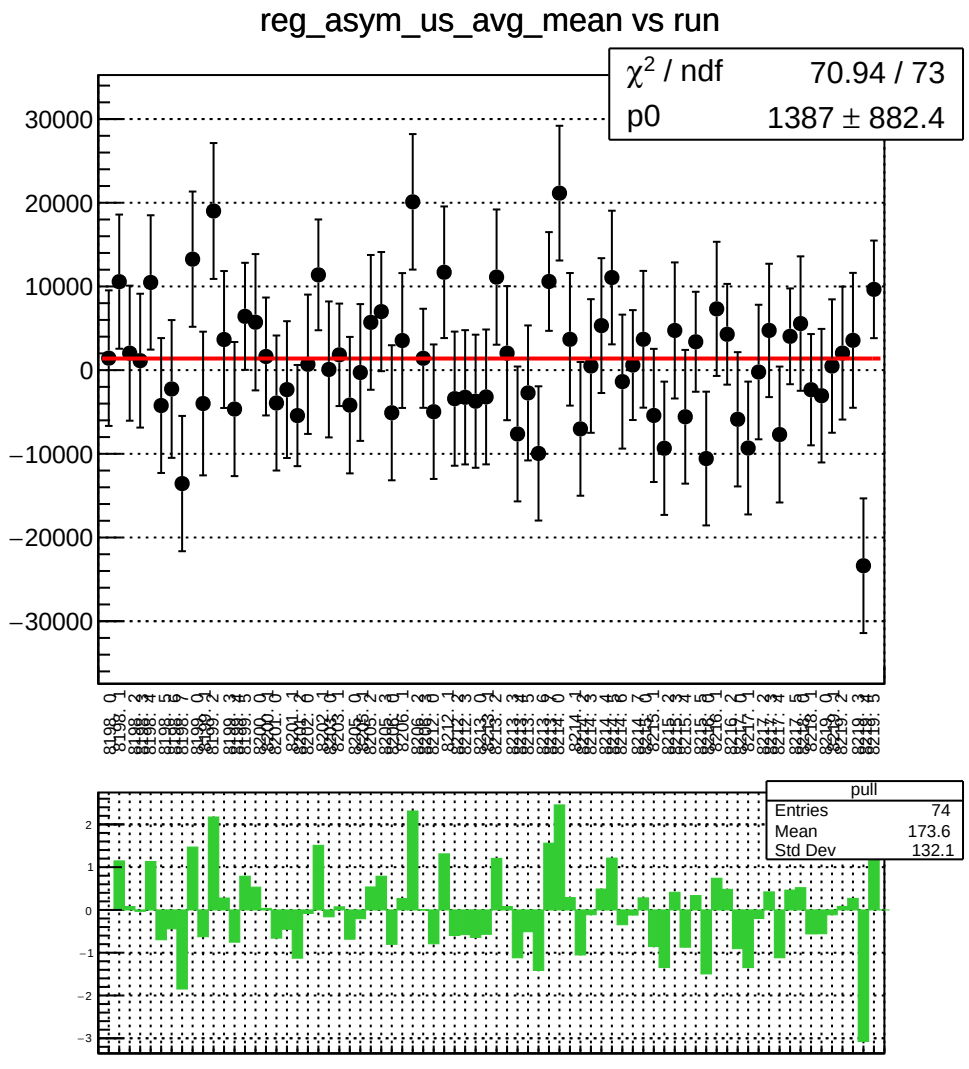
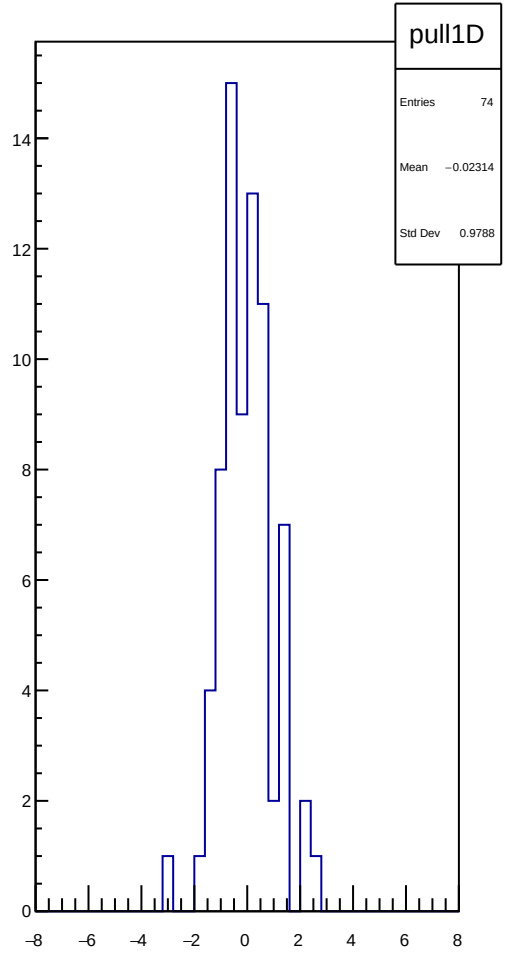
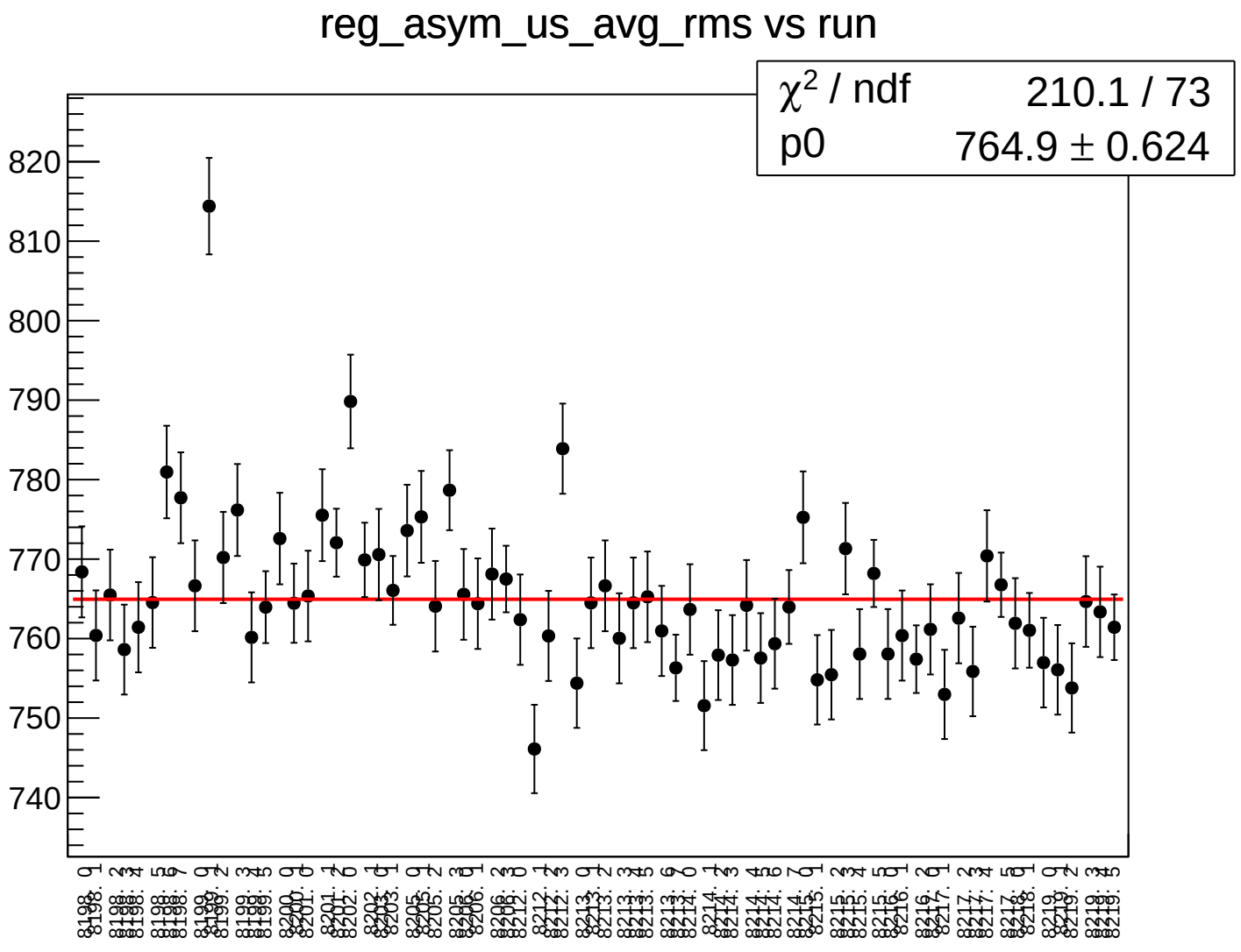
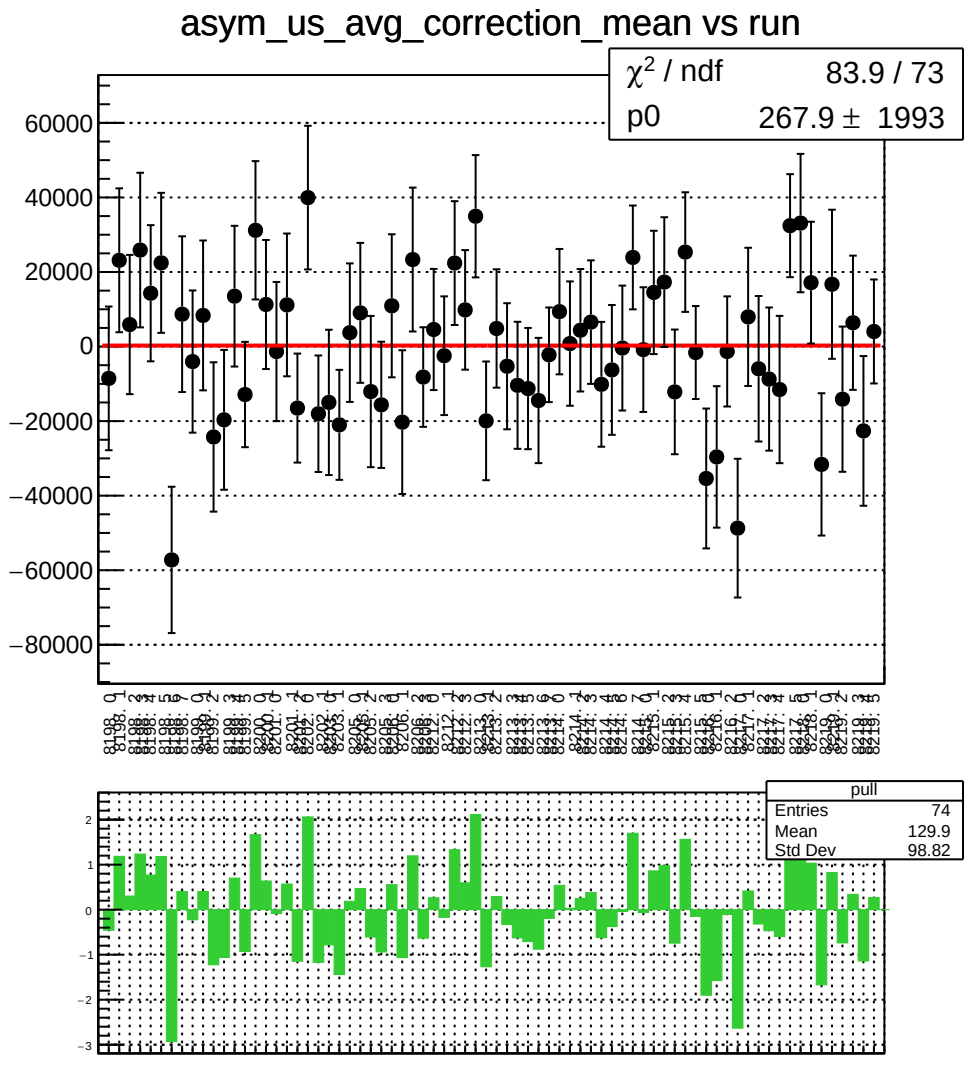
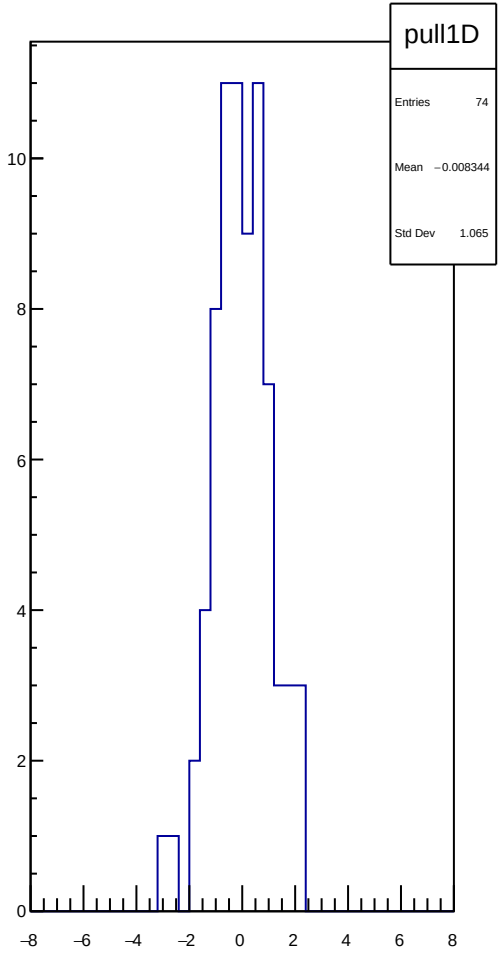
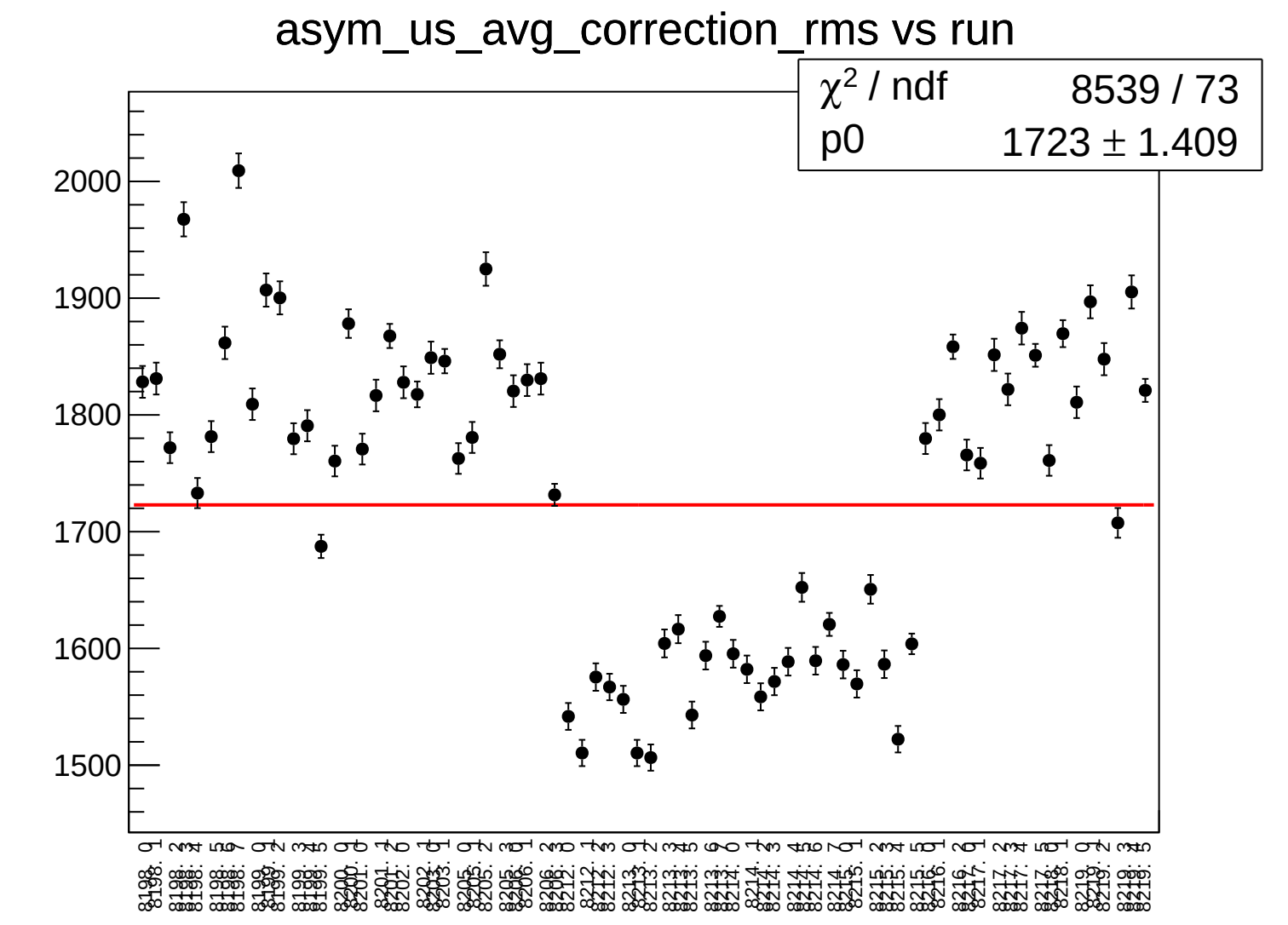

reg_asym_us_avg_mean vs run
χ² / ndf 70.94 / 73
p0 1387 ± 882.4
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 74
Mean 173.6
Std Dev 132.1
2
1
0
−1
−2
−3

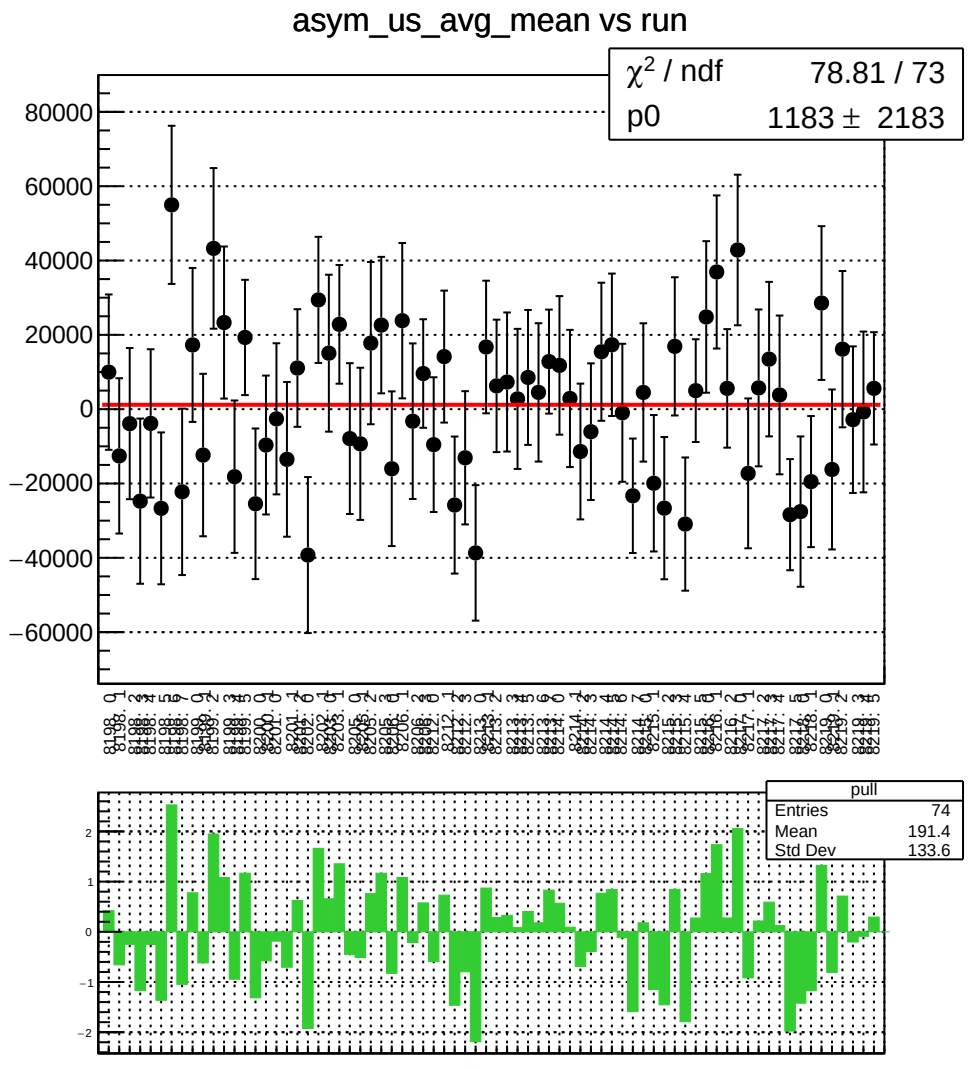

pull1D
Entries 74
Mean −0.02314
Std Dev 0.9788
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

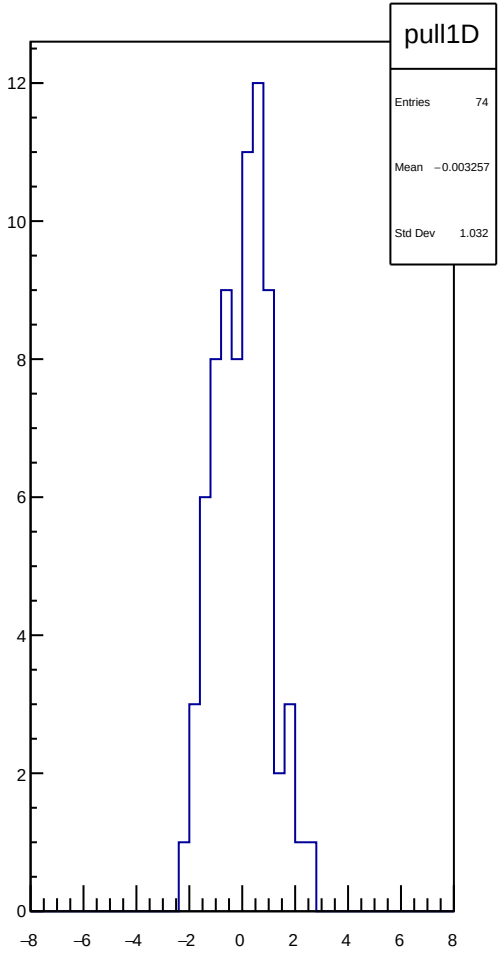

reg_asym_us_avg_rms vs run
χ^2 / ndf 210.1 / 73
p0 764.9 ± 0.624
820
810
800
790
780
770
760
750
740

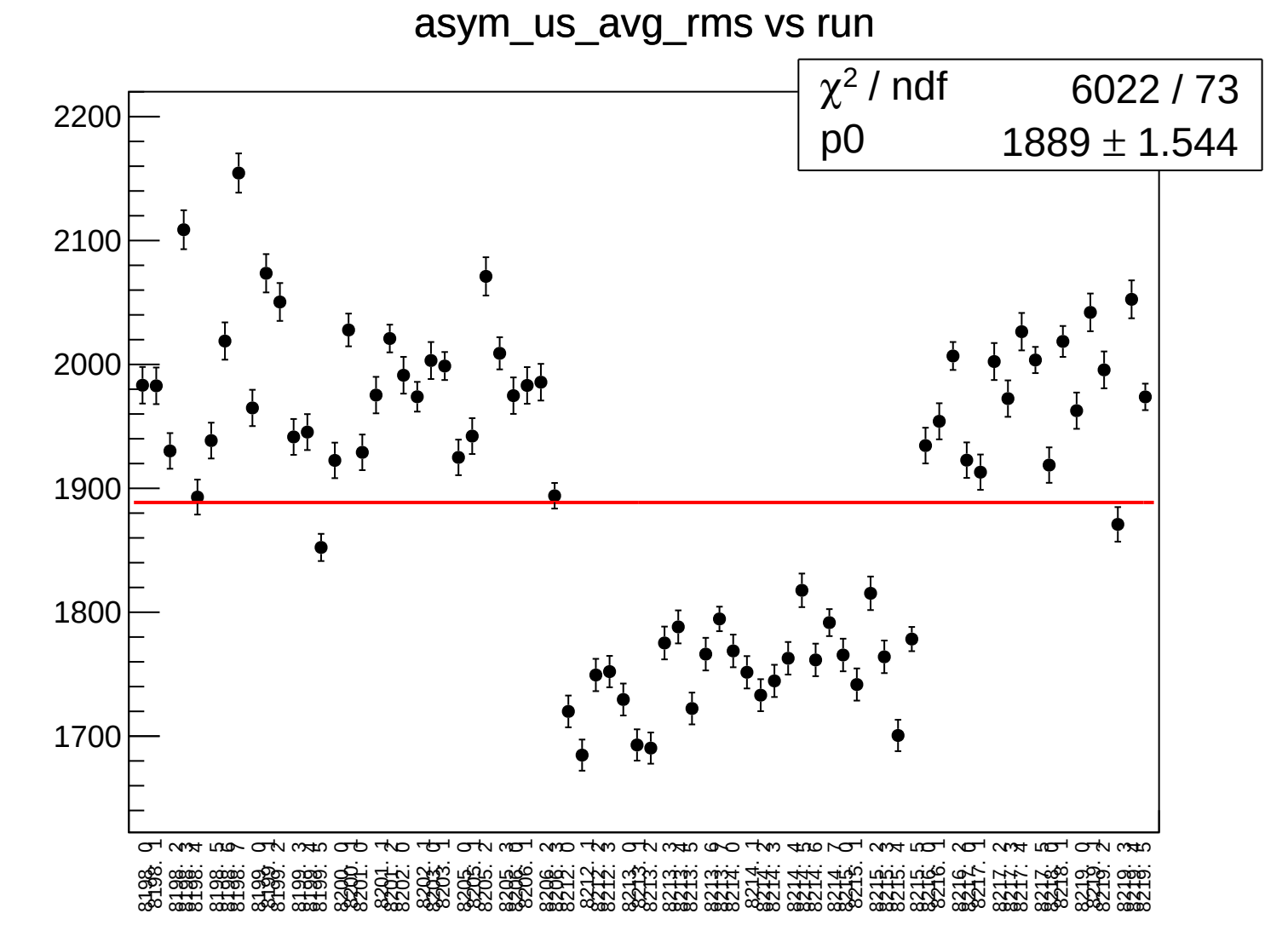

asym_us_avg_correction_mean vs run
χ² / ndf 83.9 / 73
p0 267.9 ± 1993
pull
Entries 74
Mean 129.9
Std Dev 98.82

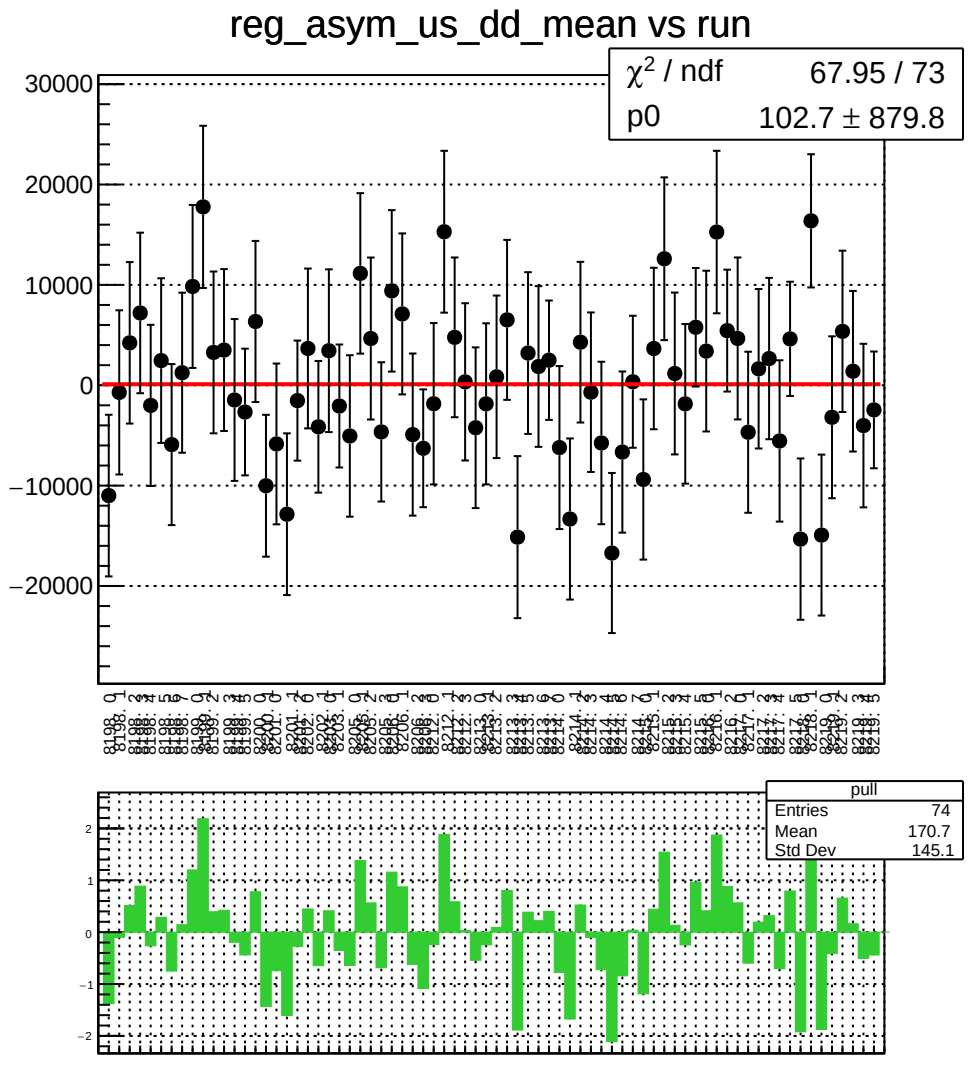

pull1D
Entries 74
Mean −0.008344
Std Dev 1.065

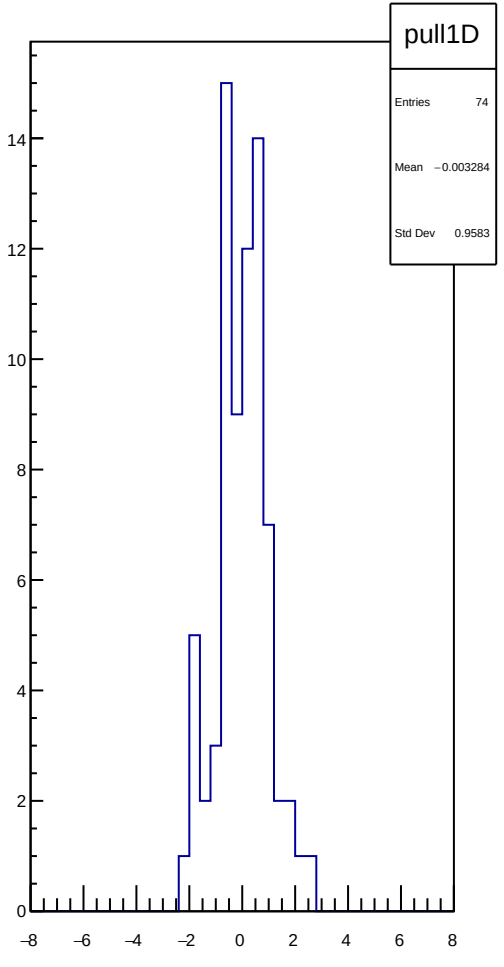

asym_us_avg_correction_rms vs run
χ² / ndf 8539 / 73
p0 1723 ± 1.409
2000
1900
1800
1700
1600
1500

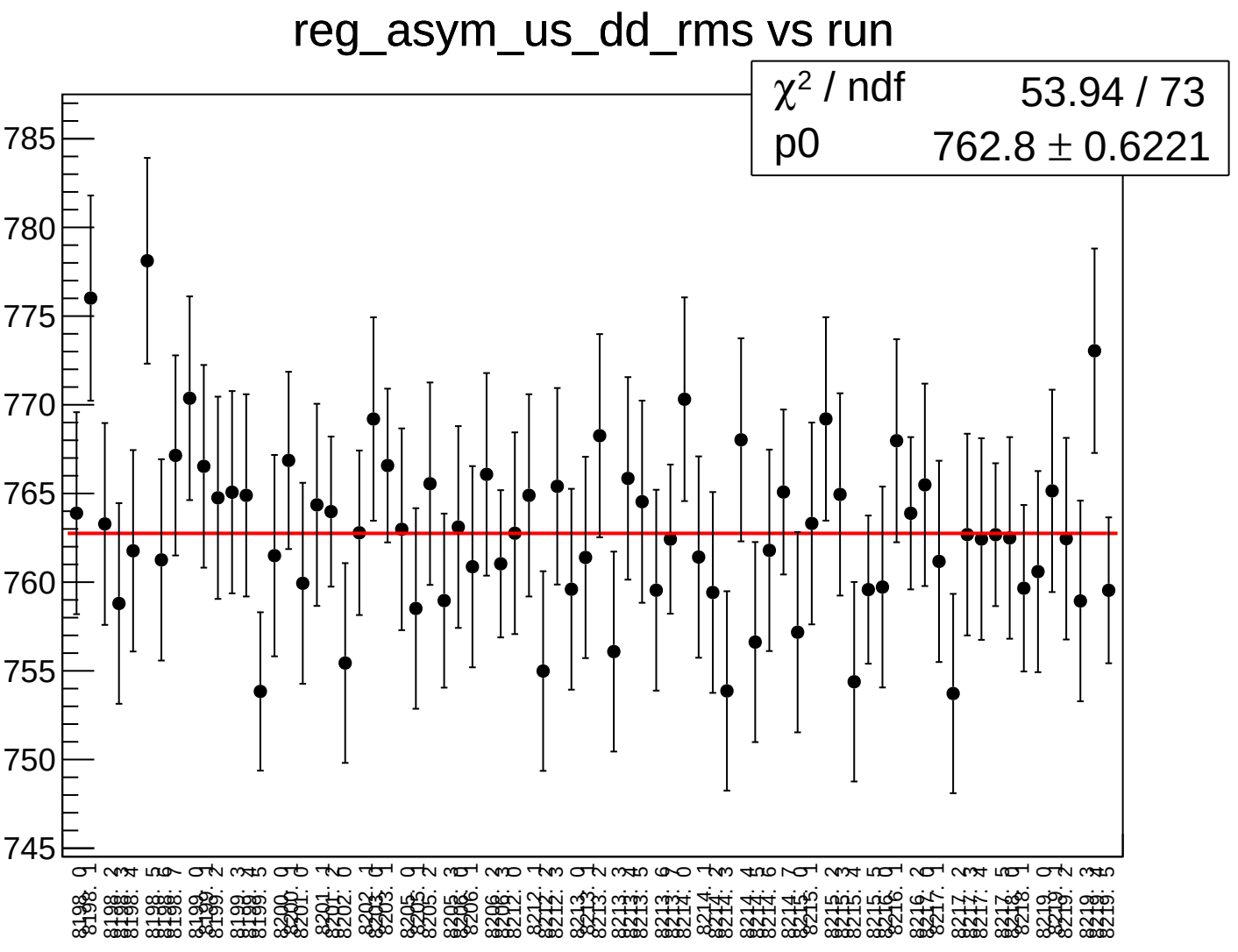

asym_us_avg_mean vs run
χ² / ndf 78.81 / 73
p0 1183 ± 2183
pull
Entries 74
Mean 191.4
Std Dev 133.6

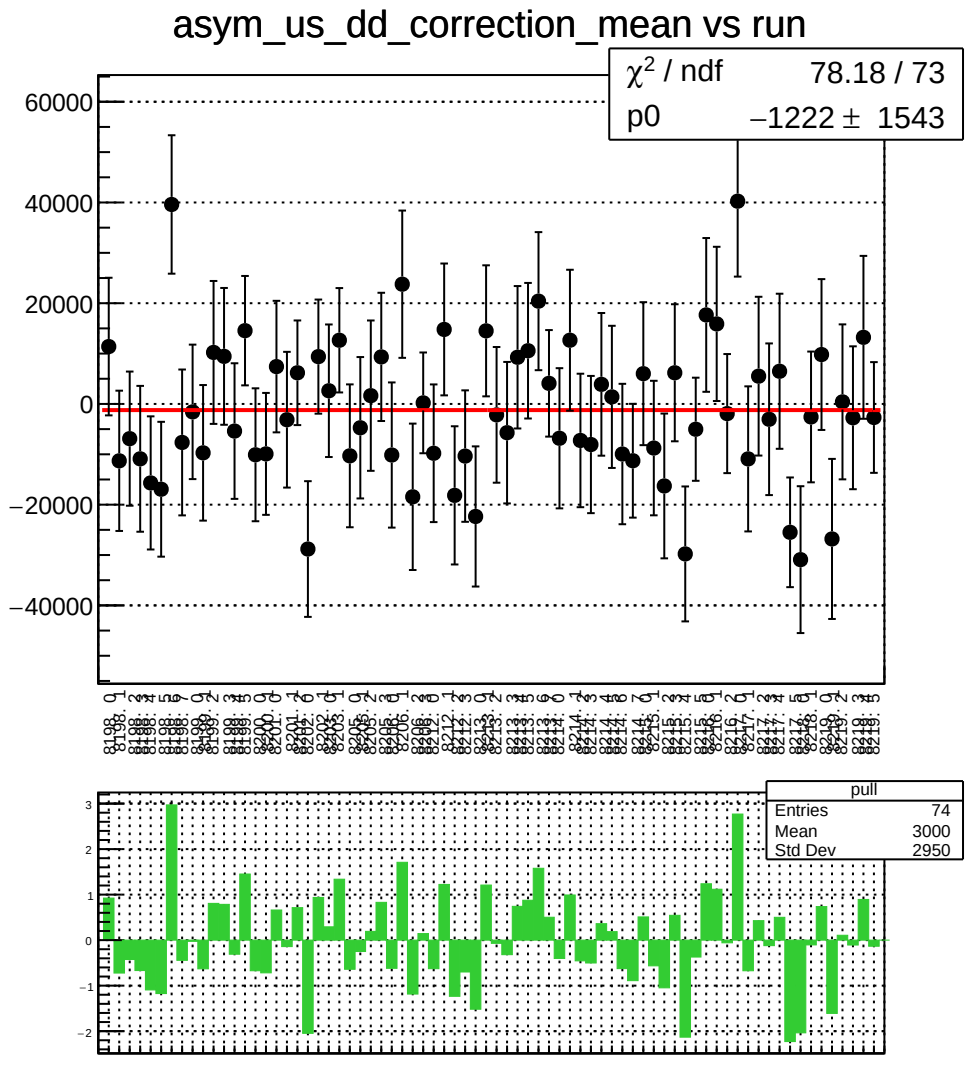

pull1D
Entries 74
Mean −0.003257
Std Dev 1.032

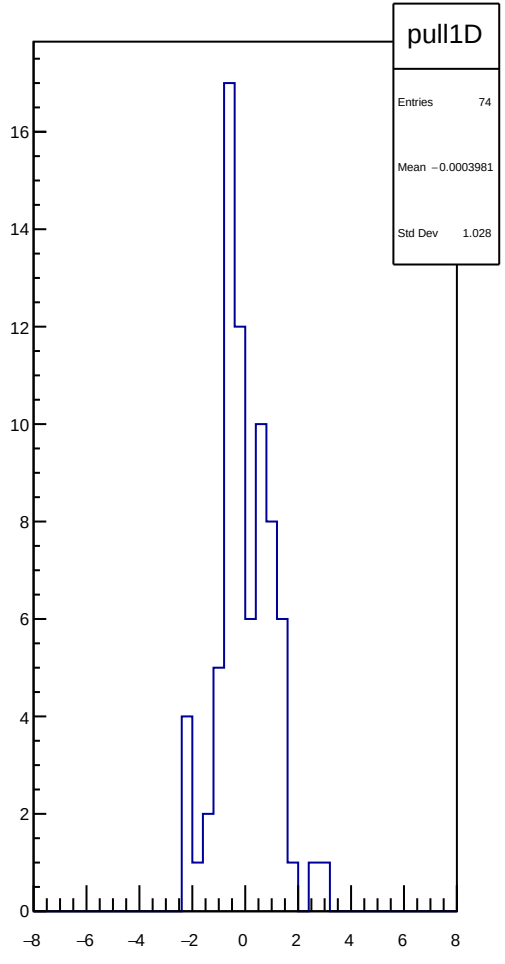

asym_us_avg_rms vs run
χ² / ndf 6022 / 73
p0 1889 ± 1.544
2200
2100
2000
1900
1800
1700

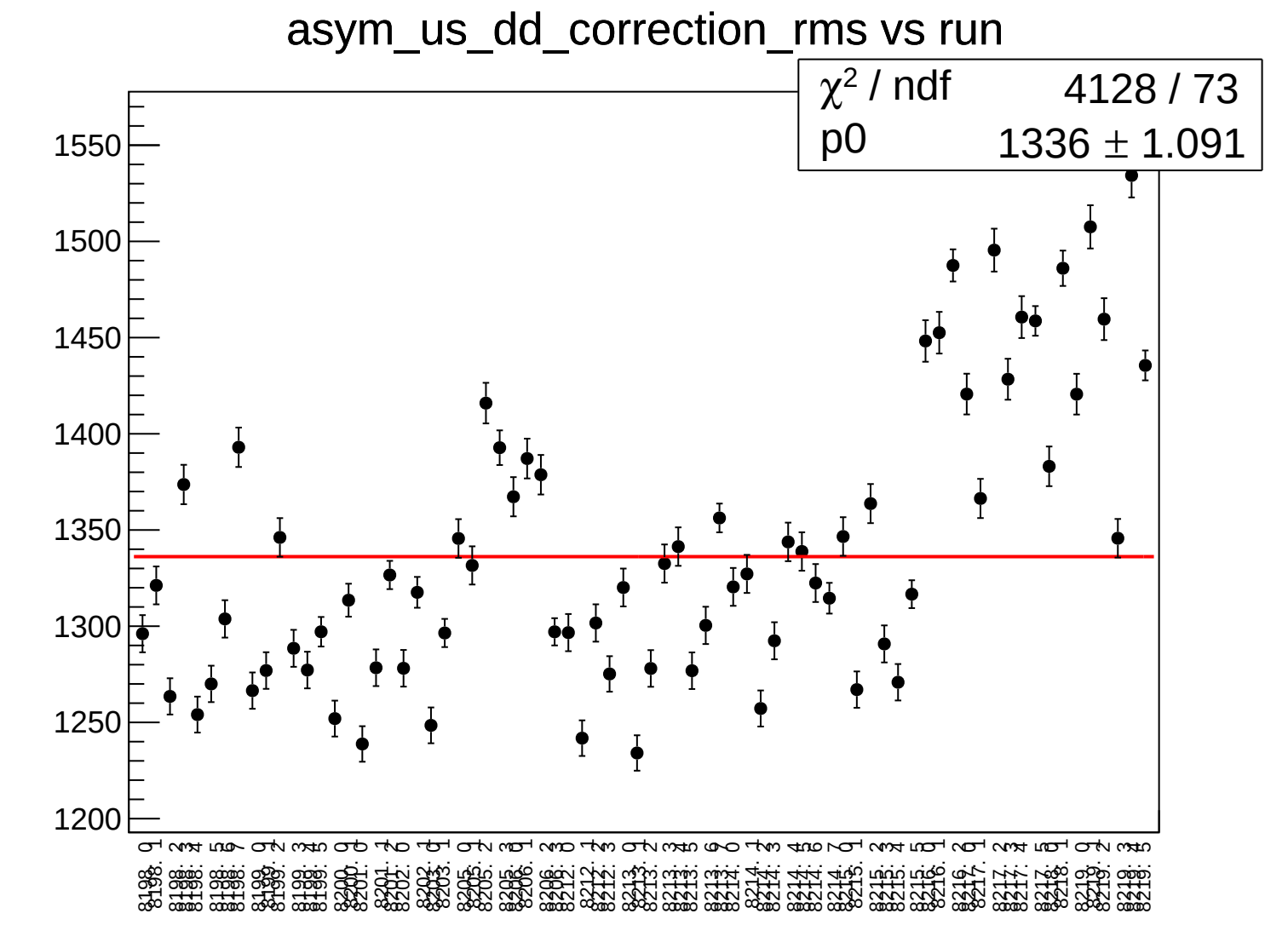

reg_asym_us_dd_mean vs run
χ² / ndf 67.95 / 73
p0 102.7 ± 879.8
pull
Entries 74
Mean 170.7
Std Dev 145.1

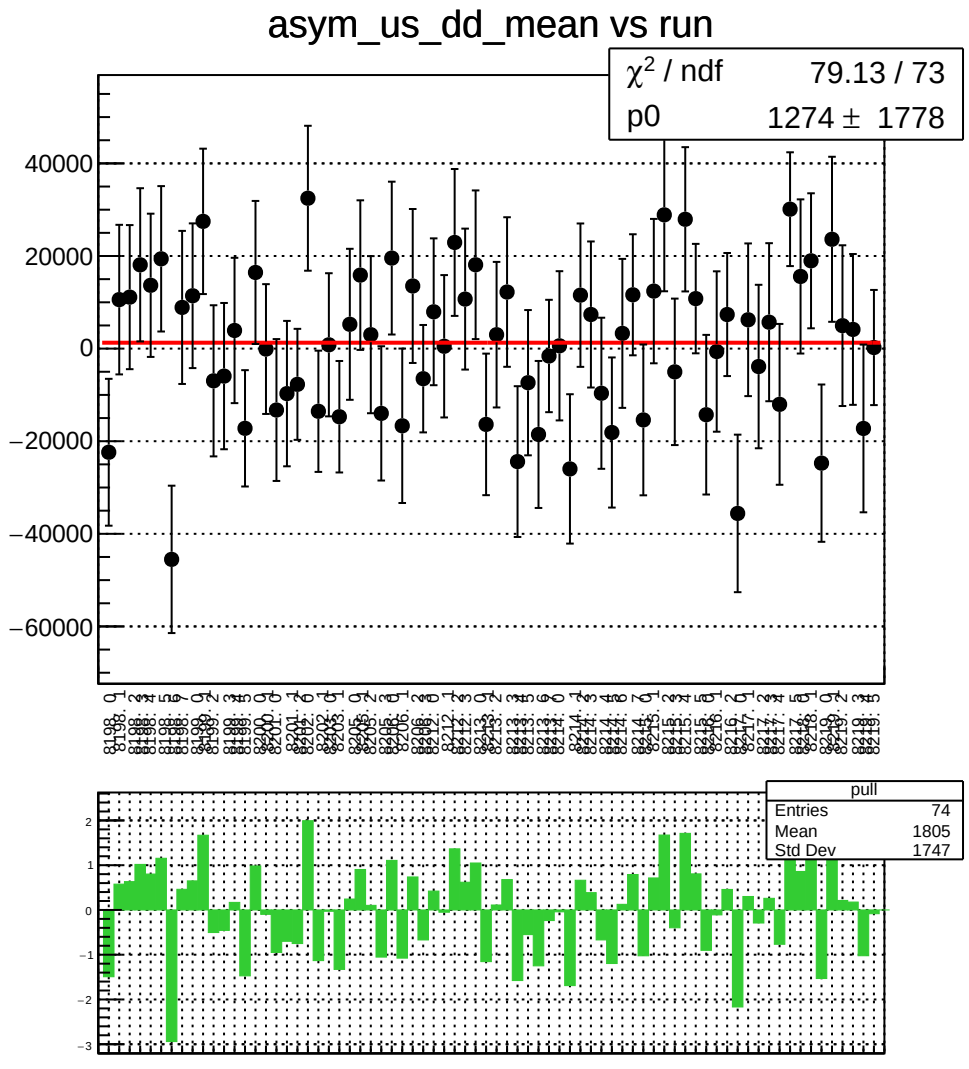

pull1D
Entries 74
Mean −0.003284
Std Dev 0.9583

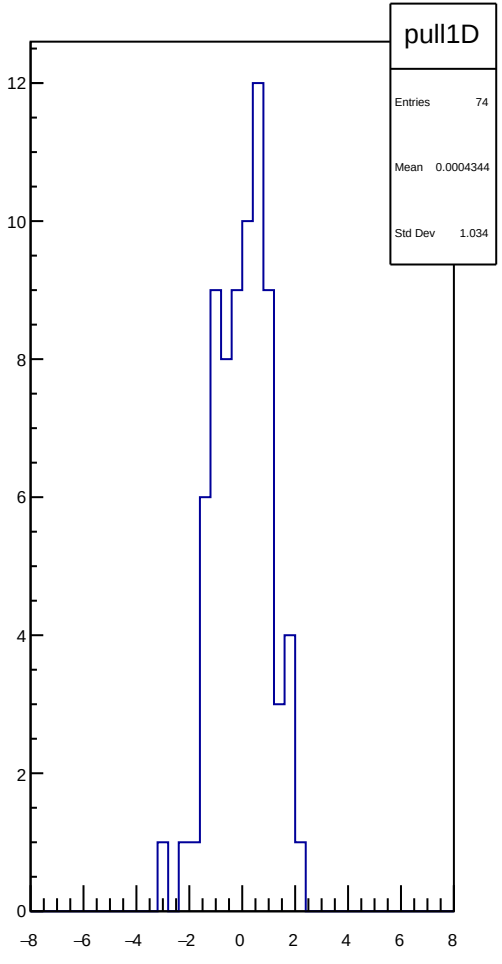

reg_asym_us_dd_rms vs run
χ² / ndf 53.94 / 73
p0 762.8 ± 0.6221
785
780
775
770
765
760
755
750
745

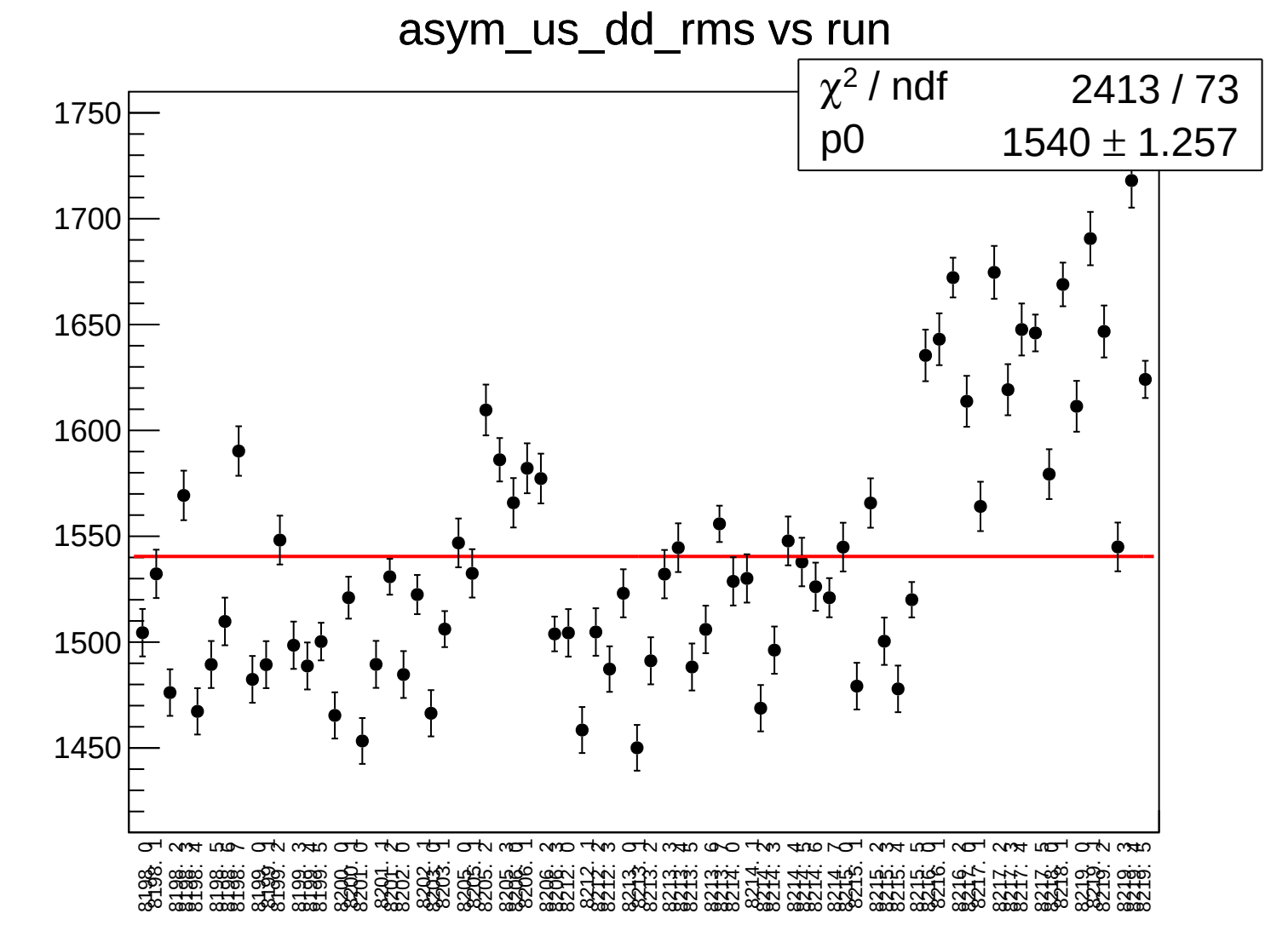

asym_us_dd_correction_mean vs run
χ² / ndf 78.18 / 73
p0 −1222 ± 1543
pull
Entries 74
Mean 3000
Std Dev 2950

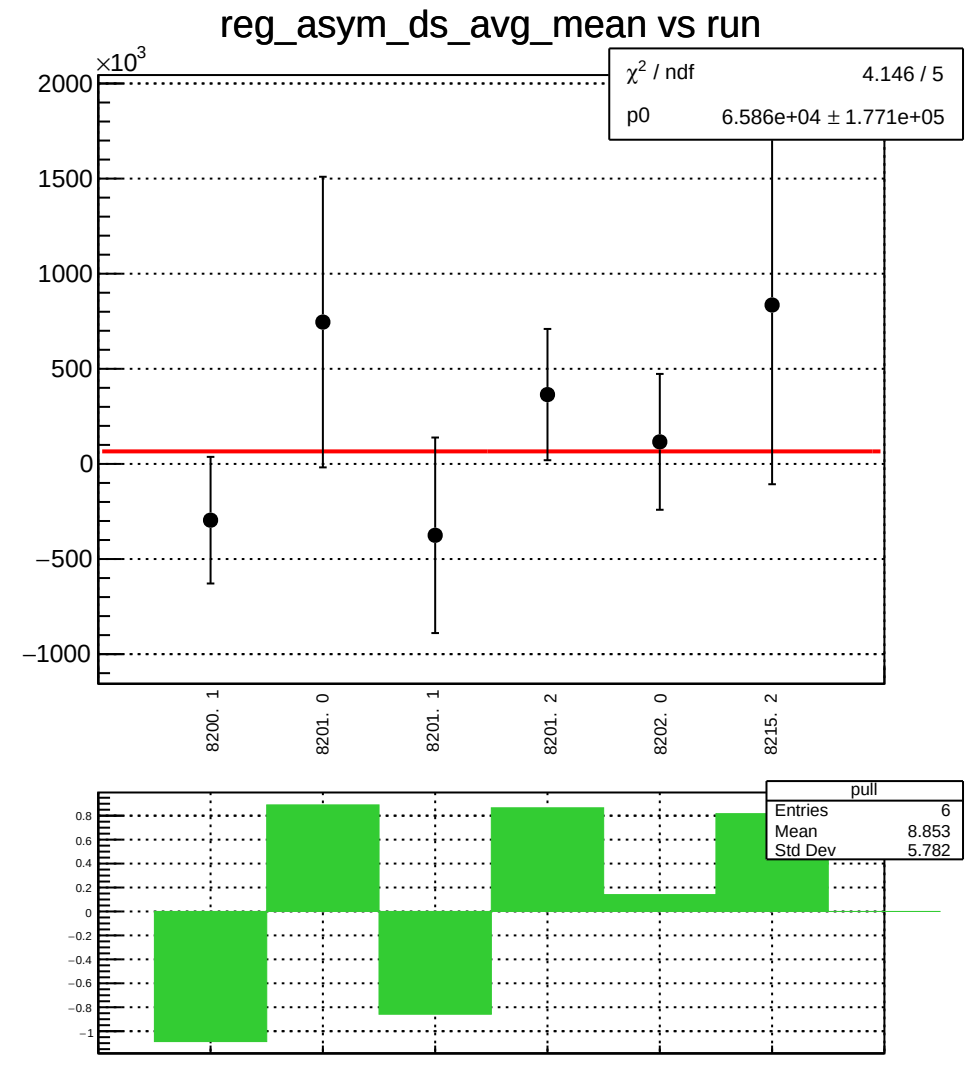

pull1D
Entries 74
Mean −0.0003981
Std Dev 1.028

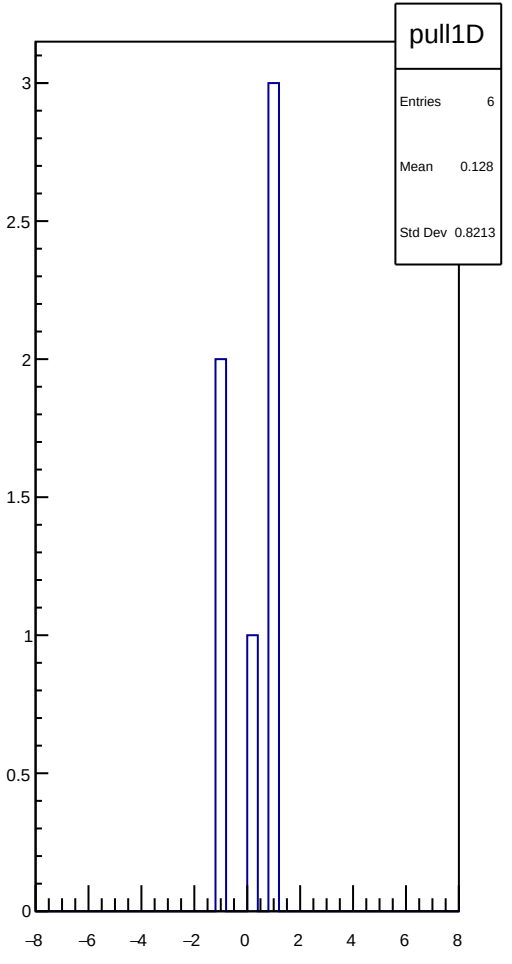

asym_us_dd_correction_rms vs run
χ² / ndf 4128 / 73
p0 1336 ± 1.091
1550
1500
1450
1400
1350
1300
1250
1200

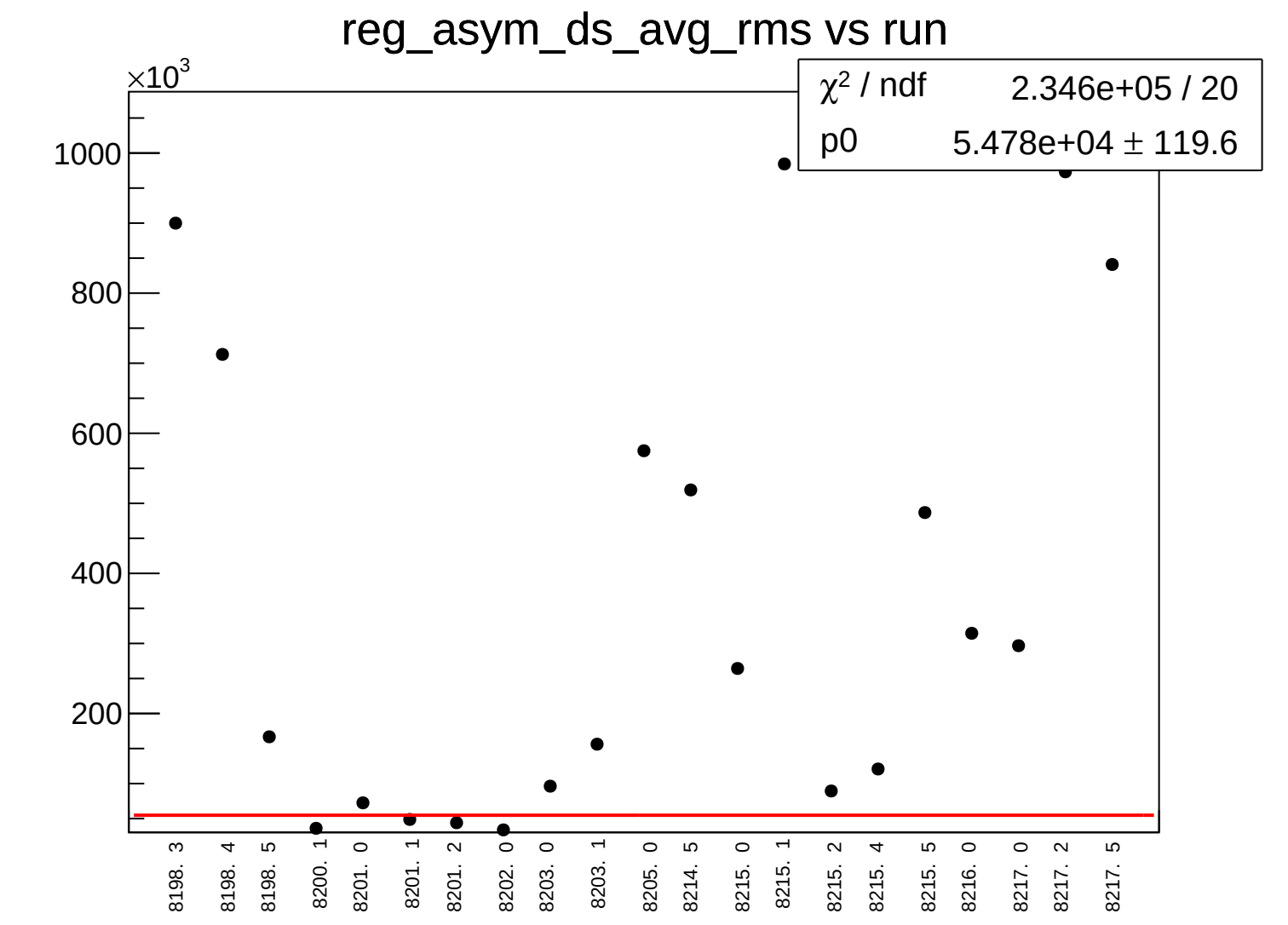

asym_us_dd_mean vs run
χ² / ndf 79.13 / 73
p0 1274 ± 1778
40000
20000
0
−20000
−40000
−60000
pull
Entries 74
Mean 1805
Std Dev 1747
2
1
0
−1
−2
−3

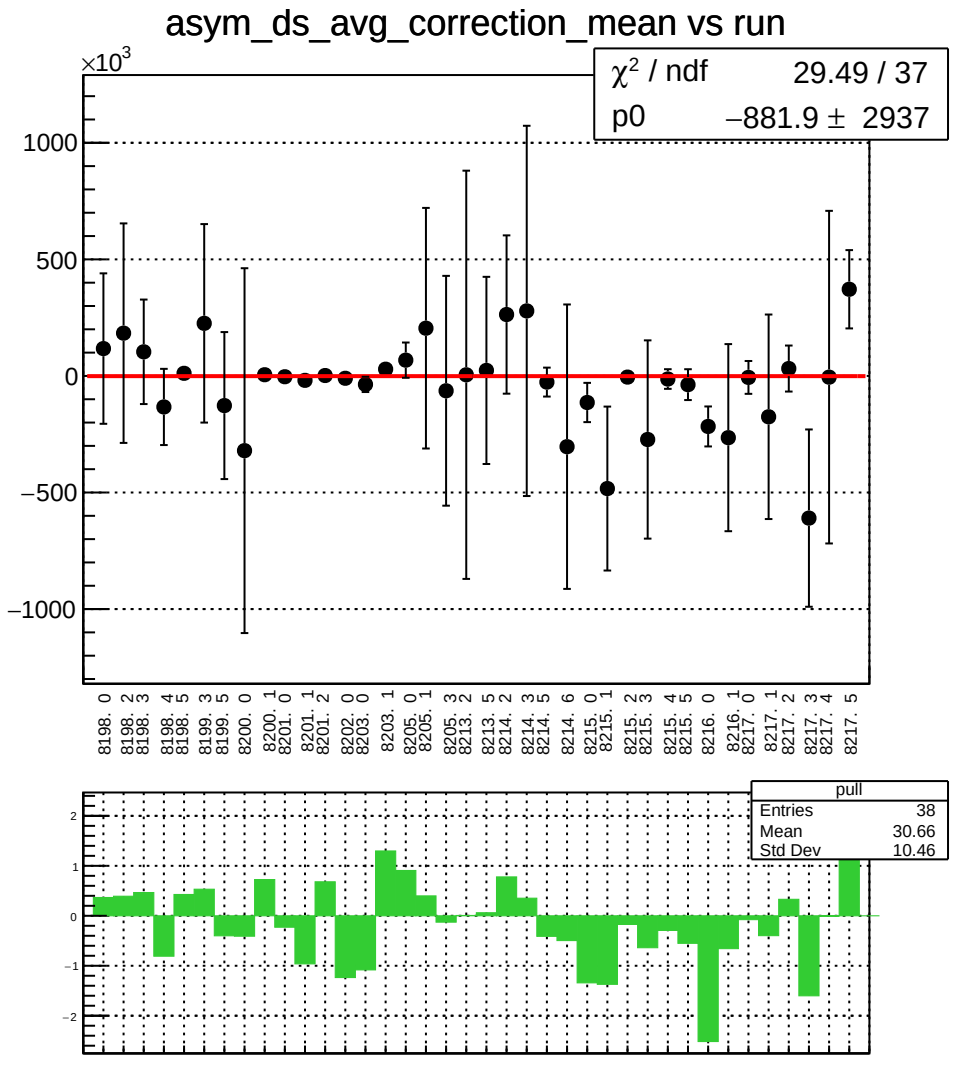

pull1D
Entries 74
Mean 0.0004344
Std Dev 1.034
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

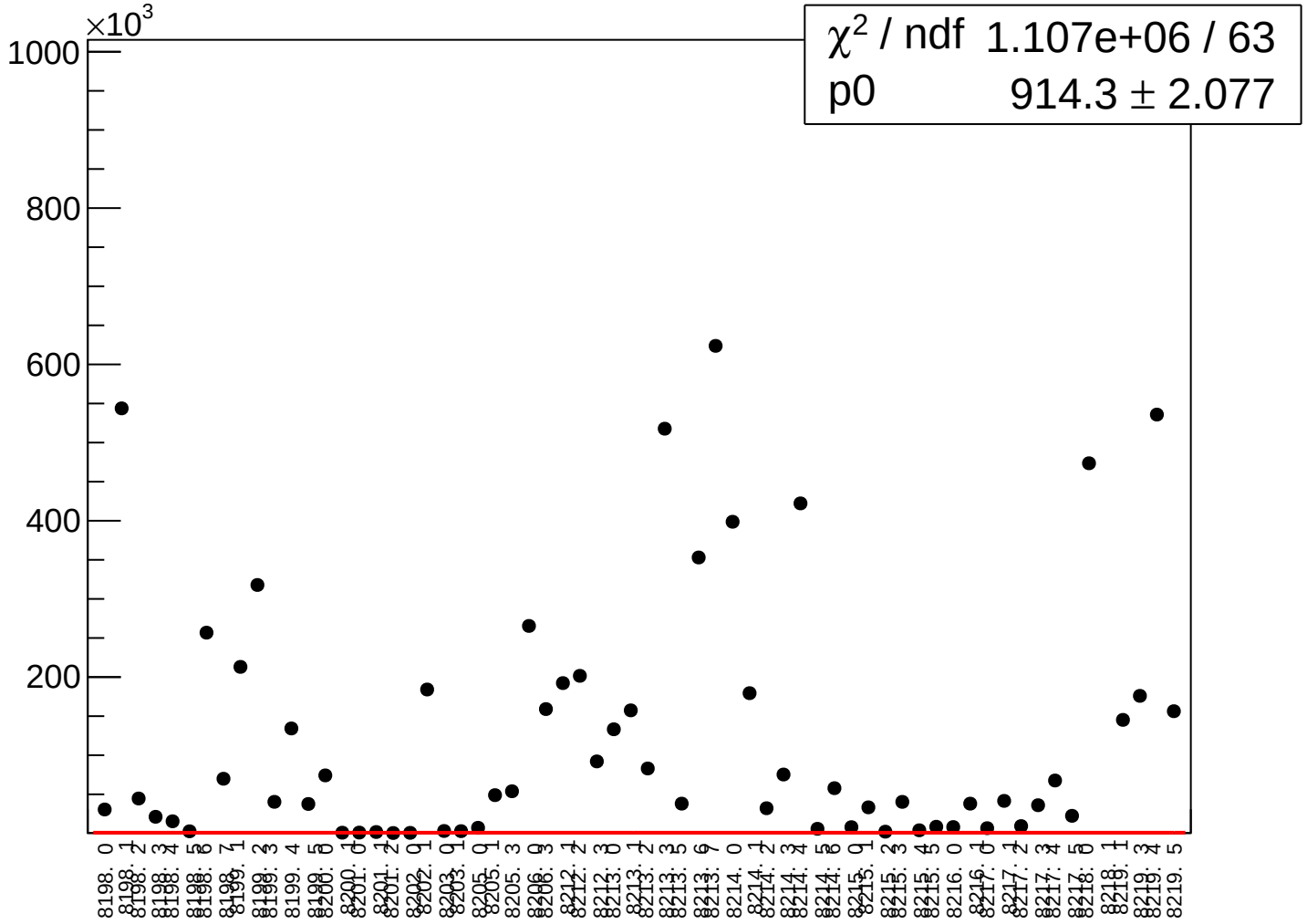

asym_us_dd_rms vs run
χ² / ndf 2413 / 73
p0 1540 ± 1.257
1750
1700
1650
1600
1550
1500
1450

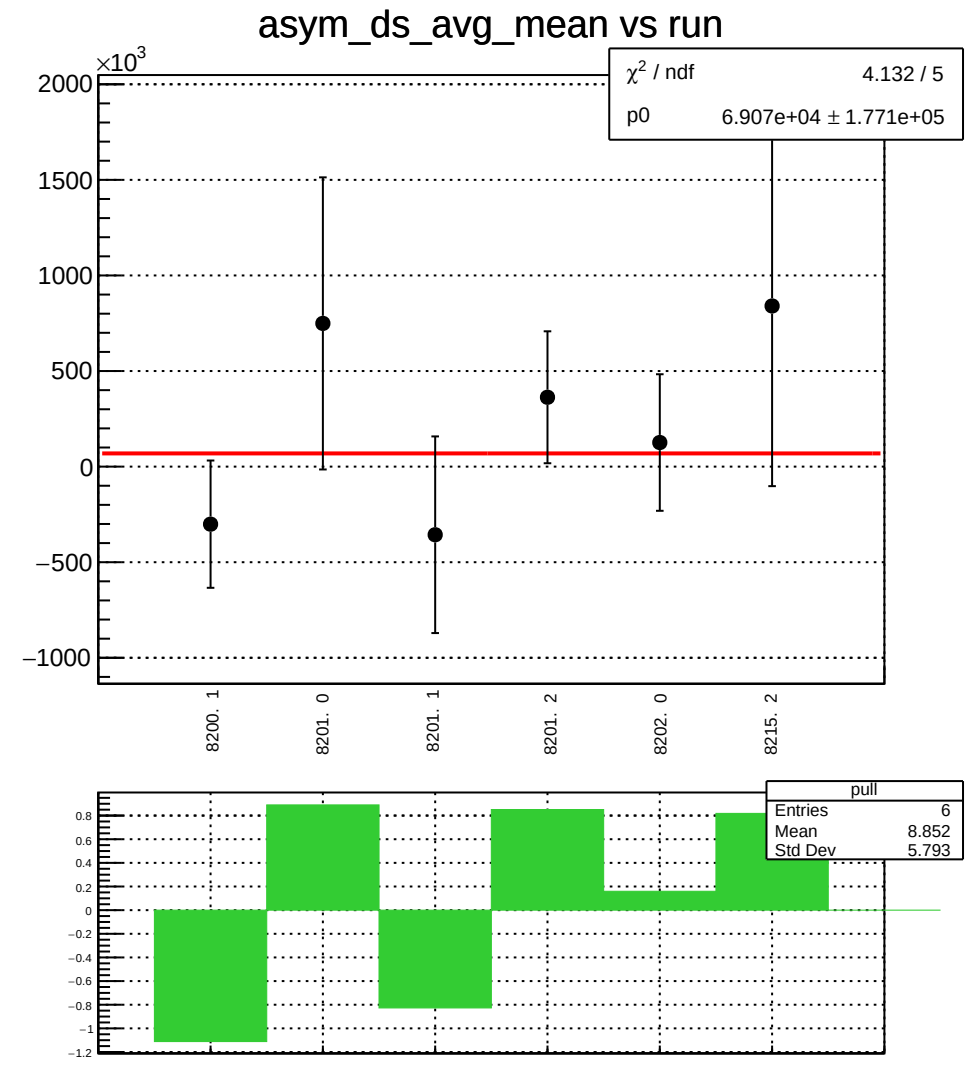

reg_asym_ds_avg_mean vs run
×10^3
χ² / ndf 4.146 / 5
p0 6.586e+04 ± 1.771e+05
2000
1500
1000
500
0
−500
−1000
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8215. 2
pull
Entries 6
Mean 8.853
Std Dev 5.782
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

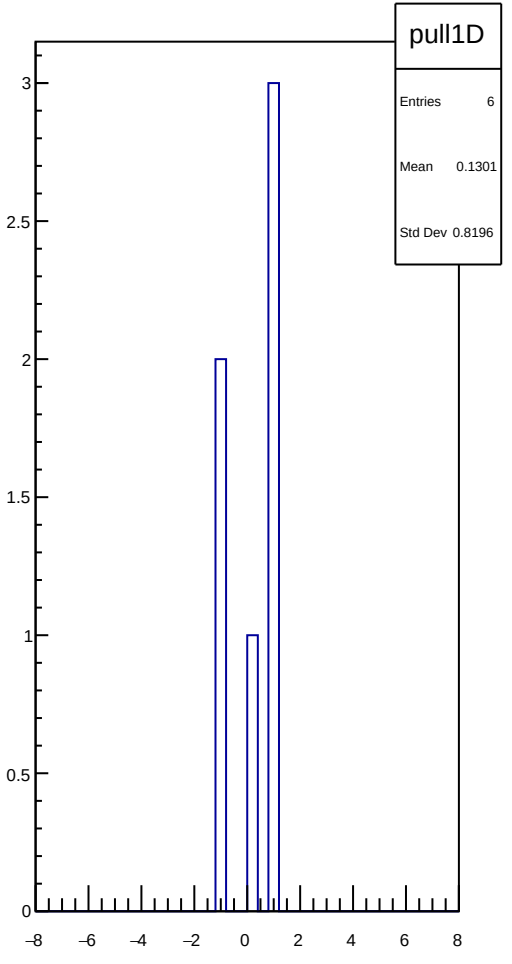

pull1D
Entries 6
Mean 0.128
Std Dev 0.8213
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

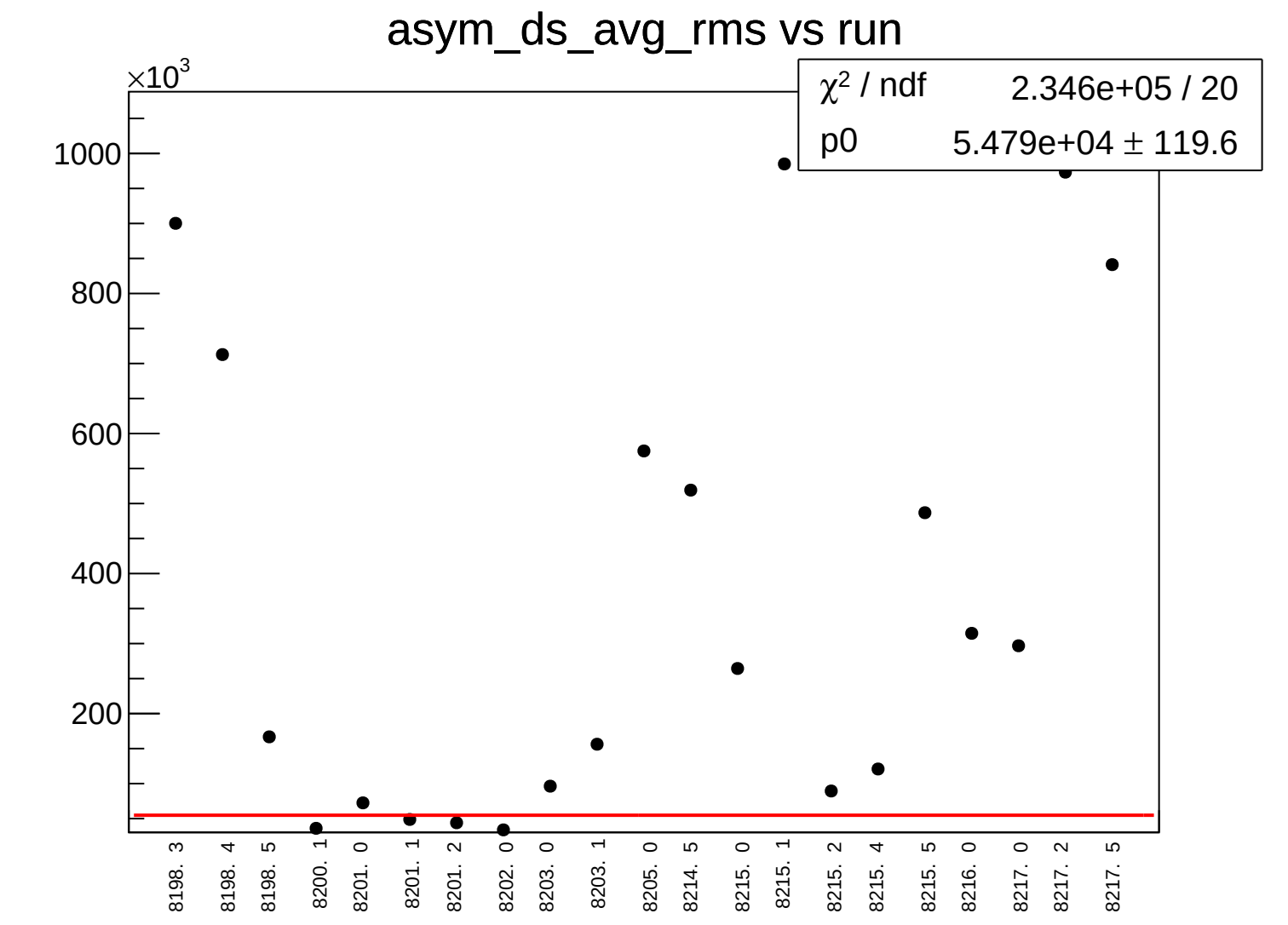

reg_asym_ds_avg_rms vs run
×10^3
χ² / ndf 2.346e+05 / 20
p0 5.478e+04 ± 119.6
1000
800
600
400
200
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5

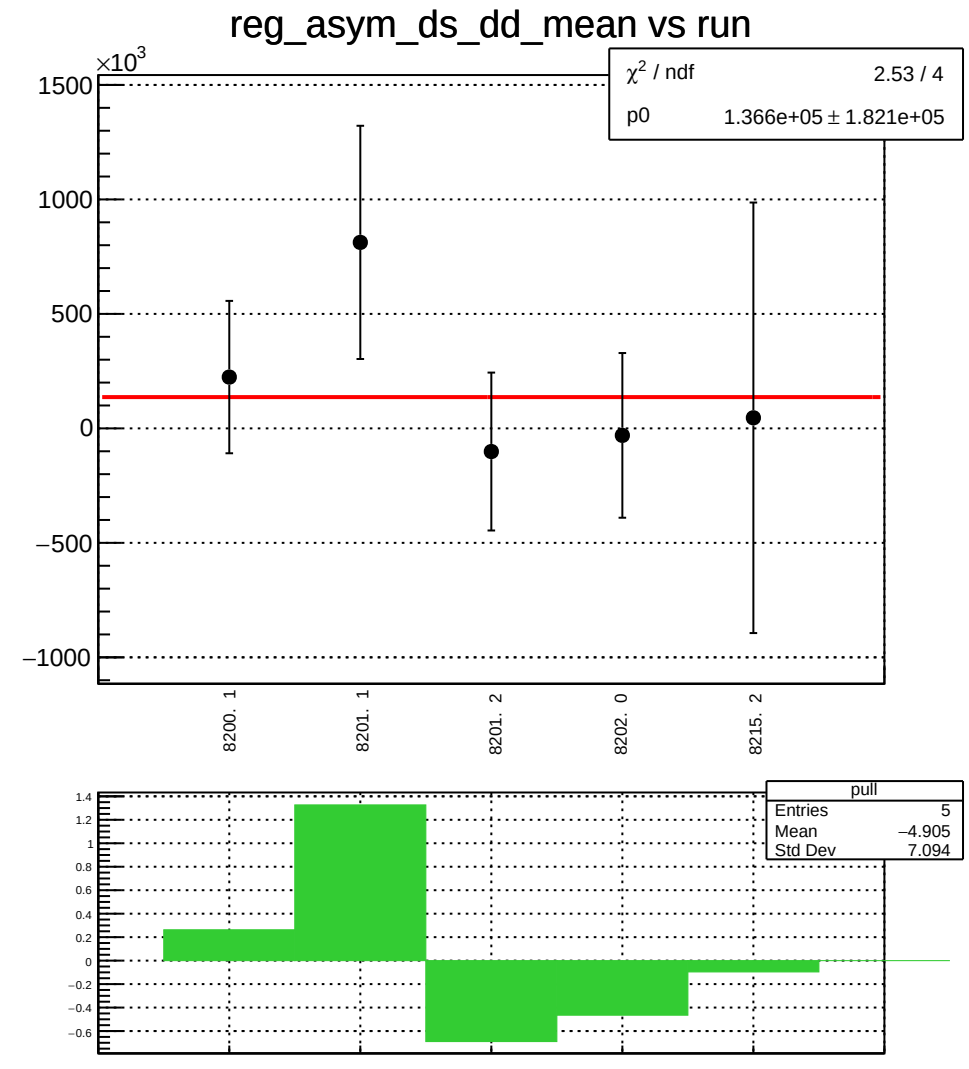

asym_ds_avg_correction_mean vs run
×10^3
χ² / ndf 29.49 / 37
p0 −881.9 ± 2937
1000
500
0
−500
−1000
8198. 0
8198. 2
8198. 3
8198. 4
8198. 5
8199. 3
8199. 5
8200. 0
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8205. 1
8205. 3
8213. 2
8213. 5
8214. 2
8214. 3
8214. 5
8214. 6
8215. 0
8215. 1
8215. 2
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8217. 0
8217. 1
8217. 2
8217. 3
8217. 4
8217. 5
pull
Entries 38
Mean 30.66
Std Dev 10.46
2
1
0
−1
−2
pull1D
Entries 38
Mean −0.1539
Std Dev 0.8674
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

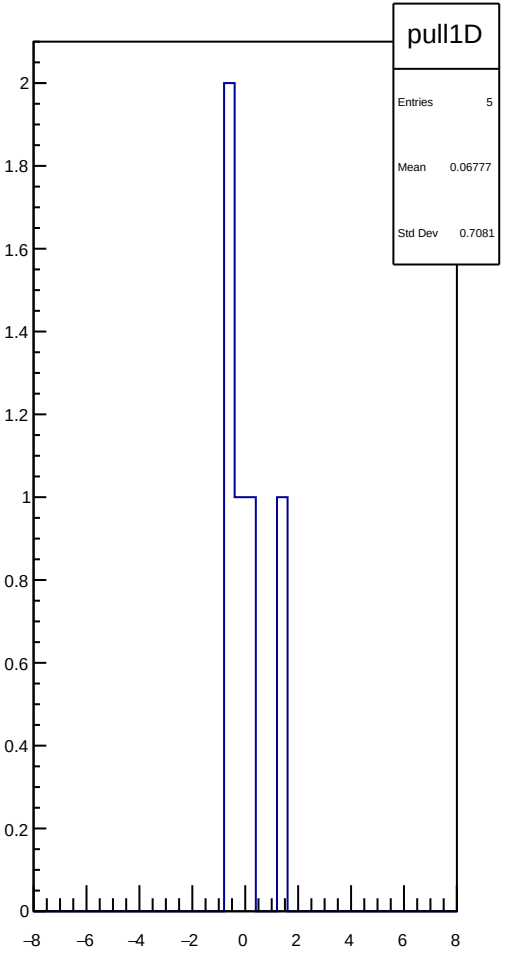

asym_ds_avg_correction_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.107e+06 / 63
p0 914.3 ± 2.077
8198. 0
8198. 1
8198. 2
8198. 3
8198. 4
8198. 5
8198. 6
8198. 7
8199. 1
8199. 2
8199. 3
8199. 4
8199. 5
8200. 0
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8202. 1
8203. 0
8203. 1
8205. 0
8205. 1
8205. 3
8206. 0
8206. 3
8212. 2
8212. 3
8213. 0
8213. 1
8213. 2
8213. 3
8213. 5
8213. 6
8213. 7
8214. 0
8214. 1
8214. 2
8214. 3
8214. 4
8214. 5
8214. 6
8215. 0
8215. 1
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8216. 6
8217. 1
8217. 2
8217. 3
8217. 4
8217. 5
8218. 0
8218. 1
8219. 3
8219. 4
8219. 5

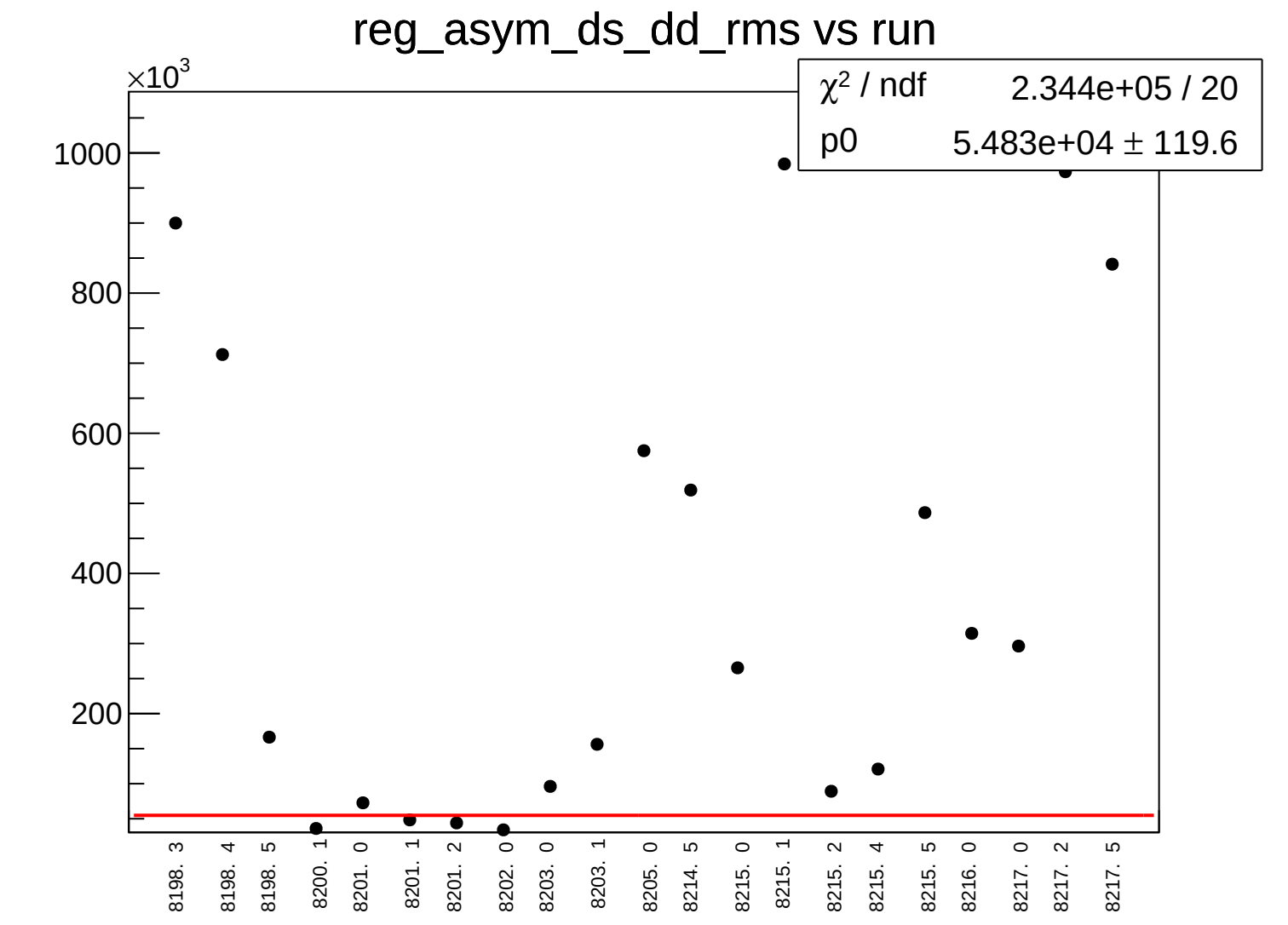

asym_ds_avg_mean vs run
×10^3
χ² / ndf 4.132 / 5
p0 6.907e+04 ± 1.771e+05
2000
1500
1000
500
0
−500
−1000
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8215. 2
pull
Entries 6
Mean 8.852
Std Dev 5.793
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

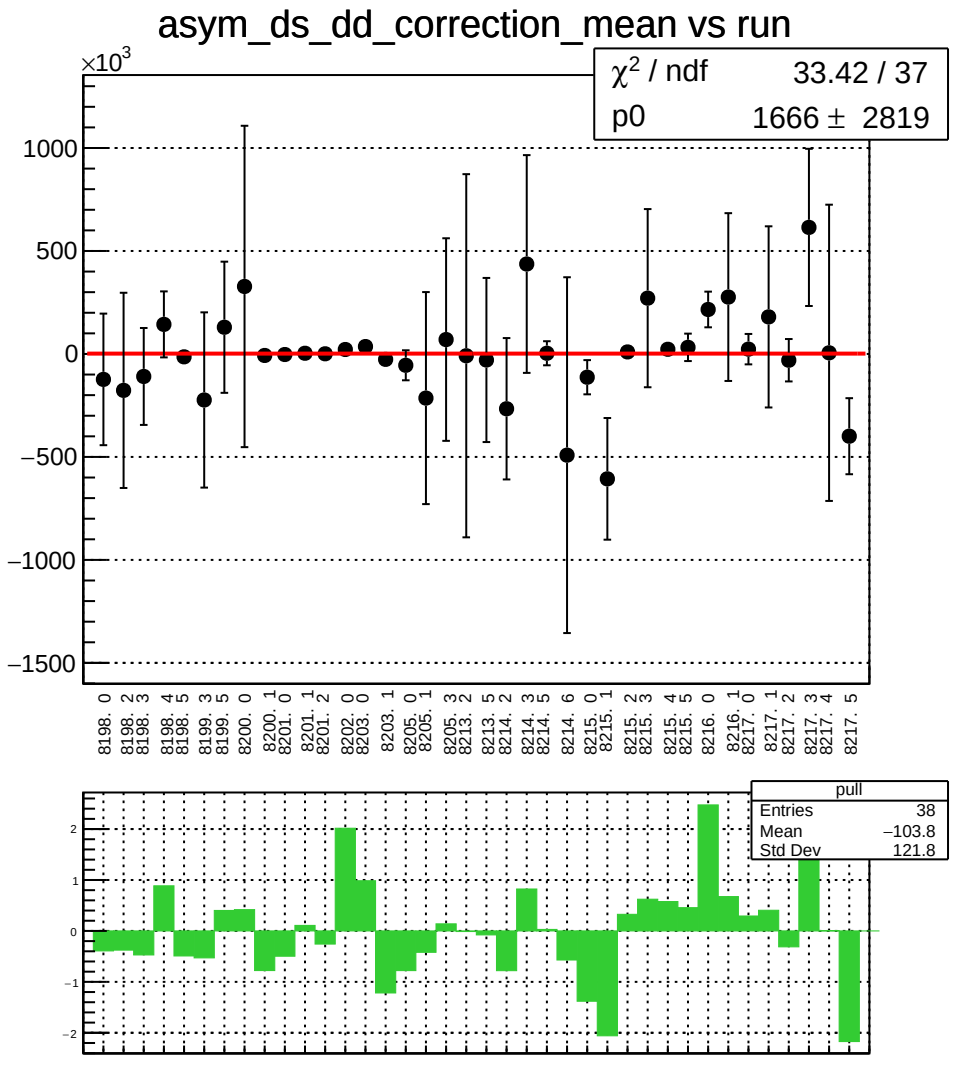

pull1D
Entries 6
Mean 0.1301
Std Dev 0.8196
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

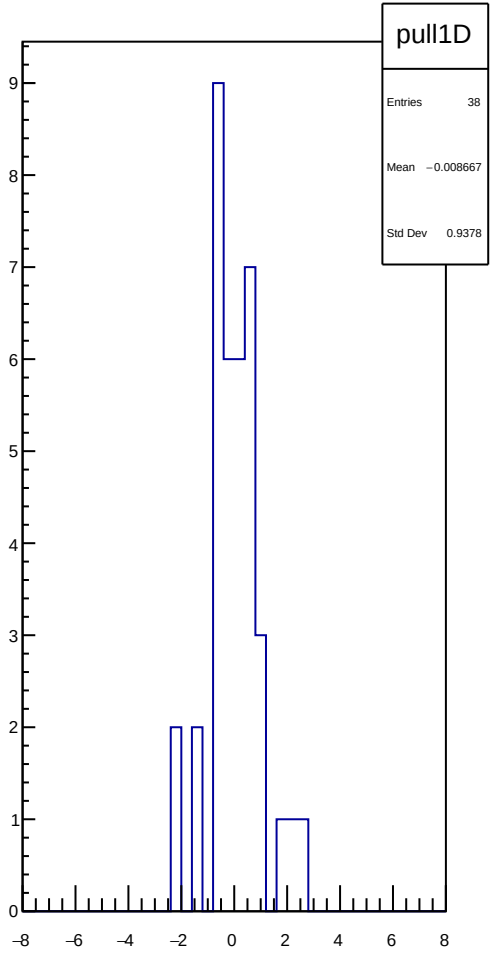

asym_ds_avg_rms vs run
×10^3
χ^2 / ndf 2.346e+05 / 20
p0 5.479e+04 ± 119.6
1000
800
600
400
200
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5

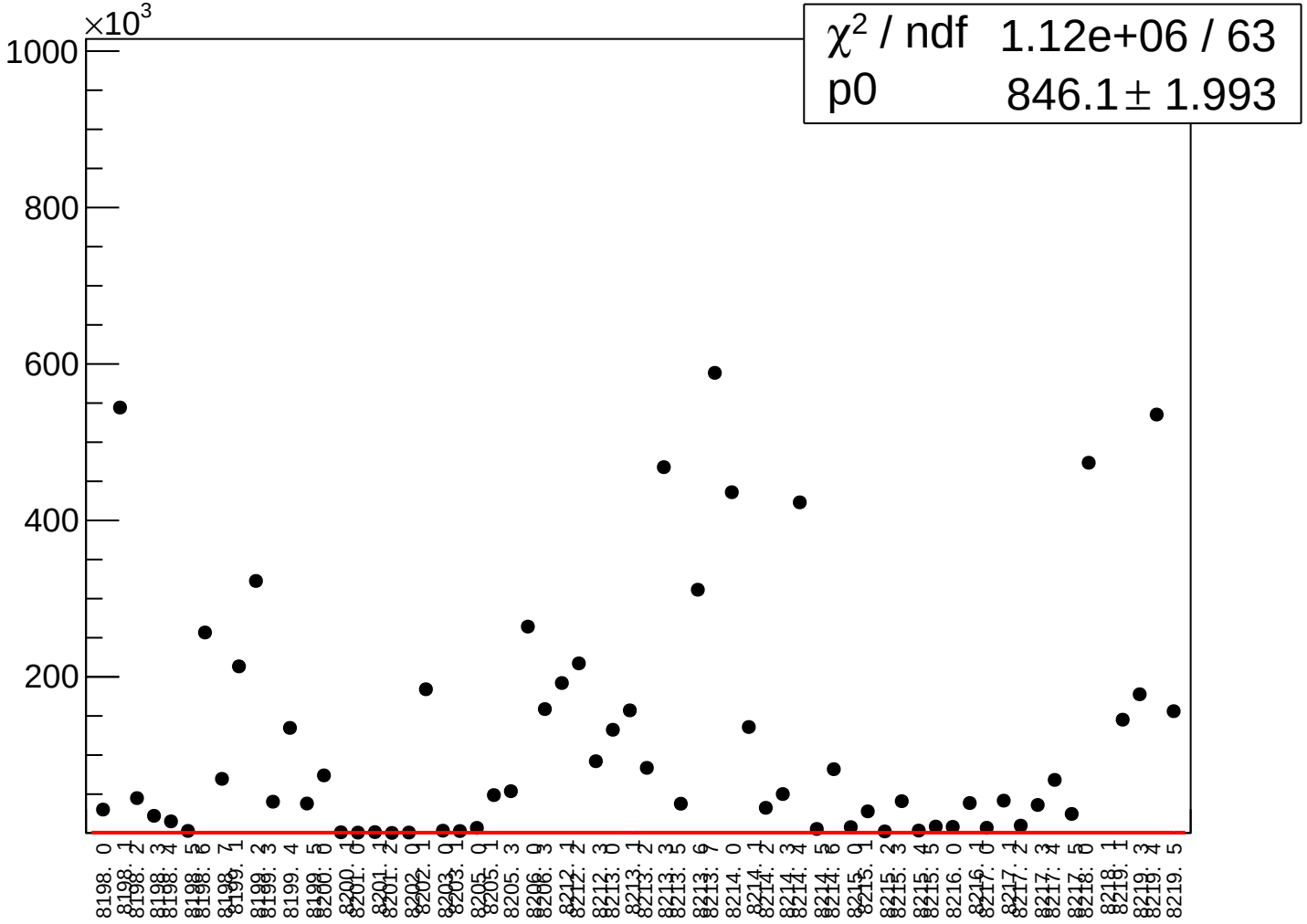

reg_asym_ds_dd_mean vs run
×10^3
χ² / ndf 2.53 / 4
p0 1.366e+05 ± 1.821e+05
1500
1000
500
0
−500
−1000
8200. 1
8201. 1
8201. 2
8202. 0
8215. 2
pull
Entries 5
Mean −4.905
Std Dev 7.094
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

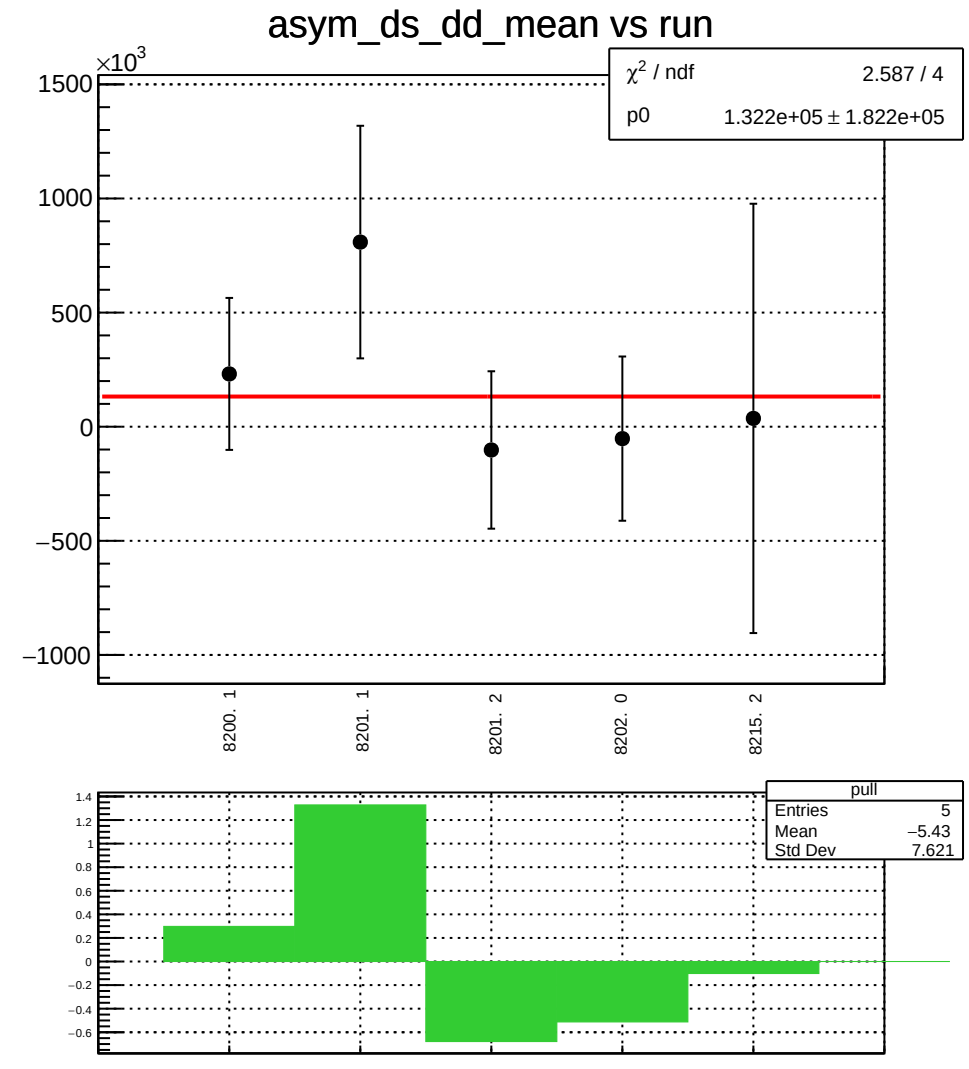

pull1D
Entries 5
Mean 0.06777
Std Dev 0.7081
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

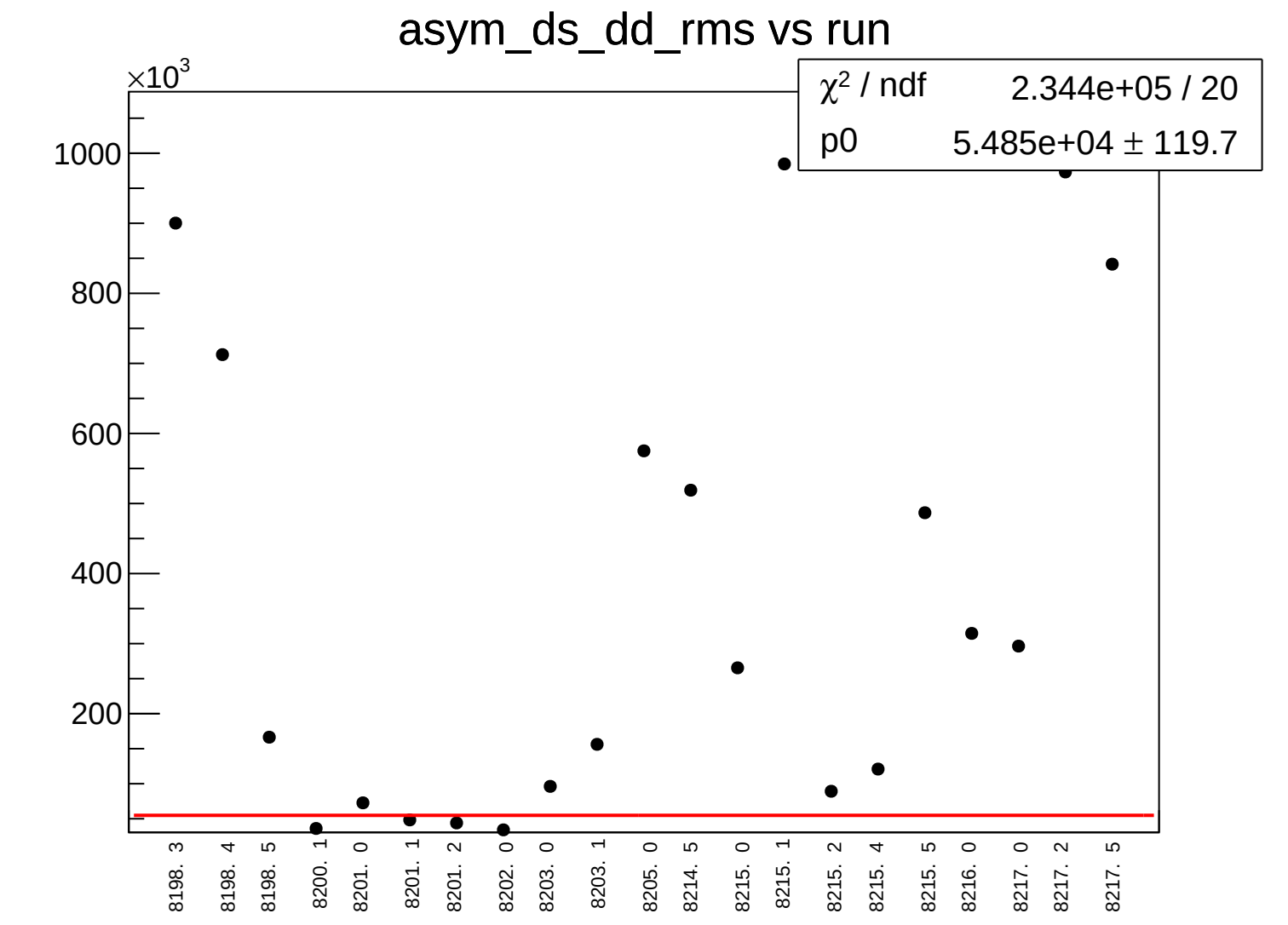

reg_asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.344e+05 / 20
p0 5.483e+04 ± 119.6
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5

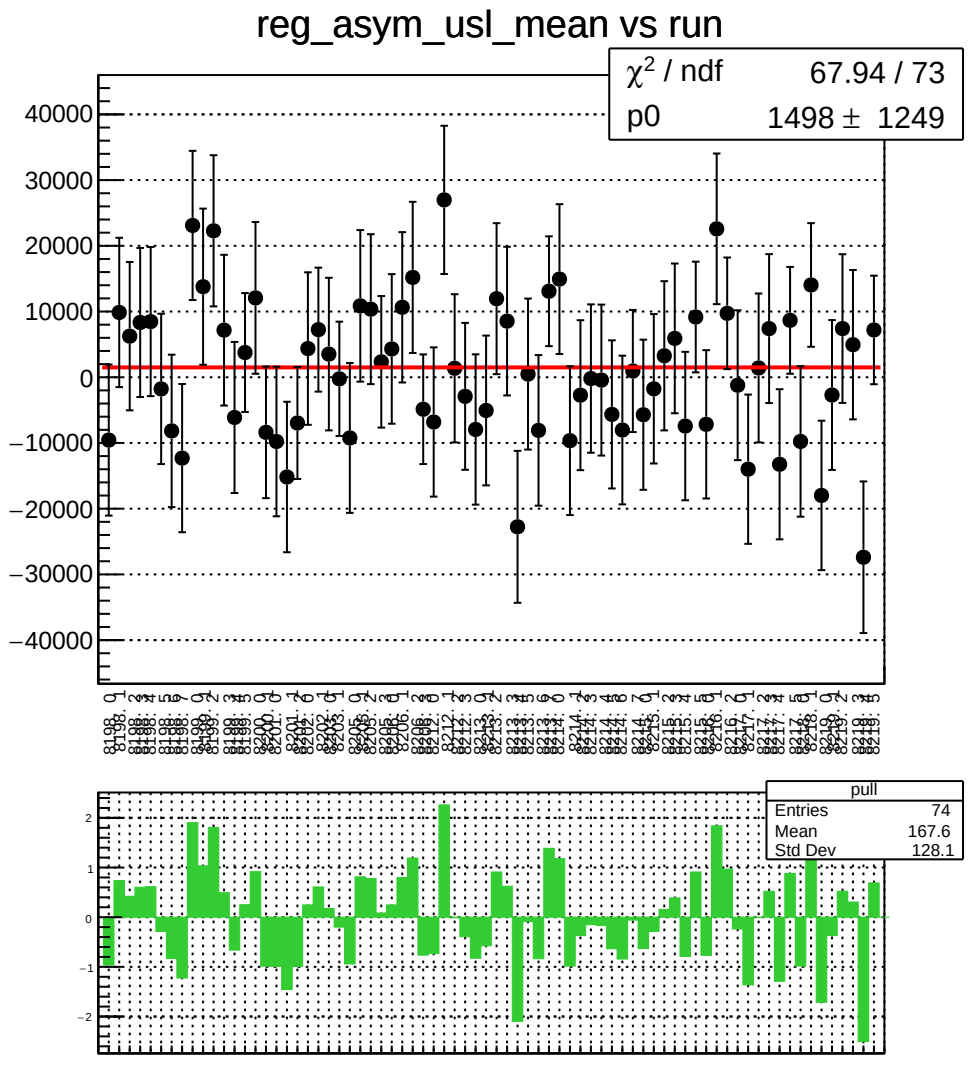

asym_ds_dd_correction_mean vs run
×10^3
χ^2 / ndf 33.42 / 37
p0 1666 ± 2819
1000
500
0
−500
−1000
−1500
8198. 0
8198. 2
8198. 3
8198. 4
8198. 5
8199. 3
8199. 5
8200. 0
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8205. 1
8205. 3
8213. 2
8213. 5
8214. 2
8214. 3
8214. 5
8214. 6
8215. 0
8215. 1
8215. 2
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8217. 0
8217. 1
8217. 2
8217. 3
8217. 4
8217. 5
pull
Entries 38
Mean −103.8
Std Dev 121.8
2
1
0
−1
−2

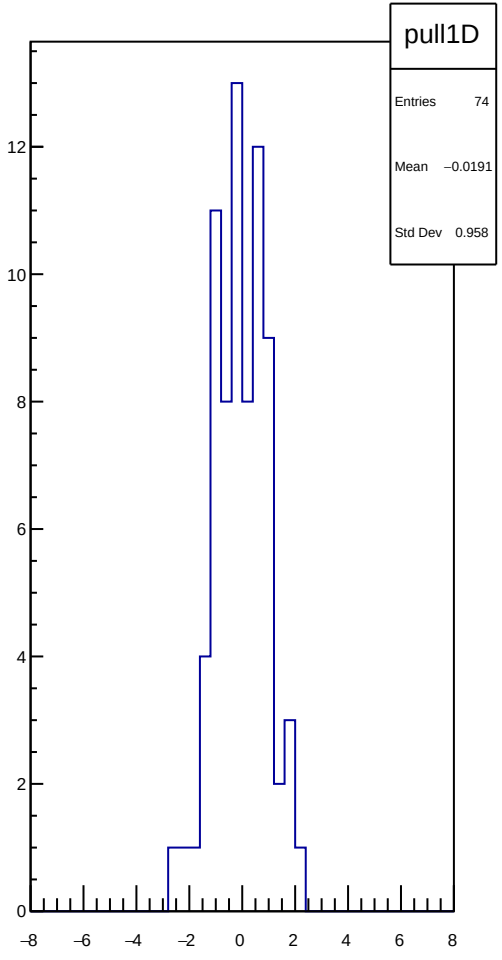

pull1D
Entries 38
Mean −0.008667
Std Dev 0.9378
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

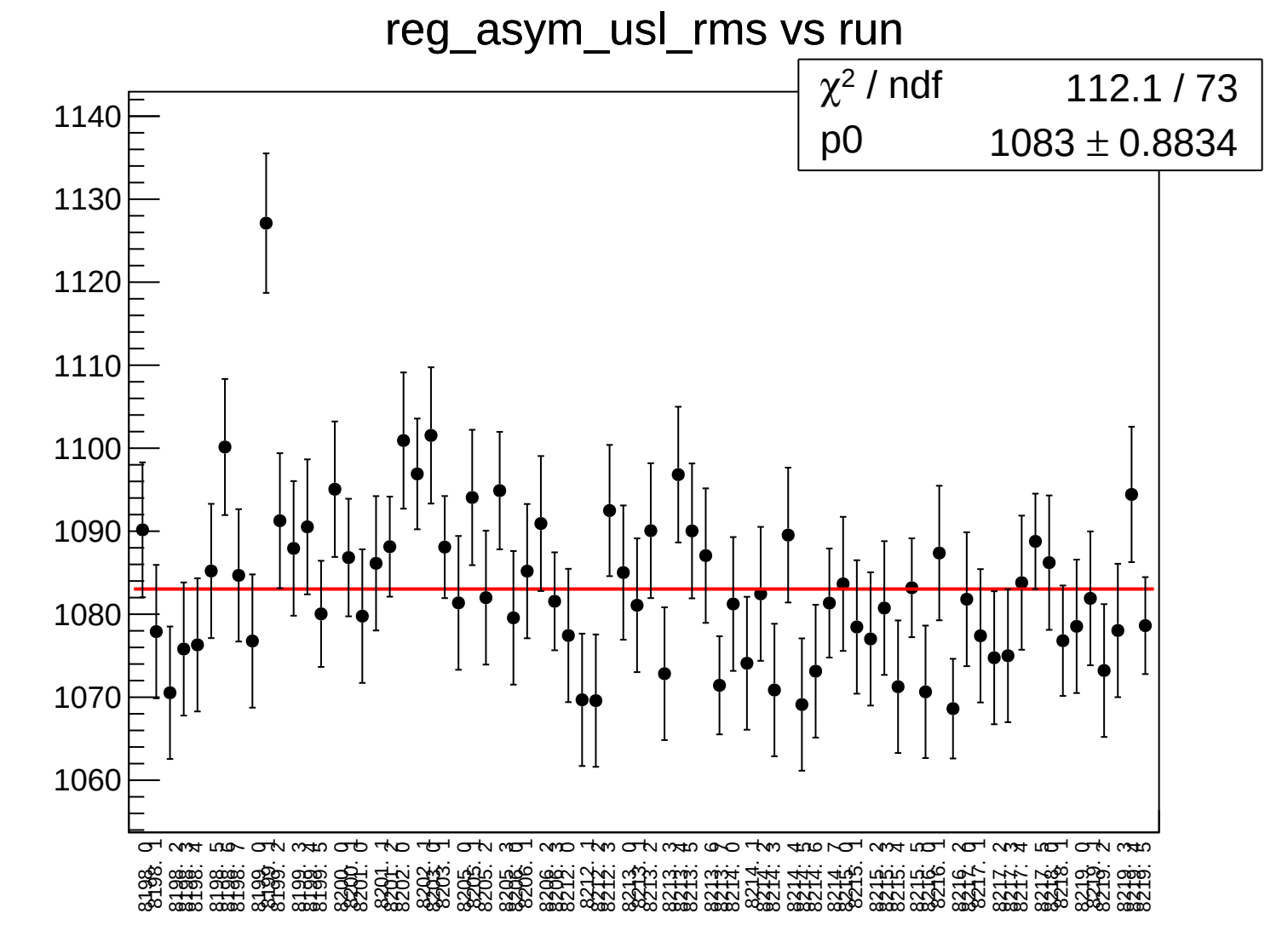

asym_ds_dd_correction_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.12e+06 / 63
p0 846.1 ± 1.993
8198. 0
8198. 1
8198. 2
8198. 3
8198. 4
8198. 5
8198. 6
8198. 7
8199. 1
8199. 2
8199. 3
8199. 4
8199. 5
8200. 0
8200. 1
8201. 2
8201. 3
8202. 0
8202. 1
8203. 0
8203. 1
8205. 0
8205. 1
8205. 3
8206. 0
8206. 3
8212. 2
8212. 3
8213. 0
8213. 1
8213. 2
8213. 3
8213. 5
8213. 6
8213. 7
8214. 0
8214. 1
8214. 2
8214. 3
8214. 4
8214. 5
8214. 6
8215. 0
8215. 1
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8216. 6
8217. 1
8217. 2
8217. 3
8217. 4
8217. 5
8218. 0
8218. 1
8219. 3
8219. 4
8219. 5

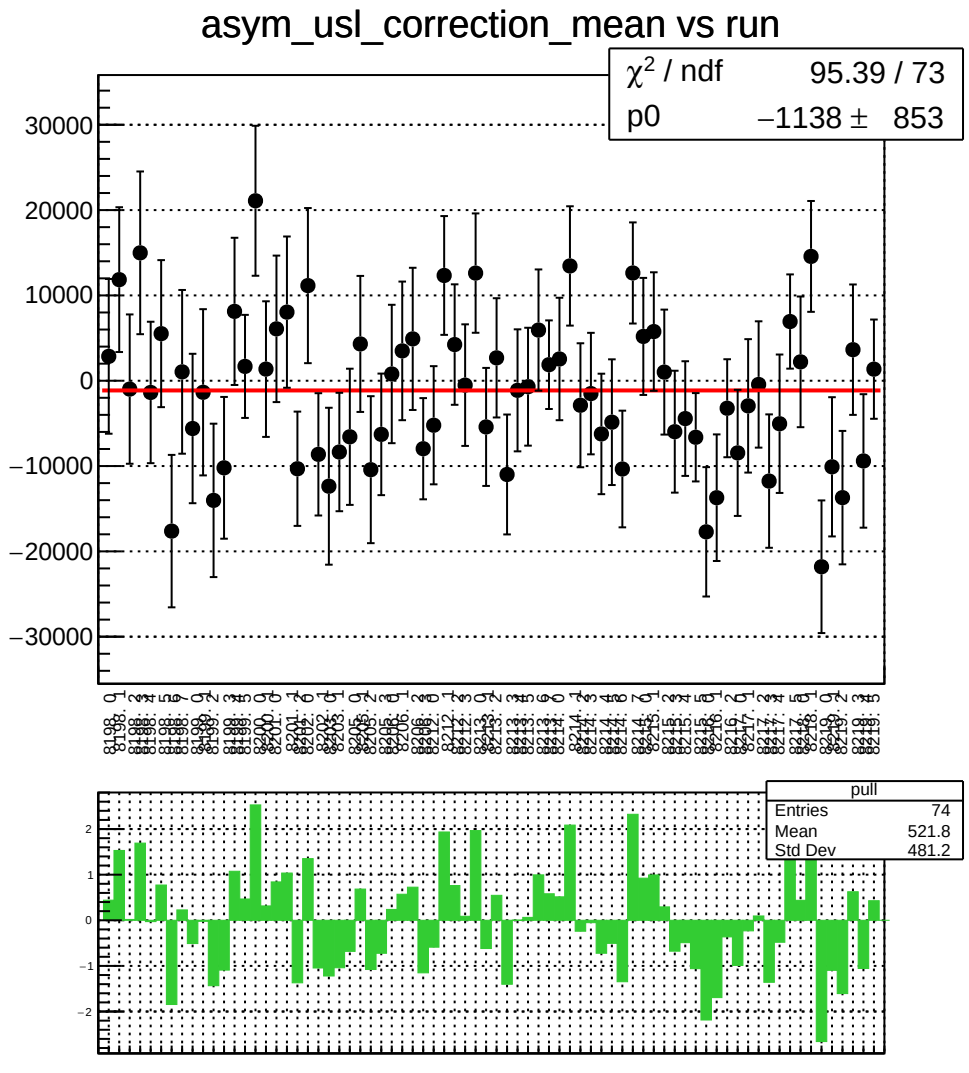

asym_ds_dd_mean vs run
×10^3
χ² / ndf 2.587 / 4
p0 1.322e+05 ± 1.822e+05
1500
1000
500
0
−500
−1000
8200. 1
8201. 1
8201. 2
8202. 0
8215. 2
pull
Entries 5
Mean −5.43
Std Dev 7.621
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 5
Mean 0.06658
Std Dev 0.7162
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

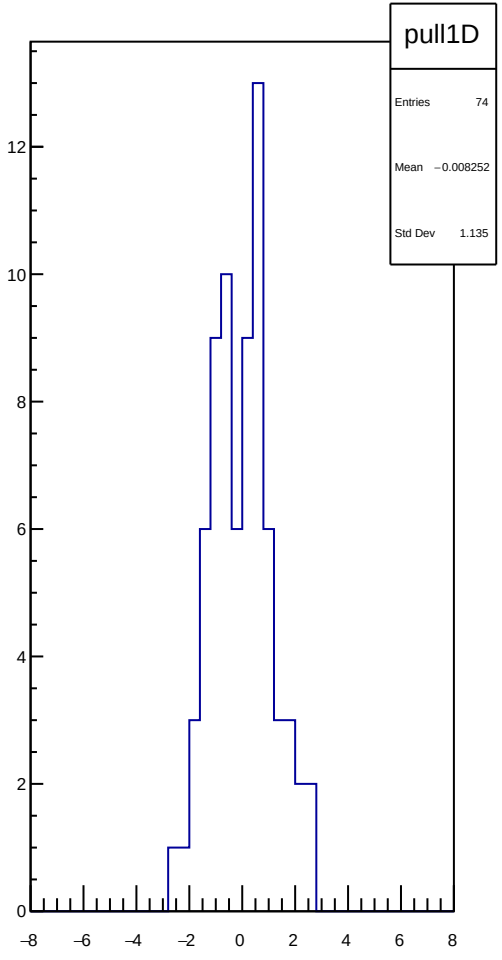

asym_ds_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.344e+05 / 20
p0 5.485e+04 ± 119.7
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5


reg_asym_usl_mean vs run
χ² / ndf 67.94 / 73
p0 1498 ± 1249
pull
Entries 74
Mean 167.6
Std Dev 128.1

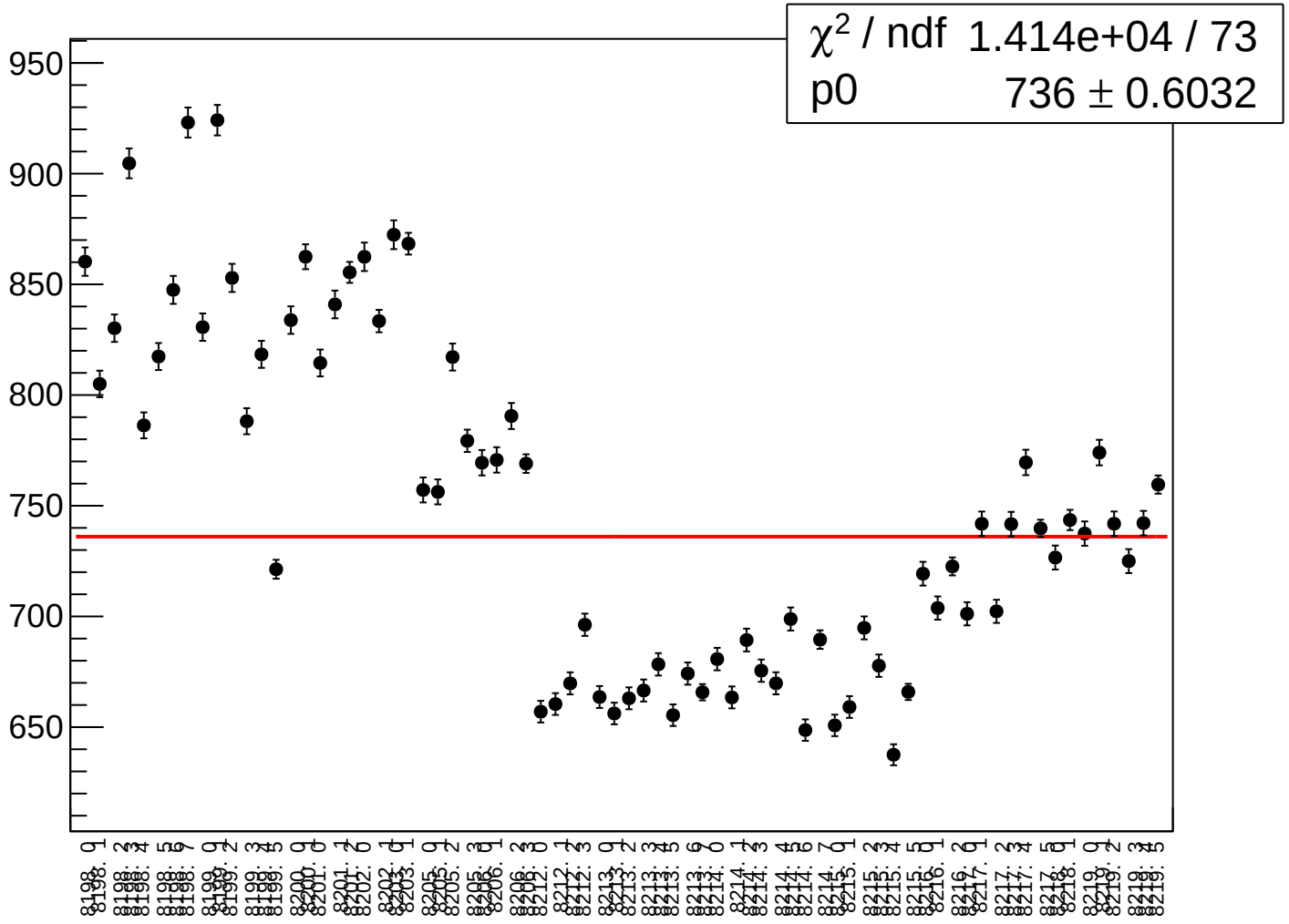

pull1D
Entries 74
Mean −0.0191
Std Dev 0.958

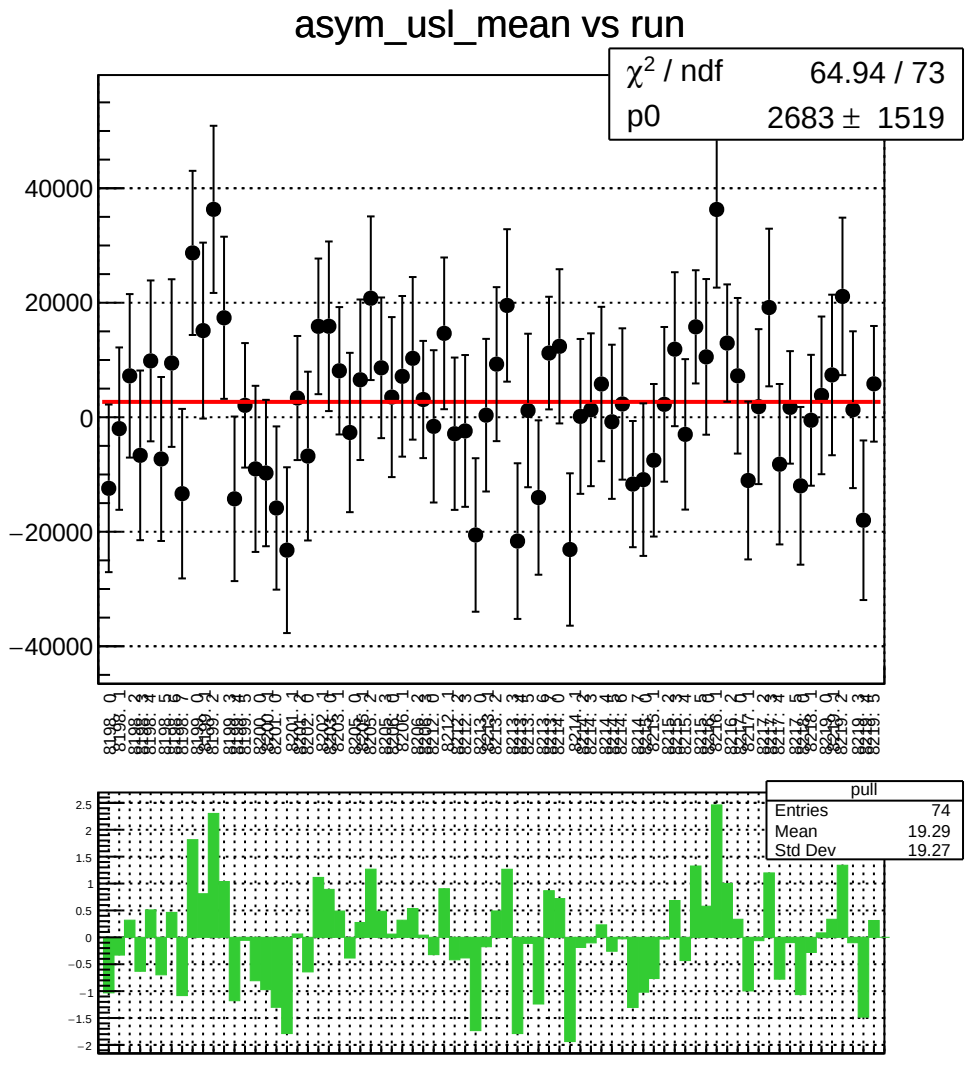

reg_asym_usl_rms vs run
χ² / ndf 112.1 / 73
p0 1083 ± 0.8834
1140
1130
1120
1110
1100
1090
1080
1070
1060

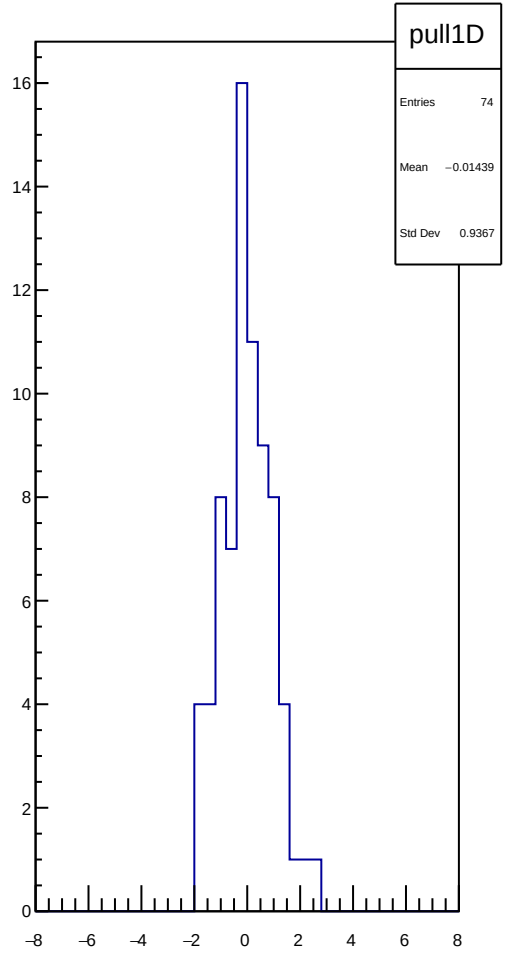

asym_usl_correction_mean vs run
χ² / ndf 95.39 / 73
p0 −1138 ± 853
pull
Entries 74
Mean 521.8
Std Dev 481.2

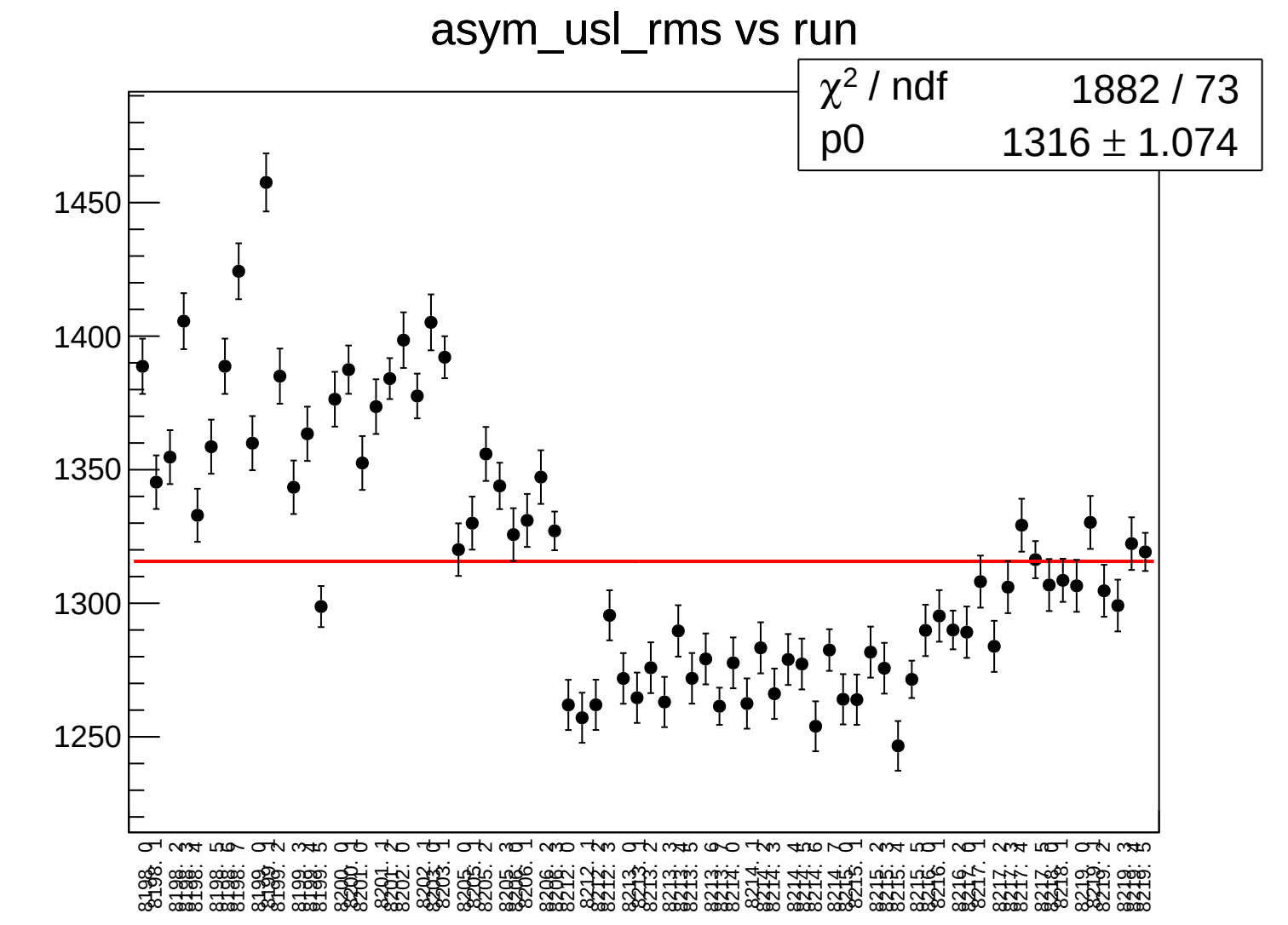

pull1D
Entries 74
Mean −0.008252
Std Dev 1.135

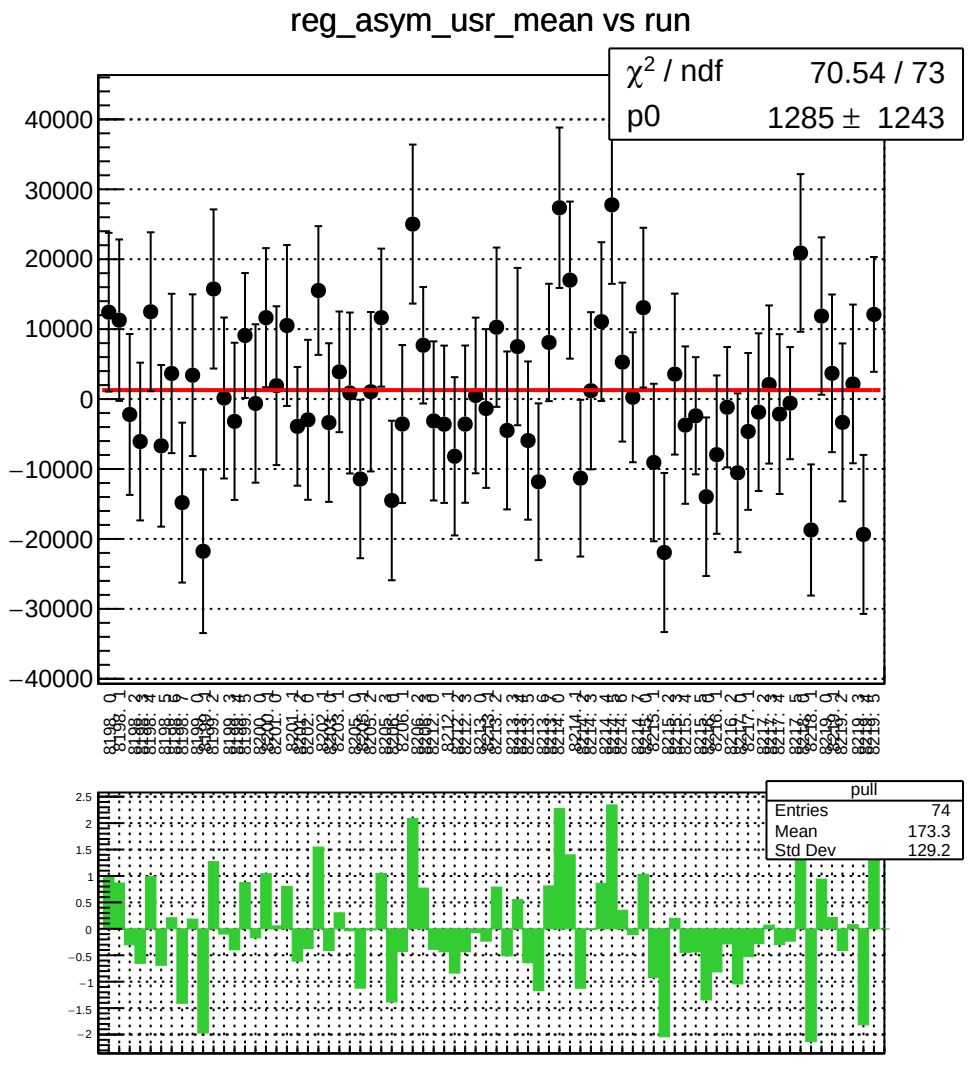
asym_usl_correction_rms vs run

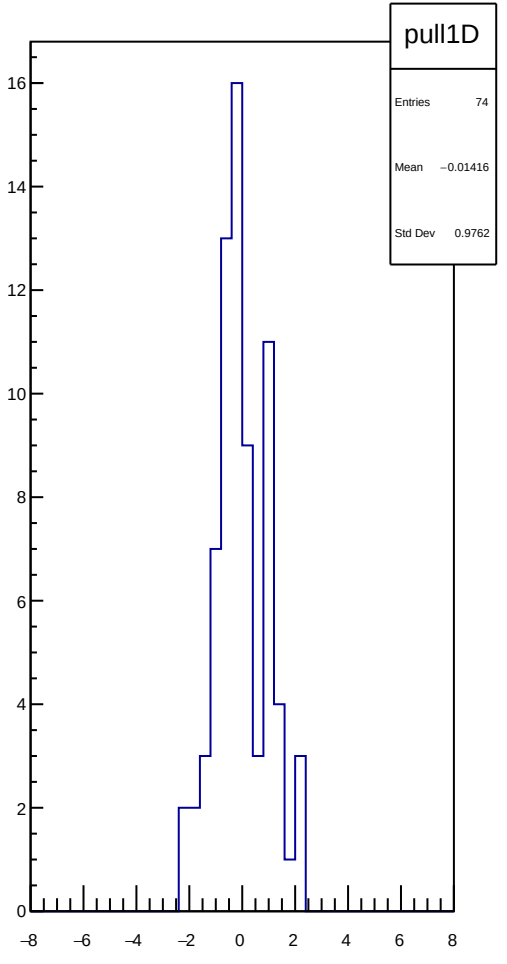


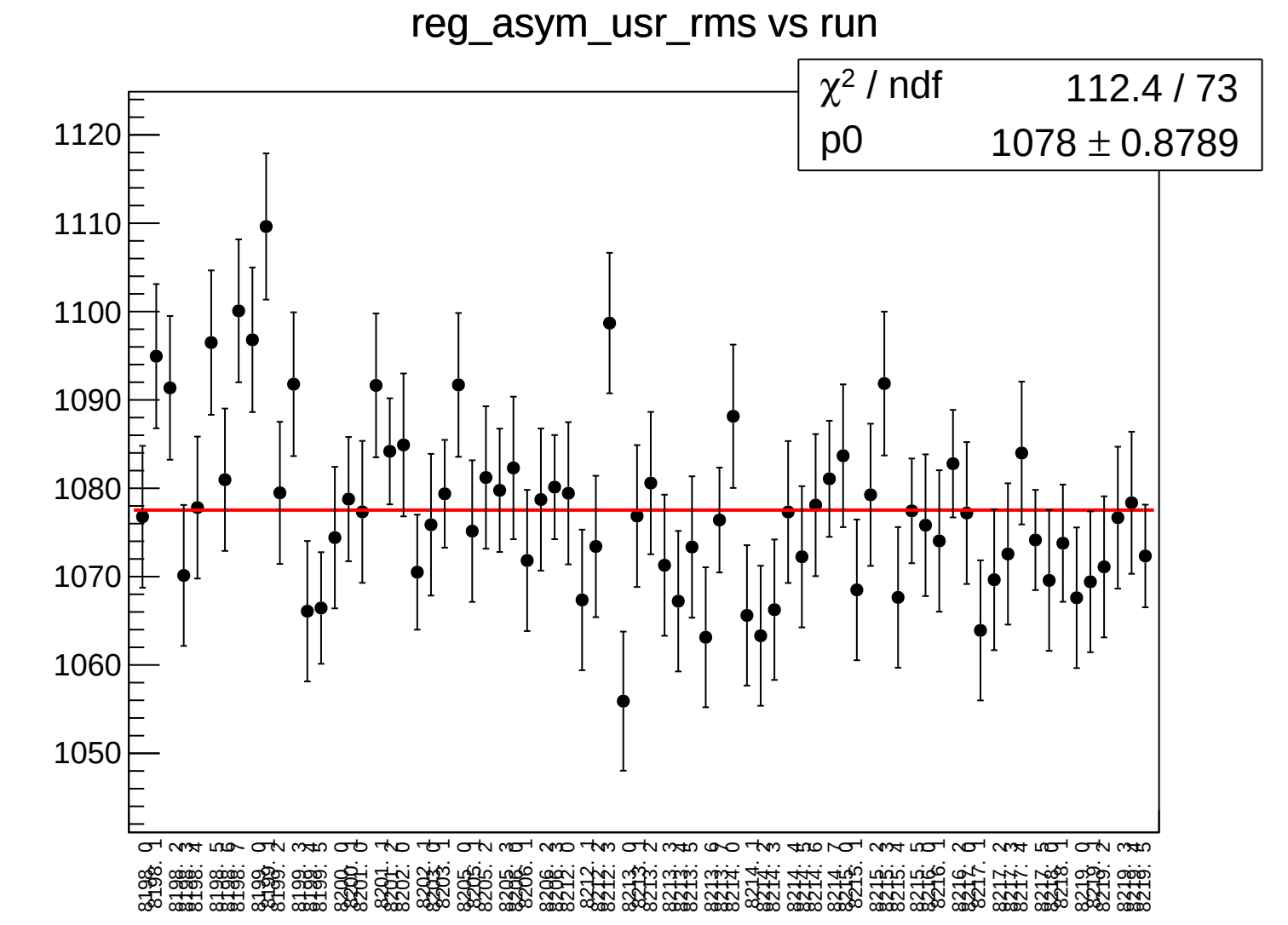

asym_usl_mean vs run
χ² / ndf 64.94 / 73
p0 2683 ± 1519
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 19.29
Std Dev 19.27
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

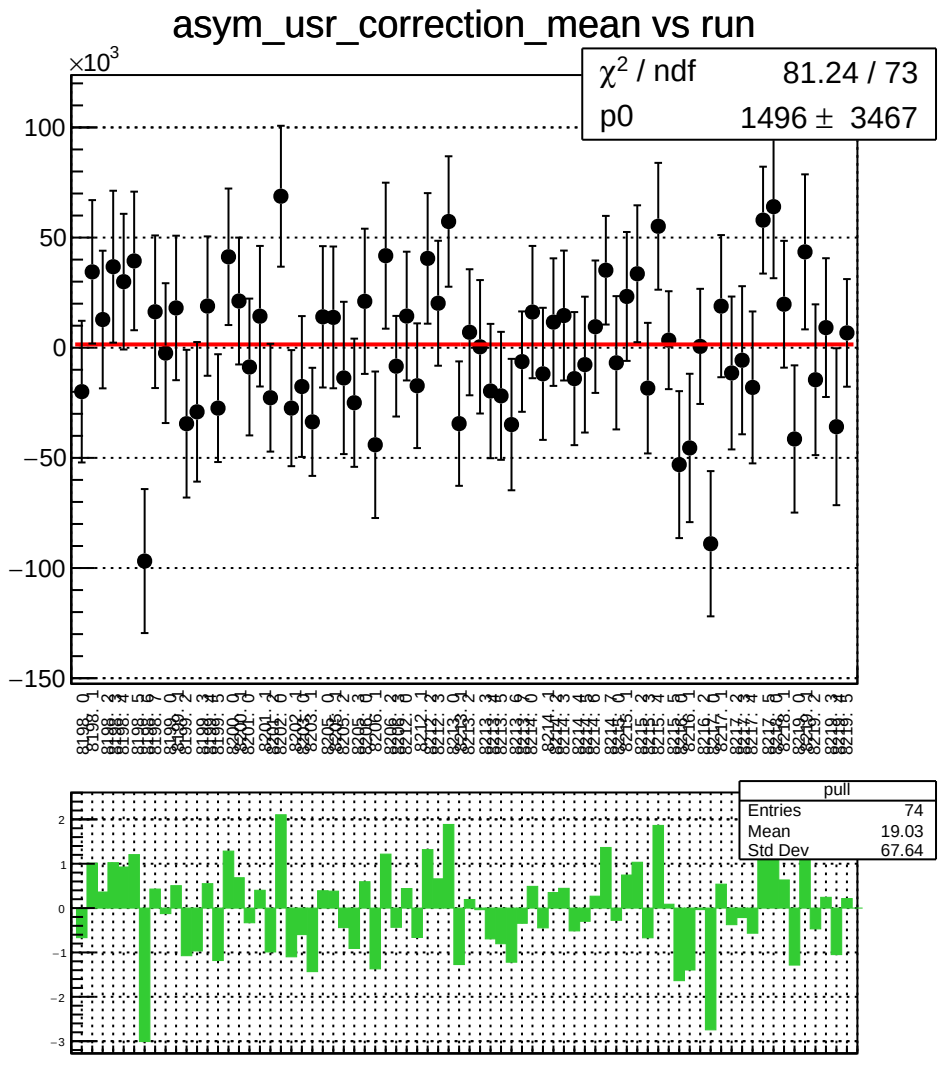

pull1D
Entries 74
Mean −0.01439
Std Dev 0.9367
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

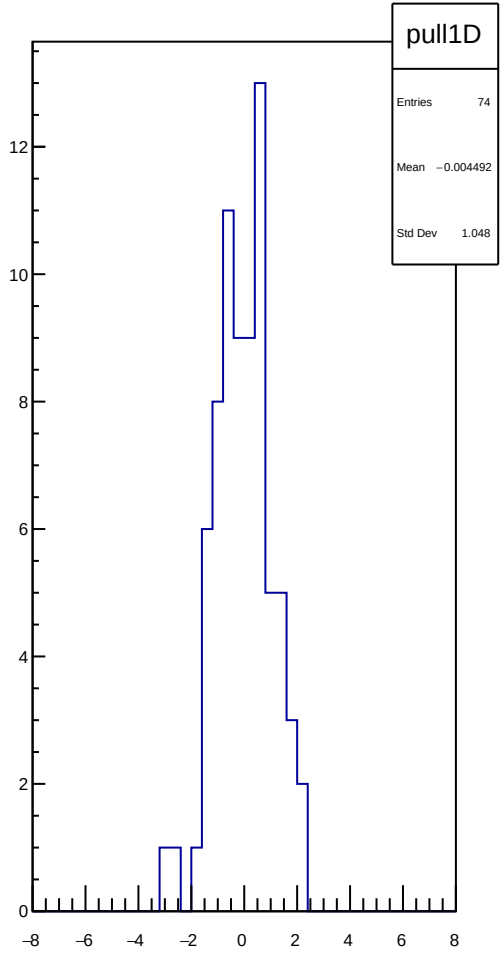

asym_usl_rms vs run
χ^2 / ndf 1882 / 73
p0 1316 ± 1.074
1450
1400
1350
1300
1250

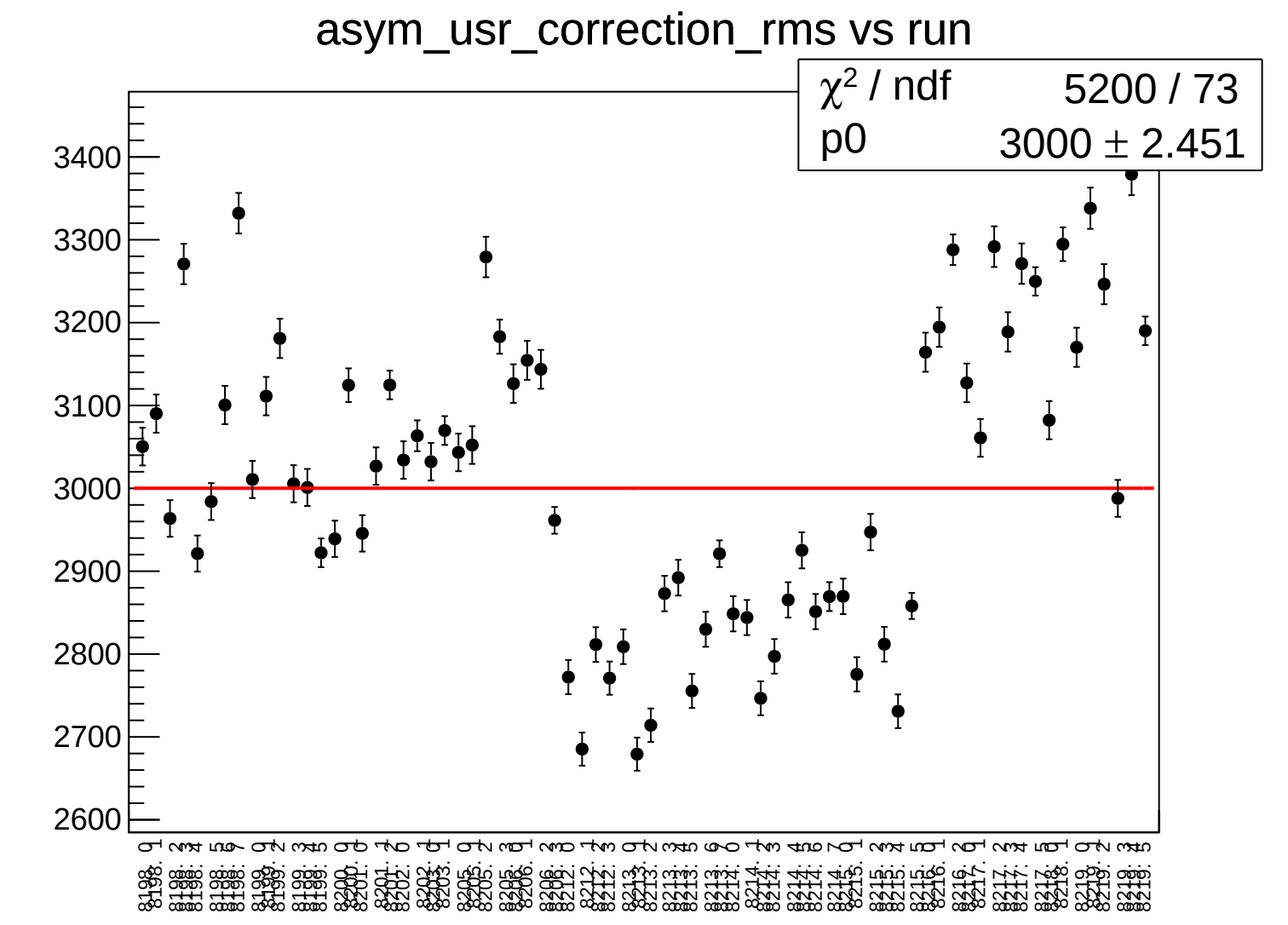

reg_asym_usr_mean vs run
χ² / ndf 70.54 / 73
p0 1285 ± 1243
pull
Entries 74
Mean 173.3
Std Dev 129.2

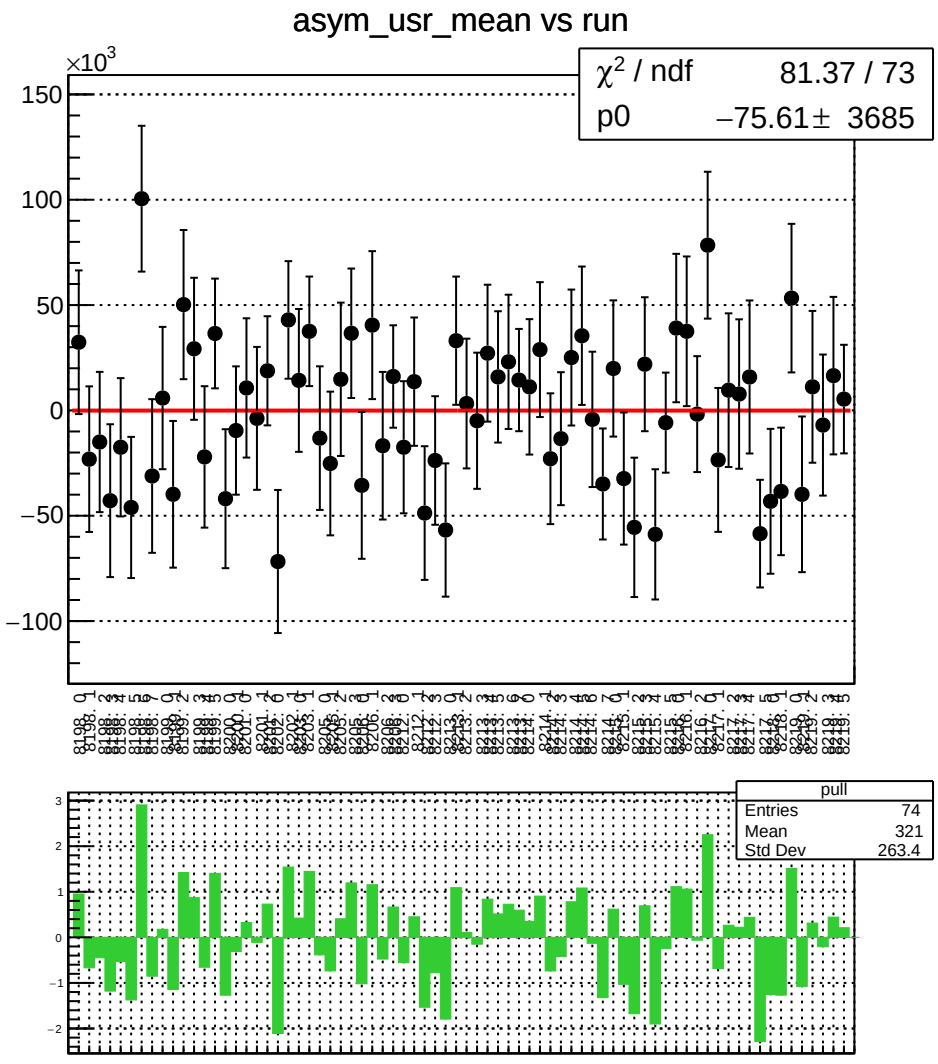

pull1D
Entries 74
Mean −0.01416
Std Dev 0.9762

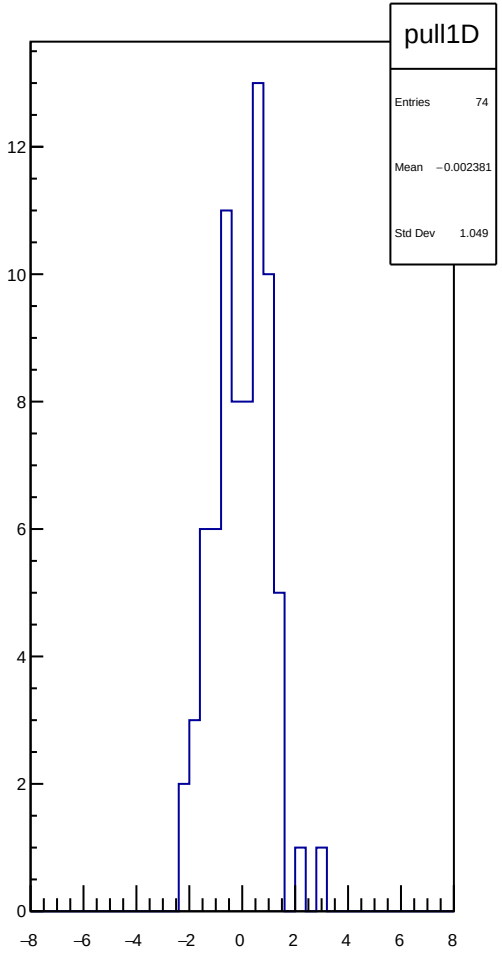

reg_asym_usr_rms vs run
χ² / ndf 112.4 / 73
p0 1078 ± 0.8789
1120
1110
1100
1090
1080
1070
1060
1050

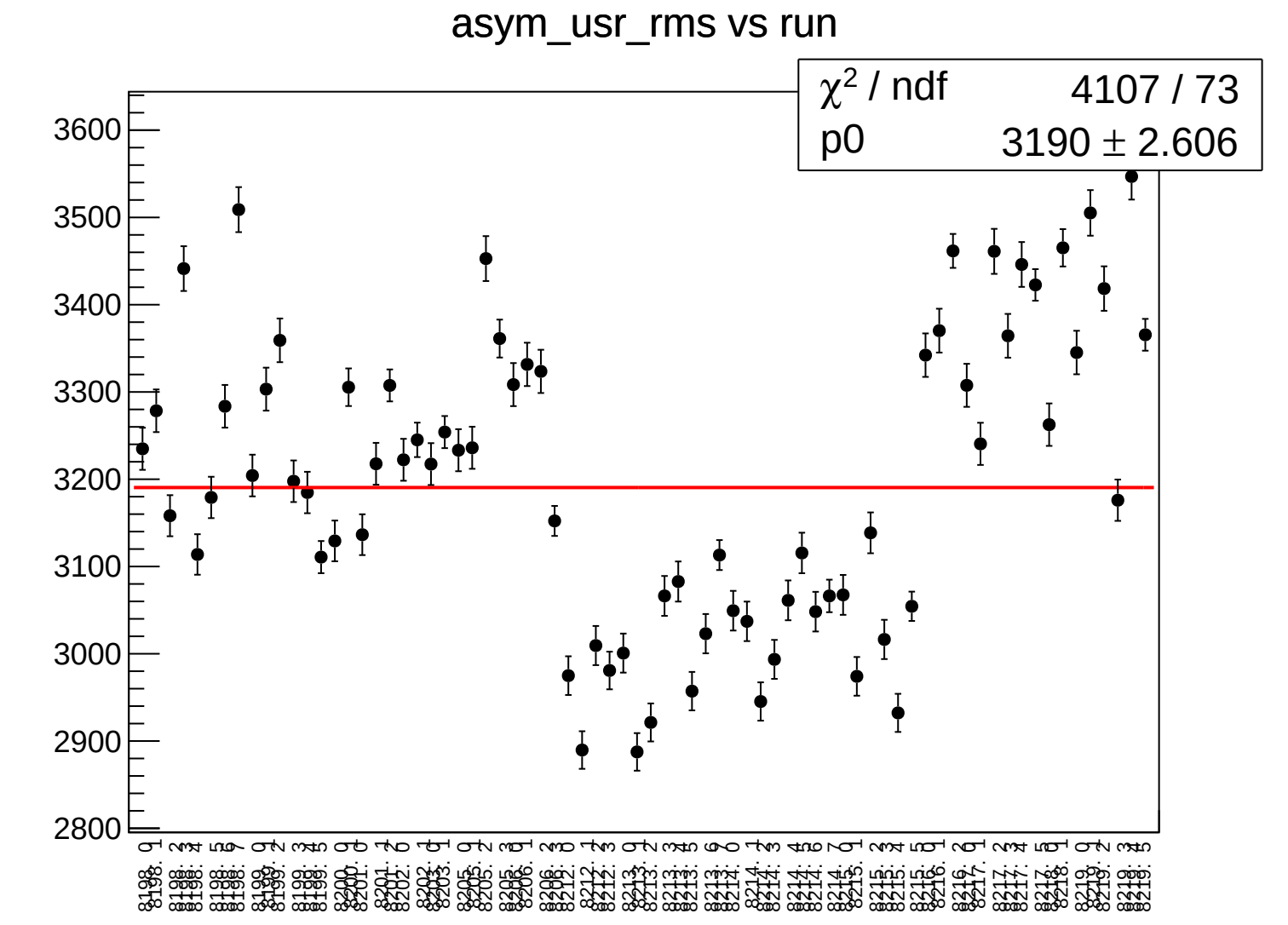

asym_usr_correction_mean vs run
×10^3
χ^2 / ndf 81.24 / 73
p0 1496 ± 3467
100
50
0
−50
−100
−150
pull
Entries 74
Mean 19.03
Std Dev 67.64
2
1
0
−1
−2
−3

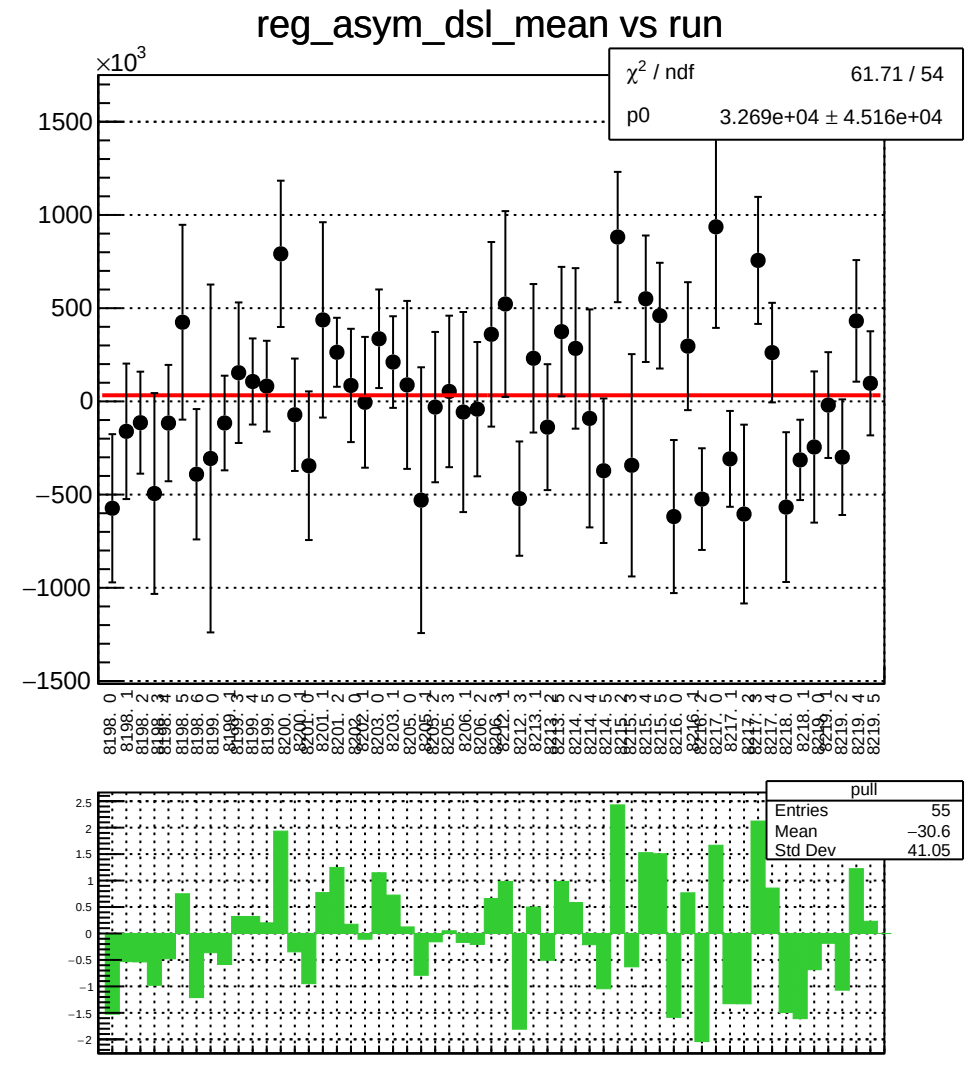

pull1D
Entries 74
Mean −0.004492
Std Dev 1.048
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

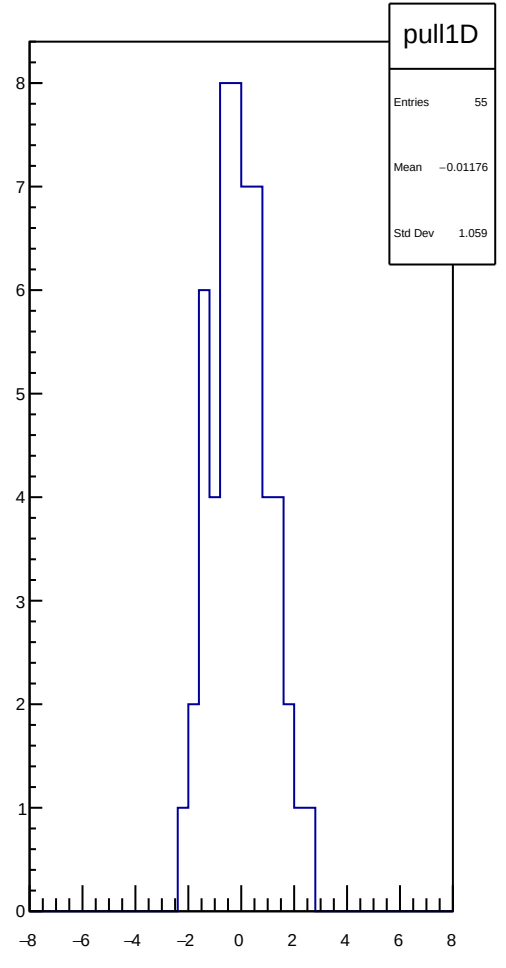

asym_usr_correction_rms vs run
χ² / ndf 5200 / 73
p0 3000 ± 2.451
3400
3300
3200
3100
3000
2900
2800
2700
2600

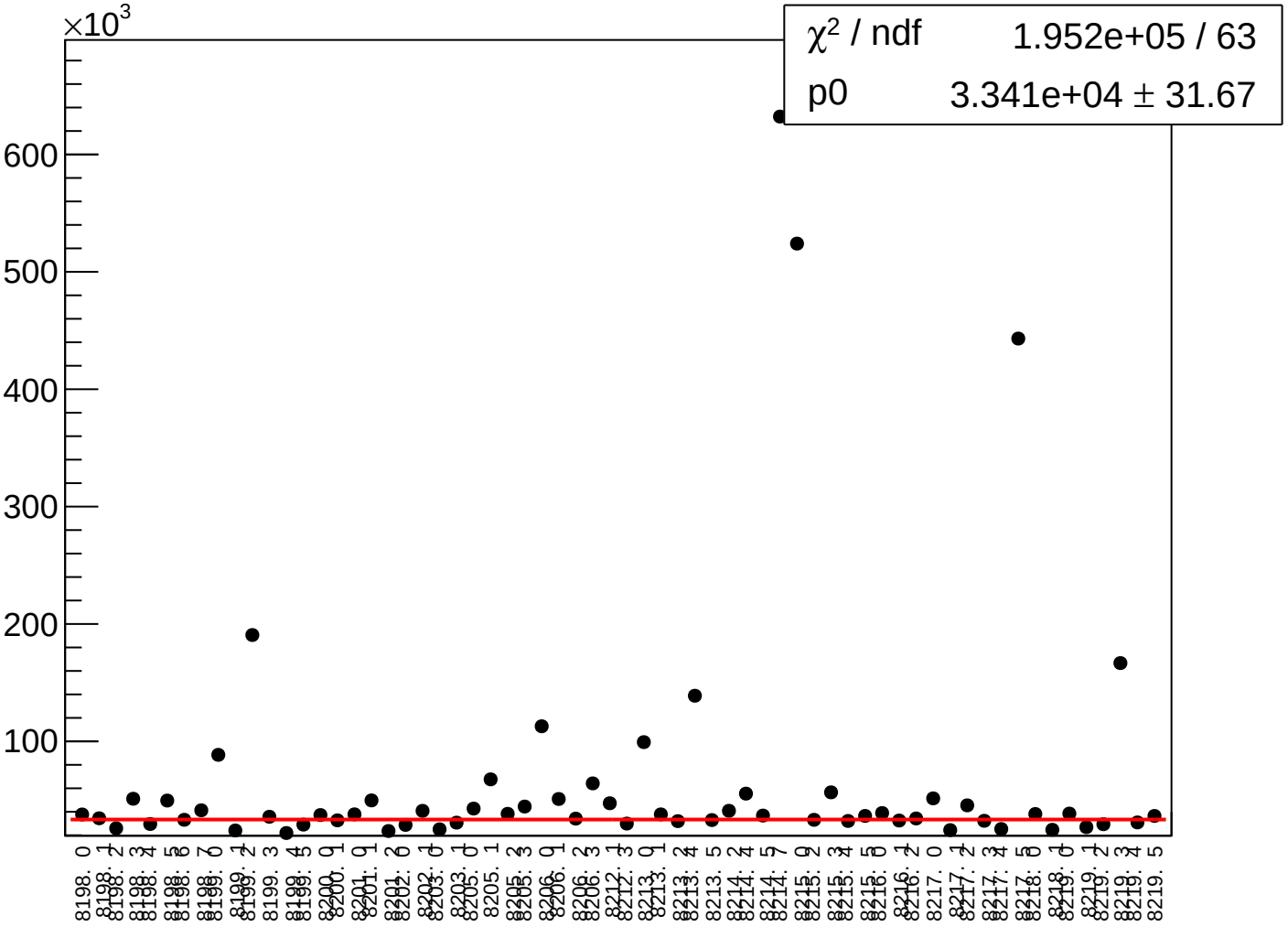

asym_usr_mean vs run
×10^3
χ² / ndf 81.37 / 73
p0 −75.61± 3685
150
100
50
0
−50
−100
pull
Entries 74
Mean 321
Std Dev 263.4
3
2
1
0
−1
−2

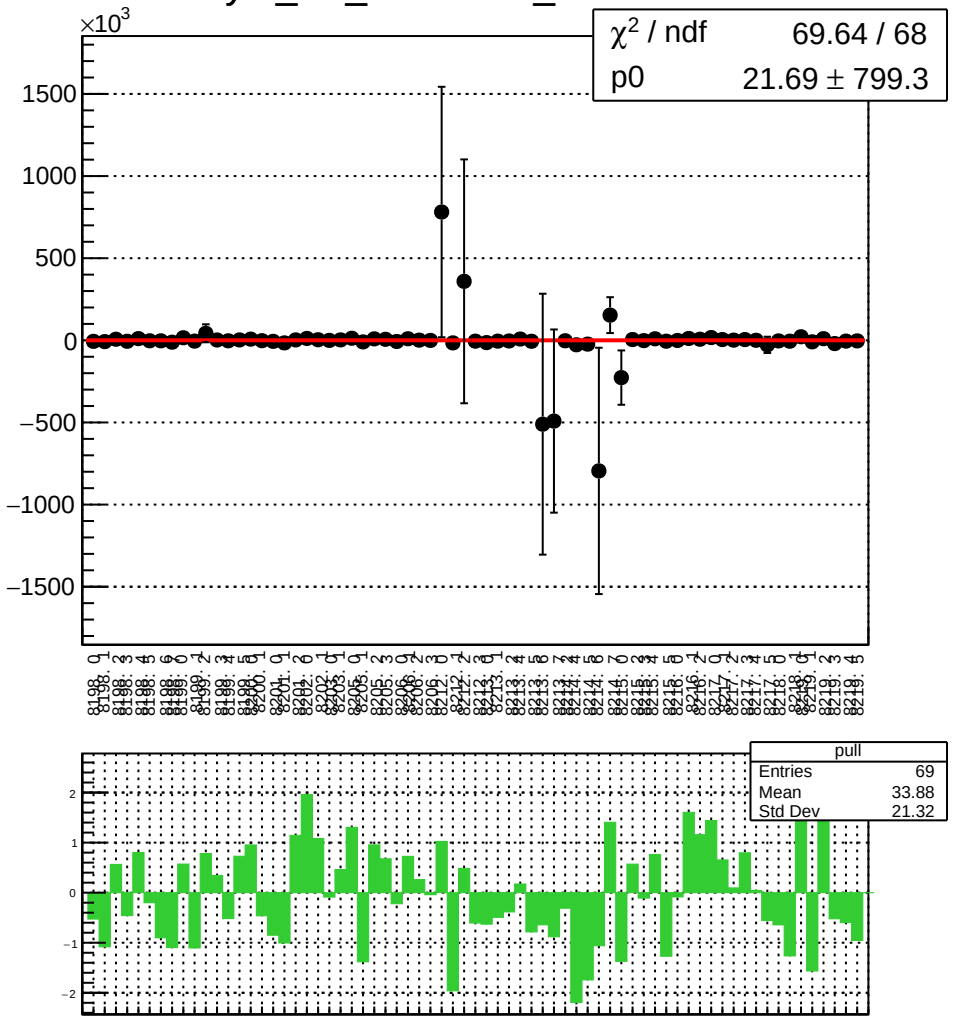

pull1D
Entries 74
Mean −0.002381
Std Dev 1.049
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

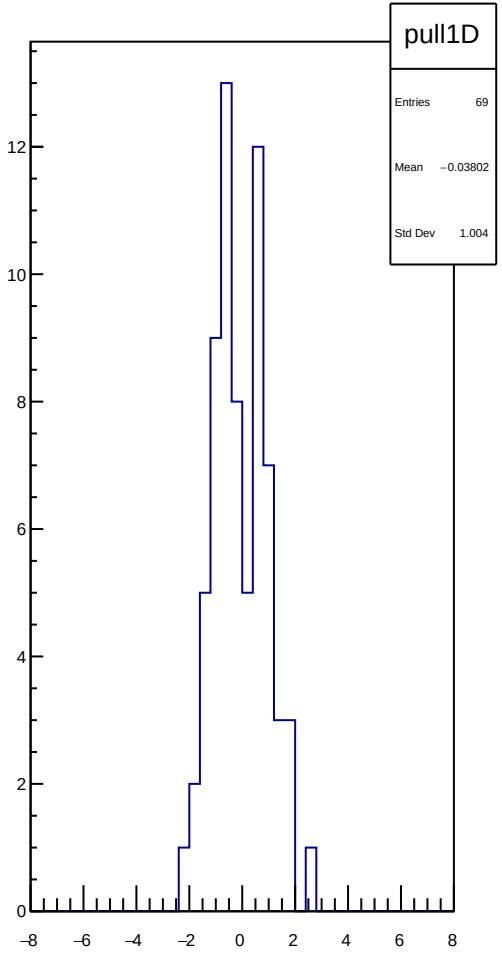

asym_usr_rms vs run
χ² / ndf 4107 / 73
p0 3190 ± 2.606
3600
3500
3400
3300
3200
3100
3000
2900
2800

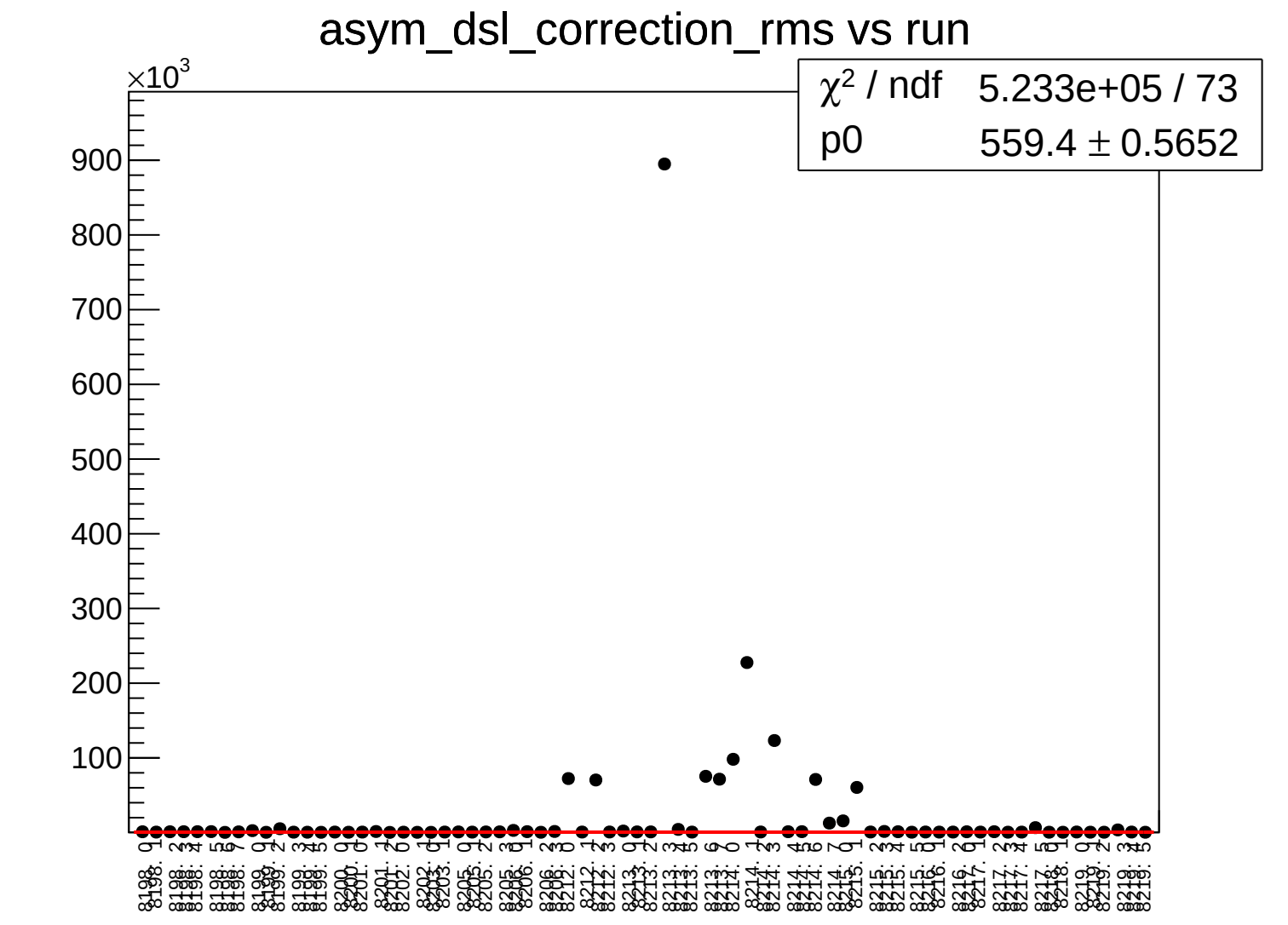

reg_asym_dsl_mean vs run
×10^3
χ² / ndf 61.71 / 54
p0 3.269e+04 ± 4.516e+04
1500
1000
500
0
−500
−1000
−1500
pull
Entries 55
Mean −30.6
Std Dev 41.05
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

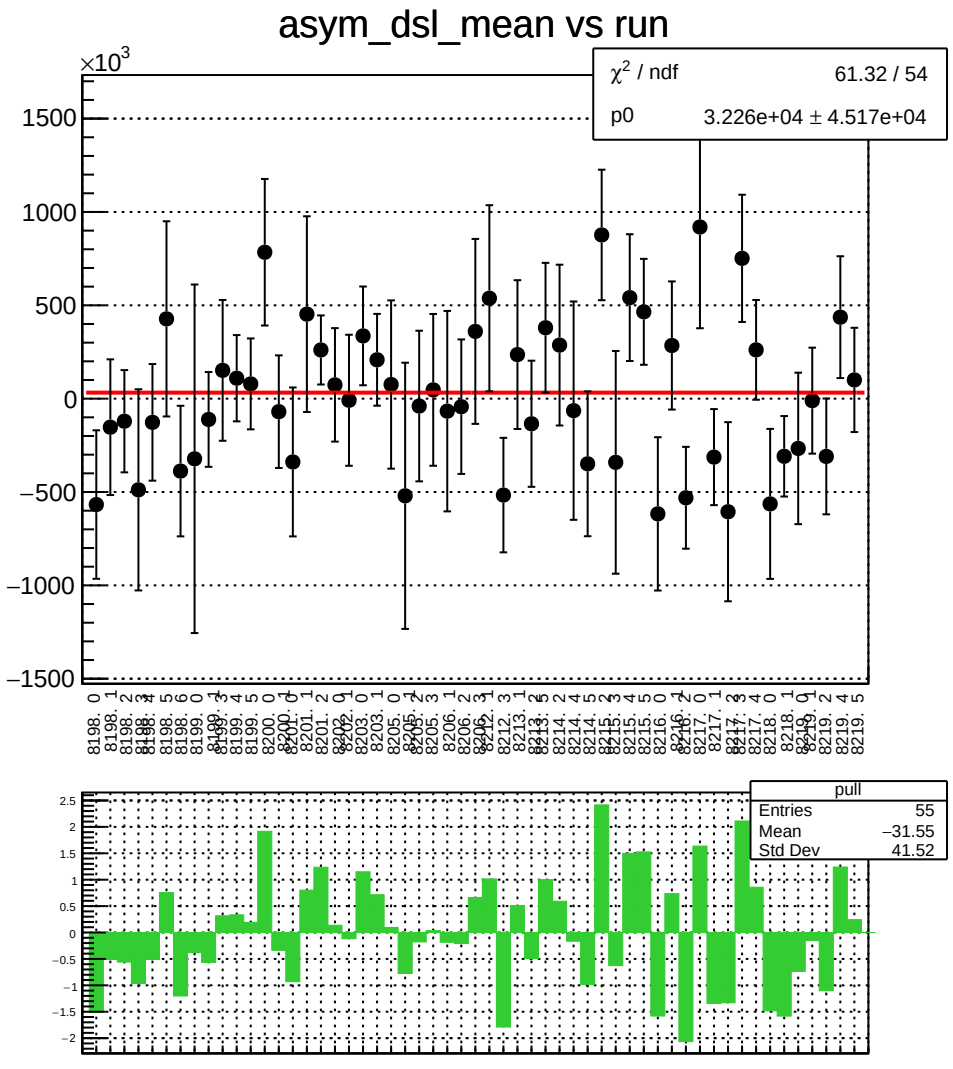

pull1D
Entries 55
Mean −0.01176
Std Dev 1.059
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

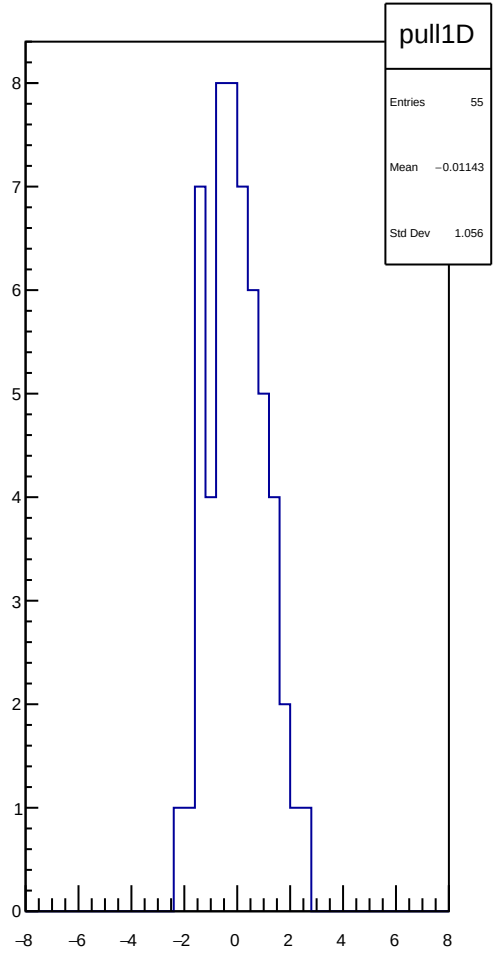

reg_asym_dsl_rms vs run
×10^3
χ² / ndf 1.952e+05 / 63
p0 3.341e+04 ± 31.67
600
500
400
300
200
100

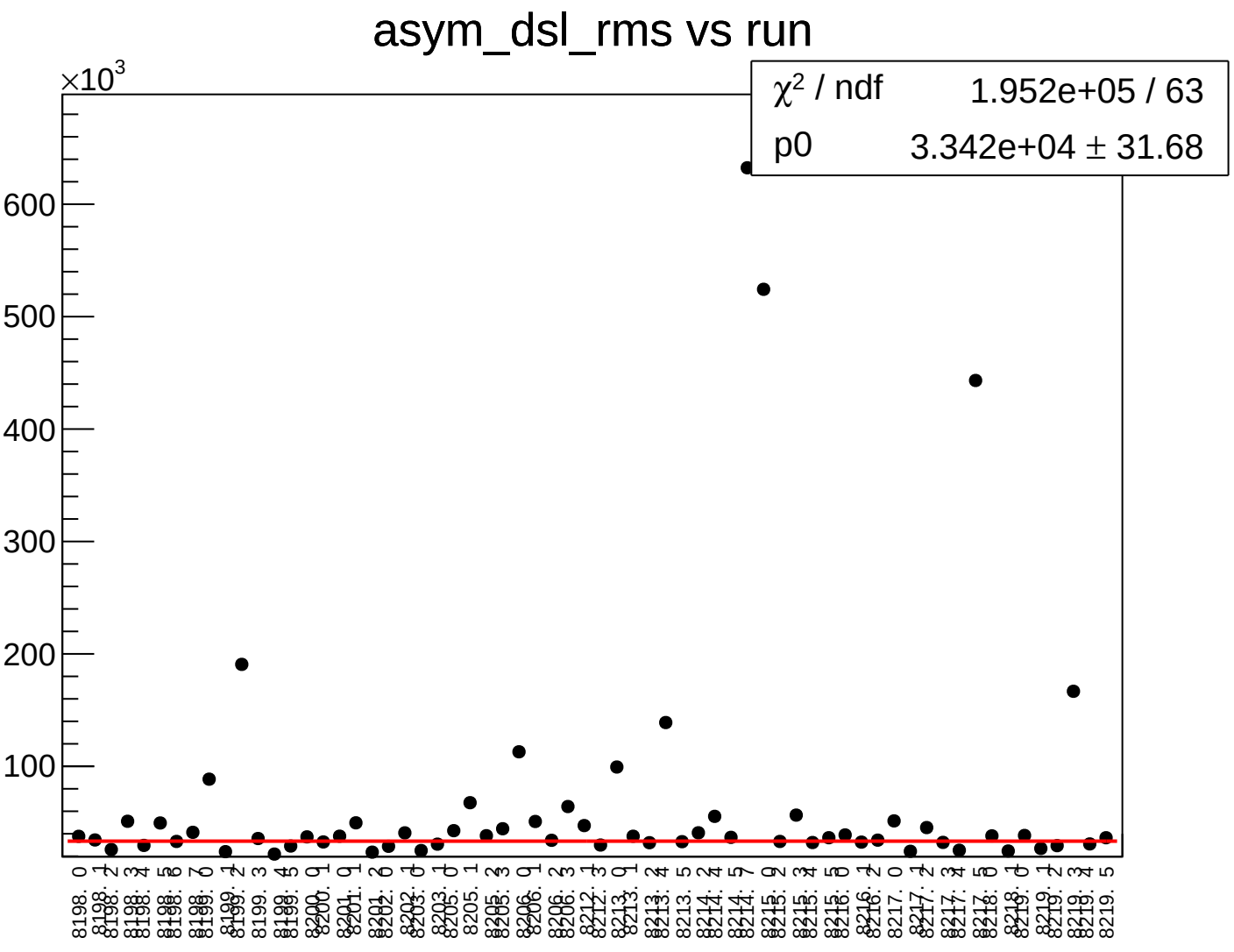

asym_dsl_correction_mean vs run
×10^3
χ^2 / ndf 69.64 / 68
p0 21.69 ± 799.3
1500
1000
500
0
−500
−1000
−1500
pull
Entries 69
Mean 33.88
Std Dev 21.32
2
1
0
−1
−2

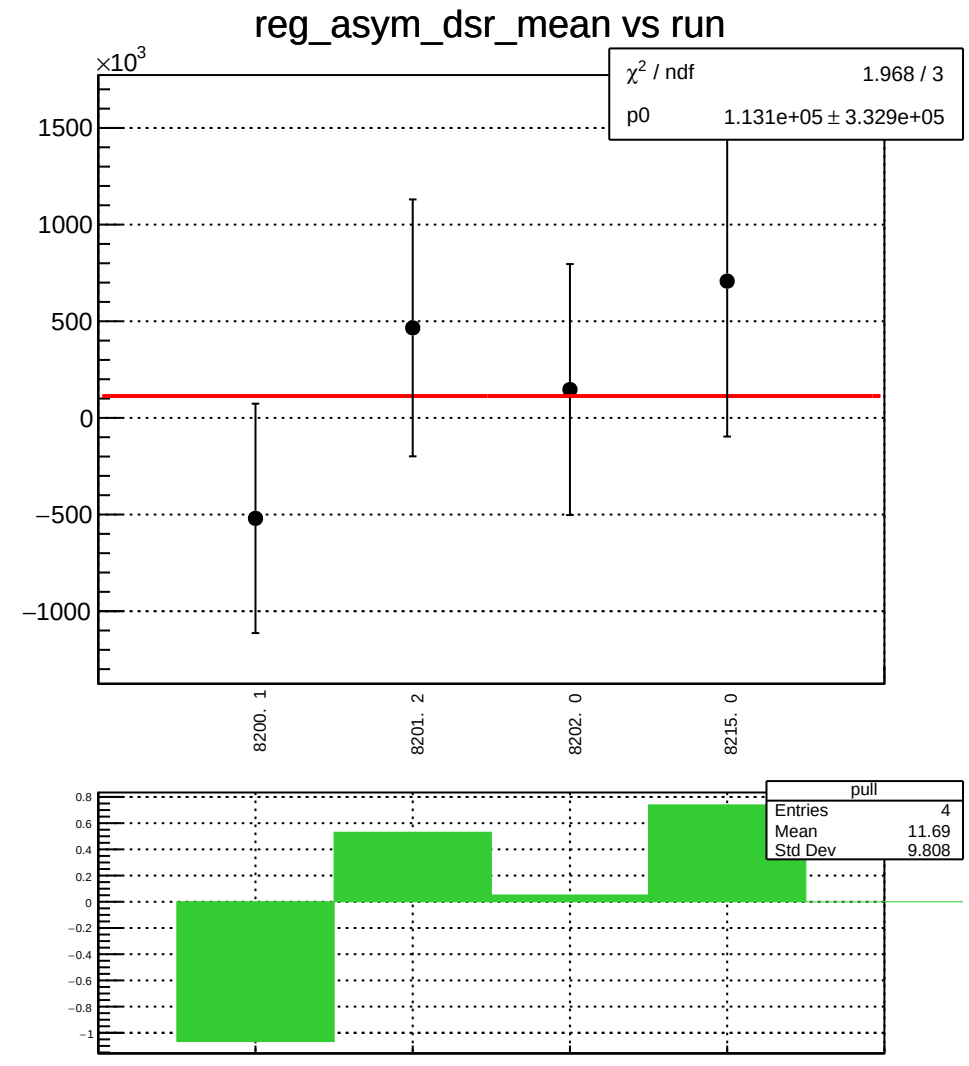

pull1D
Entries 69
Mean −0.03802
Std Dev 1.004
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

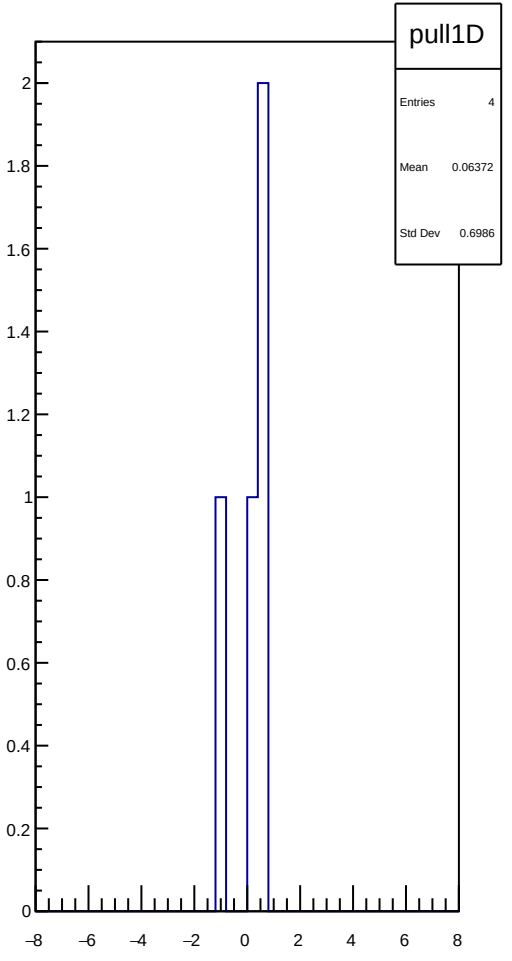

asym_dsl_correction_rms vs run
×10^3
χ² / ndf 5.233e+05 / 73
p0 559.4 ± 0.5652
900
800
700
600
500
400
300
200
100

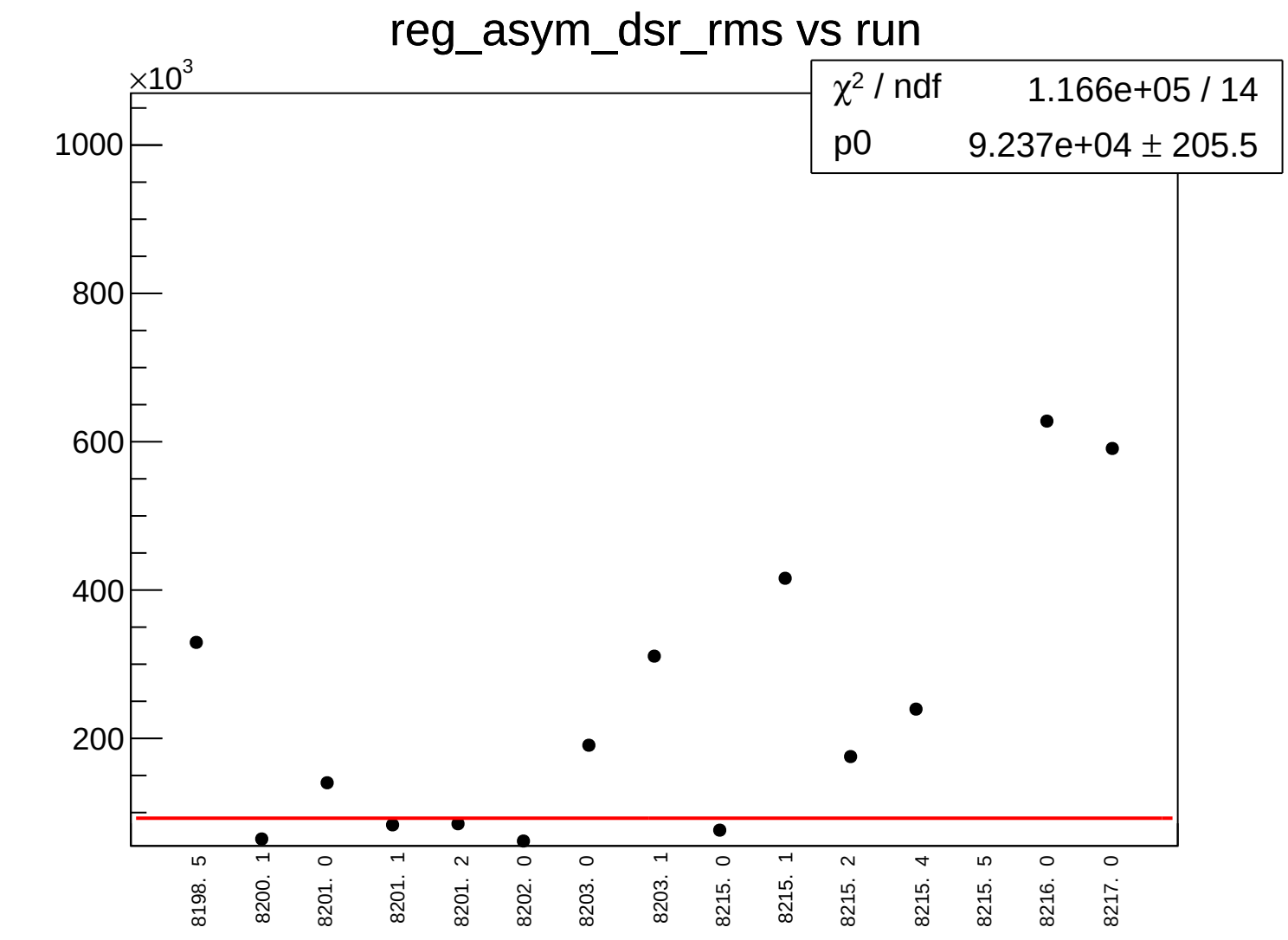

asym_dsl_mean vs run
×10^3
χ² / ndf 61.32 / 54
p0 3.226e+04 ± 4.517e+04
1500
1000
500
0
−500
−1000
−1500
pull
Entries 55
Mean −31.55
Std Dev 41.52
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

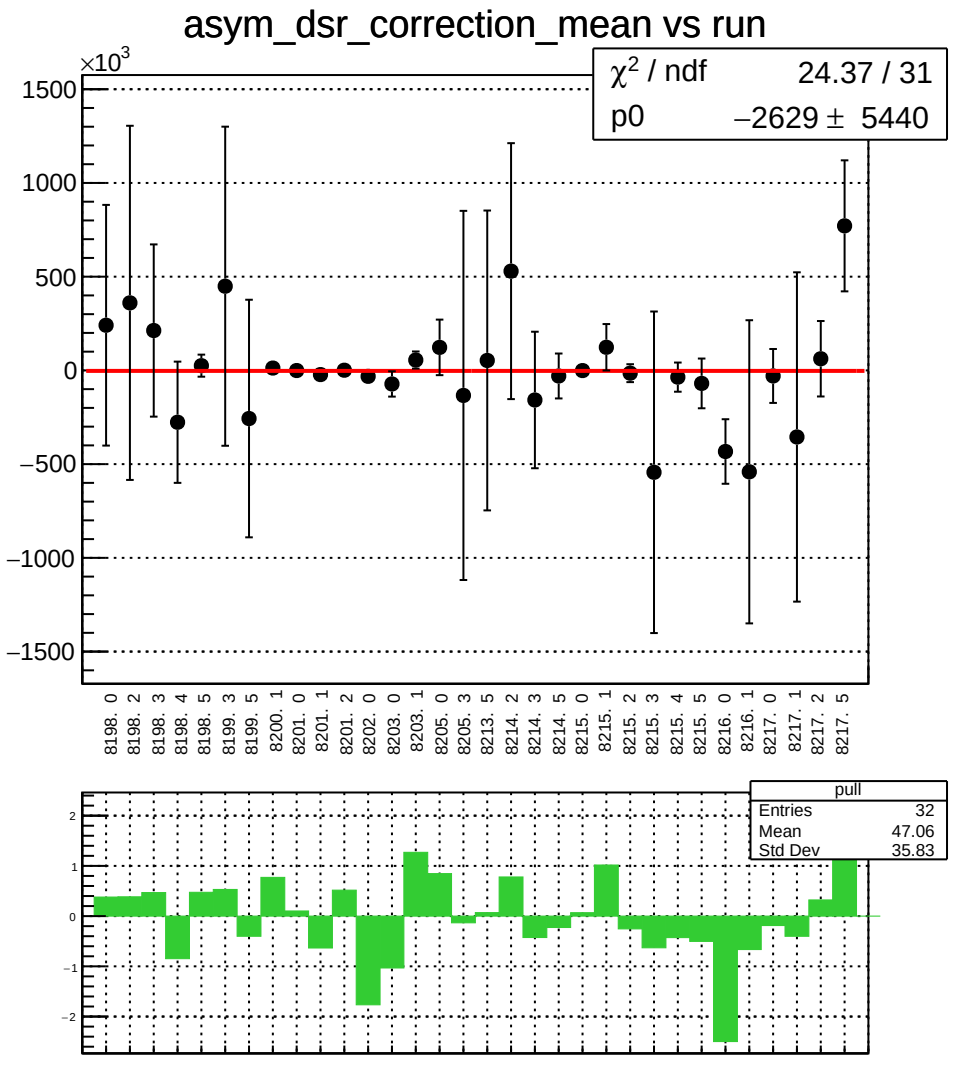

pull1D
Entries 55
Mean −0.01143
Std Dev 1.056
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

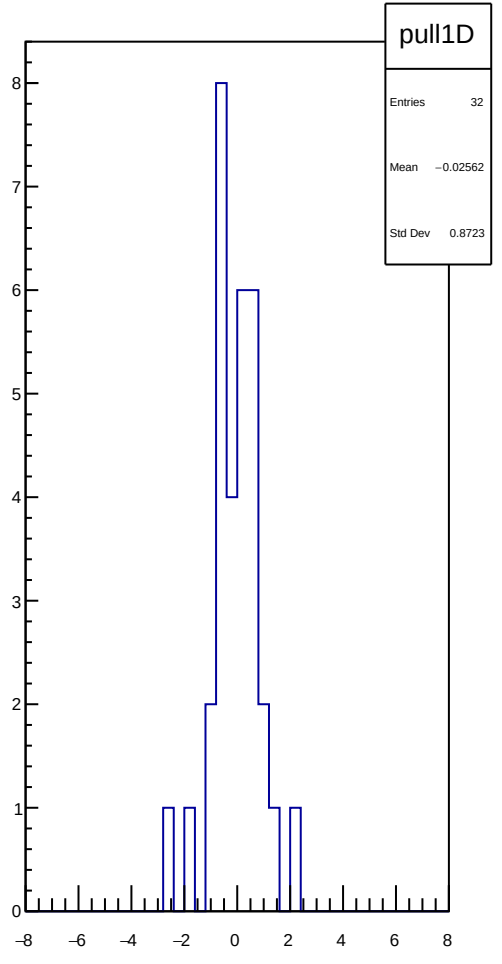

asym_dsl_rms vs run
×10^3
χ² / ndf 1.952e+05 / 63
p0 3.342e+04 ± 31.68
600
500
400
300
200
100

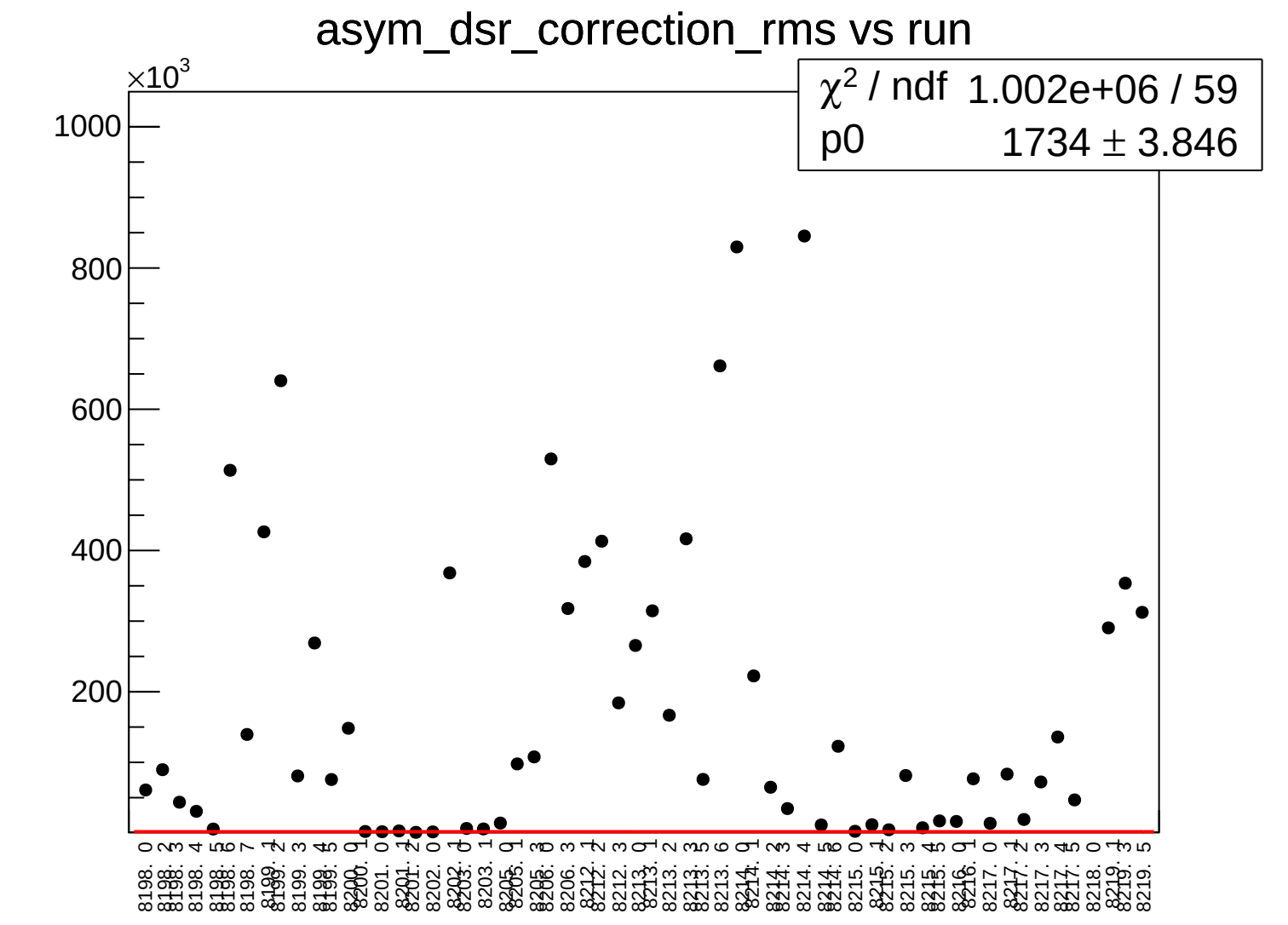

reg_asym_dsr_mean vs run
×10^3
χ² / ndf 1.968 / 3
p0 1.131e+05 ± 3.329e+05
1500
1000
500
0
−500
−1000
8200. 1
8201. 2
8202. 0
8215. 0
pull
Entries 4
Mean 11.69
Std Dev 9.808
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

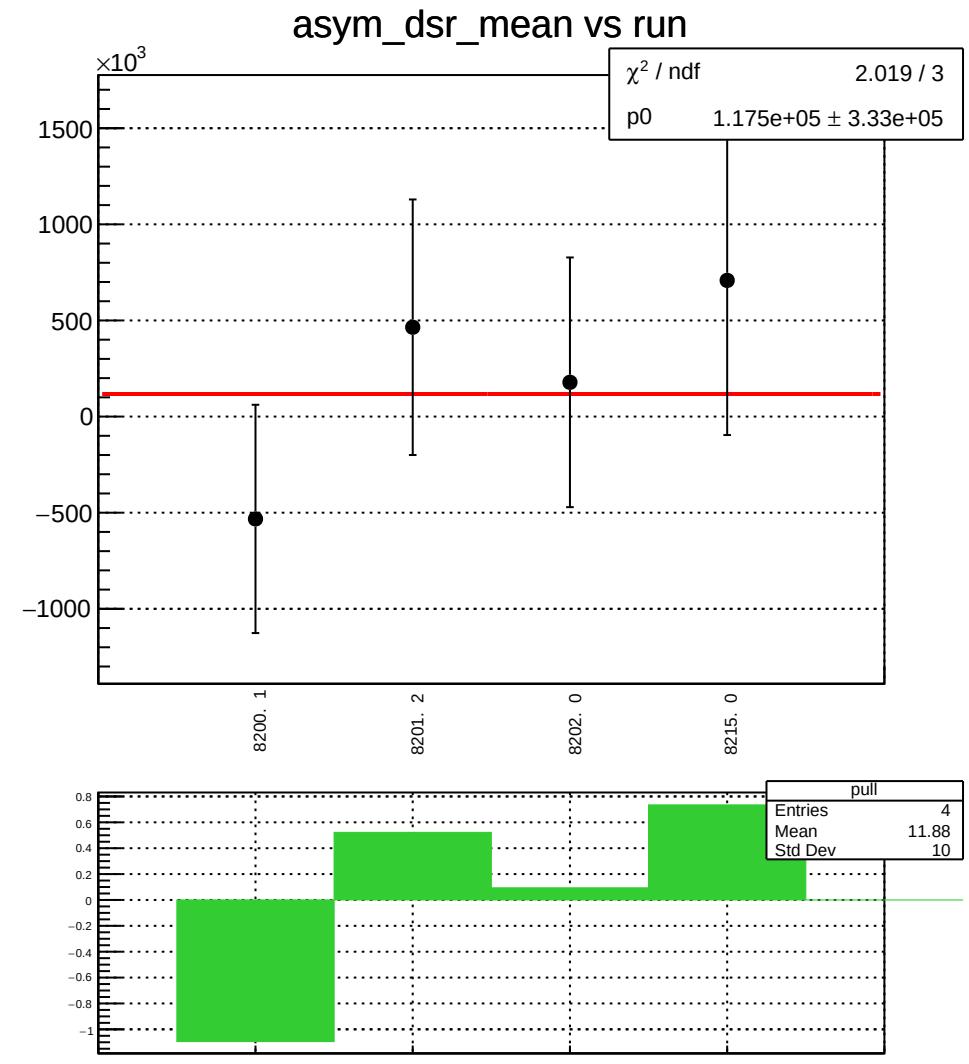

pull1D
Entries 4
Mean 0.06372
Std Dev 0.6986
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

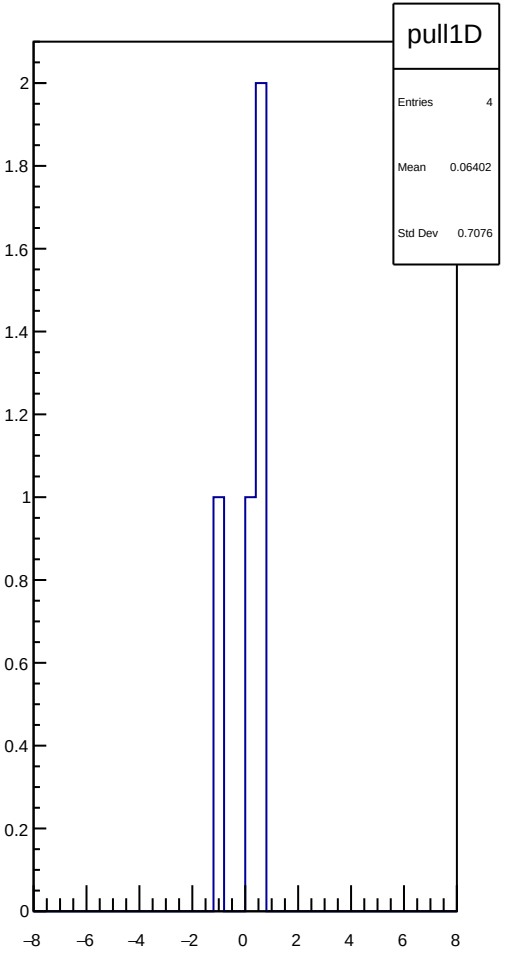

reg_asym_dsr_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.166e+05 / 14
p0 9.237e+04 ± 205.5
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0

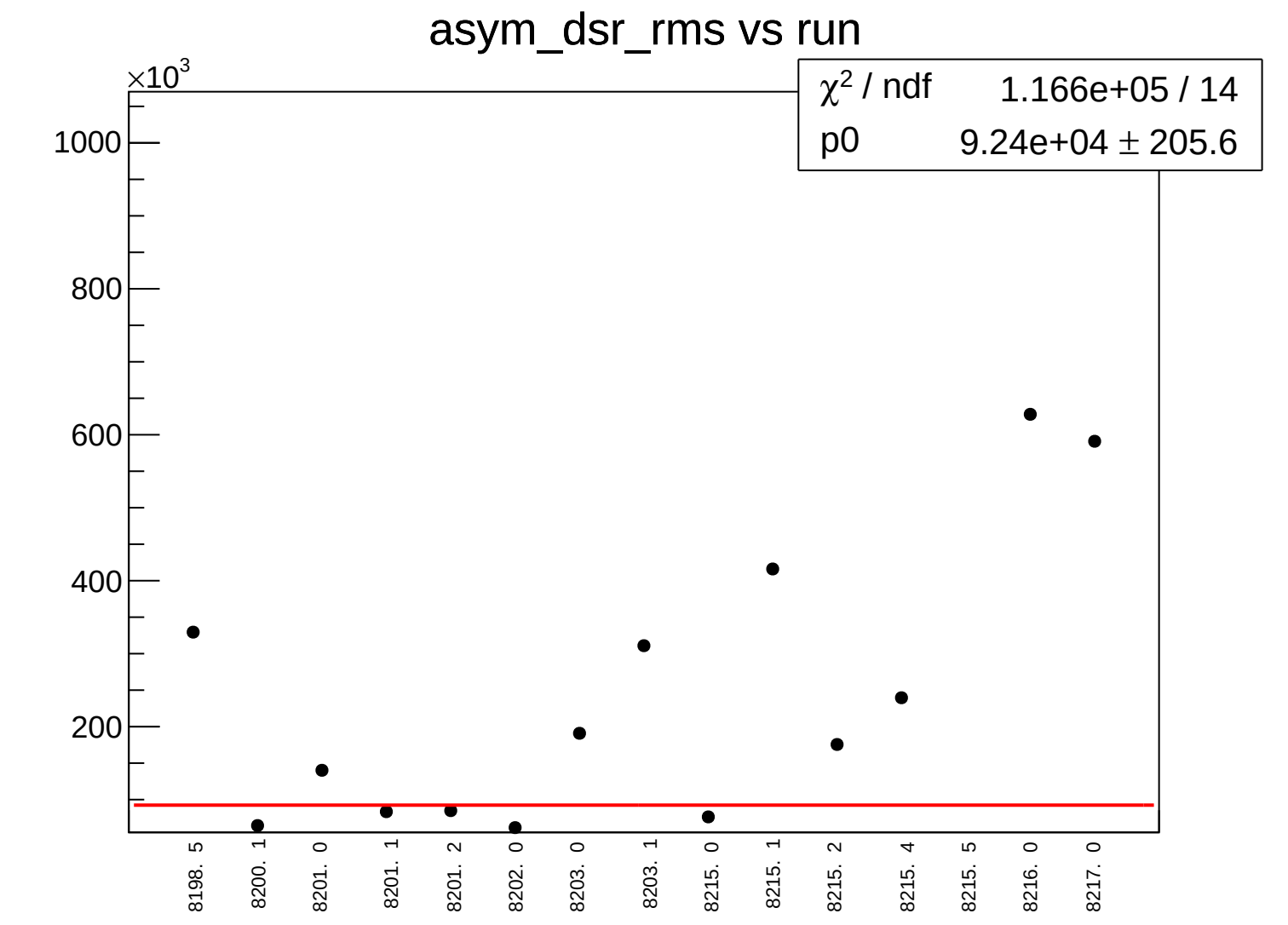

asym_dsr_correction_mean vs run
×10^3
χ² / ndf 24.37 / 31
p0 −2629 ± 5440
1500
1000
500
0
−500
−1000
−1500
8198. 0
8198. 2
8198. 3
8198. 4
8198. 5
8199. 3
8199. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8205. 3
8213. 5
8214. 2
8214. 3
8214. 5
8215. 0
8215. 1
8215. 2
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8217. 0
8217. 1
8217. 2
8217. 5
pull
Entries 32
Mean 47.06
Std Dev 35.83
2
1
0
−1
−2

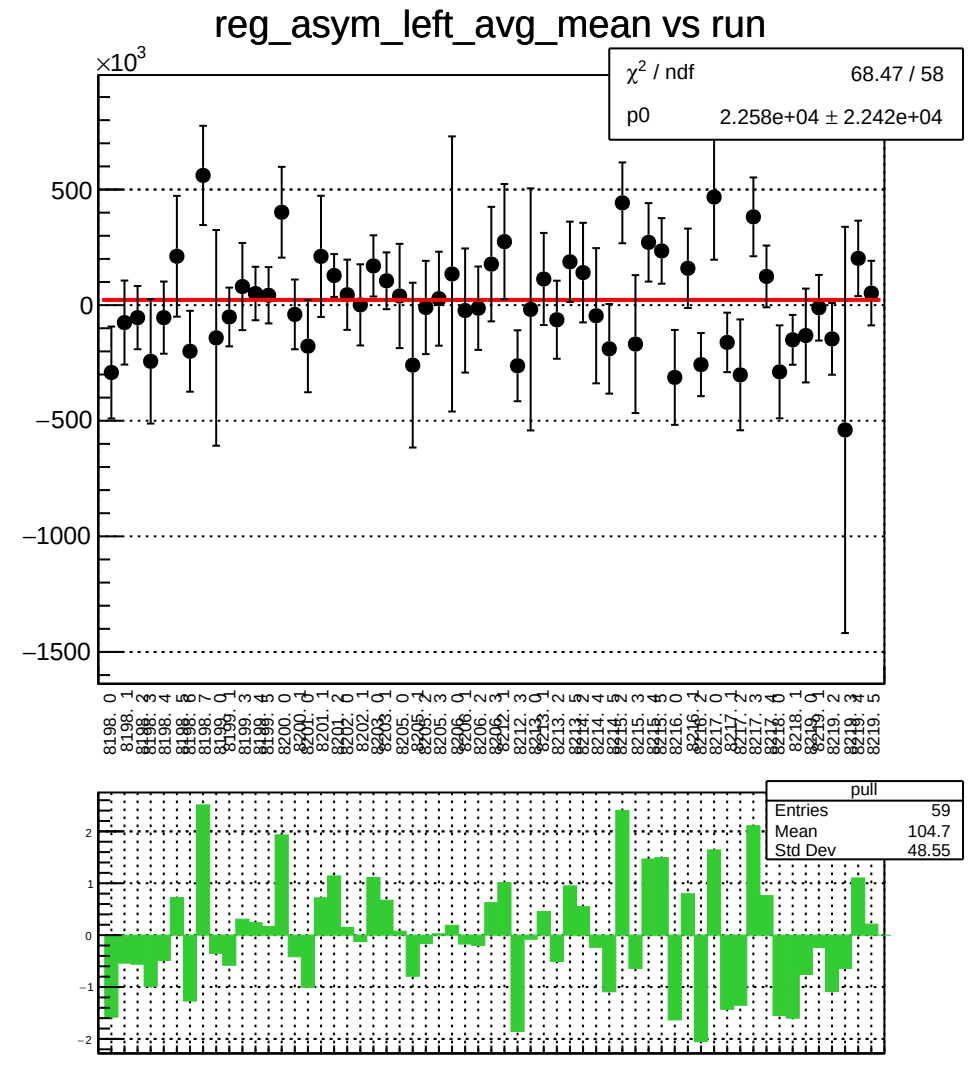

pull1D
Entries 32
Mean −0.02562
Std Dev 0.8723
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

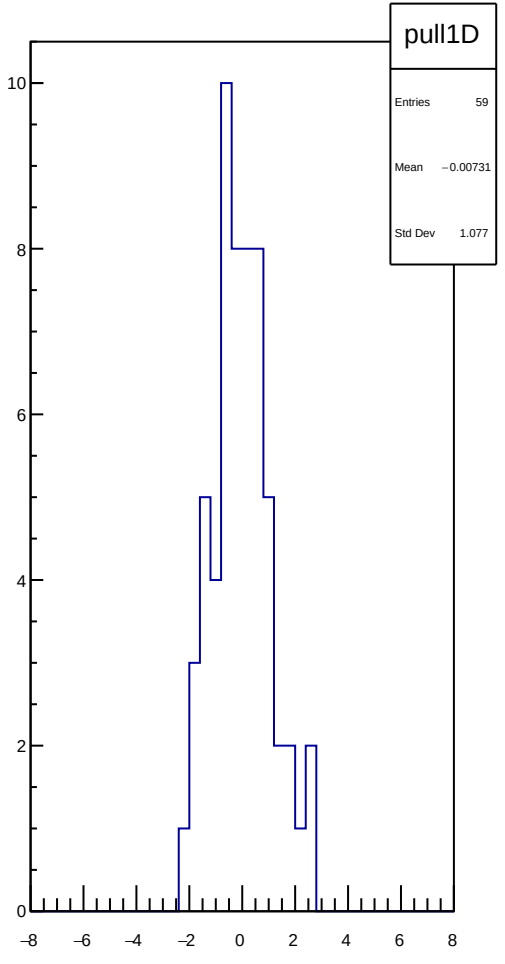

asym_dsr_correction_rms vs run
×10^3
χ^2 / ndf 1.002e+06 / 59
p0 1734 ± 3.846
1000
800
600
400
200
8198. 0
8198. 2
8198. 3
8198. 4
8198. 5
8198. 6
8198. 7
8199. 1
8199. 2
8199. 3
8199. 4
8199. 5
8200. 0
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8202. 1
8203. 0
8203. 1
8205. 0
8205. 1
8206. 0
8206. 3
8212. 1
8212. 2
8212. 3
8213. 0
8213. 1
8213. 2
8213. 3
8213. 5
8213. 6
8214. 0
8214. 1
8214. 2
8214. 3
8214. 4
8214. 5
8214. 6
8215. 0
8215. 1
8215. 2
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8217. 0
8217. 1
8217. 2
8217. 3
8217. 4
8217. 5
8218. 0
8219. 1
8219. 3
8219. 5

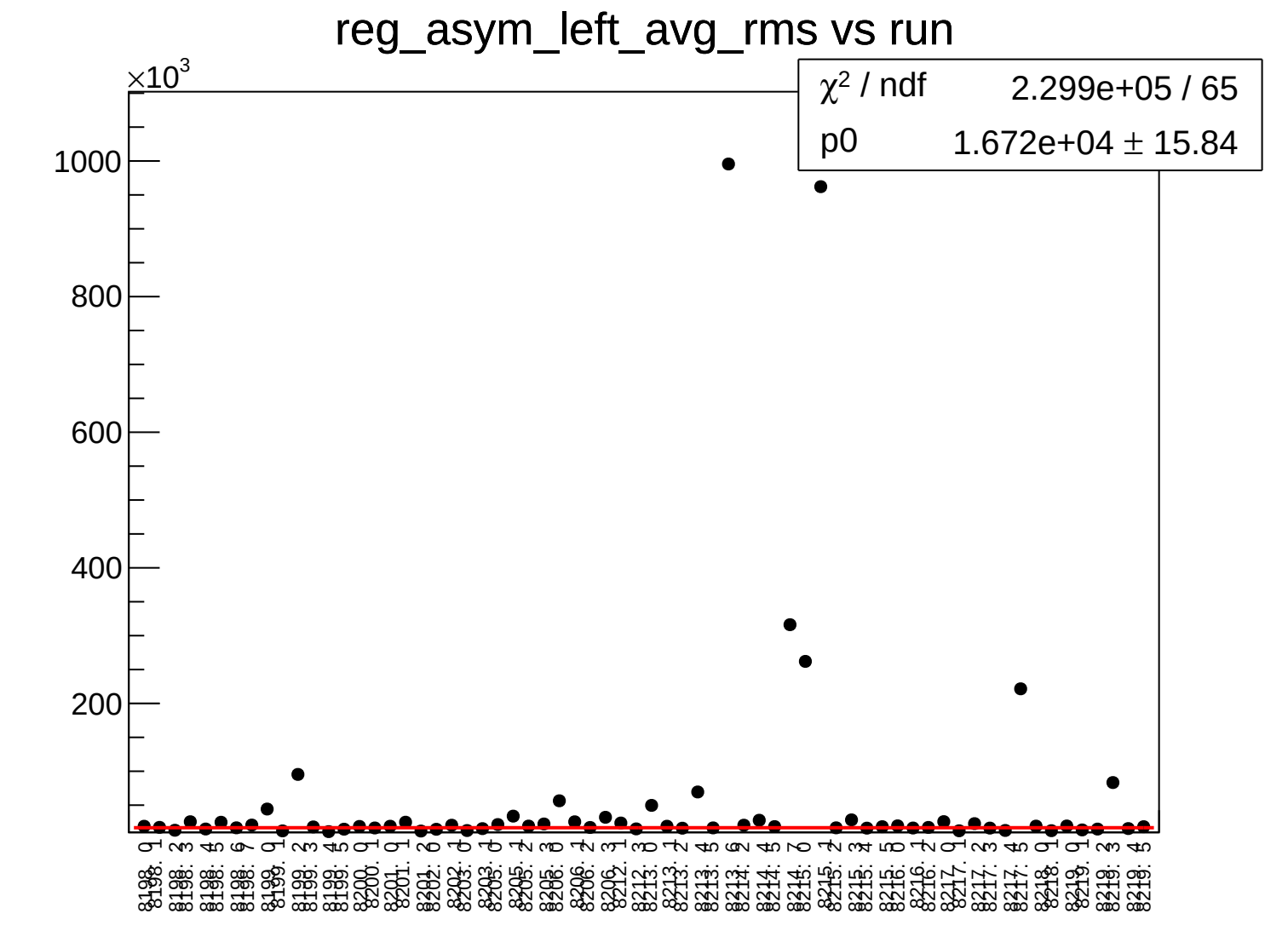

asym_dsr_mean vs run
×10^3
χ² / ndf 2.019 / 3
p0 1.175e+05 ± 3.33e+05
1500
1000
500
0
−500
−1000
8200. 1
8201. 2
8202. 0
8215. 0
pull
Entries 4
Mean 11.88
Std Dev 10
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

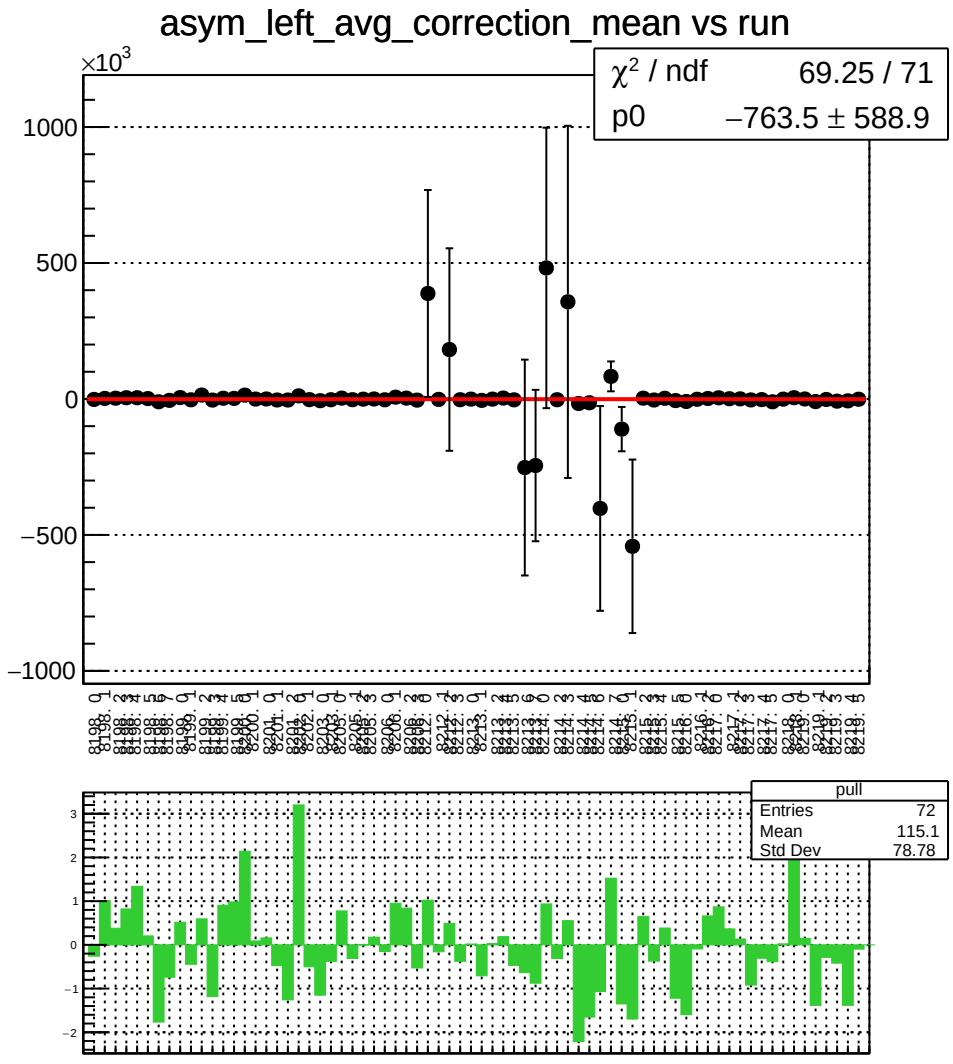

pull1D
Entries 4
Mean 0.06402
Std Dev 0.7076
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

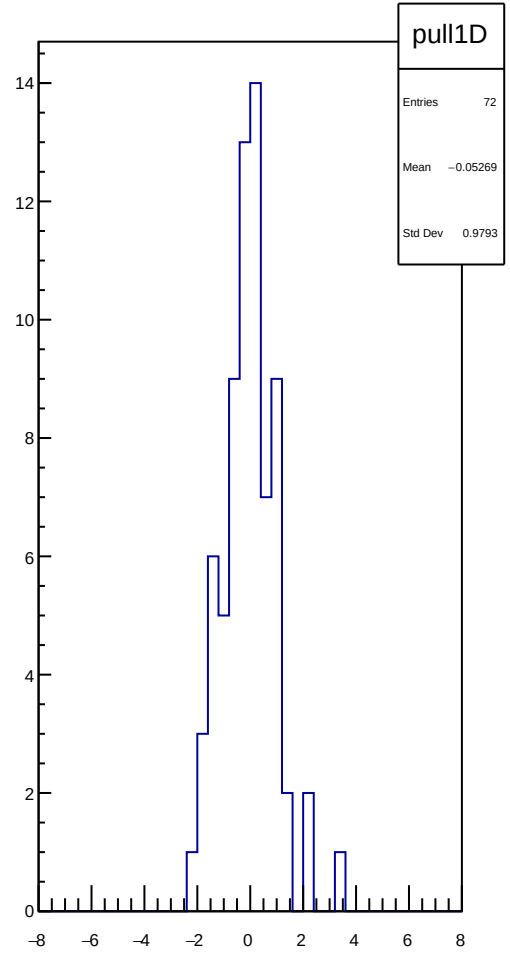

asym_dsr_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 1.166e+05 / 14
p0 9.24e+04 ± 205.6
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0

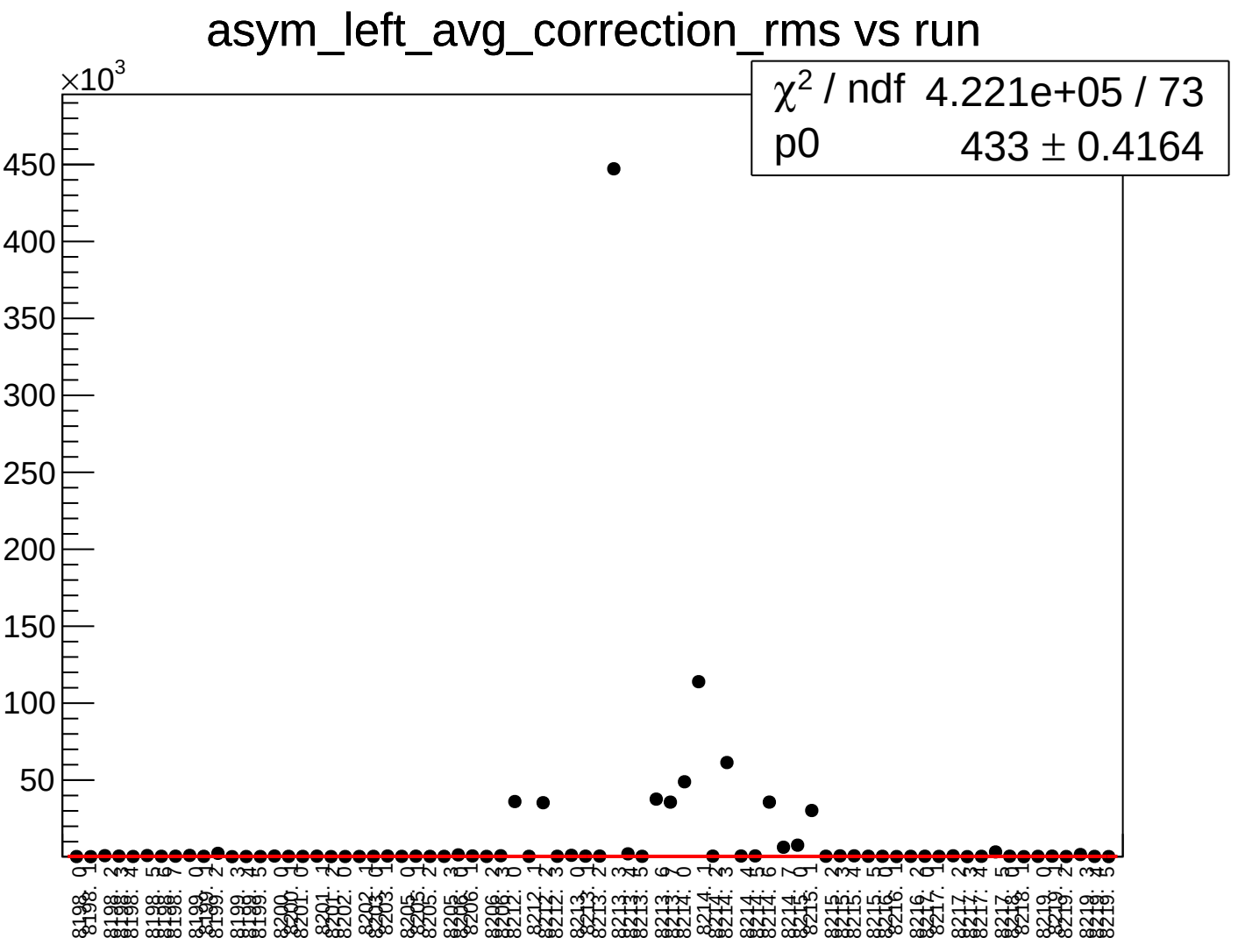

reg_asym_left_avg_mean vs run
×10^3
χ² / ndf 68.47 / 58
p0 2.258e+04 ± 2.242e+04
500
0
−500
−1000
−1500
pull
Entries 59
Mean 104.7
Std Dev 48.55
2
1
0
−1
−2

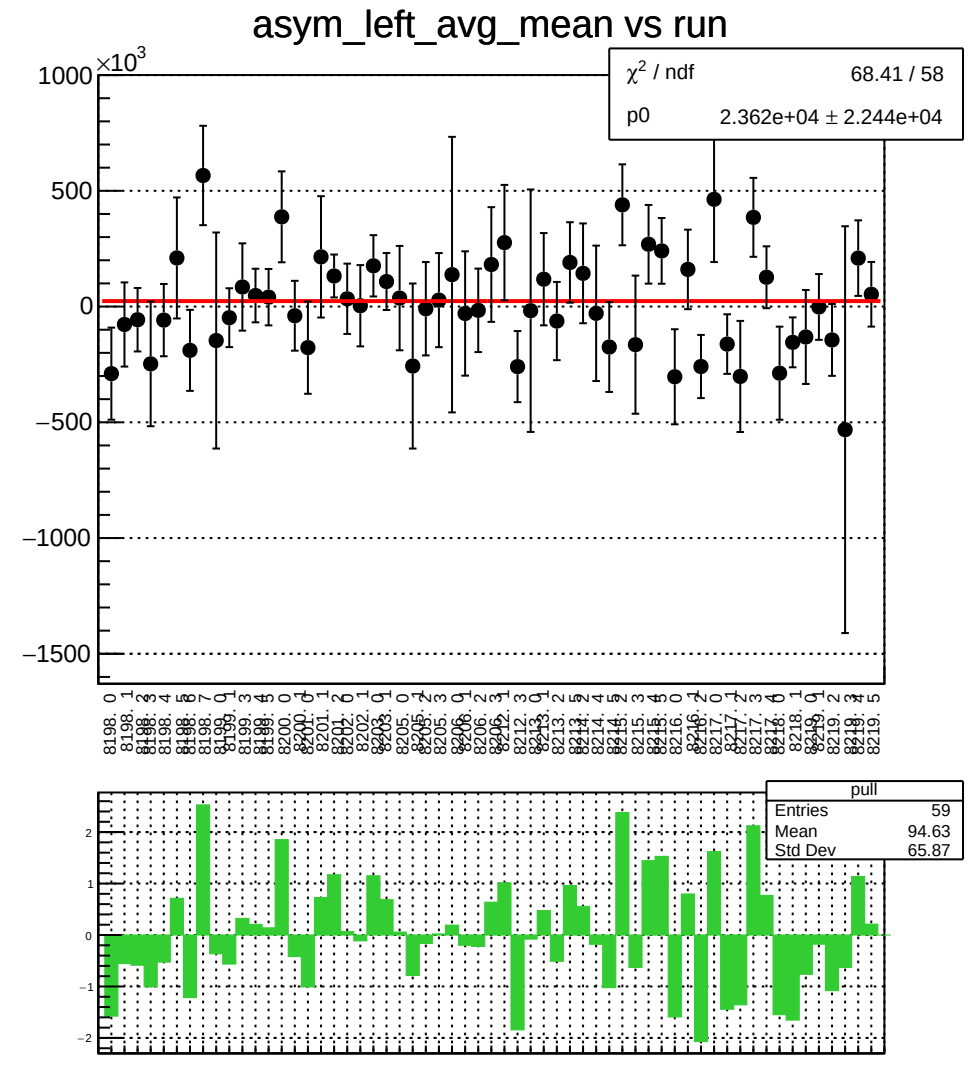

pull1D
Entries 59
Mean −0.00731
Std Dev 1.077
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

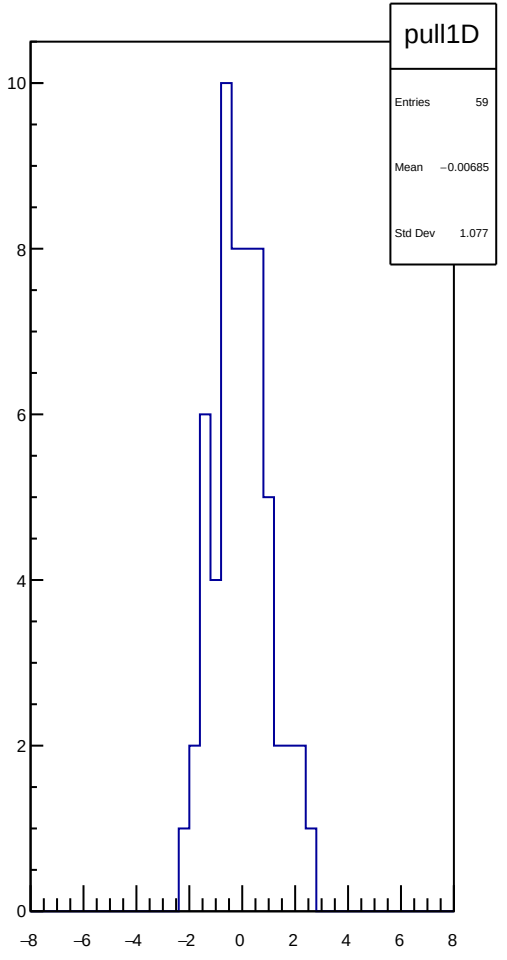

reg_asym_left_avg_rms vs run
×10^3
χ² / ndf 2.299e+05 / 65
p0 1.672e+04 ± 15.84
1000
800
600
400
200

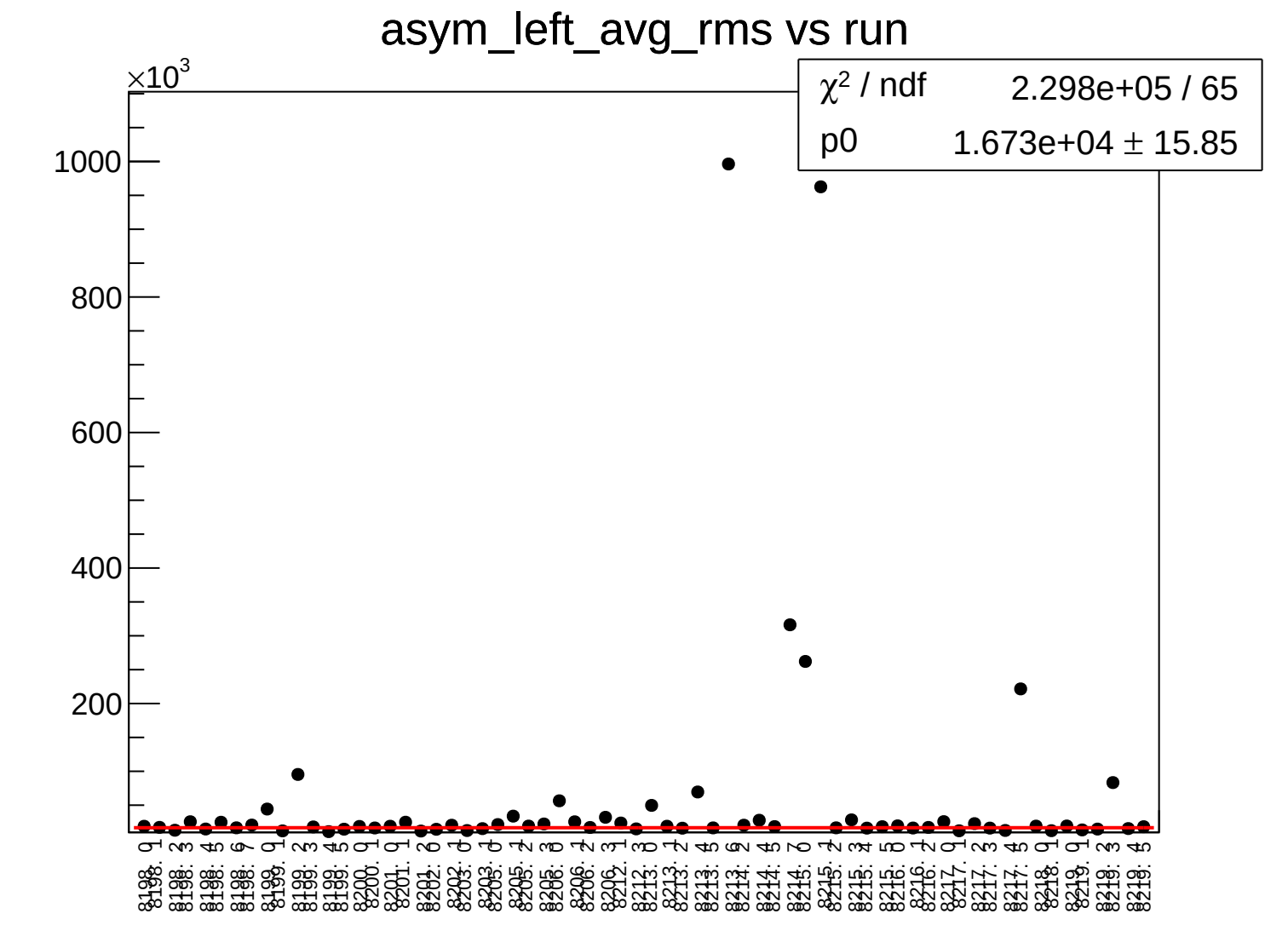

asym_left_avg_correction_mean vs run
×10^3
χ² / ndf 69.25 / 71
p0 −763.5 ± 588.9
1000
500
0
−500
−1000
pull
Entries 72
Mean 115.1
Std Dev 78.78
3
2
1
0
−1
−2

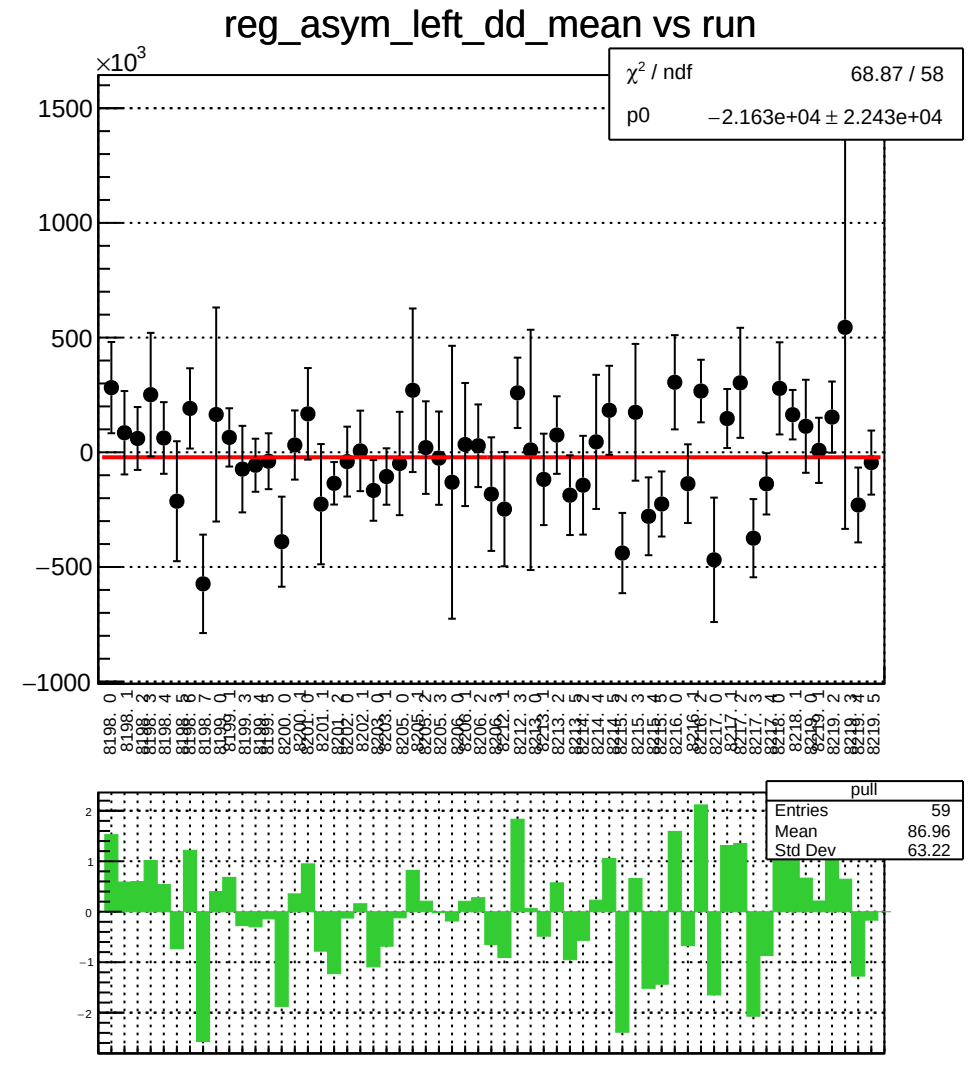

pull1D
Entries 72
Mean −0.05269
Std Dev 0.9793
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

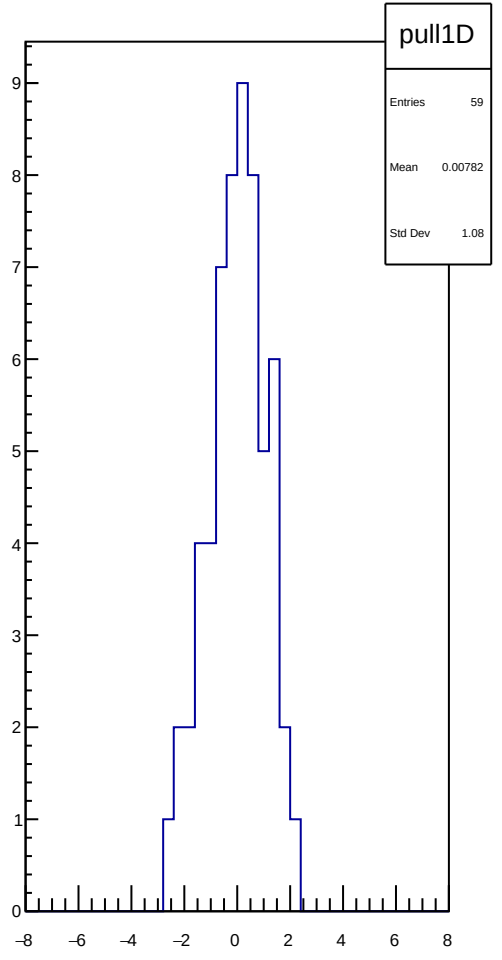

asym_left_avg_correction_rms vs run
×10^3
χ^2 / ndf 4.221e+05 / 73
p0 433 ± 0.4164
450
400
350
300
250
200
150
100
50

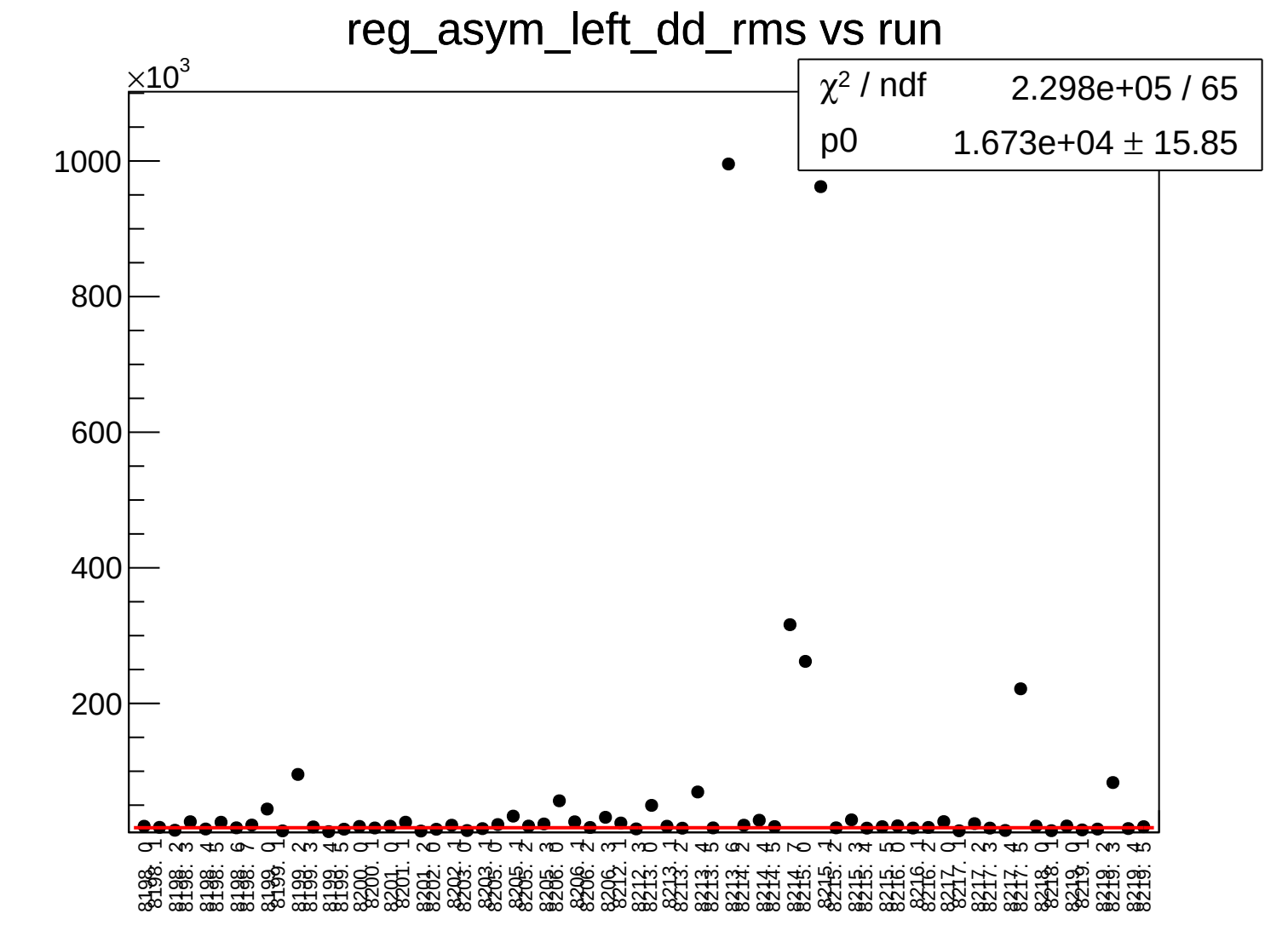

asym_left_avg_mean vs run
×10^3
1000
500
0
−500
−1000
−1500
χ² / ndf 68.41 / 58
p0 2.362e+04 ± 2.244e+04
pull
Entries 59
Mean 94.63
Std Dev 65.87
2
1
0
−1
−2

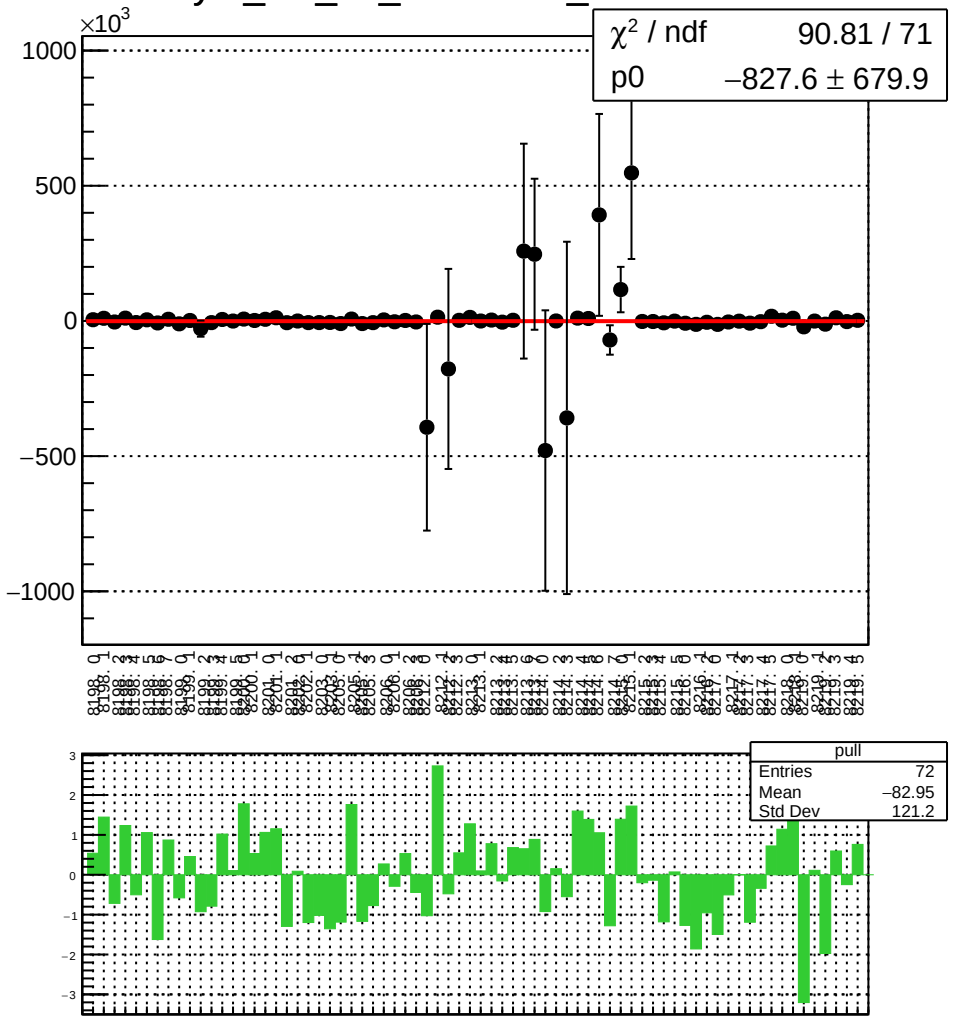

pull1D
Entries 59
Mean −0.00685
Std Dev 1.077
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

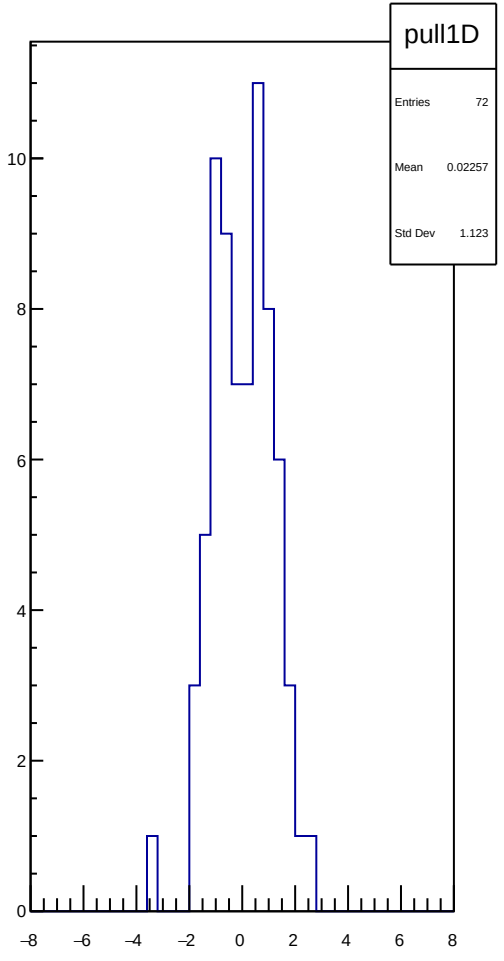

asym_left_avg_rms vs run
×10^3
χ^2 / ndf 2.298e+05 / 65
p0 1.673e+04 ± 15.85
1000
800
600
400
200

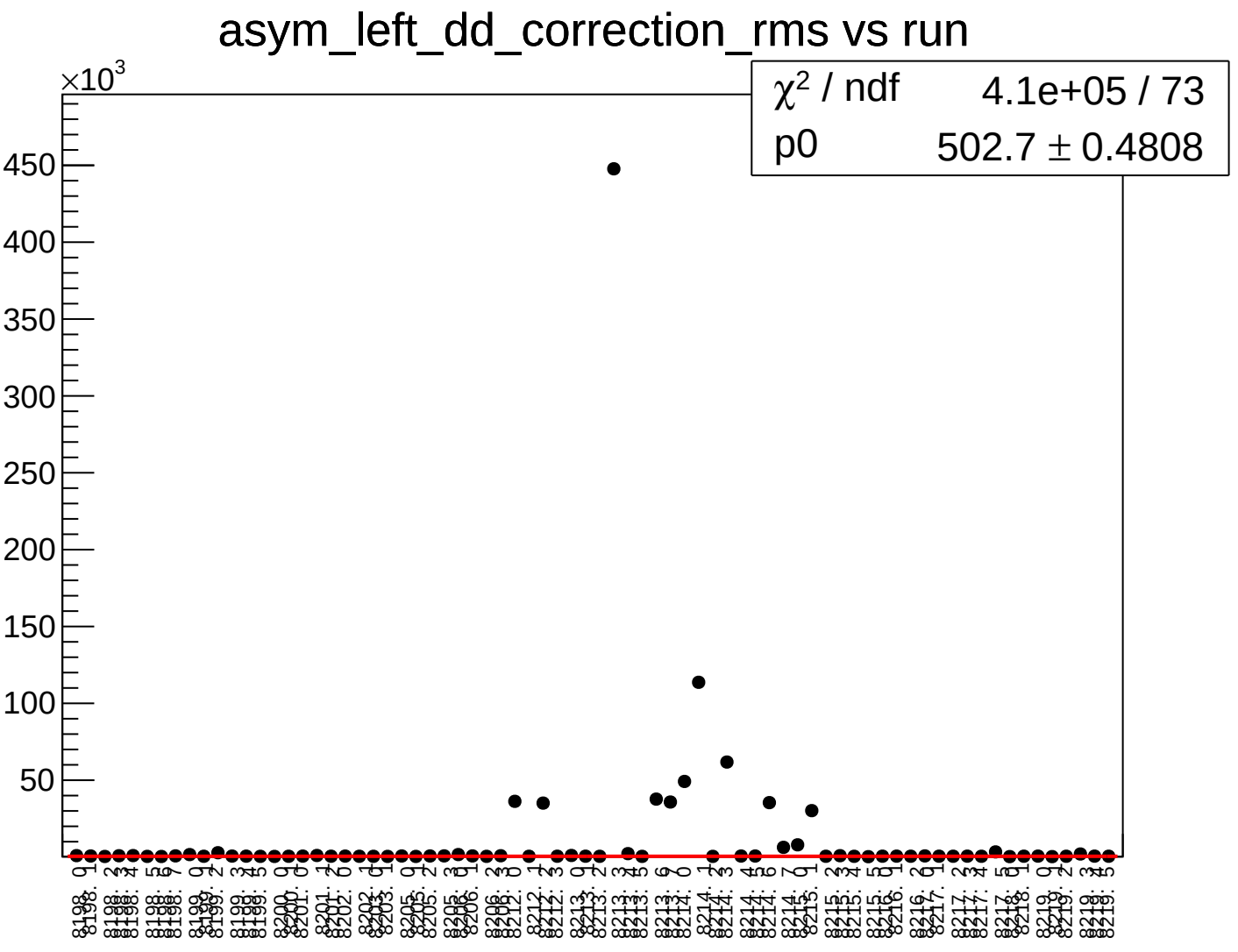

reg_asym_left_dd_mean vs run
×10^3
χ² / ndf 68.87 / 58
p0 −2.163e+04 ± 2.243e+04
1500
1000
500
0
−500
−1000
pull
Entries 59
Mean 86.96
Std Dev 63.22
2
1
0
−1
−2

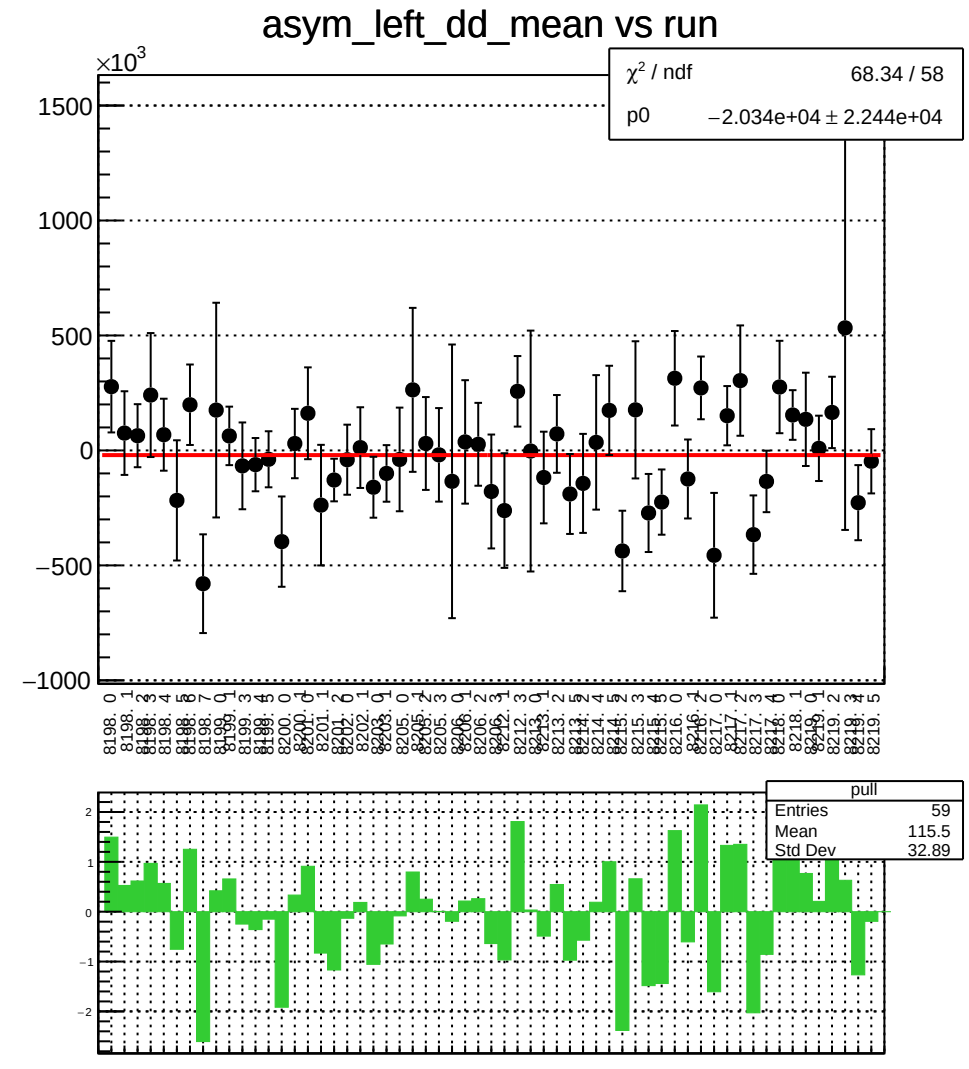

pull1D
Entries 59
Mean 0.00782
Std Dev 1.08
9
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

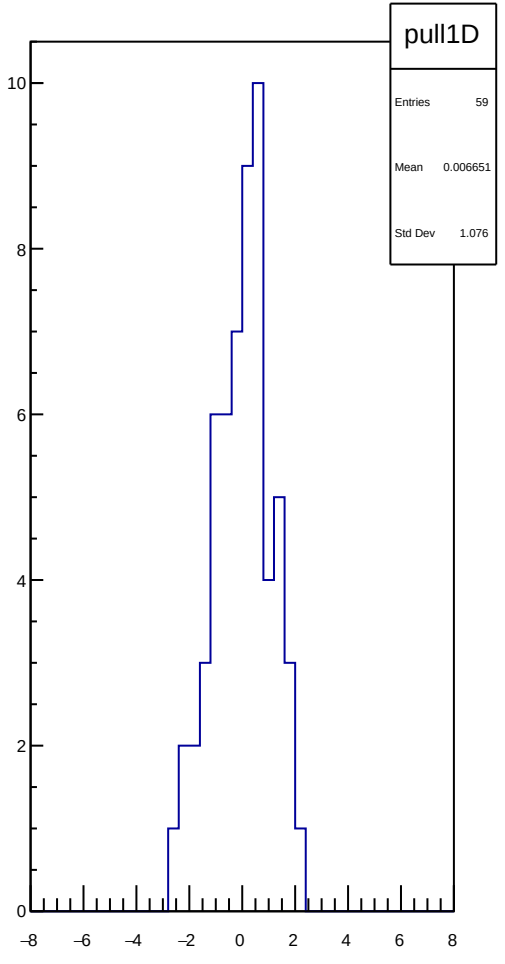

reg_asym_left_dd_rms vs run
×10^3
χ² / ndf 2.298e+05 / 65
p0 1.673e+04 ± 15.85
1000
800
600
400
200

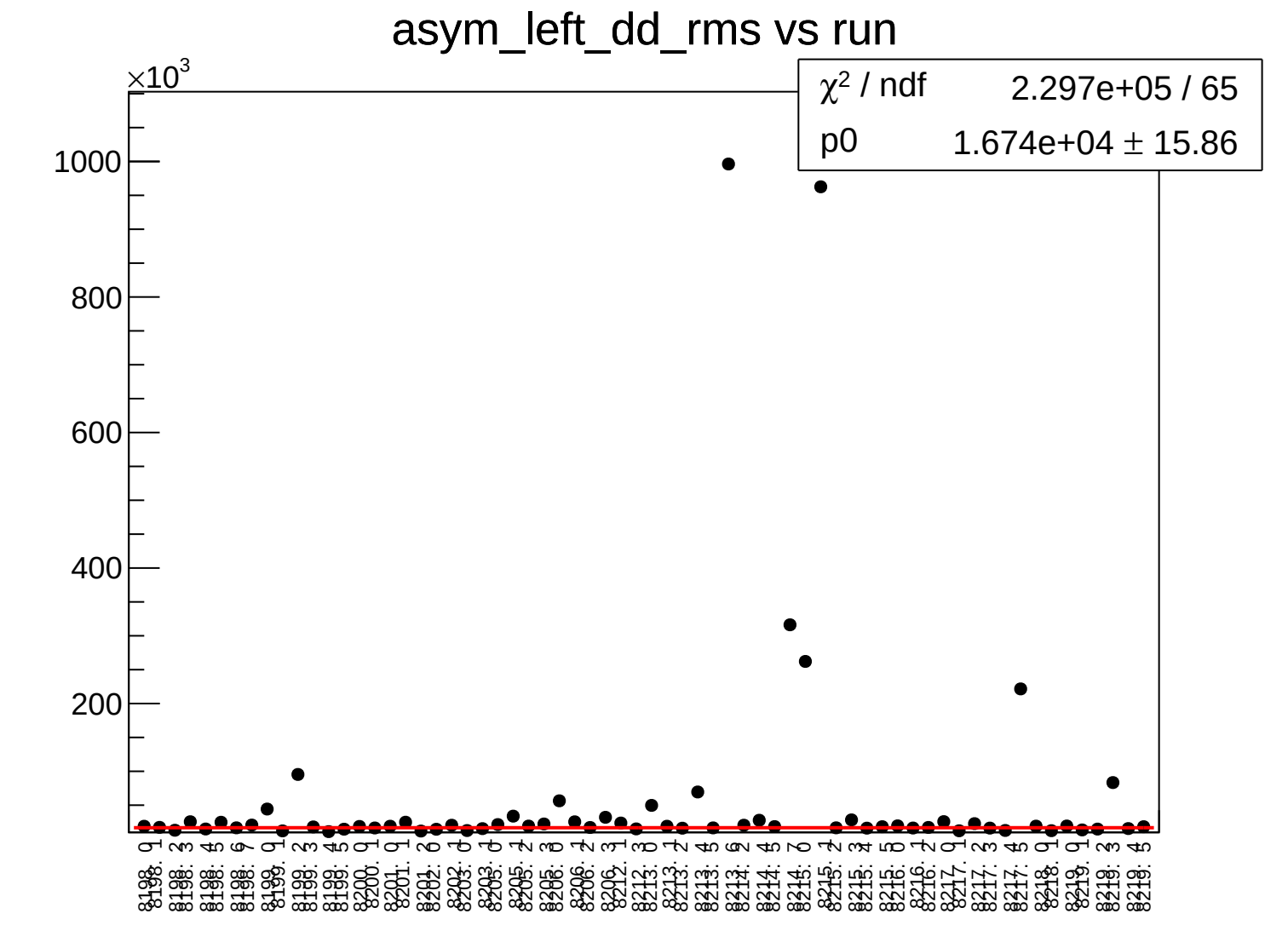

asym_left_dd_correction_mean vs run
×10^3
χ² / ndf 90.81 / 71
p0 −827.6 ± 679.9
1000
500
0
−500
−1000
pull
Entries 72
Mean −82.95
Std Dev 121.2
3
2
1
0
−1
−2
−3

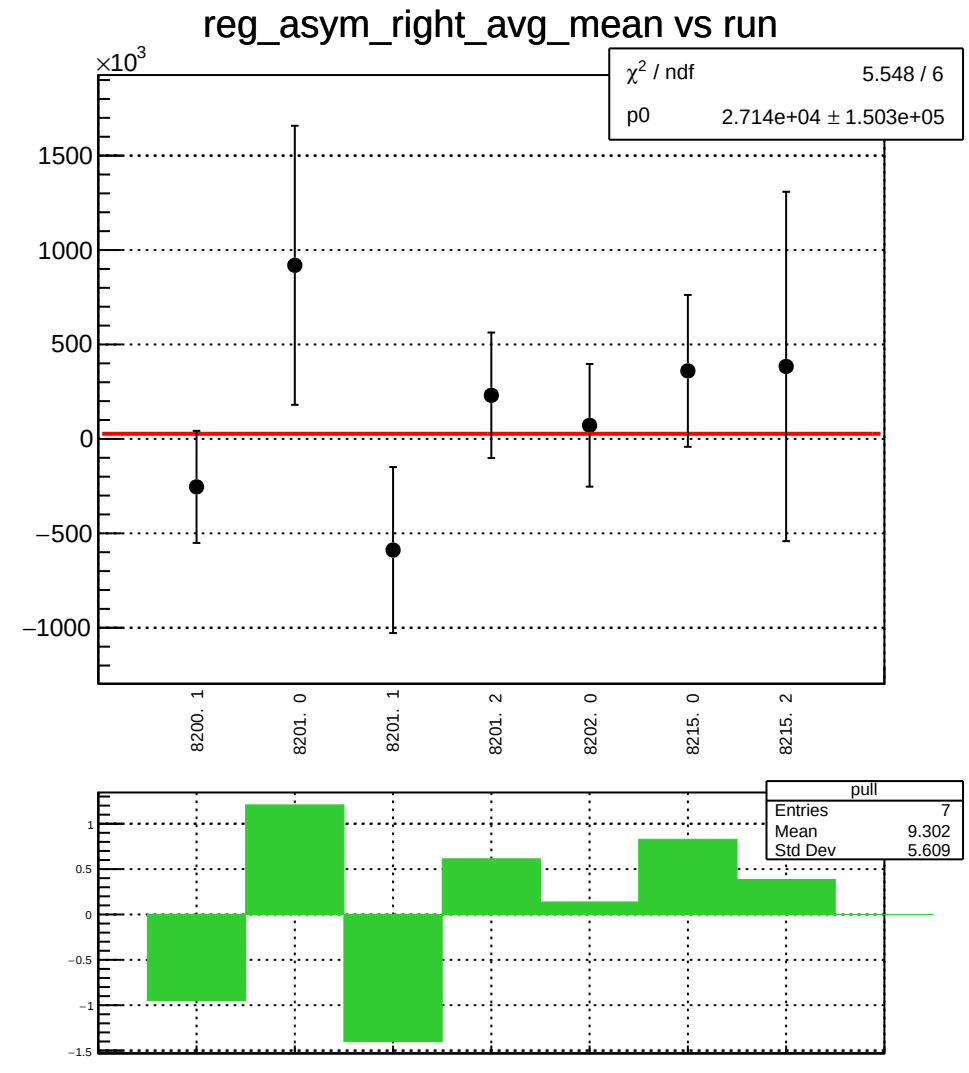

pull1D
Entries 72
Mean 0.02257
Std Dev 1.123
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

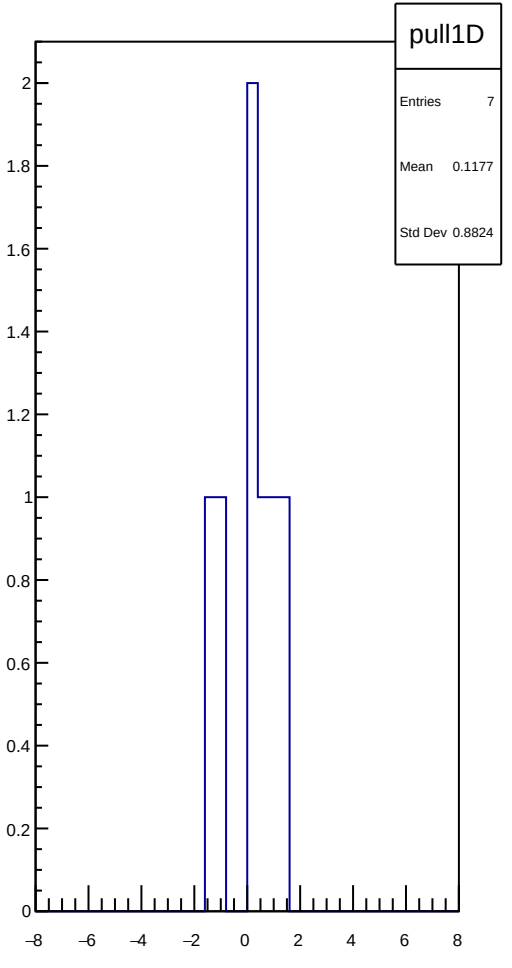

asym_left_dd_correction_rms vs run
×10^3
χ² / ndf 4.1e+05 / 73
p0 502.7 ± 0.4808
450
400
350
300
250
200
150
100
50

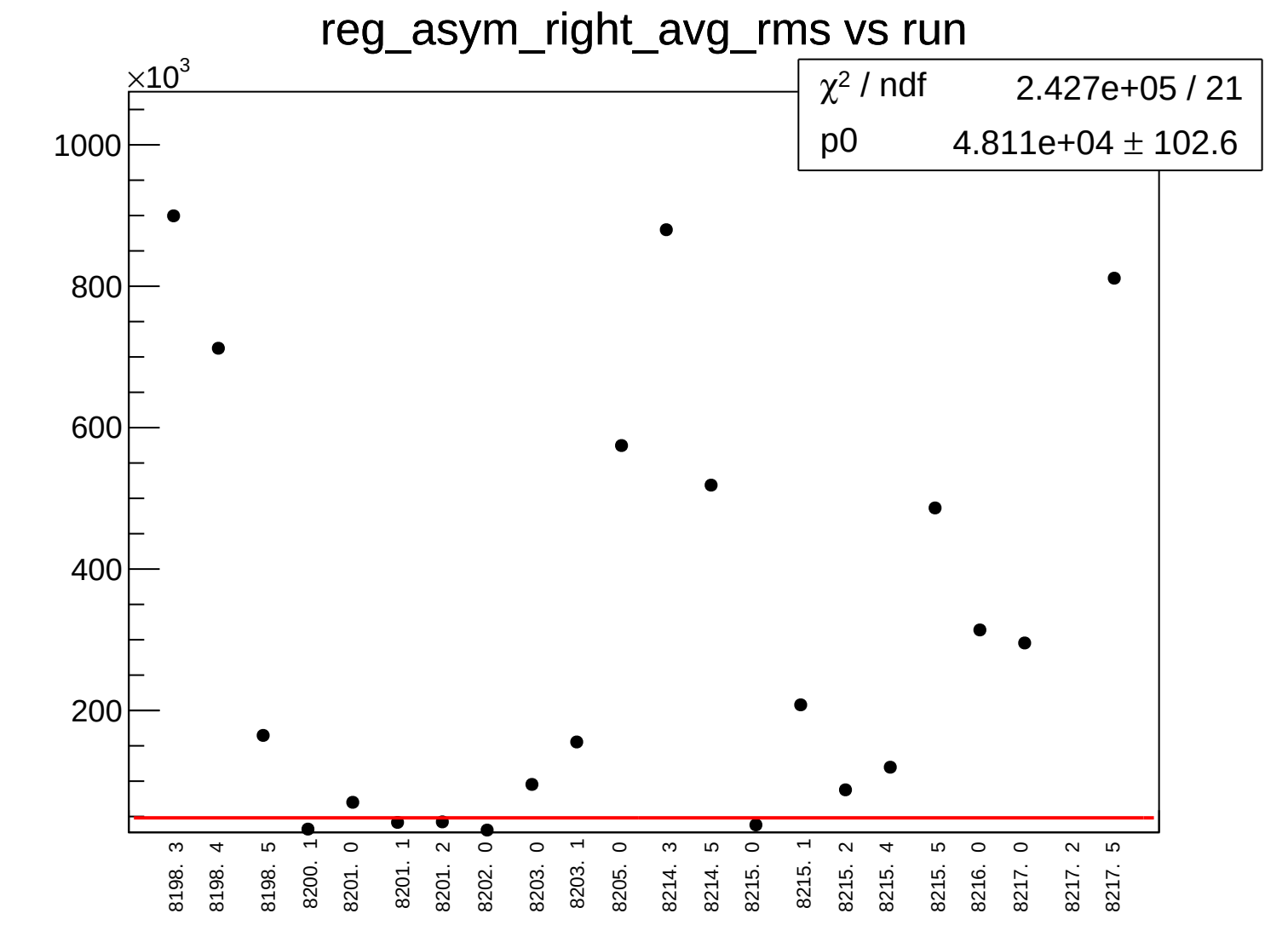

asym_left_dd_mean vs run
×10^3
χ² / ndf 68.34 / 58
p0 −2.034e+04 ± 2.244e+04
pull
Entries 59
Mean 115.5
Std Dev 32.89

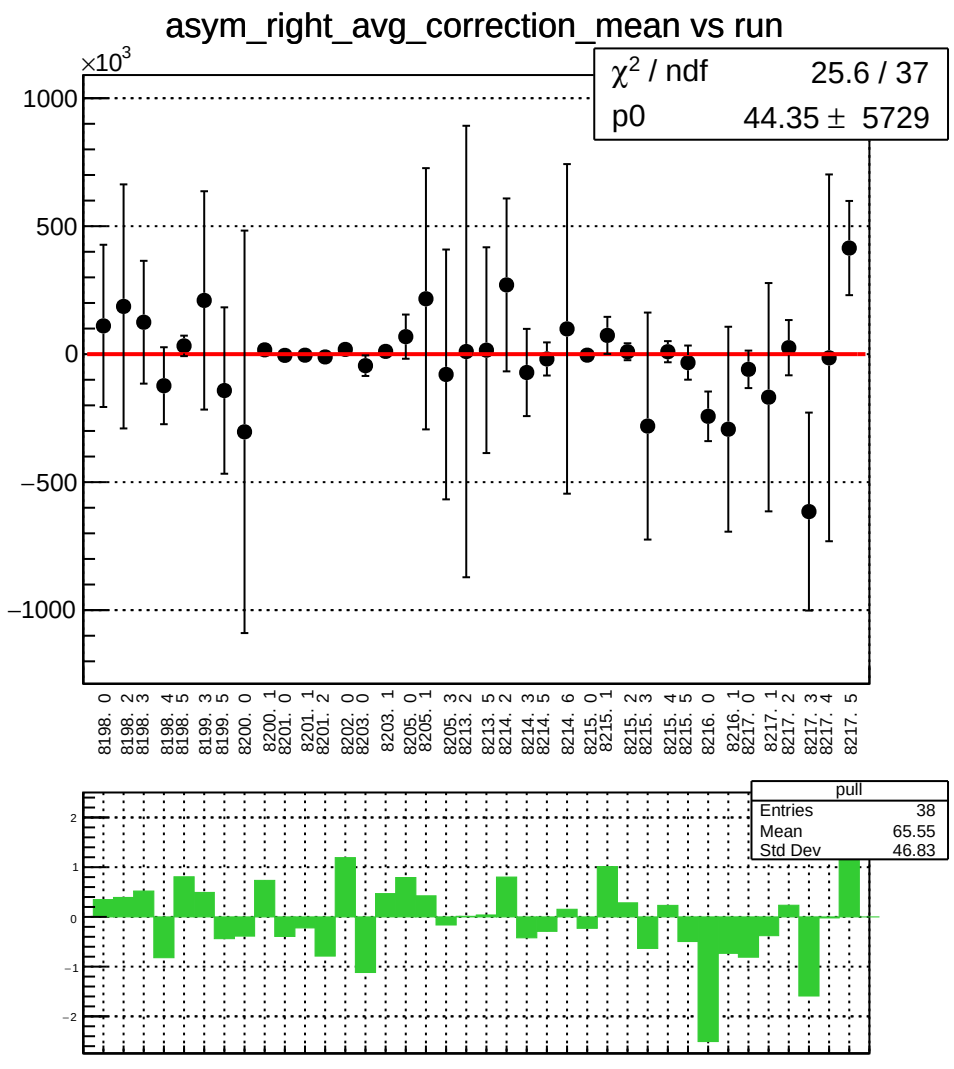

pull1D
Entries 59
Mean 0.006651
Std Dev 1.076

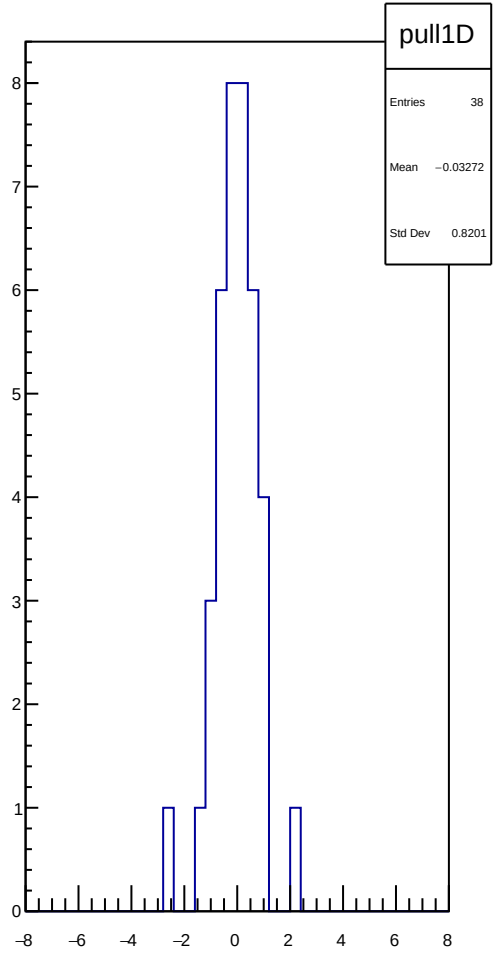

asym_left_dd_rms vs run
×10^3
χ² / ndf 2.297e+05 / 65
p0 1.674e+04 ± 15.86
1000
800
600
400
200

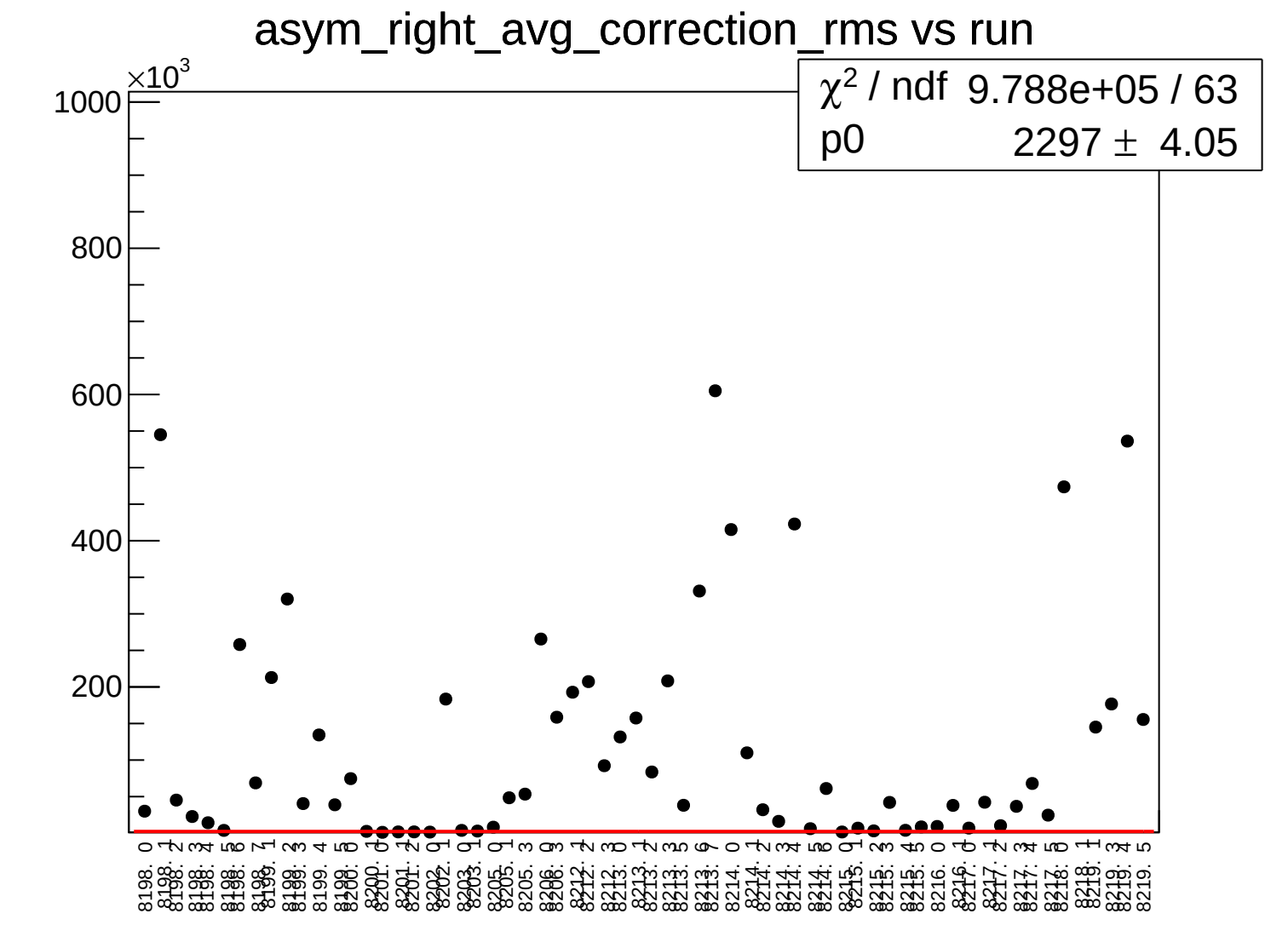

reg_asym_right_avg_mean vs run
×10^3
χ² / ndf 5.548 / 6
p0 2.714e+04 ± 1.503e+05
1500
1000
500
0
−500
−1000
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8215. 0
8215. 2
pull
Entries 7
Mean 9.302
Std Dev 5.609
1
0.5
0
−0.5
−1
−1.5

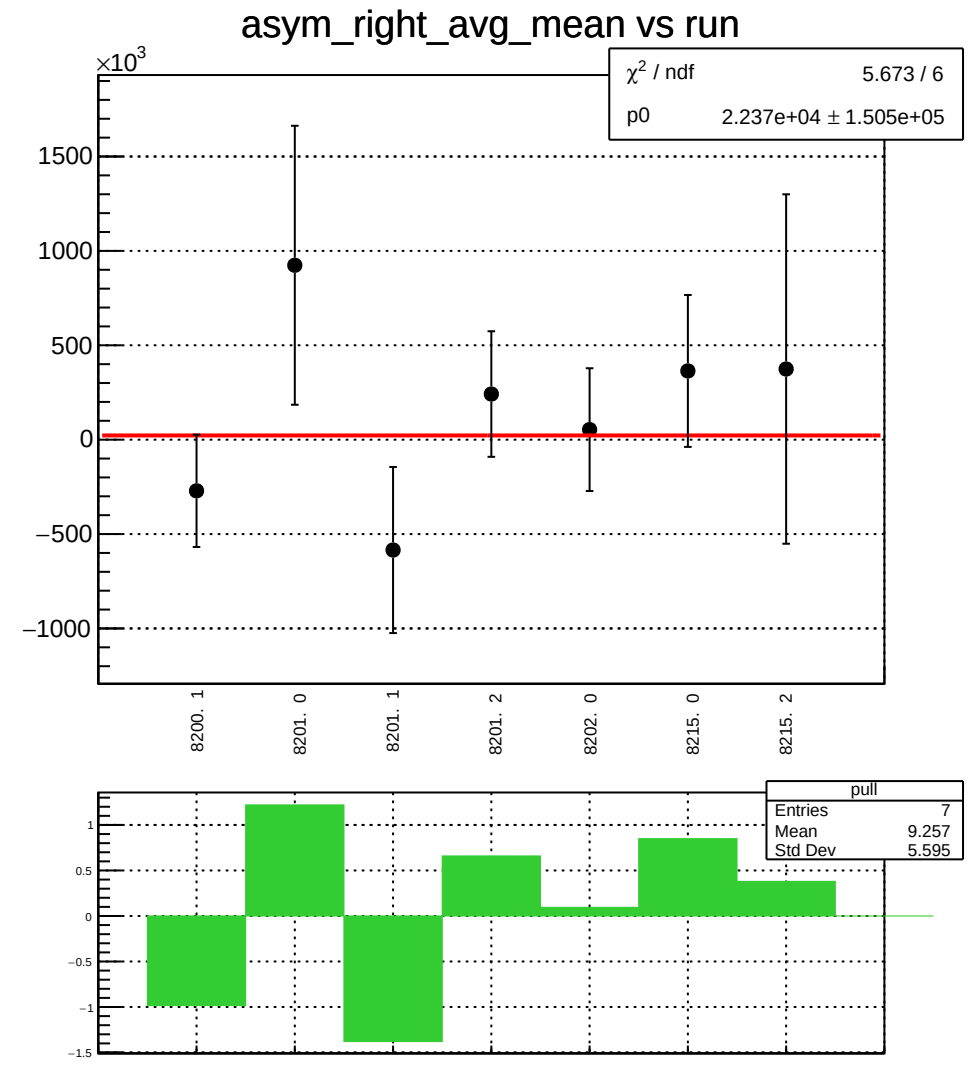

pull1D
Entries 7
Mean 0.1177
Std Dev 0.8824
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

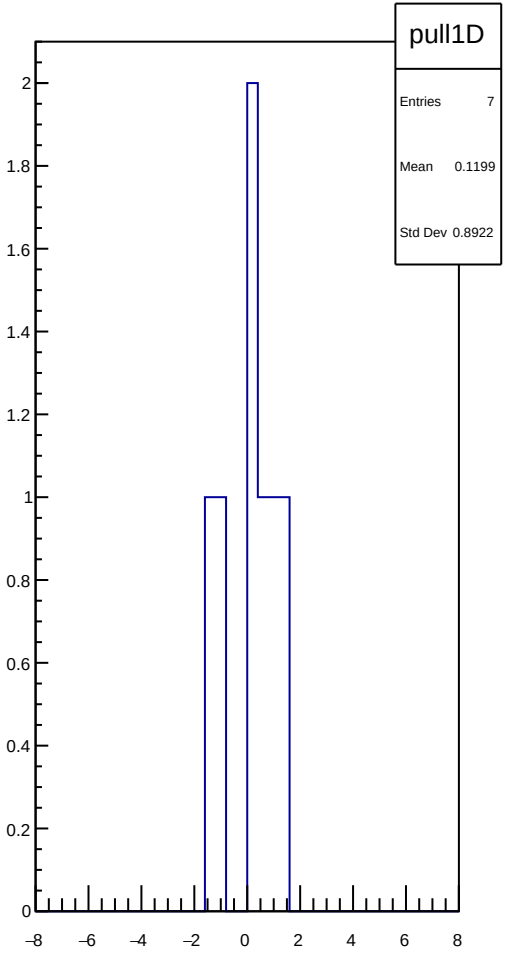

reg_asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.427e+05 / 21
p0 4.811e+04 ± 102.6
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 3
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5

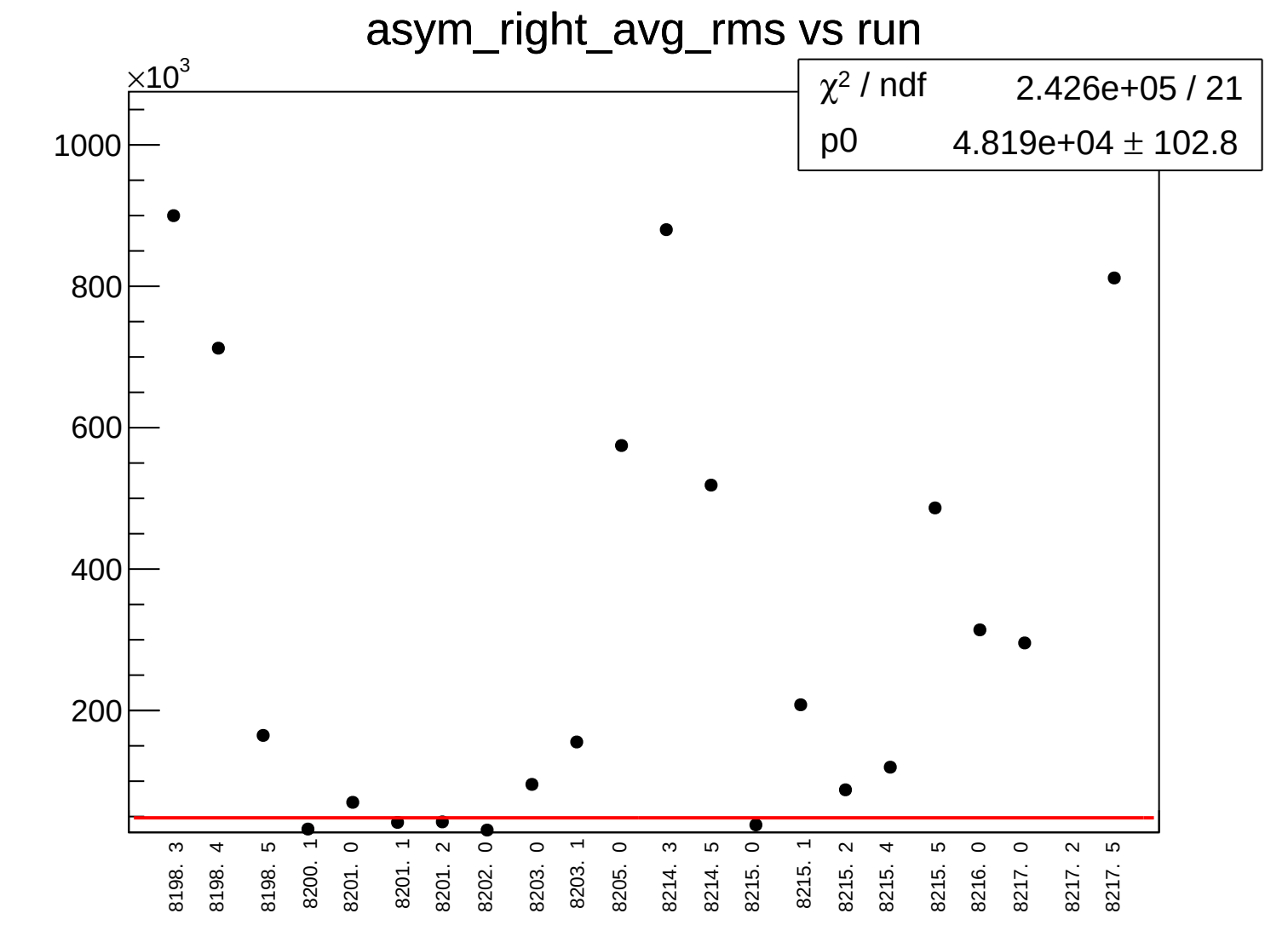

asym_right_avg_correction_mean vs run
×10^3
χ^2 / ndf 25.6 / 37
p0 44.35 ± 5729
1000
500
0
−500
−1000
8198. 0
8198. 2
8198. 3
8198. 4
8198. 5
8199. 3
8199. 5
8200. 0
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8205. 1
8205. 3
8213. 2
8213. 5
8214. 2
8214. 3
8214. 5
8214. 6
8215. 0
8215. 1
8215. 2
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8217. 0
8217. 1
8217. 2
8217. 3
8217. 4
8217. 5
pull
Entries 38
Mean 65.55
Std Dev 46.83
2
1
0
−1
−2

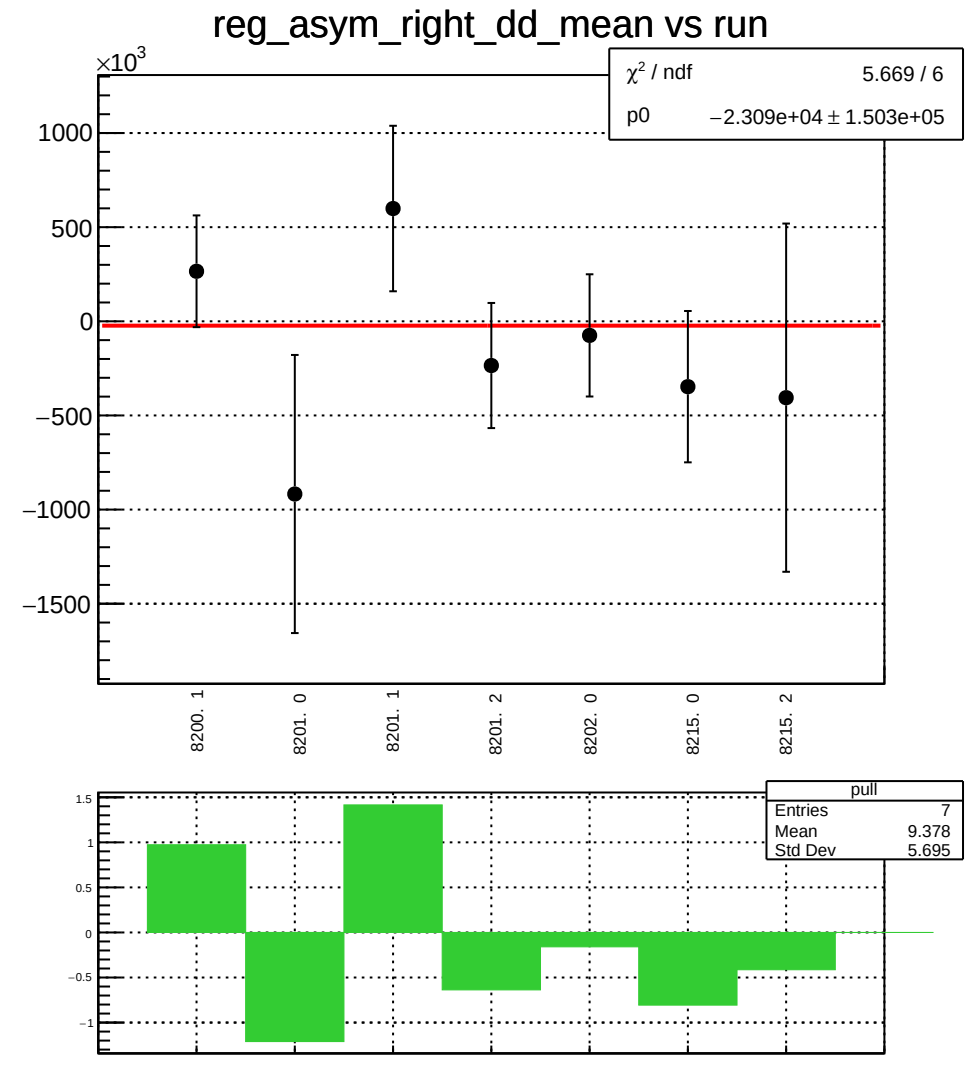

pull1D
Entries 38
Mean −0.03272
Std Dev 0.8201
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

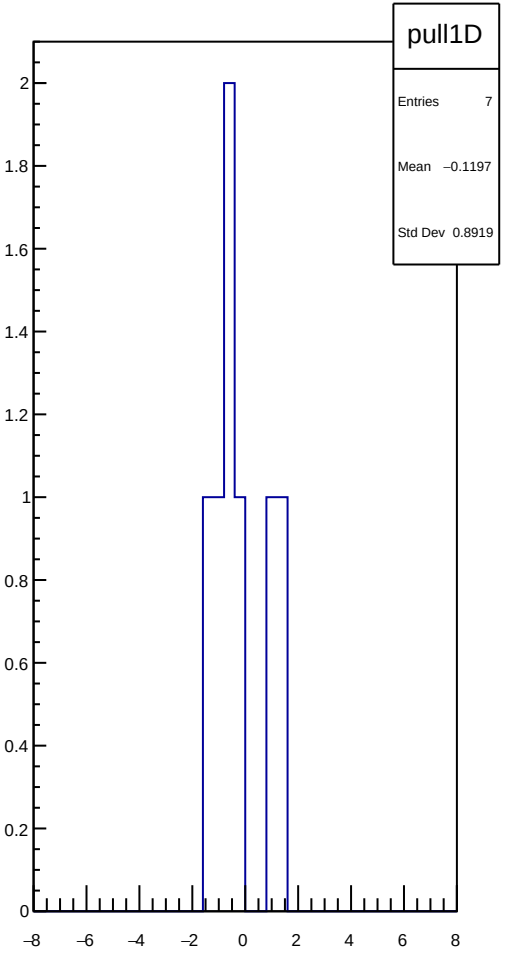

asym_right_avg_correction_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 9.788e+05 / 63
p0 2297 ± 4.05

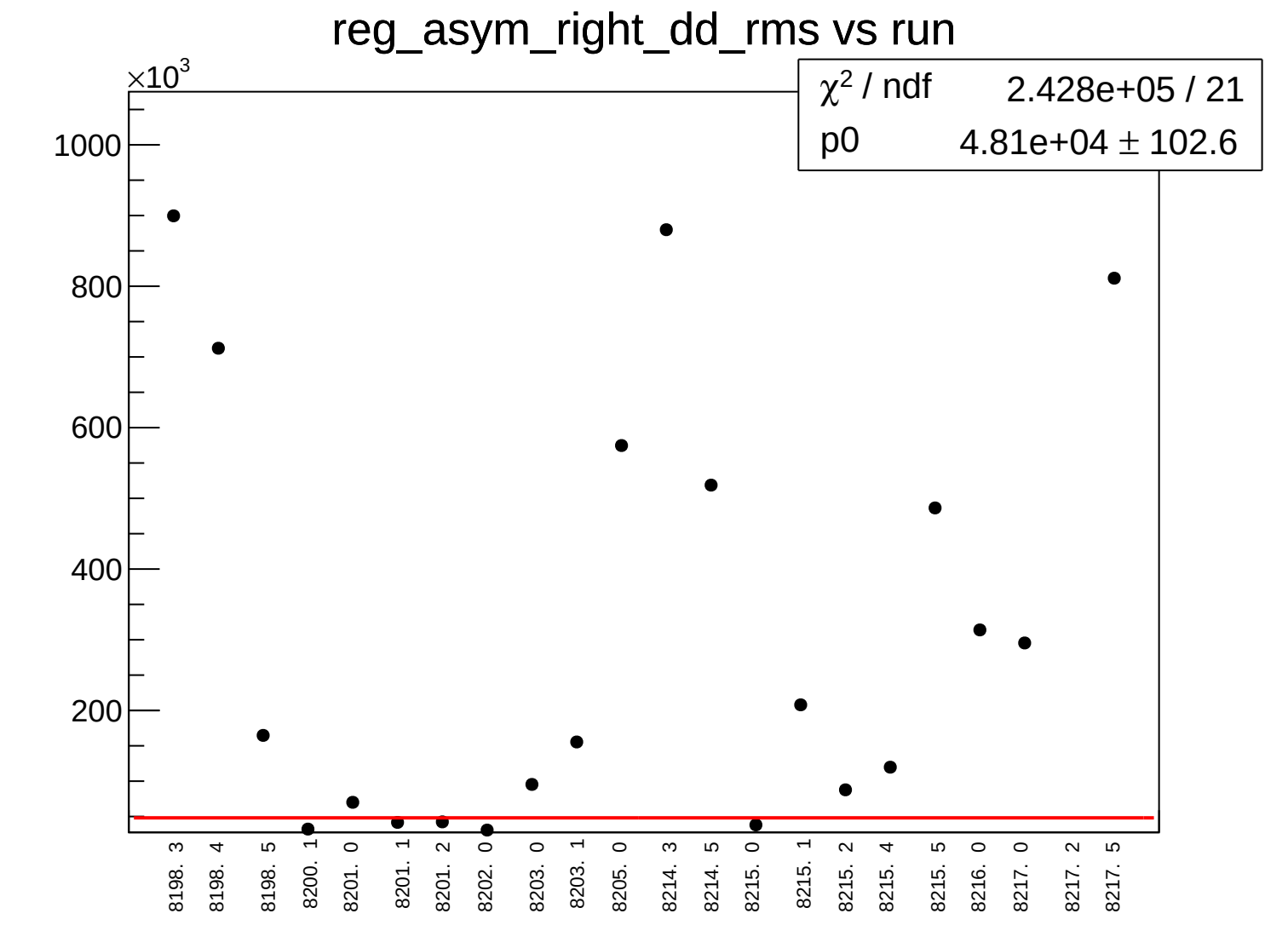

asym_right_avg_mean vs run
×10^3
χ² / ndf 5.673 / 6
p0 2.237e+04 ± 1.505e+05
1500
1000
500
0
−500
−1000
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8215. 0
8215. 2
pull
Entries 7
Mean 9.257
Std Dev 5.595
1
0.5
0
−0.5
−1
−1.5

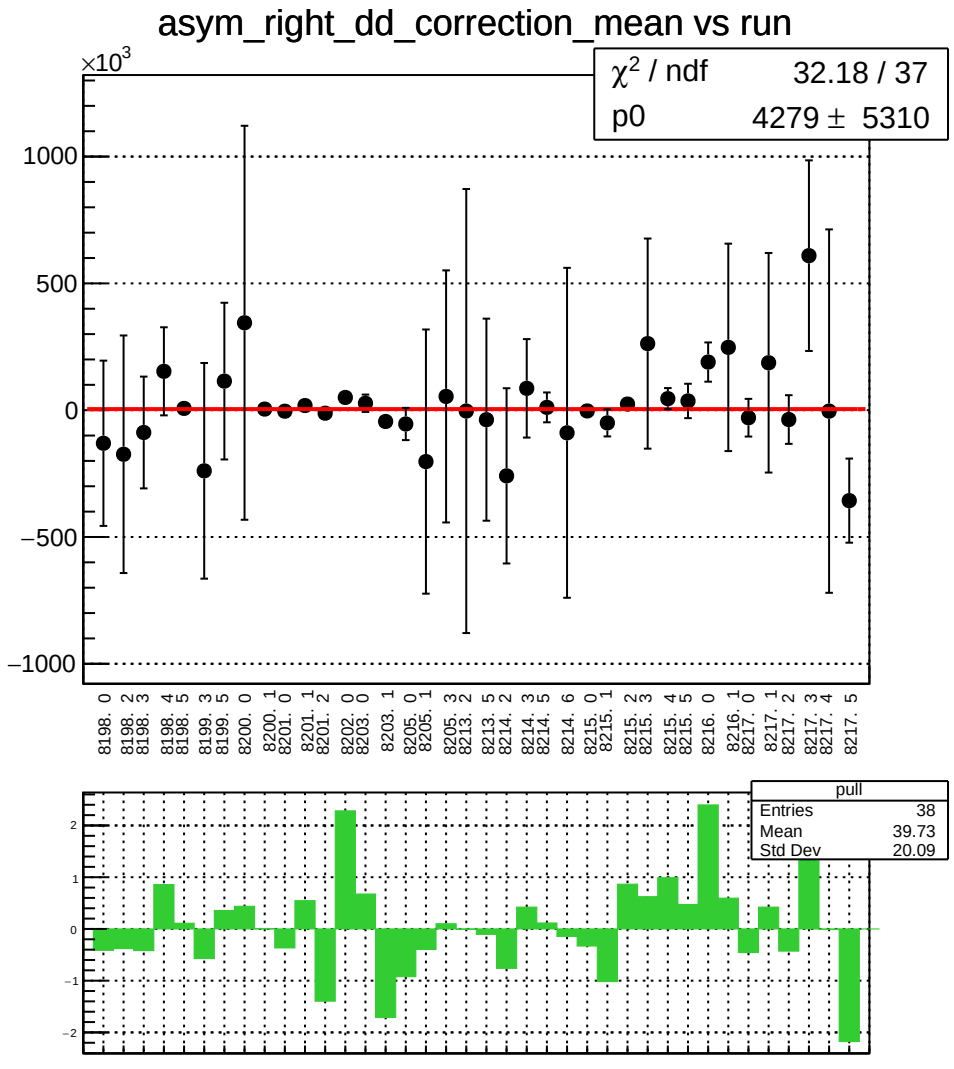

pull1D
Entries 7
Mean 0.1199
Std Dev 0.8922
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

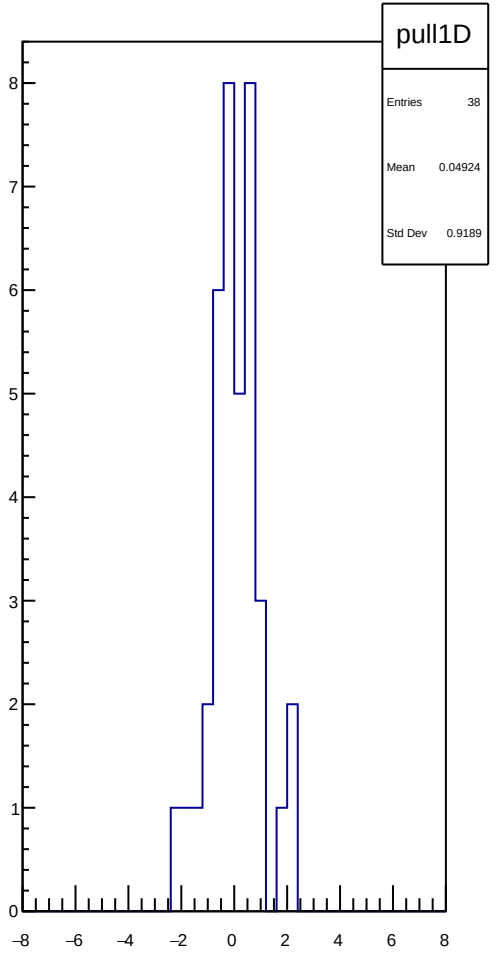

asym_right_avg_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.426e+05 / 21
p0 4.819e+04 ± 102.8
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 3
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5

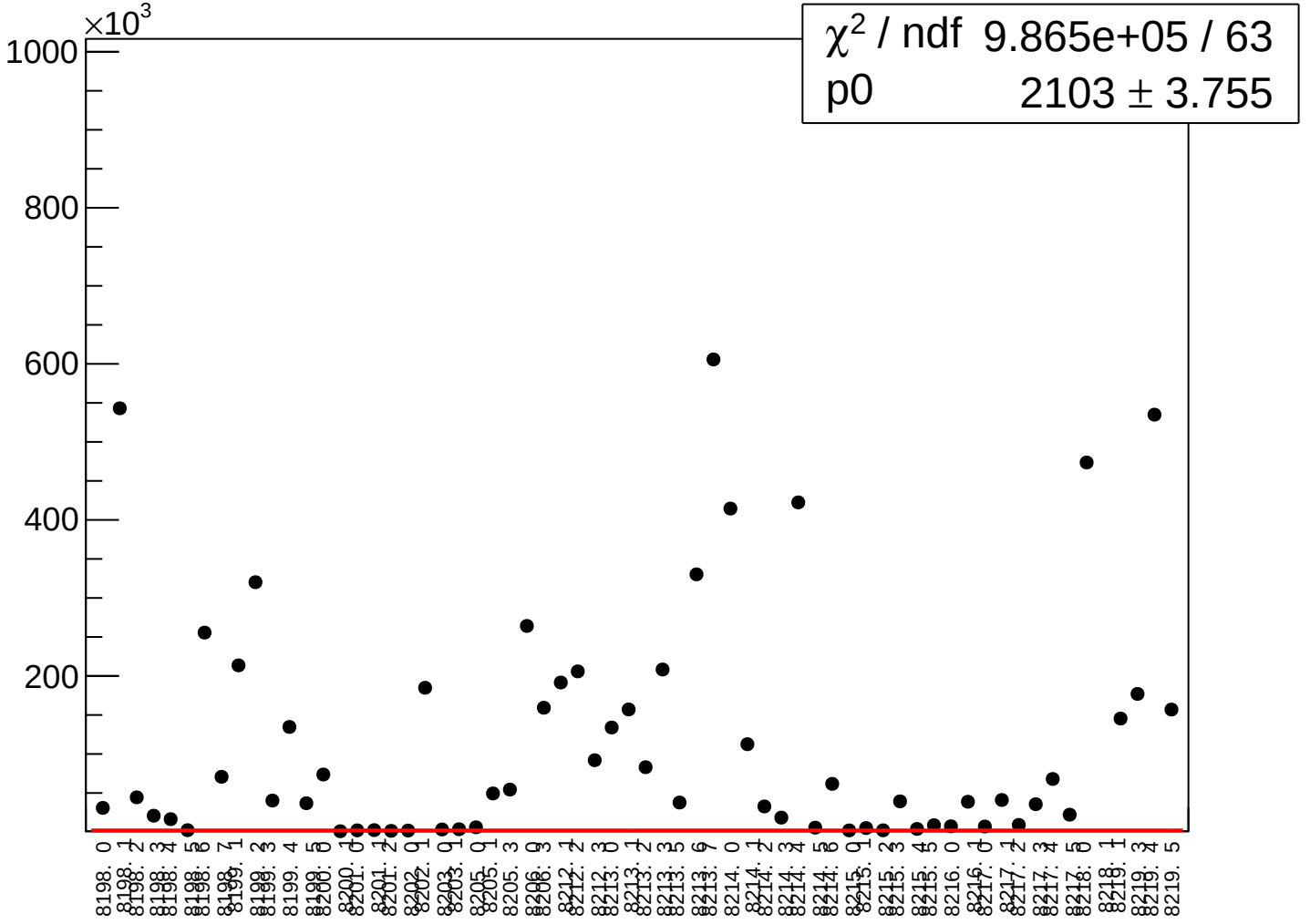

reg_asym_right_dd_mean vs run
×10^3
χ² / ndf 5.669 / 6
p0 −2.309e+04 ± 1.503e+05
1000
500
0
−500
−1000
−1500
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8215. 0
8215. 2
pull
Entries 7
Mean 9.378
Std Dev 5.695
1.5
1
0.5
0
−0.5
−1

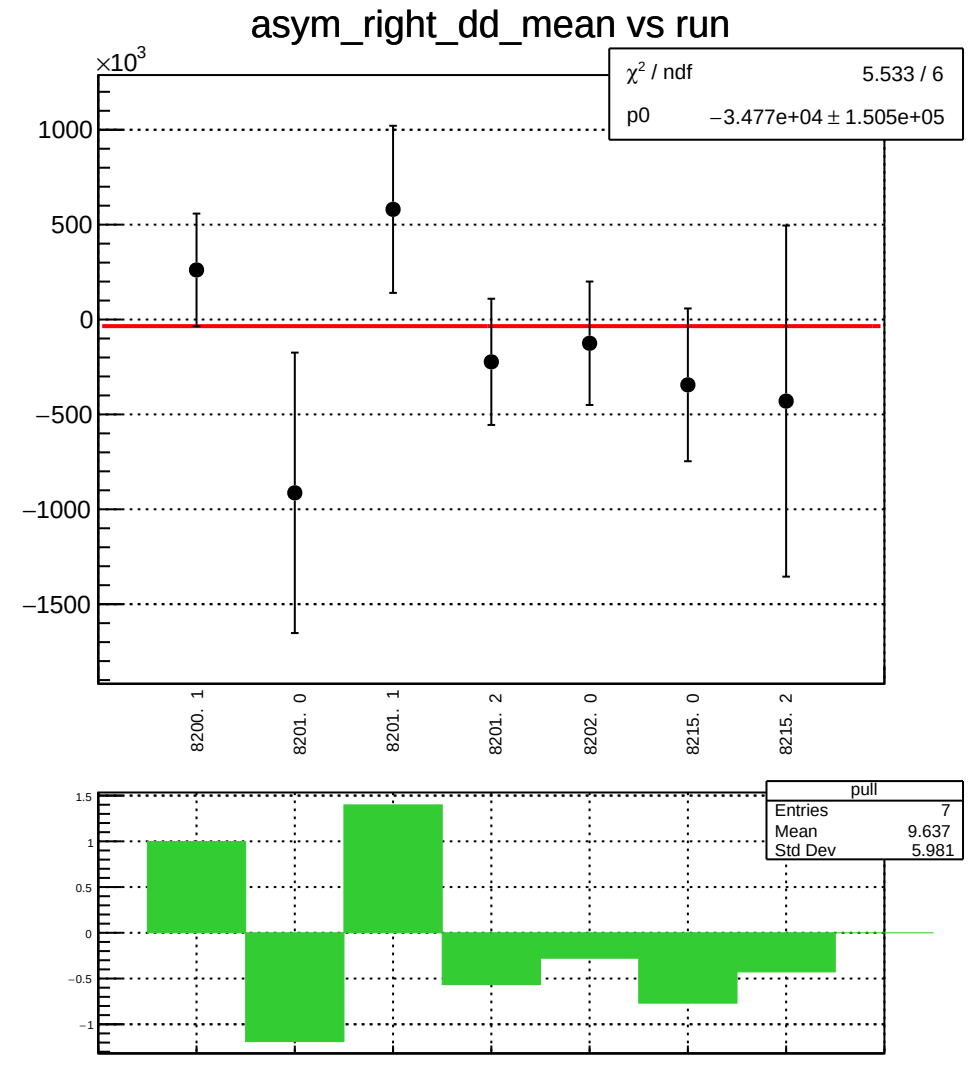

pull1D
Entries 7
Mean −0.1197
Std Dev 0.8919
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

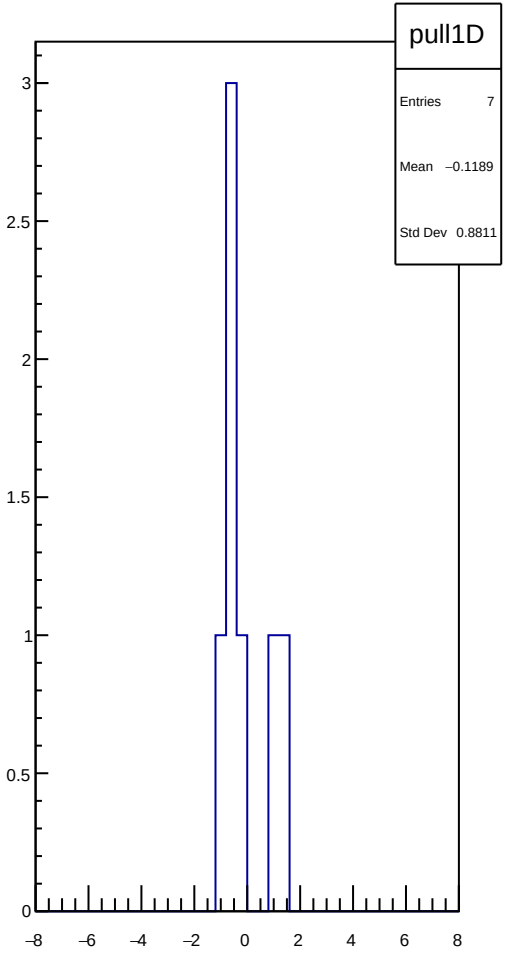

reg_asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.428e+05 / 21
p0 4.81e+04 ± 102.6
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 3
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5

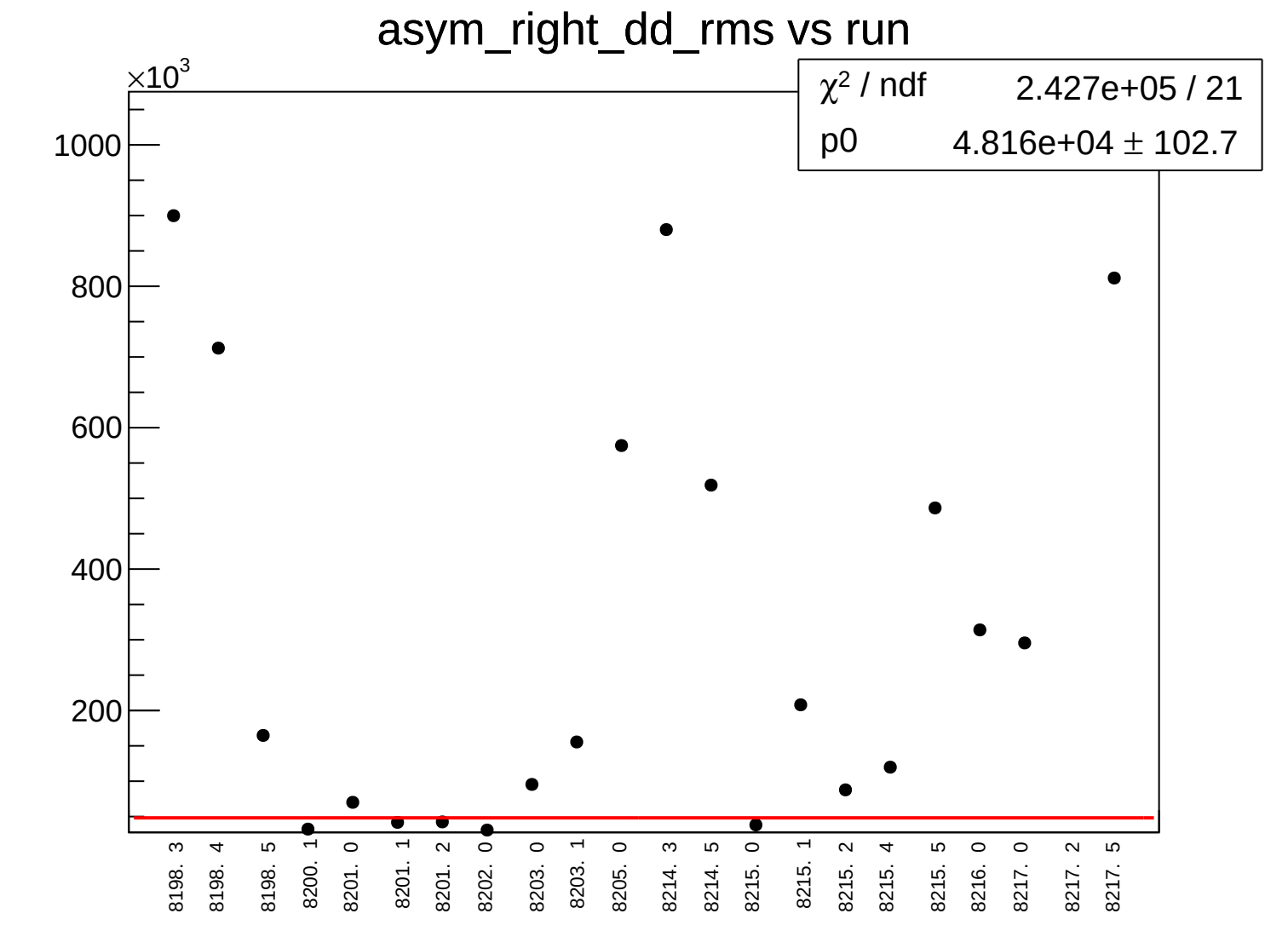

asym_right_dd_correction_mean vs run
χ² / ndf 32.18 / 37
p0 4279 ± 5310
×10³
1000
500
0
−500
−1000
8198. 0
8198. 2
8198. 3
8198. 4
8198. 5
8199. 3
8199. 5
8200. 0
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8205. 1
8205. 3
8213. 2
8213. 5
8214. 2
8214. 3
8214. 5
8214. 6
8215. 0
8215. 1
8215. 2
8215. 3
8215. 4
8215. 5
8216. 0
8216. 1
8217. 0
8217. 1
8217. 2
8217. 3
8217. 4
8217. 5
pull
Entries 38
Mean 39.73
Std Dev 20.09
2
1
0
−1
−2

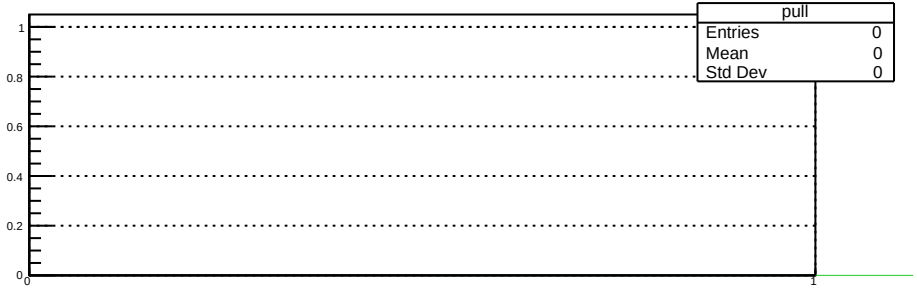

pull1D
Entries 38
Mean 0.04924
Std Dev 0.9189
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

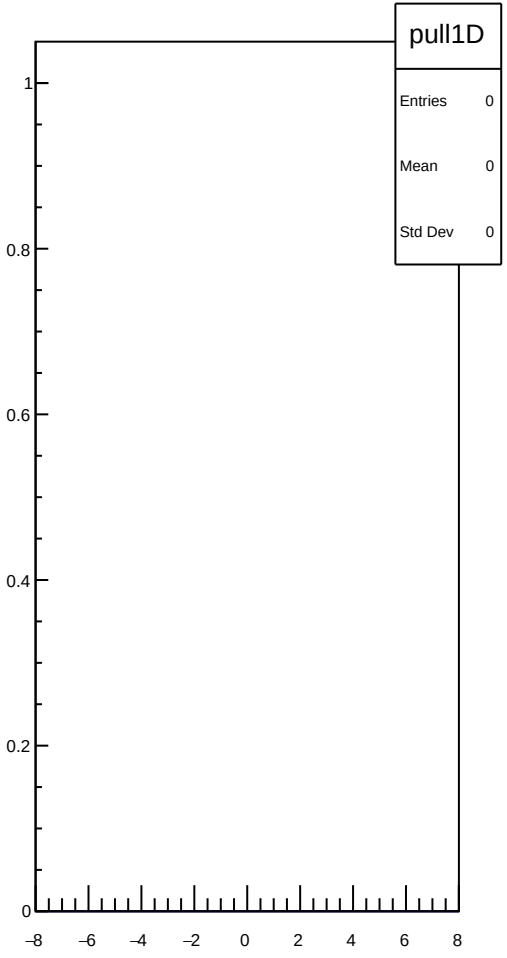

asym_right_dd_correction_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 9.865e+05 / 63
p0 2103 ± 3.755

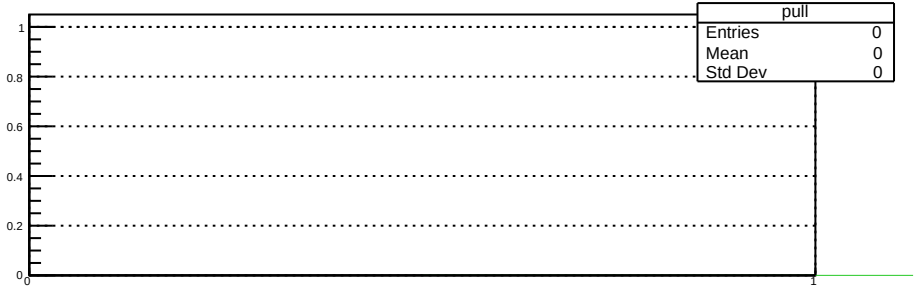

asym_right_dd_mean vs run
×10^3
χ² / ndf 5.533 / 6
p0 −3.477e+04 ± 1.505e+05
1000
500
0
−500
−1000
−1500
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8215. 0
8215. 2
pull
Entries 7
Mean 9.637
Std Dev 5.981
1.5
1
0.5
0
−0.5
−1

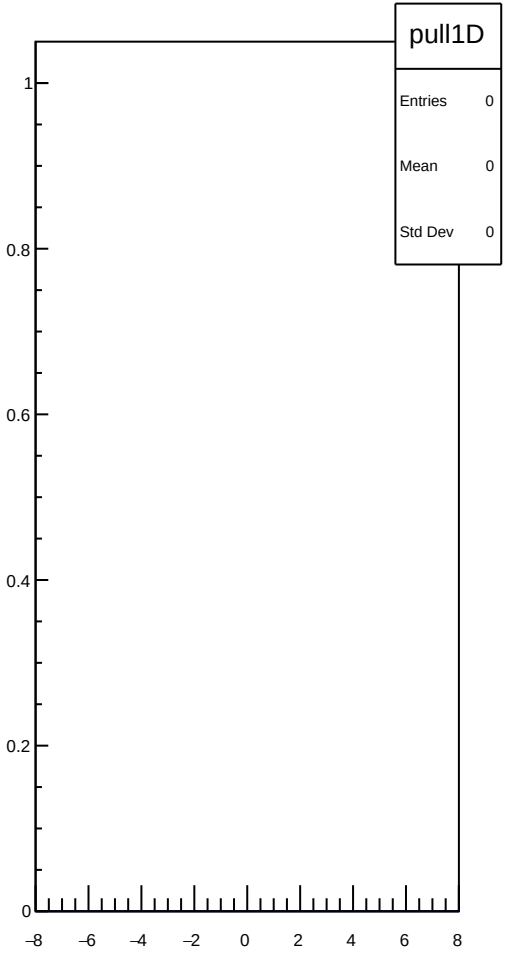

pull1D
Entries 7
Mean −0.1189
Std Dev 0.8811
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

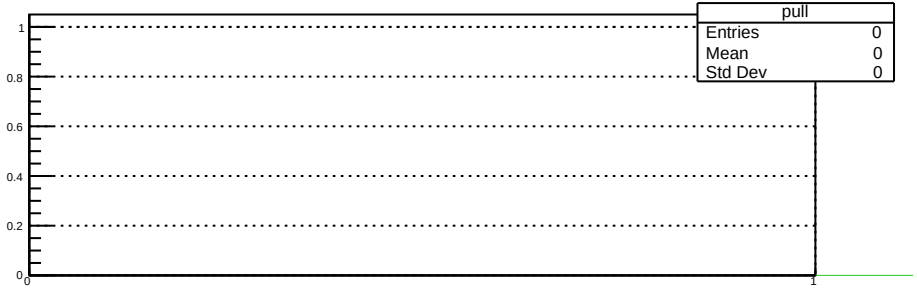

asym_right_dd_rms vs run
×10^3
1000
800
600
400
200
χ² / ndf 2.427e+05 / 21
p0 4.816e+04 ± 102.7
8198. 3
8198. 4
8198. 5
8200. 1
8201. 0
8201. 1
8201. 2
8202. 0
8203. 0
8203. 1
8205. 0
8214. 3
8214. 5
8215. 0
8215. 1
8215. 2
8215. 4
8215. 5
8216. 0
8217. 0
8217. 2
8217. 5

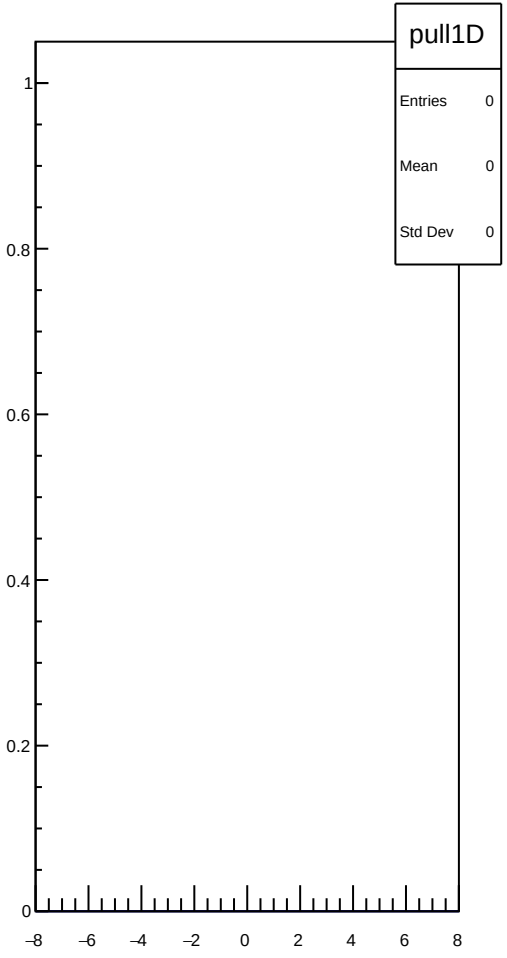

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

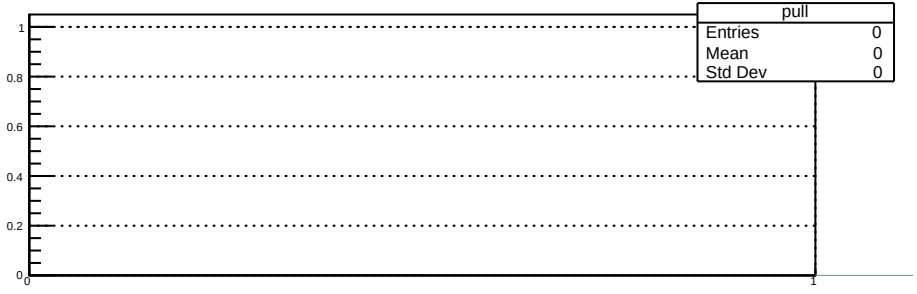

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

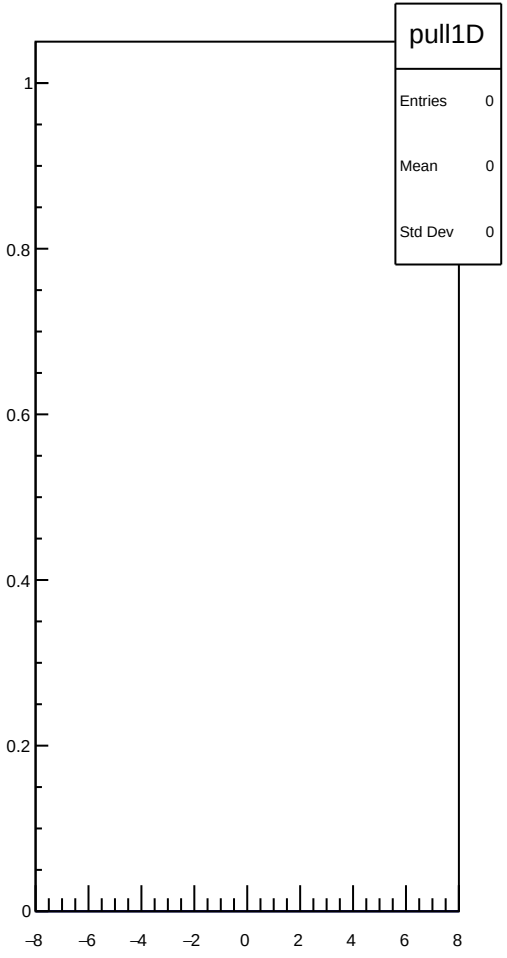

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

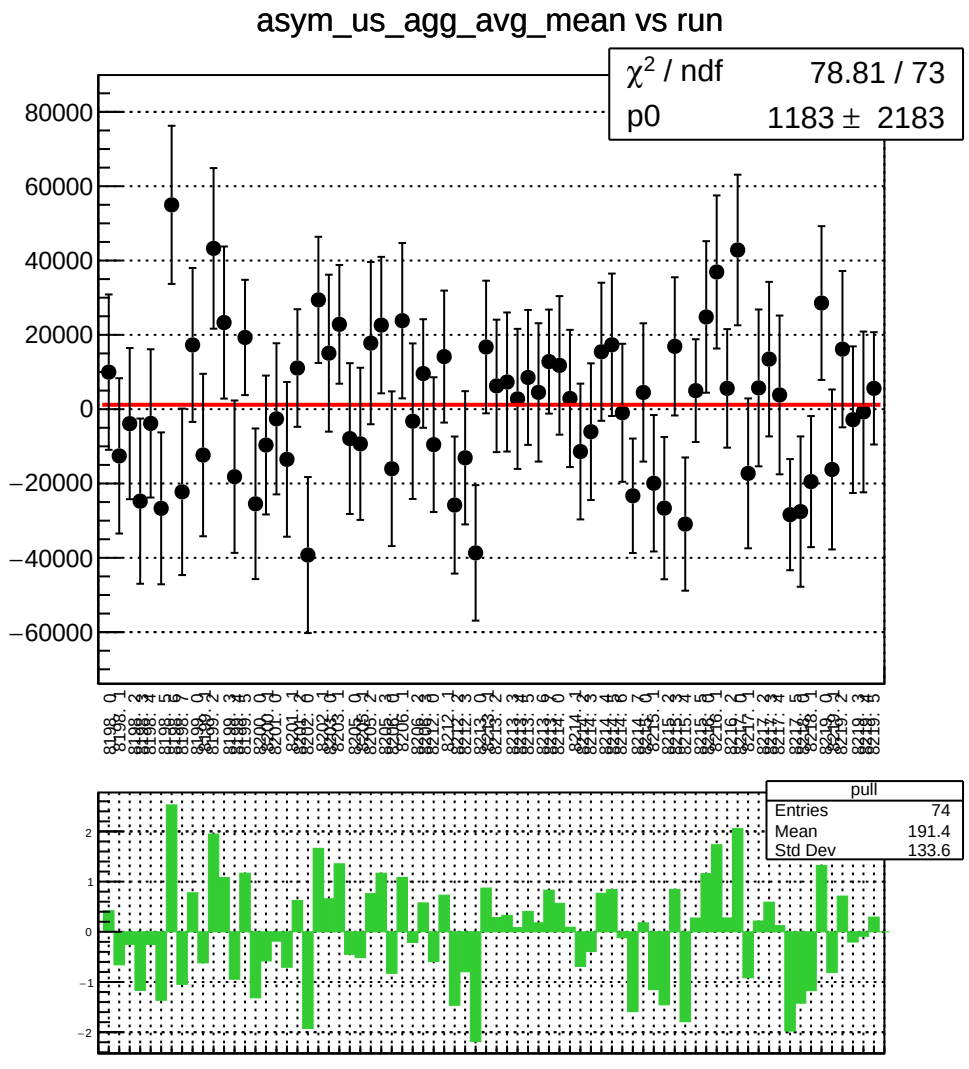

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

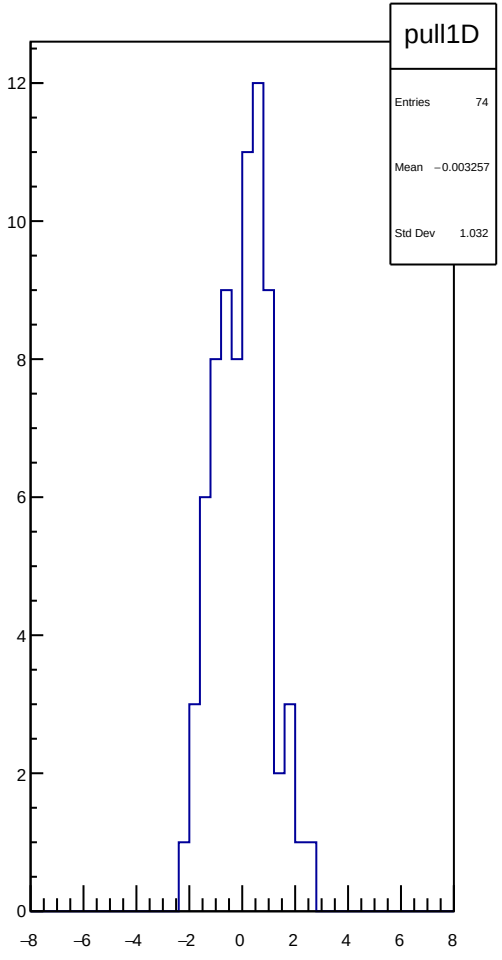

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

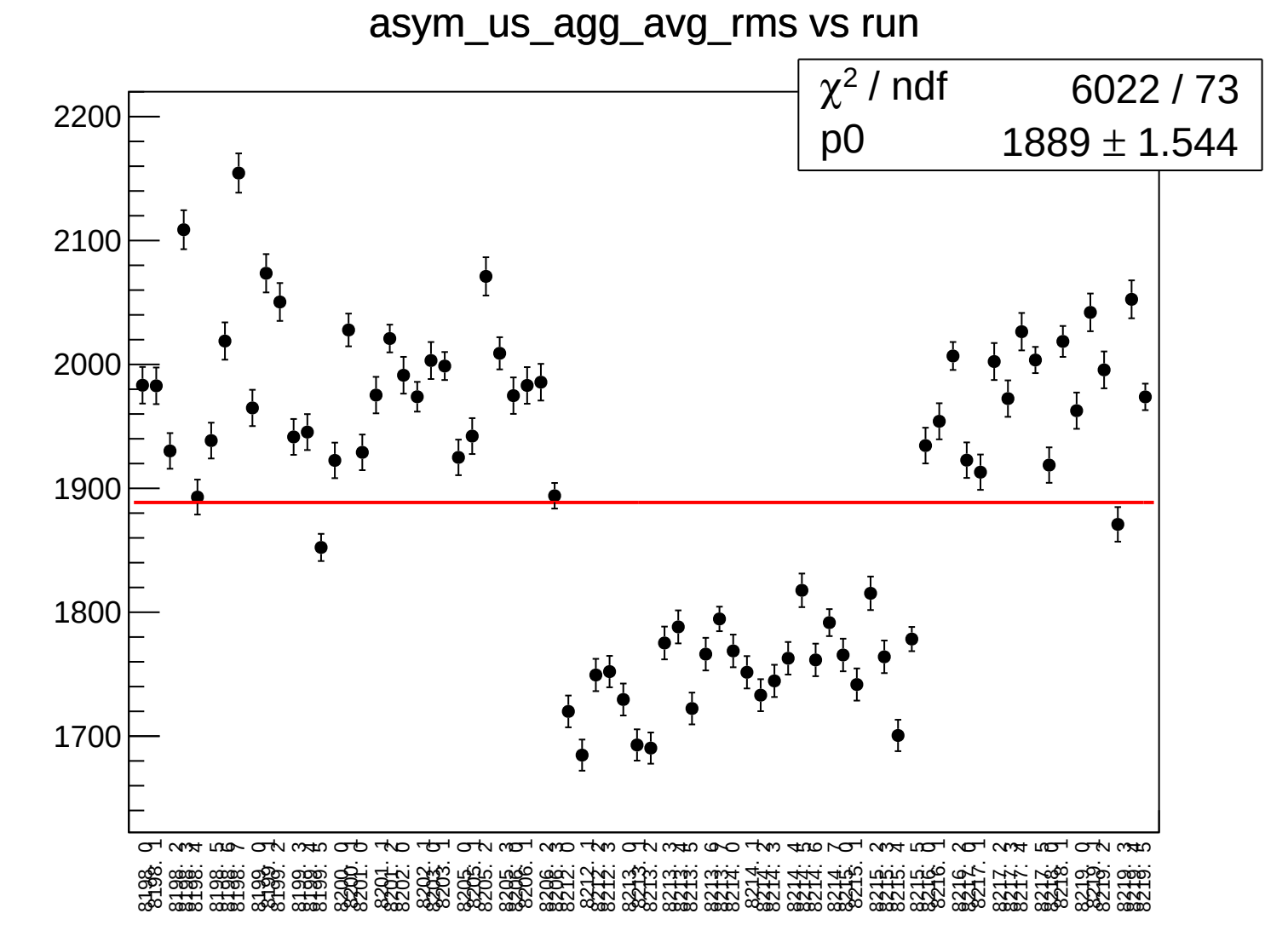

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

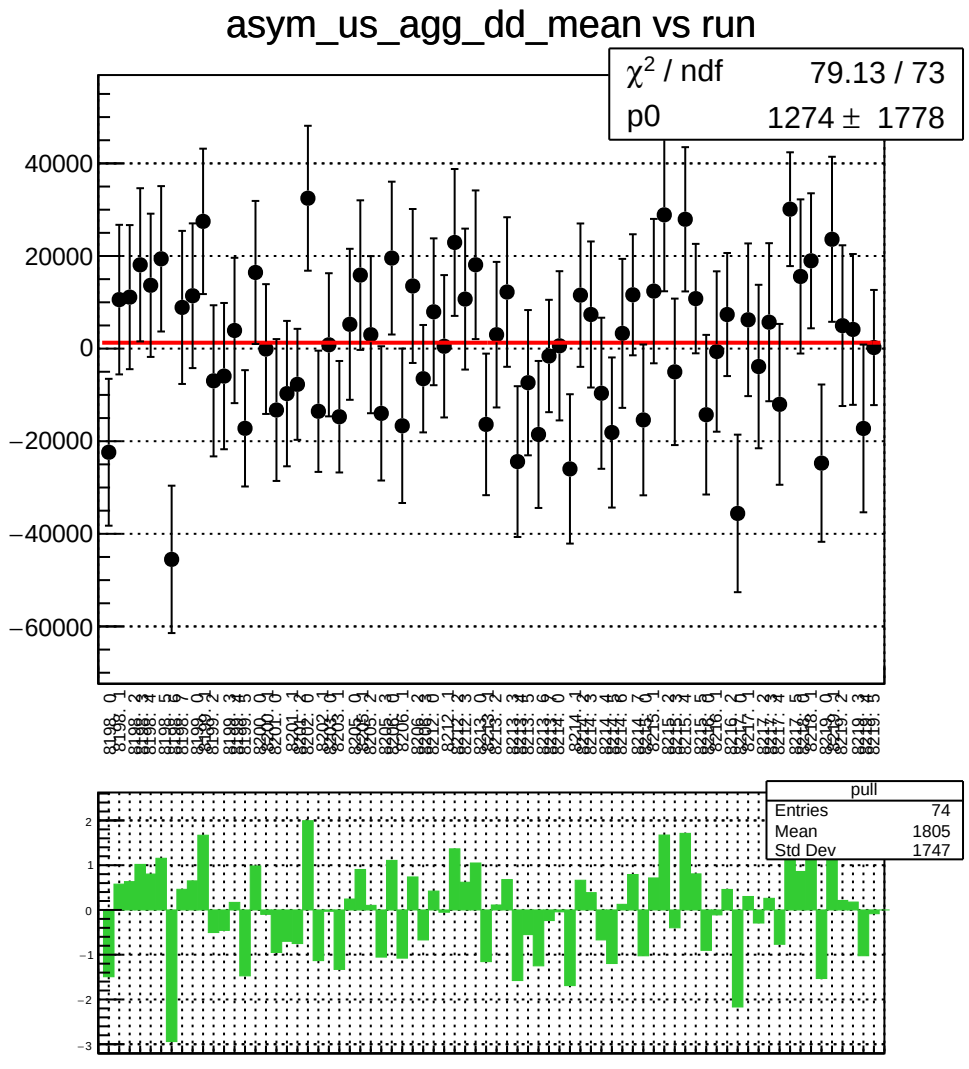

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

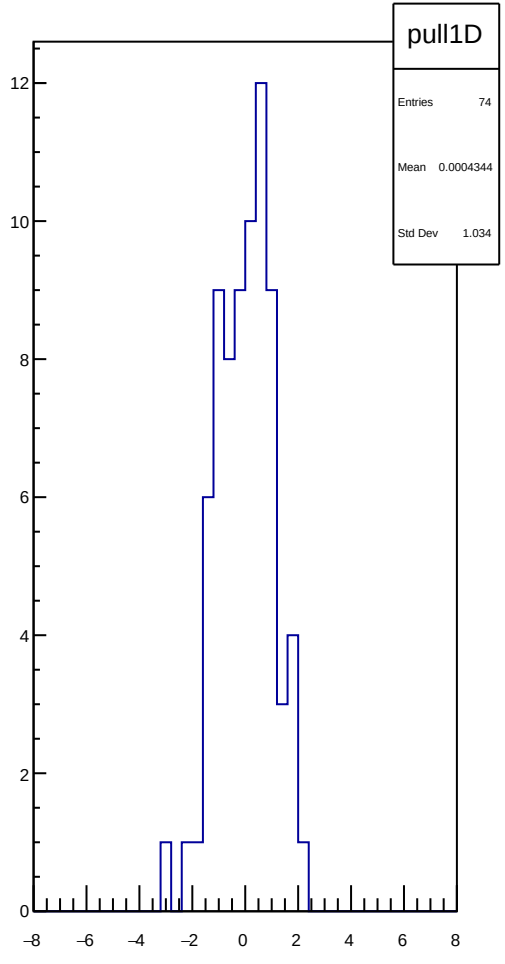

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

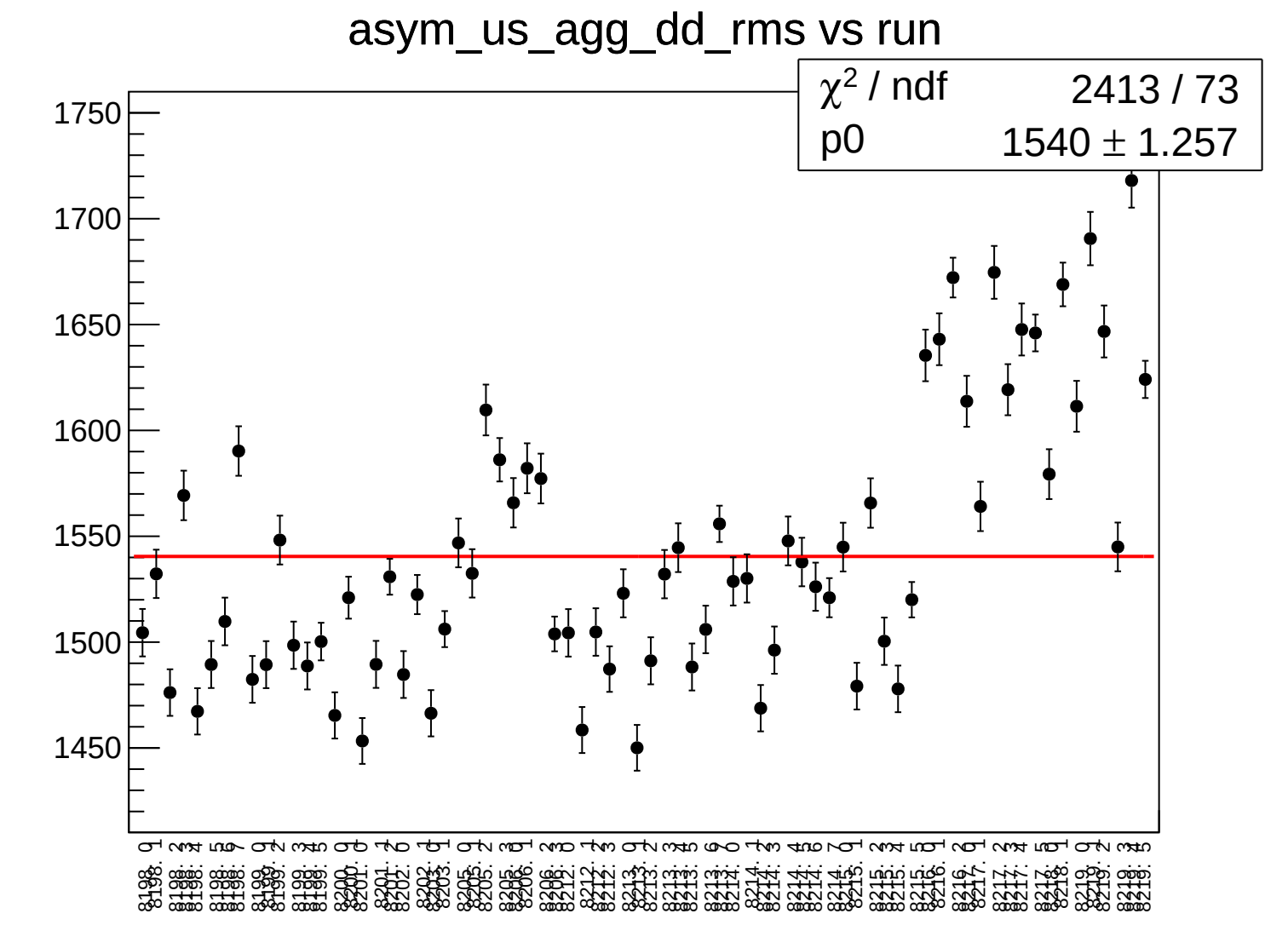

asym_us_agg_avg_mean vs run
χ² / ndf 78.81 / 73
p0 1183 ± 2183
pull
Entries 74
Mean 191.4
Std Dev 133.6

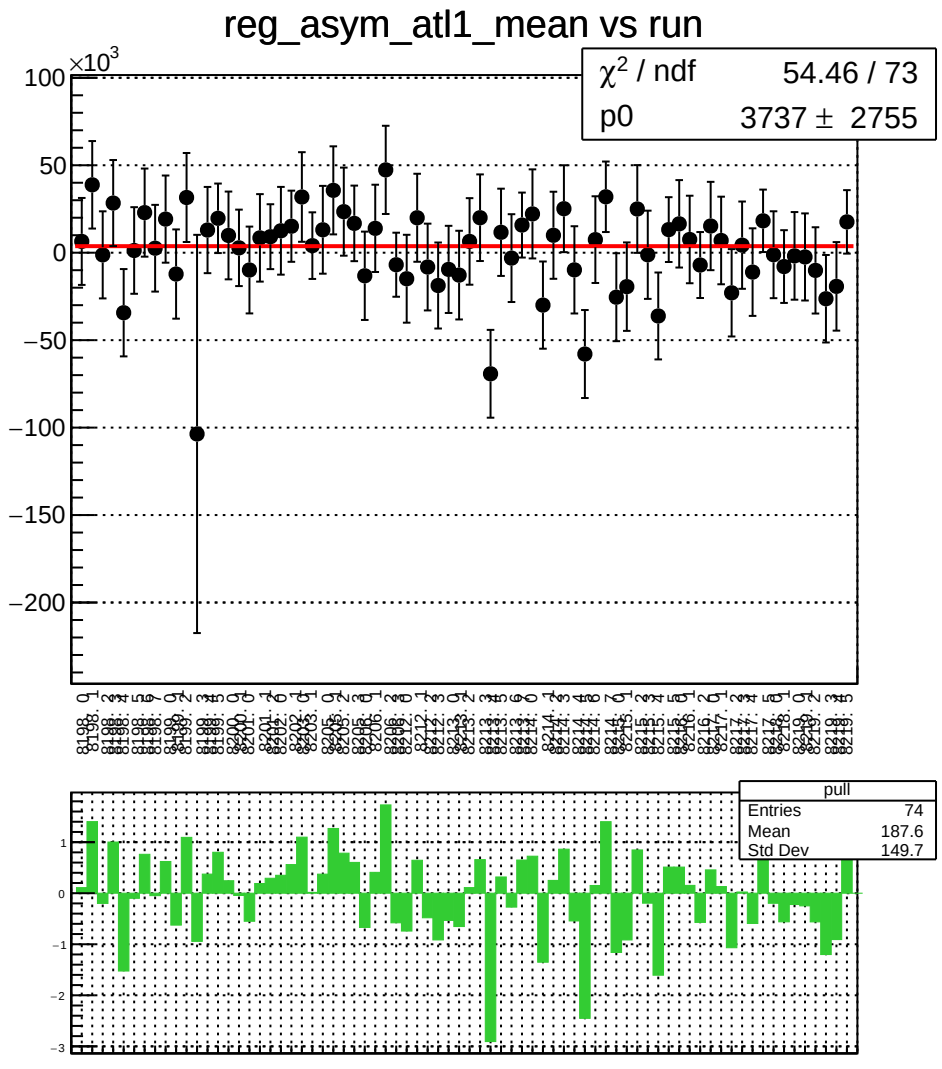

pull1D
Entries 74
Mean −0.003257
Std Dev 1.032

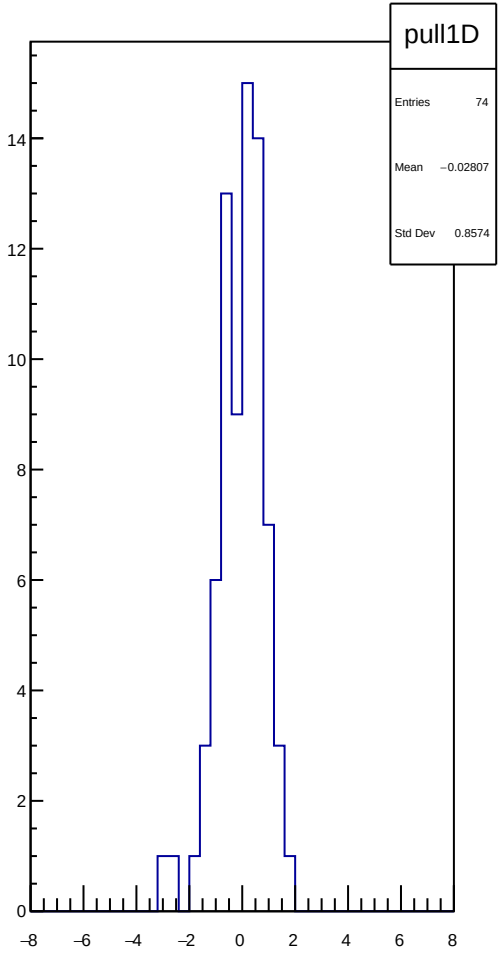

asym_us_agg_avg_rms vs run
χ² / ndf 6022 / 73
p0 1889 ± 1.544
2200
2100
2000
1900
1800
1700

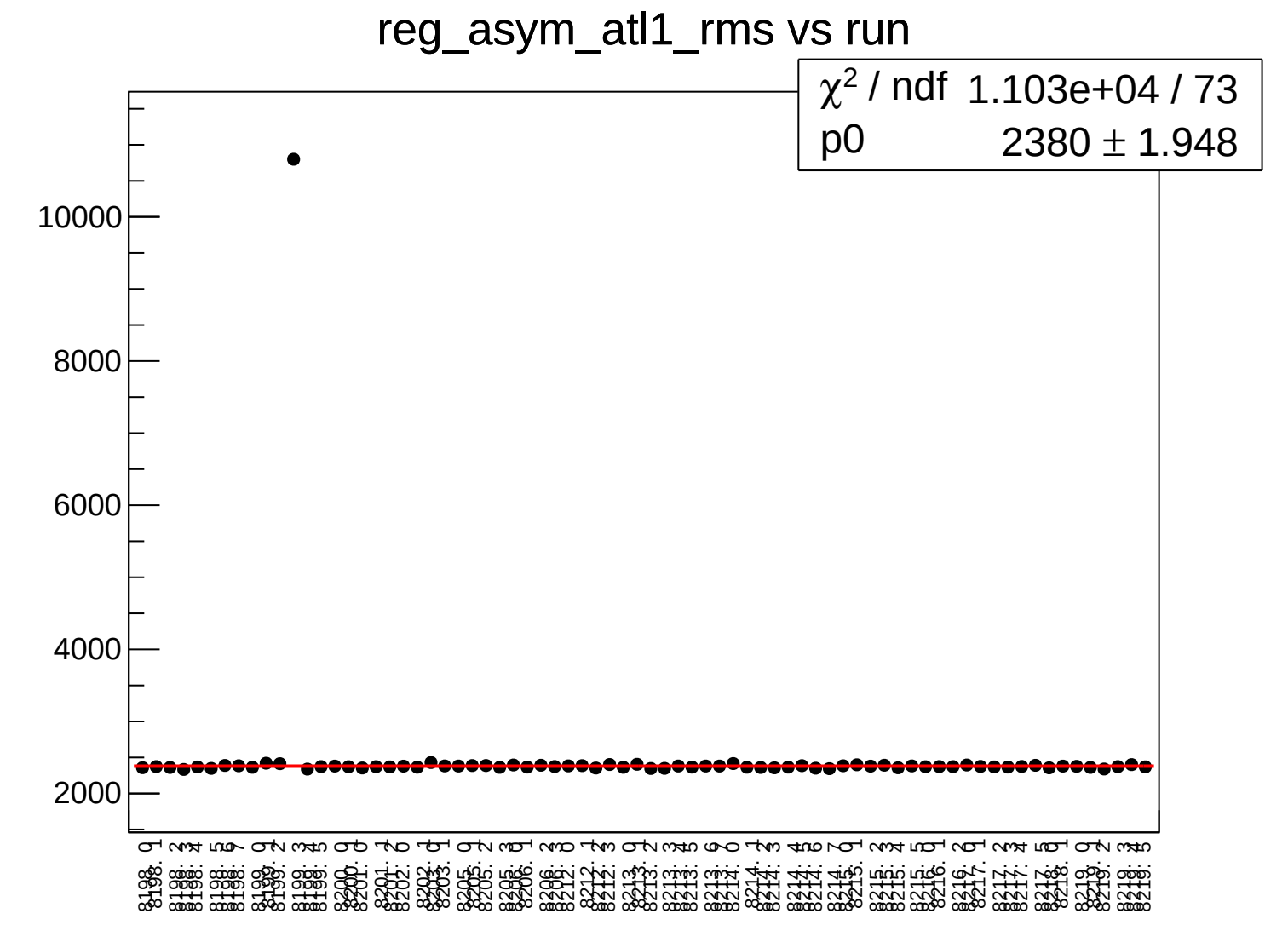

asym_us_agg_dd_mean vs run
χ² / ndf 79.13 / 73
p0 1274 ± 1778
40000
20000
0
−20000
−40000
−60000
pull
Entries 74
Mean 1805
Std Dev 1747
2
1
0
−1
−2
−3

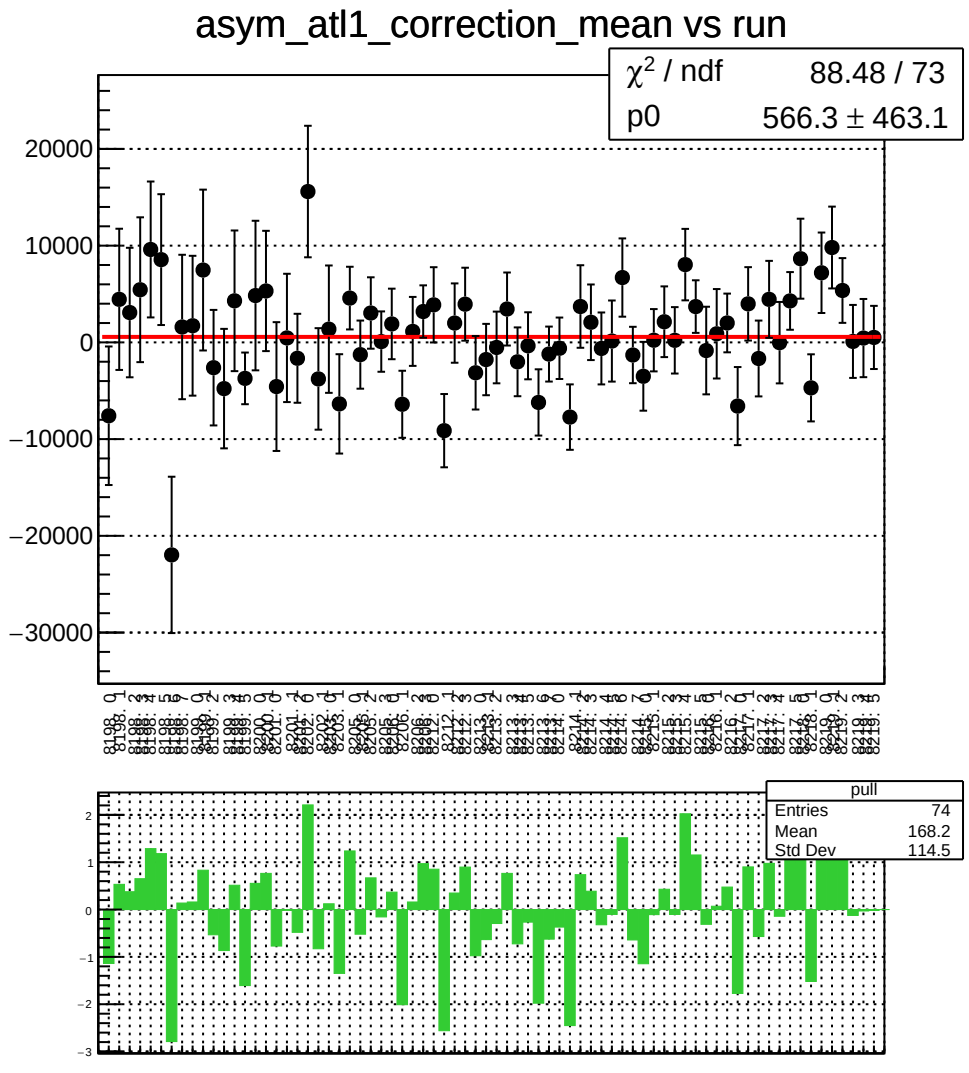

pull1D
Entries 74
Mean 0.0004344
Std Dev 1.034
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

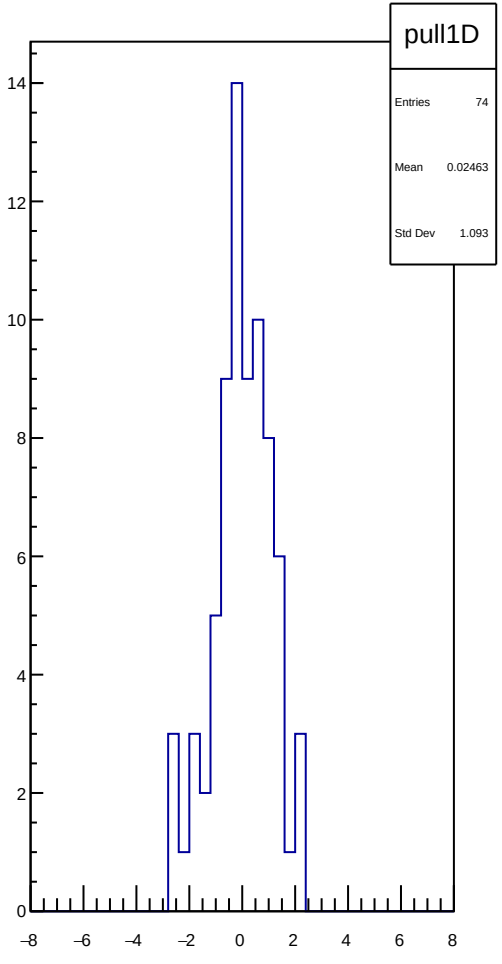

asym_us_agg_dd_rms vs run
χ² / ndf 2413 / 73
p0 1540 ± 1.257
1750
1700
1650
1600
1550
1500
1450

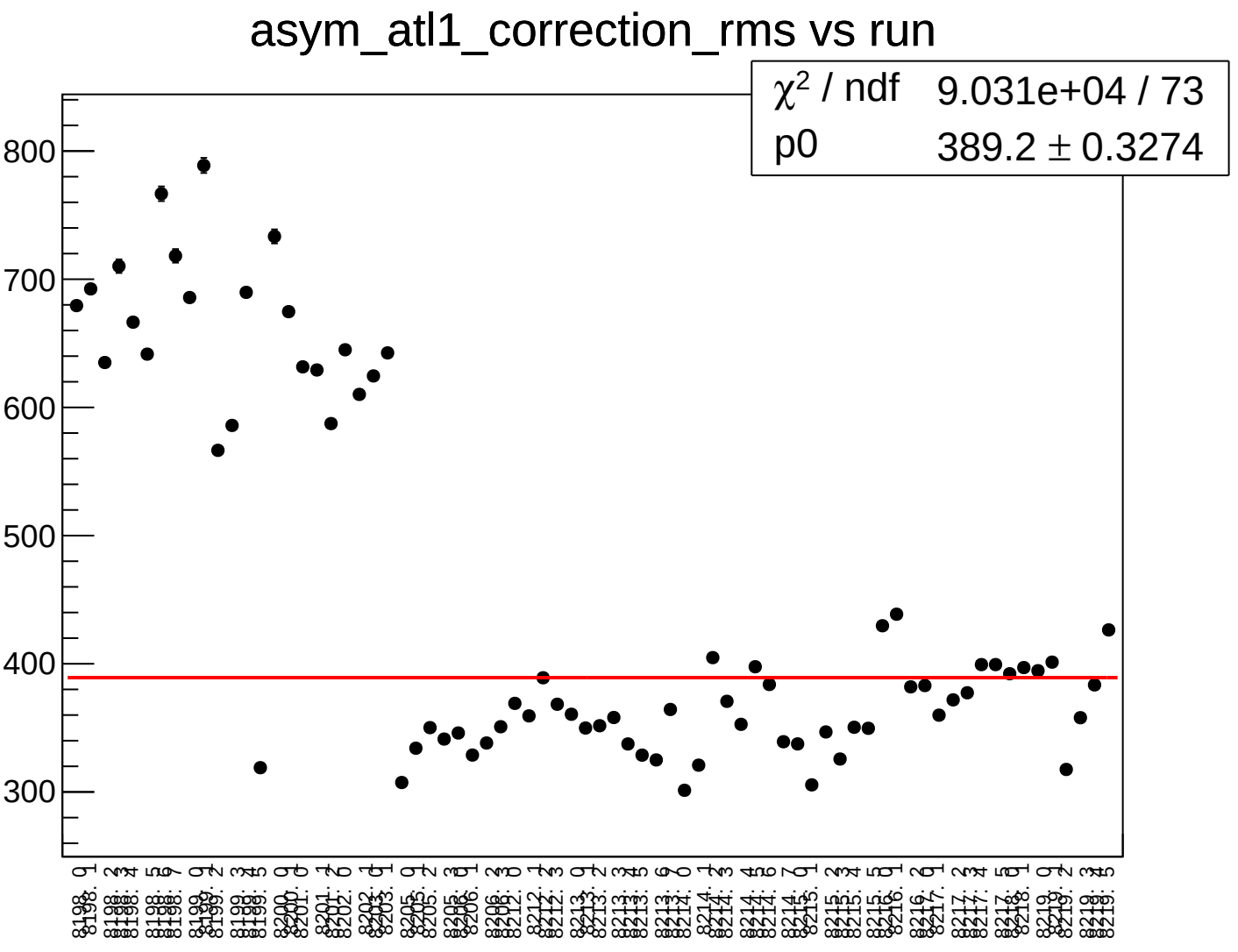

reg_asym_atl1_mean vs run
×10^3
χ² / ndf 54.46 / 73
p0 3737 ± 2755
pull
Entries 74
Mean 187.6
Std Dev 149.7

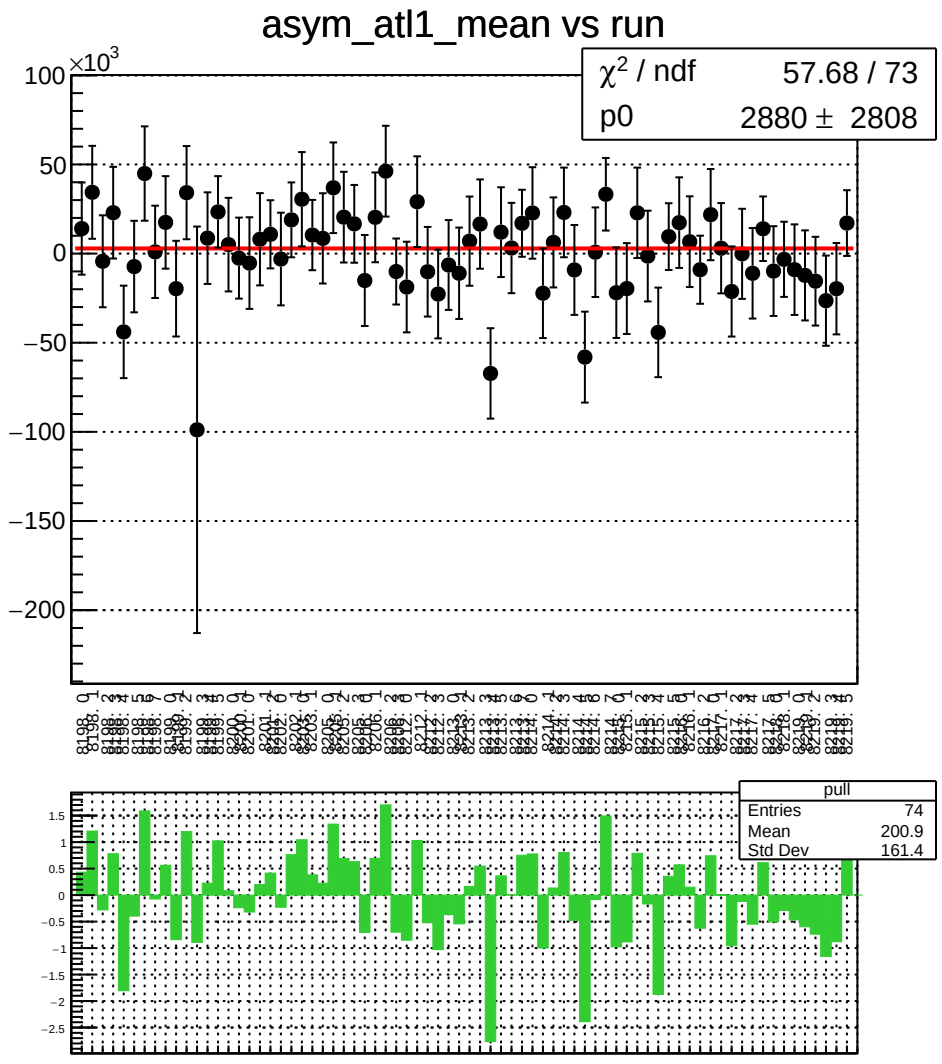

pull1D
Entries 74
Mean −0.02807
Std Dev 0.8574

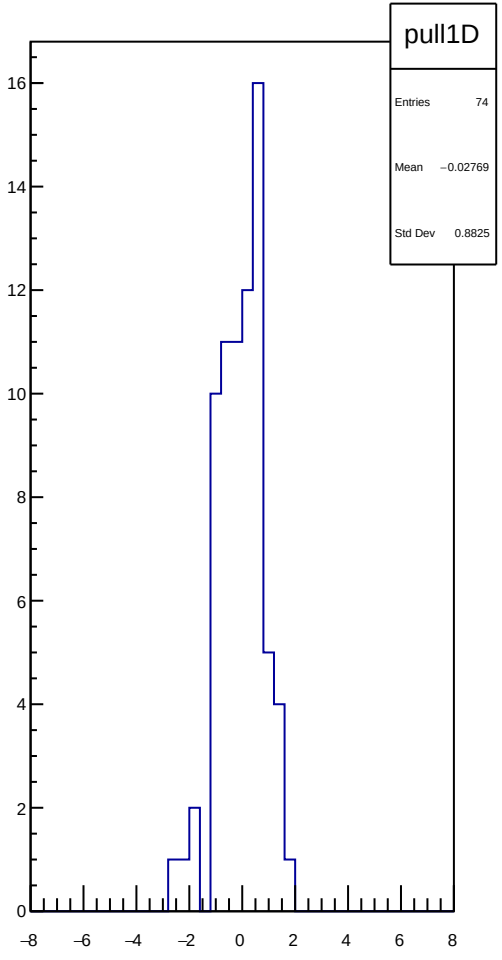

reg_asym_atl1_rms vs run
χ² / ndf 1.103e+04 / 73
p0 2380 ± 1.948
10000
8000
6000
4000
2000

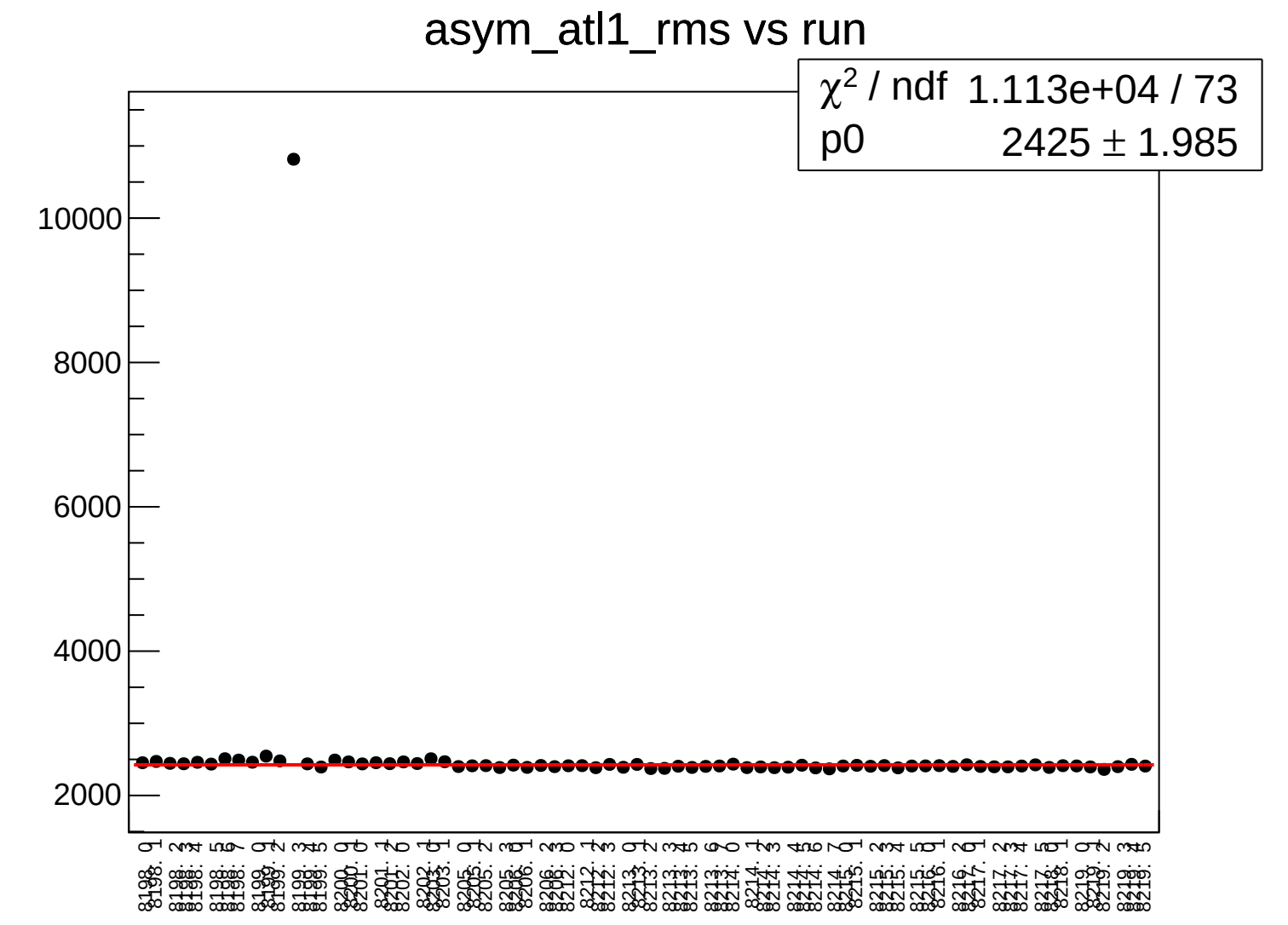

asym_atl1_correction_mean vs run
χ² / ndf 88.48 / 73
p0 566.3 ± 463.1
pull
Entries 74
Mean 168.2
Std Dev 114.5

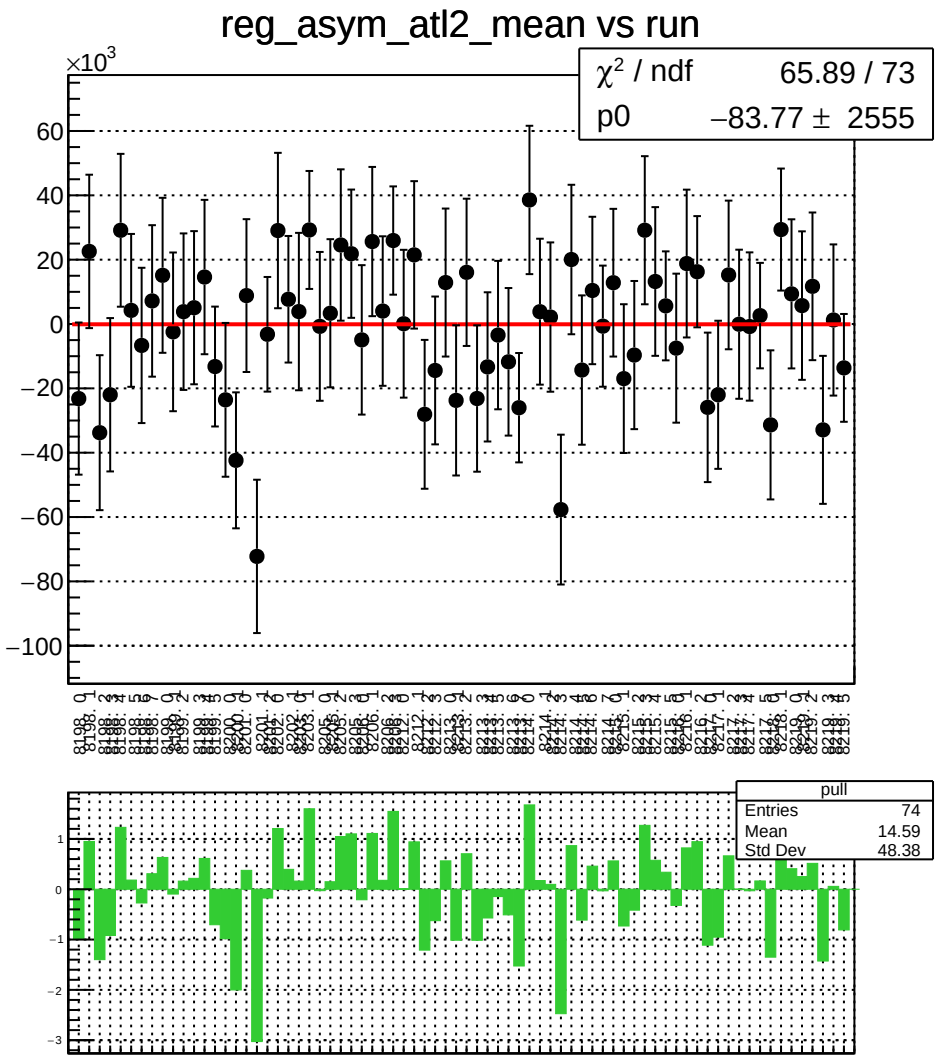

pull1D
Entries 74
Mean 0.02463
Std Dev 1.093

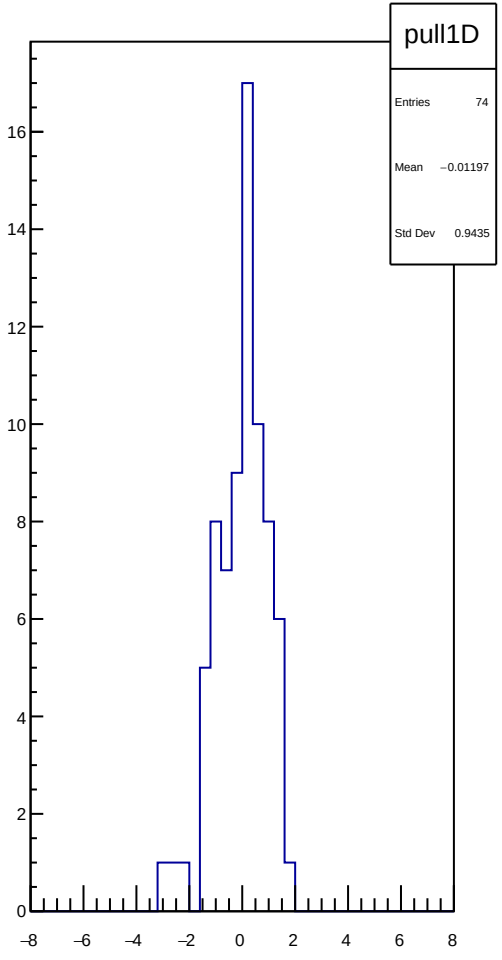

asym_atl1_correction_rms vs run
χ^2 / ndf 9.031e+04 / 73
p0 389.2 ± 0.3274
800
700
600
500
400
300

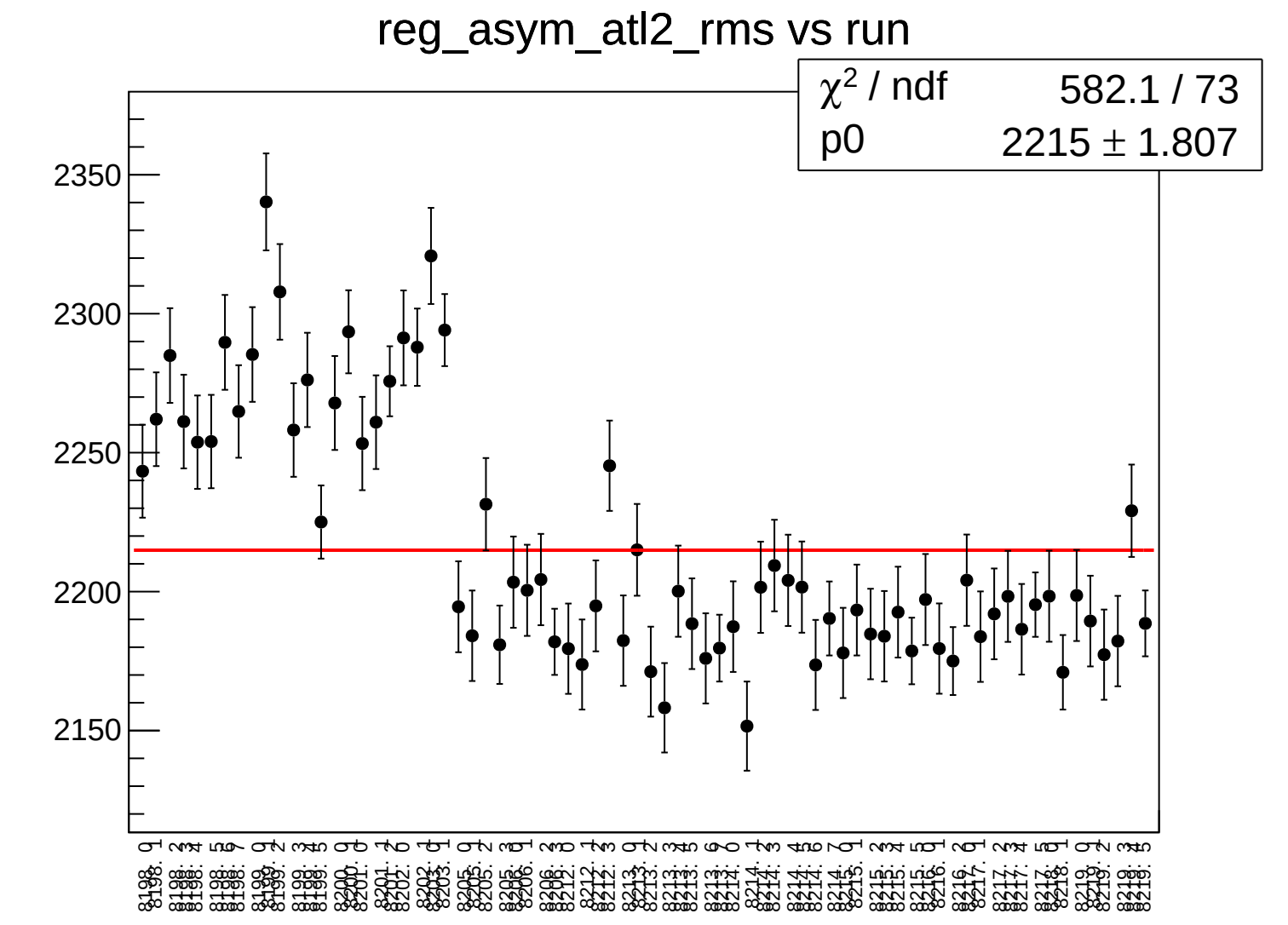

asym_atl1_mean vs run
χ² / ndf 57.68 / 73
p0 2880 ± 2808
pull
Entries 74
Mean 200.9
Std Dev 161.4

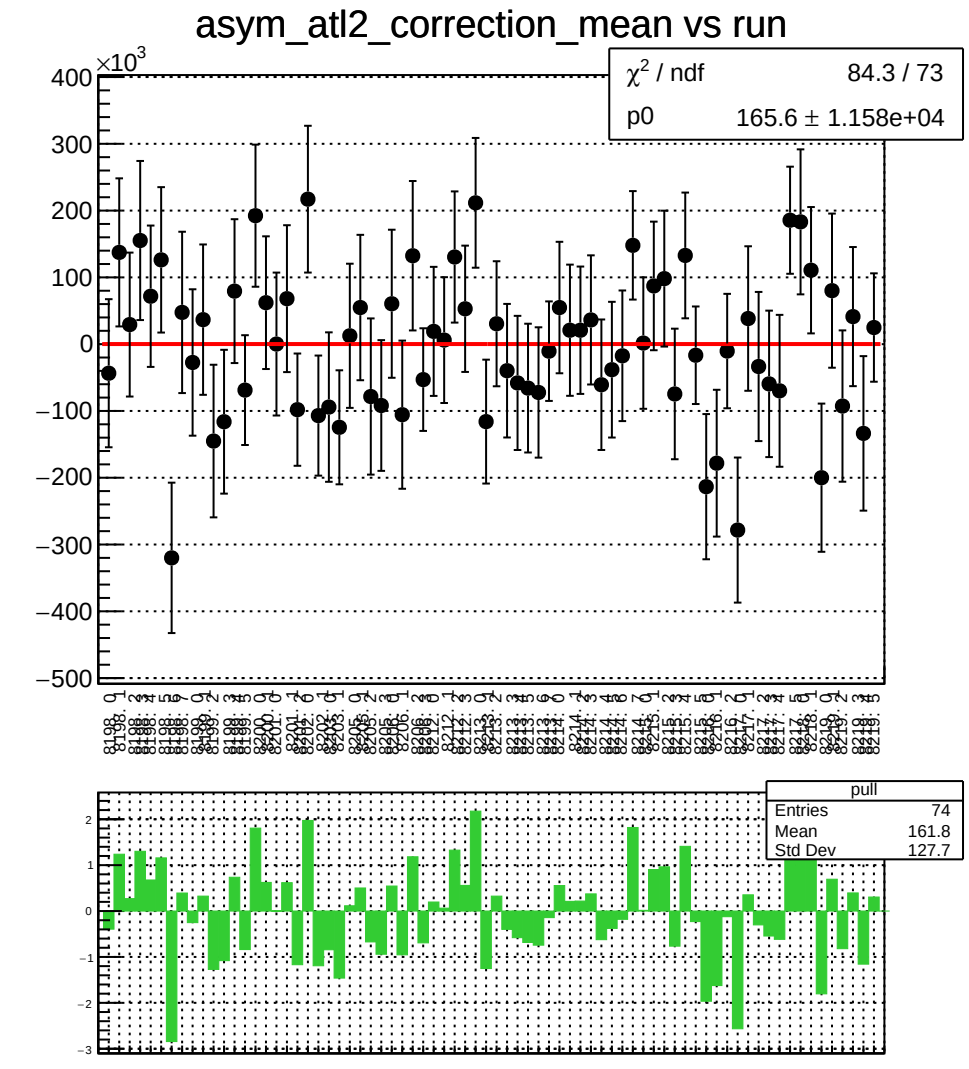

pull1D
Entries 74
Mean −0.02769
Std Dev 0.8825

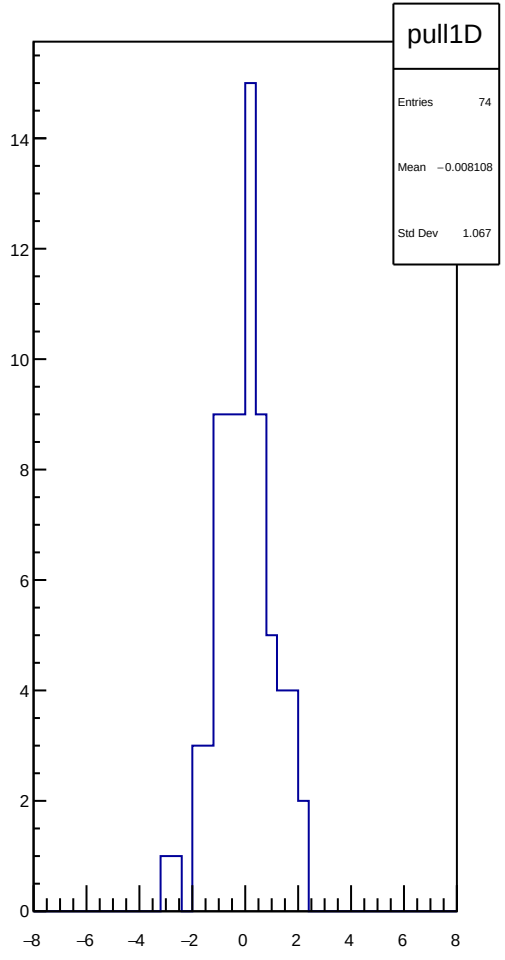

asym_atl1_rms vs run
χ² / ndf 1.113e+04 / 73
p0 2425 ± 1.985
10000
8000
6000
4000
2000

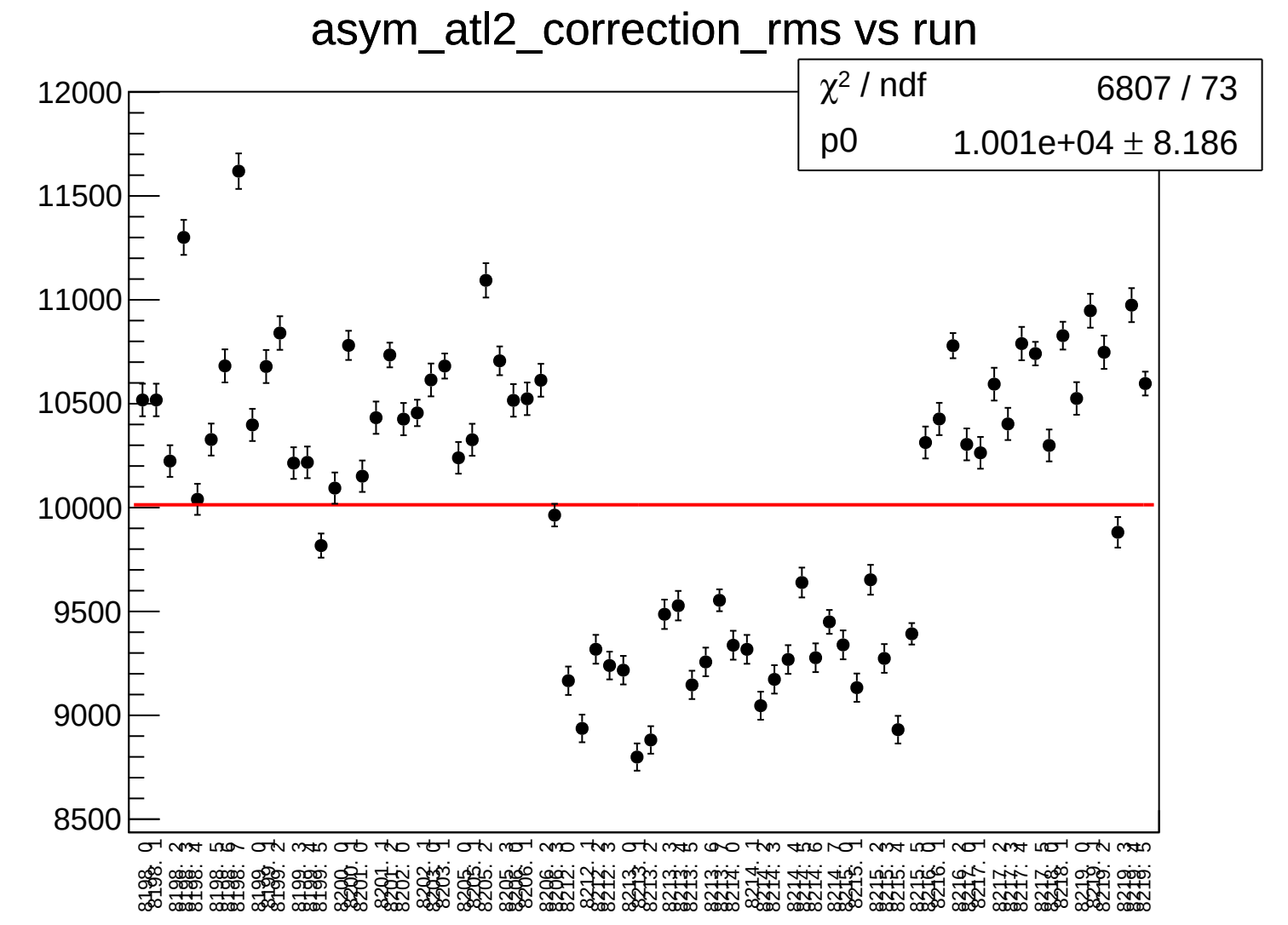

reg_asym_atl2_mean vs run
×10^3
χ² / ndf 65.89 / 73
p0 −83.77 ± 2555
pull
Entries 74
Mean 14.59
Std Dev 48.38

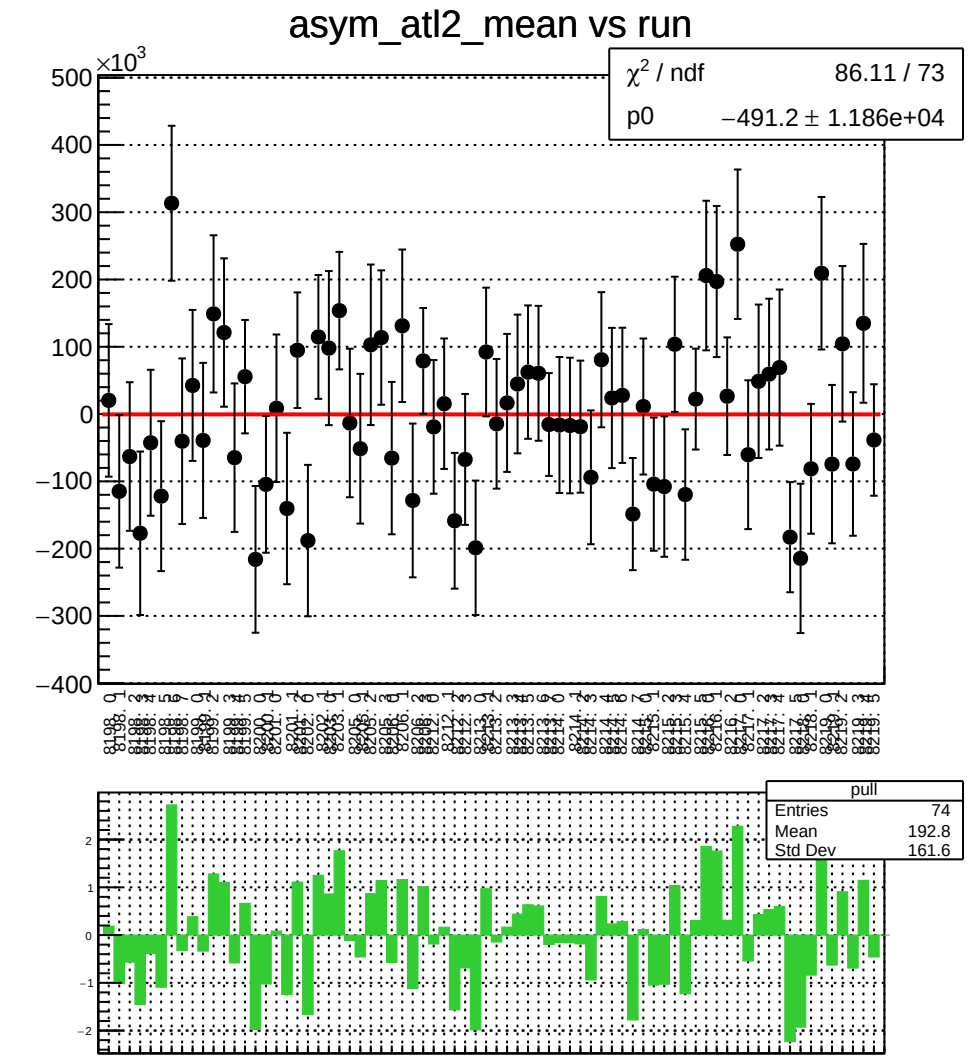

pull1D
Entries 74
Mean −0.01197
Std Dev 0.9435

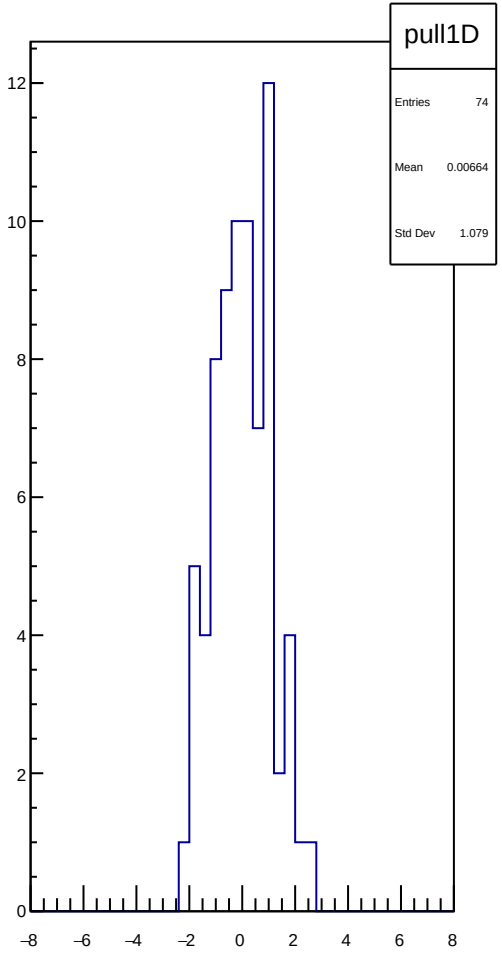

reg_asym_atl2_rms vs run
χ² / ndf 582.1 / 73
p0 2215 ± 1.807
2350
2300
2250
2200
2150

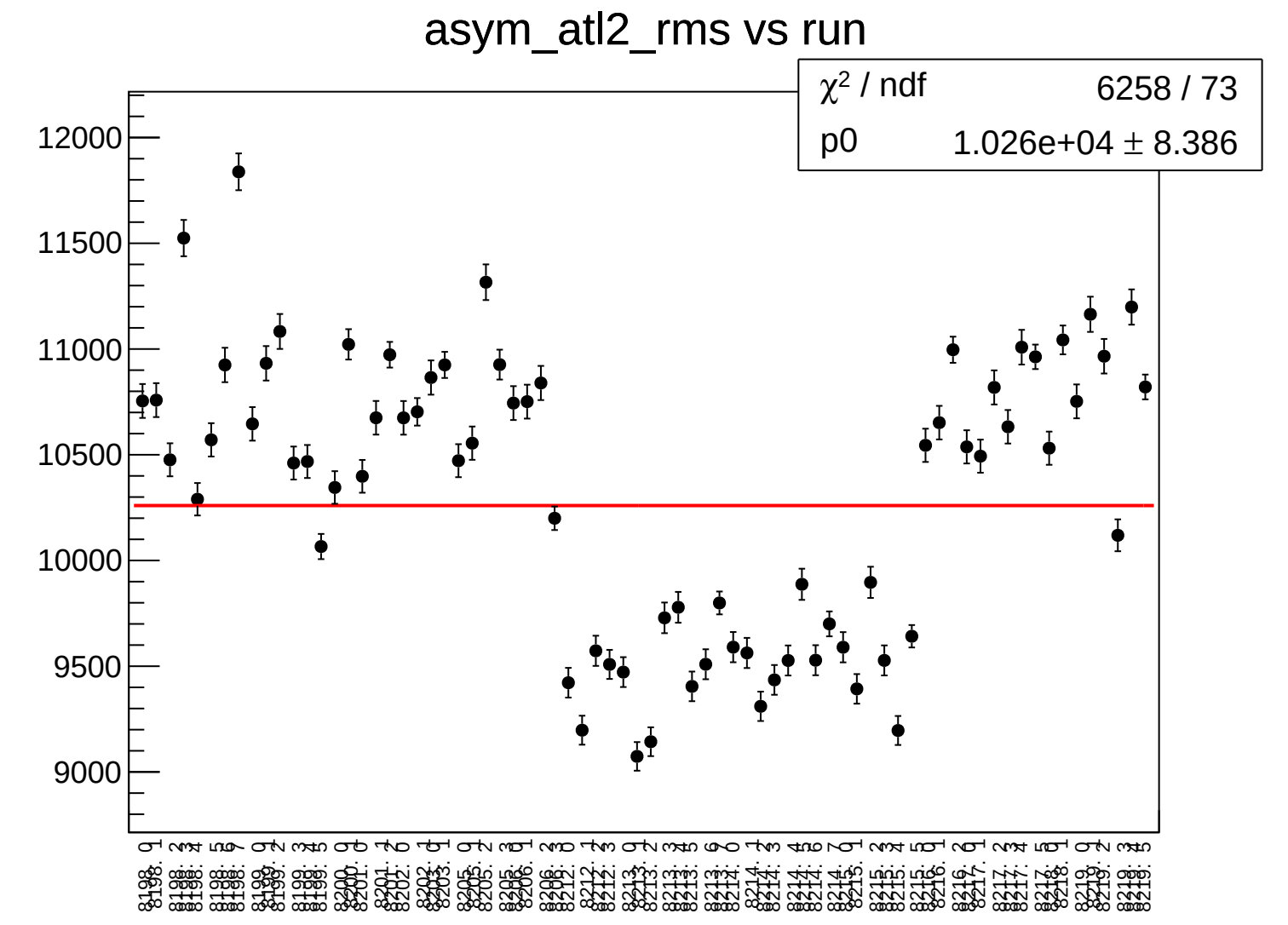

asym_atl2_correction_mean vs run
×10^3
χ² / ndf 84.3 / 73
p0 165.6 ± 1.158e+04
pull
Entries 74
Mean 161.8
Std Dev 127.7

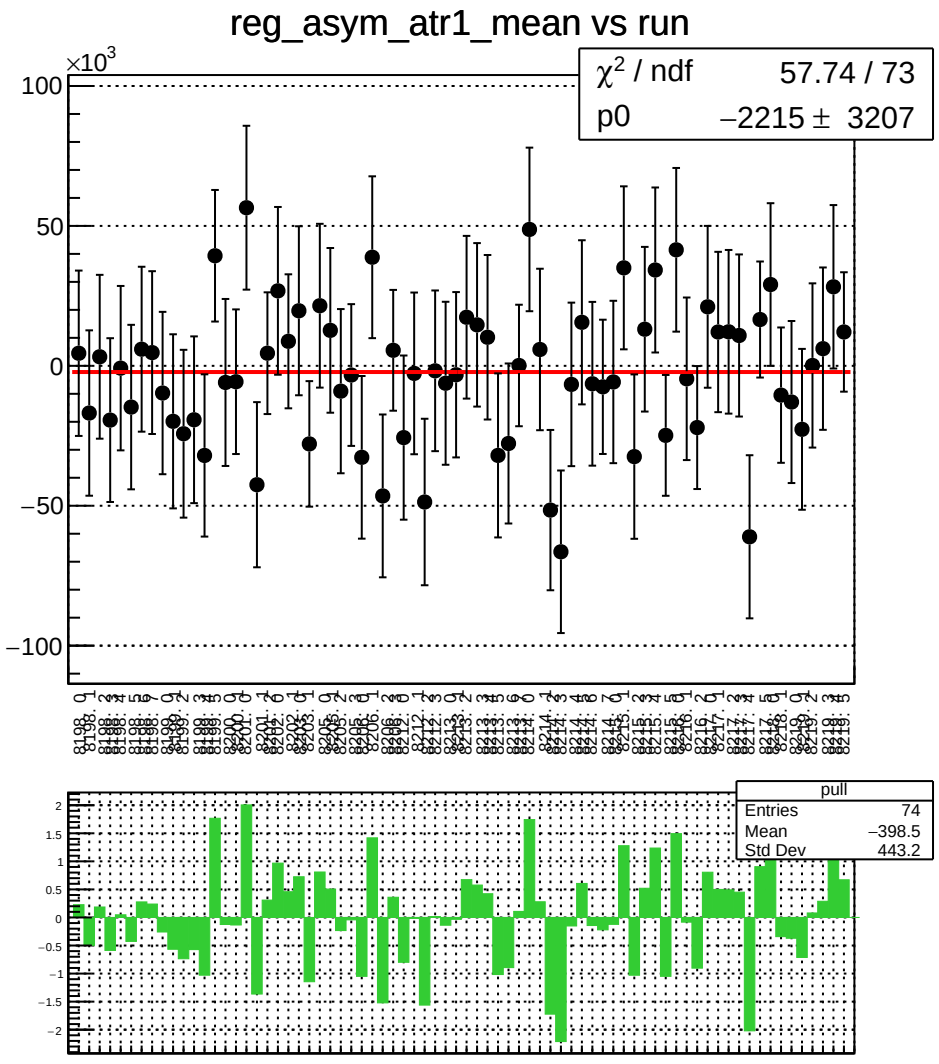

pull1D
Entries 74
Mean −0.008108
Std Dev 1.067

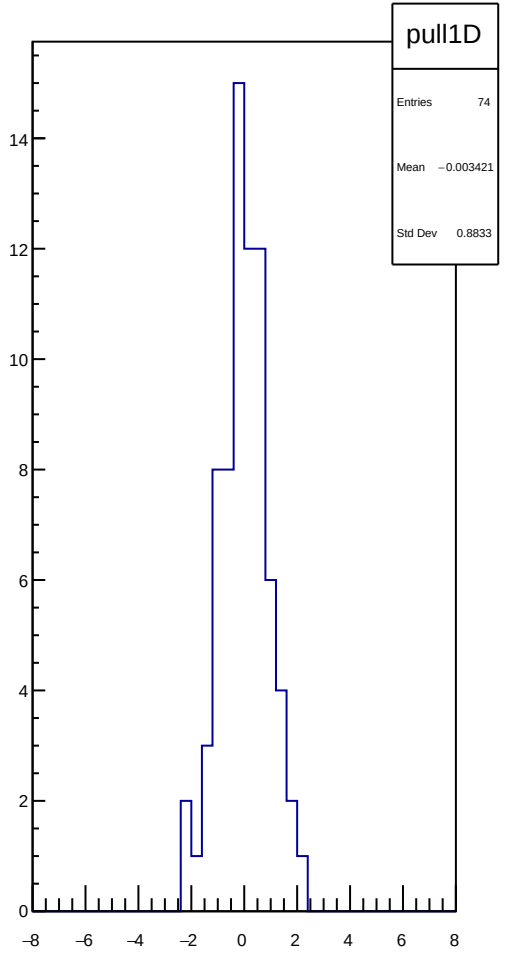

asym_atl2_correction_rms vs run
χ² / ndf 6807 / 73
p0 1.001e+04 ± 8.186
12000
11500
11000
10500
10000
9500
9000
8500

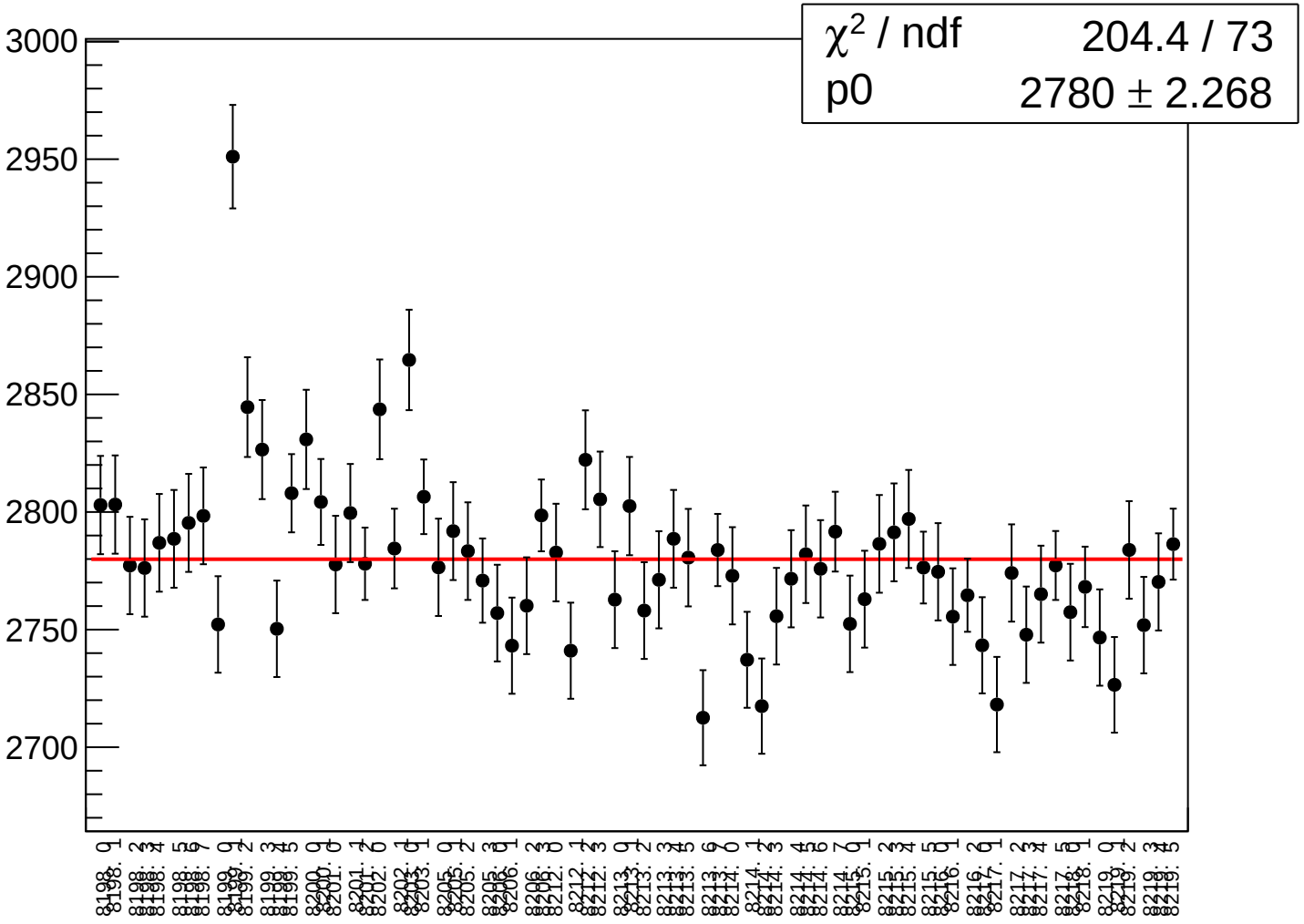

asym_atl2_mean vs run
χ^2 / ndf 86.11 / 73
p0 −491.2 ± 1.186e+04
×10^3
pull
Entries 74
Mean 192.8
Std Dev 161.6

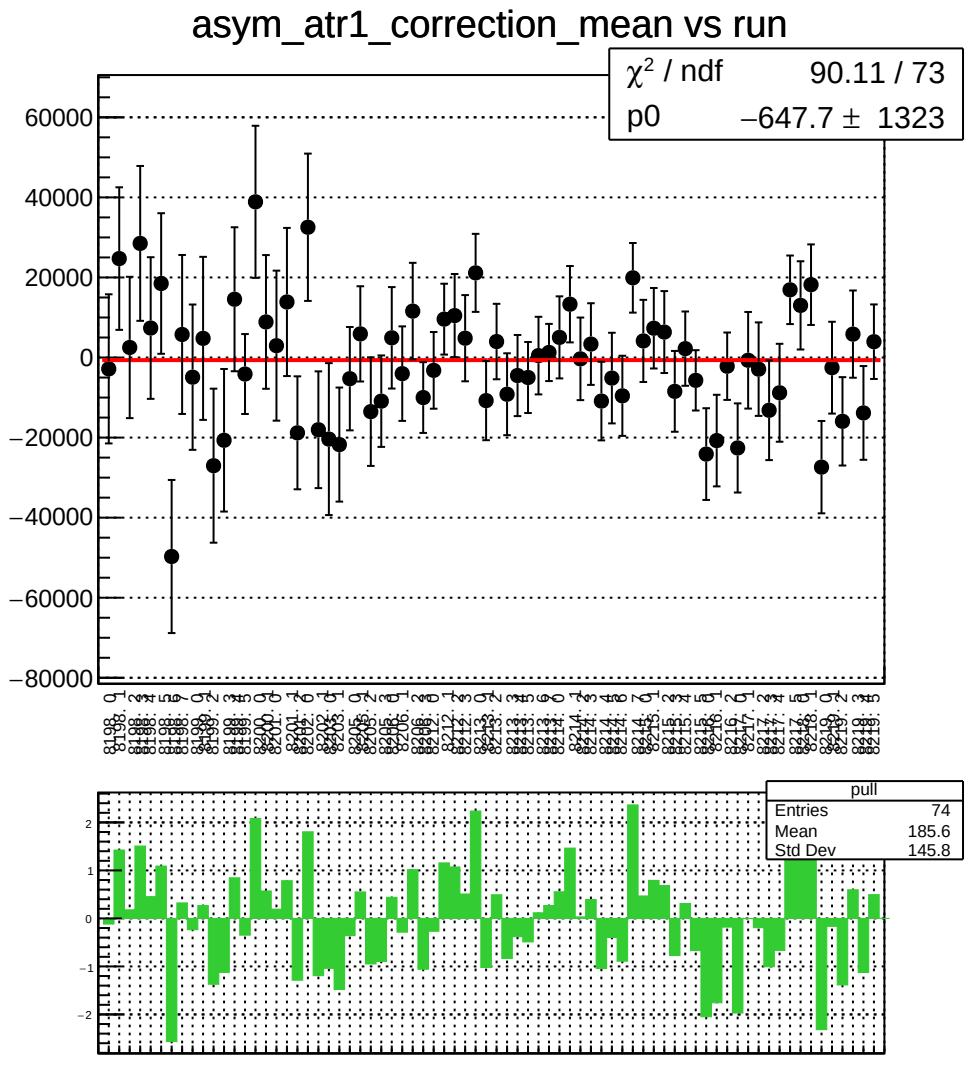

pull1D
Entries 74
Mean 0.00664
Std Dev 1.079

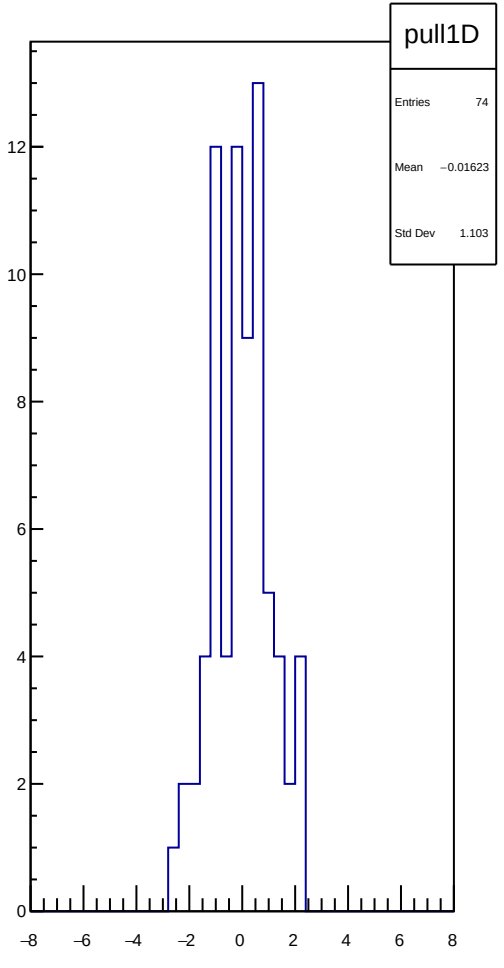

asym_atl2_rms vs run
χ² / ndf 6258 / 73
p0 1.026e+04 ± 8.386
12000
11500
11000
10500
10000
9500
9000

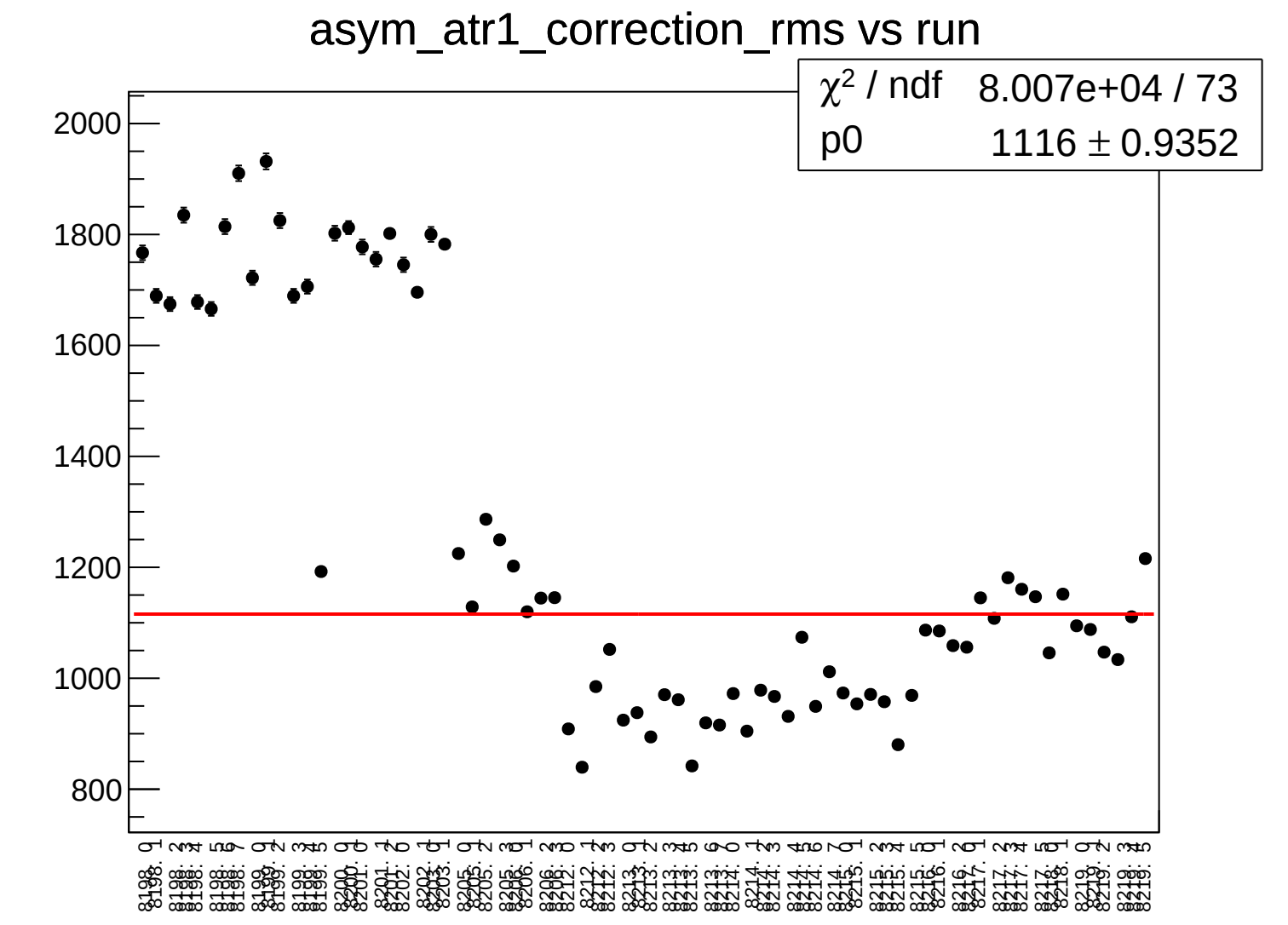

reg_asym_atr1_mean vs run
×10^3
100
50
0
−50
−100
χ² / ndf 57.74 / 73
p0 −2215 ± 3207
pull
Entries 74
Mean −398.5
Std Dev 443.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

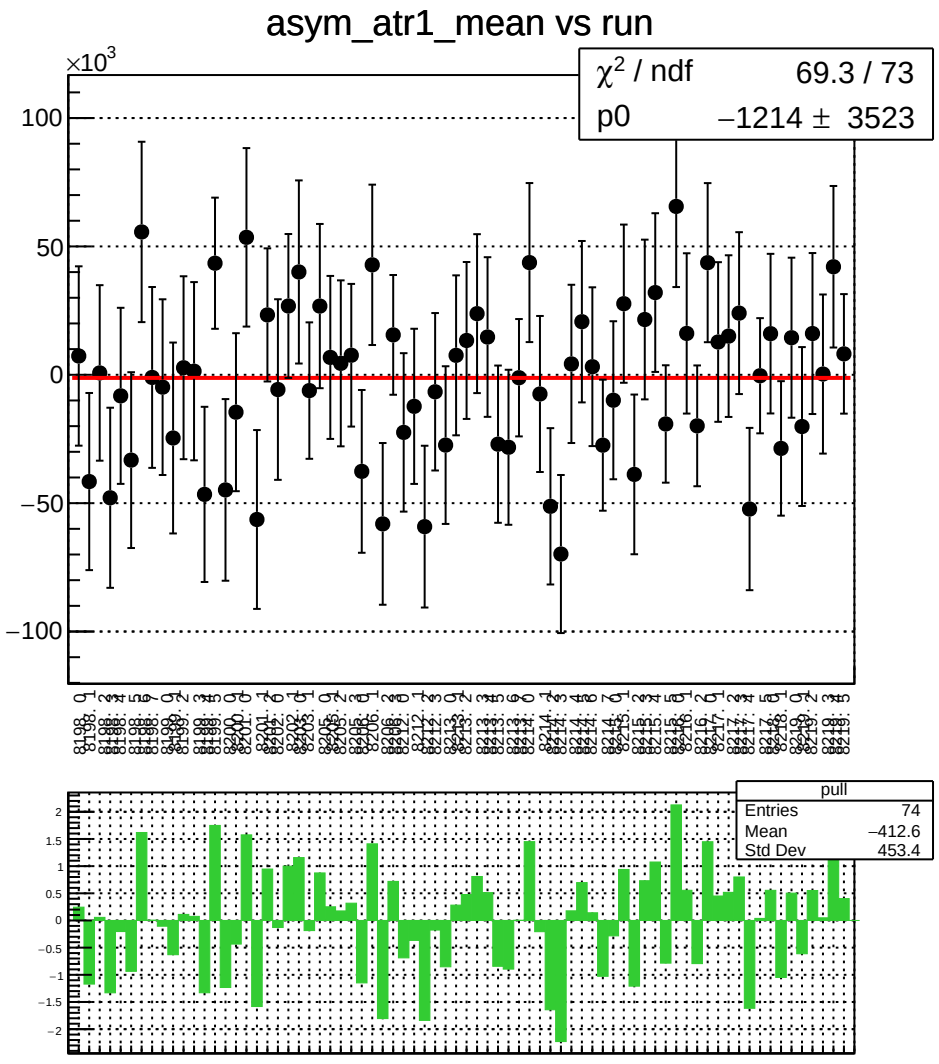

pull1D
Entries 74
Mean −0.003421
Std Dev 0.8833
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

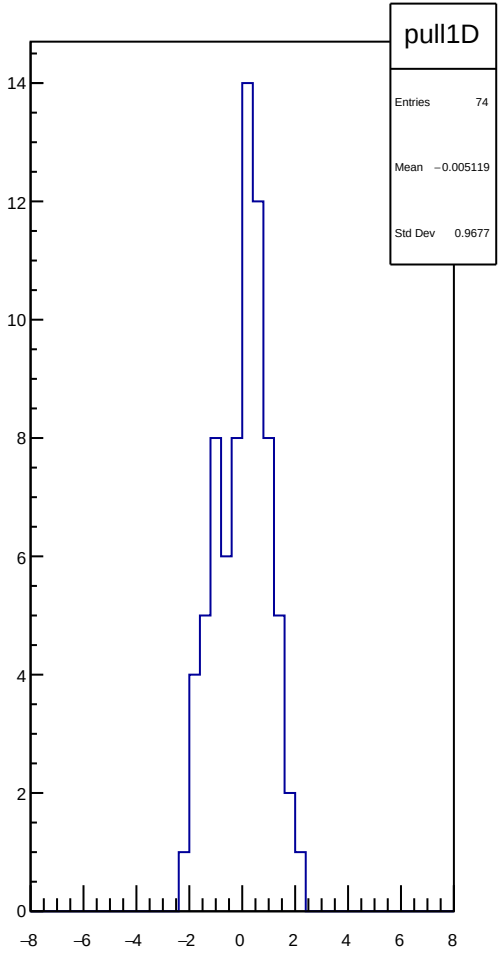

reg_asym_atr1_rms vs run
χ² / ndf 204.4 / 73
p0 2780 ± 2.268
3000
2950
2900
2850
2800
2750
2700

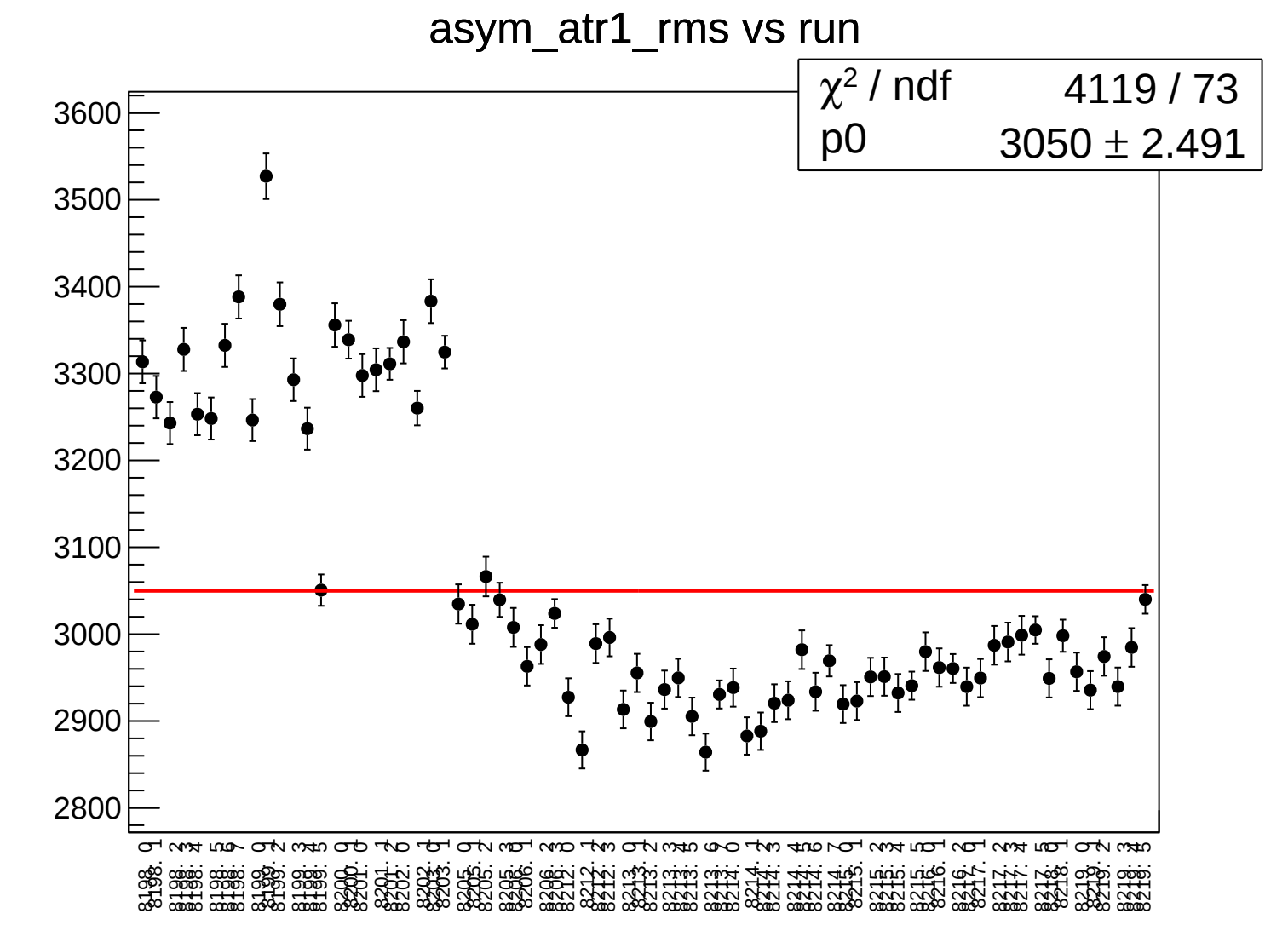

asym_atr1_correction_mean vs run
χ² / ndf 90.11 / 73
p0 −647.7 ± 1323
pull
Entries 74
Mean 185.6
Std Dev 145.8

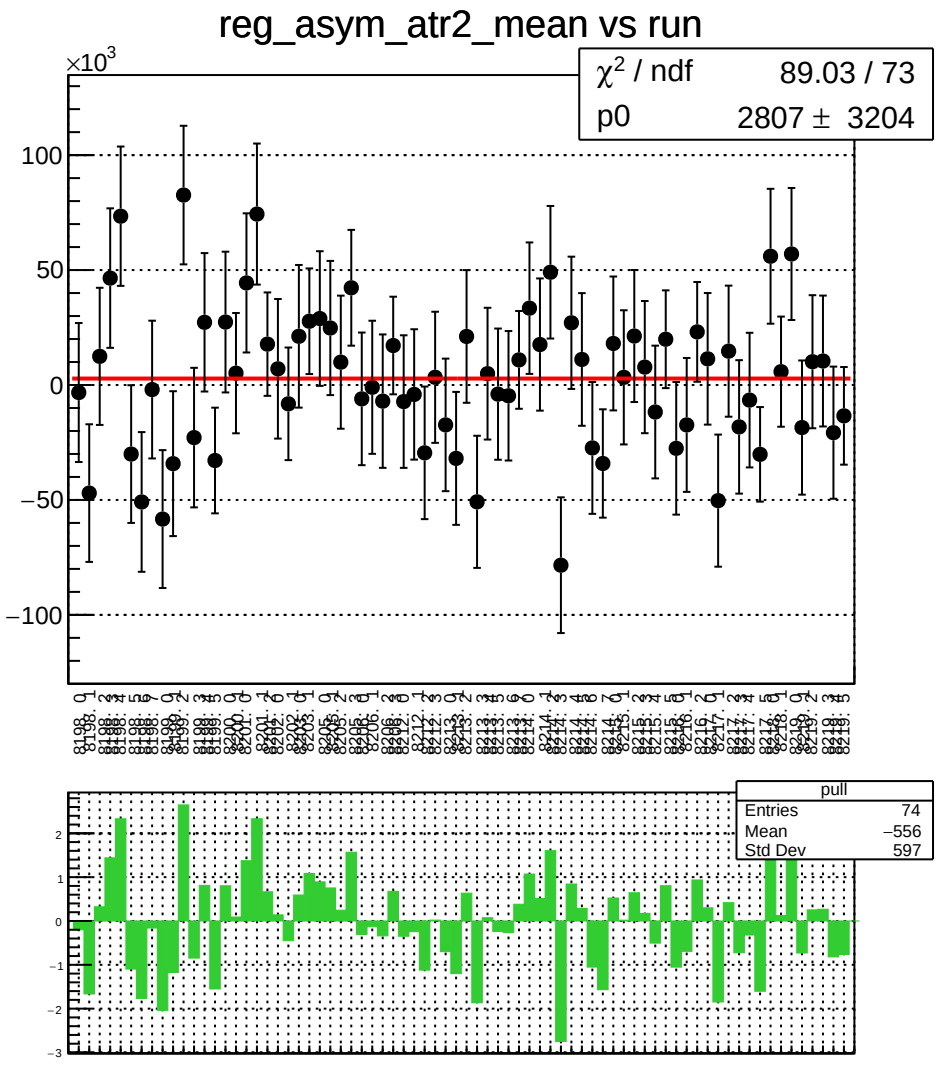

pull1D
Entries 74
Mean −0.01623
Std Dev 1.103

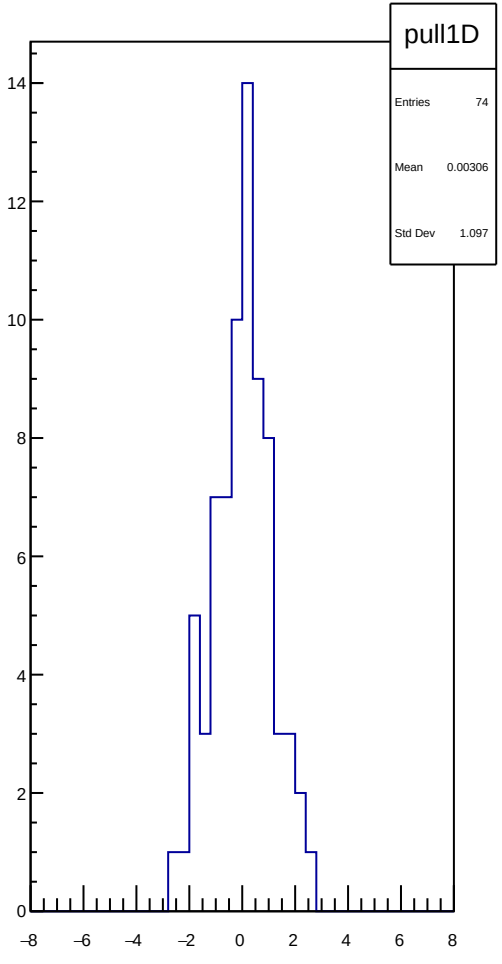

asym_atr1_correction_rms vs run
χ² / ndf 8.007e+04 / 73
p0 1116 ± 0.9352
2000
1800
1600
1400
1200
1000
800

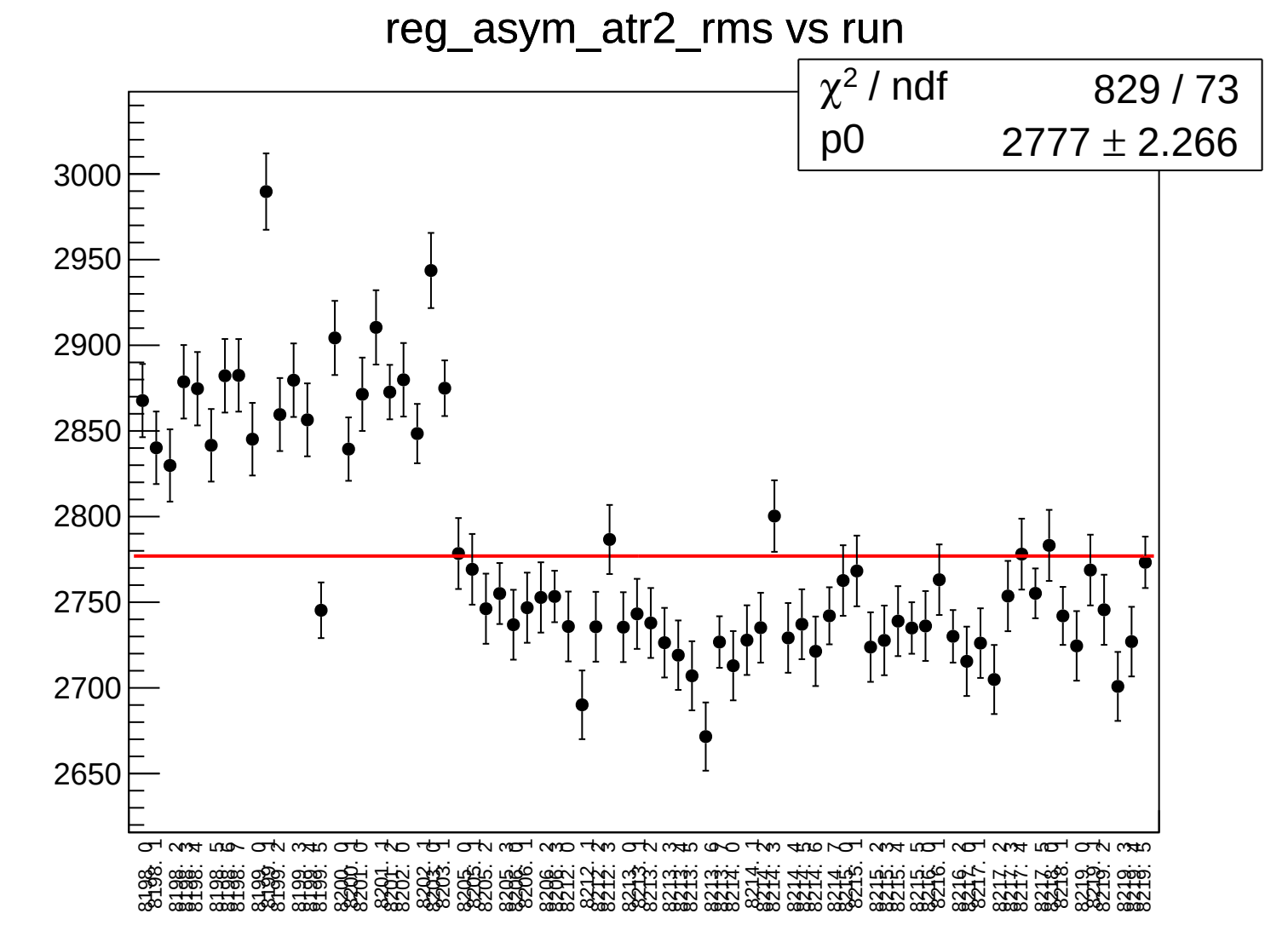

asym_atr1_mean vs run
×10^3
χ² / ndf 69.3 / 73
p0 −1214 ± 3523
100
50
0
−50
−100
pull
Entries 74
Mean −412.6
Std Dev 453.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

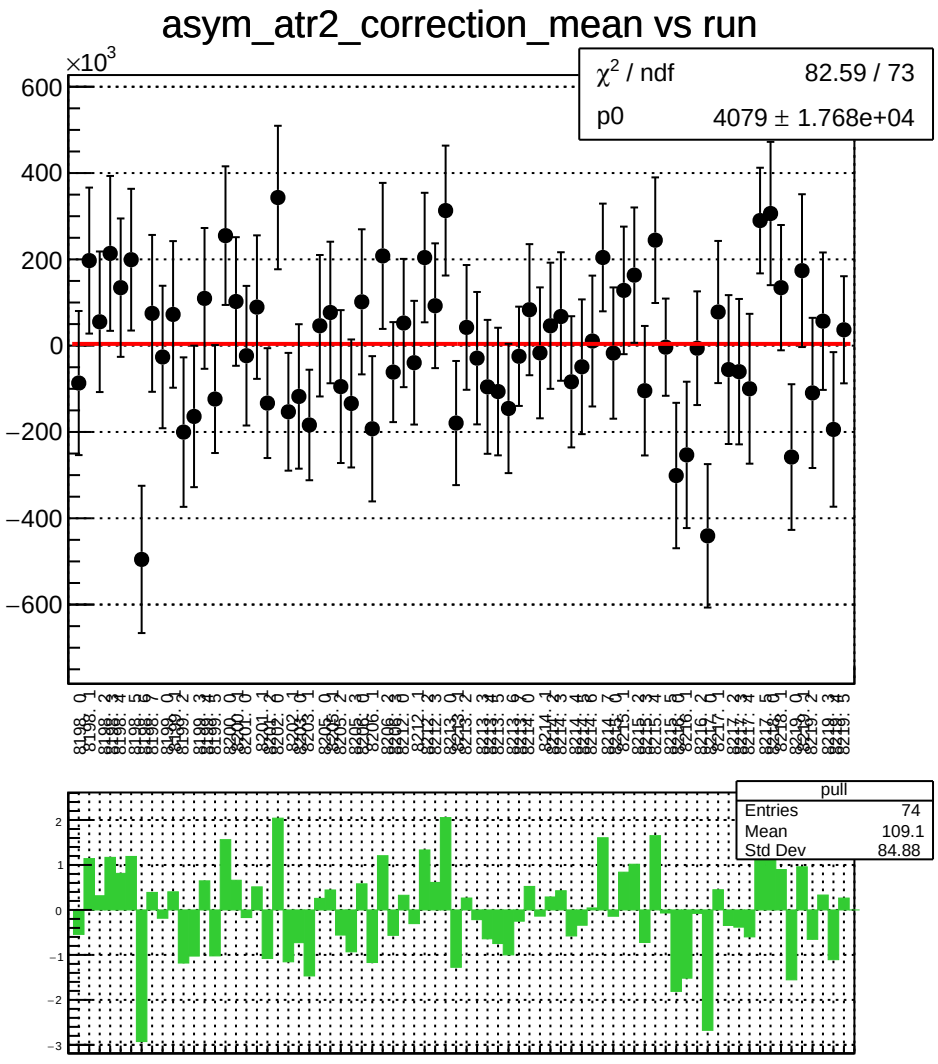

pull1D
Entries 74
Mean −0.005119
Std Dev 0.9677
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

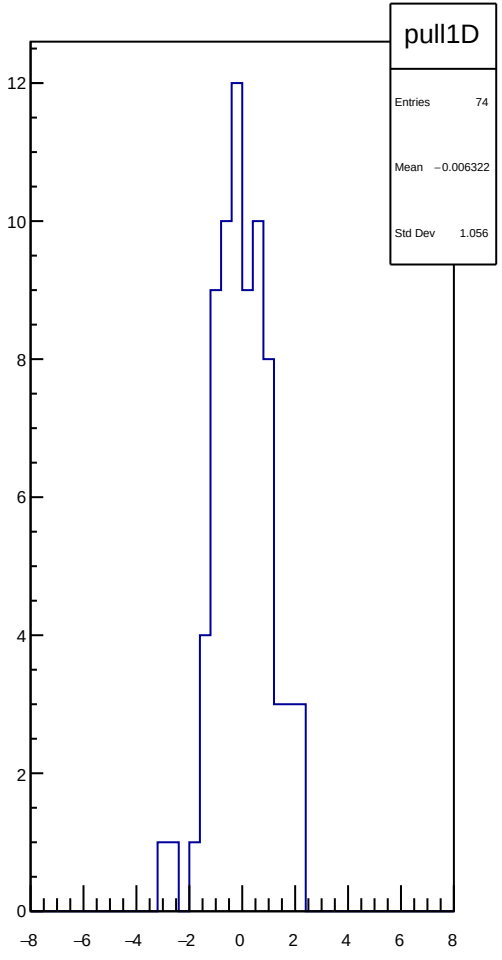

asym_atr1_rms vs run
χ² / ndf 4119 / 73
p0 3050 ± 2.491
3600
3500
3400
3300
3200
3100
3000
2900
2800

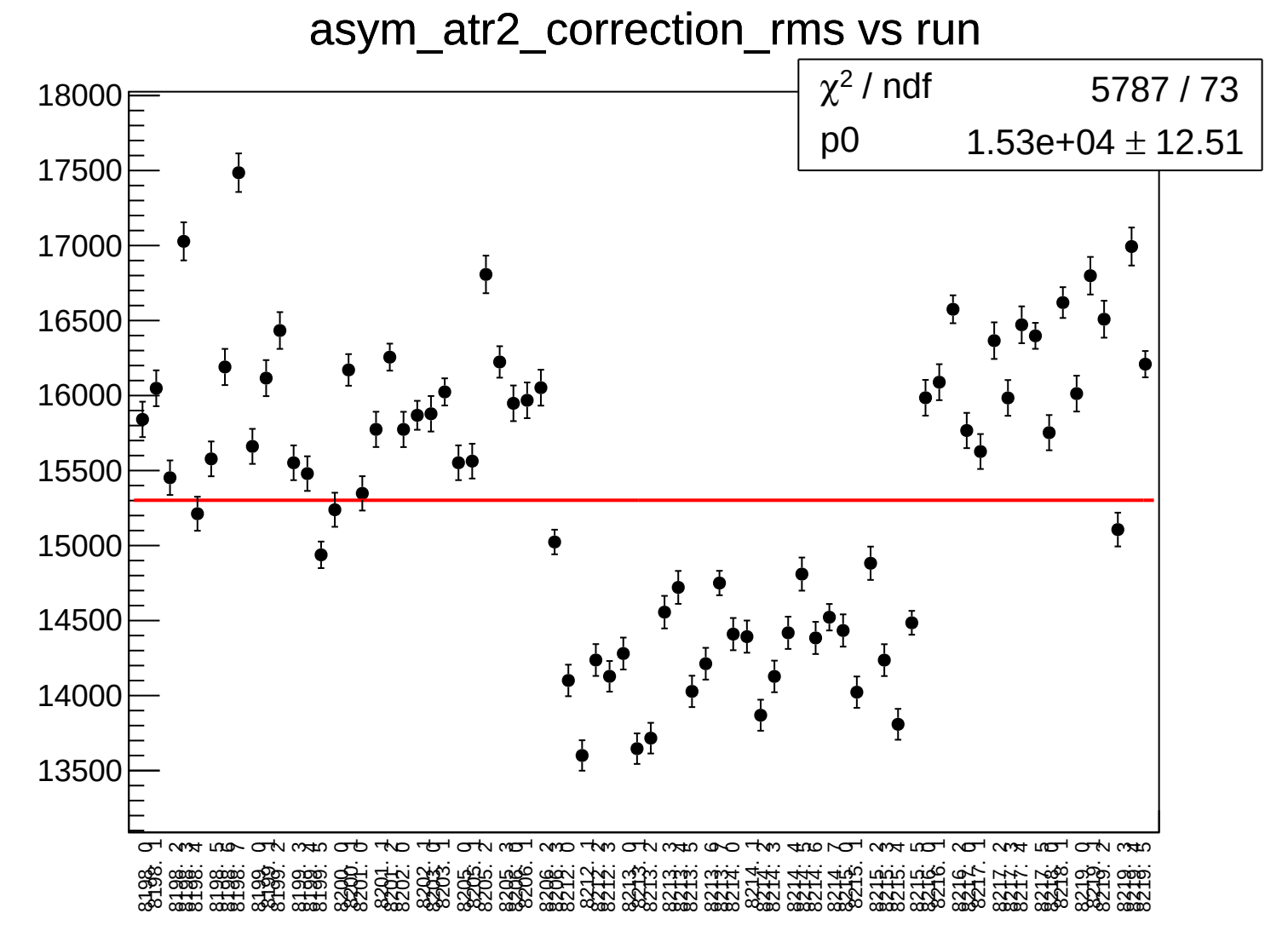

reg_asym_atr2_mean vs run
×10^3
χ^2 / ndf 89.03 / 73
p0 2807 ± 3204
100
50
0
−50
−100
pull
Entries 74
Mean −556
Std Dev 597
2
1
0
−1
−2
−3

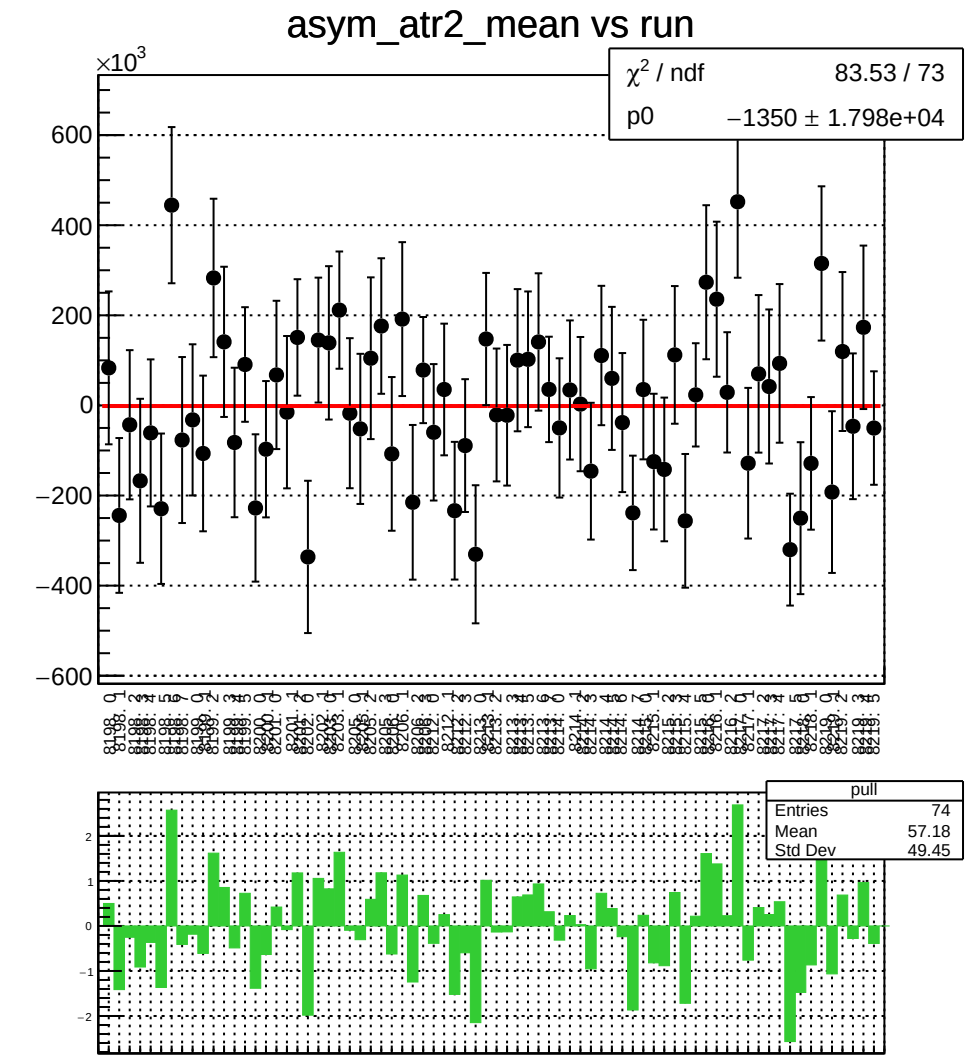

pull1D
Entries 74
Mean 0.00306
Std Dev 1.097
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

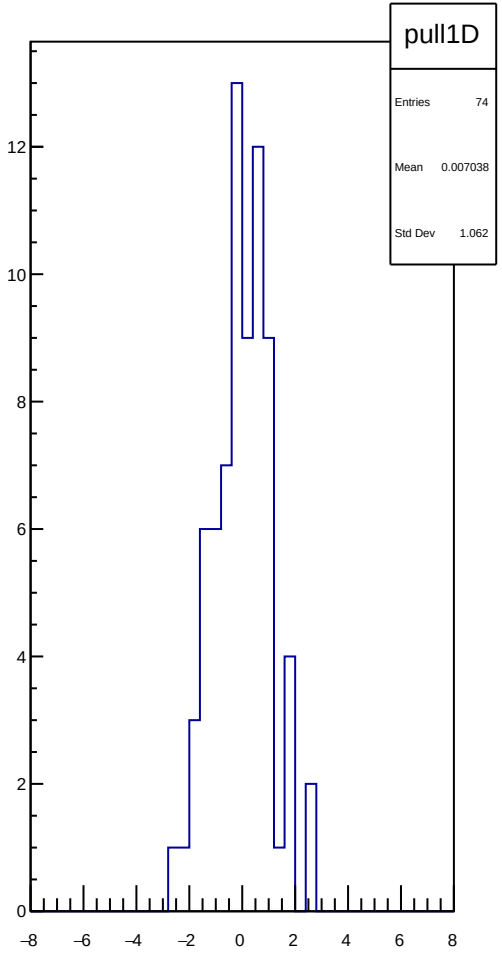

reg_asym_atr2_rms vs run
χ² / ndf 829 / 73
p0 2777 ± 2.266
3000
2950
2900
2850
2800
2750
2700
2650

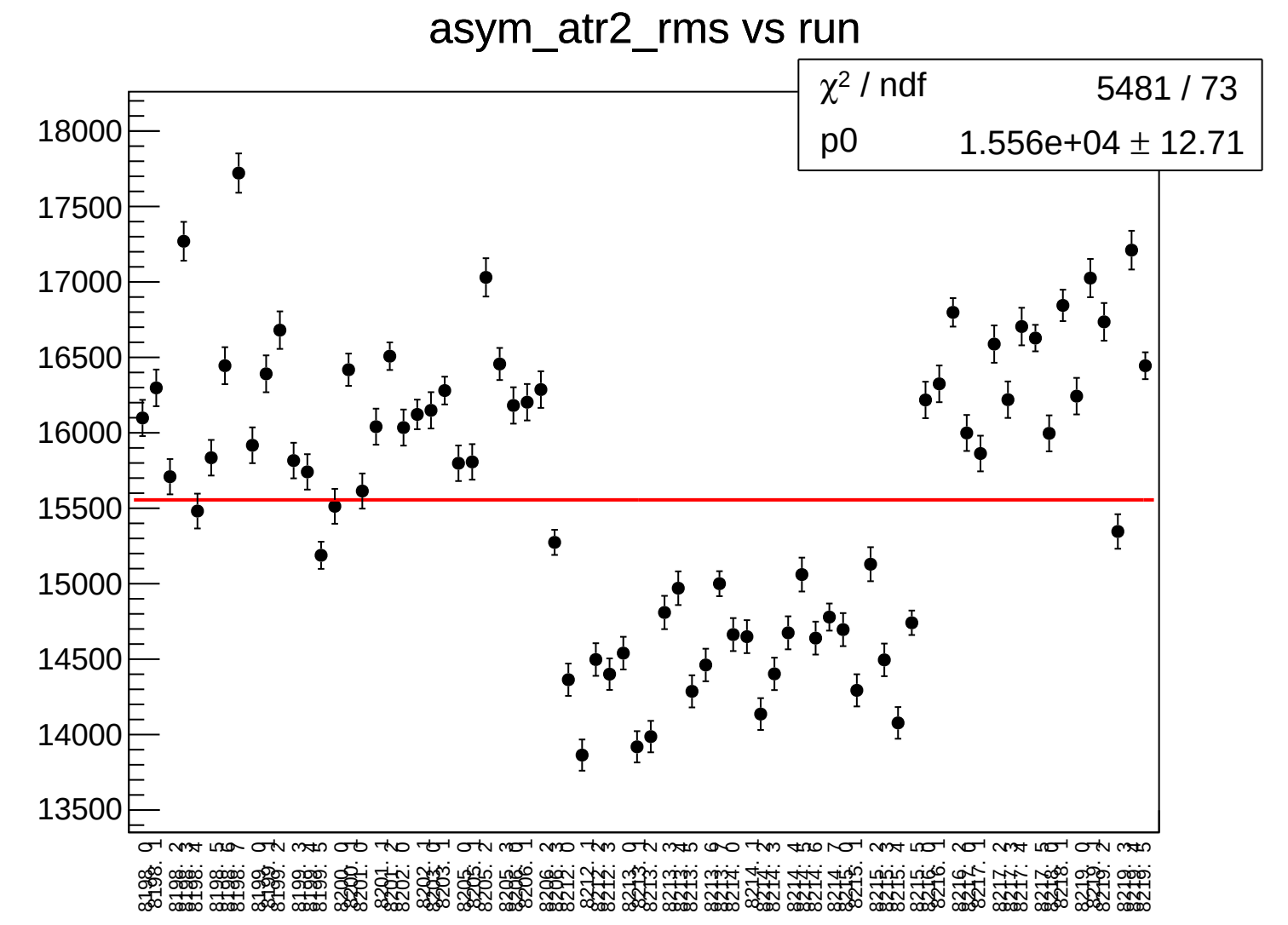

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 82.59 / 73
p0 4079 ± 1.768e+04
pull
Entries 74
Mean 109.1
Std Dev 84.88

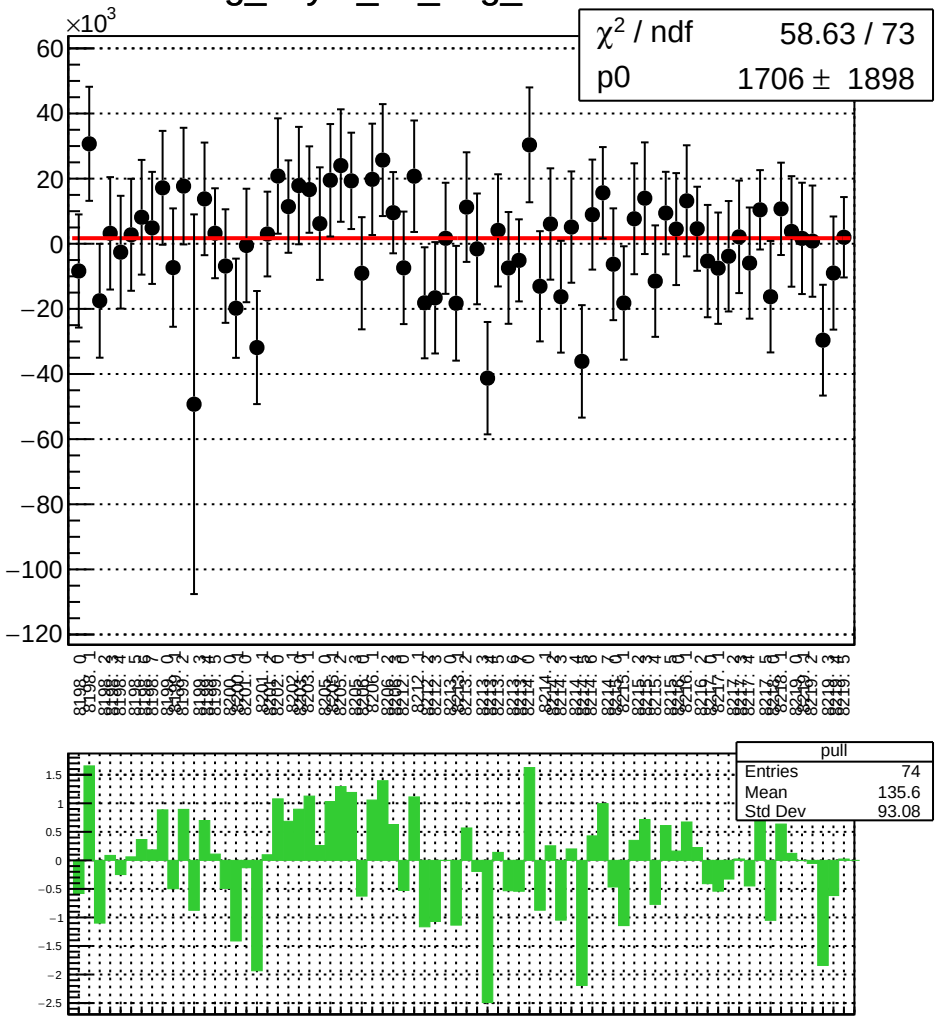

pull1D
Entries 74
Mean −0.006322
Std Dev 1.056

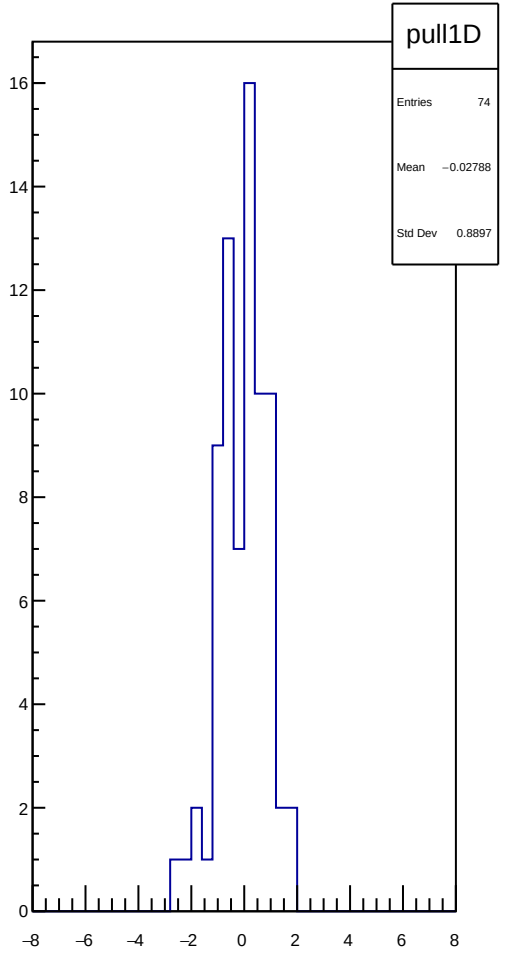

asym_atr2_correction_rms vs run
χ² / ndf 5787 / 73
p0 1.53e+04 ± 12.51
18000
17500
17000
16500
16000
15500
15000
14500
14000
13500

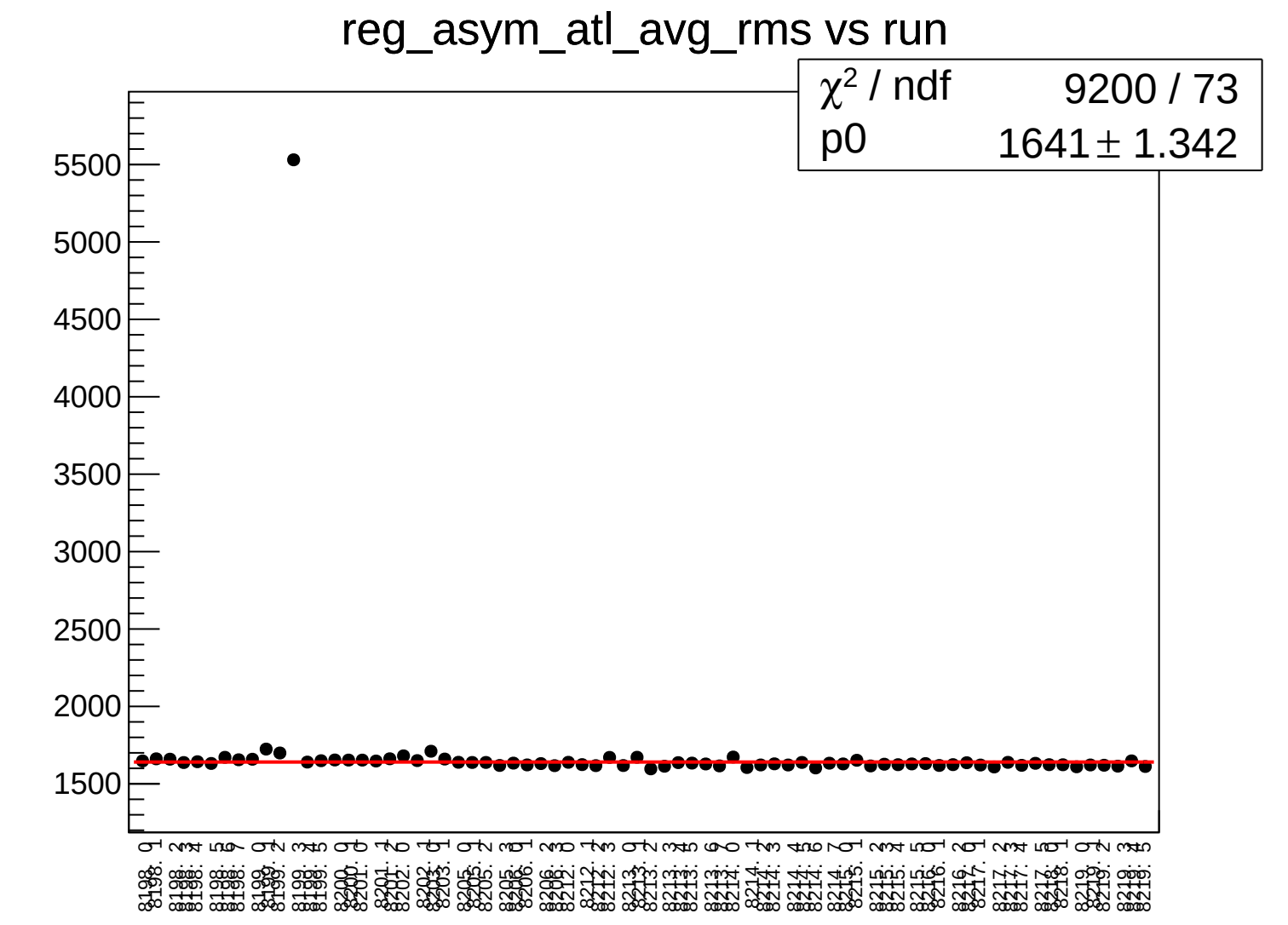

asym_atr2_mean vs run
×10^3
χ² / ndf 83.53 / 73
p0 −1350 ± 1.798e+04
600
400
200
0
−200
−400
−600
pull
Entries 74
Mean 57.18
Std Dev 49.45
2
1
0
−1
−2

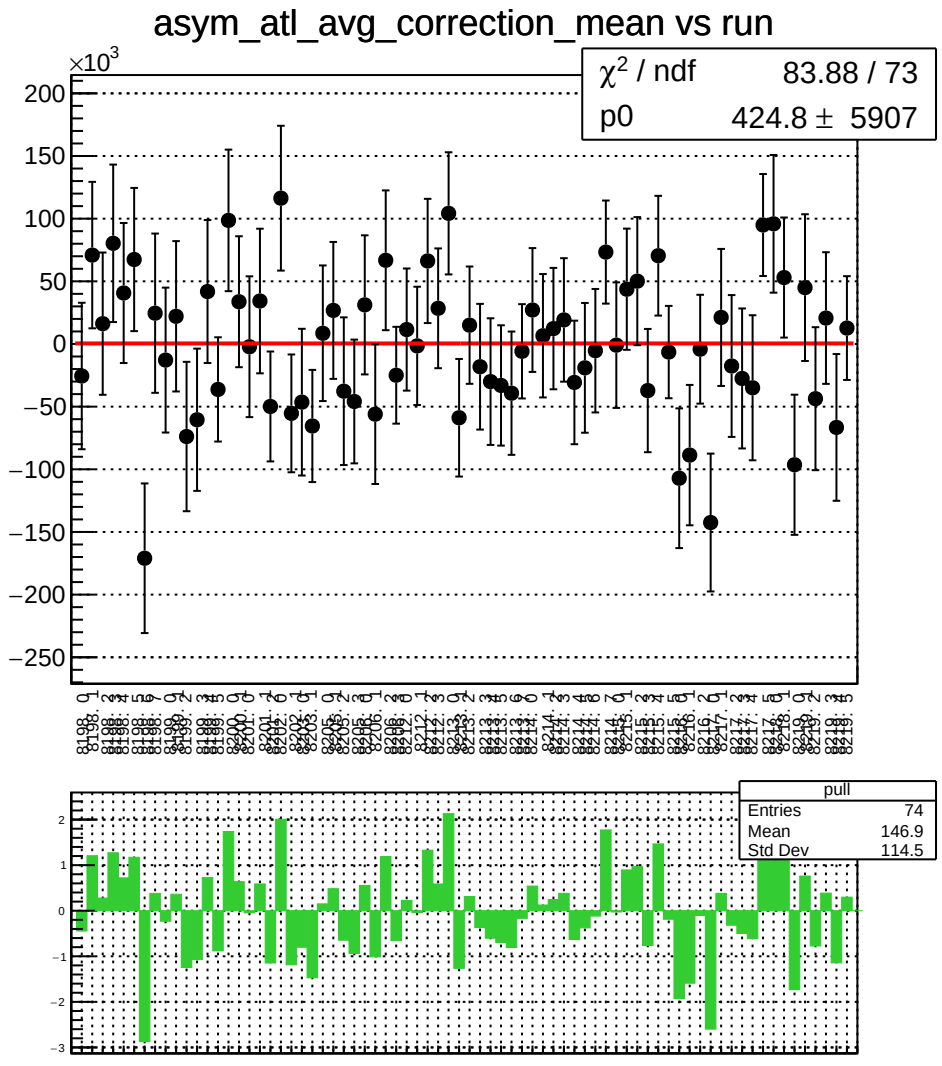

pull1D
Entries 74
Mean 0.007038
Std Dev 1.062
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

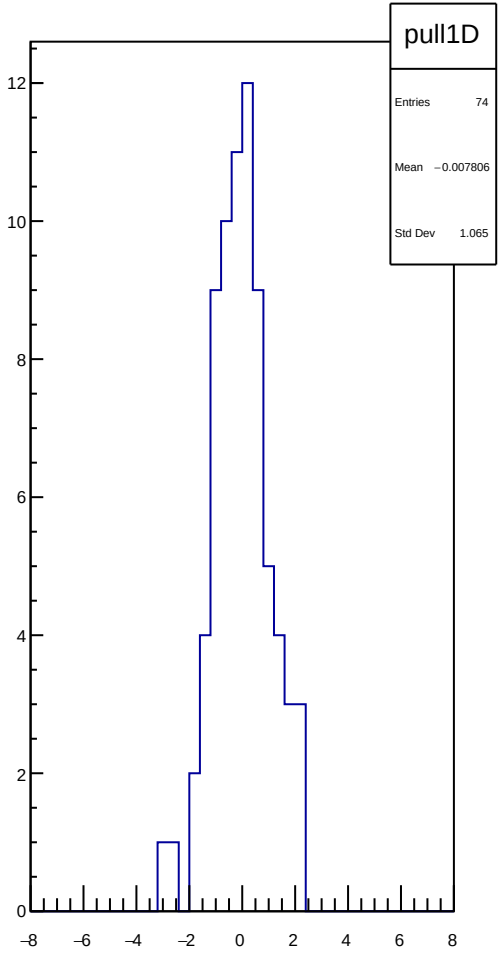

asym_atr2_rms vs run
χ² / ndf 5481 / 73
p0 1.556e+04 ± 12.71
18000
17500
17000
16500
16000
15500
15000
14500
14000
13500

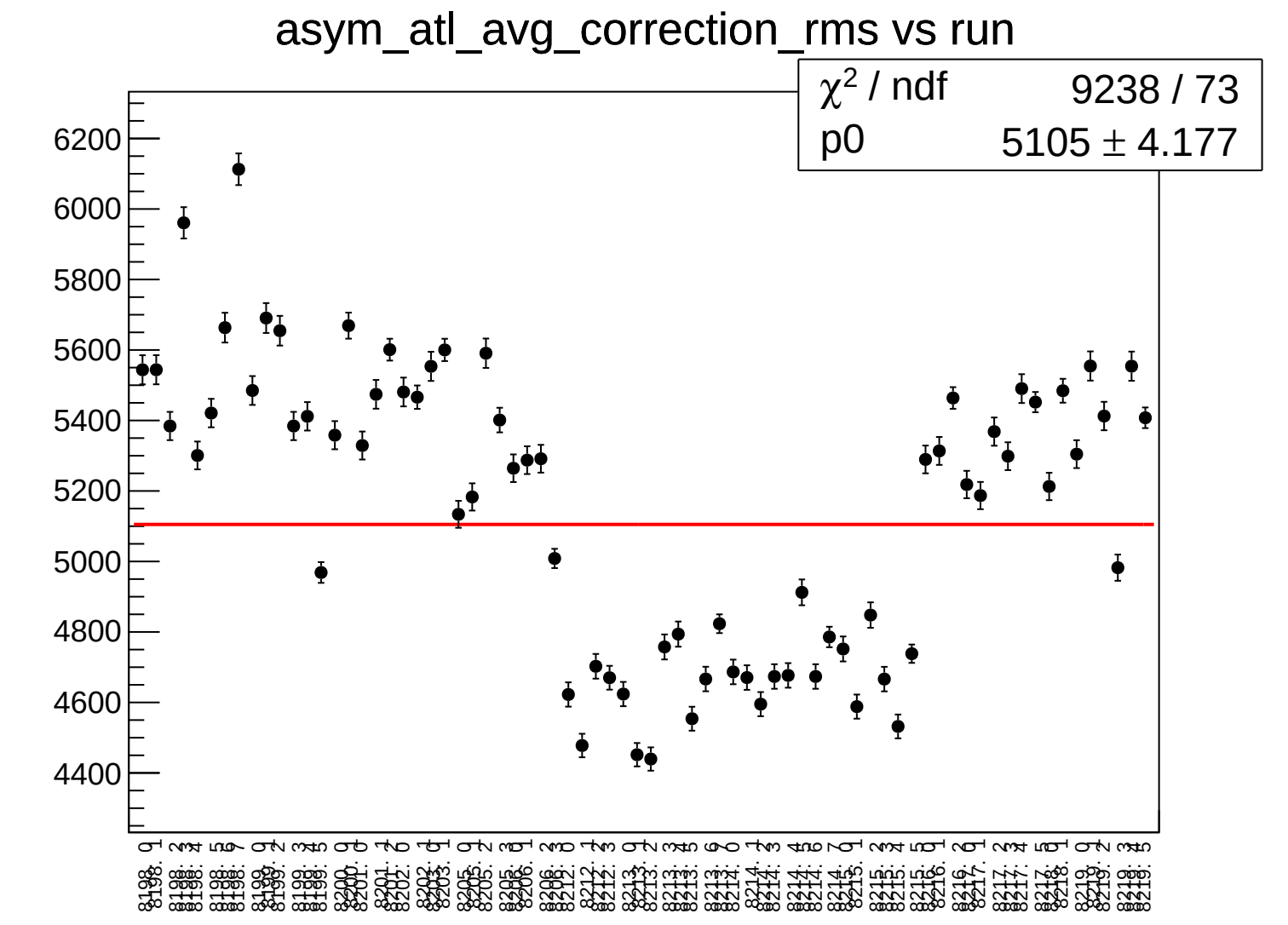

reg_asym_atl_avg_mean vs run
×10^3
χ² / ndf 58.63 / 73
p0 1706 ± 1898
pull
Entries 74
Mean 135.6
Std Dev 93.08

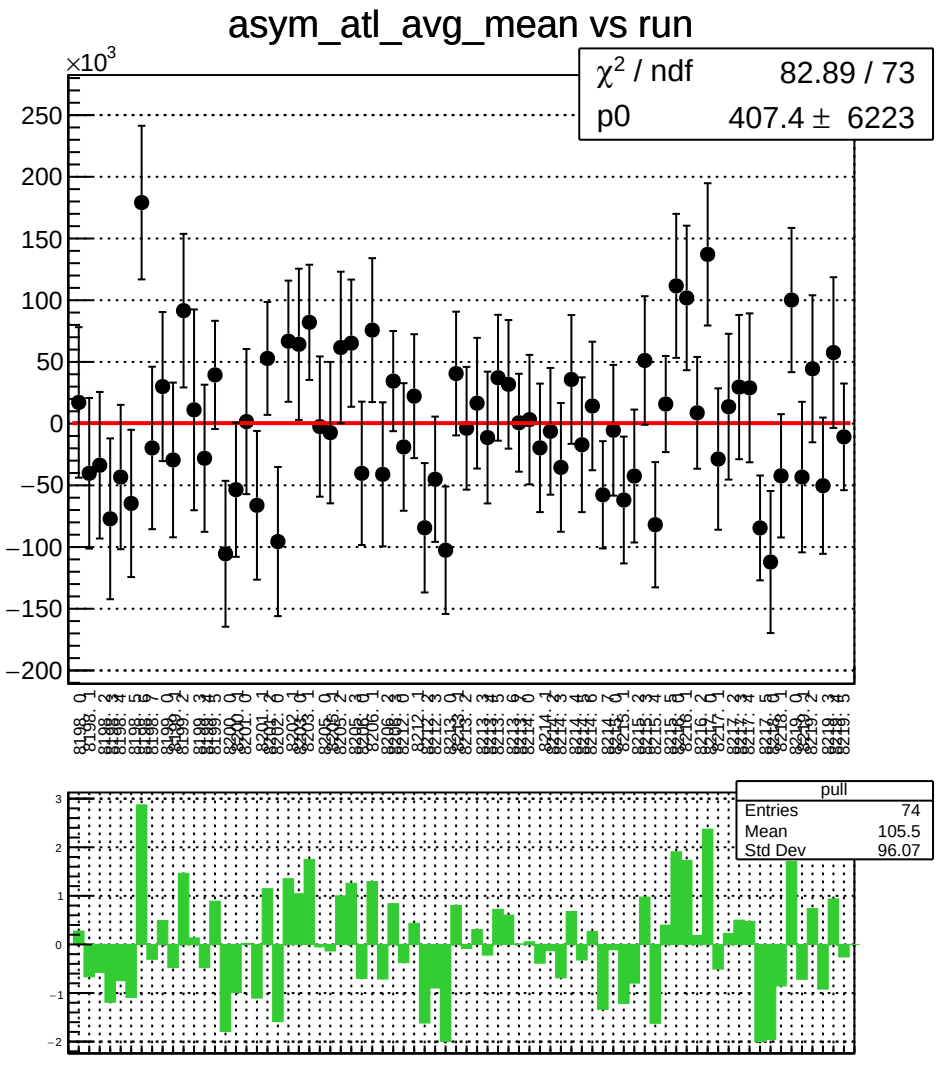

pull1D
Entries 74
Mean −0.02788
Std Dev 0.8897

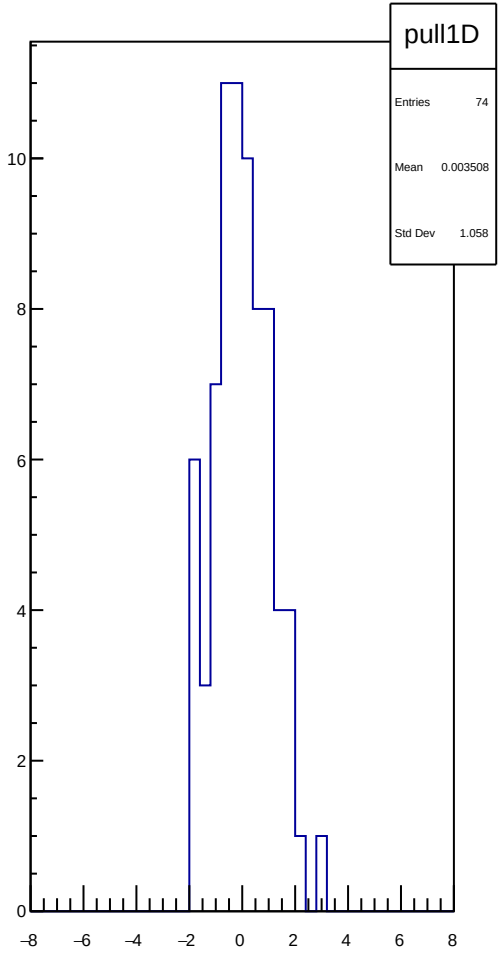

reg_asym_atl_avg_rms vs run
χ^2 / ndf 9200 / 73
p0 1641 ± 1.342
5500
5000
4500
4000
3500
3000
2500
2000
1500

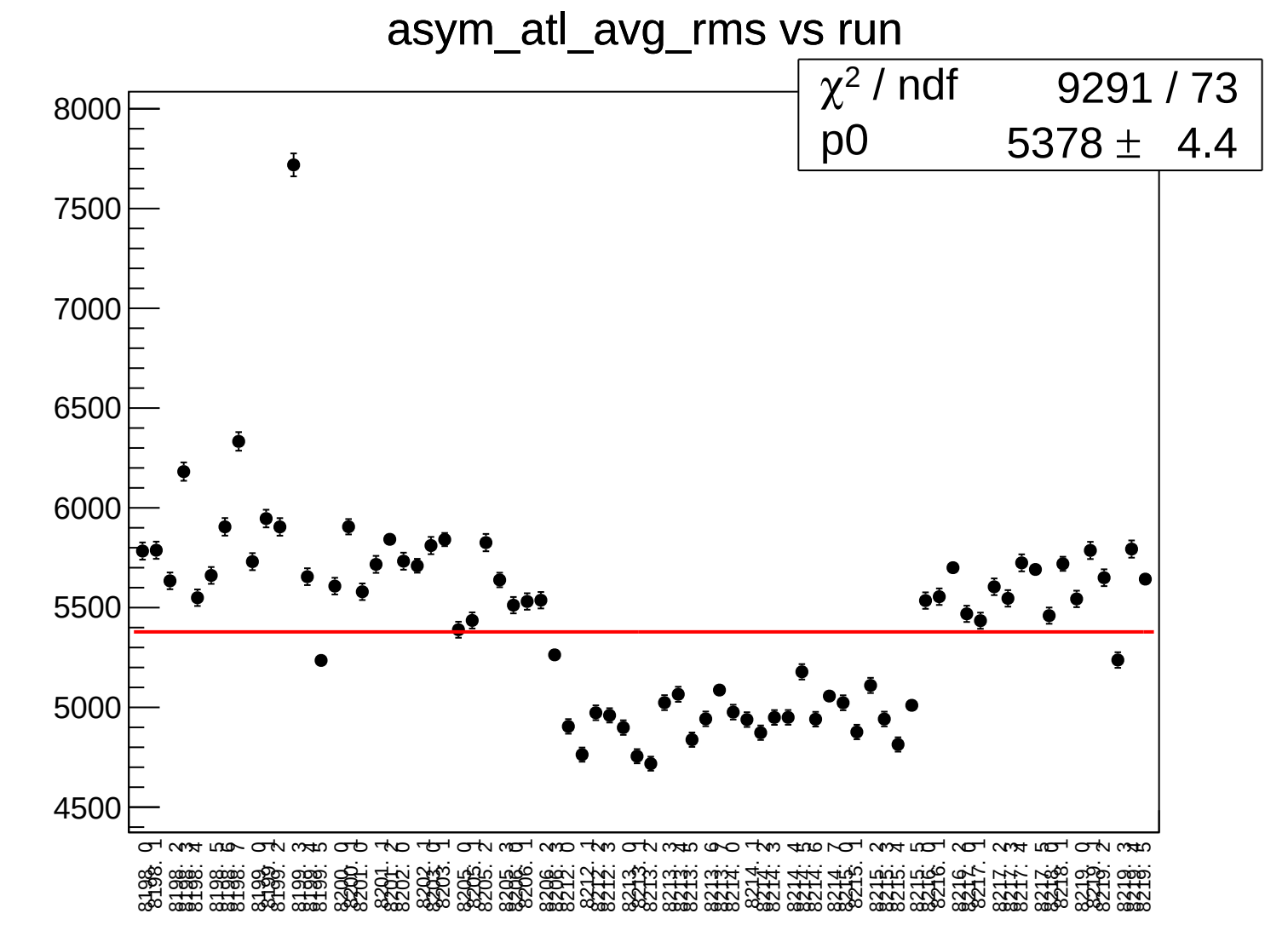

asym_atl_avg_correction_mean vs run
×10^3
χ² / ndf 83.88 / 73
p0 424.8 ± 5907
pull
Entries 74
Mean 146.9
Std Dev 114.5

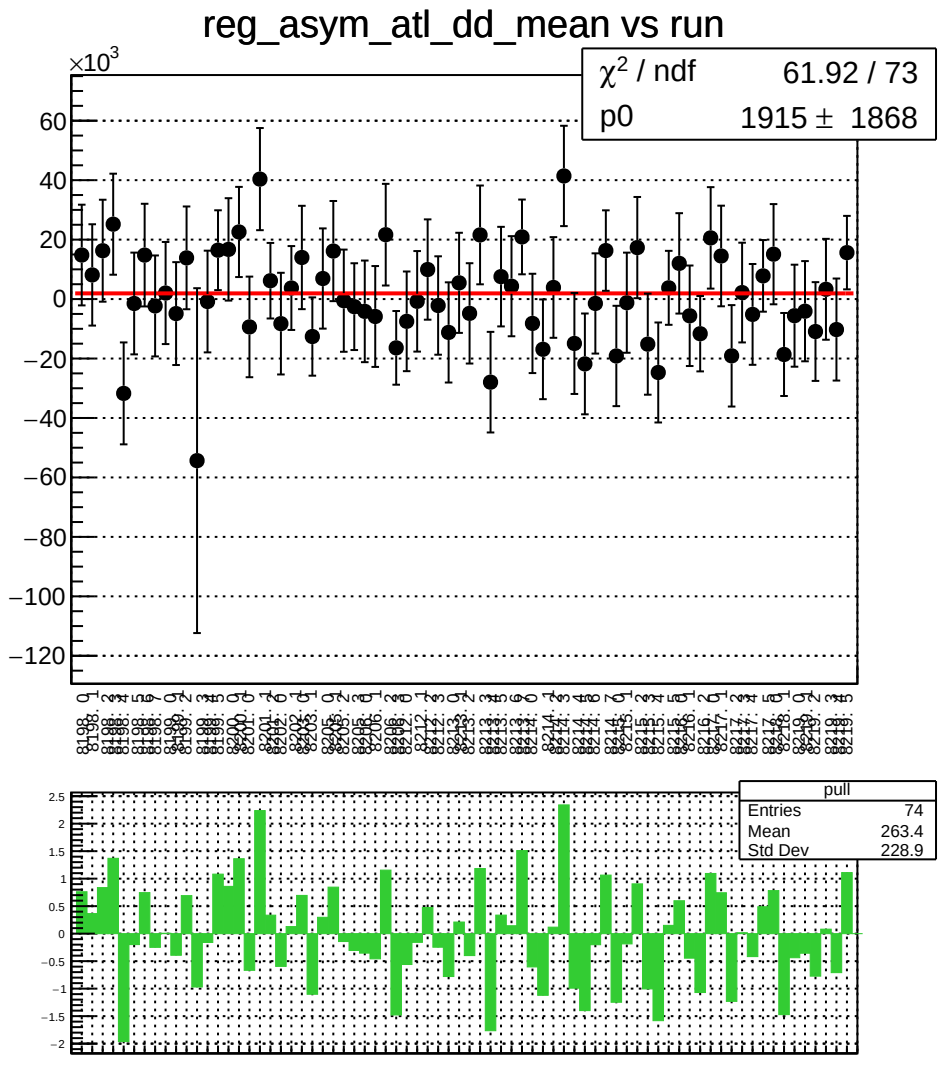

pull1D
Entries 74
Mean −0.007806
Std Dev 1.065

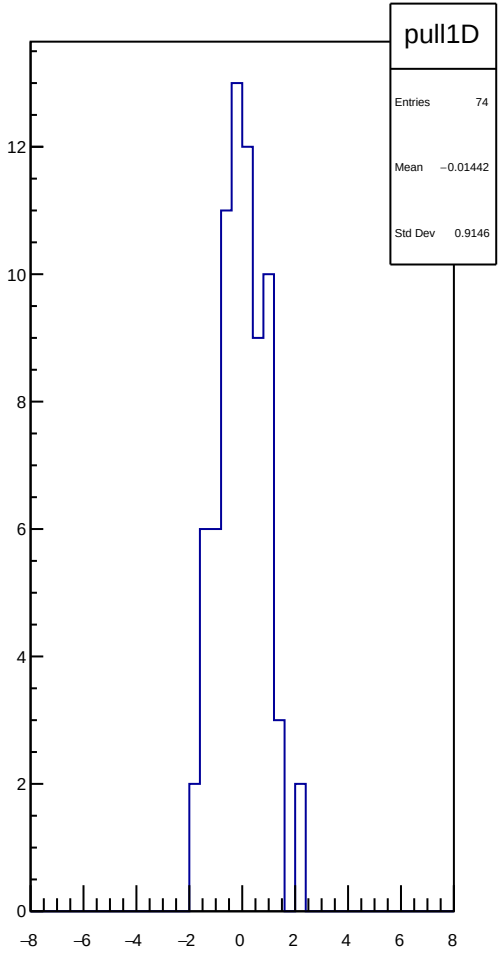

asym_atl_avg_correction_rms vs run
χ² / ndf 9238 / 73
p0 5105 ± 4.177
6200
6000
5800
5600
5400
5200
5000
4800
4600
4400

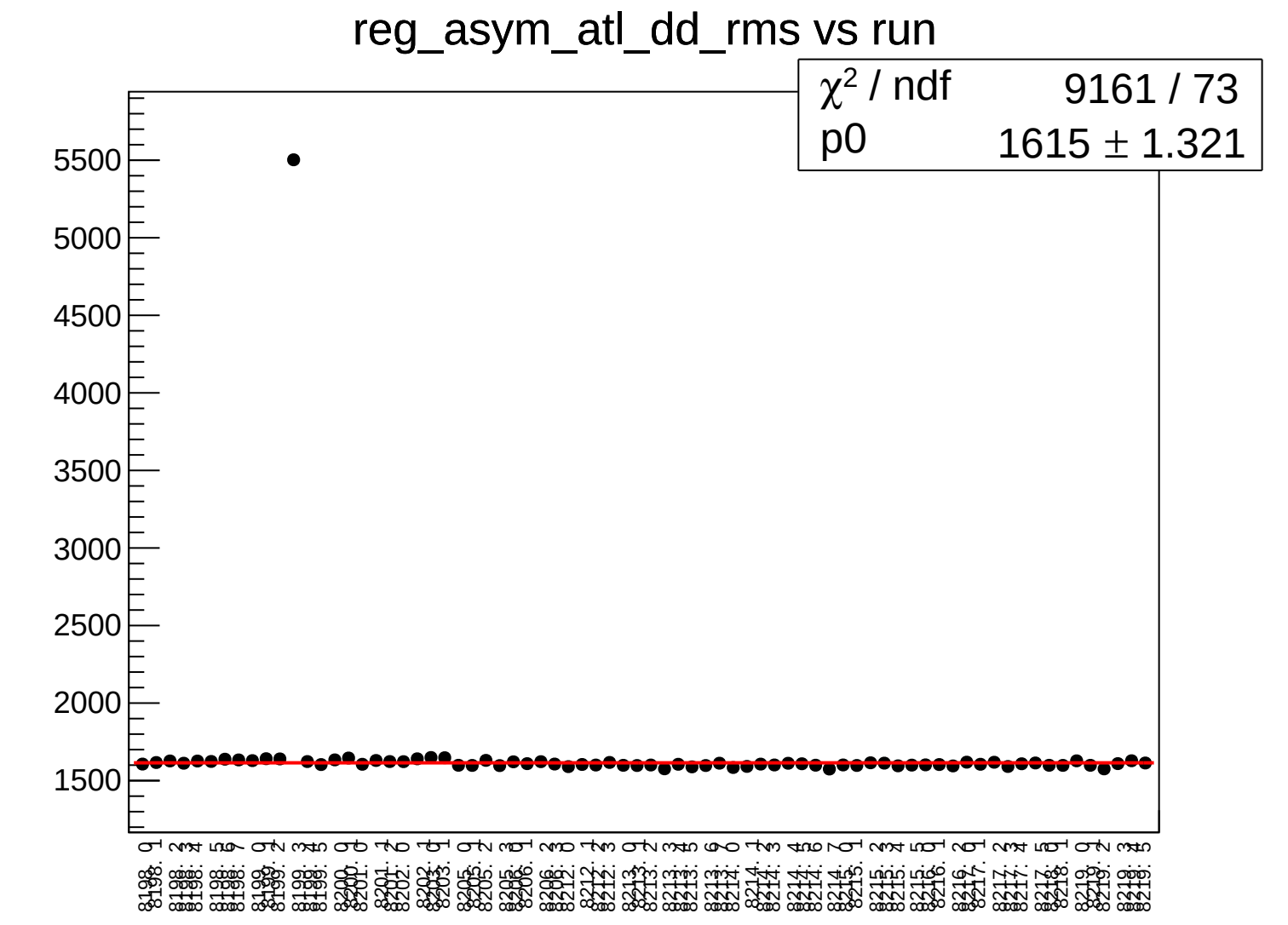

asym_atl_avg_mean vs run
×10^3
χ^2 / ndf 82.89 / 73
p0 407.4 ± 6223
pull
Entries 74
Mean 105.5
Std Dev 96.07

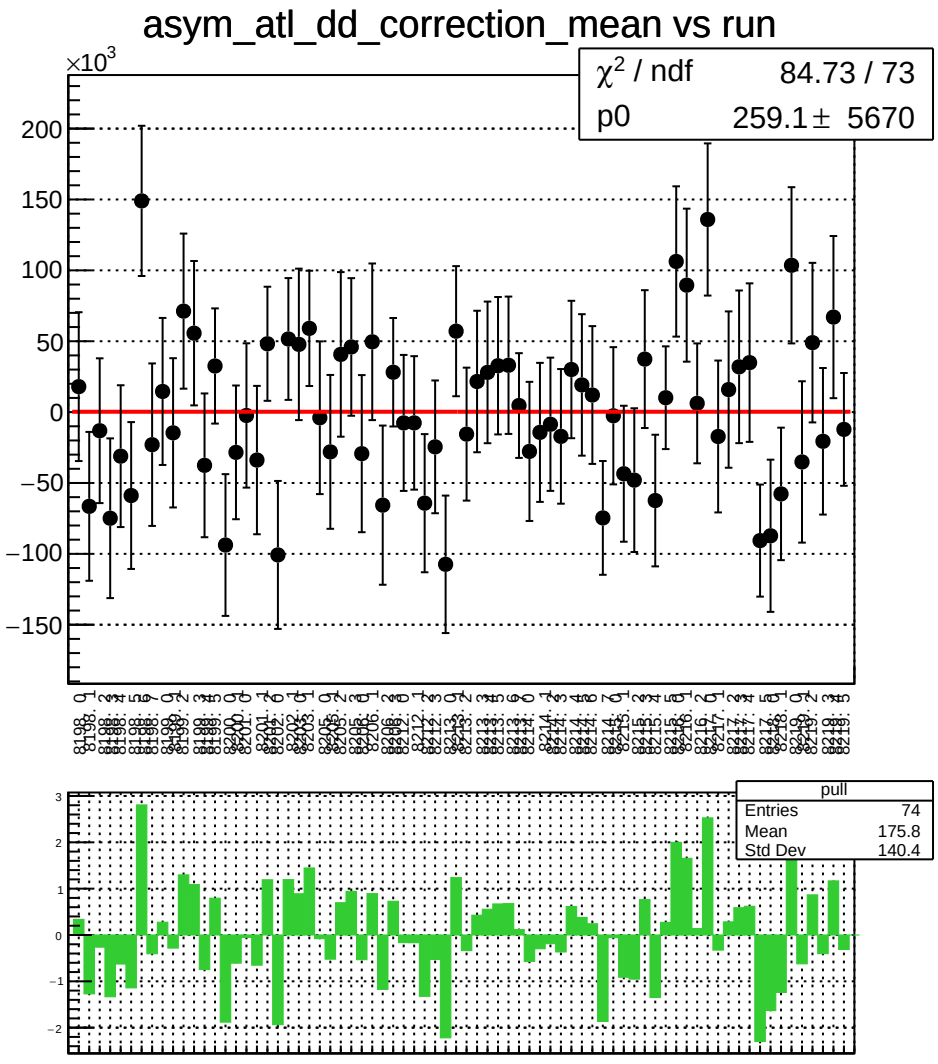

pull1D
Entries 74
Mean 0.003508
Std Dev 1.058

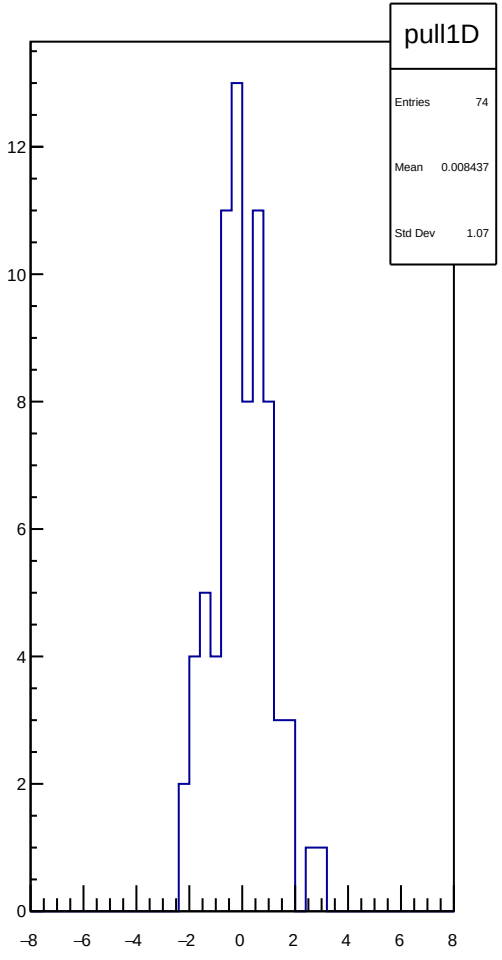

asym_atl_avg_rms vs run
χ² / ndf 9291 / 73
p0 5378 ± 4.4
8000
7500
7000
6500
6000
5500
5000
4500

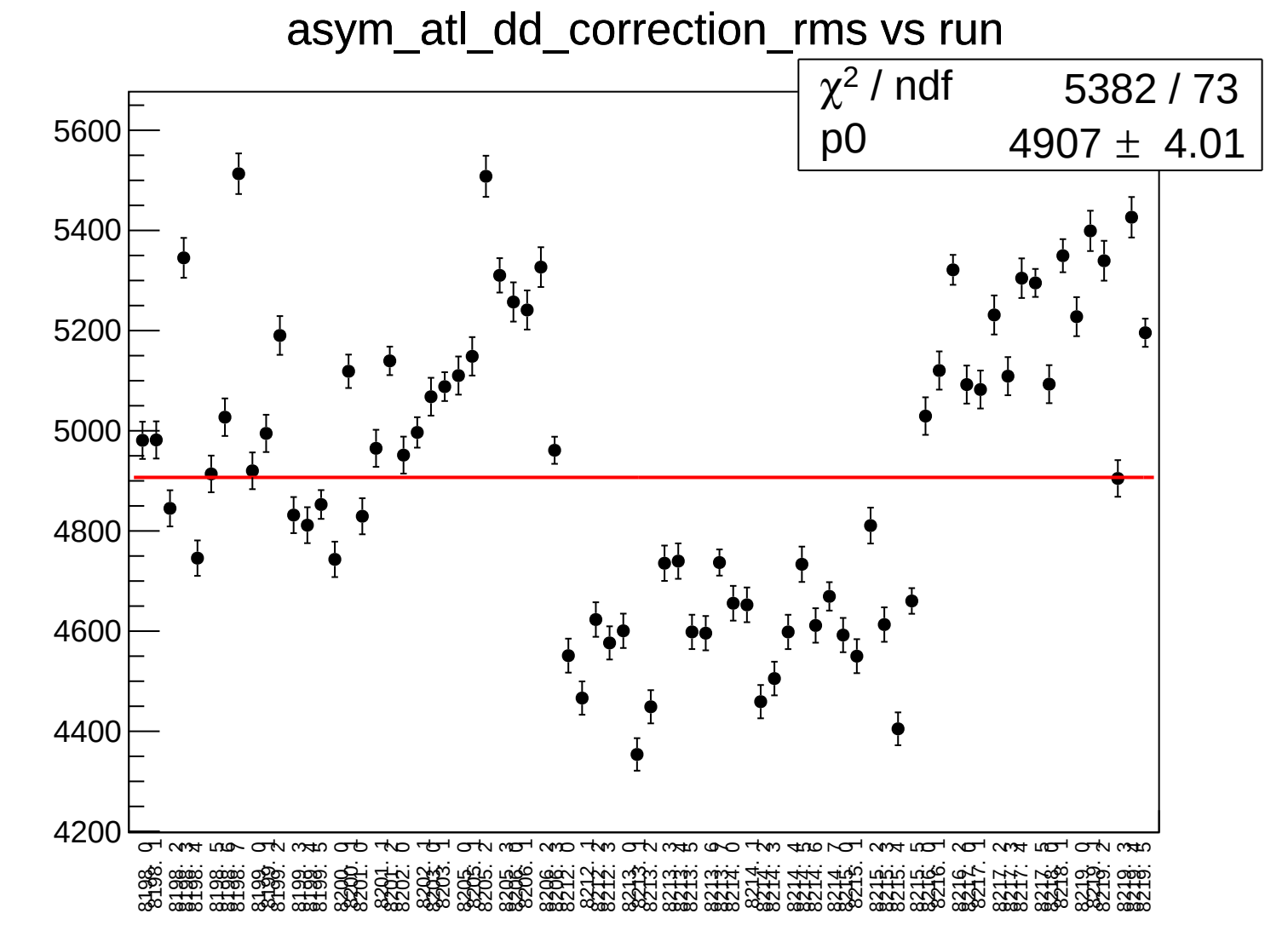

reg_asym_atl_dd_mean vs run
×10^3
χ^2 / ndf 61.92 / 73
p0 1915 ± 1868
pull
Entries 74
Mean 263.4
Std Dev 228.9

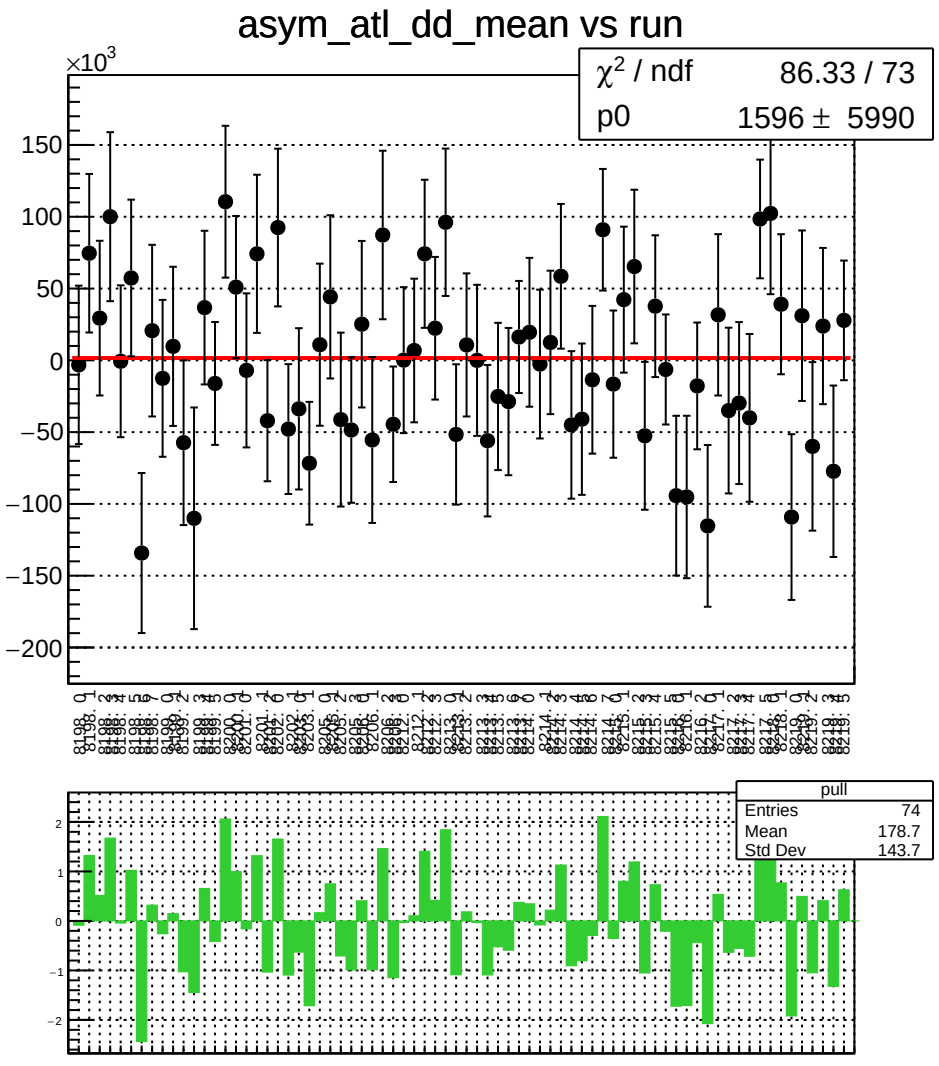

pull1D
Entries 74
Mean −0.01442
Std Dev 0.9146

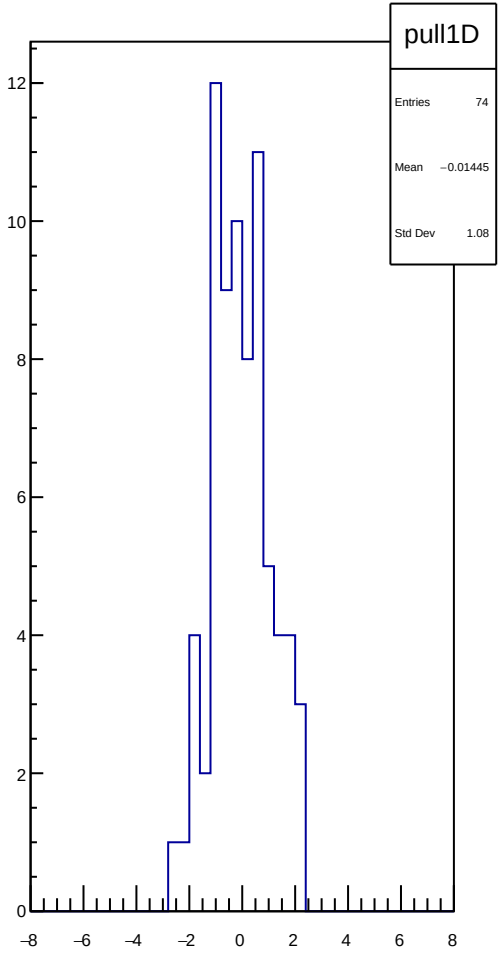

reg_asym_atl_dd_rms vs run
χ^2 / ndf 9161 / 73
p0 1615 ± 1.321
5500
5000
4500
4000
3500
3000
2500
2000
1500

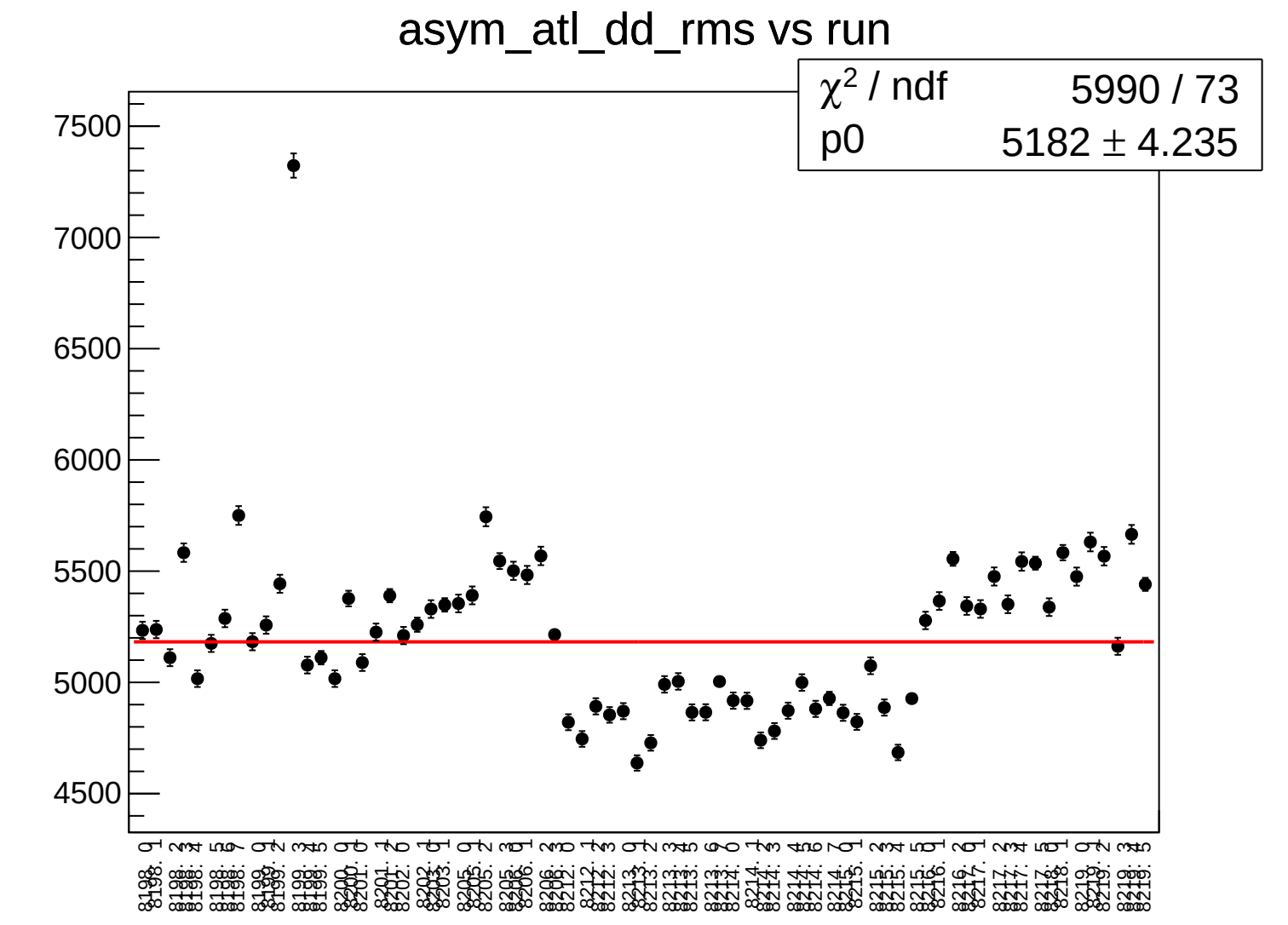

asym_atl_dd_correction_mean vs run
×10^3
χ² / ndf 84.73 / 73
p0 259.1 ± 5670
pull
Entries 74
Mean 175.8
Std Dev 140.4

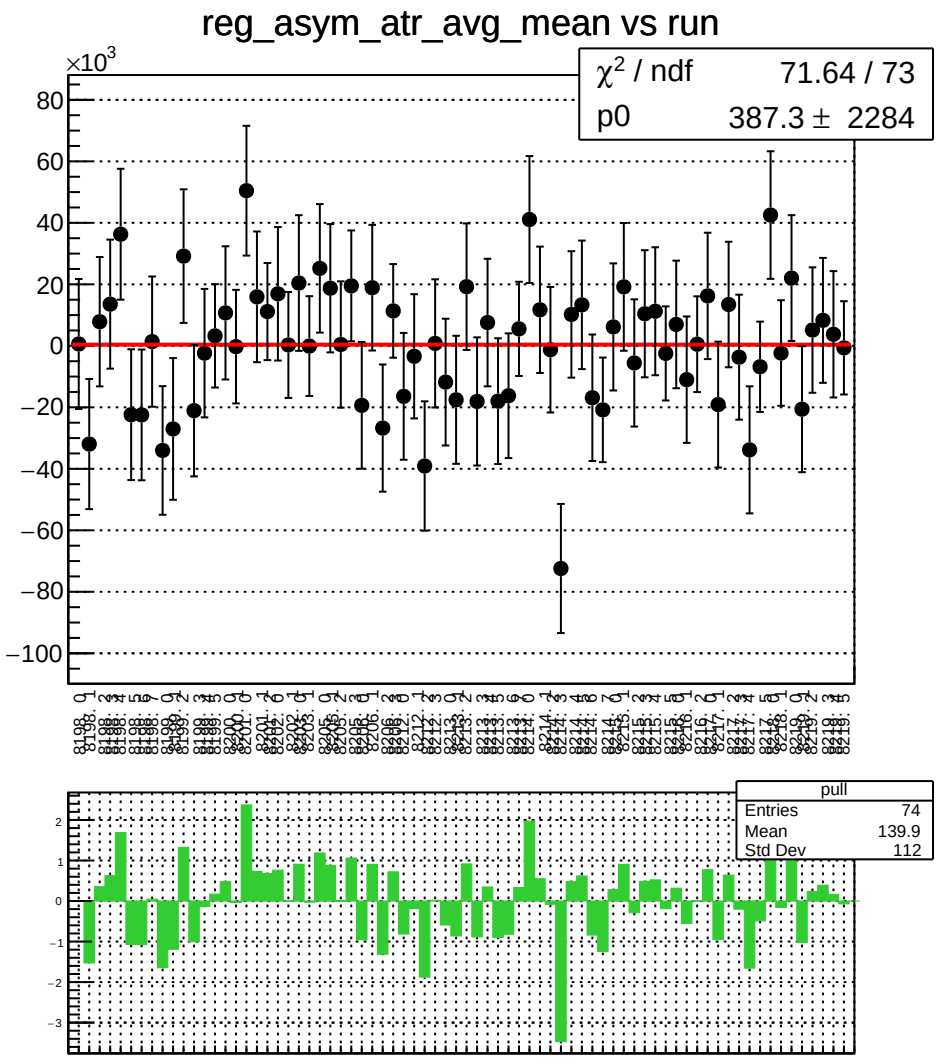

pull1D
Entries 74
Mean 0.008437
Std Dev 1.07

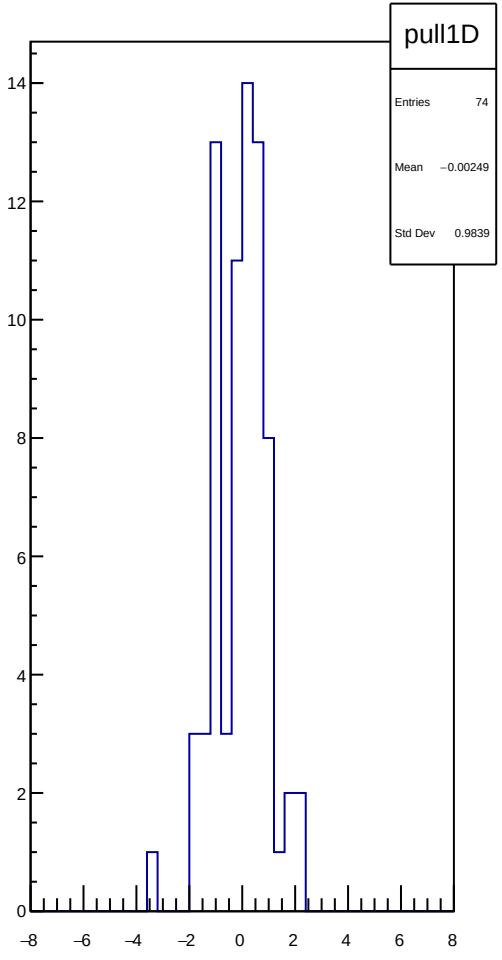

asym_atl_dd_correction_rms vs run
χ² / ndf 5382 / 73
p0 4907 ± 4.01
5600
5400
5200
5000
4800
4600
4400
4200

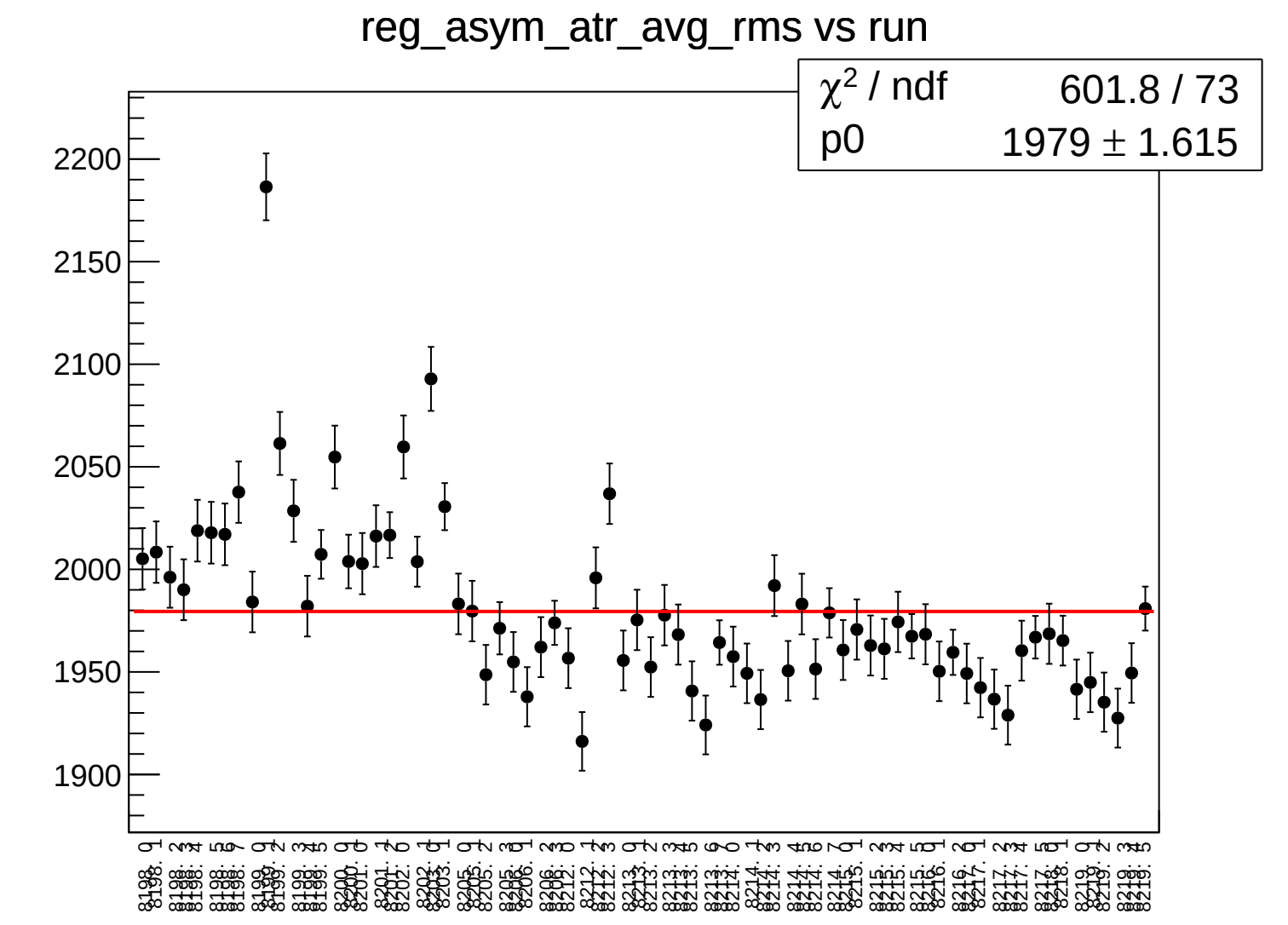

asym_atl_dd_mean vs run
×10^3
χ² / ndf 86.33 / 73
p0 1596 ± 5990
150
100
50
0
−50
−100
−150
−200
pull
Entries 74
Mean 178.7
Std Dev 143.7
2
1
0
−1
−2

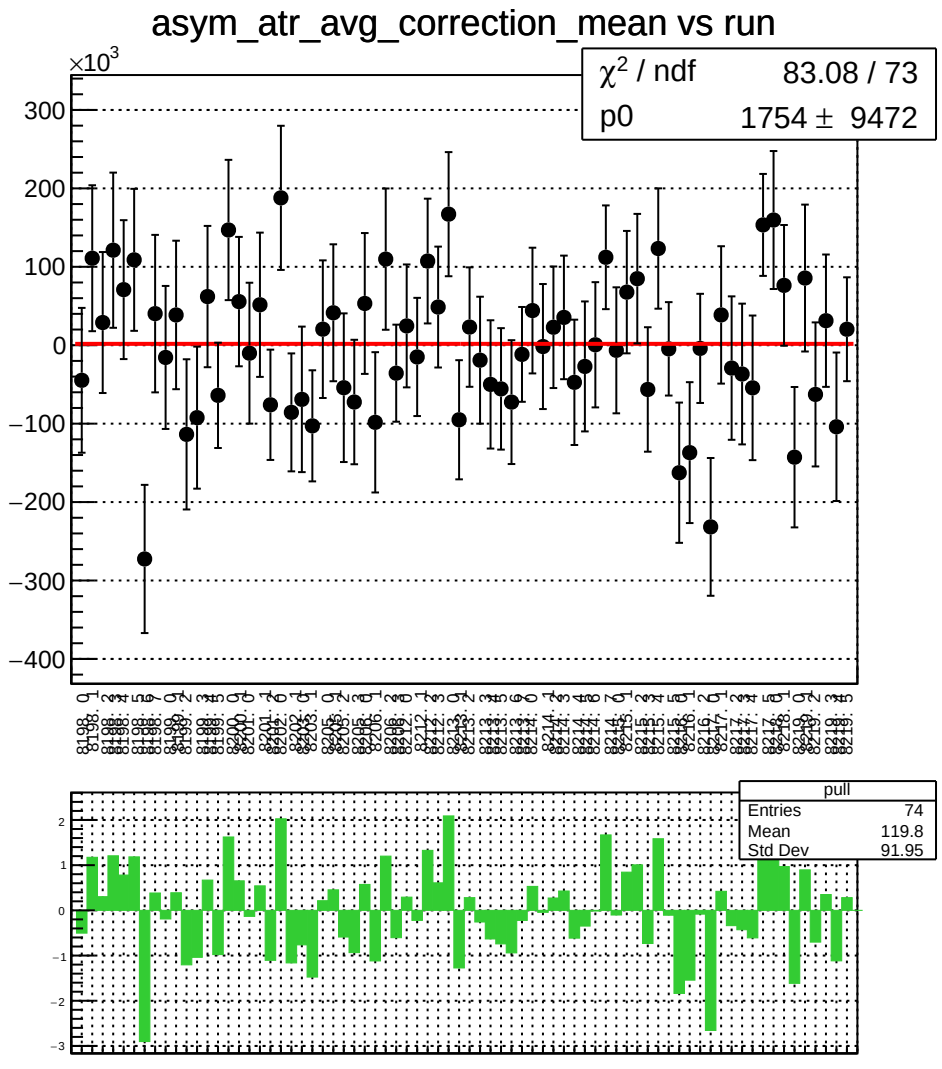

pull1D
Entries 74
Mean −0.01445
Std Dev 1.08
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

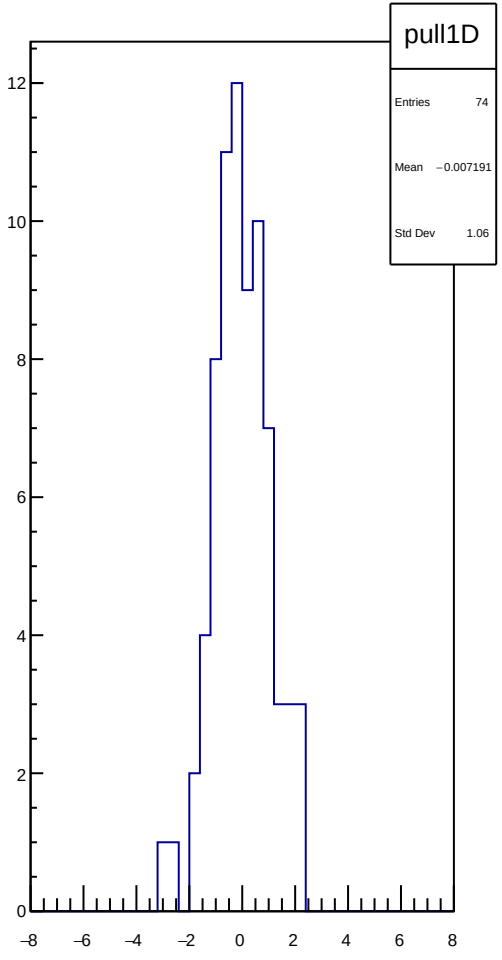

asym_atl_dd_rms vs run
χ² / ndf 5990 / 73
p0 5182 ± 4.235
7500
7000
6500
6000
5500
5000
4500

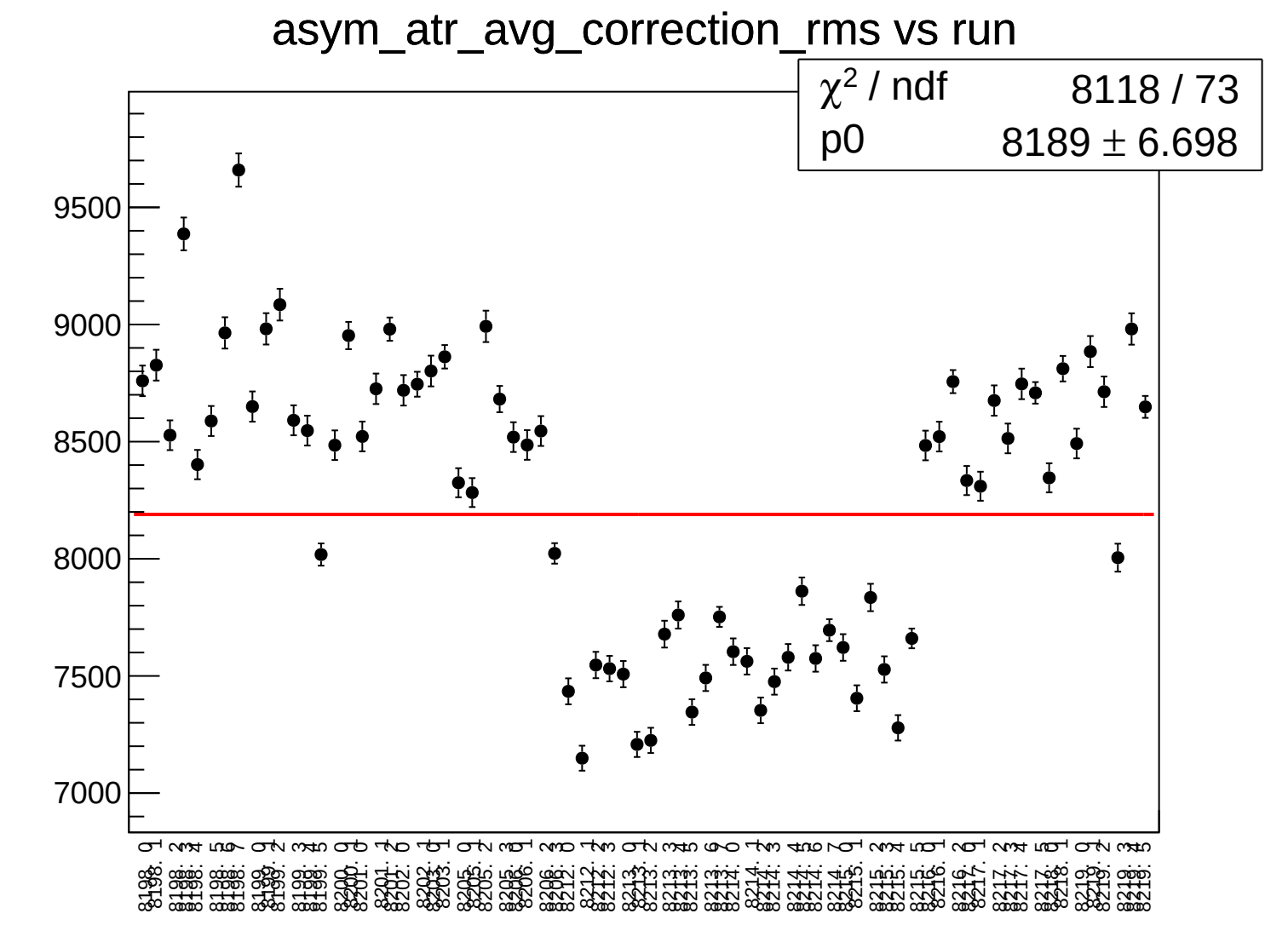

reg_asym_atr_avg_mean vs run
×10^3
χ^2 / ndf 71.64 / 73
p0 387.3 ± 2284
pull
Entries 74
Mean 139.9
Std Dev 112

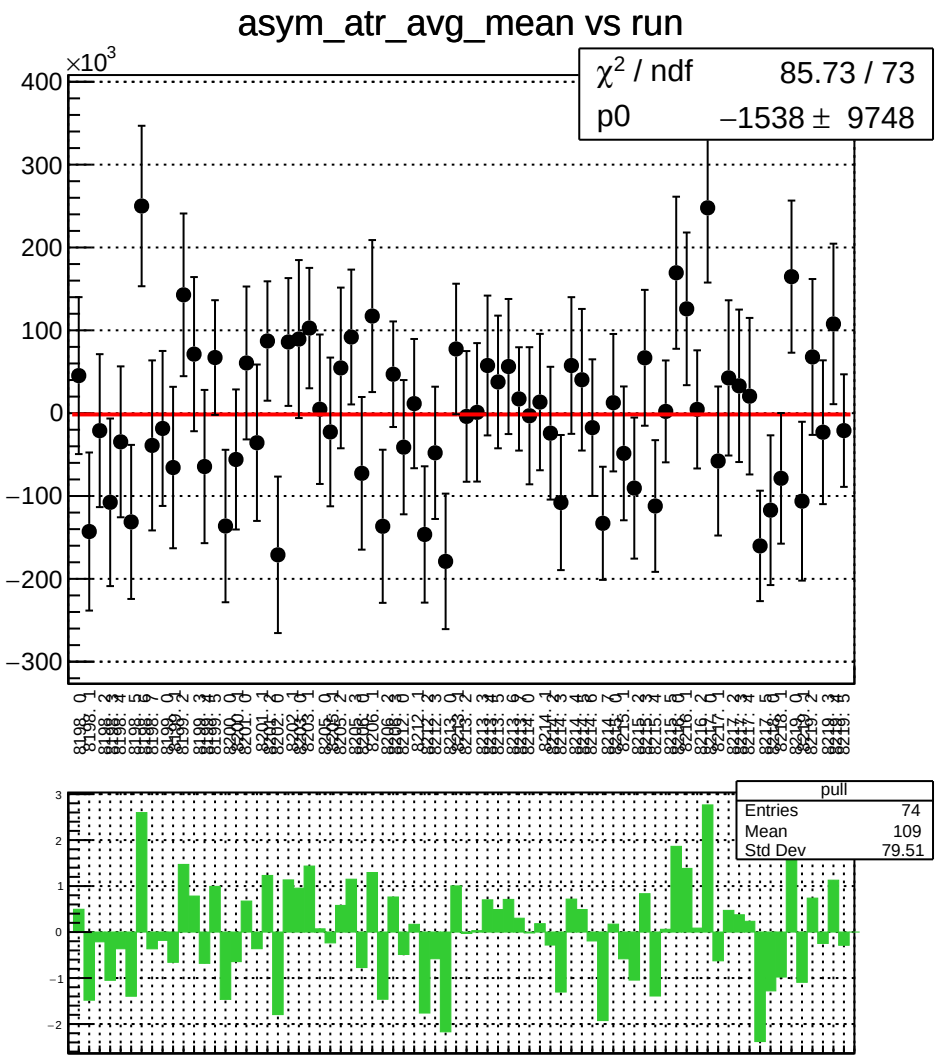

pull1D
Entries 74
Mean −0.00249
Std Dev 0.9839

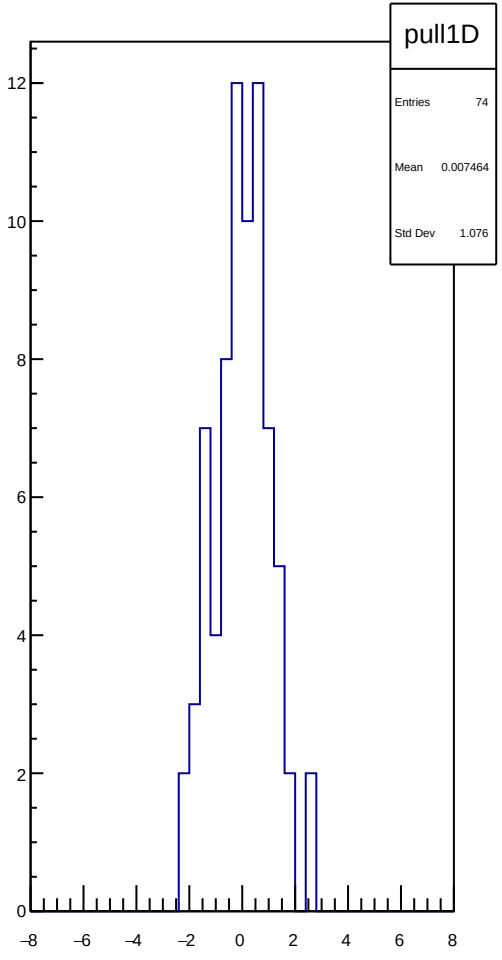

reg_asym_atr_avg_rms vs run
χ^2 / ndf 601.8 / 73
p0 1979 ± 1.615
2200
2150
2100
2050
2000
1950
1900

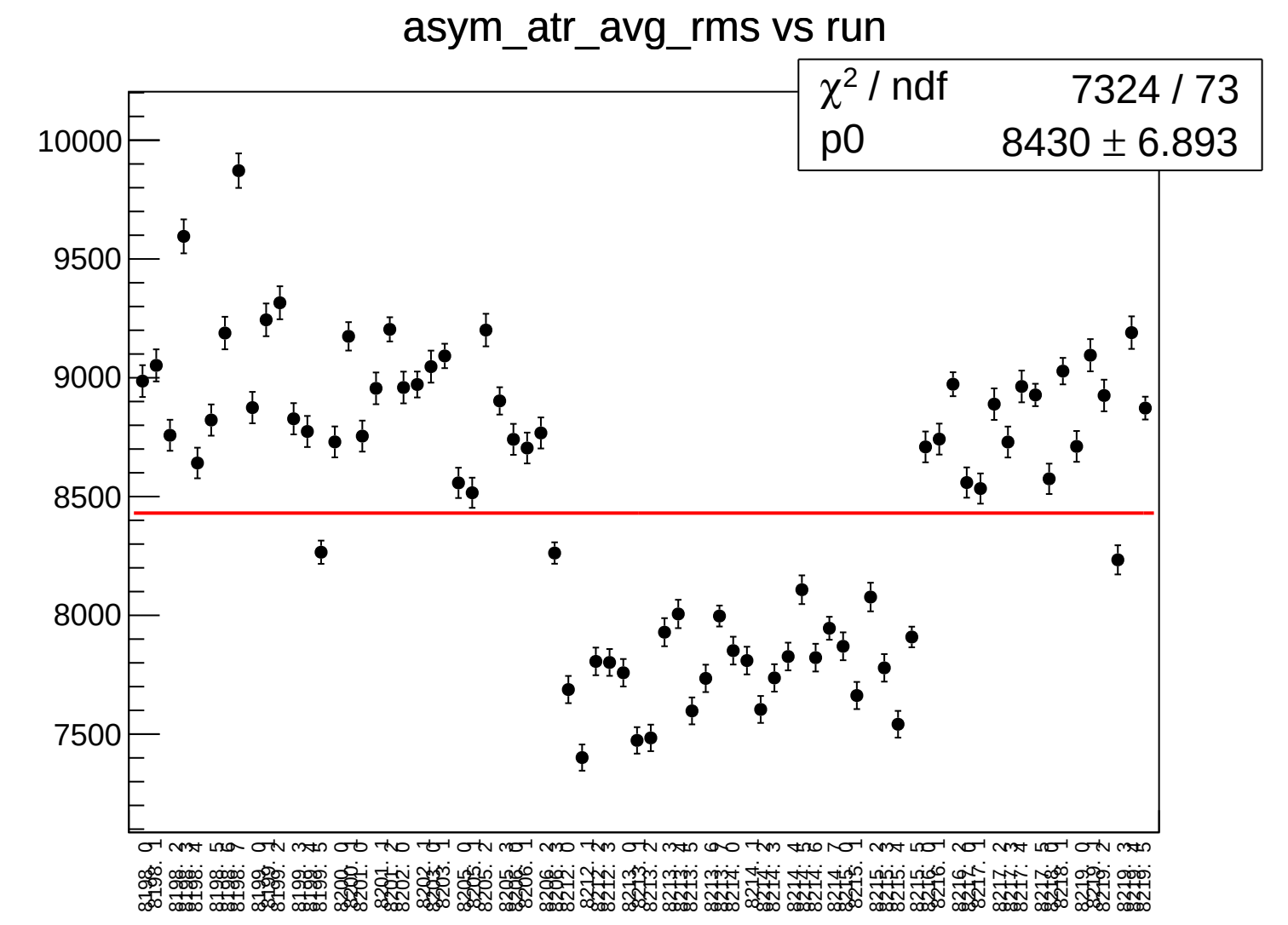

asym_atr_avg_correction_mean vs run
×10^3
χ^2 / ndf 83.08 / 73
p0 1754 ± 9472
300
200
100
0
−100
−200
−300
−400
pull
Entries 74
Mean 119.8
Std Dev 91.95
2
1
0
−1
−2
−3

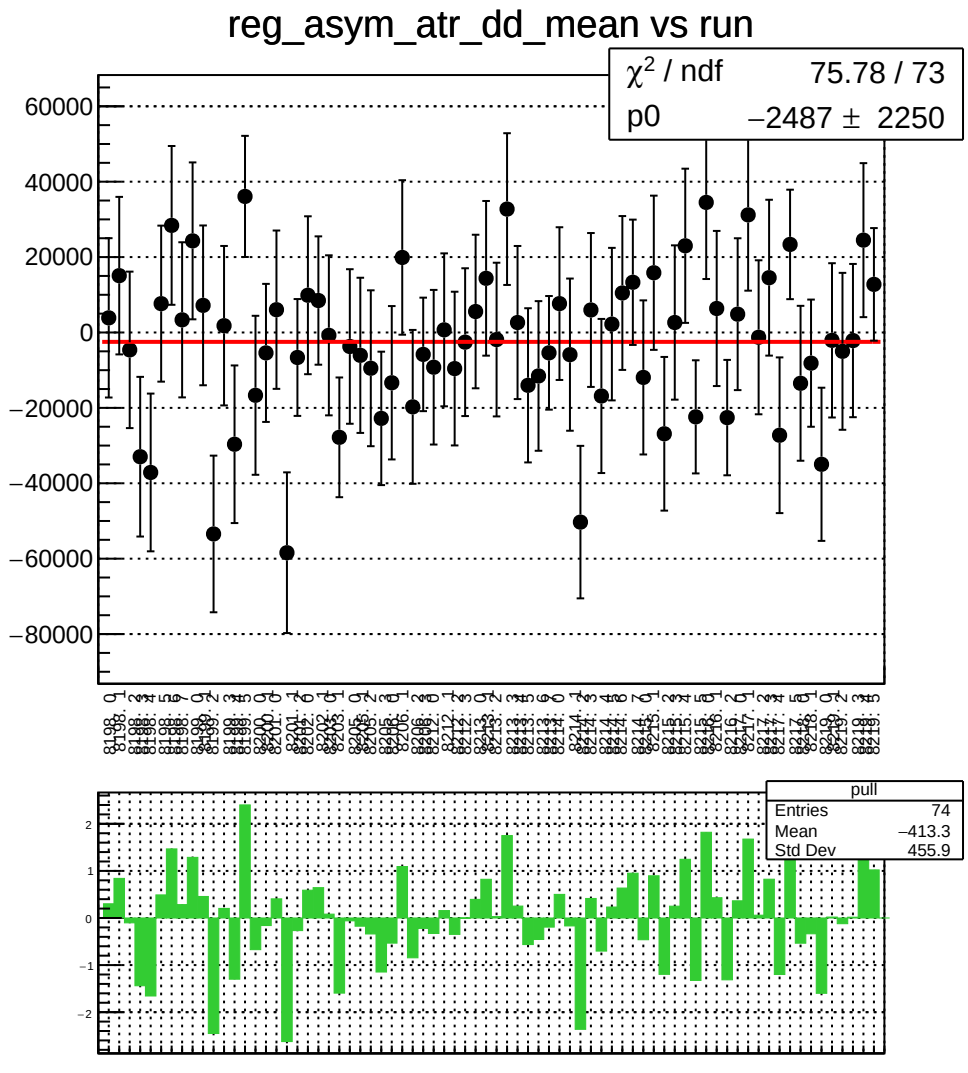

pull1D
Entries 74
Mean −0.007191
Std Dev 1.06
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

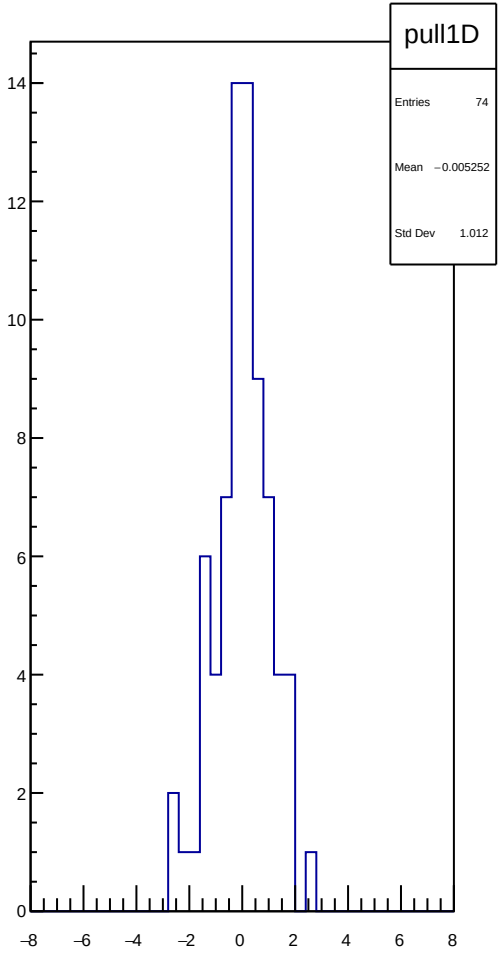

asym_atr_avg_correction_rms vs run
χ^2 / ndf 8118 / 73
p0 8189 ± 6.698
9500
9000
8500
8000
7500
7000

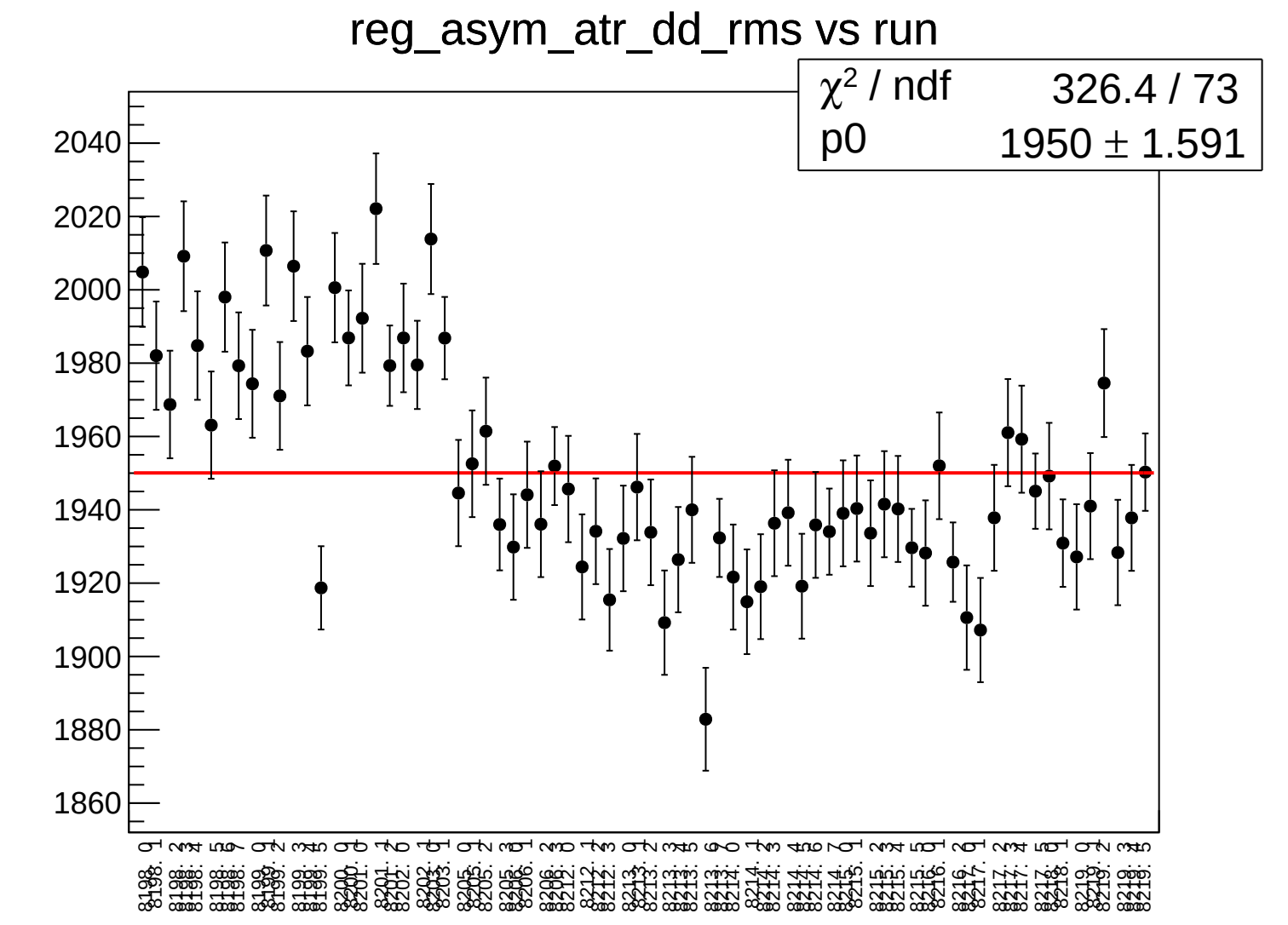

asym_atr_avg_mean vs run
×10^3
χ² / ndf 85.73 / 73
p0 −1538 ± 9748
pull
Entries 74
Mean 109
Std Dev 79.51

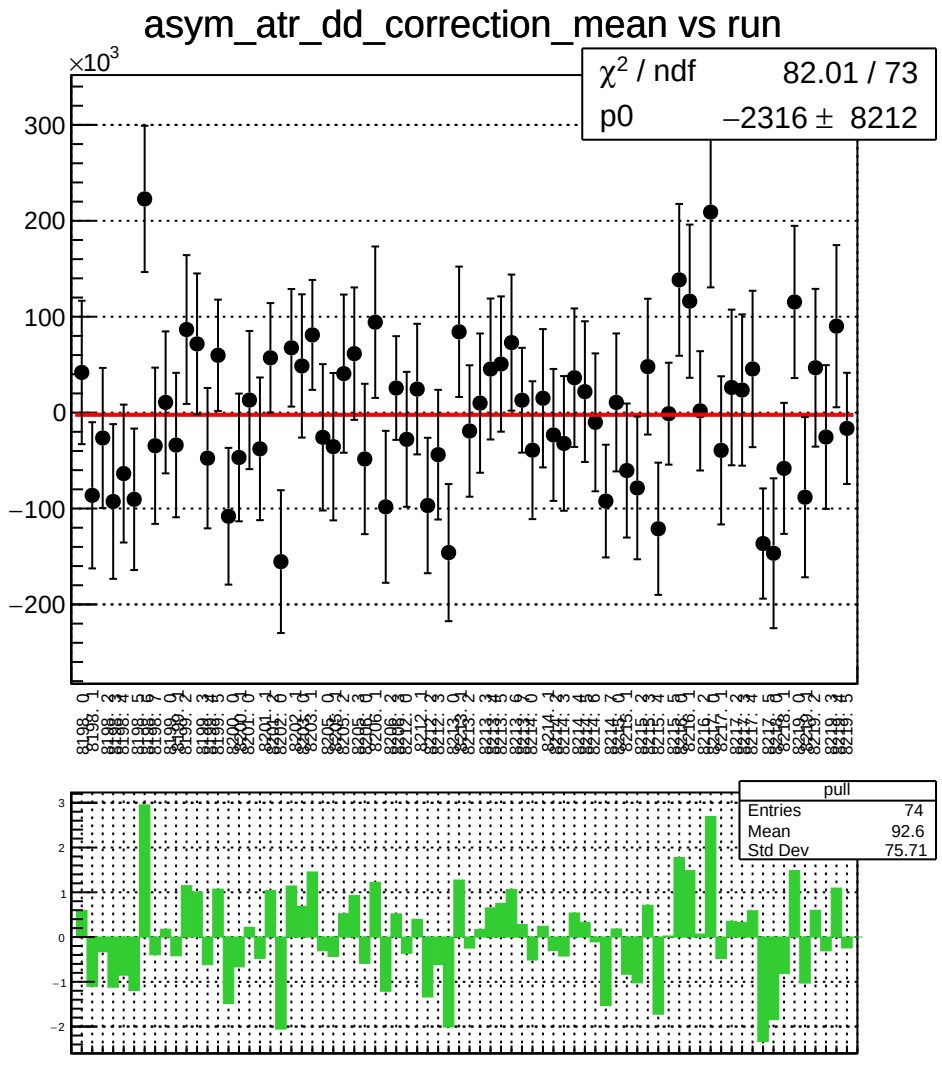

pull1D
Entries 74
Mean 0.007464
Std Dev 1.076

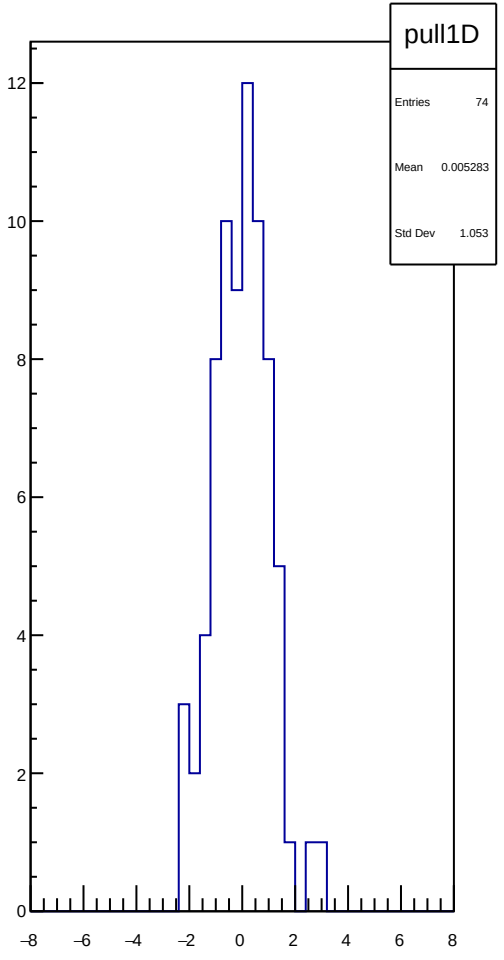

asym_atr_avg_rms vs run
χ^2 / ndf 7324 / 73
p0 8430 ± 6.893
10000
9500
9000
8500
8000
7500

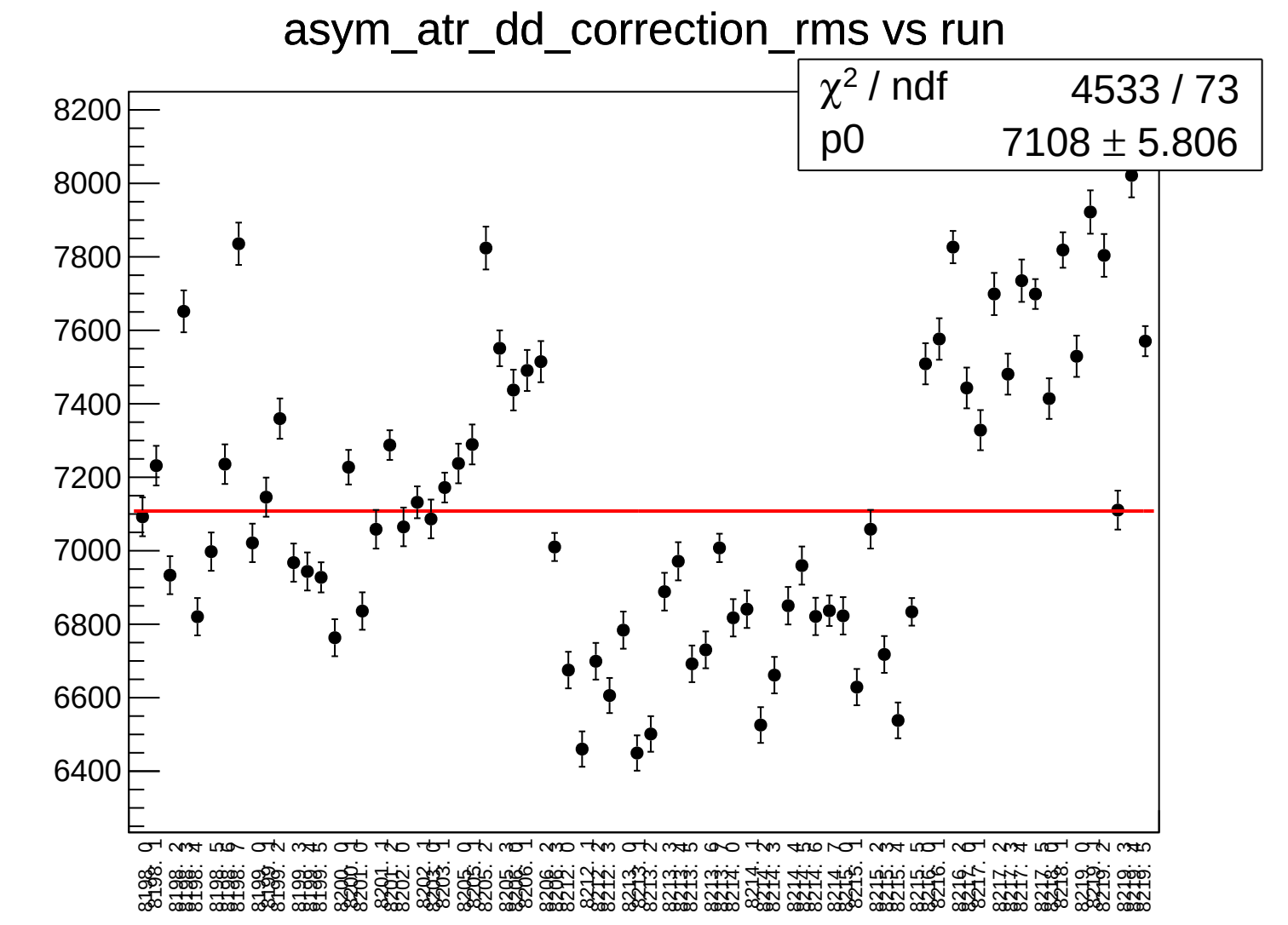

reg_asym_atr_dd_mean vs run
χ² / ndf 75.78 / 73
p0 −2487 ± 2250
pull
Entries 74
Mean −413.3
Std Dev 455.9

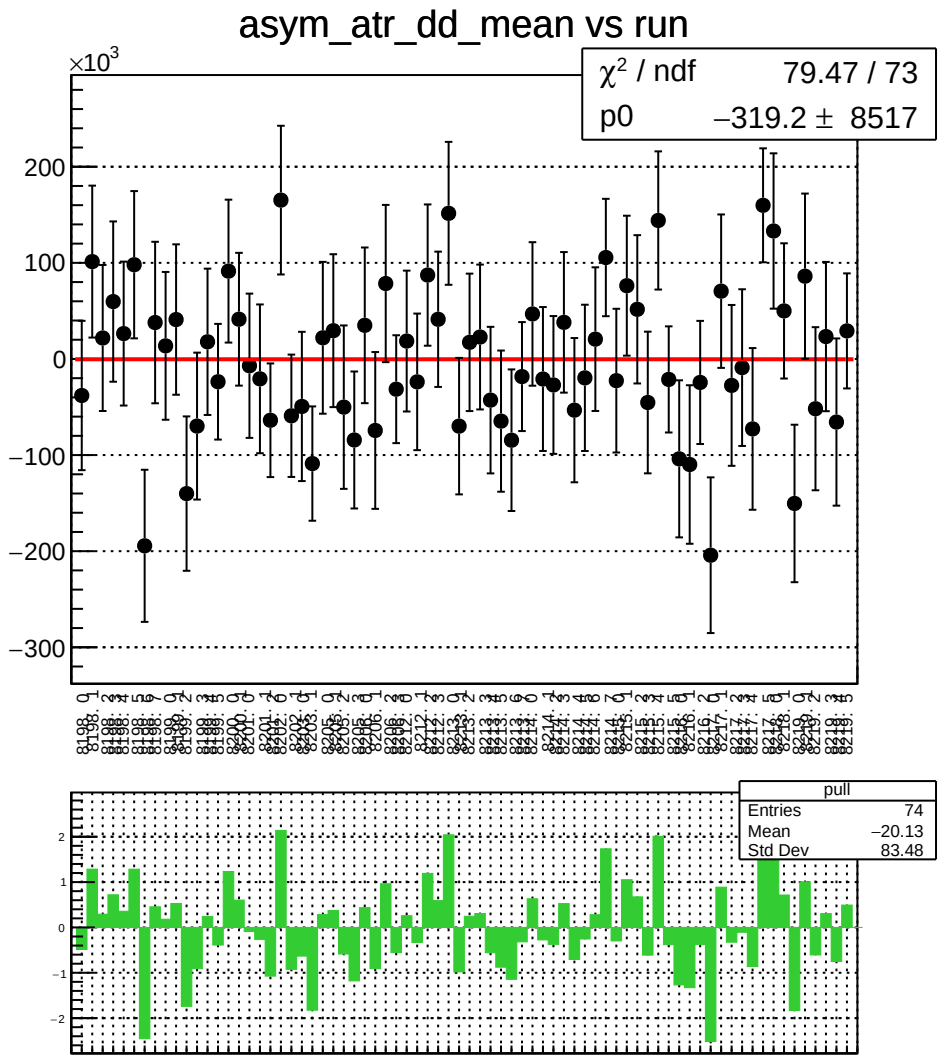

pull1D
Entries 74
Mean −0.005252
Std Dev 1.012

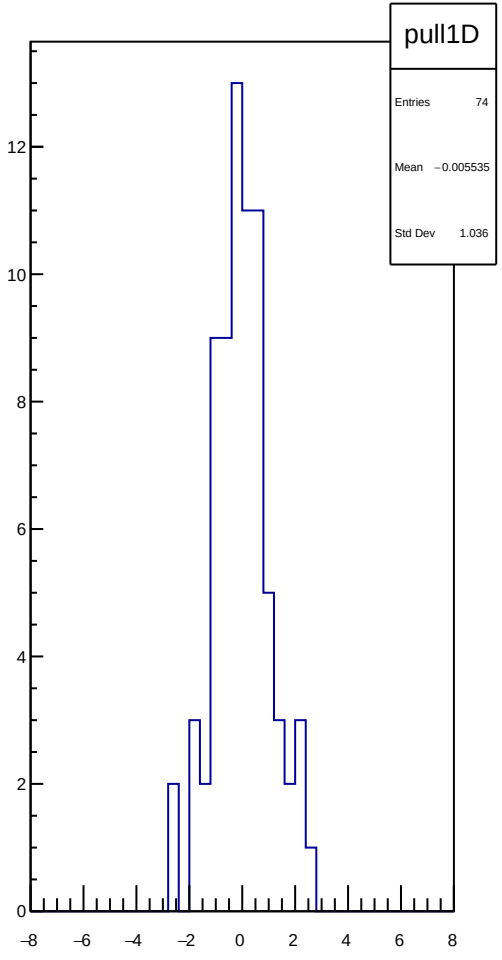

reg_asym_atr_dd_rms vs run
χ² / ndf 326.4 / 73
p0 1950 ± 1.591
2040
2020
2000
1980
1960
1940
1920
1900
1880
1860

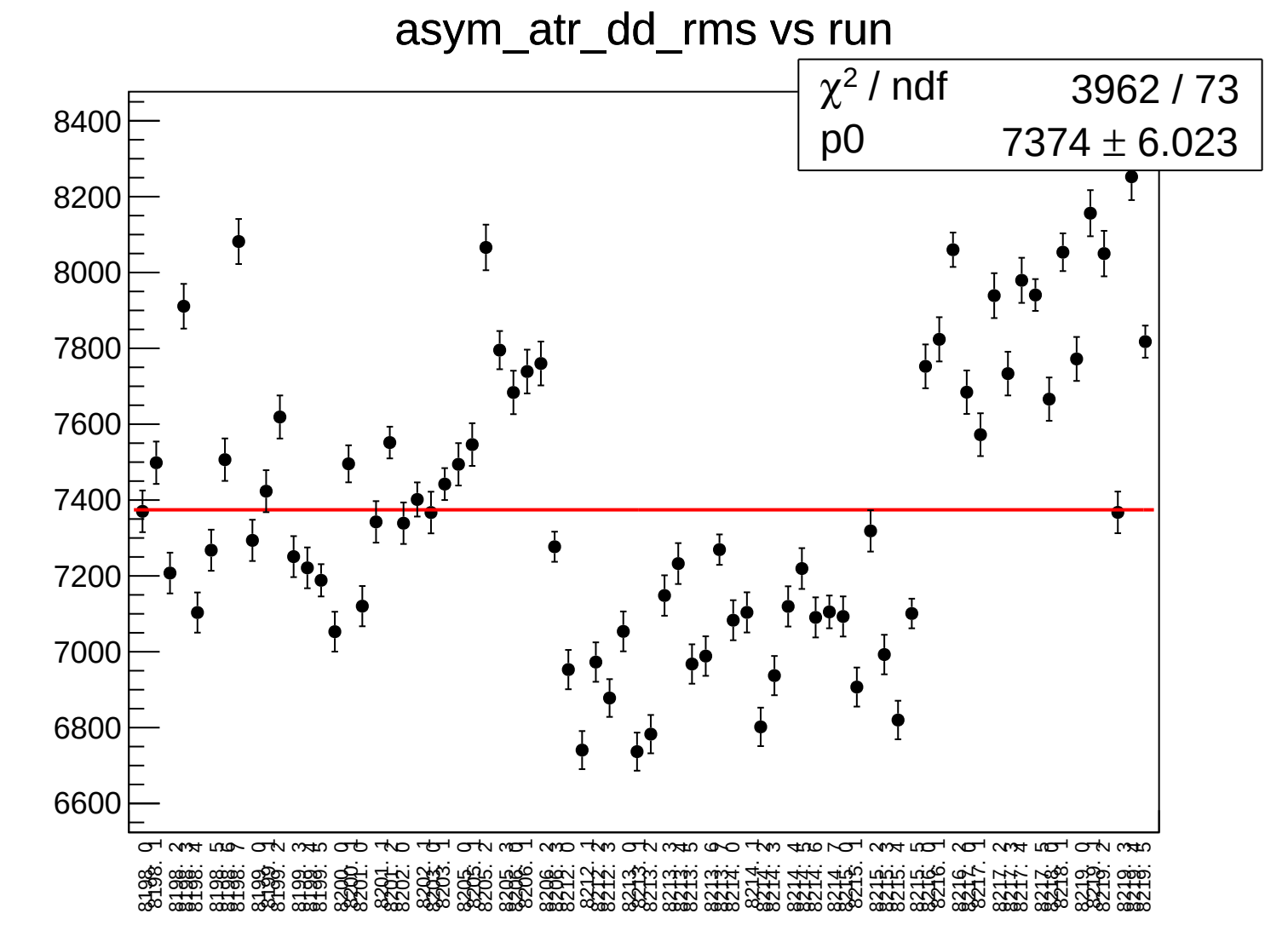

asym_atr_dd_correction_mean vs run
×10^3
χ² / ndf 82.01 / 73
p0 −2316 ± 8212
pull
Entries 74
Mean 92.6
Std Dev 75.71

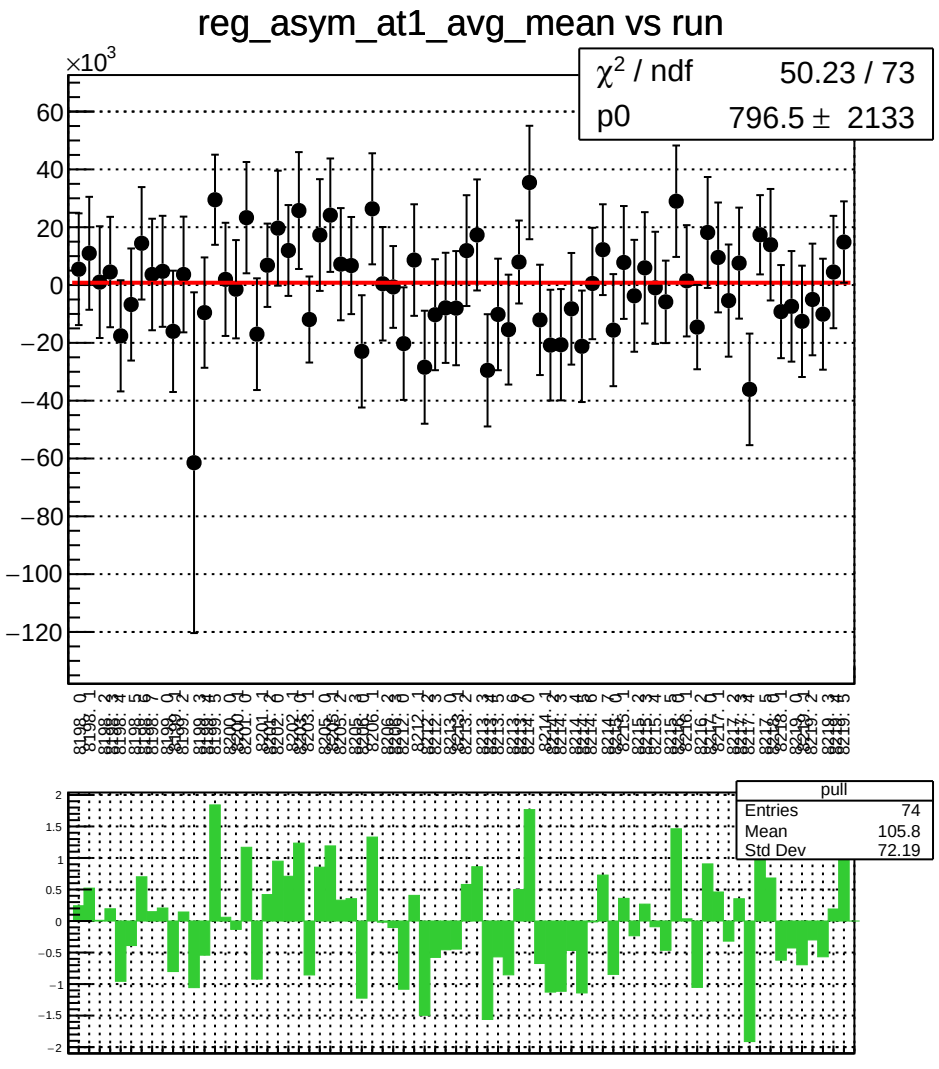

pull1D
Entries 74
Mean 0.005283
Std Dev 1.053

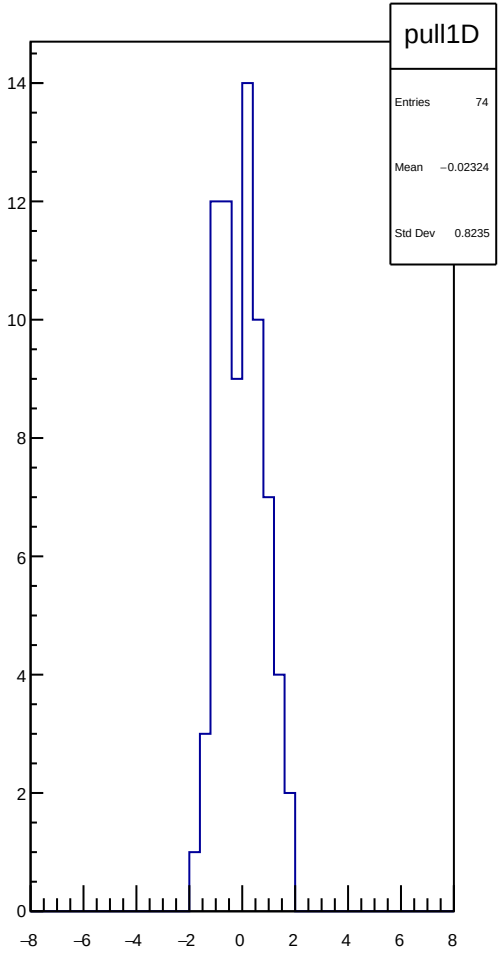

asym_atr_dd_correction_rms vs run
χ² / ndf 4533 / 73
p0 7108 ± 5.806
8200
8000
7800
7600
7400
7200
7000
6800
6600
6400

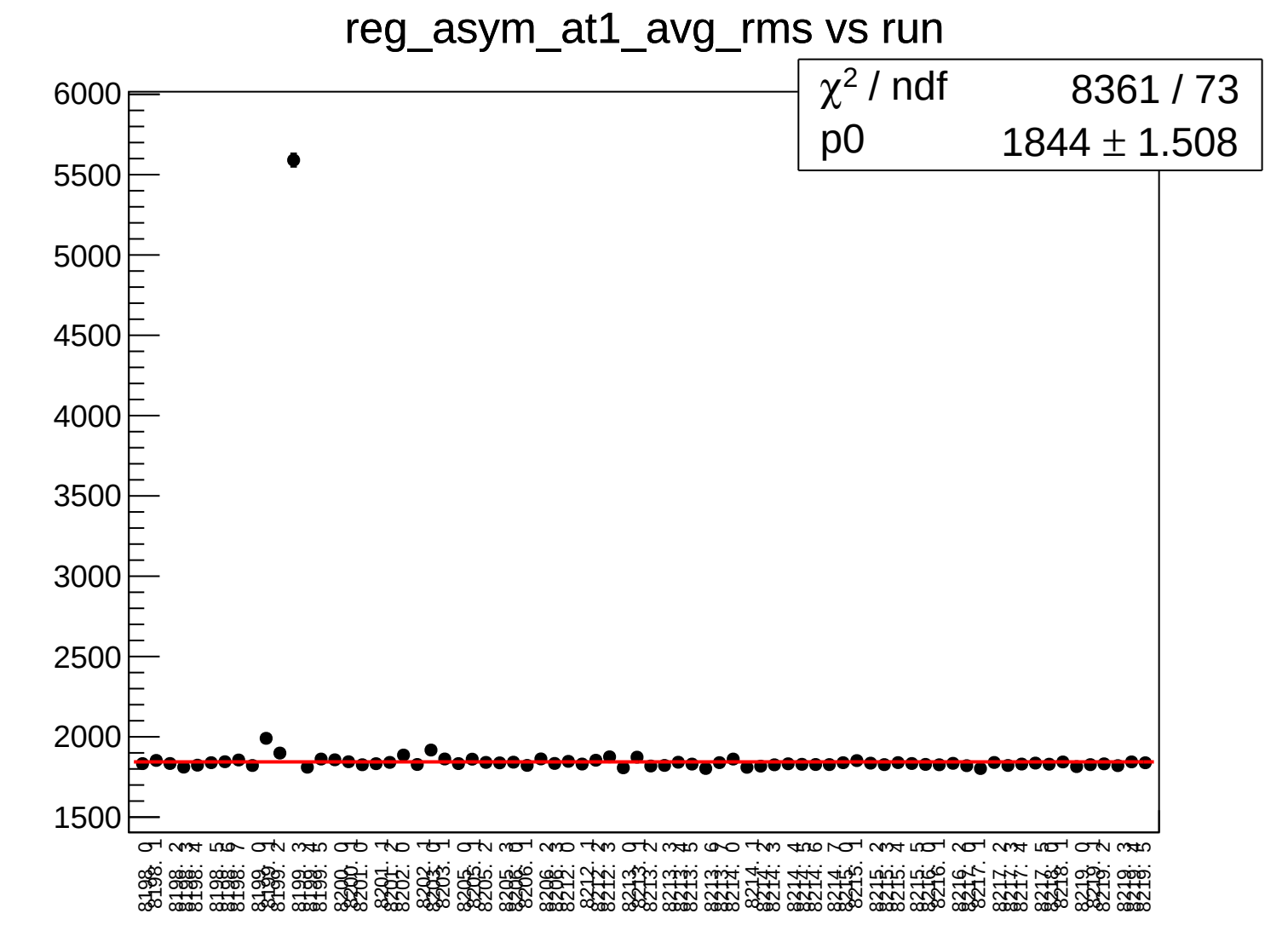

asym_atr_dd_mean vs run
×10^3
χ² / ndf 79.47 / 73
p0 −319.2 ± 8517
200
100
0
−100
−200
−300
pull
Entries 74
Mean −20.13
Std Dev 83.48
2
1
0
−1
−2

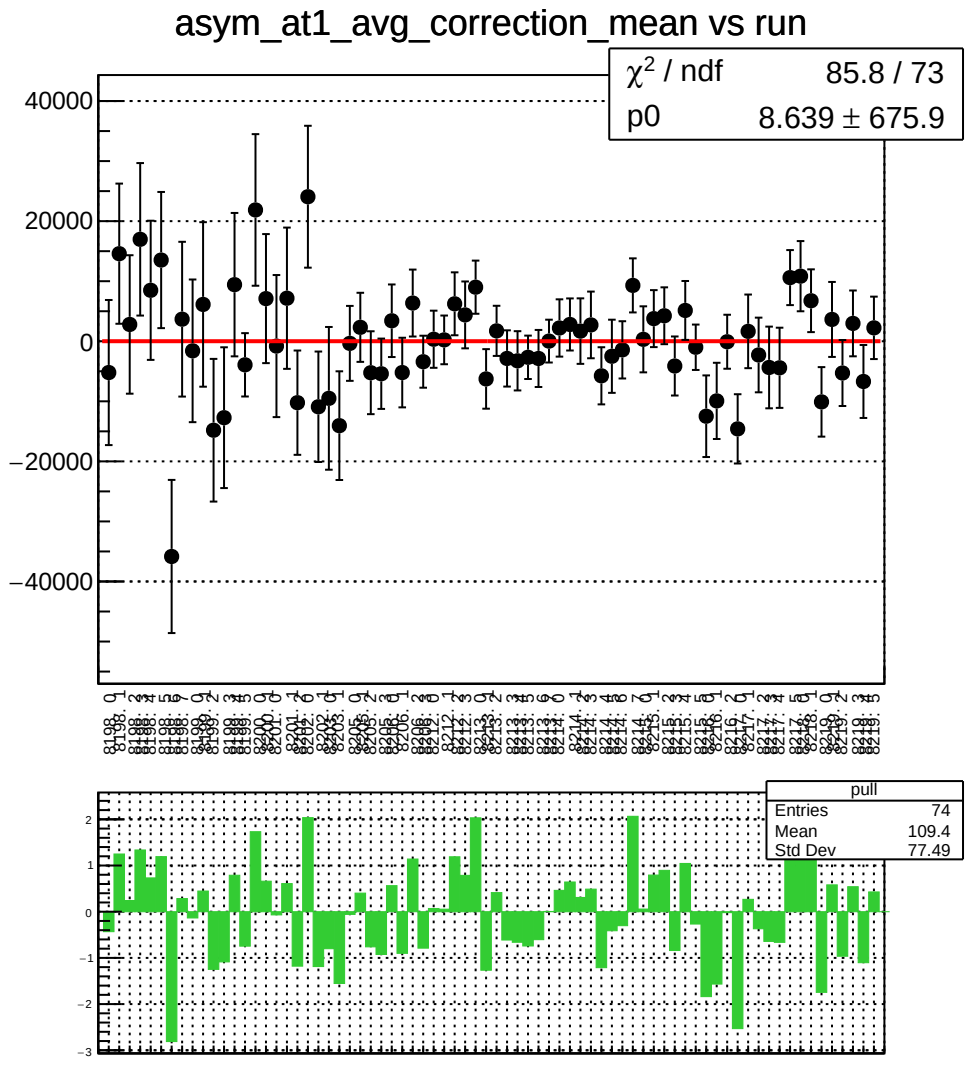

pull1D
Entries 74
Mean −0.005535
Std Dev 1.036
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

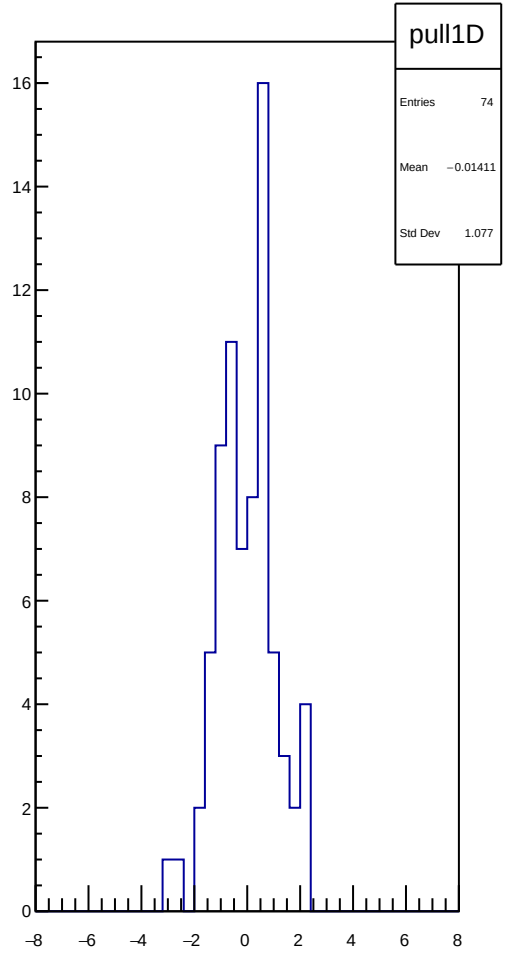

asym_atr_dd_rms vs run
χ² / ndf 3962 / 73
p0 7374 ± 6.023
8400
8200
8000
7800
7600
7400
7200
7000
6800
6600

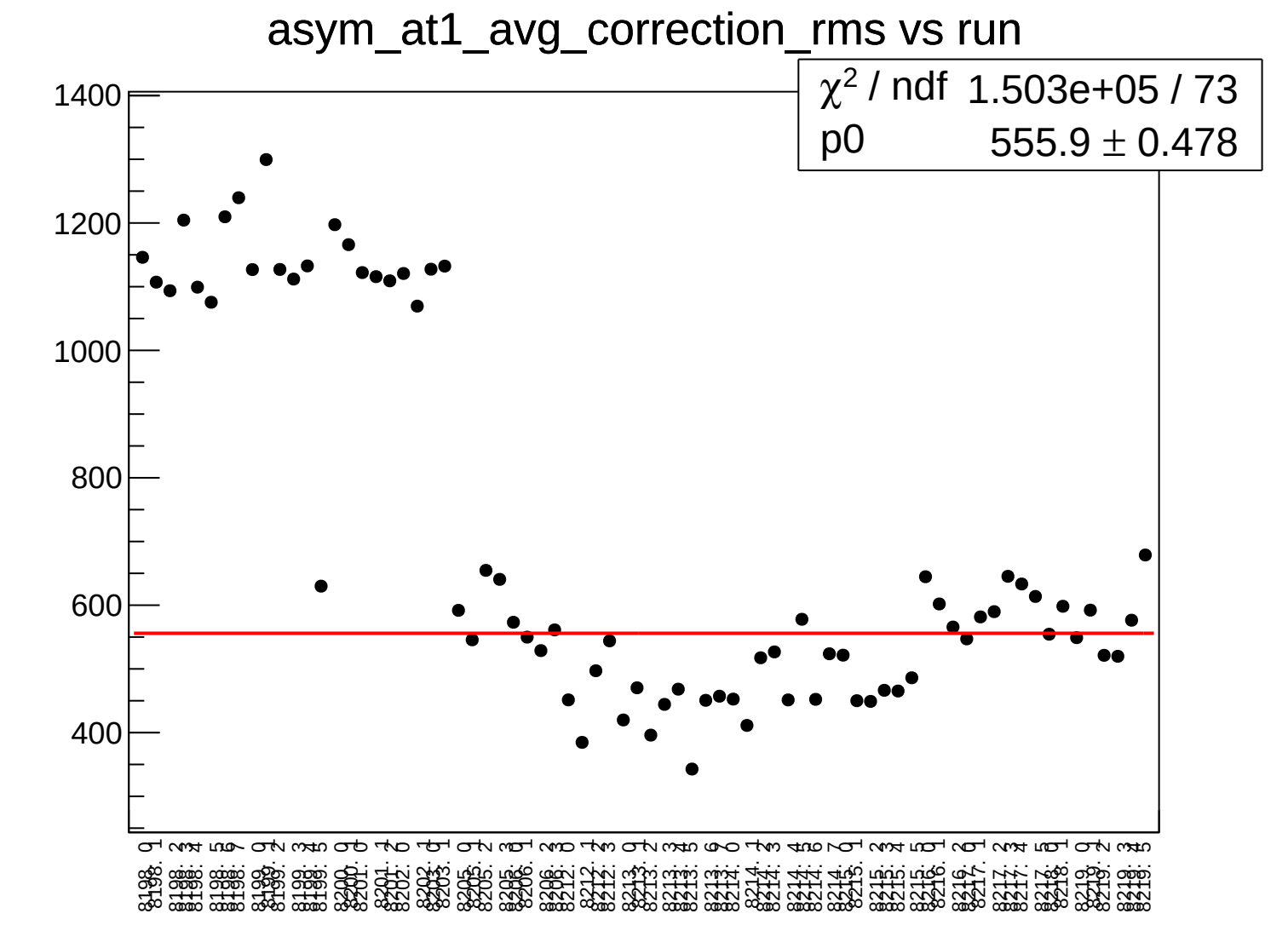

reg_asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 50.23 / 73
p0 796.5 ± 2133
pull
Entries 74
Mean 105.8
Std Dev 72.19

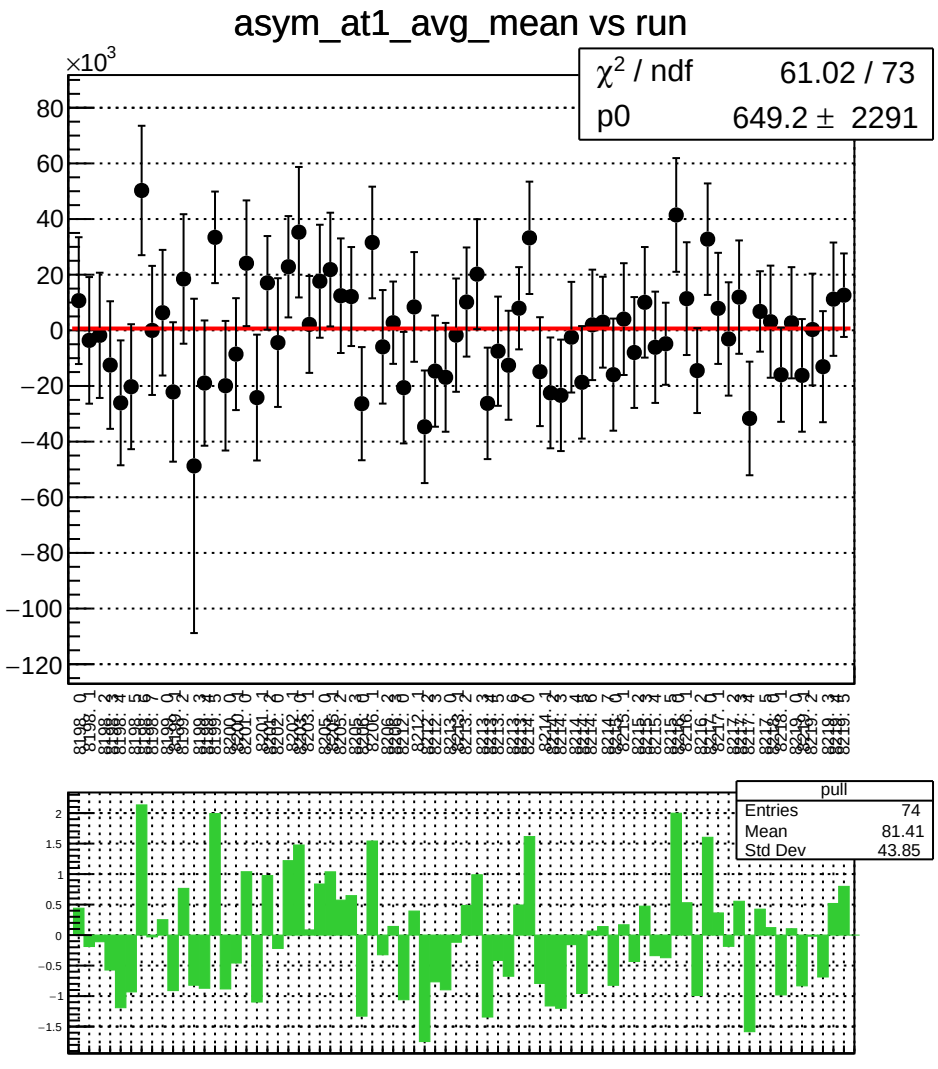

pull1D
Entries 74
Mean −0.02324
Std Dev 0.8235

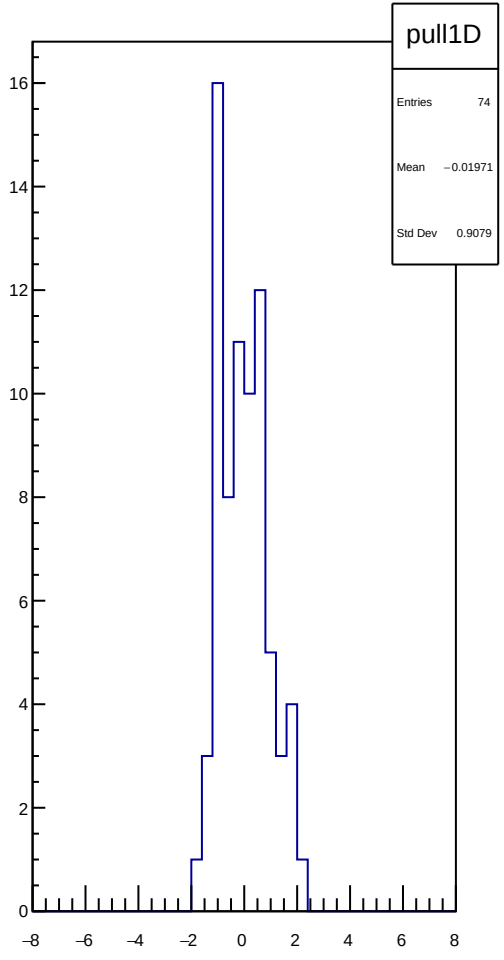

reg_asym_at1_avg_rms vs run
χ^2 / ndf 8361 / 73
p0 1844 ± 1.508
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

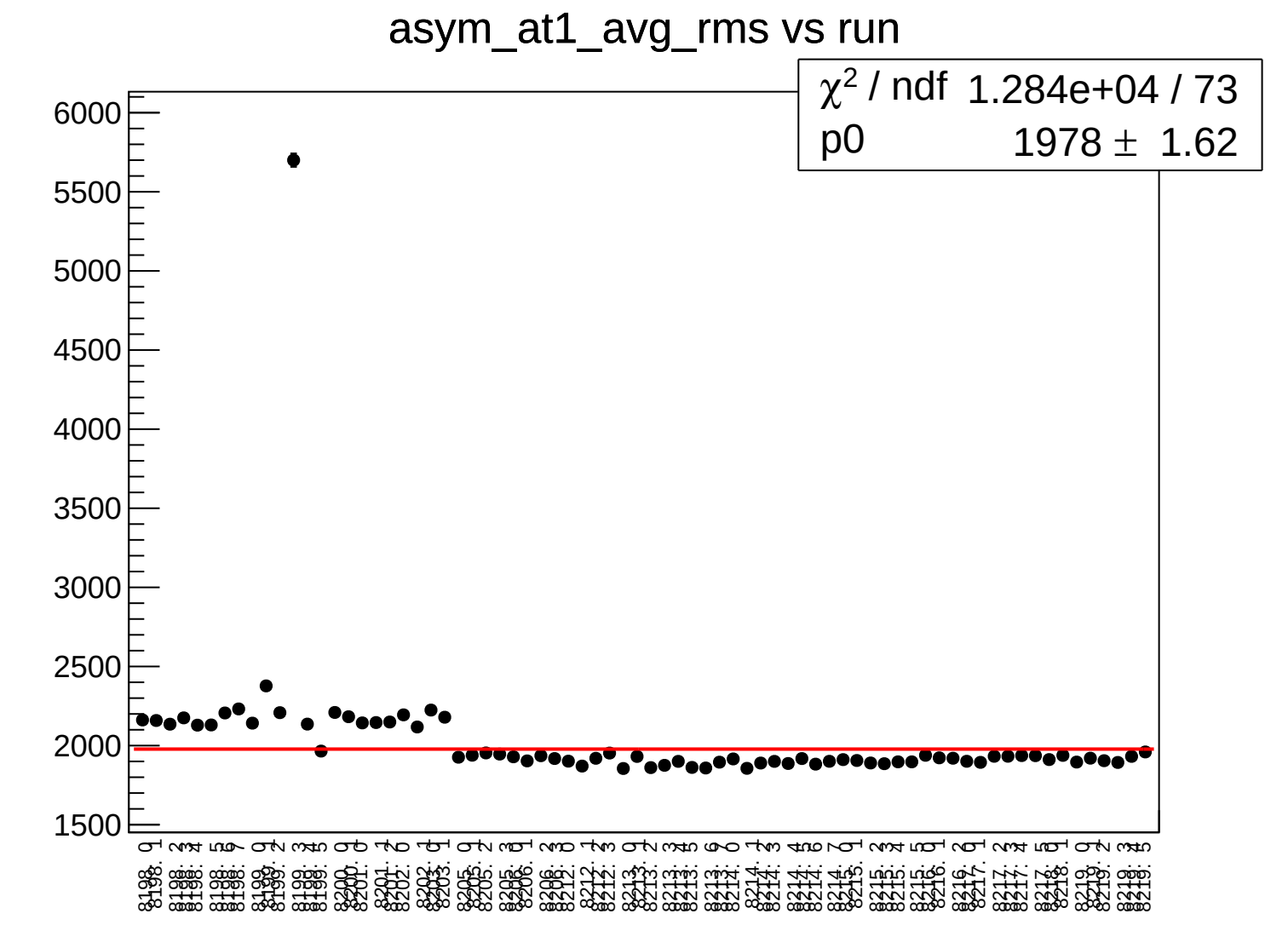

asym_at1_avg_correction_mean vs run
χ² / ndf 85.8 / 73
p0 8.639 ± 675.9
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 109.4
Std Dev 77.49
2
1
0
−1
−2
−3

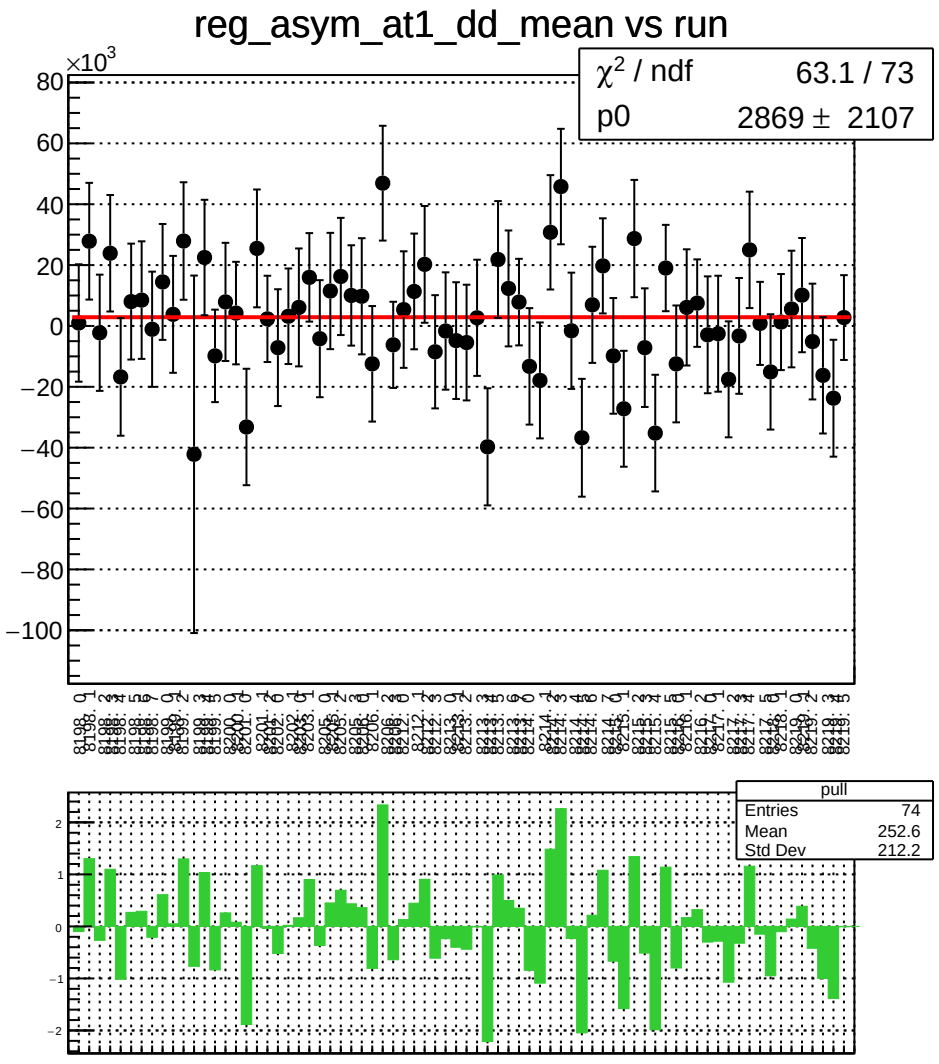

pull1D
Entries 74
Mean −0.01411
Std Dev 1.077
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

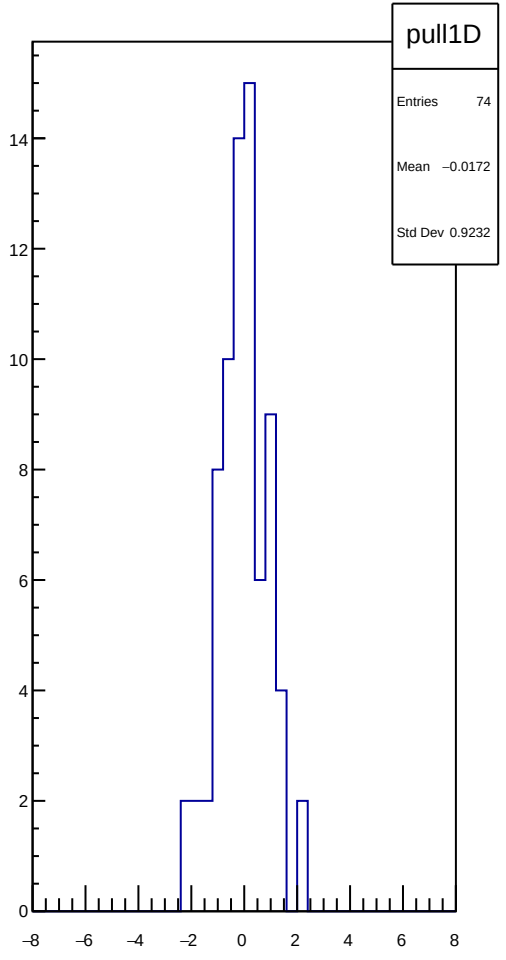

asym_at1_avg_correction_rms vs run
χ² / ndf 1.503e+05 / 73
p0 555.9 ± 0.478
1400
1200
1000
800
600
400

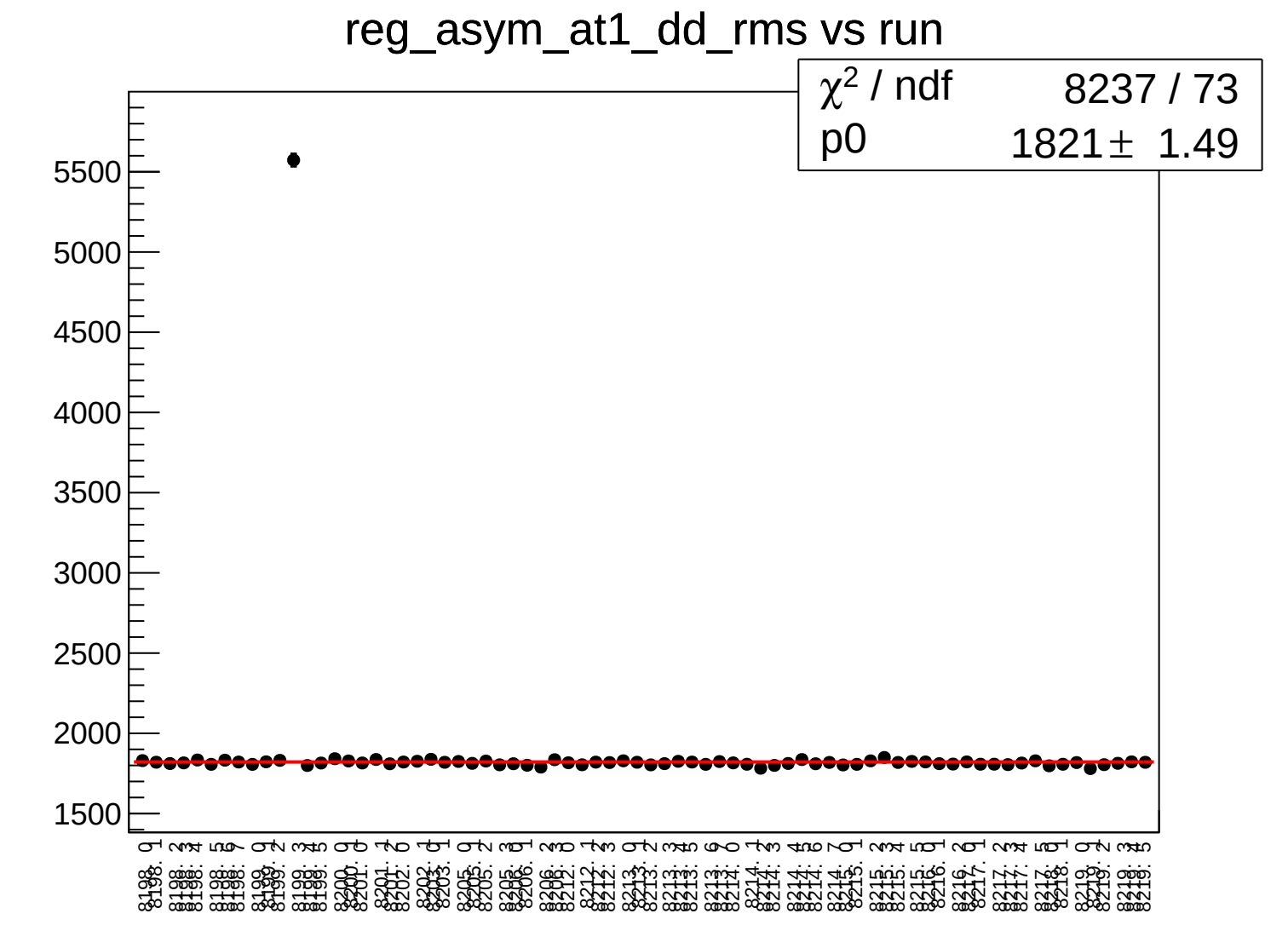

asym_at1_avg_mean vs run
×10^3
χ² / ndf 61.02 / 73
p0 649.2 ± 2291
pull
Entries 74
Mean 81.41
Std Dev 43.85

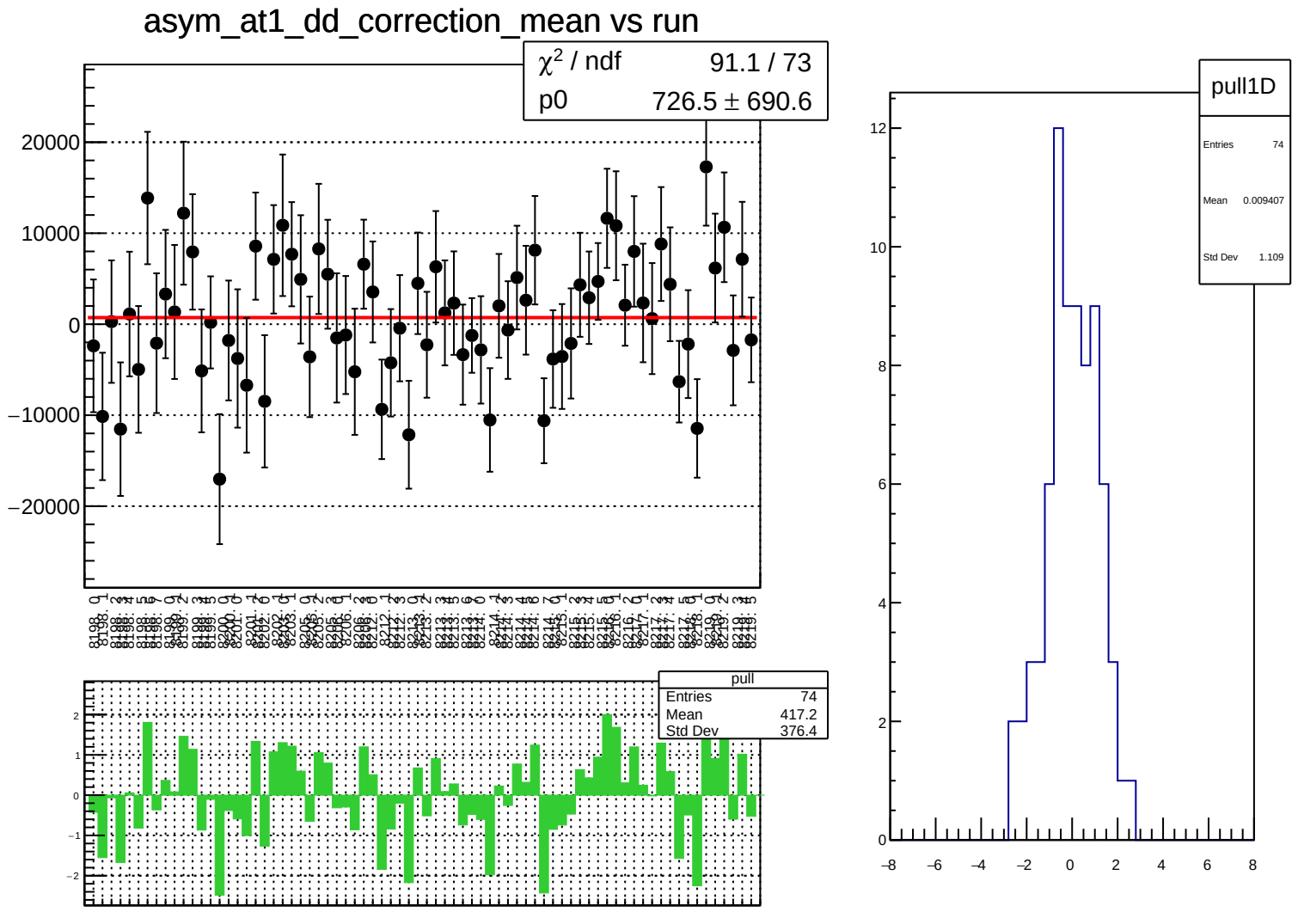

pull1D
Entries 74
Mean −0.01971
Std Dev 0.9079

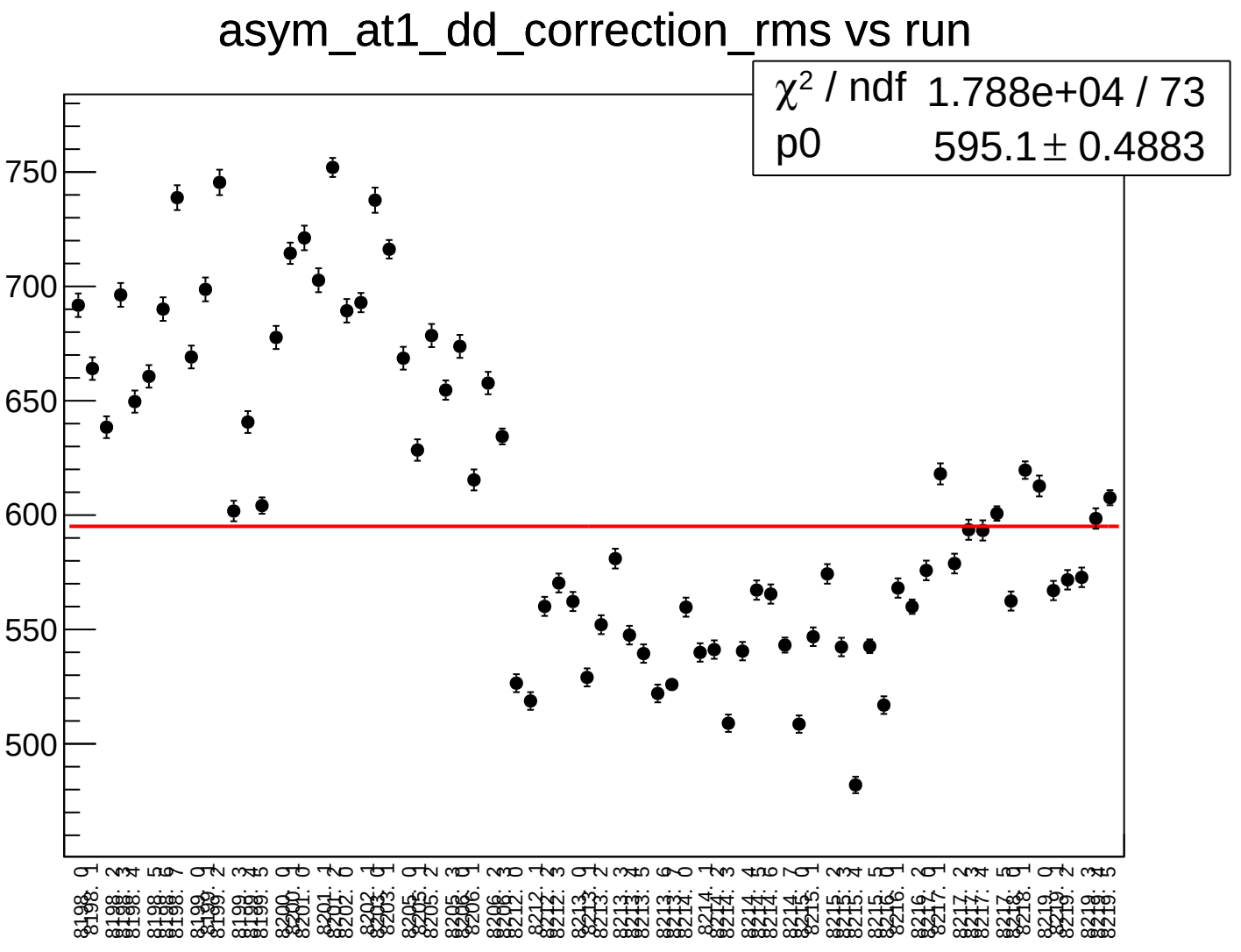

asym_at1_avg_rms vs run
χ² / ndf 1.284e+04 / 73
p0 1978 ± 1.62
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

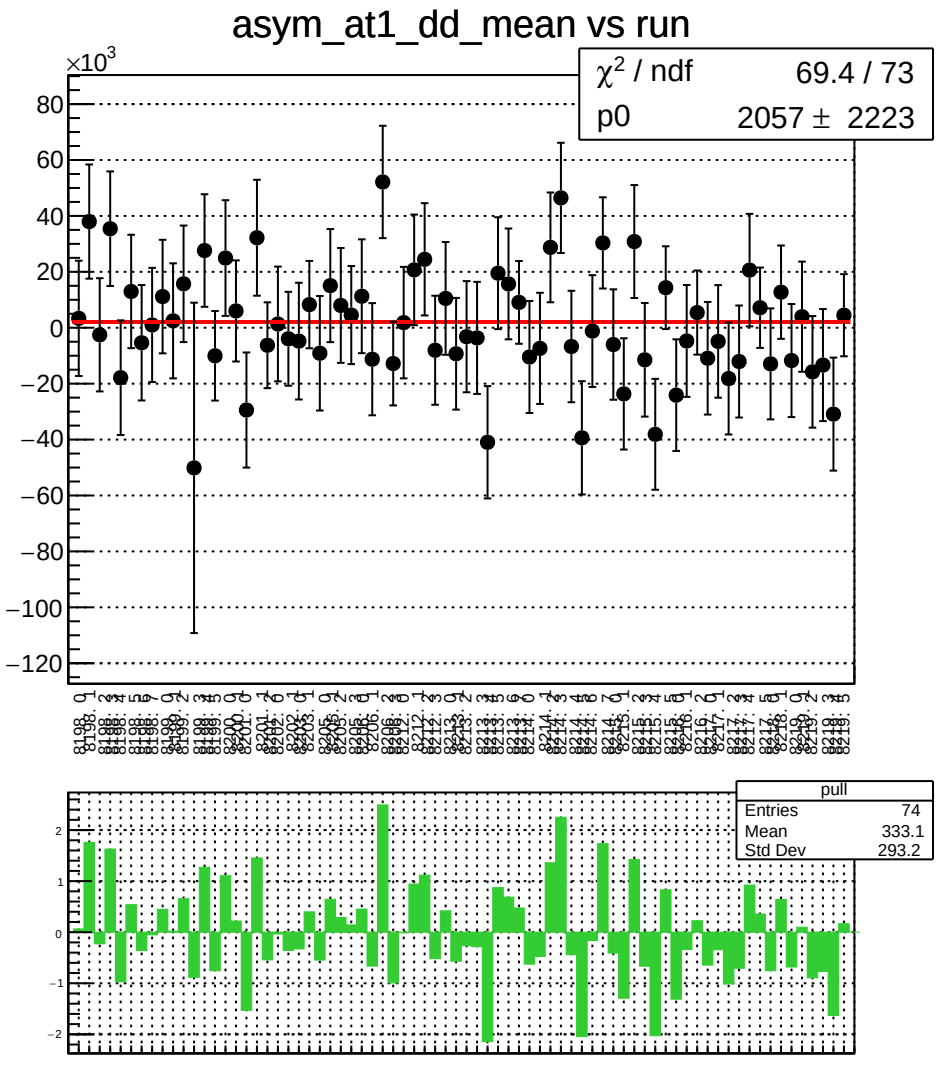

reg_asym_at1_dd_mean vs run
χ^2 / ndf 63.1 / 73
p0 2869 ± 2107
×10^3
pull
Entries 74
Mean 252.6
Std Dev 212.2

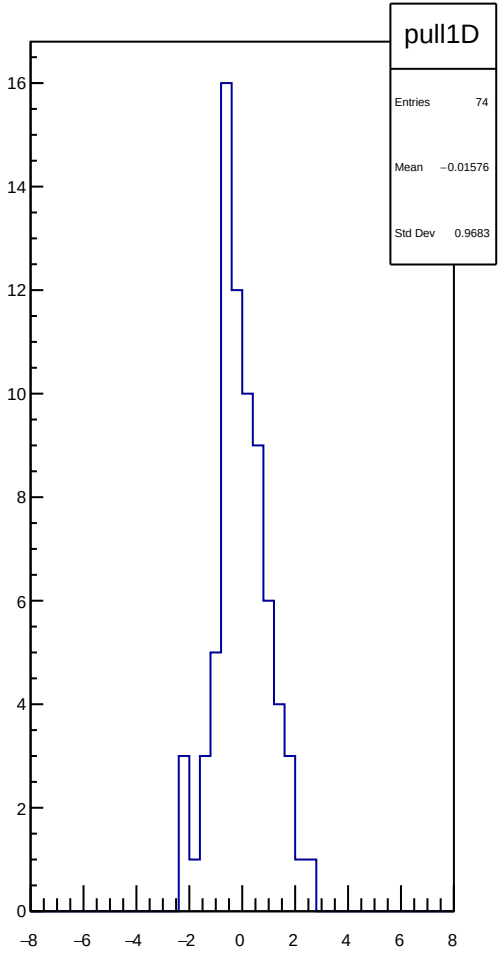

pull1D
Entries 74
Mean −0.0172
Std Dev 0.9232

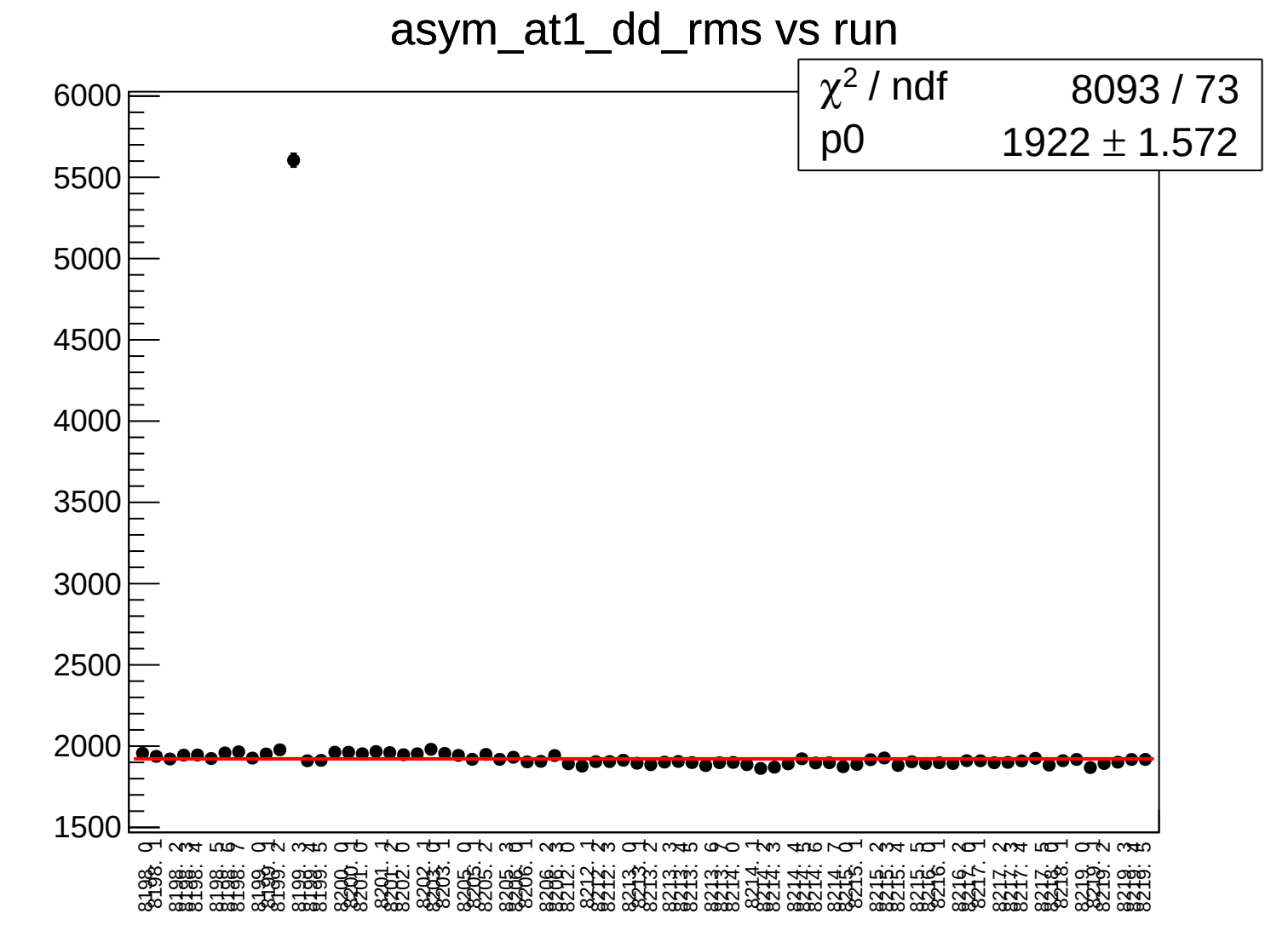

reg_asym_at1_dd_rms vs run
χ² / ndf 8237 / 73
p0 1821 ± 1.49
5500
5000
4500
4000
3500
3000
2500
2000
1500

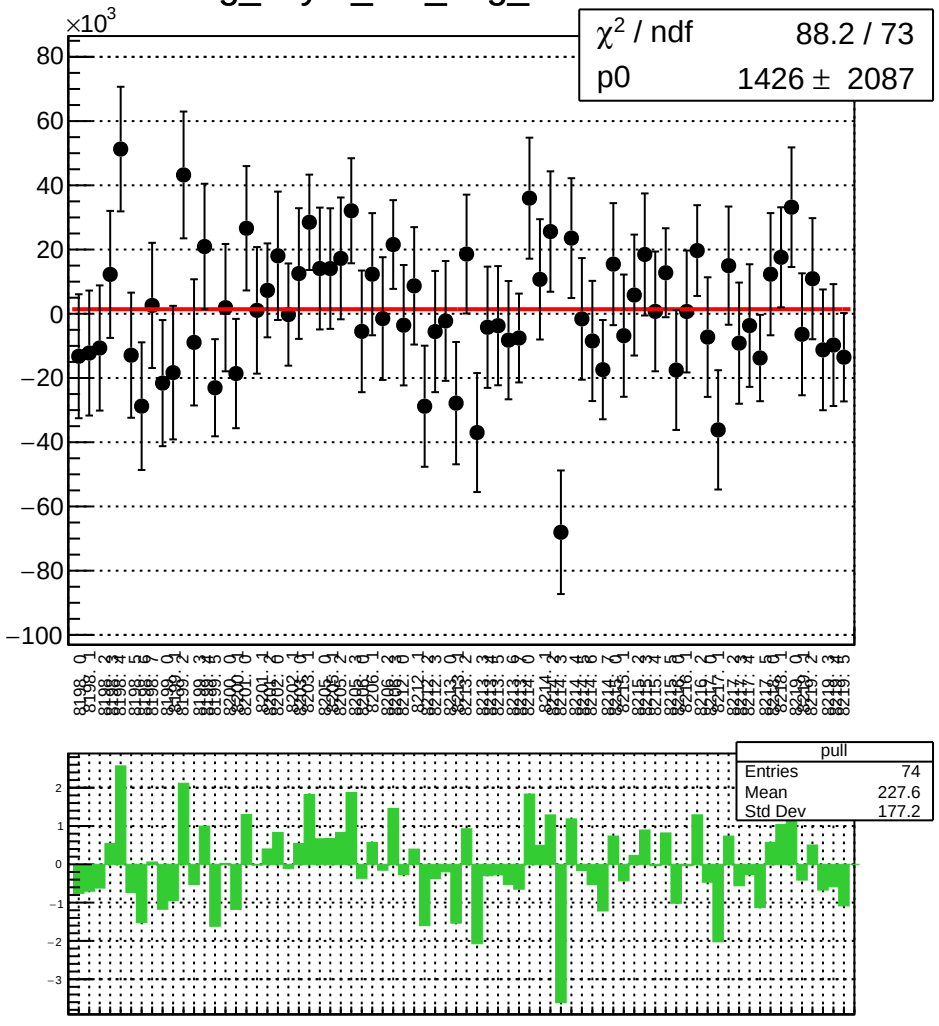

asym_at1_dd_correction_mean vs run
χ^2 / ndf 91.1 / 73
p0 726.5 ± 690.6
20000
10000
0
−10000
−20000
pull
Entries 74
Mean 417.2
Std Dev 376.4
pull1D
Entries 74
Mean 0.009407
Std Dev 1.109

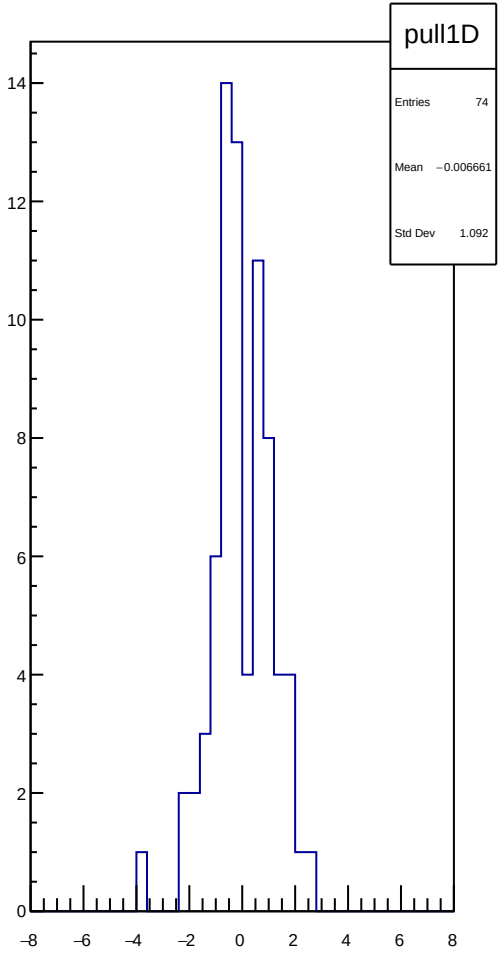

asym_at1_dd_correction_rms vs run
χ² / ndf 1.788e+04 / 73
p0 595.1 ± 0.4883
750
700
650
600
550
500

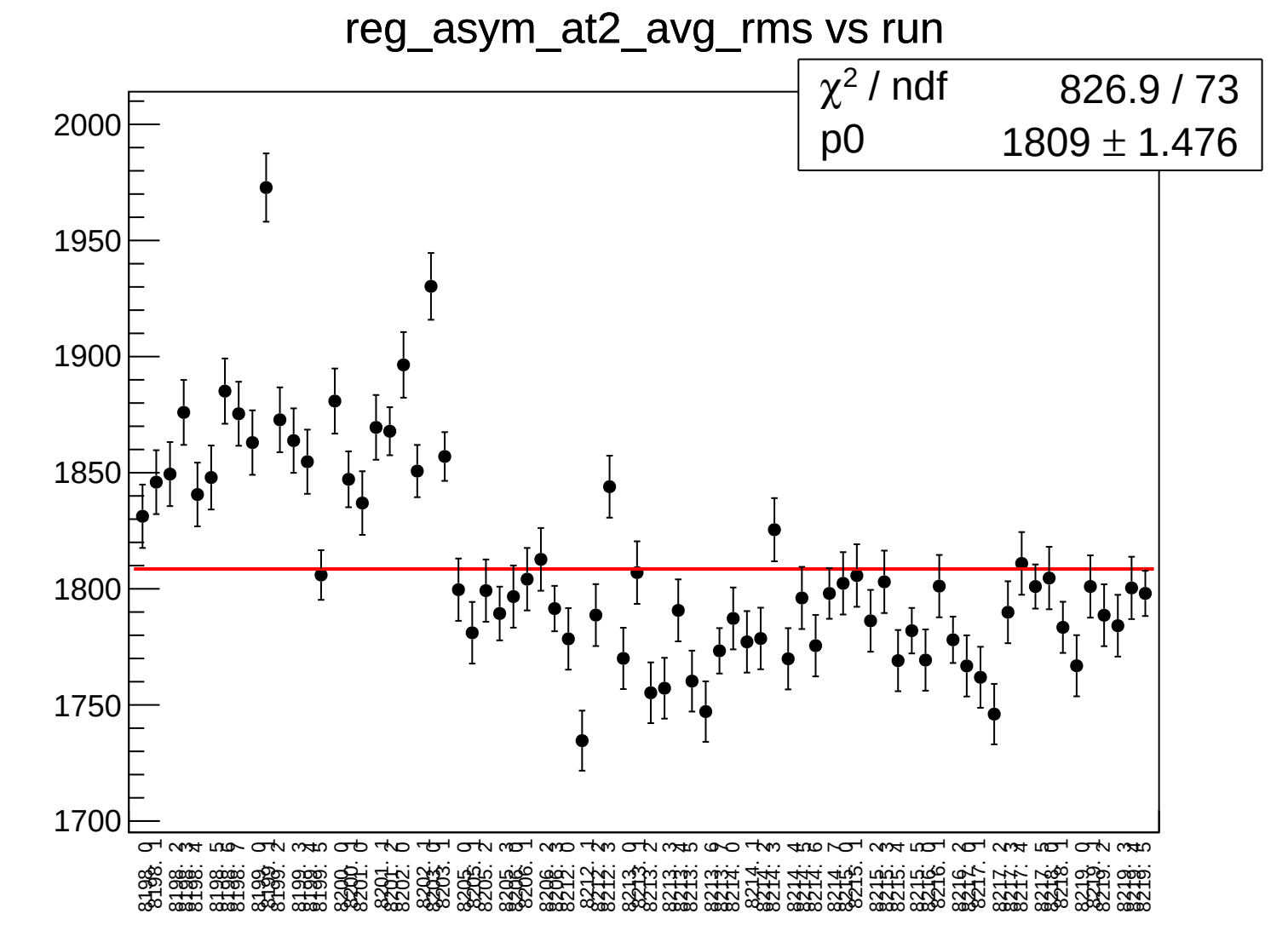

asym_at1_dd_mean vs run
×10^3
χ^2 / ndf 69.4 / 73
p0 2057 ± 2223
pull
Entries 74
Mean 333.1
Std Dev 293.2

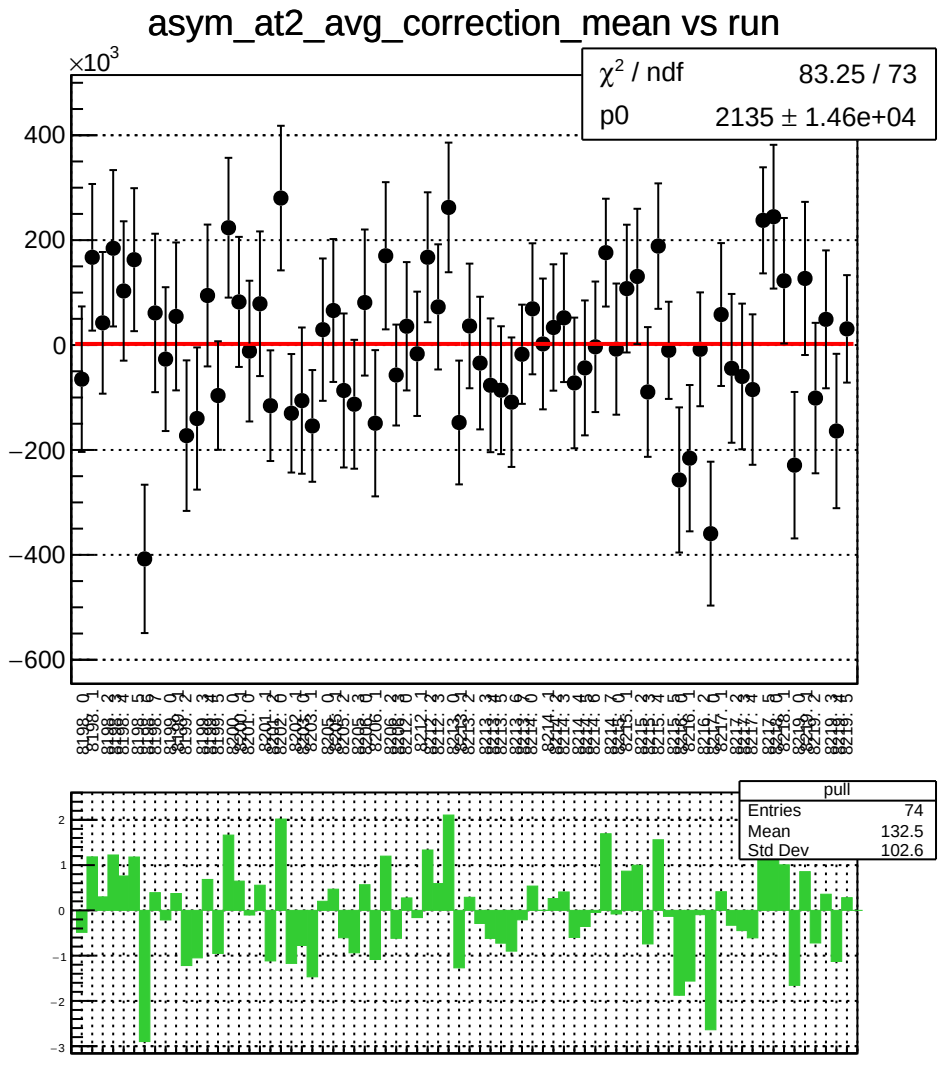

pull1D
Entries 74
Mean −0.01576
Std Dev 0.9683

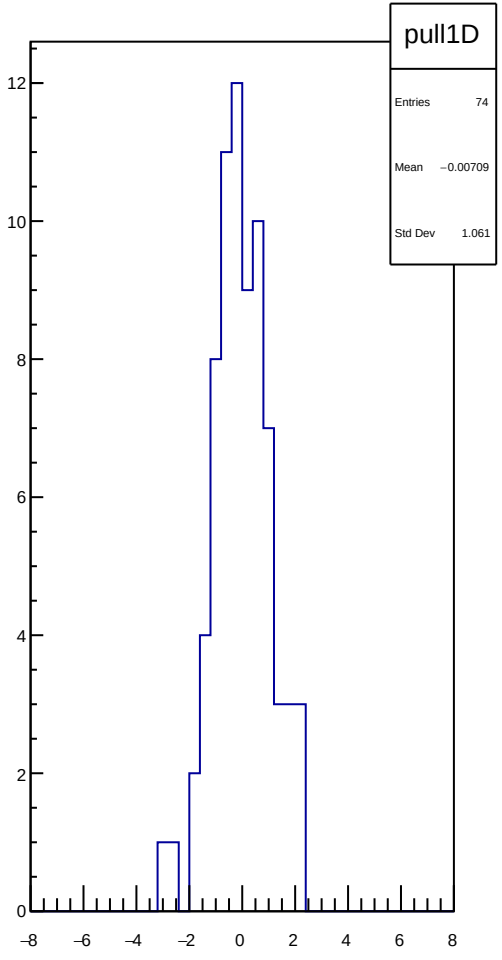

asym_at1_dd_rms vs run
χ^2 / ndf 8093 / 73
p0 1922 ± 1.572
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

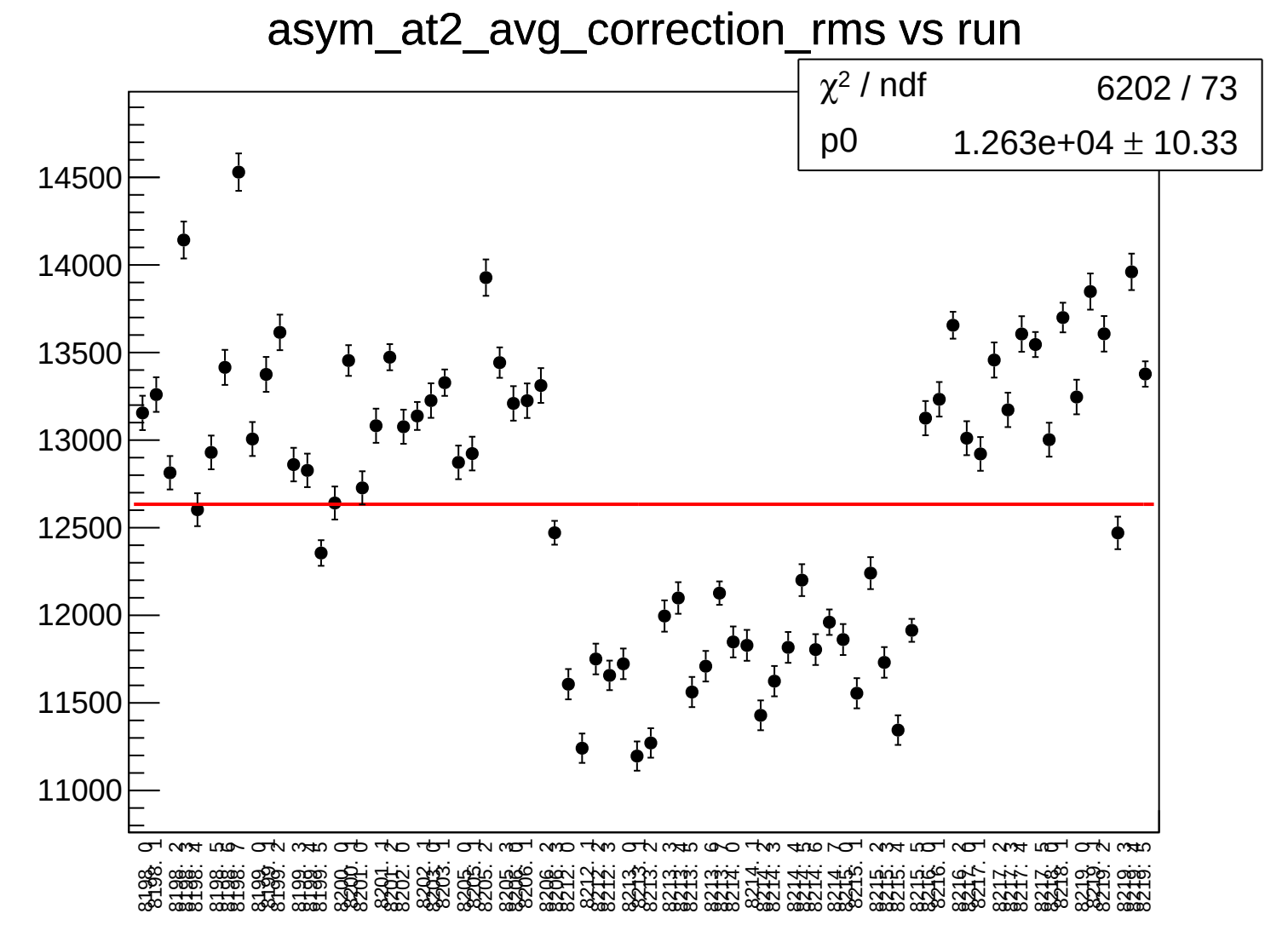

reg_asym_at2_avg_mean vs run
×10^3
χ² / ndf 88.2 / 73
p0 1426 ± 2087
pull
Entries 74
Mean 227.6
Std Dev 177.2

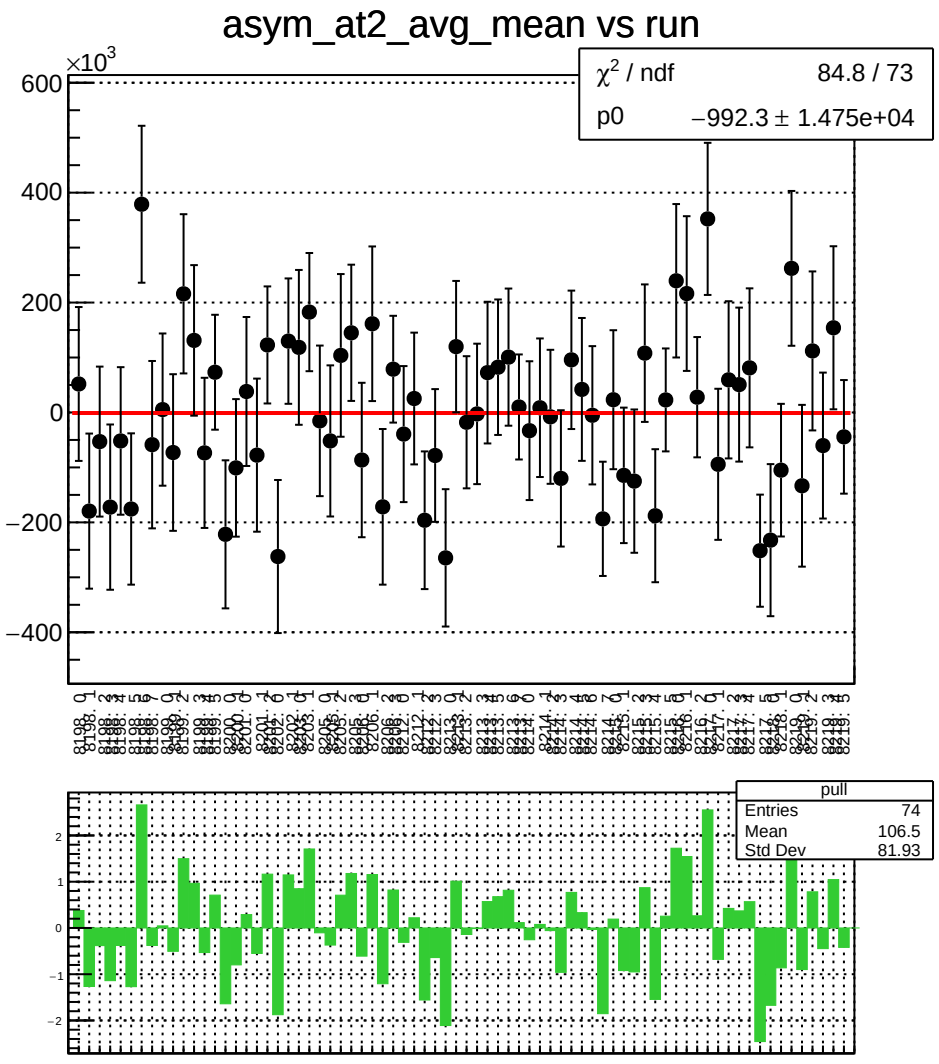

pull1D
Entries 74
Mean −0.006661
Std Dev 1.092

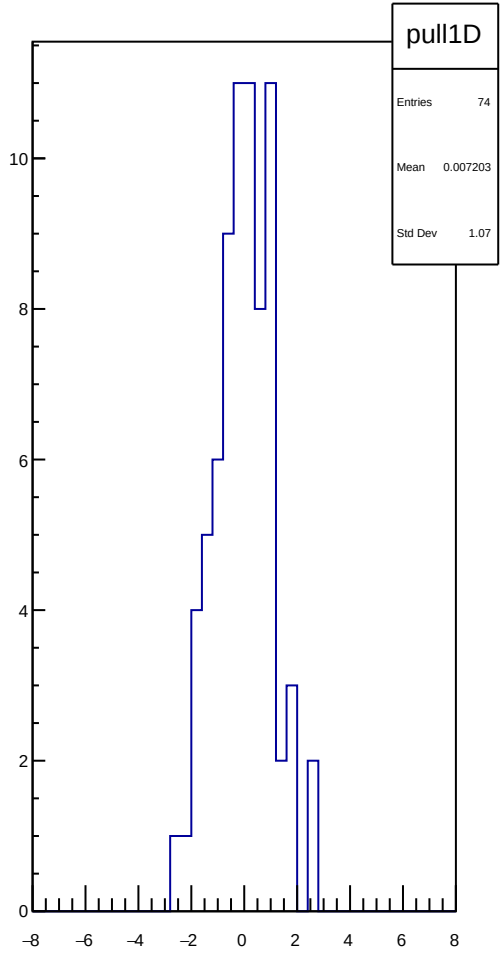

reg_asym_at2_avg_rms vs run
χ^2 / ndf 826.9 / 73
p0 1809 ± 1.476
2000
1950
1900
1850
1800
1750
1700

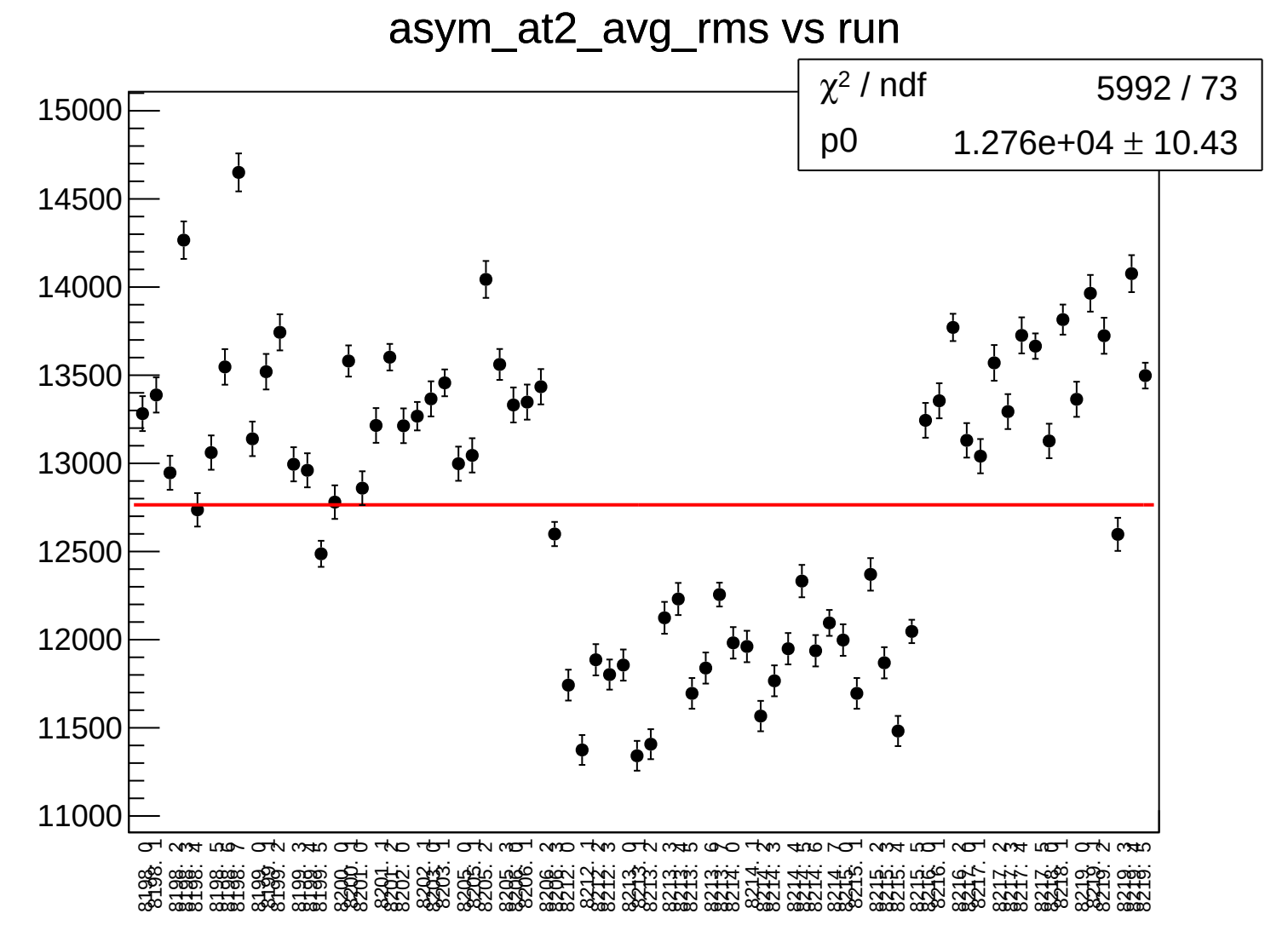

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 83.25 / 73
p0 2135 ± 1.46e+04
400
200
0
−200
−400
−600
pull
Entries 74
Mean 132.5
Std Dev 102.6
2
1
0
−1
−2
−3

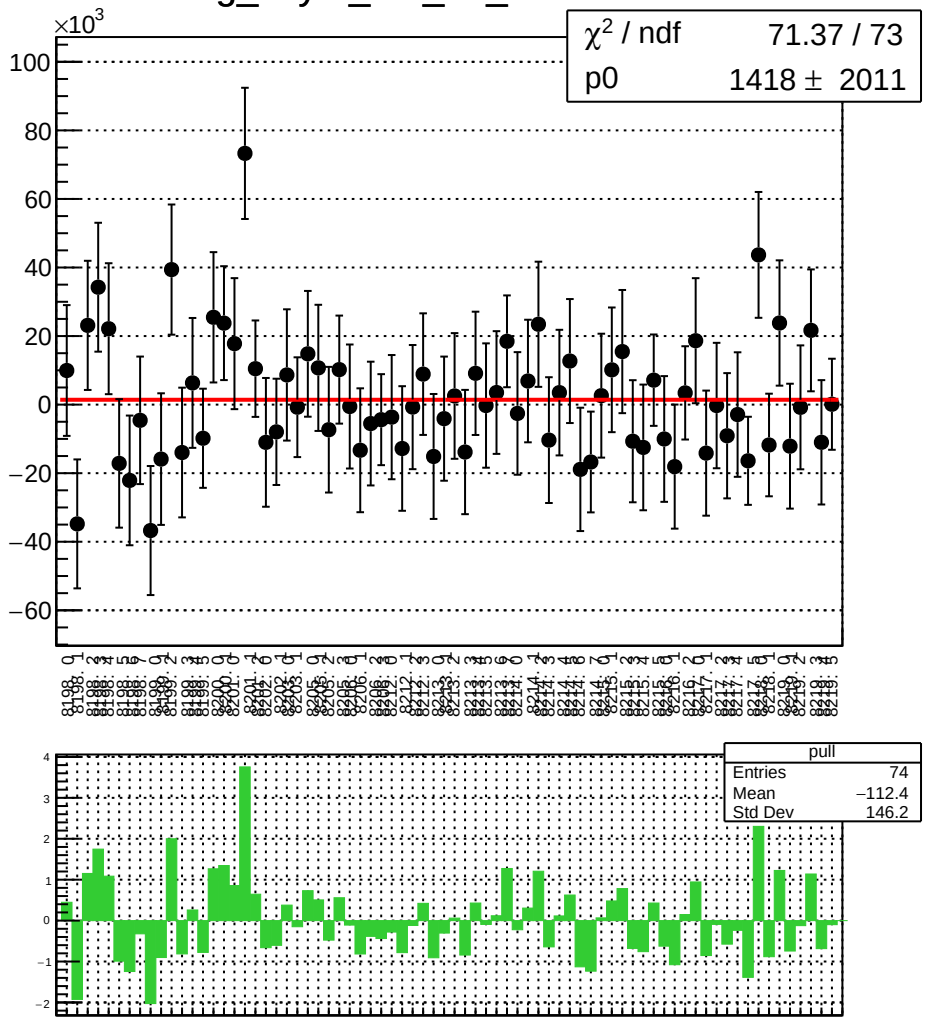

pull1D
Entries 74
Mean −0.00709
Std Dev 1.061
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

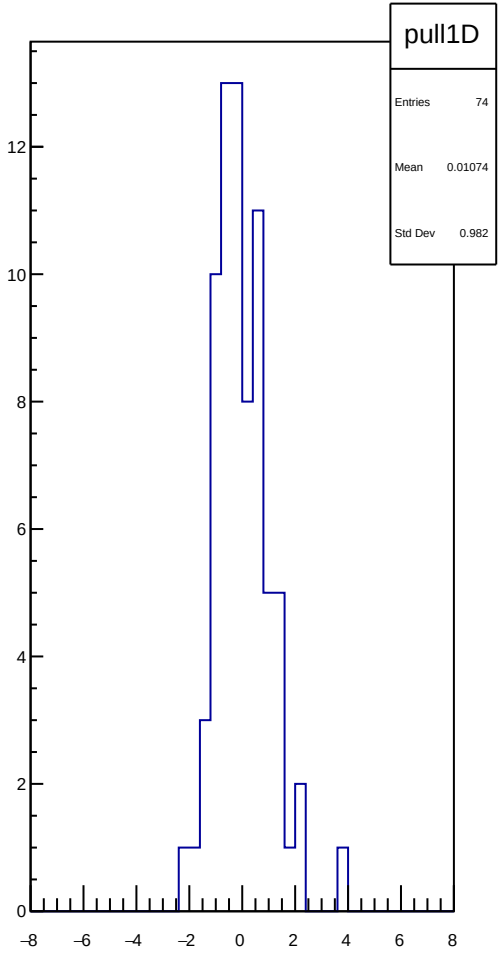

asym_at2_avg_correction_rms vs run
χ² / ndf 6202 / 73
p0 1.263e+04 ± 10.33
14500
14000
13500
13000
12500
12000
11500
11000

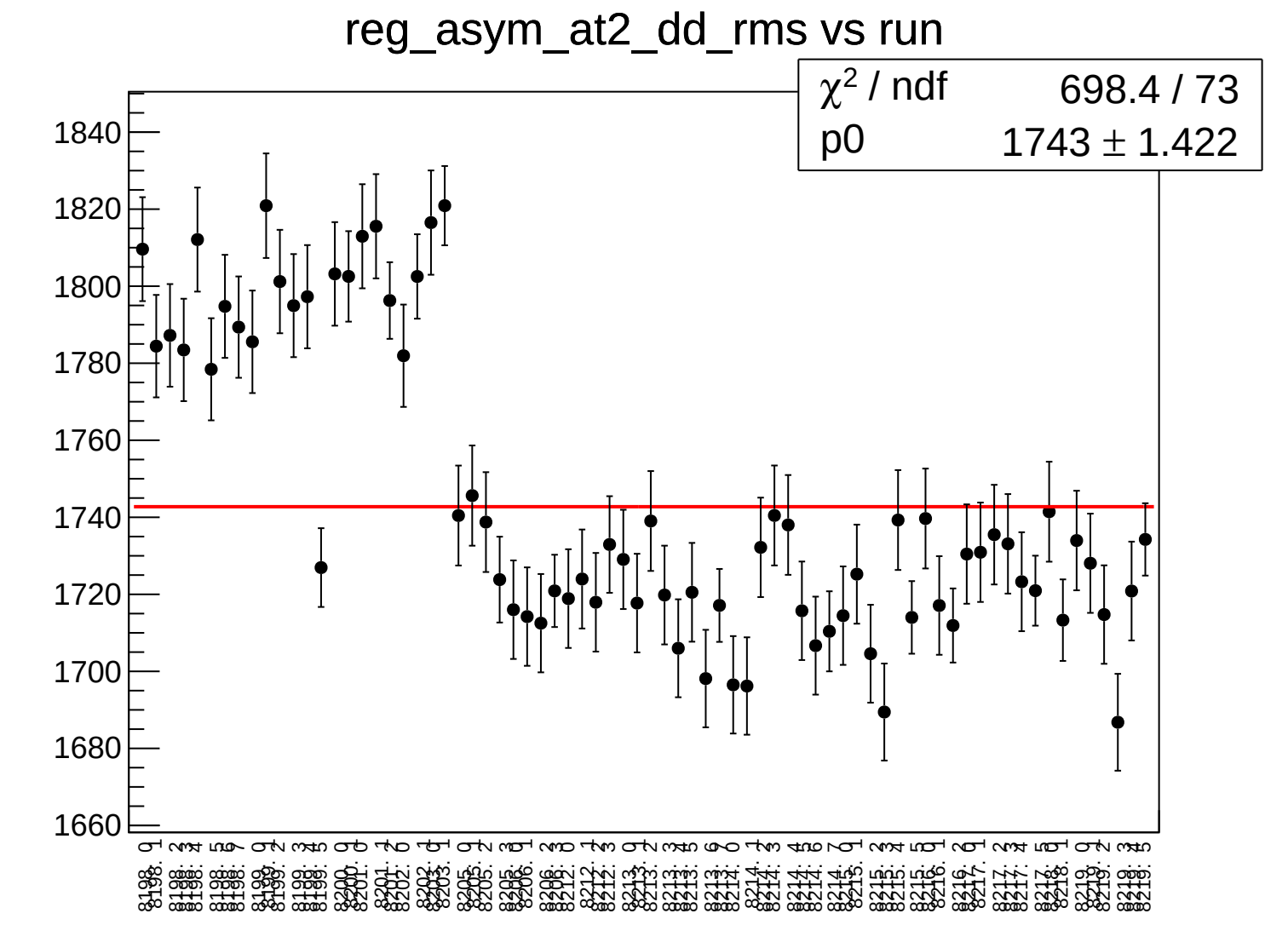

asym_at2_avg_mean vs run
×10^3
600
400
200
0
−200
−400
χ² / ndf 84.8 / 73
p0 −992.3 ± 1.475e+04
pull
Entries 74
Mean 106.5
Std Dev 81.93
2
1
0
−1
−2

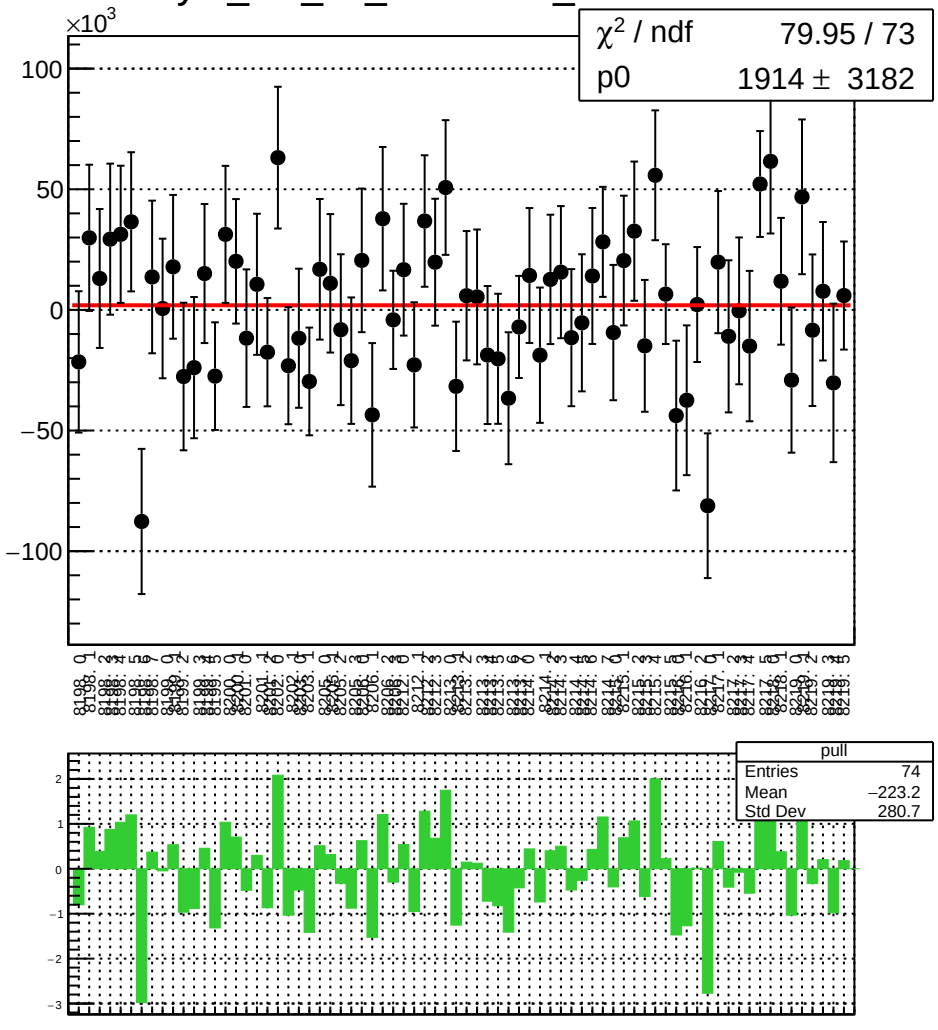

pull1D
Entries 74
Mean 0.007203
Std Dev 1.07
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

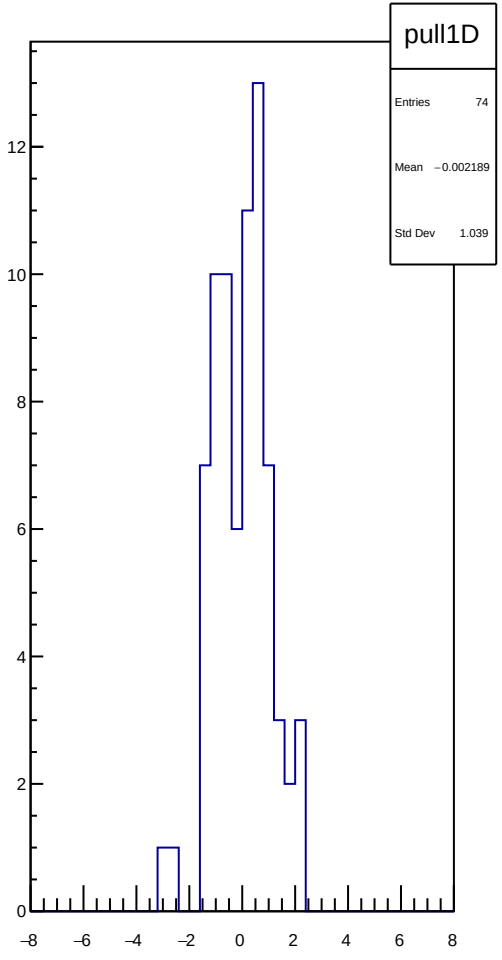

asym_at2_avg_rms vs run
χ² / ndf 5992 / 73
p0 1.276e+04 ± 10.43
15000
14500
14000
13500
13000
12500
12000
11500
11000

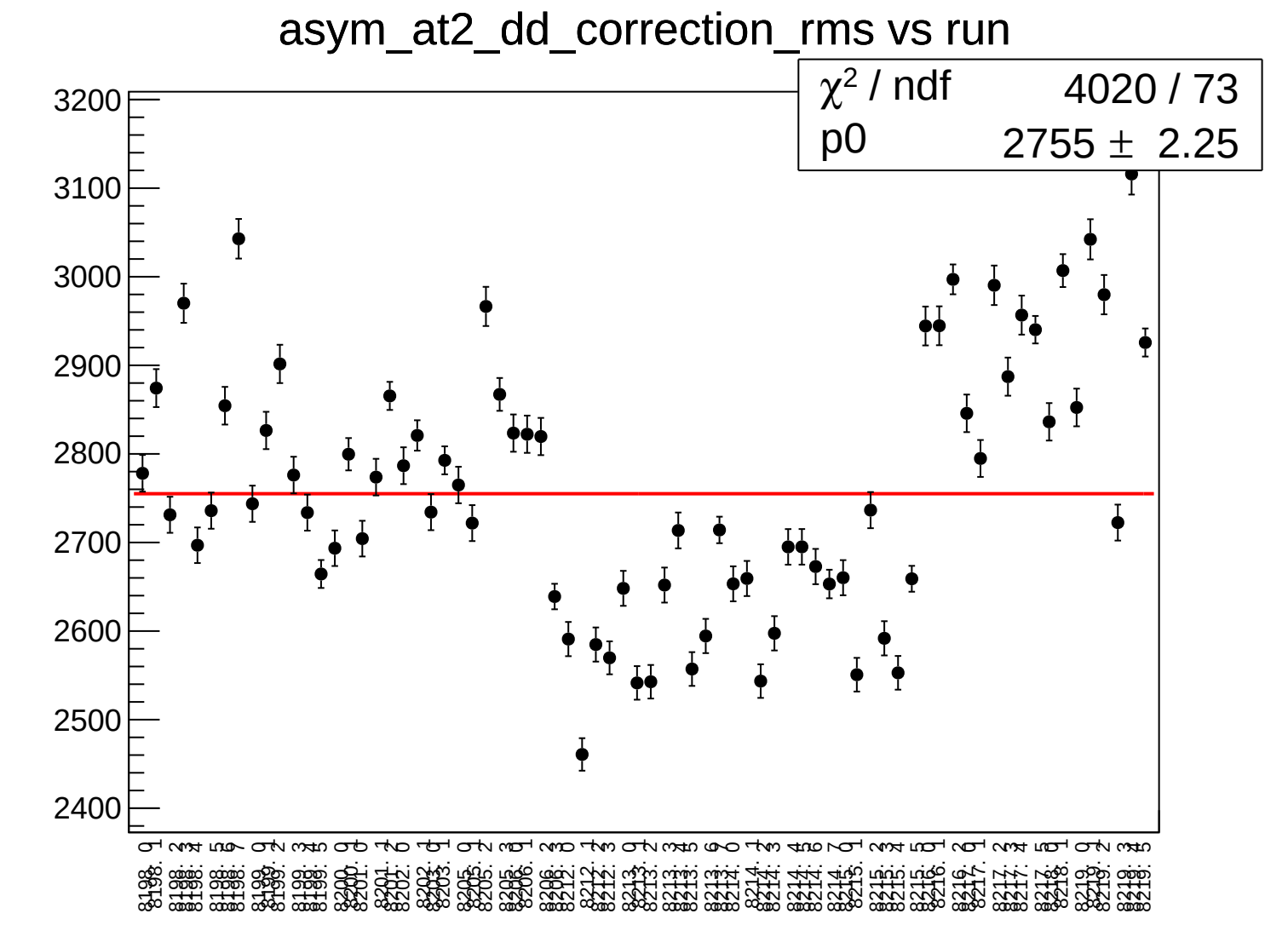

reg_asym_at2_dd_mean vs run
×10^3
χ^2 / ndf 71.37 / 73
p0 1418 ± 2011
pull
Entries 74
Mean −112.4
Std Dev 146.2

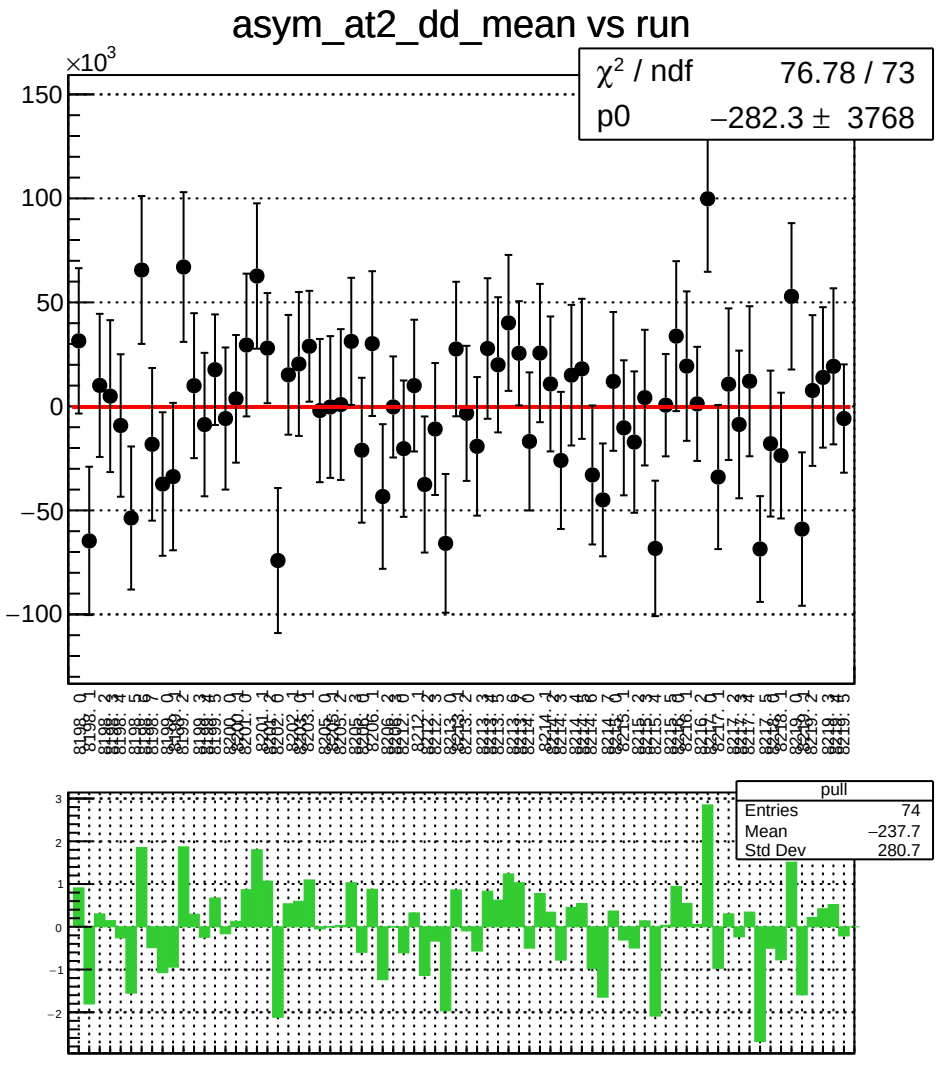

pull1D
Entries 74
Mean 0.01074
Std Dev 0.982

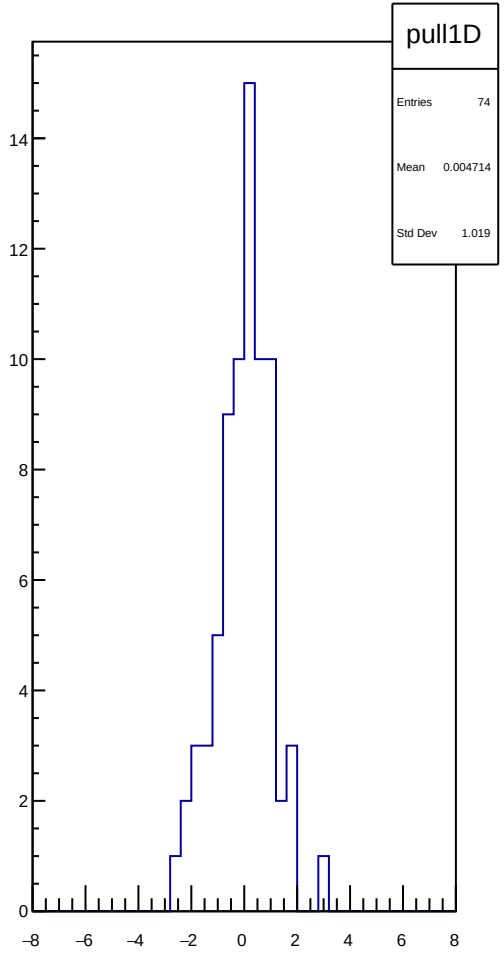

reg_asym_at2_dd_rms vs run
χ^2 / ndf 698.4 / 73
p0 1743 ± 1.422
1840
1820
1800
1780
1760
1740
1720
1700
1680
1660

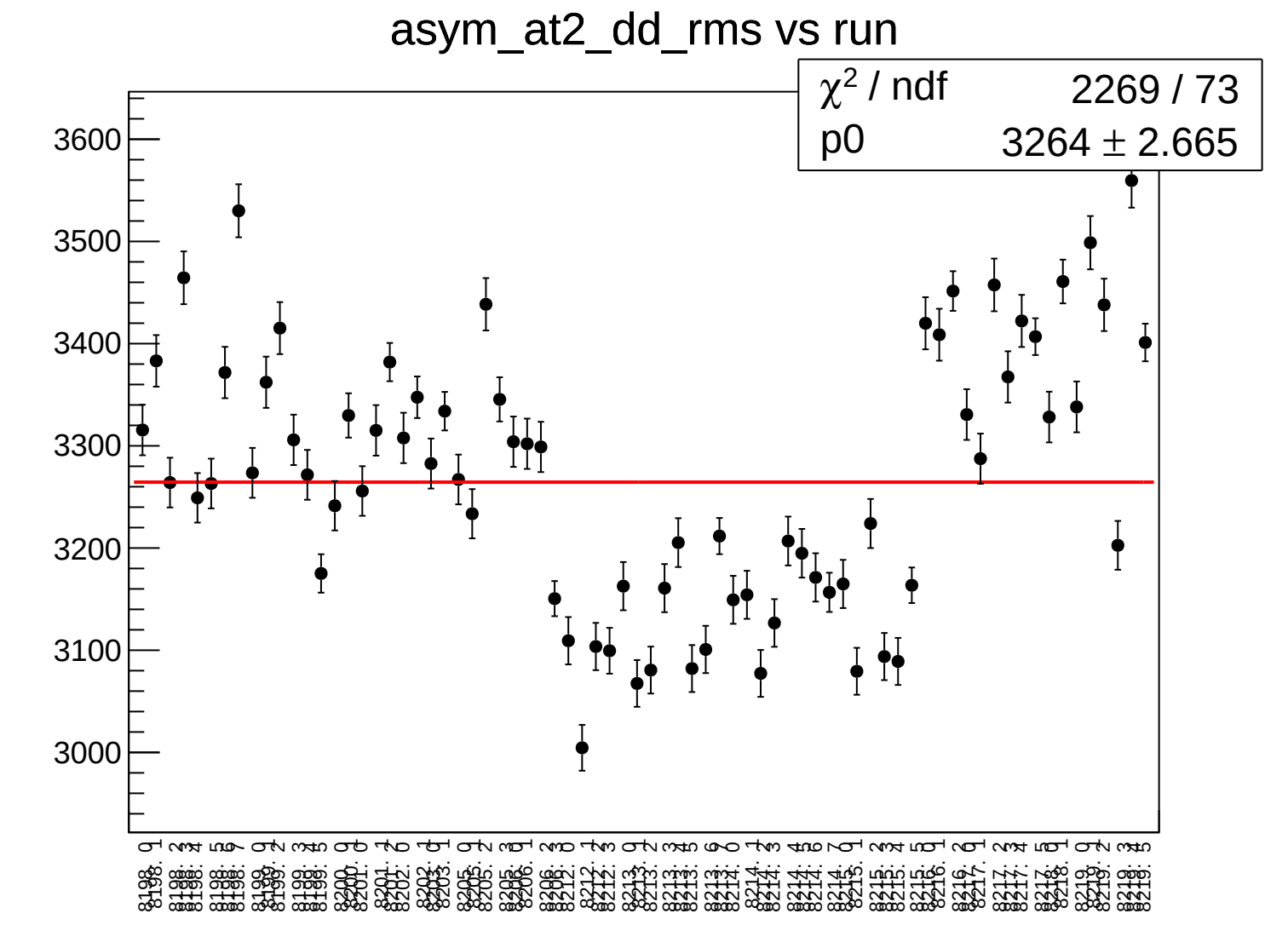

asym_at2_dd_correction_mean vs run
×10^3
χ² / ndf 79.95 / 73
p0 1914 ± 3182
100
50
0
−50
−100
pull
Entries 74
Mean −223.2
Std Dev 280.7
2
1
0
−1
−2
−3

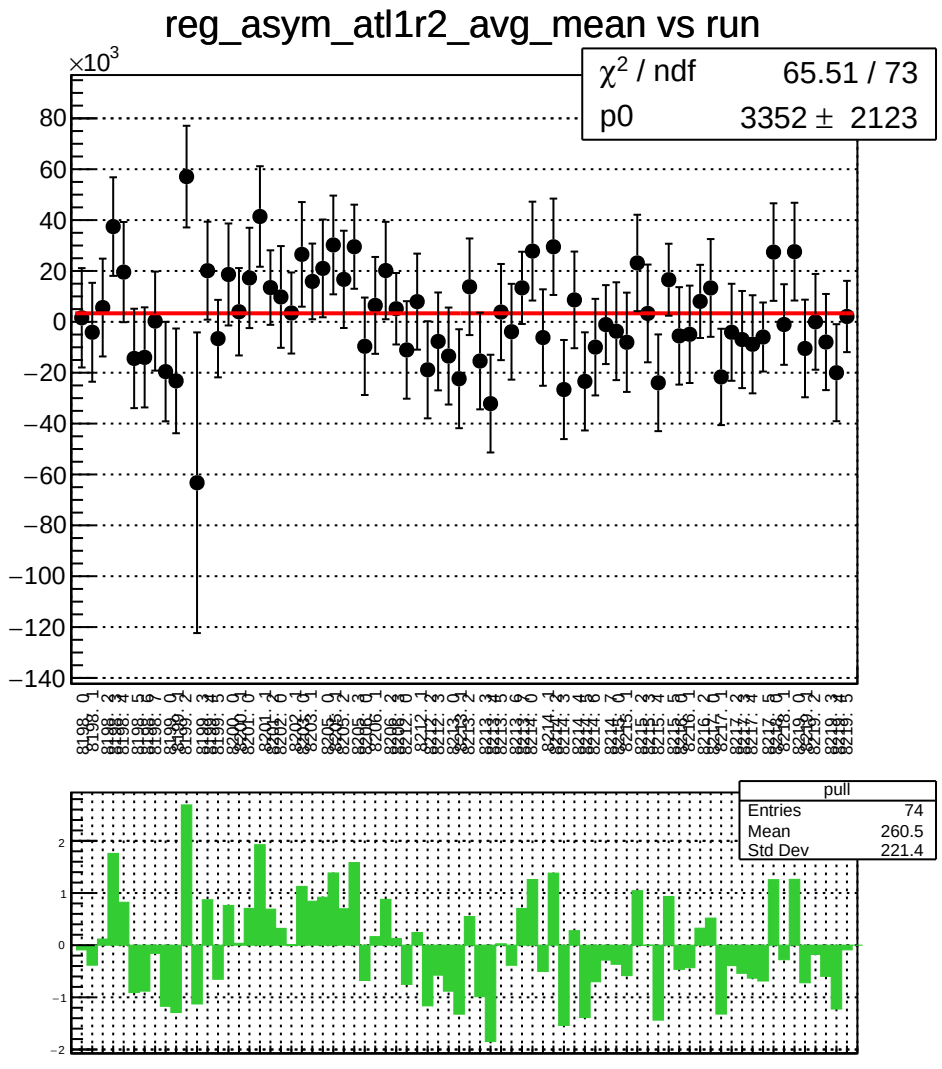

pull1D
Entries 74
Mean −0.002189
Std Dev 1.039
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

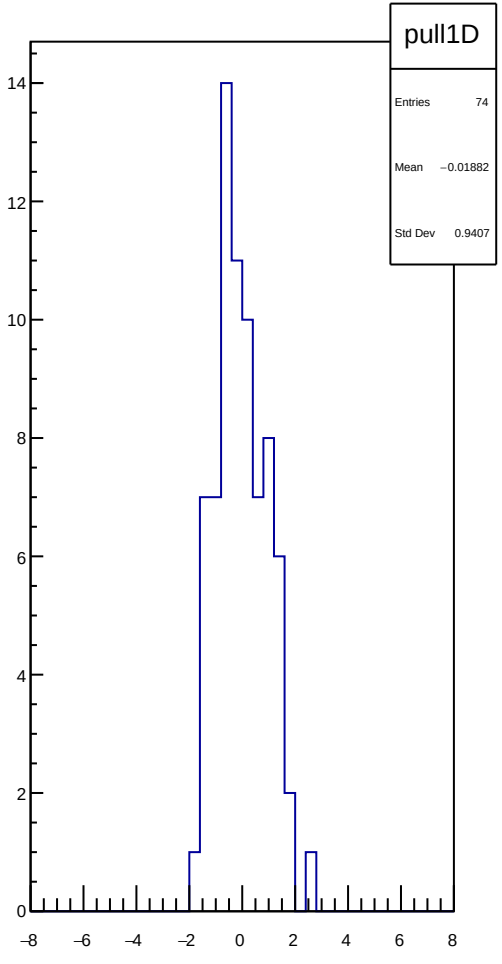

asym_at2_dd_correction_rms vs run
χ² / ndf 4020 / 73
p0 2755 ± 2.25
3200
3100
3000
2900
2800
2700
2600
2500
2400

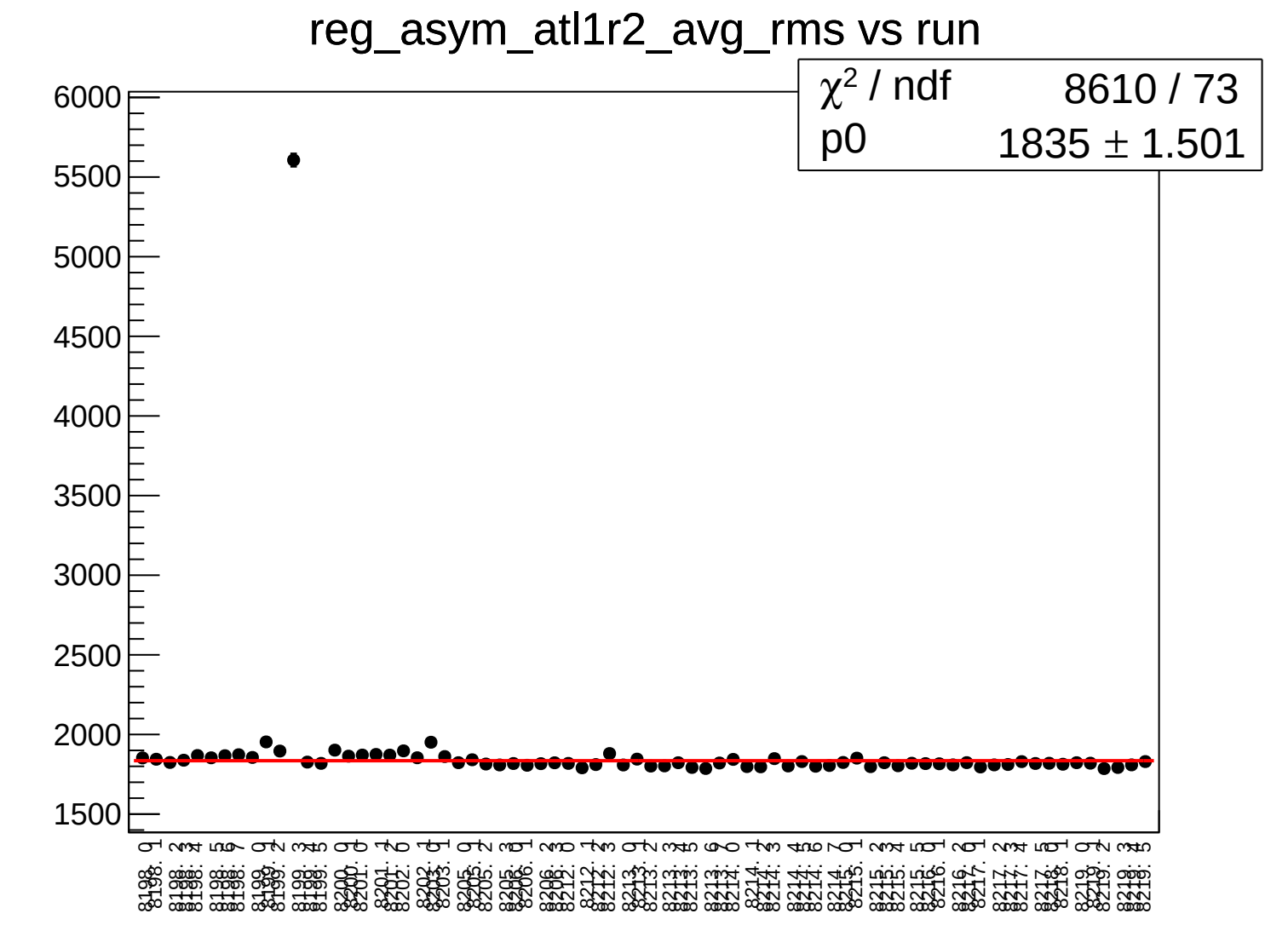

asym_at2_dd_mean vs run
×10^3
χ² / ndf 76.78 / 73
p0 −282.3 ± 3768
150
100
50
0
−50
−100
pull
Entries 74
Mean −237.7
Std Dev 280.7
3
2
1
0
−1
−2

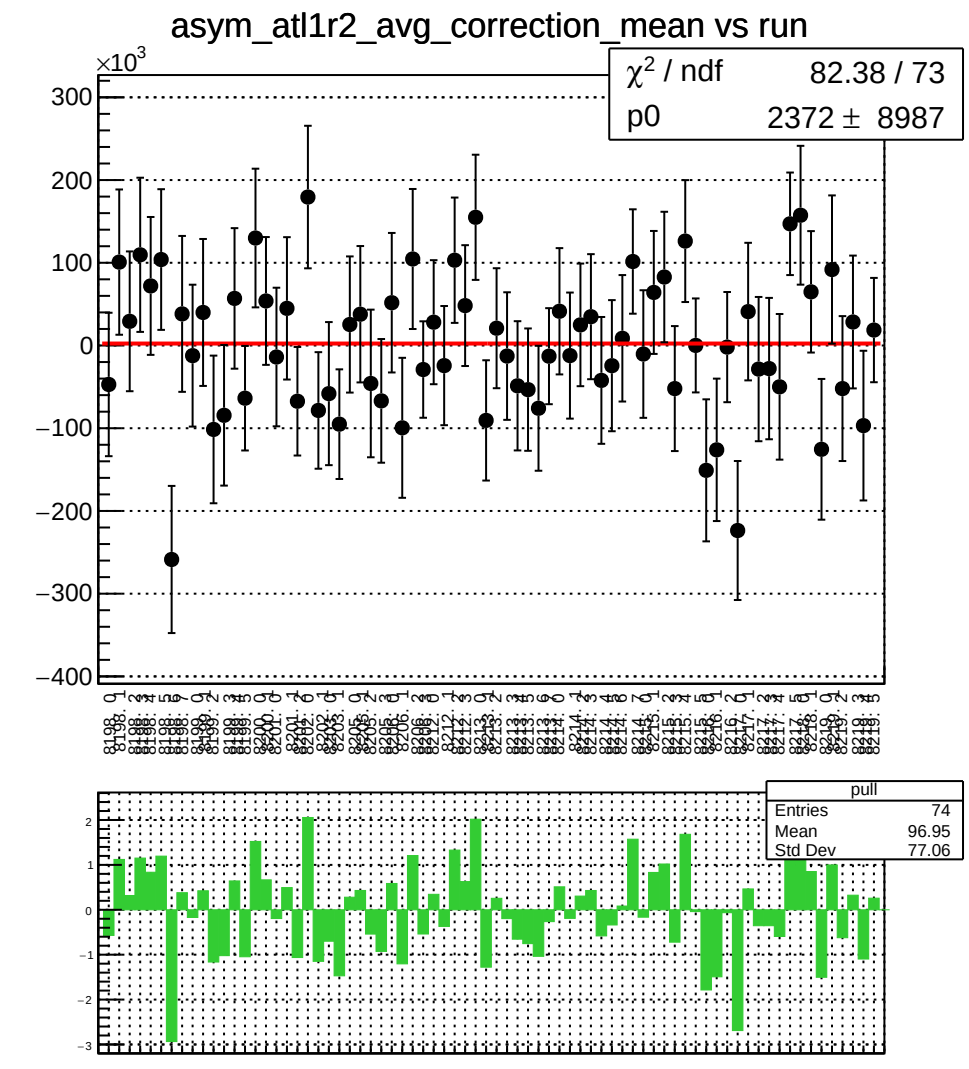

pull1D
Entries 74
Mean 0.004714
Std Dev 1.019
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

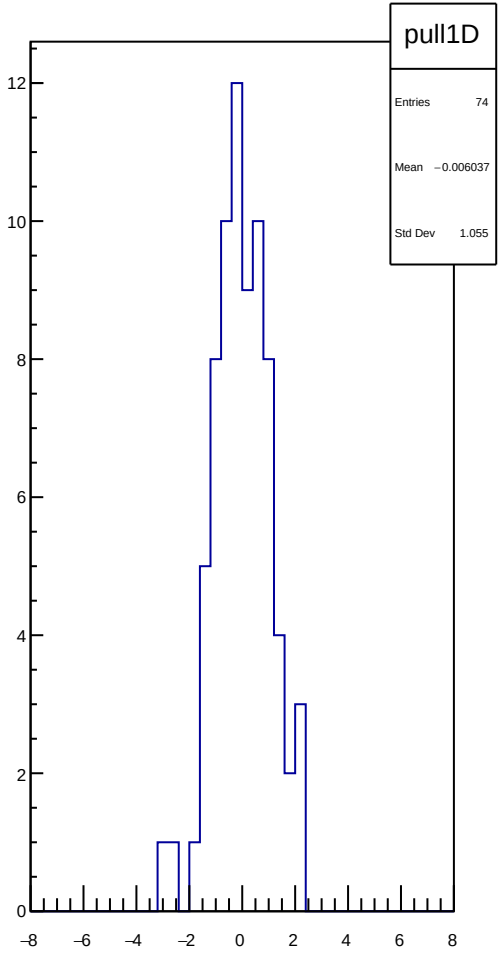

asym_at2_dd_rms vs run
χ² / ndf 2269 / 73
p0 3264 ± 2.665
3600
3500
3400
3300
3200
3100
3000

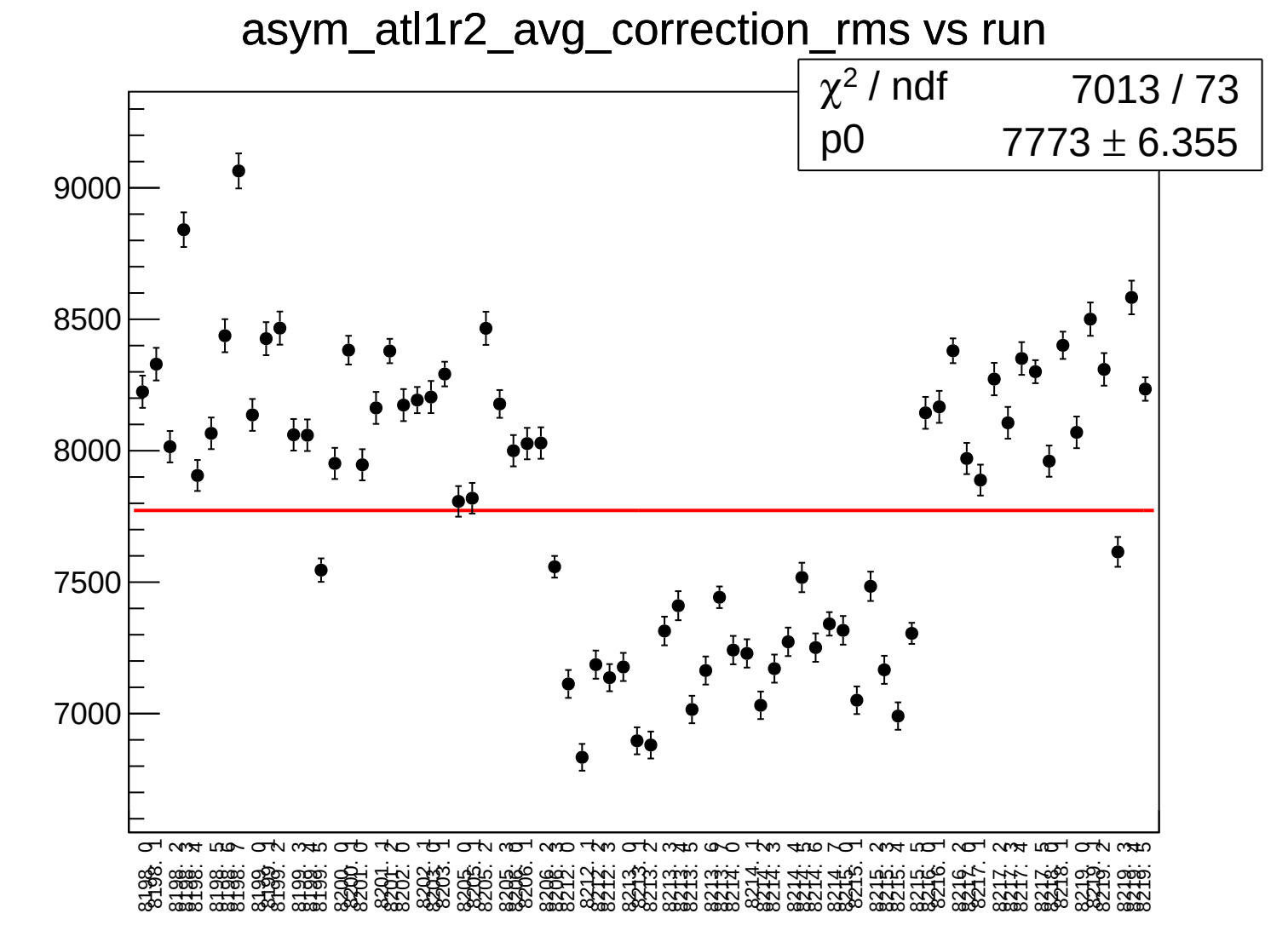

reg_asym_atl1r2_avg_mean vs run
χ² / ndf 65.51 / 73
p0 3352 ± 2123
pull
Entries 74
Mean 260.5
Std Dev 221.4

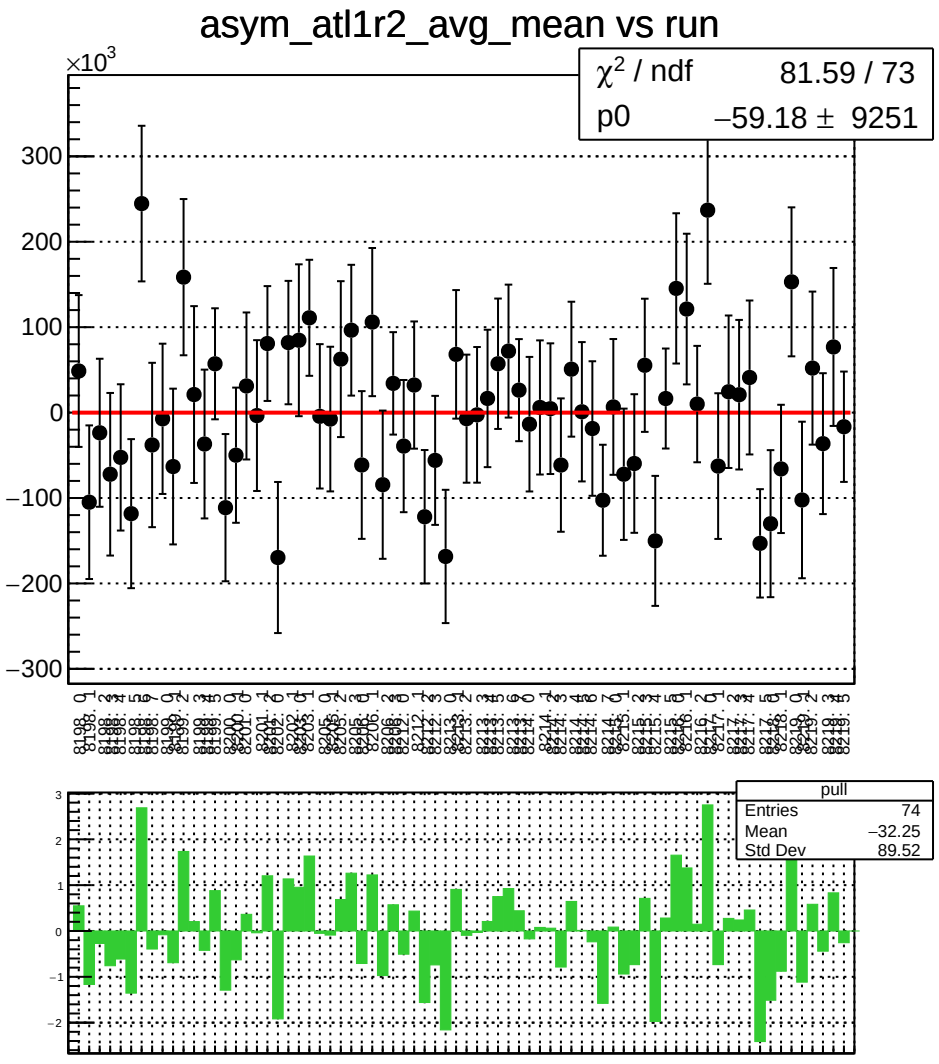

pull1D
Entries 74
Mean −0.01882
Std Dev 0.9407

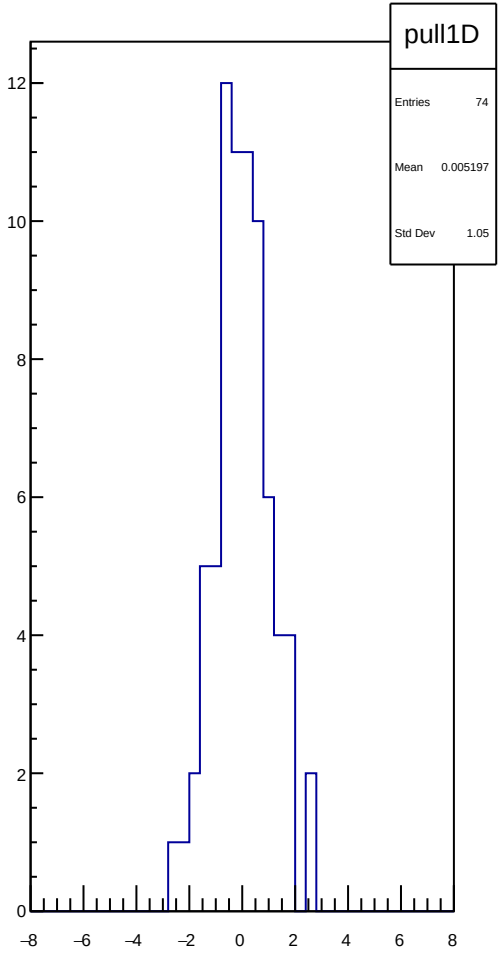

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 8610 / 73
p0 1835 ± 1.501
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500

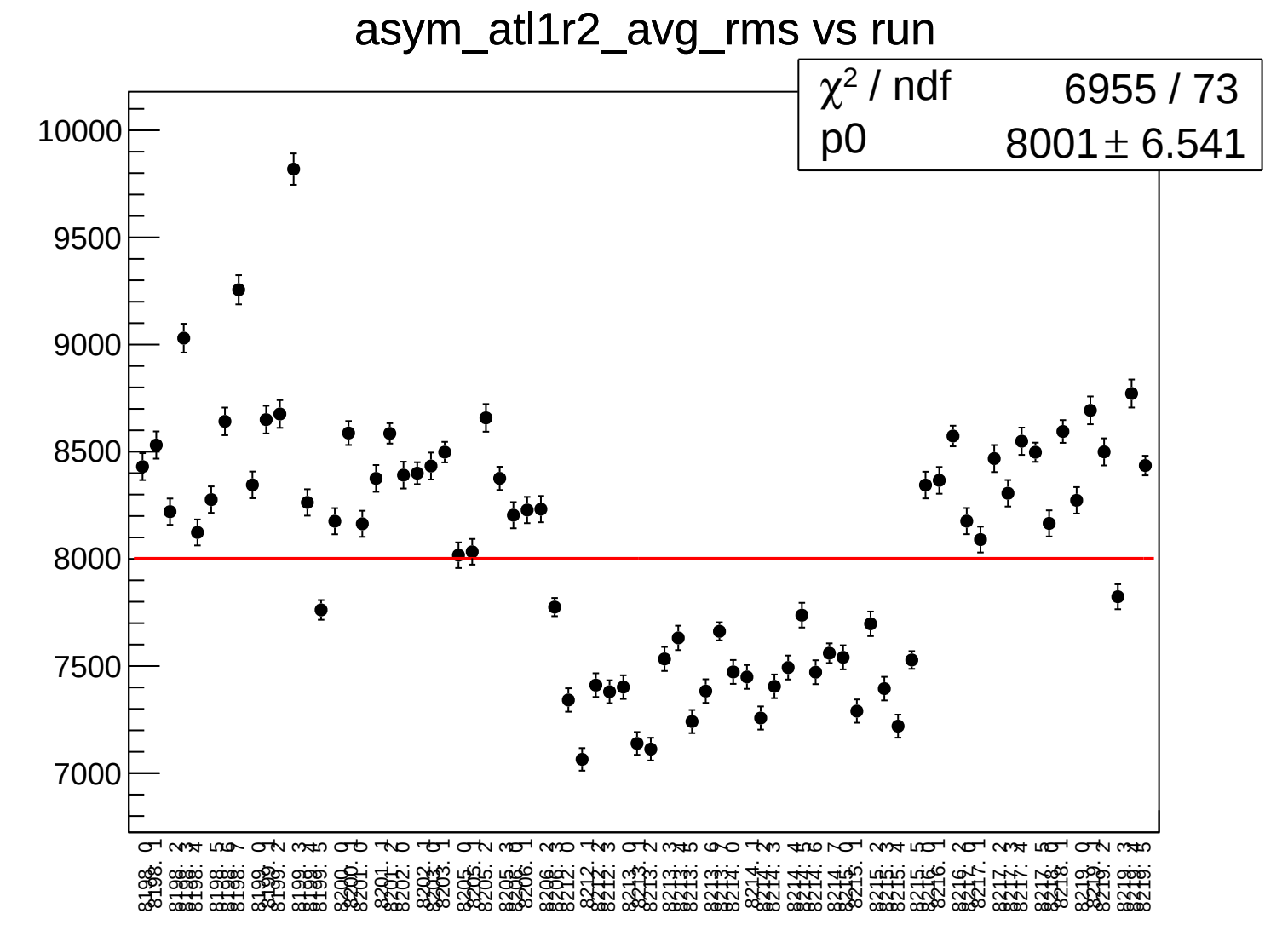

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 82.38 / 73
p0 2372 ± 8987
pull
Entries 74
Mean 96.95
Std Dev 77.06

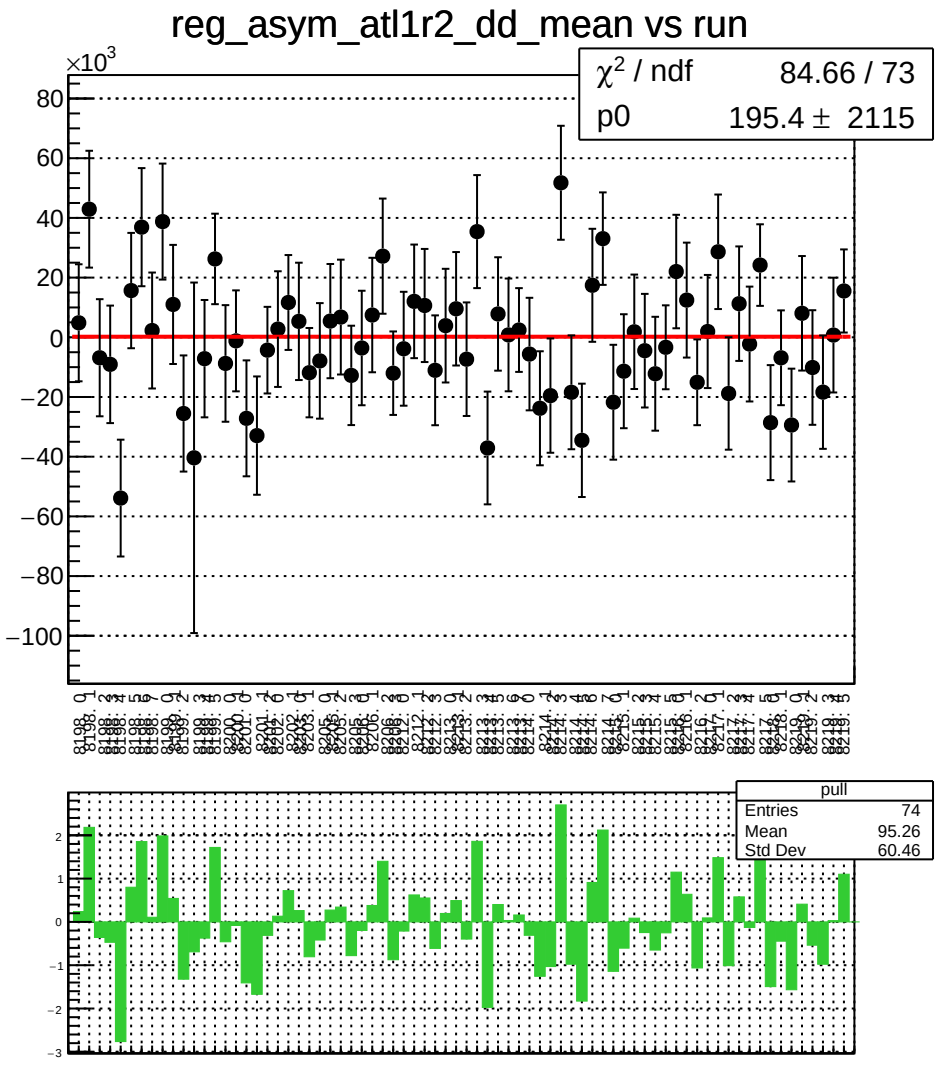

pull1D
Entries 74
Mean −0.006037
Std Dev 1.055

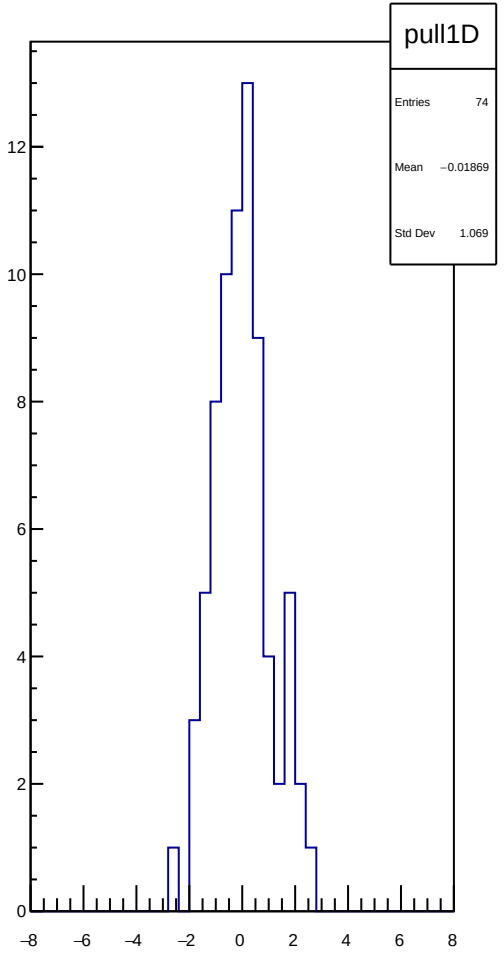

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 7013 / 73
p0 7773 ± 6.355
9000
8500
8000
7500
7000

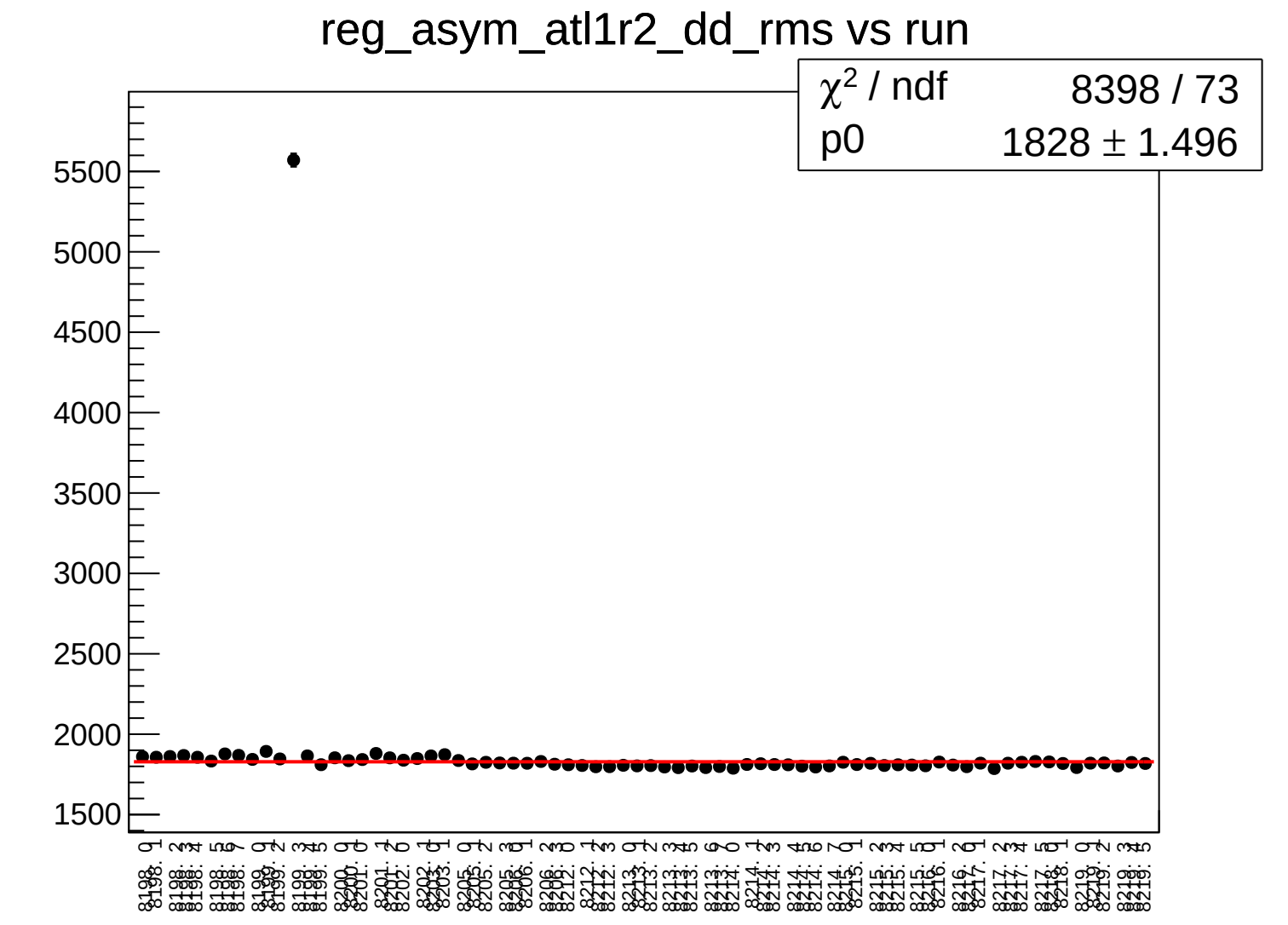

asym_atl1r2_avg_mean vs run
χ² / ndf 81.59 / 73
p0 −59.18 ± 9251
pull
Entries 74
Mean −32.25
Std Dev 89.52

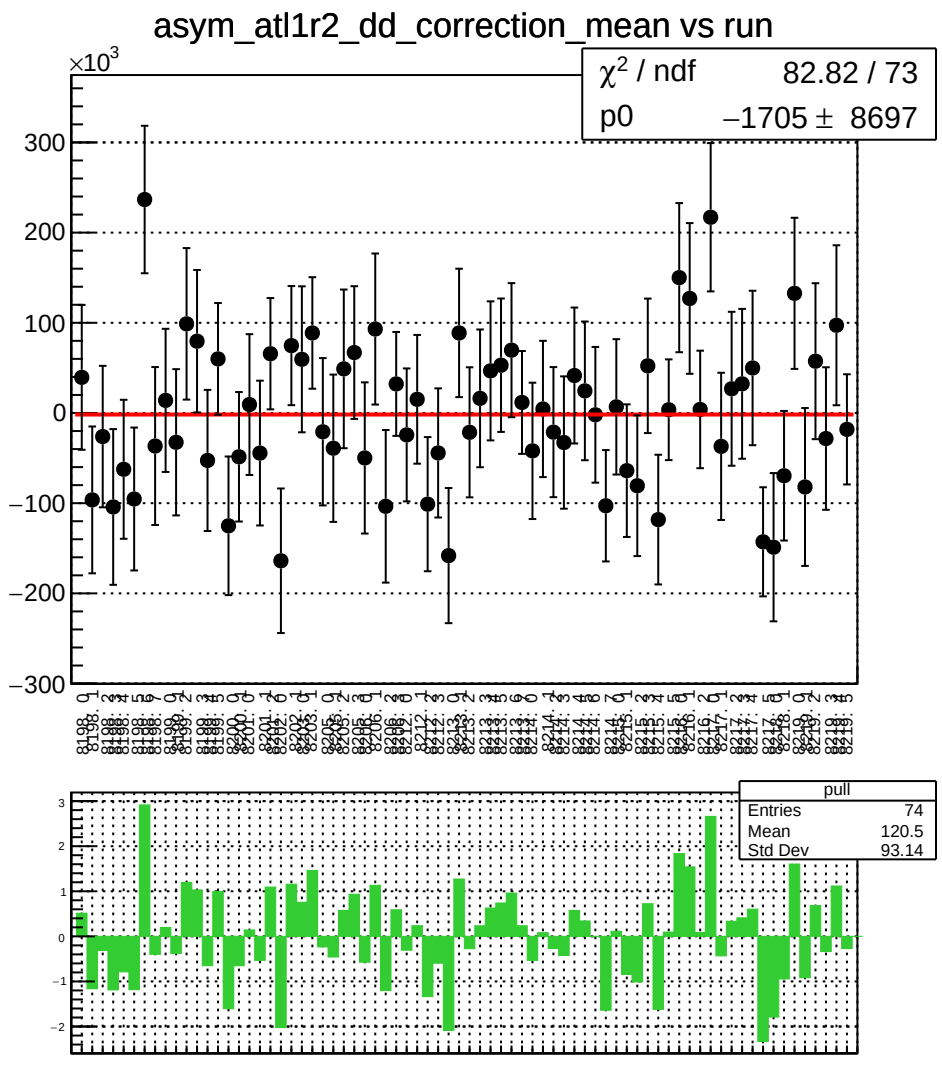

pull1D
Entries 74
Mean 0.005197
Std Dev 1.05

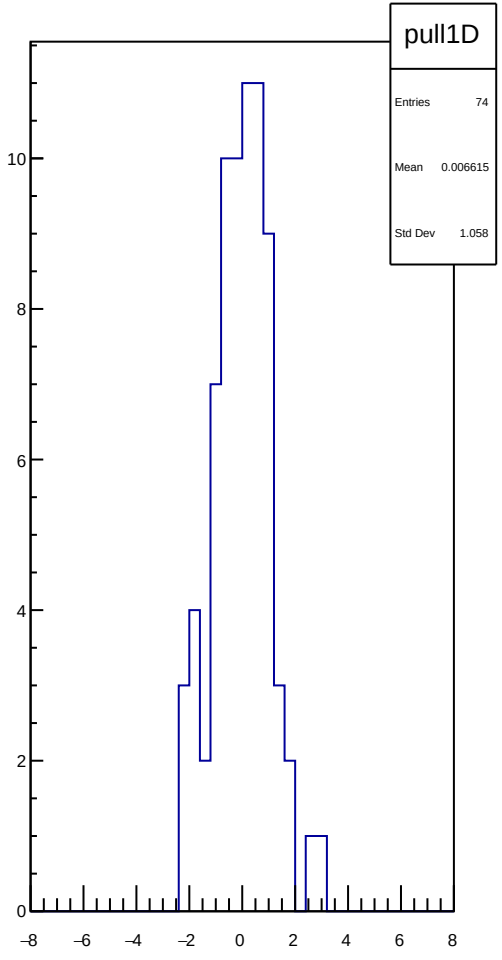

asym_atl1r2_avg_rms vs run
χ² / ndf 6955 / 73
p0 8001 ± 6.541
10000
9500
9000
8500
8000
7500
7000

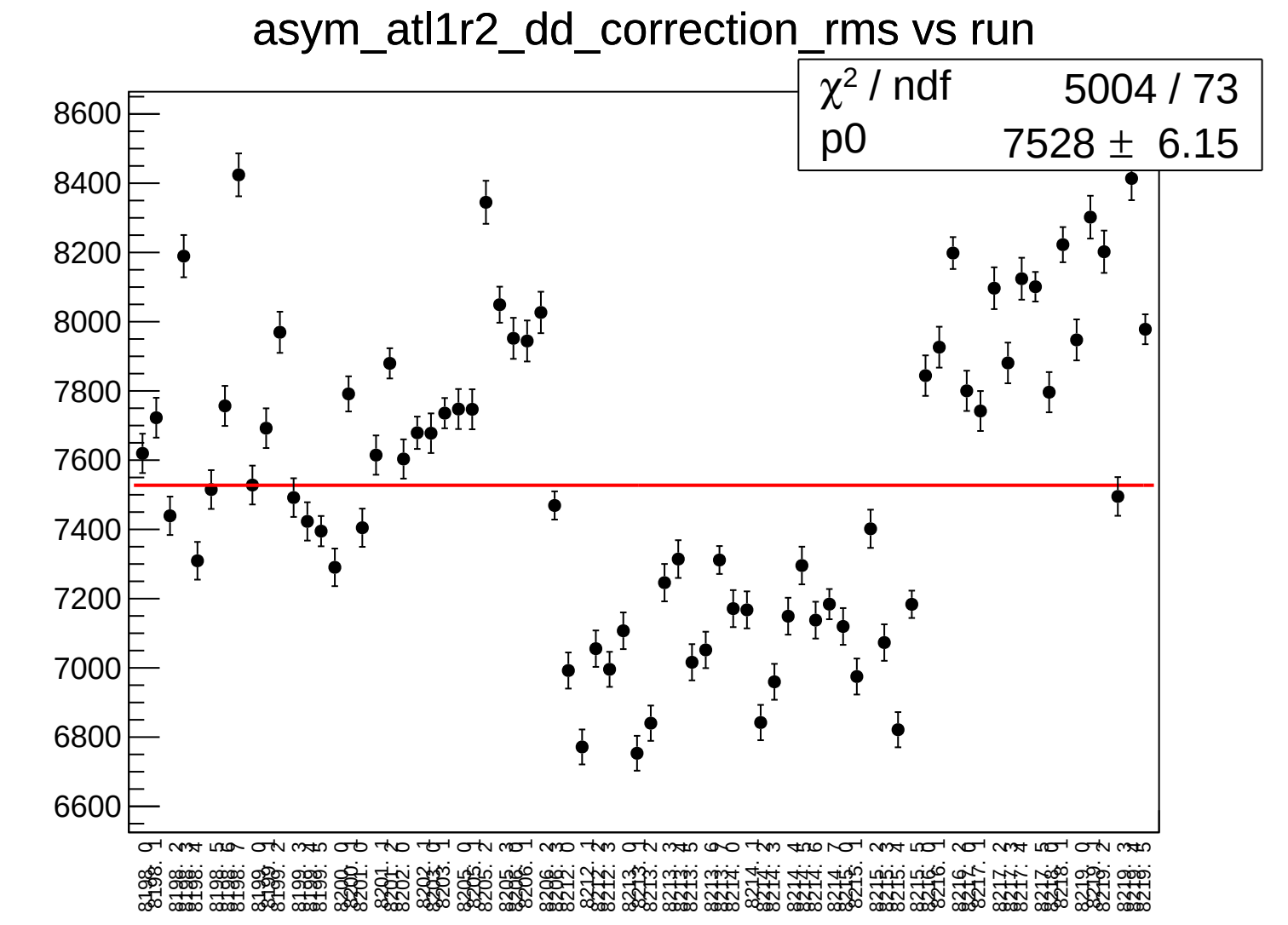

reg_asym_atl1r2_dd_mean vs run
×10^3
χ^2 / ndf 84.66 / 73
p0 195.4 ± 2115
pull
Entries 74
Mean 95.26
Std Dev 60.46

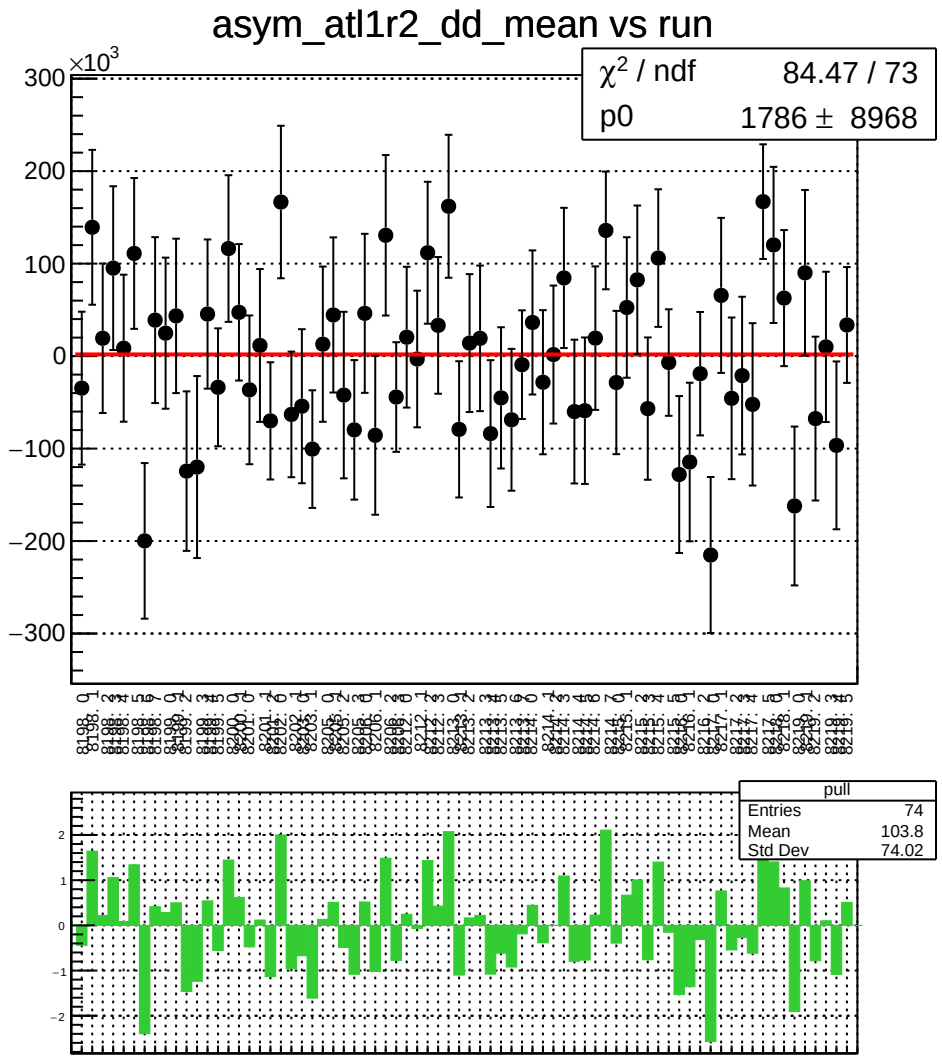

pull1D
Entries 74
Mean −0.01869
Std Dev 1.069

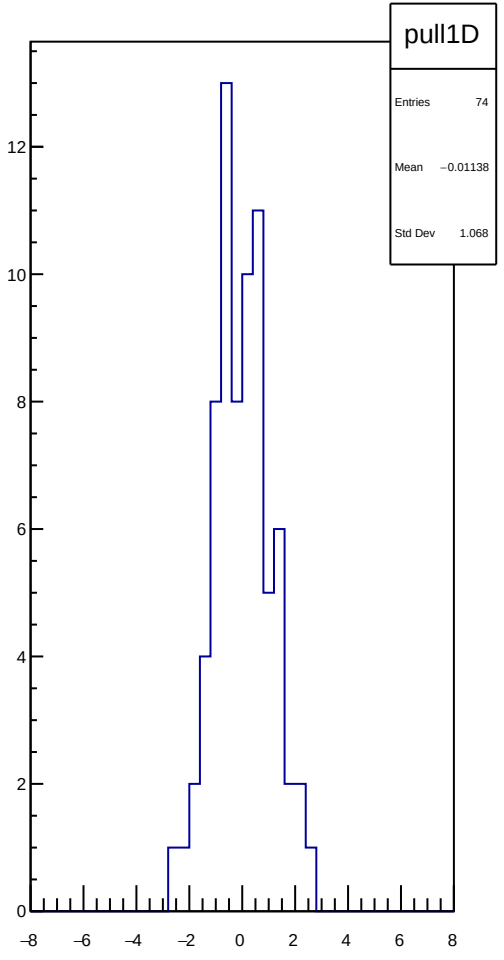

reg_asym_atl1r2_dd_rms vs run
χ^2 / ndf 8398 / 73
p0 1828 ± 1.496
5500
5000
4500
4000
3500
3000
2500
2000
1500

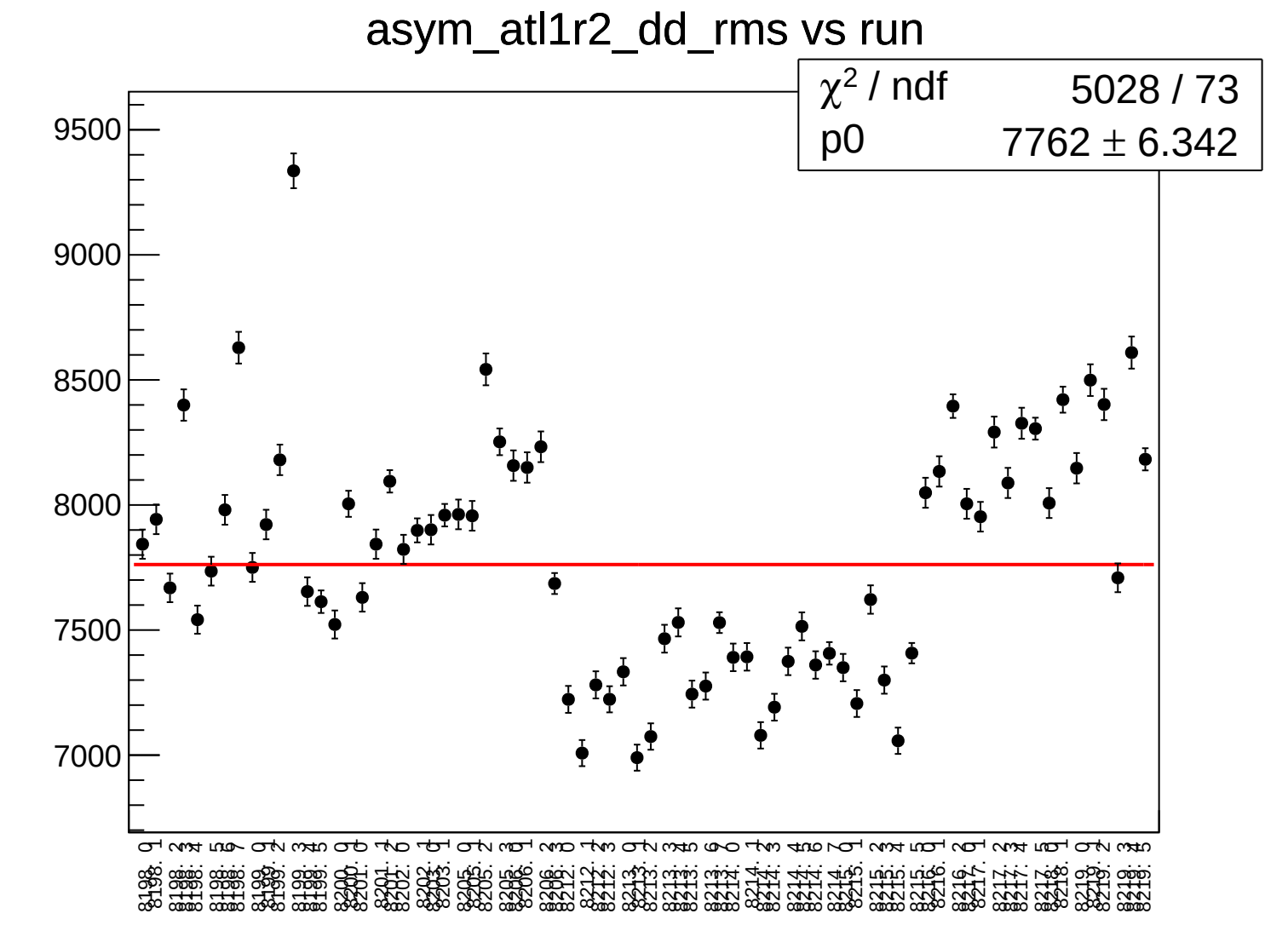

asym_atl1r2_dd_correction_mean vs run
χ² / ndf 82.82 / 73
p0 −1705 ± 8697
×10³
300
200
100
0
−100
−200
−300
pull
Entries 74
Mean 120.5
Std Dev 93.14
3
2
1
0
−1
−2

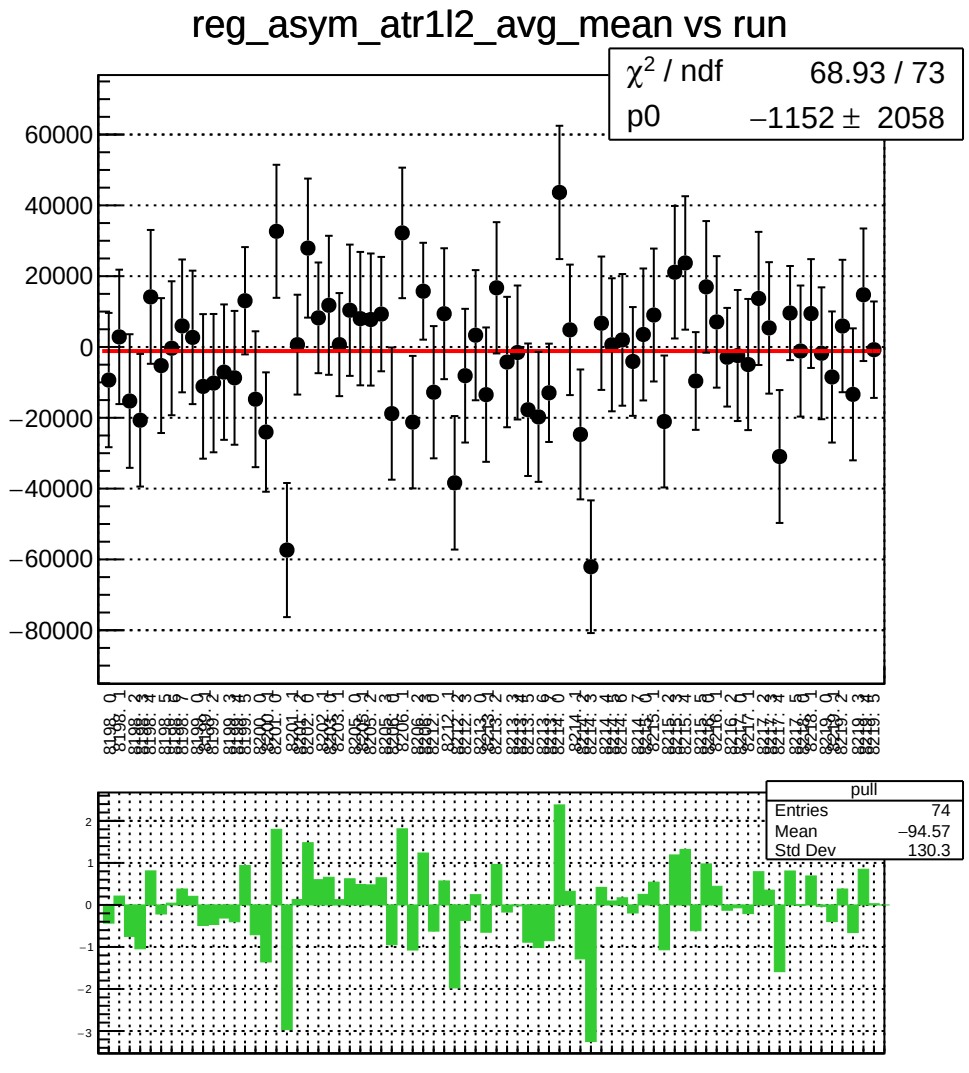

pull1D
Entries 74
Mean 0.006615
Std Dev 1.058
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

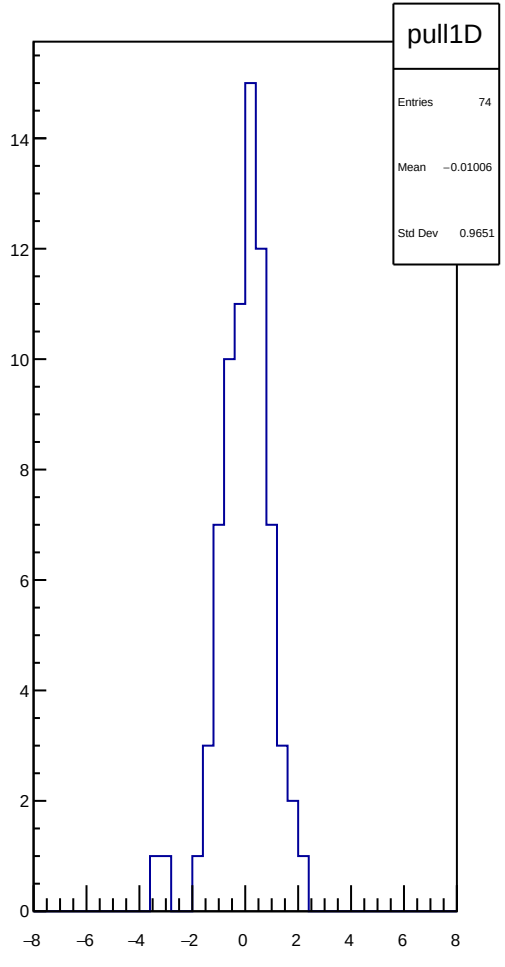

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 5004 / 73
p0 7528 ± 6.15
8600
8400
8200
8000
7800
7600
7400
7200
7000
6800
6600

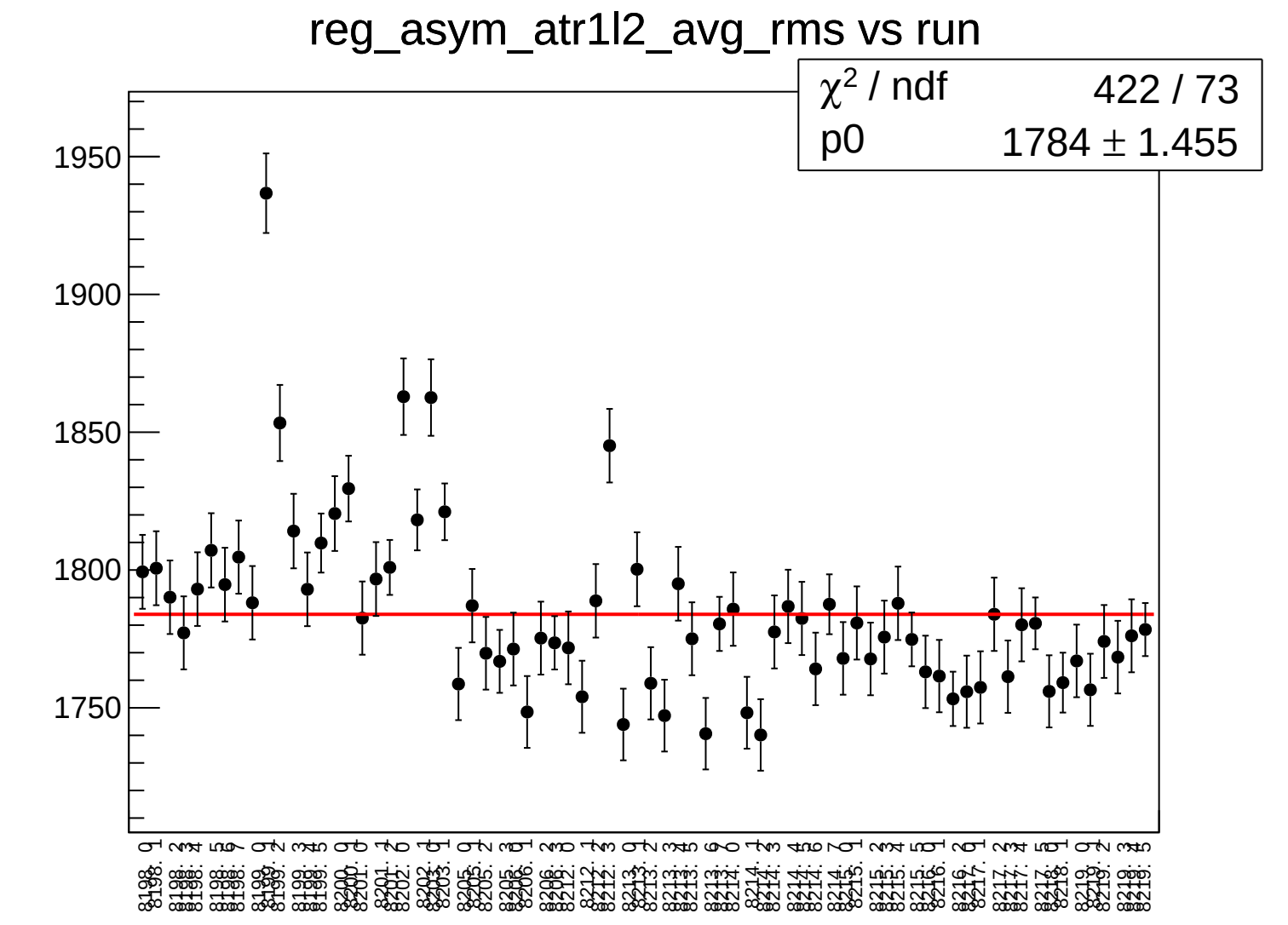

asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 84.47 / 73
p0 1786 ± 8968
pull
Entries 74
Mean 103.8
Std Dev 74.02

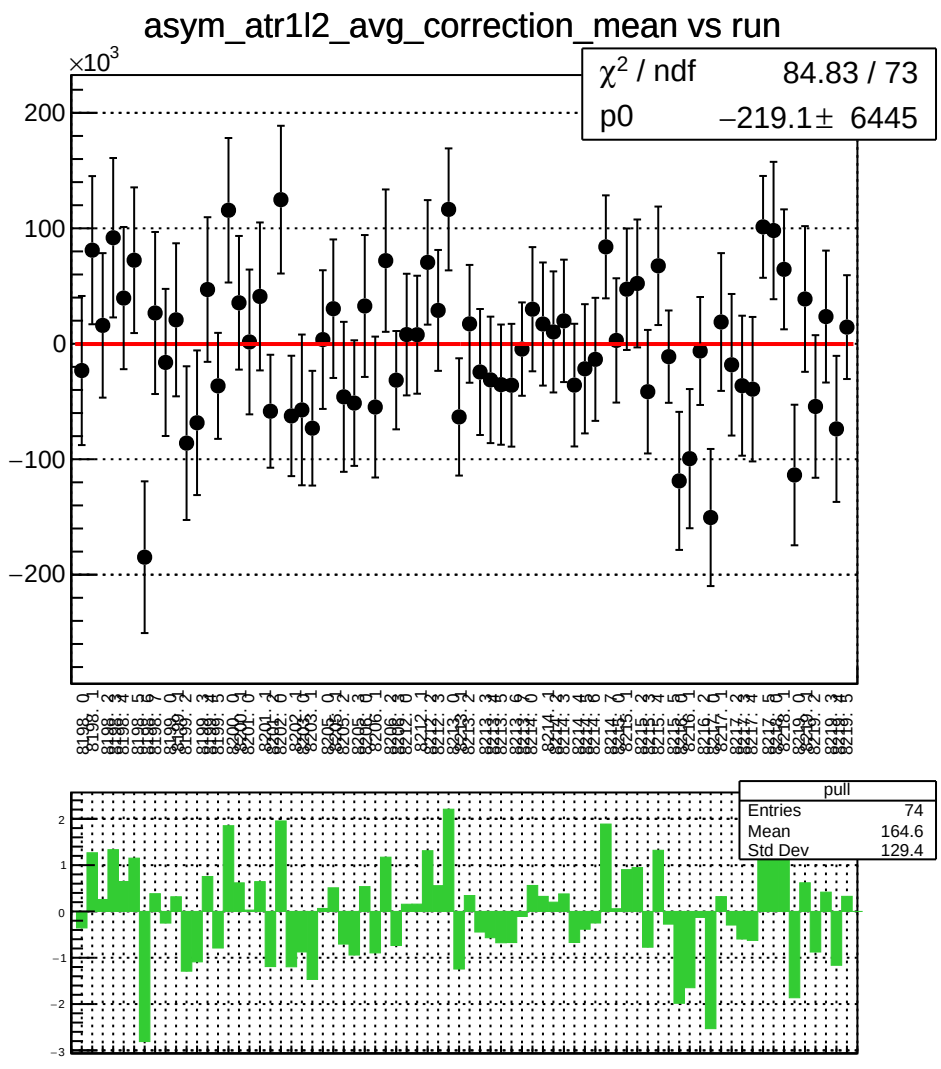

pull1D
Entries 74
Mean −0.01138
Std Dev 1.068

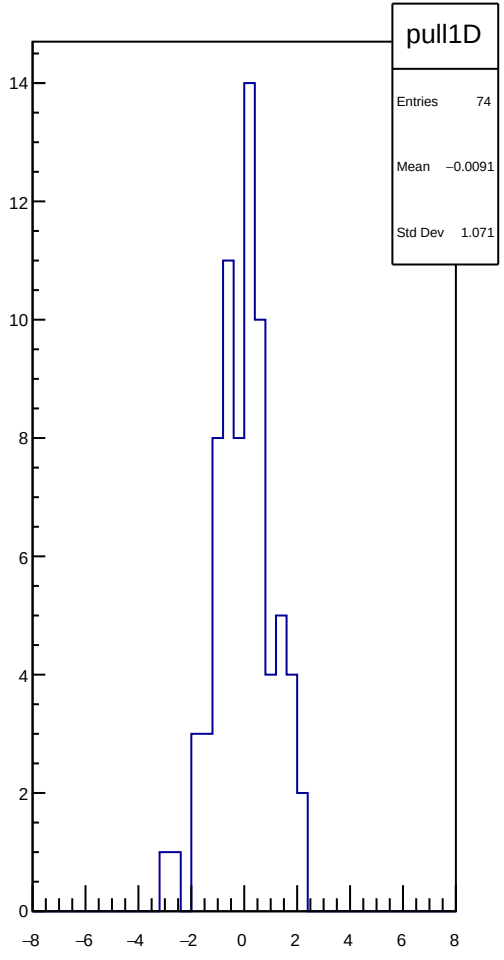

asym_atl1r2_dd_rms vs run
χ^2 / ndf 5028 / 73
p0 7762 ± 6.342
9500
9000
8500
8000
7500
7000

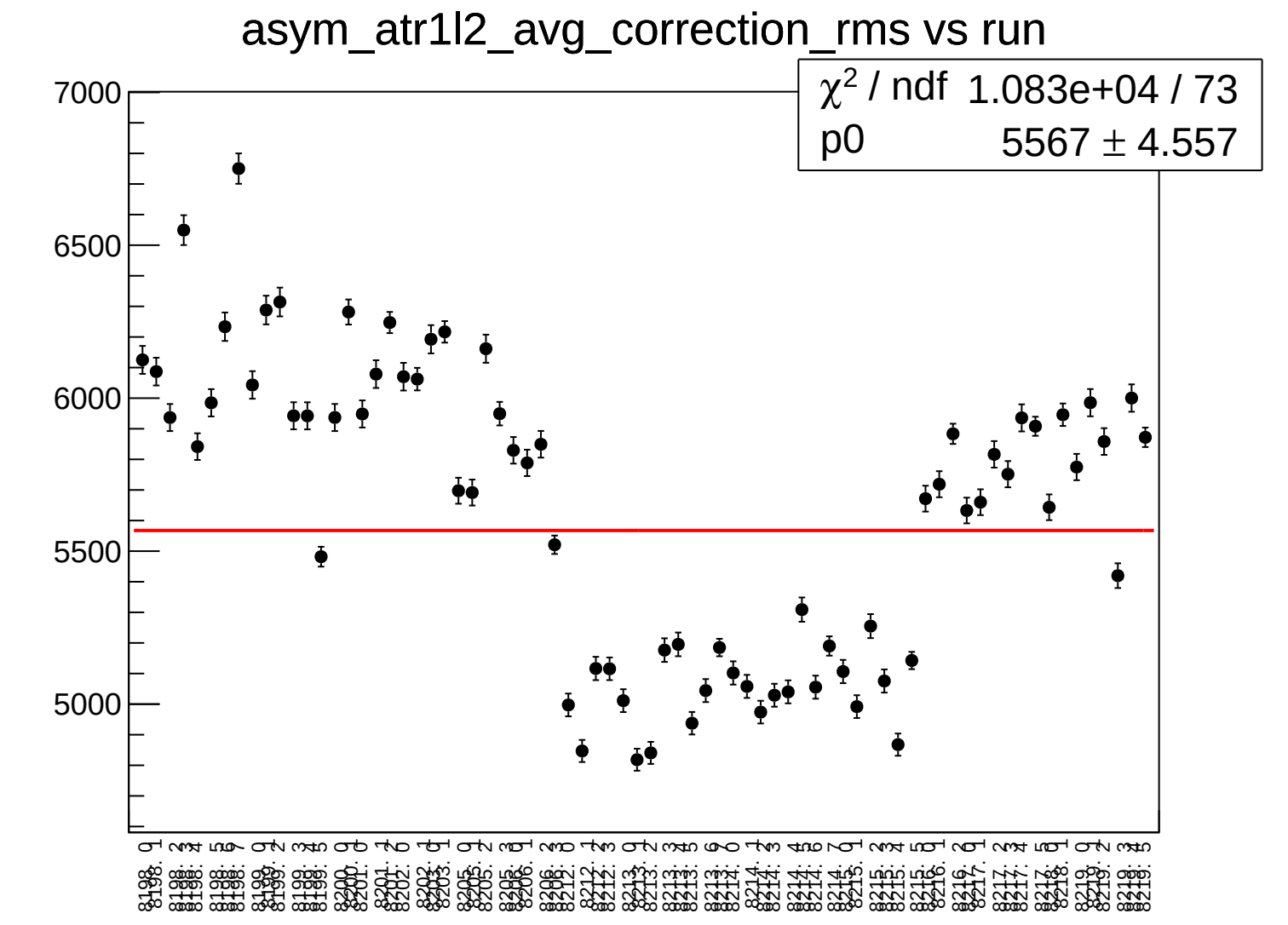

reg_asym_atr1l2_avg_mean vs run
χ² / ndf 68.93 / 73
p0 −1152 ± 2058
pull
Entries 74
Mean −94.57
Std Dev 130.3

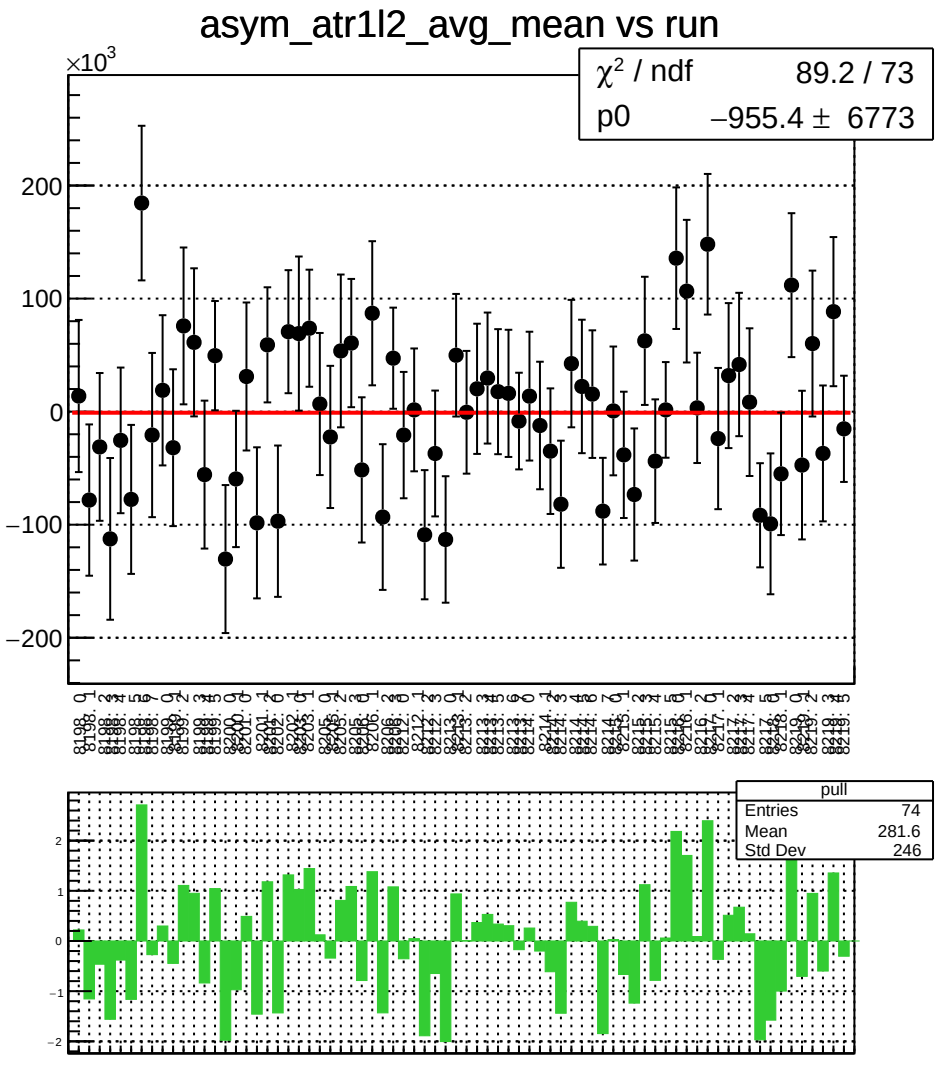

pull1D
Entries 74
Mean −0.01006
Std Dev 0.9651

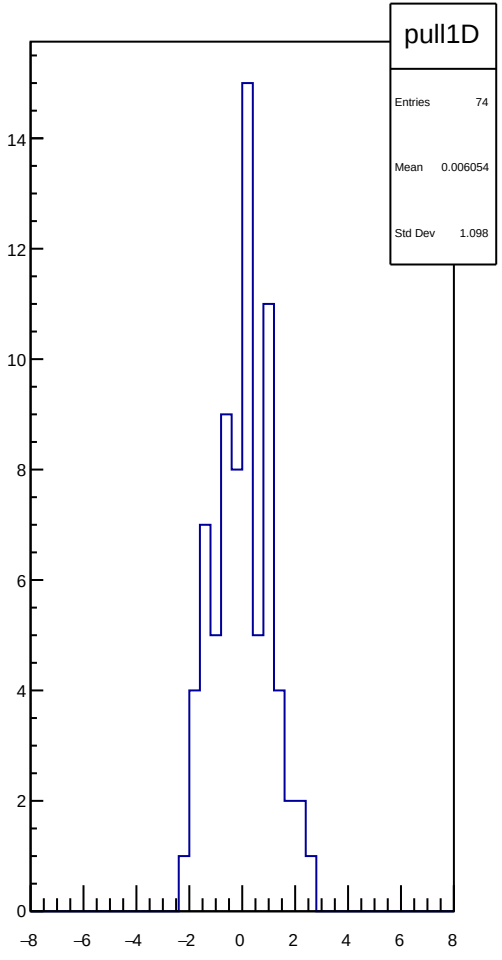

reg_asym_atr1l2_avg_rms vs run
χ^2 / ndf 422 / 73
p0 1784 ± 1.455
1950
1900
1850
1800
1750

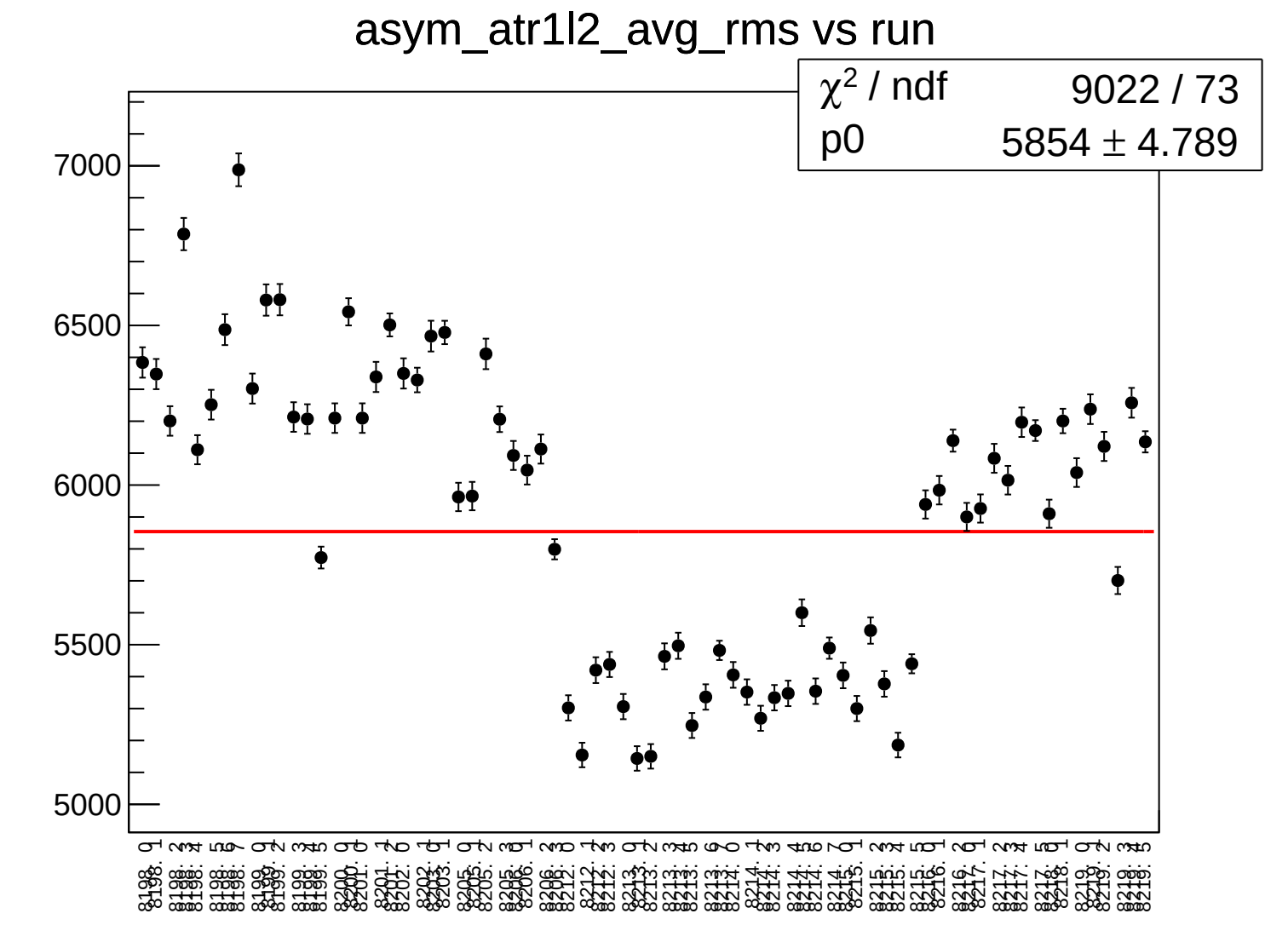

asym_atr1l2_avg_correction_mean vs run
×10^3
χ² / ndf 84.83 / 73
p0 −219.1± 6445
200
100
0
−100
−200
pull
Entries 74
Mean 164.6
Std Dev 129.4
2
1
0
−1
−2
−3

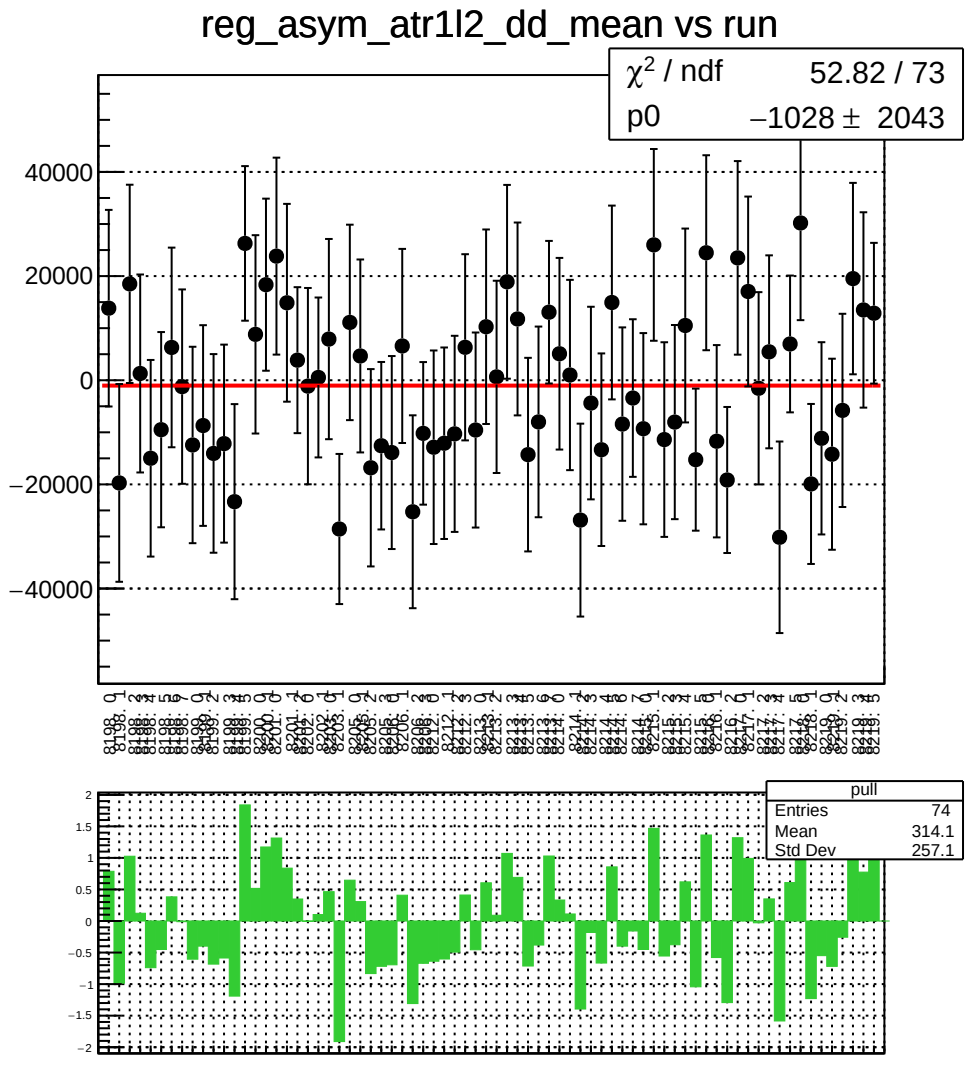

pull1D
Entries 74
Mean −0.0091
Std Dev 1.071
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

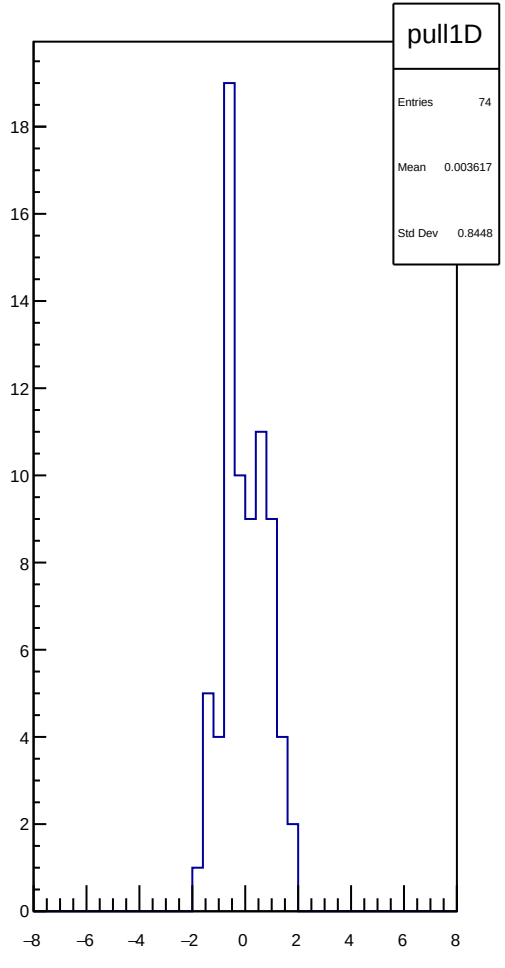

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 1.083e+04 / 73
p0 5567 ± 4.557
7000
6500
6000
5500
5000

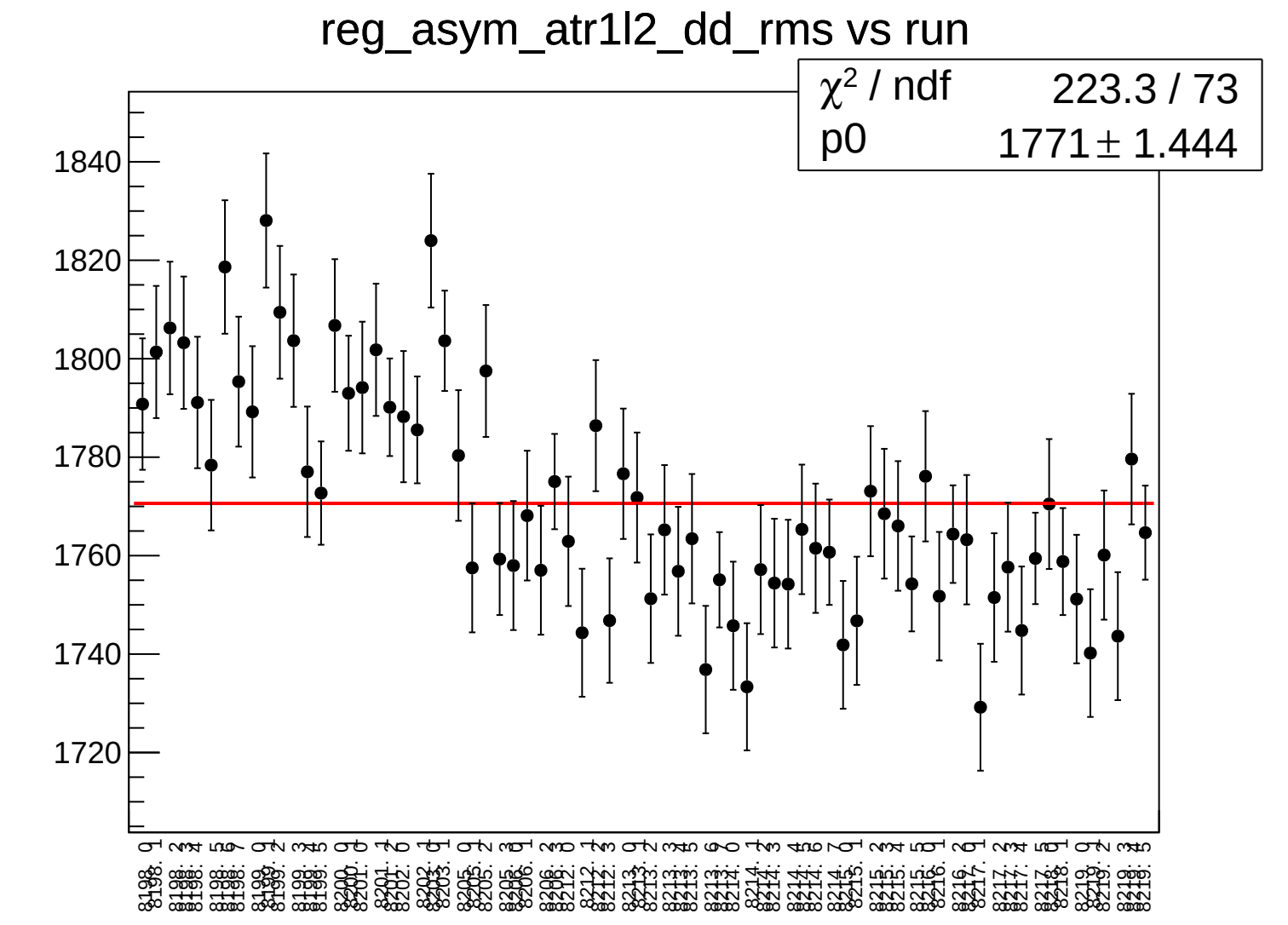

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 89.2 / 73
p0 −955.4 ± 6773
200
100
0
−100
−200
pull
Entries 74
Mean 281.6
Std Dev 246
2
1
0
−1
−2

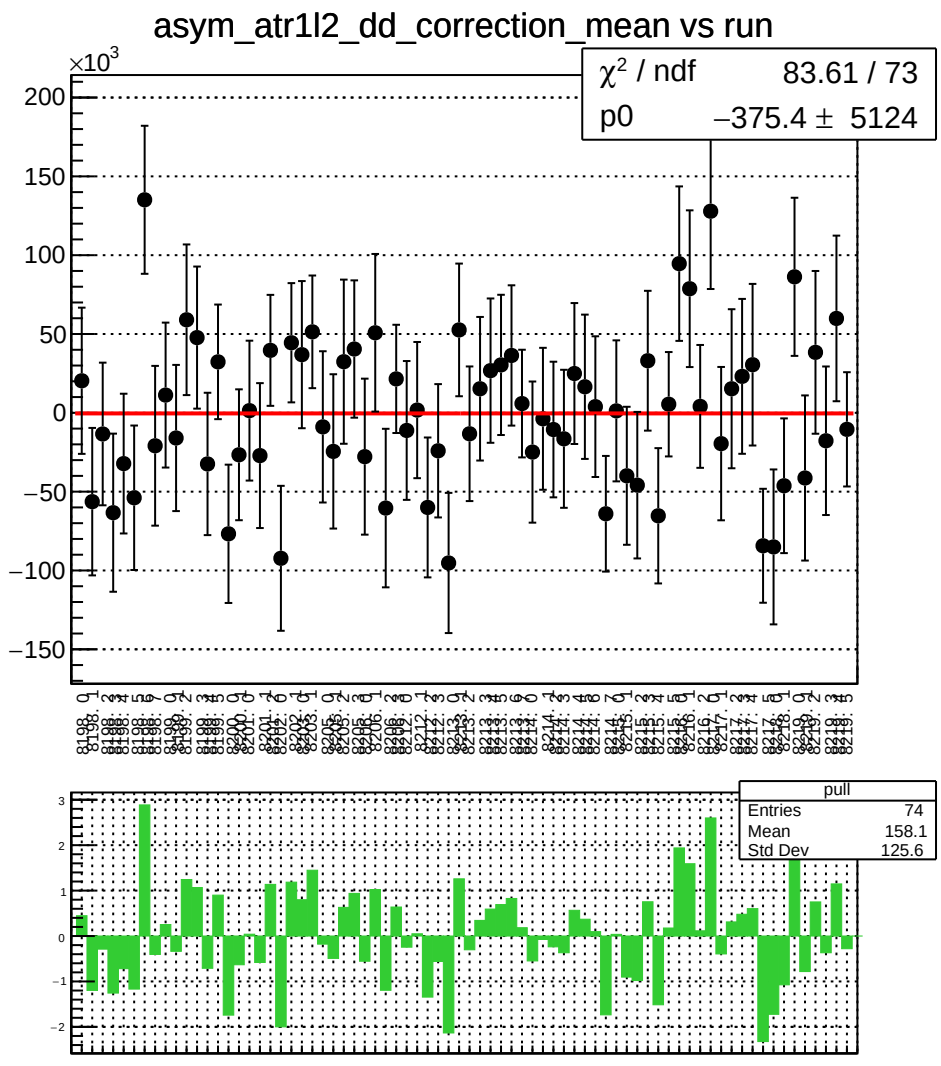

pull1D
Entries 74
Mean 0.006054
Std Dev 1.098
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

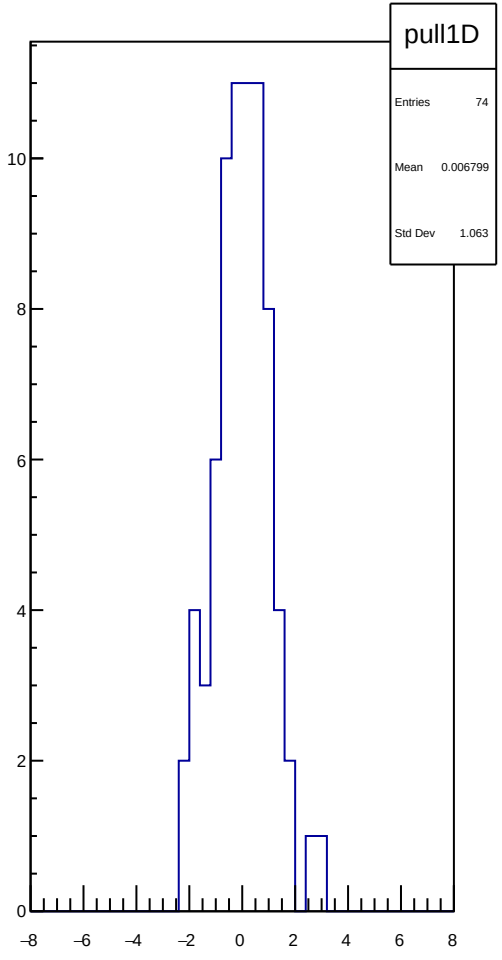

asym_atr1l2_avg_rms vs run
χ² / ndf 9022 / 73
p0 5854 ± 4.789
7000
6500
6000
5500
5000

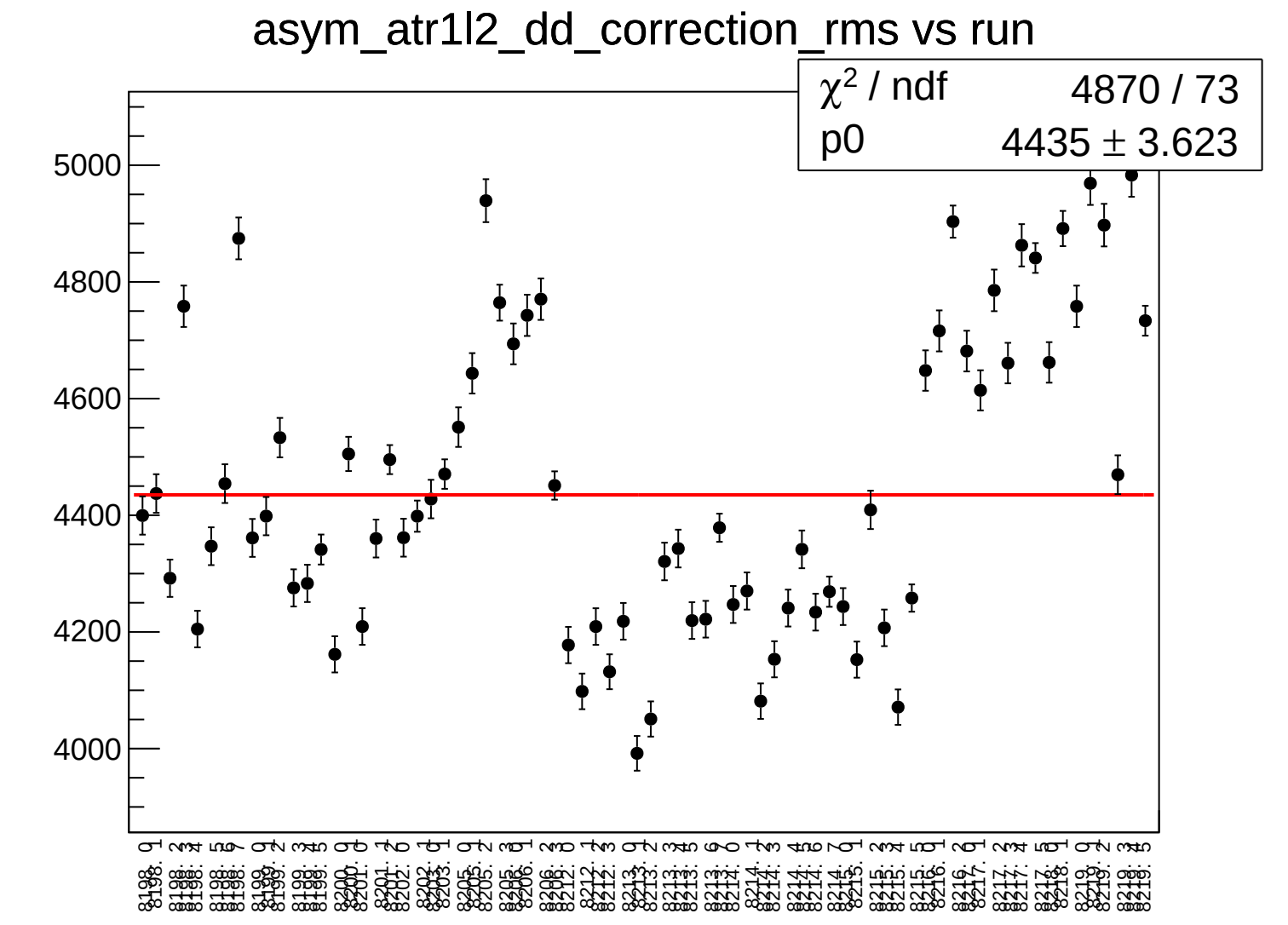

reg_asym_atr1l2_dd_mean vs run
χ² / ndf 52.82 / 73
p0 −1028 ± 2043
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 314.1
Std Dev 257.1
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

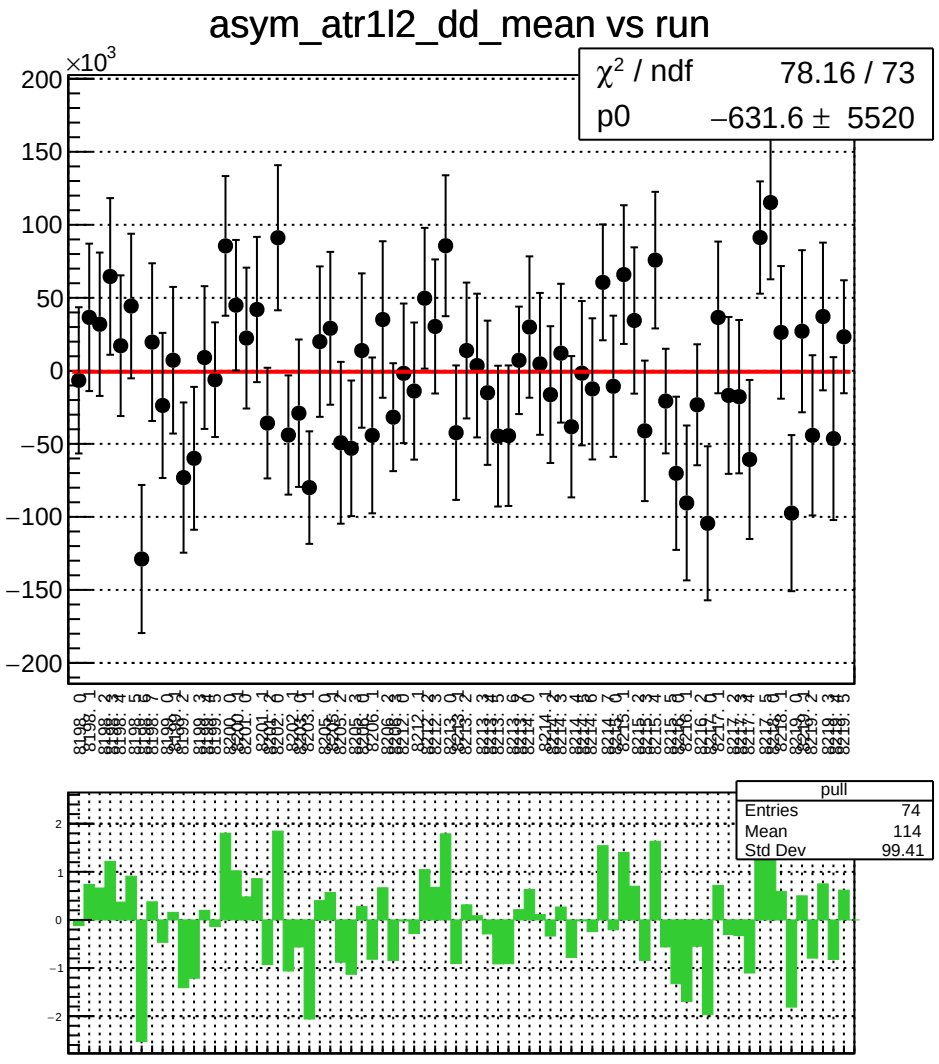

pull1D
Entries 74
Mean 0.003617
Std Dev 0.8448
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

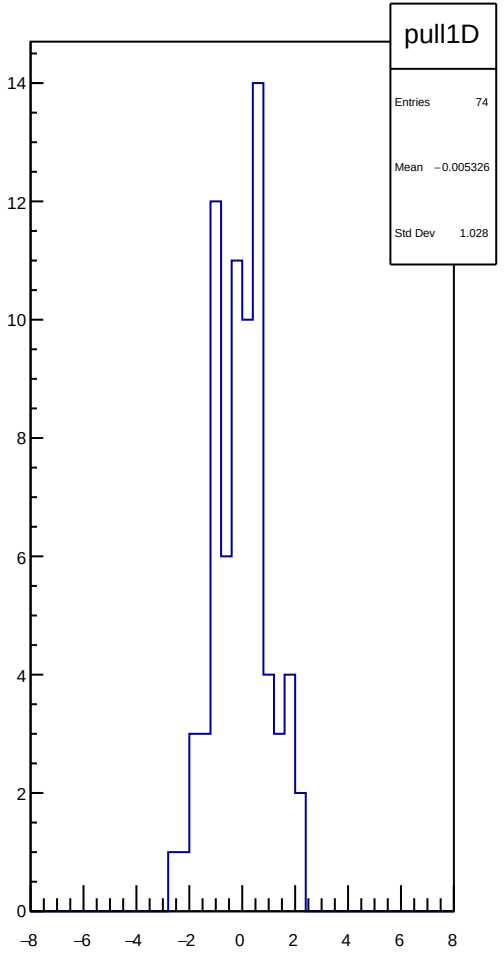

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 223.3 / 73
p0 1771 ± 1.444
1840
1820
1800
1780
1760
1740
1720

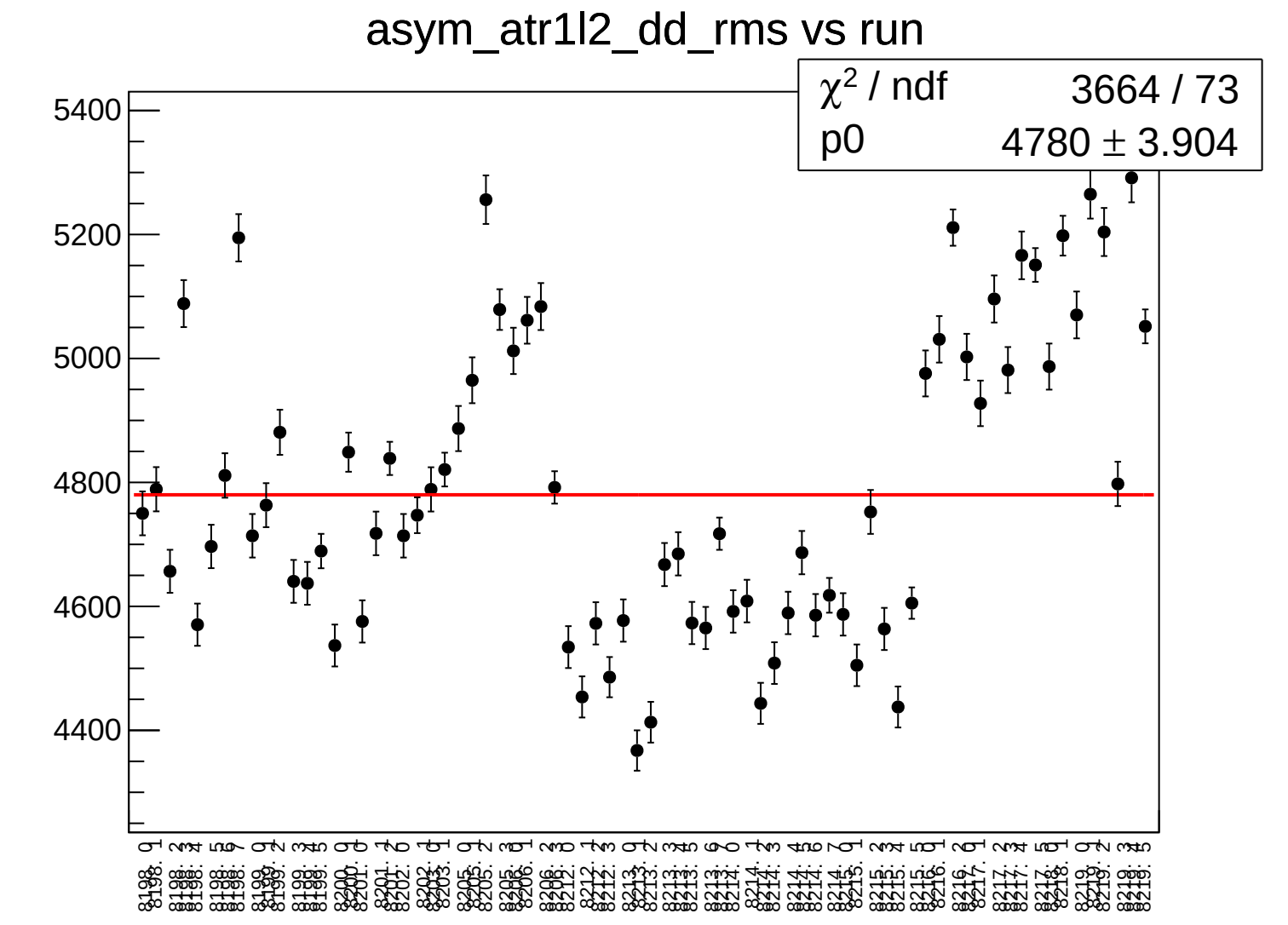

asym_atr1l2_dd_correction_mean vs run
×10^3
χ² / ndf 83.61 / 73
p0 −375.4 ± 5124
pull
Entries 74
Mean 158.1
Std Dev 125.6

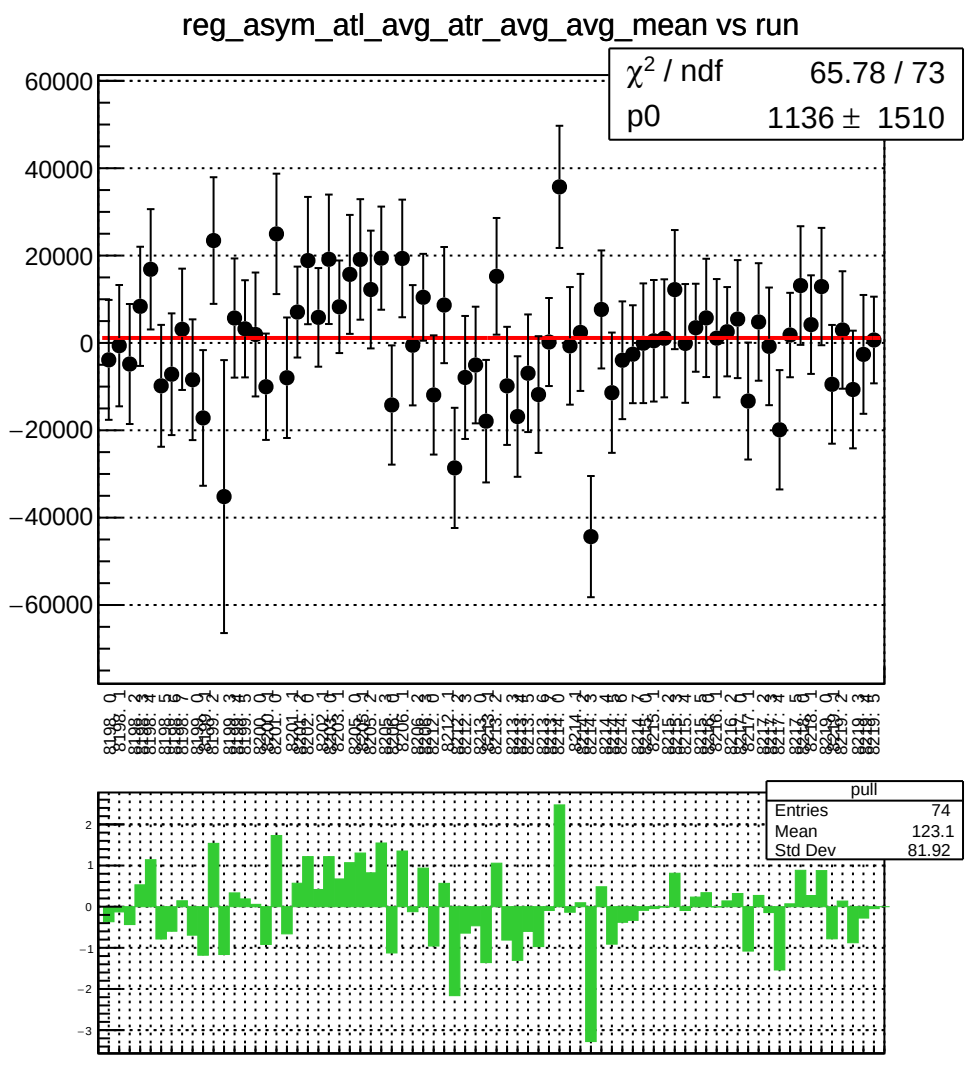

pull1D
Entries 74
Mean 0.006799
Std Dev 1.063

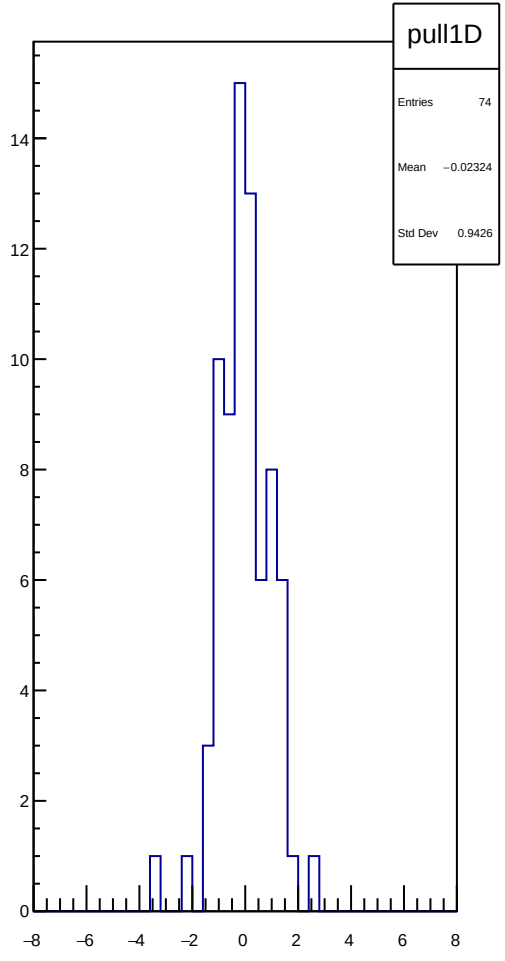

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 4870 / 73
p0 4435 ± 3.623
5000
4800
4600
4400
4200
4000

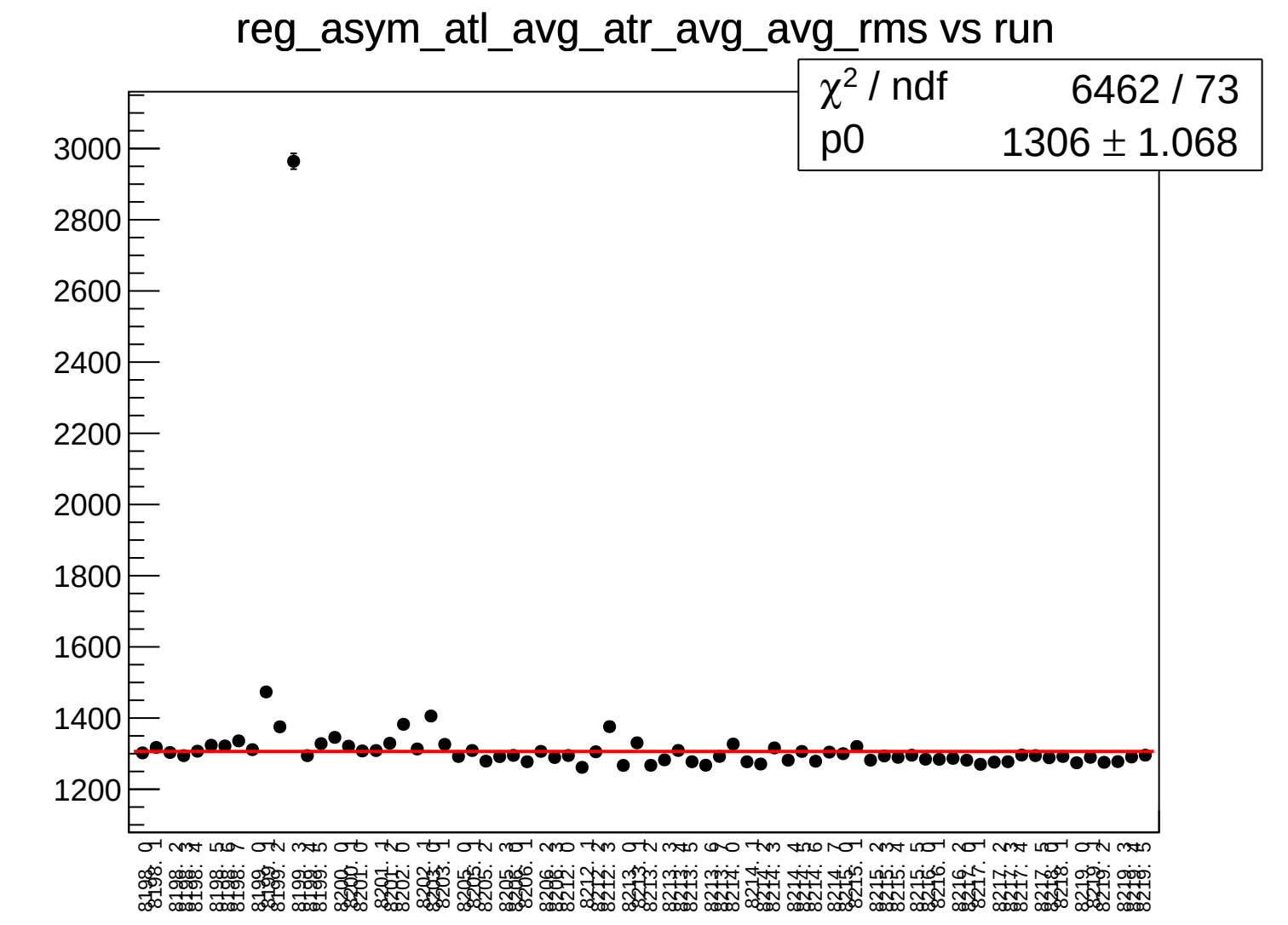

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 78.16 / 73
p0 −631.6 ± 5520
pull
Entries 74
Mean 114
Std Dev 99.41

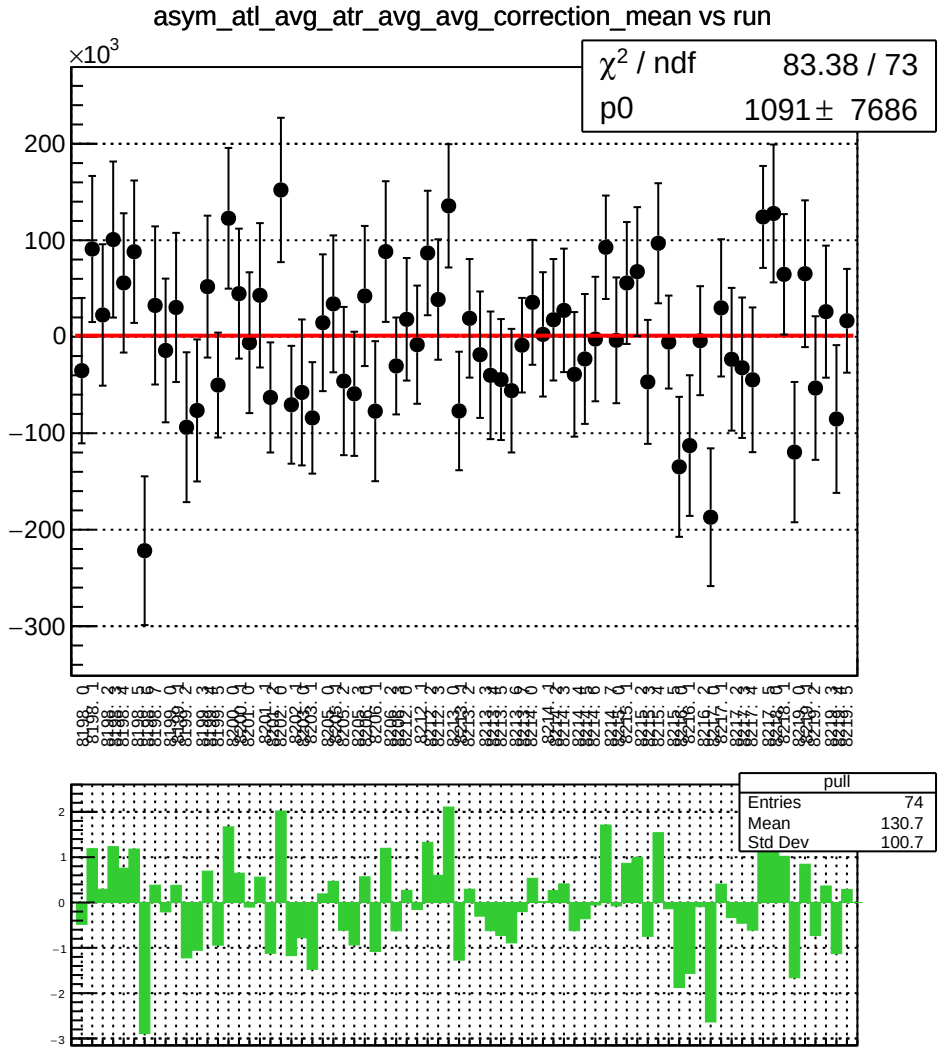

pull1D
Entries 74
Mean −0.005326
Std Dev 1.028

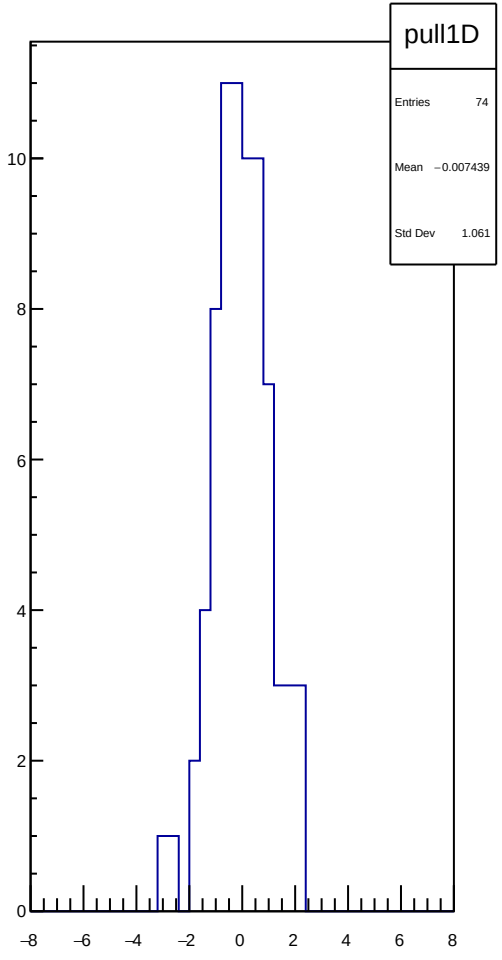

asym_atr1l2_dd_rms vs run
χ² / ndf 3664 / 73
p0 4780 ± 3.904
5400
5200
5000
4800
4600
4400

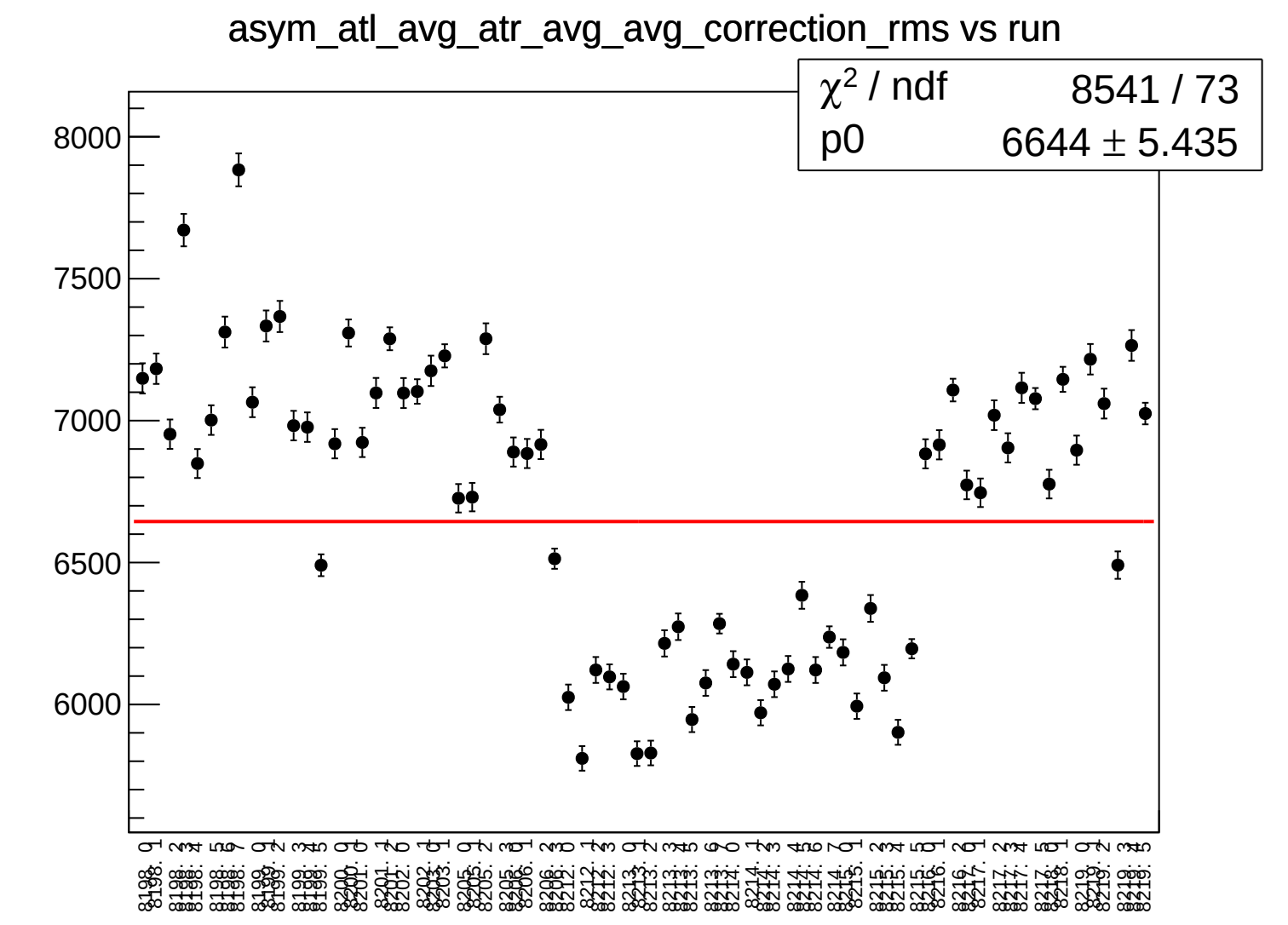

reg_asym_atl_avg_atr_avg_avg_mean vs run
χ² / ndf 65.78 / 73
p0 1136 ± 1510
pull
Entries 74
Mean 123.1
Std Dev 81.92

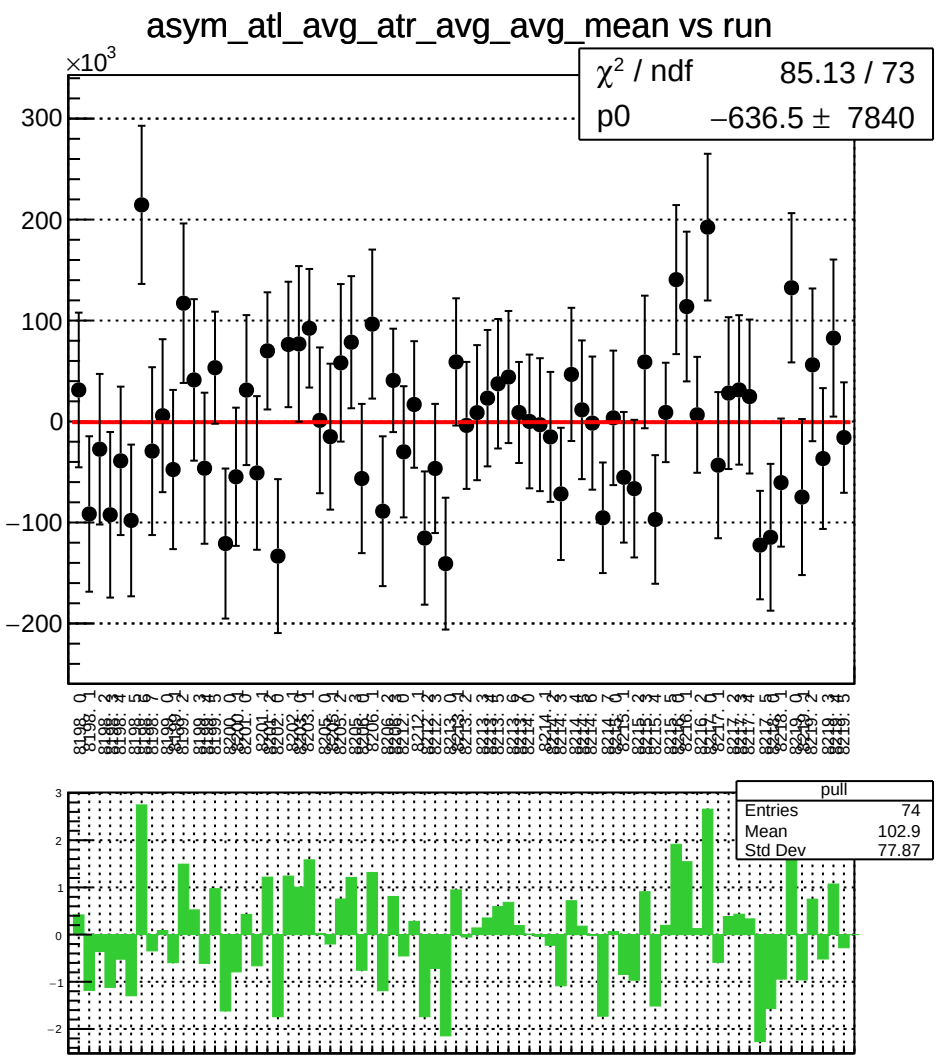

pull1D
Entries 74
Mean −0.02324
Std Dev 0.9426

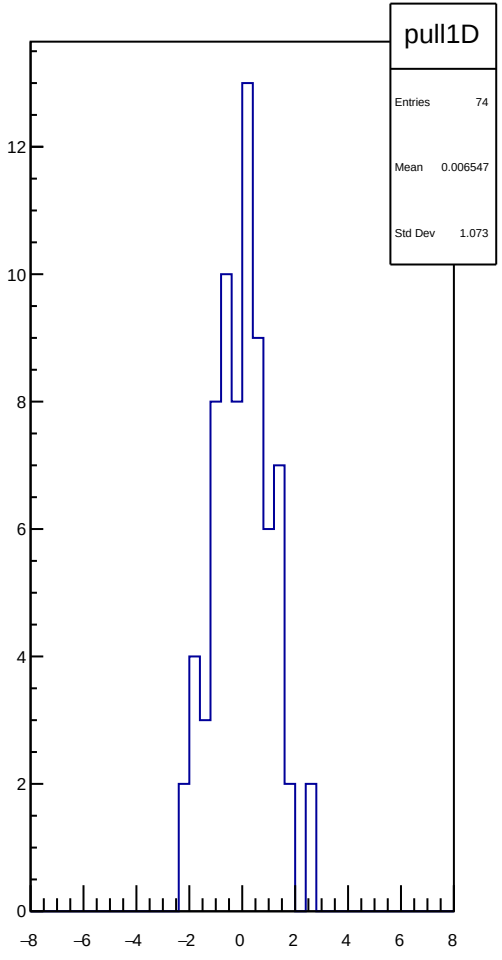

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 6462 / 73
p0 1306 ± 1.068
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

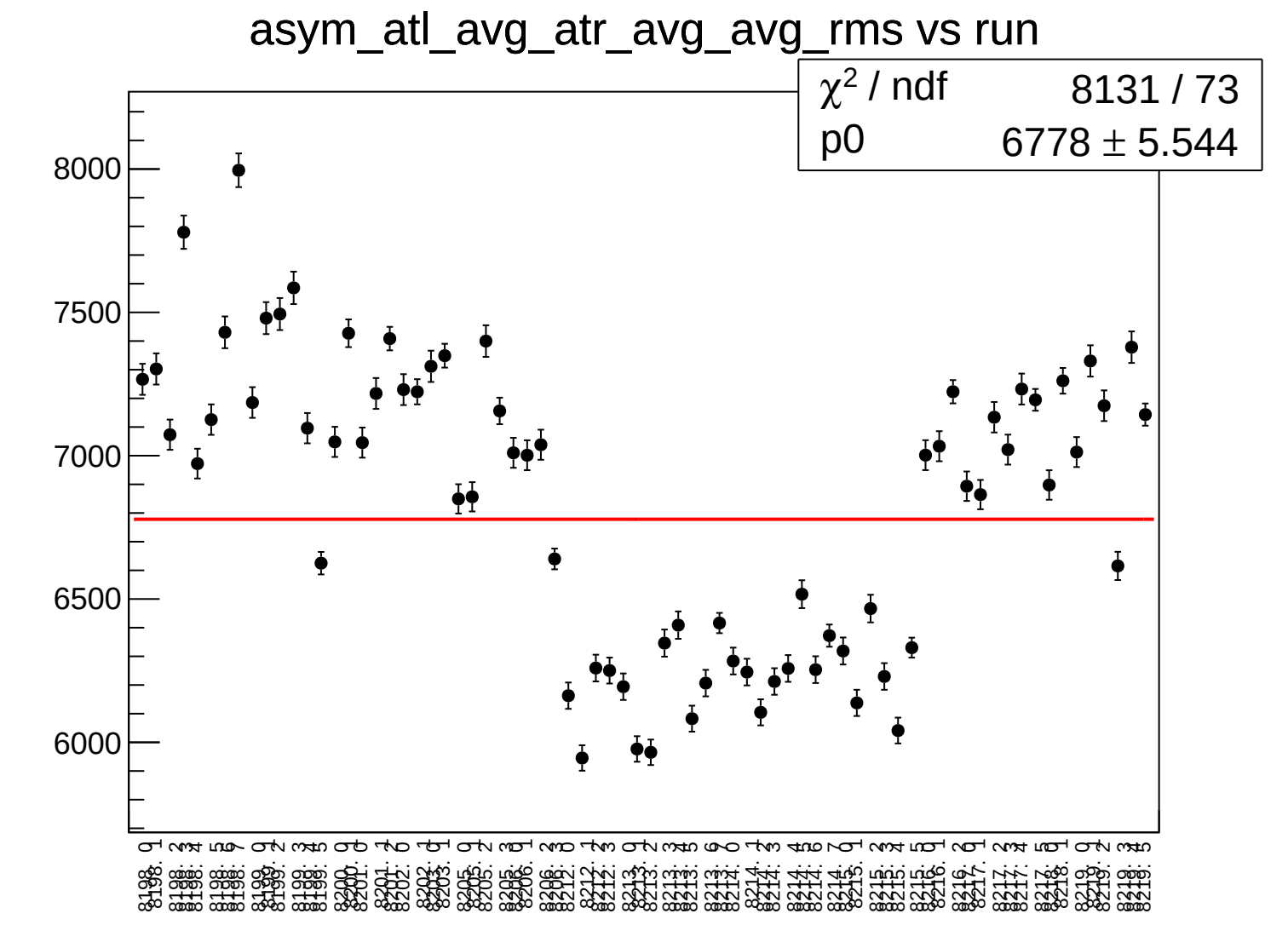

asym_atl_avg_atr_avg_avg_correction_mean vs run
×10^3
χ² / ndf 83.38 / 73
p0 1091 ± 7686
200
100
0
−100
−200
−300
pull
Entries 74
Mean 130.7
Std Dev 100.7
2
1
0
−1
−2
−3

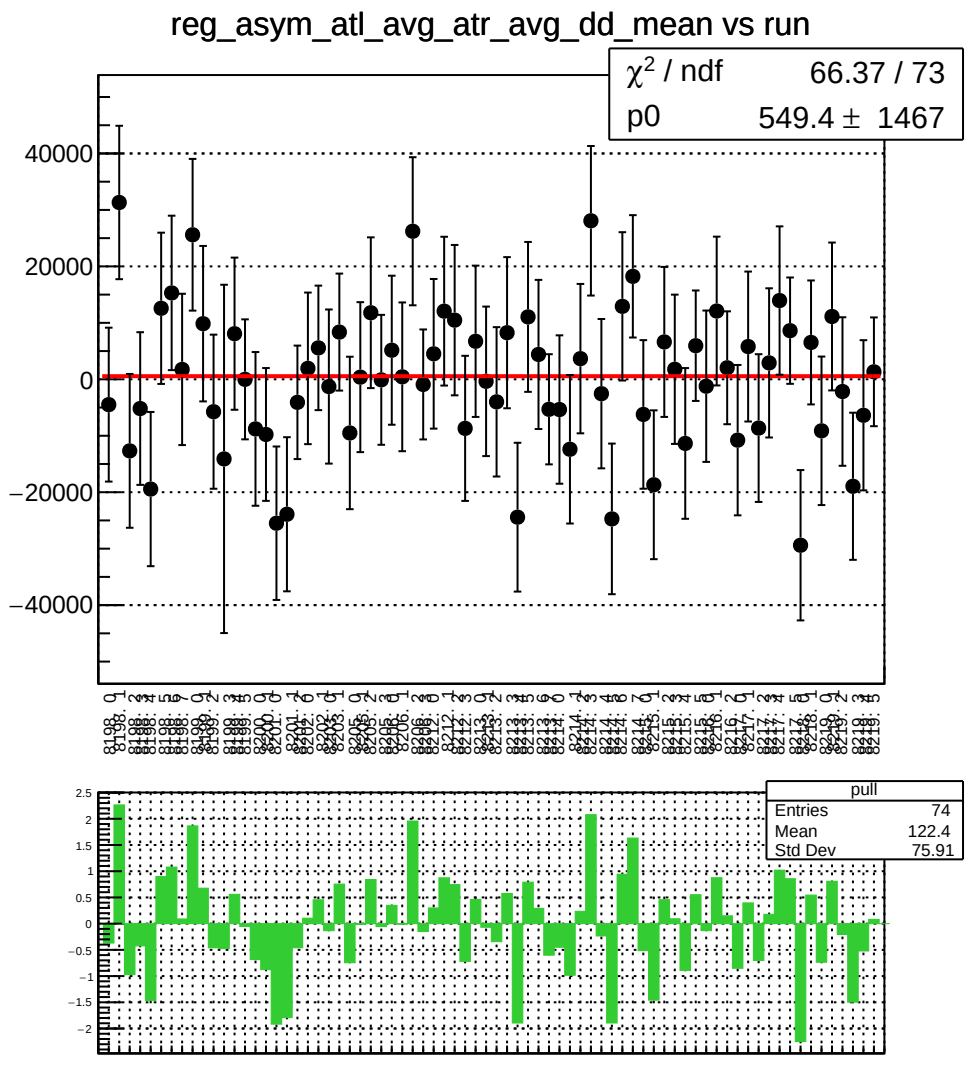

pull1D
Entries 74
Mean −0.007439
Std Dev 1.061
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

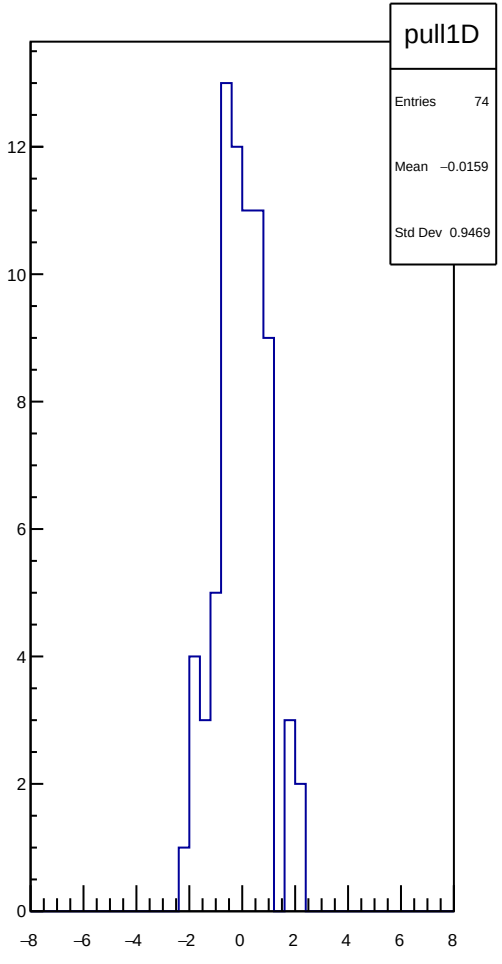

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 8541 / 73
p0 6644 ± 5.435
8000
7500
7000
6500
6000

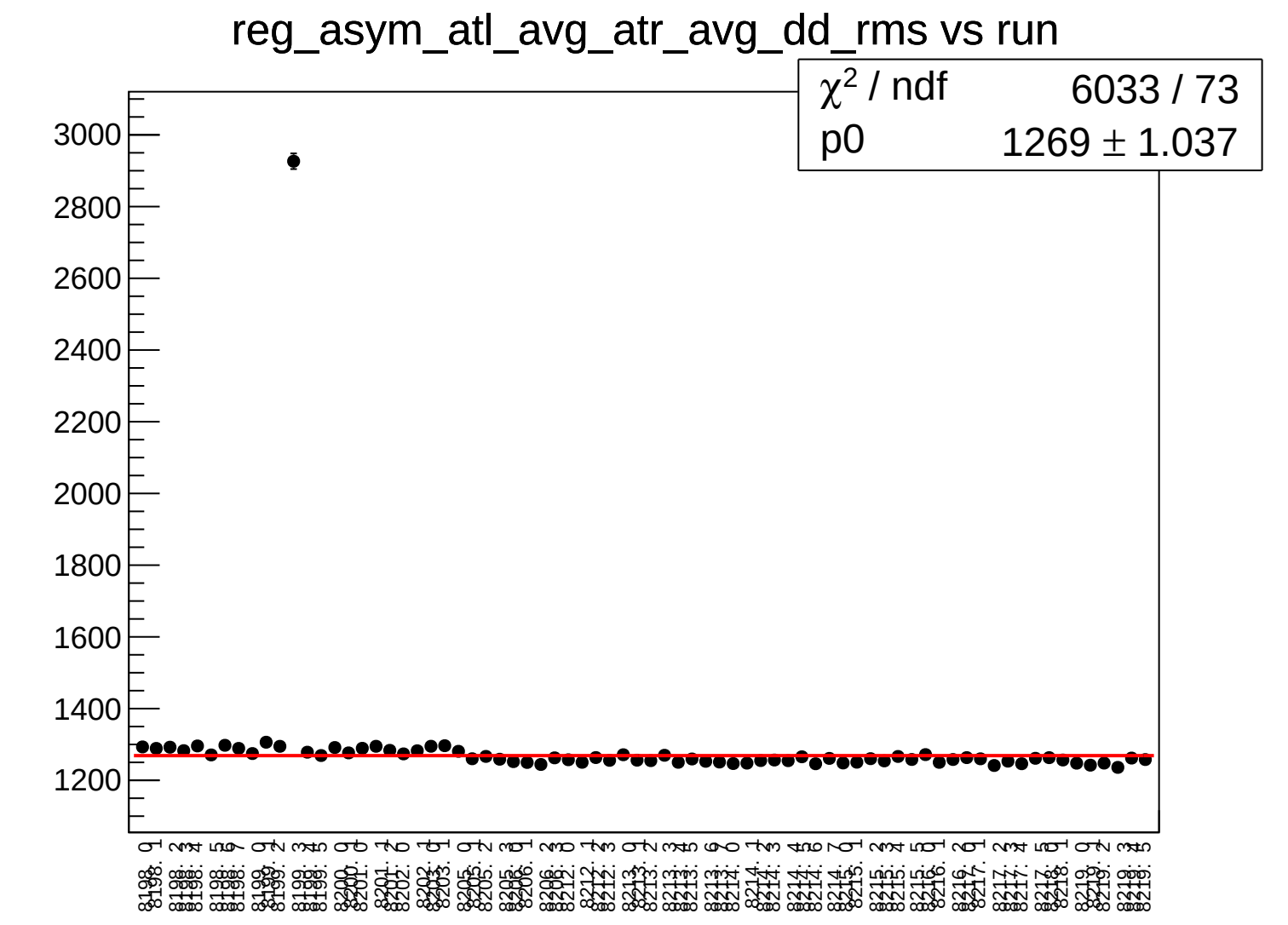

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 85.13 / 73
p0 −636.5 ± 7840
300
200
100
0
−100
−200
pull
Entries 74
Mean 102.9
Std Dev 77.87
3
2
1
0
−1
−2

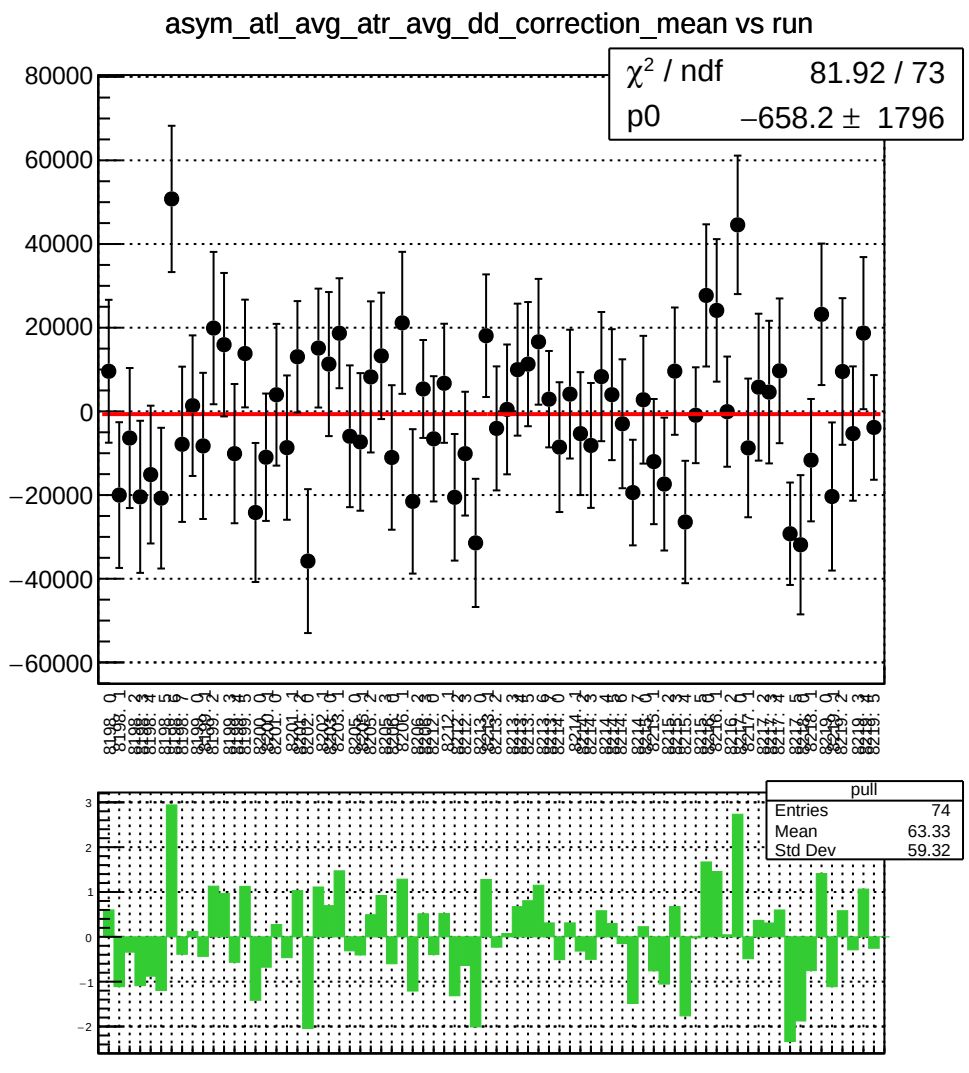

pull1D
Entries 74
Mean 0.006547
Std Dev 1.073
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

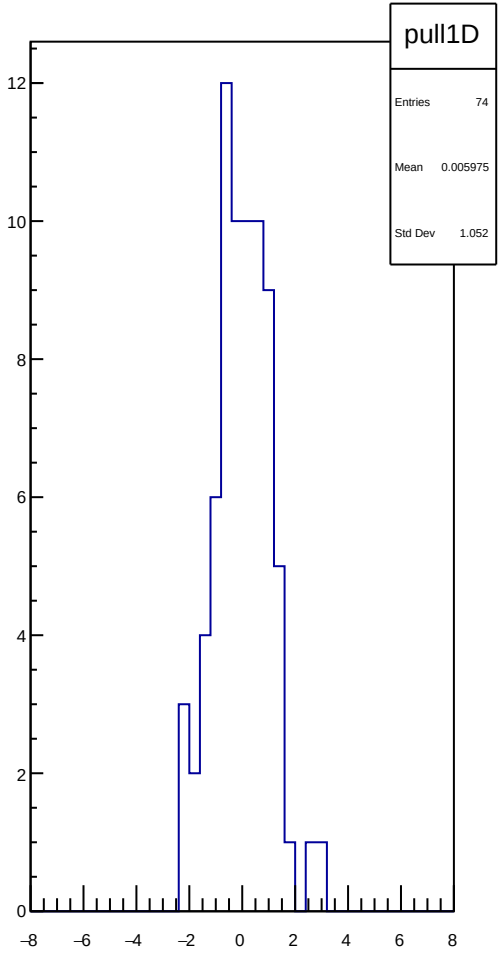

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 8131 / 73
p0 6778 ± 5.544
8000
7500
7000
6500
6000

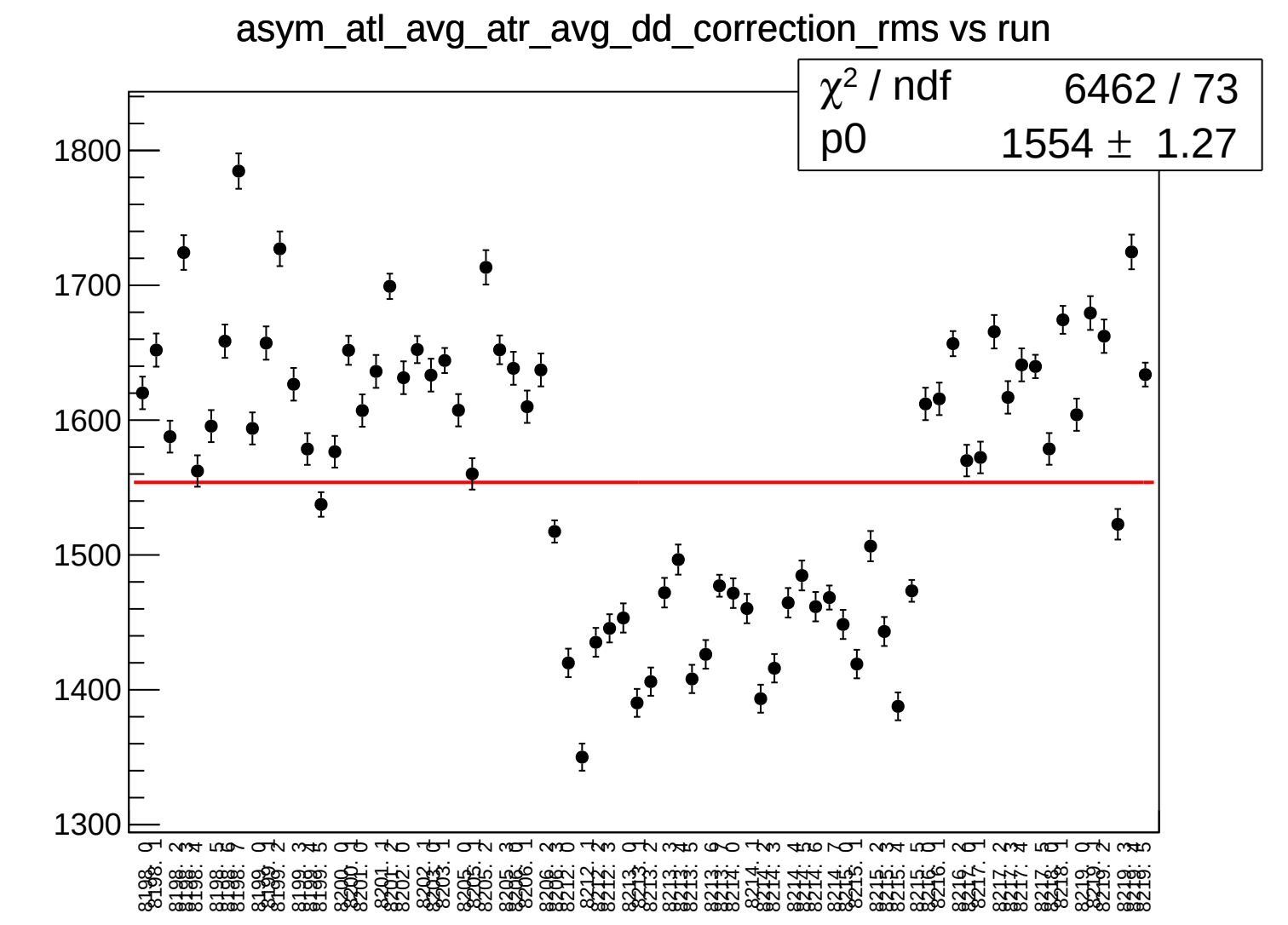

reg_asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 66.37 / 73
p0 549.4 ± 1467
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 122.4
Std Dev 75.91
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

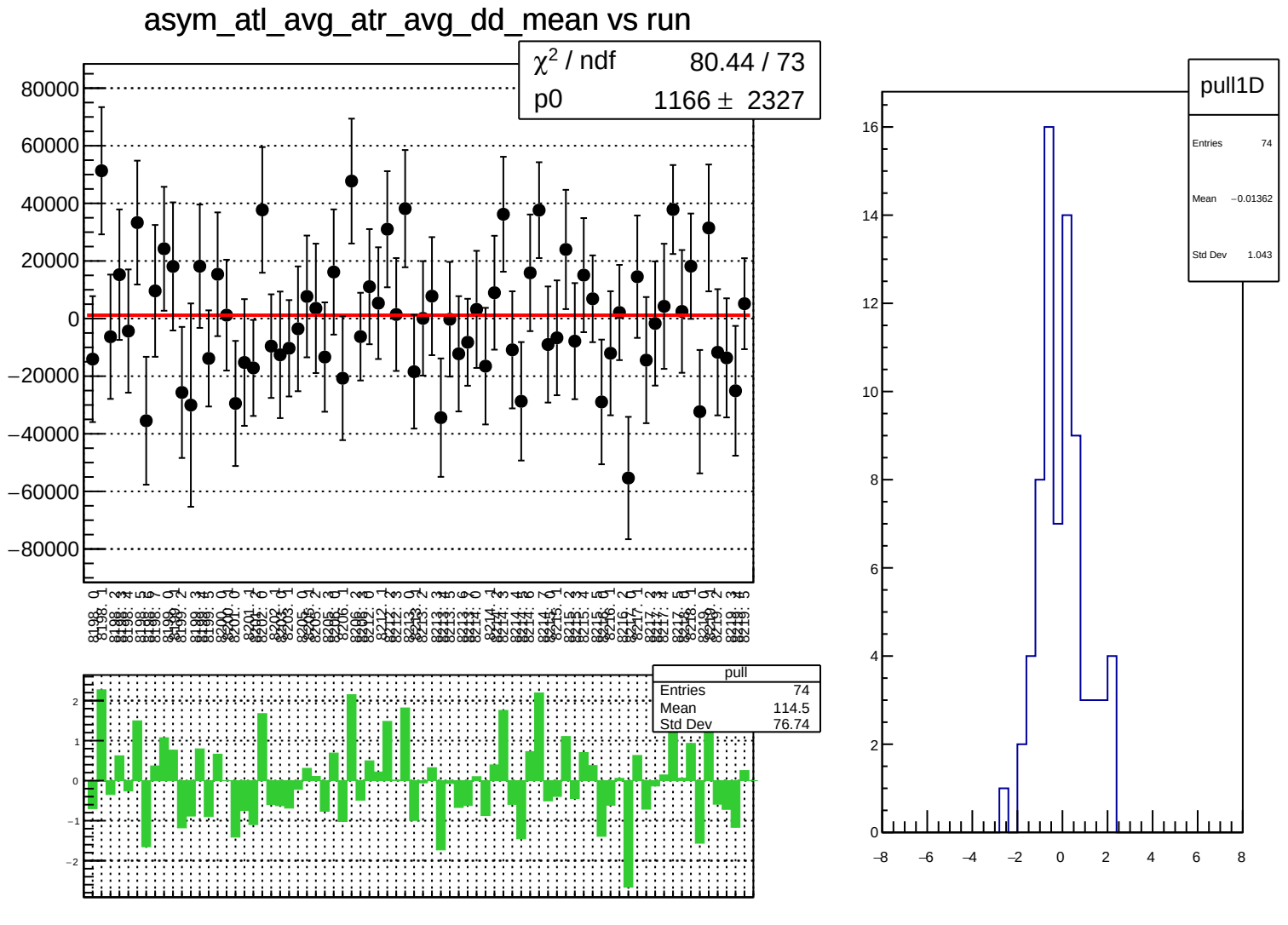

pull1D
Entries 74
Mean −0.0159
Std Dev 0.9469
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

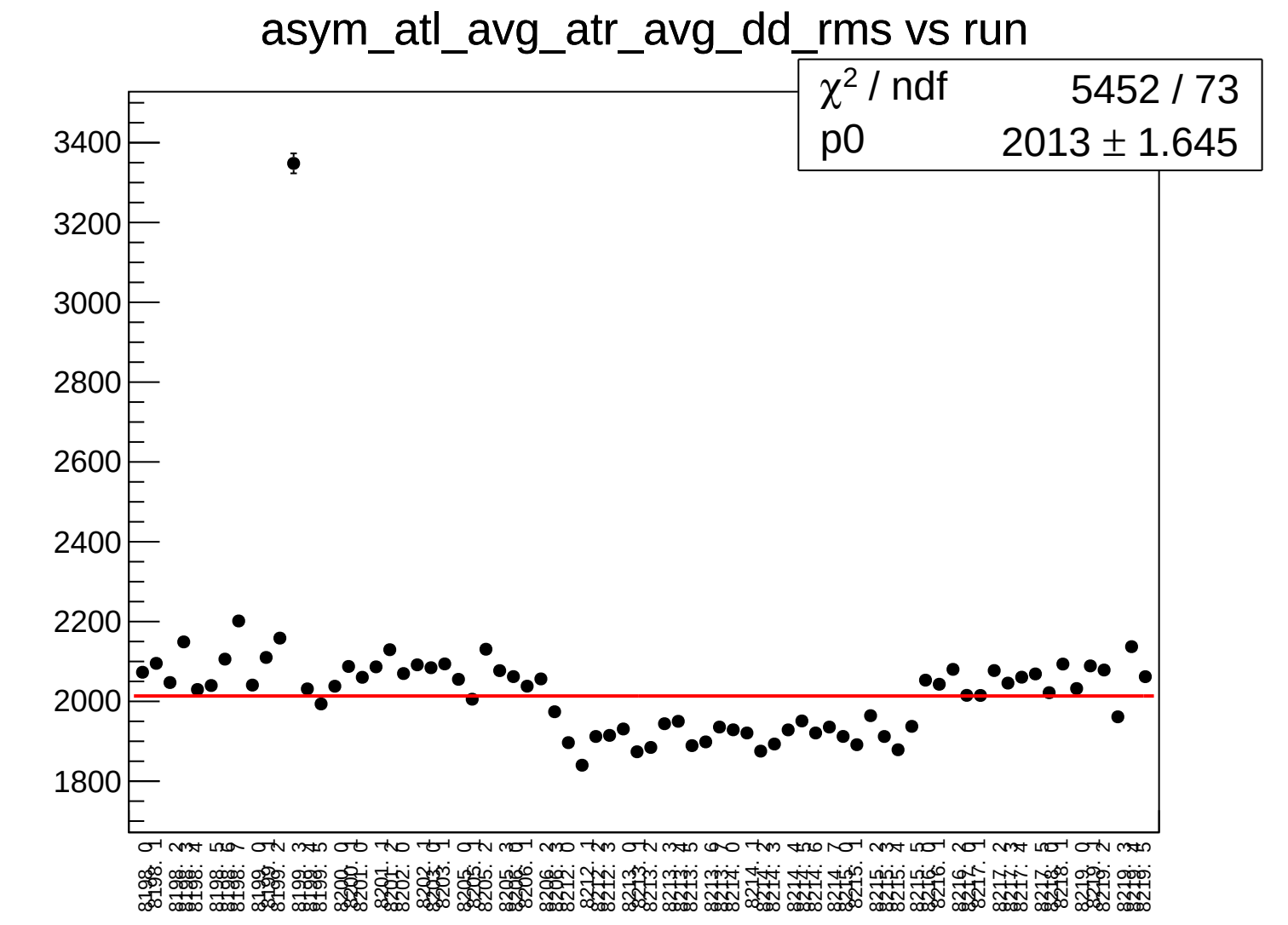

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 6033 / 73
p0 1269 ± 1.037
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

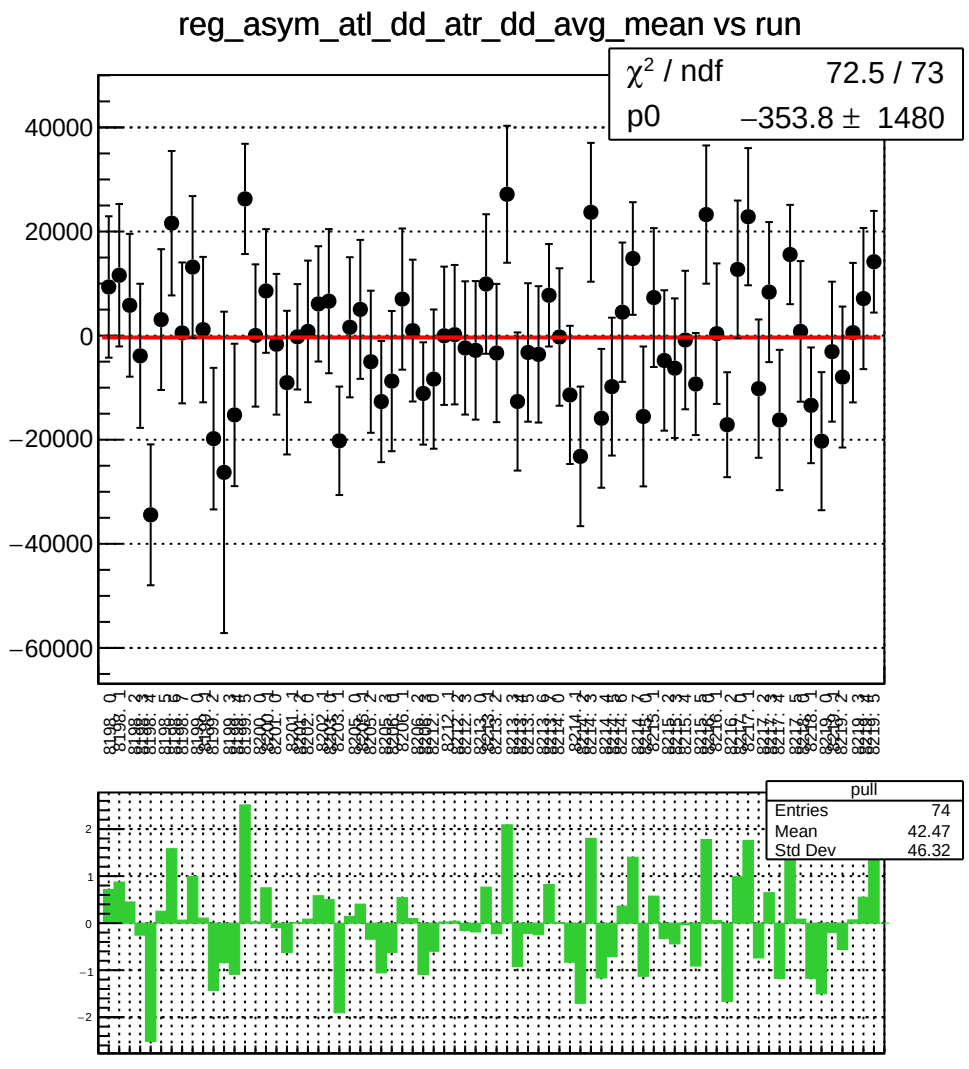

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 81.92 / 73
p0 −658.2 ± 1796
pull
Entries 74
Mean 63.33
Std Dev 59.32

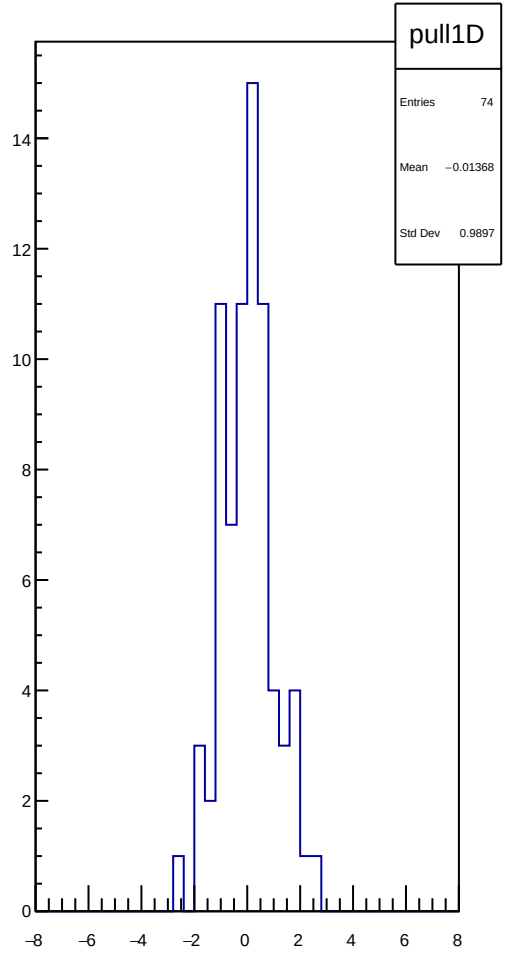

pull1D
Entries 74
Mean 0.005975
Std Dev 1.052

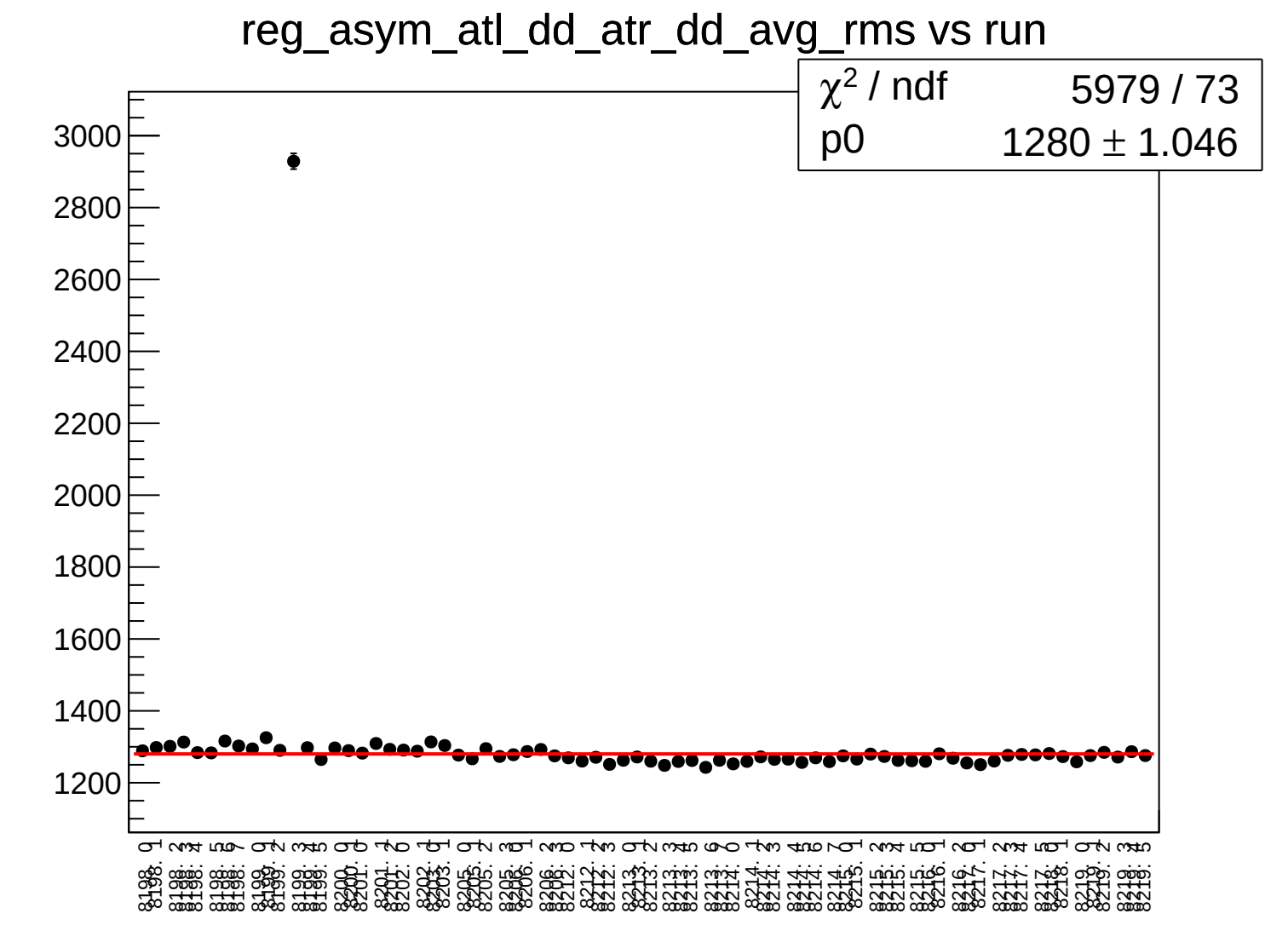

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 6462 / 73
p0 1554 ± 1.27
1800
1700
1600
1500
1400
1300

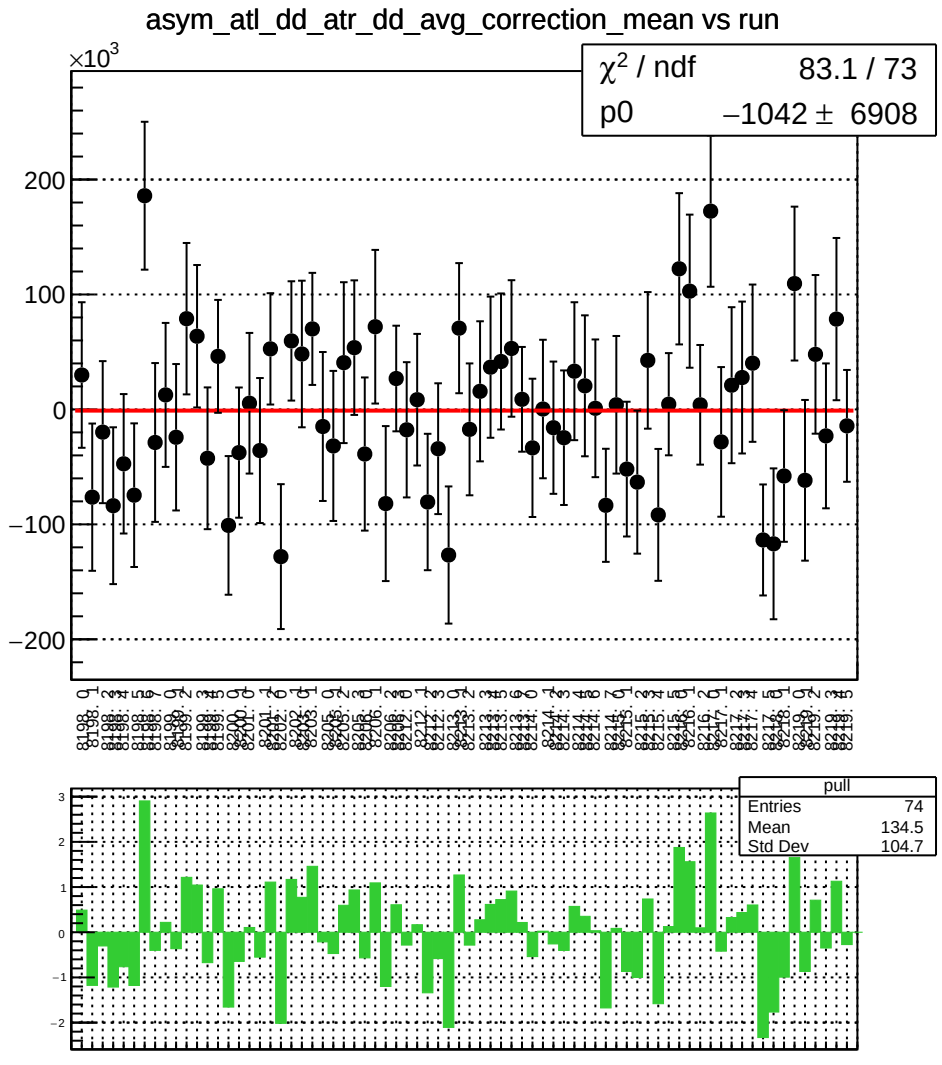

asym_atl_avg_atr_avg_dd_mean vs run
χ² / ndf 80.44 / 73
p0 1166 ± 2327
pull
Entries 74
Mean 114.5
Std Dev 76.74
pull1D
Entries 74
Mean −0.01362
Std Dev 1.043

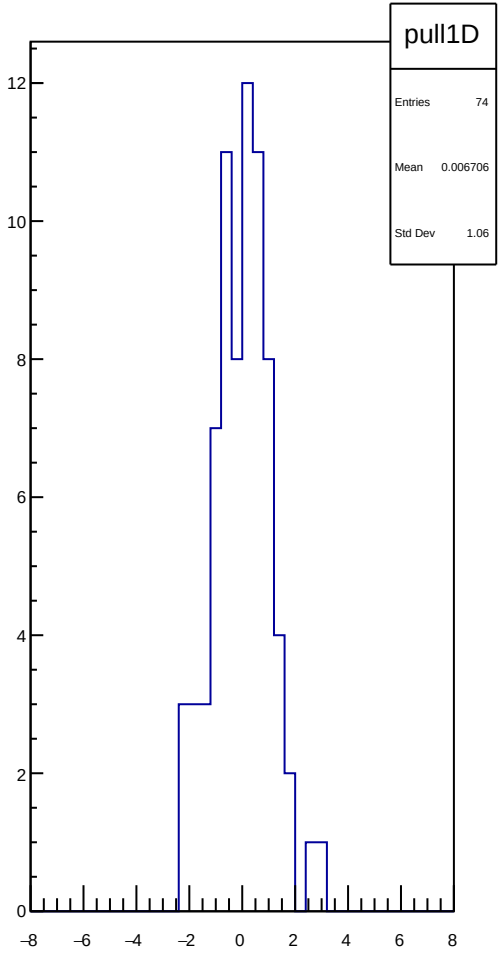

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 5452 / 73
p0 2013 ± 1.645
3400
3200
3000
2800
2600
2400
2200
2000
1800

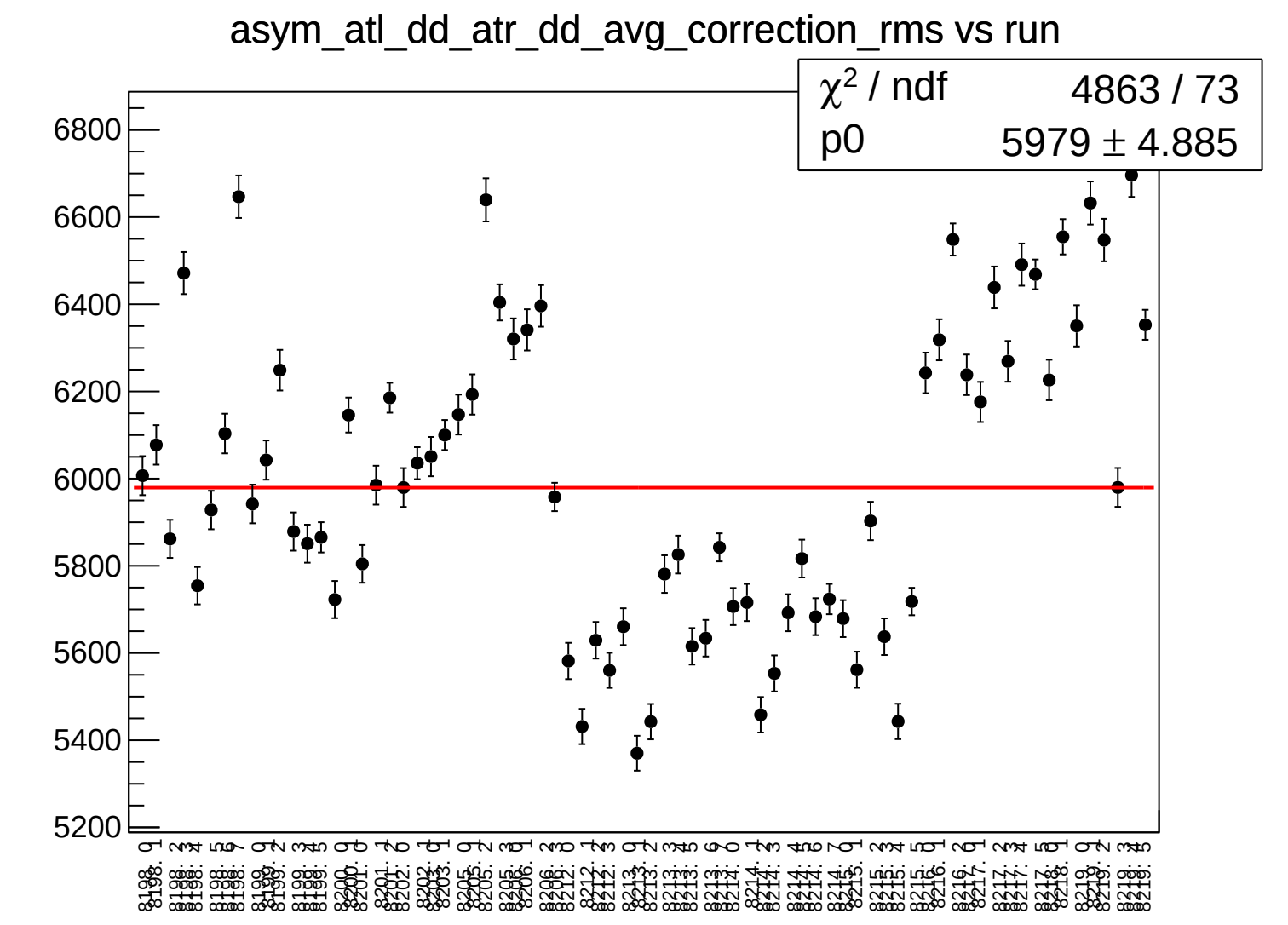

reg_asym_atl_dd_atr_dd_avg_mean vs run
χ² / ndf 72.5 / 73
p0 −353.8 ± 1480
40000
20000
0
−20000
−40000
−60000
pull
Entries 74
Mean 42.47
Std Dev 46.32
2
1
0
−1
−2

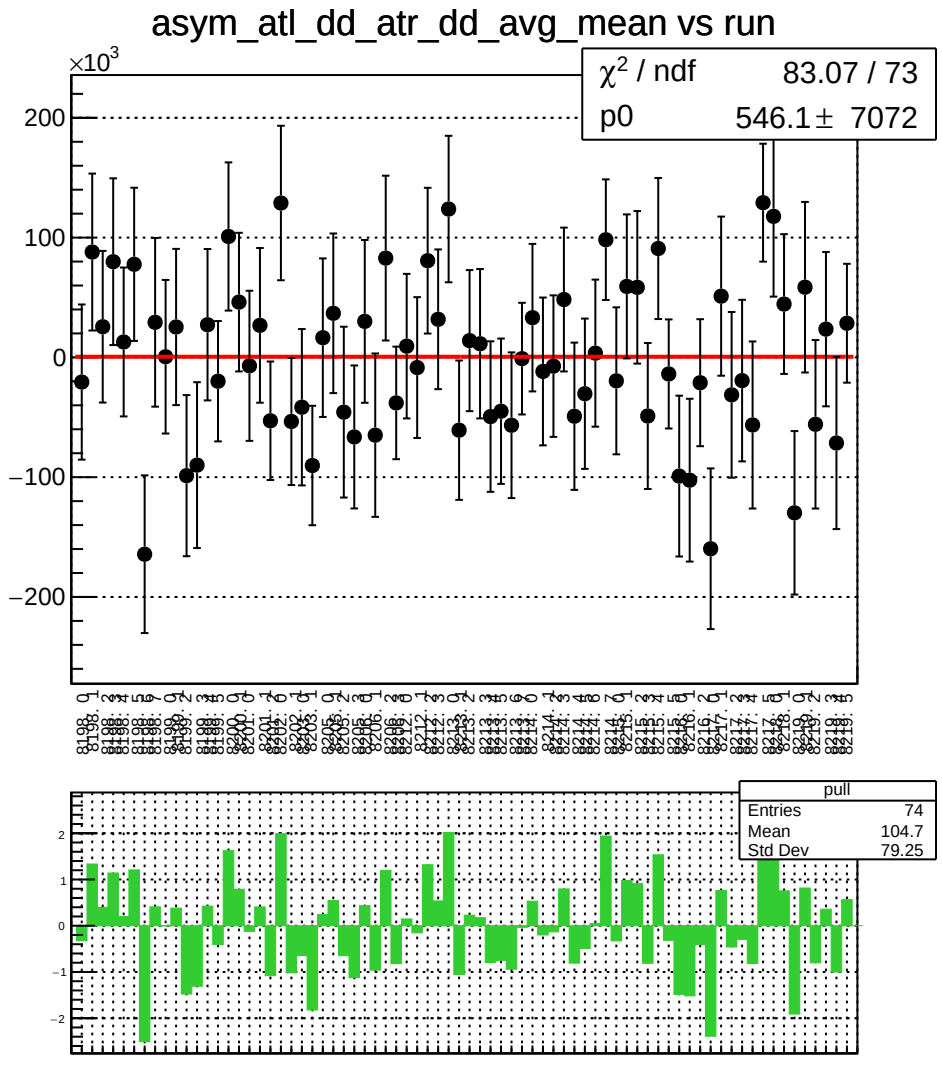

pull1D
Entries 74
Mean −0.01368
Std Dev 0.9897
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

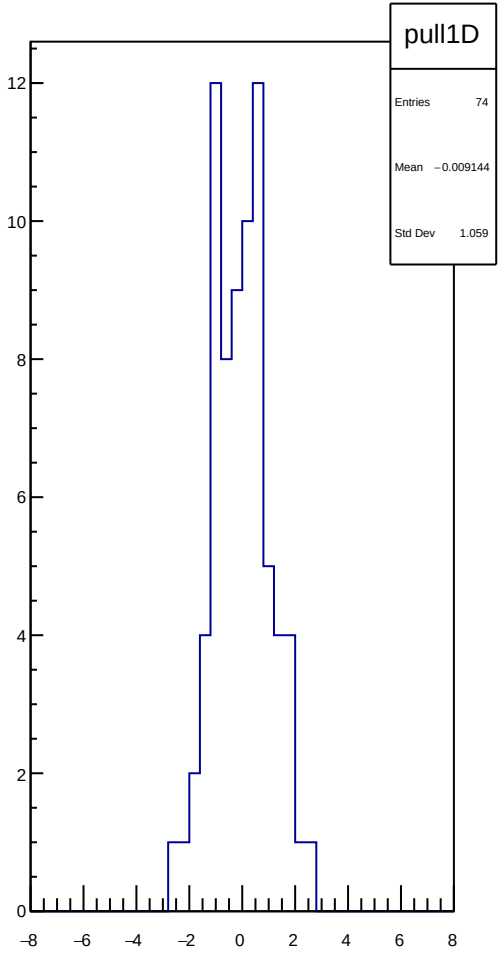

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ^2 / ndf 5979 / 73
p0 1280 ± 1.046
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

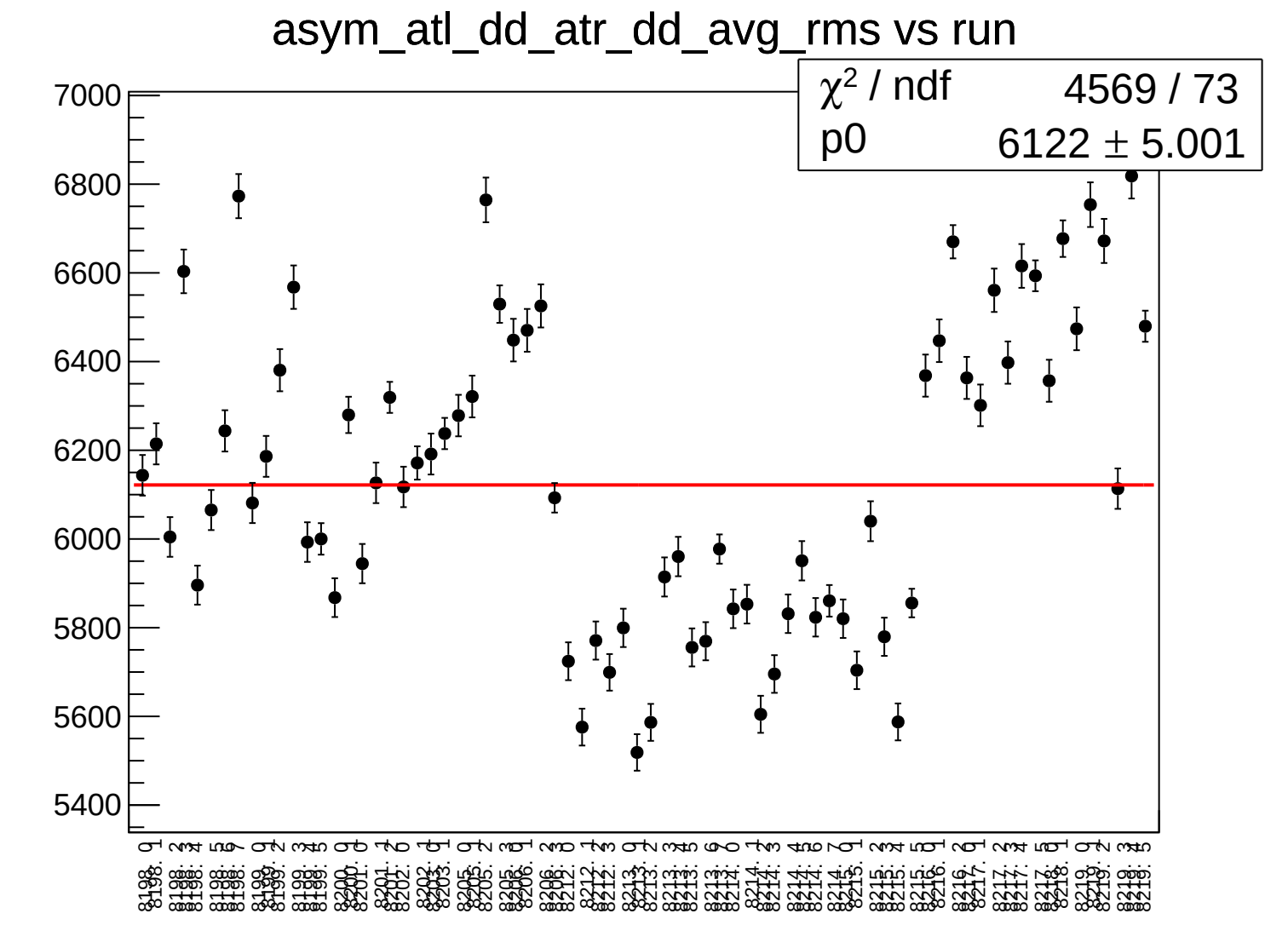

asym_atl_dd_atr_dd_avg_correction_mean vs run
×10^3
χ² / ndf 83.1 / 73
p0 −1042 ± 6908
200
100
0
−100
−200
pull
Entries 74
Mean 134.5
Std Dev 104.7
3
2
1
0
−1
−2

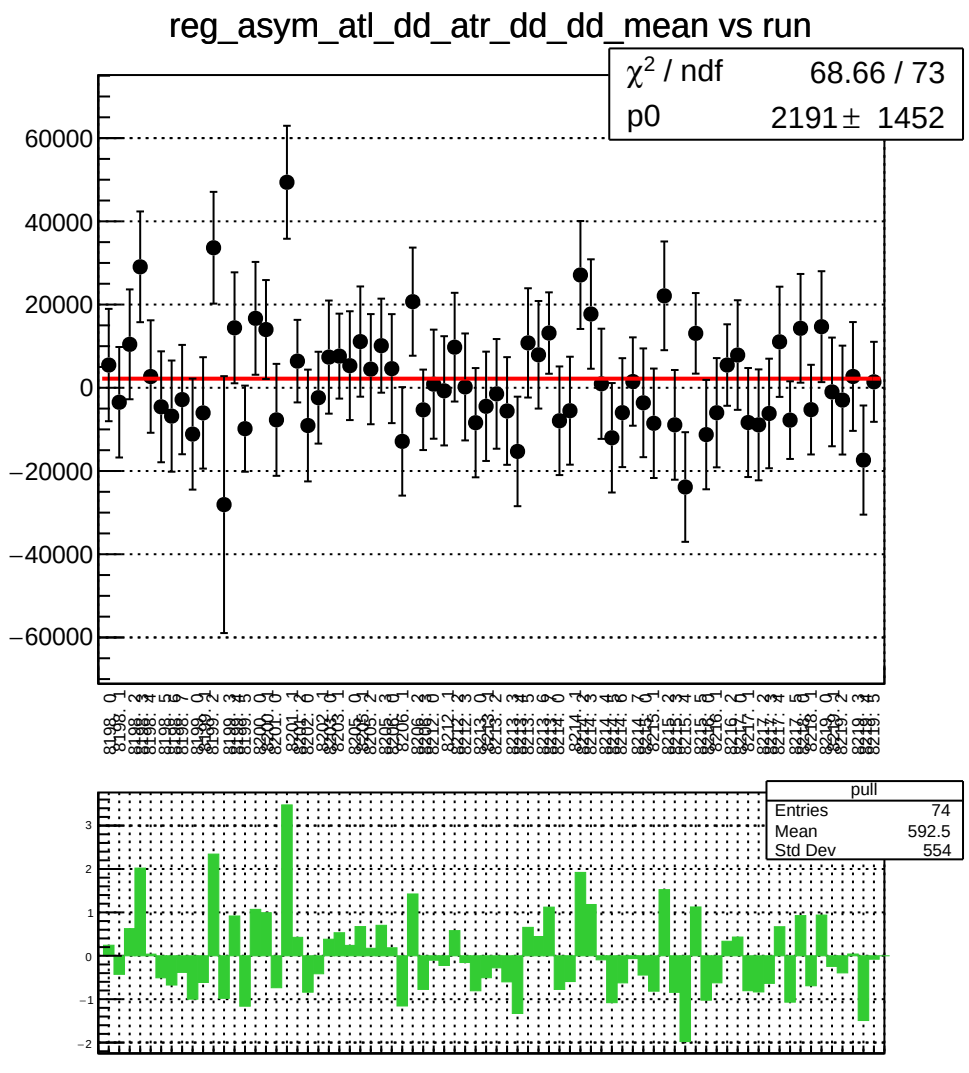

pull1D
Entries 74
Mean 0.006706
Std Dev 1.06
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

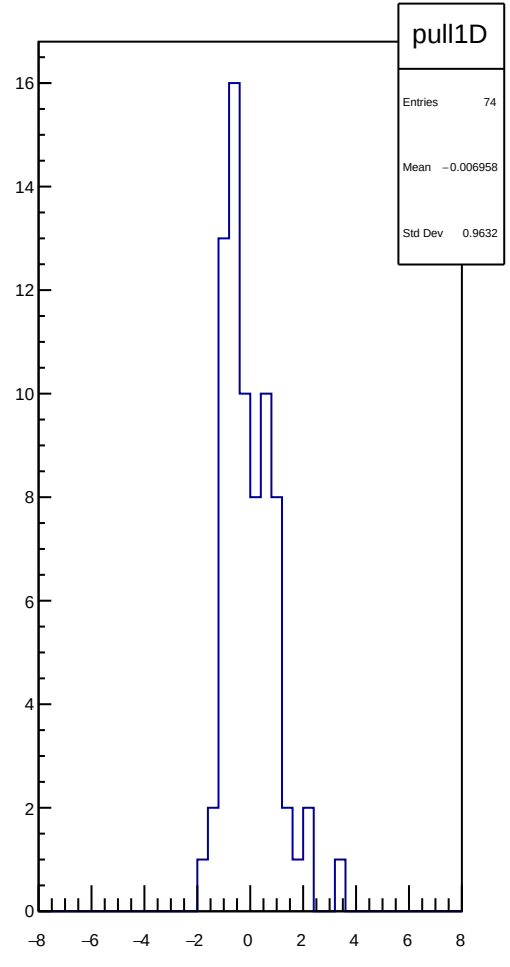

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 4863 / 73
p0 5979 ± 4.885
6800
6600
6400
6200
6000
5800
5600
5400
5200

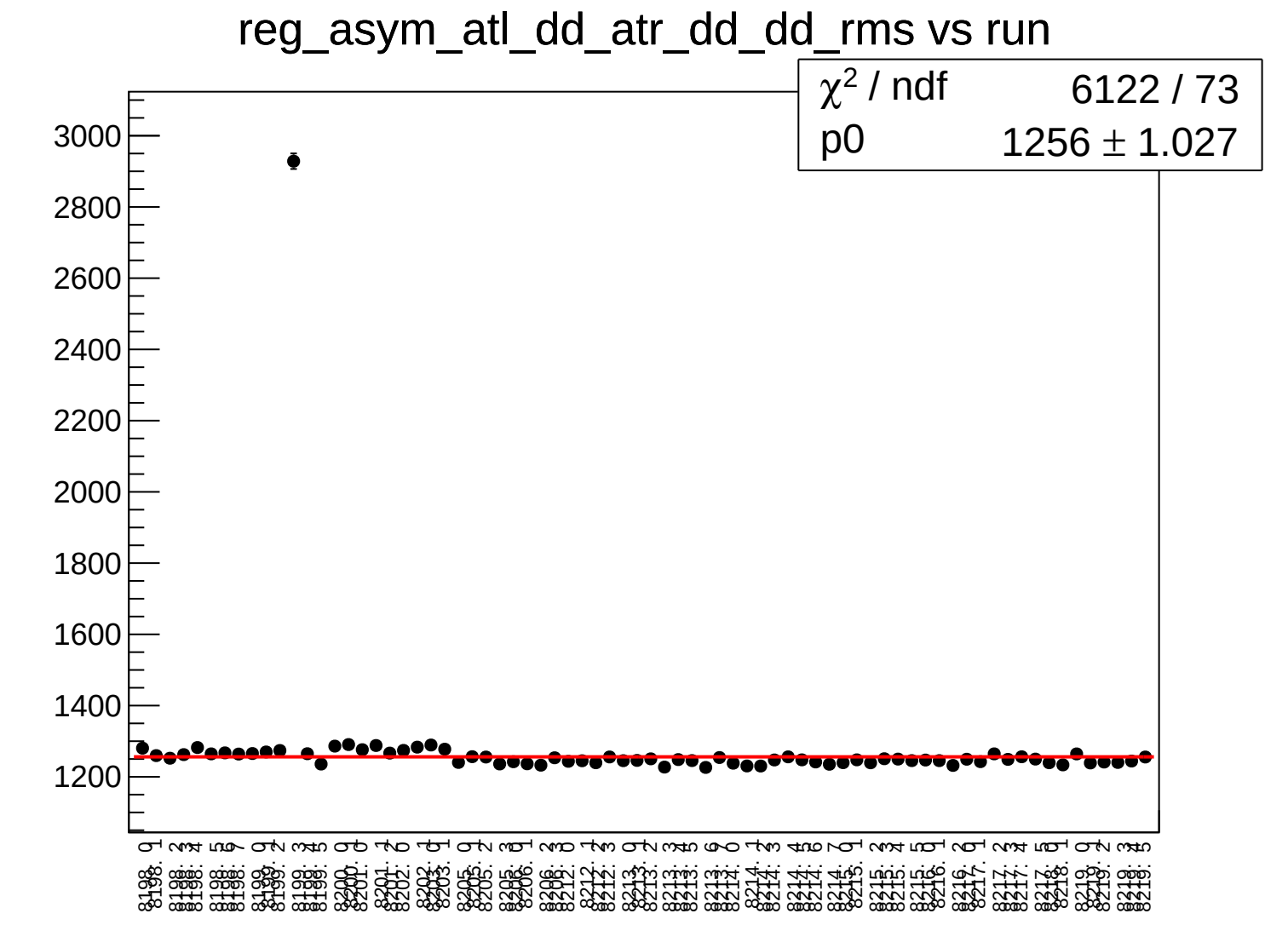

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 83.07 / 73
p0 546.1 ± 7072
200
100
0
−100
−200
pull
Entries 74
Mean 104.7
Std Dev 79.25
2
1
0
−1
−2

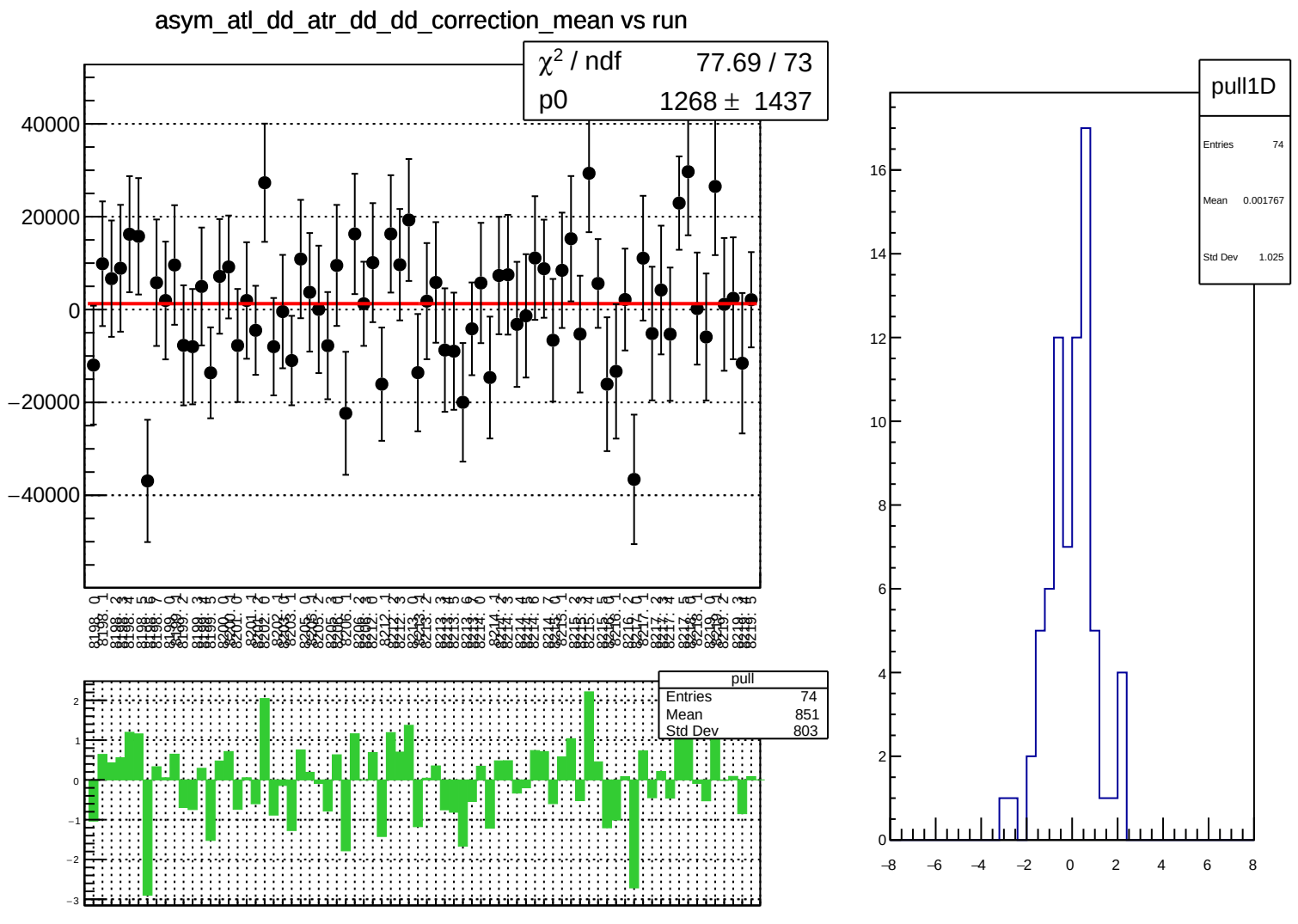

pull1D
Entries 74
Mean −0.009144
Std Dev 1.059
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

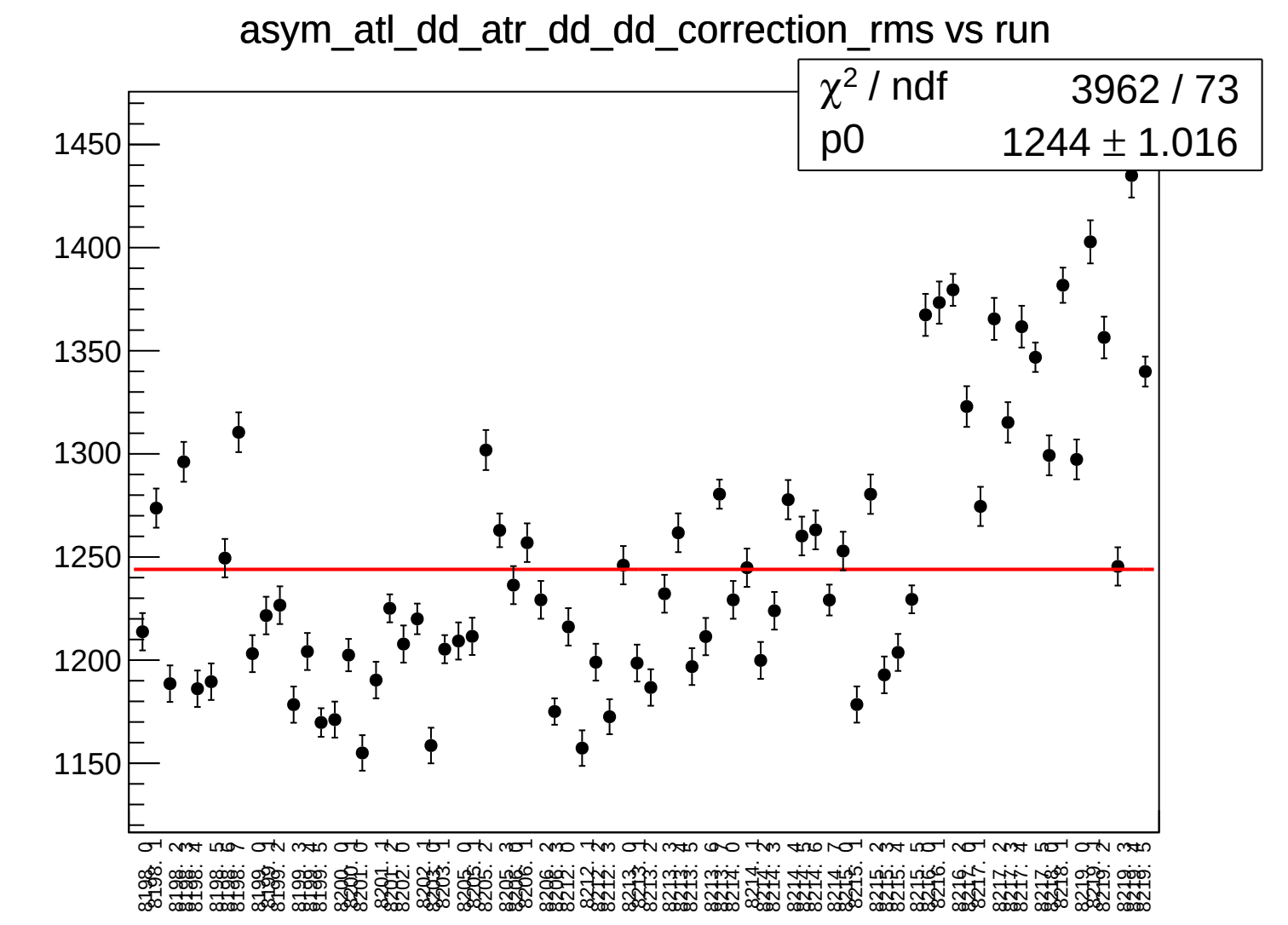

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 4569 / 73
p0 6122 ± 5.001
7000
6800
6600
6400
6200
6000
5800
5600
5400

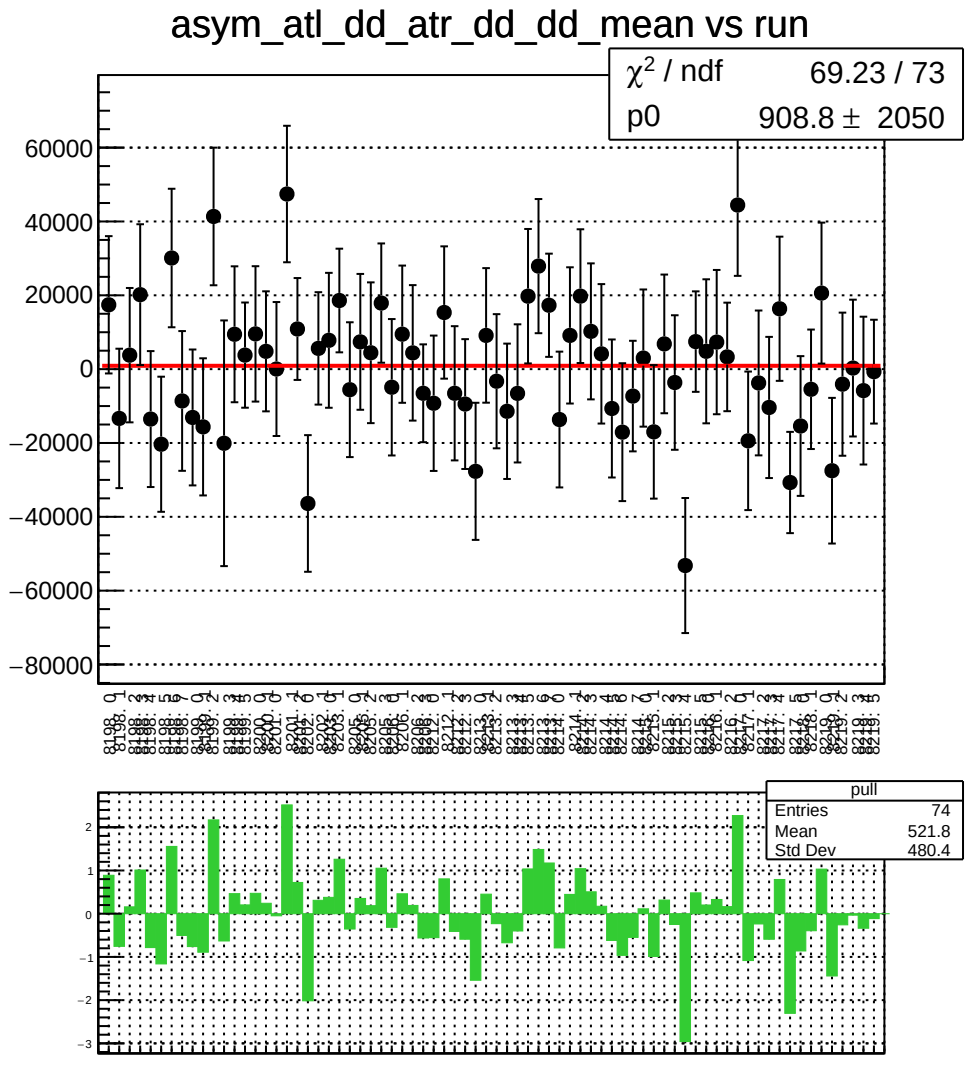

reg_asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 68.66 / 73
p0 2191 ± 1452
pull
Entries 74
Mean 592.5
Std Dev 554

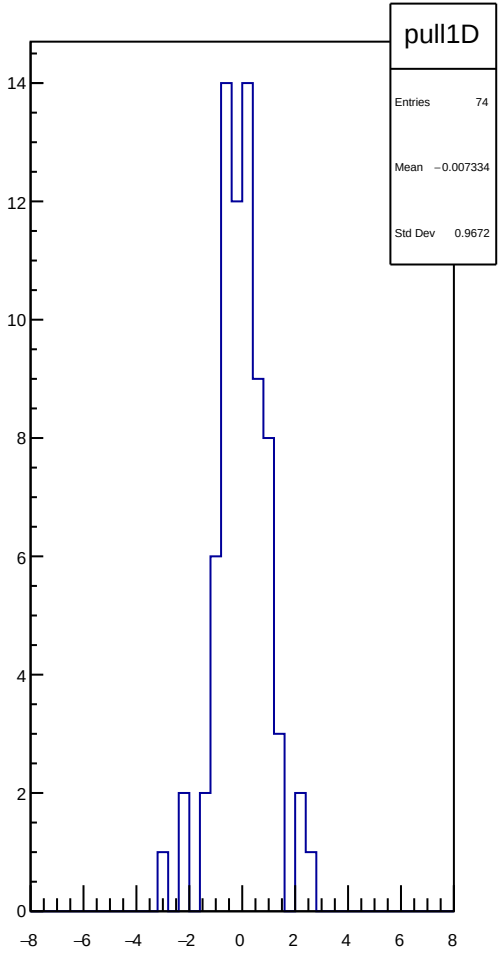

pull1D
Entries 74
Mean −0.006958
Std Dev 0.9632

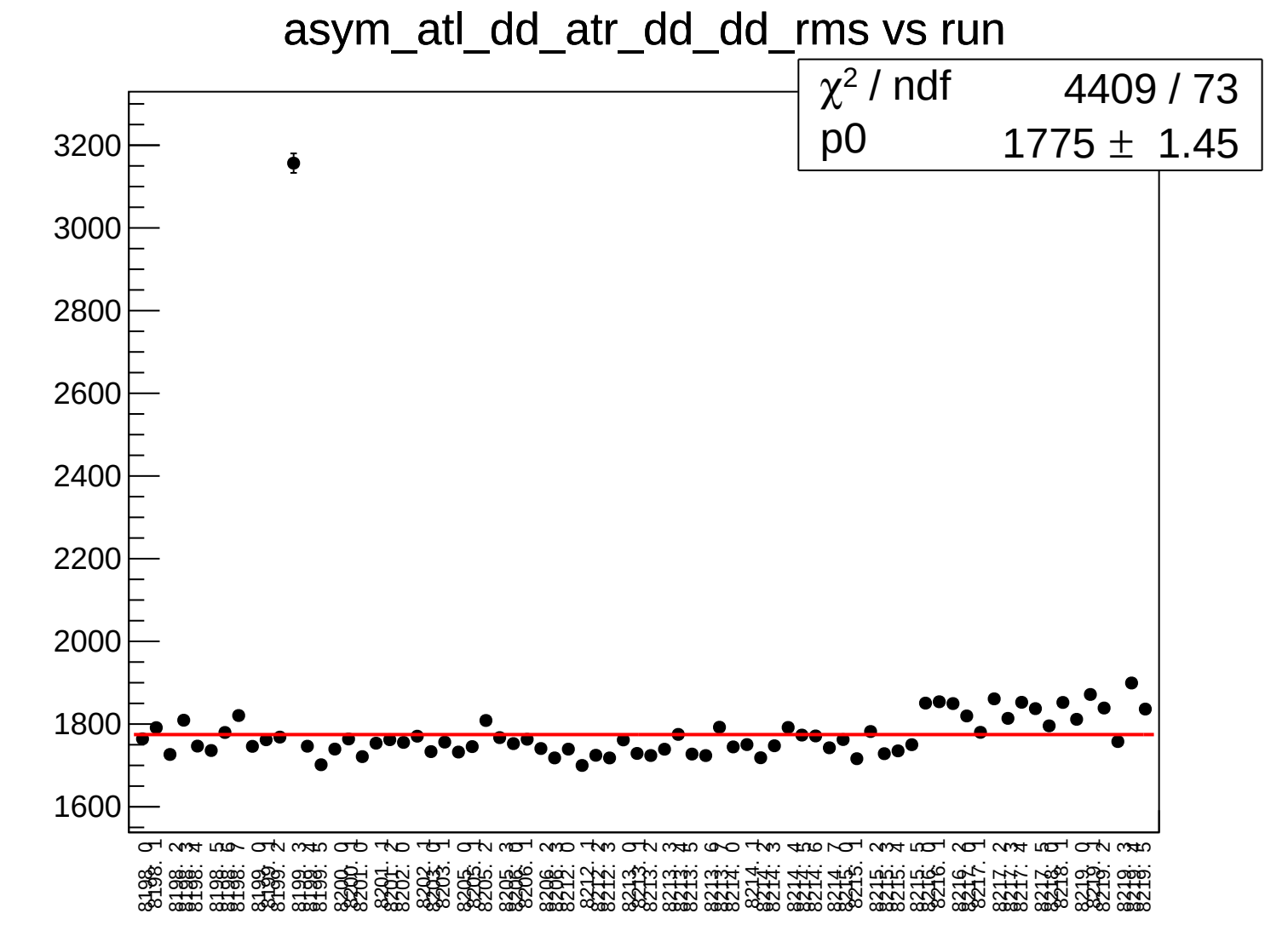

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 6122 / 73
p0 1256 ± 1.027
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200

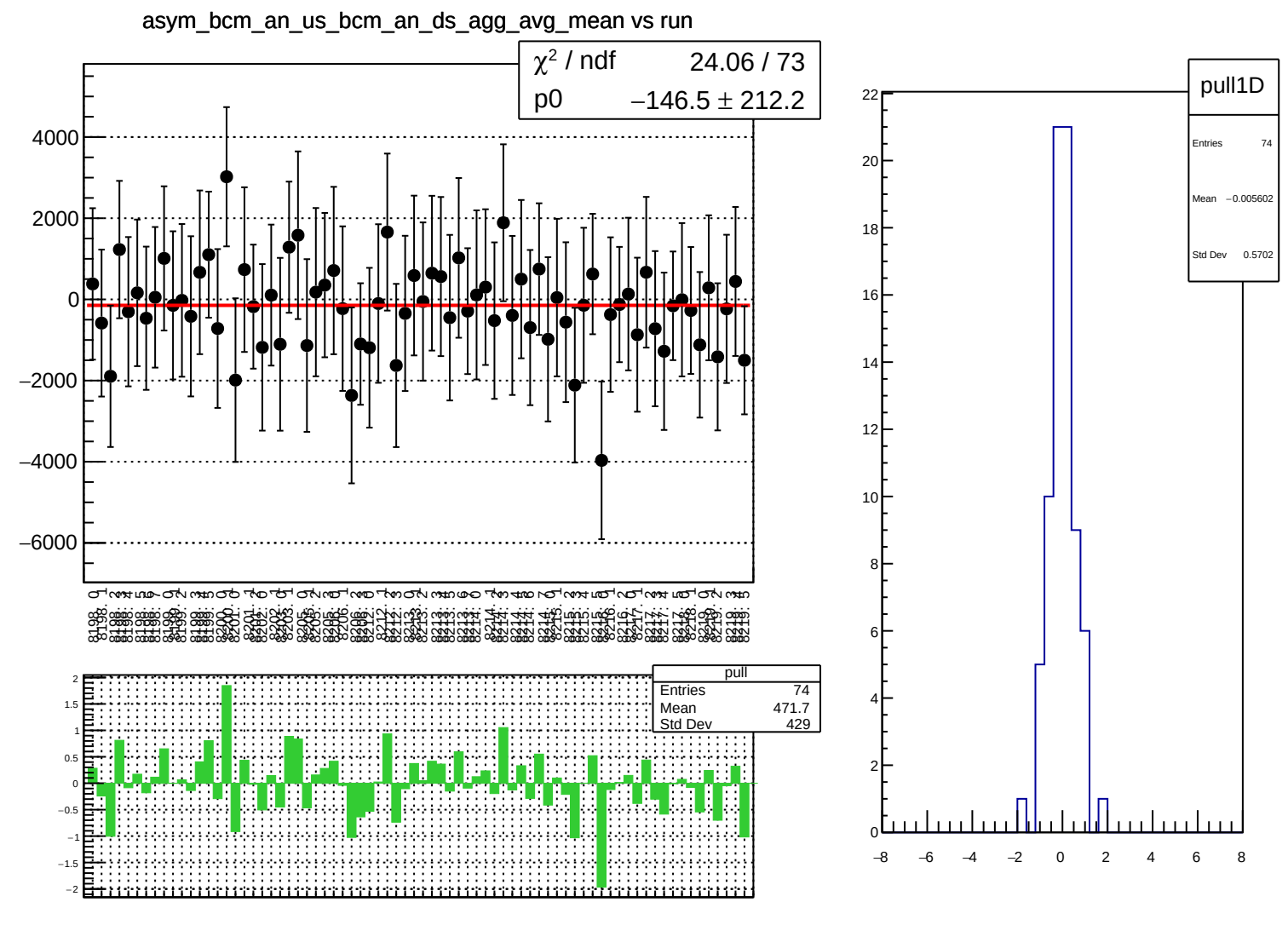

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 77.69 / 73
p0 1268 ± 1437
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 851
Std Dev 803
2
1
0
−1
−2
−3
pull1D
Entries 74
Mean 0.001767
Std Dev 1.025
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

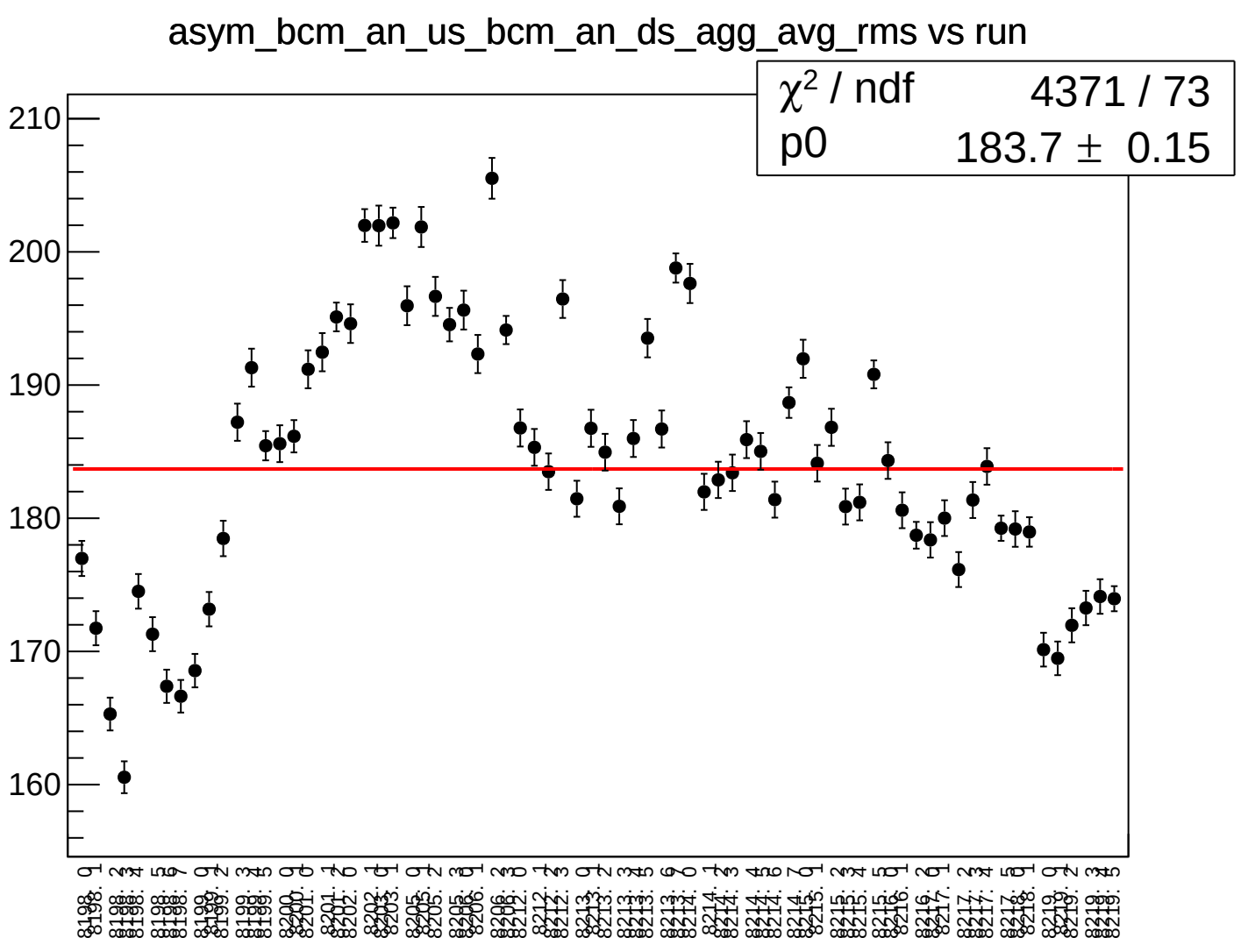

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 3962 / 73
p0 1244 ± 1.016
1450
1400
1350
1300
1250
1200
1150

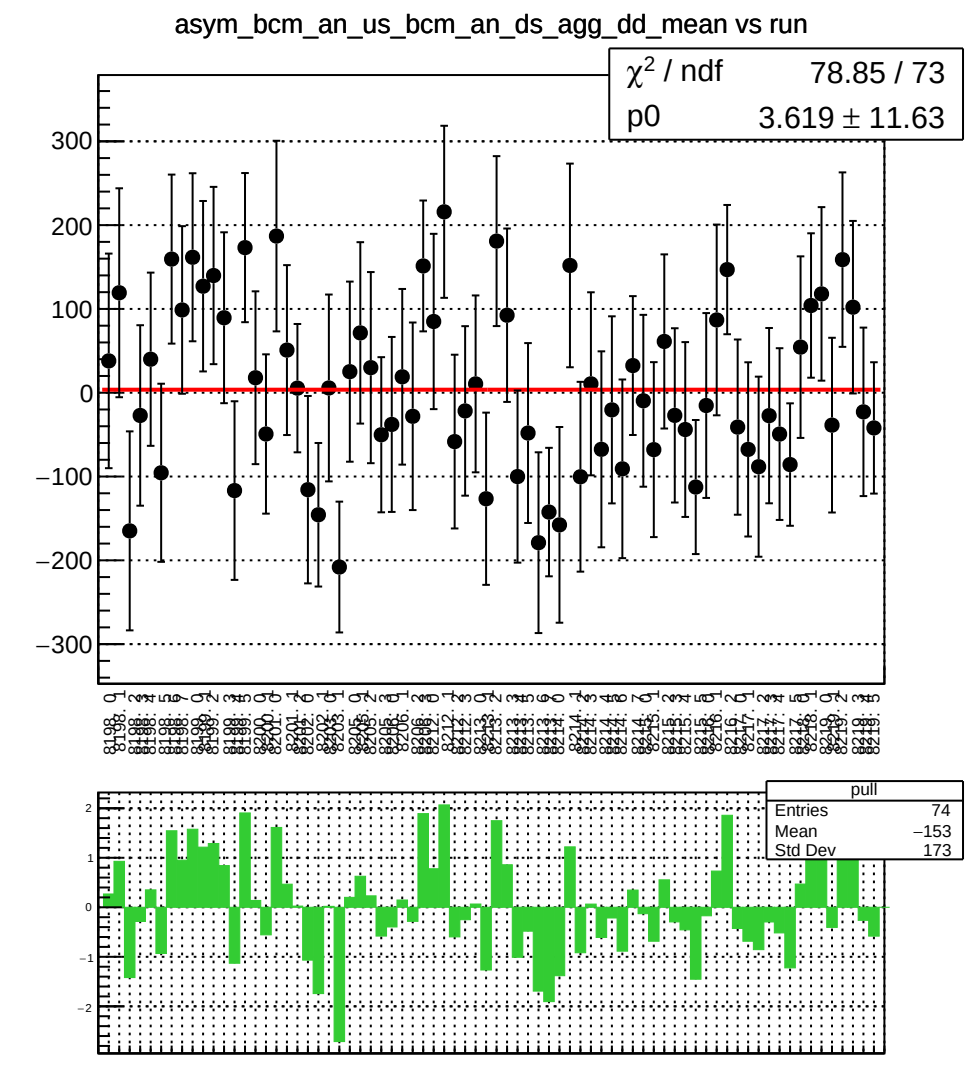

asym_atl_dd_atr_dd_dd_mean vs run
χ² / ndf 69.23 / 73
p0 908.8 ± 2050
pull
Entries 74
Mean 521.8
Std Dev 480.4

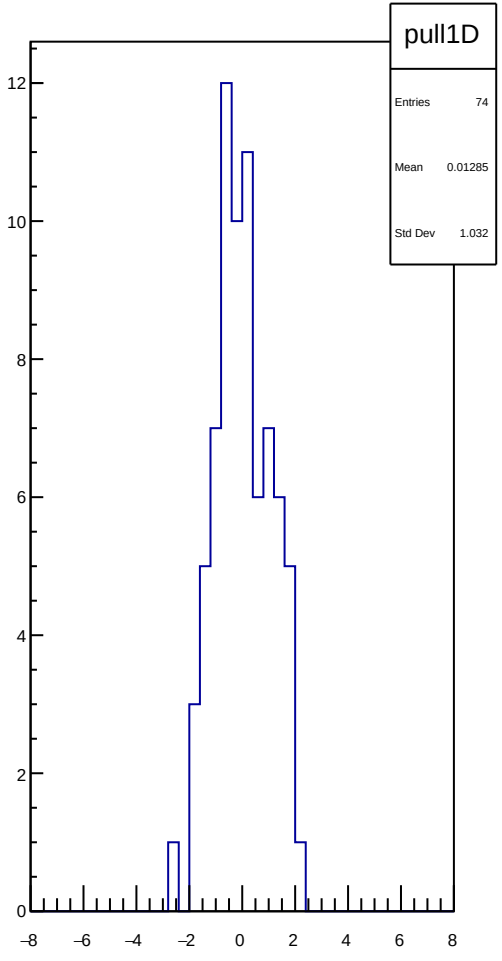

pull1D
Entries 74
Mean −0.007334
Std Dev 0.9672

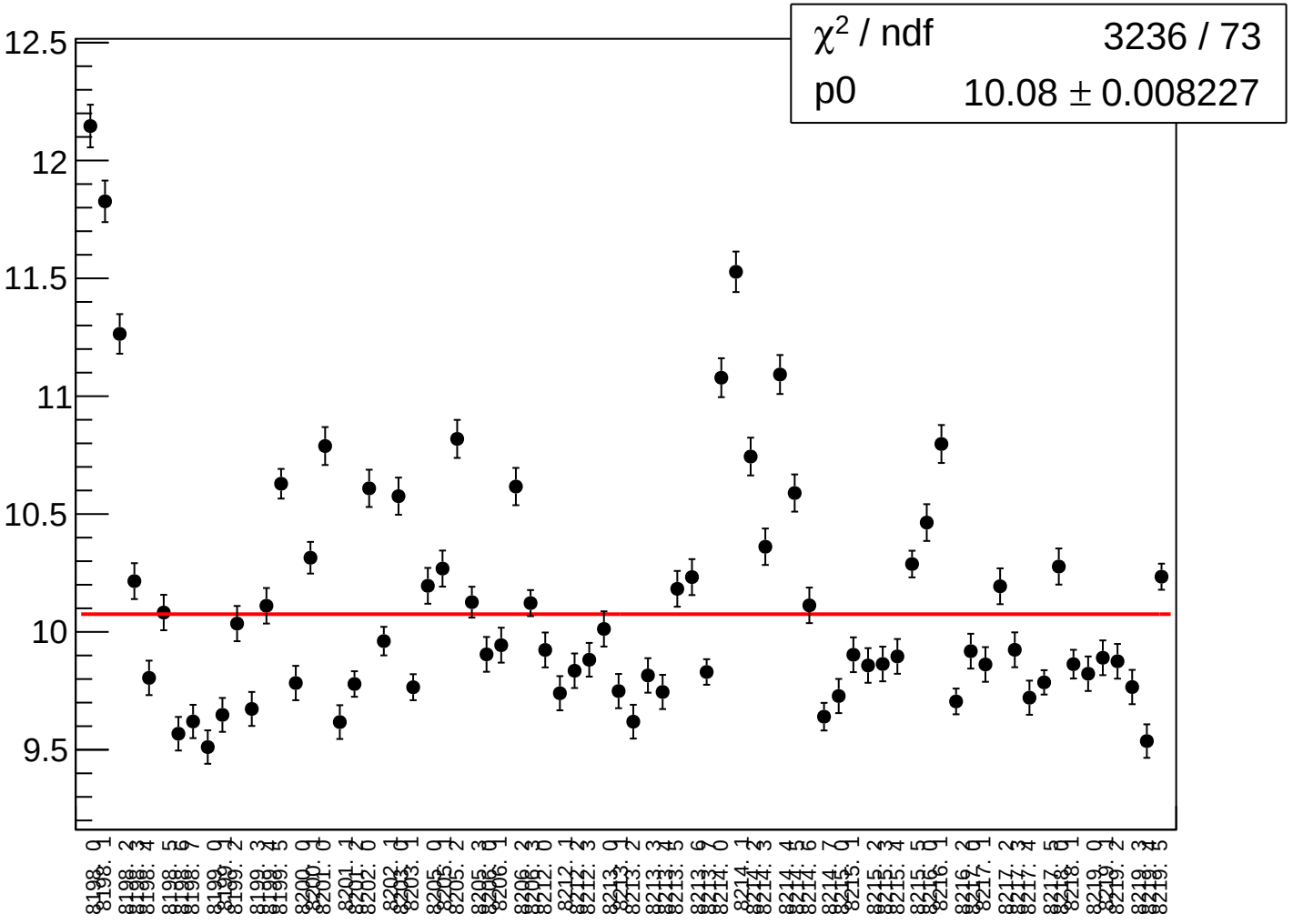

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 4409 / 73
p0 1775 ± 1.45
3200
3000
2800
2600
2400
2200
2000
1800
1600

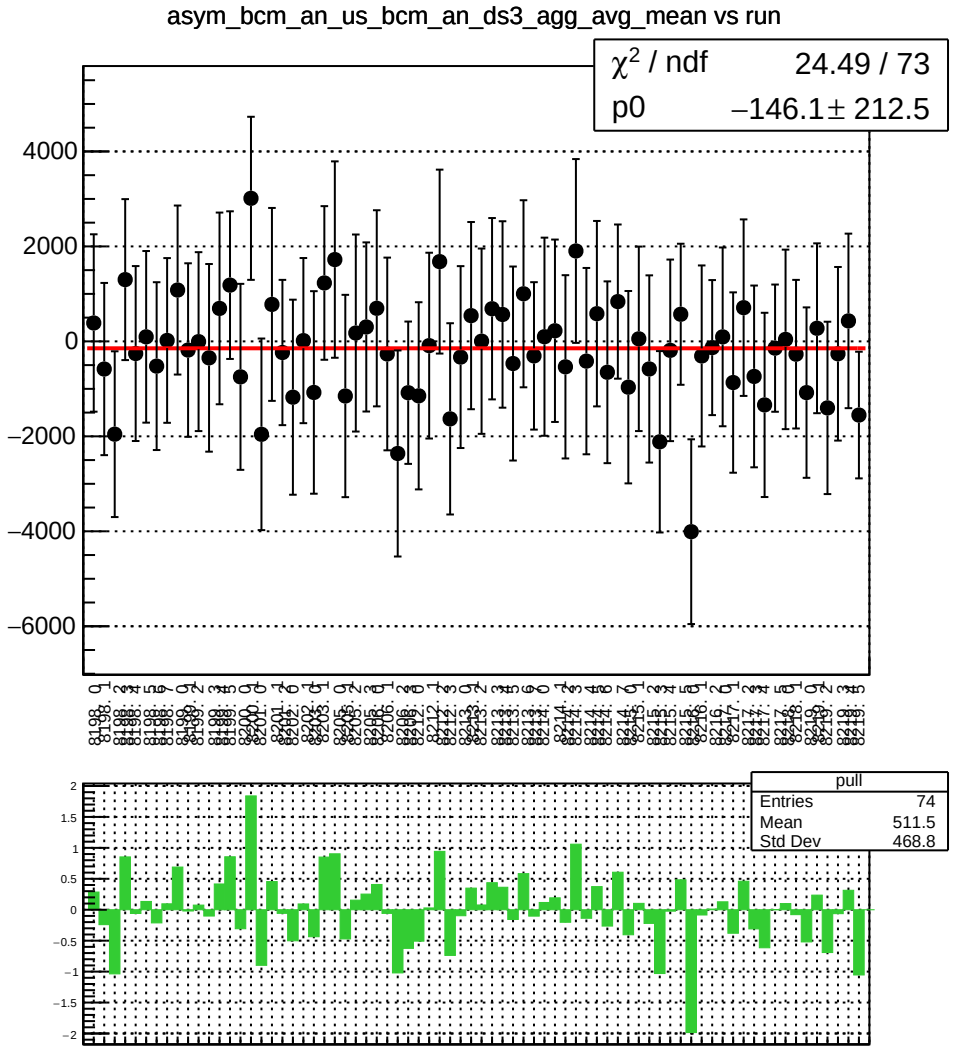

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 24.06 / 73
p0 −146.5 ± 212.2
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 471.7
Std Dev 429
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 74
Mean −0.005602
Std Dev 0.5702
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

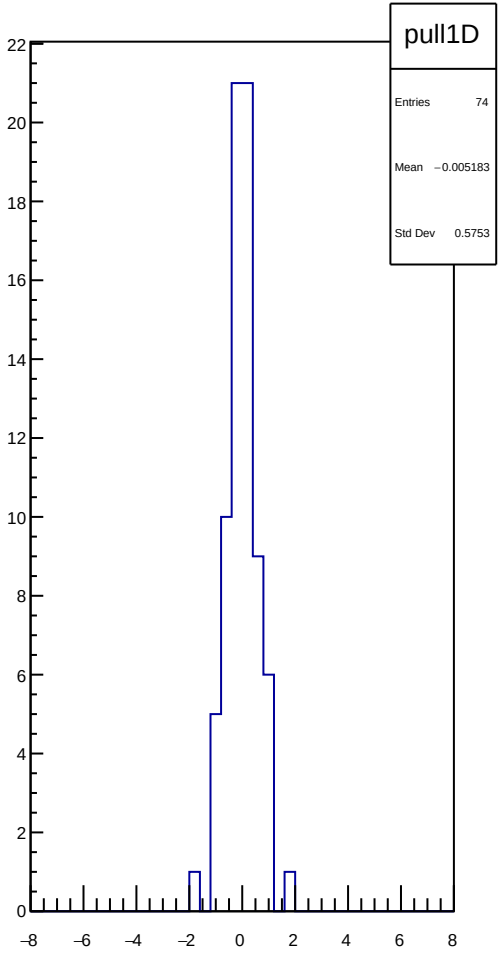

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4371 / 73
p0 183.7 ± 0.15
210
200
190
180
170
160

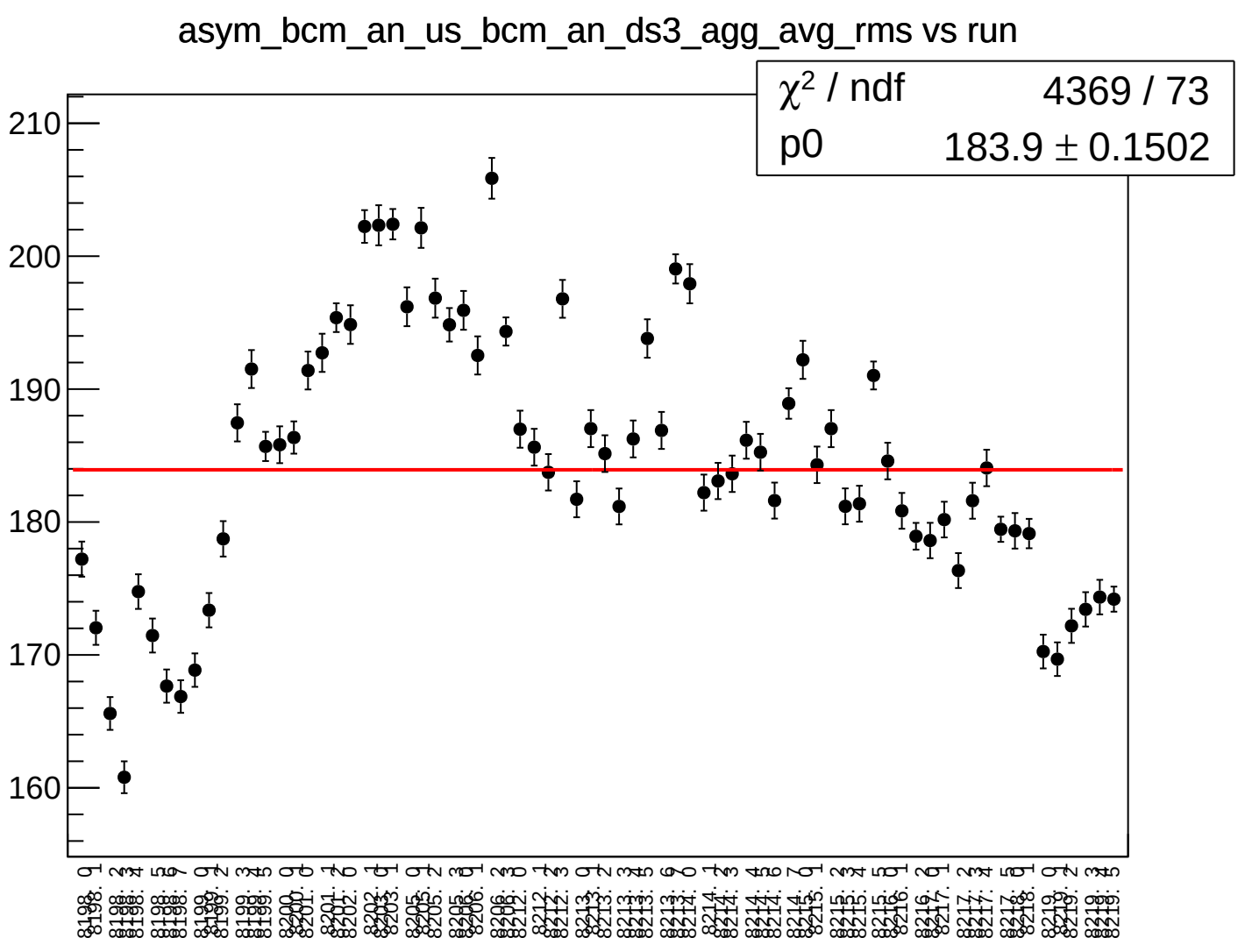

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 78.85 / 73
p0 3.619 ± 11.63
pull
Entries 74
Mean −153
Std Dev 173

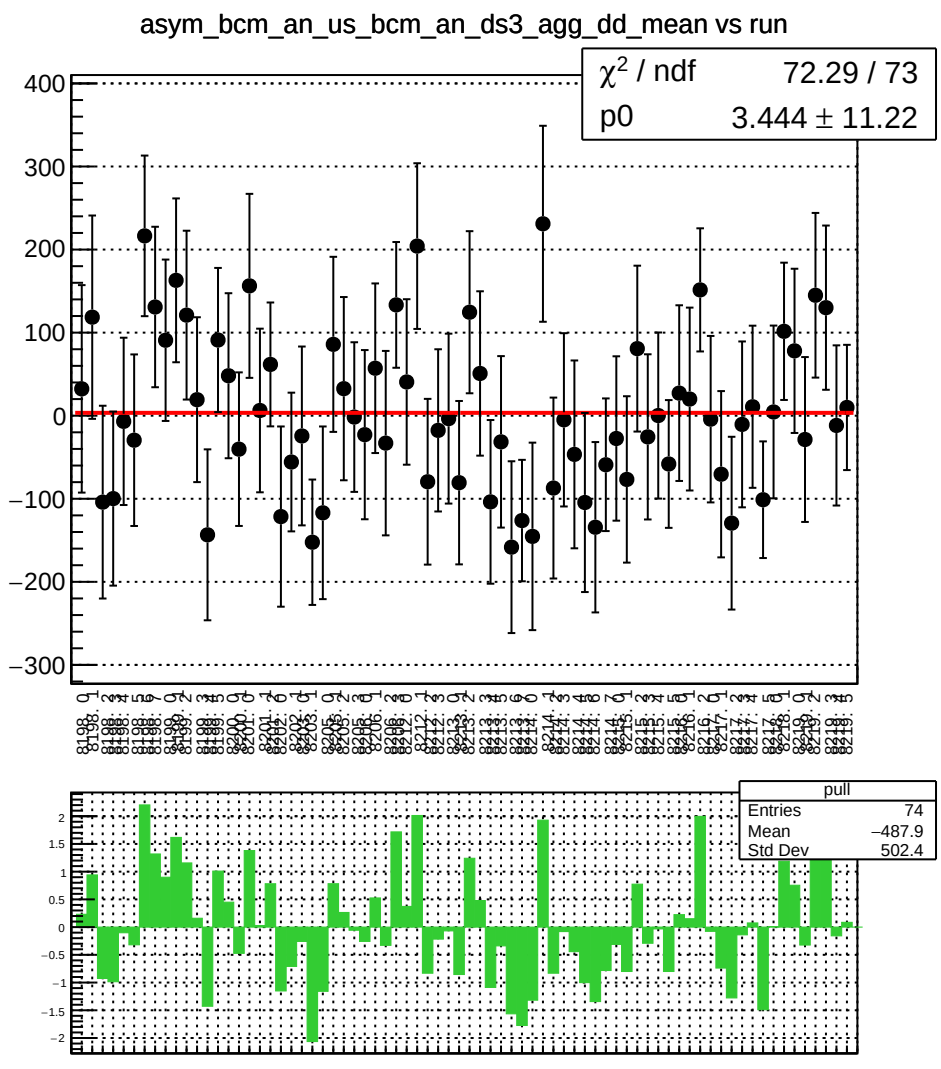

pull1D
Entries 74
Mean 0.01285
Std Dev 1.032

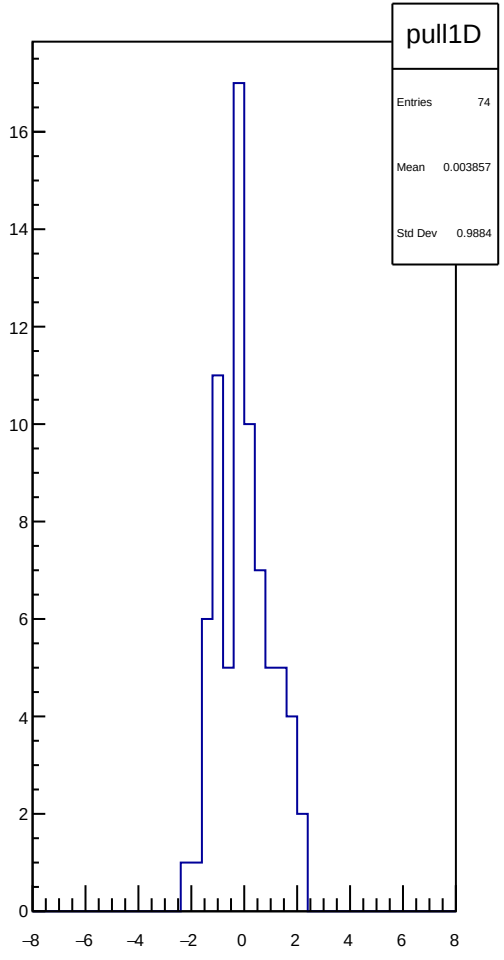

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 3236 / 73
p0 10.08 ± 0.008227
12.5
12
11.5
11
10.5
10
9.5

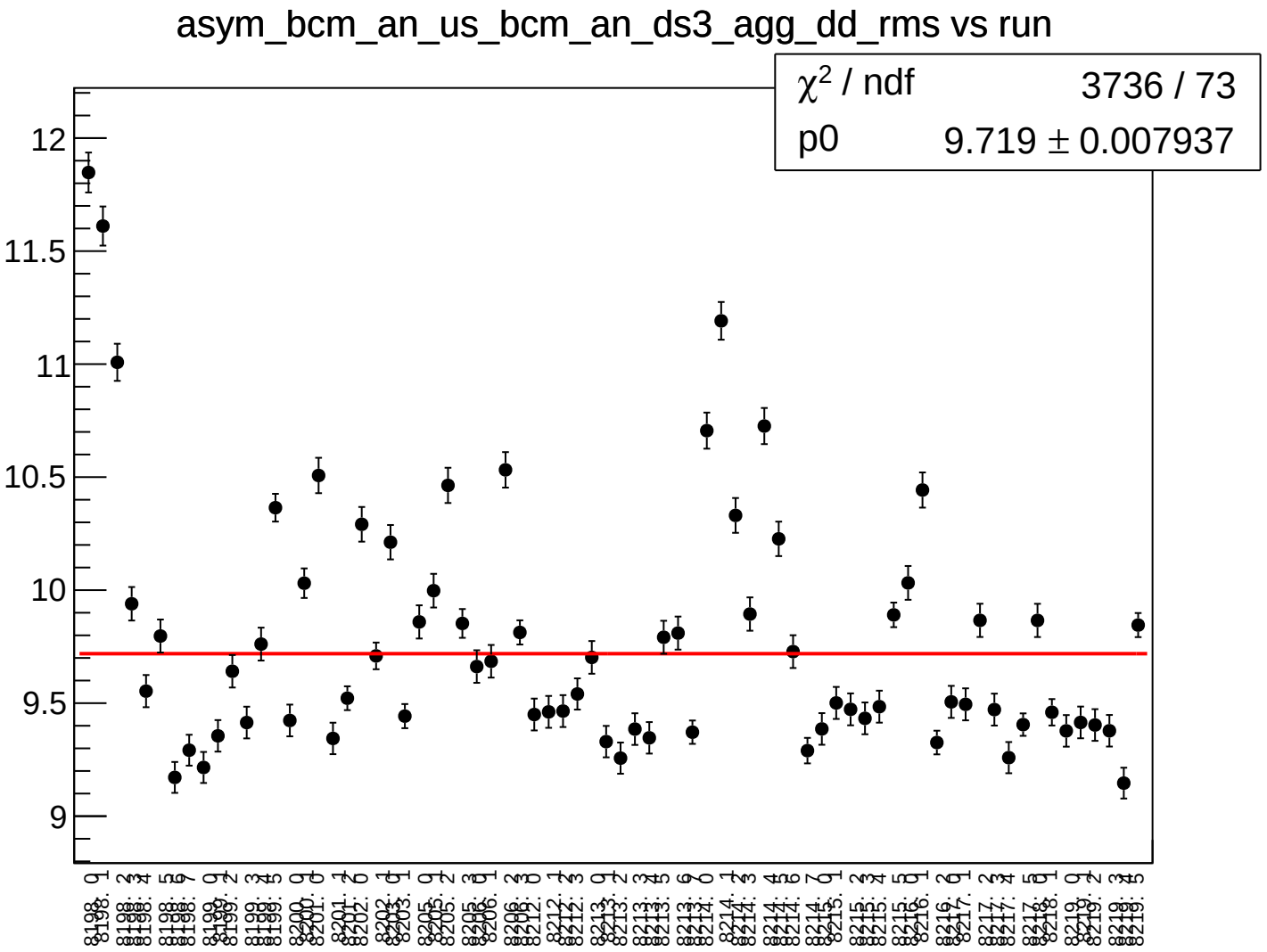

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 24.49 / 73
p0 −146.1± 212.5
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 511.5
Std Dev 468.8
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

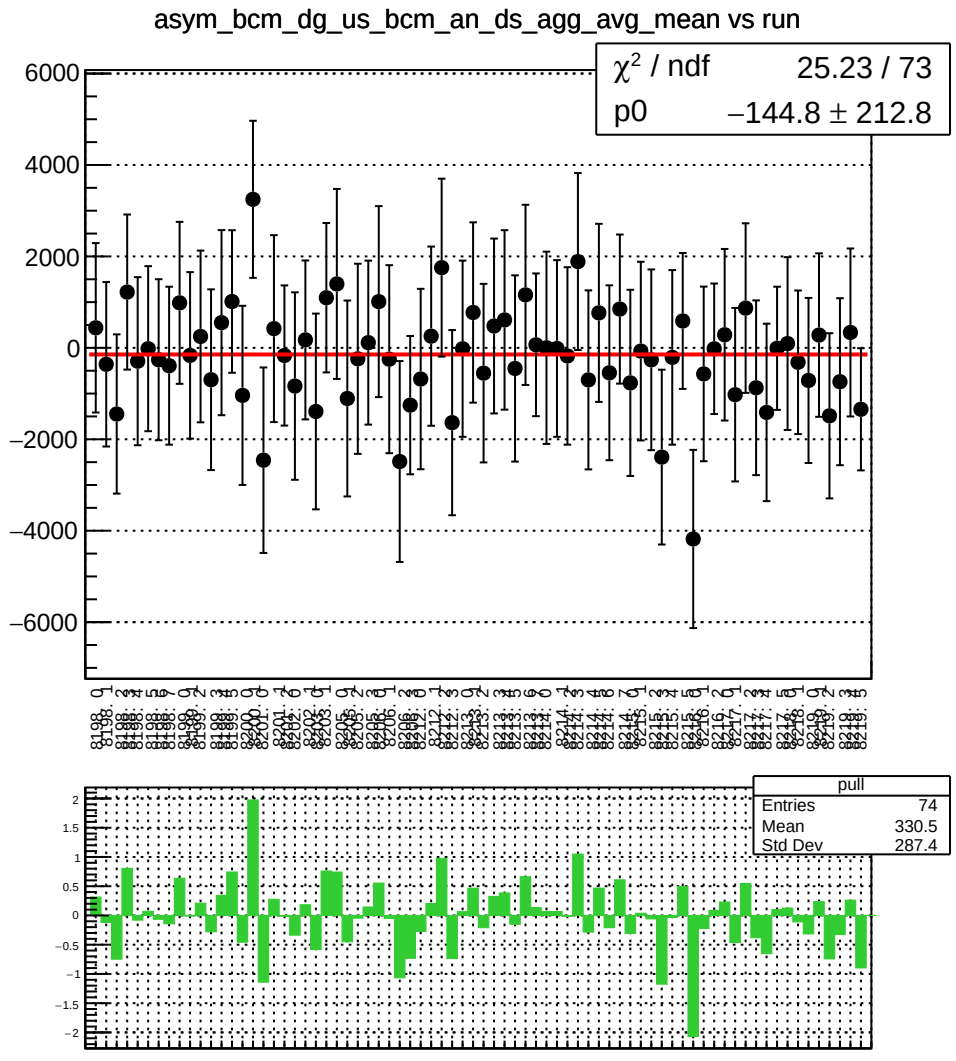

pull1D
Entries 74
Mean −0.005183
Std Dev 0.5753
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

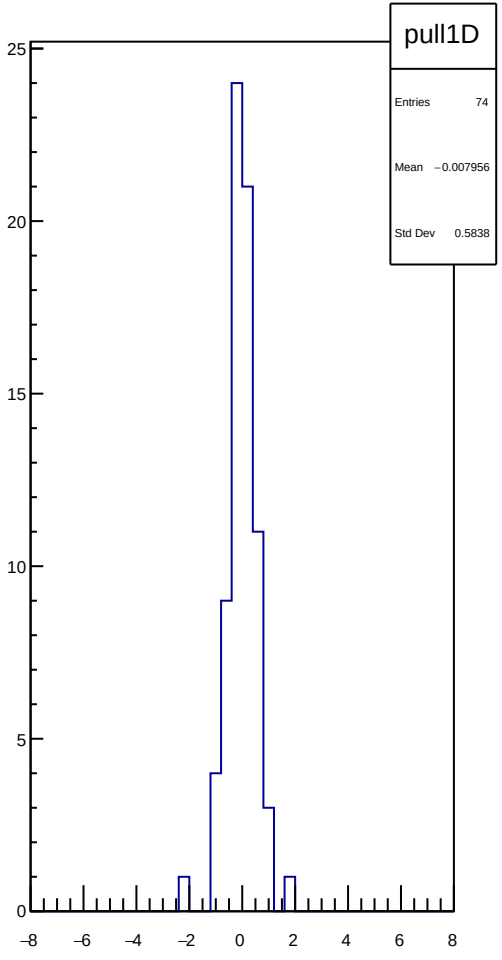

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 4369 / 73
p0 183.9 ± 0.1502
210
200
190
180
170
160

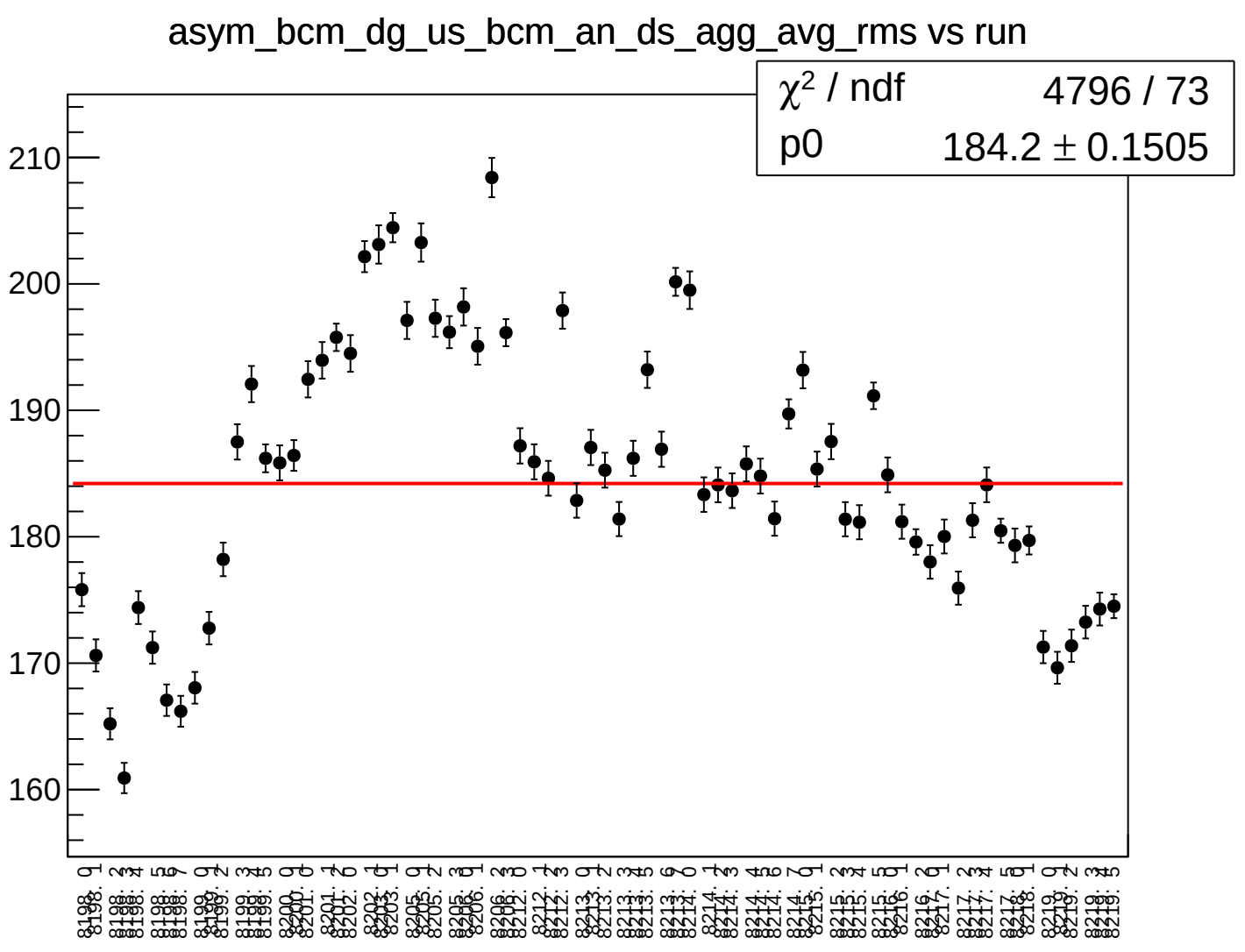

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 72.29 / 73
p0 3.444 ± 11.22
pull
Entries 74
Mean −487.9
Std Dev 502.4

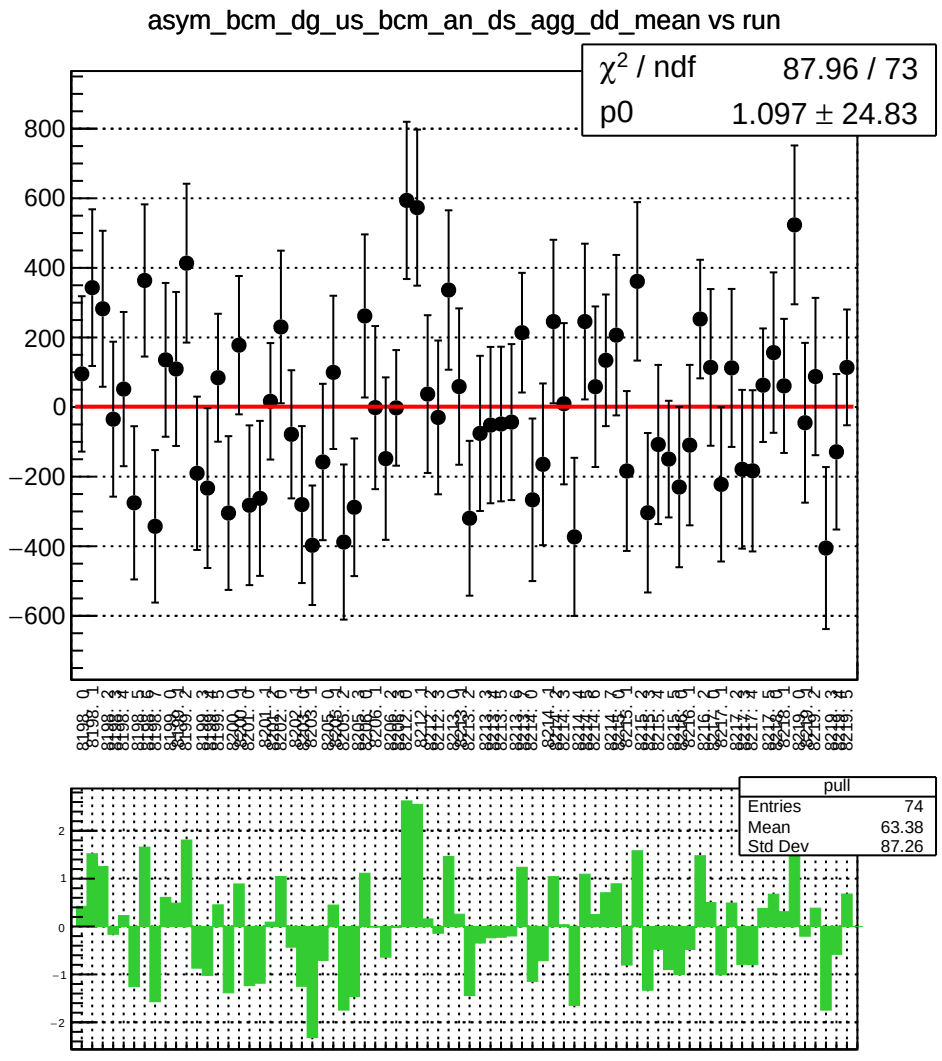

pull1D
Entries 74
Mean 0.003857
Std Dev 0.9884

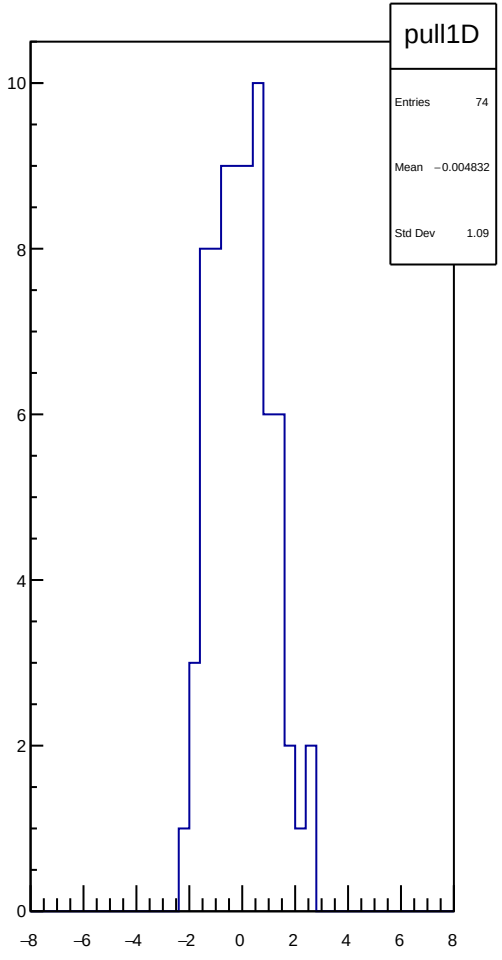

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 3736 / 73
p0 9.719 ± 0.007937
12
11.5
11
10.5
10
9.5
9

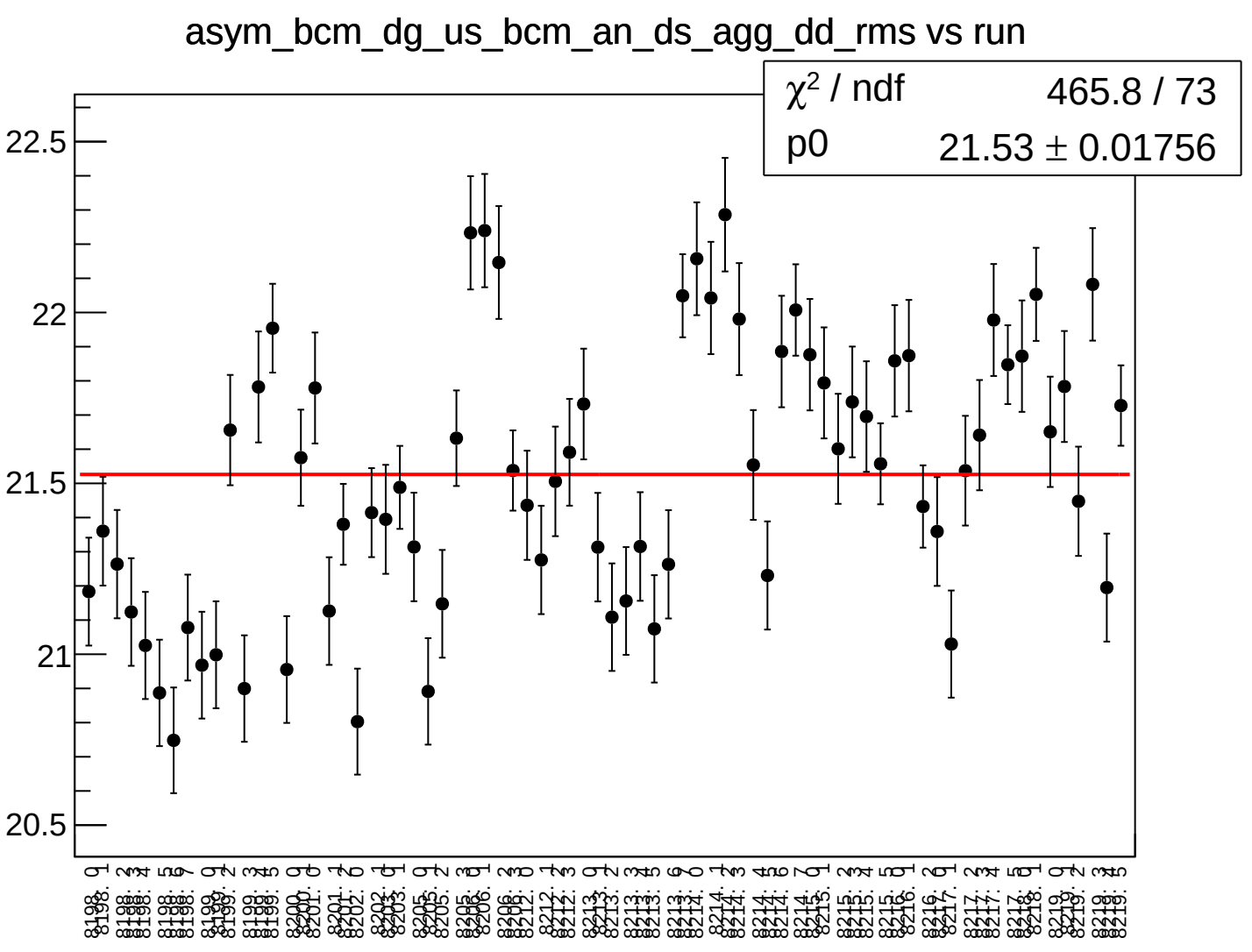

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 25.23 / 73
p0 −144.8 ± 212.8
pull
Entries 74
Mean 330.5
Std Dev 287.4

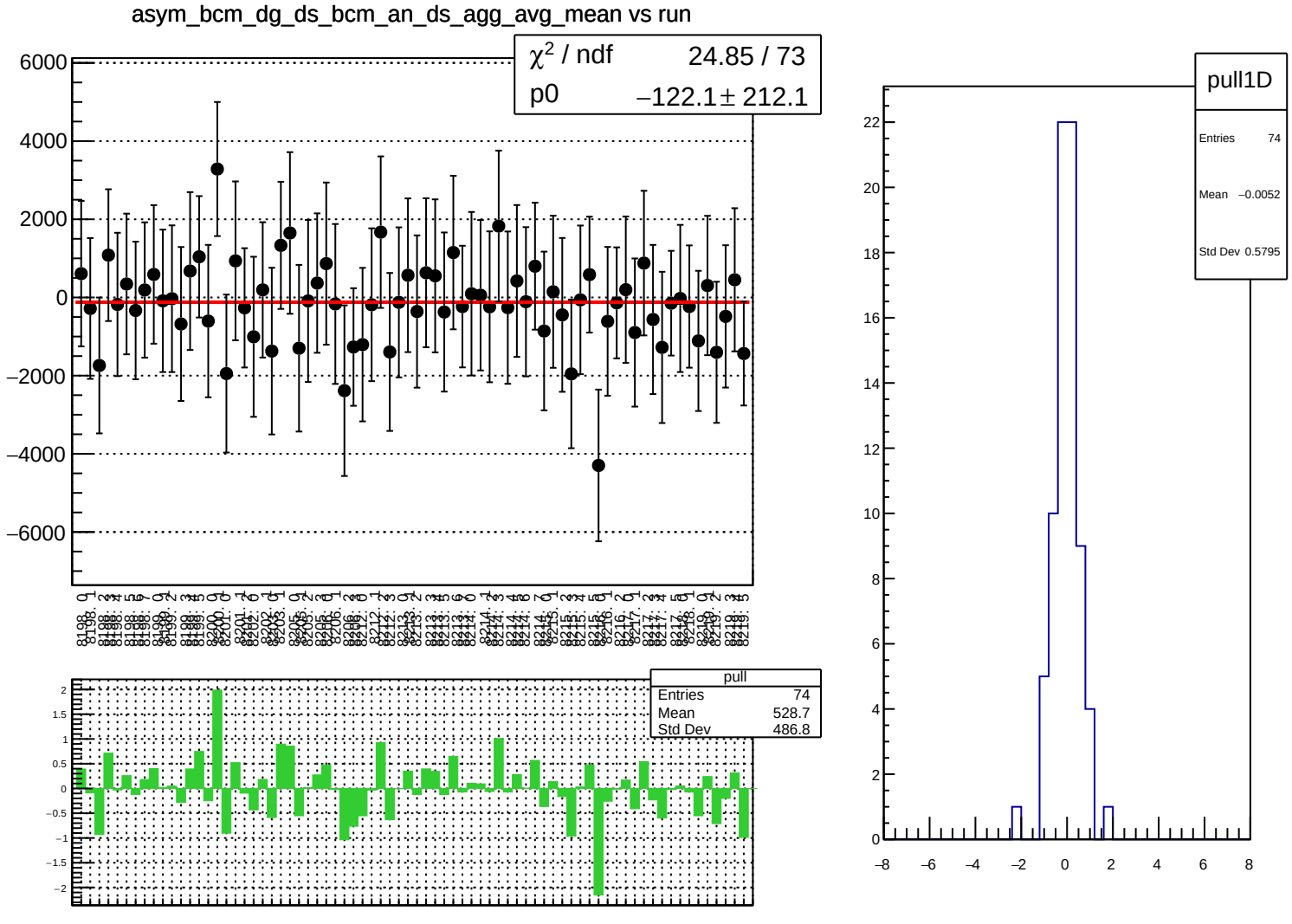

pull1D
Entries 74
Mean −0.007956
Std Dev 0.5838

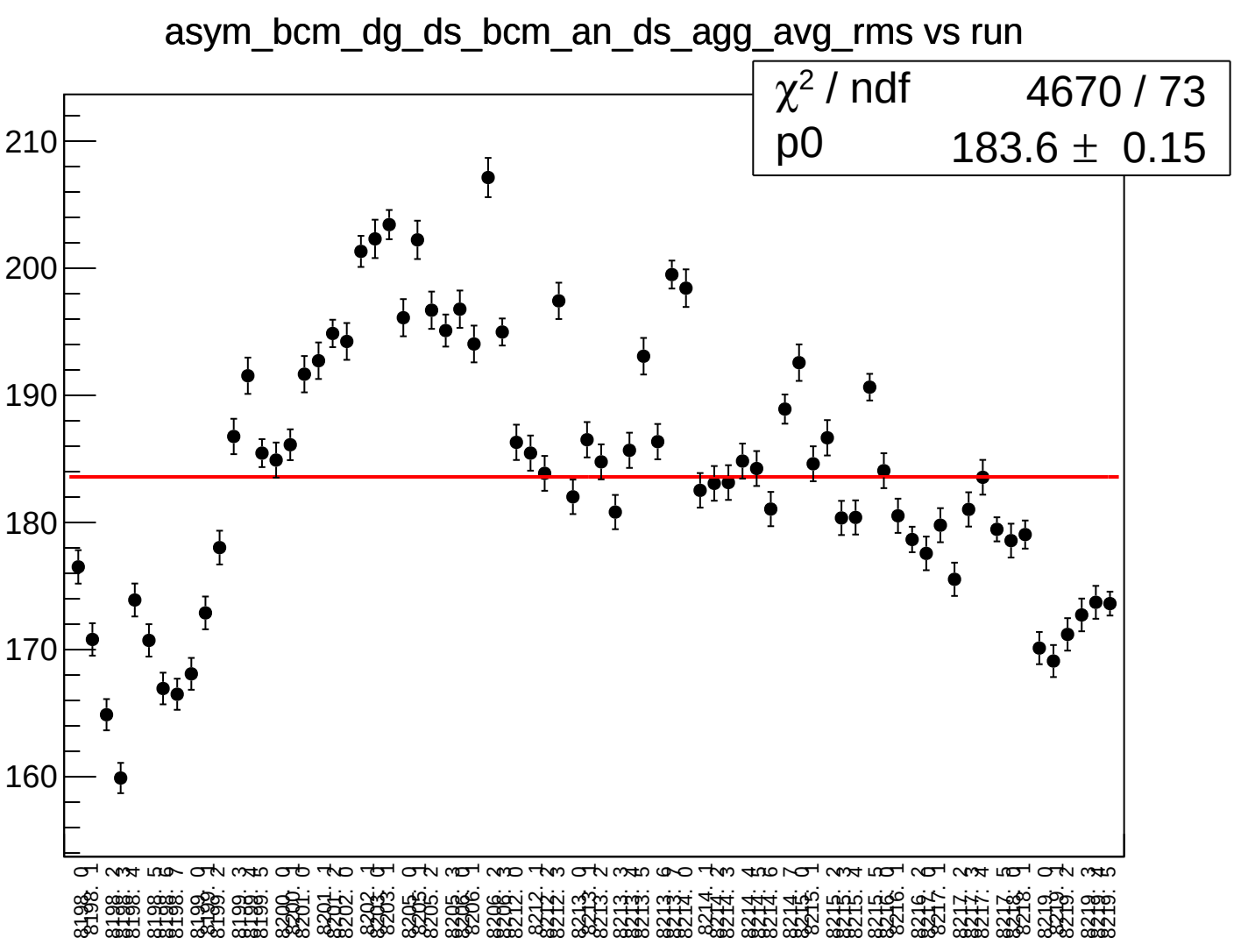

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4796 / 73
p0 184.2 ± 0.1505
210
200
190
180
170
160

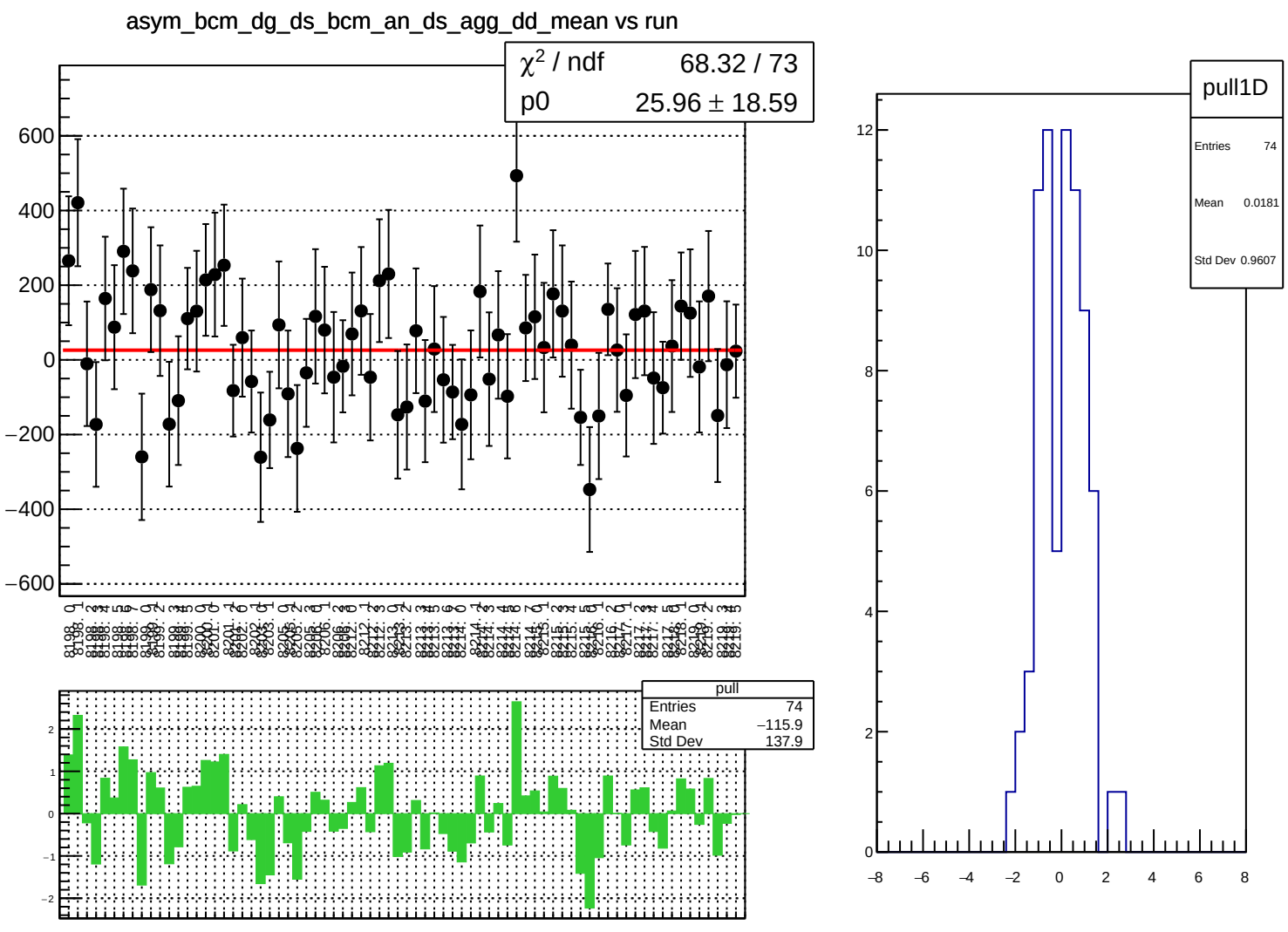

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 87.96 / 73
p0 1.097 ± 24.83
pull
Entries 74
Mean 63.38
Std Dev 87.26

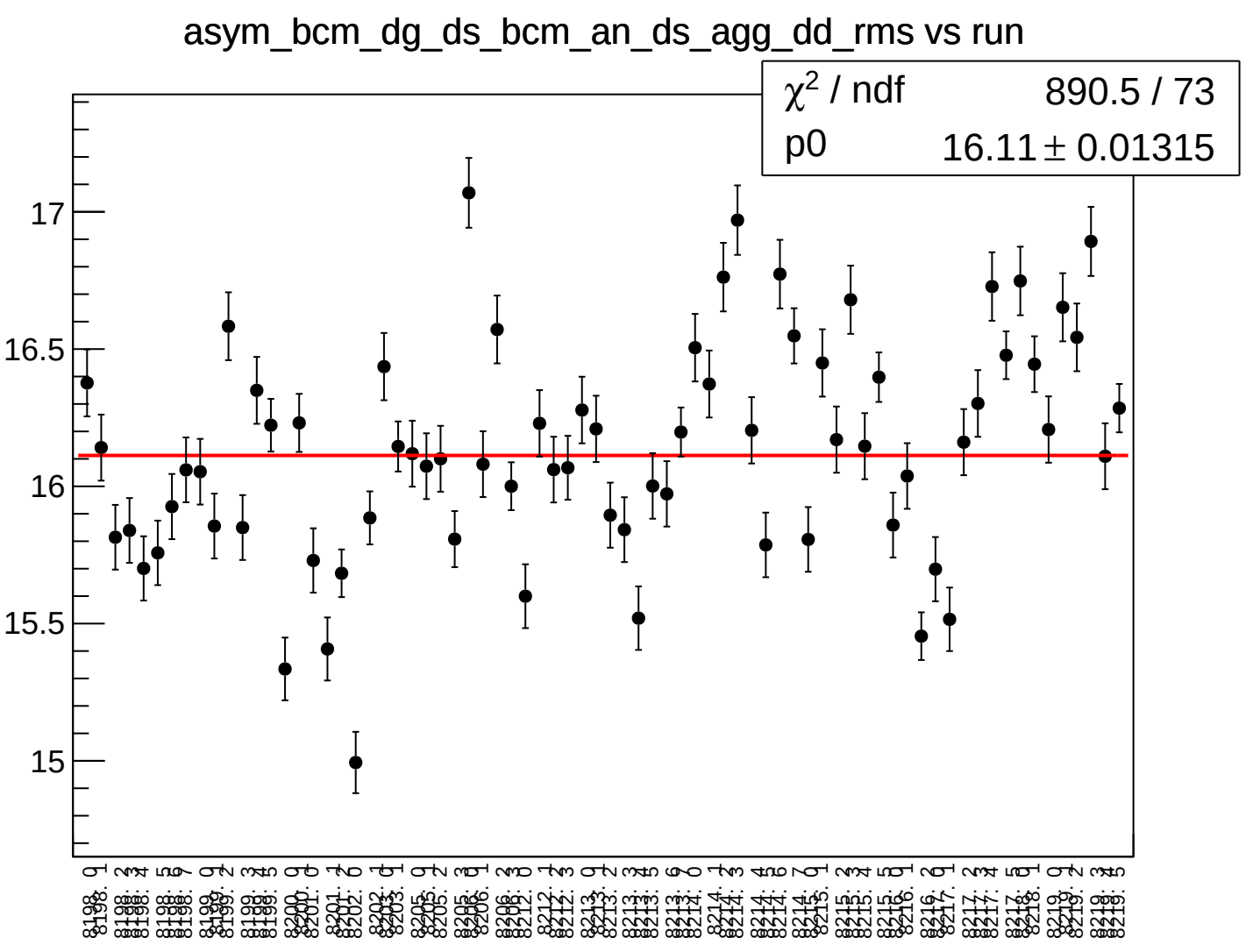

pull1D
Entries 74
Mean −0.004832
Std Dev 1.09

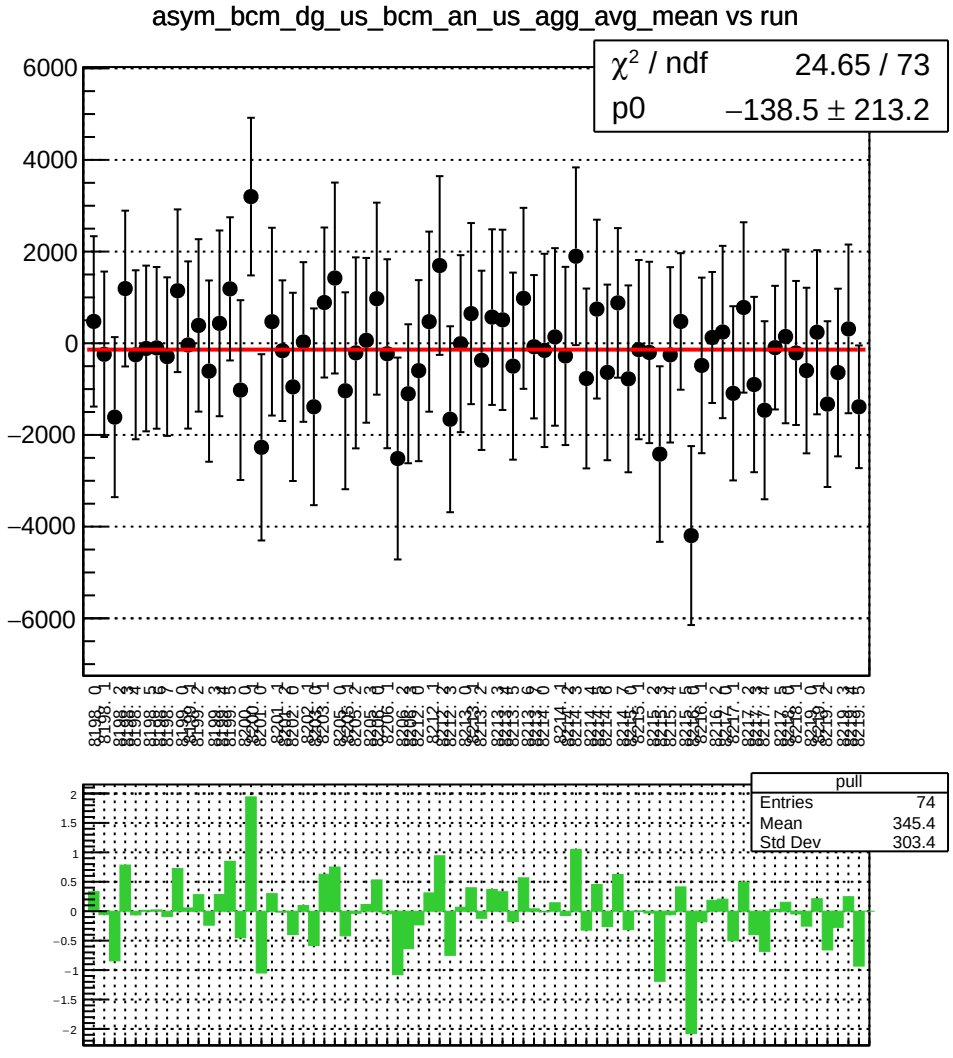

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 465.8 / 73
p0 21.53 ± 0.01756
22.5
22
21.5
21
20.5

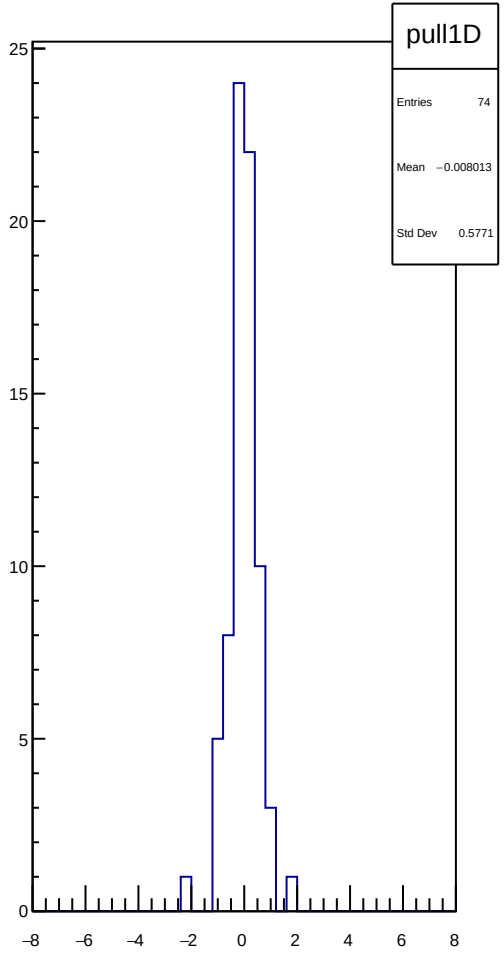

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 24.85 / 73
p0 −122.1 ± 212.1
pull
Entries 74
Mean 528.7
Std Dev 486.8
pull1D
Entries 74
Mean −0.0052
Std Dev 0.5795

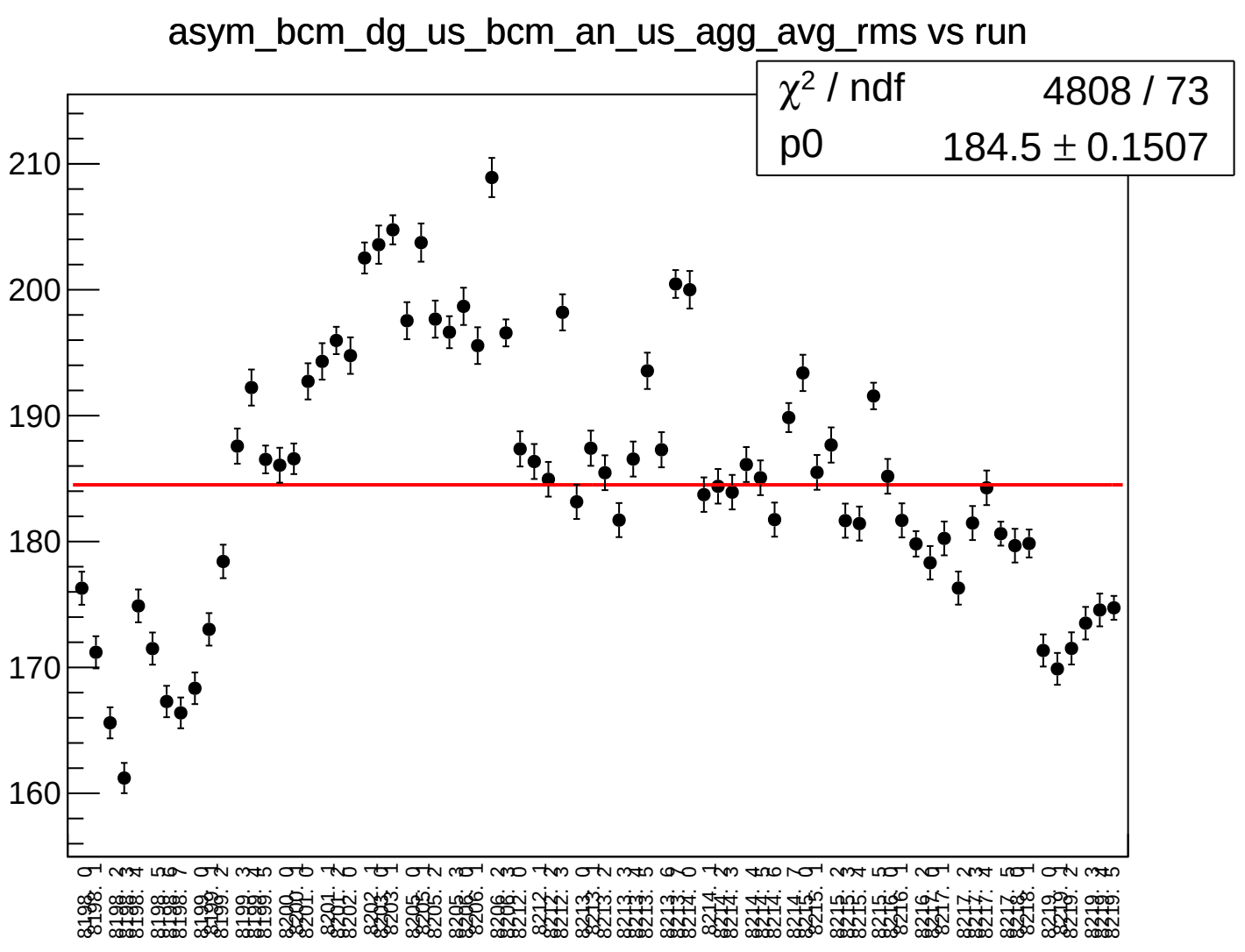

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4670 / 73
p0 183.6 ± 0.15
210
200
190
180
170
160

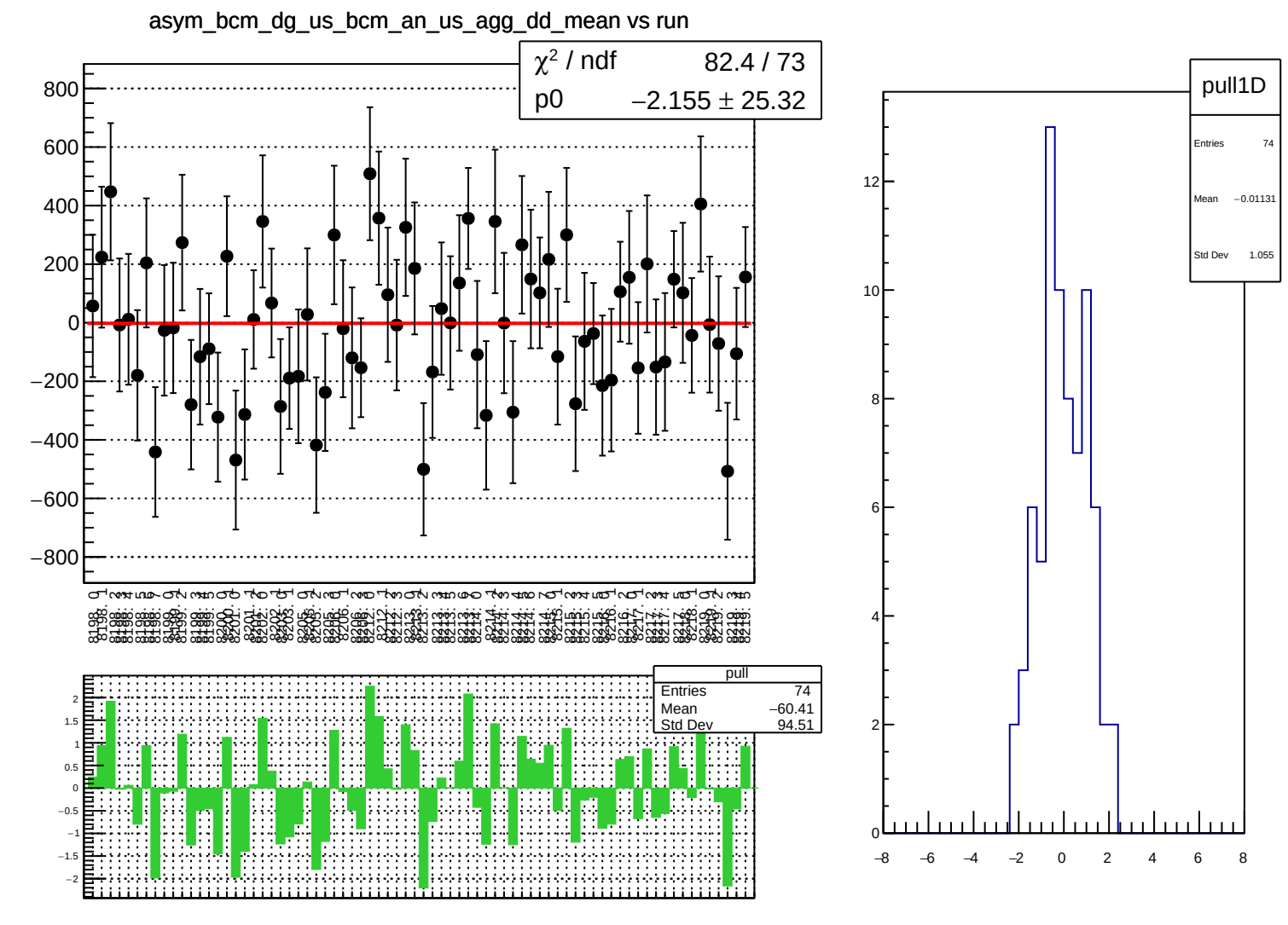

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 68.32 / 73
p0 25.96 ± 18.59
pull
Entries 74
Mean −115.9
Std Dev 137.9
pull1D
Entries 74
Mean 0.0181
Std Dev 0.9607

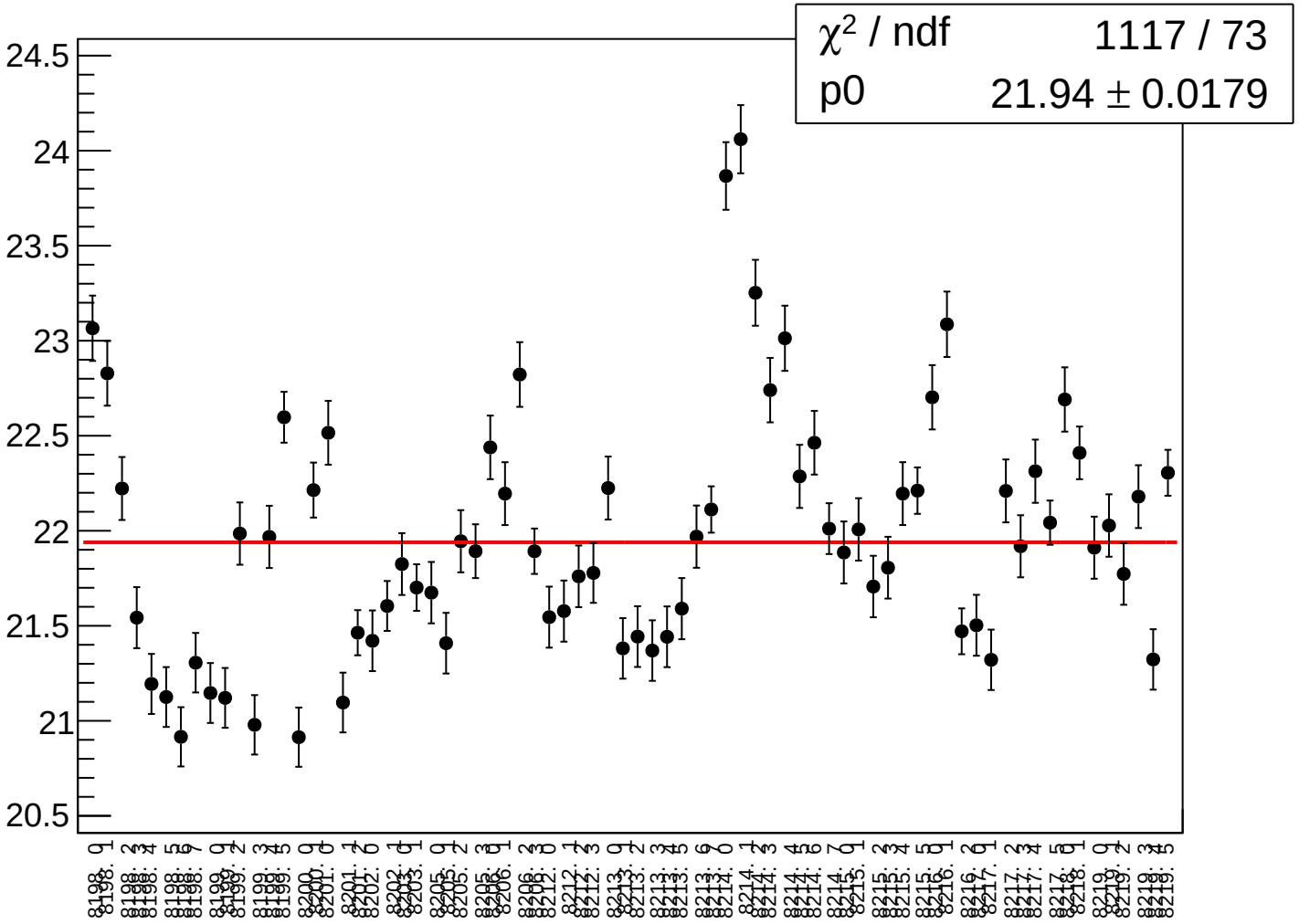

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ^2 / ndf 890.5 / 73
p0 16.11 ± 0.01315
17
16.5
16
15.5
15

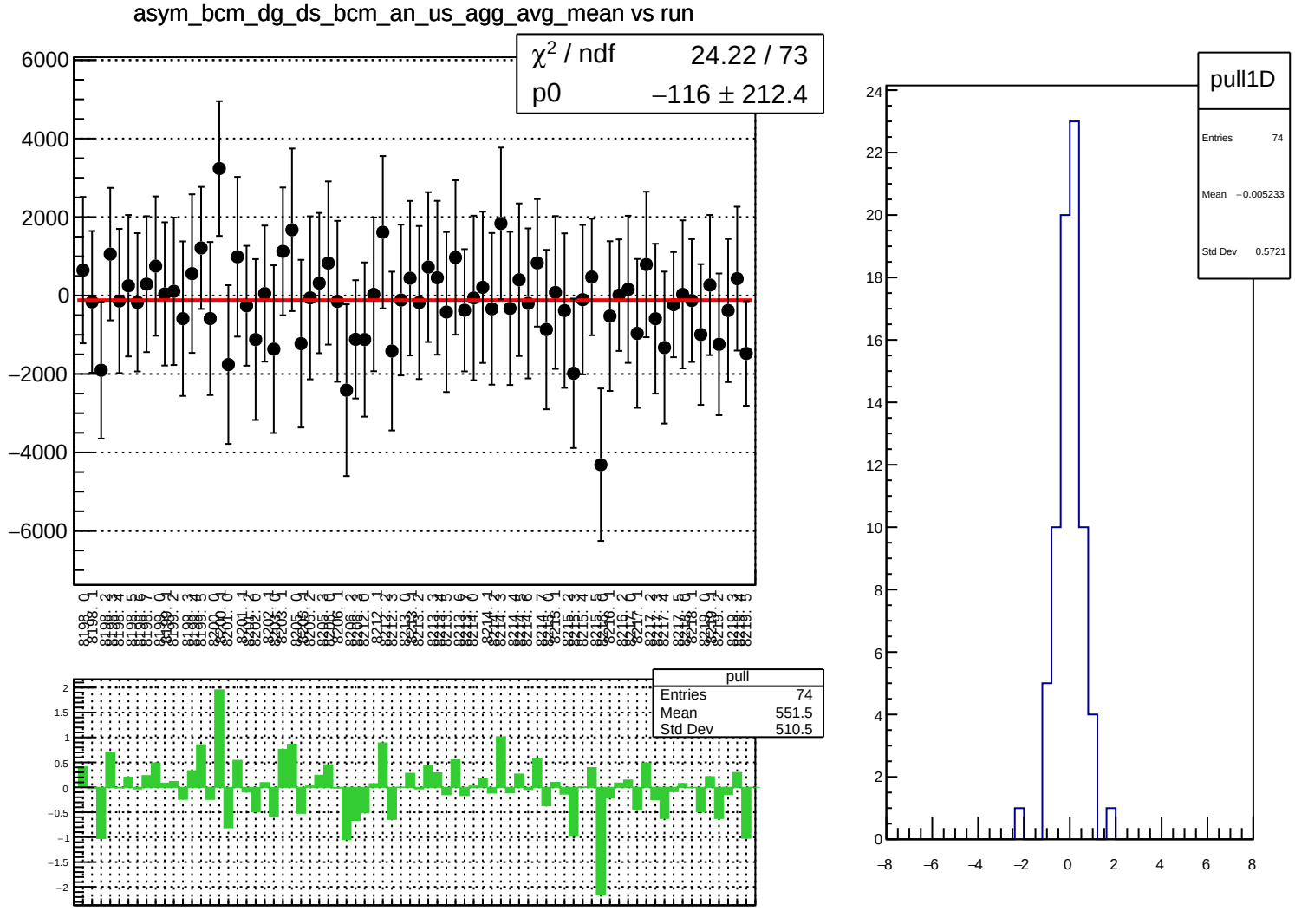

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 24.65 / 73
p0 −138.5 ± 213.2
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 345.4
Std Dev 303.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

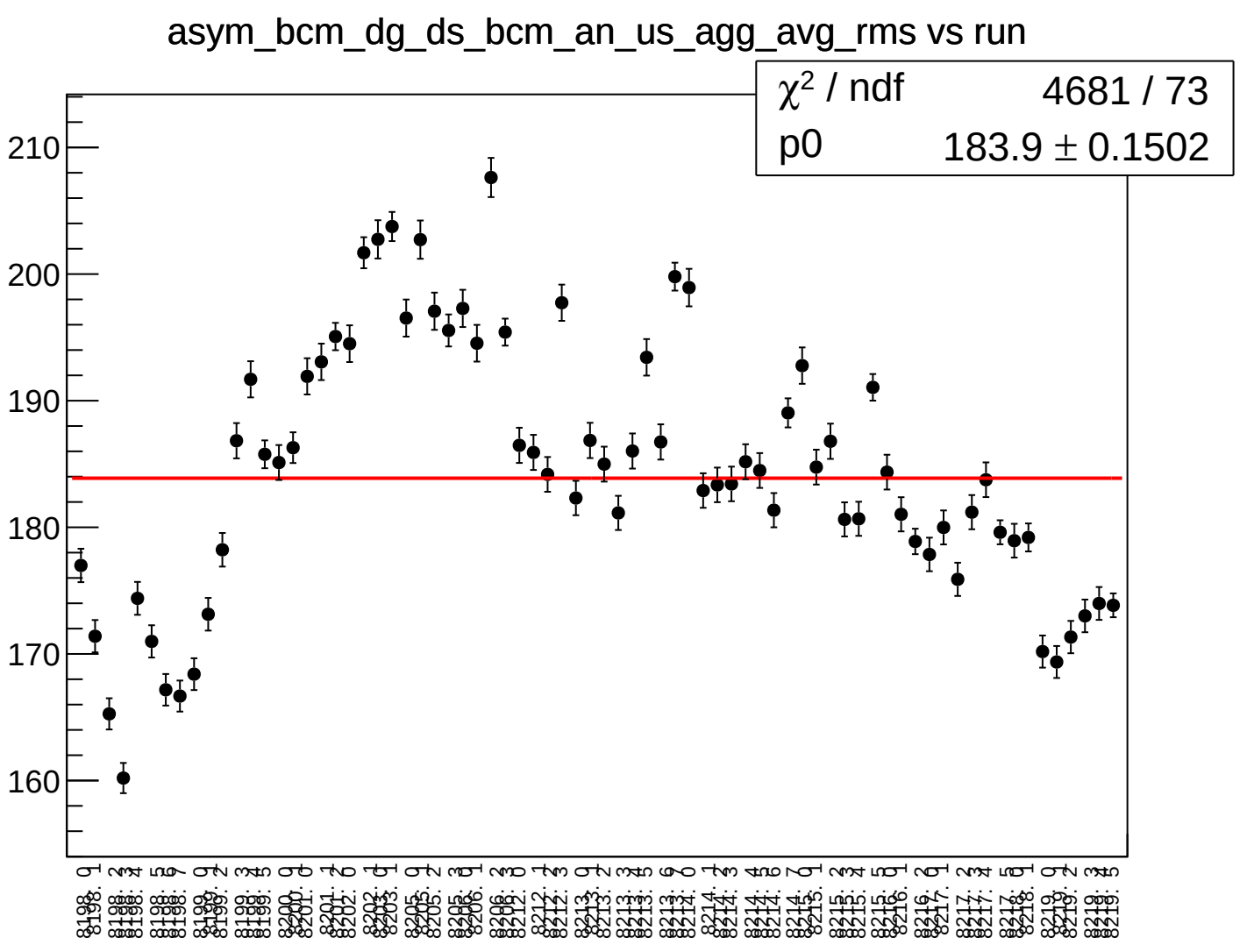

pull1D
Entries 74
Mean −0.008013
Std Dev 0.5771
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

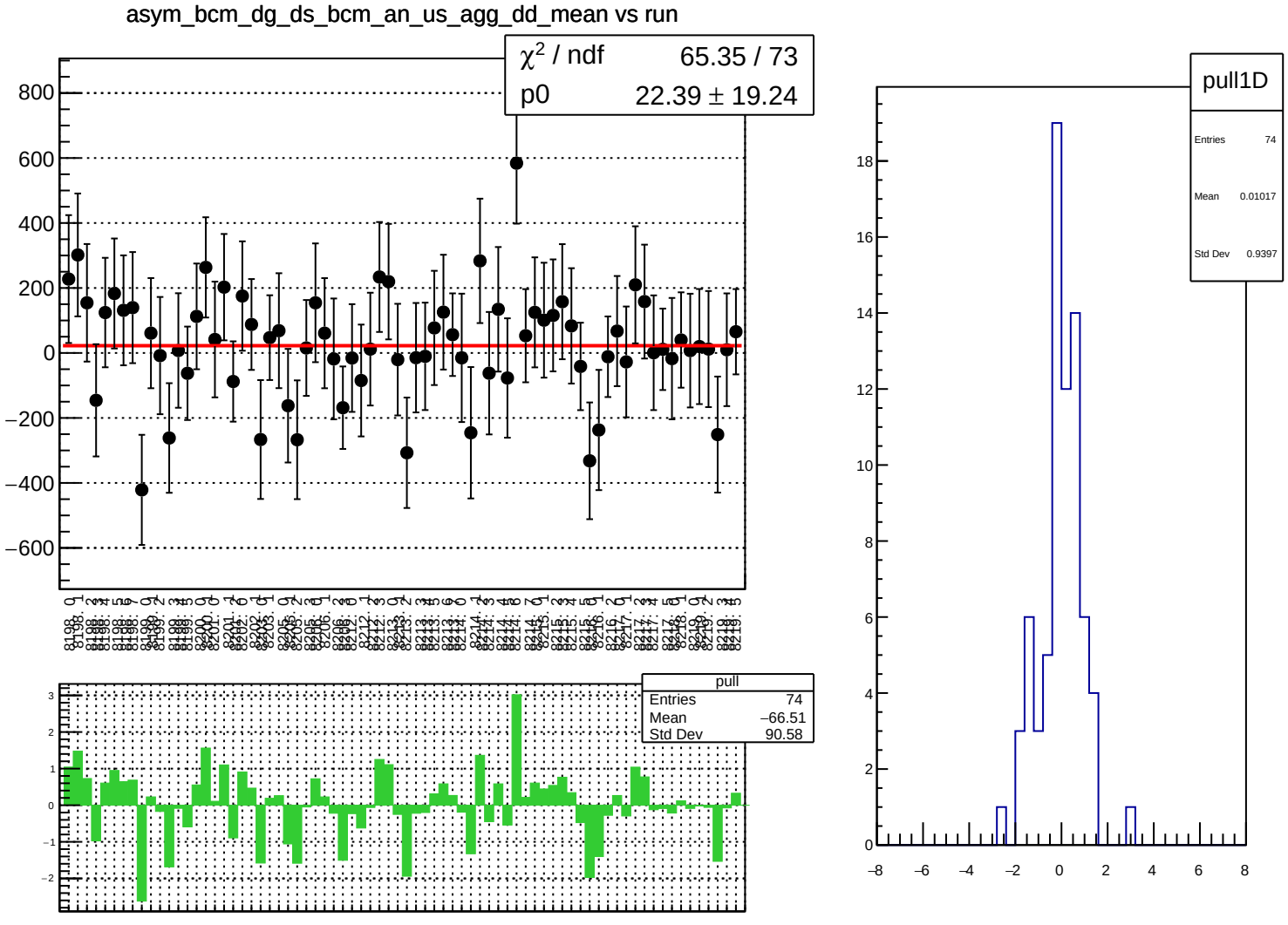

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 4808 / 73
p0 184.5 ± 0.1507
210
200
190
180
170
160

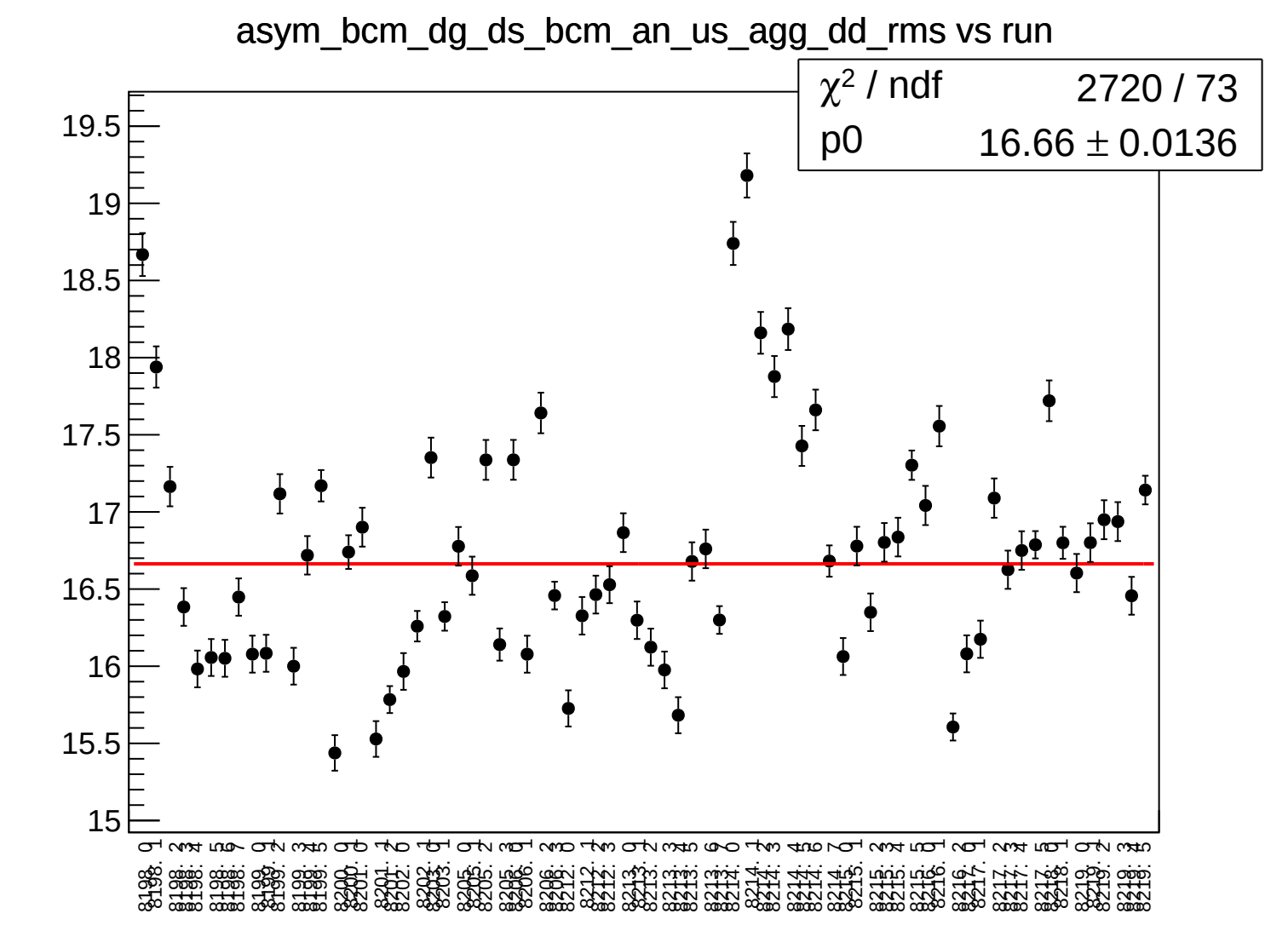

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 82.4 / 73
p0 −2.155 ± 25.32
pull
Entries 74
Mean −60.41
Std Dev 94.51
pull1D
Entries 74
Mean −0.01131
Std Dev 1.055

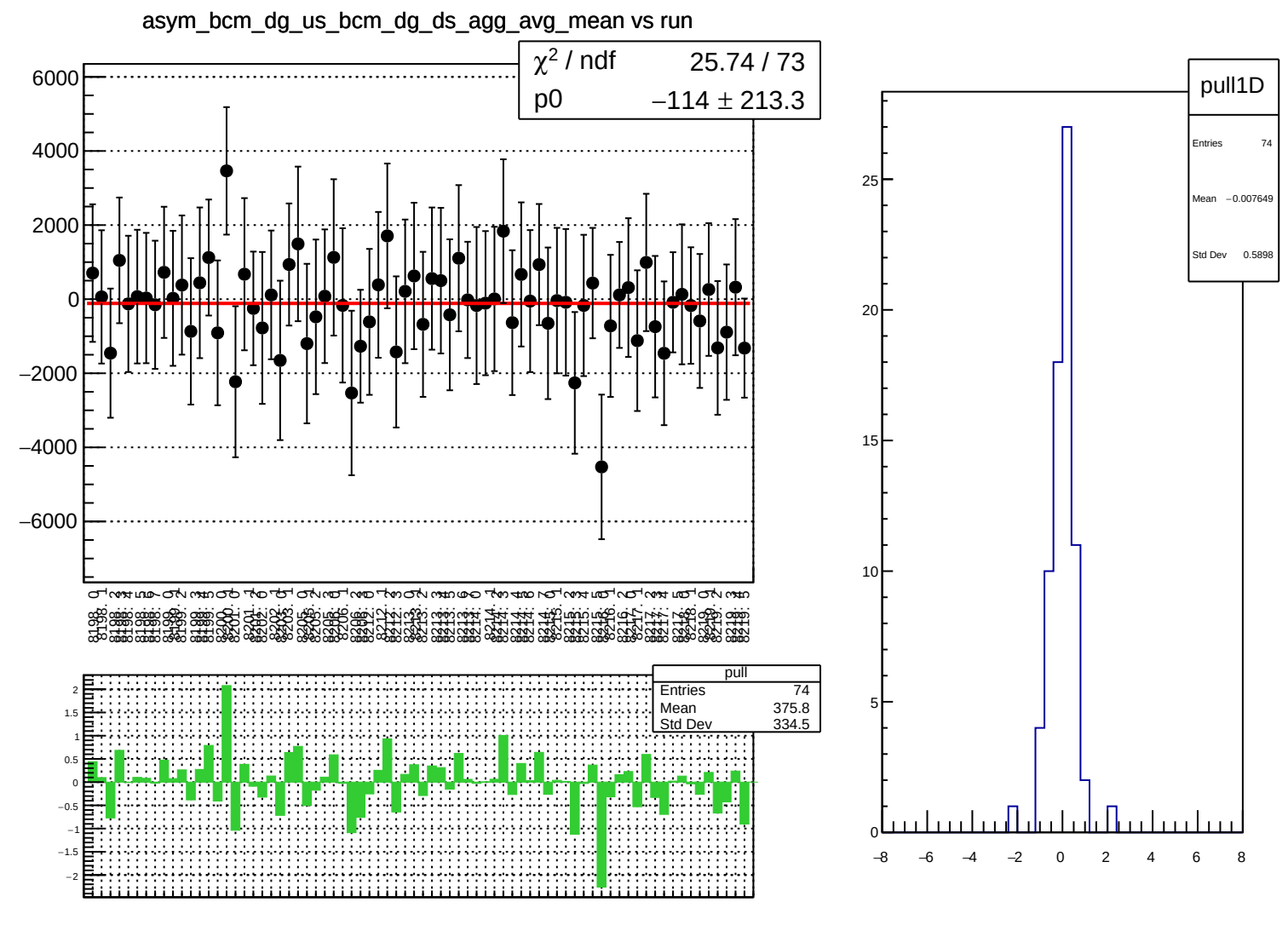

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 1117 / 73
p0 21.94 ± 0.0179
24.5
24
23.5
23
22.5
22
21.5
21
20.5

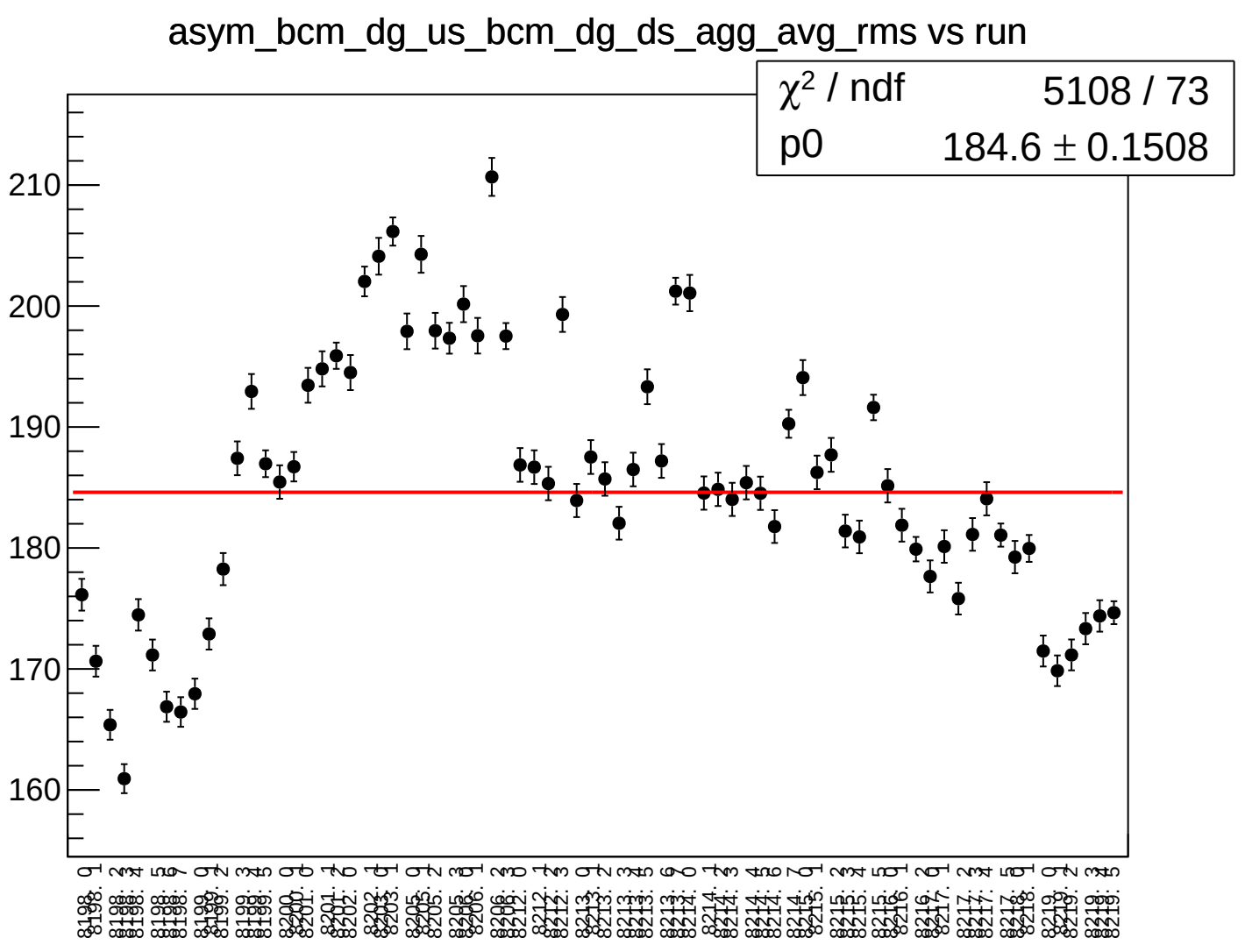

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 24.22 / 73
p0 −116 ± 212.4
pull
Entries 74
Mean 551.5
Std Dev 510.5
pull1D
Entries 74
Mean −0.005233
Std Dev 0.5721

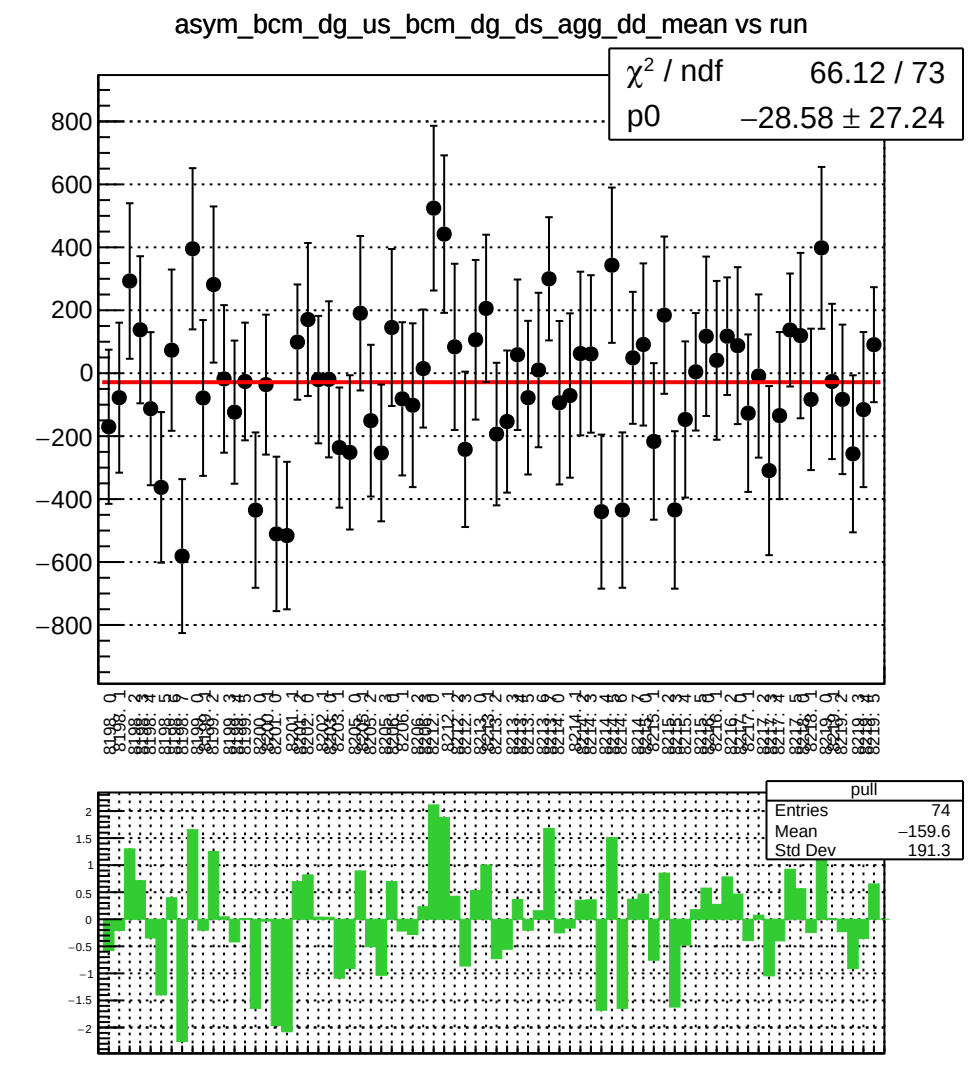

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 4681 / 73
p0 183.9 ± 0.1502
210
200
190
180
170
160

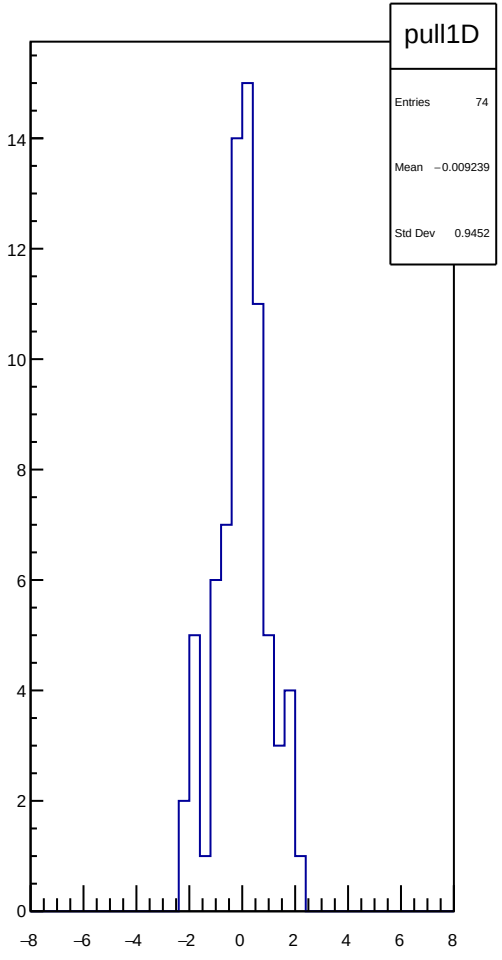

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 65.35 / 73
p0 22.39 ± 19.24
pull
Entries 74
Mean −66.51
Std Dev 90.58
pull1D
Entries 74
Mean 0.01017
Std Dev 0.9397

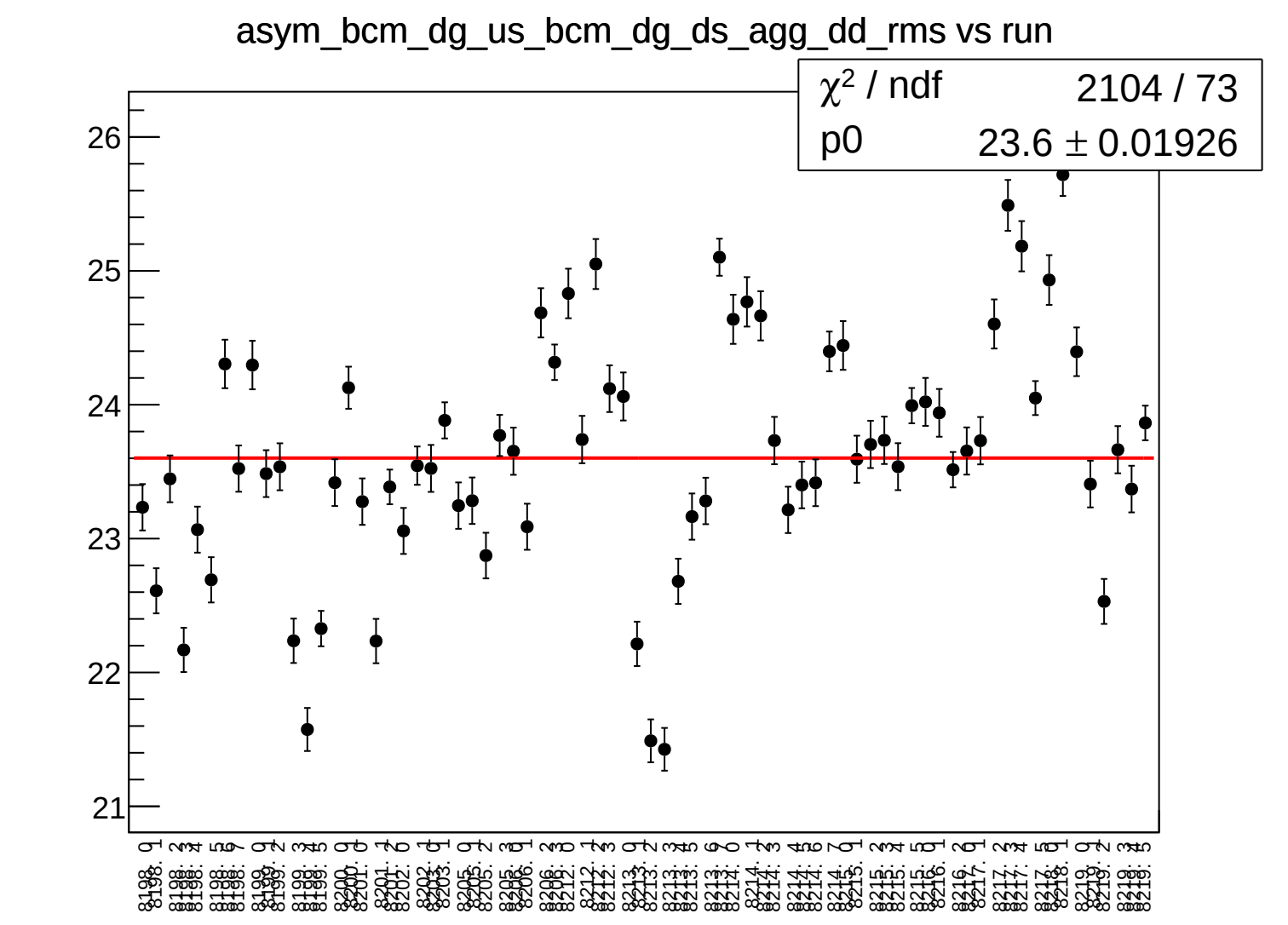

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2720 / 73
p0 16.66 ± 0.0136
19.5
19
18.5
18
17.5
17
16.5
16
15.5
15

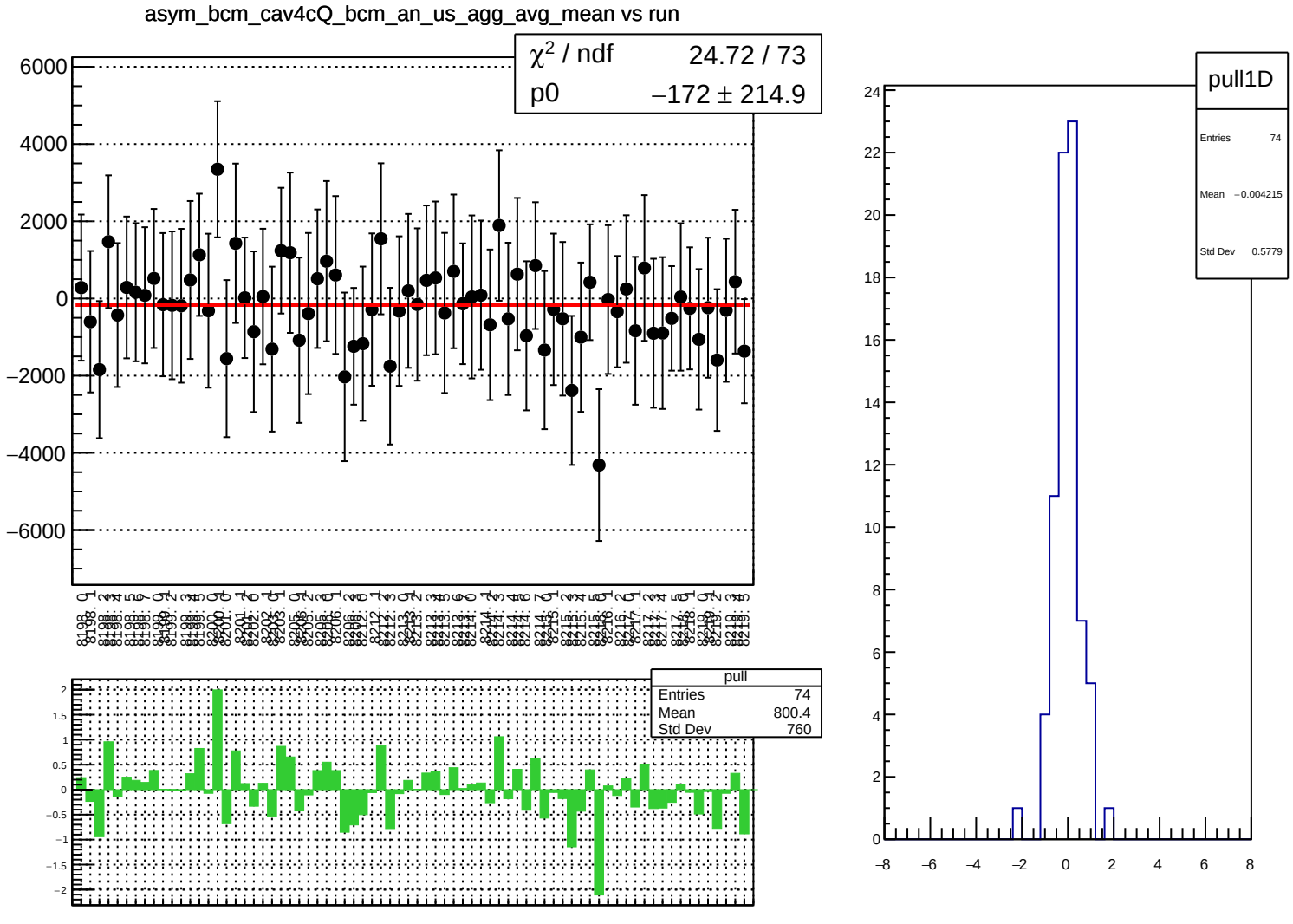

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 25.74 / 73
p0 −114 ± 213.3
pull
Entries 74
Mean 375.8
Std Dev 334.5
pull1D
Entries 74
Mean −0.007649
Std Dev 0.5898

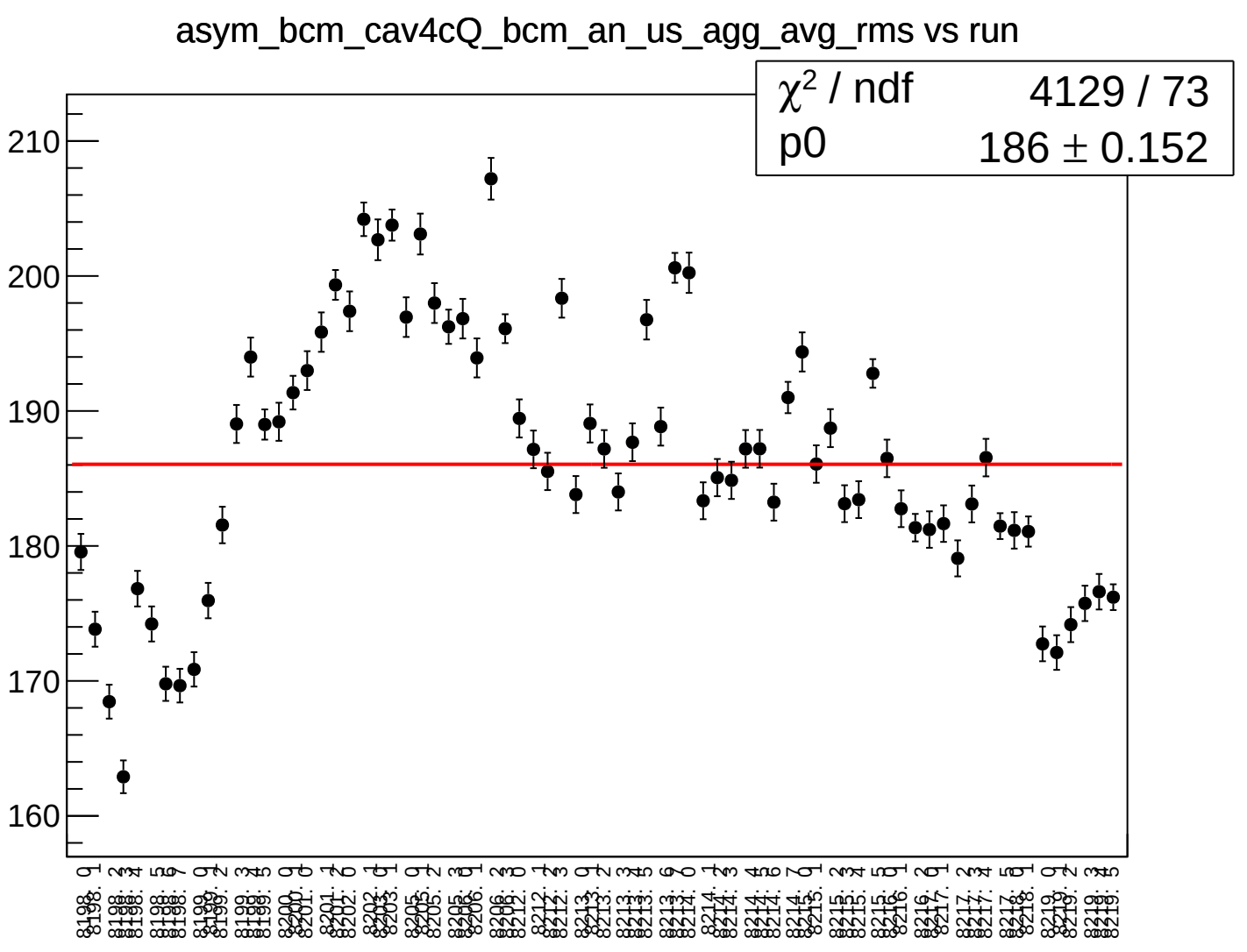

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 5108 / 73
p0 184.6 ± 0.1508
210
200
190
180
170
160

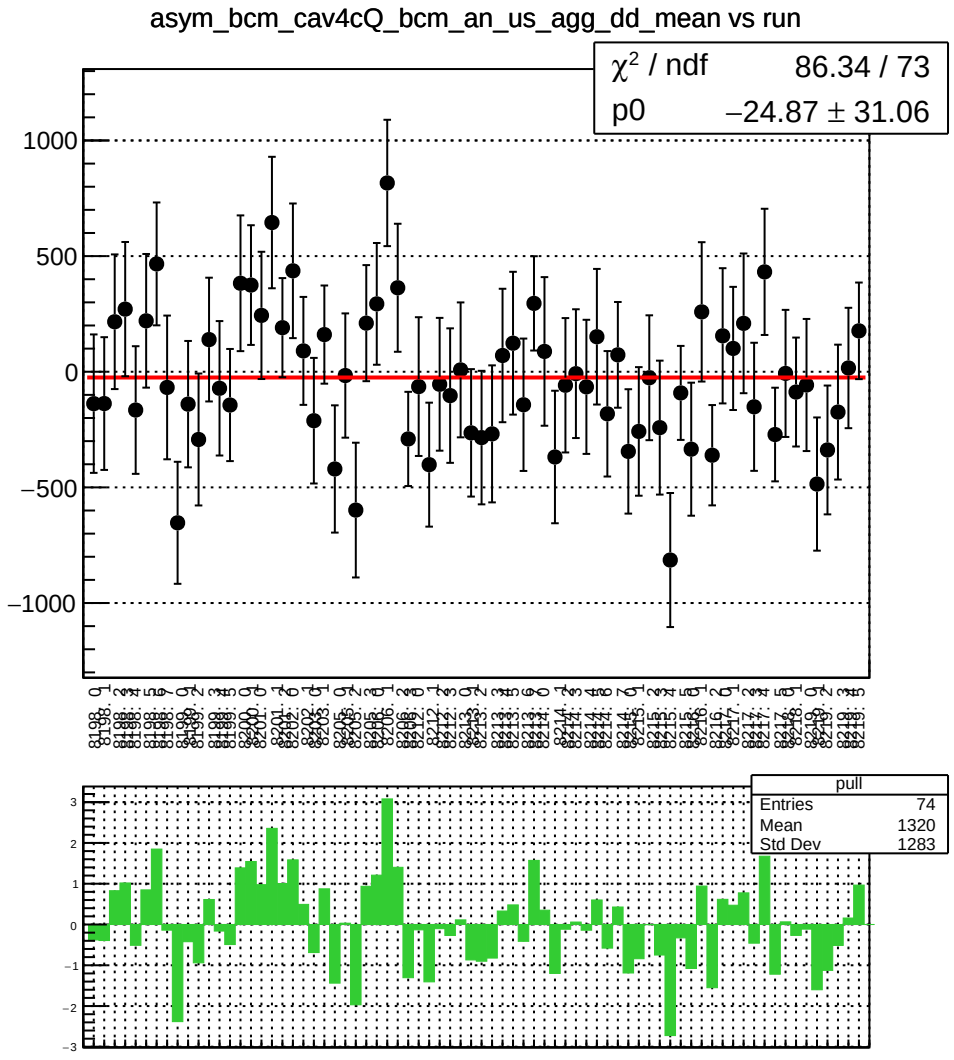

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 66.12 / 73
p0 −28.58 ± 27.24
pull
Entries 74
Mean −159.6
Std Dev 191.3

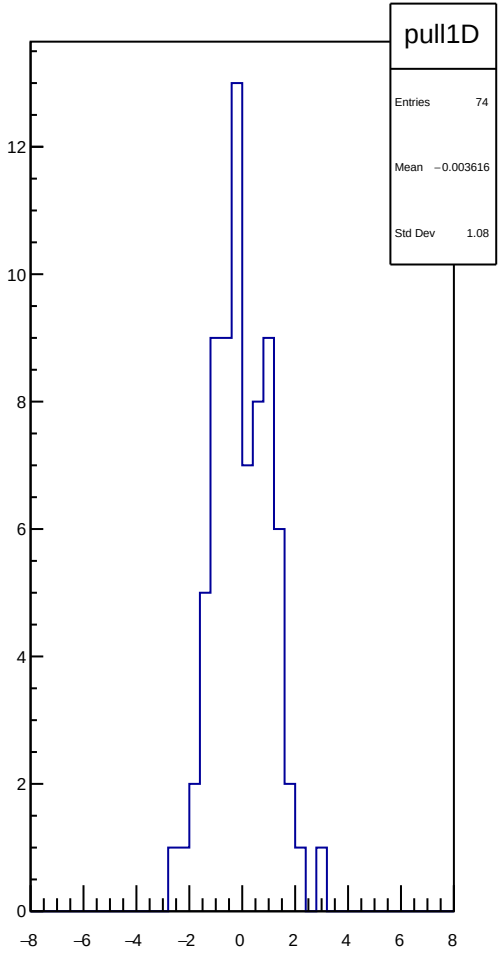

pull1D
Entries 74
Mean −0.009239
Std Dev 0.9452

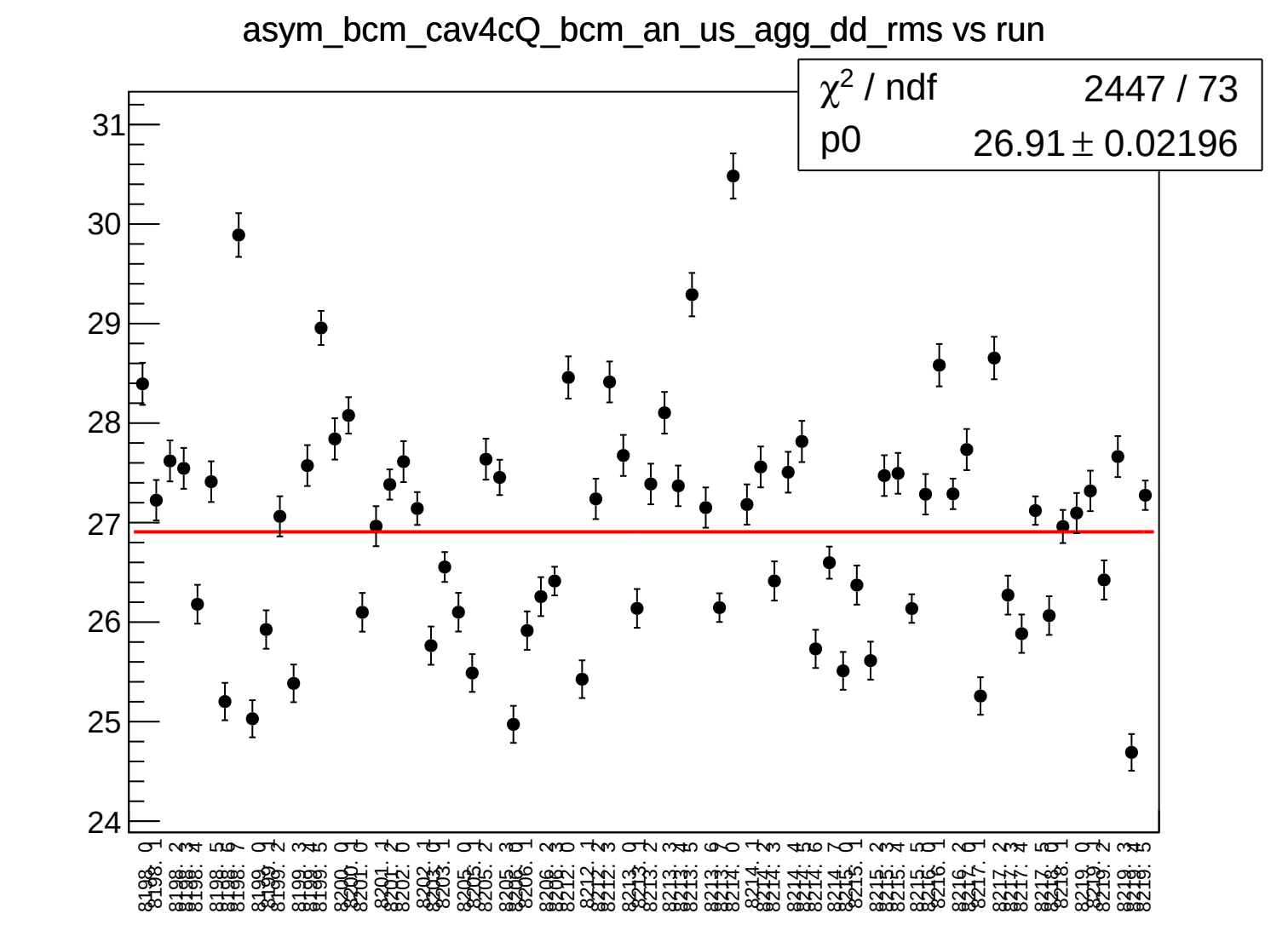

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 2104 / 73
p0 23.6 ± 0.01926
26
25
24
23
22
21

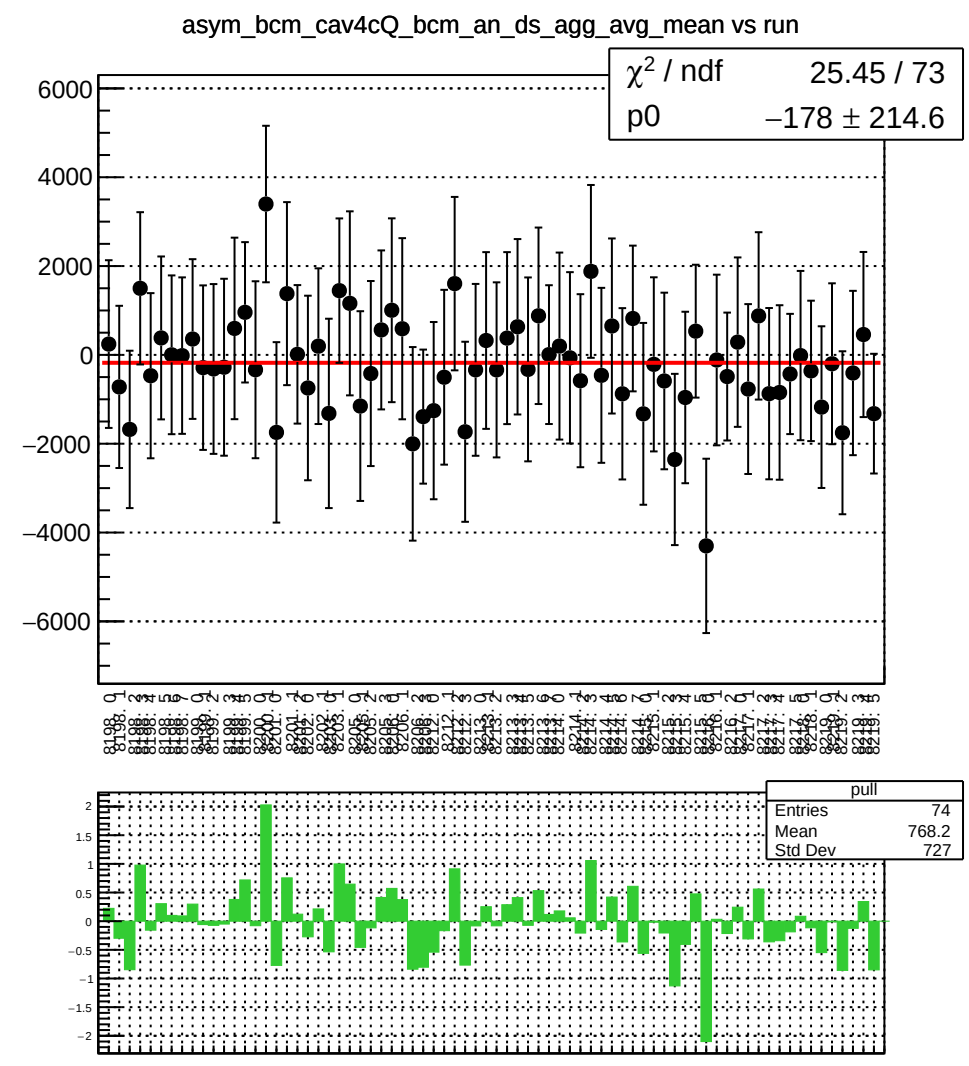

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 24.72 / 73
p0 −172 ± 214.9
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 800.4
Std Dev 760
pull1D
Entries 74
Mean −0.004215
Std Dev 0.5779

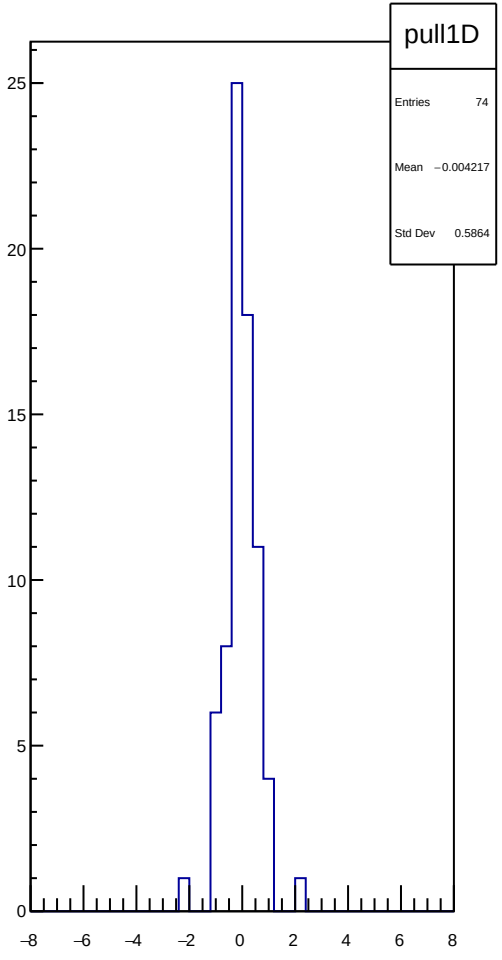

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 4129 / 73
p0 186 ± 0.152
210
200
190
180
170
160

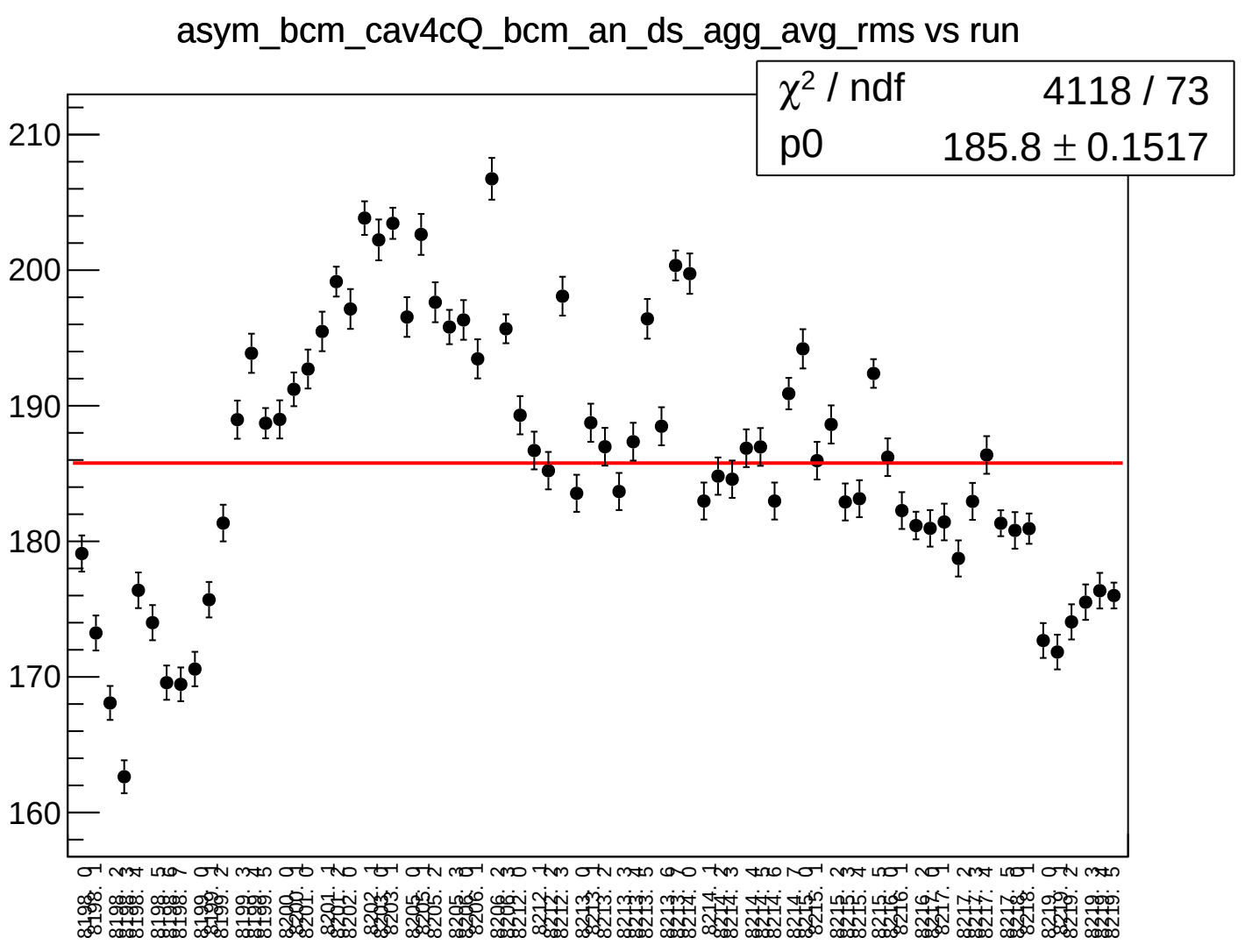

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 86.34 / 73
p0 −24.87 ± 31.06
1000
500
0
−500
−1000
pull
Entries 74
Mean 1320
Std Dev 1283
3
2
1
0
−1
−2
−3

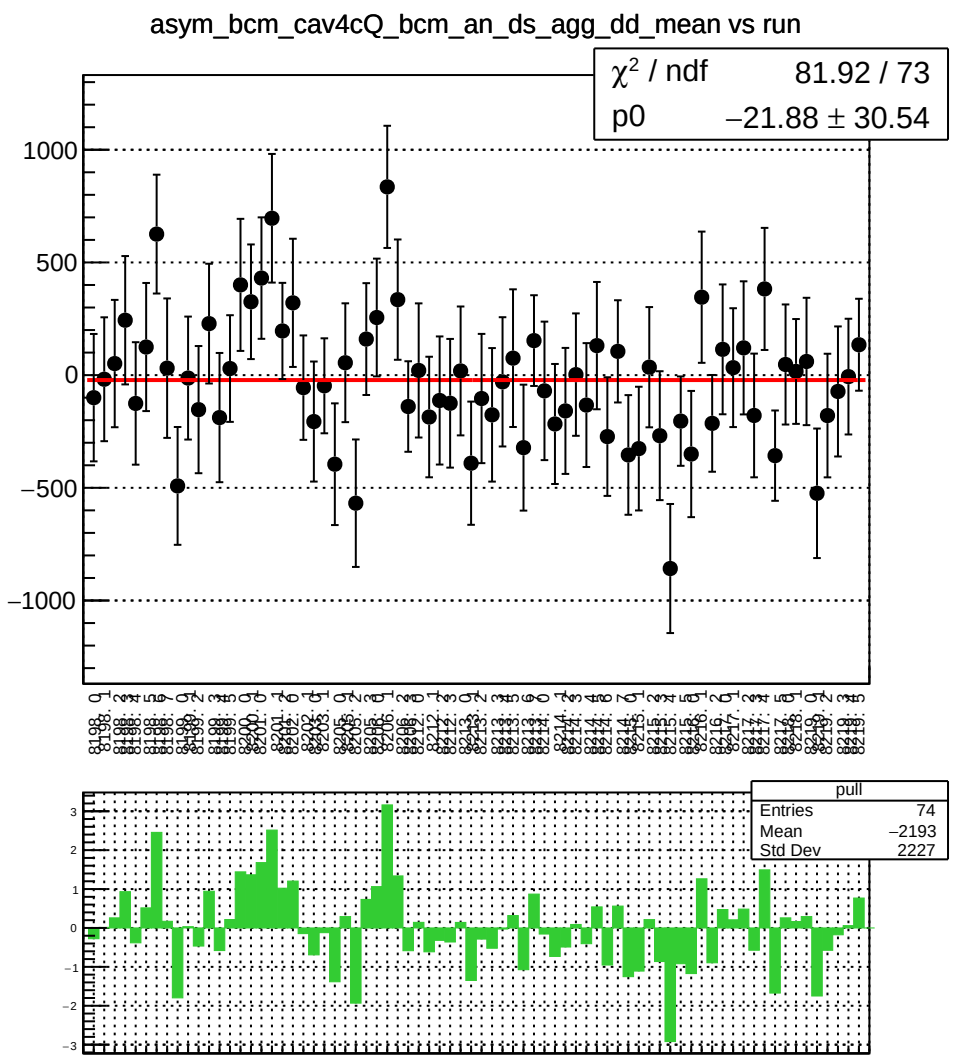

pull1D
Entries 74
Mean −0.003616
Std Dev 1.08
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

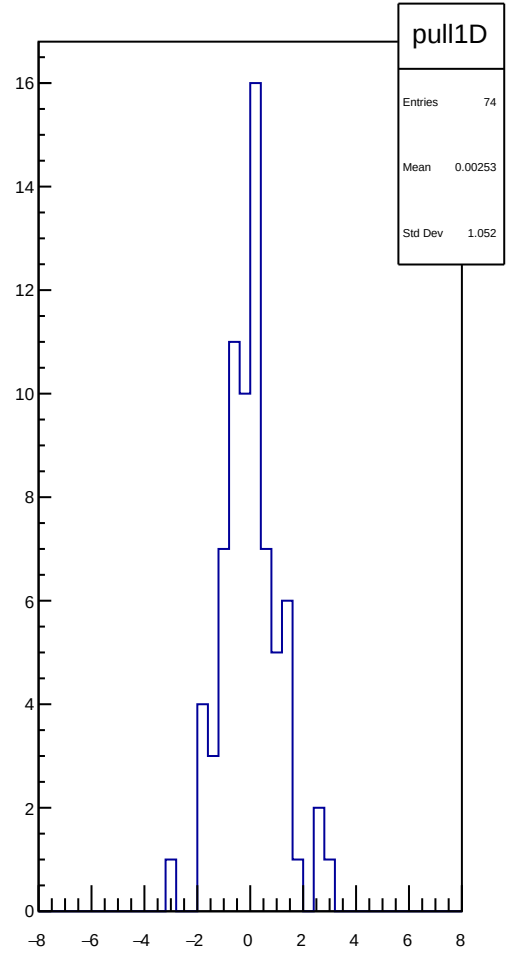

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 2447 / 73
p0 26.91 ± 0.02196
31
30
29
28
27
26
25
24

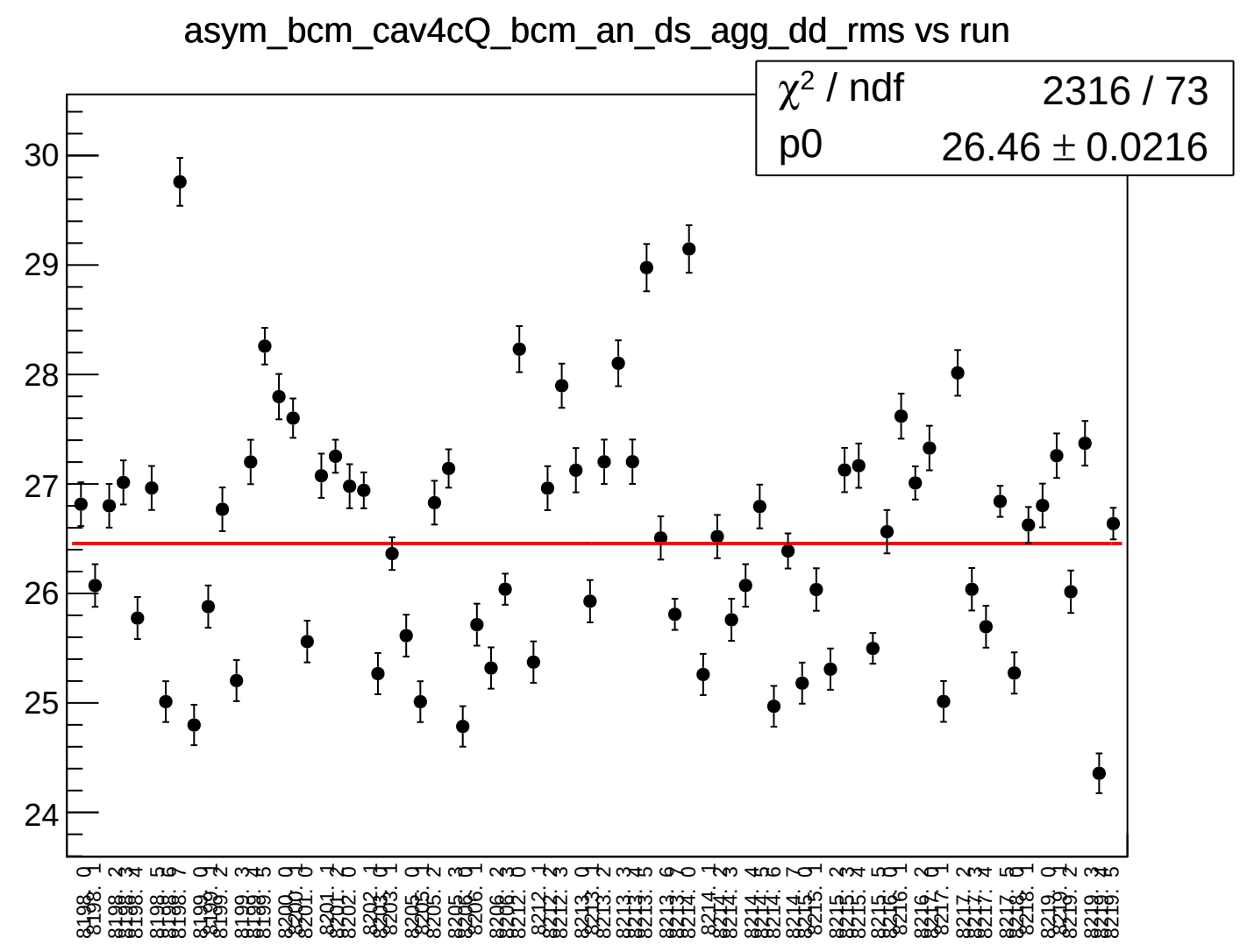

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 25.45 / 73
p0 −178 ± 214.6
pull
Entries 74
Mean 768.2
Std Dev 727

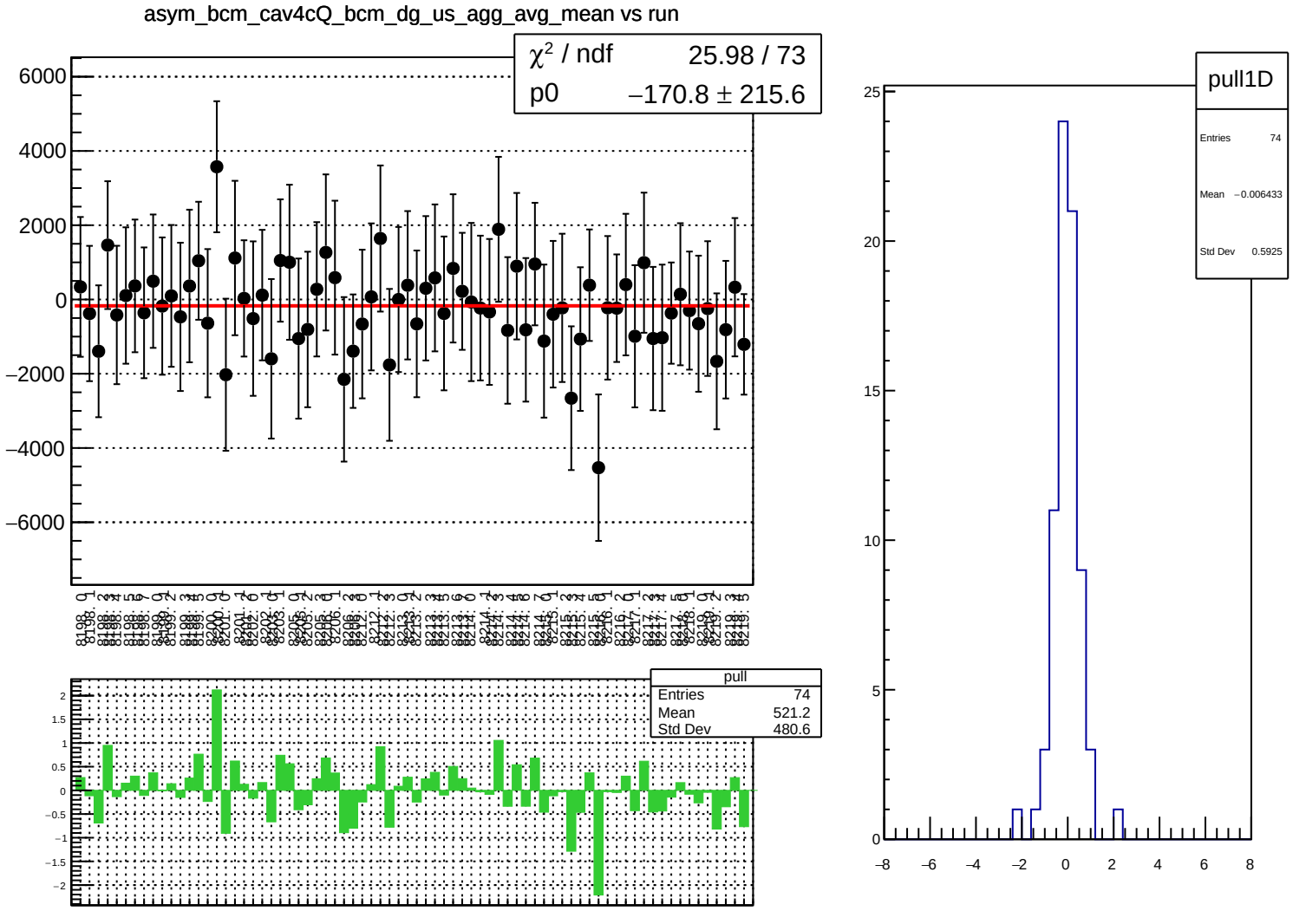

pull1D
Entries 74
Mean −0.004217
Std Dev 0.5864

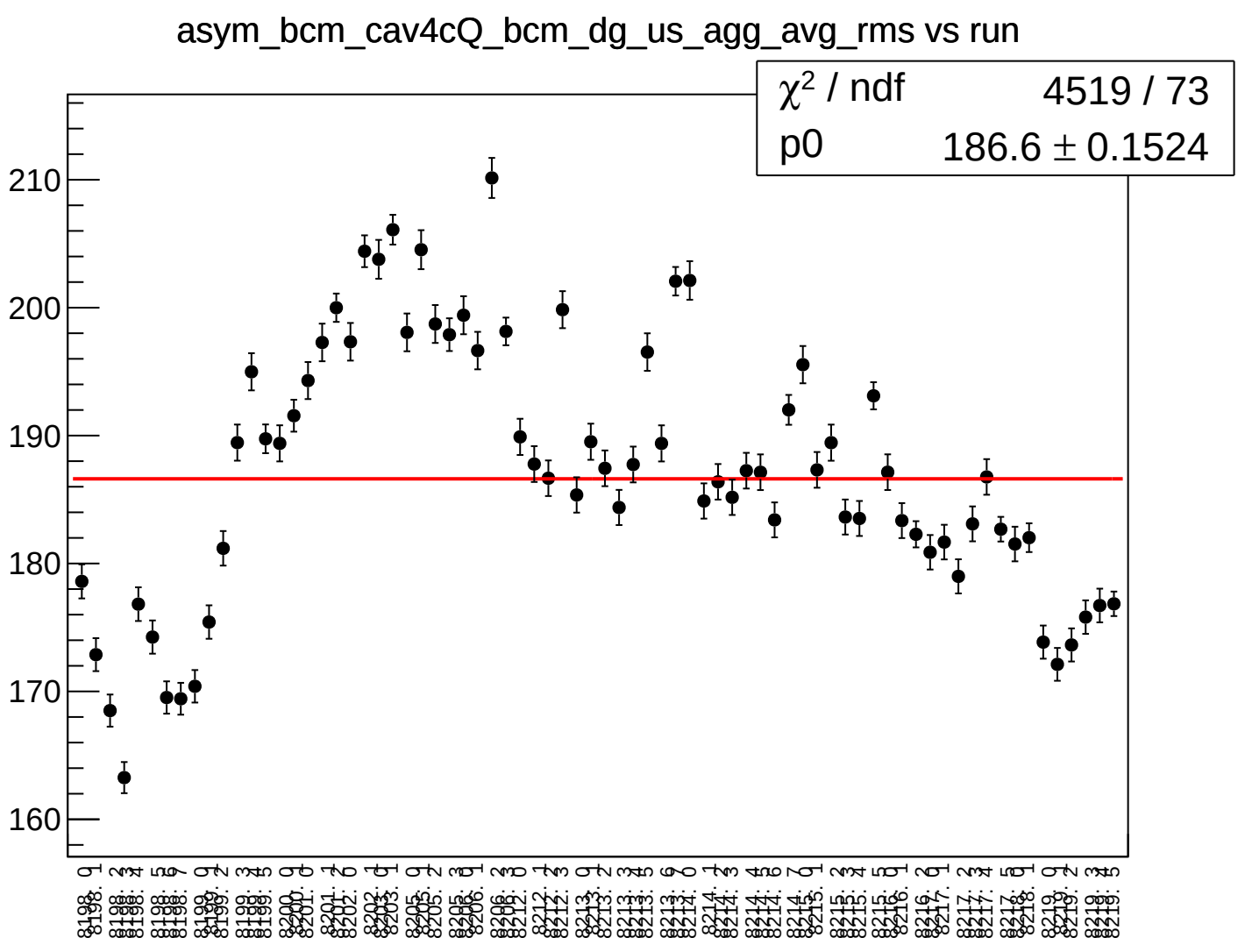

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 4118 / 73
p0 185.8 ± 0.1517
210
200
190
180
170
160

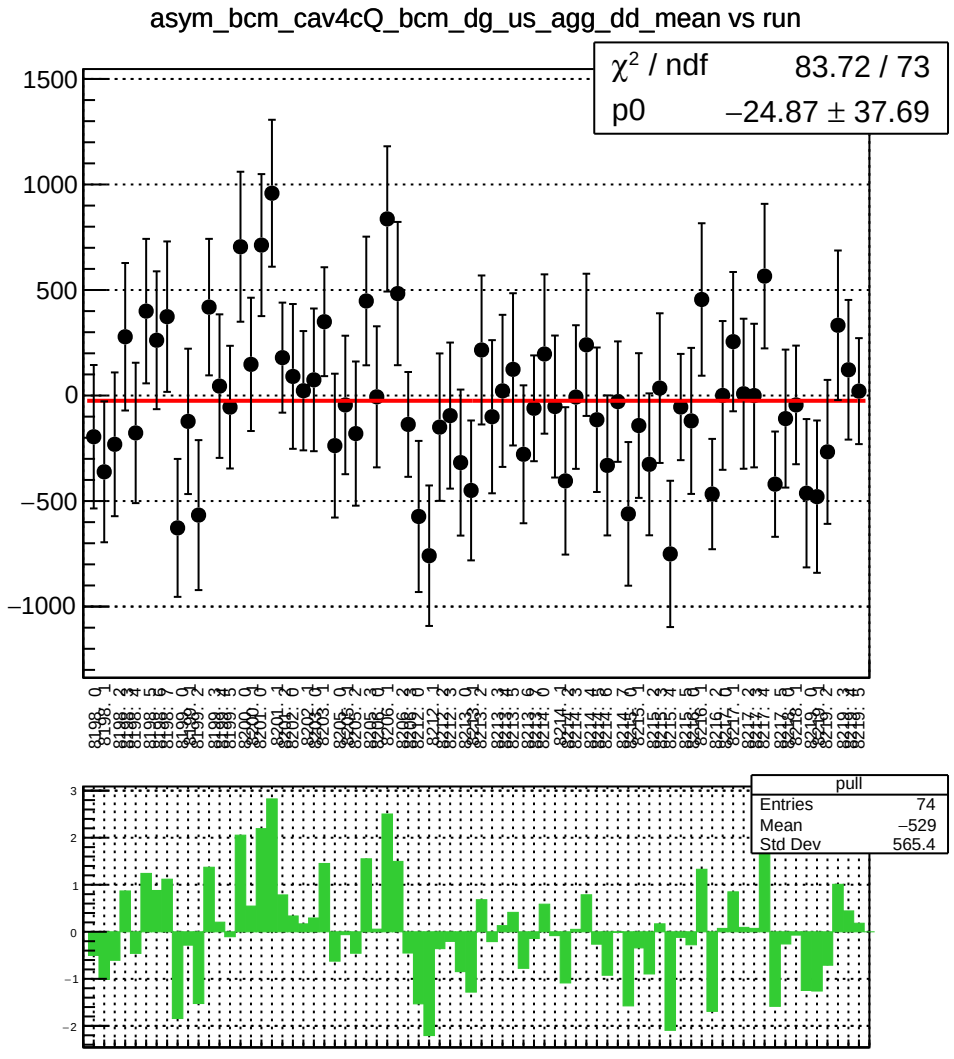

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 81.92 / 73
p0 −21.88 ± 30.54
1000
500
0
−500
−1000
pull
Entries 74
Mean −2193
Std Dev 2227
3
2
1
0
−1
−2
−3

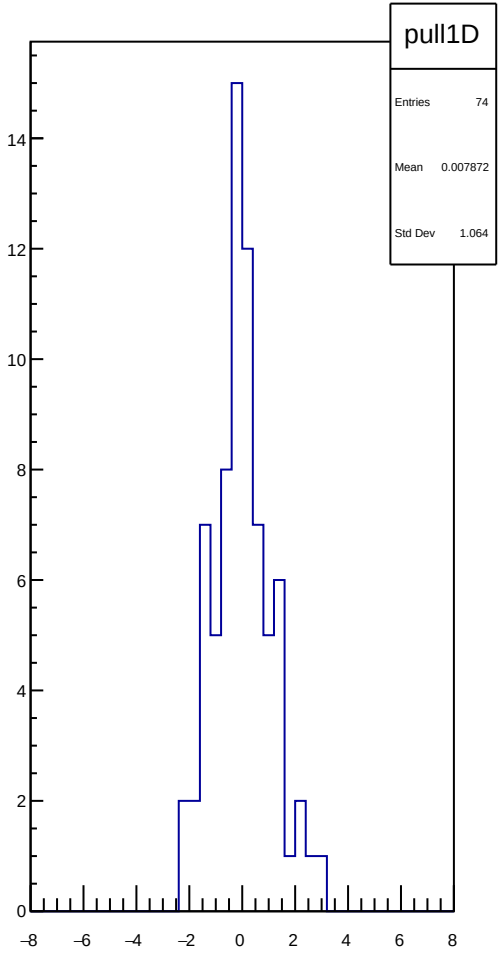

pull1D
Entries 74
Mean 0.00253
Std Dev 1.052
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

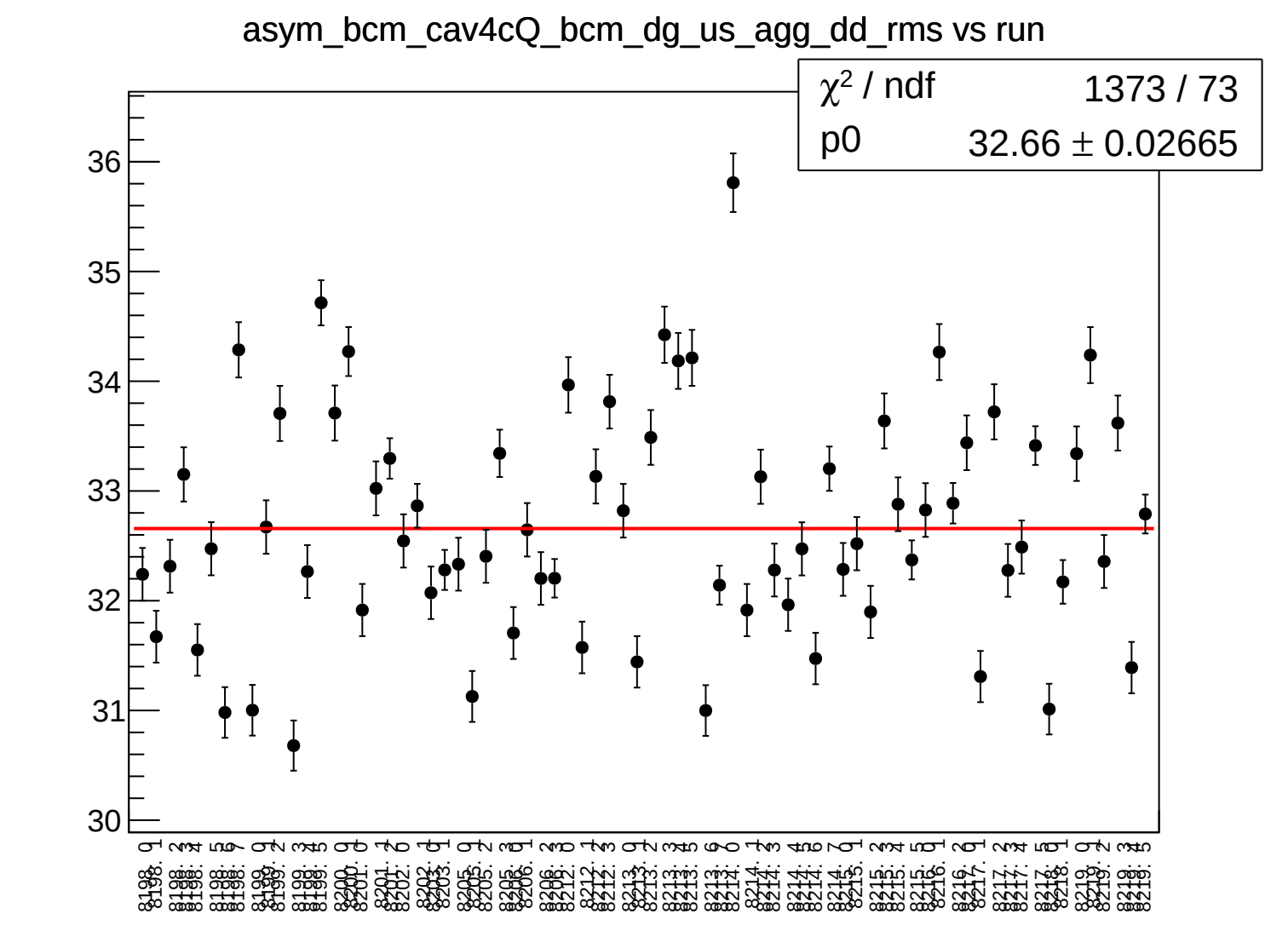

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 2316 / 73
p0 26.46 ± 0.0216
30
29
28
27
26
25
24

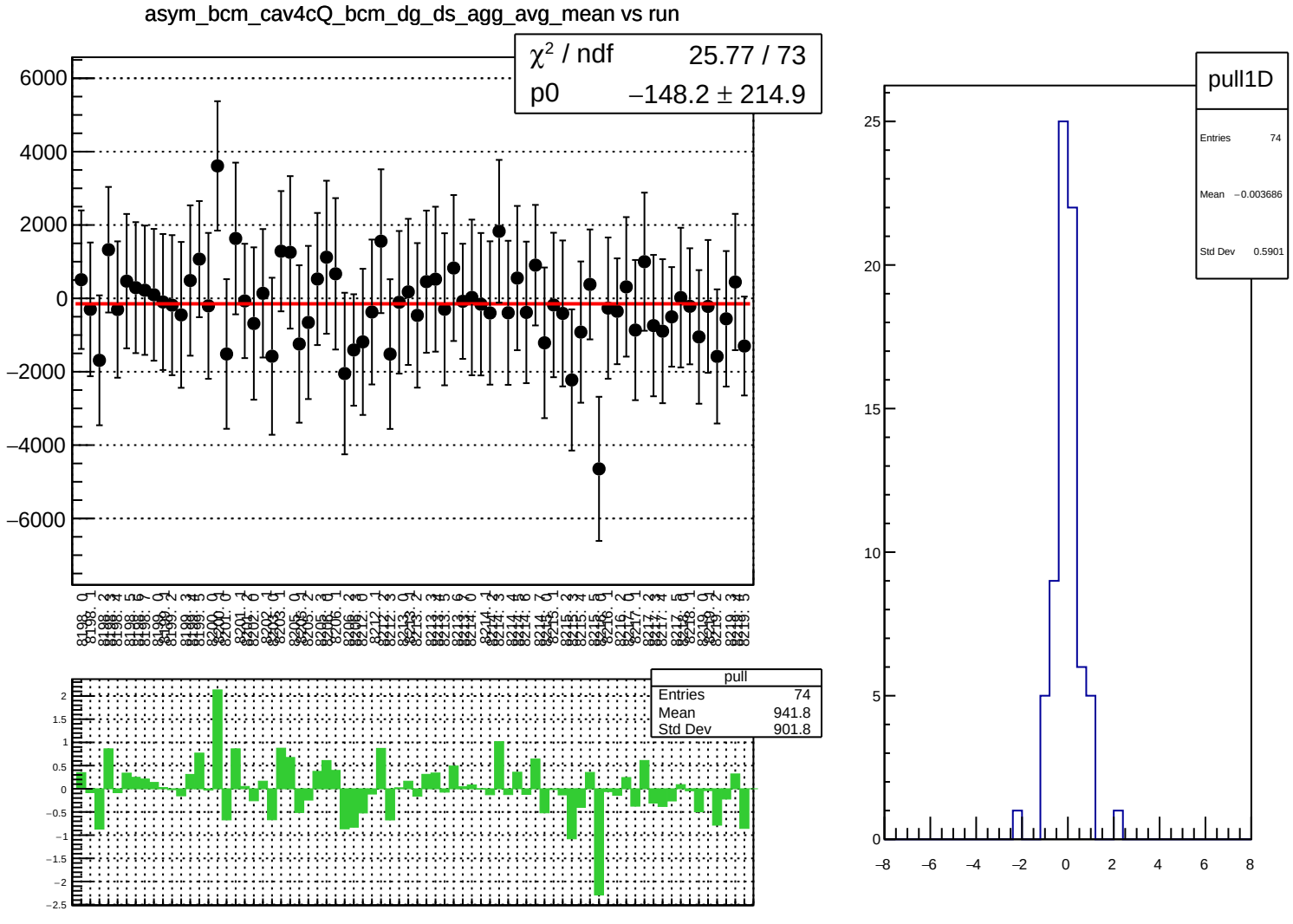

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 25.98 / 73
p0 −170.8 ± 215.6
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 521.2
Std Dev 480.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 74
Mean −0.006433
Std Dev 0.5925
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

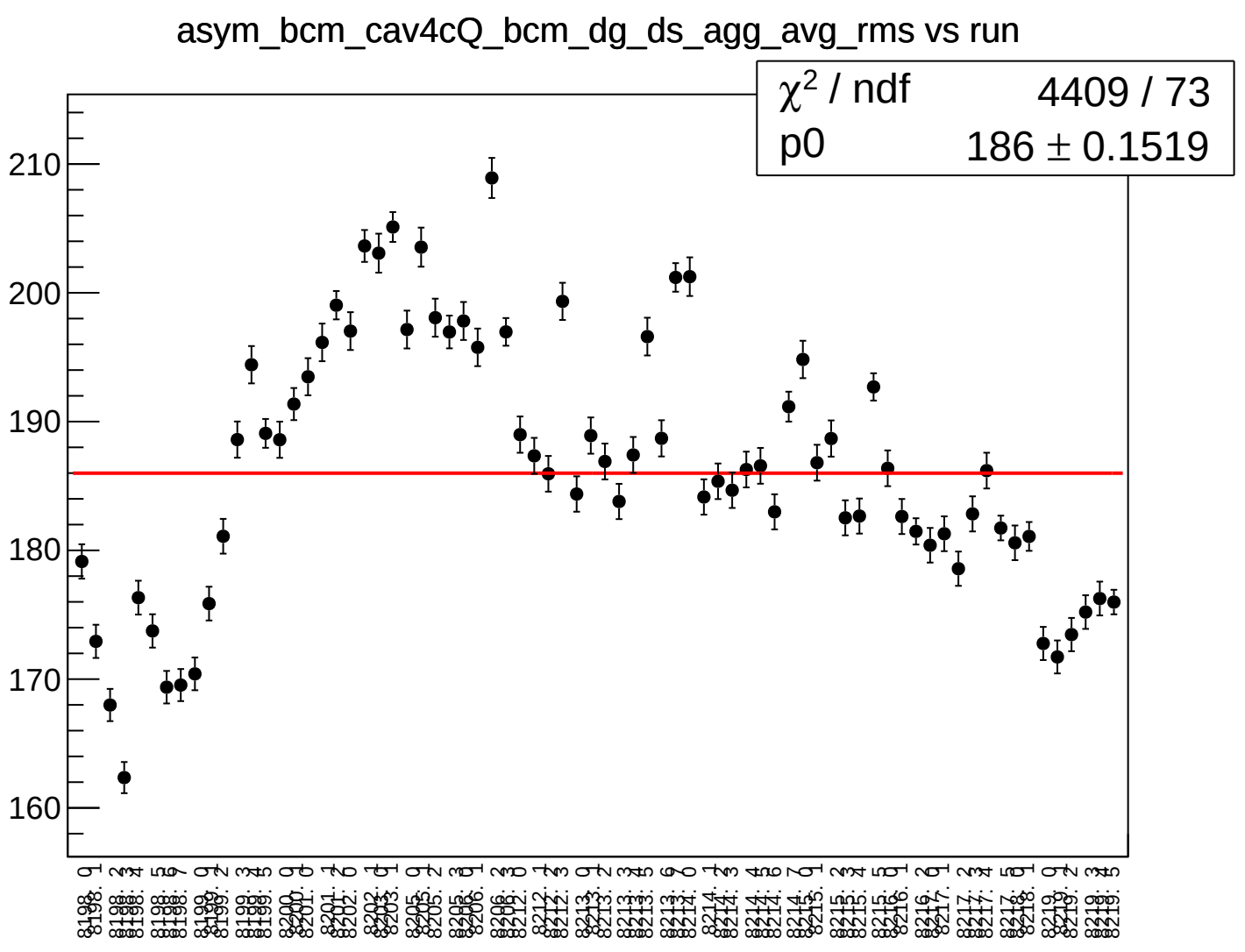

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 4519 / 73
p0 186.6 ± 0.1524
210
200
190
180
170
160

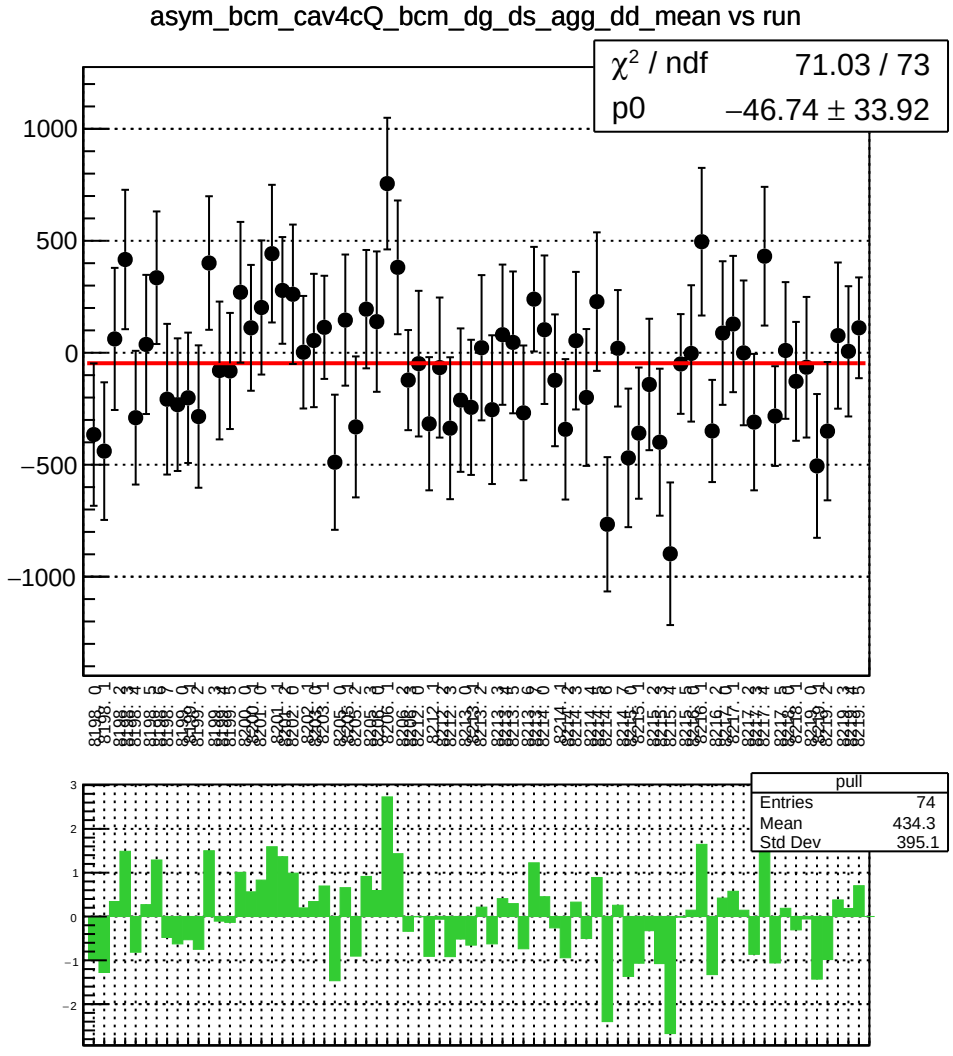

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 83.72 / 73
p0 −24.87 ± 37.69
pull
Entries 74
Mean −529
Std Dev 565.4

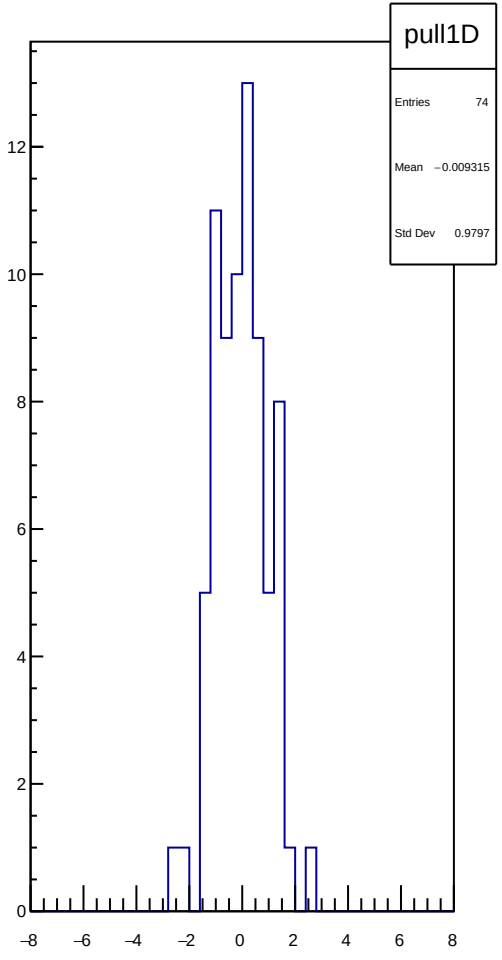

pull1D
Entries 74
Mean 0.007872
Std Dev 1.064

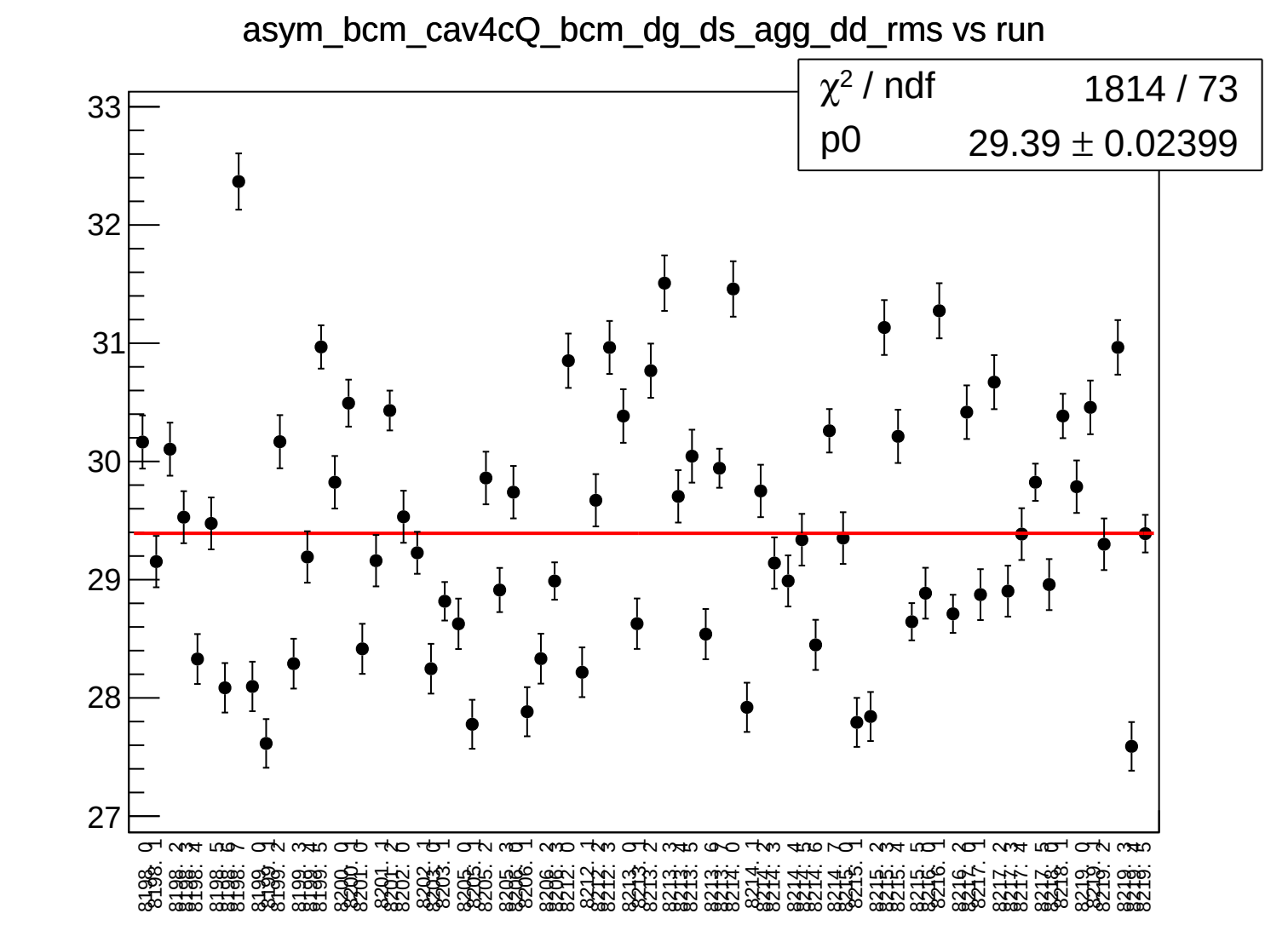

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 1373 / 73
p0 32.66 ± 0.02665
36
35
34
33
32
31
30

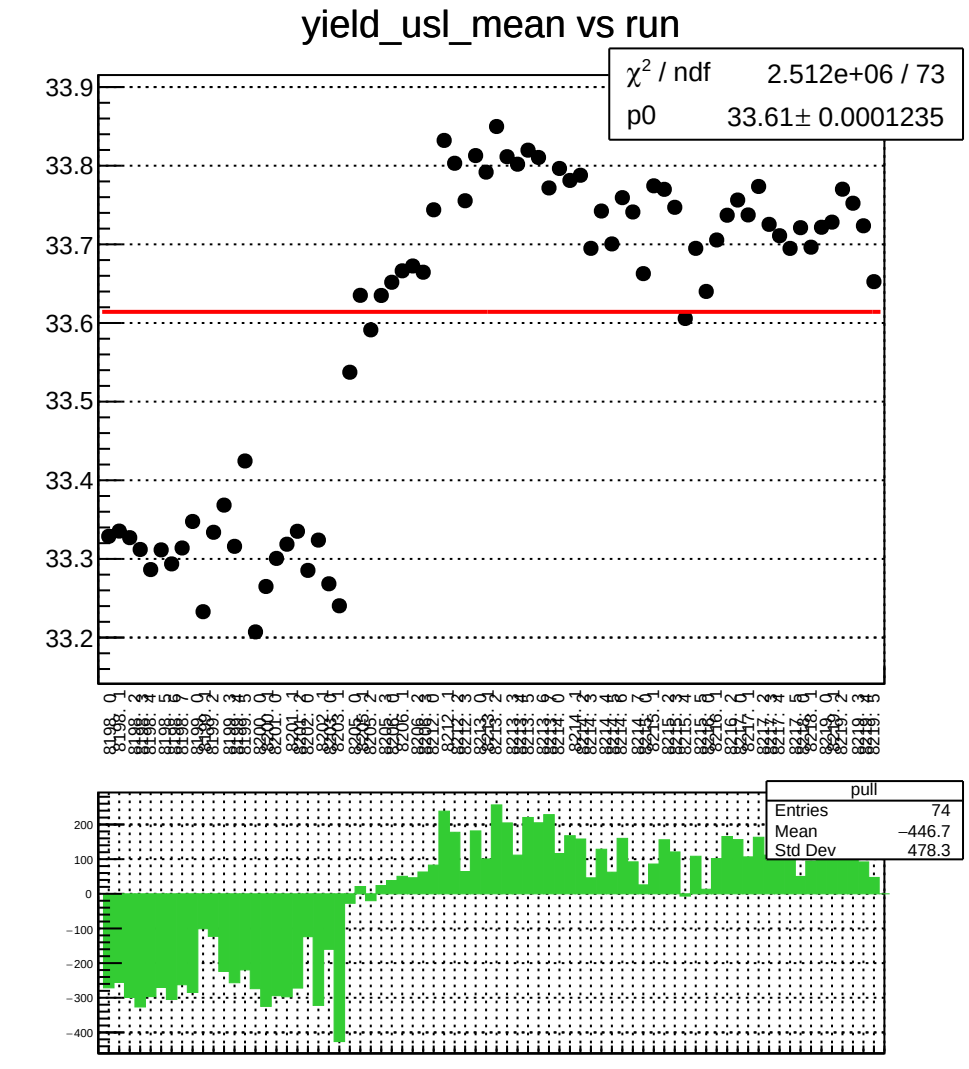

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 25.77 / 73
p0 −148.2 ± 214.9
pull
Entries 74
Mean 941.8
Std Dev 901.8
pull1D
Entries 74
Mean −0.003686
Std Dev 0.5901

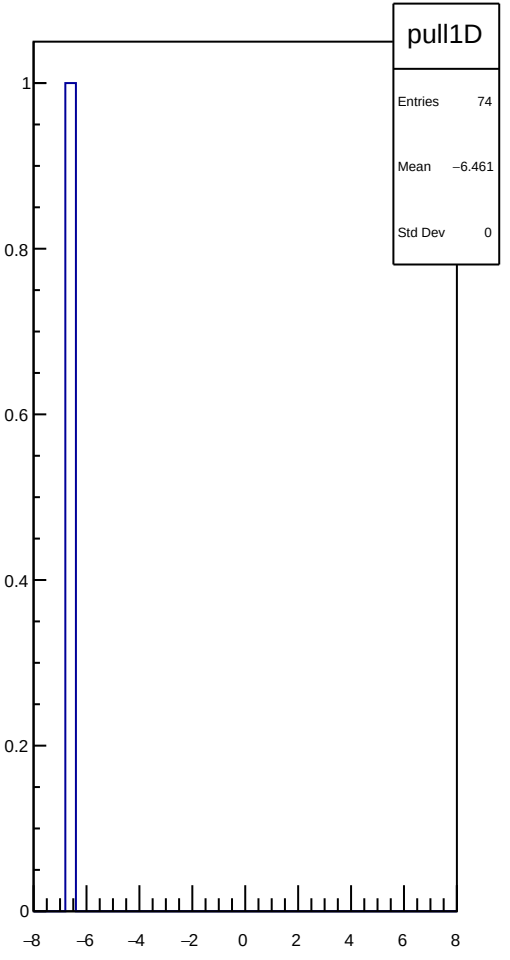

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 4409 / 73
p0 186 ± 0.1519
210
200
190
180
170
160

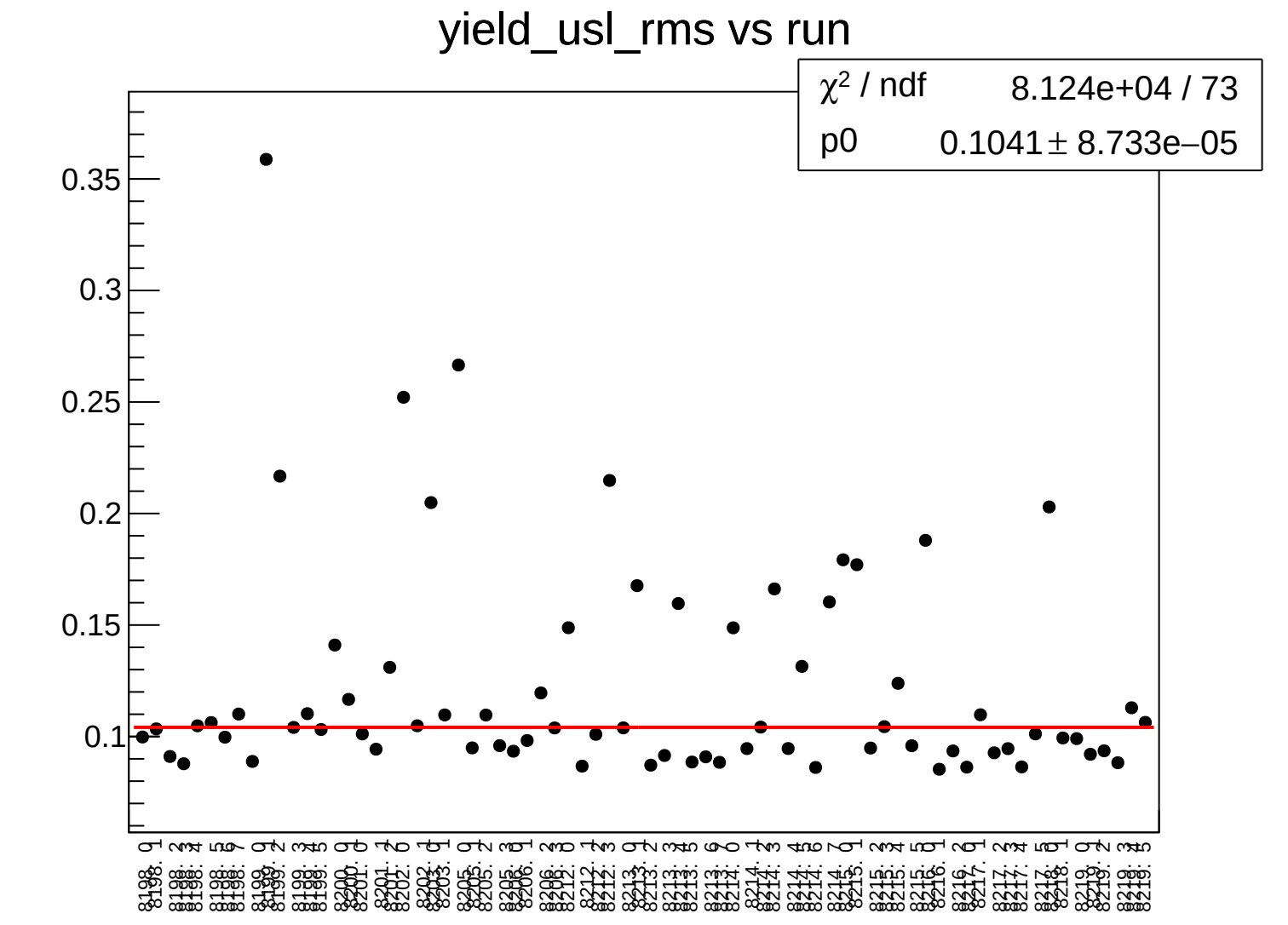

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 71.03 / 73
p0 −46.74 ± 33.92
1000
500
0
−500
−1000
pull
Entries 74
Mean 434.3
Std Dev 395.1
3
2
1
0
−1
−2

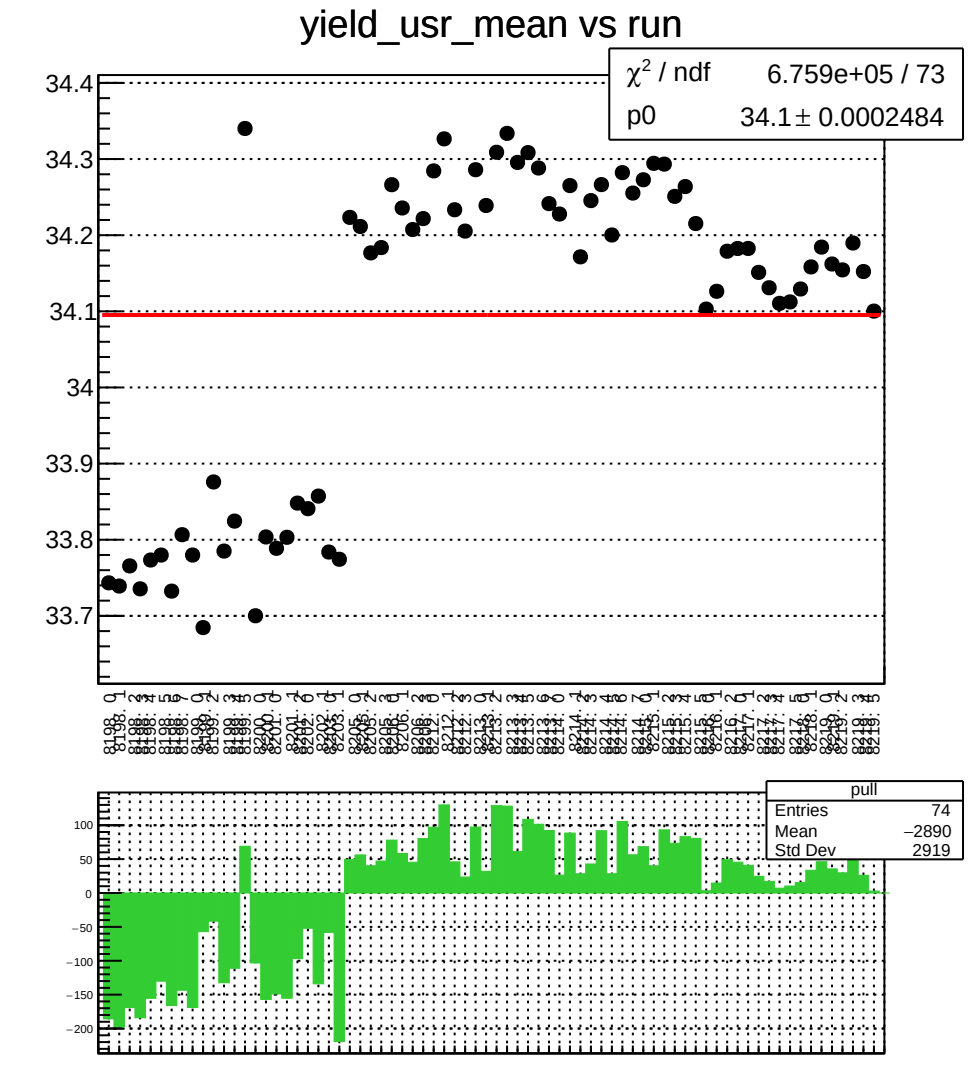

pull1D
Entries 74
Mean −0.009315
Std Dev 0.9797
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

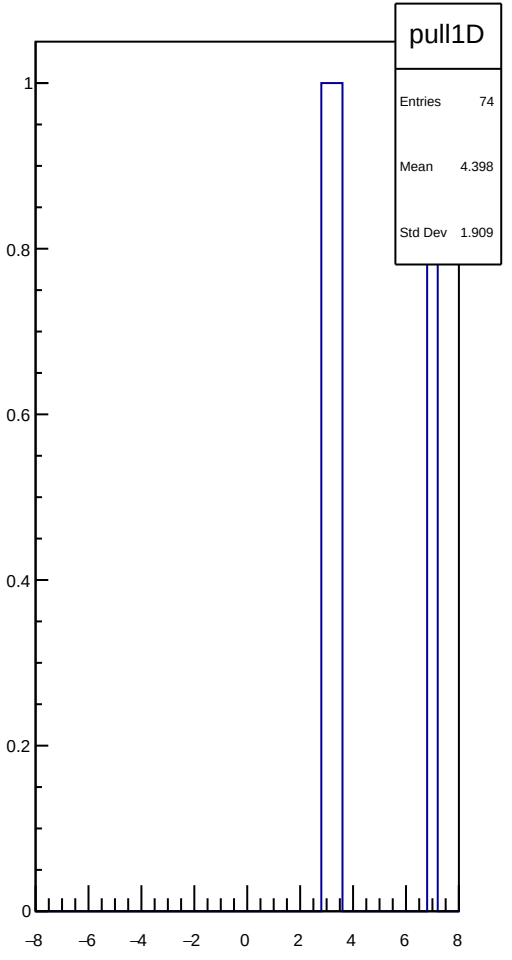

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 1814 / 73
p0 29.39 ± 0.02399
33
32
31
30
29
28
27

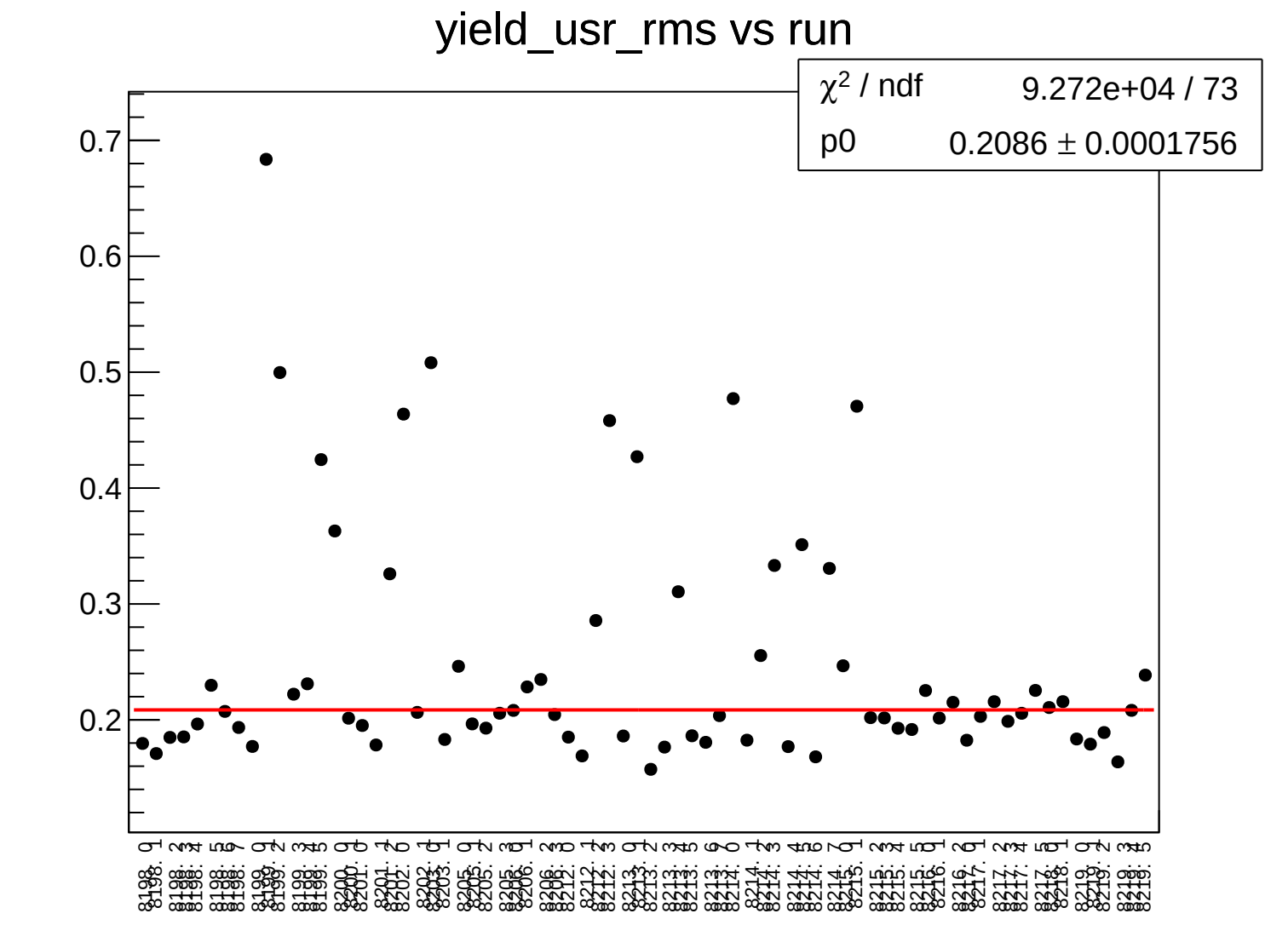

yield_usl_mean vs run
χ² / ndf 2.512e+06 / 73
p0 33.61± 0.0001235
33.9
33.8
33.7
33.6
33.5
33.4
33.3
33.2
pull
Entries 74
Mean −446.7
Std Dev 478.3
200
100
0
−100
−200
−300
−400

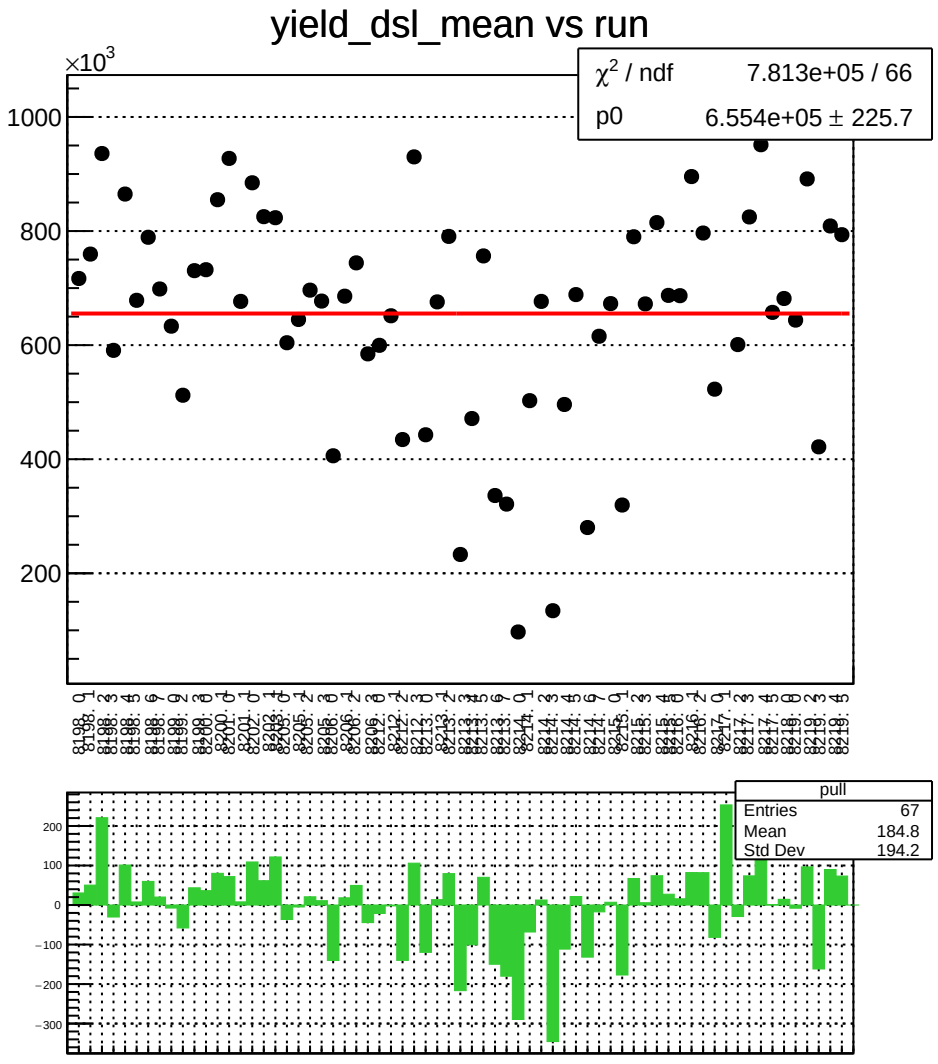

pull1D
Entries 74
Mean −6.461
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

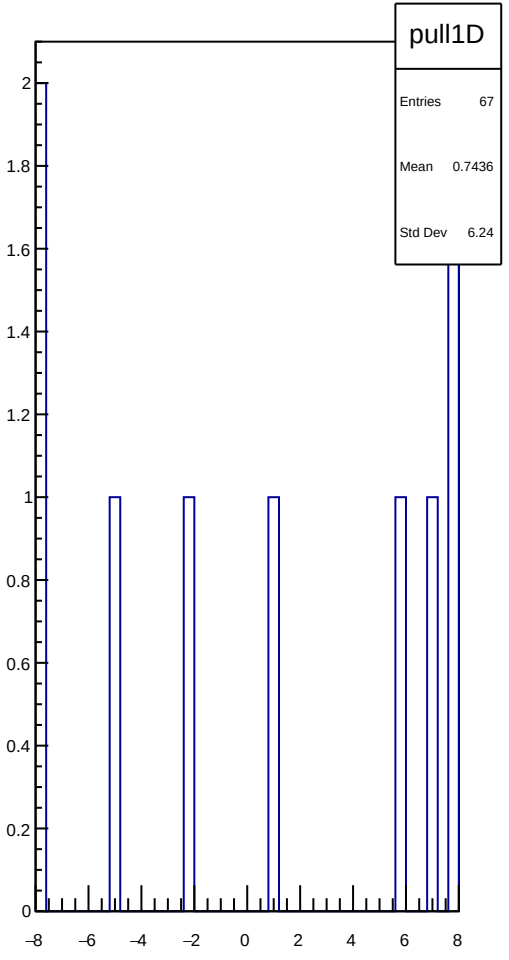

yield_usl_rms vs run
χ² / ndf 8.124e+04 / 73
p0 0.1041 ± 8.733e−05
0.35
0.3
0.25
0.2
0.15
0.1

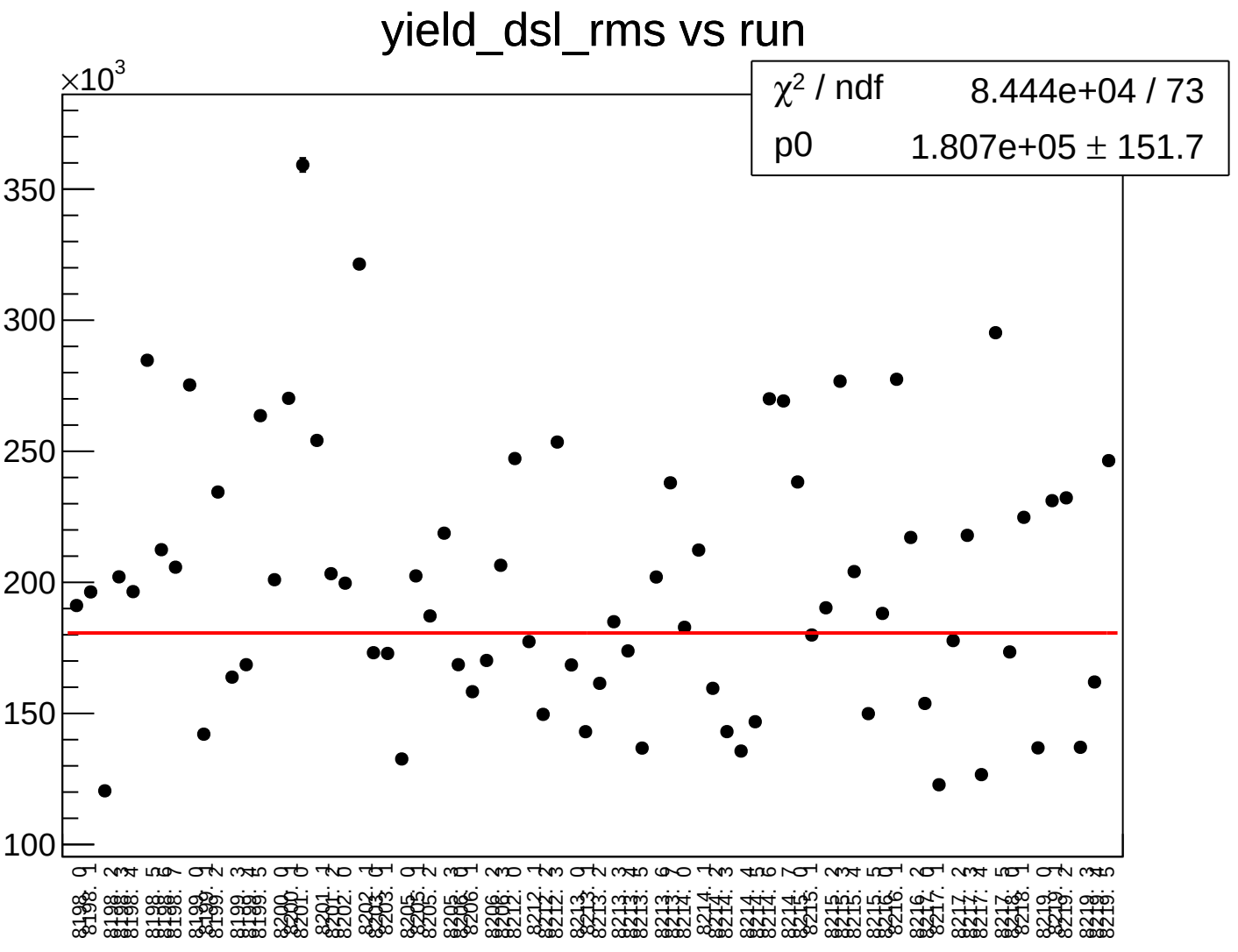

yield_usr_mean vs run
χ² / ndf 6.759e+05 / 73
p0 34.1 ± 0.0002484
34.4
34.3
34.2
34.1
34
33.9
33.8
33.7
pull
Entries 74
Mean −2890
Std Dev 2919
100
50
0
−50
−100
−150
−200

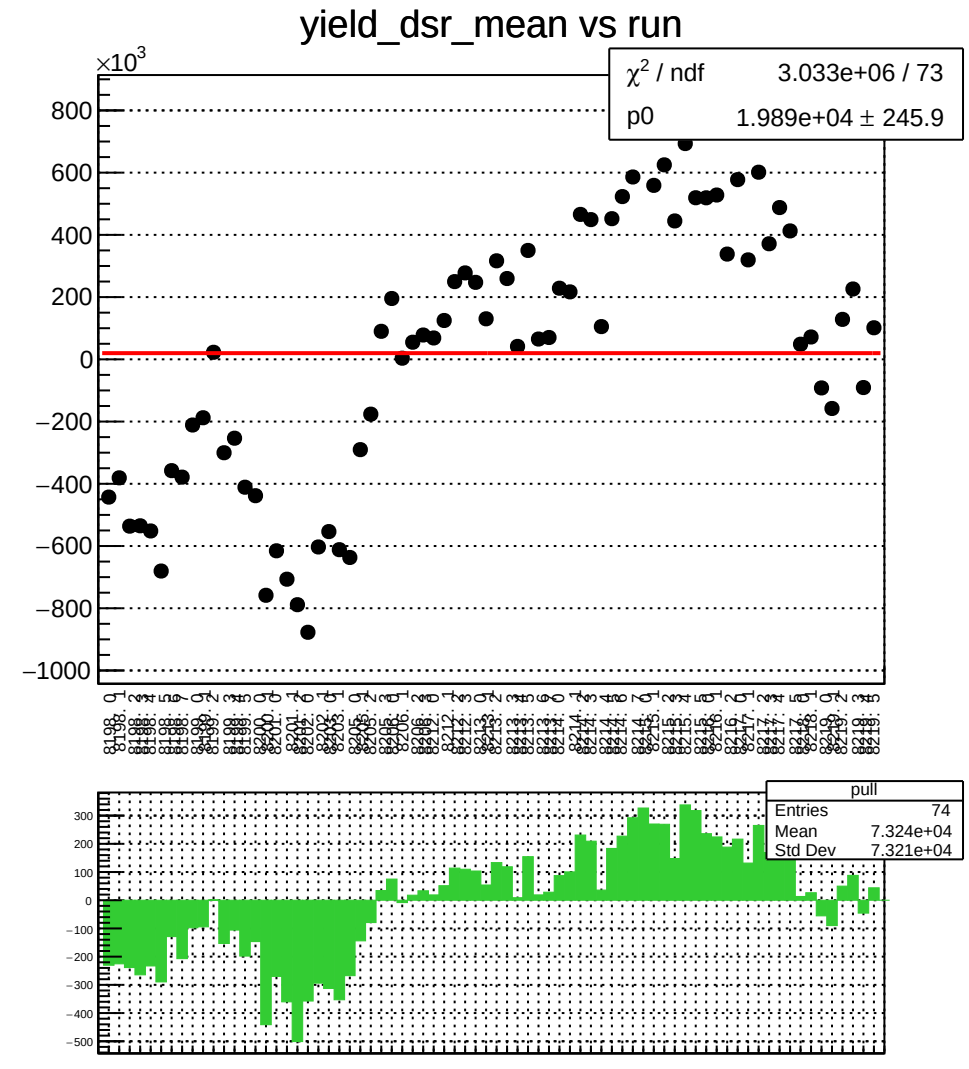

pull1D
Entries 74
Mean 4.398
Std Dev 1.909
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

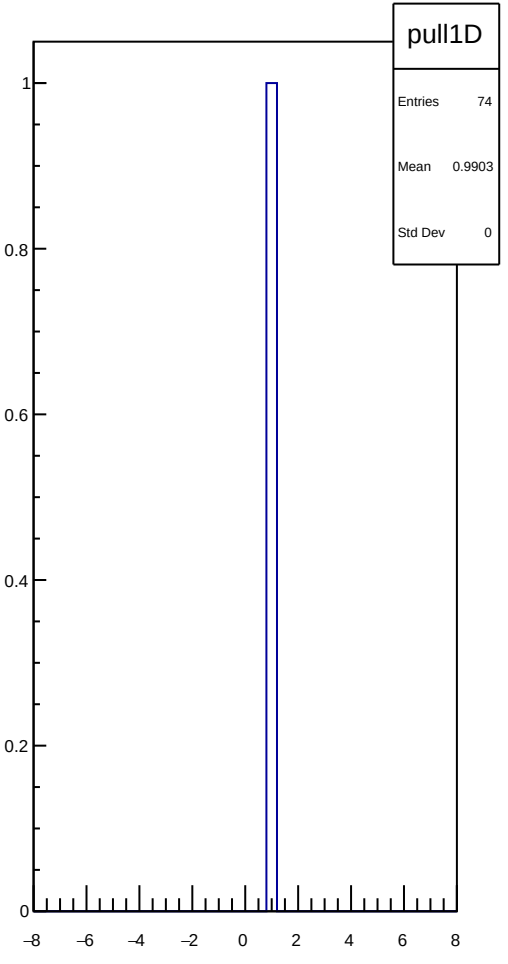

yield_usr_rms vs run
χ² / ndf 9.272e+04 / 73
p0 0.2086 ± 0.0001756
0.7
0.6
0.5
0.4
0.3
0.2

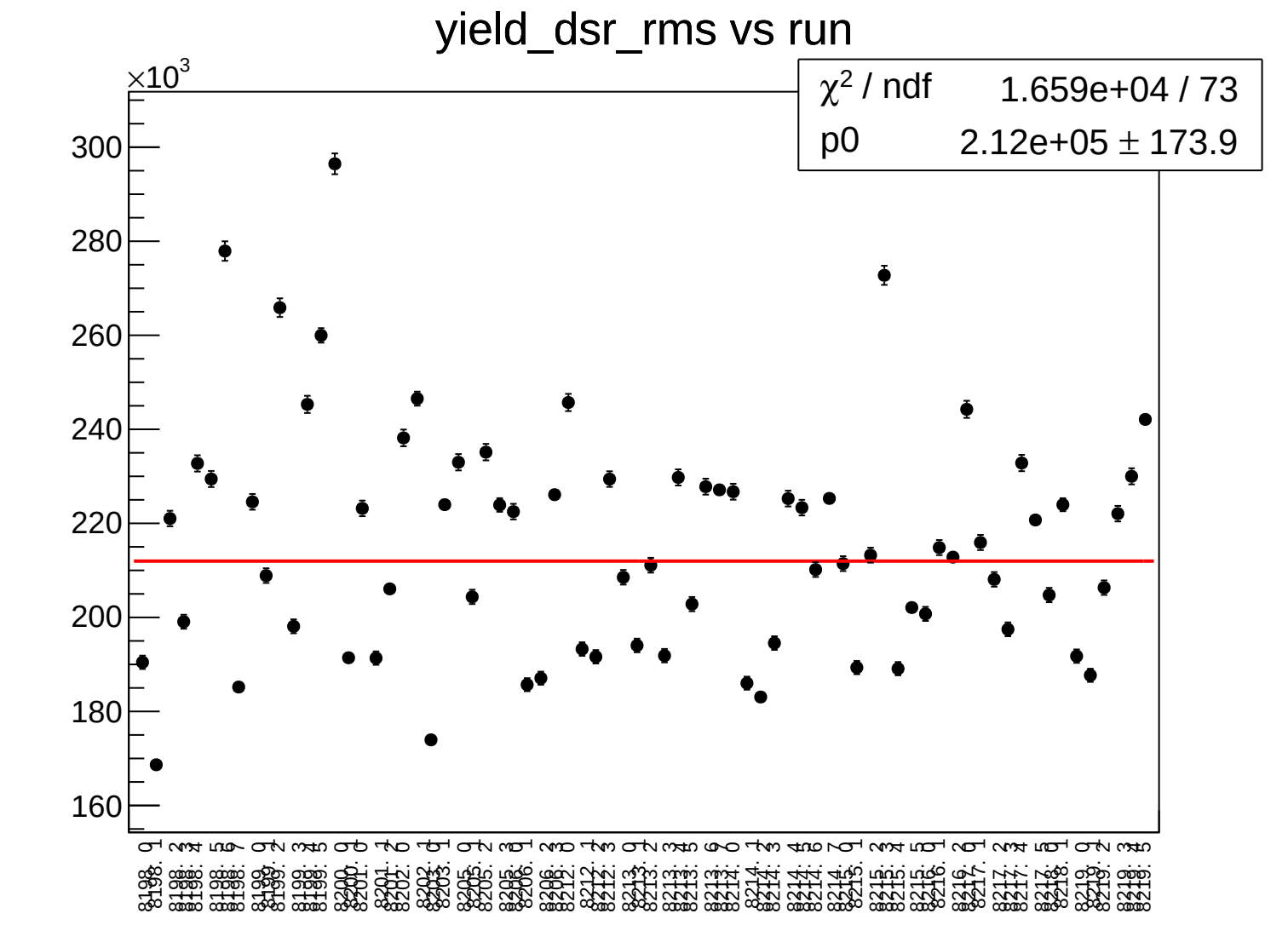

yield_dsl_mean vs run
×10^3
χ² / ndf 7.813e+05 / 66
p0 6.554e+05 ± 225.7
1000
800
600
400
200
pull
Entries 67
Mean 184.8
Std Dev 194.2
200
100
0
−100
−200
−300

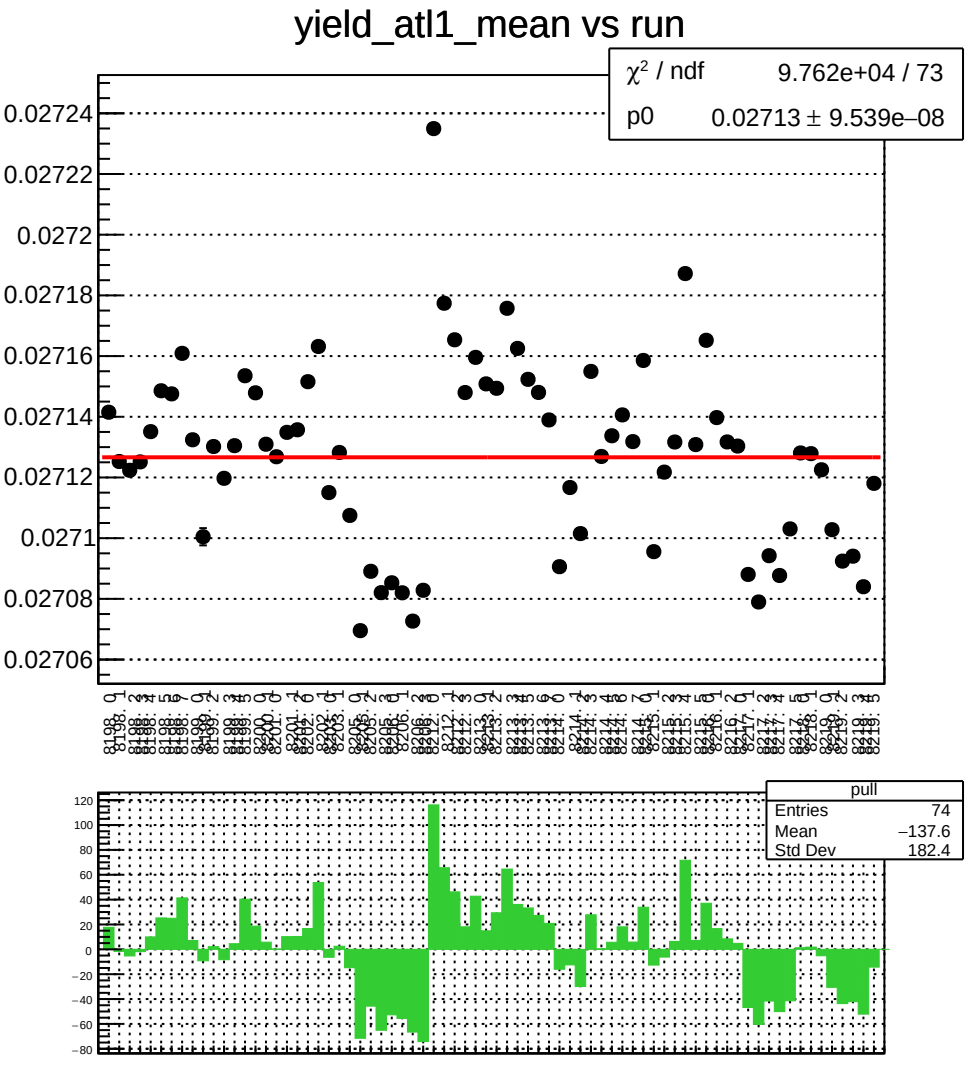

pull1D
Entries 67
Mean 0.7436
Std Dev 6.24
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

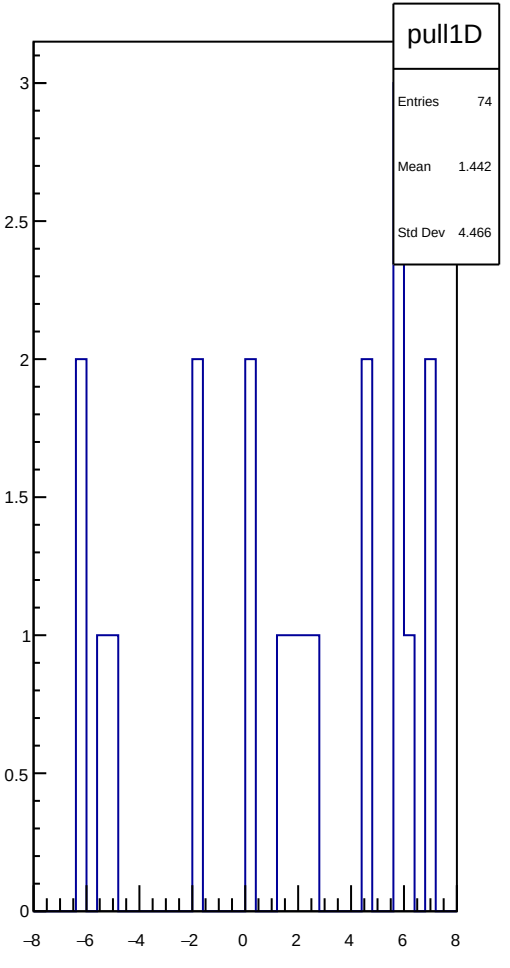

yield_dsl_rms vs run
×10^3
χ² / ndf 8.444e+04 / 73
p0 1.807e+05 ± 151.7
350
300
250
200
150
100

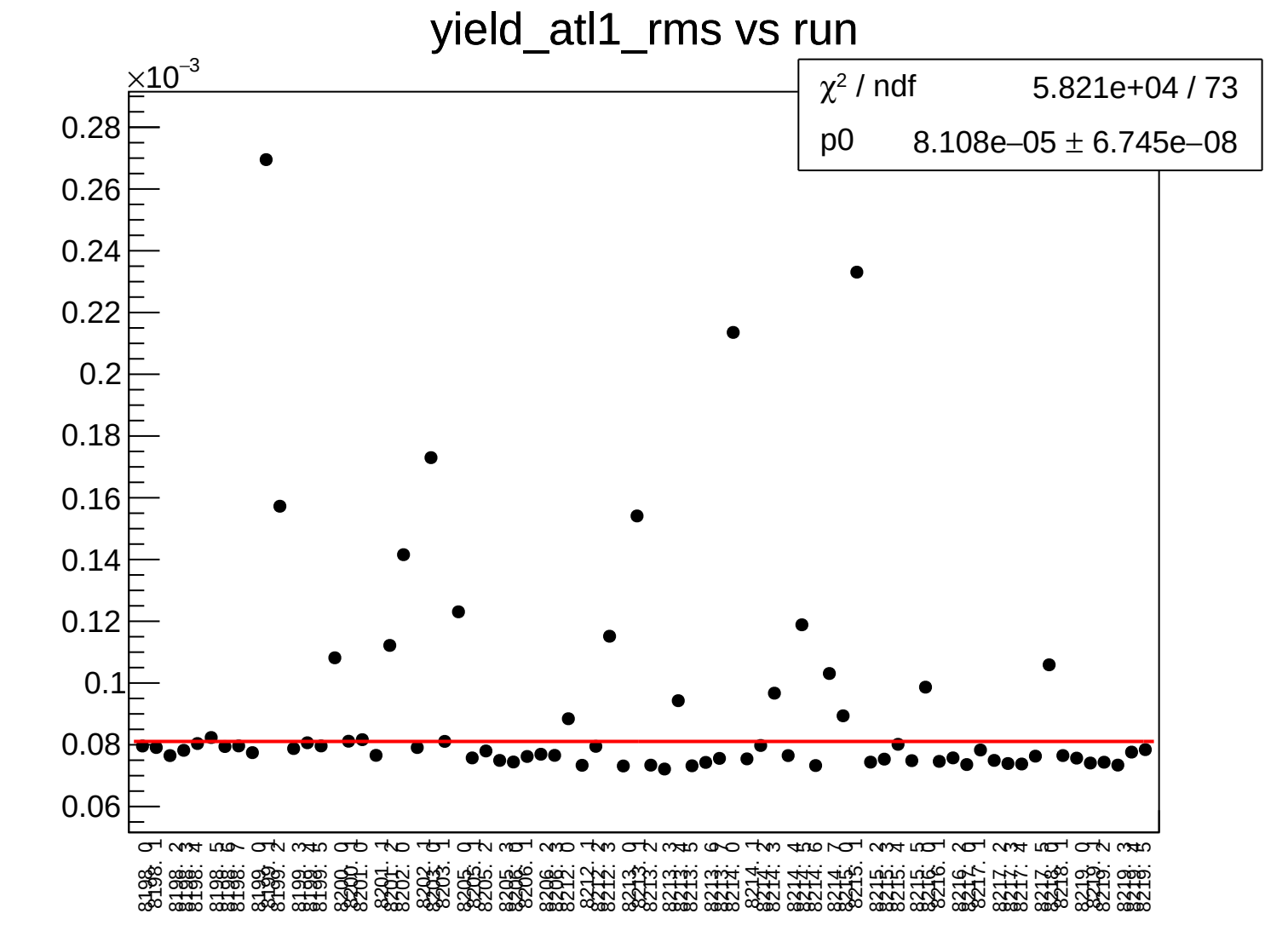

yield_dsr_mean vs run
×10^3
χ² / ndf 3.033e+06 / 73
p0 1.989e+04 ± 245.9
pull
Entries 74
Mean 7.324e+04
Std Dev 7.321e+04

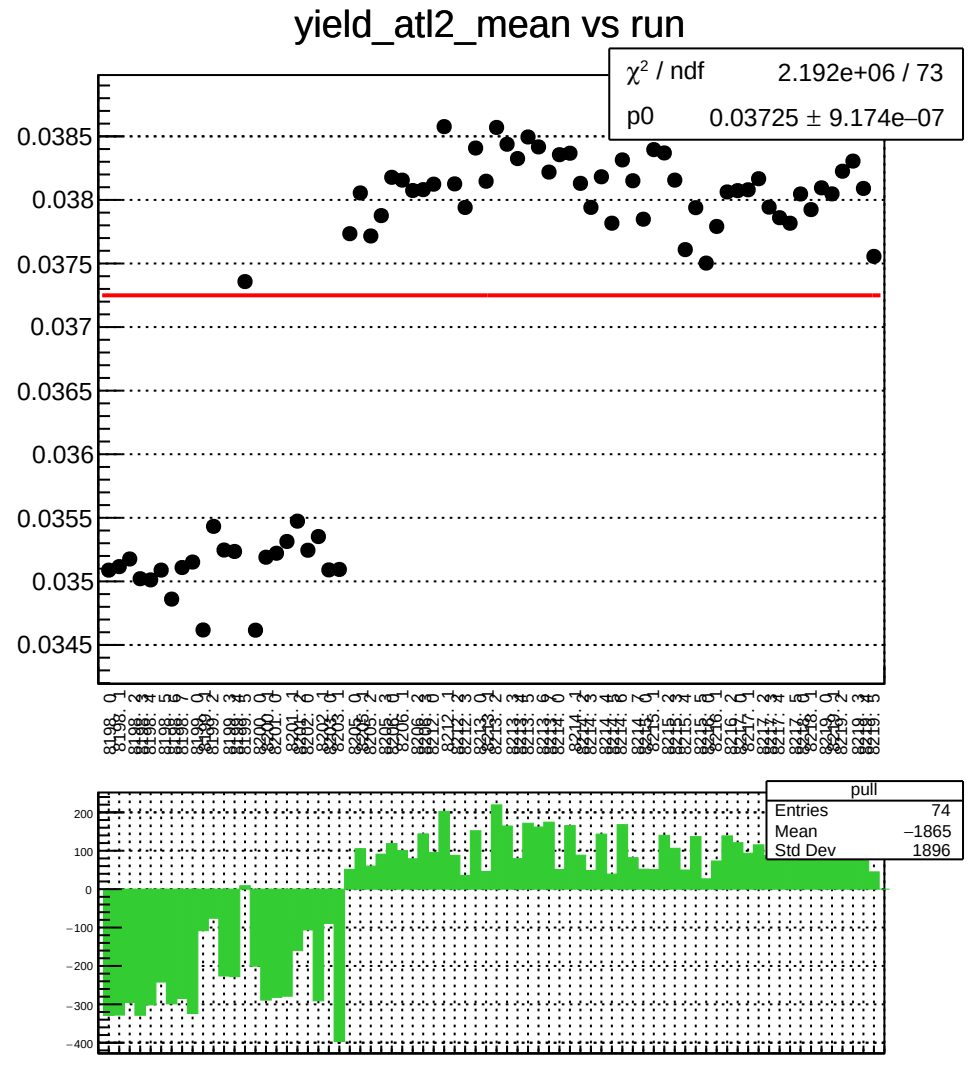

pull1D
Entries 74
Mean 0.9903
Std Dev 0

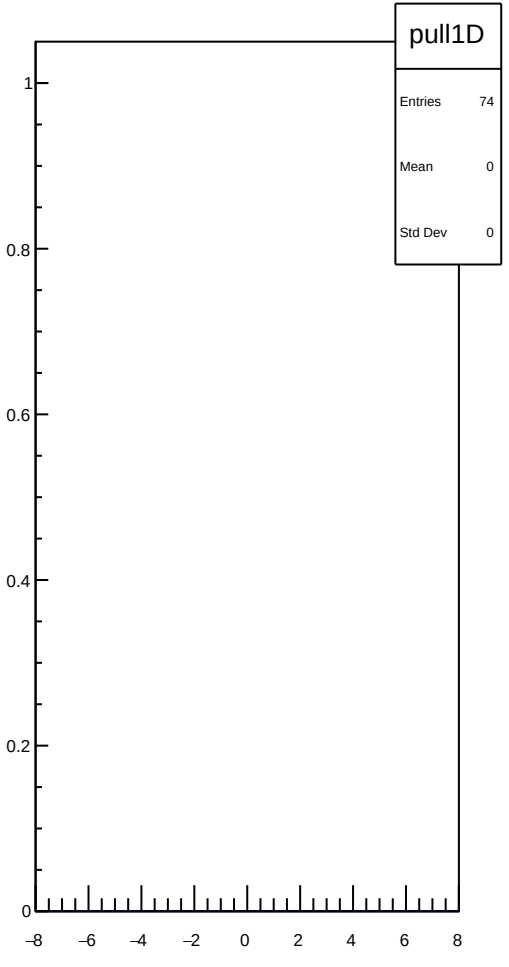

yield_dsr_rms vs run
×10^3
χ² / ndf 1.659e+04 / 73
p0 2.12e+05 ± 173.9
300
280
260
240
220
200
180
160

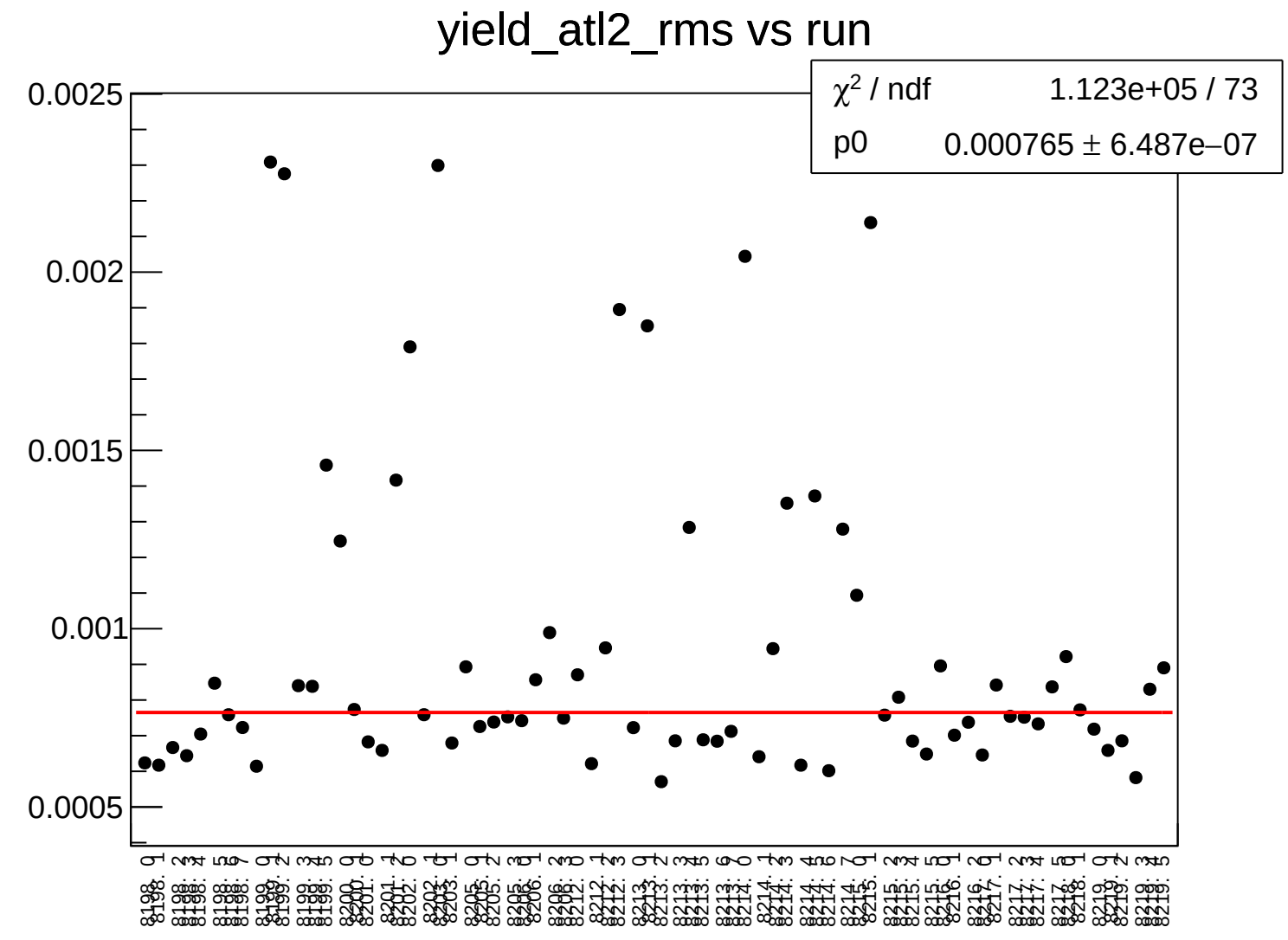

yield_atl1_mean vs run
χ² / ndf 9.762e+04 / 73
p0 0.02713 ± 9.539e−08
0.02724
0.02722
0.0272
0.02718
0.02716
0.02714
0.02712
0.0271
0.02708
0.02706
pull
Entries 74
Mean −137.6
Std Dev 182.4
120
100
80
60
40
20
0
−20
−40
−60
−80

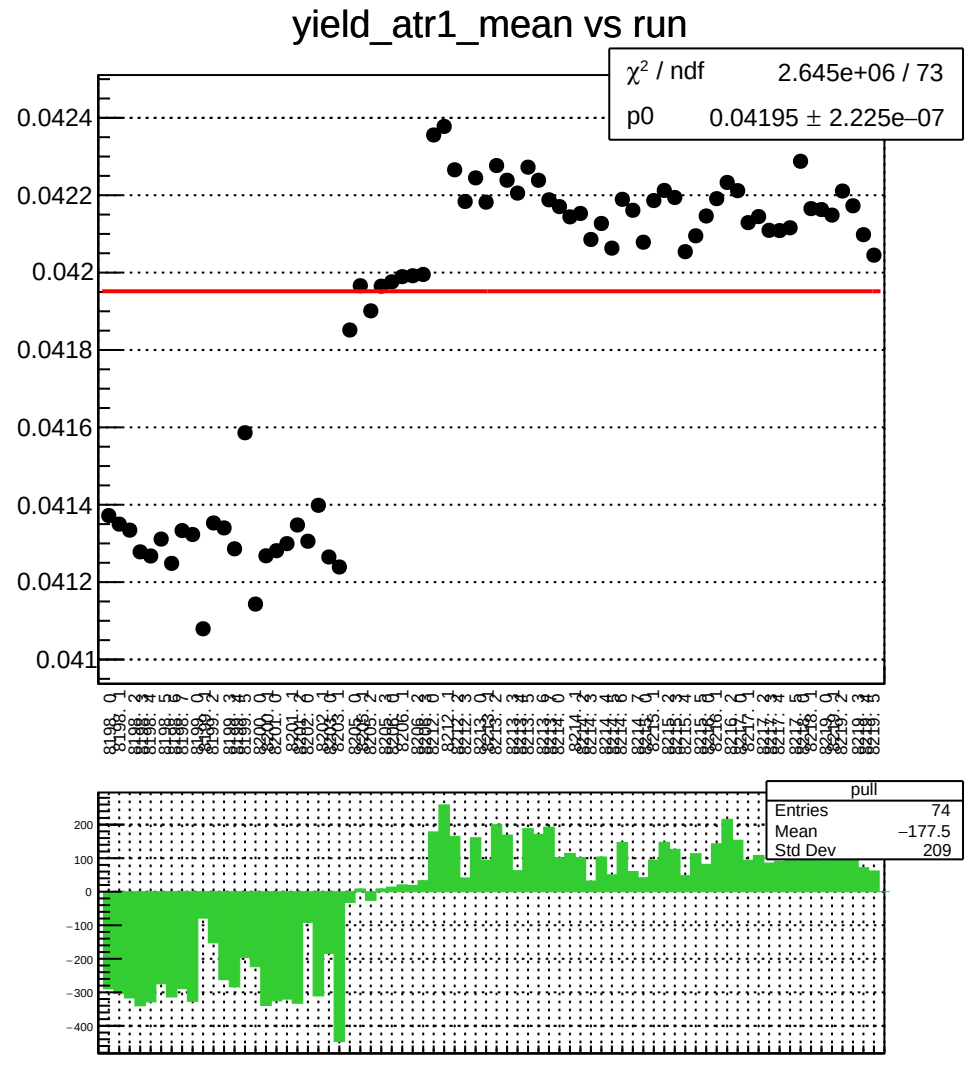

pull1D
Entries 74
Mean 1.442
Std Dev 4.466
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

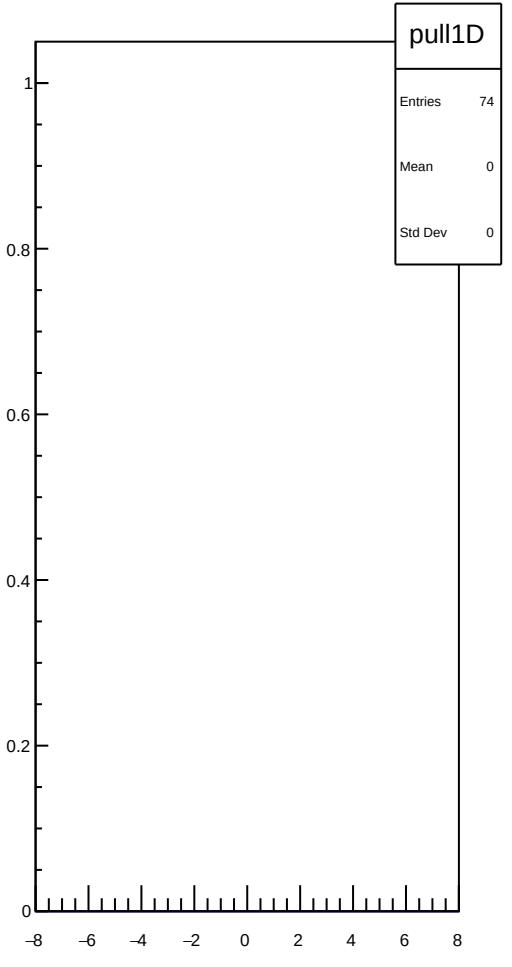

yield_atl1_rms vs run
×10⁻³
χ² / ndf 5.821e+04 / 73
p0 8.108e−05 ± 6.745e−08
0.28
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06

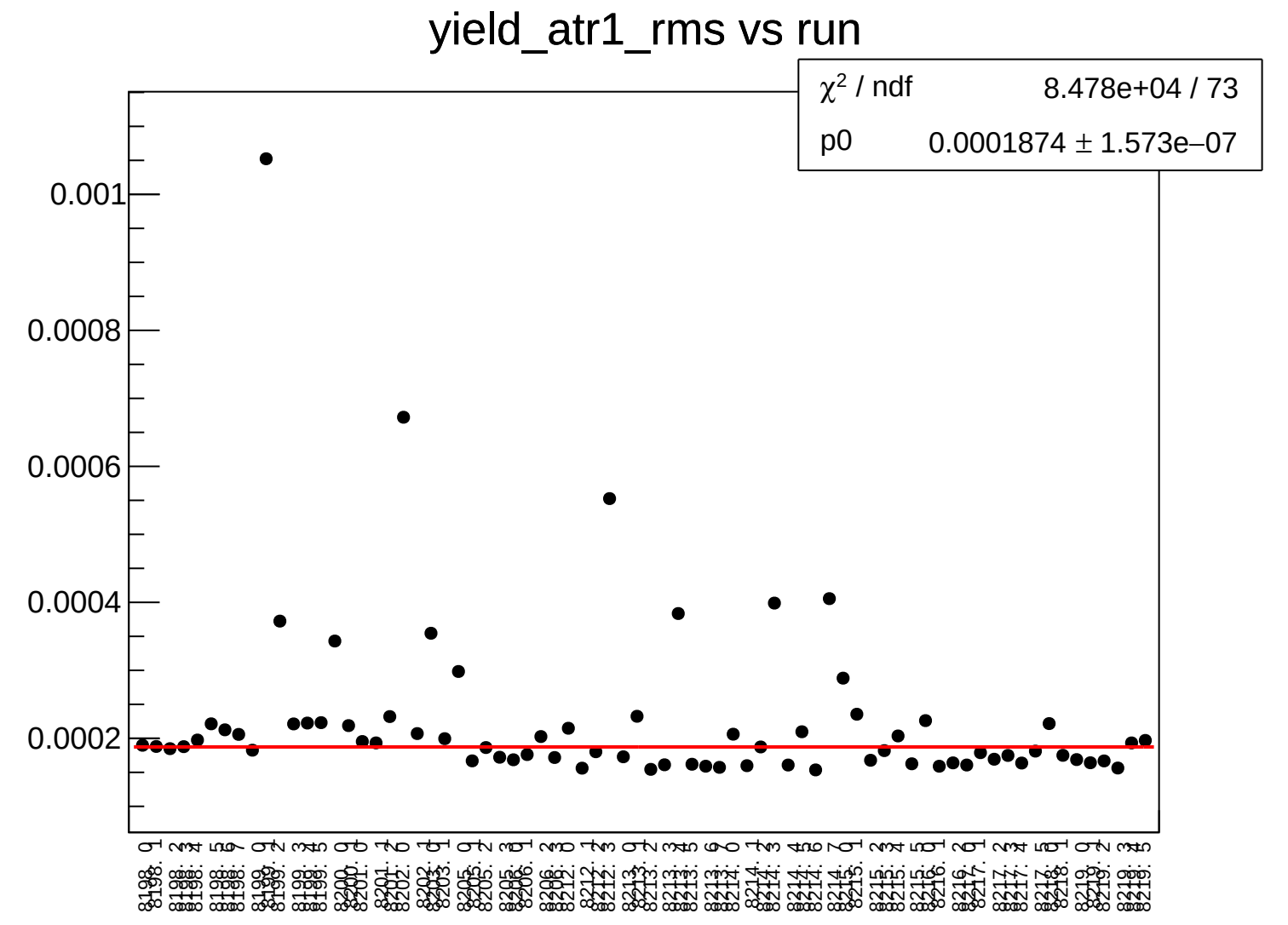

yield_atl2_mean vs run
χ² / ndf 2.192e+06 / 73
p0 0.03725 ± 9.174e−07
0.0385
0.038
0.0375
0.037
0.0365
0.036
0.0355
0.035
0.0345
pull
Entries 74
Mean −1865
Std Dev 1896
200
100
0
−100
−200
−300
−400

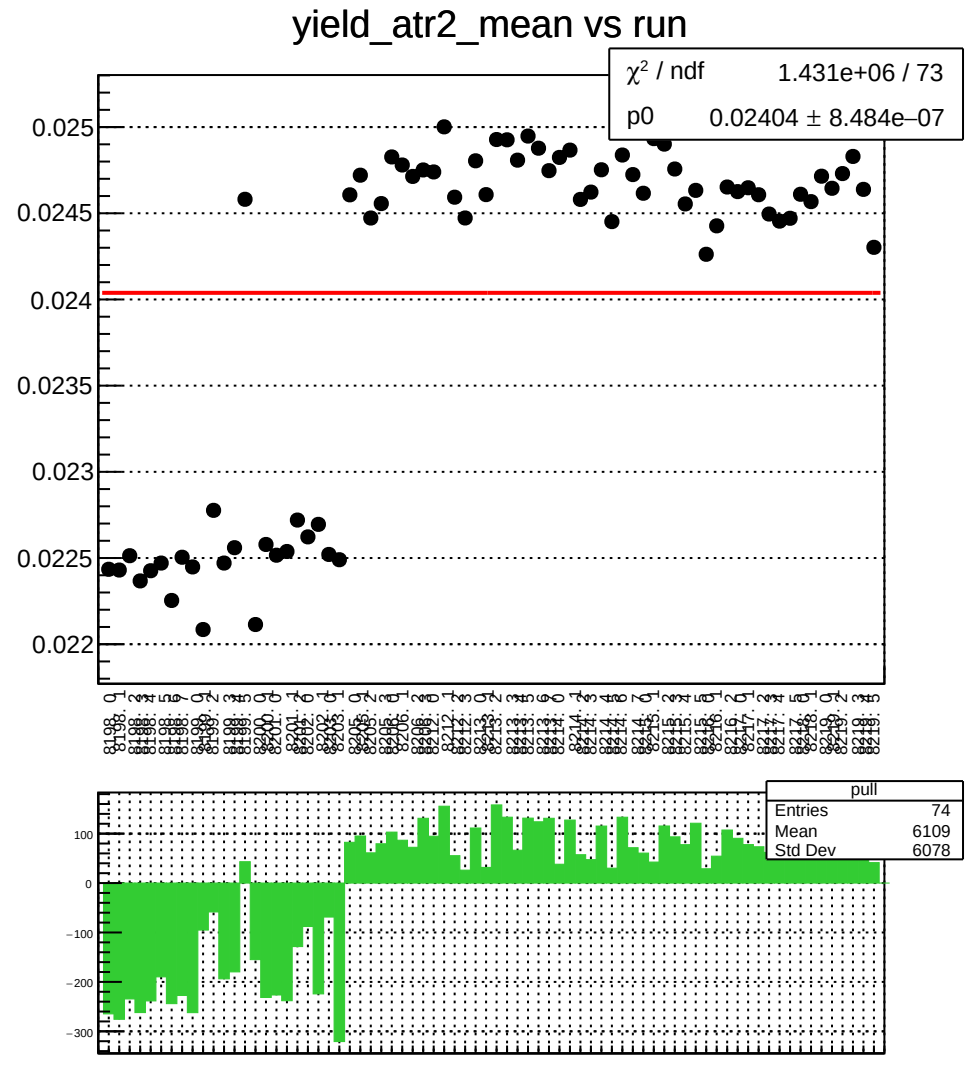

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

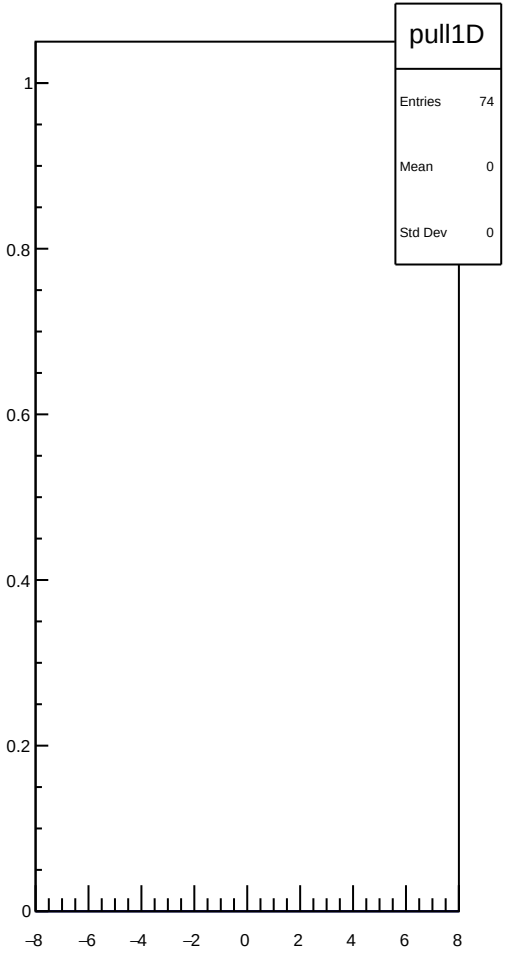

yield_atl2_rms vs run
χ² / ndf 1.123e+05 / 73
p0 0.000765 ± 6.487e−07
0.0025
0.002
0.0015
0.001
0.0005

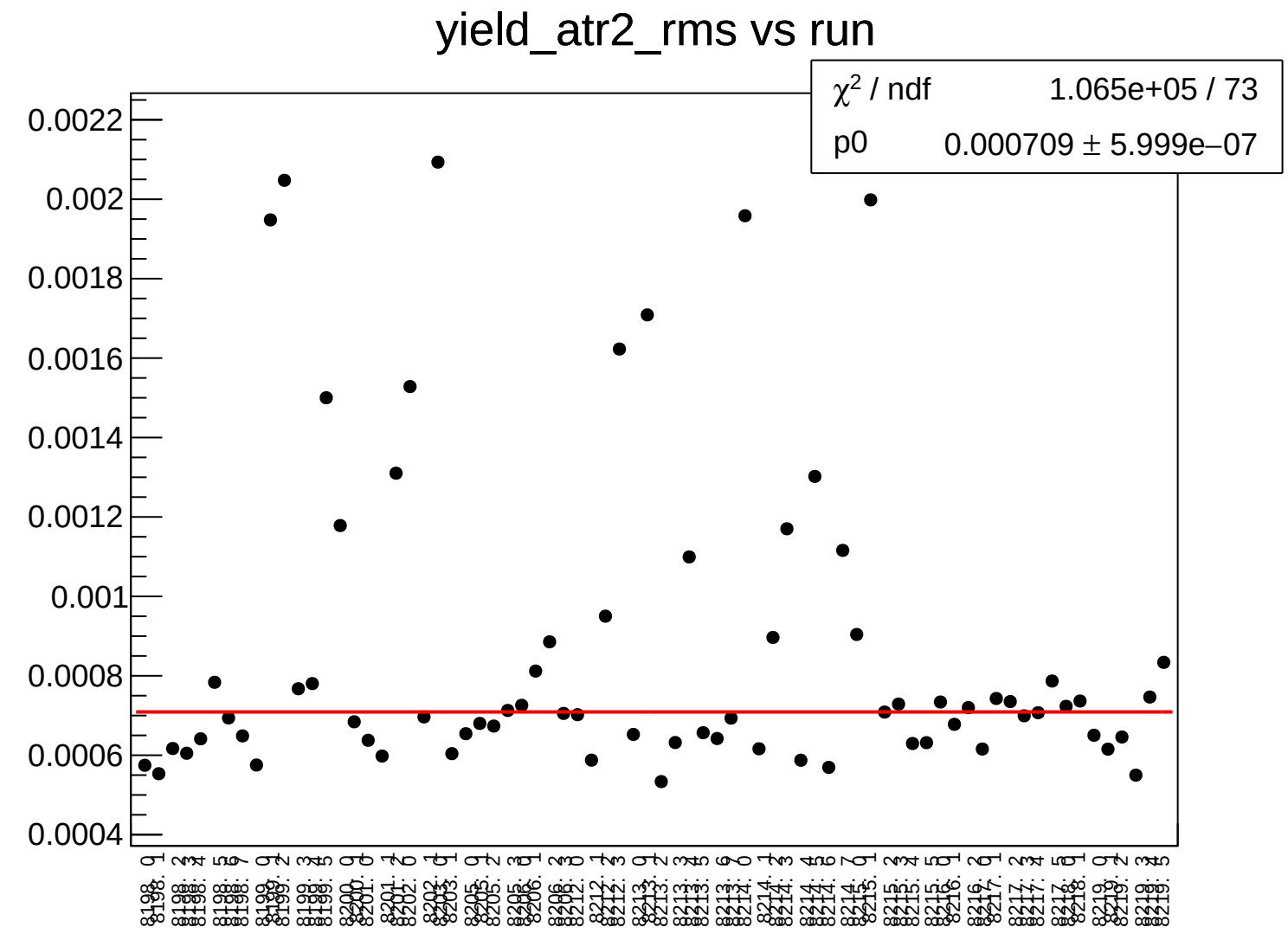

yield_atr1_mean vs run
χ² / ndf 2.645e+06 / 73
p0 0.04195 ± 2.225e−07
0.0424
0.0422
0.042
0.0418
0.0416
0.0414
0.0412
0.041
pull
Entries 74
Mean −177.5
Std Dev 209
200
100
0
−100
−200
−300
−400

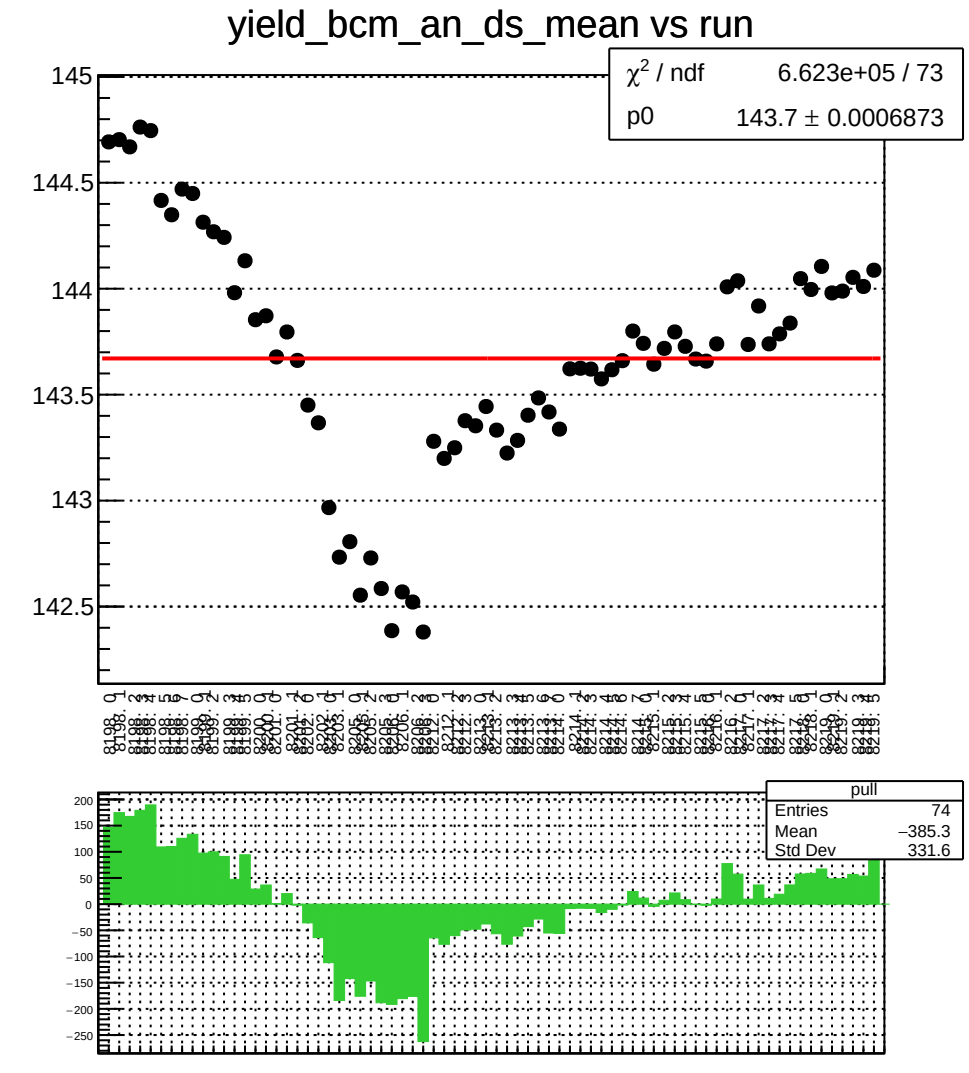

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

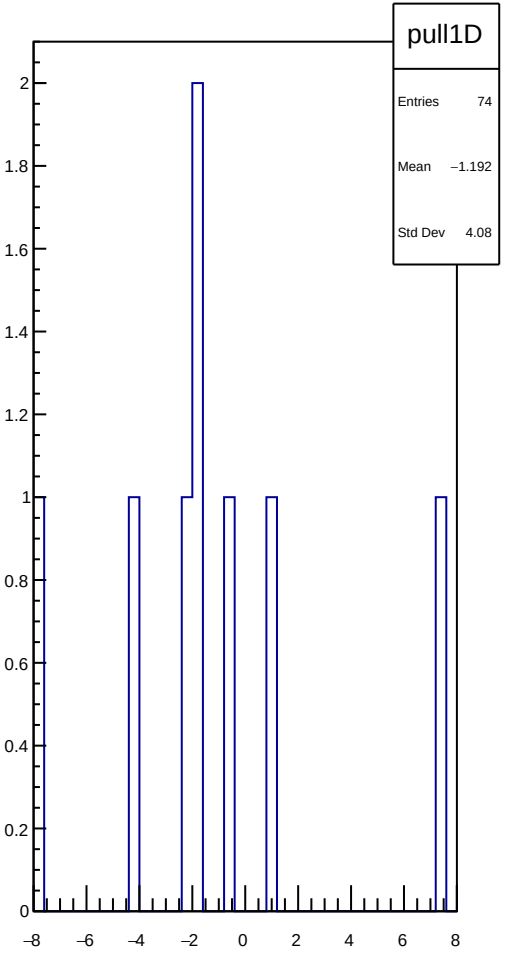

yield_atr1_rms vs run
χ² / ndf 8.478e+04 / 73
p0 0.0001874 ± 1.573e−07
0.001
0.0008
0.0006
0.0004
0.0002

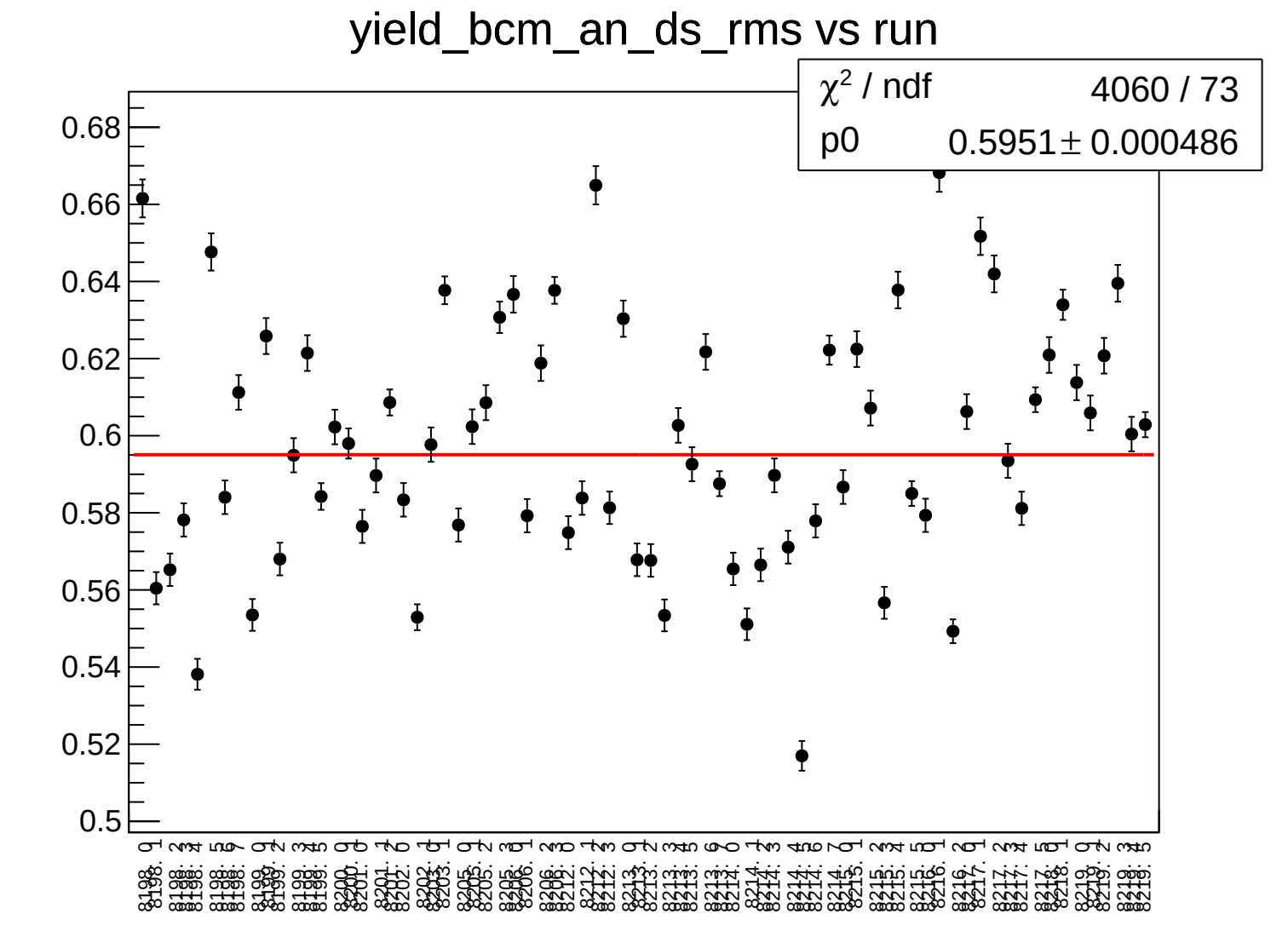

yield_atr2_mean vs run
χ² / ndf 1.431e+06 / 73
p0 0.02404 ± 8.484e−07
0.025
0.0245
0.024
0.0235
0.023
0.0225
0.022
pull
Entries 74
Mean 6109
Std Dev 6078
100
0
−100
−200
−300

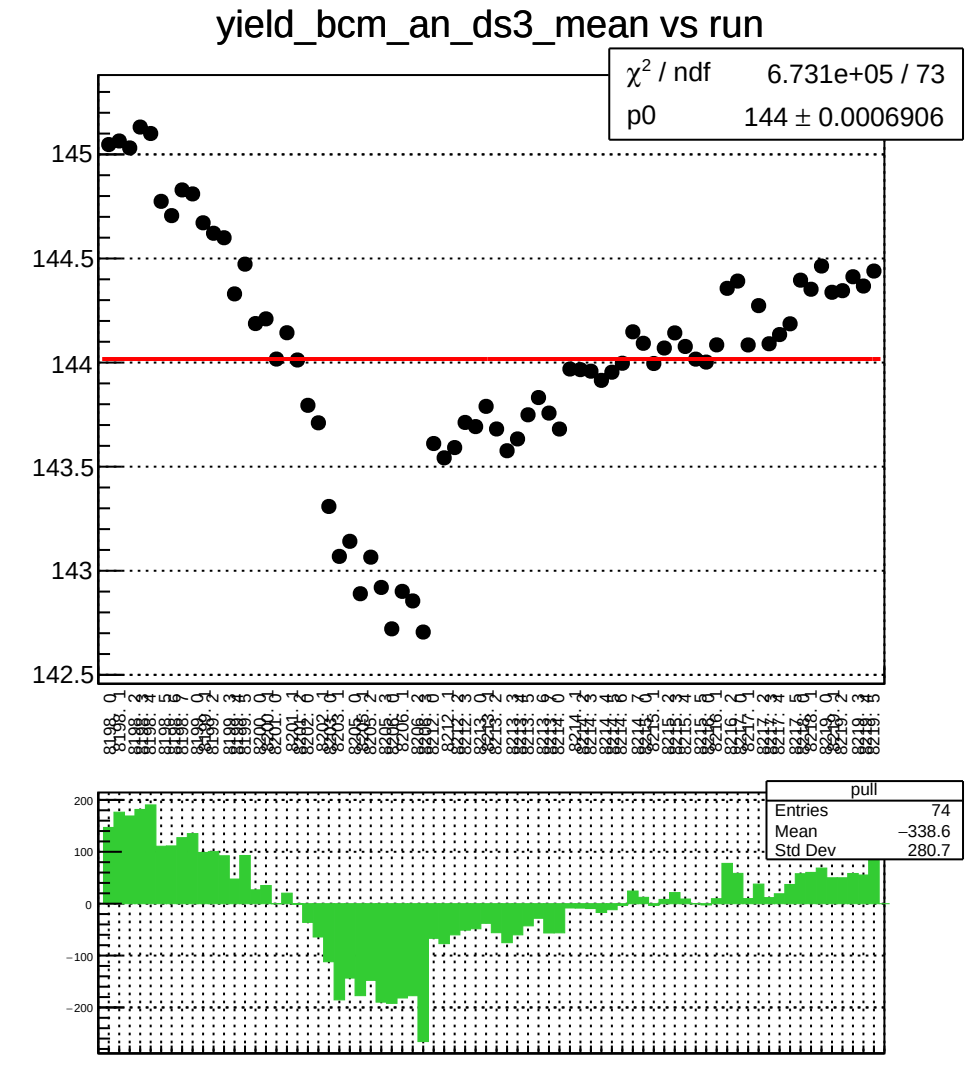

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

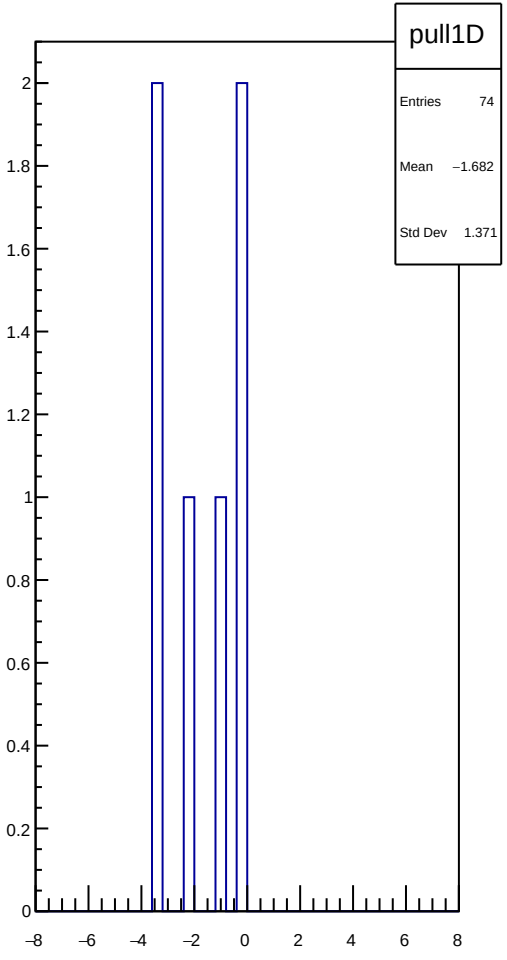

yield_atr2_rms vs run
χ^2 / ndf 1.065e+05 / 73
p0 0.000709 ± 5.999e−07
0.0022
0.002
0.0018
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004

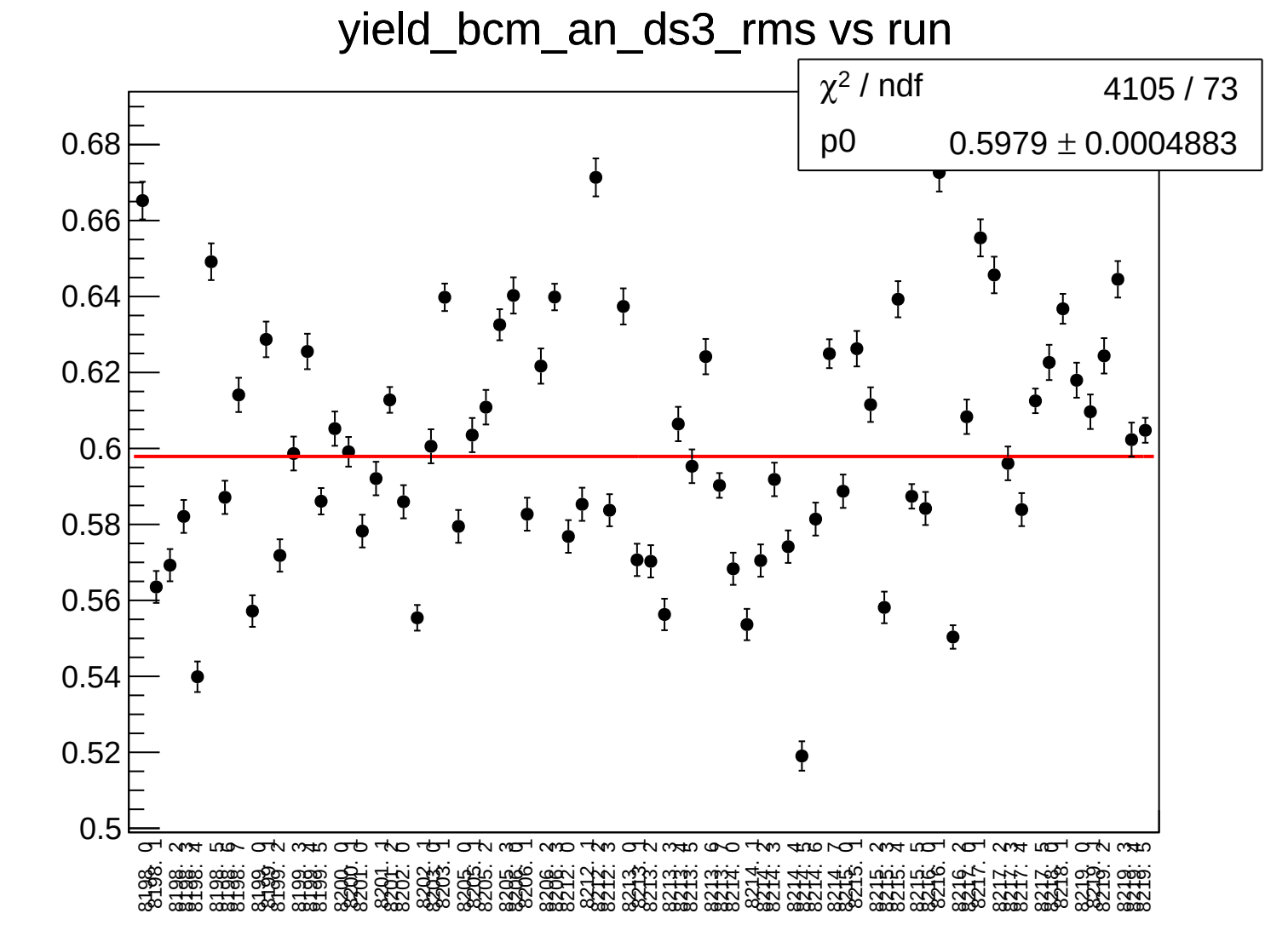

yield_bcm_an_ds_mean vs run
χ² / ndf 6.623e+05 / 73
p0 143.7 ± 0.0006873
145
144.5
144
143.5
143
142.5
pull
Entries 74
Mean −385.3
Std Dev 331.6
200
150
100
50
0
−50
−100
−150
−200
−250

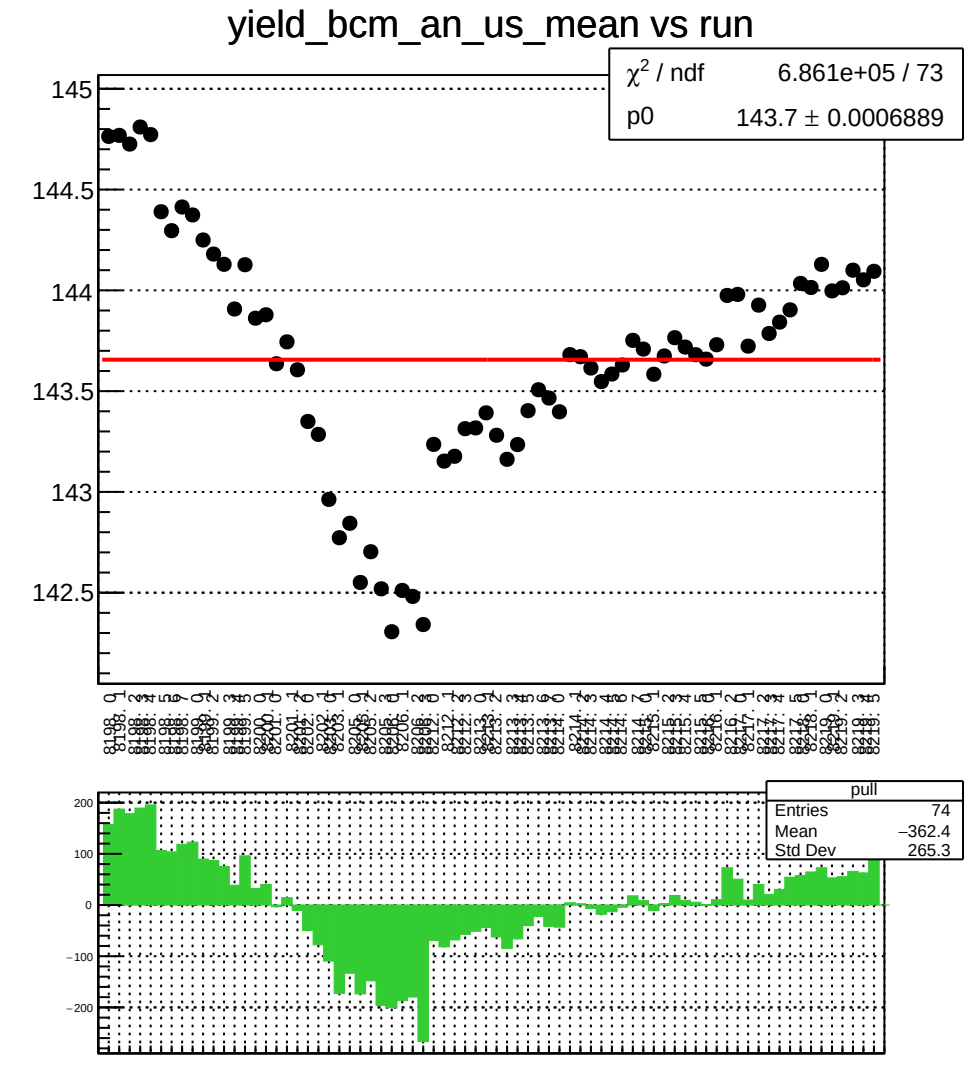

pull1D
Entries 74
Mean −1.192
Std Dev 4.08
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

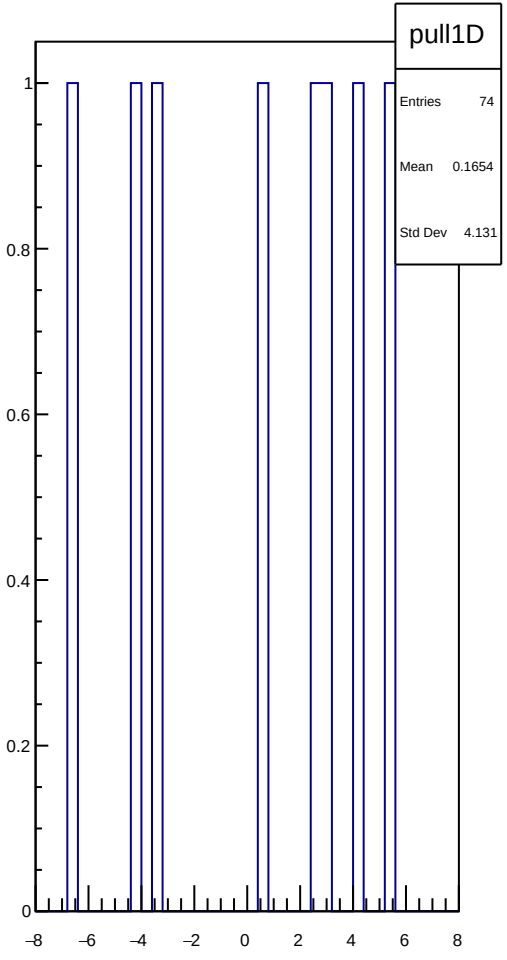

yield_bcm_an_ds_rms vs run
χ² / ndf 4060 / 73
p0 0.5951 ± 0.000486
0.68
0.66
0.64
0.62
0.6
0.58
0.56
0.54
0.52
0.5

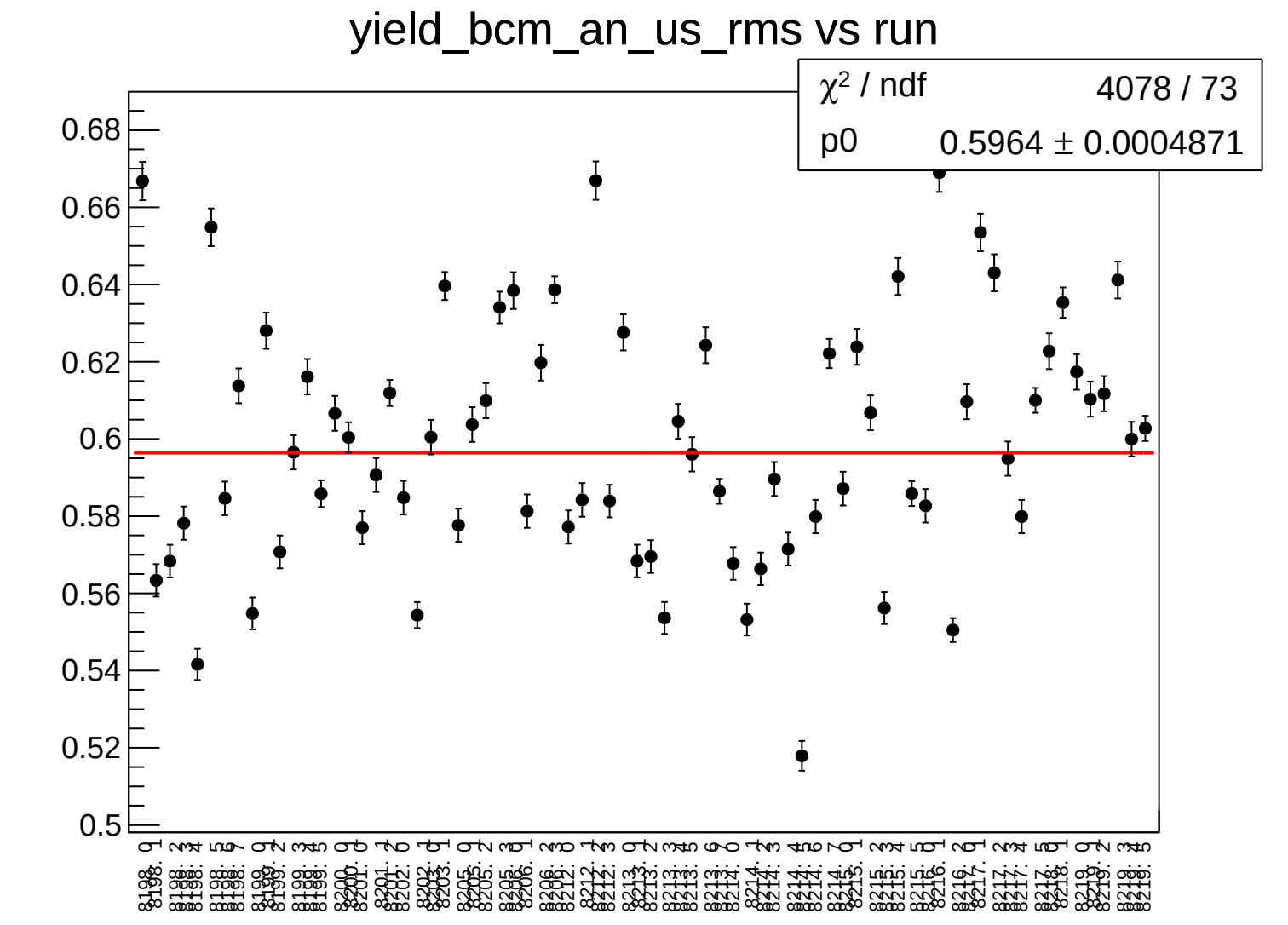

yield_bcm_an_ds3_mean vs run
χ² / ndf 6.731e+05 / 73
p0 144 ± 0.0006906
145
144.5
144
143.5
143
142.5
pull
Entries 74
Mean −338.6
Std Dev 280.7
200
100
0
−100
−200

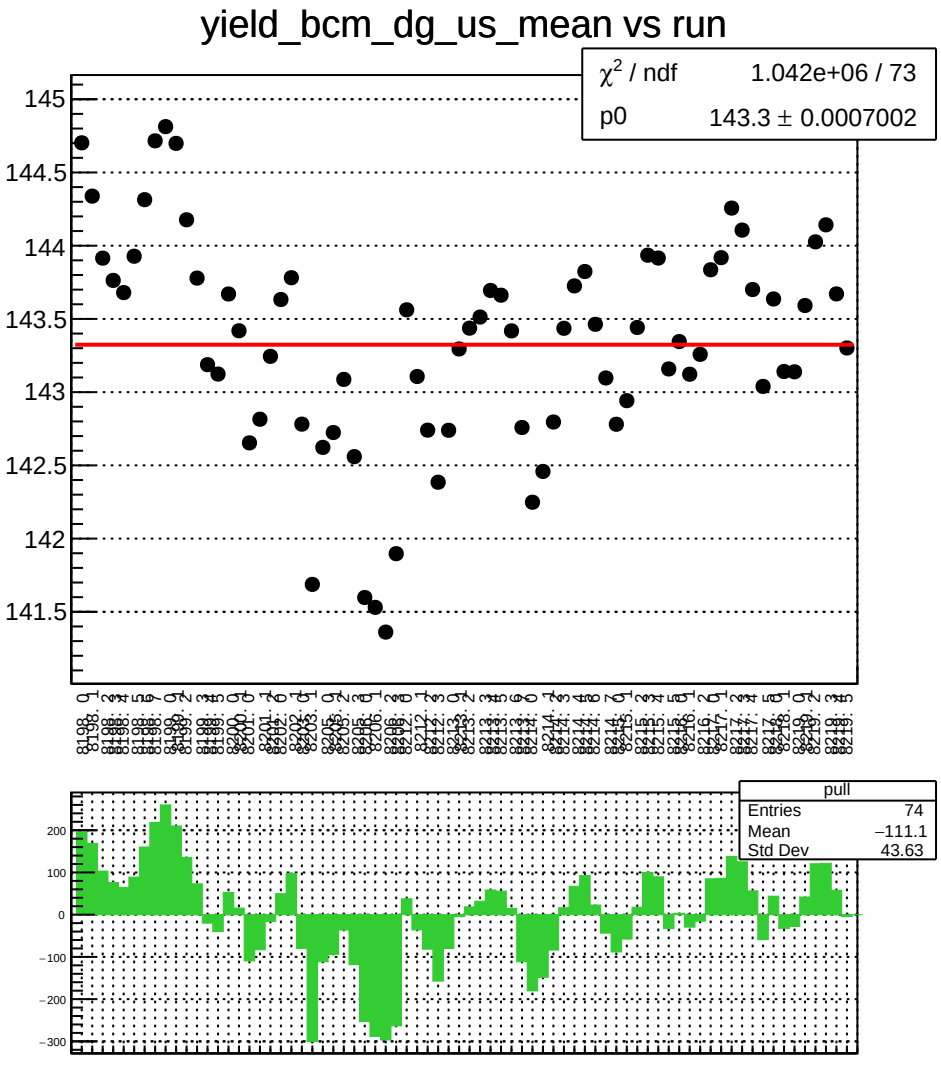

pull1D
Entries 74
Mean −1.682
Std Dev 1.371
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

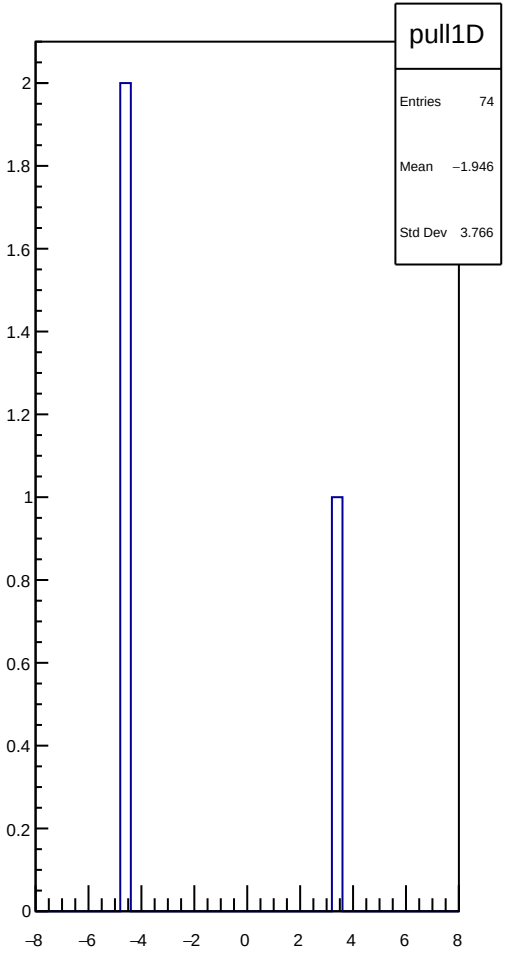

yield_bcm_an_ds3_rms vs run
χ² / ndf 4105 / 73
p0 0.5979 ± 0.0004883
0.68
0.66
0.64
0.62
0.6
0.58
0.56
0.54
0.52
0.5

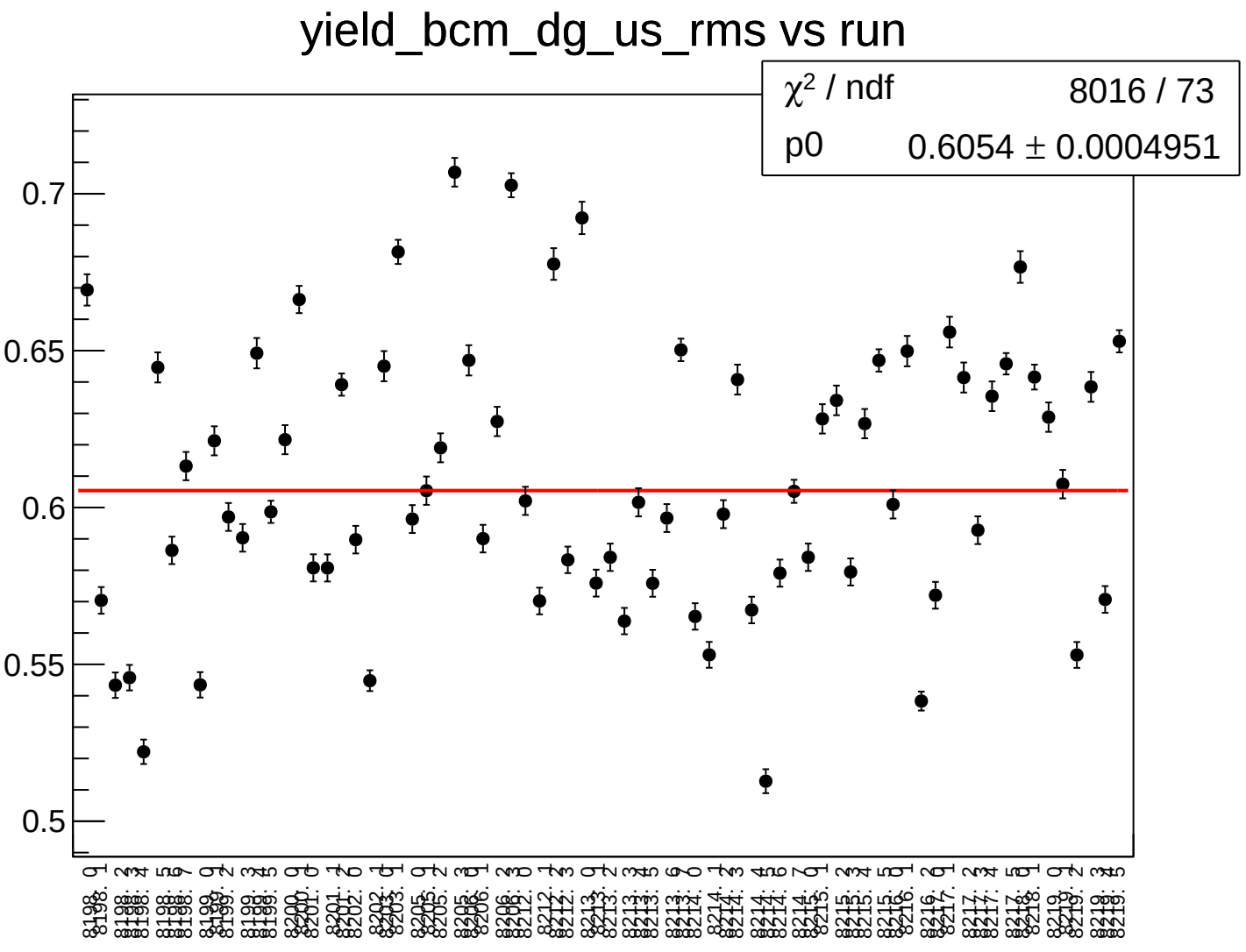

yield_bcm_an_us_mean vs run
χ² / ndf 6.861e+05 / 73
p0 143.7 ± 0.0006889
145
144.5
144
143.5
143
142.5
pull
Entries 74
Mean −362.4
Std Dev 265.3
200
100
0
−100
−200

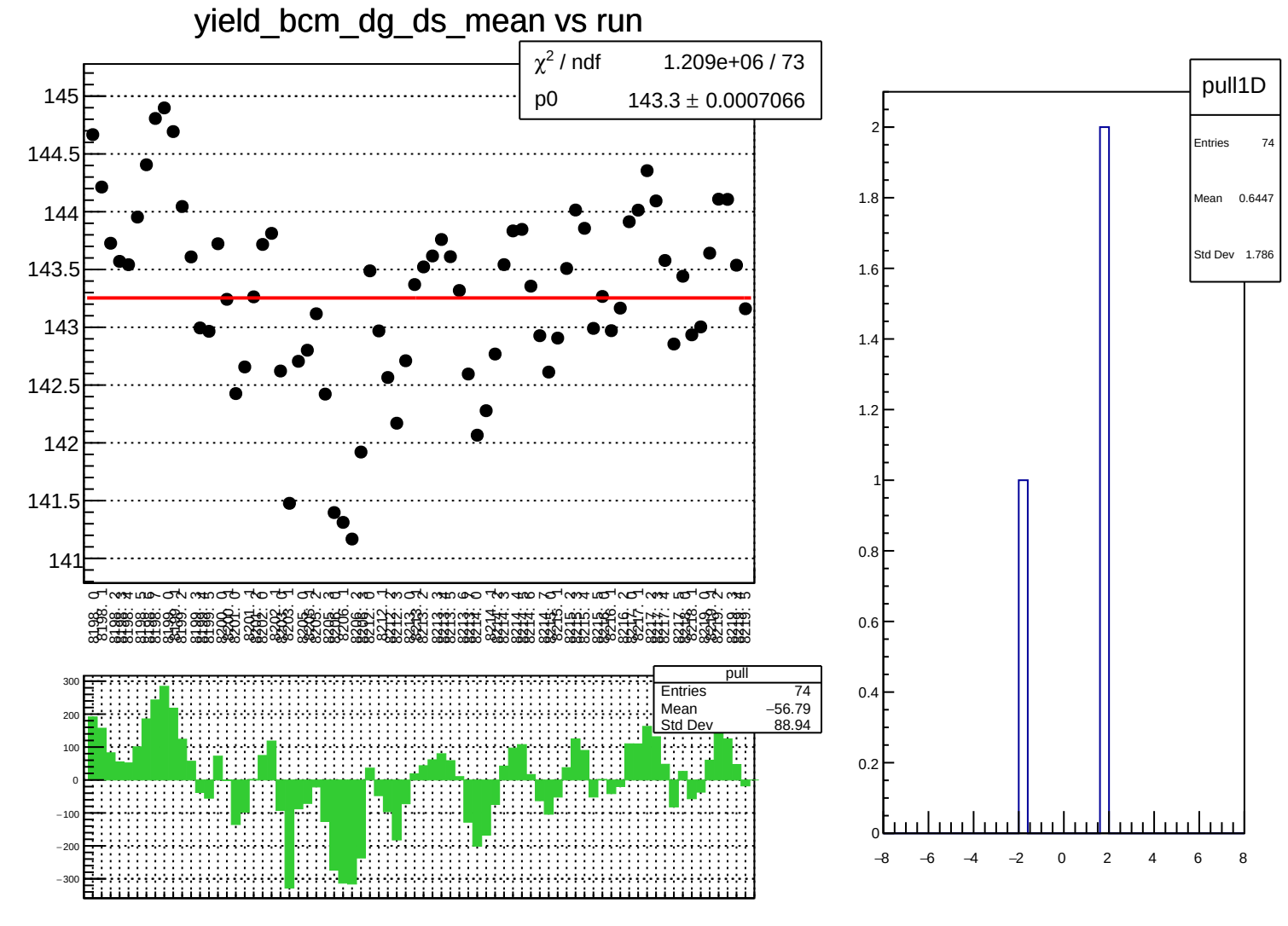

pull1D
Entries 74
Mean 0.1654
Std Dev 4.131
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

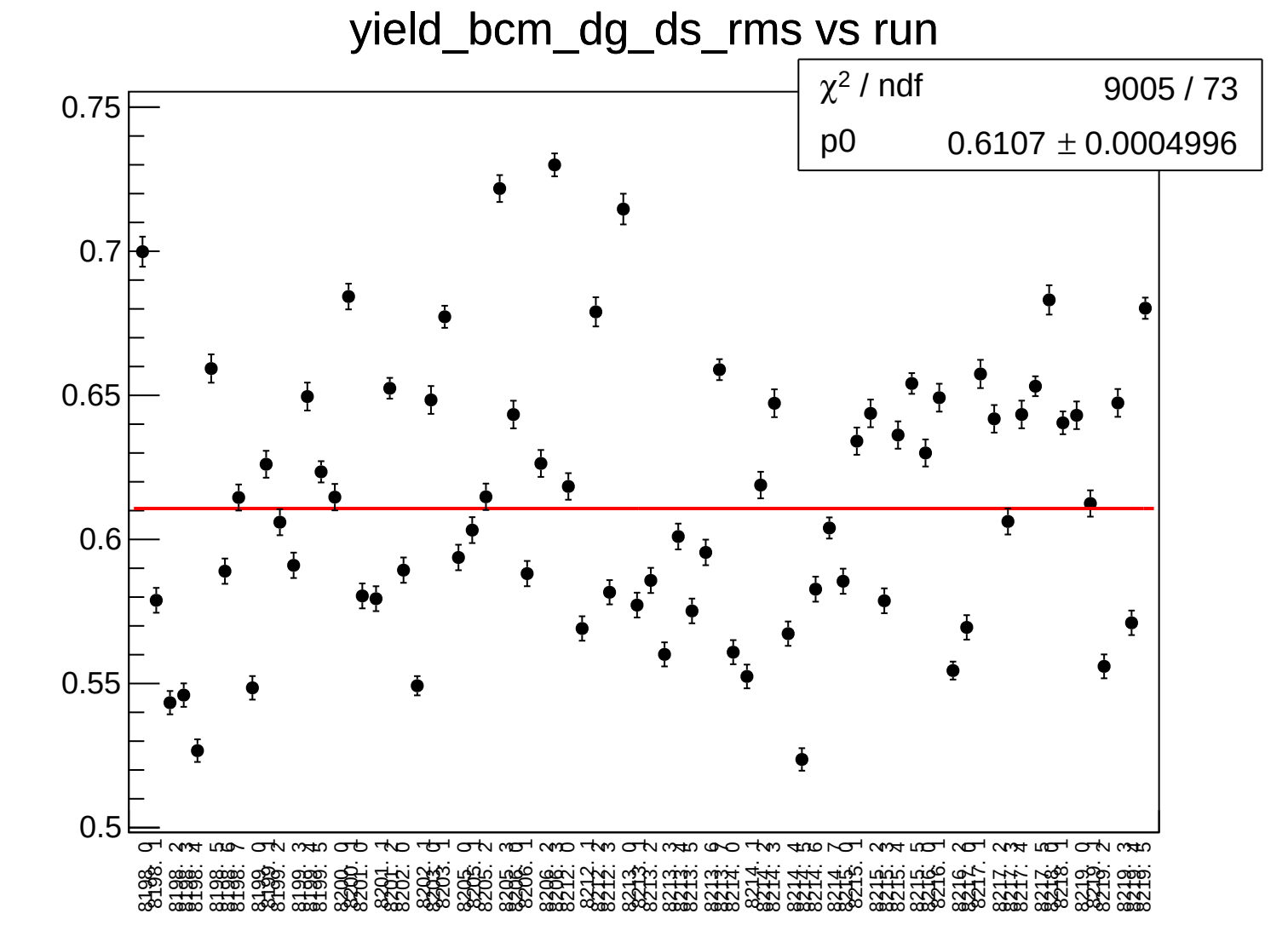

yield_bcm_an_us_rms vs run
χ² / ndf 4078 / 73
p0 0.5964 ± 0.0004871
0.68
0.66
0.64
0.62
0.6
0.58
0.56
0.54
0.52
0.5

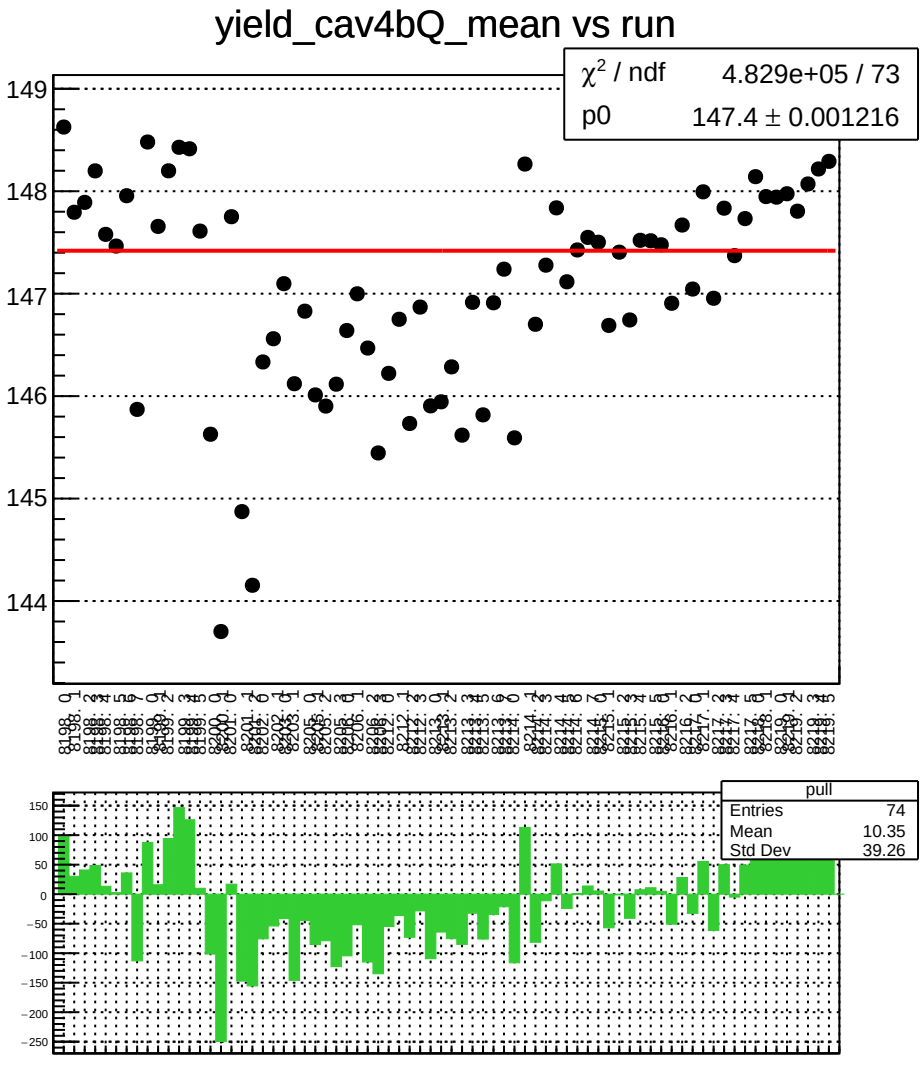

yield_bcm_dg_us_mean vs run
χ² / ndf 1.042e+06 / 73
p0 143.3 ± 0.0007002
145
144.5
144
143.5
143
142.5
142
141.5
pull
Entries 74
Mean −111.1
Std Dev 43.63
200
100
0
−100
−200
−300

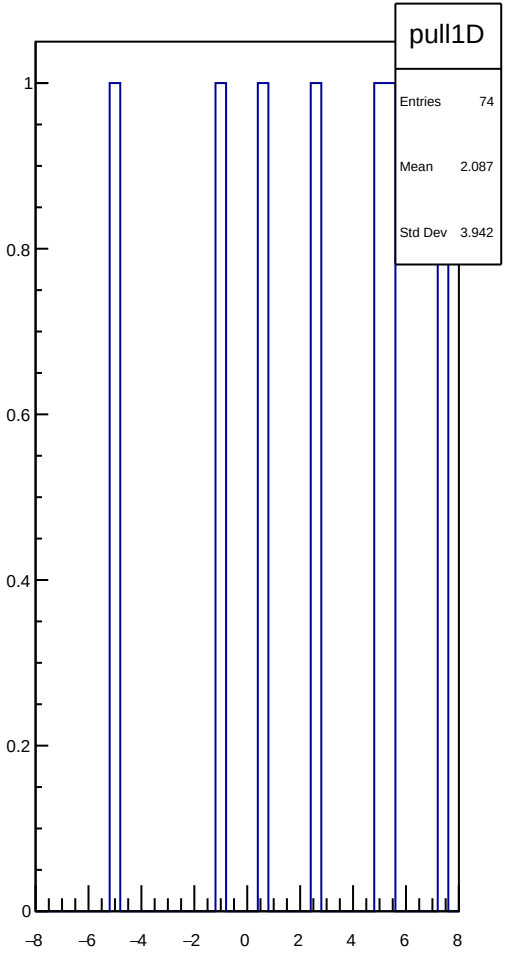

pull1D
Entries 74
Mean −1.946
Std Dev 3.766
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

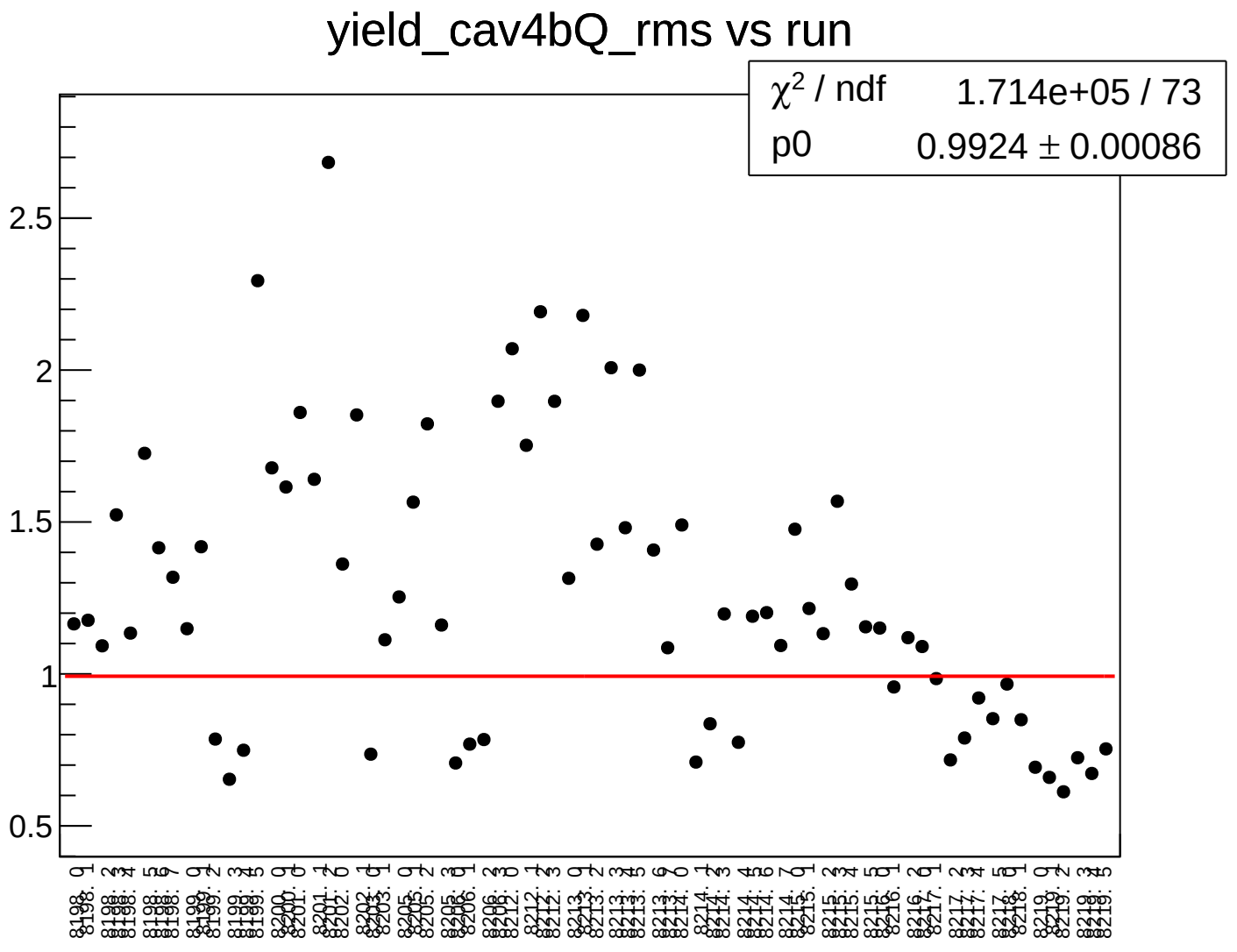

yield_bcm_dg_us_rms vs run
χ² / ndf 8016 / 73
p0 0.6054 ± 0.0004951
0.7
0.65
0.6
0.55
0.5

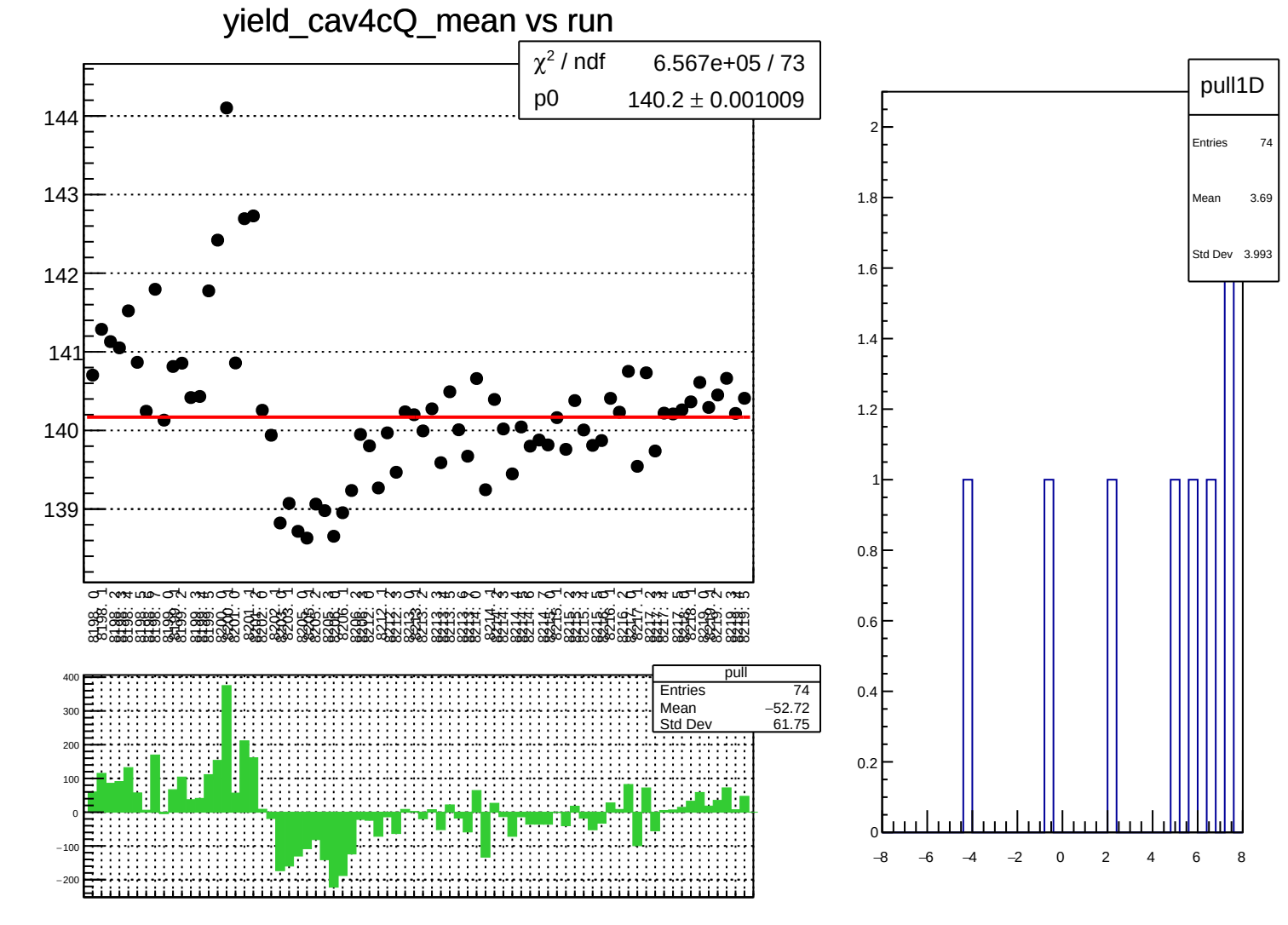

yield_bcm_dg_ds_mean vs run
χ² / ndf 1.209e+06 / 73
p0 143.3 ± 0.0007066
145
144.5
144
143.5
143
142.5
142
141.5
141
pull
Entries 74
Mean −56.79
Std Dev 88.94
300
200
100
0
−100
−200
−300
pull1D
Entries 74
Mean 0.6447
Std Dev 1.786
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

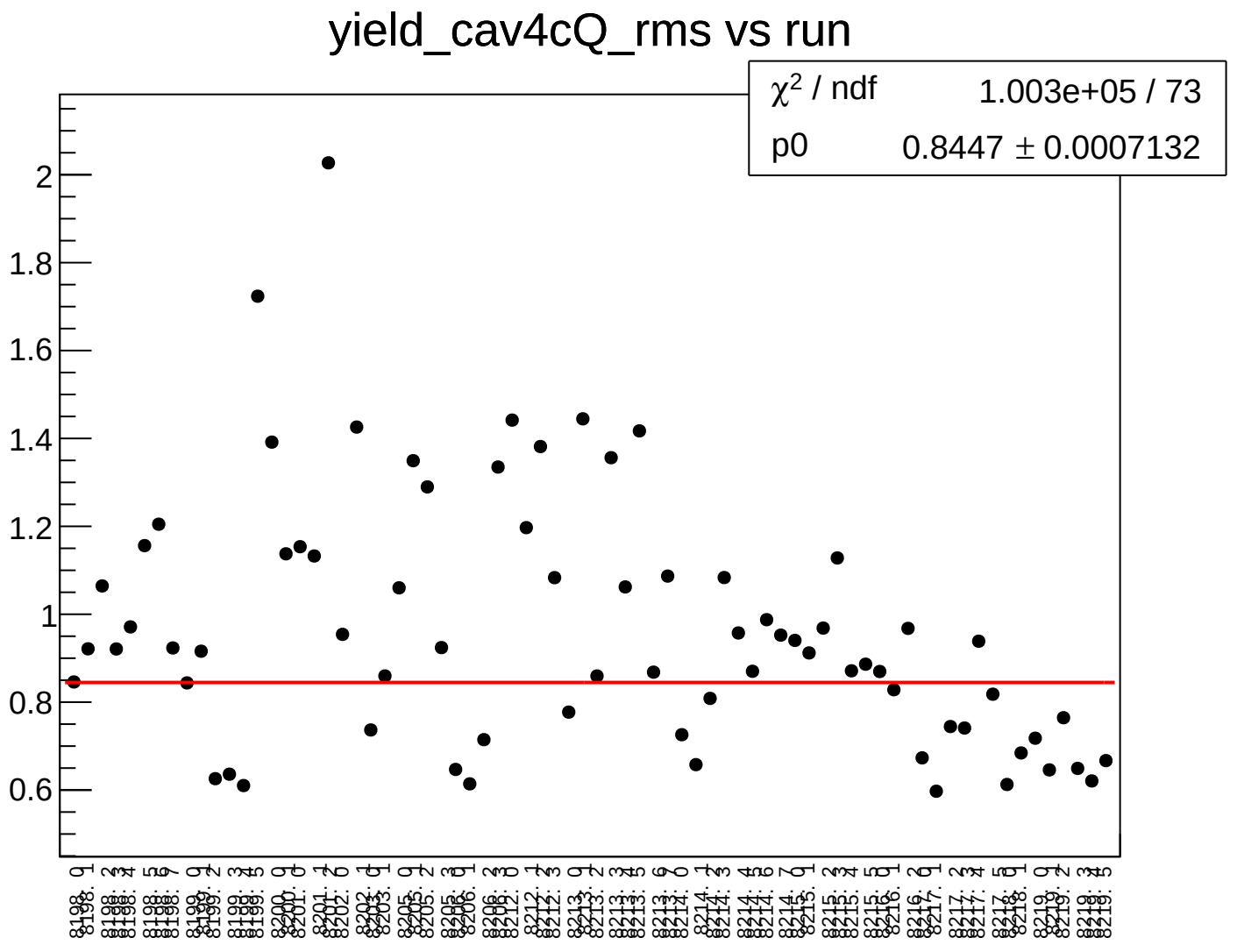

yield_bcm_dg_ds_rms vs run
χ² / ndf 9005 / 73
p0 0.6107 ± 0.0004996
0.75
0.7
0.65
0.6
0.55
0.5

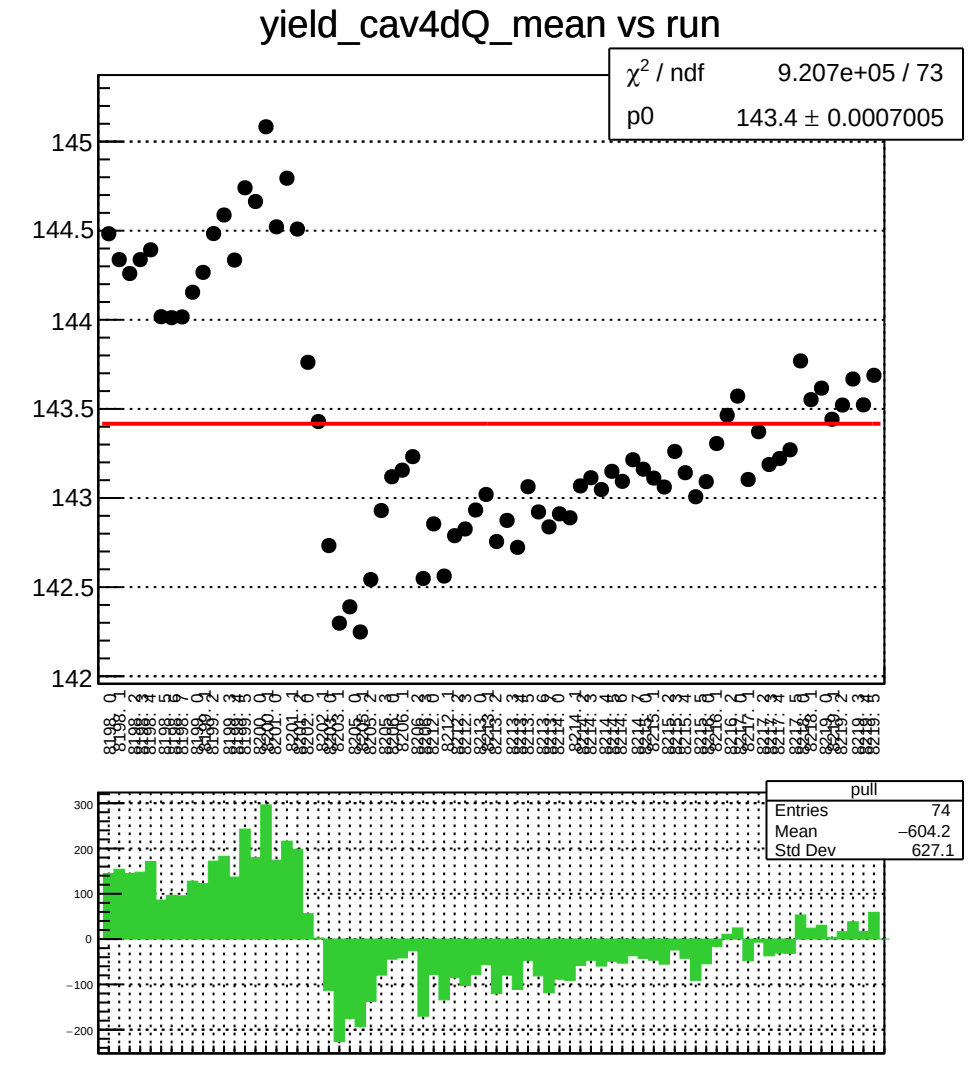

yield_cav4bQ_mean vs run
χ² / ndf 4.829e+05 / 73
p0 147.4 ± 0.001216
149
148
147
146
145
144
pull
Entries 74
Mean 10.35
Std Dev 39.26
150
100
50
0
−50
−100
−150
−200
−250

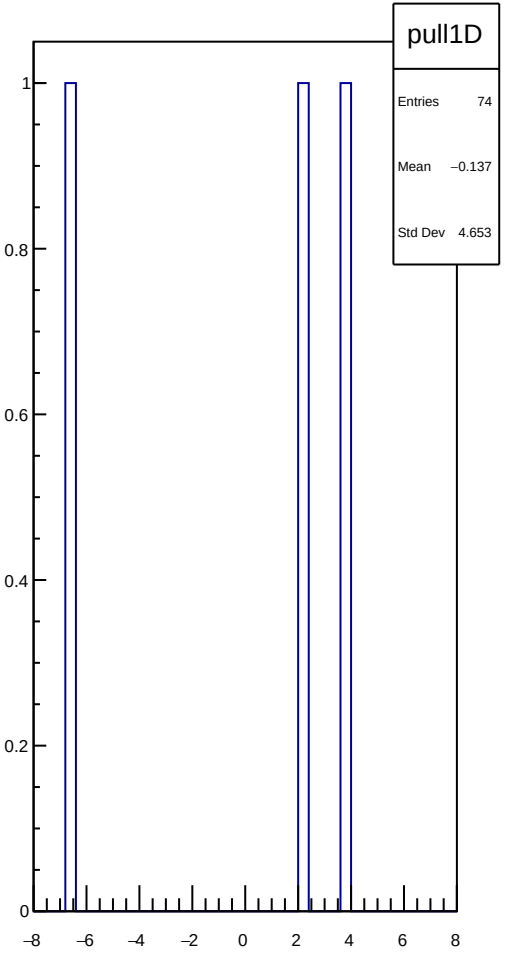

pull1D
Entries 74
Mean 2.087
Std Dev 3.942
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

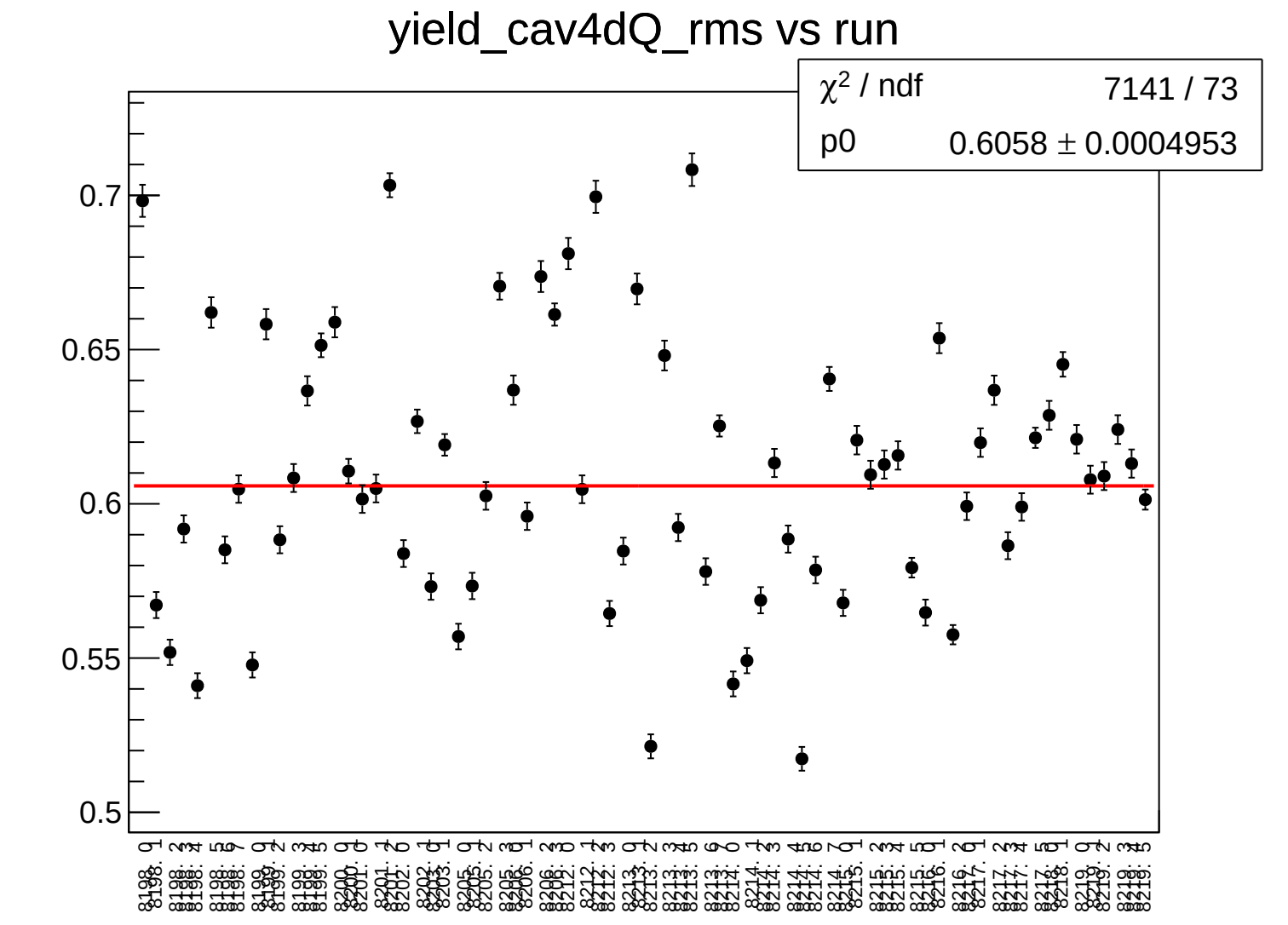

yield_cav4bQ_rms vs run
χ^2 / ndf 1.714e+05 / 73
p0 0.9924 ± 0.00086
2.5
2
1.5
1
0.5

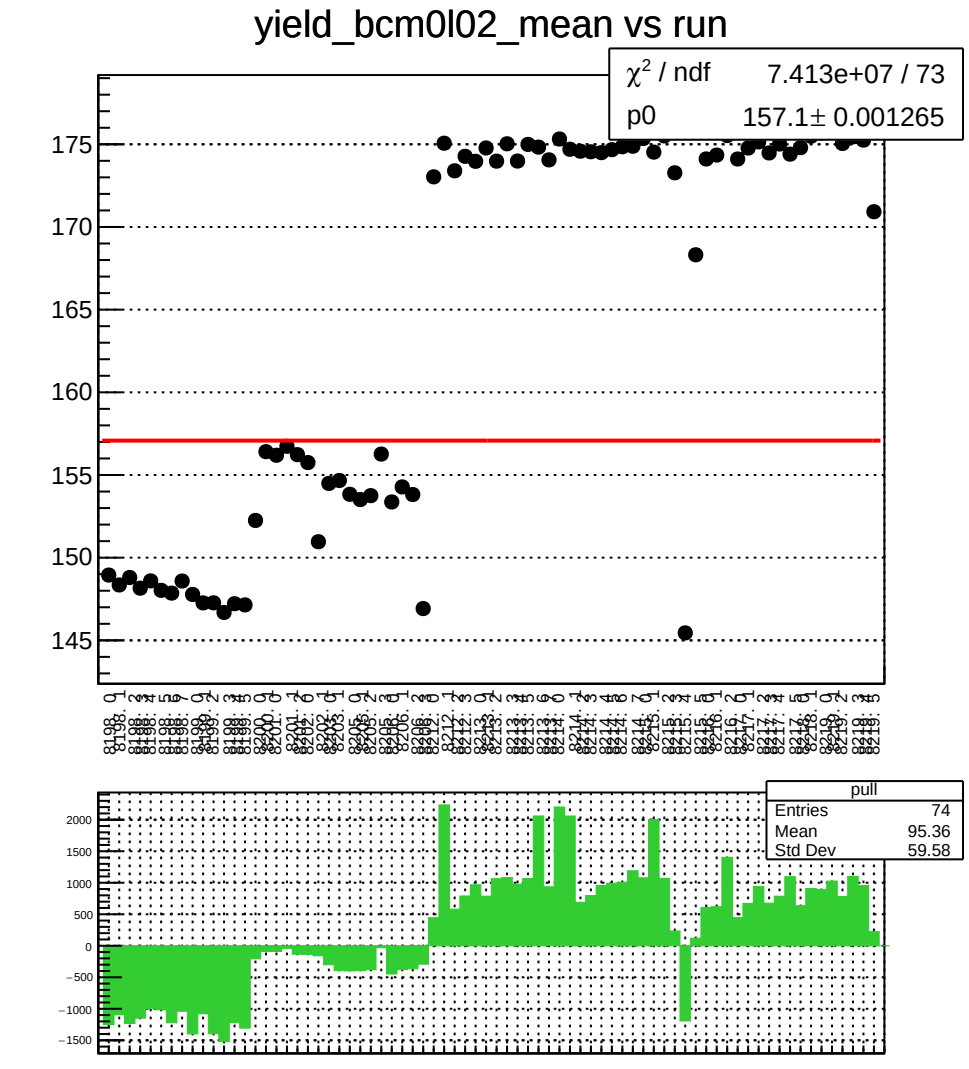

yield_cav4cQ_mean vs run
χ² / ndf 6.567e+05 / 73
p0 140.2 ± 0.001009
144
143
142
141
140
139
pull
Entries 74
Mean −52.72
Std Dev 61.75
400
300
200
100
0
−100
−200
pull1D
Entries 74
Mean 3.69
Std Dev 3.993
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

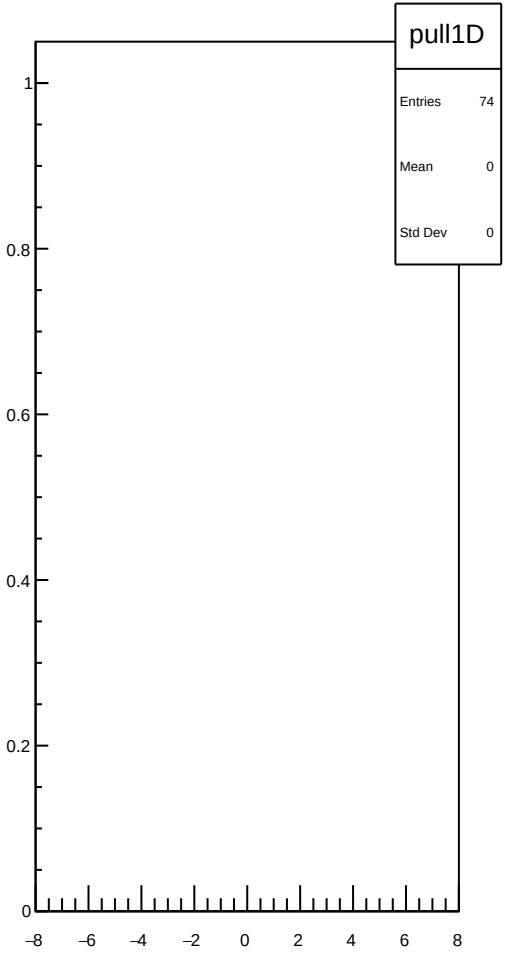

yield_cav4cQ_rms vs run
χ² / ndf 1.003e+05 / 73
p0 0.8447 ± 0.0007132
2
1.8
1.6
1.4
1.2
1
0.8
0.6

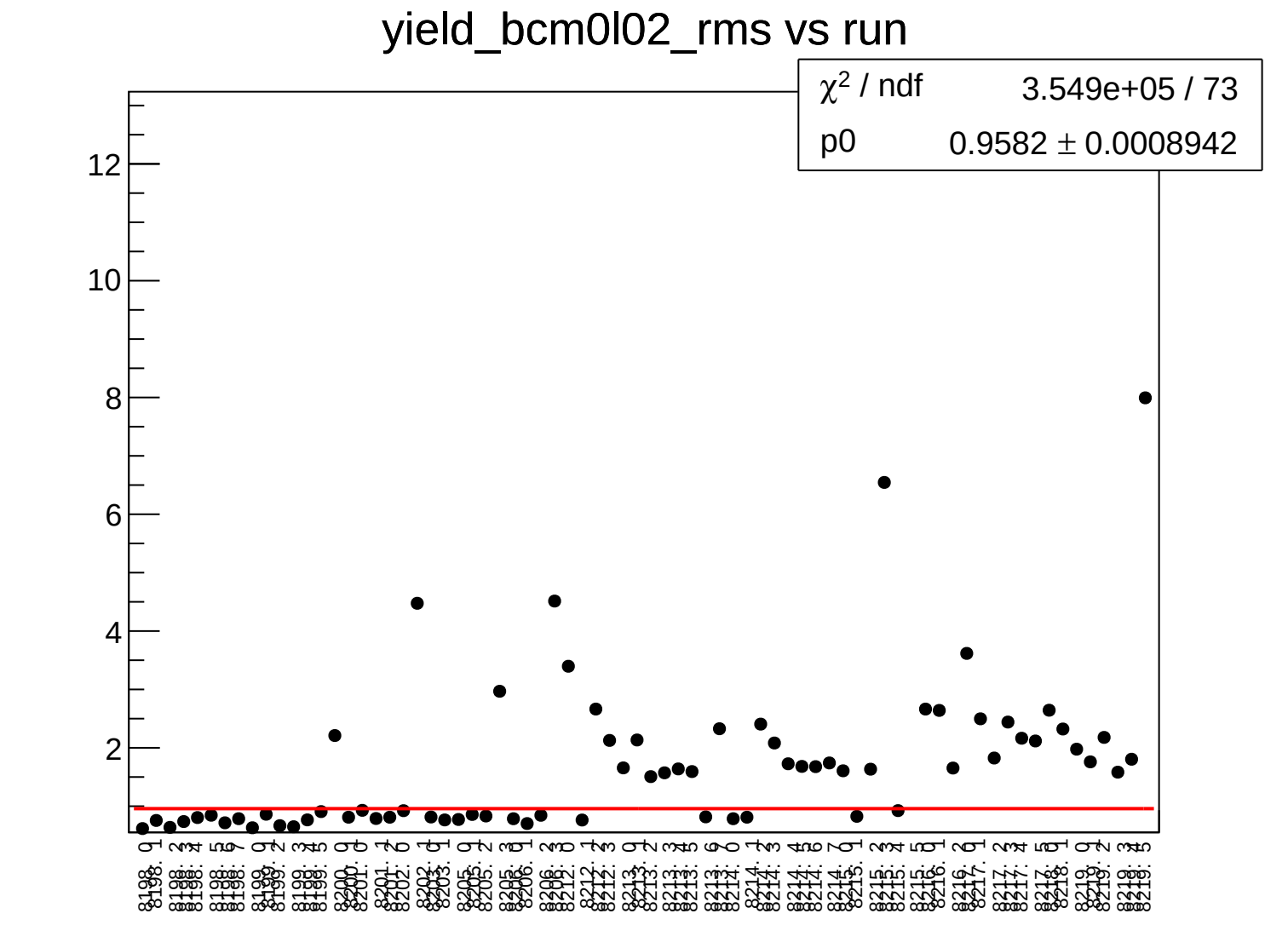

yield_cav4dQ_mean vs run
χ² / ndf 9.207e+05 / 73
p0 143.4 ± 0.0007005
145
144.5
144
143.5
143
142.5
142
pull
Entries 74
Mean −604.2
Std Dev 627.1
300
200
100
0
−100
−200

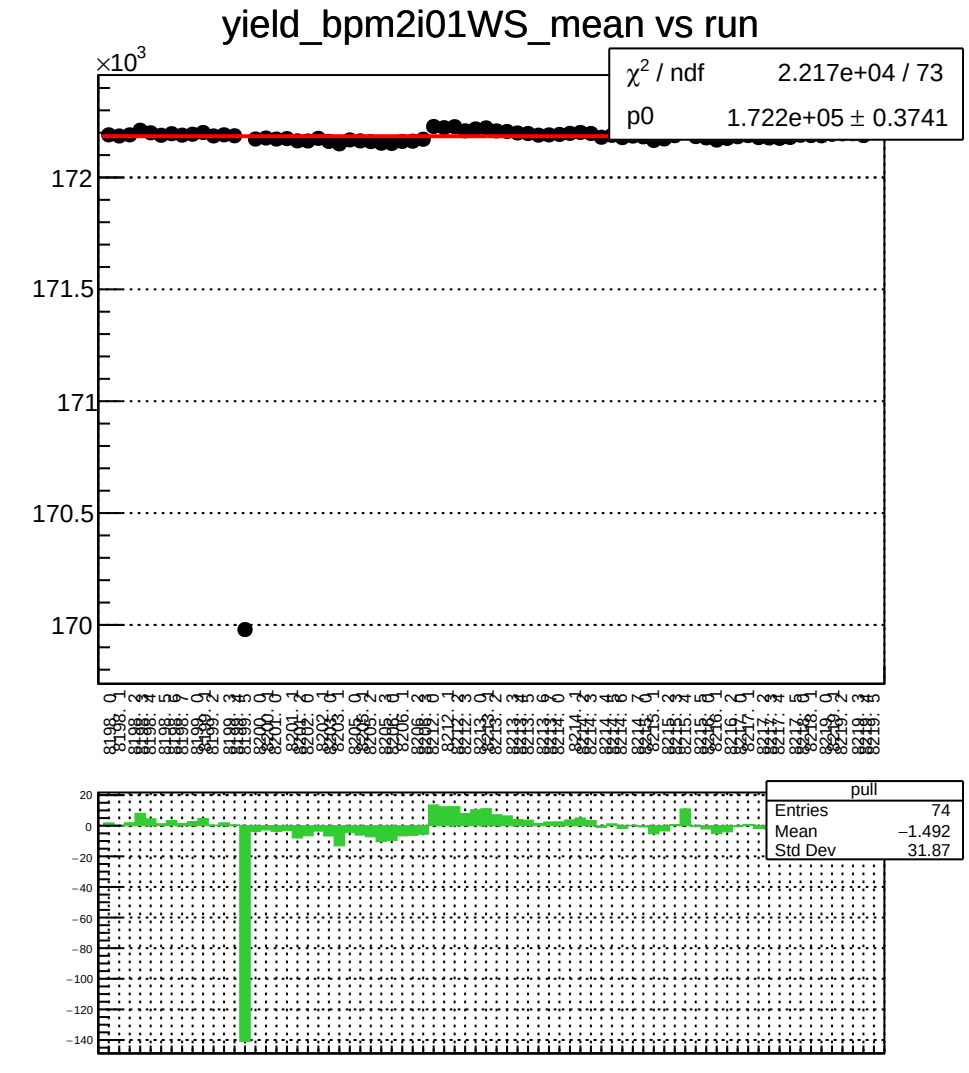

pull1D
Entries 74
Mean −0.137
Std Dev 4.653
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

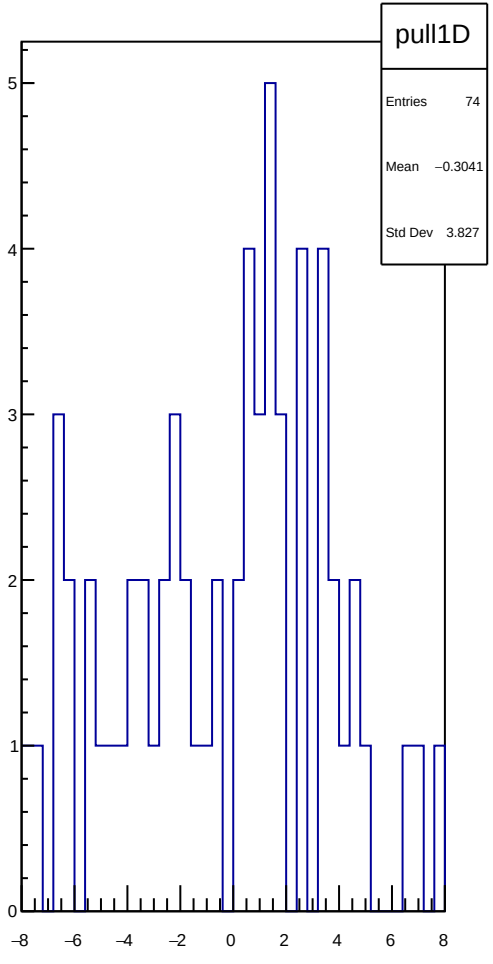

yield_cav4dQ_rms vs run
χ² / ndf 7141 / 73
p0 0.6058 ± 0.0004953
0.7
0.65
0.6
0.55
0.5

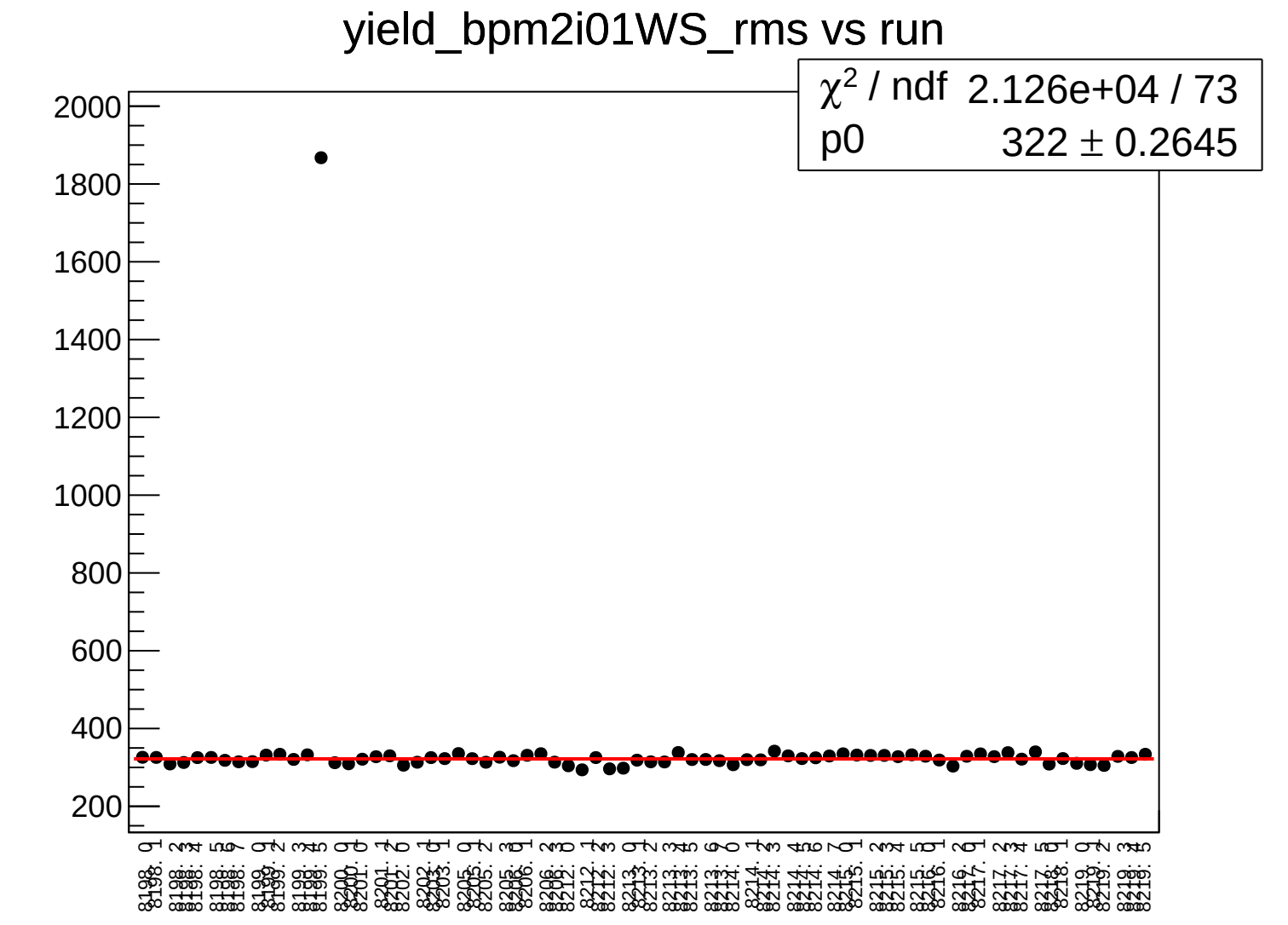

yield_bcm0l02_mean vs run
χ² / ndf 7.413e+07 / 73
p0 157.1± 0.001265
175
170
165
160
155
150
145
pull
Entries 74
Mean 95.36
Std Dev 59.58
2000
1500
1000
500
0
−500
−1000
−1500

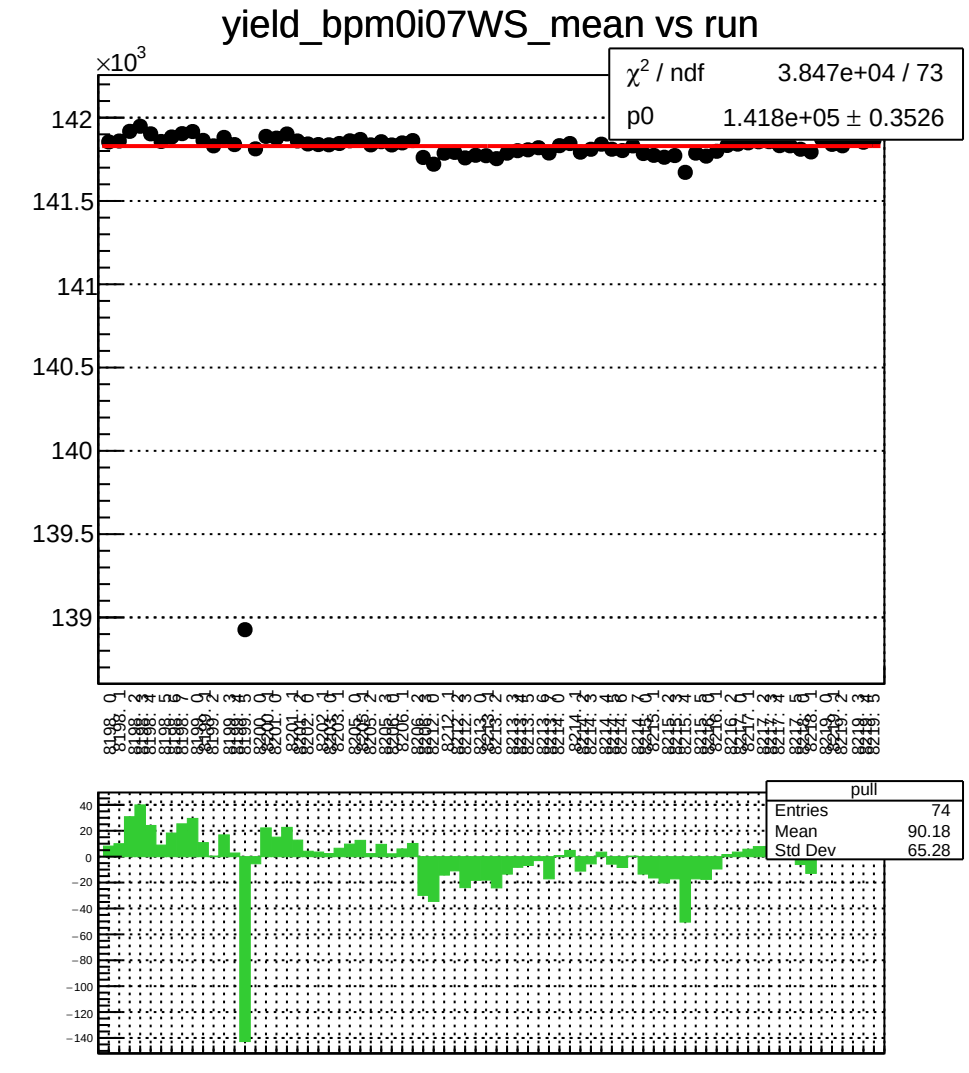

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

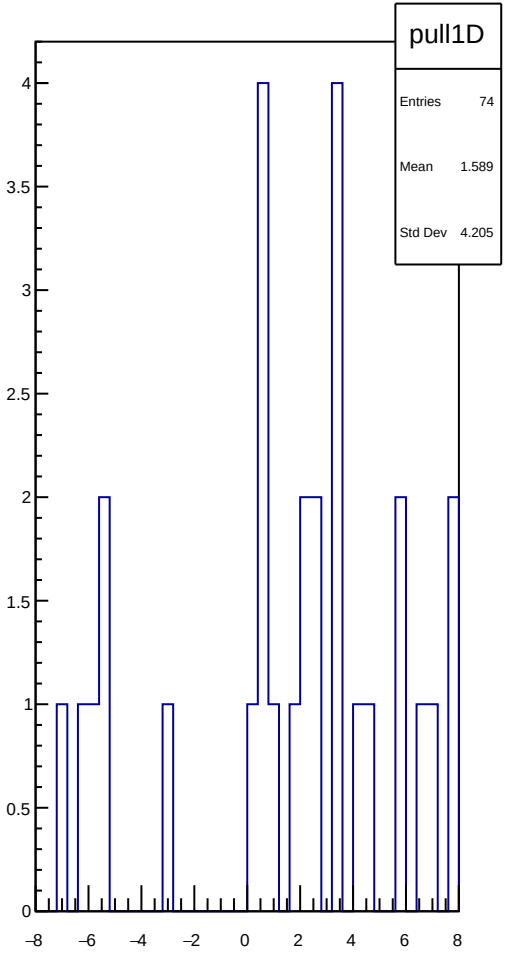

yield_bcm0l02_rms vs run
χ² / ndf 3.549e+05 / 73
p0 0.9582 ± 0.0008942
12
10
8
6
4
2

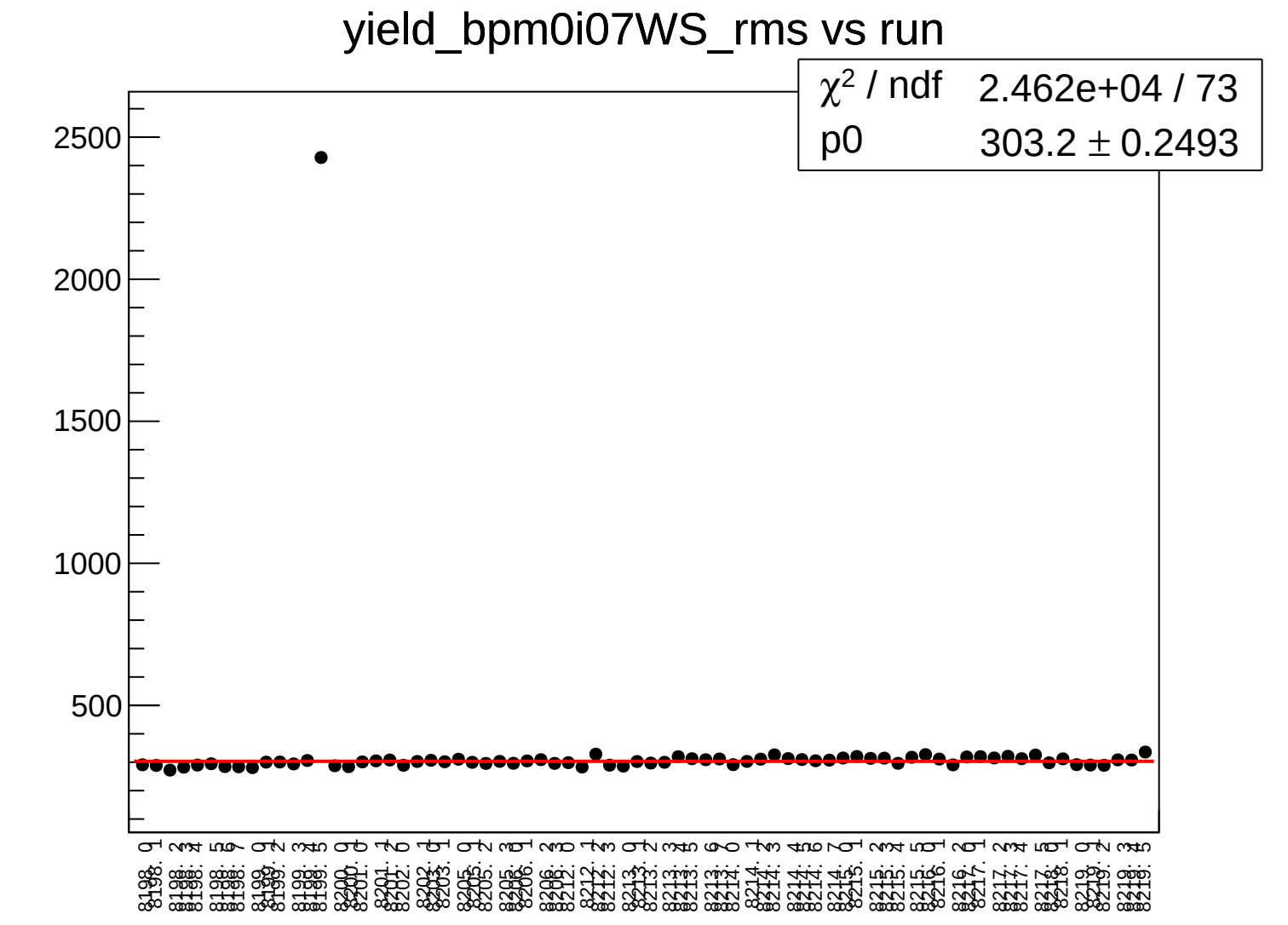

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 2.217e+04 / 73
p0 1.722e+05 ± 0.3741
172
171.5
171
170.5
170
pull
Entries 74
Mean −1.492
Std Dev 31.87
20
0
−20
−40
−60
−80
−100
−120
−140

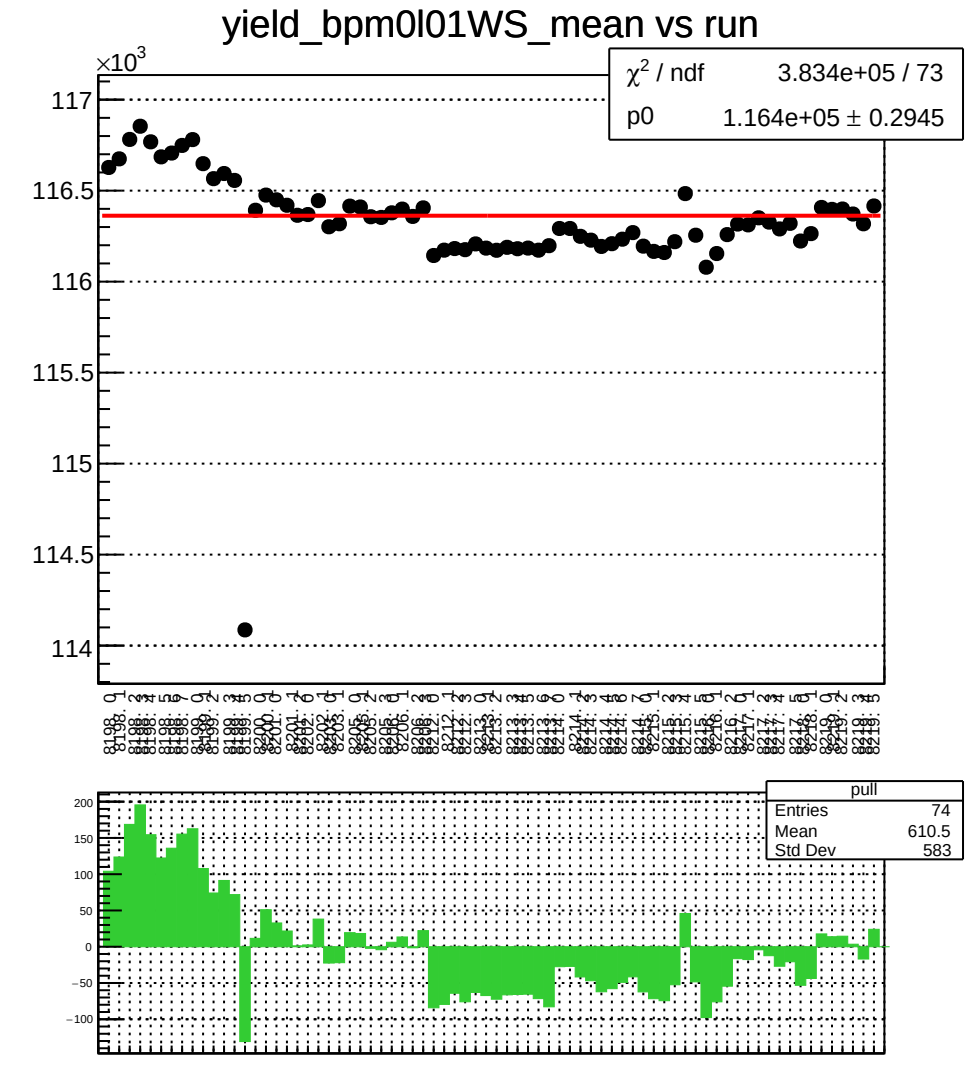

pull1D
Entries 74
Mean −0.3041
Std Dev 3.827
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

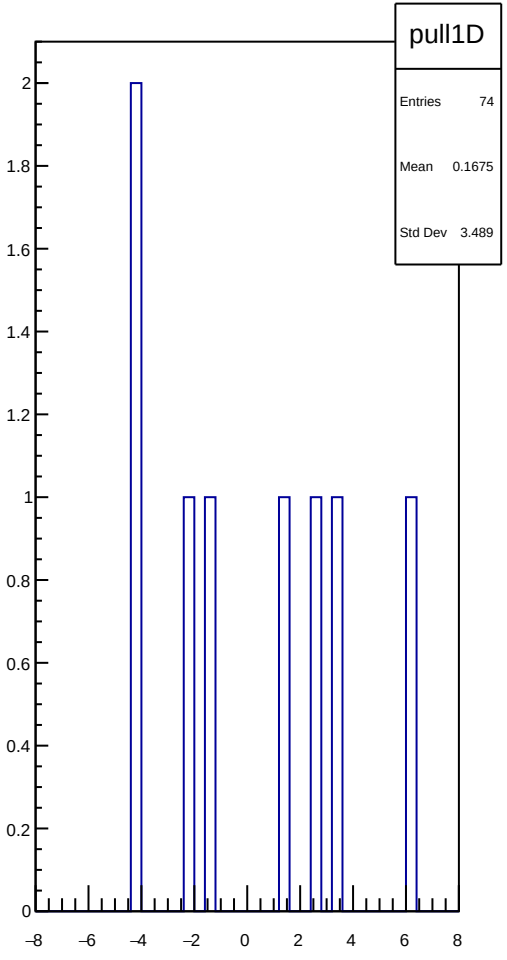

yield_bpm2i01WS_rms vs run
χ² / ndf 2.126e+04 / 73
p0 322 ± 0.2645
2000
1800
1600
1400
1200
1000
800
600
400
200

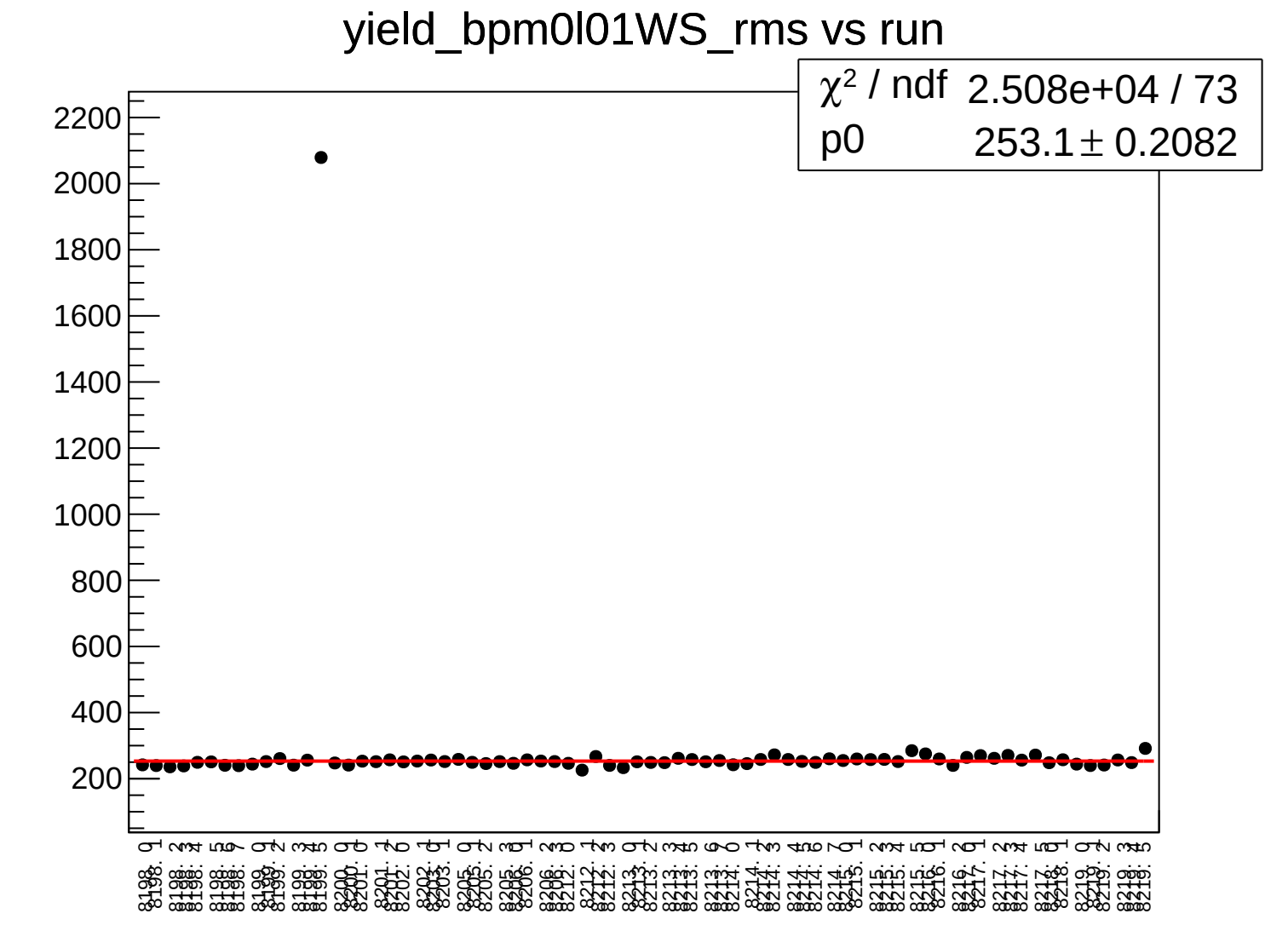

yield_bpm0i07WS_mean vs run
×10^3
χ² / ndf 3.847e+04 / 73
p0 1.418e+05 ± 0.3526
142
141.5
141
140.5
140
139.5
139
pull
Entries 74
Mean 90.18
Std Dev 65.28
40
20
0
−20
−40
−60
−80
−100
−120
−140

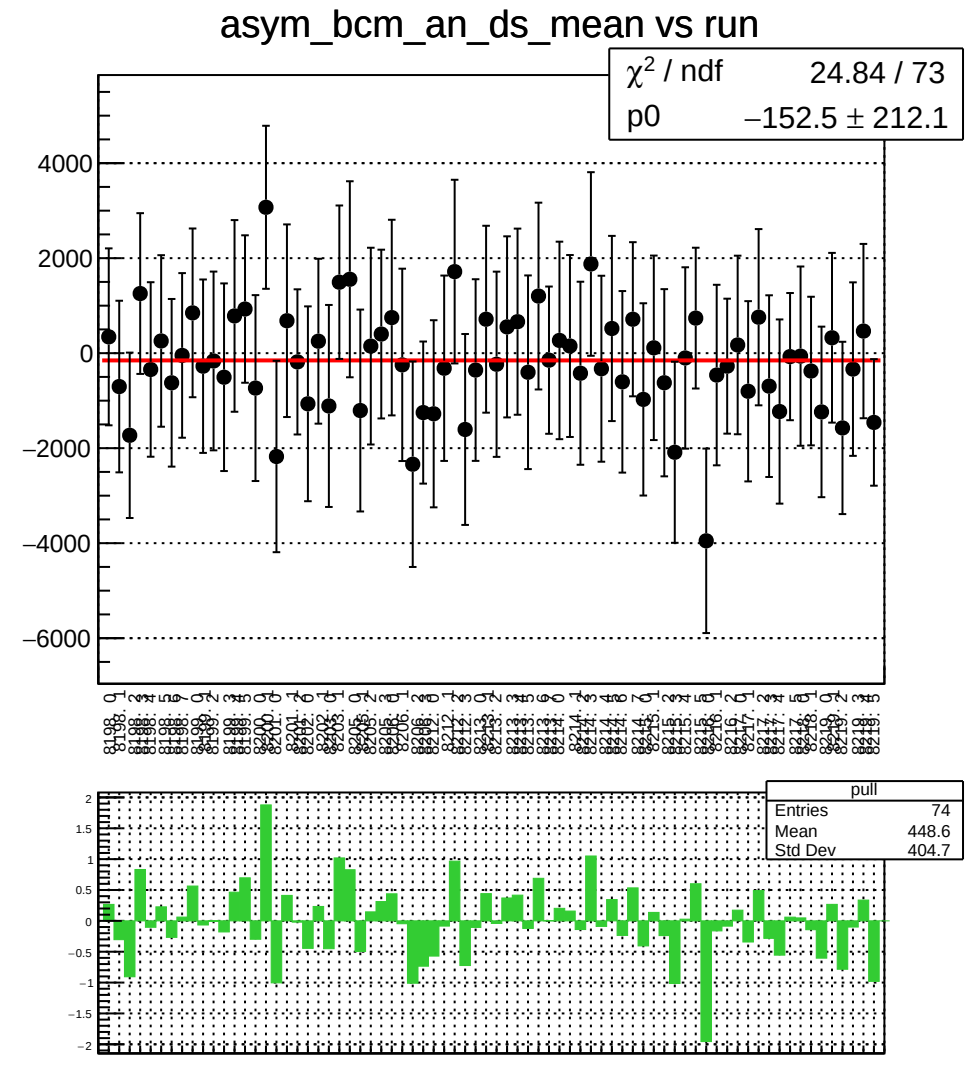

pull1D
Entries 74
Mean 1.589
Std Dev 4.205
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

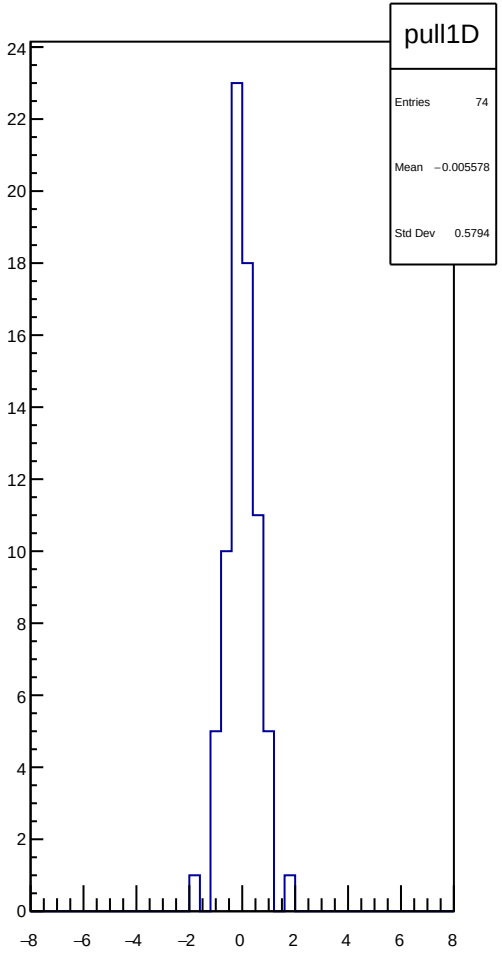

yield_bpm0i07WS_rms vs run
χ² / ndf 2.462e+04 / 73
p0 303.2 ± 0.2493
2500
2000
1500
1000
500

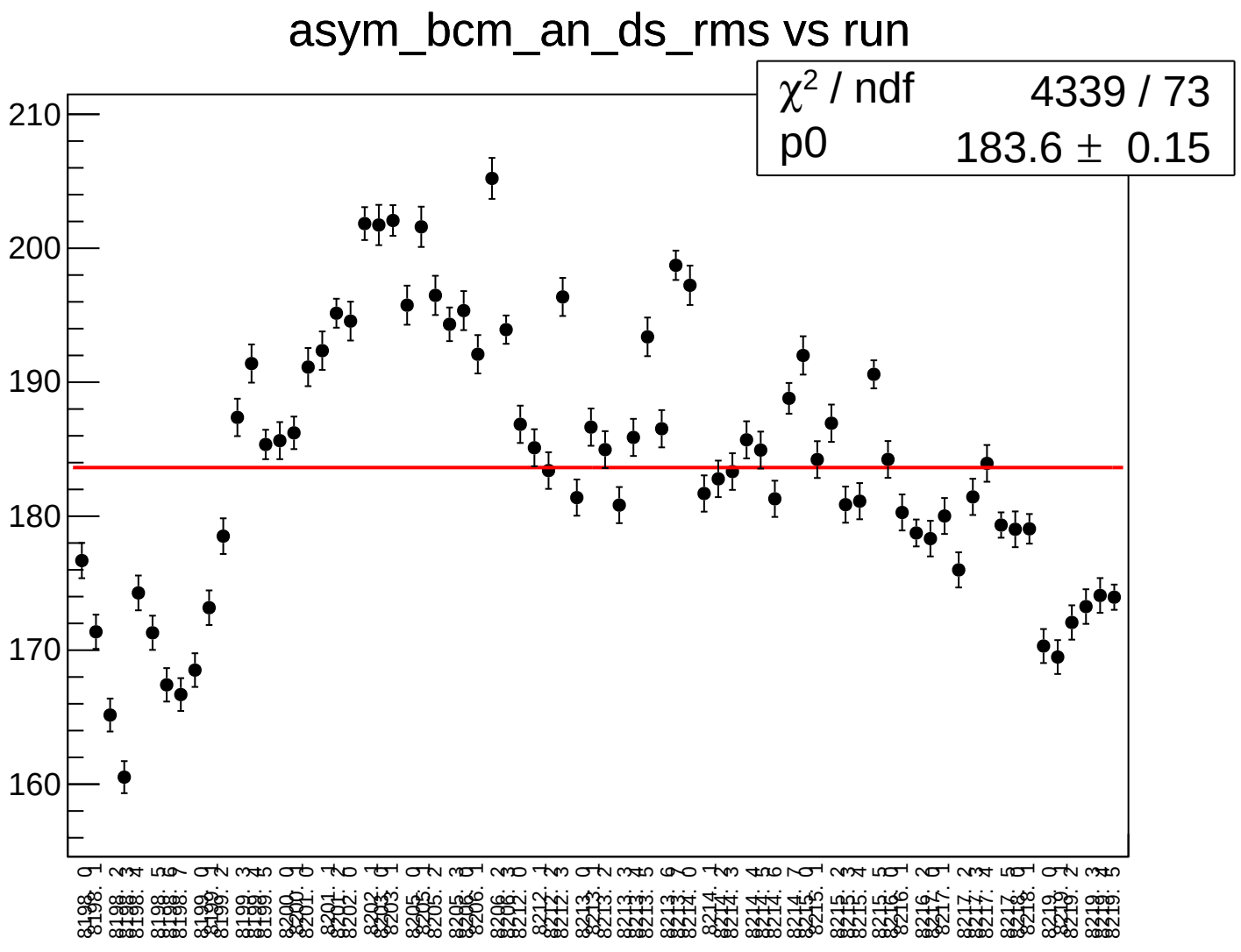

yield_bpm0l01WS_mean vs run
×10^3
χ² / ndf 3.834e+05 / 73
p0 1.164e+05 ± 0.2945
117
116.5
116
115.5
115
114.5
114
pull
Entries 74
Mean 610.5
Std Dev 583
200
150
100
50
0
−50
−100

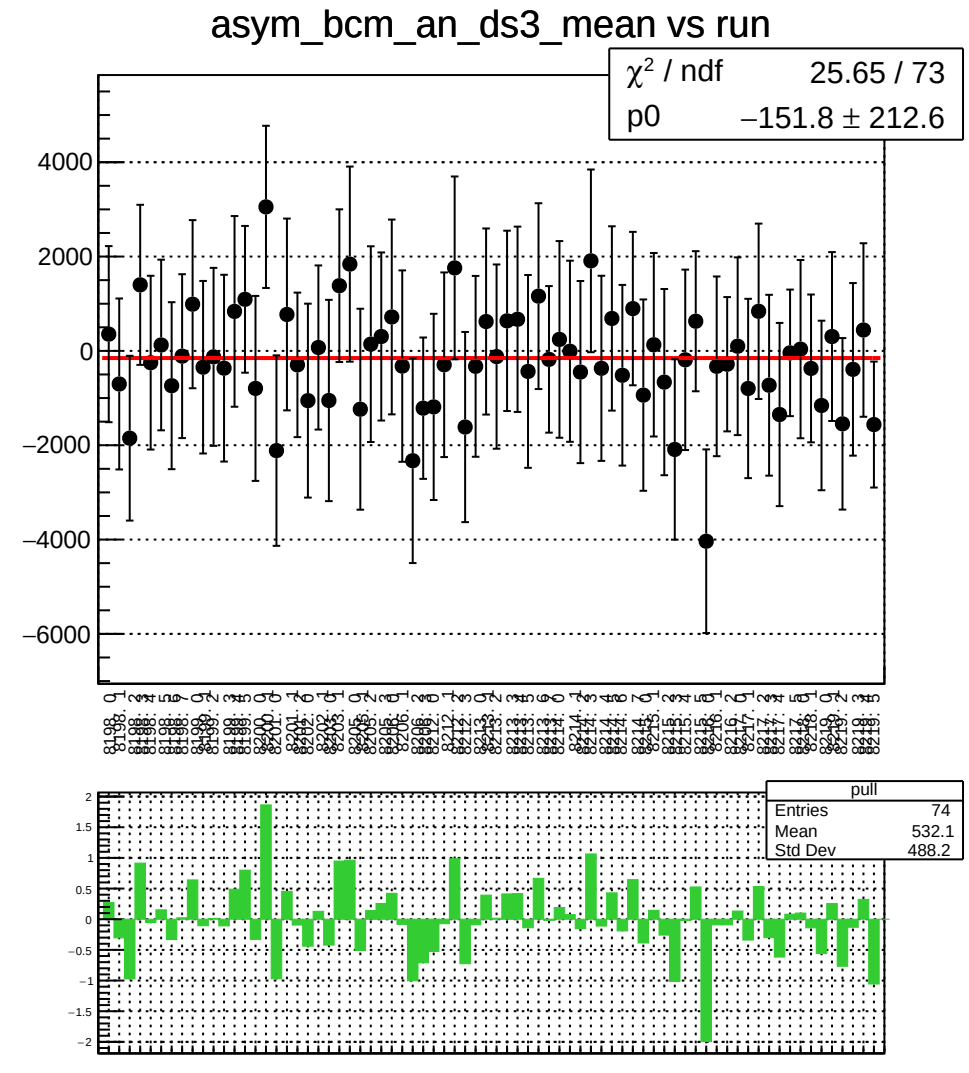

pull1D
Entries 74
Mean 0.1675
Std Dev 3.489
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

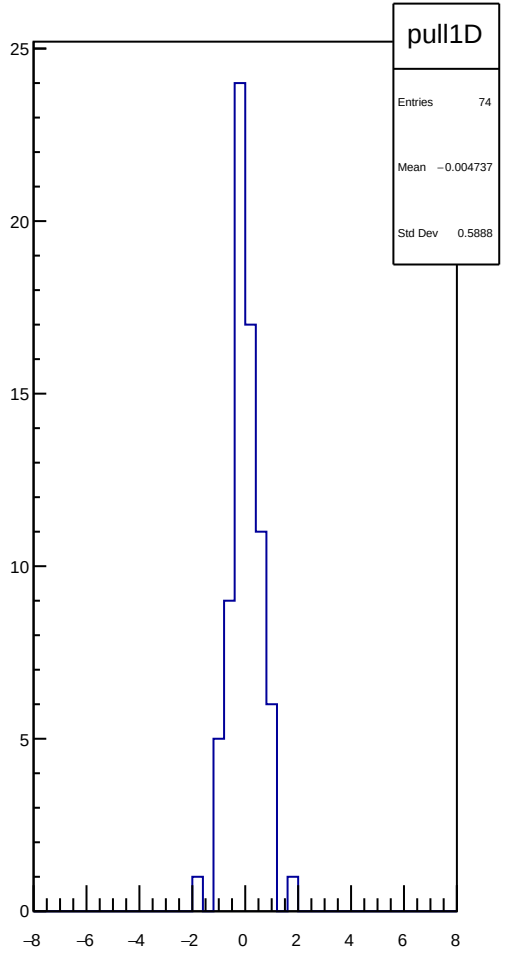

yield_bpm0l01WS_rms vs run
χ² / ndf 2.508e+04 / 73
p0 253.1 ± 0.2082
2200
2000
1800
1600
1400
1200
1000
800
600
400
200

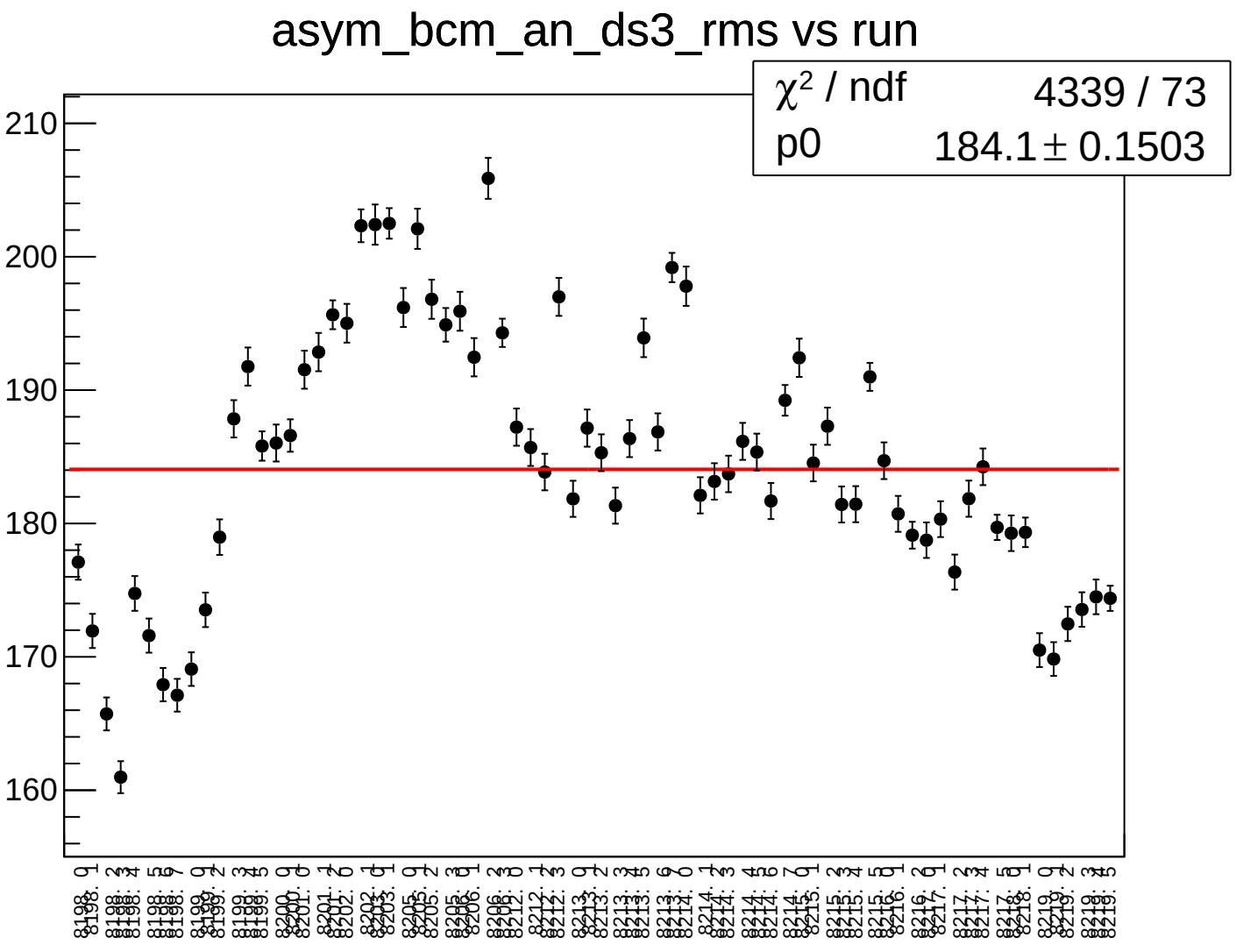

asym_bcm_an_ds_mean vs run
χ² / ndf 24.84 / 73
p0 −152.5 ± 212.1
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 448.6
Std Dev 404.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

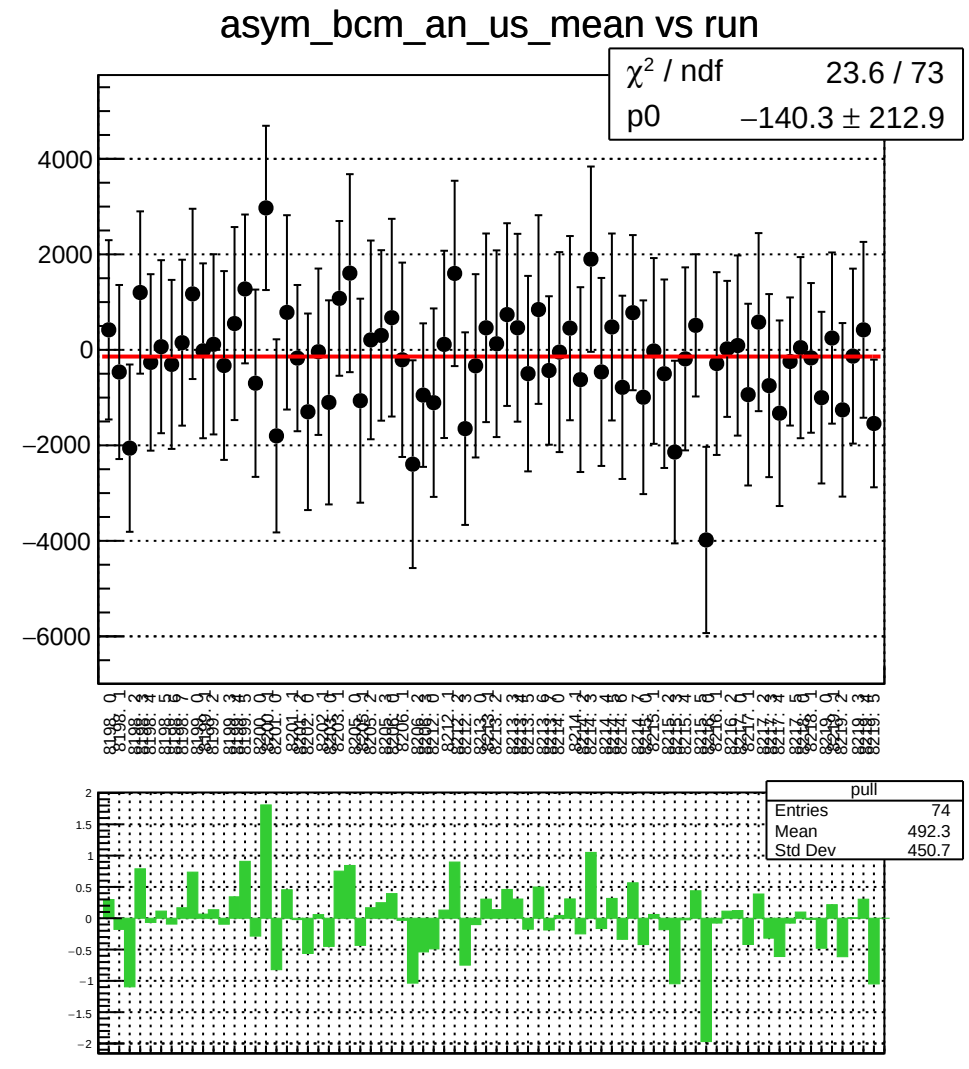

pull1D
Entries 74
Mean −0.005578
Std Dev 0.5794
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

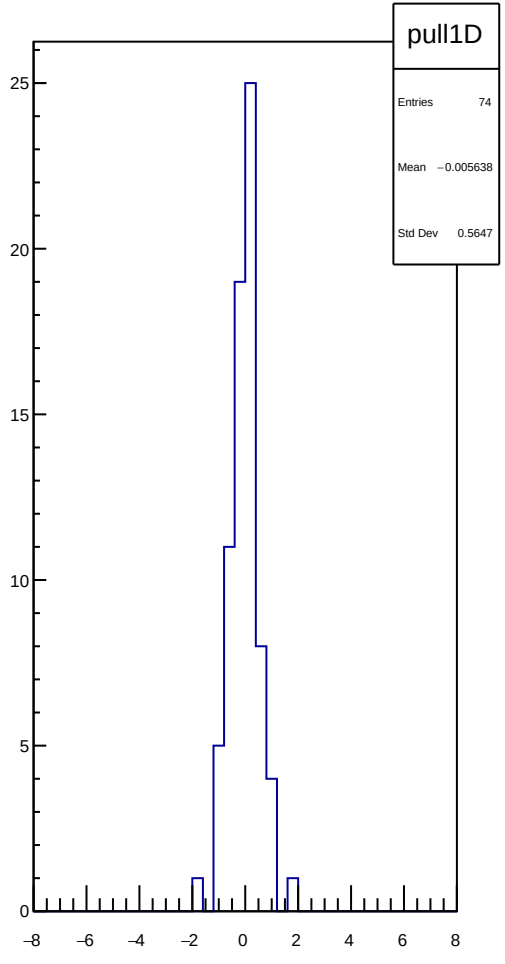

asym_bcm_an_ds_rms vs run
χ² / ndf 4339 / 73
p0 183.6 ± 0.15
210
200
190
180
170
160

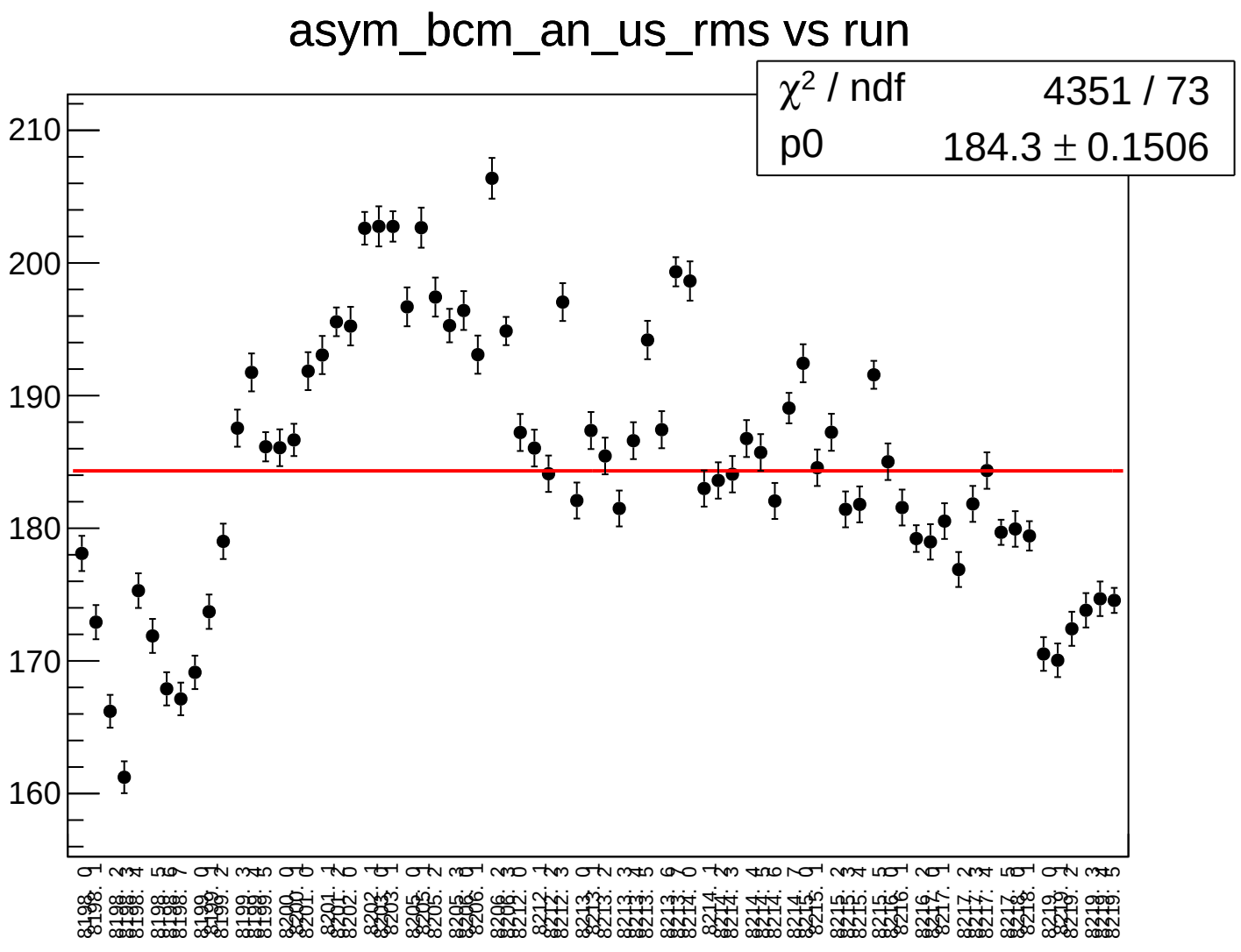

asym_bcm_an_ds3_mean vs run
χ² / ndf 25.65 / 73
p0 −151.8 ± 212.6
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 532.1
Std Dev 488.2
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

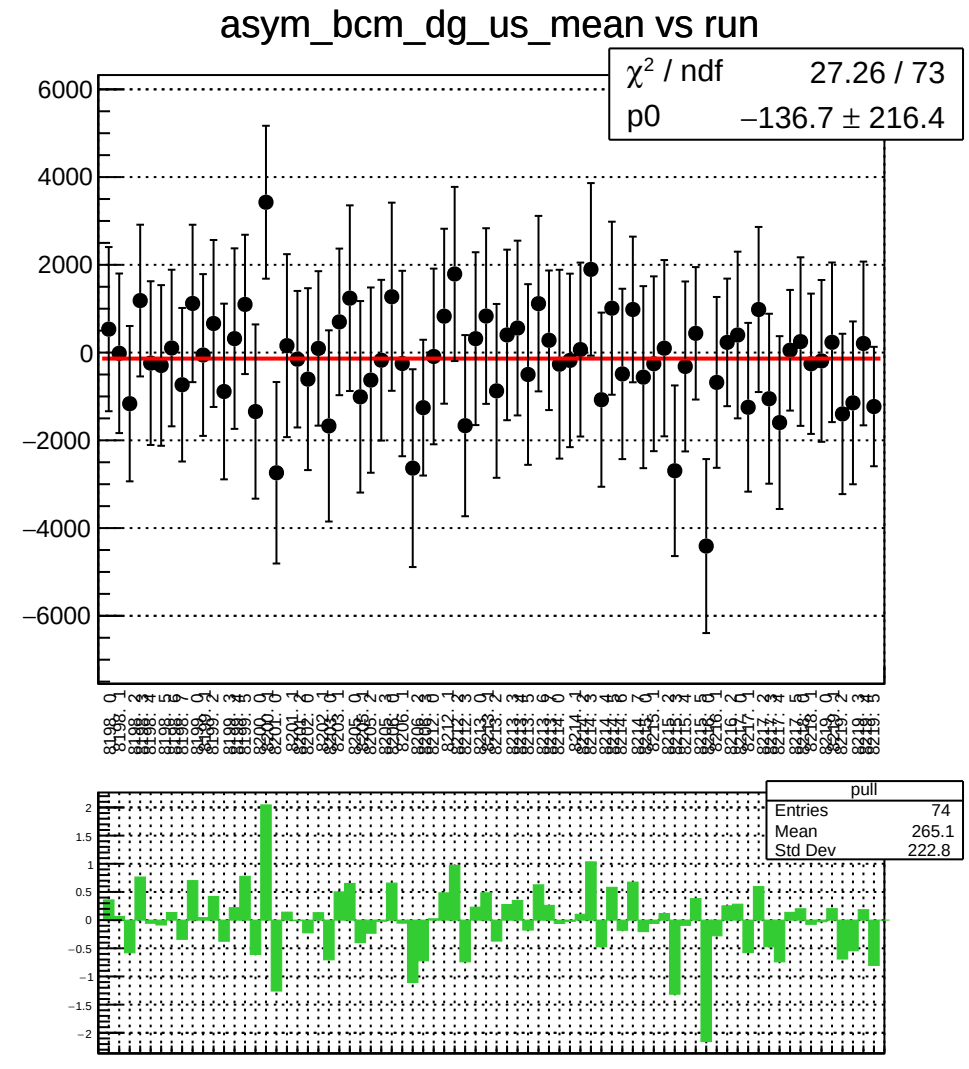

pull1D
Entries 74
Mean −0.004737
Std Dev 0.5888
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

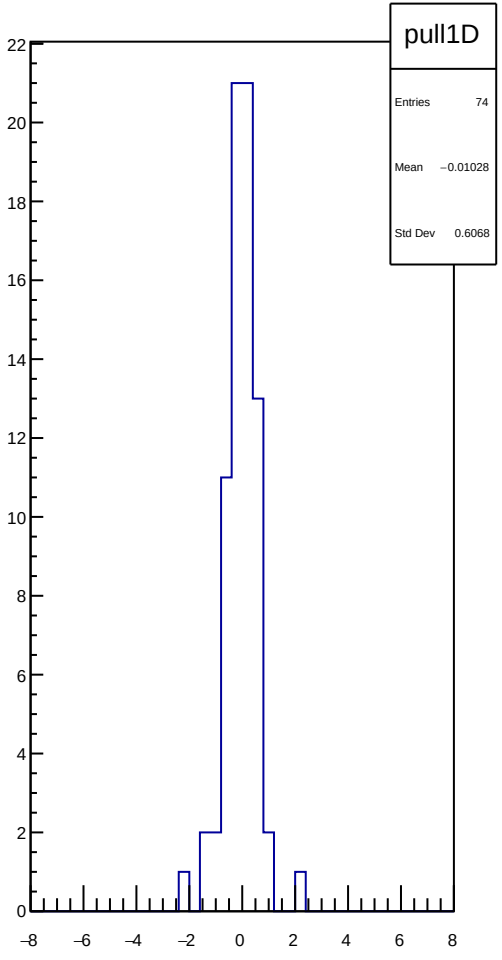

asym_bcm_an_ds3_rms vs run
χ² / ndf 4339 / 73
p0 184.1 ± 0.1503
210
200
190
180
170
160

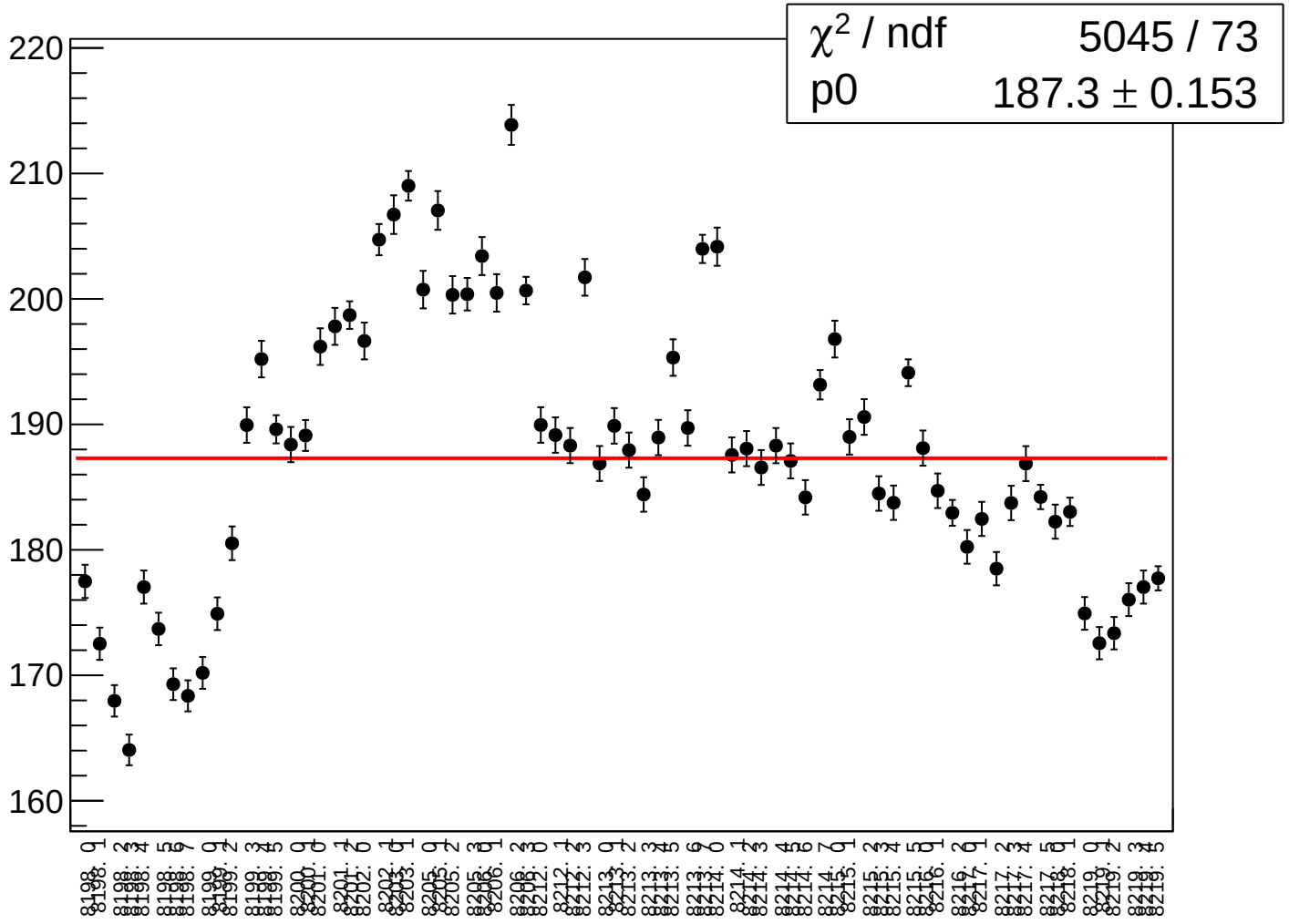

asym_bcm_an_us_mean vs run
χ² / ndf 23.6 / 73
p0 −140.3 ± 212.9
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 492.3
Std Dev 450.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

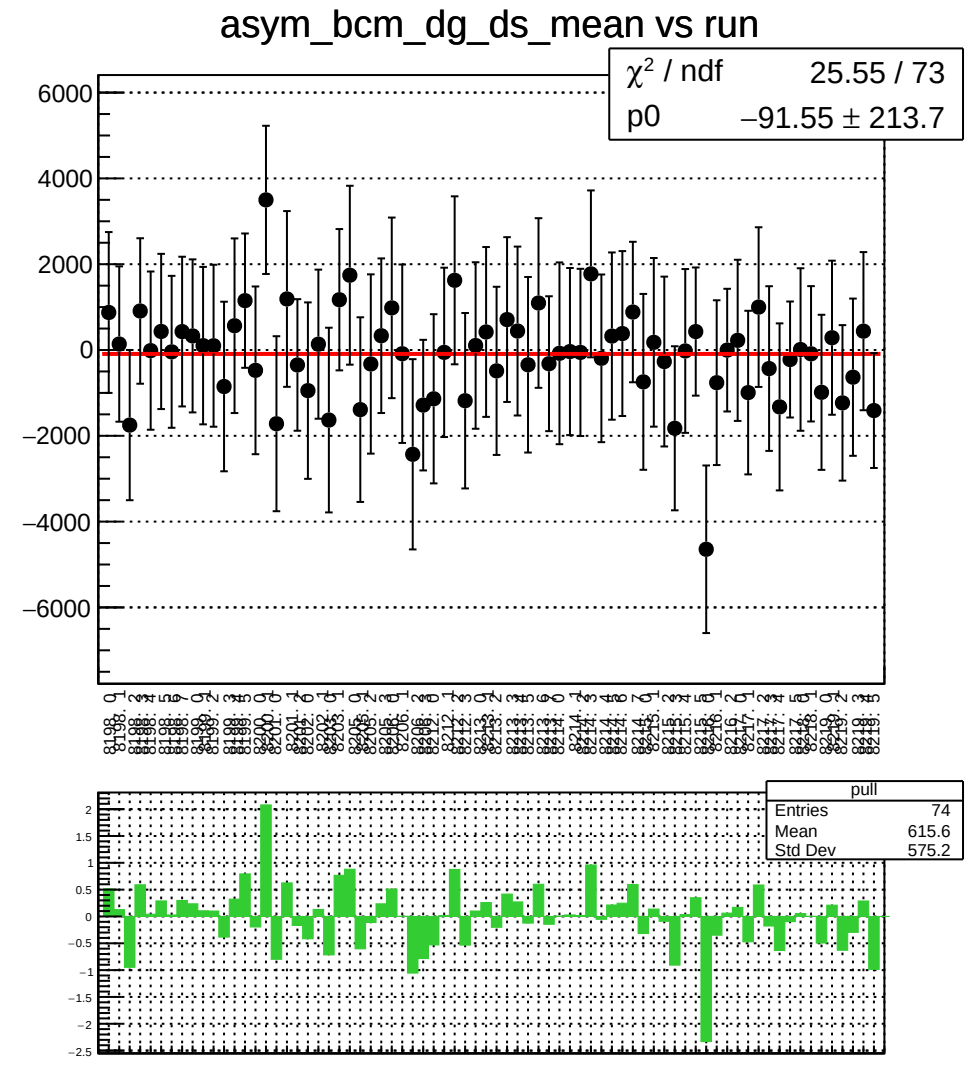

pull1D
Entries 74
Mean −0.005638
Std Dev 0.5647
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

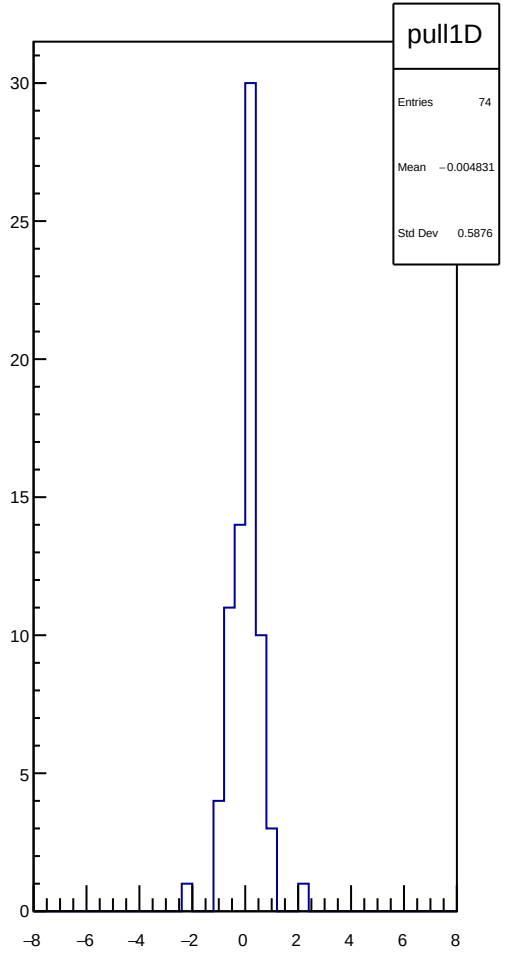

asym_bcm_an_us_rms vs run
χ² / ndf 4351 / 73
p0 184.3 ± 0.1506
210
200
190
180
170
160

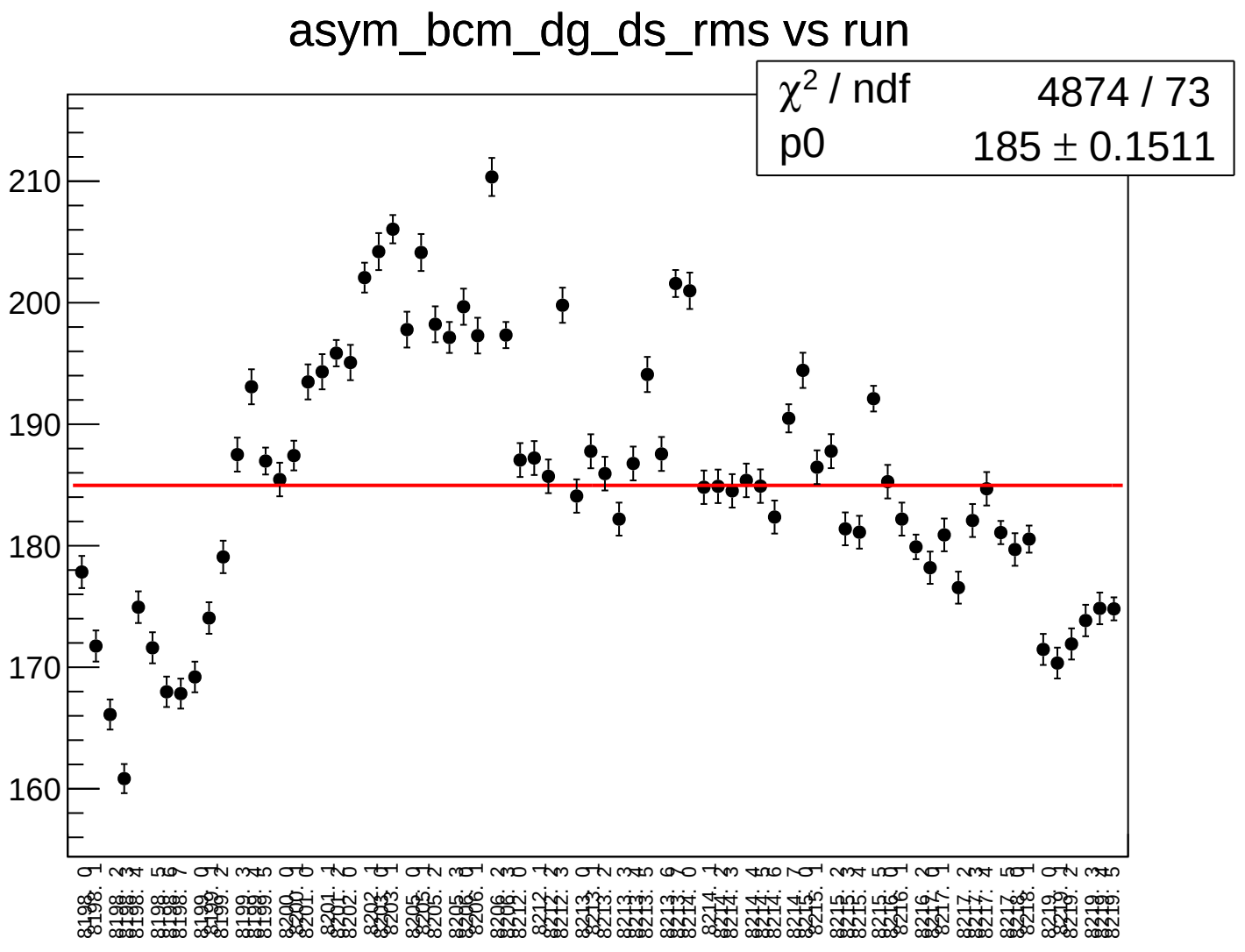

asym_bcm_dg_us_mean vs run
χ² / ndf 27.26 / 73
p0 −136.7 ± 216.4
pull
Entries 74
Mean 265.1
Std Dev 222.8

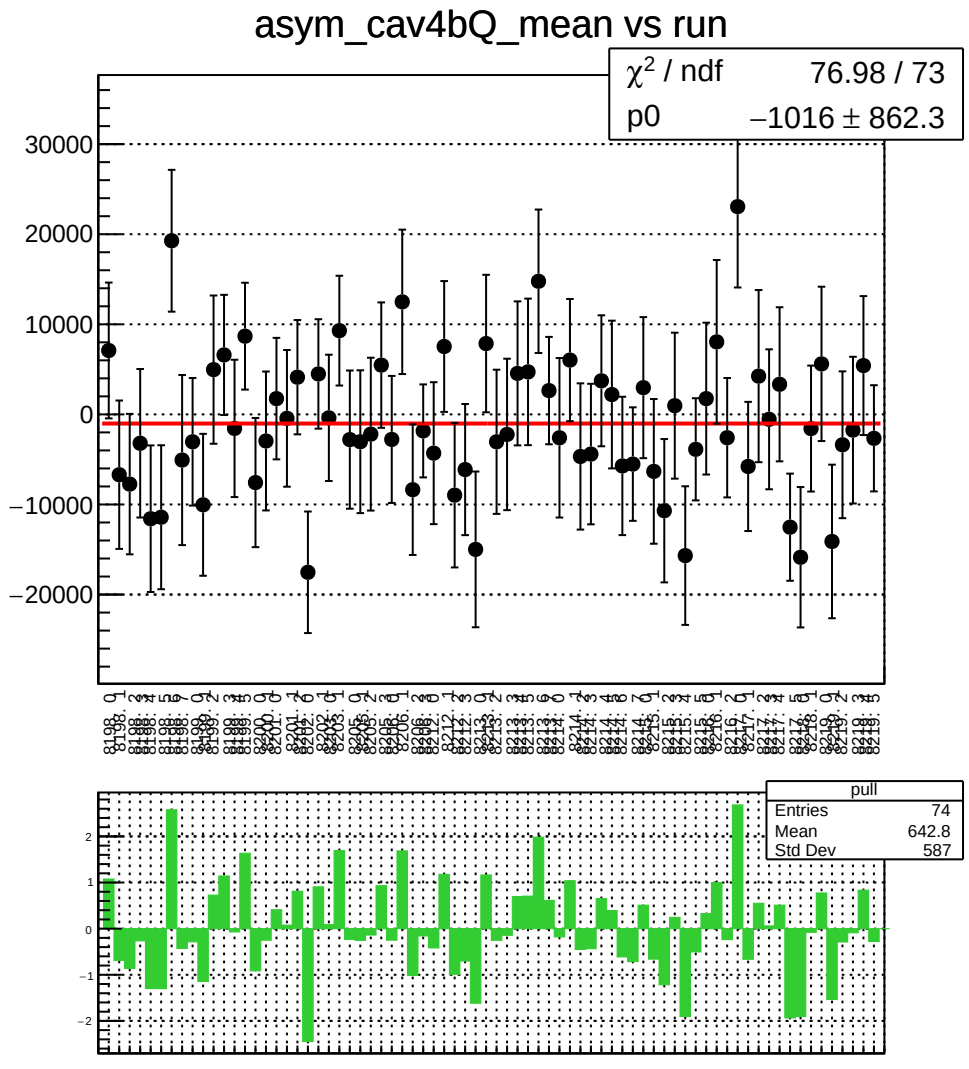

pull1D
Entries 74
Mean −0.01028
Std Dev 0.6068

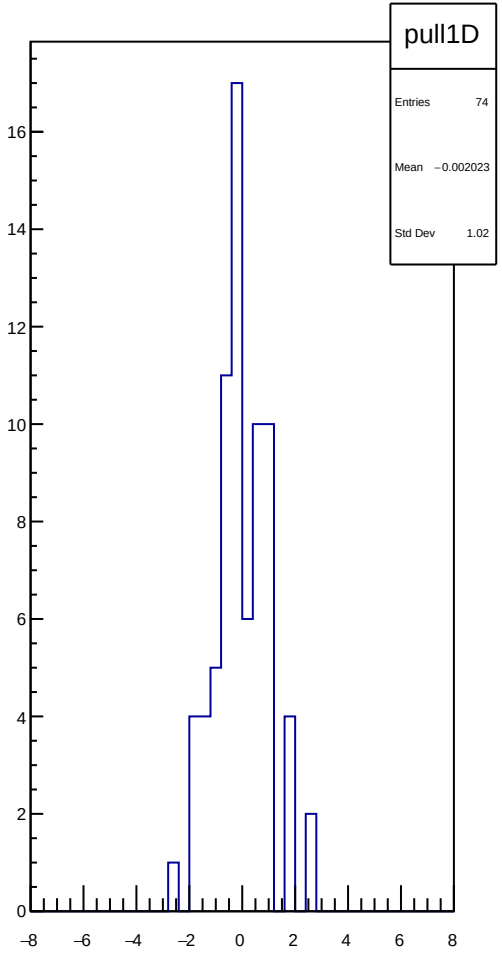

asym_bcm_dg_us_rms vs run
χ^2 / ndf 5045 / 73
p0 187.3 ± 0.153
220
210
200
190
180
170
160

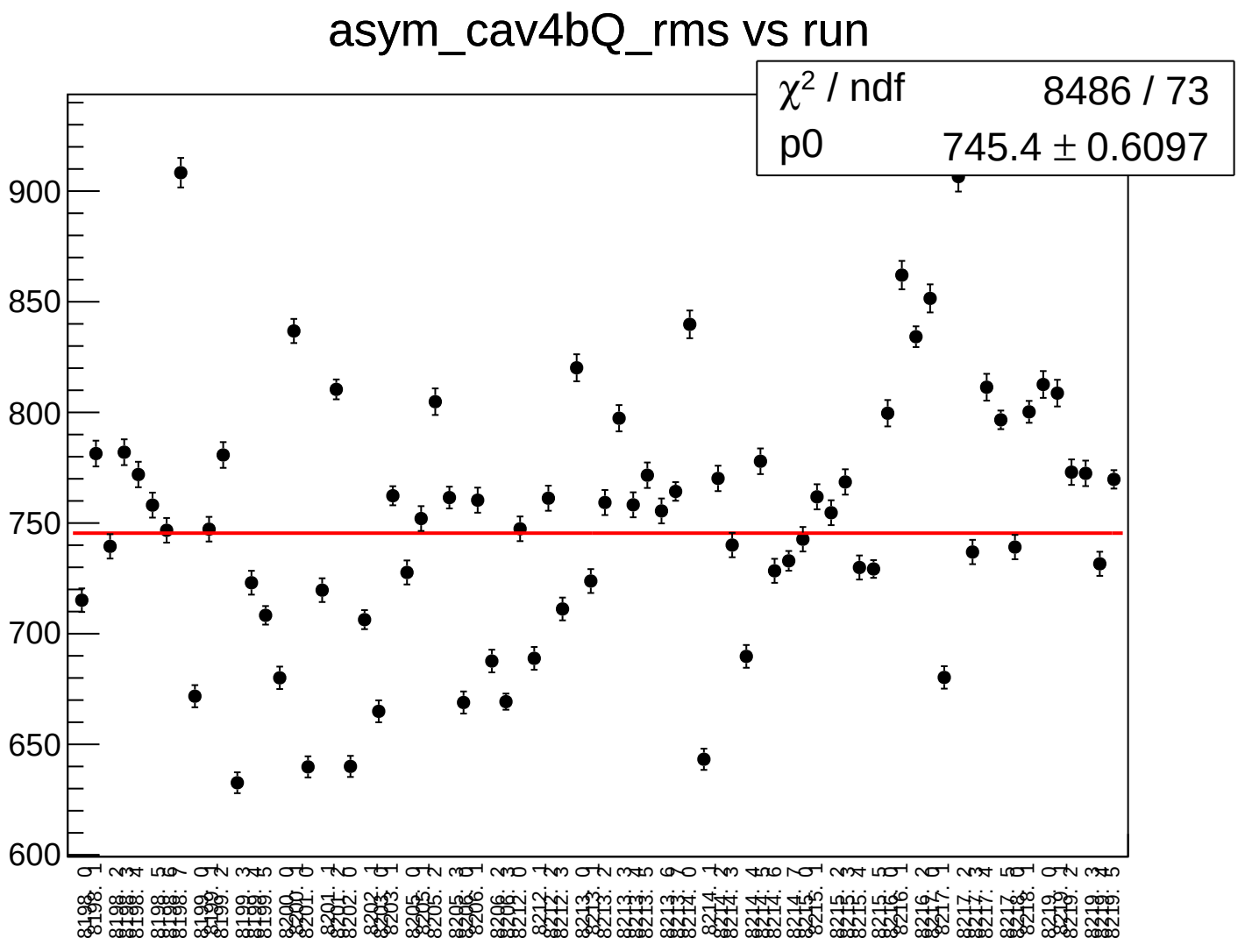

asym_bcm_dg_ds_mean vs run
χ² / ndf 25.55 / 73
p0 −91.55 ± 213.7
pull
Entries 74
Mean 615.6
Std Dev 575.2

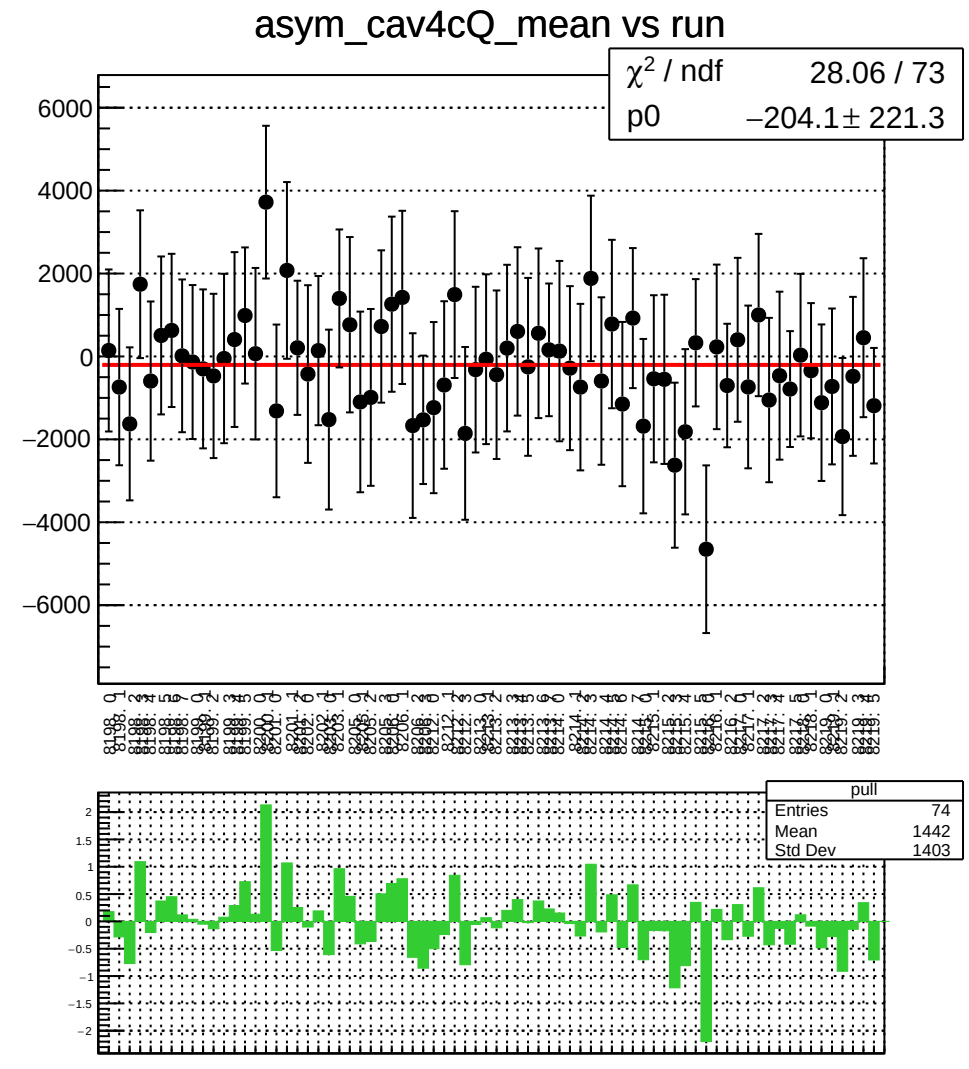

pull1D
Entries 74
Mean −0.004831
Std Dev 0.5876

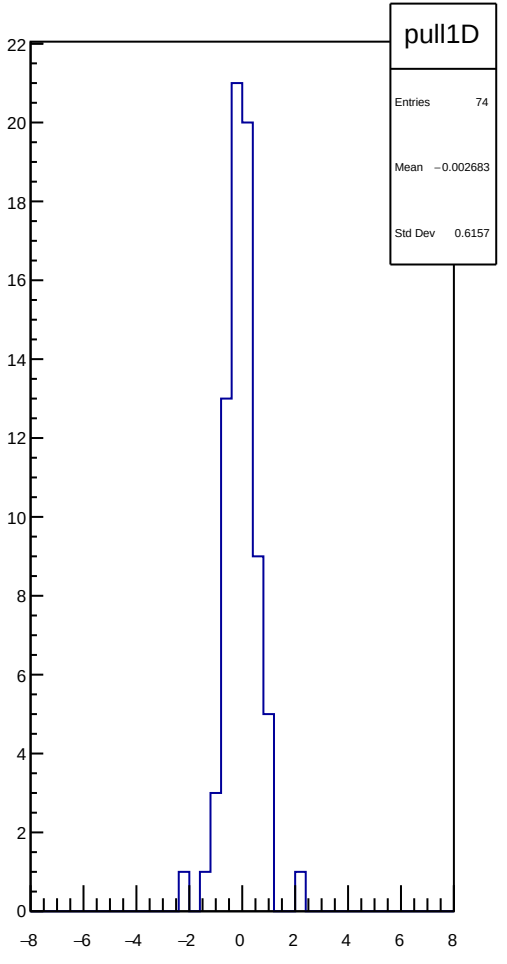

asym_bcm_dg_ds_rms vs run
χ² / ndf 4874 / 73
p0 185 ± 0.1511
210
200
190
180
170
160

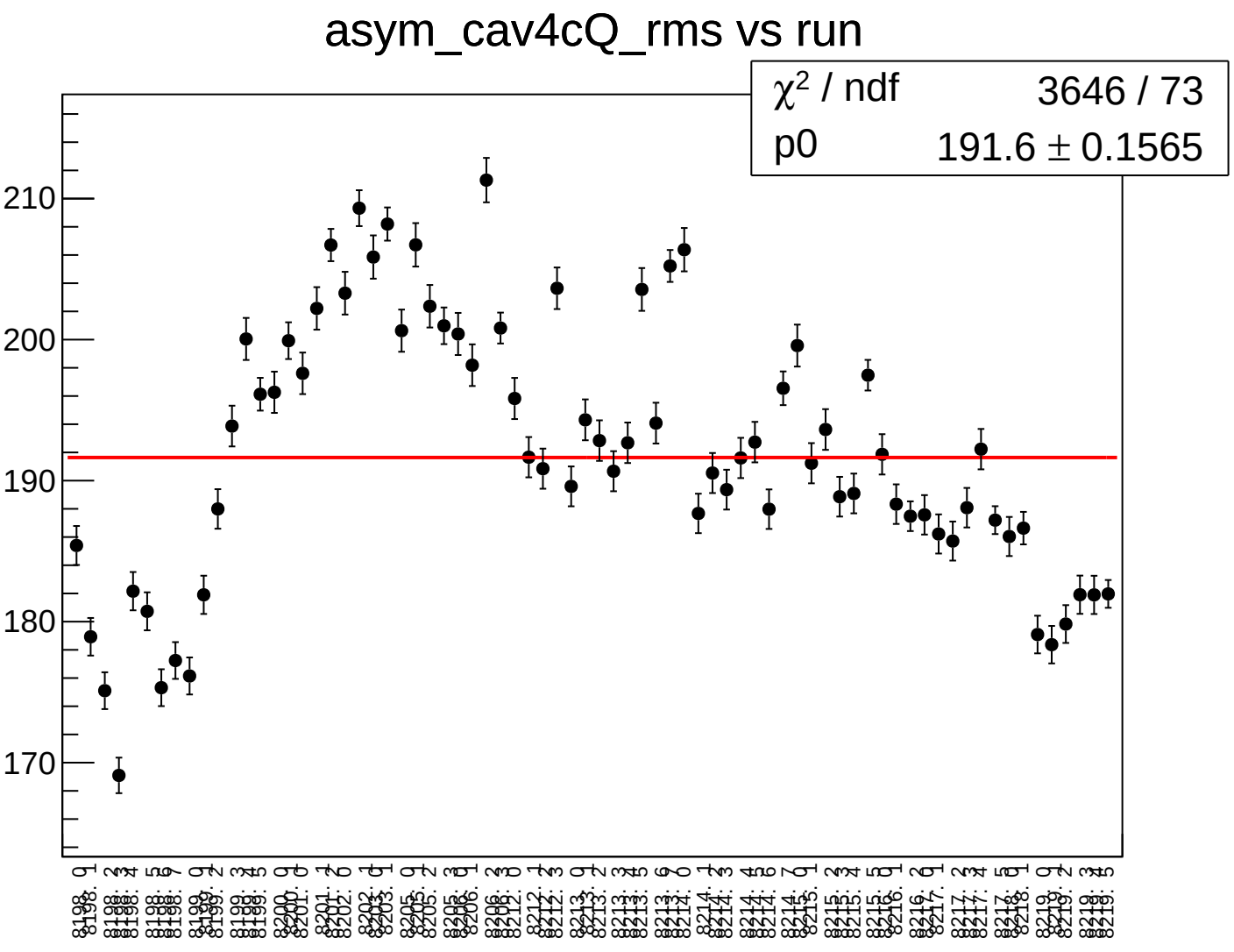

asym_cav4bQ_mean vs run
χ² / ndf 76.98 / 73
p0 −1016 ± 862.3
30000
20000
10000
0
−10000
−20000
pull
Entries 74
Mean 642.8
Std Dev 587
2
1
0
−1
−2

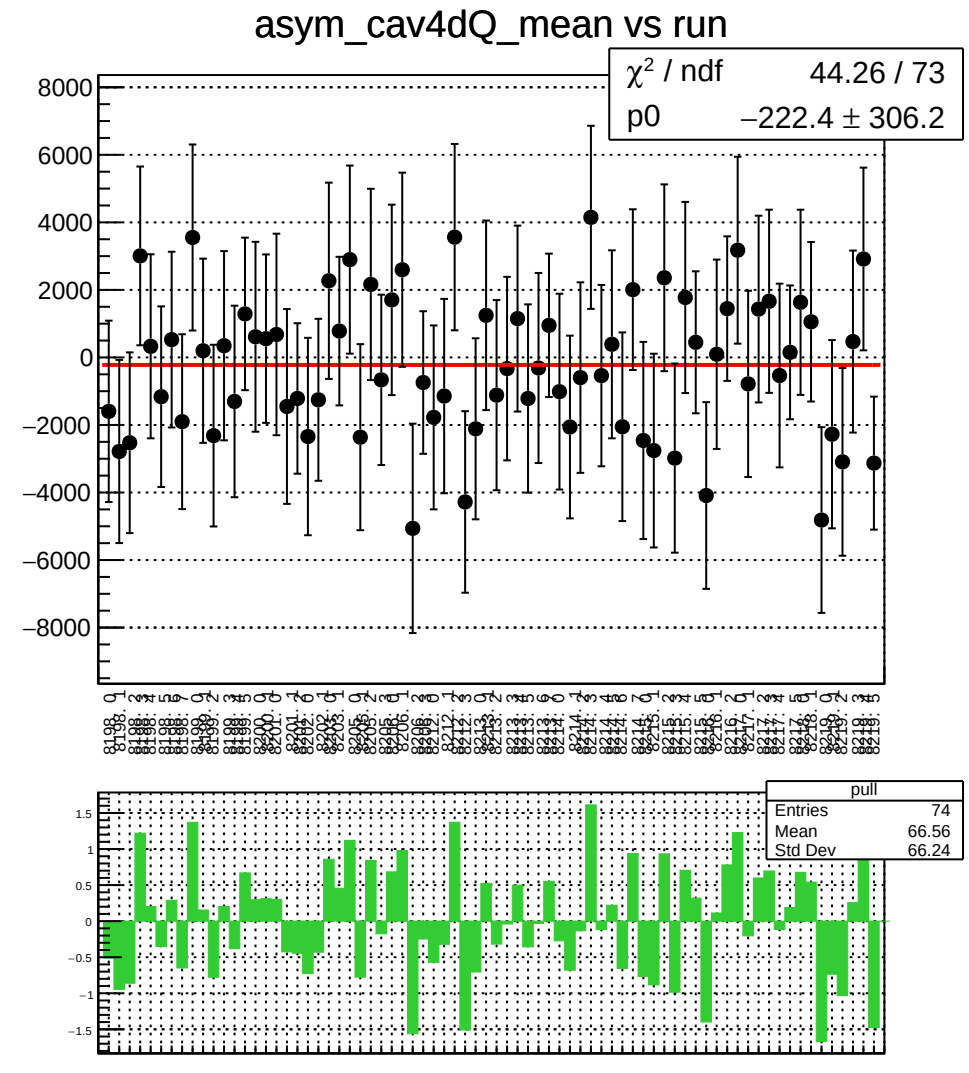

pull1D
Entries 74
Mean −0.002023
Std Dev 1.02
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

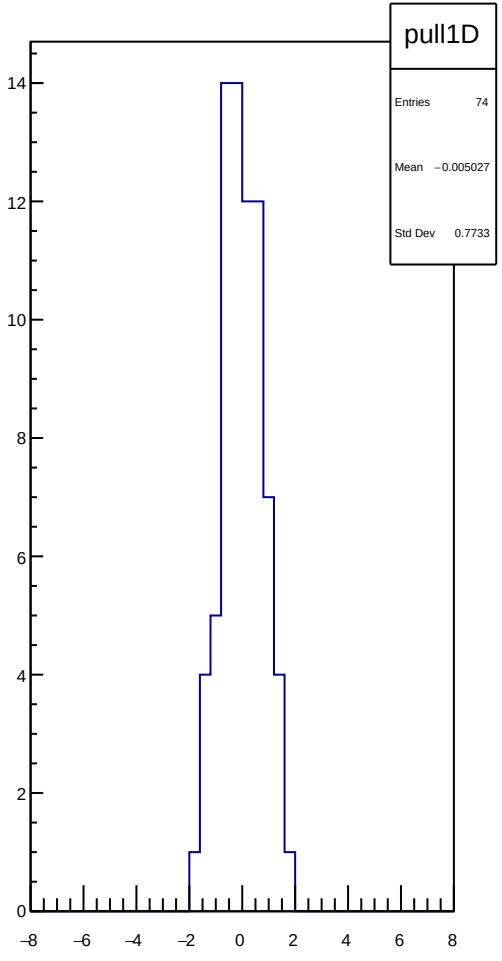

asym_cav4bQ_rms vs run
χ² / ndf 8486 / 73
p0 745.4 ± 0.6097
900
850
800
750
700
650
600

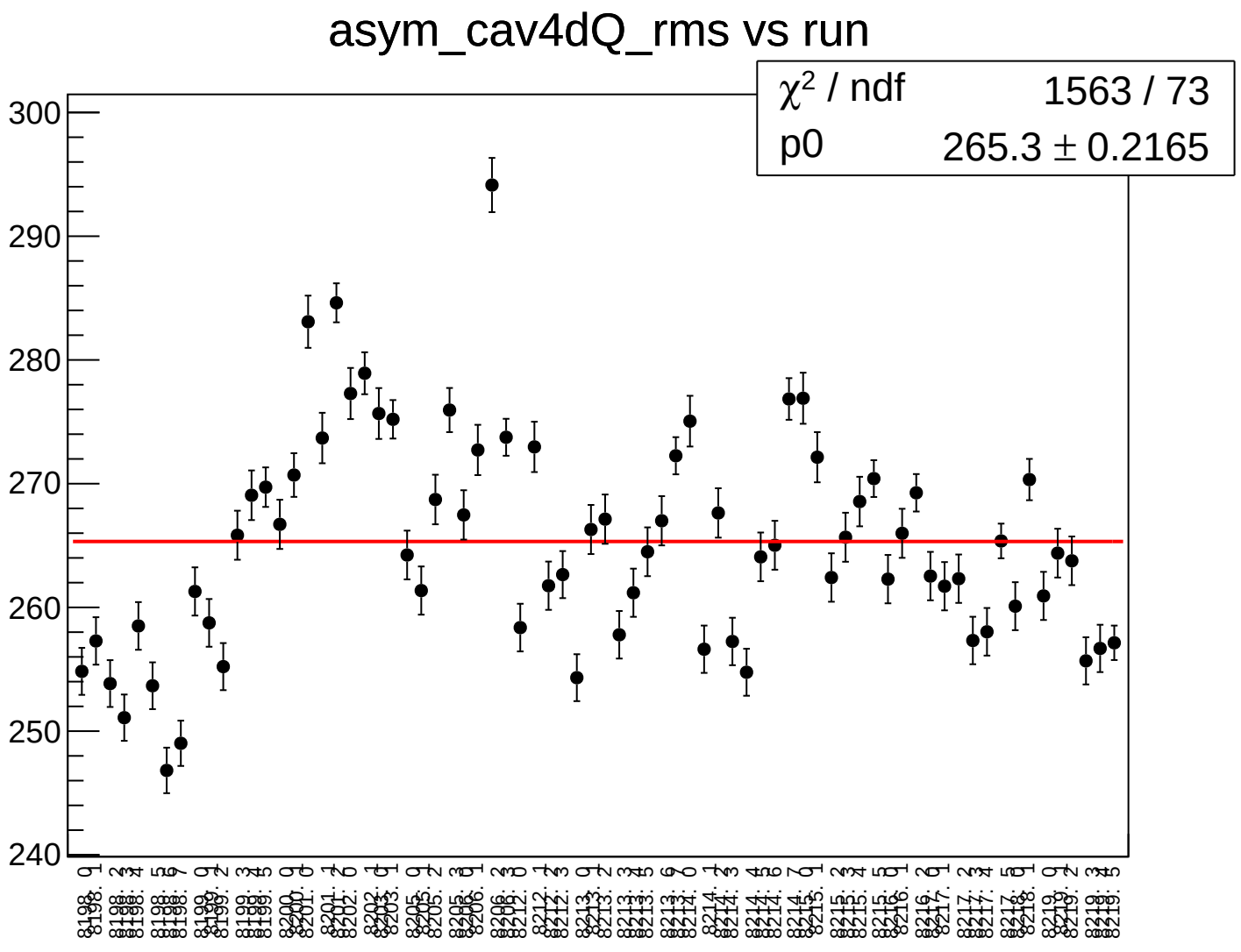

asym_cav4cQ_mean vs run
χ² / ndf 28.06 / 73
p0 −204.1± 221.3
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 1442
Std Dev 1403
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

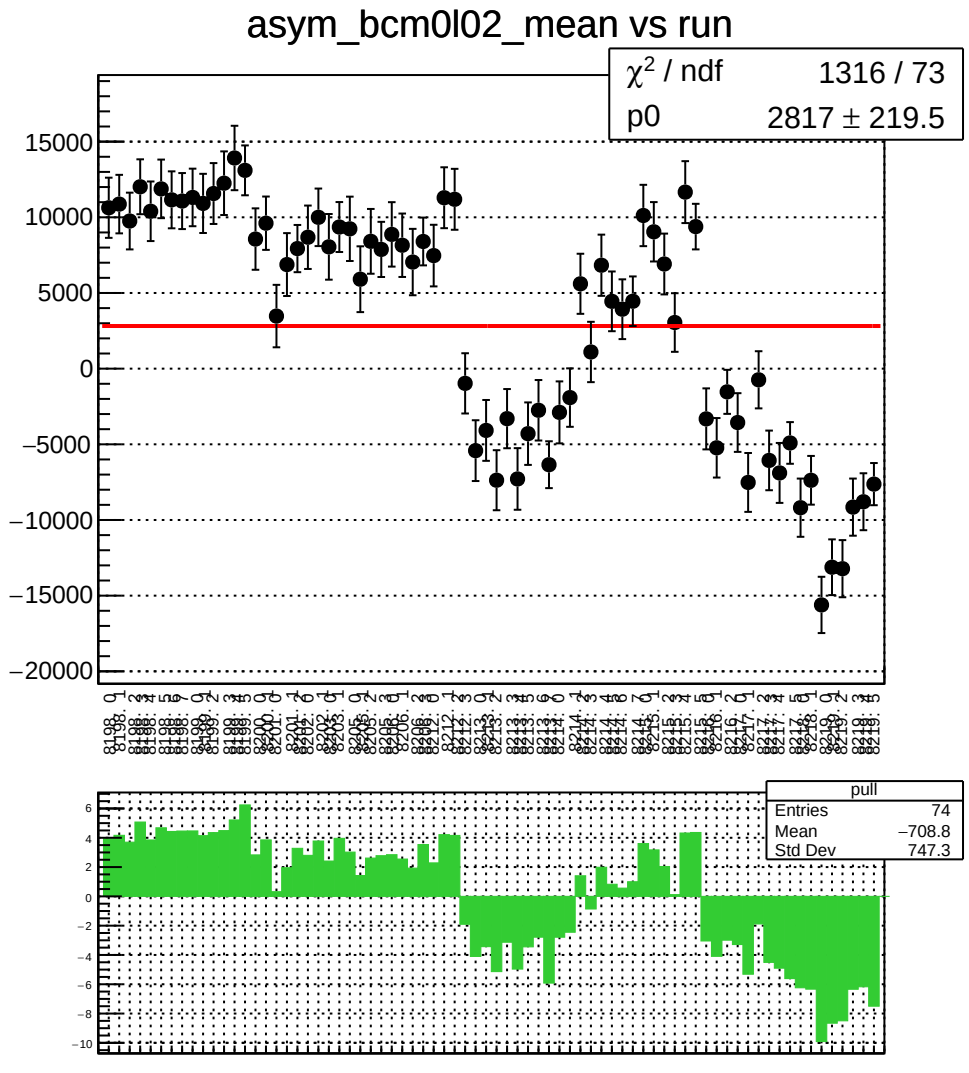

pull1D
Entries 74
Mean −0.002683
Std Dev 0.6157
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

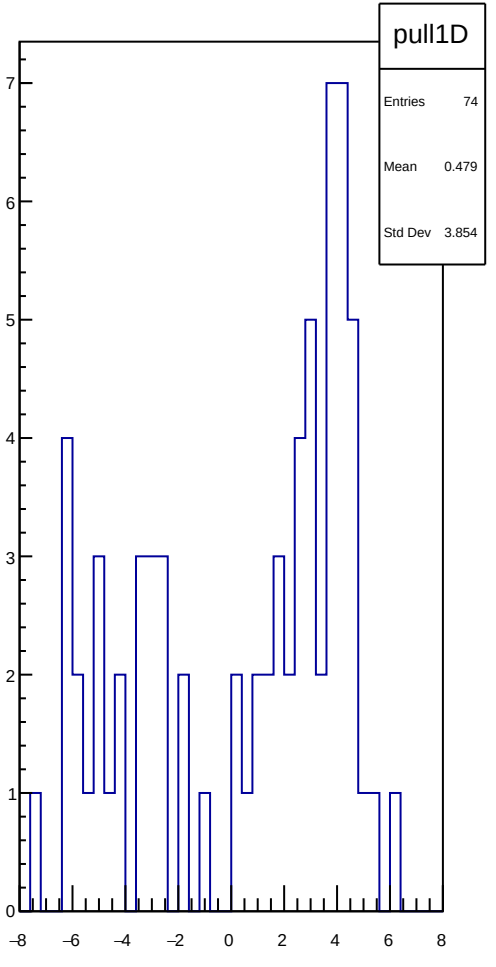

asym_cav4cQ_rms vs run
χ² / ndf 3646 / 73
p0 191.6 ± 0.1565
210
200
190
180
170

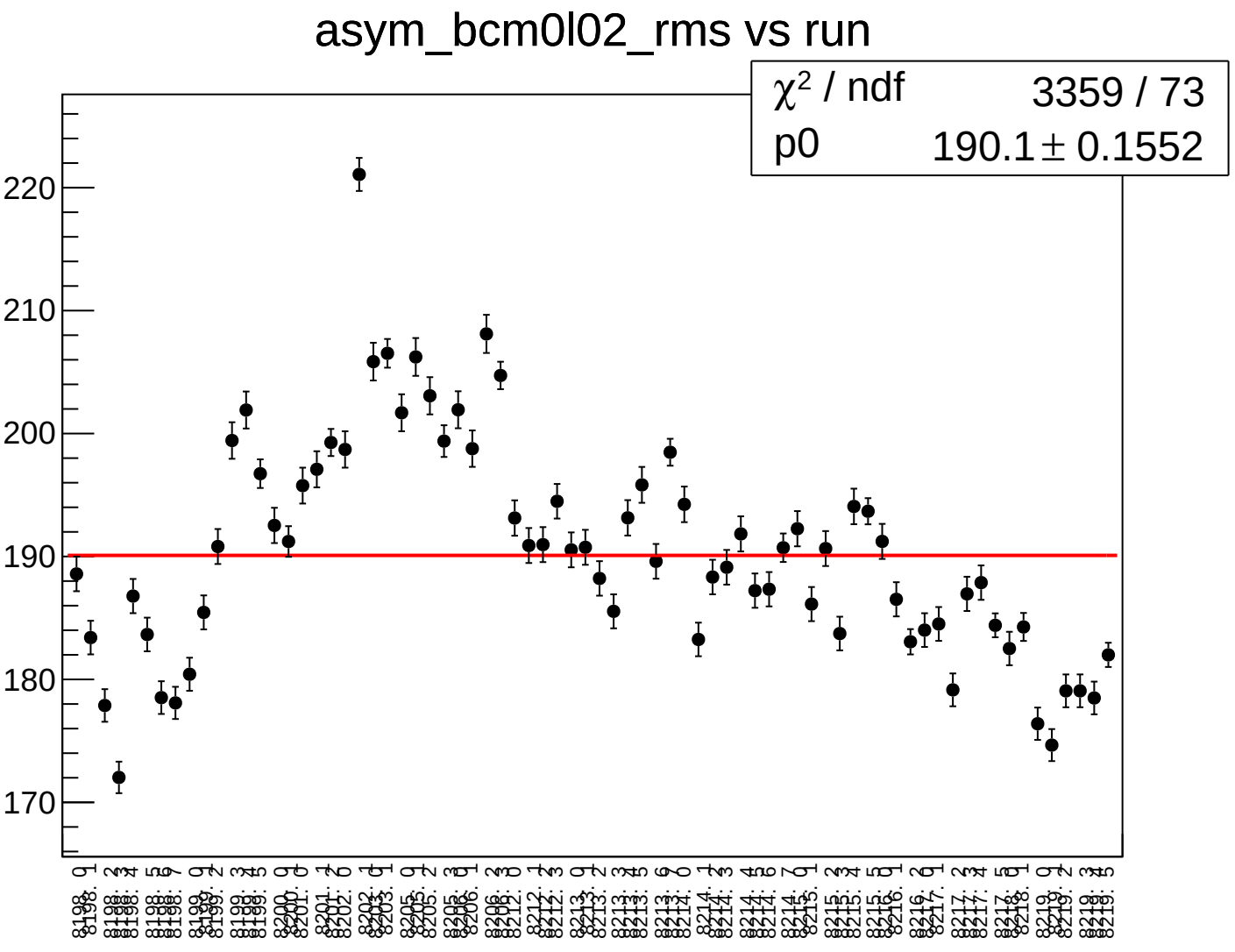

asym_cav4dQ_mean vs run
χ² / ndf 44.26 / 73
p0 −222.4 ± 306.2
pull
Entries 74
Mean 66.56
Std Dev 66.24

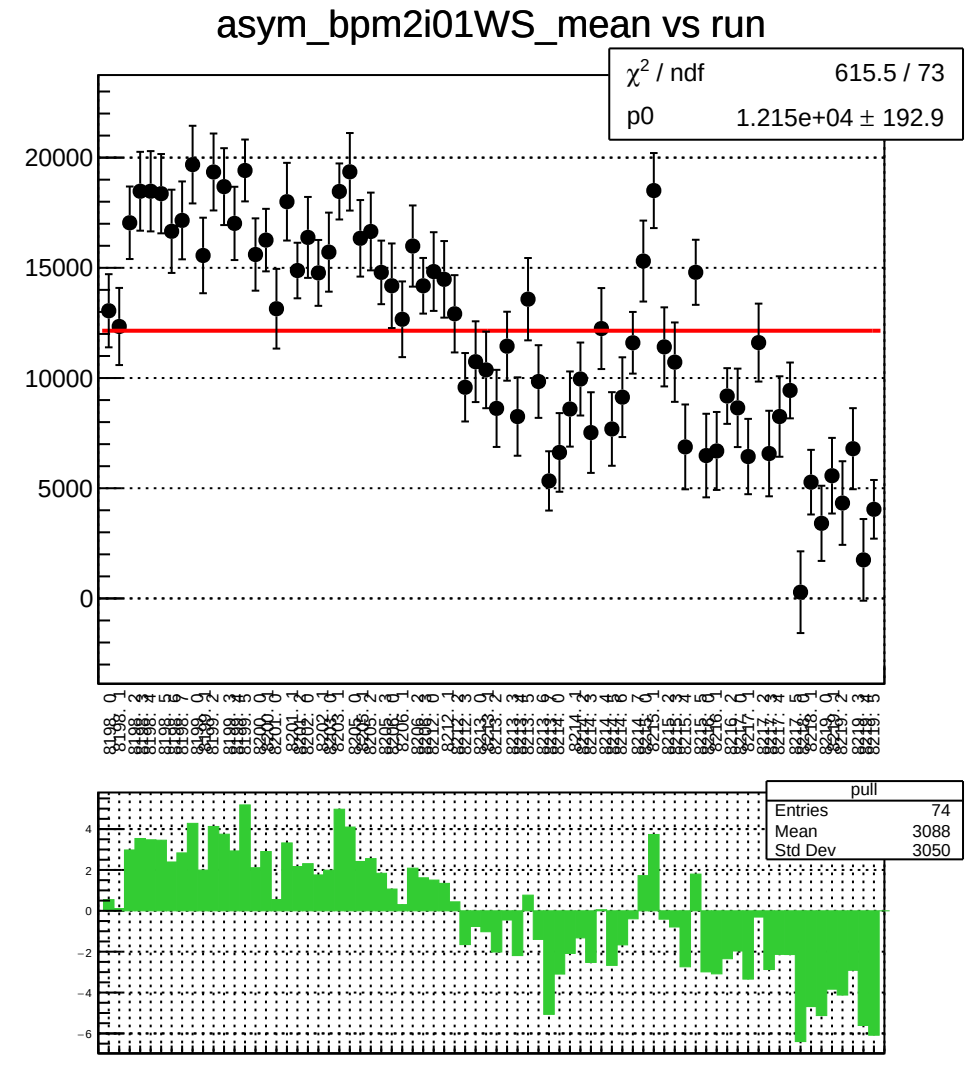

pull1D
Entries 74
Mean −0.005027
Std Dev 0.7733

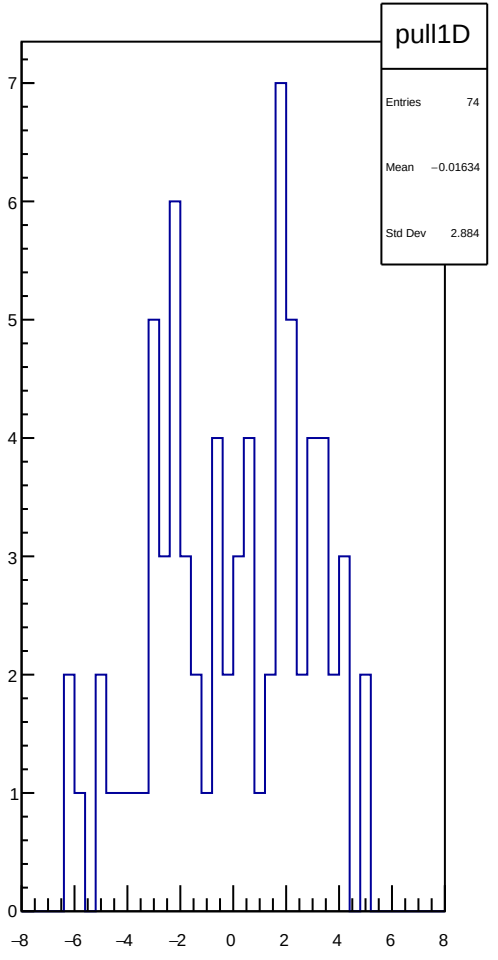

asym_cav4dQ_rms vs run
χ² / ndf 1563 / 73
p0 265.3 ± 0.2165
300
290
280
270
260
250
240

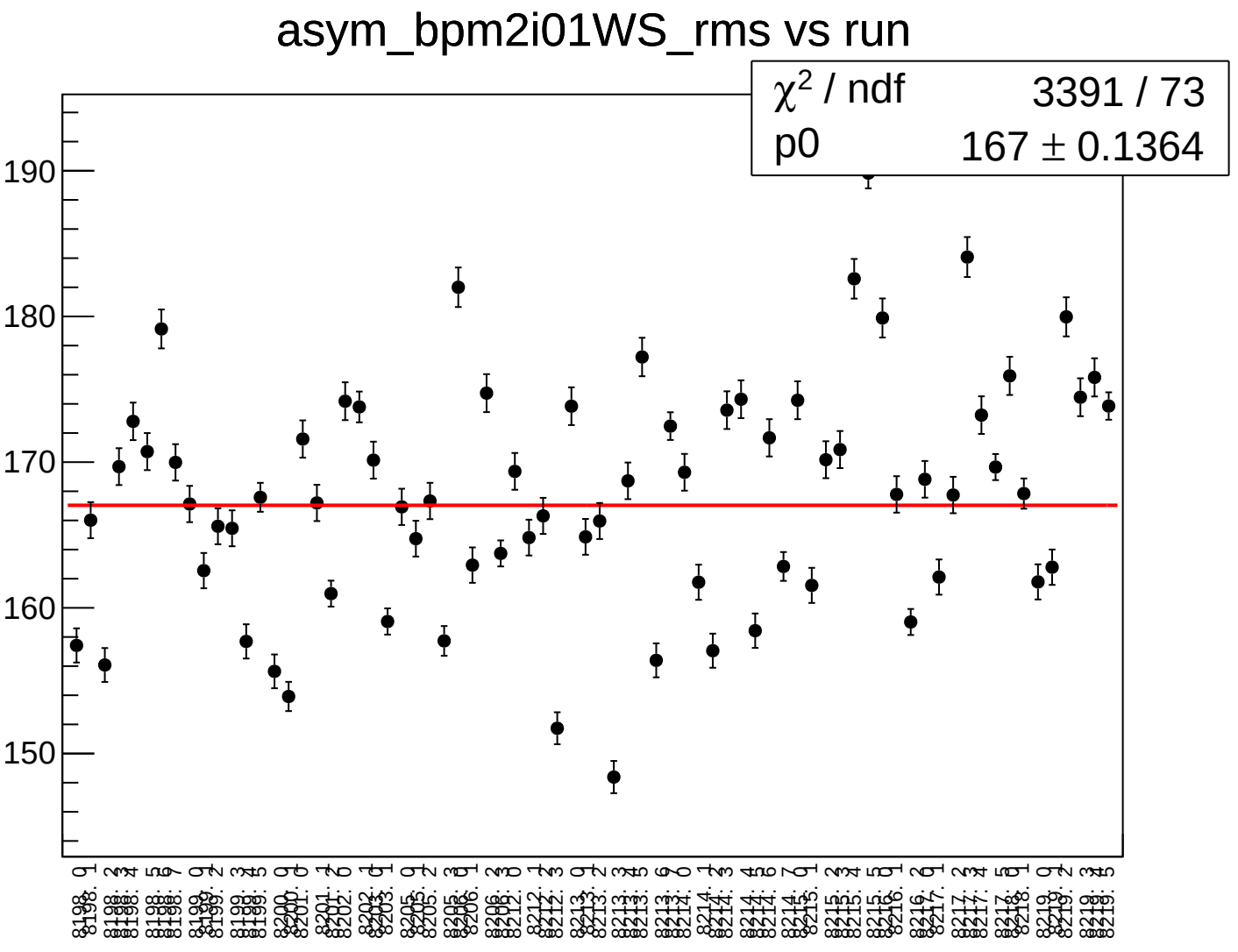

asym_bcm0l02_mean vs run
χ² / ndf 1316 / 73
p0 2817 ± 219.5
pull
Entries 74
Mean −708.8
Std Dev 747.3

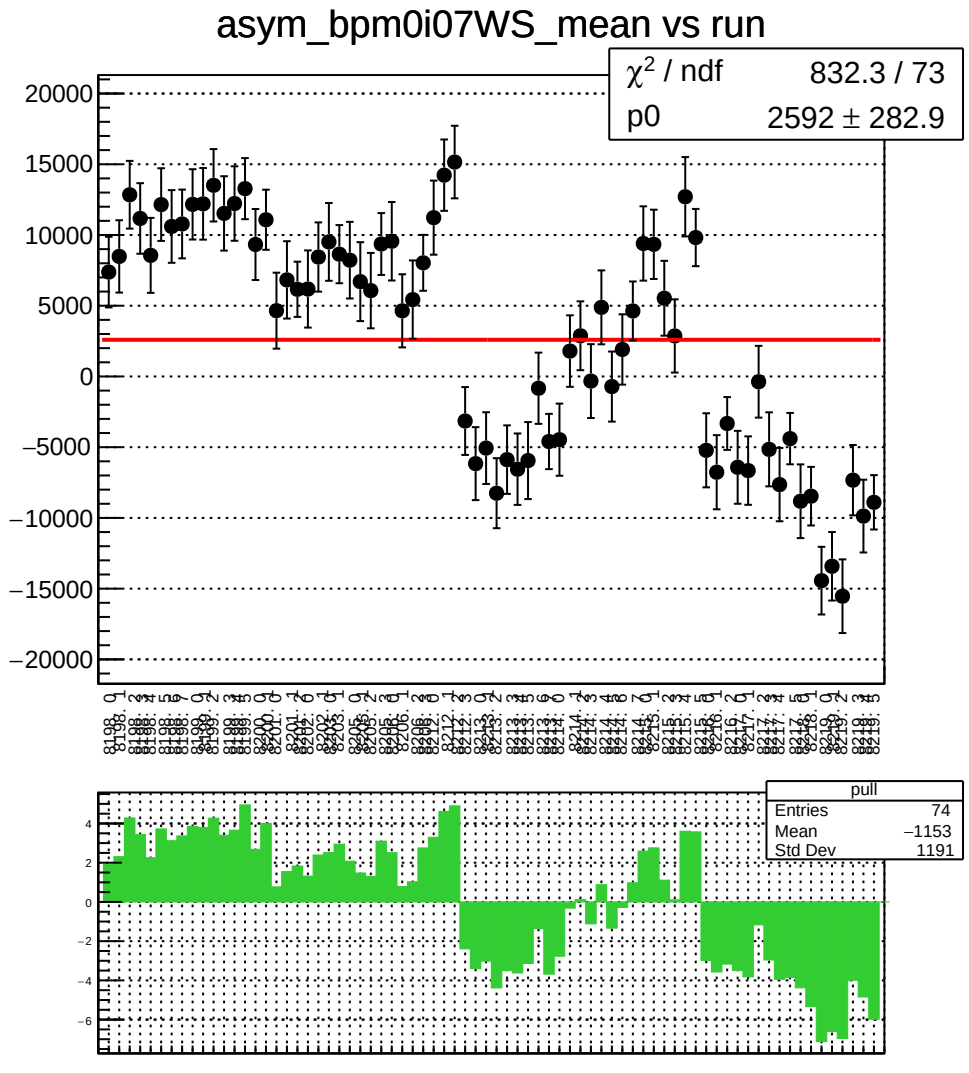

pull1D
Entries 74
Mean 0.479
Std Dev 3.854

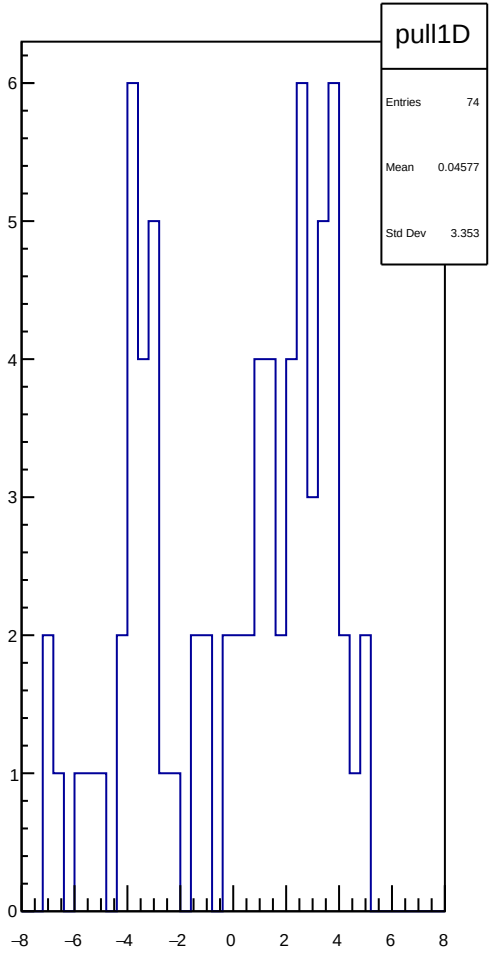

asym_bcm0l02_rms vs run
χ² / ndf 3359 / 73
p0 190.1 ± 0.1552
220
210
200
190
180
170

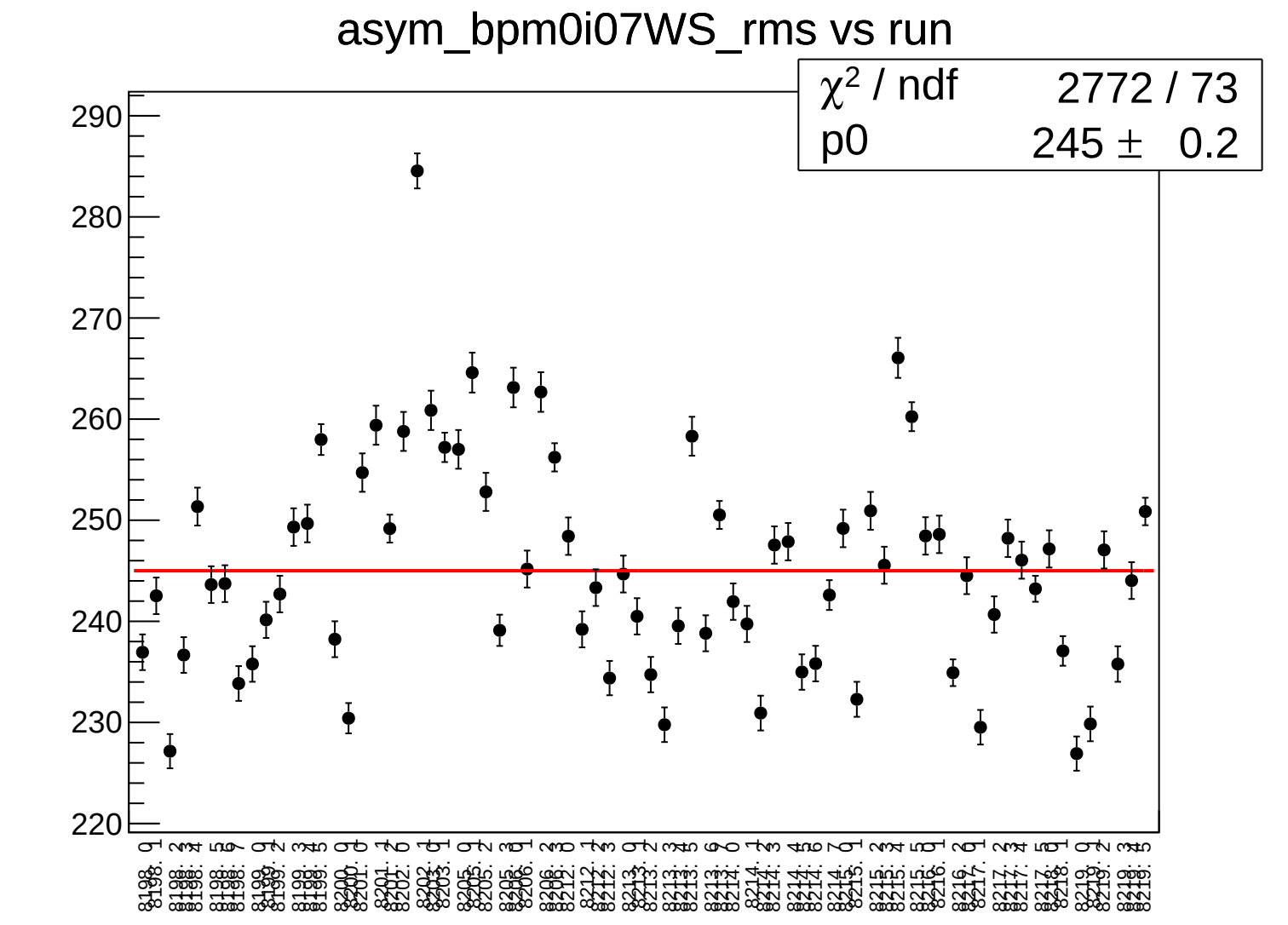

asym_bpm2i01WS_mean vs run
χ² / ndf 615.5 / 73
p0 1.215e+04 ± 192.9
20000
15000
10000
5000
0
pull
Entries 74
Mean 3088
Std Dev 3050
4
2
0
−2
−4
−6

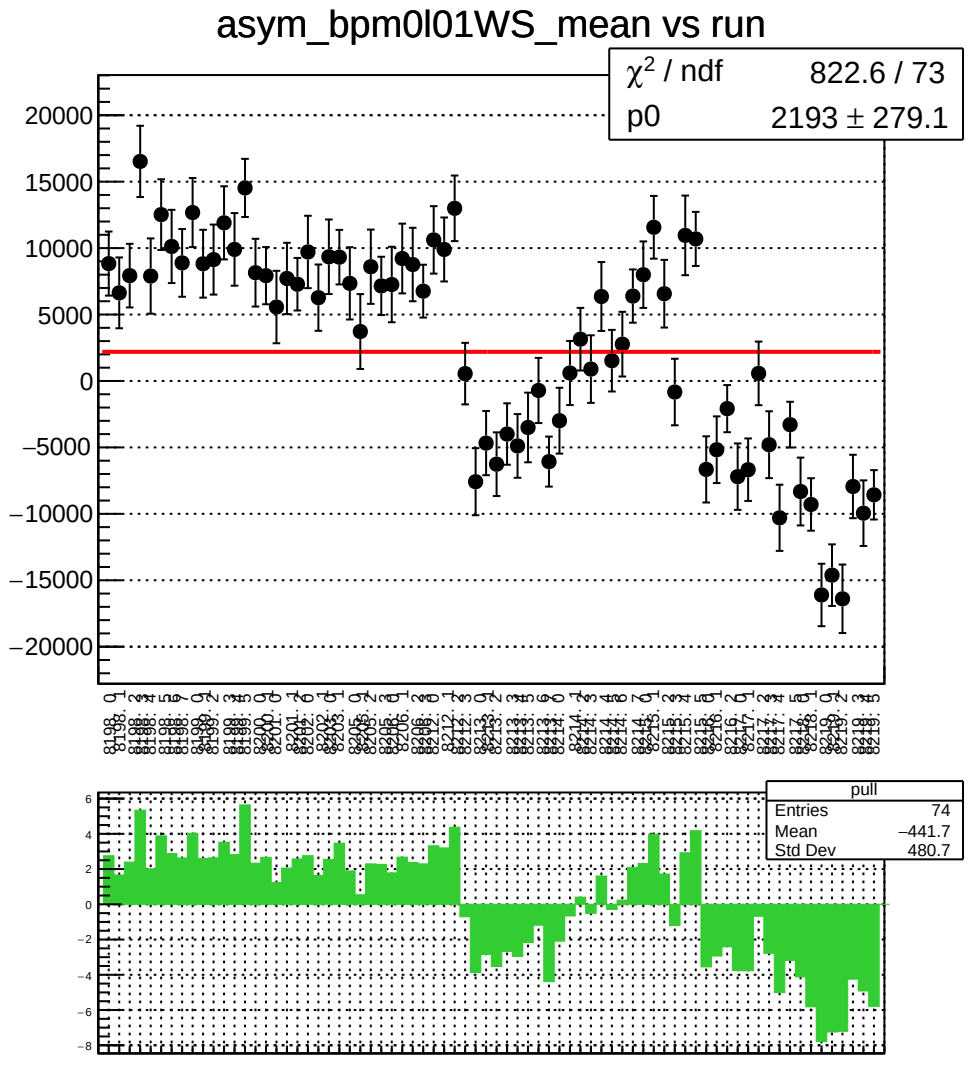

pull1D
Entries 74
Mean −0.01634
Std Dev 2.884
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

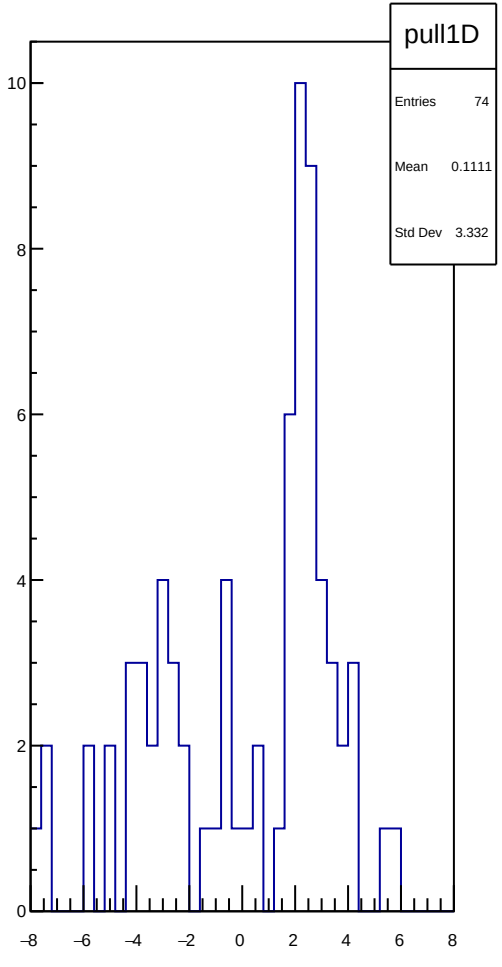

asym_bpm2i01WS_rms vs run
χ² / ndf 3391 / 73
p0 167 ± 0.1364
190
180
170
160
150

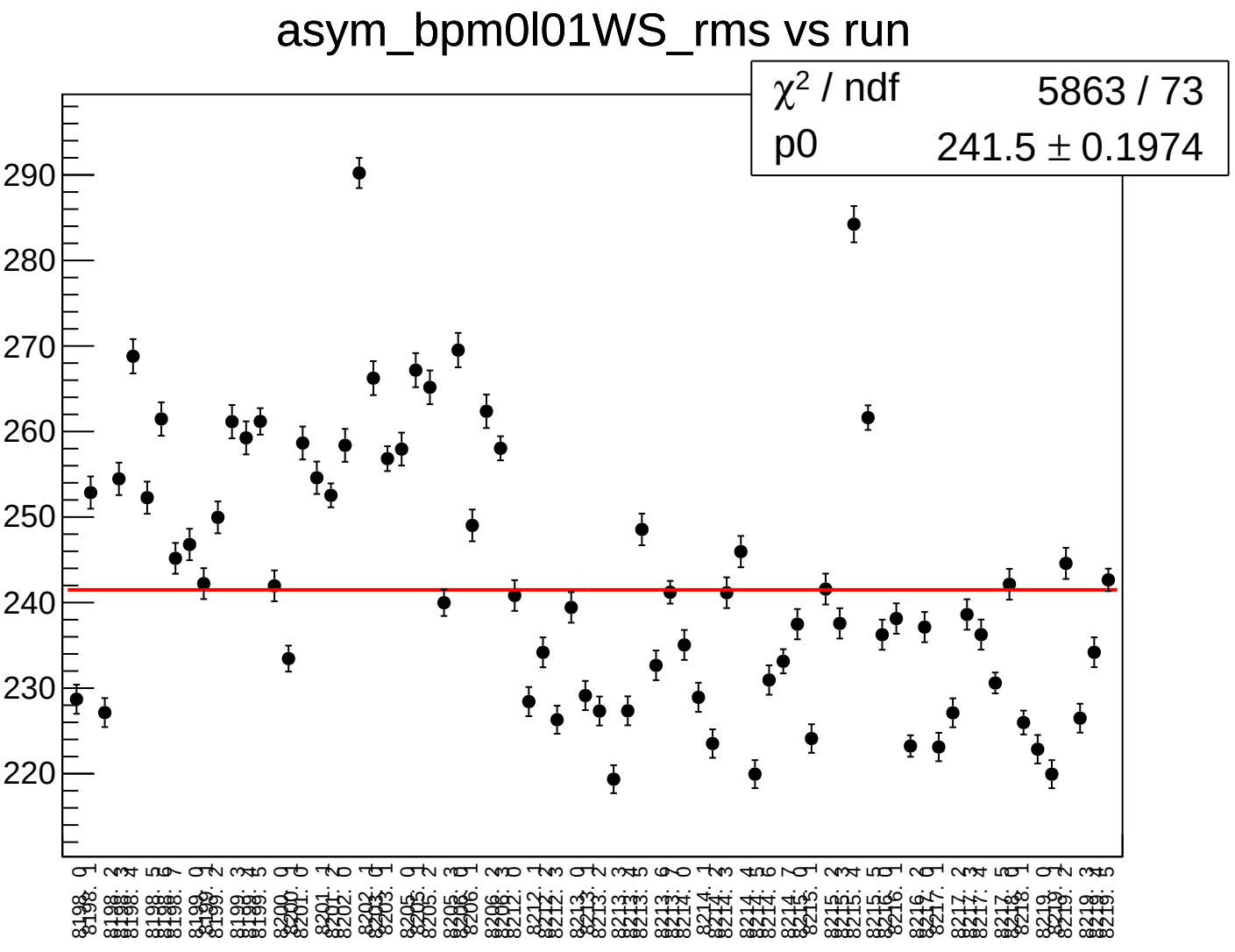

asym_bpm0i07WS_mean vs run
χ² / ndf 832.3 / 73
p0 2592 ± 282.9
pull
Entries 74
Mean −1153
Std Dev 1191

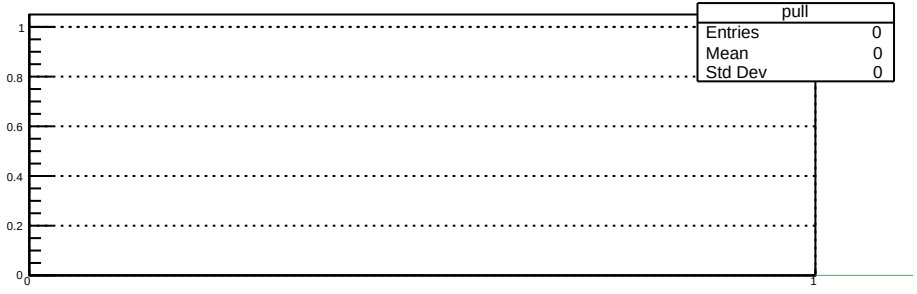

pull1D
Entries 74
Mean 0.04577
Std Dev 3.353

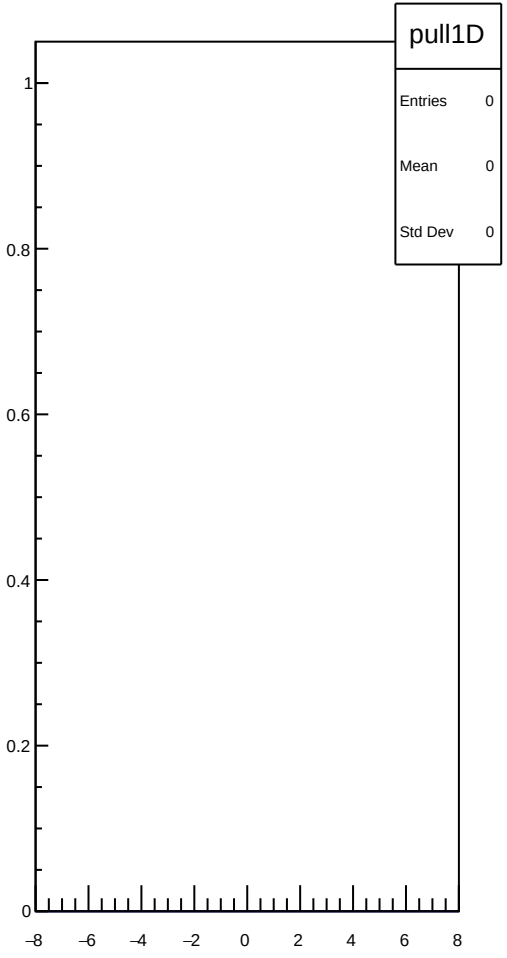

asym_bpm0i07WS_rms vs run
χ² / ndf 2772 / 73
p0 245 ± 0.2
290
280
270
260
250
240
230
220

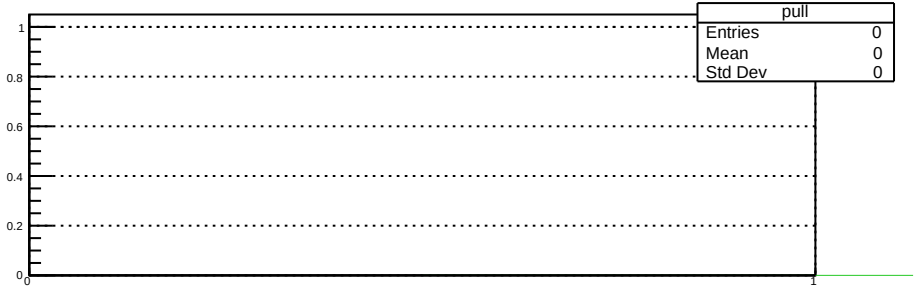

asym_bpm0l01WS_mean vs run
χ² / ndf 822.6 / 73
p0 2193 ± 279.1
pull
Entries 74
Mean −441.7
Std Dev 480.7

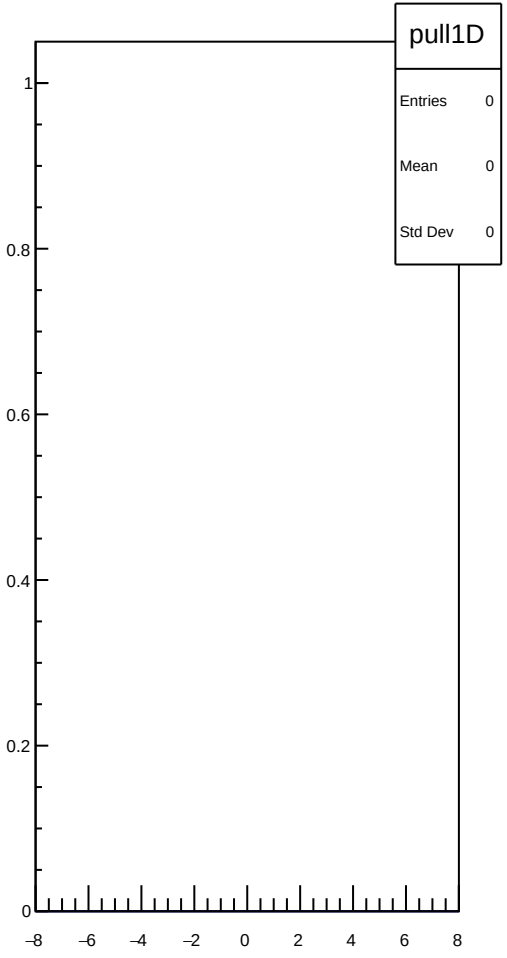

pull1D
Entries 74
Mean 0.1111
Std Dev 3.332

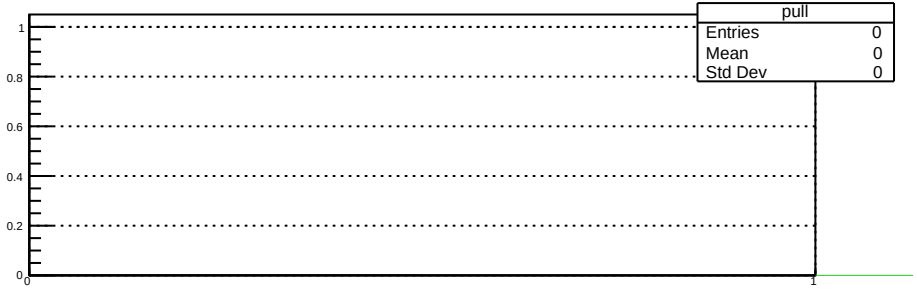

asym_bpm0l01WS_rms vs run
χ^2 / ndf 5863 / 73
p0 241.5 ± 0.1974
290
280
270
260
250
240
230
220

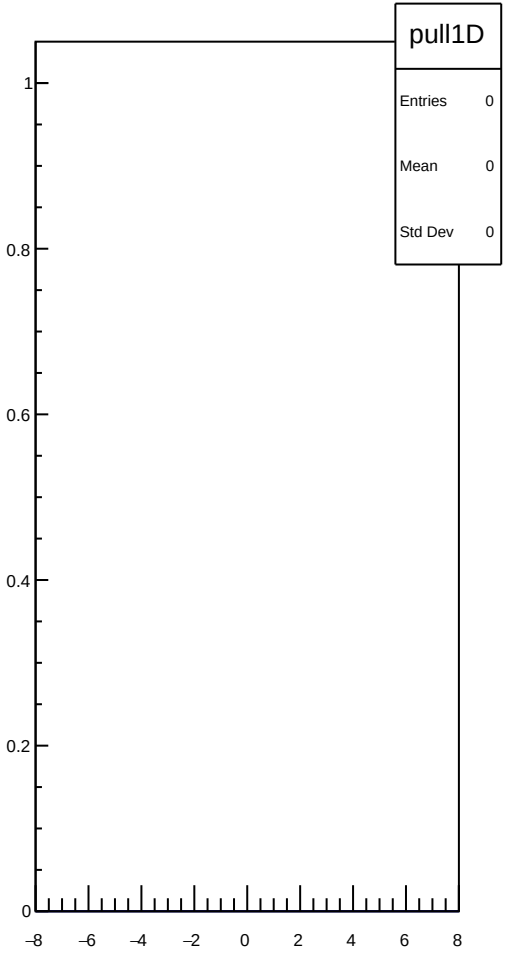

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

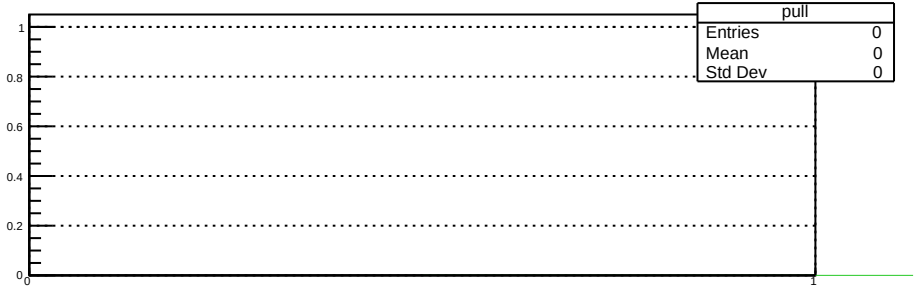

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

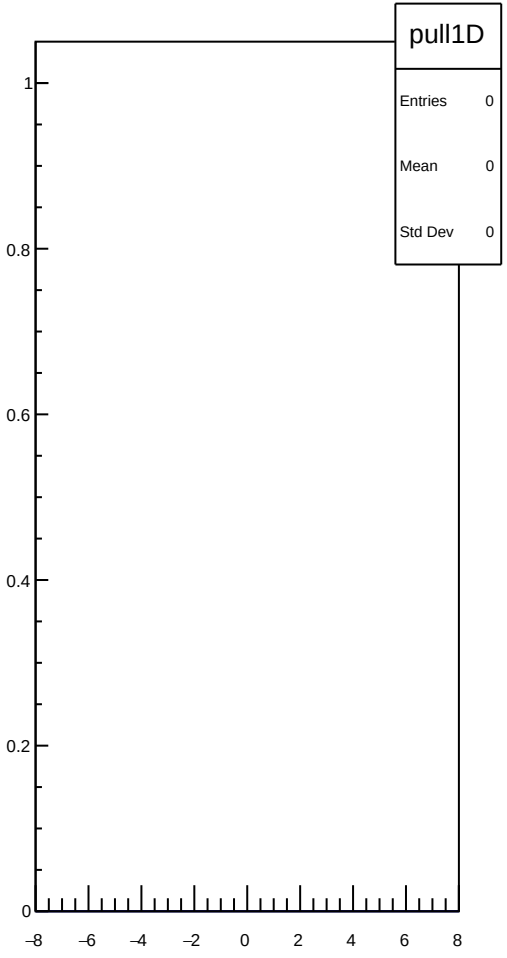

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

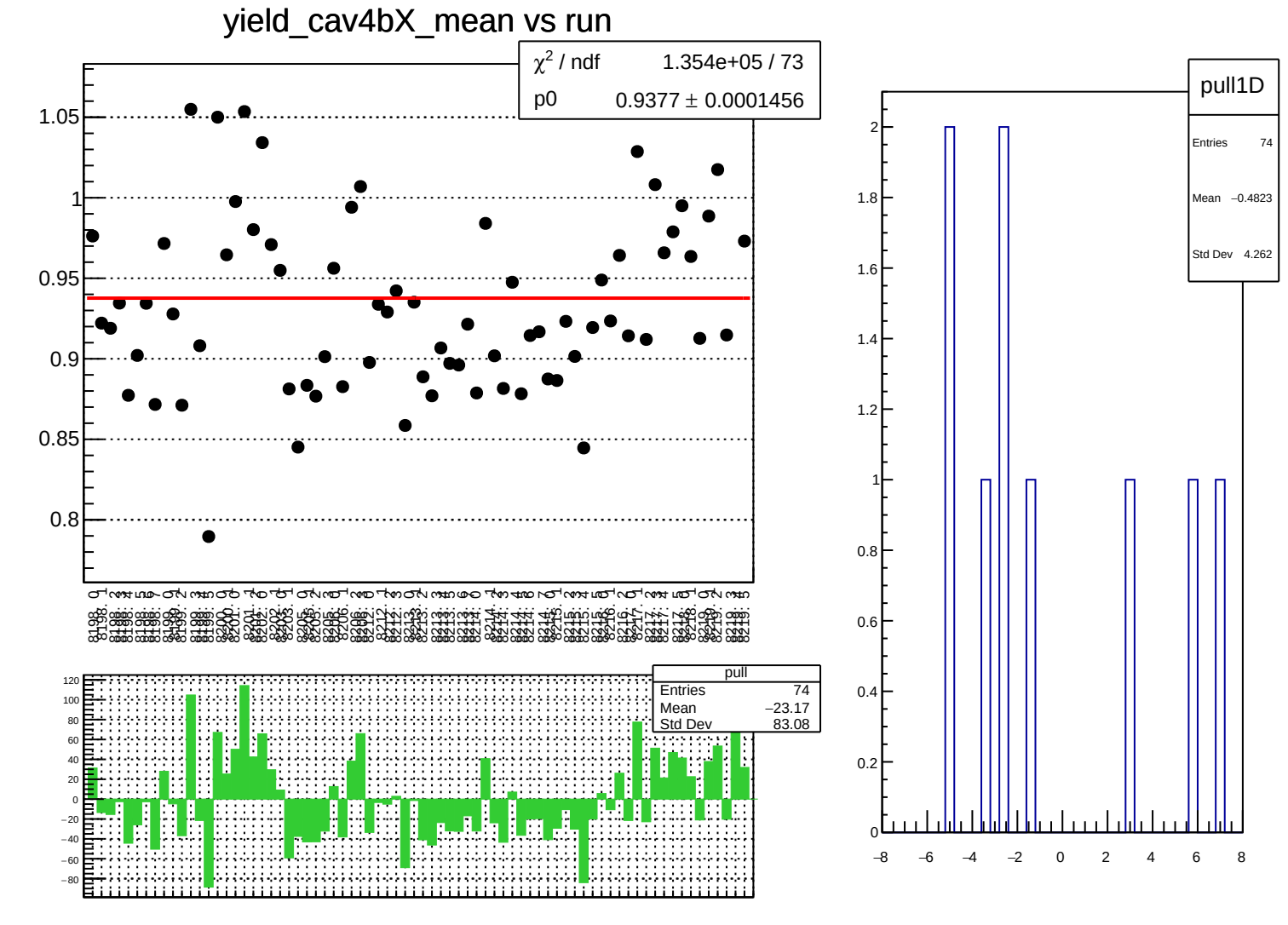

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

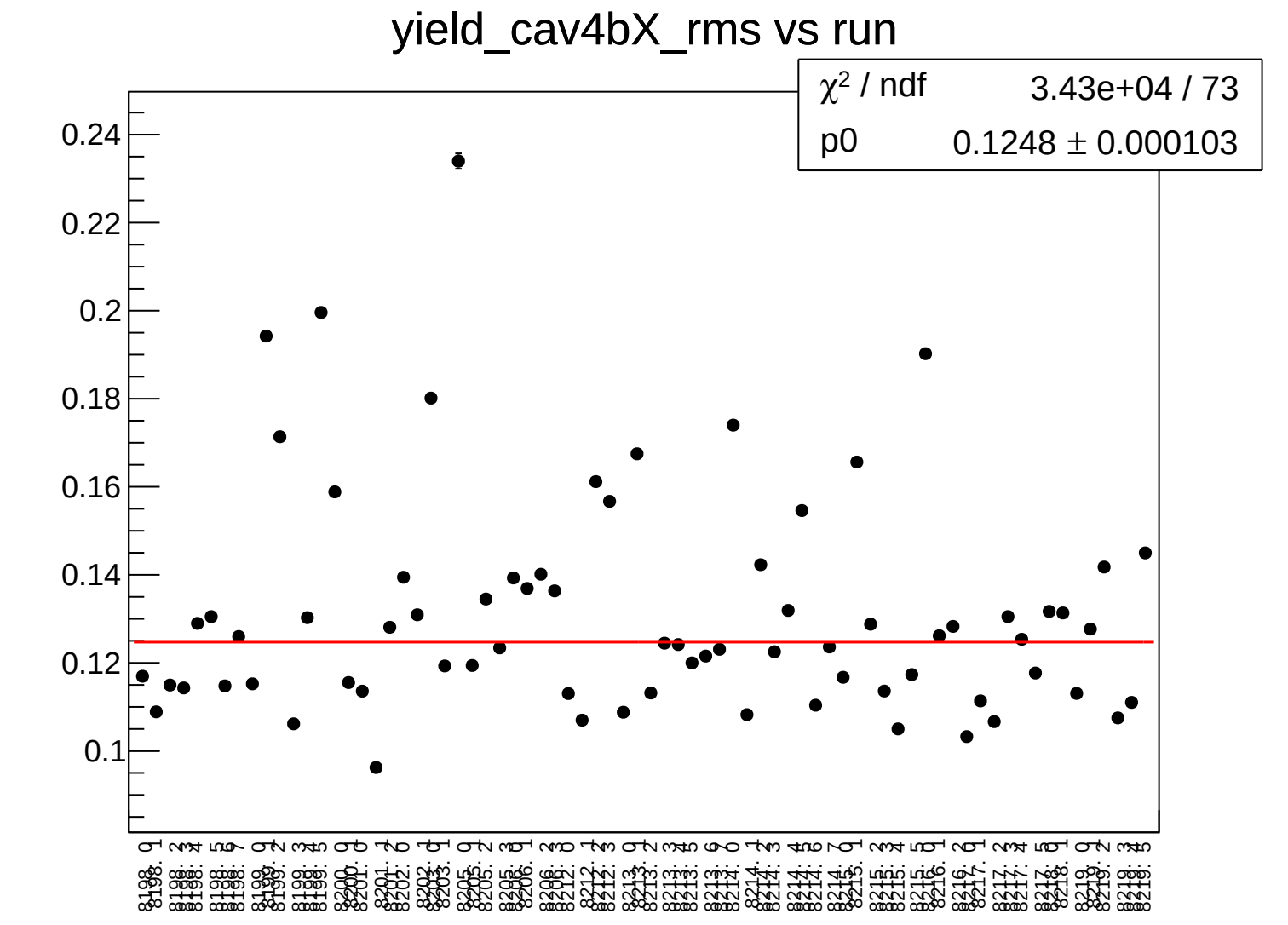

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

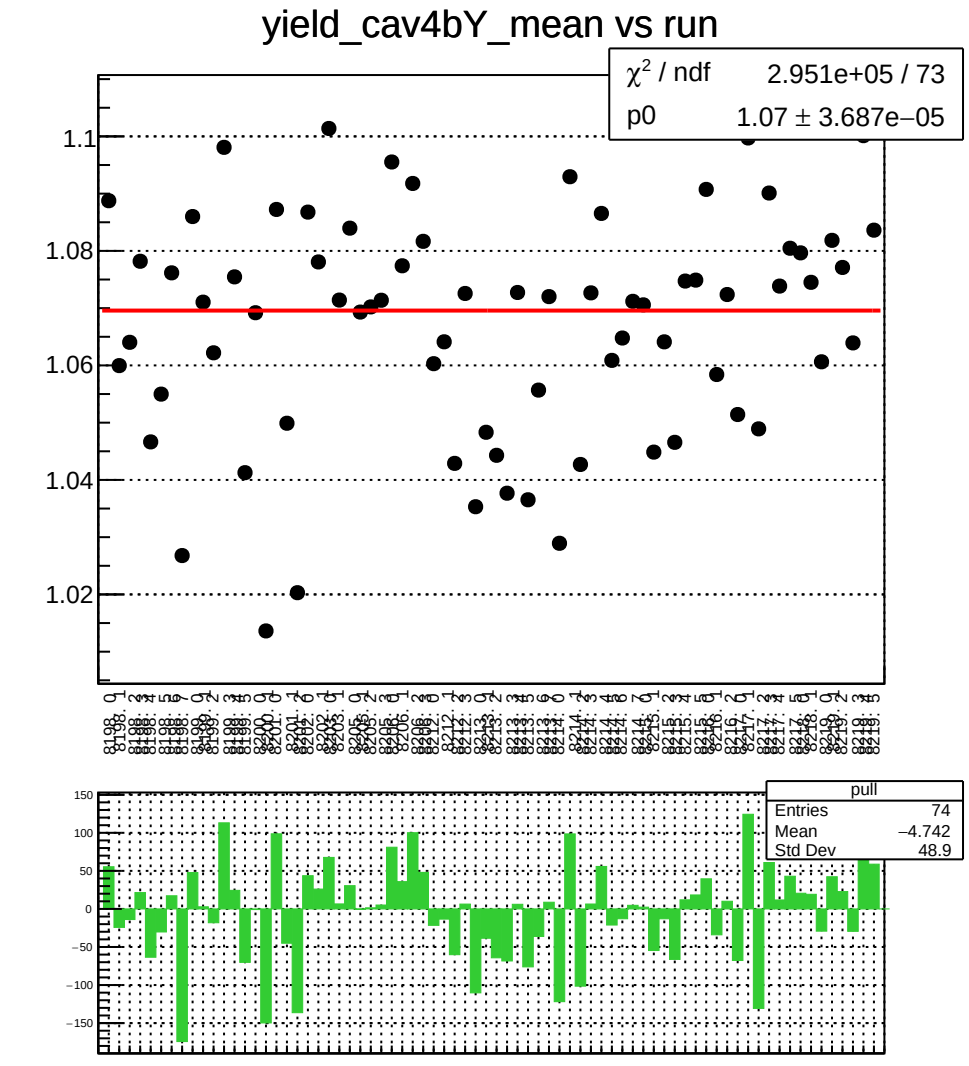

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

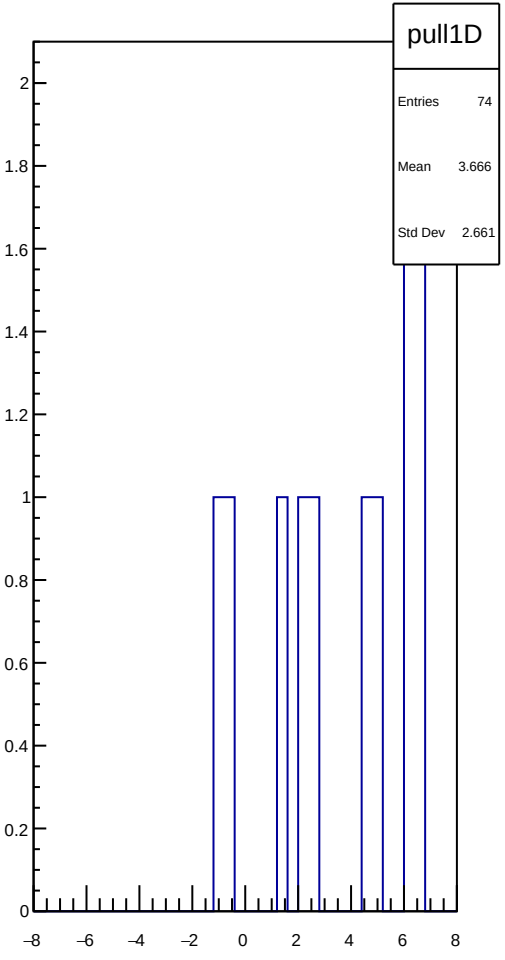

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

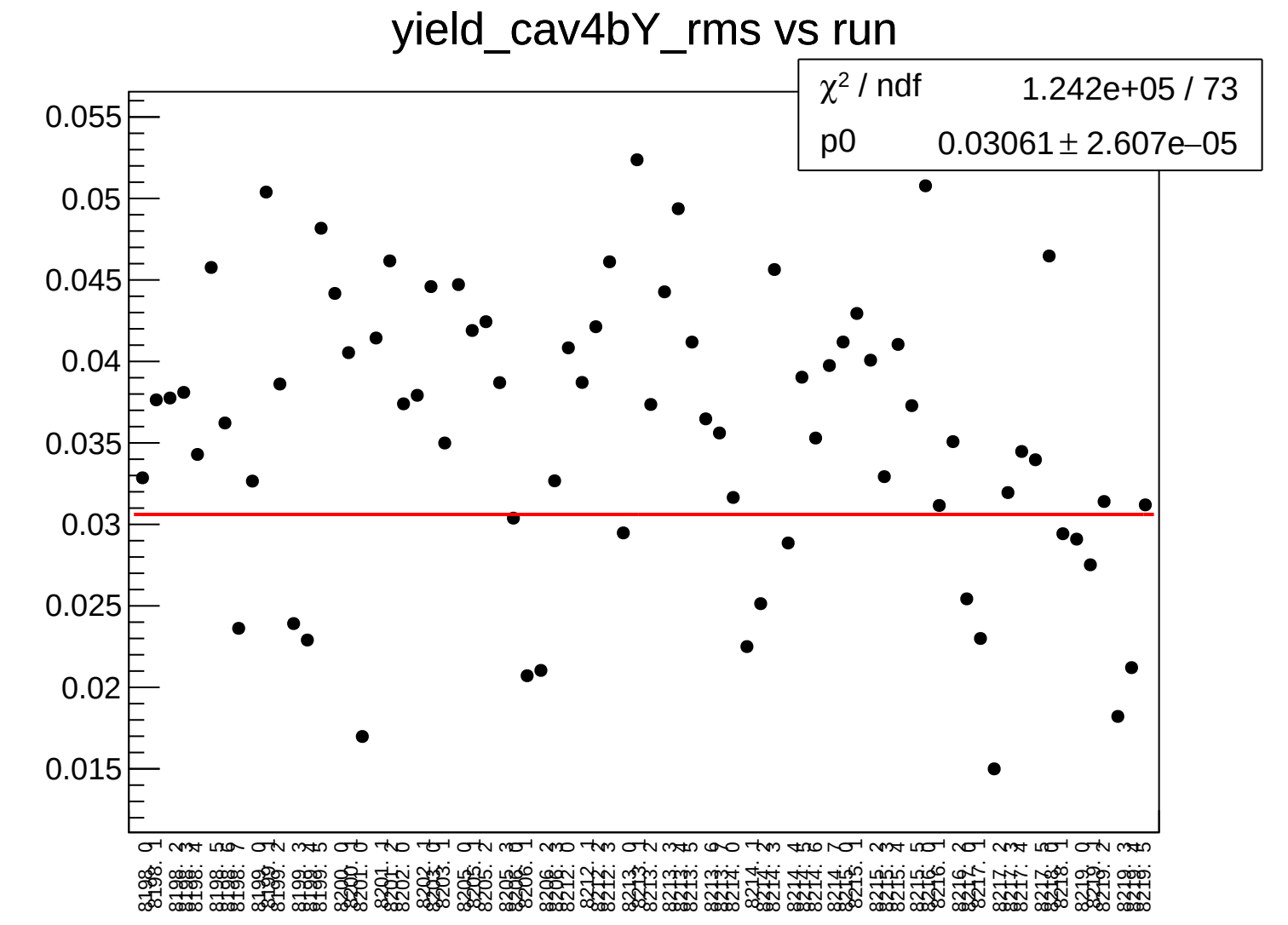

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

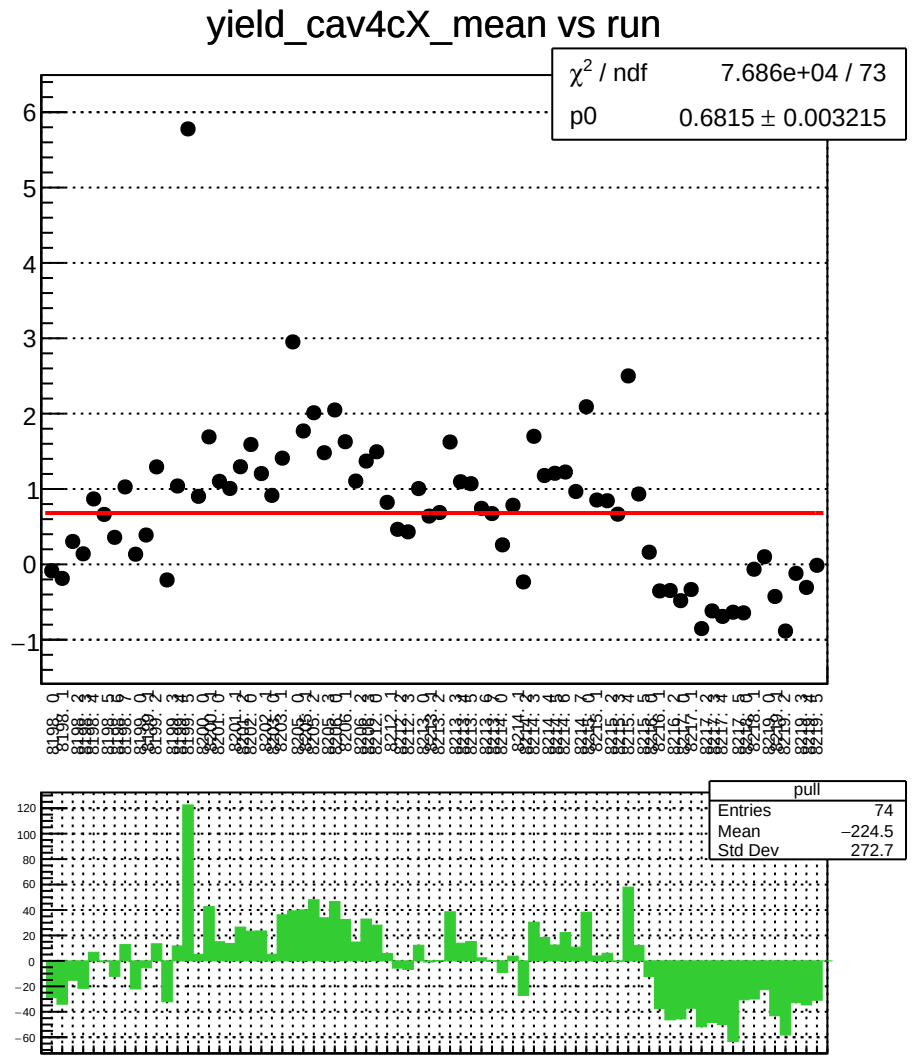

yield_cav4bX_mean vs run
χ² / ndf 1.354e+05 / 73
p0 0.9377 ± 0.0001456
pull
Entries 74
Mean −23.17
Std Dev 83.08
pull1D
Entries 74
Mean −0.4823
Std Dev 4.262

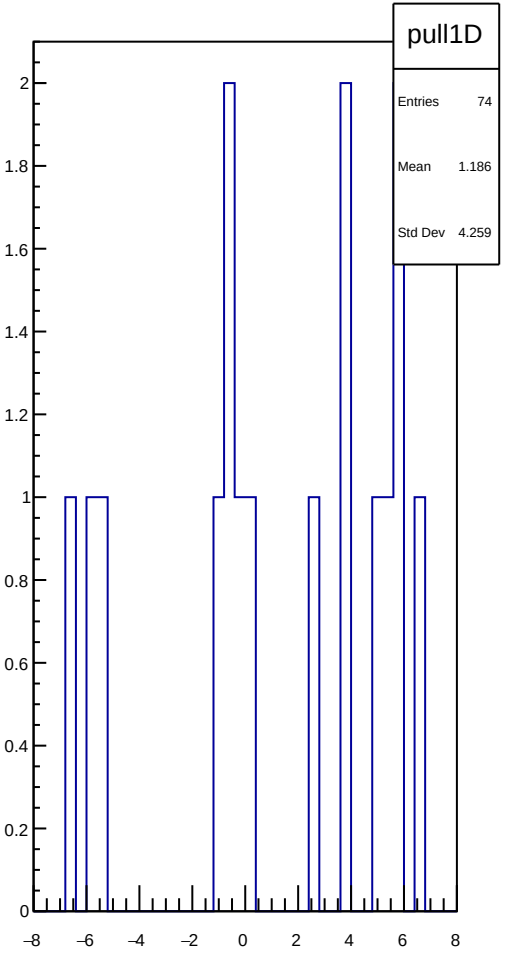

yield_cav4bX_rms vs run
χ² / ndf 3.43e+04 / 73
p0 0.1248 ± 0.000103
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1

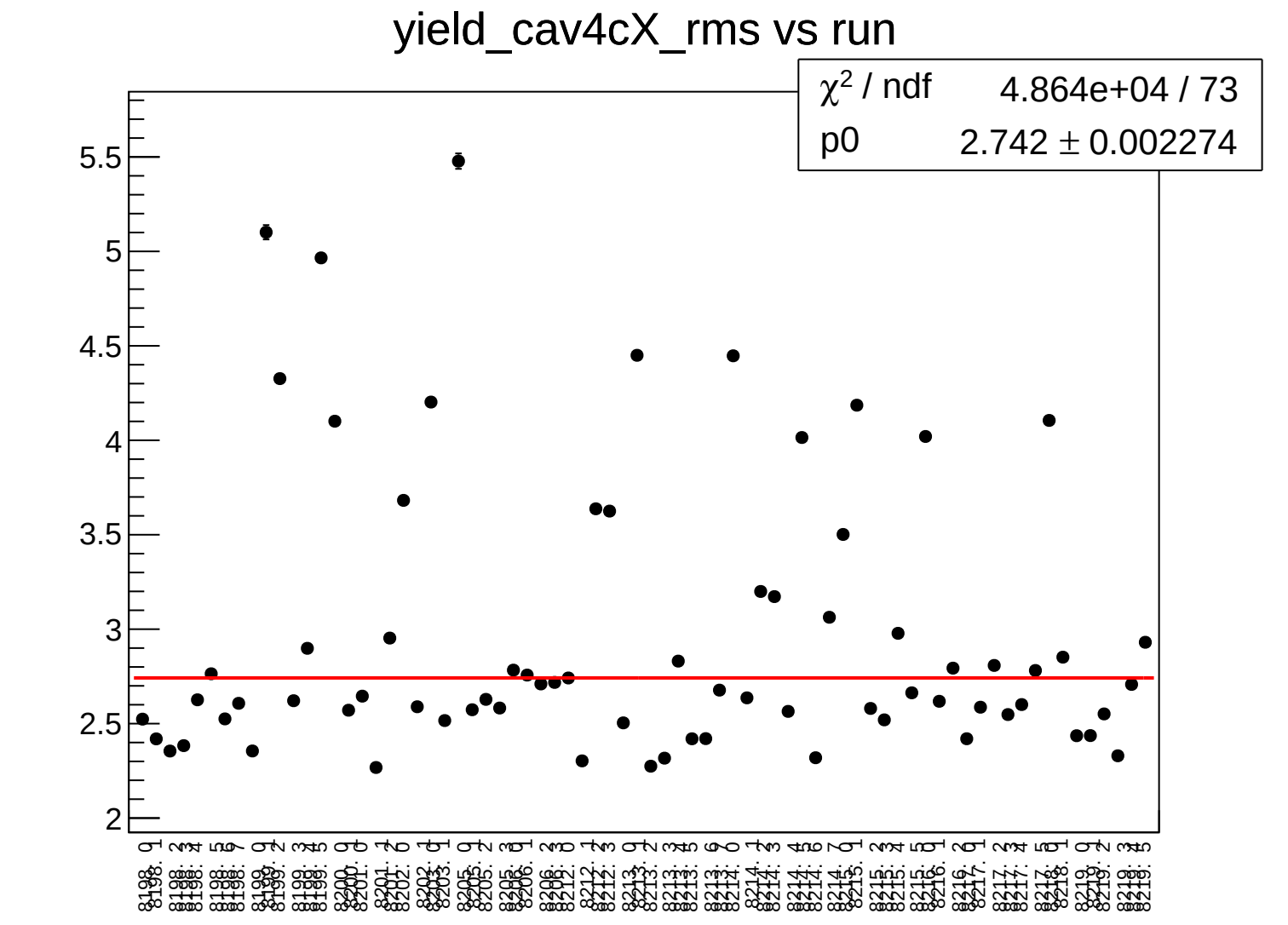

yield_cav4bY_mean vs run
χ² / ndf 2.951e+05 / 73
p0 1.07 ± 3.687e−05
1.1
1.08
1.06
1.04
1.02
pull
Entries 74
Mean −4.742
Std Dev 48.9
150
100
50
0
−50
−100
−150

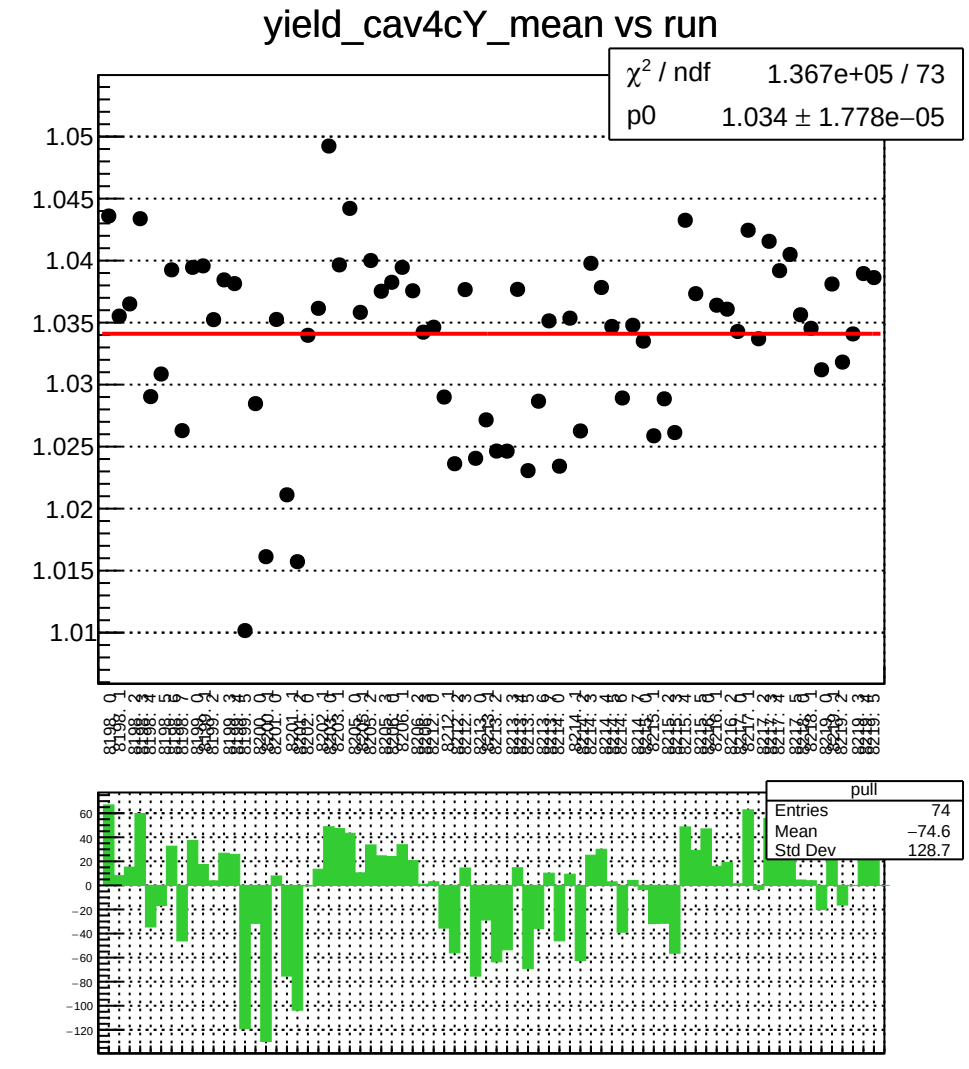

pull1D
Entries 74
Mean 3.666
Std Dev 2.661
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

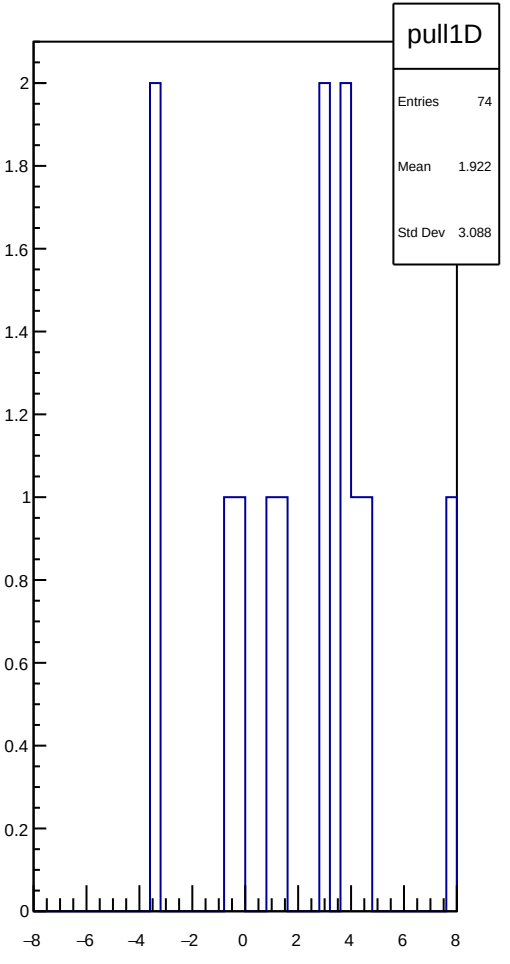

yield_cav4bY_rms vs run
χ² / ndf 1.242e+05 / 73
p0 0.03061 ± 2.607e–05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

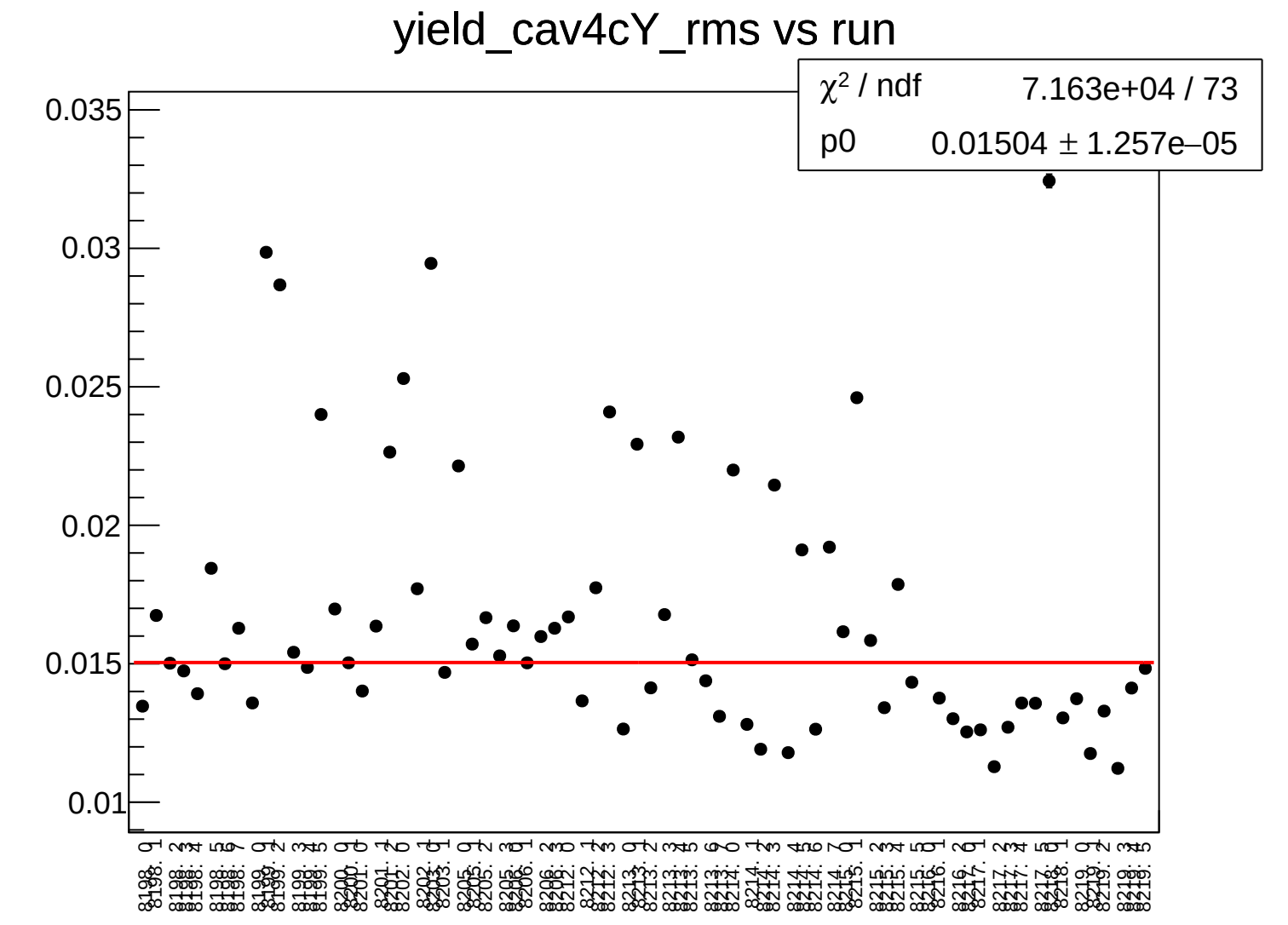

yield_cav4cX_mean vs run
χ² / ndf 7.686e+04 / 73
p0 0.6815 ± 0.003215
pull
Entries 74
Mean −224.5
Std Dev 272.7

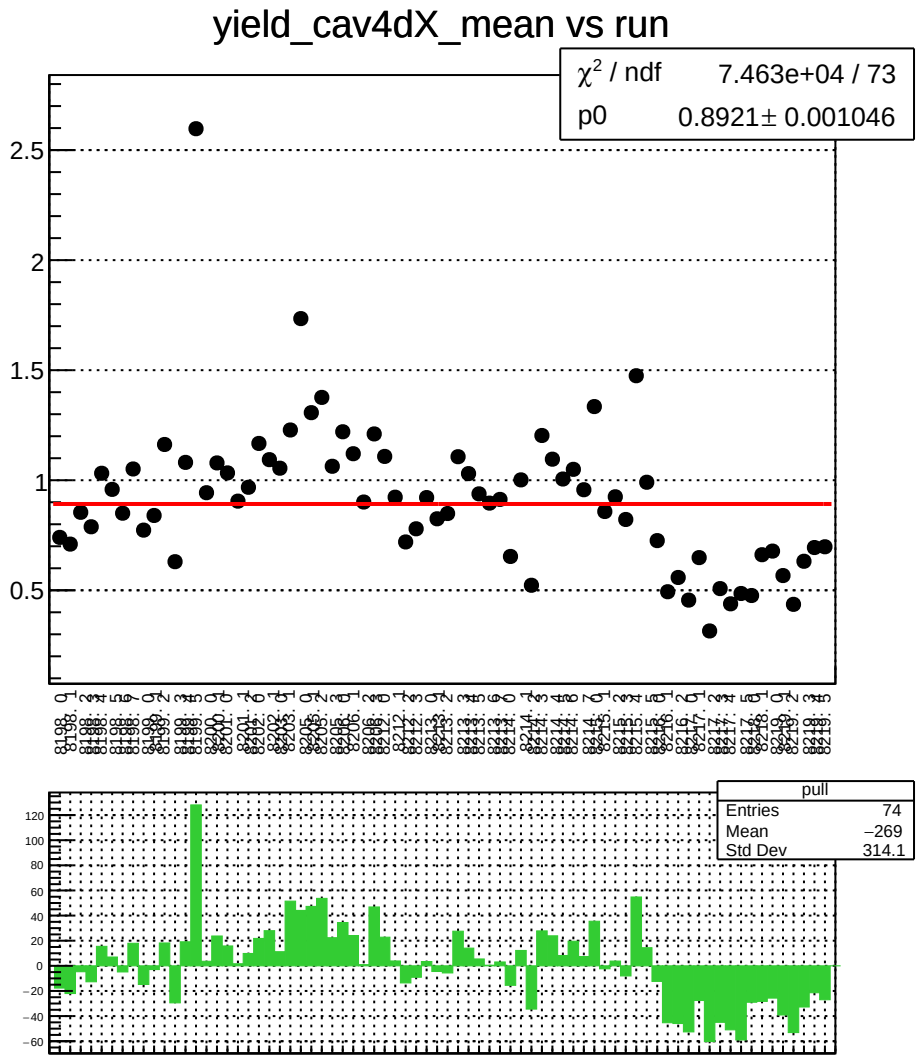

pull1D
Entries 74
Mean 1.186
Std Dev 4.259

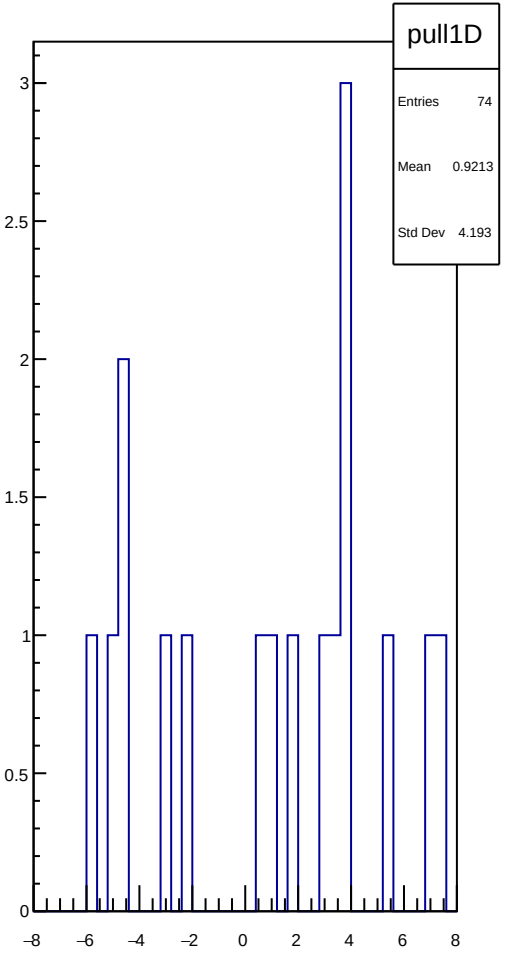

yield_cav4cX_rms vs run
χ^2 / ndf 4.864e+04 / 73
p0 2.742 ± 0.002274
5.5
5
4.5
4
3.5
3
2.5
2

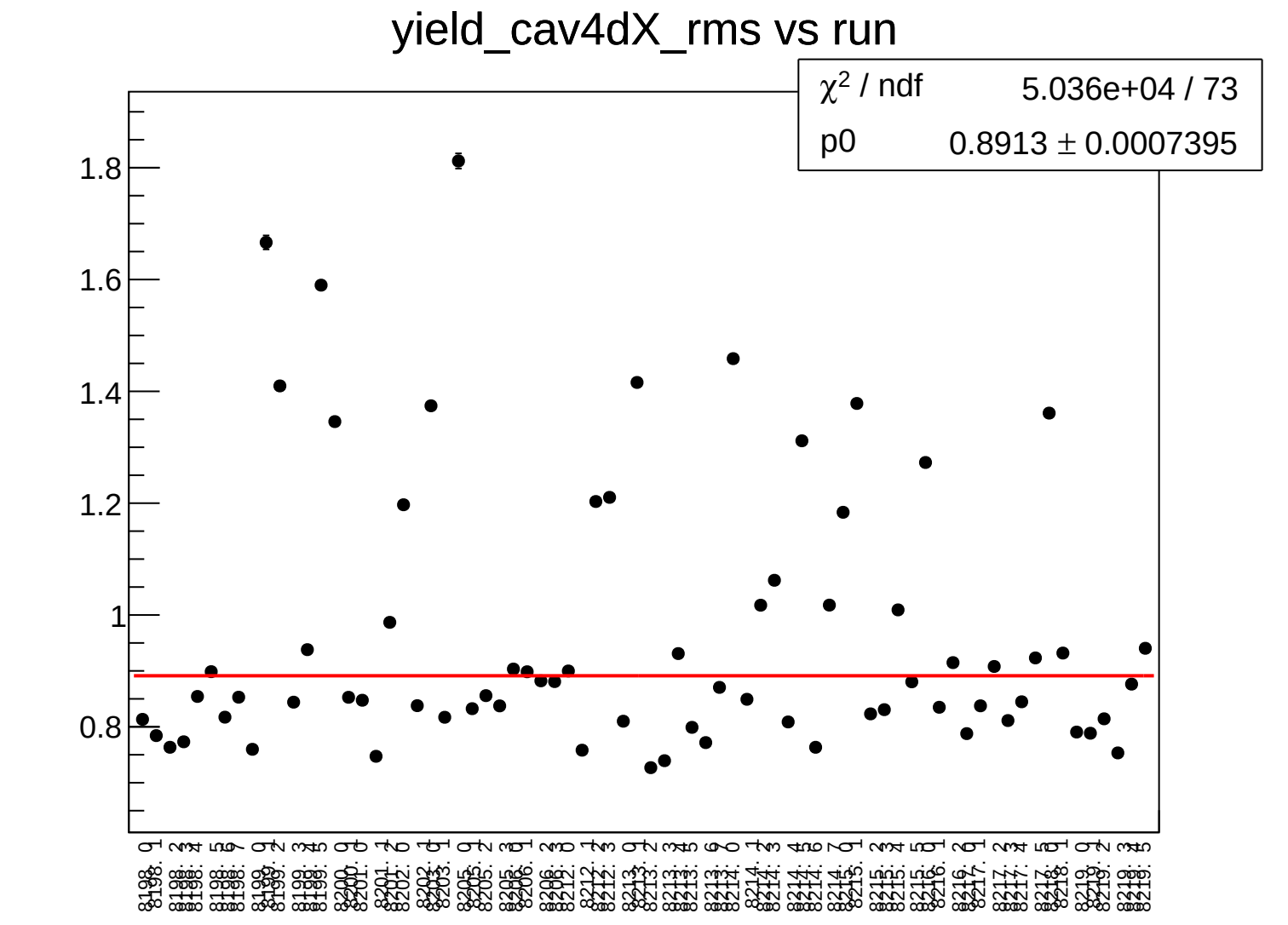

yield_cav4cY_mean vs run
χ² / ndf 1.367e+05 / 73
p0 1.034 ± 1.778e−05
pull
Entries 74
Mean −74.6
Std Dev 128.7

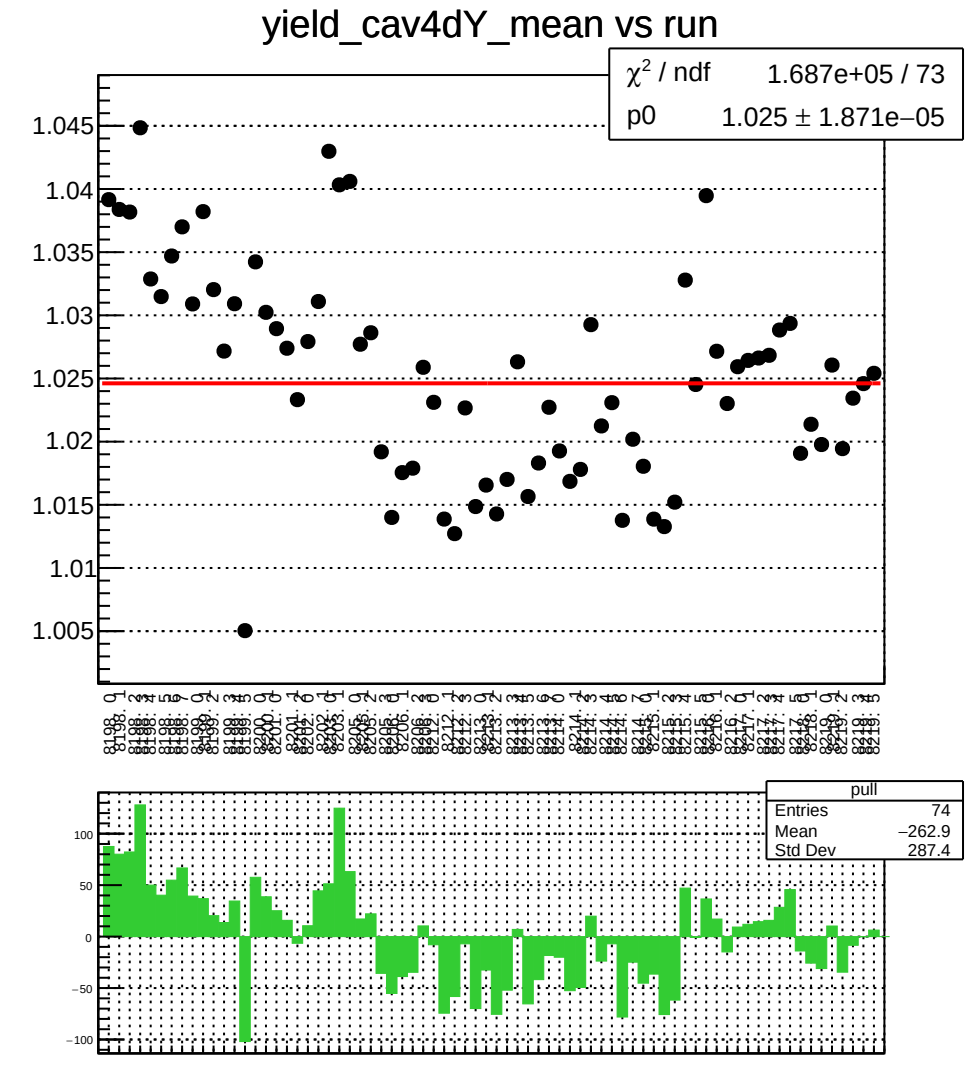

pull1D
Entries 74
Mean 1.922
Std Dev 3.088

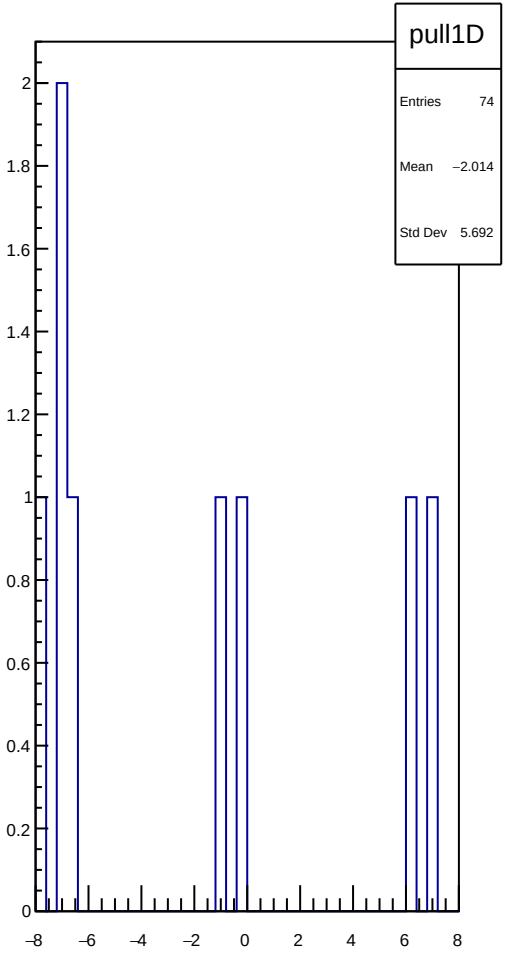

yield_cav4cY_rms vs run
χ² / ndf 7.163e+04 / 73
p0 0.01504 ± 1.257e–05
0.035
0.03
0.025
0.02
0.015
0.01

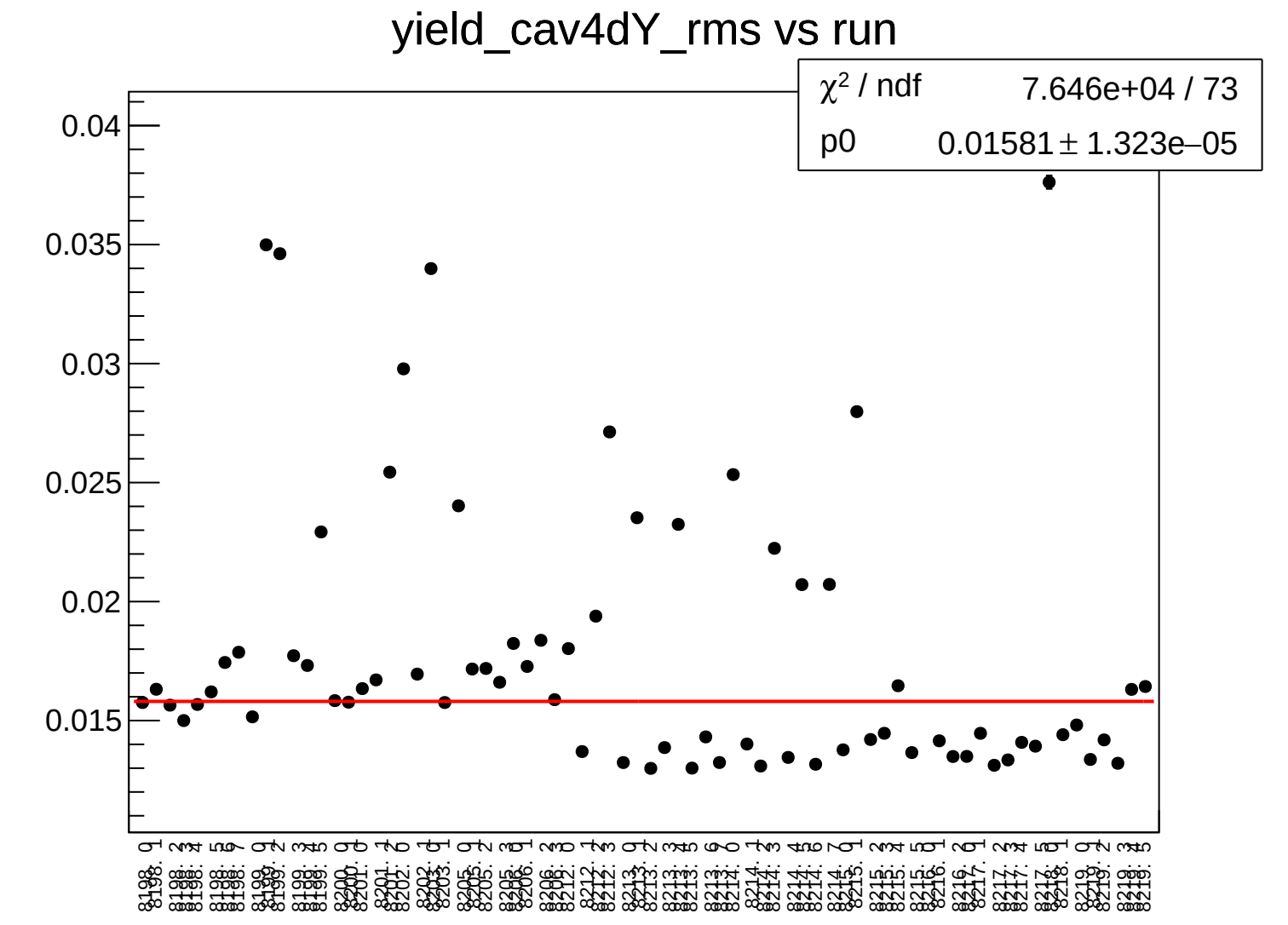

yield_cav4dX_mean vs run
χ² / ndf 7.463e+04 / 73
p0 0.8921± 0.001046
pull
Entries 74
Mean −269
Std Dev 314.1

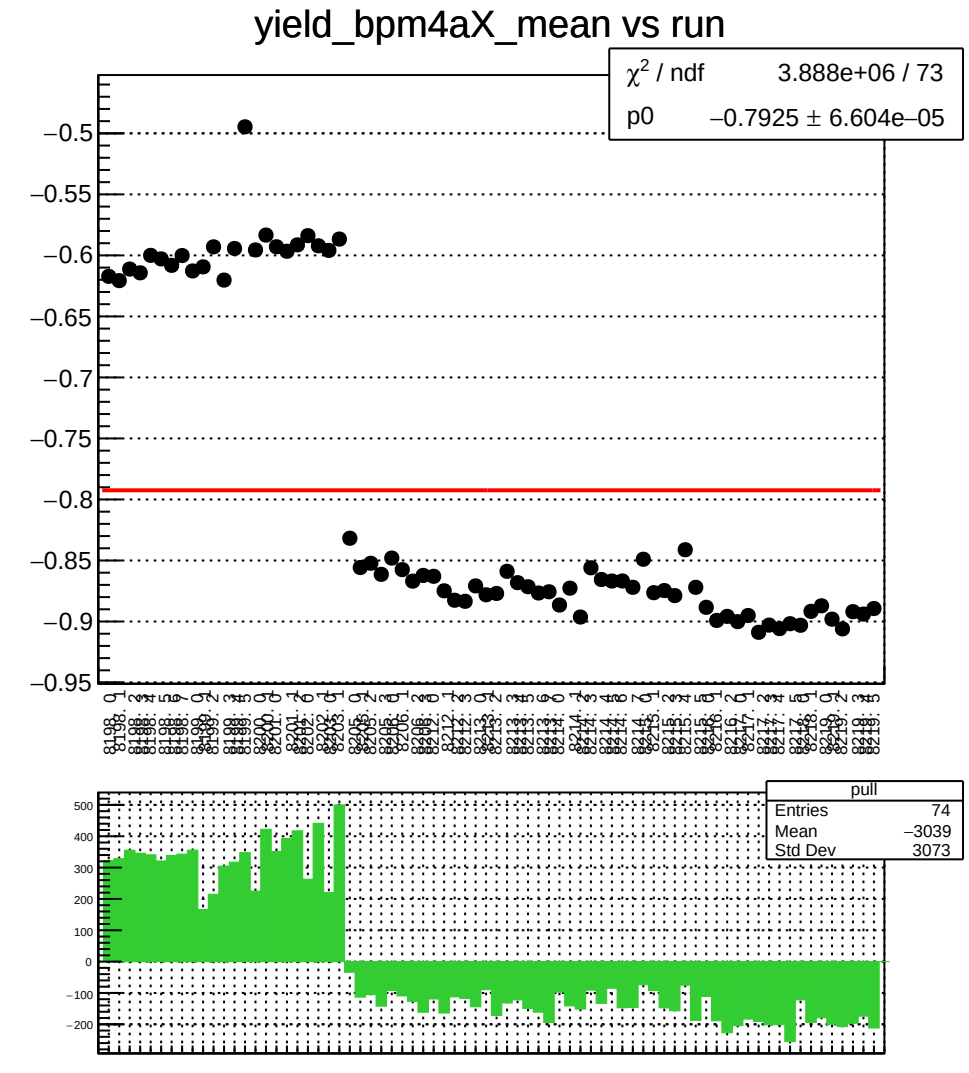

pull1D
Entries 74
Mean 0.9213
Std Dev 4.193

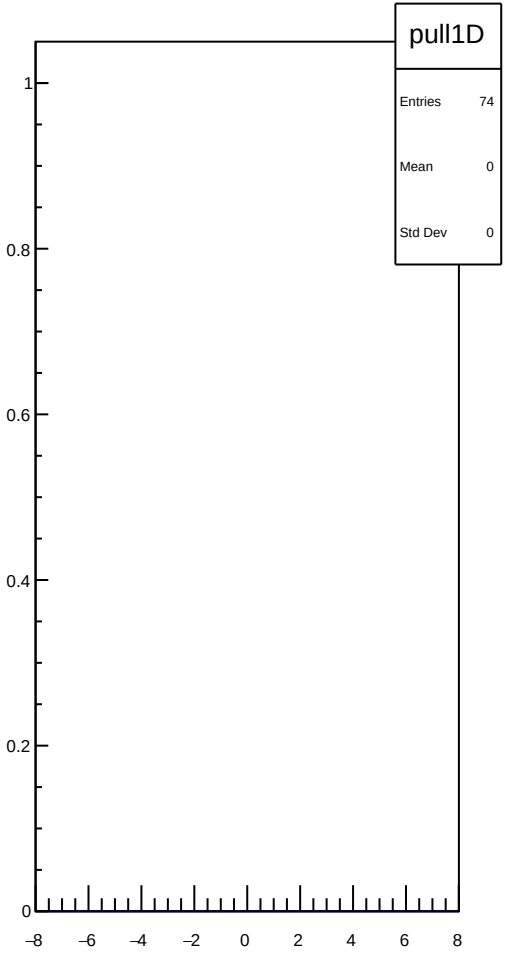

yield_cav4dX_rms vs run
χ² / ndf 5.036e+04 / 73
p0 0.8913 ± 0.0007395
1.8
1.6
1.4
1.2
1
0.8

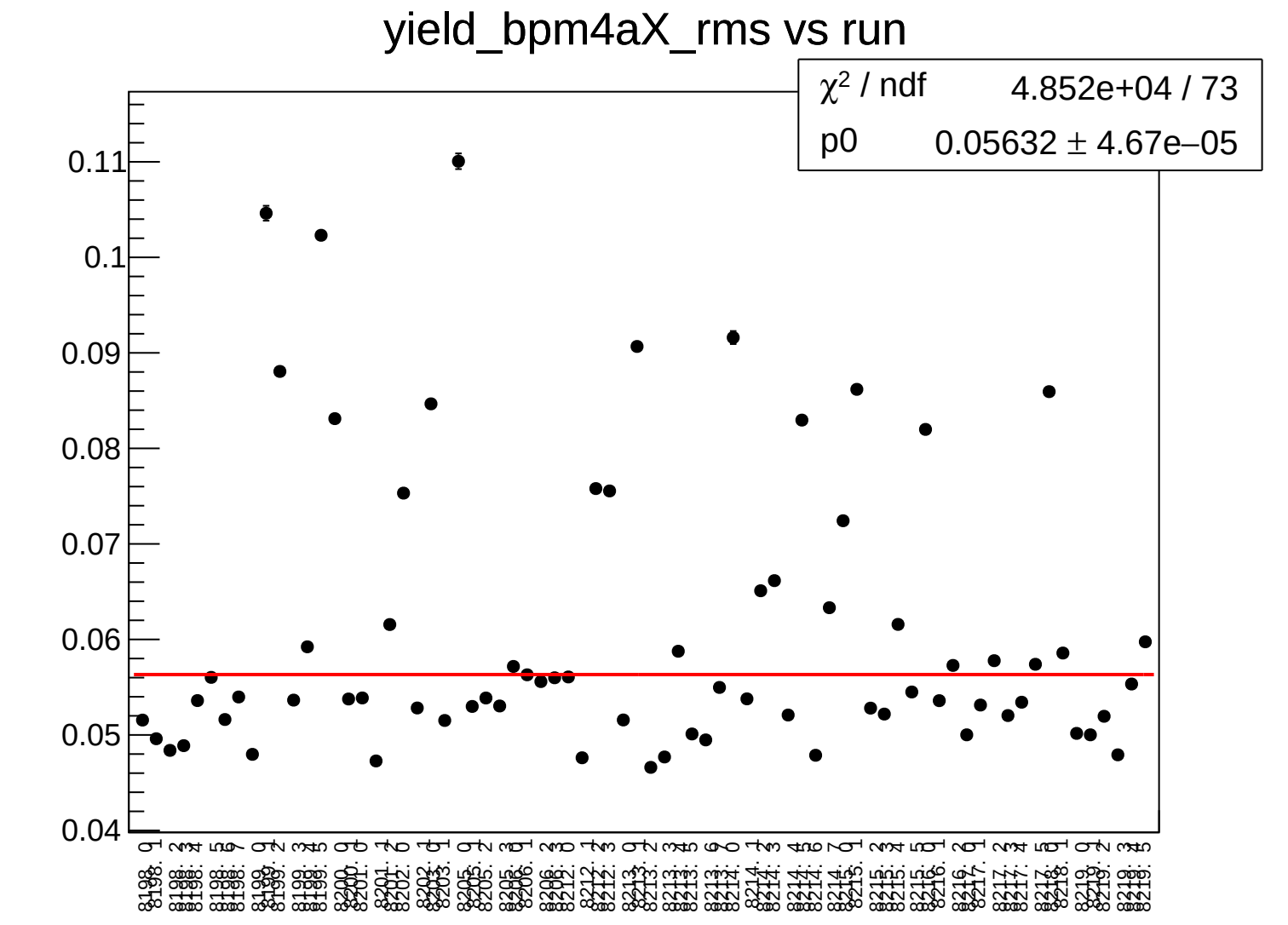

yield_cav4dY_mean vs run
χ² / ndf 1.687e+05 / 73
p0 1.025 ± 1.871e−05
1.045
1.04
1.035
1.03
1.025
1.02
1.015
1.01
1.005
pull
Entries 74
Mean −262.9
Std Dev 287.4
100
50
0
−50
−100

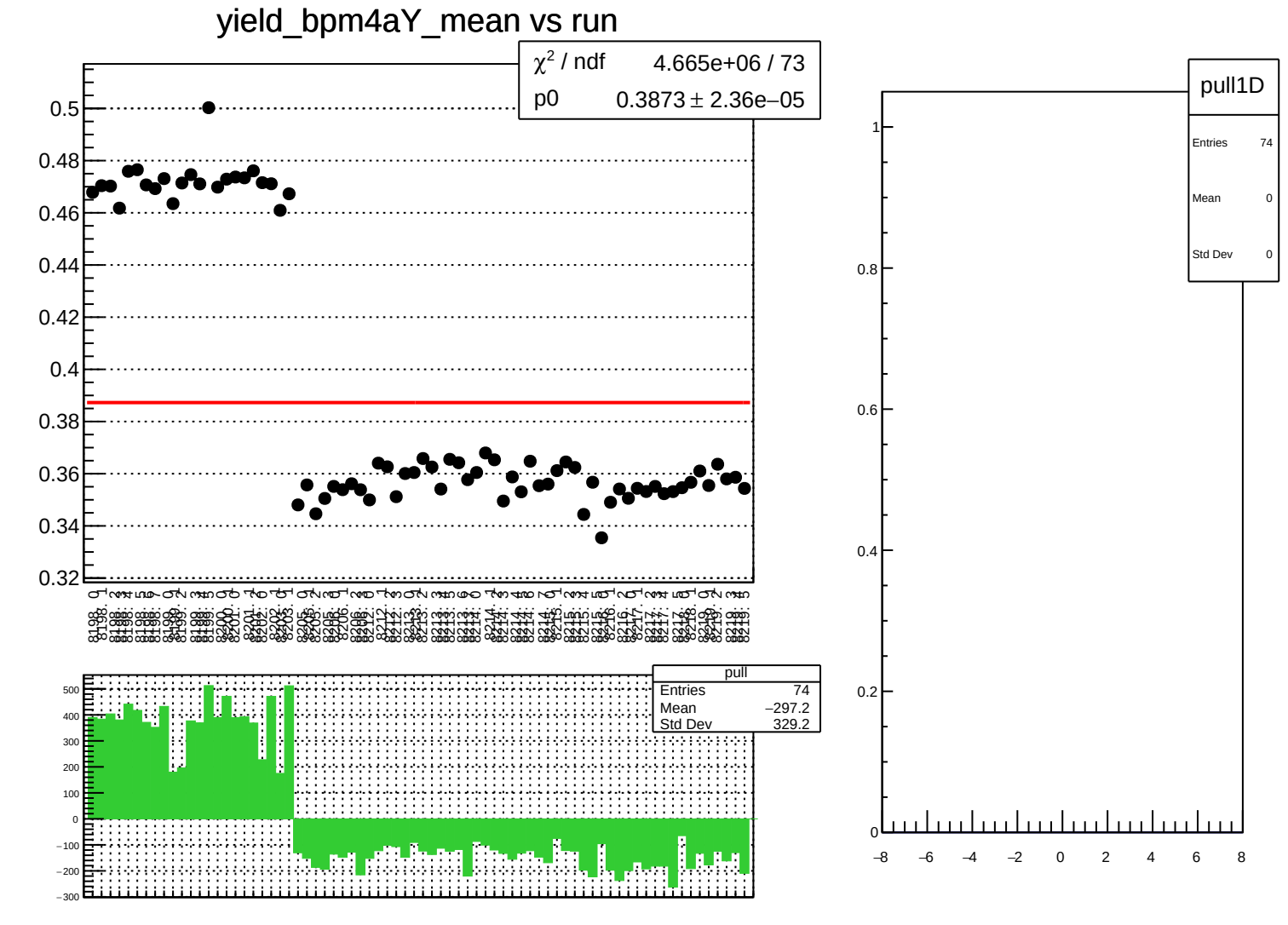

pull1D
Entries 74
Mean −2.014
Std Dev 5.692
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


yield_cav4dY_rms vs run
χ² / ndf 7.646e+04 / 73
p0 0.01581 ± 1.323e−05
0.04
0.035
0.03
0.025
0.02
0.015

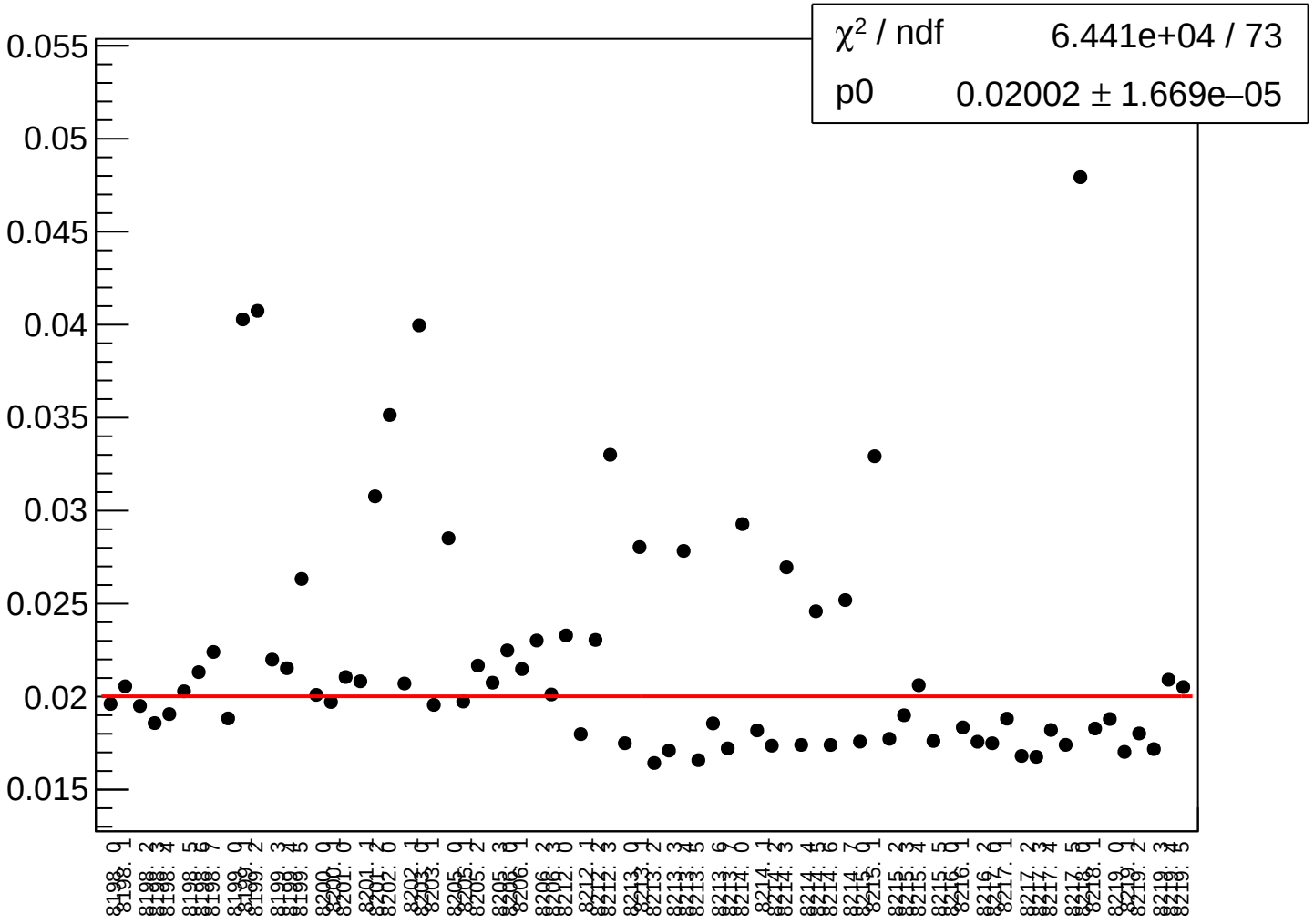

yield_bpm4aX_mean vs run
χ² / ndf 3.888e+06 / 73
p0 −0.7925 ± 6.604e−05
pull
Entries 74
Mean −3039
Std Dev 3073

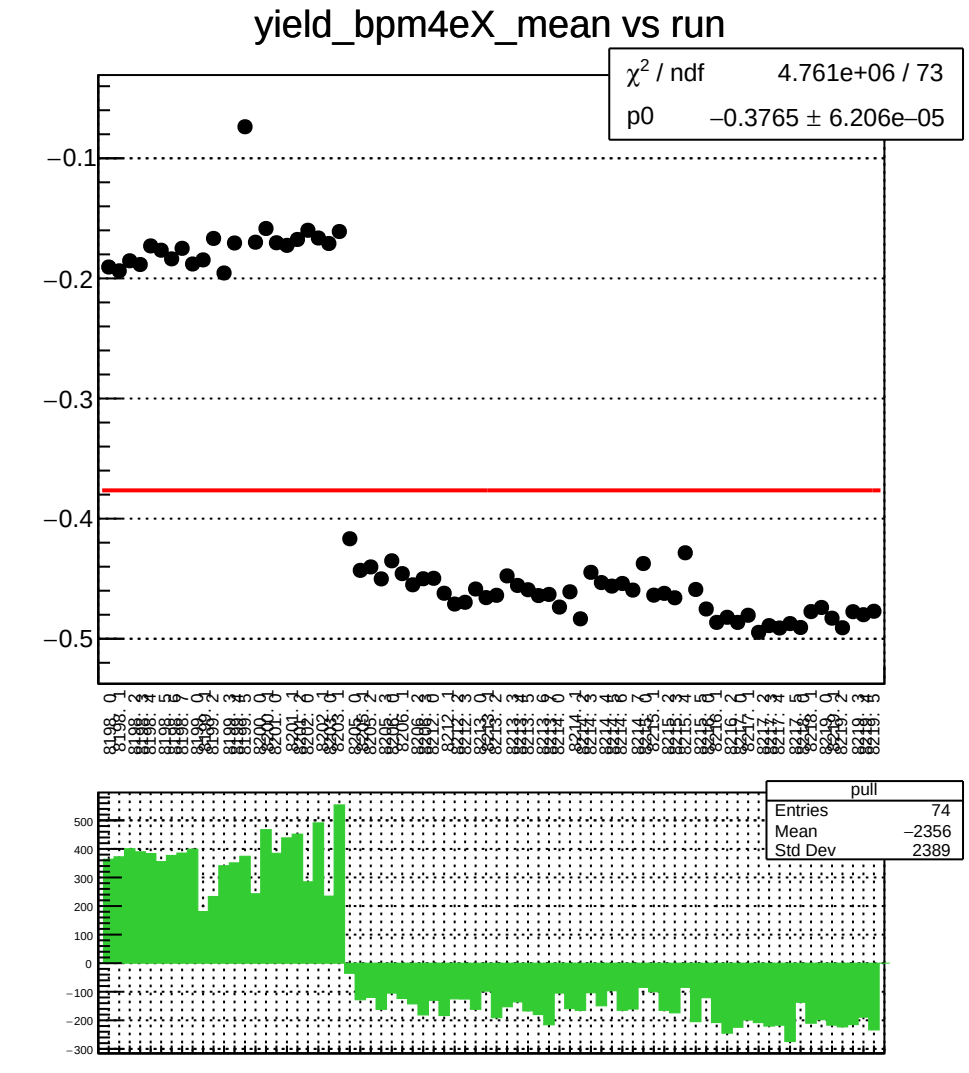

pull1D
Entries 74
Mean 0
Std Dev 0

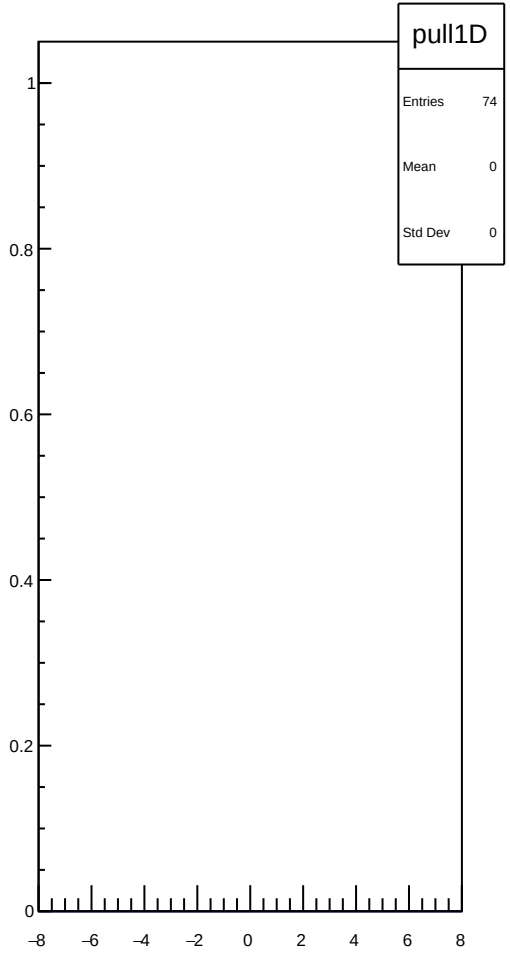

yield_bpm4aX_rms vs run
χ² / ndf 4.852e+04 / 73
p0 0.05632 ± 4.67e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

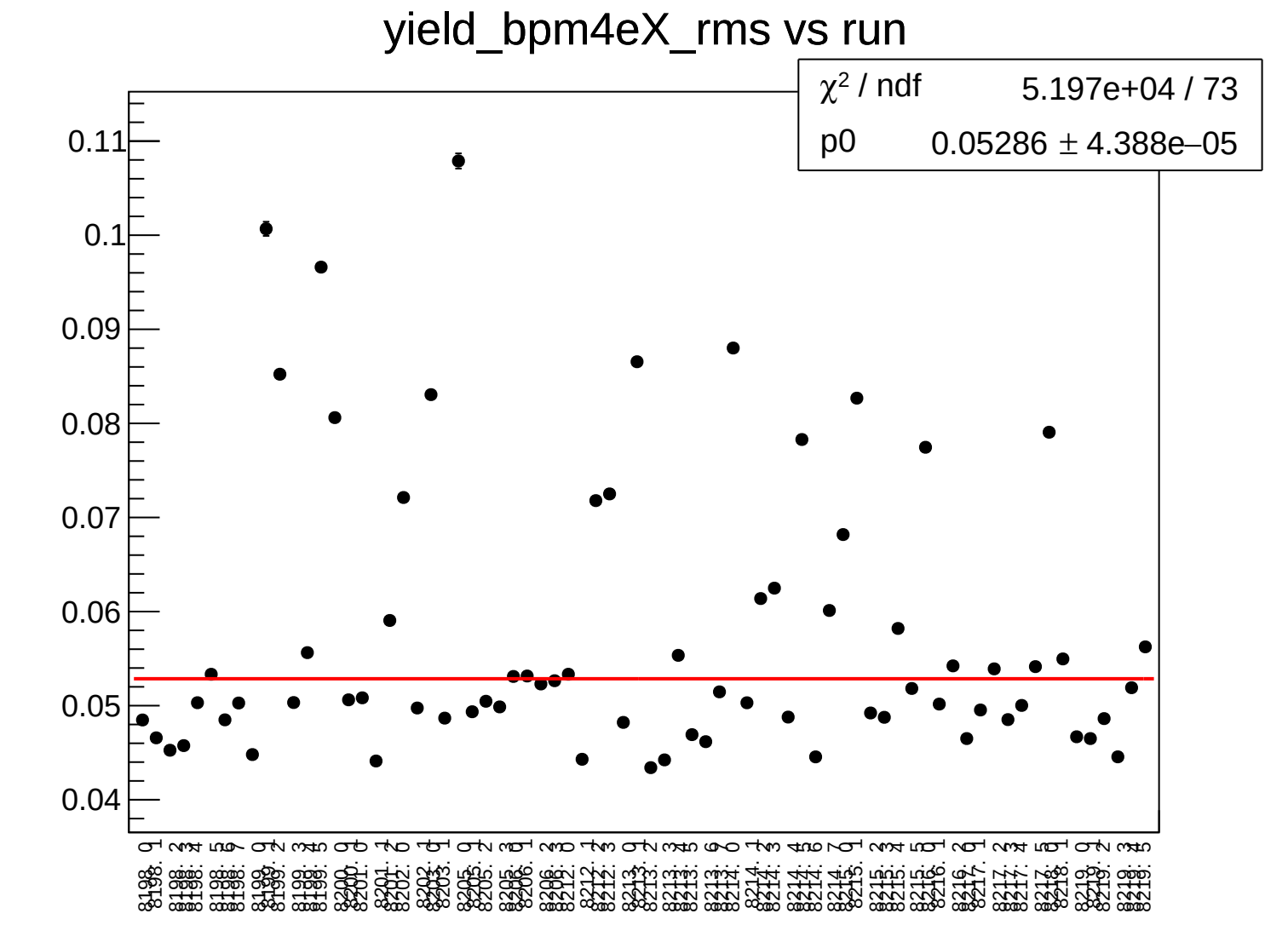

yield_bpm4aY_mean vs run
χ² / ndf 4.665e+06 / 73
p0 0.3873 ± 2.36e−05
pull
Entries 74
Mean −297.2
Std Dev 329.2
pull1D
Entries 74
Mean 0
Std Dev 0

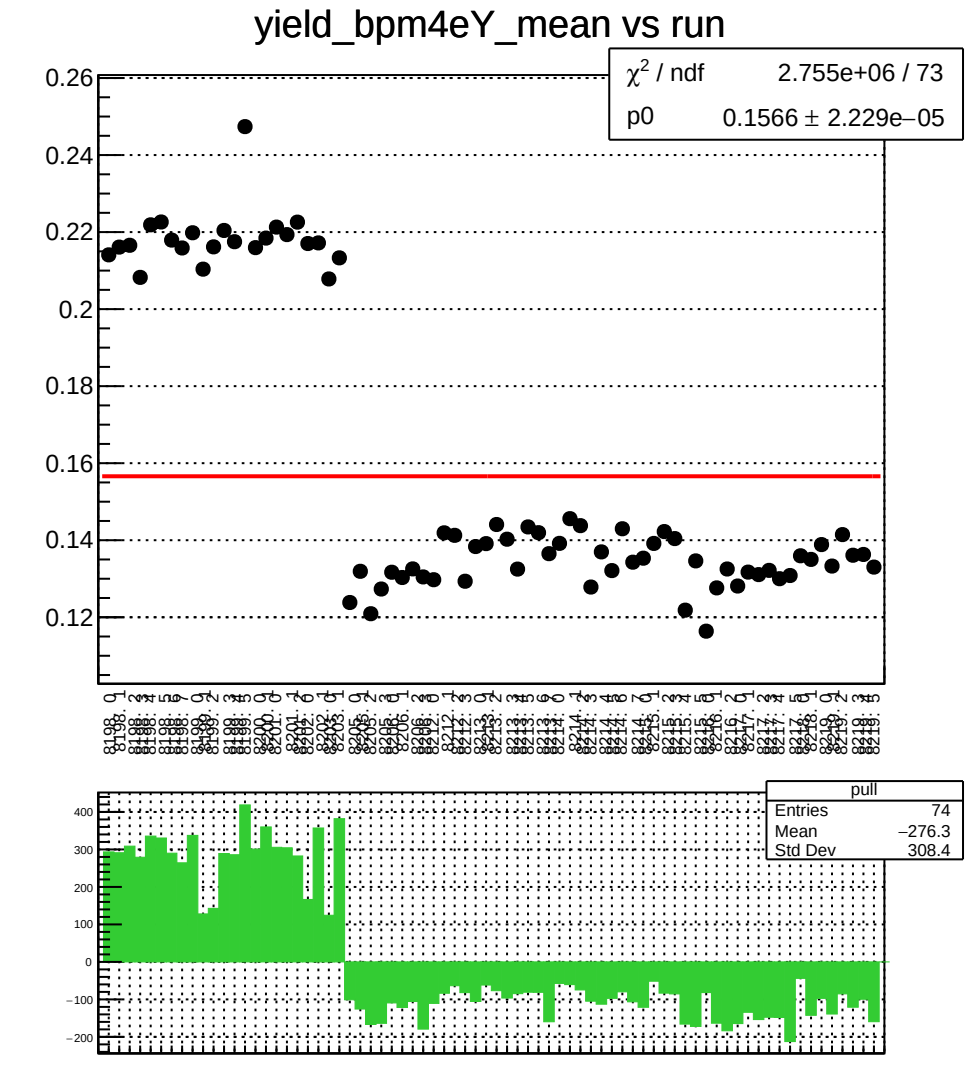
yield_bpm4aY_rms vs run

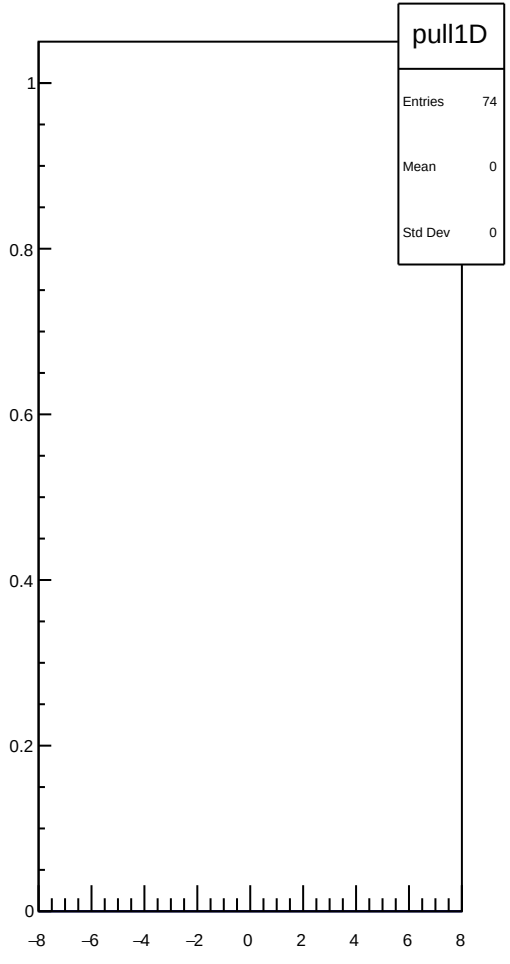


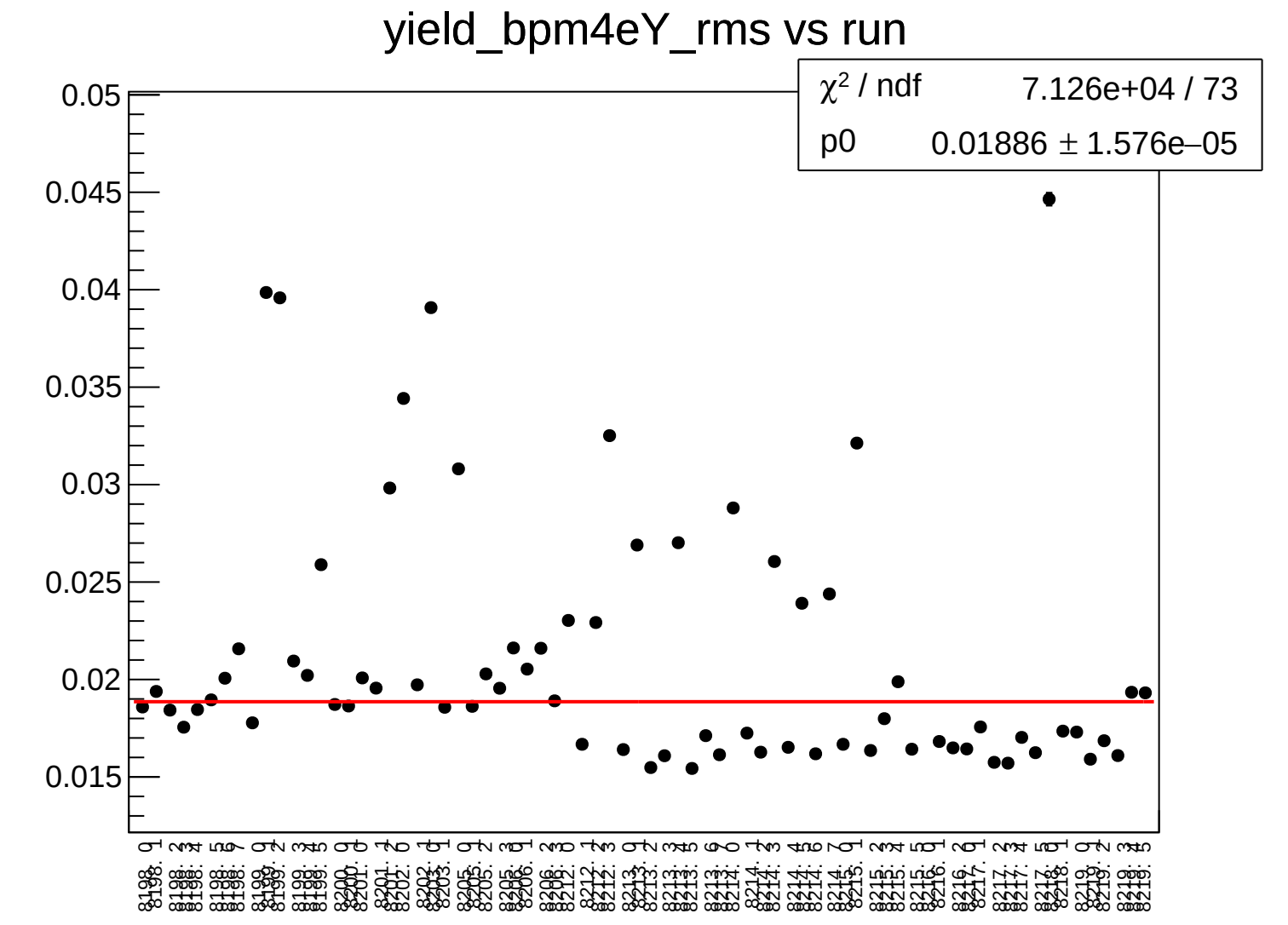

yield_bpm4eX_mean vs run
χ² / ndf 4.761e+06 / 73
p0 −0.3765 ± 6.206e−05
−0.1
−0.2
−0.3
−0.4
−0.5
pull
Entries 74
Mean −2356
Std Dev 2389
500
400
300
200
100
0
−100
−200
−300

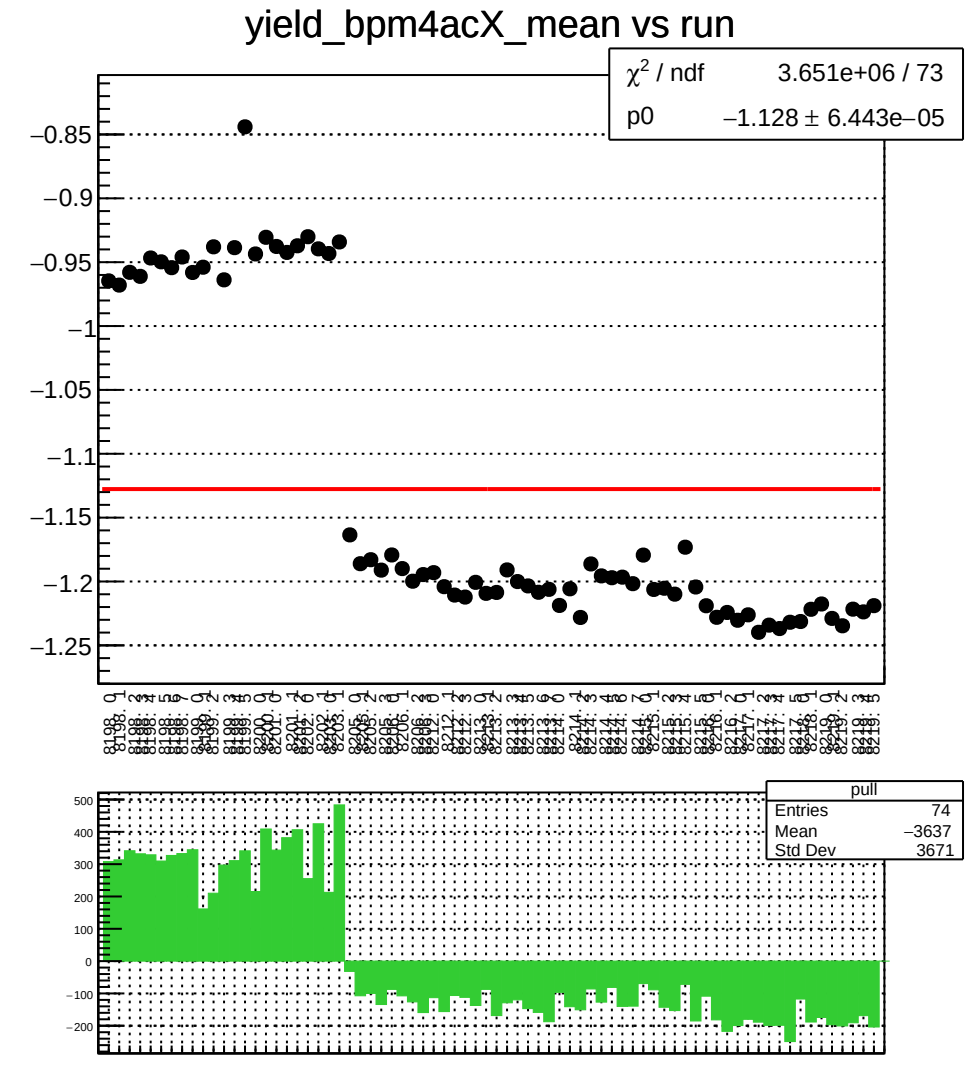

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

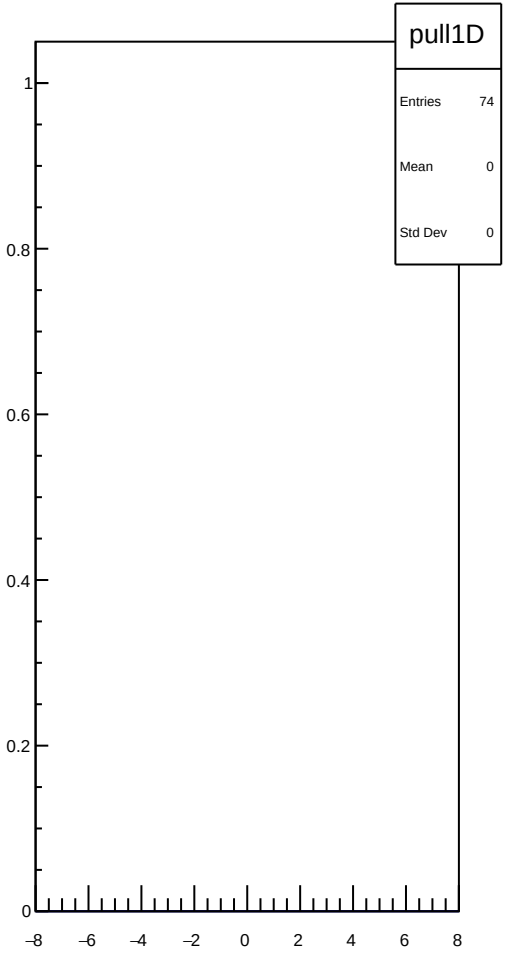

yield_bpm4eX_rms vs run
χ² / ndf 5.197e+04 / 73
p0 0.05286 ± 4.388e–05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

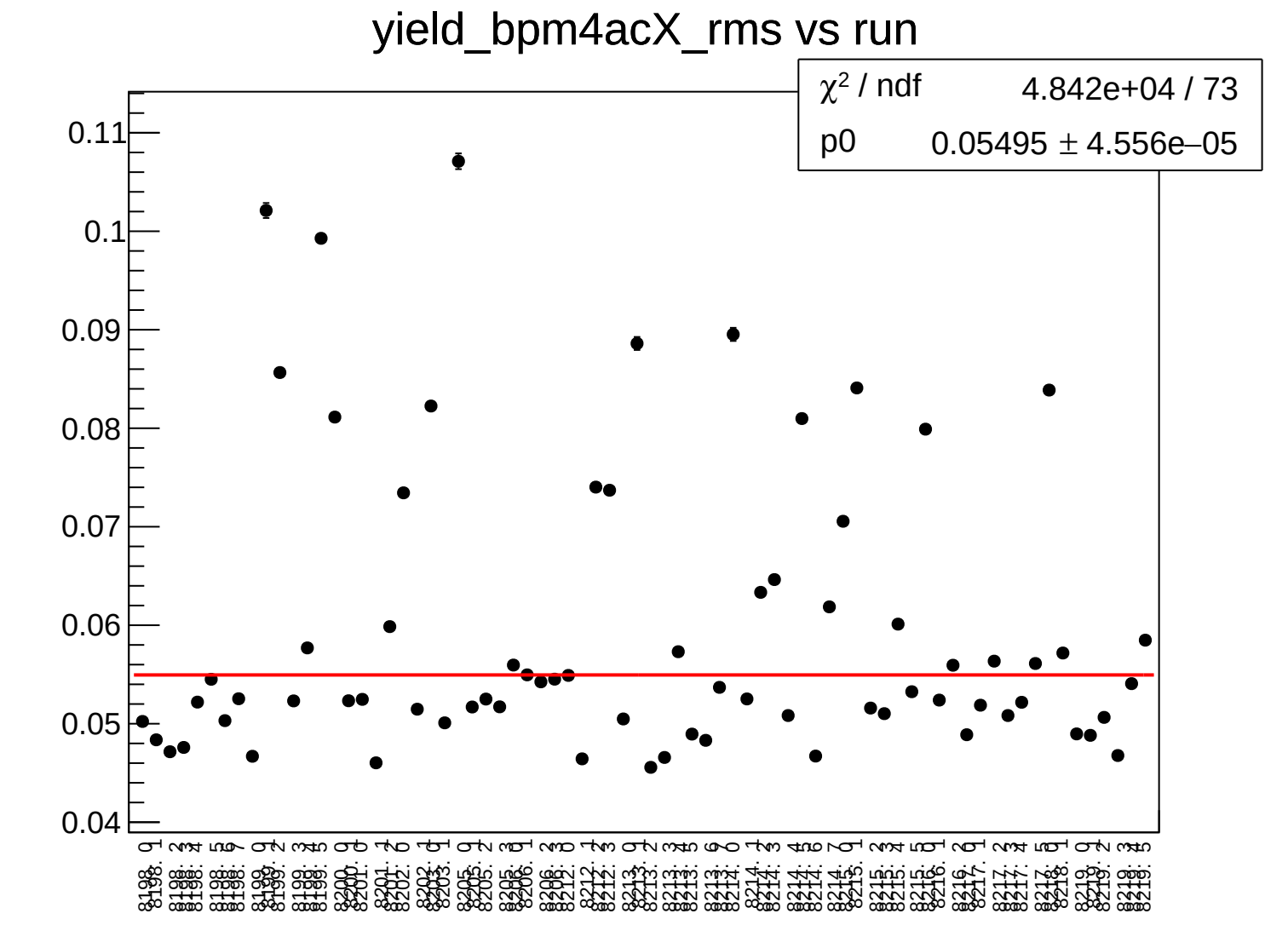

yield_bpm4eY_mean vs run
χ² / ndf 2.755e+06 / 73
p0 0.1566 ± 2.229e−05
pull
Entries 74
Mean −276.3
Std Dev 308.4

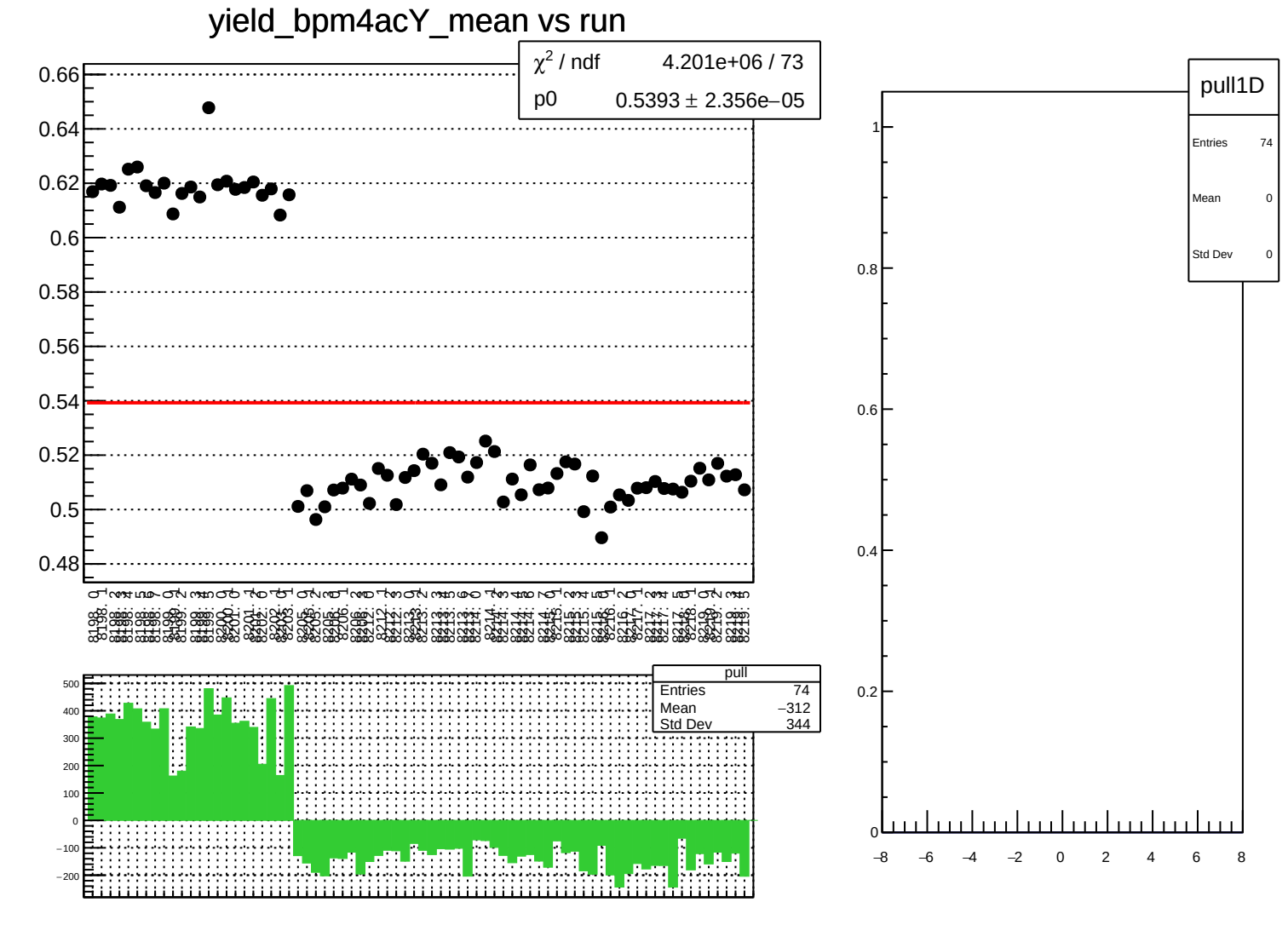

pull1D
Entries 74
Mean 0
Std Dev 0

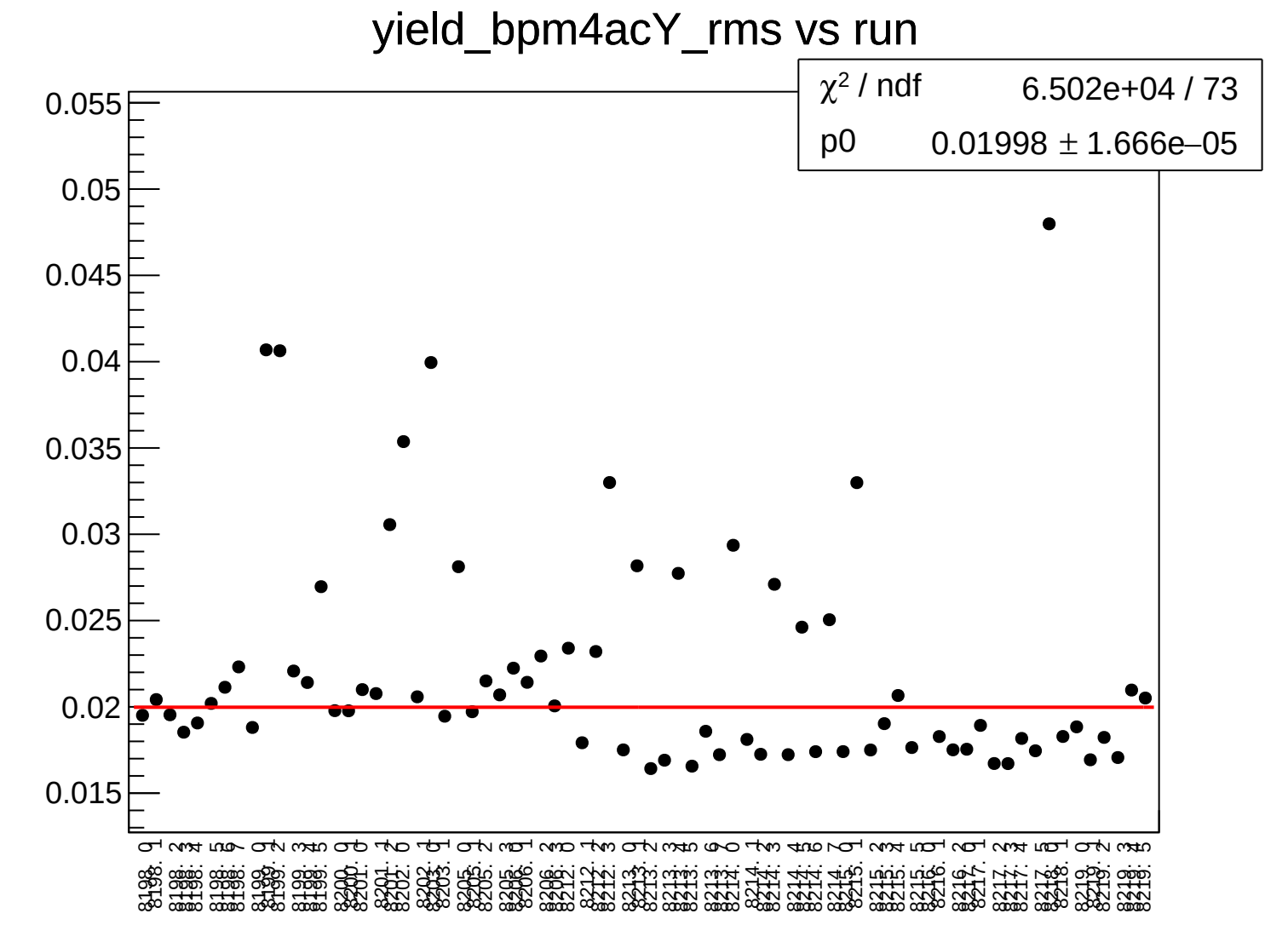

yield_bpm4eY_rms vs run
χ² / ndf 7.126e+04 / 73
p0 0.01886 ± 1.576e−05
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

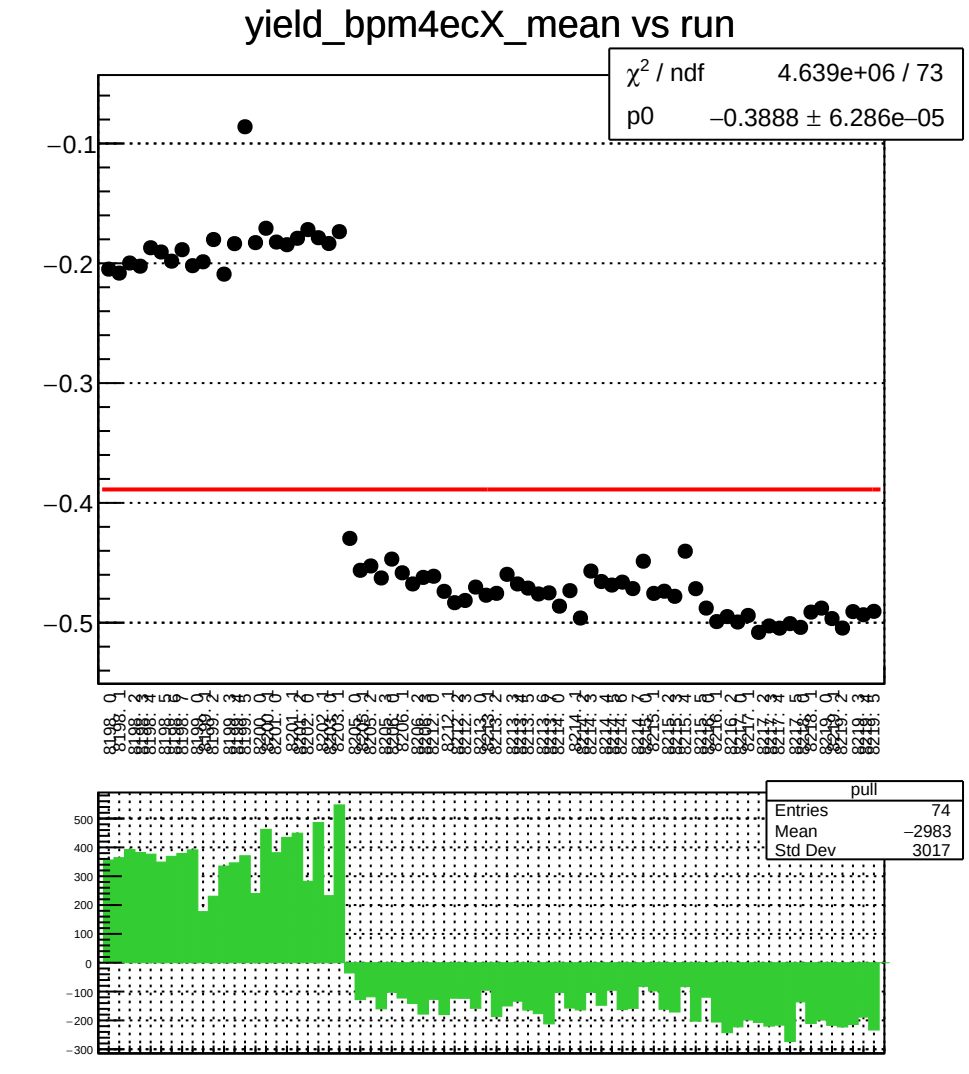

yield_bpm4acX_mean vs run
χ² / ndf 3.651e+06 / 73
p0 −1.128 ± 6.443e−05
−0.85
−0.9
−0.95
−1
−1.05
−1.1
−1.15
−1.2
−1.25
pull
Entries 74
Mean −3637
Std Dev 3671
500
400
300
200
100
0
−100
−200

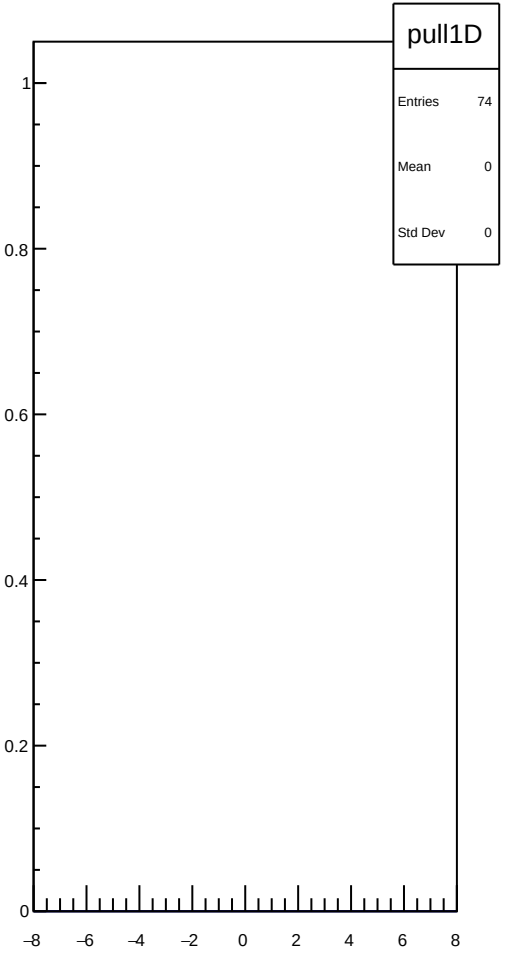

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

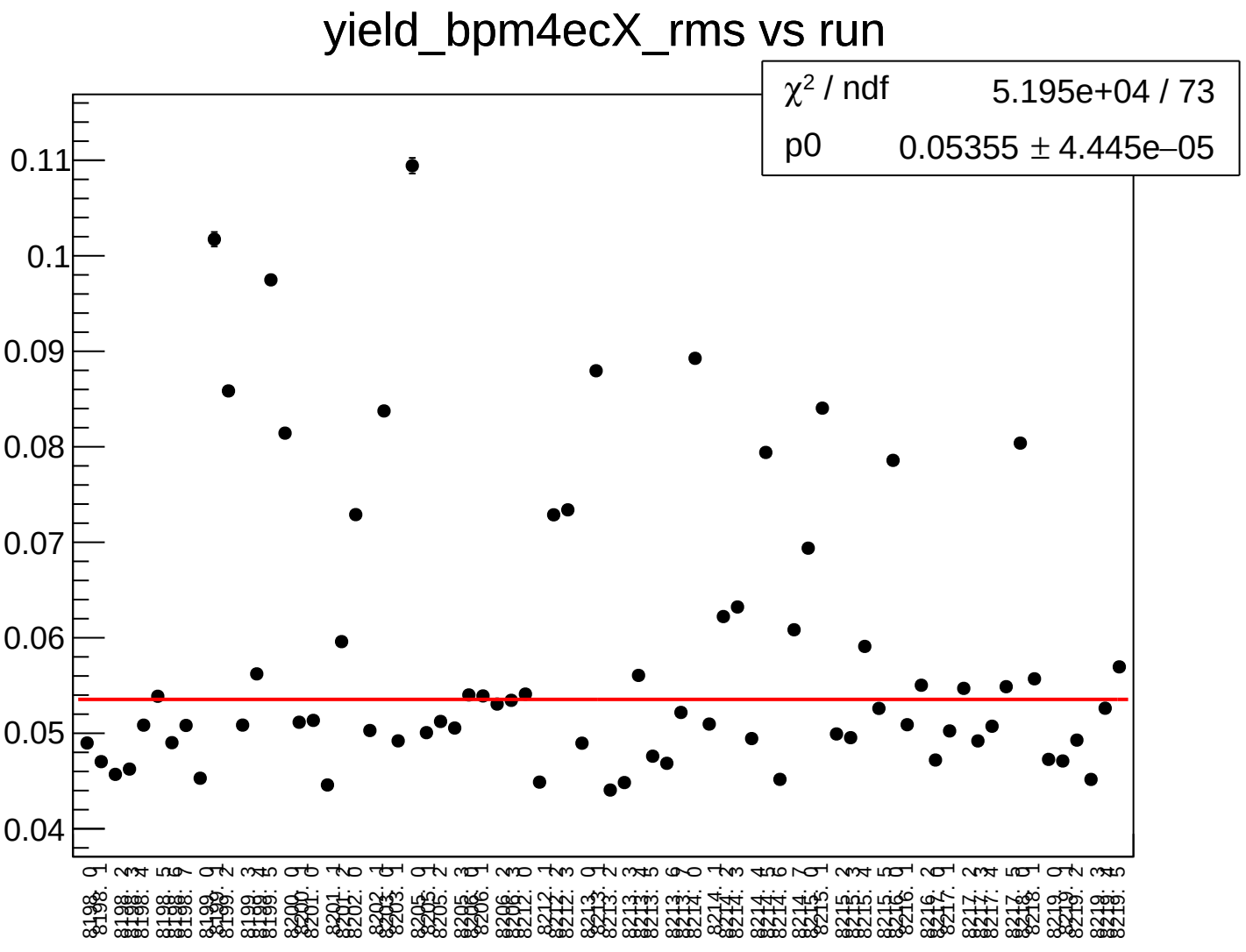

yield_bpm4acX_rms vs run
χ² / ndf 4.842e+04 / 73
p0 0.05495 ± 4.556e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

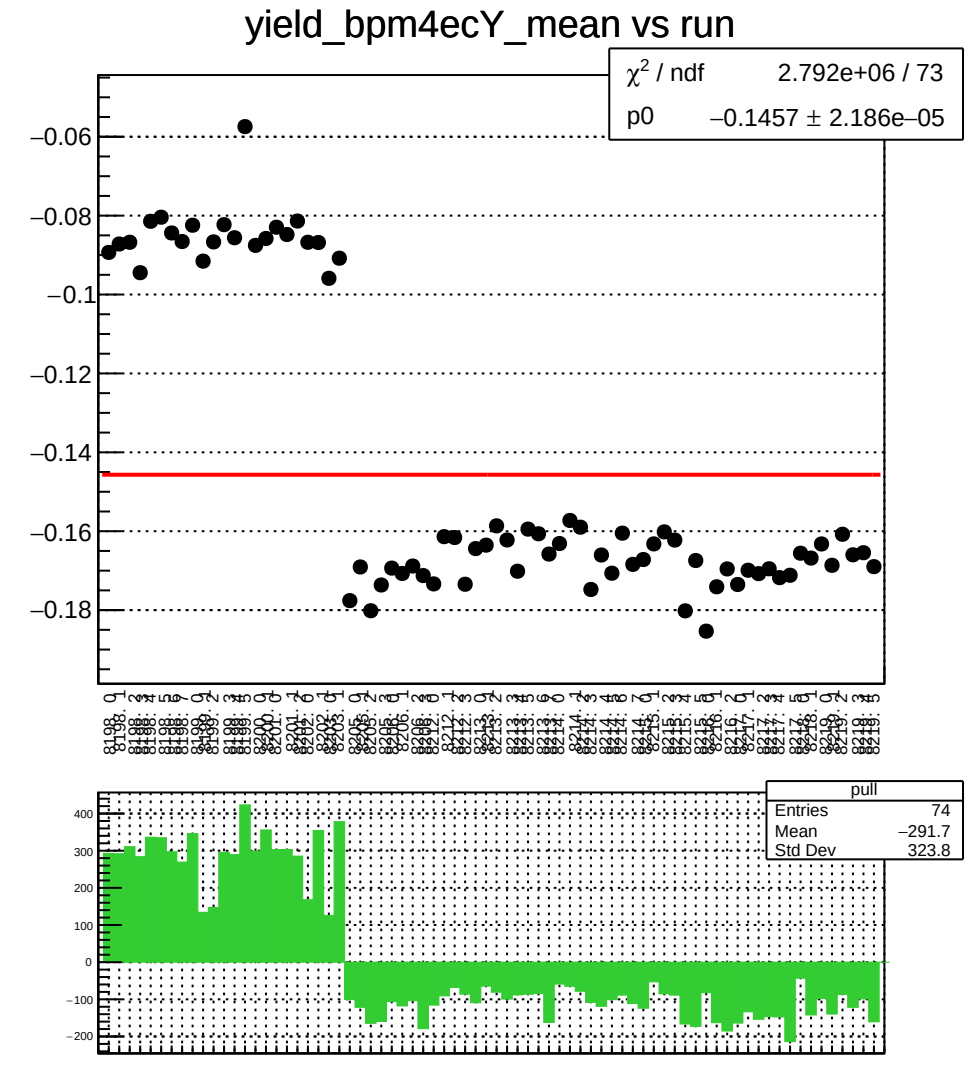

yield_bpm4acY_mean vs run
χ² / ndf 4.201e+06 / 73
p0 0.5393 ± 2.356e−05
pull
Entries 74
Mean −312
Std Dev 344
pull1D
Entries 74
Mean 0
Std Dev 0

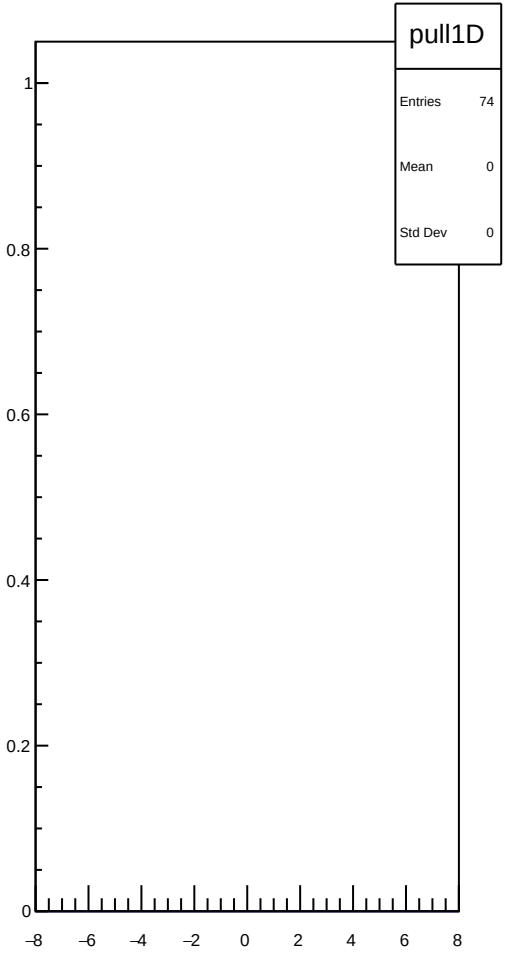

yield_bpm4acY_rms vs run
χ² / ndf 6.502e+04 / 73
p0 0.01998 ± 1.666e−05
0.055
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

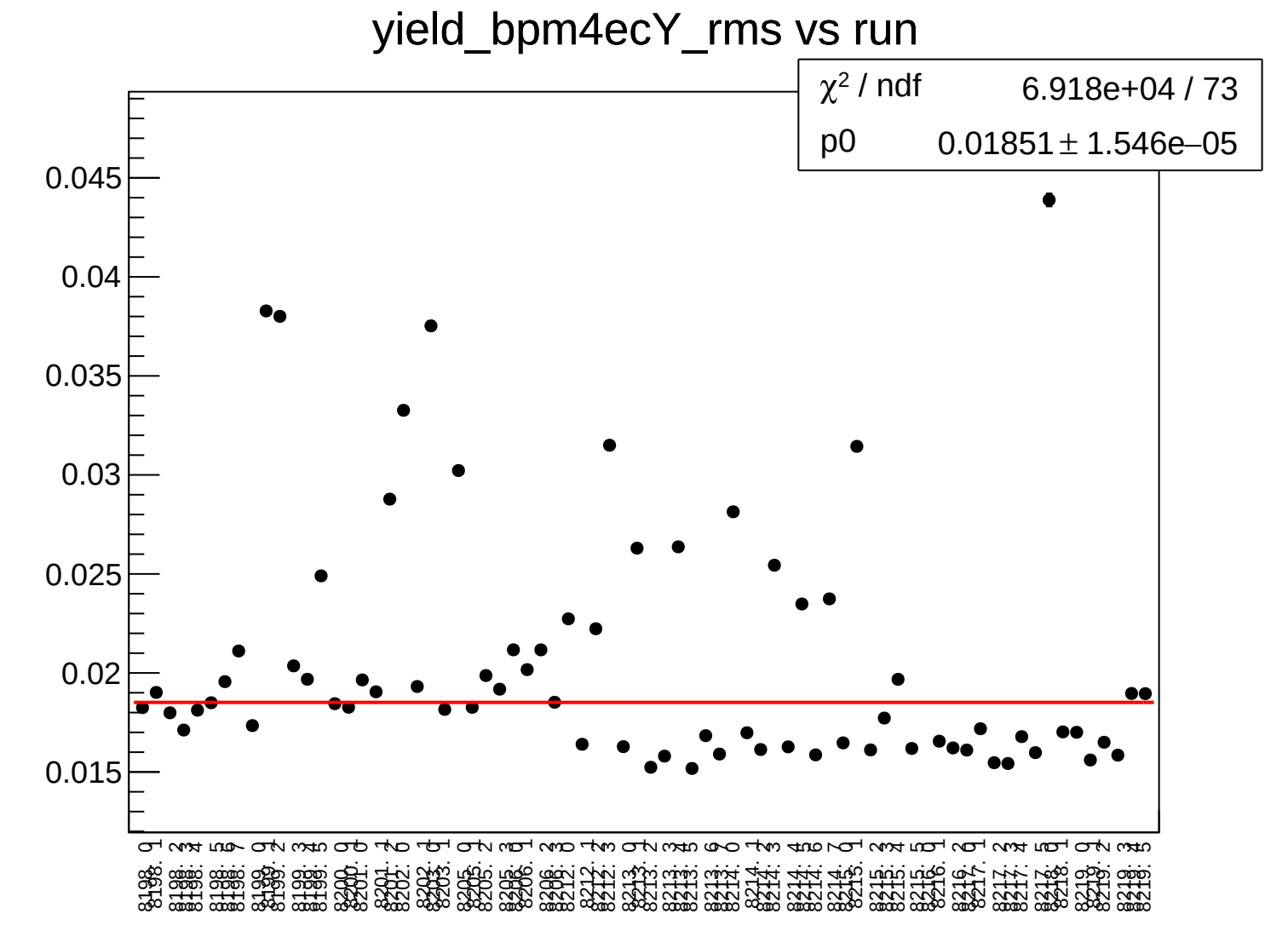

yield_bpm4ecX_mean vs run
χ² / ndf 4.639e+06 / 73
p0 −0.3888 ± 6.286e−05
pull
Entries 74
Mean −2983
Std Dev 3017

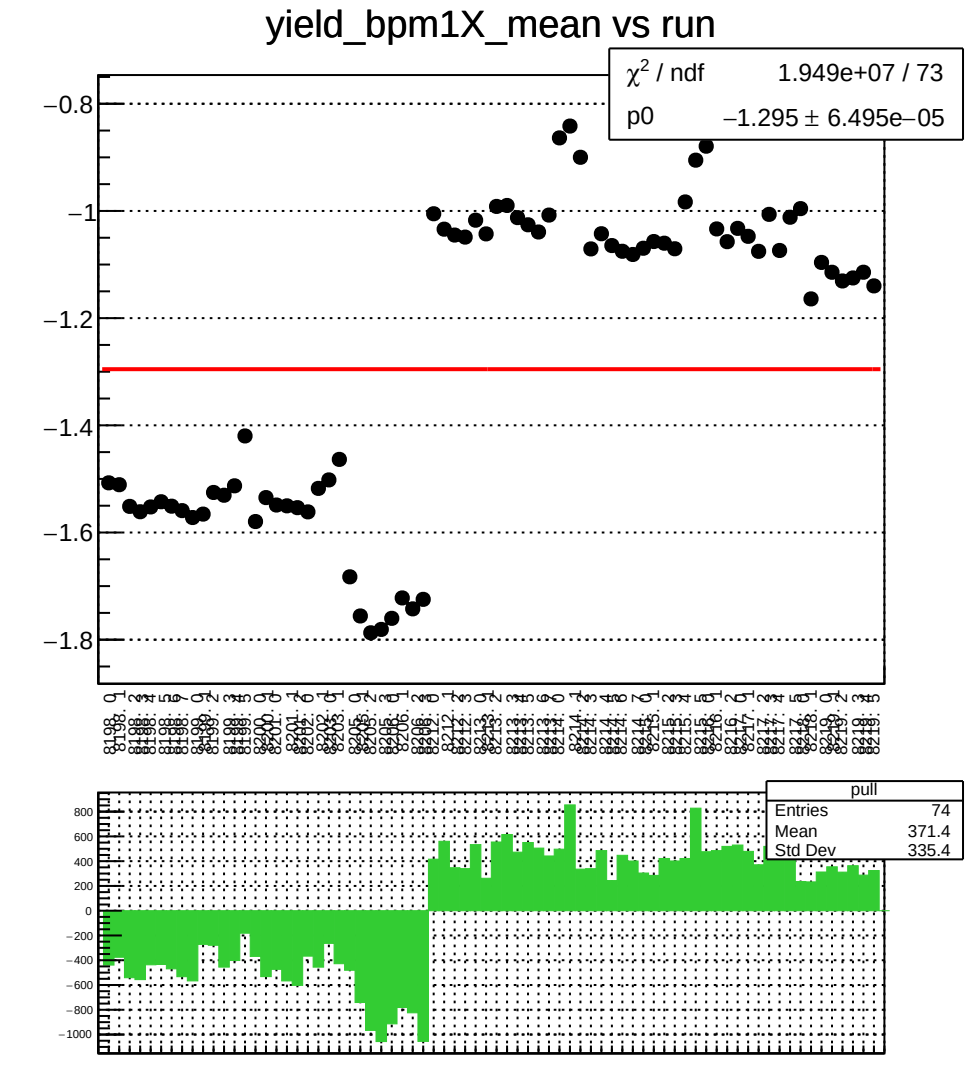

pull1D
Entries 74
Mean 0
Std Dev 0

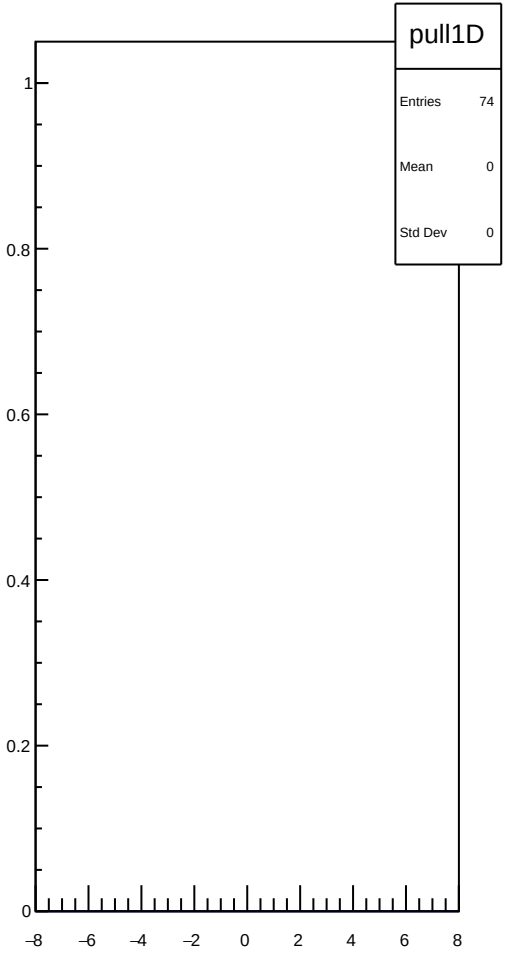

yield_bpm4ecX_rms vs run
χ² / ndf 5.195e+04 / 73
p0 0.05355 ± 4.445e−05
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

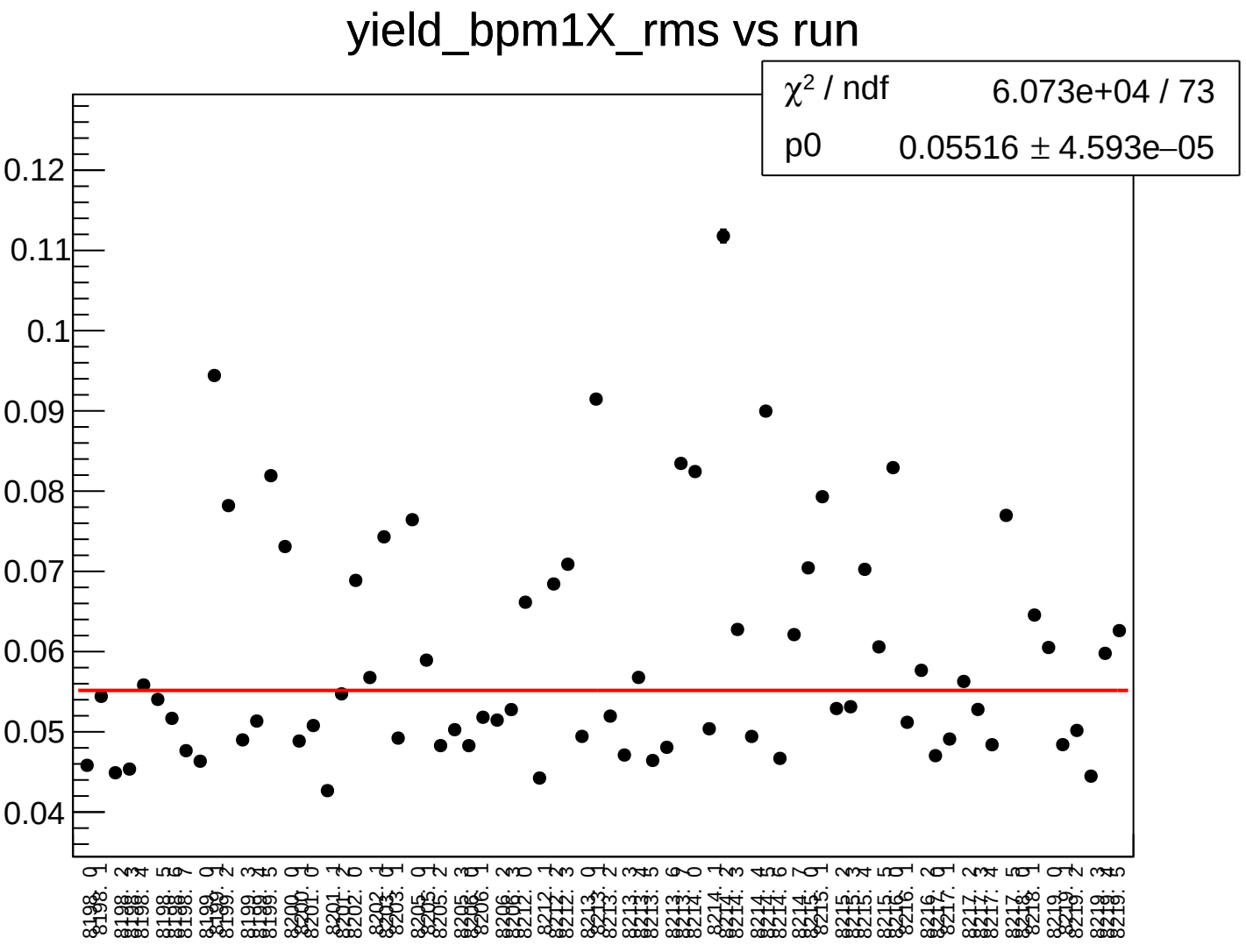

yield_bpm4ecY_mean vs run
χ² / ndf 2.792e+06 / 73
p0 −0.1457 ± 2.186e−05
−0.06
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
pull
Entries 74
Mean −291.7
Std Dev 323.8
400
300
200
100
0
−100
−200

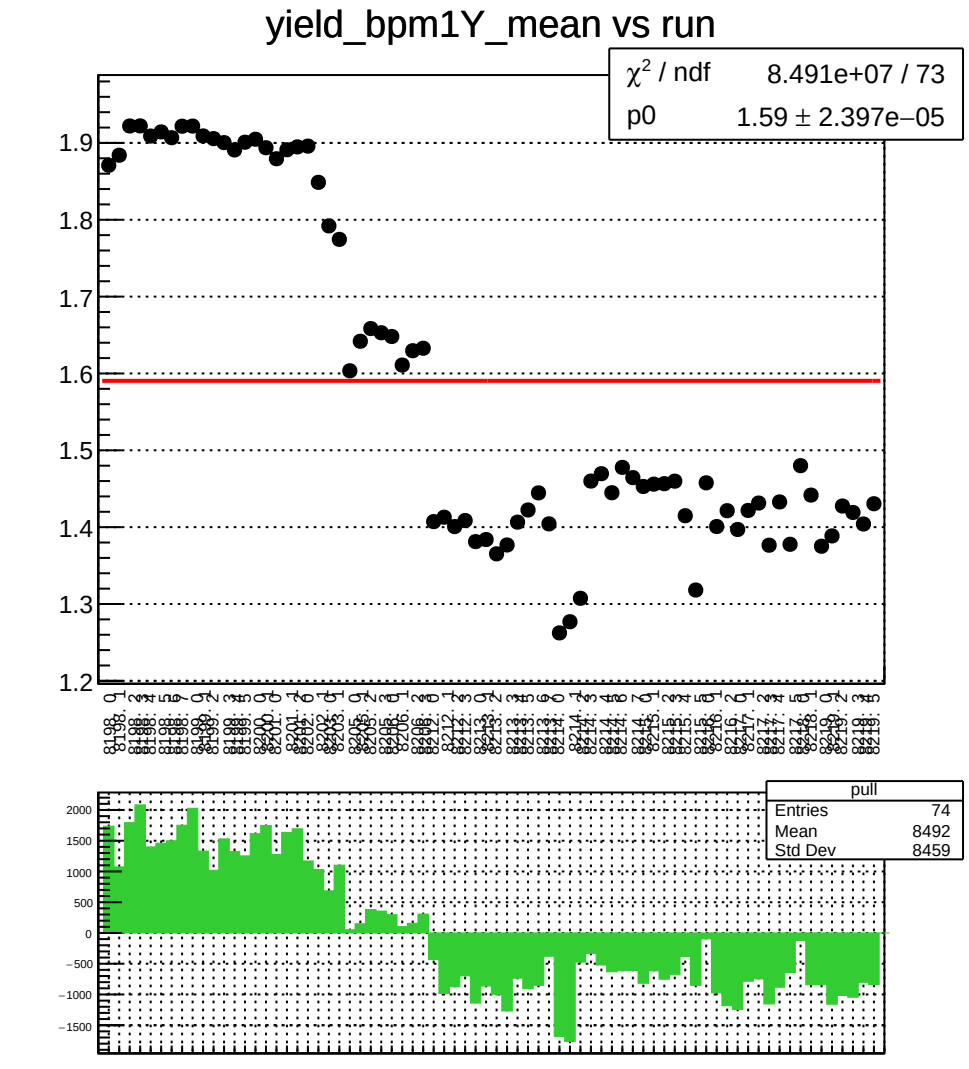

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

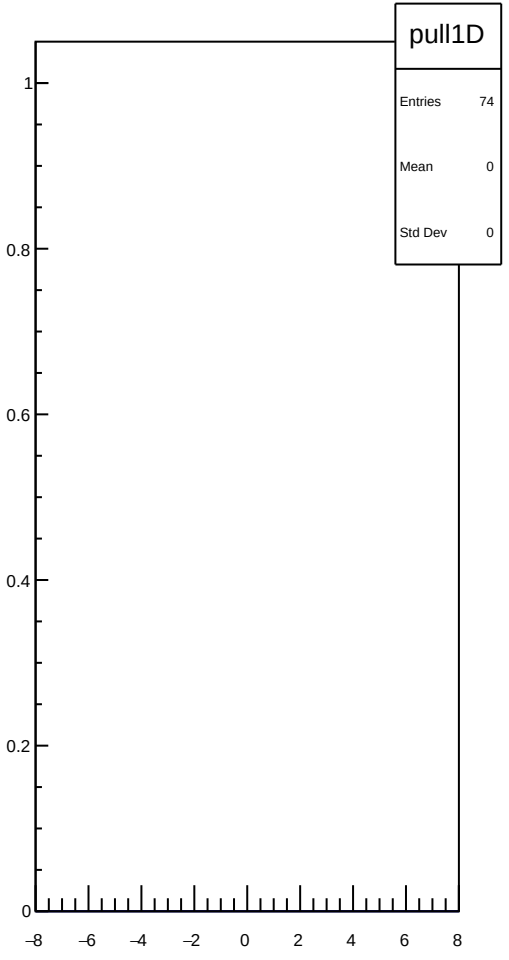

yield_bpm4ecY_rms vs run
χ² / ndf 6.918e+04 / 73
p0 0.01851 ± 1.546e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015

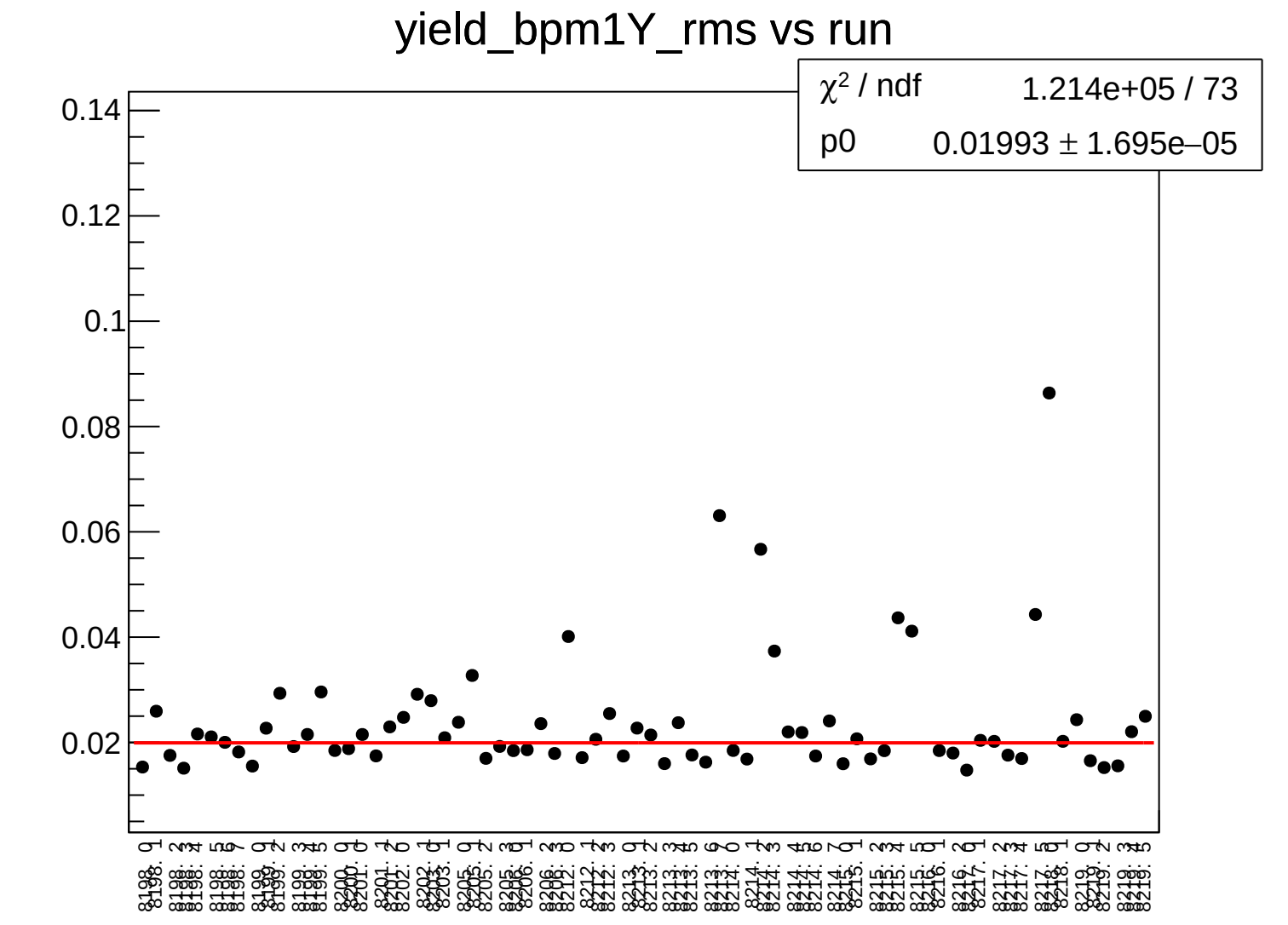

yield_bpm1X_mean vs run
χ² / ndf 1.949e+07 / 73
p0 −1.295 ± 6.495e−05
−0.8
−1
−1.2
−1.4
−1.6
−1.8
pull
Entries 74
Mean 371.4
Std Dev 335.4
800
600
400
200
0
−200
−400
−600
−800
−1000

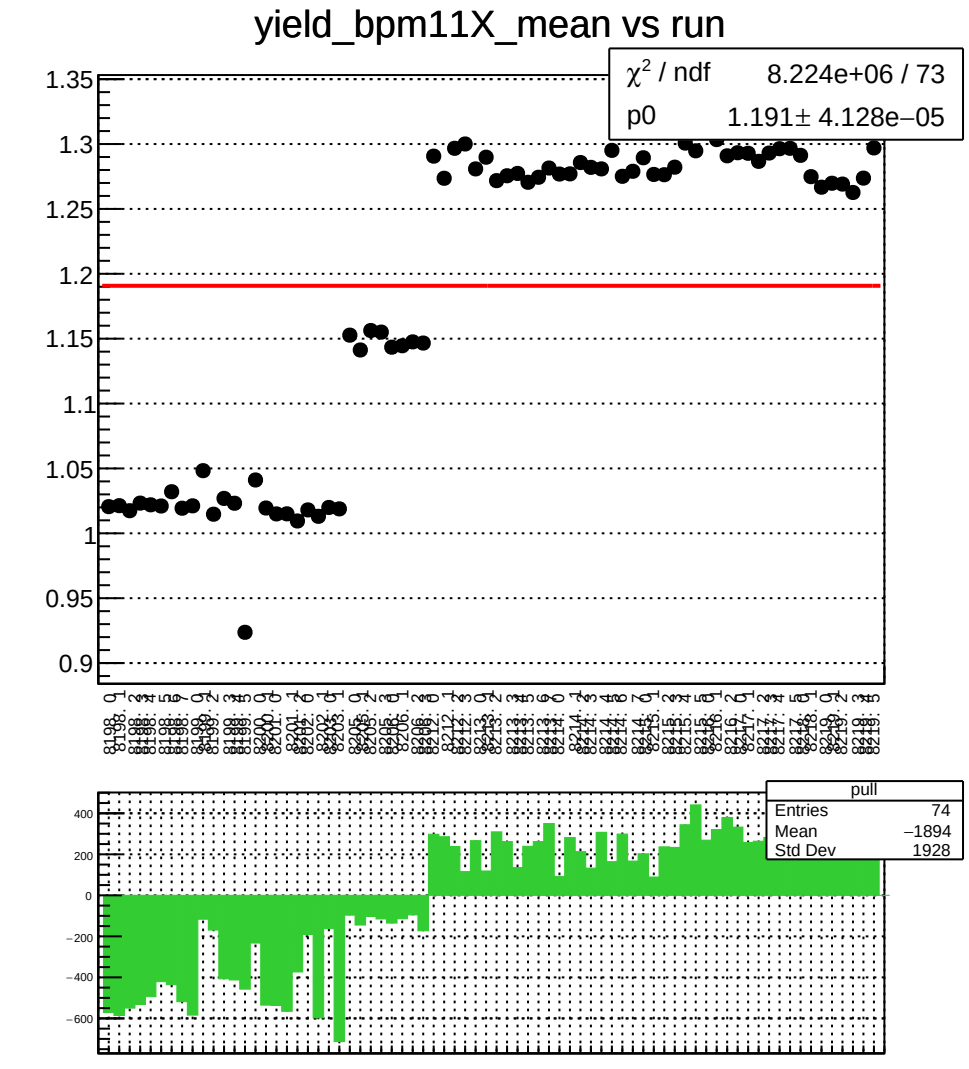

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

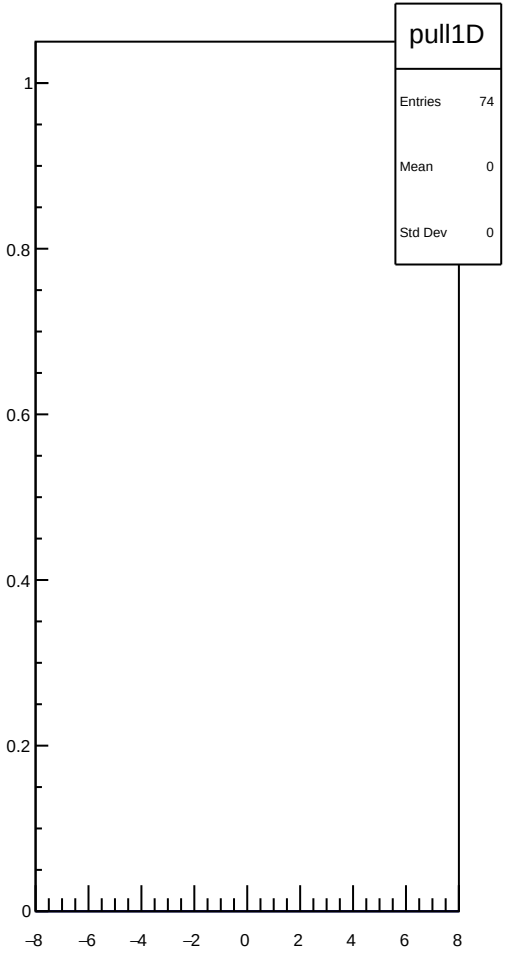

yield_bpm1X_rms vs run
χ² / ndf 6.073e+04 / 73
p0 0.05516 ± 4.593e–05
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04

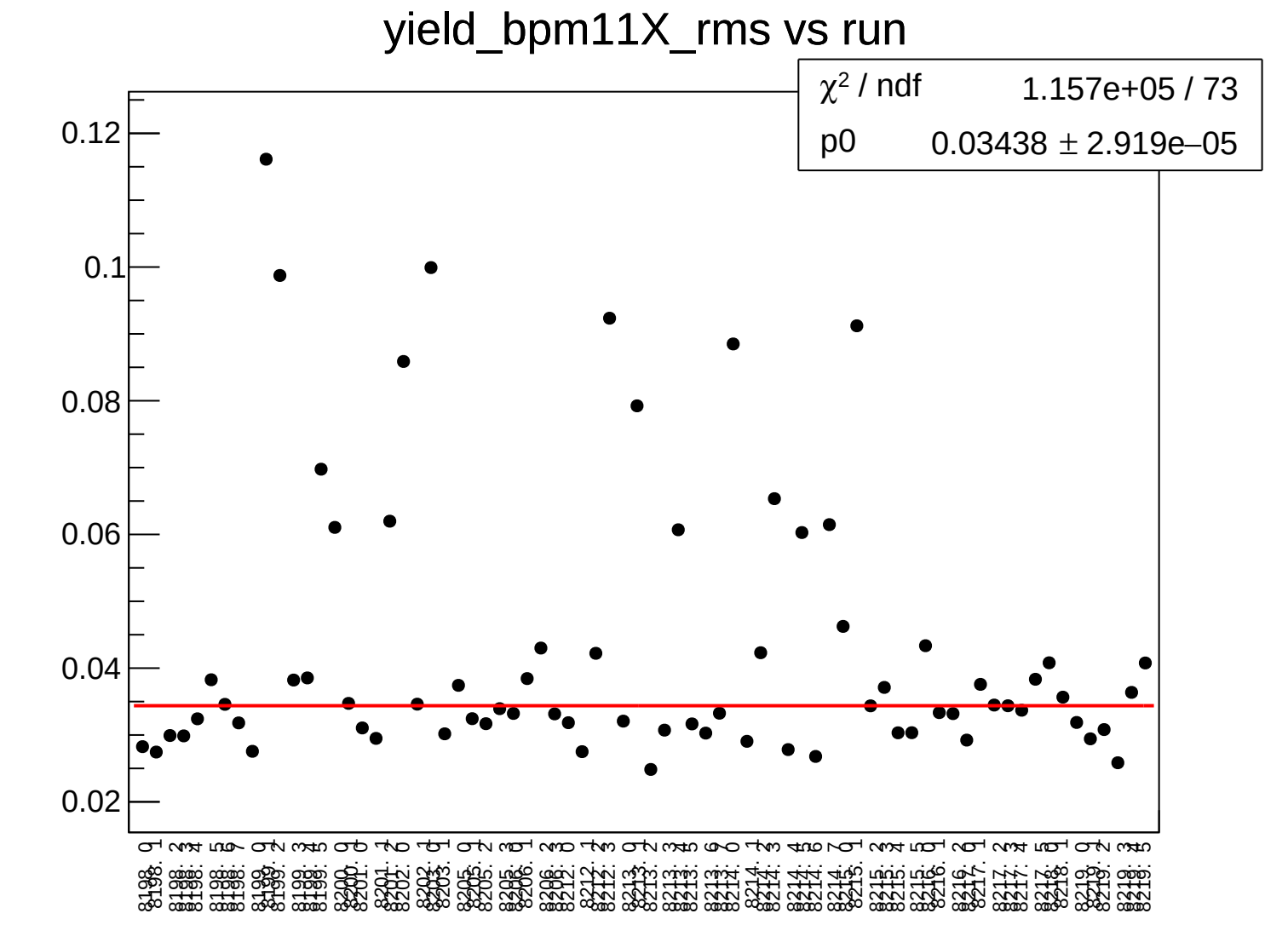

yield_bpm1Y_mean vs run
χ² / ndf 8.491e+07 / 73
p0 1.59 ± 2.397e−05
pull
Entries 74
Mean 8492
Std Dev 8459

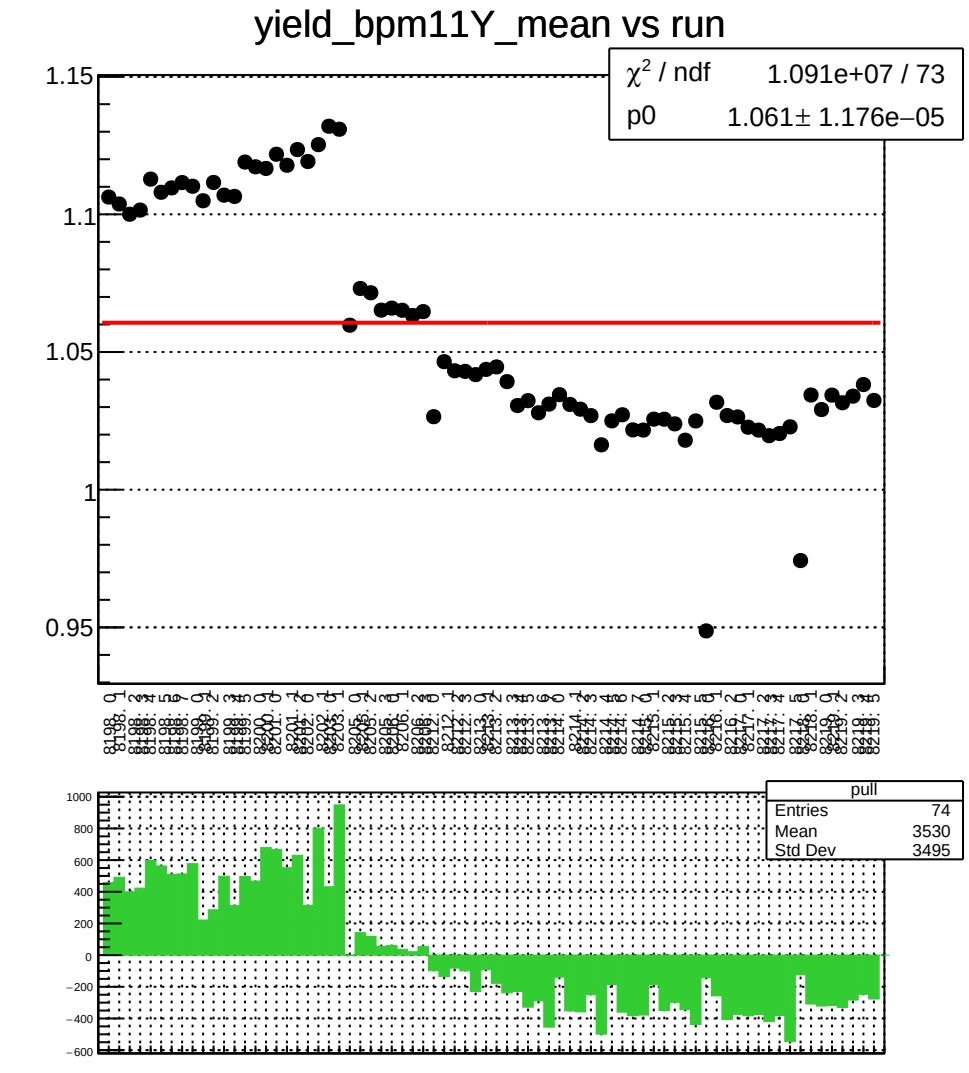

pull1D
Entries 74
Mean 0
Std Dev 0

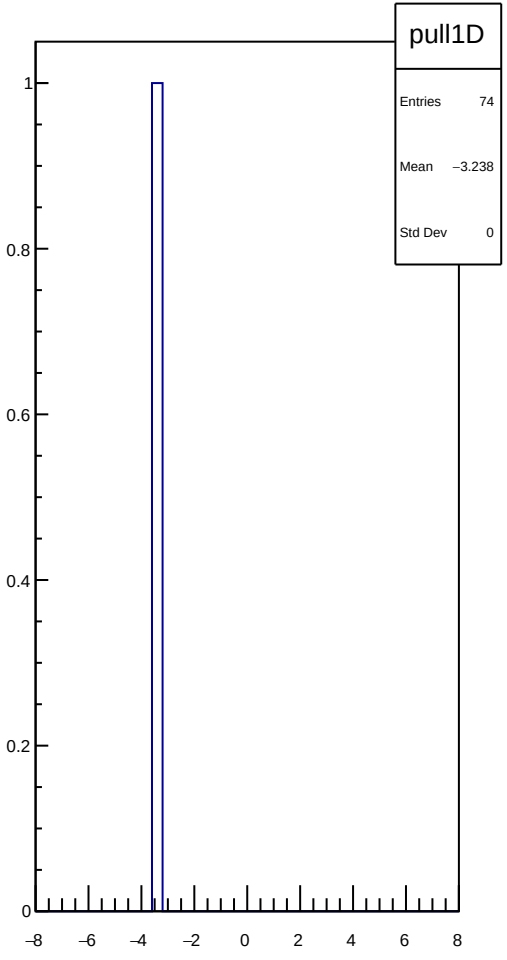

yield_bpm1Y_rms vs run
χ² / ndf 1.214e+05 / 73
p0 0.01993 ± 1.695e−05
0.14
0.12
0.1
0.08
0.06
0.04
0.02

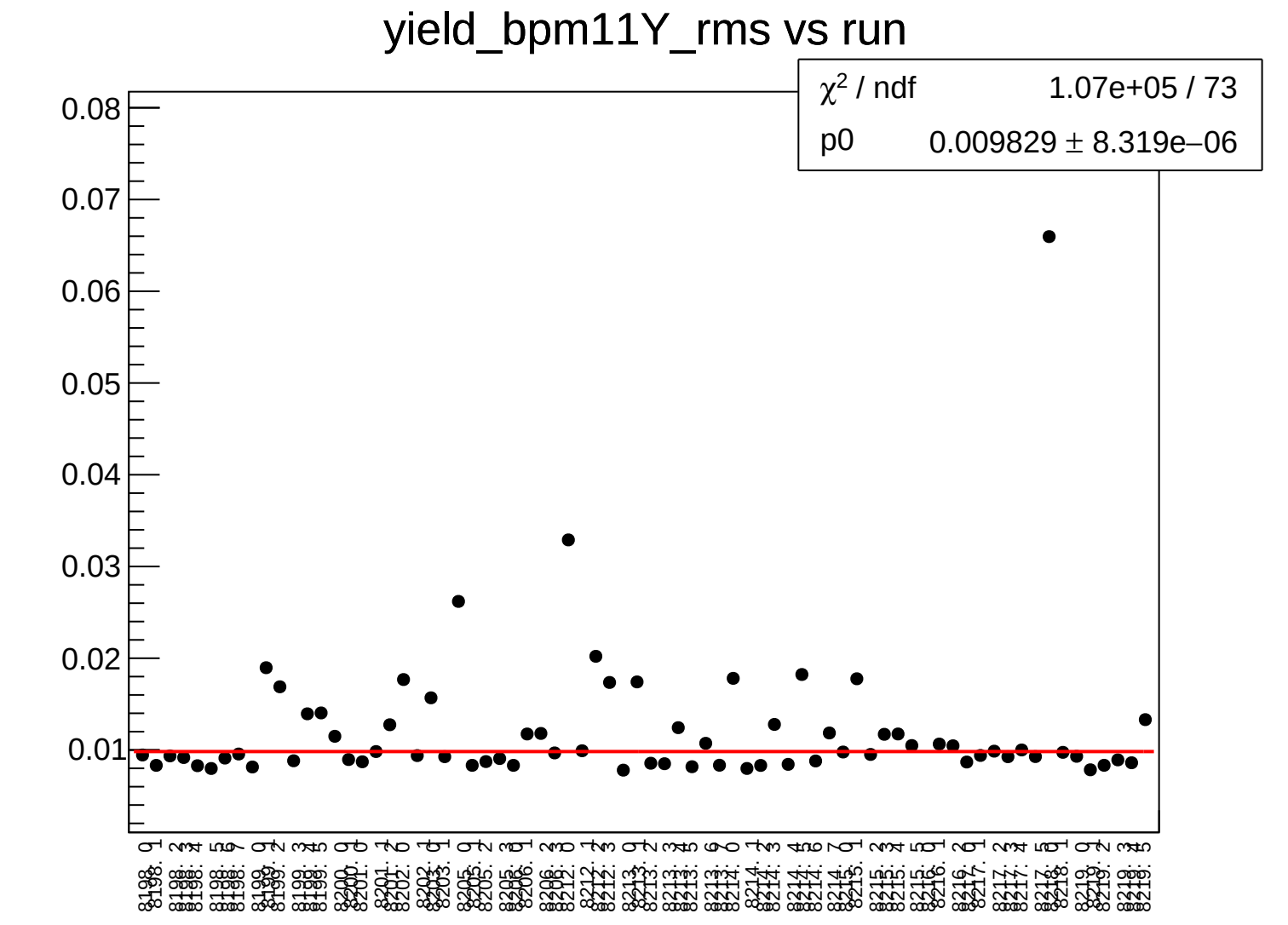

yield_bpm11X_mean vs run
χ² / ndf 8.224e+06 / 73
p0 1.191± 4.128e−05
pull
Entries 74
Mean −1894
Std Dev 1928

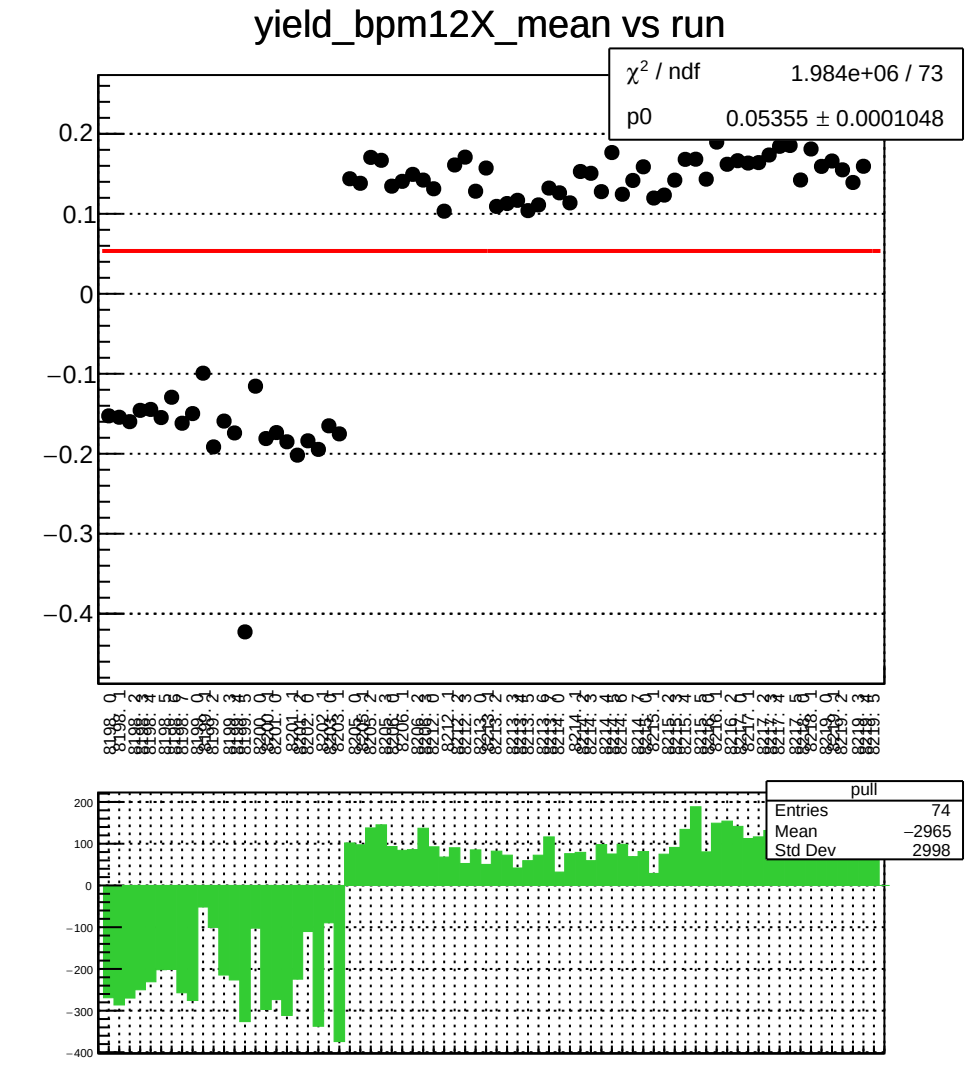

pull1D
Entries 74
Mean 0
Std Dev 0

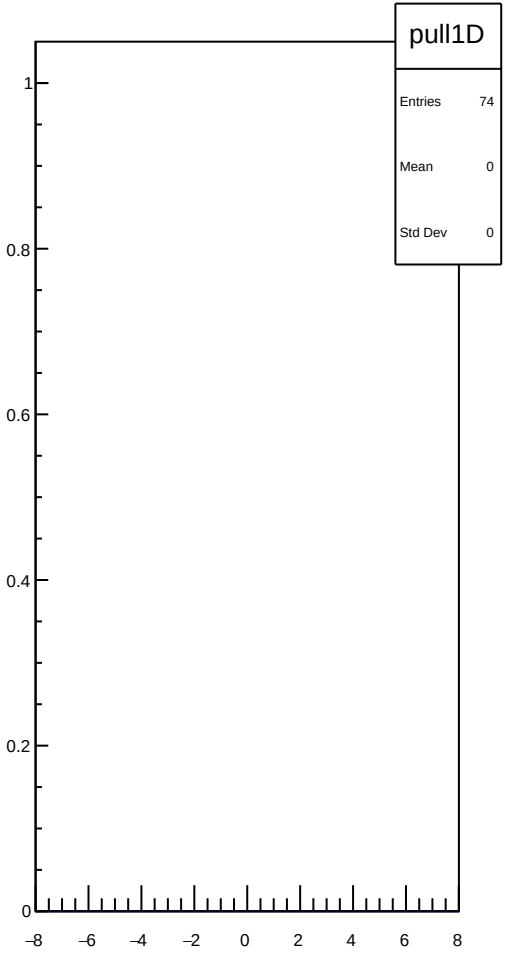

yield_bpm11X_rms vs run
χ² / ndf 1.157e+05 / 73
p0 0.03438 ± 2.919e–05
0.12
0.1
0.08
0.06
0.04
0.02

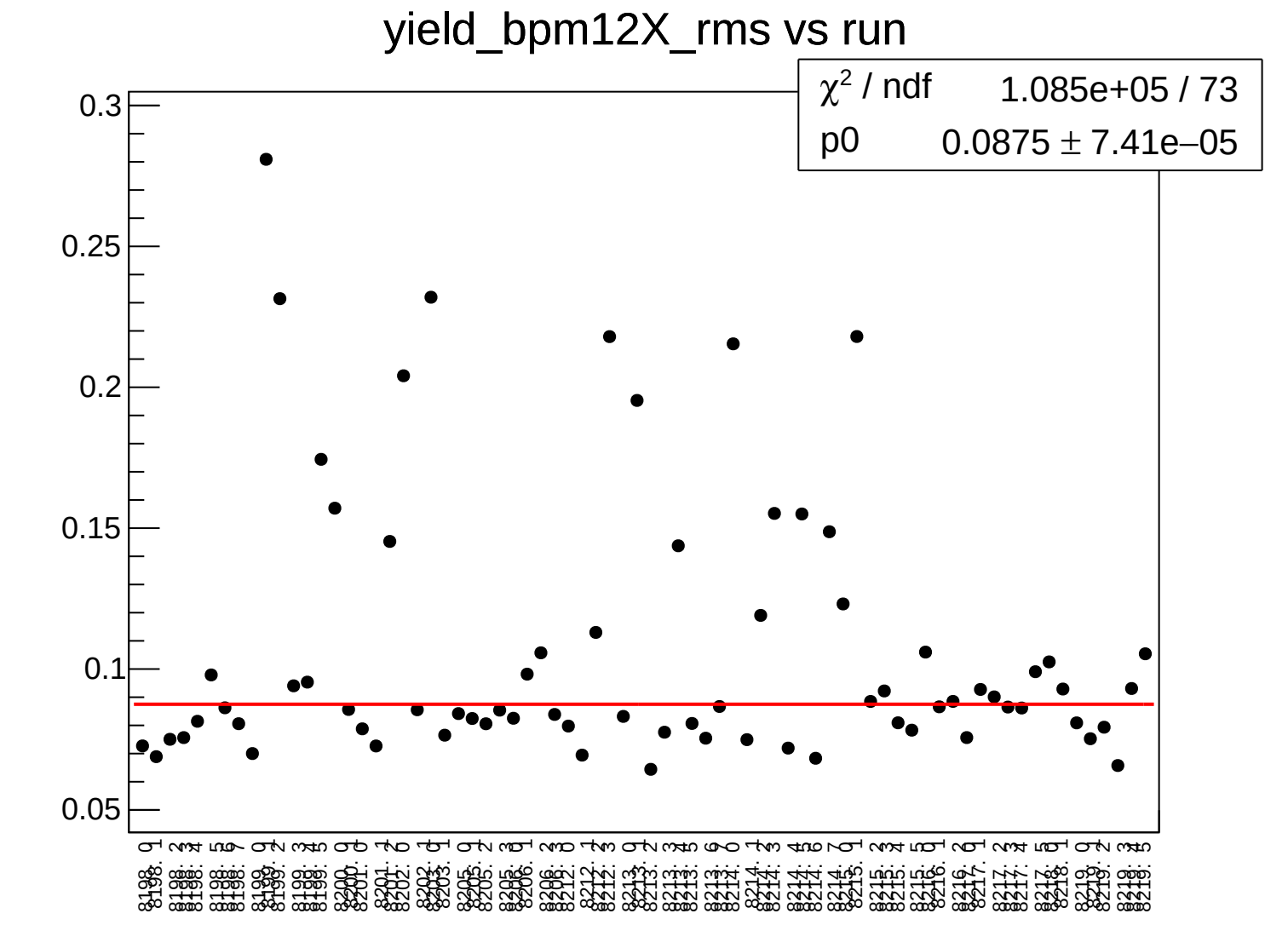

yield_bpm11Y_mean vs run
χ² / ndf 1.091e+07 / 73
p0 1.061± 1.176e−05
1.15
1.1
1.05
1
0.95
pull
Entries 74
Mean 3530
Std Dev 3495
1000
800
600
400
200
0
−200
−400
−600

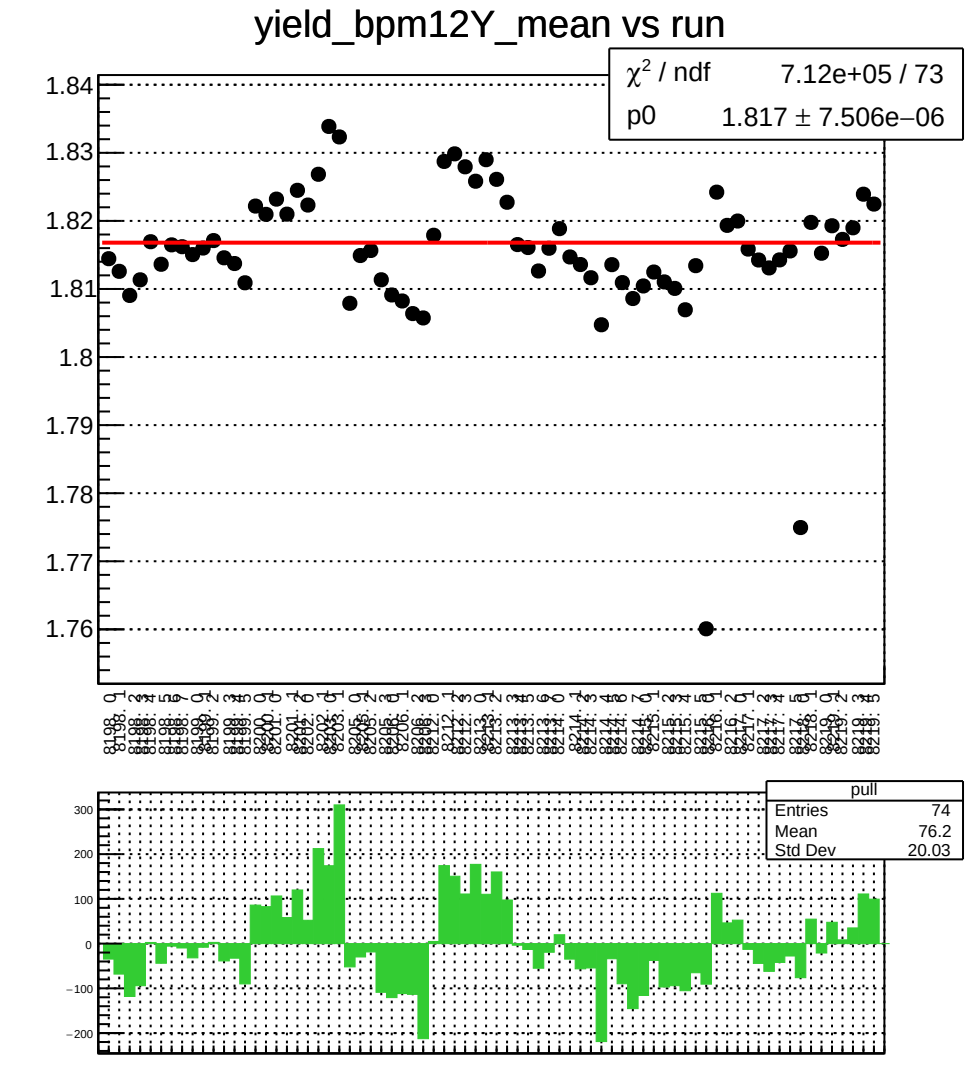

pull1D
Entries 74
Mean −3.238
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

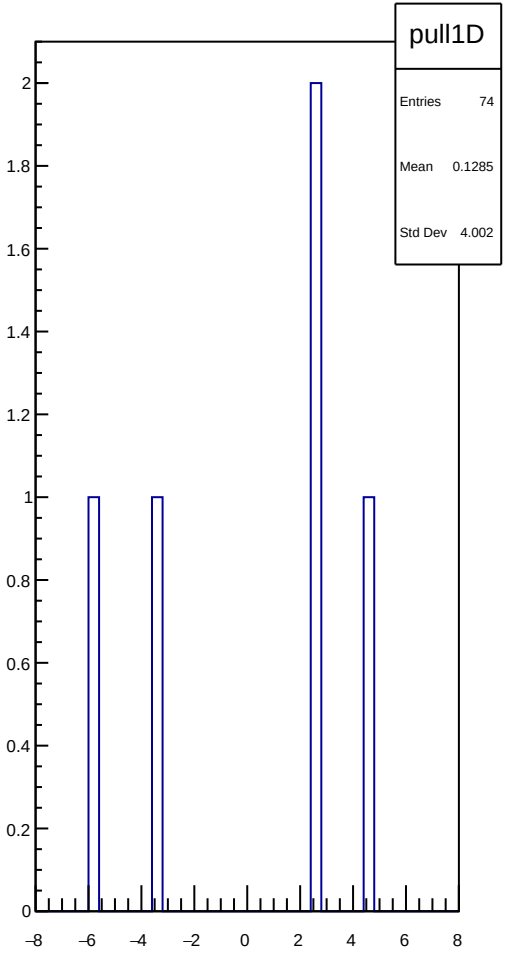

yield_bpm11Y_rms vs run
χ² / ndf 1.07e+05 / 73
p0 0.009829 ± 8.319e−06
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01

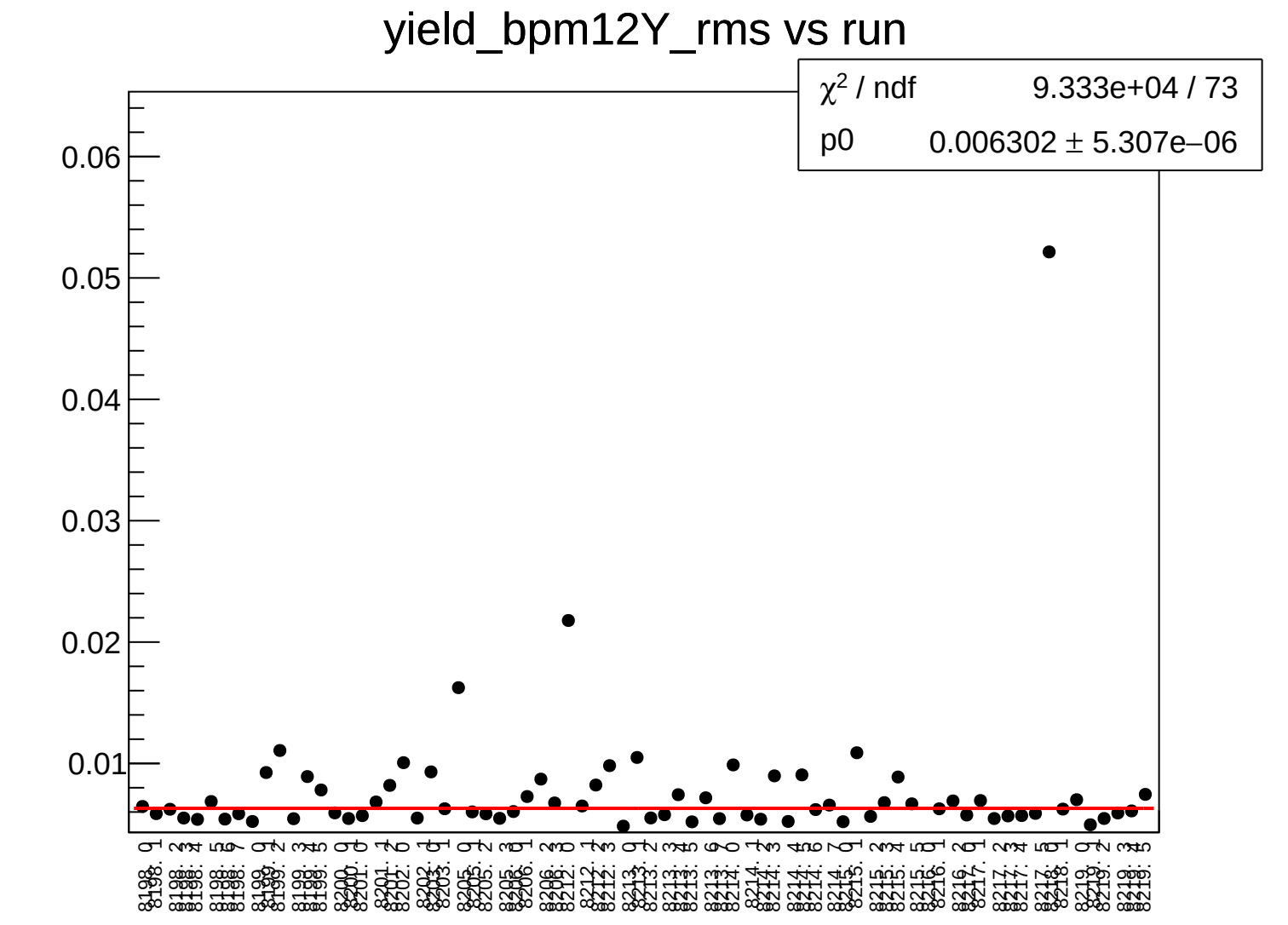

yield_bpm12X_mean vs run
χ² / ndf 1.984e+06 / 73
p0 0.05355 ± 0.0001048
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
pull
Entries 74
Mean −2965
Std Dev 2998
200
100
0
−100
−200
−300
−400

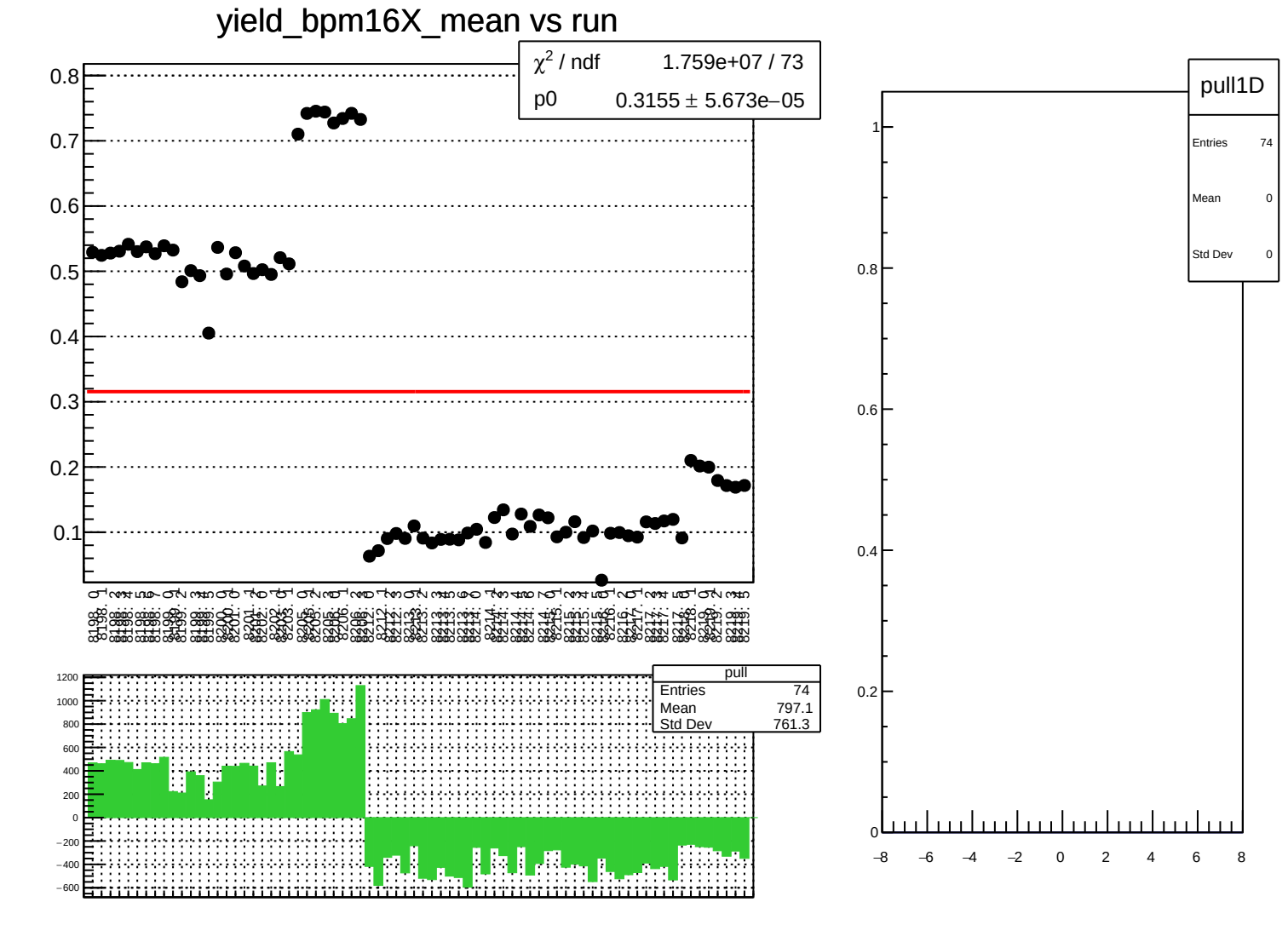

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

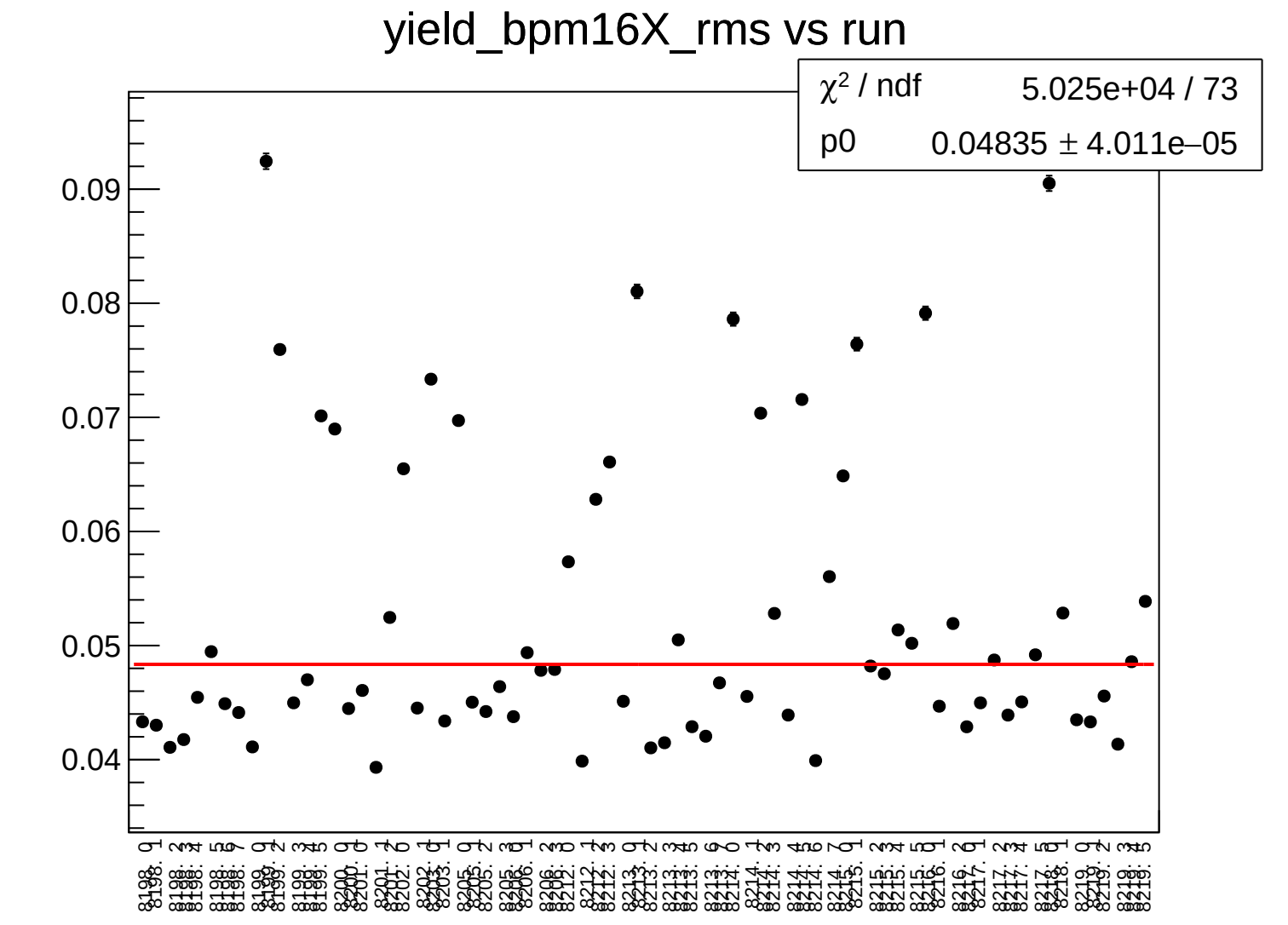

yield_bpm12X_rms vs run
χ² / ndf 1.085e+05 / 73
p0 0.0875 ± 7.41e−05
0.3
0.25
0.2
0.15
0.1
0.05

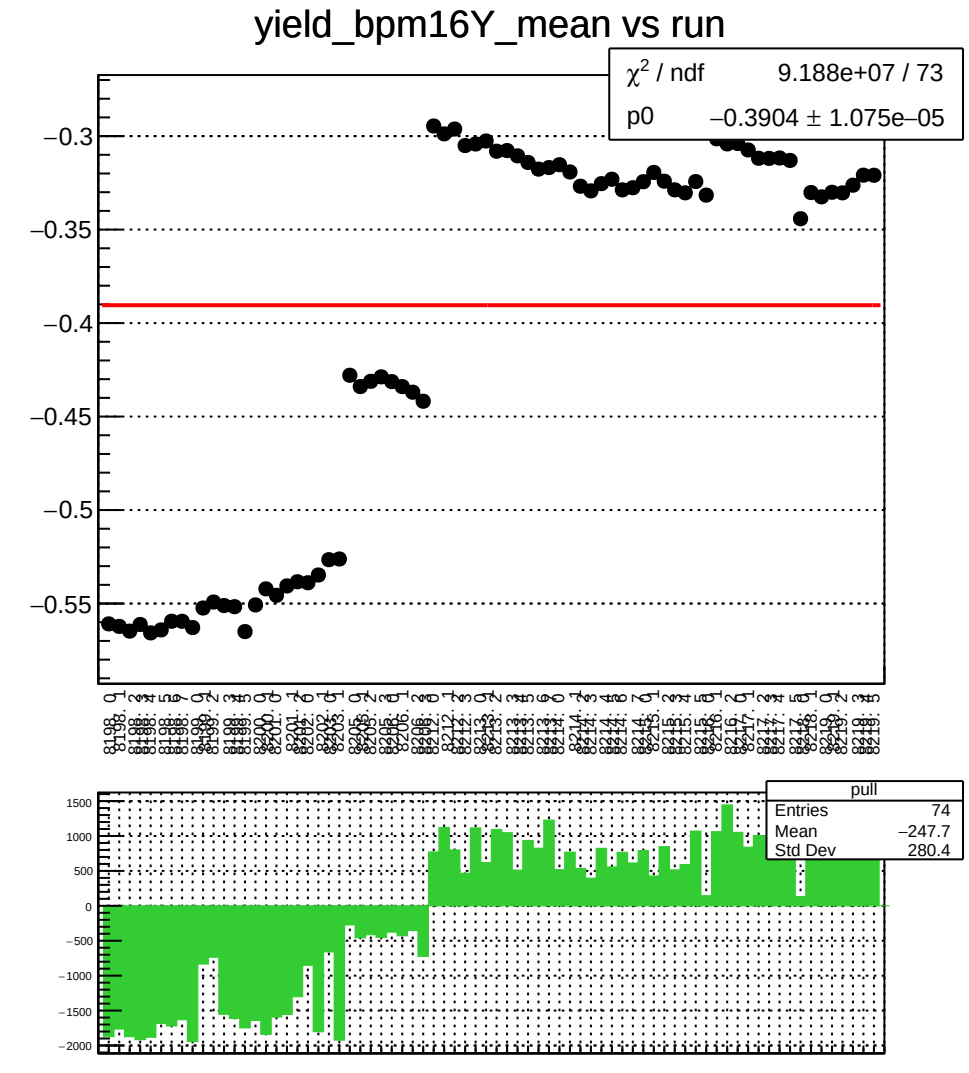

yield_bpm12Y_mean vs run
χ² / ndf 7.12e+05 / 73
p0 1.817 ± 7.506e−06
pull
Entries 74
Mean 76.2
Std Dev 20.03

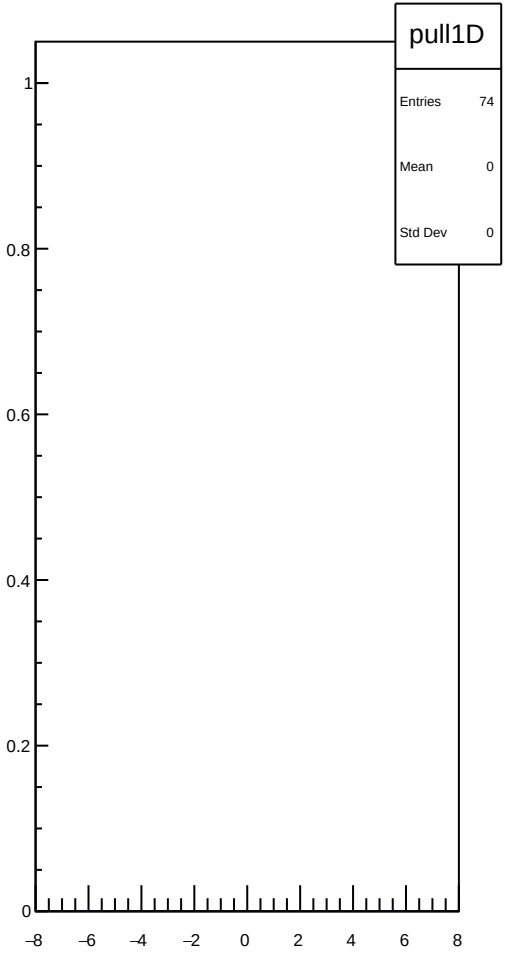

pull1D
Entries 74
Mean 0.1285
Std Dev 4.002

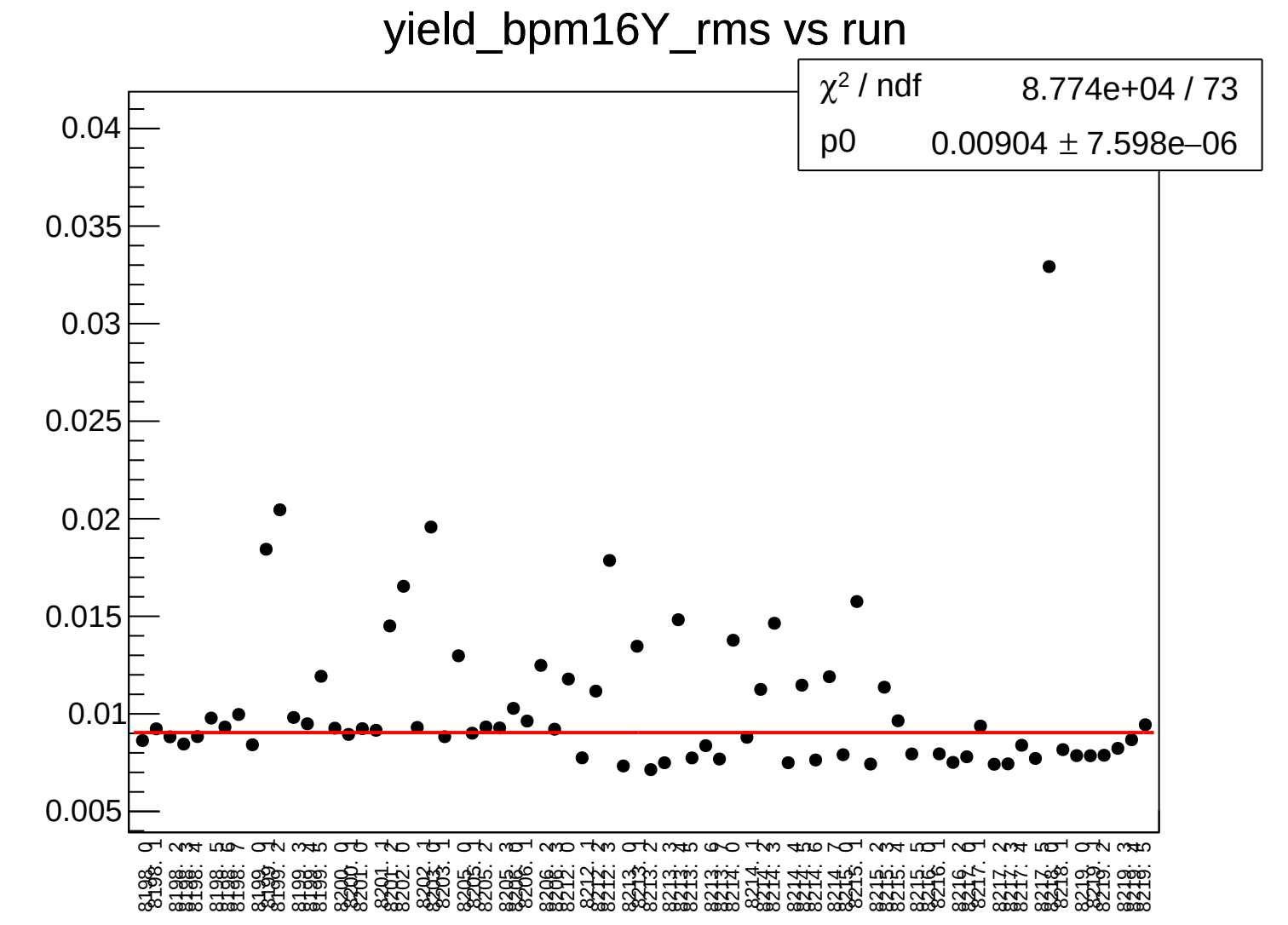

yield_bpm12Y_rms vs run
χ² / ndf 9.333e+04 / 73
p0 0.006302 ± 5.307e−06
0.06
0.05
0.04
0.03
0.02
0.01

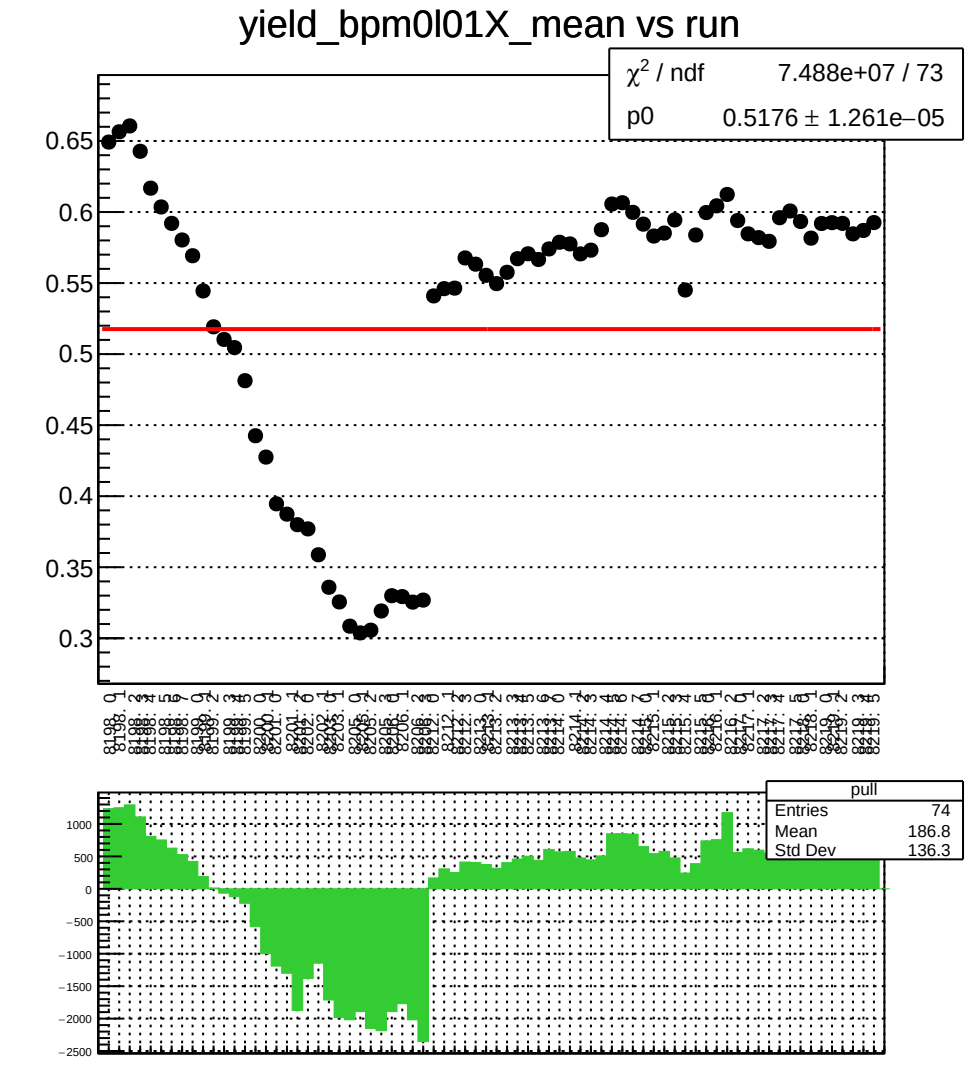

yield_bpm16X_mean vs run
χ² / ndf 1.759e+07 / 73
p0 0.3155 ± 5.673e−05
pull
Entries 74
Mean 797.1
Std Dev 761.3
pull1D
Entries 74
Mean 0
Std Dev 0

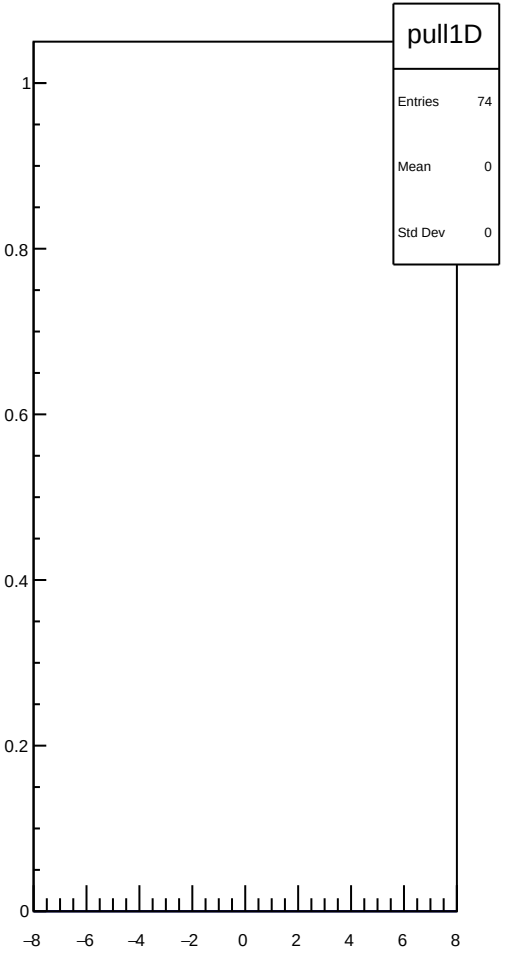

yield_bpm16X_rms vs run
χ² / ndf 5.025e+04 / 73
p0 0.04835 ± 4.011e–05
0.09
0.08
0.07
0.06
0.05
0.04

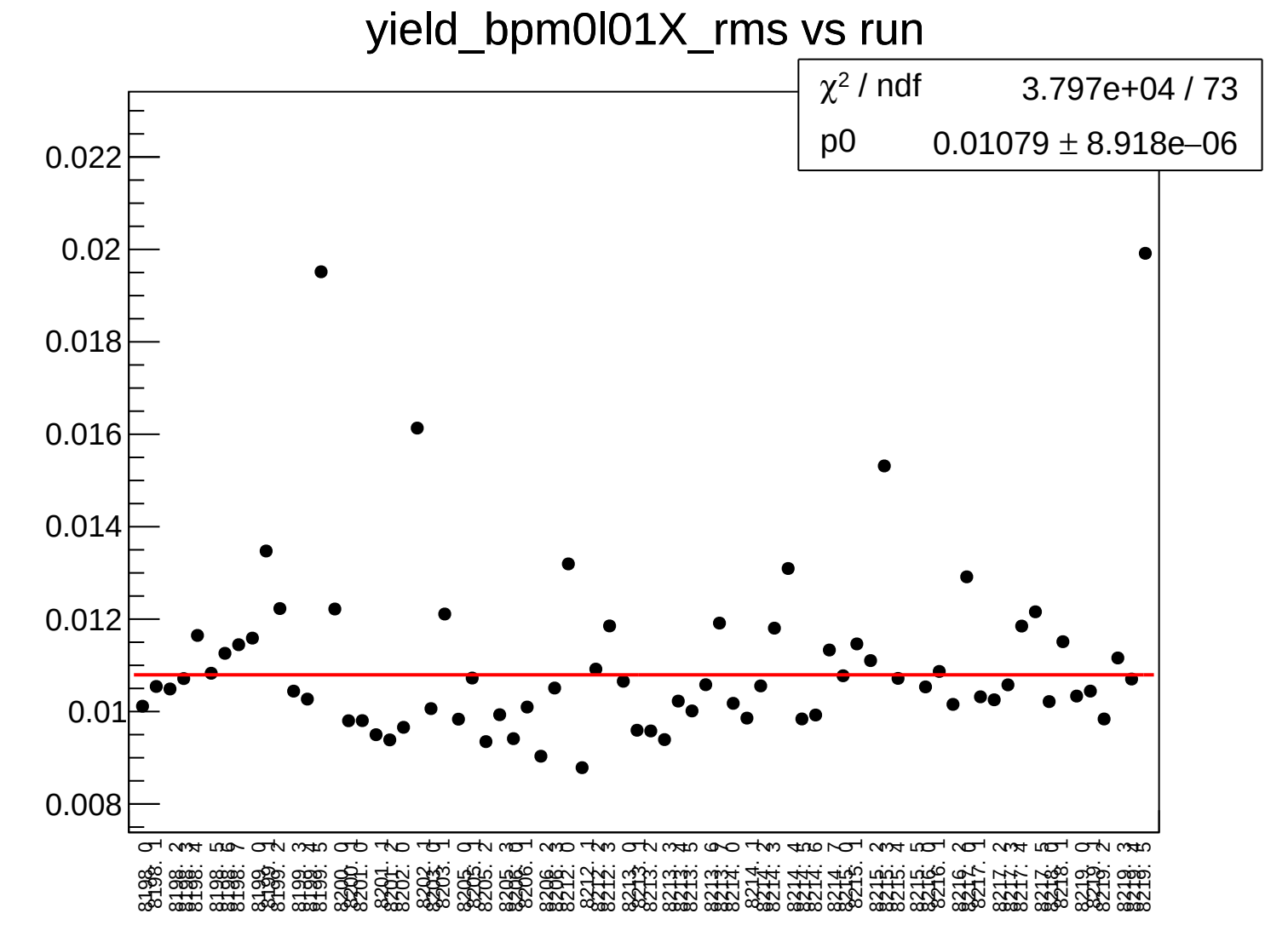

yield_bpm16Y_mean vs run
χ² / ndf 9.188e+07 / 73
p0 −0.3904 ± 1.075e−05
−0.3
−0.35
−0.4
−0.45
−0.5
−0.55
pull
Entries 74
Mean −247.7
Std Dev 280.4
1500
1000
500
0
−500
−1000
−1500
−2000

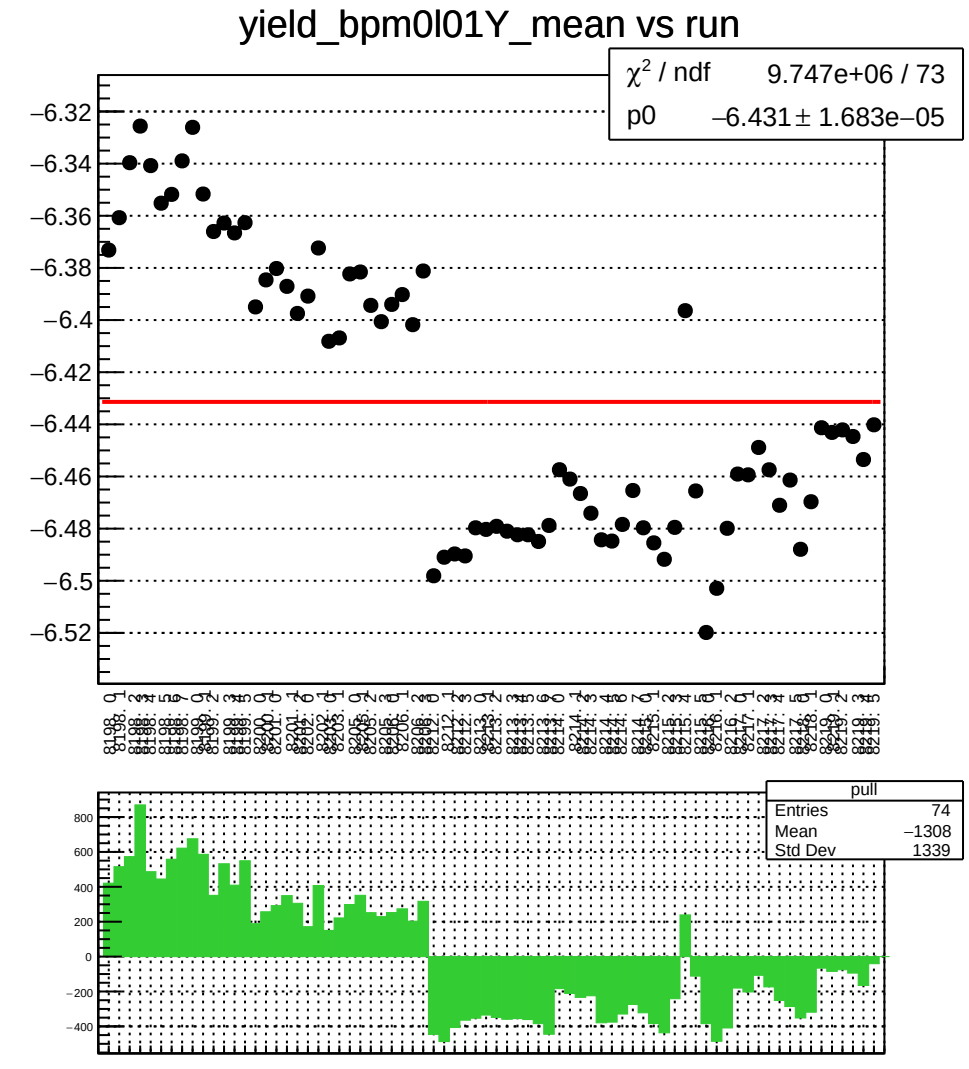

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

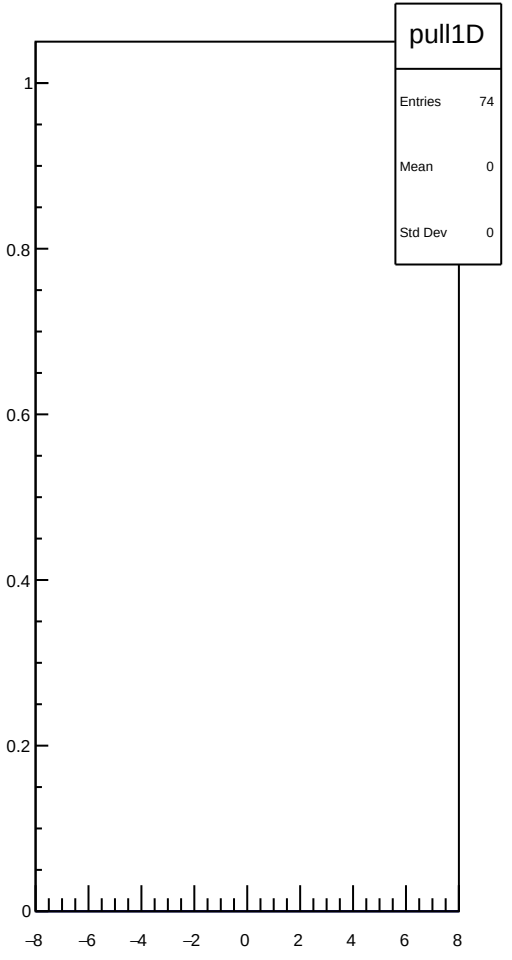

yield_bpm16Y_rms vs run
χ² / ndf 8.774e+04 / 73
p0 0.00904 ± 7.598e–06
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005

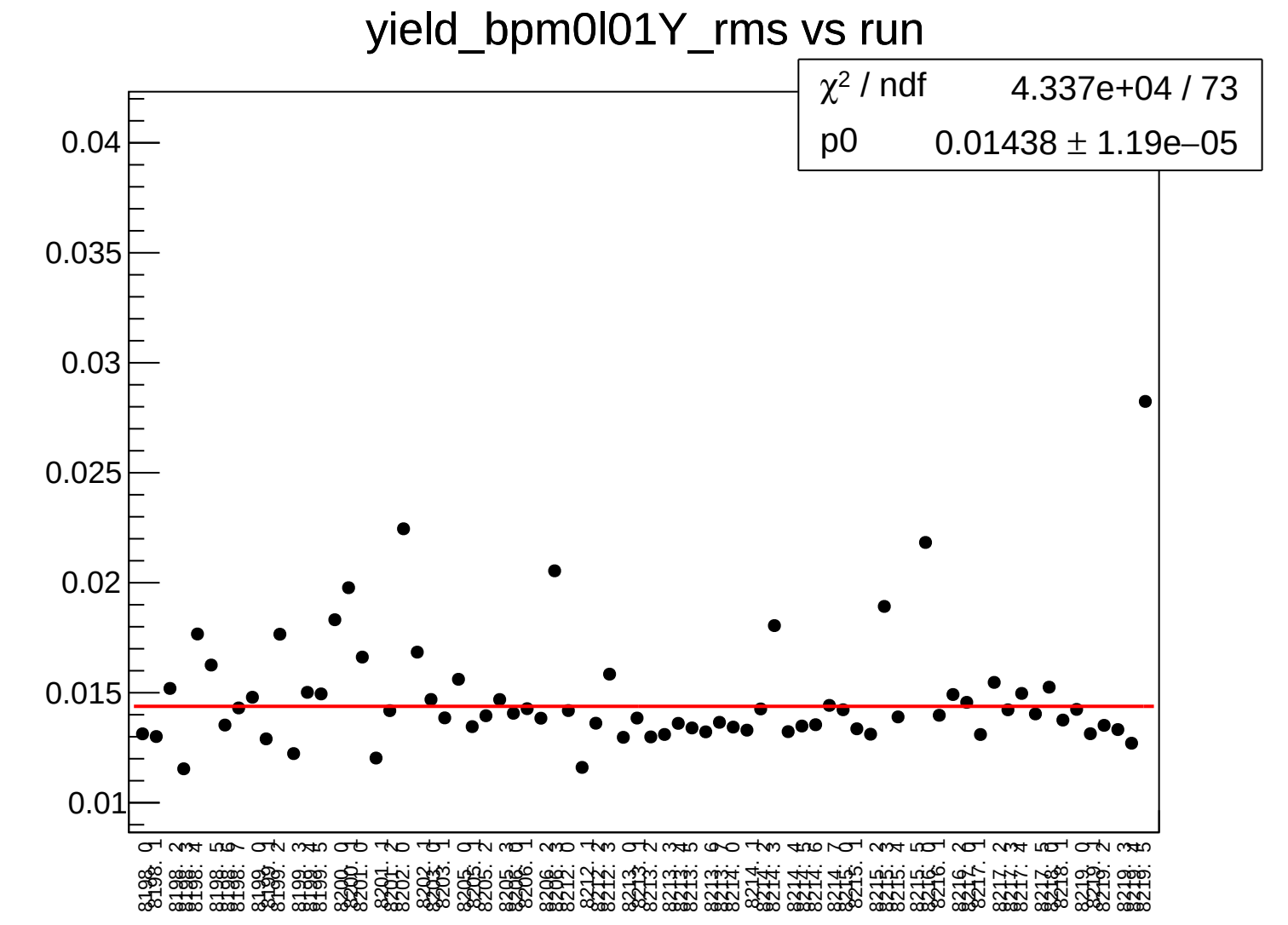

yield_bpm0l01X_mean vs run
χ² / ndf 7.488e+07 / 73
p0 0.5176 ± 1.261e−05
pull
Entries 74
Mean 186.8
Std Dev 136.3

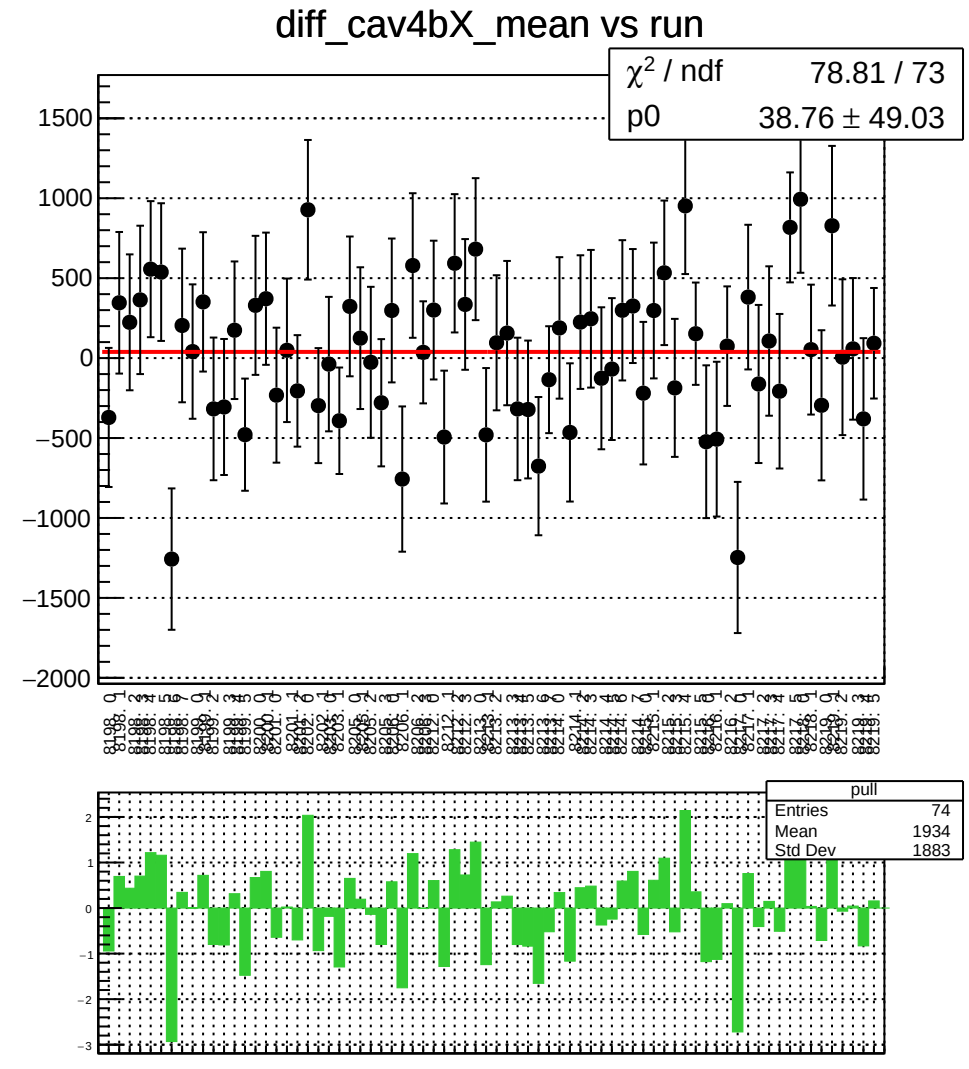

pull1D
Entries 74
Mean 0
Std Dev 0

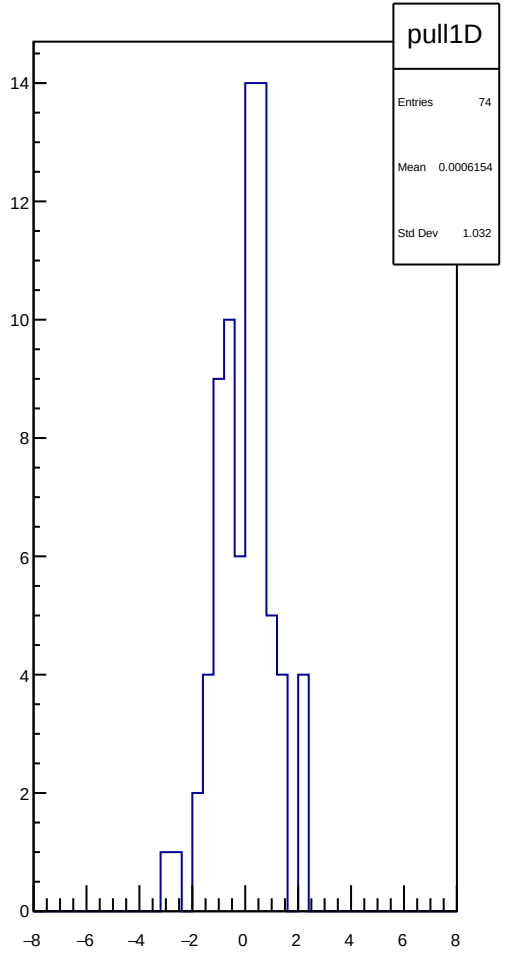

yield_bpm0l01X_rms vs run
χ² / ndf 3.797e+04 / 73
p0 0.01079 ± 8.918e–06
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

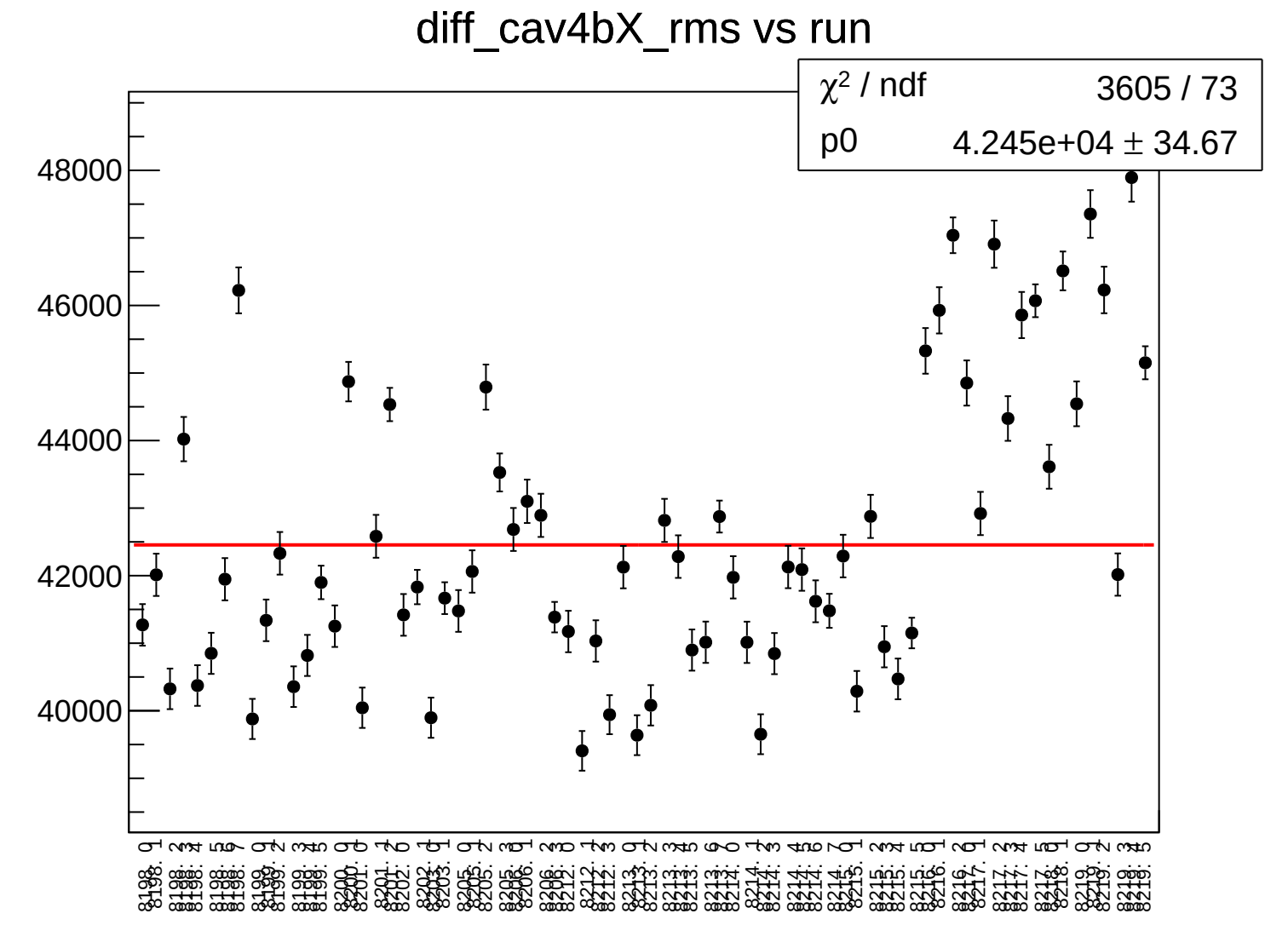

yield_bpm0l01Y_mean vs run
χ² / ndf 9.747e+06 / 73
p0 −6.431 ± 1.683e−05
−6.32
−6.34
−6.36
−6.38
−6.4
−6.42
−6.44
−6.46
−6.48
−6.5
−6.52
pull
Entries 74
Mean −1308
Std Dev 1339
800
600
400
200
0
−200
−400

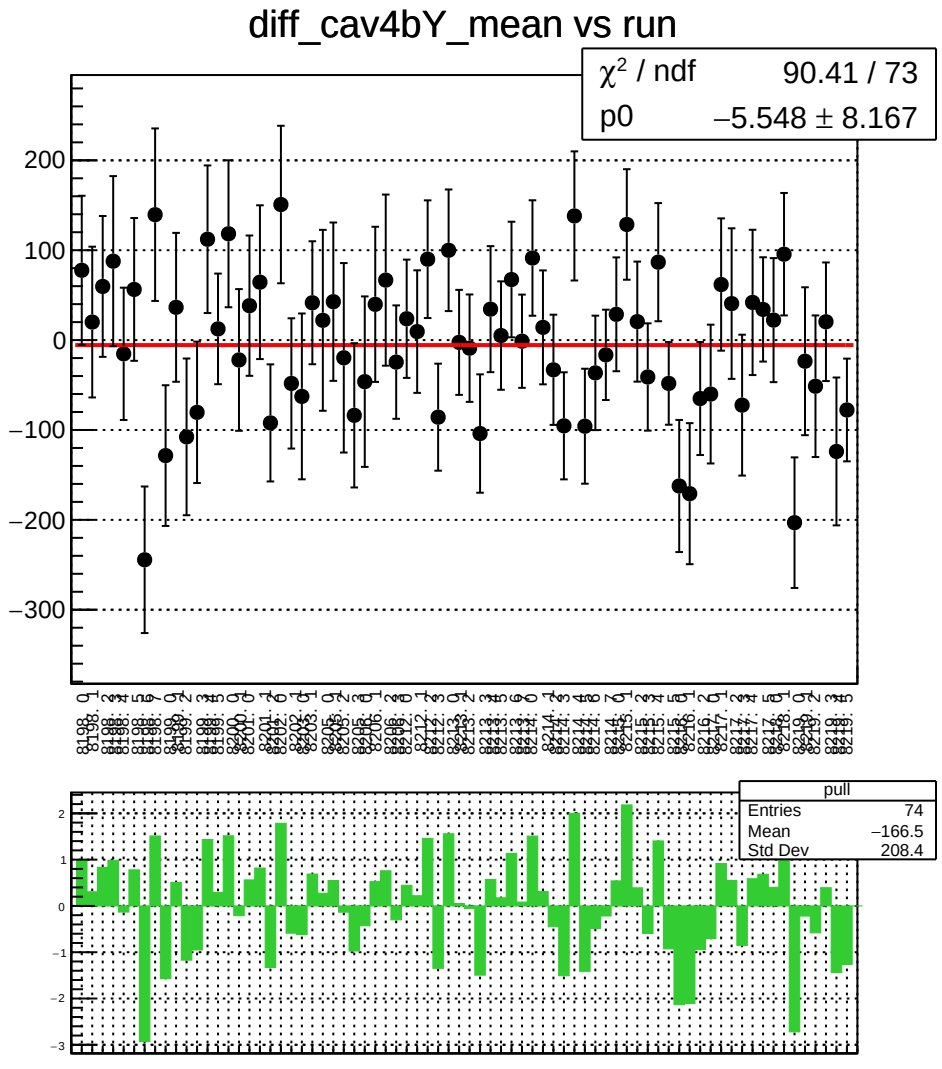

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

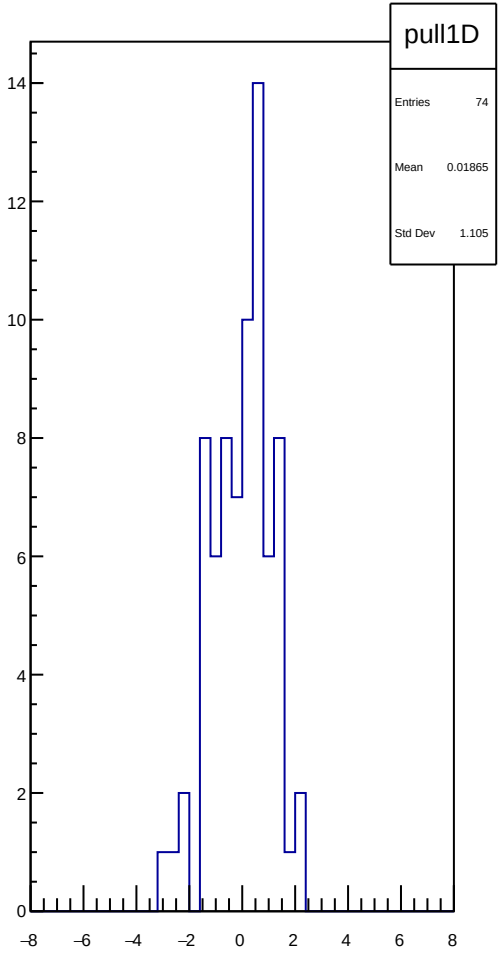

yield_bpm0l01Y_rms vs run
χ² / ndf 4.337e+04 / 73
p0 0.01438 ± 1.19e−05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

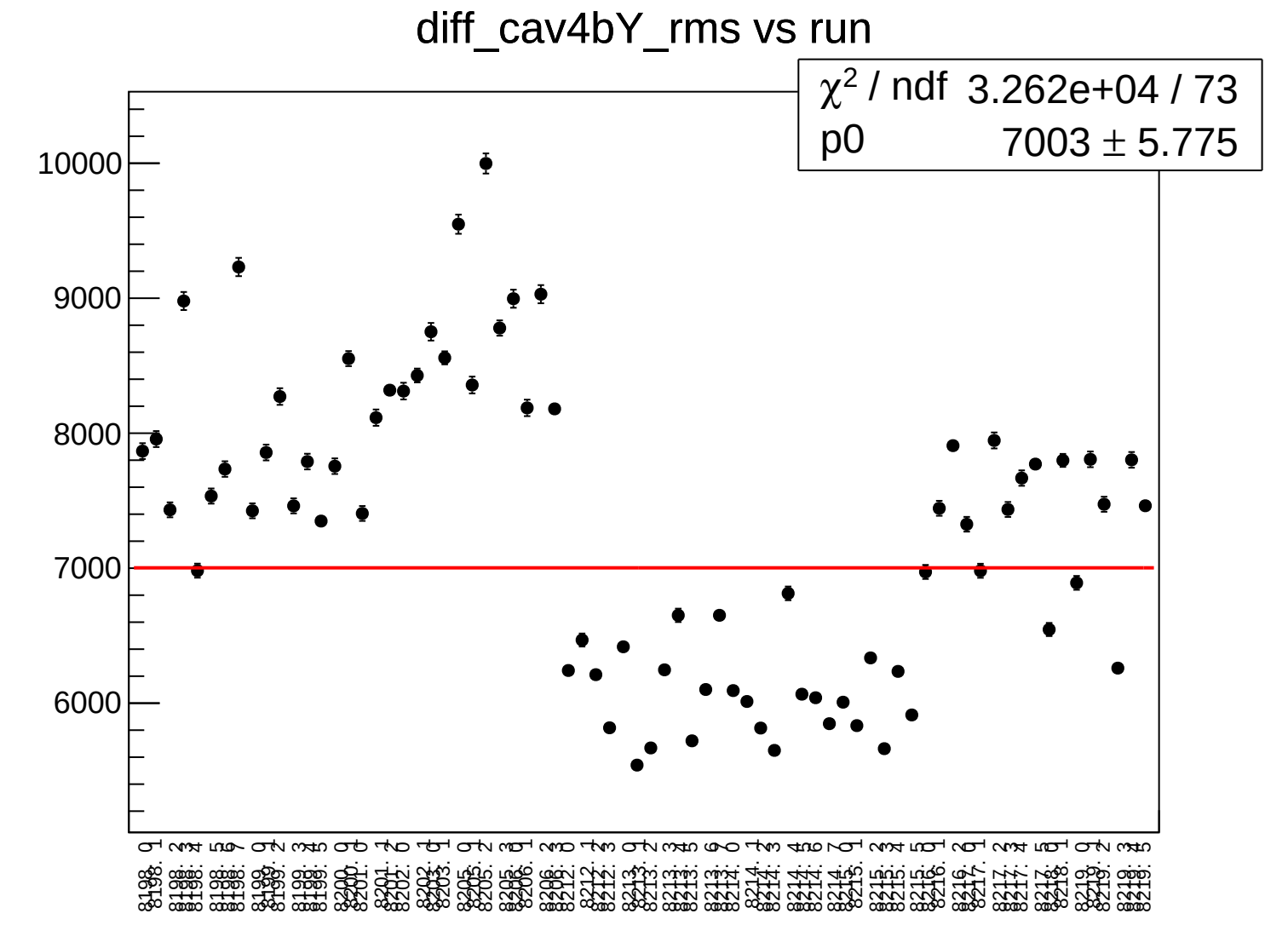

diff_cav4bX_mean vs run
χ² / ndf 78.81 / 73
p0 38.76 ± 49.03
pull
Entries 74
Mean 1934
Std Dev 1883

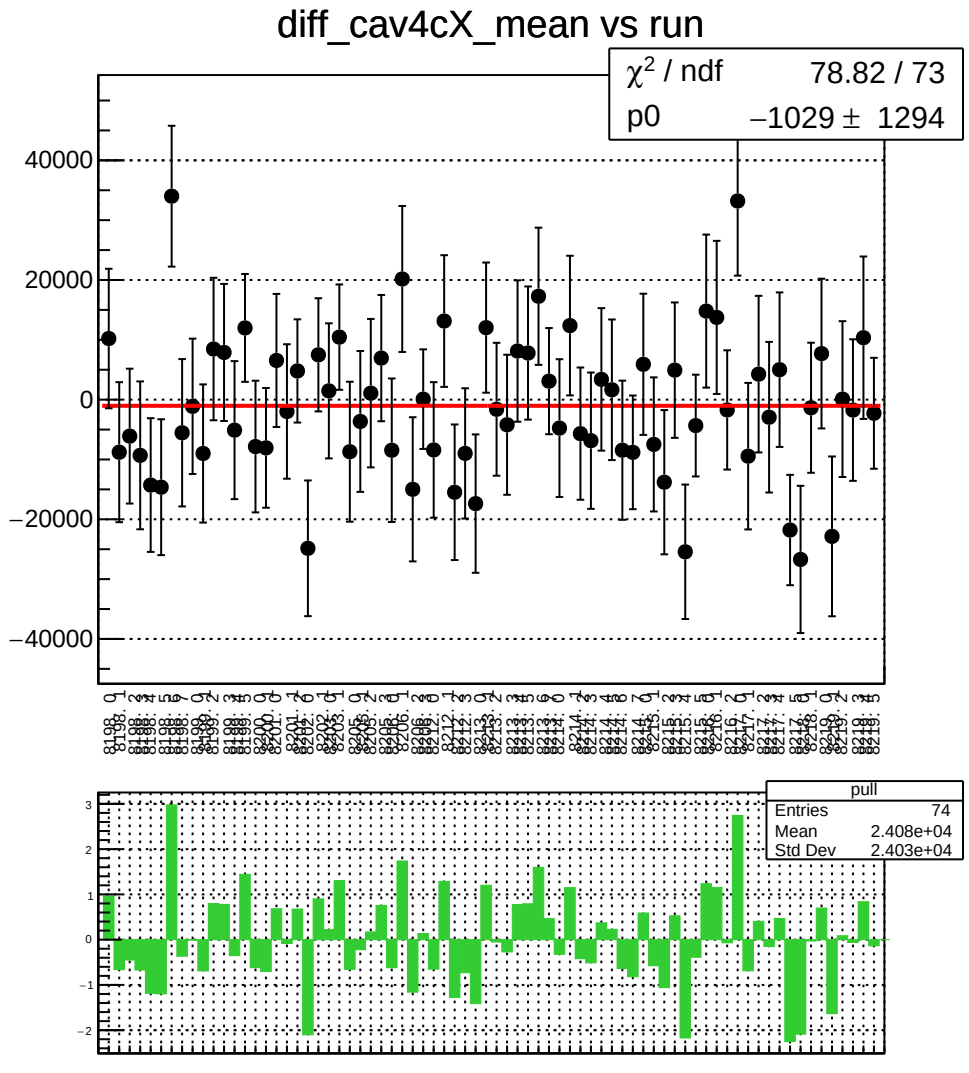

pull1D
Entries 74
Mean 0.0006154
Std Dev 1.032

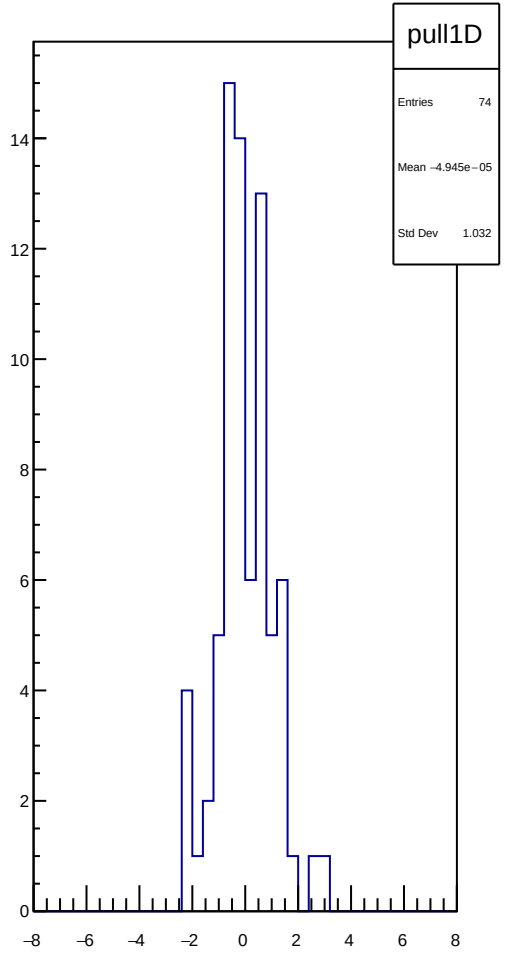

diff_cav4bX_rms vs run
χ² / ndf 3605 / 73
p0 4.245e+04 ± 34.67
48000
46000
44000
42000
40000

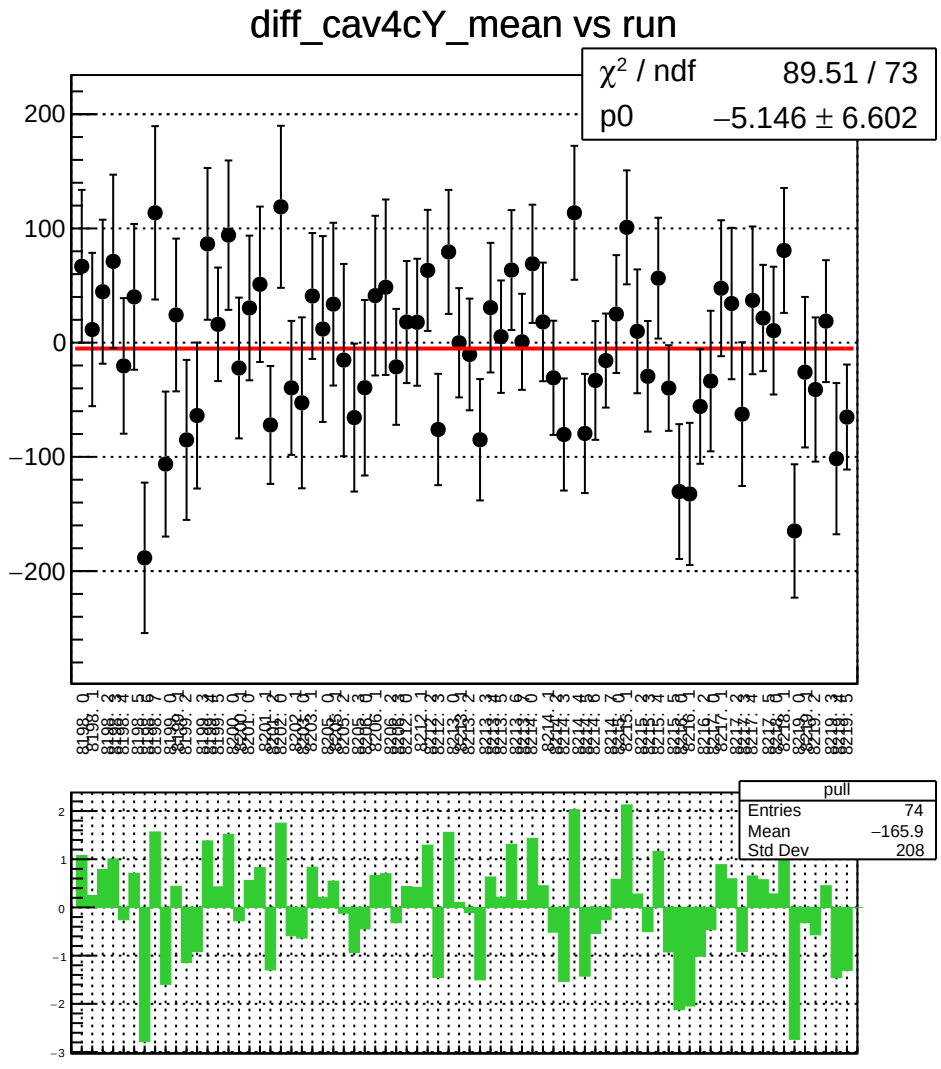

diff_cav4bY_mean vs run
χ² / ndf 90.41 / 73
p0 −5.548 ± 8.167
pull
Entries 74
Mean −166.5
Std Dev 208.4

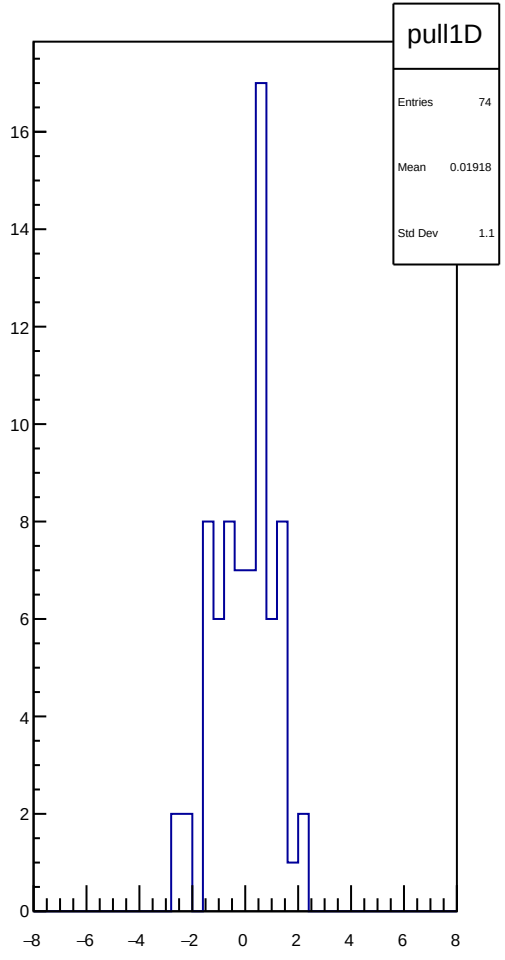

pull1D
Entries 74
Mean 0.01865
Std Dev 1.105

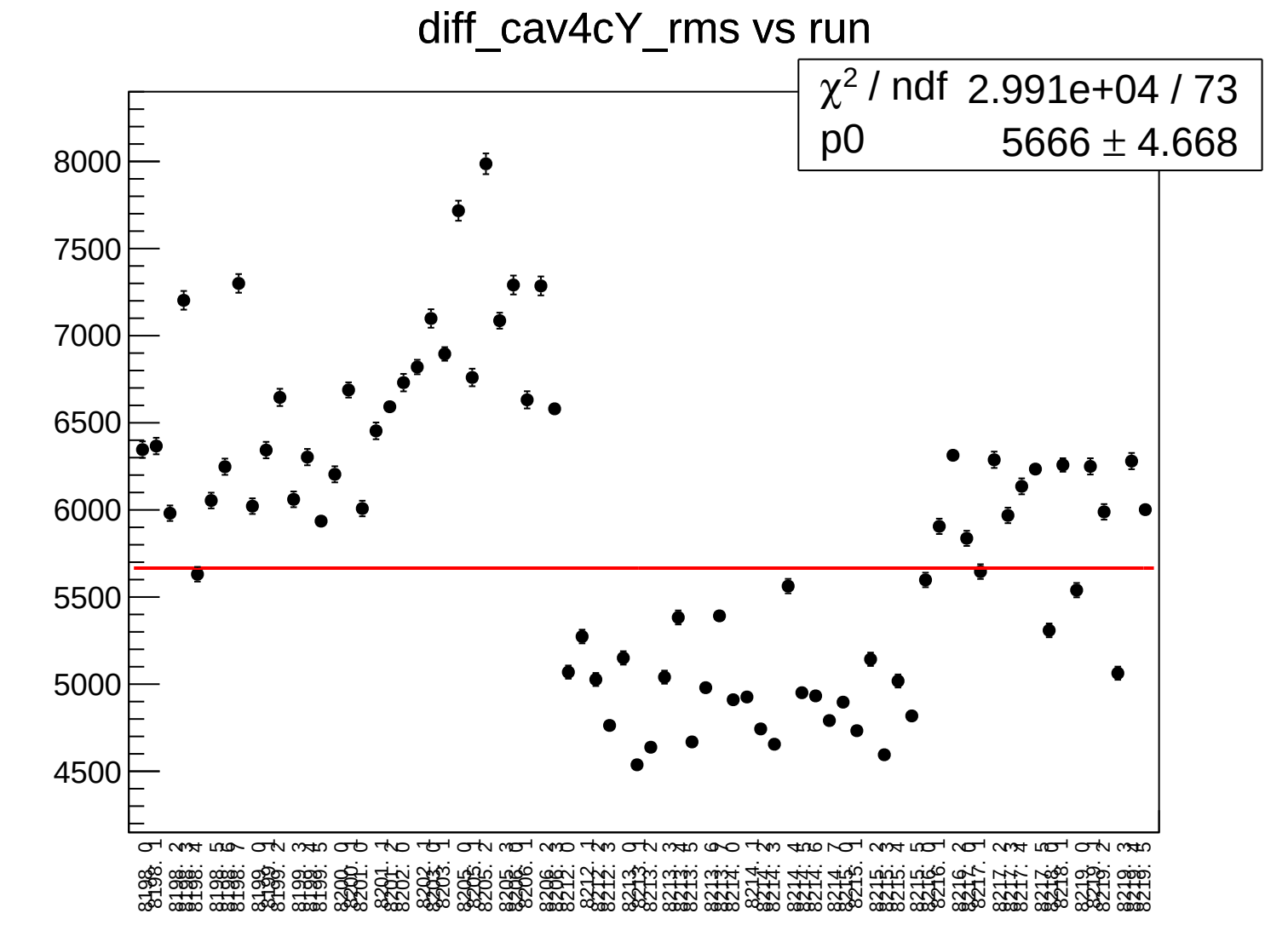

diff_cav4bY_rms vs run
χ² / ndf 3.262e+04 / 73
p0 7003 ± 5.775
10000
9000
8000
7000
6000

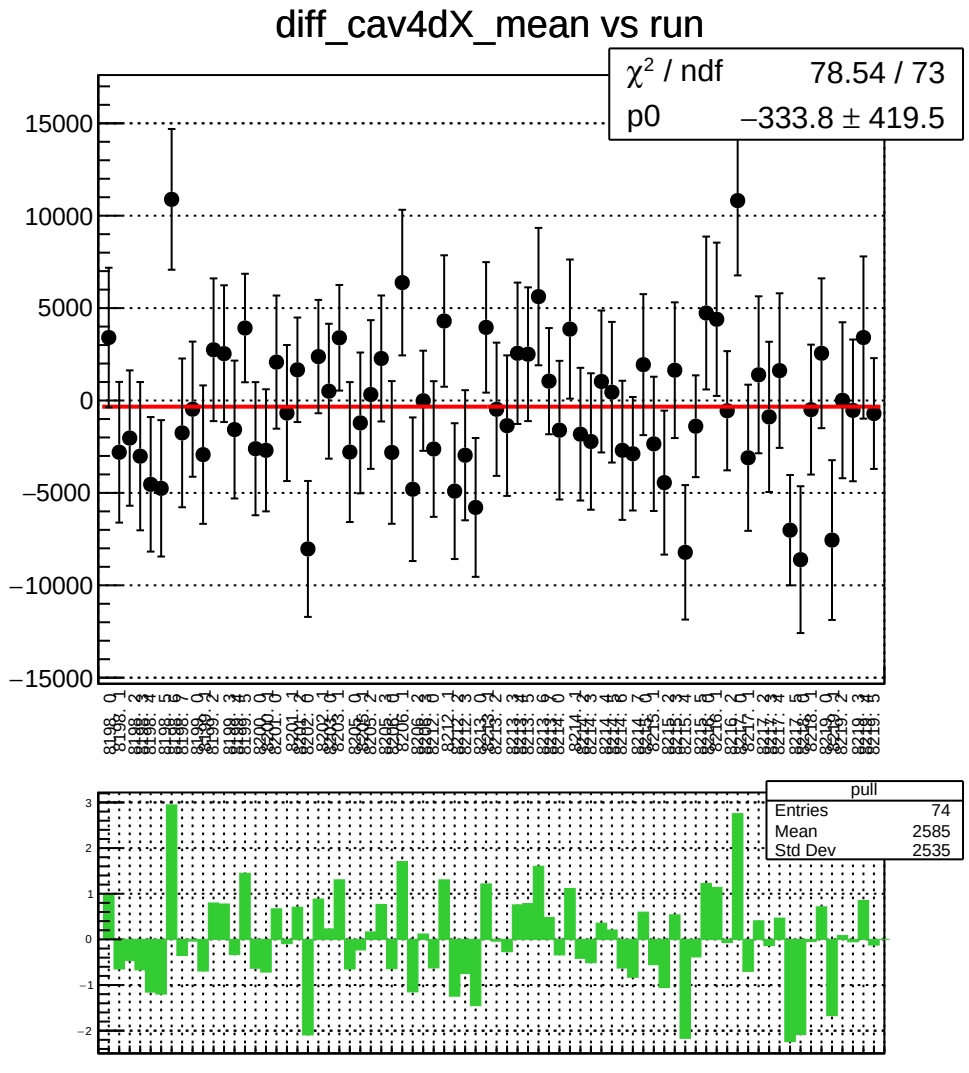

diff_cav4cX_mean vs run
χ² / ndf 78.82 / 73
p0 −1029 ± 1294
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 2.408e+04
Std Dev 2.403e+04
3
2
1
0
−1
−2

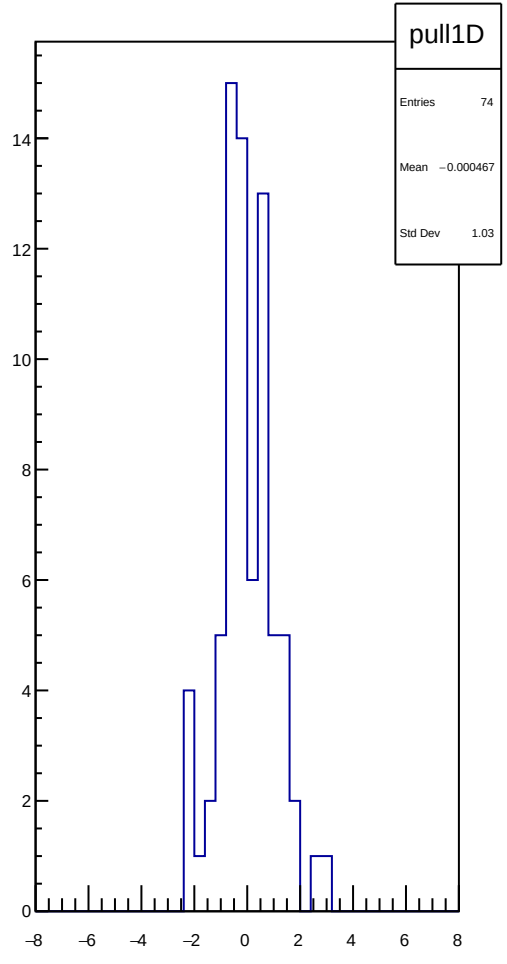

pull1D
Entries 74
Mean −4.945e−05
Std Dev 1.032
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

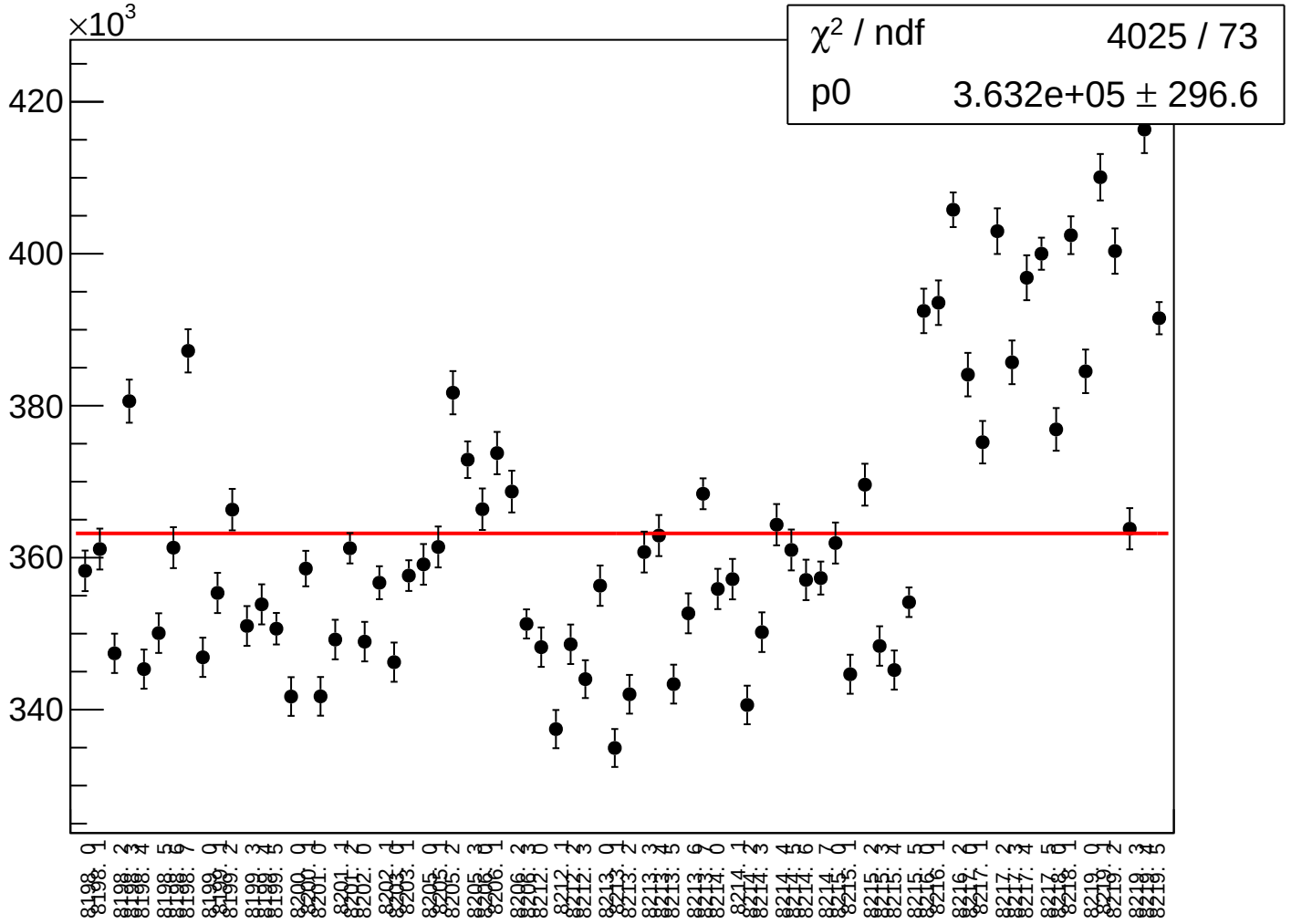

diff_cav4cY_mean vs run
χ² / ndf 89.51 / 73
p0 −5.146 ± 6.602
pull
Entries 74
Mean −165.9
Std Dev 208

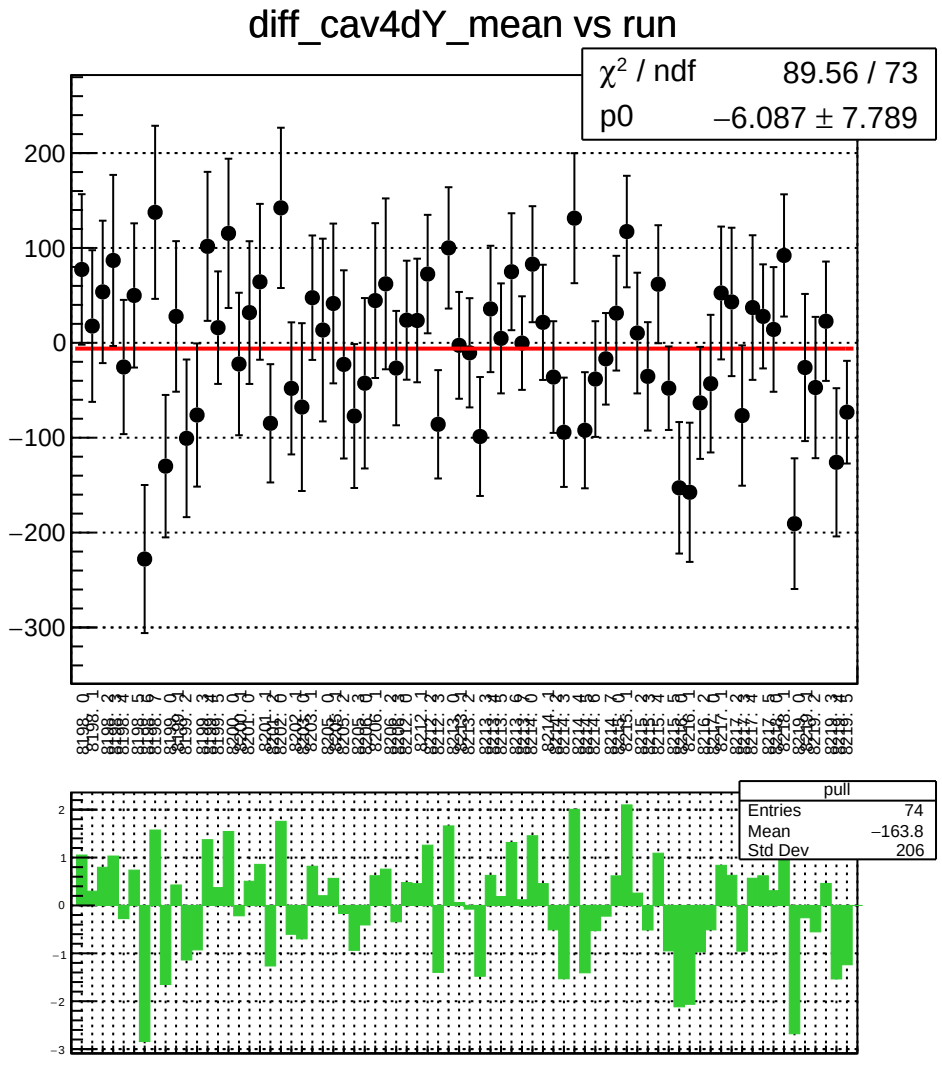

pull1D
Entries 74
Mean 0.01918
Std Dev 1.1

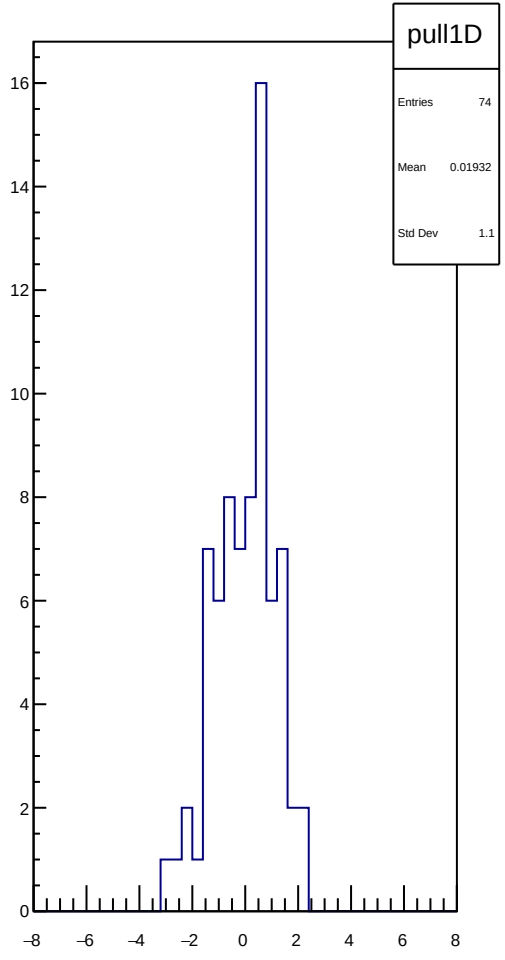

diff_cav4cY_rms vs run
χ² / ndf 2.991e+04 / 73
p0 5666 ± 4.668
8000
7500
7000
6500
6000
5500
5000
4500

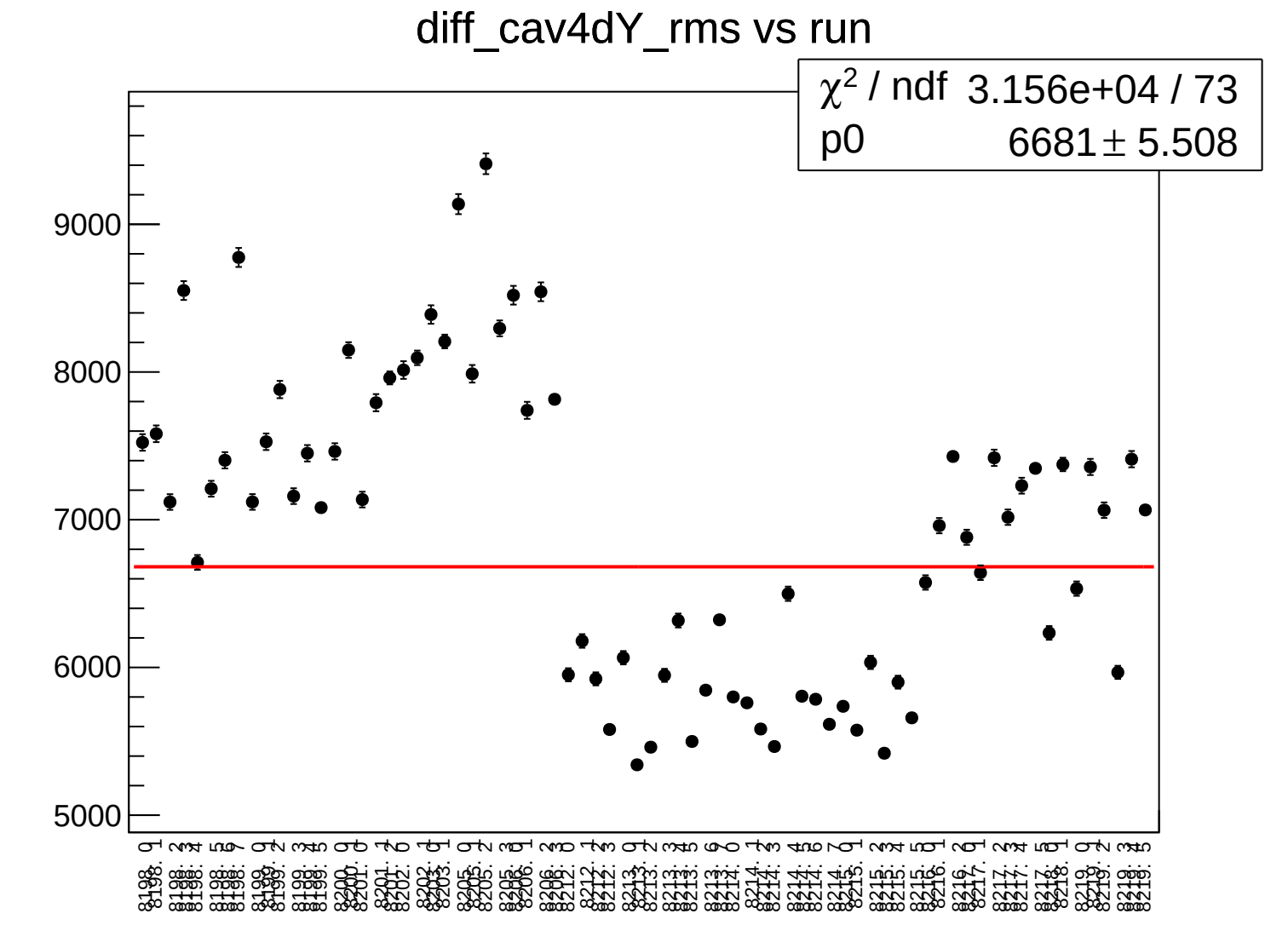

diff_cav4dX_mean vs run
χ² / ndf 78.54 / 73
p0 −333.8 ± 419.5
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 74
Mean 2585
Std Dev 2535
3
2
1
0
−1
−2

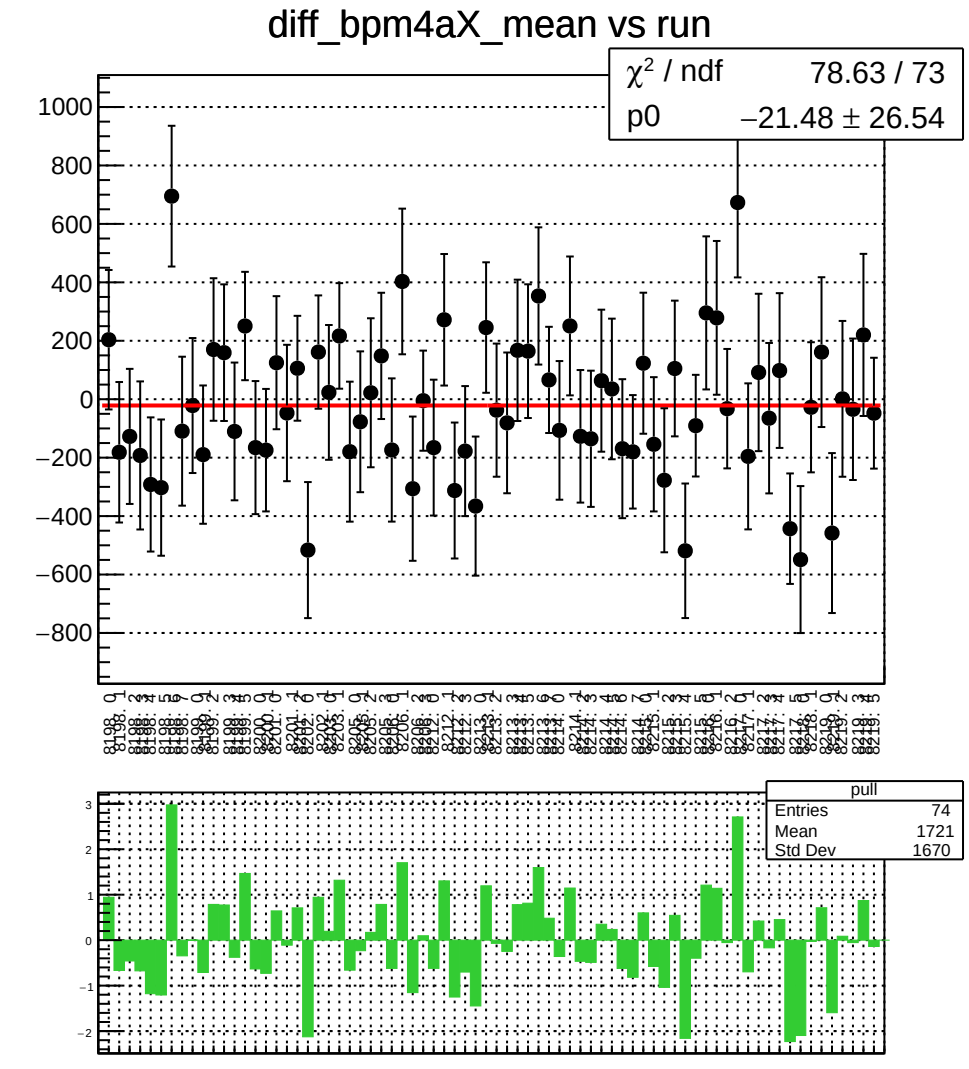

pull1D
Entries 74
Mean −0.000467
Std Dev 1.03
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

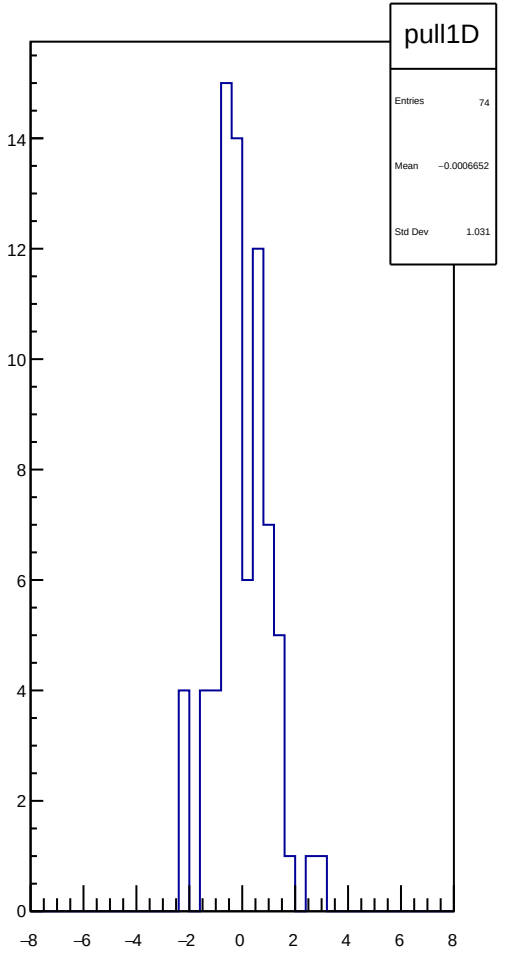

diff_cav4dX_rms vs run
×10^3
420
400
380
360
340
χ² / ndf 4025 / 73
p0 3.632e+05 ± 296.6

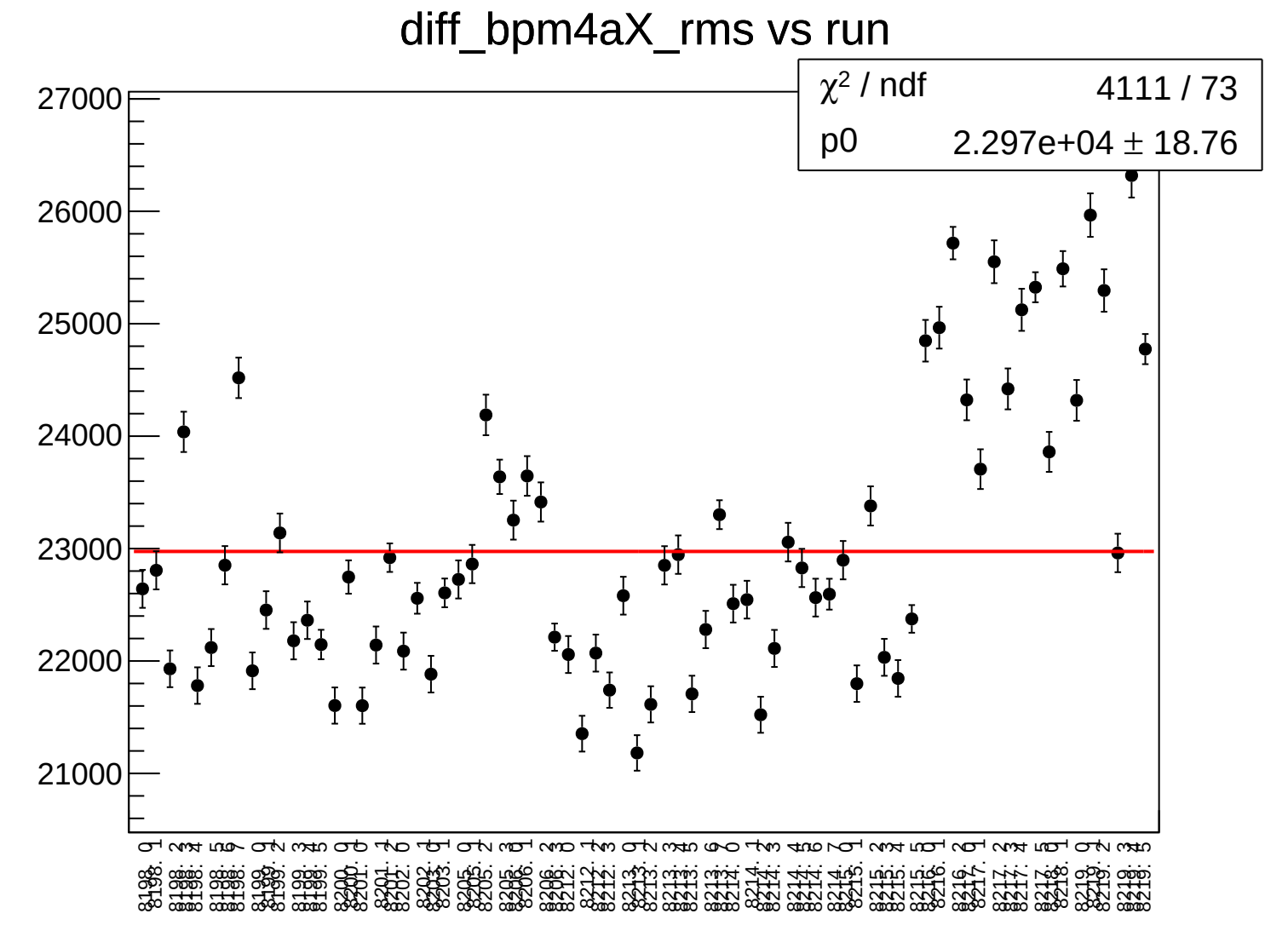

diff_cav4dY_mean vs run
χ² / ndf 89.56 / 73
p0 −6.087 ± 7.789
pull
Entries 74
Mean −163.8
Std Dev 206

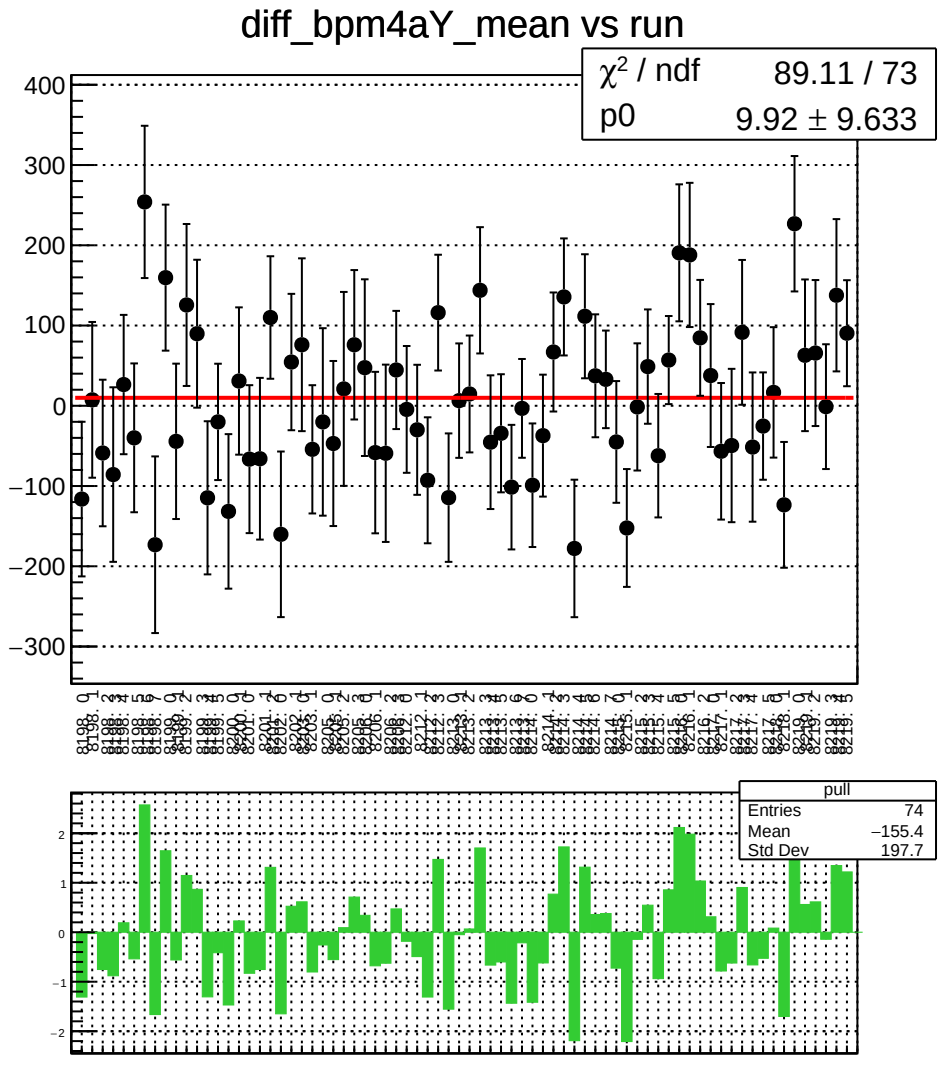

pull1D
Entries 74
Mean 0.01932
Std Dev 1.1

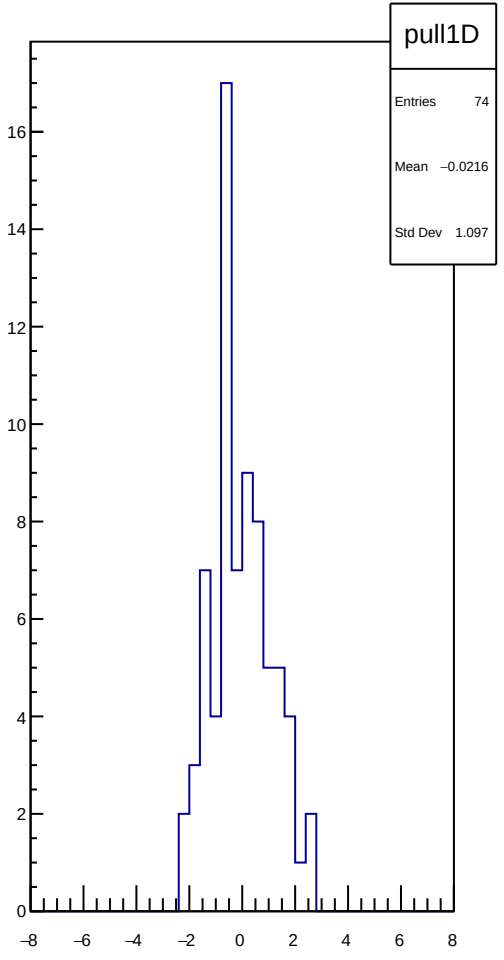

diff_cav4dY_rms vs run
χ² / ndf 3.156e+04 / 73
p0 6681 ± 5.508
9000
8000
7000
6000
5000

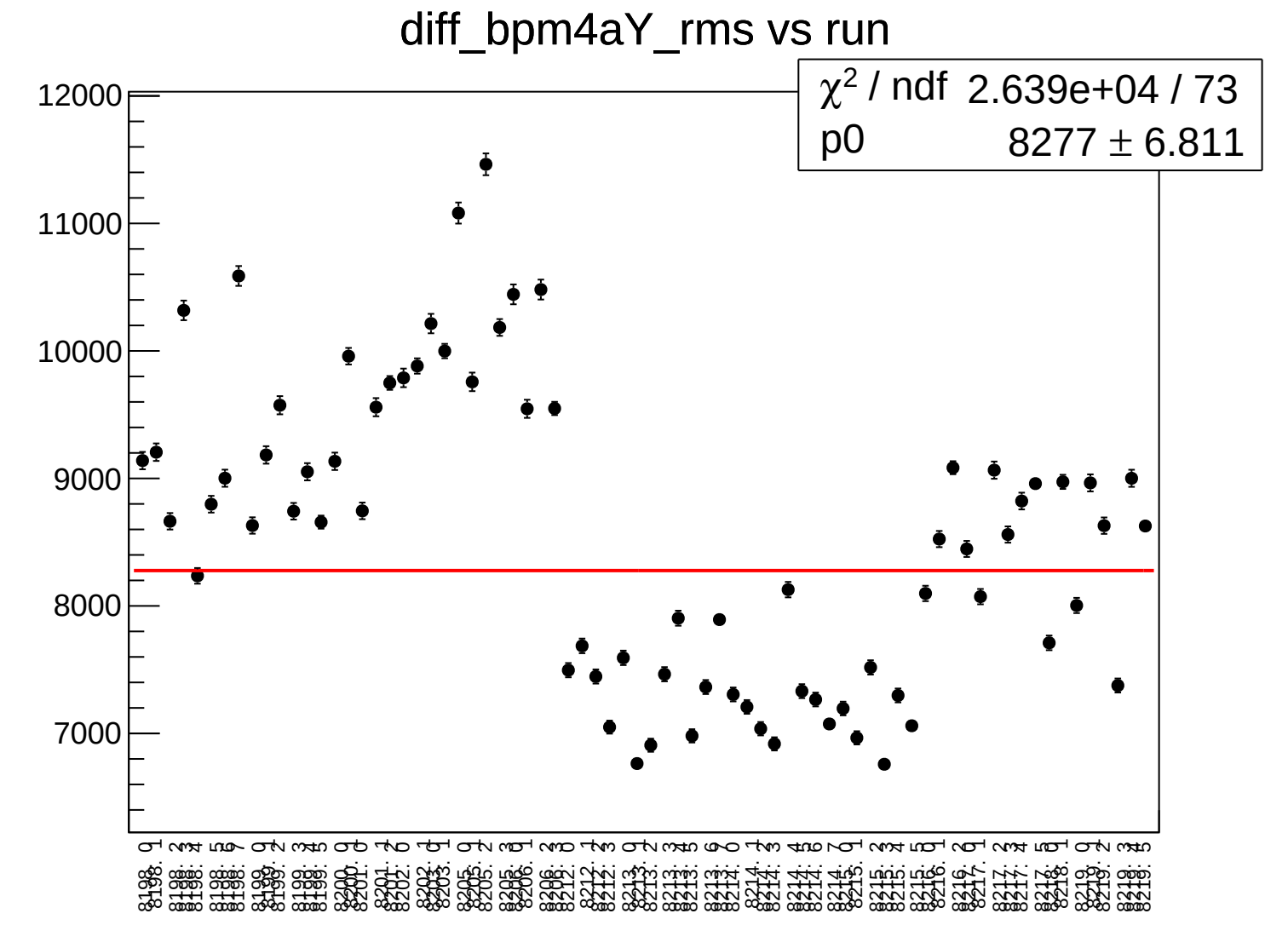

diff_bpm4aX_mean vs run
χ² / ndf 78.63 / 73
p0 −21.48 ± 26.54
pull
Entries 74
Mean 1721
Std Dev 1670

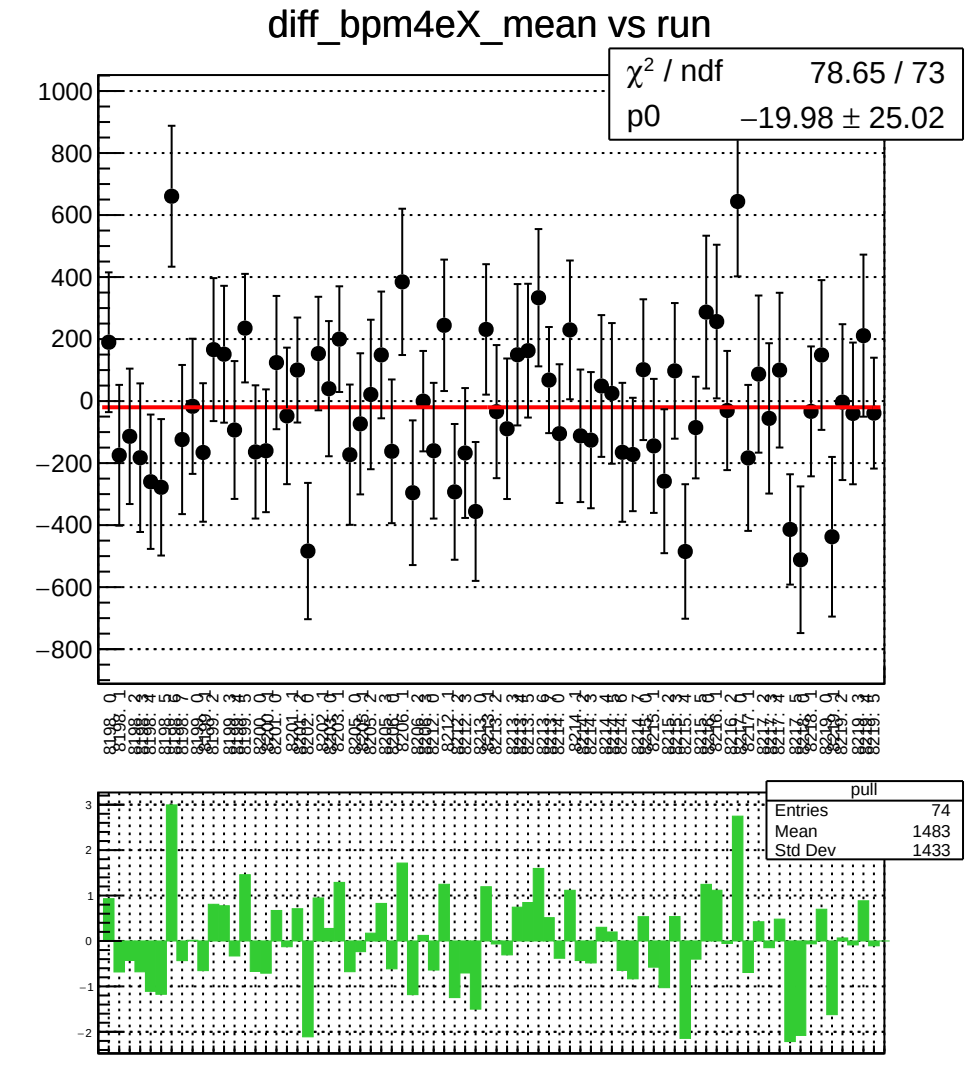

pull1D
Entries 74
Mean −0.0006652
Std Dev 1.031

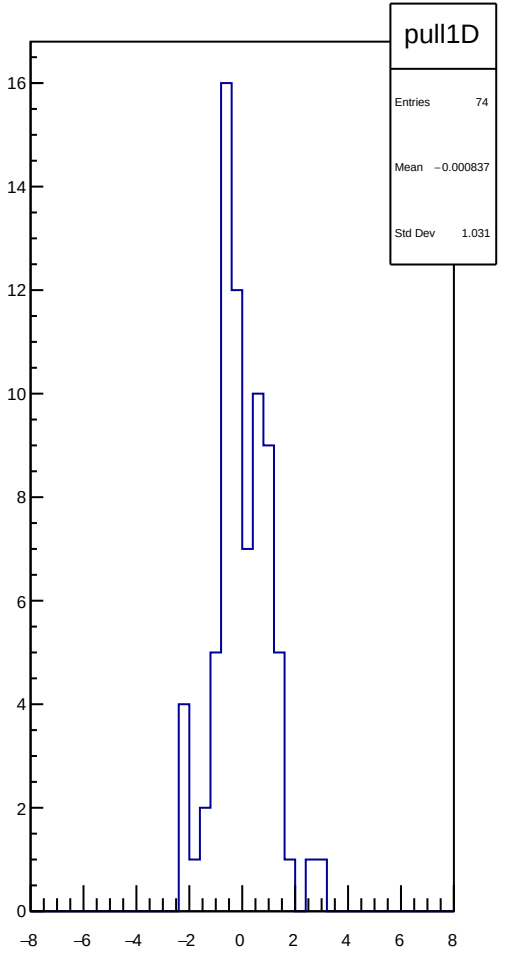

diff_bpm4aX_rms vs run
χ² / ndf 4111 / 73
p0 2.297e+04 ± 18.76
27000
26000
25000
24000
23000
22000
21000

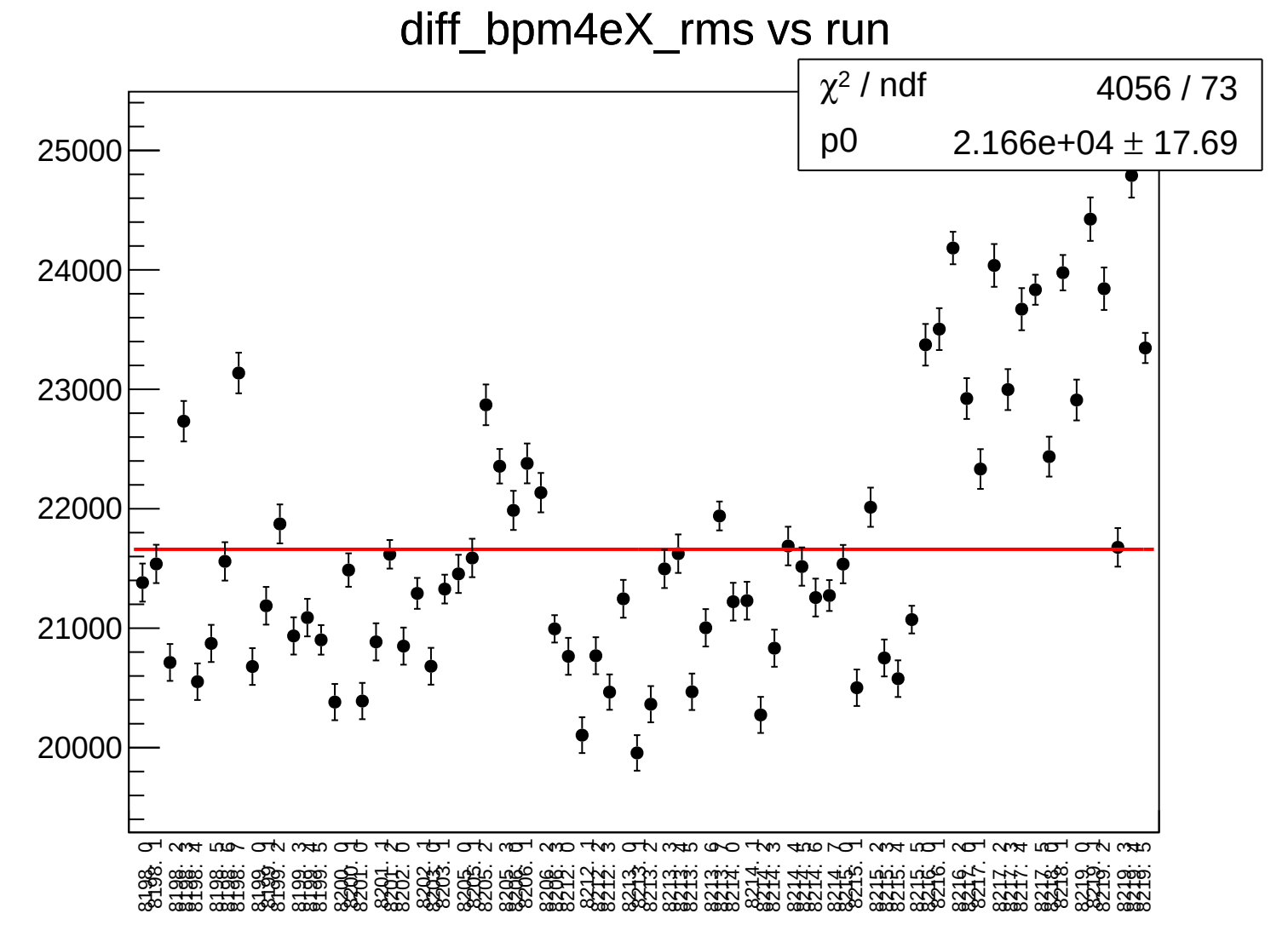

diff_bpm4aY_mean vs run
χ² / ndf 89.11 / 73
p0 9.92 ± 9.633
pull
Entries 74
Mean −155.4
Std Dev 197.7

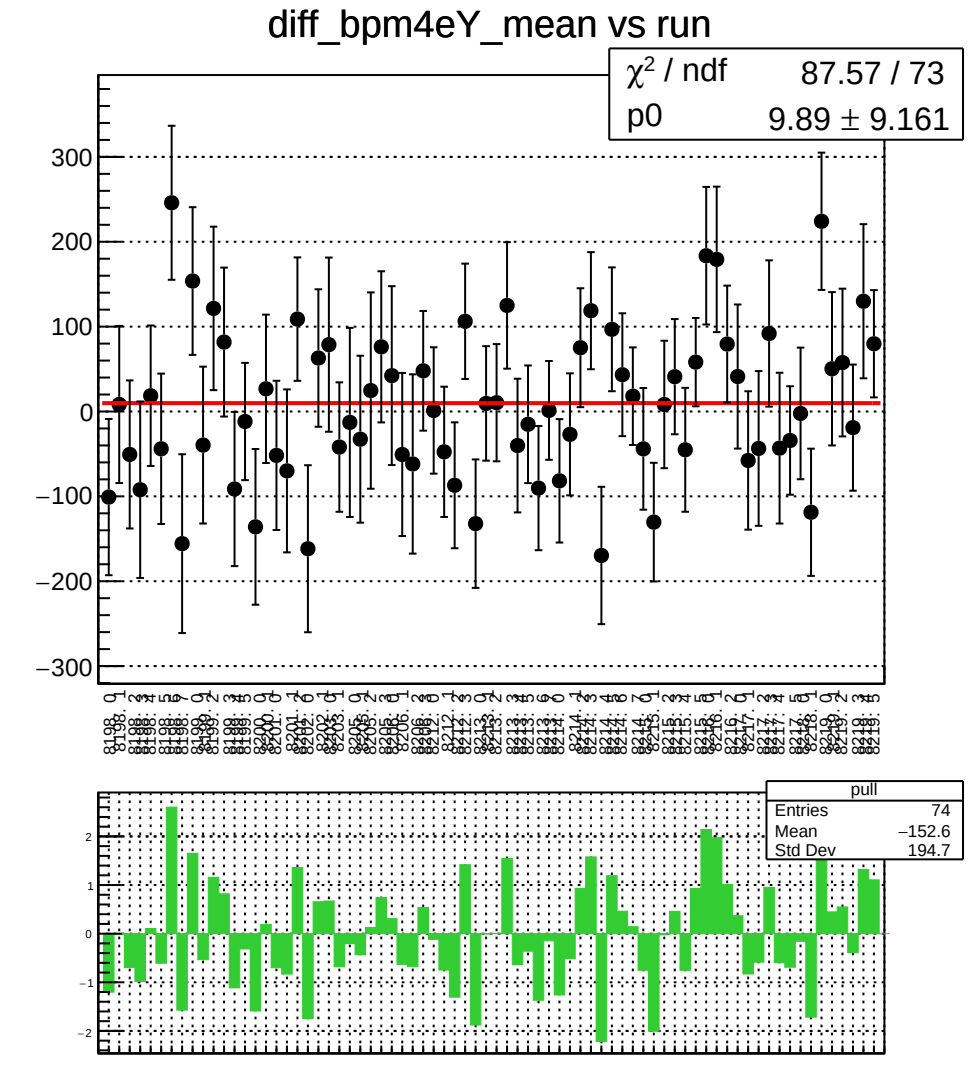

pull1D
Entries 74
Mean −0.0216
Std Dev 1.097

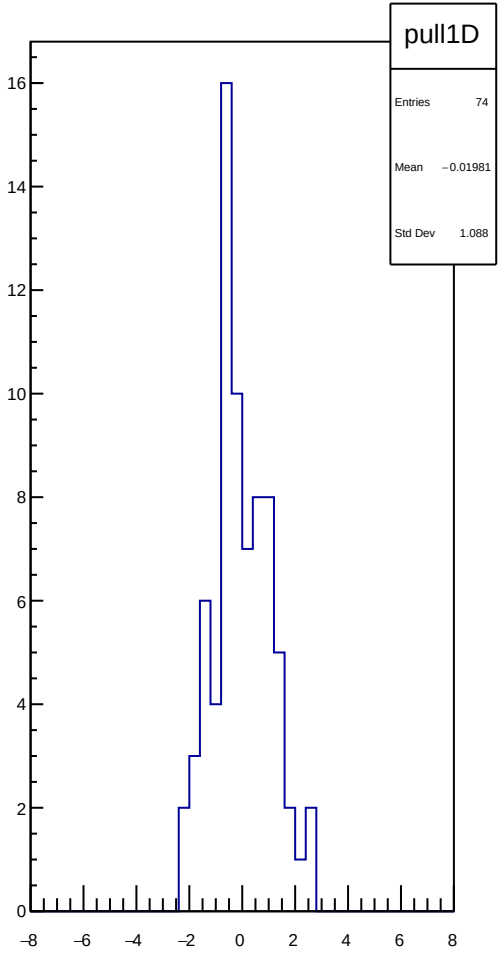

diff_bpm4aY_rms vs run
χ² / ndf 2.639e+04 / 73
p0 8277 ± 6.811
12000
11000
10000
9000
8000
7000

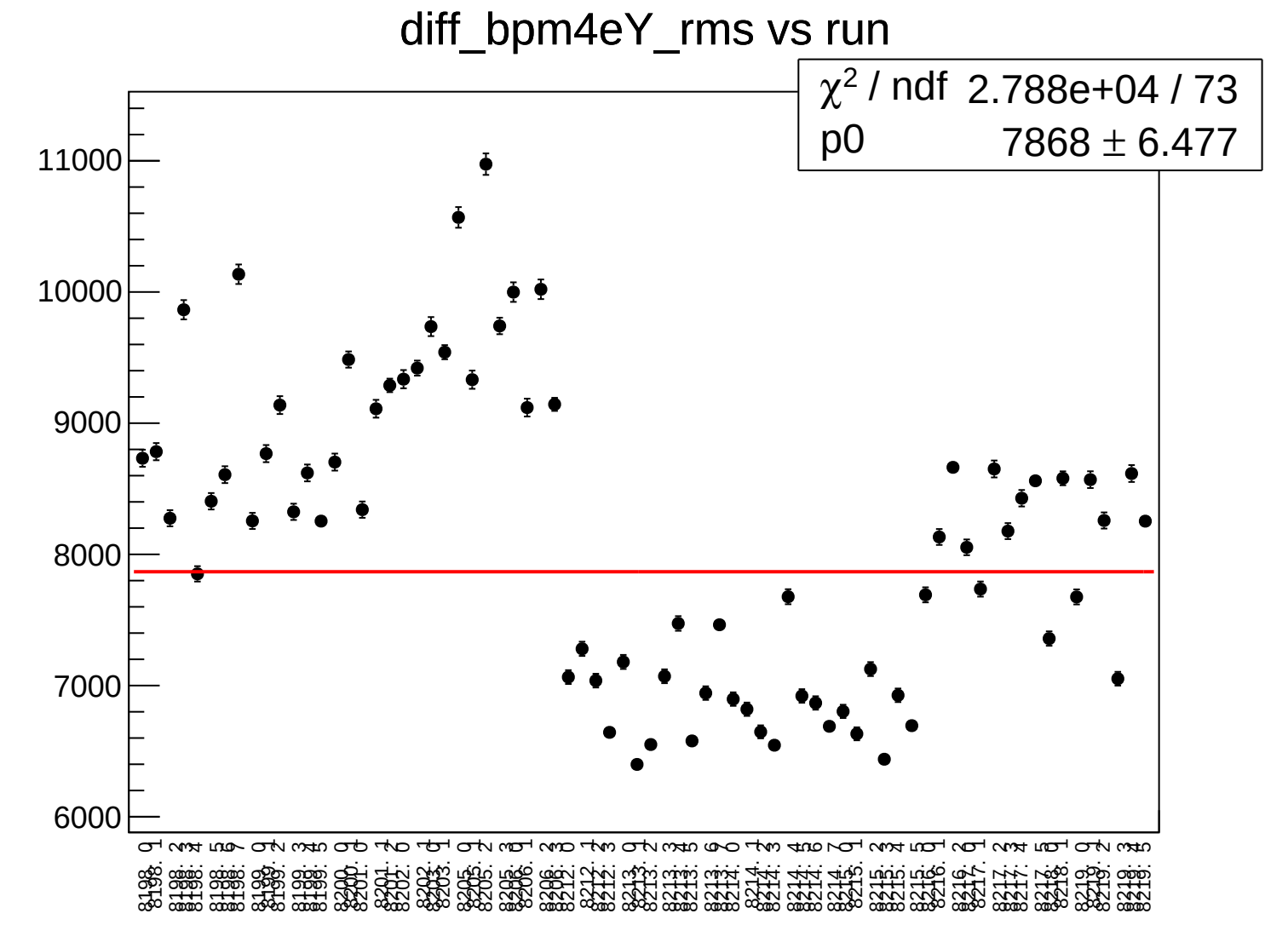

diff_bpm4eX_mean vs run
χ² / ndf 78.65 / 73
p0 −19.98 ± 25.02
pull
Entries 74
Mean 1483
Std Dev 1433

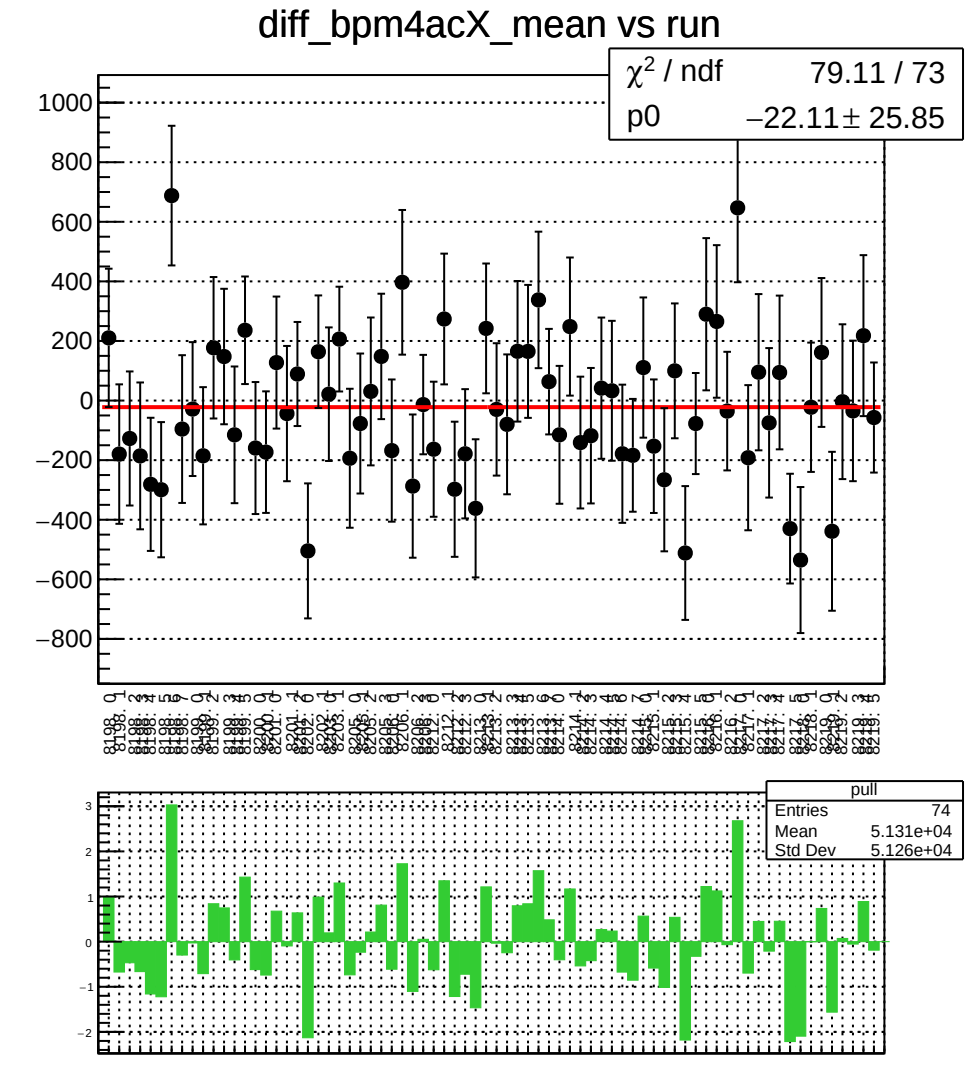

pull1D
Entries 74
Mean −0.000837
Std Dev 1.031

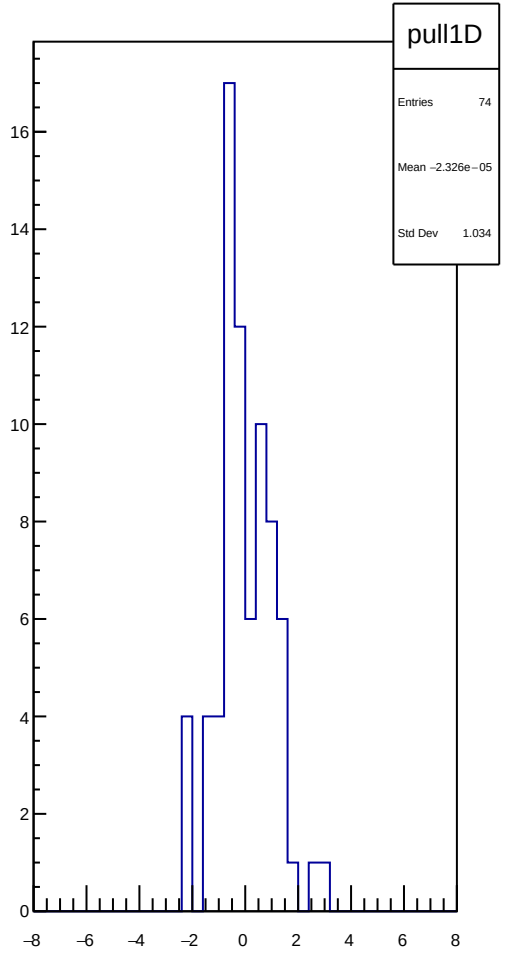

diff_bpm4eX_rms vs run
χ² / ndf 4056 / 73
p0 2.166e+04 ± 17.69
25000
24000
23000
22000
21000
20000

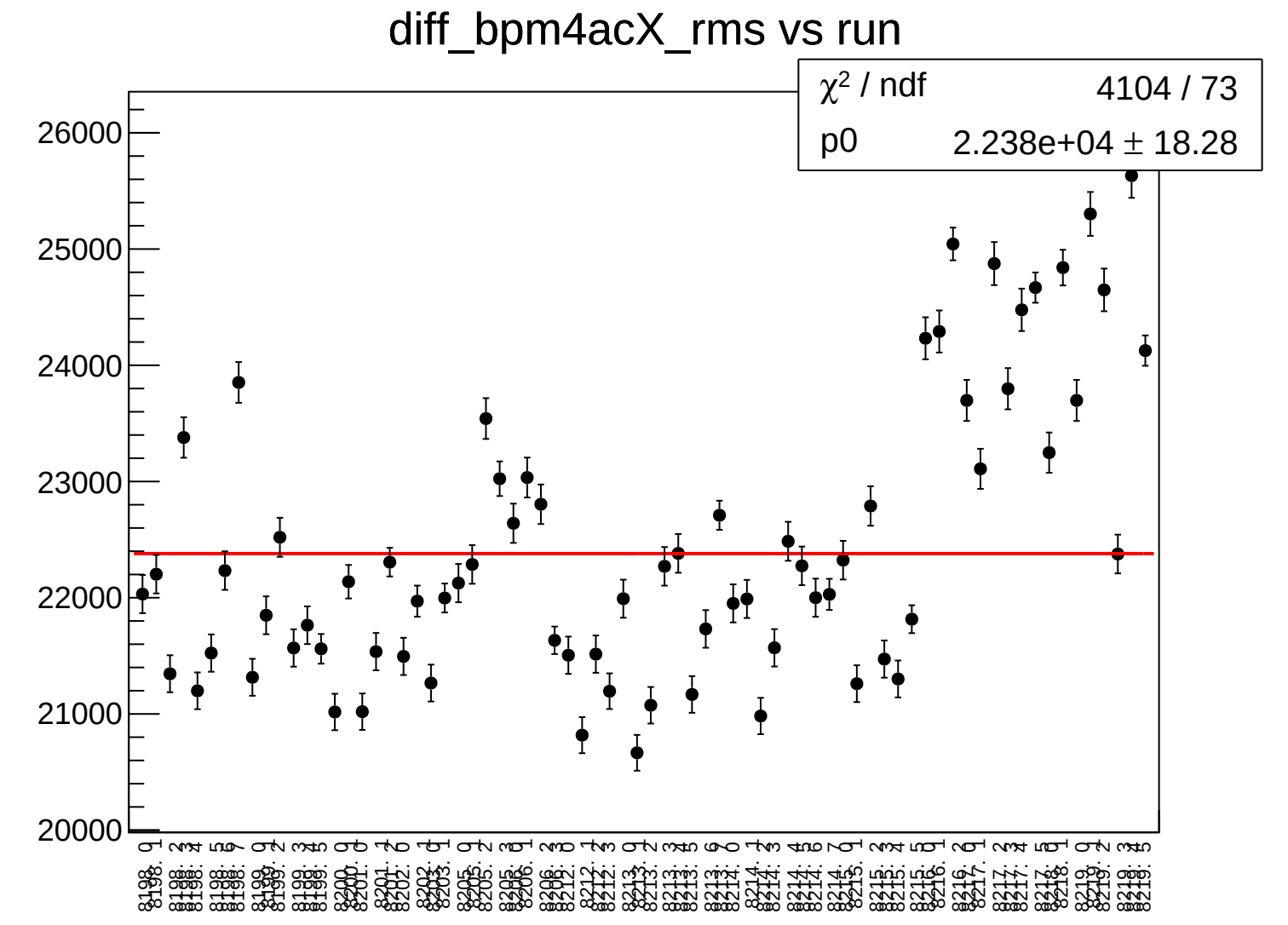

diff_bpm4eY_mean vs run
χ² / ndf 87.57 / 73
p0 9.89 ± 9.161
pull
Entries 74
Mean −152.6
Std Dev 194.7

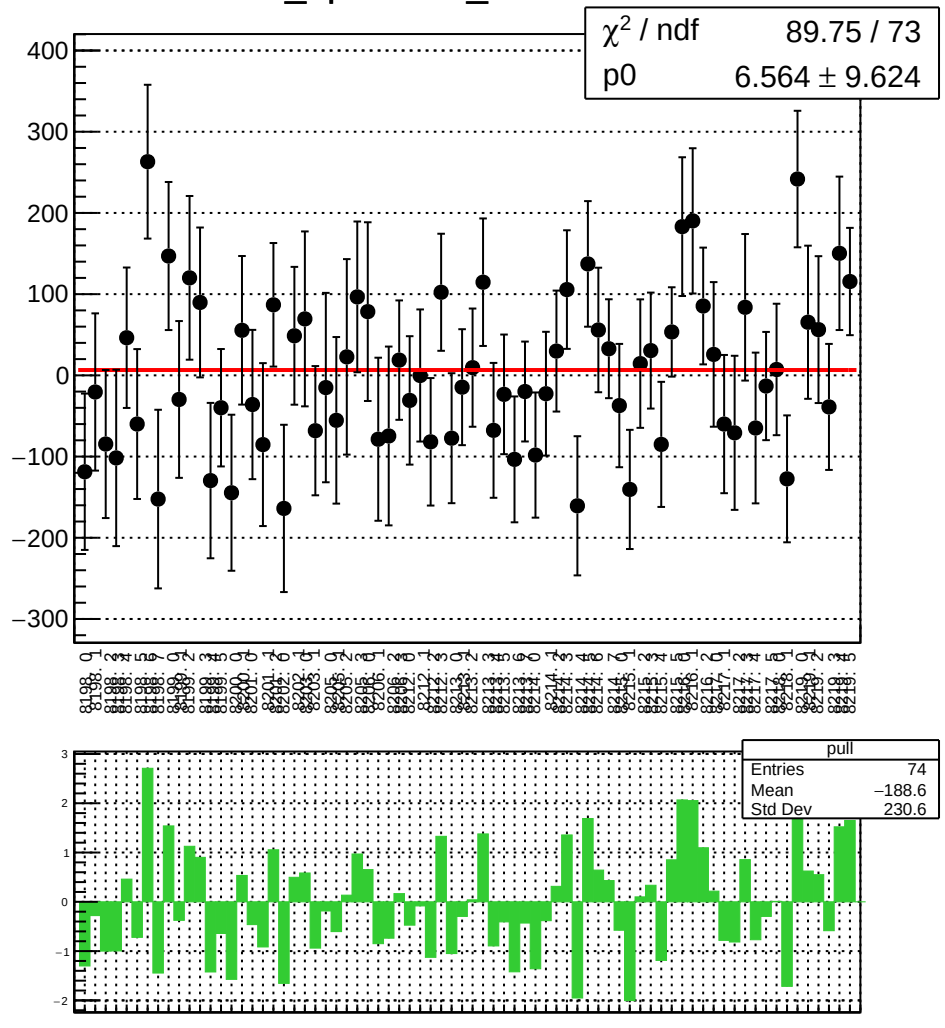

pull1D
Entries 74
Mean −0.01981
Std Dev 1.088

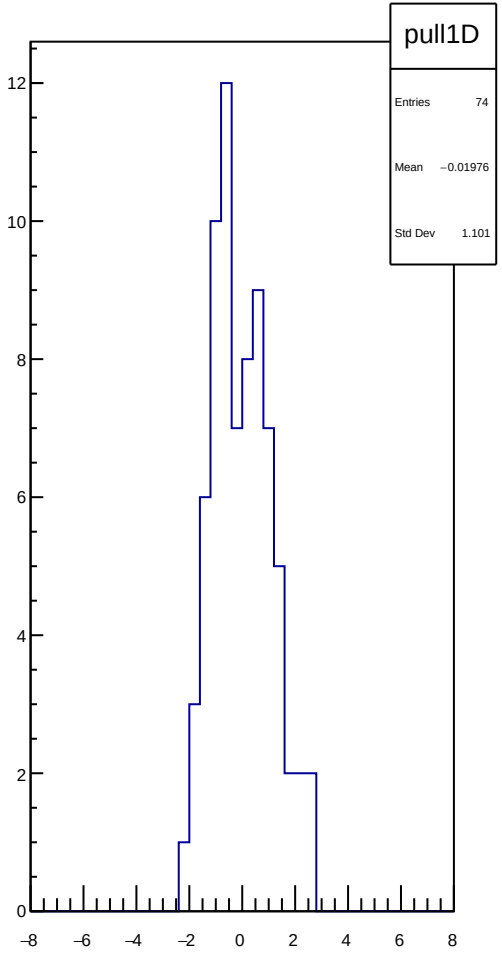

diff_bpm4eY_rms vs run
χ² / ndf 2.788e+04 / 73
p0 7868 ± 6.477
11000
10000
9000
8000
7000
6000

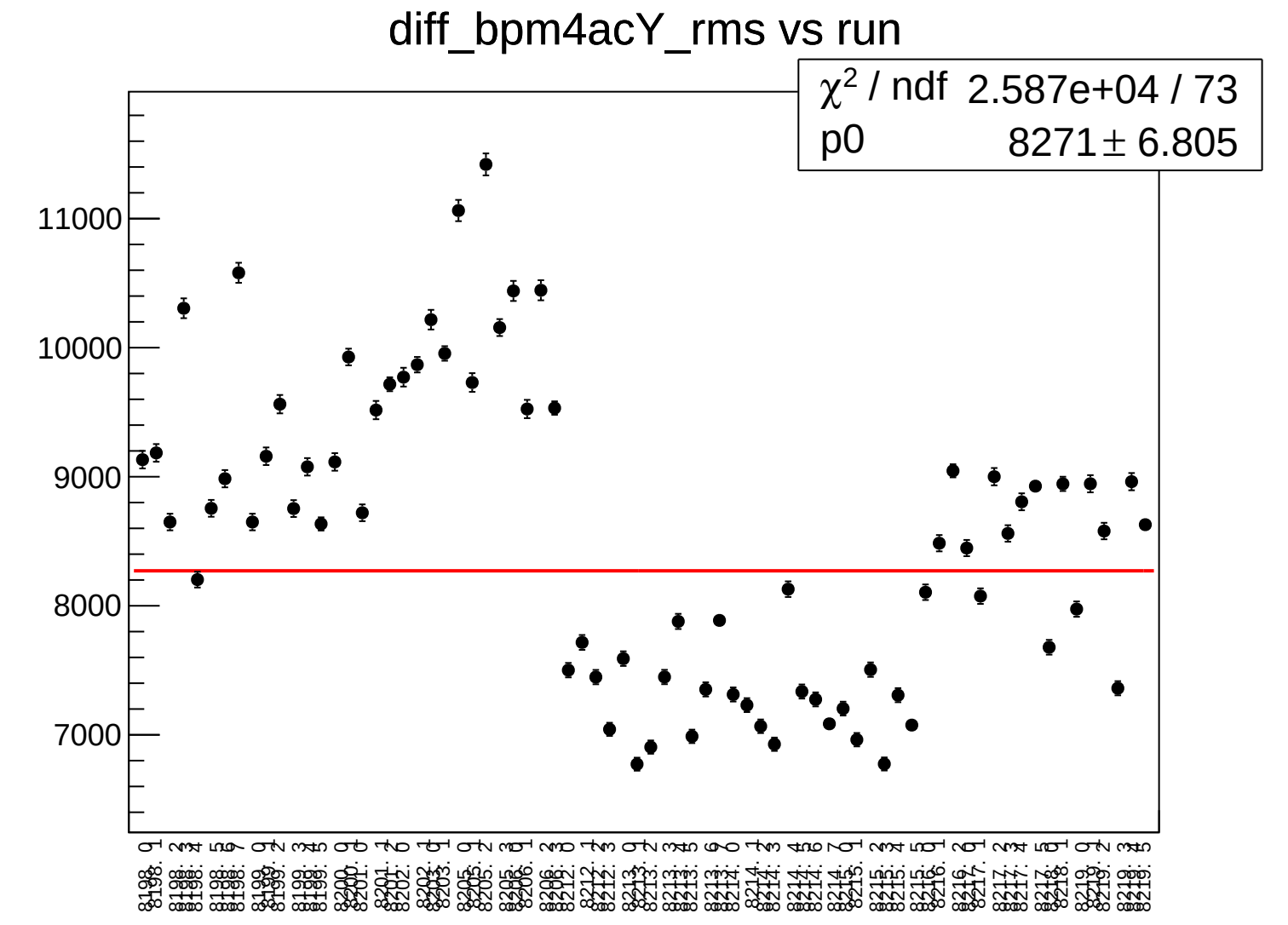

diff_bpm4acX_mean vs run
χ² / ndf 79.11 / 73
p0 −22.11± 25.85
pull
Entries 74
Mean 5.131e+04
Std Dev 5.126e+04

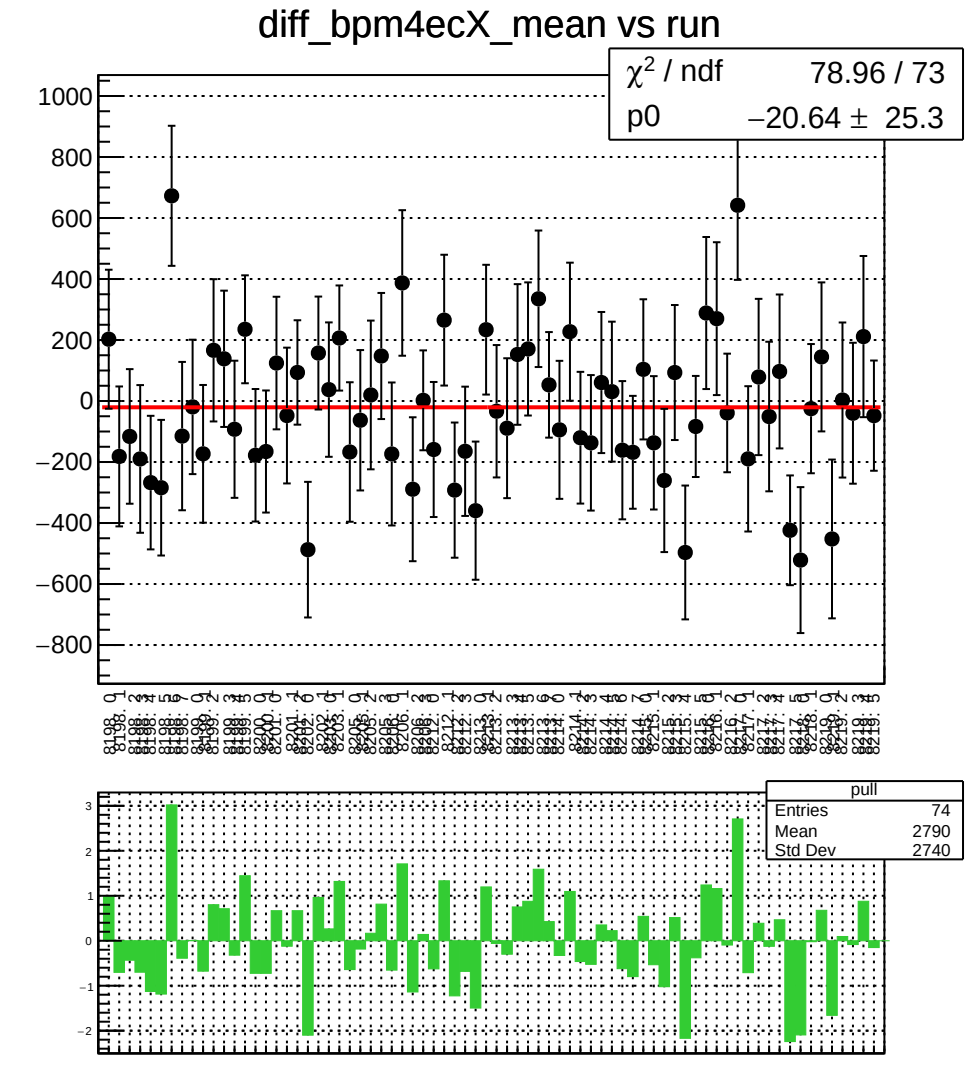

pull1D
Entries 74
Mean −2.326e−05
Std Dev 1.034

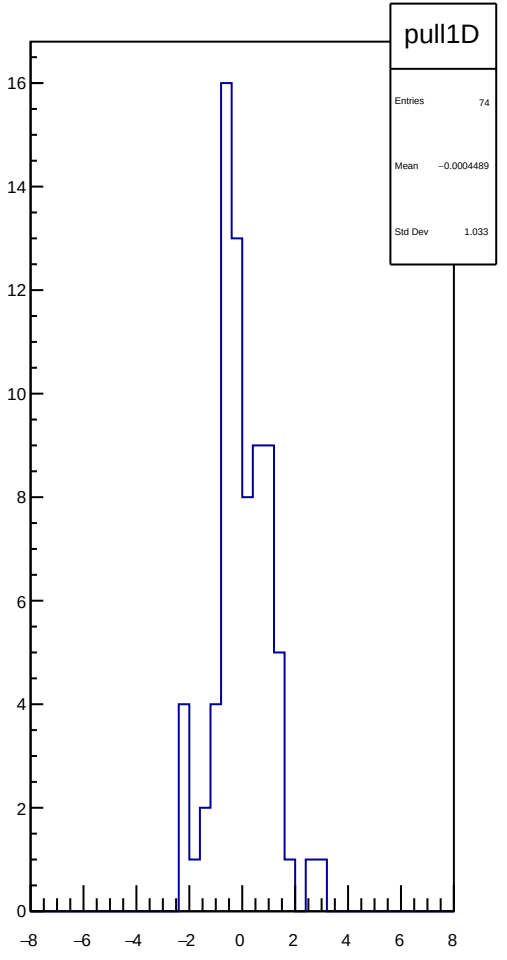

diff_bpm4acX_rms vs run
χ² / ndf 4104 / 73
p0 2.238e+04 ± 18.28
26000
25000
24000
23000
22000
21000
20000

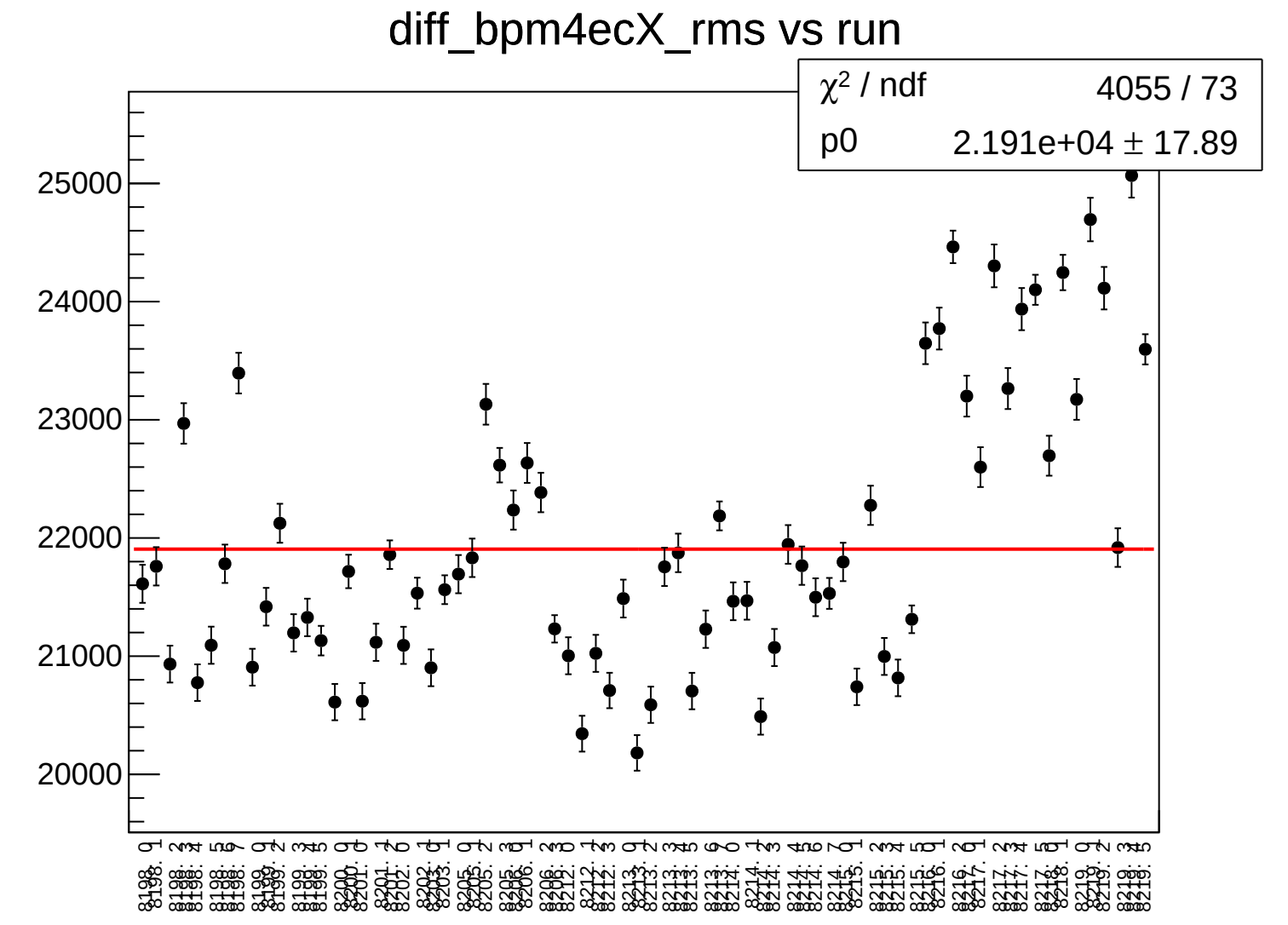

diff_bpm4acY_mean vs run
χ² / ndf 89.75 / 73
p0 6.564 ± 9.624
pull
Entries 74
Mean −188.6
Std Dev 230.6

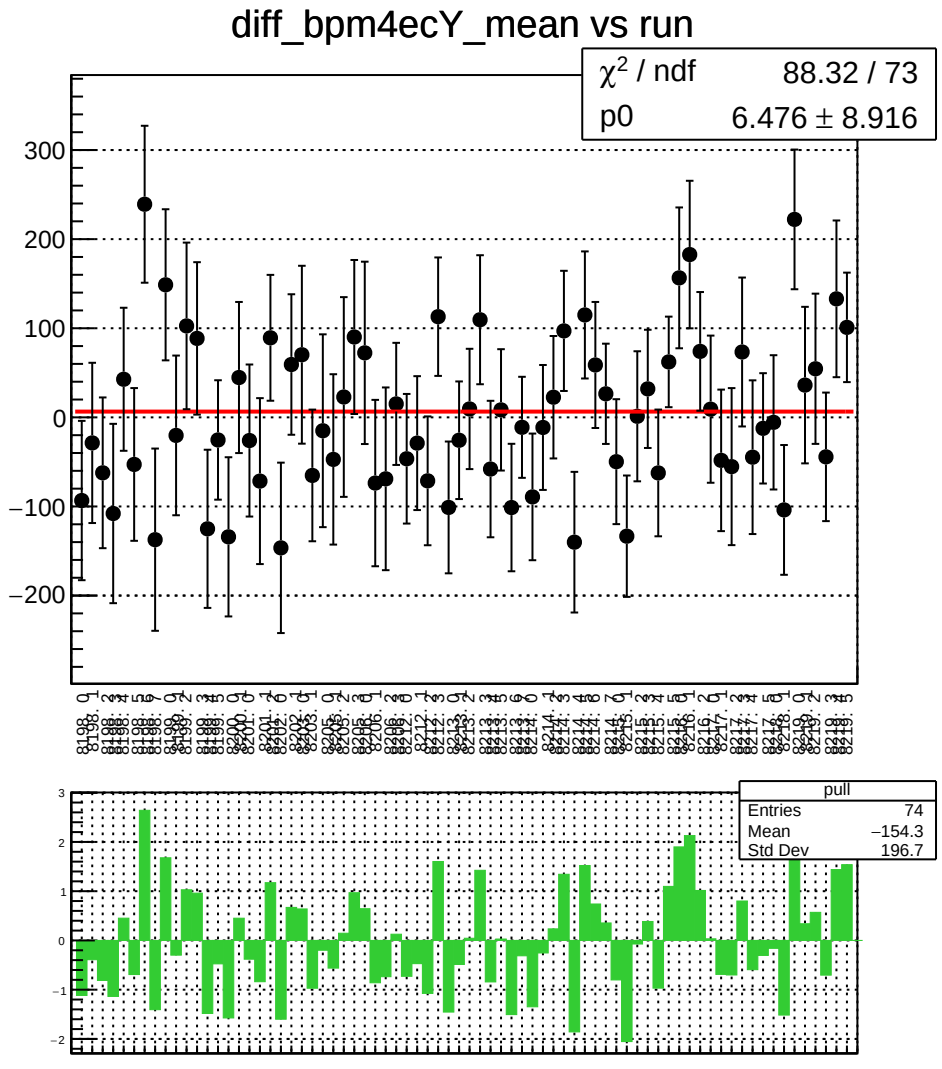

pull1D
Entries 74
Mean −0.01976
Std Dev 1.101

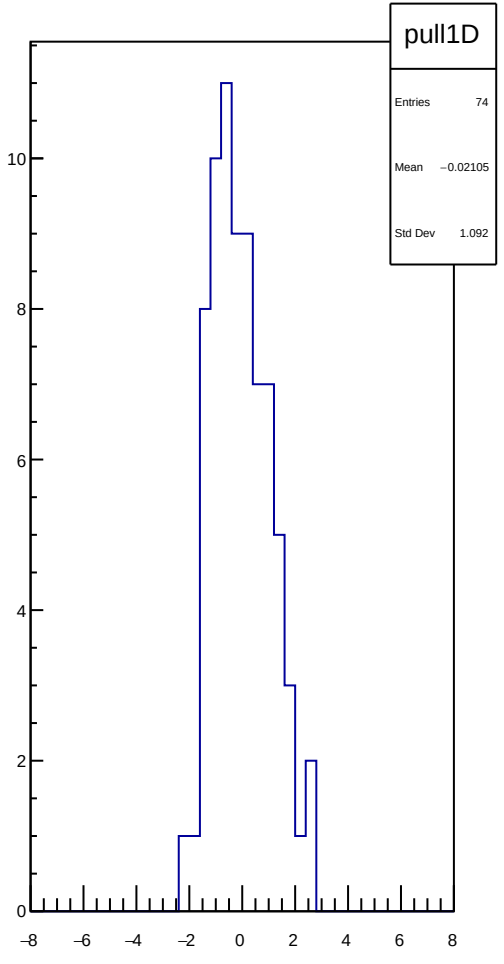

diff_bpm4acY_rms vs run
χ² / ndf 2.587e+04 / 73
p0 8271 ± 6.805
11000
10000
9000
8000
7000

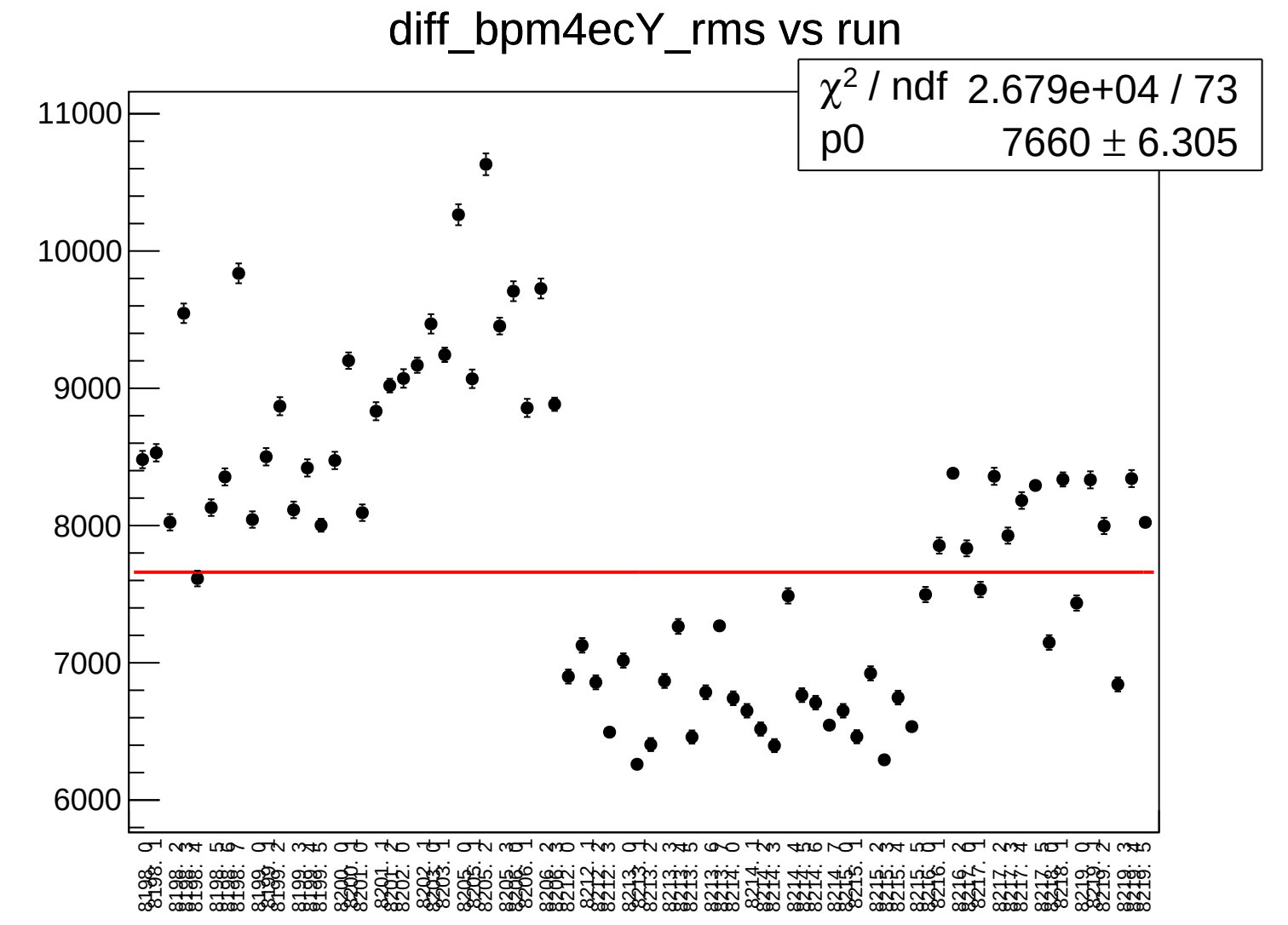

diff_bpm4ecX_mean vs run
χ² / ndf 78.96 / 73
p0 −20.64 ± 25.3
pull
Entries 74
Mean 2790
Std Dev 2740

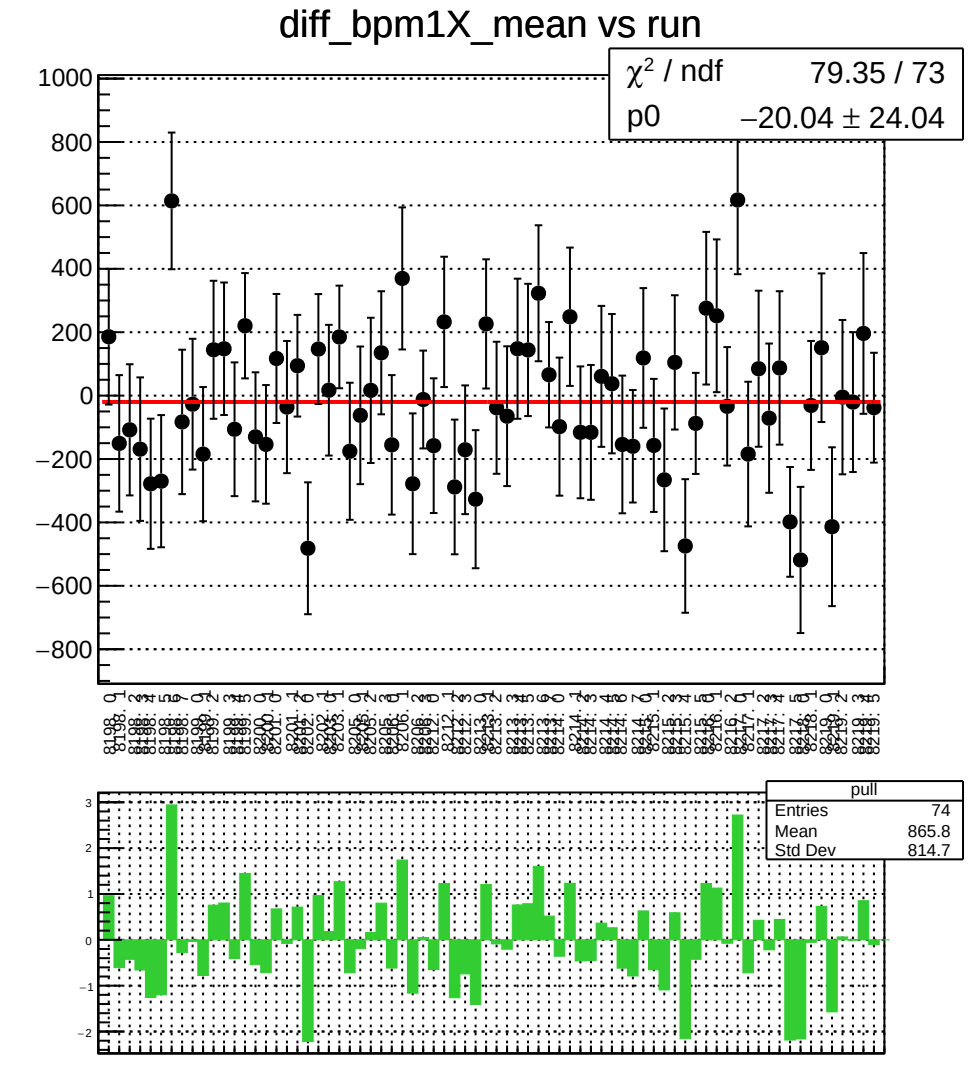

pull1D
Entries 74
Mean −0.0004489
Std Dev 1.033

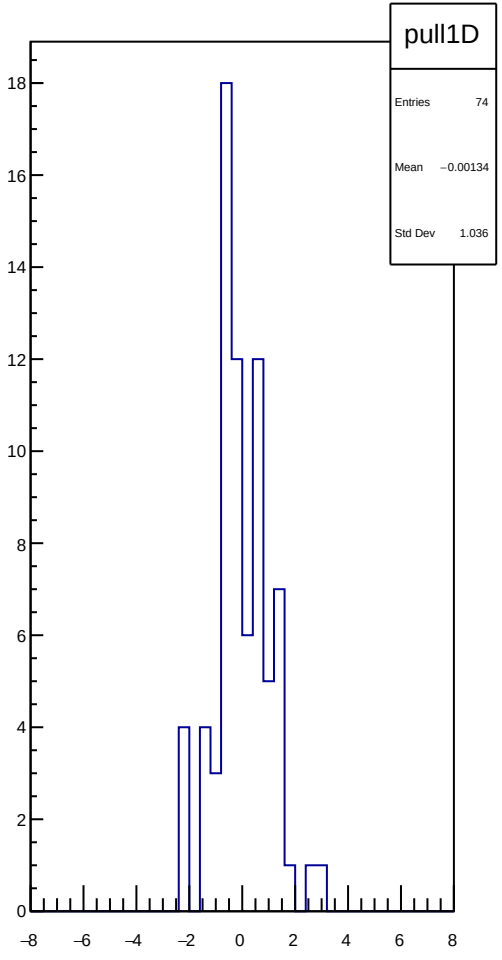

diff_bpm4ecX_rms vs run
χ² / ndf 4055 / 73
p0 2.191e+04 ± 17.89
25000
24000
23000
22000
21000
20000

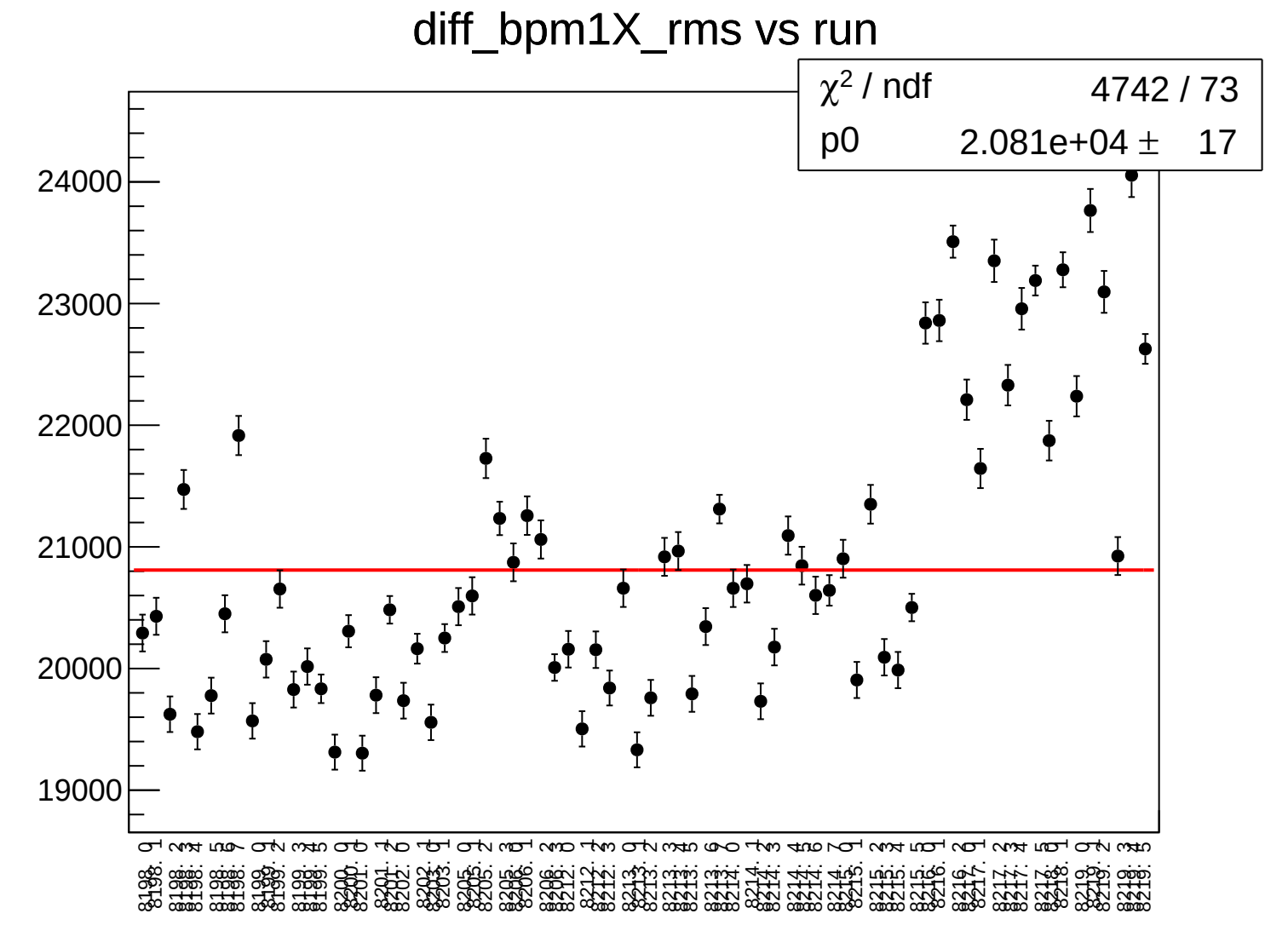

diff_bpm4ecY_mean vs run
χ² / ndf 88.32 / 73
p0 6.476 ± 8.916
300
200
100
0
−100
−200
pull
Entries 74
Mean −154.3
Std Dev 196.7
3
2
1
0
−1
−2

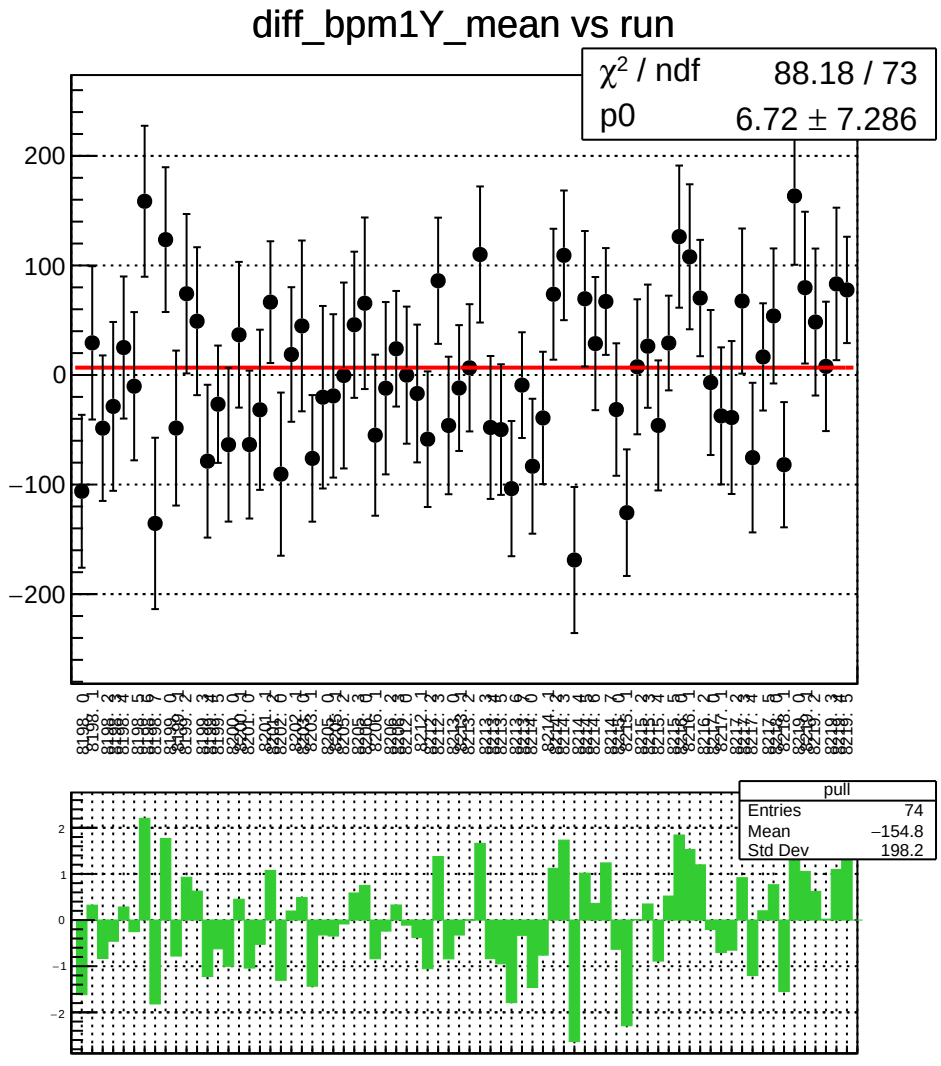

pull1D
Entries 74
Mean −0.02105
Std Dev 1.092
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

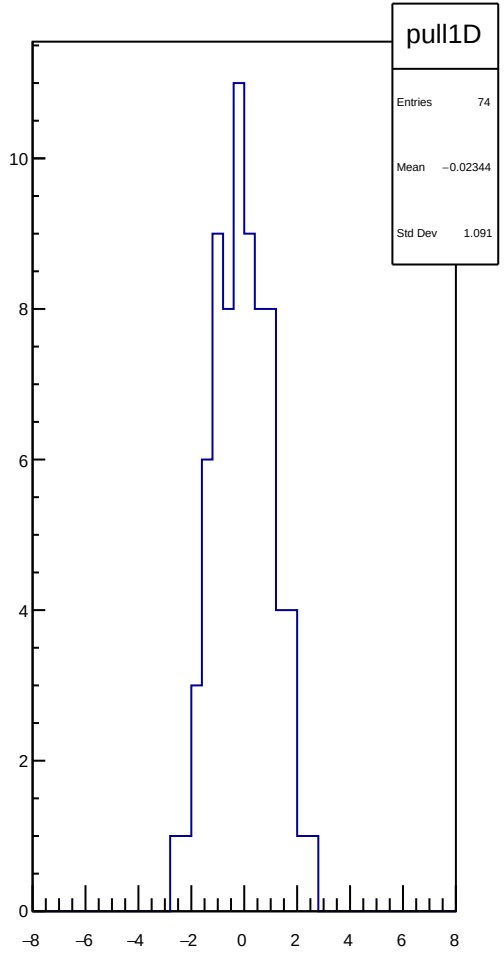

diff_bpm4ecY_rms vs run
χ² / ndf 2.679e+04 / 73
p0 7660 ± 6.305
11000
10000
9000
8000
7000
6000

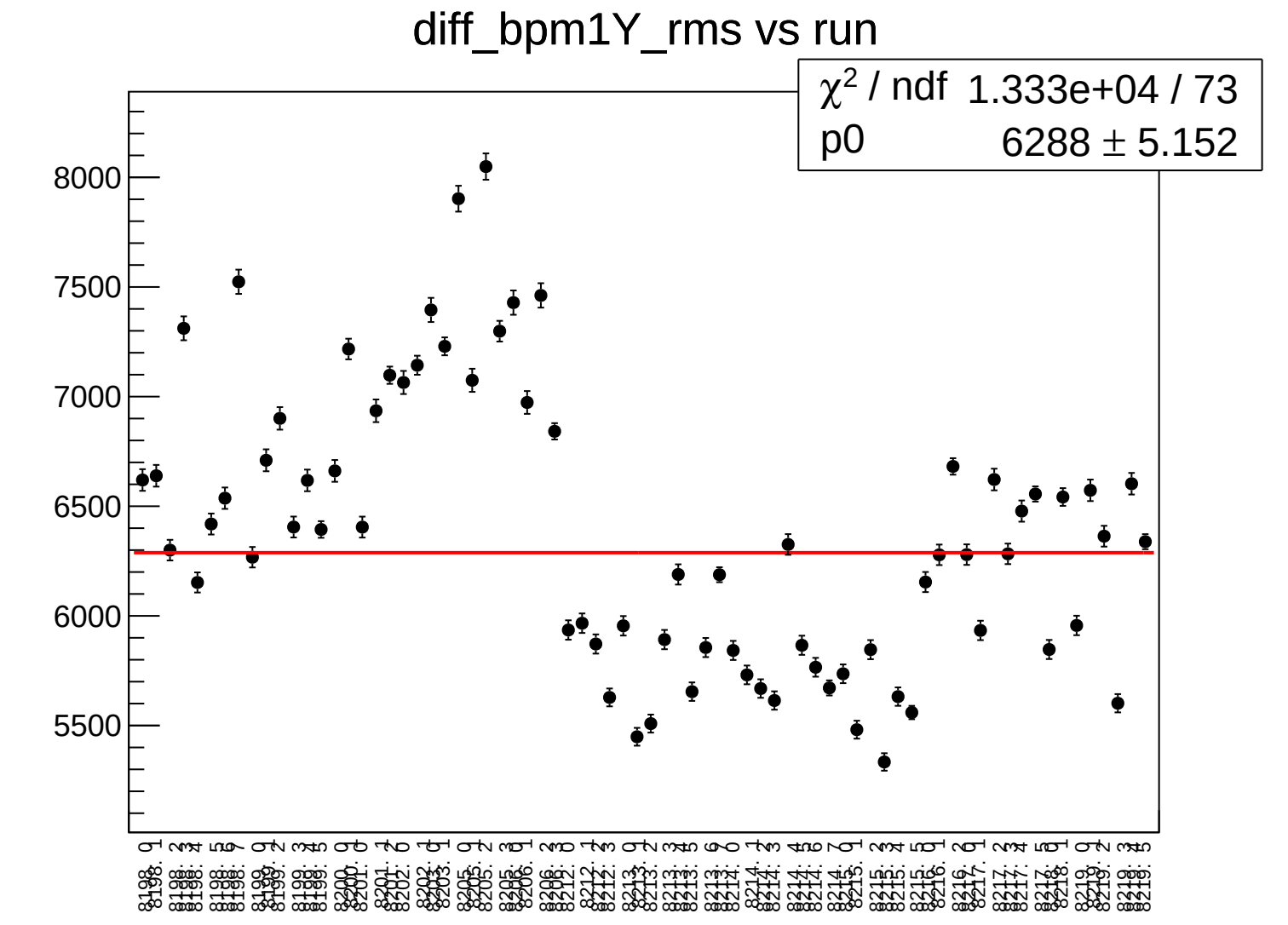

diff_bpm1X_mean vs run
χ² / ndf 79.35 / 73
p0 −20.04 ± 24.04
pull
Entries 74
Mean 865.8
Std Dev 814.7

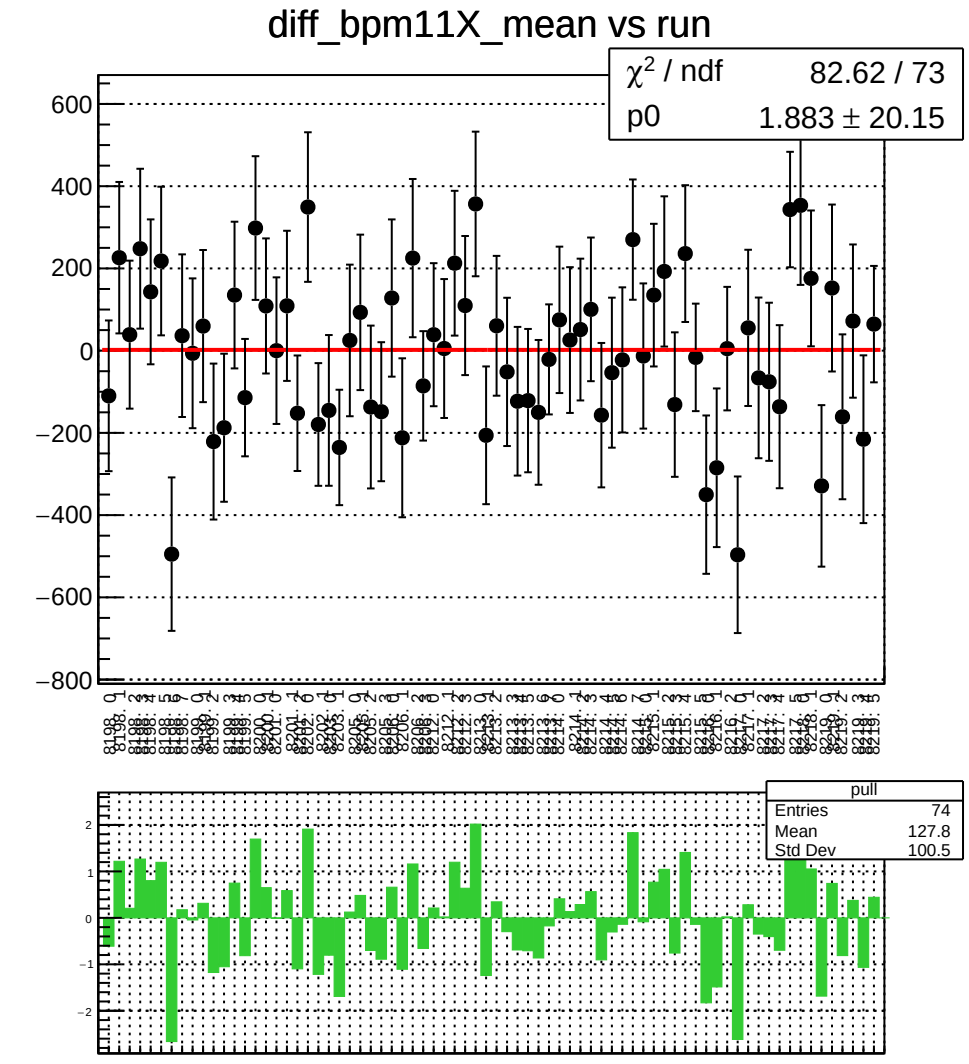

pull1D
Entries 74
Mean −0.00134
Std Dev 1.036

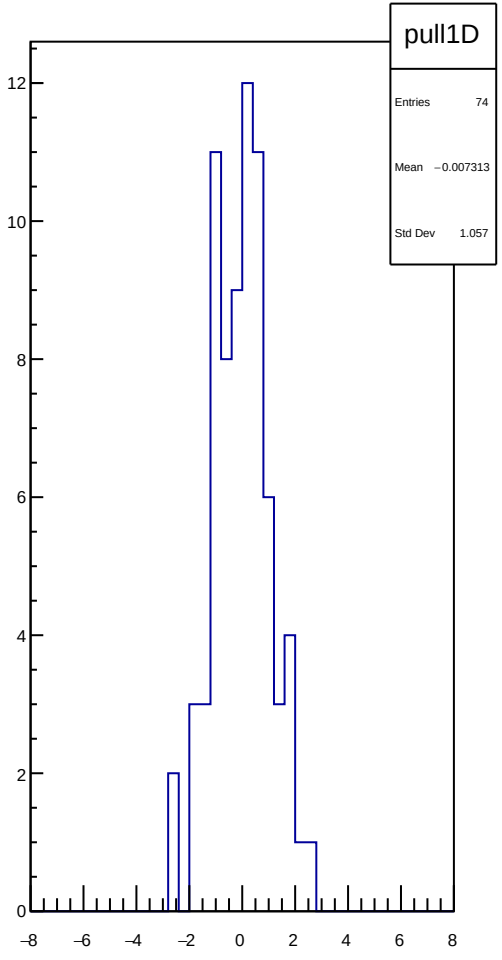

diff_bpm1X_rms vs run
χ² / ndf 4742 / 73
p0 2.081e+04 ± 17
24000
23000
22000
21000
20000
19000

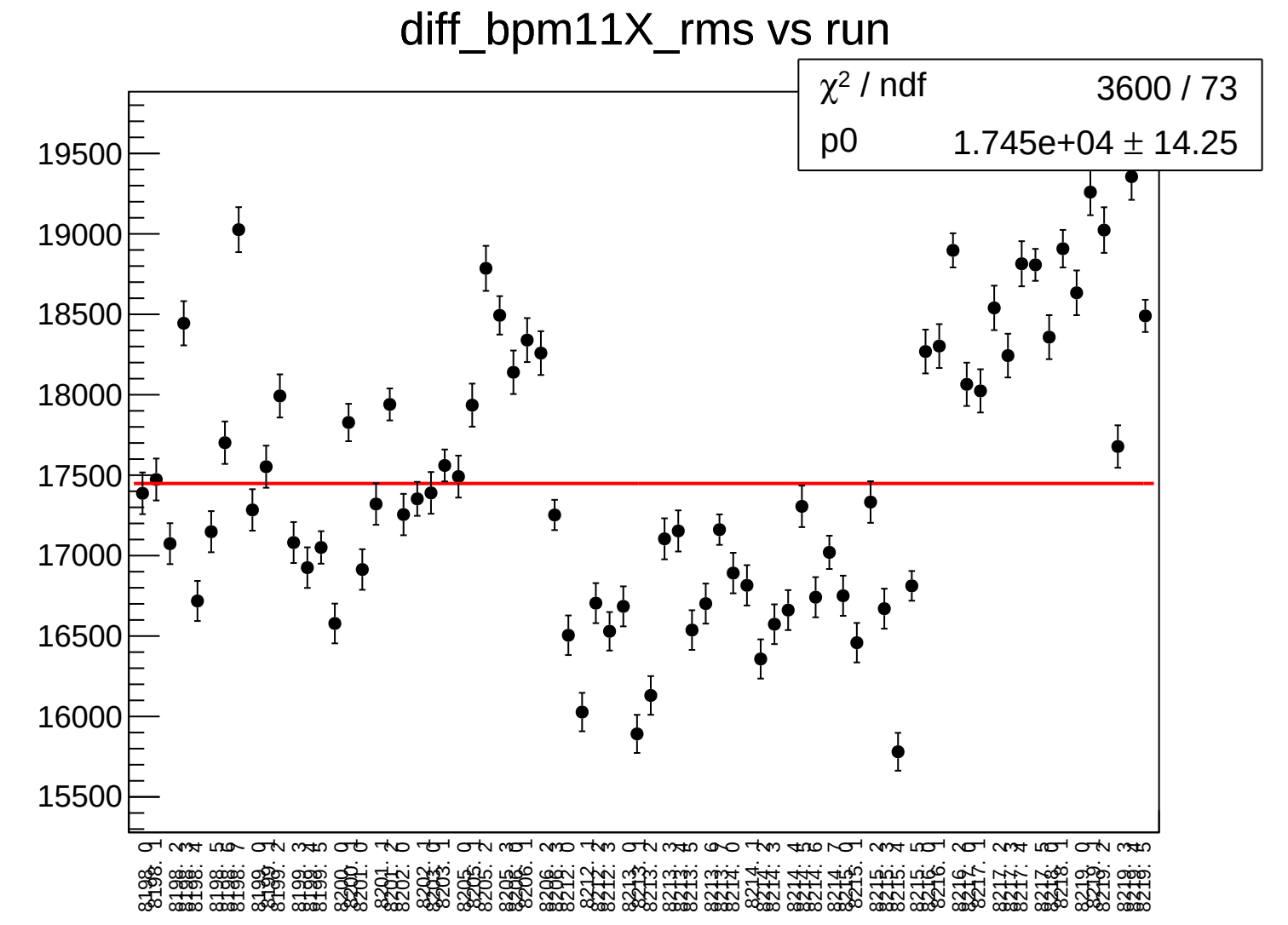

diff_bpm1Y_mean vs run
χ² / ndf 88.18 / 73
p0 6.72 ± 7.286
200
100
0
−100
−200
pull
Entries 74
Mean −154.8
Std Dev 198.2
2
1
0
−1
−2

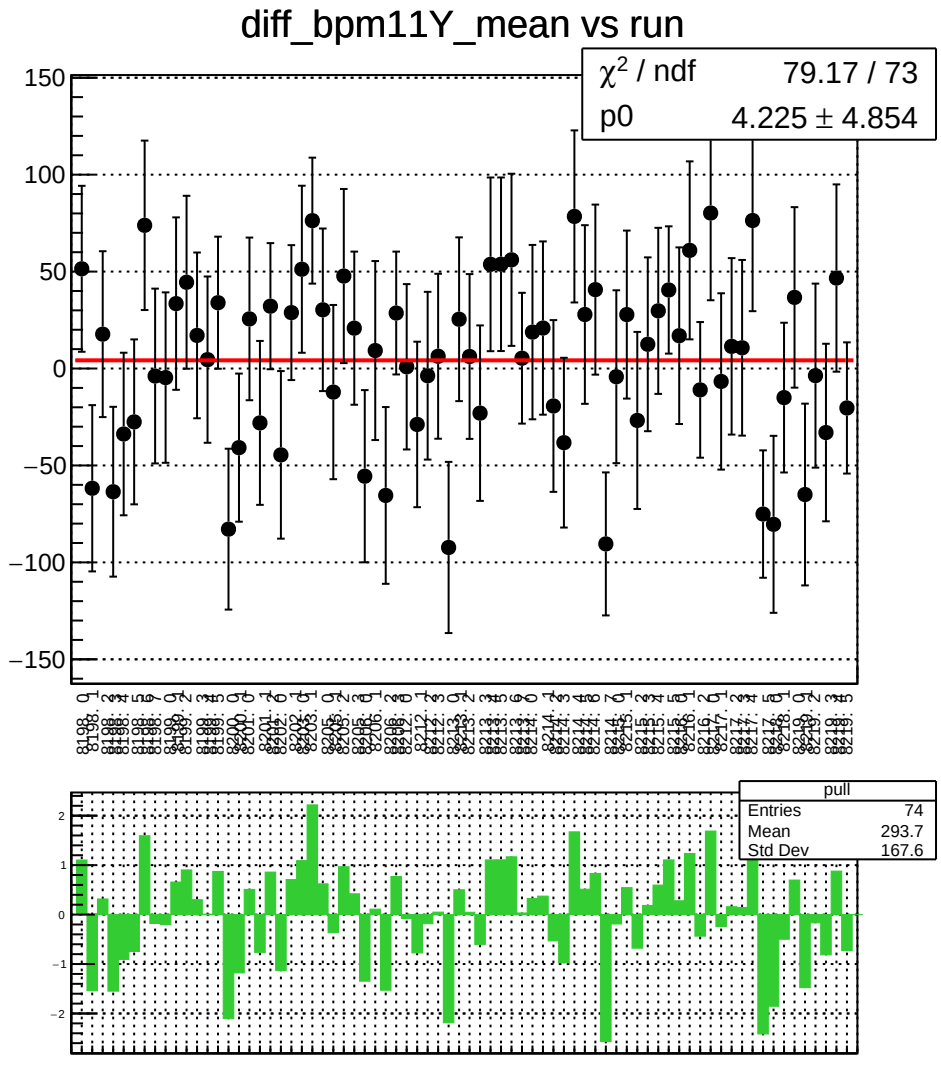

pull1D
Entries 74
Mean −0.02344
Std Dev 1.091
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

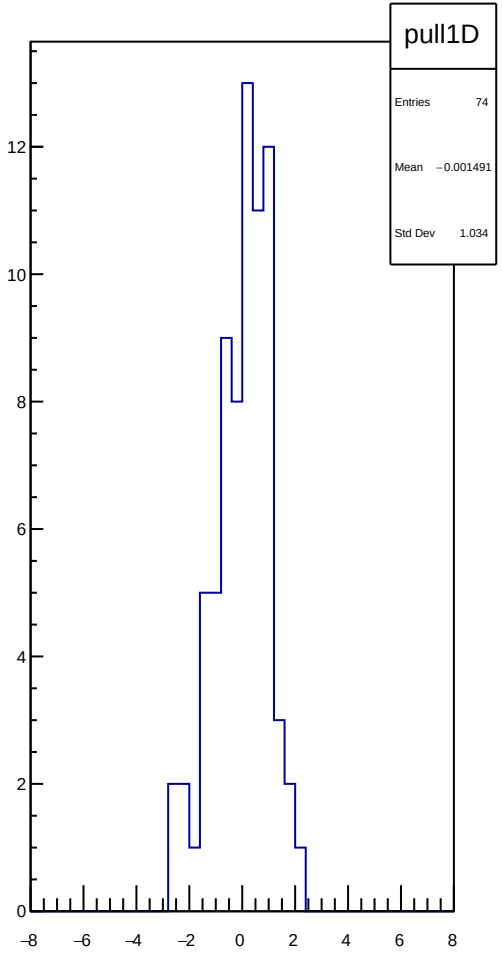

diff_bpm1Y_rms vs run
χ² / ndf 1.333e+04 / 73
p0 6288 ± 5.152
8000
7500
7000
6500
6000
5500

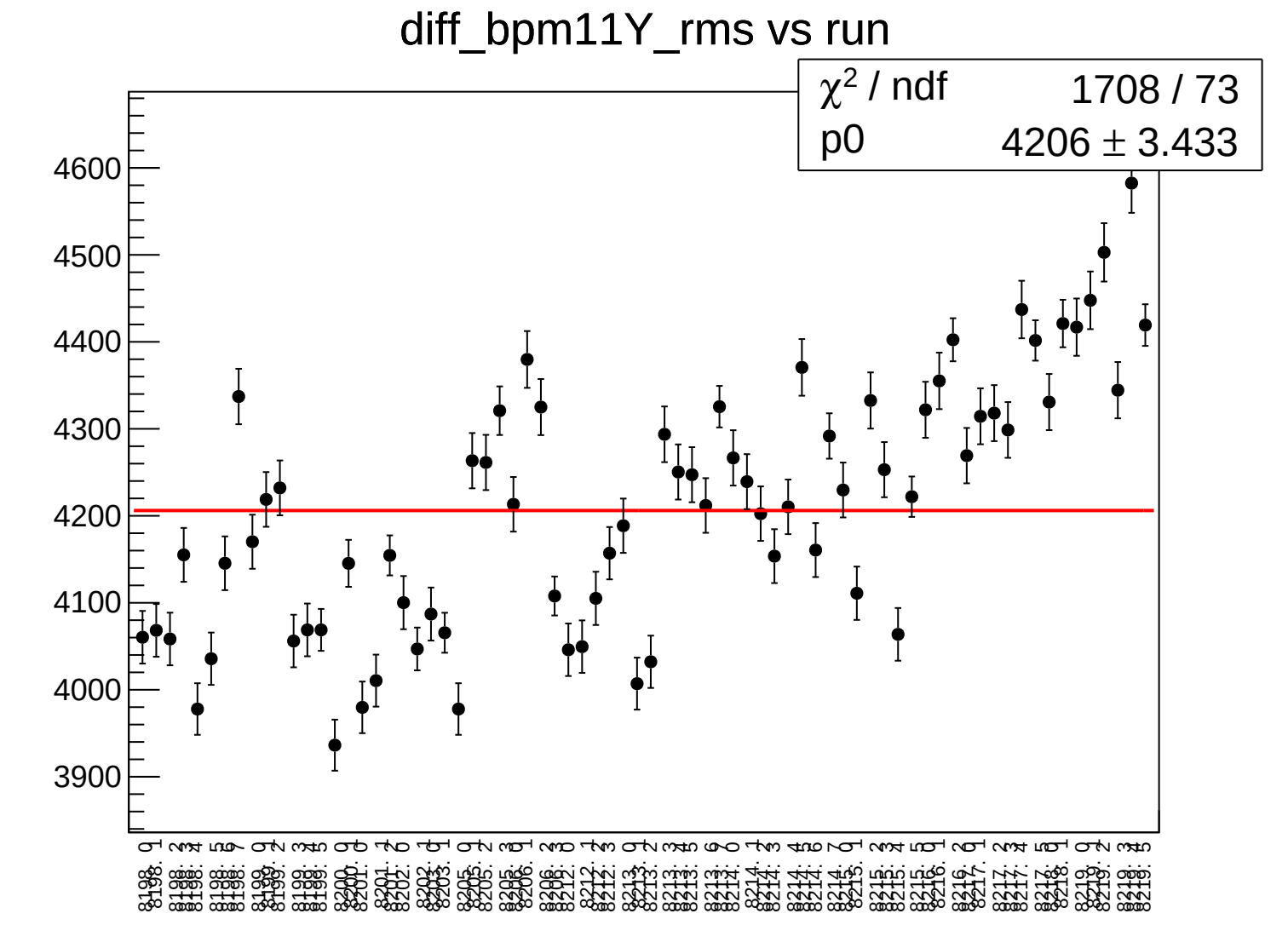

diff_bpm11X_mean vs run
χ^2 / ndf 82.62 / 73
p0 1.883 ± 20.15
pull
Entries 74
Mean 127.8
Std Dev 100.5

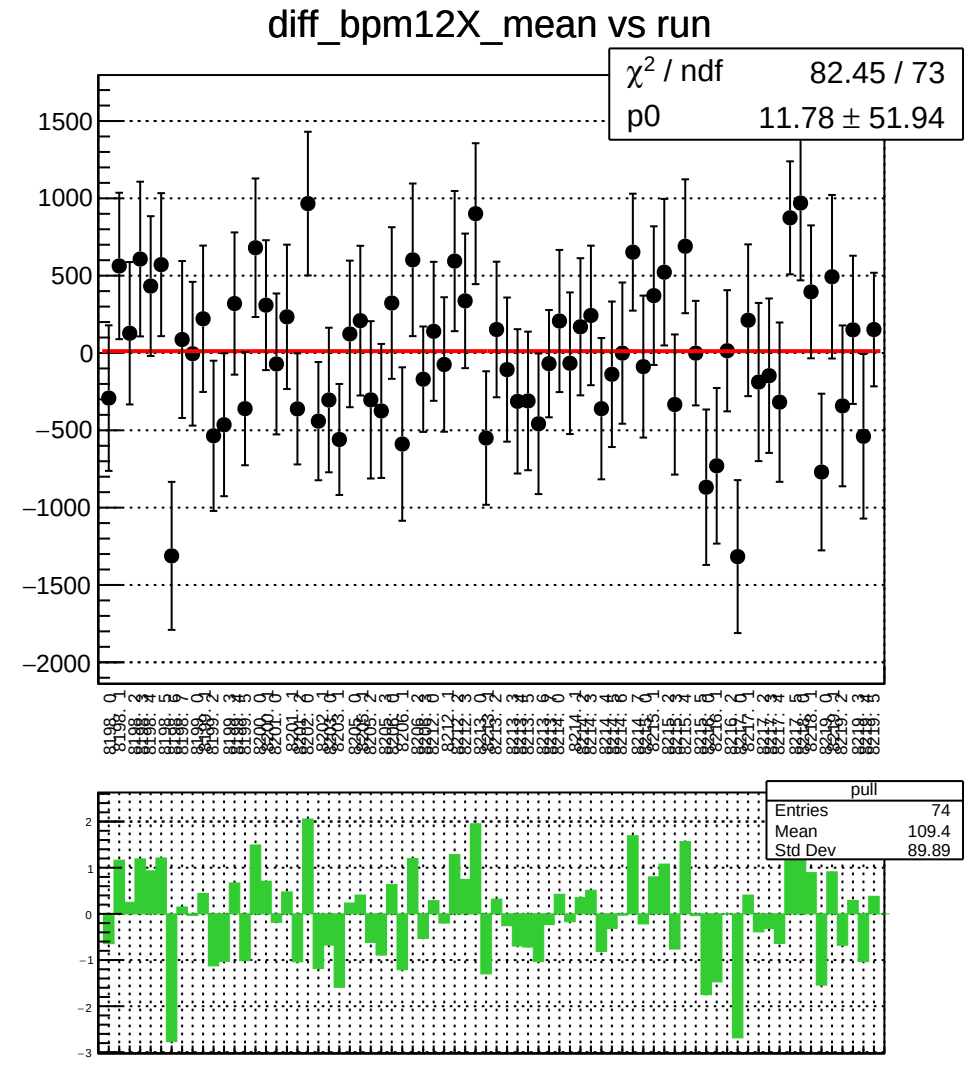

pull1D
Entries 74
Mean −0.007313
Std Dev 1.057

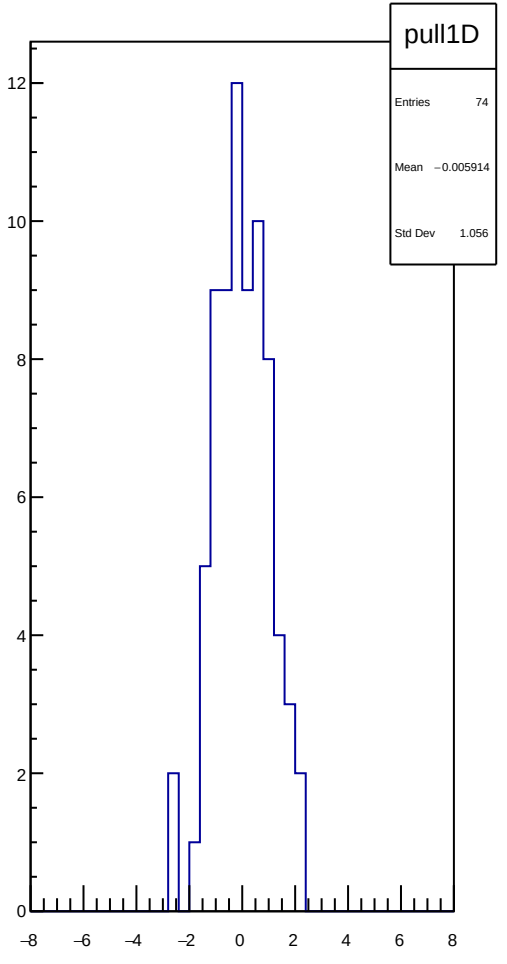

diff_bpm11X_rms vs run
χ² / ndf 3600 / 73
p0 1.745e+04 ± 14.25
19500
19000
18500
18000
17500
17000
16500
16000
15500

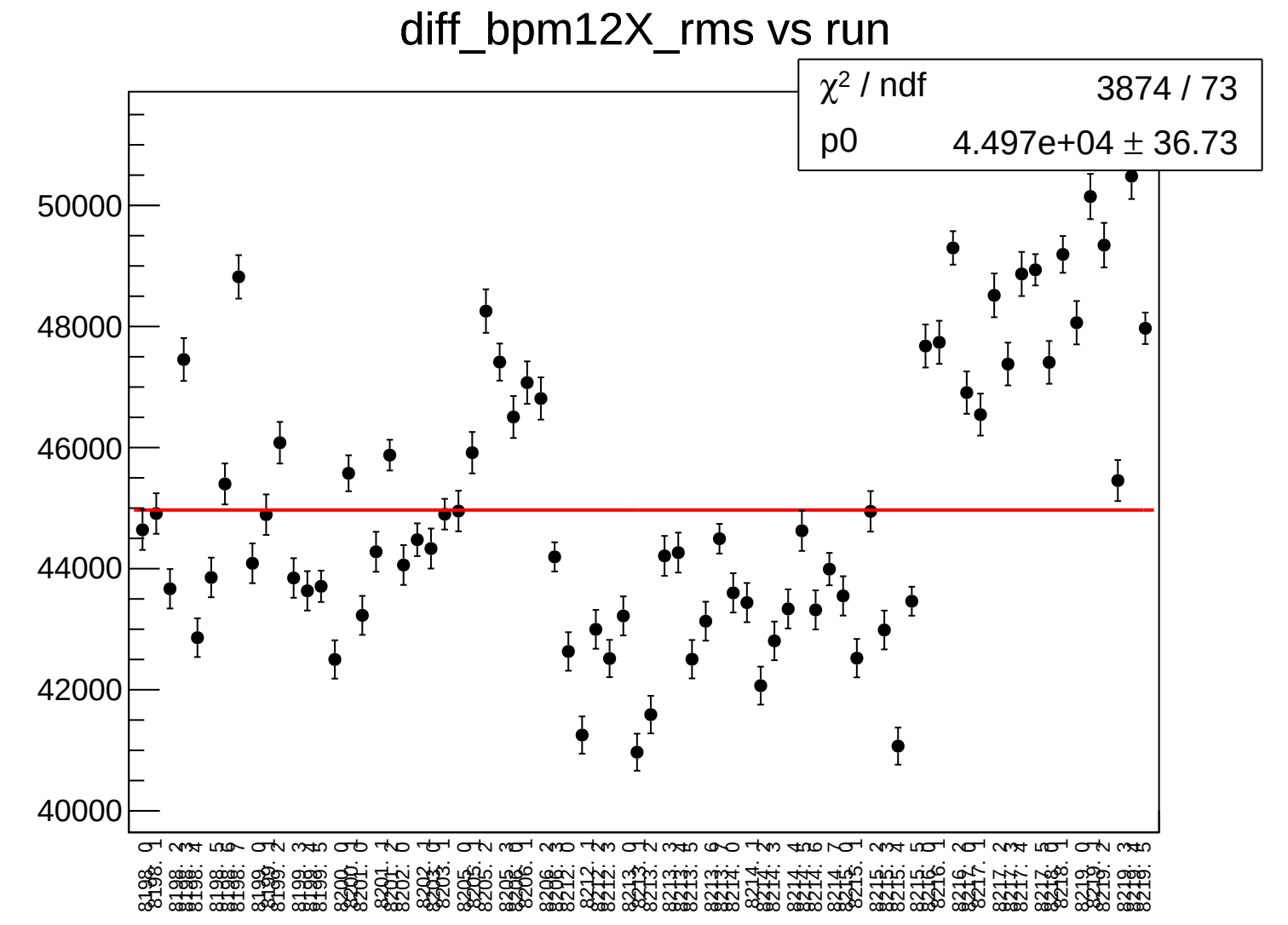

diff_bpm11Y_mean vs run
χ^2 / ndf 79.17 / 73
p0 4.225 ± 4.854
150
100
50
0
−50
−100
−150
pull
Entries 74
Mean 293.7
Std Dev 167.6
2
1
0
−1
−2

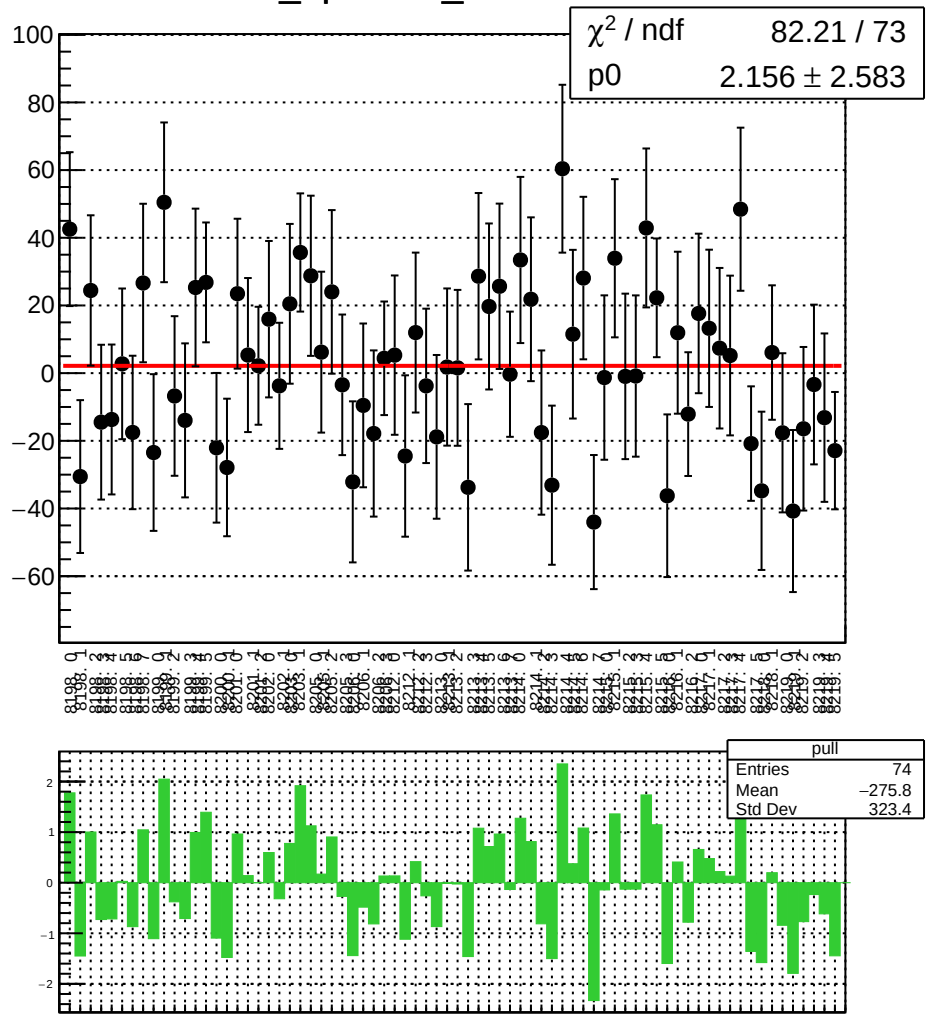

pull1D
Entries 74
Mean −0.001491
Std Dev 1.034
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

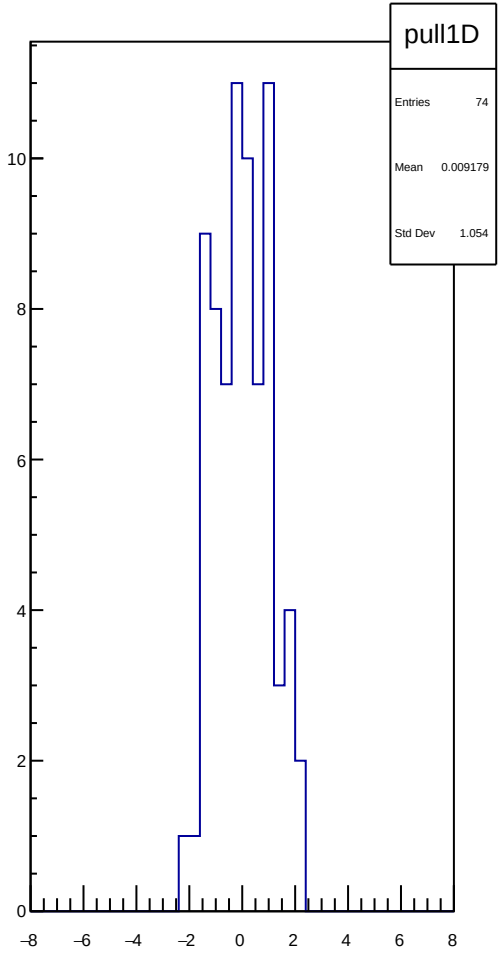

diff_bpm11Y_rms vs run
χ^2 / ndf 1708 / 73
p0 4206 ± 3.433
4600
4500
4400
4300
4200
4100
4000
3900

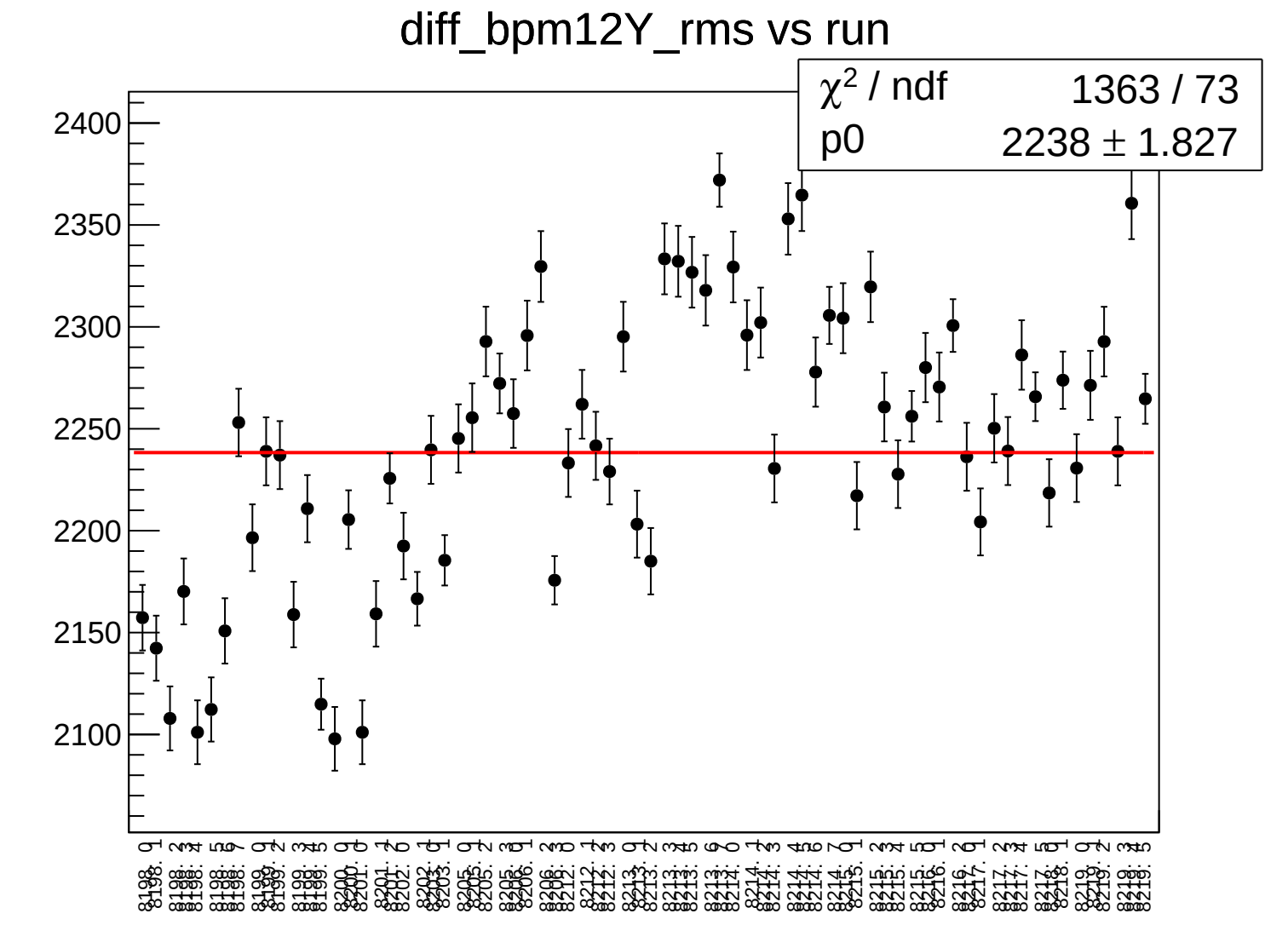

diff_bpm12X_mean vs run
χ² / ndf 82.45 / 73
p0 11.78 ± 51.94
pull
Entries 74
Mean 109.4
Std Dev 89.89

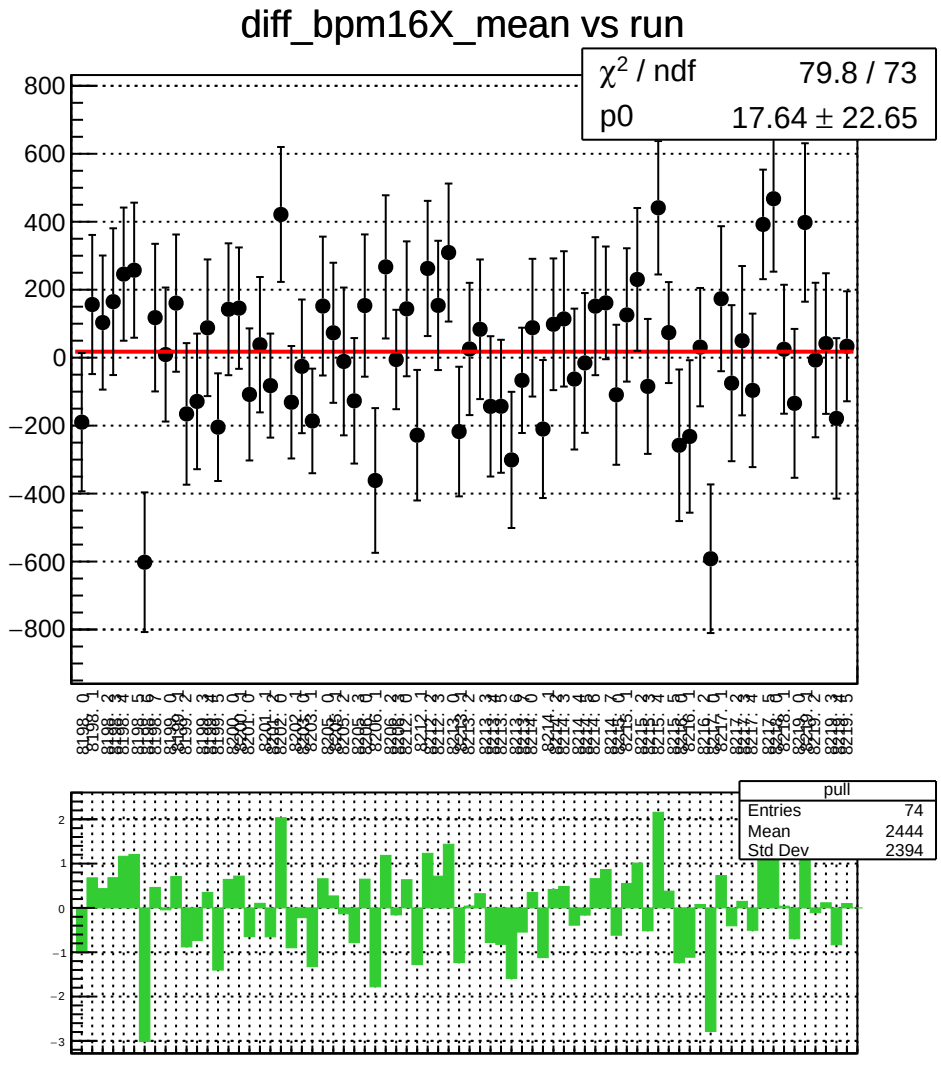

pull1D
Entries 74
Mean −0.005914
Std Dev 1.056

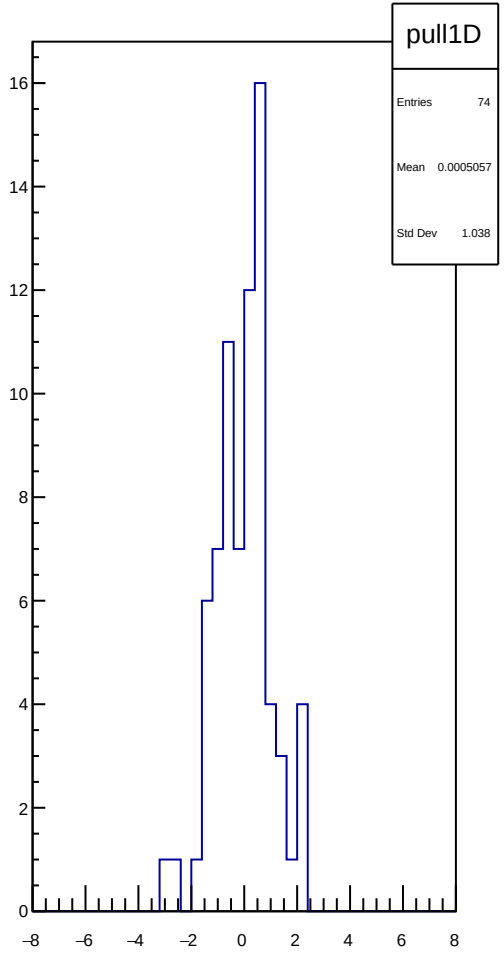

diff_bpm12X_rms vs run
χ² / ndf 3874 / 73
p0 4.497e+04 ± 36.73
50000
48000
46000
44000
42000
40000

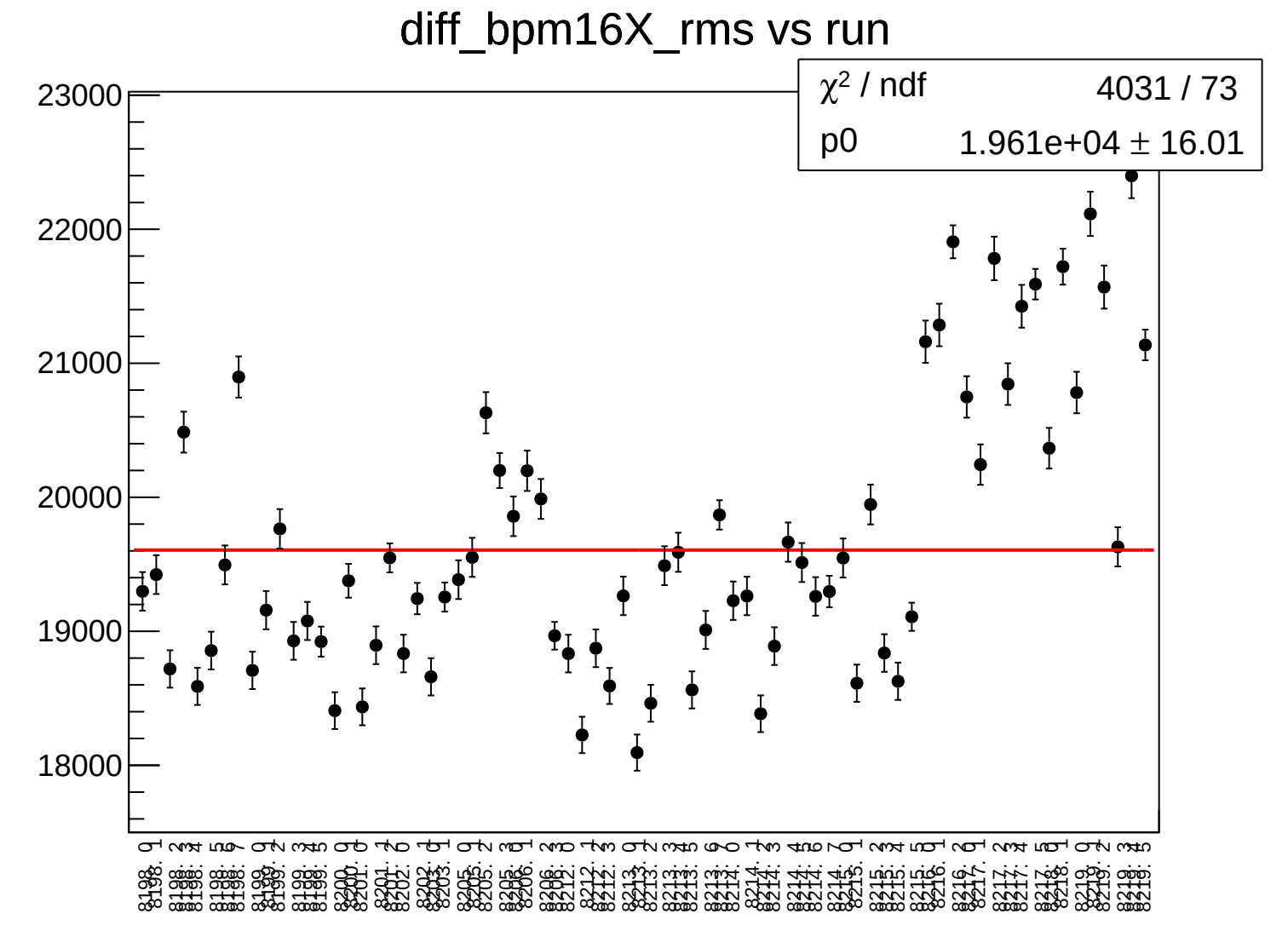

diff_bpm12Y_mean vs run
χ² / ndf 82.21 / 73
p0 2.156 ± 2.583
pull
Entries 74
Mean −275.8
Std Dev 323.4

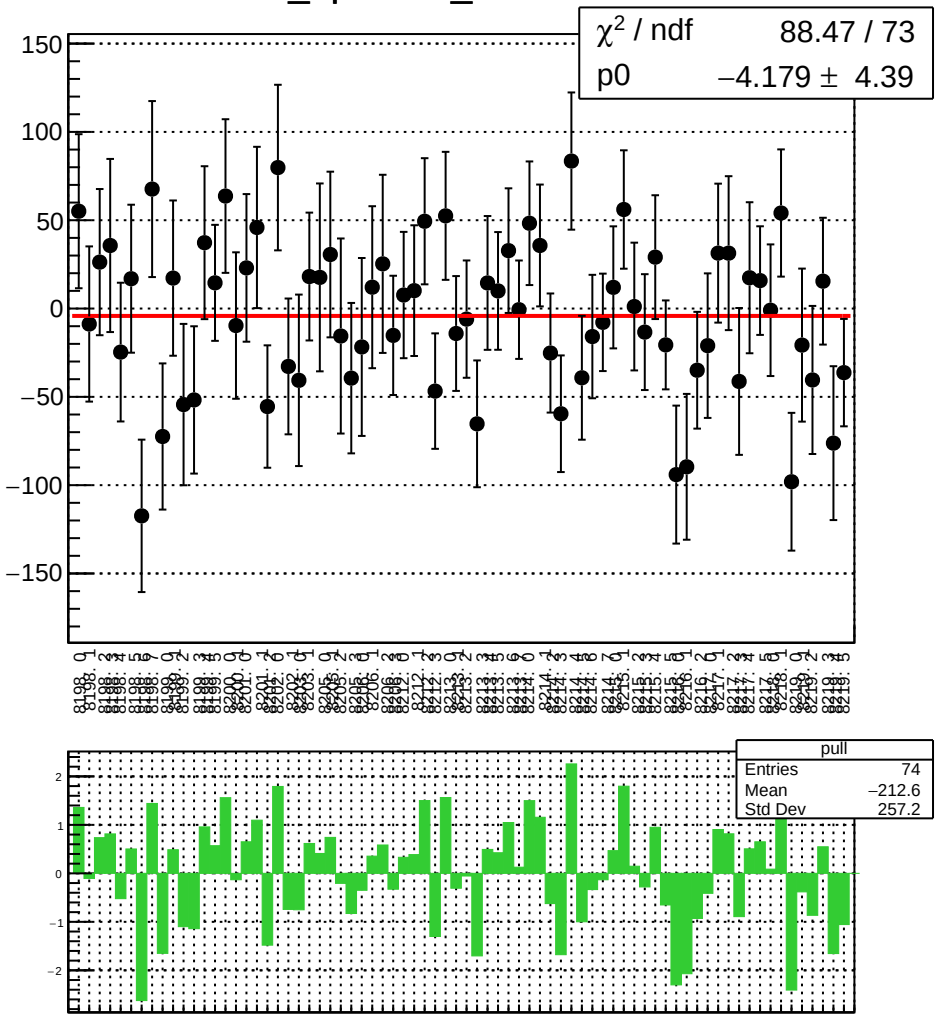

pull1D
Entries 74
Mean 0.009179
Std Dev 1.054

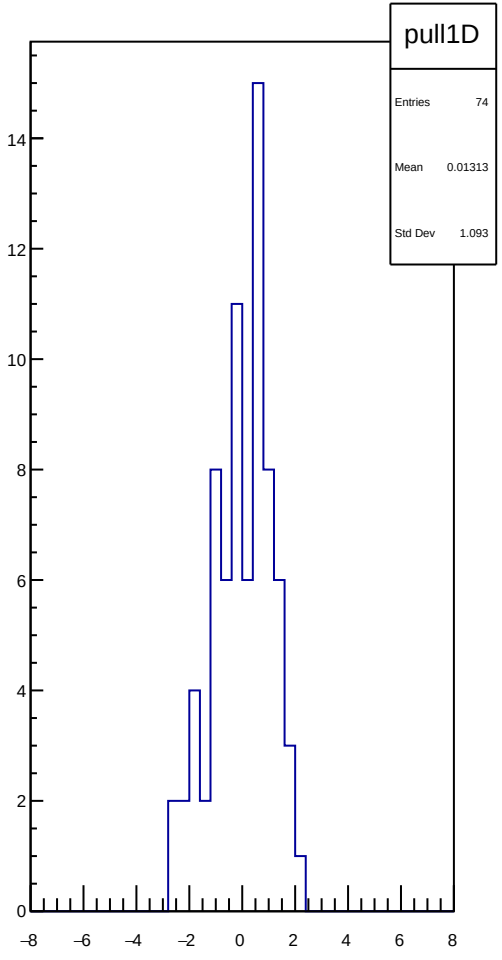

diff_bpm12Y_rms vs run
χ² / ndf 1363 / 73
p0 2238 ± 1.827
2400
2350
2300
2250
2200
2150
2100

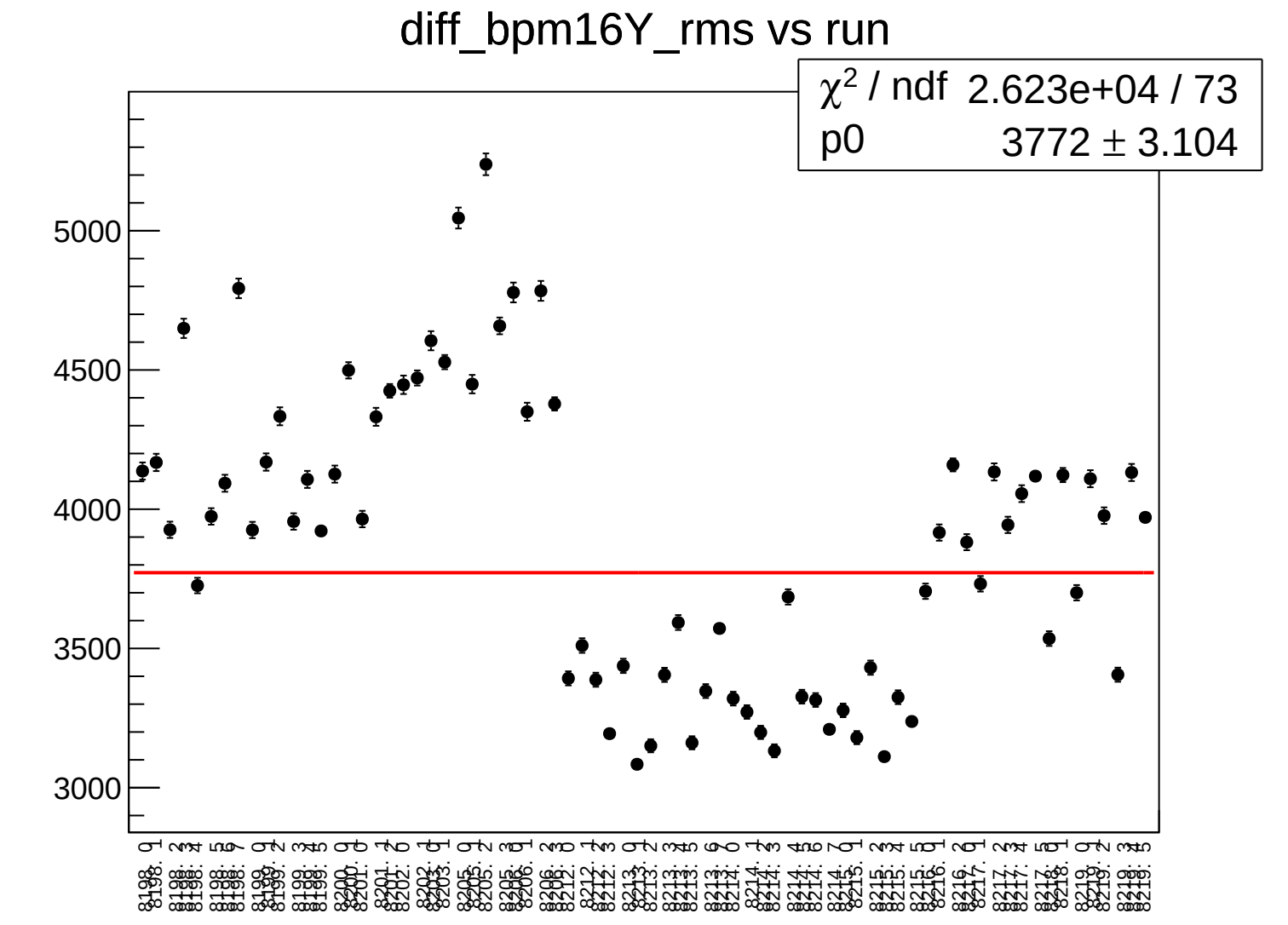

diff_bpm16X_mean vs run
χ^2 / ndf 79.8 / 73
p0 17.64 ± 22.65
pull
Entries 74
Mean 2444
Std Dev 2394

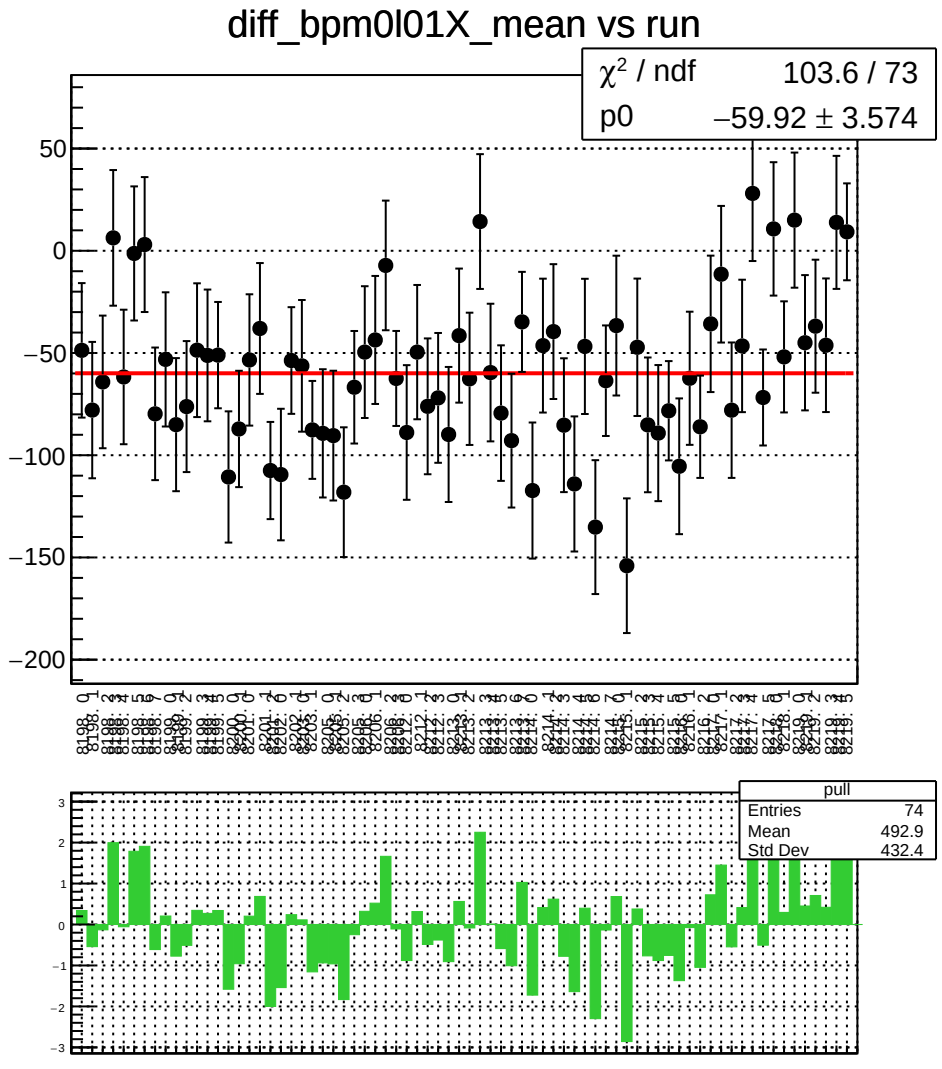

pull1D
Entries 74
Mean 0.0005057
Std Dev 1.038

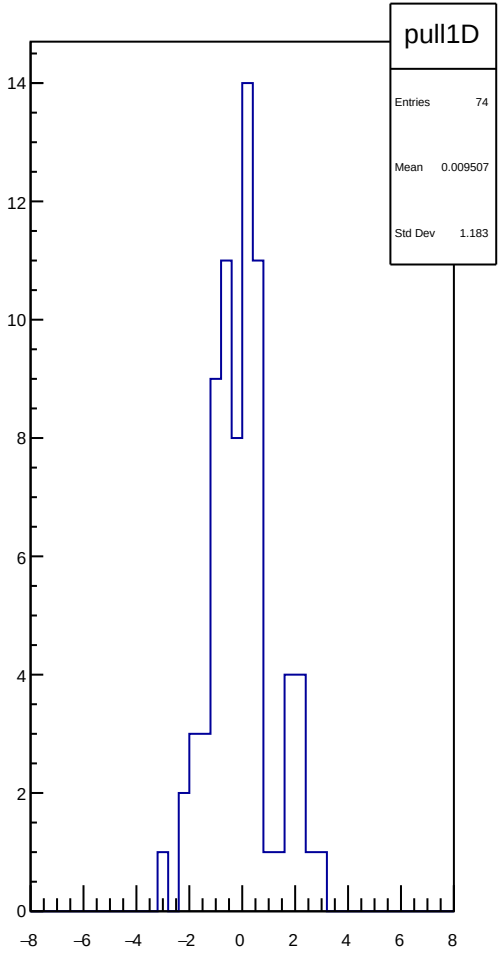

diff_bpm16X_rms vs run
χ² / ndf 4031 / 73
p0 1.961e+04 ± 16.01
23000
22000
21000
20000
19000
18000

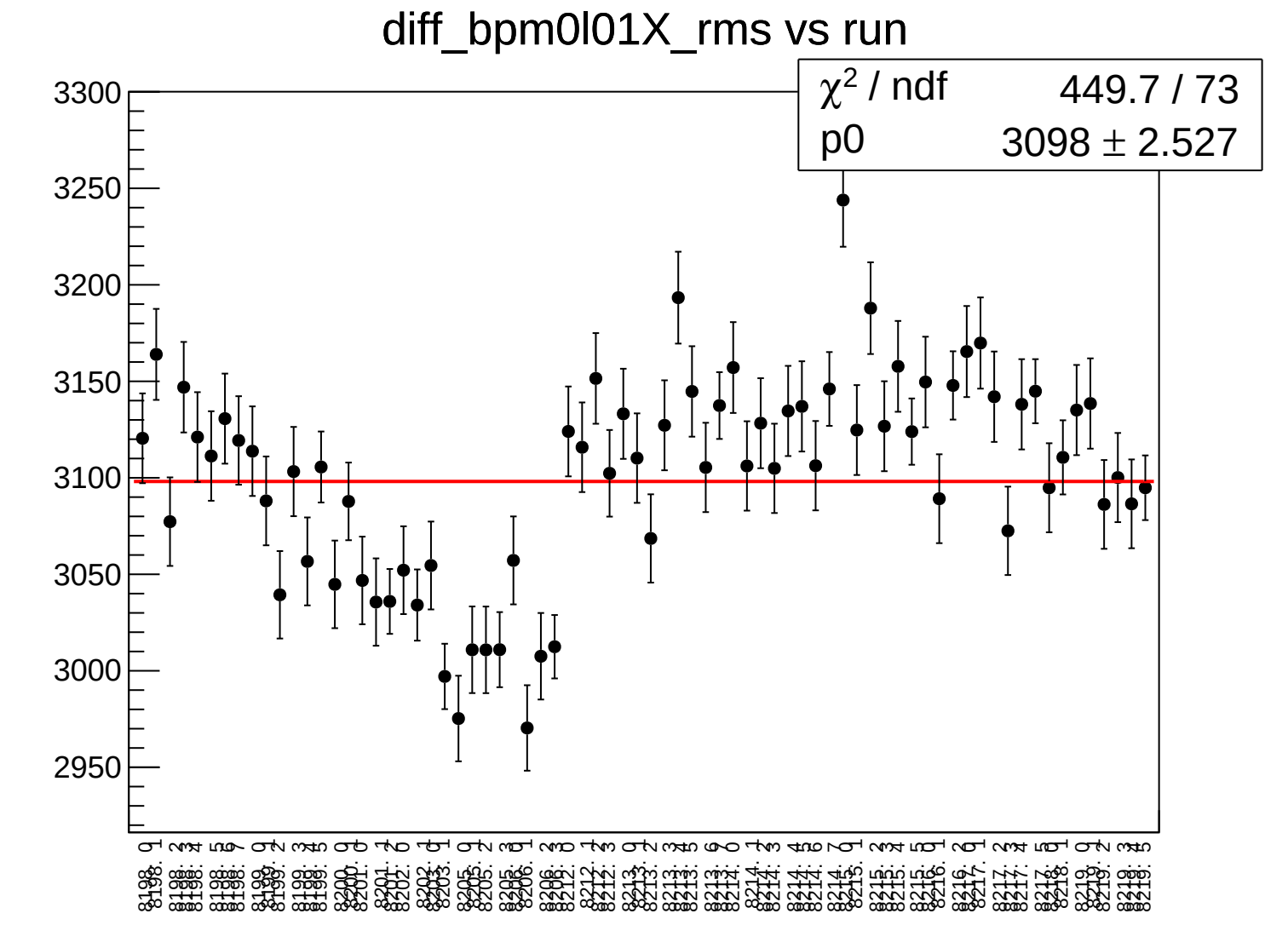

diff_bpm16Y_mean vs run
χ² / ndf 88.47 / 73
p0 −4.179 ± 4.39
pull
Entries 74
Mean −212.6
Std Dev 257.2

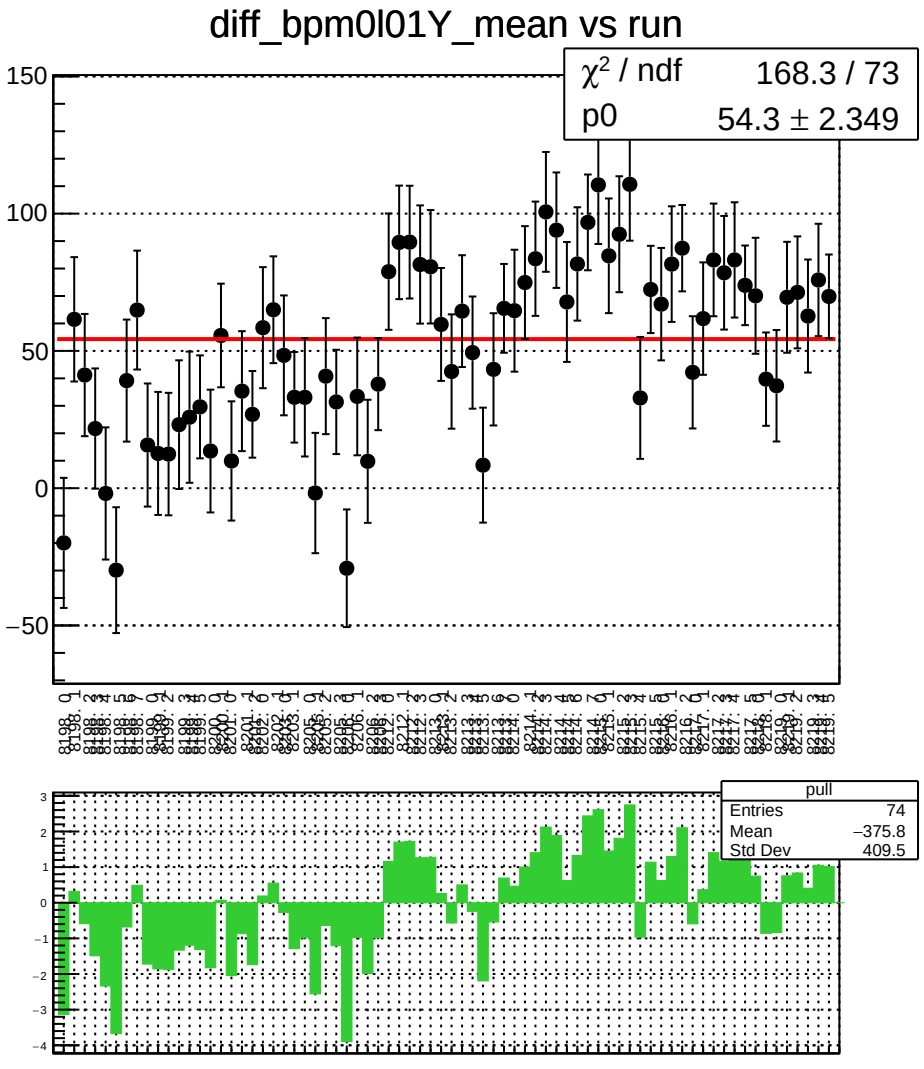

pull1D
Entries 74
Mean 0.01313
Std Dev 1.093

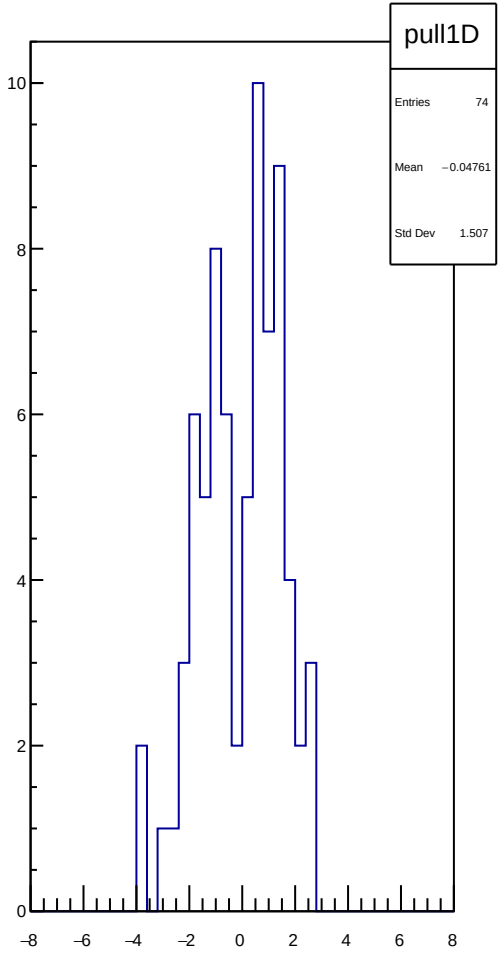

diff_bpm16Y_rms vs run
χ² / ndf 2.623e+04 / 73
p0 3772 ± 3.104
5000
4500
4000
3500
3000

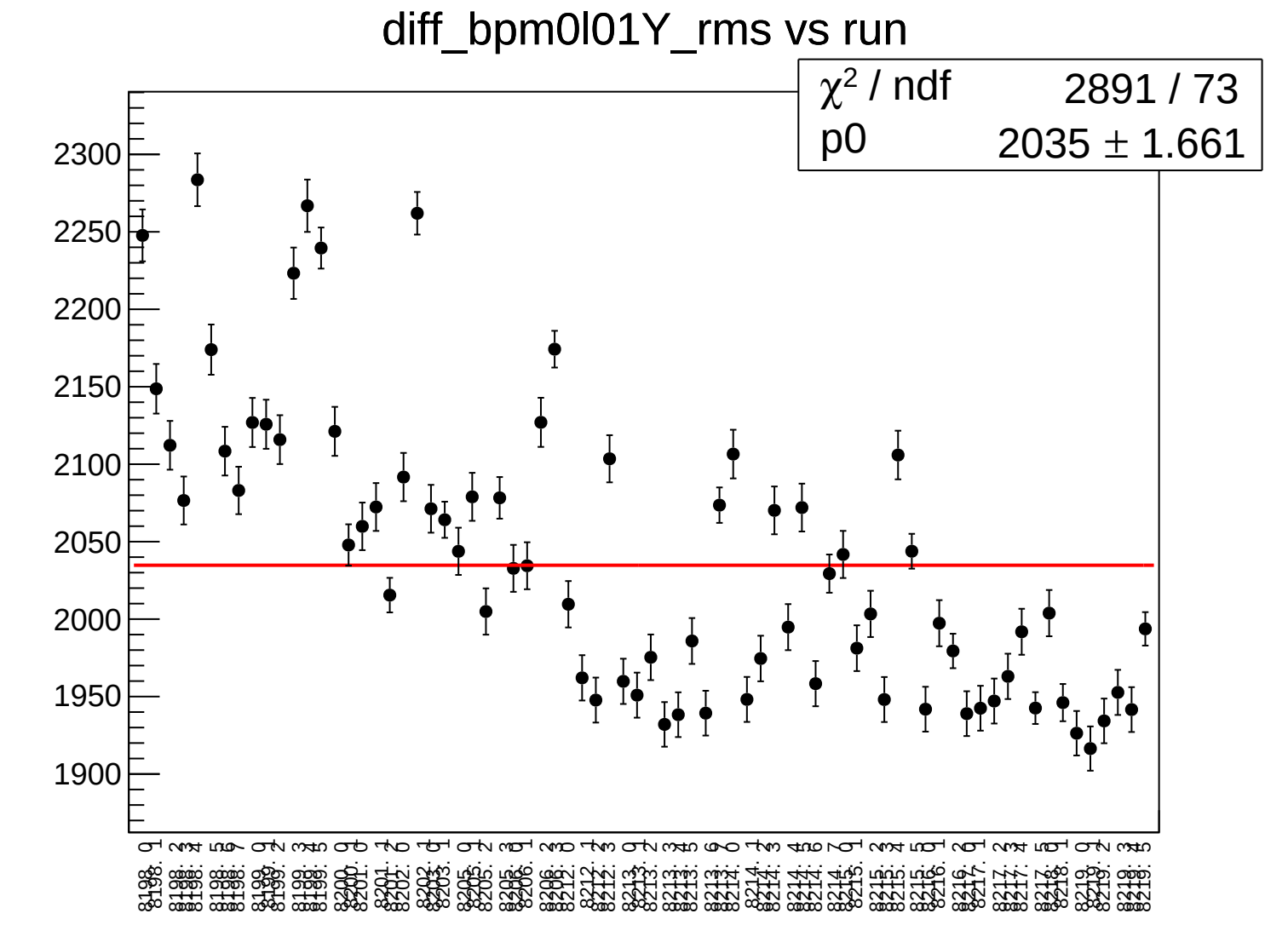

diff_bpm0l01X_mean vs run
χ² / ndf 103.6 / 73
p0 −59.92 ± 3.574
pull
Entries 74
Mean 492.9
Std Dev 432.4

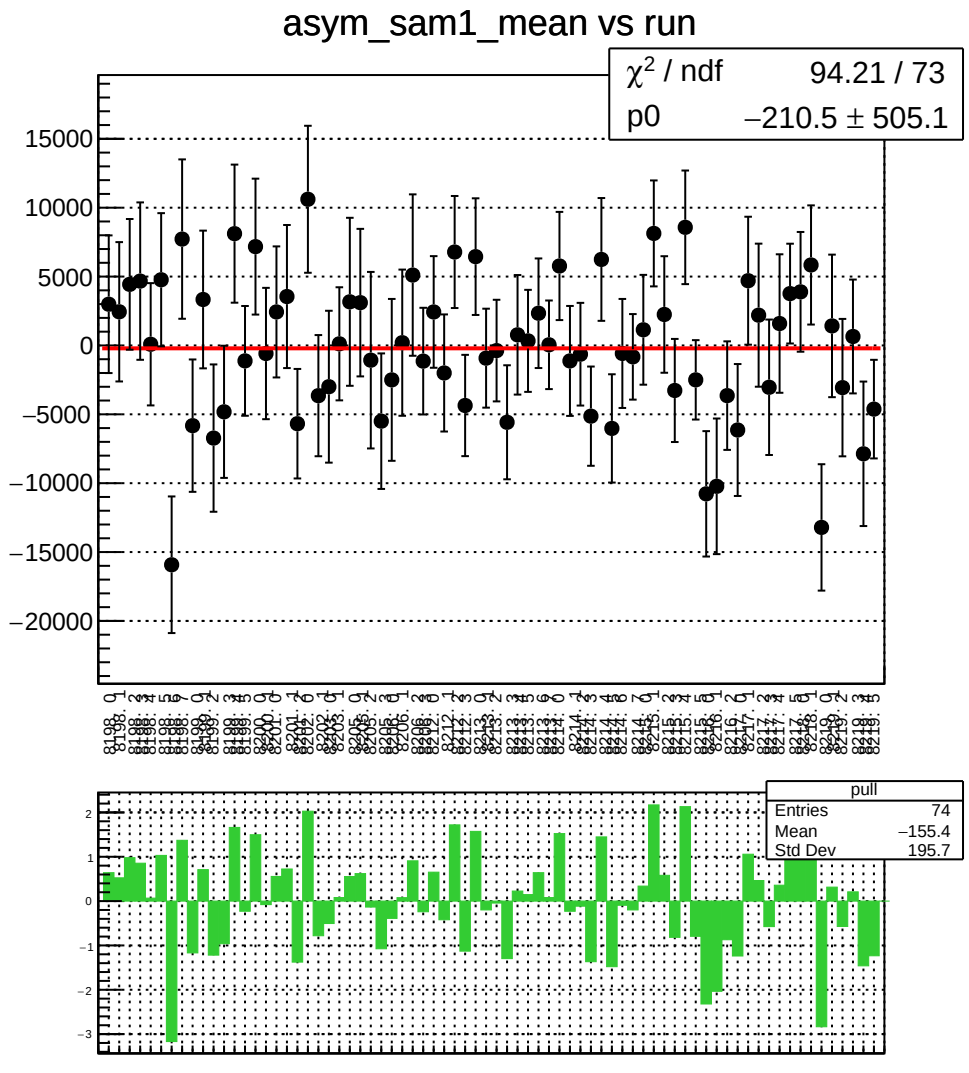

pull1D
Entries 74
Mean 0.009507
Std Dev 1.183

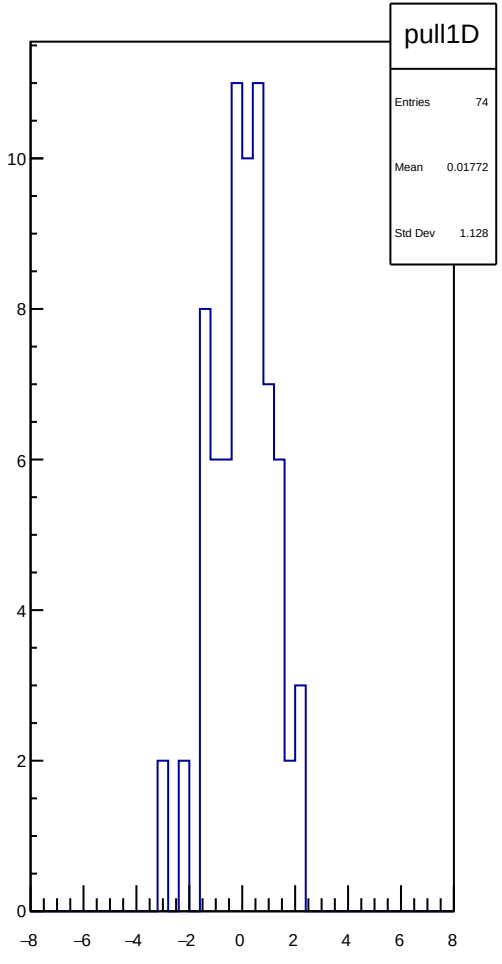

diff_bpm0l01X_rms vs run
χ² / ndf 449.7 / 73
p0 3098 ± 2.527
3300
3250
3200
3150
3100
3050
3000
2950

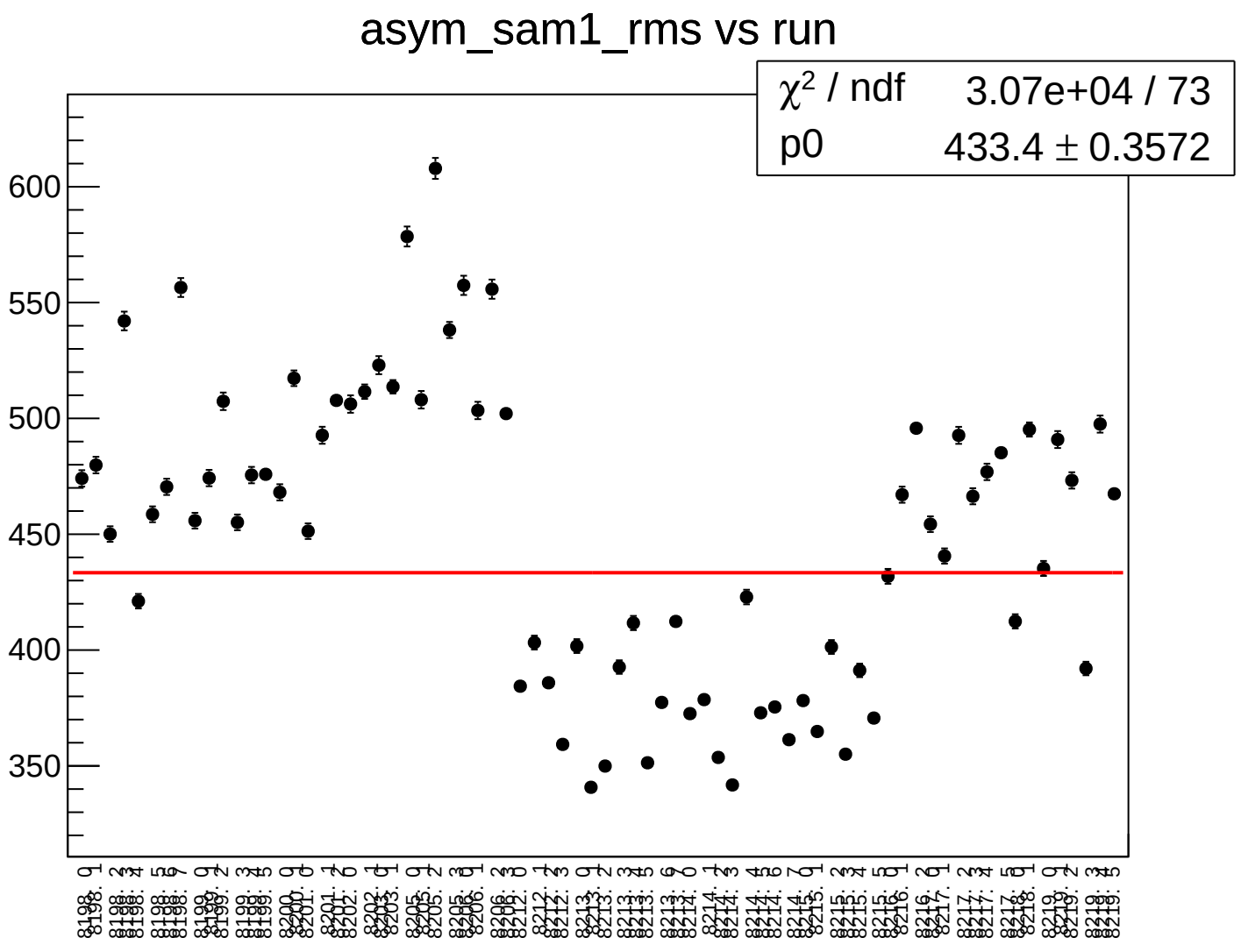

diff_bpm0l01Y_mean vs run
χ^2 / ndf 168.3 / 73
p0 54.3 ± 2.349
150
100
50
0
−50
pull
Entries 74
Mean −375.8
Std Dev 409.5
3
2
1
0
−1
−2
−3
−4

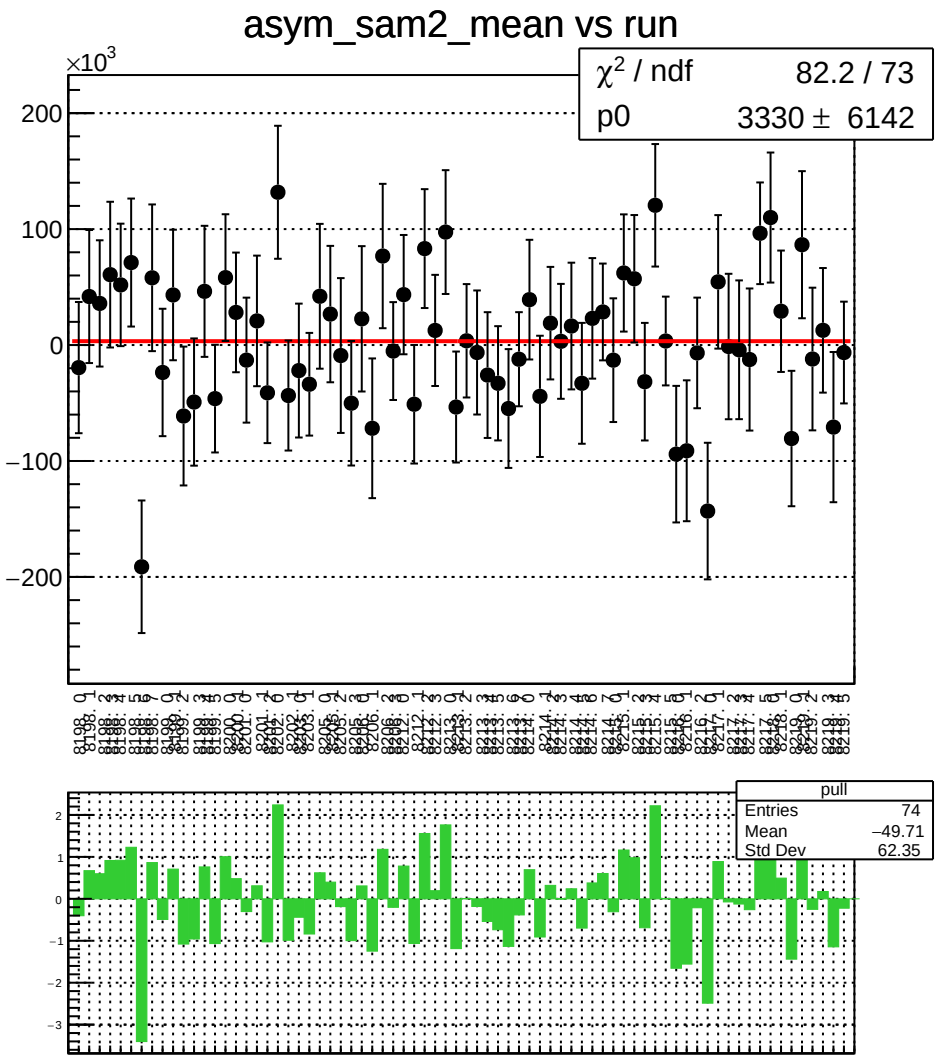

pull1D
Entries 74
Mean −0.04761
Std Dev 1.507
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

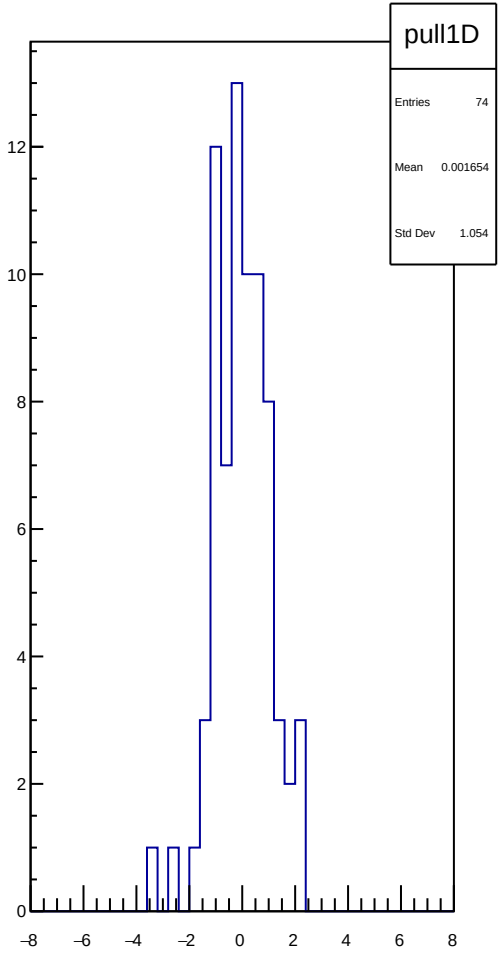

diff_bpm0l01Y_rms vs run
χ² / ndf 2891 / 73
p0 2035 ± 1.661
2300
2250
2200
2150
2100
2050
2000
1950
1900

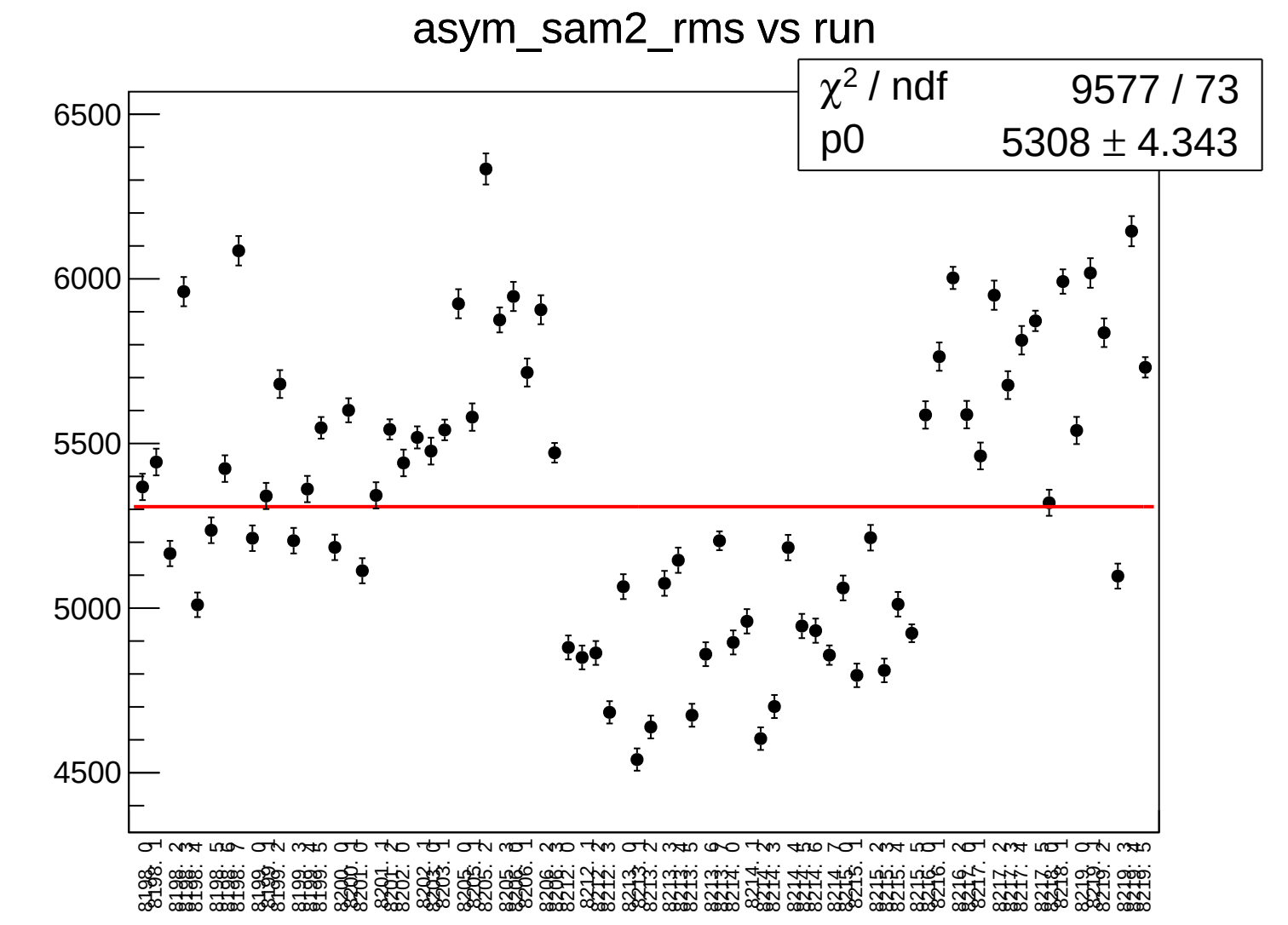

asym_sam1_mean vs run
χ² / ndf 94.21 / 73
p0 −210.5 ± 505.1
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 74
Mean −155.4
Std Dev 195.7
2
1
0
−1
−2
−3

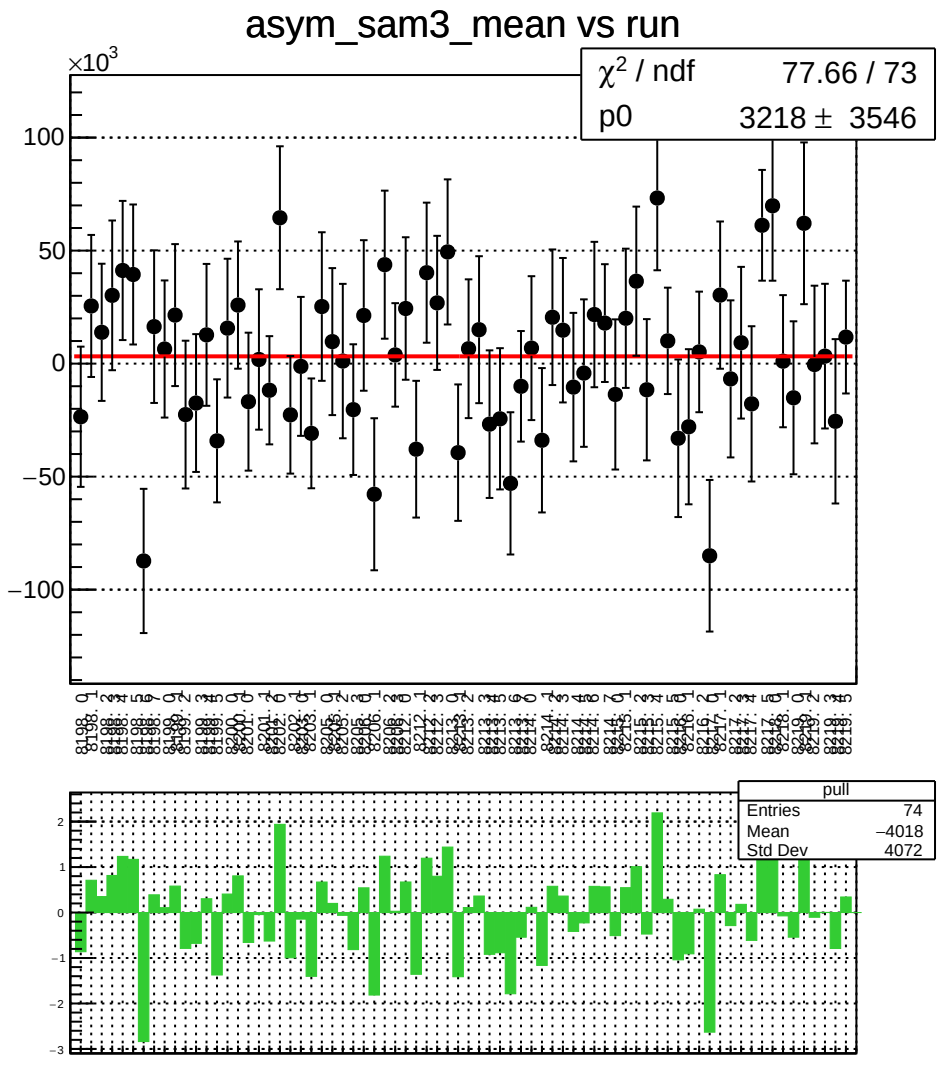

pull1D
Entries 74
Mean 0.01772
Std Dev 1.128
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

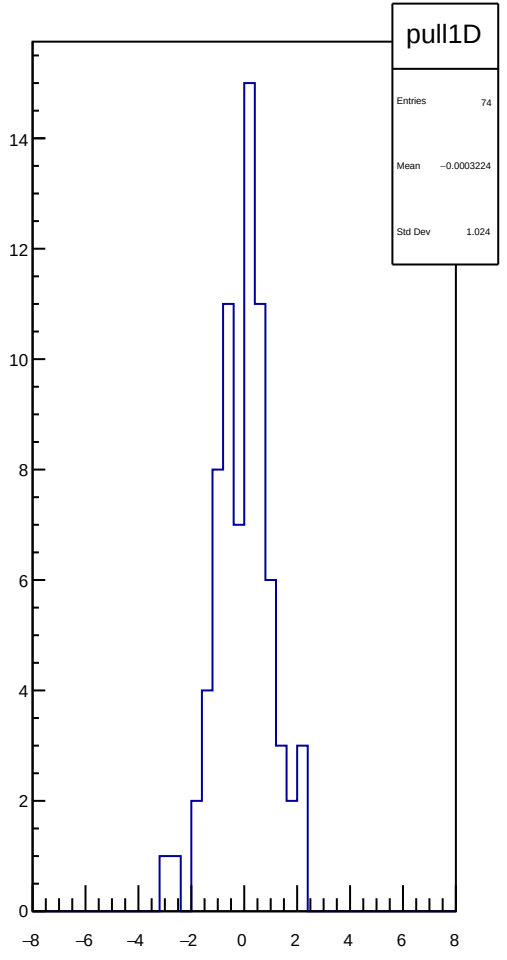

asym_sam1_rms vs run
χ² / ndf 3.07e+04 / 73
p0 433.4 ± 0.3572
600
550
500
450
400
350

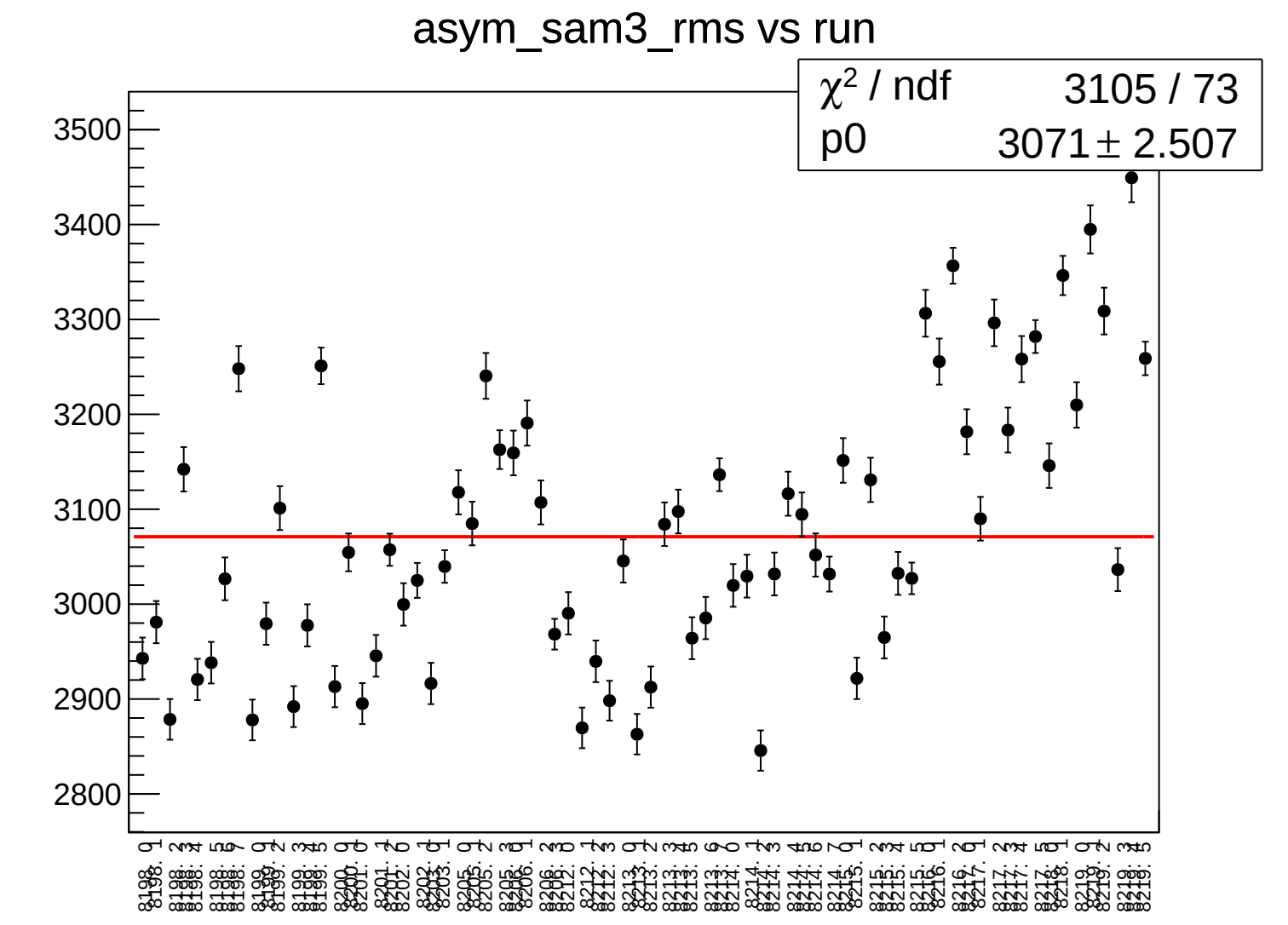

asym_sam2_mean vs run
×10^3
χ² / ndf 82.2 / 73
p0 3330 ± 6142
200
100
0
−100
−200
pull
Entries 74
Mean −49.71
Std Dev 62.35
2
1
0
−1
−2
−3

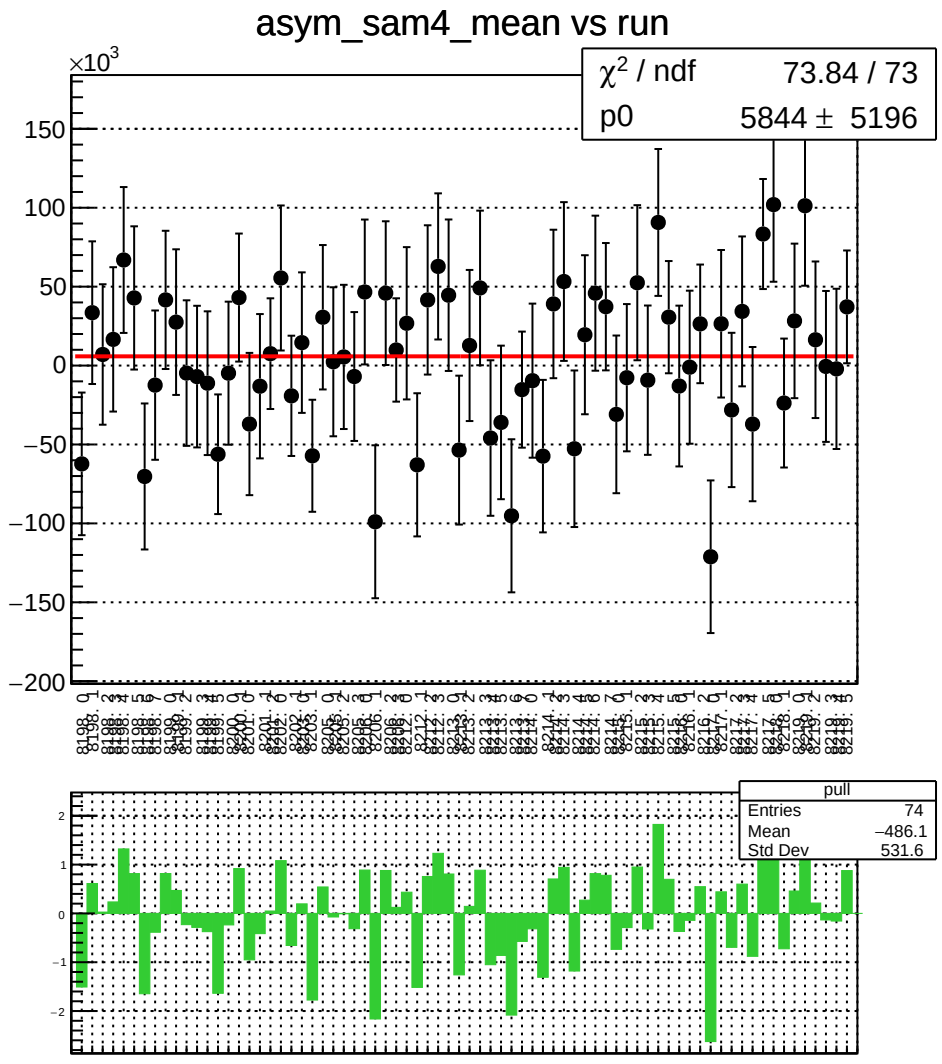

pull1D
Entries 74
Mean 0.001654
Std Dev 1.054
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

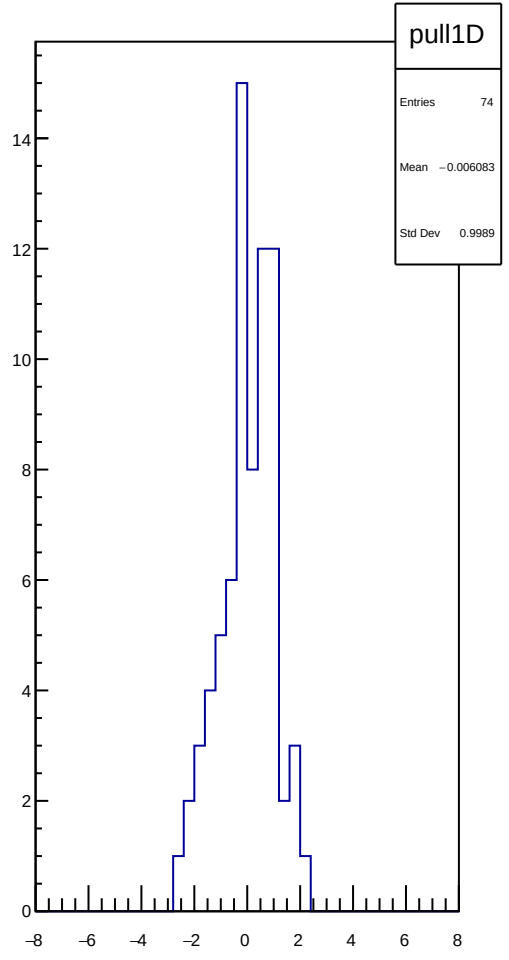

asym_sam2_rms vs run
χ² / ndf 9577 / 73
p0 5308 ± 4.343
6500
6000
5500
5000
4500

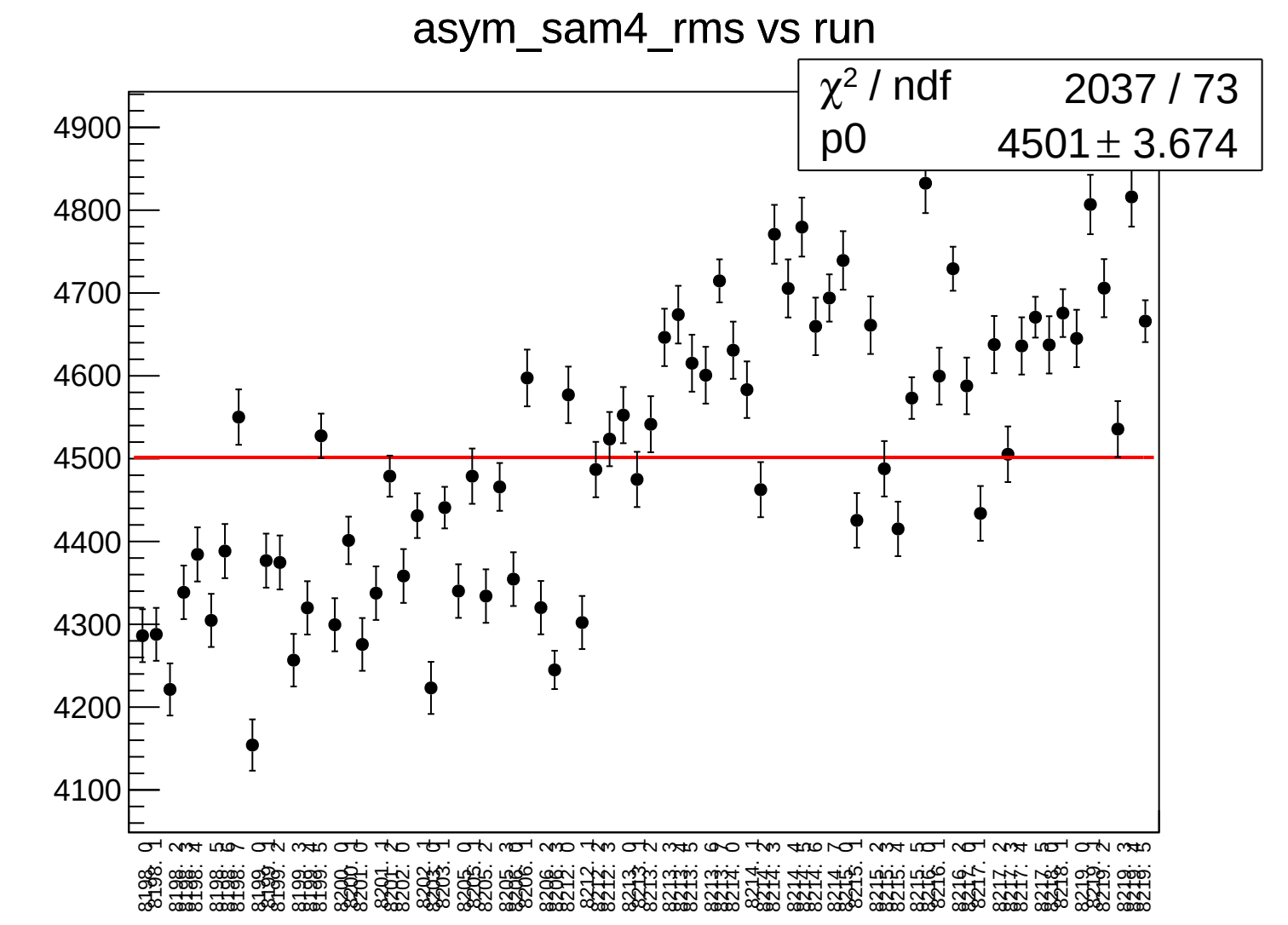

asym_sam3_mean vs run
×10^3
χ² / ndf 77.66 / 73
p0 3218 ± 3546
100
50
0
−50
−100
pull
Entries 74
Mean −4018
Std Dev 4072
2
1
0
−1
−2
−3

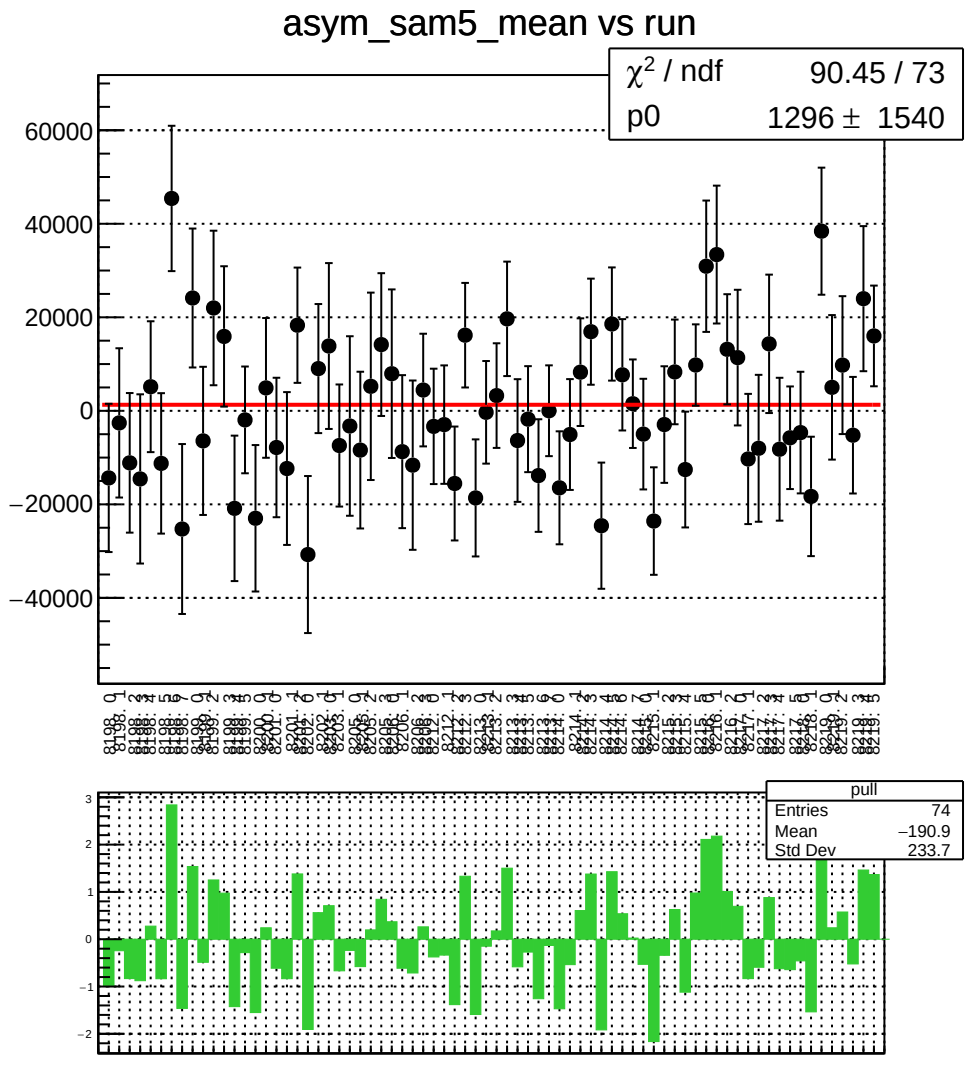

pull1D
Entries 74
Mean −0.0003224
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

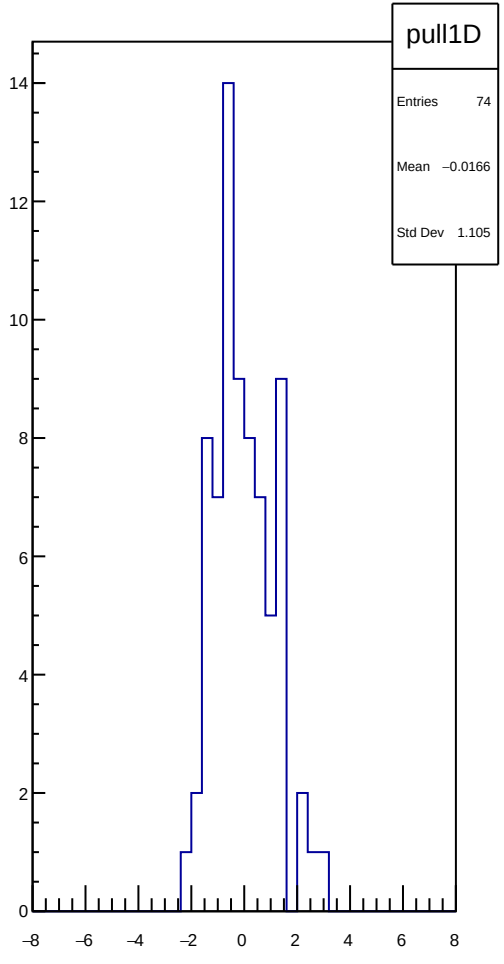

asym_sam3_rms vs run
χ² / ndf 3105 / 73
p0 3071 ± 2.507
3500
3400
3300
3200
3100
3000
2900
2800

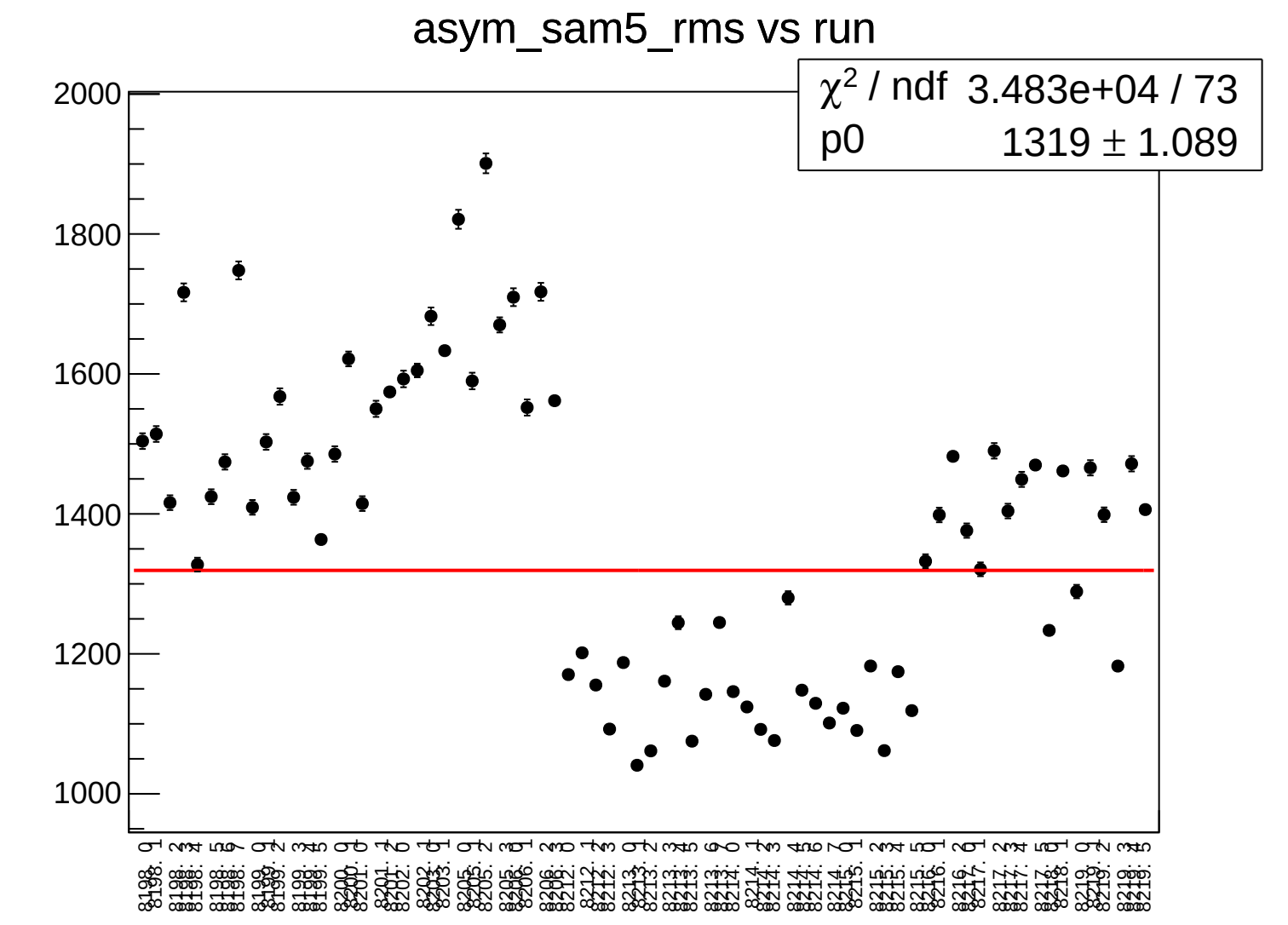

asym_sam4_mean vs run
×10^3
χ² / ndf 73.84 / 73
p0 5844 ± 5196
150
100
50
0
−50
−100
−150
−200
pull
Entries 74
Mean −486.1
Std Dev 531.6
2
1
0
−1
−2

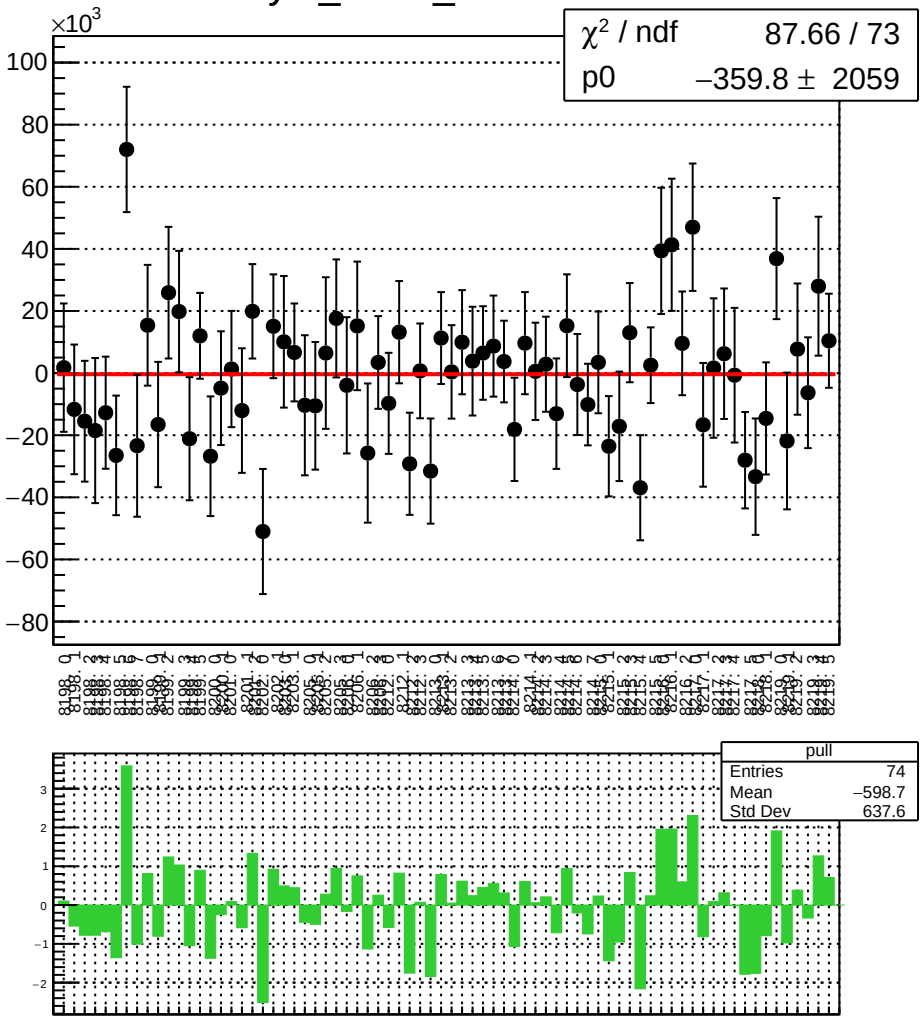

pull1D
Entries 74
Mean −0.006083
Std Dev 0.9989
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

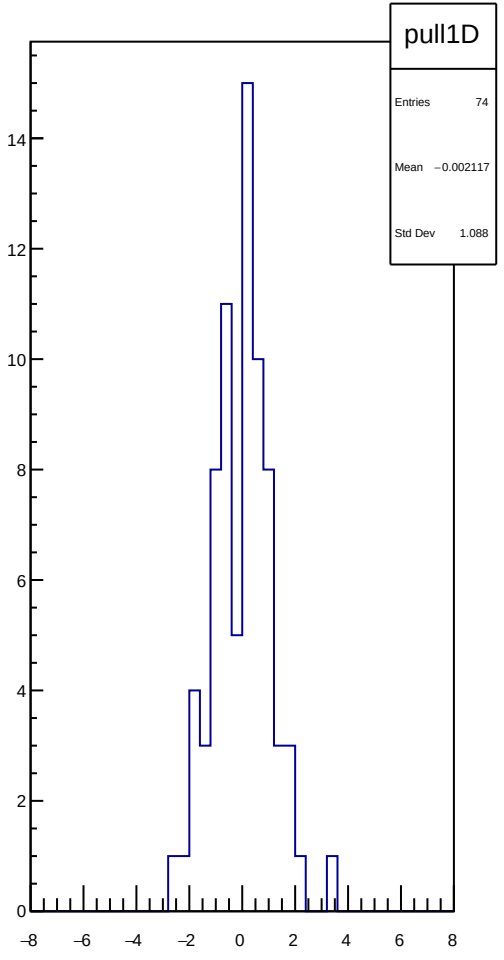

asym_sam4_rms vs run
χ² / ndf 2037 / 73
p0 4501 ± 3.674
4900
4800
4700
4600
4500
4400
4300
4200
4100

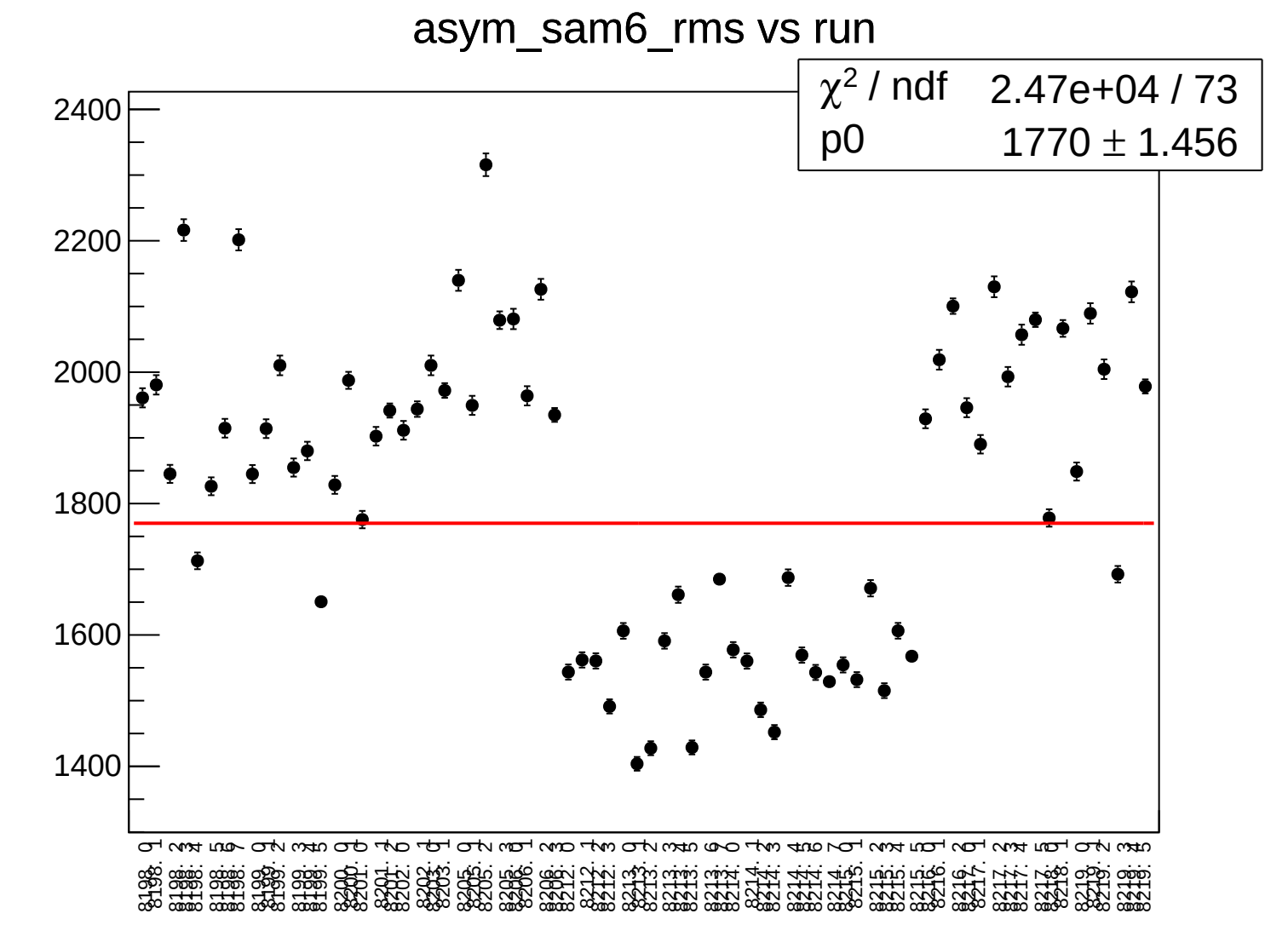

asym_sam5_mean vs run
χ² / ndf 90.45 / 73
p0 1296 ± 1540
60000
40000
20000
0
−20000
−40000
pull
Entries 74
Mean −190.9
Std Dev 233.7
3
2
1
0
−1
−2

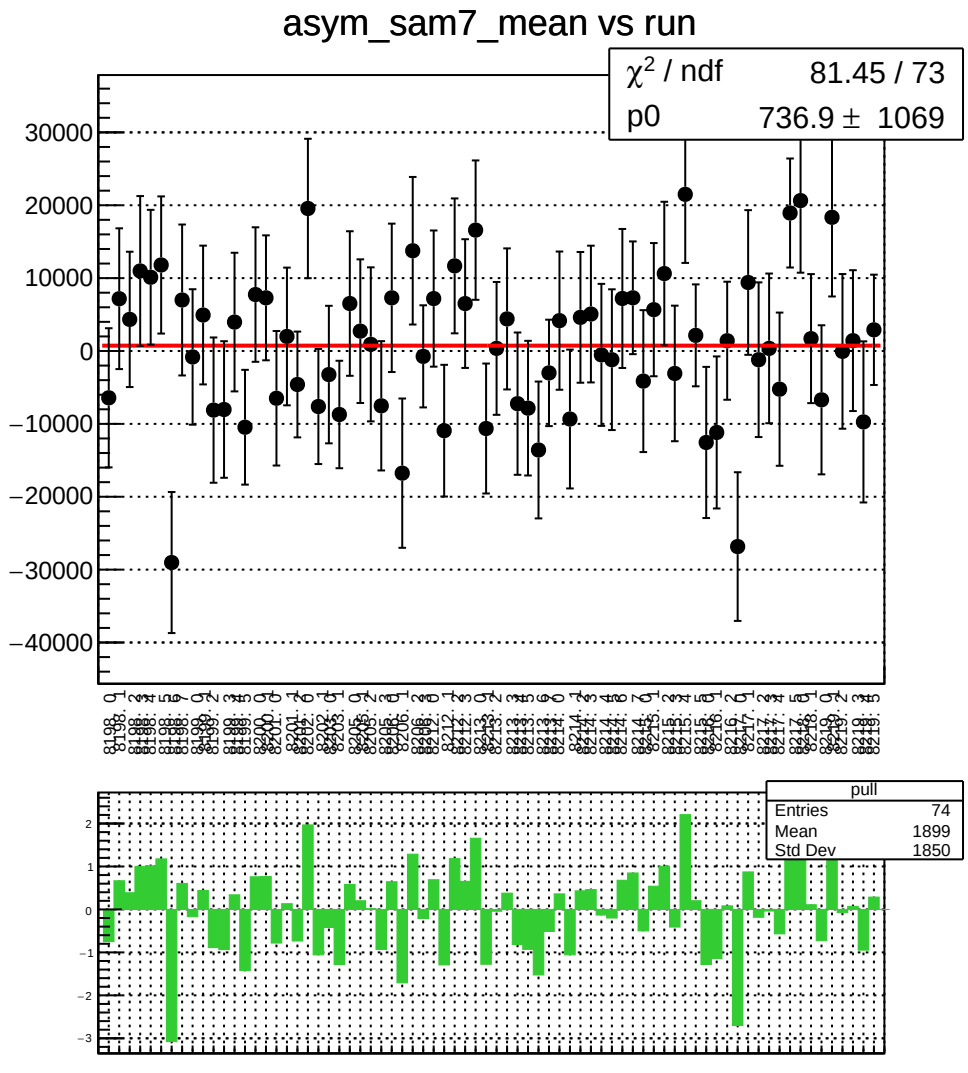

pull1D
Entries 74
Mean −0.0166
Std Dev 1.105
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

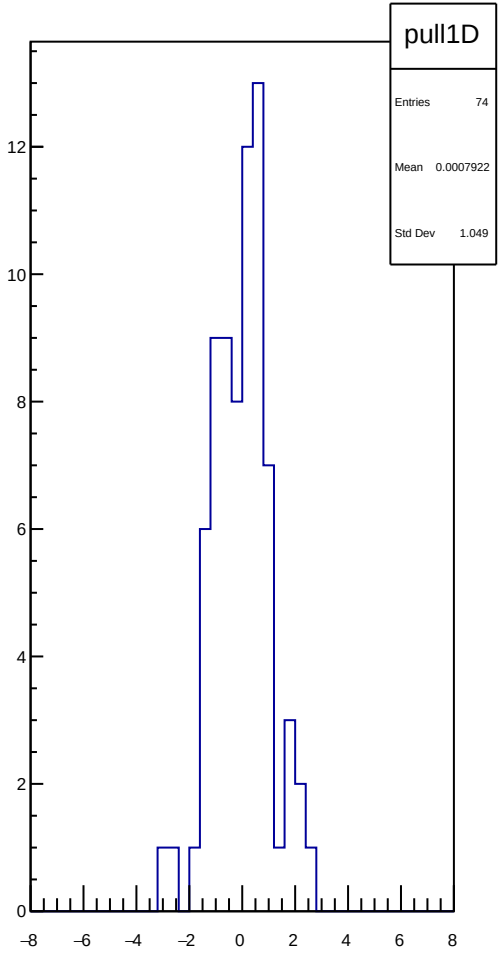

asym_sam5_rms vs run
χ² / ndf 3.483e+04 / 73
p0 1319 ± 1.089
2000
1800
1600
1400
1200
1000

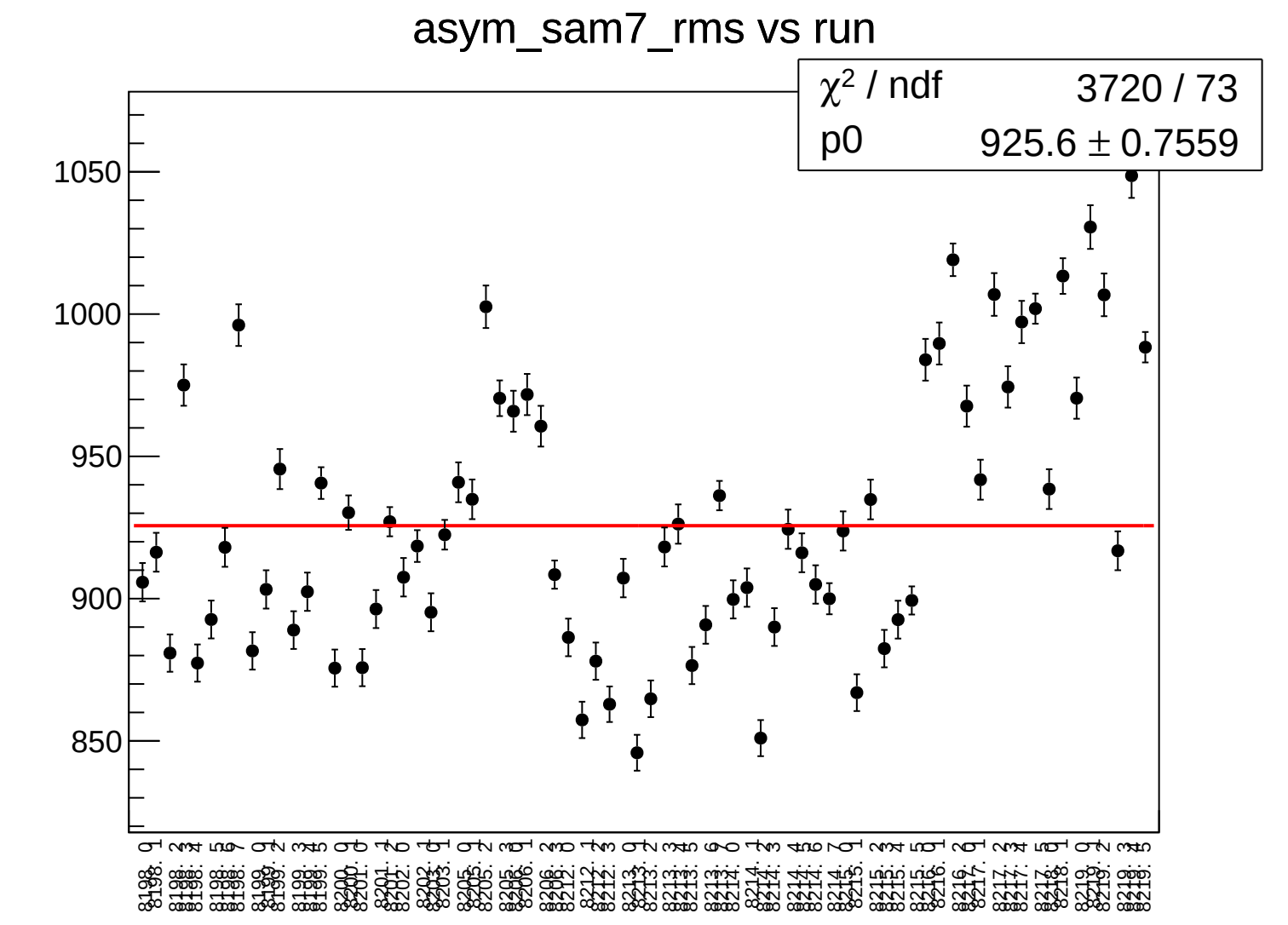

asym_sam6_mean vs run
×10^3
χ² / ndf 87.66 / 73
p0 −359.8 ± 2059
pull
Entries 74
Mean −598.7
Std Dev 637.6

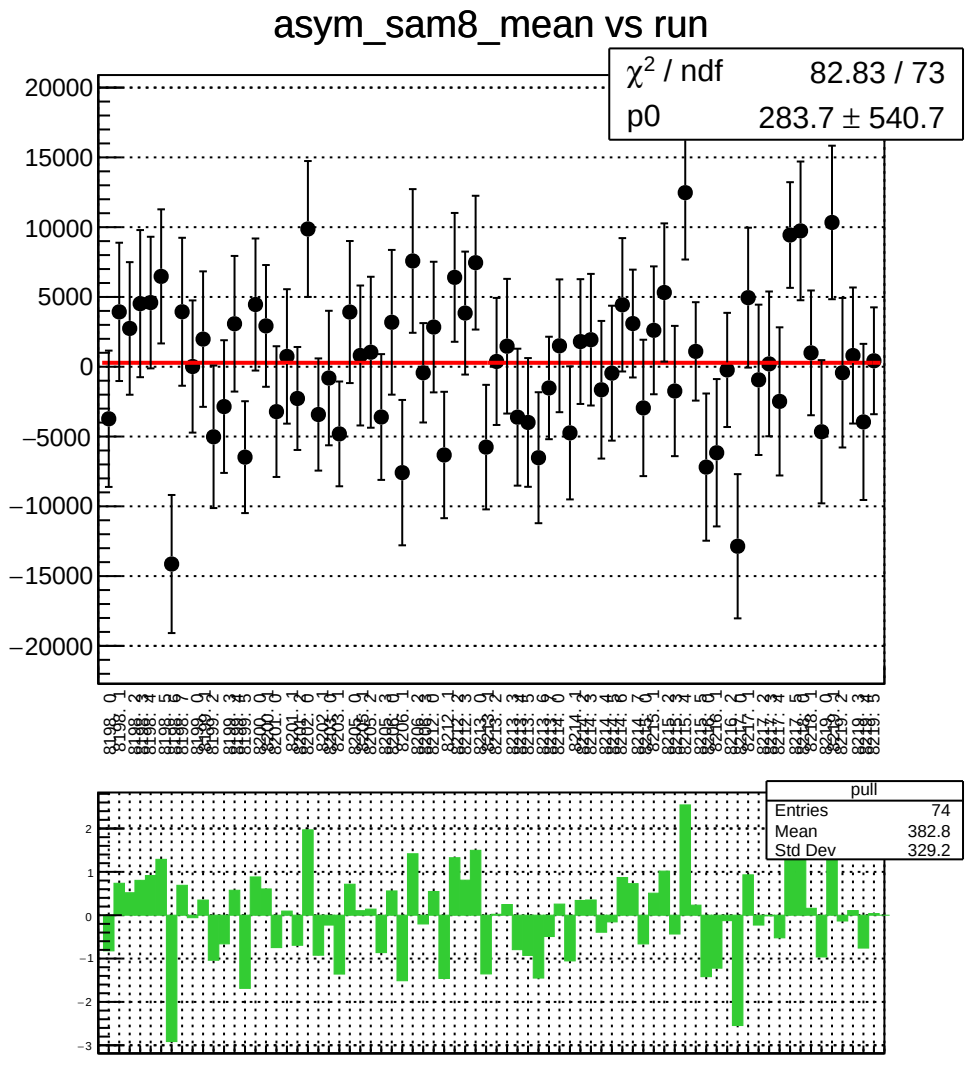

pull1D
Entries 74
Mean −0.002117
Std Dev 1.088

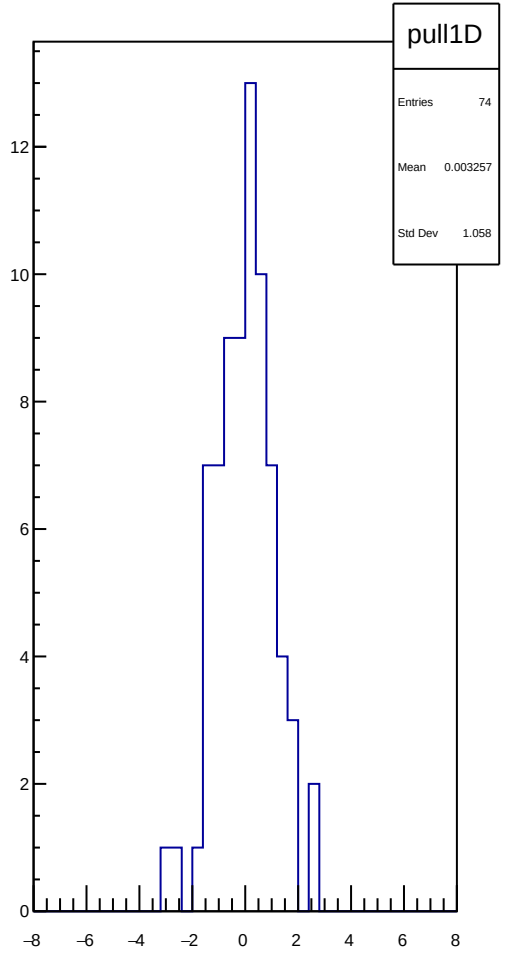

asym_sam6_rms vs run
χ² / ndf 2.47e+04 / 73
p0 1770 ± 1.456
2400
2200
2000
1800
1600
1400

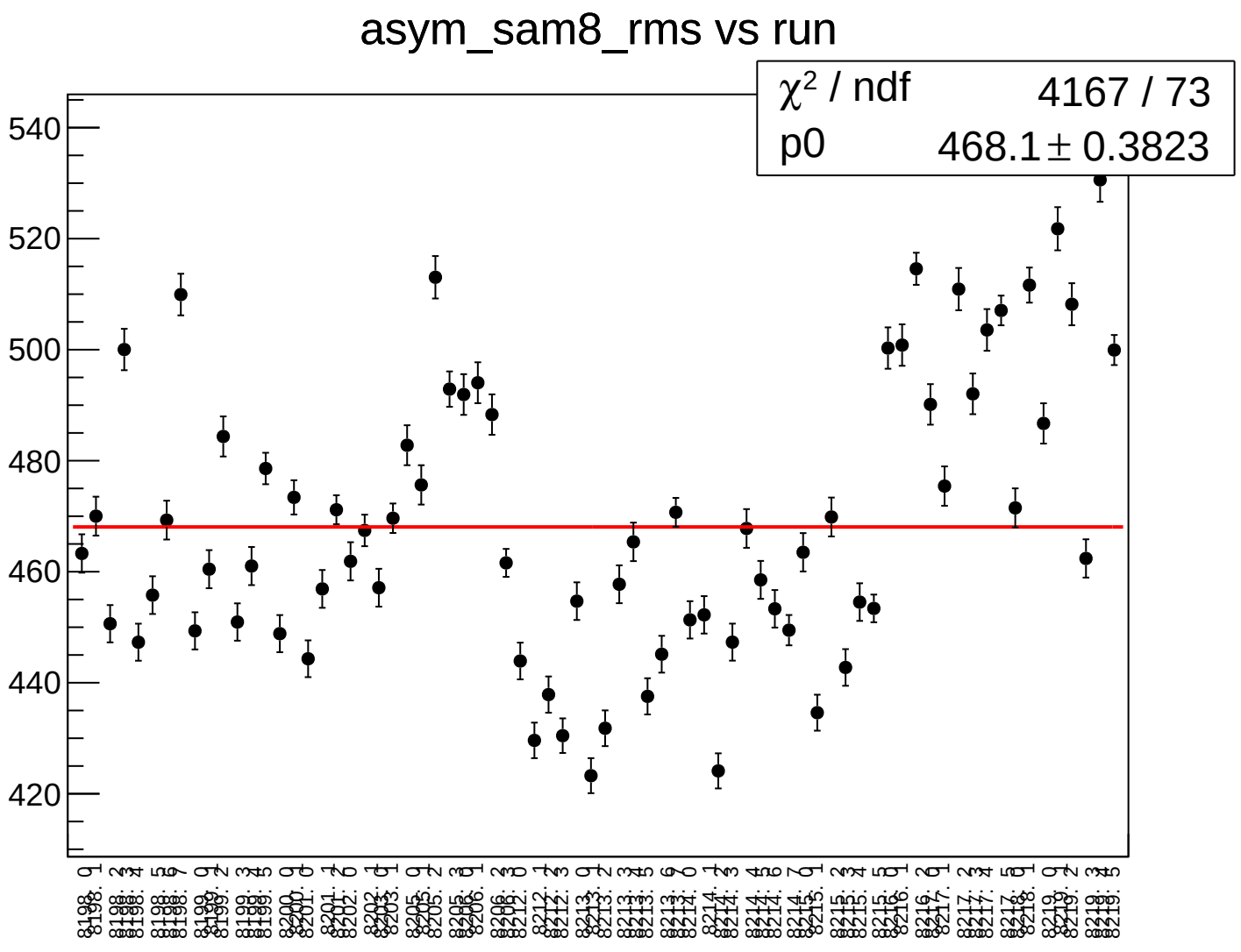

asym_sam7_mean vs run
χ² / ndf 81.45 / 73
p0 736.9 ± 1069
pull
Entries 74
Mean 1899
Std Dev 1850

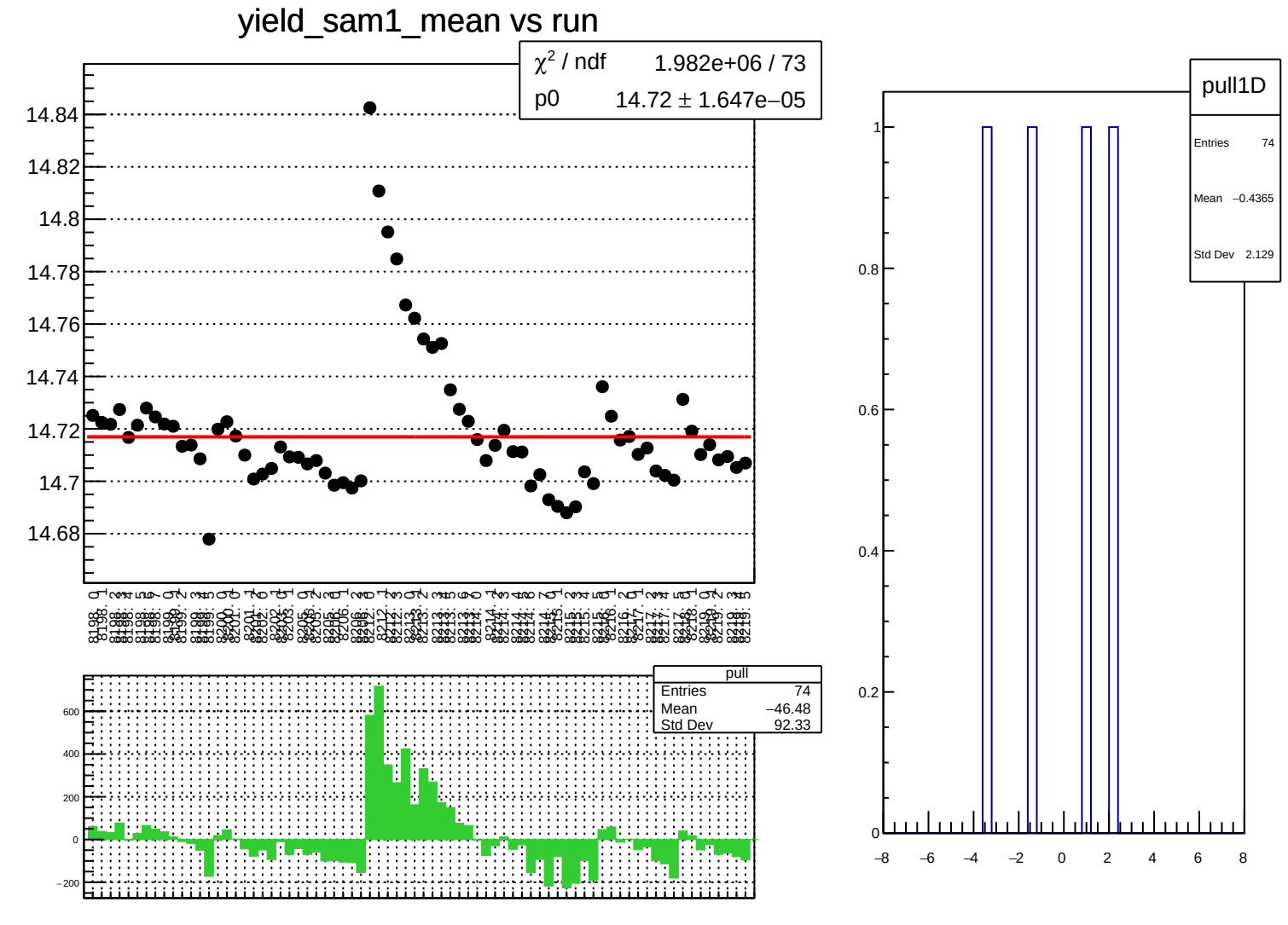

pull1D
Entries 74
Mean 0.0007922
Std Dev 1.049

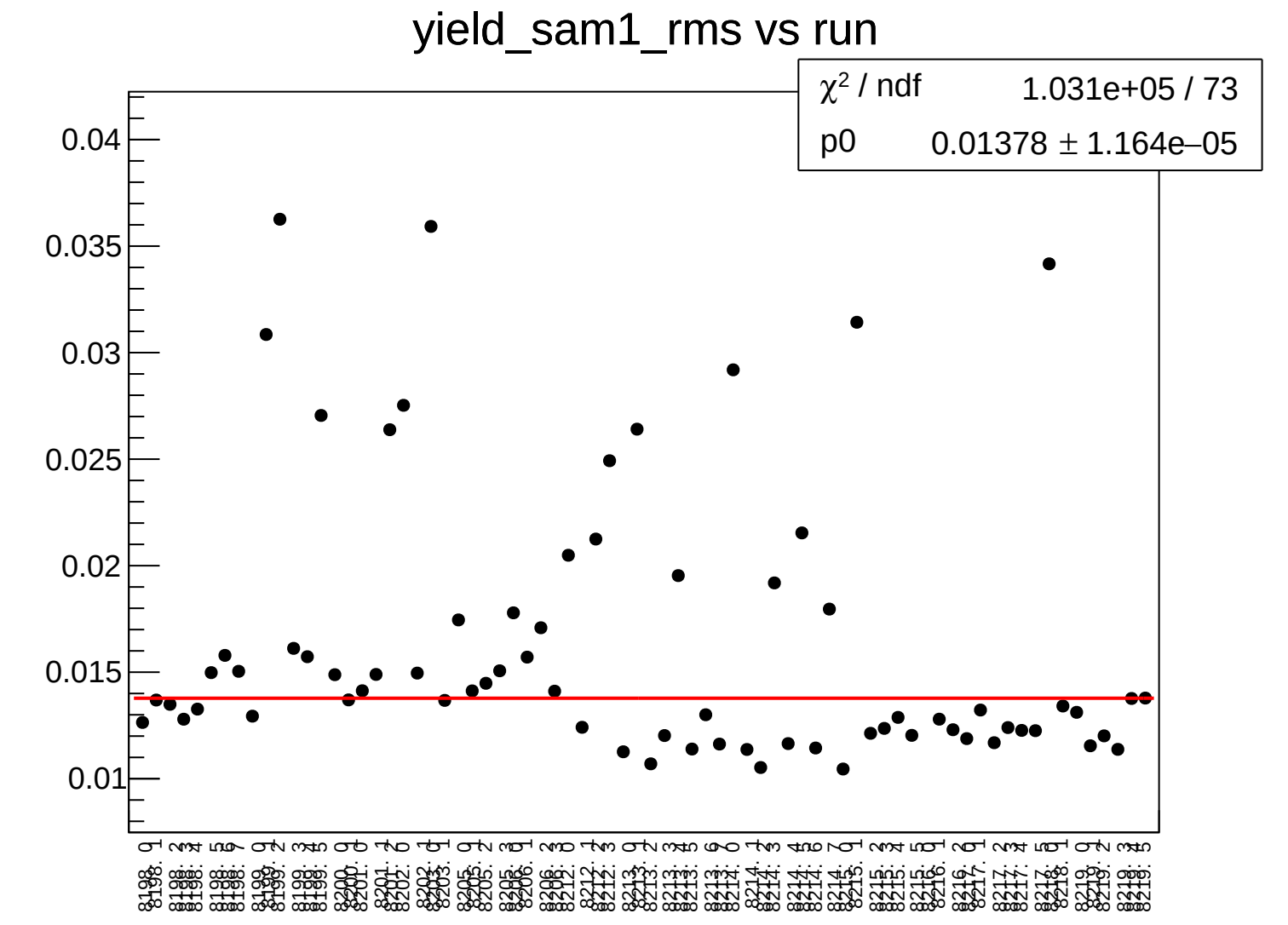

asym_sam7_rms vs run
χ² / ndf 3720 / 73
p0 925.6 ± 0.7559
1050
1000
950
900
850

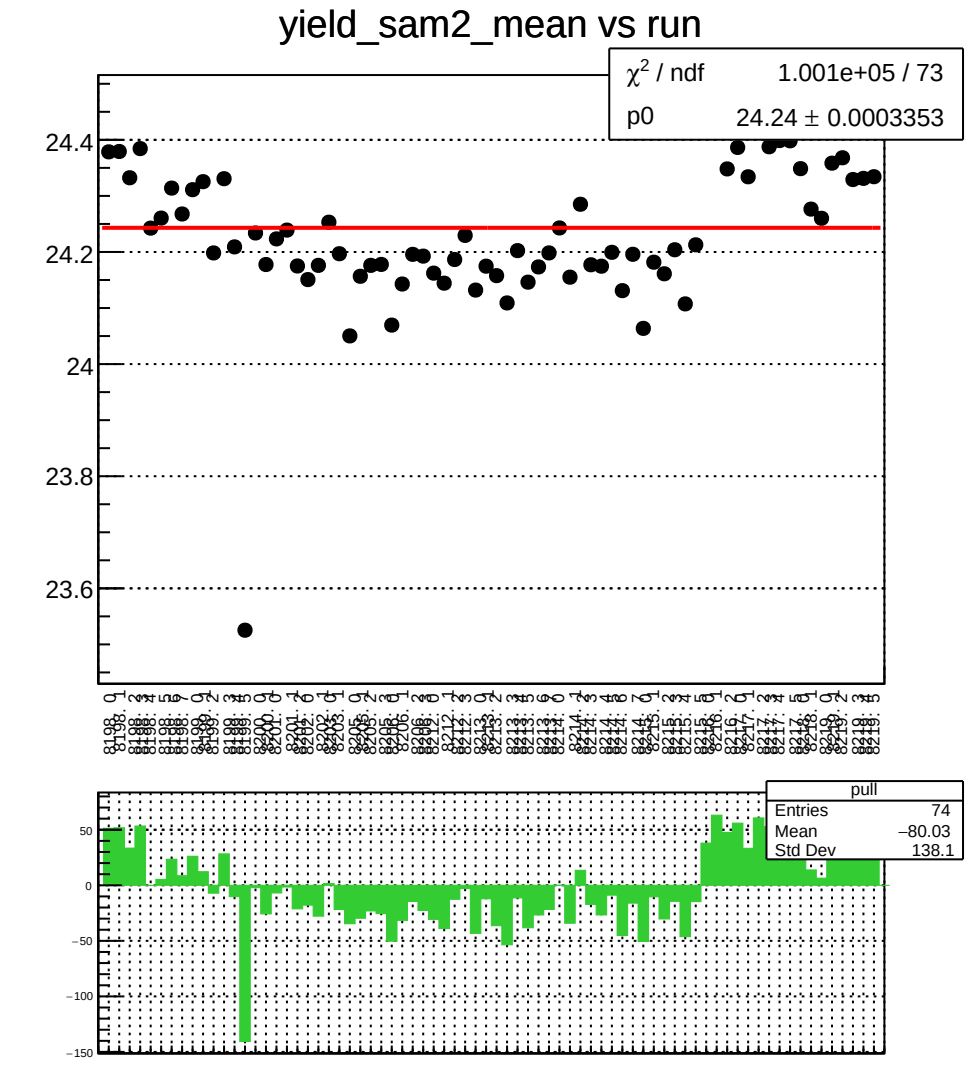

asym_sam8_mean vs run
χ² / ndf 82.83 / 73
p0 283.7 ± 540.7
pull
Entries 74
Mean 382.8
Std Dev 329.2

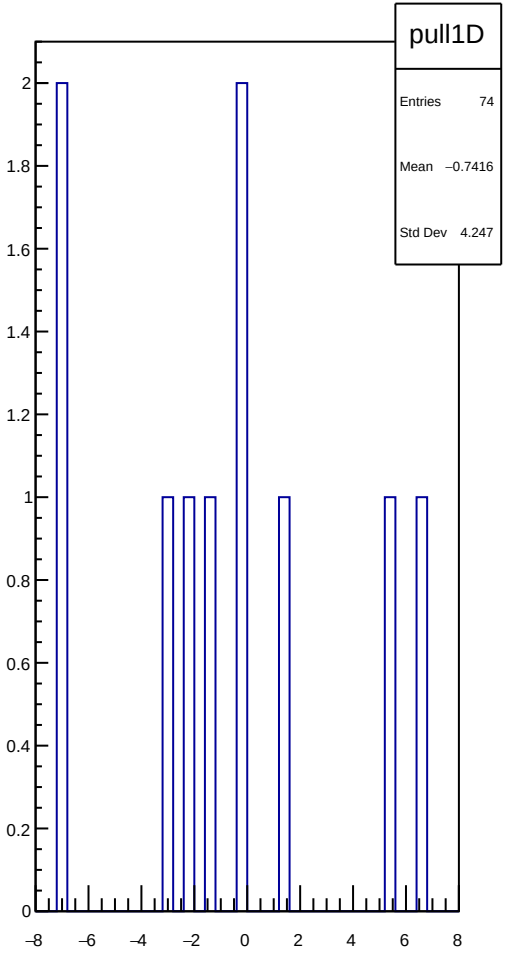

pull1D
Entries 74
Mean 0.003257
Std Dev 1.058

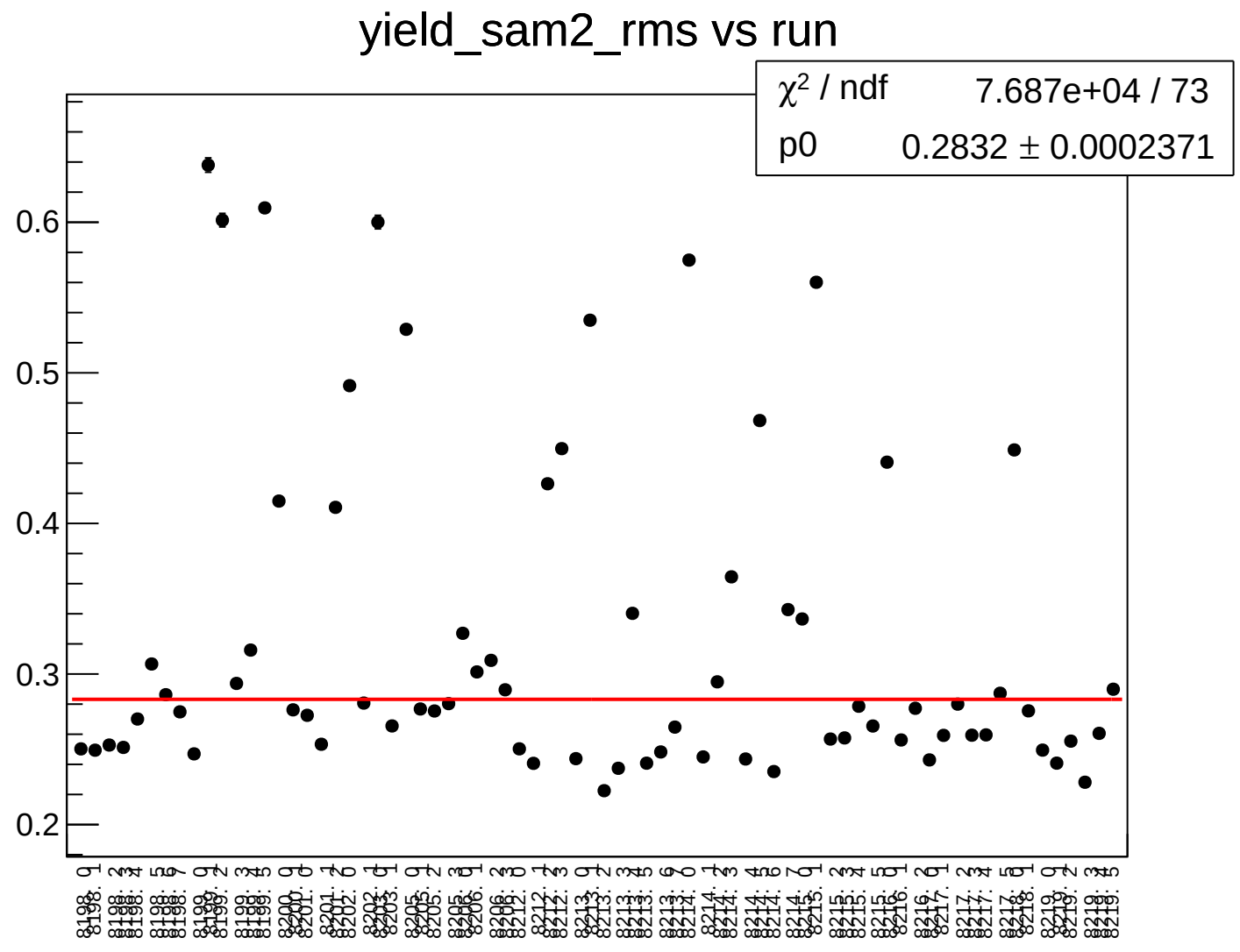

asym_sam8_rms vs run
χ² / ndf 4167 / 73
p0 468.1 ± 0.3823
540
520
500
480
460
440
420

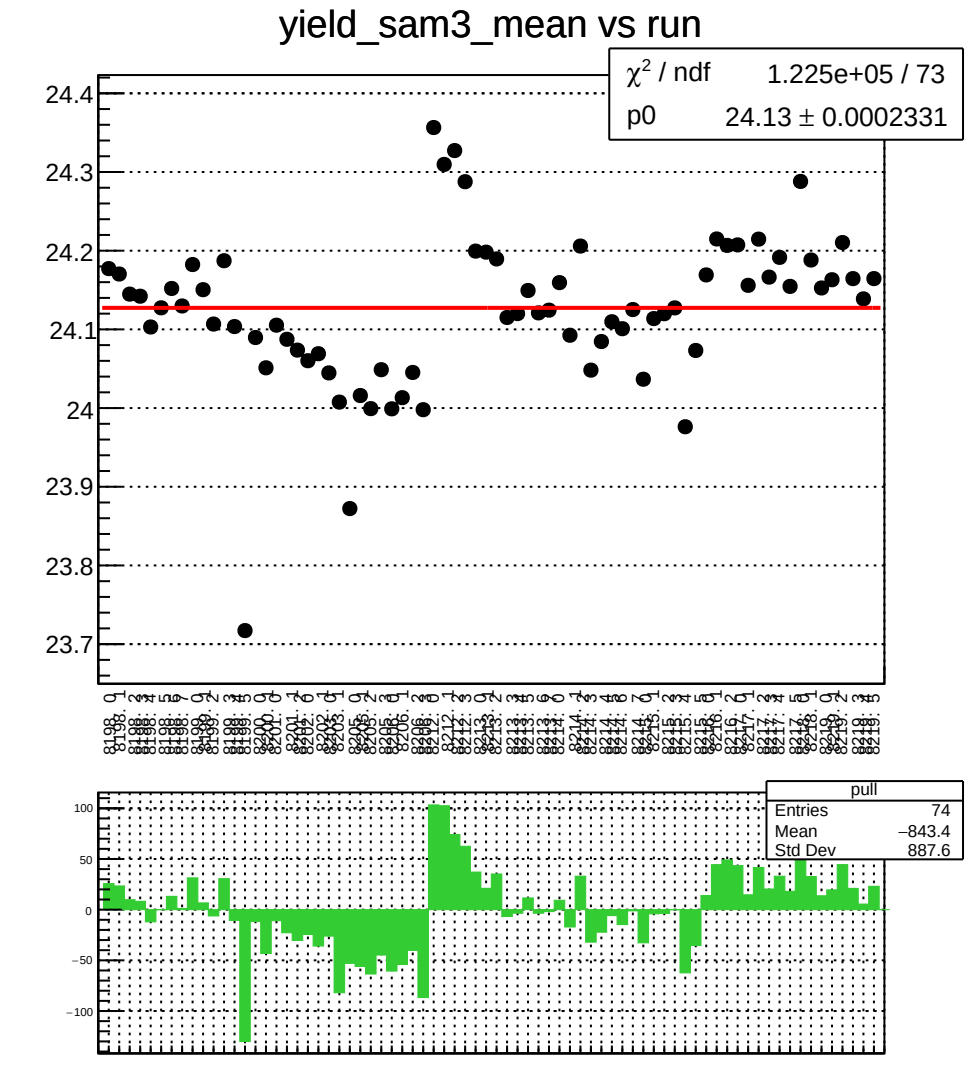

yield_sam1_mean vs run
χ² / ndf 1.982e+06 / 73
p0 14.72 ± 1.647e−05
14.84
14.82
14.8
14.78
14.76
14.74
14.72
14.7
14.68
pull
Entries 74
Mean −46.48
Std Dev 92.33
600
400
200
0
−200
pull1D
Entries 74
Mean −0.4365
Std Dev 2.129
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

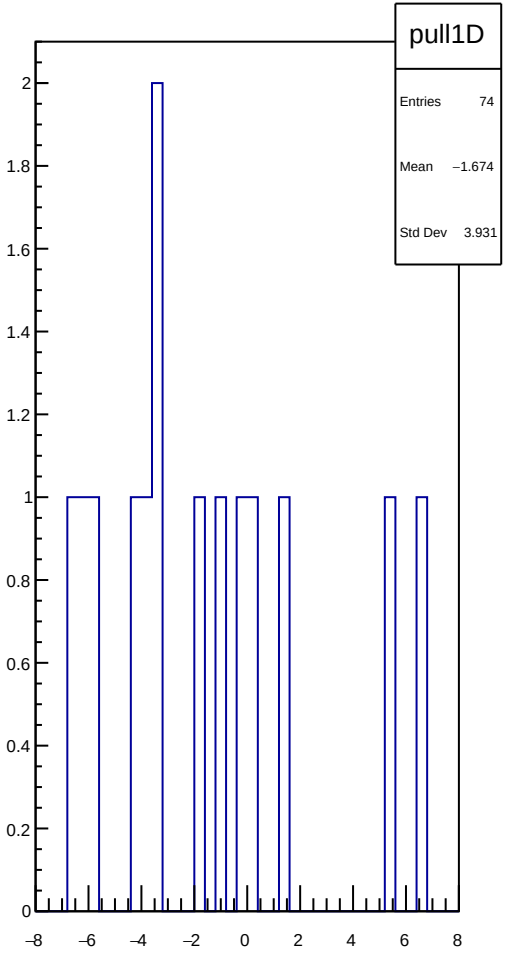

yield_sam1_rms vs run
χ² / ndf 1.031e+05 / 73
p0 0.01378 ± 1.164e–05
0.04
0.035
0.03
0.025
0.02
0.015
0.01

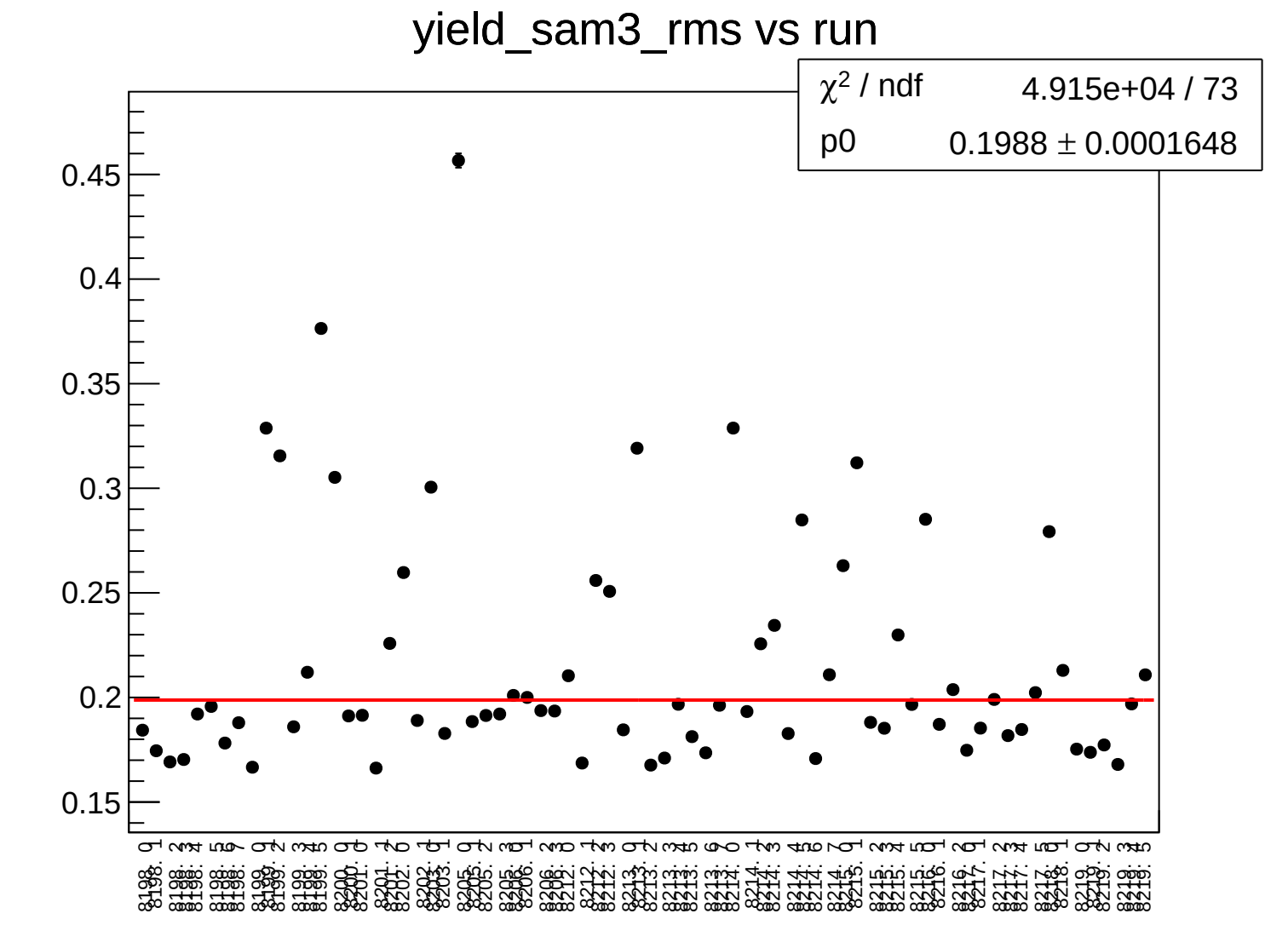

yield_sam2_mean vs run
χ² / ndf 1.001e+05 / 73
p0 24.24 ± 0.0003353
24.4
24.2
24
23.8
23.6
pull
Entries 74
Mean −80.03
Std Dev 138.1
50
0
−50
−100
−150

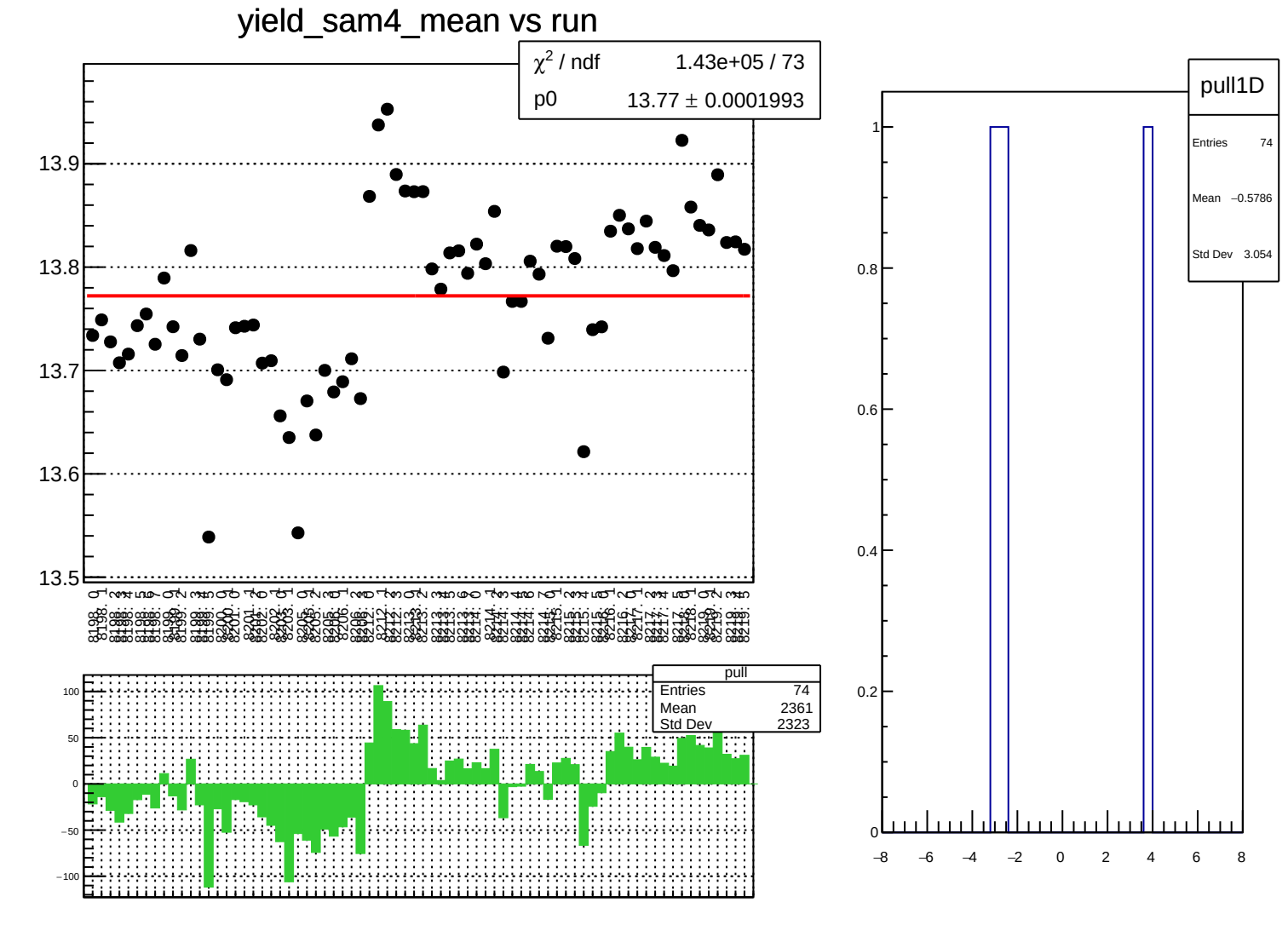

pull1D
Entries 74
Mean −0.7416
Std Dev 4.247
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

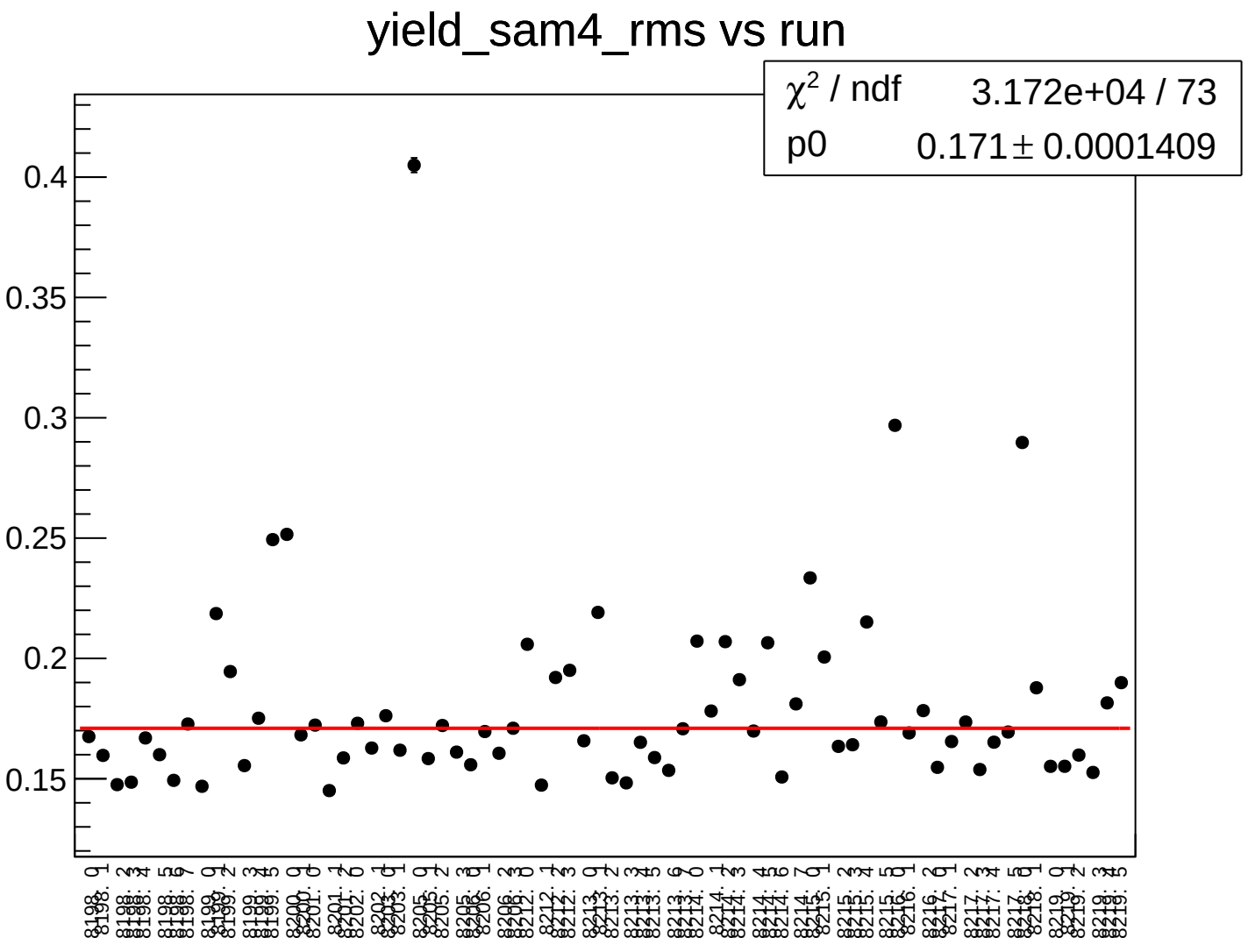

yield_sam2_rms vs run
χ² / ndf 7.687e+04 / 73
p0 0.2832 ± 0.0002371
0.6
0.5
0.4
0.3
0.2

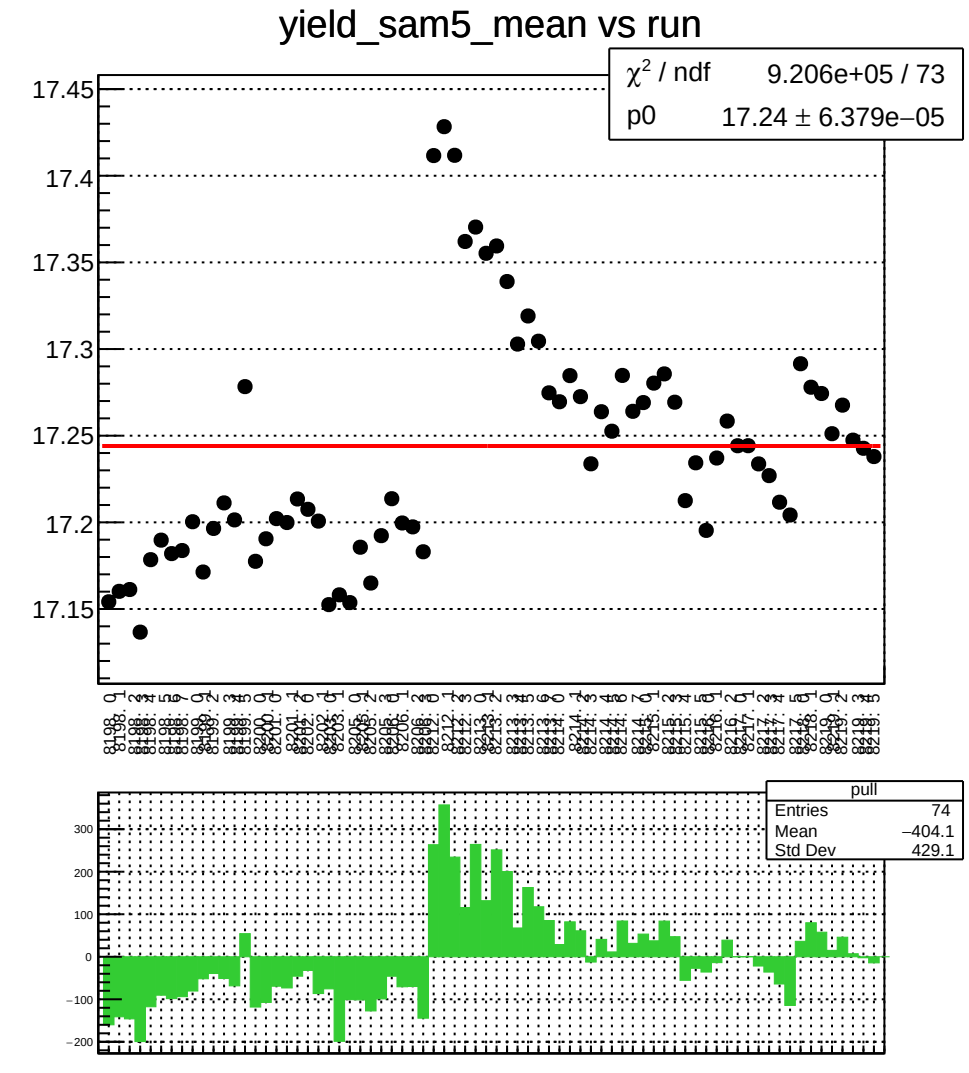

yield_sam3_mean vs run
χ^2 / ndf 1.225e+05 / 73
p0 24.13 ± 0.0002331
24.4
24.3
24.2
24.1
24
23.9
23.8
23.7
pull
Entries 74
Mean −843.4
Std Dev 887.6
100
50
0
−50
−100

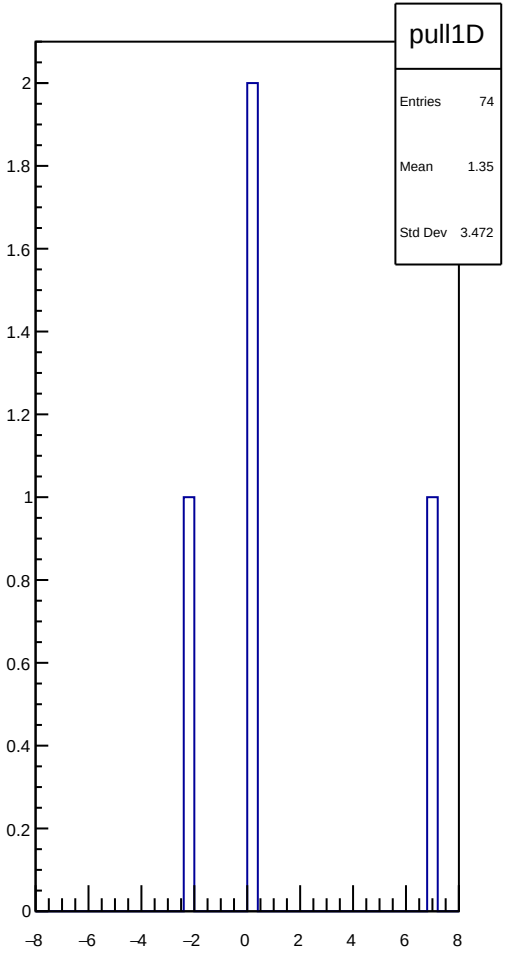

pull1D
Entries 74
Mean −1.674
Std Dev 3.931
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

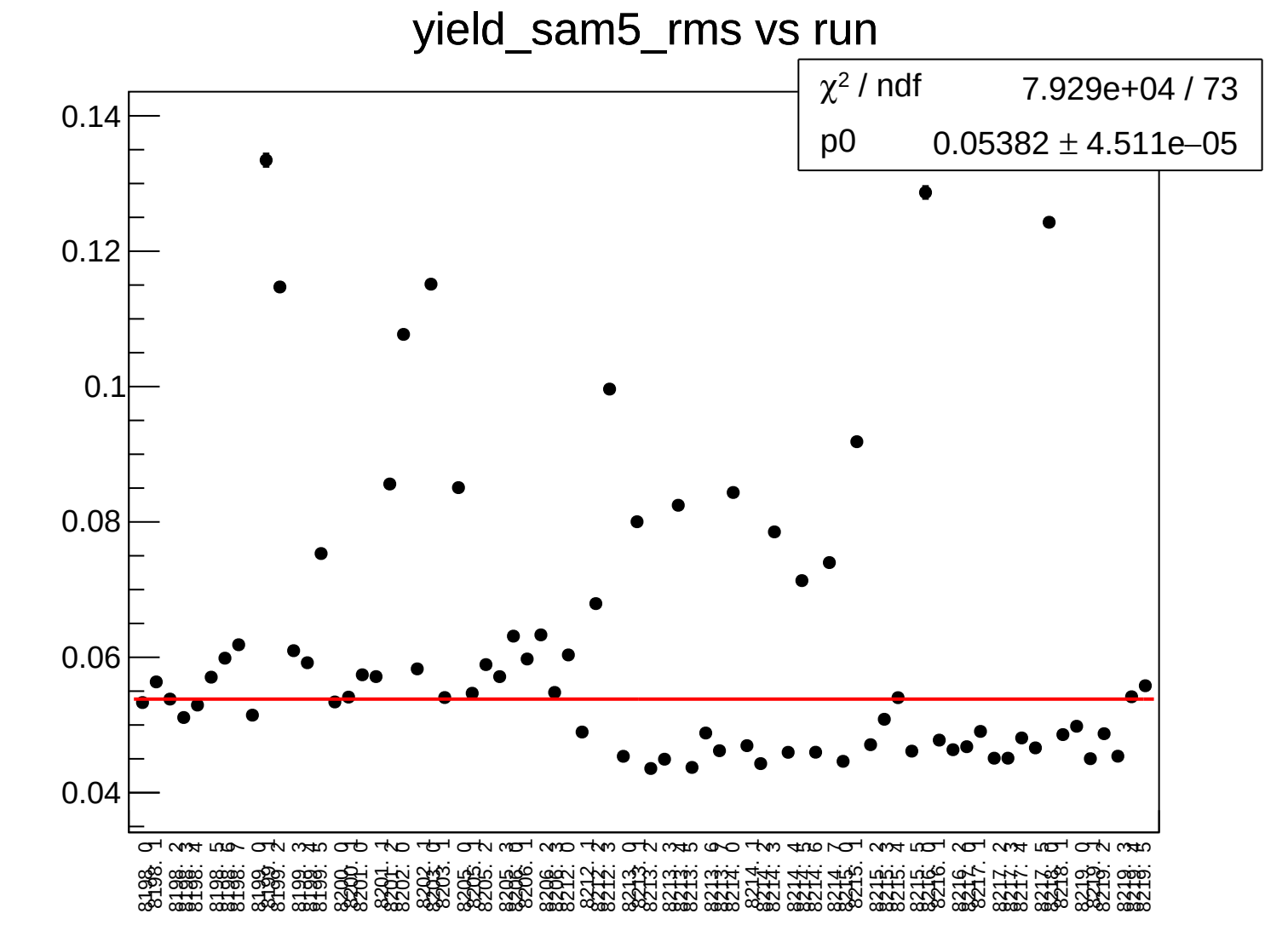

yield_sam3_rms vs run
χ² / ndf 4.915e+04 / 73
p0 0.1988 ± 0.0001648
0.45
0.4
0.35
0.3
0.25
0.2
0.15

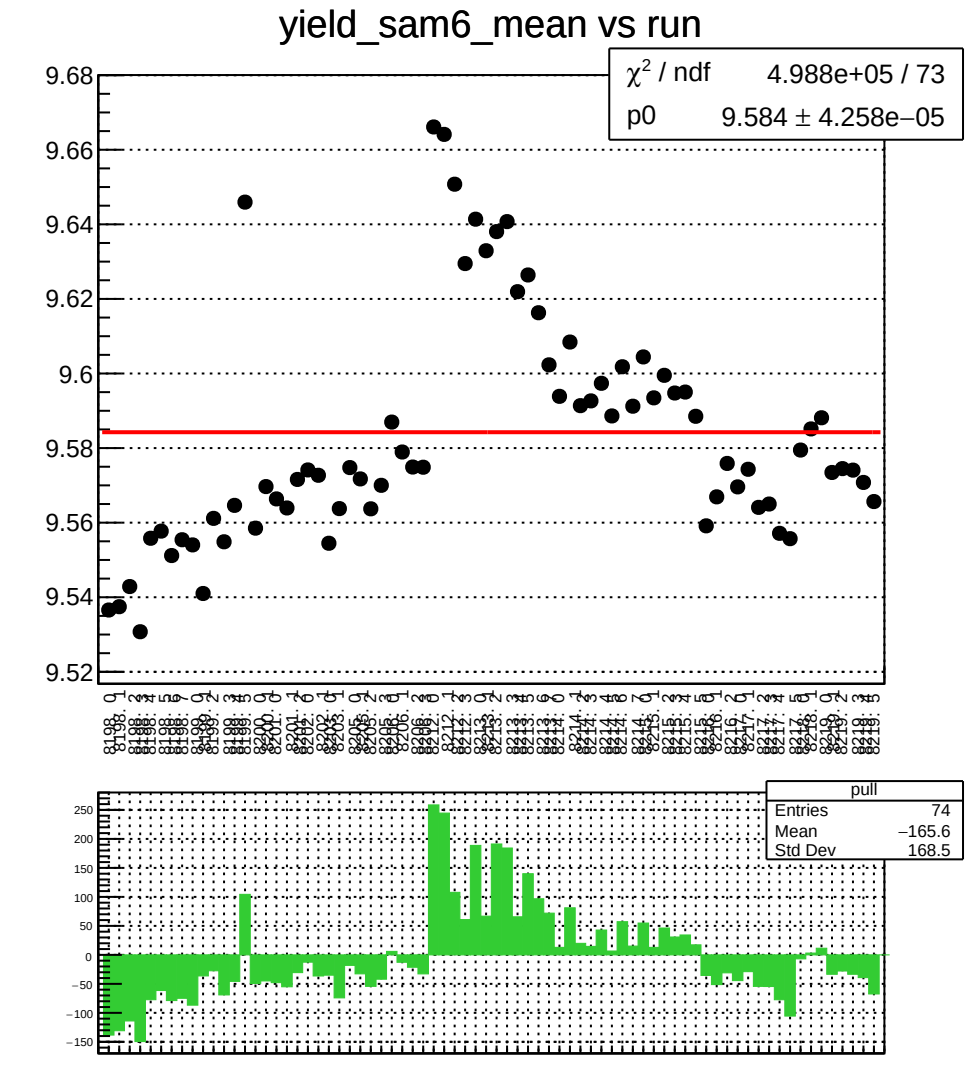

yield_sam4_mean vs run
χ² / ndf 1.43e+05 / 73
p0 13.77 ± 0.0001993
13.9
13.8
13.7
13.6
13.5
pull
Entries 74
Mean 2361
Std Dev 2323
100
50
0
−50
−100
pull1D
Entries 74
Mean −0.5786
Std Dev 3.054
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

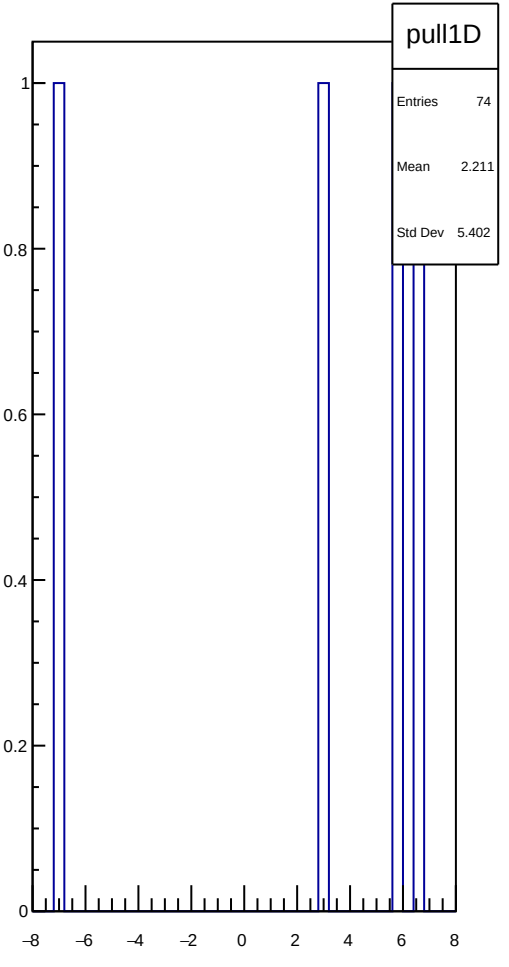

yield_sam4_rms vs run
χ² / ndf 3.172e+04 / 73
p0 0.171 ± 0.0001409
0.4
0.35
0.3
0.25
0.2
0.15

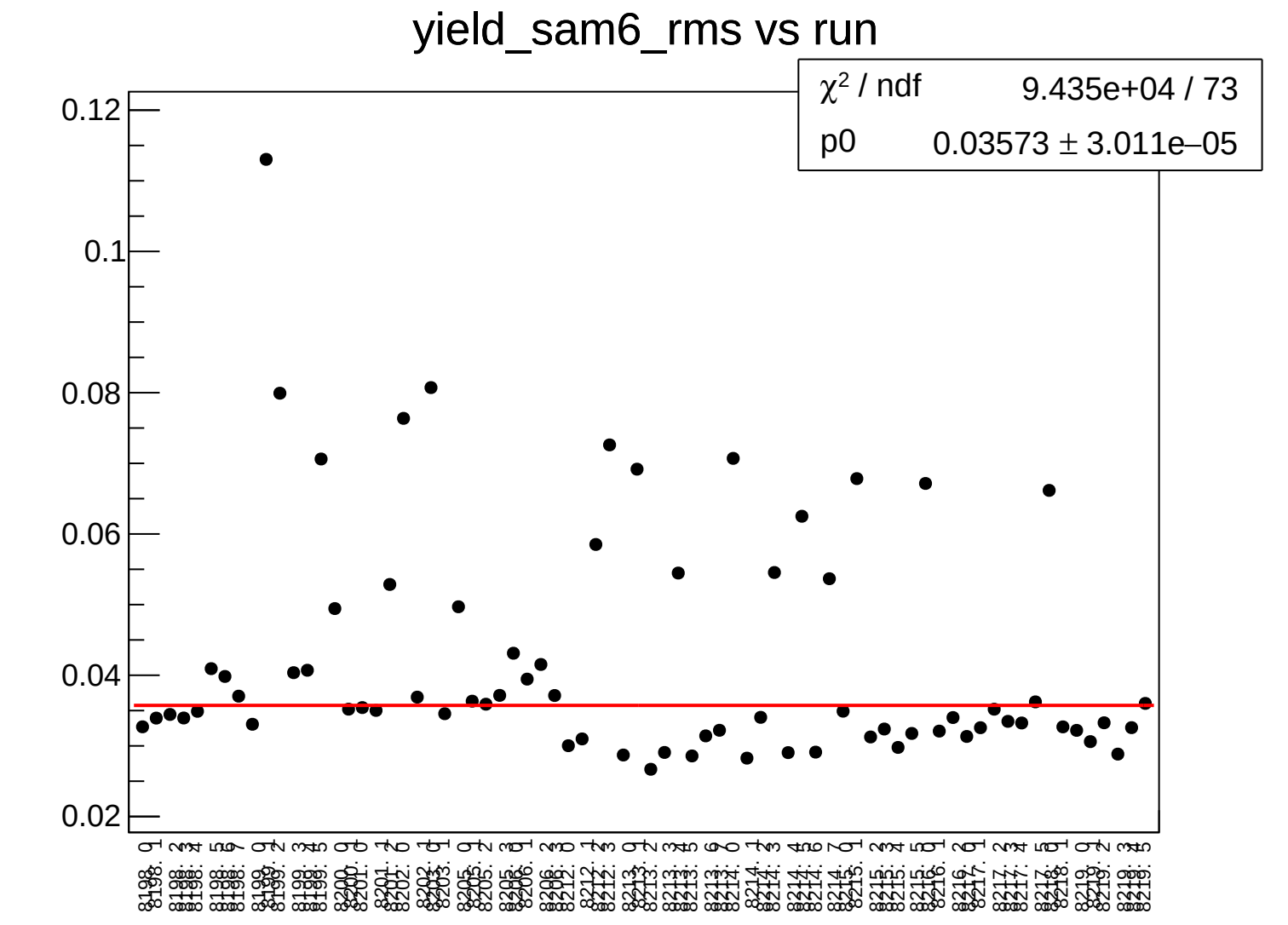

yield_sam5_mean vs run
χ² / ndf 9.206e+05 / 73
p0 17.24 ± 6.379e−05
17.45
17.4
17.35
17.3
17.25
17.2
17.15
pull
Entries 74
Mean −404.1
Std Dev 429.1
300
200
100
0
−100
−200

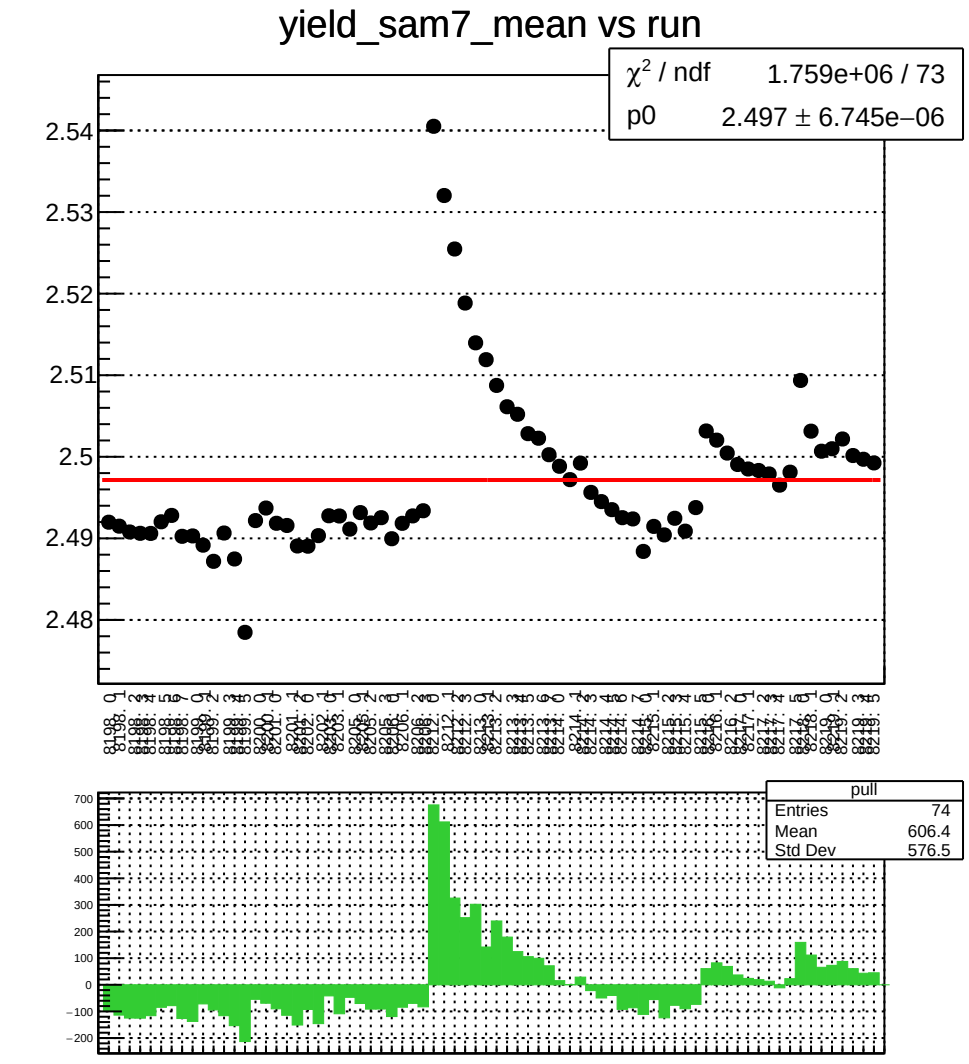

pull1D
Entries 74
Mean 1.35
Std Dev 3.472
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

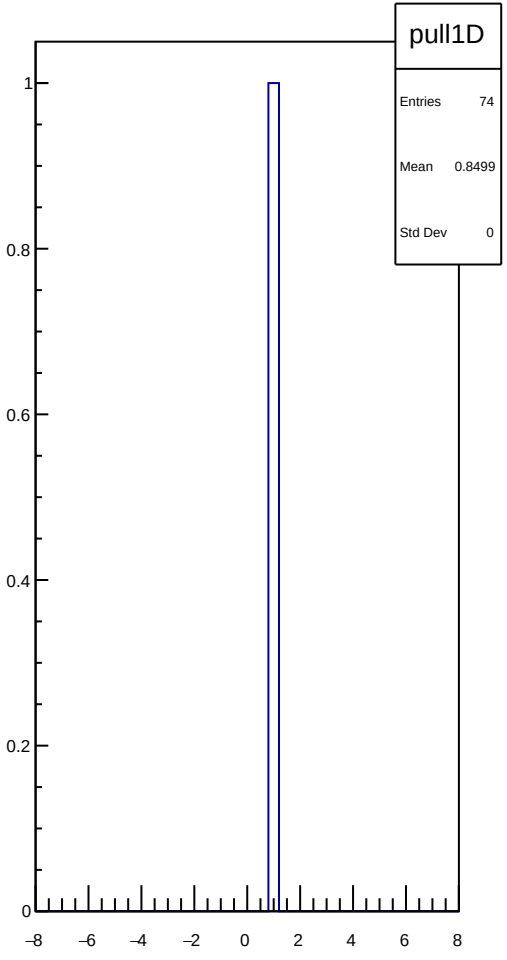

yield_sam5_rms vs run
χ² / ndf 7.929e+04 / 73
p0 0.05382 ± 4.511e−05
0.14
0.12
0.1
0.08
0.06
0.04

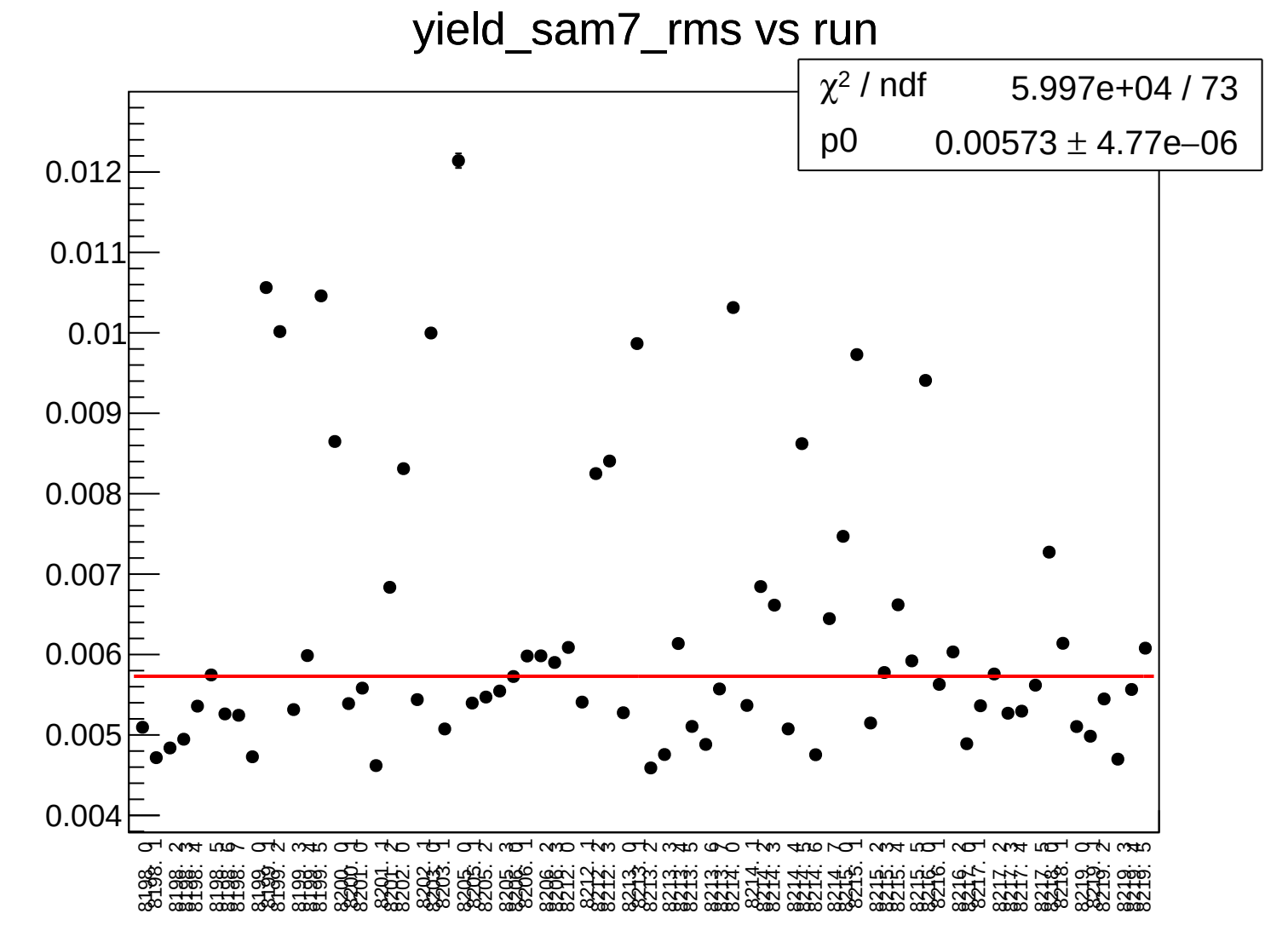

yield_sam6_mean vs run
χ² / ndf 4.988e+05 / 73
p0 9.584 ± 4.258e−05
9.68
9.66
9.64
9.62
9.6
9.58
9.56
9.54
9.52
pull
Entries 74
Mean −165.6
Std Dev 168.5
250
200
150
100
50
0
−50
−100
−150

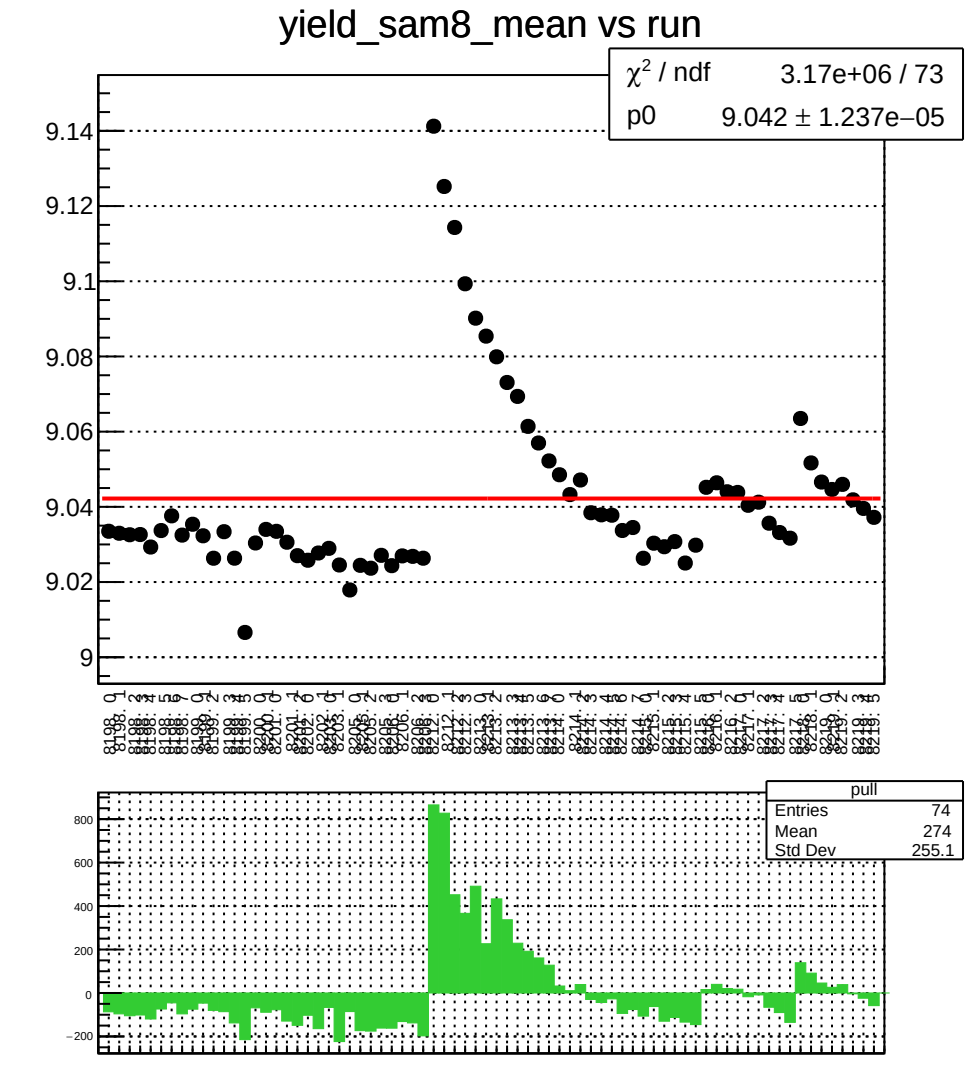

pull1D
Entries 74
Mean 2.211
Std Dev 5.402
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

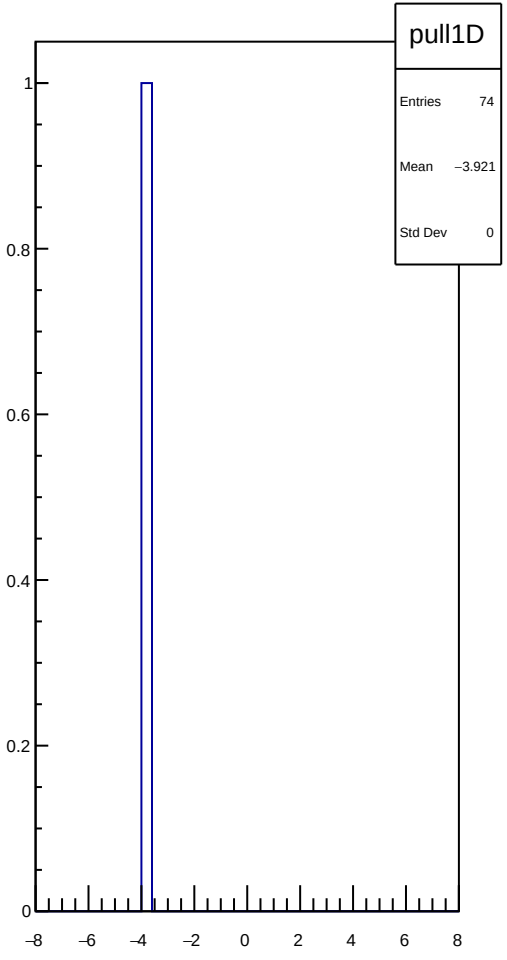

yield_sam6_rms vs run
χ² / ndf 9.435e+04 / 73
p0 0.03573 ± 3.011e−05
0.12
0.1
0.08
0.06
0.04
0.02

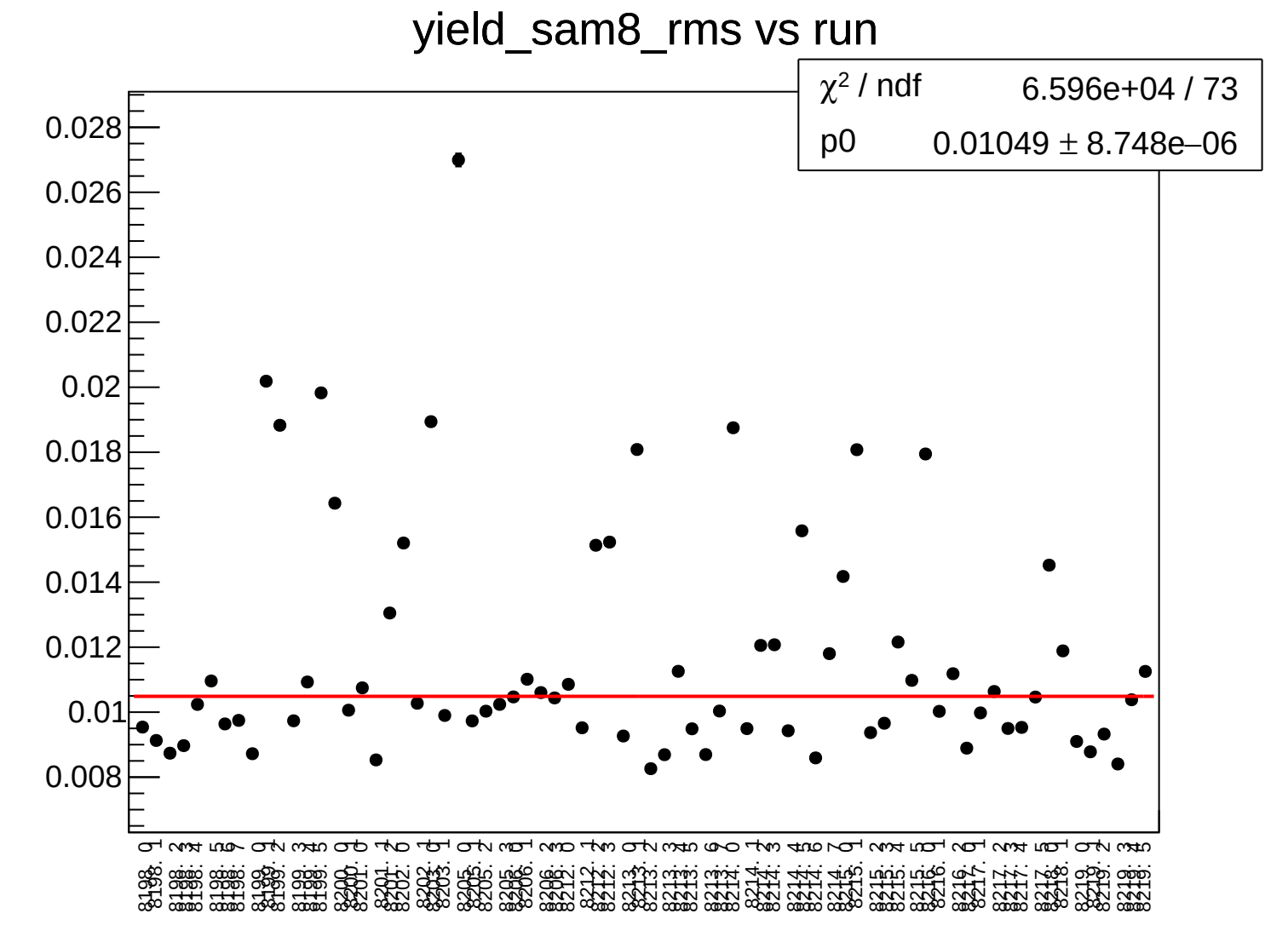

yield_sam7_mean vs run
χ² / ndf 1.759e+06 / 73
p0 2.497 ± 6.745e−06
2.54
2.53
2.52
2.51
2.5
2.49
2.48
pull
Entries 74
Mean 606.4
Std Dev 576.5
700
600
500
400
300
200
100
0
−100
−200

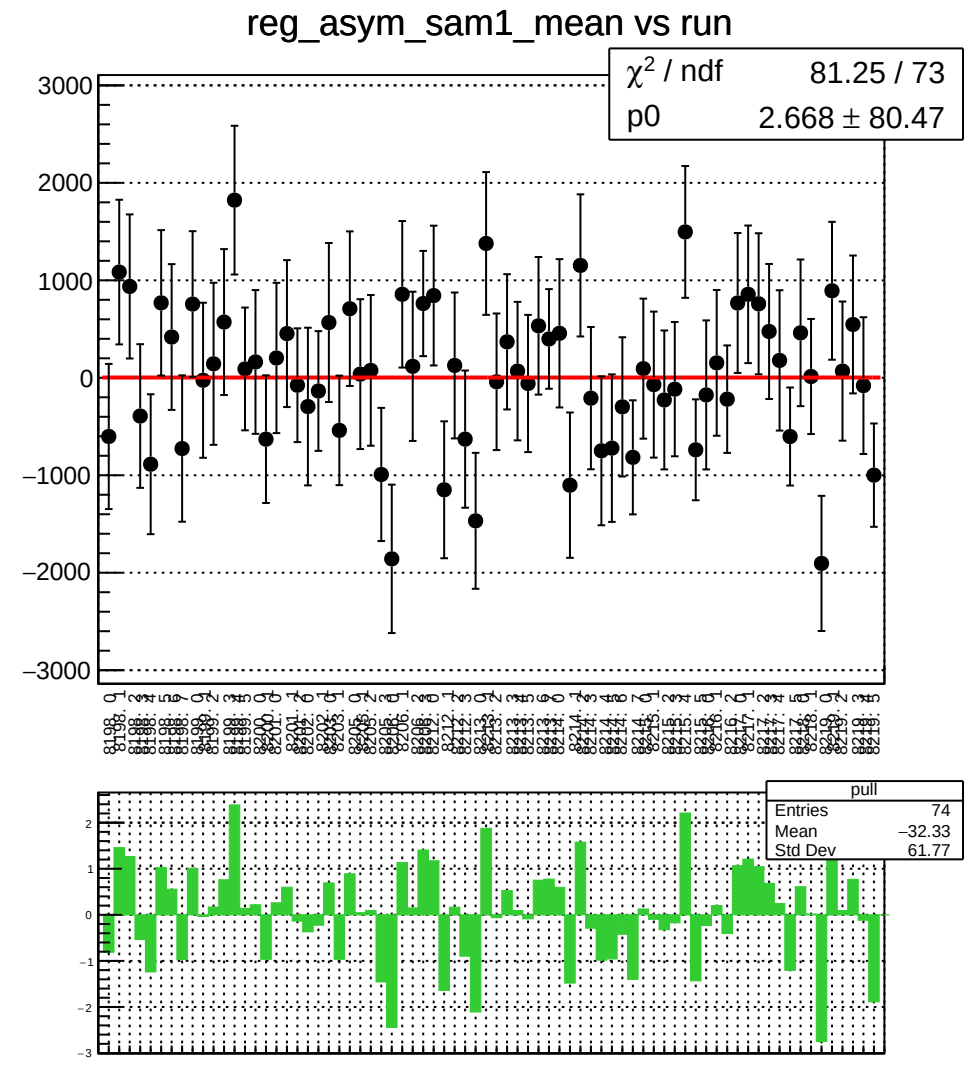

pull1D
Entries 74
Mean 0.8499
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

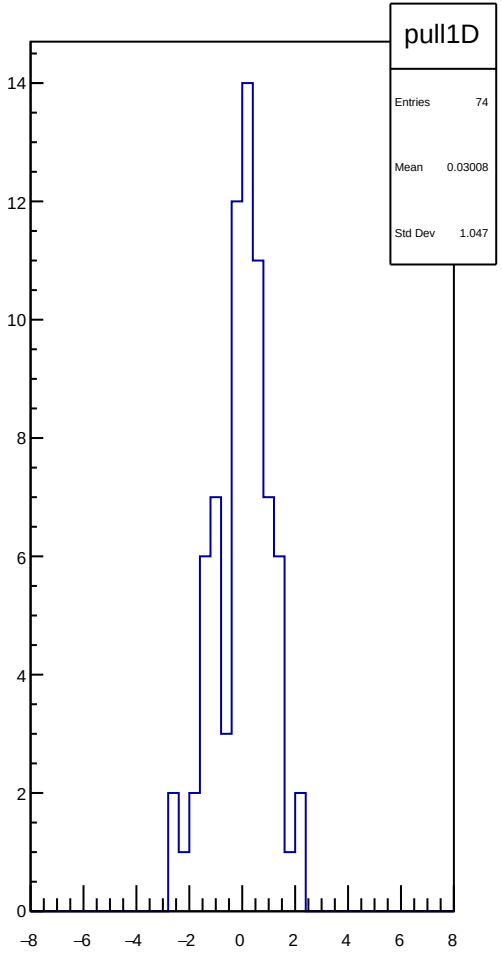

yield_sam7_rms vs run
χ² / ndf 5.997e+04 / 73
p0 0.00573 ± 4.77e−06
0.012
0.011
0.01
0.009
0.008
0.007
0.006
0.005
0.004

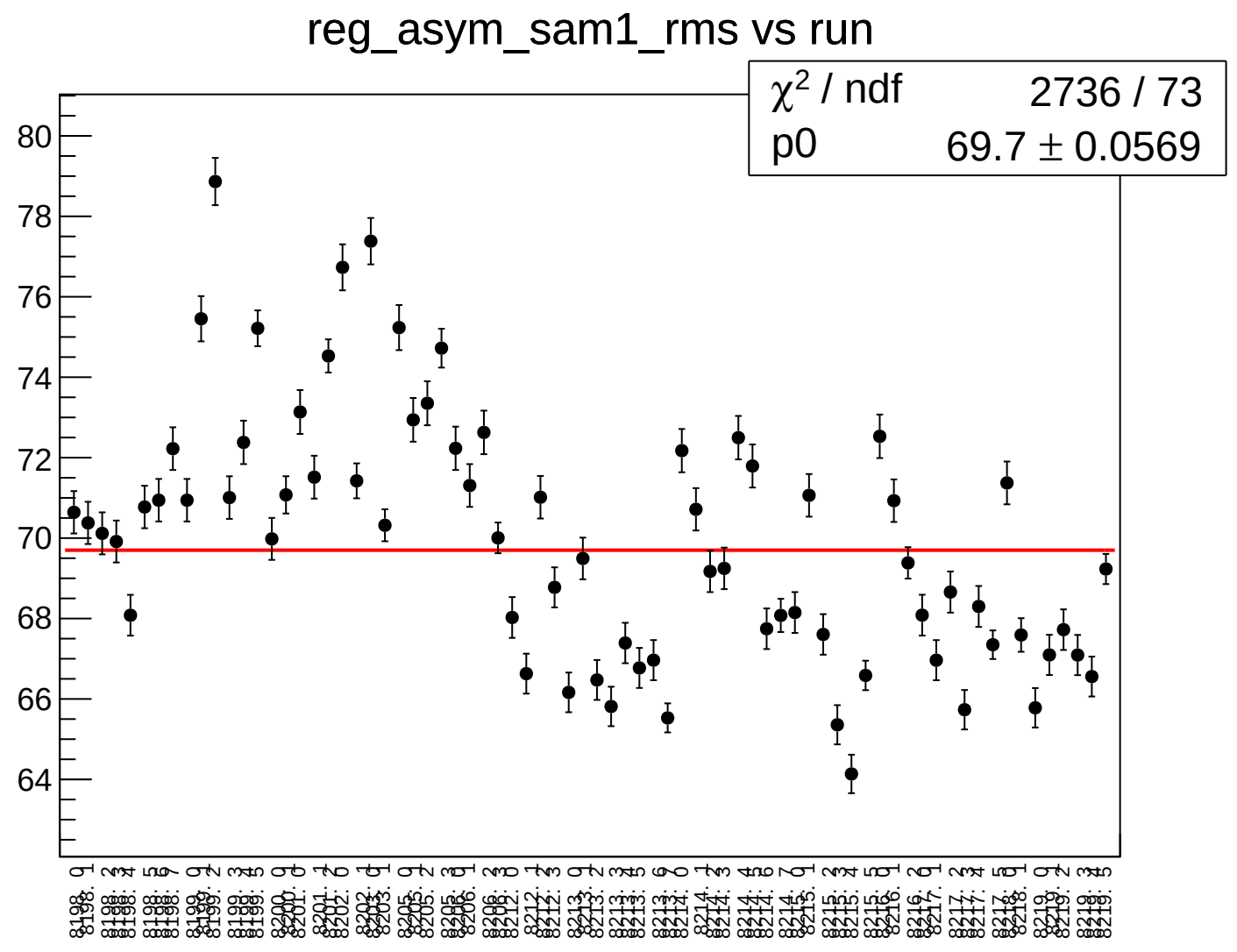

yield_sam8_mean vs run
χ² / ndf 3.17e+06 / 73
p0 9.042 ± 1.237e−05
9.14
9.12
9.1
9.08
9.06
9.04
9.02
9
pull
Entries 74
Mean 274
Std Dev 255.1
800
600
400
200
0
−200

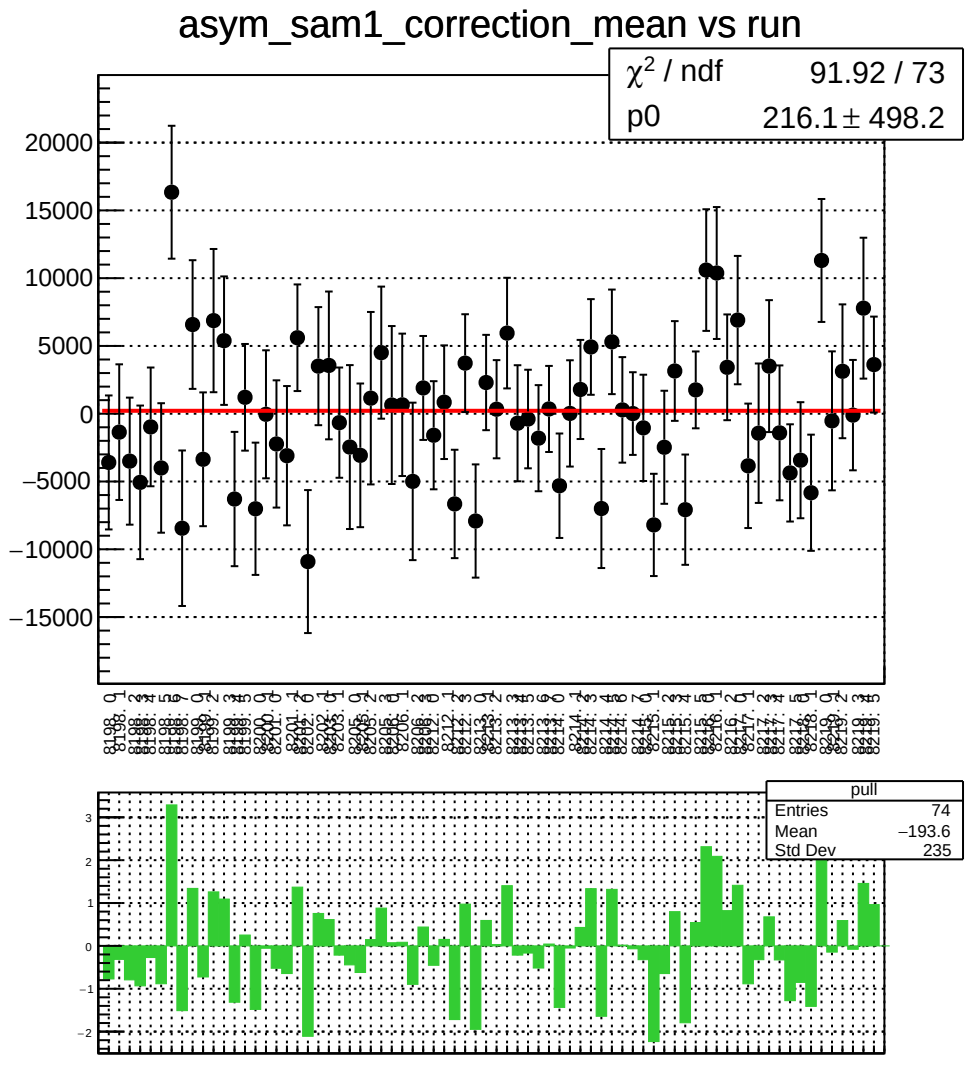

pull1D
Entries 74
Mean −3.921
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

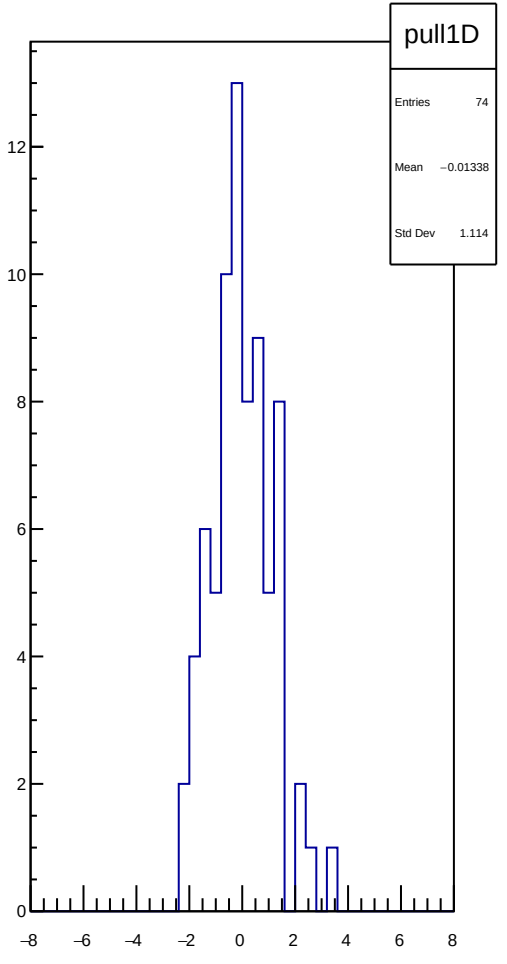

yield_sam8_rms vs run
χ² / ndf 6.596e+04 / 73
p0 0.01049 ± 8.748e–06
0.028
0.026
0.024
0.022
0.02
0.018
0.016
0.014
0.012
0.01
0.008

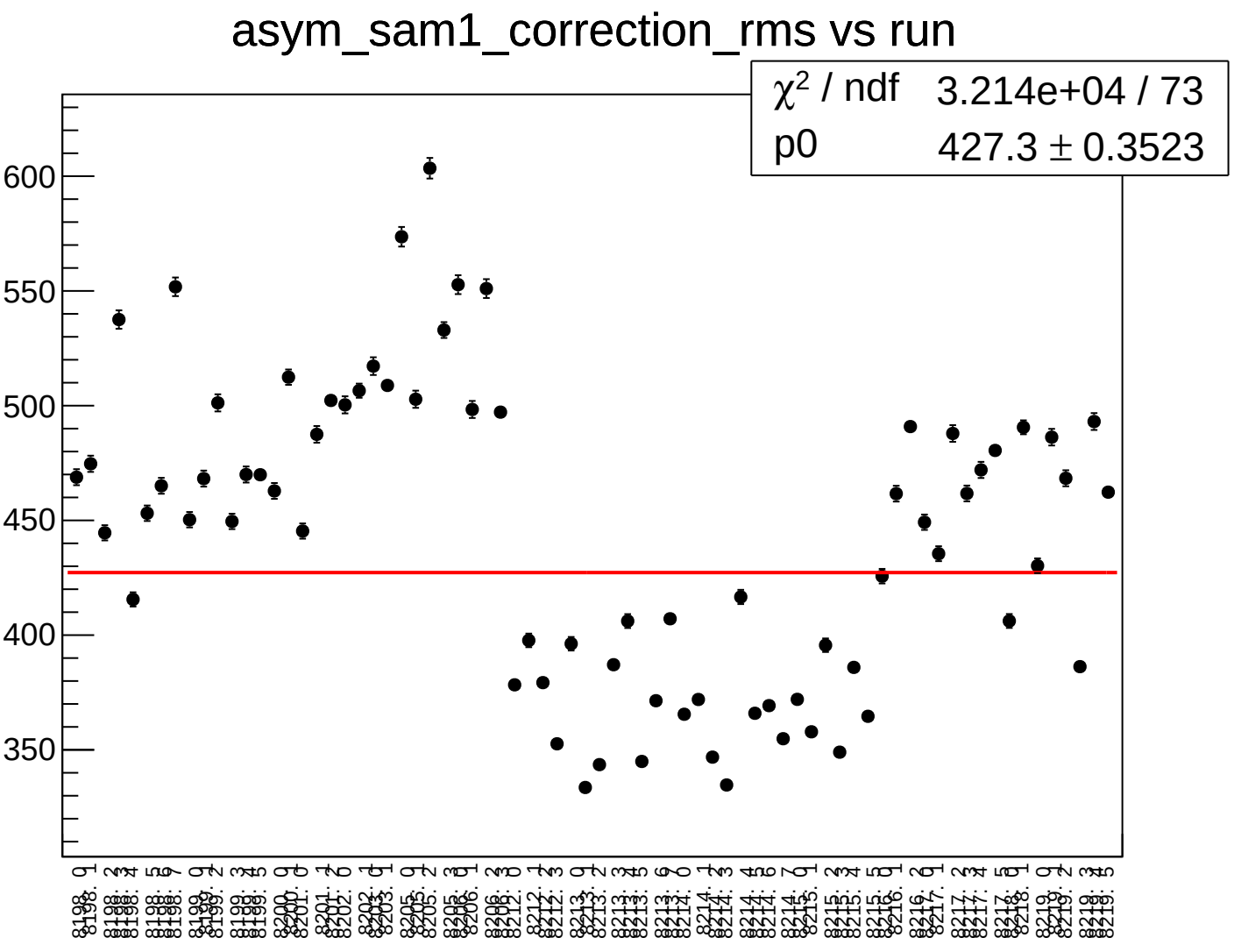

reg_asym_sam1_mean vs run
χ² / ndf 81.25 / 73
p0 2.668 ± 80.47
pull
Entries 74
Mean −32.33
Std Dev 61.77

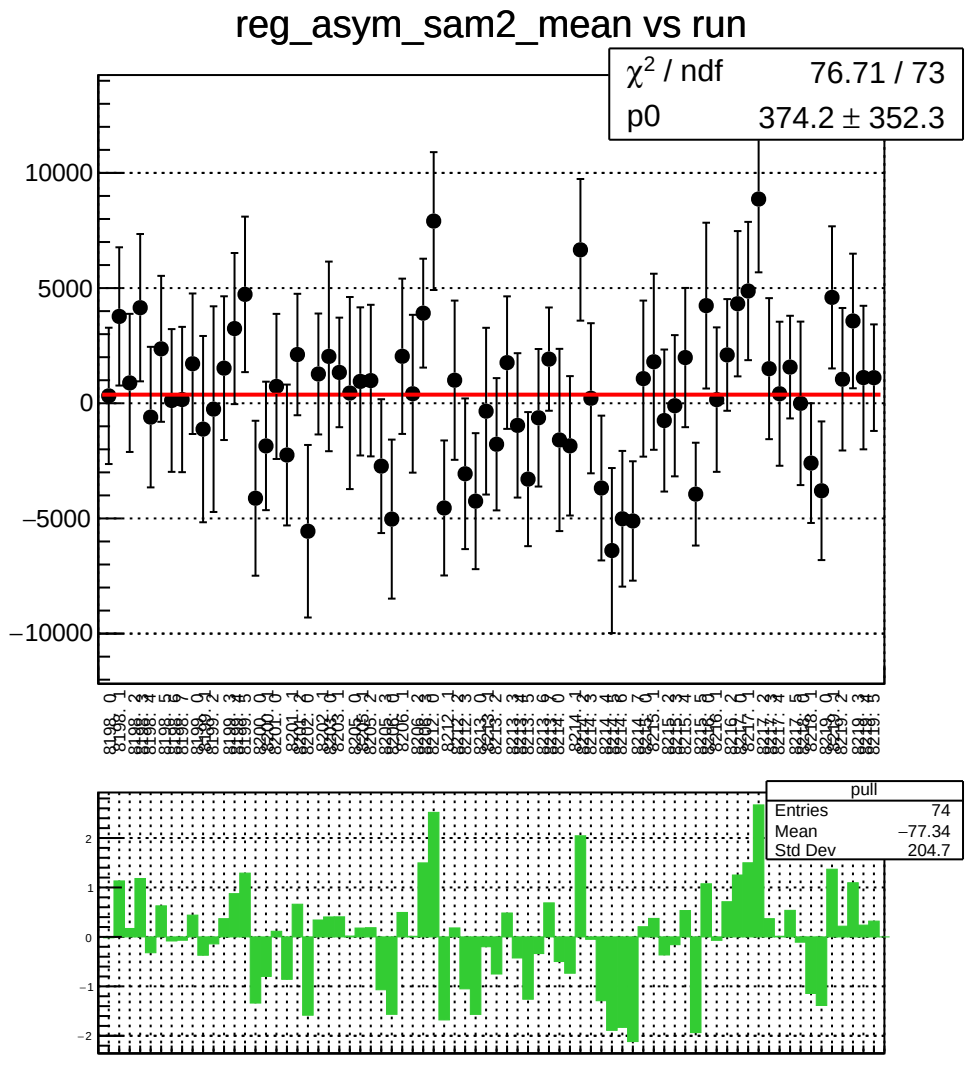

pull1D
Entries 74
Mean 0.03008
Std Dev 1.047

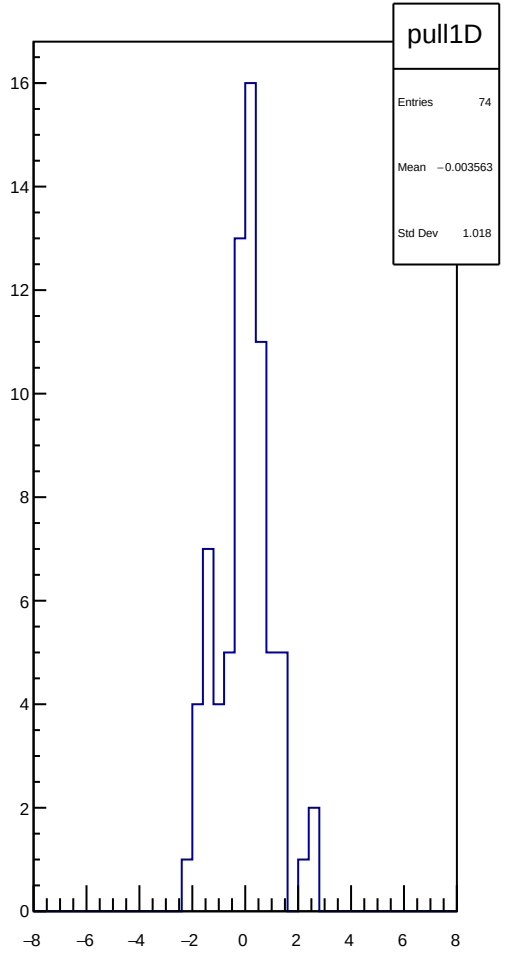

reg_asym_sam1_rms vs run
χ^2 / ndf 2736 / 73
p0 69.7 ± 0.0569
80
78
76
74
72
70
68
66
64

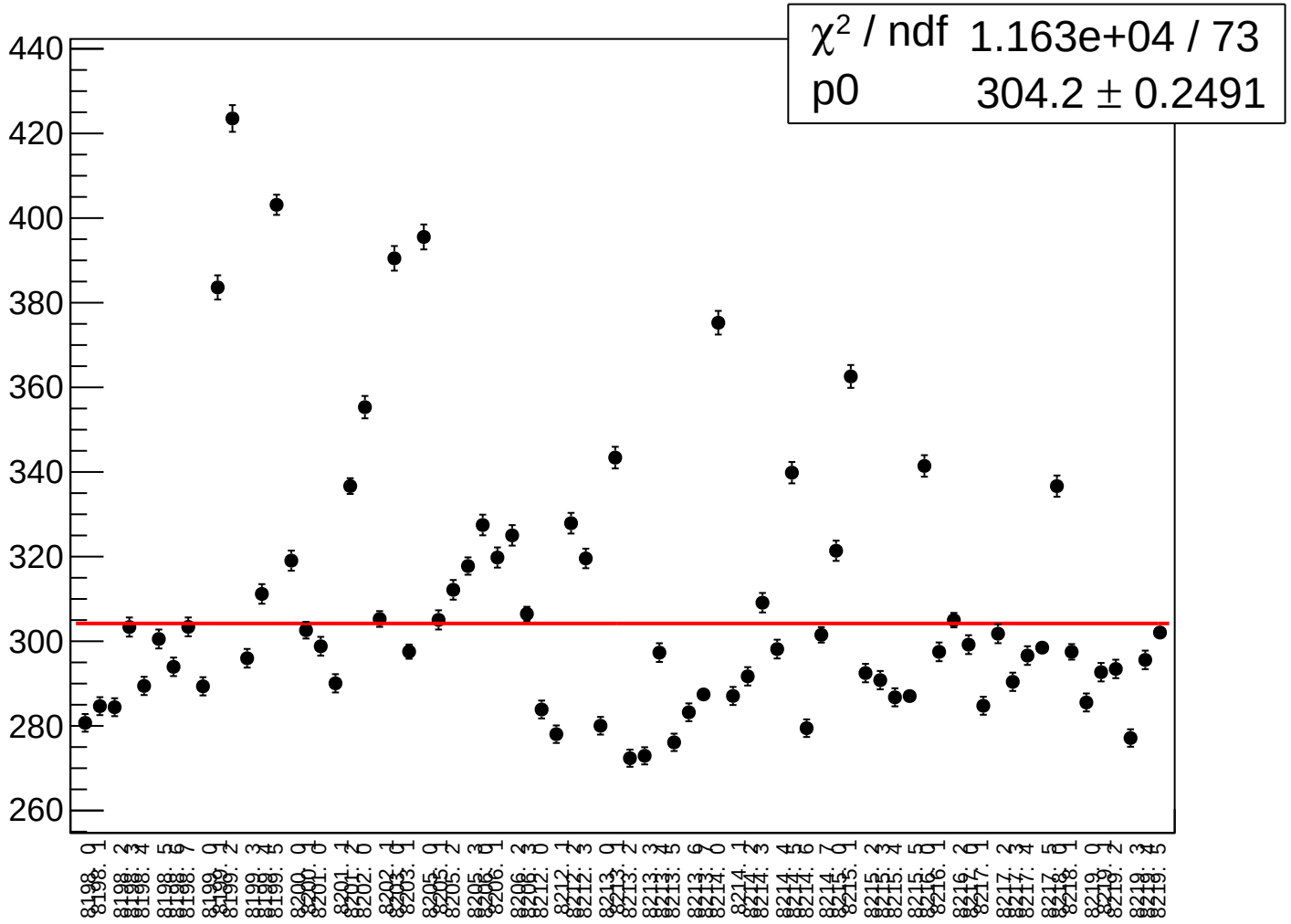

asym_sam1_correction_mean vs run
χ² / ndf 91.92 / 73
p0 216.1 ± 498.2
pull
Entries 74
Mean −193.6
Std Dev 235

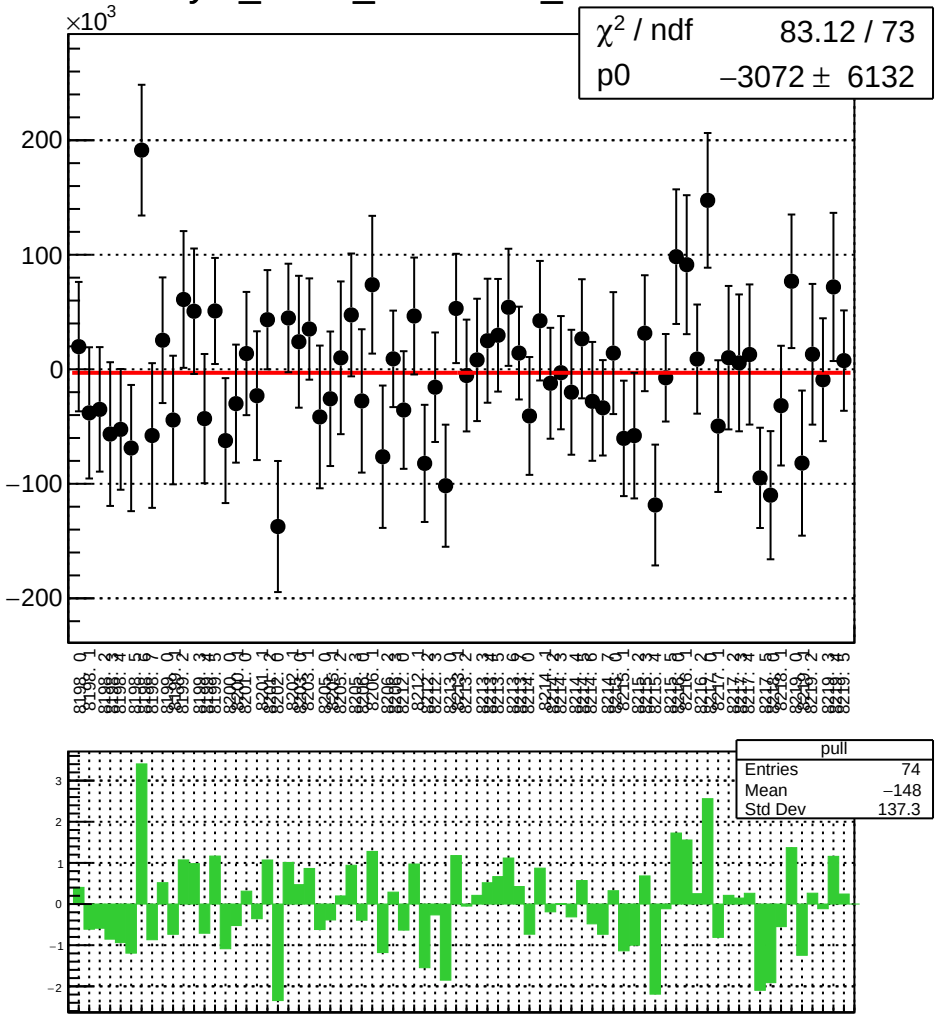

pull1D
Entries 74
Mean −0.01338
Std Dev 1.114

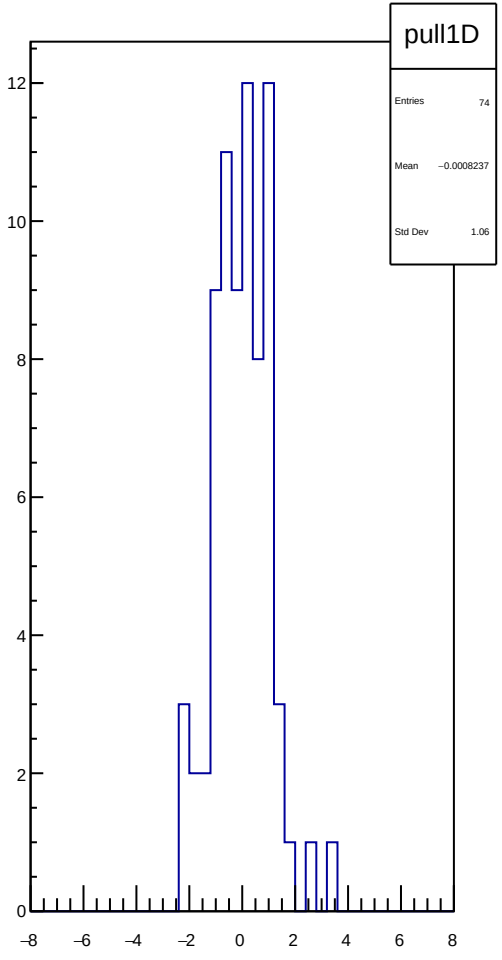

asym_sam1_correction_rms vs run
χ² / ndf 3.214e+04 / 73
p0 427.3 ± 0.3523
600
550
500
450
400
350

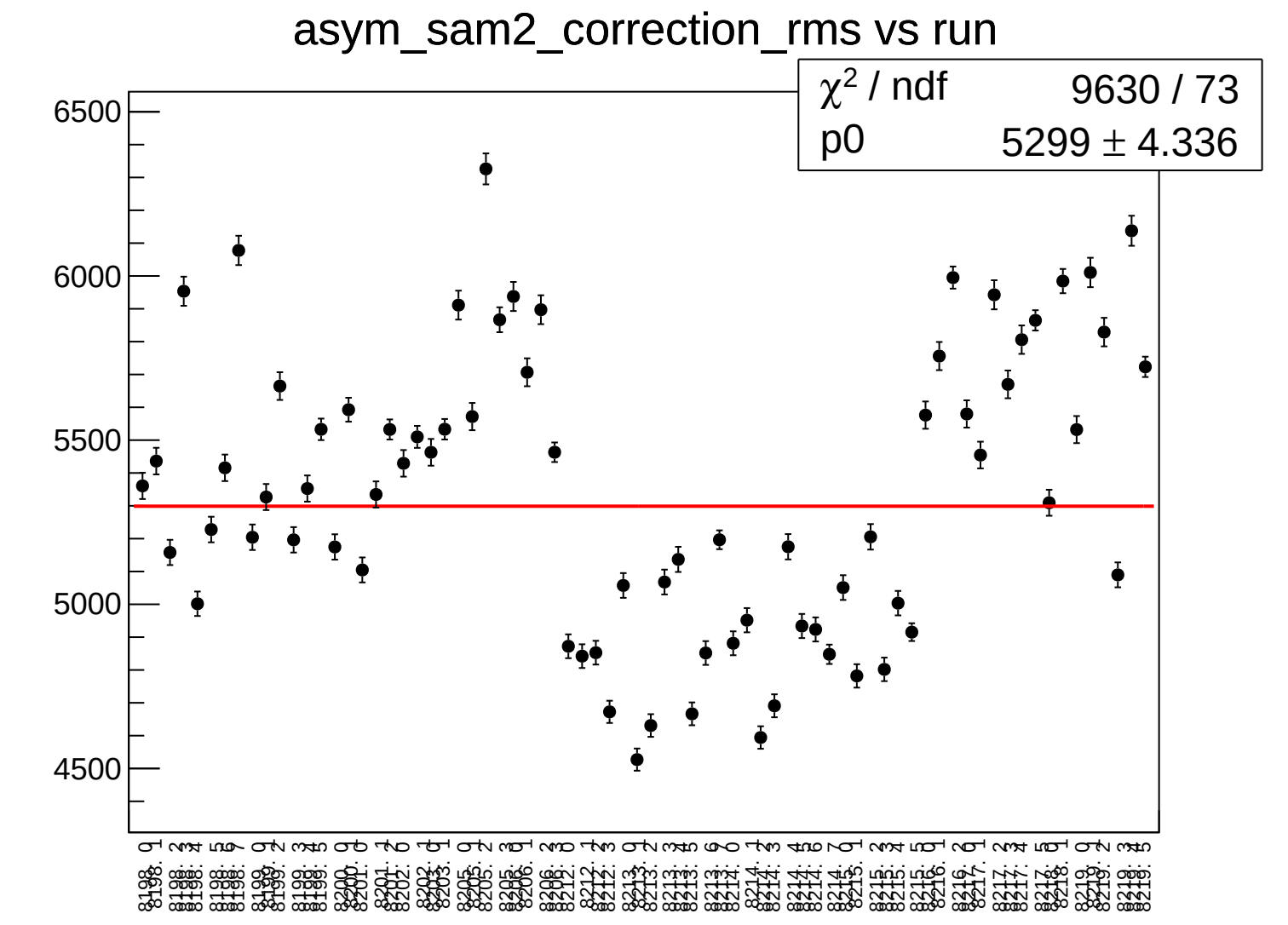

reg_asym_sam2_mean vs run
χ² / ndf 76.71 / 73
p0 374.2 ± 352.3
10000
5000
0
−5000
−10000
pull
Entries 74
Mean −77.34
Std Dev 204.7
2
1
0
−1
−2

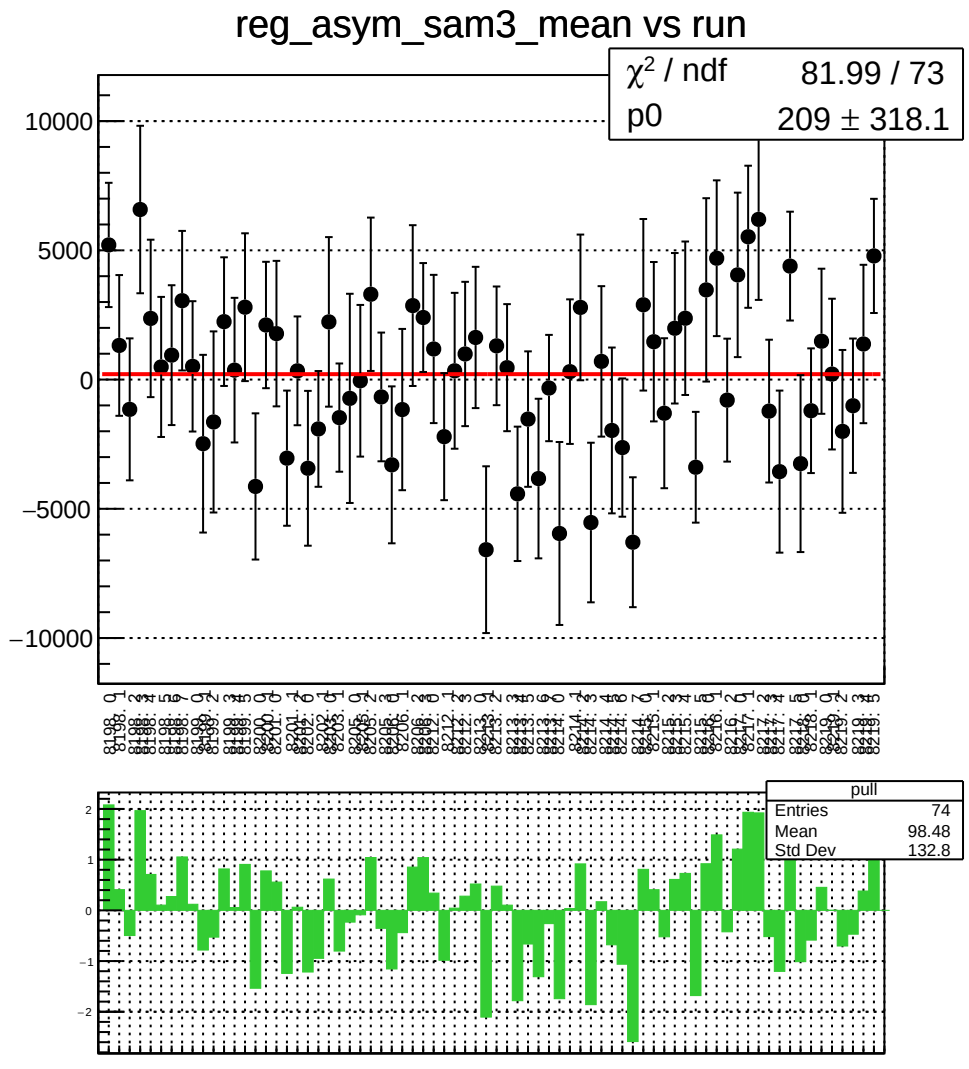

pull1D
Entries 74
Mean −0.003563
Std Dev 1.018
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

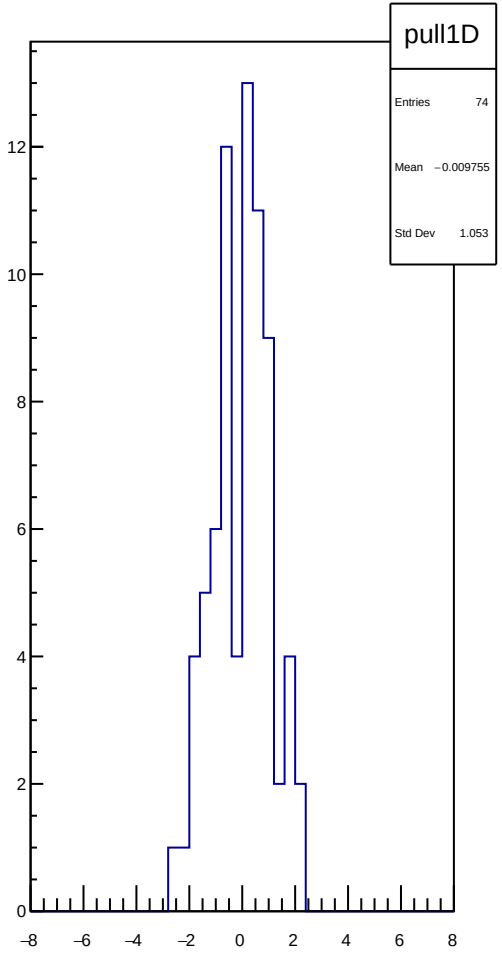

reg_asym_sam2_rms vs run
χ² / ndf 1.163e+04 / 73
p0 304.2 ± 0.2491
440
420
400
380
360
340
320
300
280
260

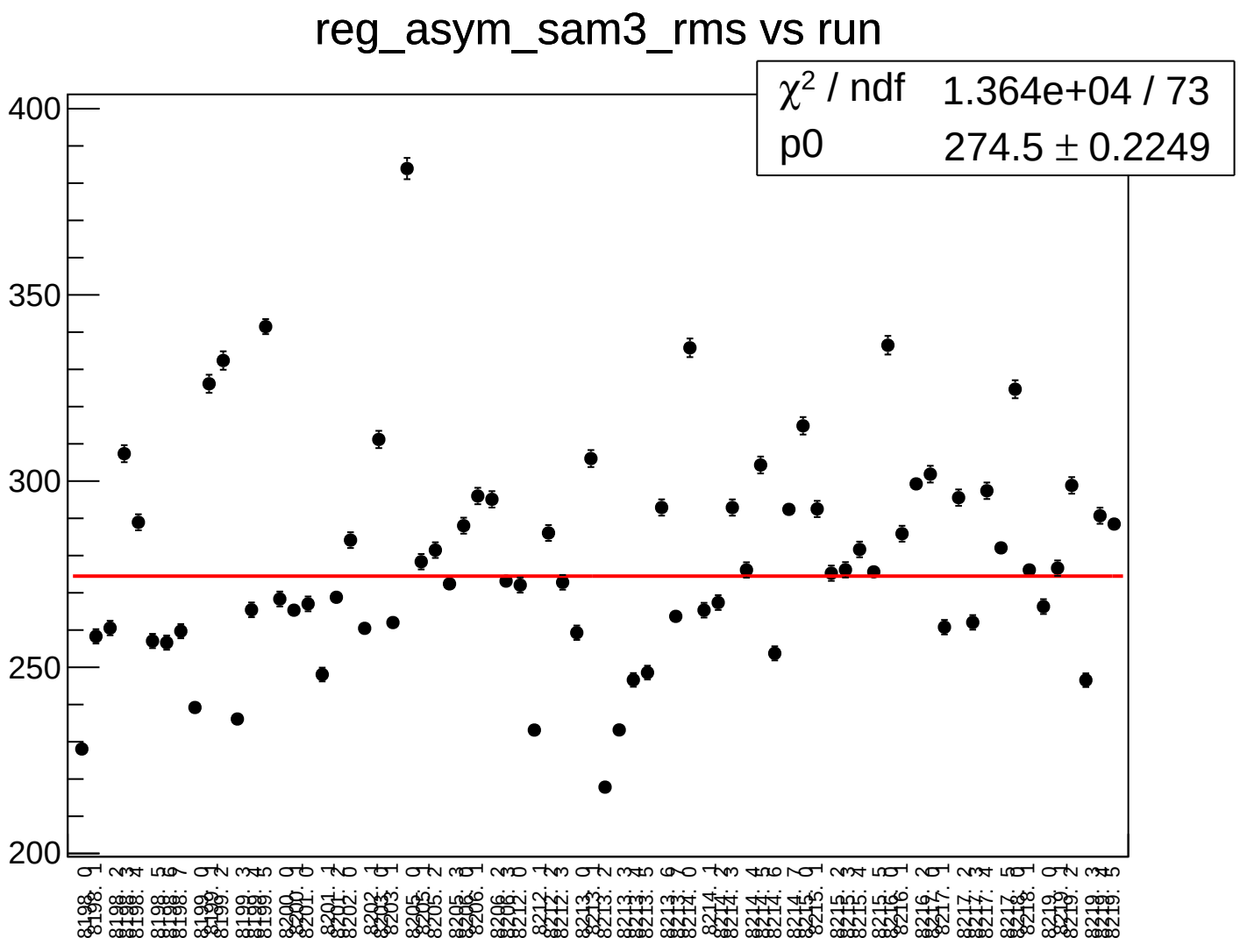

asym_sam2_correction_mean vs run
×10^3
χ² / ndf 83.12 / 73
p0 −3072 ± 6132
200
100
0
−100
−200
pull
Entries 74
Mean −148
Std Dev 137.3
3
2
1
0
−1
−2

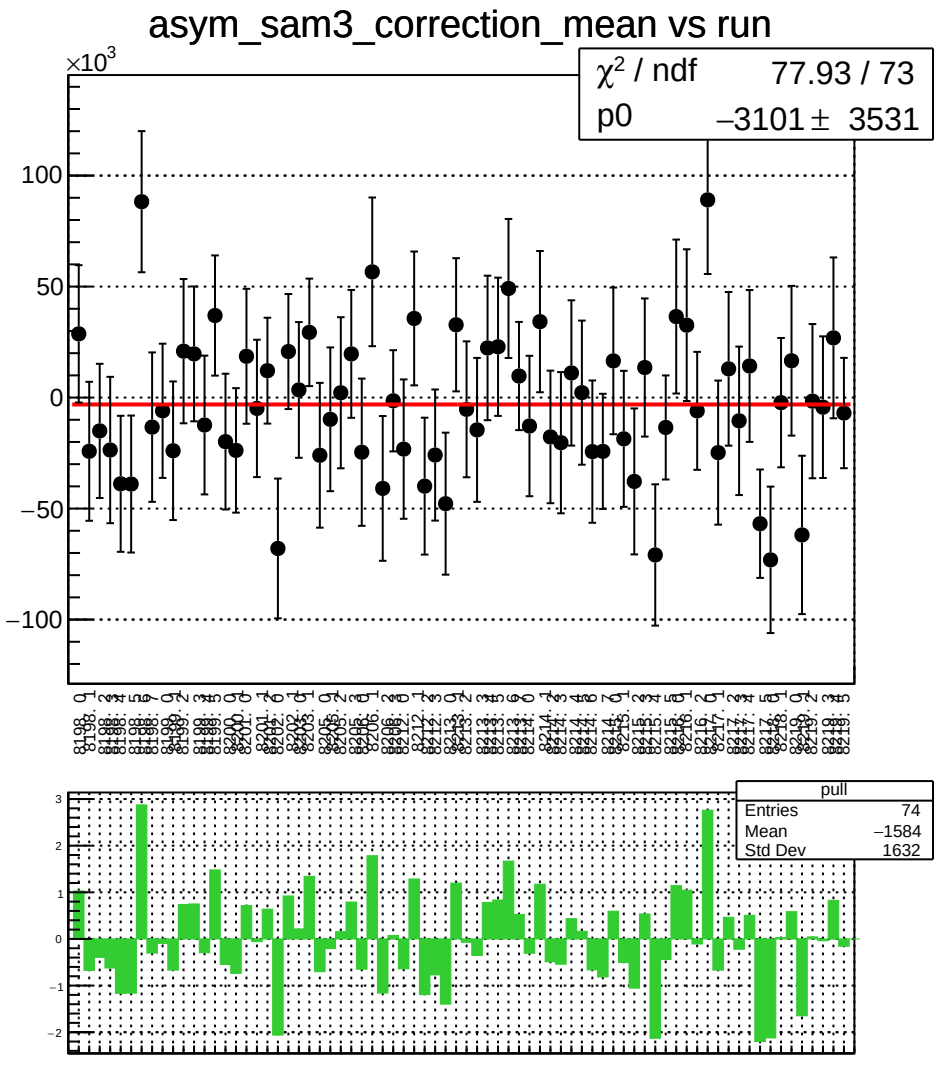

pull1D
Entries 74
Mean −0.0008237
Std Dev 1.06
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

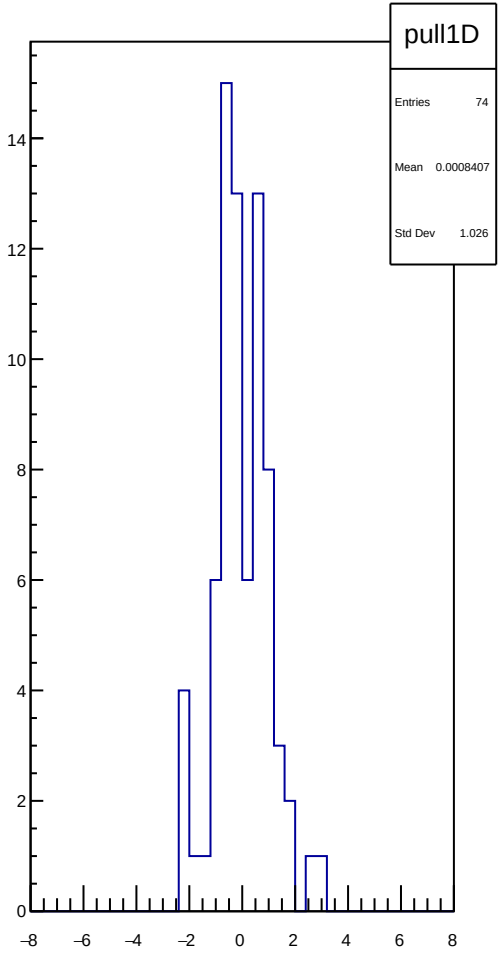

asym_sam2_correction_rms vs run
χ² / ndf 9630 / 73
p0 5299 ± 4.336
6500
6000
5500
5000
4500

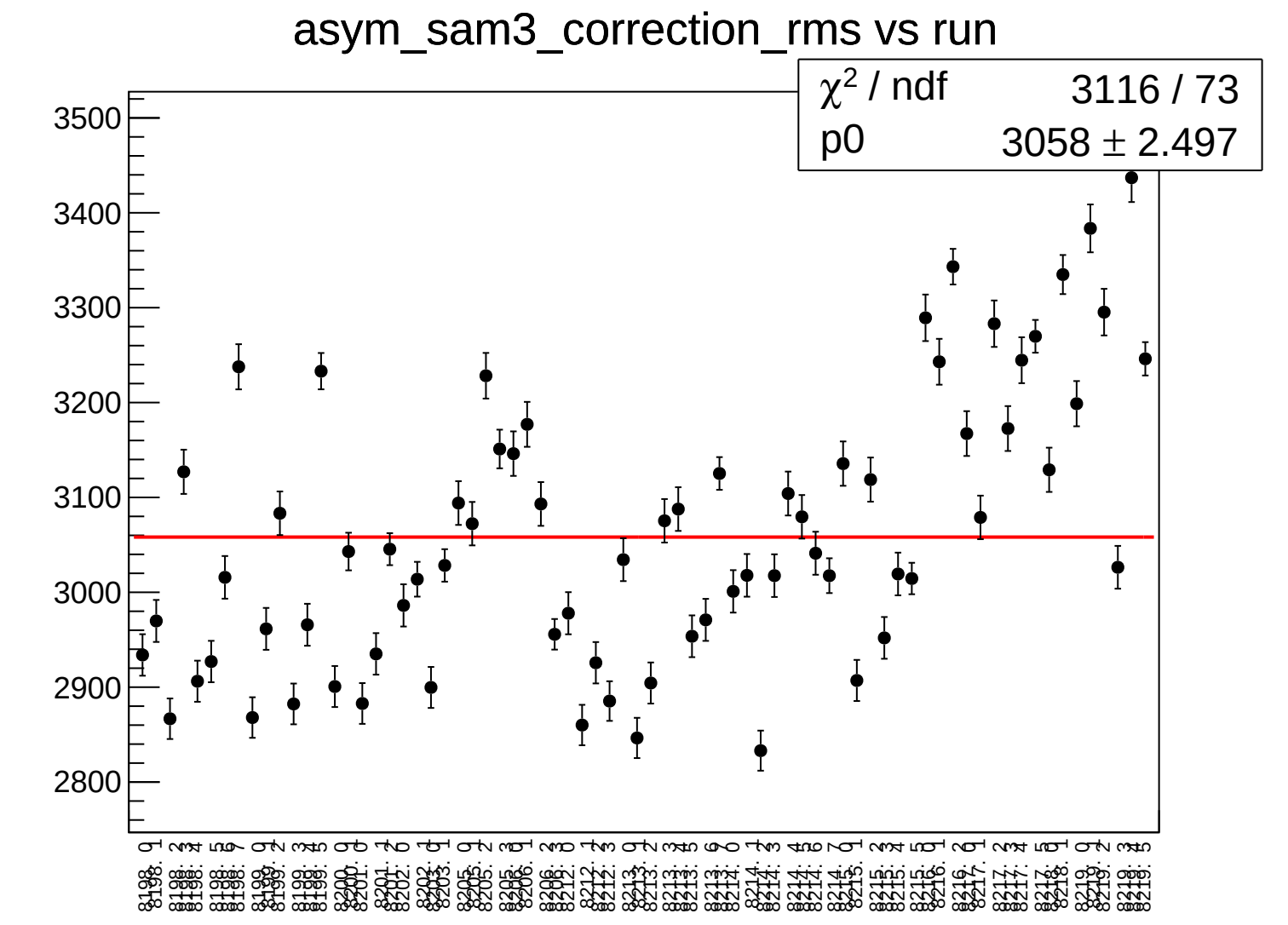

reg_asym_sam3_mean vs run
χ² / ndf 81.99 / 73
p0 209 ± 318.1
10000
5000
0
−5000
−10000
pull
Entries 74
Mean 98.48
Std Dev 132.8
2
1
0
−1
−2

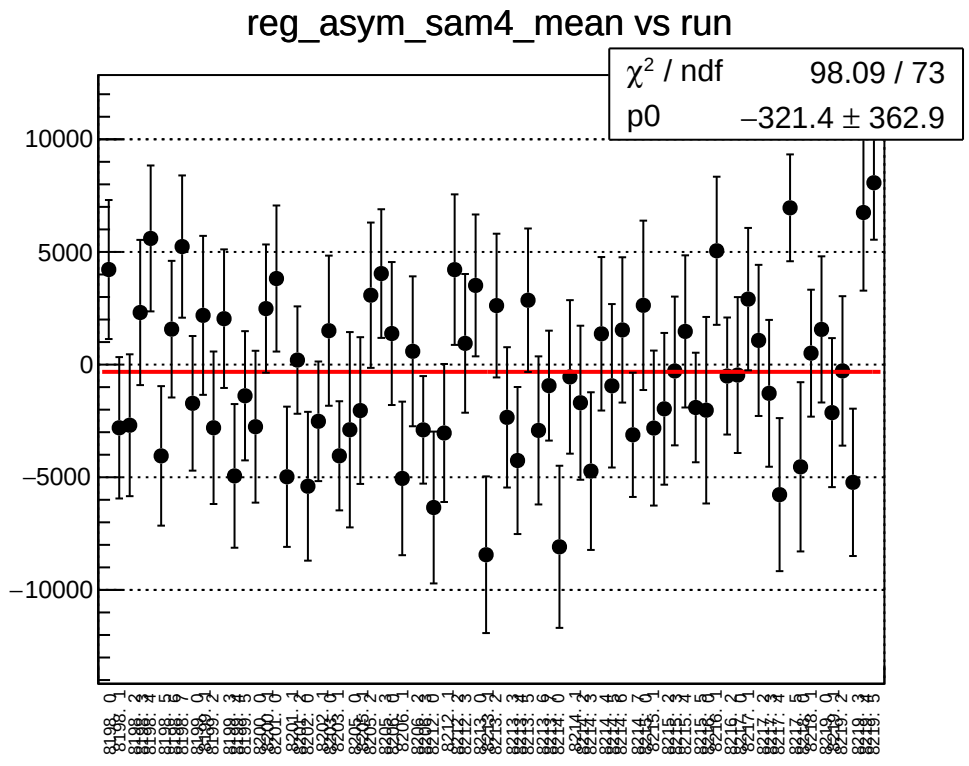

pull1D
Entries 74
Mean −0.009755
Std Dev 1.053
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

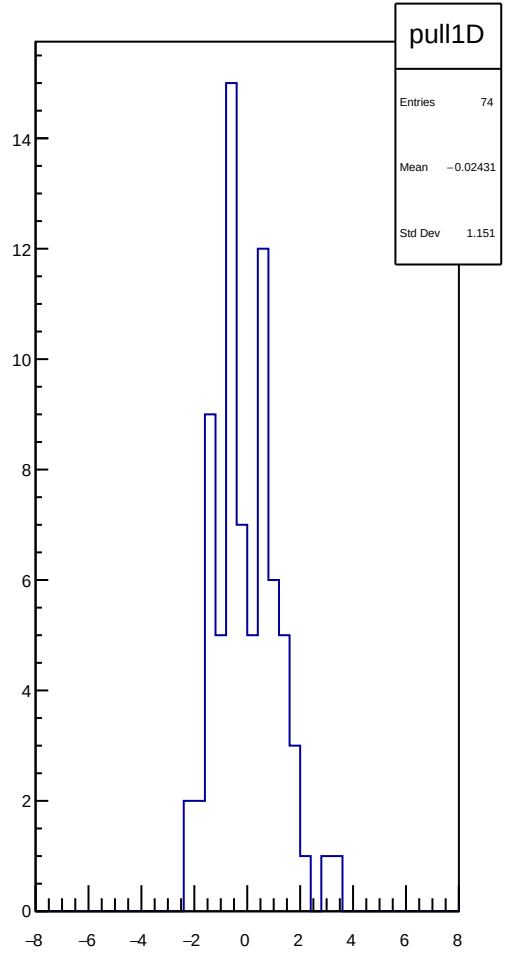

reg_asym_sam3_rms vs run
χ² / ndf 1.364e+04 / 73
p0 274.5 ± 0.2249
400
350
300
250
200

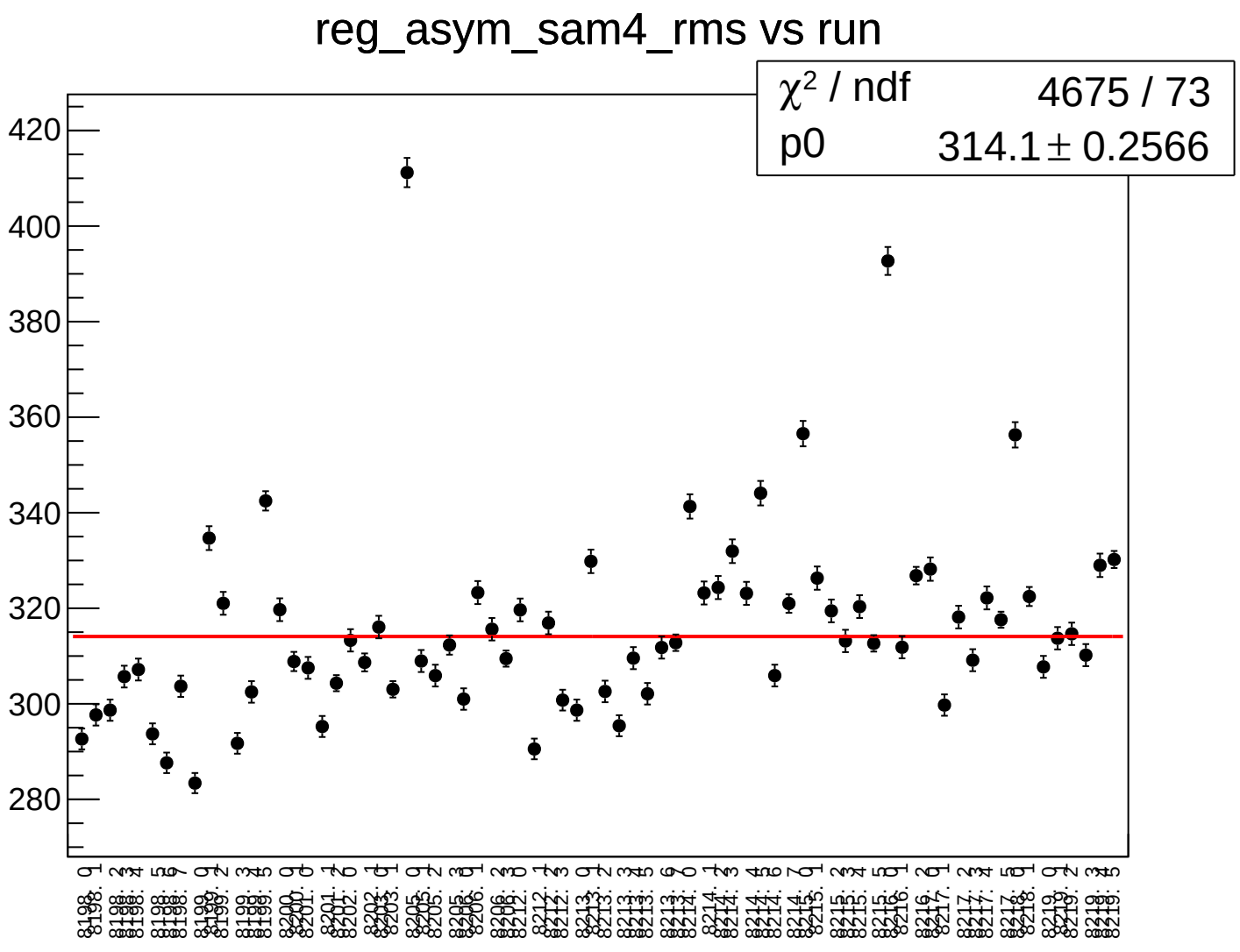

asym_sam3_correction_mean vs run
×10^3
χ² / ndf 77.93 / 73
p0 −3101 ± 3531
100
50
0
−50
−100
pull
Entries 74
Mean −1584
Std Dev 1632
3
2
1
0
−1
−2

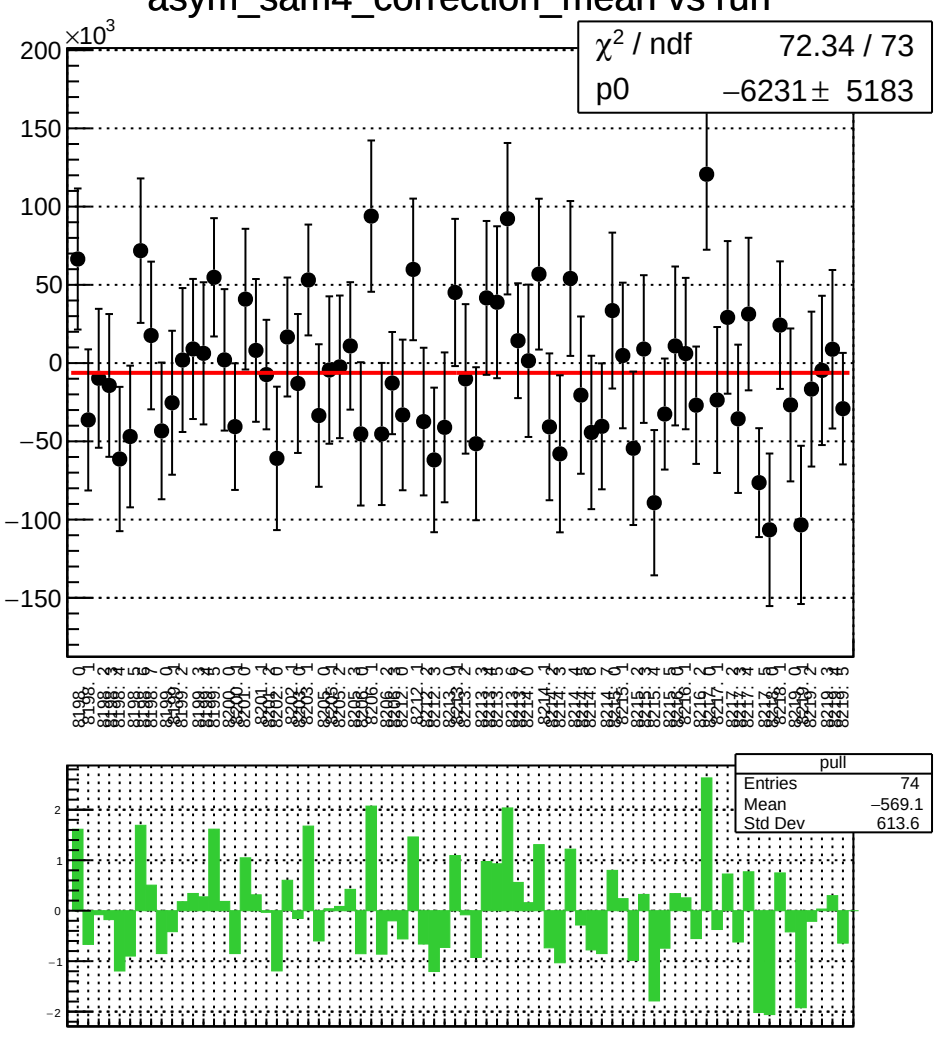

pull1D
Entries 74
Mean 0.0008407
Std Dev 1.026
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

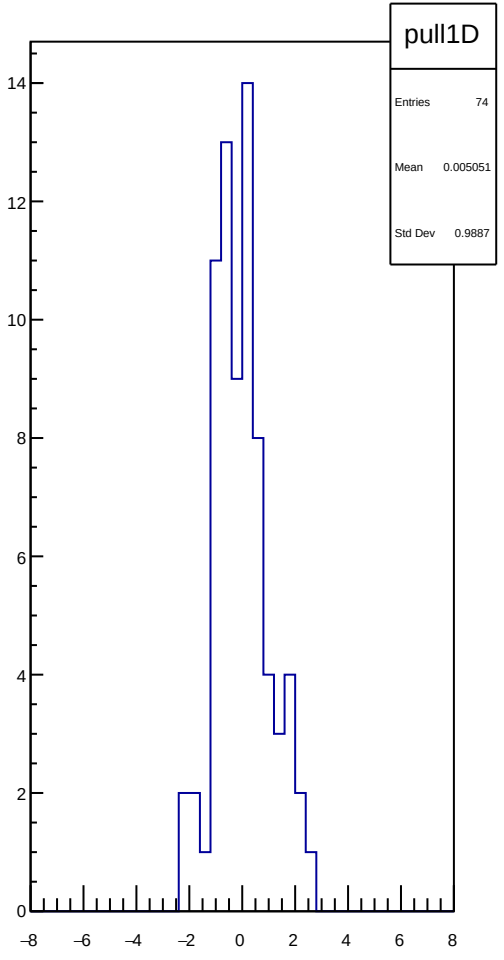

asym_sam3_correction_rms vs run
χ² / ndf 3116 / 73
p0 3058 ± 2.497
3500
3400
3300
3200
3100
3000
2900
2800

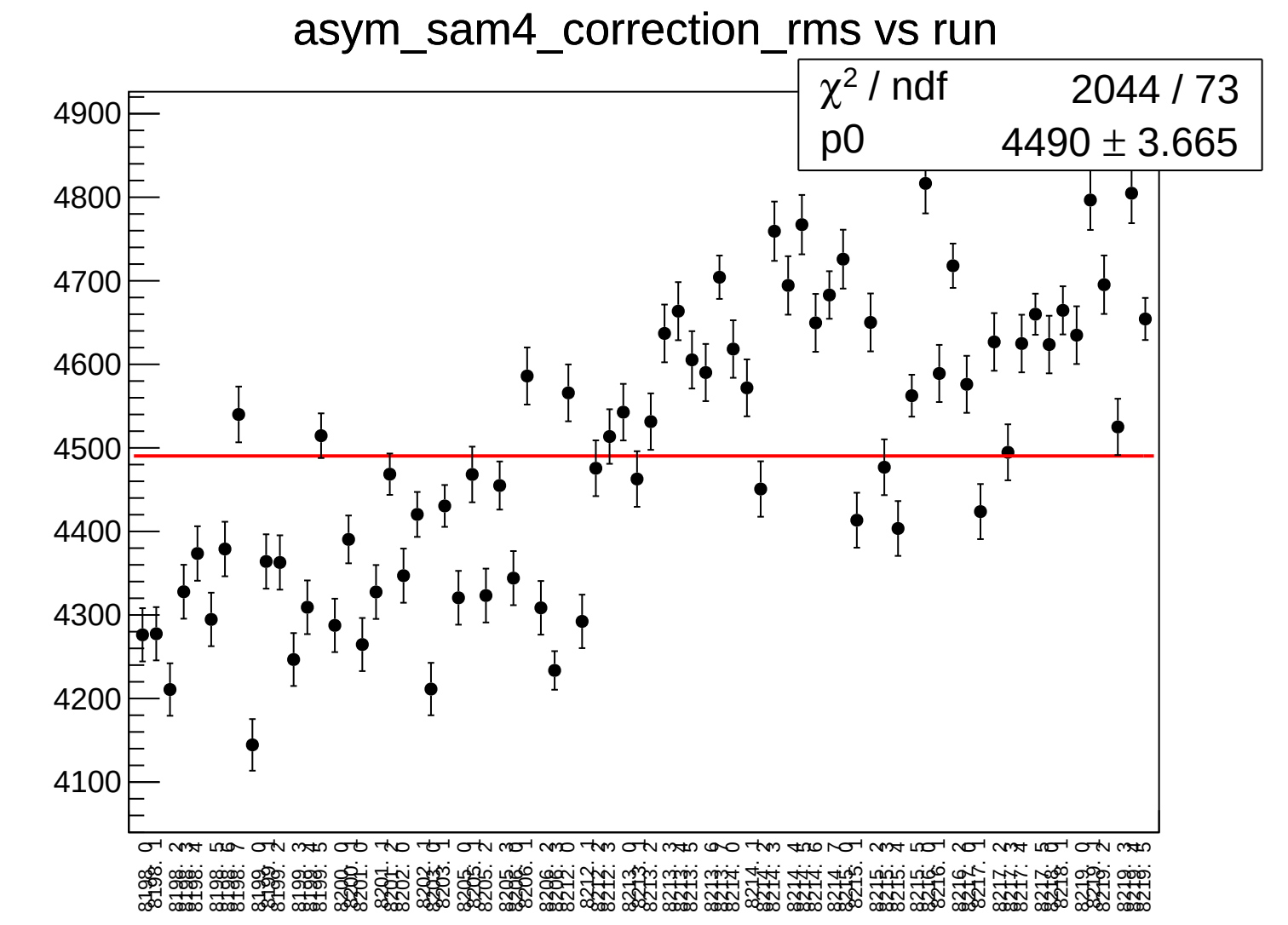

reg_asym_sam4_mean vs run
χ² / ndf 98.09 / 73
p0 −321.4 ± 362.9
10000
5000
0
−5000
−10000
pull
Entries 74
Mean −39.39
Std Dev 103
3
2
1
0
−1
−2

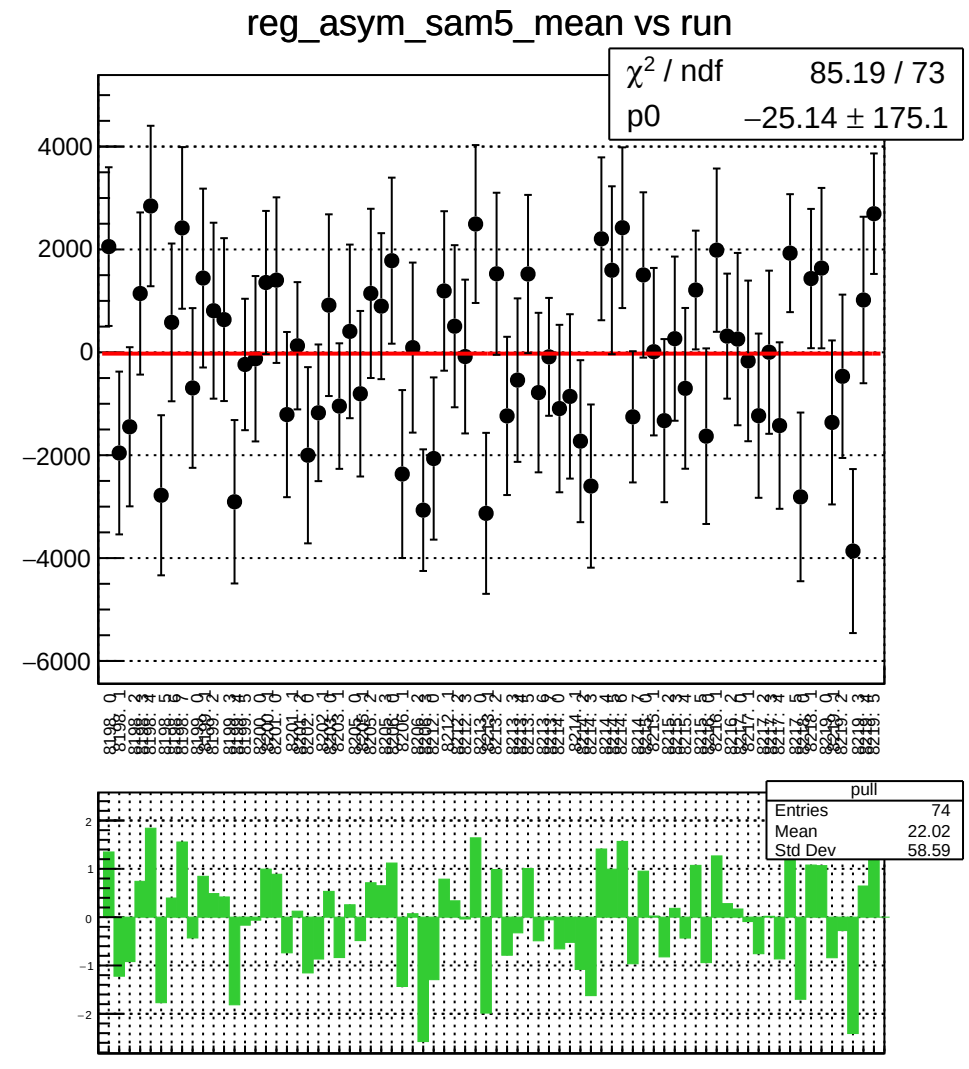

pull1D
Entries 74
Mean −0.02431
Std Dev 1.151
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

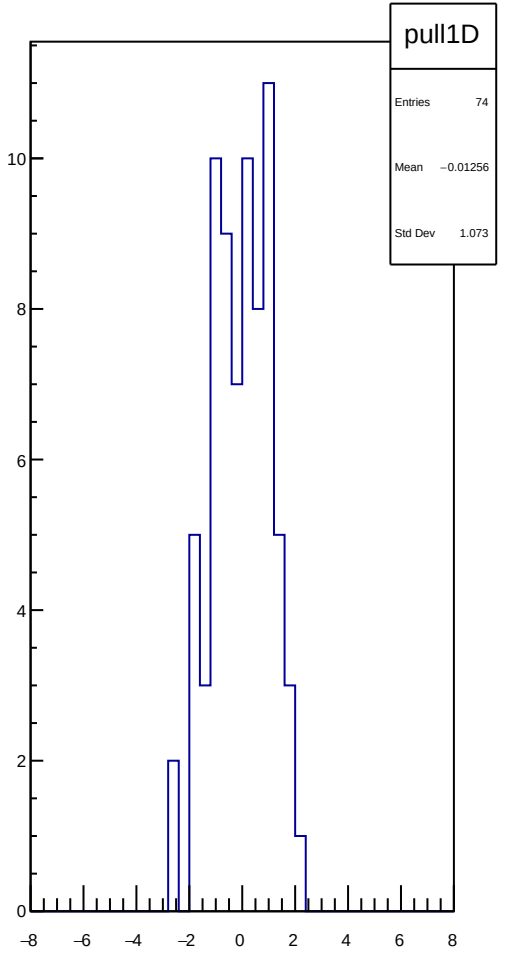

reg_asym_sam4_rms vs run
χ² / ndf 4675 / 73
p0 314.1 ± 0.2566
420
400
380
360
340
320
300
280

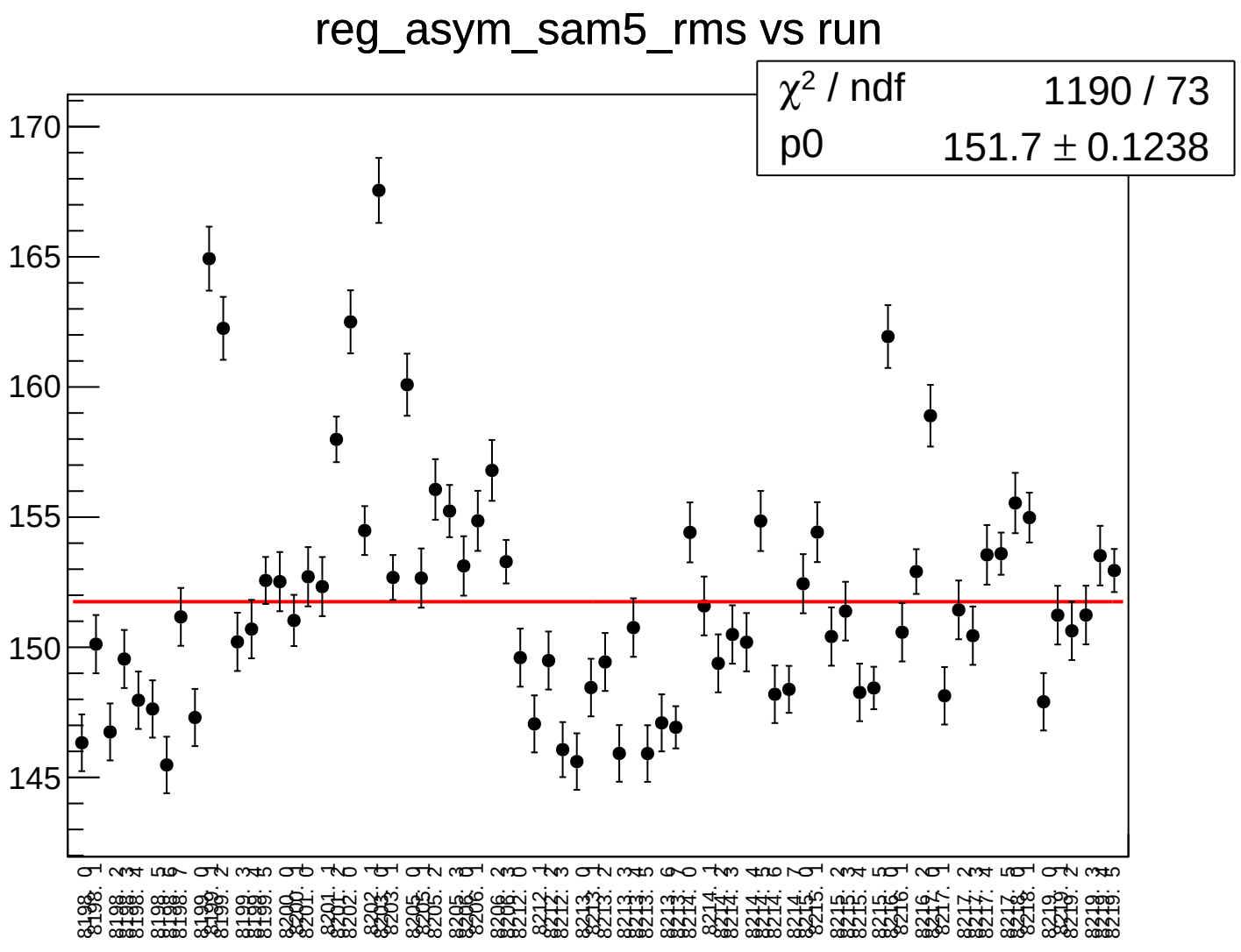

asym_sam4_correction_mean vs run
χ² / ndf 72.34 / 73
p0 −6231 ± 5183
pull
Entries 74
Mean −569.1
Std Dev 613.6

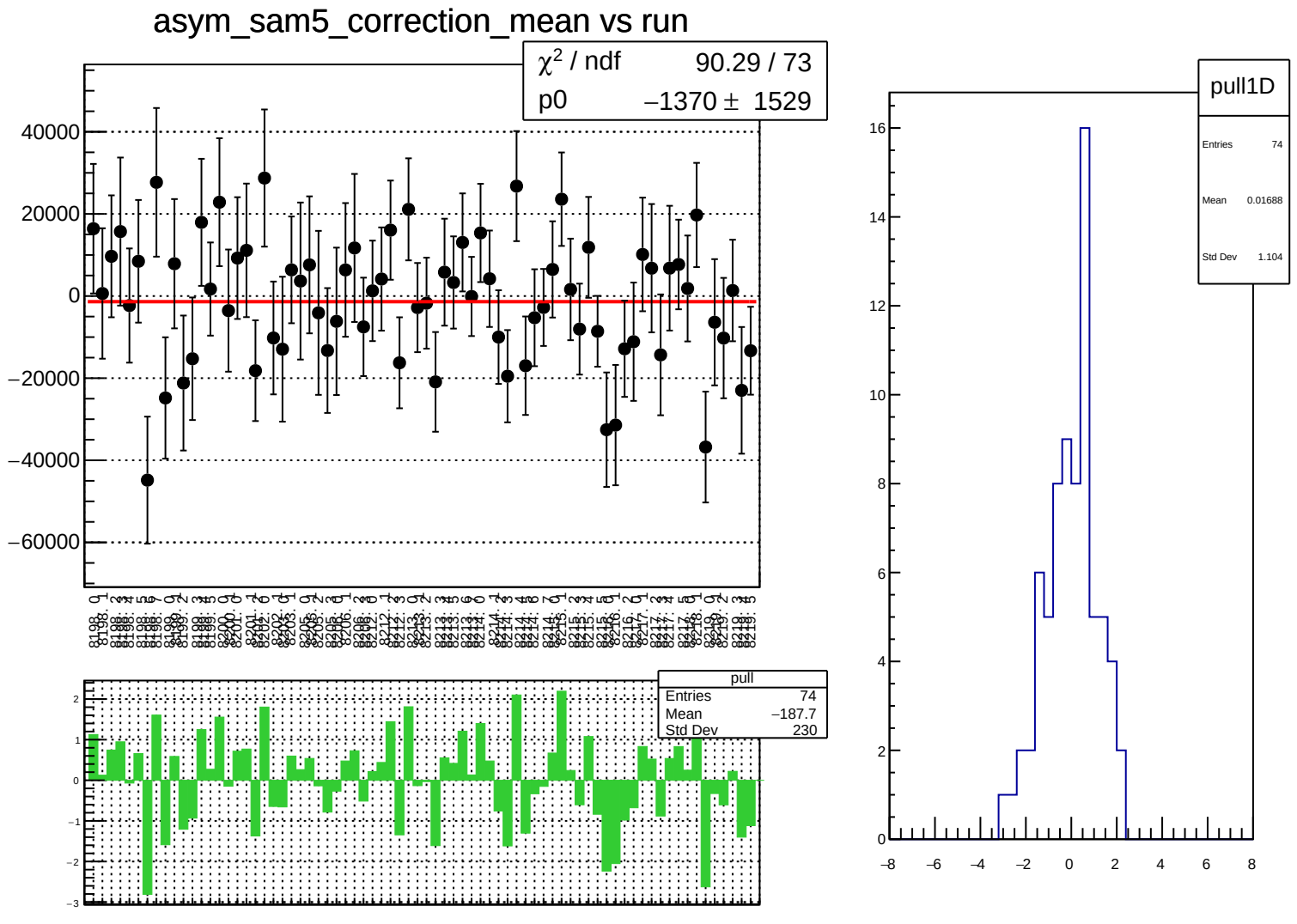

pull1D
Entries 74
Mean 0.005051
Std Dev 0.9887

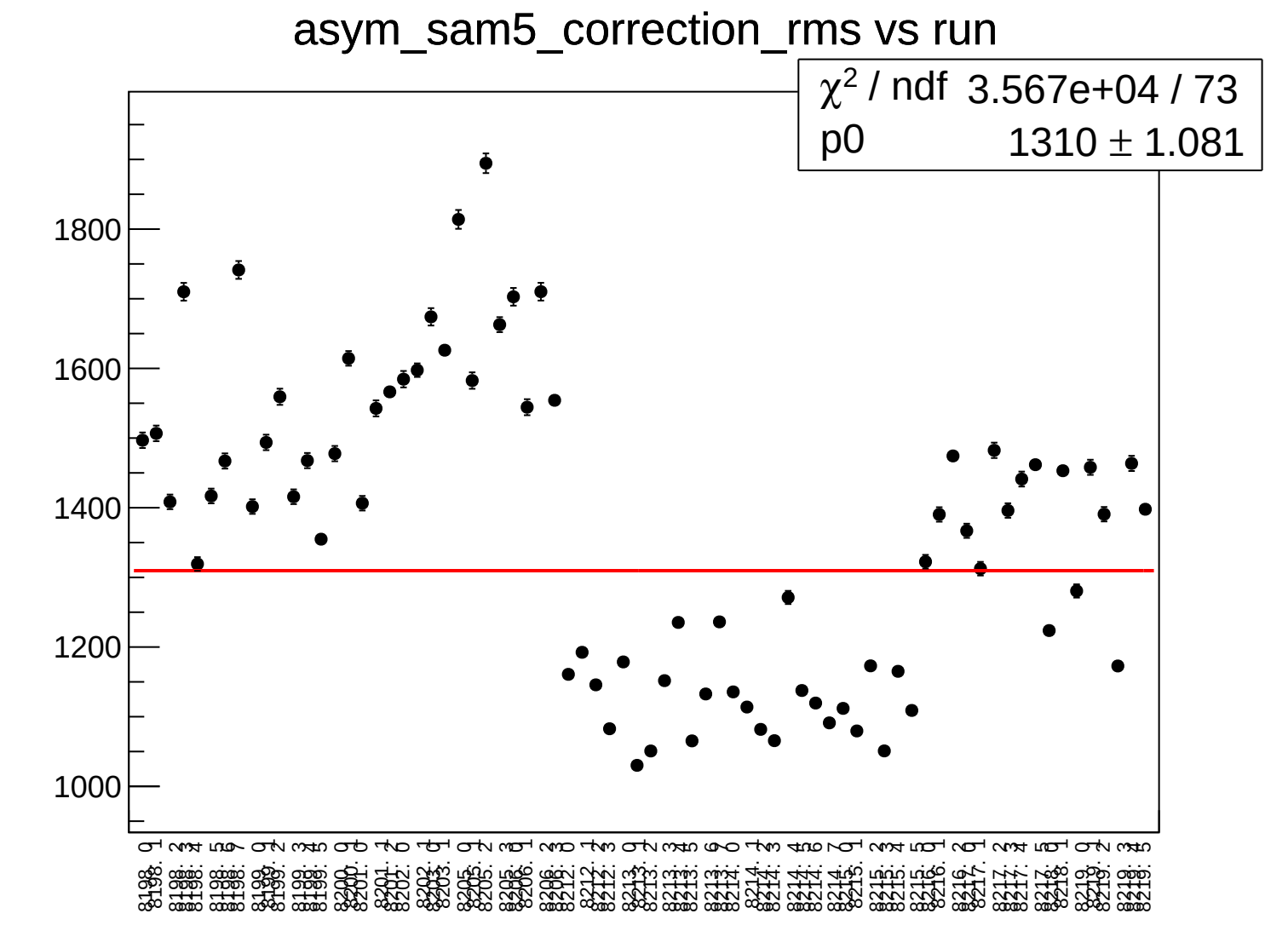

asym_sam4_correction_rms vs run
χ² / ndf 2044 / 73
p0 4490 ± 3.665
4900
4800
4700
4600
4500
4400
4300
4200
4100

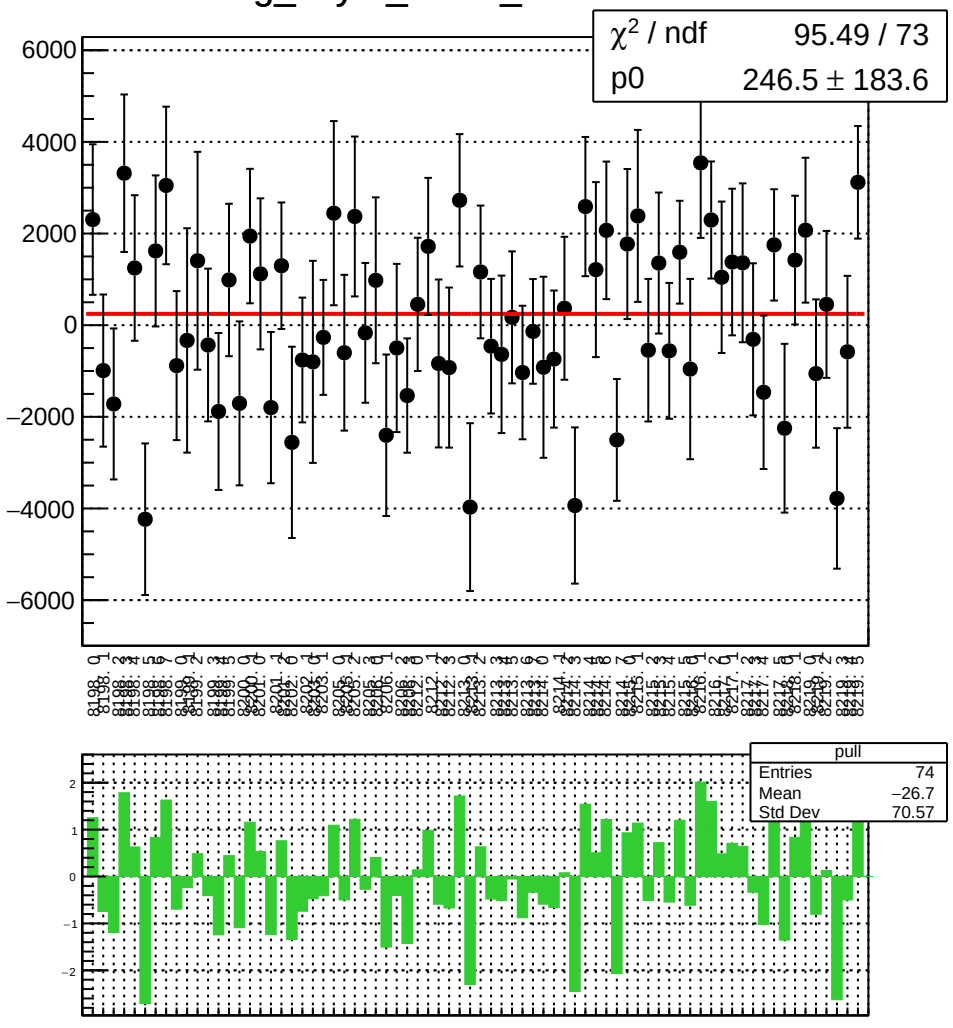

reg_asym_sam5_mean vs run
χ² / ndf 85.19 / 73
p0 −25.14 ± 175.1
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean 22.02
Std Dev 58.59
2
1
0
−1
−2

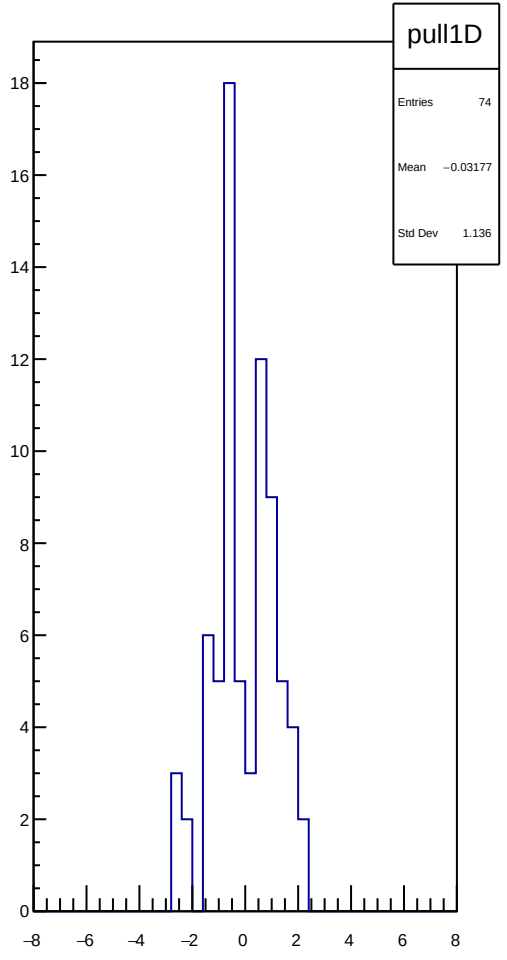

pull1D
Entries 74
Mean −0.01256
Std Dev 1.073
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

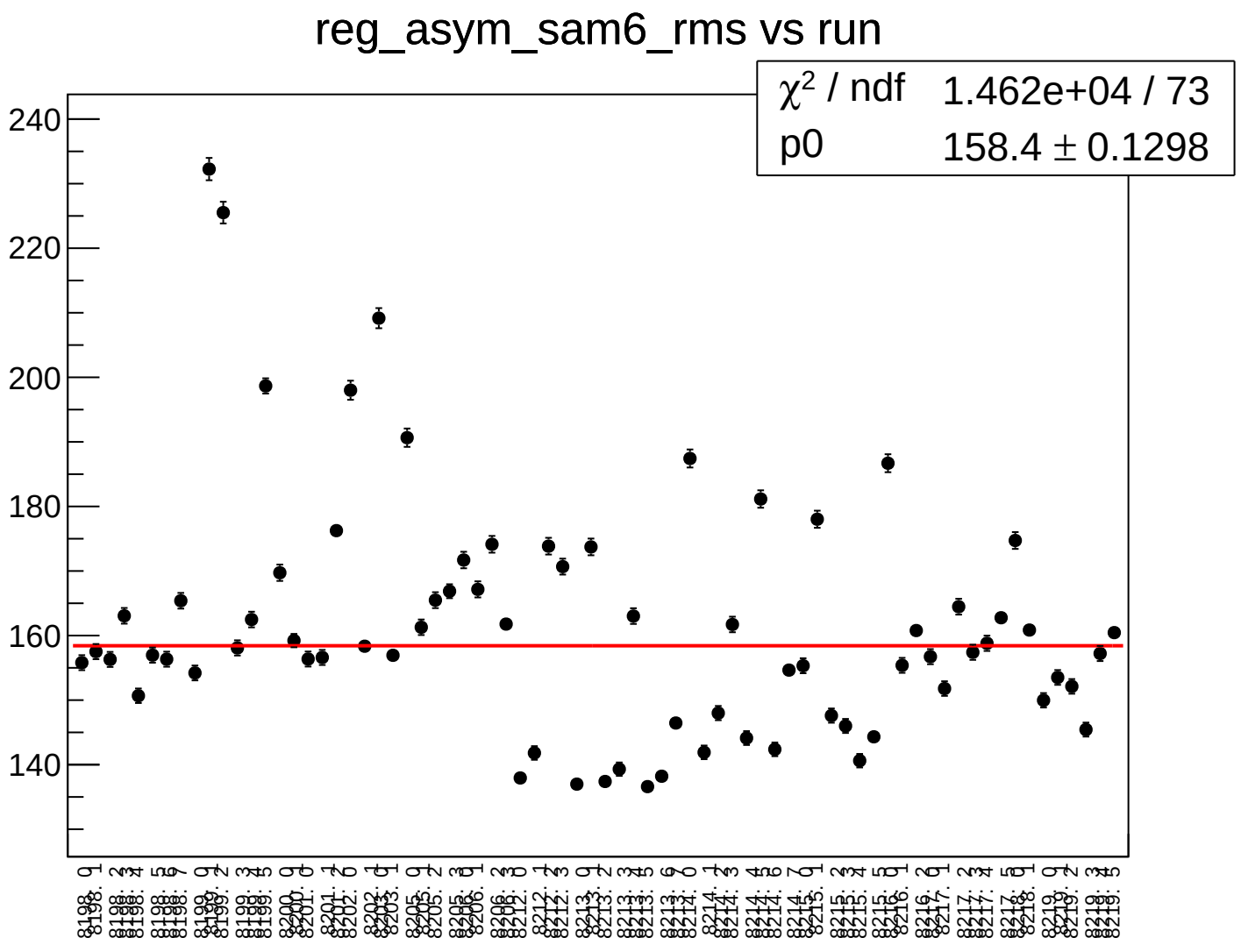

reg_asym_sam5_rms vs run
χ² / ndf 1190 / 73
p0 151.7 ± 0.1238
170
165
160
155
150
145

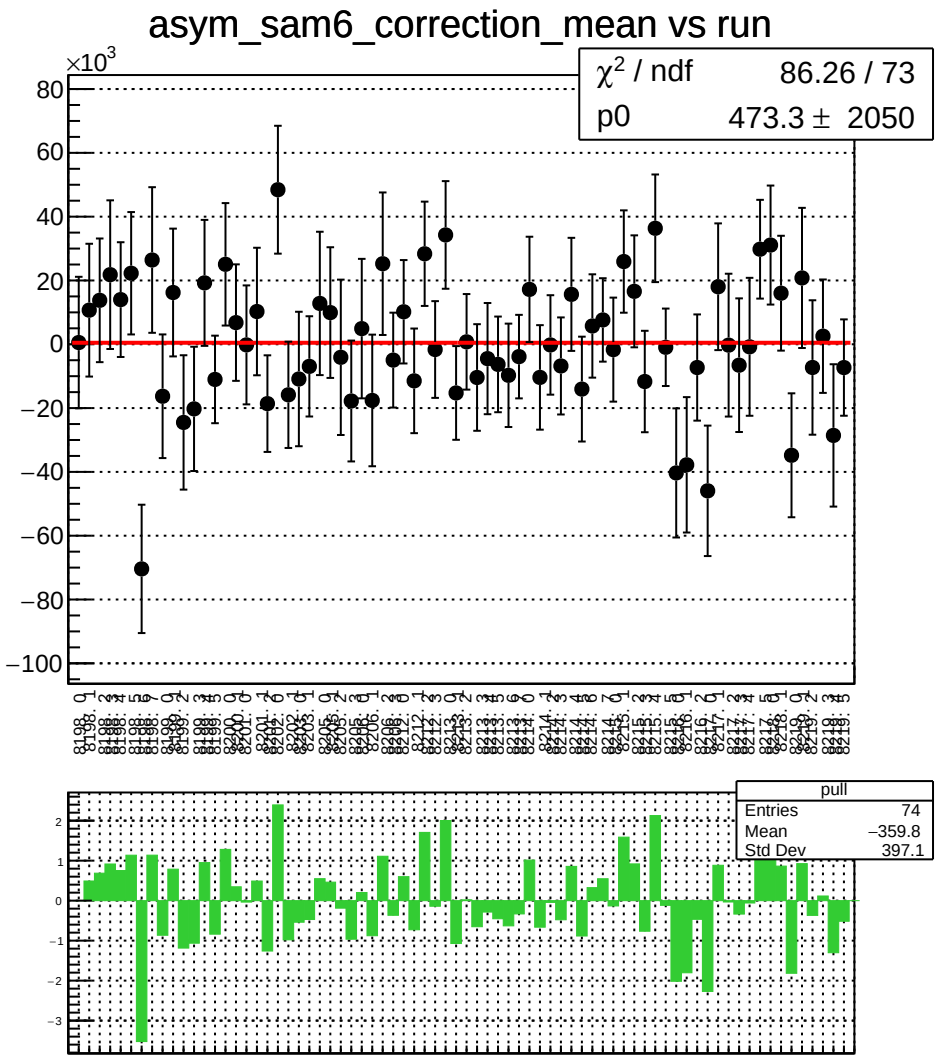

asym_sam5_correction_mean vs run
χ² / ndf 90.29 / 73
p0 −1370 ± 1529
40000
20000
0
−20000
−40000
−60000
pull
Entries 74
Mean −187.7
Std Dev 230
2
1
0
−1
−2
−3
pull1D
Entries 74
Mean 0.01688
Std Dev 1.104
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

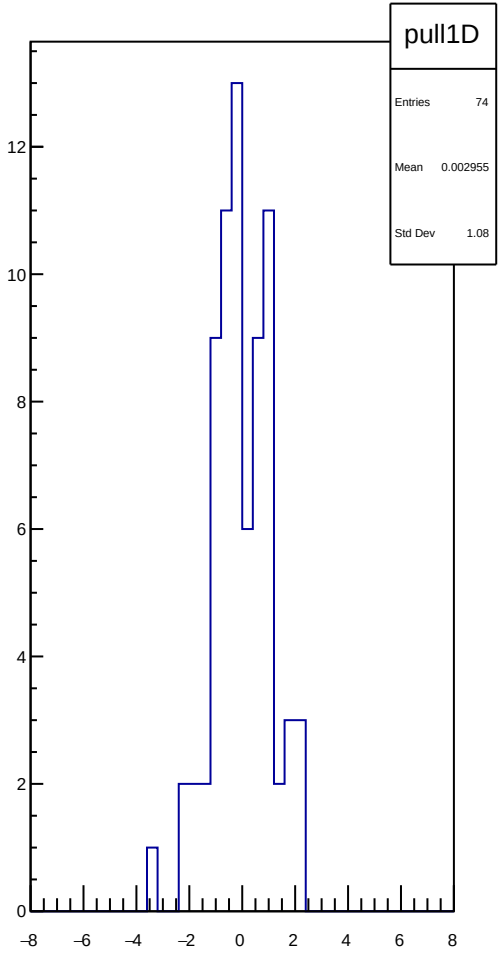

asym_sam5_correction_rms vs run
χ^2 / ndf 3.567e+04 / 73
p0 1310 ± 1.081
1800
1600
1400
1200
1000

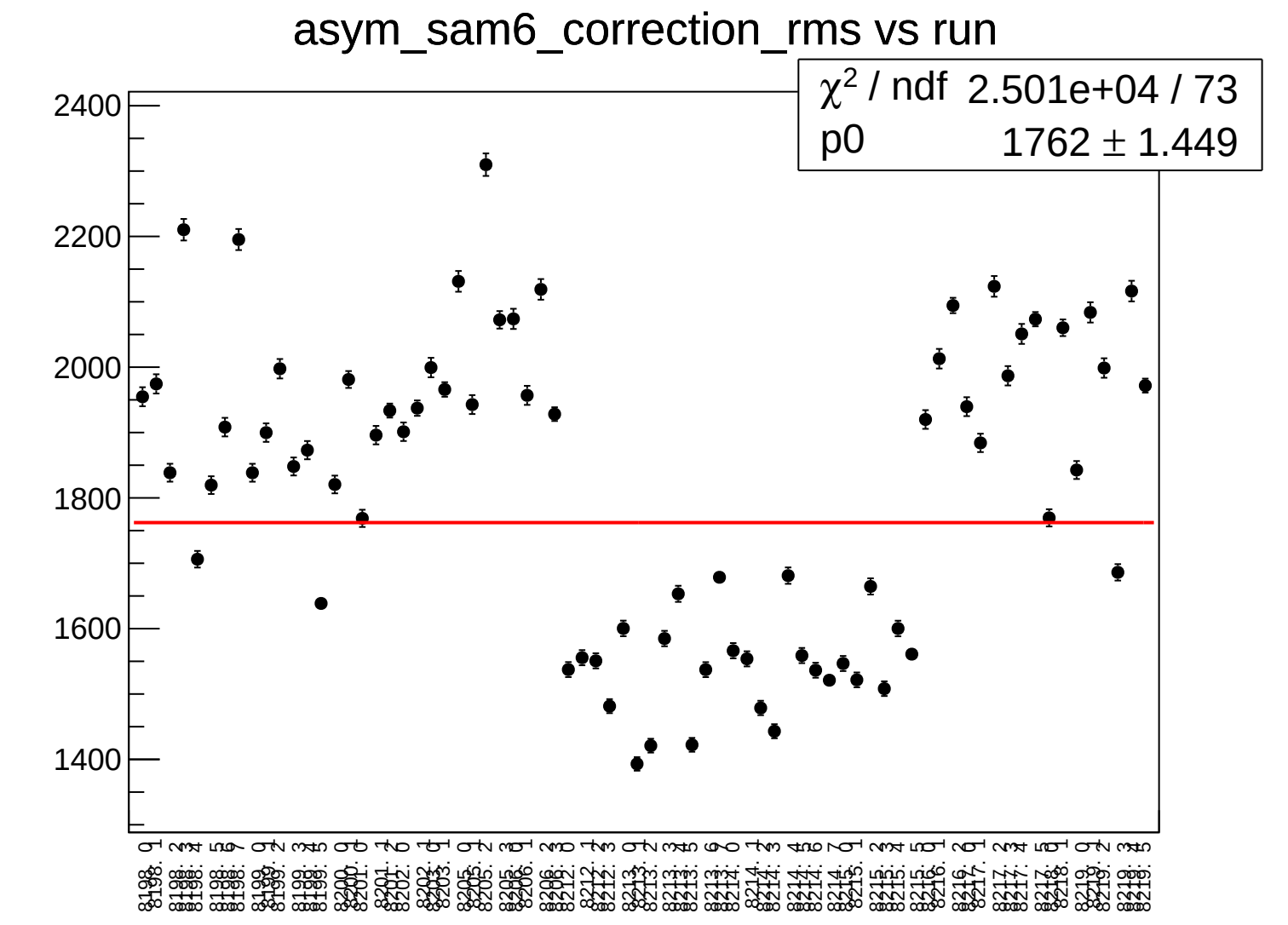

reg_asym_sam6_mean vs run
χ² / ndf 95.49 / 73
p0 246.5 ± 183.6
pull
Entries 74
Mean −26.7
Std Dev 70.57

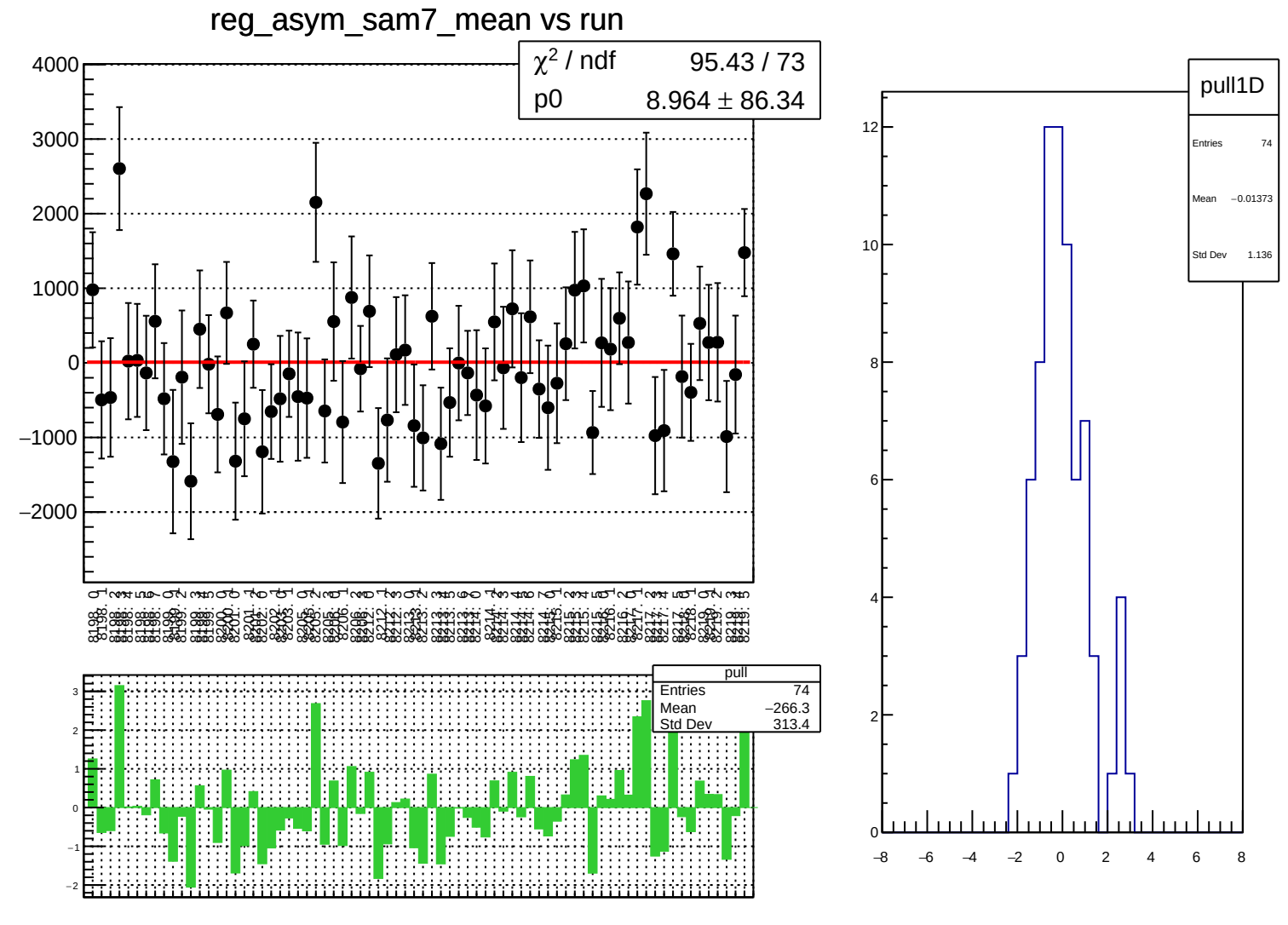

pull1D
Entries 74
Mean −0.03177
Std Dev 1.136

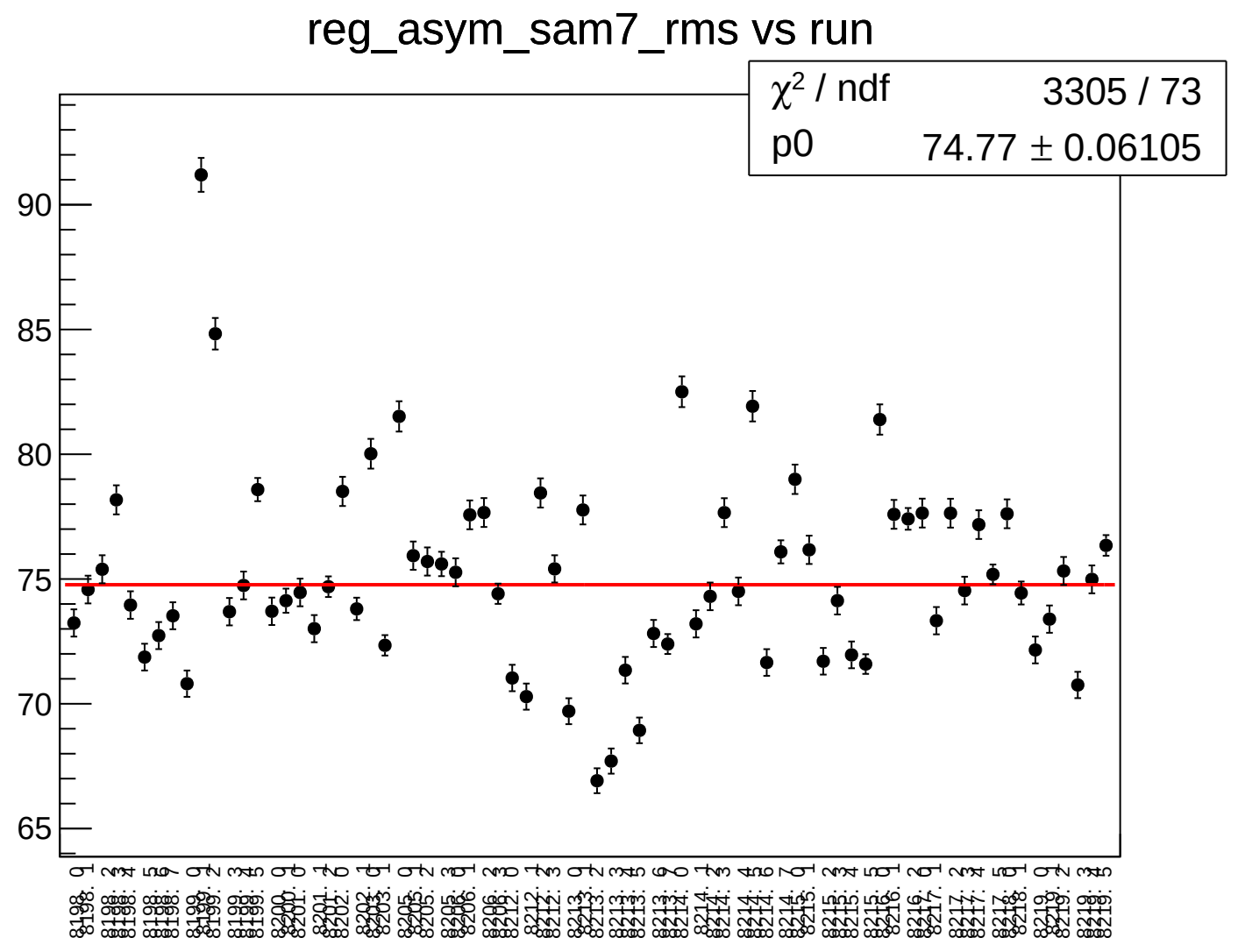

reg_asym_sam6_rms vs run
χ² / ndf 1.462e+04 / 73
p0 158.4 ± 0.1298
240
220
200
180
160
140

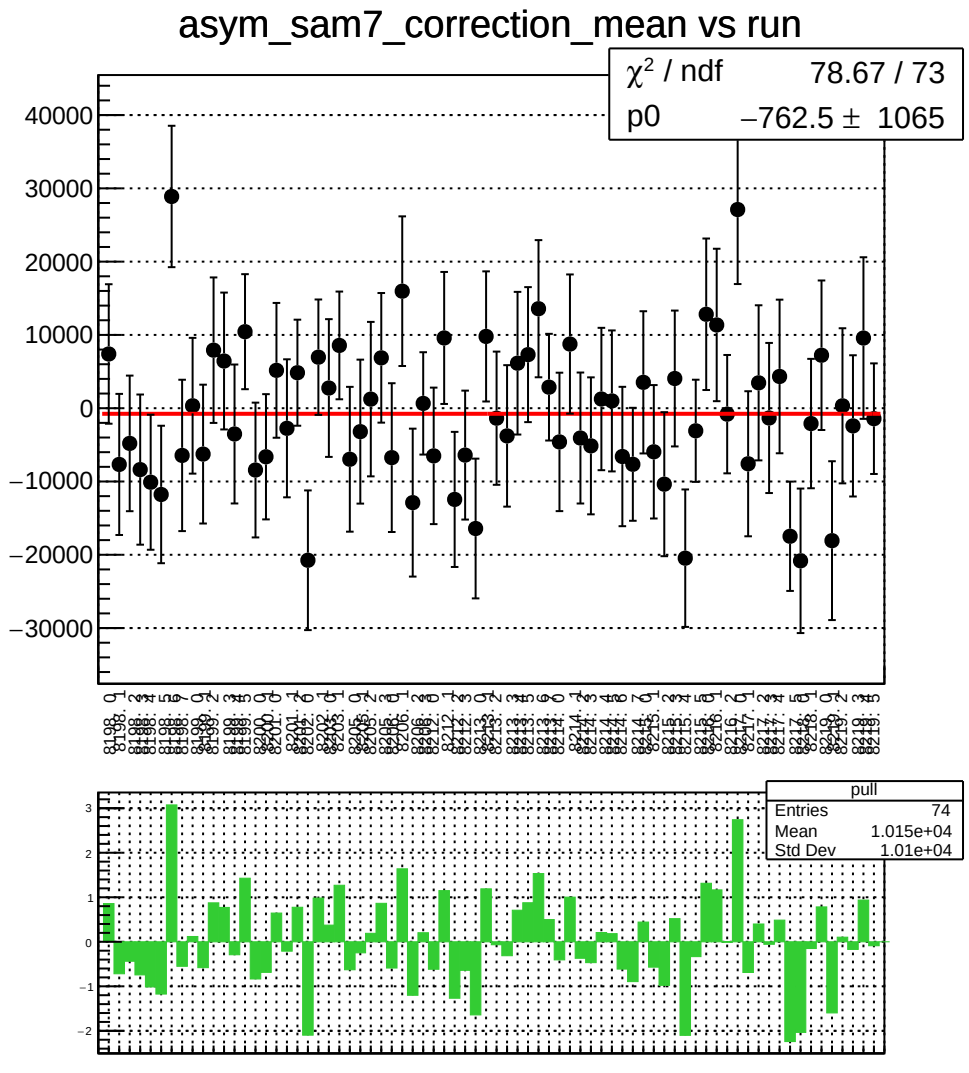

asym_sam6_correction_mean vs run
×10^3
χ² / ndf 86.26 / 73
p0 473.3 ± 2050
pull
Entries 74
Mean −359.8
Std Dev 397.1

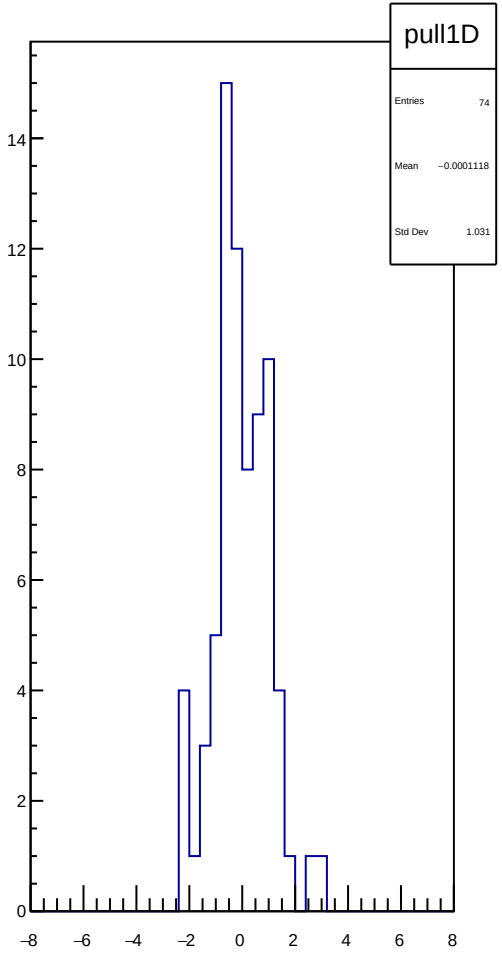

pull1D
Entries 74
Mean 0.002955
Std Dev 1.08

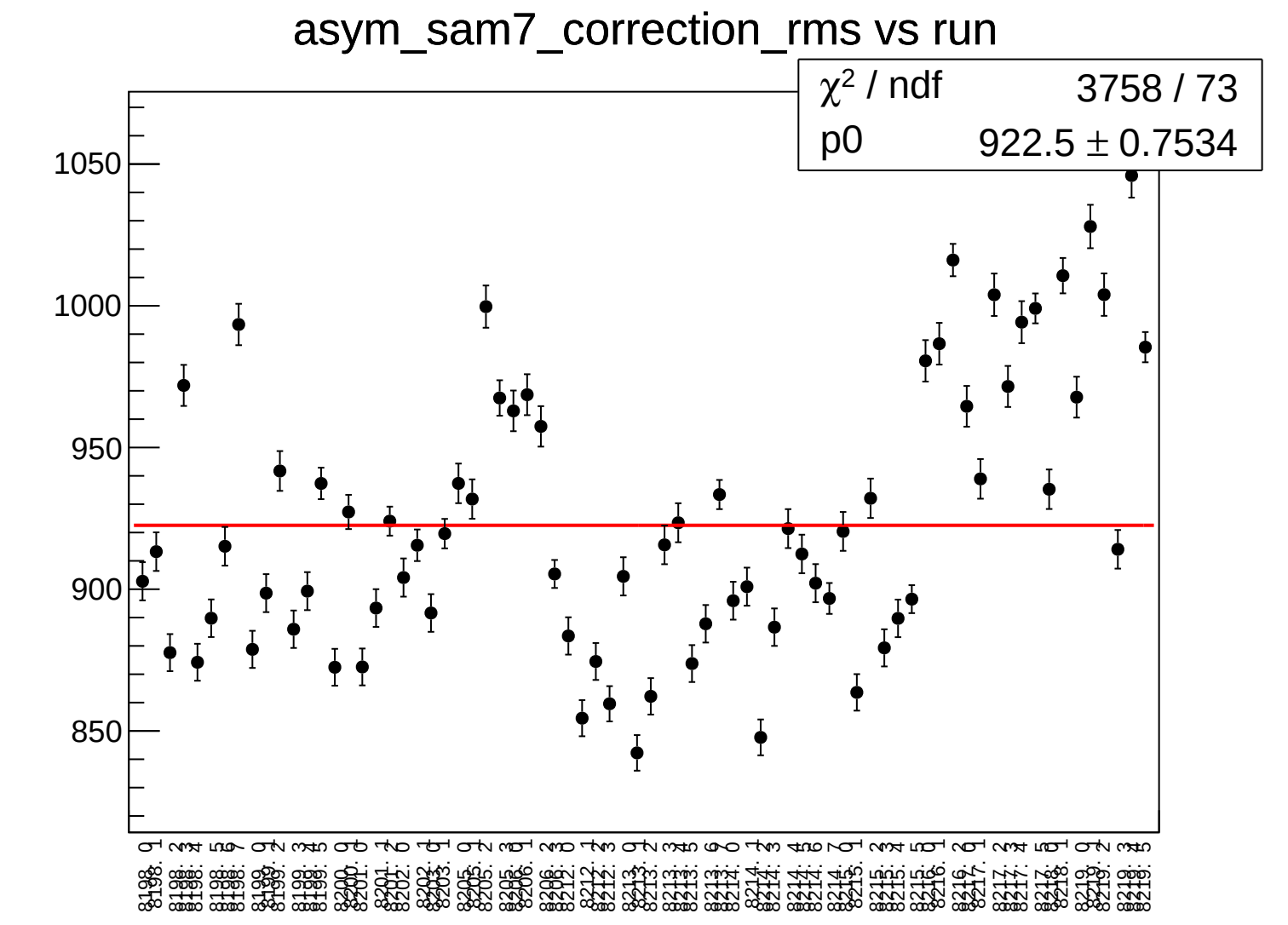

asym_sam6_correction_rms vs run
χ² / ndf 2.501e+04 / 73
p0 1762 ± 1.449
2400
2200
2000
1800
1600
1400

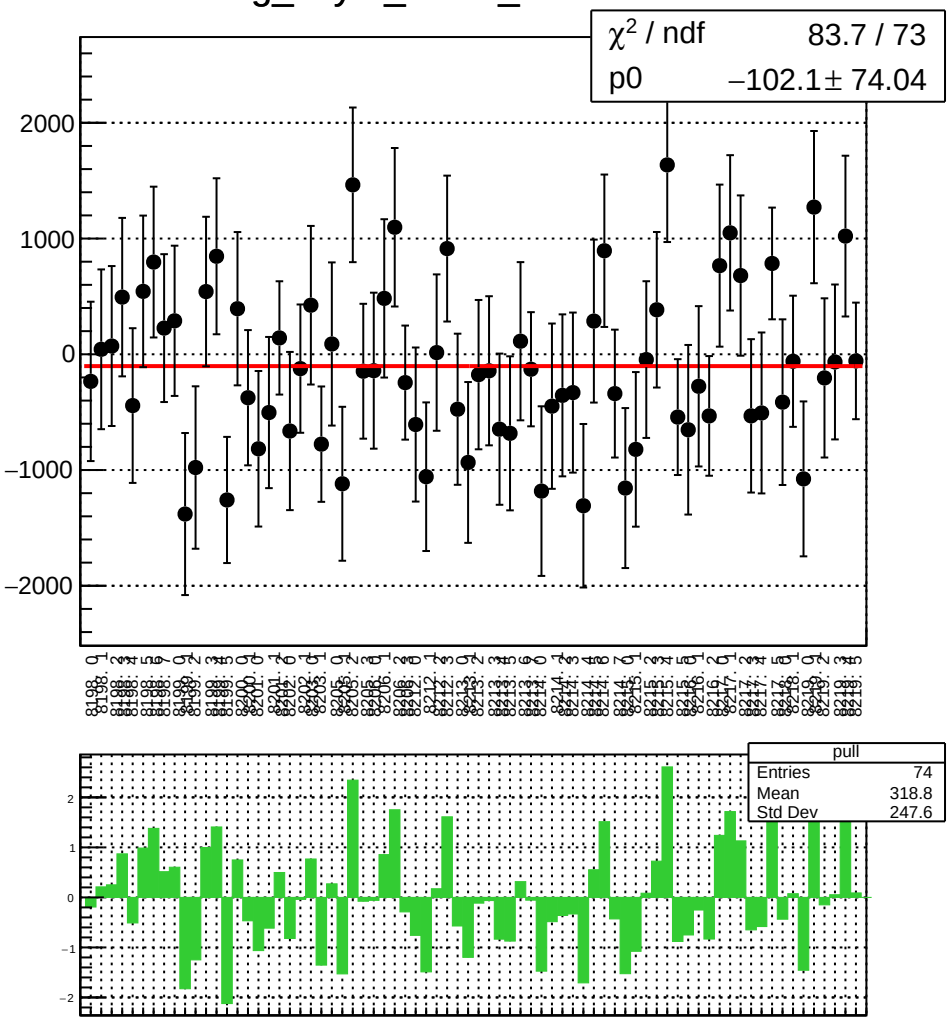

reg_asym_sam7_mean vs run
χ² / ndf 95.43 / 73
p0 8.964 ± 86.34
pull
Entries 74
Mean −266.3
Std Dev 313.4
pull1D
Entries 74
Mean −0.01373
Std Dev 1.136

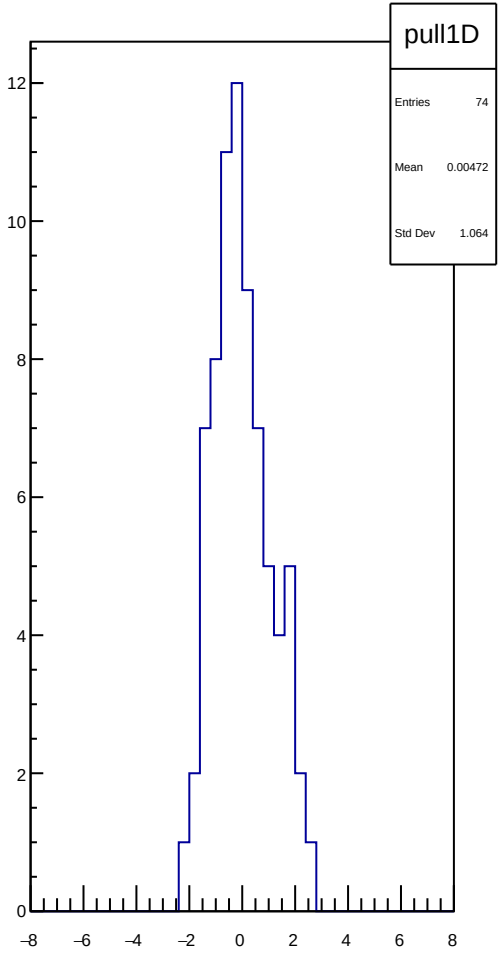

reg_asym_sam7_rms vs run
χ^2 / ndf 3305 / 73
p0 74.77 ± 0.06105
90
85
80
75
70
65

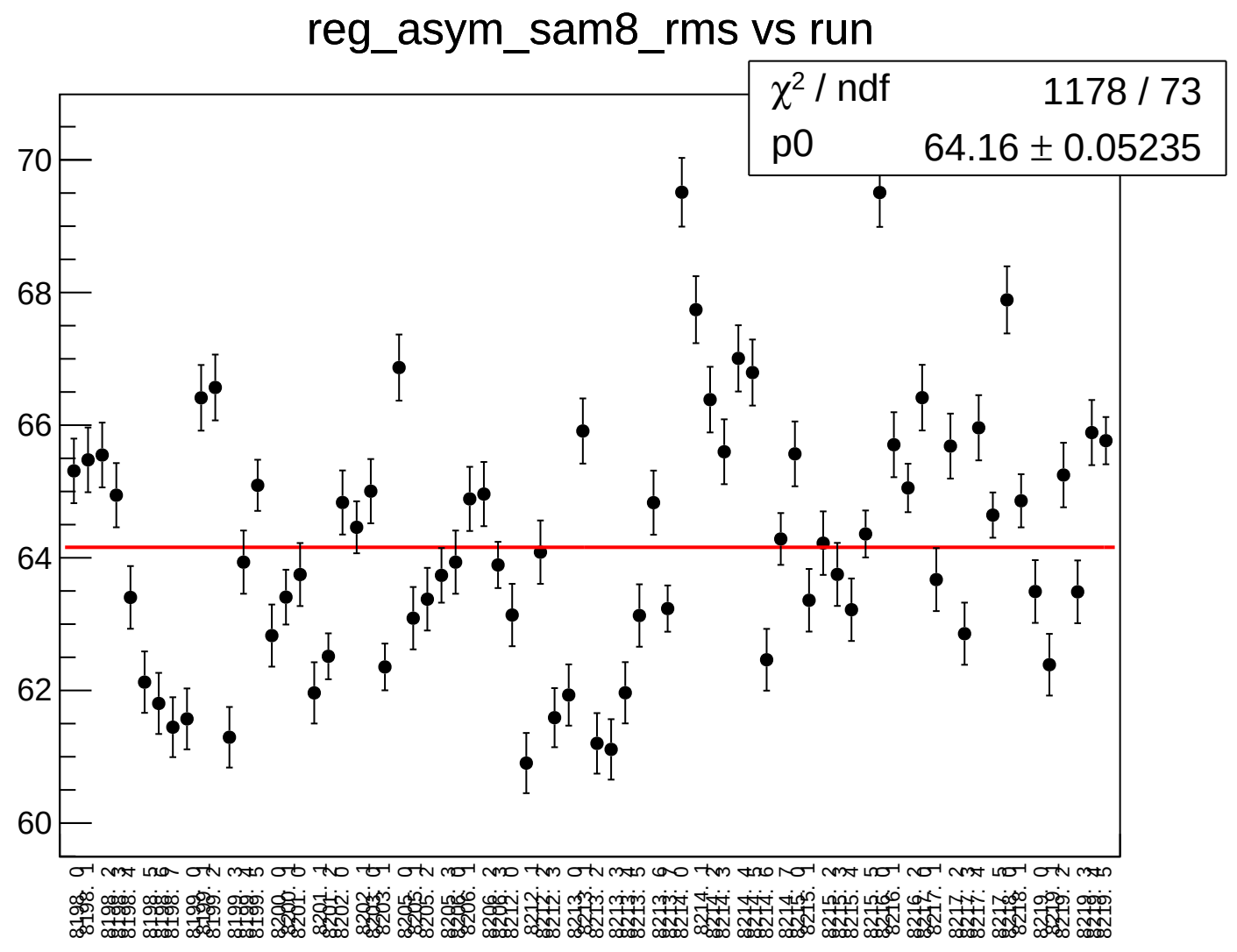

asym_sam7_correction_mean vs run
χ² / ndf 78.67 / 73
p0 −762.5 ± 1065
pull
Entries 74
Mean 1.015e+04
Std Dev 1.01e+04

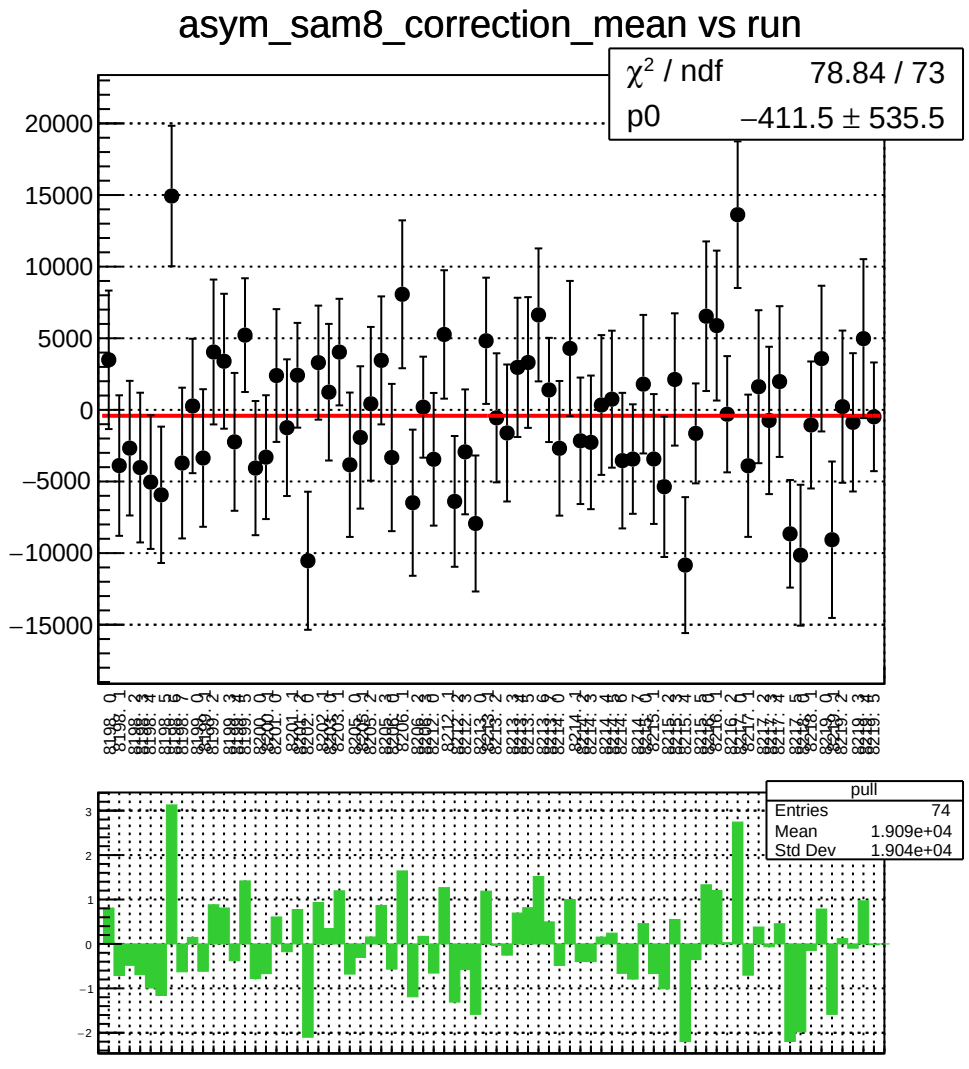

pull1D
Entries 74
Mean −0.0001118
Std Dev 1.031

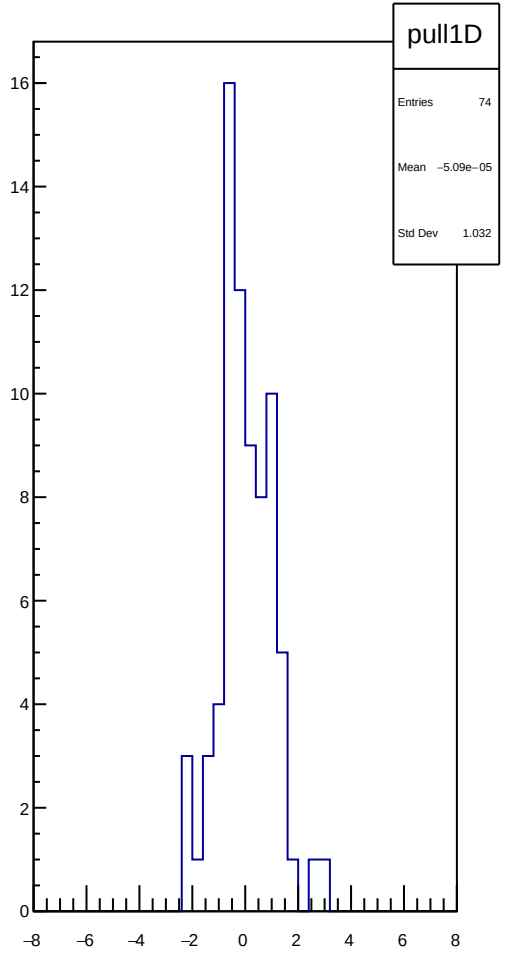

asym_sam7_correction_rms vs run
χ² / ndf 3758 / 73
p0 922.5 ± 0.7534
1050
1000
950
900
850

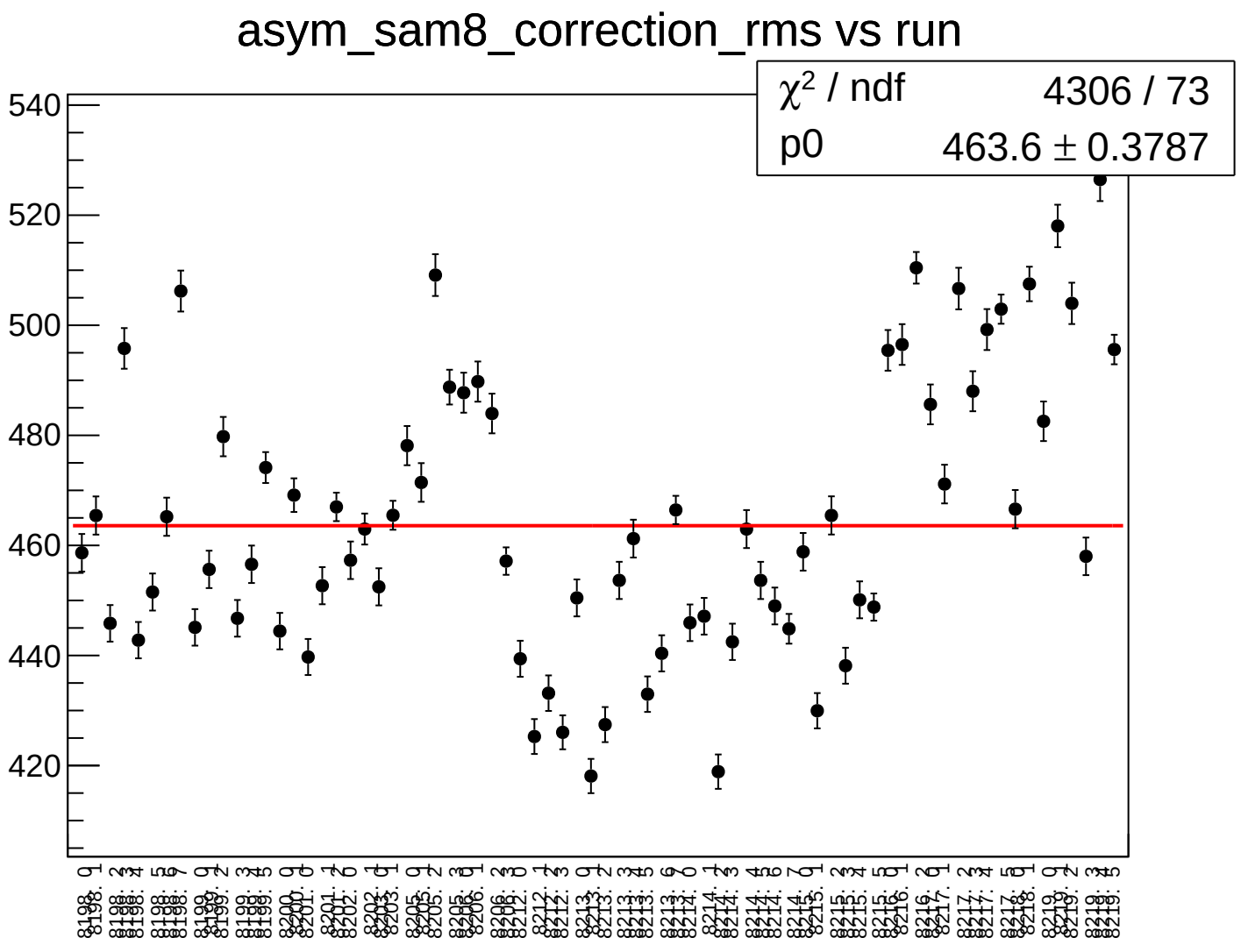

reg_asym_sam8_mean vs run
χ² / ndf 83.7 / 73
p0 −102.1± 74.04
2000
1000
0
−1000
−2000
pull
Entries 74
Mean 318.8
Std Dev 247.6
2
1
0
−1
−2

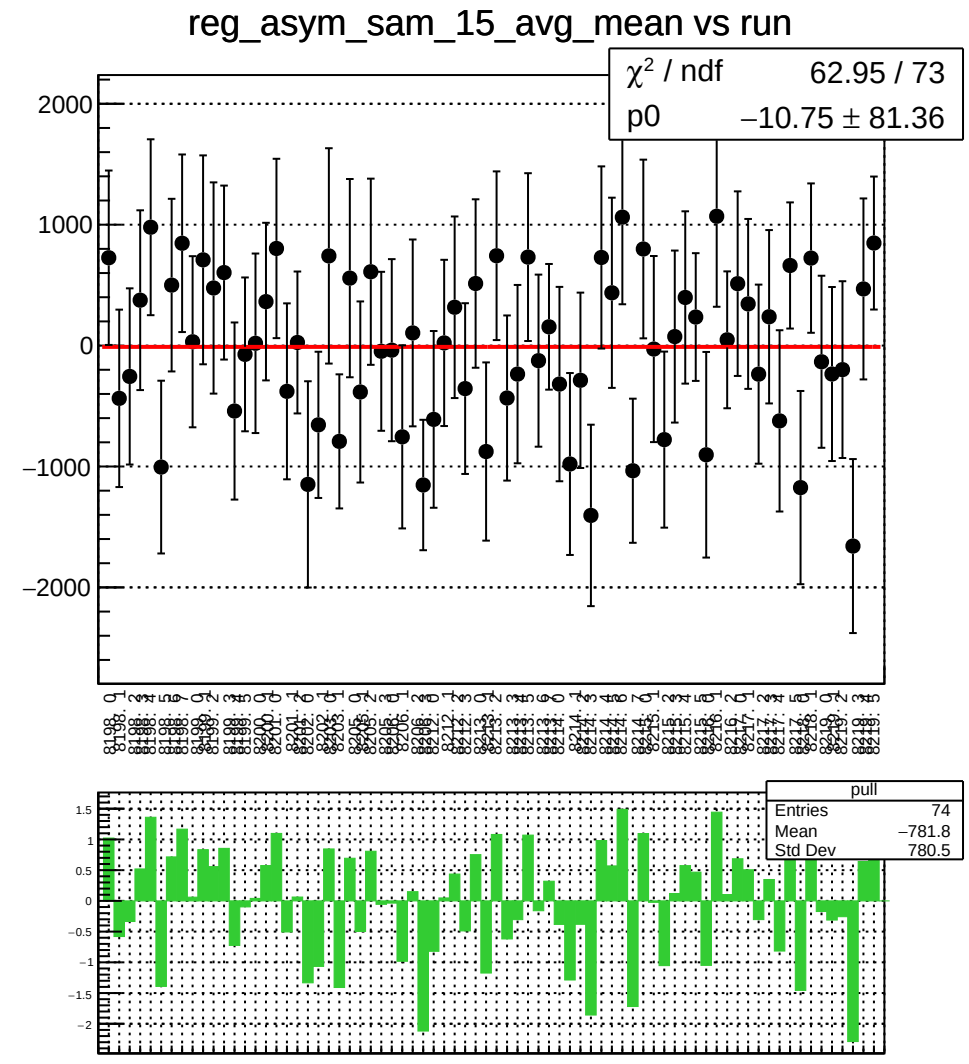

pull1D
Entries 74
Mean 0.00472
Std Dev 1.064
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

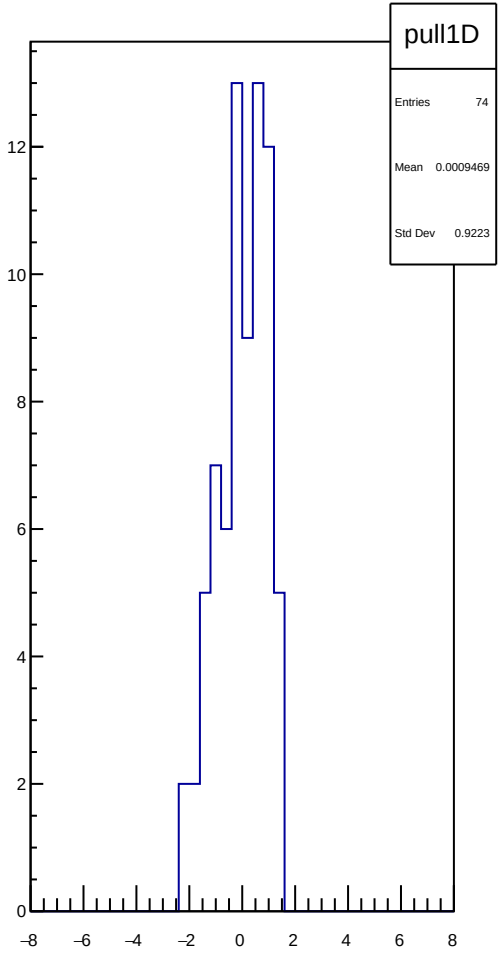

reg_asym_sam8_rms vs run
χ^2 / ndf 1178 / 73
p0 64.16 ± 0.05235
70
68
66
64
62
60

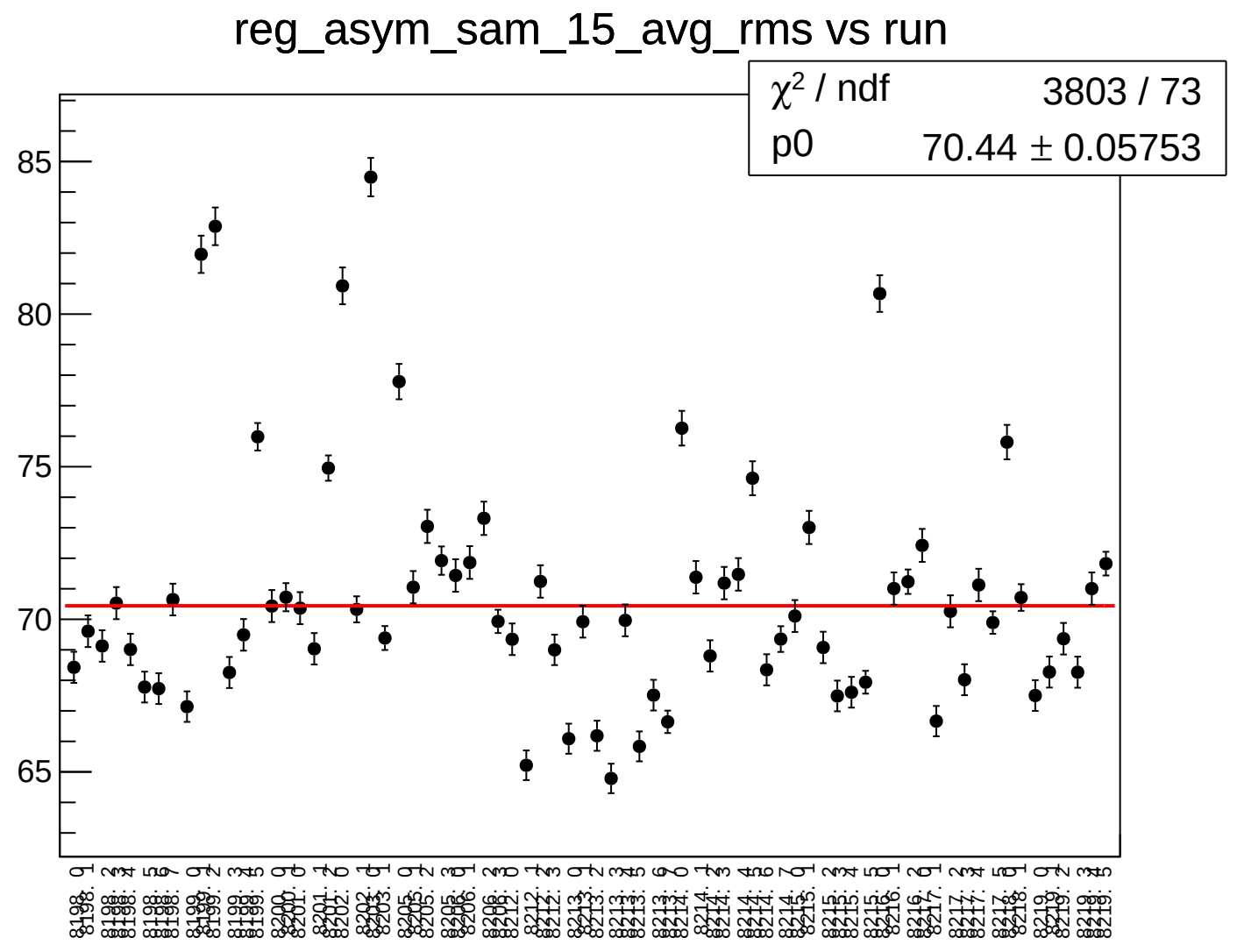

asym_sam8_correction_mean vs run
χ² / ndf 78.84 / 73
p0 −411.5 ± 535.5
20000
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 74
Mean 1.909e+04
Std Dev 1.904e+04
3
2
1
0
−1
−2

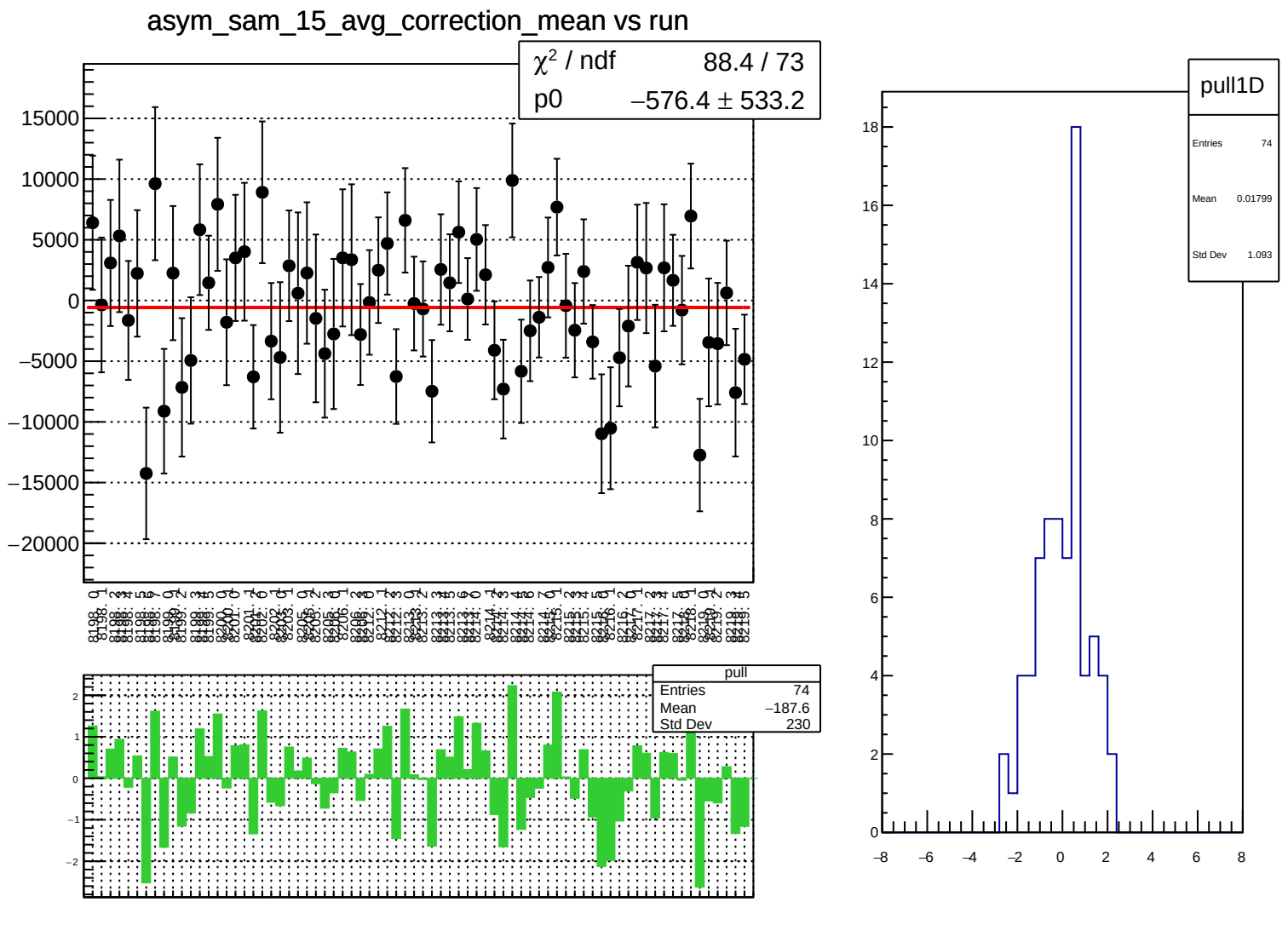

pull1D
Entries 74
Mean −5.09e−05
Std Dev 1.032
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

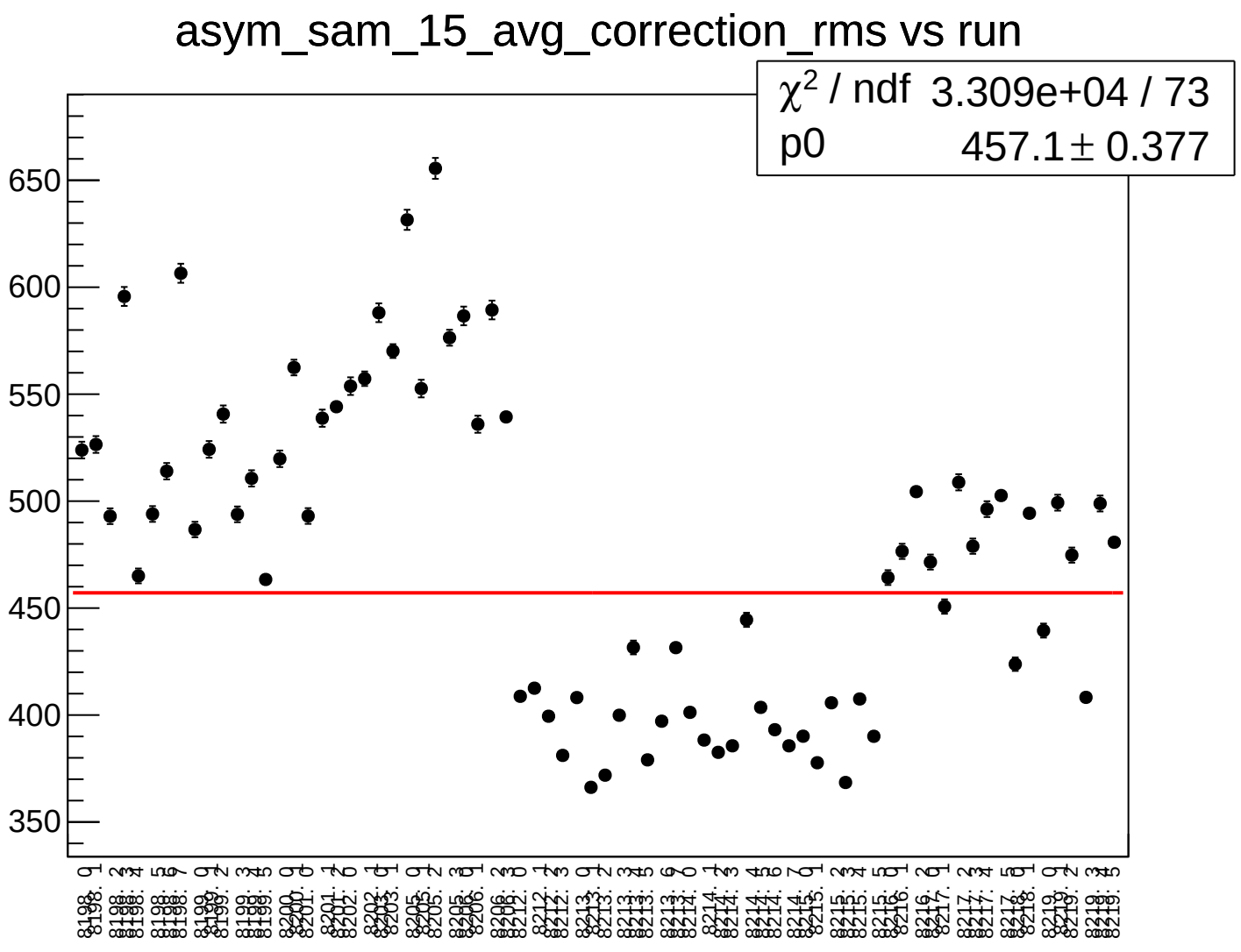

asym_sam8_correction_rms vs run
χ² / ndf 4306 / 73
p0 463.6 ± 0.3787
540
520
500
480
460
440
420

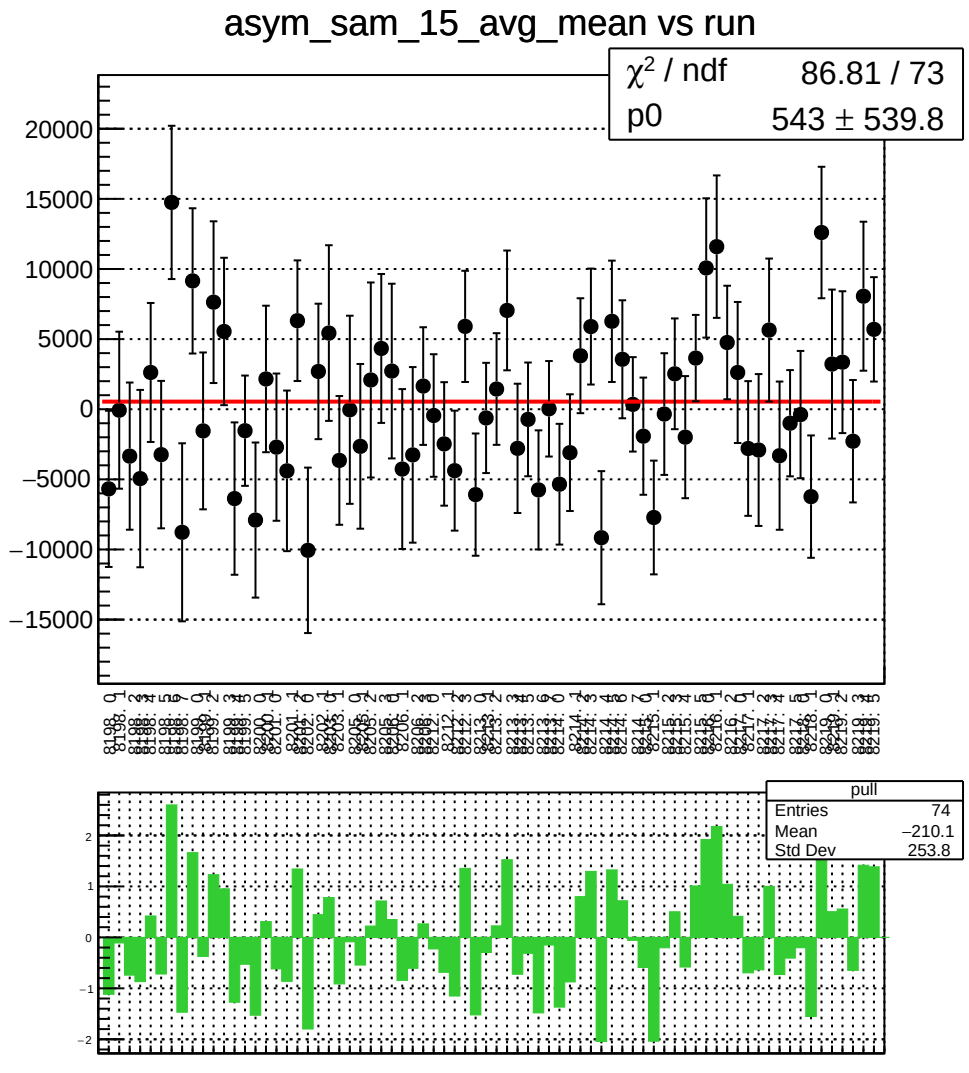

reg_asym_sam_15_avg_mean vs run
χ² / ndf 62.95 / 73
p0 −10.75 ± 81.36
2000
1000
0
−1000
−2000
pull
Entries 74
Mean −781.8
Std Dev 780.5
1.5
1
0.5
0
−0.5
−1
−1.5
−2

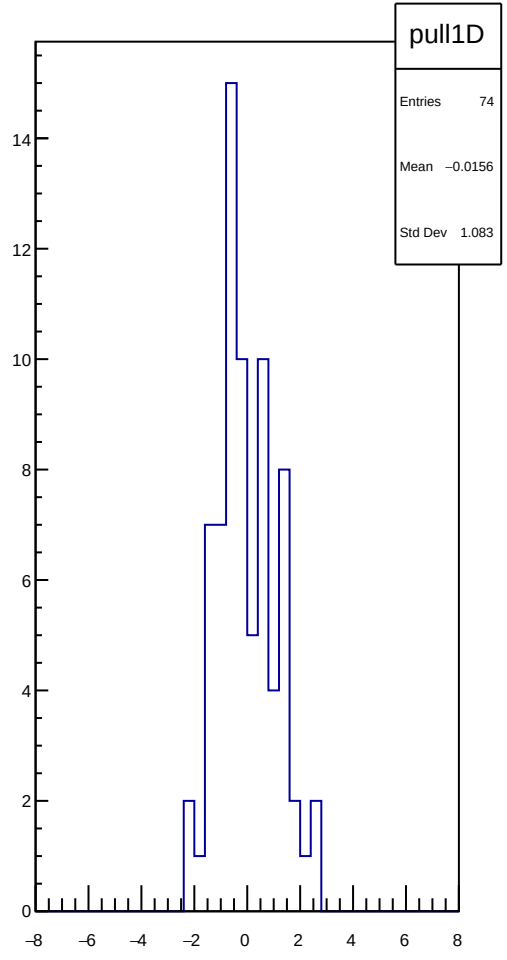

pull1D
Entries 74
Mean 0.0009469
Std Dev 0.9223
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

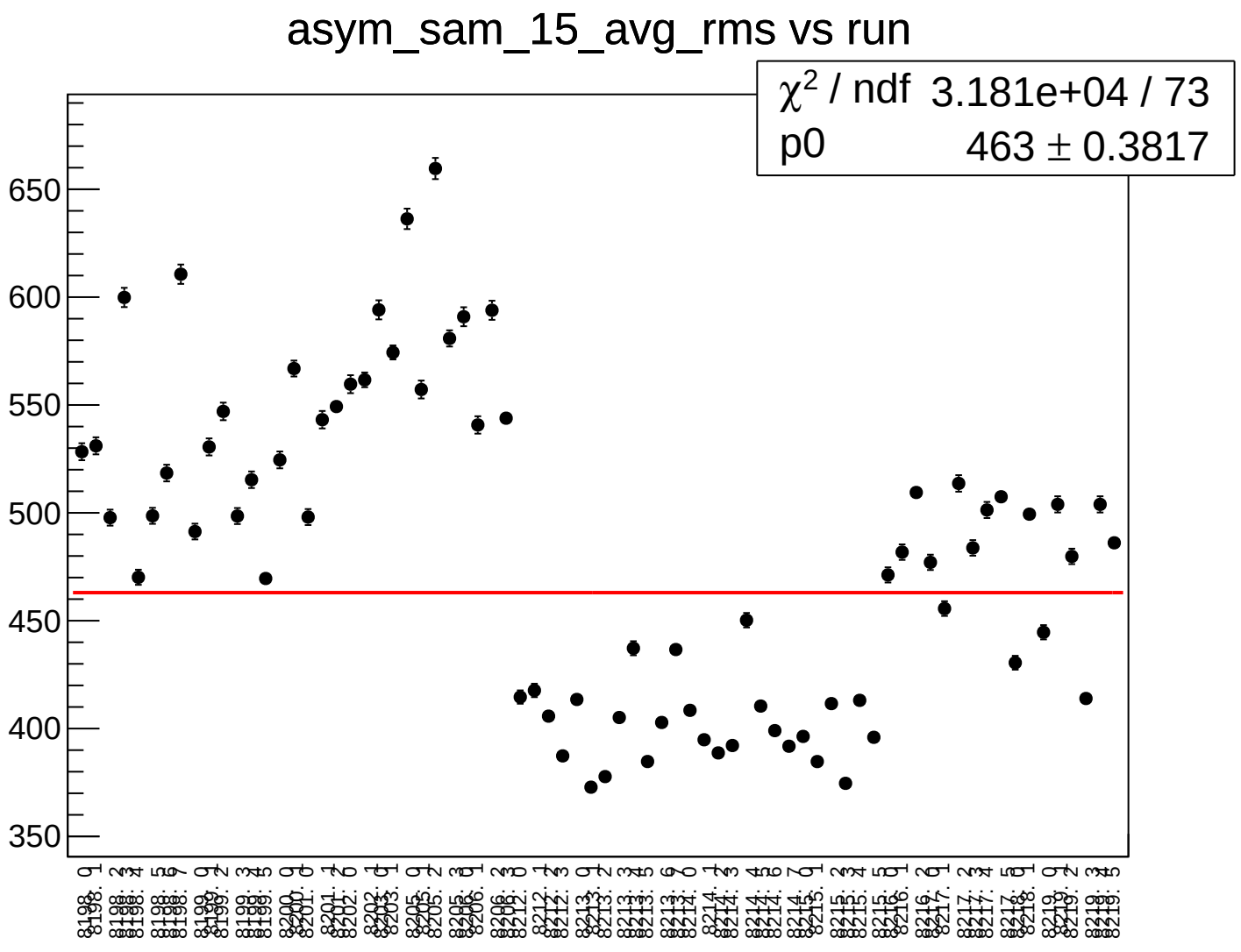

reg_asym_sam_15_avg_rms vs run
χ^2 / ndf 3803 / 73
p0 70.44 ± 0.05753
85
80
75
70
65

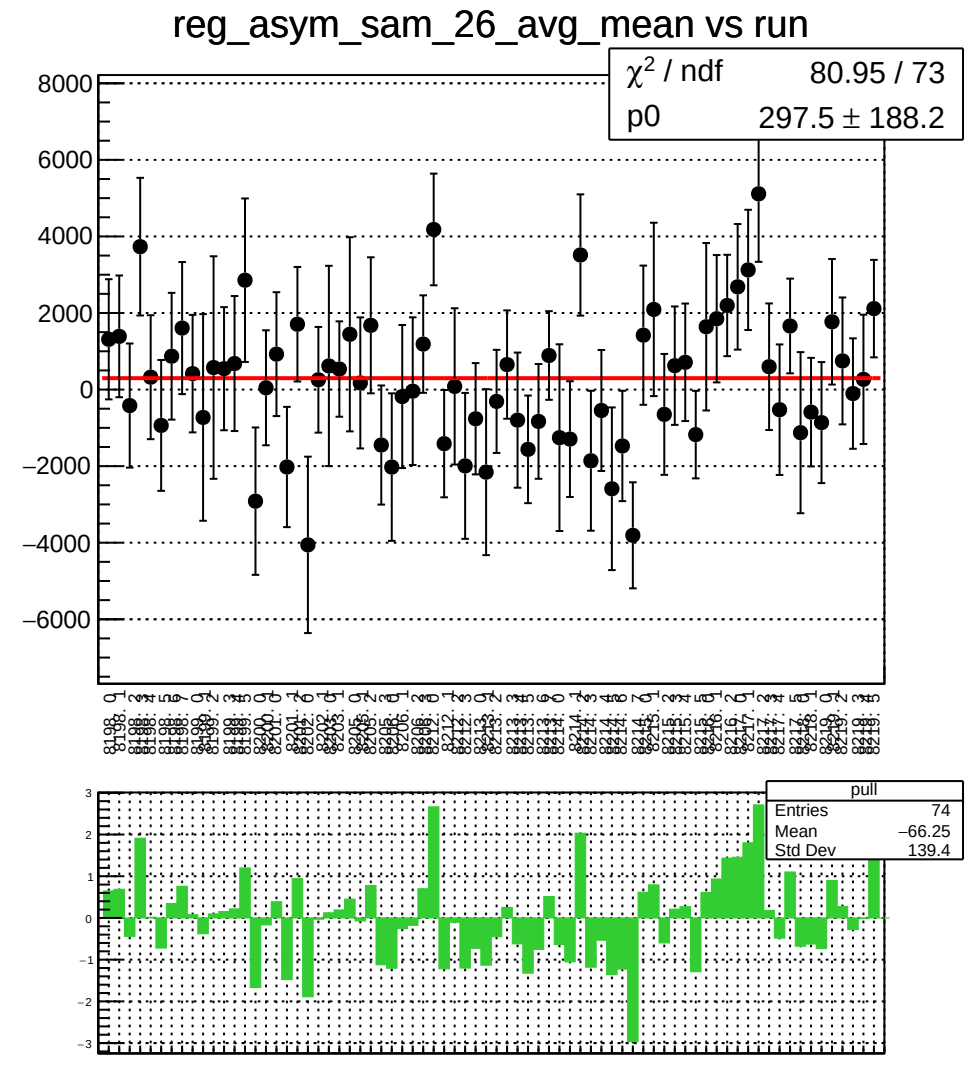

asym_sam_15_avg_correction_mean vs run
χ² / ndf 88.4 / 73
p0 −576.4 ± 533.2
15000
10000
5000
0
−5000
−10000
−15000
−20000
pull
Entries 74
Mean −187.6
Std Dev 230
2
1
0
−1
−2
pull1D
Entries 74
Mean 0.01799
Std Dev 1.093
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

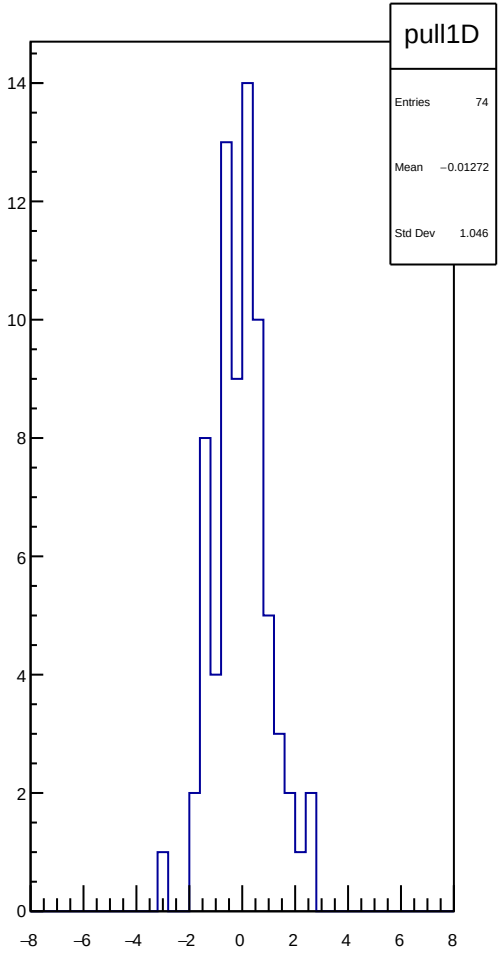

asym_sam_15_avg_correction_rms vs run
χ² / ndf 3.309e+04 / 73
p0 457.1 ± 0.377
650
600
550
500
450
400
350

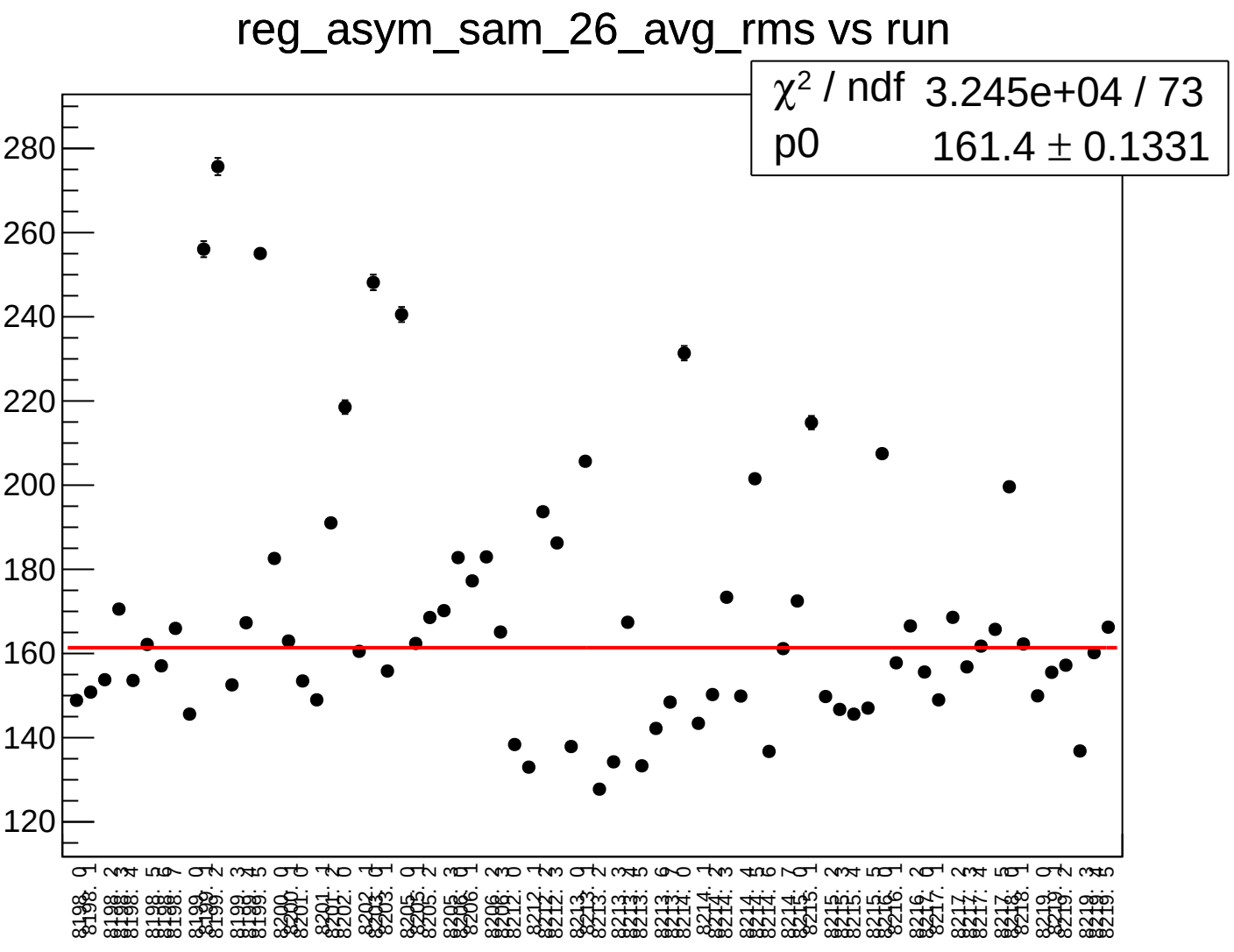

asym_sam_15_avg_mean vs run
χ² / ndf 86.81 / 73
p0 543 ± 539.8
pull
Entries 74
Mean −210.1
Std Dev 253.8

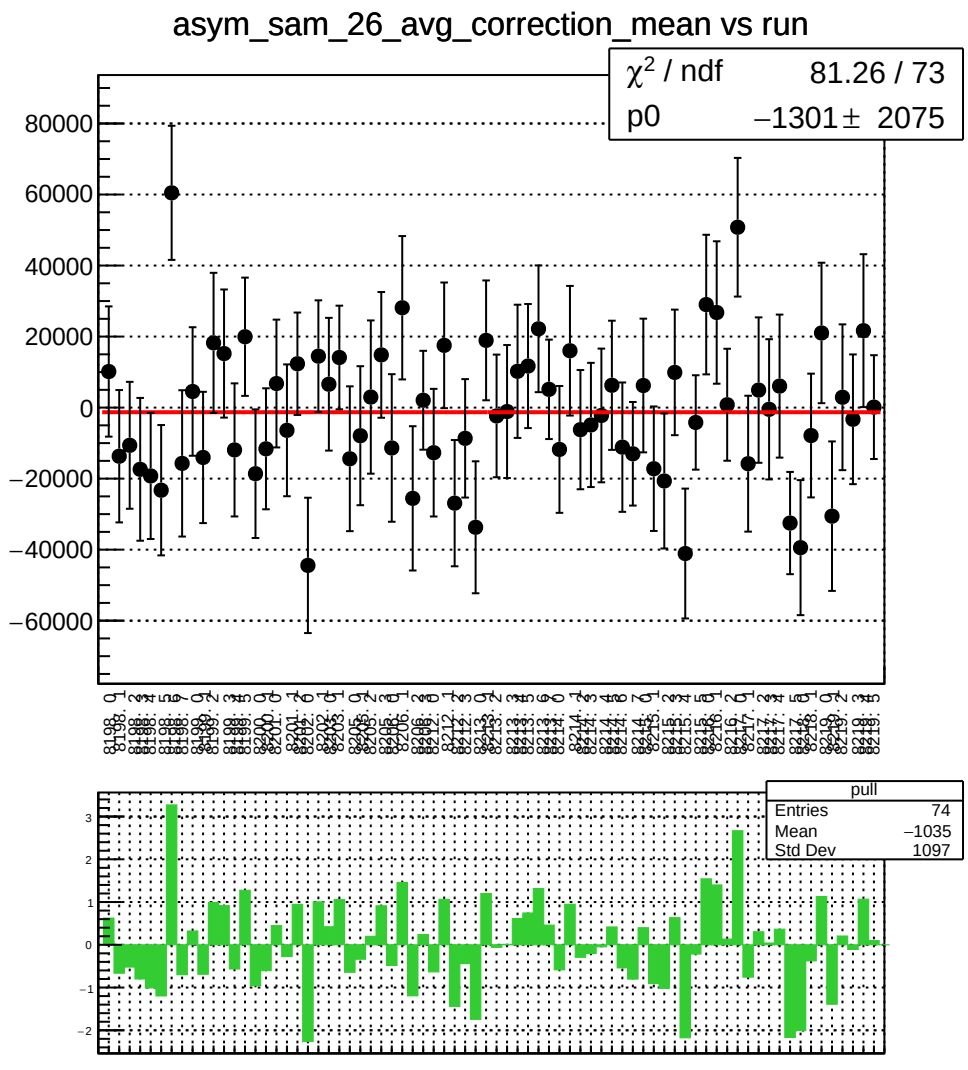

pull1D
Entries 74
Mean −0.0156
Std Dev 1.083

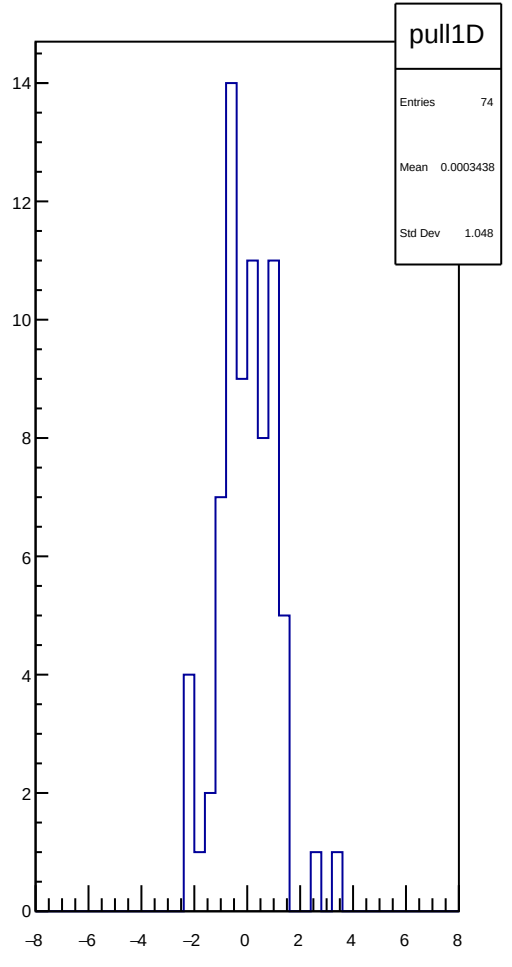

asym_sam_15_avg_rms vs run
χ^2 / ndf 3.181e+04 / 73
p0 463 ± 0.3817
650
600
550
500
450
400
350

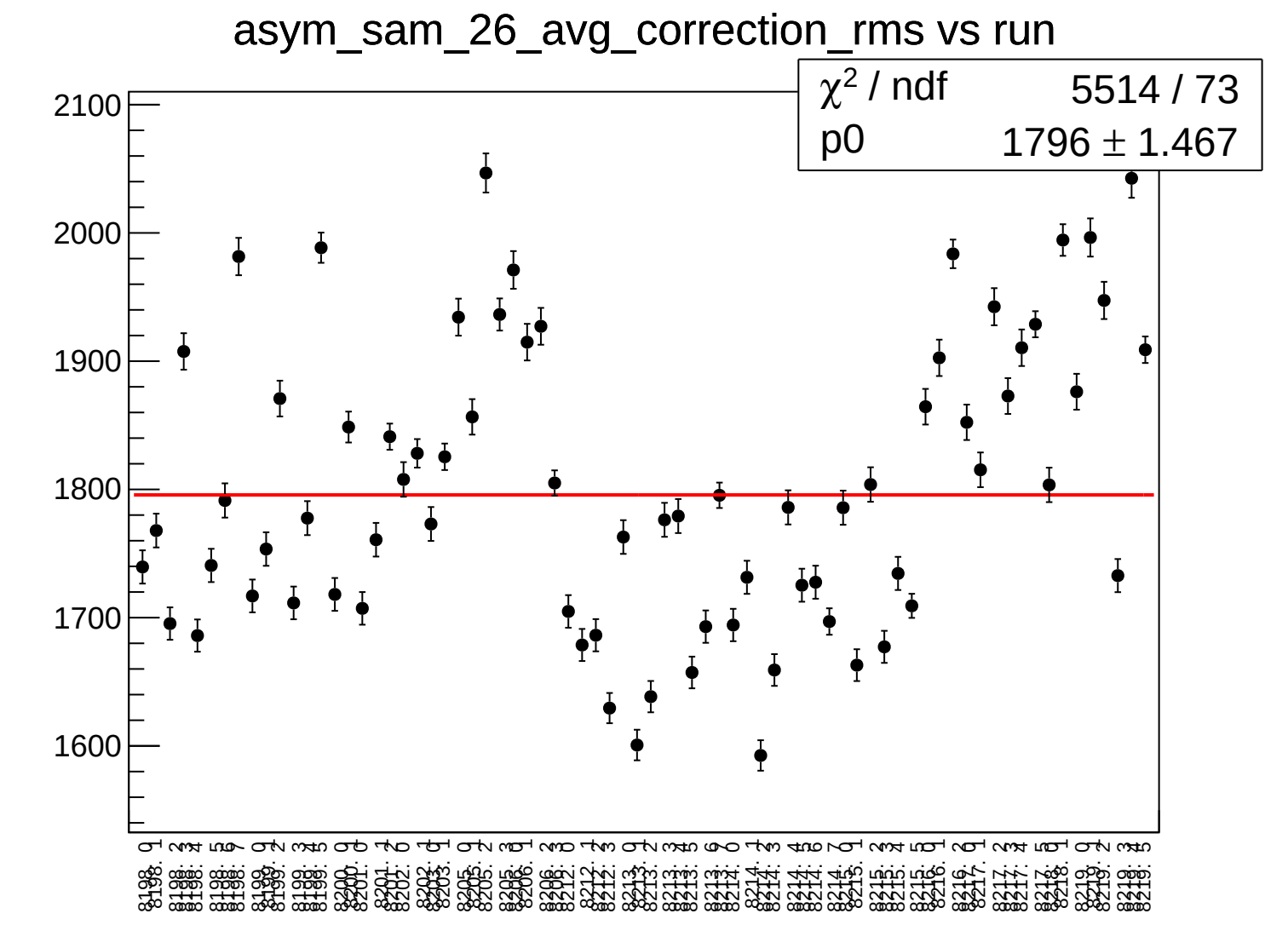

reg_asym_sam_26_avg_mean vs run
χ² / ndf 80.95 / 73
p0 297.5 ± 188.2
pull
Entries 74
Mean −66.25
Std Dev 139.4

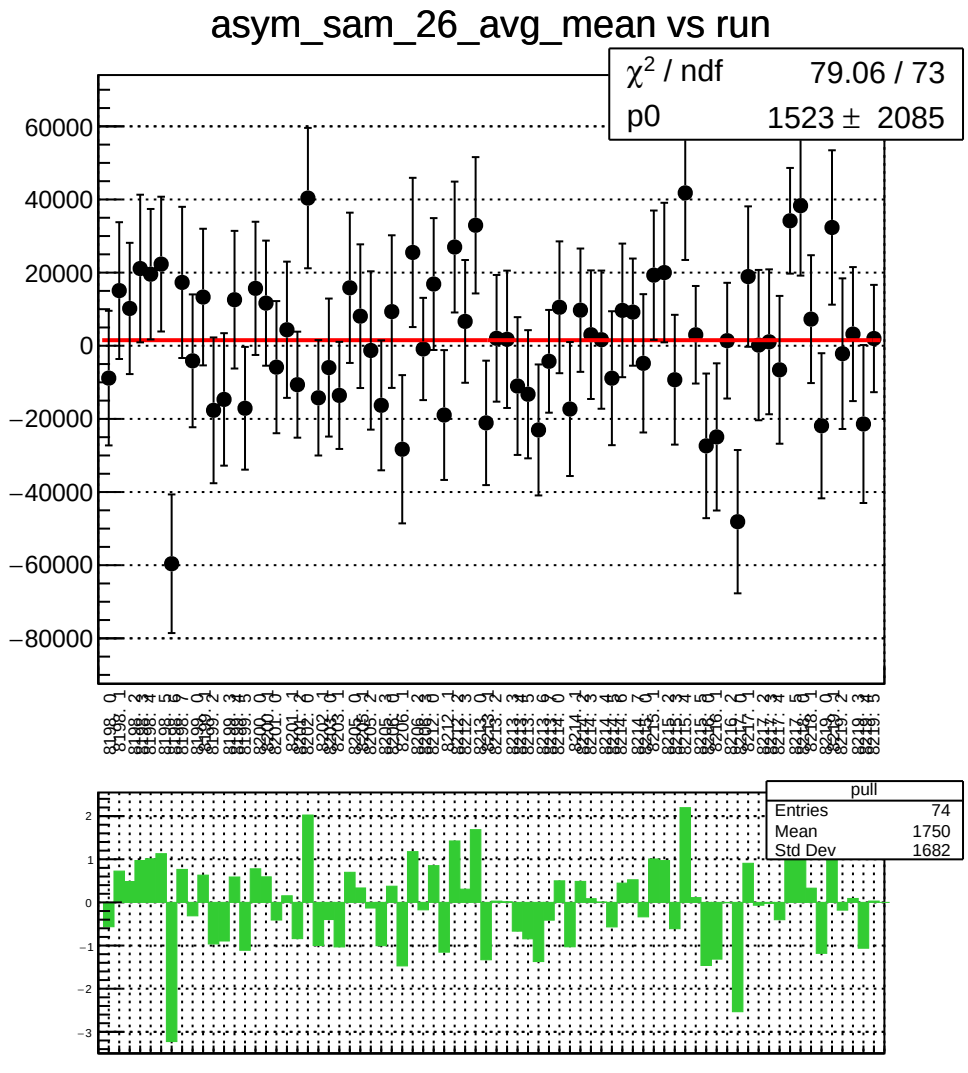

pull1D
Entries 74
Mean −0.01272
Std Dev 1.046

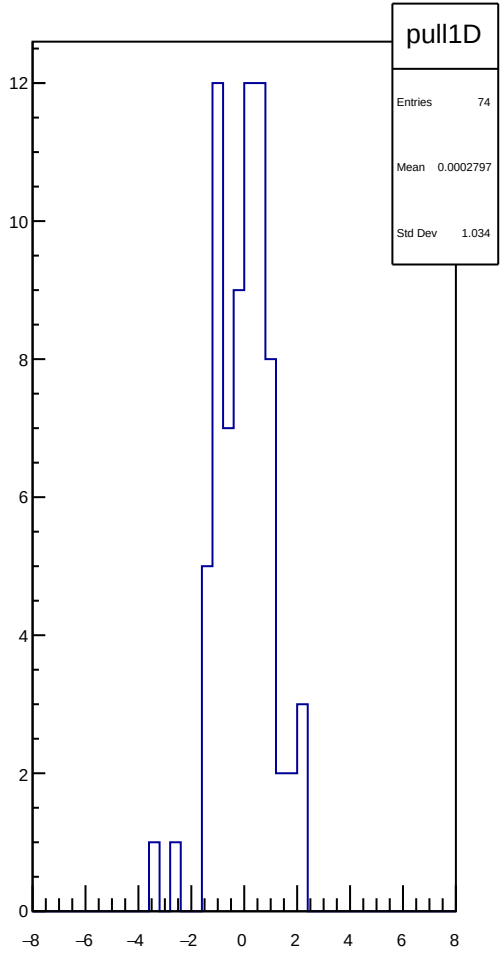

reg_asym_sam_26_avg_rms vs run
χ² / ndf 3.245e+04 / 73
p0 161.4 ± 0.1331
280
260
240
220
200
180
160
140
120

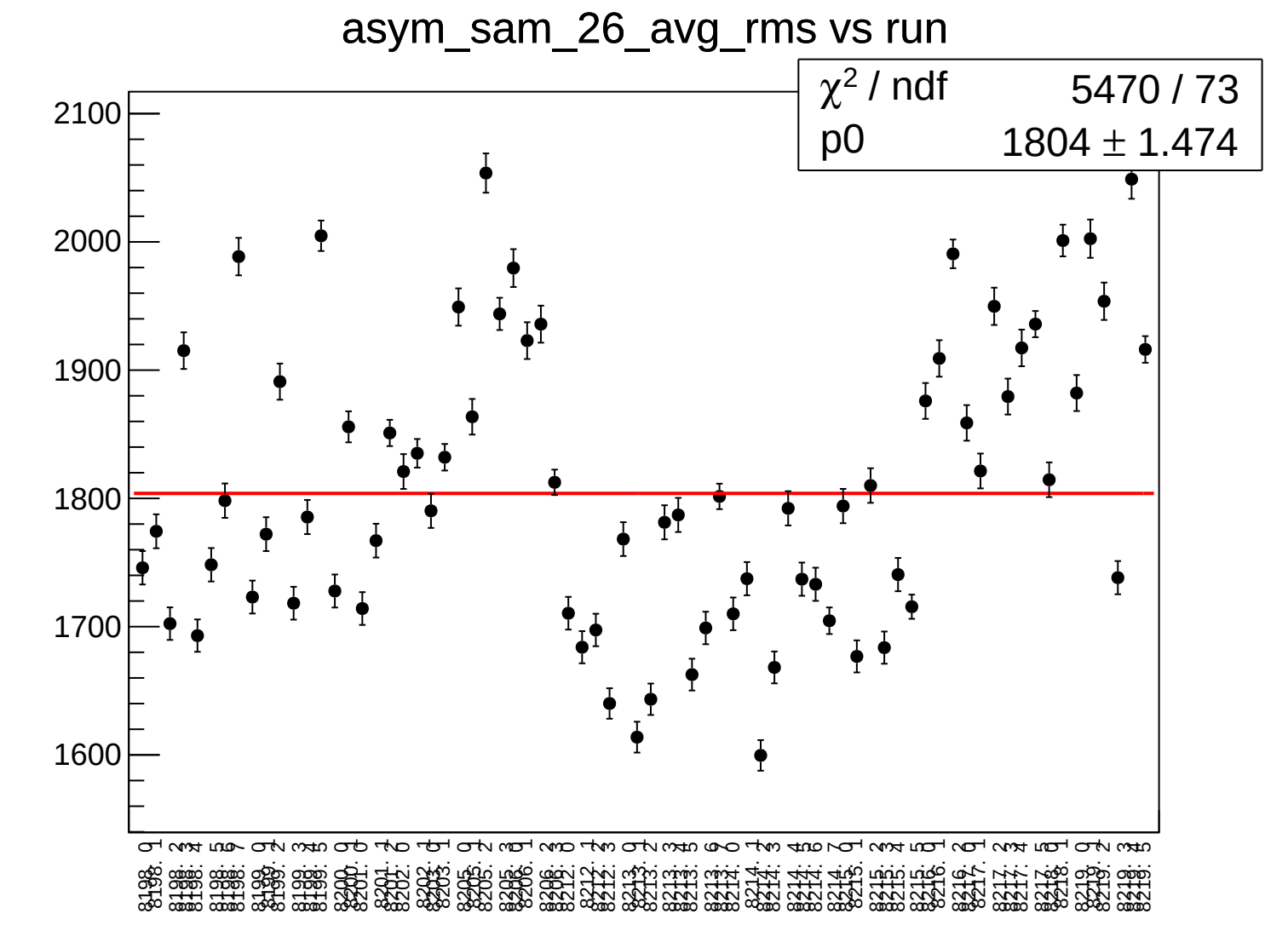

asym_sam_26_avg_correction_mean vs run
χ² / ndf 81.26 / 73
p0 −1301 ± 2075
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 74
Mean −1035
Std Dev 1097
3
2
1
0
−1
−2

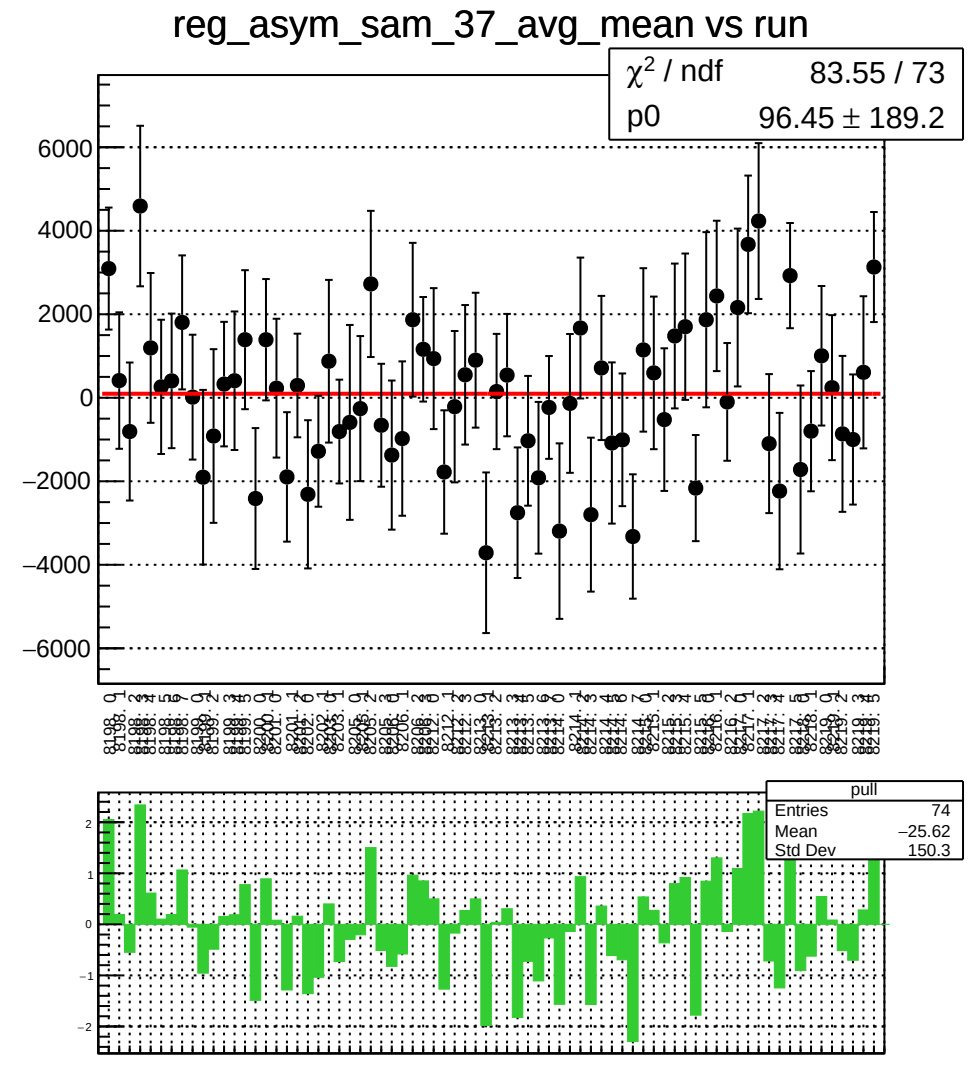

pull1D
Entries 74
Mean 0.0003438
Std Dev 1.048
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

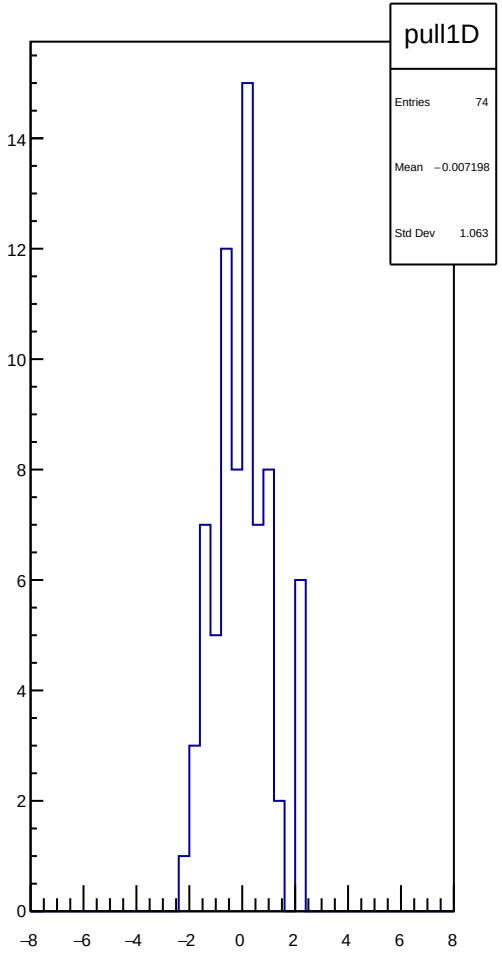

asym_sam_26_avg_correction_rms vs run
χ² / ndf 5514 / 73
p0 1796 ± 1.467
2100
2000
1900
1800
1700
1600

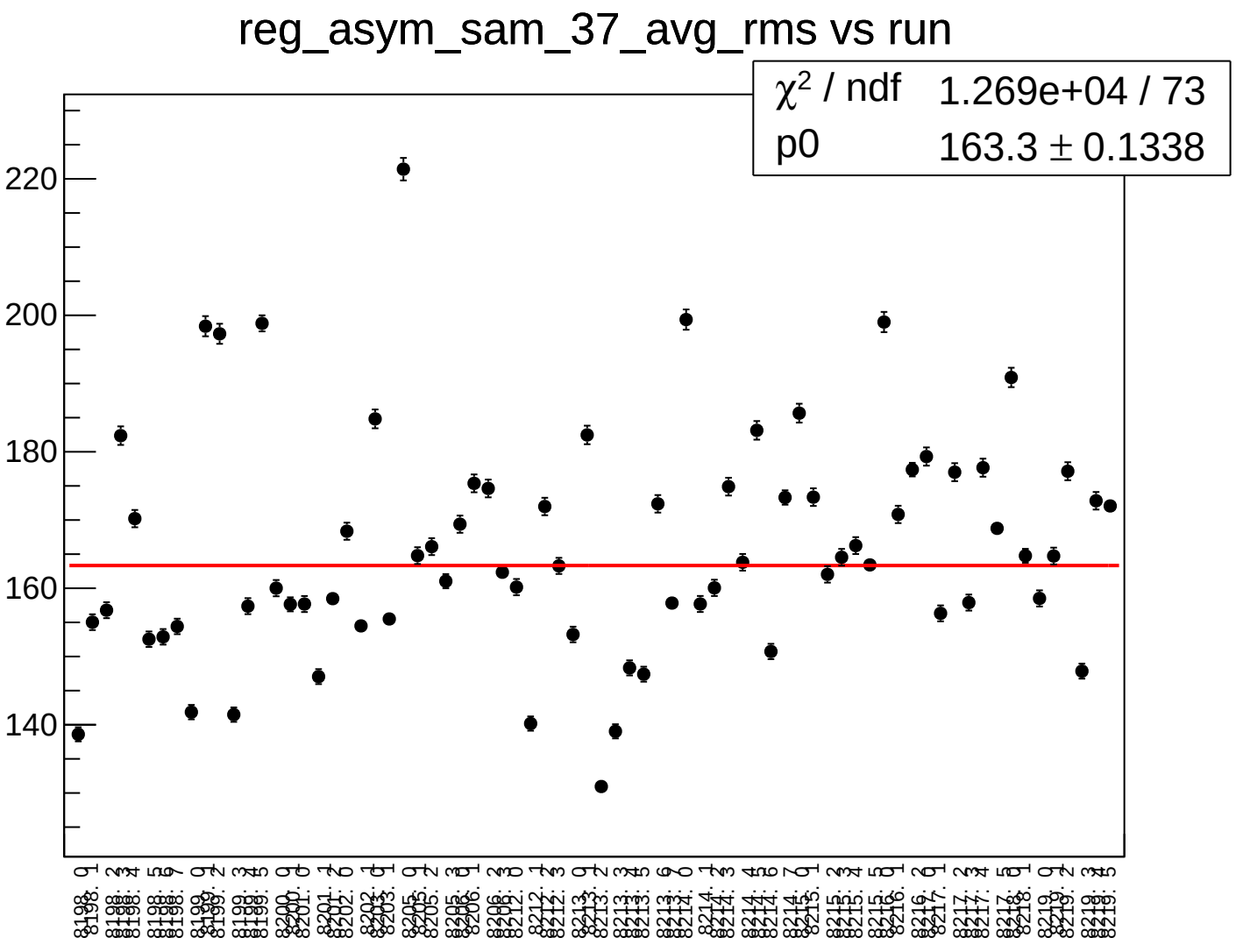

asym_sam_26_avg_mean vs run
χ² / ndf 79.06 / 73
p0 1523 ± 2085
pull
Entries 74
Mean 1750
Std Dev 1682

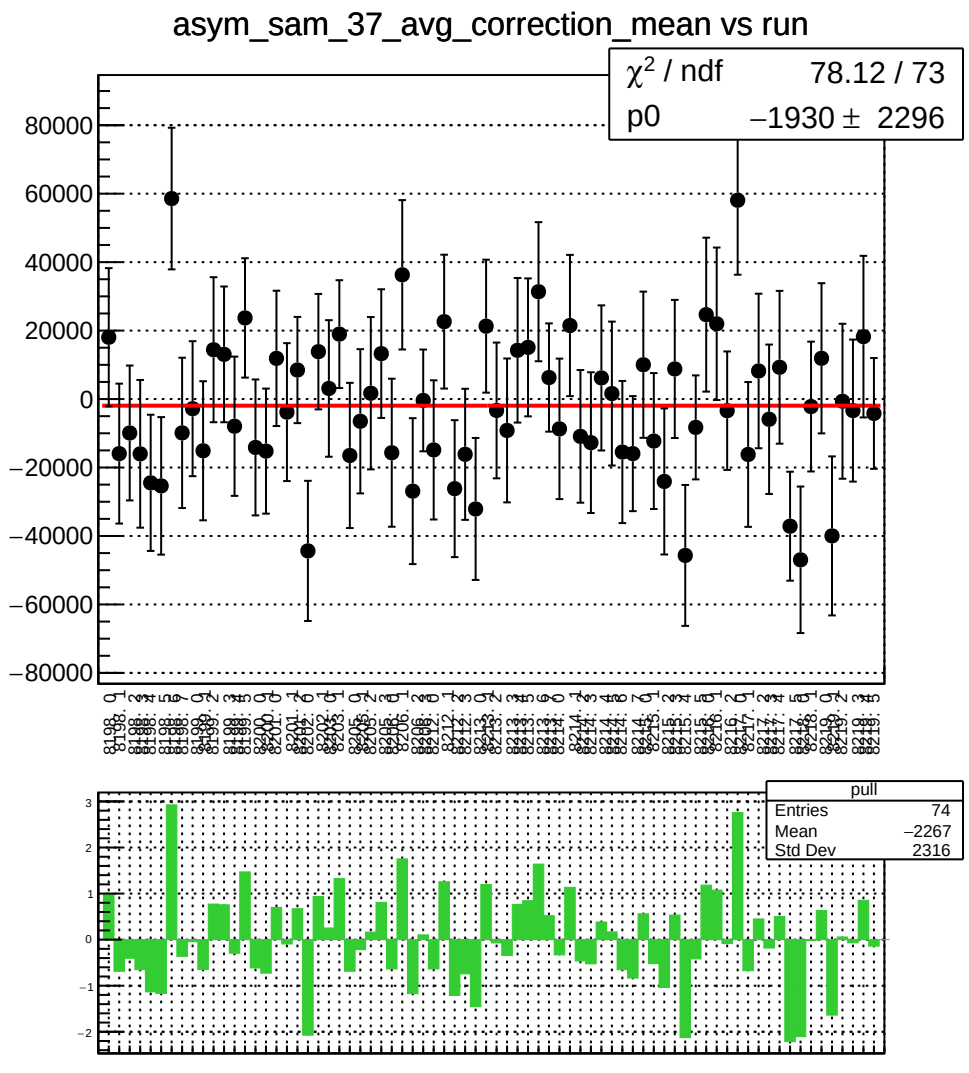

pull1D
Entries 74
Mean 0.0002797
Std Dev 1.034

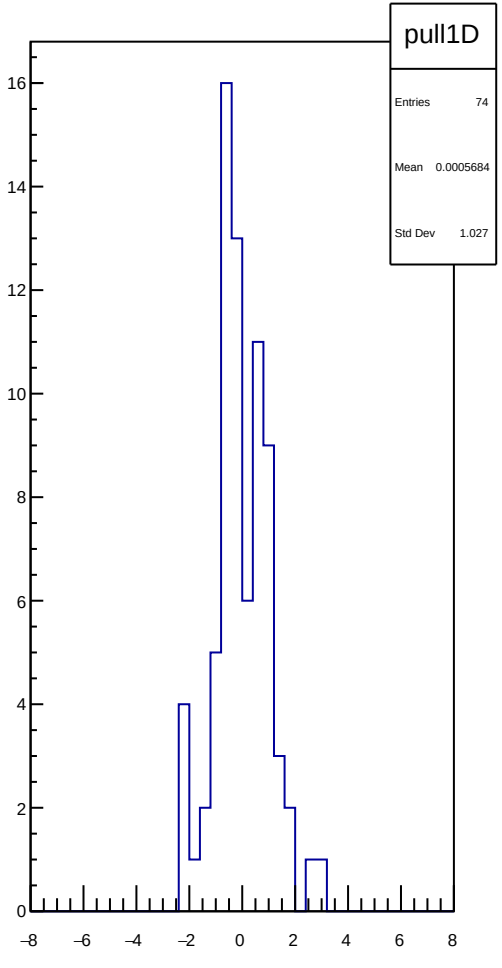

asym_sam_26_avg_rms vs run
χ² / ndf 5470 / 73
p0 1804 ± 1.474
2100
2000
1900
1800
1700
1600

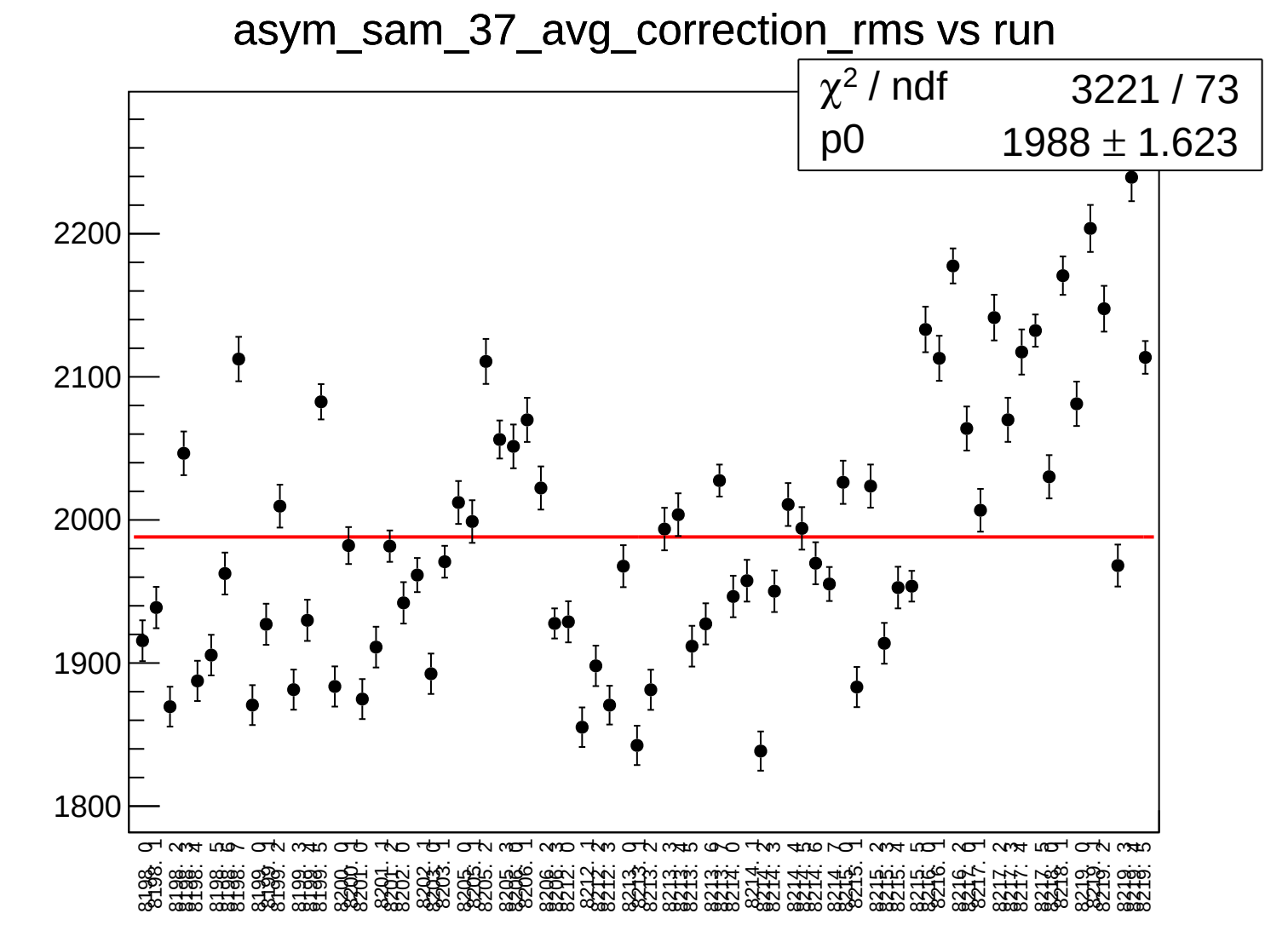

reg_asym_sam_37_avg_mean vs run
χ² / ndf 83.55 / 73
p0 96.45 ± 189.2
pull
Entries 74
Mean −25.62
Std Dev 150.3

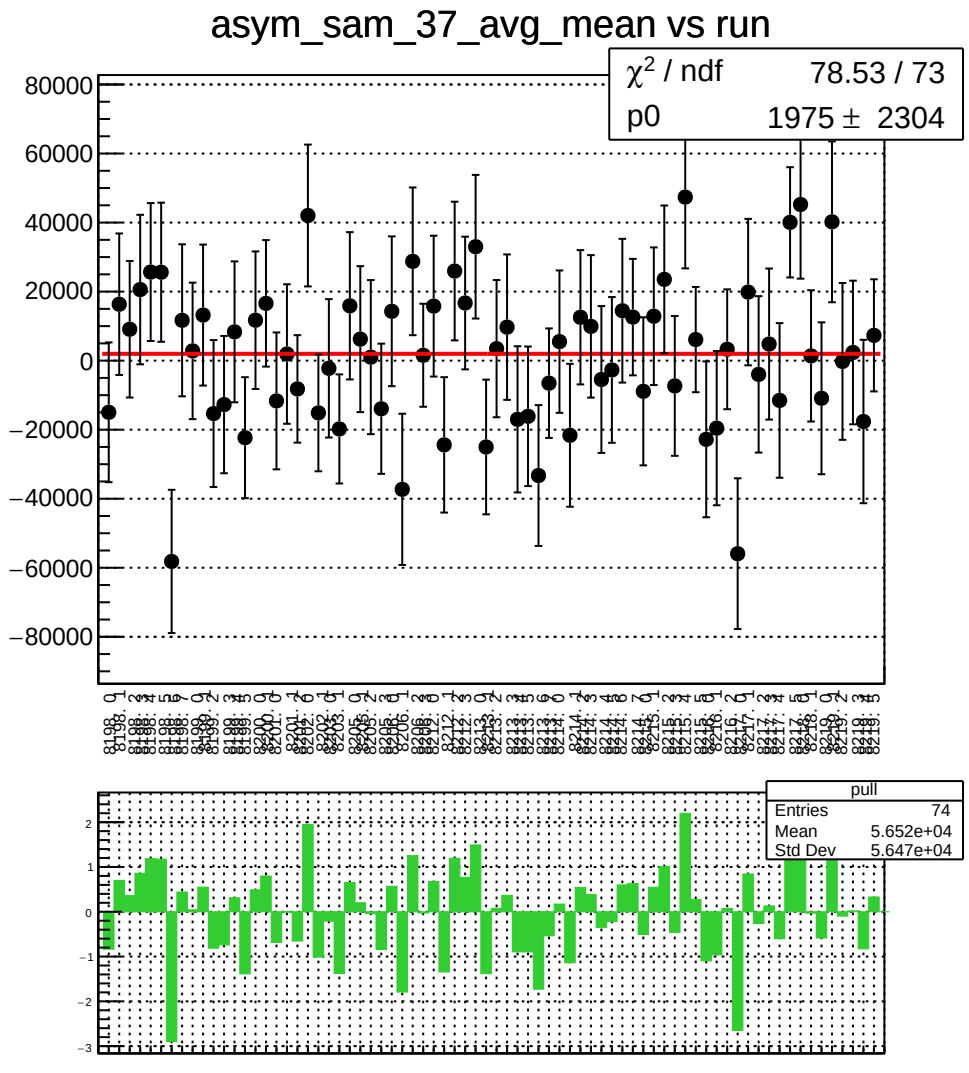

pull1D
Entries 74
Mean −0.007198
Std Dev 1.063

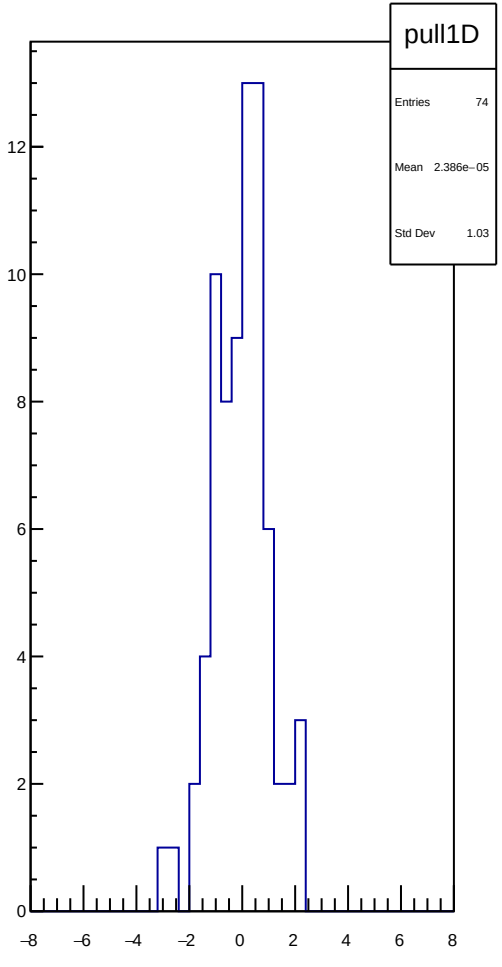

reg_asym_sam_37_avg_rms vs run
χ² / ndf 1.269e+04 / 73
p0 163.3 ± 0.1338
220
200
180
160
140

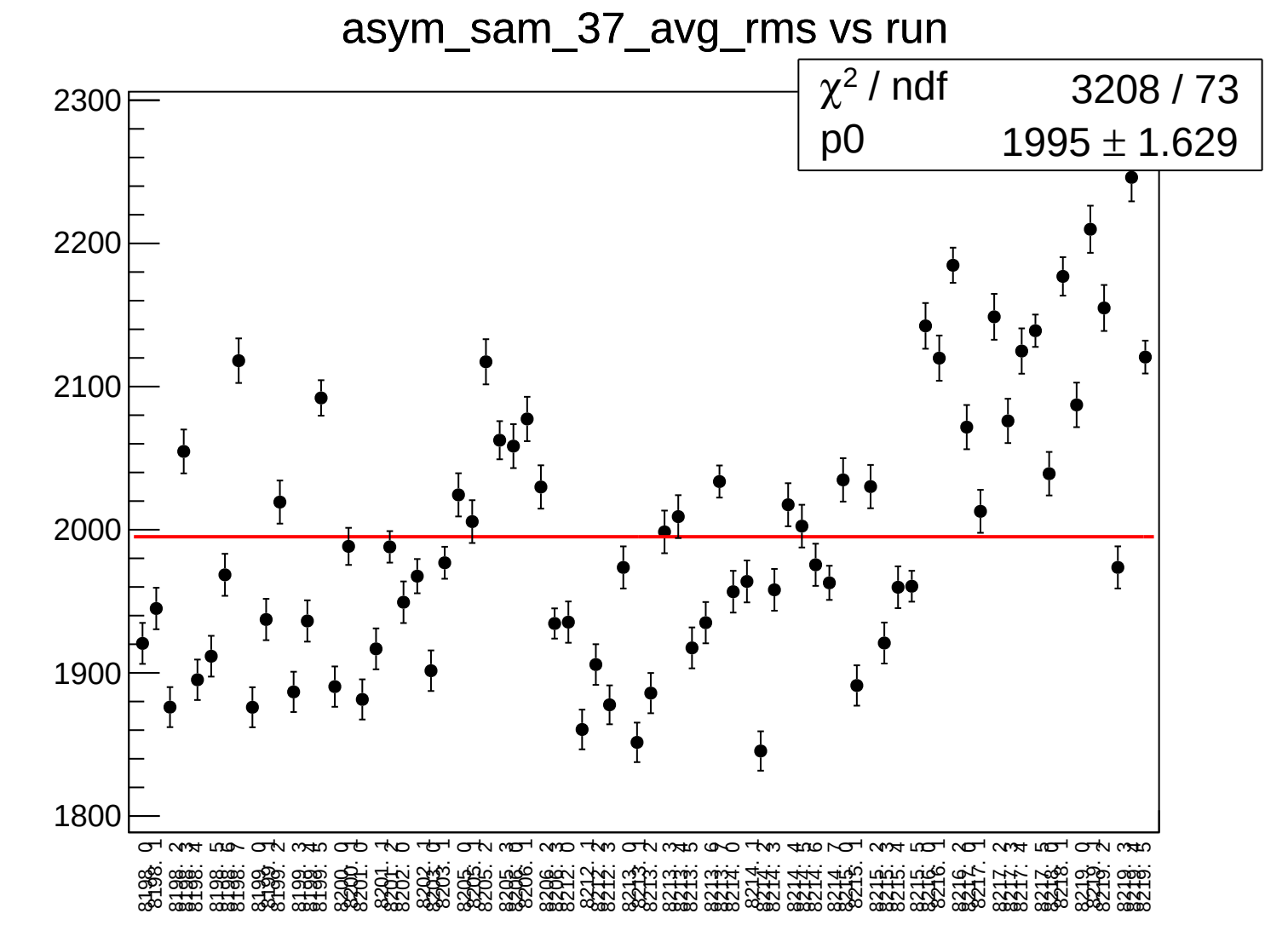

asym_sam_37_avg_correction_mean vs run
χ² / ndf 78.12 / 73
p0 −1930 ± 2296
pull
Entries 74
Mean −2267
Std Dev 2316

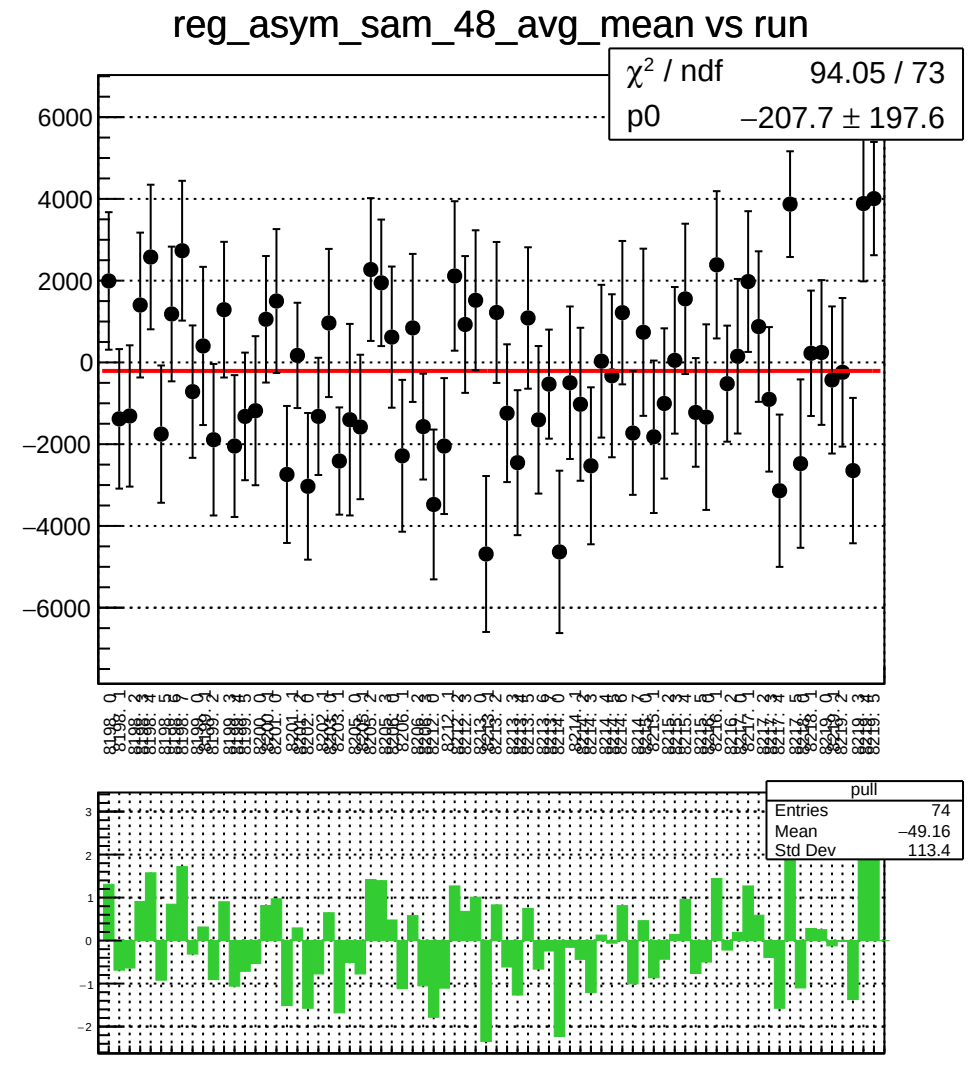

pull1D
Entries 74
Mean 0.0005684
Std Dev 1.027

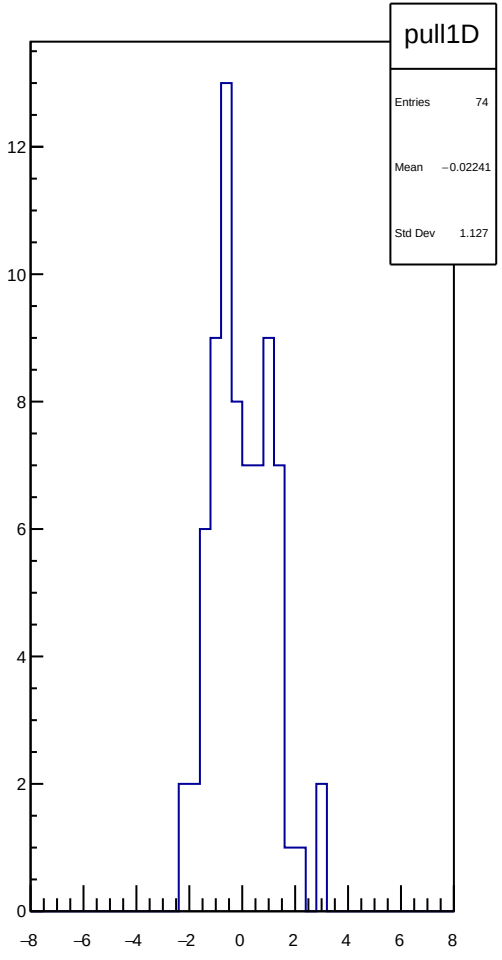

asym_sam_37_avg_correction_rms vs run
χ² / ndf 3221 / 73
p0 1988 ± 1.623
2200
2100
2000
1900
1800

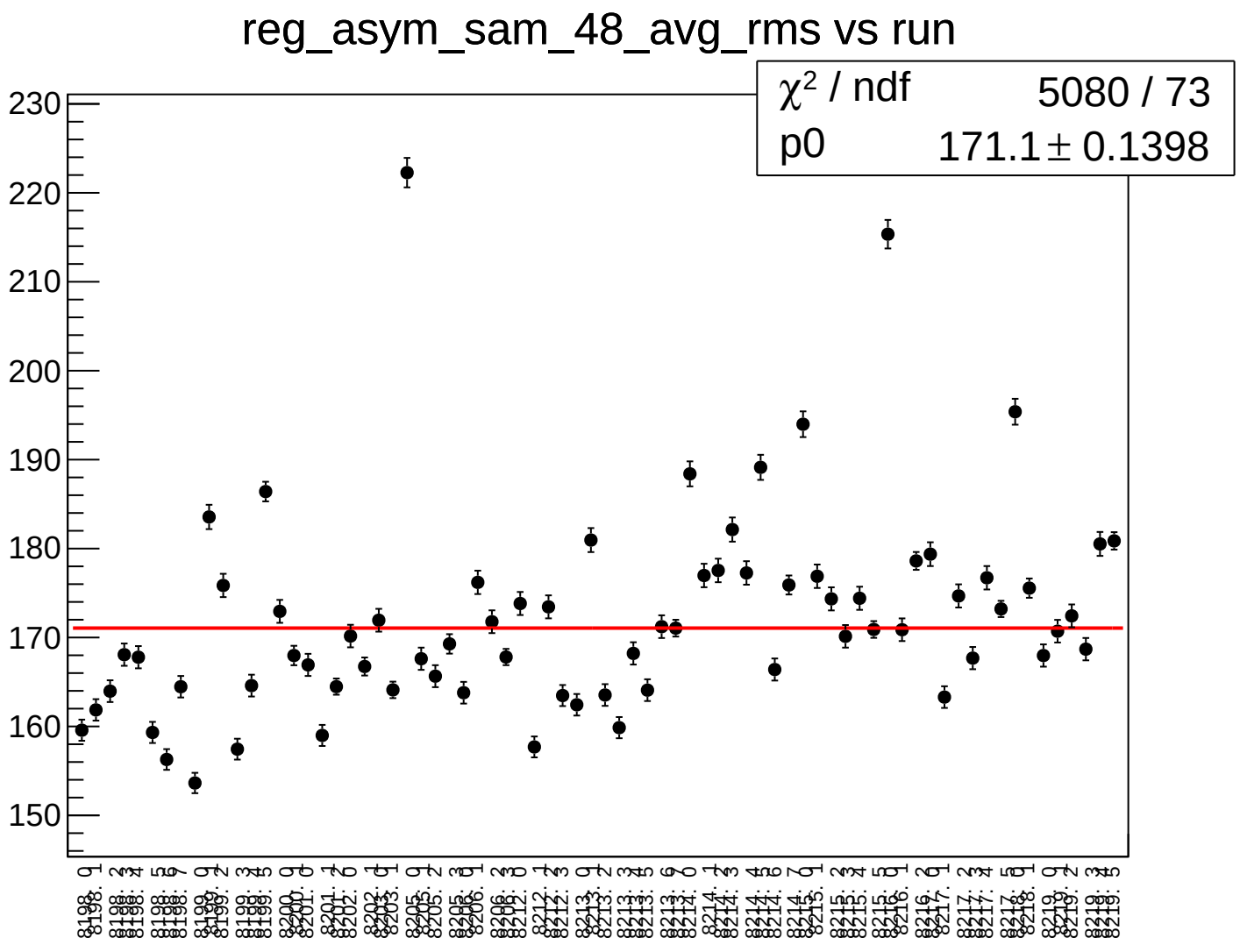

asym_sam_37_avg_mean vs run
χ² / ndf 78.53 / 73
p0 1975 ± 2304
pull
Entries 74
Mean 5.652e+04
Std Dev 5.647e+04

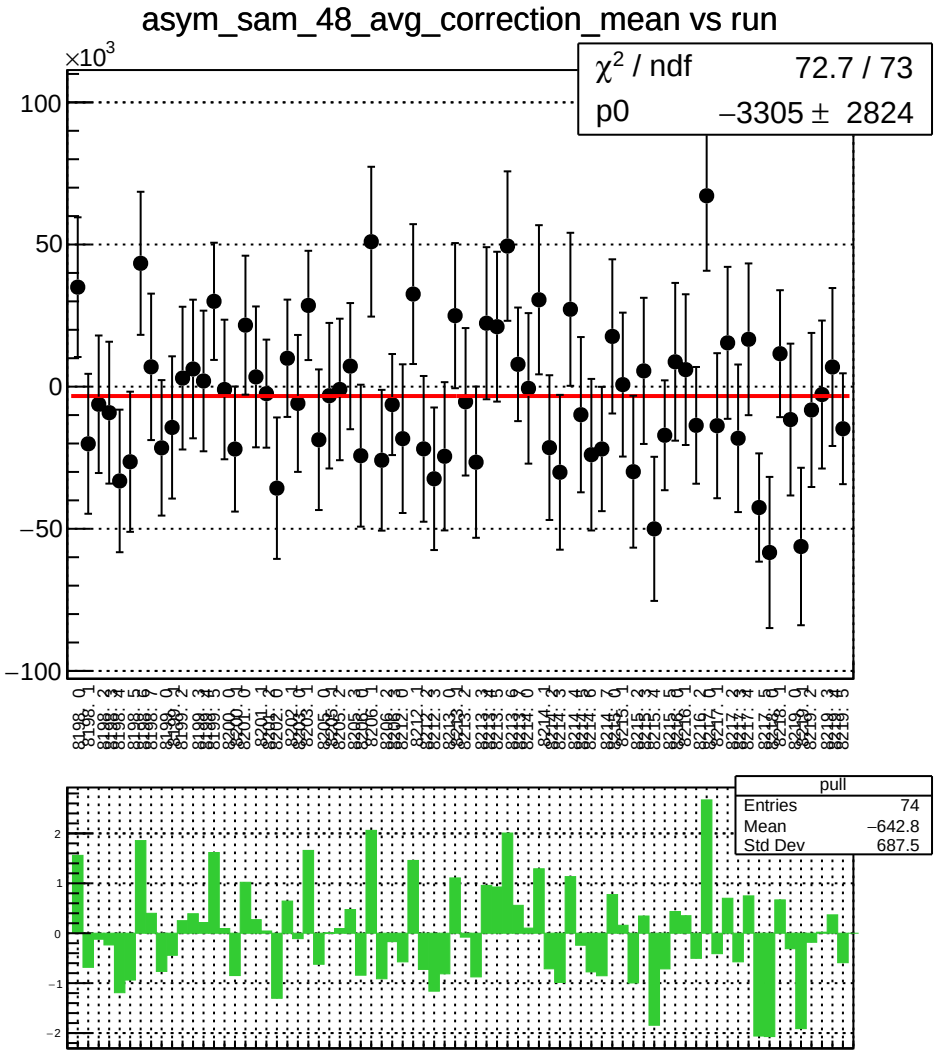

pull1D
Entries 74
Mean 2.386e−05
Std Dev 1.03

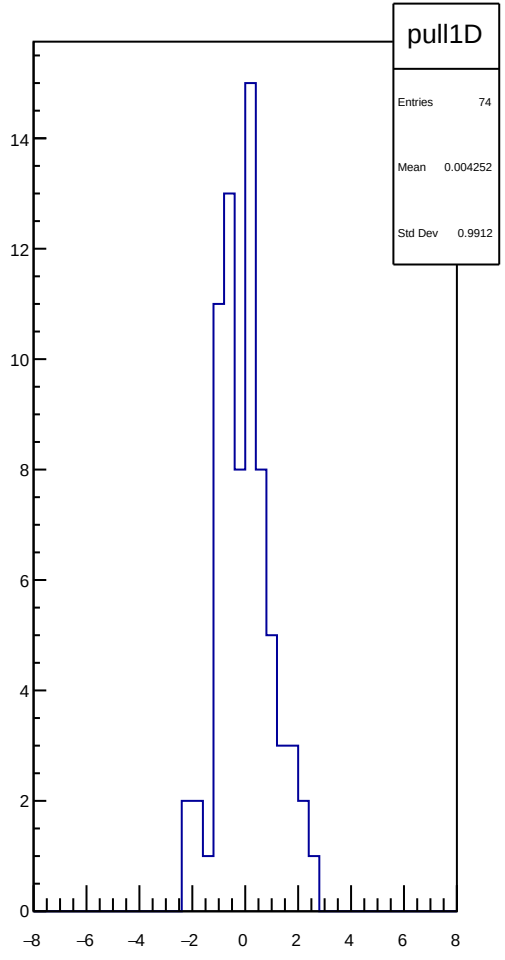

asym_sam_37_avg_rms vs run
χ² / ndf 3208 / 73
p0 1995 ± 1.629
2300
2200
2100
2000
1900
1800

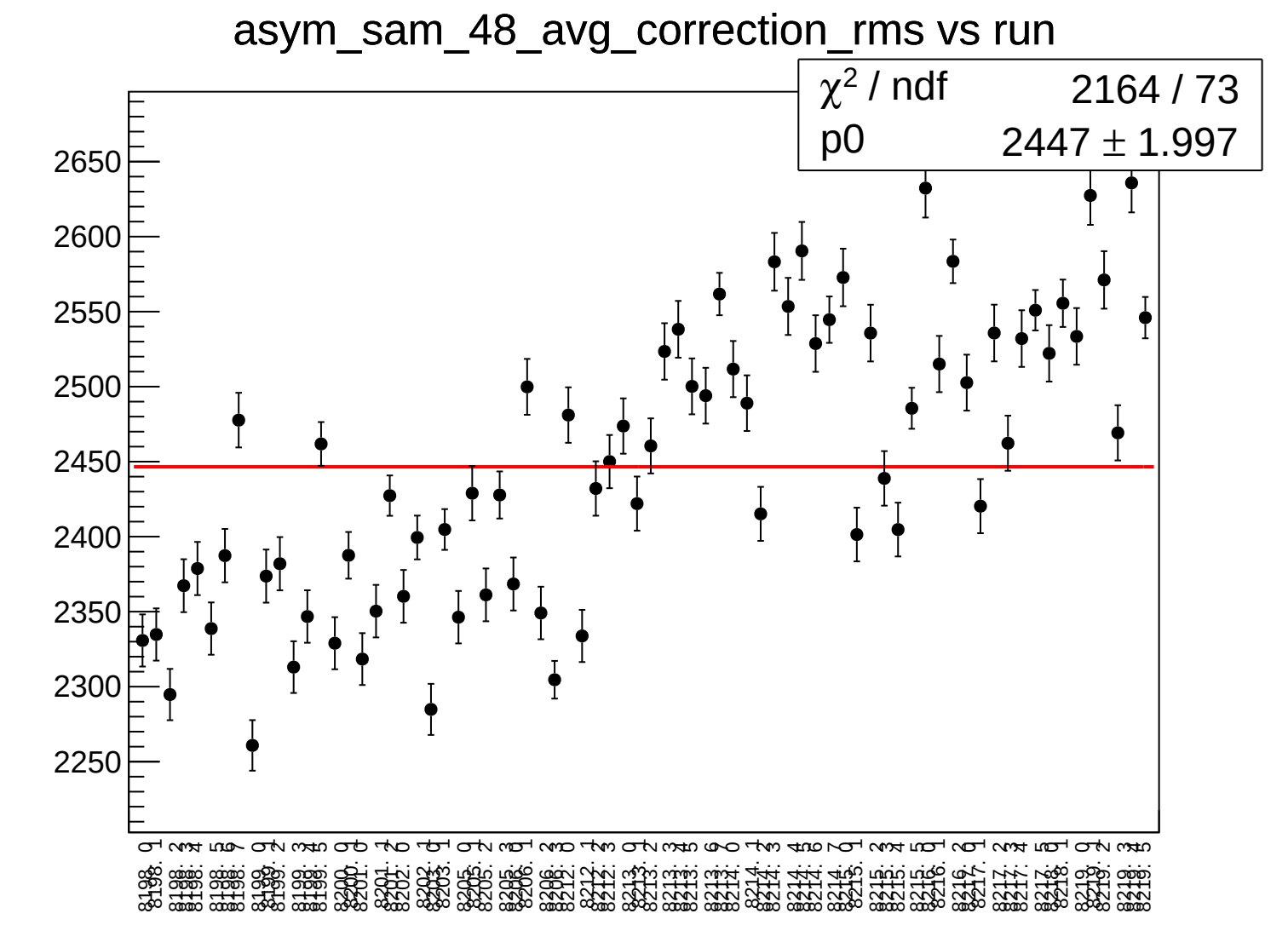

reg_asym_sam_48_avg_mean vs run
χ² / ndf 94.05 / 73
p0 −207.7 ± 197.6
pull
Entries 74
Mean −49.16
Std Dev 113.4

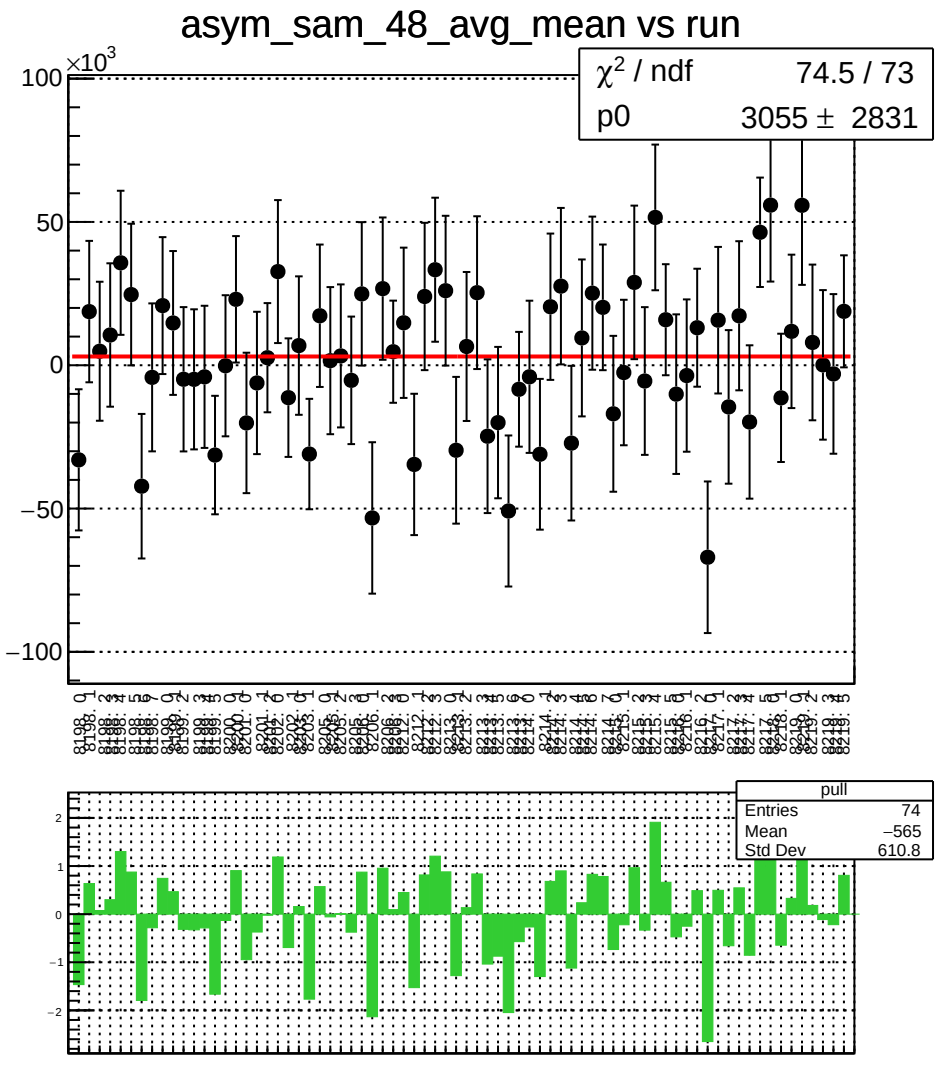

pull1D
Entries 74
Mean −0.02241
Std Dev 1.127

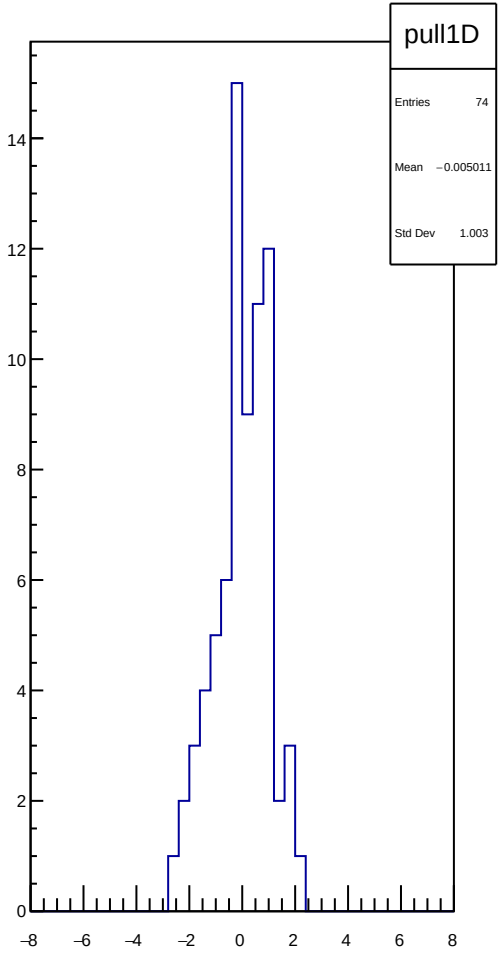

reg_asym_sam_48_avg_rms vs run
χ² / ndf 5080 / 73
p0 171.1 ± 0.1398
230
220
210
200
190
180
170
160
150

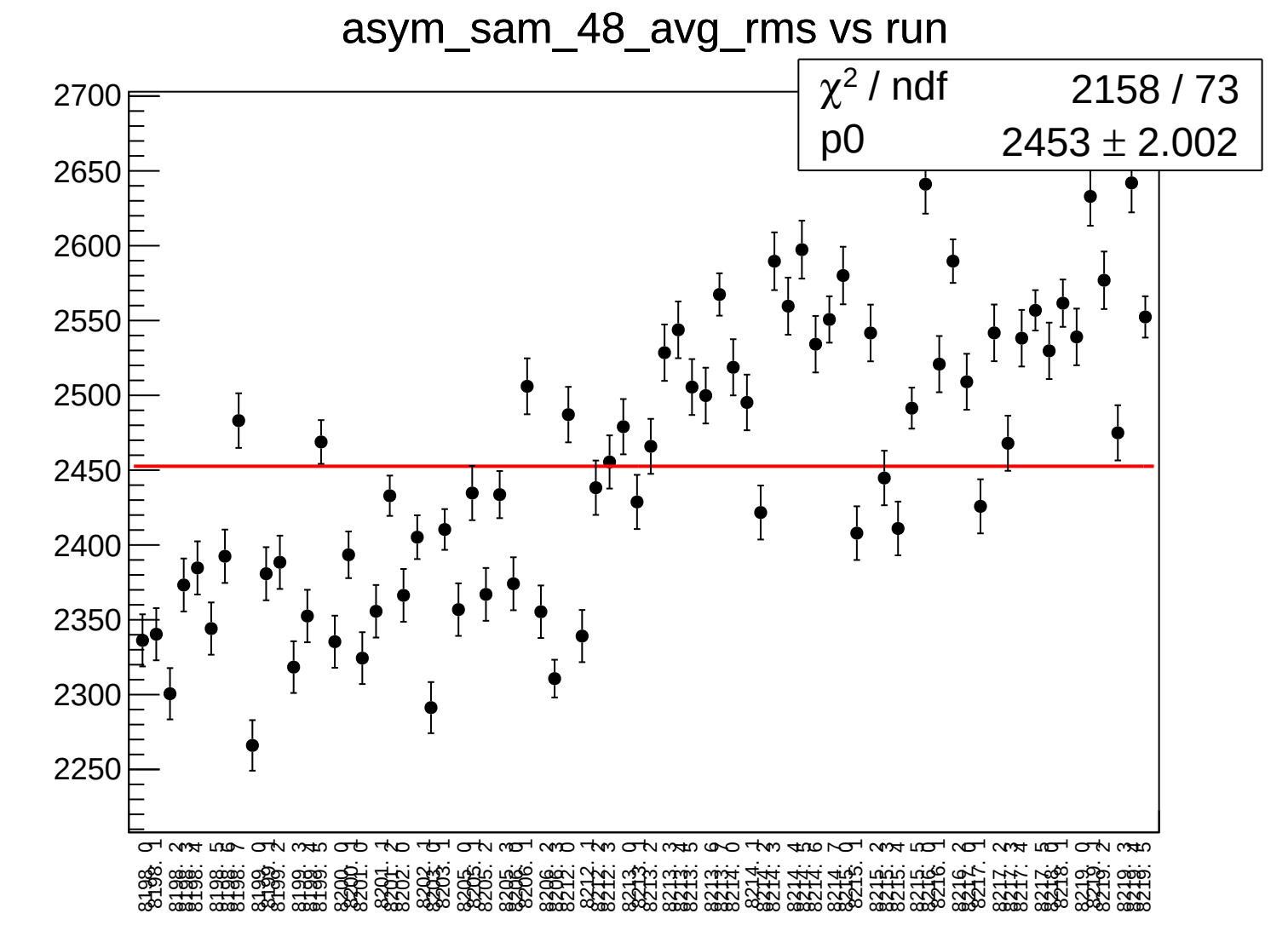

asym_sam_48_avg_correction_mean vs run
×10^3
χ² / ndf 72.7 / 73
p0 −3305 ± 2824
100
50
0
−50
−100
pull
Entries 74
Mean −642.8
Std Dev 687.5
2
1
0
−1
−2

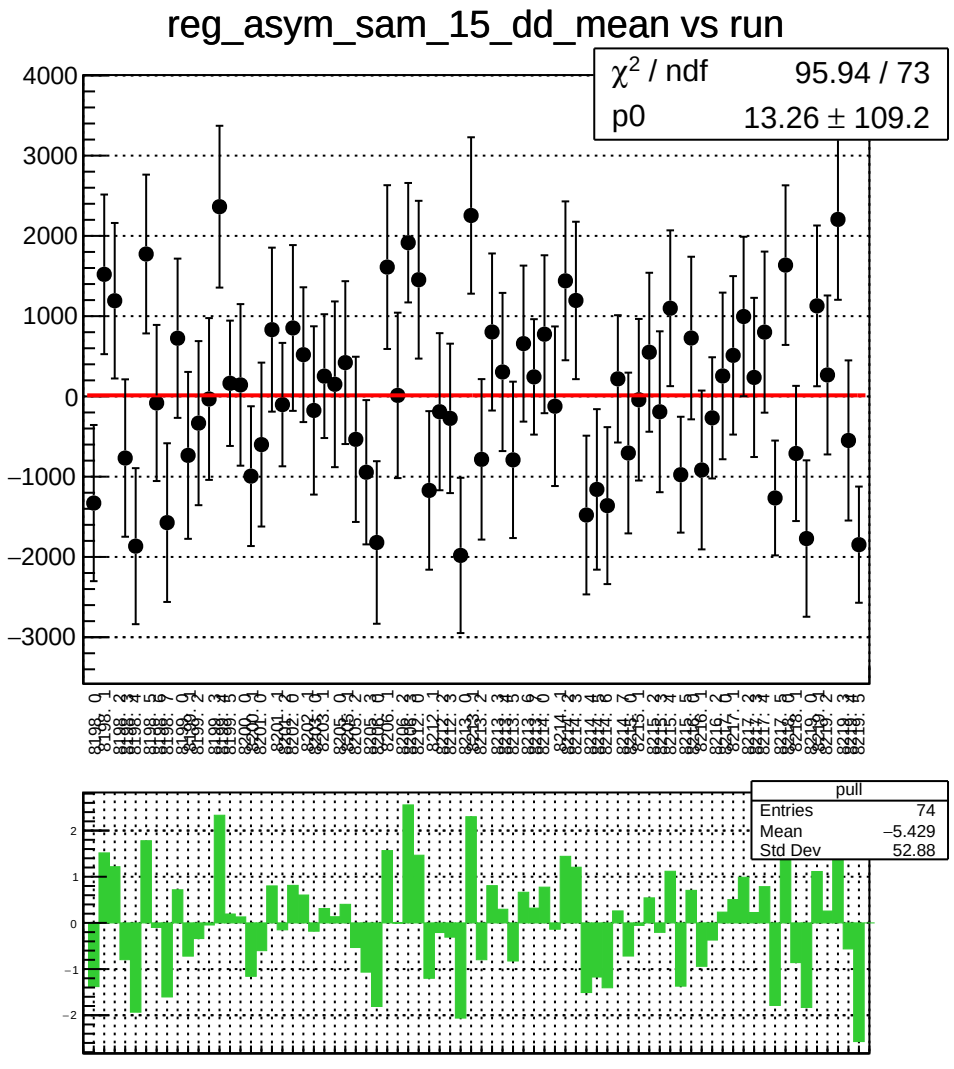

pull1D
Entries 74
Mean 0.004252
Std Dev 0.9912
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

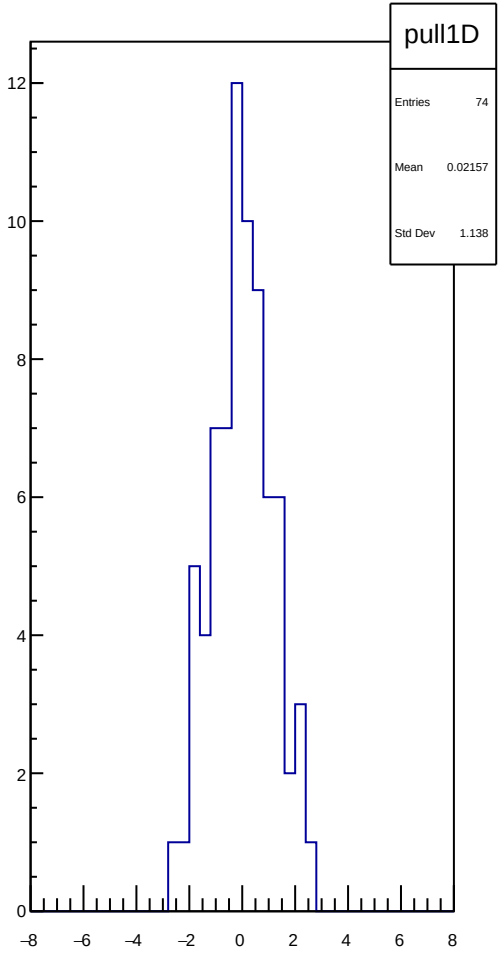

asym_sam_48_avg_correction_rms vs run
χ² / ndf 2164 / 73
p0 2447 ± 1.997
2650
2600
2550
2500
2450
2400
2350
2300
2250

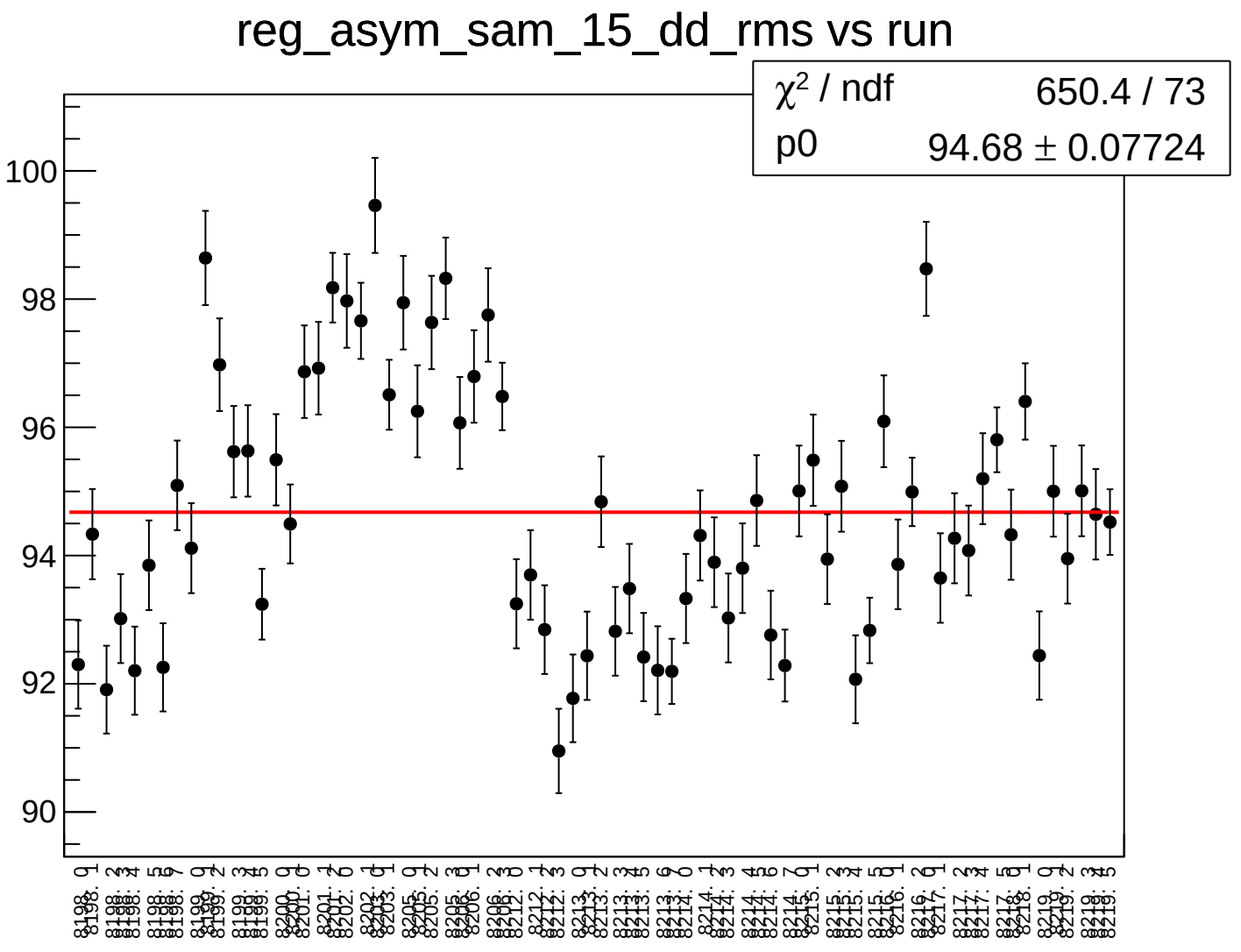

asym_sam_48_avg_mean vs run
×10^3
χ^2 / ndf 74.5 / 73
p0 3055 ± 2831
pull
Entries 74
Mean −565
Std Dev 610.8

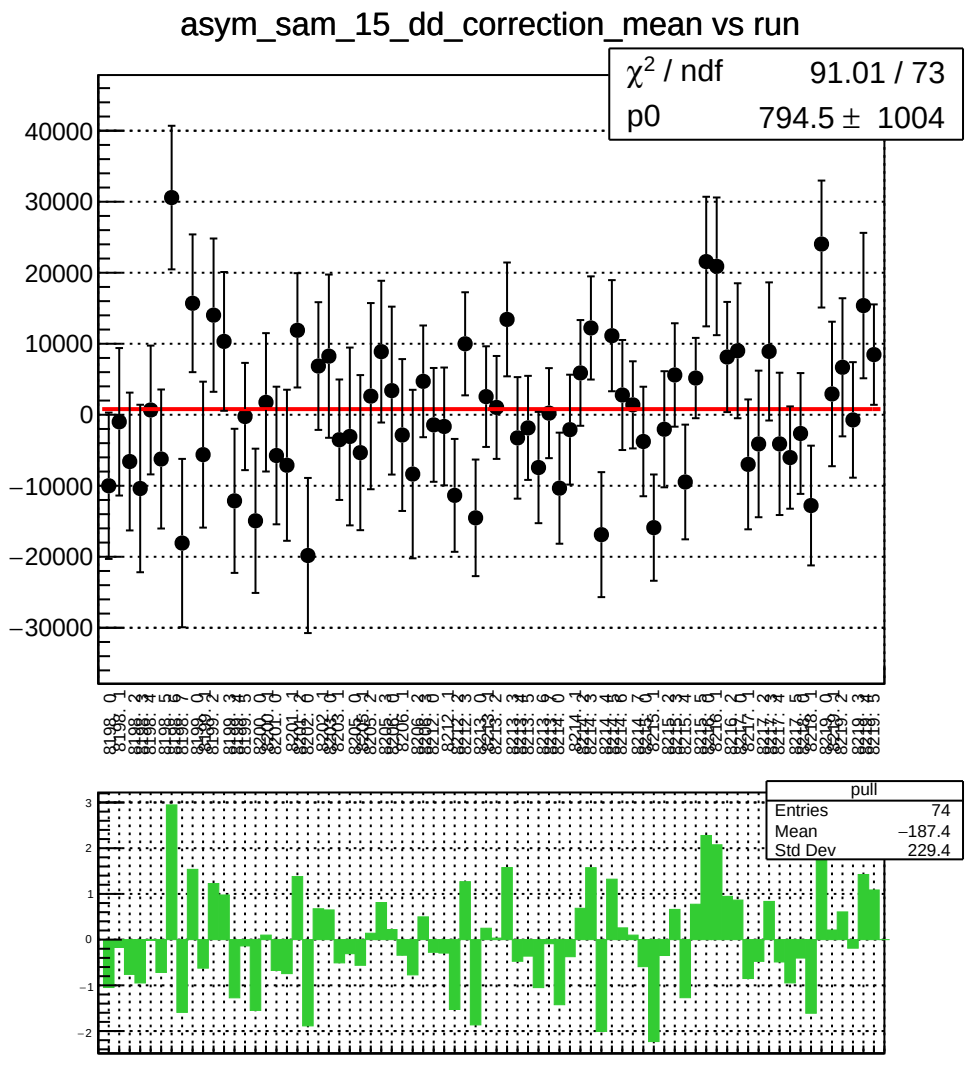

pull1D
Entries 74
Mean −0.005011
Std Dev 1.003

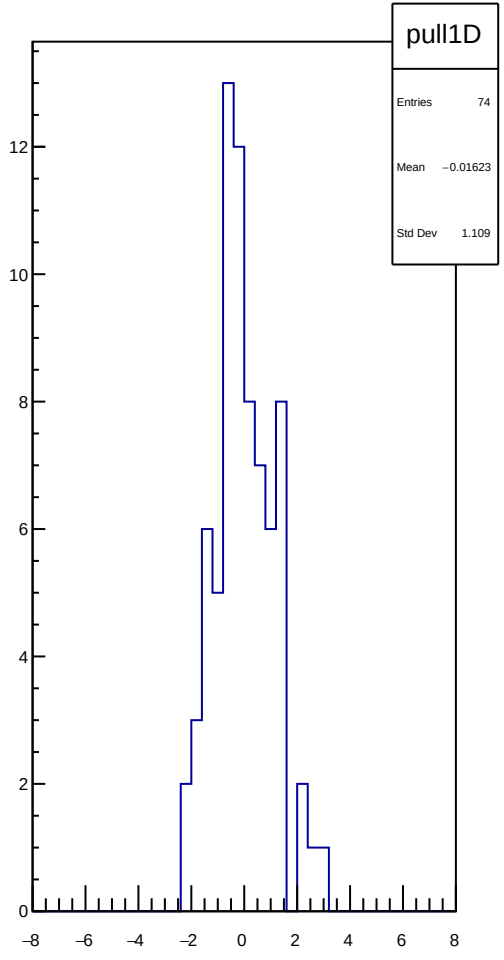

asym_sam_48_avg_rms vs run
χ² / ndf 2158 / 73
p0 2453 ± 2.002
2700
2650
2600
2550
2500
2450
2400
2350
2300
2250

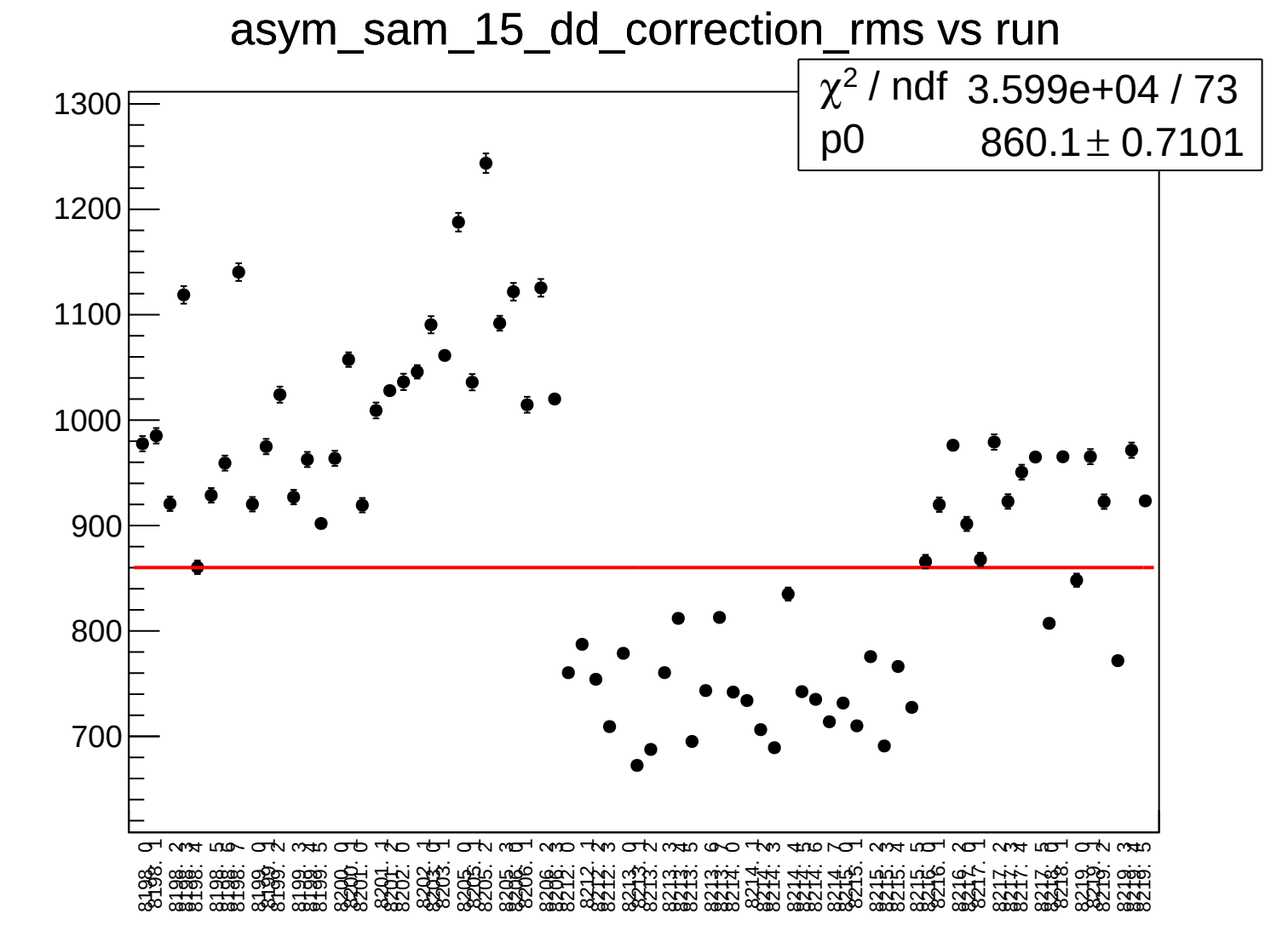

reg_asym_sam_15_dd_mean vs run
χ^2 / ndf 95.94 / 73
p0 13.26 ± 109.2
pull
Entries 74
Mean −5.429
Std Dev 52.88

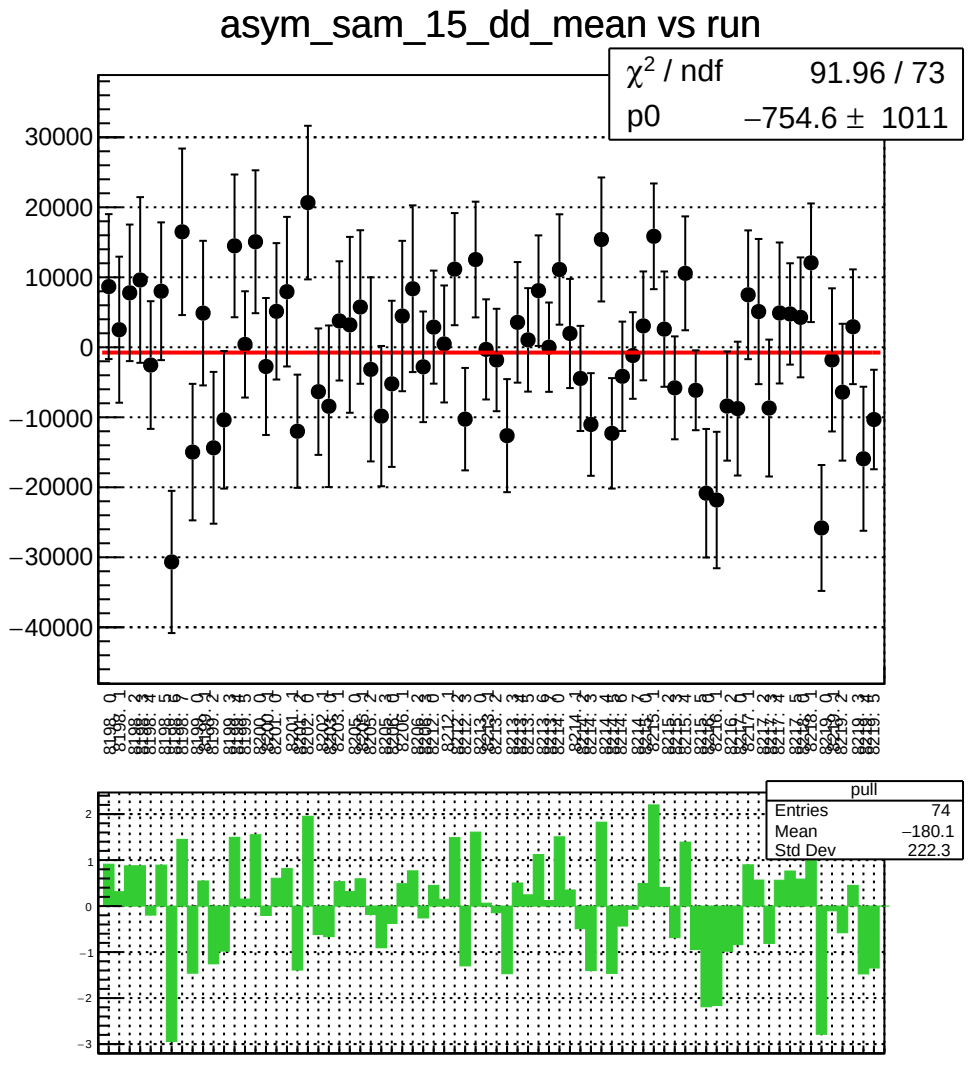

pull1D
Entries 74
Mean 0.02157
Std Dev 1.138

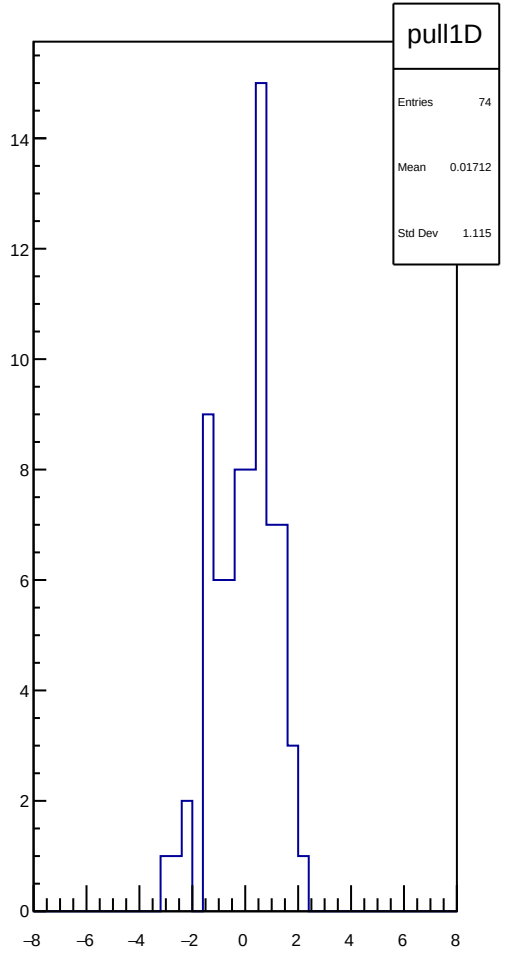

reg_asym_sam_15_dd_rms vs run
χ² / ndf 650.4 / 73
p0 94.68 ± 0.07724
100
98
96
94
92
90

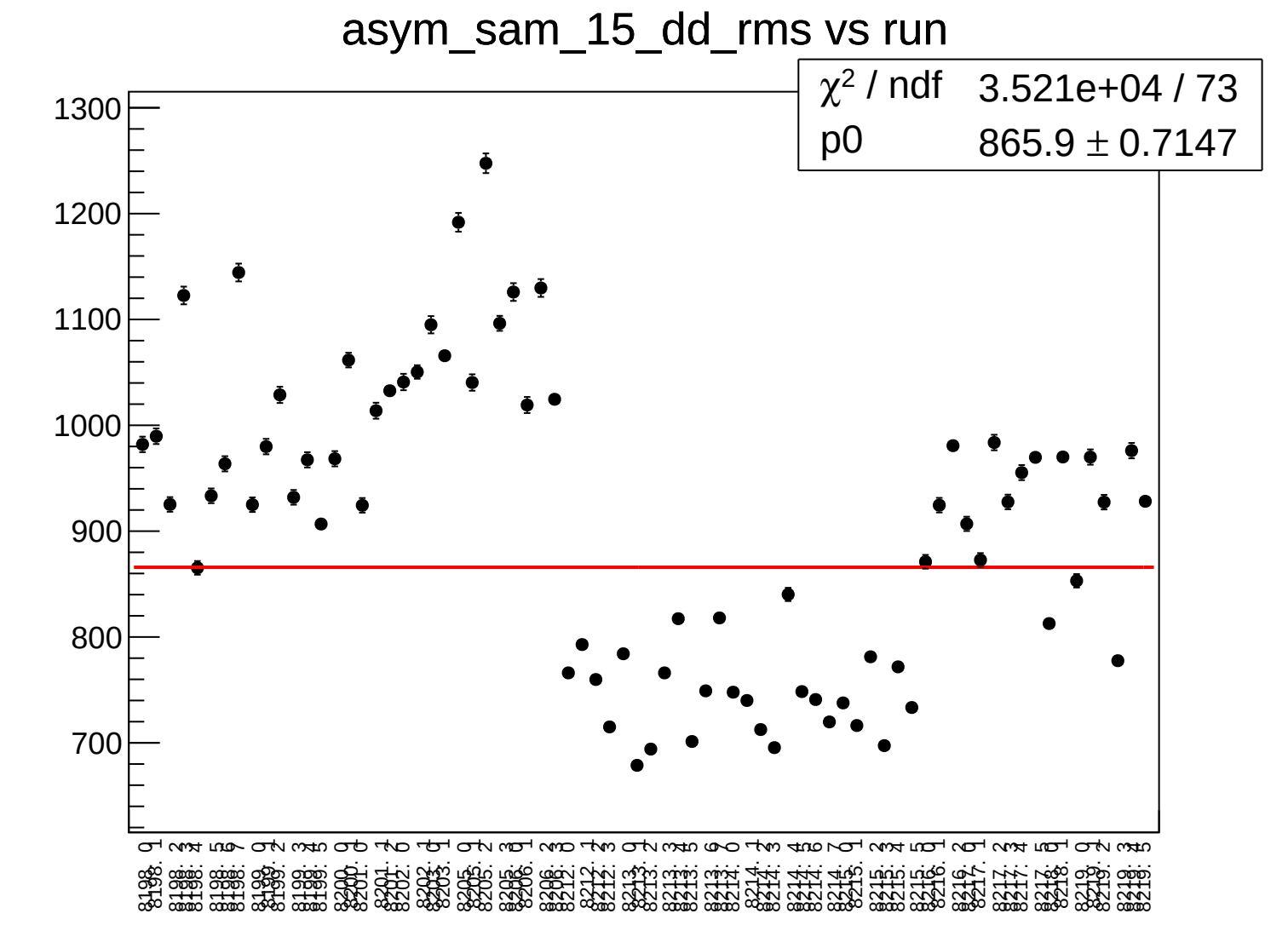

asym_sam_15_dd_correction_mean vs run
χ² / ndf 91.01 / 73
p0 794.5 ± 1004
40000
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 74
Mean −187.4
Std Dev 229.4
3
2
1
0
−1
−2

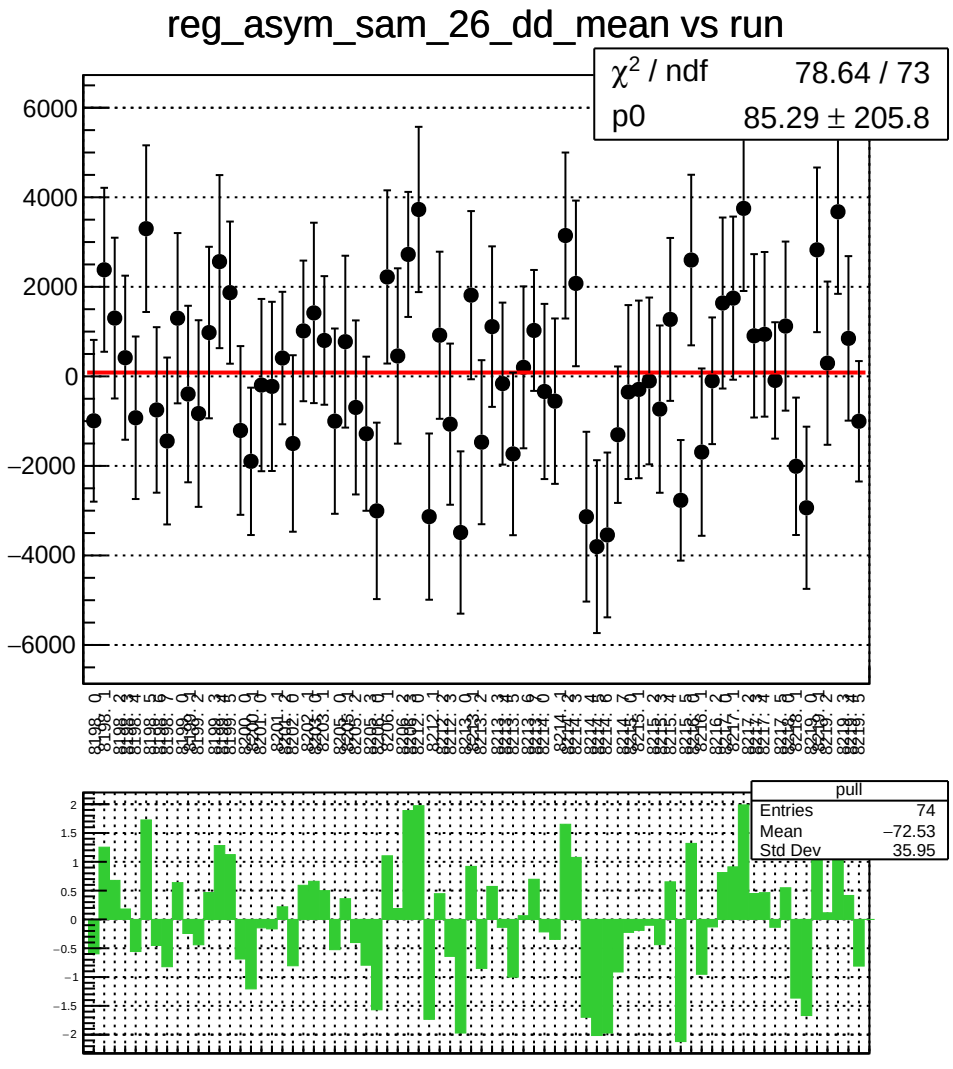

pull1D
Entries 74
Mean −0.01623
Std Dev 1.109
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

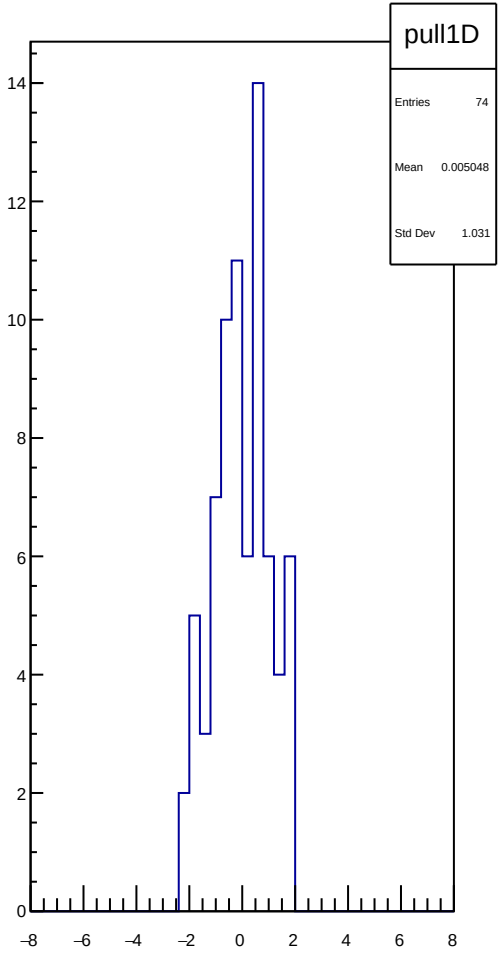

asym_sam_15_dd_correction_rms vs run
χ² / ndf 3.599e+04 / 73
p0 860.1 ± 0.7101
1300
1200
1100
1000
900
800
700

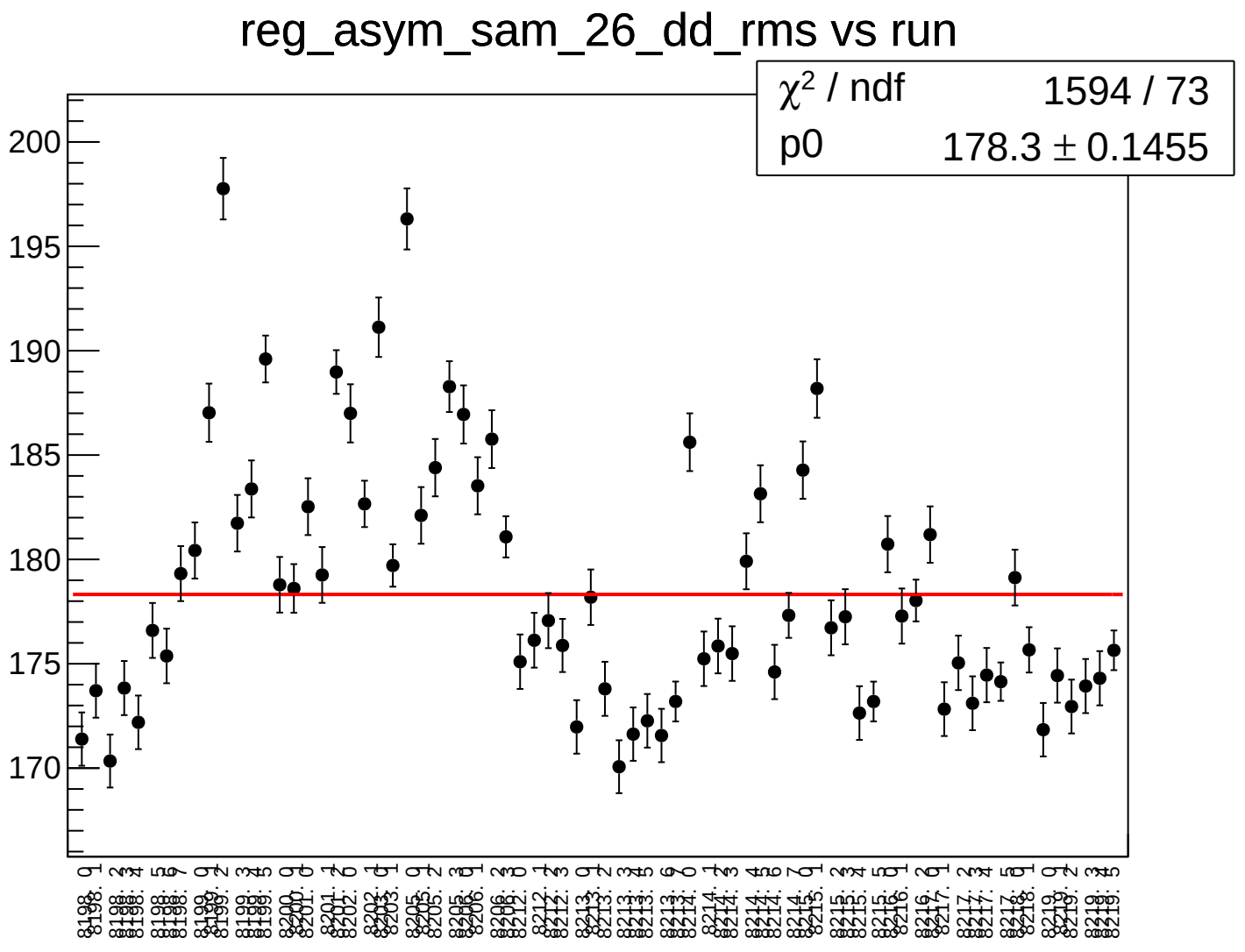

asym_sam_15_dd_mean vs run
χ² / ndf 91.96 / 73
p0 −754.6 ± 1011
pull
Entries 74
Mean −180.1
Std Dev 222.3

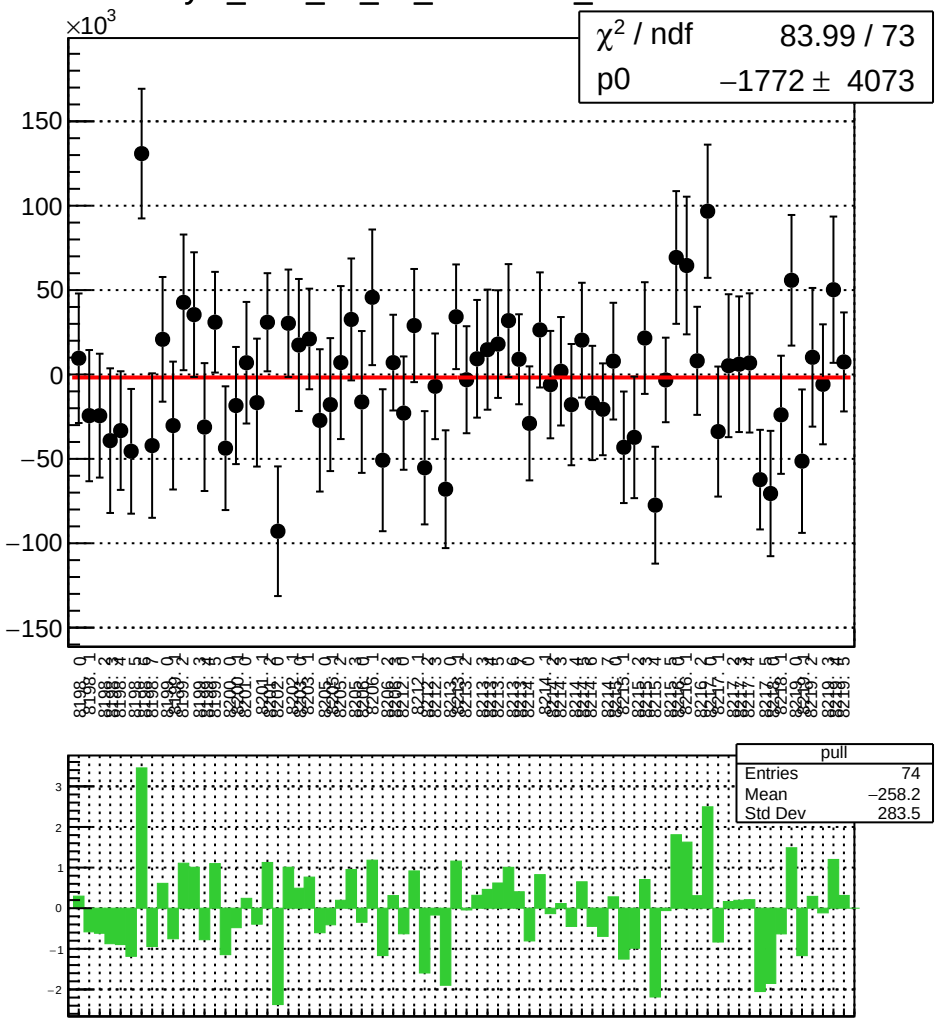

pull1D
Entries 74
Mean 0.01712
Std Dev 1.115

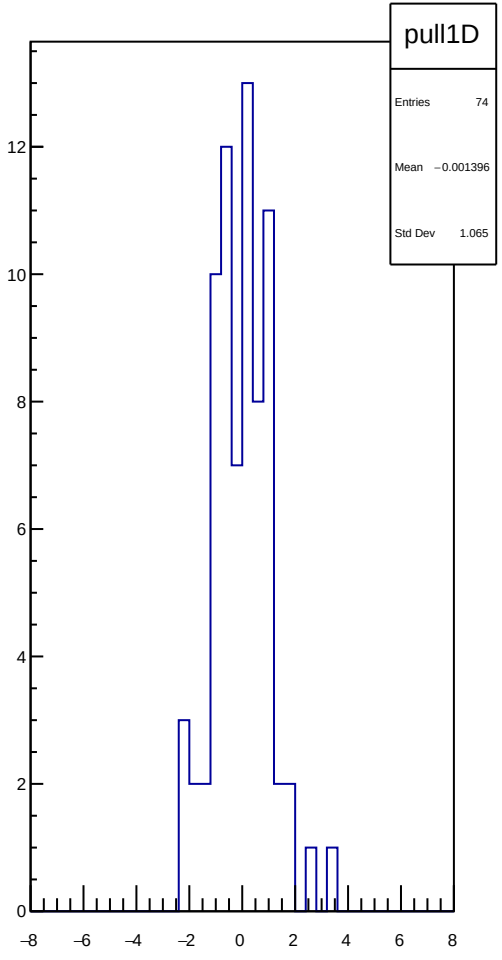

asym_sam_15_dd_rms vs run
χ² / ndf 3.521e+04 / 73
p0 865.9 ± 0.7147
1300
1200
1100
1000
900
800
700

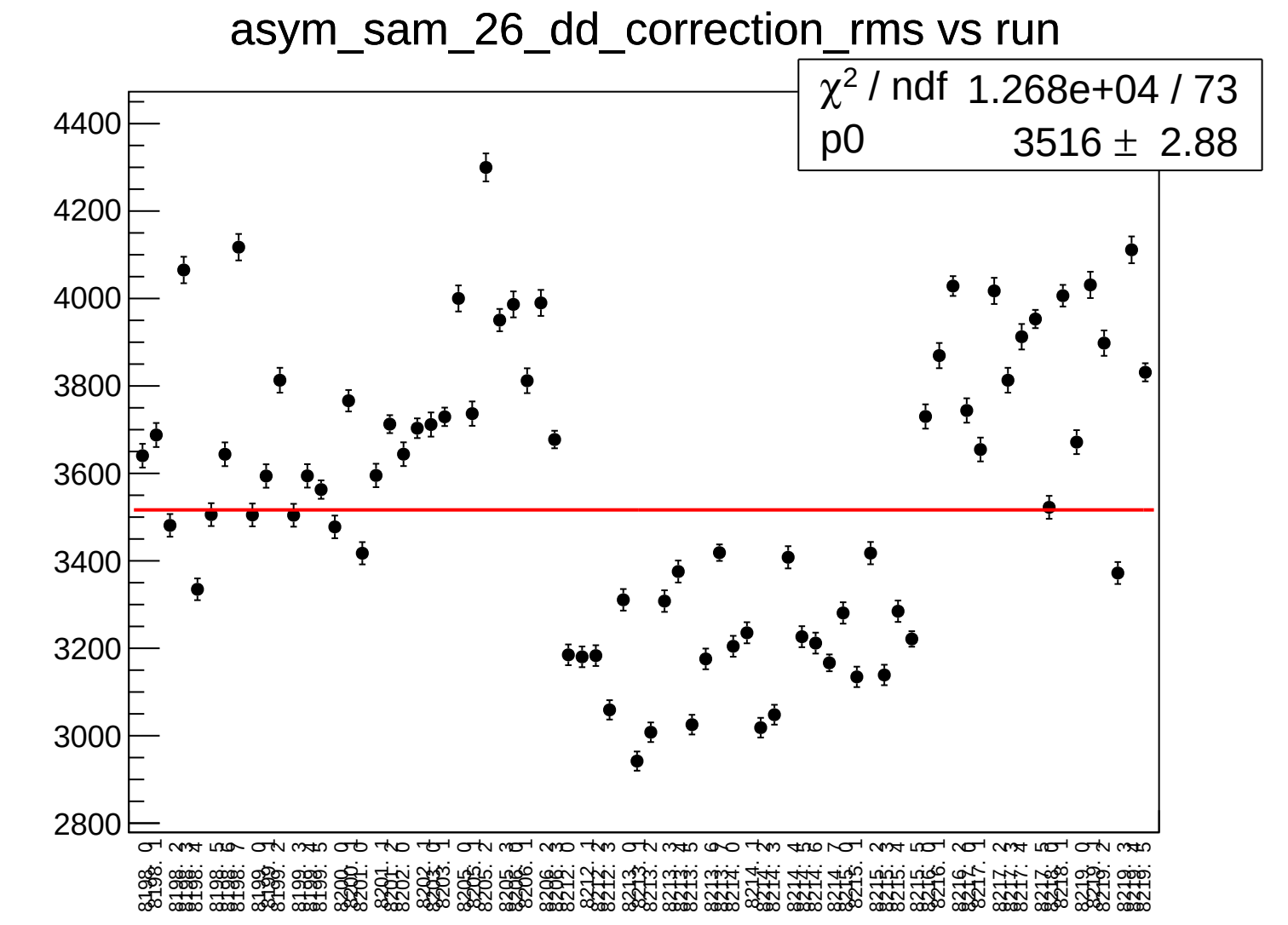

reg_asym_sam_26_dd_mean vs run
χ² / ndf 78.64 / 73
p0 85.29 ± 205.8
pull
Entries 74
Mean −72.53
Std Dev 35.95

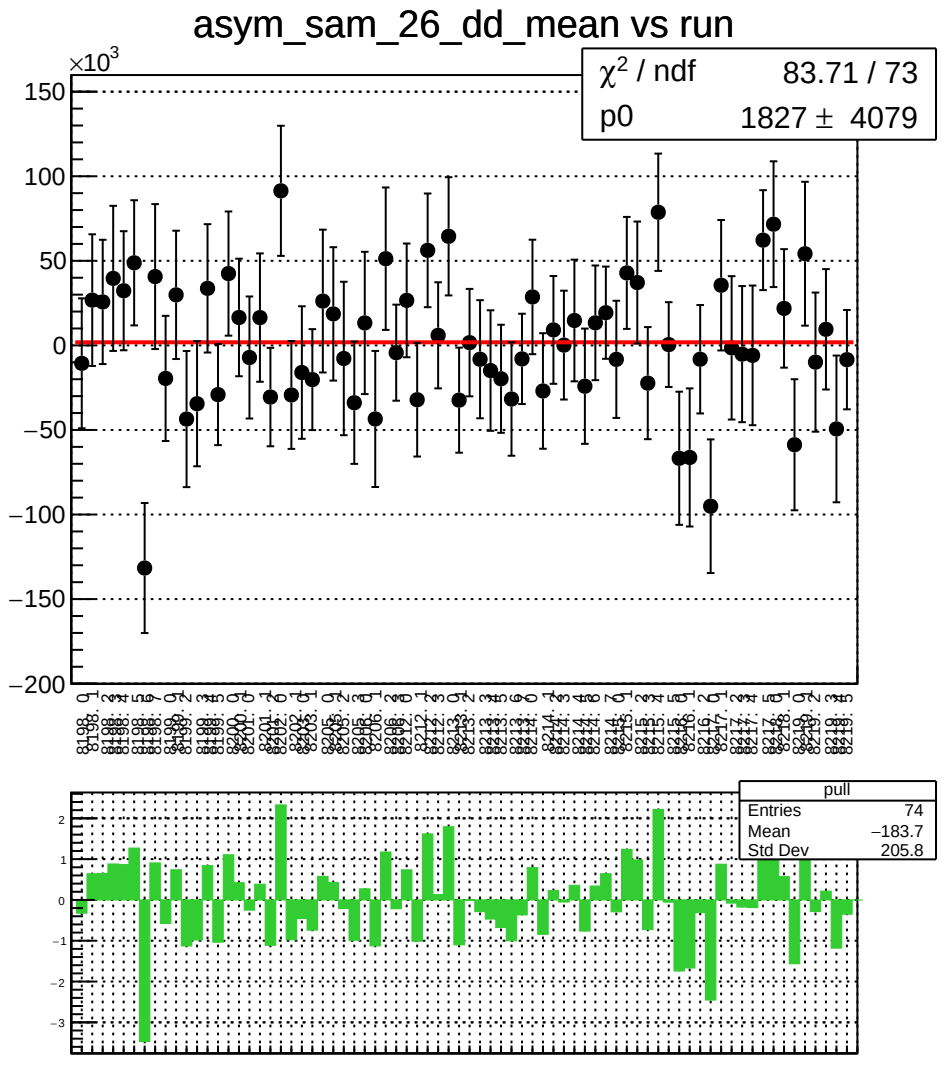

pull1D
Entries 74
Mean 0.005048
Std Dev 1.031

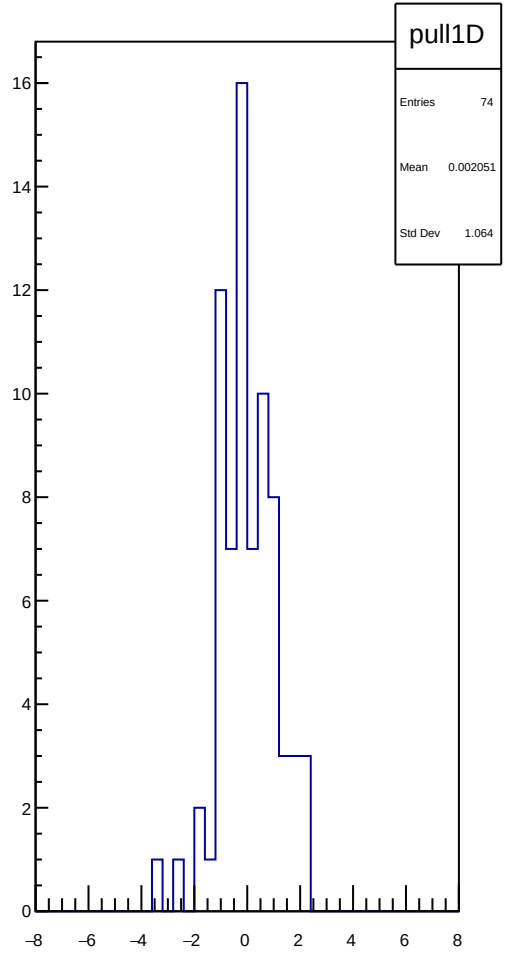

reg_asym_sam_26_dd_rms vs run
χ² / ndf 1594 / 73
p0 178.3 ± 0.1455
200
195
190
185
180
175
170

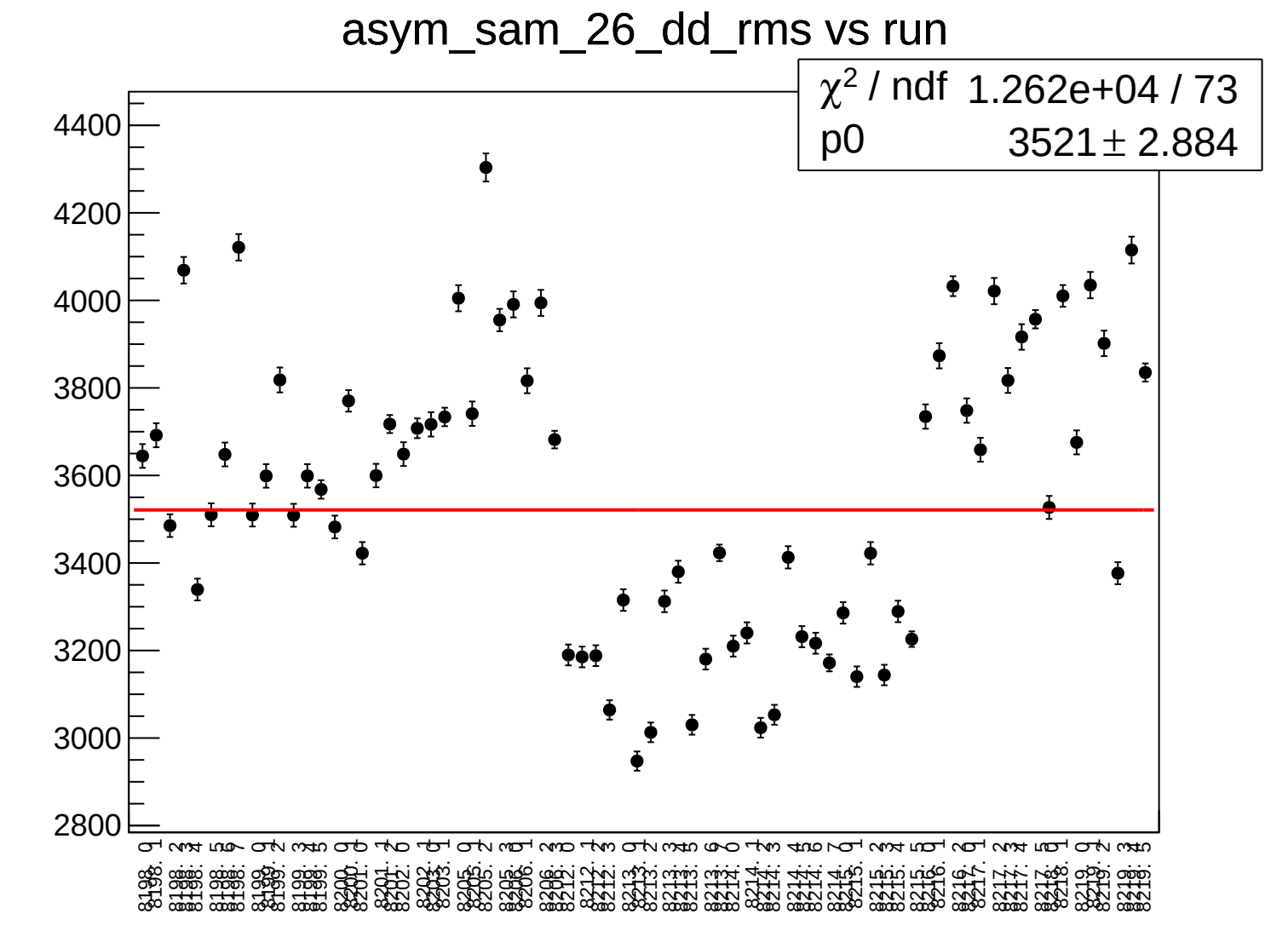

asym_sam_26_dd_correction_mean vs run
×10^3
χ² / ndf 83.99 / 73
p0 −1772 ± 4073
150
100
50
0
−50
−100
−150
pull
Entries 74
Mean −258.2
Std Dev 283.5
3
2
1
0
−1
−2

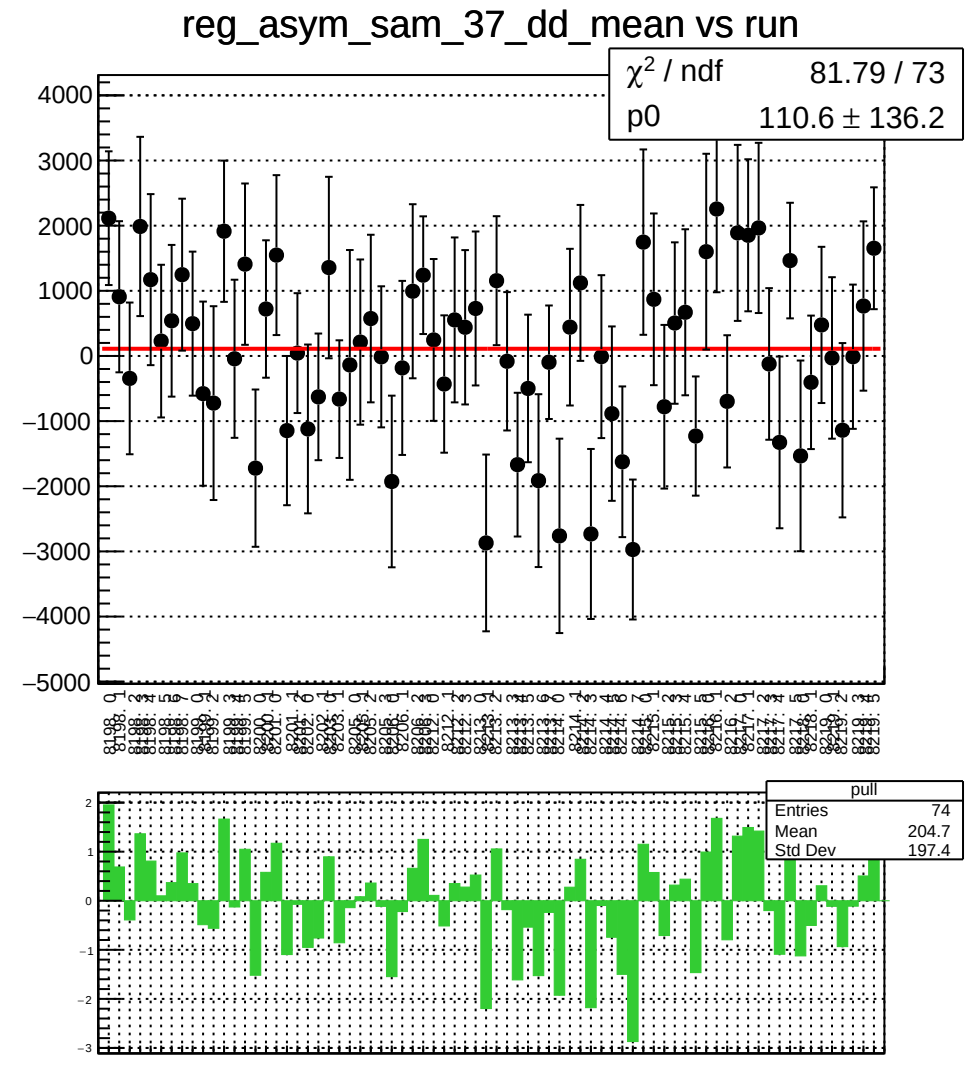

pull1D
Entries 74
Mean −0.001396
Std Dev 1.065
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

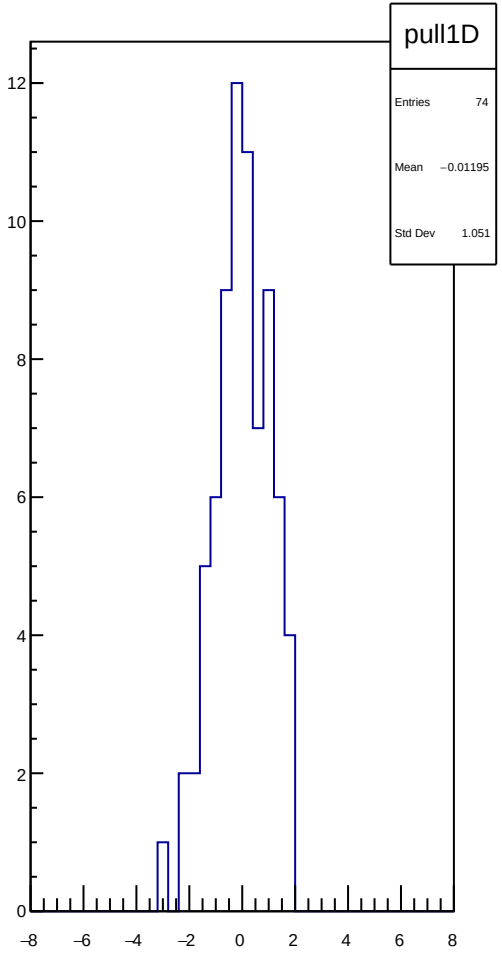

asym_sam_26_dd_correction_rms vs run
χ² / ndf 1.268e+04 / 73
p0 3516 ± 2.88
4400
4200
4000
3800
3600
3400
3200
3000
2800

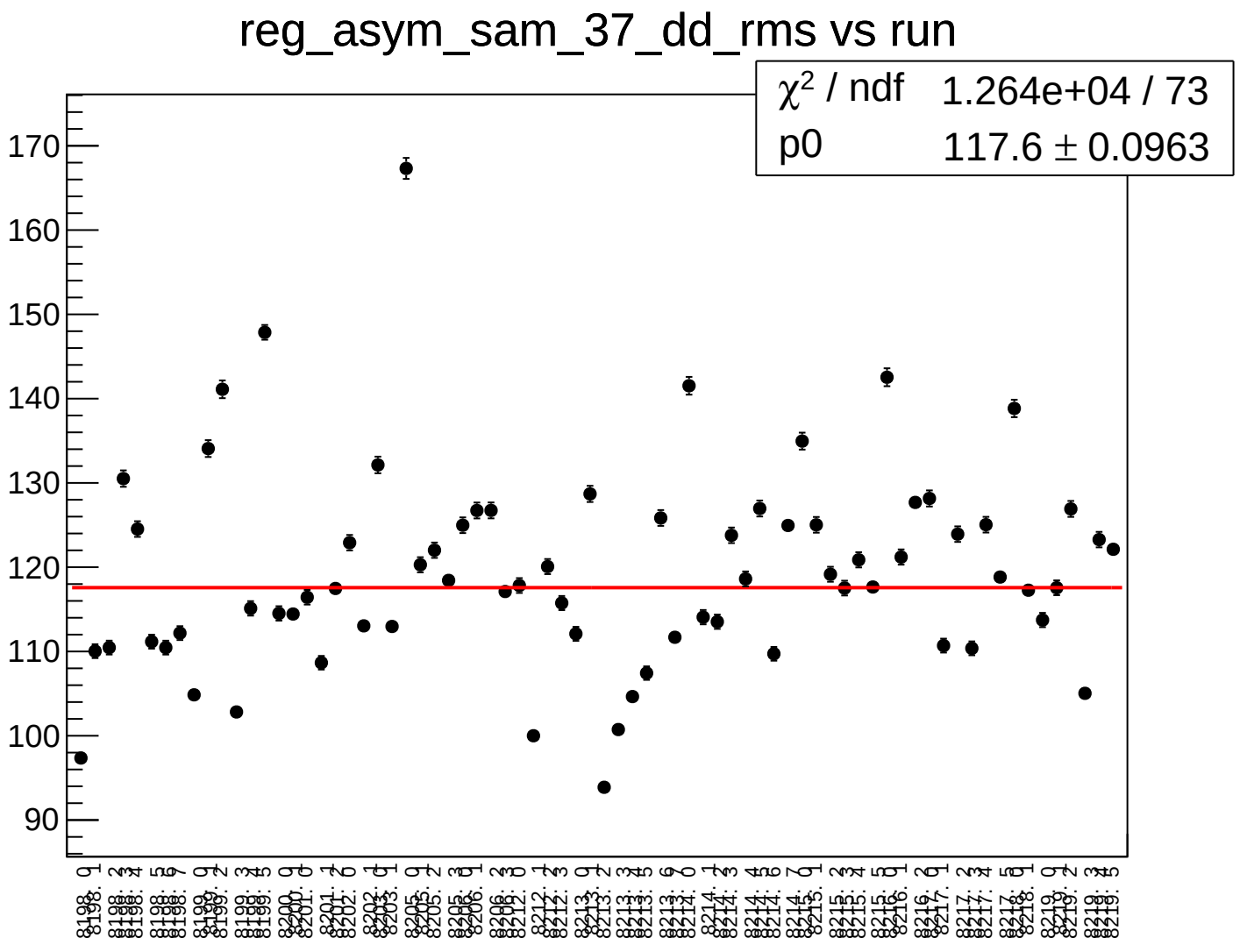

asym_sam_26_dd_mean vs run
×10^3
χ^2 / ndf 83.71 / 73
p0 1827 ± 4079
150
100
50
0
−50
−100
−150
−200
pull
Entries 74
Mean −183.7
Std Dev 205.8
2
1
0
−1
−2
−3

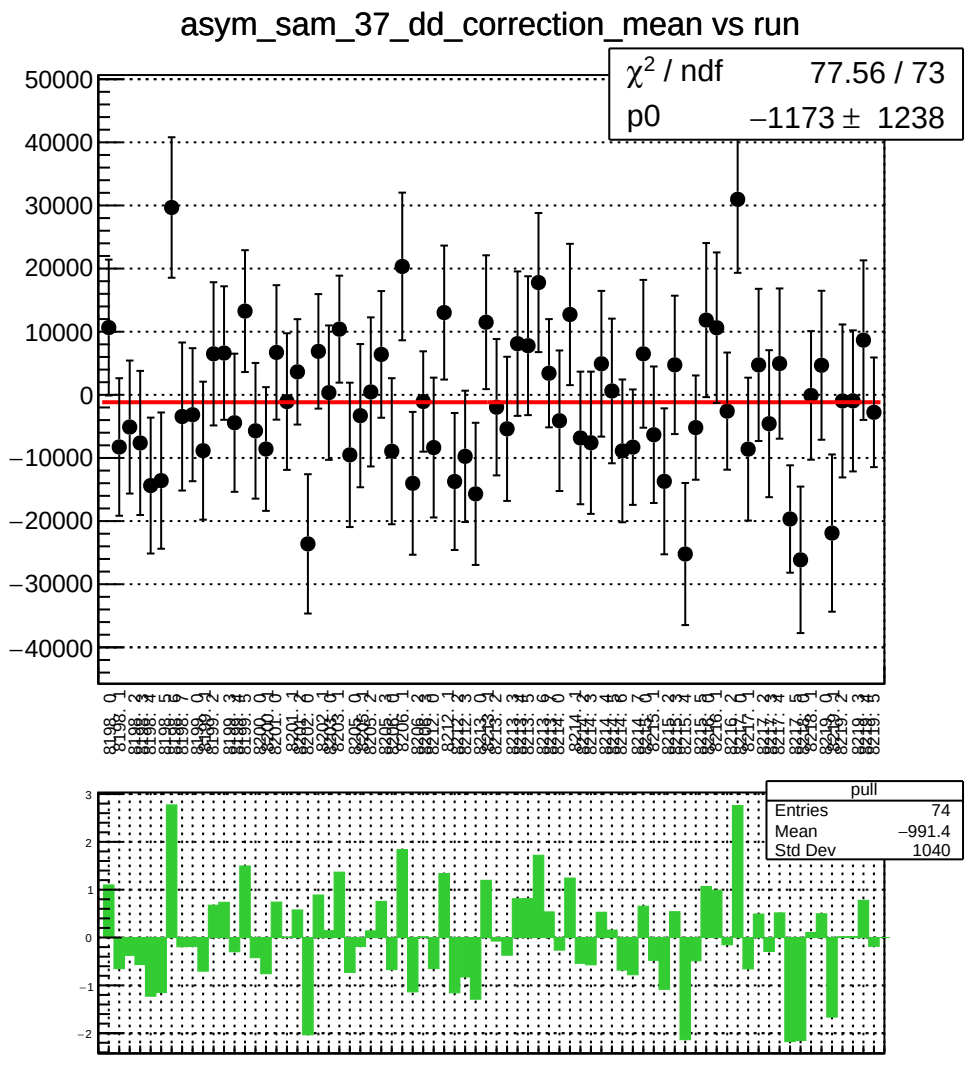

pull1D
Entries 74
Mean 0.002051
Std Dev 1.064
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

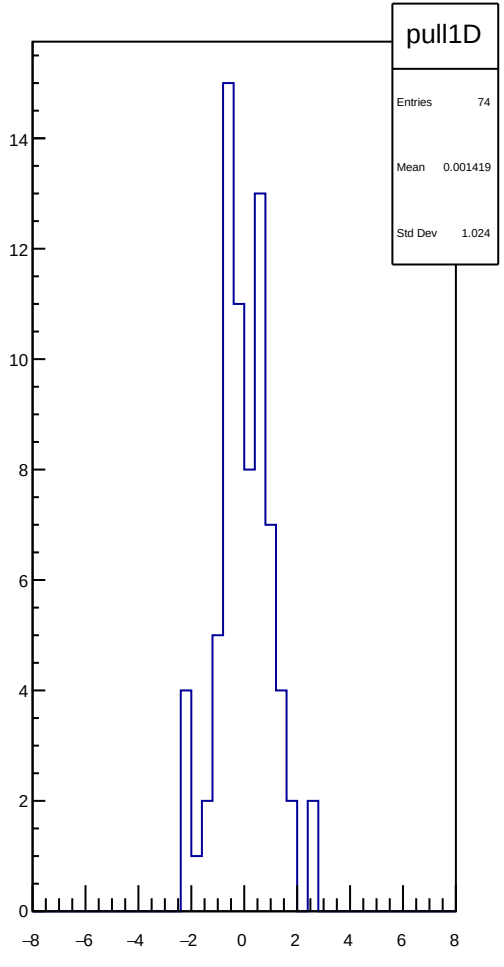

asym_sam_26_dd_rms vs run
χ² / ndf 1.262e+04 / 73
p0 3521 ± 2.884
4400
4200
4000
3800
3600
3400
3200
3000
2800

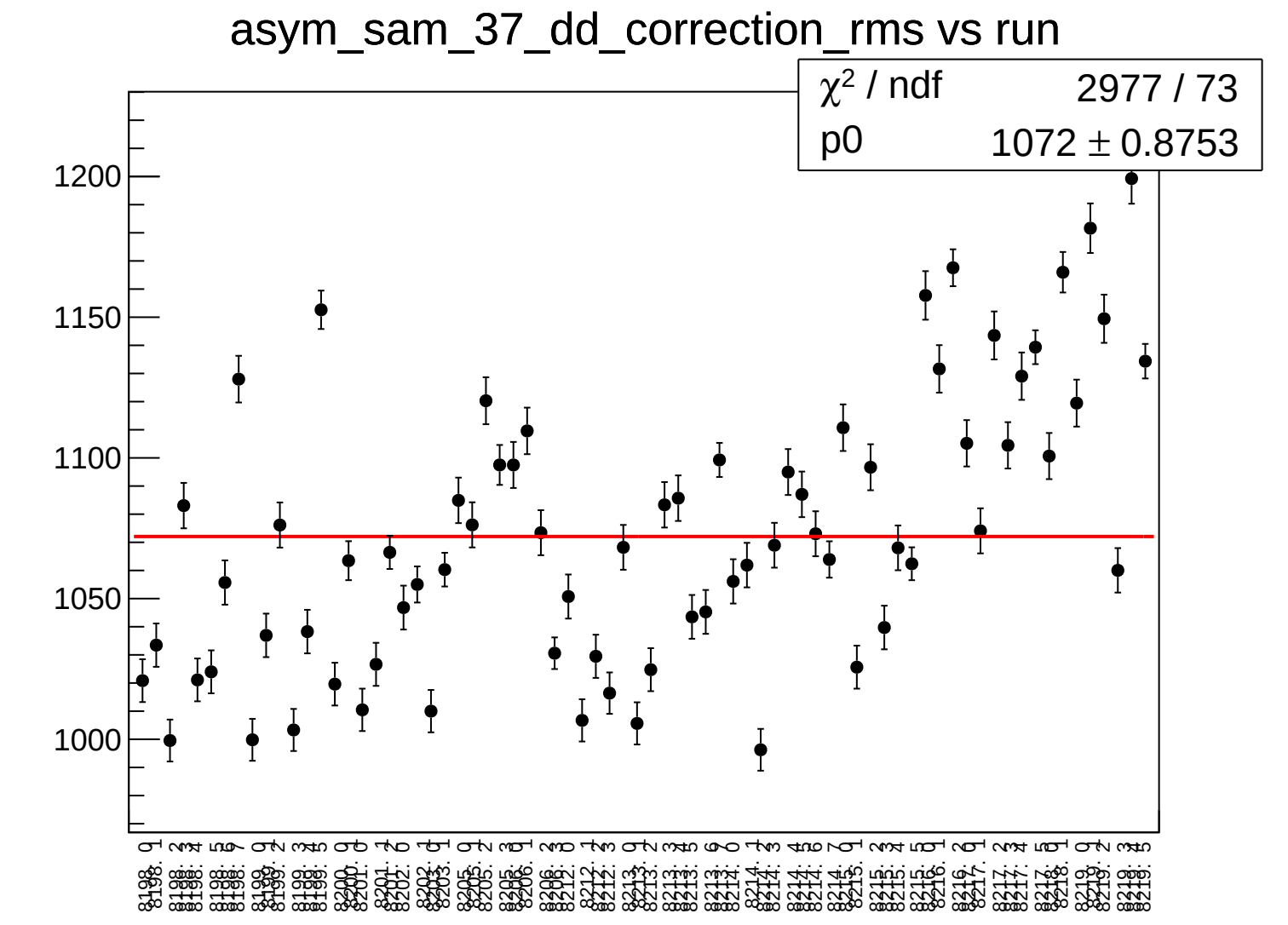

reg_asym_sam_37_dd_mean vs run
χ^2 / ndf 81.79 / 73
p0 110.6 ± 136.2
pull
Entries 74
Mean 204.7
Std Dev 197.4

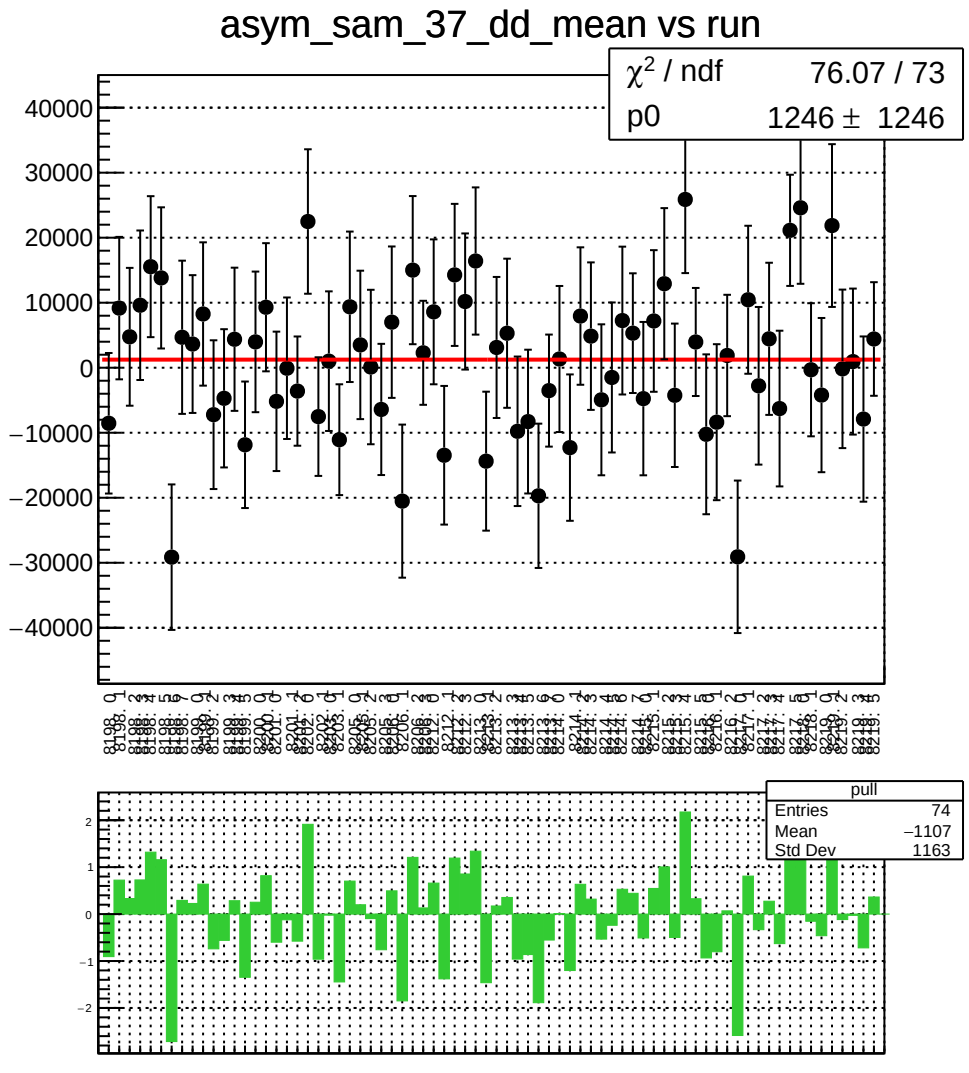

pull1D
Entries 74
Mean −0.01195
Std Dev 1.051

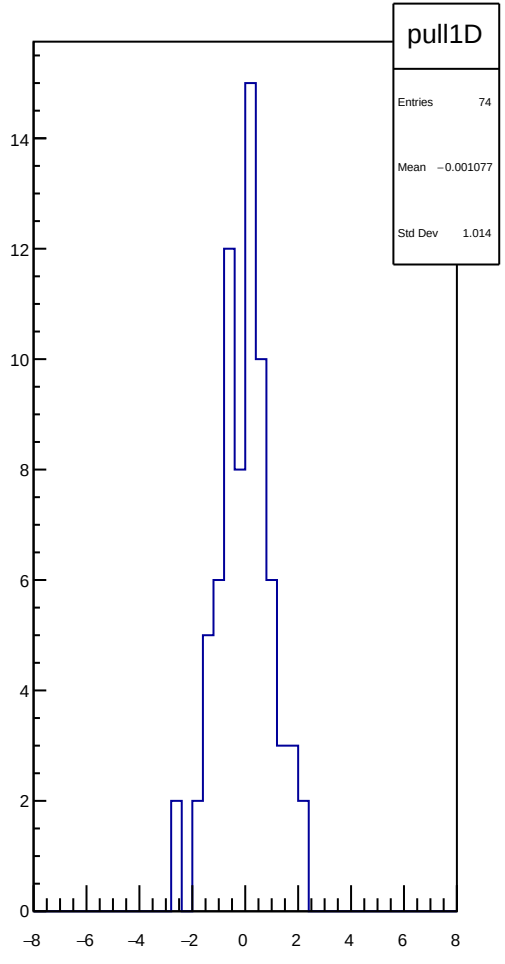

reg_asym_sam_37_dd_rms vs run
χ^2 / ndf 1.264e+04 / 73
p0 117.6 ± 0.0963
170
160
150
140
130
120
110
100
90

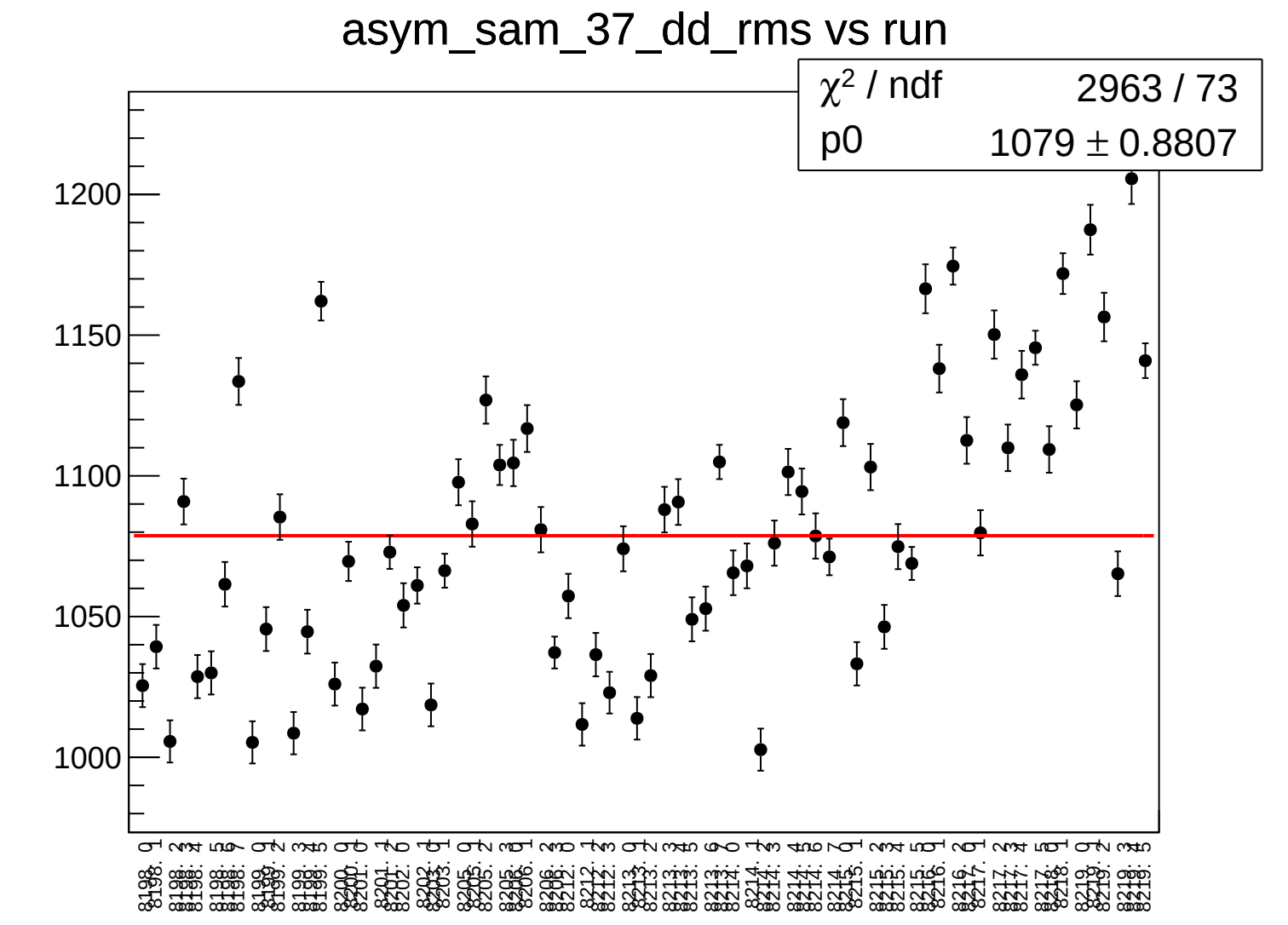

asym_sam_37_dd_correction_mean vs run
χ² / ndf 77.56 / 73
p0 −1173 ± 1238
pull
Entries 74
Mean −991.4
Std Dev 1040

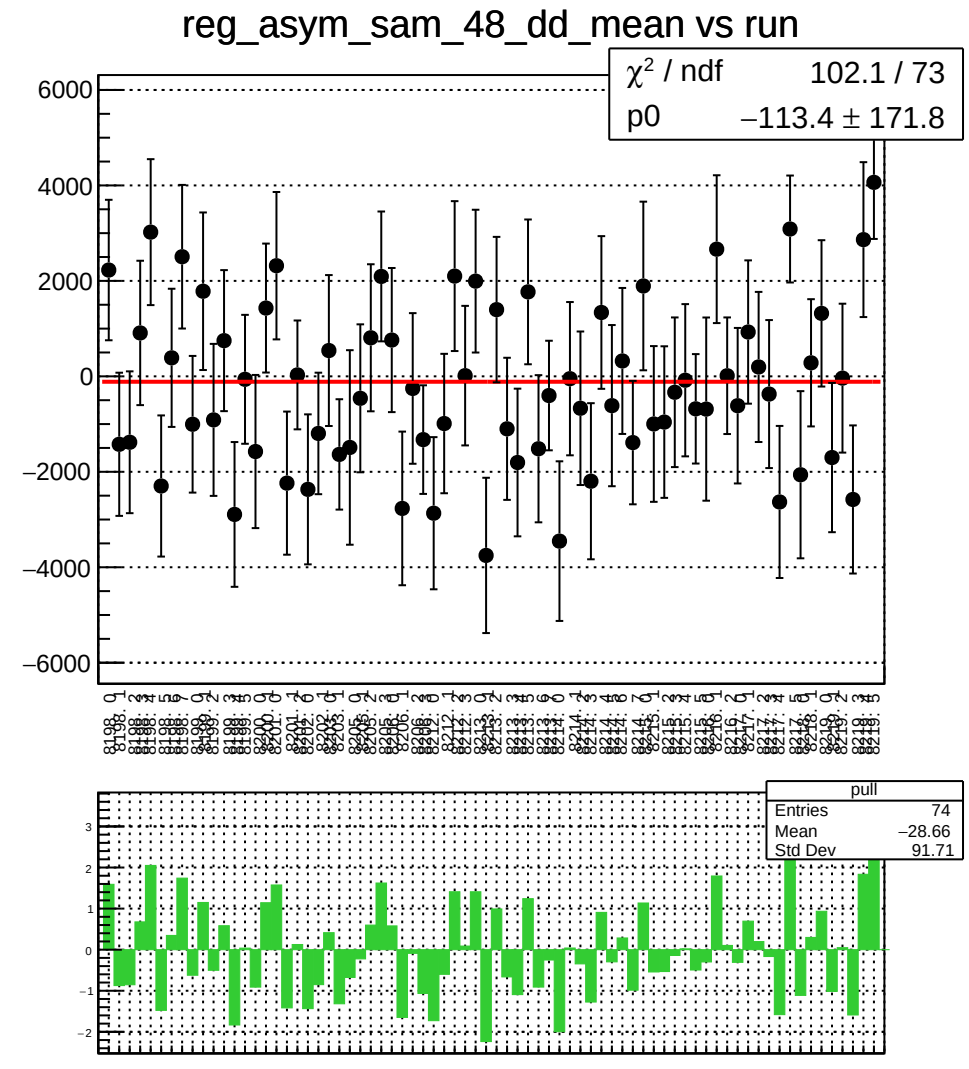

pull1D
Entries 74
Mean 0.001419
Std Dev 1.024

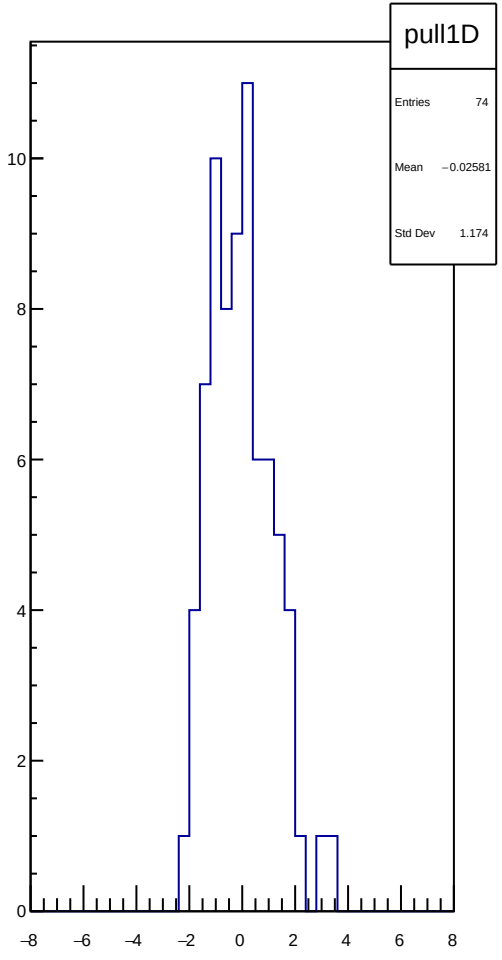

asym_sam_37_dd_correction_rms vs run
χ² / ndf 2977 / 73
p0 1072 ± 0.8753
1200
1150
1100
1050
1000

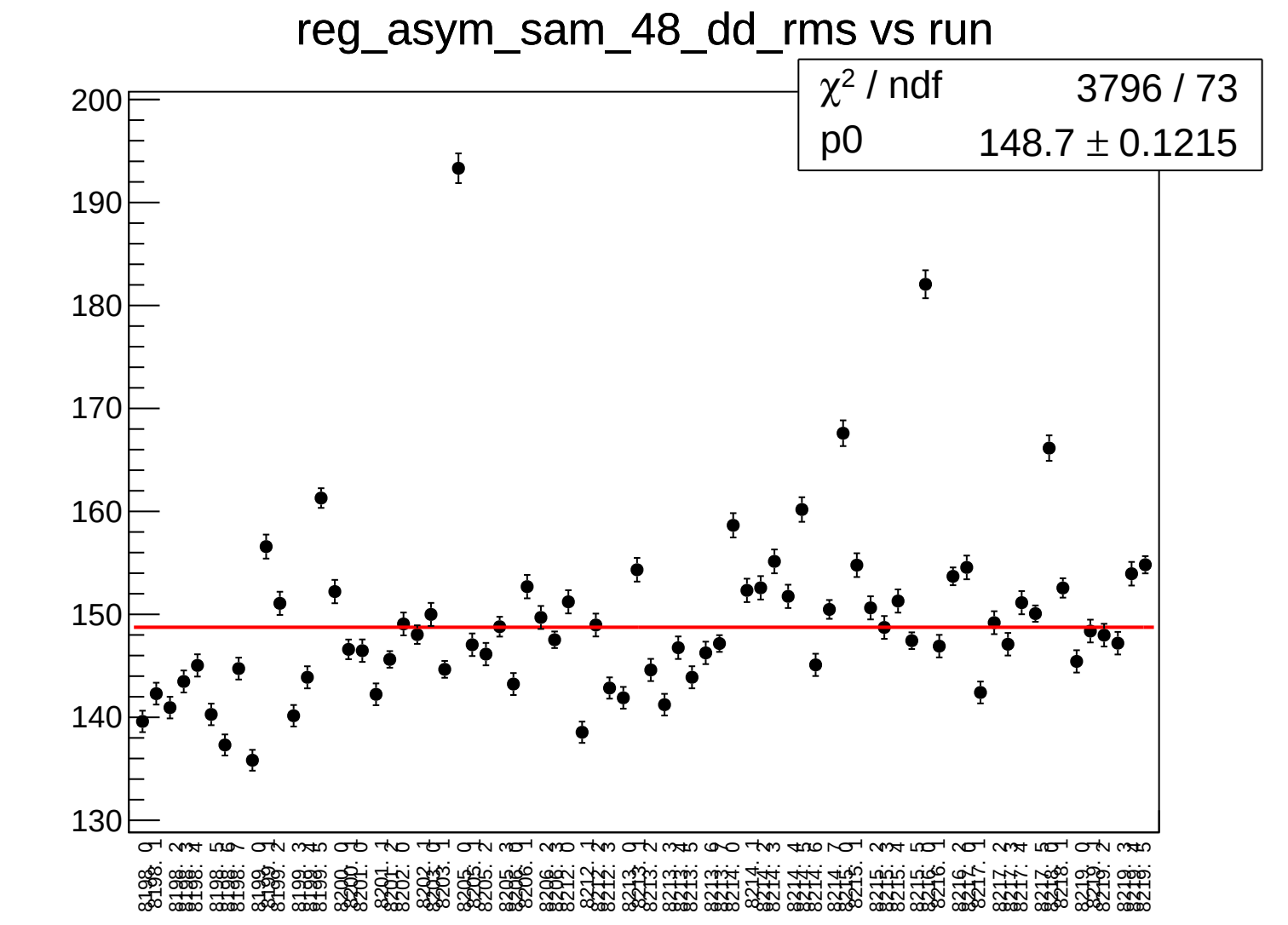

asym_sam_37_dd_mean vs run
χ² / ndf 76.07 / 73
p0 1246 ± 1246
pull
Entries 74
Mean −1107
Std Dev 1163

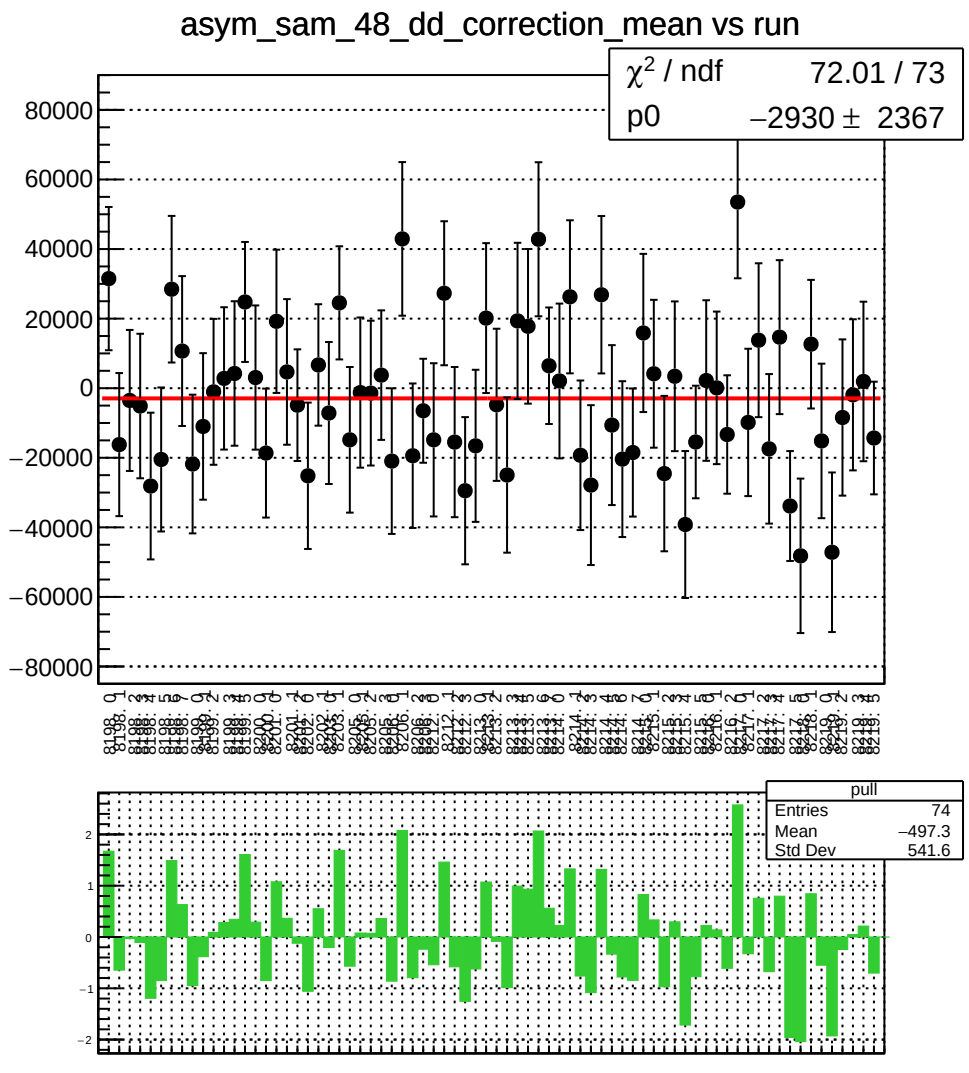

pull1D
Entries 74
Mean −0.001077
Std Dev 1.014

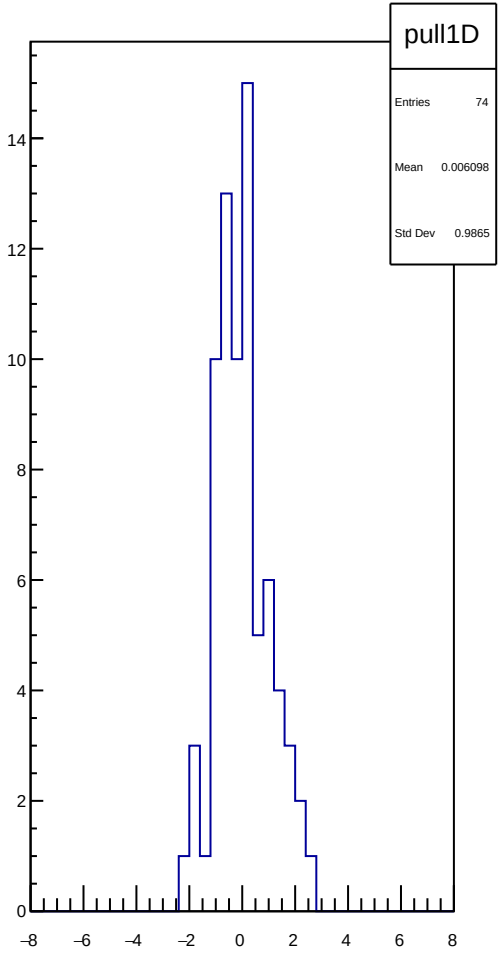

asym_sam_37_dd_rms vs run
χ² / ndf 2963 / 73
p0 1079 ± 0.8807
1200
1150
1100
1050
1000

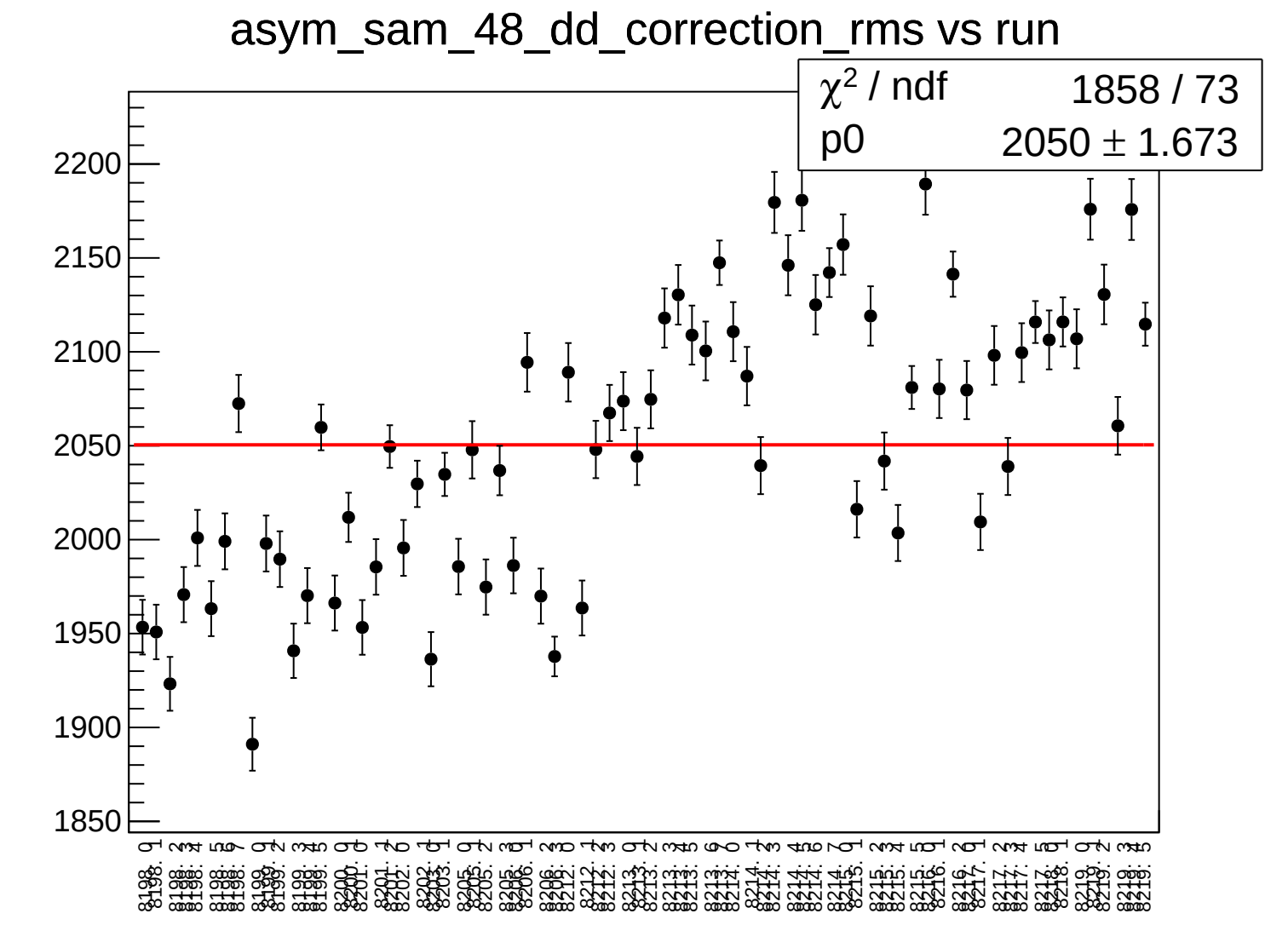

reg_asym_sam_48_dd_mean vs run
χ² / ndf 102.1 / 73
p0 −113.4 ± 171.8
6000
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean −28.66
Std Dev 91.71
3
2
1
0
−1
−2

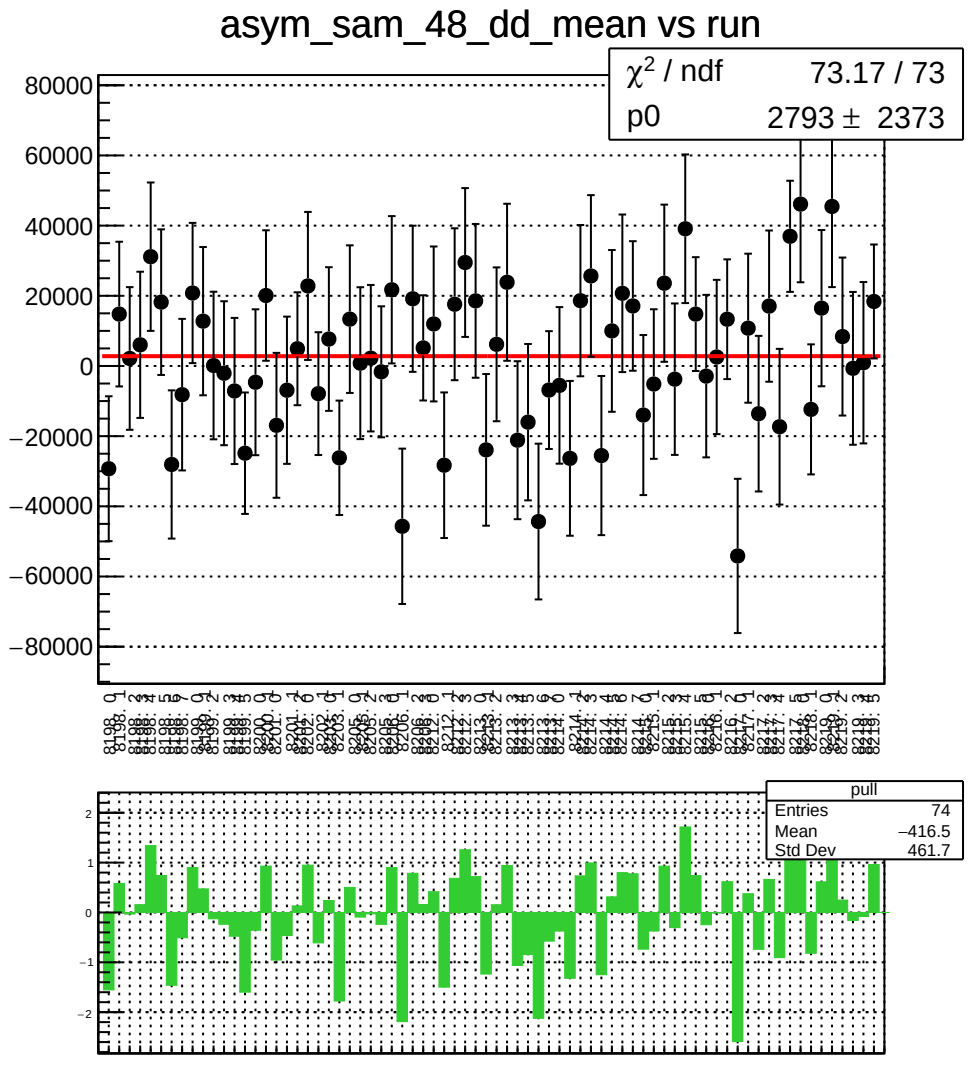

pull1D
Entries 74
Mean −0.02581
Std Dev 1.174
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

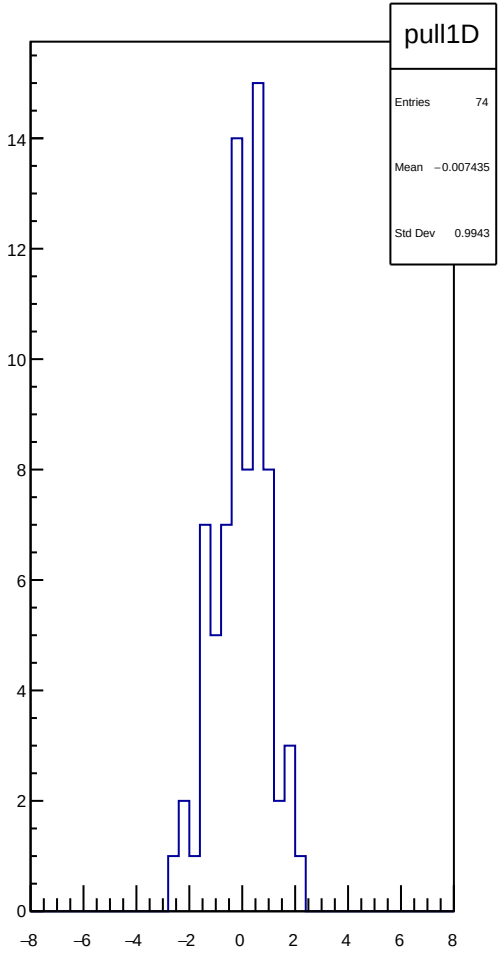

reg_asym_sam_48_dd_rms vs run
χ² / ndf 3796 / 73
p0 148.7 ± 0.1215
200
190
180
170
160
150
140
130

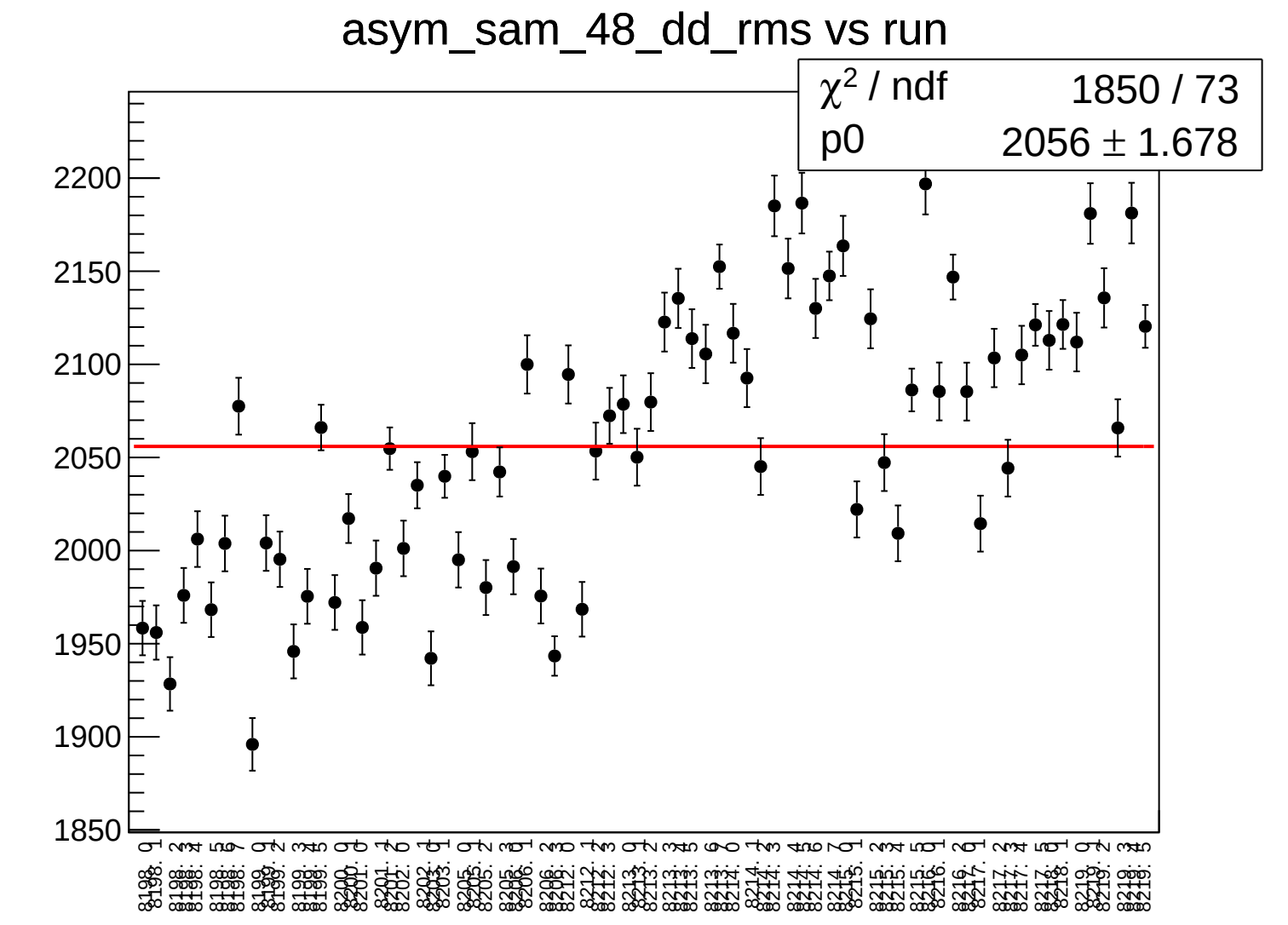

asym_sam_48_dd_correction_mean vs run
χ² / ndf 72.01 / 73
p0 −2930 ± 2367
pull
Entries 74
Mean −497.3
Std Dev 541.6

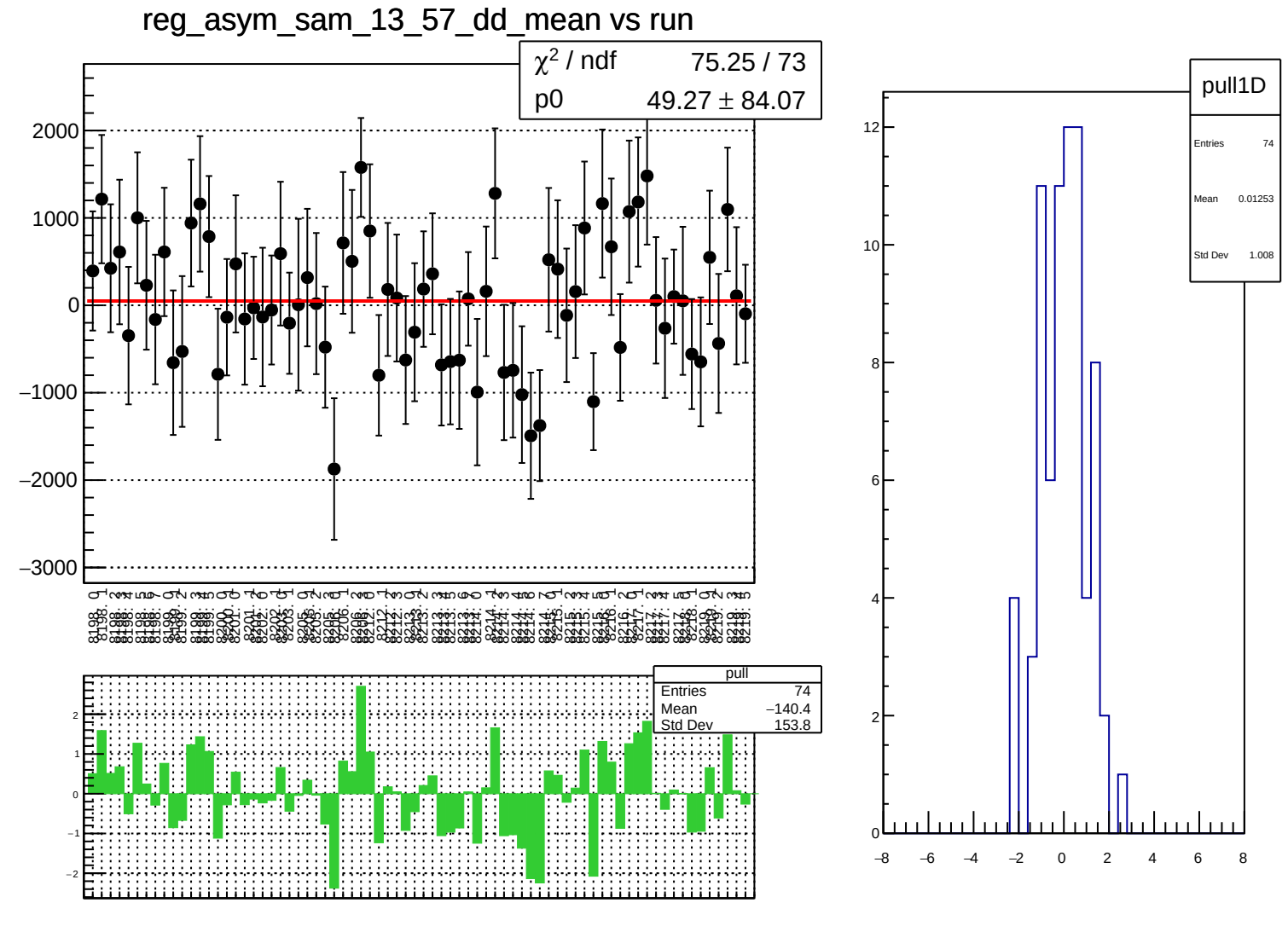

pull1D
Entries 74
Mean 0.006098
Std Dev 0.9865

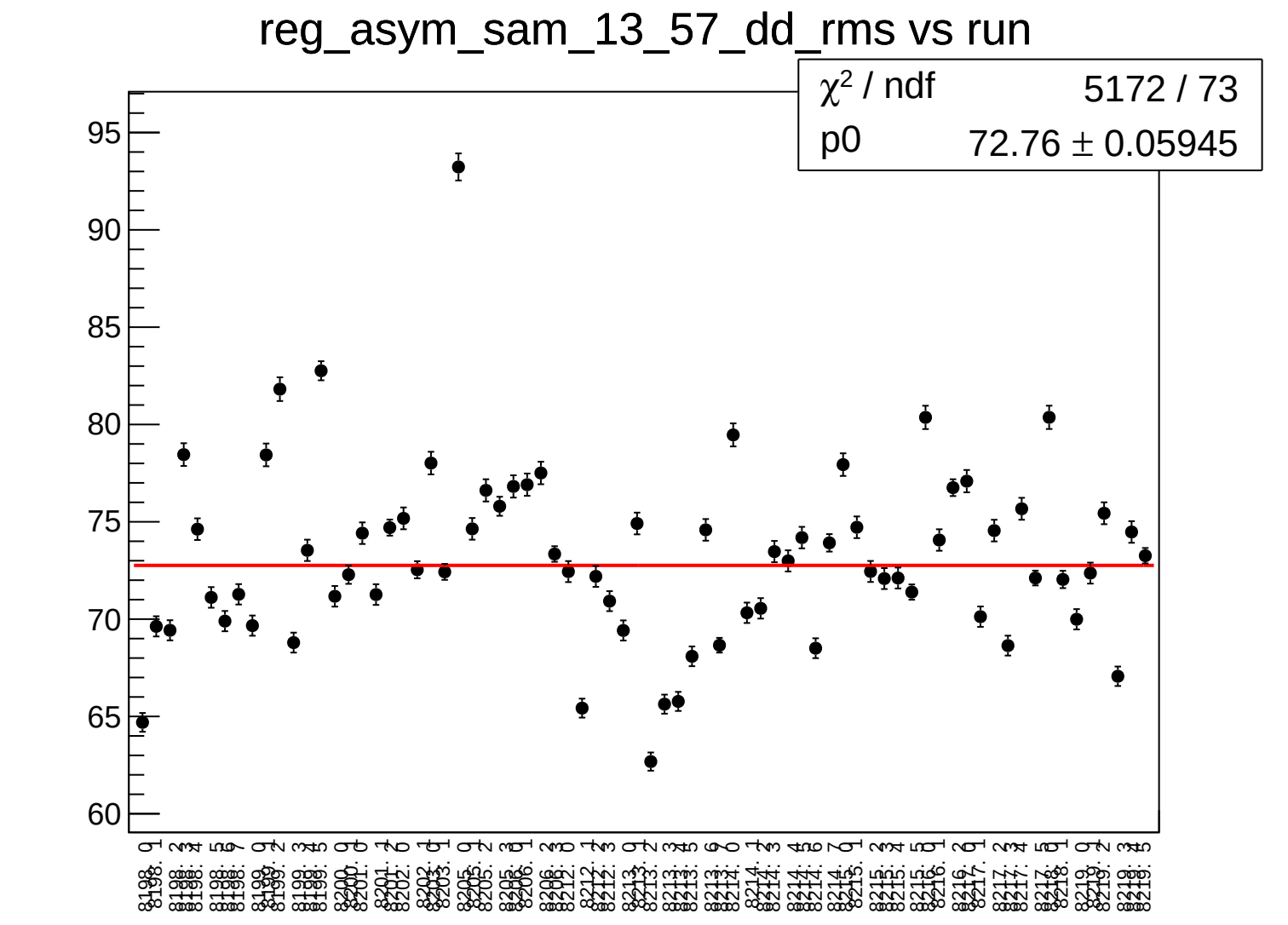

asym_sam_48_dd_correction_rms vs run
χ² / ndf 1858 / 73
p0 2050 ± 1.673
2200
2150
2100
2050
2000
1950
1900
1850

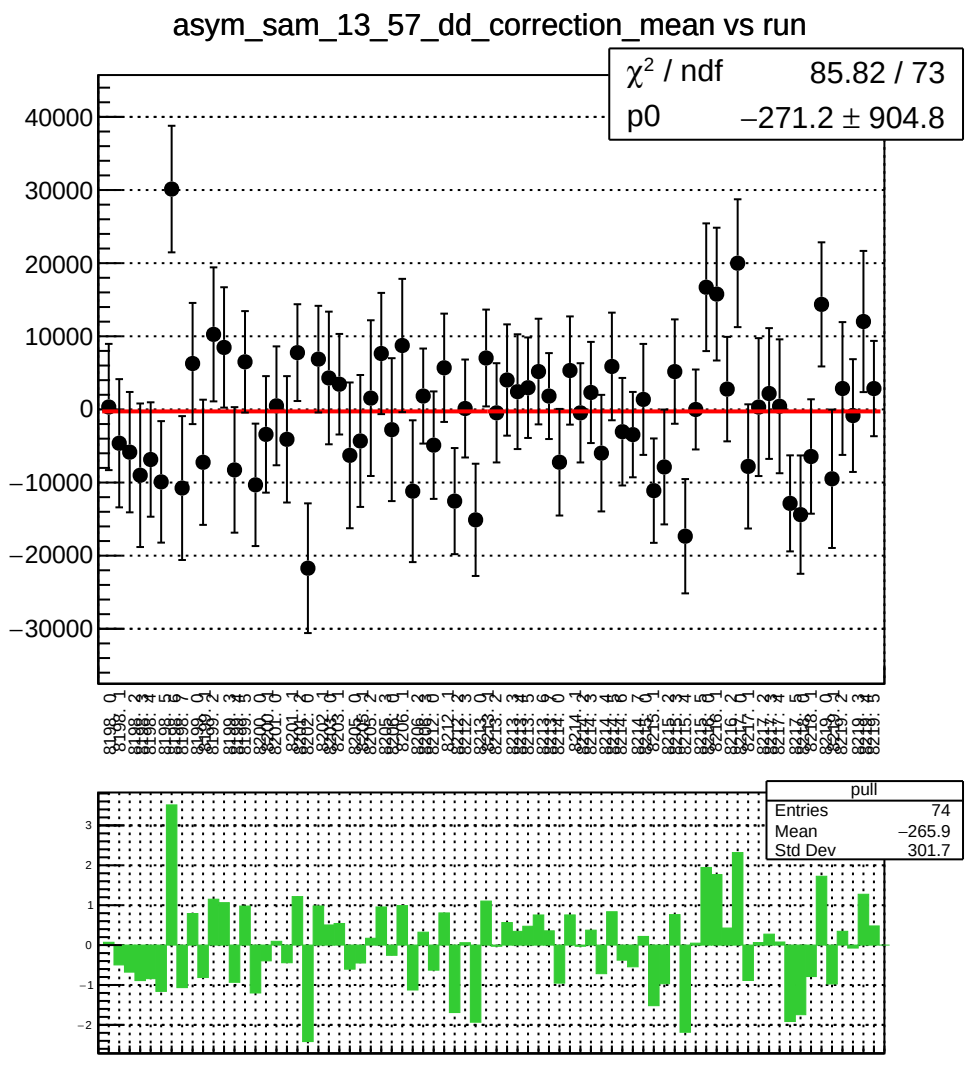

asym_sam_48_dd_mean vs run
χ² / ndf 73.17 / 73
p0 2793 ± 2373
pull
Entries 74
Mean −416.5
Std Dev 461.7

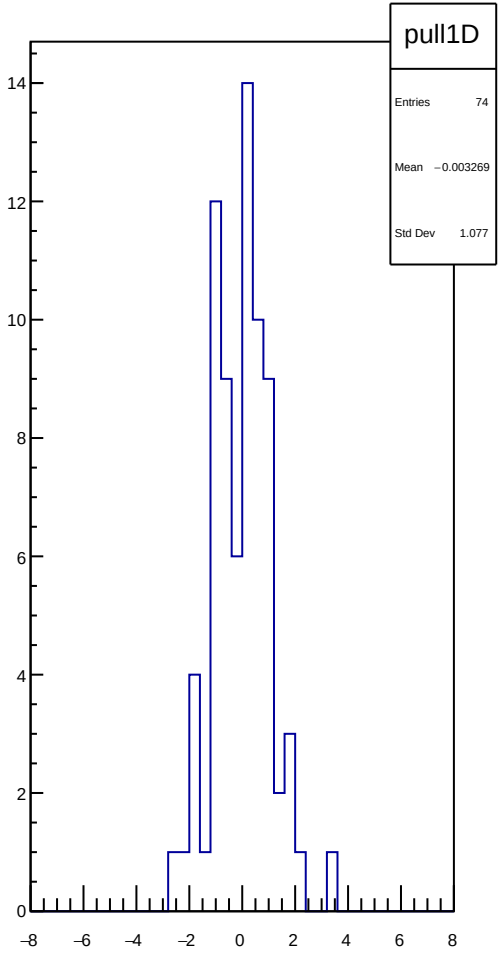

pull1D
Entries 74
Mean −0.007435
Std Dev 0.9943

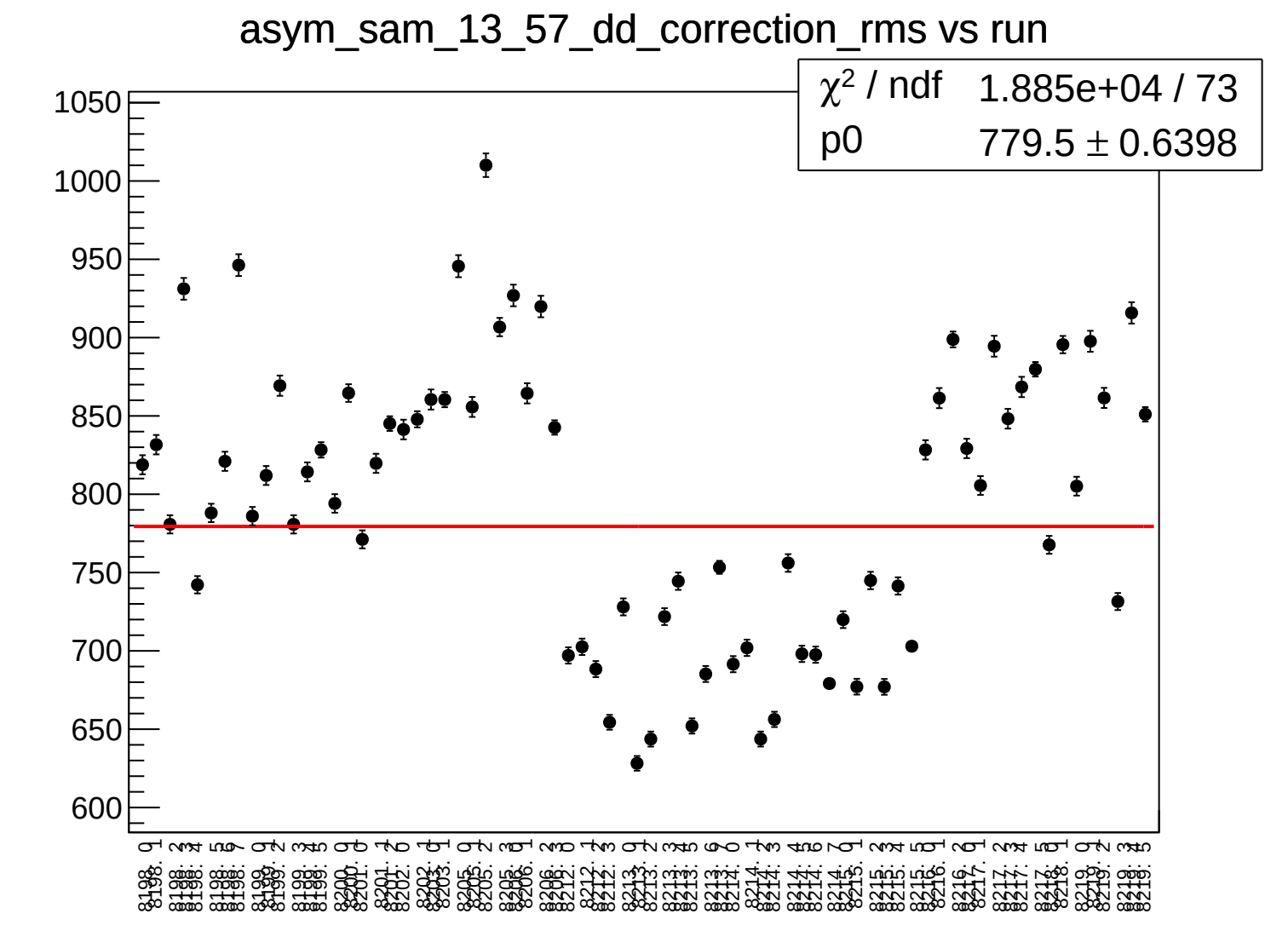

asym_sam_48_dd_rms vs run
χ² / ndf 1850 / 73
p0 2056 ± 1.678
2200
2150
2100
2050
2000
1950
1900
1850

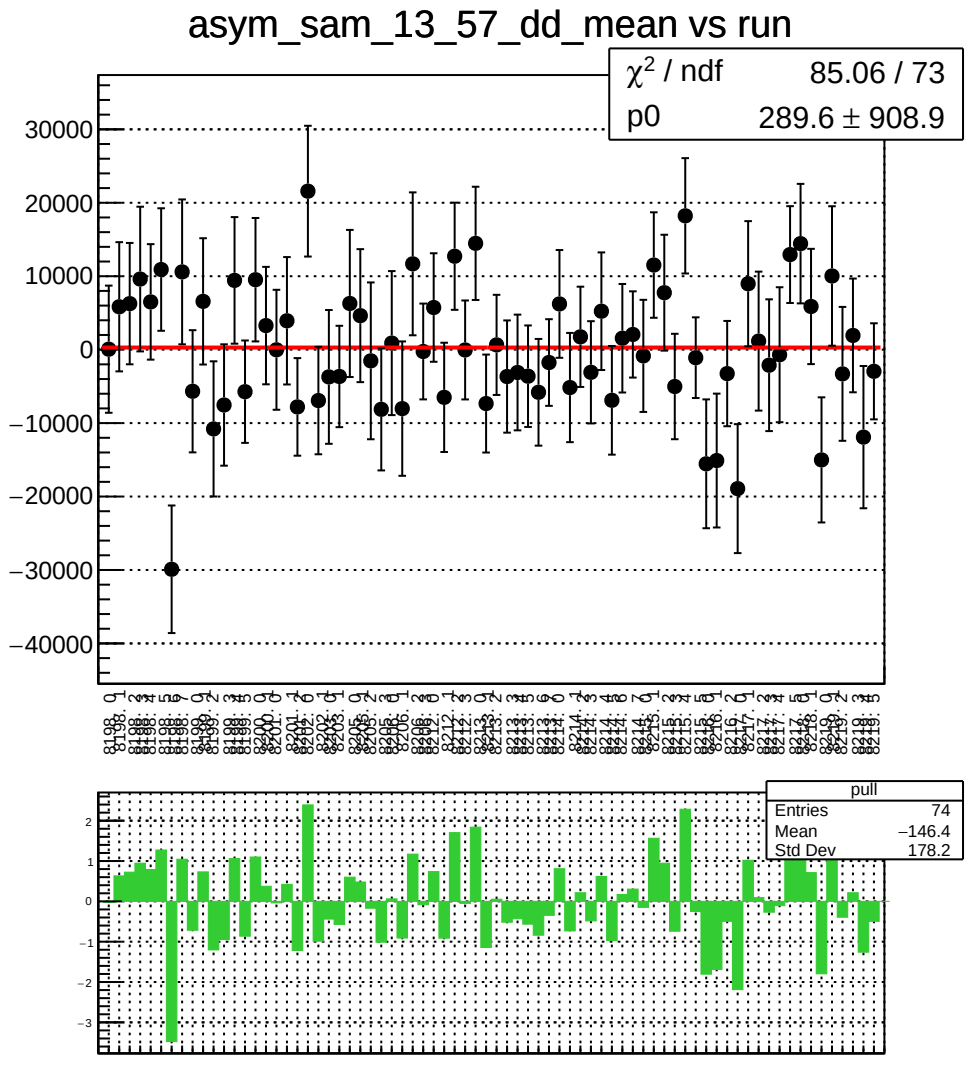

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 75.25 / 73
p0 49.27 ± 84.07
pull
Entries 74
Mean −140.4
Std Dev 153.8
pull1D
Entries 74
Mean 0.01253
Std Dev 1.008

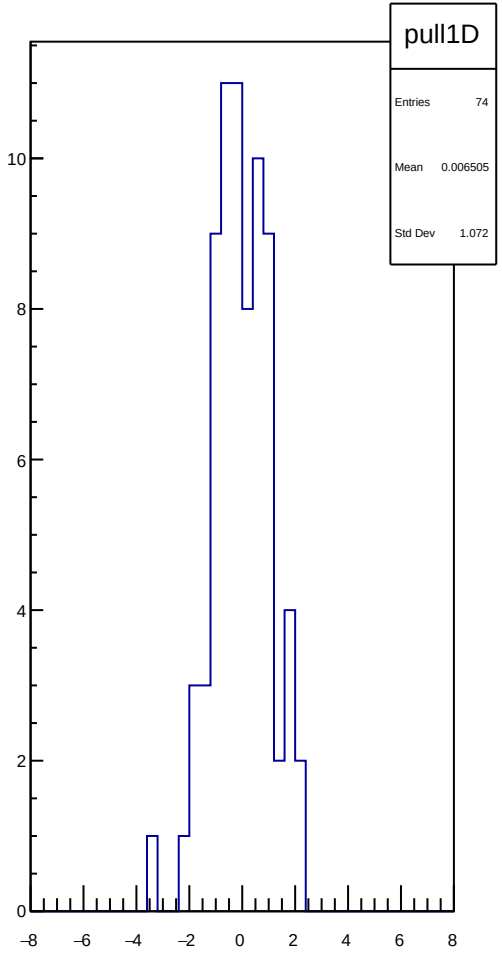

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 5172 / 73
p0 72.76 ± 0.05945
95
90
85
80
75
70
65
60

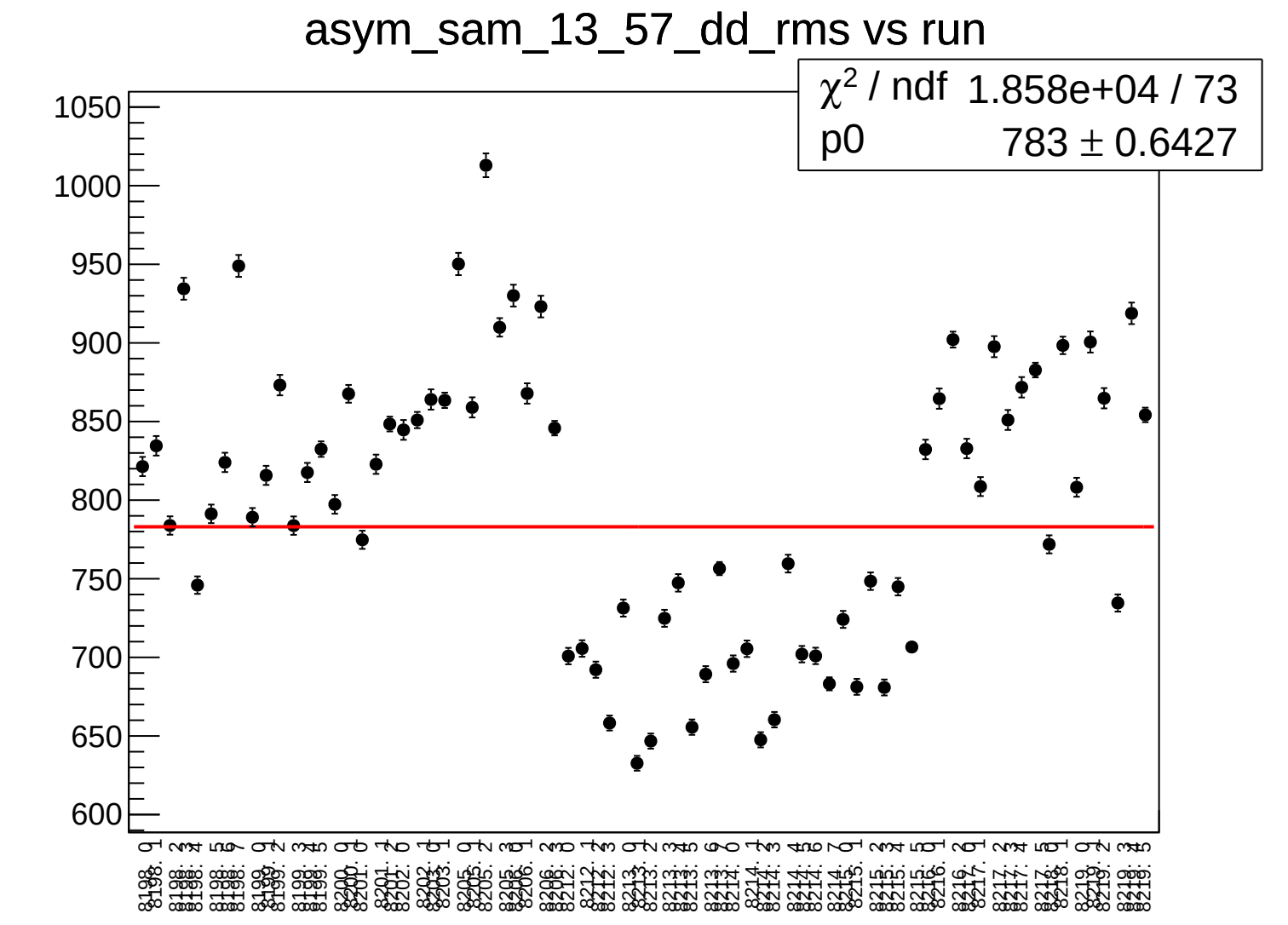

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 85.82 / 73
p0 −271.2 ± 904.8
pull
Entries 74
Mean −265.9
Std Dev 301.7

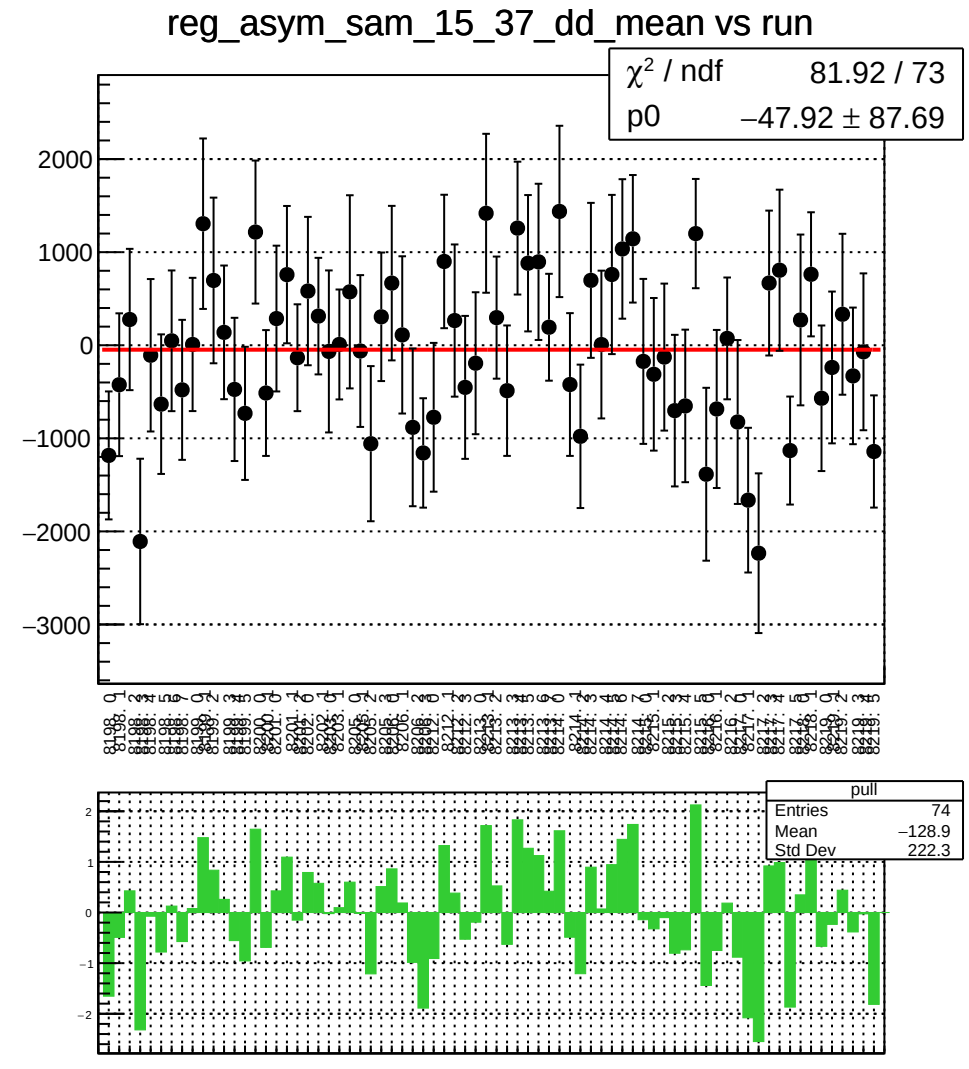

pull1D
Entries 74
Mean −0.003269
Std Dev 1.077

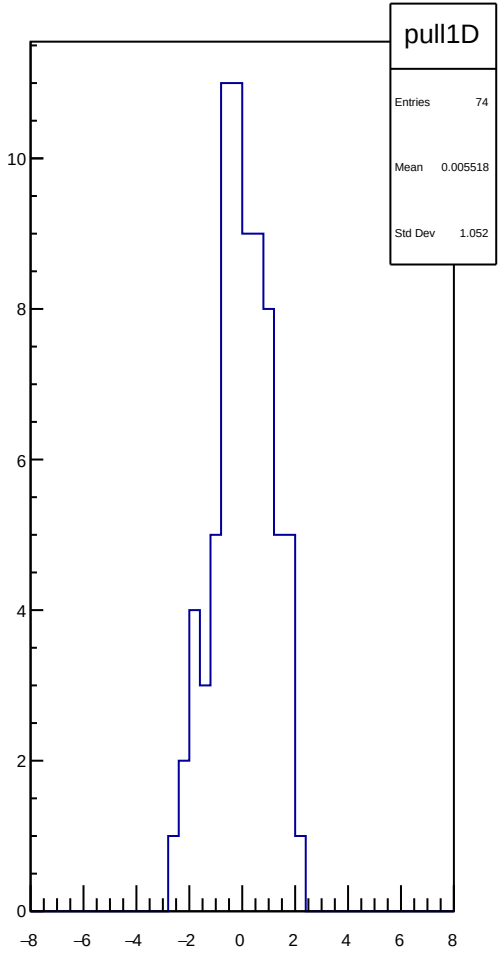

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 1.885e+04 / 73
p0 779.5 ± 0.6398
1050
1000
950
900
850
800
750
700
650
600

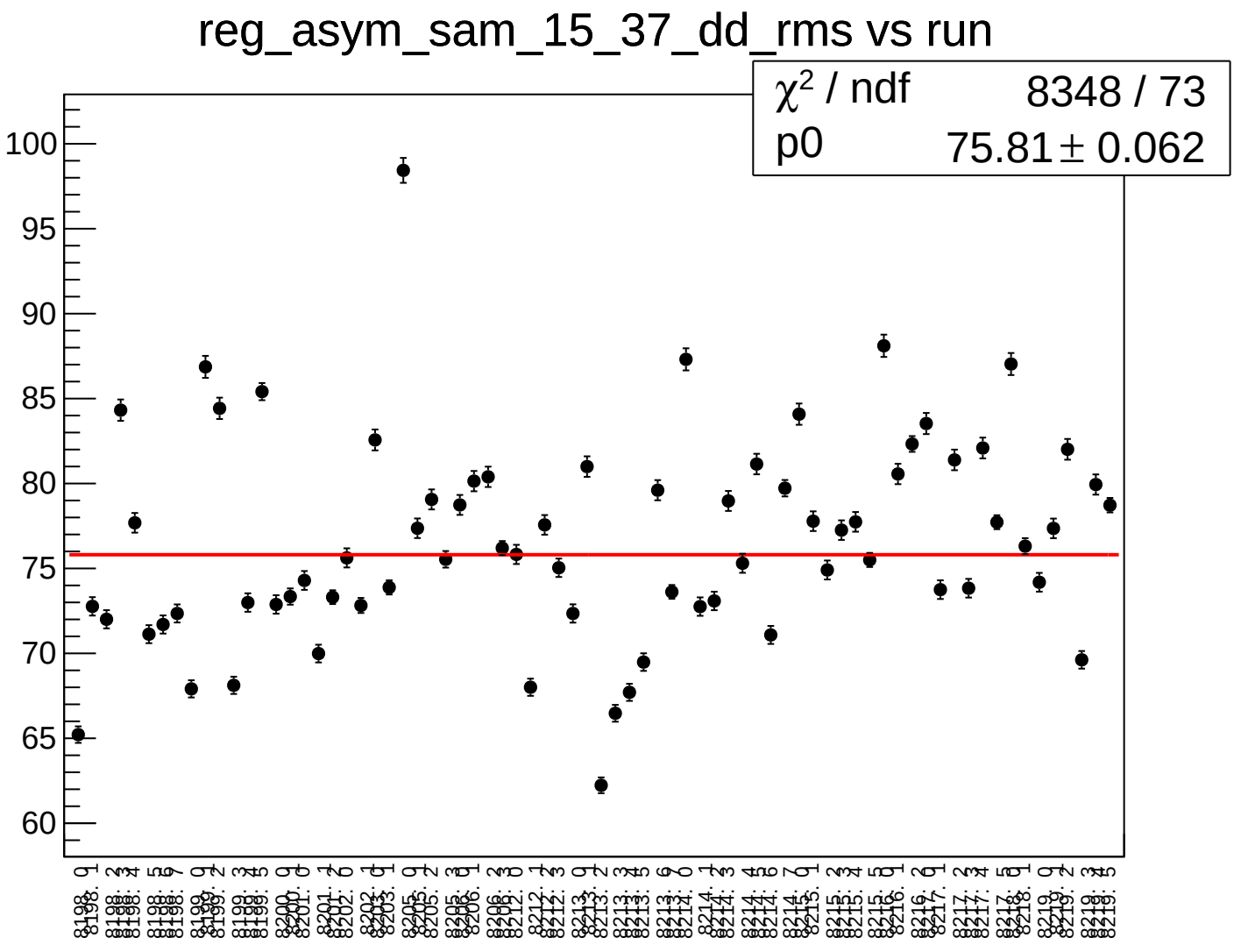

asym_sam_13_57_dd_mean vs run
χ² / ndf 85.06 / 73
p0 289.6 ± 908.9
pull
Entries 74
Mean −146.4
Std Dev 178.2

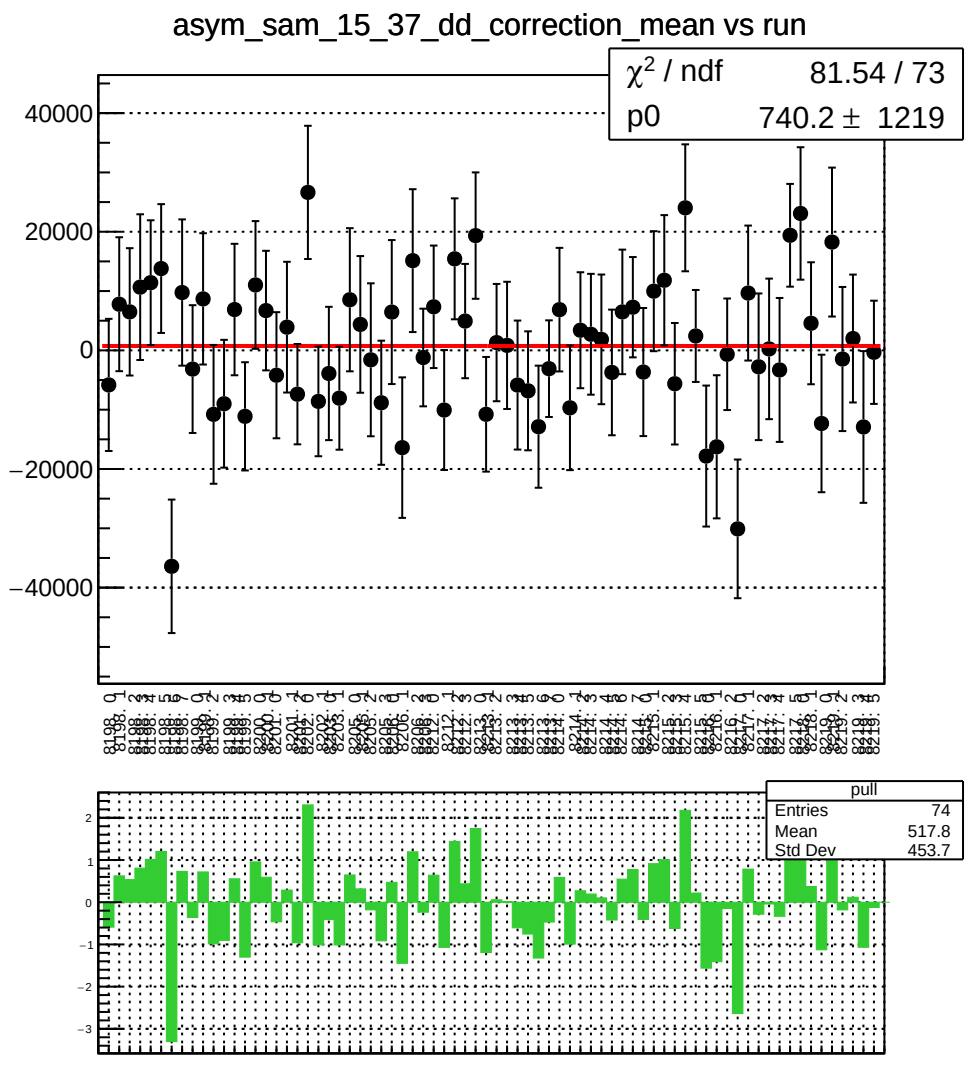

pull1D
Entries 74
Mean 0.006505
Std Dev 1.072

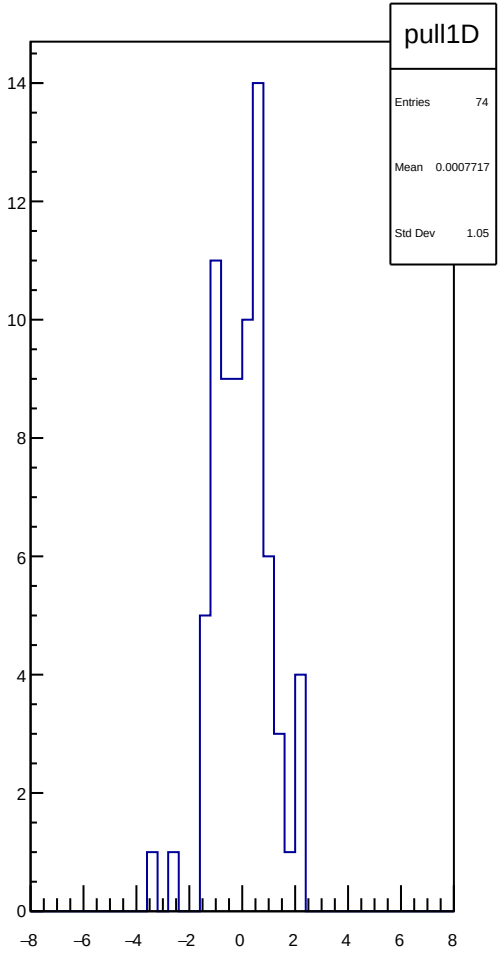

asym_sam_13_57_dd_rms vs run
χ² / ndf 1.858e+04 / 73
p0 783 ± 0.6427
1050
1000
950
900
850
800
750
700
650
600

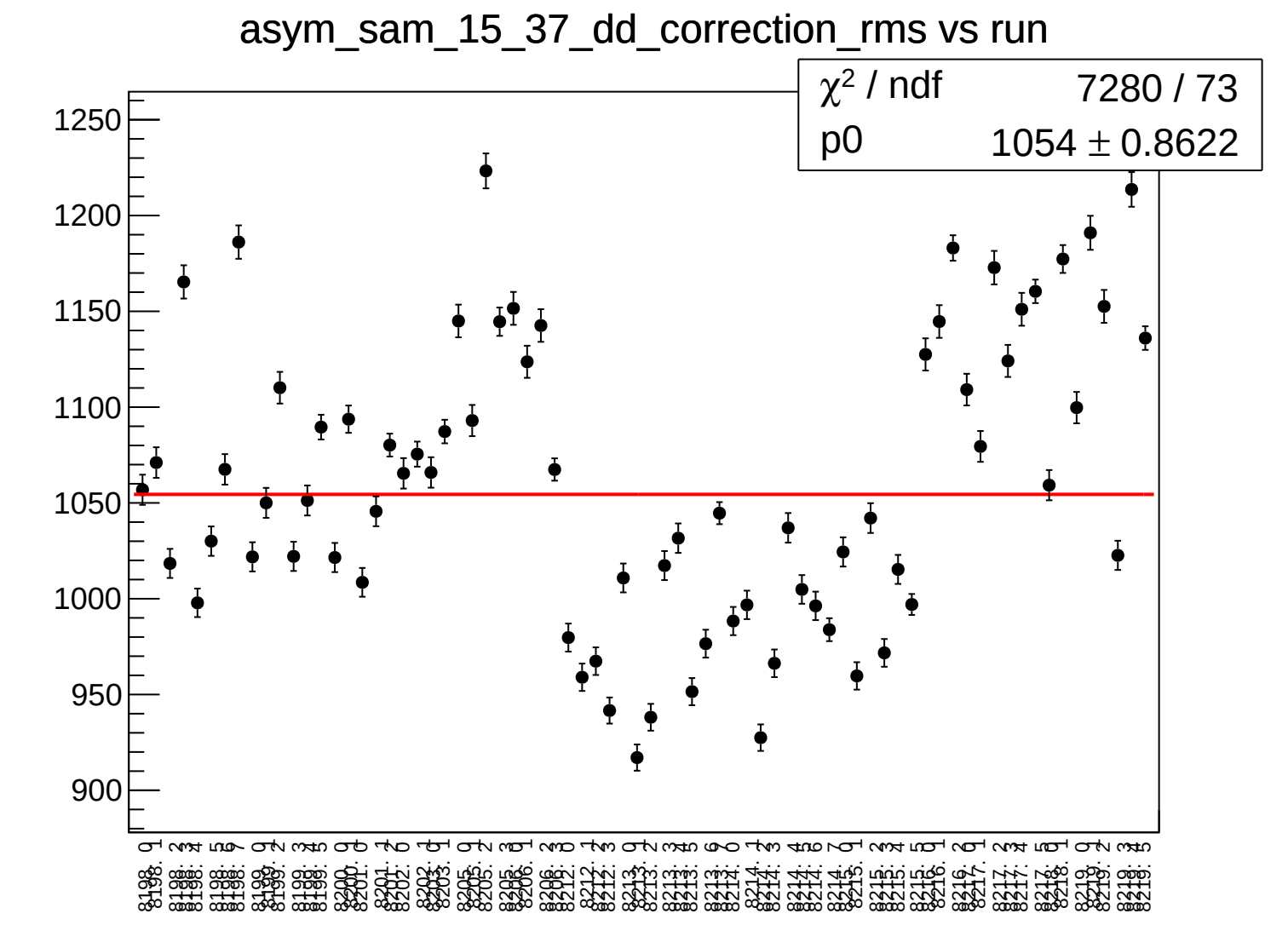

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 81.92 / 73
p0 −47.92 ± 87.69
pull
Entries 74
Mean −128.9
Std Dev 222.3

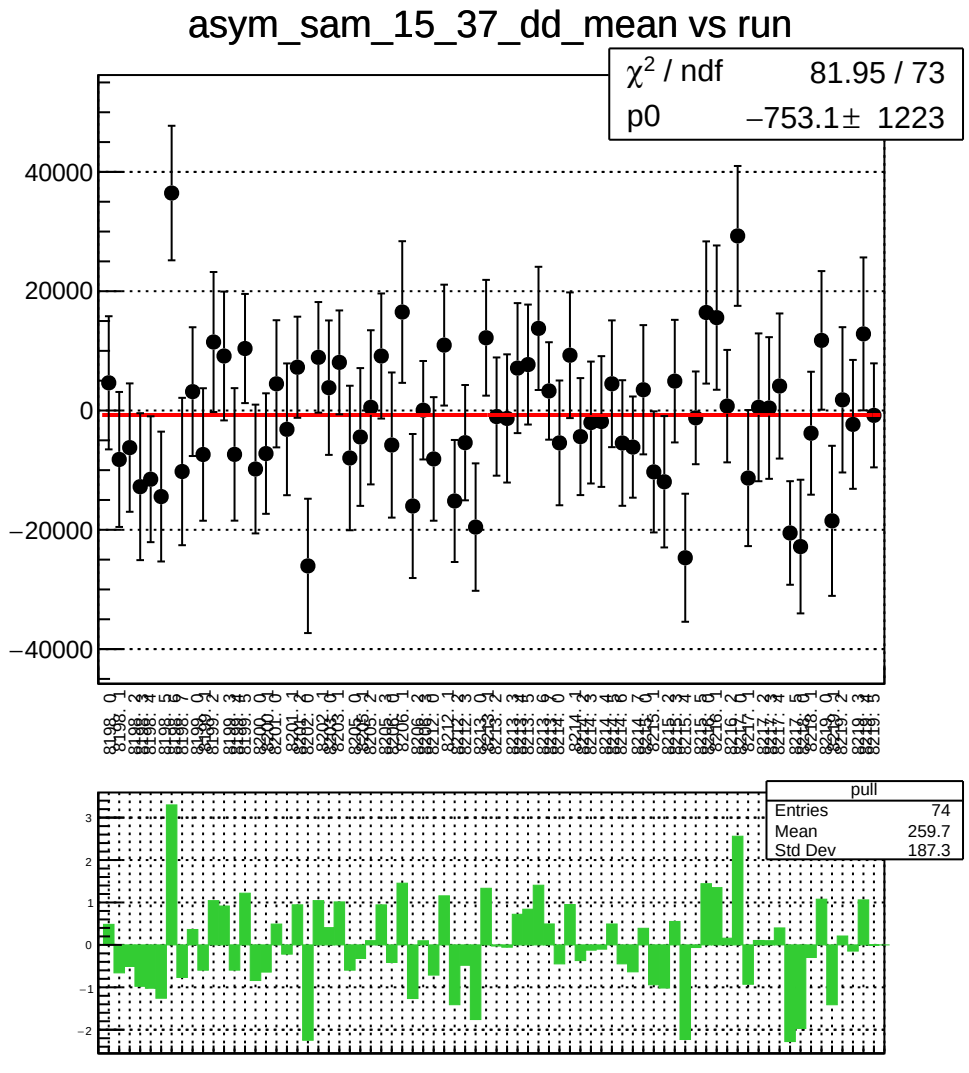

pull1D
Entries 74
Mean 0.005518
Std Dev 1.052

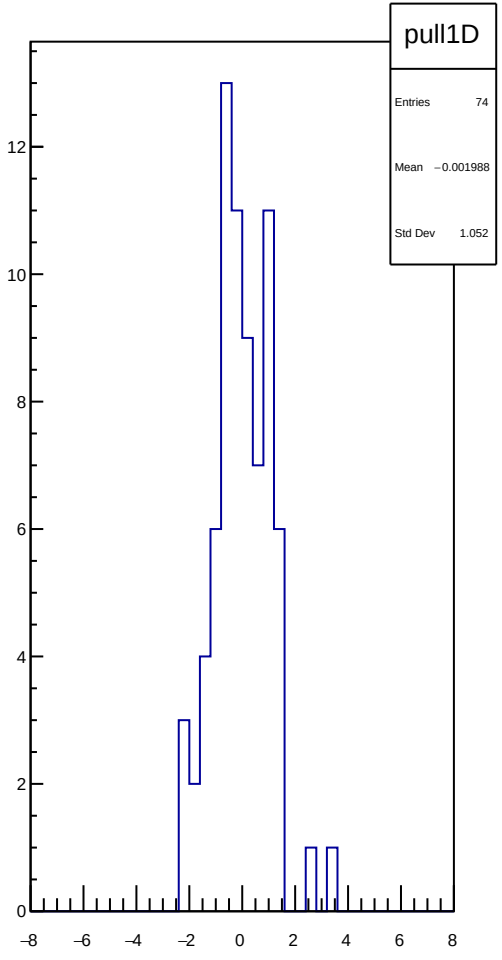

reg_asym_sam_15_37_dd_rms vs run
χ^2 / ndf 8348 / 73
p0 75.81 ± 0.062
100
95
90
85
80
75
70
65
60

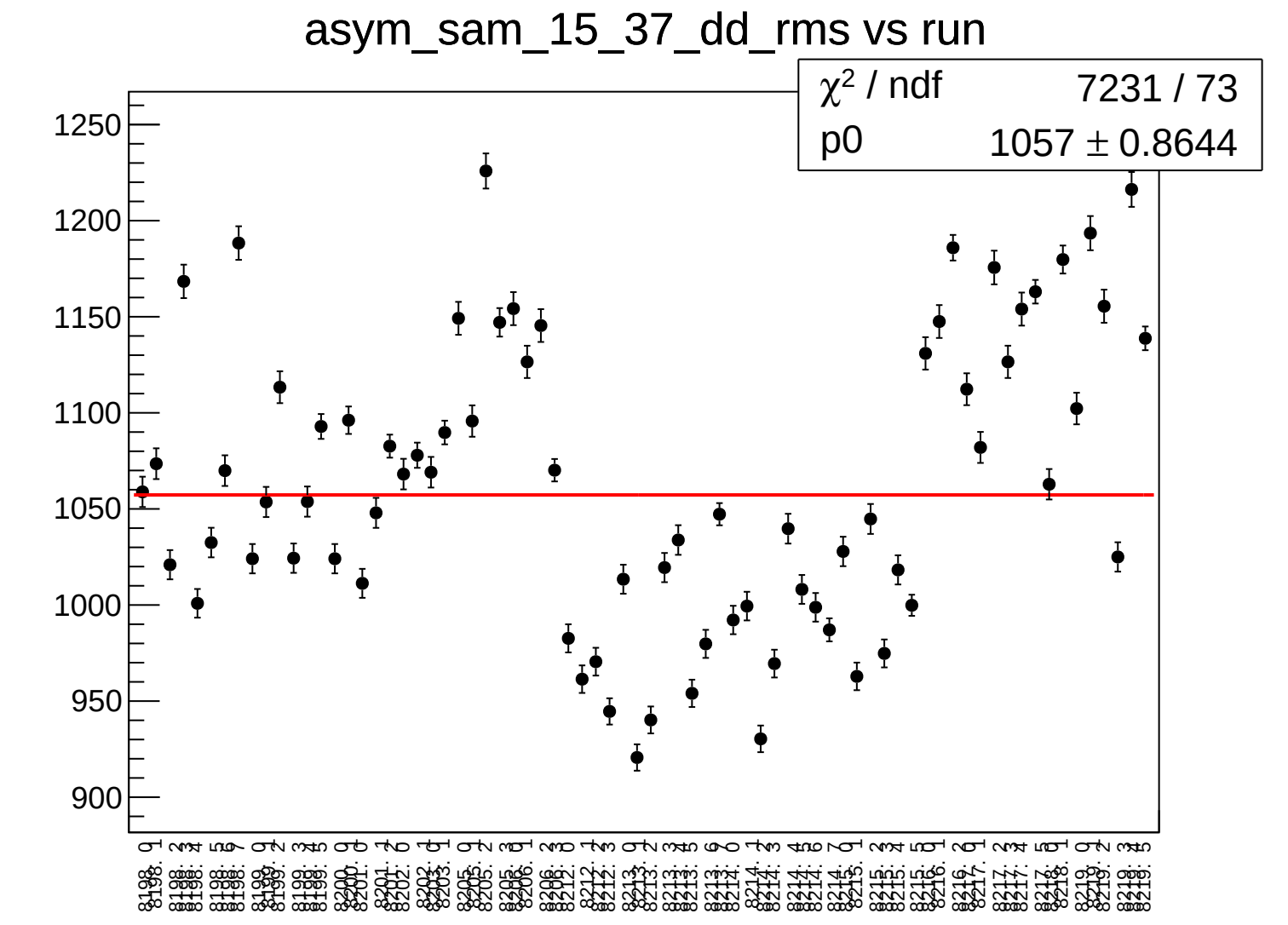

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 81.54 / 73
p0 740.2 ± 1219
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 517.8
Std Dev 453.7
2
1
0
−1
−2
−3

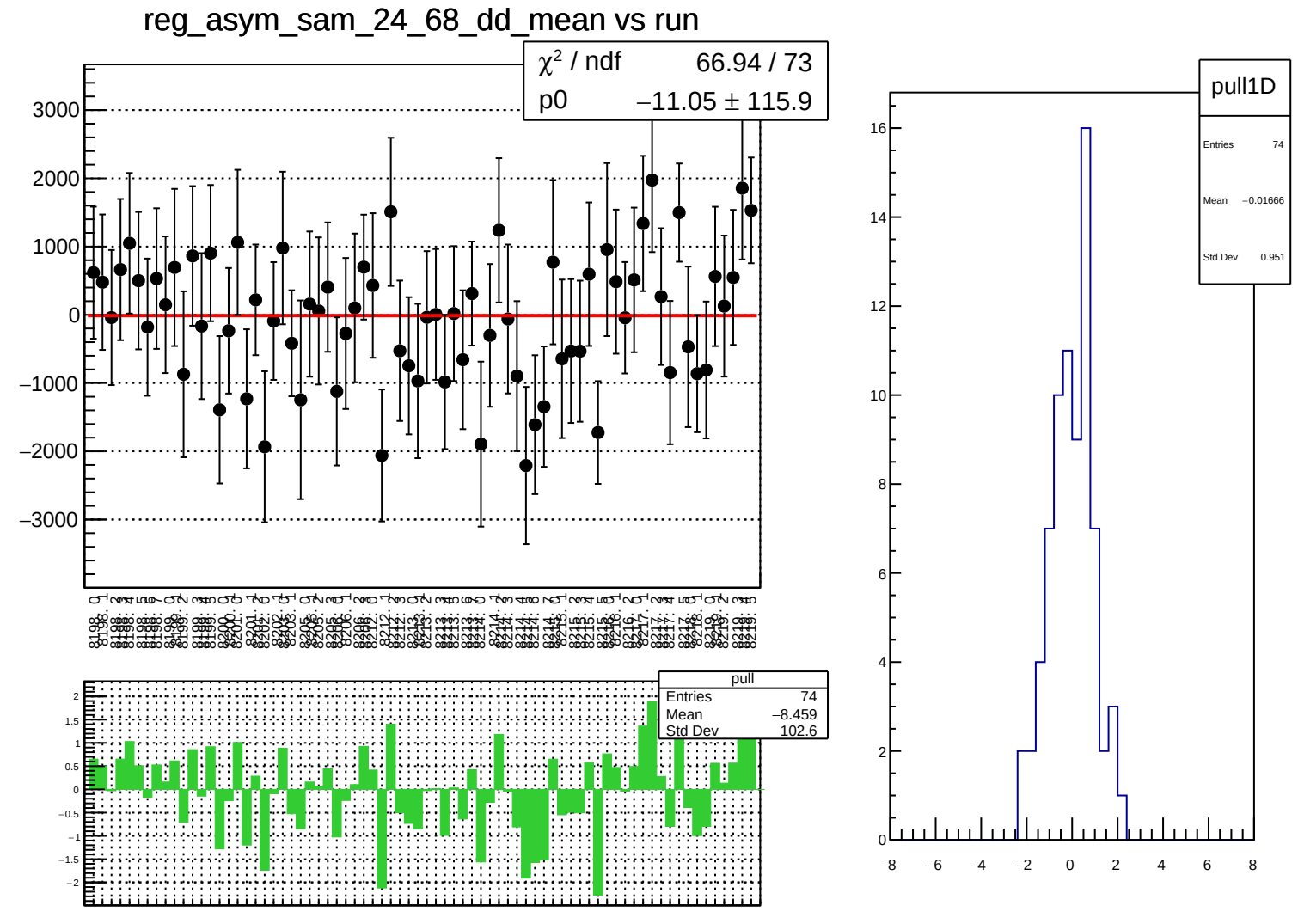

pull1D
Entries 74
Mean 0.0007717
Std Dev 1.05
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

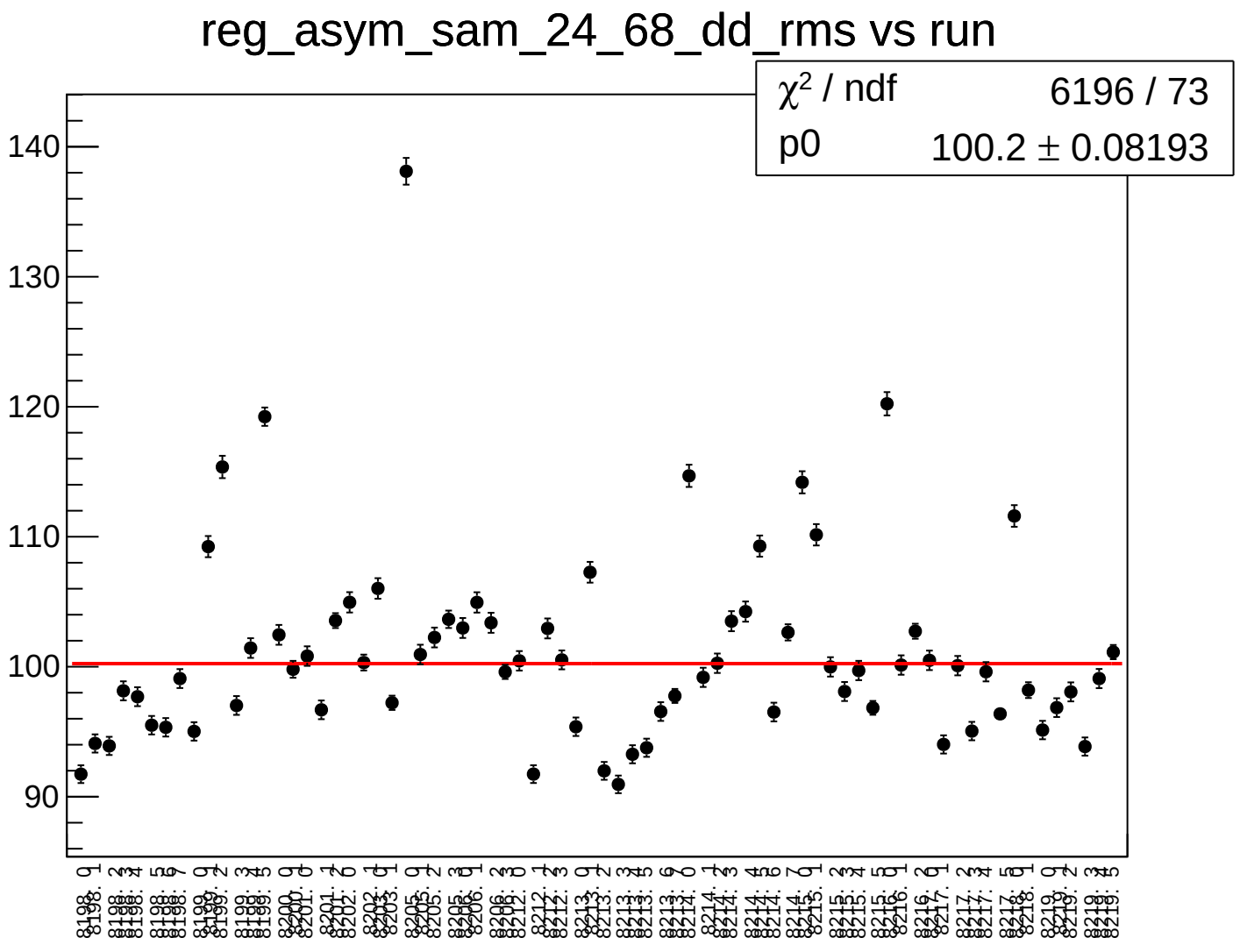

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 7280 / 73
p0 1054 ± 0.8622
1250
1200
1150
1100
1050
1000
950
900

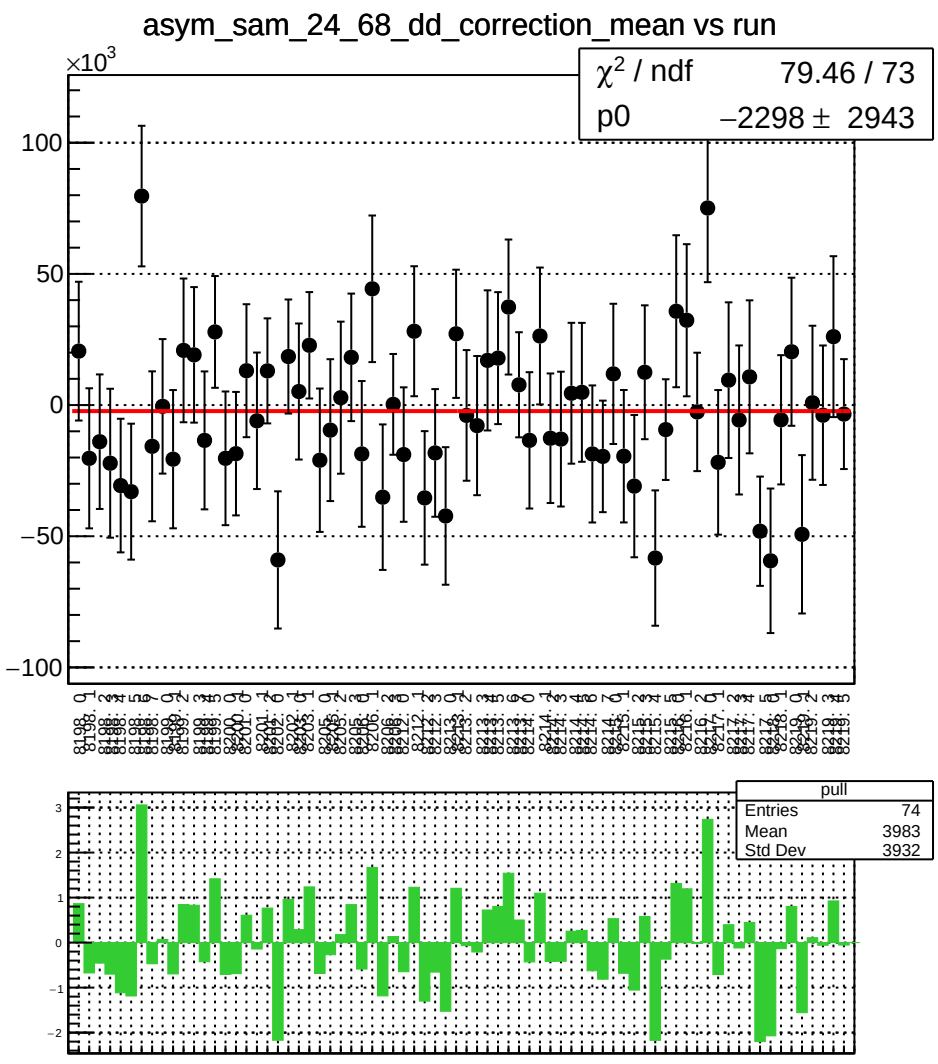

asym_sam_15_37_dd_mean vs run
χ² / ndf 81.95 / 73
p0 −753.1± 1223
40000
20000
0
−20000
−40000
pull
Entries 74
Mean 259.7
Std Dev 187.3
3
2
1
0
−1
−2

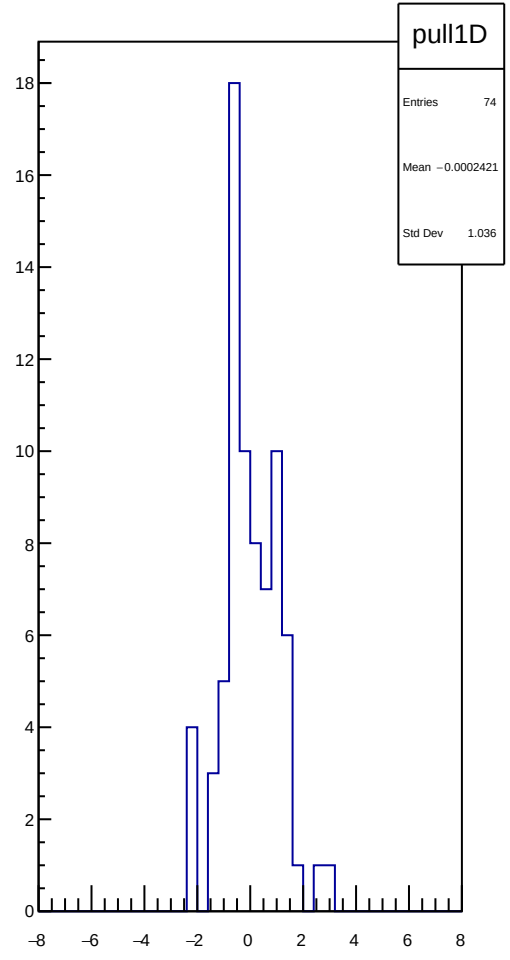

pull1D
Entries 74
Mean −0.001988
Std Dev 1.052
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

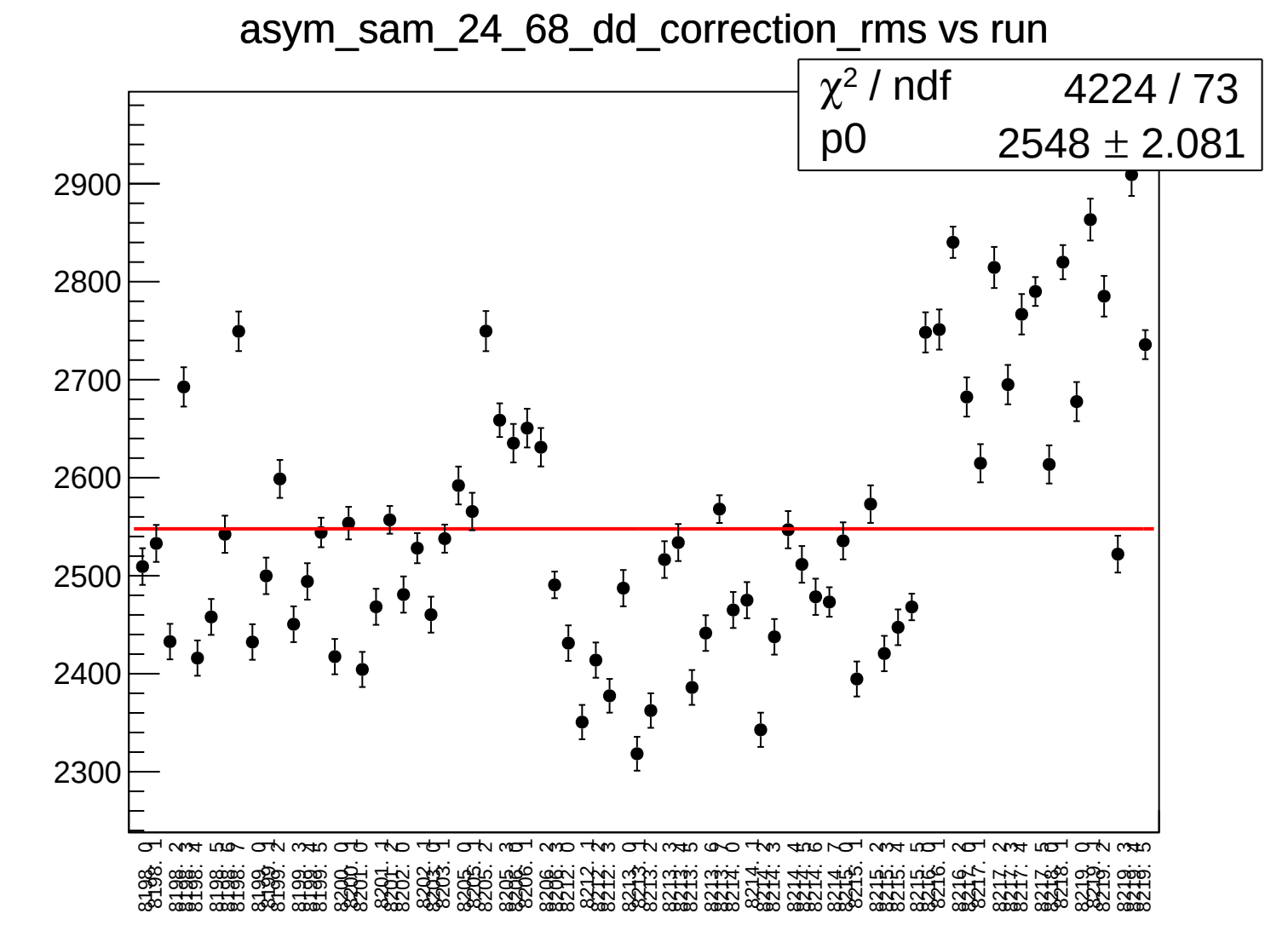

asym_sam_15_37_dd_rms vs run
χ² / ndf 7231 / 73
p0 1057 ± 0.8644
1250
1200
1150
1100
1050
1000
950
900

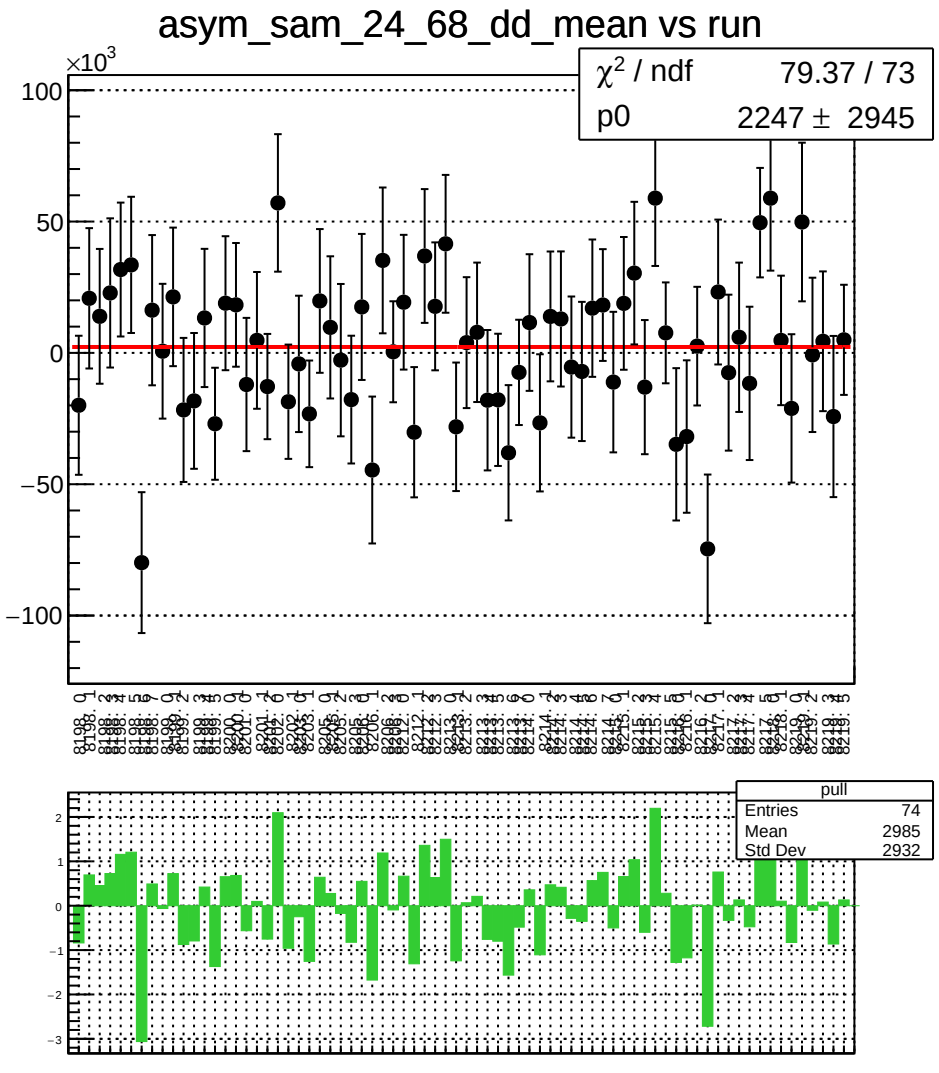

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 66.94 / 73
p0 −11.05 ± 115.9
3000
2000
1000
0
−1000
−2000
−3000
pull
Entries 74
Mean −8.459
Std Dev 102.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
pull1D
Entries 74
Mean −0.01666
Std Dev 0.951
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

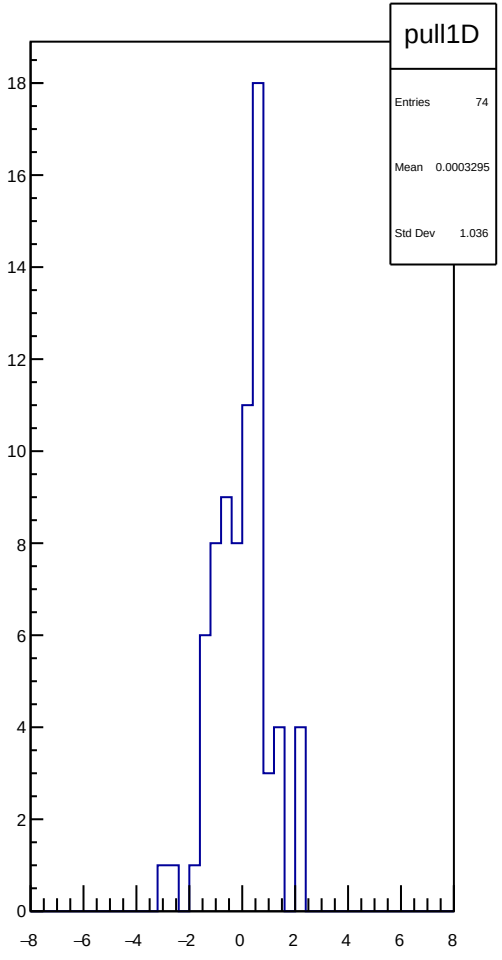

reg_asym_sam_24_68_dd_rms vs run
χ² / ndf 6196 / 73
p0 100.2 ± 0.08193
140
130
120
110
100
90

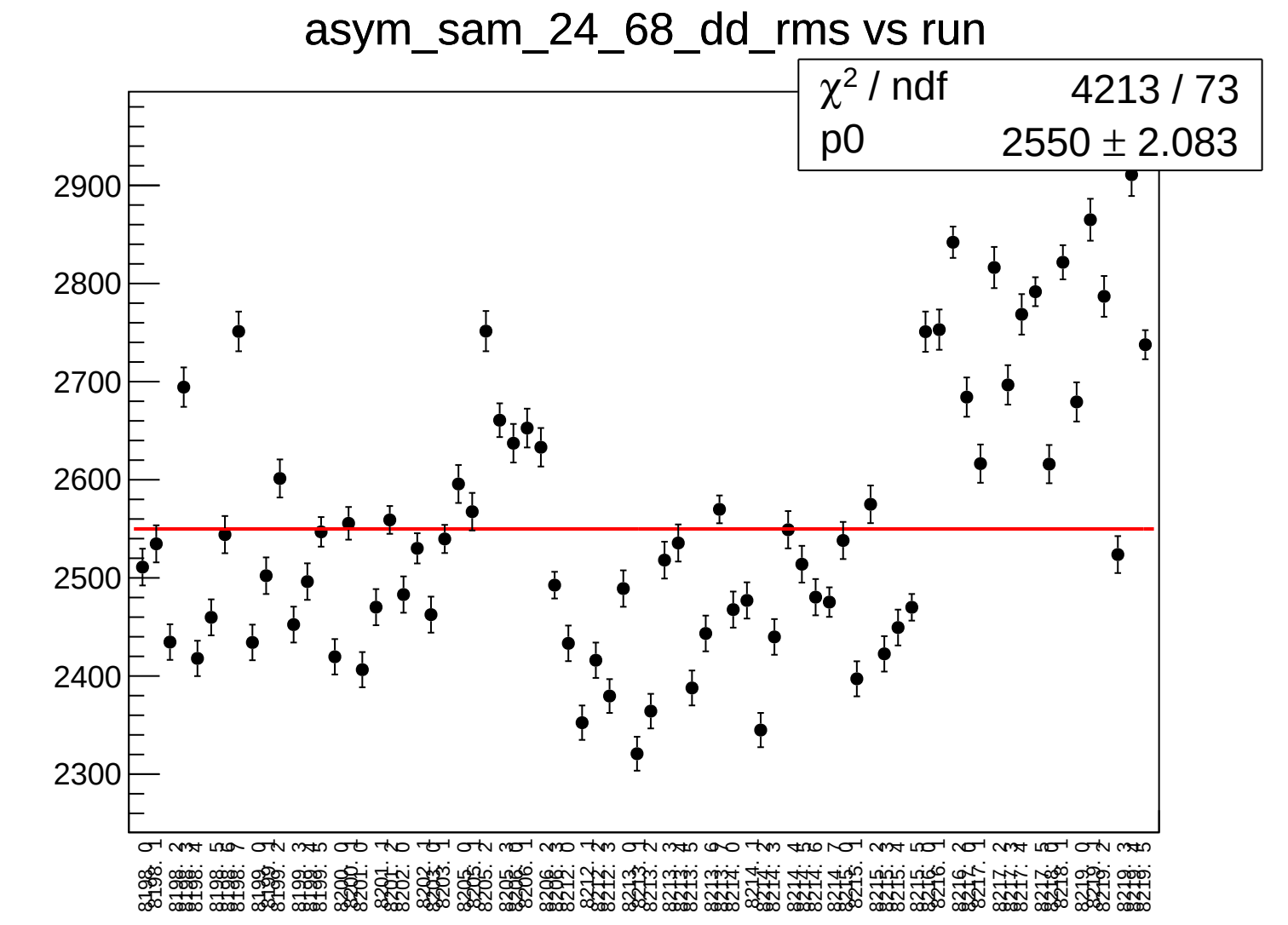

asym_sam_24_68_dd_correction_mean vs run
×10^3
χ^2 / ndf 79.46 / 73
p0 −2298 ± 2943
100
50
0
−50
−100
pull
Entries 74
Mean 3983
Std Dev 3932
3
2
1
0
−1
−2

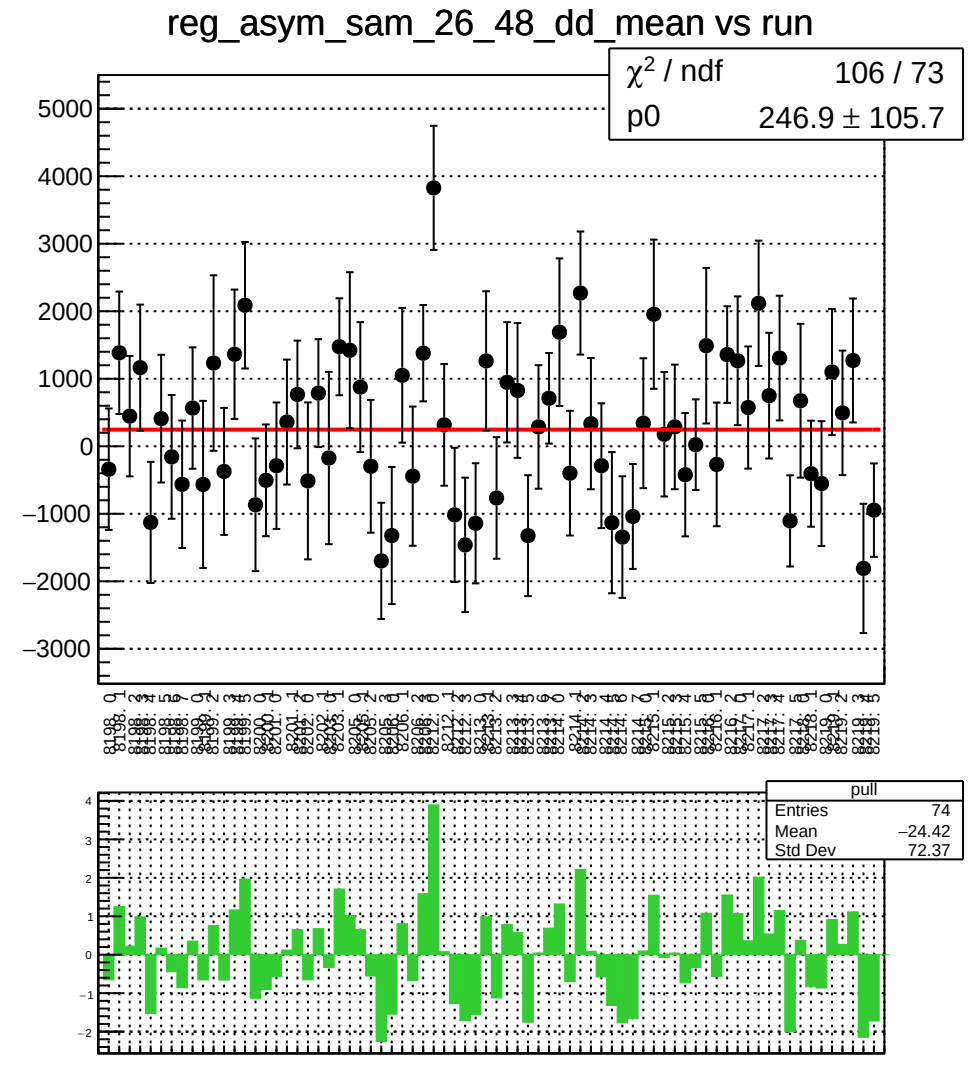

pull1D
Entries 74
Mean −0.0002421
Std Dev 1.036
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

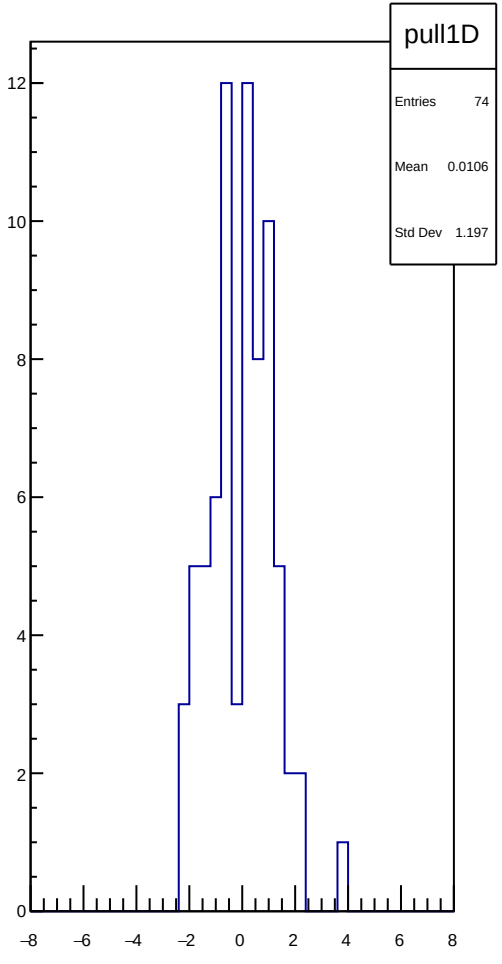

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 4224 / 73
p0 2548 ± 2.081
2900
2800
2700
2600
2500
2400
2300

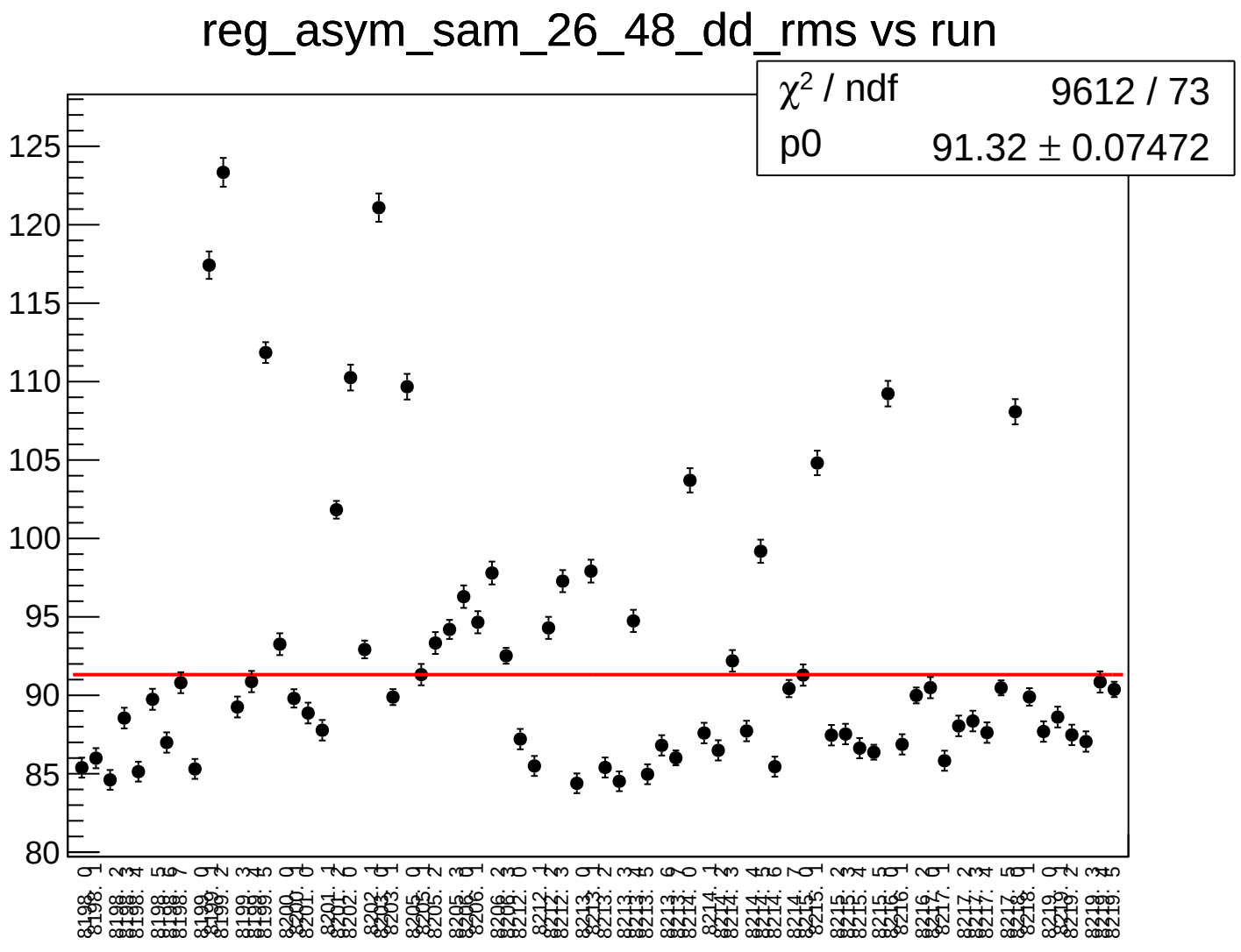

asym_sam_24_68_dd_mean vs run
×10^3
χ² / ndf 79.37 / 73
p0 2247 ± 2945
pull
Entries 74
Mean 2985
Std Dev 2932

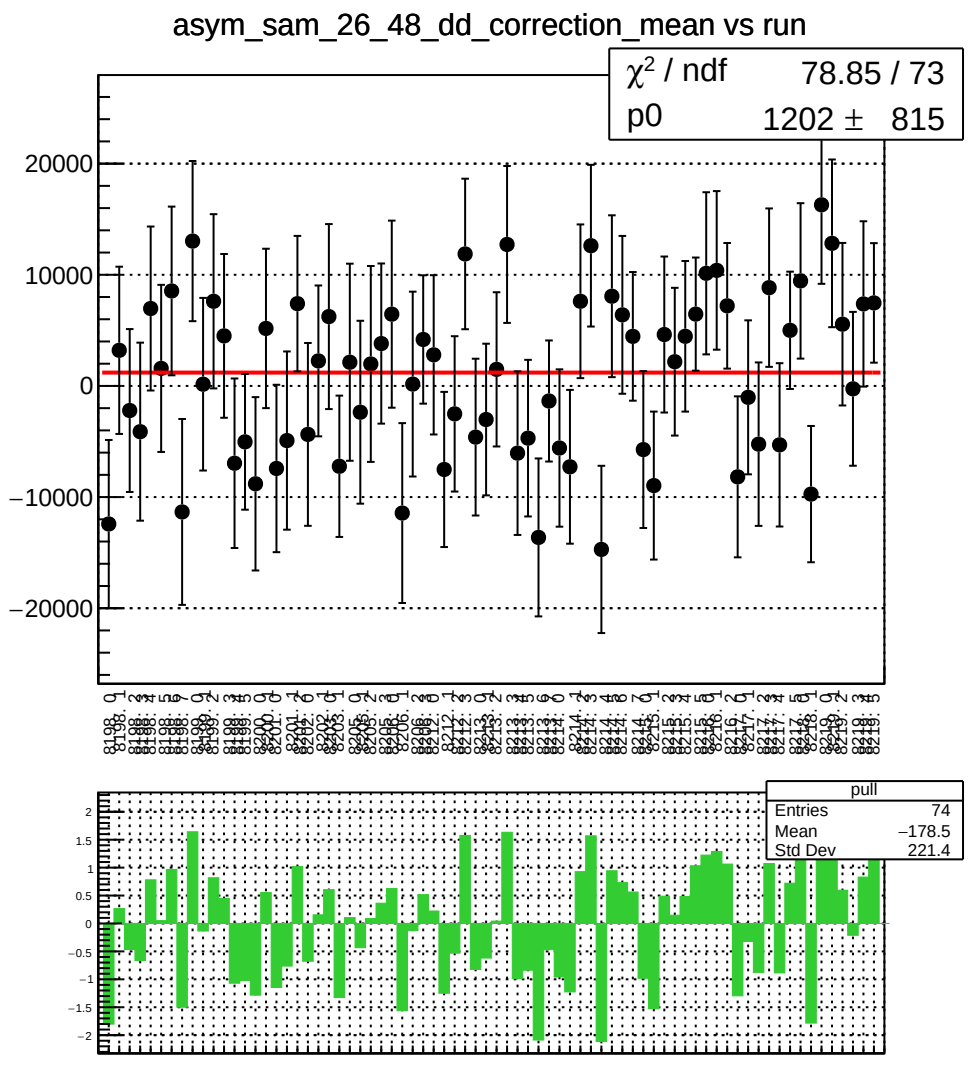

pull1D
Entries 74
Mean 0.0003295
Std Dev 1.036

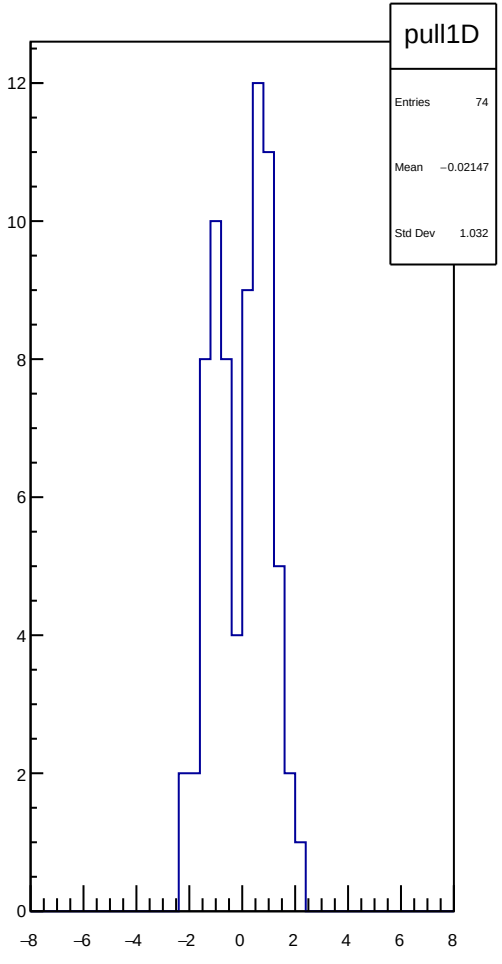

asym_sam_24_68_dd_rms vs run
χ² / ndf 4213 / 73
p0 2550 ± 2.083
2900
2800
2700
2600
2500
2400
2300

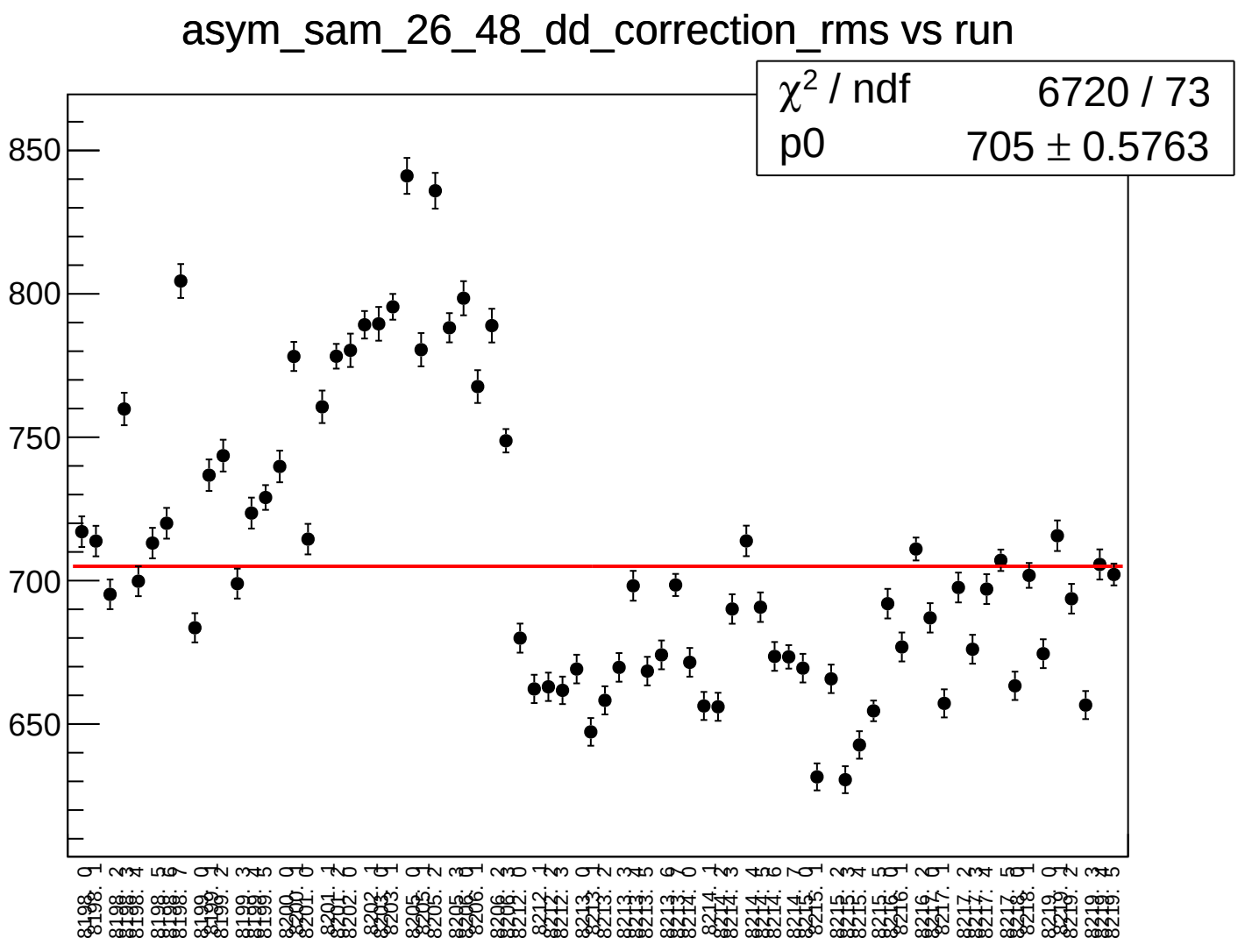

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 106 / 73
p0 246.9 ± 105.7
pull
Entries 74
Mean −24.42
Std Dev 72.37

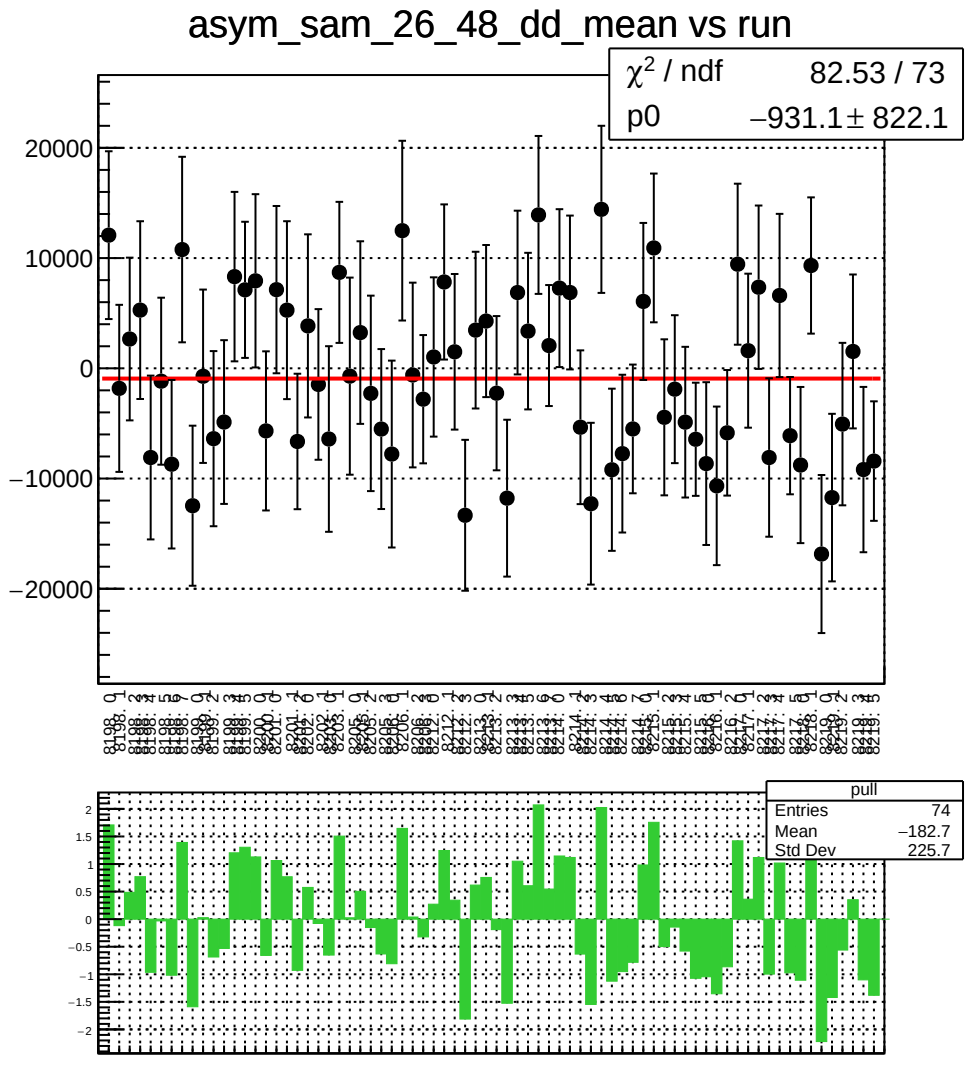

pull1D
Entries 74
Mean 0.0106
Std Dev 1.197

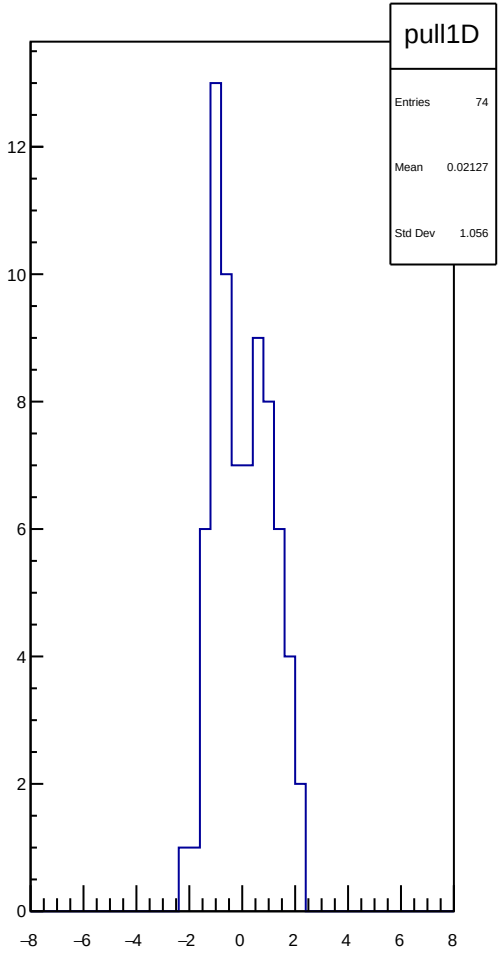

reg_asym_sam_26_48_dd_rms vs run
χ^2 / ndf 9612 / 73
p0 91.32 ± 0.07472
125
120
115
110
105
100
95
90
85
80

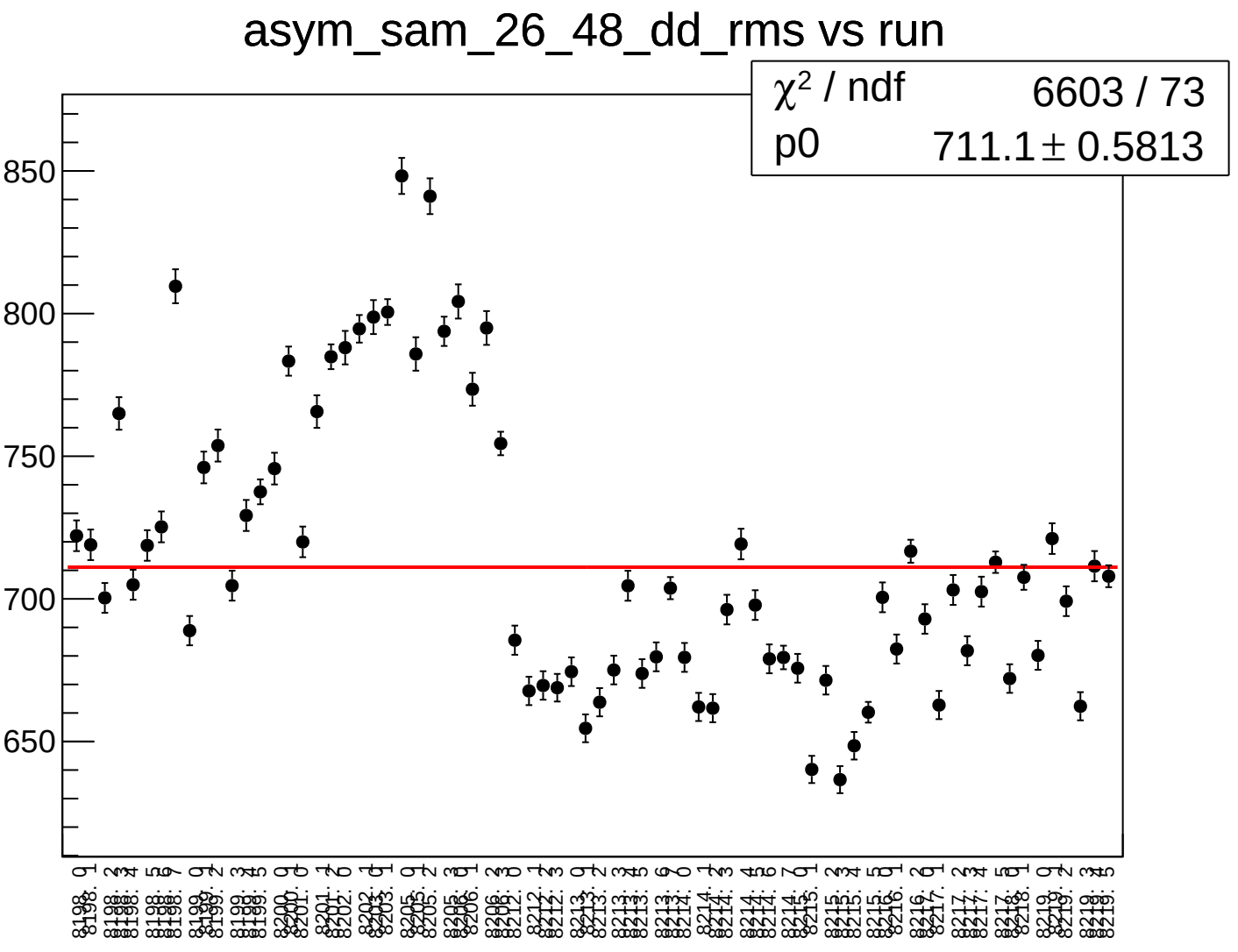

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 78.85 / 73
p0 1202 ± 815
20000
10000
0
−10000
−20000
pull
Entries 74
Mean −178.5
Std Dev 221.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

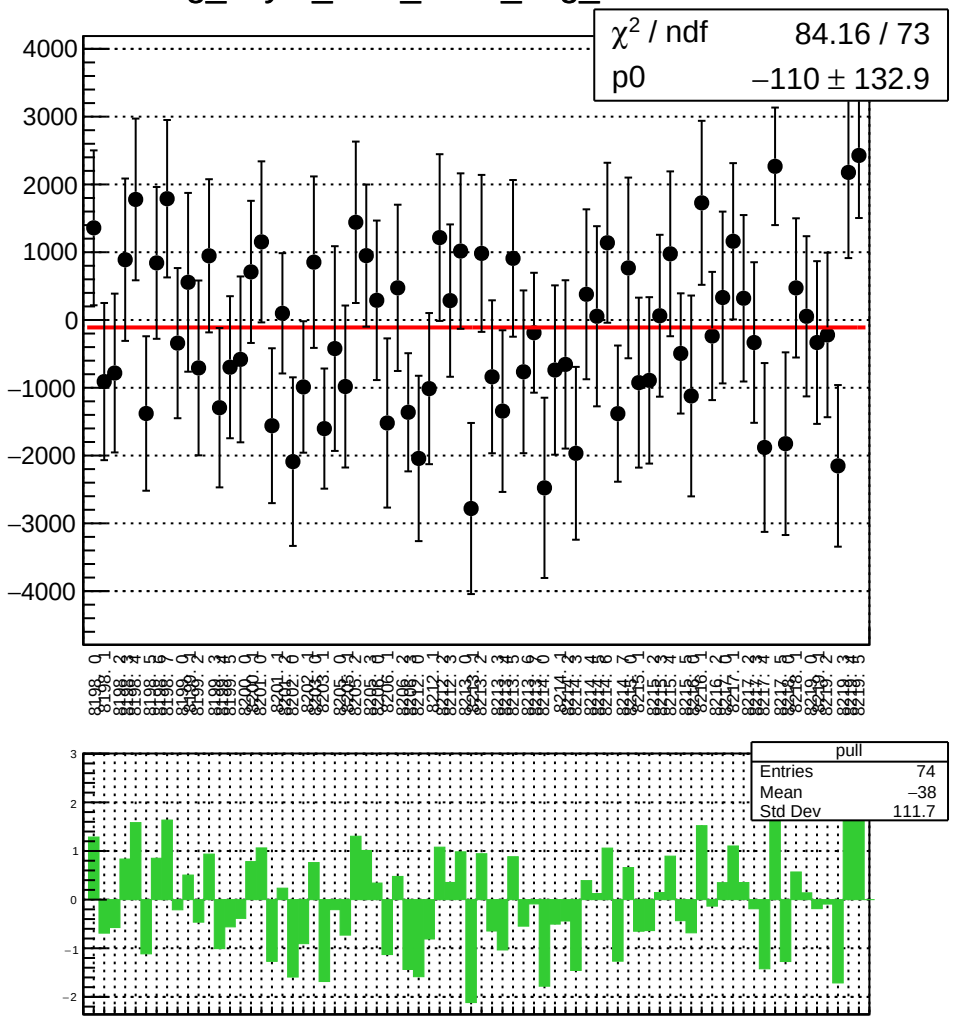

pull1D
Entries 74
Mean −0.02147
Std Dev 1.032
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

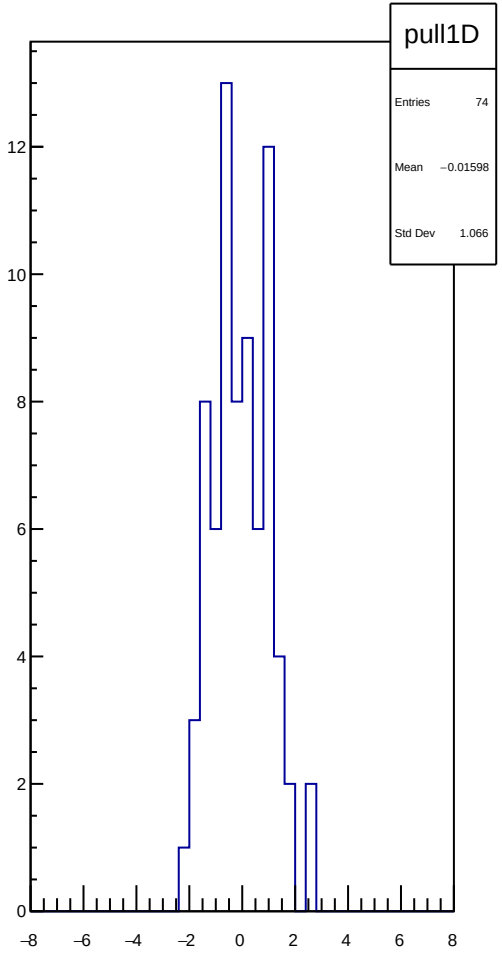

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 6720 / 73
p0 705 ± 0.5763
850
800
750
700
650

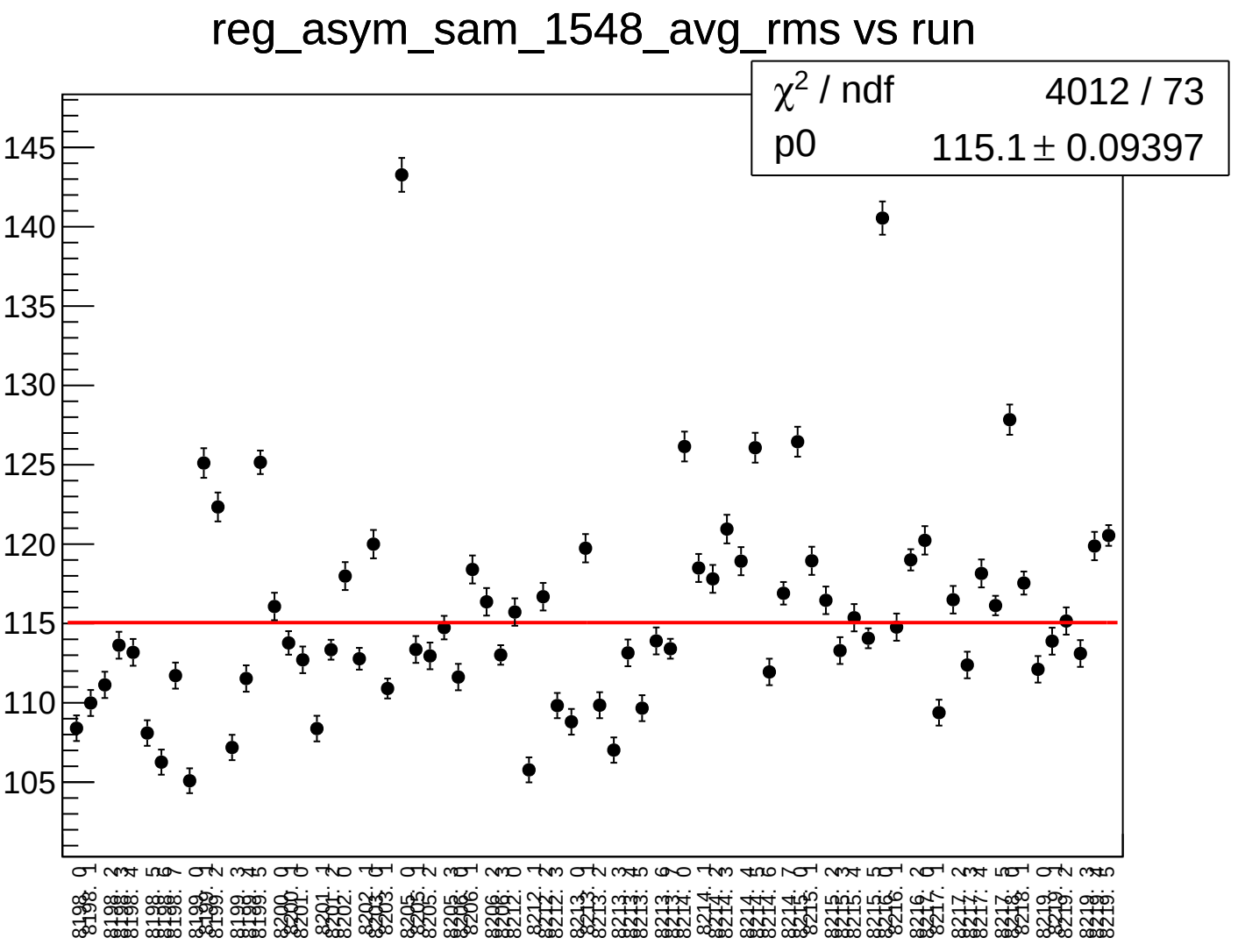

asym_sam_26_48_dd_mean vs run
χ² / ndf 82.53 / 73
p0 −931.1 ± 822.1
20000
10000
0
−10000
−20000
pull
Entries 74
Mean −182.7
Std Dev 225.7
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

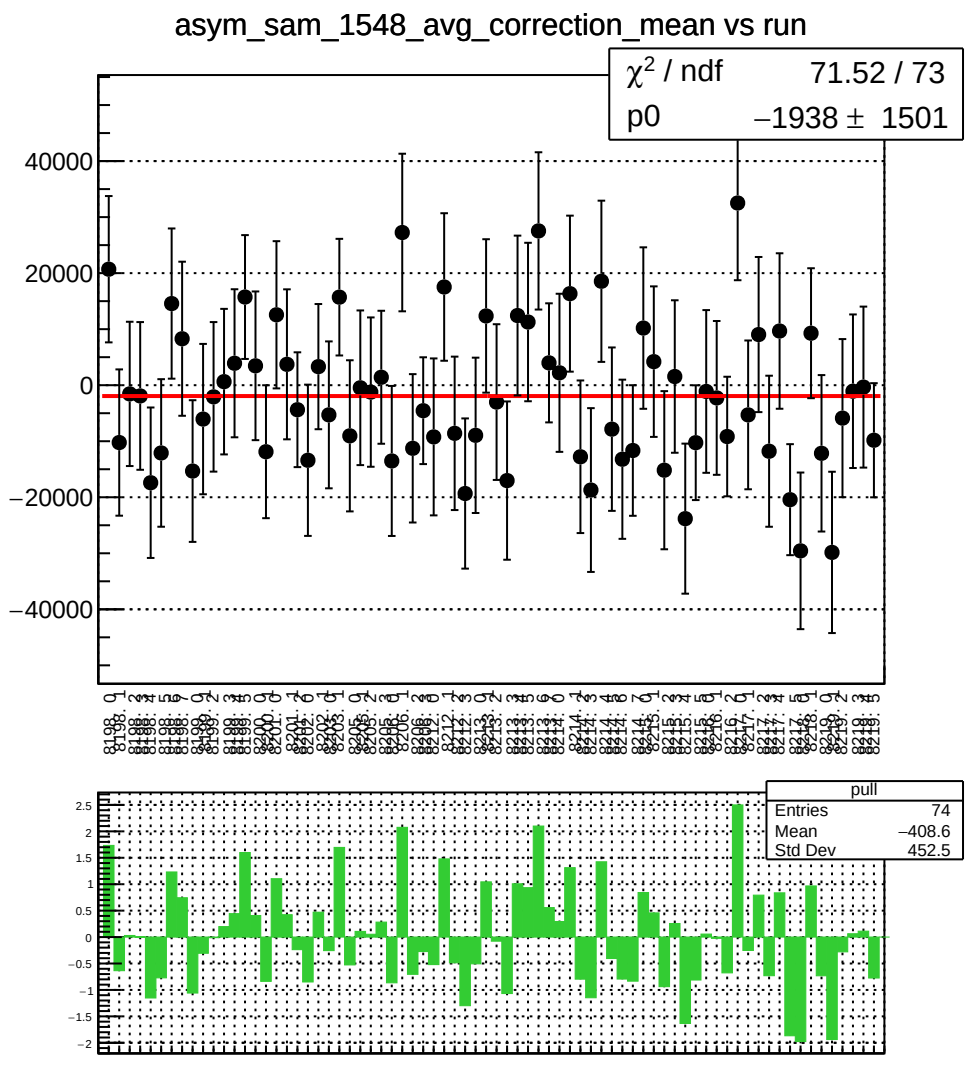

pull1D
Entries 74
Mean 0.02127
Std Dev 1.056
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

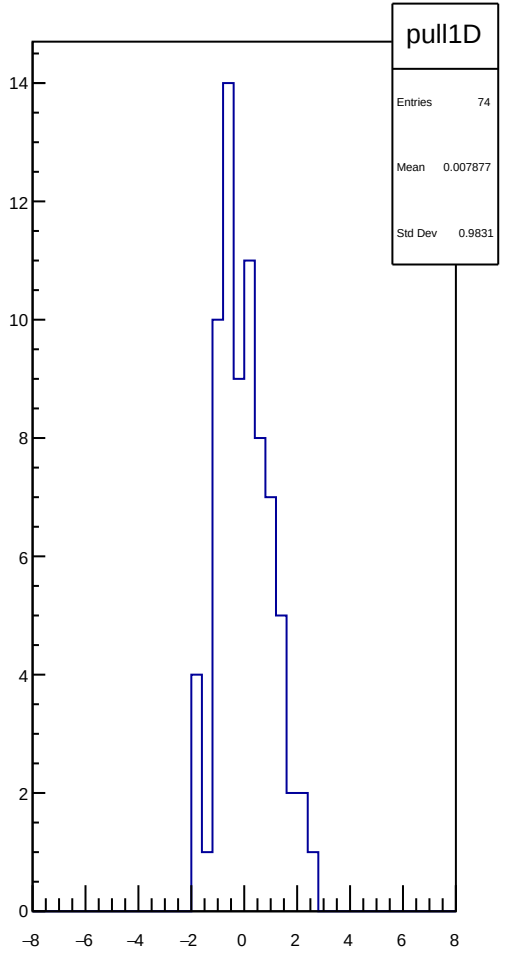

asym_sam_26_48_dd_rms vs run
χ² / ndf 6603 / 73
p0 711.1 ± 0.5813
850
800
750
700
650

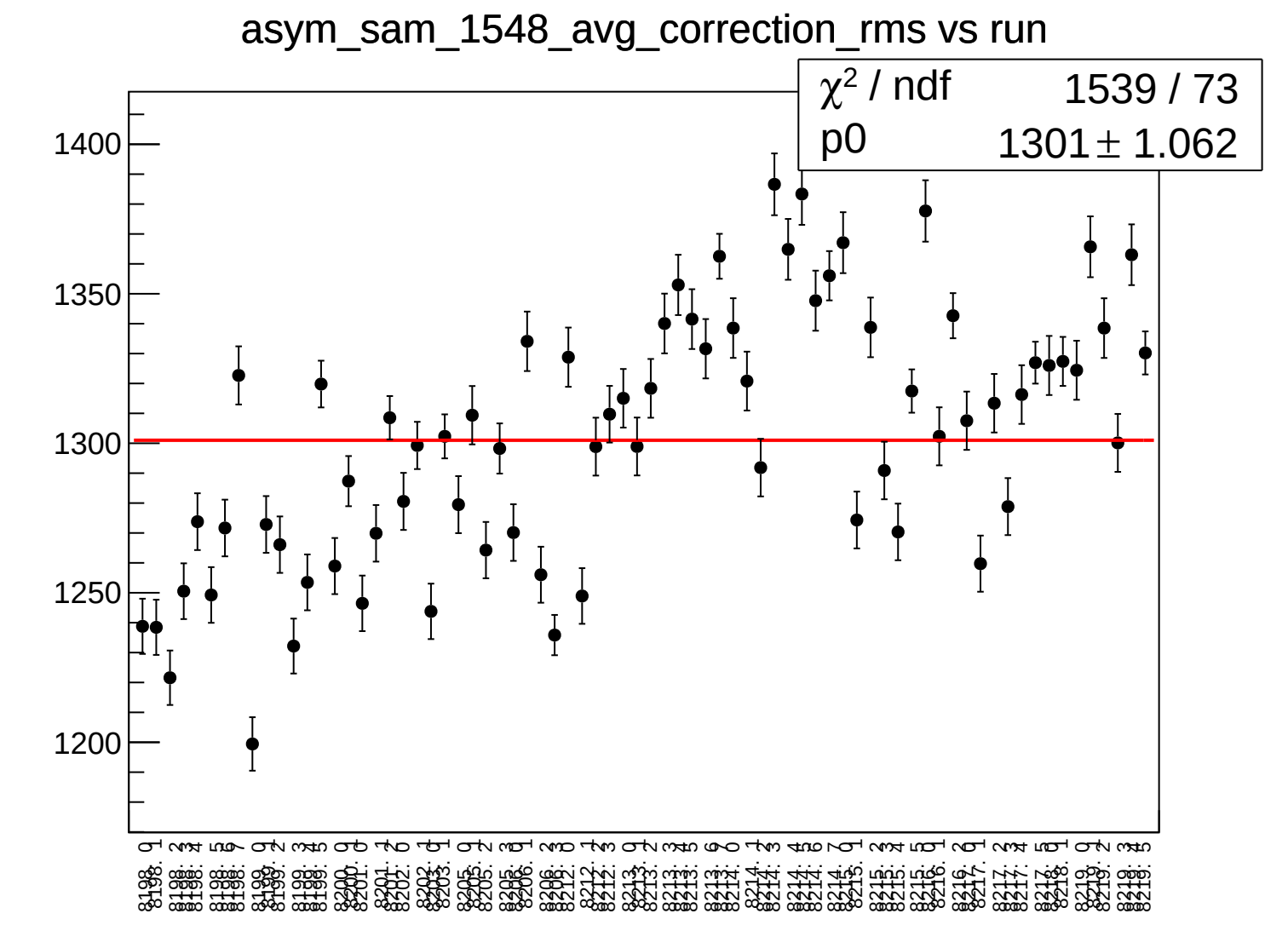

reg_asym_sam_1548_avg_mean vs run
χ² / ndf 84.16 / 73
p0 −110 ± 132.9
pull
Entries 74
Mean −38
Std Dev 111.7

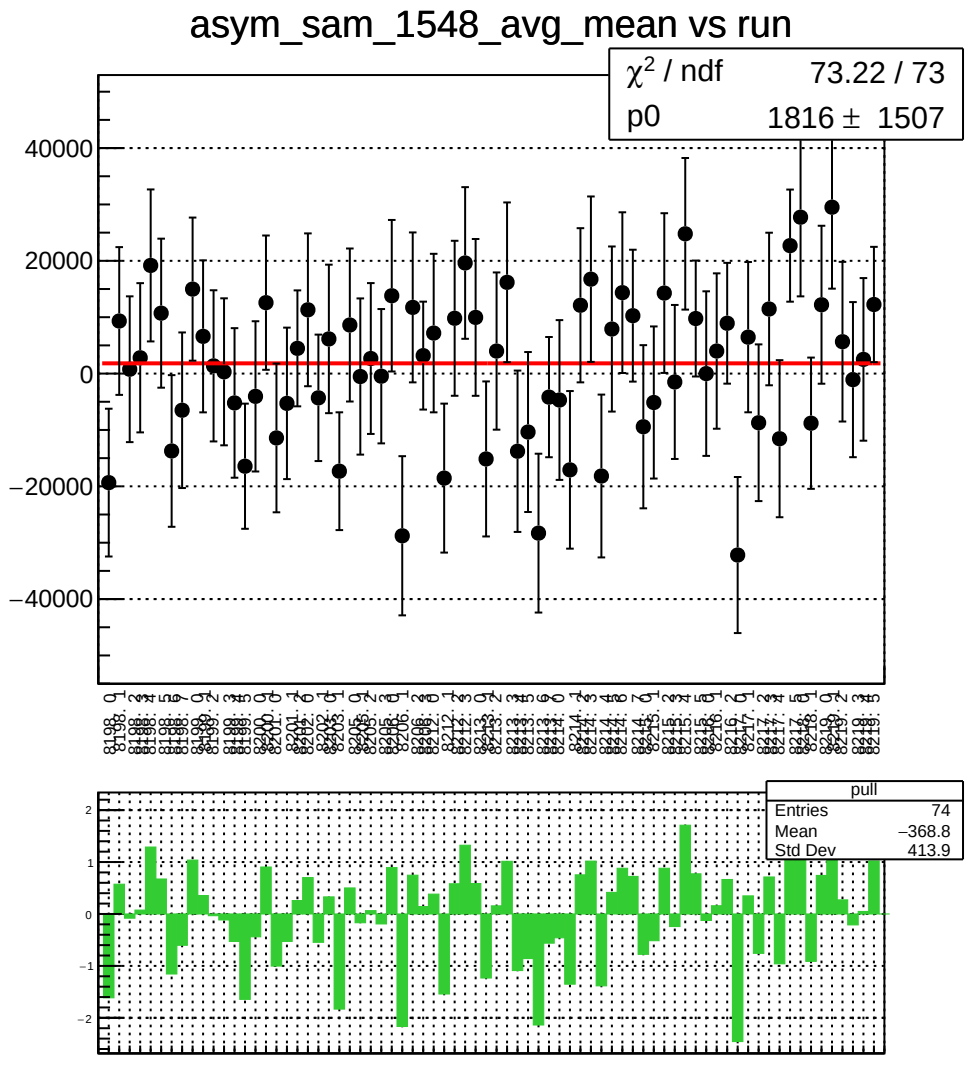

pull1D
Entries 74
Mean −0.01598
Std Dev 1.066

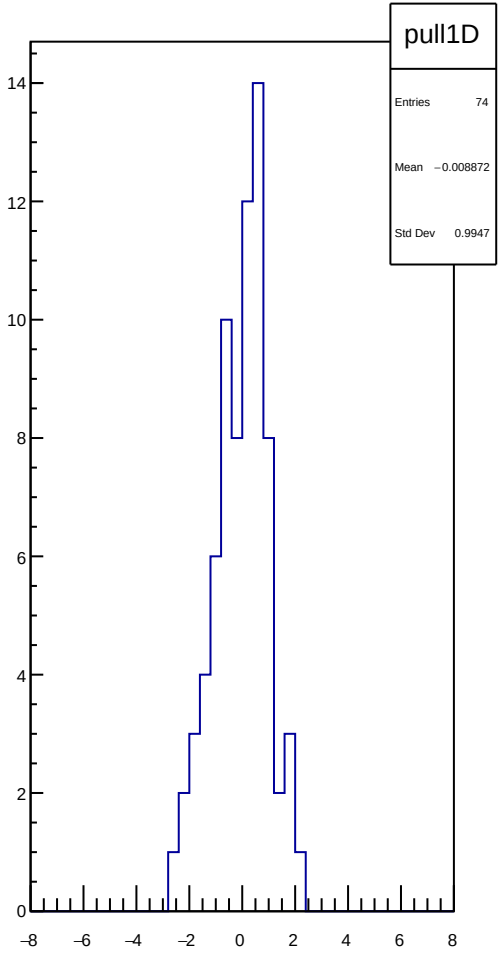

reg_asym_sam_1548_avg_rms vs run
χ^2 / ndf 4012 / 73
p0 115.1 ± 0.09397
145
140
135
130
125
120
115
110
105

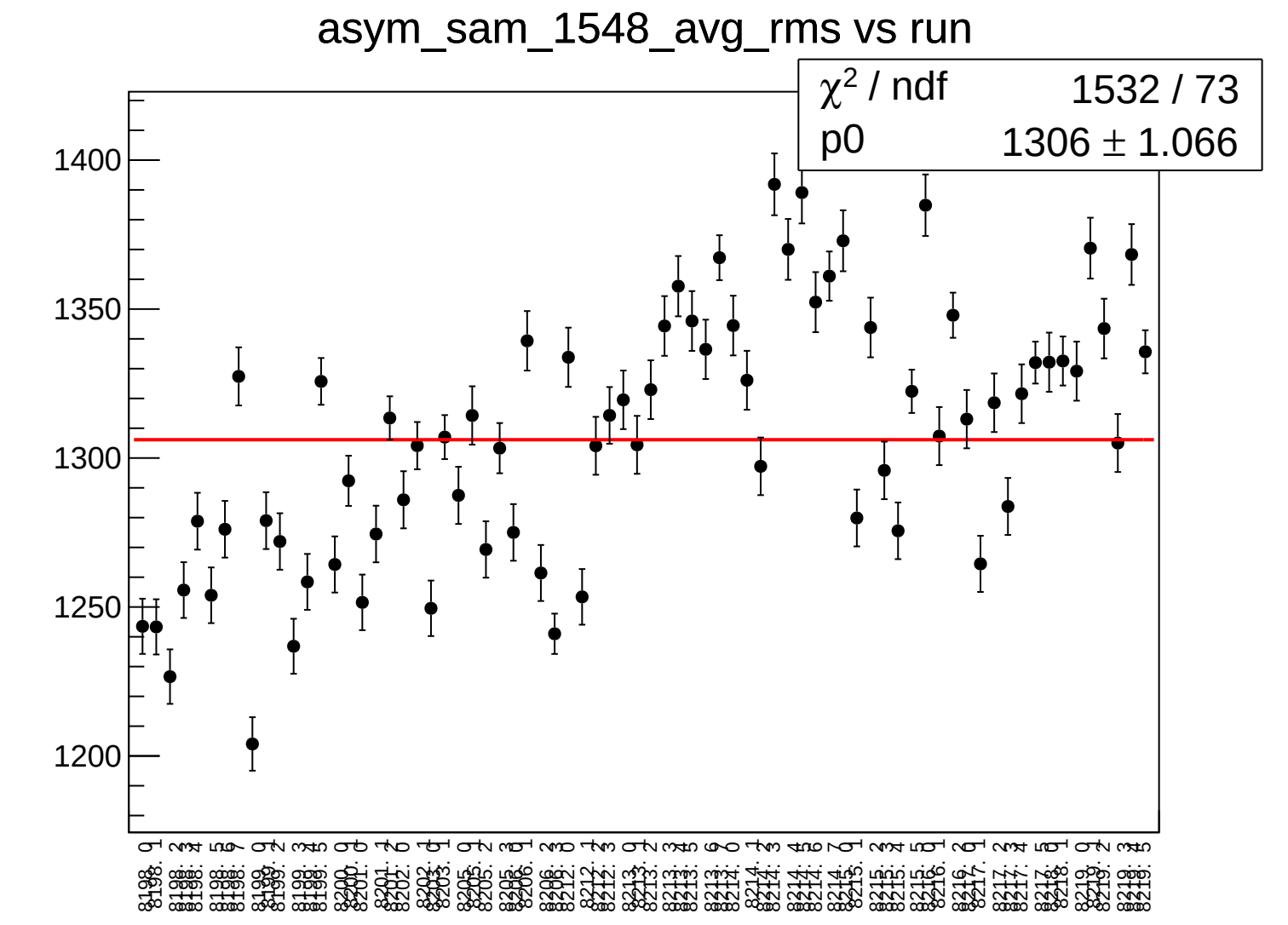

asym_sam_1548_avg_correction_mean vs run
χ² / ndf 71.52 / 73
p0 −1938 ± 1501
40000
20000
0
−20000
−40000
pull
Entries 74
Mean −408.6
Std Dev 452.5
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

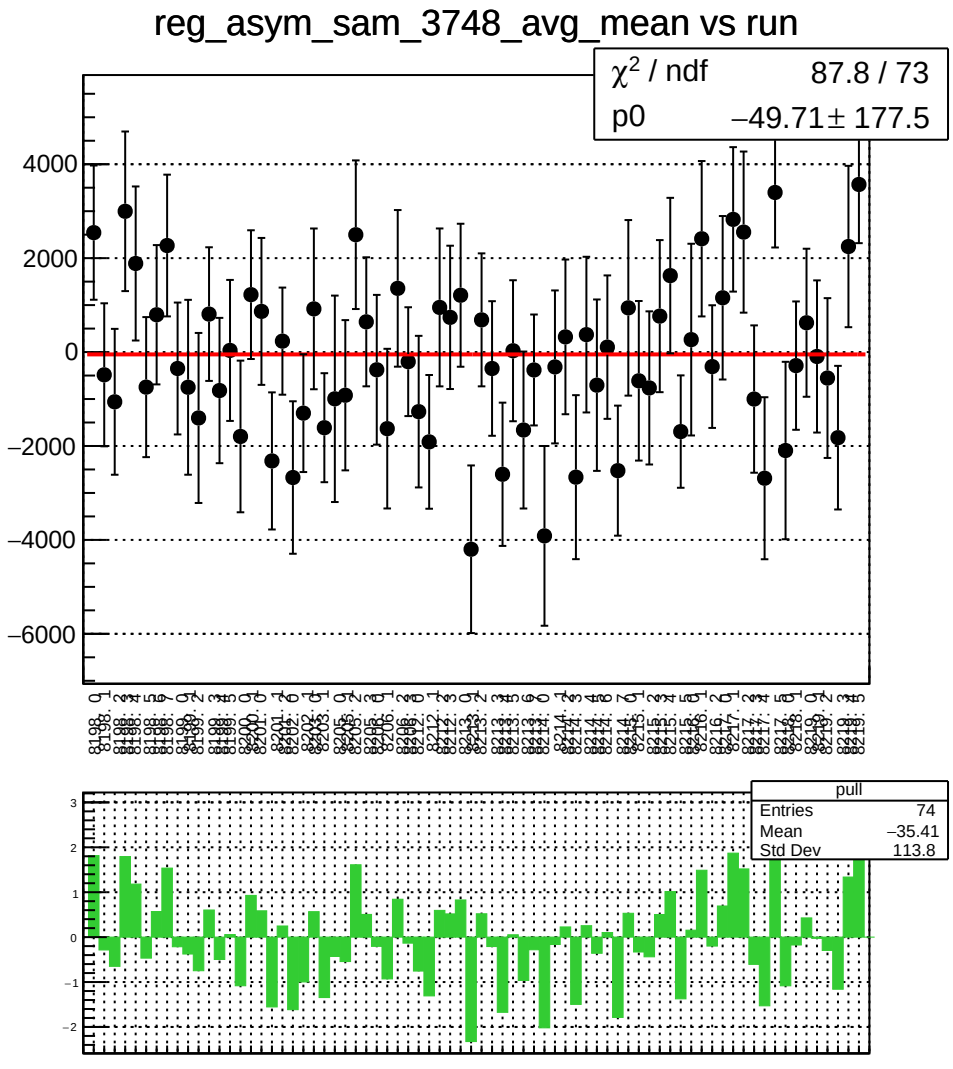

pull1D
Entries 74
Mean 0.007877
Std Dev 0.9831
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

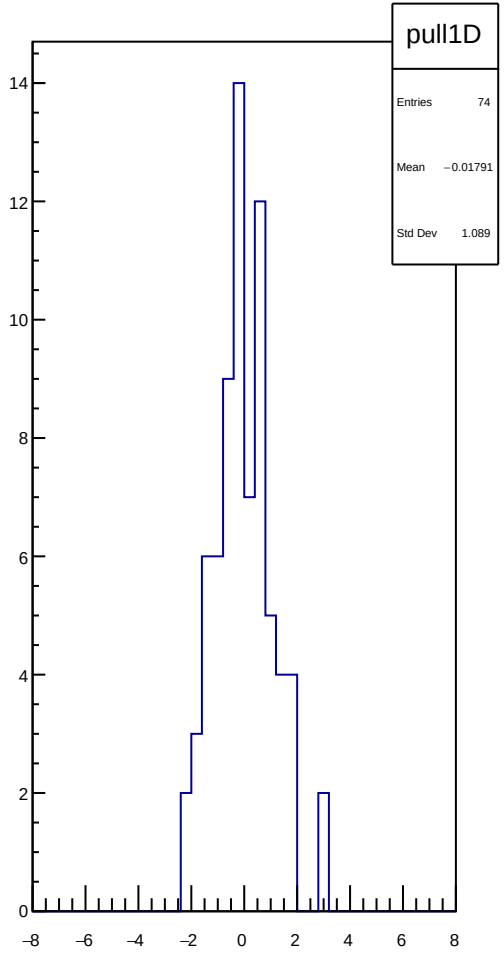

asym_sam_1548_avg_correction_rms vs run
χ² / ndf 1539 / 73
p0 1301 ± 1.062
1400
1350
1300
1250
1200

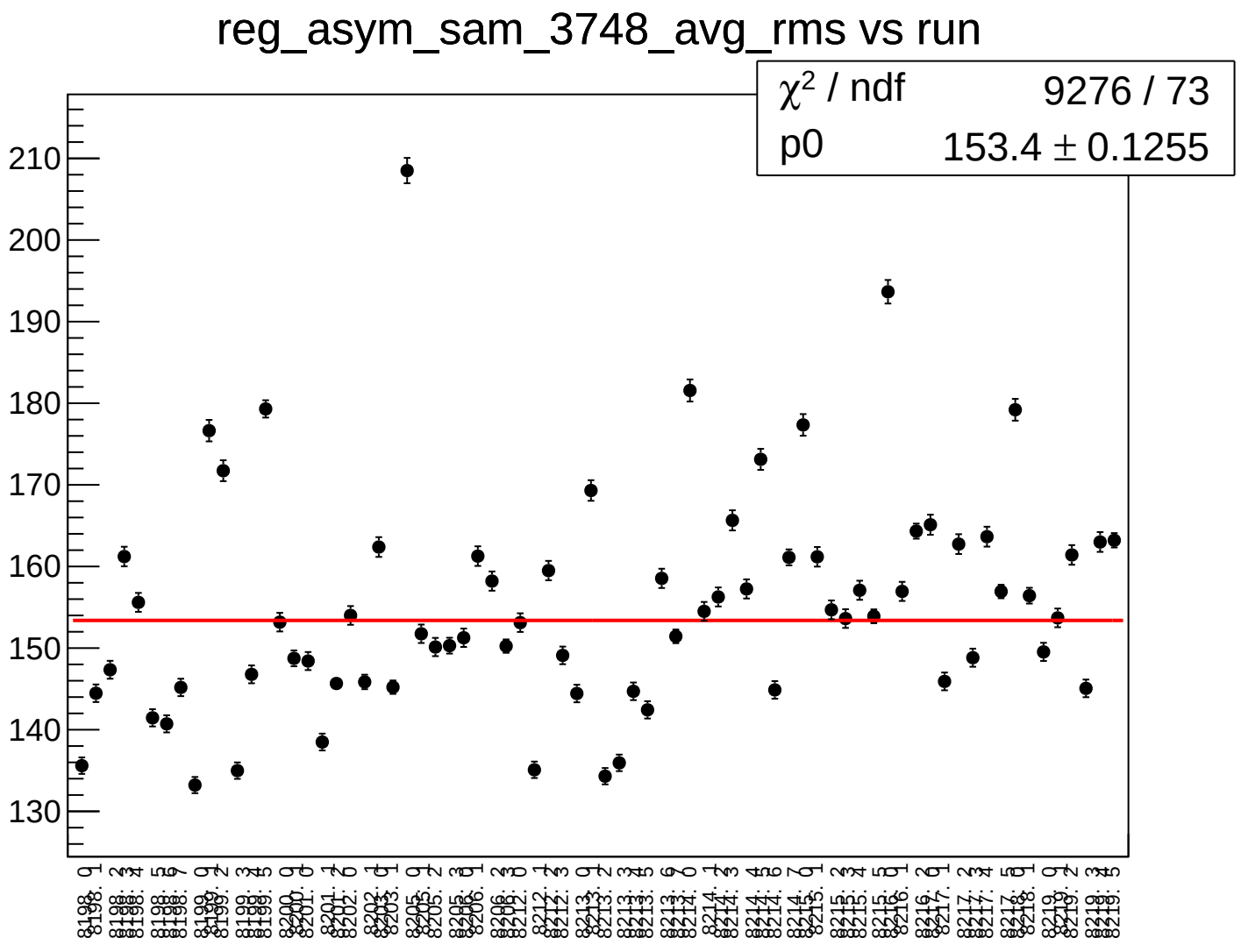

asym_sam_1548_avg_mean vs run
χ² / ndf 73.22 / 73
p0 1816 ± 1507
40000
20000
0
−20000
−40000
pull
Entries 74
Mean −368.8
Std Dev 413.9
2
1
0
−1
−2

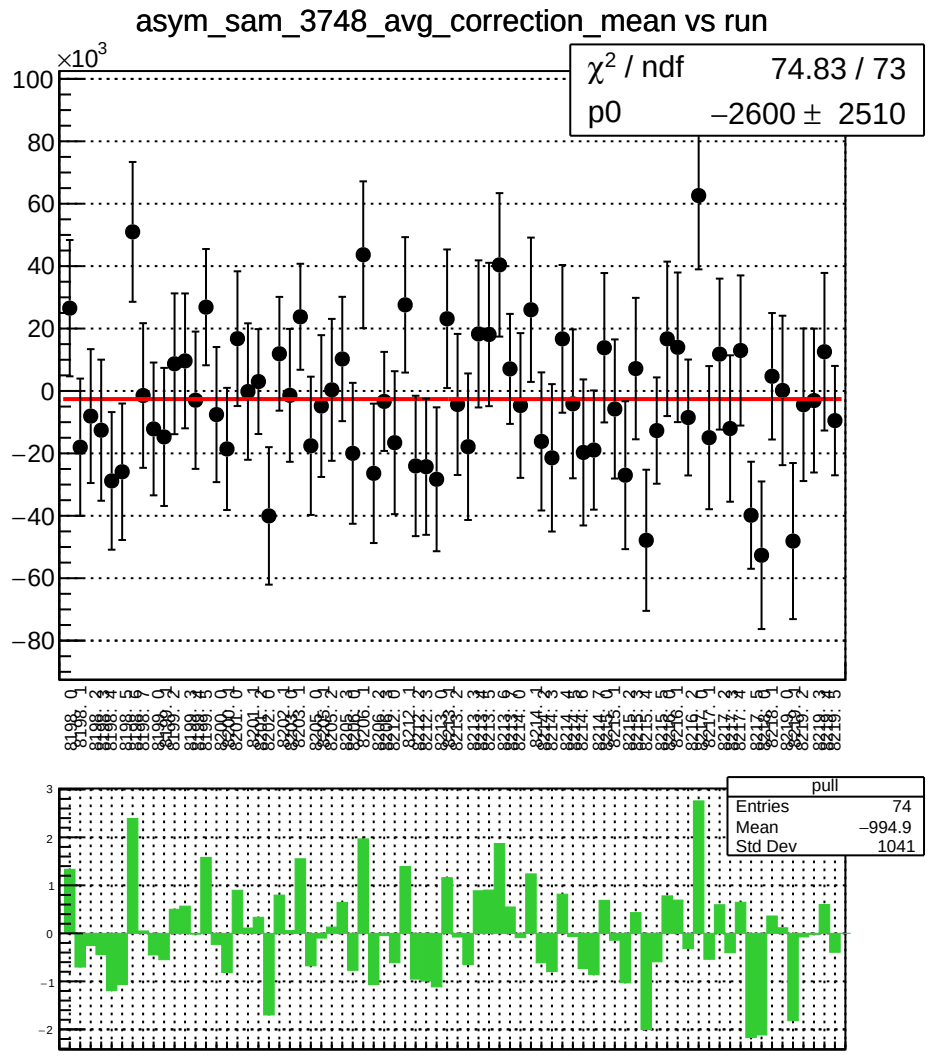

pull1D
Entries 74
Mean −0.008872
Std Dev 0.9947
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

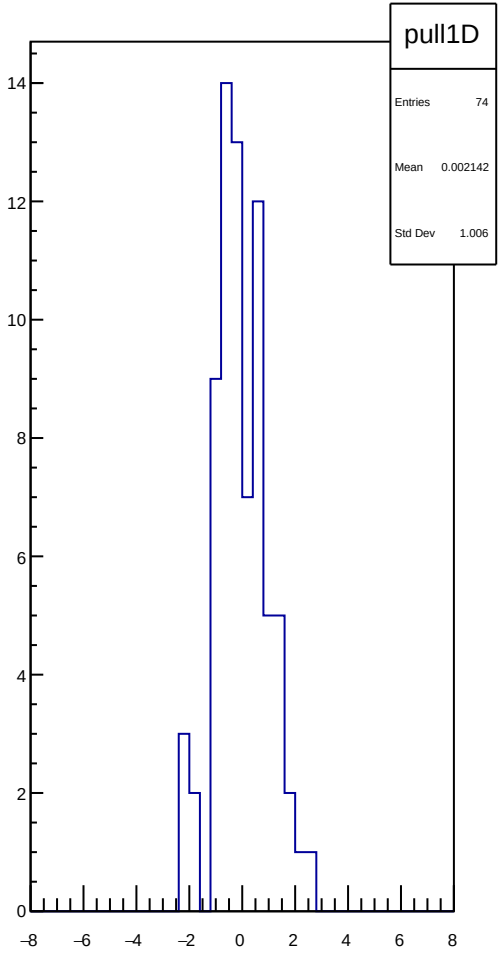

asym_sam_1548_avg_rms vs run
χ² / ndf 1532 / 73
p0 1306 ± 1.066
1400
1350
1300
1250
1200

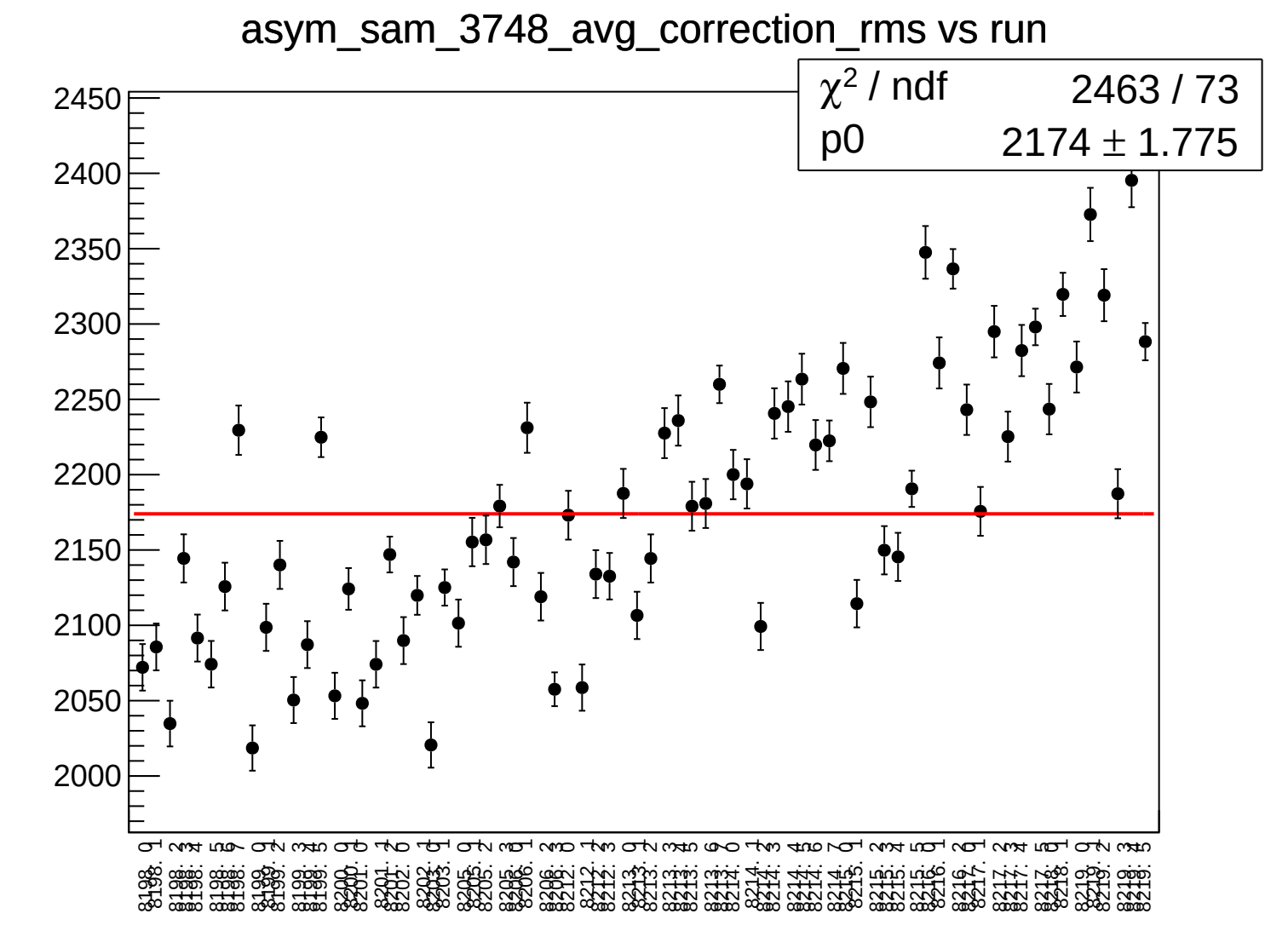

reg_asym_sam_3748_avg_mean vs run
χ² / ndf 87.8 / 73
p0 −49.71 ± 177.5
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean −35.41
Std Dev 113.8
3
2
1
0
−1
−2

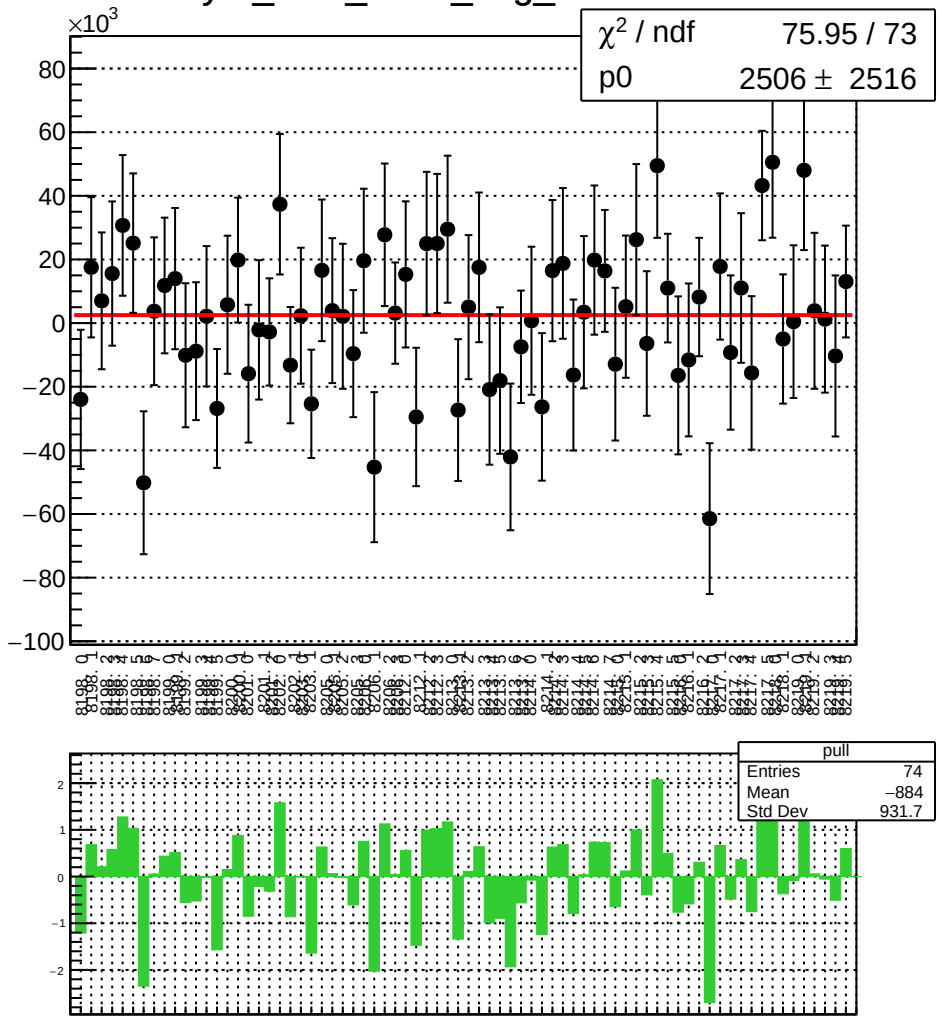

pull1D
Entries 74
Mean −0.01791
Std Dev 1.089
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

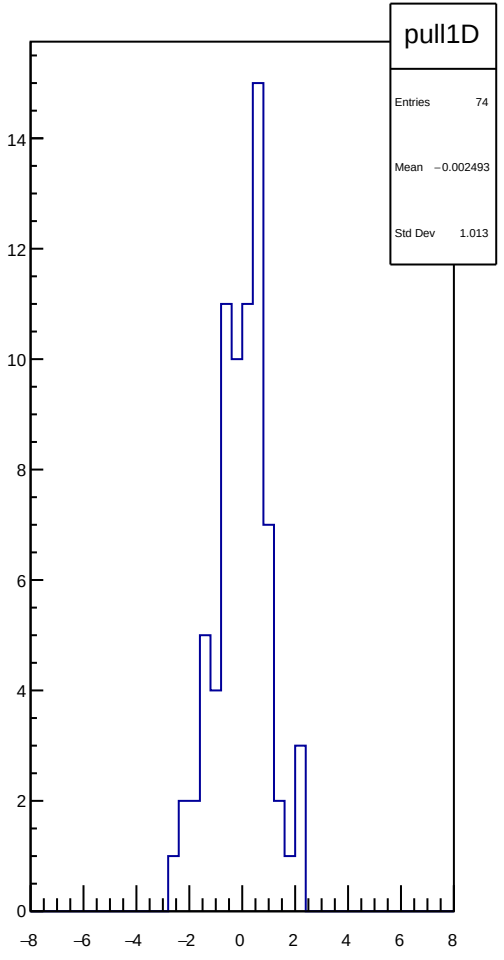

reg_asym_sam_3748_avg_rms vs run
χ² / ndf 9276 / 73
p0 153.4 ± 0.1255
210
200
190
180
170
160
150
140
130

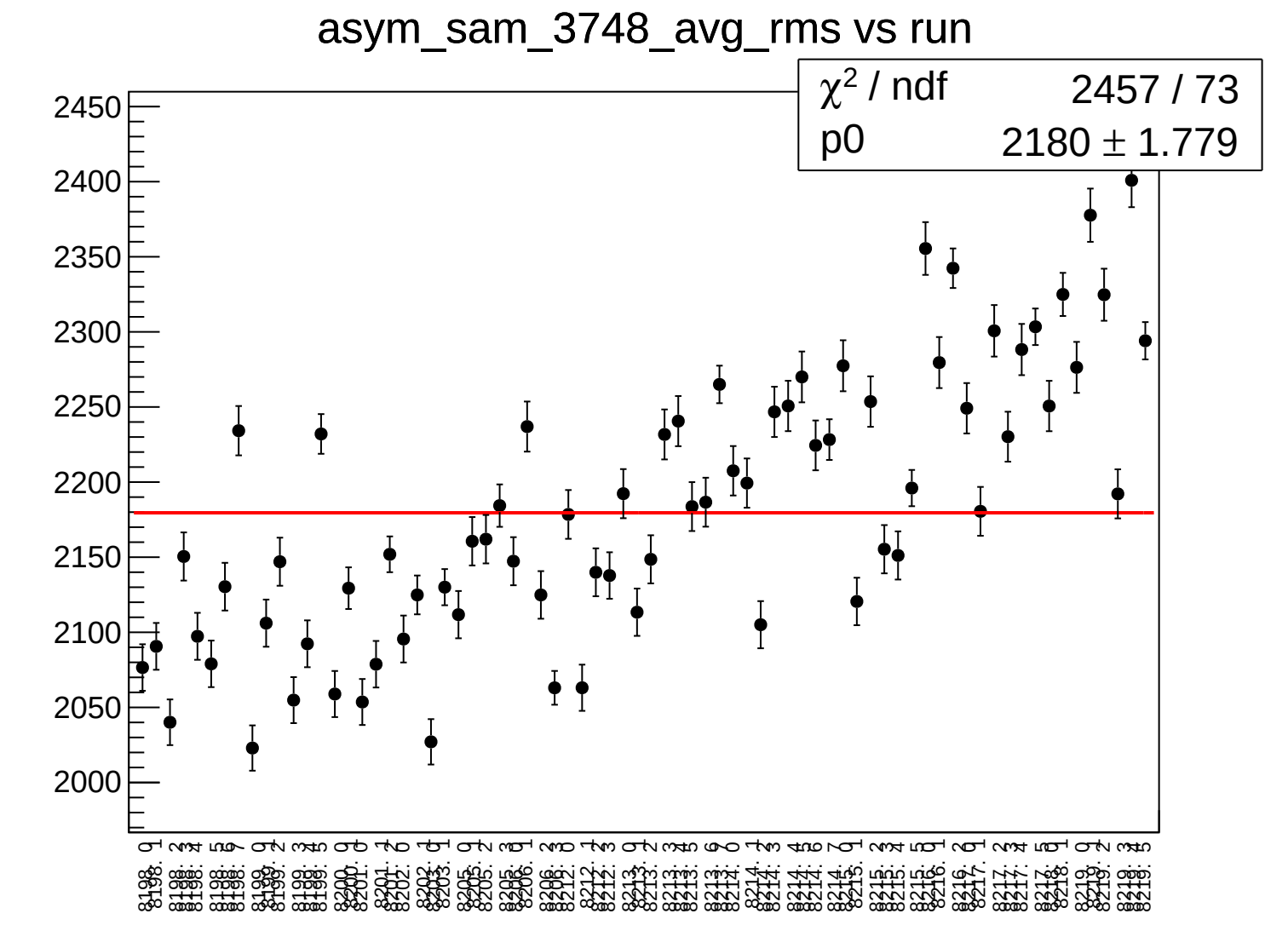

asym_sam_3748_avg_correction_mean vs run
×10^3
χ² / ndf 74.83 / 73
p0 −2600 ± 2510
pull
Entries 74
Mean −994.9
Std Dev 1041

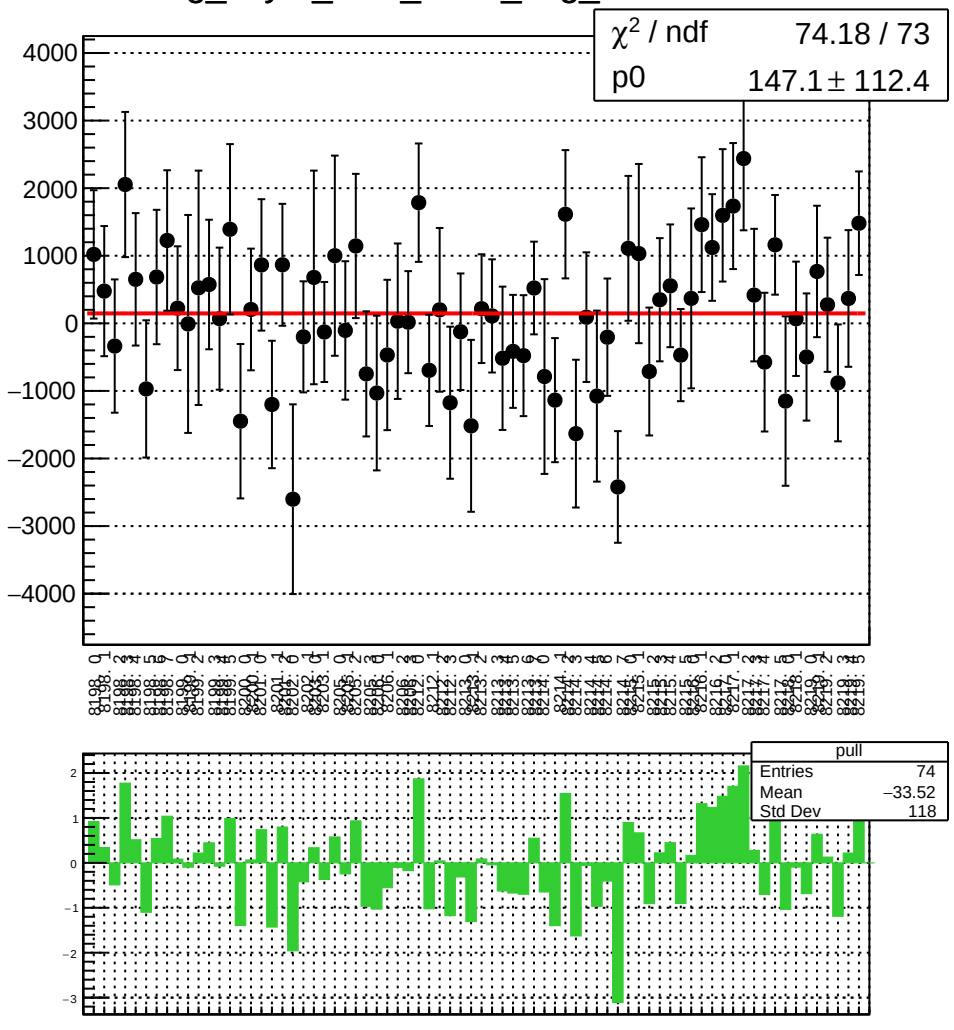

pull1D
Entries 74
Mean 0.002142
Std Dev 1.006

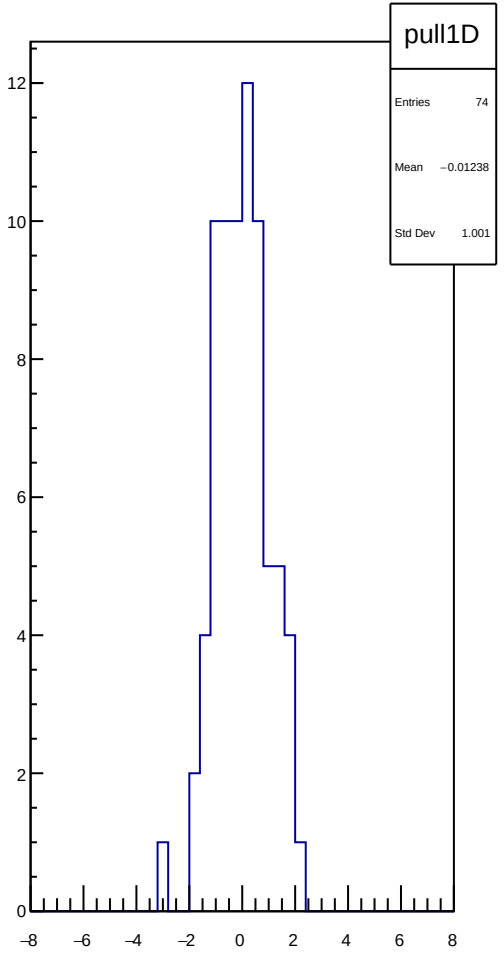

asym_sam_3748_avg_correction_rms vs run
χ² / ndf 2463 / 73
p0 2174 ± 1.775
2450
2400
2350
2300
2250
2200
2150
2100
2050
2000

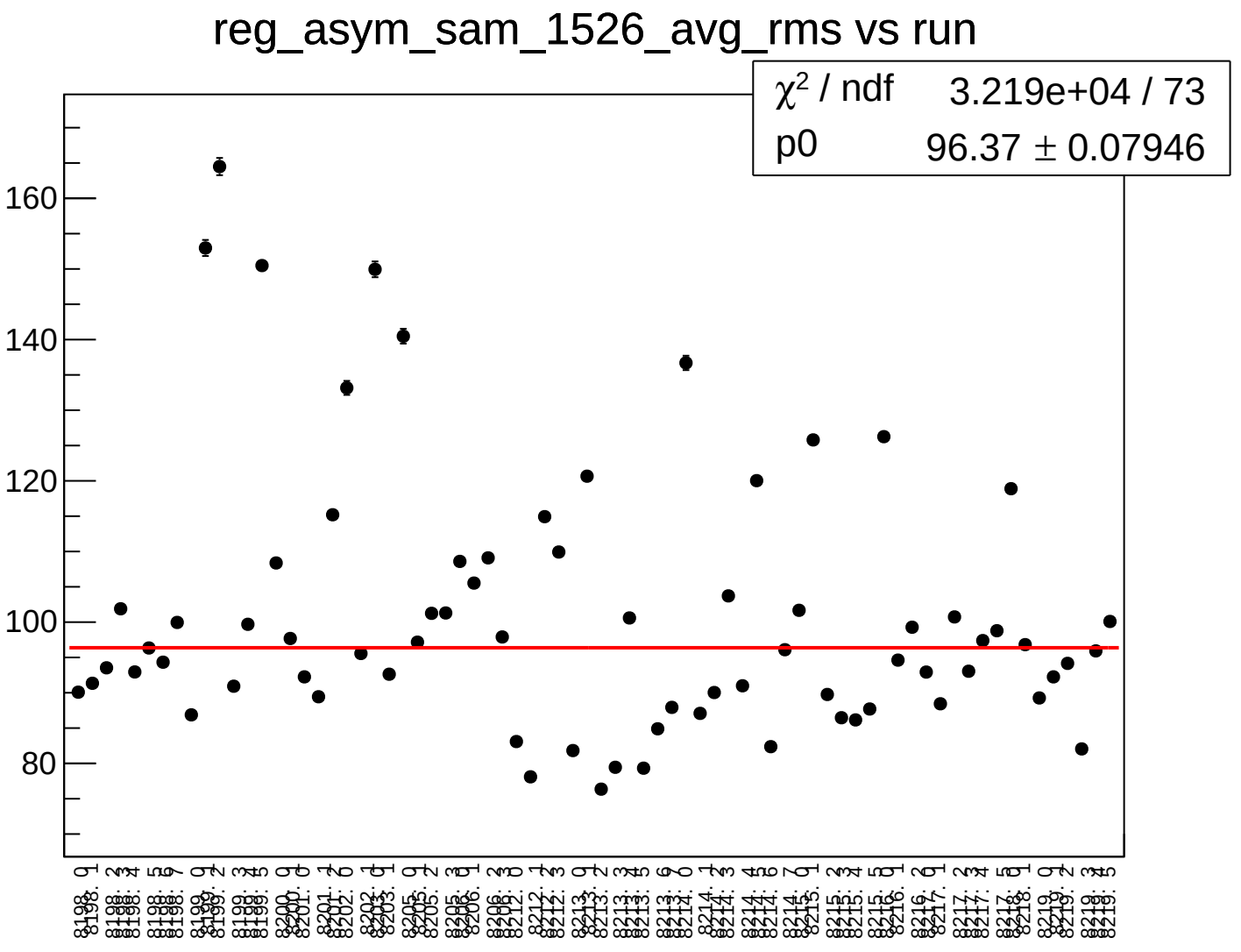

asym_sam_3748_avg_mean vs run
χ² / ndf 75.95 / 73
p0 2506 ± 2516
×10³
pull
Entries 74
Mean −884
Std Dev 931.7

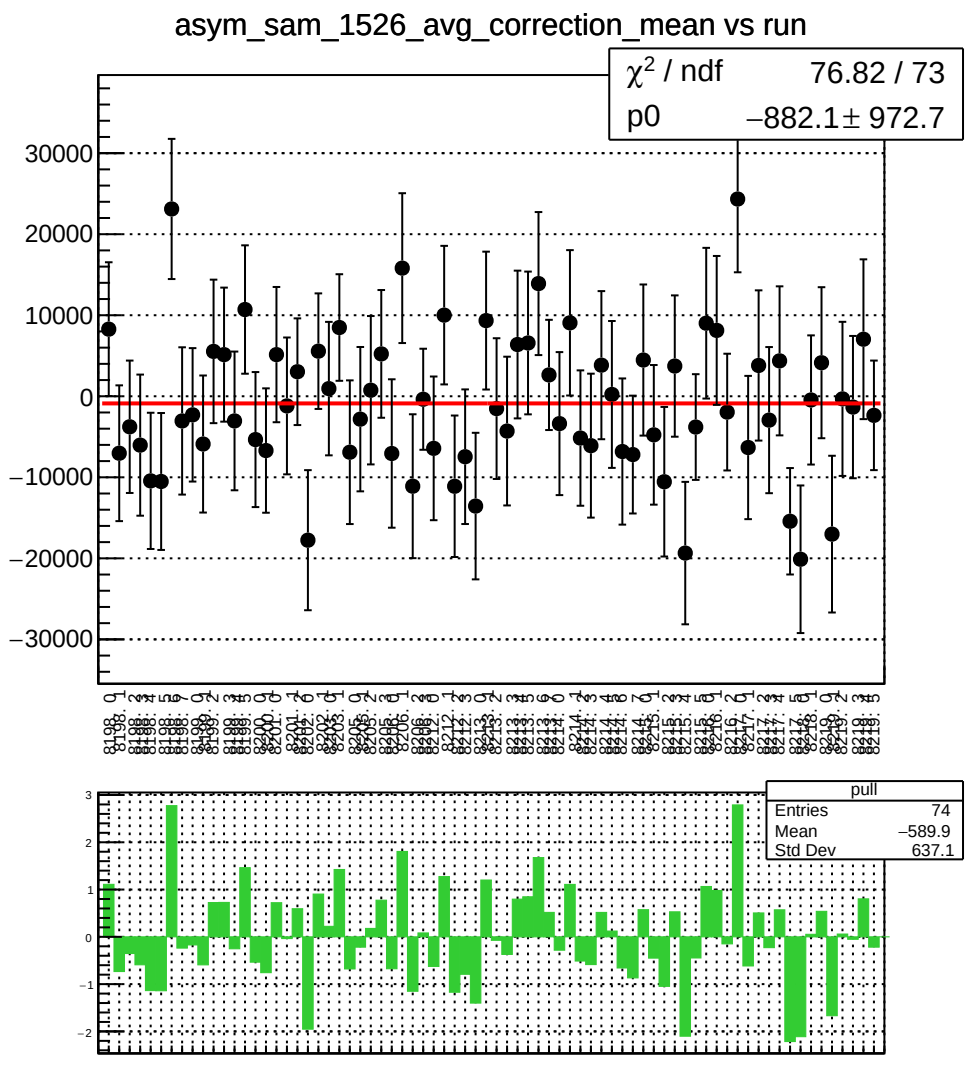

pull1D
Entries 74
Mean −0.002493
Std Dev 1.013

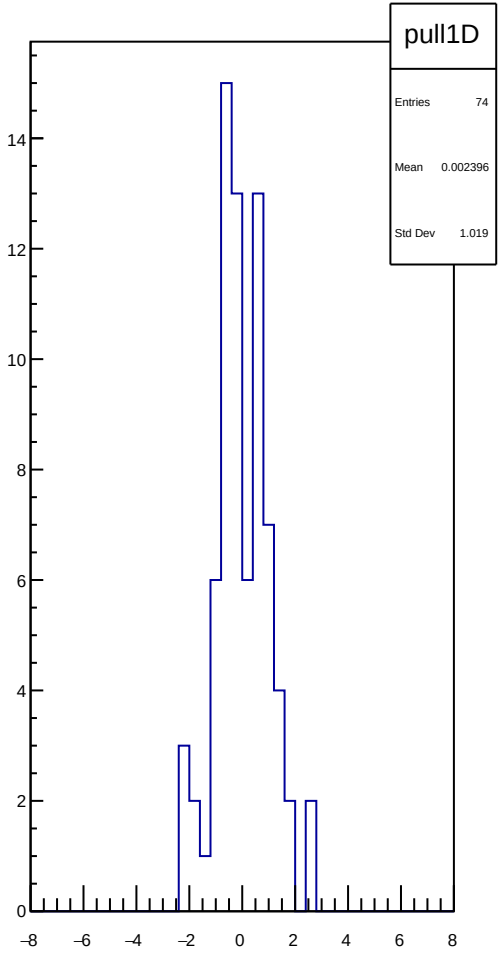

asym_sam_3748_avg_rms vs run
χ² / ndf 2457 / 73
p0 2180 ± 1.779
2450
2400
2350
2300
2250
2200
2150
2100
2050
2000

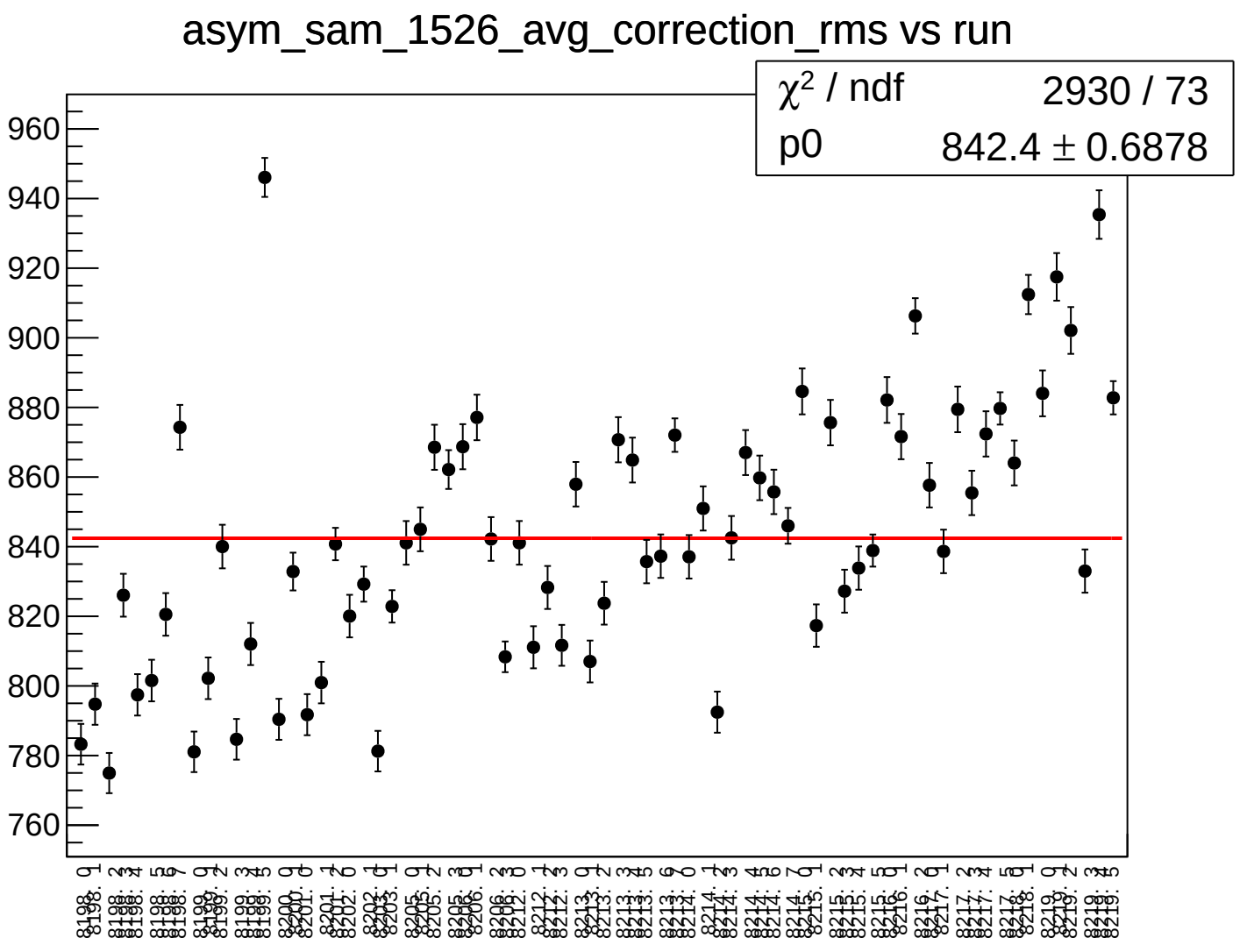

reg_asym_sam_1526_avg_mean vs run
χ² / ndf 74.18 / 73
p0 147.1 ± 112.4
pull
Entries 74
Mean −33.52
Std Dev 118

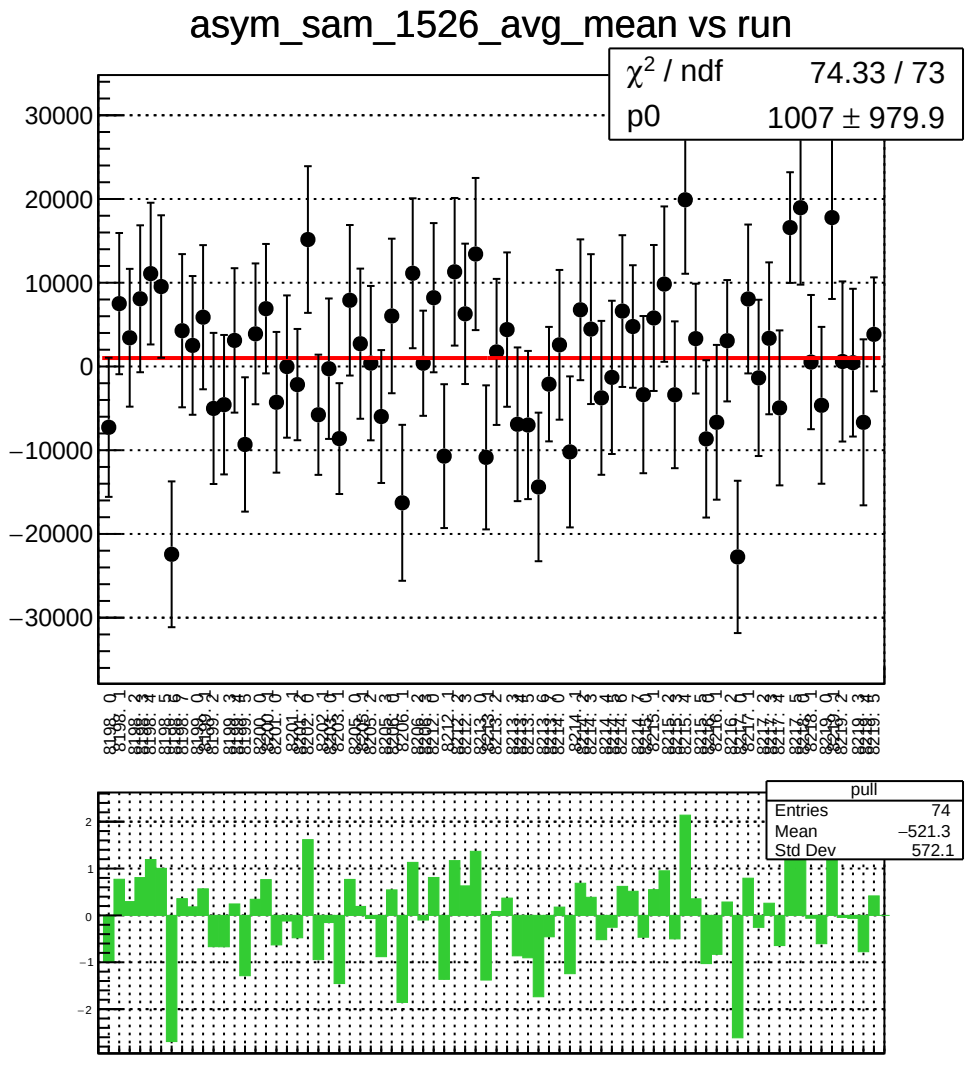

pull1D
Entries 74
Mean −0.01238
Std Dev 1.001

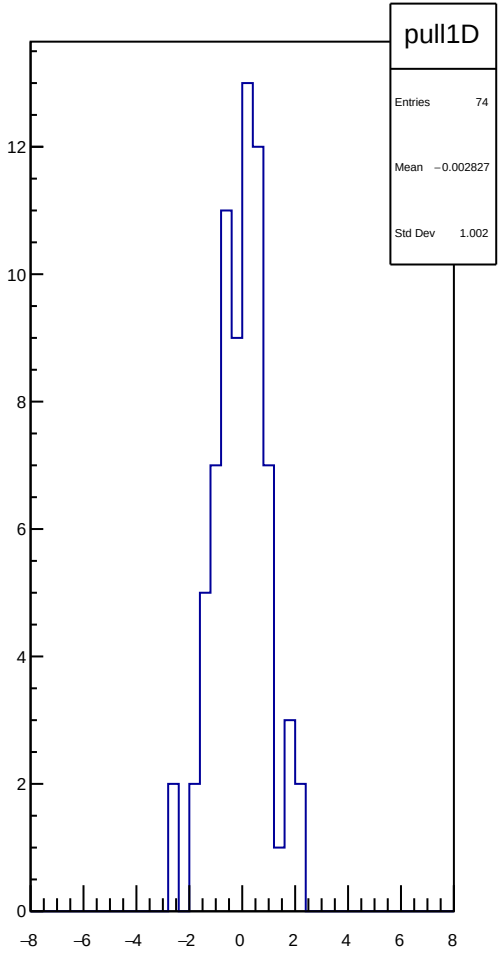

reg_asym_sam_1526_avg_rms vs run
χ^2 / ndf 3.219e+04 / 73
p0 96.37 ± 0.07946
160
140
120
100
80

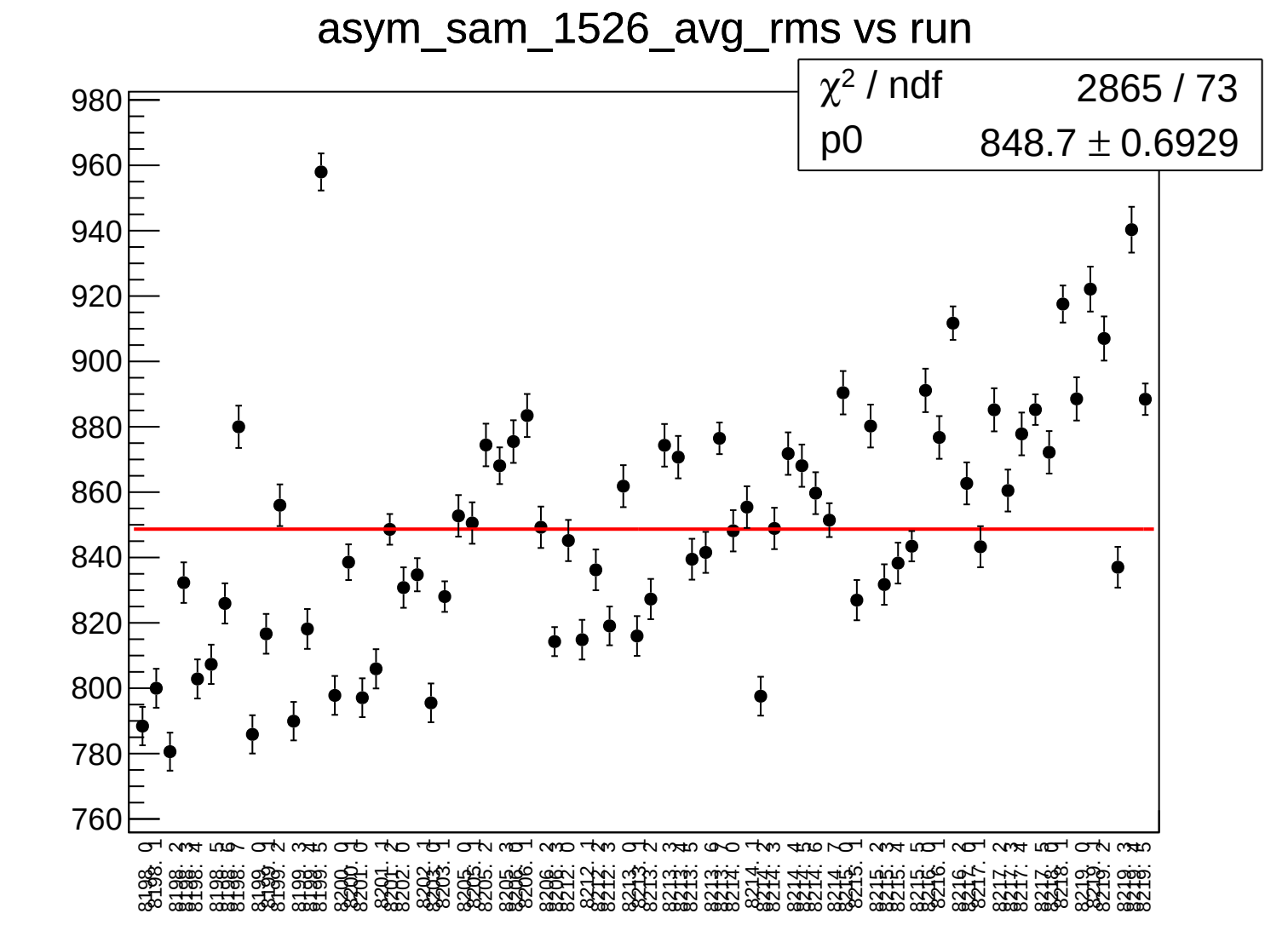

asym_sam_1526_avg_correction_mean vs run
χ² / ndf 76.82 / 73
p0 −882.1± 972.7
pull
Entries 74
Mean −589.9
Std Dev 637.1

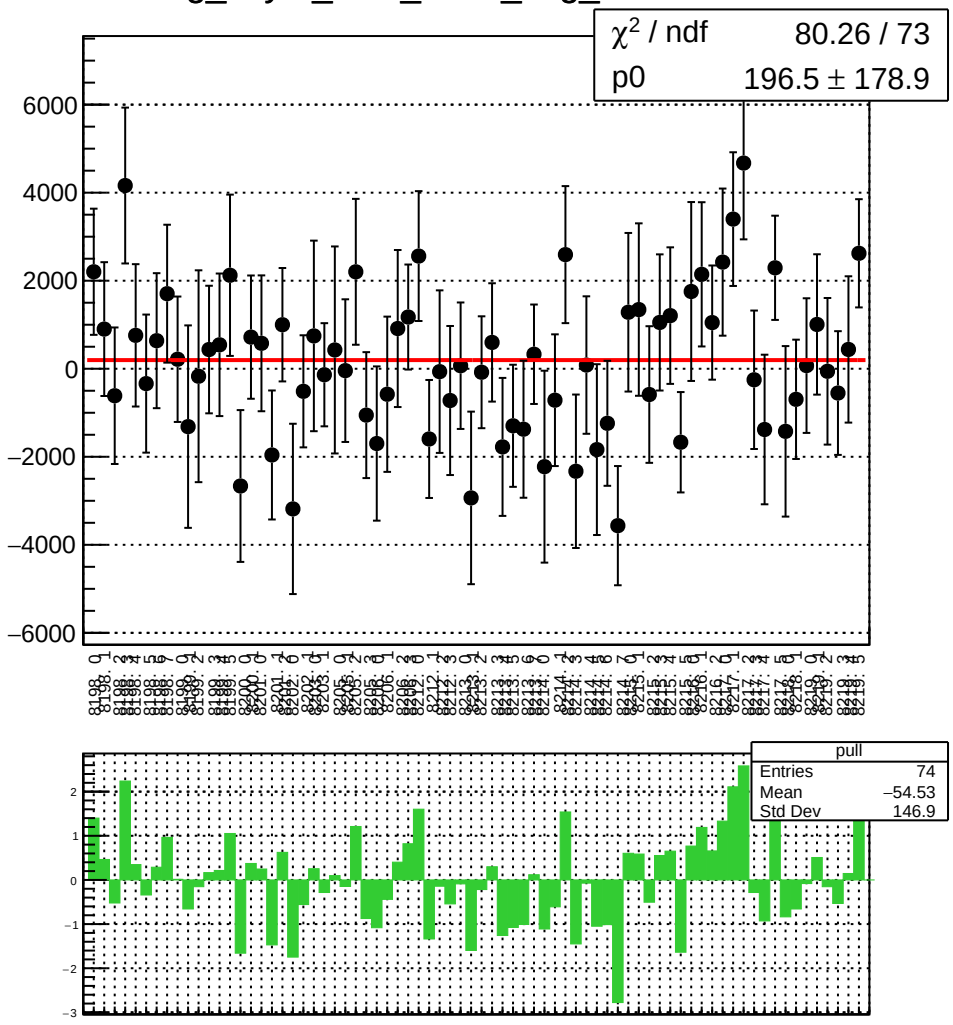

pull1D
Entries 74
Mean 0.002396
Std Dev 1.019

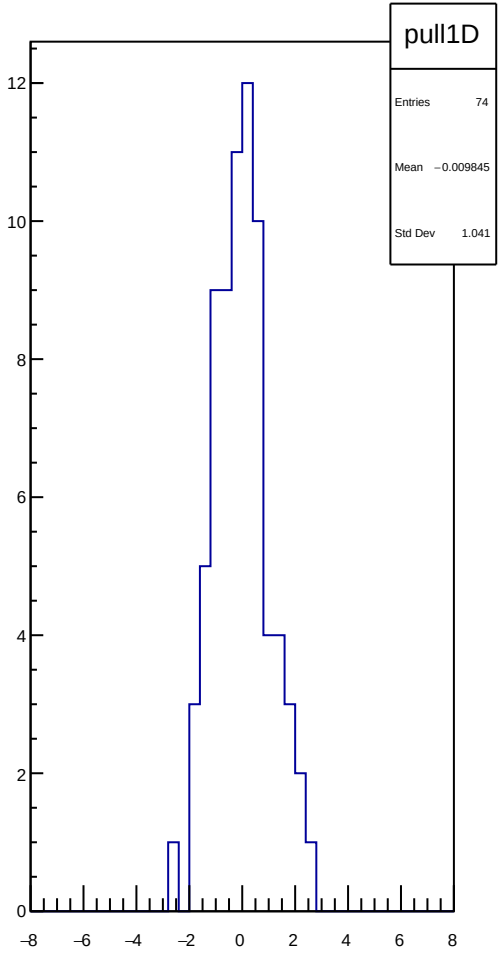

asym_sam_1526_avg_correction_rms vs run
χ² / ndf 2930 / 73
p0 842.4 ± 0.6878
960
940
920
900
880
860
840
820
800
780
760

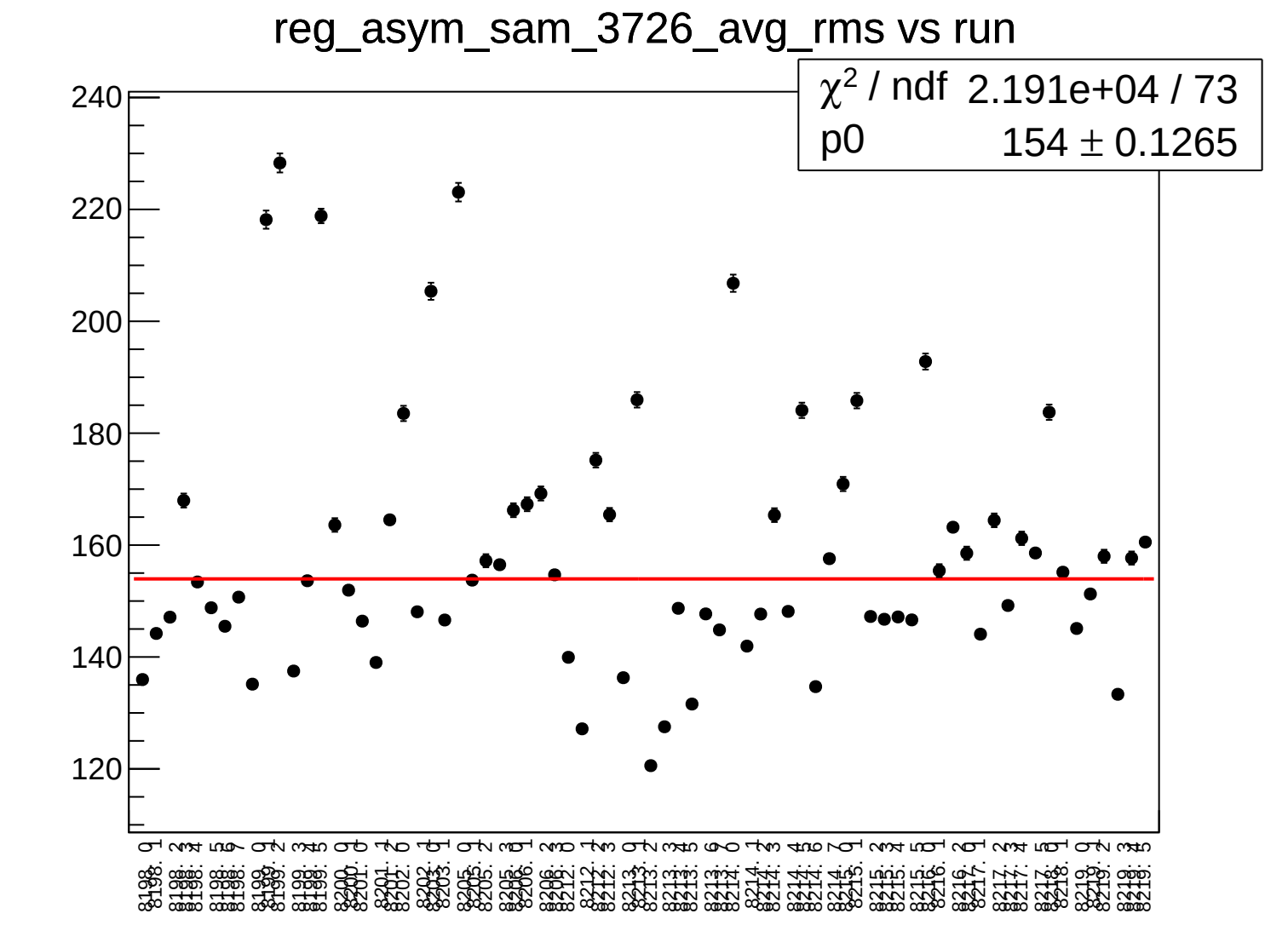

asym_sam_1526_avg_mean vs run
χ² / ndf 74.33 / 73
p0 1007 ± 979.9
30000
20000
10000
0
−10000
−20000
−30000
pull
Entries 74
Mean −521.3
Std Dev 572.1
2
1
0
−1
−2

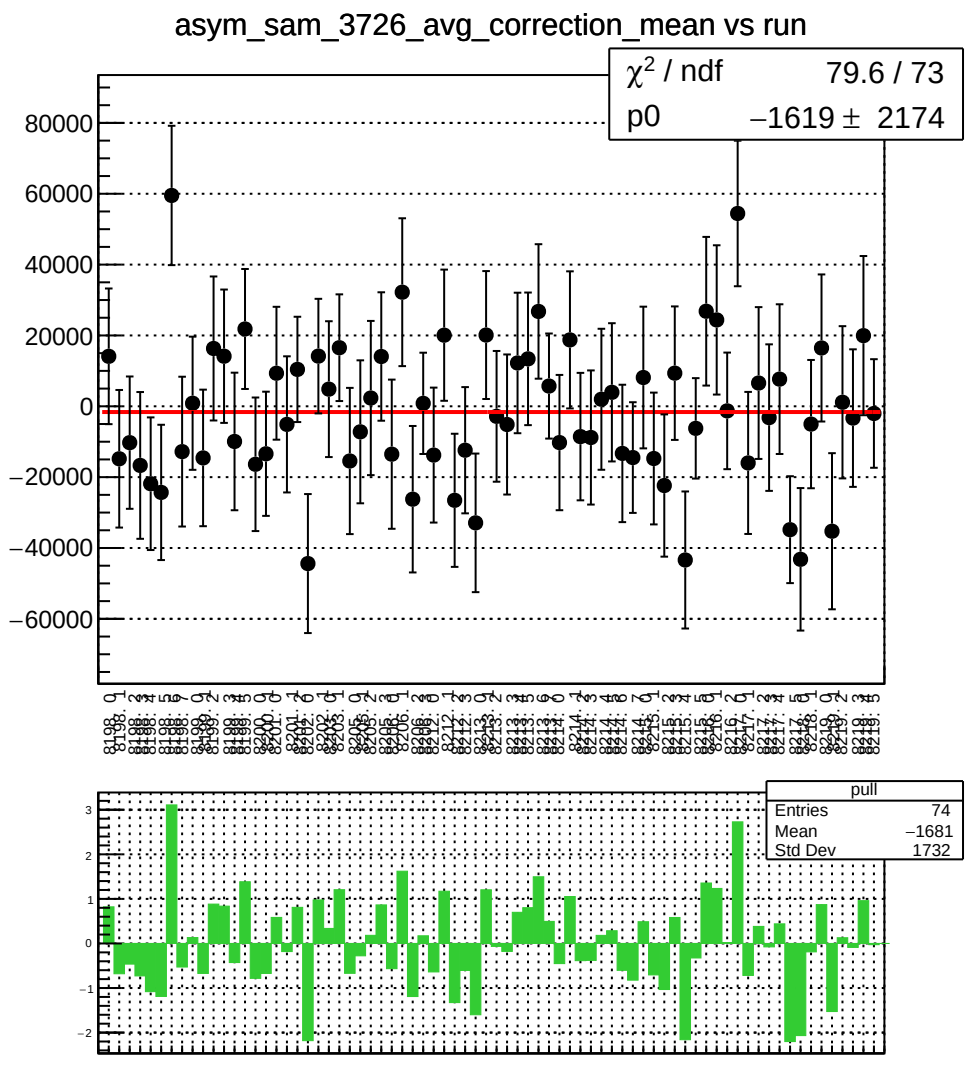

pull1D
Entries 74
Mean −0.002827
Std Dev 1.002
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

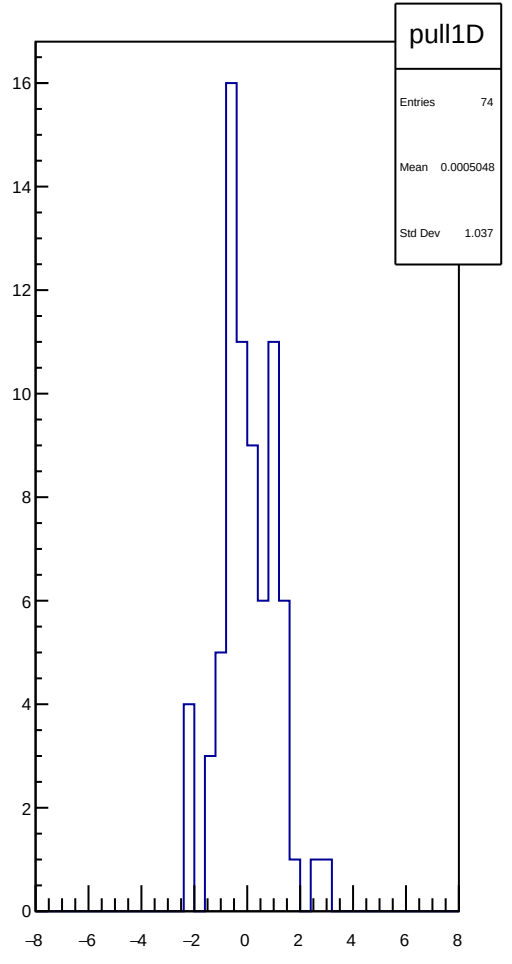

asym_sam_1526_avg_rms vs run
χ² / ndf 2865 / 73
p0 848.7 ± 0.6929
980
960
940
920
900
880
860
840
820
800
780
760

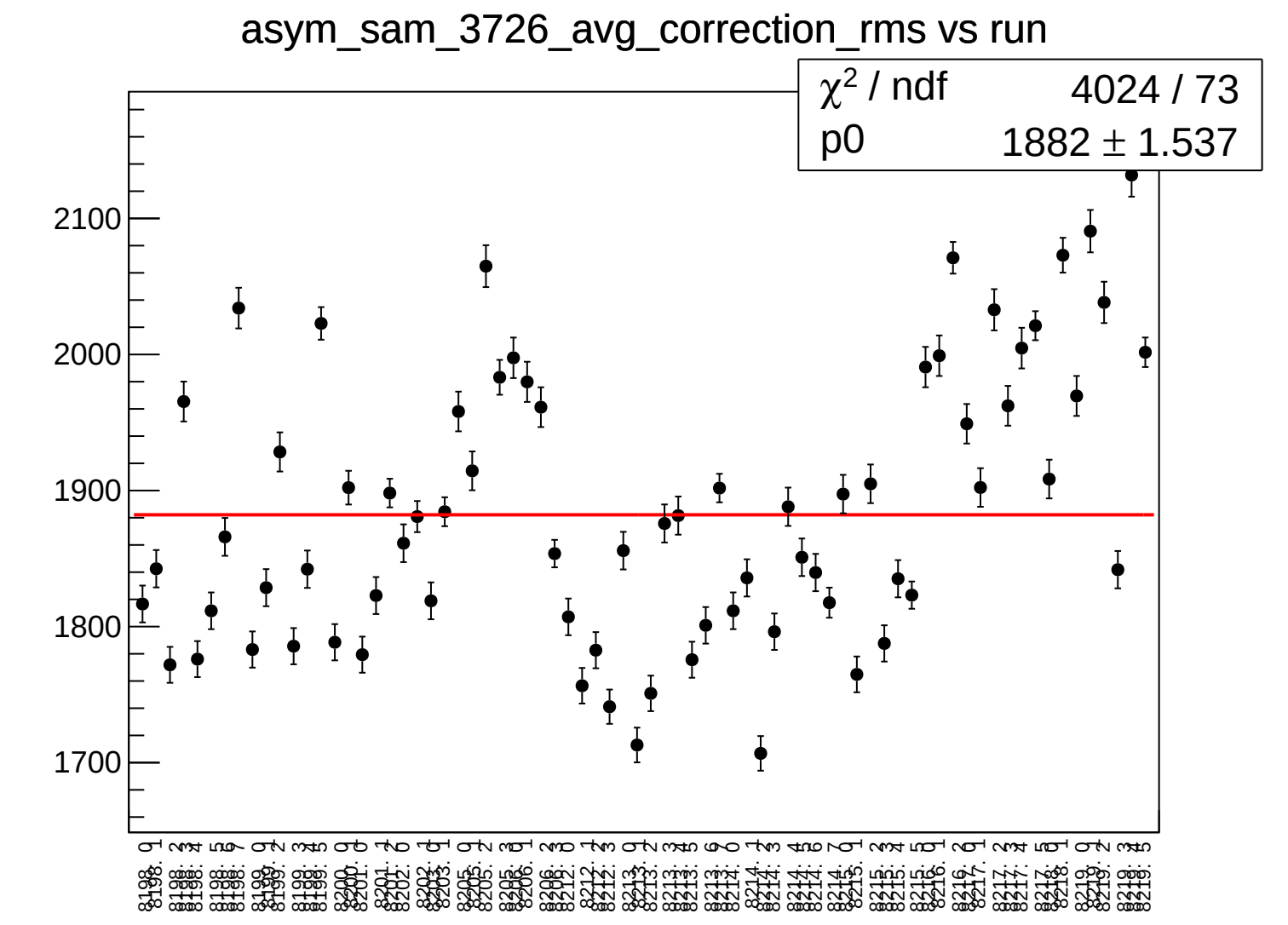

reg_asym_sam_3726_avg_mean vs run
χ² / ndf 80.26 / 73
p0 196.5 ± 178.9
pull
Entries 74
Mean −54.53
Std Dev 146.9

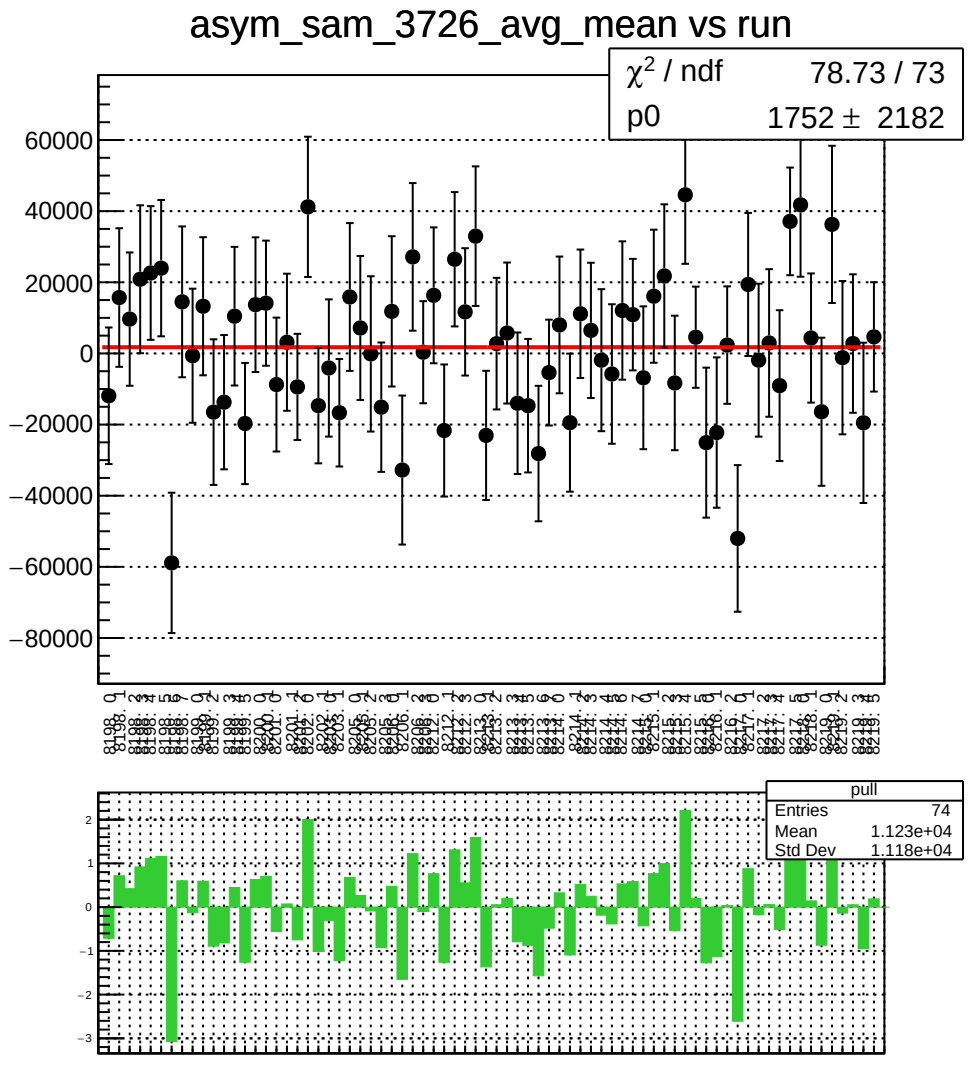

pull1D
Entries 74
Mean −0.009845
Std Dev 1.041

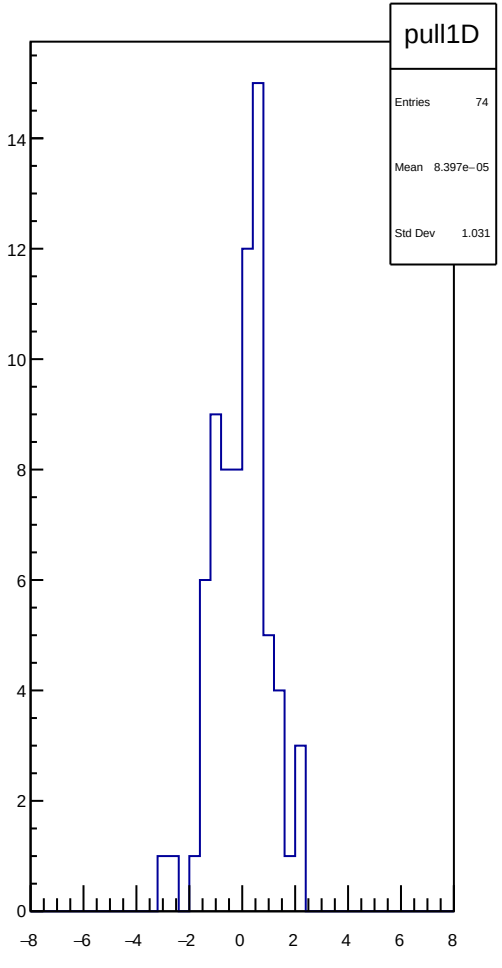

reg_asym_sam_3726_avg_rms vs run
χ² / ndf 2.191e+04 / 73
p0 154 ± 0.1265
240
220
200
180
160
140
120

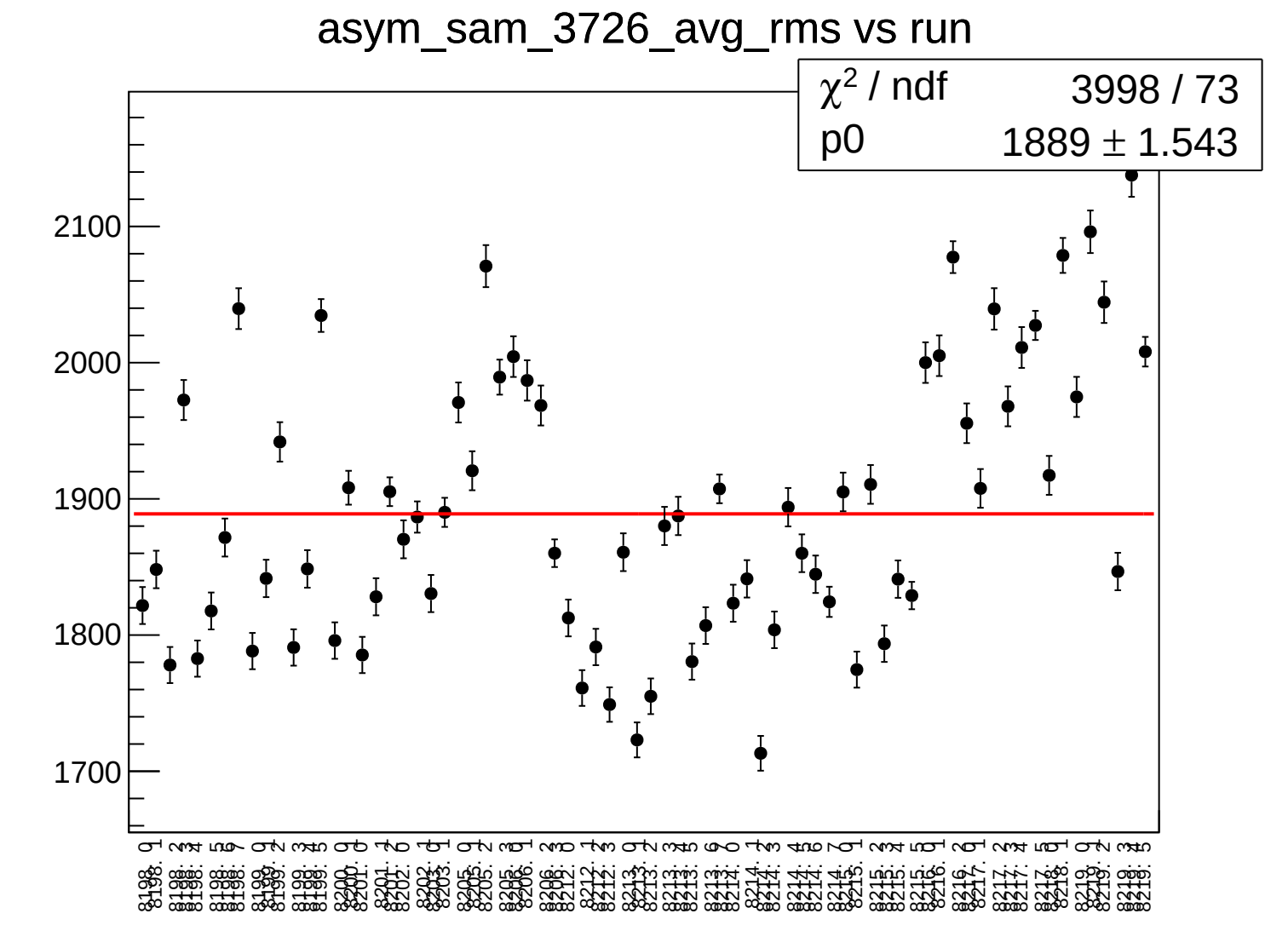

asym_sam_3726_avg_correction_mean vs run
χ² / ndf 79.6 / 73
p0 −1619 ± 2174
80000
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 74
Mean −1681
Std Dev 1732
3
2
1
0
−1
−2

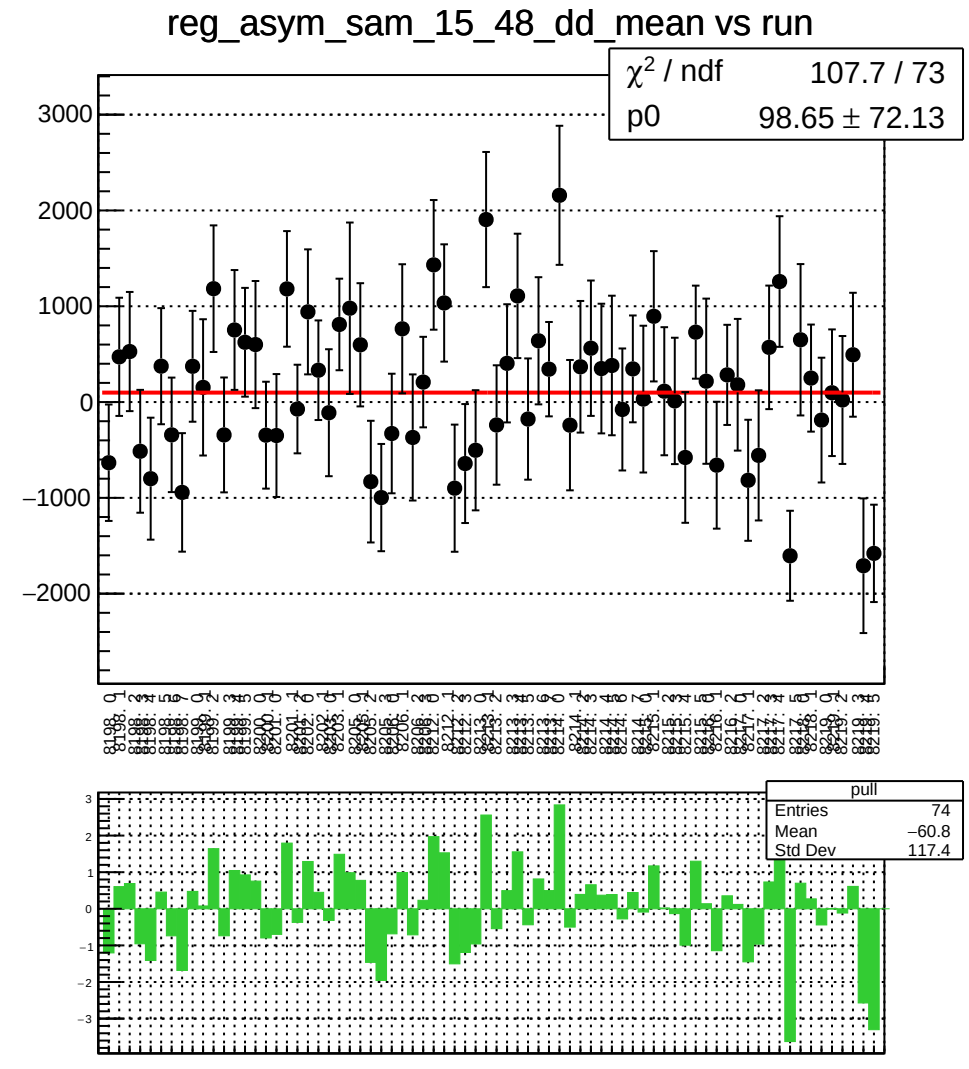

pull1D
Entries 74
Mean 0.0005048
Std Dev 1.037
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

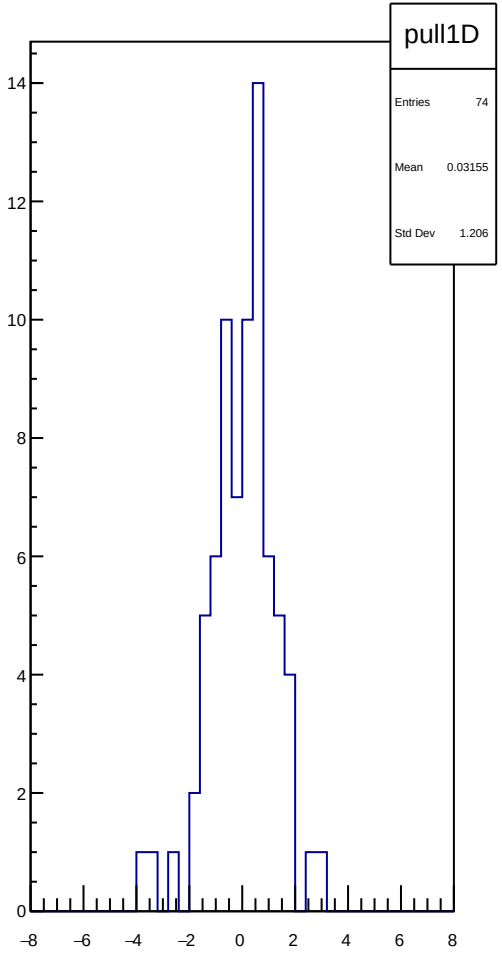

asym_sam_3726_avg_correction_rms vs run
χ² / ndf 4024 / 73
p0 1882 ± 1.537
2100
2000
1900
1800
1700

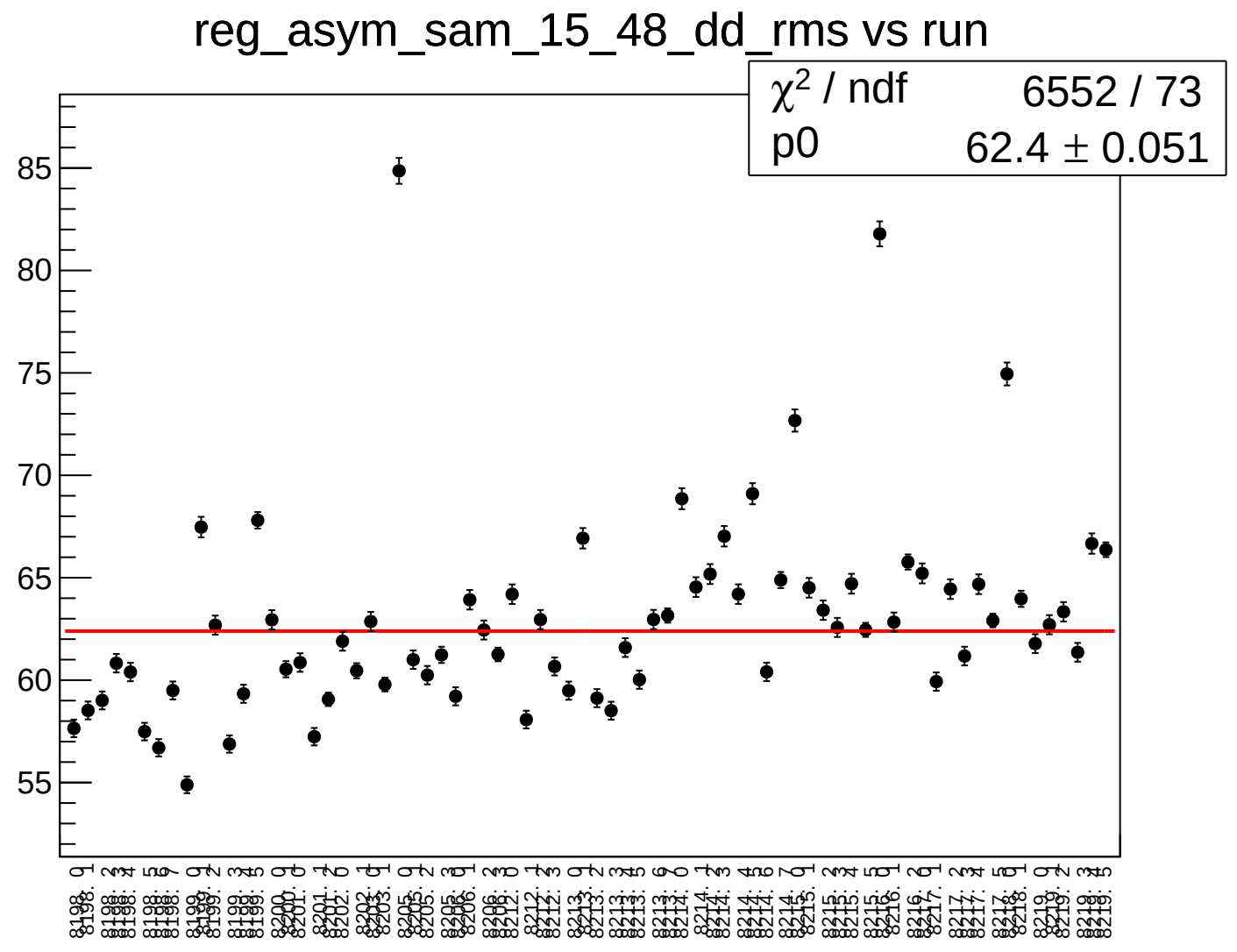

asym_sam_3726_avg_mean vs run
χ² / ndf 78.73 / 73
p0 1752 ± 2182
pull
Entries 74
Mean 1.123e+04
Std Dev 1.118e+04

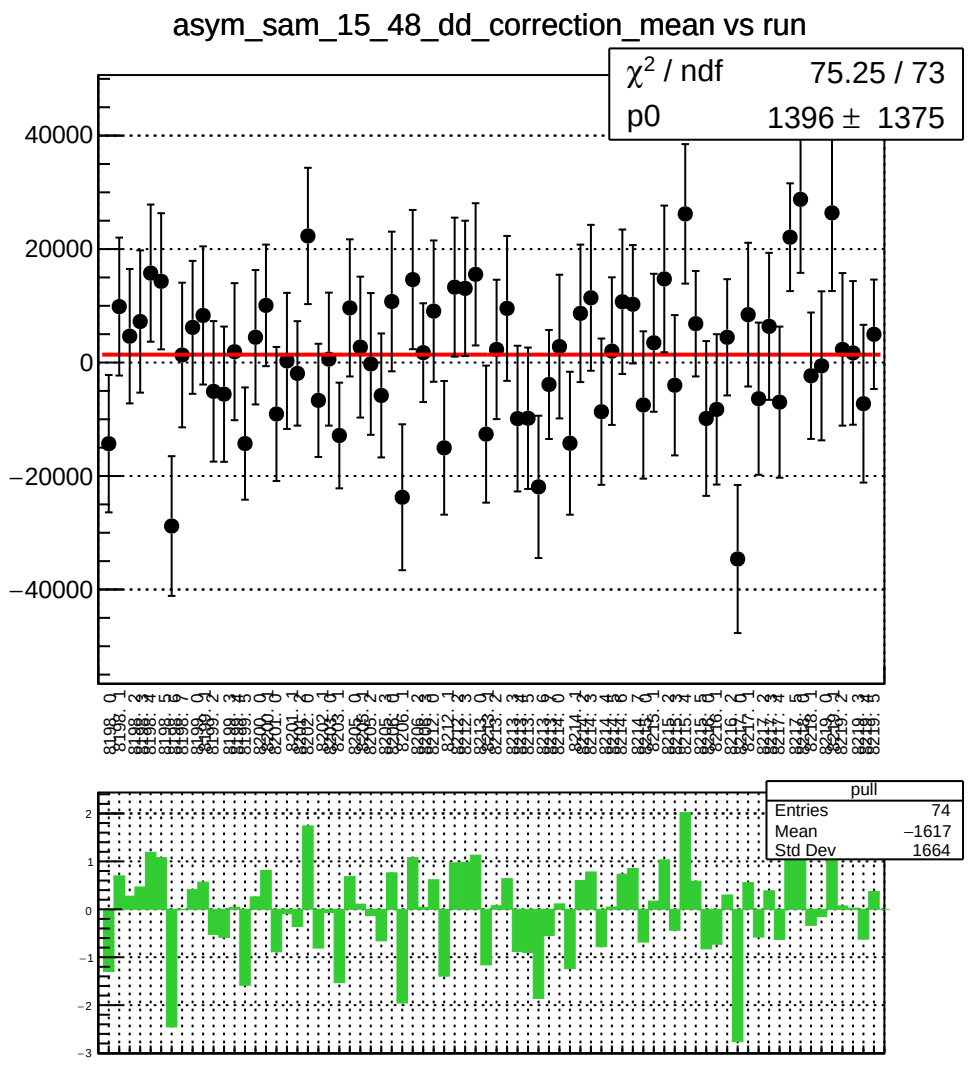

pull1D
Entries 74
Mean 8.397e−05
Std Dev 1.031

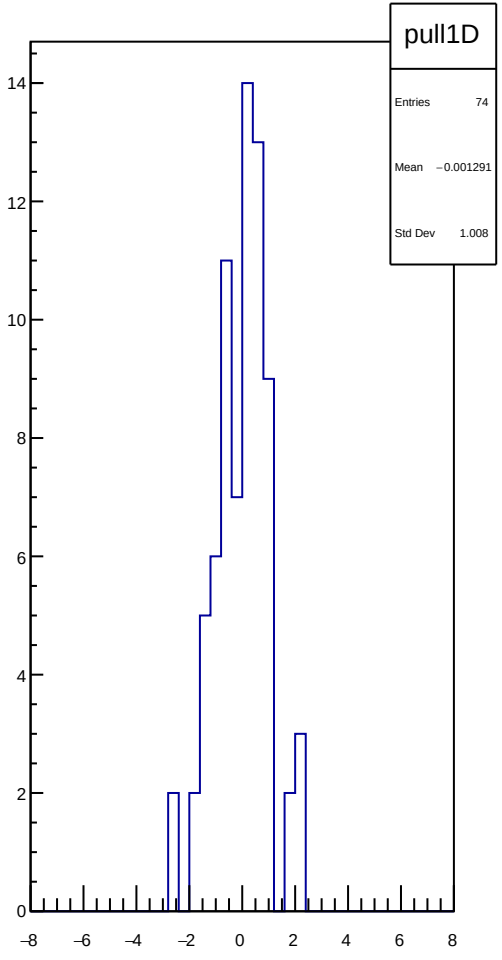

asym_sam_3726_avg_rms vs run
χ^2 / ndf 3998 / 73
p0 1889 ± 1.543
2100
2000
1900
1800
1700

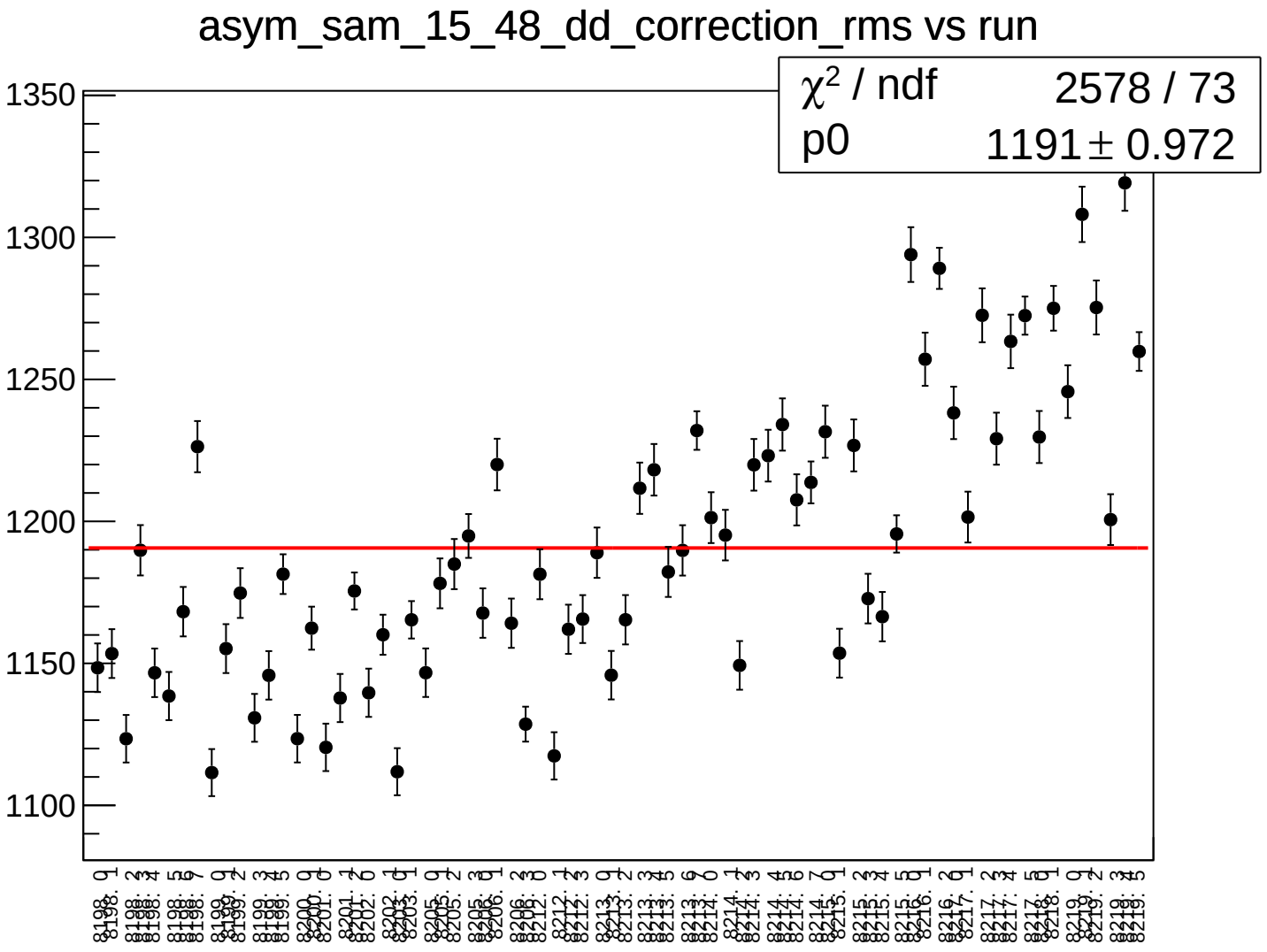

reg_asym_sam_15_48_dd_mean vs run
χ² / ndf 107.7 / 73
p0 98.65 ± 72.13
pull
Entries 74
Mean −60.8
Std Dev 117.4

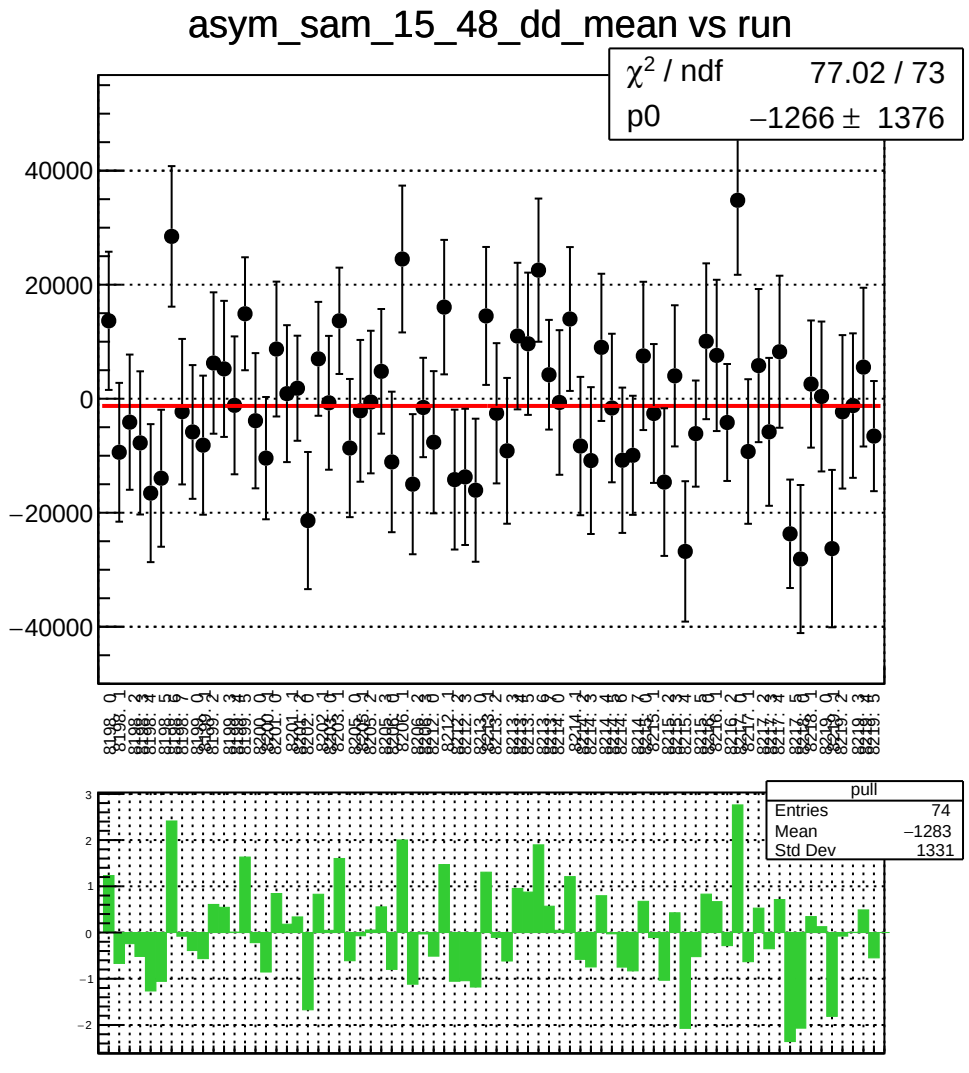

pull1D
Entries 74
Mean 0.03155
Std Dev 1.206

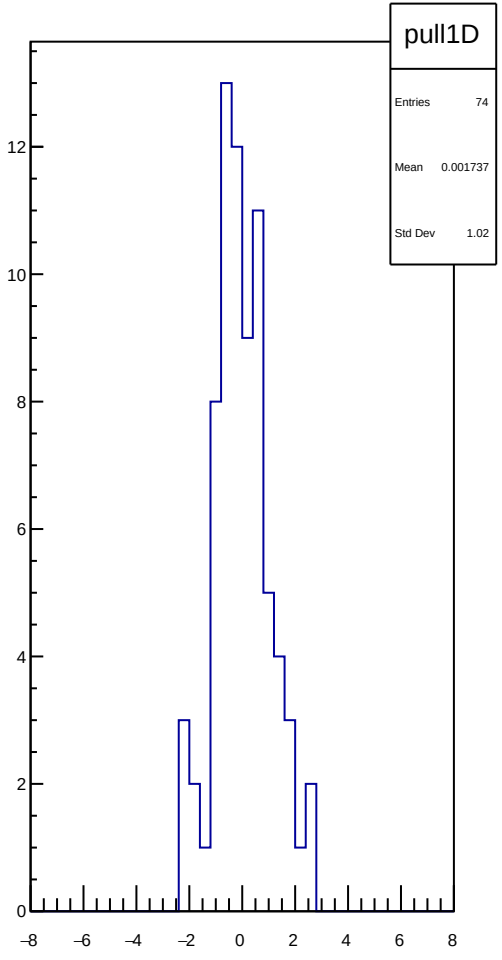

reg_asym_sam_15_48_dd_rms vs run
χ² / ndf 6552 / 73
p0 62.4 ± 0.051
85
80
75
70
65
60
55

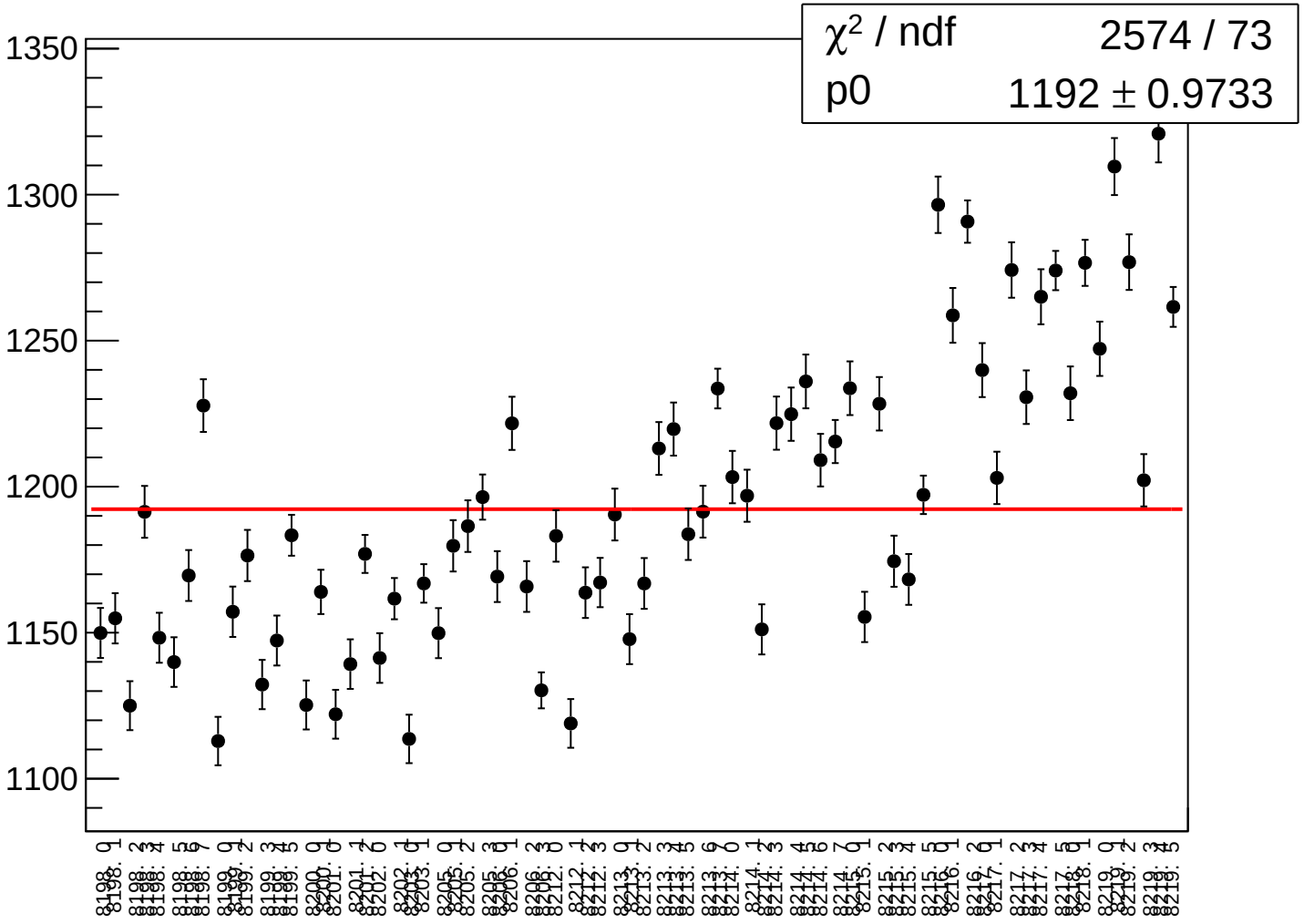

asym_sam_15_48_dd_correction_mean vs run
χ² / ndf 75.25 / 73
p0 1396 ± 1375
40000
20000
0
−20000
−40000
pull
Entries 74
Mean −1617
Std Dev 1664
2
1
0
−1
−2
−3

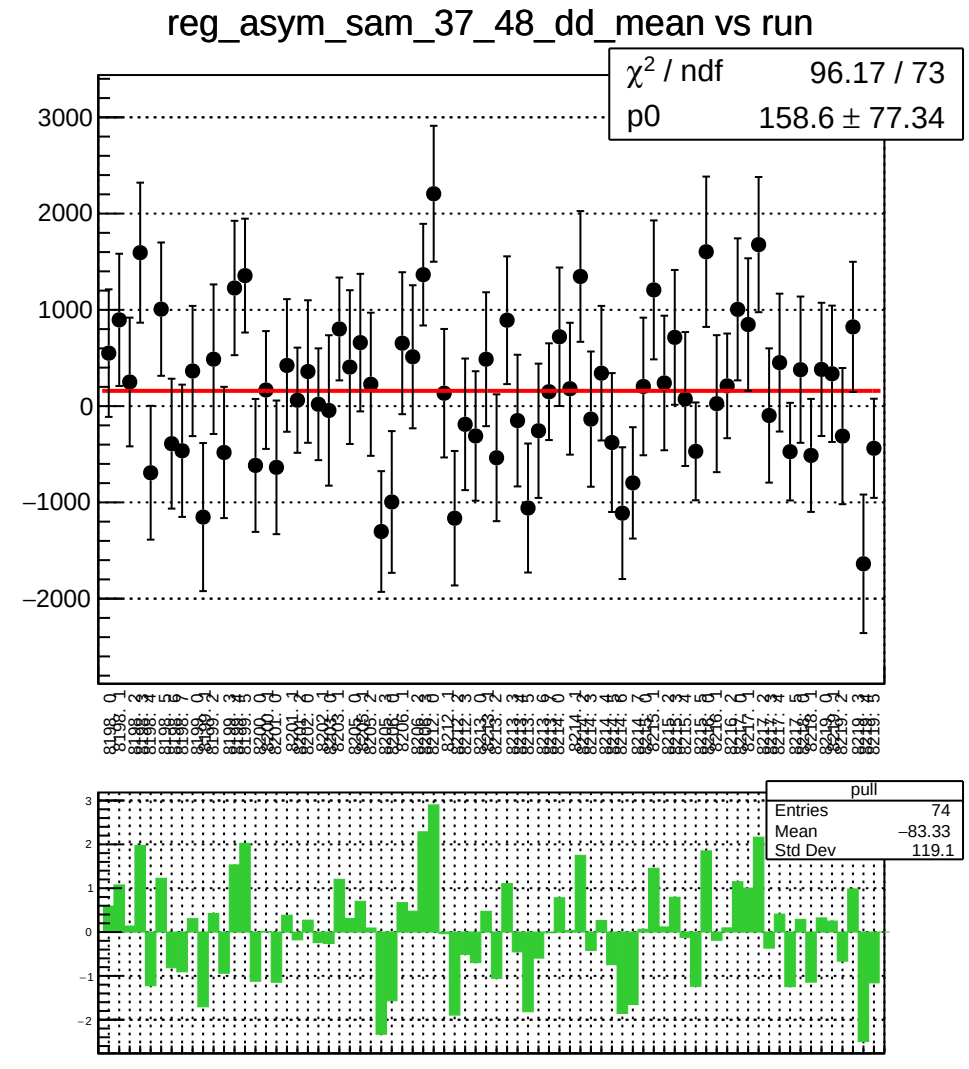

pull1D
Entries 74
Mean −0.001291
Std Dev 1.008
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

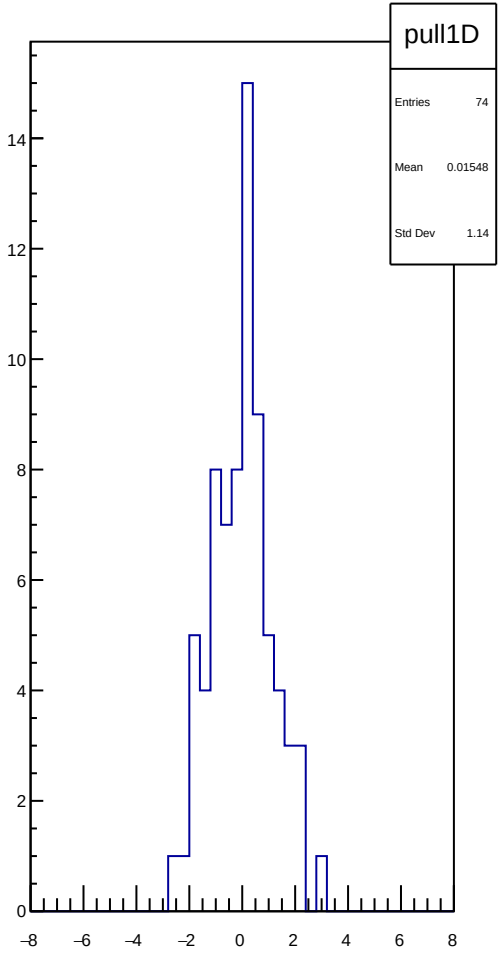

asym_sam_15_48_dd_correction_rms vs run
χ² / ndf 2578 / 73
p0 1191 ± 0.972
1350
1300
1250
1200
1150
1100

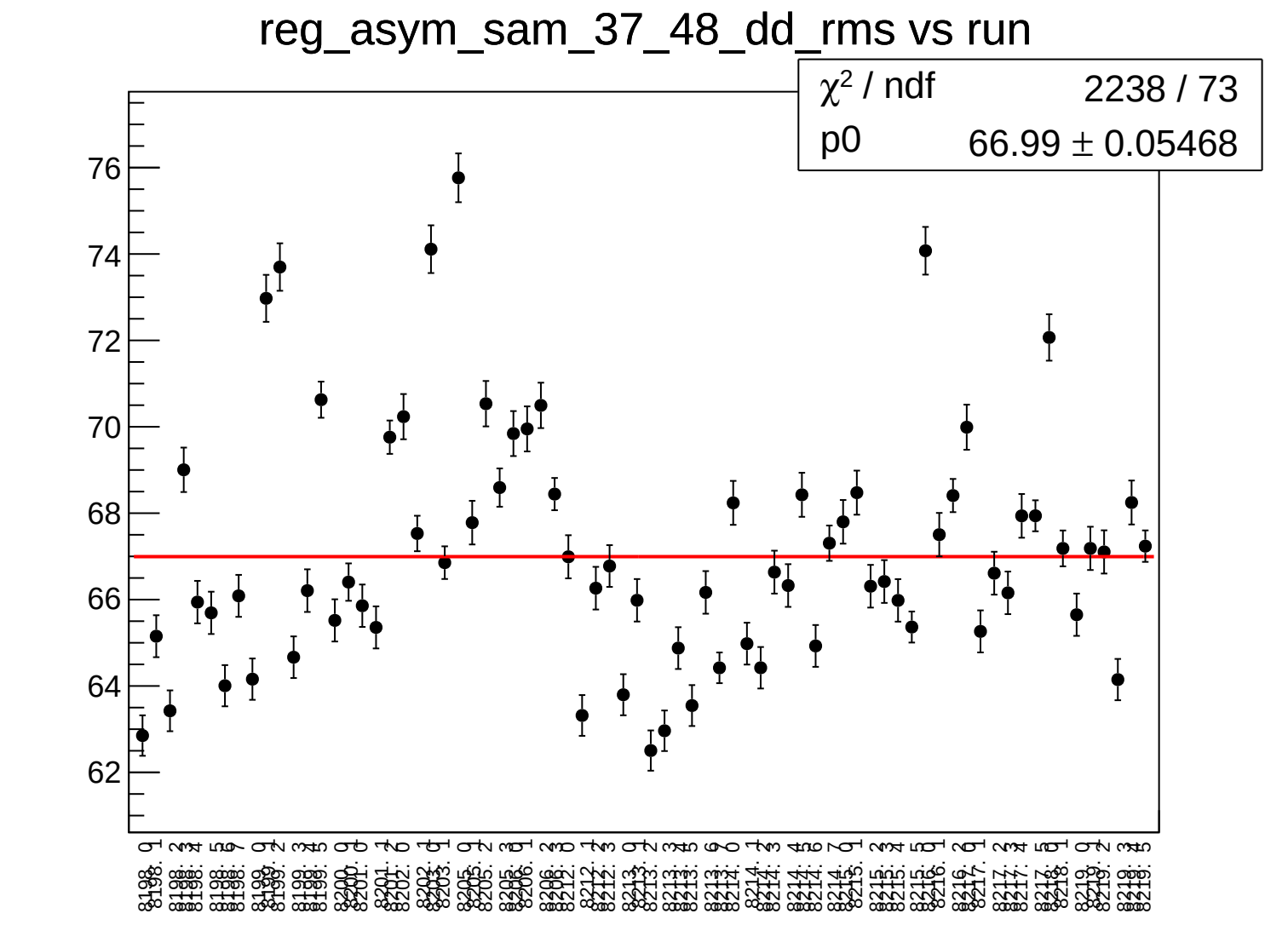

asym_sam_15_48_dd_mean vs run
χ² / ndf 77.02 / 73
p0 −1266 ± 1376
40000
20000
0
−20000
−40000
pull
Entries 74
Mean −1283
Std Dev 1331
3
2
1
0
−1
−2

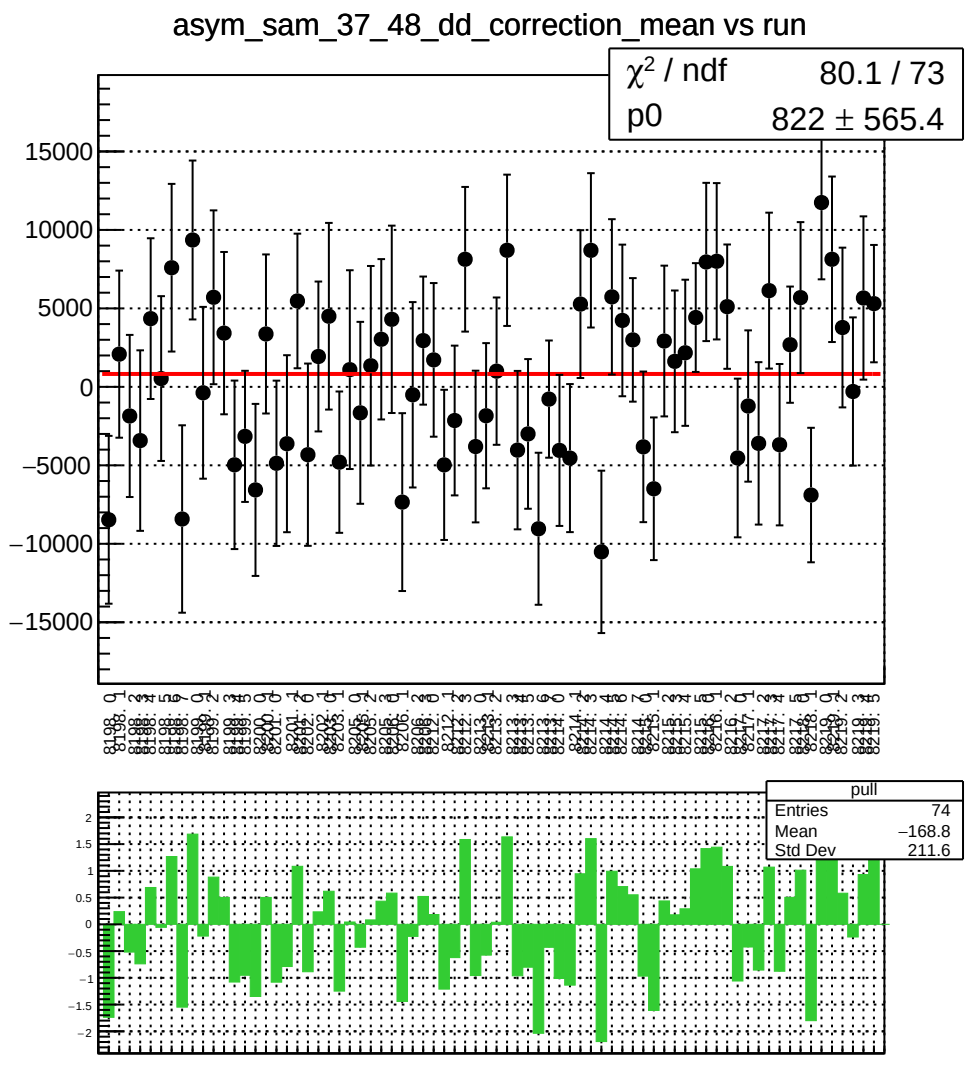

pull1D
Entries 74
Mean 0.001737
Std Dev 1.02
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

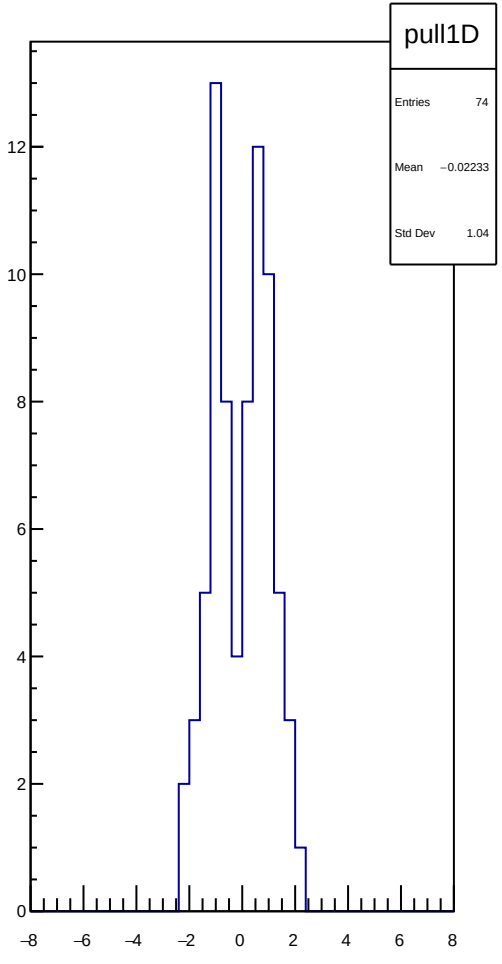

asym_sam_15_48_dd_rms vs run
χ² / ndf 2574 / 73
p0 1192 ± 0.9733
1350
1300
1250
1200
1150
1100

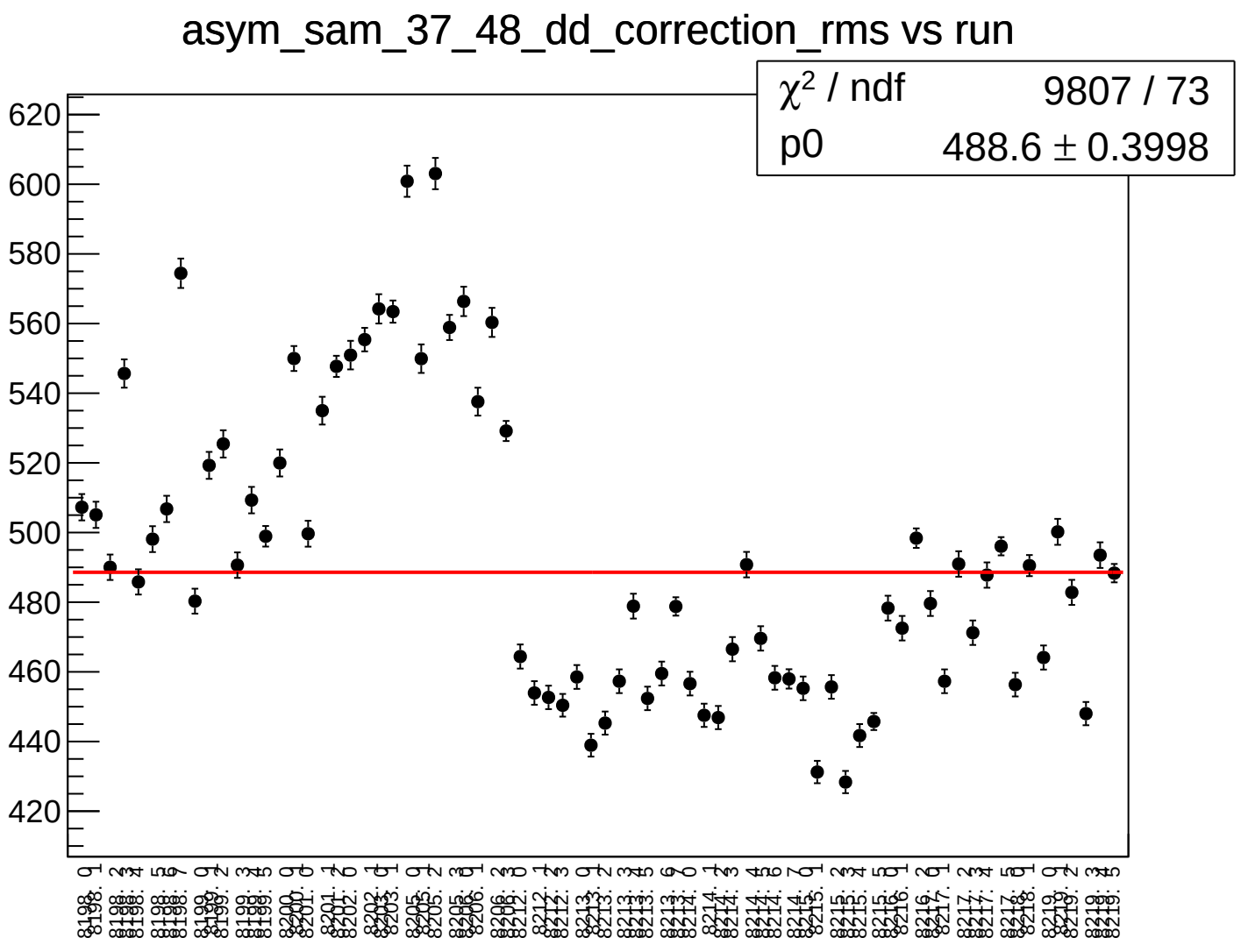

reg_asym_sam_37_48_dd_mean vs run
χ² / ndf 96.17 / 73
p0 158.6 ± 77.34
pull
Entries 74
Mean −83.33
Std Dev 119.1

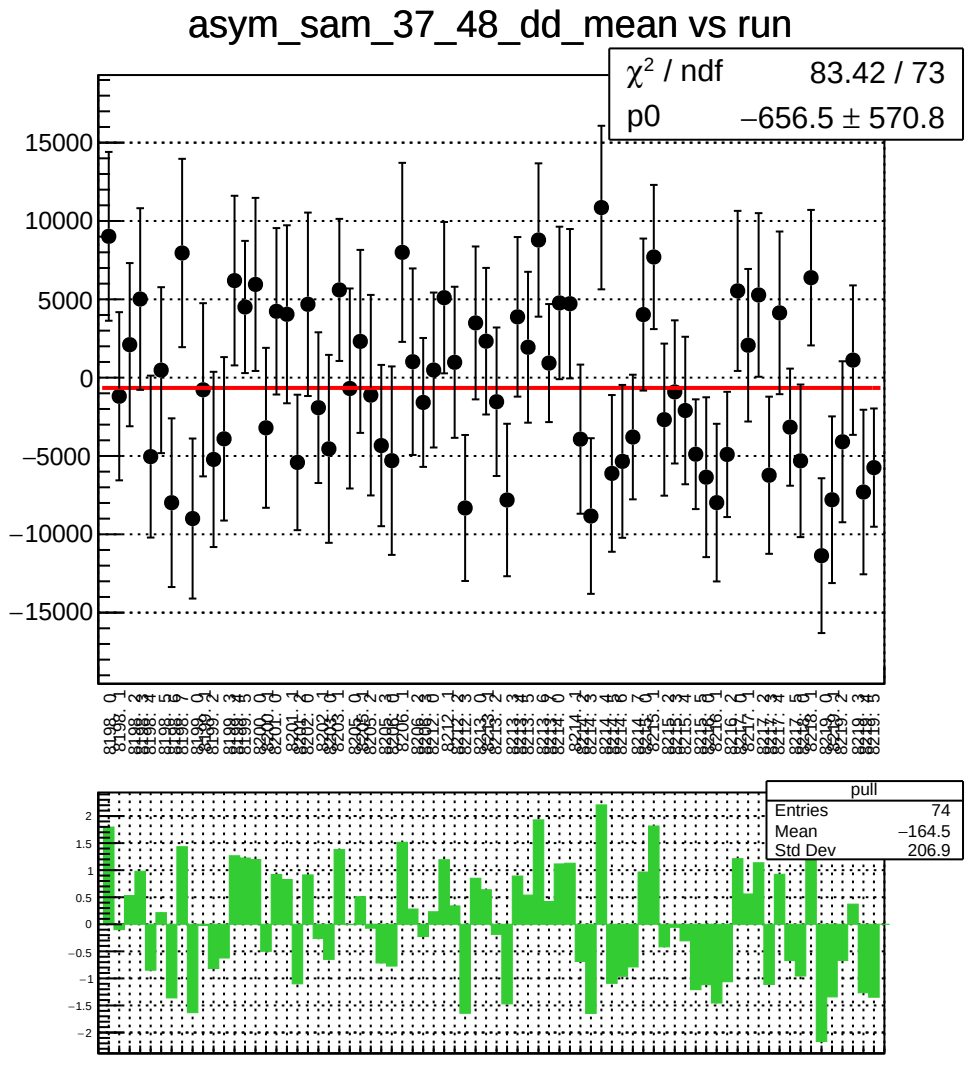

pull1D
Entries 74
Mean 0.01548
Std Dev 1.14

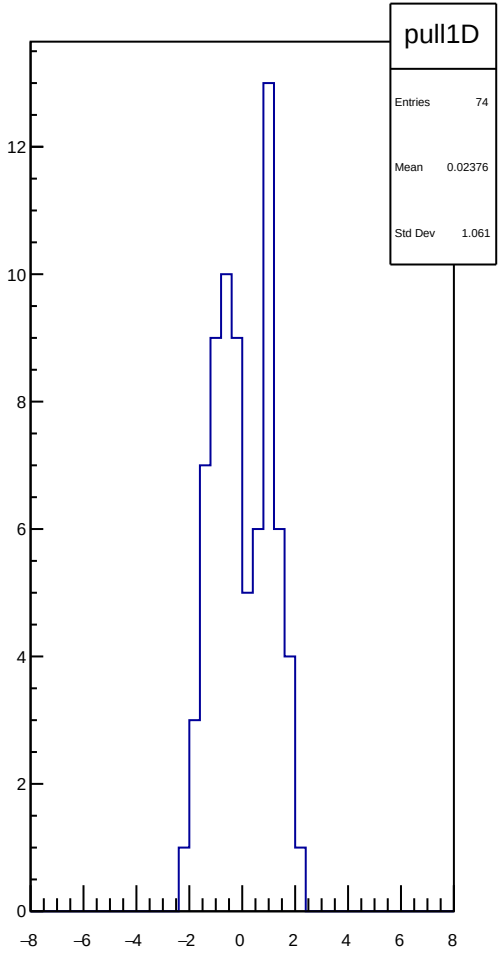

reg_asym_sam_37_48_dd_rms vs run
χ² / ndf 2238 / 73
p0 66.99 ± 0.05468
76
74
72
70
68
66
64
62

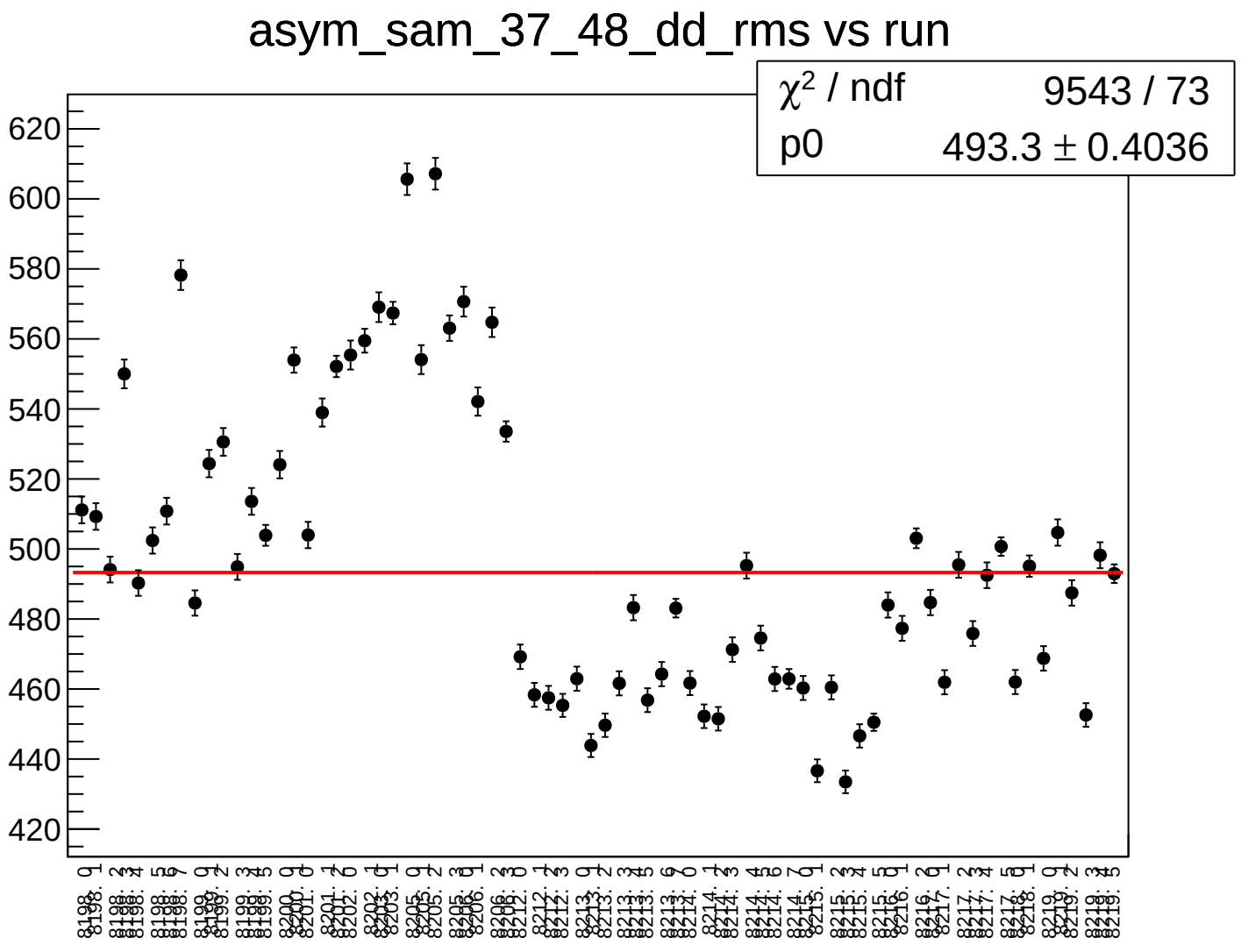

asym_sam_37_48_dd_correction_mean vs run
χ² / ndf 80.1 / 73
p0 822 ± 565.4
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 74
Mean −168.8
Std Dev 211.6
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

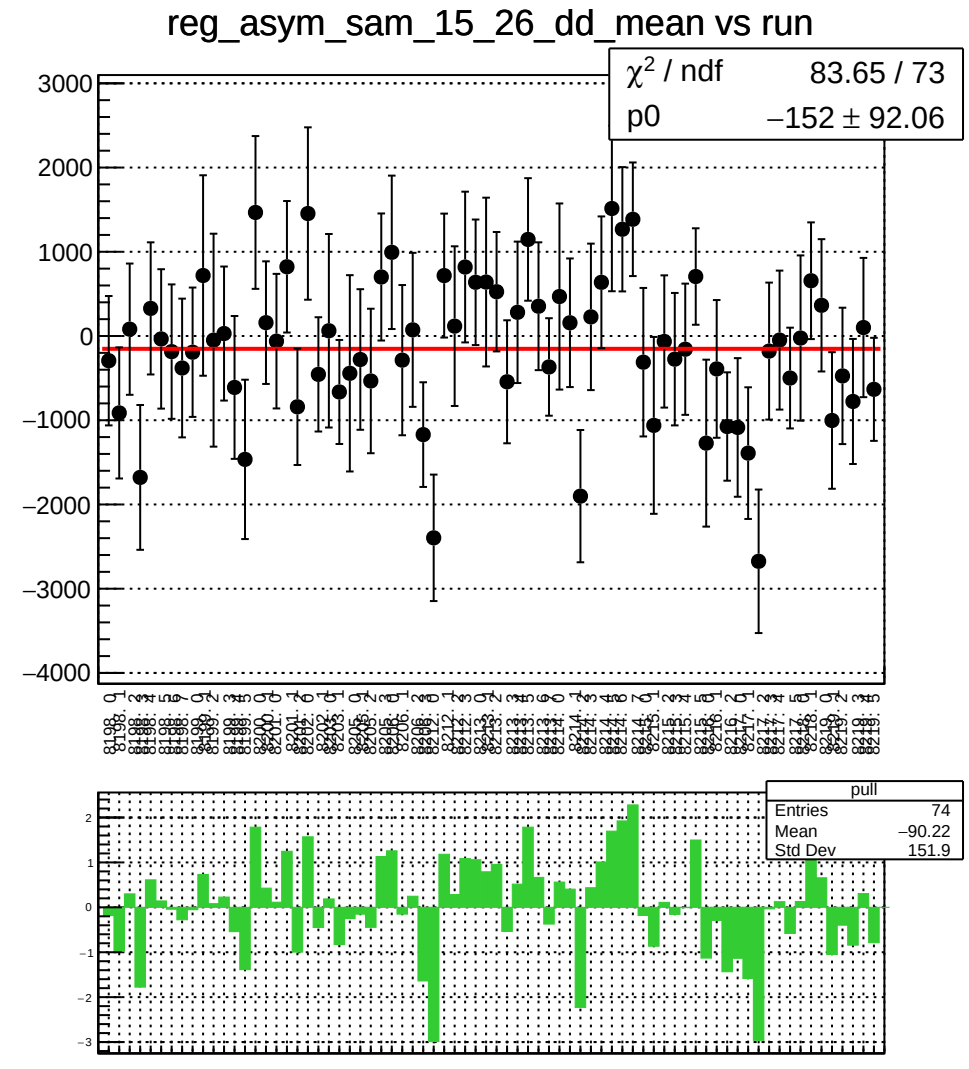

pull1D
Entries 74
Mean −0.02233
Std Dev 1.04
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

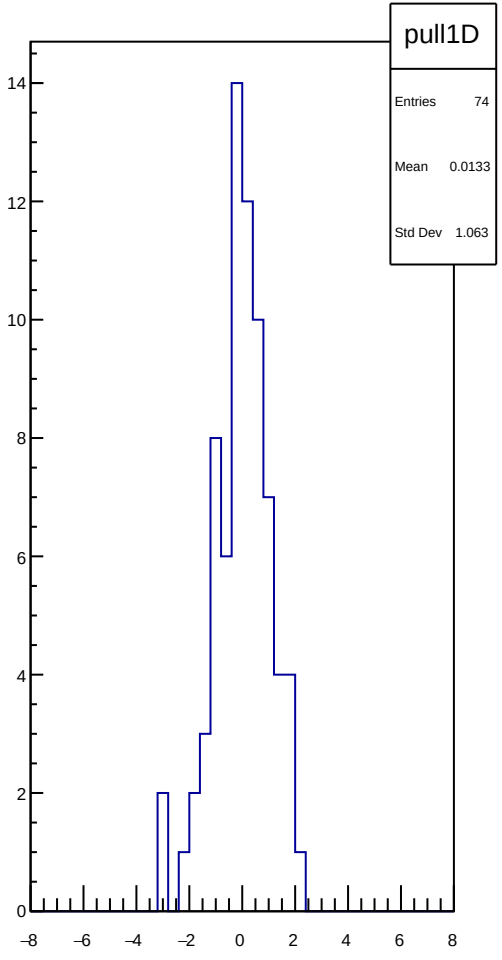

asym_sam_37_48_dd_correction_rms vs run
χ² / ndf 9807 / 73
p0 488.6 ± 0.3998
620
600
580
560
540
520
500
480
460
440
420

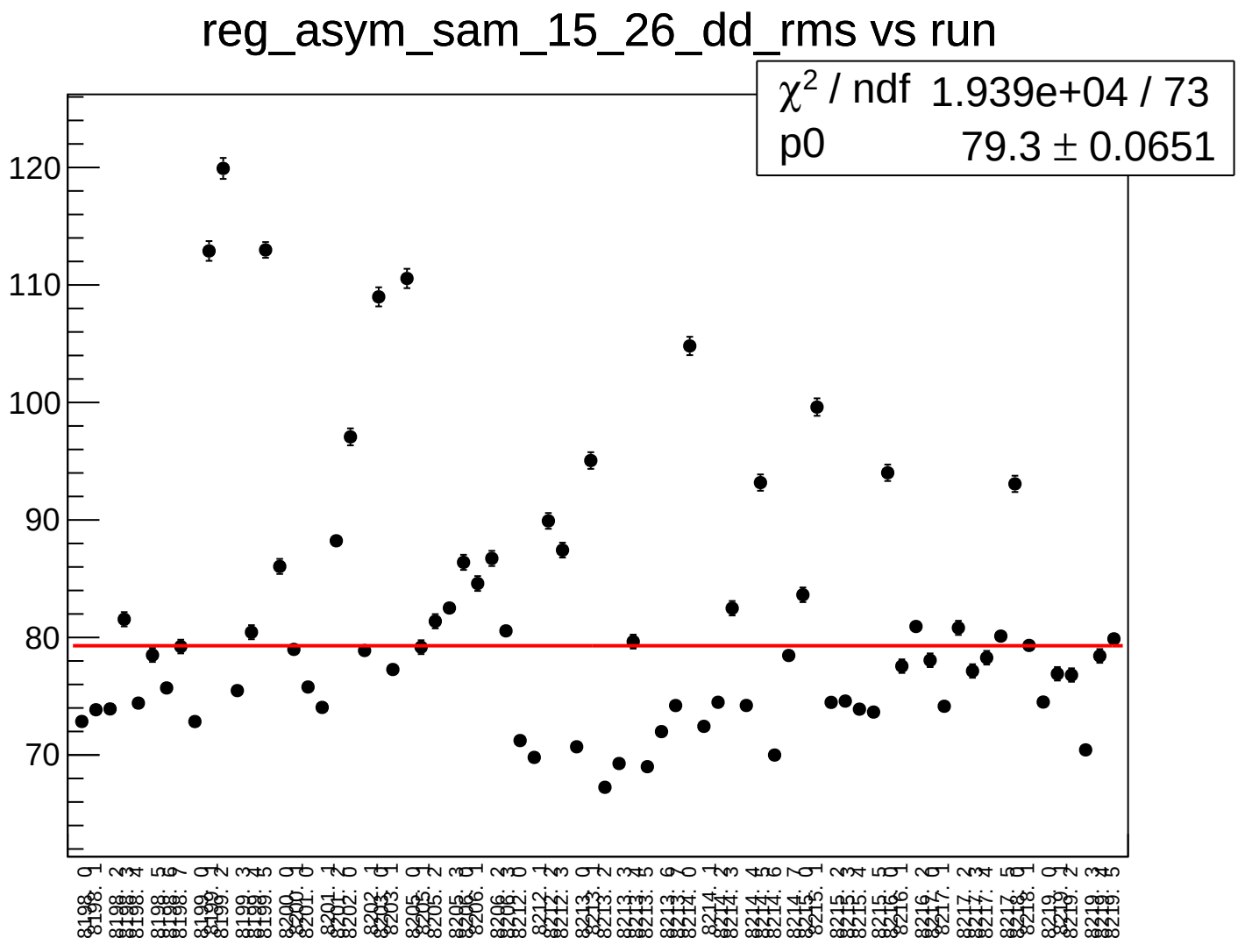

asym_sam_37_48_dd_mean vs run
χ² / ndf 83.42 / 73
p0 −656.5 ± 570.8
15000
10000
5000
0
−5000
−10000
−15000
pull
Entries 74
Mean −164.5
Std Dev 206.9
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

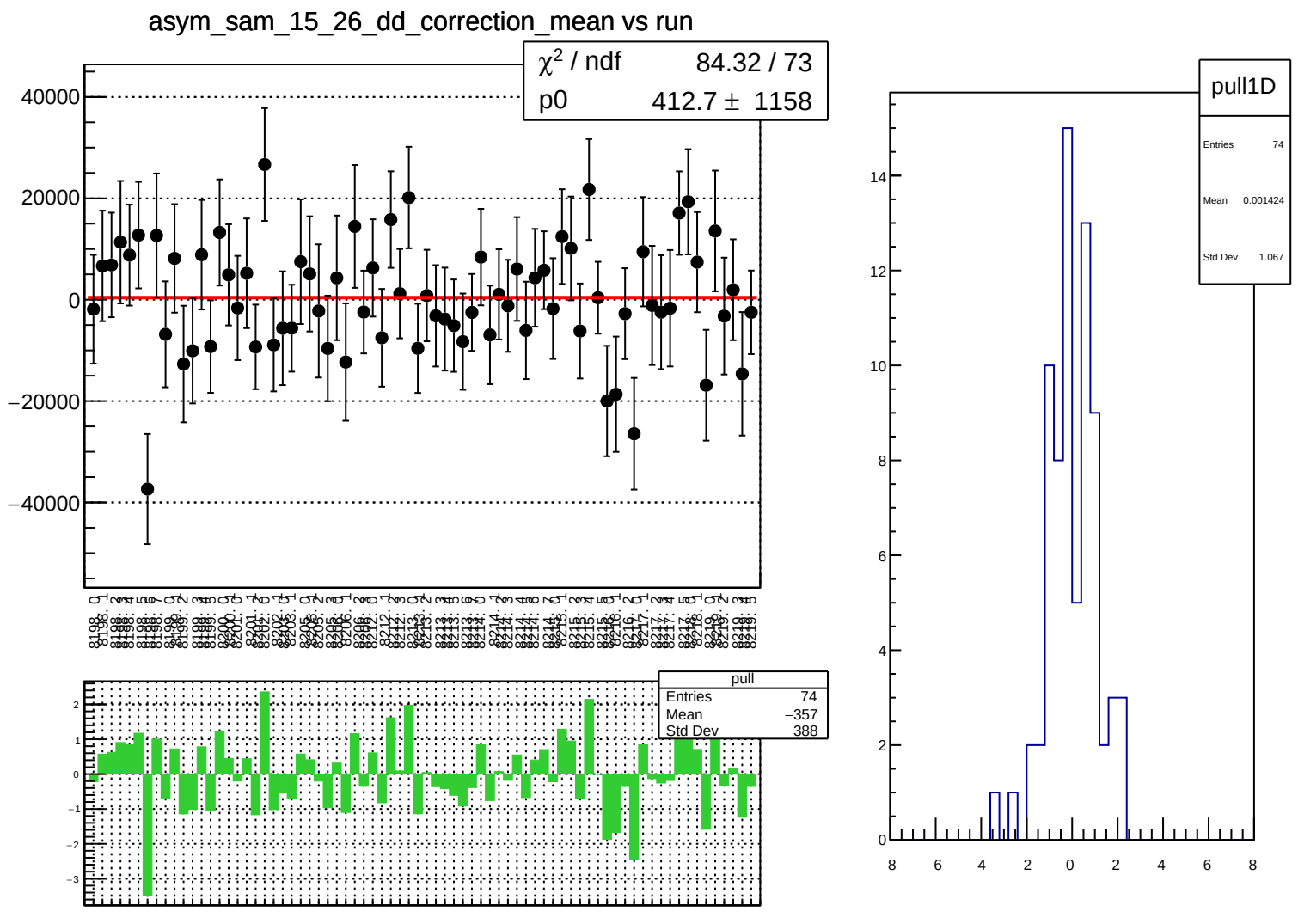

pull1D
Entries 74
Mean 0.02376
Std Dev 1.061
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

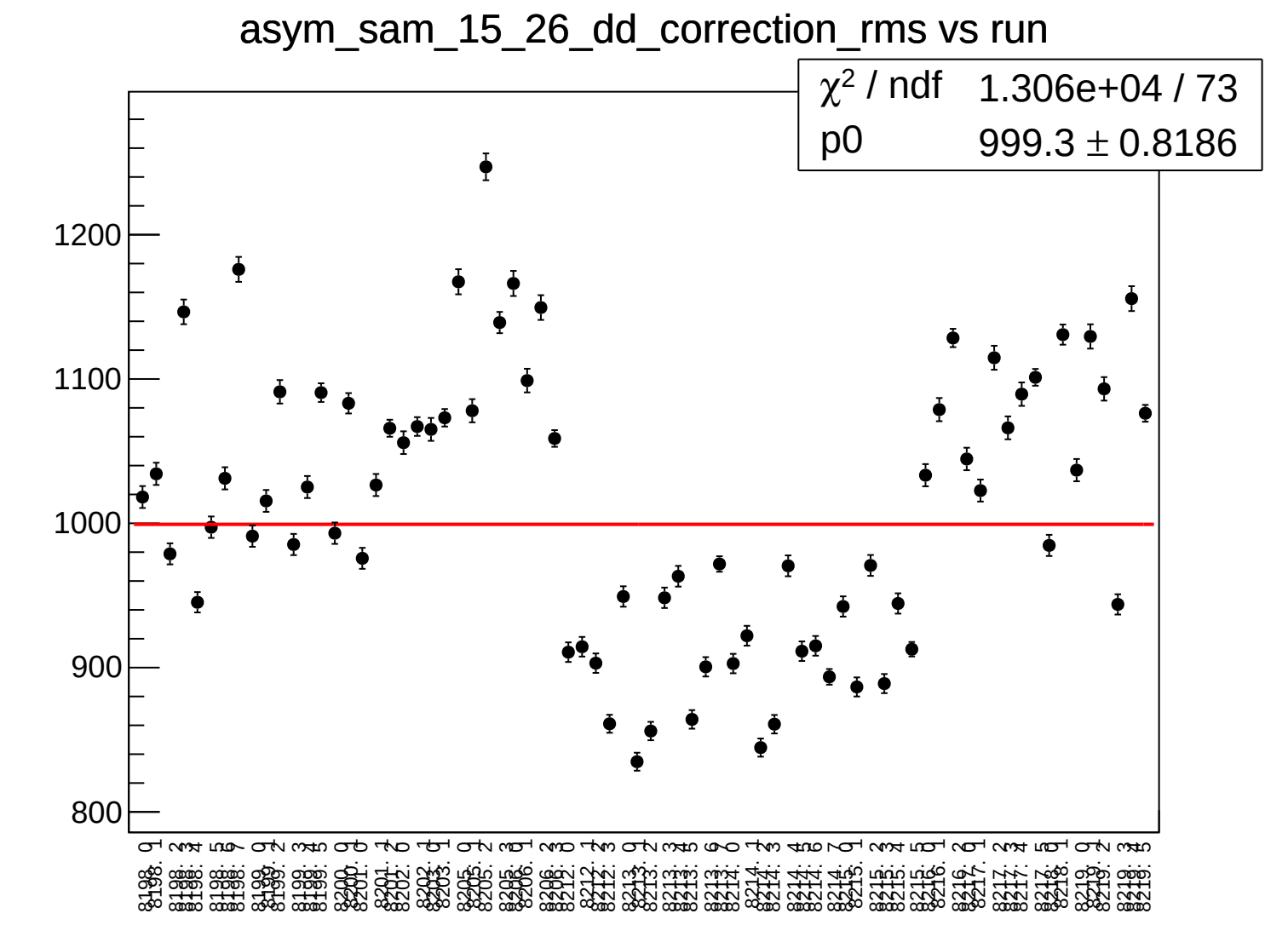

asym_sam_37_48_dd_rms vs run
χ² / ndf 9543 / 73
p0 493.3 ± 0.4036
620
600
580
560
540
520
500
480
460
440
420

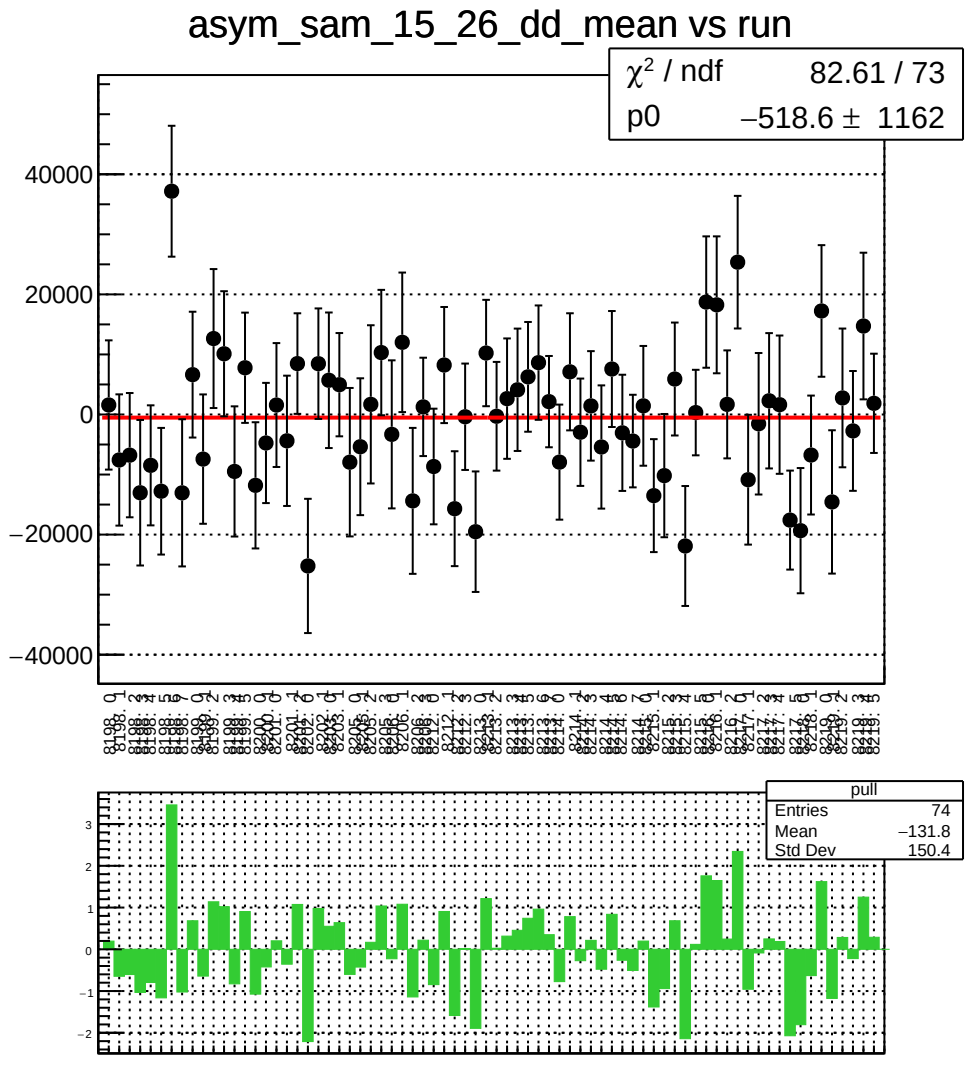

reg_asym_sam_15_26_dd_mean vs run
χ² / ndf 83.65 / 73
p0 −152 ± 92.06
pull
Entries 74
Mean −90.22
Std Dev 151.9

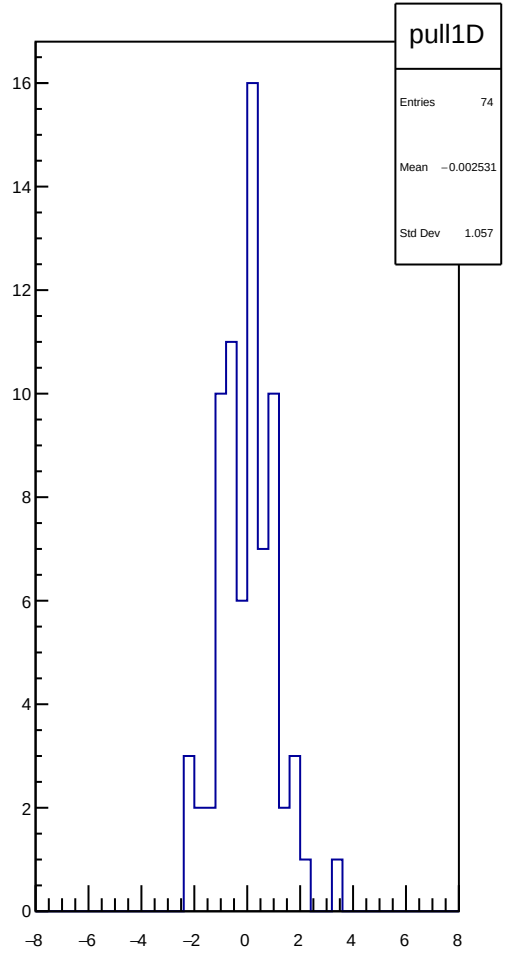

pull1D
Entries 74
Mean 0.0133
Std Dev 1.063

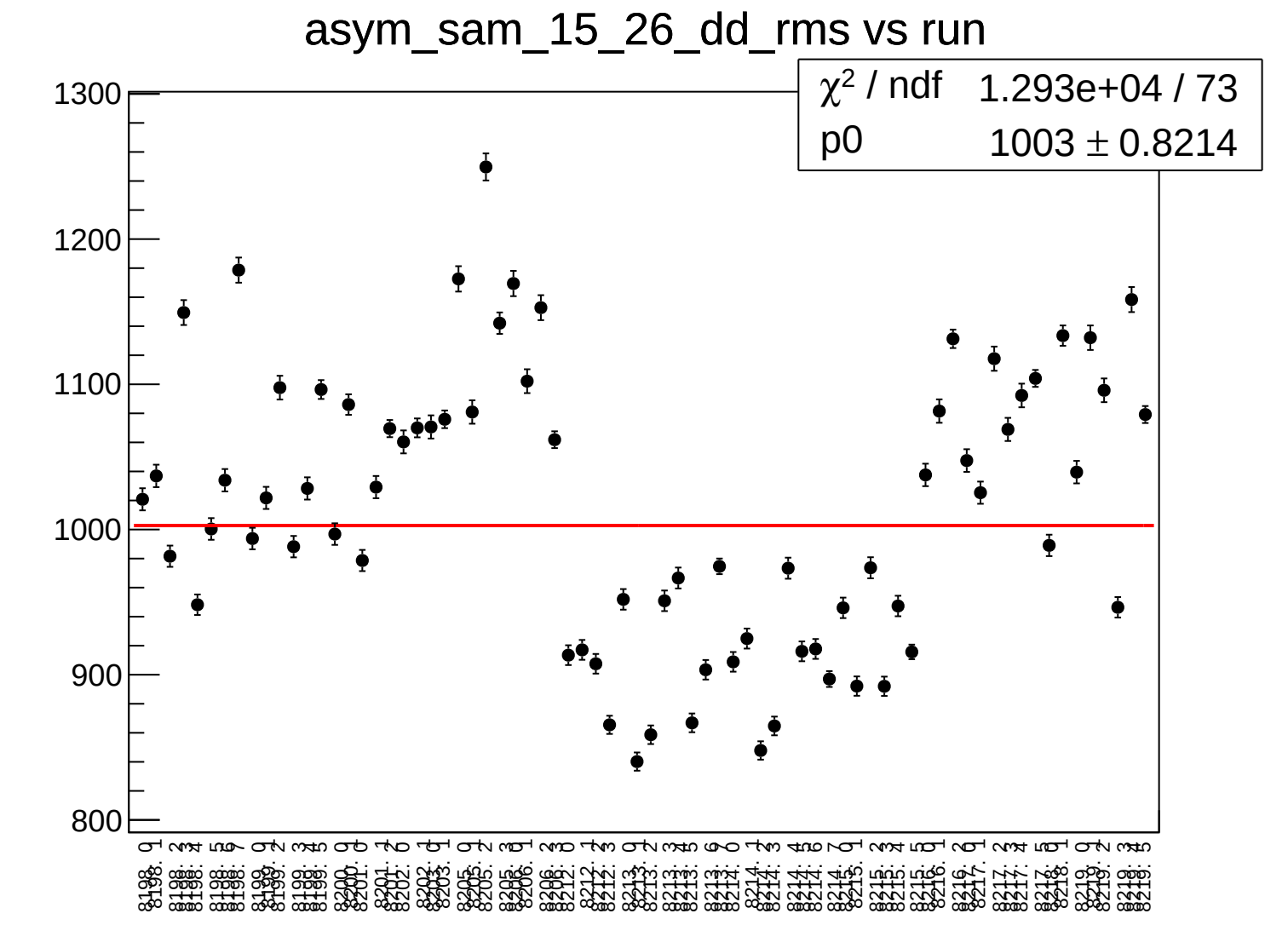

reg_asym_sam_15_26_dd_rms vs run
χ² / ndf 1.939e+04 / 73
p0 79.3 ± 0.0651
120
110
100
90
80
70

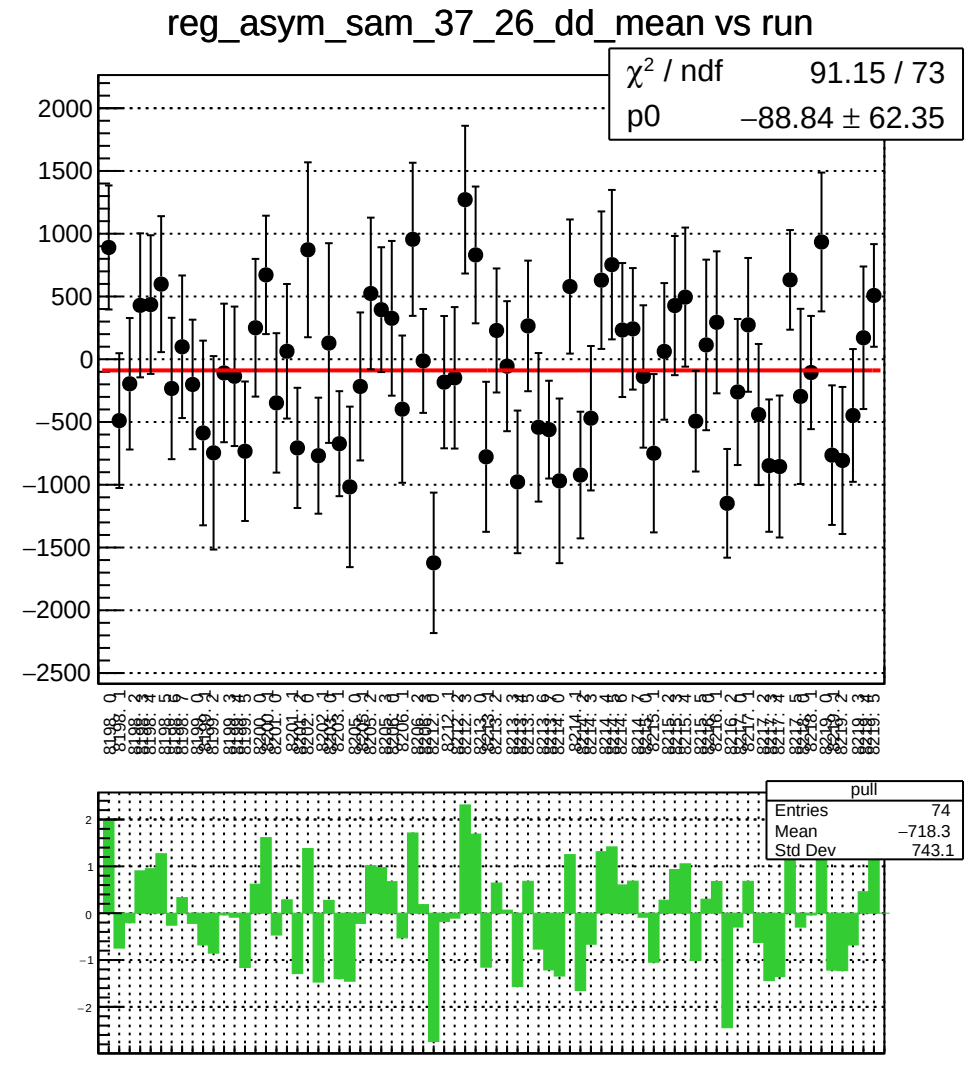

asym_sam_15_26_dd_correction_mean vs run
χ² / ndf 84.32 / 73
p0 412.7 ± 1158
40000
20000
0
−20000
−40000
pull
Entries 74
Mean −357
Std Dev 388
2
1
0
−1
−2
−3
pull1D
Entries 74
Mean 0.001424
Std Dev 1.067
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

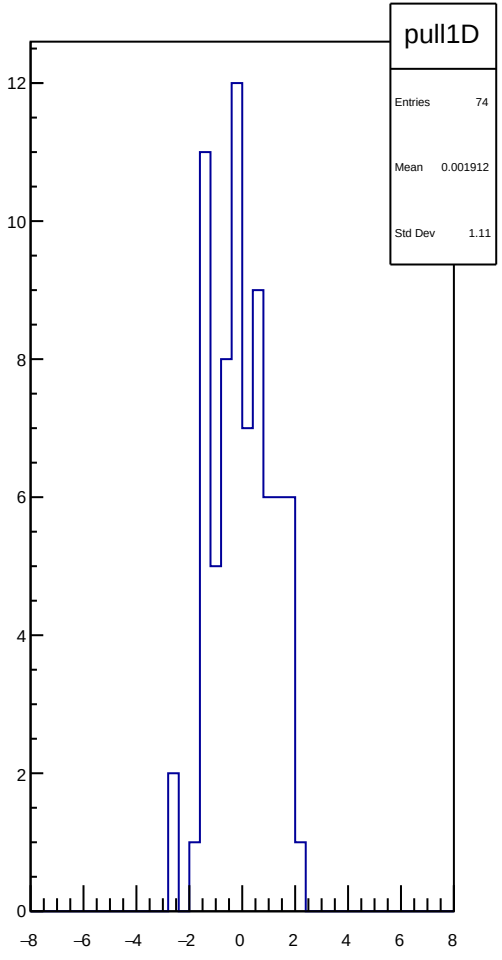

asym_sam_15_26_dd_correction_rms vs run
χ² / ndf 1.306e+04 / 73
p0 999.3 ± 0.8186
1200
1100
1000
900
800

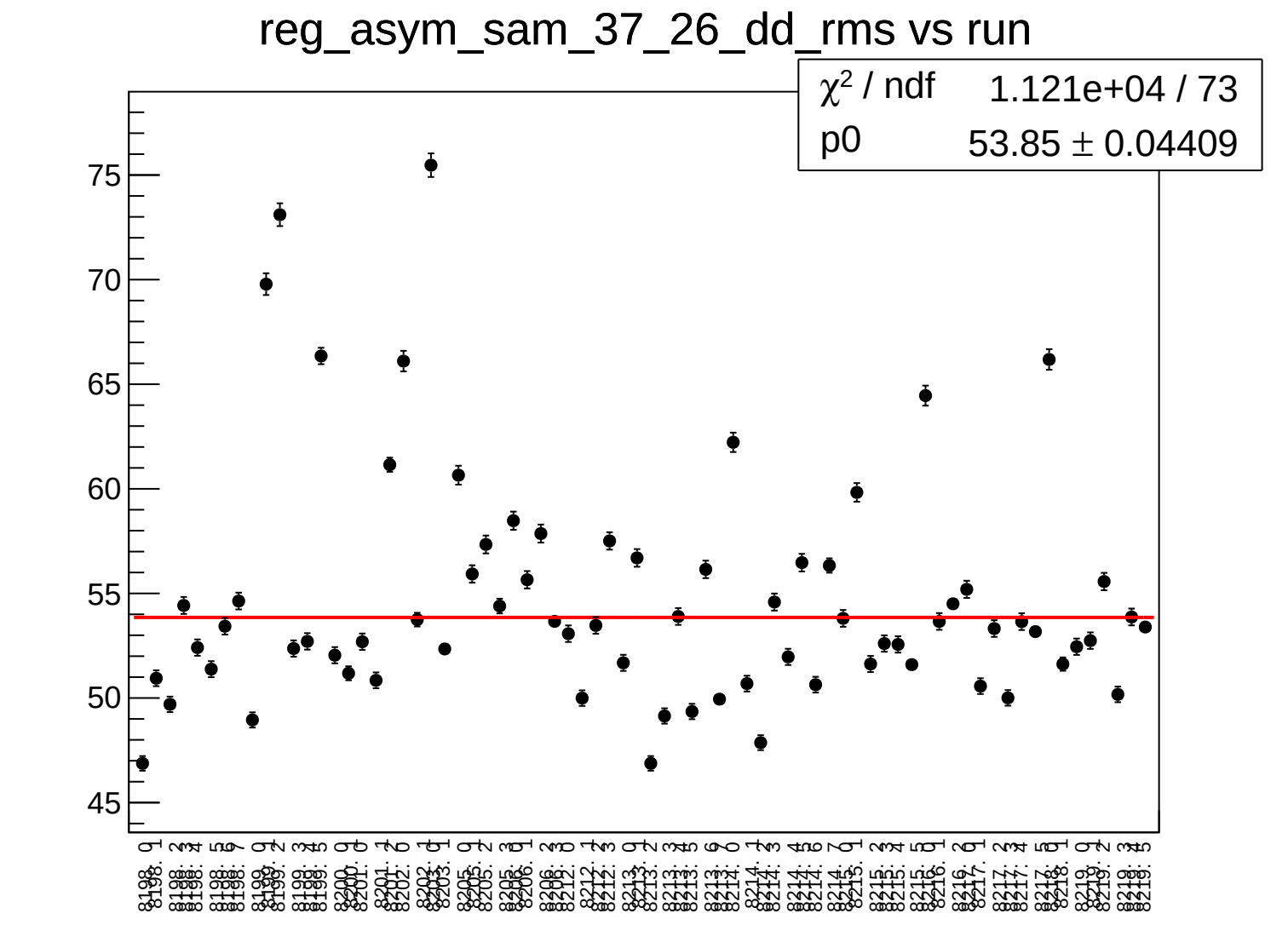

asym_sam_15_26_dd_mean vs run
χ² / ndf 82.61 / 73
p0 −518.6 ± 1162
40000
20000
0
−20000
−40000
pull
Entries 74
Mean −131.8
Std Dev 150.4
3
2
1
0
−1
−2

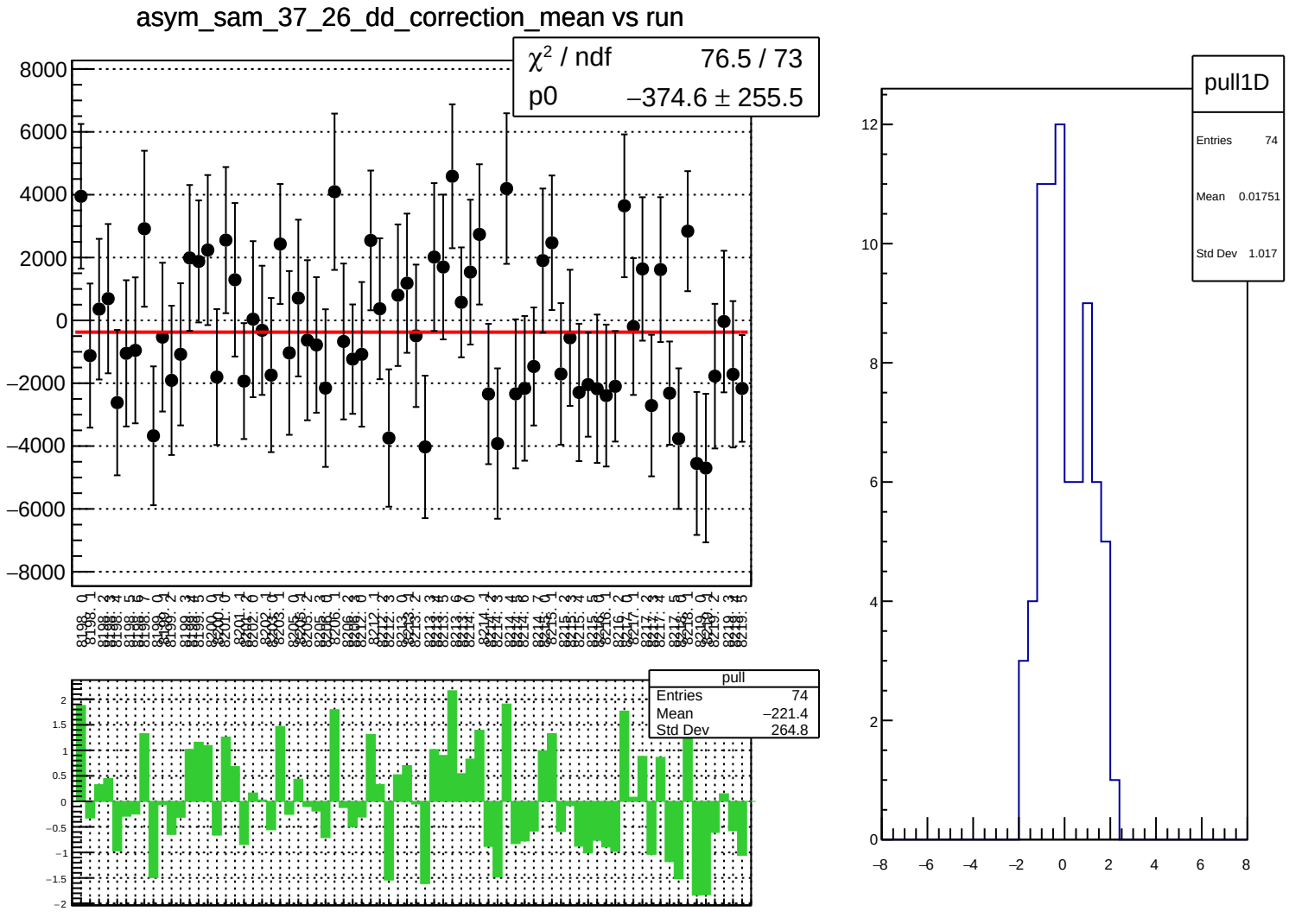

pull1D
Entries 74
Mean −0.002531
Std Dev 1.057
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

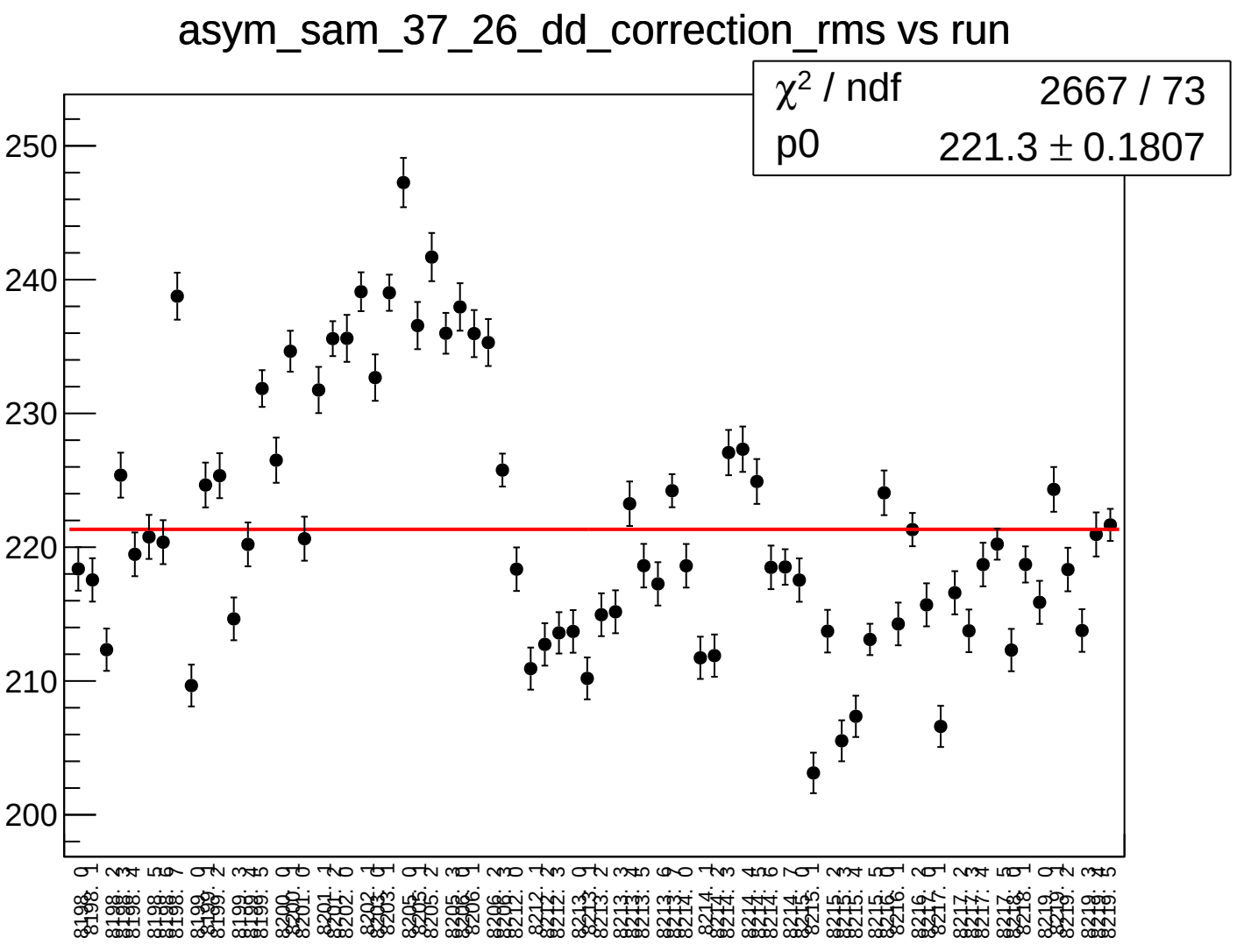

asym_sam_15_26_dd_rms vs run
χ² / ndf 1.293e+04 / 73
p0 1003 ± 0.8214
1300
1200
1100
1000
900
800

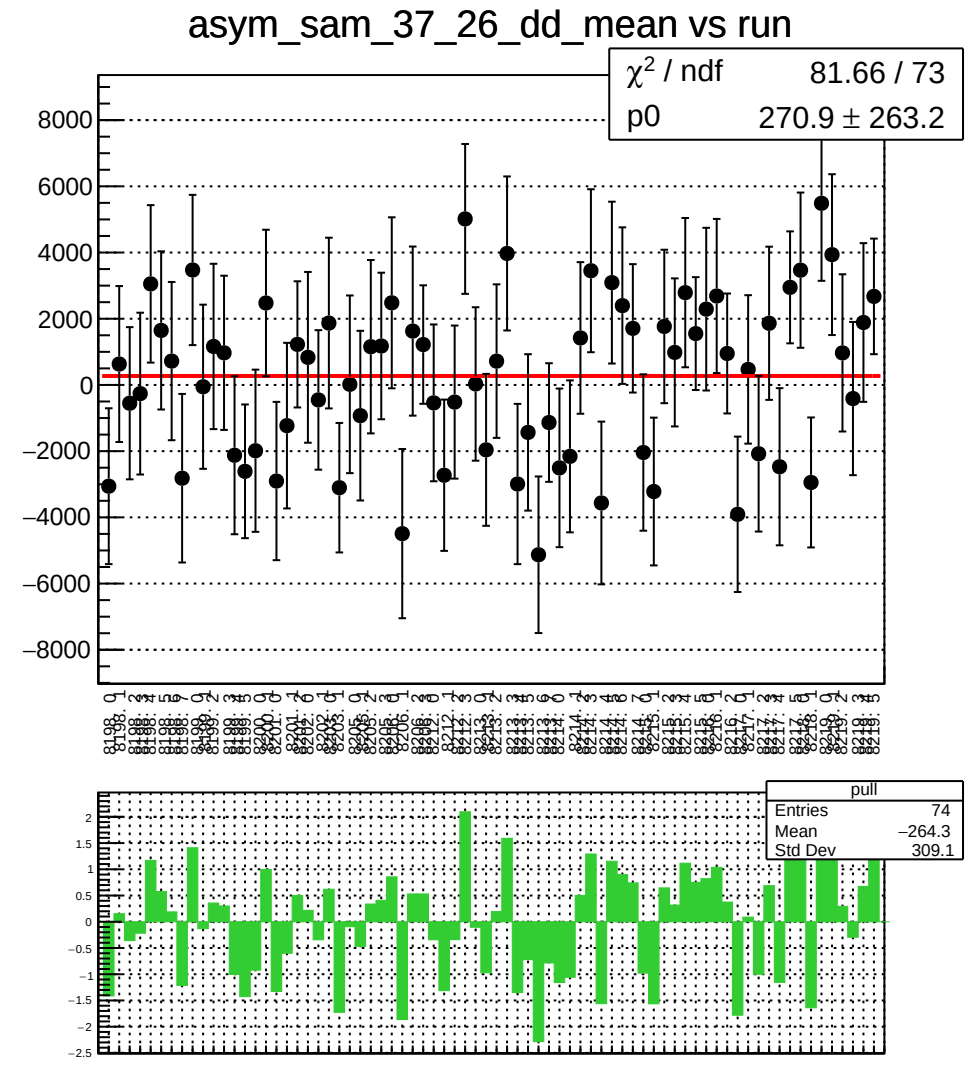

reg_asym_sam_37_26_dd_mean vs run
χ² / ndf 91.15 / 73
p0 −88.84 ± 62.35
pull
Entries 74
Mean −718.3
Std Dev 743.1

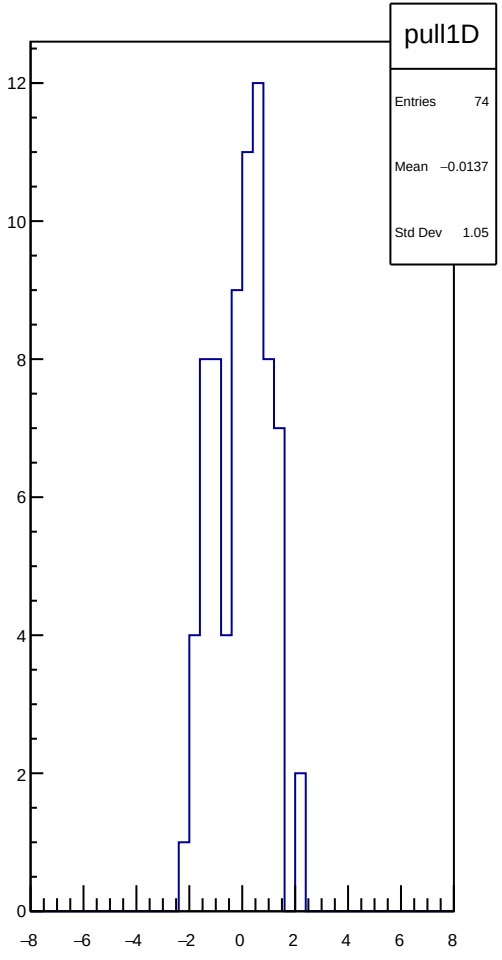

pull1D
Entries 74
Mean 0.001912
Std Dev 1.11

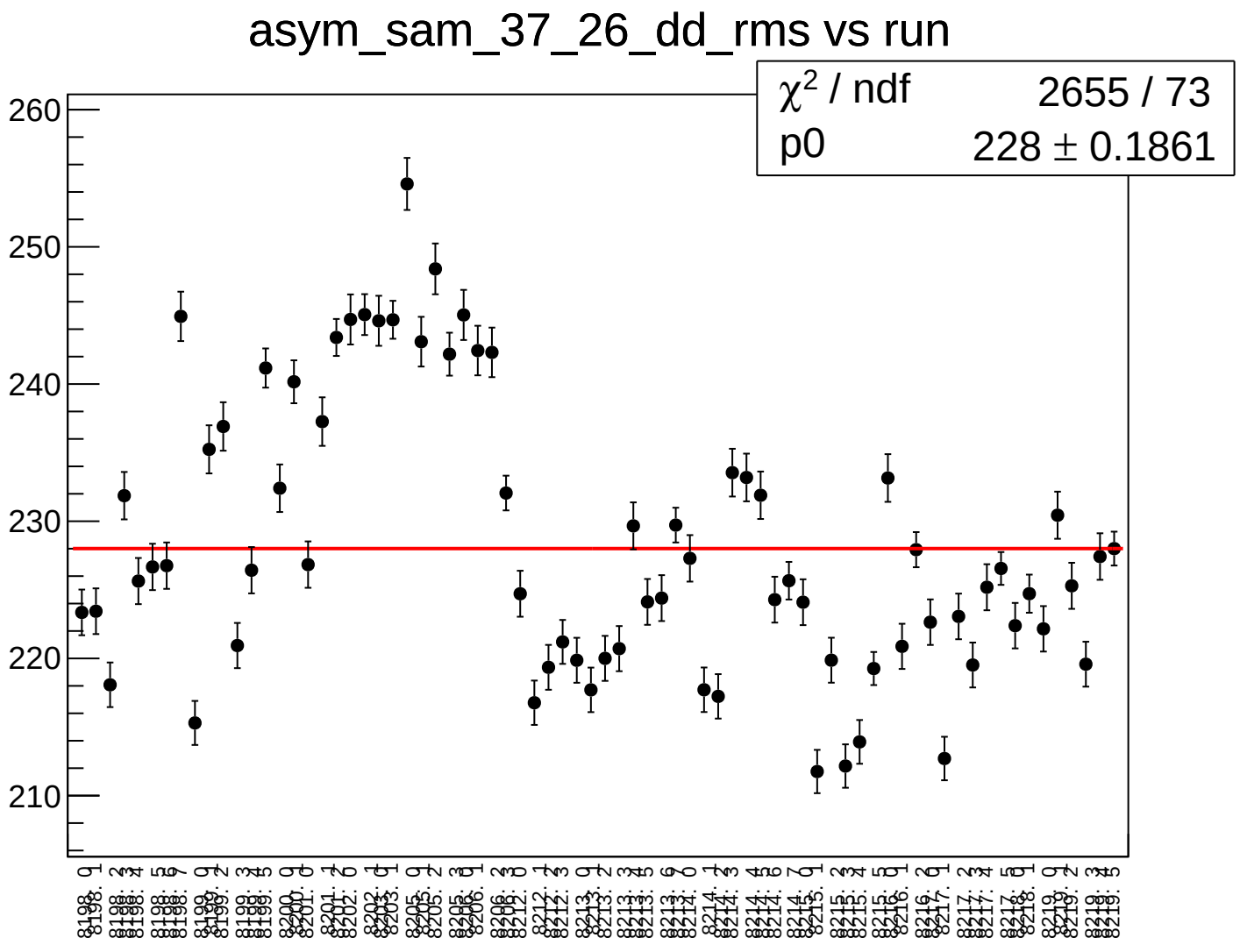

reg_asym_sam_37_26_dd_rms vs run
χ^2 / ndf 1.121e+04 / 73
p0 53.85 ± 0.04409
75
70
65
60
55
50
45

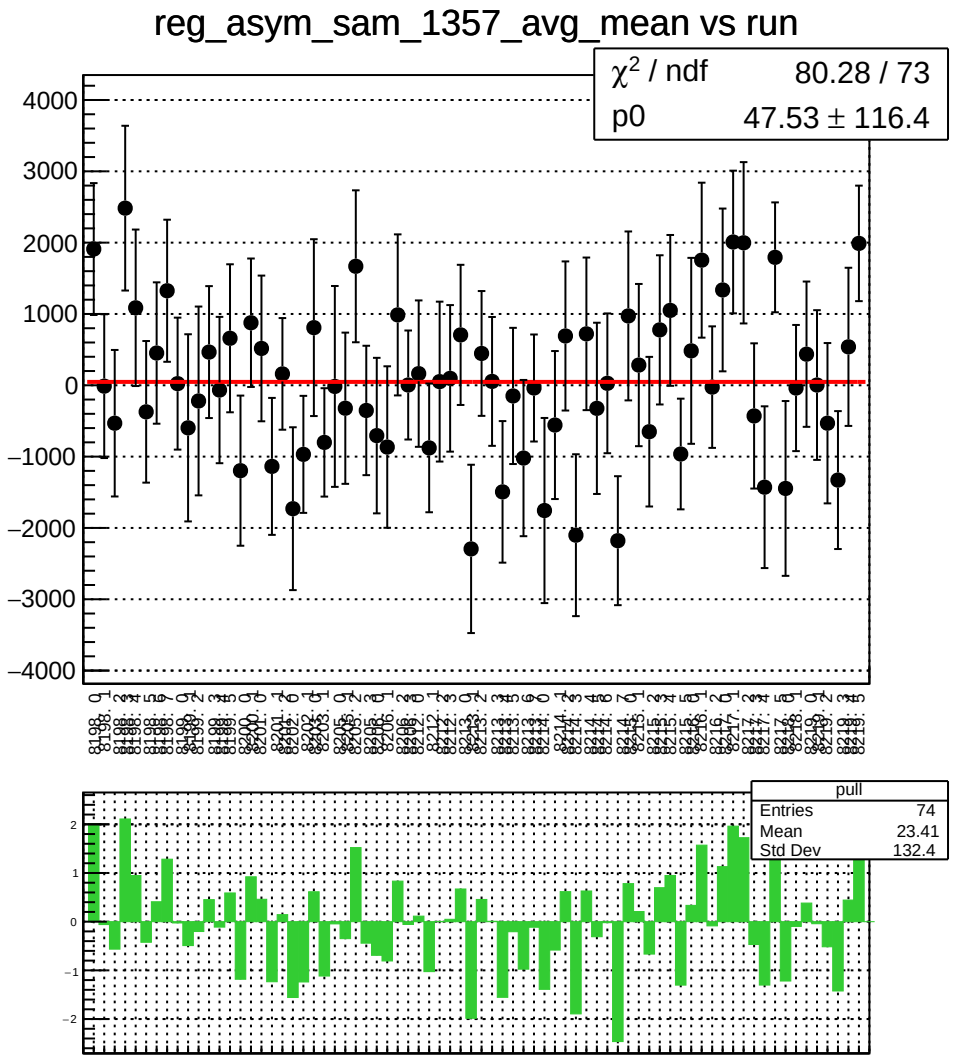

asym_sam_37_26_dd_correction_mean vs run
χ² / ndf 76.5 / 73
p0 −374.6 ± 255.5
pull
Entries 74
Mean −221.4
Std Dev 264.8
pull1D
Entries 74
Mean 0.01751
Std Dev 1.017

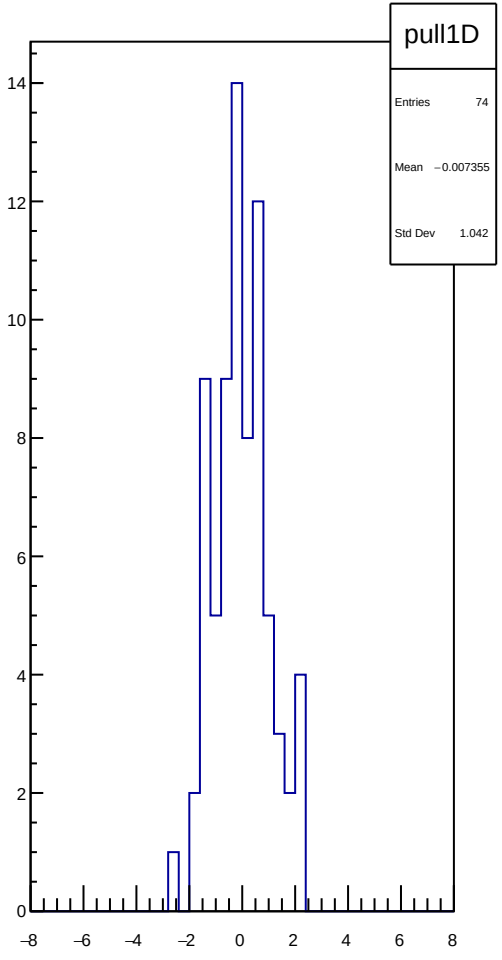

asym_sam_37_26_dd_correction_rms vs run
χ² / ndf 2667 / 73
p0 221.3 ± 0.1807
250
240
230
220
210
200

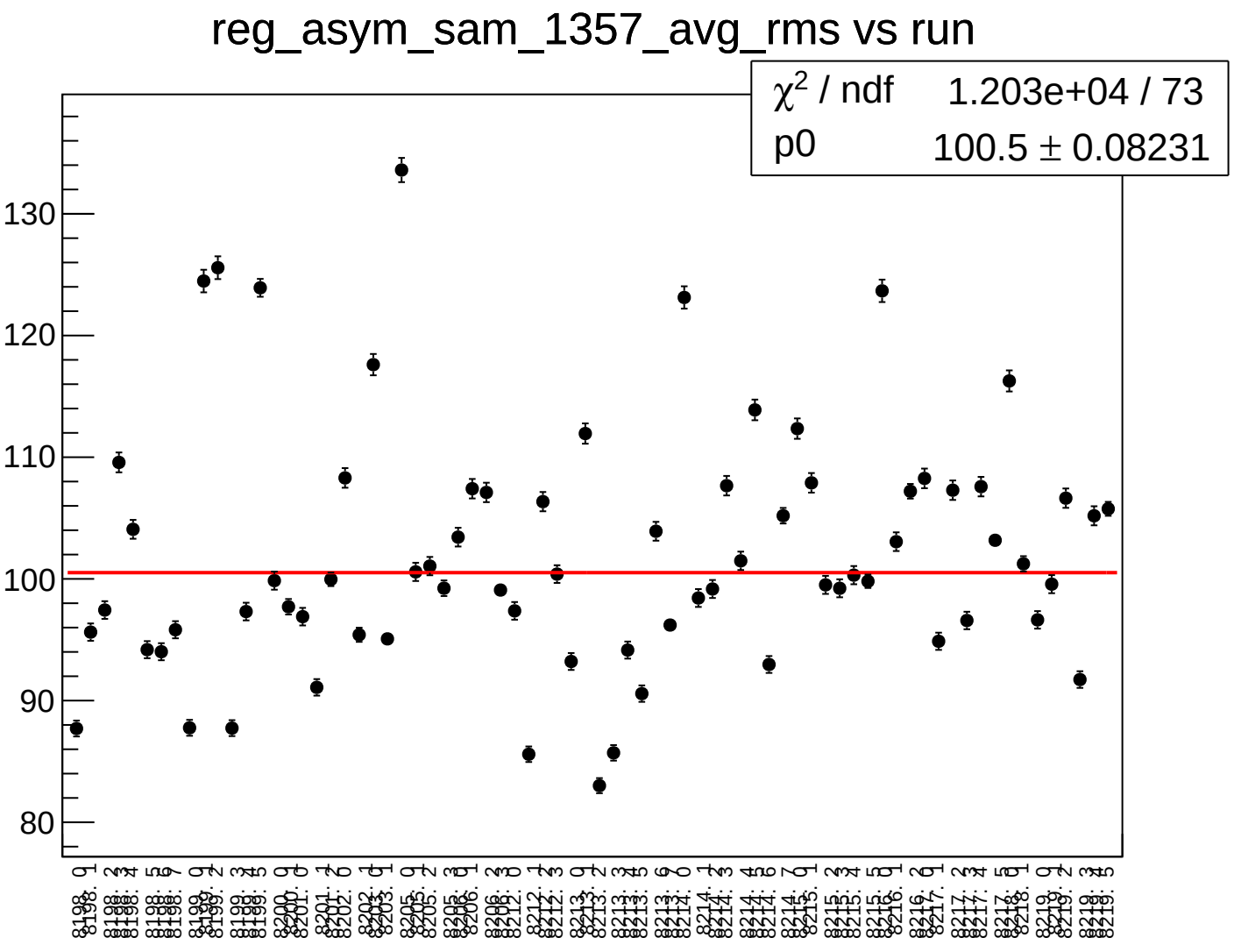

asym_sam_37_26_dd_mean vs run
χ² / ndf 81.66 / 73
p0 270.9 ± 263.2
pull
Entries 74
Mean −264.3
Std Dev 309.1

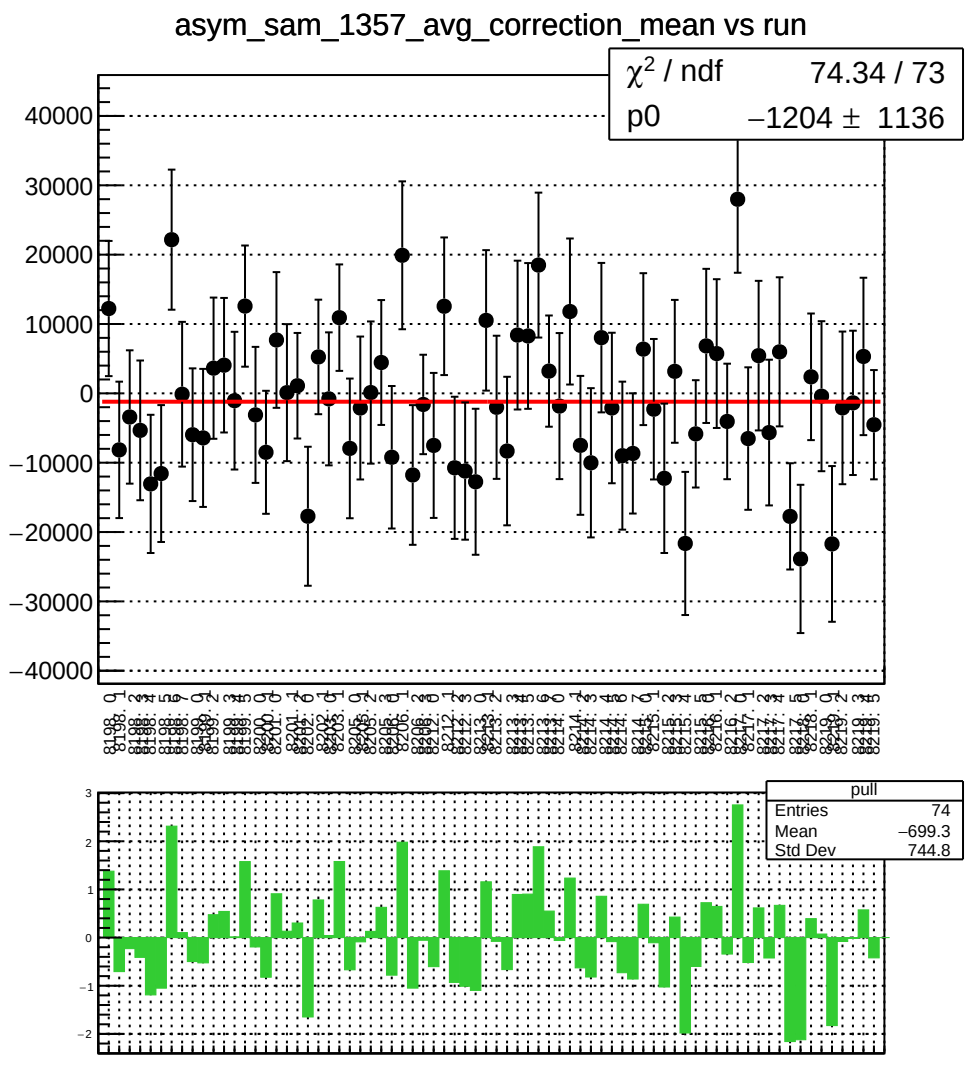

pull1D
Entries 74
Mean −0.0137
Std Dev 1.05

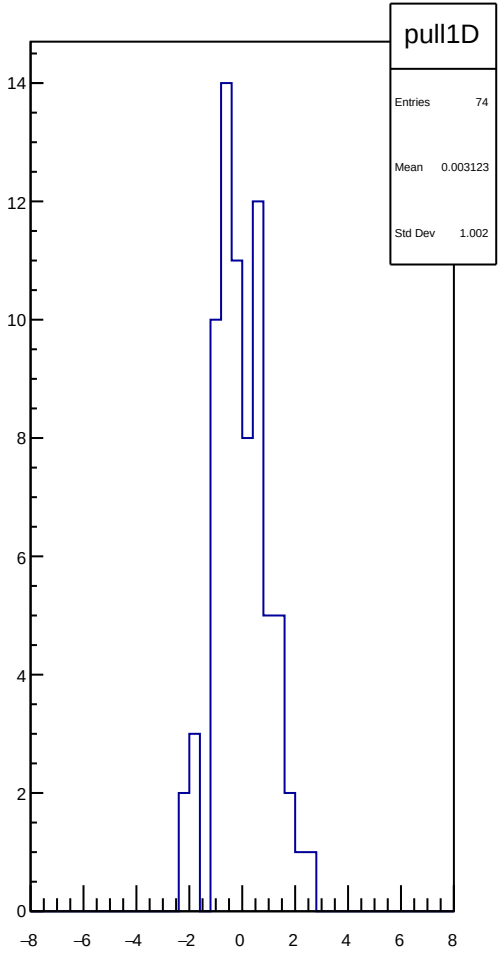

asym_sam_37_26_dd_rms vs run
χ² / ndf 2655 / 73
p0 228 ± 0.1861
260
250
240
230
220
210

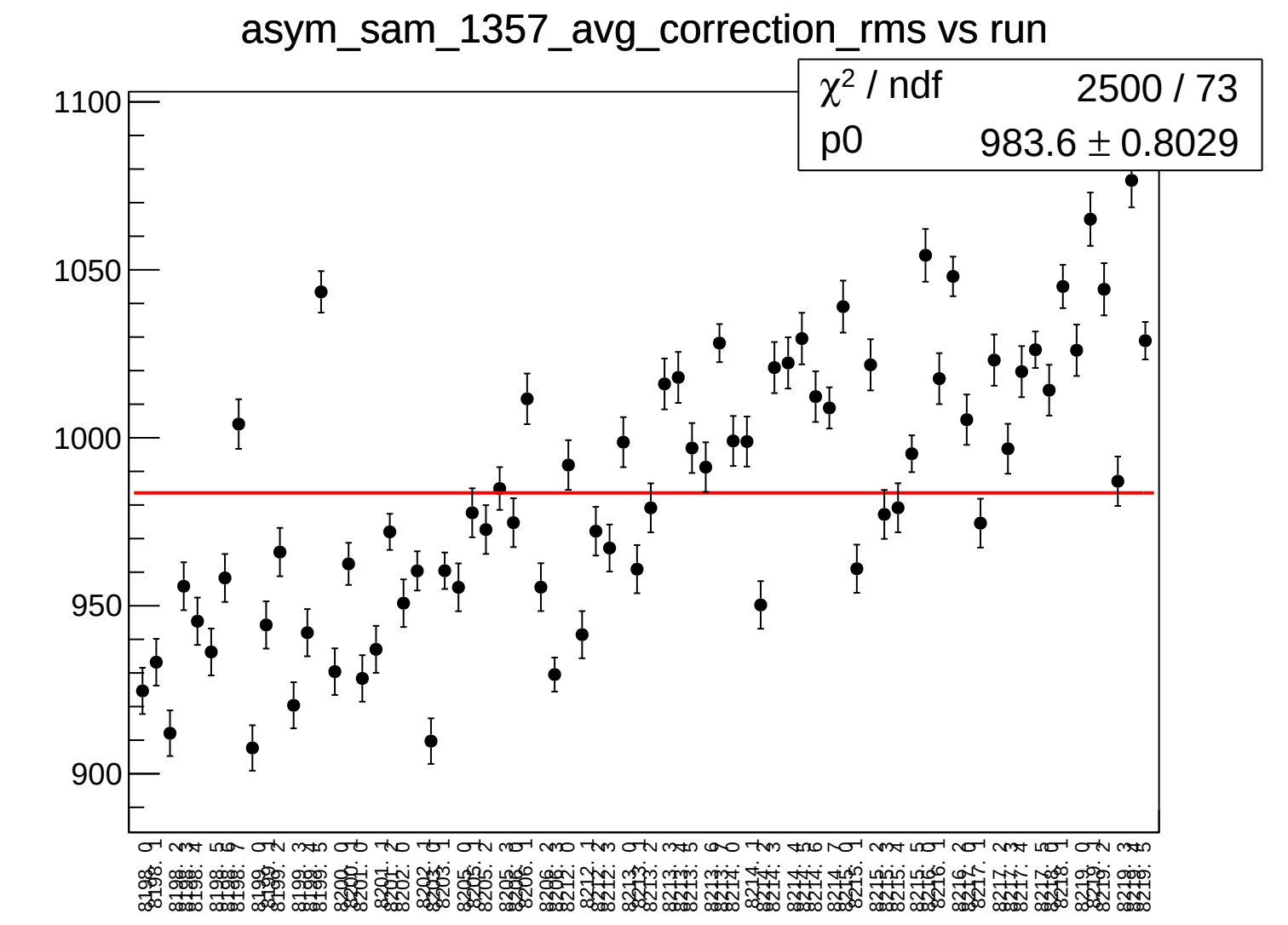

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 80.28 / 73
p0 47.53 ± 116.4
pull
Entries 74
Mean 23.41
Std Dev 132.4

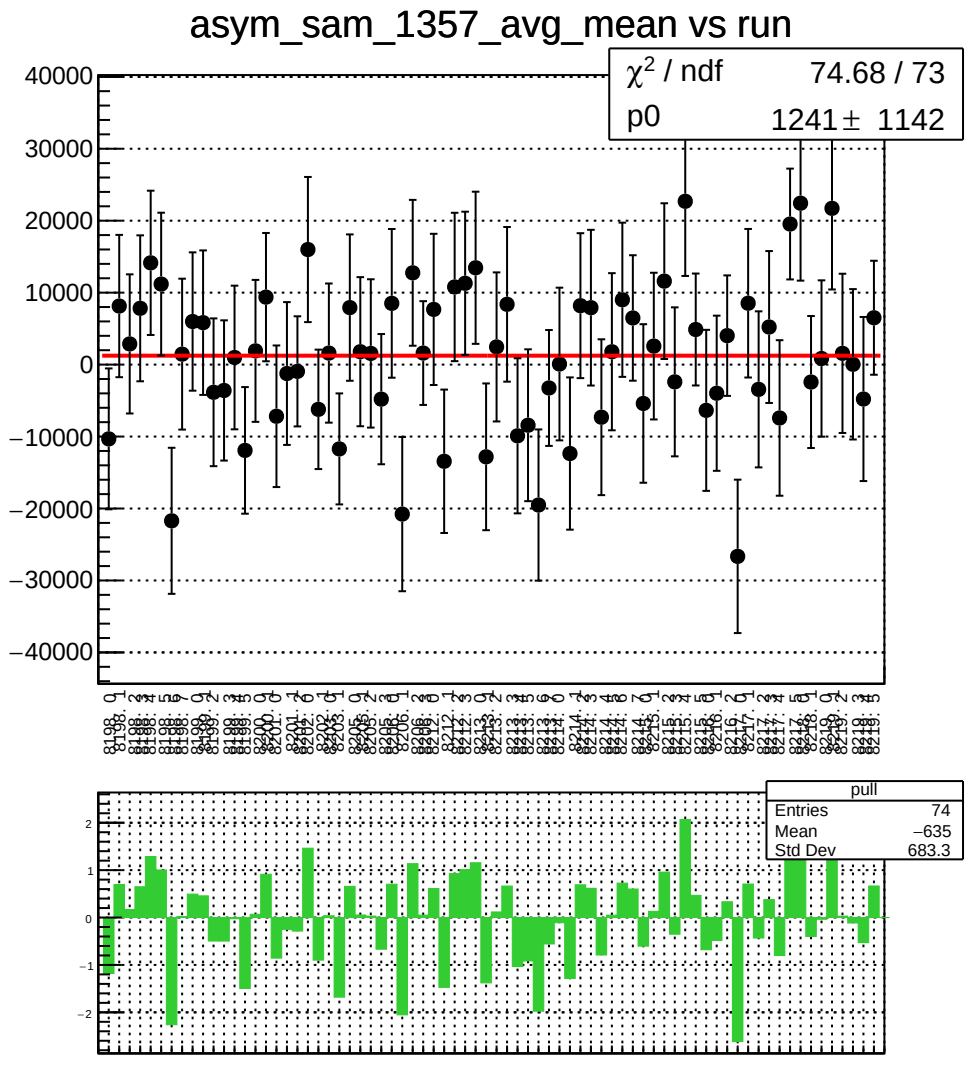

pull1D
Entries 74
Mean −0.007355
Std Dev 1.042

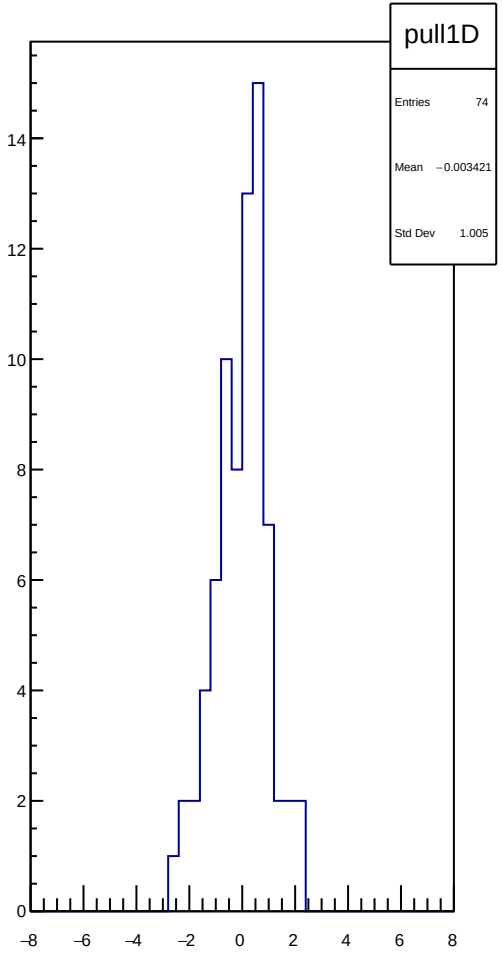

reg_asym_sam_1357_avg_rms vs run
χ^2 / ndf 1.203e+04 / 73
p0 100.5 ± 0.08231
130
120
110
100
90
80

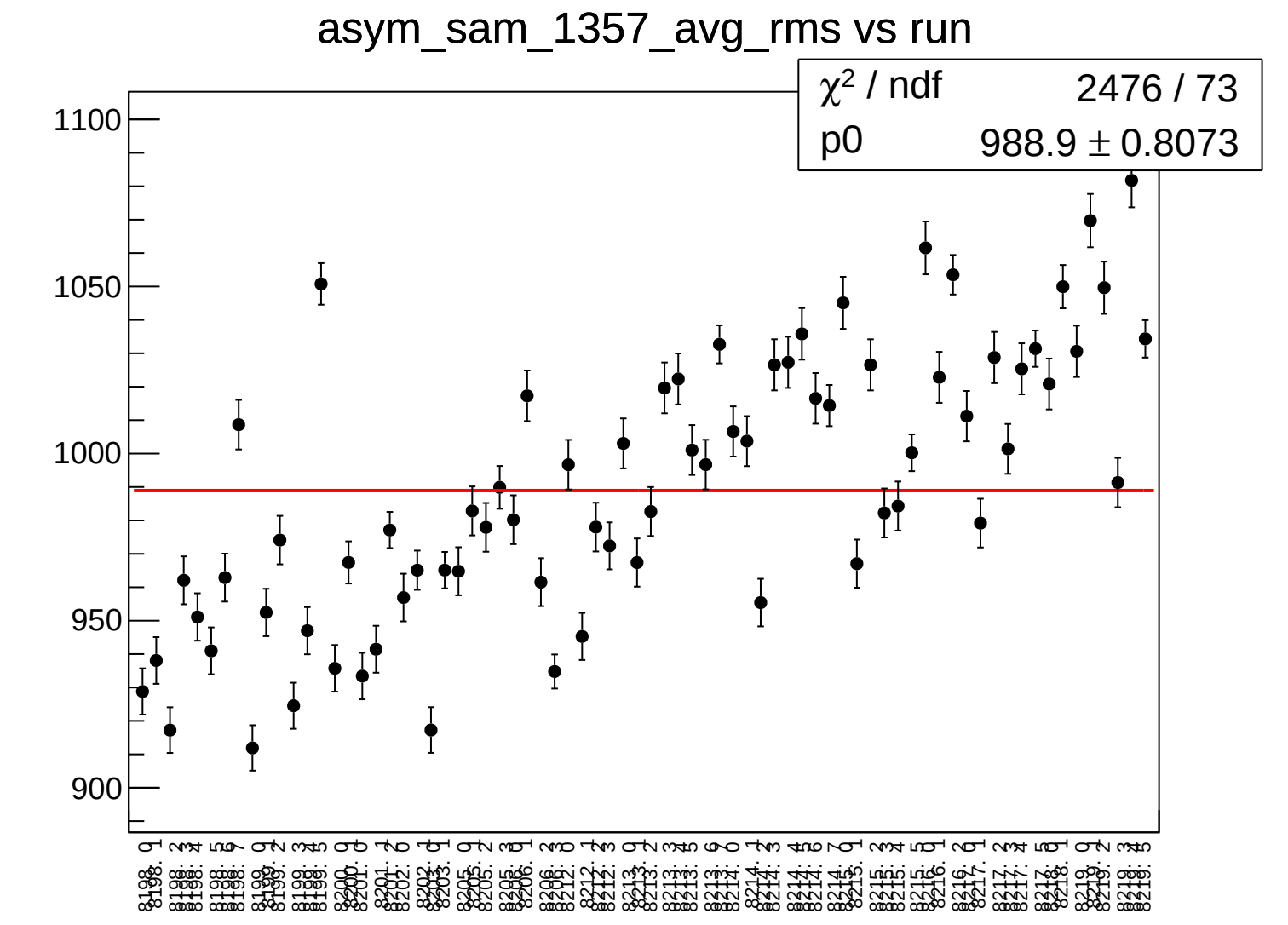

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 74.34 / 73
p0 −1204 ± 1136
pull
Entries 74
Mean −699.3
Std Dev 744.8

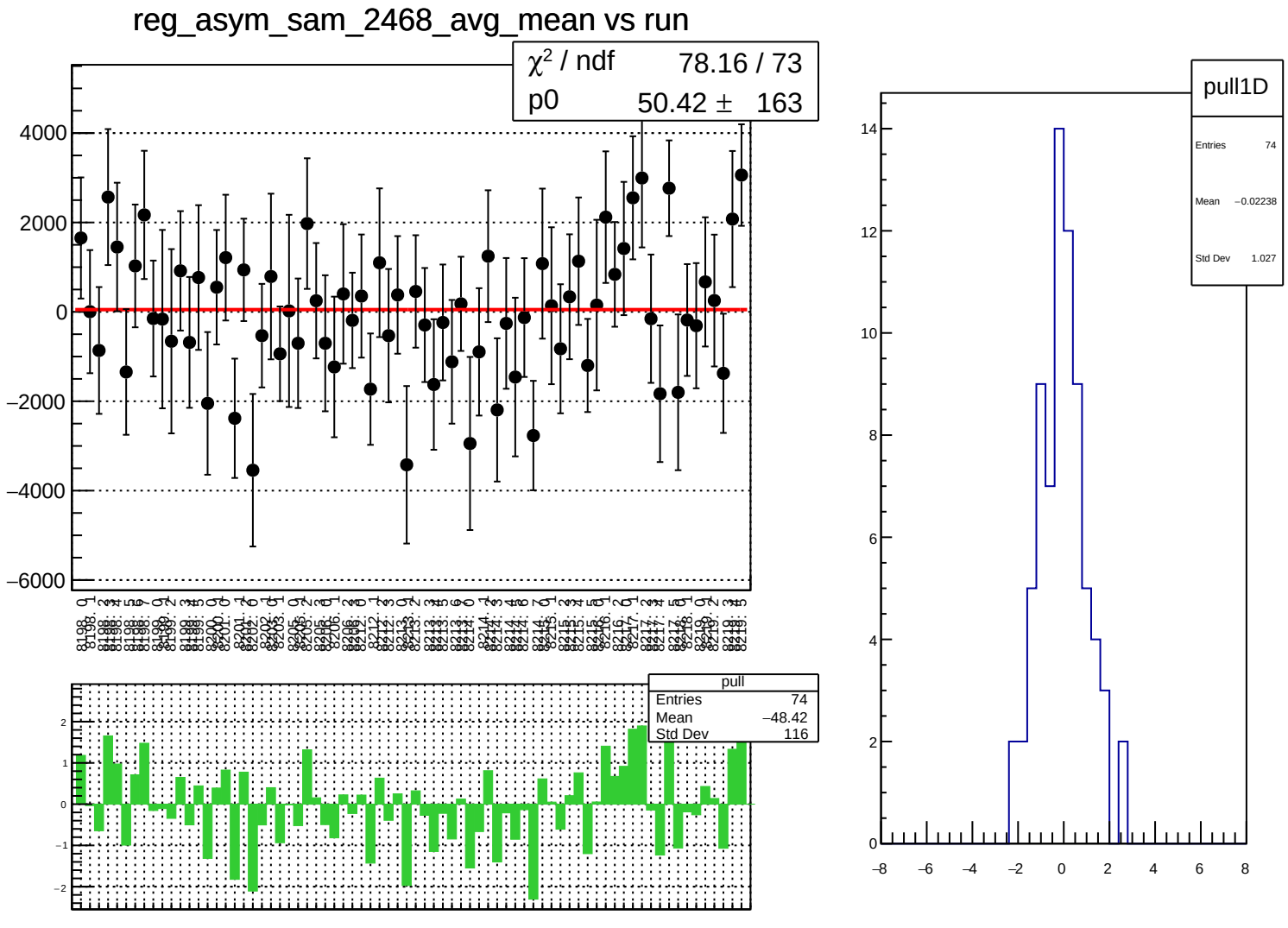

pull1D
Entries 74
Mean 0.003123
Std Dev 1.002

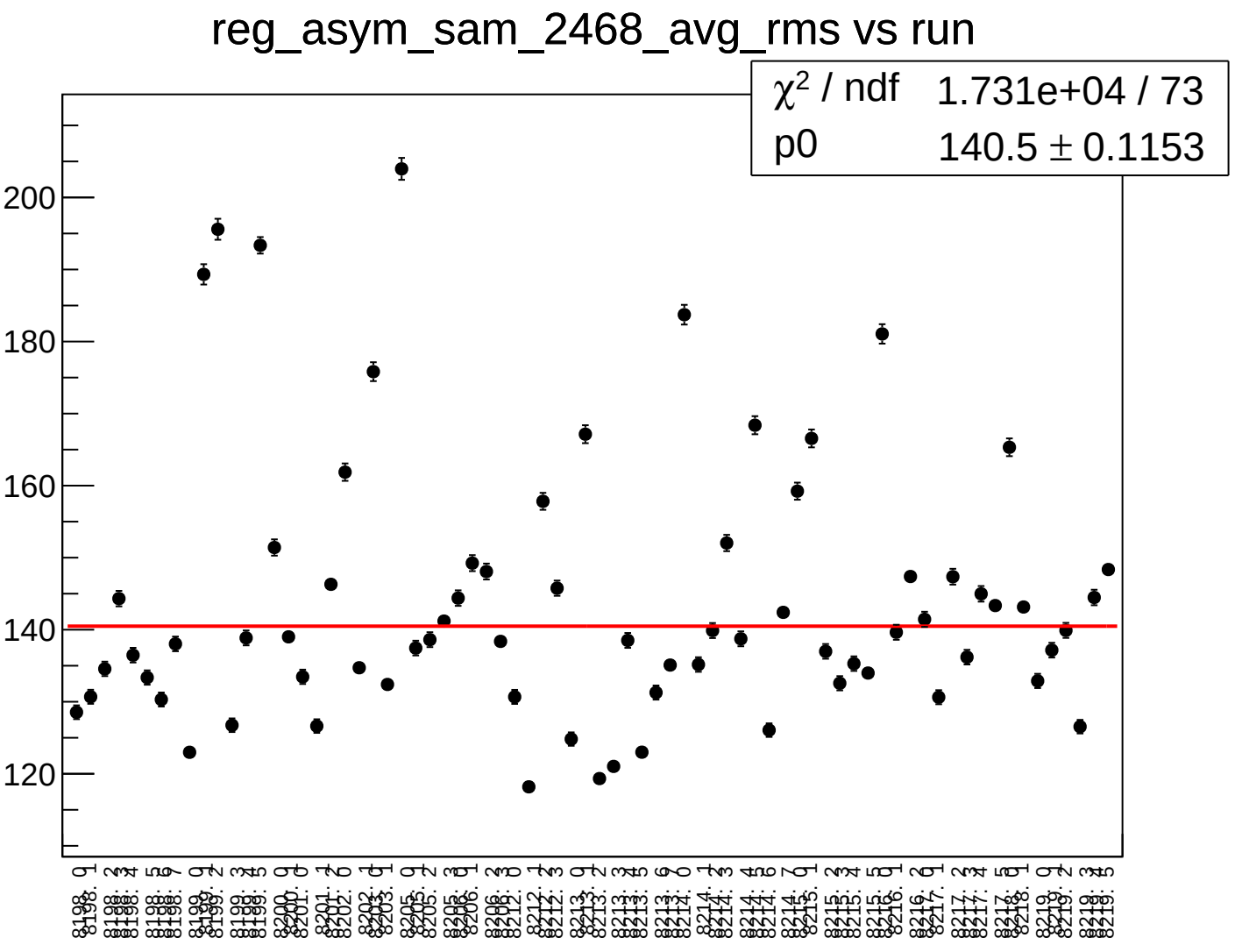

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 2500 / 73
p0 983.6 ± 0.8029
1100
1050
1000
950
900

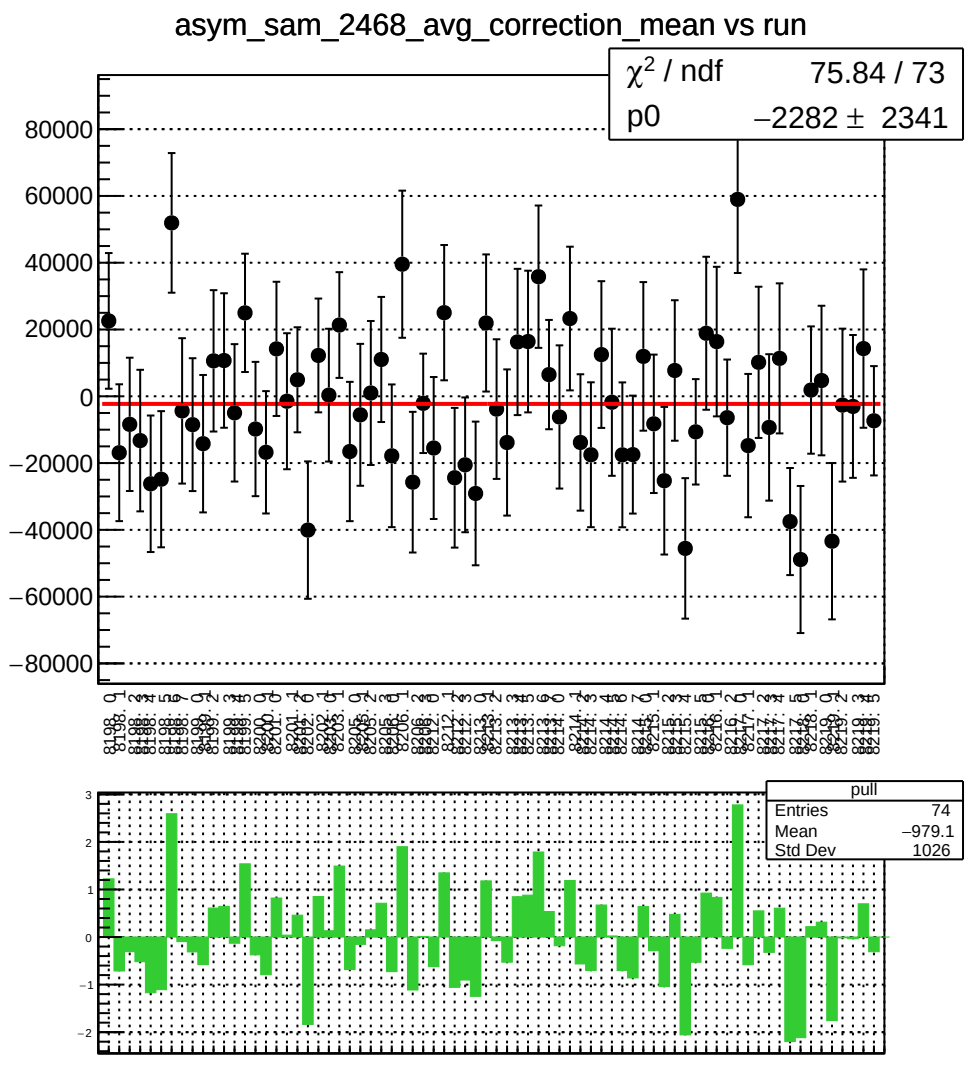

asym_sam_1357_avg_mean vs run
χ² / ndf 74.68 / 73
p0 1241 ± 1142
pull
Entries 74
Mean −635
Std Dev 683.3

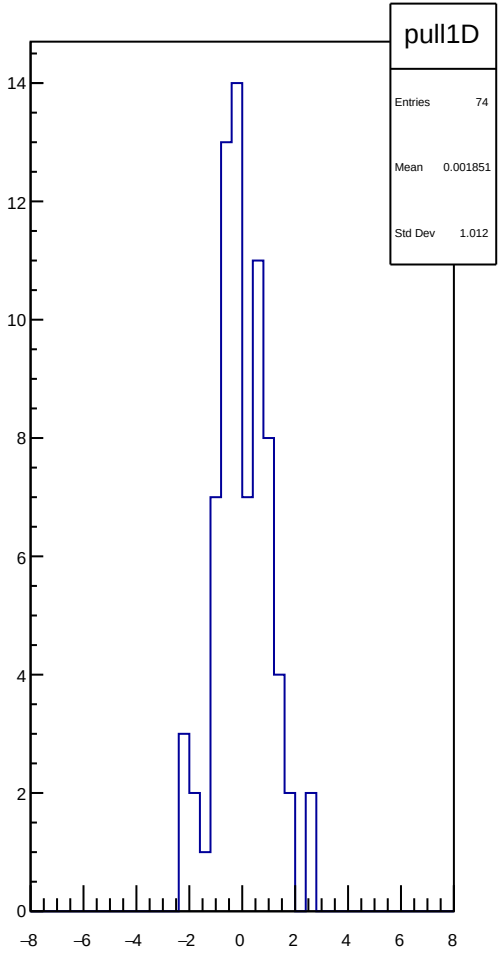

pull1D
Entries 74
Mean −0.003421
Std Dev 1.005

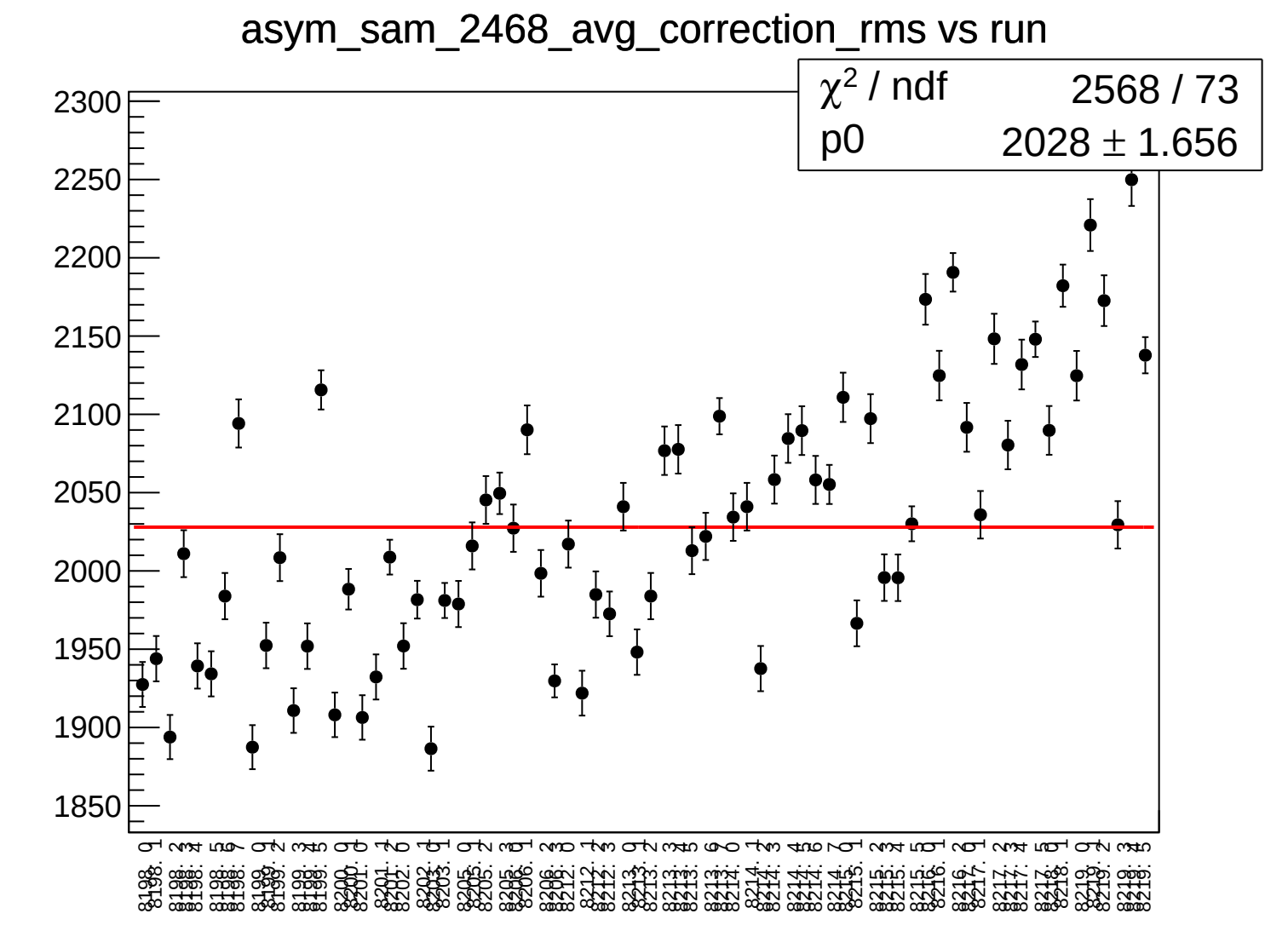

asym_sam_1357_avg_rms vs run
χ² / ndf 2476 / 73
p0 988.9 ± 0.8073
1100
1050
1000
950
900

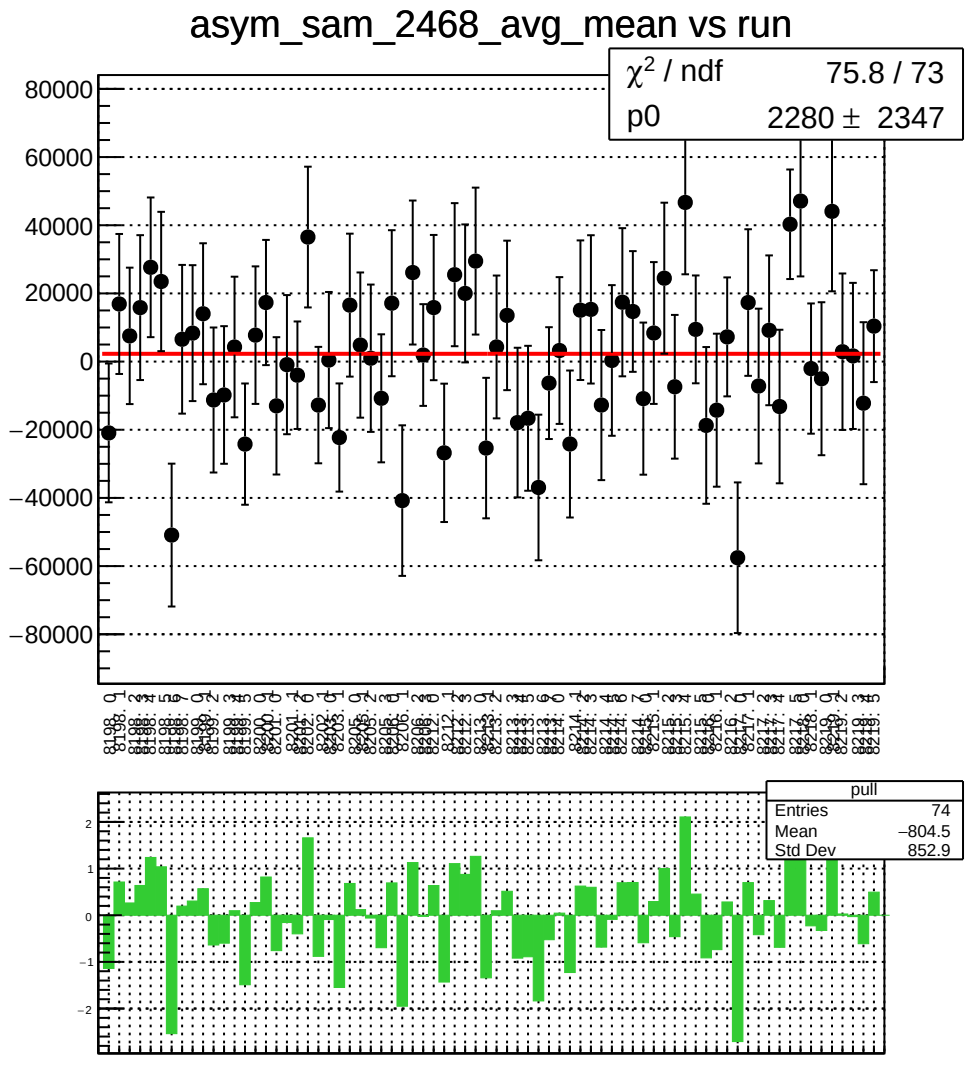

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 78.16 / 73
p0 50.42 ± 163
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean −48.42
Std Dev 116
pull1D
Entries 74
Mean −0.02238
Std Dev 1.027
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

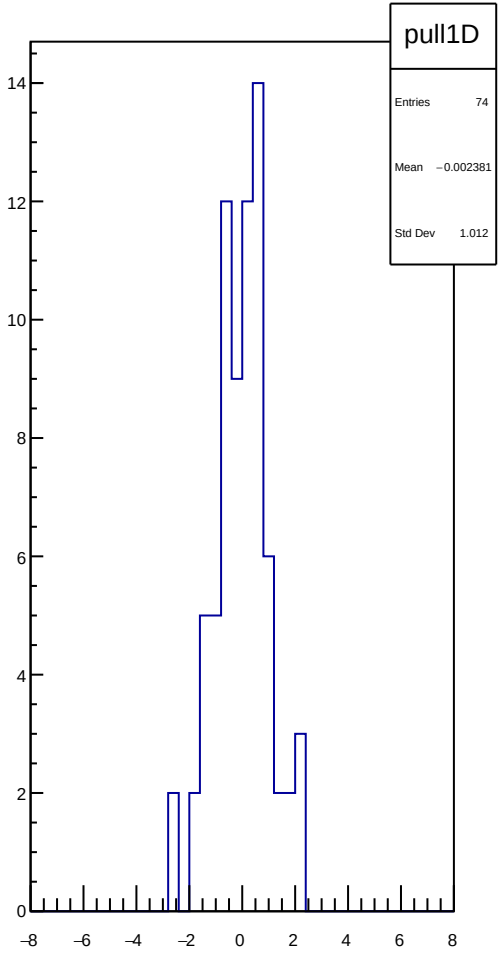

reg_asym_sam_2468_avg_rms vs run
χ² / ndf 1.731e+04 / 73
p0 140.5 ± 0.1153
200
180
160
140
120

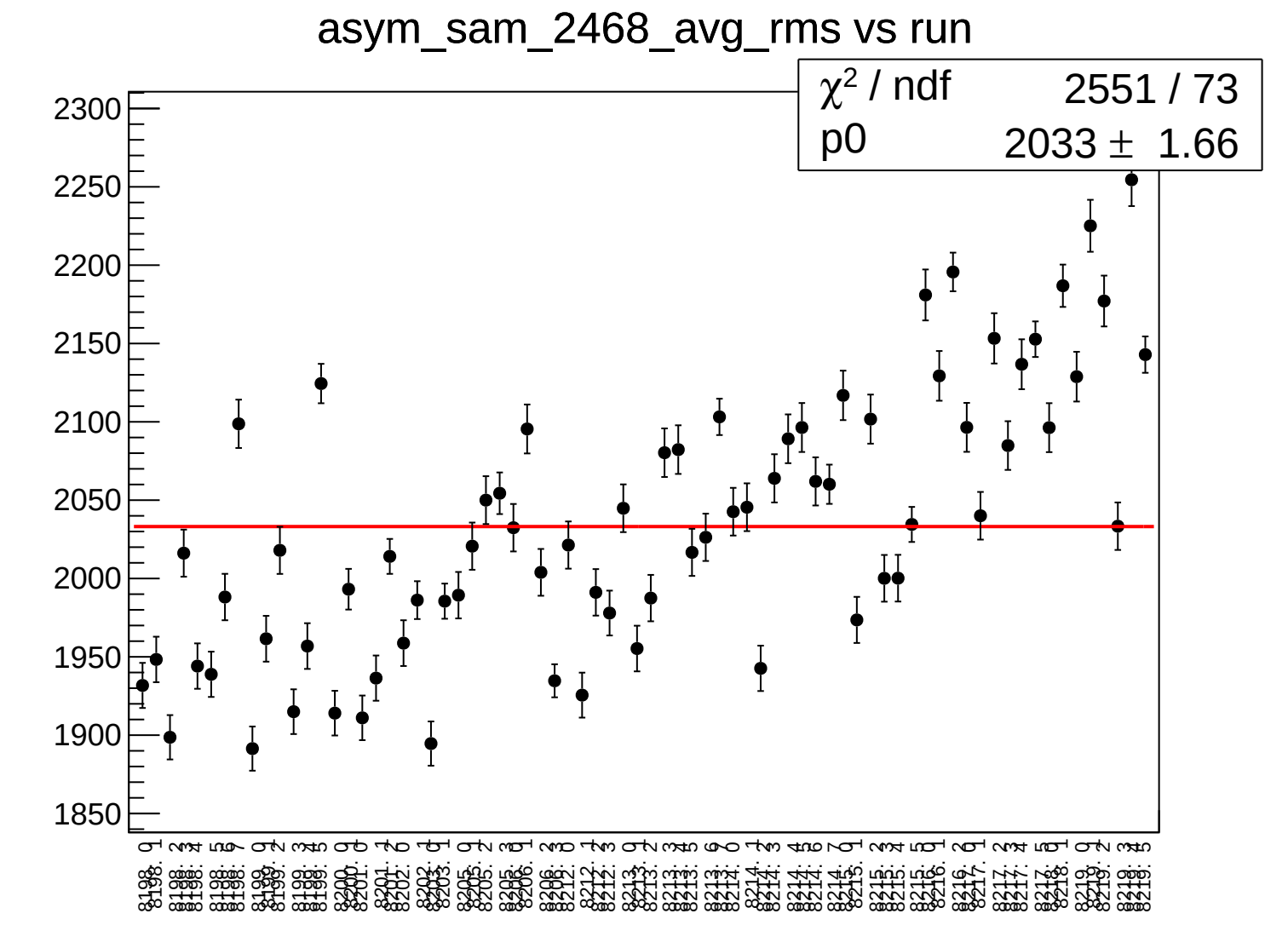

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 75.84 / 73
p0 −2282 ± 2341
80000
60000
40000
20000
0
−20000
−40000
−60000
−80000
pull
Entries 74
Mean −979.1
Std Dev 1026
3
2
1
0
−1
−2

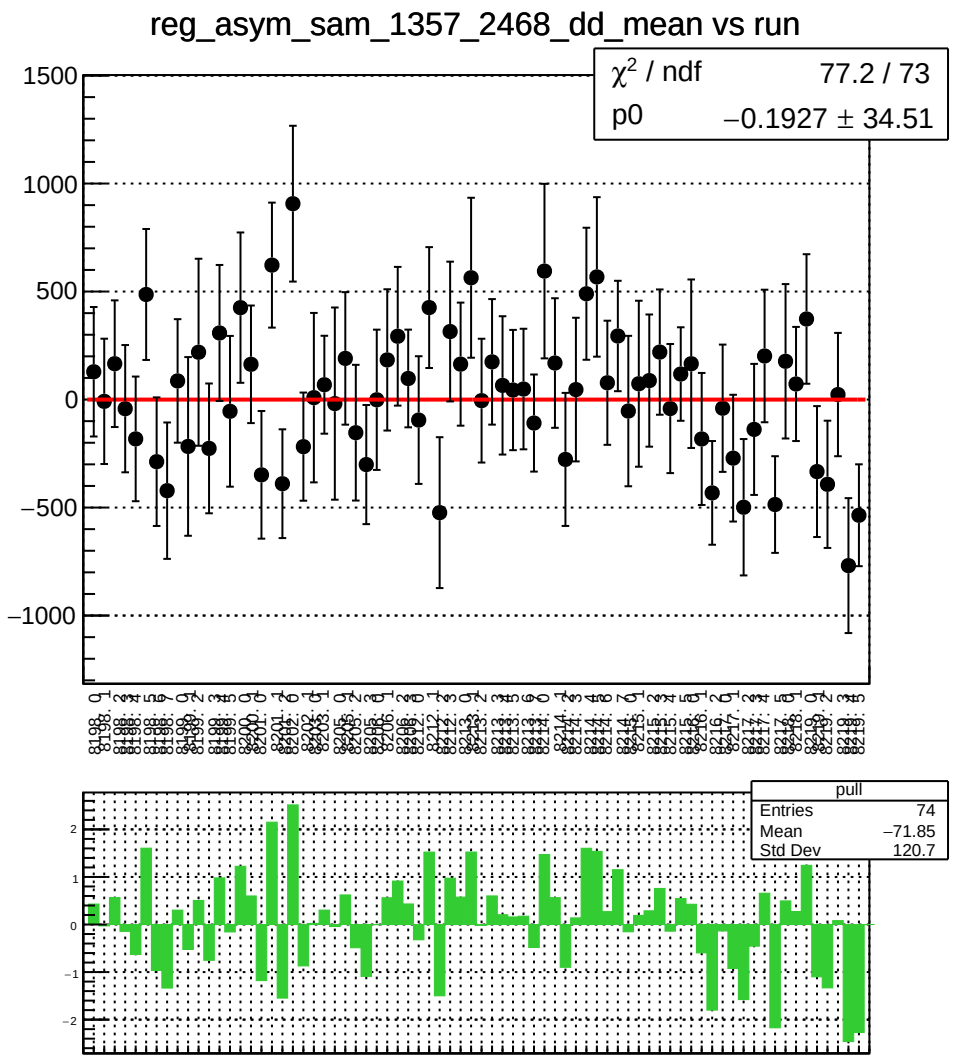

pull1D
Entries 74
Mean 0.001851
Std Dev 1.012
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

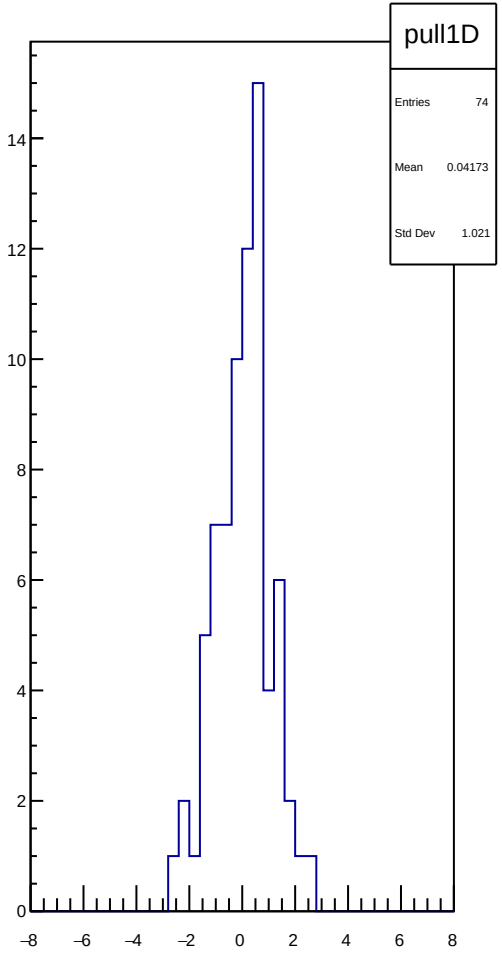

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 2568 / 73
p0 2028 ± 1.656
2300
2250
2200
2150
2100
2050
2000
1950
1900
1850

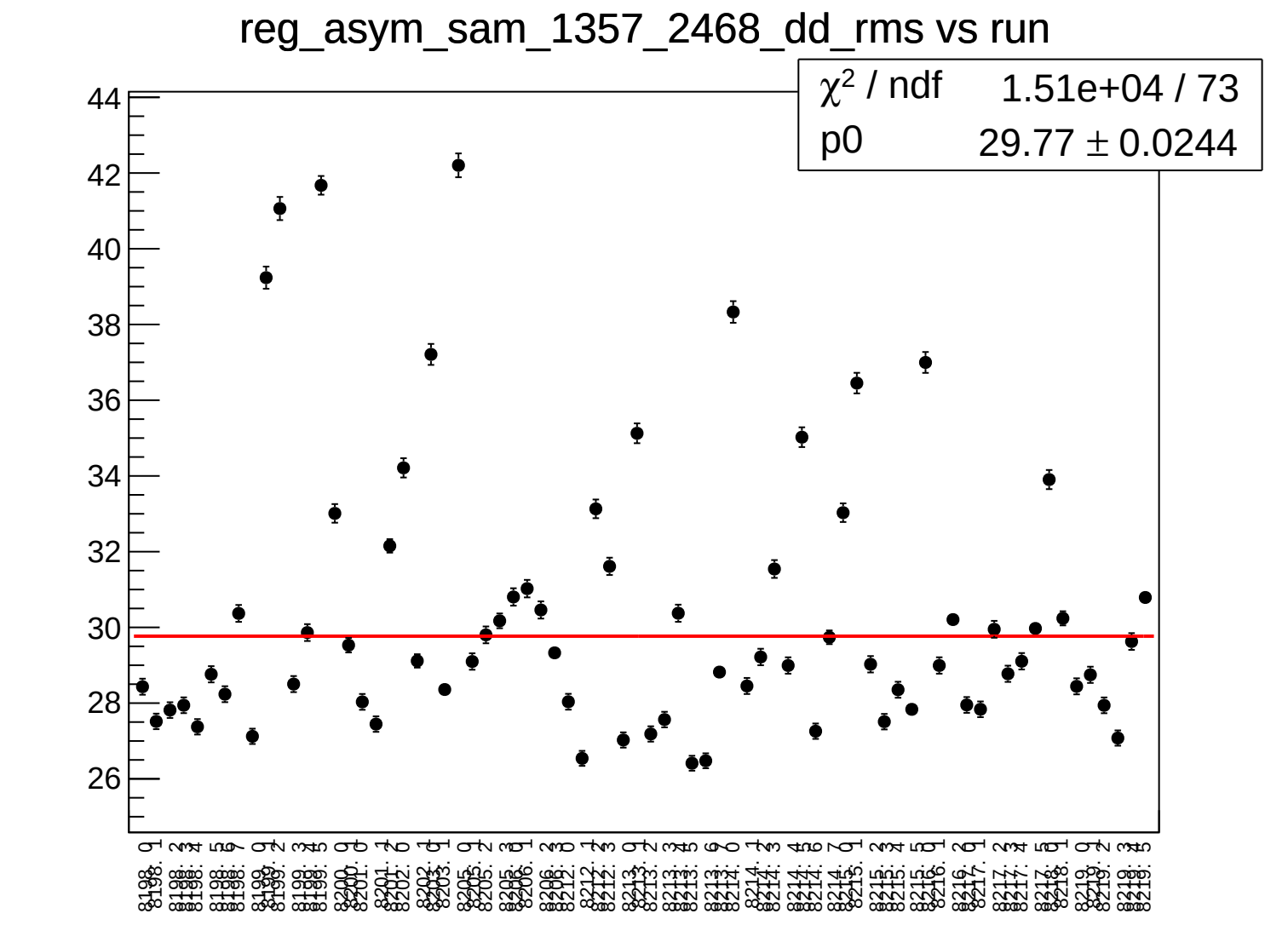

asym_sam_2468_avg_mean vs run
χ² / ndf 75.8 / 73
p0 2280 ± 2347
pull
Entries 74
Mean −804.5
Std Dev 852.9

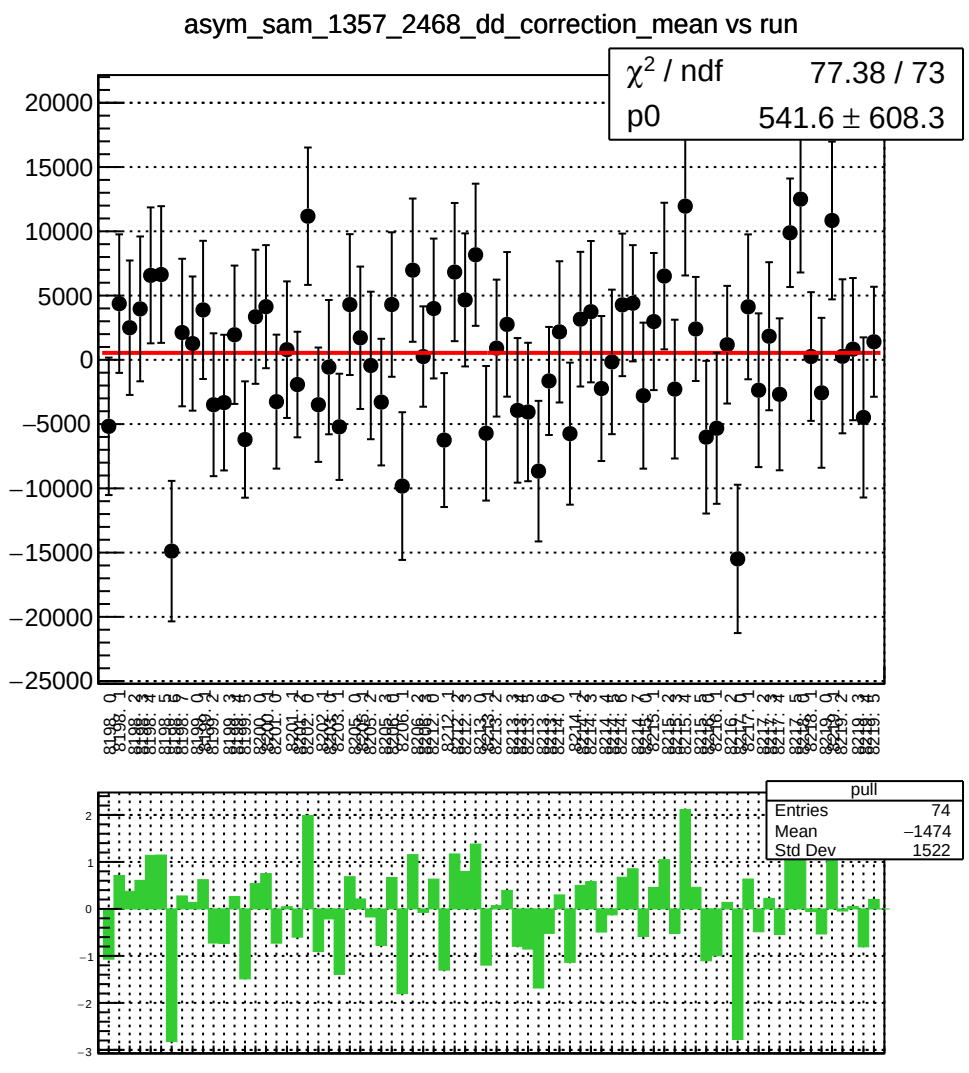

pull1D
Entries 74
Mean −0.002381
Std Dev 1.012

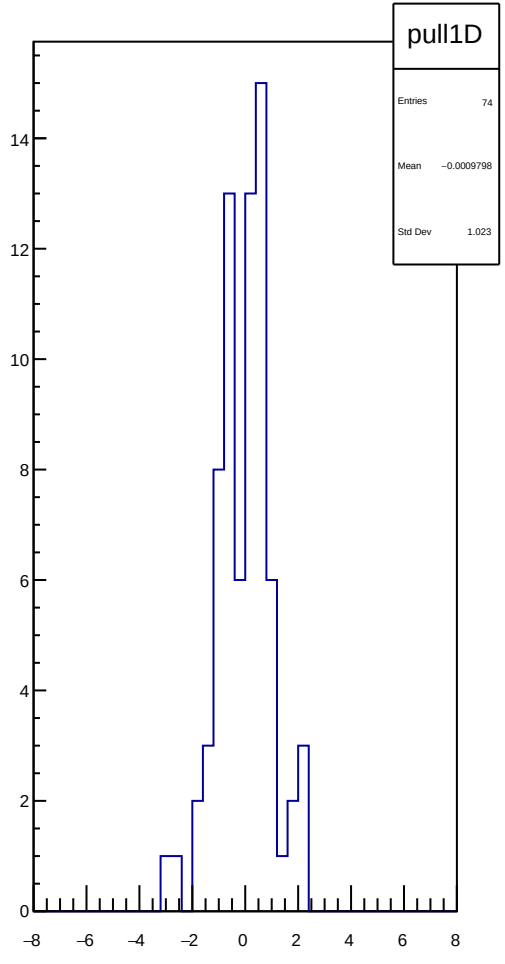

asym_sam_2468_avg_rms vs run
χ² / ndf 2551 / 73
p0 2033 ± 1.66
2300
2250
2200
2150
2100
2050
2000
1950
1900
1850

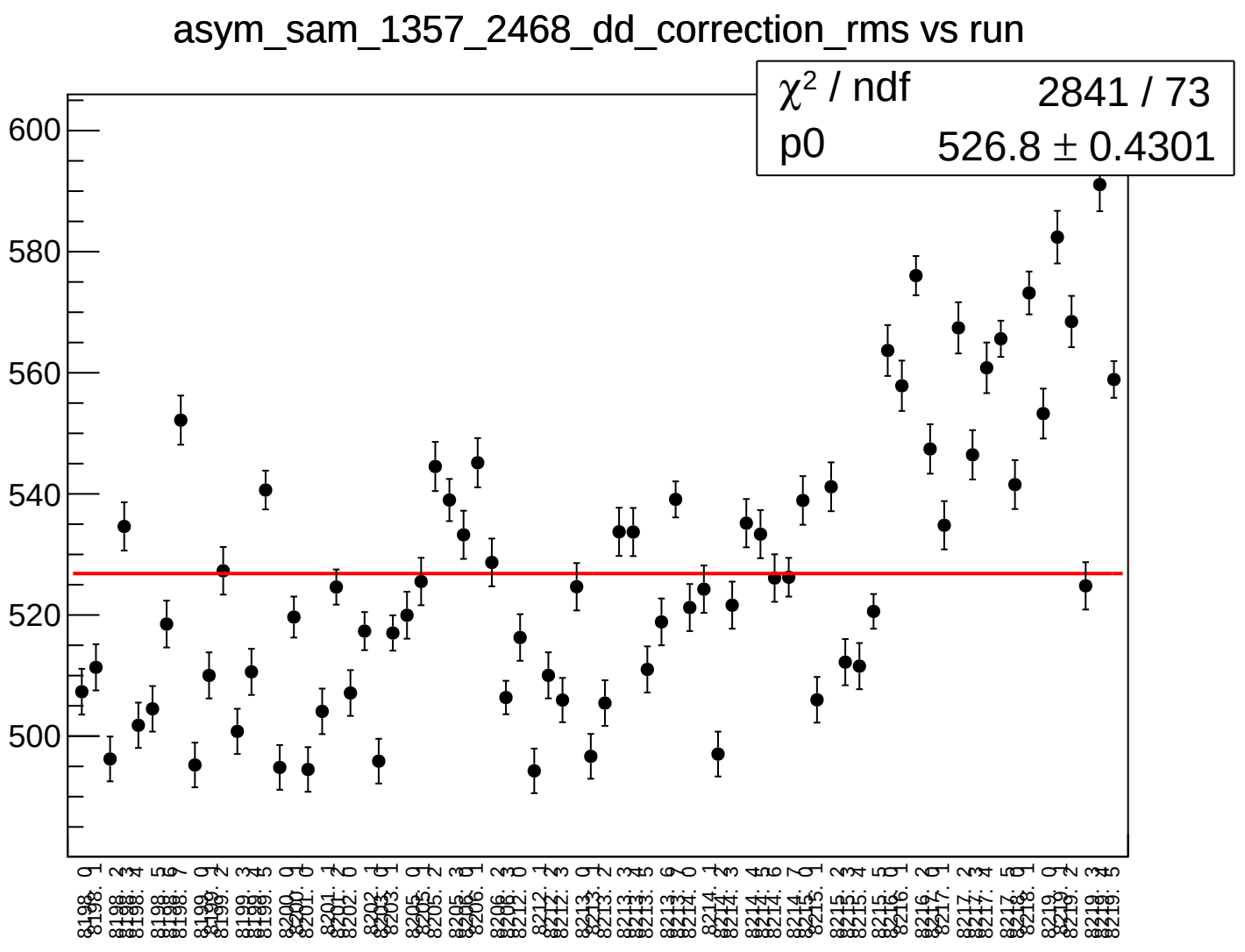

reg_asym_sam_1357_2468_dd_mean vs run
χ^2 / ndf 77.2 / 73
p0 −0.1927 ± 34.51
1500
1000
500
0
−500
−1000
pull
Entries 74
Mean −71.85
Std Dev 120.7
2
1
0
−1
−2

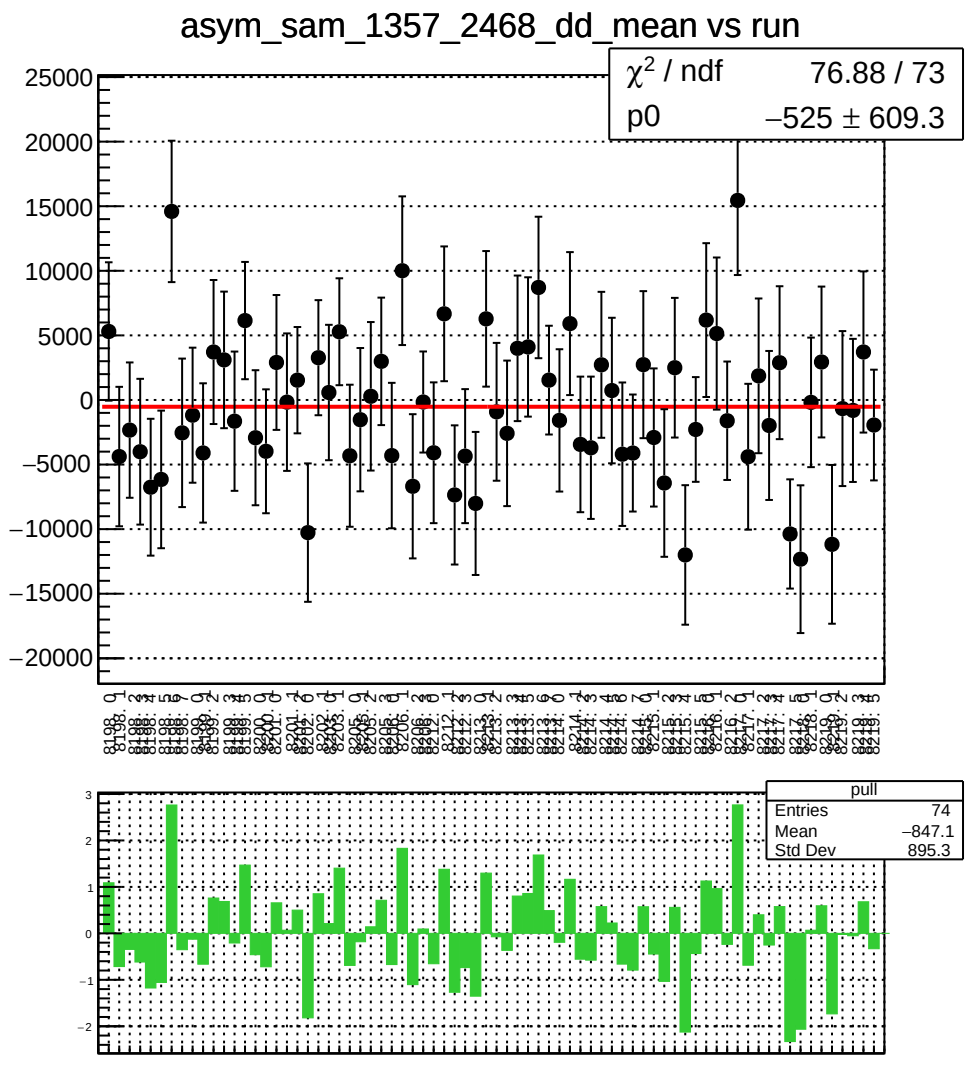

pull1D
Entries 74
Mean 0.04173
Std Dev 1.021
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

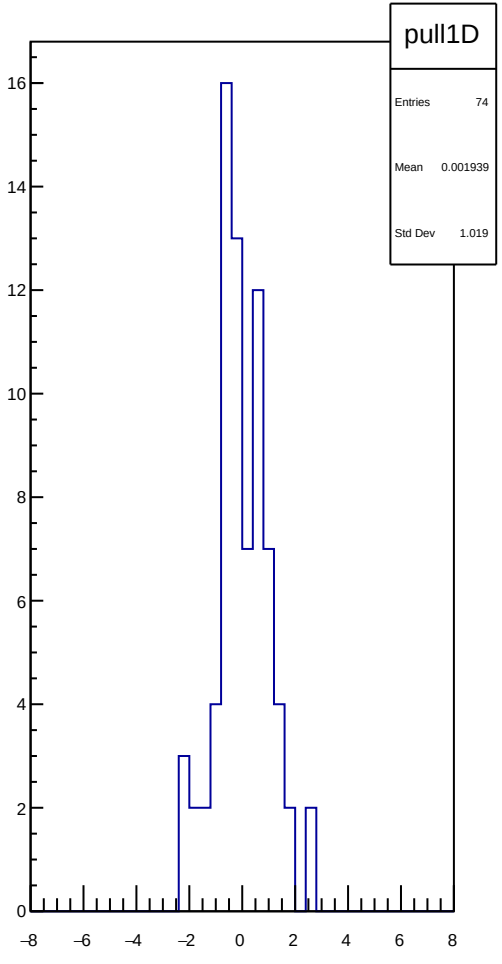

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 1.51e+04 / 73
p0 29.77 ± 0.0244
44
42
40
38
36
34
32
30
28
26

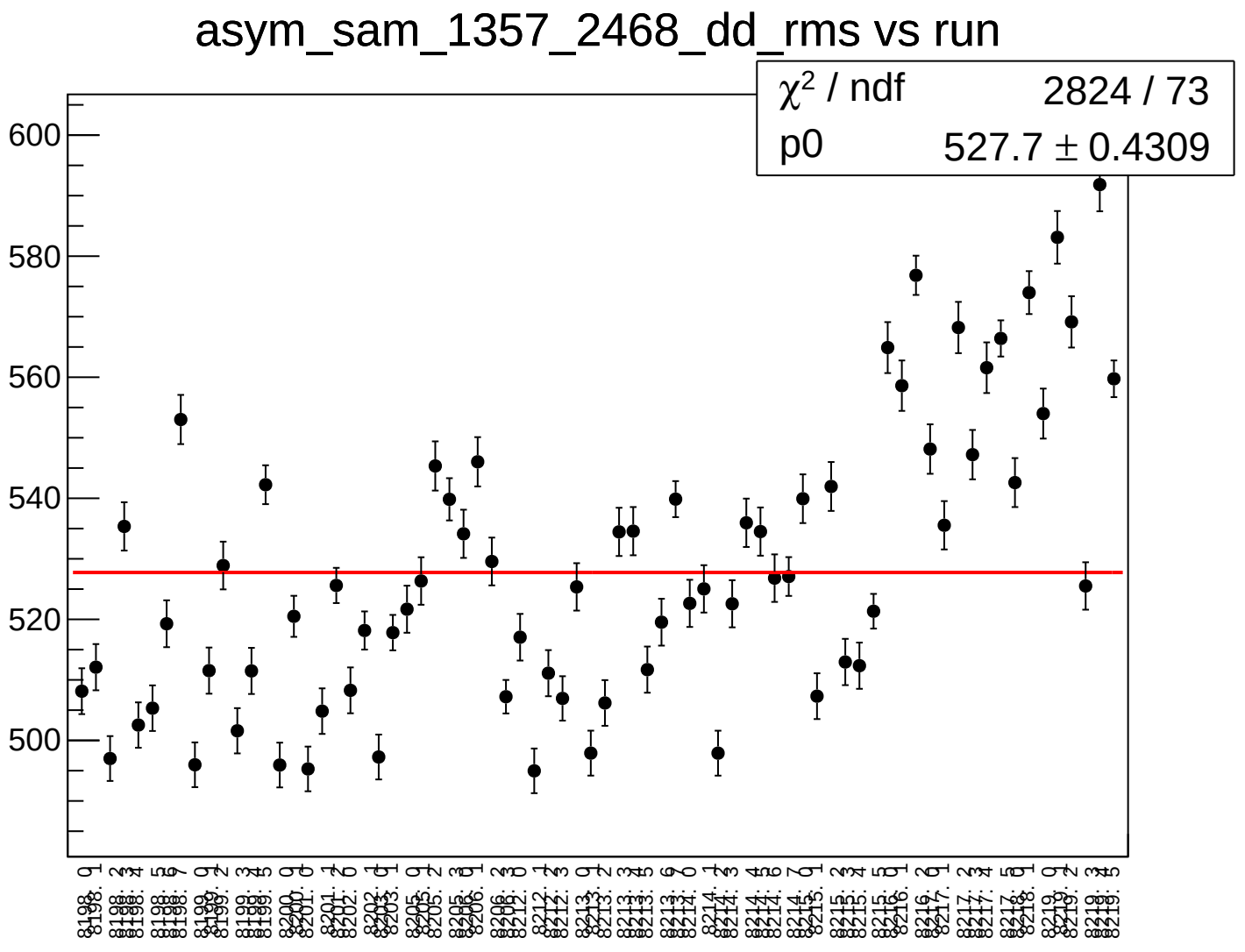

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 77.38 / 73
p0 541.6 ± 608.3
pull
Entries 74
Mean −1474
Std Dev 1522

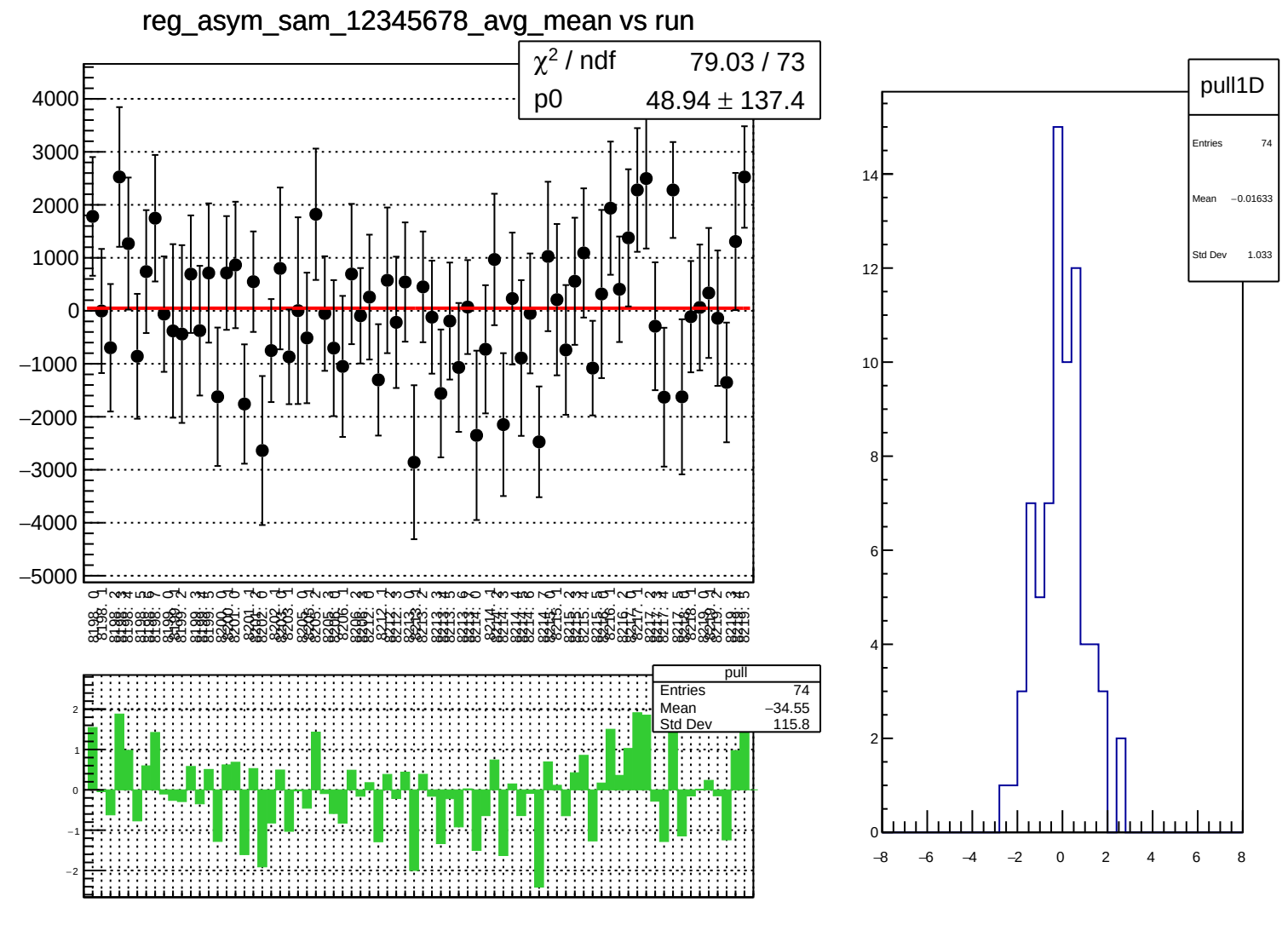

pull1D
Entries 74
Mean −0.0009798
Std Dev 1.023

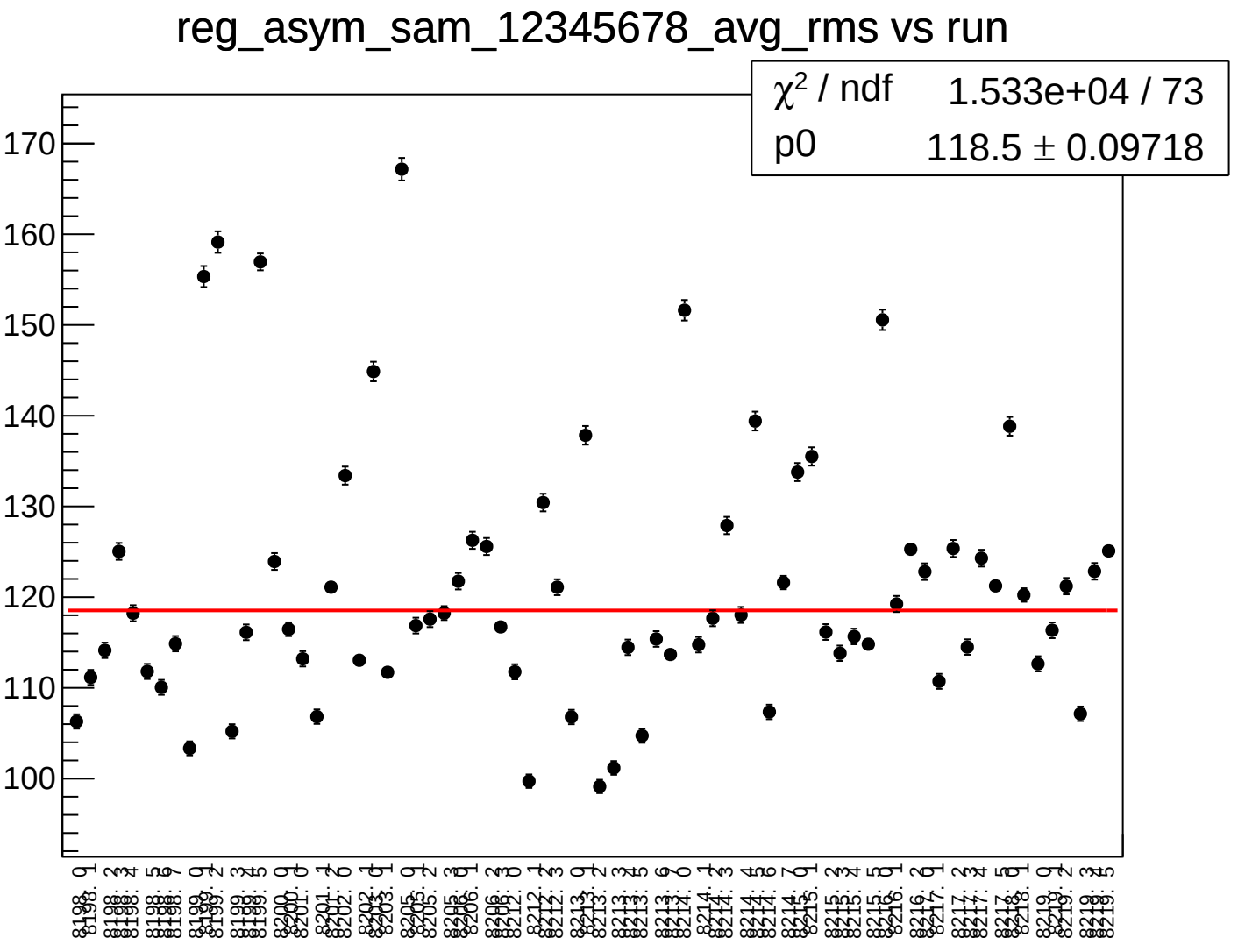

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 2841 / 73
p0 526.8 ± 0.4301
600
580
560
540
520
500

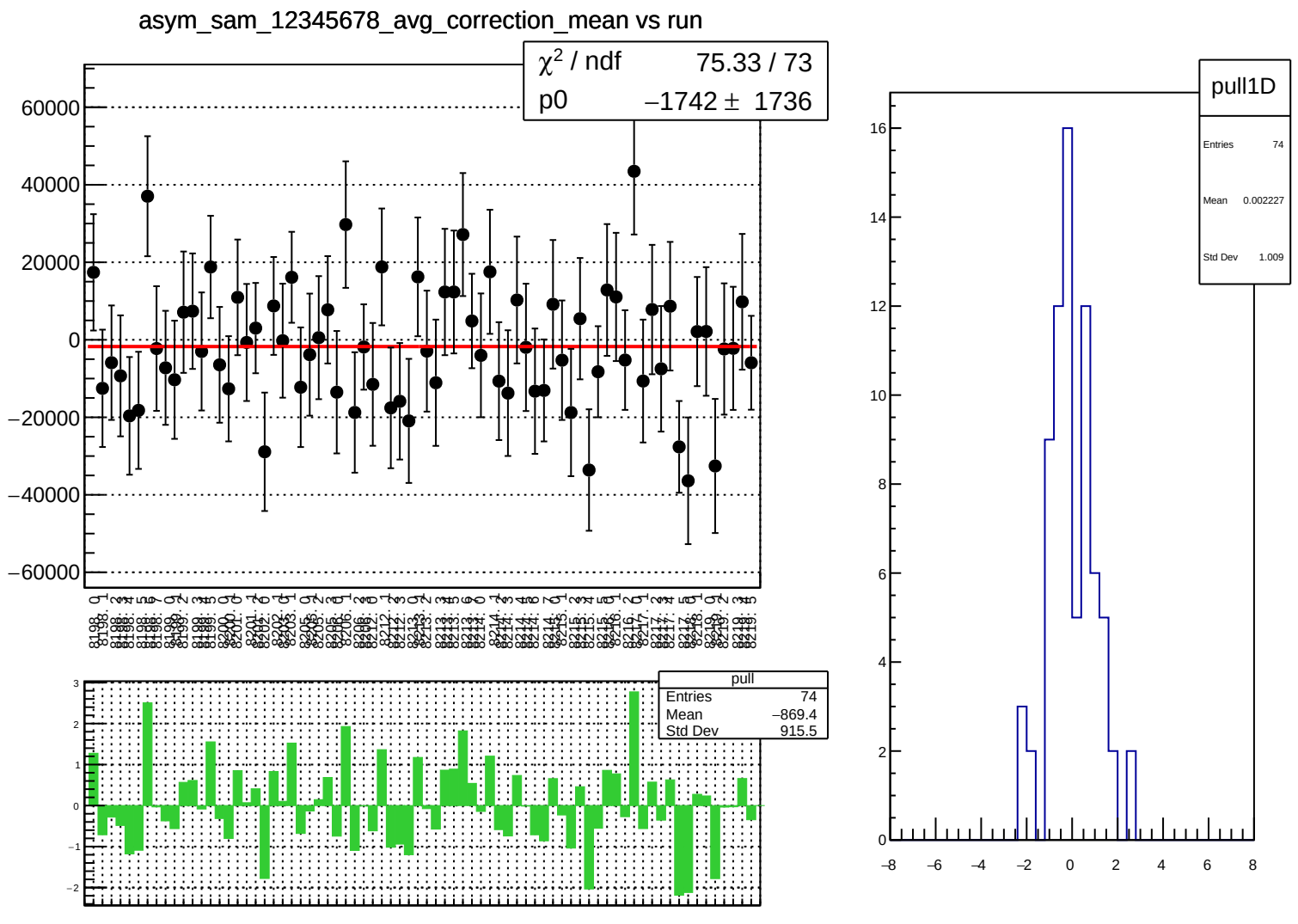

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 76.88 / 73
p0 −525 ± 609.3
pull
Entries 74
Mean −847.1
Std Dev 895.3

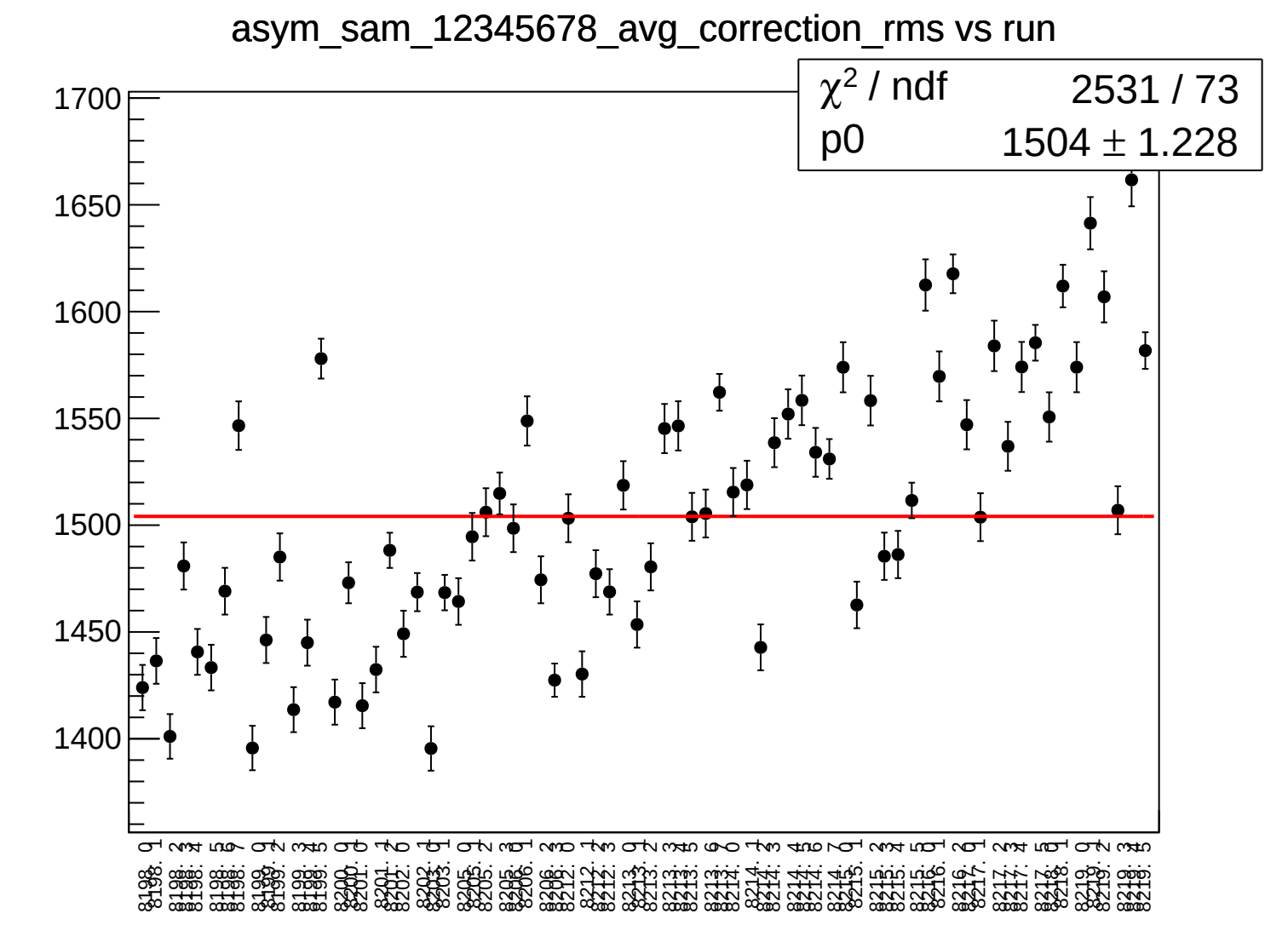

pull1D
Entries 74
Mean 0.001939
Std Dev 1.019

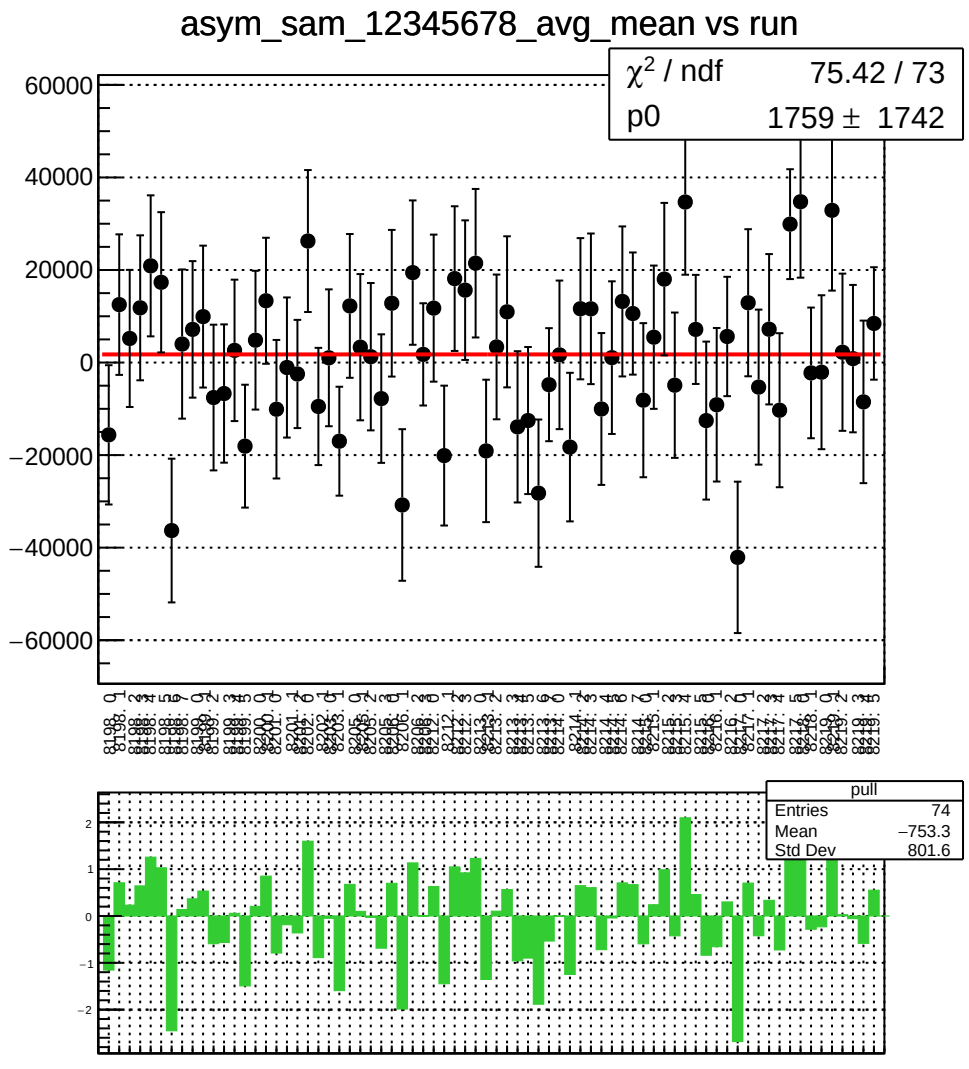

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 2824 / 73
p0 527.7 ± 0.4309
600
580
560
540
520
500

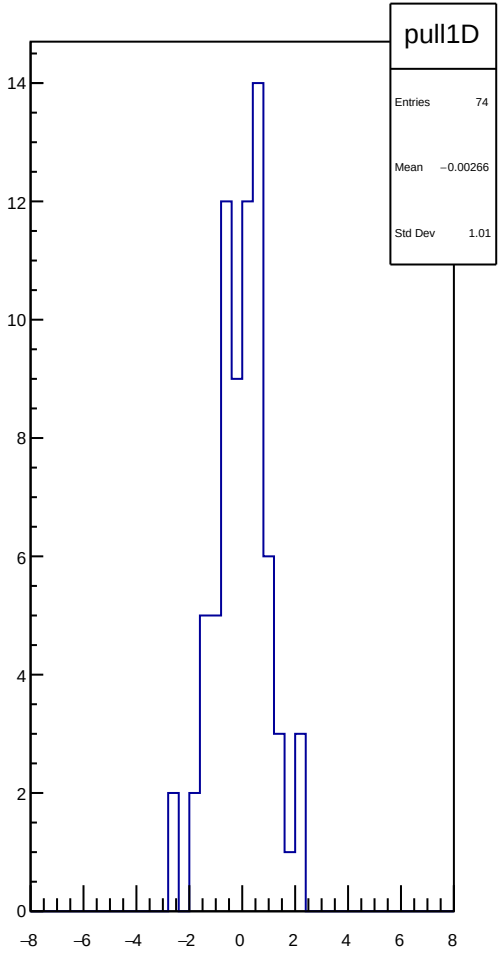

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 79.03 / 73
p0 48.94 ± 137.4
pull
Entries 74
Mean −34.55
Std Dev 115.8
pull1D
Entries 74
Mean −0.01633
Std Dev 1.033

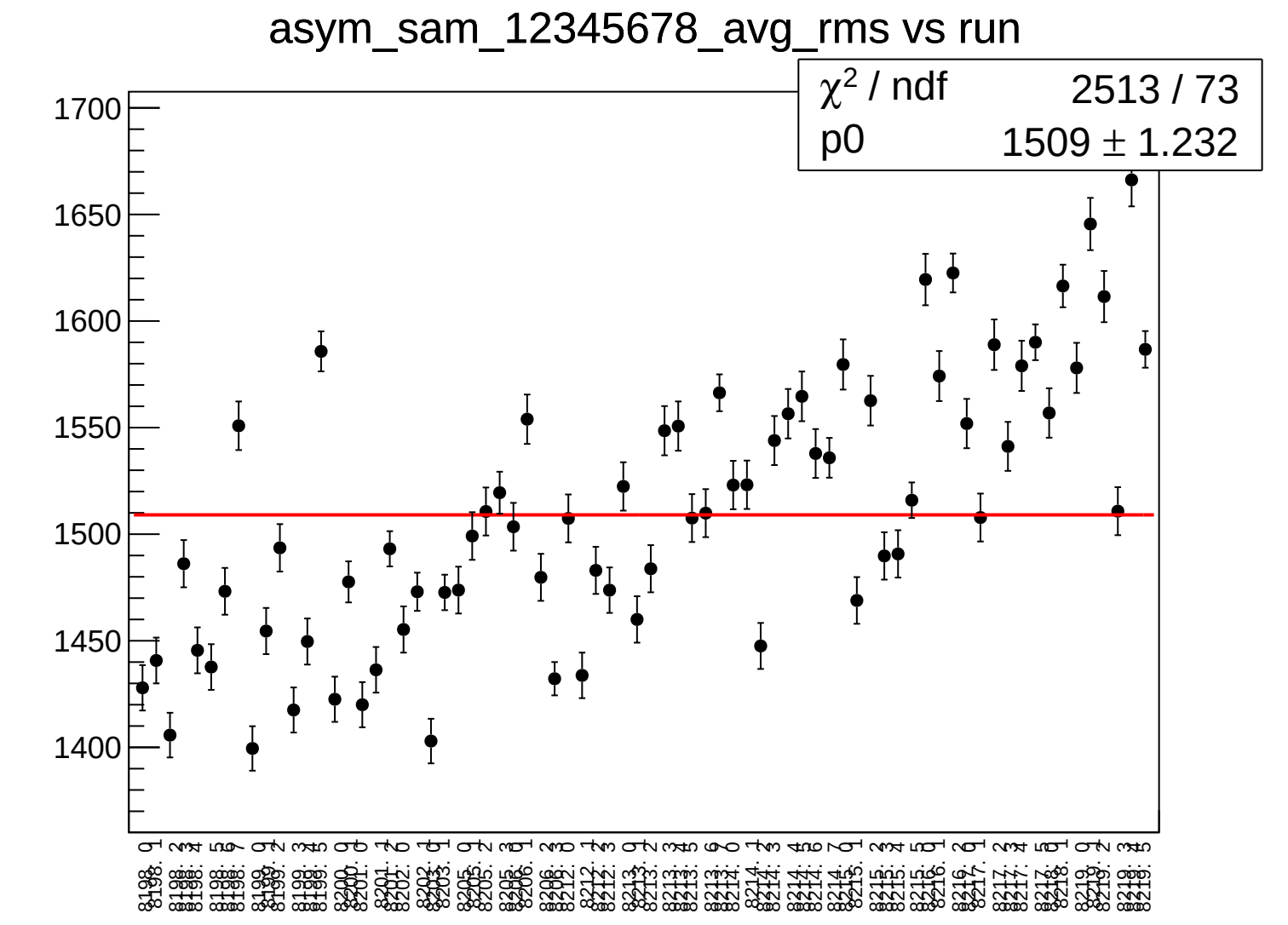

reg_asym_sam_12345678_avg_rms vs run
χ^2 / ndf 1.533e+04 / 73
p0 118.5 ± 0.09718
170
160
150
140
130
120
110
100

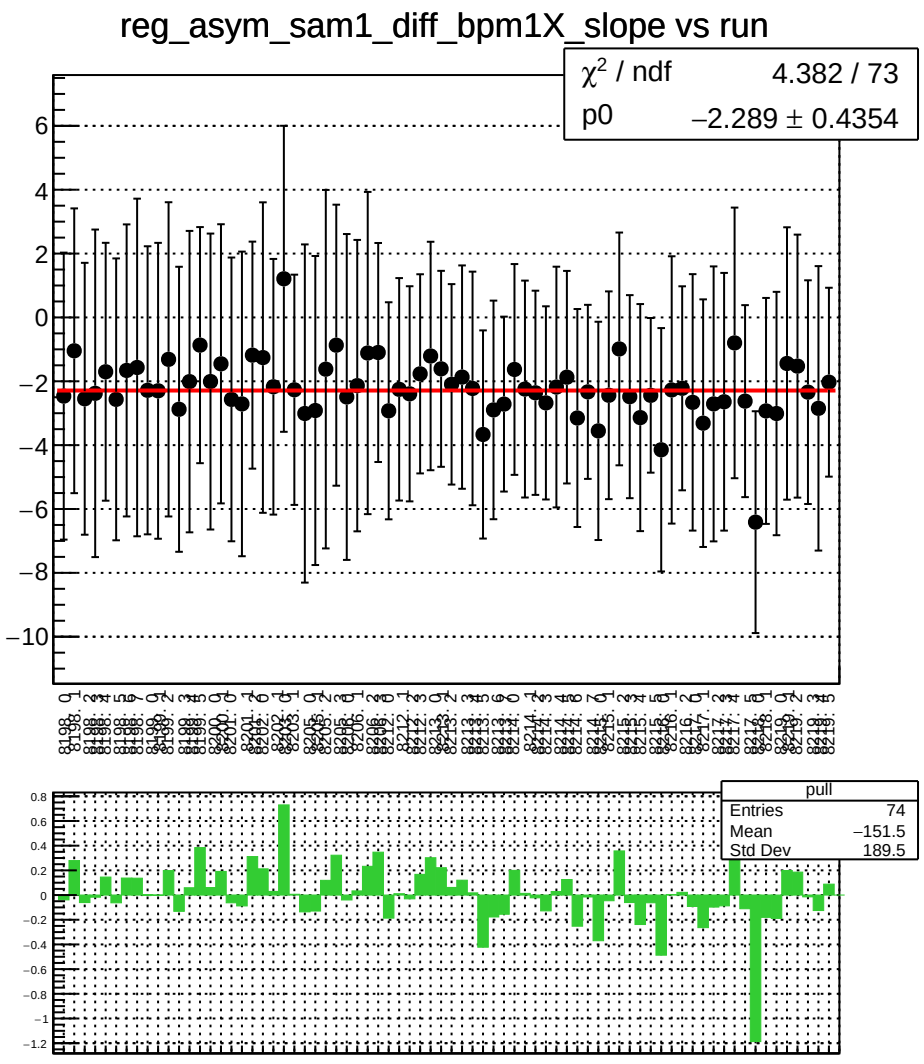

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 75.33 / 73
p0 −1742 ± 1736
60000
40000
20000
0
−20000
−40000
−60000
pull
Entries 74
Mean −869.4
Std Dev 915.5
3
2
1
0
−1
−2
pull1D
Entries 74
Mean 0.002227
Std Dev 1.009
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

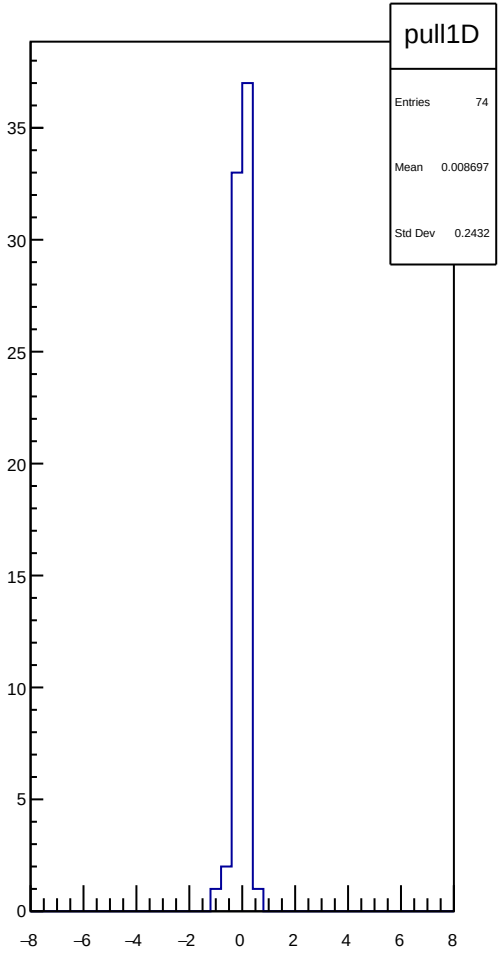

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 2531 / 73
p0 1504 ± 1.228
1700
1650
1600
1550
1500
1450
1400

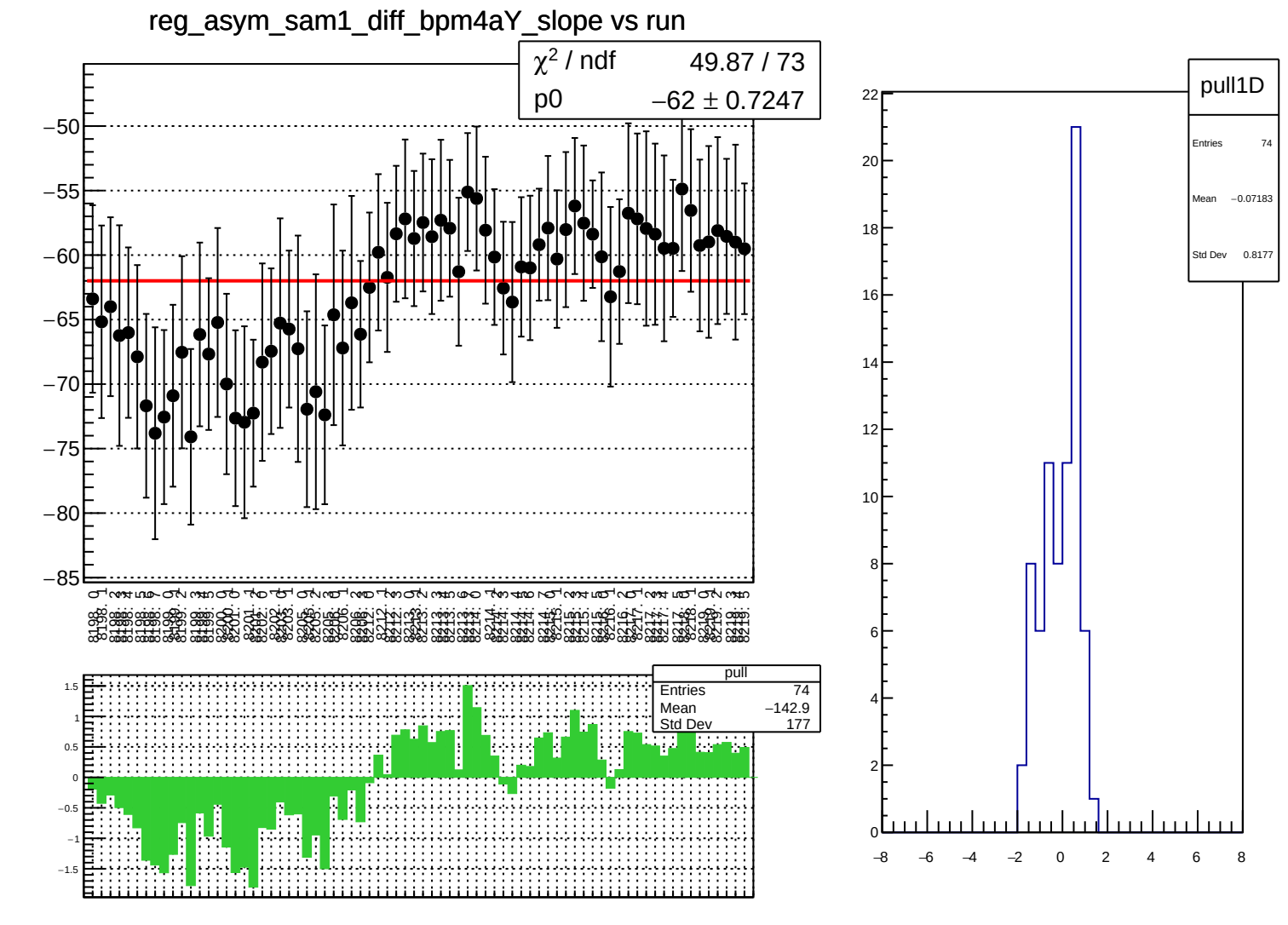

asym_sam_12345678_avg_mean vs run
χ² / ndf 75.42 / 73
p0 1759 ± 1742
pull
Entries 74
Mean −753.3
Std Dev 801.6

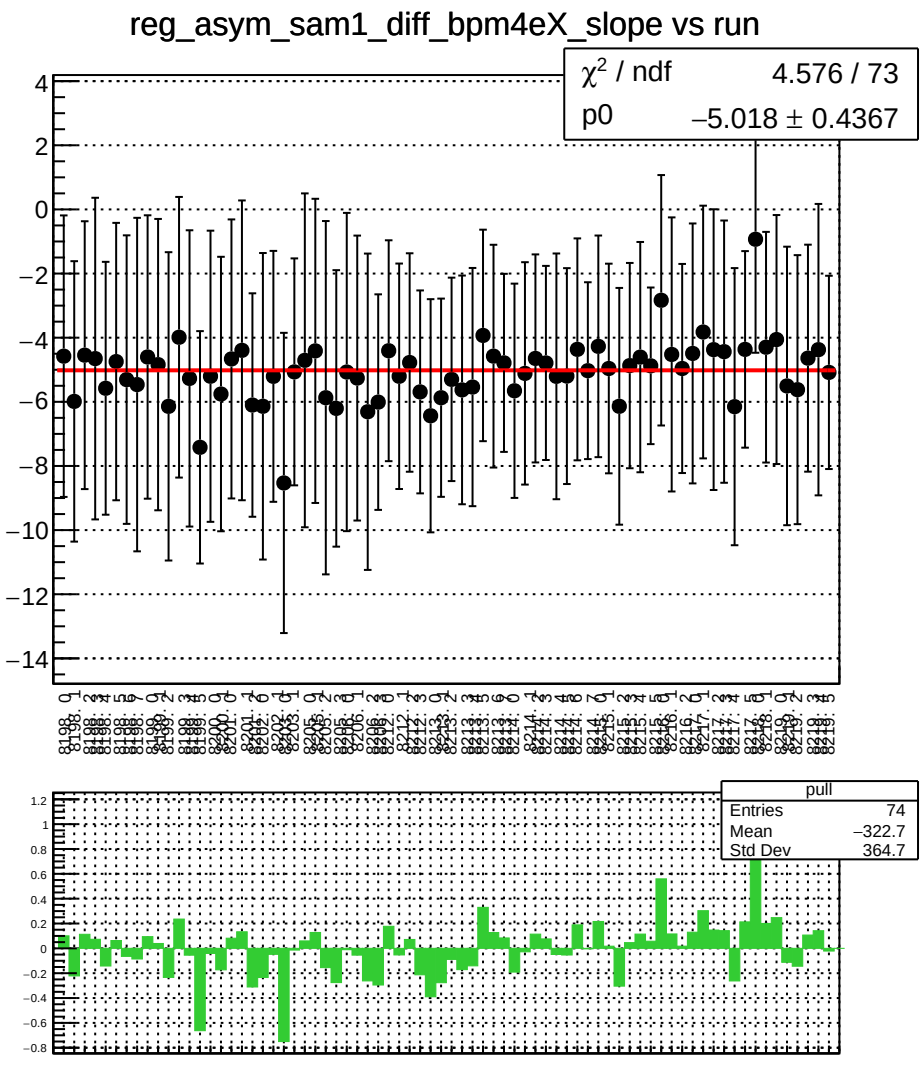

pull1D
Entries 74
Mean −0.00266
Std Dev 1.01

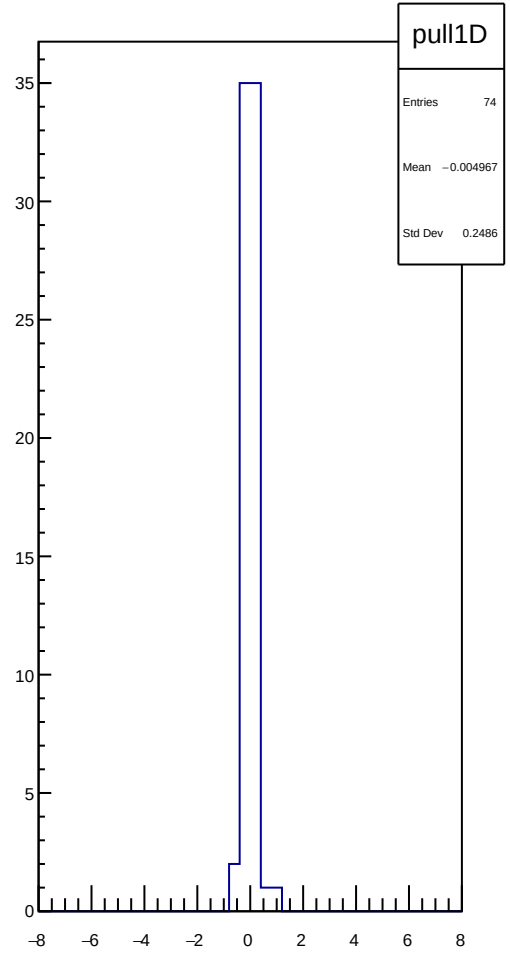

asym_sam_12345678_avg_rms vs run
χ² / ndf 2513 / 73
p0 1509 ± 1.232
1700
1650
1600
1550
1500
1450
1400

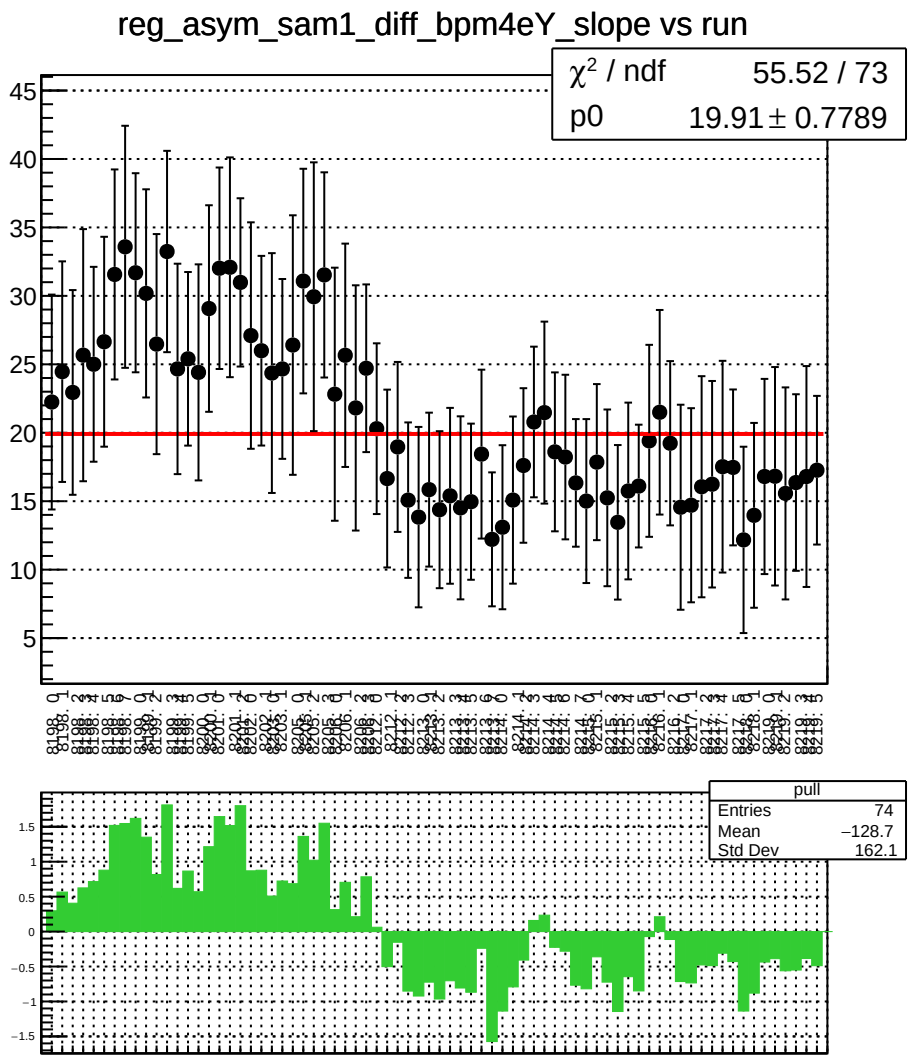

reg_asym_sam1_diff_bpm1X_slope vs run
χ² / ndf 4.382 / 73
p0 −2.289 ± 0.4354
pull
Entries 74
Mean −151.5
Std Dev 189.5

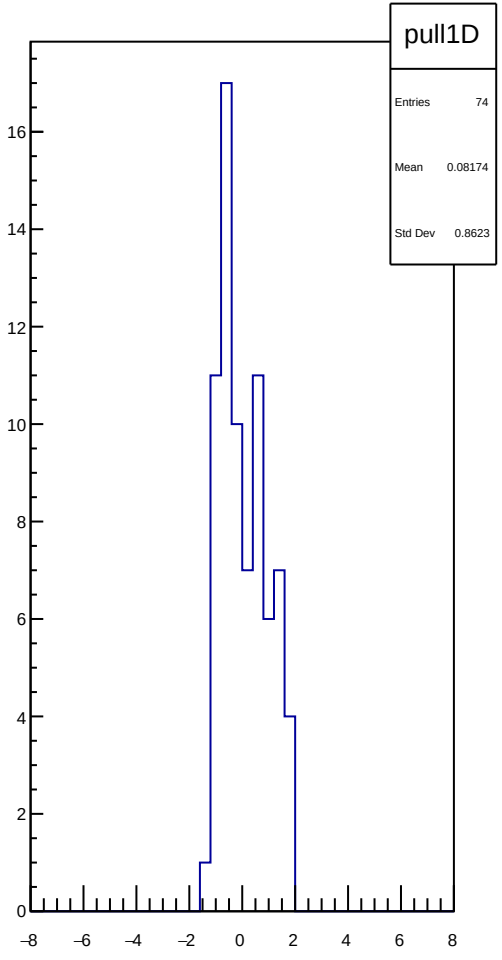

pull1D
Entries 74
Mean 0.008697
Std Dev 0.2432

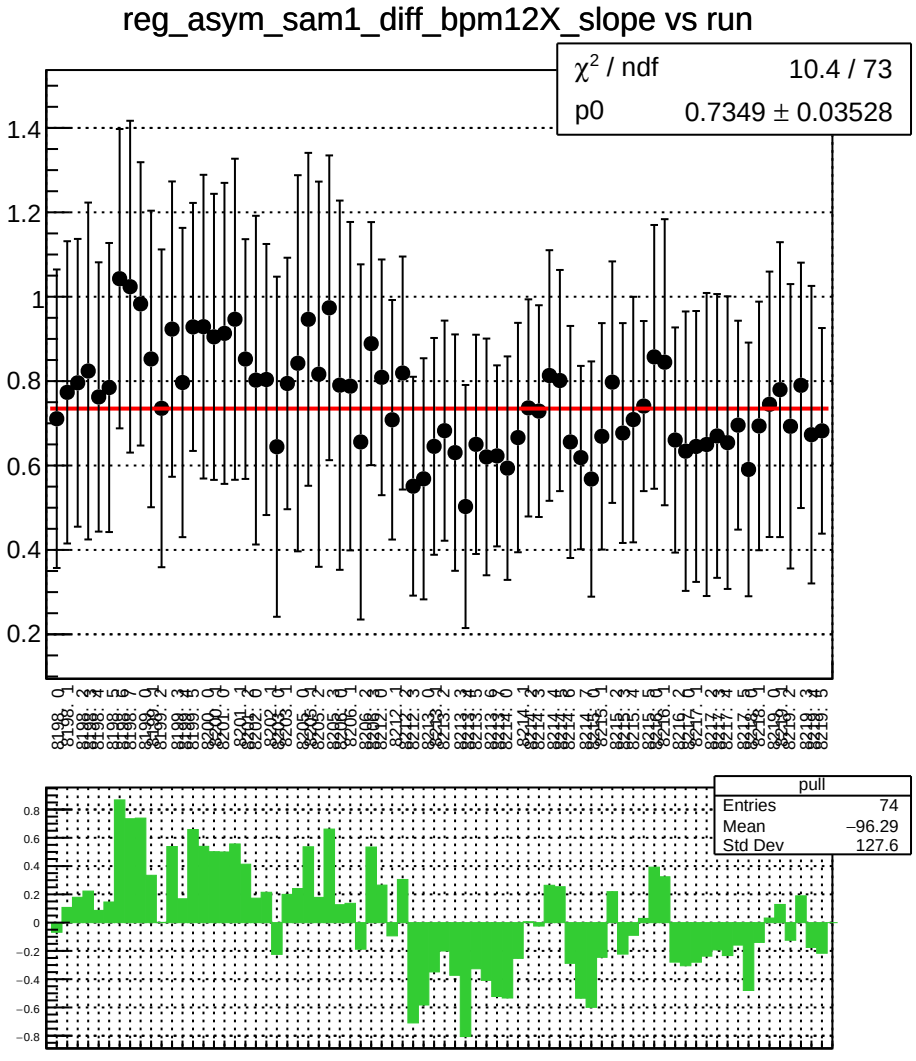

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 49.87 / 73
p0 −62 ± 0.7247
pull
Entries 74
Mean −142.9
Std Dev 177
pull1D
Entries 74
Mean −0.07183
Std Dev 0.8177

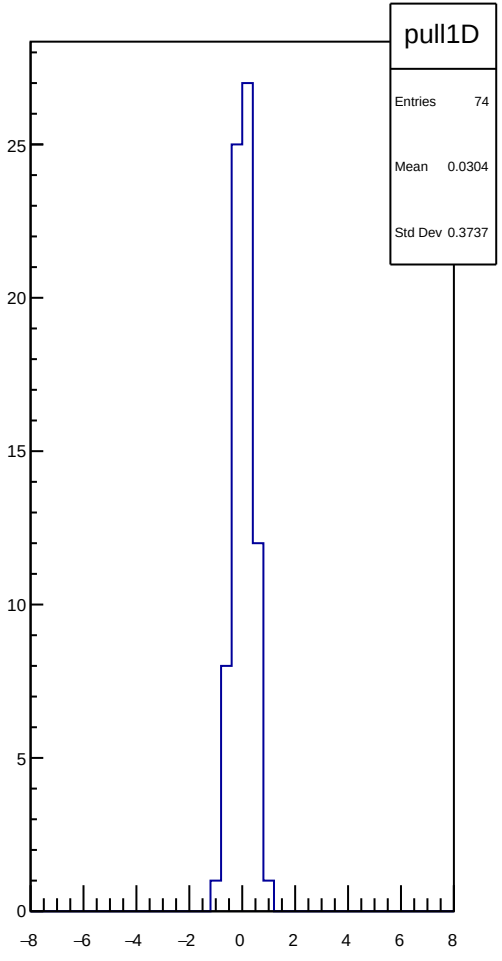

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 4.576 / 73
p0 −5.018 ± 0.4367
pull
Entries 74
Mean −322.7
Std Dev 364.7

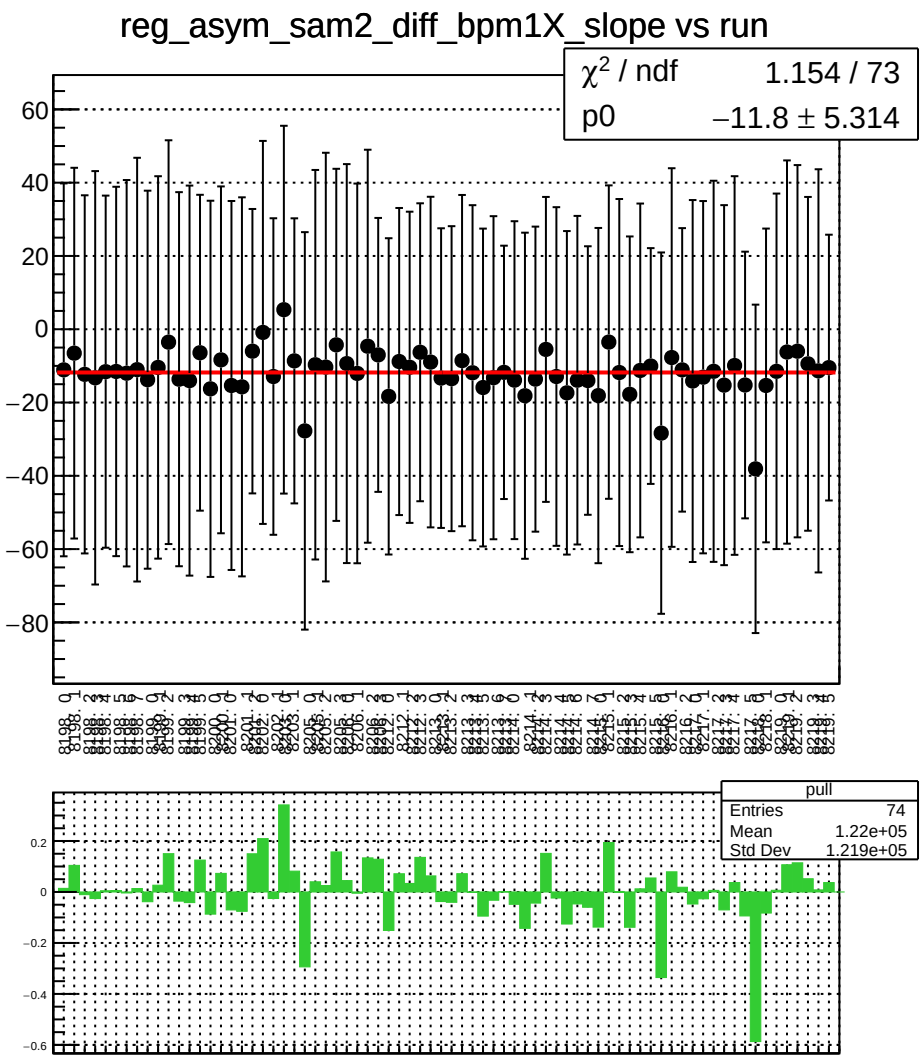

pull1D
Entries 74
Mean −0.004967
Std Dev 0.2486

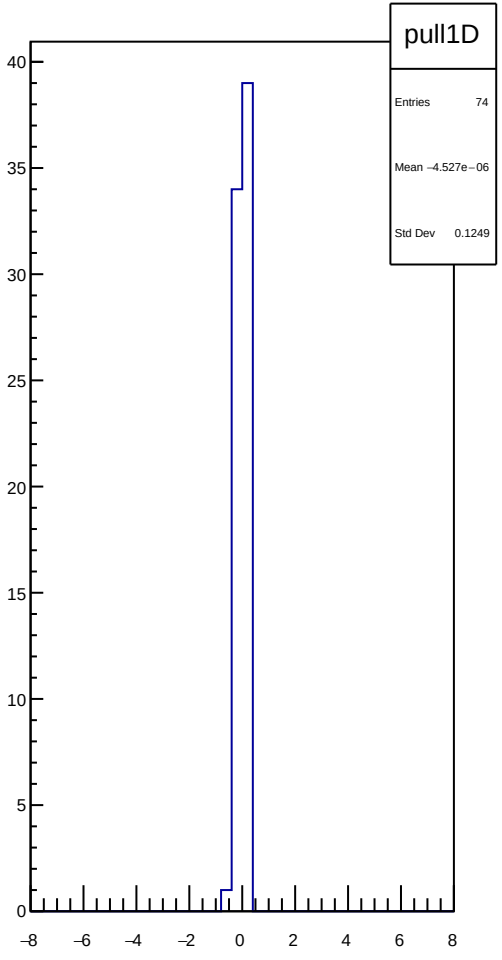

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 55.52 / 73
p0 19.91 ± 0.7789
pull
Entries 74
Mean −128.7
Std Dev 162.1

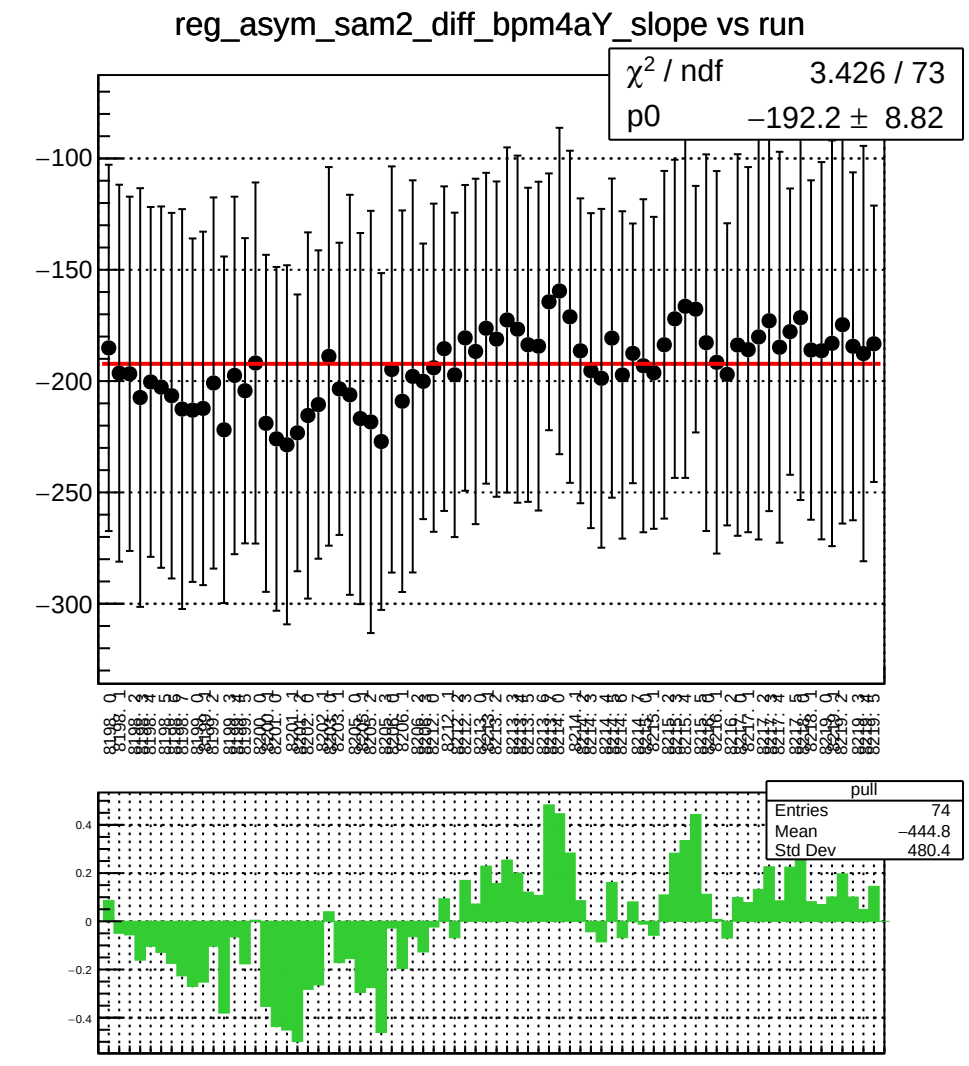

pull1D
Entries 74
Mean 0.08174
Std Dev 0.8623

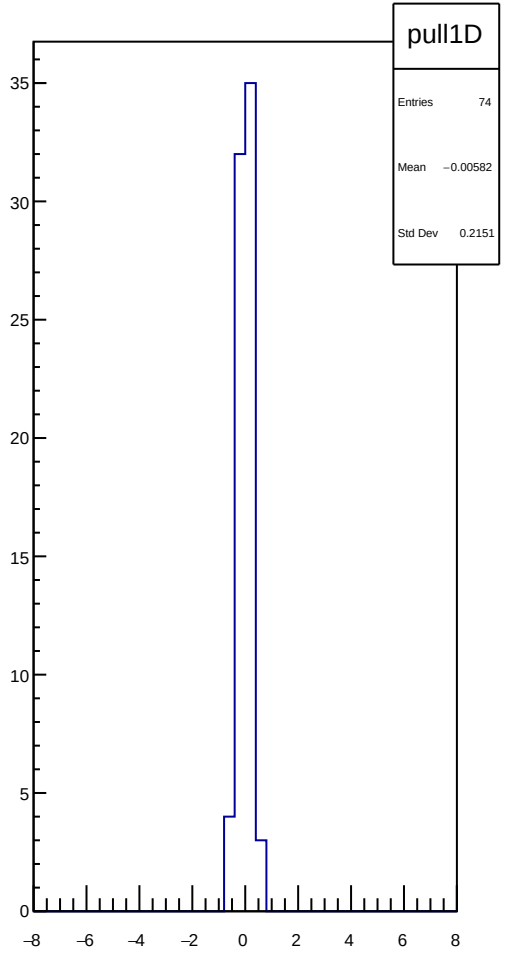

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 10.4 / 73
p0 0.7349 ± 0.03528
pull
Entries 74
Mean −96.29
Std Dev 127.6

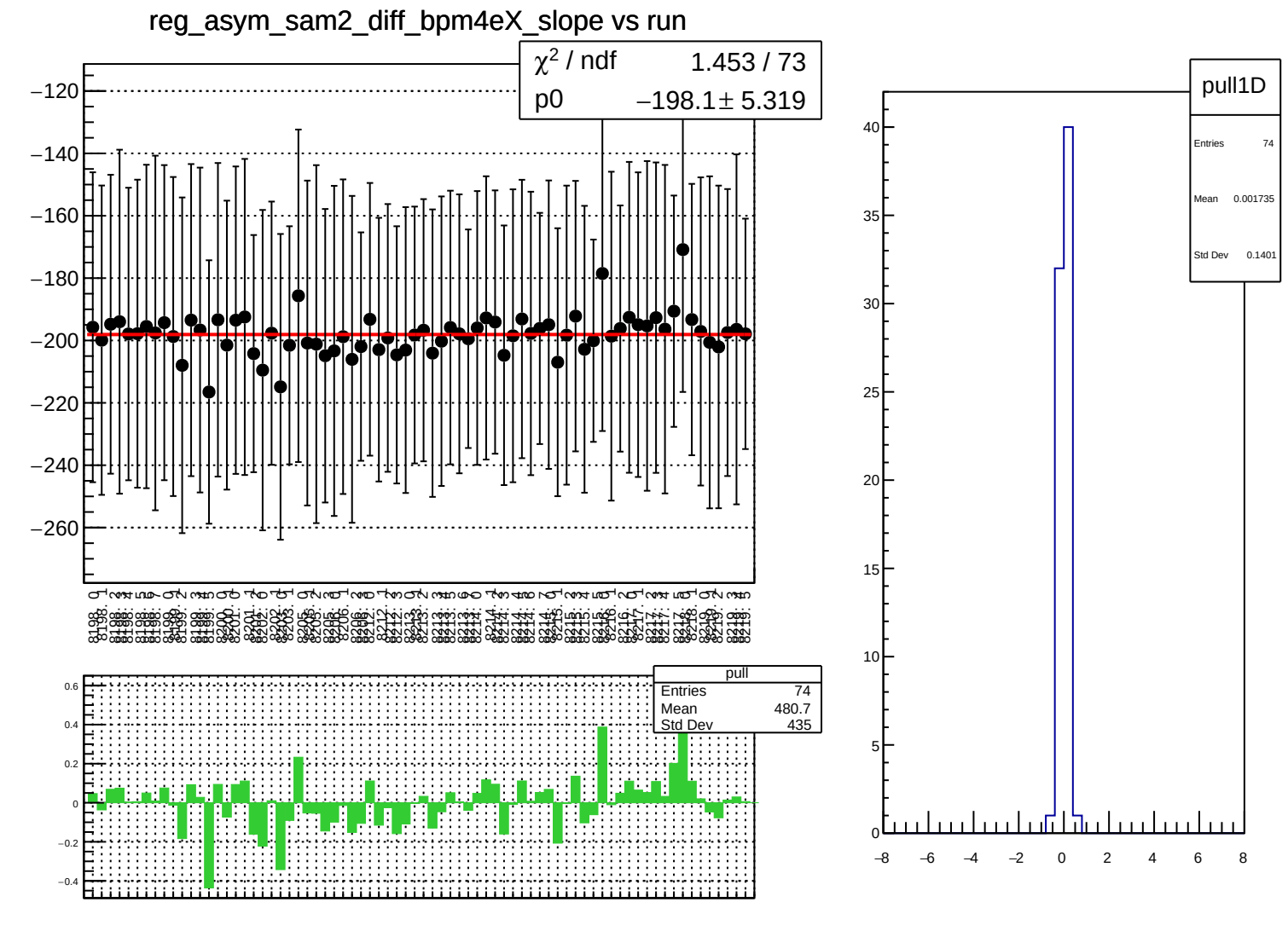

pull1D
Entries 74
Mean 0.0304
Std Dev 0.3737

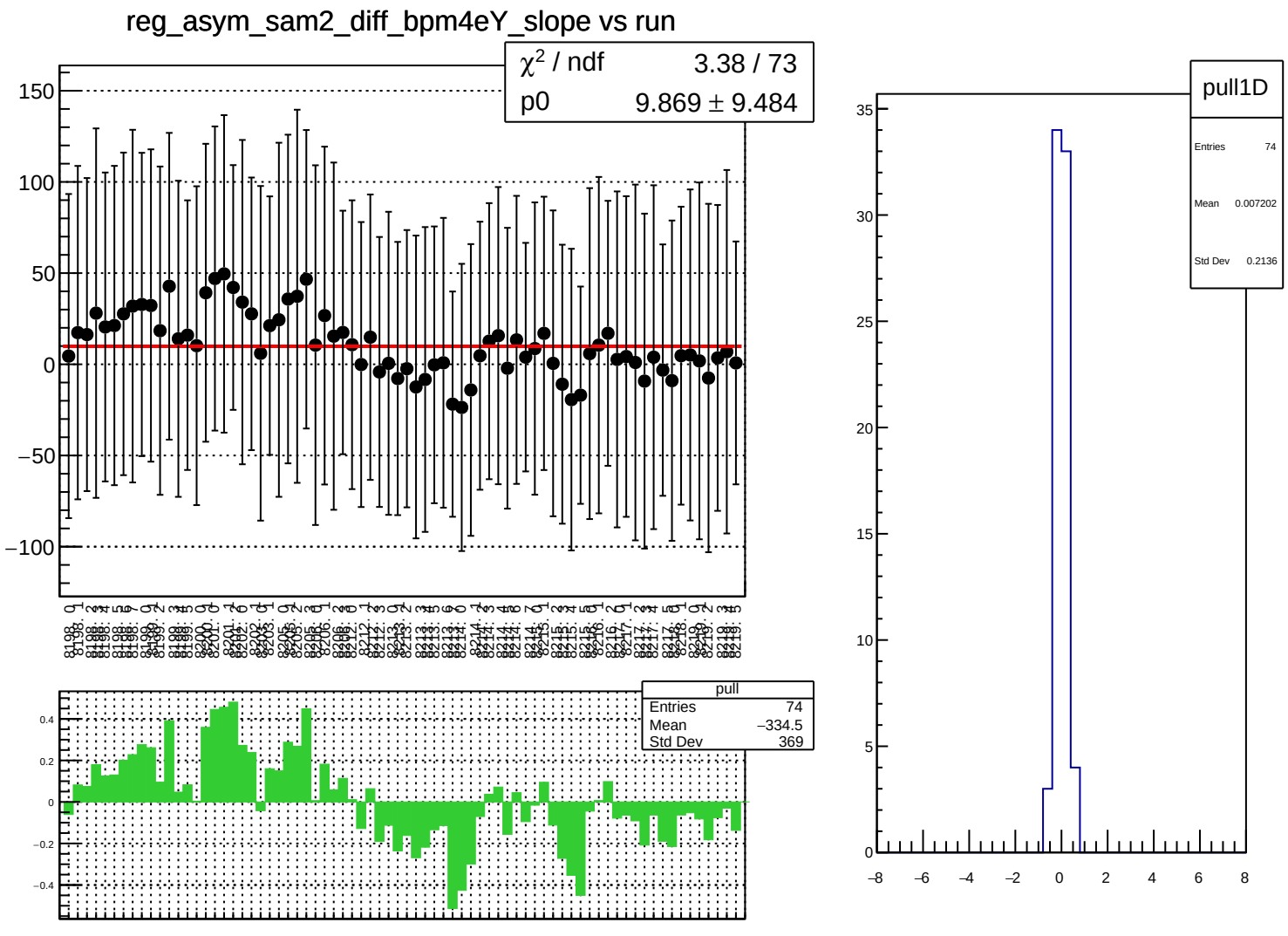

reg_asym_sam2_diff_bpm1X_slope vs run
χ² / ndf 1.154 / 73
p0 −11.8 ± 5.314
pull
Entries 74
Mean 1.22e+05
Std Dev 1.219e+05

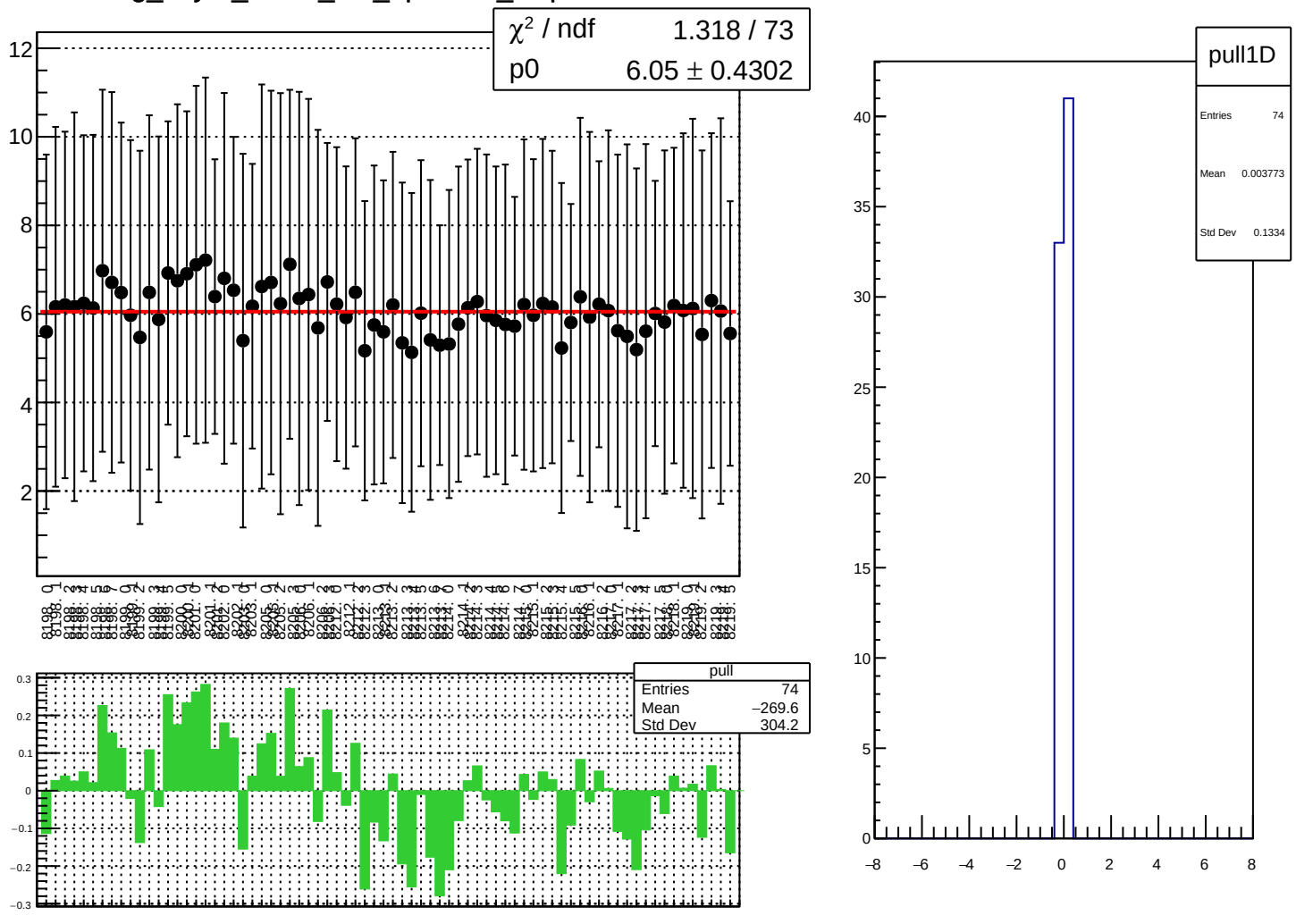

pull1D
Entries 74
Mean −4.527e−06
Std Dev 0.1249

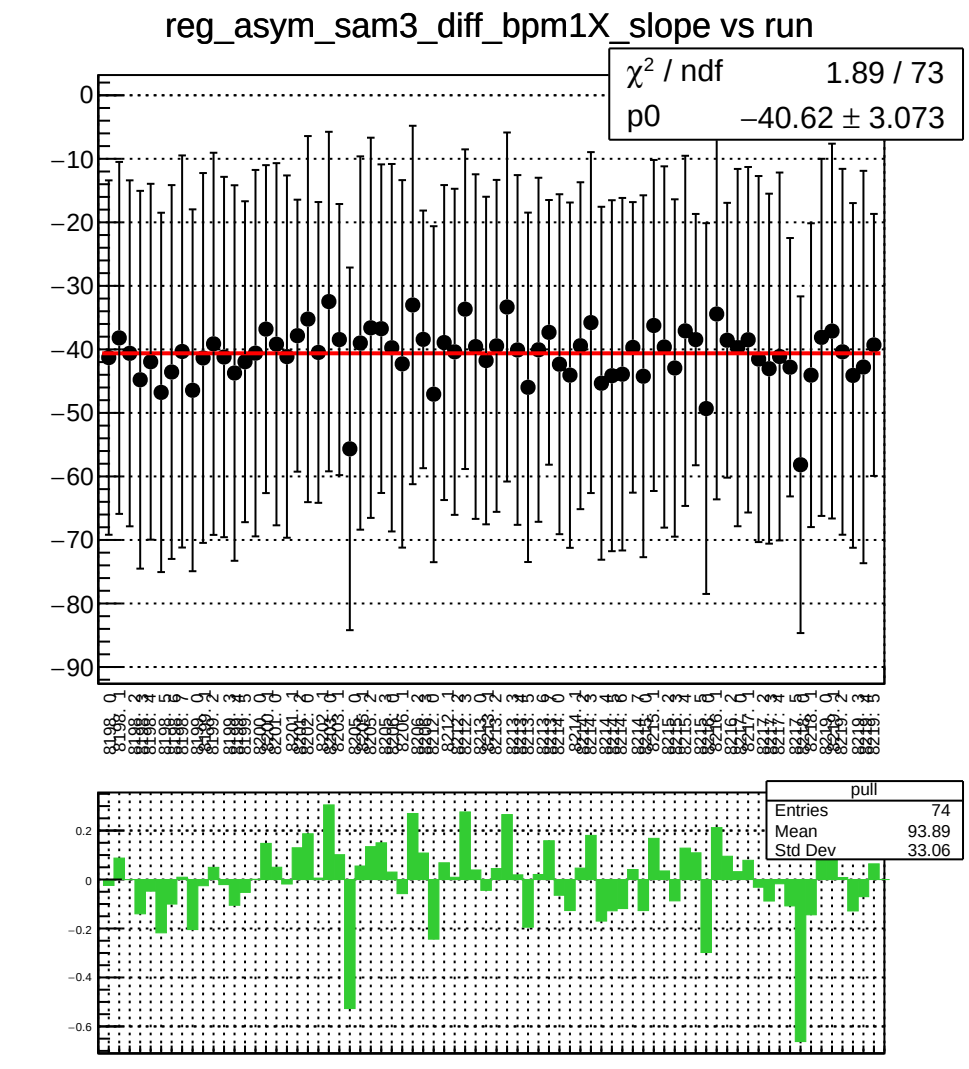

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 3.426 / 73
p0 −192.2 ± 8.82
−100
−150
−200
−250
−300
pull
Entries 74
Mean −444.8
Std Dev 480.4
0.4
0.2
0
−0.2
−0.4

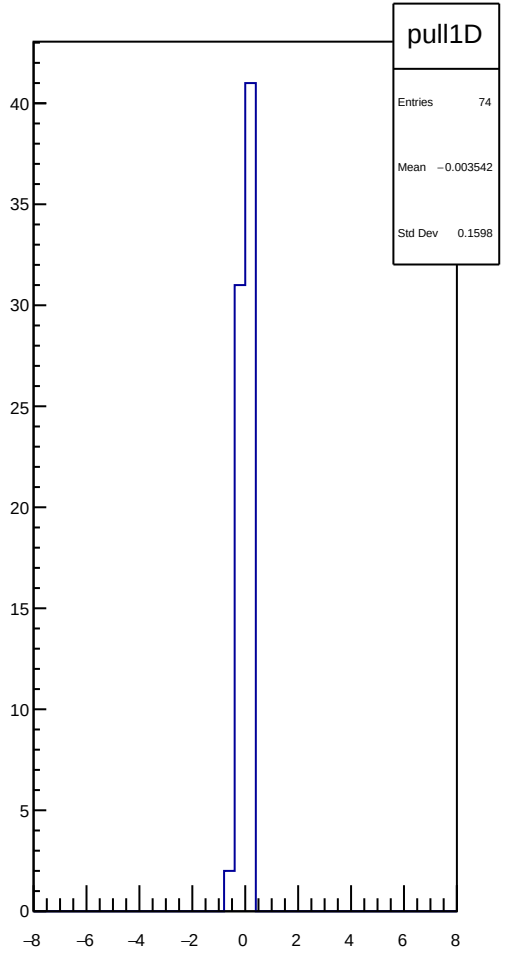

pull1D
Entries 74
Mean −0.00582
Std Dev 0.2151
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

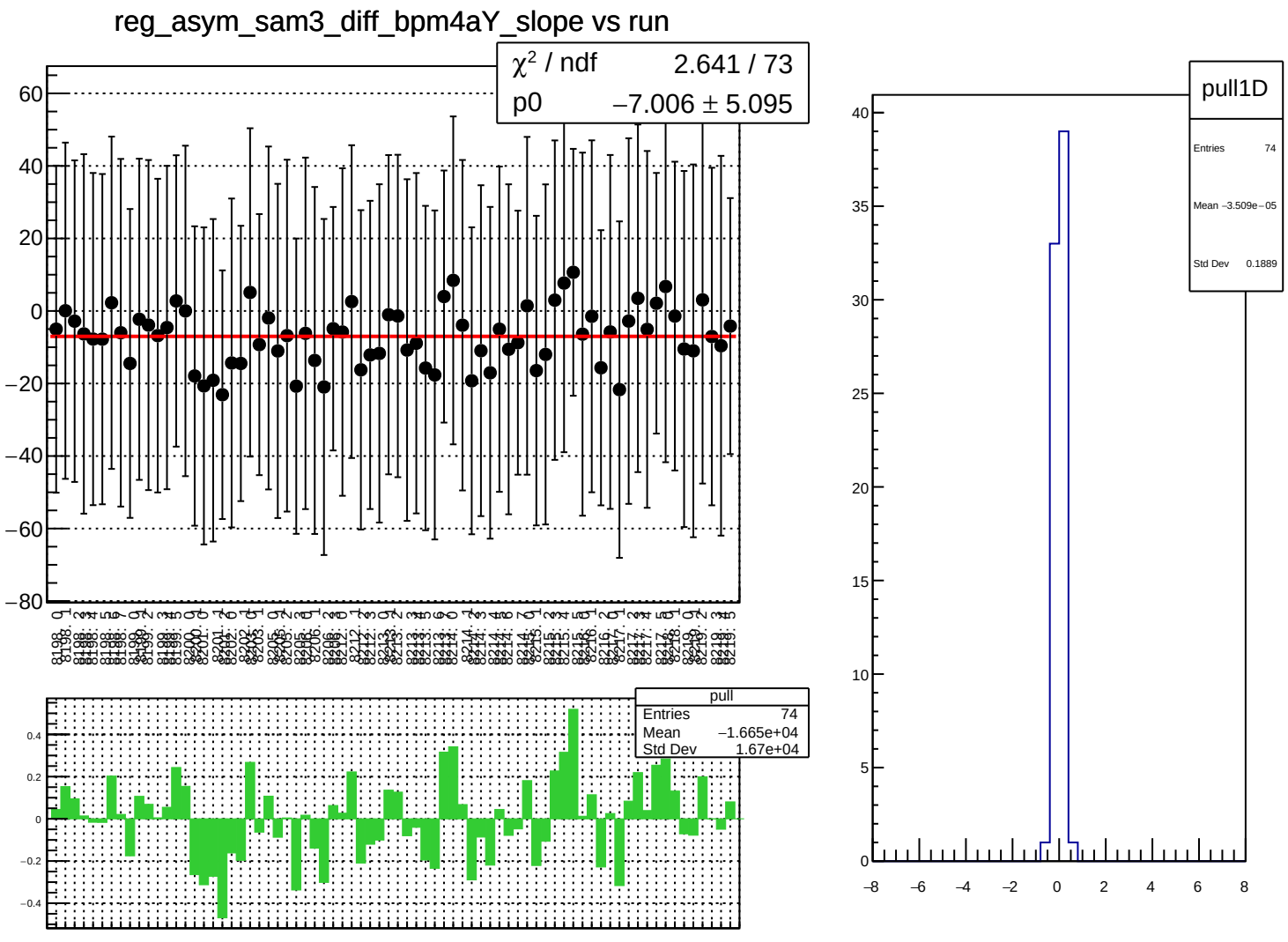

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 1.453 / 73
p0 −198.1 ± 5.319
pull
Entries 74
Mean 480.7
Std Dev 435
pull1D
Entries 74
Mean 0.001735
Std Dev 0.1401

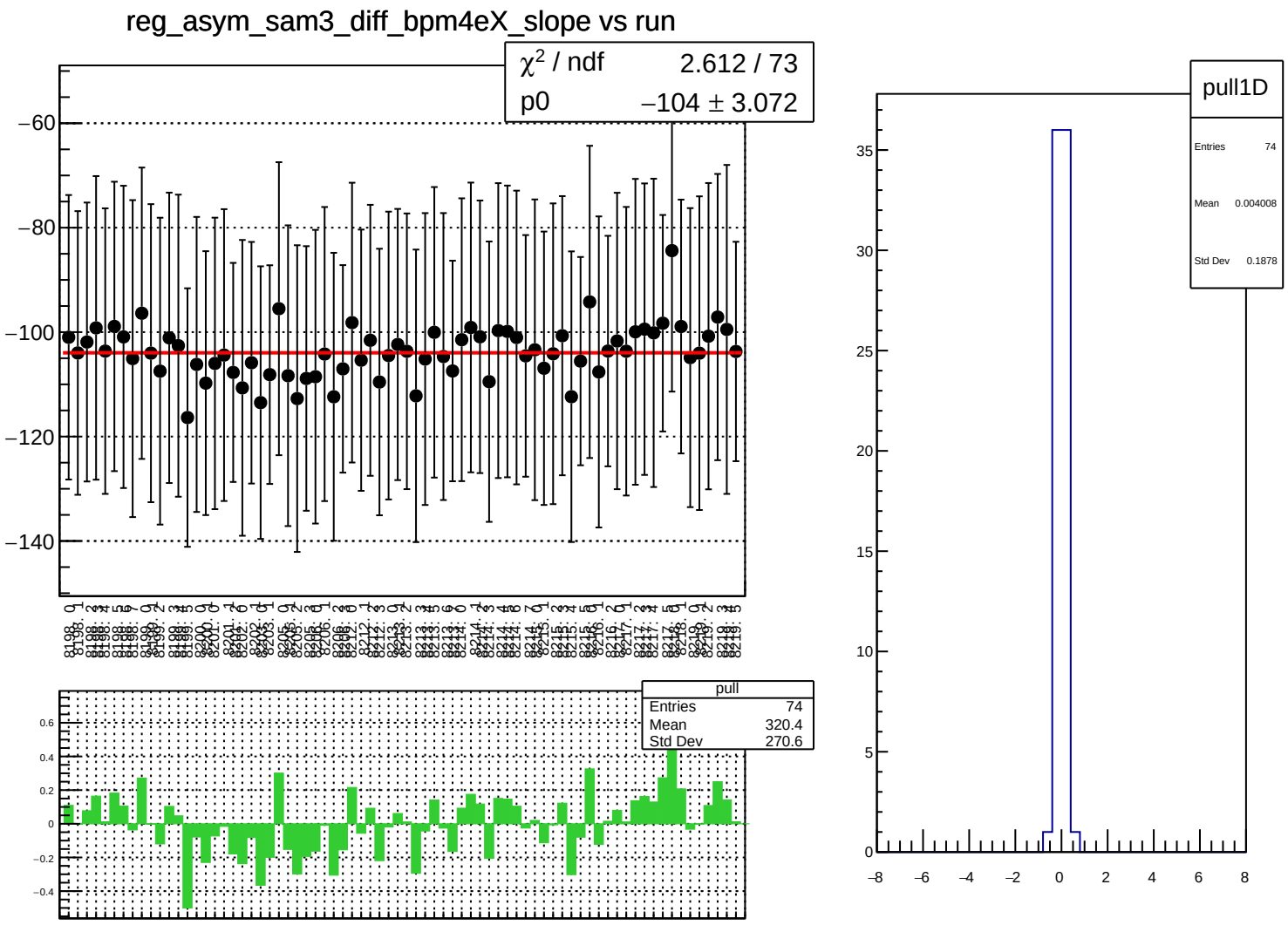

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 3.38 / 73
p0 9.869 ± 9.484
150
100
50
0
−50
−100
pull
Entries 74
Mean −334.5
Std Dev 369
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 74
Mean 0.007202
Std Dev 0.2136
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

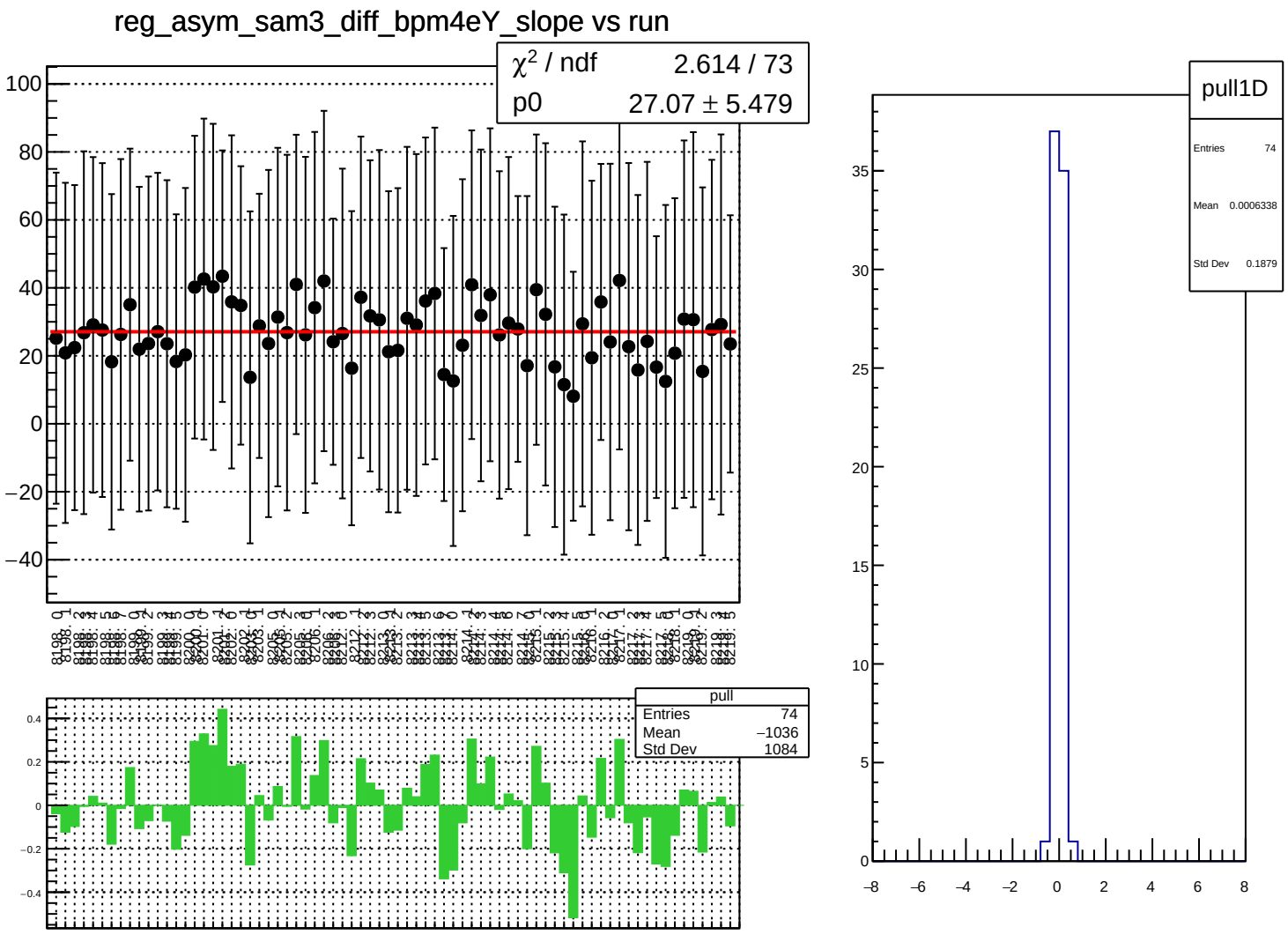

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 1.318 / 73
p0 6.05 ± 0.4302
pull
Entries 74
Mean −269.6
Std Dev 304.2
pull1D
Entries 74
Mean 0.003773
Std Dev 0.1334

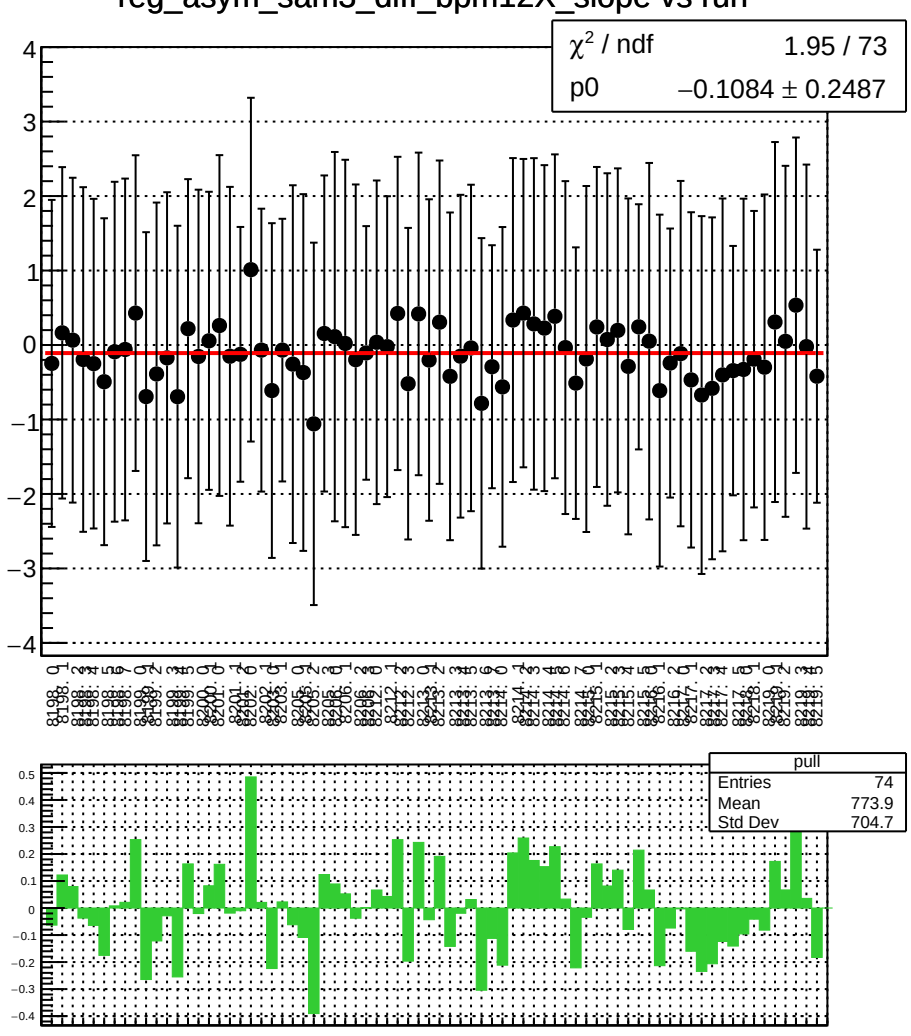

reg_asym_sam3_diff_bpm1X_slope vs run
χ² / ndf 1.89 / 73
p0 −40.62 ± 3.073
pull
Entries 74
Mean 93.89
Std Dev 33.06

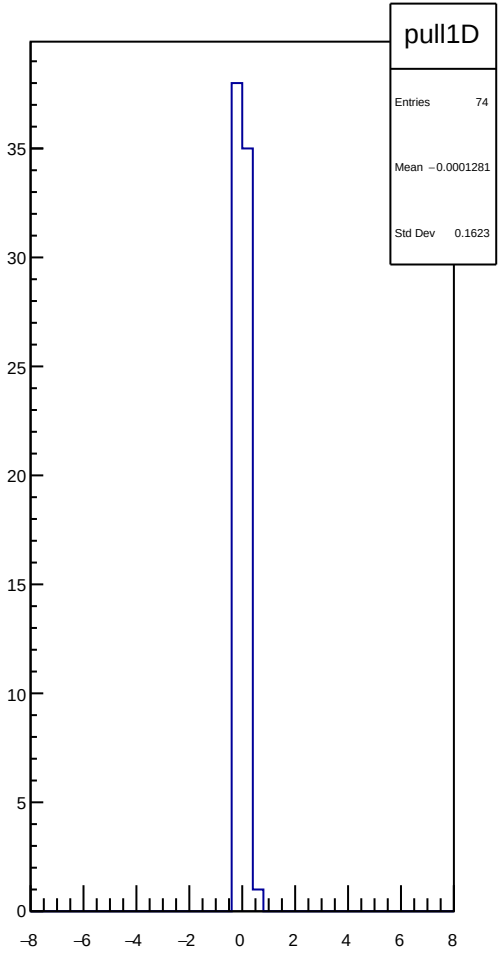

pull1D
Entries 74
Mean −0.003542
Std Dev 0.1598

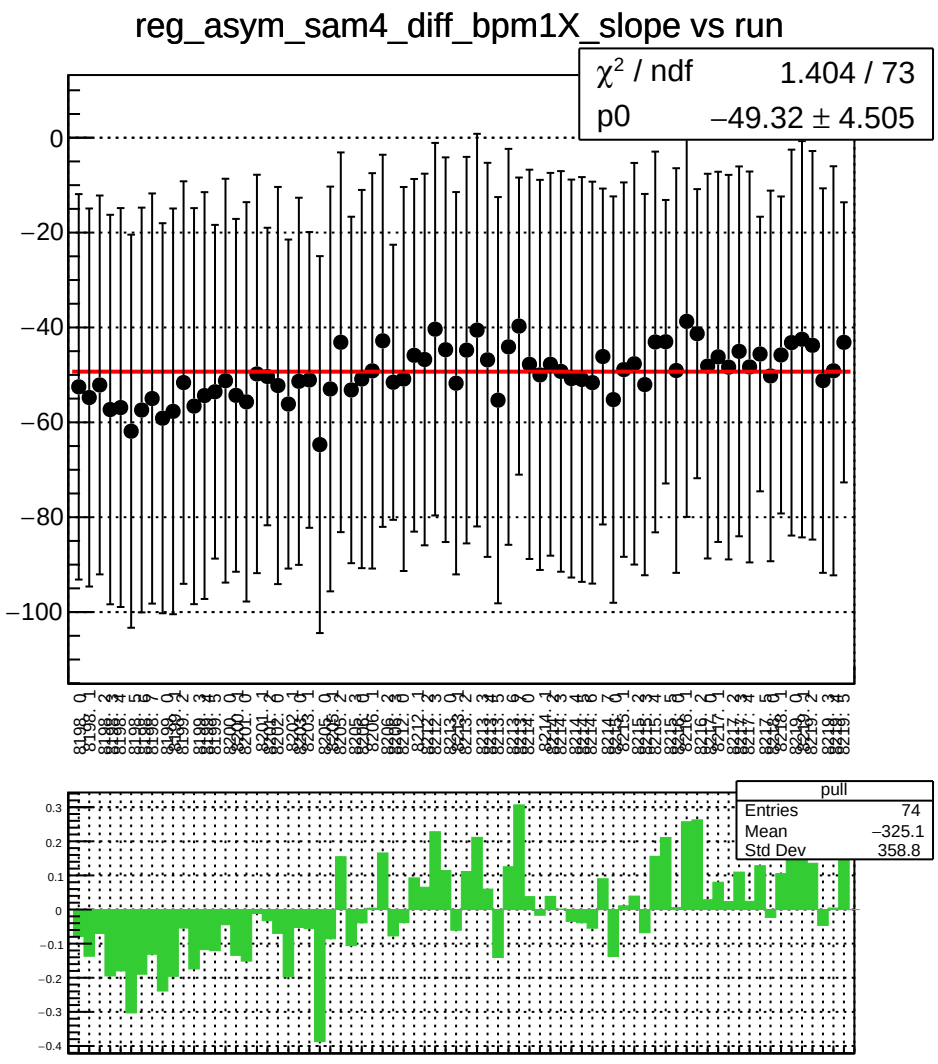

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 2.641 / 73
p0 −7.006 ± 5.095
pull
Entries 74
Mean −1.665e+04
Std Dev 1.67e+04
pull1D
Entries 74
Mean −3.509e−05
Std Dev 0.1889

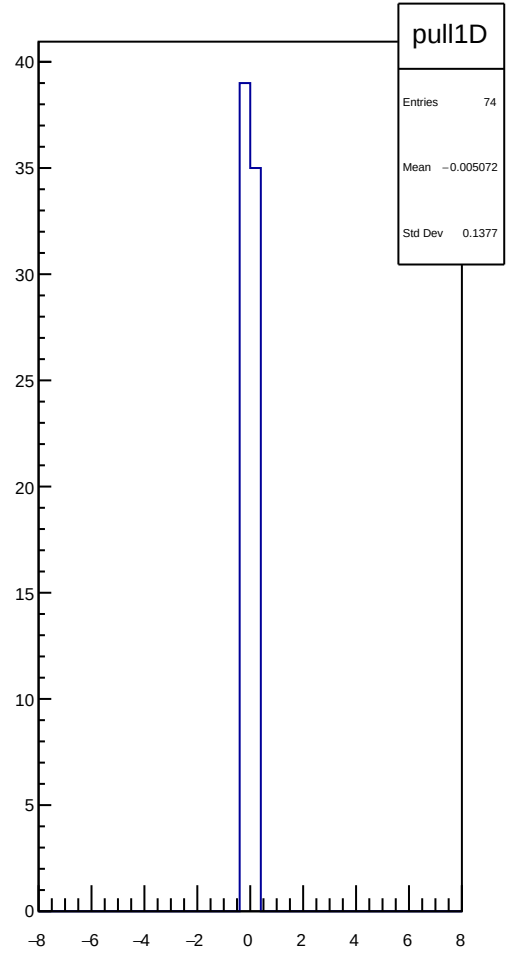

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 2.612 / 73
p0 −104 ± 3.072
−60
−80
−100
−120
−140
pull
Entries 74
Mean 320.4
Std Dev 270.6
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 74
Mean 0.004008
Std Dev 0.1878
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

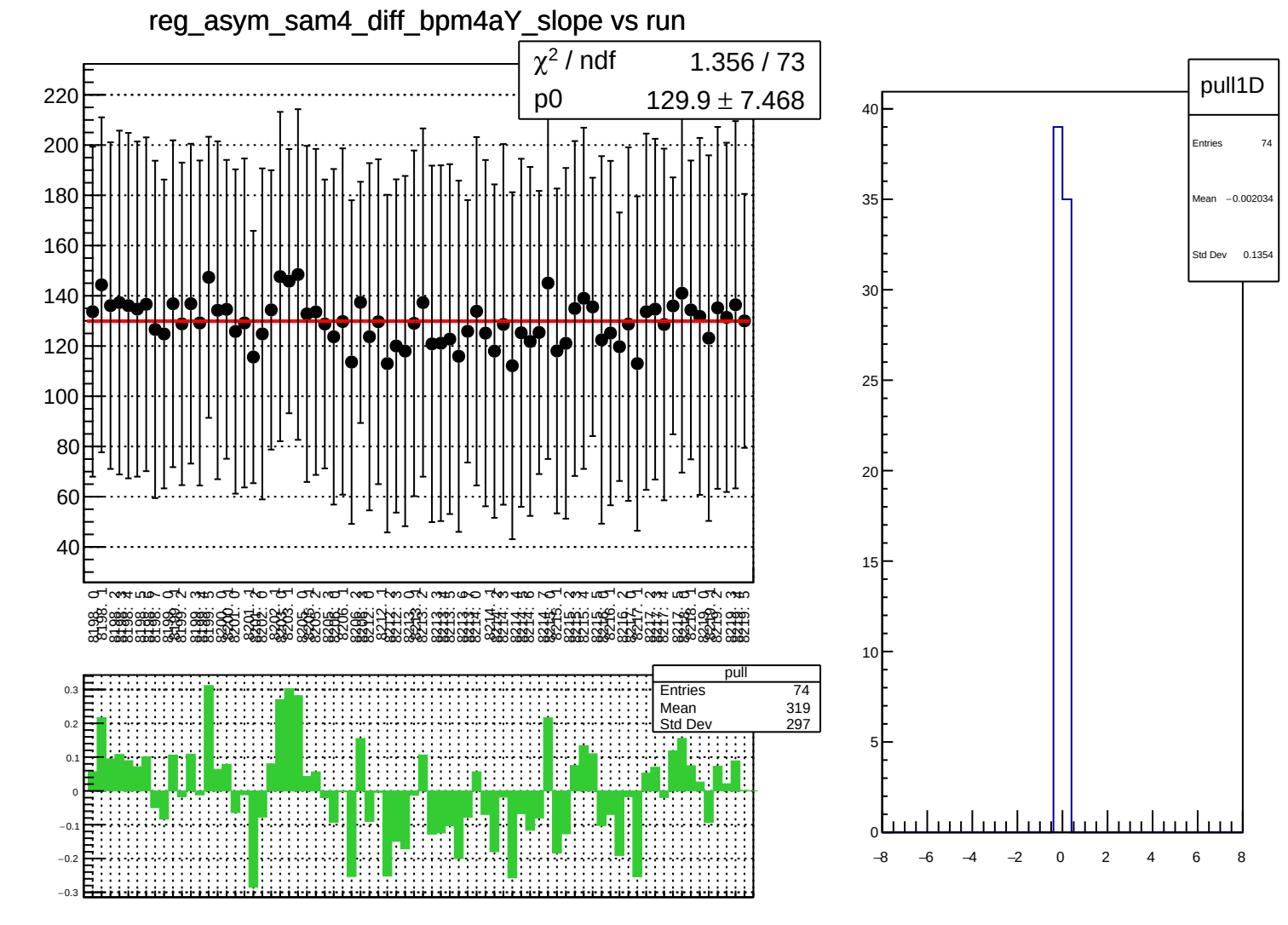

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 2.614 / 73
p0 27.07 ± 5.479
pull
Entries 74
Mean −1036
Std Dev 1084
pull1D
Entries 74
Mean 0.0006338
Std Dev 0.1879

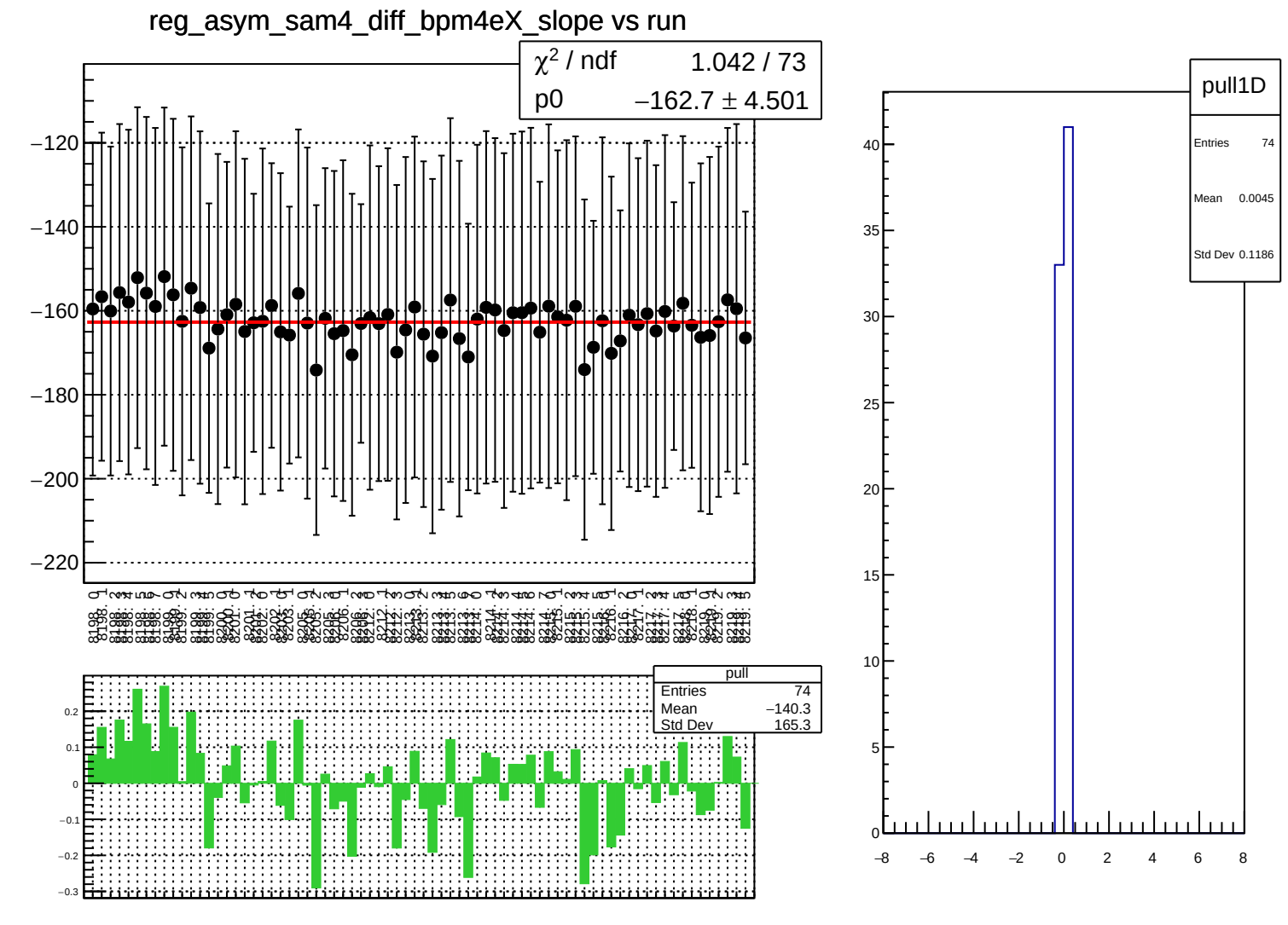

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 1.95 / 73
p0 −0.1084 ± 0.2487
pull
Entries 74
Mean 773.9
Std Dev 704.7

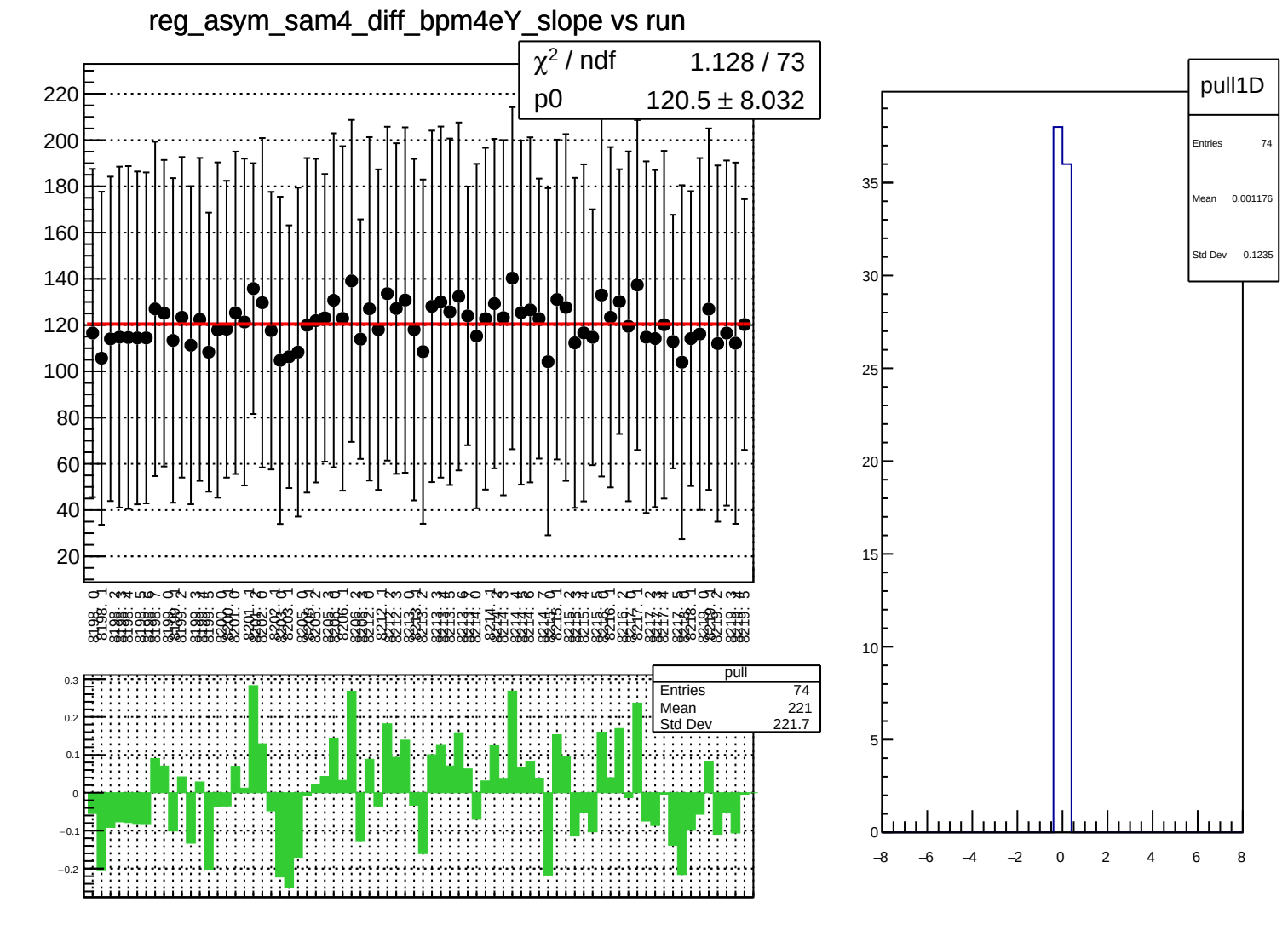

pull1D
Entries 74
Mean −0.0001281
Std Dev 0.1623

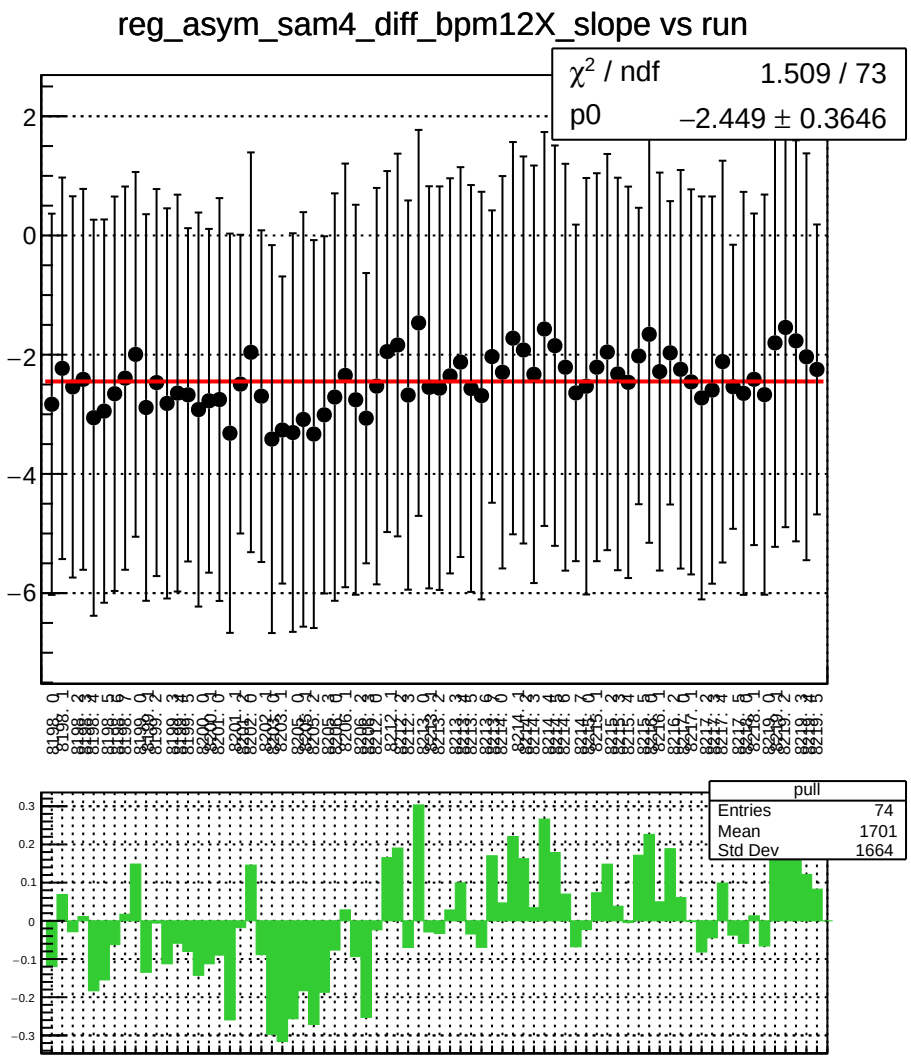

reg_asym_sam4_diff_bpm1X_slope vs run
χ² / ndf 1.404 / 73
p0 −49.32 ± 4.505
pull
Entries 74
Mean −325.1
Std Dev 358.8

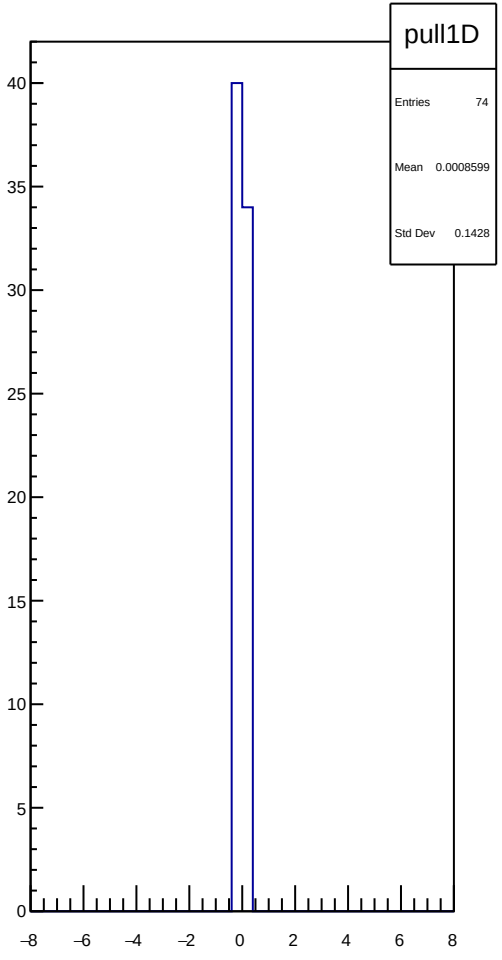

pull1D
Entries 74
Mean −0.005072
Std Dev 0.1377

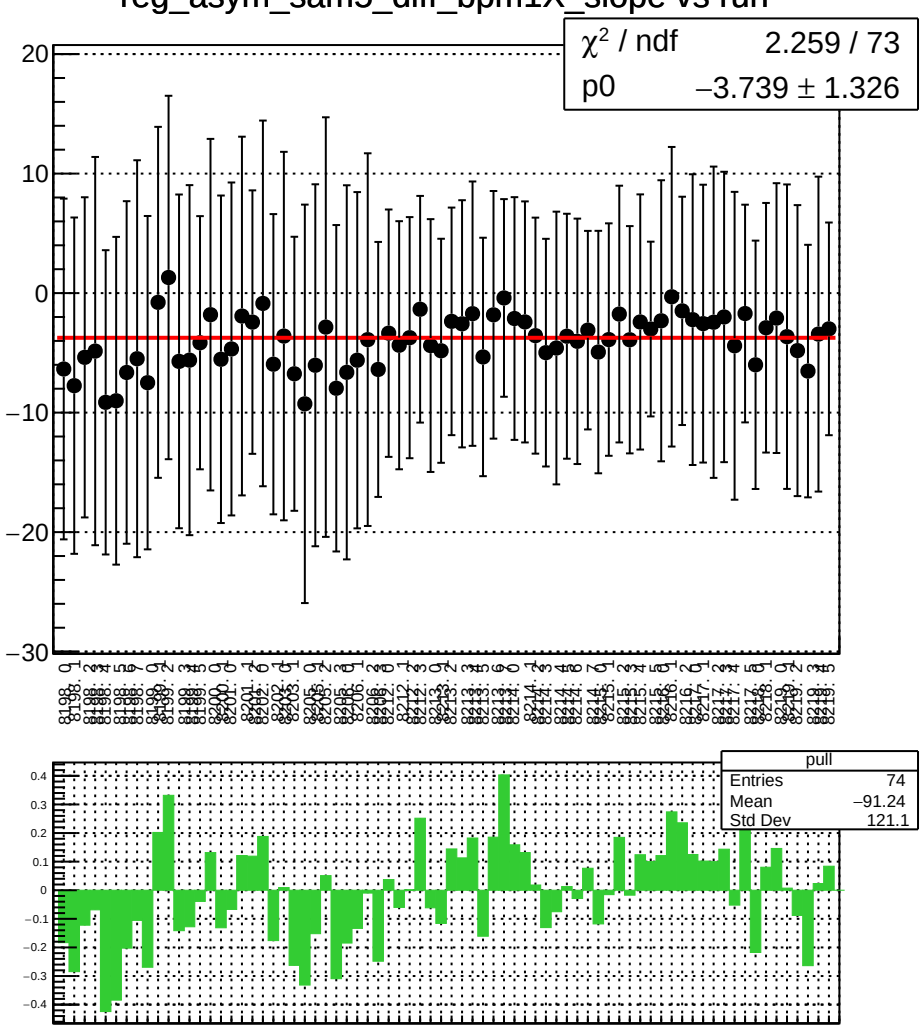

reg_asym_sam4_diff_bpm4aY_slope vs run
χ^2 / ndf 1.356 / 73
p0 129.9 ± 7.468
pull
Entries 74
Mean 319
Std Dev 297
pull1D
Entries 74
Mean −0.002034
Std Dev 0.1354

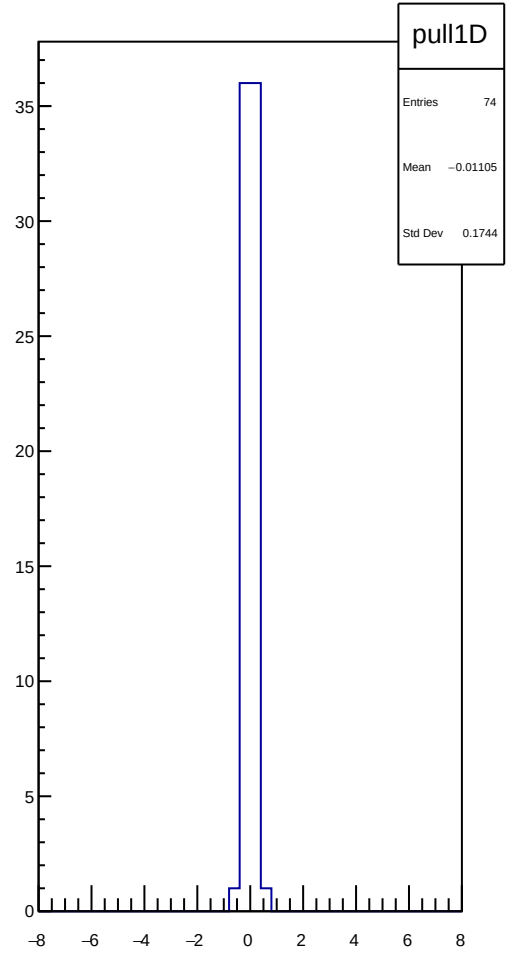

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 1.042 / 73
p0 −162.7 ± 4.501
pull
Entries 74
Mean −140.3
Std Dev 165.3
pull1D
Entries 74
Mean 0.0045
Std Dev 0.1186

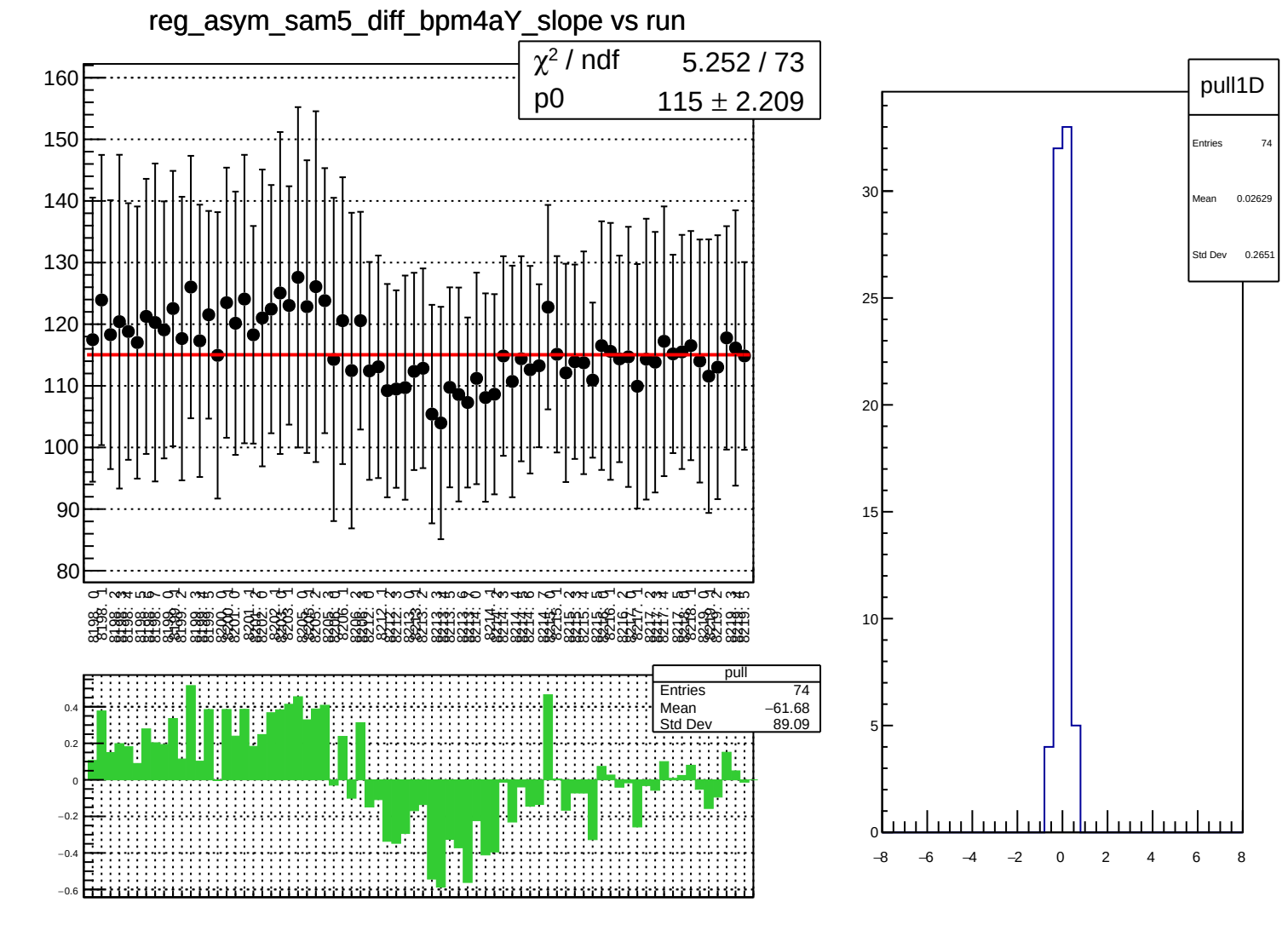

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 1.128 / 73
p0 120.5 ± 8.032
pull
Entries 74
Mean 221
Std Dev 221.7
pull1D
Entries 74
Mean 0.001176
Std Dev 0.1235

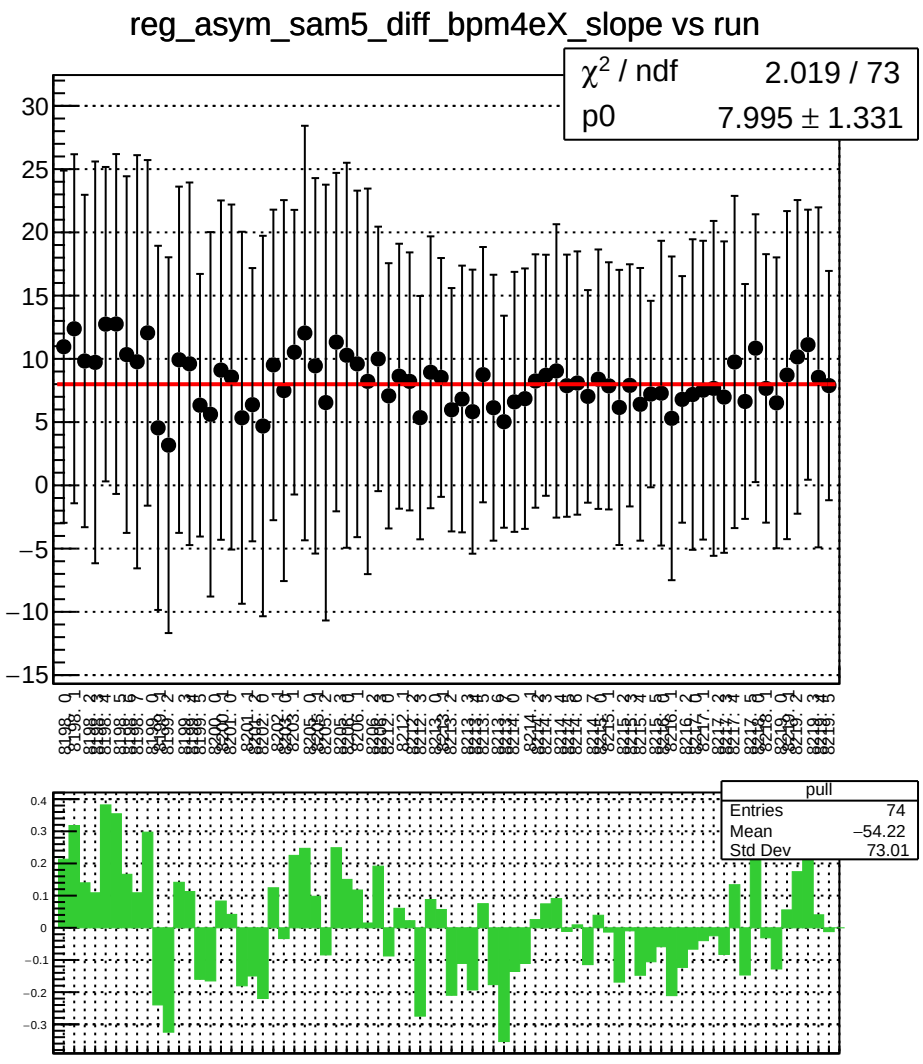

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 1.509 / 73
p0 −2.449 ± 0.3646
pull
Entries 74
Mean 1701
Std Dev 1664

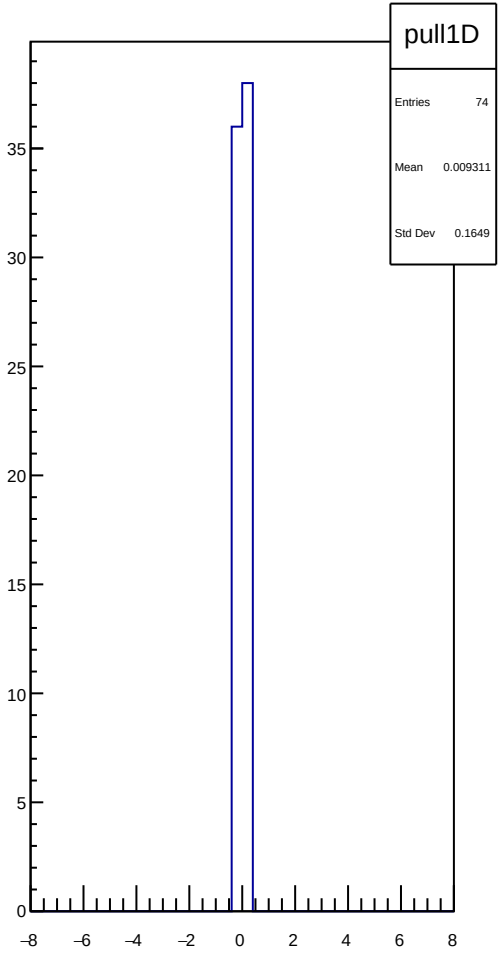

pull1D
Entries 74
Mean 0.0008599
Std Dev 0.1428

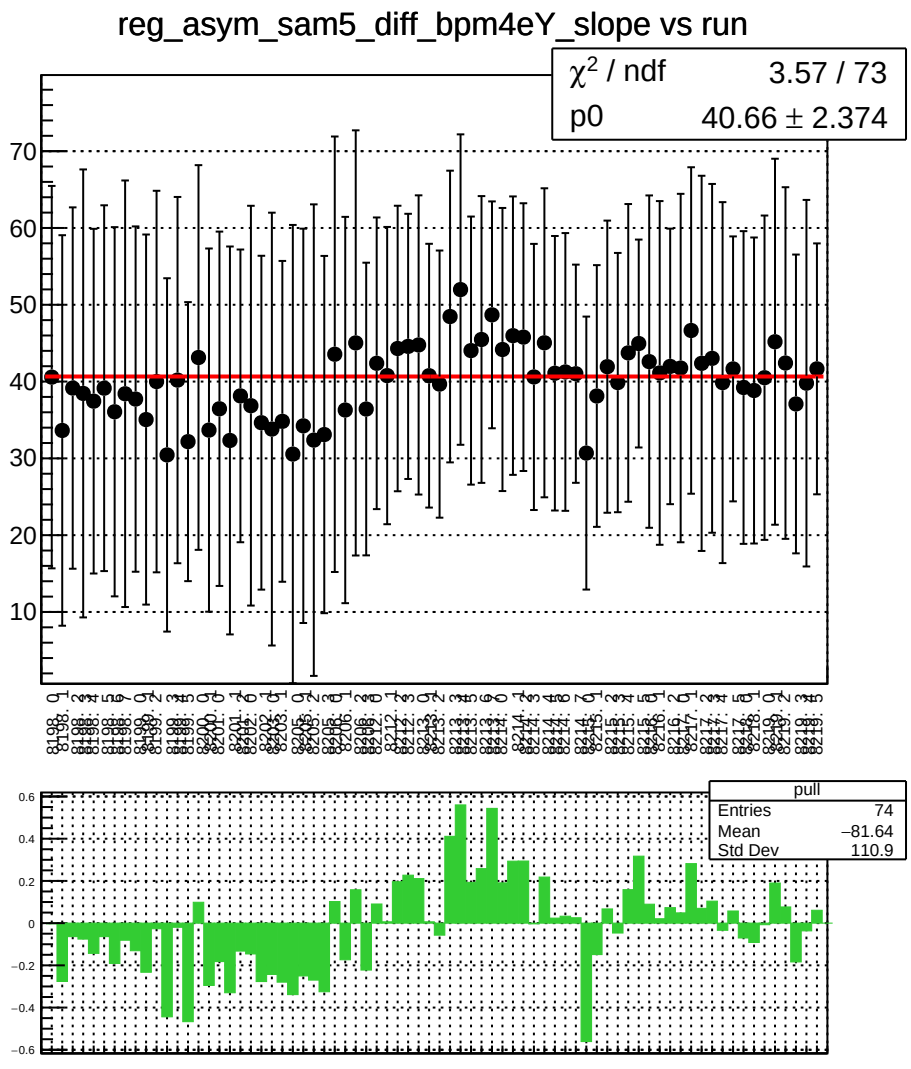

reg_asym_sam5_diff_bpm1X_slope vs run
χ² / ndf 2.259 / 73
p0 −3.739 ± 1.326
pull
Entries 74
Mean −91.24
Std Dev 121.1

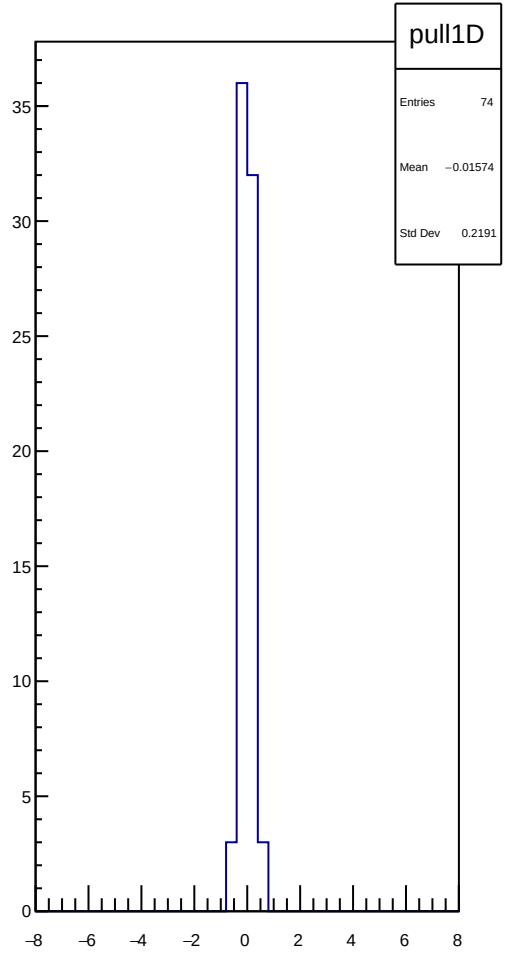

pull1D
Entries 74
Mean −0.01105
Std Dev 0.1744

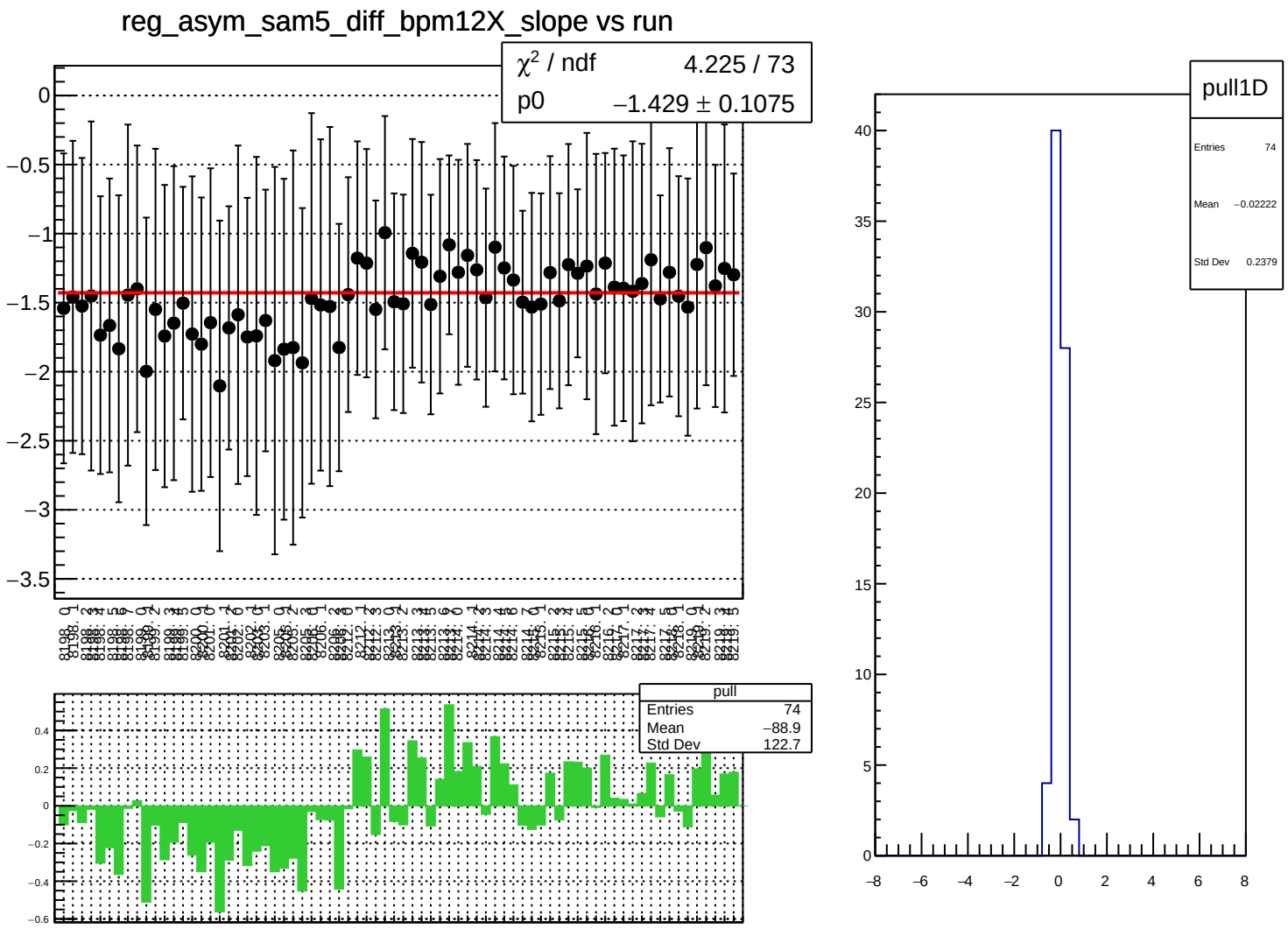

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 5.252 / 73
p0 115 ± 2.209
pull
Entries 74
Mean −61.68
Std Dev 89.09
pull1D
Entries 74
Mean 0.02629
Std Dev 0.2651

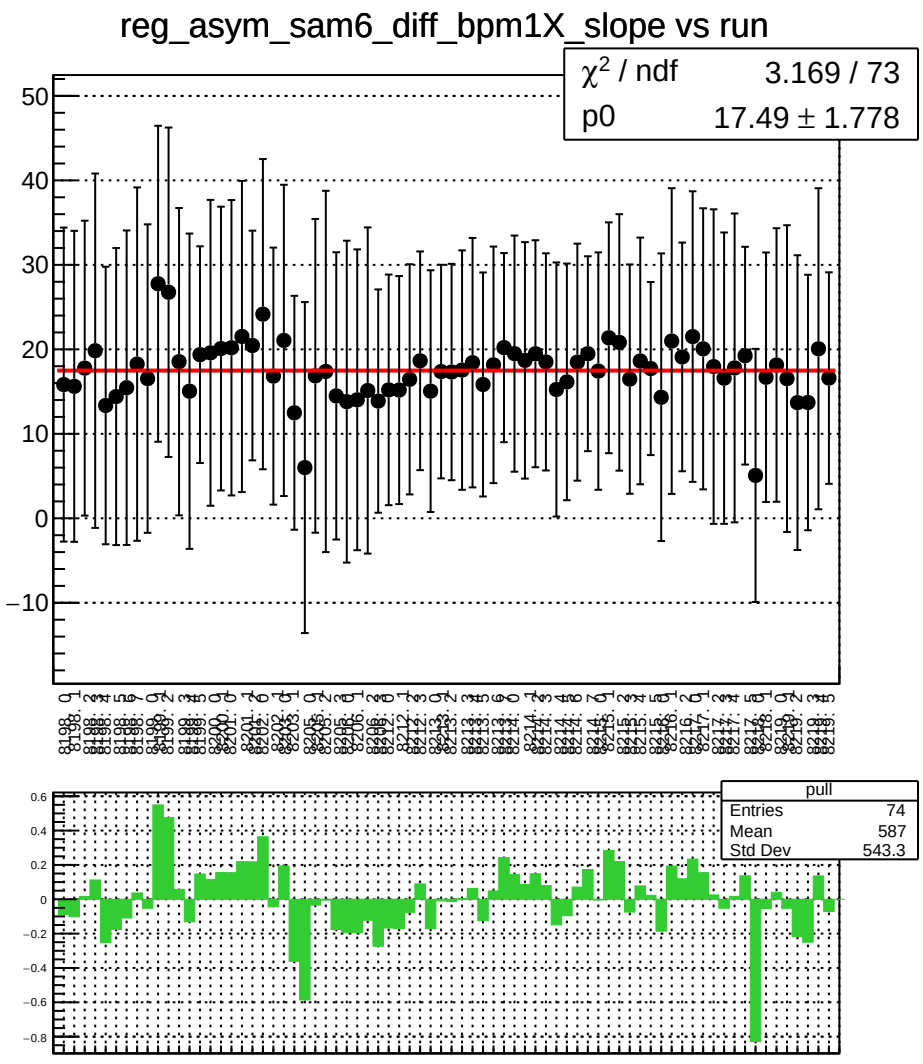

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 2.019 / 73
p0 7.995 ± 1.331
pull
Entries 74
Mean −54.22
Std Dev 73.01

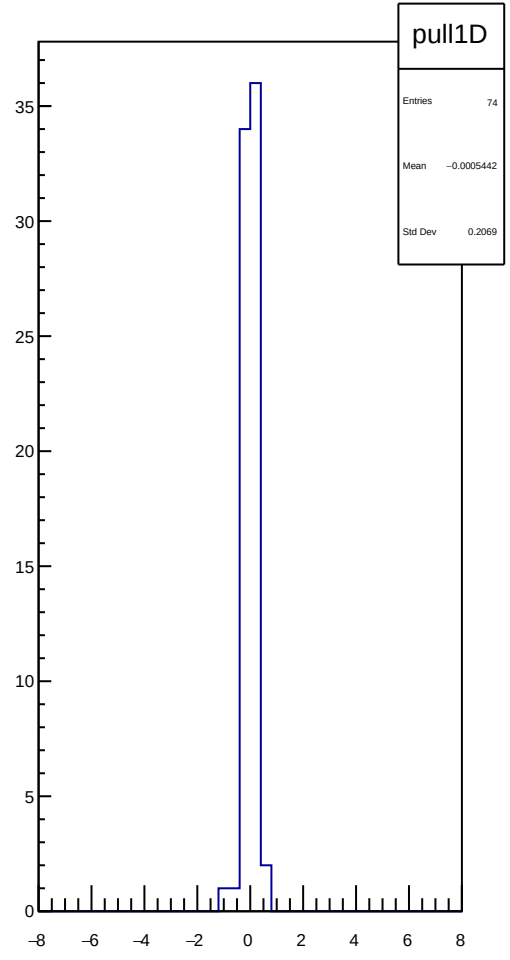

pull1D
Entries 74
Mean 0.009311
Std Dev 0.1649

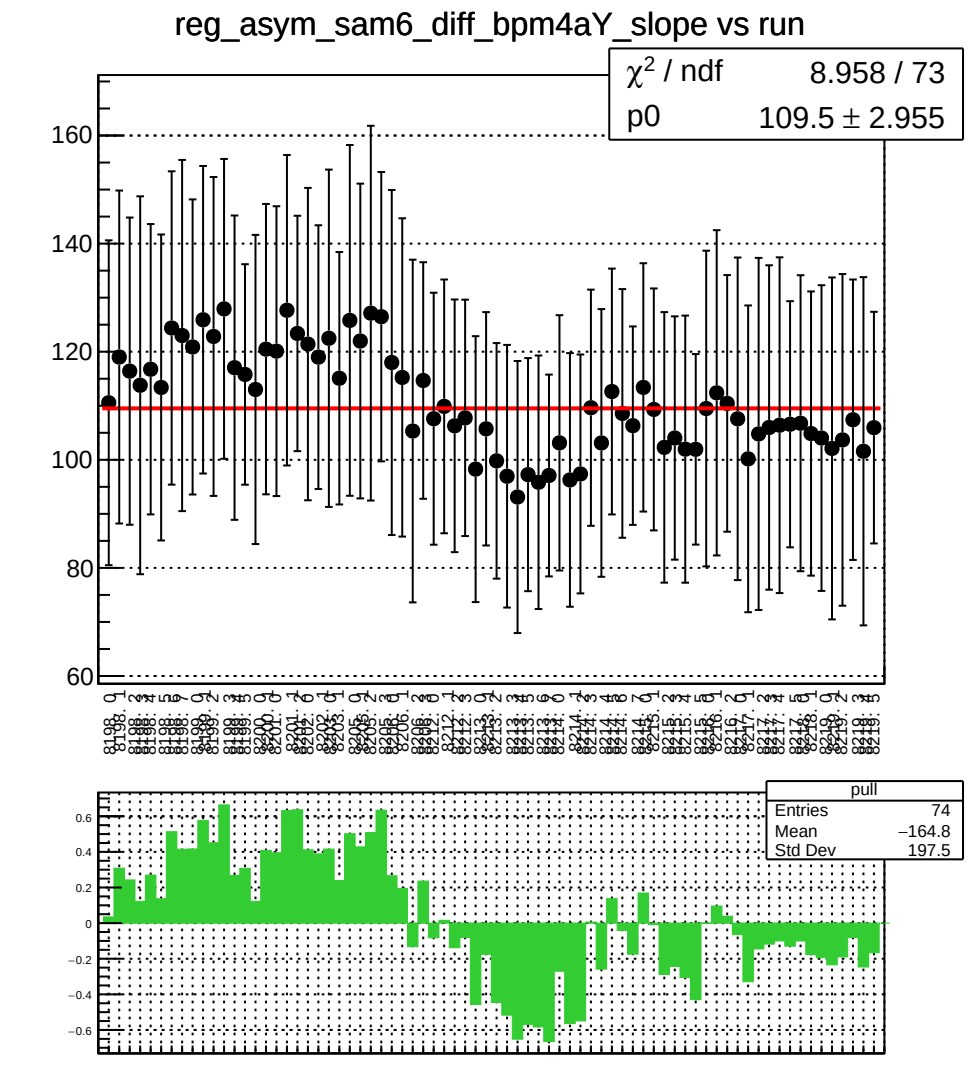

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 3.57 / 73
p0 40.66 ± 2.374
pull
Entries 74
Mean −81.64
Std Dev 110.9

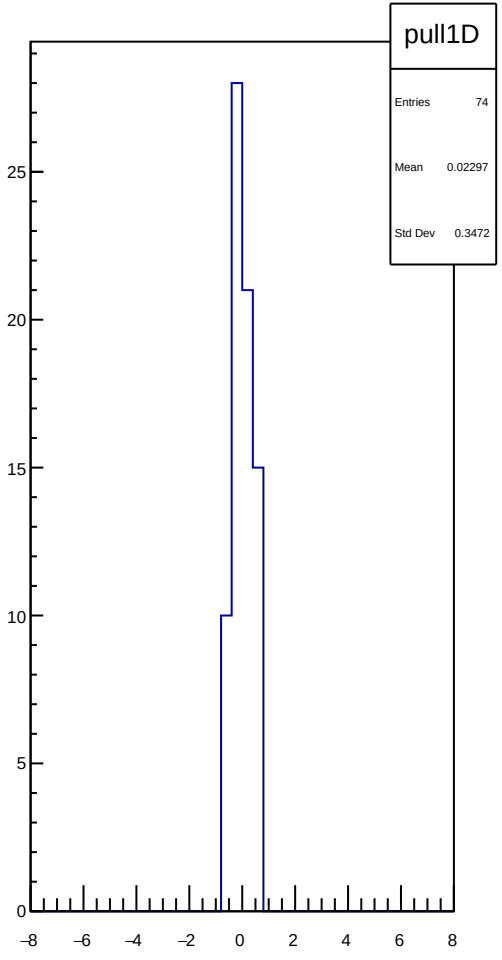

pull1D
Entries 74
Mean −0.01574
Std Dev 0.2191

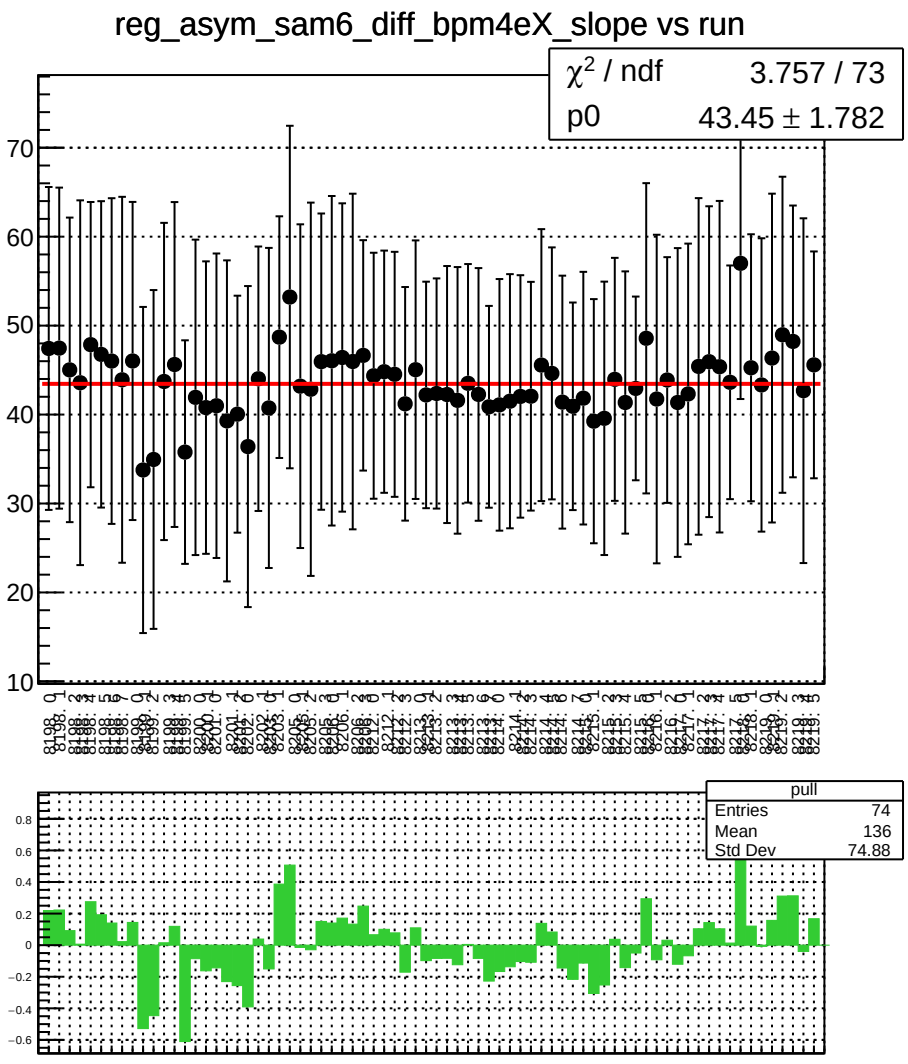

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 4.225 / 73
p0 −1.429 ± 0.1075
pull
Entries 74
Mean −88.9
Std Dev 122.7
pull1D
Entries 74
Mean −0.02222
Std Dev 0.2379

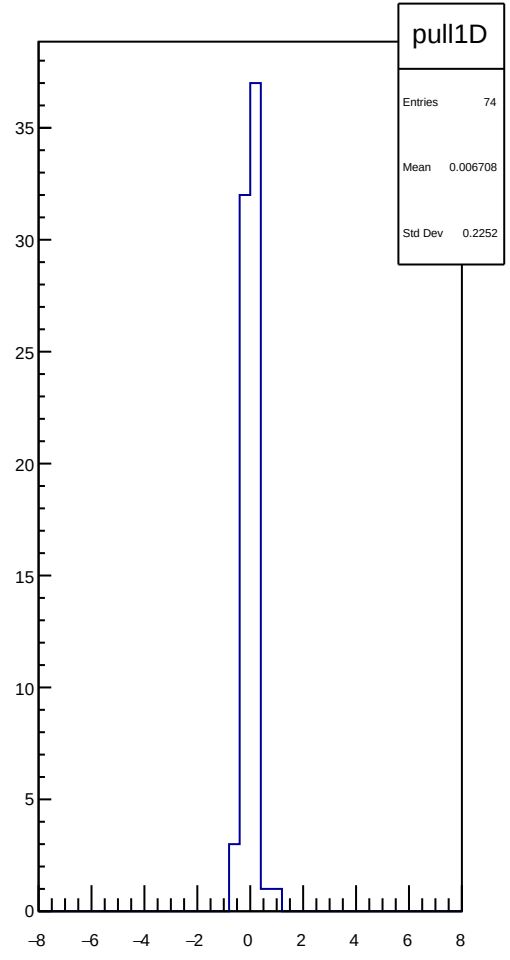

reg_asym_sam6_diff_bpm1X_slope vs run
χ² / ndf 3.169 / 73
p0 17.49 ± 1.778
pull
Entries 74
Mean 587
Std Dev 543.3

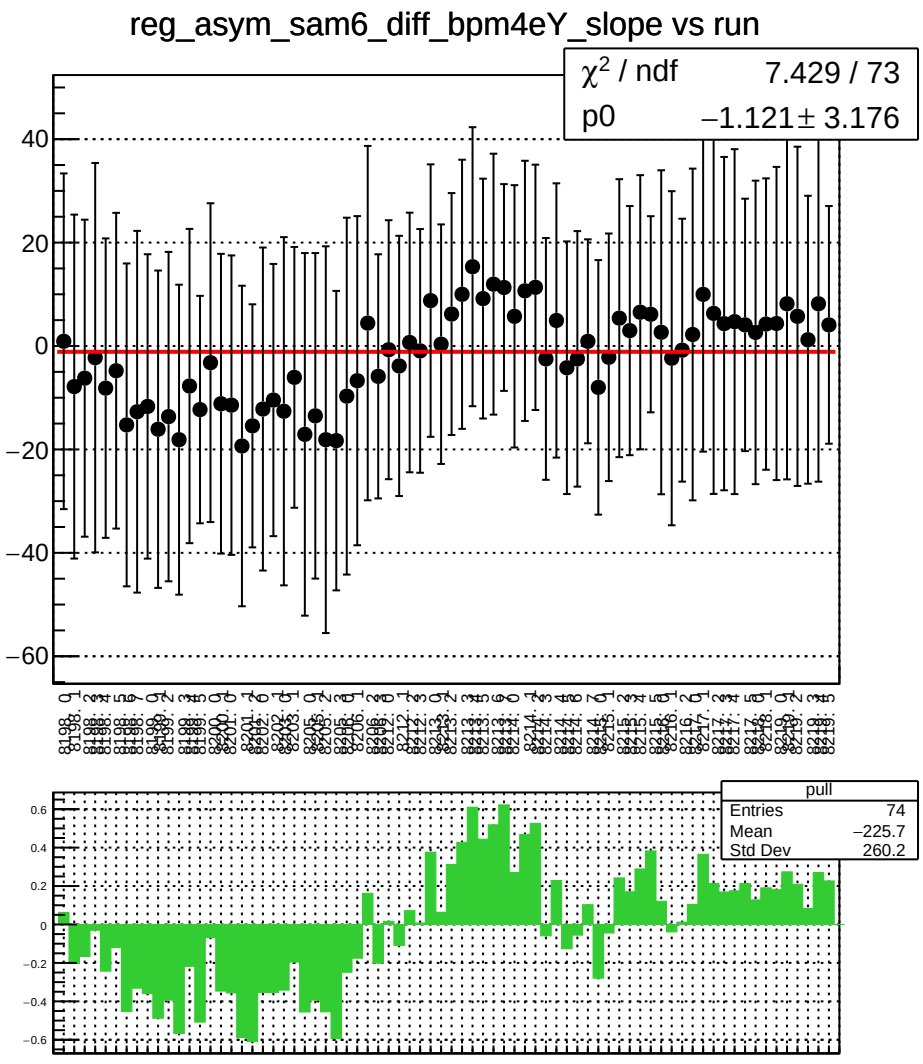

pull1D
Entries 74
Mean −0.0005442
Std Dev 0.2069

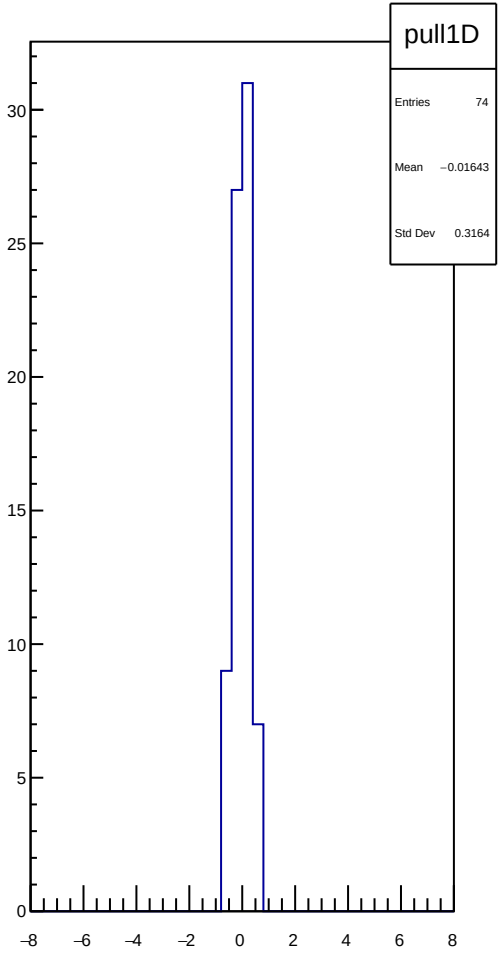

reg_asym_sam6_diff_bpm4aY_slope vs run
χ^2 / ndf 8.958 / 73
p0 109.5 ± 2.955
pull
Entries 74
Mean −164.8
Std Dev 197.5

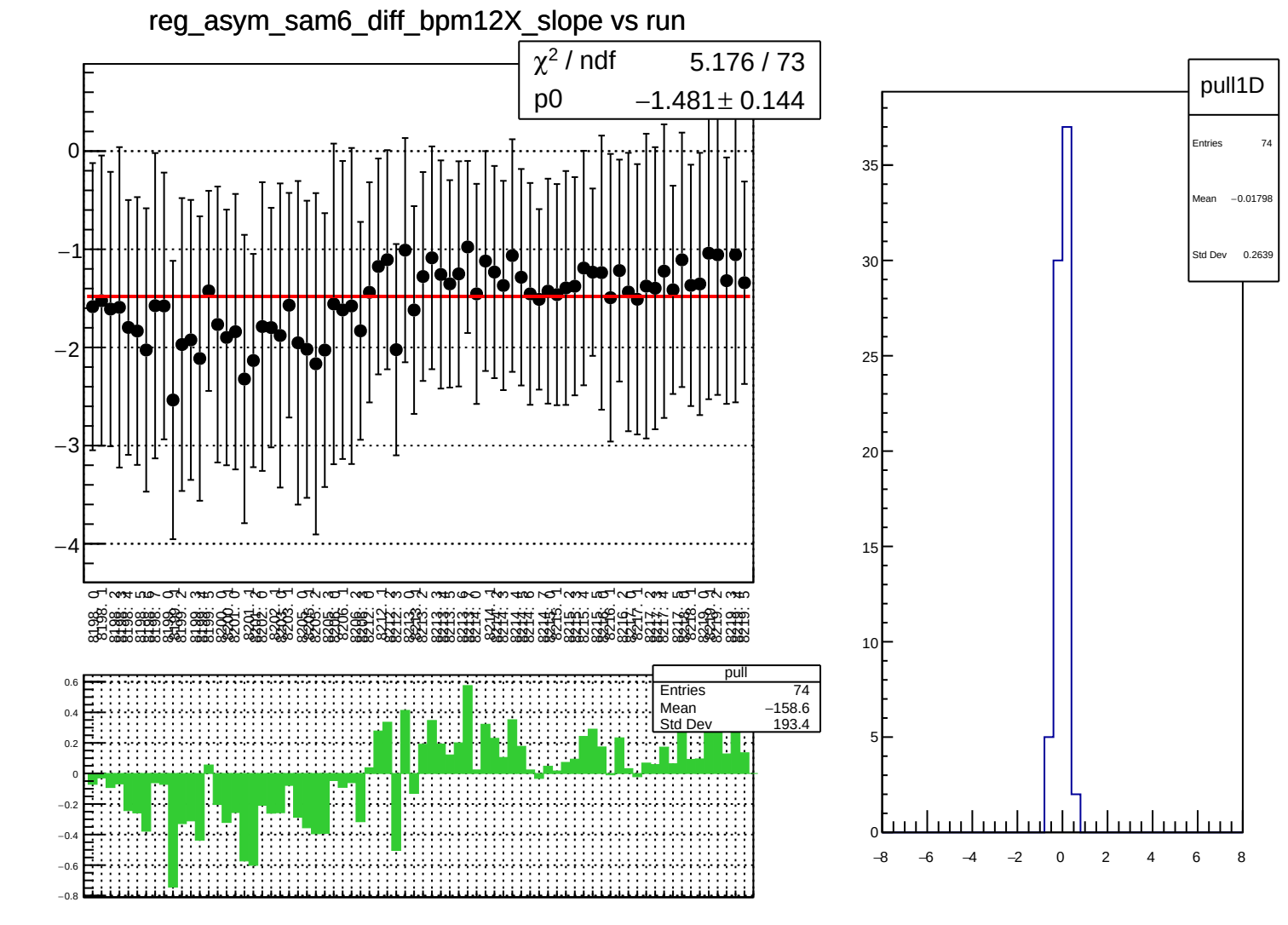

pull1D
Entries 74
Mean 0.02297
Std Dev 0.3472

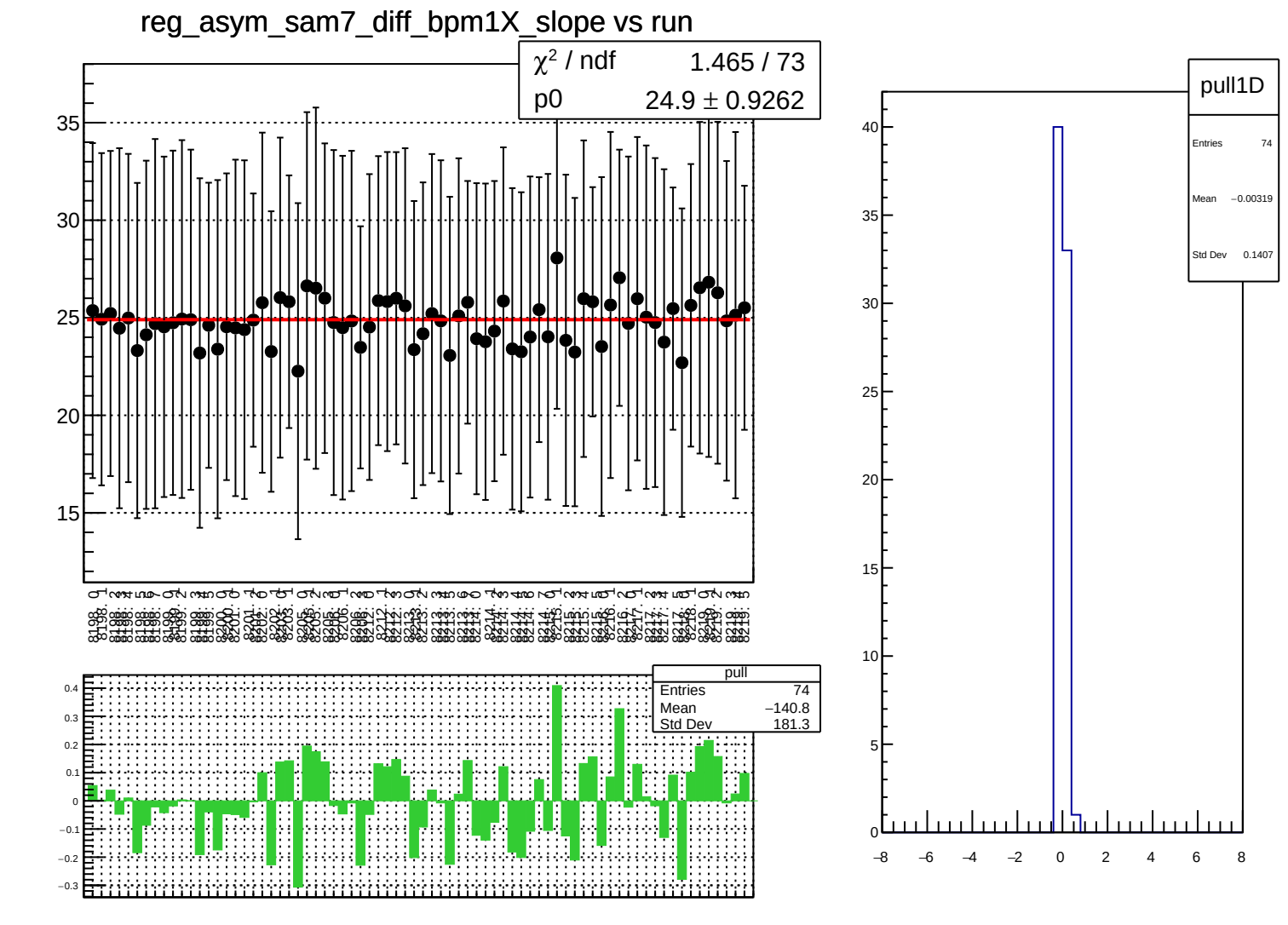

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 3.757 / 73
p0 43.45 ± 1.782
pull
Entries 74
Mean 136
Std Dev 74.88

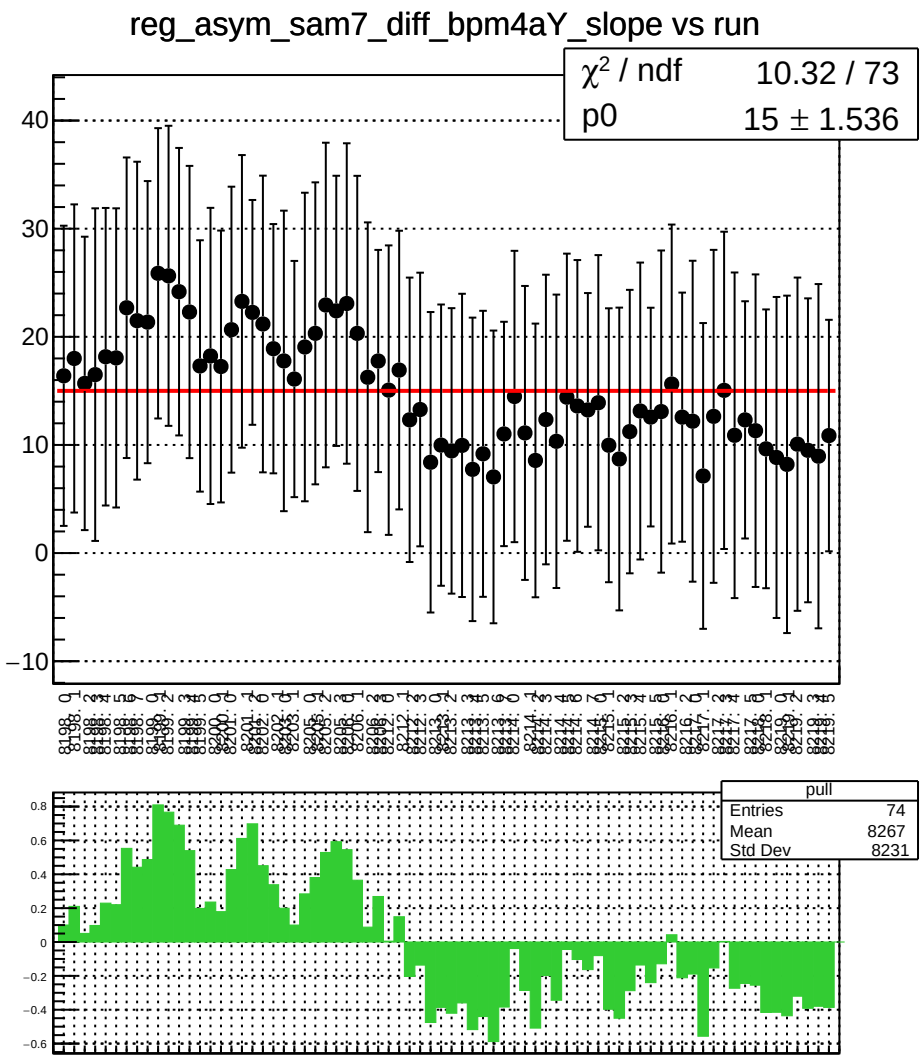

pull1D
Entries 74
Mean 0.006708
Std Dev 0.2252

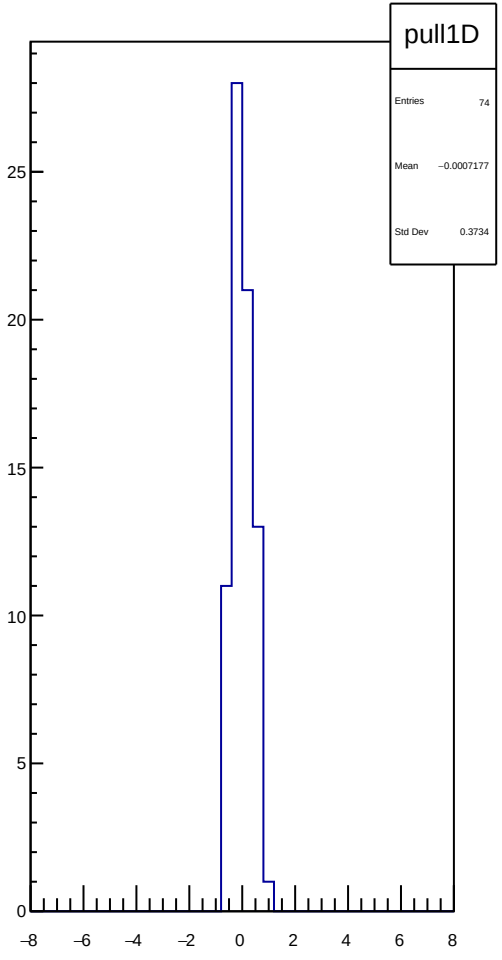

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 7.429 / 73
p0 −1.121 ± 3.176
pull
Entries 74
Mean −225.7
Std Dev 260.2

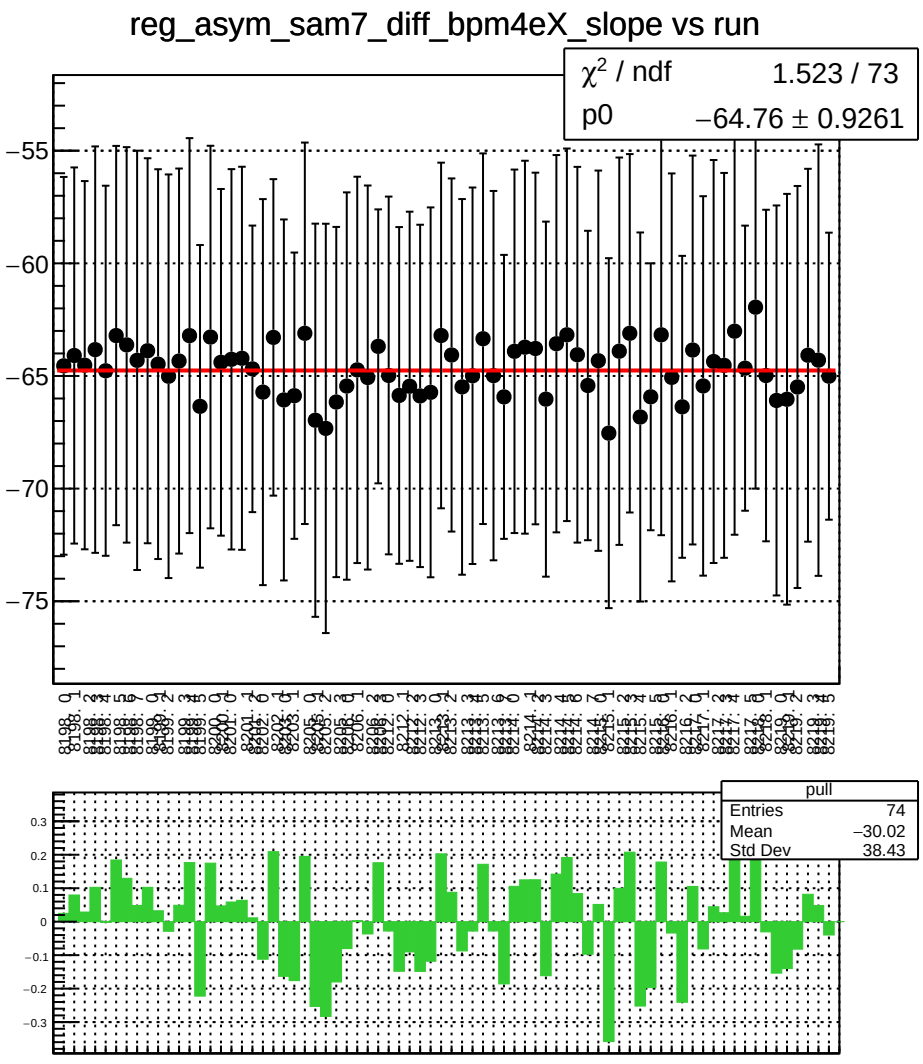

pull1D
Entries 74
Mean −0.01643
Std Dev 0.3164

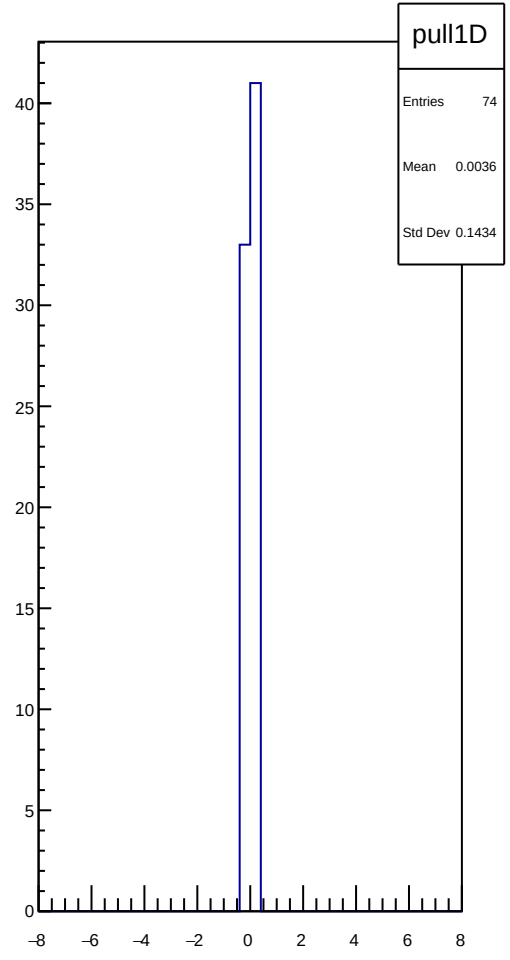

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 5.176 / 73
p0 −1.481 ± 0.144
pull
Entries 74
Mean −158.6
Std Dev 193.4
pull1D
Entries 74
Mean −0.01798
Std Dev 0.2639

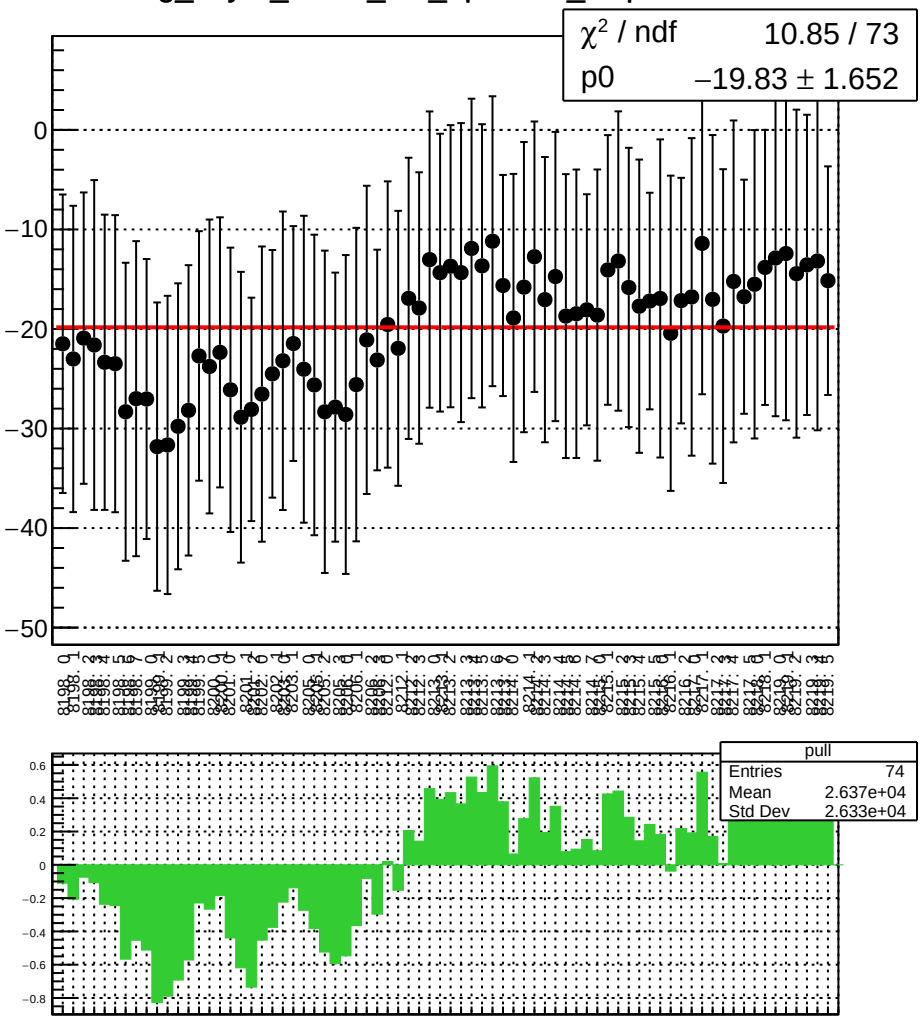

reg_asym_sam7_diff_bpm1X_slope vs run
χ² / ndf 1.465 / 73
p0 24.9 ± 0.9262
pull
Entries 74
Mean −140.8
Std Dev 181.3
pull1D
Entries 74
Mean −0.00319
Std Dev 0.1407

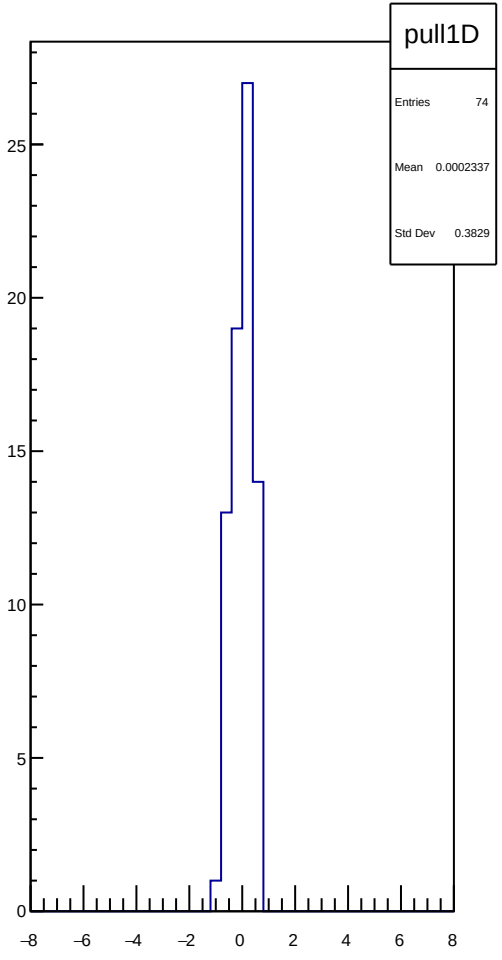

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 10.32 / 73
p0 15 ± 1.536
pull
Entries 74
Mean 8267
Std Dev 8231

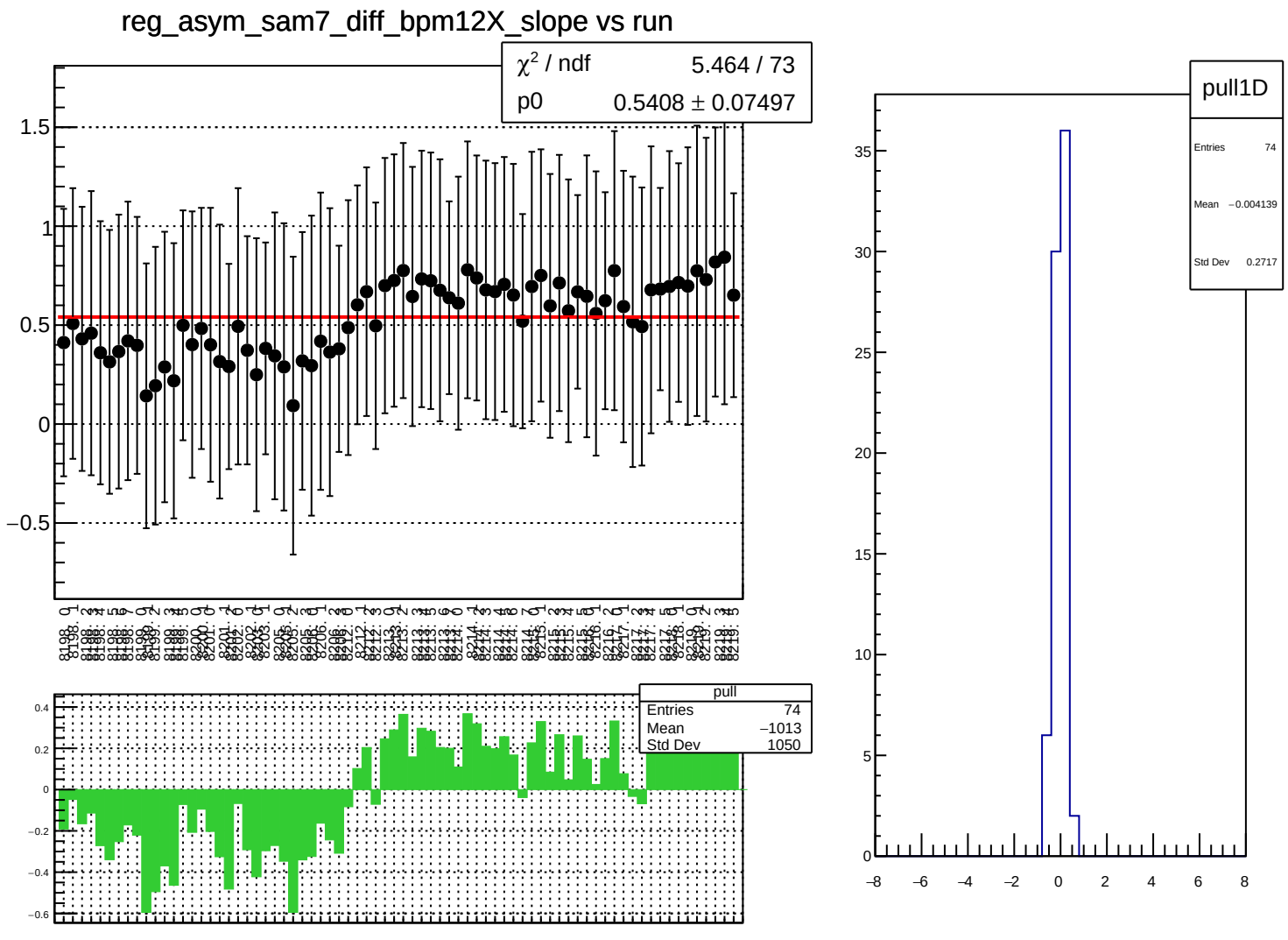

pull1D
Entries 74
Mean −0.0007177
Std Dev 0.3734

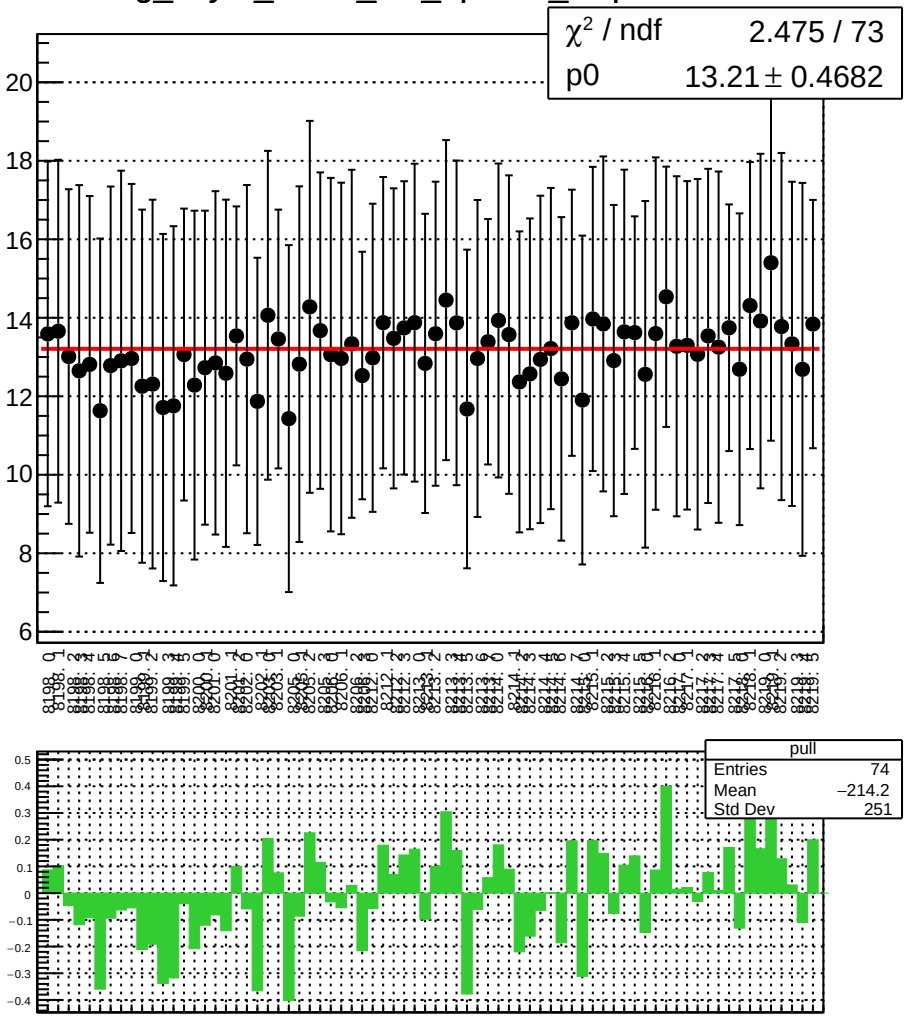

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 1.523 / 73
p0 −64.76 ± 0.9261
pull
Entries 74
Mean −30.02
Std Dev 38.43

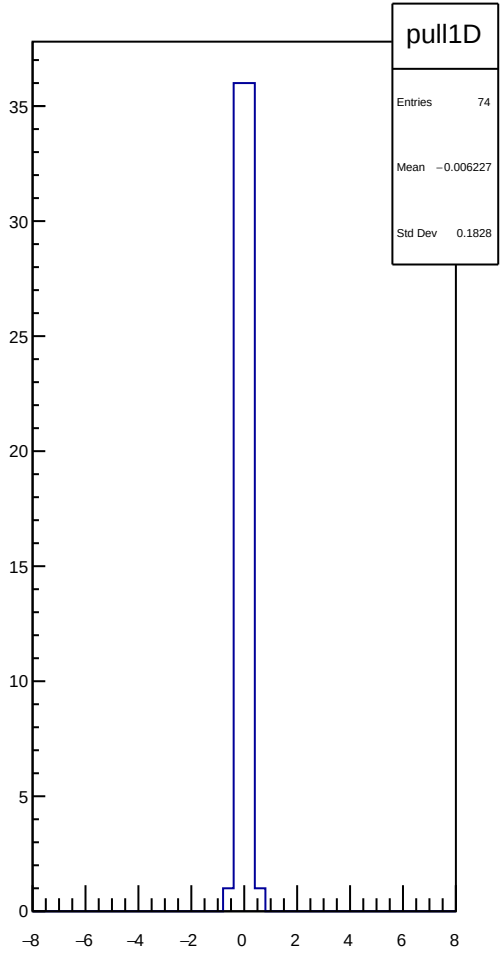

pull1D
Entries 74
Mean 0.0036
Std Dev 0.1434

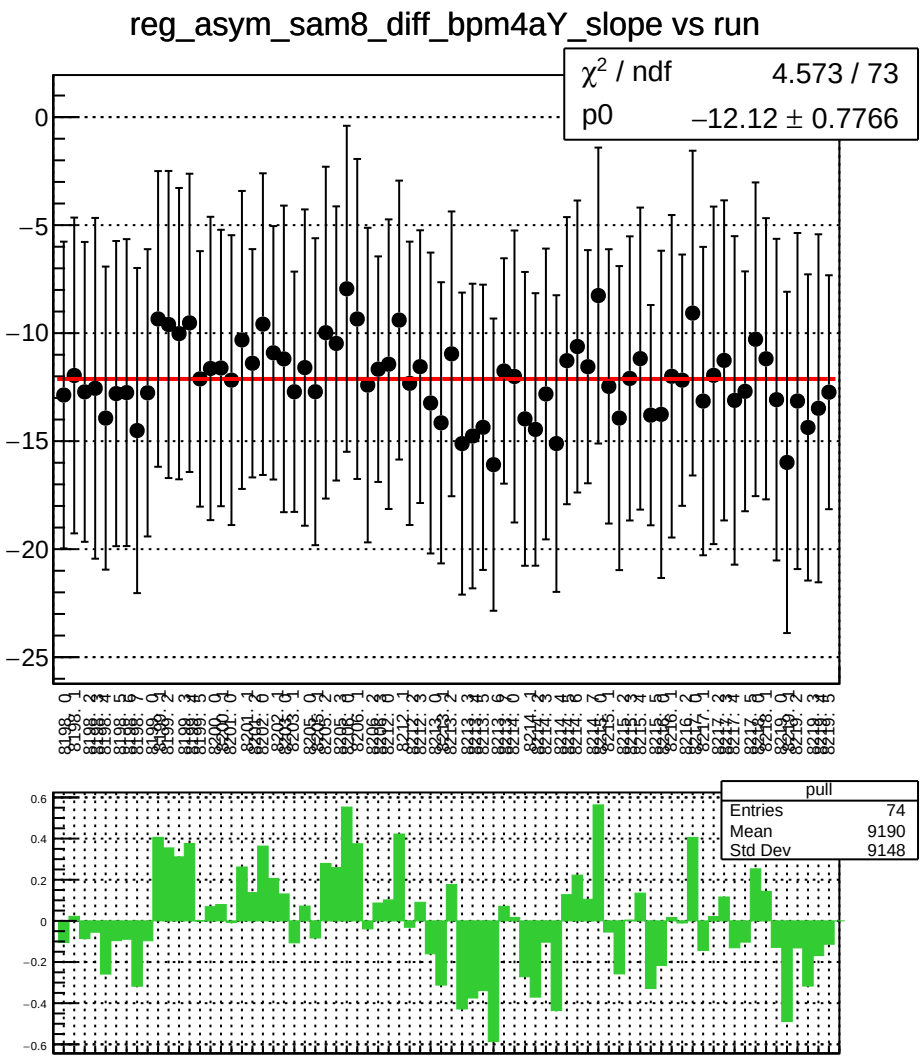

reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 10.85 / 73
p0 −19.83 ± 1.652
pull
Entries 74
Mean 2.637e+04
Std Dev 2.633e+04

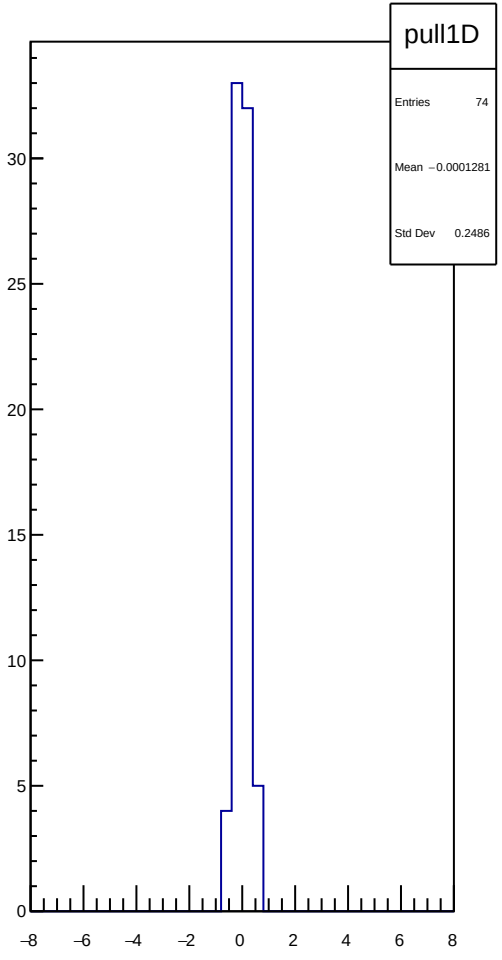

pull1D
Entries 74
Mean 0.0002337
Std Dev 0.3829

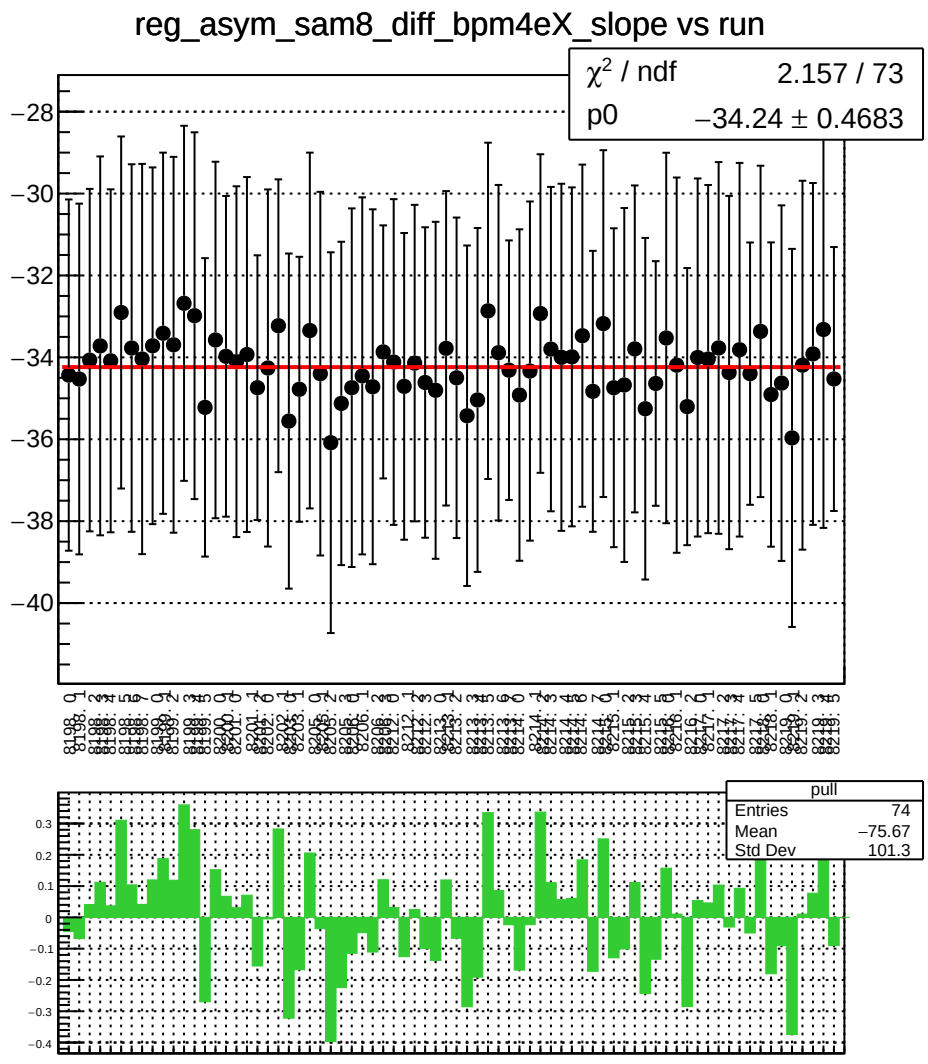

reg_asym_sam7_diff_bpm12X_slope vs run
χ² / ndf 5.464 / 73
p0 0.5408 ± 0.07497
pull
Entries 74
Mean −1013
Std Dev 1050
pull1D
Entries 74
Mean −0.004139
Std Dev 0.2717

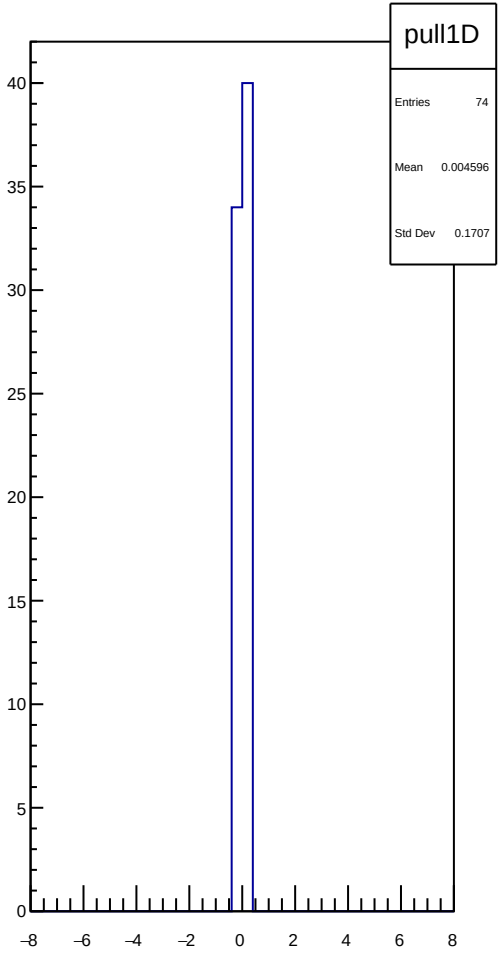

reg_asym_sam8_diff_bpm1X_slope vs run
χ² / ndf 2.475 / 73
p0 13.21 ± 0.4682
pull
Entries 74
Mean −214.2
Std Dev 251

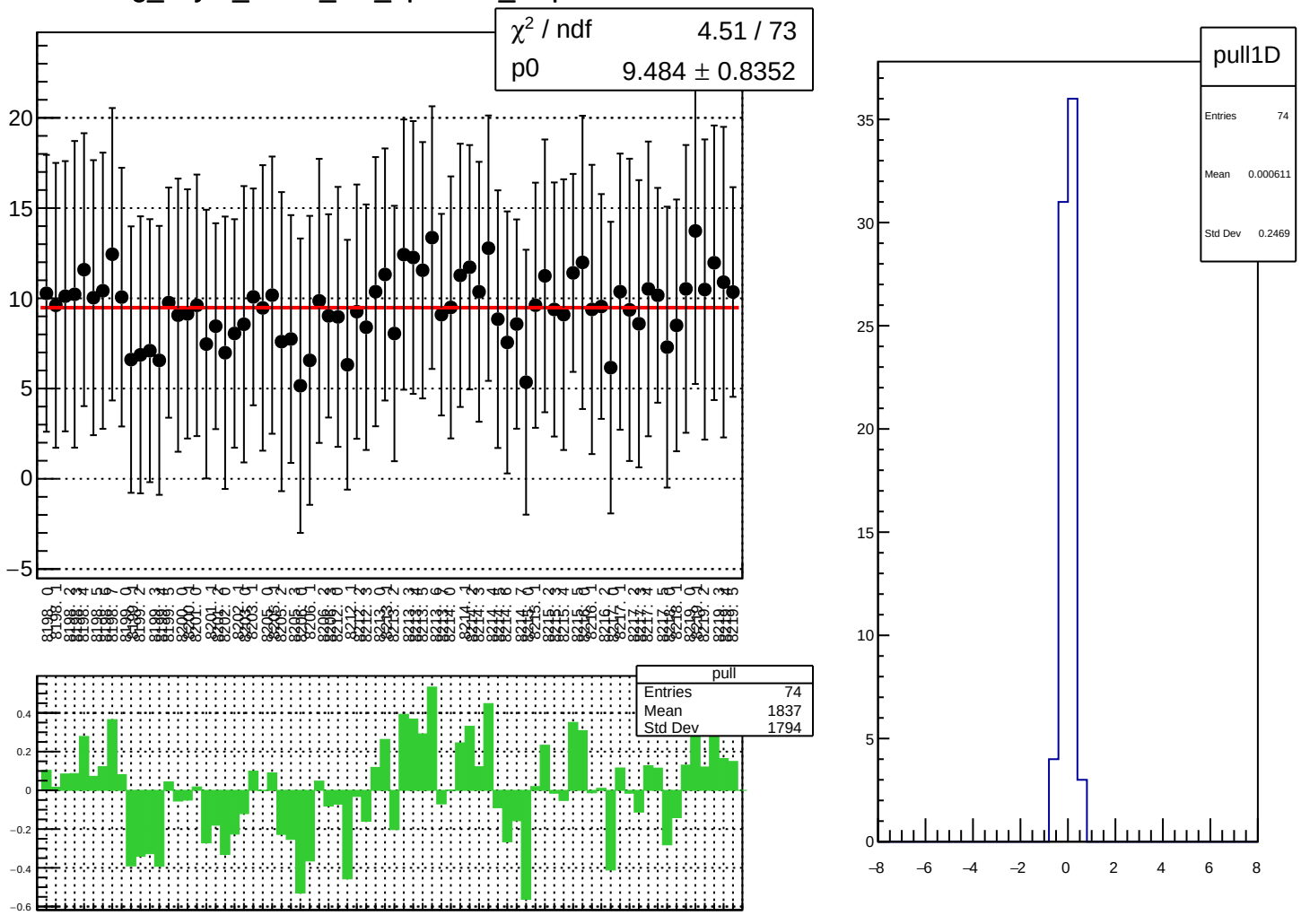

pull1D
Entries 74
Mean −0.006227
Std Dev 0.1828

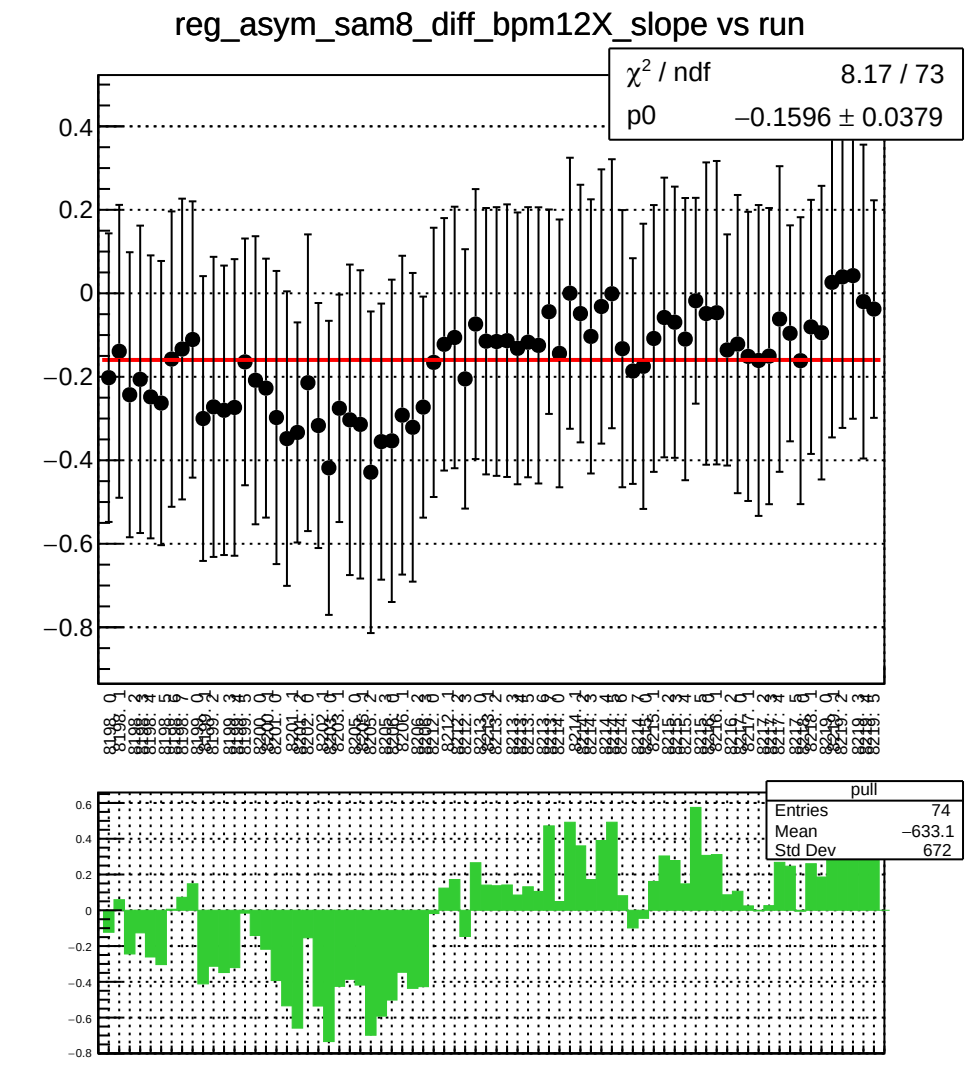

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 4.573 / 73
p0 −12.12 ± 0.7766
pull
Entries 74
Mean 9190
Std Dev 9148

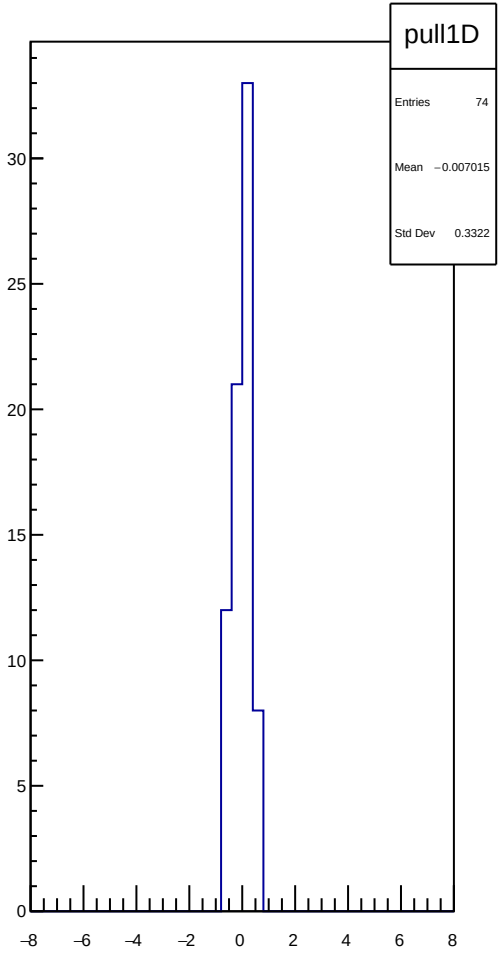

pull1D
Entries 74
Mean −0.0001281
Std Dev 0.2486

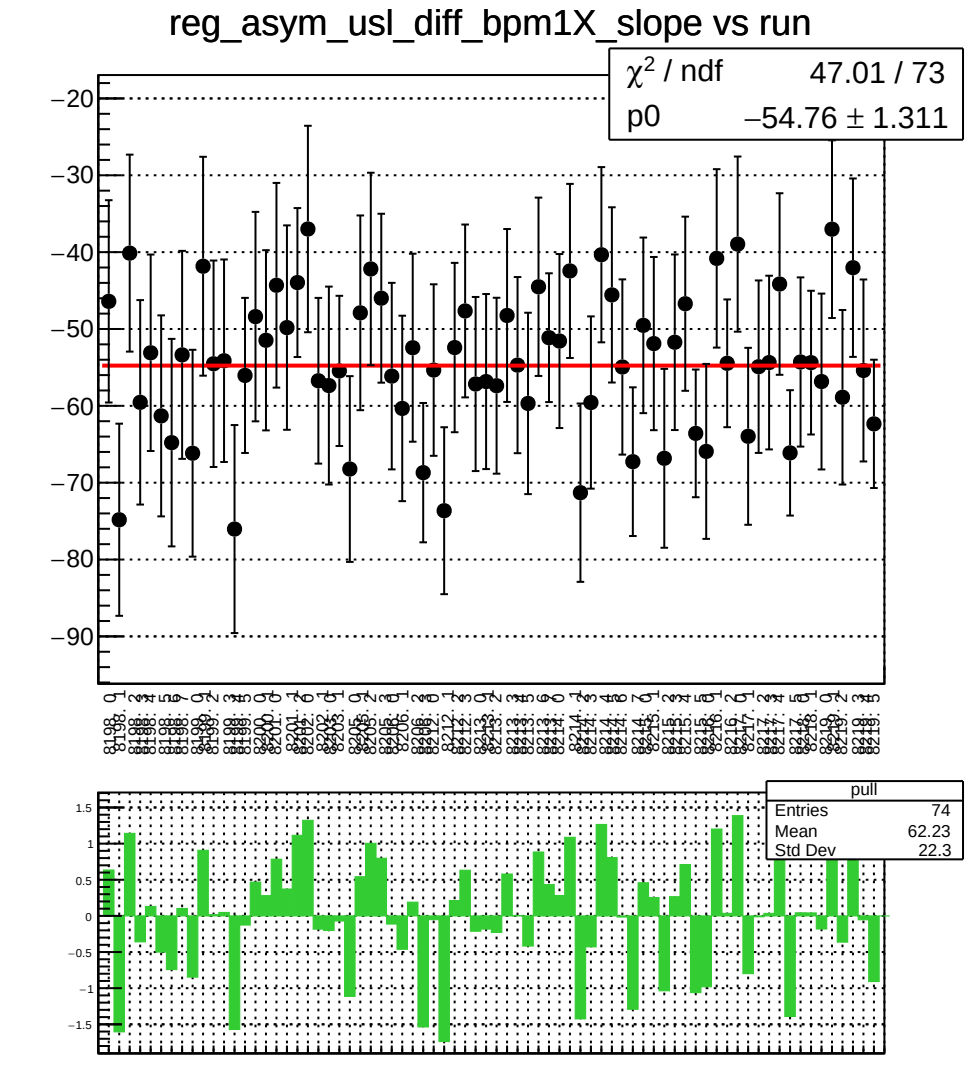

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 2.157 / 73
p0 −34.24 ± 0.4683
pull
Entries 74
Mean −75.67
Std Dev 101.3

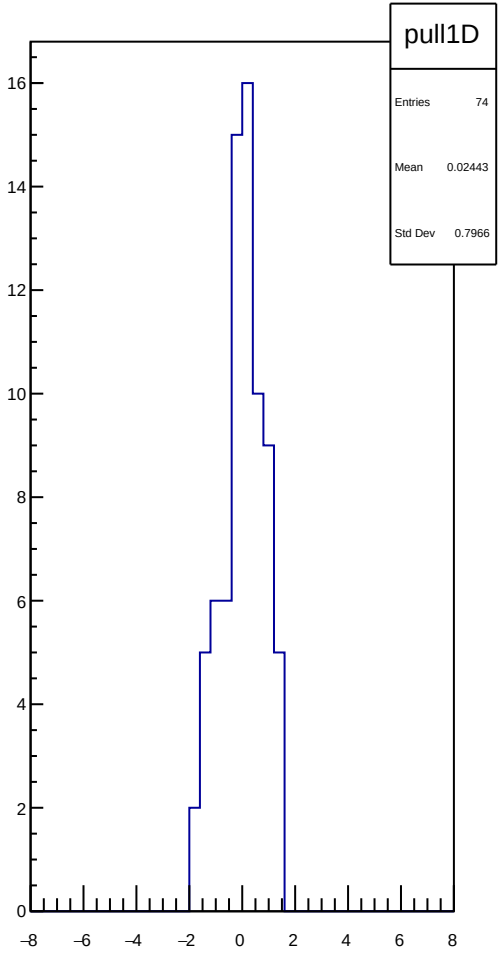

pull1D
Entries 74
Mean 0.004596
Std Dev 0.1707

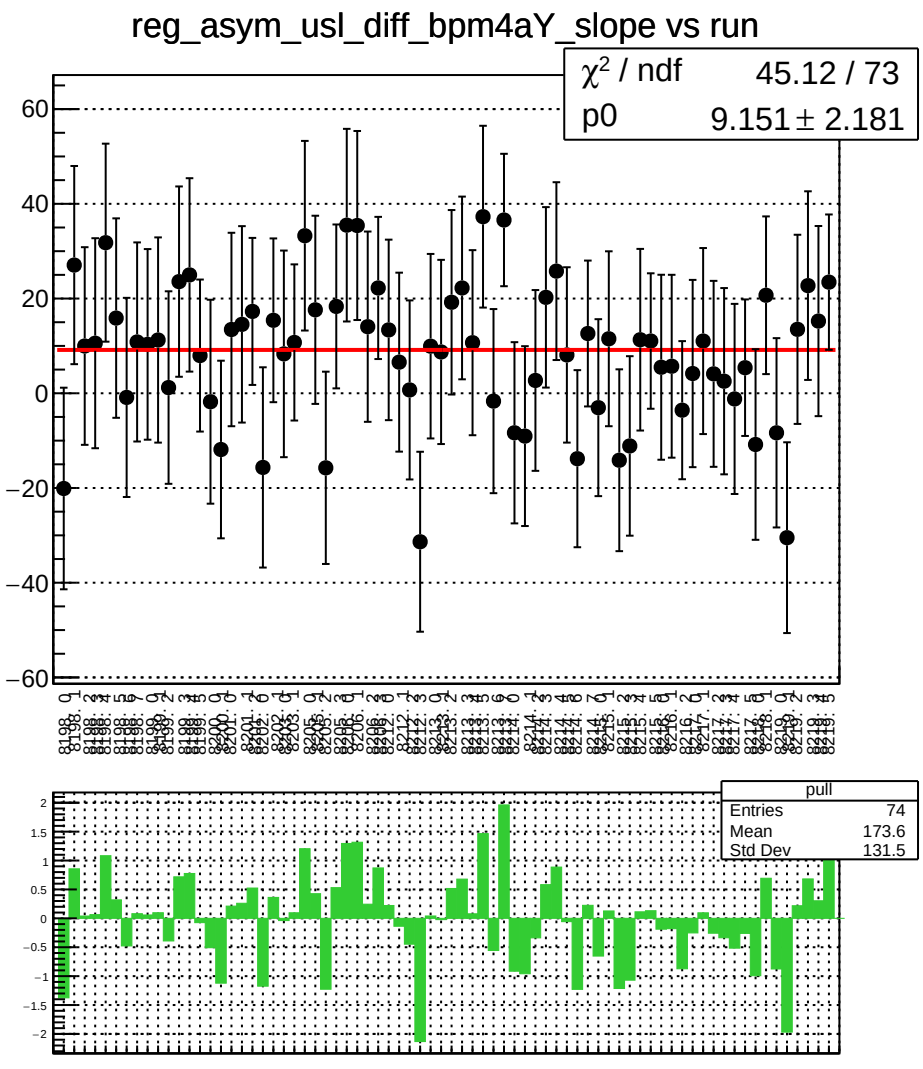

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 4.51 / 73
p0 9.484 ± 0.8352
pull
Entries 74
Mean 1837
Std Dev 1794
pull1D
Entries 74
Mean 0.000611
Std Dev 0.2469

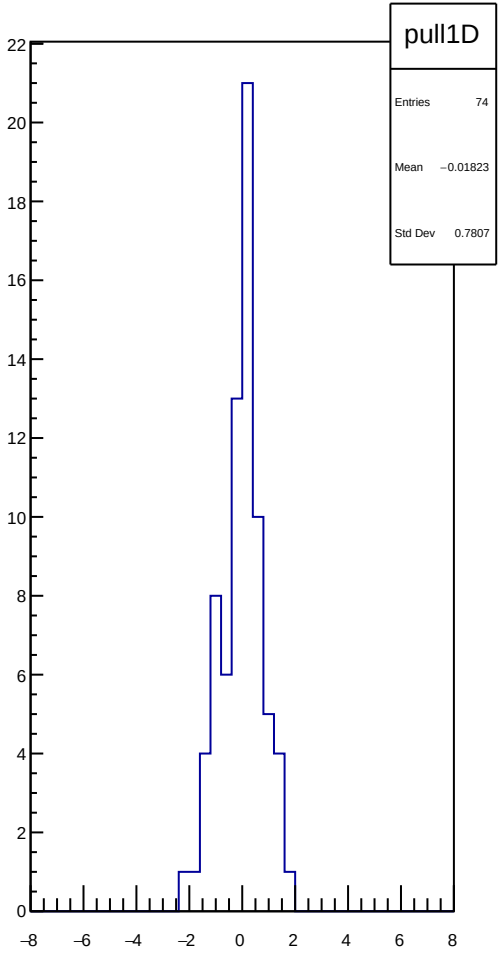

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 8.17 / 73
p0 −0.1596 ± 0.0379
pull
Entries 74
Mean −633.1
Std Dev 672

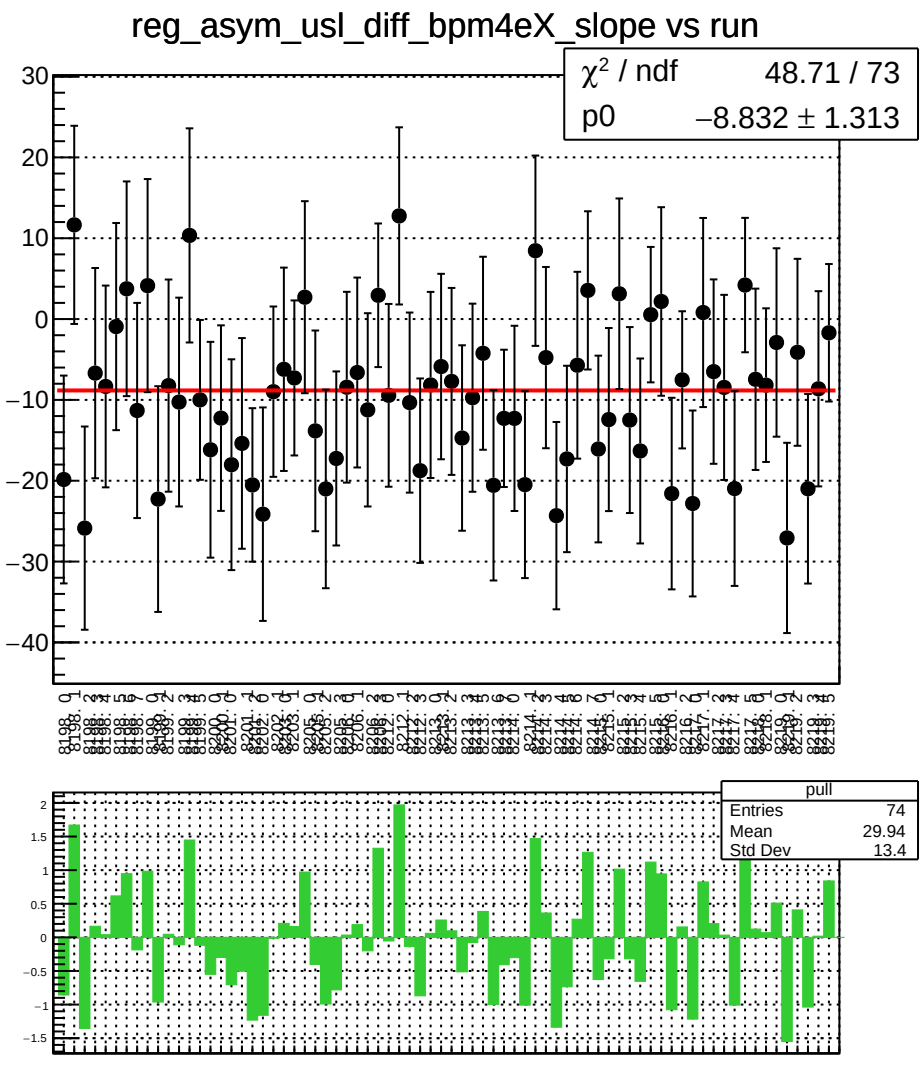

pull1D
Entries 74
Mean −0.007015
Std Dev 0.3322

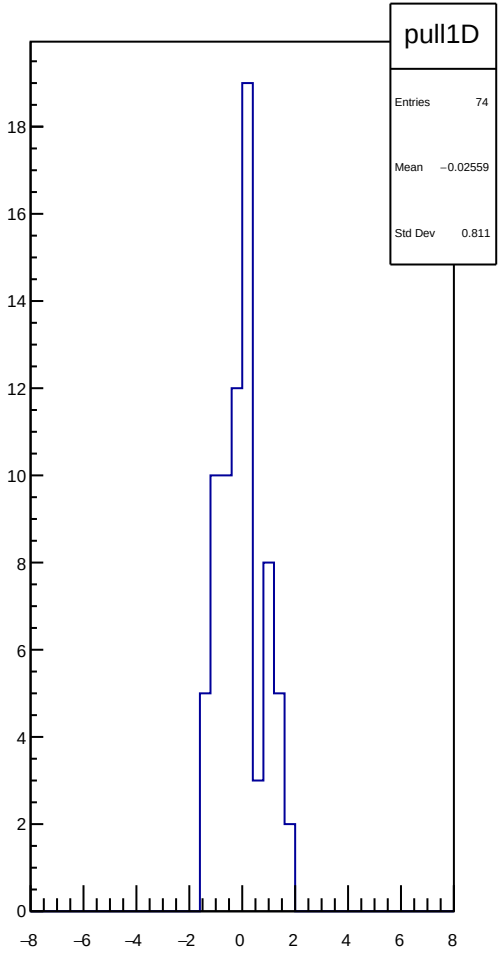

reg_asym_usl_diff_bpm1X_slope vs run
χ² / ndf 47.01 / 73
p0 −54.76 ± 1.311
pull
Entries 74
Mean 62.23
Std Dev 22.3

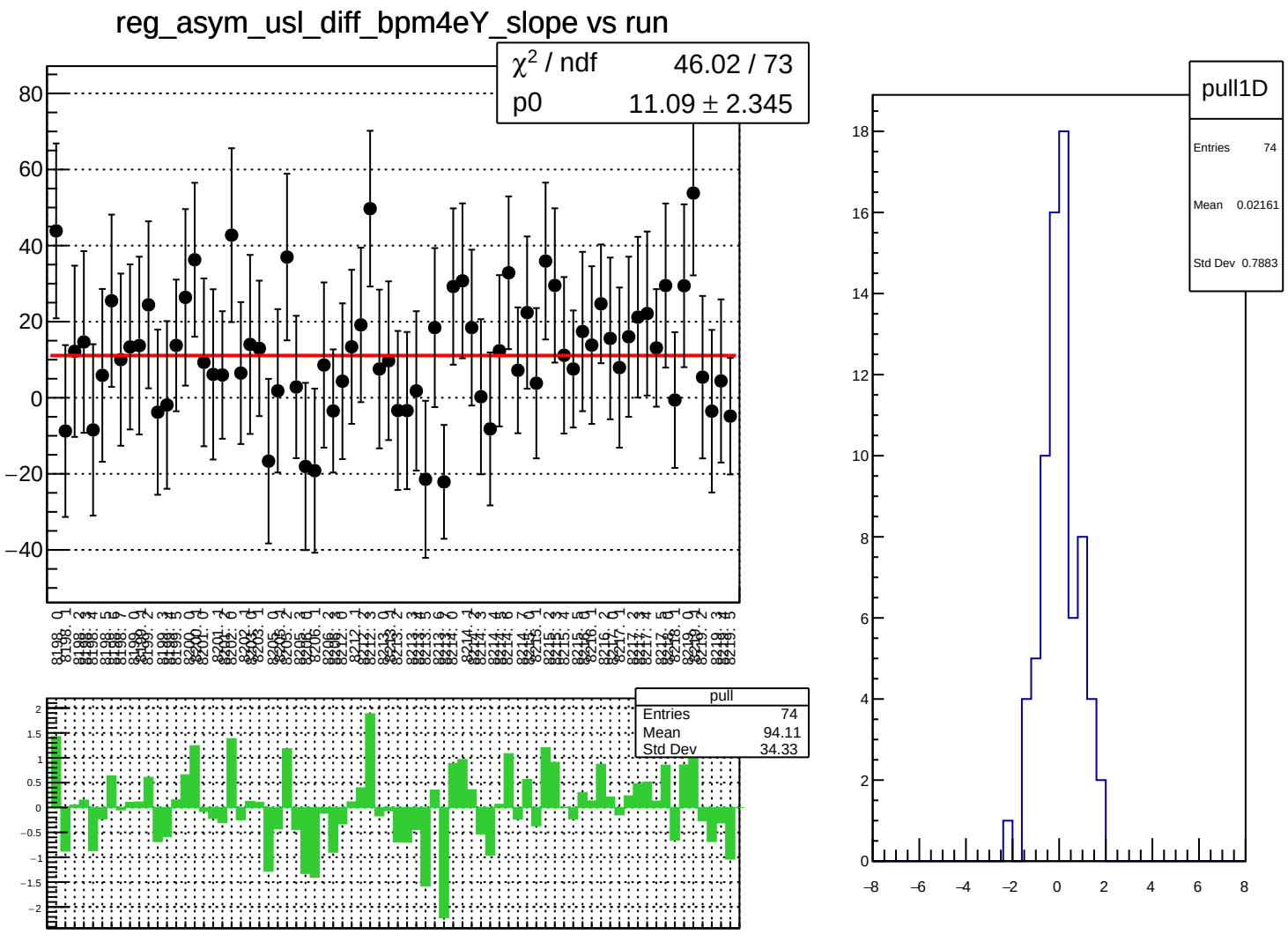

pull1D
Entries 74
Mean 0.02443
Std Dev 0.7966

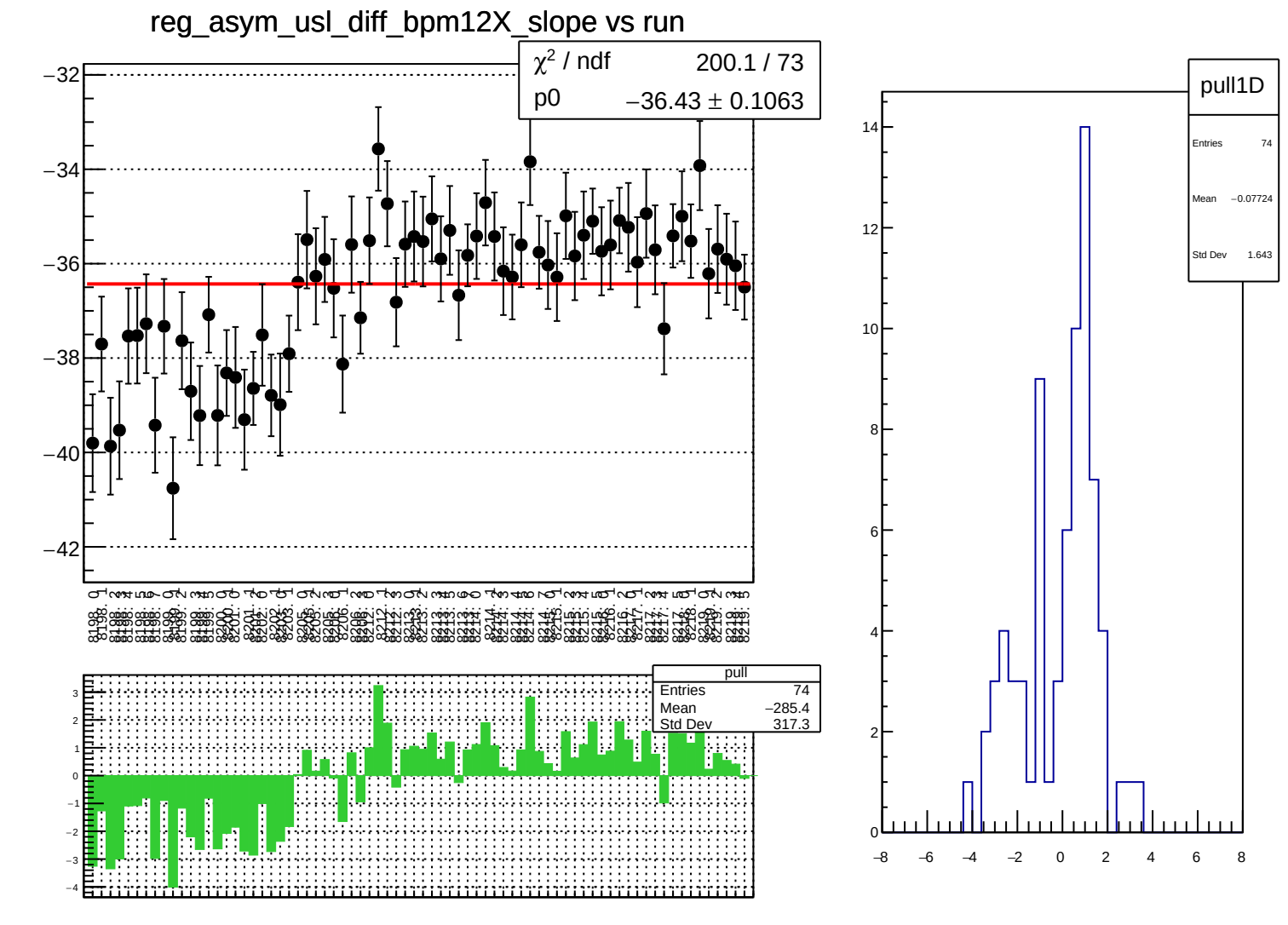

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 45.12 / 73
p0 9.151 ± 2.181
pull
Entries 74
Mean 173.6
Std Dev 131.5

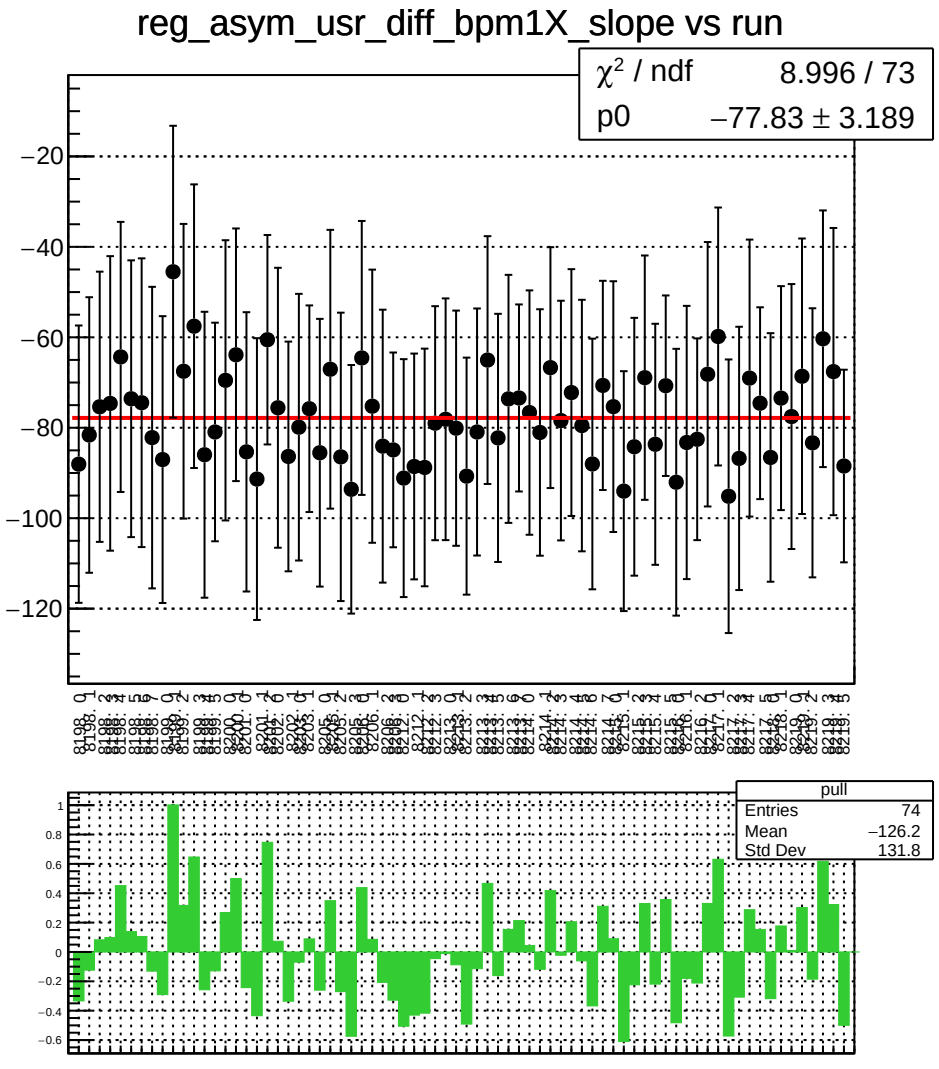

pull1D
Entries 74
Mean −0.01823
Std Dev 0.7807

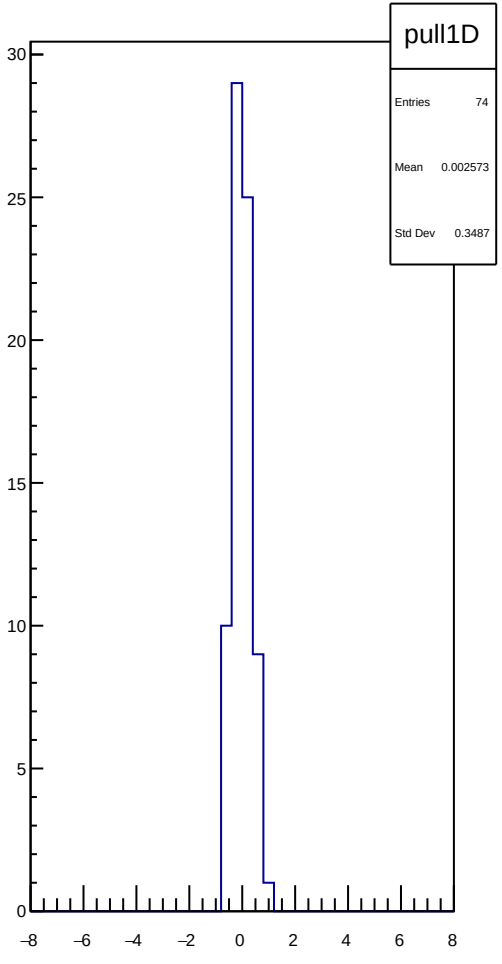

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 48.71 / 73
p0 −8.832 ± 1.313
pull
Entries 74
Mean 29.94
Std Dev 13.4

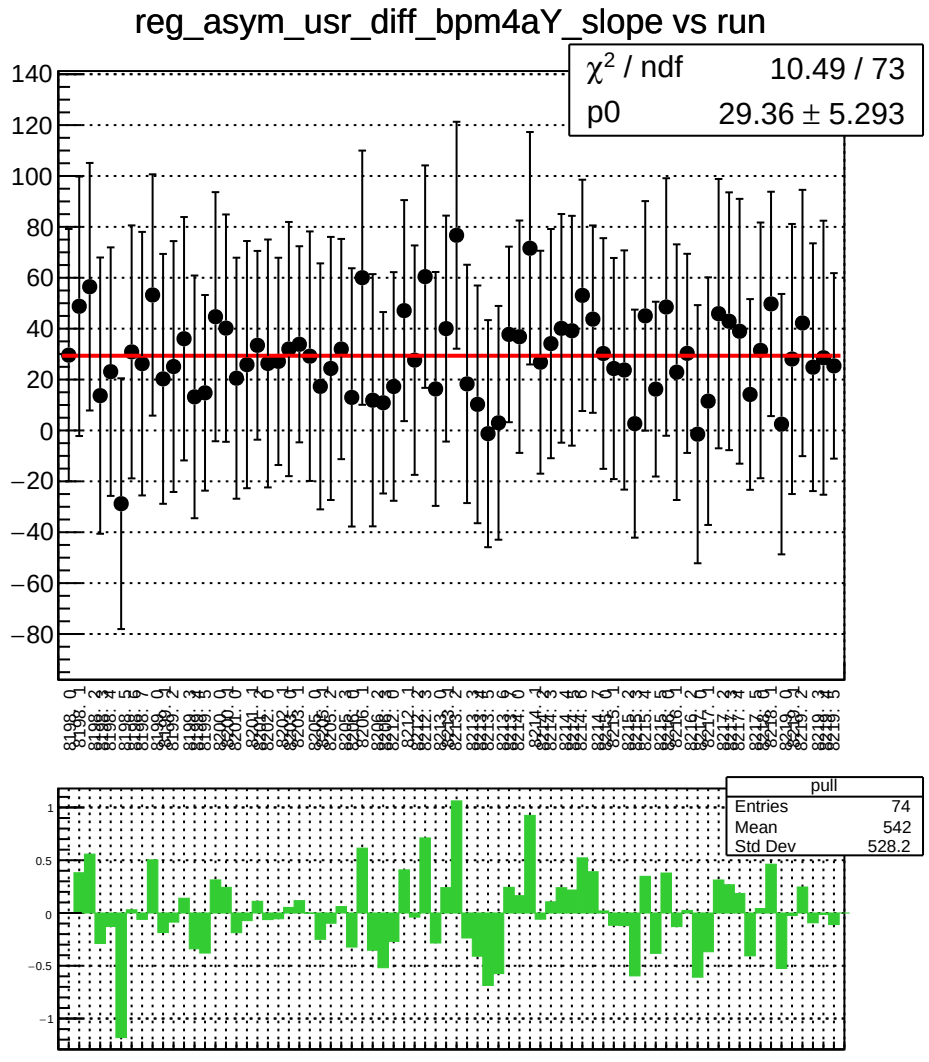

pull1D
Entries 74
Mean −0.02559
Std Dev 0.811

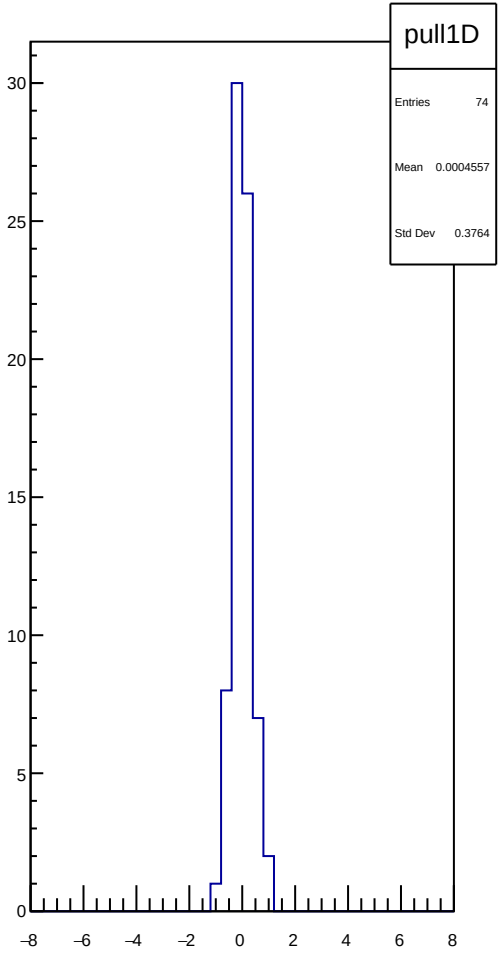

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 46.02 / 73
p0 11.09 ± 2.345
pull
Entries 74
Mean 94.11
Std Dev 34.33
pull1D
Entries 74
Mean 0.02161
Std Dev 0.7883

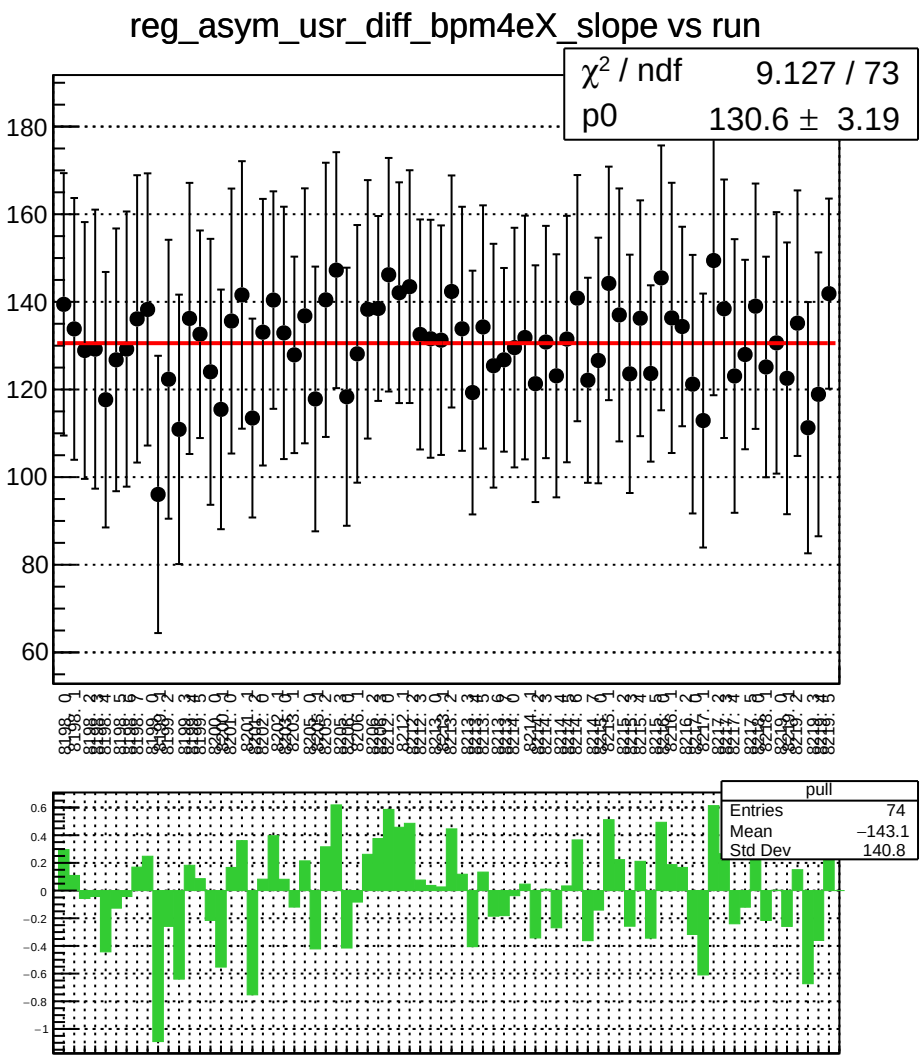

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 200.1 / 73
p0 −36.43 ± 0.1063
pull
Entries 74
Mean −285.4
Std Dev 317.3
pull1D
Entries 74
Mean −0.07724
Std Dev 1.643

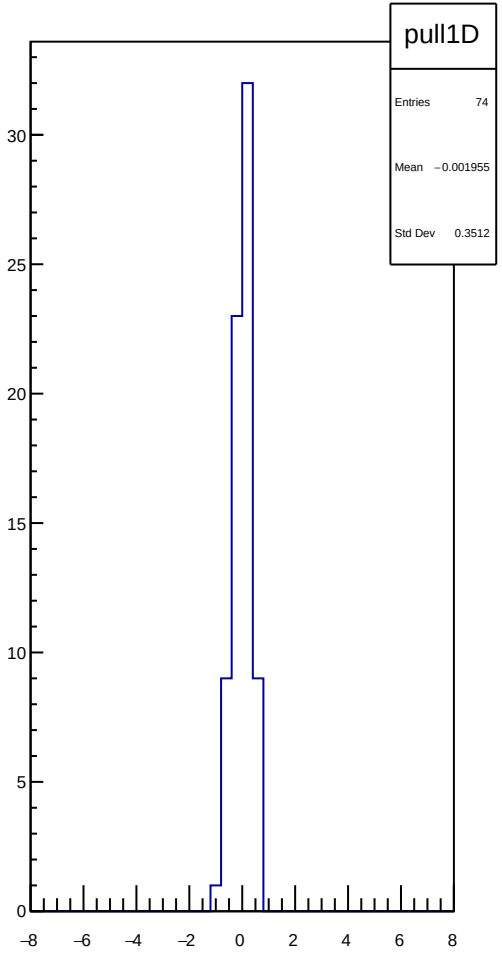

reg_asym_usr_diff_bpm1X_slope vs run
χ² / ndf 8.996 / 73
p0 −77.83 ± 3.189
pull
Entries 74
Mean −126.2
Std Dev 131.8

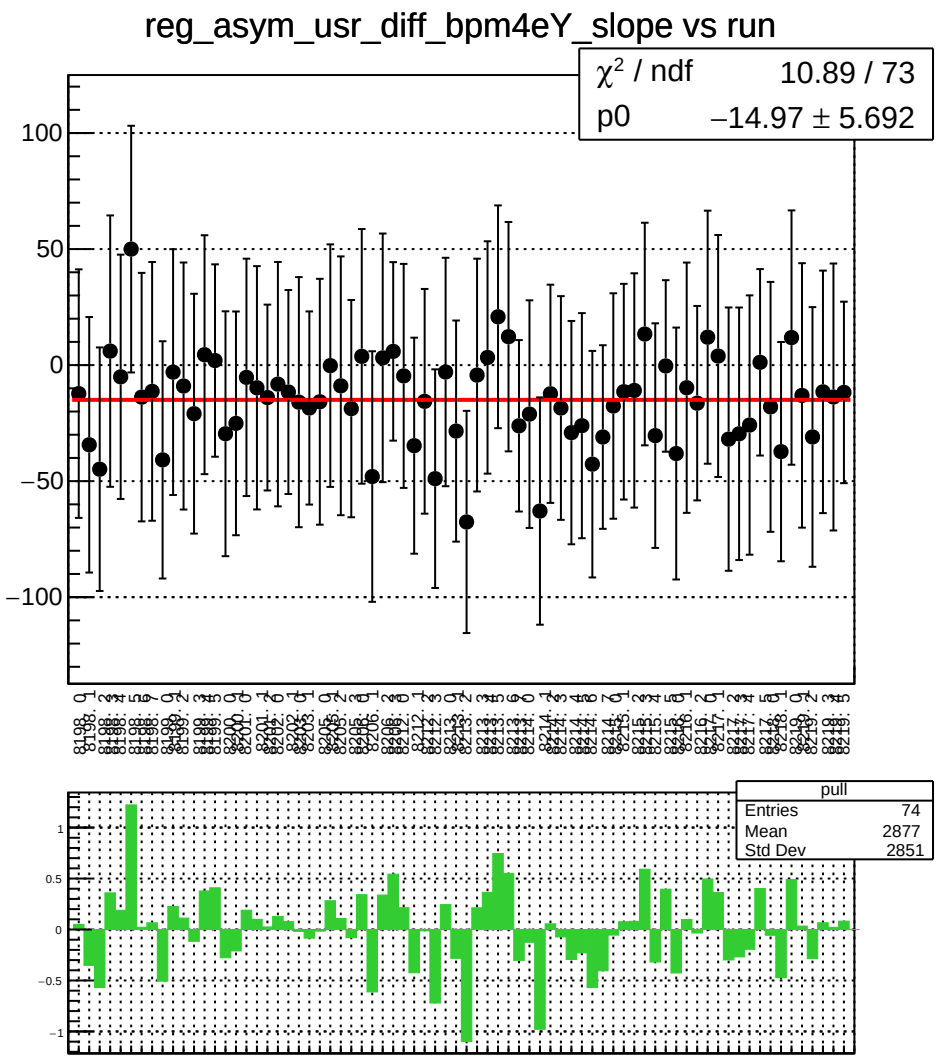

pull1D
Entries 74
Mean 0.002573
Std Dev 0.3487

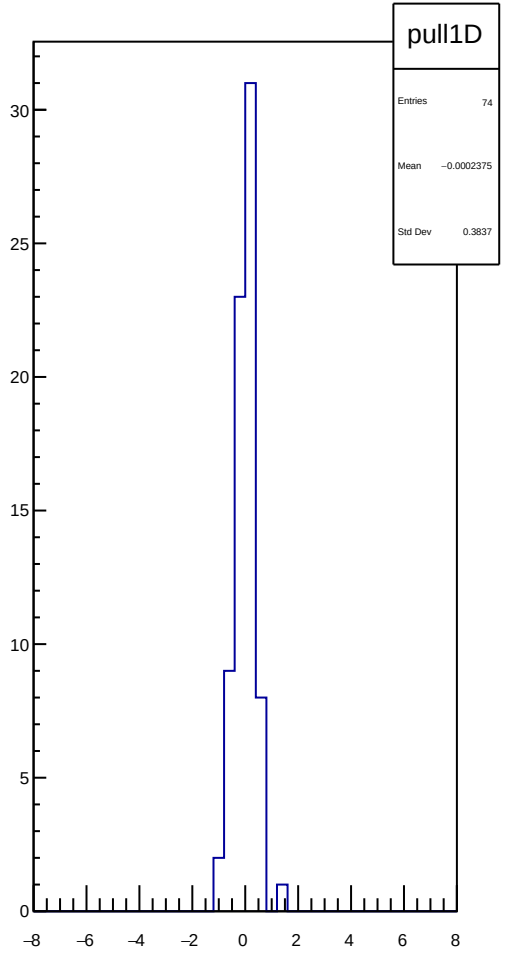

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 10.49 / 73
p0 29.36 ± 5.293
pull
Entries 74
Mean 542
Std Dev 528.2

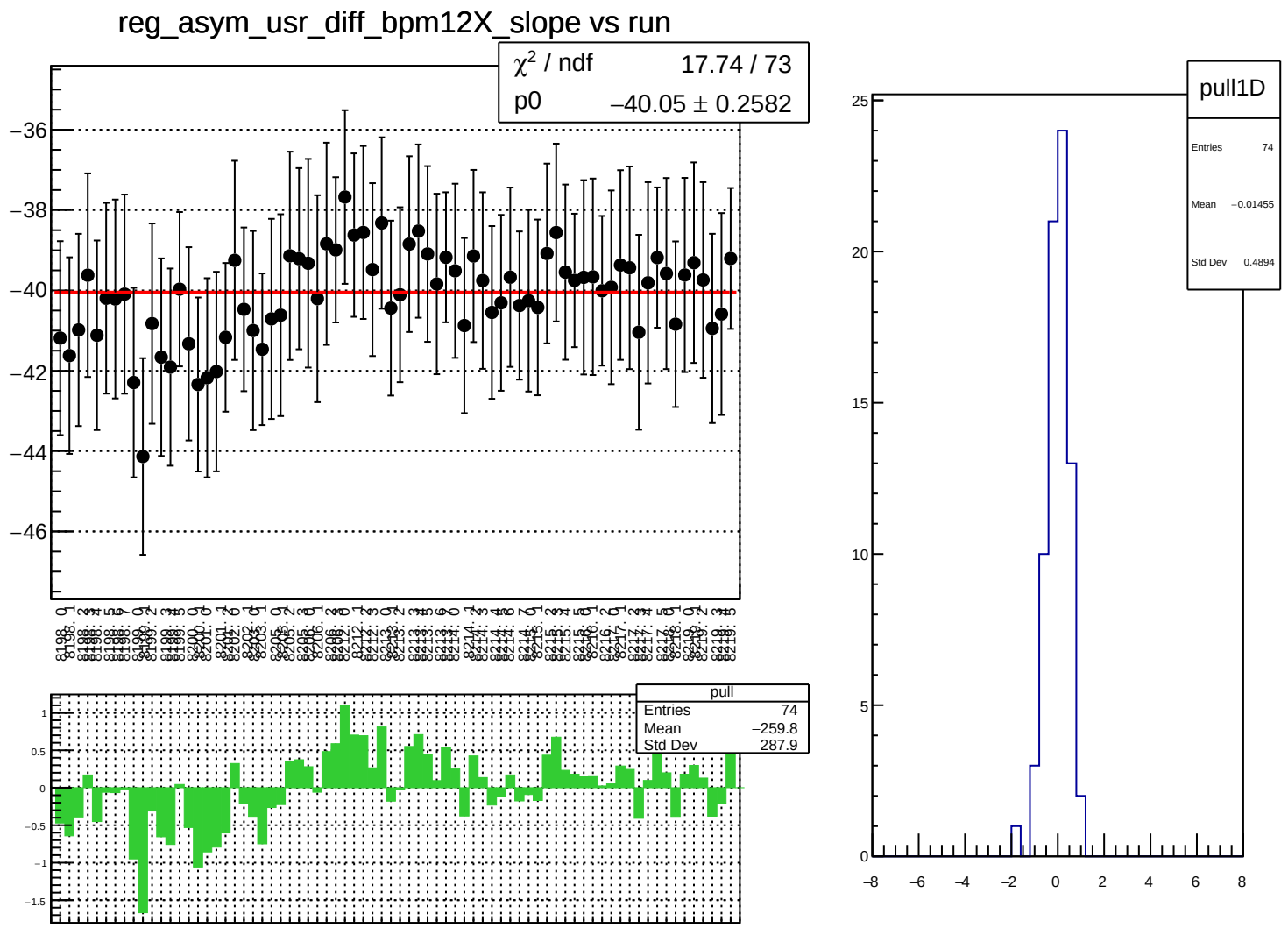

pull1D
Entries 74
Mean 0.0004557
Std Dev 0.3764

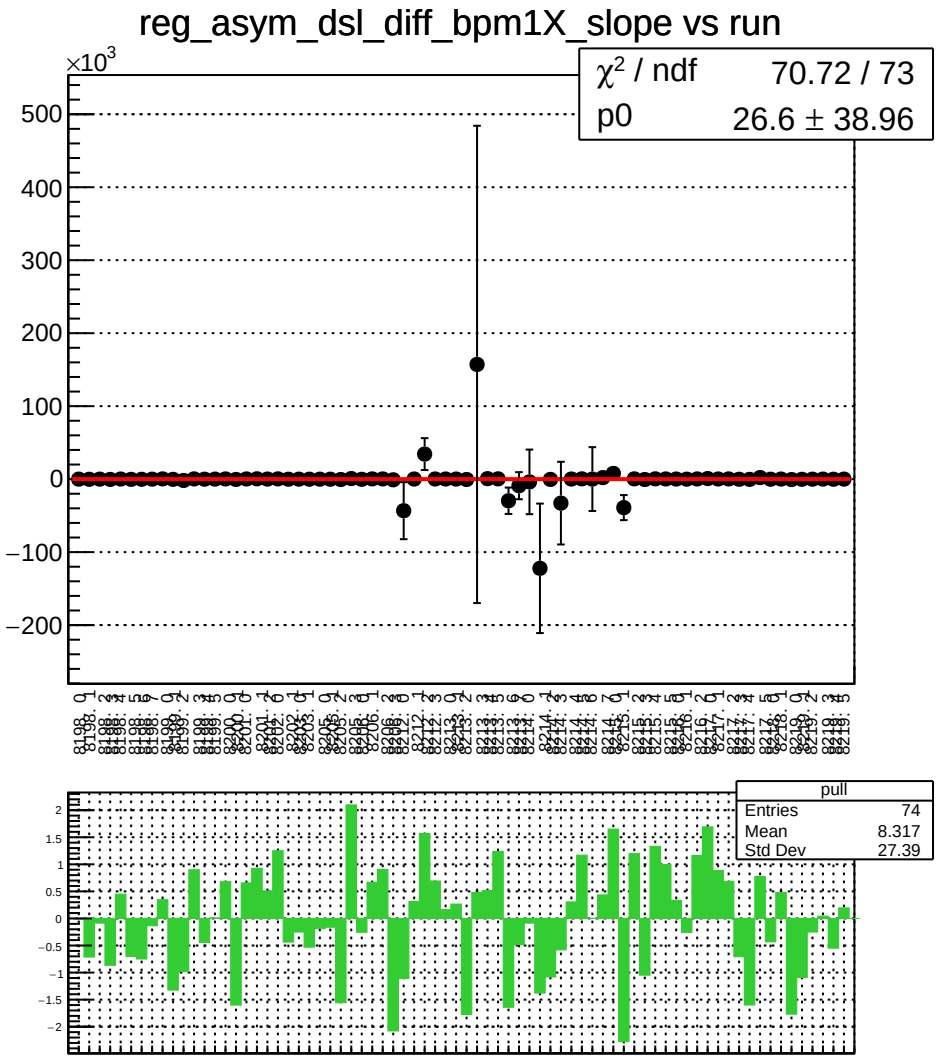

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 9.127 / 73
p0 130.6 ± 3.19
pull
Entries 74
Mean −143.1
Std Dev 140.8

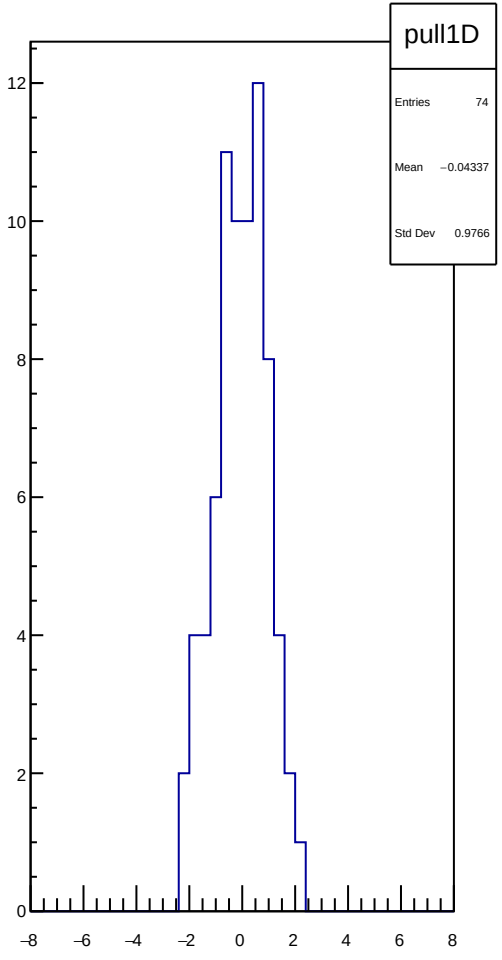

pull1D
Entries 74
Mean −0.001955
Std Dev 0.3512

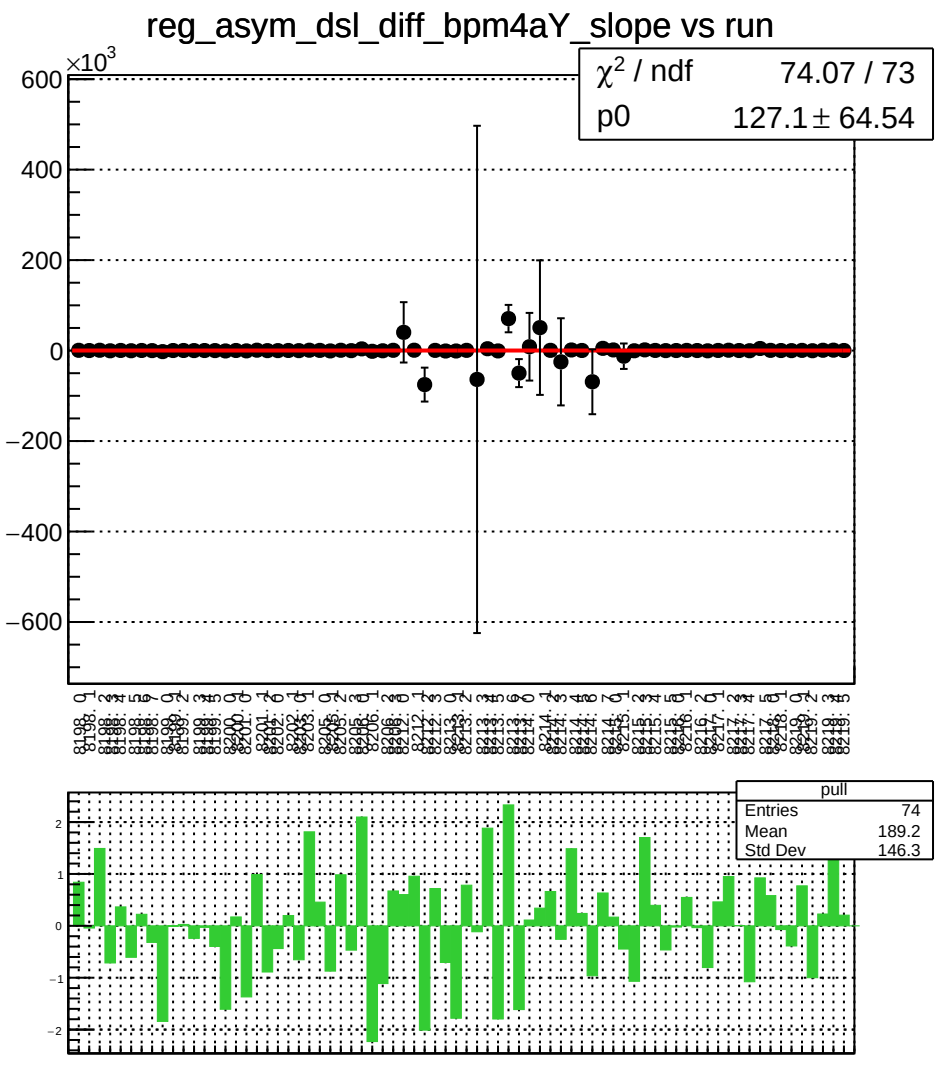

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 10.89 / 73
p0 −14.97 ± 5.692
100
50
0
−50
−100
pull
Entries 74
Mean 2877
Std Dev 2851
1
0.5
0
−0.5
−1

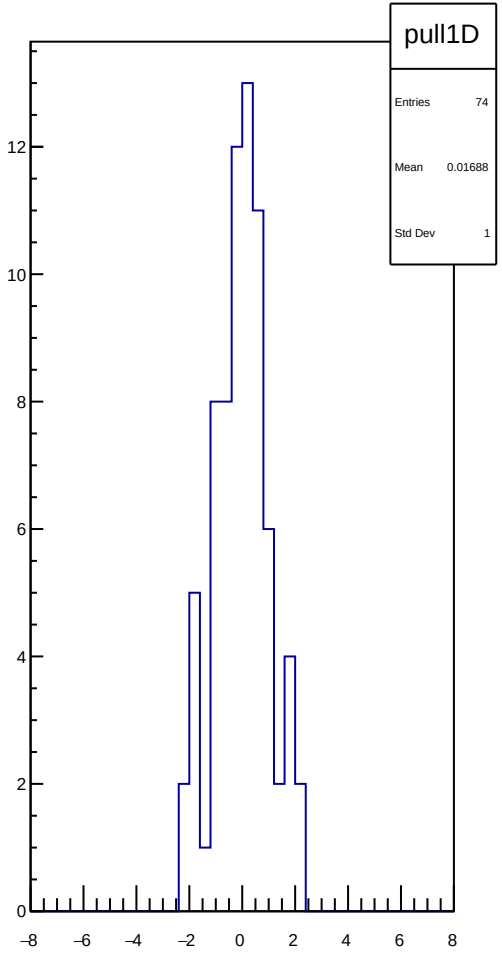

pull1D
Entries 74
Mean −0.0002375
Std Dev 0.3837
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

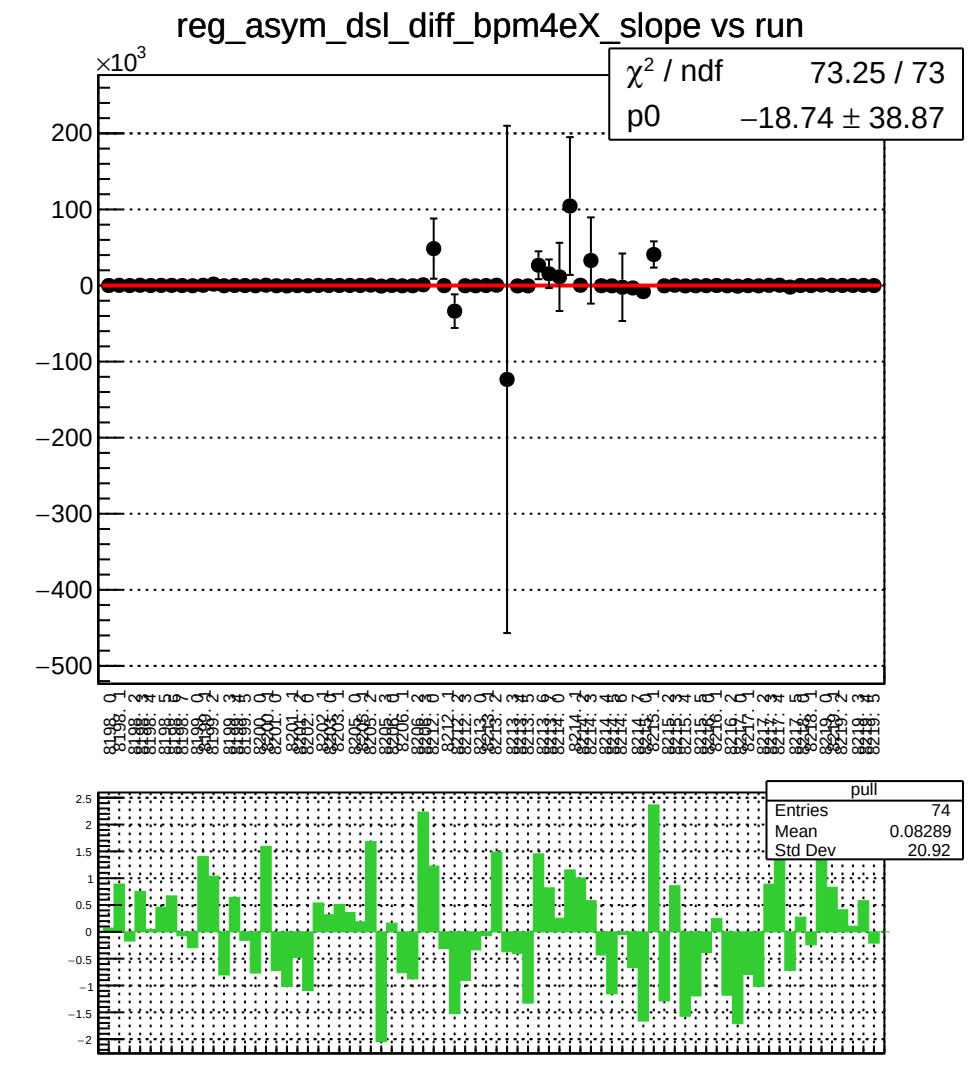

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 17.74 / 73
p0 −40.05 ± 0.2582
pull
Entries 74
Mean −259.8
Std Dev 287.9
pull1D
Entries 74
Mean −0.01455
Std Dev 0.4894

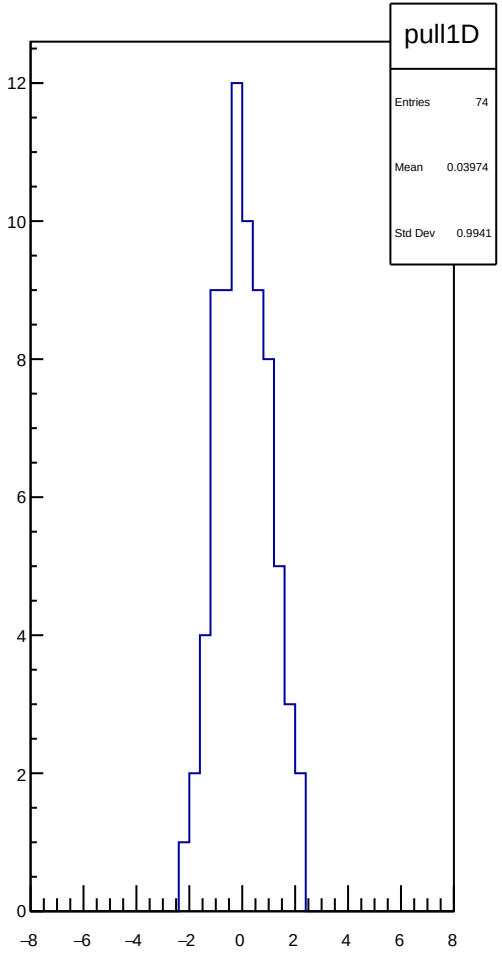

reg_asym_dsl_diff_bpm1X_slope vs run
χ² / ndf 70.72 / 73
p0 26.6 ± 38.96
pull
Entries 74
Mean 8.317
Std Dev 27.39

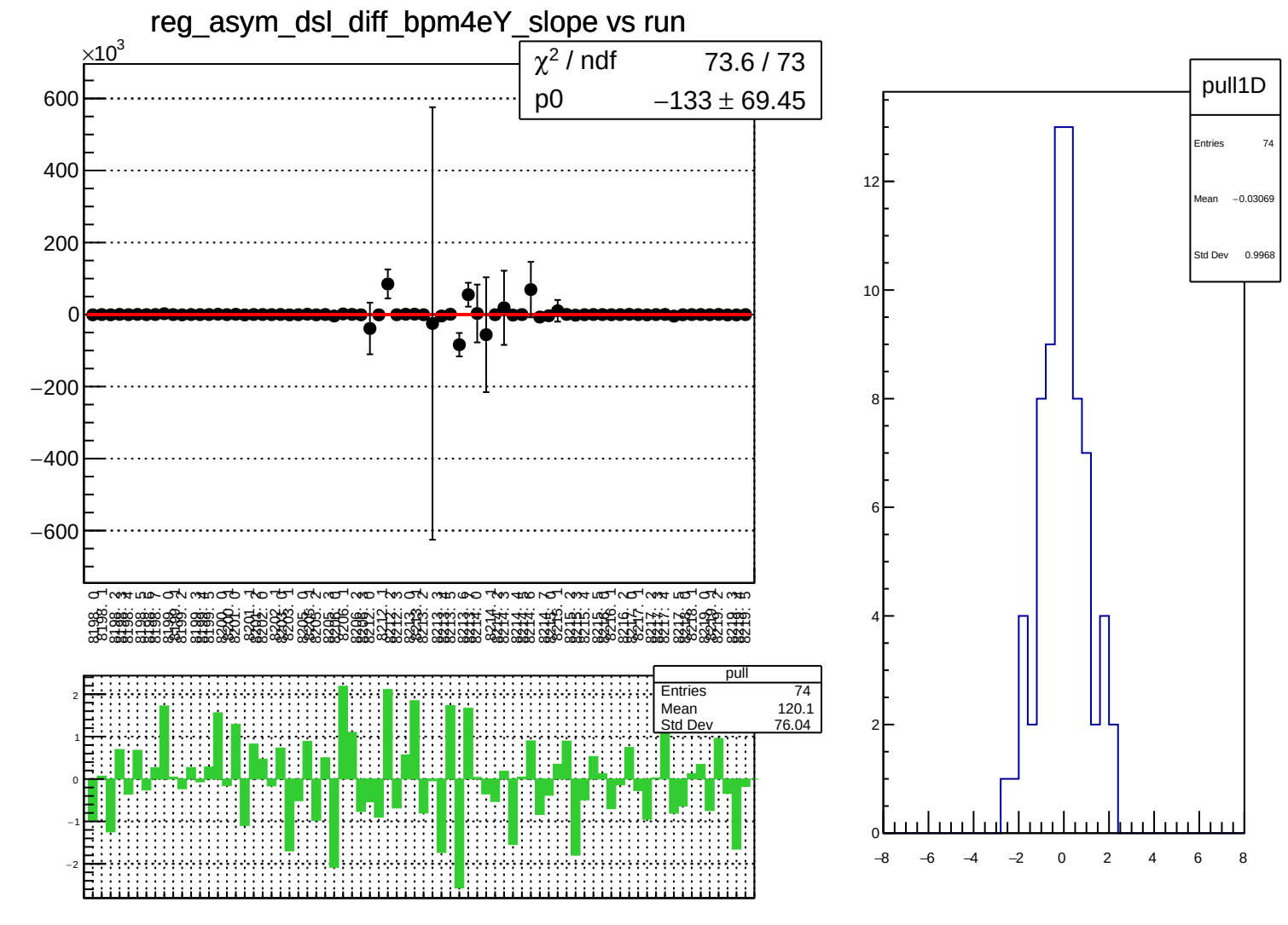

pull1D
Entries 74
Mean −0.04337
Std Dev 0.9766

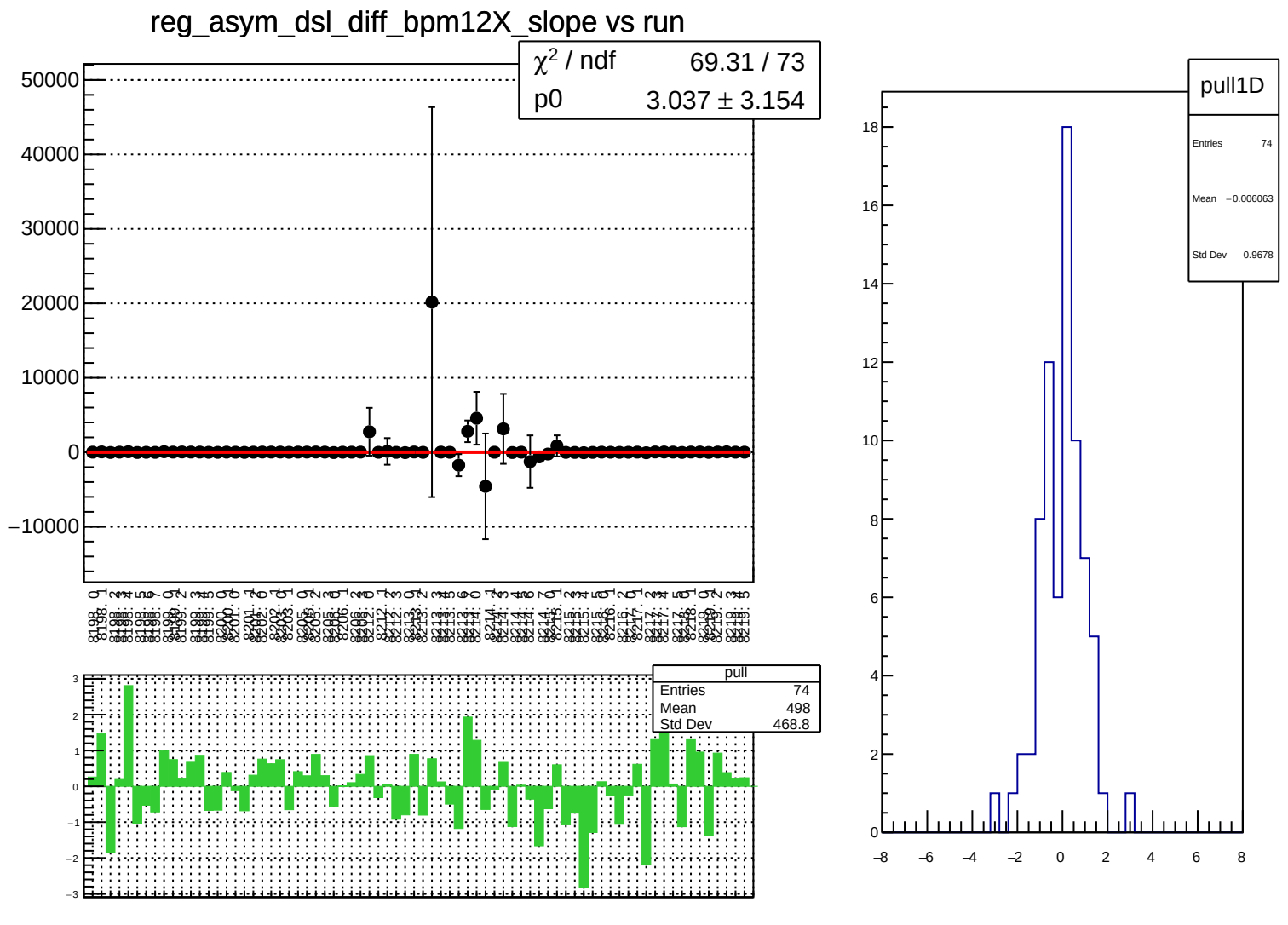

reg_asym_dsl_diff_bpm4aY_slope vs run
×10^3
600
400
200
0
−200
−400
−600
χ² / ndf 74.07 / 73
p0 127.1 ± 64.54
pull
Entries 74
Mean 189.2
Std Dev 146.3
2
1
0
−1
−2

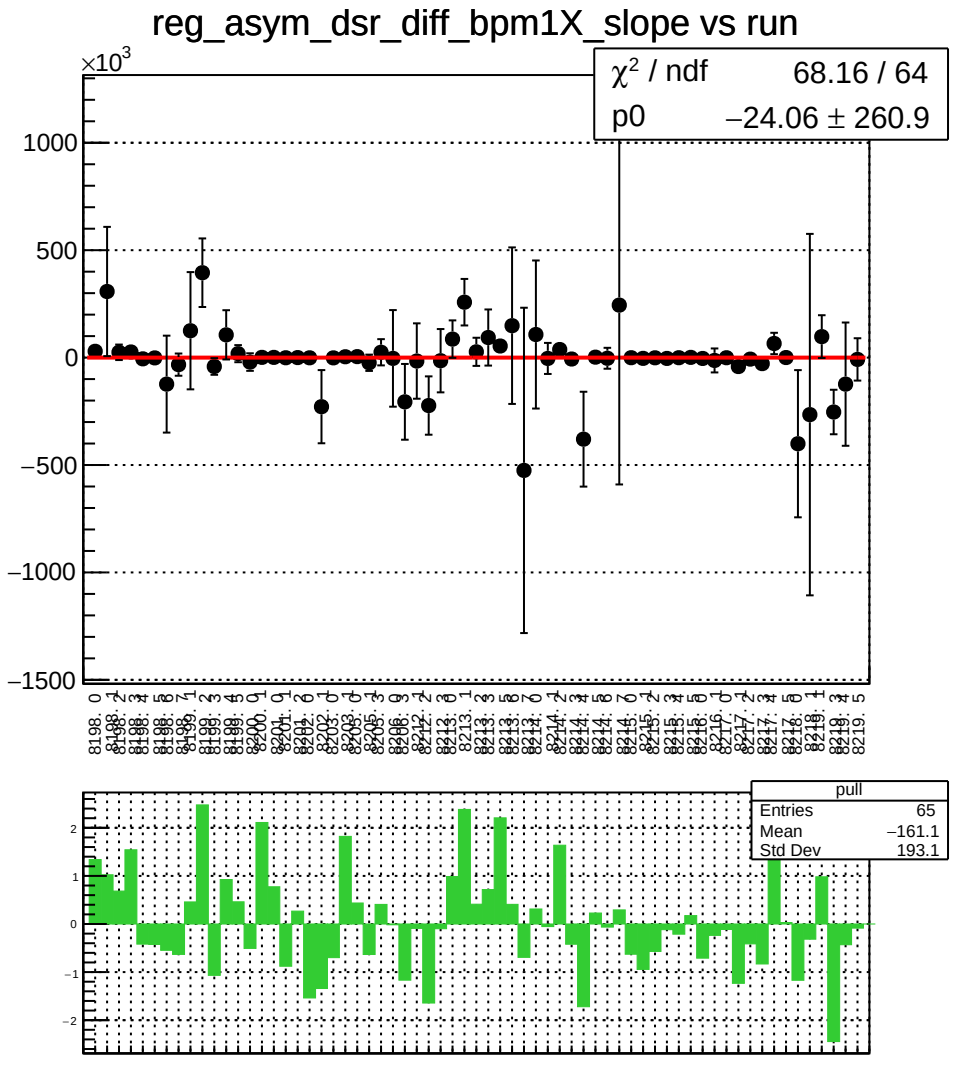

pull1D
Entries 74
Mean 0.01688
Std Dev 1
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

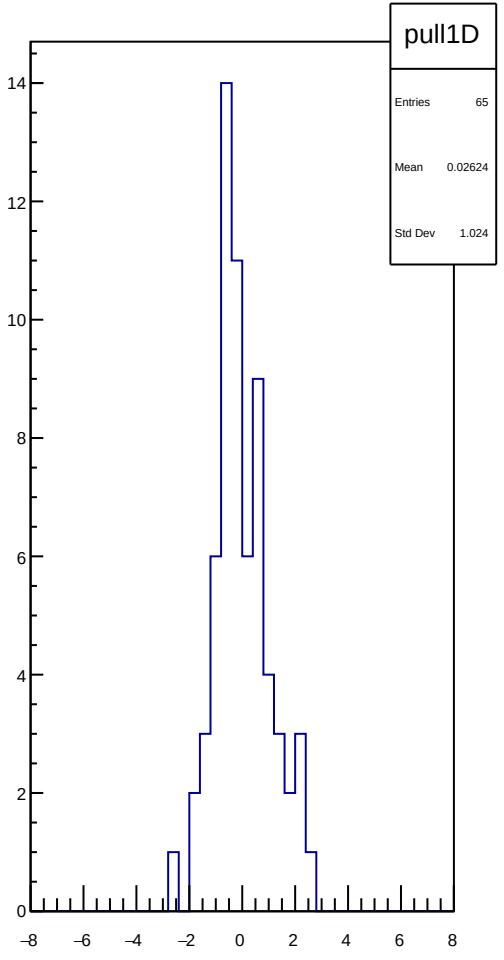

reg_asym_dsl_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 73.25 / 73
p0 −18.74 ± 38.87
pull
Entries 74
Mean 0.08289
Std Dev 20.92

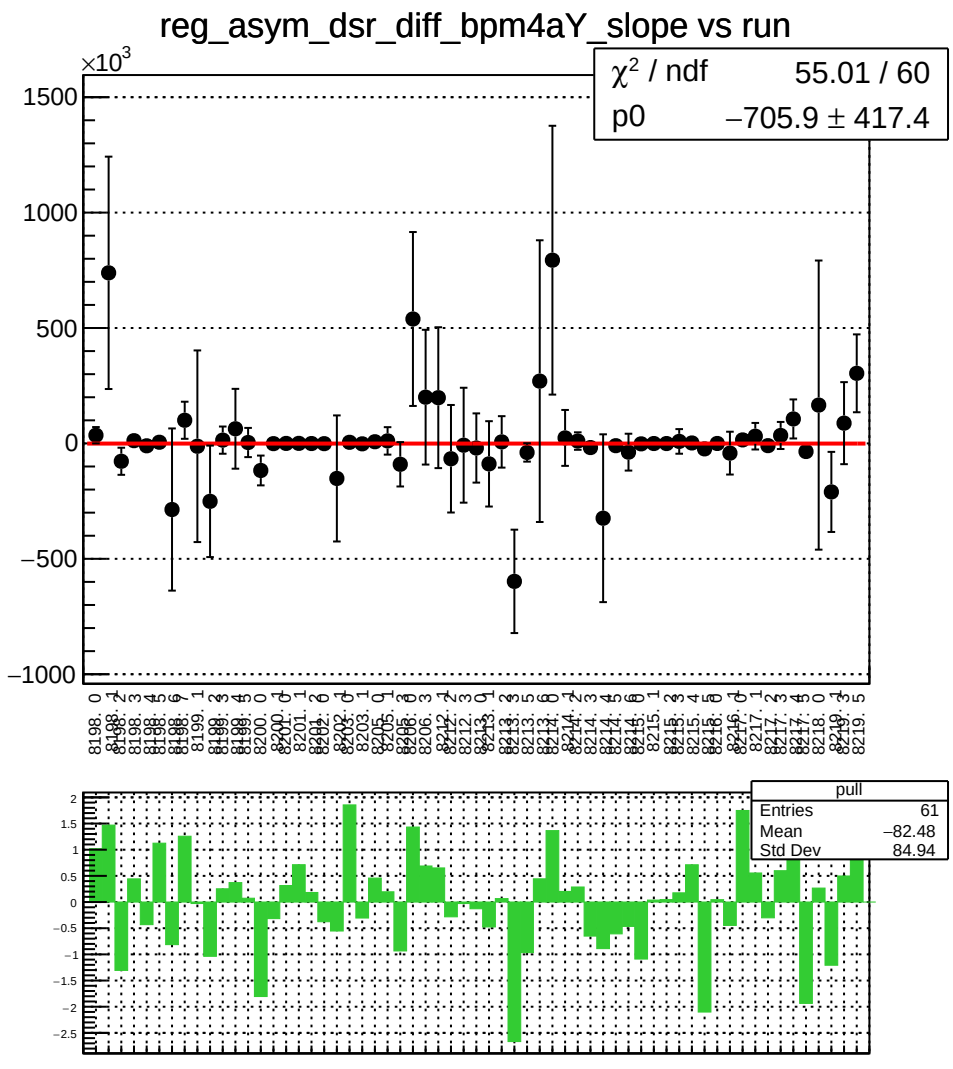

pull1D
Entries 74
Mean 0.03974
Std Dev 0.9941

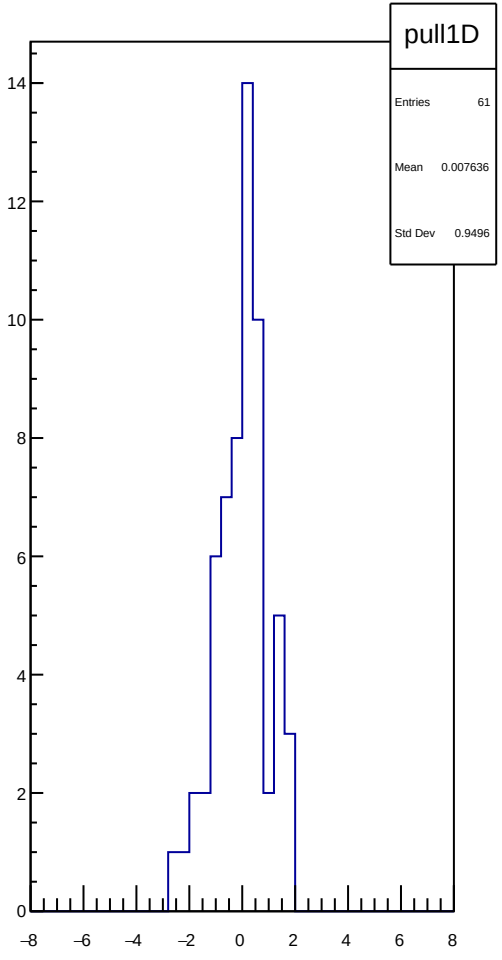

reg_asym_dsl_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 73.6 / 73
p0 −133 ± 69.45
600
400
200
0
−200
−400
−600
pull
Entries 74
Mean 120.1
Std Dev 76.04
2
1
0
−1
−2
pull1D
Entries 74
Mean −0.03069
Std Dev 0.9968
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

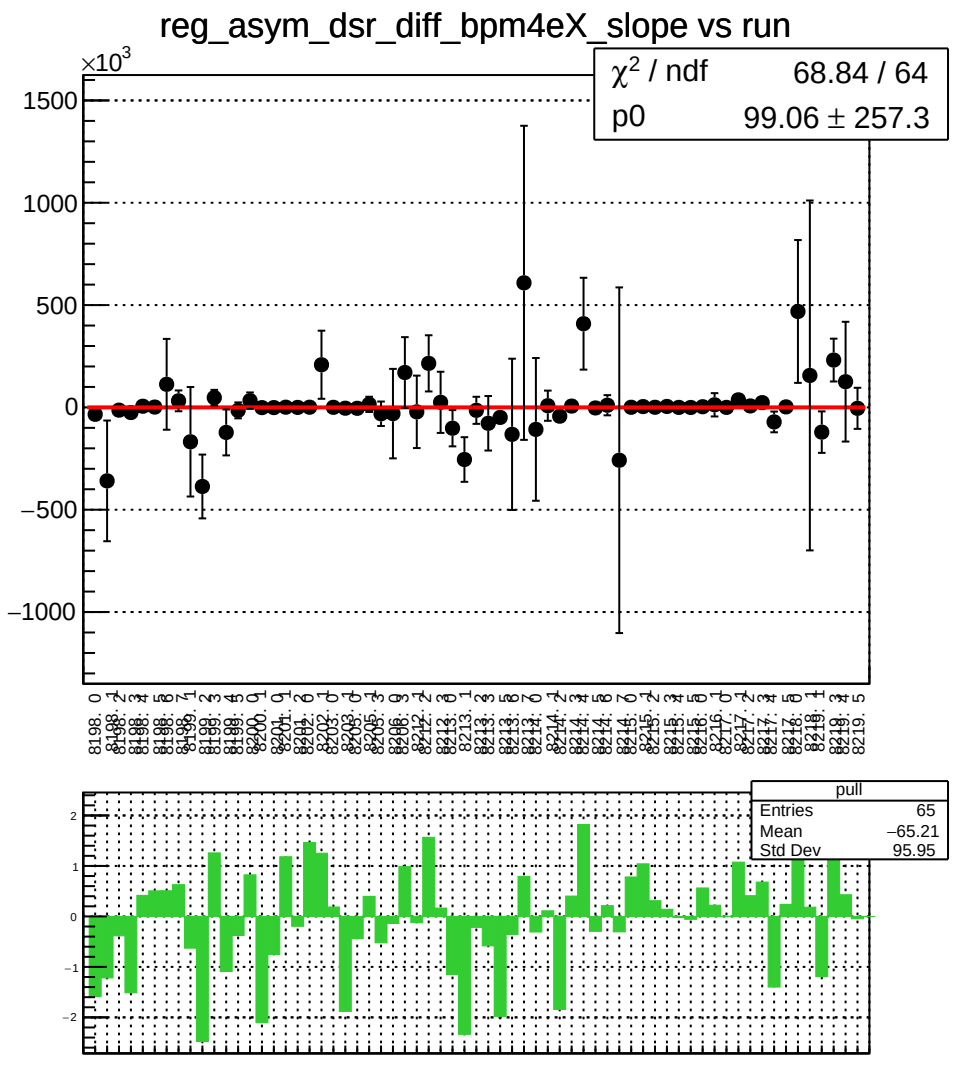

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 69.31 / 73
p0 3.037 ± 3.154
pull
Entries 74
Mean 498
Std Dev 468.8
pull1D
Entries 74
Mean −0.006063
Std Dev 0.9678

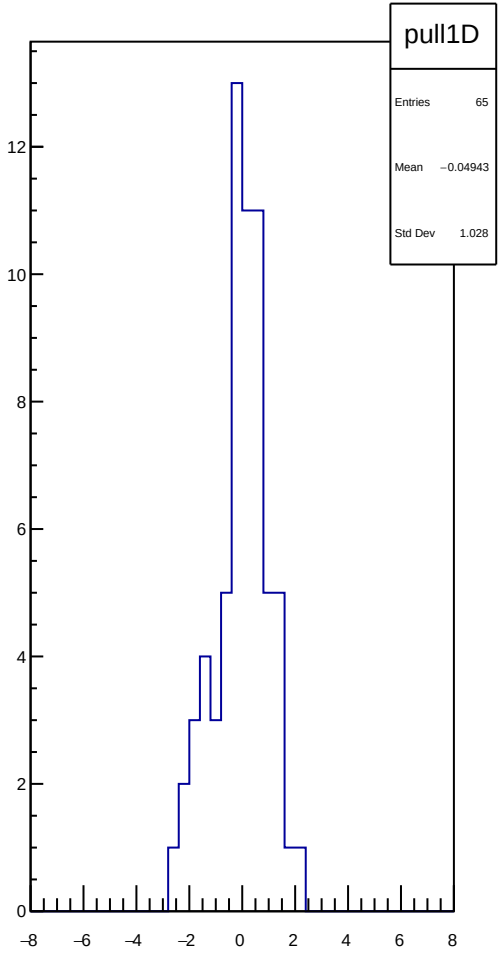

reg_asym_dsr_diff_bpm1X_slope vs run
×10^3
χ² / ndf 68.16 / 64
p0 −24.06 ± 260.9
1000
500
0
−500
−1000
−1500
pull
Entries 65
Mean −161.1
Std Dev 193.1
2
1
0
−1
−2

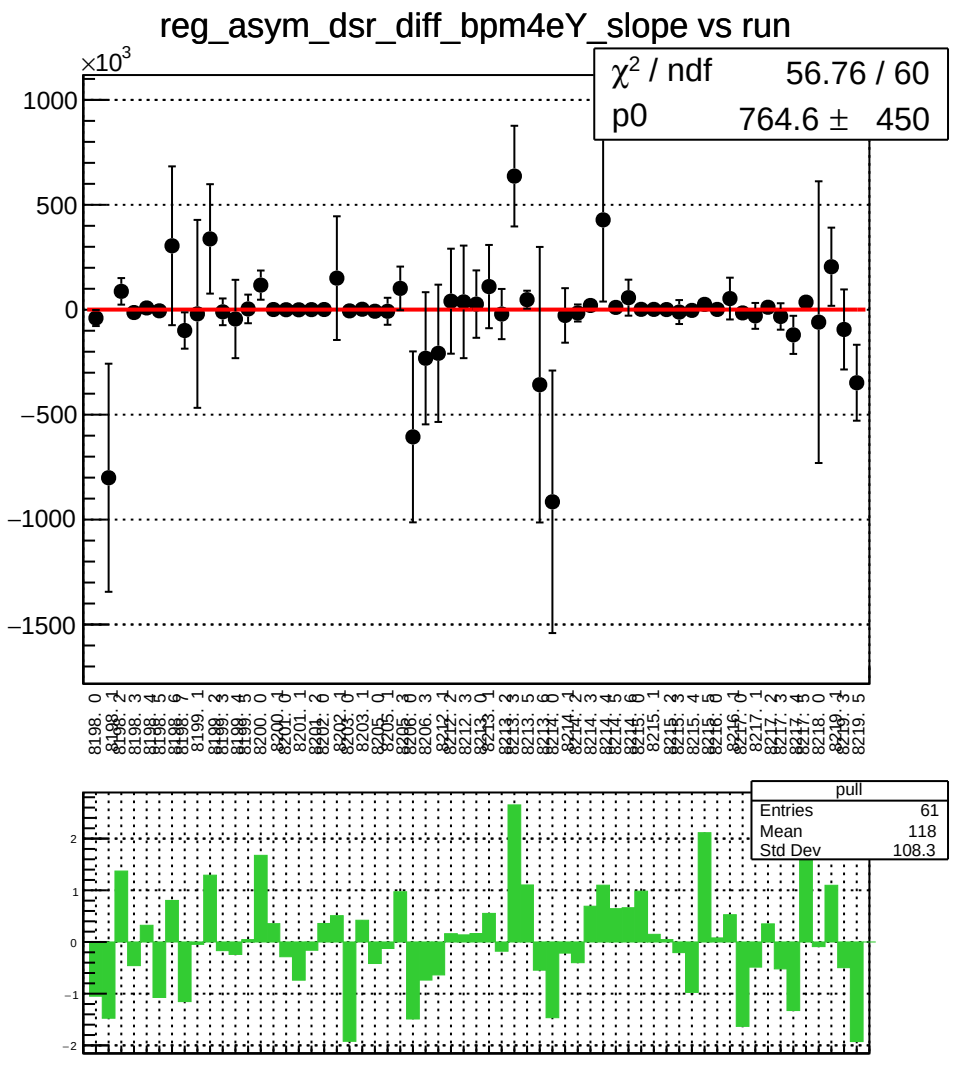

pull1D
Entries 65
Mean 0.02624
Std Dev 1.024
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

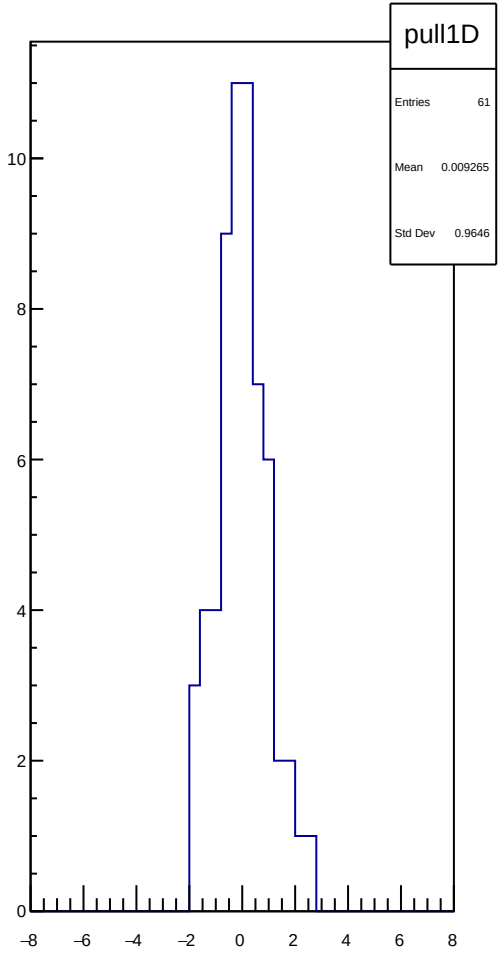

reg_asym_dsr_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 55.01 / 60
p0 −705.9 ± 417.4
pull
Entries 61
Mean −82.48
Std Dev 84.94

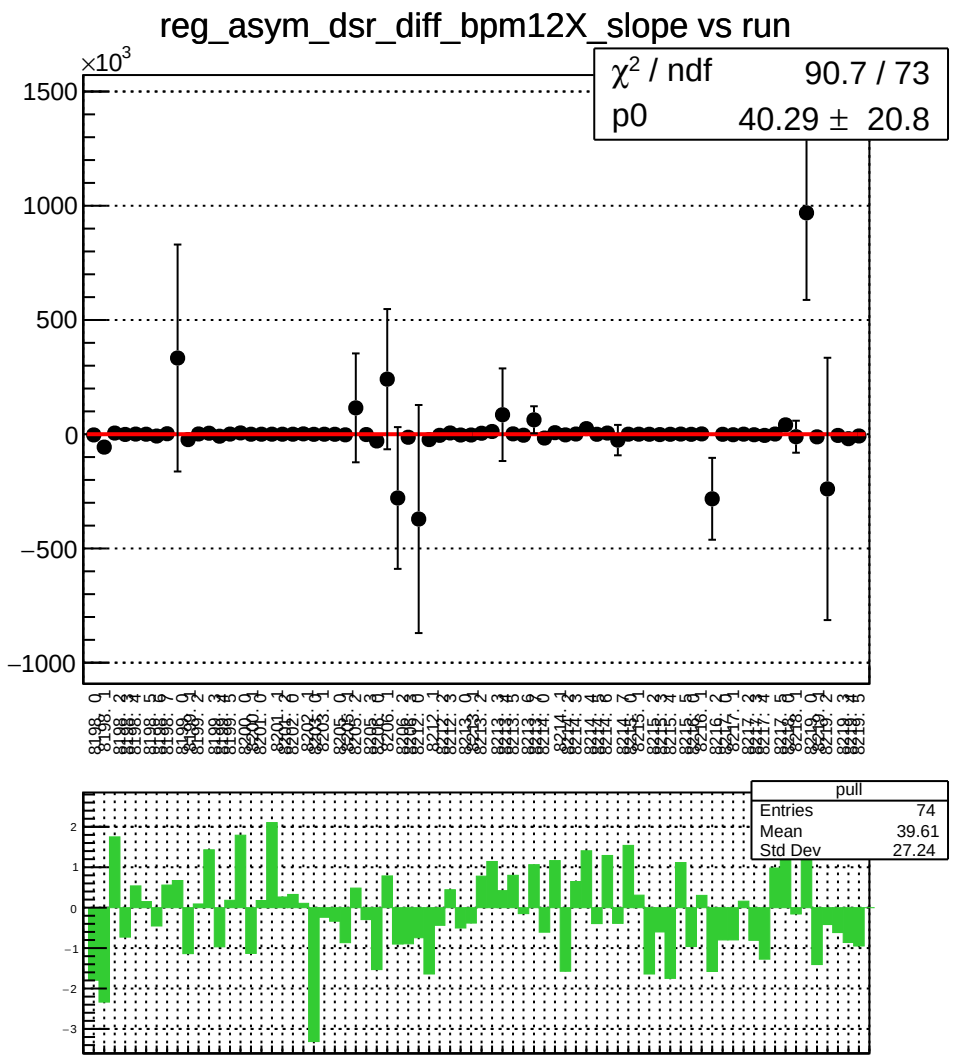

pull1D
Entries 61
Mean 0.007636
Std Dev 0.9496

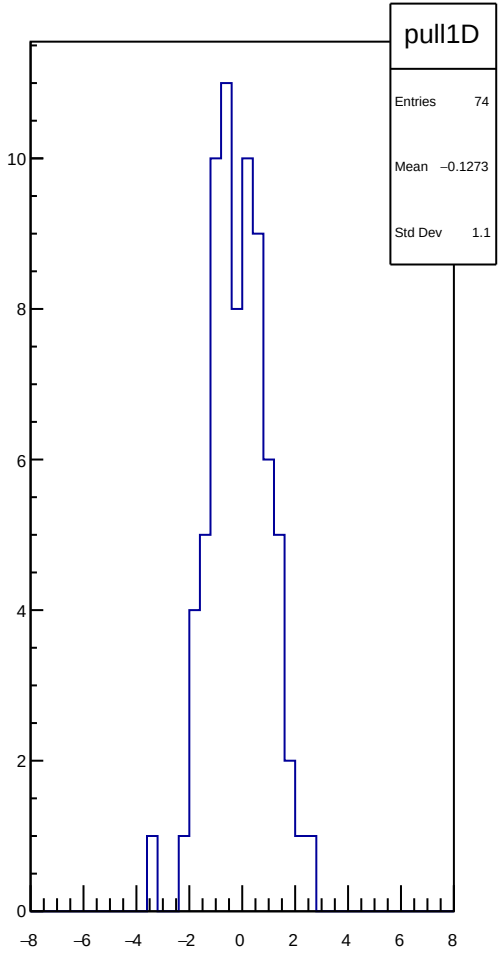

reg_asym_dsr_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 68.84 / 64
p0 99.06 ± 257.3
1500
1000
500
0
−500
−1000
pull
Entries 65
Mean −65.21
Std Dev 95.95
2
1
0
−1
−2

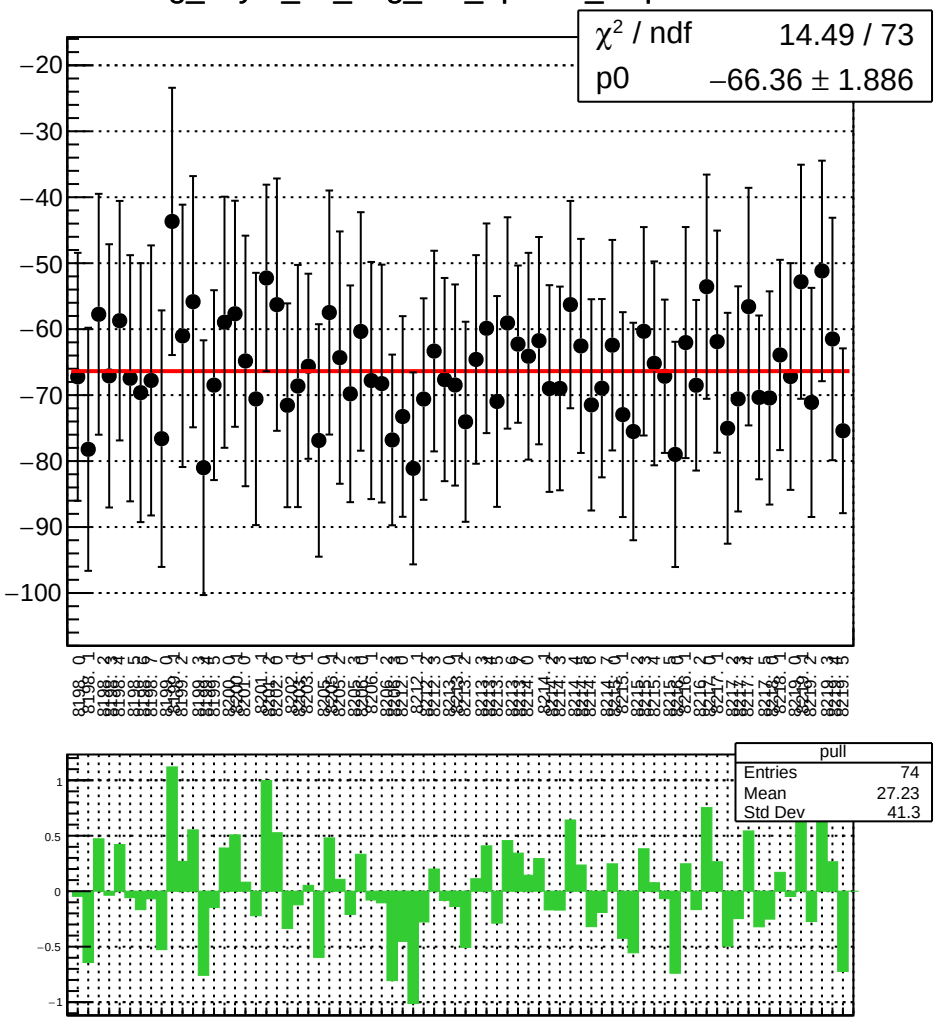

pull1D
Entries 65
Mean −0.04943
Std Dev 1.028
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

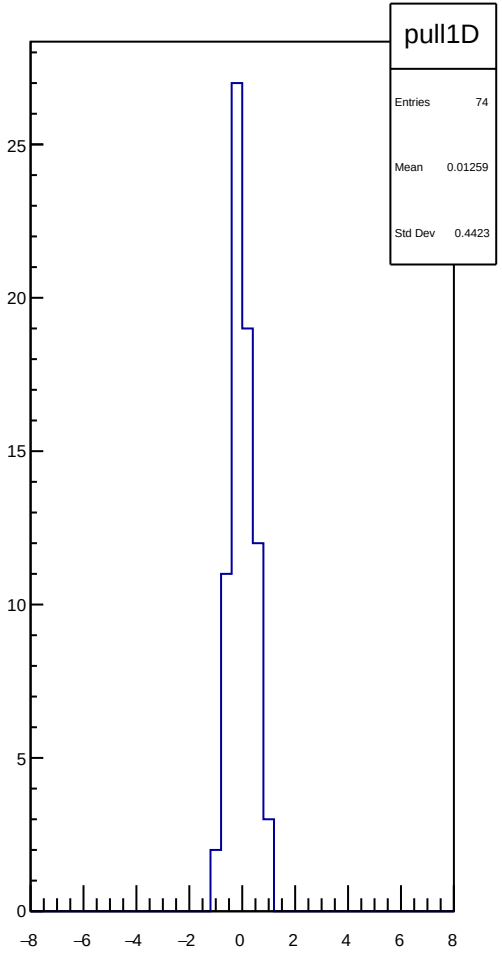

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 56.76 / 60
p0 764.6 ± 450
×10³
1000
500
0
−500
−1000
−1500
pull
Entries 61
Mean 118
Std Dev 108.3
2
1
0
−1
−2

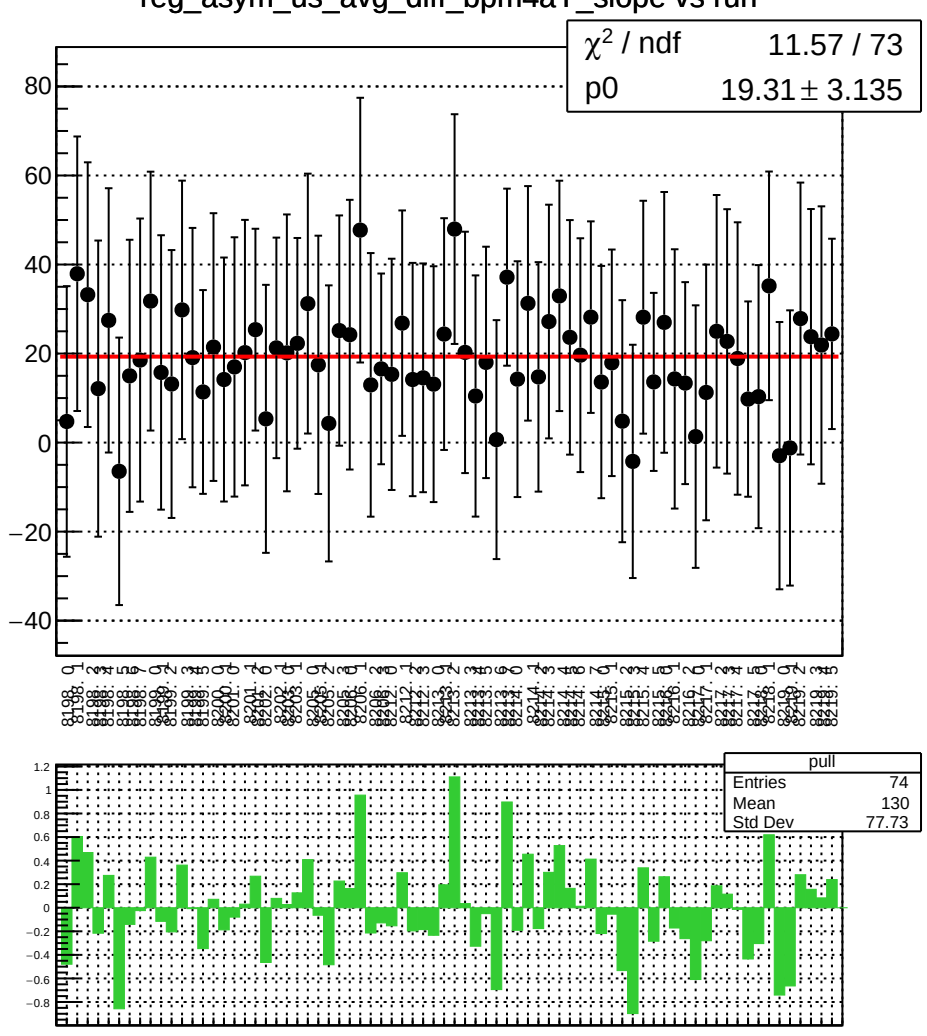

pull1D
Entries 61
Mean 0.009265
Std Dev 0.9646
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

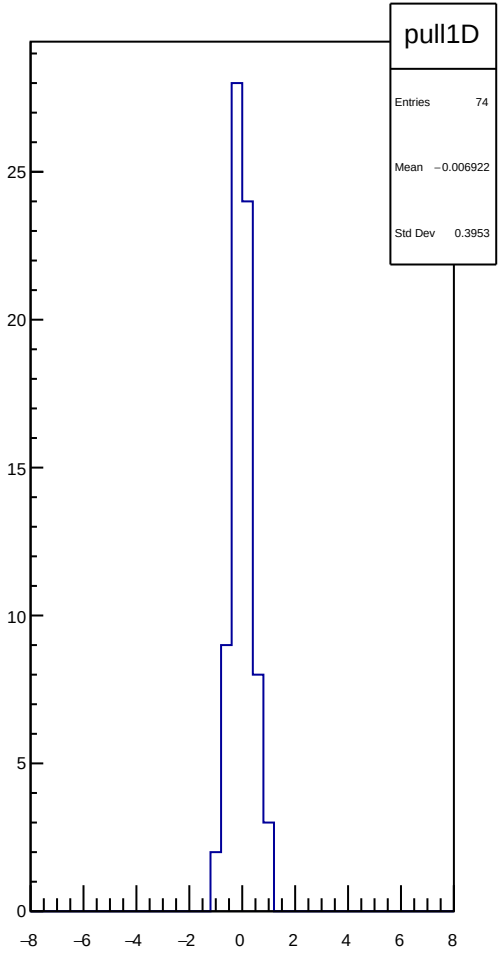

reg_asym_dsr_diff_bpm12X_slope vs run
×10^3
χ² / ndf 90.7 / 73
p0 40.29 ± 20.8
1500
1000
500
0
−500
−1000
pull
Entries 74
Mean 39.61
Std Dev 27.24
2
1
0
−1
−2
−3

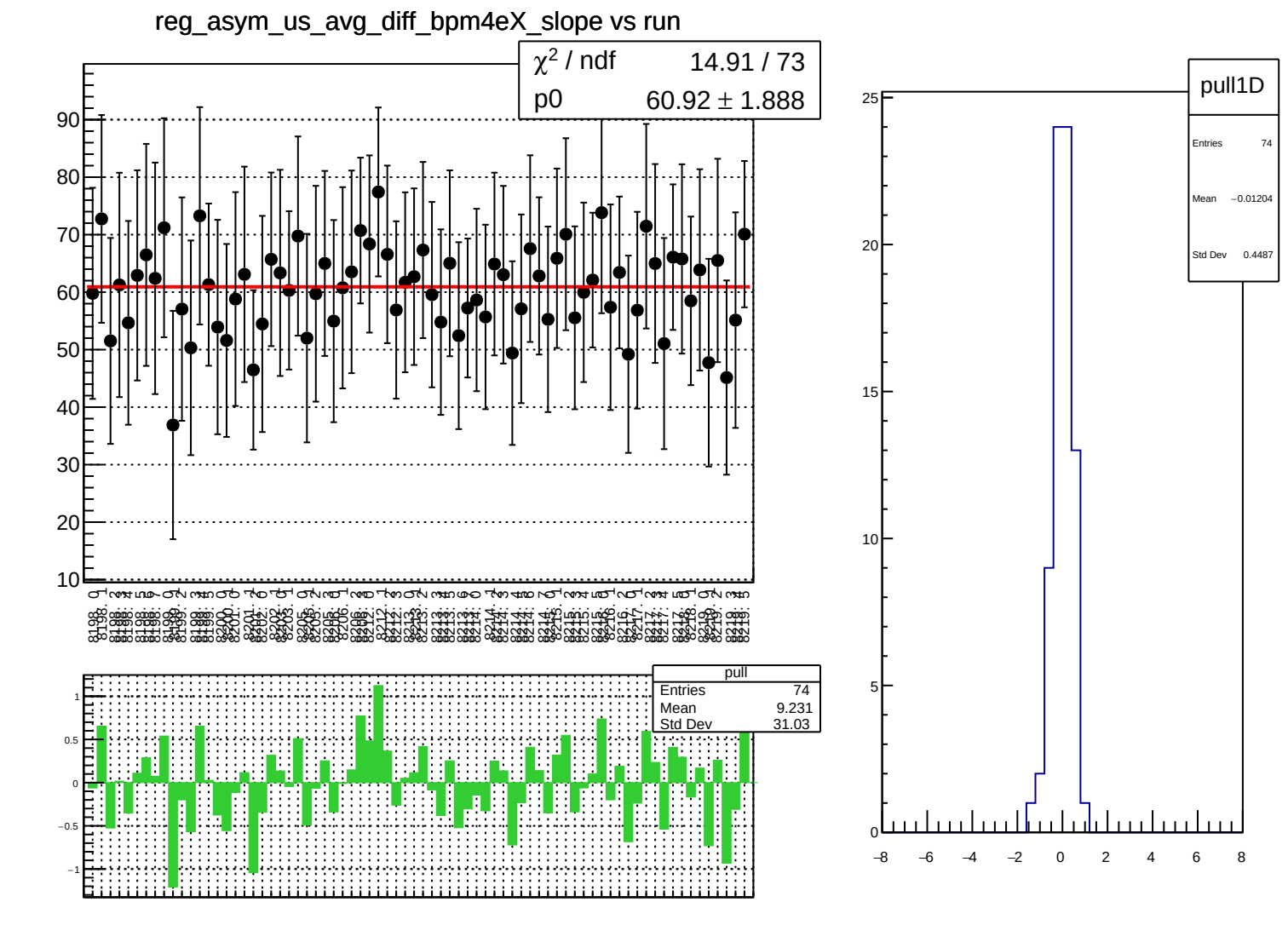

pull1D
Entries 74
Mean −0.1273
Std Dev 1.1
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

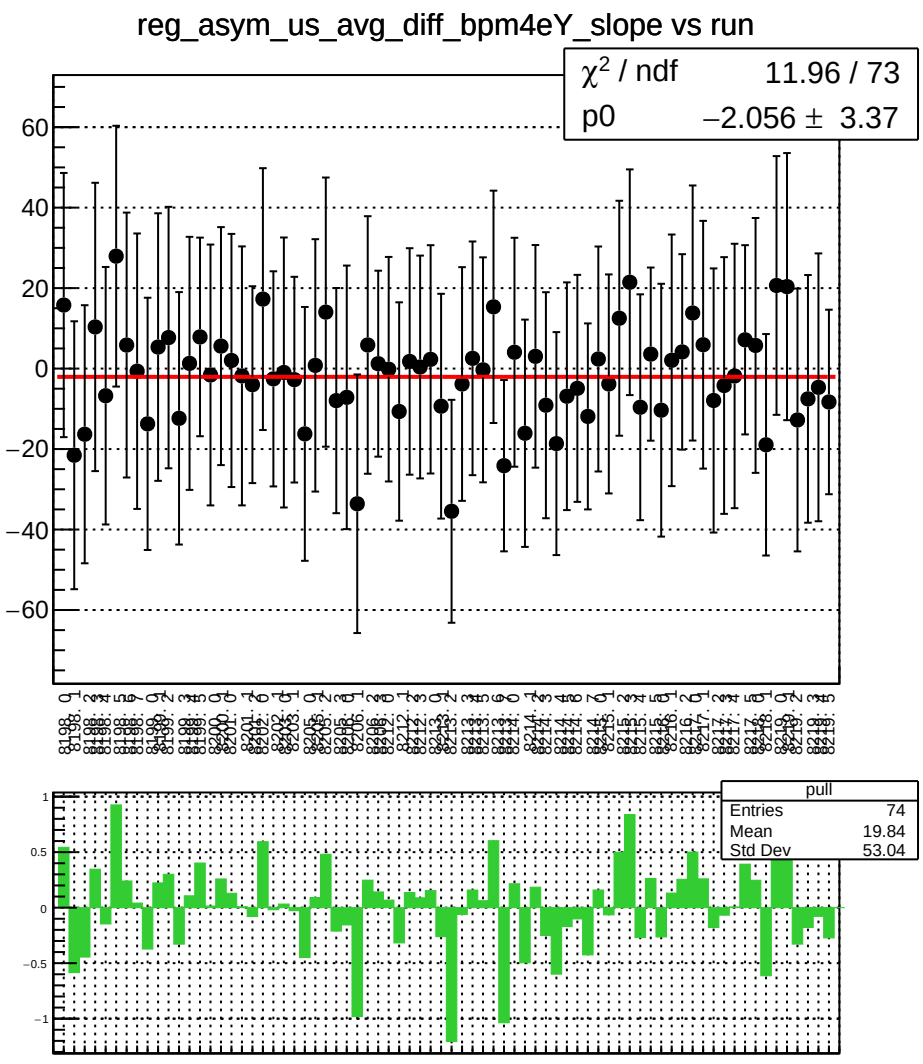

reg_asym_us_avg_diff_bpm1X_slope vs run
χ² / ndf 14.49 / 73
p0 −66.36 ± 1.886
pull
Entries 74
Mean 27.23
Std Dev 41.3

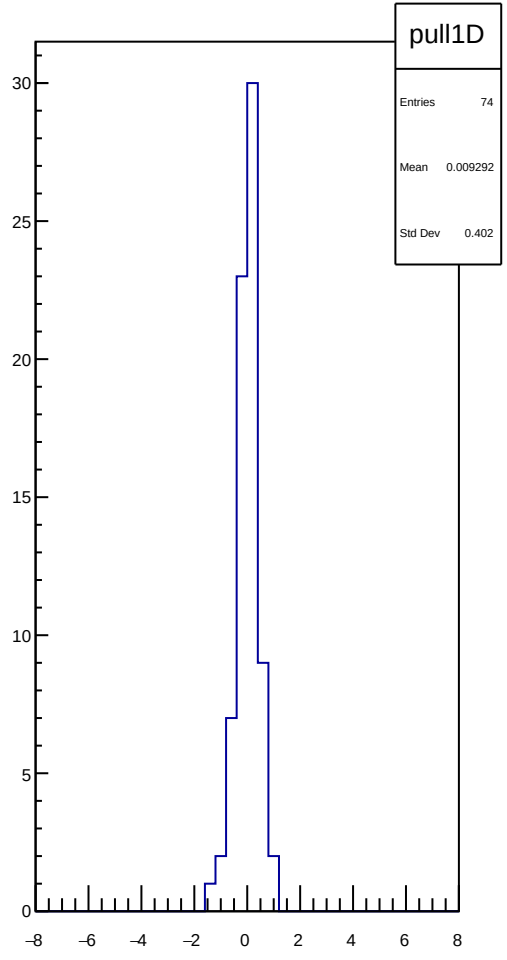

pull1D
Entries 74
Mean 0.01259
Std Dev 0.4423

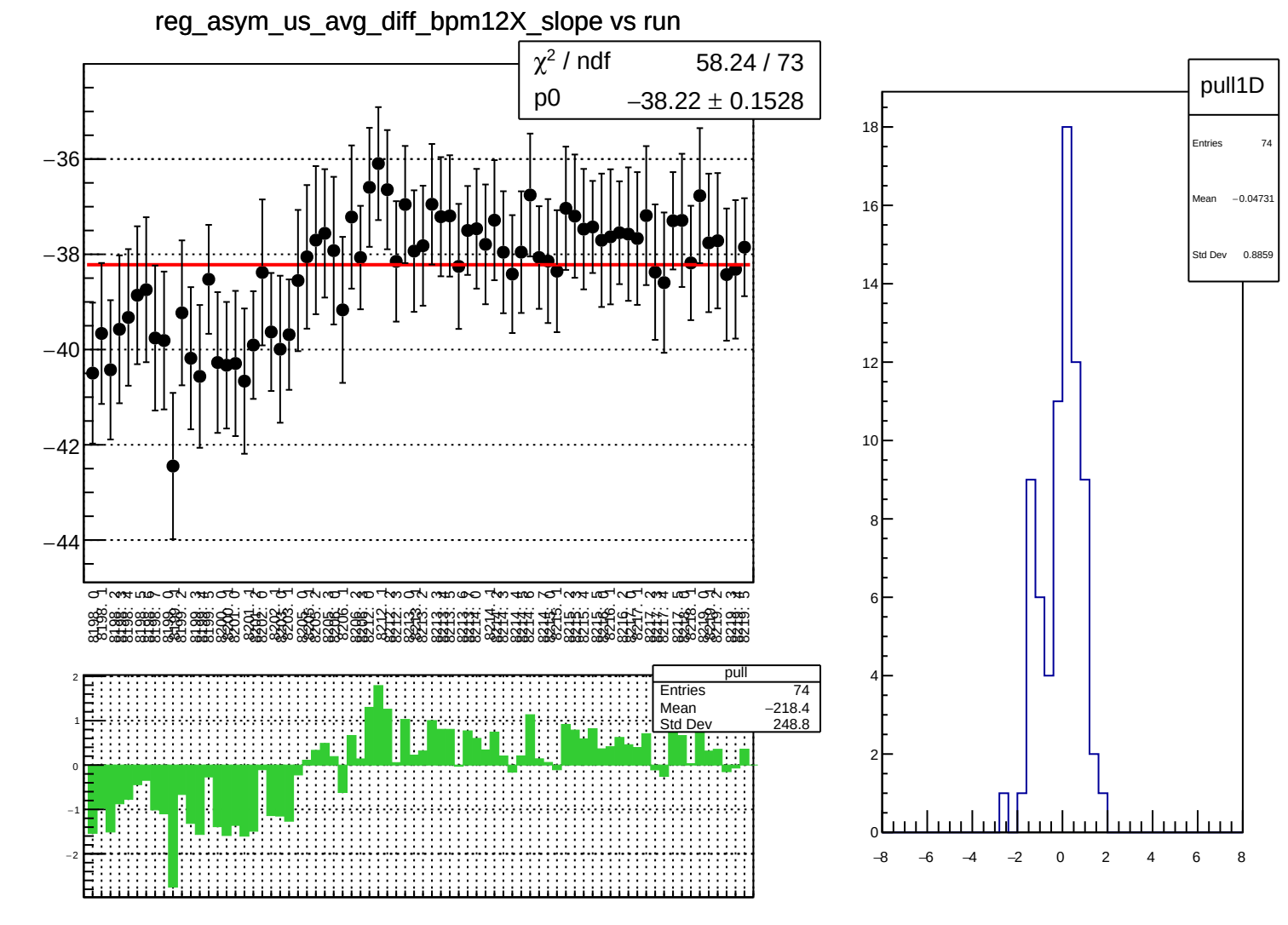

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 11.57 / 73
p0 19.31 ± 3.135
pull
Entries 74
Mean 130
Std Dev 77.73

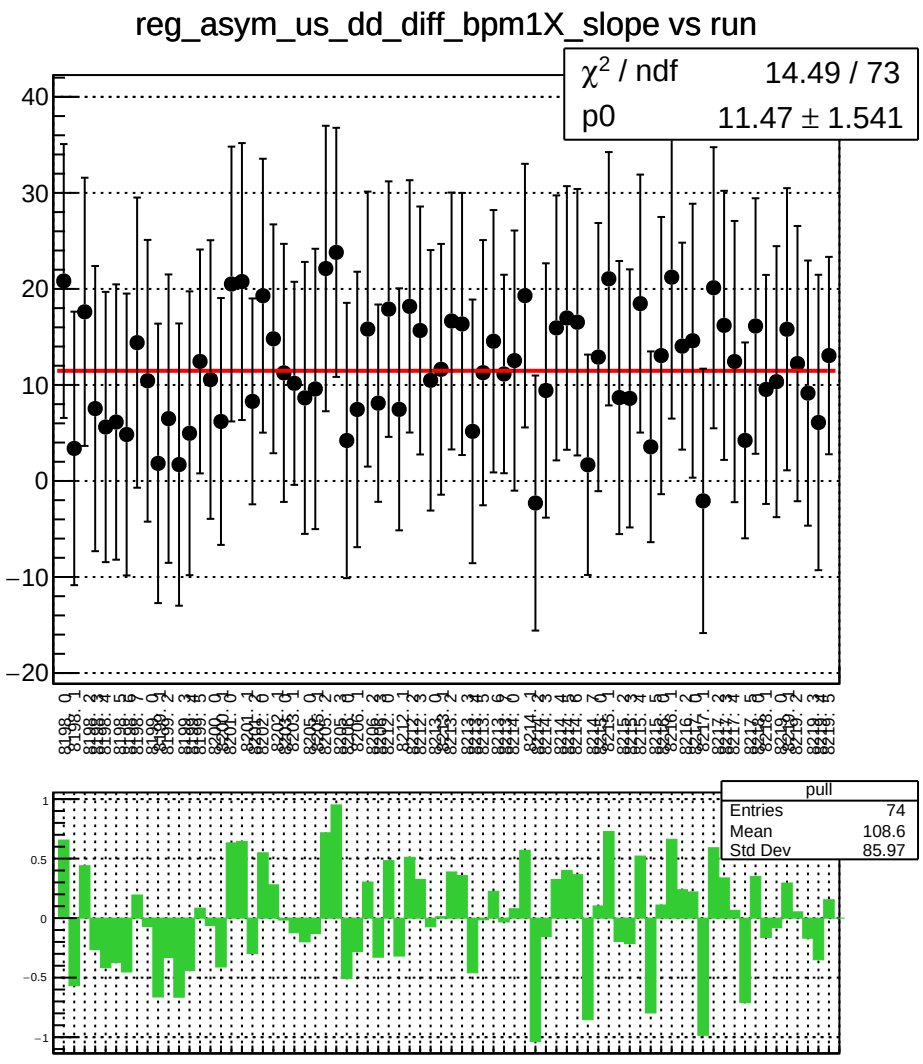

pull1D
Entries 74
Mean −0.006922
Std Dev 0.3953

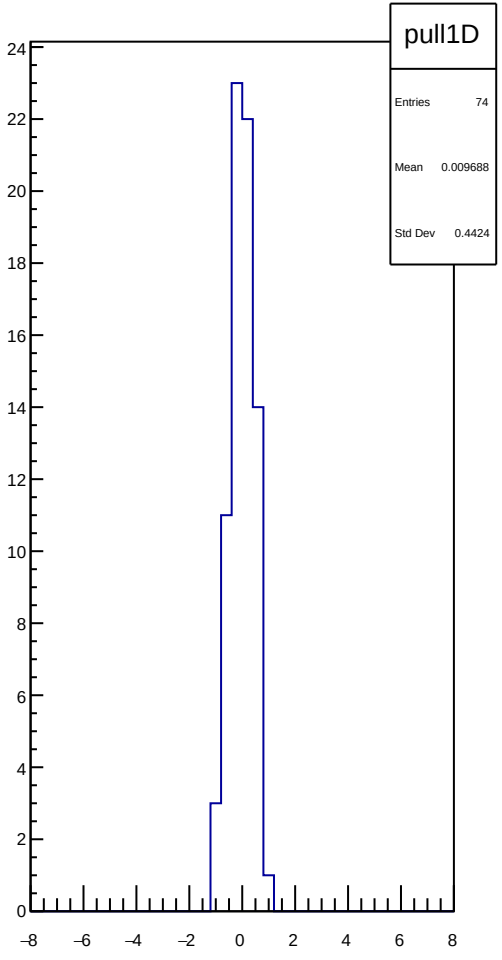

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 14.91 / 73
p0 60.92 ± 1.888
pull
Entries 74
Mean 9.231
Std Dev 31.03
pull1D
Entries 74
Mean −0.01204
Std Dev 0.4487

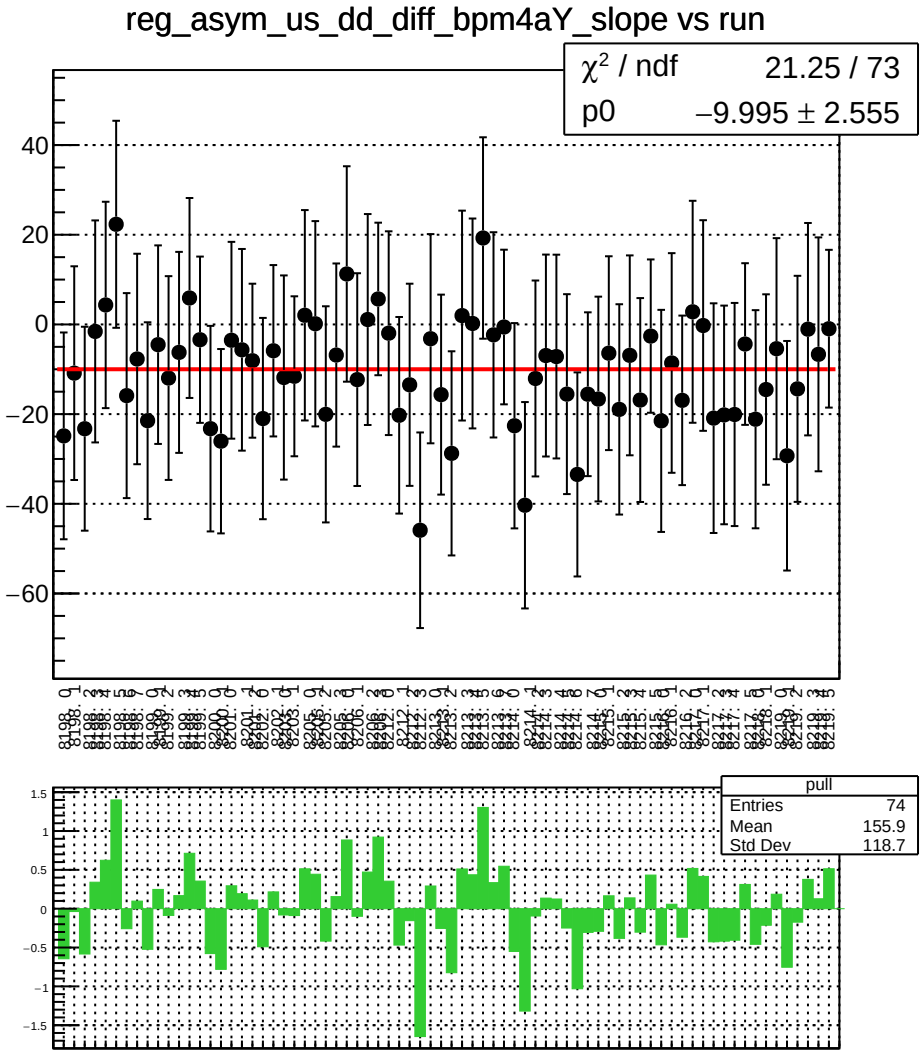

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 11.96 / 73
p0 −2.056 ± 3.37
pull
Entries 74
Mean 19.84
Std Dev 53.04

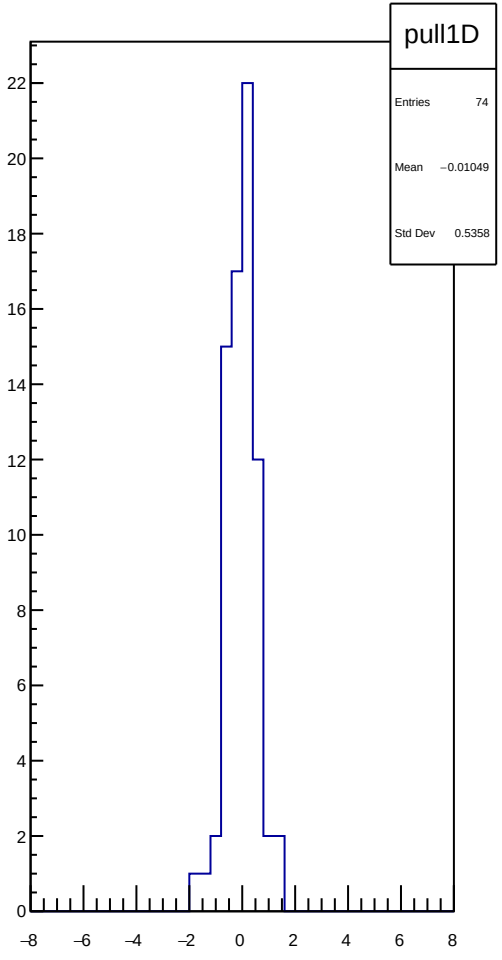

pull1D
Entries 74
Mean 0.009292
Std Dev 0.402

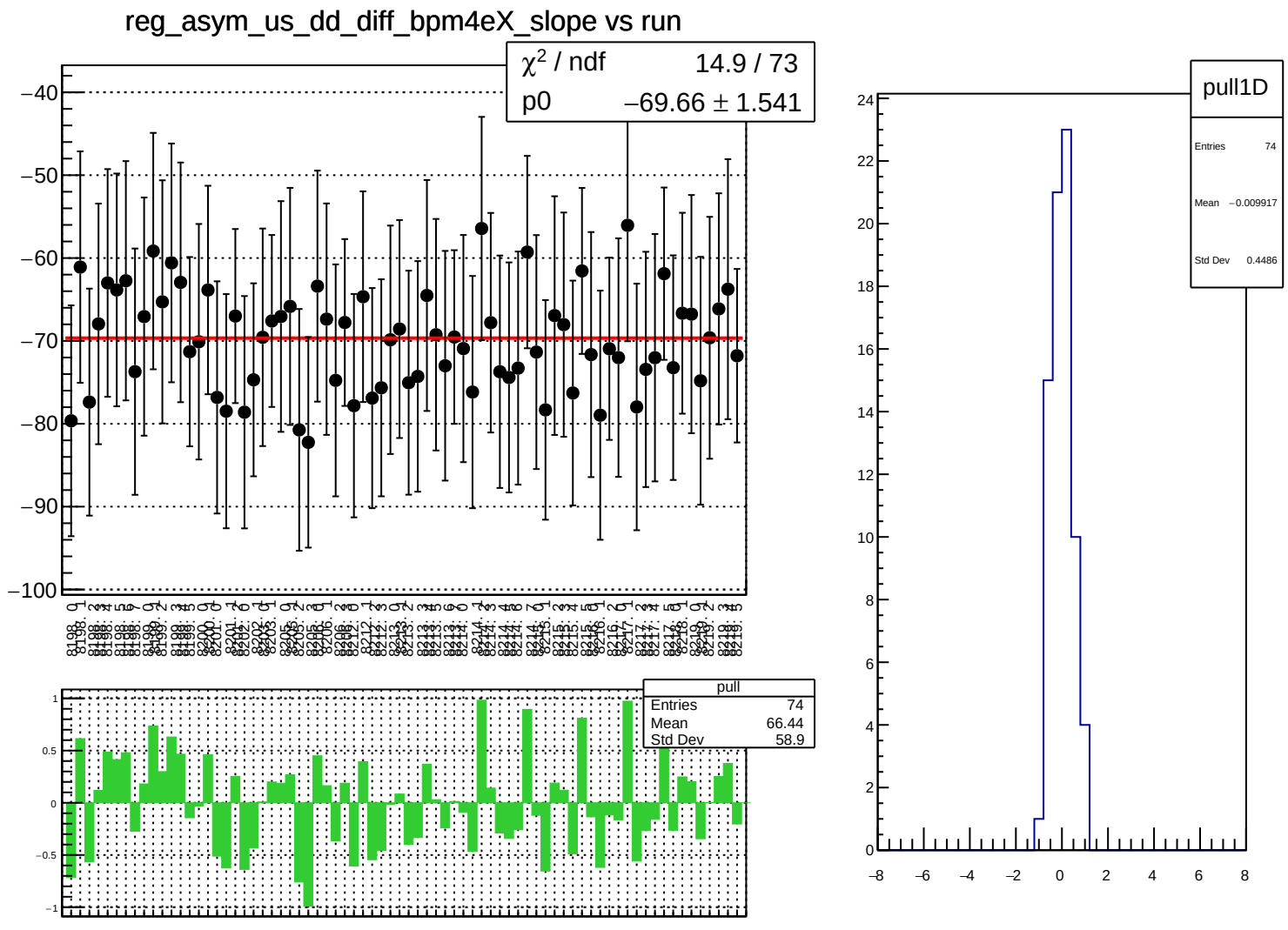

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 58.24 / 73
p0 −38.22 ± 0.1528
−36
−38
−40
−42
−44
pull
Entries 74
Mean −218.4
Std Dev 248.8
pull1D
Entries 74
Mean −0.04731
Std Dev 0.8859

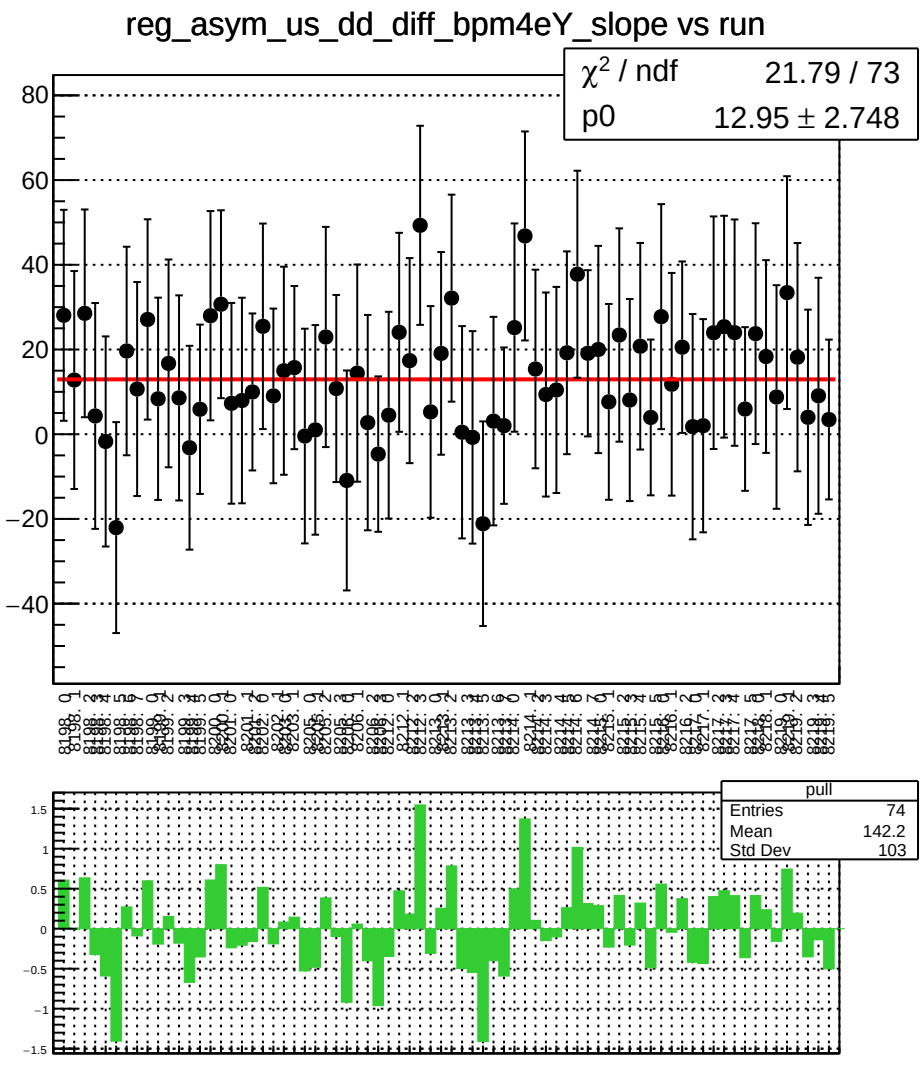

reg_asym_us_dd_diff_bpm1X_slope vs run
χ² / ndf 14.49 / 73
p0 11.47 ± 1.541
pull
Entries 74
Mean 108.6
Std Dev 85.97

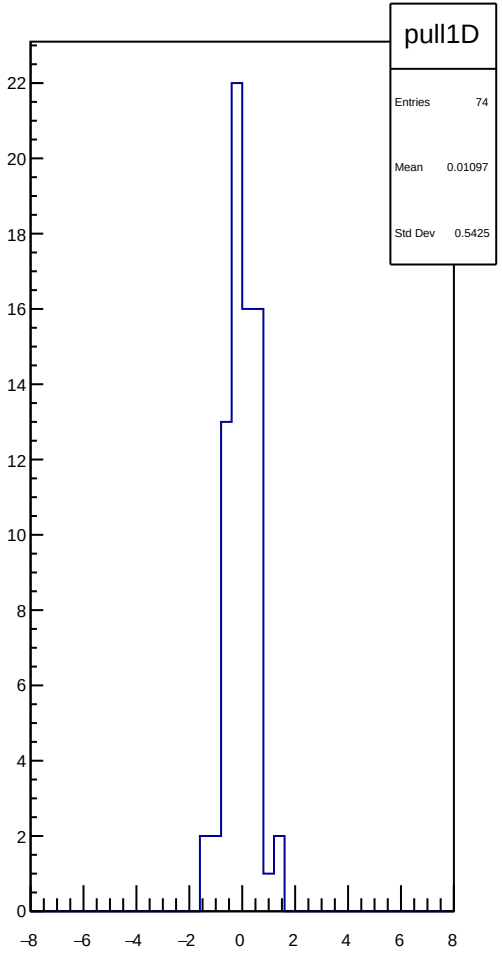

pull1D
Entries 74
Mean 0.009688
Std Dev 0.4424

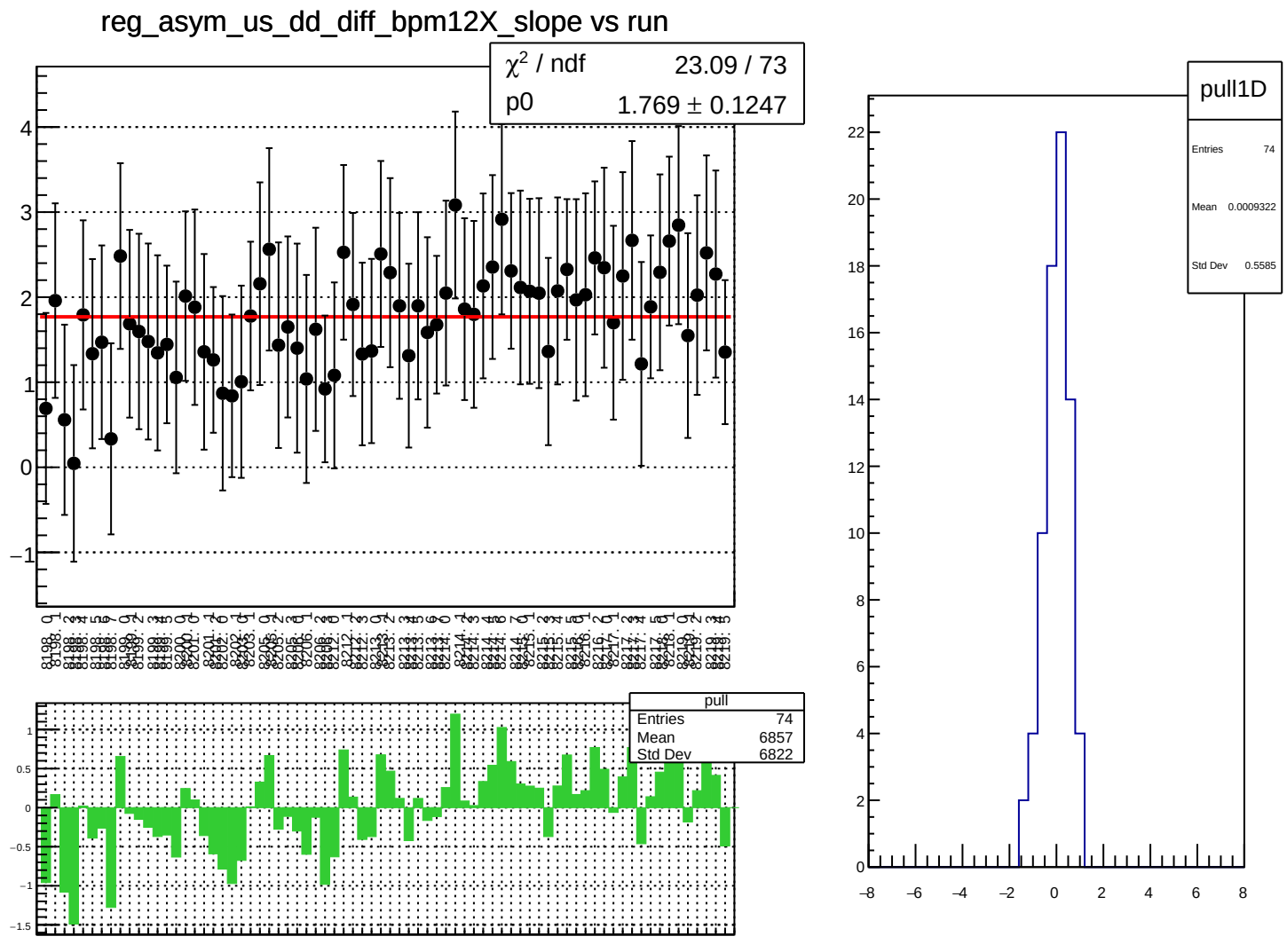

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 21.25 / 73
p0 −9.995 ± 2.555
pull
Entries 74
Mean 155.9
Std Dev 118.7

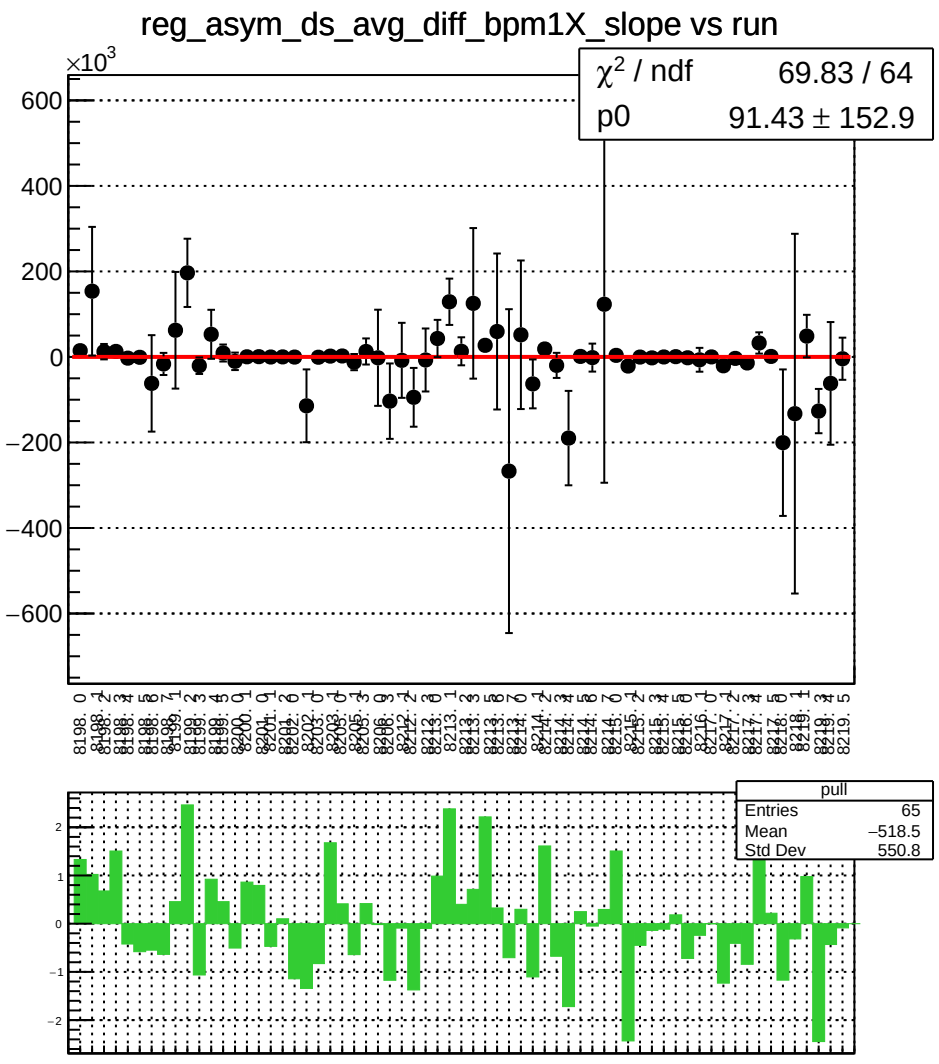

pull1D
Entries 74
Mean −0.01049
Std Dev 0.5358

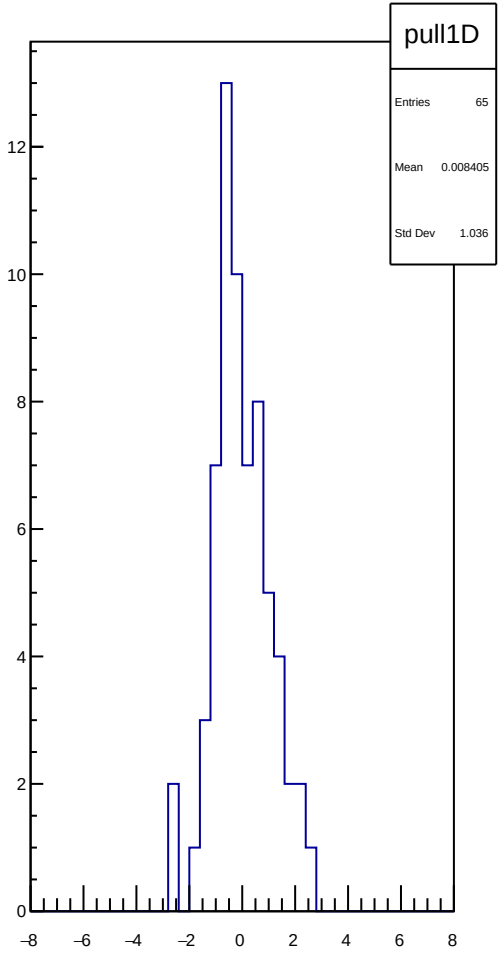

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 14.9 / 73
p0 −69.66 ± 1.541
pull
Entries 74
Mean 66.44
Std Dev 58.9
pull1D
Entries 74
Mean −0.009917
Std Dev 0.4486

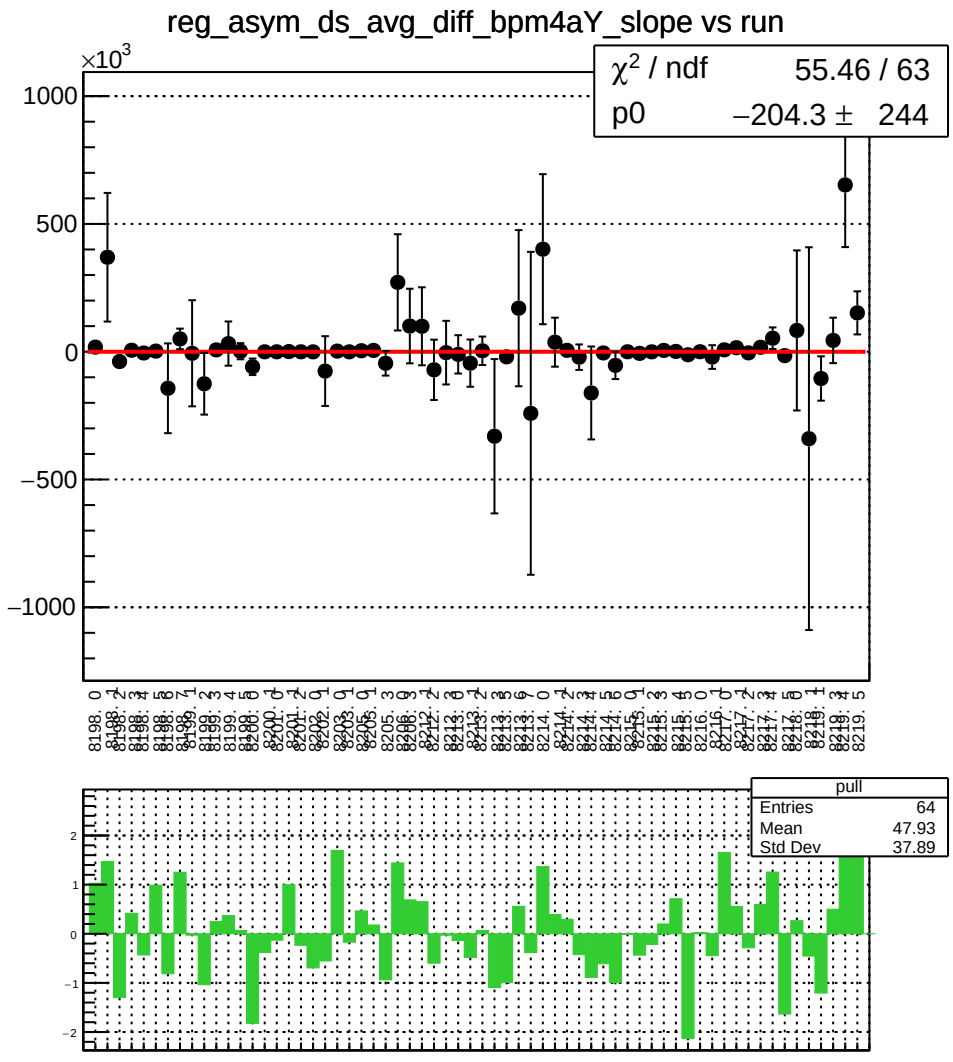

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 21.79 / 73
p0 12.95 ± 2.748
pull
Entries 74
Mean 142.2
Std Dev 103

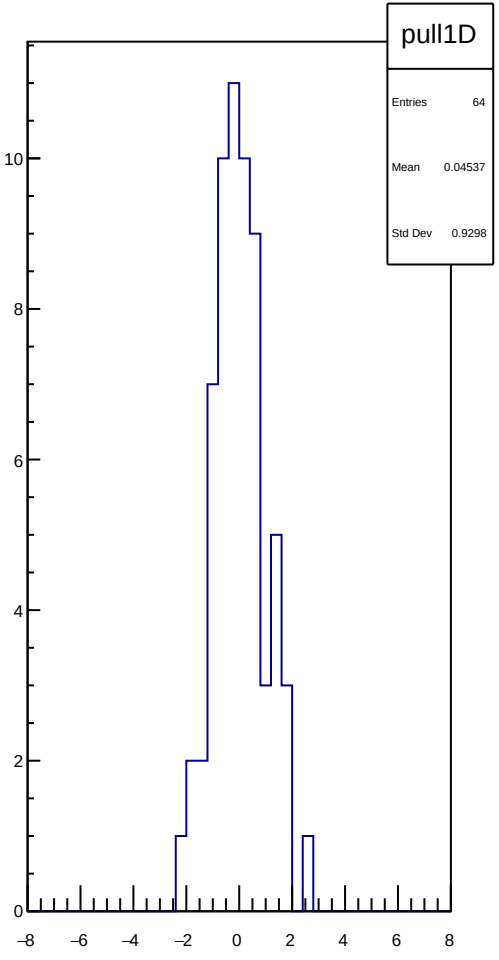

pull1D
Entries 74
Mean 0.01097
Std Dev 0.5425

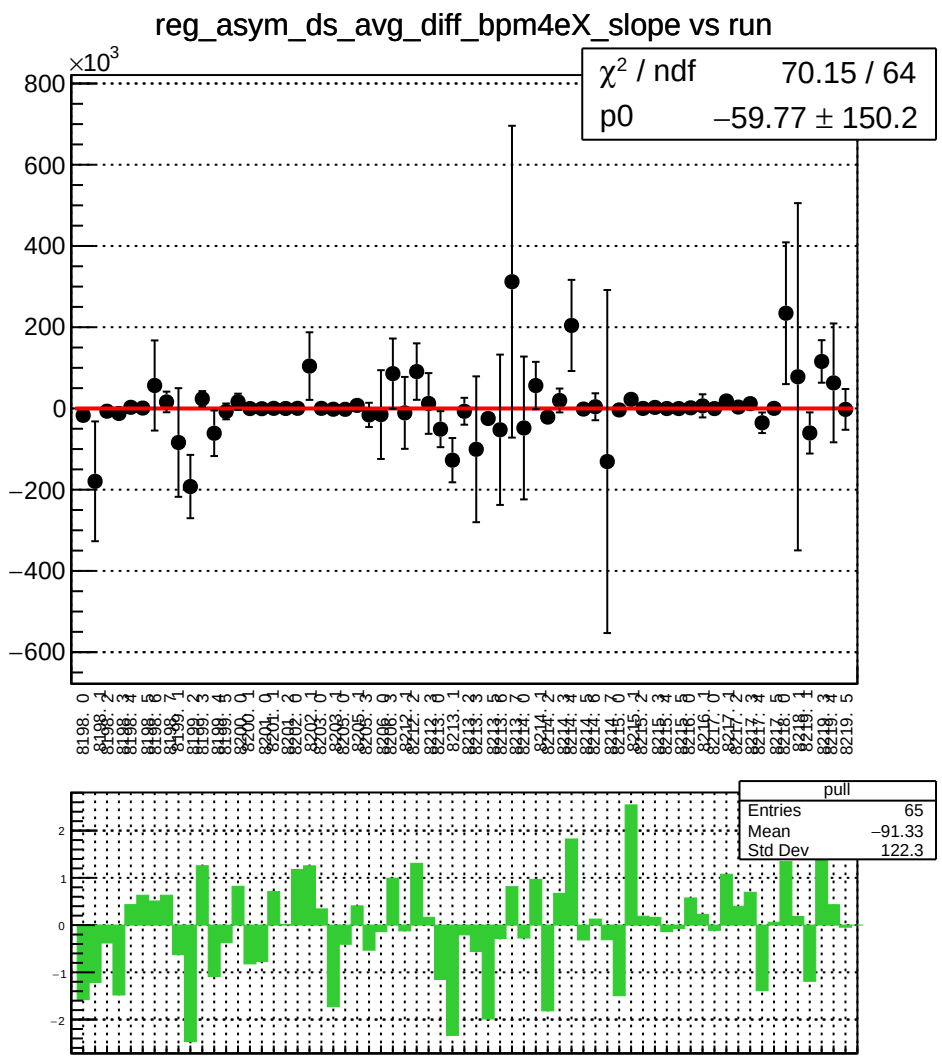

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 23.09 / 73
p0 1.769 ± 0.1247
pull
Entries 74
Mean 6857
Std Dev 6822
pull1D
Entries 74
Mean 0.0009322
Std Dev 0.5585

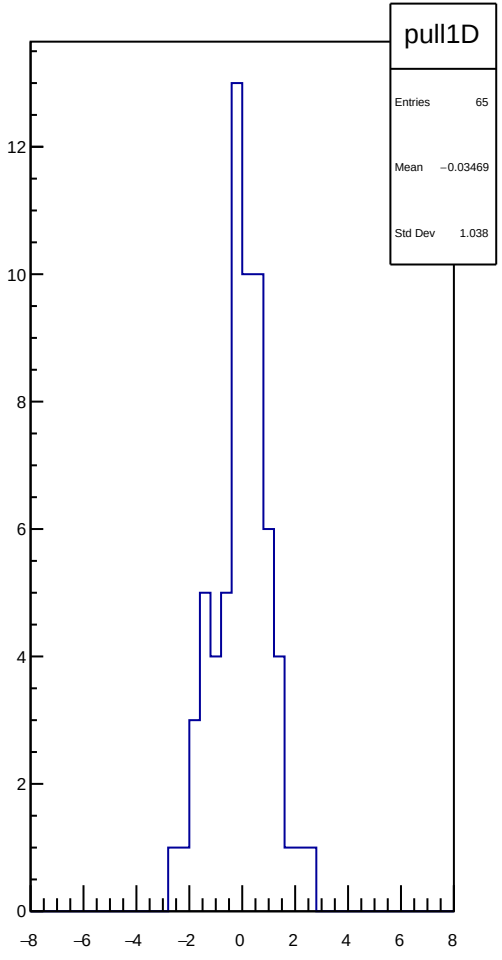

reg_asym_ds_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 69.83 / 64
p0 91.43 ± 152.9
pull
Entries 65
Mean −518.5
Std Dev 550.8

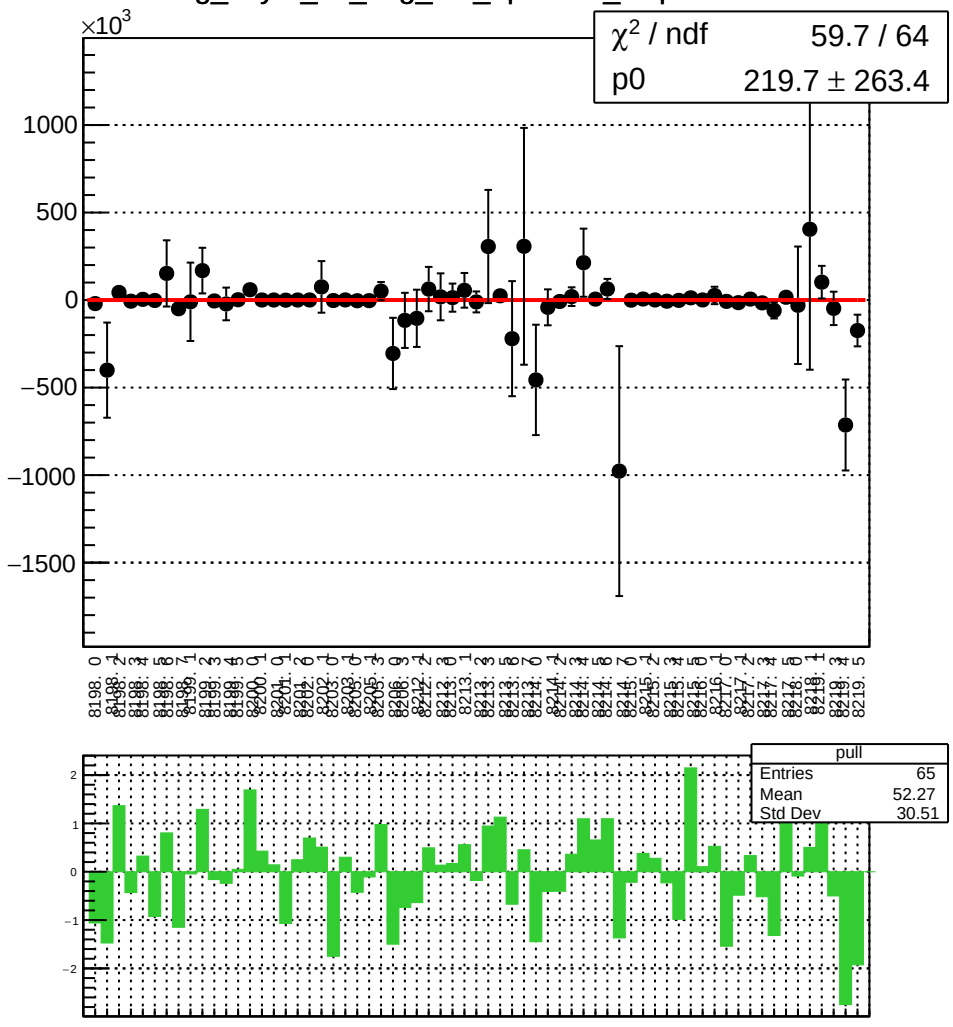

pull1D
Entries 65
Mean 0.008405
Std Dev 1.036

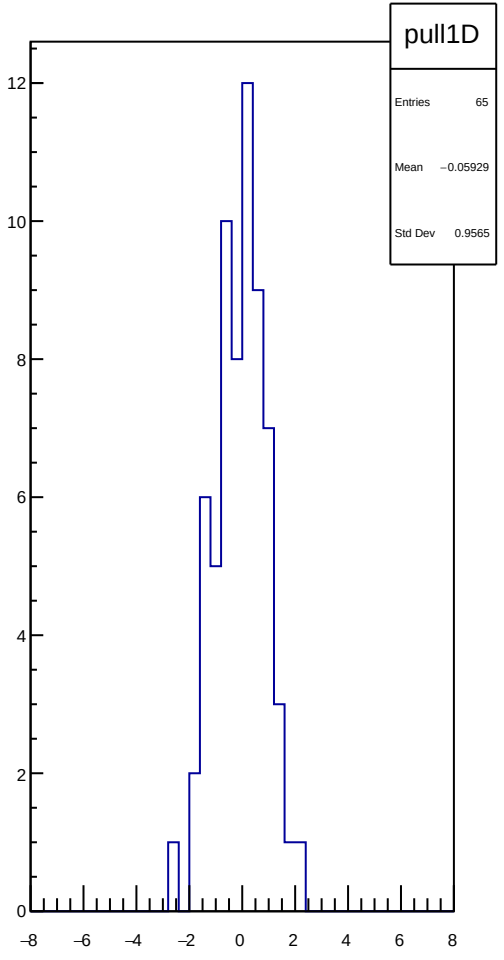

reg_asym_ds_avg_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 55.46 / 63
p0 −204.3 ± 244
1000
500
0
−500
−1000
pull
Entries 64
Mean 47.93
Std Dev 37.89
2
1
0
−1
−2

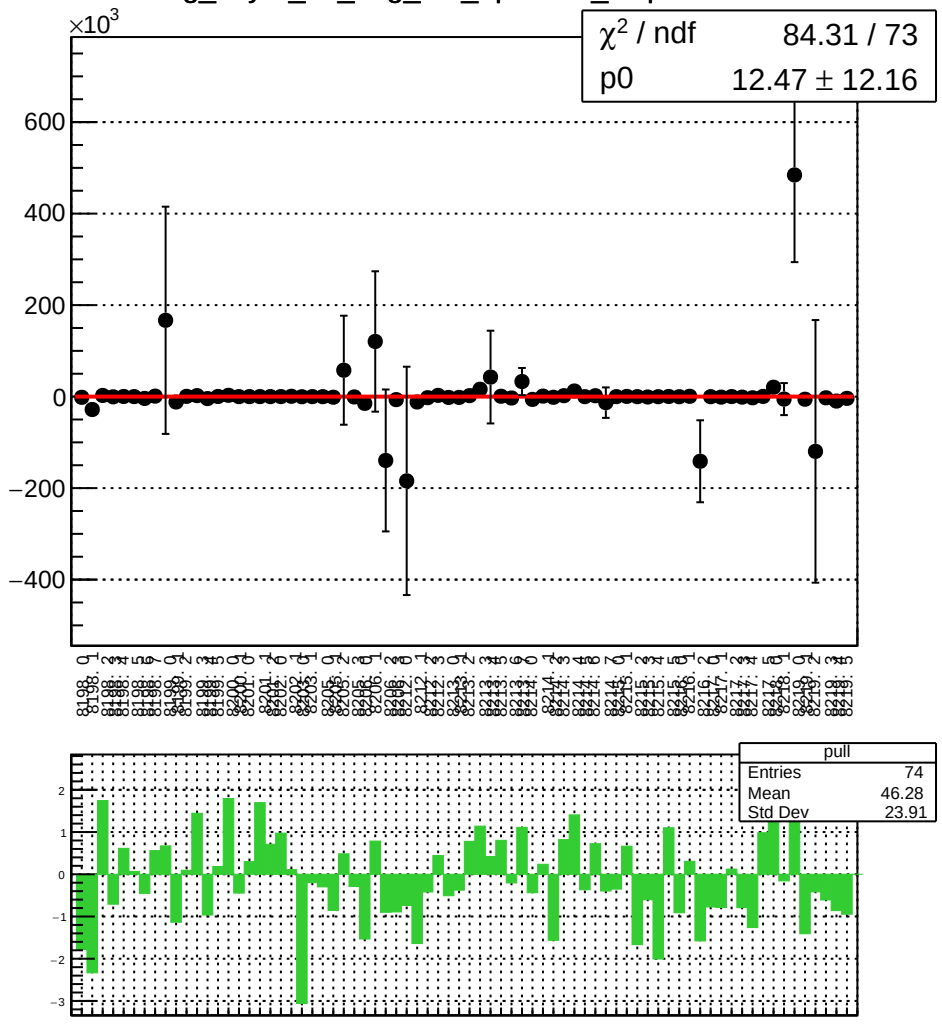

pull1D
Entries 64
Mean 0.04537
Std Dev 0.9298
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

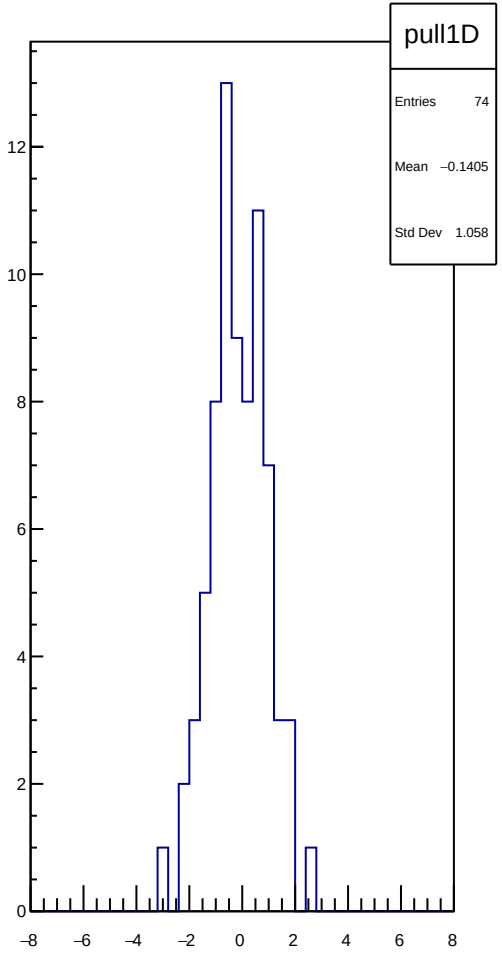

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 70.15 / 64
p0 −59.77 ± 150.2
pull
Entries 65
Mean −91.33
Std Dev 122.3

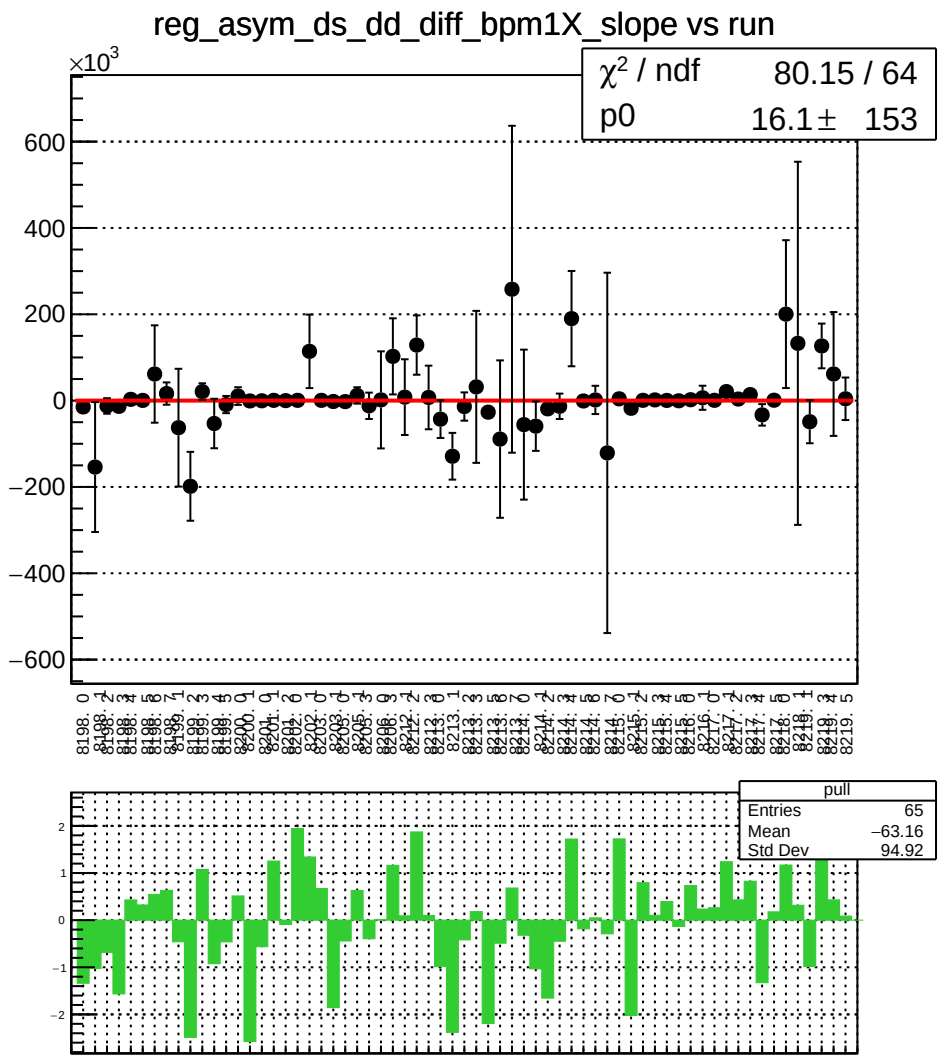

pull1D
Entries 65
Mean −0.03469
Std Dev 1.038

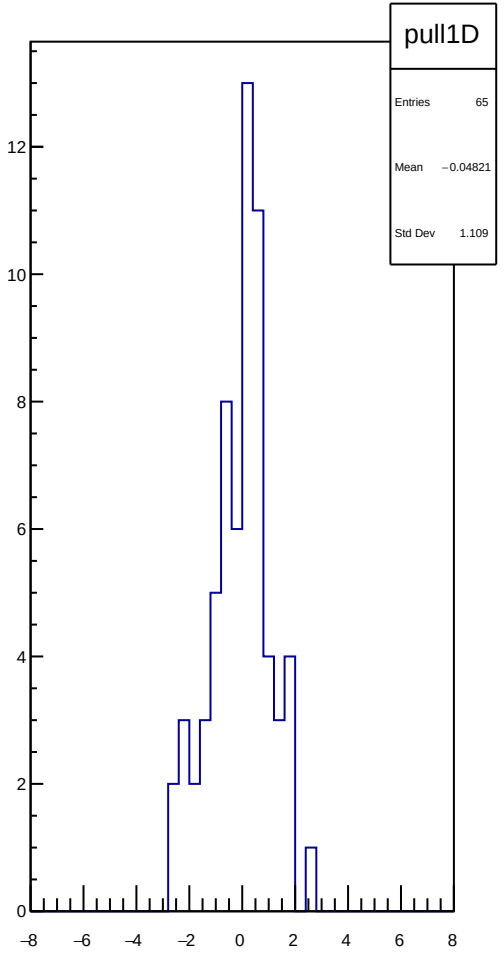

reg_asym_ds_avg_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 59.7 / 64
p0 219.7 ± 263.4
1000
500
0
−500
−1000
−1500
pull
Entries 65
Mean 52.27
Std Dev 30.51
2
1
0
−1
−2

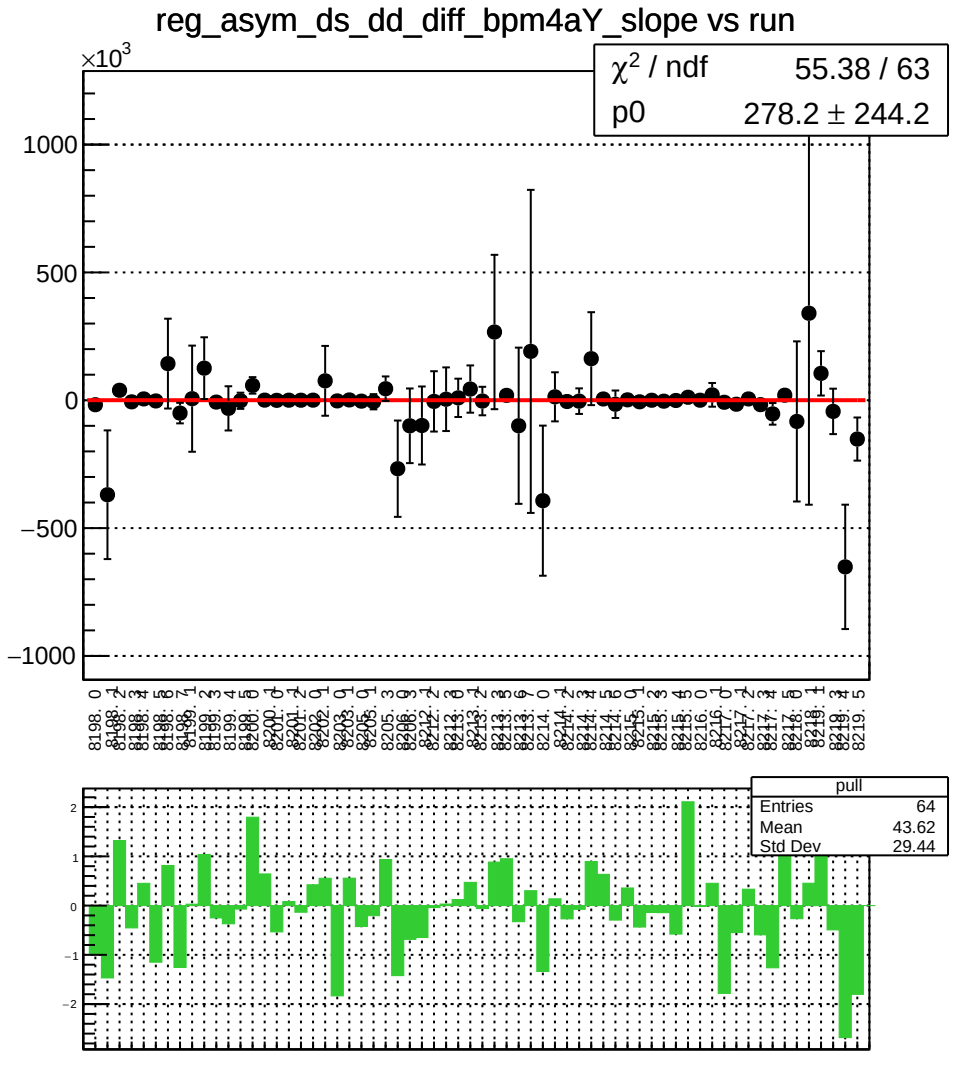

pull1D
Entries 65
Mean −0.05929
Std Dev 0.9565
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

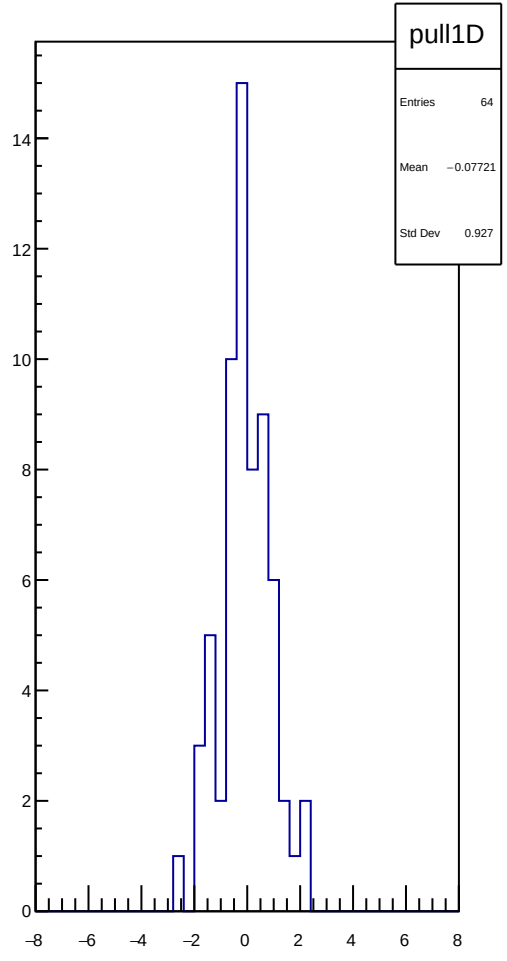

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 84.31 / 73
p0 12.47 ± 12.16
×10³
pull
Entries 74
Mean 46.28
Std Dev 23.91

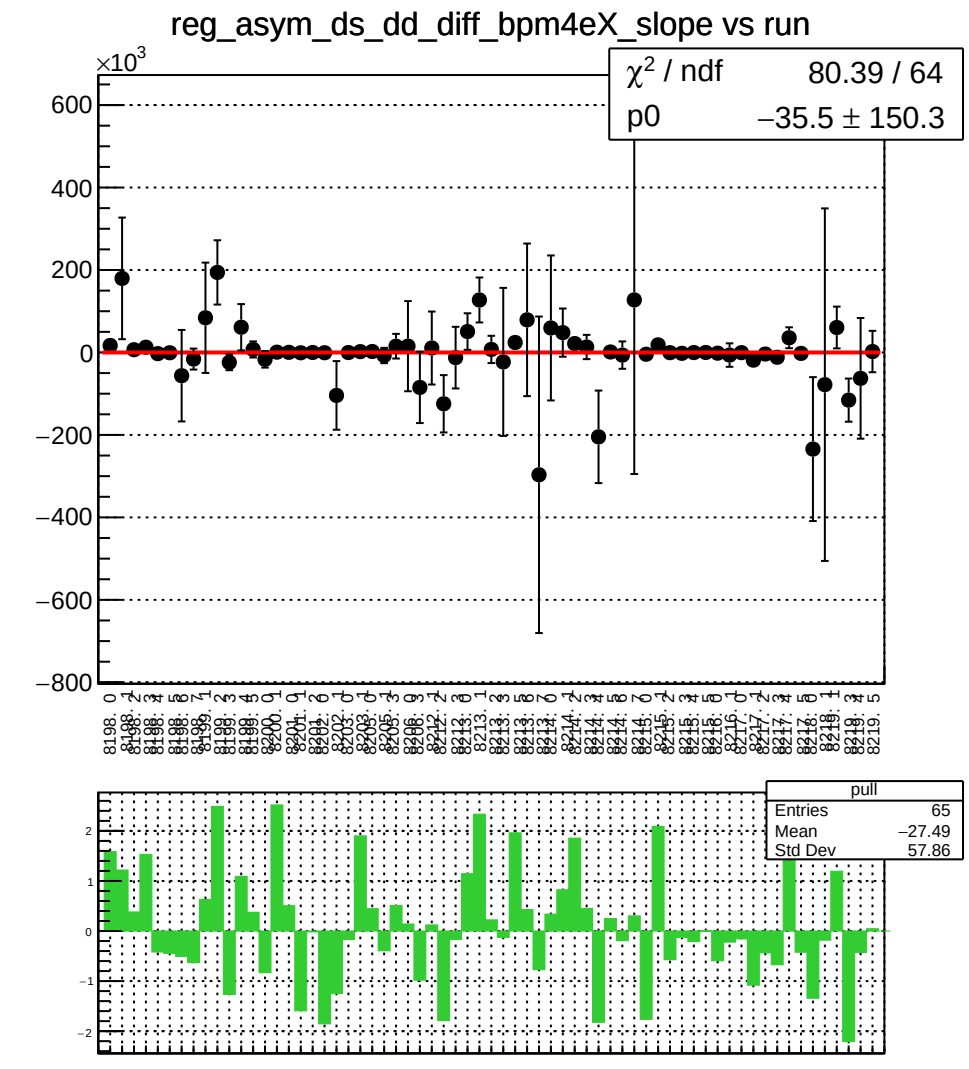

pull1D
Entries 74
Mean −0.1405
Std Dev 1.058

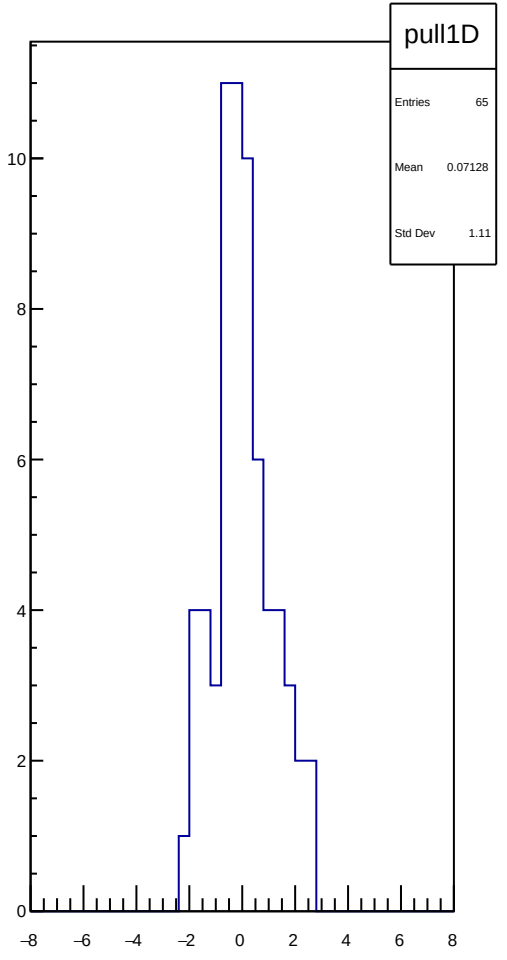

reg_asym_ds_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 80.15 / 64
p0 16.1 ± 153
600
400
200
0
−200
−400
−600
pull
Entries 65
Mean −63.16
Std Dev 94.92
2
1
0
−1
−2

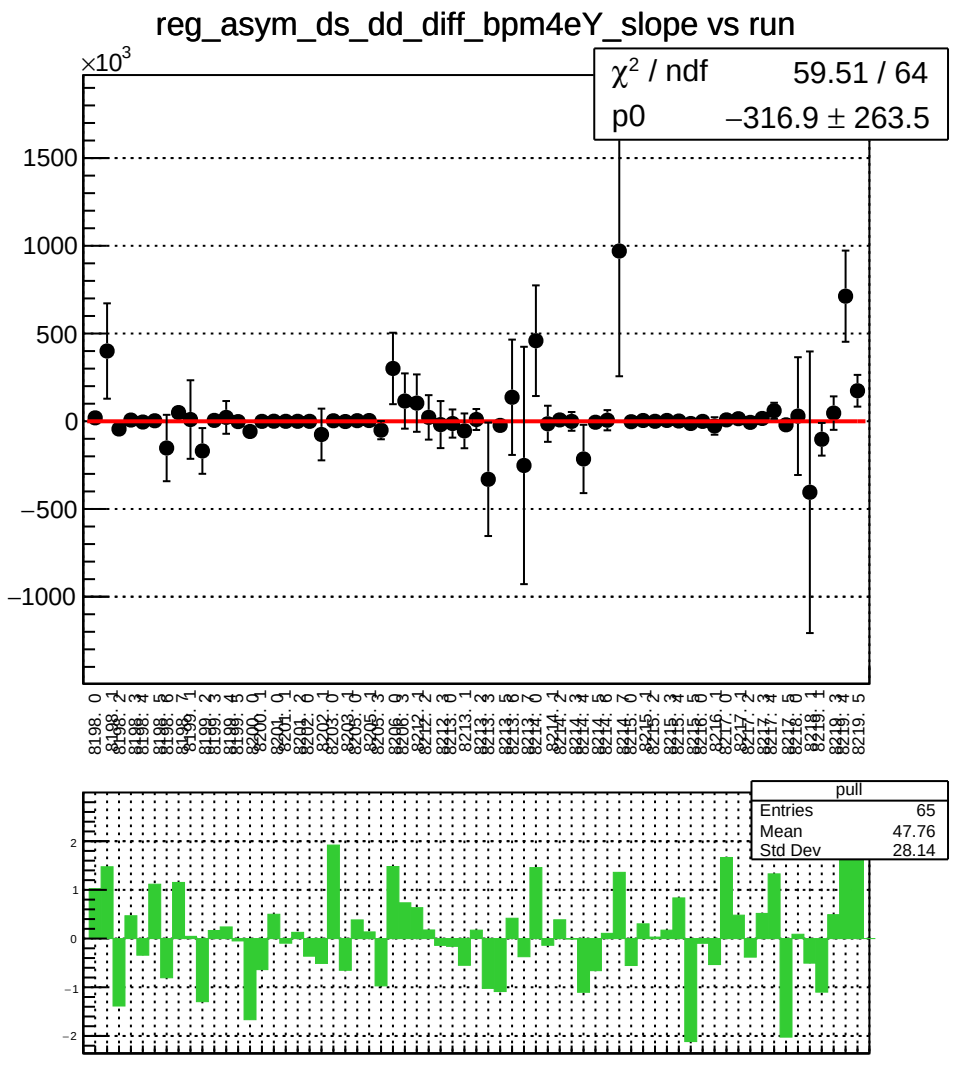

pull1D
Entries 65
Mean −0.04821
Std Dev 1.109
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

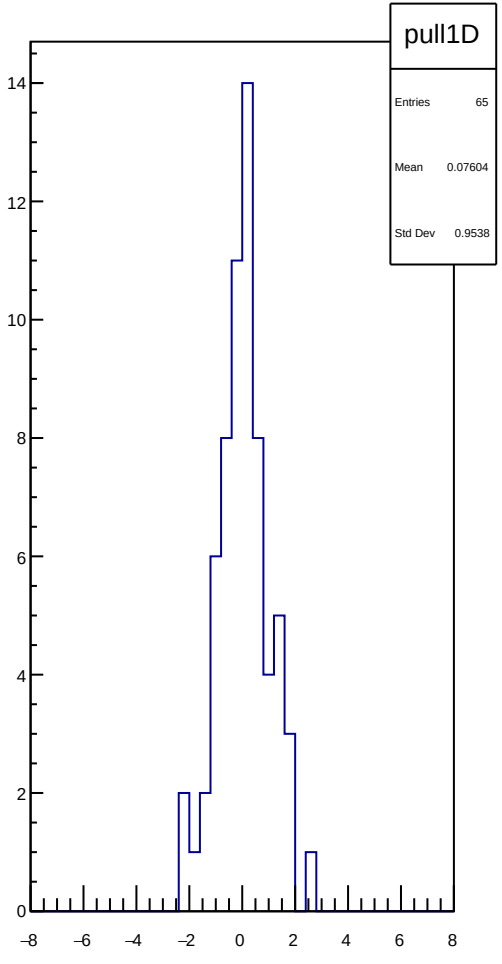

reg_asym_ds_dd_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 55.38 / 63
p0 278.2 ± 244.2
1000
500
0
−500
−1000
pull
Entries 64
Mean 43.62
Std Dev 29.44
2
1
0
−1
−2

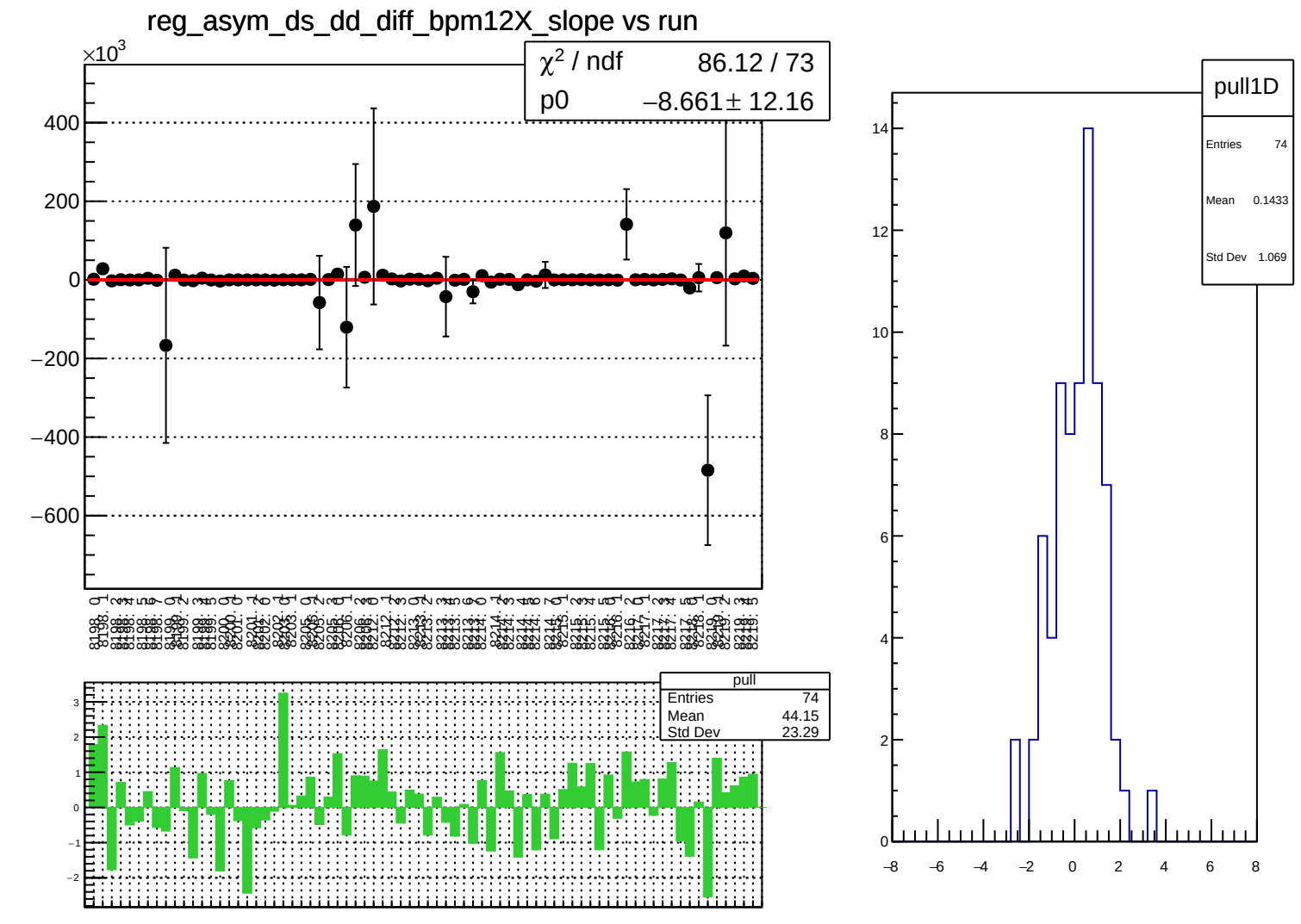

pull1D
Entries 64
Mean −0.07721
Std Dev 0.927
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

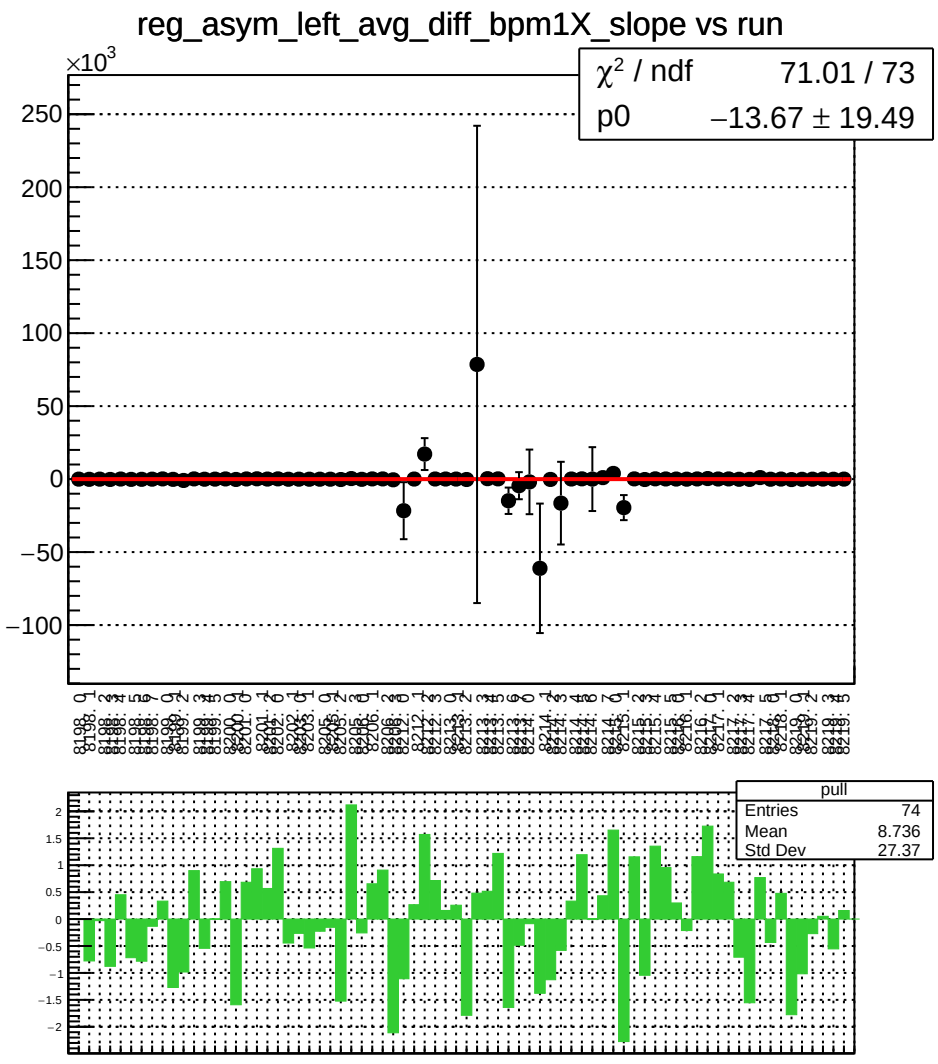

reg_asym_ds_dd_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 80.39 / 64
p0 −35.5 ± 150.3
pull
Entries 65
Mean −27.49
Std Dev 57.86

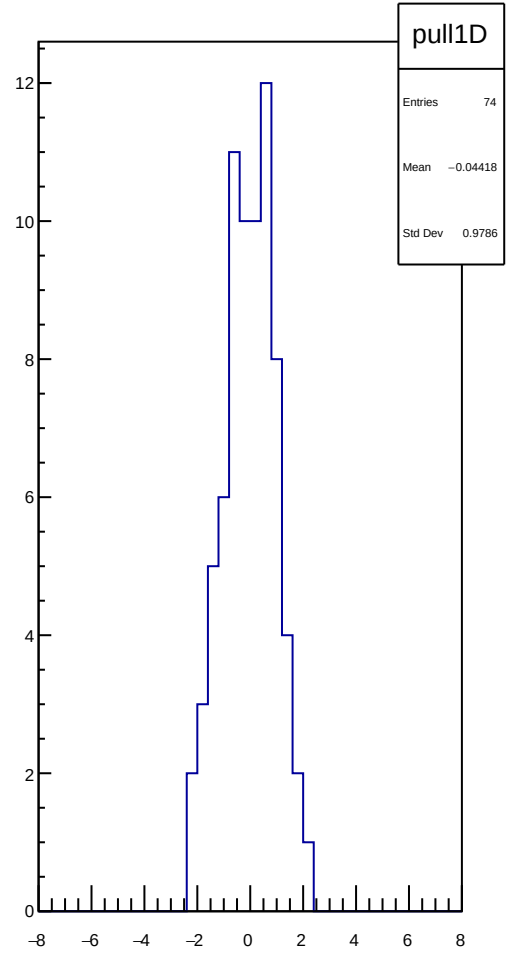

pull1D
Entries 65
Mean 0.07128
Std Dev 1.11

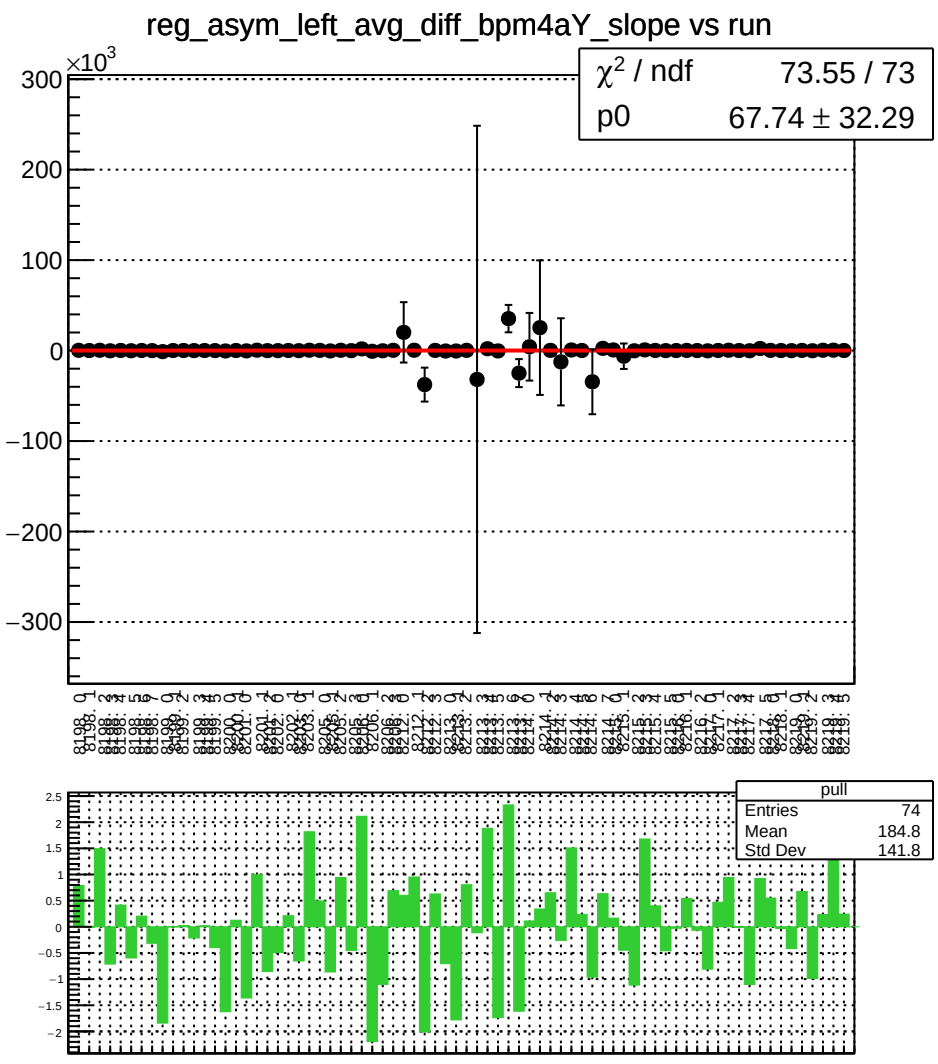

reg_asym_ds_dd_diff_bpm4eY_slope vs run
×10^3
χ² / ndf 59.51 / 64
p0 −316.9 ± 263.5
1500
1000
500
0
−500
−1000
pull
Entries 65
Mean 47.76
Std Dev 28.14
2
1
0
−1
−2

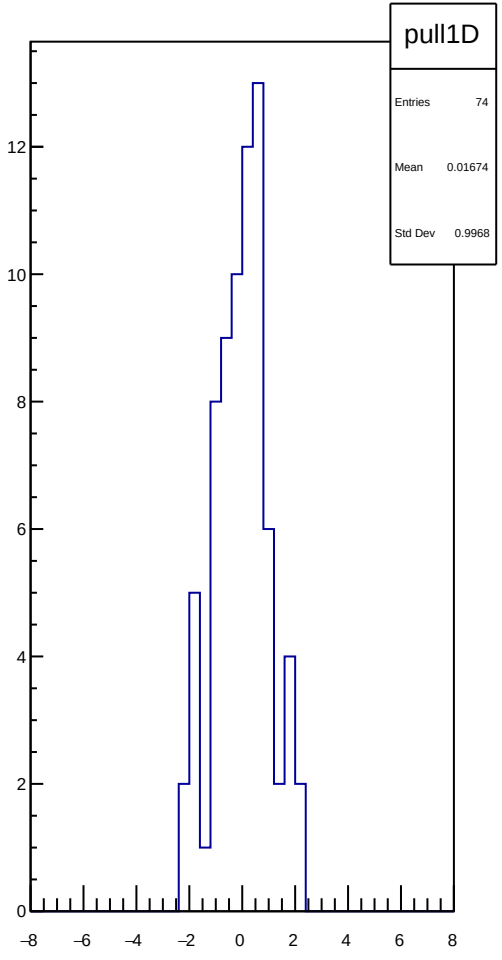

pull1D
Entries 65
Mean 0.07604
Std Dev 0.9538
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

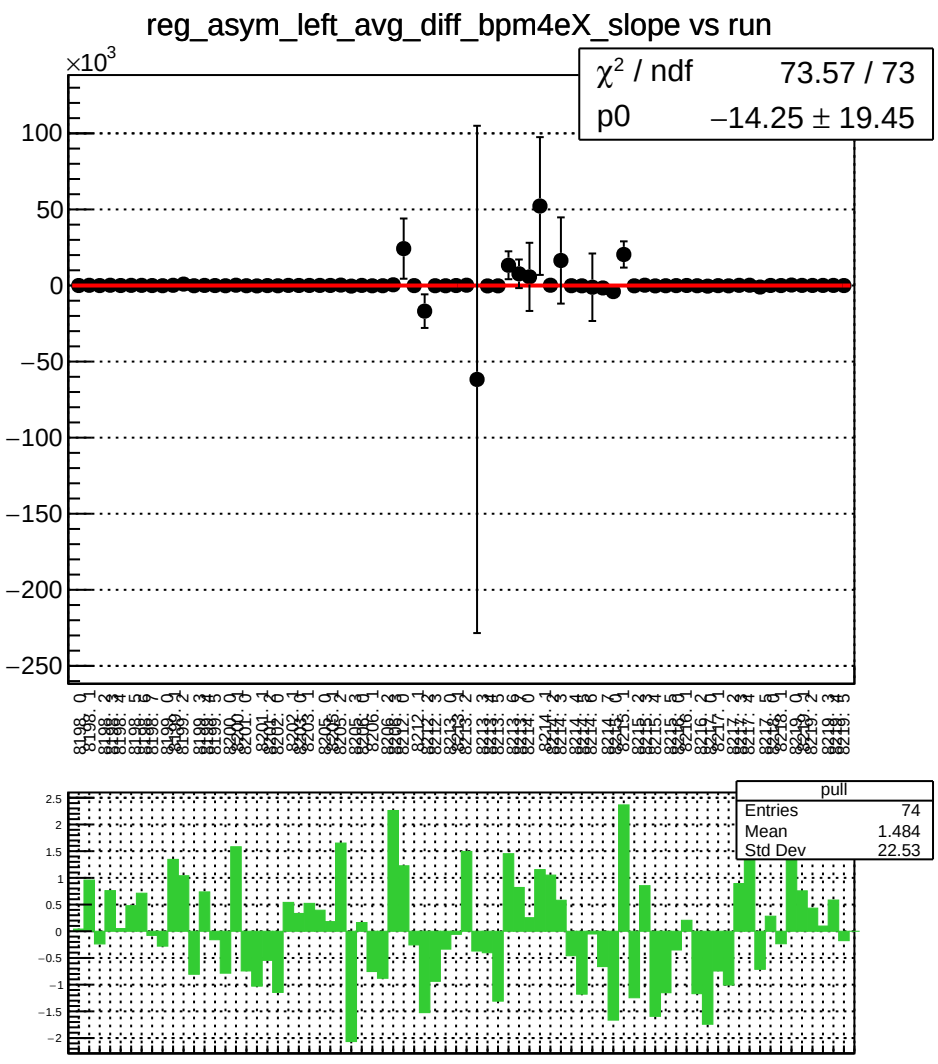

reg_asym_ds_dd_diff_bpm12X_slope vs run
×10^3
χ^2 / ndf 86.12 / 73
p0 −8.661 ± 12.16
pull
Entries 74
Mean 44.15
Std Dev 23.29
pull1D
Entries 74
Mean 0.1433
Std Dev 1.069

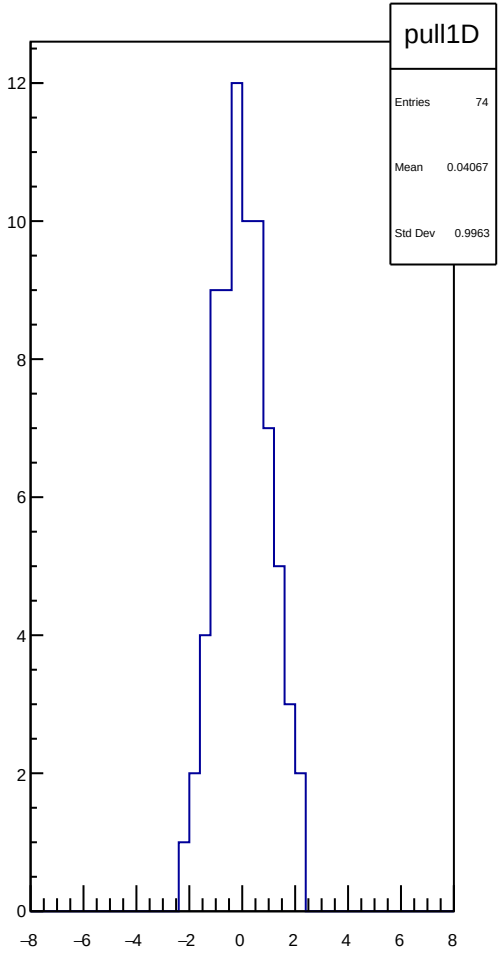

reg_asym_left_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 71.01 / 73
p0 −13.67 ± 19.49
250
200
150
100
50
0
−50
−100
pull
Entries 74
Mean 8.736
Std Dev 27.37
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

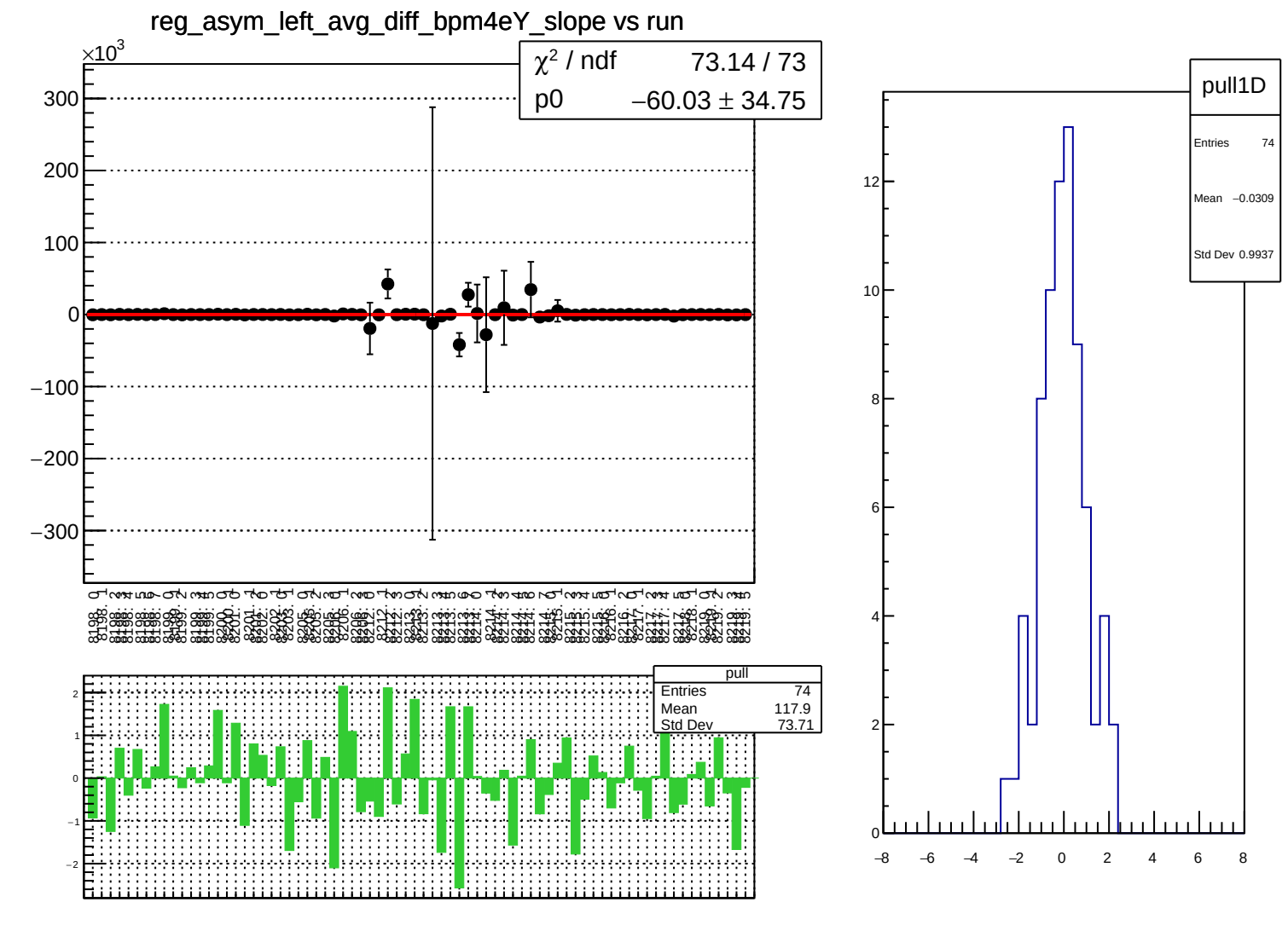

pull1D
Entries 74
Mean −0.04418
Std Dev 0.9786
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

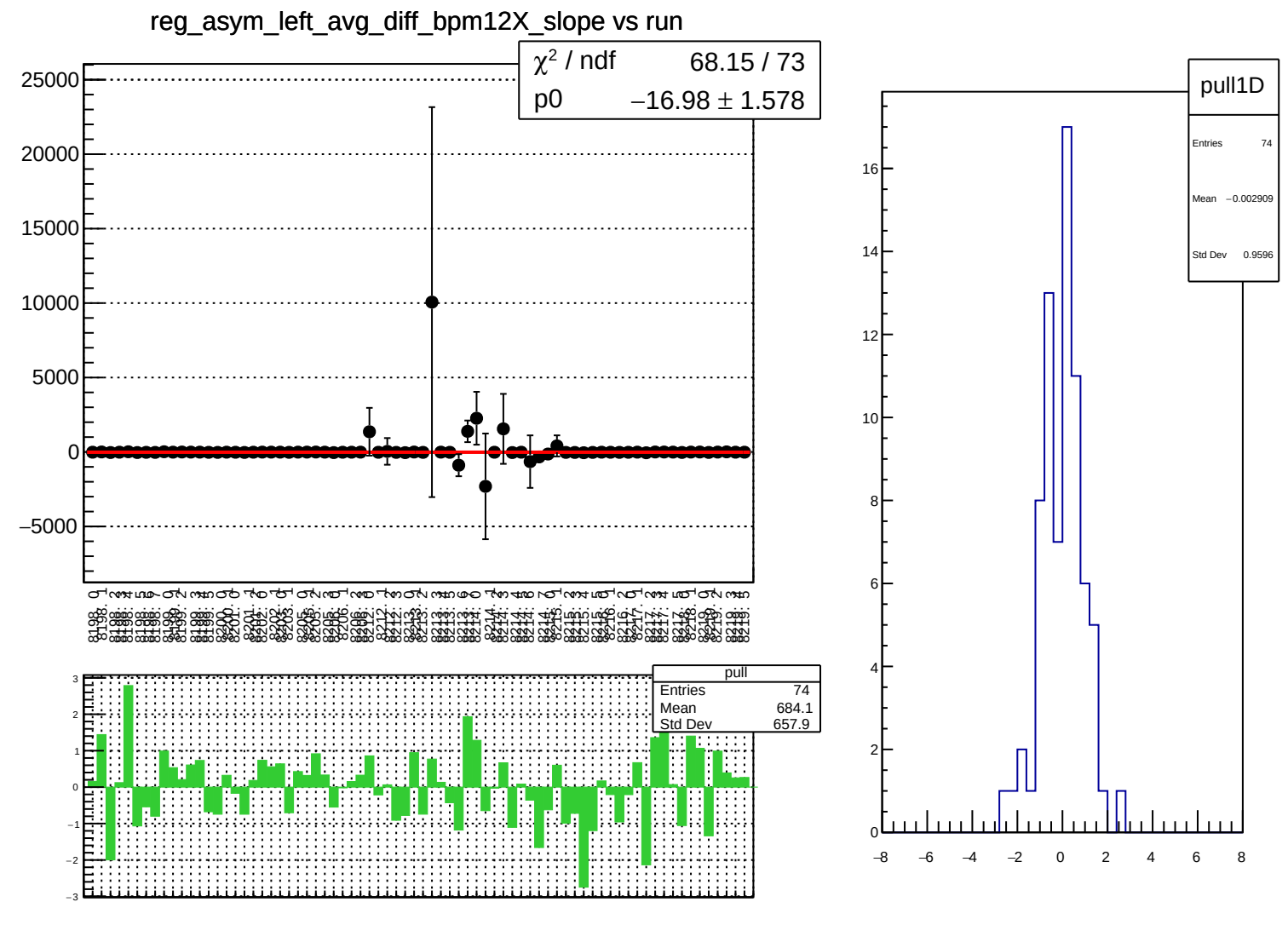

reg_asym_left_avg_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 73.55 / 73
p0 67.74 ± 32.29
pull
Entries 74
Mean 184.8
Std Dev 141.8

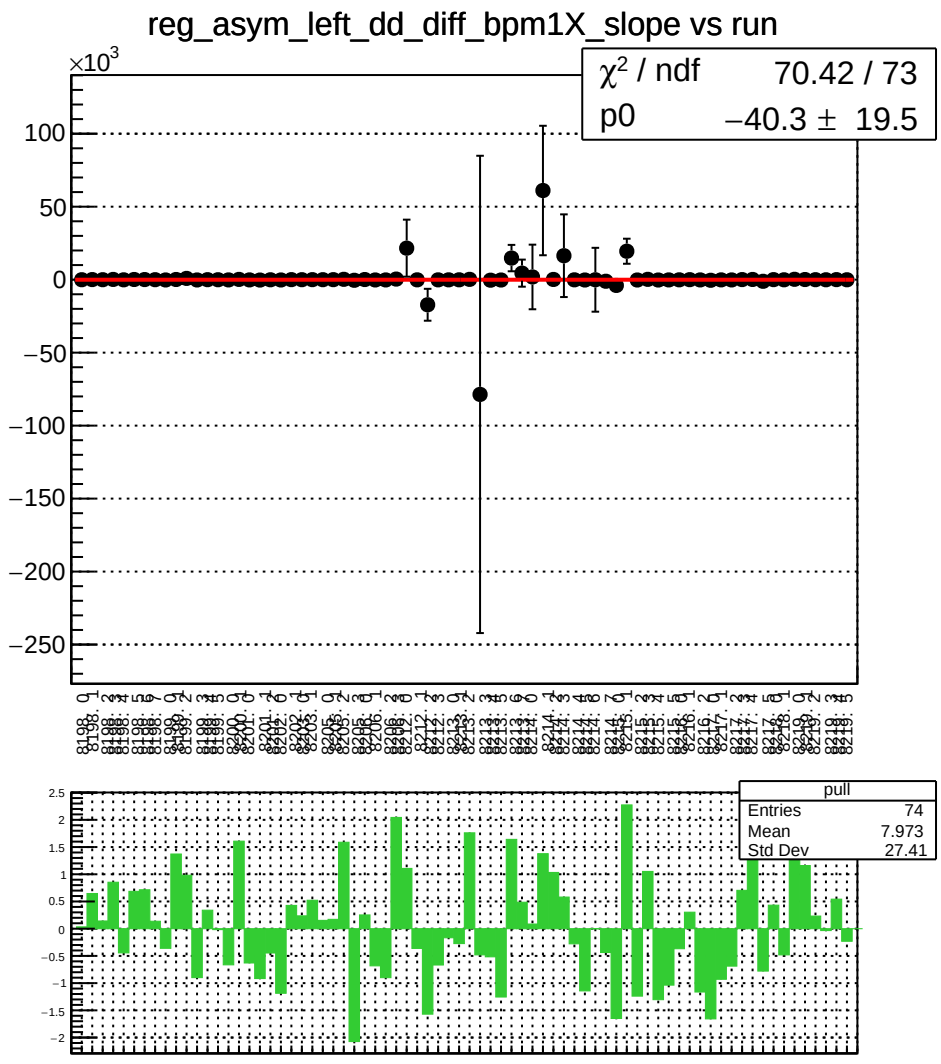

pull1D
Entries 74
Mean 0.01674
Std Dev 0.9968

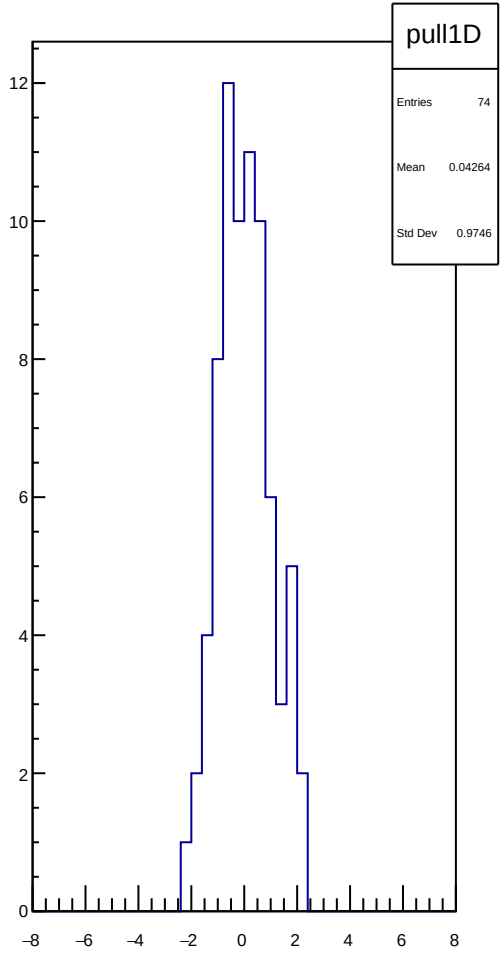

reg_asym_left_avg_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 73.57 / 73
p0 −14.25 ± 19.45
pull
Entries 74
Mean 1.484
Std Dev 22.53

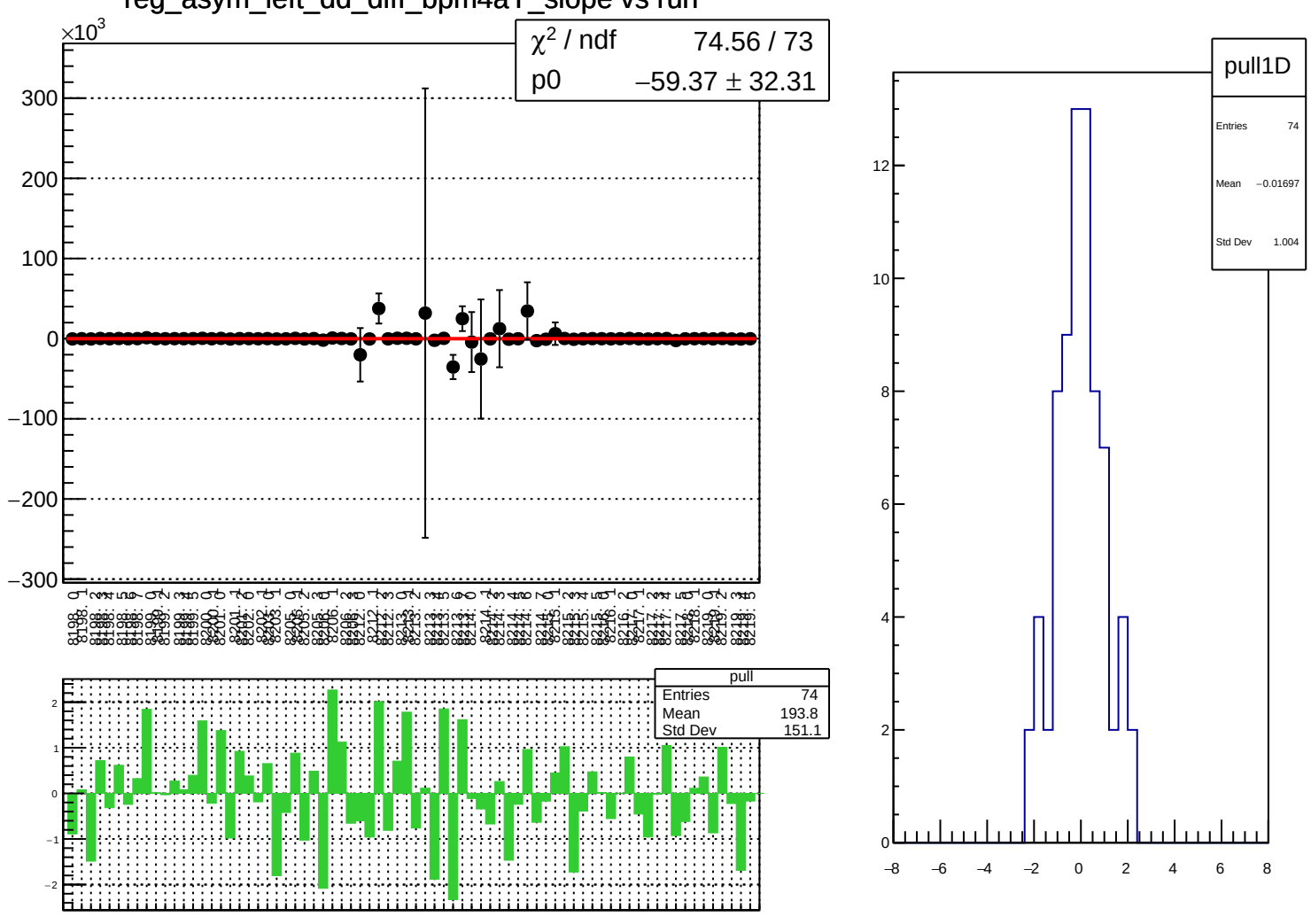

pull1D
Entries 74
Mean 0.04067
Std Dev 0.9963

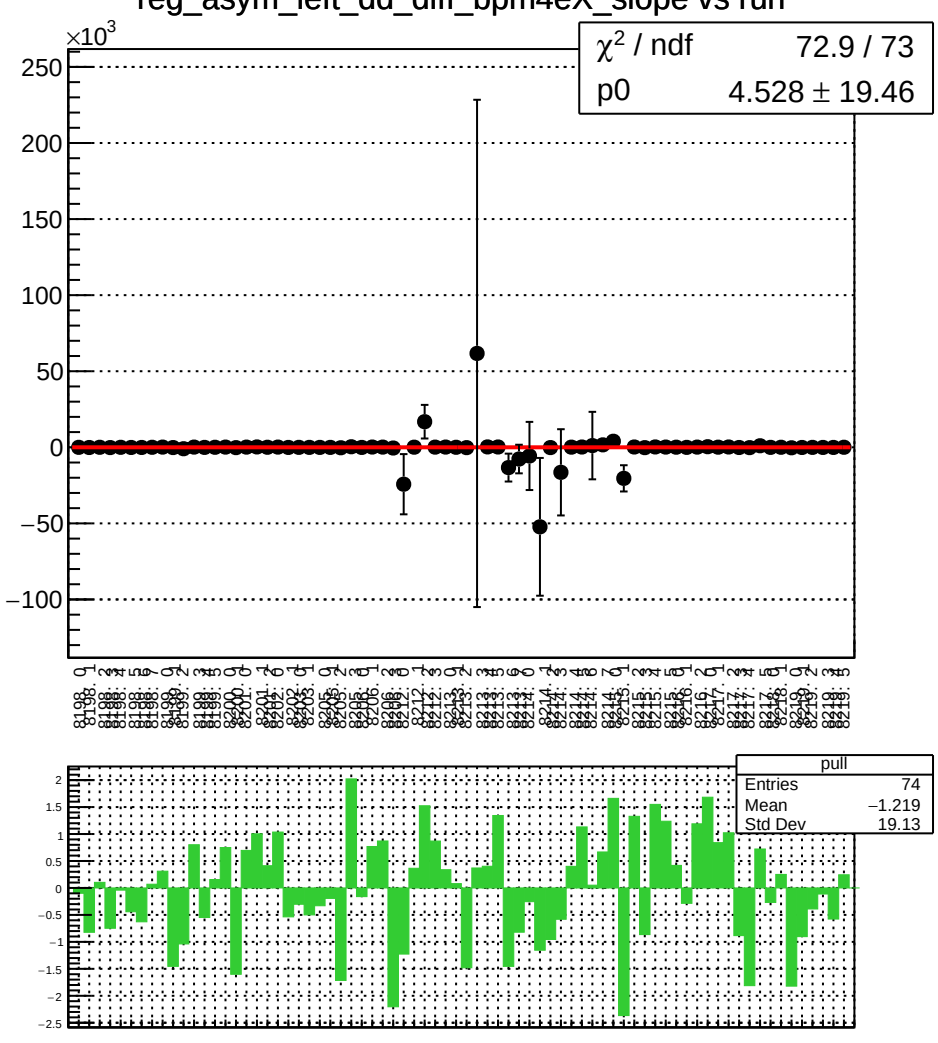

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 73.14 / 73
p0 −60.03 ± 34.75
×10³
300
200
100
0
−100
−200
−300
pull
Entries 74
Mean 117.9
Std Dev 73.71
2
1
0
−1
−2
pull1D
Entries 74
Mean −0.0309
Std Dev 0.9937
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

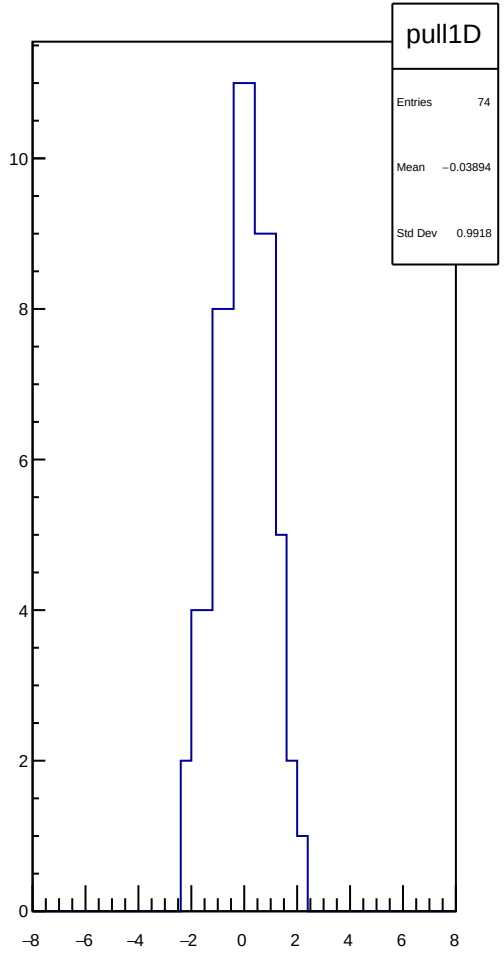

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 68.15 / 73
p0 −16.98 ± 1.578
pull
Entries 74
Mean 684.1
Std Dev 657.9
pull1D
Entries 74
Mean −0.002909
Std Dev 0.9596

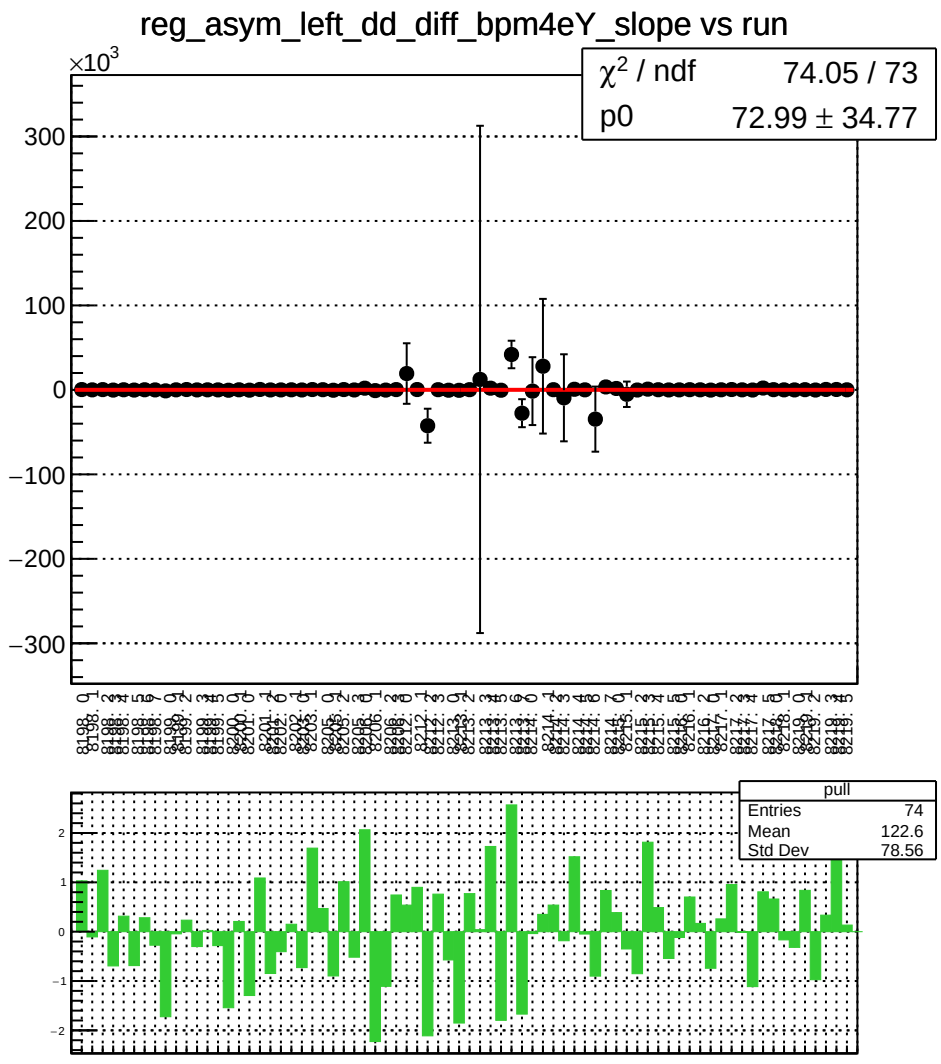

reg_asym_left_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 70.42 / 73
p0 −40.3 ± 19.5
100
50
0
−50
−100
−150
−200
−250
pull
Entries 74
Mean 7.973
Std Dev 27.41
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

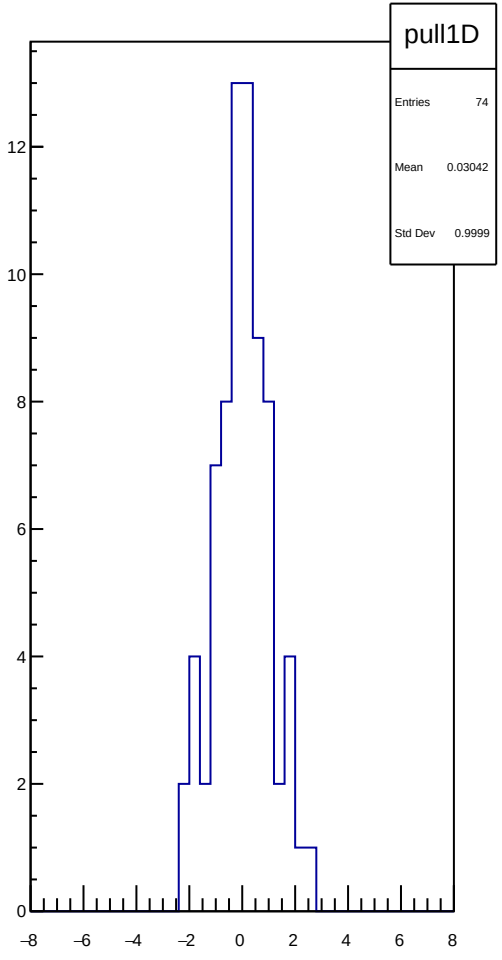

pull1D
Entries 74
Mean 0.04264
Std Dev 0.9746
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

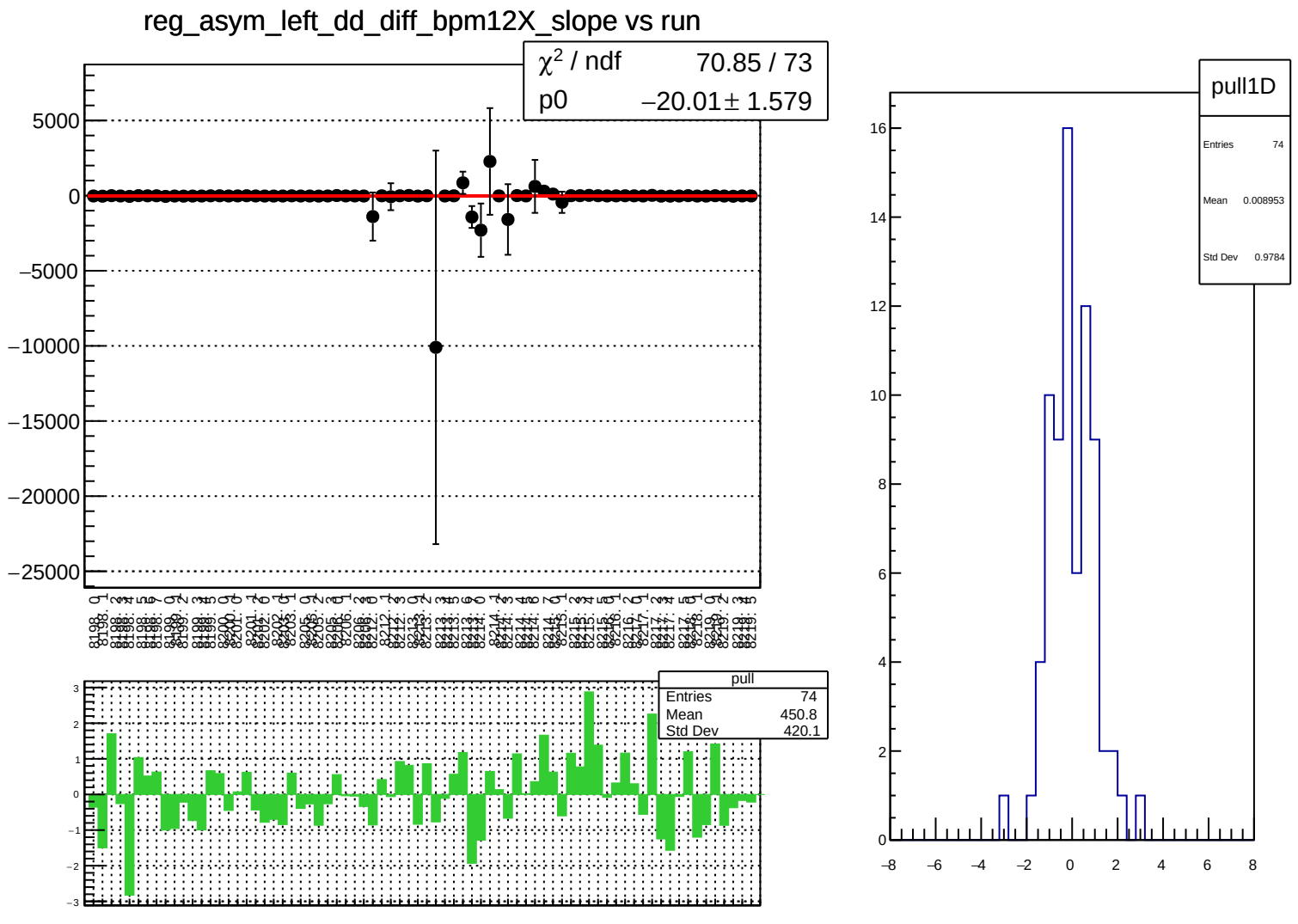

reg_asym_left_dd_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 74.56 / 73
p0 −59.37 ± 32.31
300
200
100
0
−100
−200
−300
pull
Entries 74
Mean 193.8
Std Dev 151.1
2
1
0
−1
−2
pull1D
Entries 74
Mean −0.01697
Std Dev 1.004
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

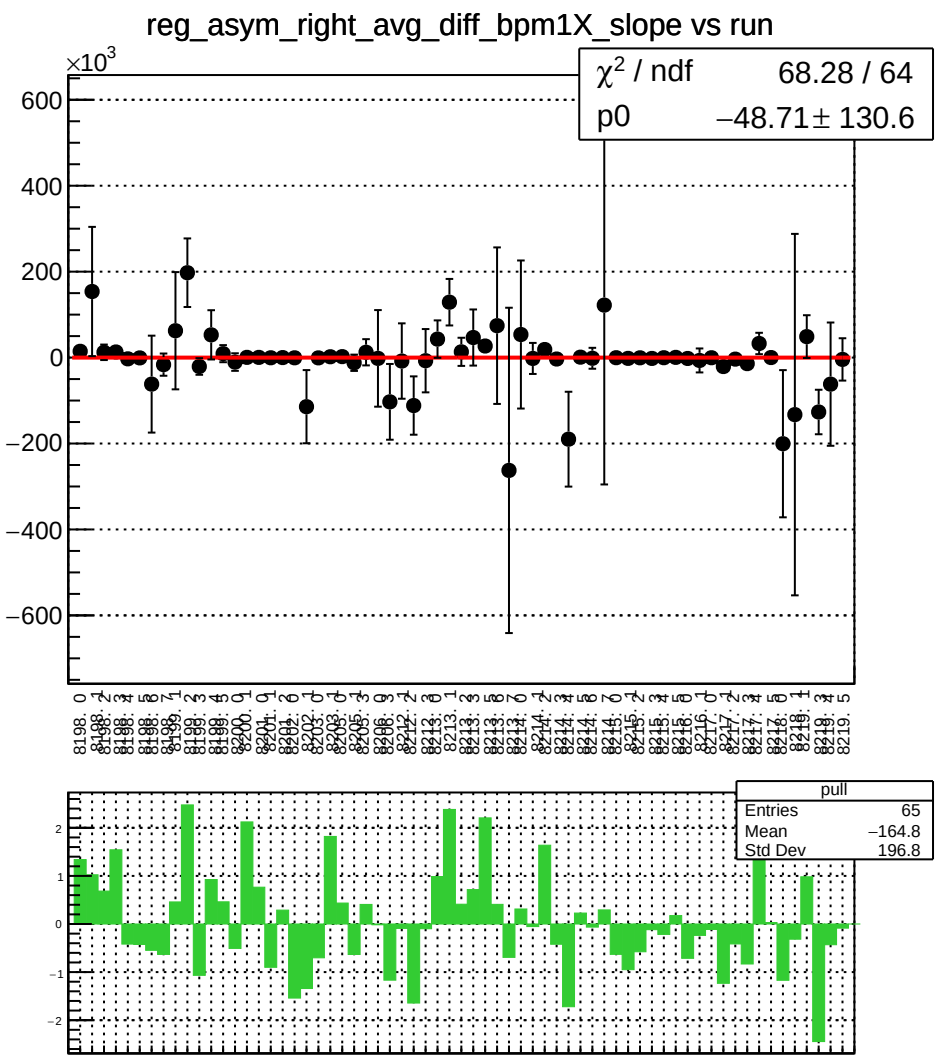

reg_asym_left_dd_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 72.9 / 73
p0 4.528 ± 19.46
250
200
150
100
50
0
−50
−100
pull
Entries 74
Mean −1.219
Std Dev 19.13
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5

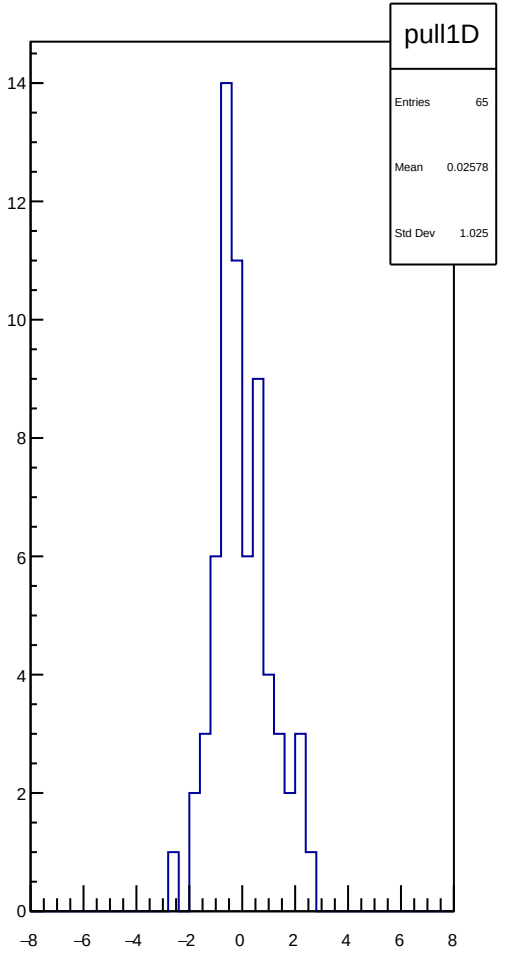

pull1D
Entries 74
Mean −0.03894
Std Dev 0.9918
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

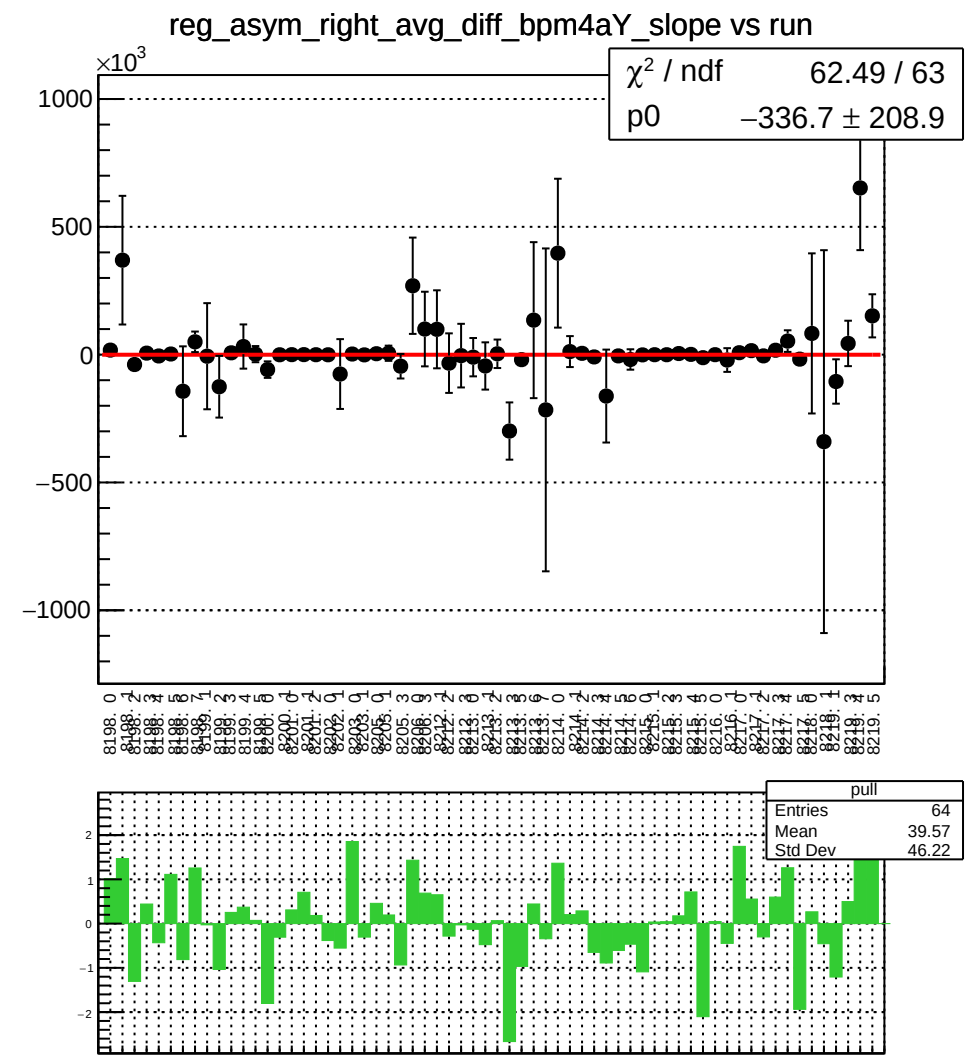

reg_asym_left_dd_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 74.05 / 73
p0 72.99 ± 34.77
300
200
100
0
−100
−200
−300
pull
Entries 74
Mean 122.6
Std Dev 78.56
2
1
0
−1
−2

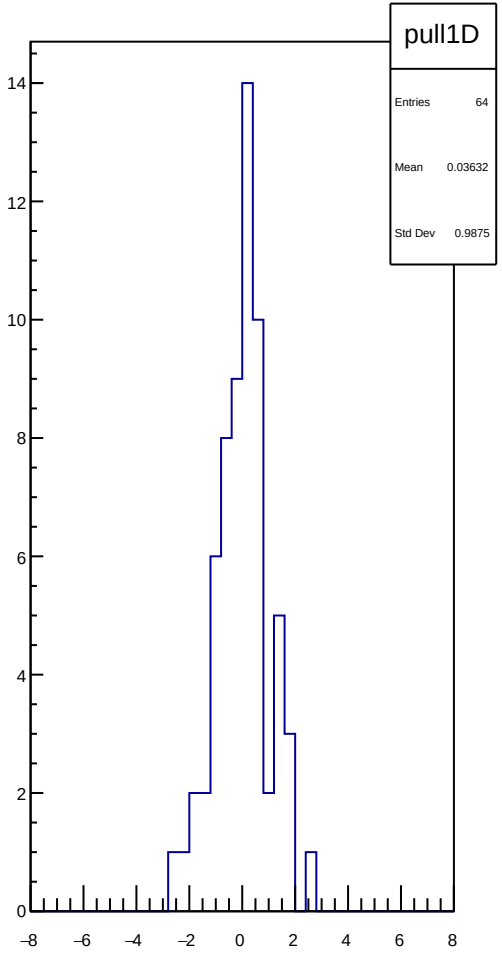

pull1D
Entries 74
Mean 0.03042
Std Dev 0.9999
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

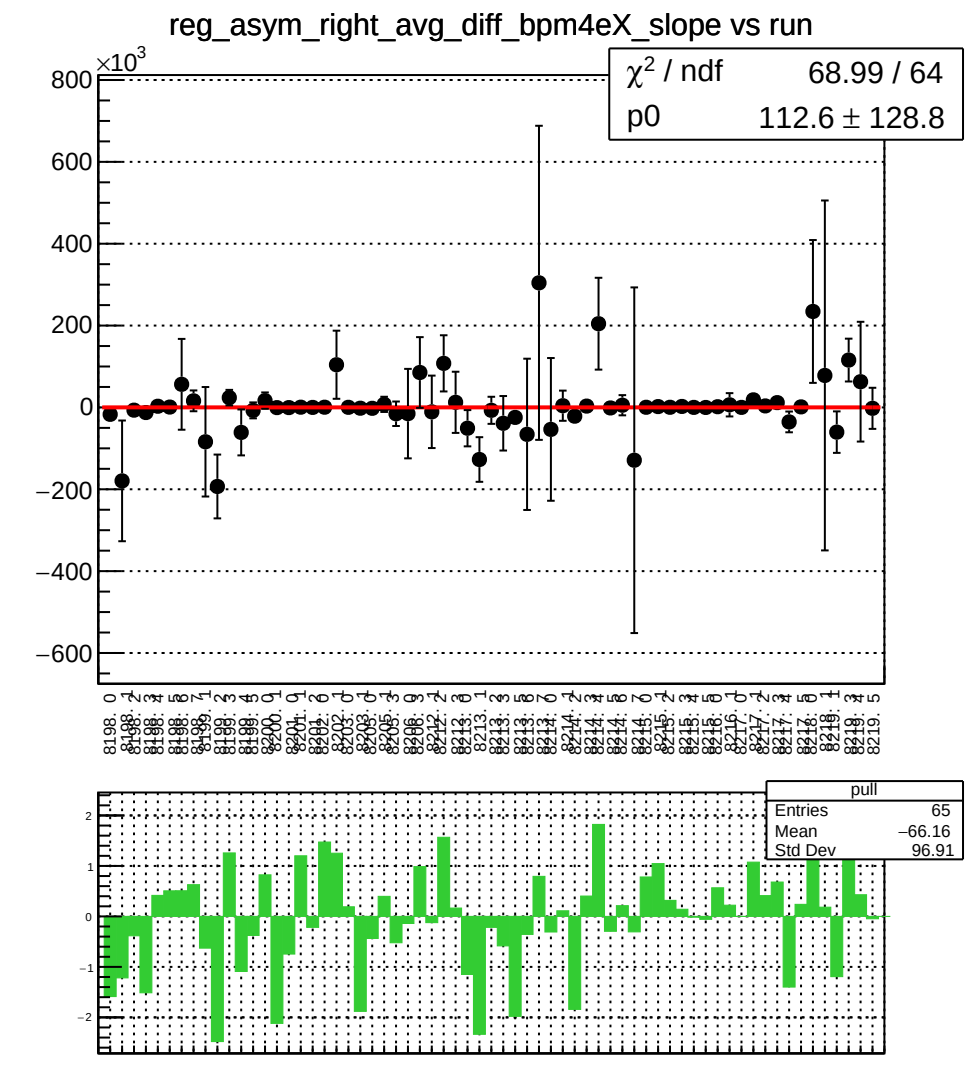

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 70.85 / 73
p0 −20.01 ± 1.579
5000
0
−5000
−10000
−15000
−20000
−25000
pull
Entries 74
Mean 450.8
Std Dev 420.1
3
2
1
0
−1
−2
−3
pull1D
Entries 74
Mean 0.008953
Std Dev 0.9784
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

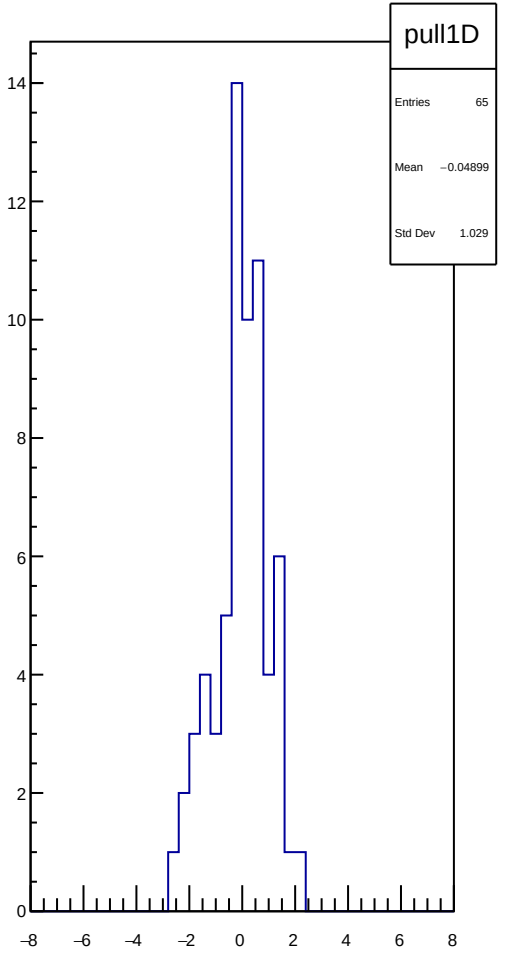

reg_asym_right_avg_diff_bpm1X_slope vs run
×10^3
χ² / ndf 68.28 / 64
p0 −48.71 ± 130.6
pull
Entries 65
Mean −164.8
Std Dev 196.8

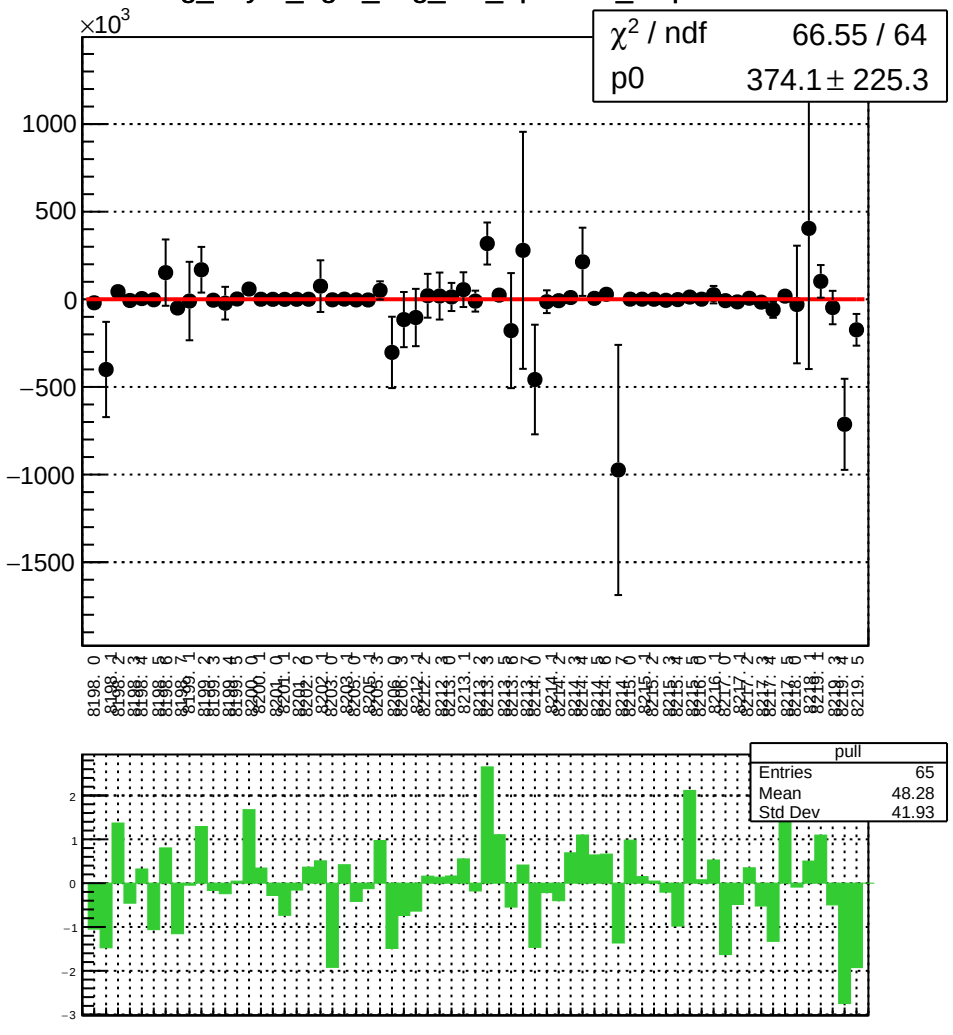

pull1D
Entries 65
Mean 0.02578
Std Dev 1.025

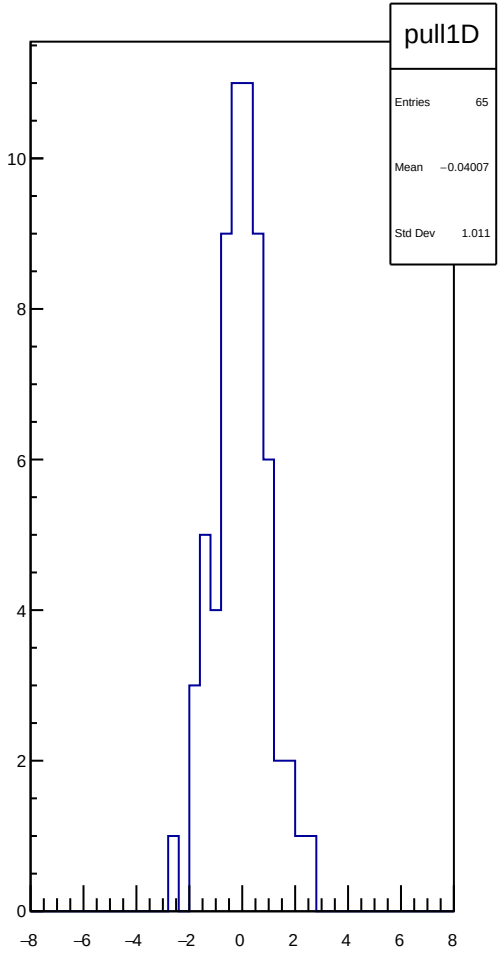

reg_asym_right_avg_diff_bpm4aY_slope vs run
×10^3
χ² / ndf 62.49 / 63
p0 −336.7 ± 208.9
1000
500
0
−500
−1000
pull
Entries 64
Mean 39.57
Std Dev 46.22
2
1
0
−1
−2

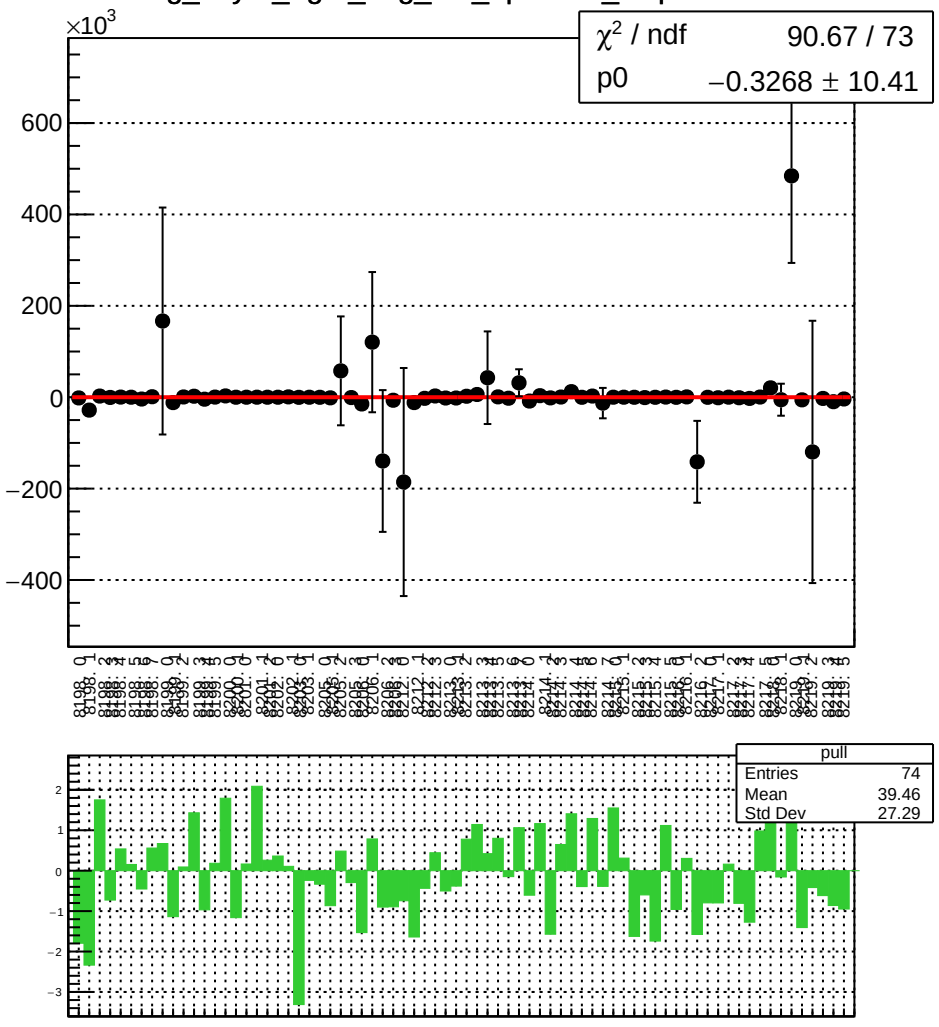

pull1D
Entries 64
Mean 0.03632
Std Dev 0.9875
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

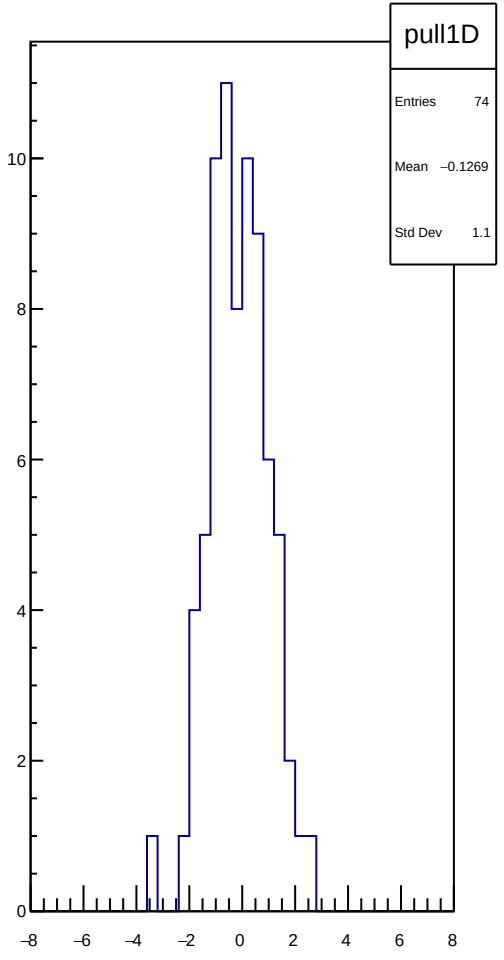

reg_asym_right_avg_diff_bpm4eX_slope vs run
×10^3
χ^2 / ndf 68.99 / 64
p0 112.6 ± 128.8
pull
Entries 65
Mean −66.16
Std Dev 96.91

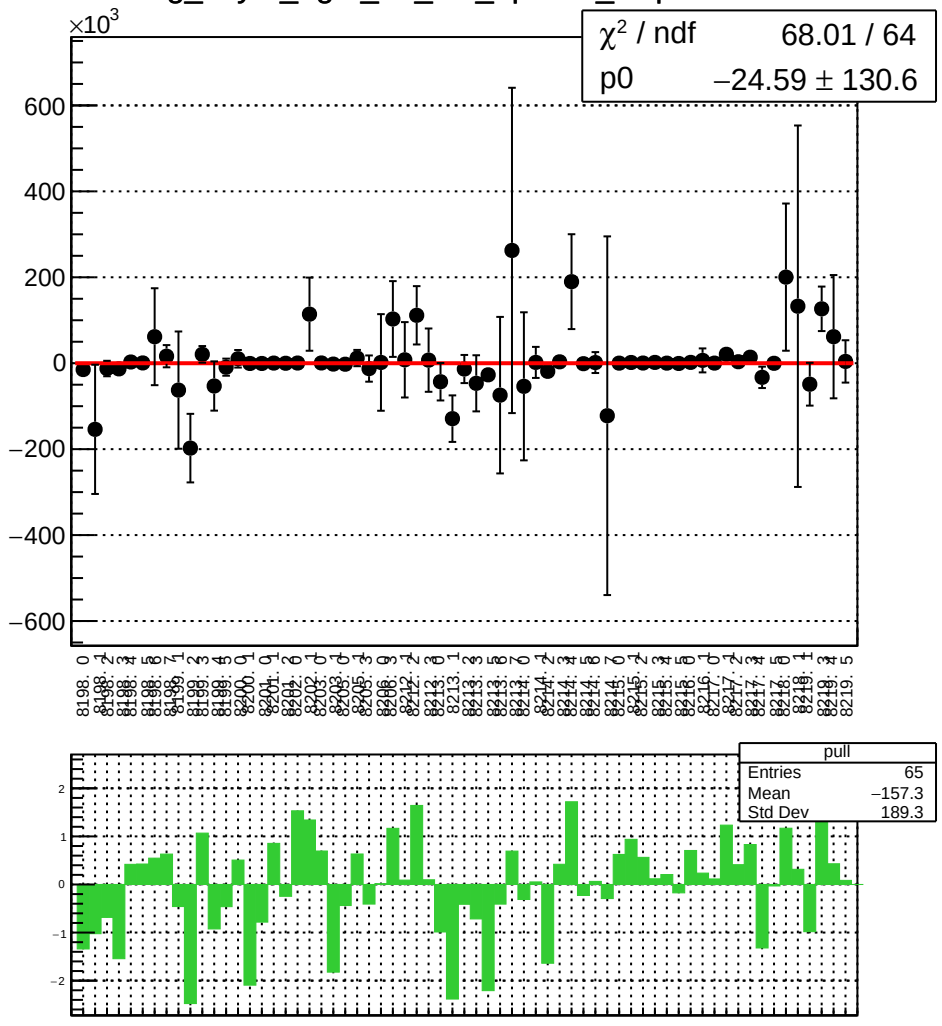

pull1D
Entries 65
Mean −0.04899
Std Dev 1.029

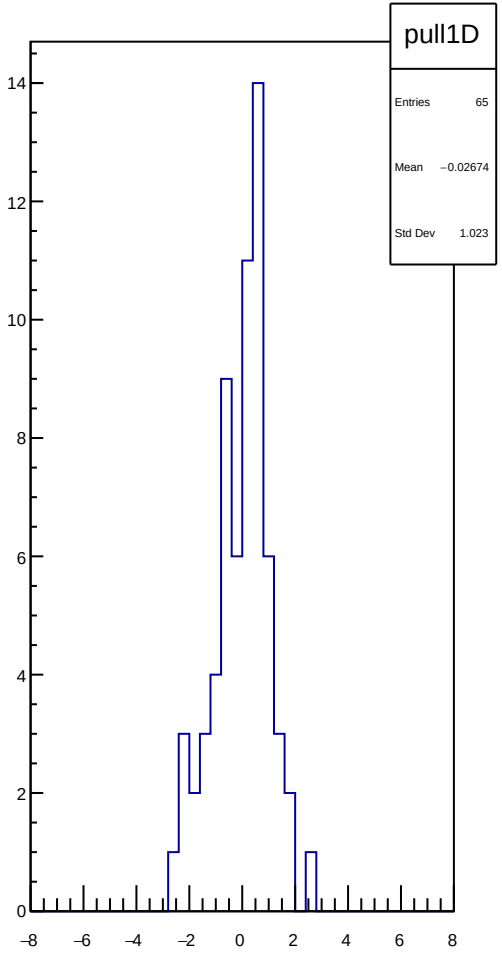

reg_asym_right_avg_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 66.55 / 64
p0 374.1 ± 225.3
1000
500
0
−500
−1000
−1500
pull
Entries 65
Mean 48.28
Std Dev 41.93
2
1
0
−1
−2
−3

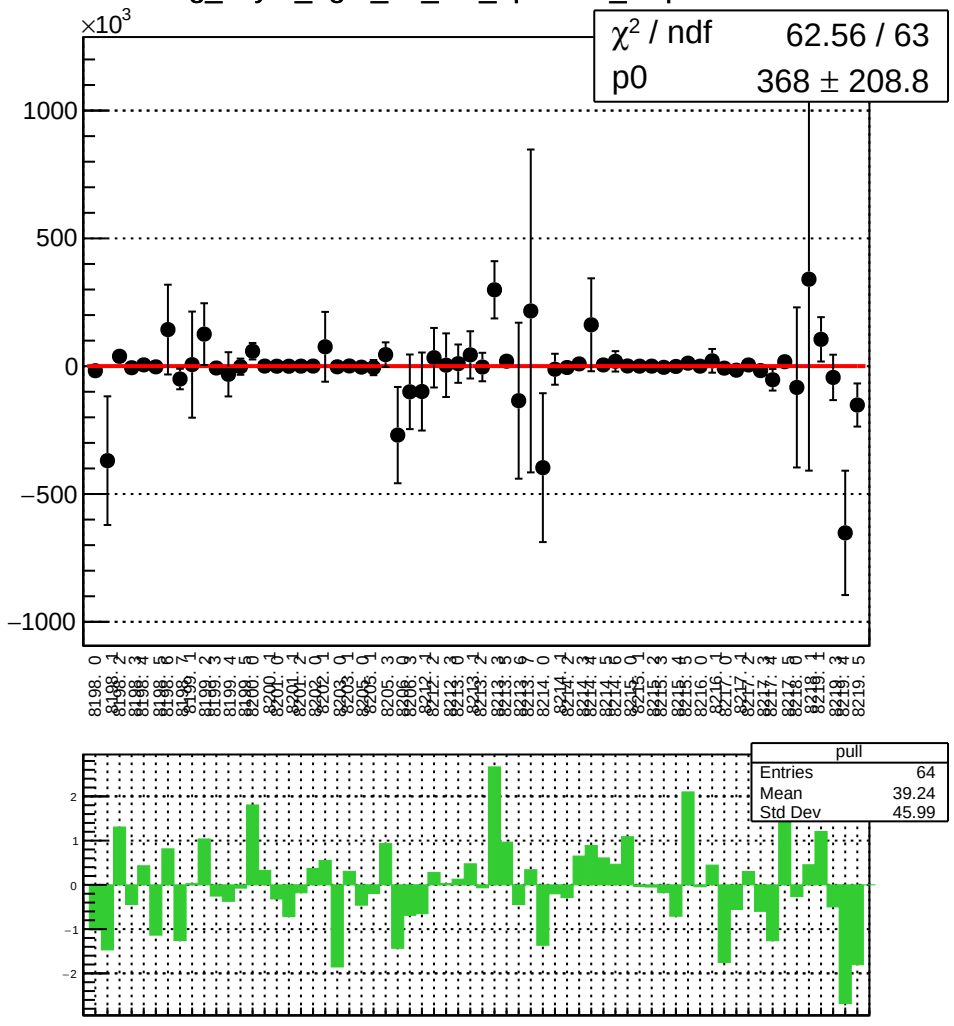

pull1D
Entries 65
Mean −0.04007
Std Dev 1.011
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

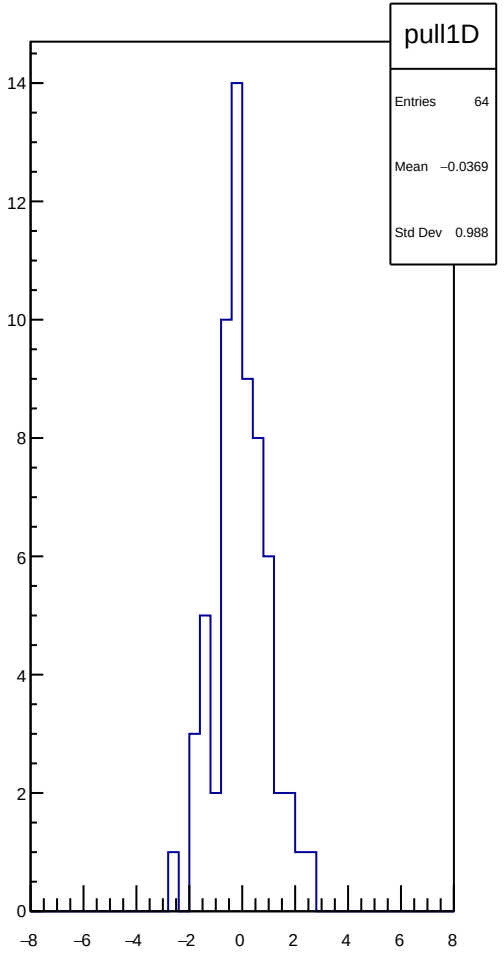

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 90.67 / 73
p0 −0.3268 ± 10.41
pull
Entries 74
Mean 39.46
Std Dev 27.29

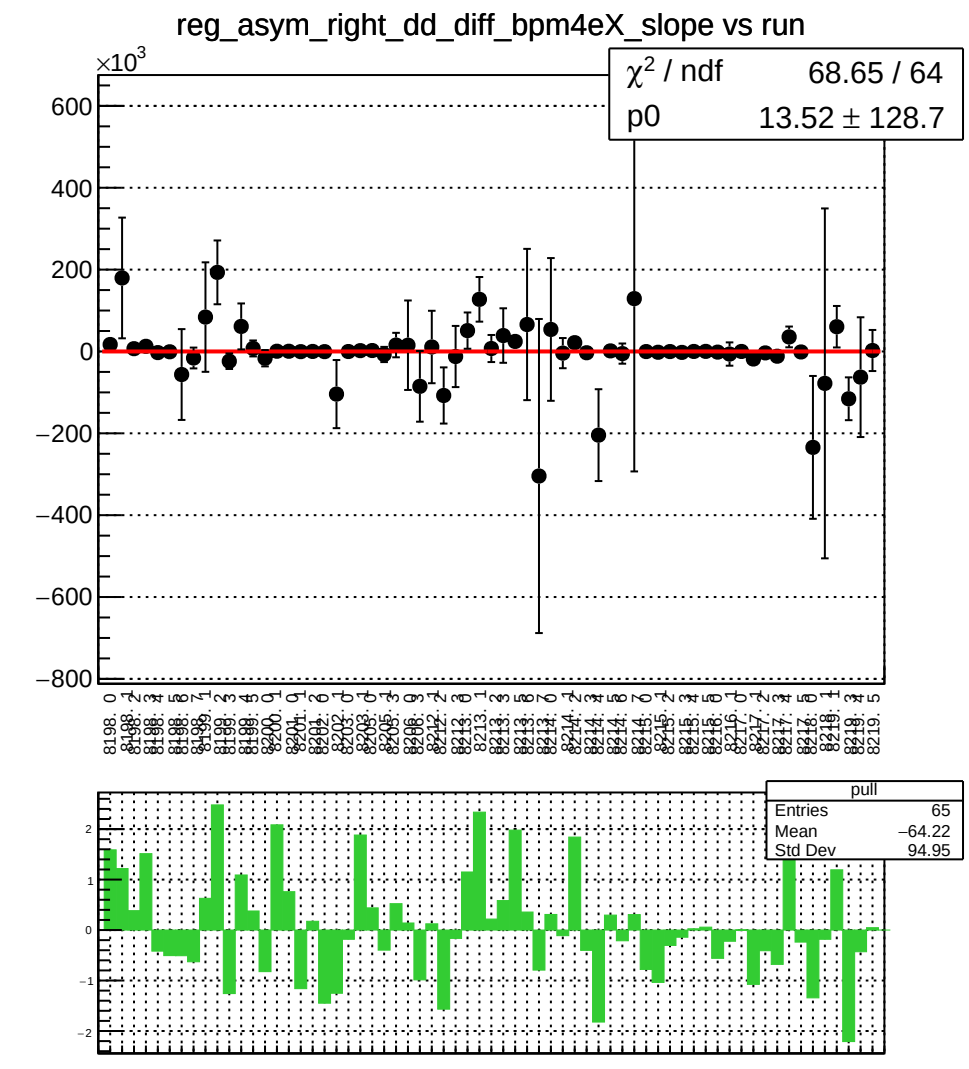

pull1D
Entries 74
Mean −0.1269
Std Dev 1.1

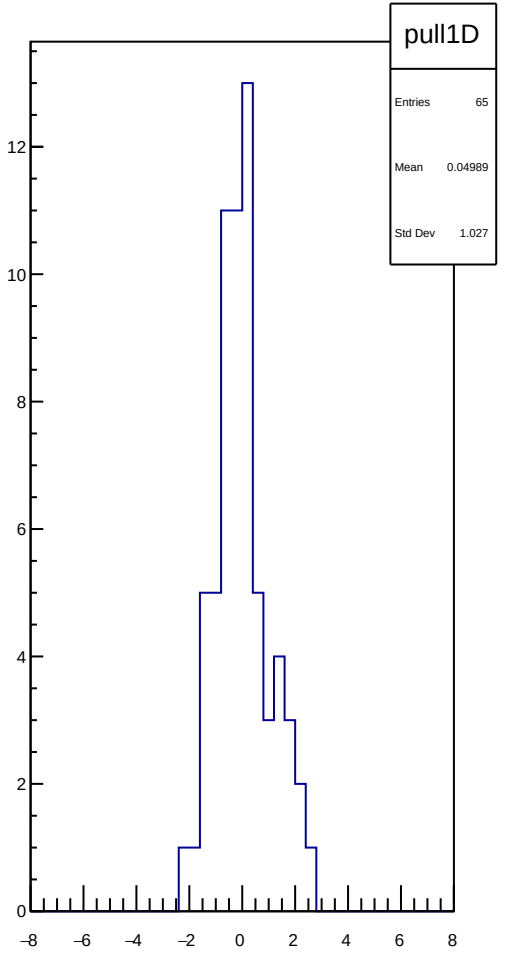

reg_asym_right_dd_diff_bpm1X_slope vs run
×10^3
χ² / ndf 68.01 / 64
p0 −24.59 ± 130.6
600
400
200
0
−200
−400
−600
pull
Entries 65
Mean −157.3
Std Dev 189.3
2
1
0
−1
−2

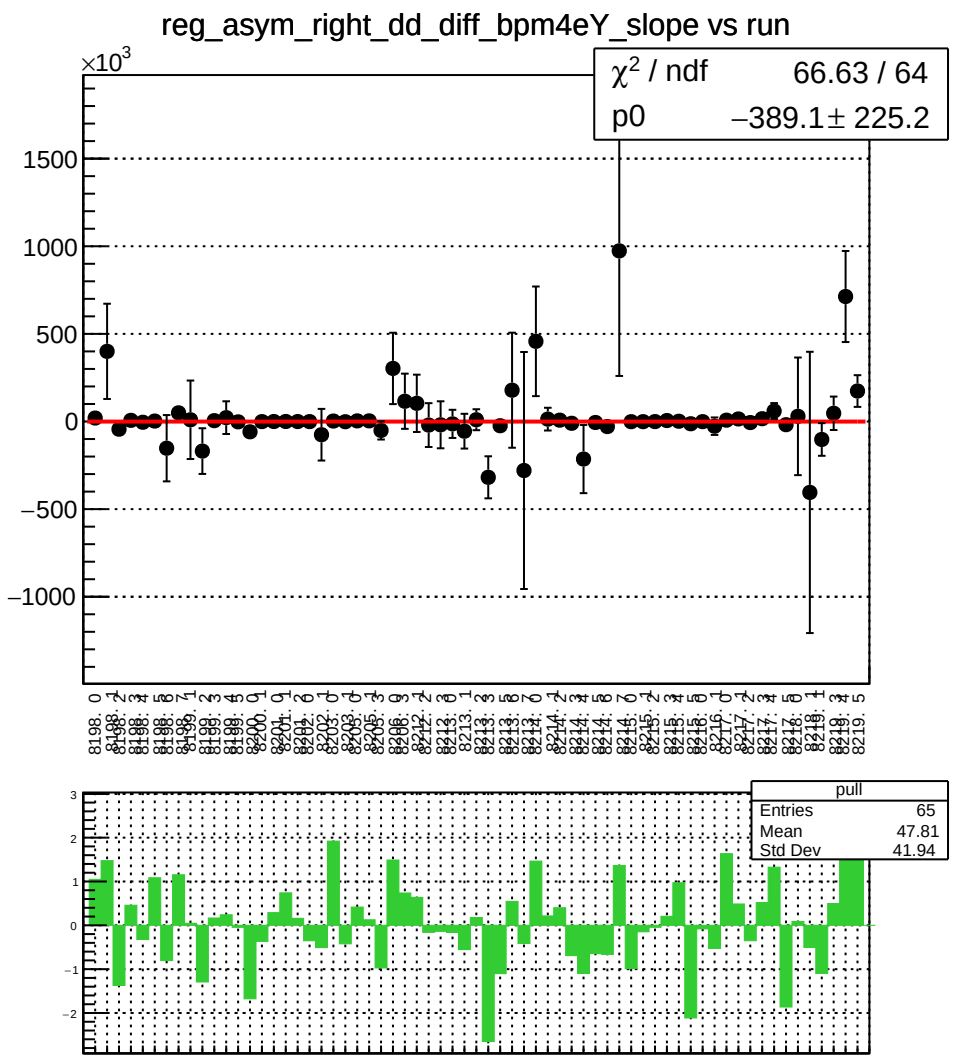

pull1D
Entries 65
Mean −0.02674
Std Dev 1.023
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

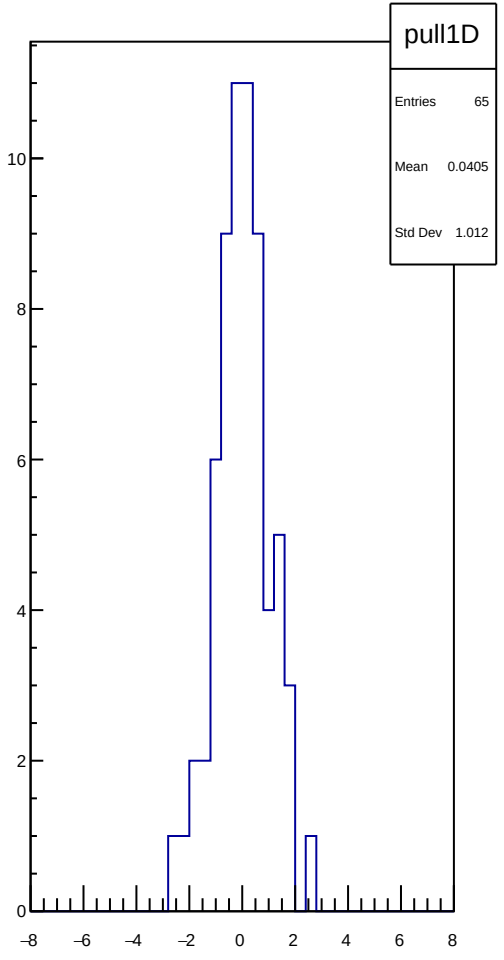

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 62.56 / 63
p0 368 ± 208.8
pull
Entries 64
Mean 39.24
Std Dev 45.99

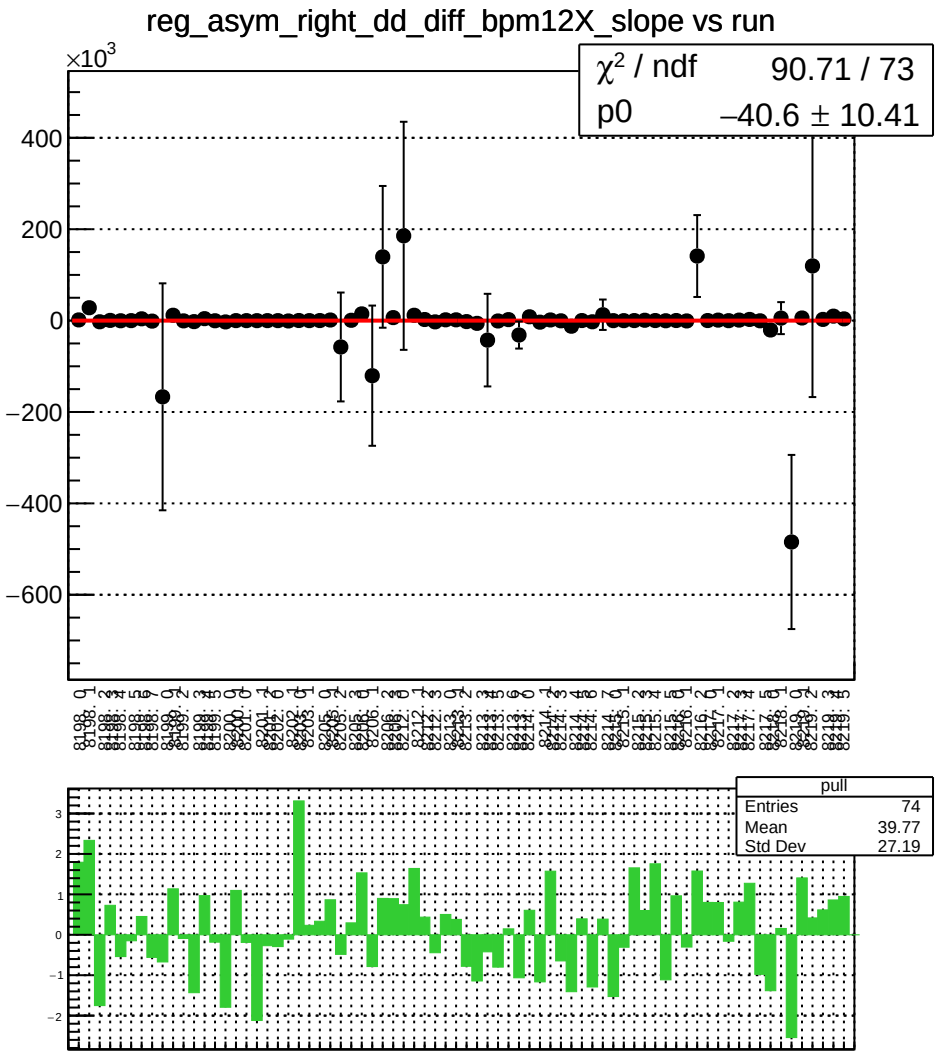

pull1D
Entries 64
Mean −0.0369
Std Dev 0.988

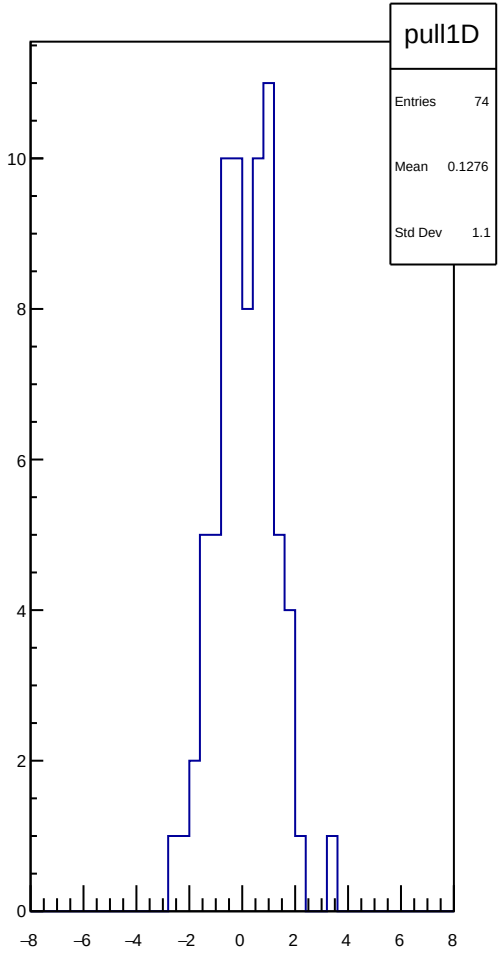

reg_asym_right_dd_diff_bpm4eX_slope vs run
×10^3
χ² / ndf 68.65 / 64
p0 13.52 ± 128.7
pull
Entries 65
Mean −64.22
Std Dev 94.95

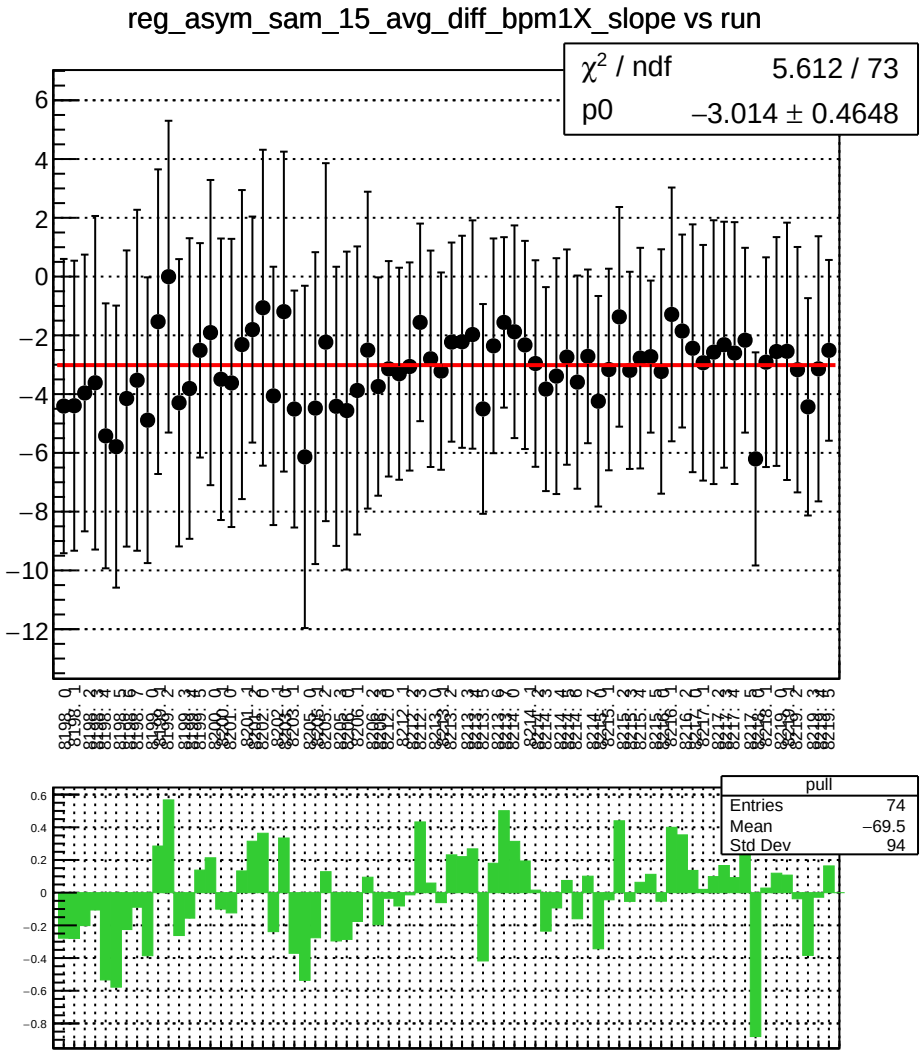

pull1D
Entries 65
Mean 0.04989
Std Dev 1.027

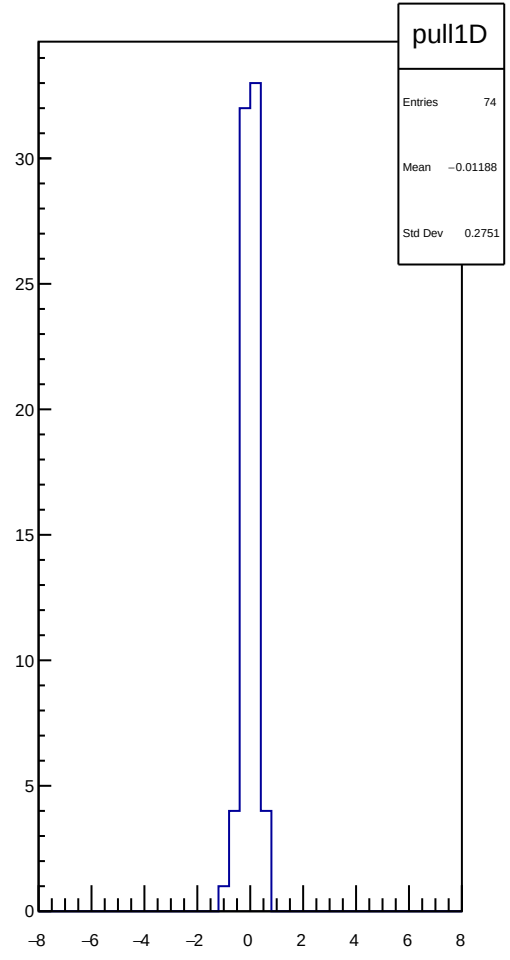

reg_asym_right_dd_diff_bpm4eY_slope vs run
×10^3
χ^2 / ndf 66.63 / 64
p0 −389.1± 225.2
1500
1000
500
0
−500
−1000
pull
Entries 65
Mean 47.81
Std Dev 41.94
3
2
1
0
−1
−2

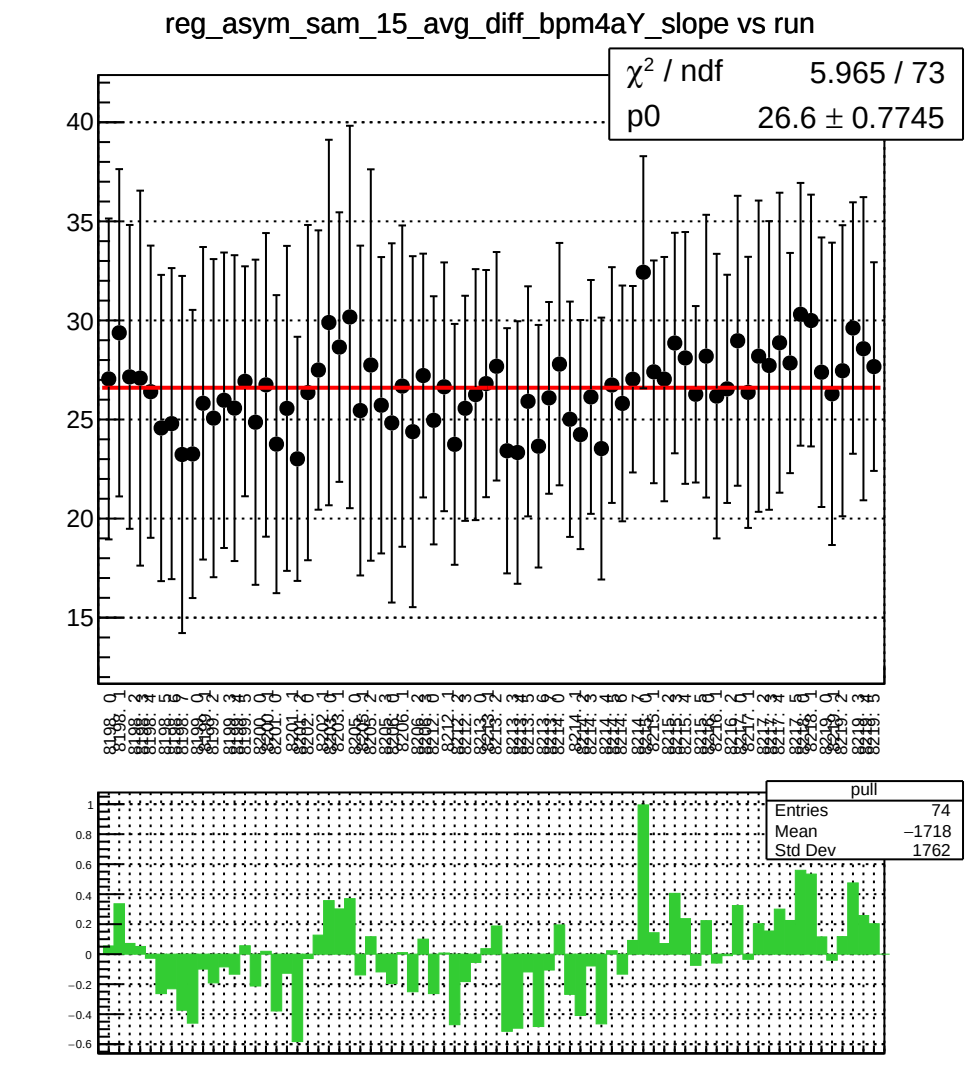

pull1D
Entries 65
Mean 0.0405
Std Dev 1.012
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

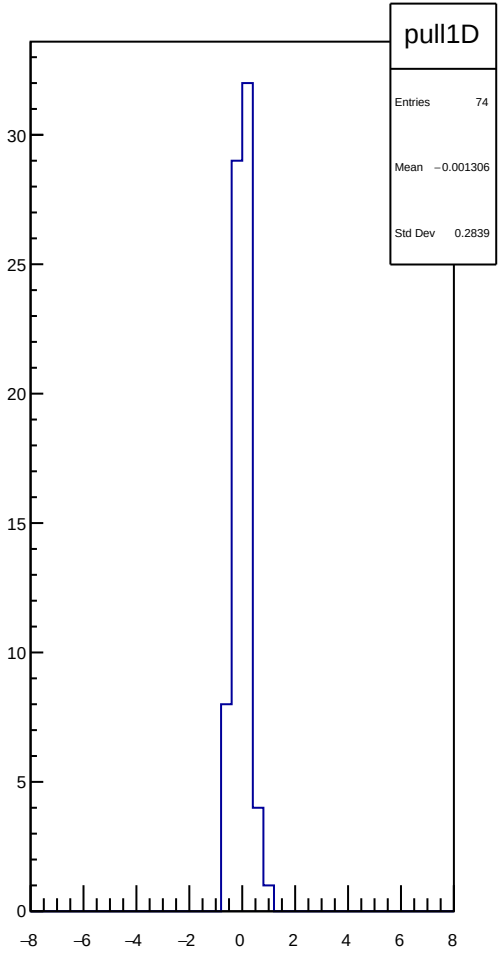

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 90.71 / 73
p0 −40.6 ± 10.41
×10³
pull
Entries 74
Mean 39.77
Std Dev 27.19

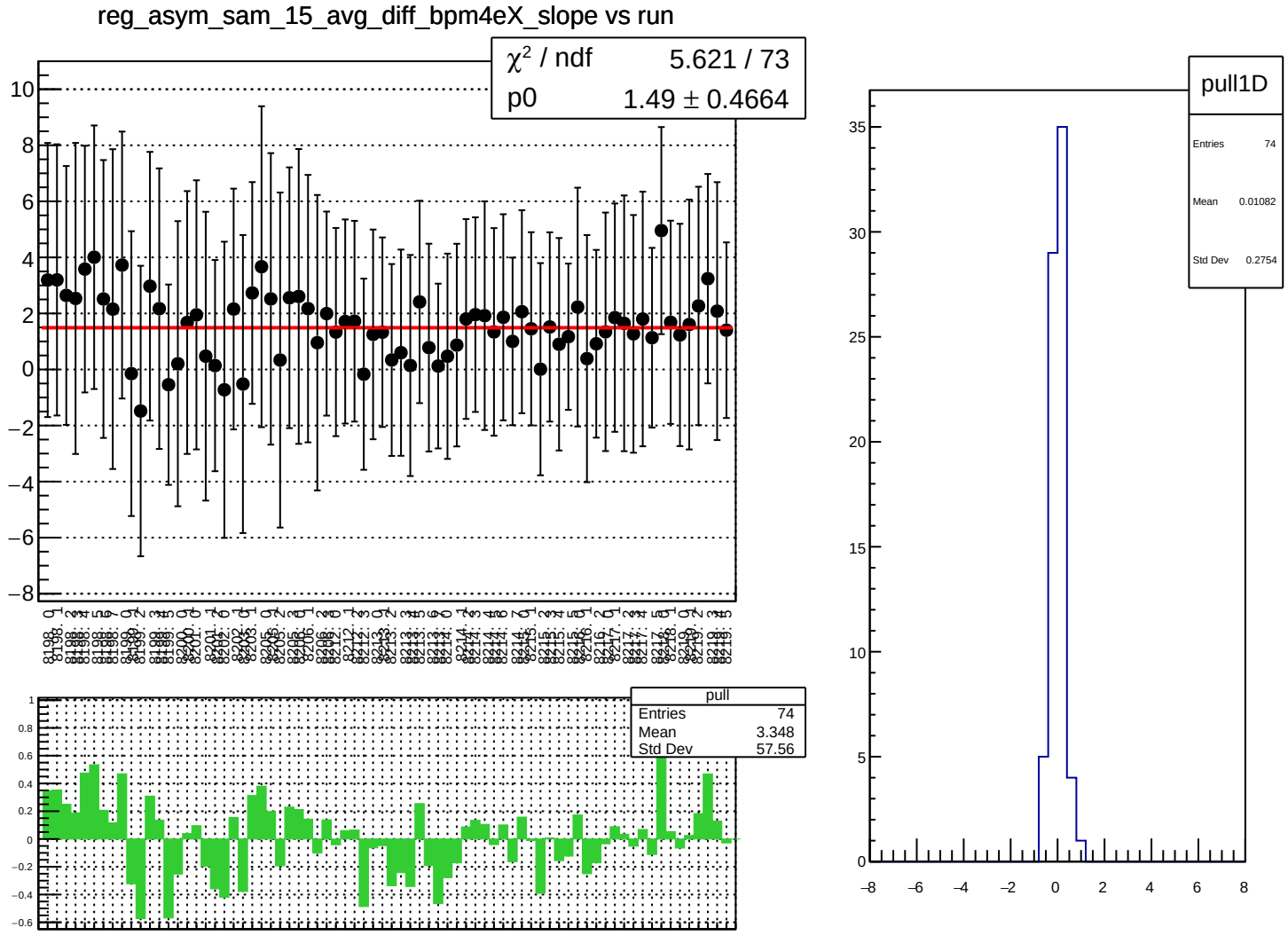

pull1D
Entries 74
Mean 0.1276
Std Dev 1.1

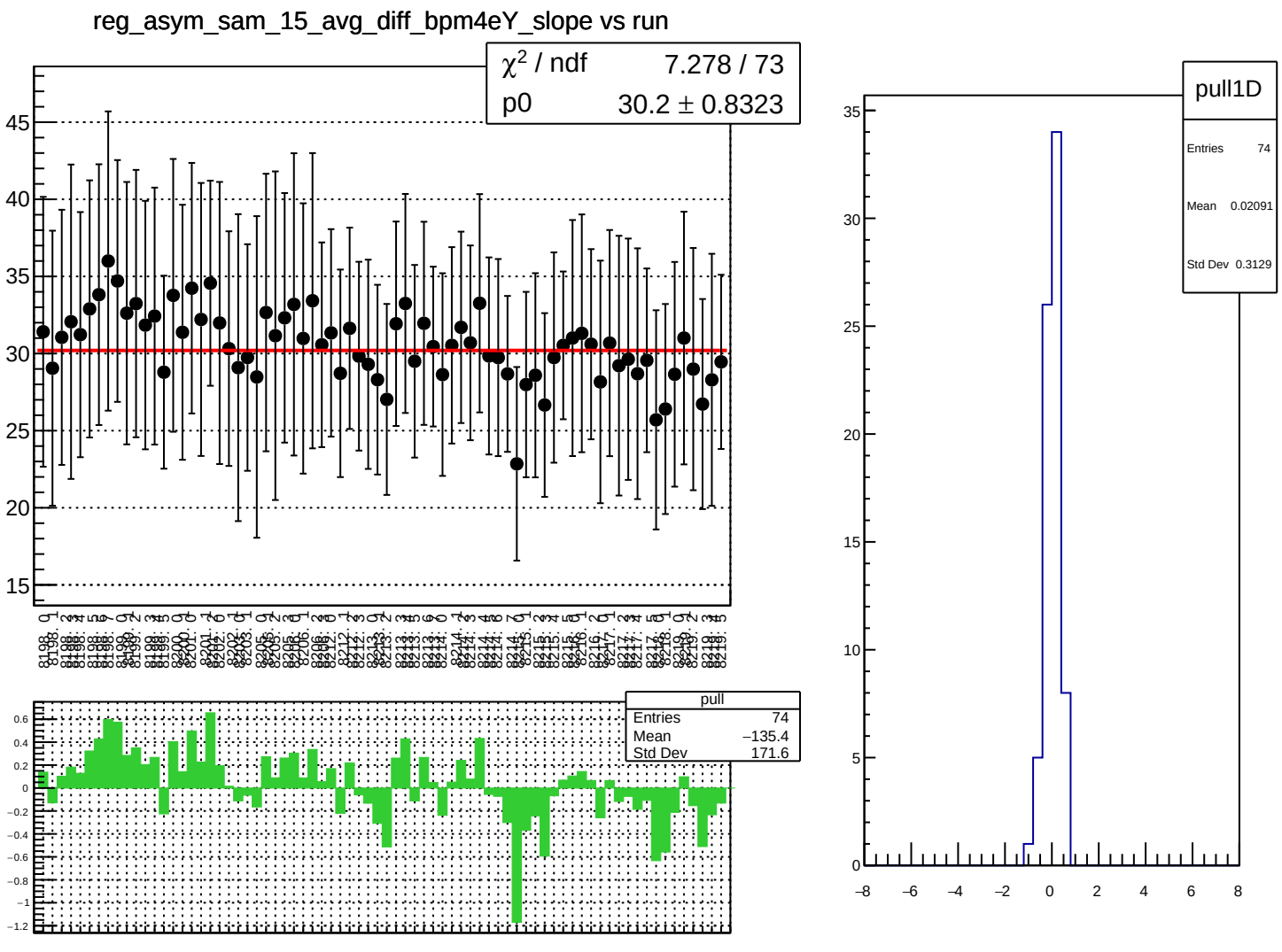

reg_asym_sam_15_avg_diff_bpm1X_slope vs run
χ² / ndf 5.612 / 73
p0 −3.014 ± 0.4648
pull
Entries 74
Mean −69.5
Std Dev 94

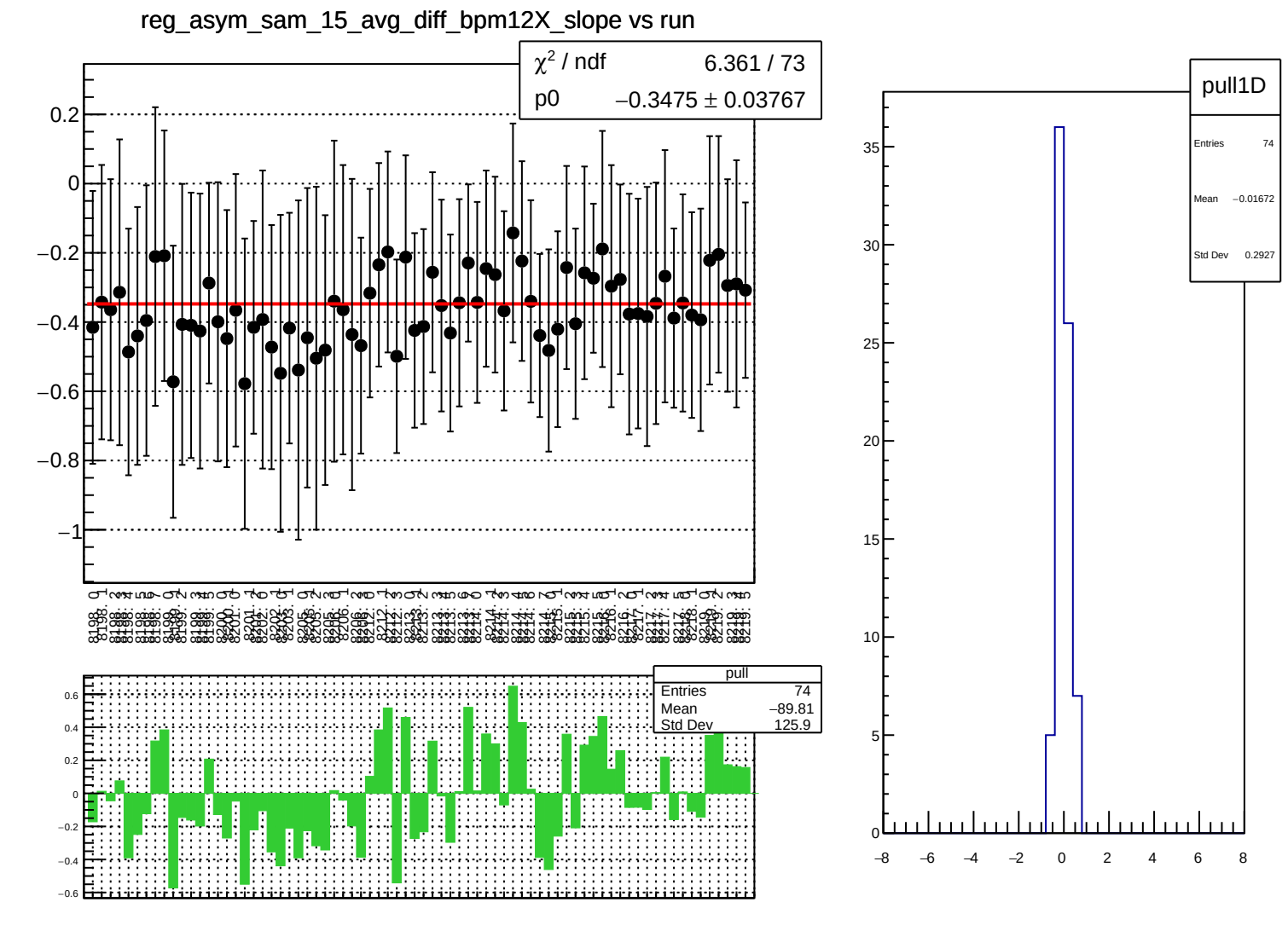

pull1D
Entries 74
Mean −0.01188
Std Dev 0.2751

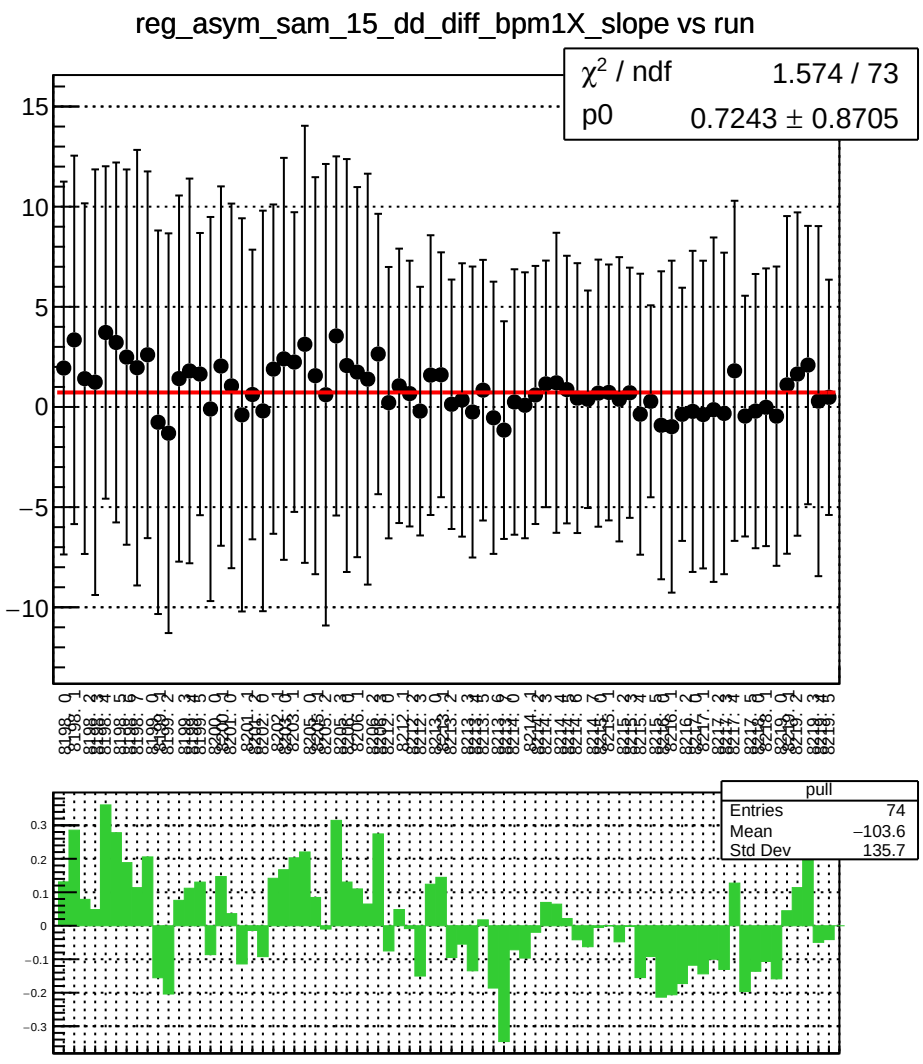

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.965 / 73
p0 26.6 ± 0.7745
pull
Entries 74
Mean −1718
Std Dev 1762

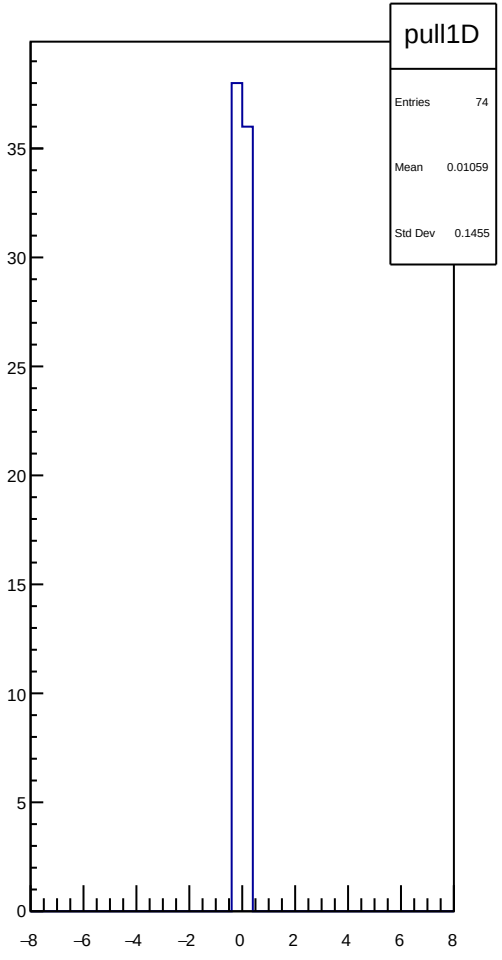

pull1D
Entries 74
Mean −0.001306
Std Dev 0.2839

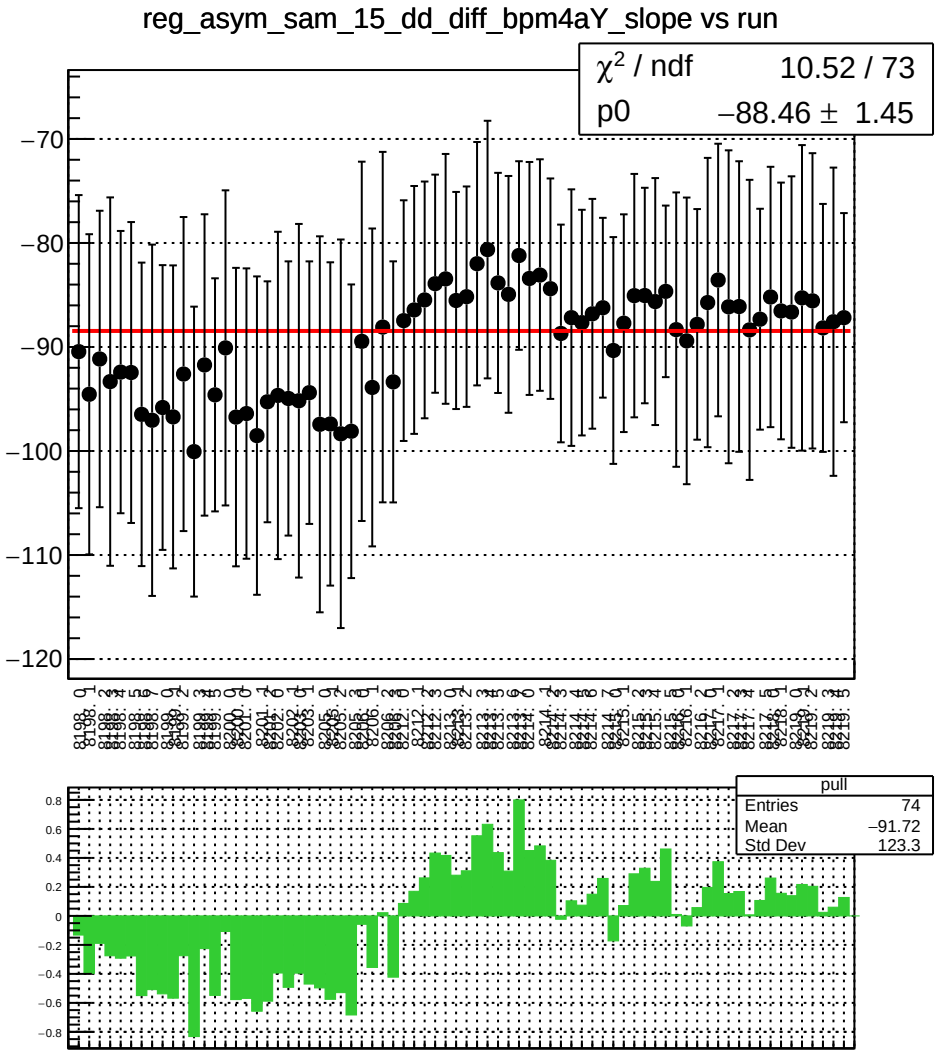

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 5.621 / 73
p0 1.49 ± 0.4664
pull
Entries 74
Mean 3.348
Std Dev 57.56
pull1D
Entries 74
Mean 0.01082
Std Dev 0.2754

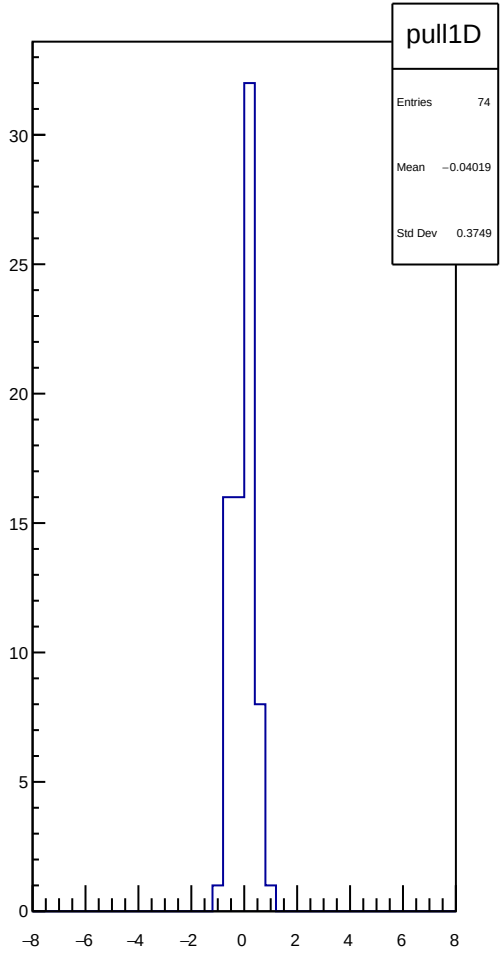

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.278 / 73
p0 30.2 ± 0.8323
pull
Entries 74
Mean −135.4
Std Dev 171.6
pull1D
Entries 74
Mean 0.02091
Std Dev 0.3129

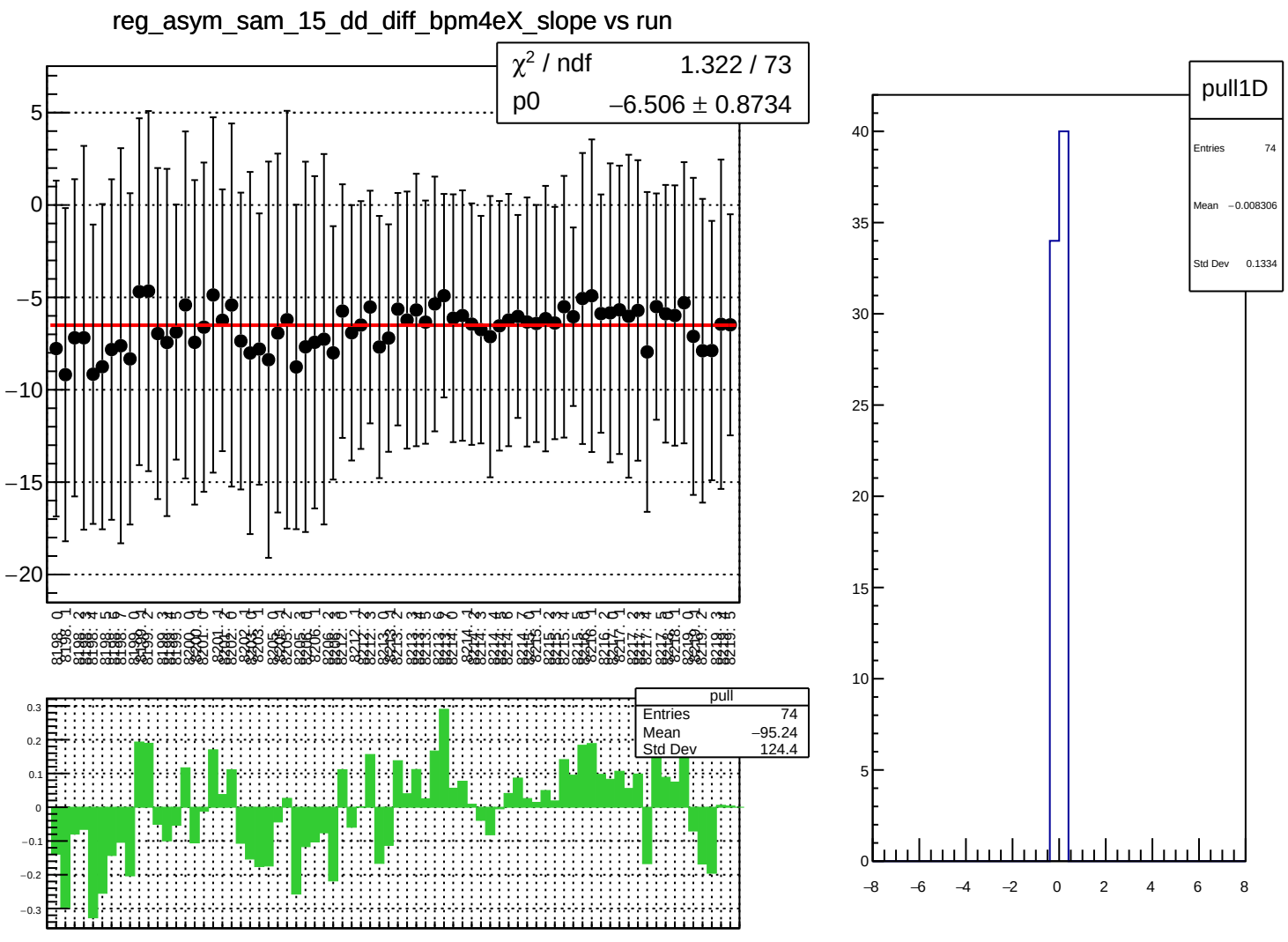

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 6.361 / 73
p0 −0.3475 ± 0.03767
pull
Entries 74
Mean −89.81
Std Dev 125.9
pull1D
Entries 74
Mean −0.01672
Std Dev 0.2927

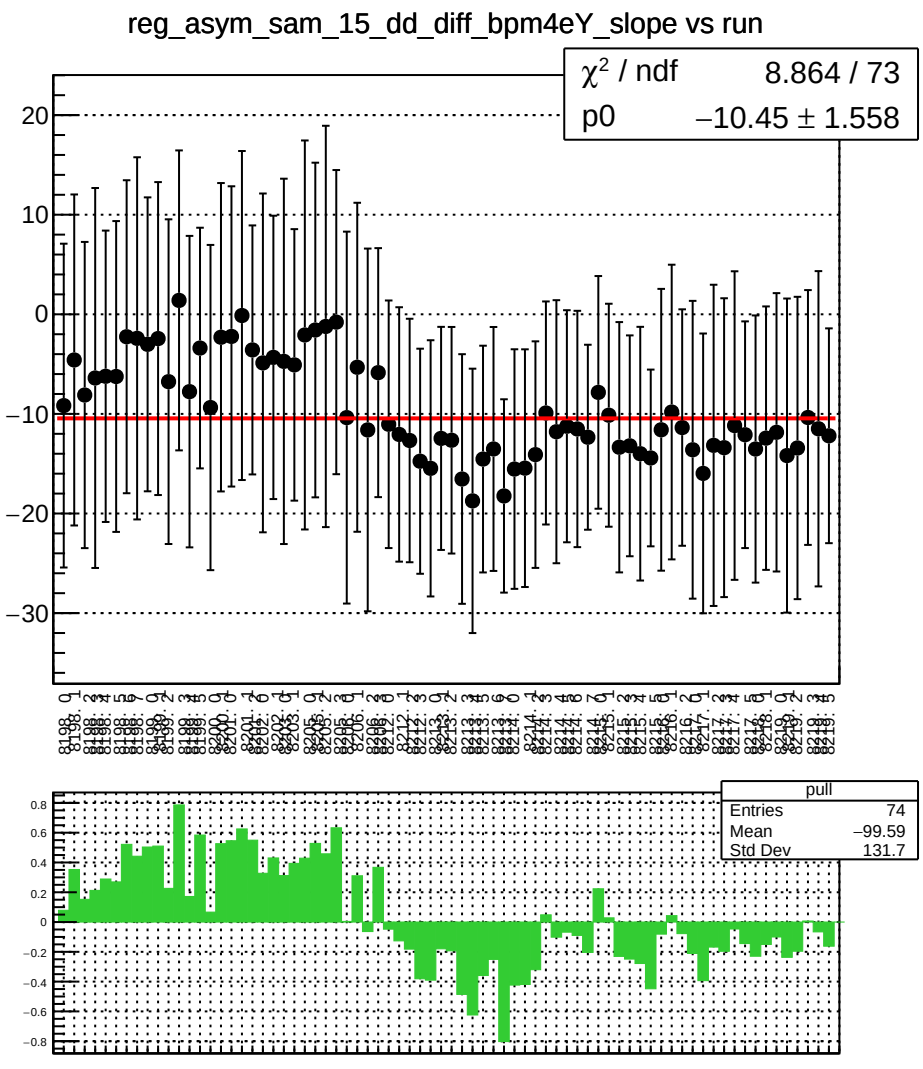

reg_asym_sam_15_dd_diff_bpm1X_slope vs run
χ² / ndf 1.574 / 73
p0 0.7243 ± 0.8705
pull
Entries 74
Mean −103.6
Std Dev 135.7

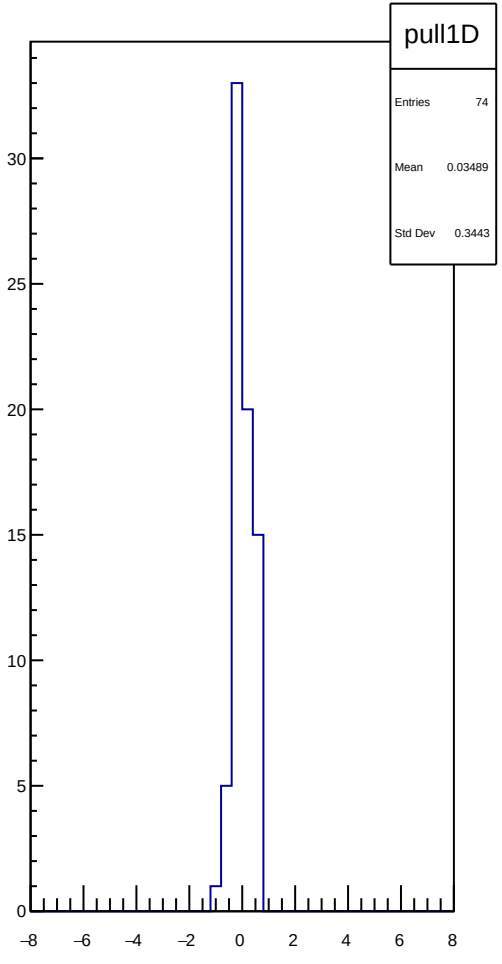

pull1D
Entries 74
Mean 0.01059
Std Dev 0.1455

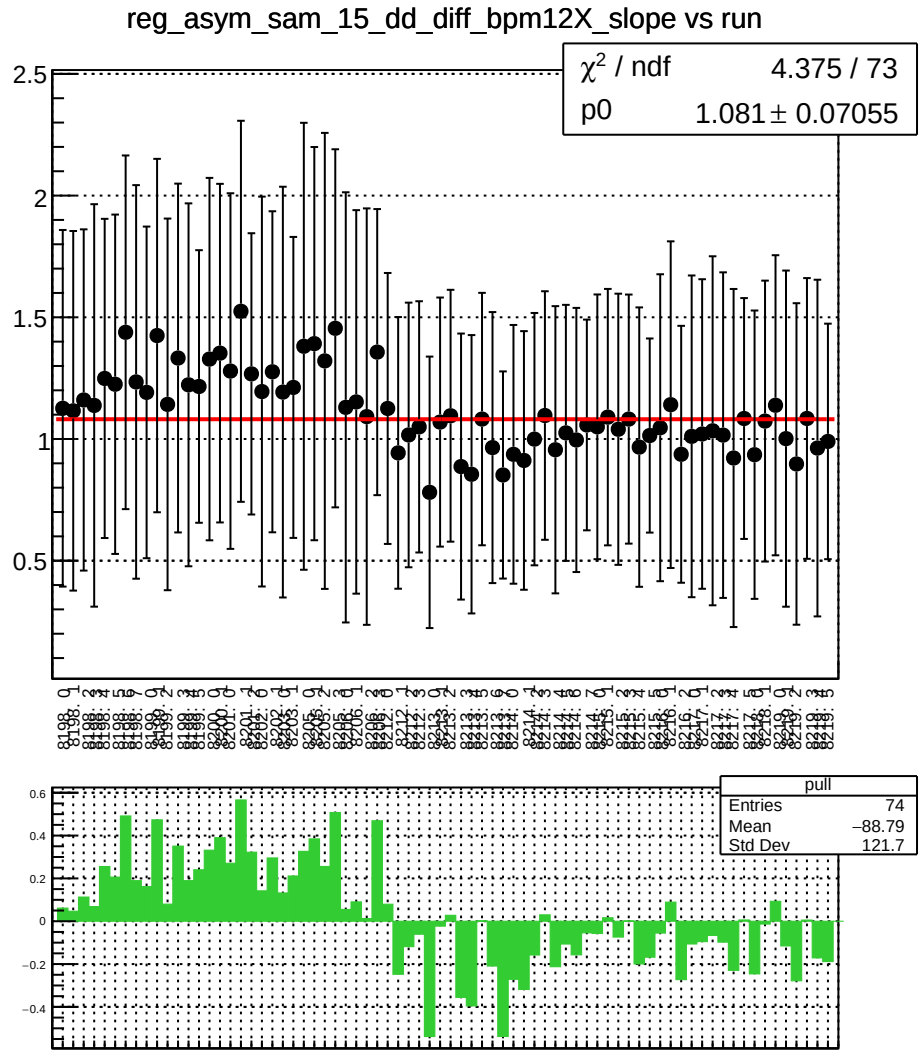

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 10.52 / 73
p0 −88.46 ± 1.45
−70
−80
−90
−100
−110
−120
pull
Entries 74
Mean −91.72
Std Dev 123.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

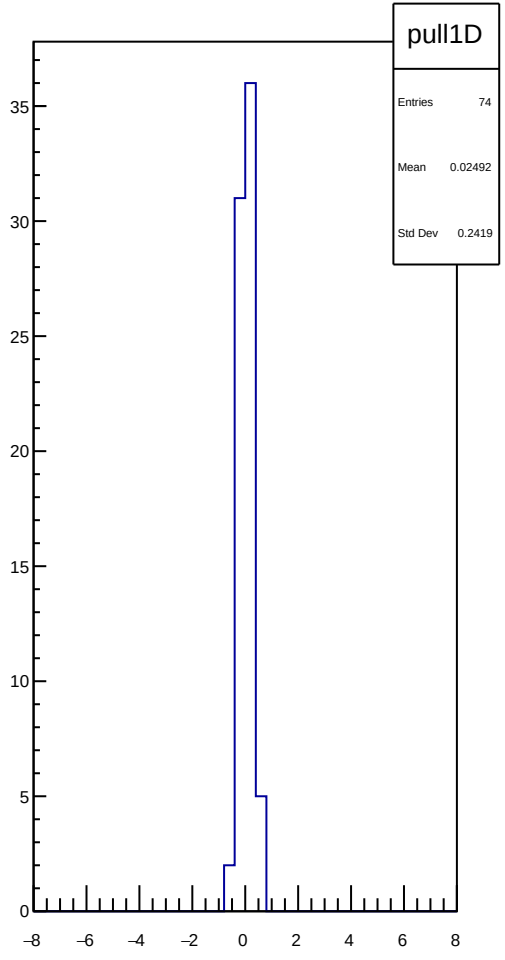

pull1D
Entries 74
Mean −0.04019
Std Dev 0.3749
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

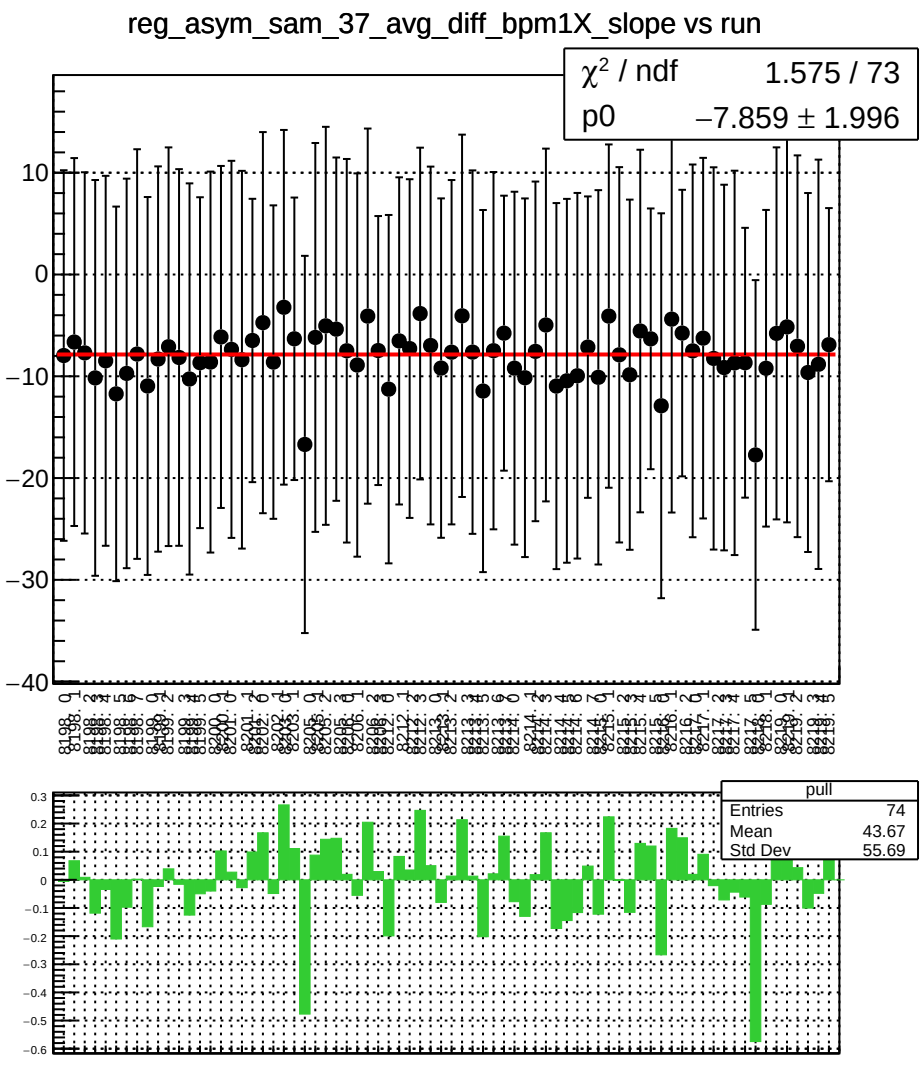

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.322 / 73
p0 −6.506 ± 0.8734
pull
Entries 74
Mean −95.24
Std Dev 124.4
pull1D
Entries 74
Mean −0.008306
Std Dev 0.1334

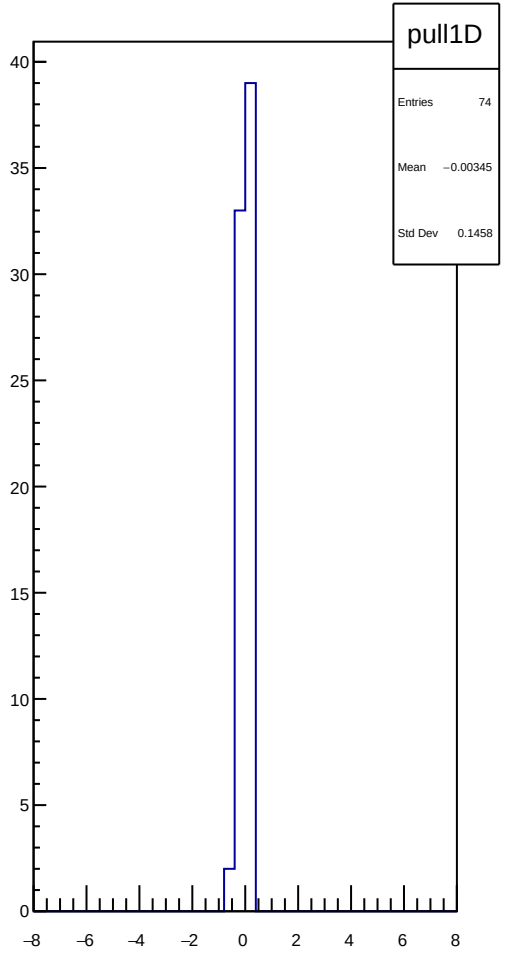

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 8.864 / 73
p0 −10.45 ± 1.558
pull
Entries 74
Mean −99.59
Std Dev 131.7

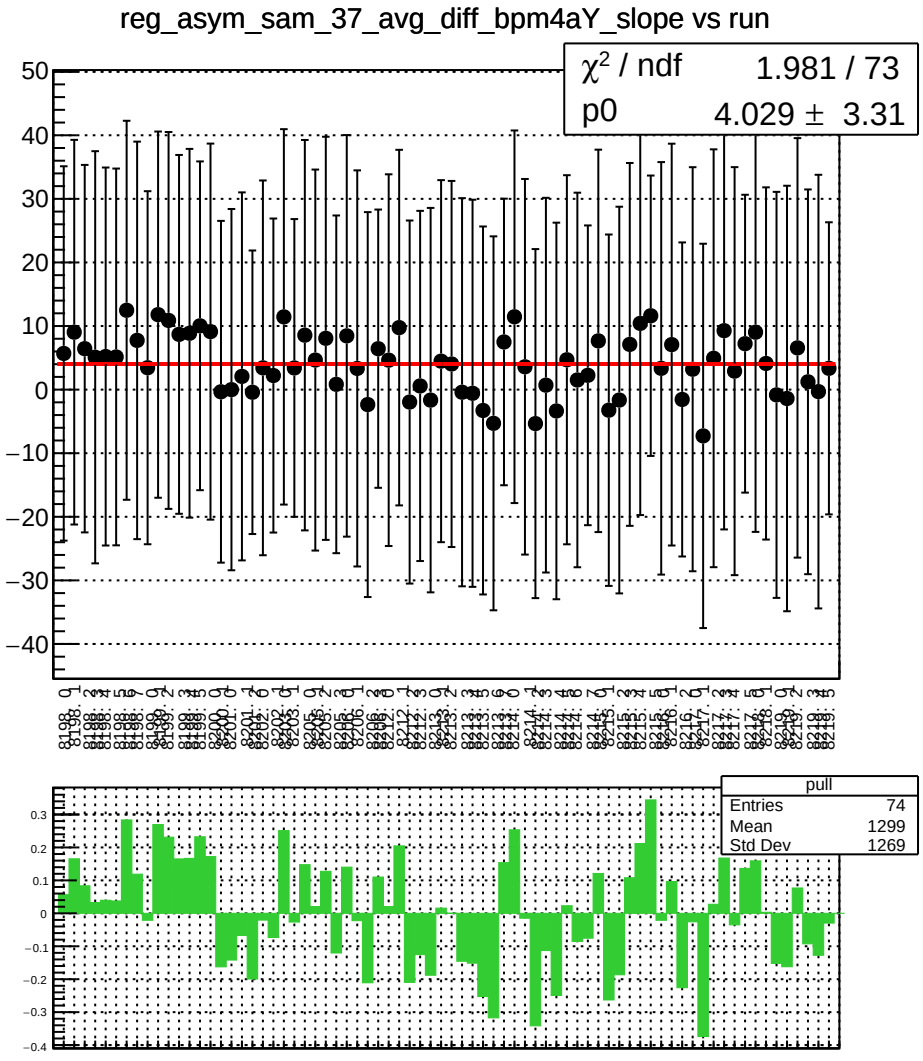

pull1D
Entries 74
Mean 0.03489
Std Dev 0.3443

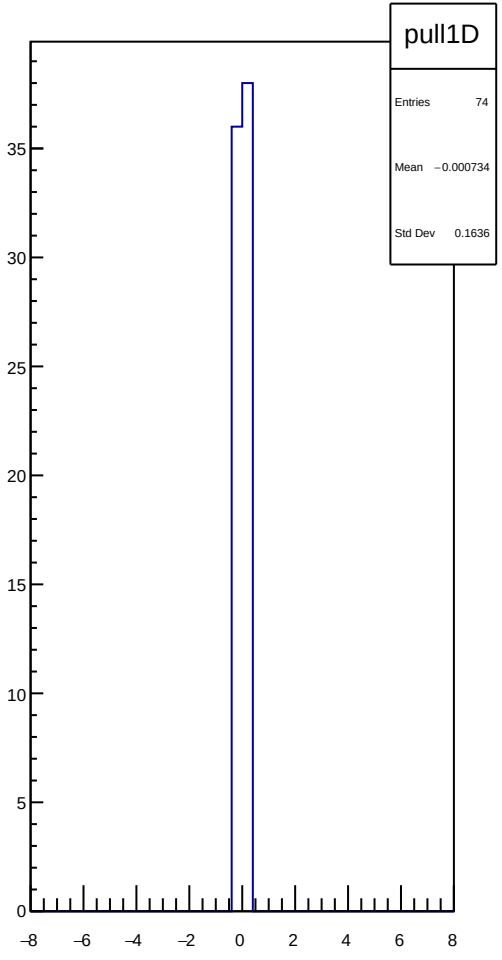

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 4.375 / 73
p0 1.081 ± 0.07055
pull
Entries 74
Mean −88.79
Std Dev 121.7

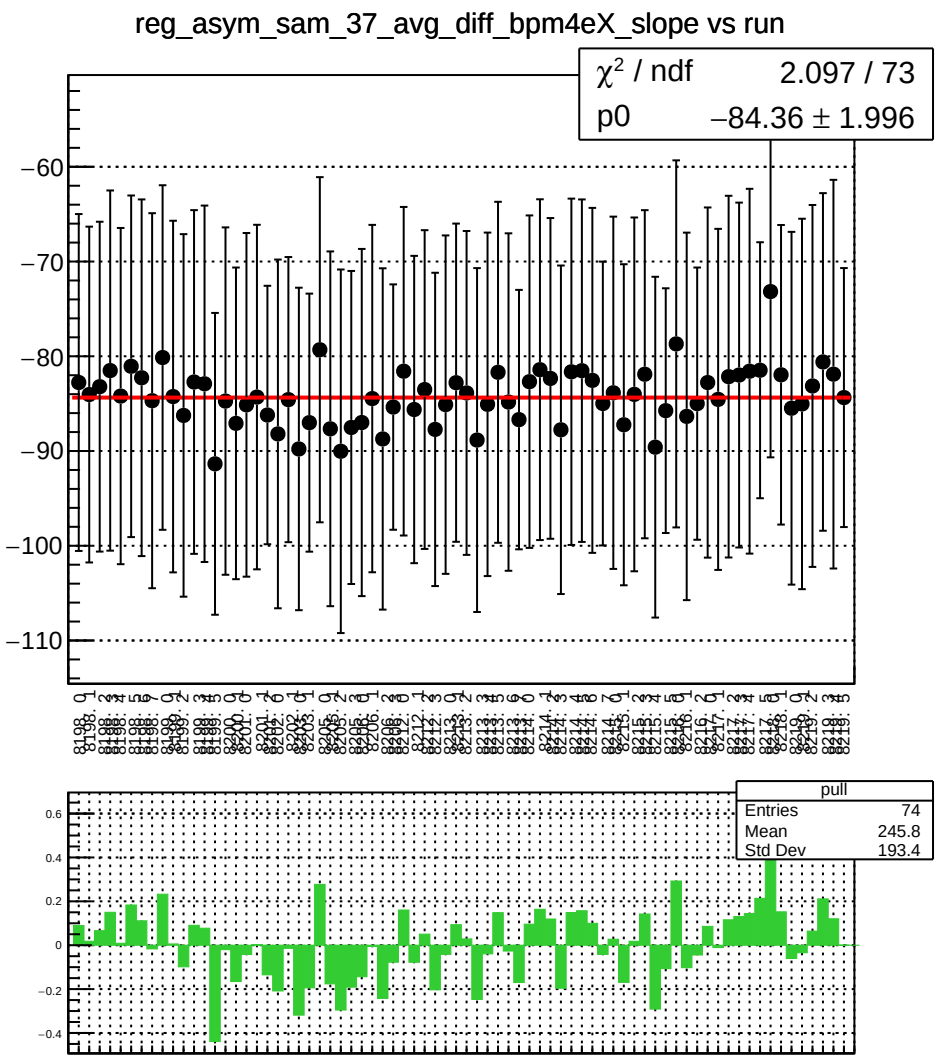

pull1D
Entries 74
Mean 0.02492
Std Dev 0.2419

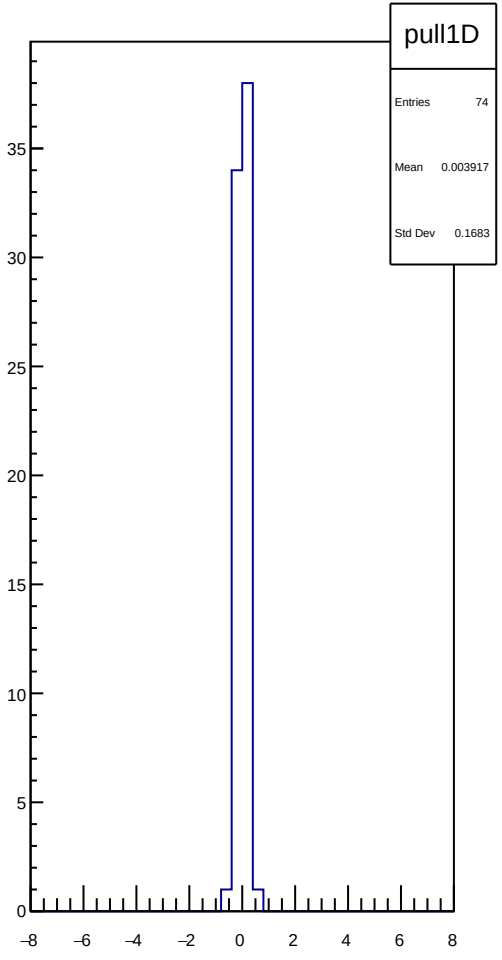

reg_asym_sam_37_avg_diff_bpm1X_slope vs run
χ² / ndf 1.575 / 73
p0 −7.859 ± 1.996
pull
Entries 74
Mean 43.67
Std Dev 55.69

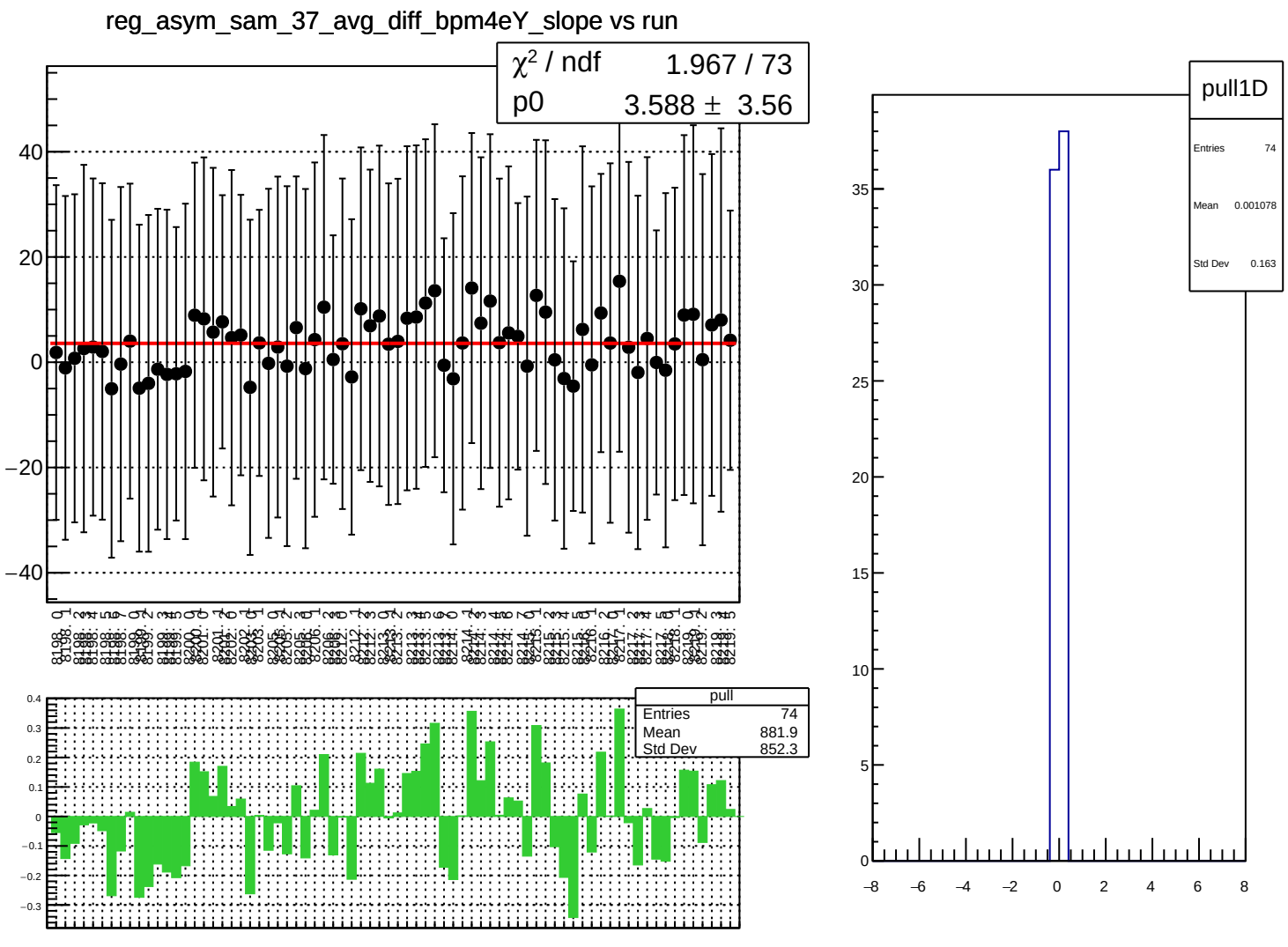

pull1D
Entries 74
Mean −0.00345
Std Dev 0.1458

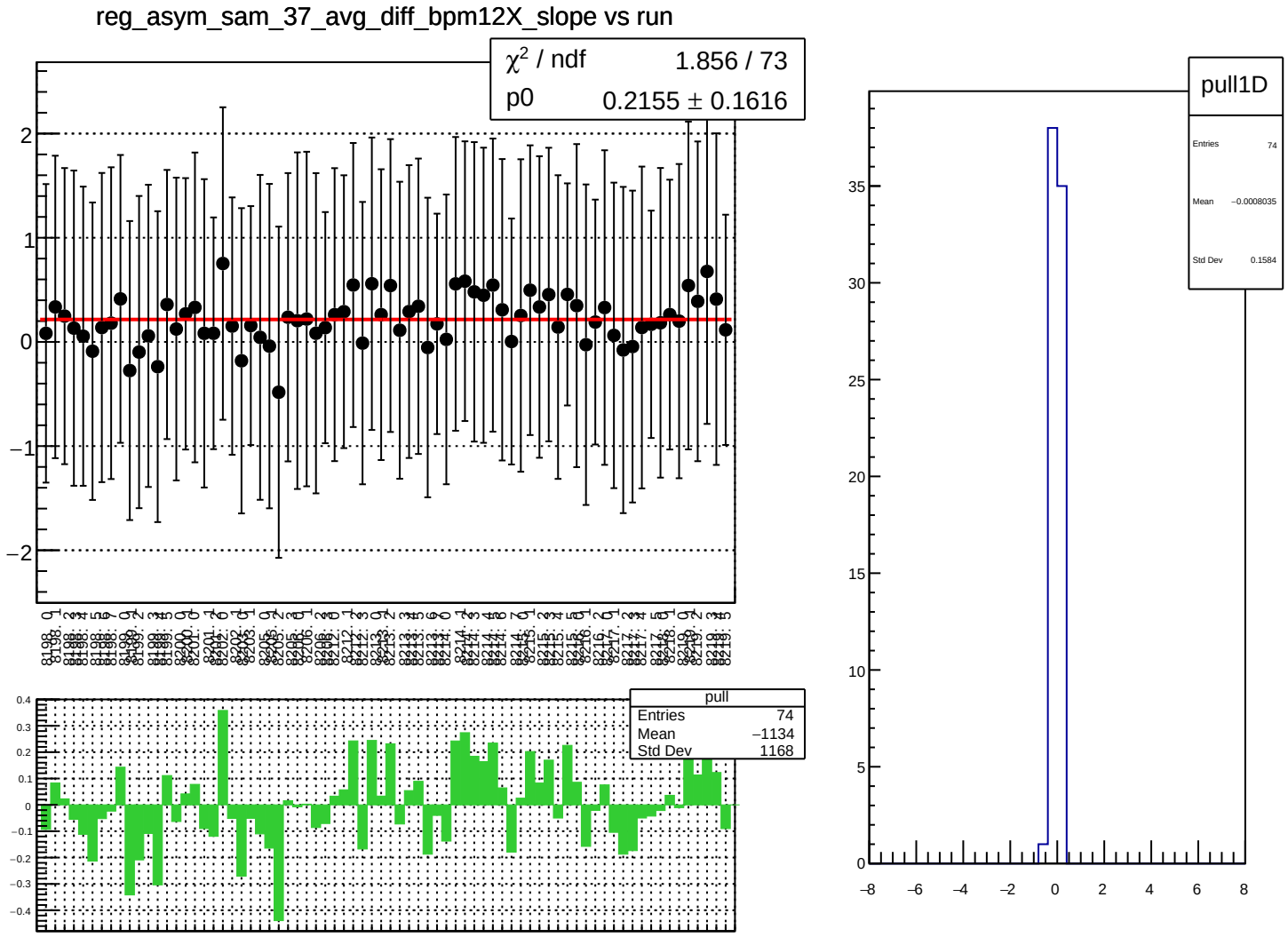

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.981 / 73
p0 4.029 ± 3.31
pull
Entries 74
Mean 1299
Std Dev 1269

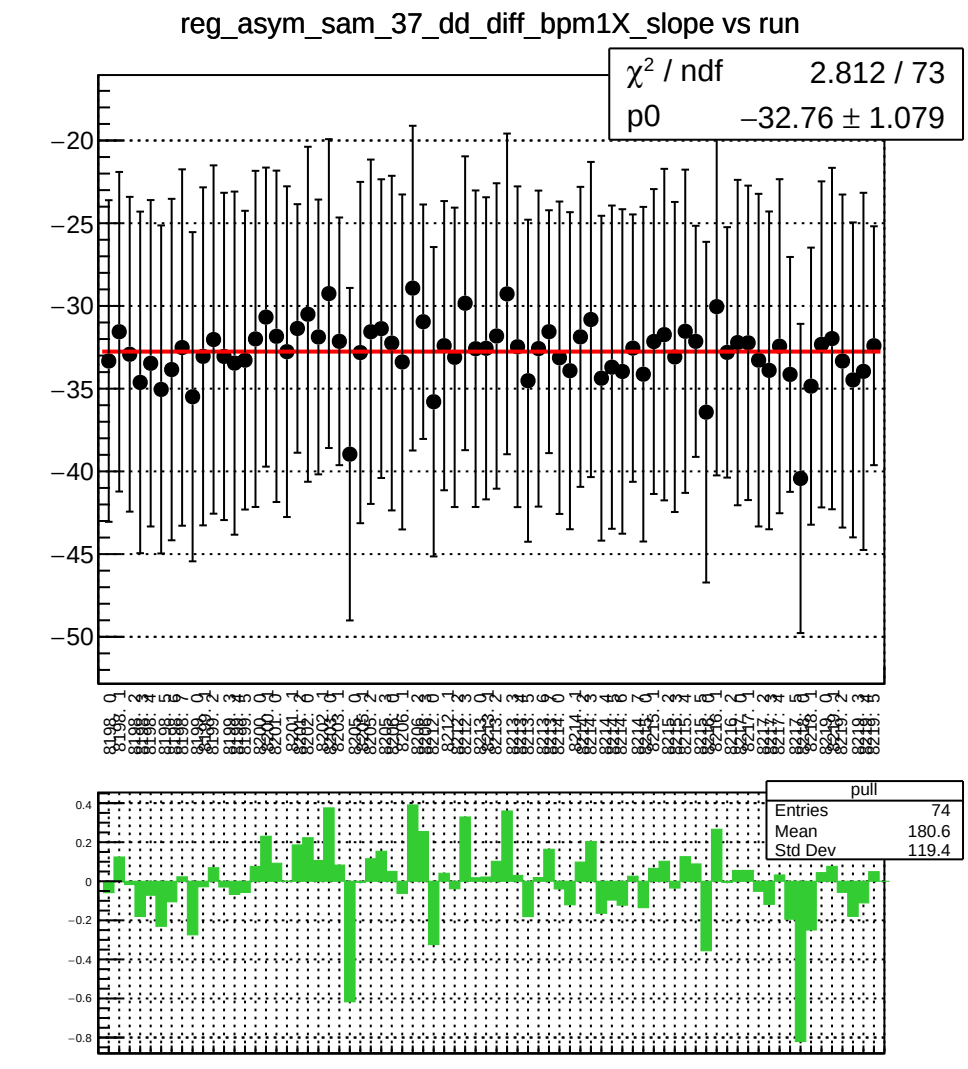

pull1D
Entries 74
Mean −0.000734
Std Dev 0.1636

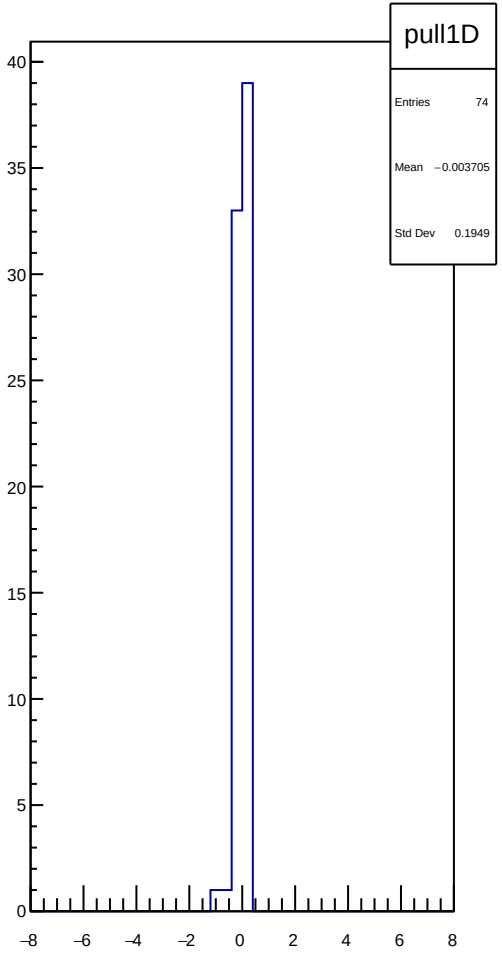

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.097 / 73
p0 −84.36 ± 1.996
pull
Entries 74
Mean 245.8
Std Dev 193.4

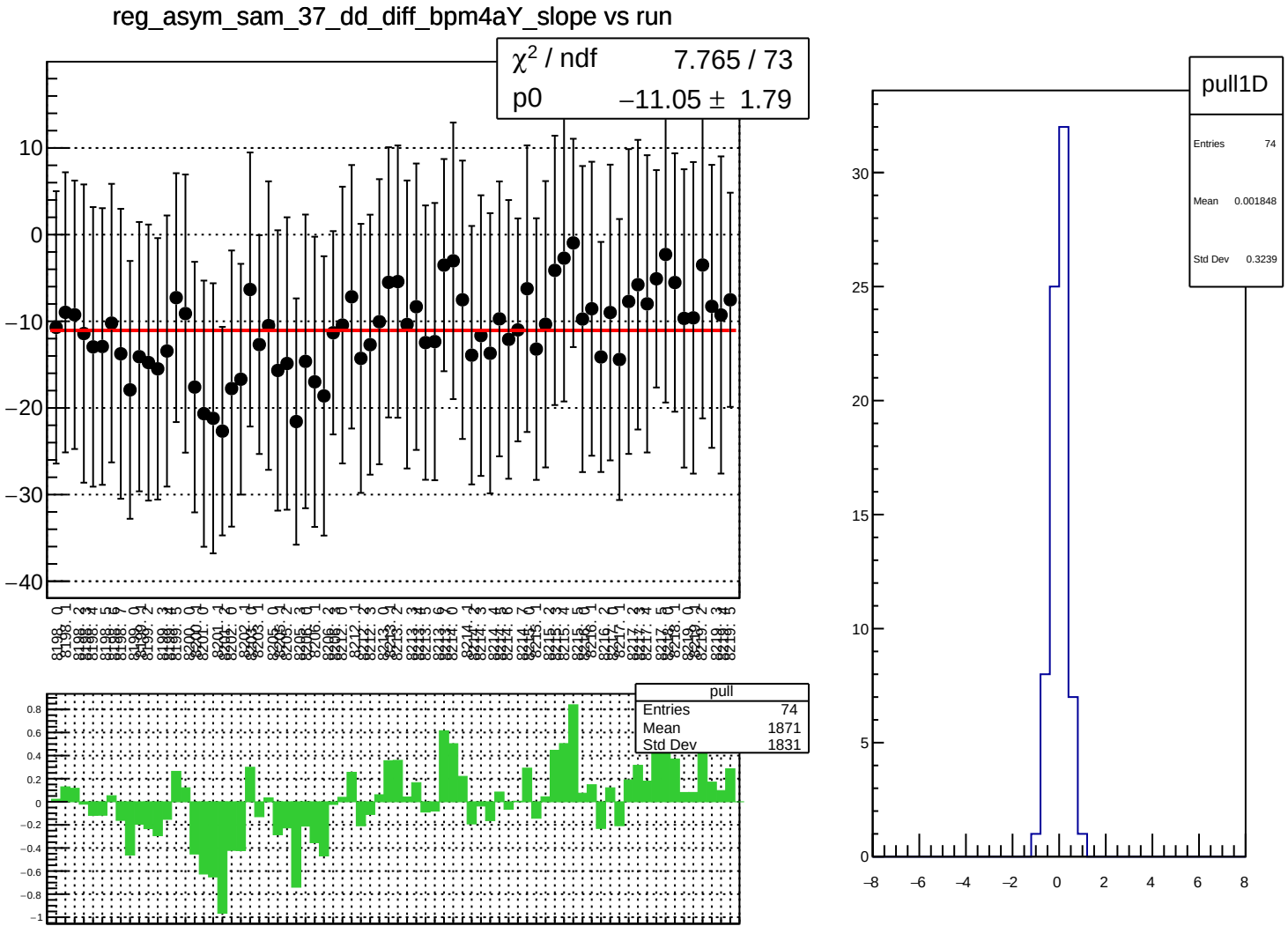

pull1D
Entries 74
Mean 0.003917
Std Dev 0.1683

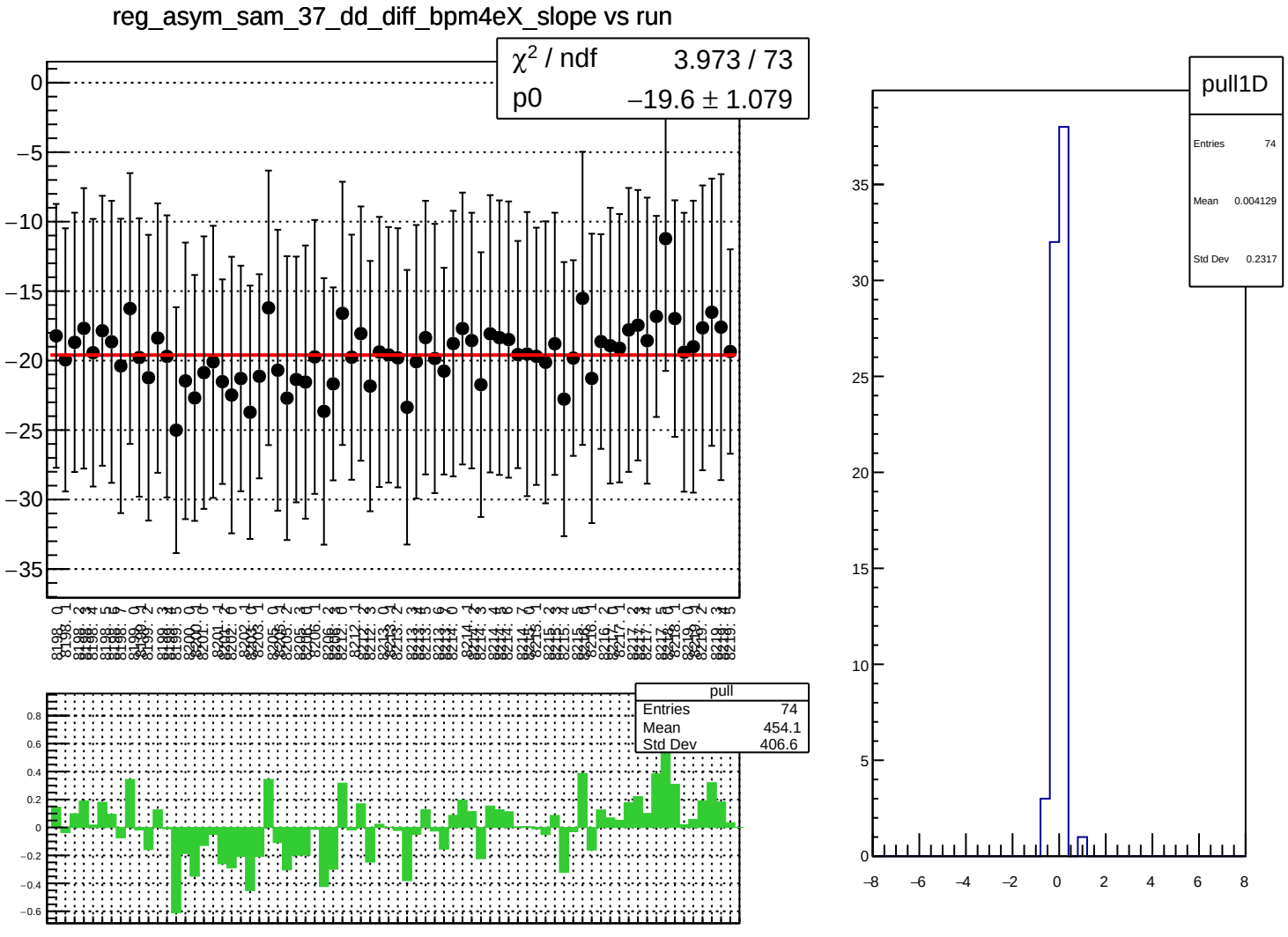

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.967 / 73
p0 3.588 ± 3.56
pull
Entries 74
Mean 881.9
Std Dev 852.3
pull1D
Entries 74
Mean 0.001078
Std Dev 0.163

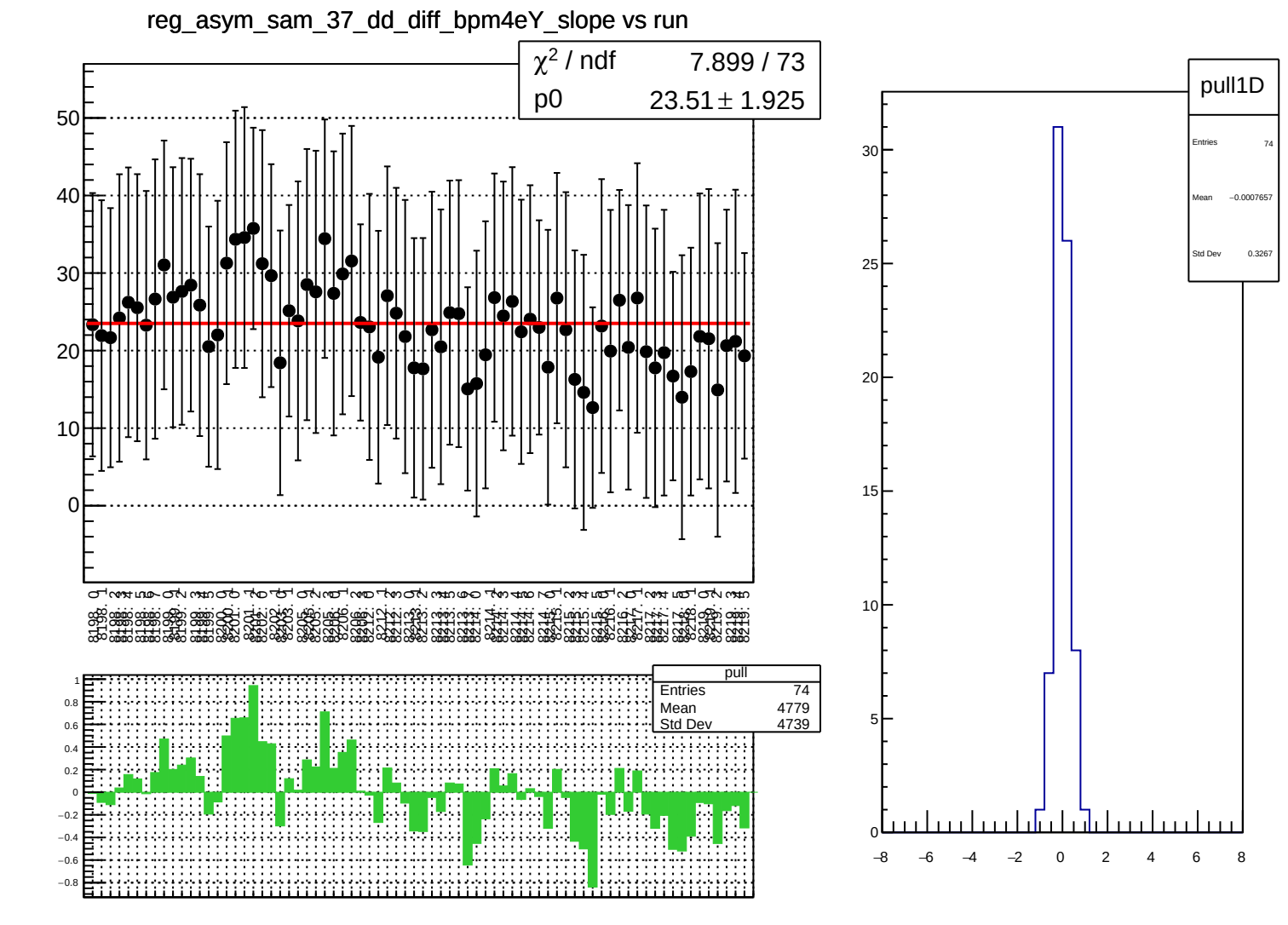

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 1.856 / 73
p0 0.2155 ± 0.1616
pull
Entries 74
Mean −1134
Std Dev 1168
pull1D
Entries 74
Mean −0.0008035
Std Dev 0.1584

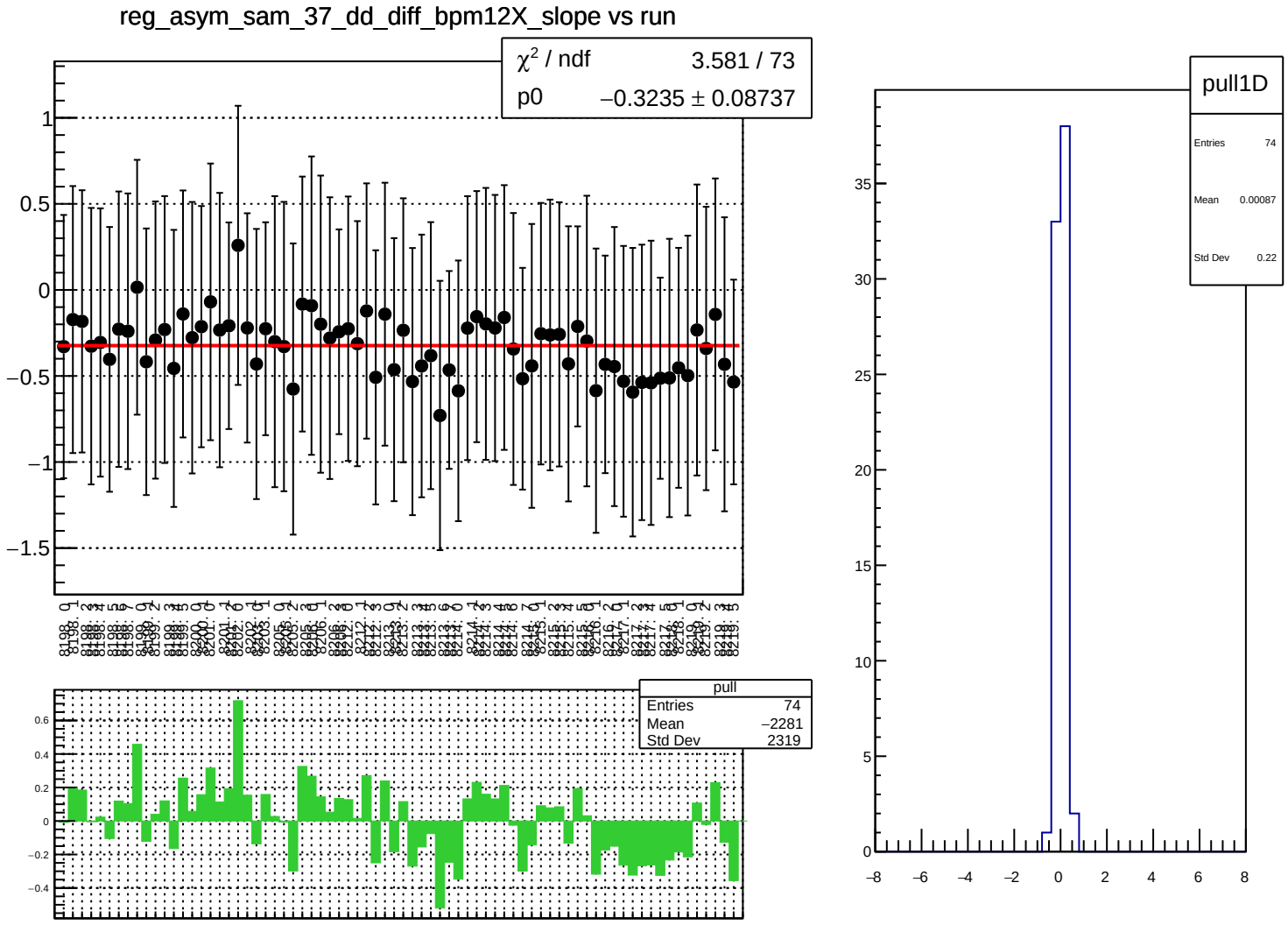

reg_asym_sam_37_dd_diff_bpm1X_slope vs run
χ² / ndf 2.812 / 73
p0 −32.76 ± 1.079
pull
Entries 74
Mean 180.6
Std Dev 119.4

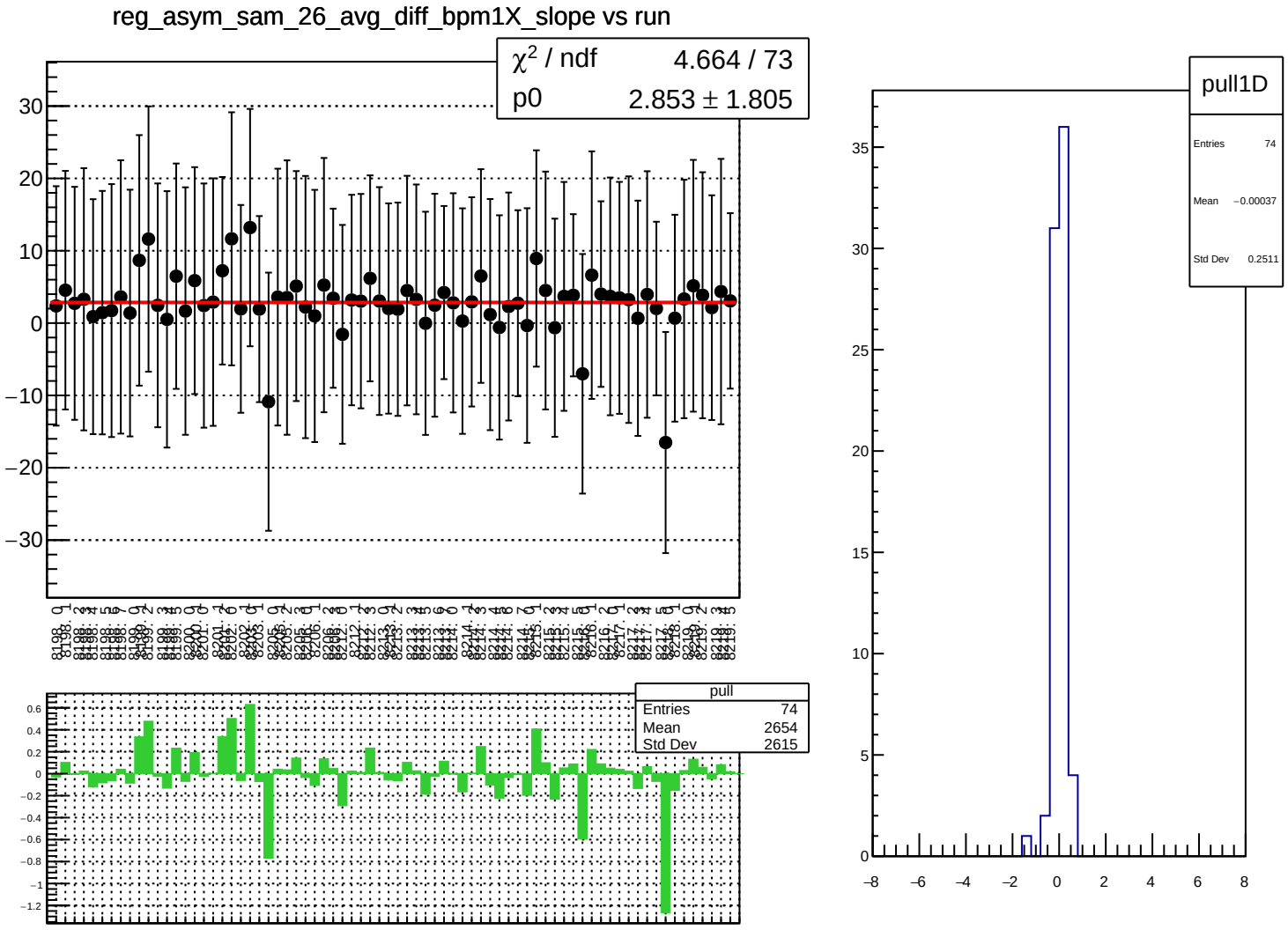

pull1D
Entries 74
Mean −0.003705
Std Dev 0.1949

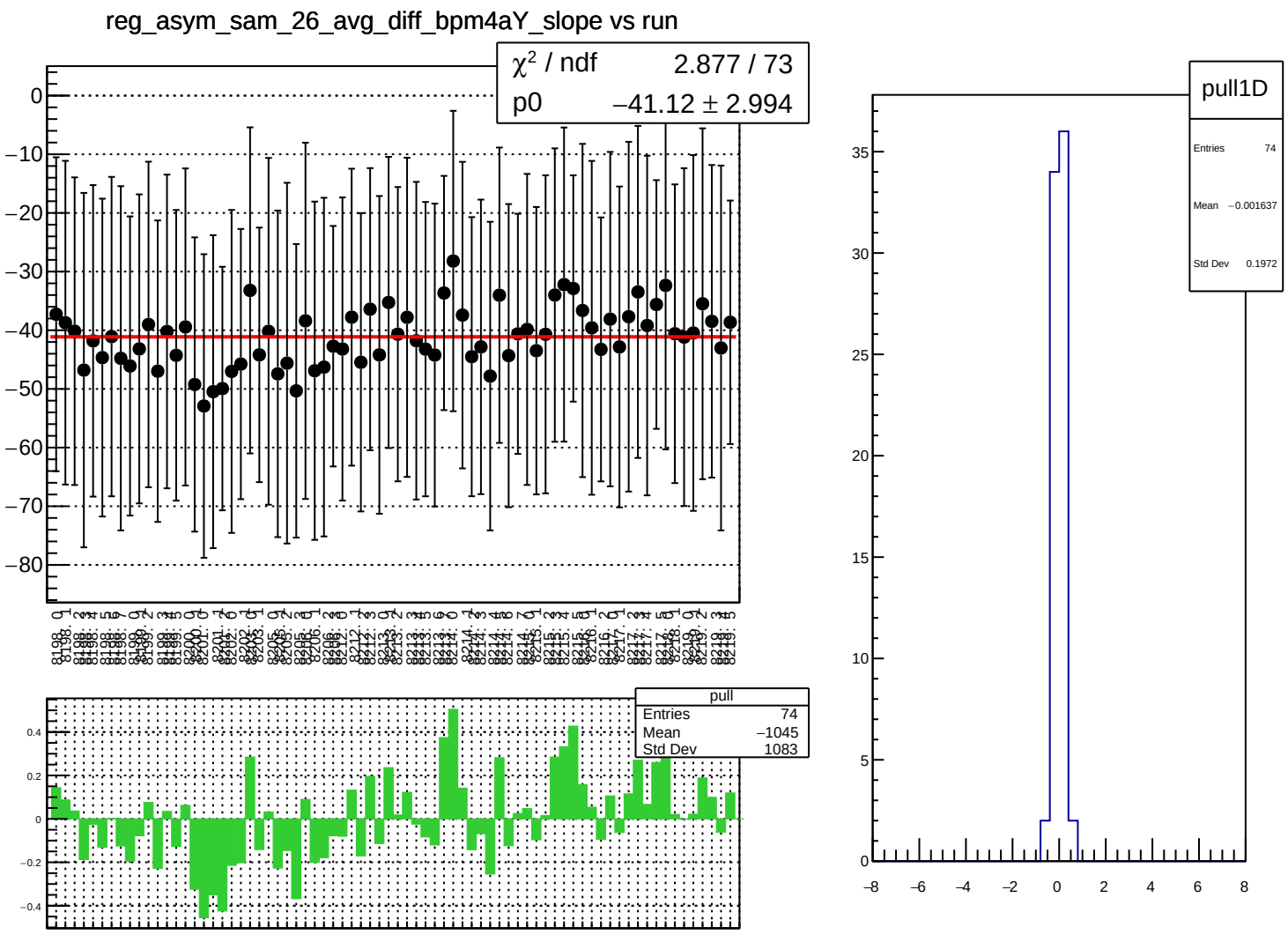

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 7.765 / 73
p0 −11.05 ± 1.79
pull
Entries 74
Mean 1871
Std Dev 1831
pull1D
Entries 74
Mean 0.001848
Std Dev 0.3239

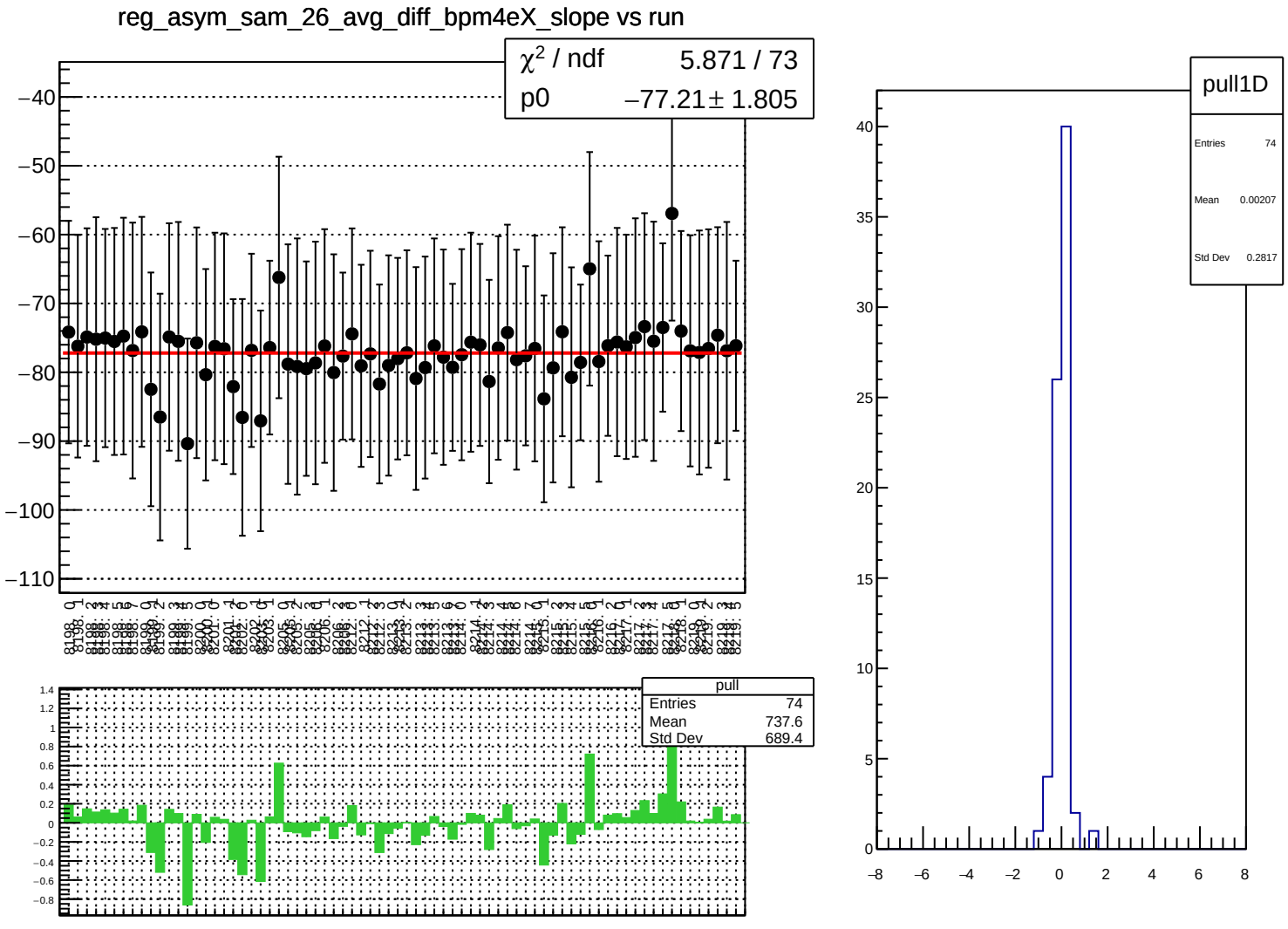

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.973 / 73
p0 −19.6 ± 1.079
pull
Entries 74
Mean 454.1
Std Dev 406.6
pull1D
Entries 74
Mean 0.004129
Std Dev 0.2317

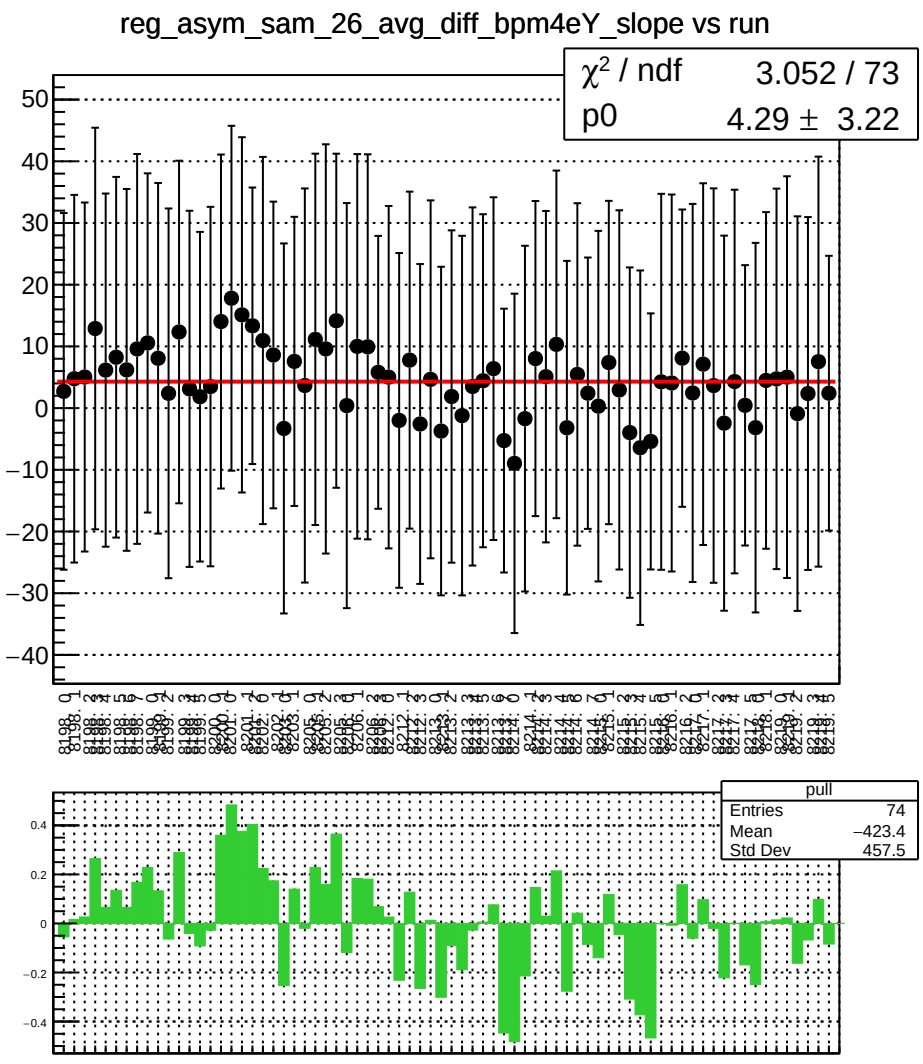

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 7.899 / 73
p0 23.51 ± 1.925
pull
Entries 74
Mean 4779
Std Dev 4739
pull1D
Entries 74
Mean −0.0007657
Std Dev 0.3267

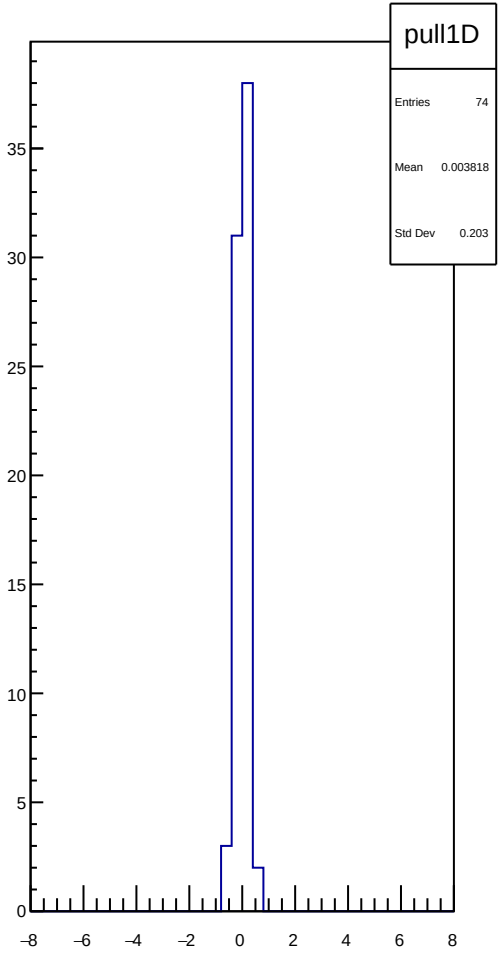

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 3.581 / 73
p0 −0.3235 ± 0.08737
pull
Entries 74
Mean −2281
Std Dev 2319
pull1D
Entries 74
Mean 0.00087
Std Dev 0.22

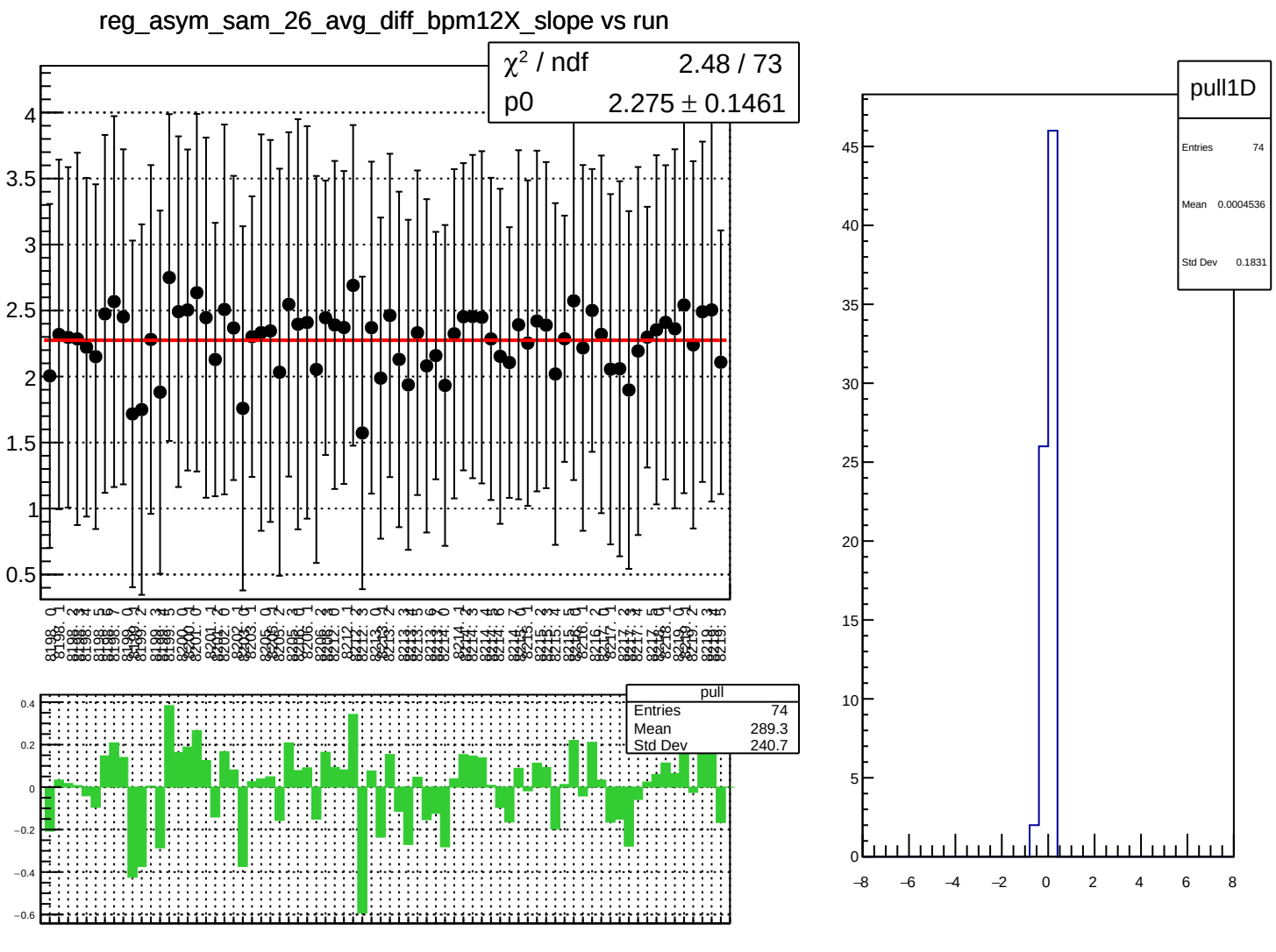

reg_asym_sam_26_avg_diff_bpm1X_slope vs run
χ² / ndf 4.664 / 73
p0 2.853 ± 1.805
pull
Entries 74
Mean 2654
Std Dev 2615
pull1D
Entries 74
Mean −0.00037
Std Dev 0.2511

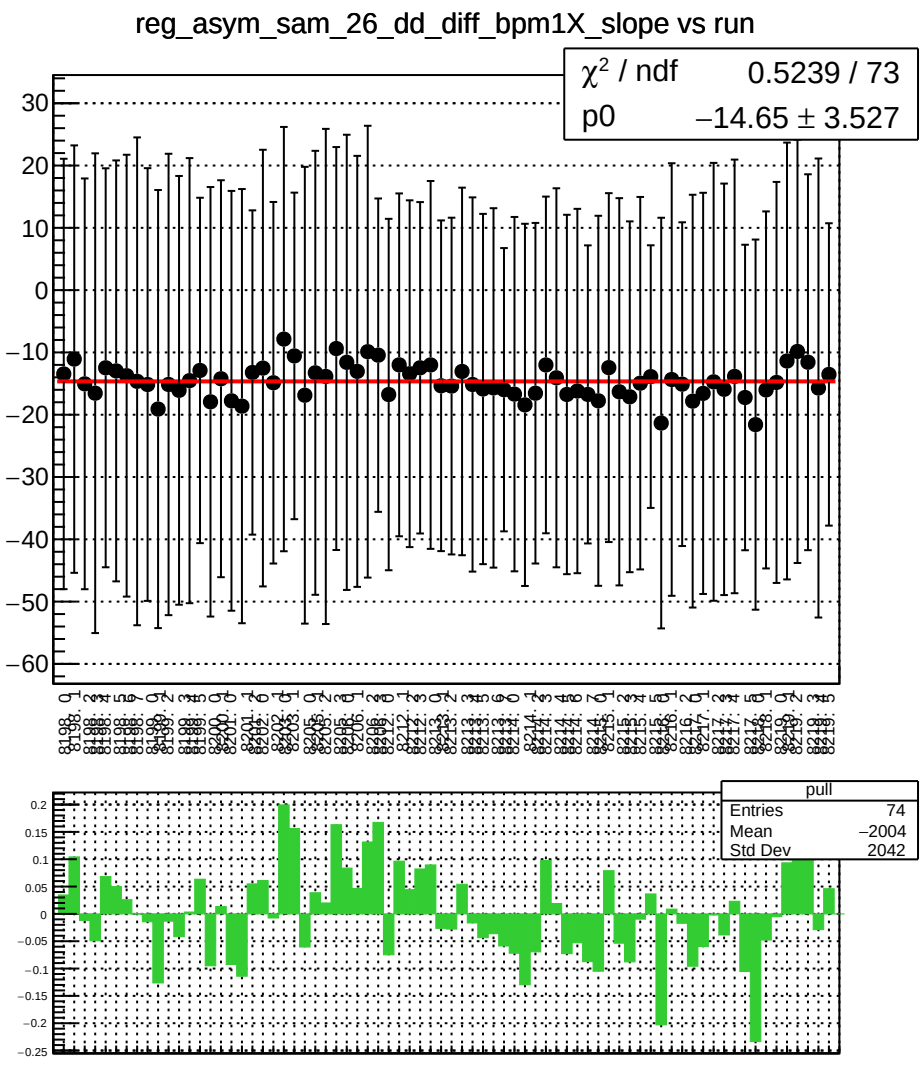

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.877 / 73
p0 −41.12 ± 2.994
pull
Entries 74
Mean −1045
Std Dev 1083
pull1D
Entries 74
Mean −0.001637
Std Dev 0.1972

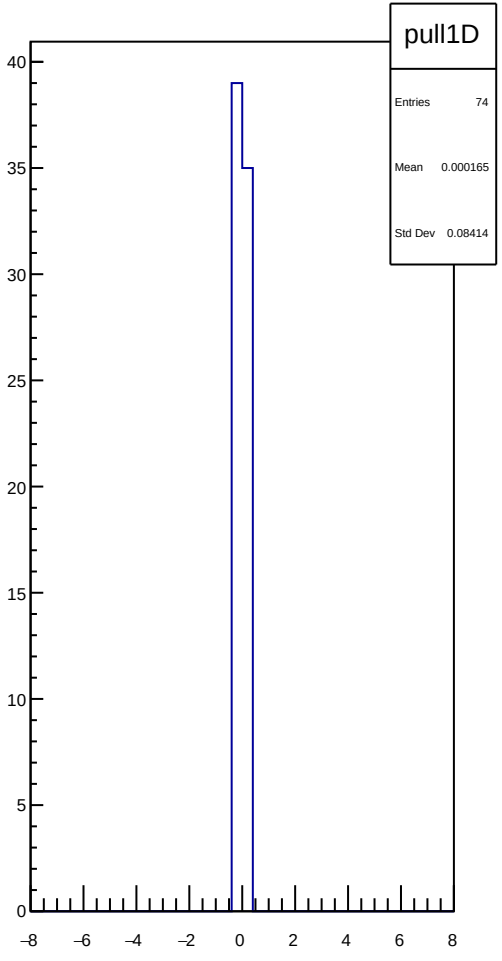

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 5.871 / 73
p0 −77.21± 1.805
pull
Entries 74
Mean 737.6
Std Dev 689.4
pull1D
Entries 74
Mean 0.00207
Std Dev 0.2817

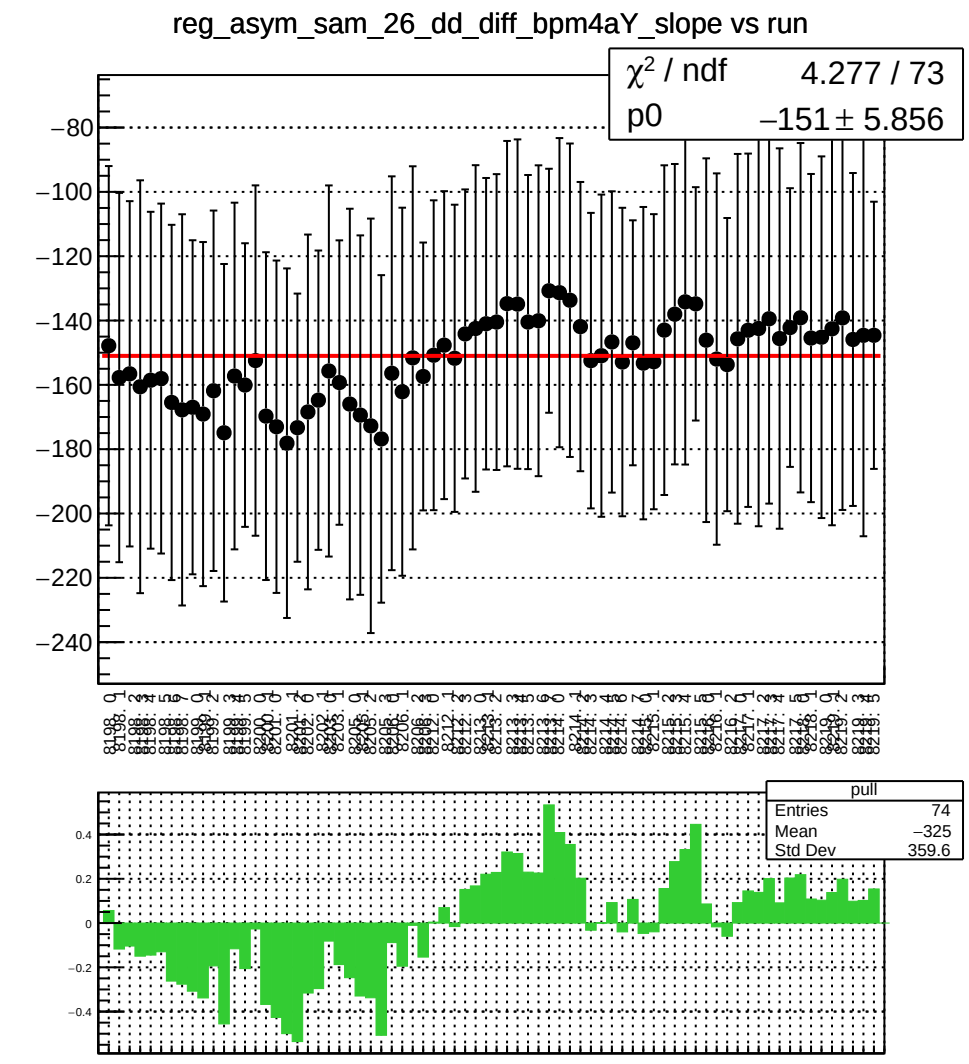

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.052 / 73
p0 4.29 ± 3.22
pull
Entries 74
Mean −423.4
Std Dev 457.5

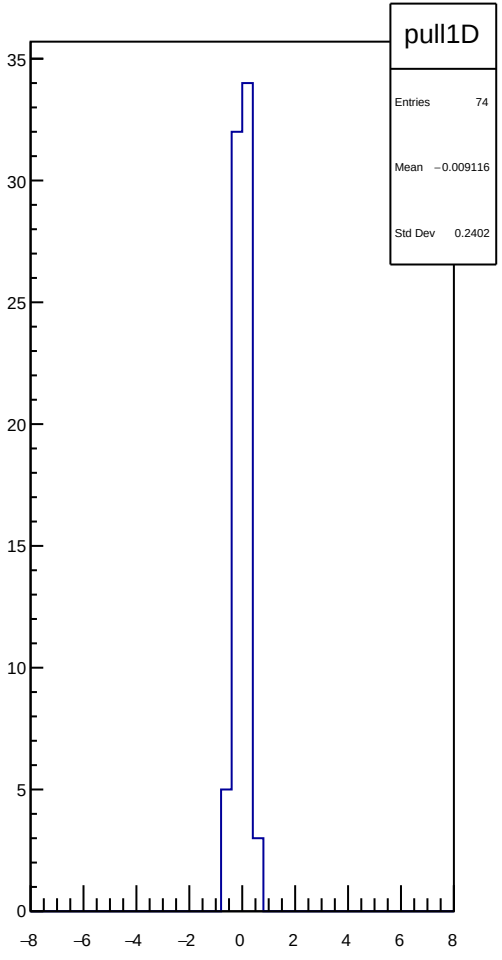

pull1D
Entries 74
Mean 0.003818
Std Dev 0.203

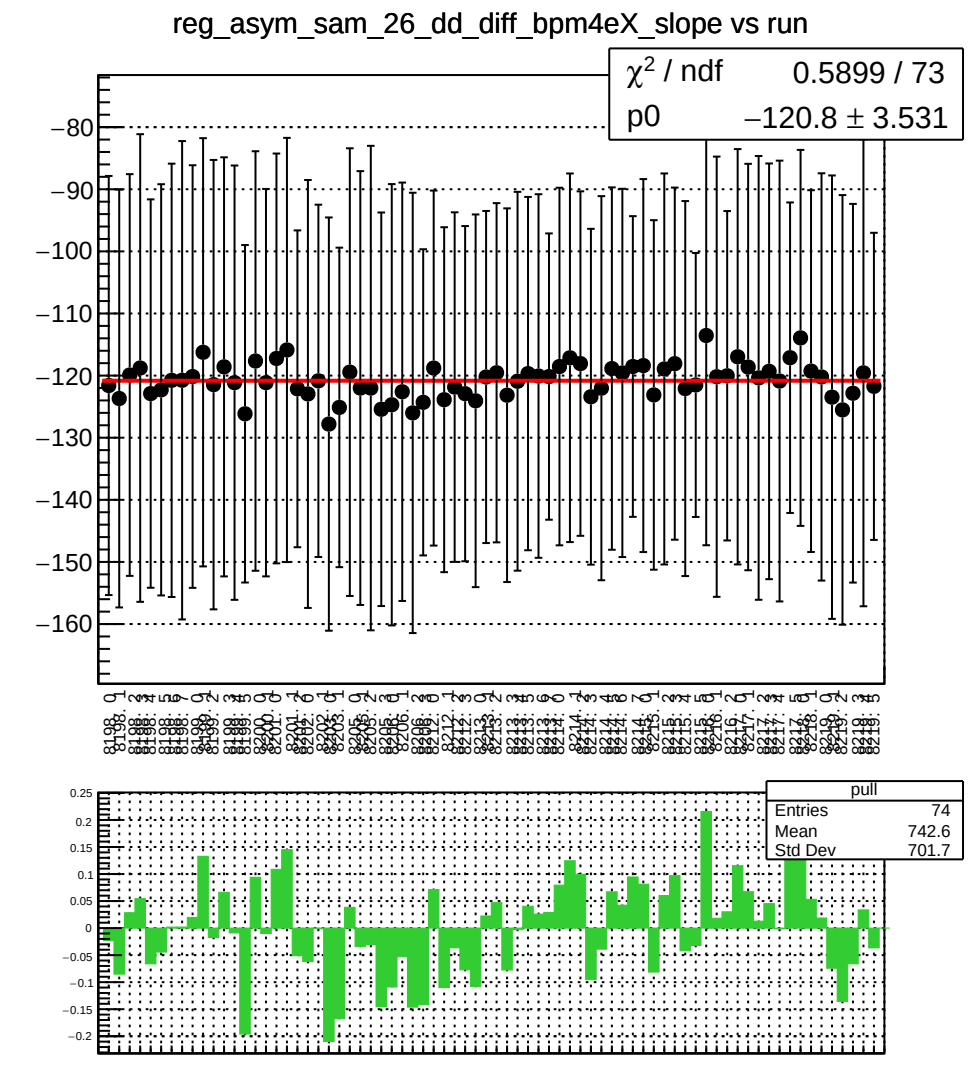

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 2.48 / 73
p0 2.275 ± 0.1461
pull
Entries 74
Mean 289.3
Std Dev 240.7
pull1D
Entries 74
Mean 0.0004536
Std Dev 0.1831

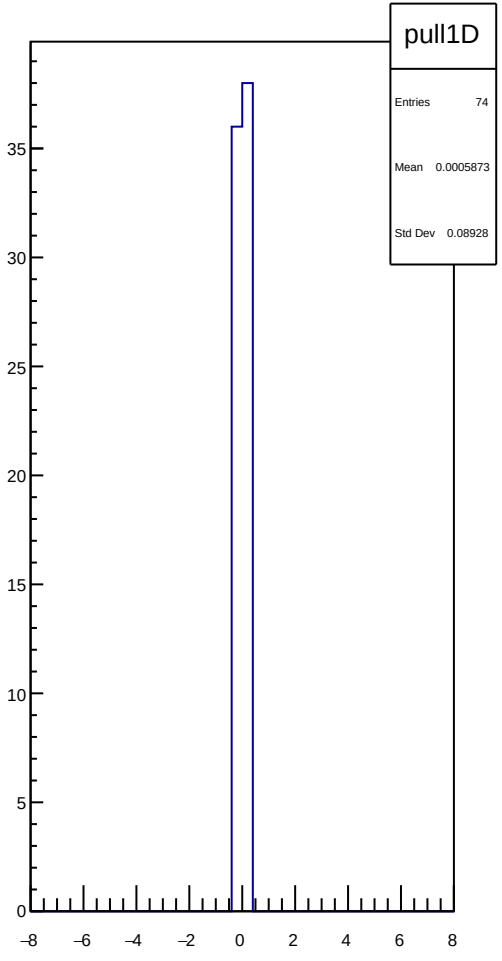

reg_asym_sam_26_dd_diff_bpm1X_slope vs run
χ² / ndf 0.5239 / 73
p0 −14.65 ± 3.527
pull
Entries 74
Mean −2004
Std Dev 2042

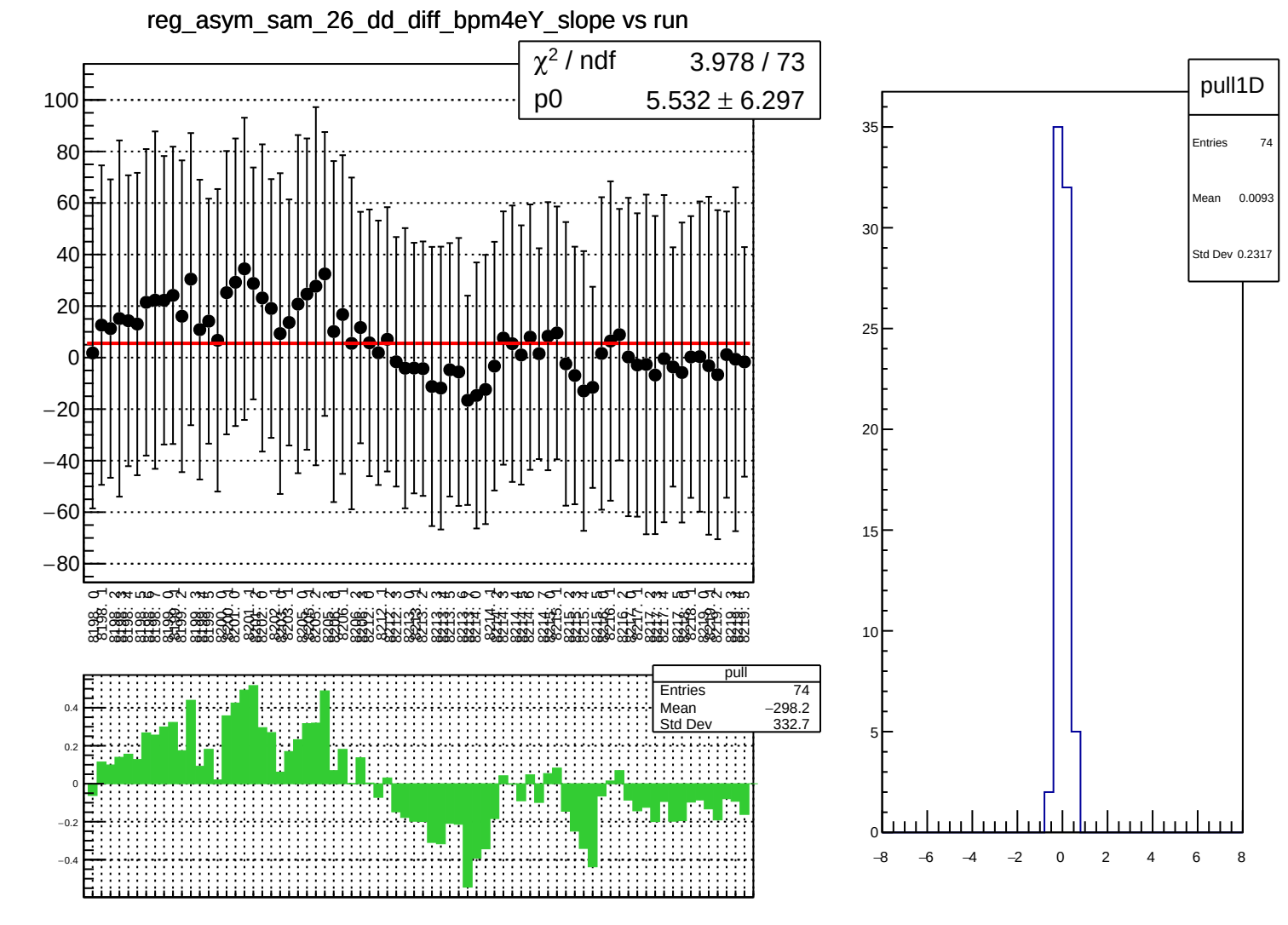

pull1D
Entries 74
Mean 0.000165
Std Dev 0.08414

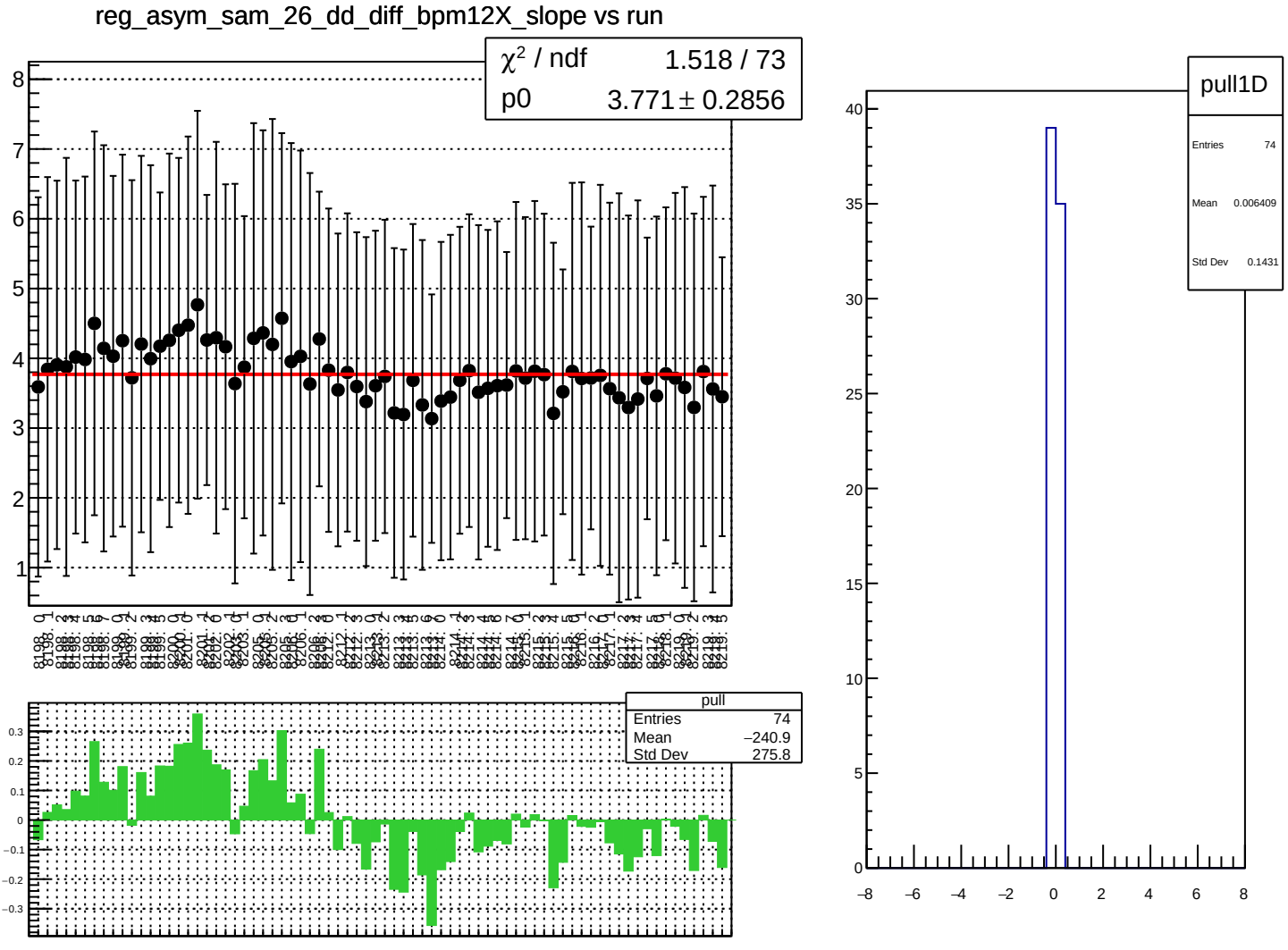

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.277 / 73
p0 −151 ± 5.856
pull
Entries 74
Mean −325
Std Dev 359.6

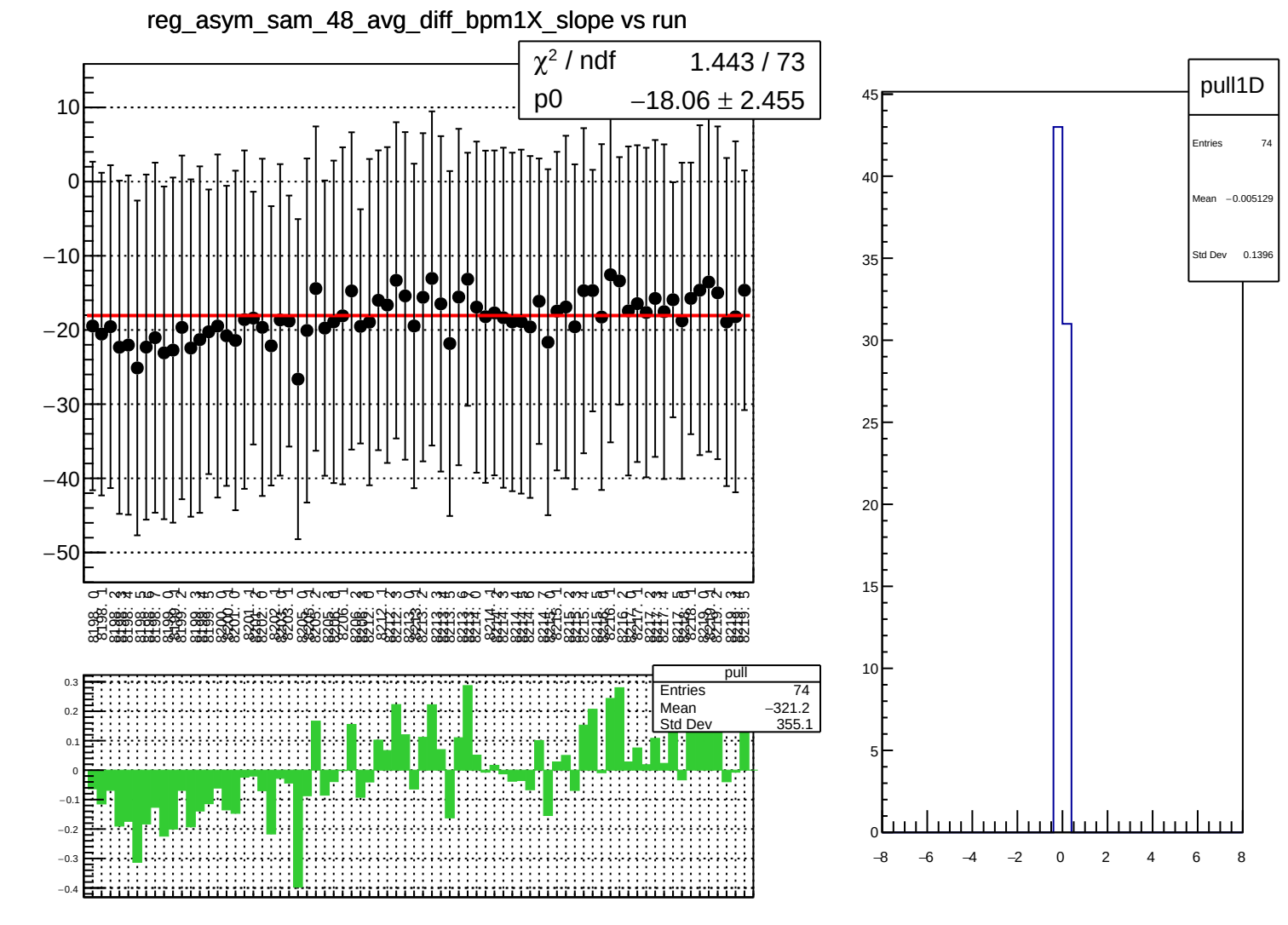

pull1D
Entries 74
Mean −0.009116
Std Dev 0.2402

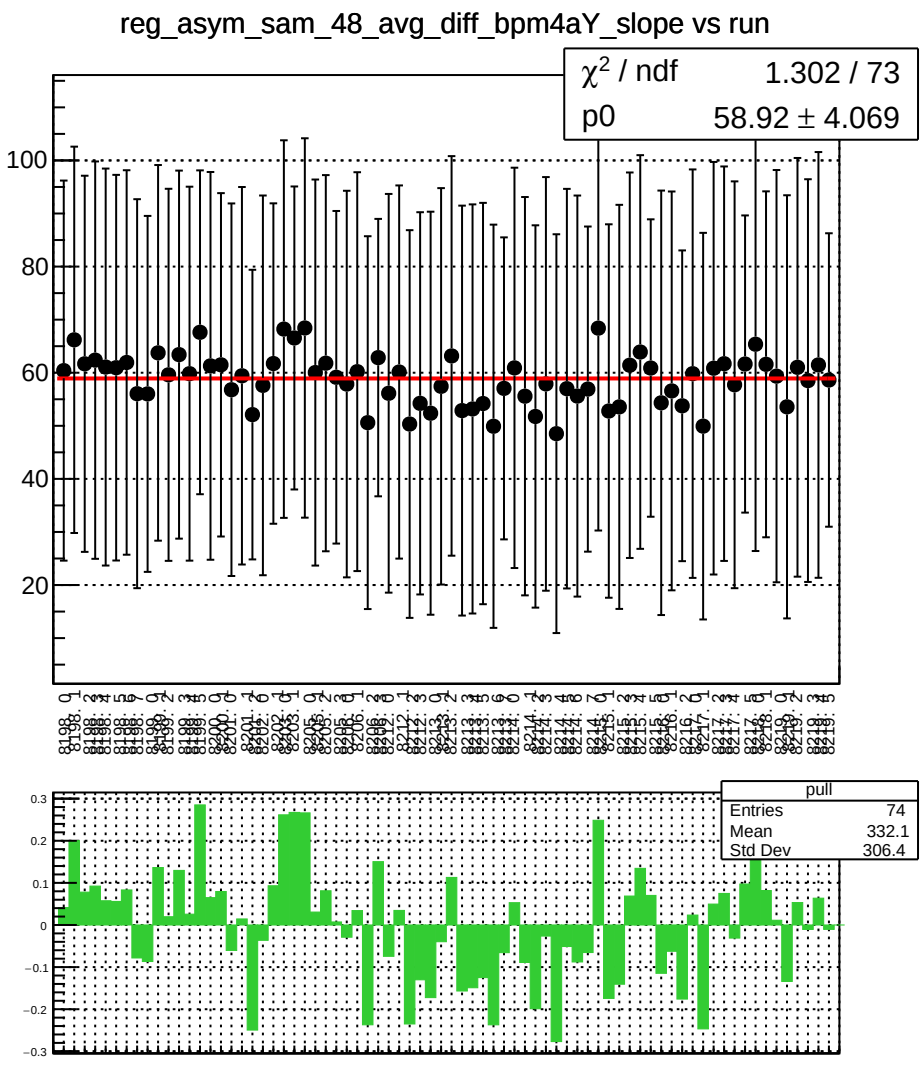

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.5899 / 73
p0 −120.8 ± 3.531
pull
Entries 74
Mean 742.6
Std Dev 701.7

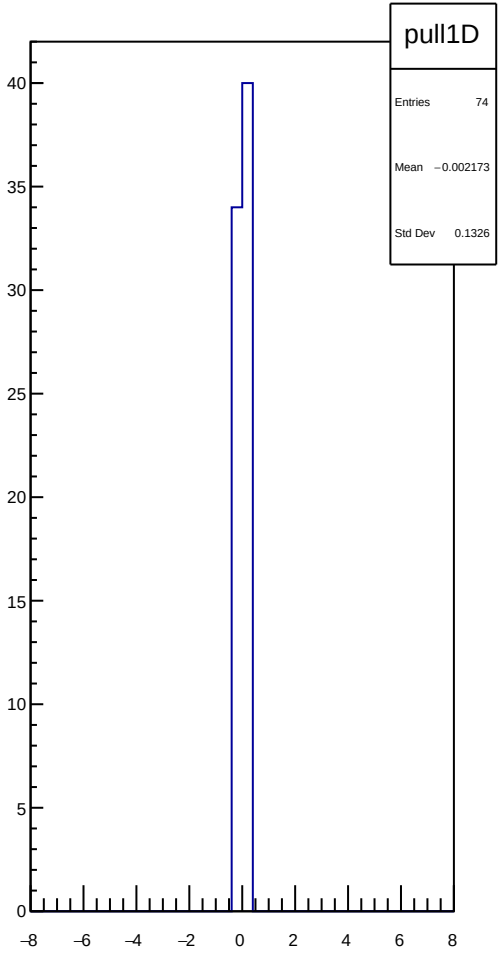

pull1D
Entries 74
Mean 0.0005873
Std Dev 0.08928

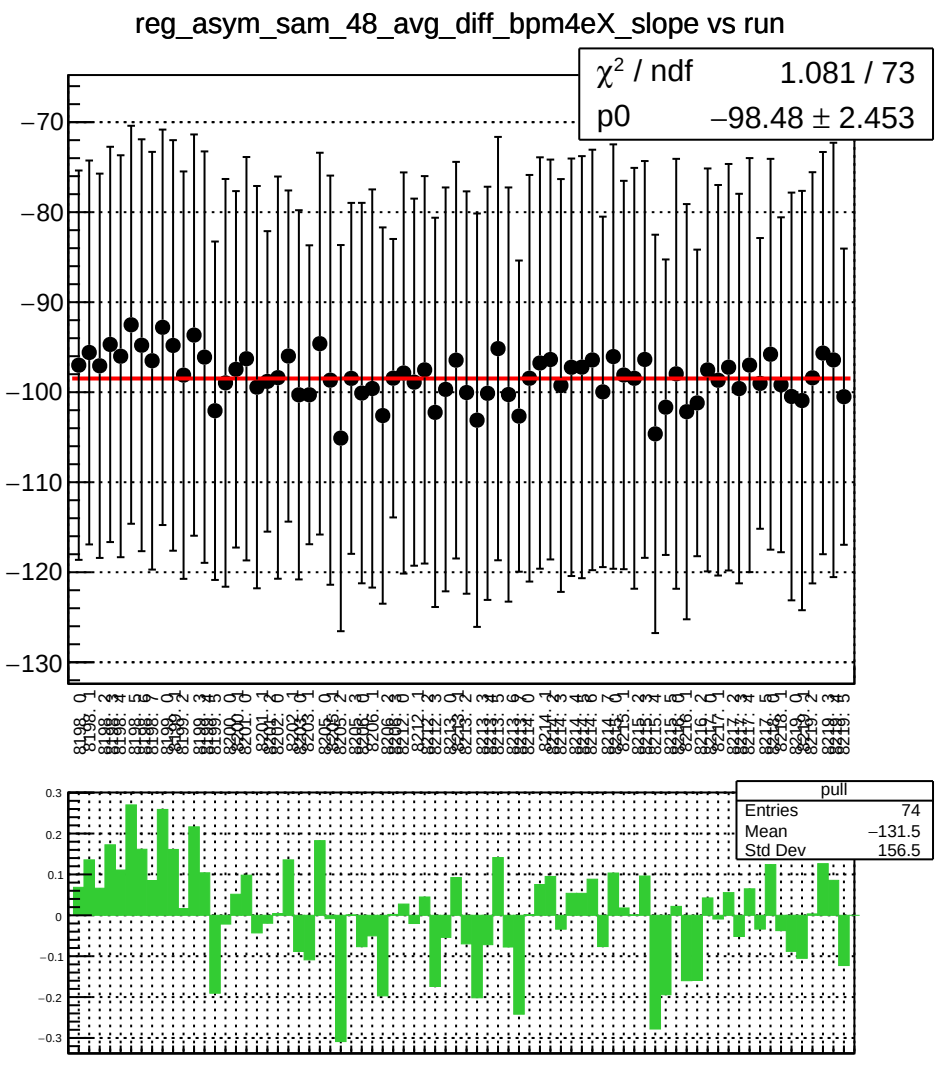

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.978 / 73
p0 5.532 ± 6.297
pull
Entries 74
Mean −298.2
Std Dev 332.7
pull1D
Entries 74
Mean 0.0093
Std Dev 0.2317

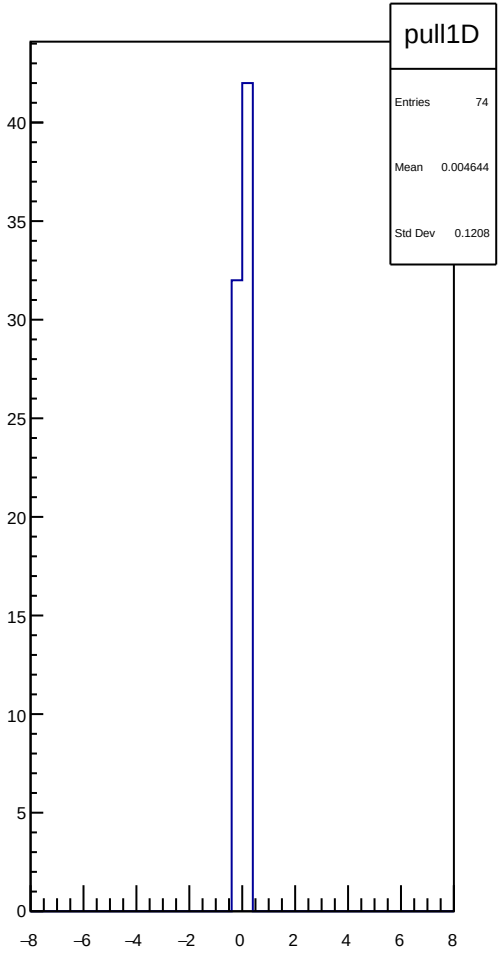

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 1.518 / 73
p0 3.771 ± 0.2856
pull
Entries 74
Mean −240.9
Std Dev 275.8
pull1D
Entries 74
Mean 0.006409
Std Dev 0.1431


reg_asym_sam_48_avg_diff_bpm1X_slope vs run
χ² / ndf 1.443 / 73
p0 −18.06 ± 2.455
pull
Entries 74
Mean −321.2
Std Dev 355.1
pull1D
Entries 74
Mean −0.005129
Std Dev 0.1396

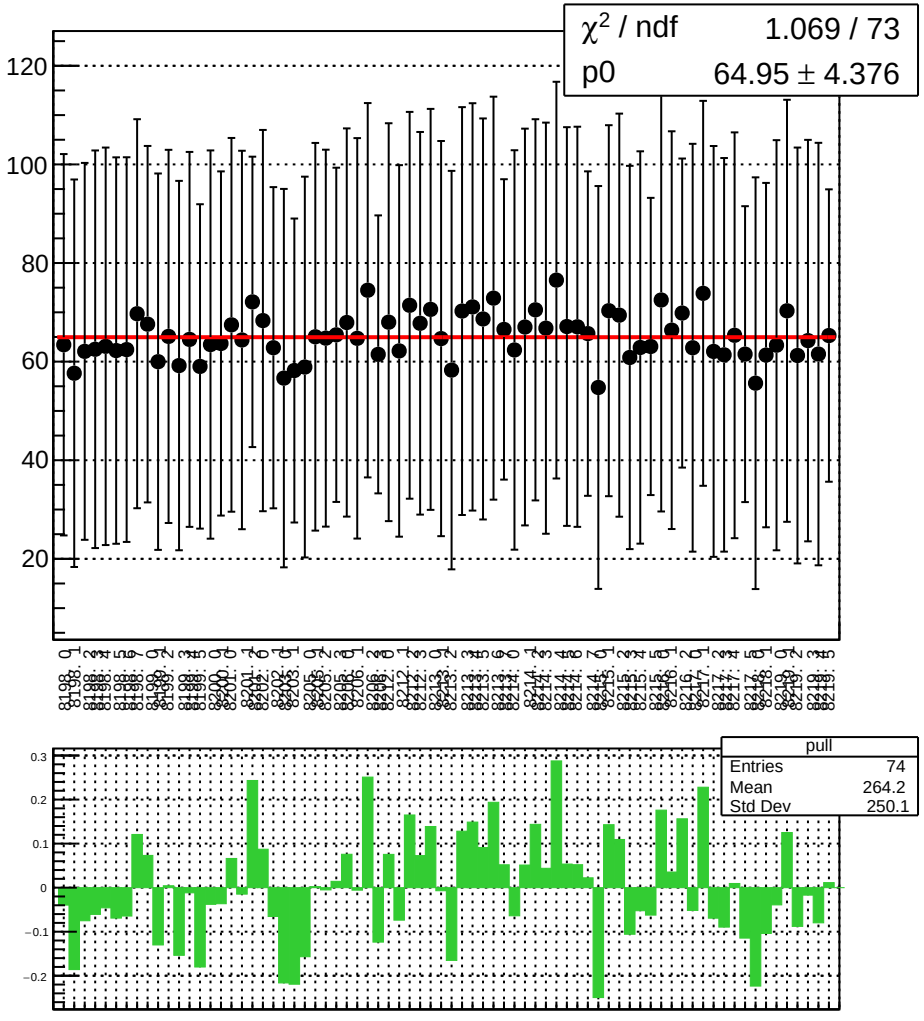

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.302 / 73
p0 58.92 ± 4.069
pull
Entries 74
Mean 332.1
Std Dev 306.4

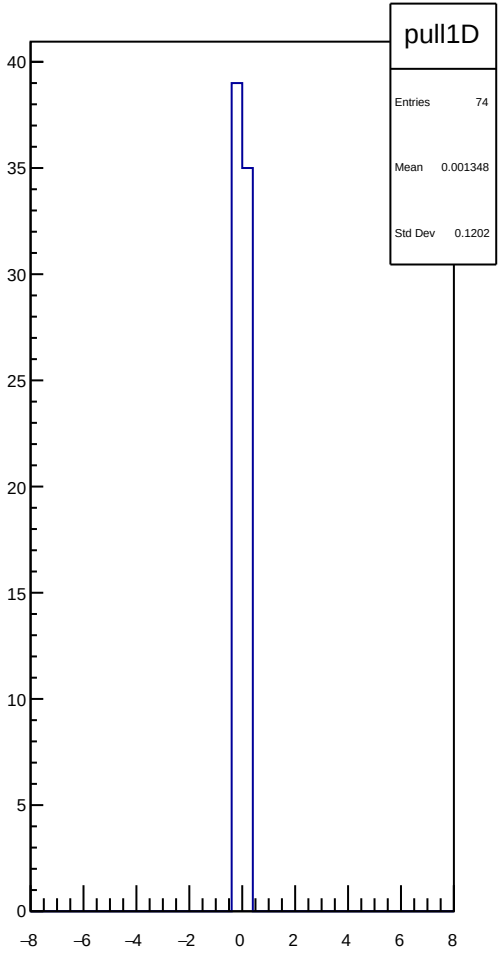

pull1D
Entries 74
Mean −0.002173
Std Dev 0.1326

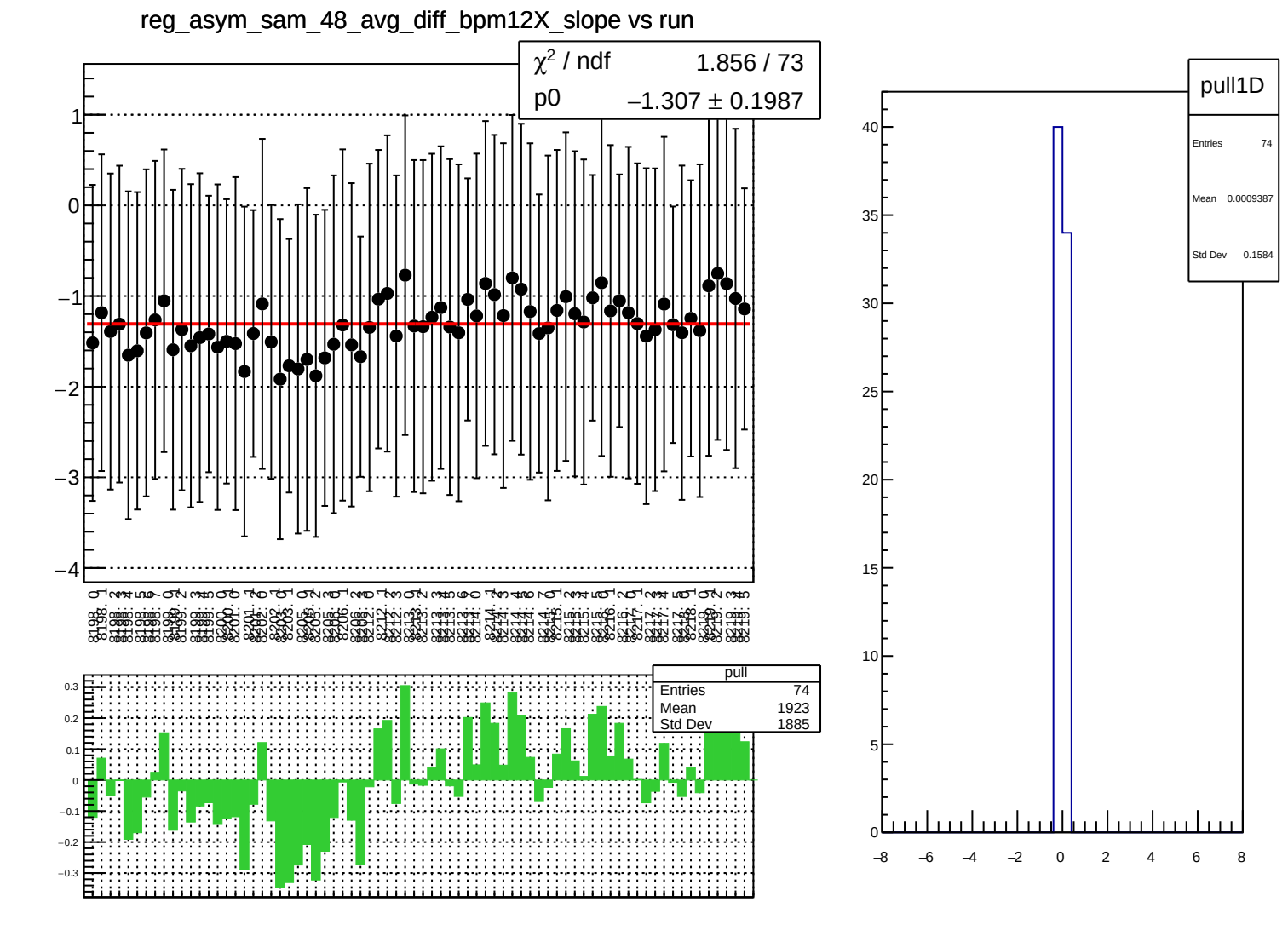

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.081 / 73
p0 −98.48 ± 2.453
pull
Entries 74
Mean −131.5
Std Dev 156.5

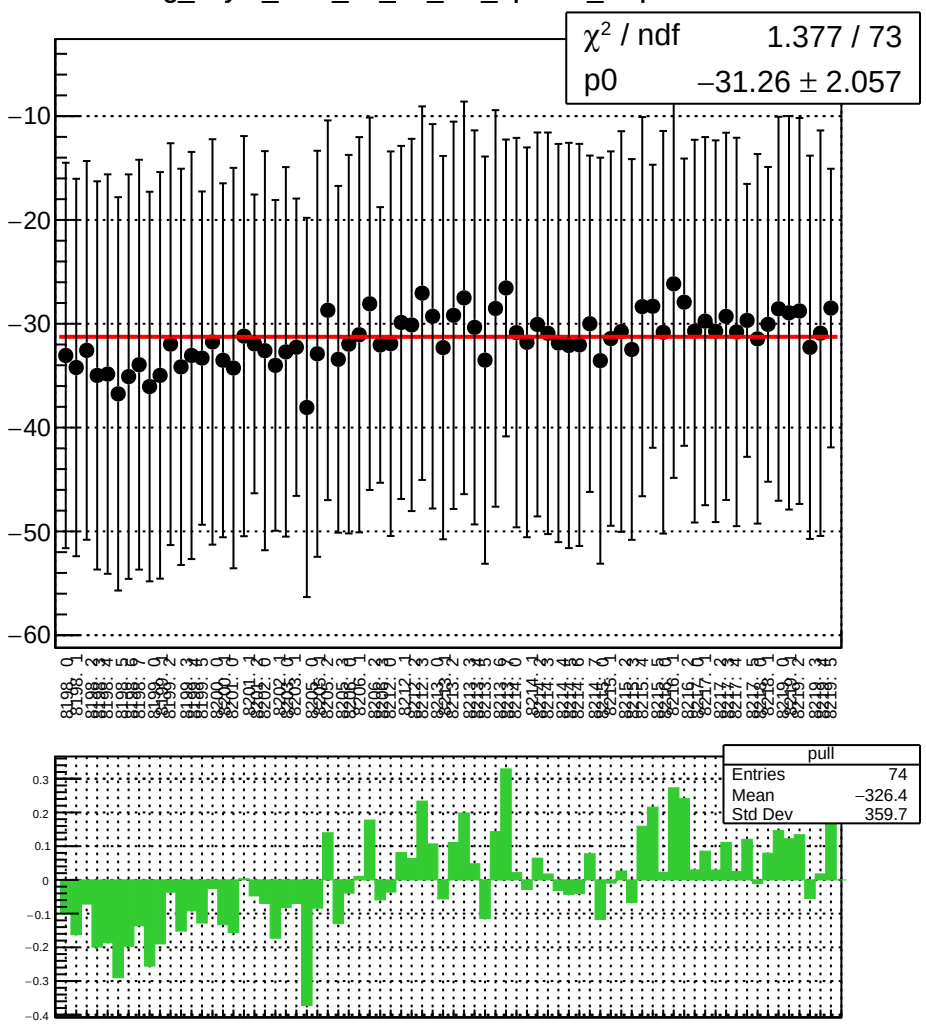

pull1D
Entries 74
Mean 0.004644
Std Dev 0.1208

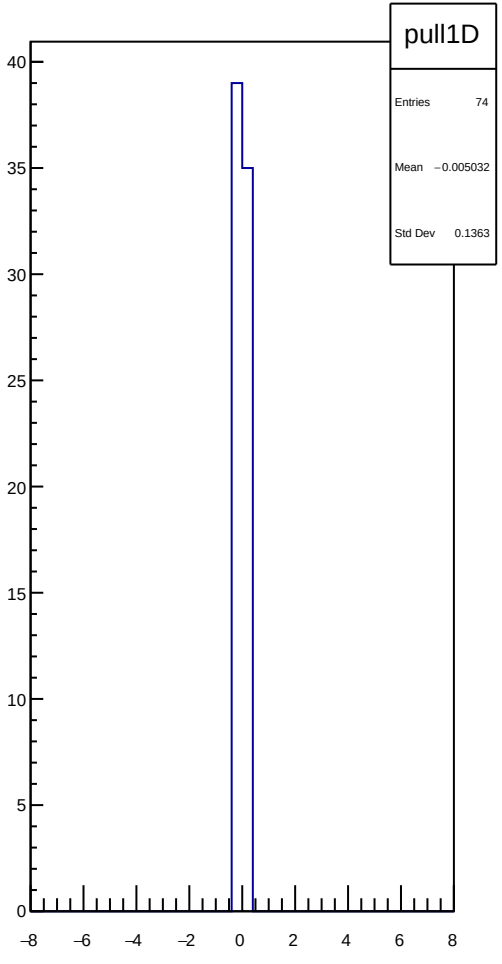
reg_asym_sam_48_avg_diff_bpm4eY_slope vs run

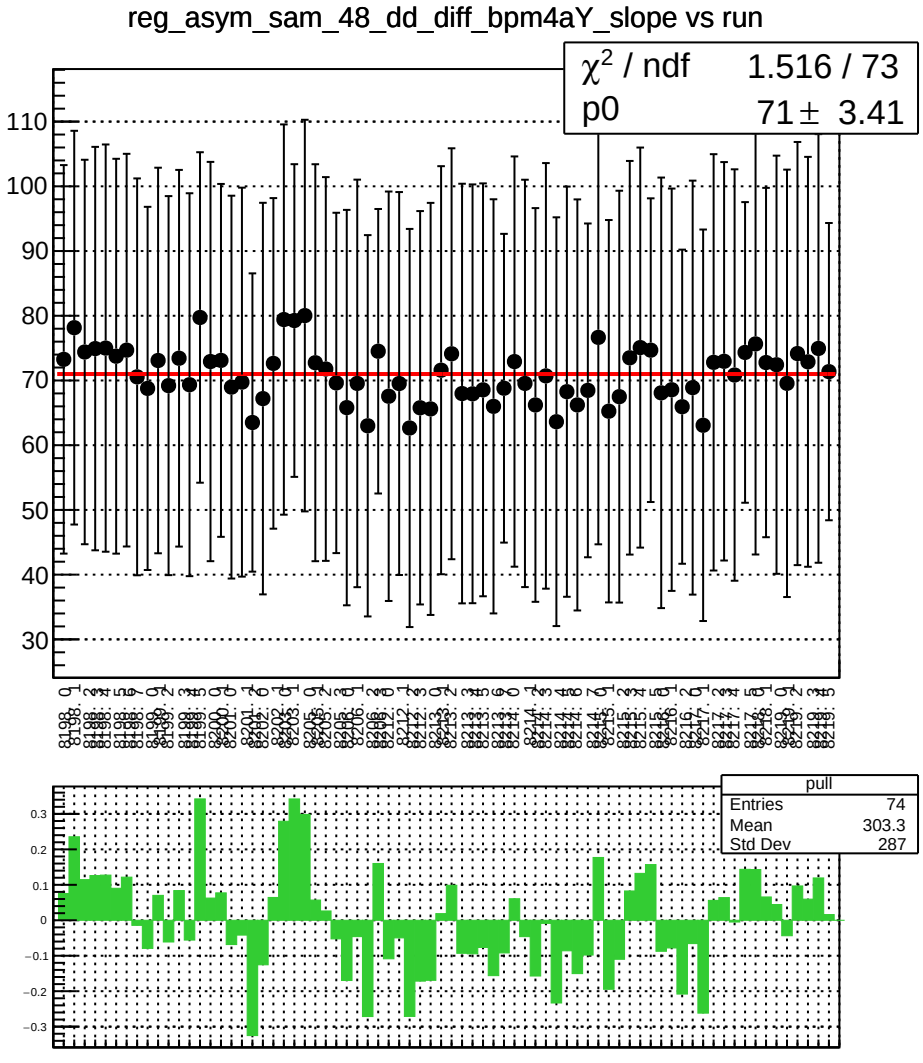


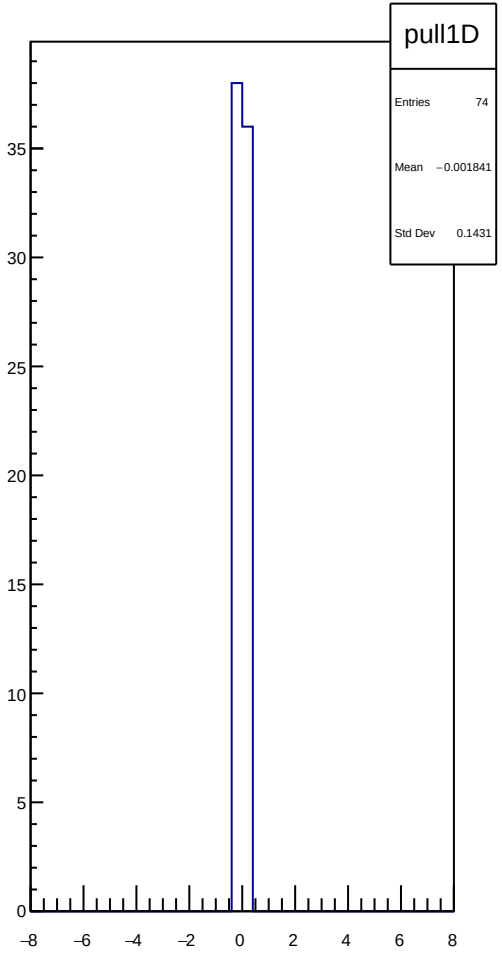


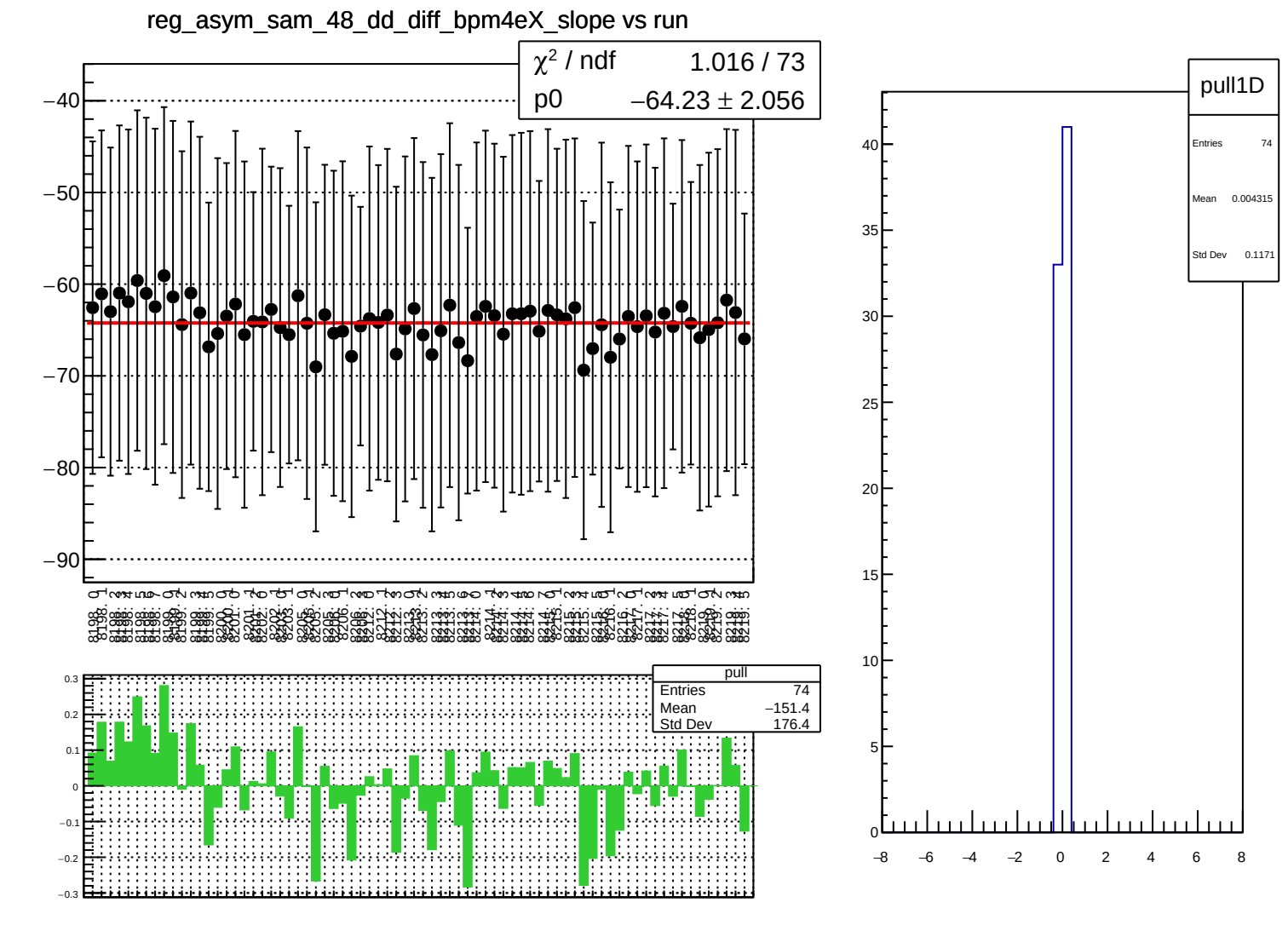

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 1.856 / 73
p0 −1.307 ± 0.1987
pull
Entries 74
Mean 1923
Std Dev 1885
pull1D
Entries 74
Mean 0.0009387
Std Dev 0.1584

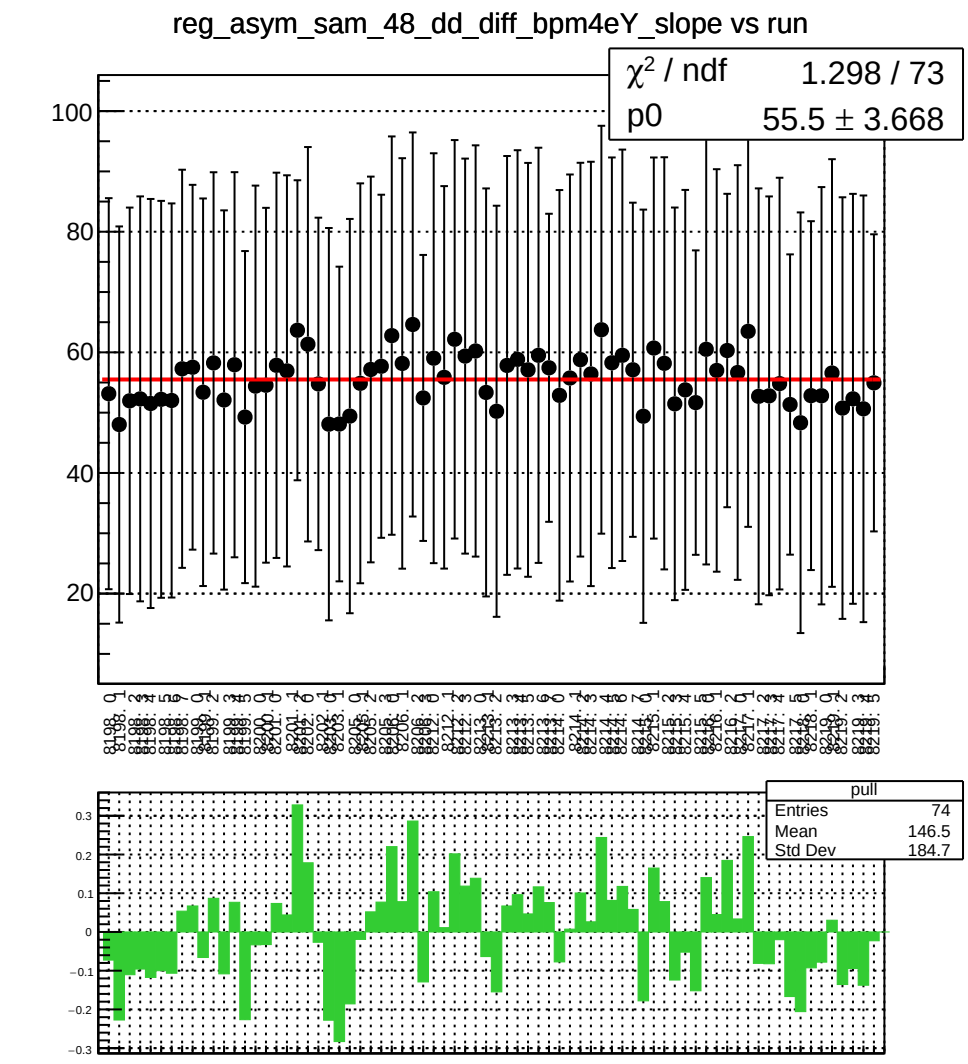

reg_asym_sam_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.377 / 73
p0 −31.26 ± 2.057
pull
Entries 74
Mean −326.4
Std Dev 359.7

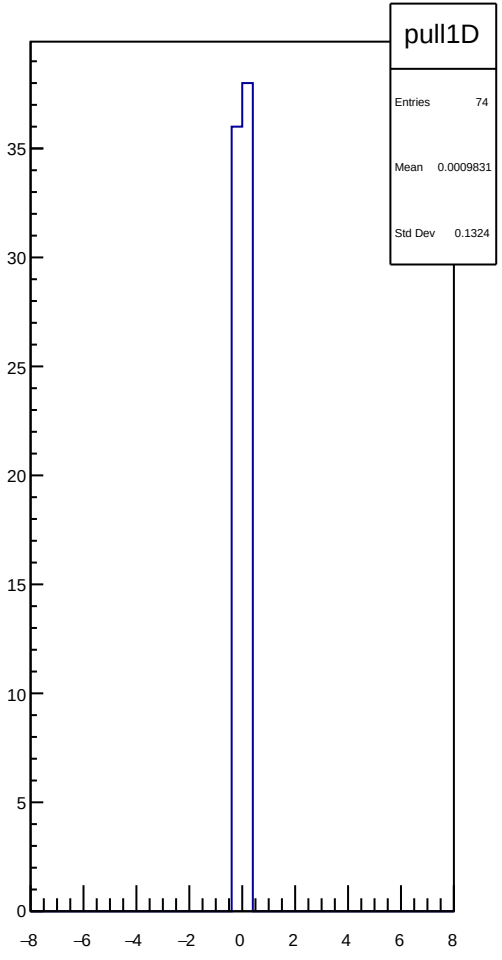

pull1D
Entries 74
Mean −0.005032
Std Dev 0.1363

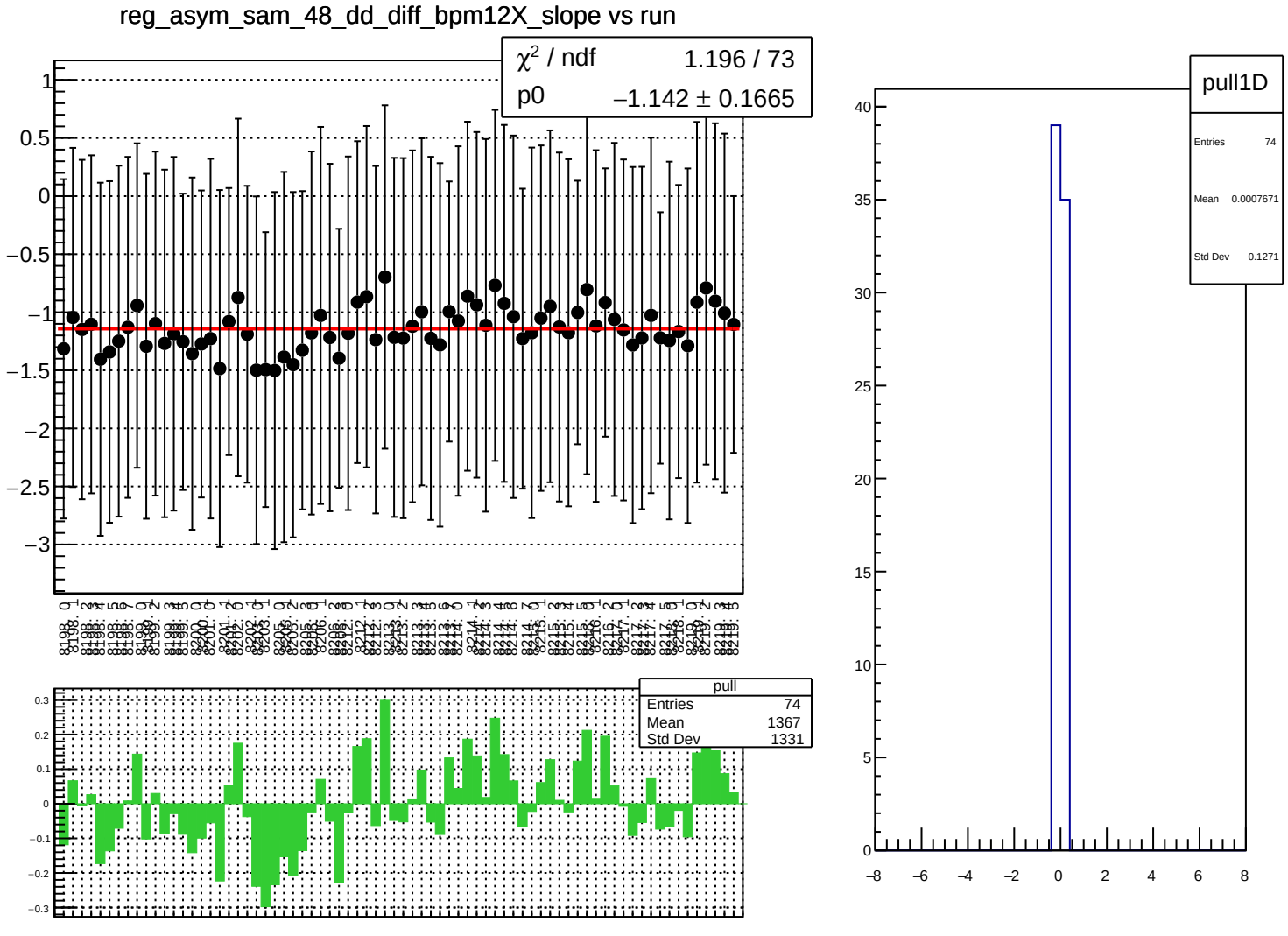

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.516 / 73
p0 71 ± 3.41
pull
Entries 74
Mean 303.3
Std Dev 287

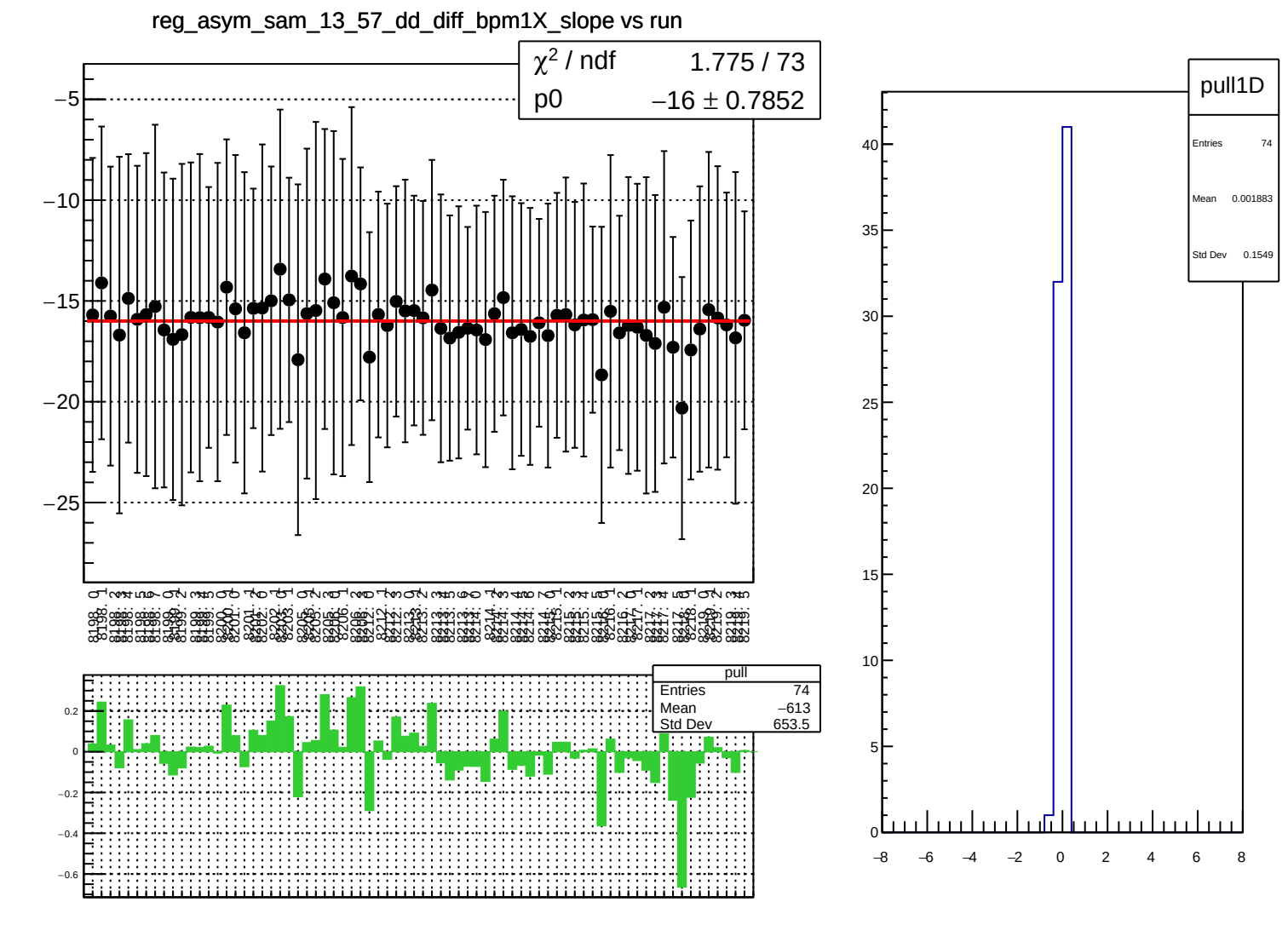

pull1D
Entries 74
Mean −0.001841
Std Dev 0.1431

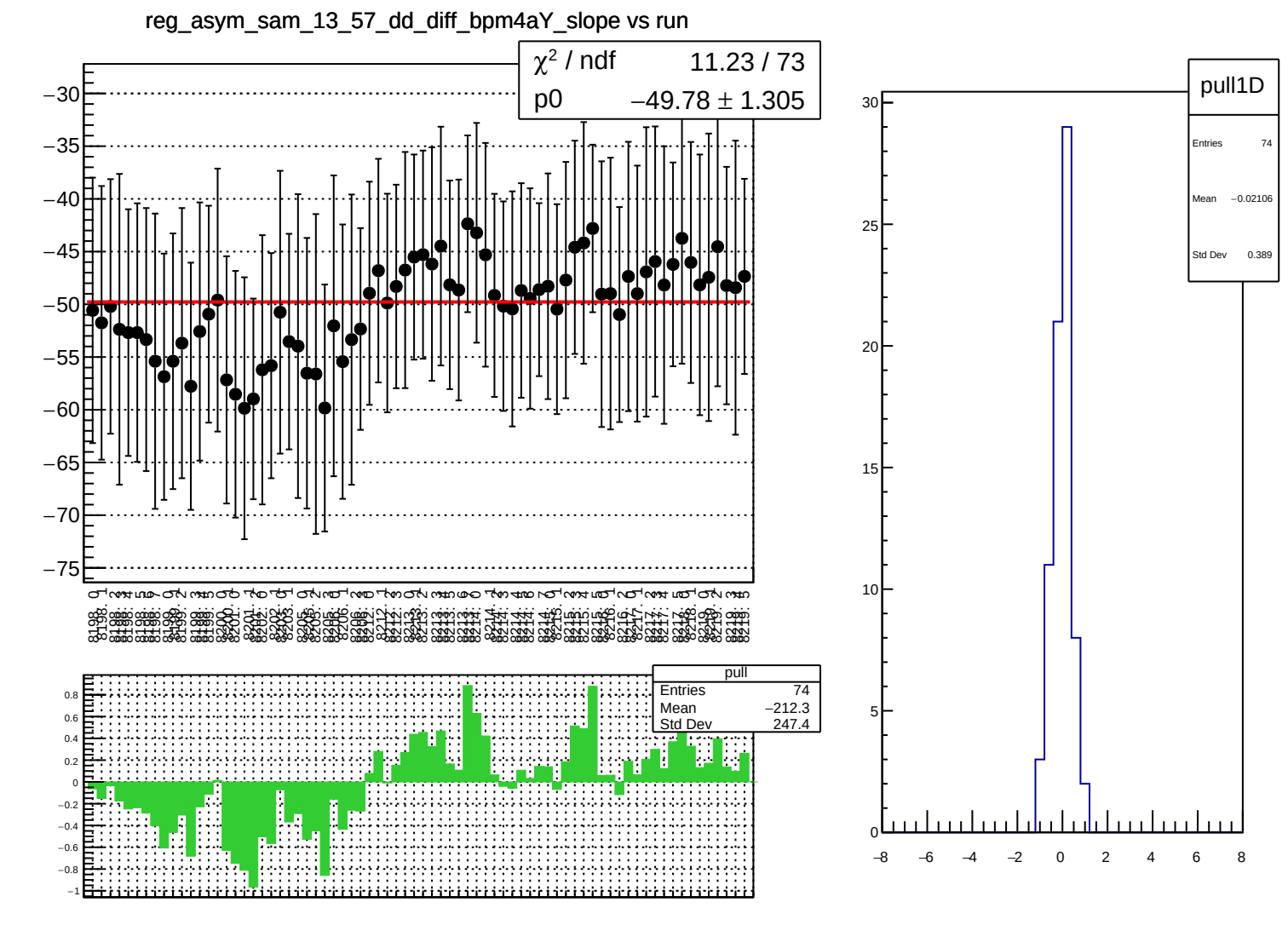

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.016 / 73
p0 −64.23 ± 2.056
pull
Entries 74
Mean −151.4
Std Dev 176.4
pull1D
Entries 74
Mean 0.004315
Std Dev 0.1171

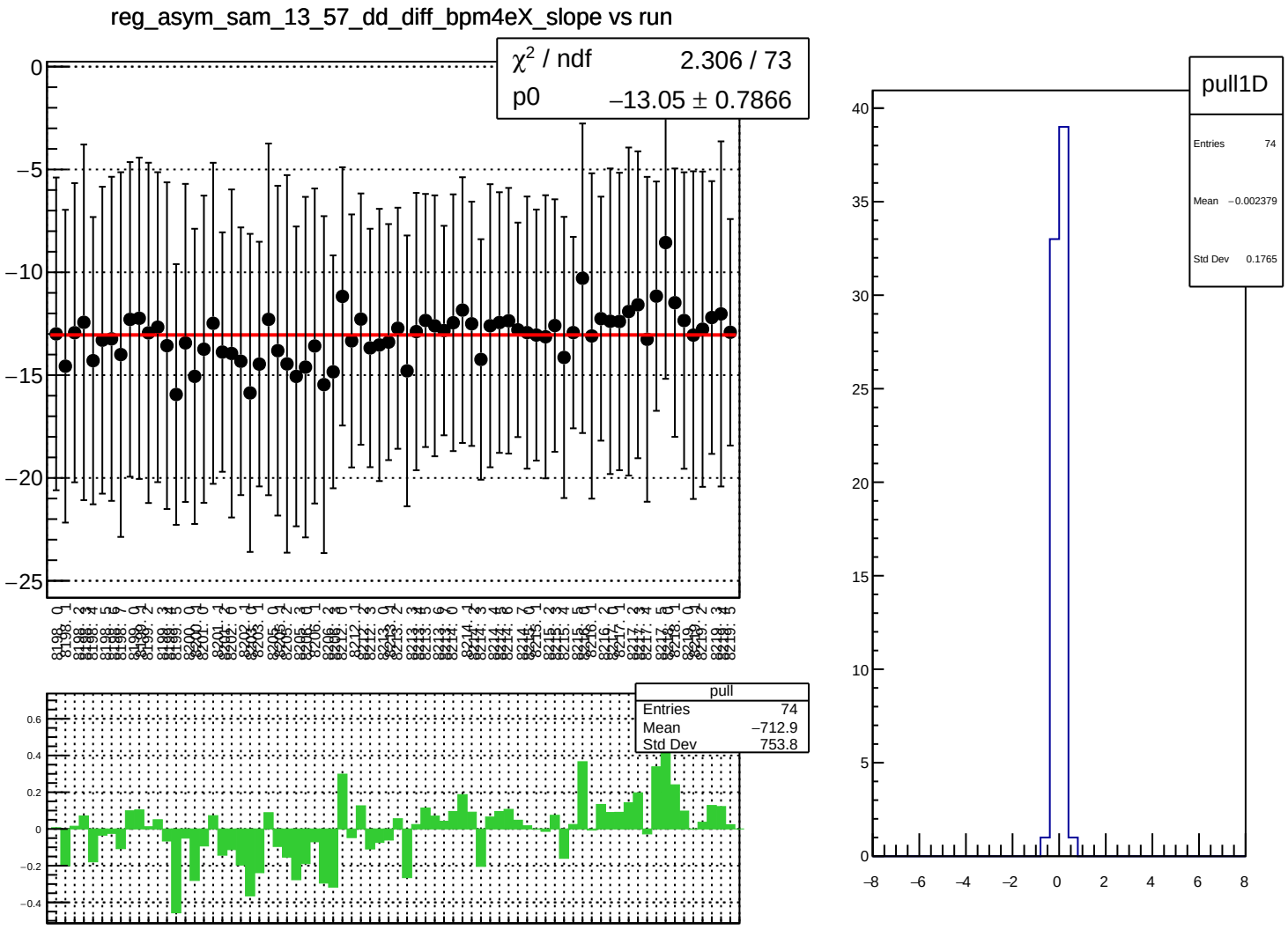

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.298 / 73
p0 55.5 ± 3.668
pull
Entries 74
Mean 146.5
Std Dev 184.7

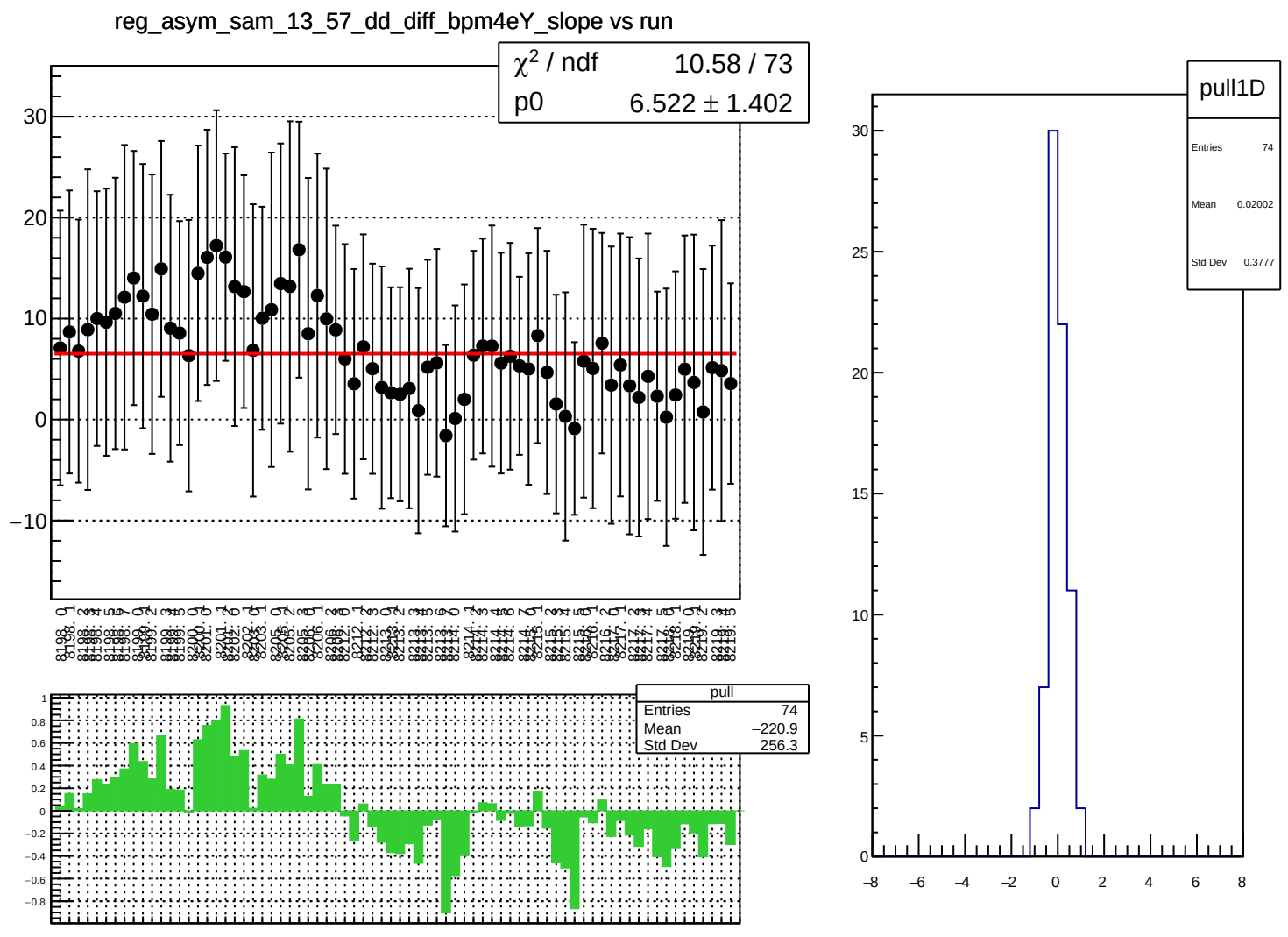

pull1D
Entries 74
Mean 0.0009831
Std Dev 0.1324

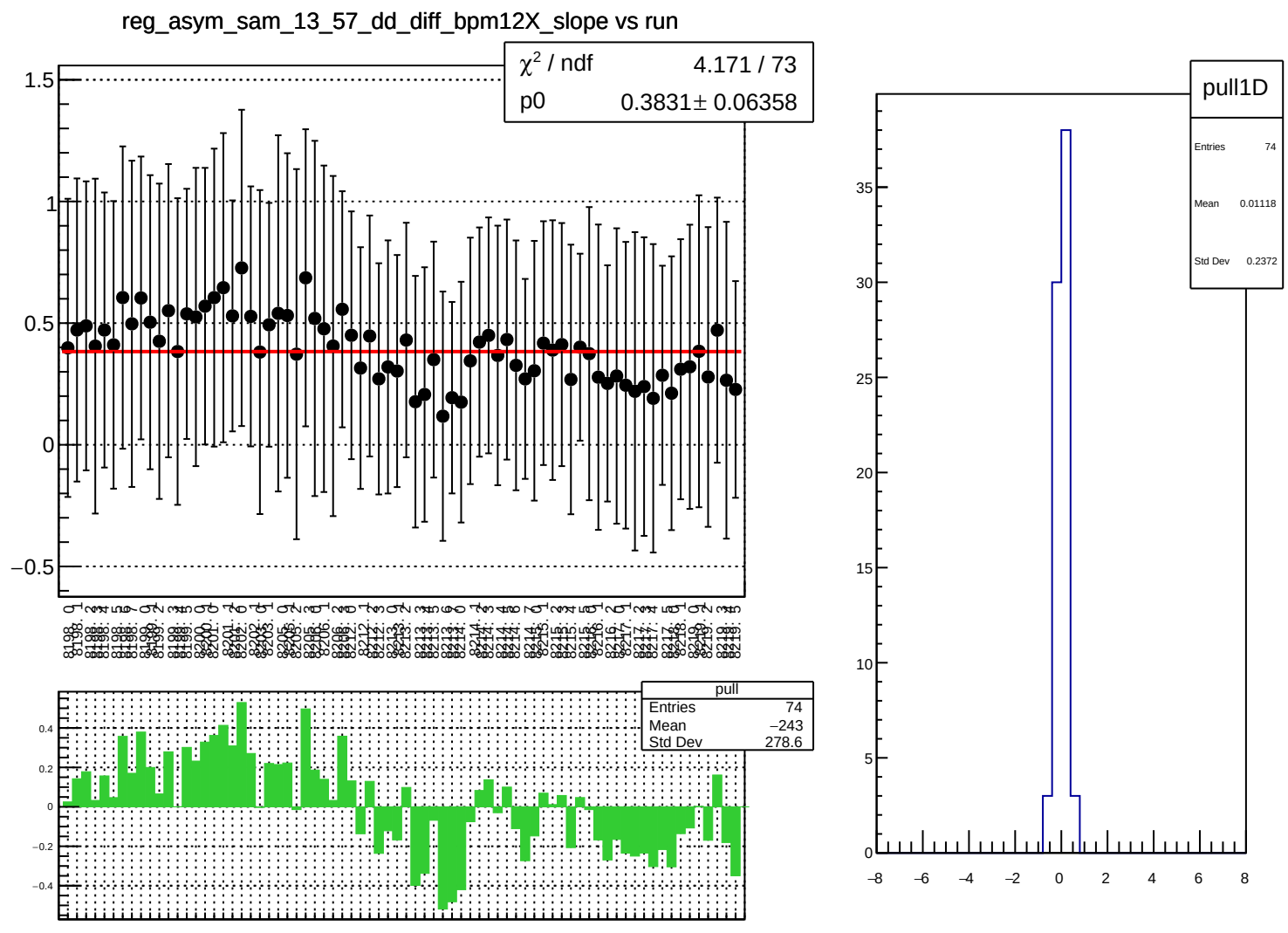

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 1.196 / 73
p0 −1.142 ± 0.1665
pull
Entries 74
Mean 1367
Std Dev 1331
pull1D
Entries 74
Mean 0.0007671
Std Dev 0.1271

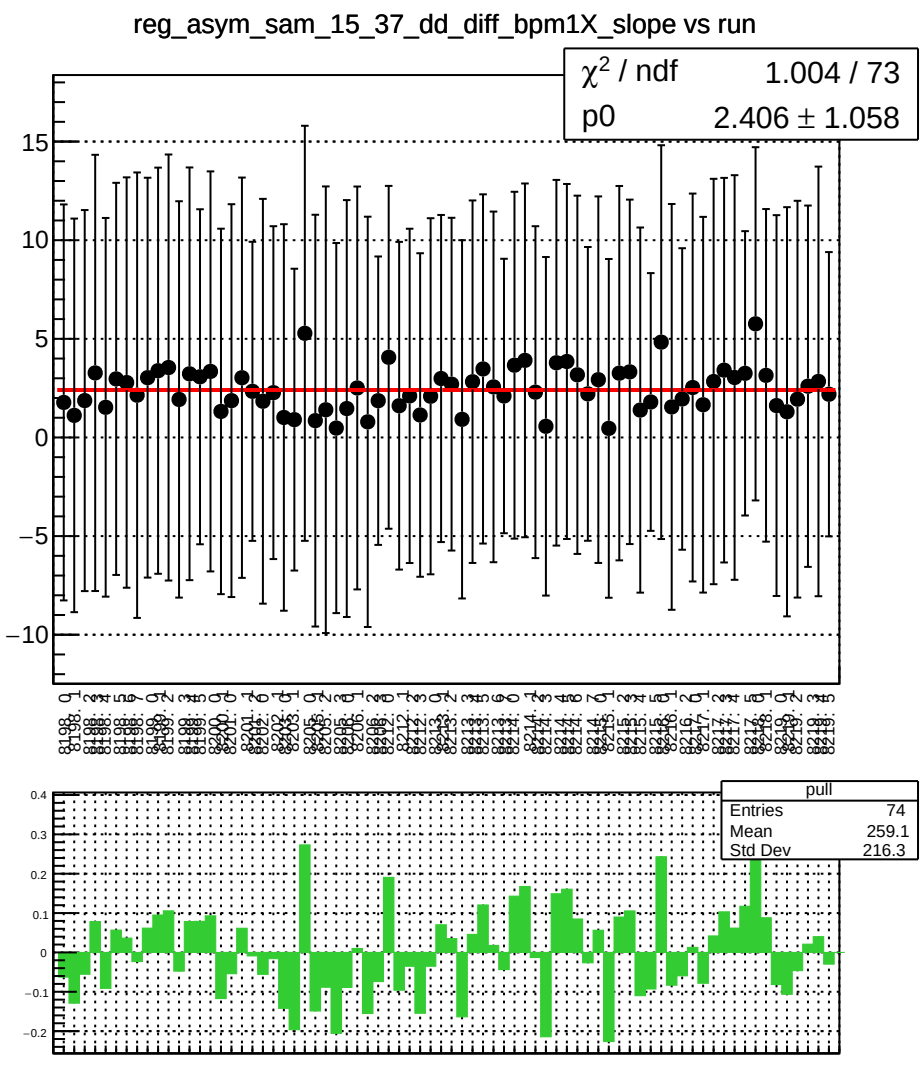

reg_asym_sam_13_57_dd_diff_bpm1X_slope vs run
χ² / ndf 1.775 / 73
p0 −16 ± 0.7852
pull
Entries 74
Mean −613
Std Dev 653.5
pull1D
Entries 74
Mean 0.001883
Std Dev 0.1549

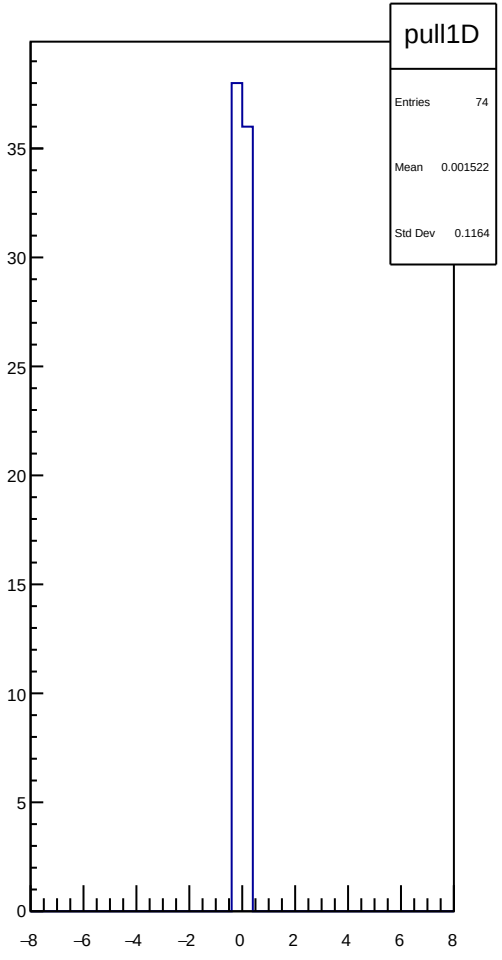

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 11.23 / 73
p0 −49.78 ± 1.305
pull
Entries 74
Mean −212.3
Std Dev 247.4
pull1D
Entries 74
Mean −0.02106
Std Dev 0.389

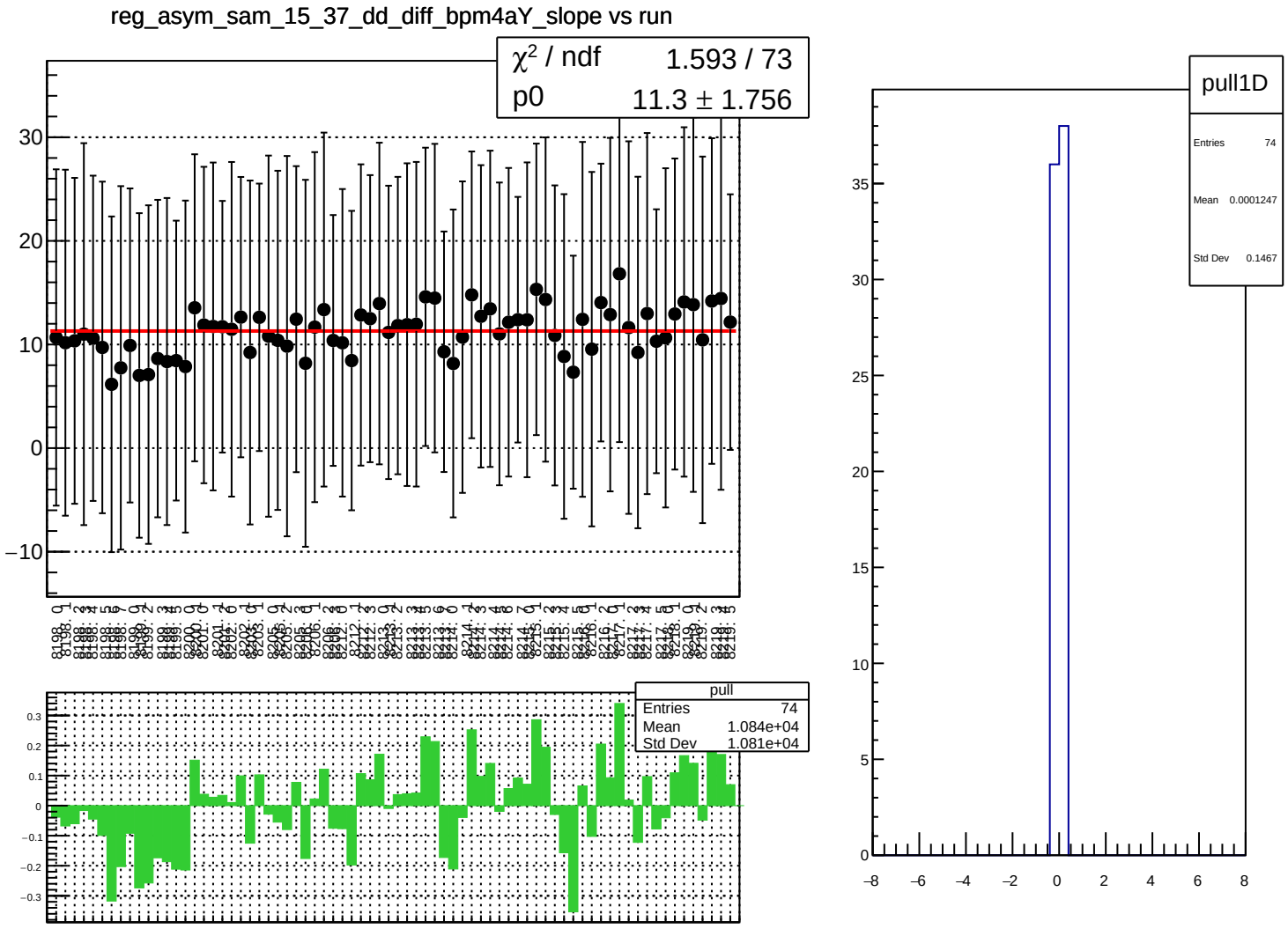

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.306 / 73
p0 −13.05 ± 0.7866
pull
Entries 74
Mean −712.9
Std Dev 753.8
pull1D
Entries 74
Mean −0.002379
Std Dev 0.1765

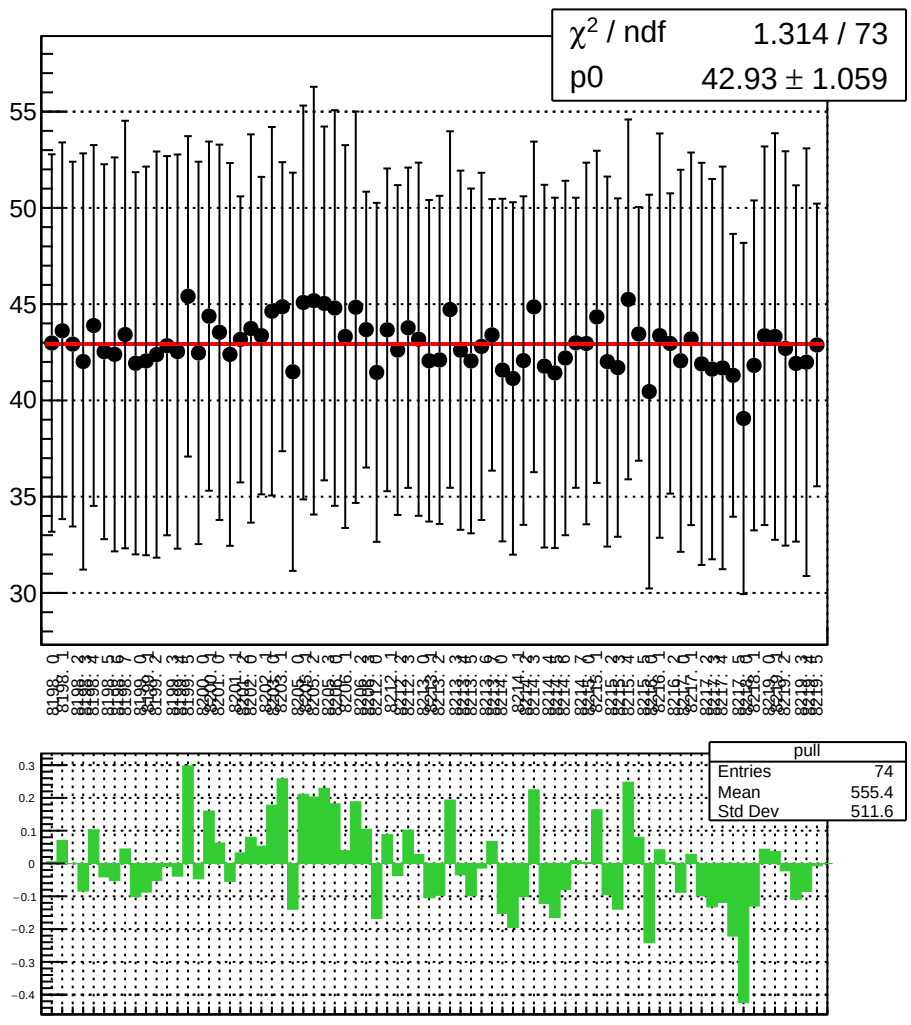

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.58 / 73
p0 6.522 ± 1.402
pull
Entries 74
Mean −220.9
Std Dev 256.3
pull1D
Entries 74
Mean 0.02002
Std Dev 0.3777

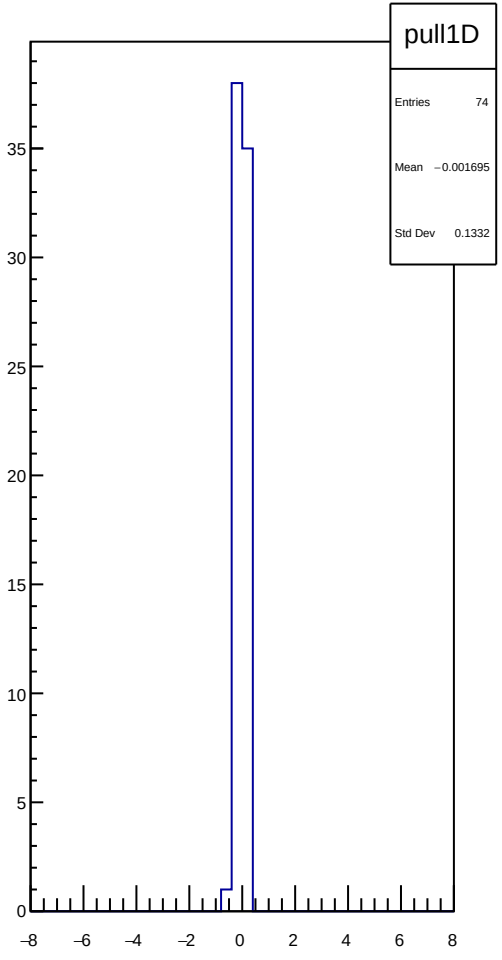

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 4.171 / 73
p0 0.3831± 0.06358
pull
Entries 74
Mean −243
Std Dev 278.6
pull1D
Entries 74
Mean 0.01118
Std Dev 0.2372

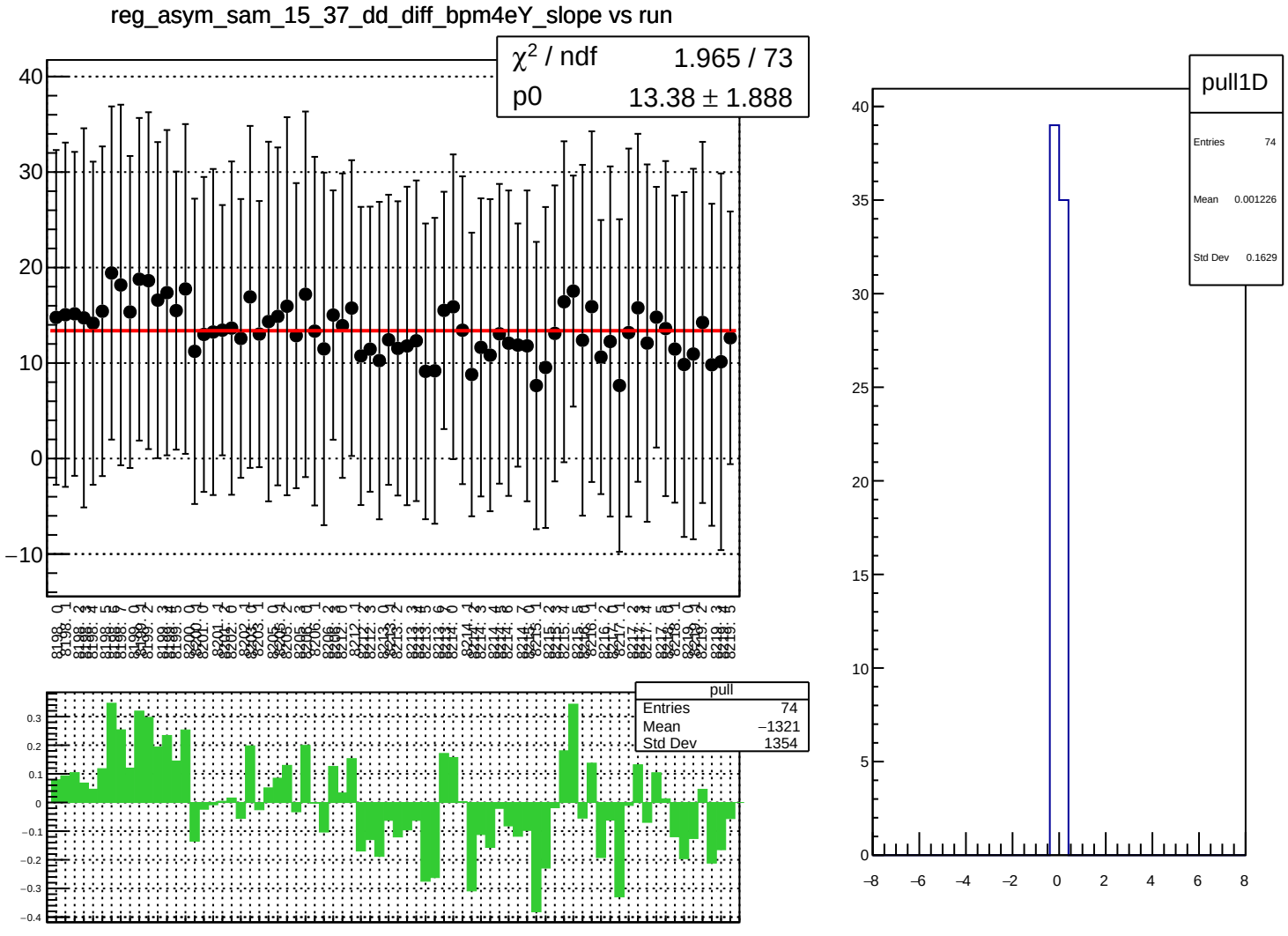

reg_asym_sam_15_37_dd_diff_bpm1X_slope vs run
χ² / ndf 1.004 / 73
p0 2.406 ± 1.058
pull
Entries 74
Mean 259.1
Std Dev 216.3

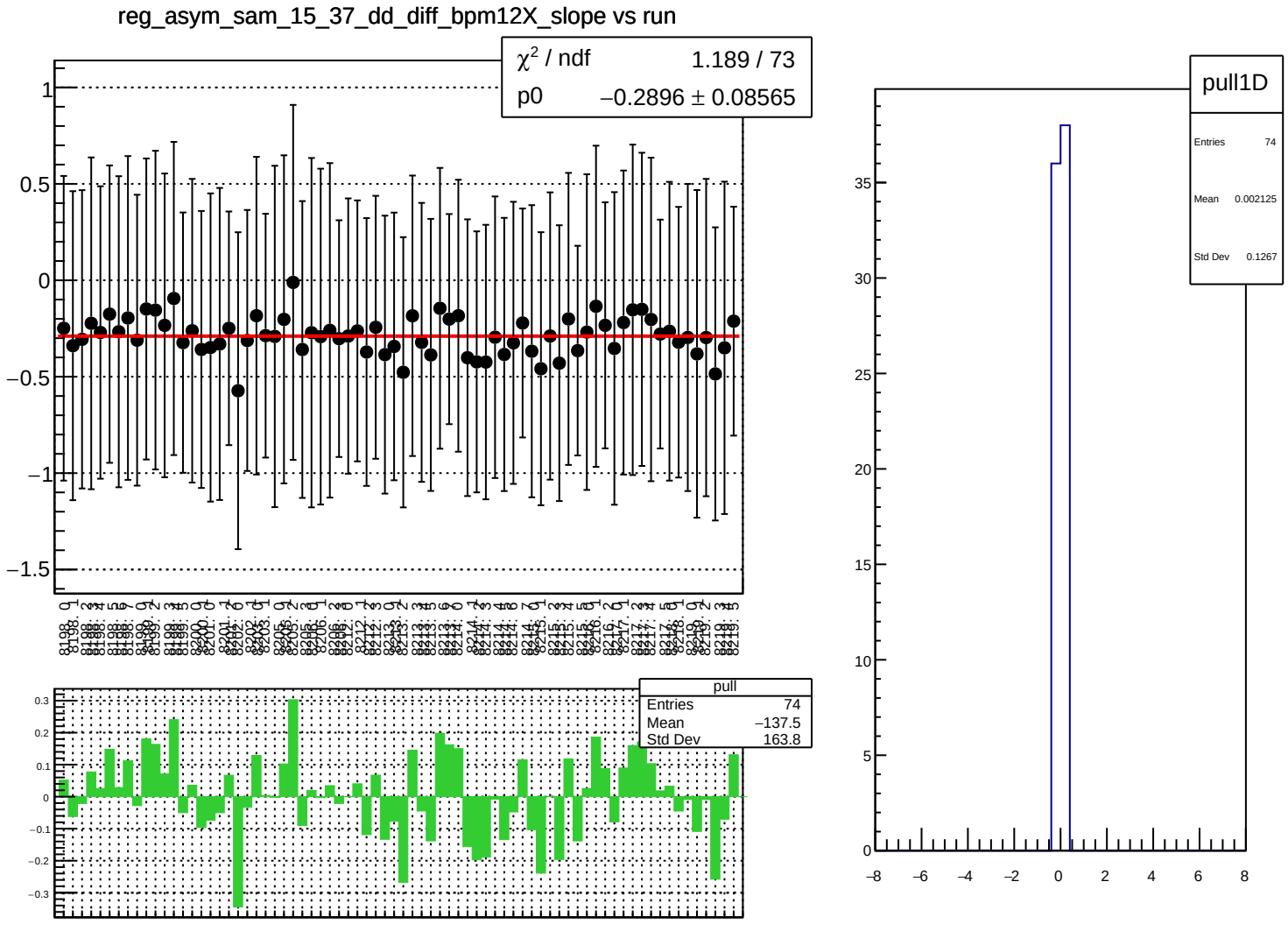

pull1D
Entries 74
Mean 0.001522
Std Dev 0.1164

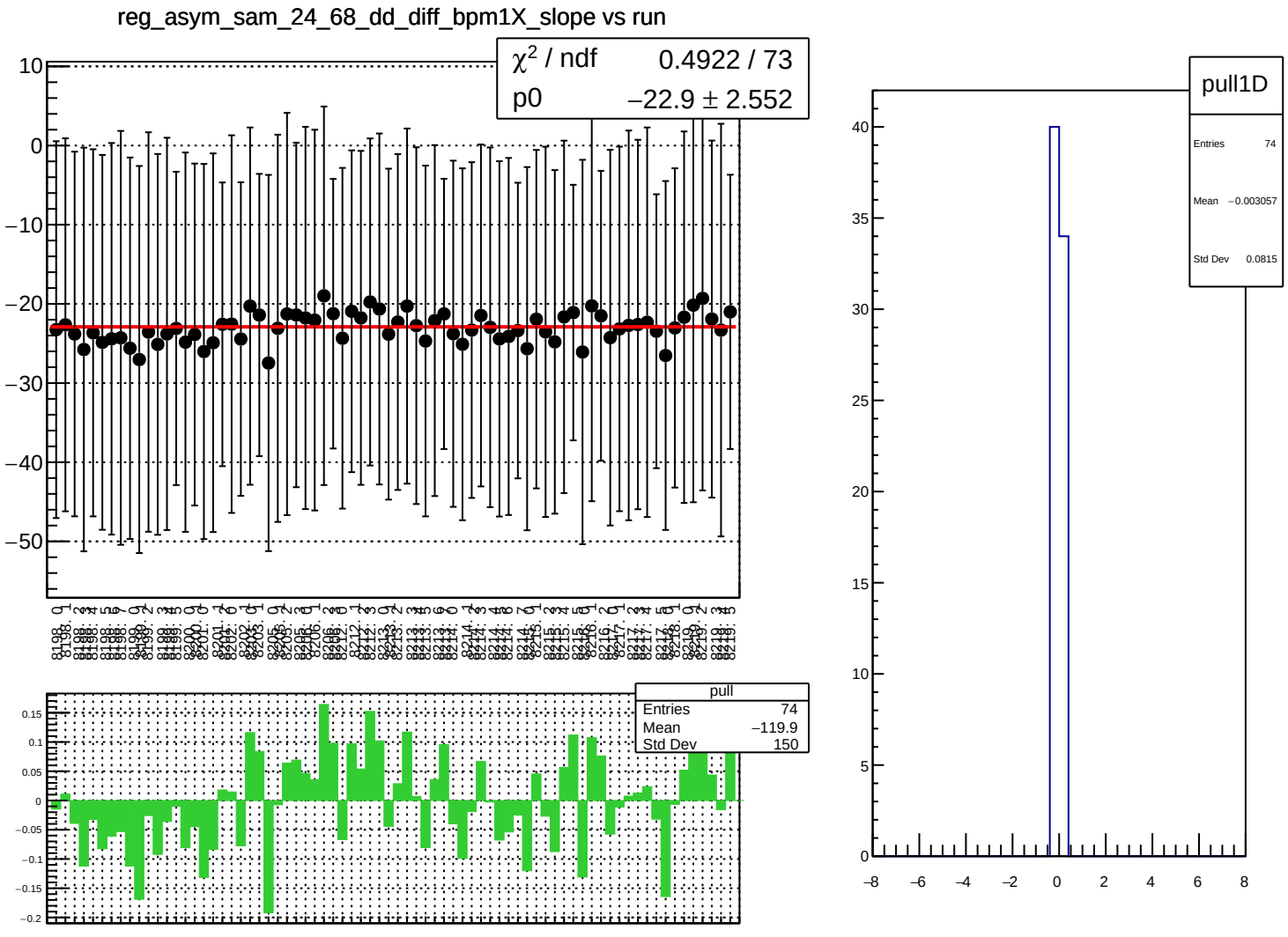

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.593 / 73
p0 11.3 ± 1.756
pull
Entries 74
Mean 1.084e+04
Std Dev 1.081e+04
pull1D
Entries 74
Mean 0.0001247
Std Dev 0.1467

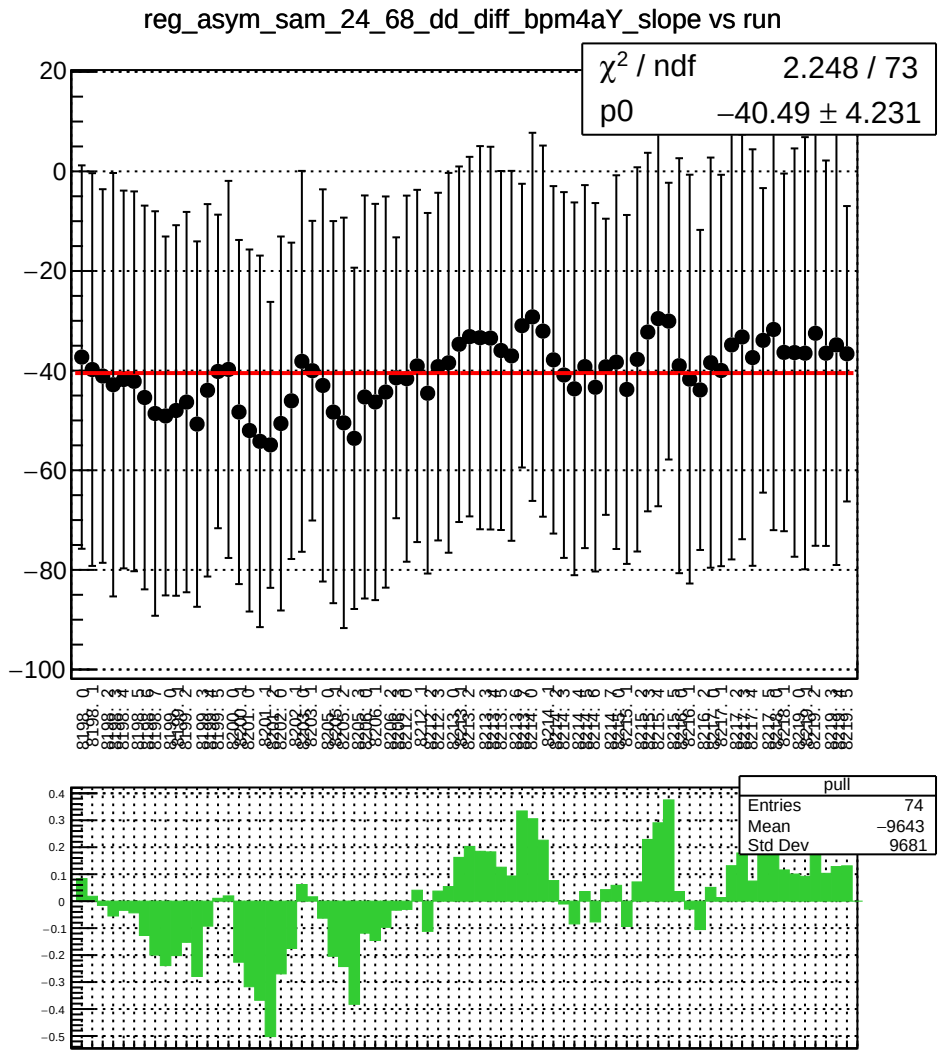

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.314 / 73
p0 42.93 ± 1.059
pull
Entries 74
Mean 555.4
Std Dev 511.6

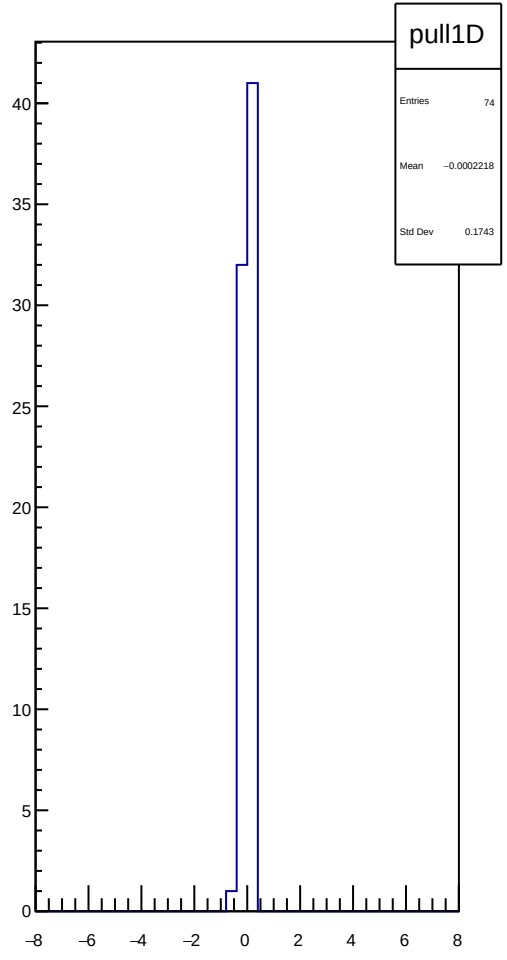

pull1D
Entries 74
Mean −0.001695
Std Dev 0.1332

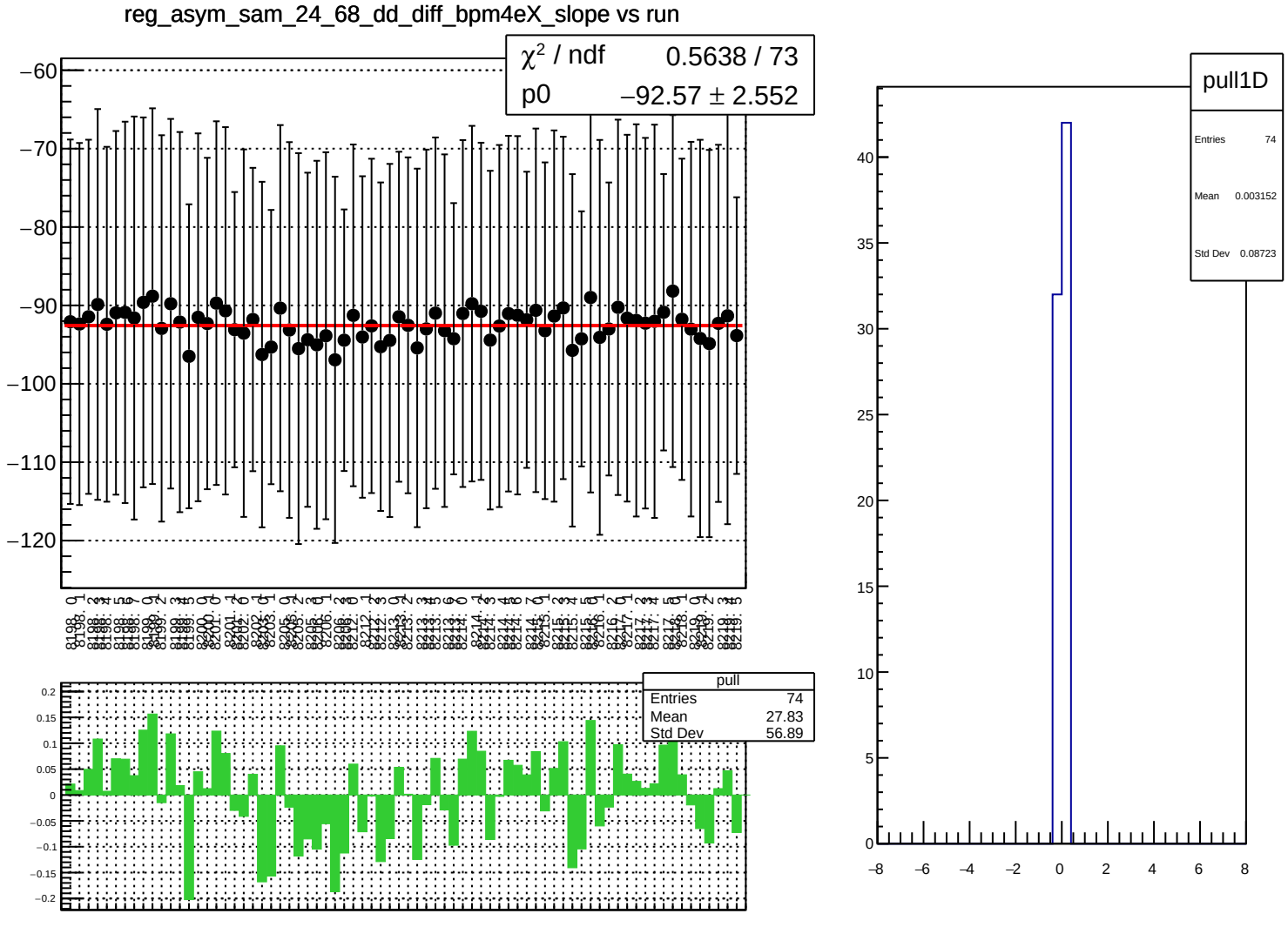

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.965 / 73
p0 13.38 ± 1.888
pull
Entries 74
Mean −1321
Std Dev 1354
pull1D
Entries 74
Mean 0.001226
Std Dev 0.1629

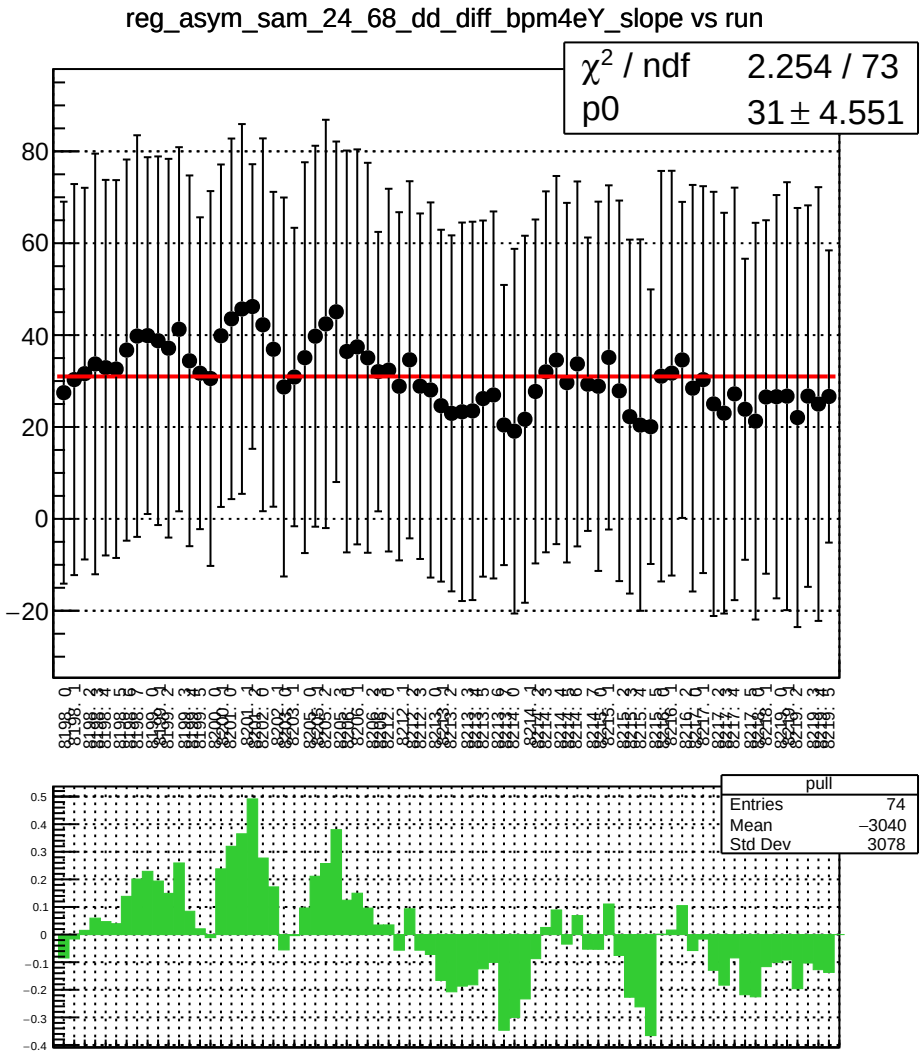

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 1.189 / 73
p0 −0.2896 ± 0.08565
pull
Entries 74
Mean −137.5
Std Dev 163.8
pull1D
Entries 74
Mean 0.002125
Std Dev 0.1267

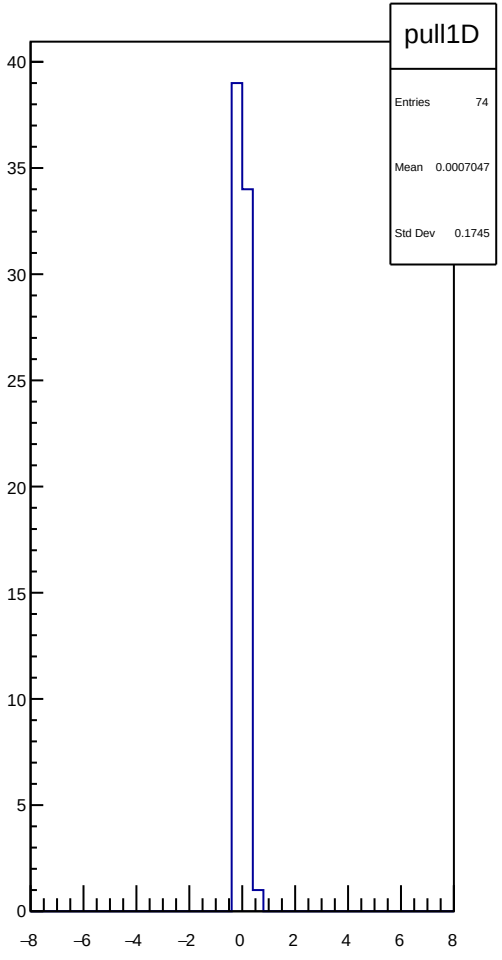

reg_asym_sam_24_68_dd_diff_bpm1X_slope vs run
χ² / ndf 0.4922 / 73
p0 −22.9 ± 2.552
pull
Entries 74
Mean −119.9
Std Dev 150
pull1D
Entries 74
Mean −0.003057
Std Dev 0.0815

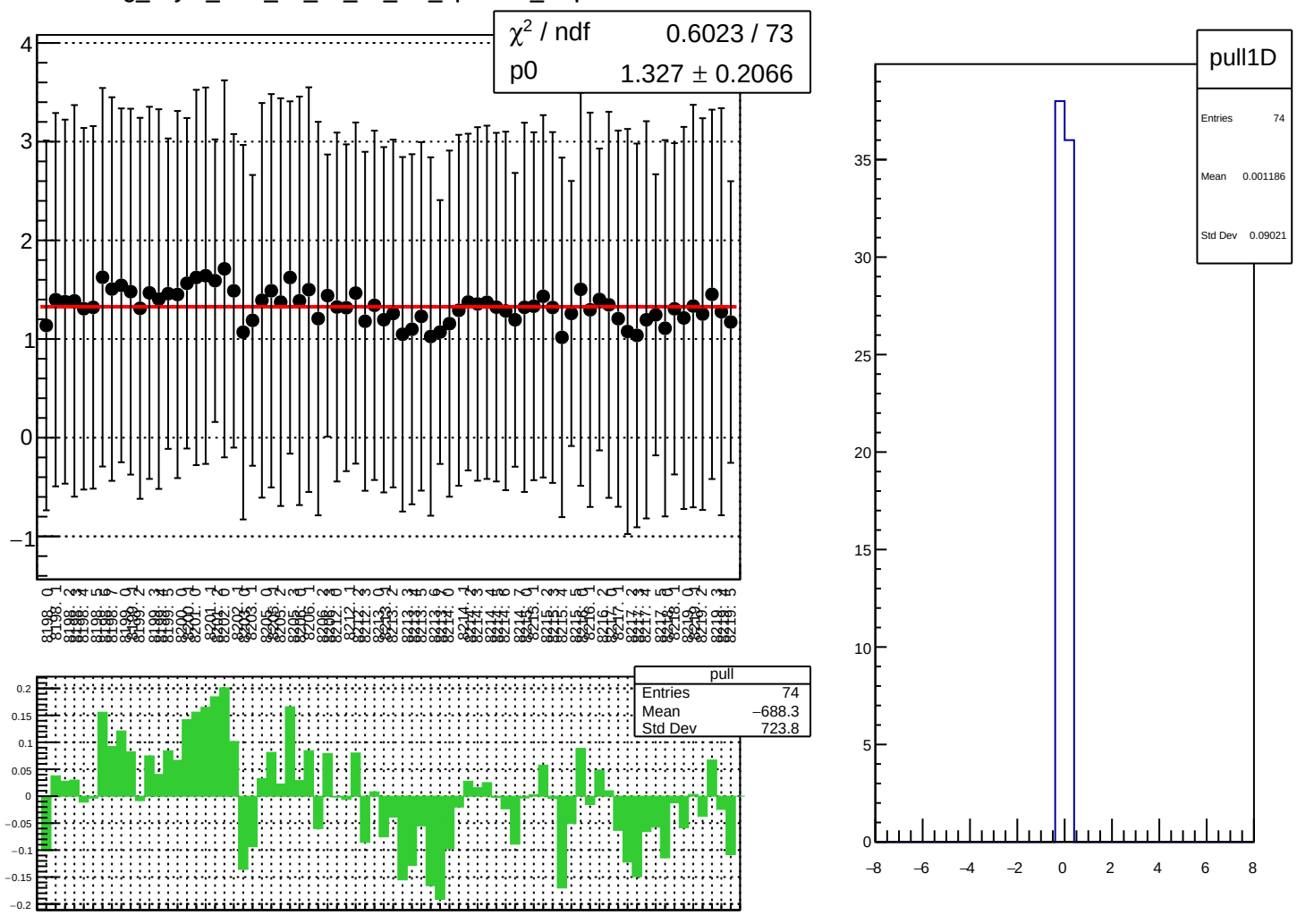

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.248 / 73
p0 −40.49 ± 4.231
pull
Entries 74
Mean −9643
Std Dev 9681

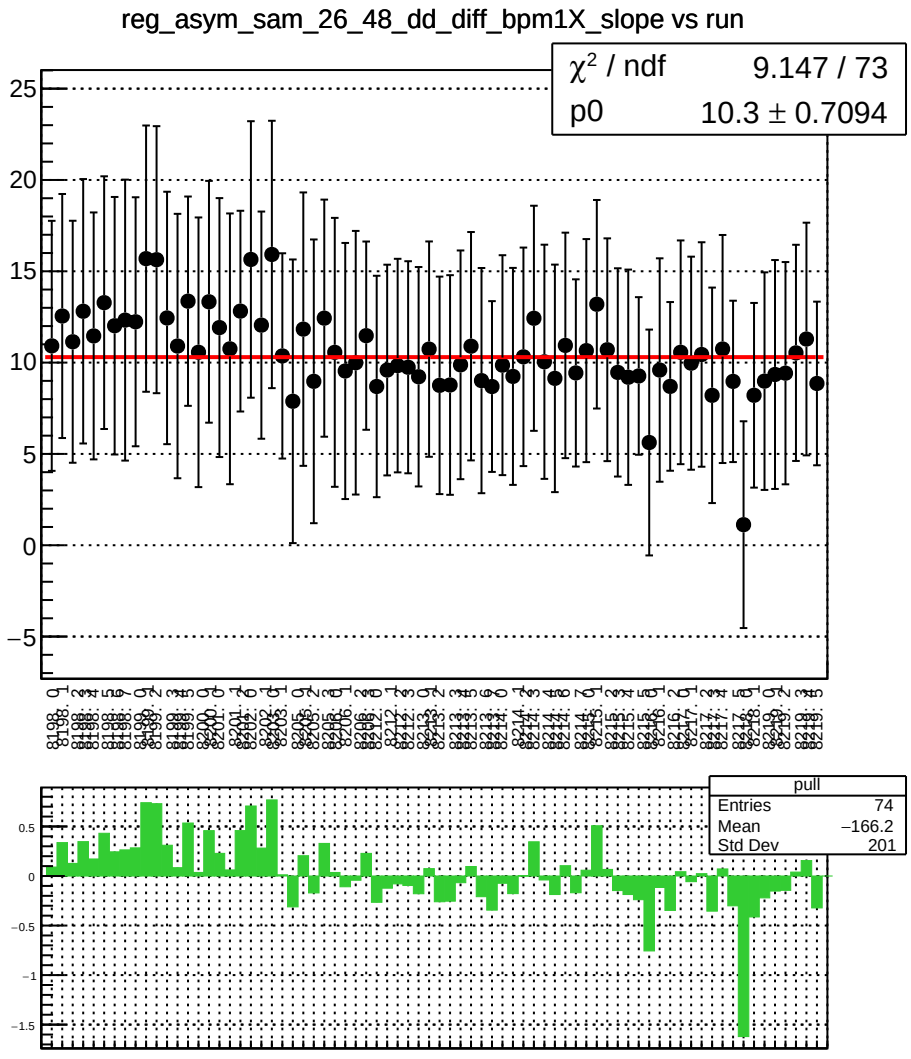

pull1D
Entries 74
Mean −0.0002218
Std Dev 0.1743

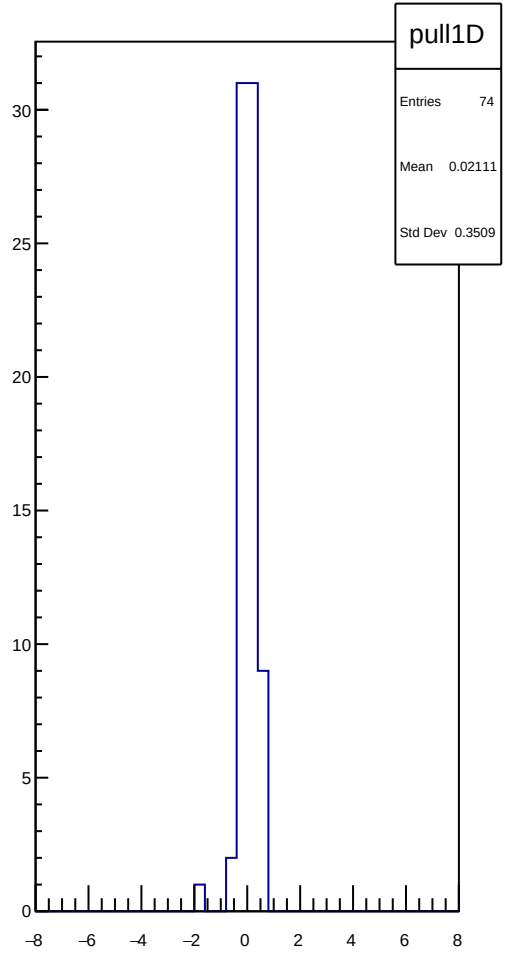

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.5638 / 73
p0 −92.57 ± 2.552
pull
Entries 74
Mean 27.83
Std Dev 56.89
pull1D
Entries 74
Mean 0.003152
Std Dev 0.08723

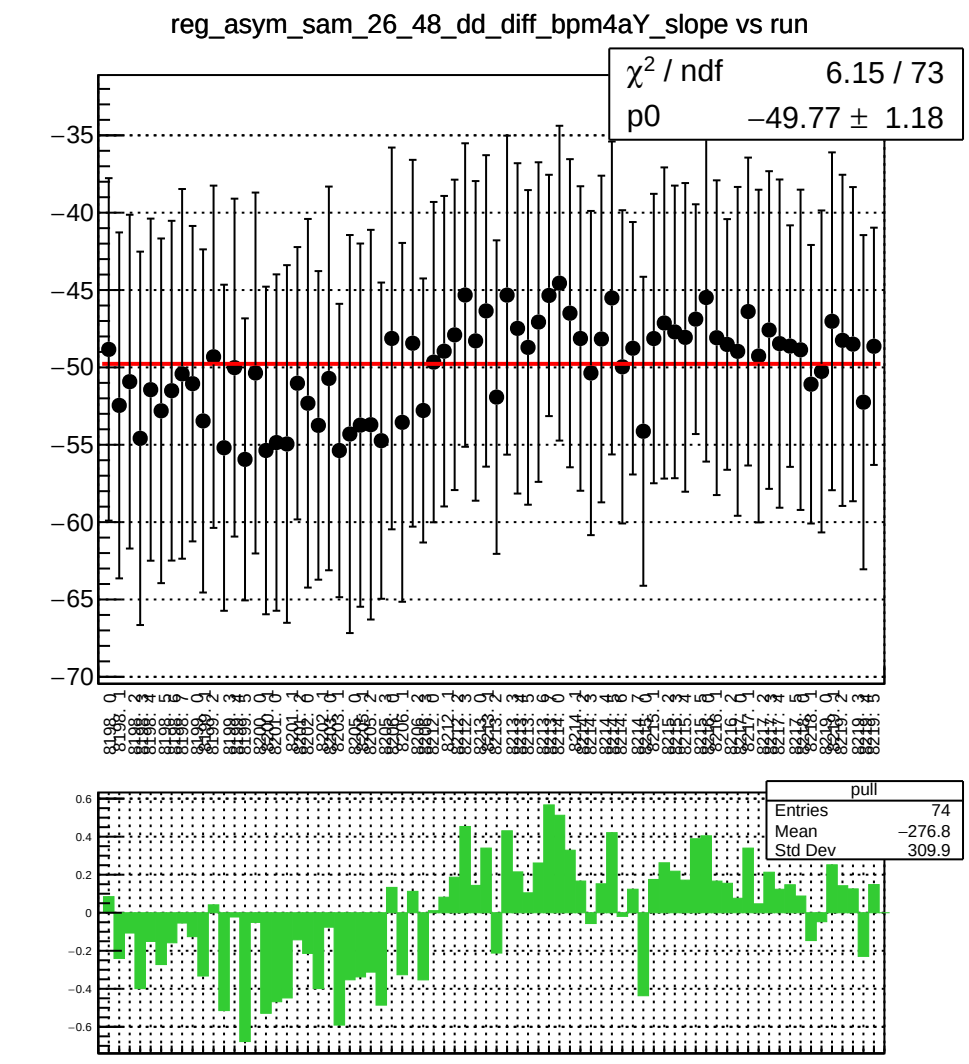

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.254 / 73
p0 31 ± 4.551
pull
Entries 74
Mean −3040
Std Dev 3078

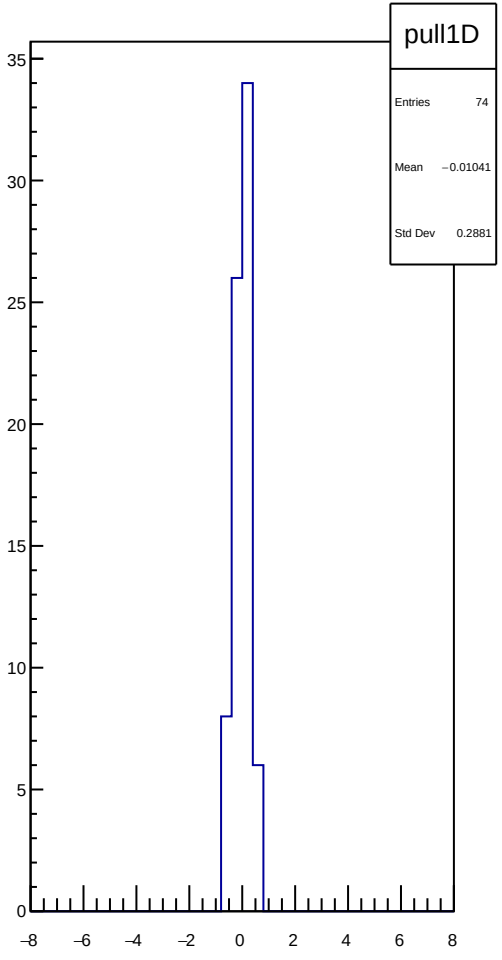

pull1D
Entries 74
Mean 0.0007047
Std Dev 0.1745

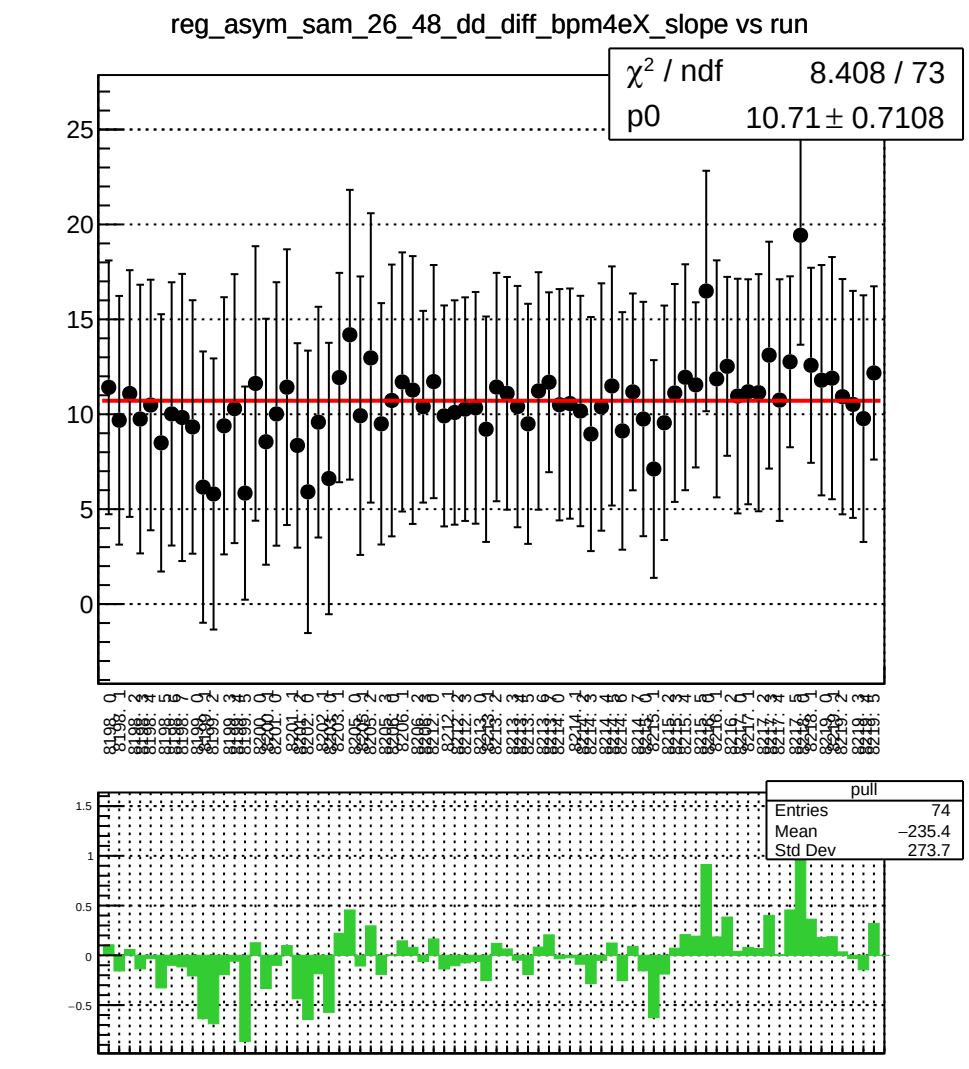

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 0.6023 / 73
p0 1.327 ± 0.2066
pull
Entries 74
Mean −688.3
Std Dev 723.8
pull1D
Entries 74
Mean 0.001186
Std Dev 0.09021

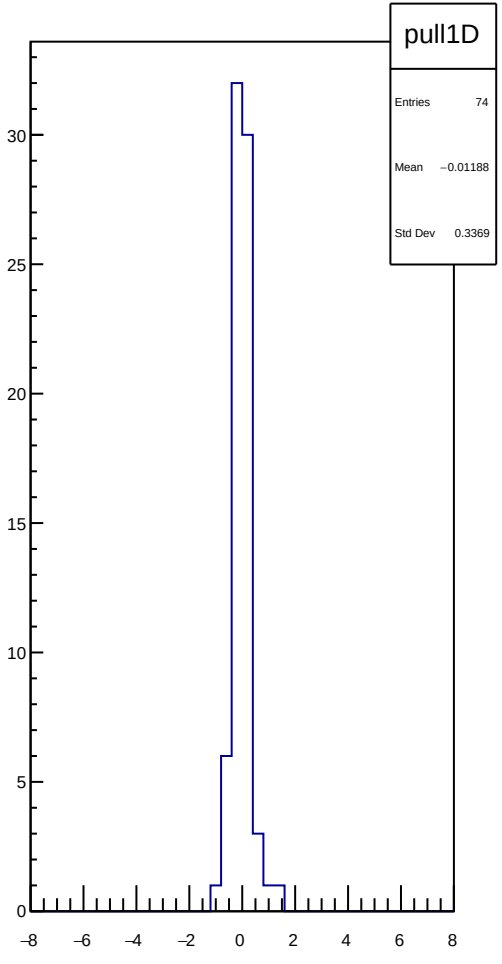

reg_asym_sam_26_48_dd_diff_bpm1X_slope vs run
χ² / ndf 9.147 / 73
p0 10.3 ± 0.7094
pull
Entries 74
Mean −166.2
Std Dev 201

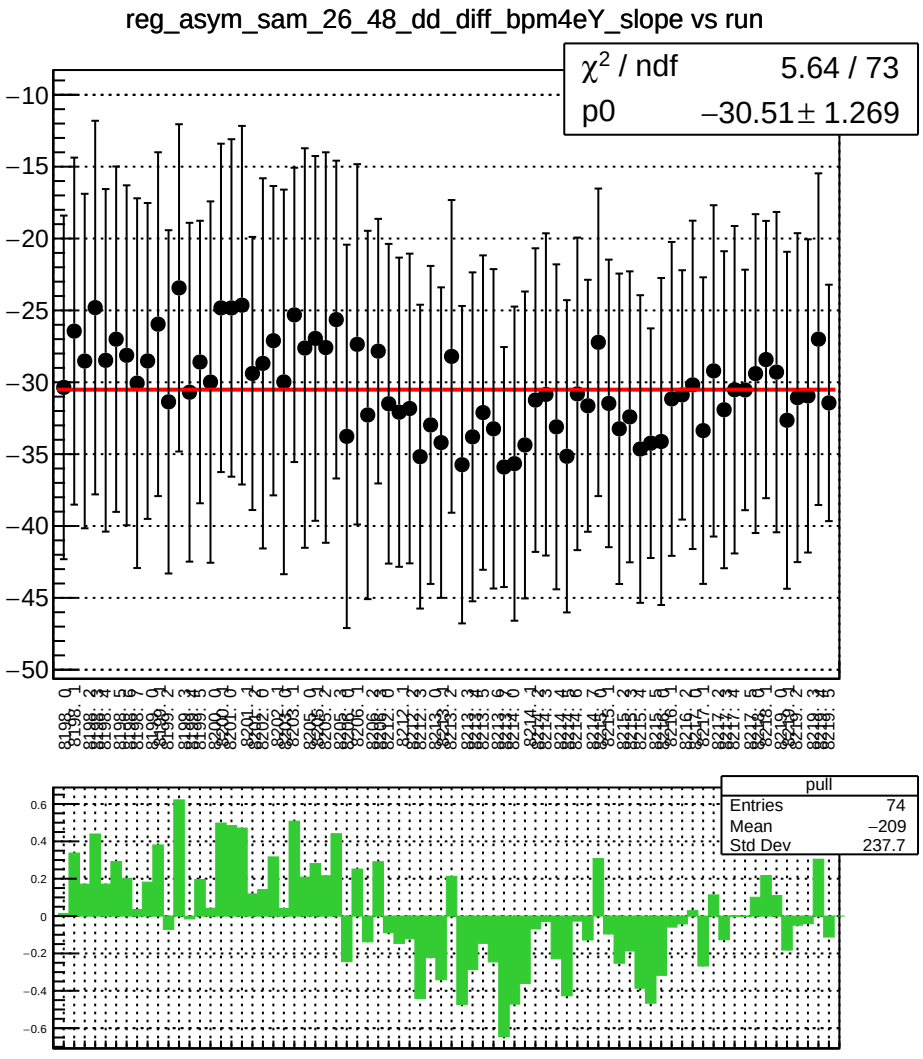

pull1D
Entries 74
Mean 0.02111
Std Dev 0.3509

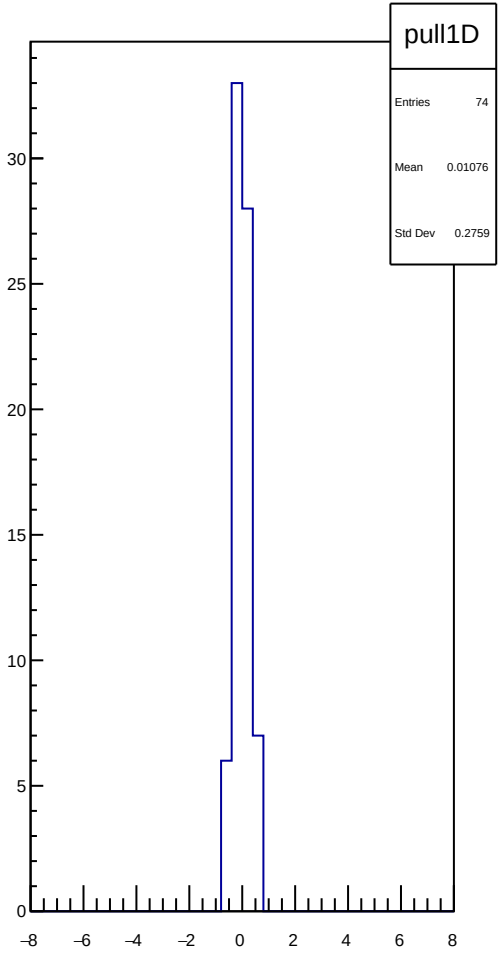

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 6.15 / 73
p0 −49.77 ± 1.18
pull
Entries 74
Mean −276.8
Std Dev 309.9

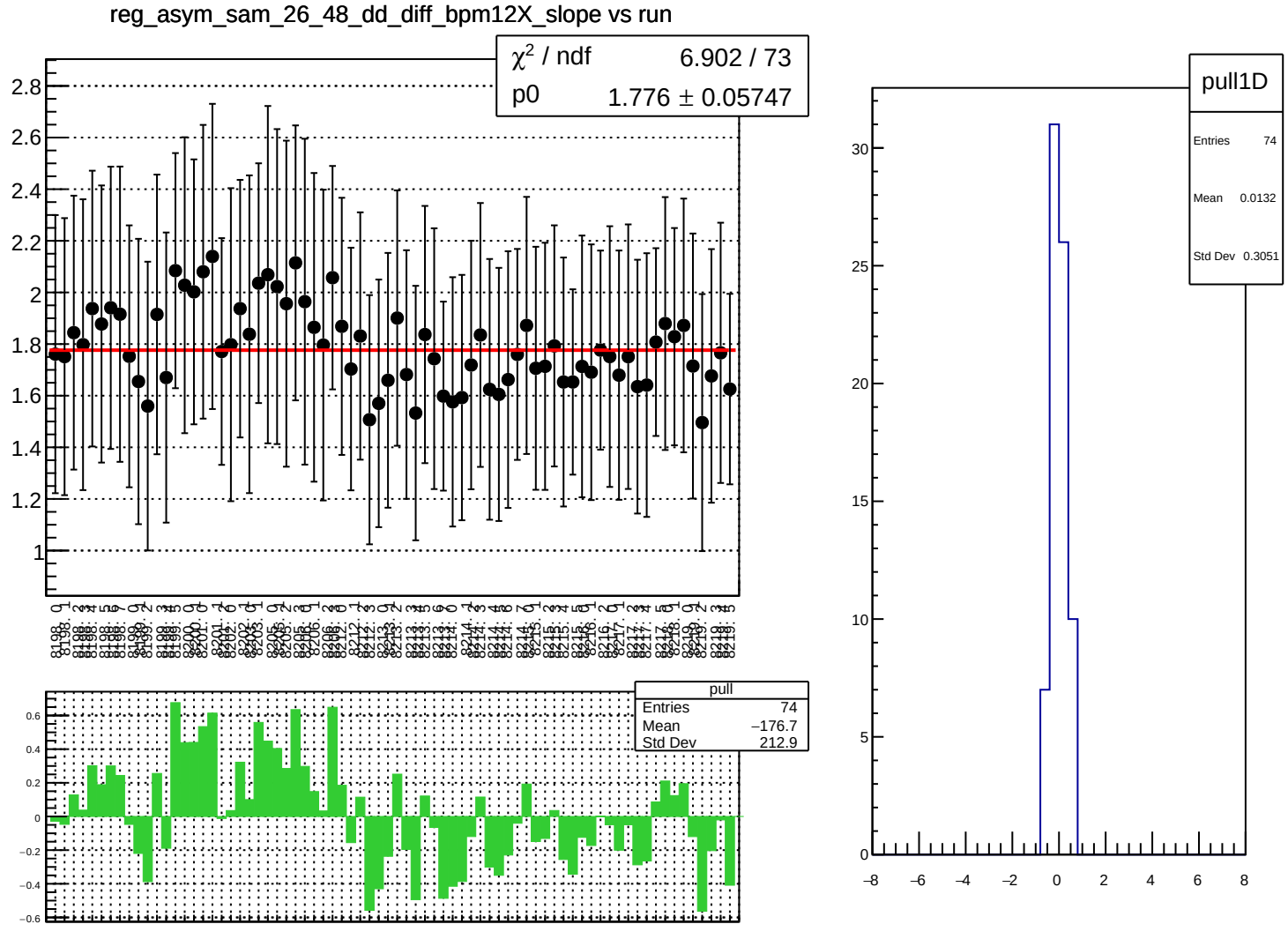

pull1D
Entries 74
Mean −0.01041
Std Dev 0.2881

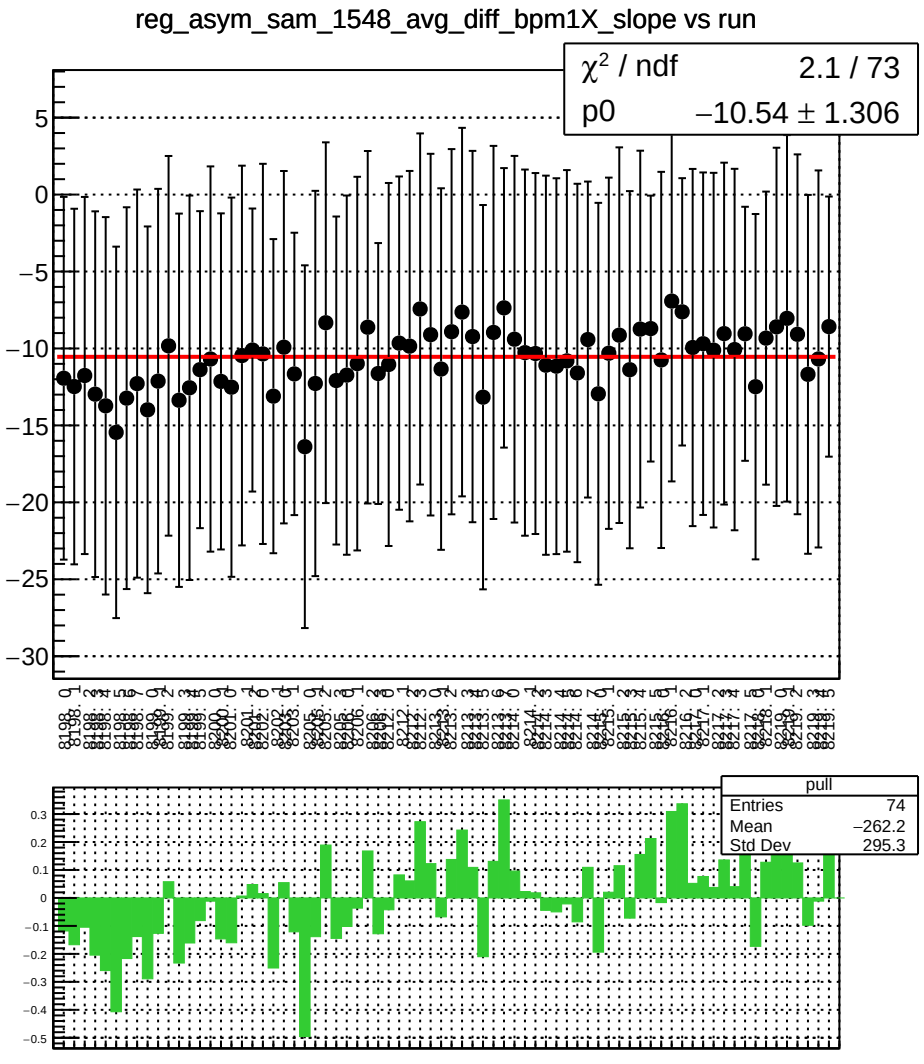

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 8.408 / 73
p0 10.71 ± 0.7108
pull
Entries 74
Mean −235.4
Std Dev 273.7

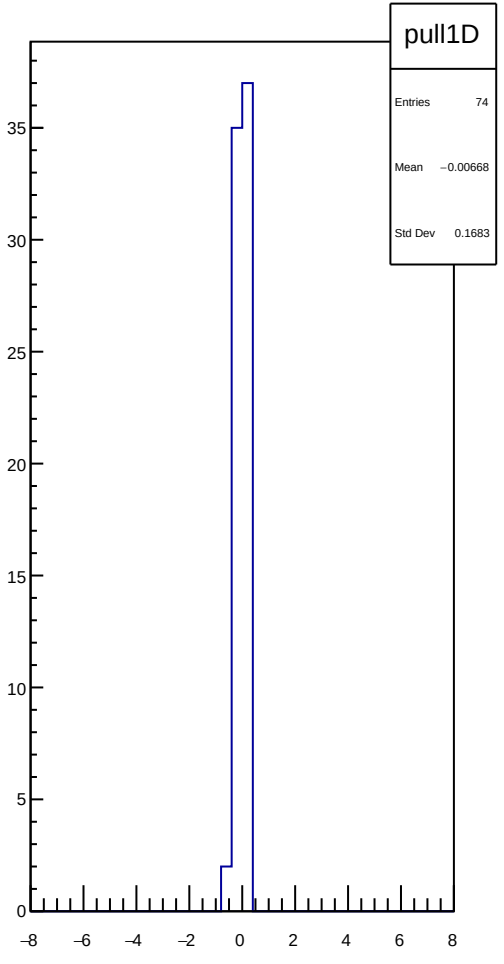

pull1D
Entries 74
Mean −0.01188
Std Dev 0.3369

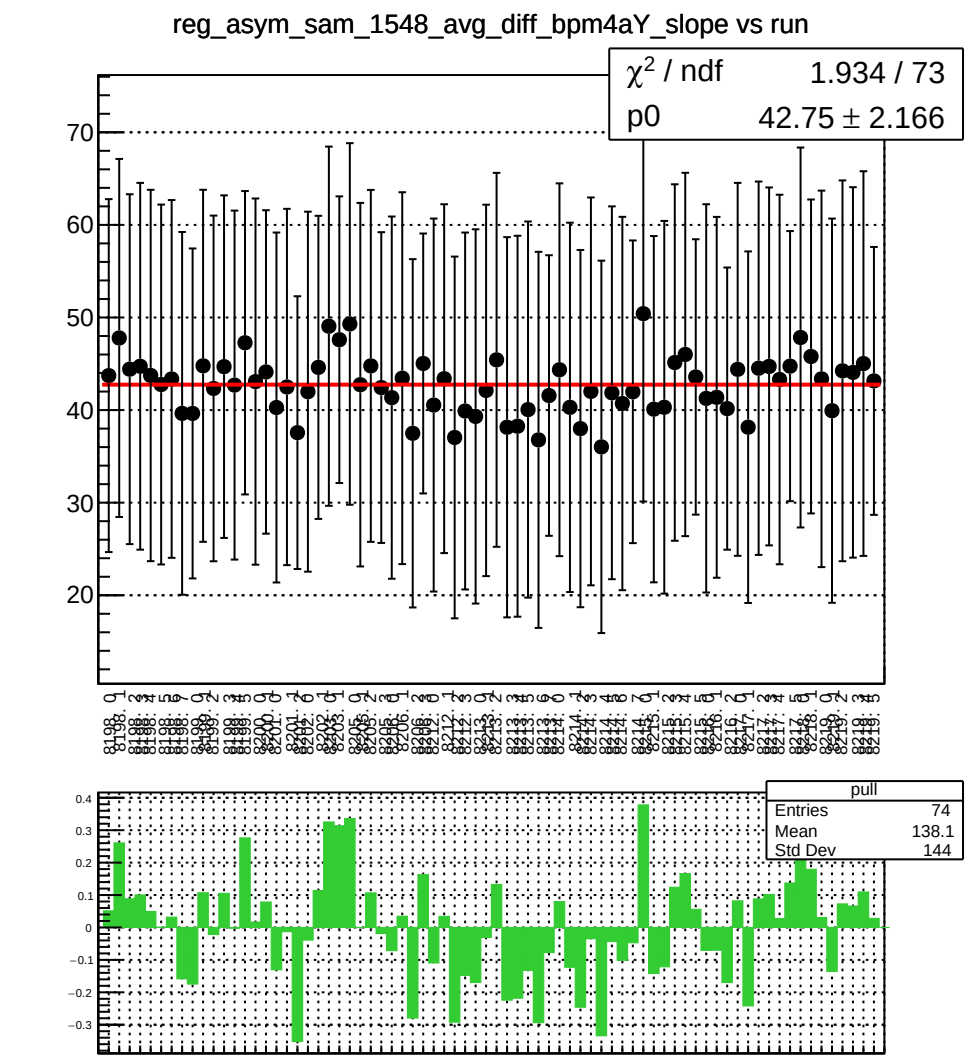

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.64 / 73
p0 −30.51 ± 1.269
pull
Entries 74
Mean −209
Std Dev 237.7

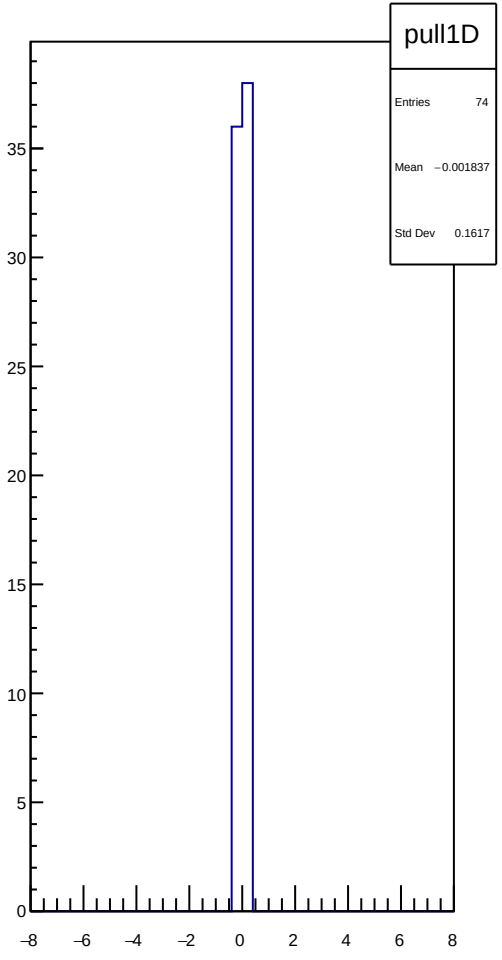

pull1D
Entries 74
Mean 0.01076
Std Dev 0.2759

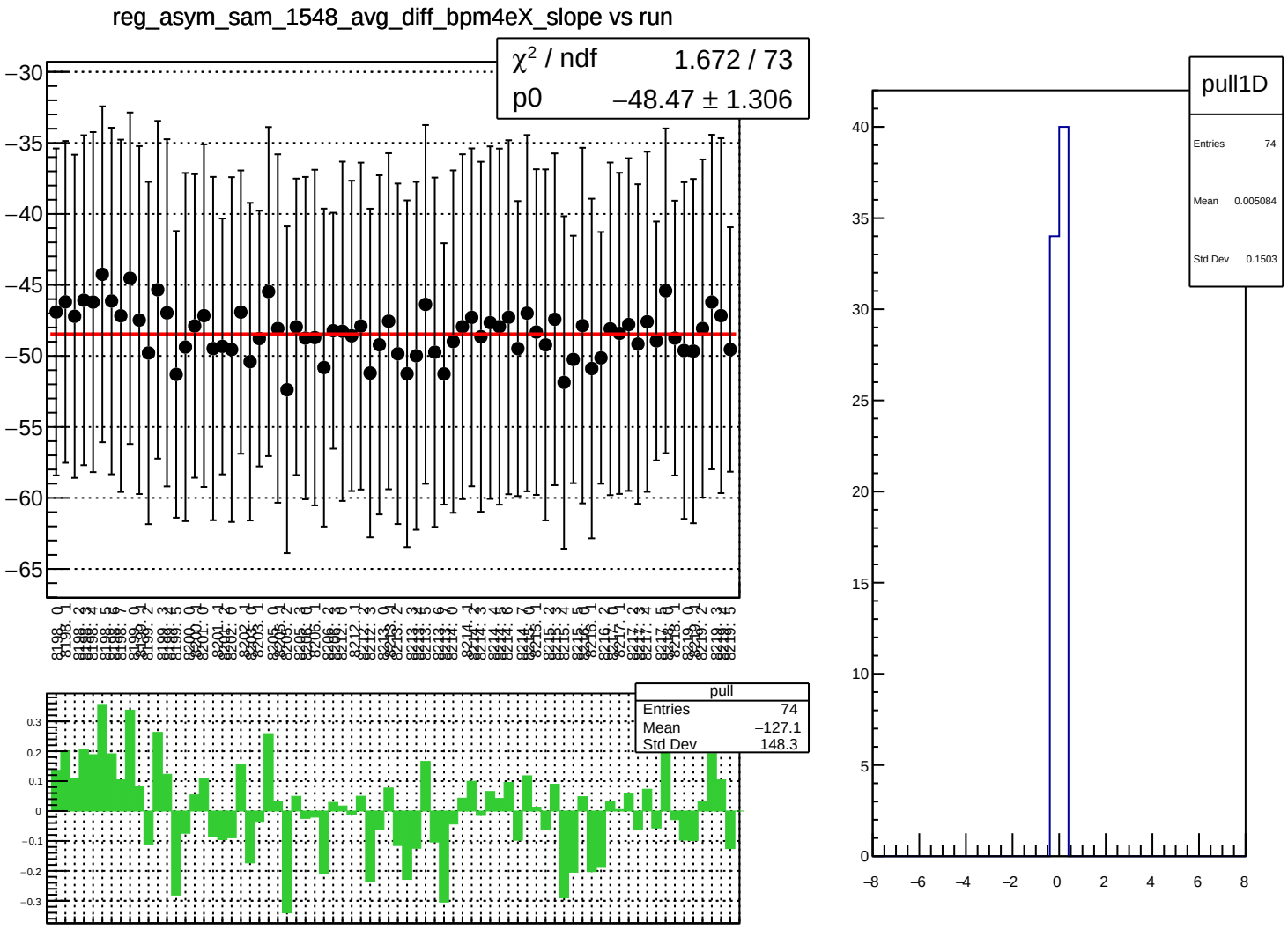

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 6.902 / 73
p0 1.776 ± 0.05747
pull
Entries 74
Mean −176.7
Std Dev 212.9
pull1D
Entries 74
Mean 0.0132
Std Dev 0.3051

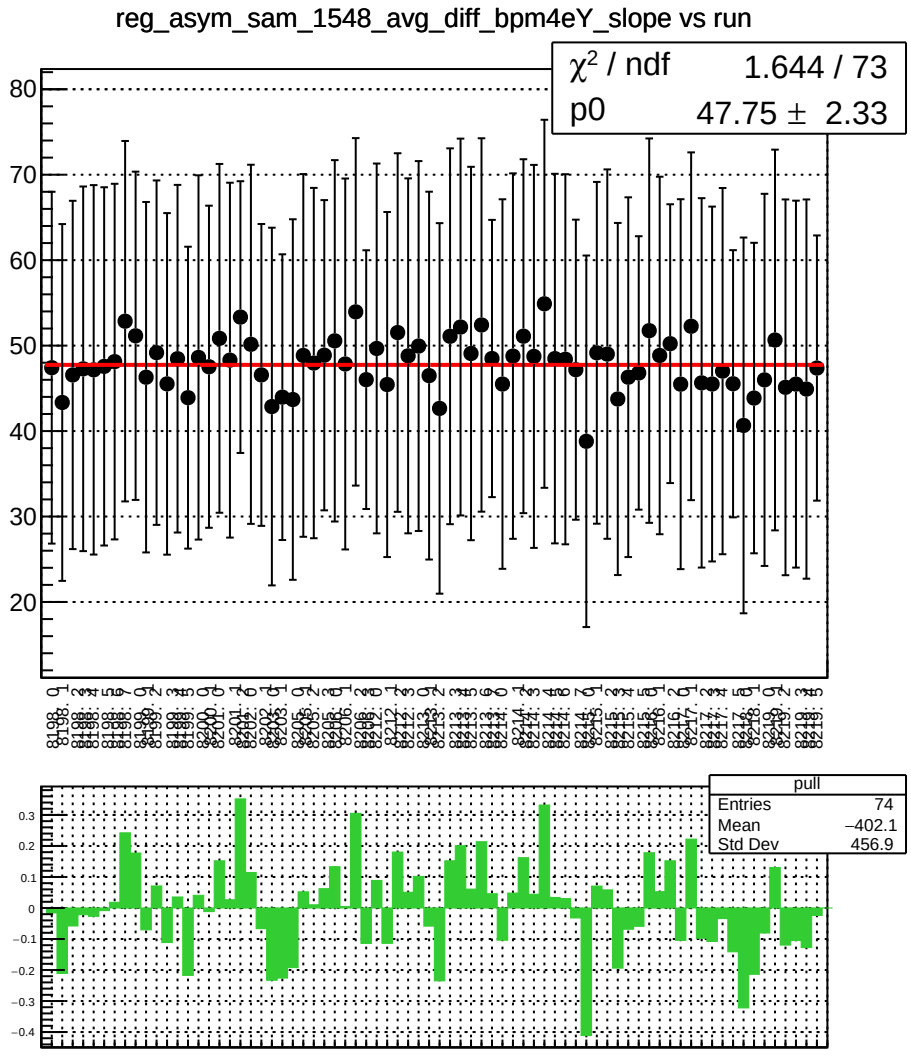

reg_asym_sam_1548_avg_diff_bpm1X_slope vs run
χ² / ndf 2.1 / 73
p0 −10.54 ± 1.306
pull
Entries 74
Mean −262.2
Std Dev 295.3

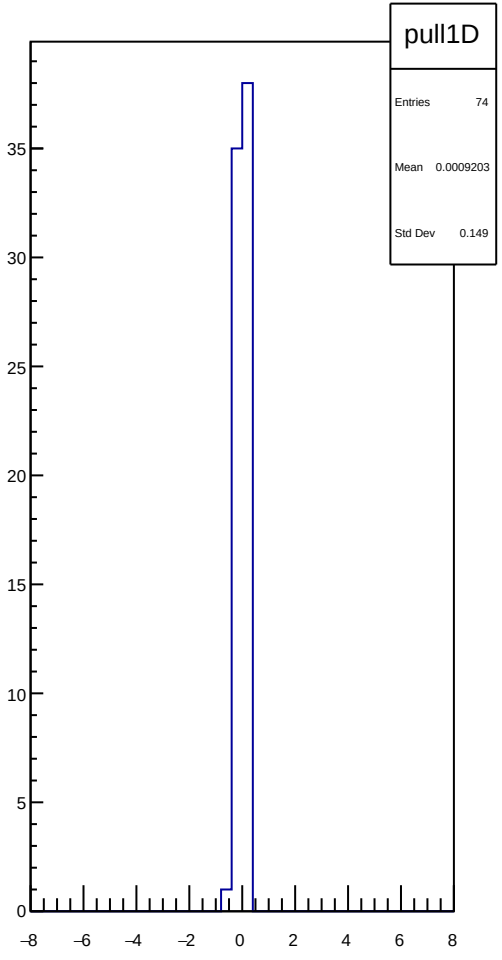

pull1D
Entries 74
Mean −0.00668
Std Dev 0.1683

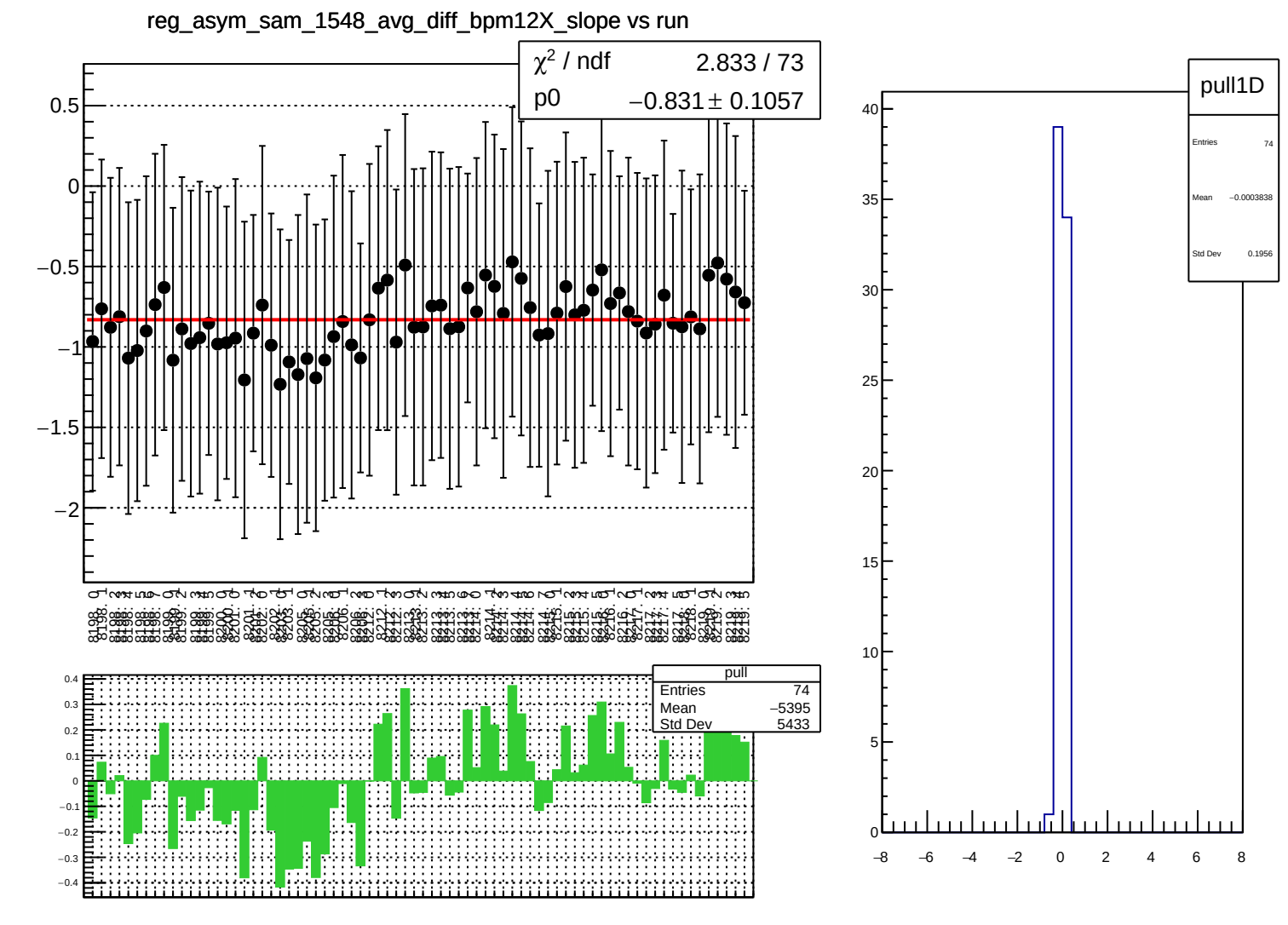

reg_asym_sam_1548_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.934 / 73
p0 42.75 ± 2.166
pull
Entries 74
Mean 138.1
Std Dev 144

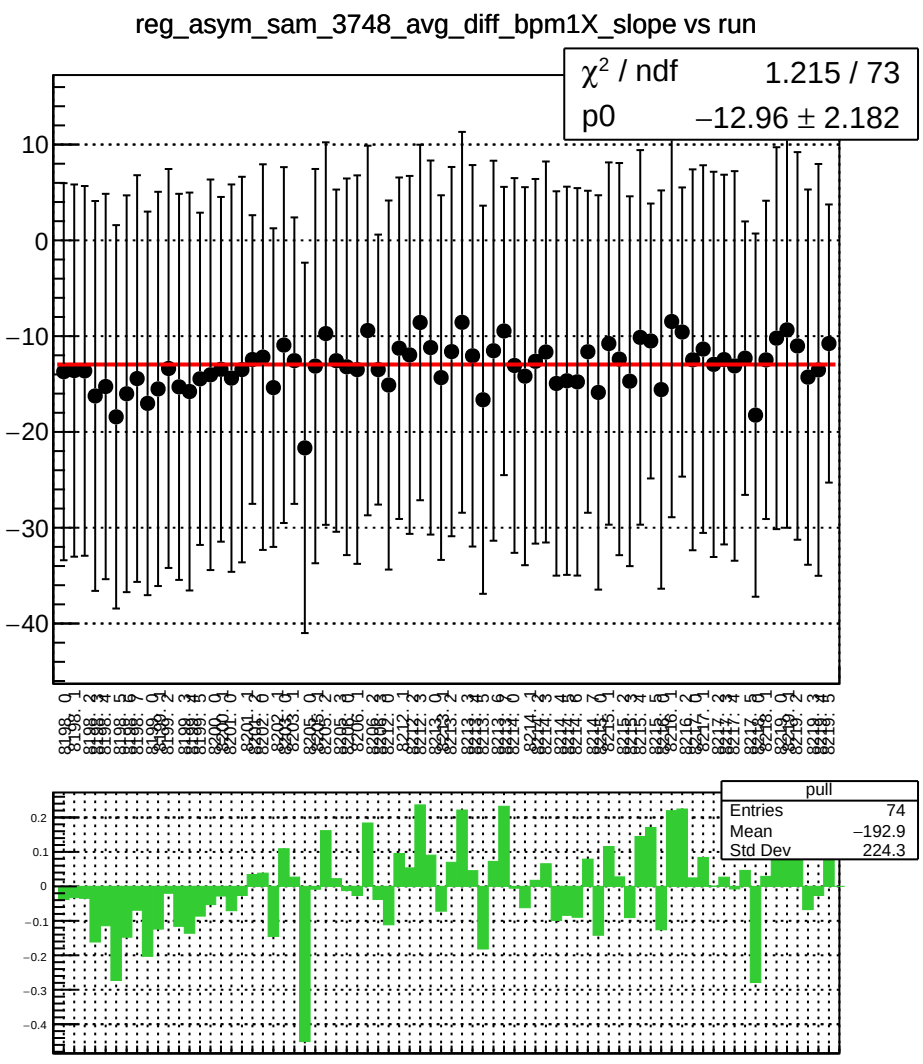

pull1D
Entries 74
Mean −0.001837
Std Dev 0.1617

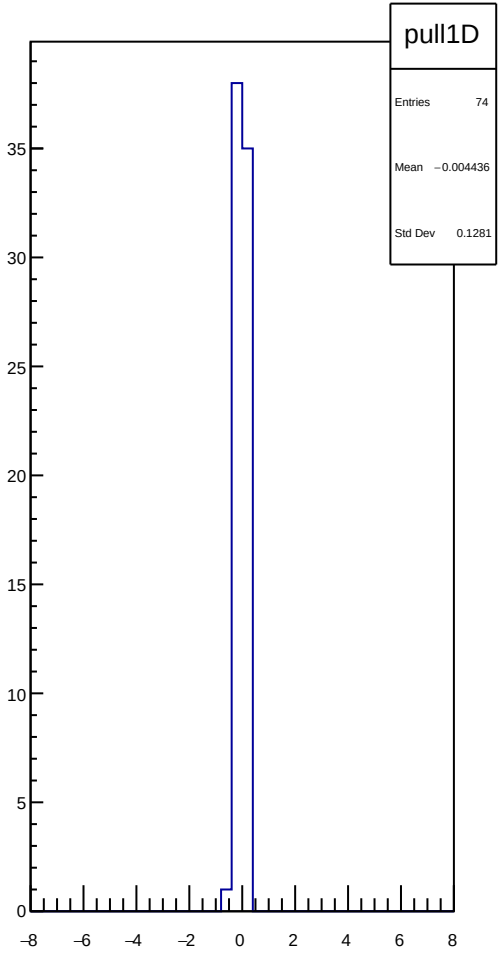

reg_asym_sam_1548_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.672 / 73
p0 −48.47 ± 1.306
pull
Entries 74
Mean −127.1
Std Dev 148.3
pull1D
Entries 74
Mean 0.005084
Std Dev 0.1503

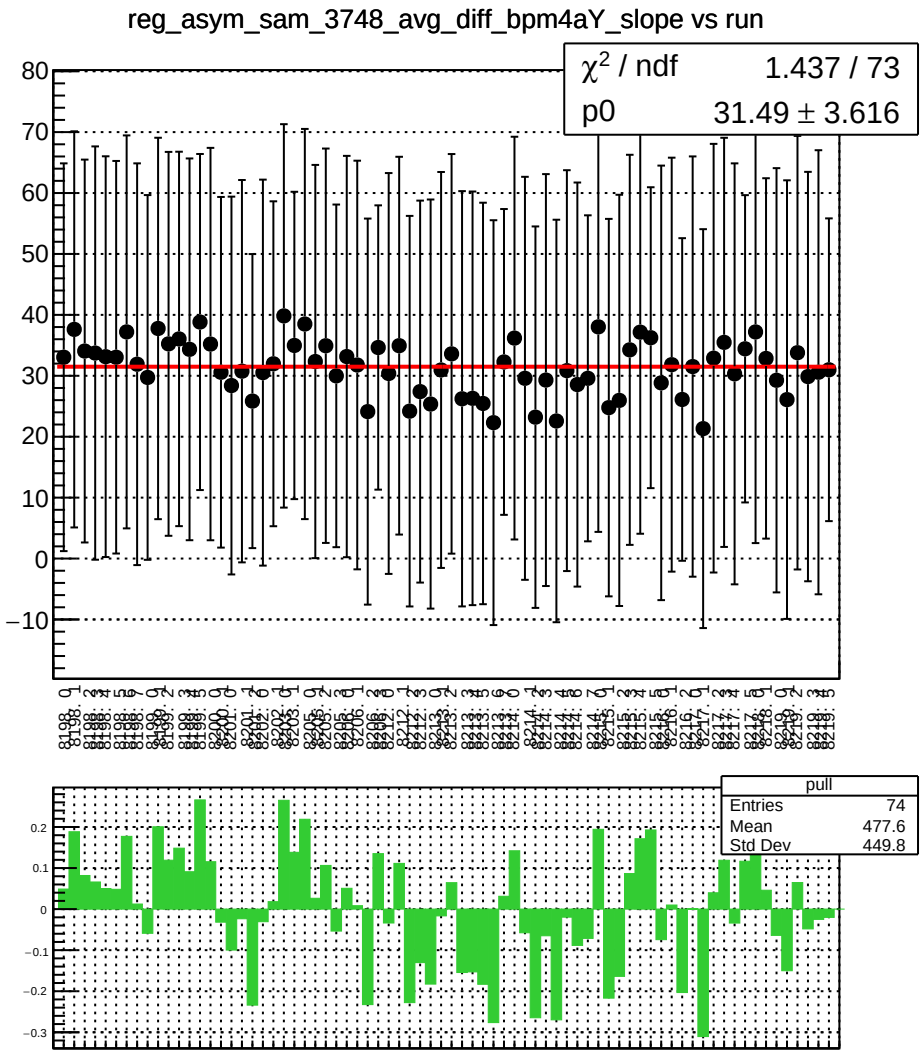

reg_asym_sam_1548_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.644 / 73
p0 47.75 ± 2.33
pull
Entries 74
Mean −402.1
Std Dev 456.9

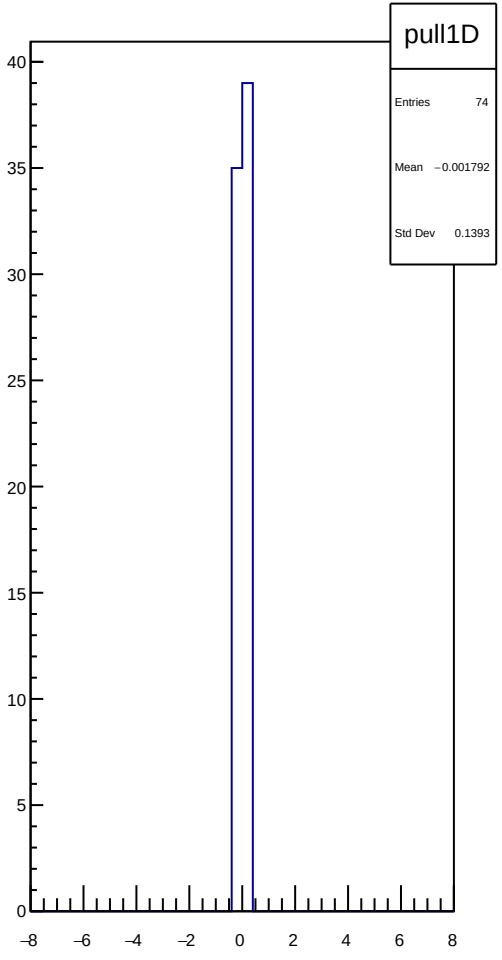

pull1D
Entries 74
Mean 0.0009203
Std Dev 0.149

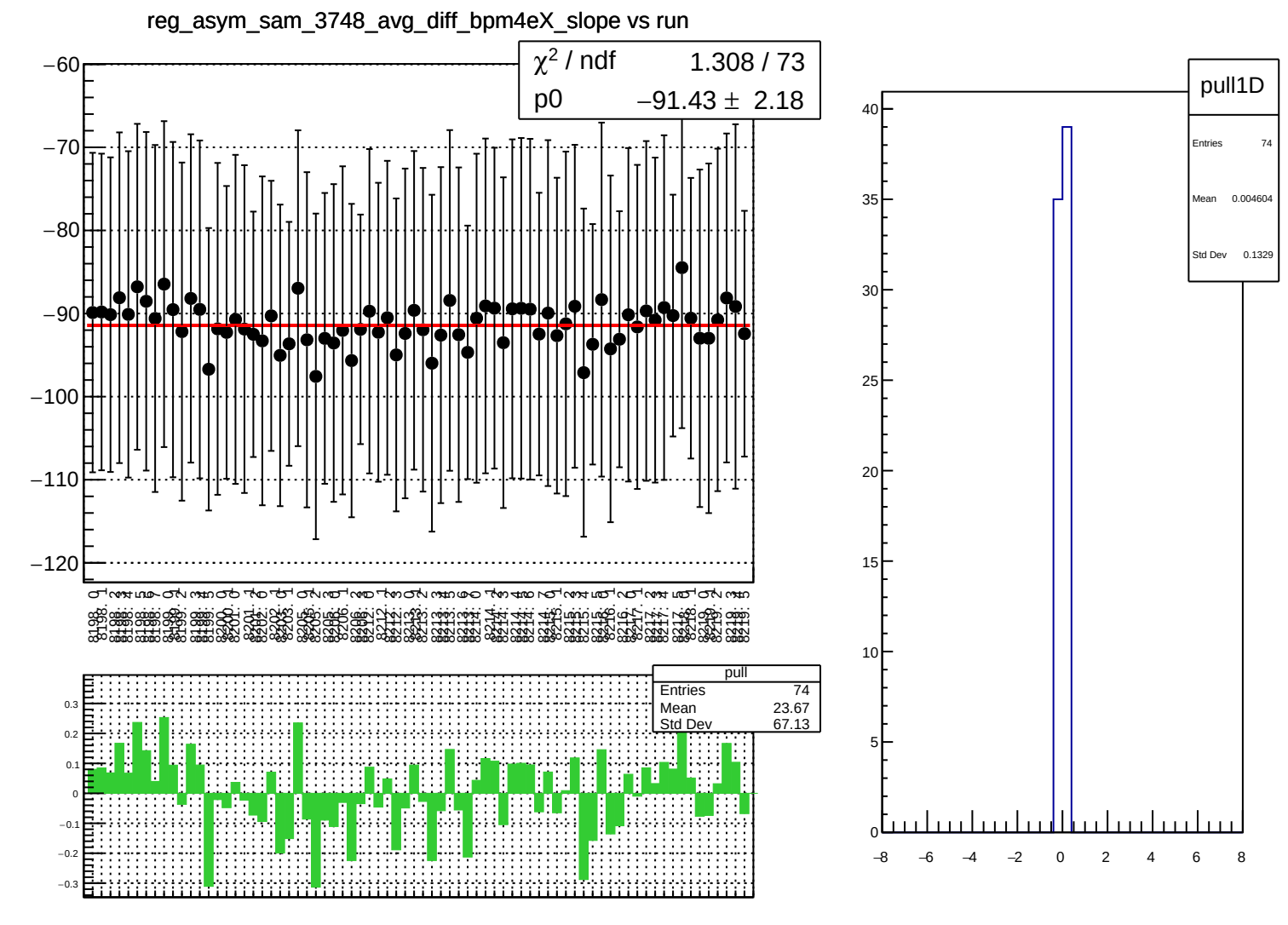

reg_asym_sam_1548_avg_diff_bpm12X_slope vs run
χ² / ndf 2.833 / 73
p0 −0.831 ± 0.1057
pull
Entries 74
Mean −5395
Std Dev 5433
pull1D
Entries 74
Mean −0.0003838
Std Dev 0.1956

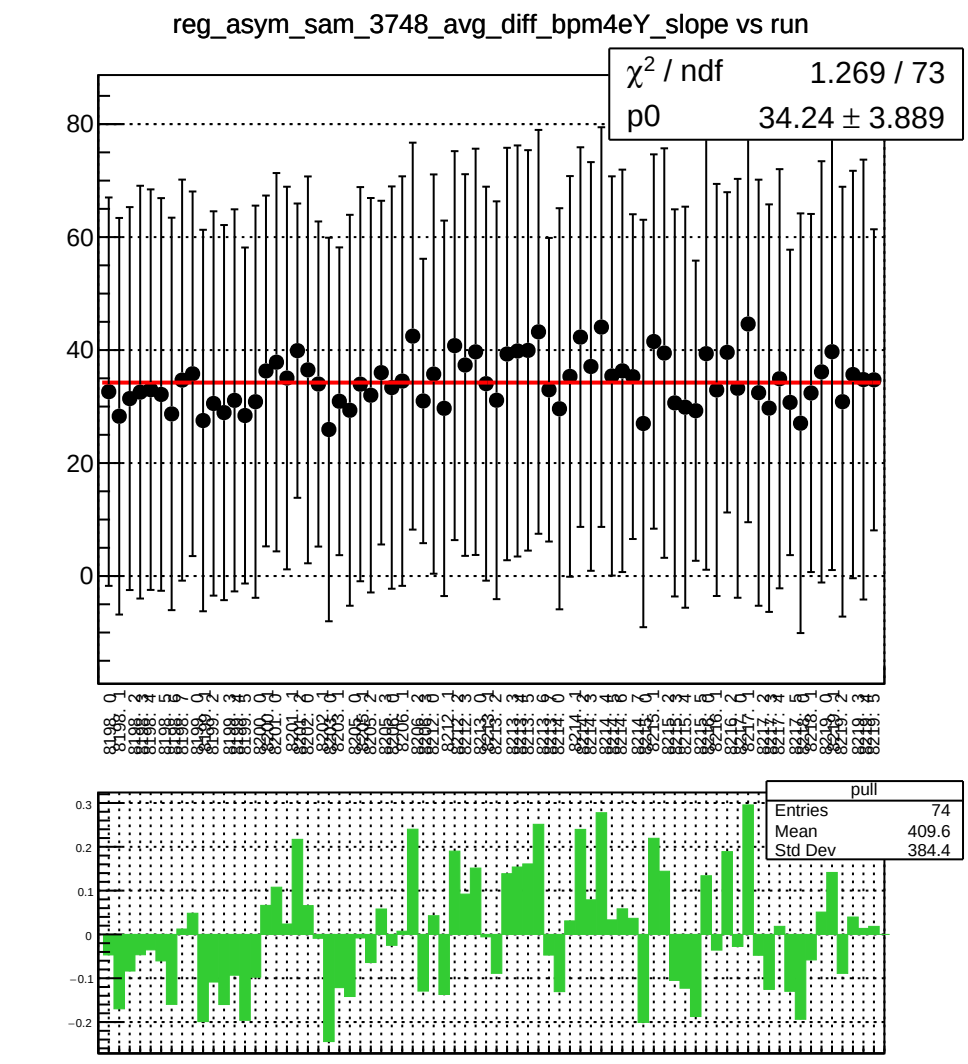

reg_asym_sam_3748_avg_diff_bpm1X_slope vs run
χ² / ndf 1.215 / 73
p0 −12.96 ± 2.182
pull
Entries 74
Mean −192.9
Std Dev 224.3

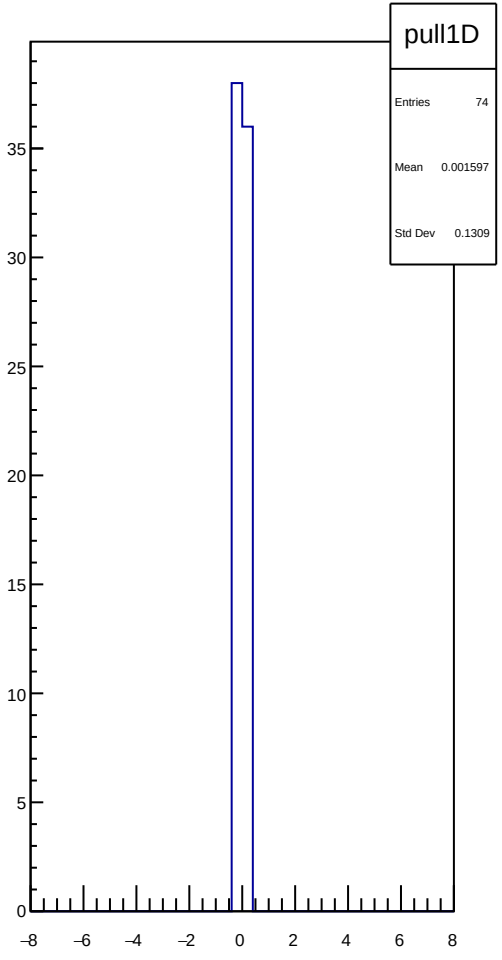

pull1D
Entries 74
Mean −0.004436
Std Dev 0.1281

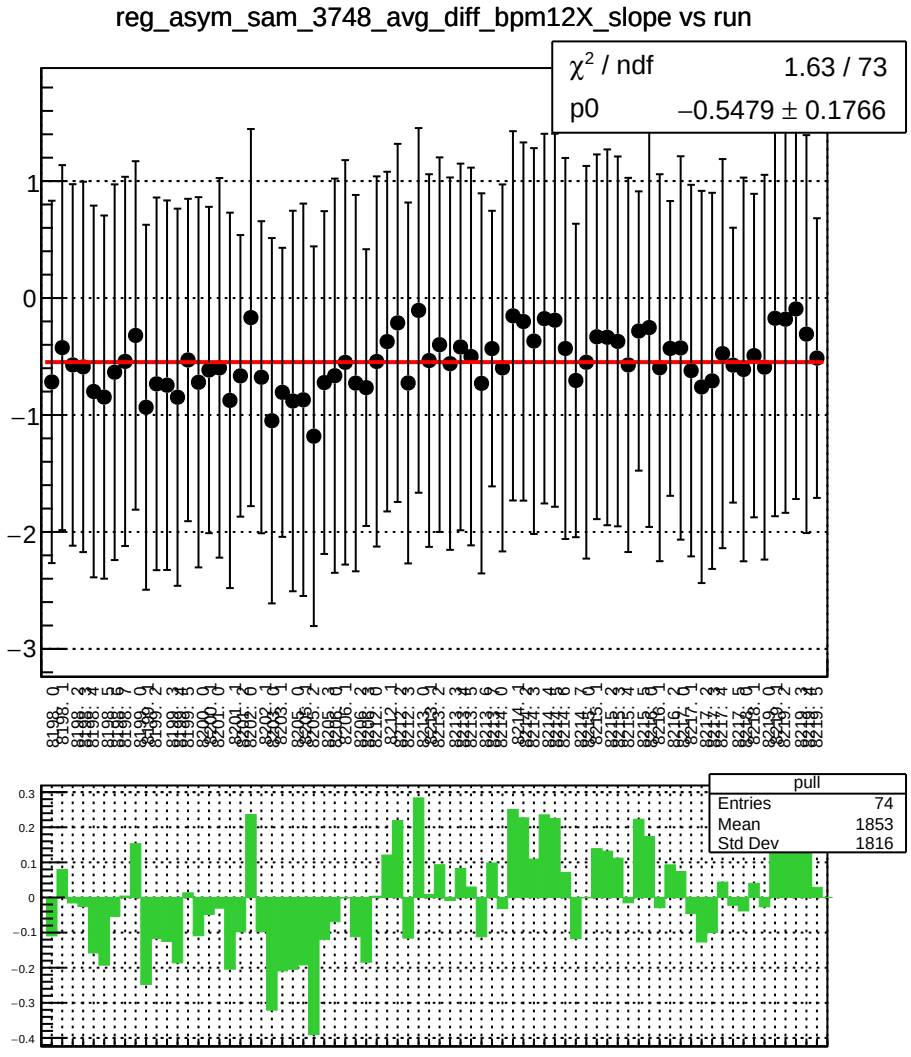

reg_asym_sam_3748_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.437 / 73
p0 31.49 ± 3.616
pull
Entries 74
Mean 477.6
Std Dev 449.8

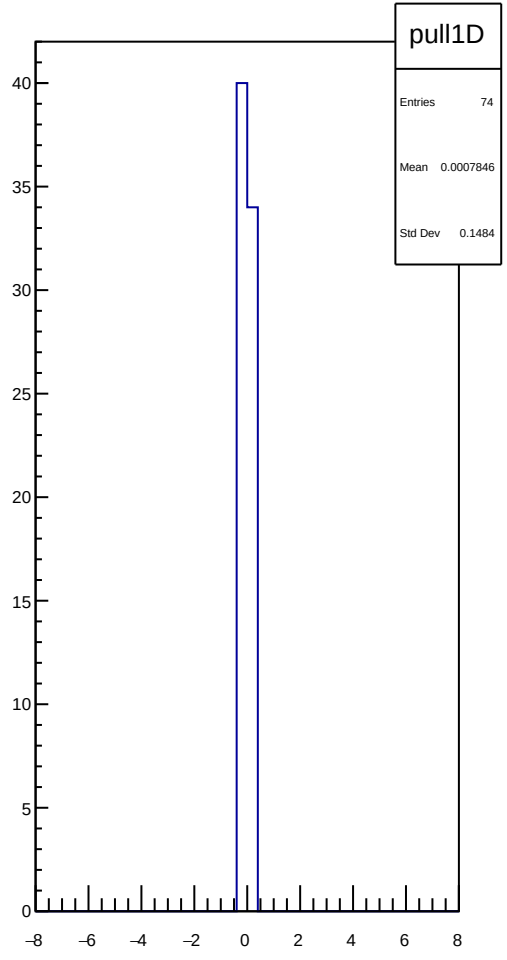

pull1D
Entries 74
Mean −0.001792
Std Dev 0.1393

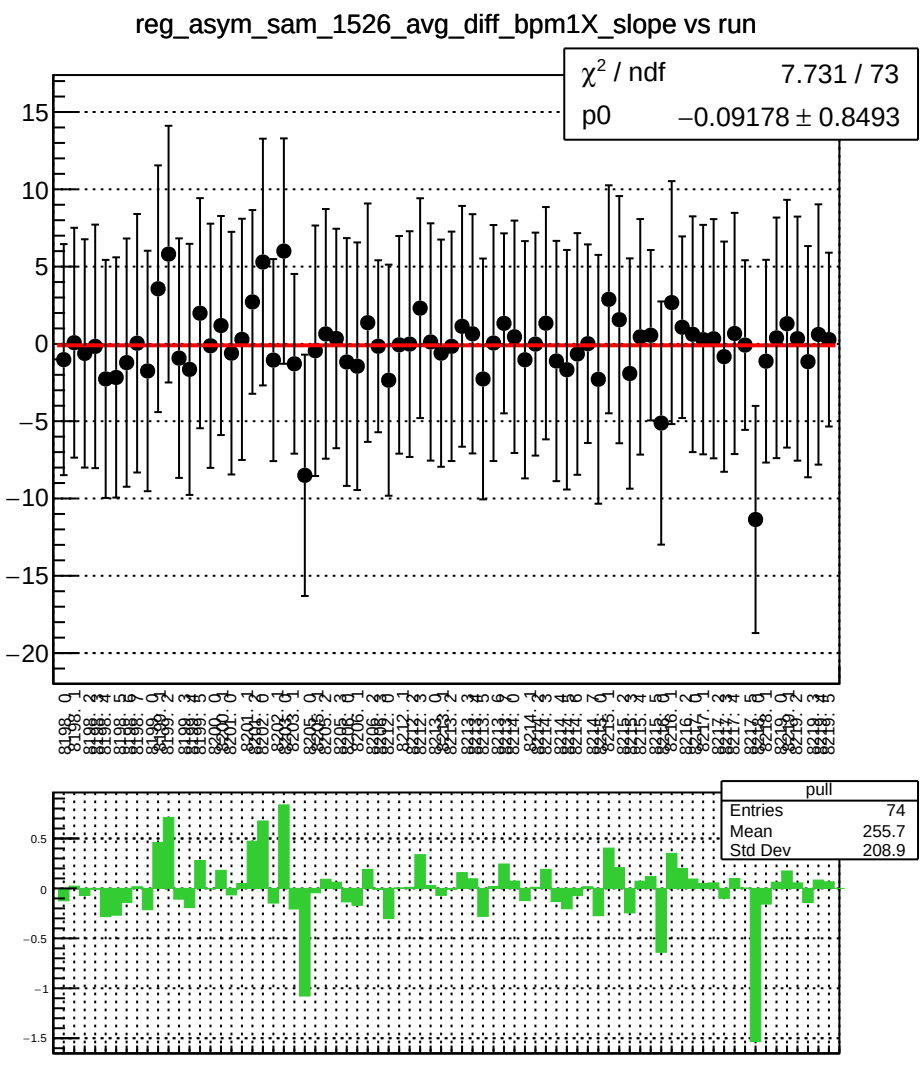

reg_asym_sam_3748_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.308 / 73
p0 −91.43 ± 2.18
pull
Entries 74
Mean 23.67
Std Dev 67.13
pull1D
Entries 74
Mean 0.004604
Std Dev 0.1329

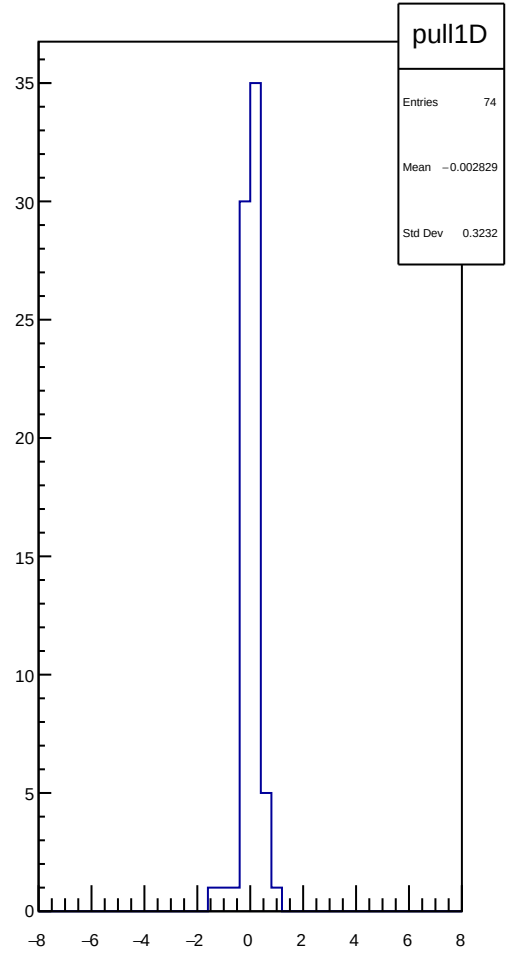

reg_asym_sam_3748_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.269 / 73
p0 34.24 ± 3.889
pull
Entries 74
Mean 409.6
Std Dev 384.4

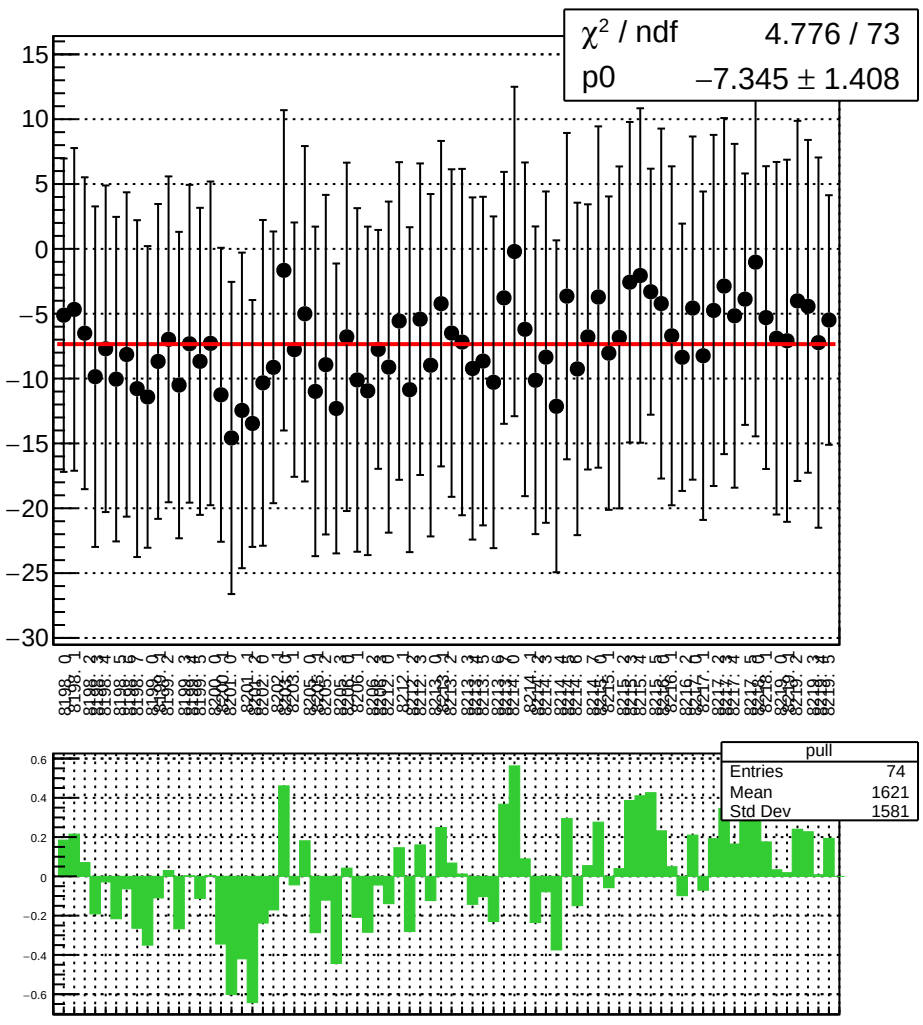

pull1D
Entries 74
Mean 0.001597
Std Dev 0.1309

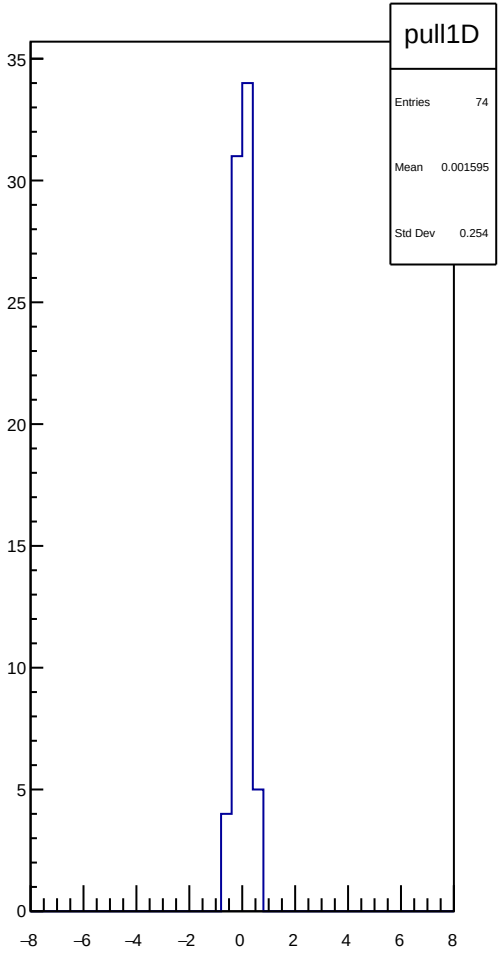

reg_asym_sam_3748_avg_diff_bpm12X_slope vs run
χ² / ndf 1.63 / 73
p0 −0.5479 ± 0.1766
pull
Entries 74
Mean 1853
Std Dev 1816

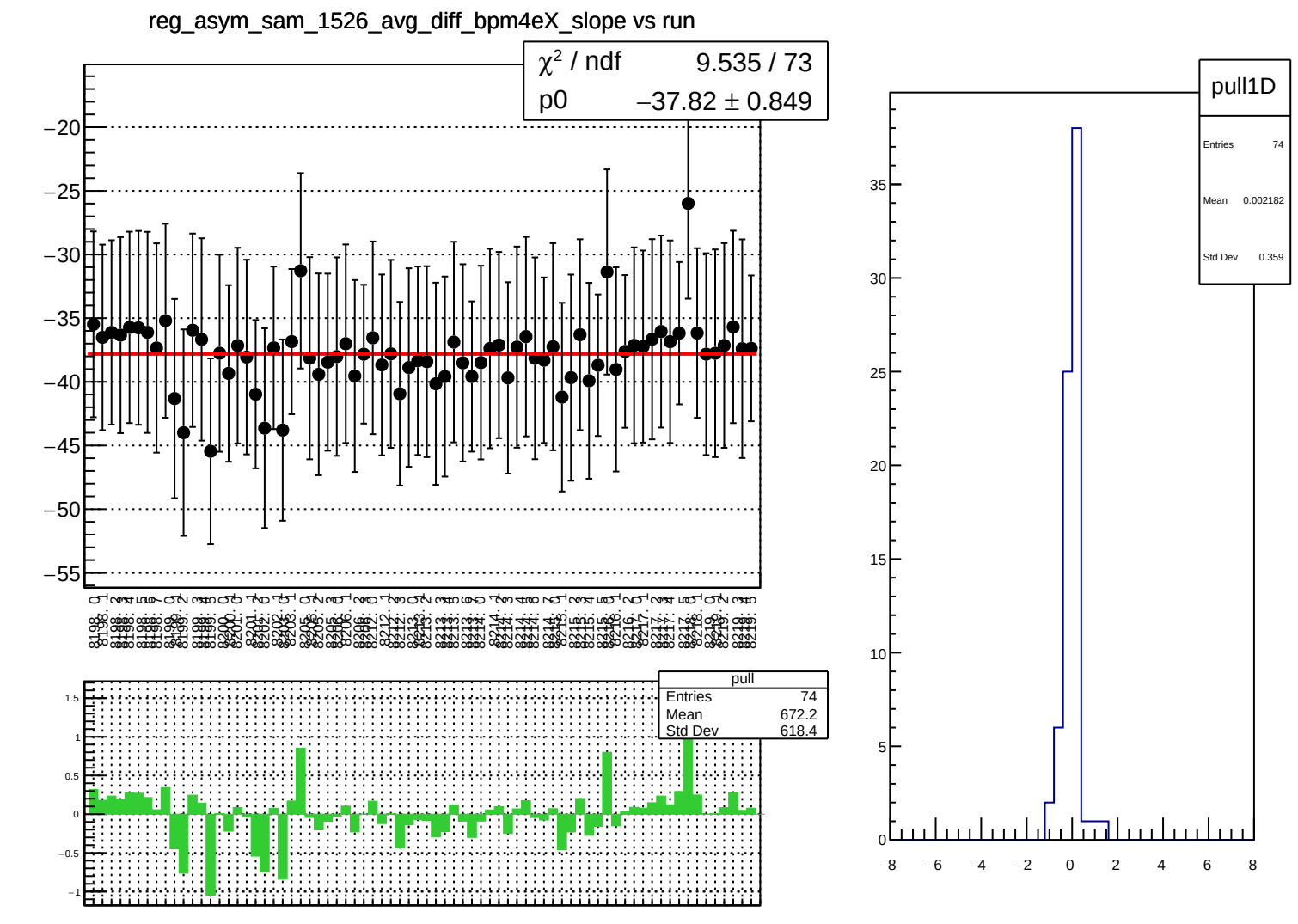

pull1D
Entries 74
Mean 0.0007846
Std Dev 0.1484

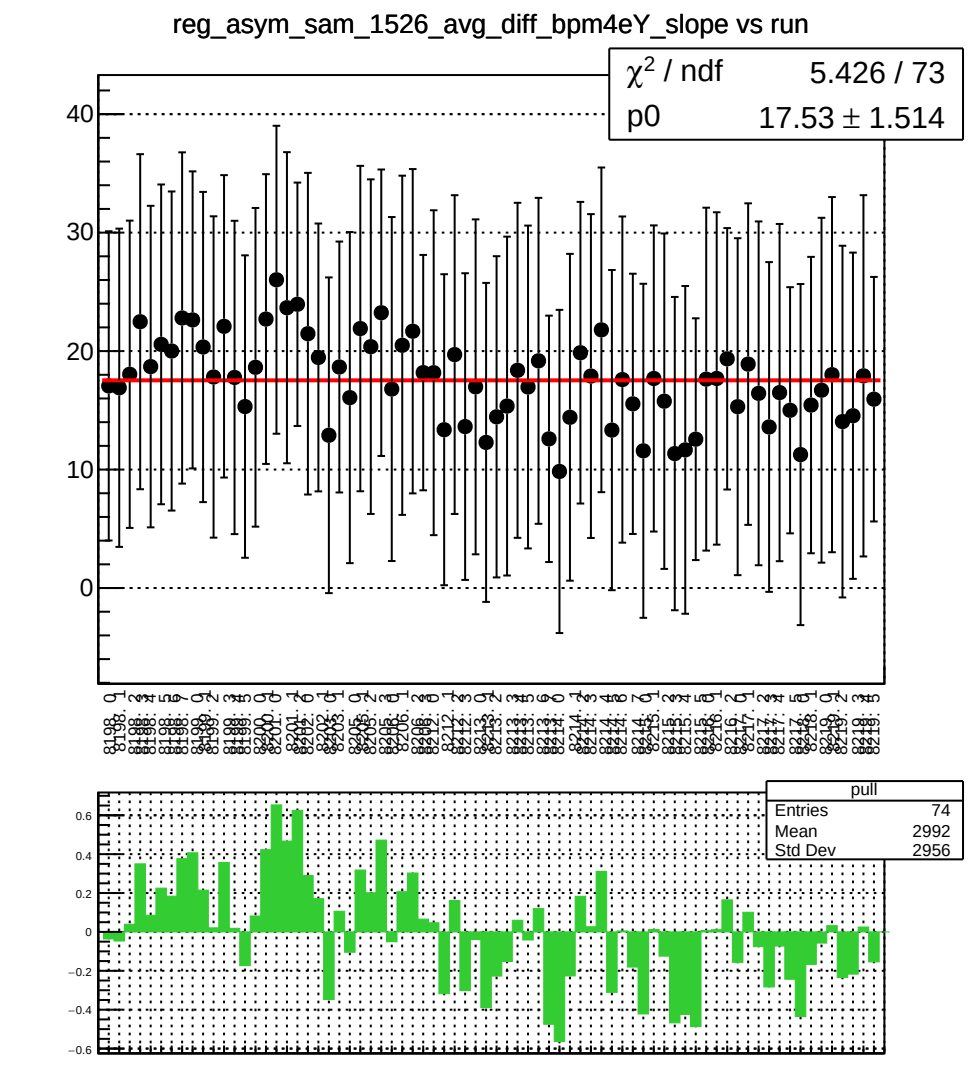

reg_asym_sam_1526_avg_diff_bpm1X_slope vs run
χ² / ndf 7.731 / 73
p0 −0.09178 ± 0.8493
pull
Entries 74
Mean 255.7
Std Dev 208.9

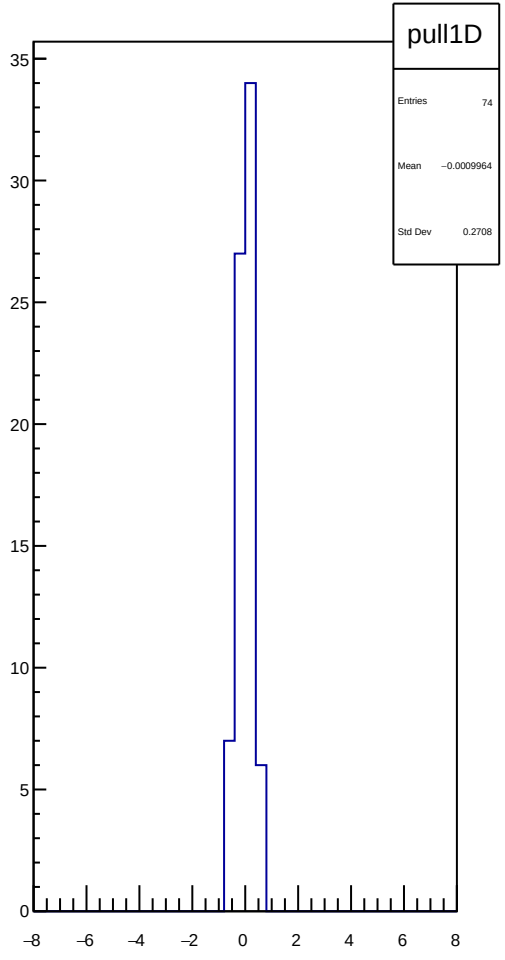

pull1D
Entries 74
Mean −0.002829
Std Dev 0.3232

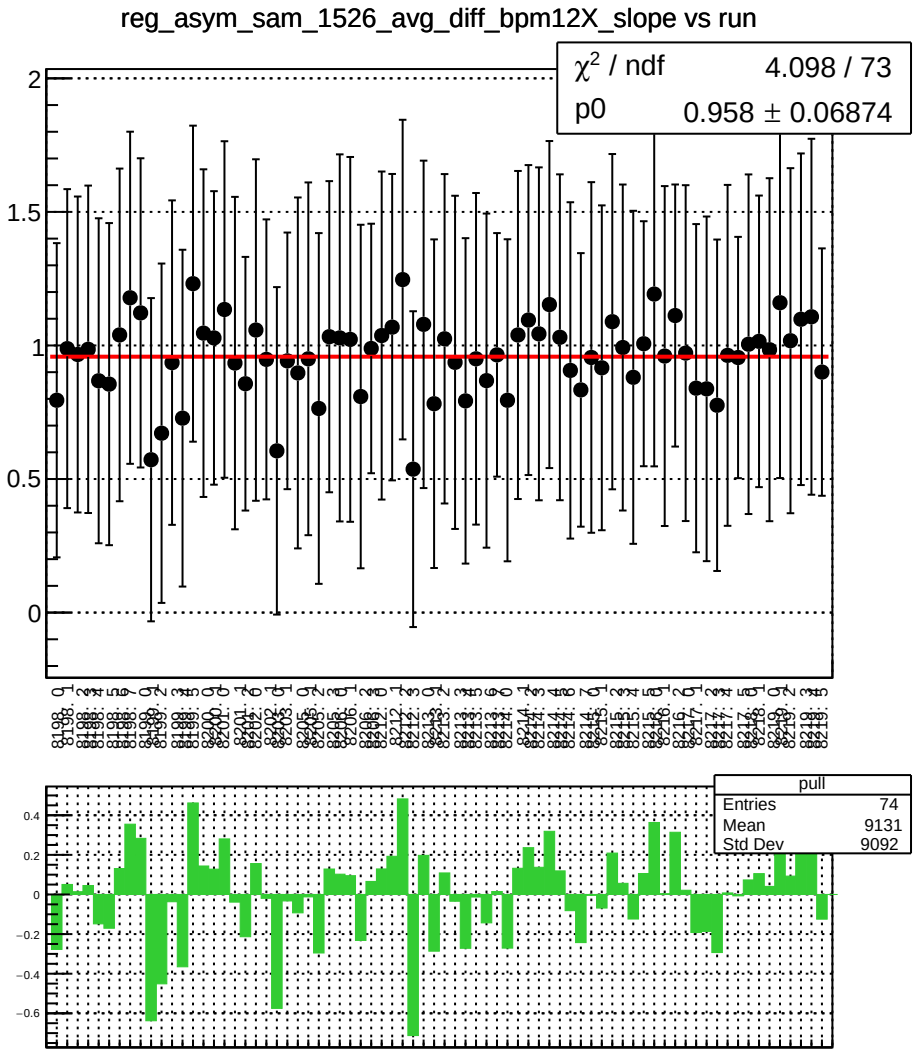

reg_asym_sam_1526_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.776 / 73
p0 −7.345 ± 1.408
pull
Entries 74
Mean 1621
Std Dev 1581

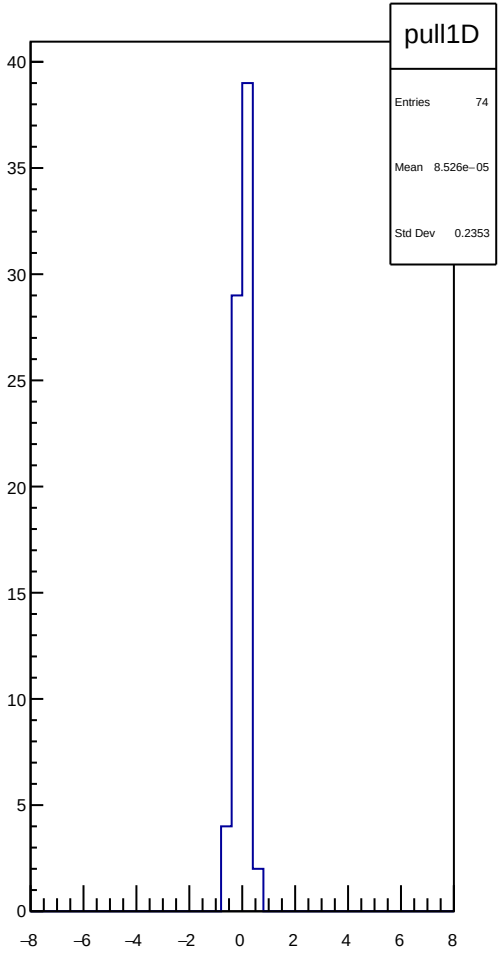

pull1D
Entries 74
Mean 0.001595
Std Dev 0.254

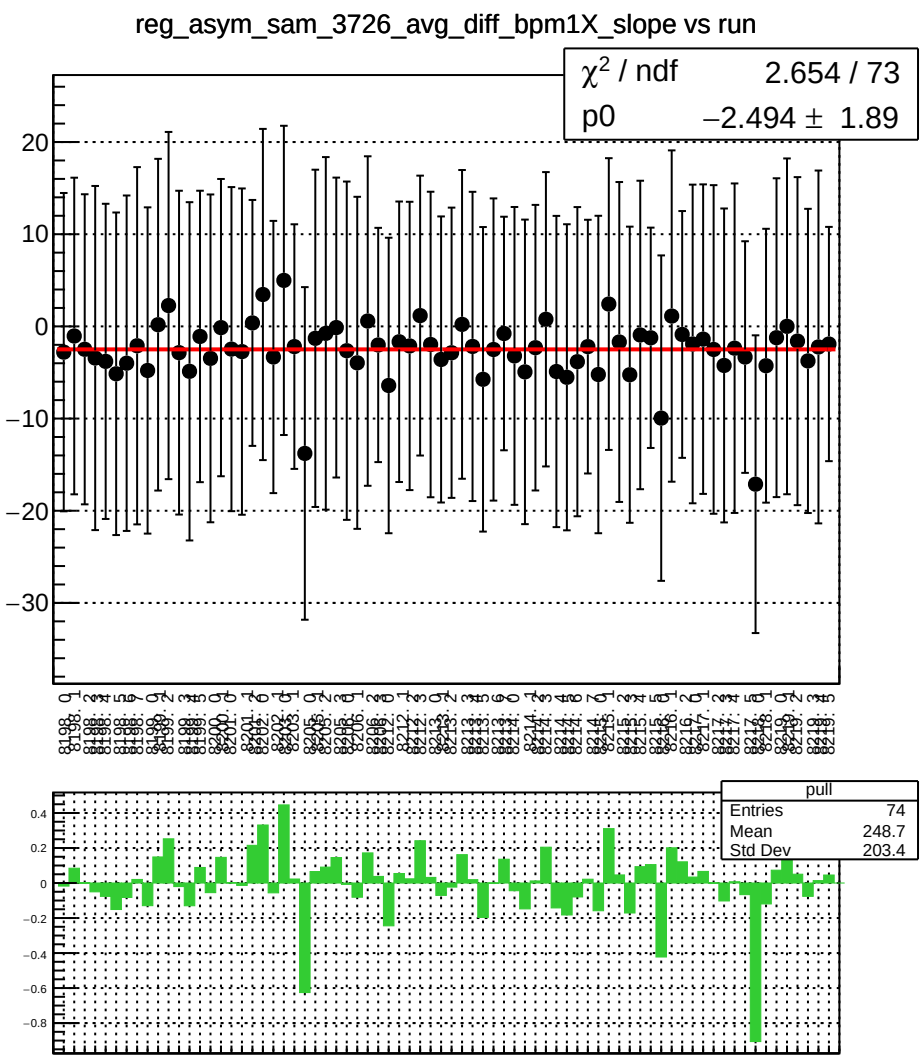

reg_asym_sam_1526_avg_diff_bpm4eX_slope vs run
χ² / ndf 9.535 / 73
p0 −37.82 ± 0.849
pull
Entries 74
Mean 672.2
Std Dev 618.4
pull1D
Entries 74
Mean 0.002182
Std Dev 0.359

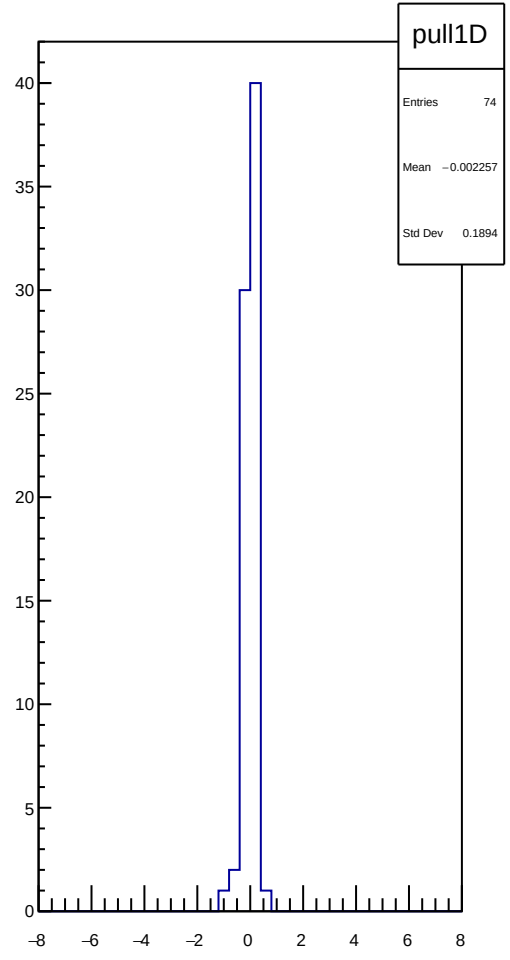

reg_asym_sam_1526_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.426 / 73
p0 17.53 ± 1.514
pull
Entries 74
Mean 2992
Std Dev 2956

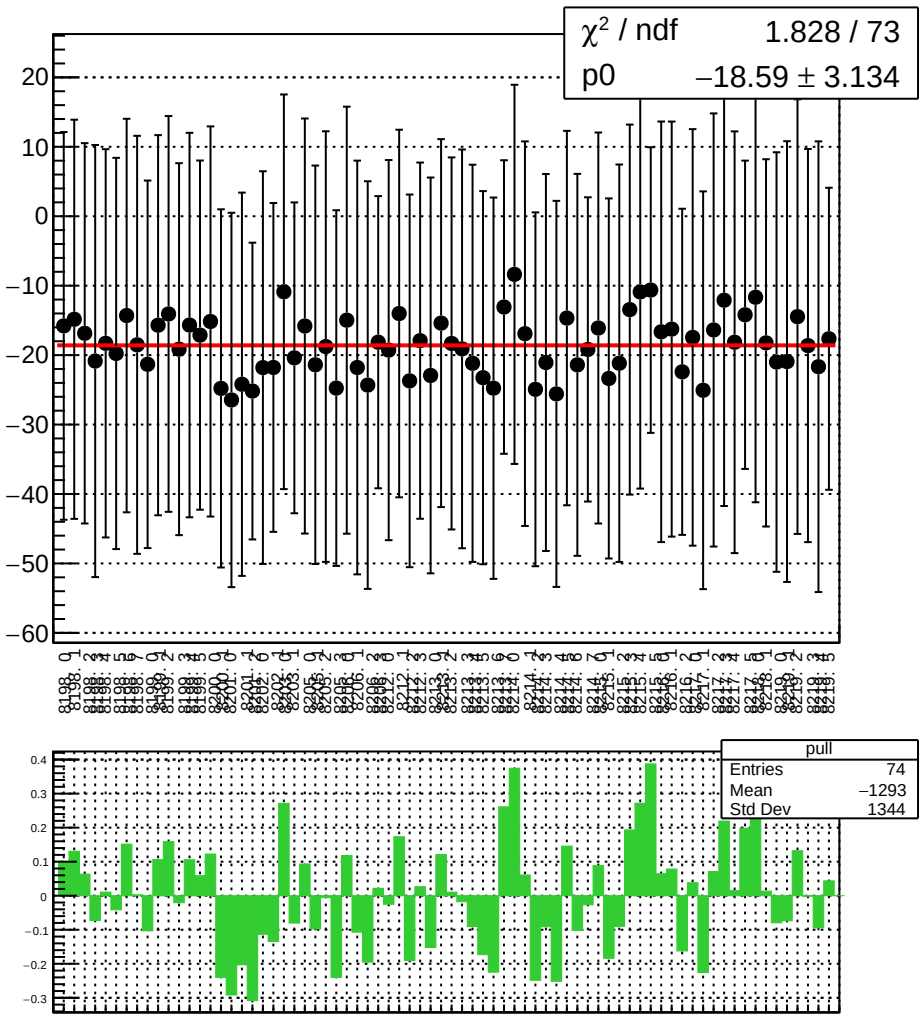

pull1D
Entries 74
Mean −0.0009964
Std Dev 0.2708

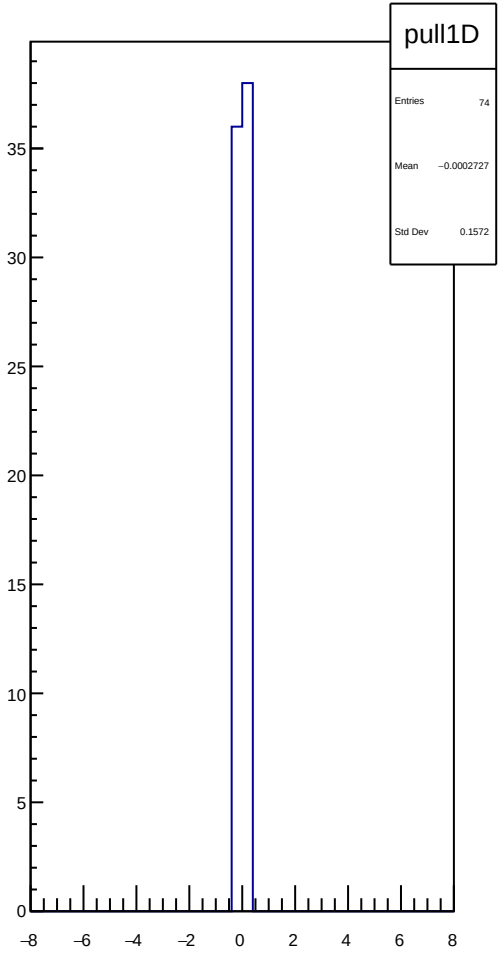

reg_asym_sam_1526_avg_diff_bpm12X_slope vs run
χ² / ndf 4.098 / 73
p0 0.958 ± 0.06874
pull
Entries 74
Mean 9131
Std Dev 9092

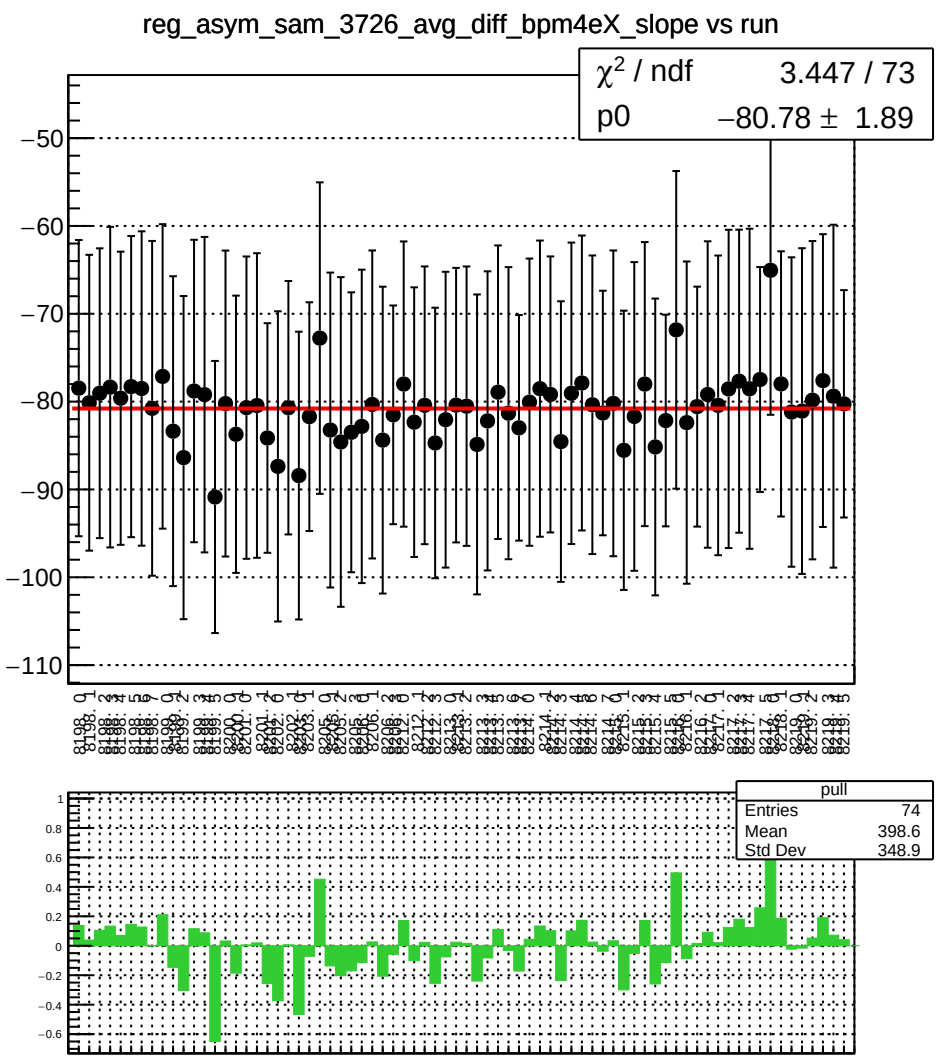

pull1D
Entries 74
Mean 8.526e−05
Std Dev 0.2353

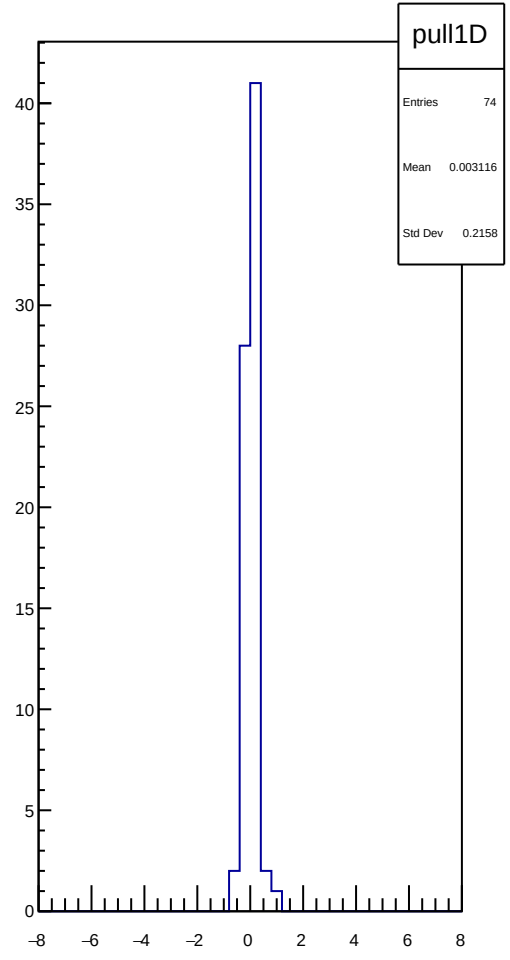

reg_asym_sam_3726_avg_diff_bpm1X_slope vs run
χ² / ndf 2.654 / 73
p0 −2.494 ± 1.89
pull
Entries 74
Mean 248.7
Std Dev 203.4

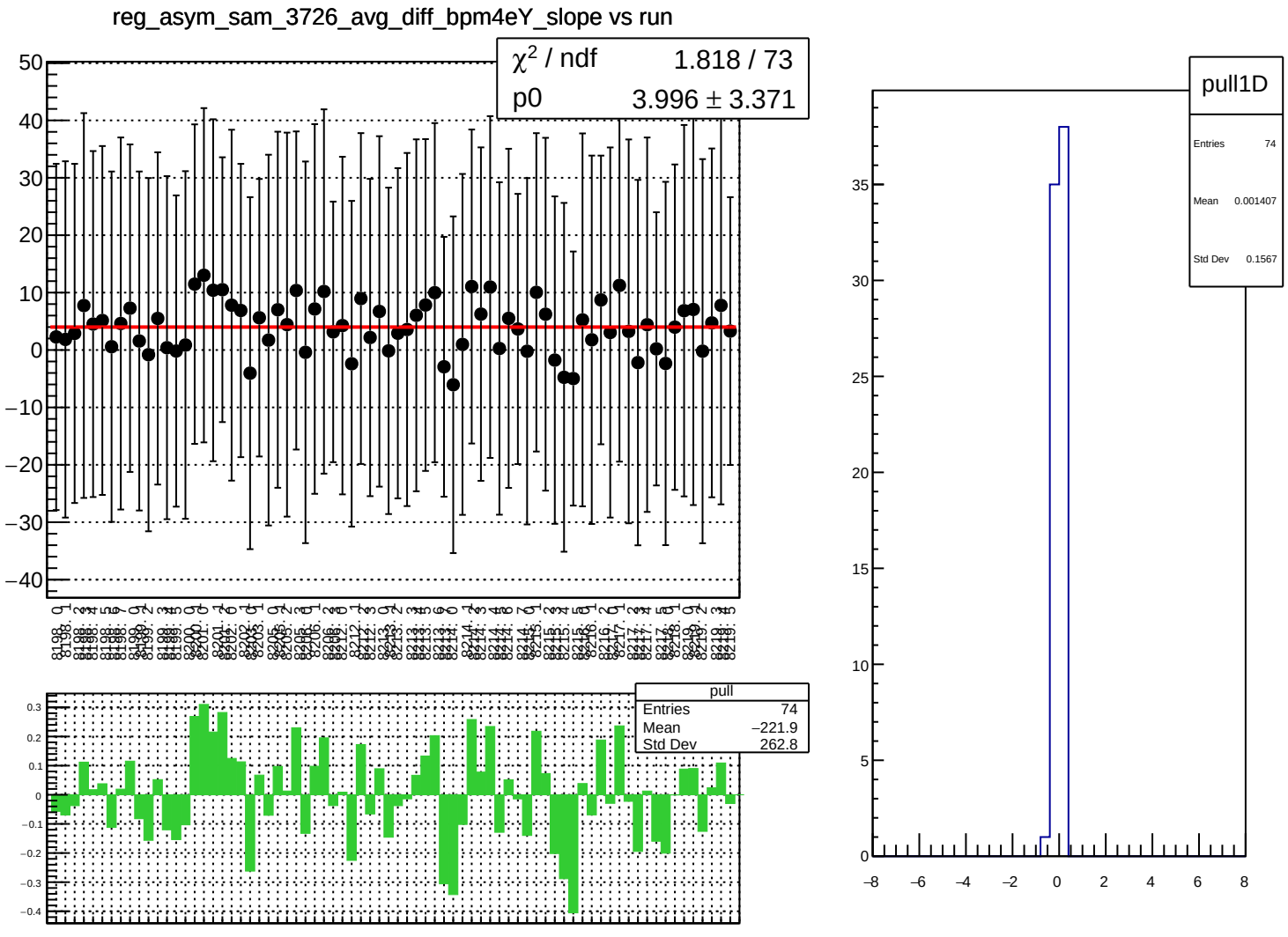

pull1D
Entries 74
Mean −0.002257
Std Dev 0.1894

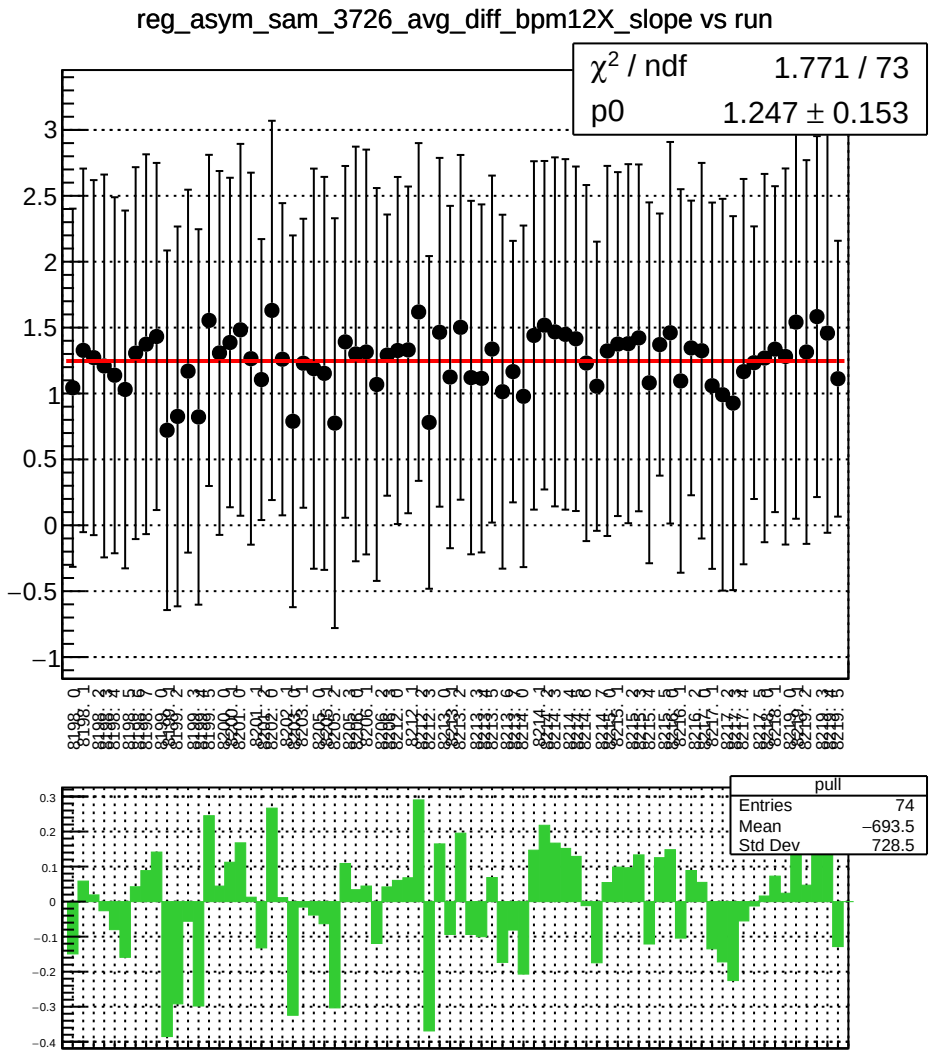

reg_asym_sam_3726_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.828 / 73
p0 −18.59 ± 3.134
pull
Entries 74
Mean −1293
Std Dev 1344

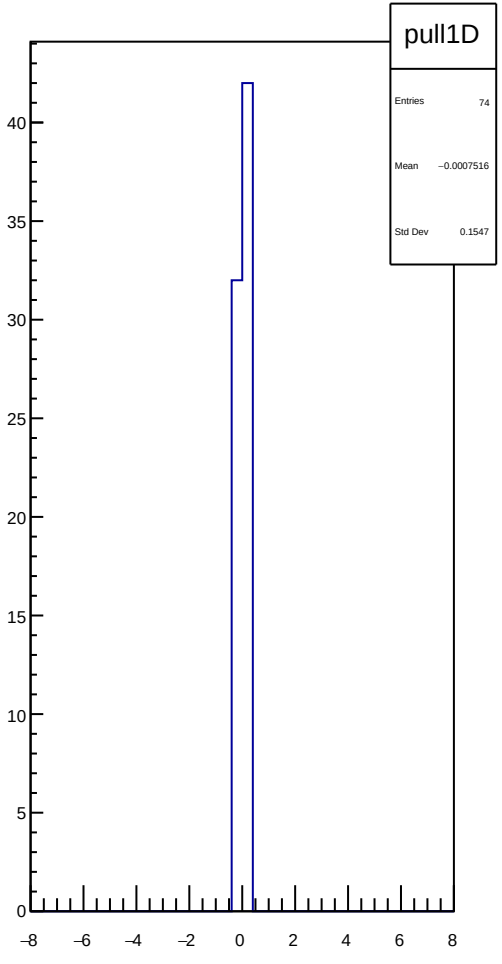

pull1D
Entries 74
Mean −0.0002727
Std Dev 0.1572

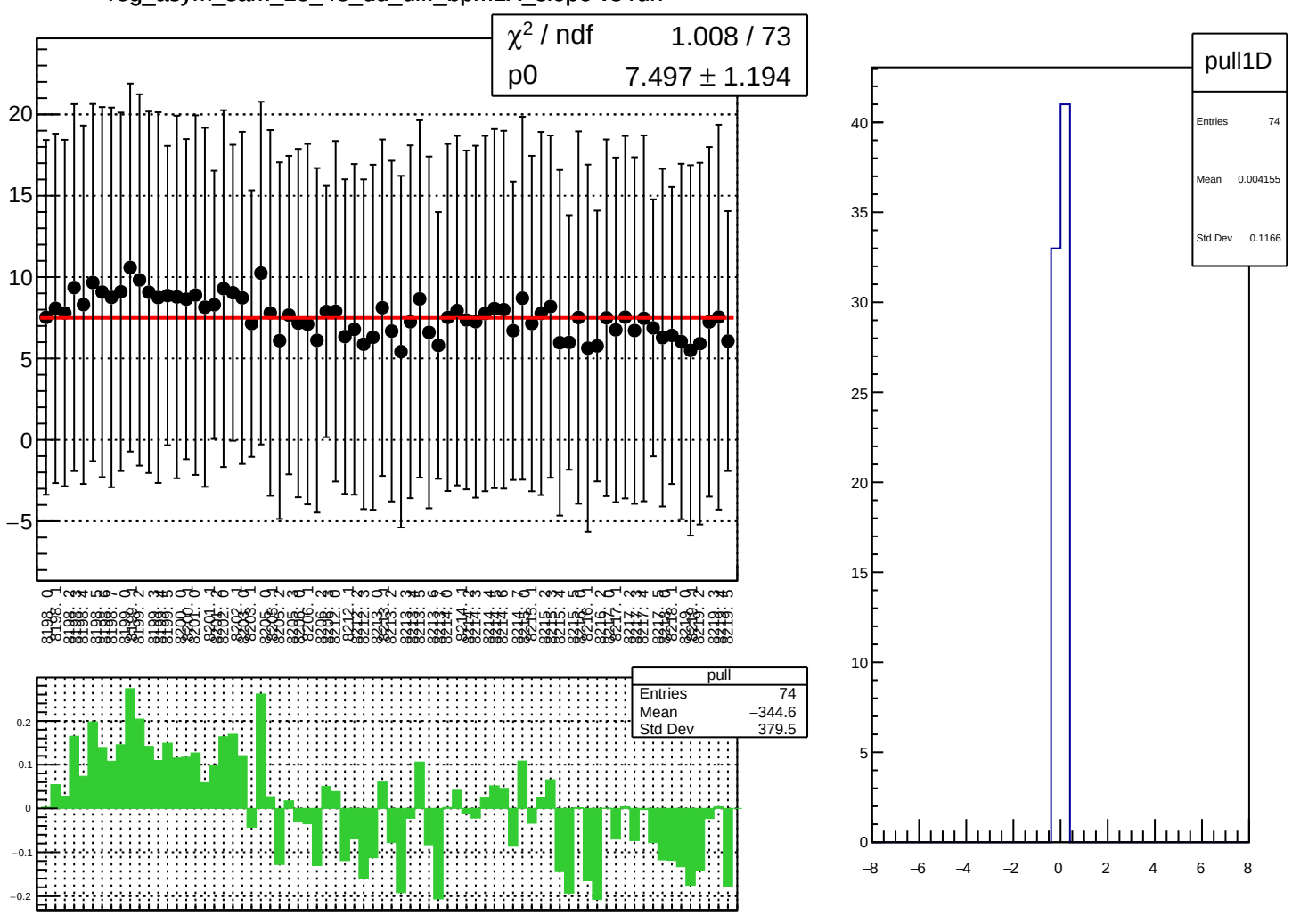

reg_asym_sam_3726_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.447 / 73
p0 −80.78 ± 1.89
pull
Entries 74
Mean 398.6
Std Dev 348.9

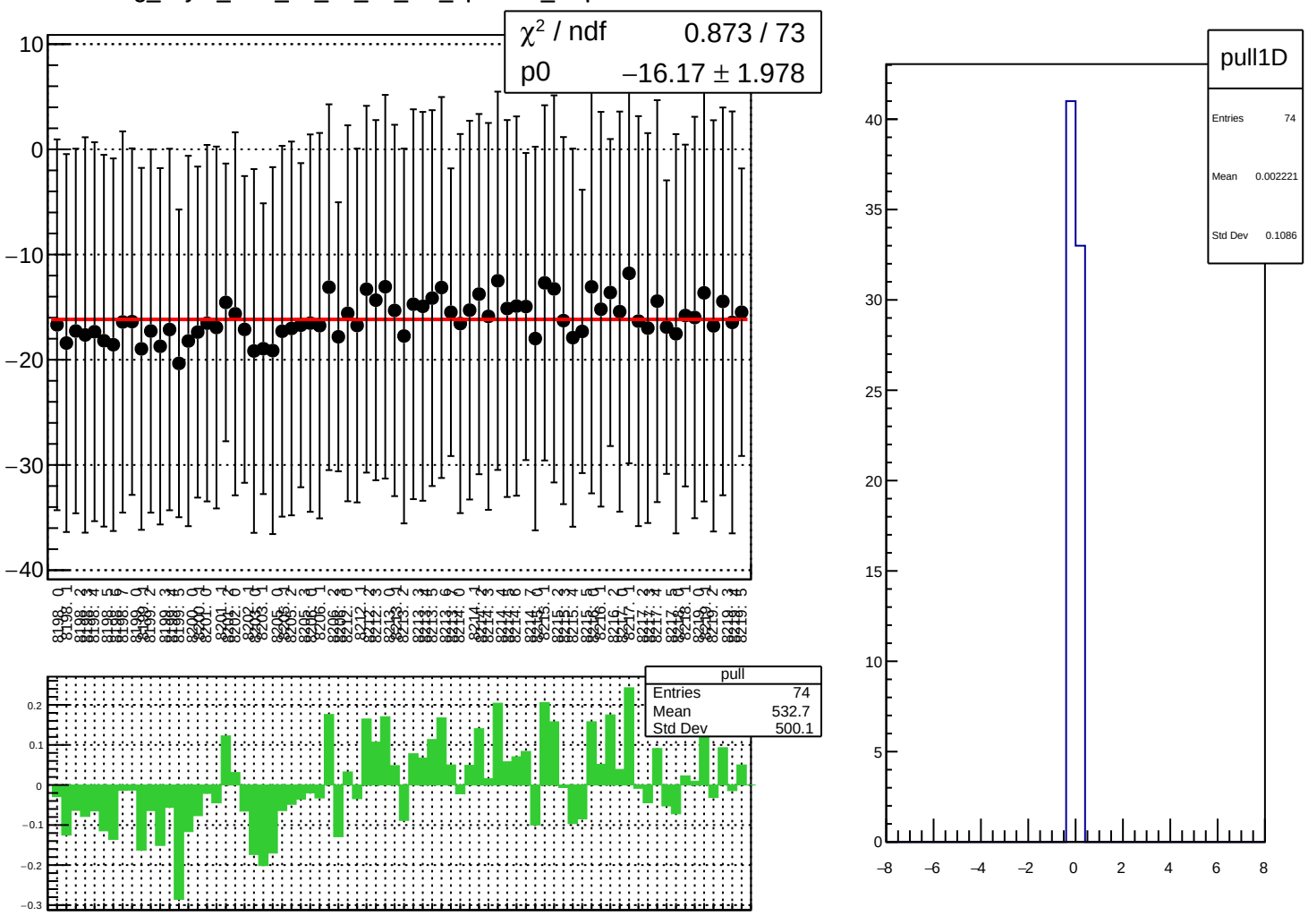

pull1D
Entries 74
Mean 0.003116
Std Dev 0.2158

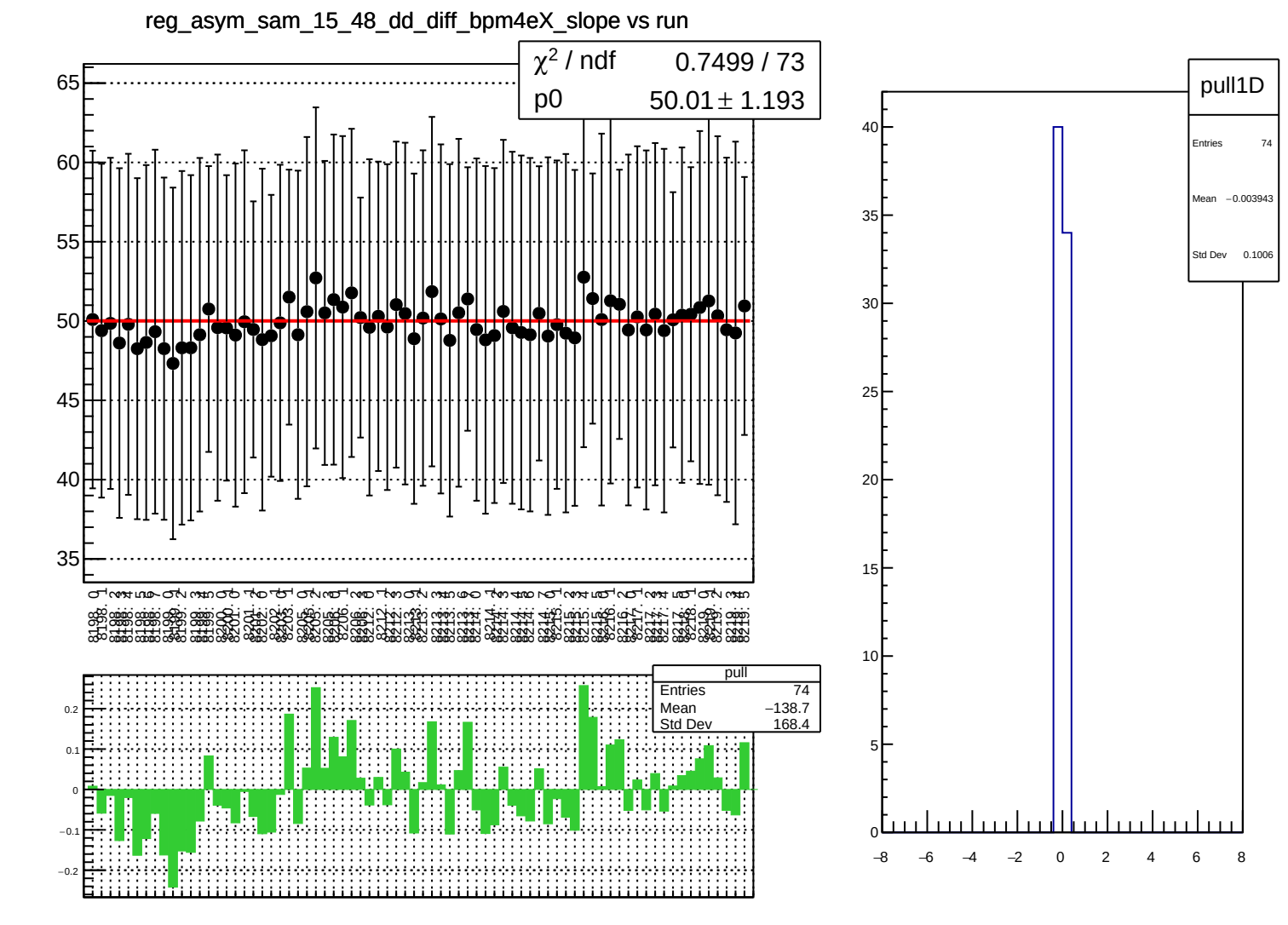

reg_asym_sam_3726_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.818 / 73
p0 3.996 ± 3.371
pull
Entries 74
Mean −221.9
Std Dev 262.8
pull1D
Entries 74
Mean 0.001407
Std Dev 0.1567

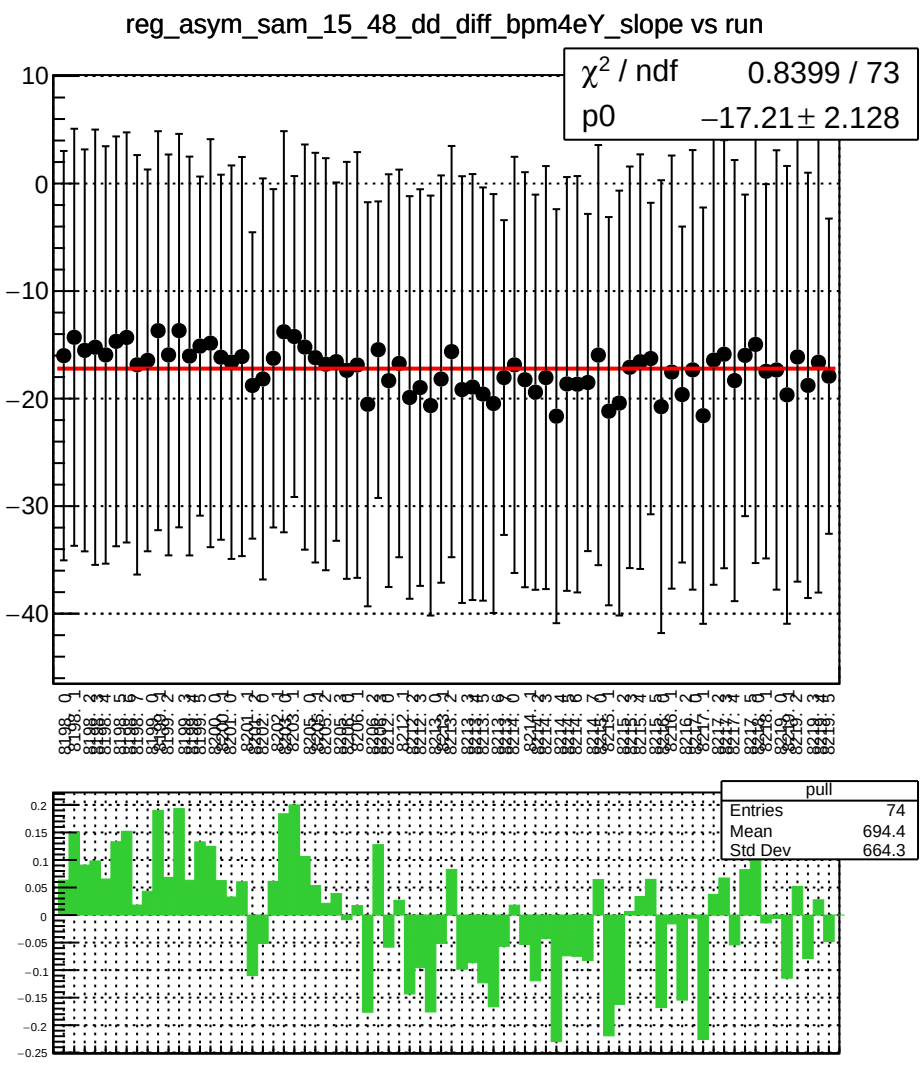

reg_asym_sam_3726_avg_diff_bpm12X_slope vs run
χ² / ndf 1.771 / 73
p0 1.247 ± 0.153
pull
Entries 74
Mean −693.5
Std Dev 728.5

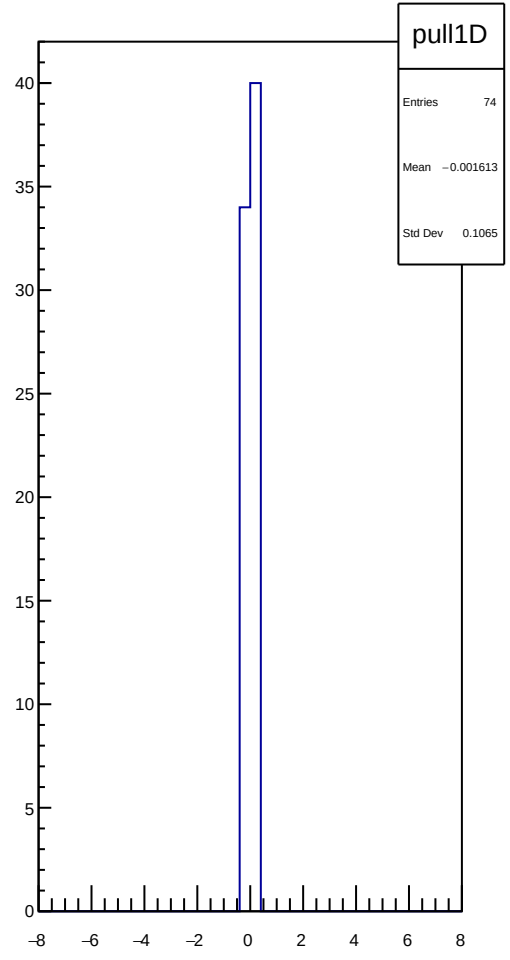

pull1D
Entries 74
Mean −0.0007516
Std Dev 0.1547

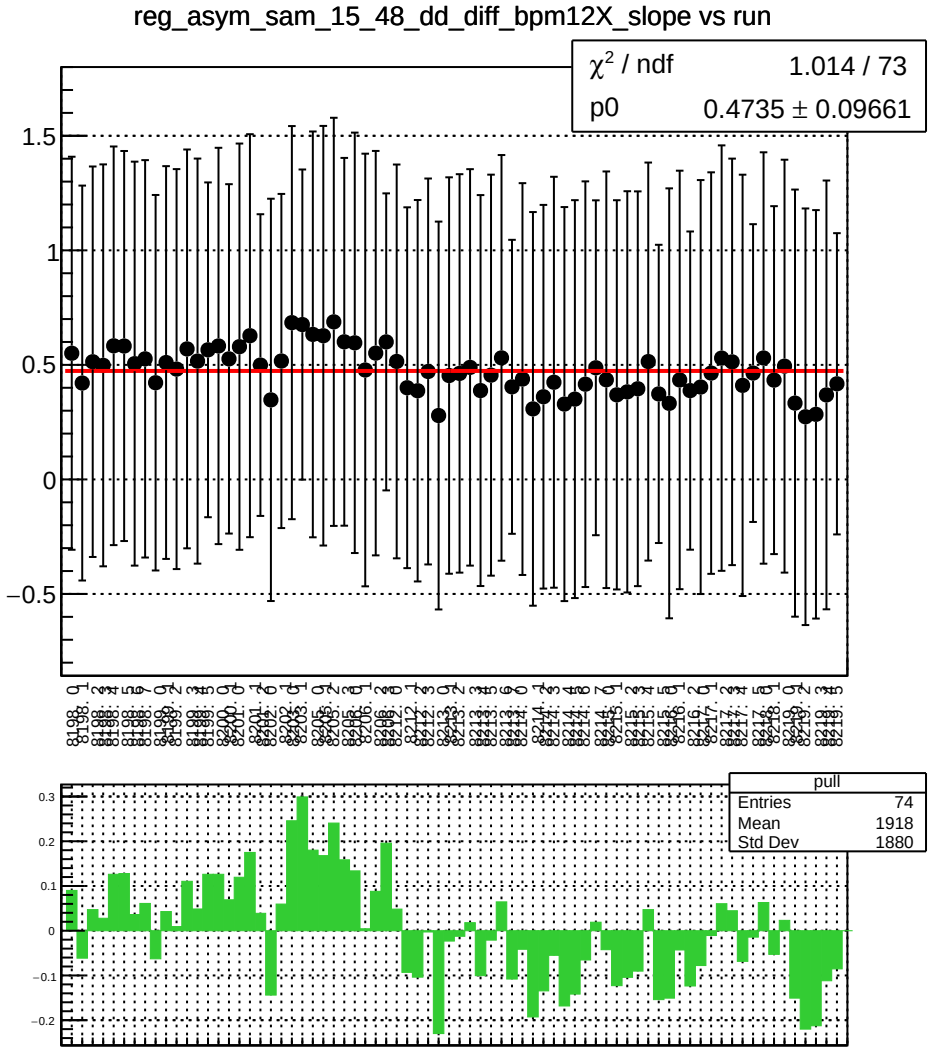

reg_asym_sam_15_48_dd_diff_bpm1X_slope vs run
χ² / ndf 1.008 / 73
p0 7.497 ± 1.194
pull
Entries 74
Mean −344.6
Std Dev 379.5
pull1D
Entries 74
Mean 0.004155
Std Dev 0.1166

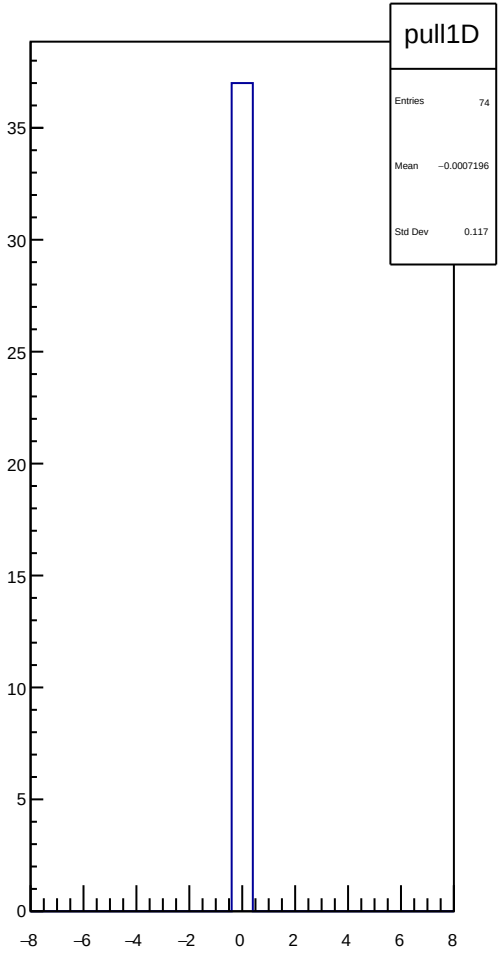

reg_asym_sam_15_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.873 / 73
p0 −16.17 ± 1.978
pull
Entries 74
Mean 532.7
Std Dev 500.1
pull1D
Entries 74
Mean 0.002221
Std Dev 0.1086

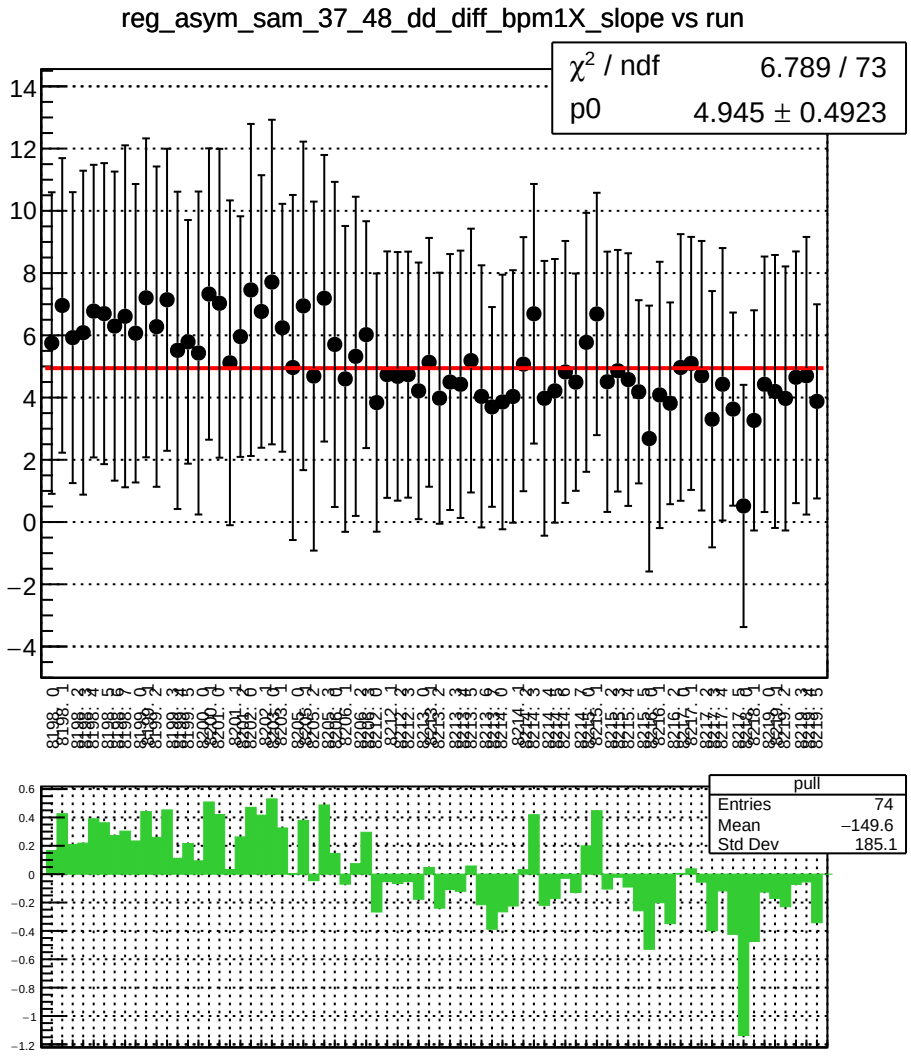

reg_asym_sam_15_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.7499 / 73
p0 50.01 ± 1.193
pull
Entries 74
Mean −138.7
Std Dev 168.4
pull1D
Entries 74
Mean −0.003943
Std Dev 0.1006

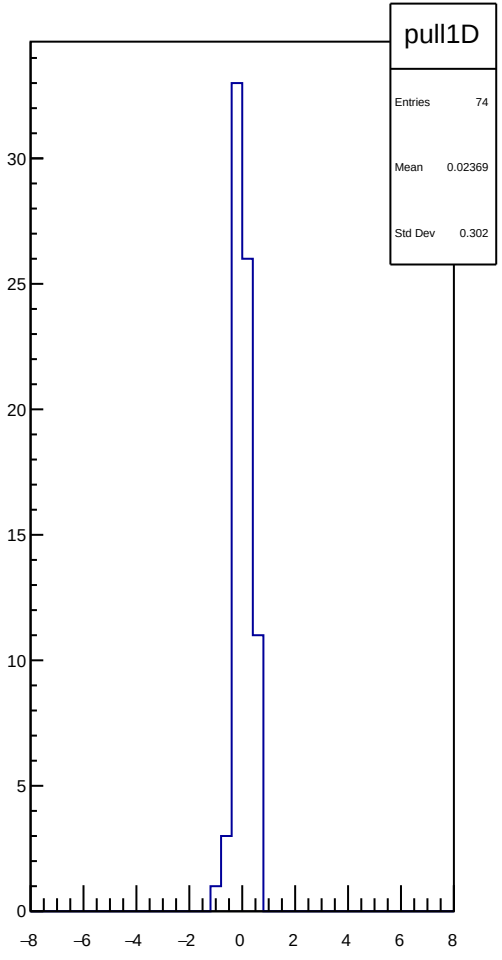

reg_asym_sam_15_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.8399 / 73
p0 −17.21± 2.128
pull
Entries 74
Mean 694.4
Std Dev 664.3

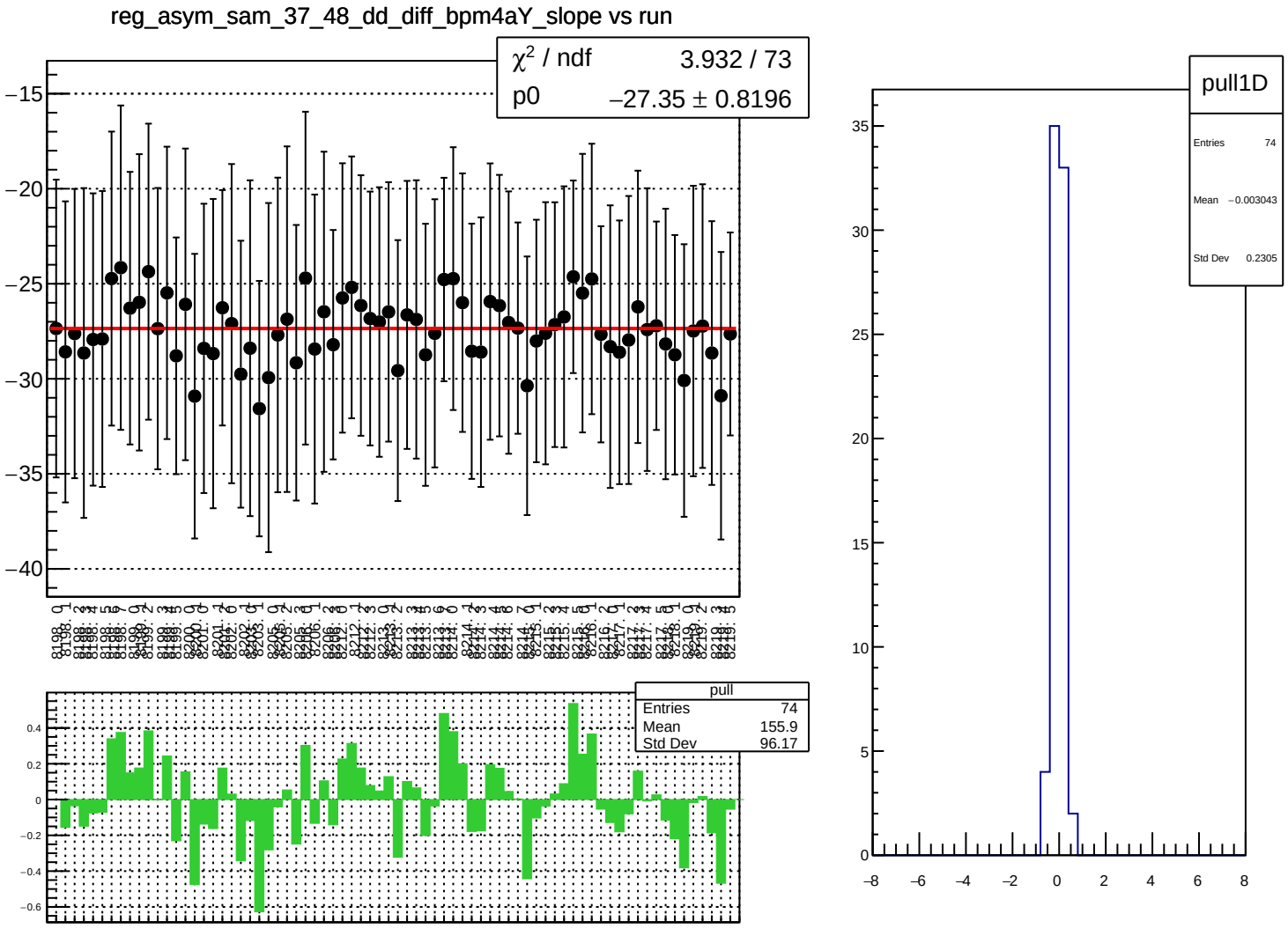

pull1D
Entries 74
Mean −0.001613
Std Dev 0.1065

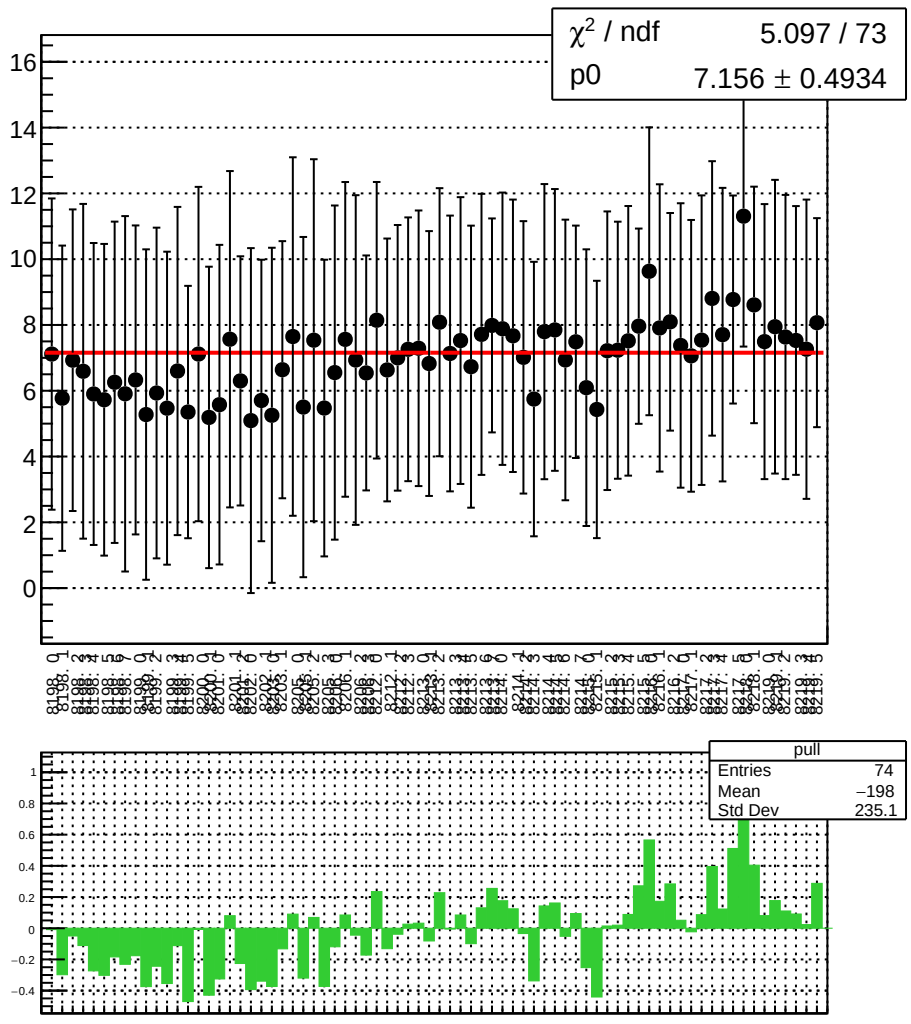

reg_asym_sam_15_48_dd_diff_bpm12X_slope vs run
χ² / ndf 1.014 / 73
p0 0.4735 ± 0.09661
pull
Entries 74
Mean 1918
Std Dev 1880

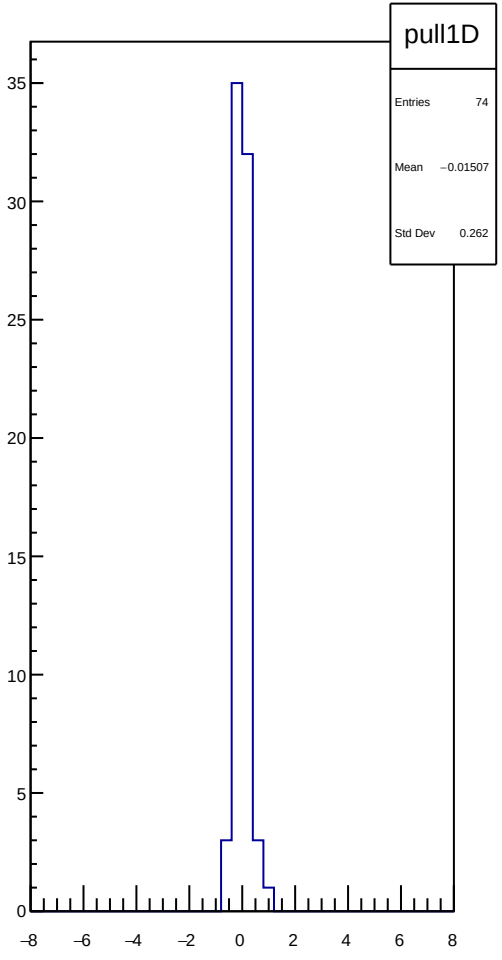

pull1D
Entries 74
Mean −0.0007196
Std Dev 0.117

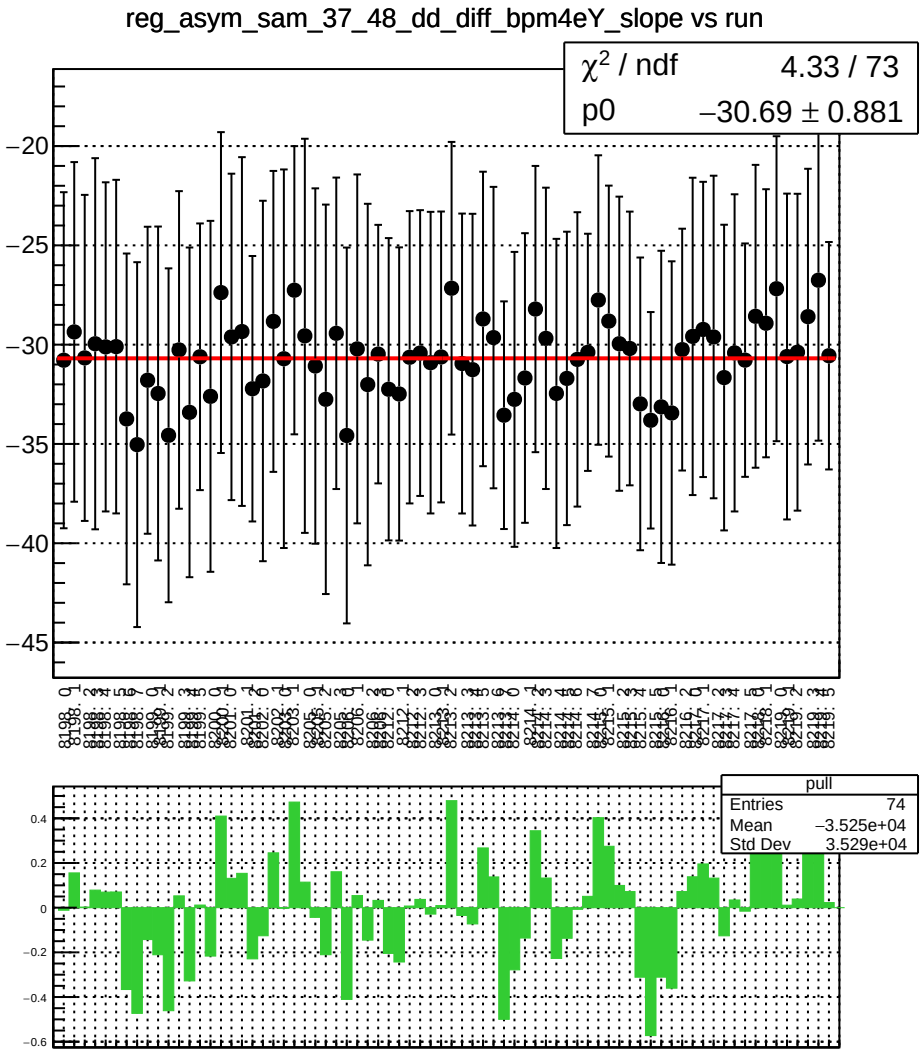

reg_asym_sam_37_48_dd_diff_bpm1X_slope vs run
χ² / ndf 6.789 / 73
p0 4.945 ± 0.4923
pull
Entries 74
Mean −149.6
Std Dev 185.1

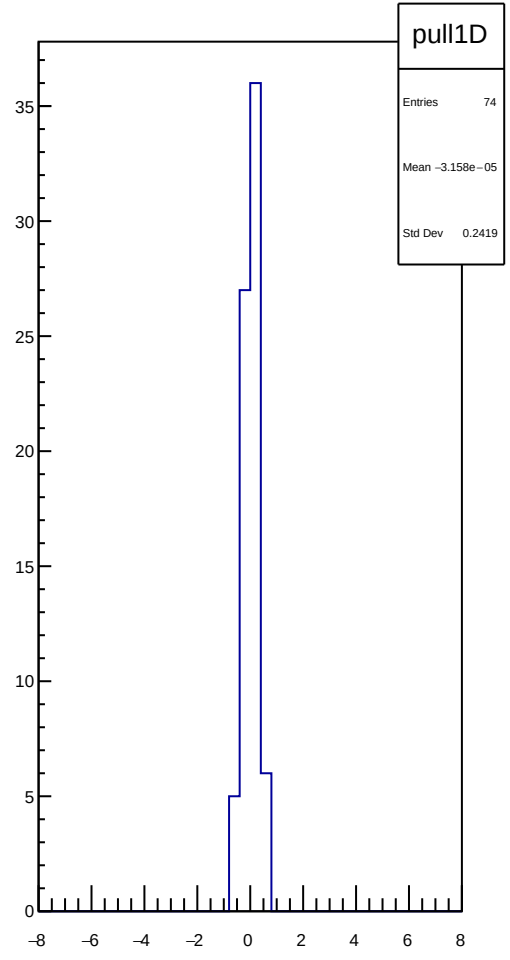

pull1D
Entries 74
Mean 0.02369
Std Dev 0.302

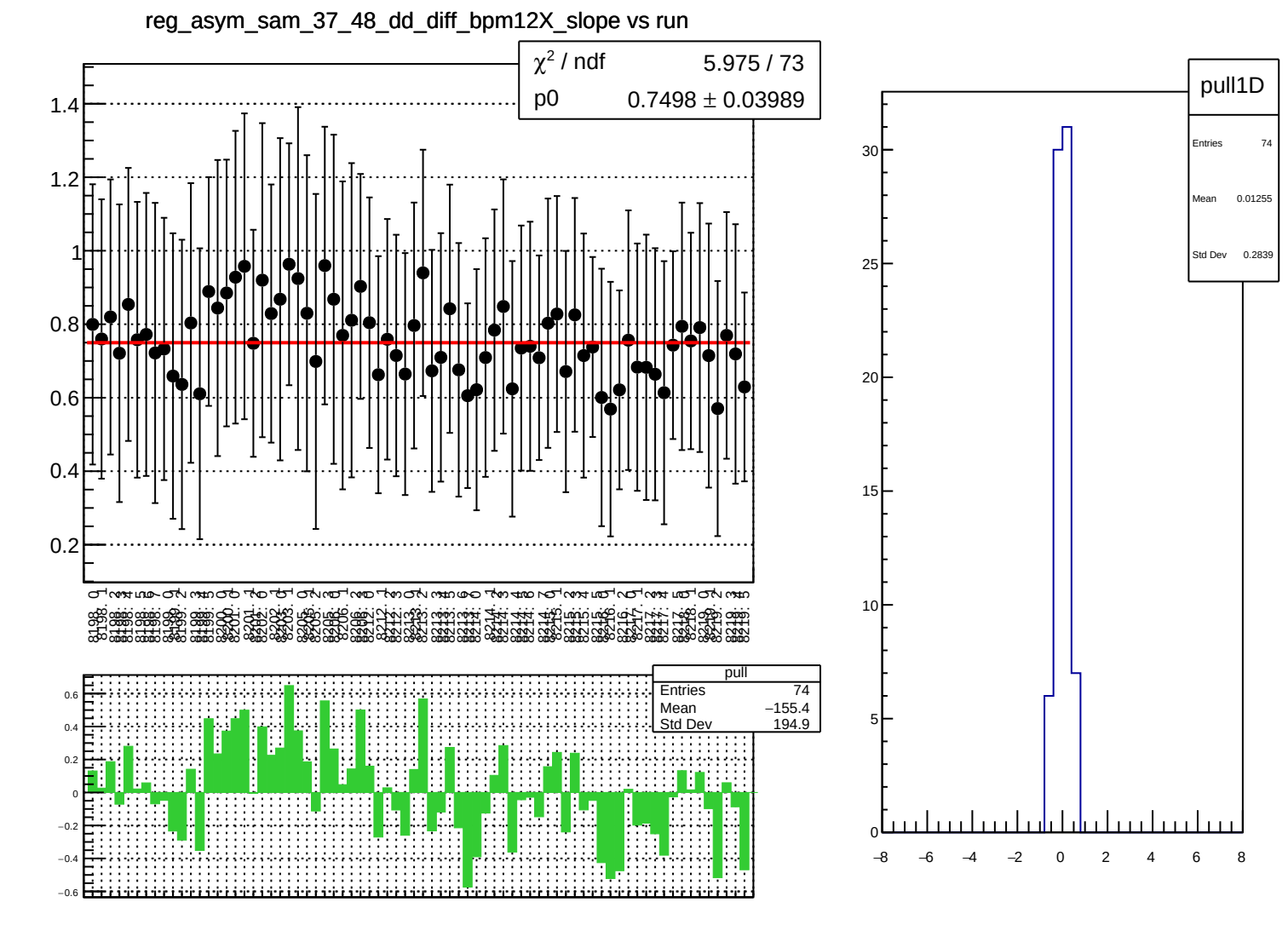

reg_asym_sam_37_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 3.932 / 73
p0 −27.35 ± 0.8196
pull
Entries 74
Mean 155.9
Std Dev 96.17
pull1D
Entries 74
Mean −0.003043
Std Dev 0.2305

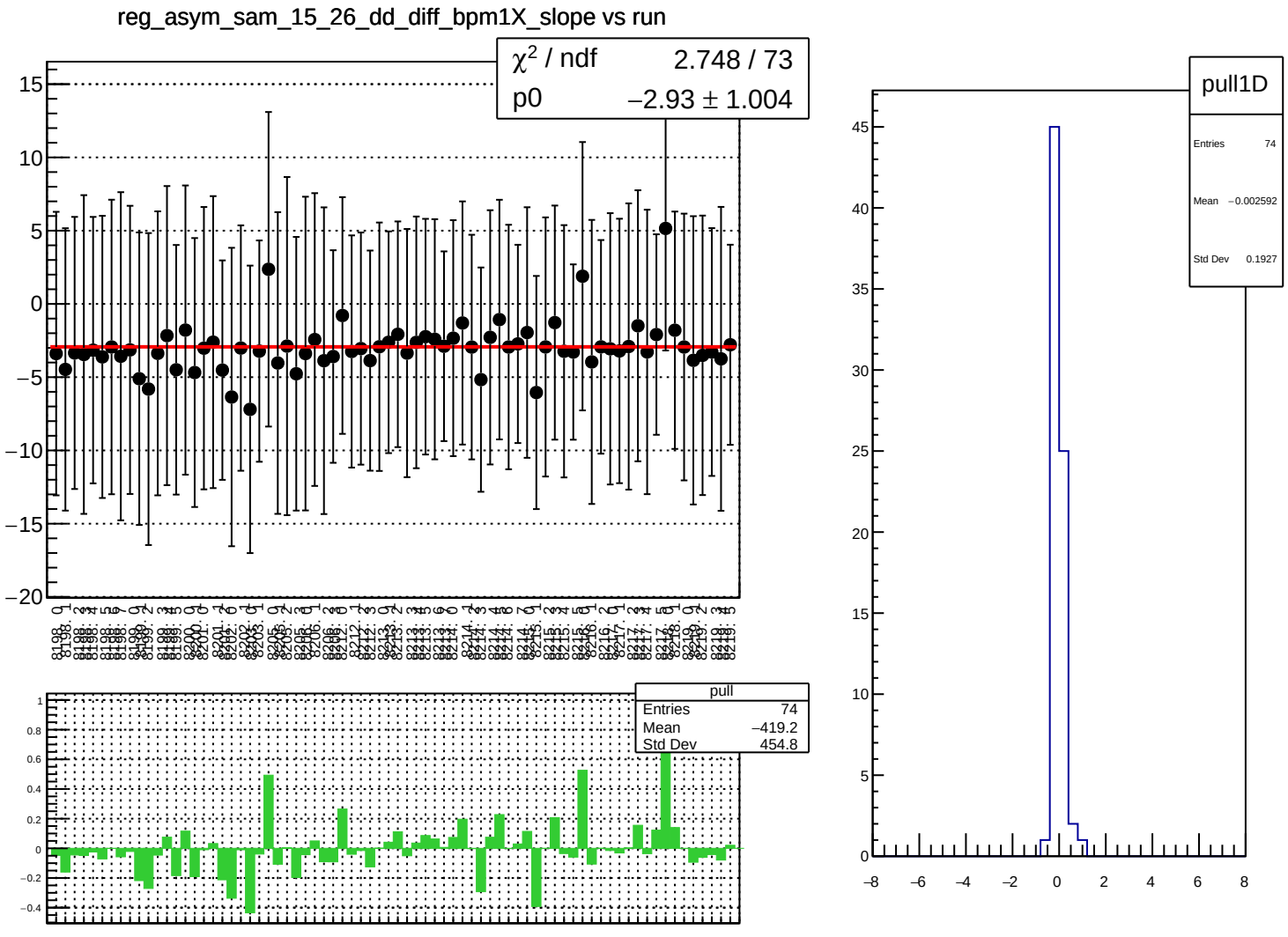

reg_asym_sam_37_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 5.097 / 73
p0 7.156 ± 0.4934
pull
Entries 74
Mean −198
Std Dev 235.1

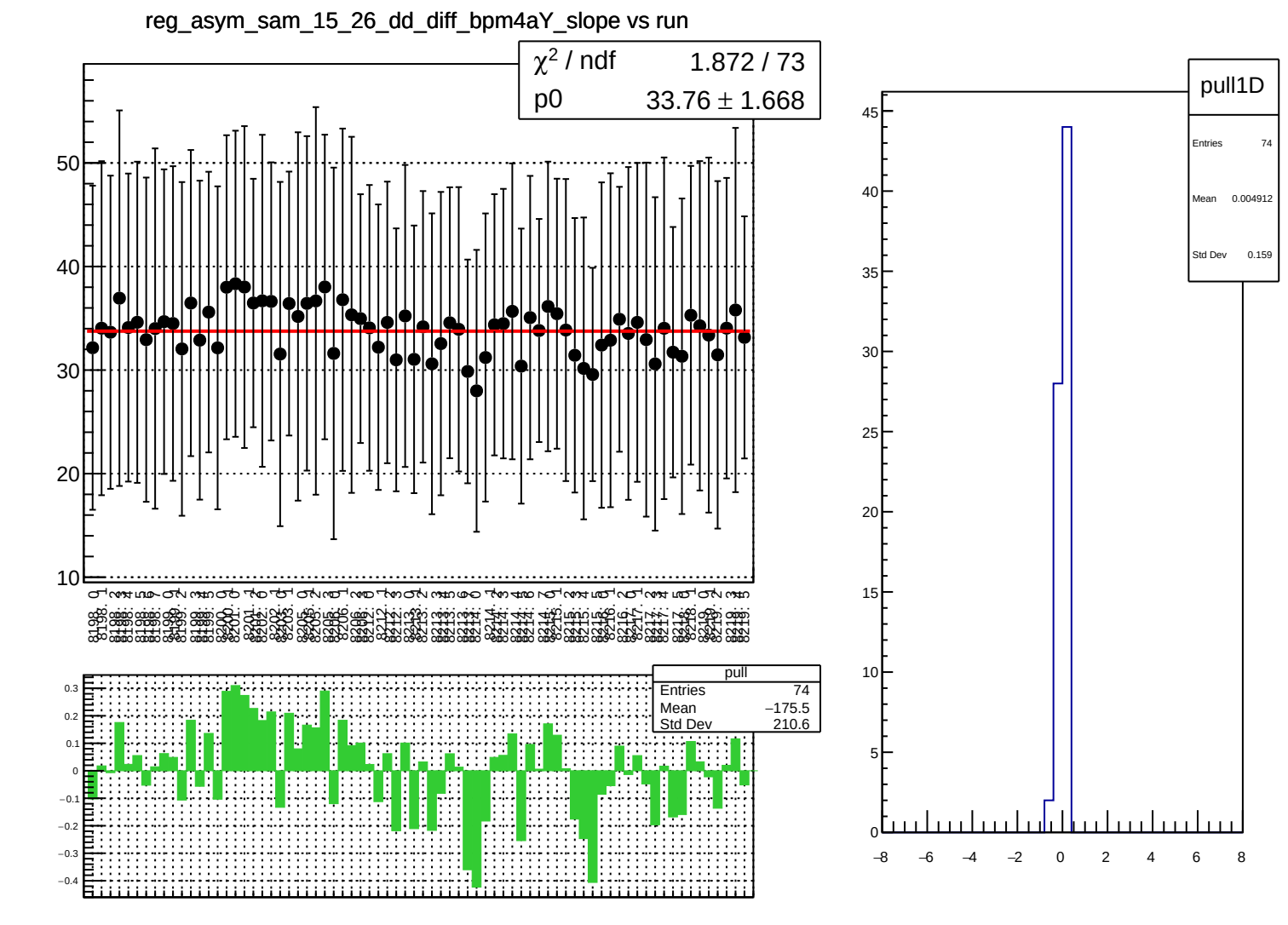

pull1D
Entries 74
Mean −0.01507
Std Dev 0.262

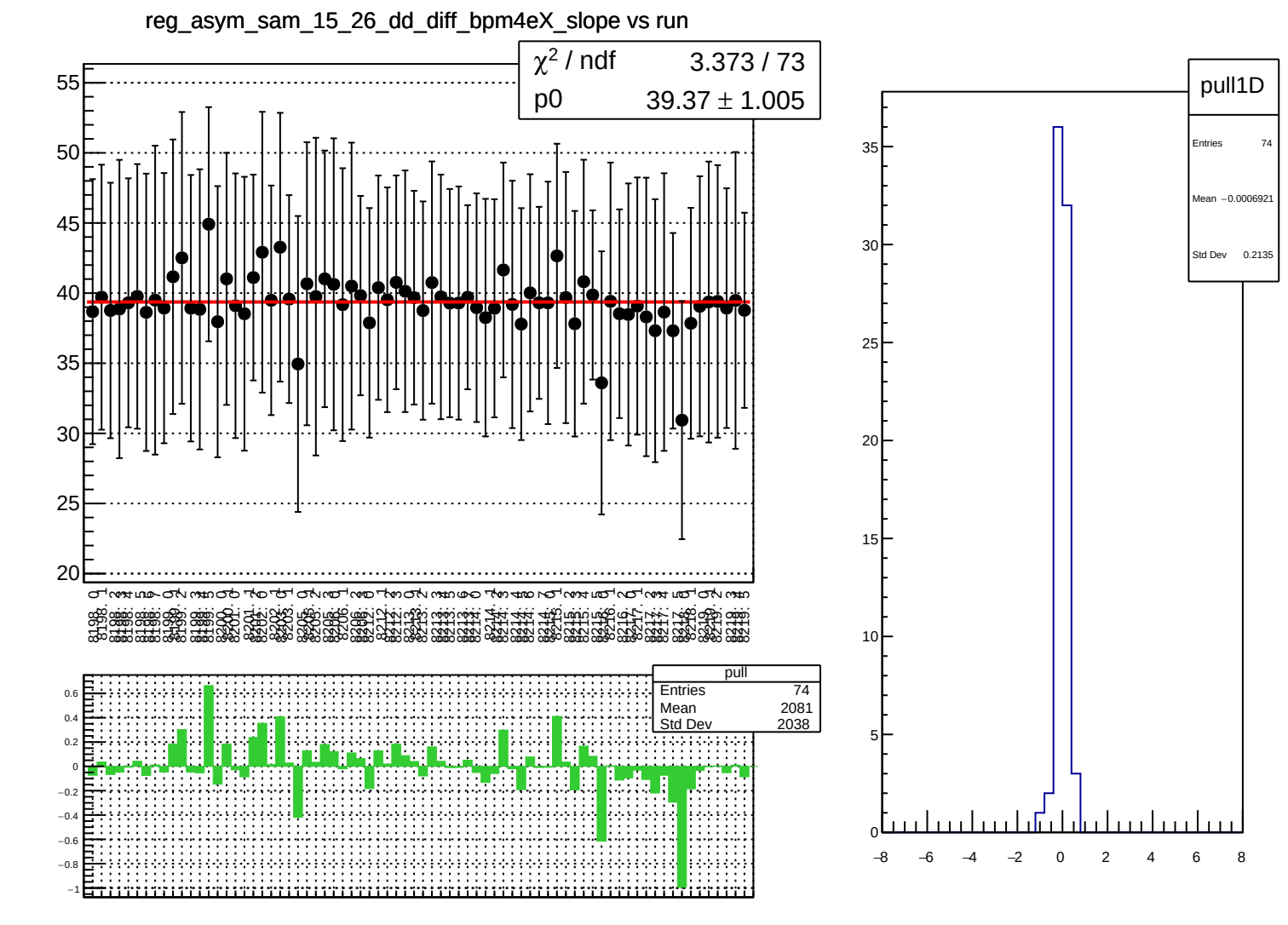

reg_asym_sam_37_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.33 / 73
p0 −30.69 ± 0.881
pull
Entries 74
Mean −3.525e+04
Std Dev 3.529e+04

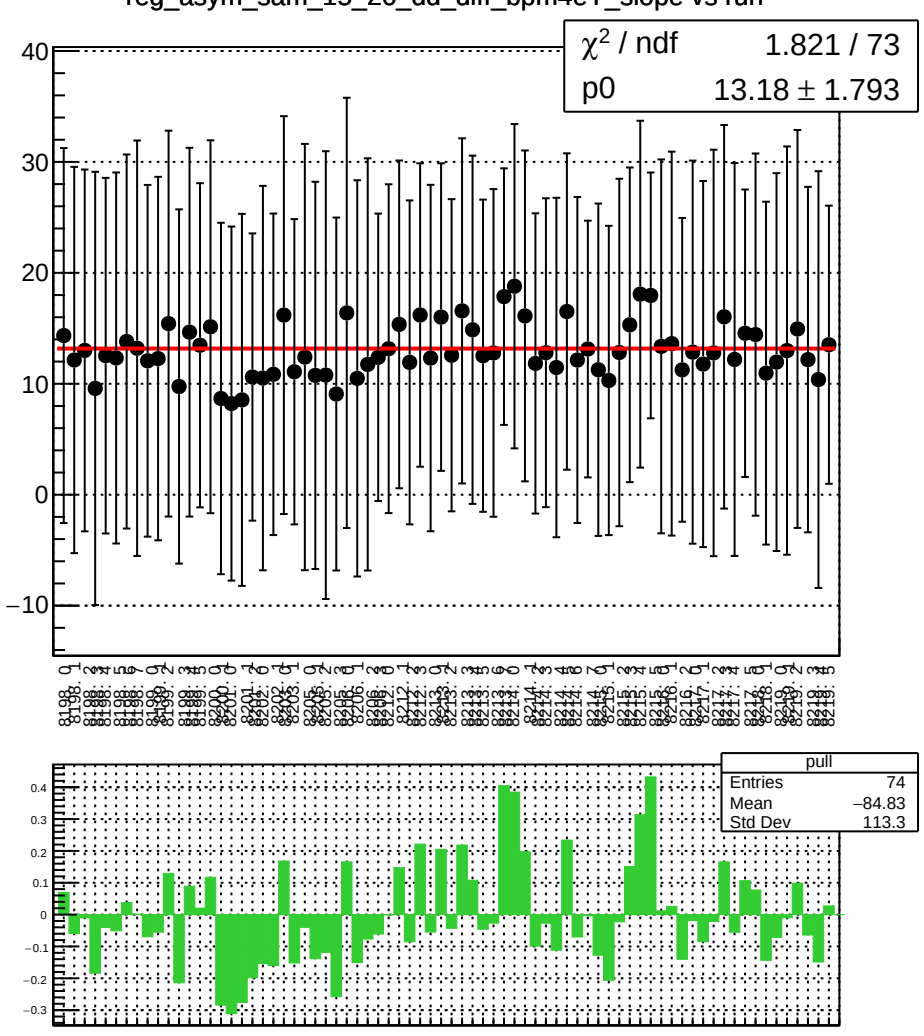

pull1D
Entries 74
Mean −3.158e−05
Std Dev 0.2419

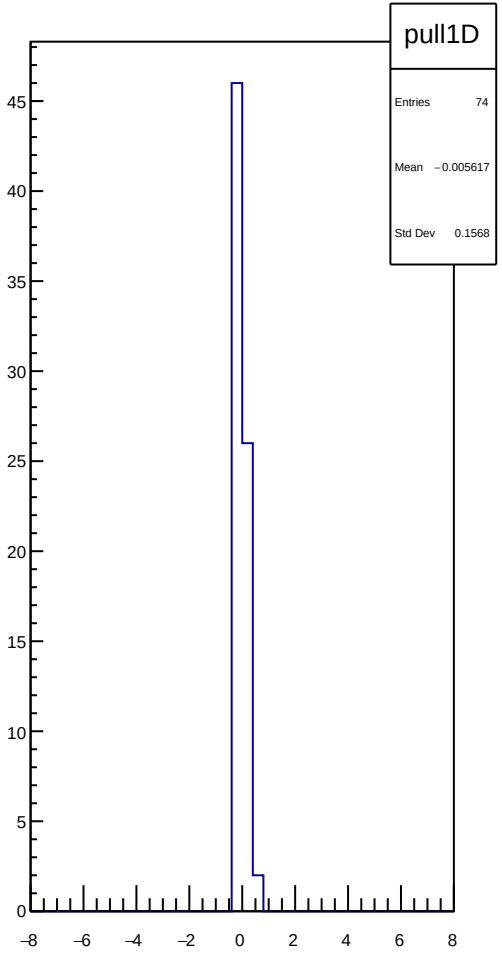

reg_asym_sam_37_48_dd_diff_bpm12X_slope vs run
χ² / ndf 5.975 / 73
p0 0.7498 ± 0.03989
pull
Entries 74
Mean −155.4
Std Dev 194.9
pull1D
Entries 74
Mean 0.01255
Std Dev 0.2839

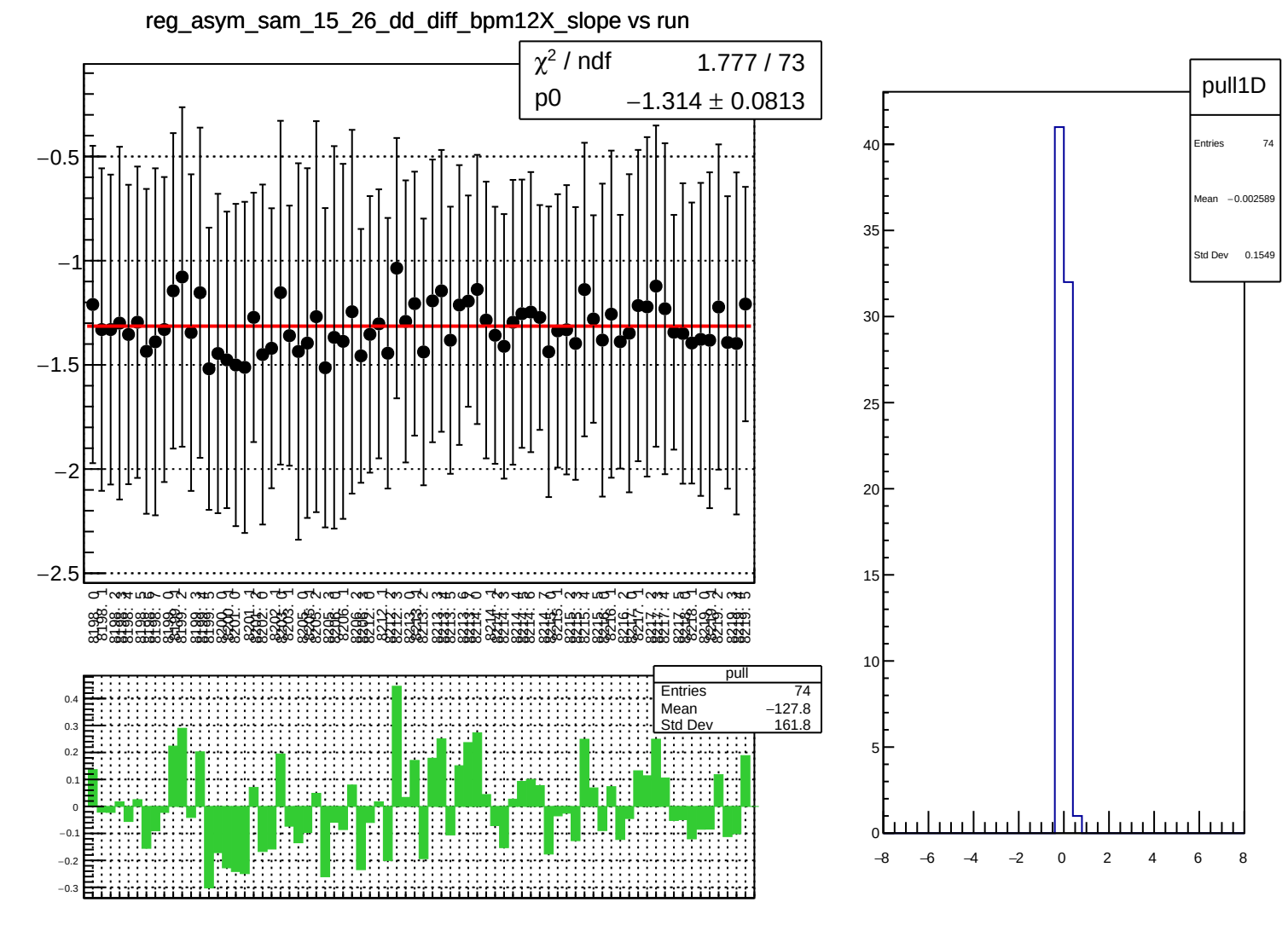

reg_asym_sam_15_26_dd_diff_bpm1X_slope vs run
χ² / ndf 2.748 / 73
p0 −2.93 ± 1.004
pull
Entries 74
Mean −419.2
Std Dev 454.8
pull1D
Entries 74
Mean −0.002592
Std Dev 0.1927

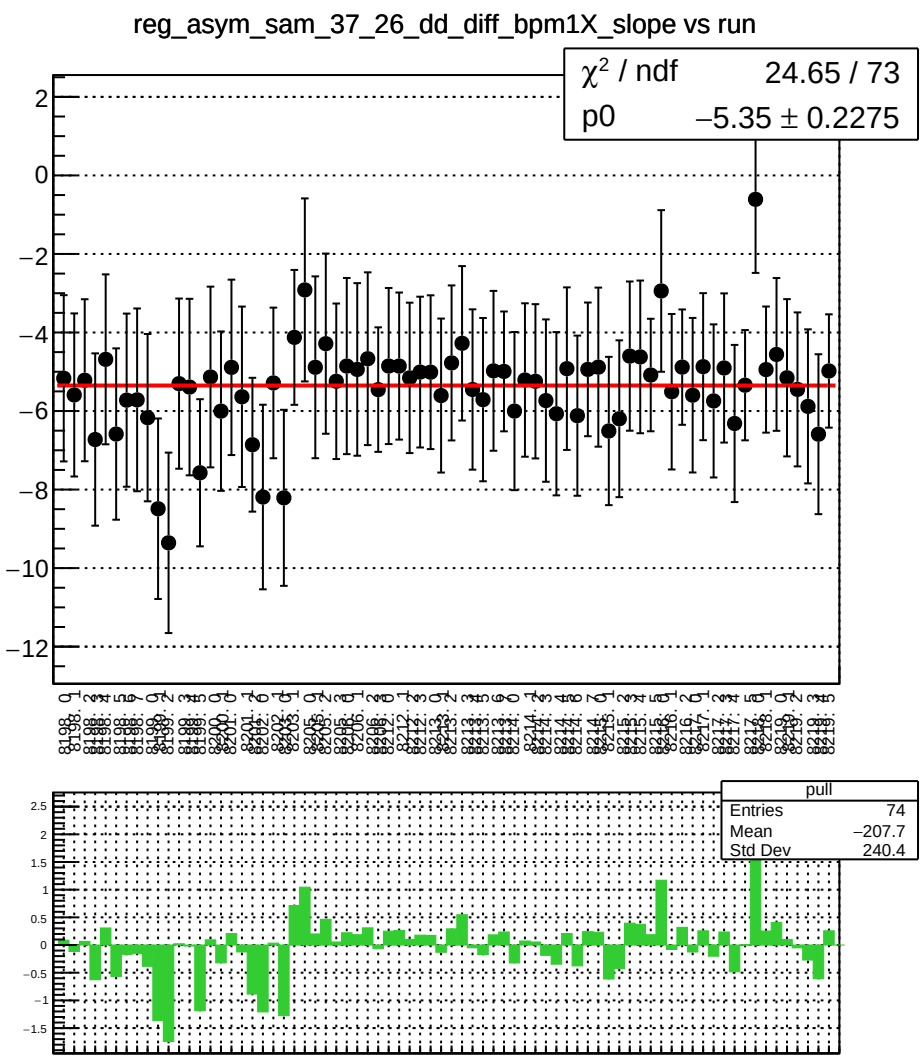

reg_asym_sam_15_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.872 / 73
p0 33.76 ± 1.668
pull
Entries 74
Mean −175.5
Std Dev 210.6
pull1D
Entries 74
Mean 0.004912
Std Dev 0.159

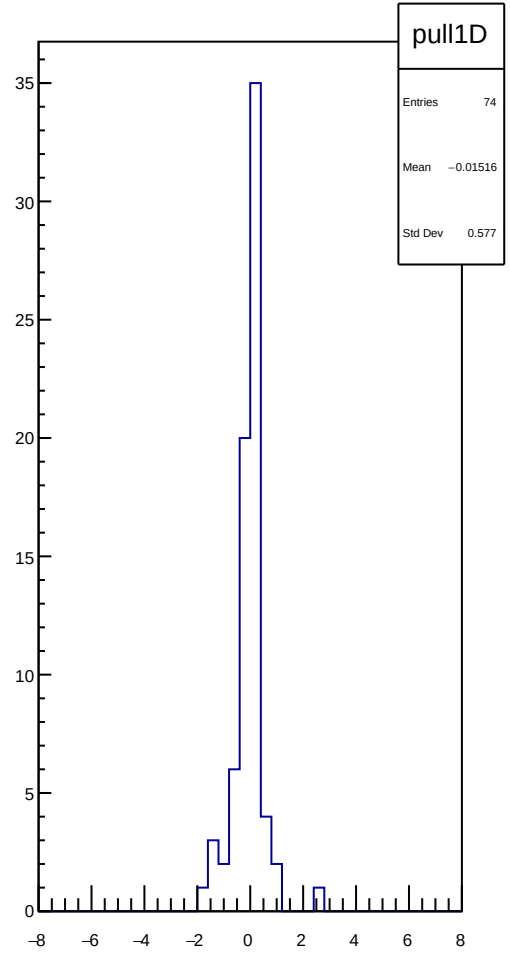

reg_asym_sam_15_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.373 / 73
p0 39.37 ± 1.005
pull
Entries 74
Mean 2081
Std Dev 2038
pull1D
Entries 74
Mean −0.0006921
Std Dev 0.2135

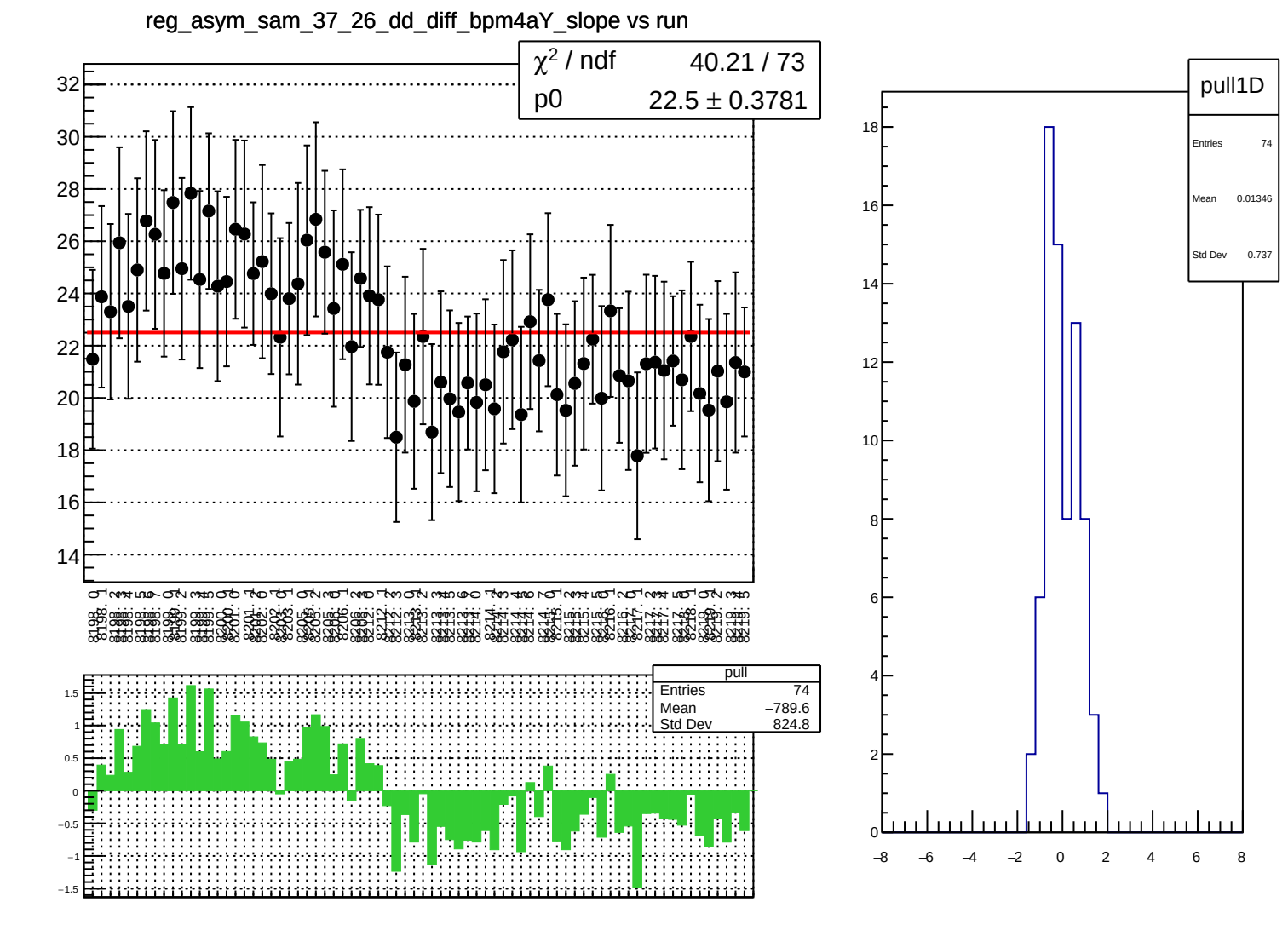

reg_asym_sam_15_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.821 / 73
p0 13.18 ± 1.793
pull
Entries 74
Mean −84.83
Std Dev 113.3

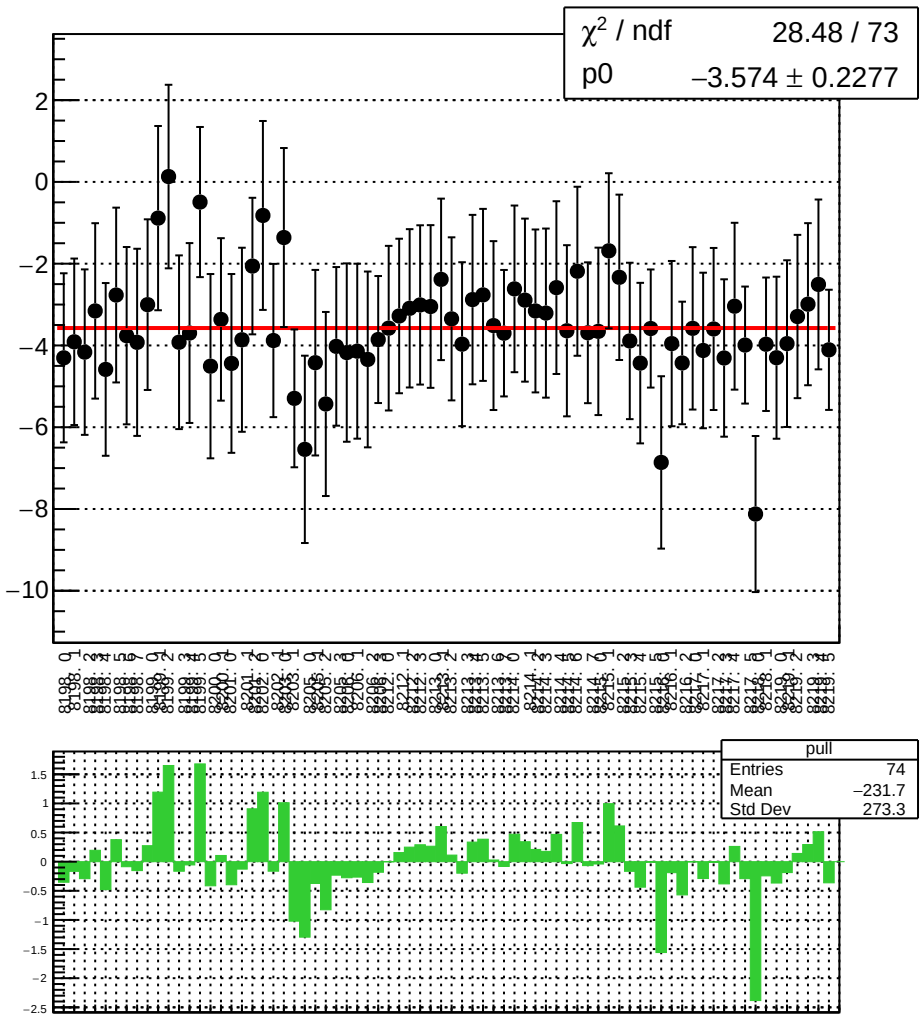

pull1D
Entries 74
Mean −0.005617
Std Dev 0.1568

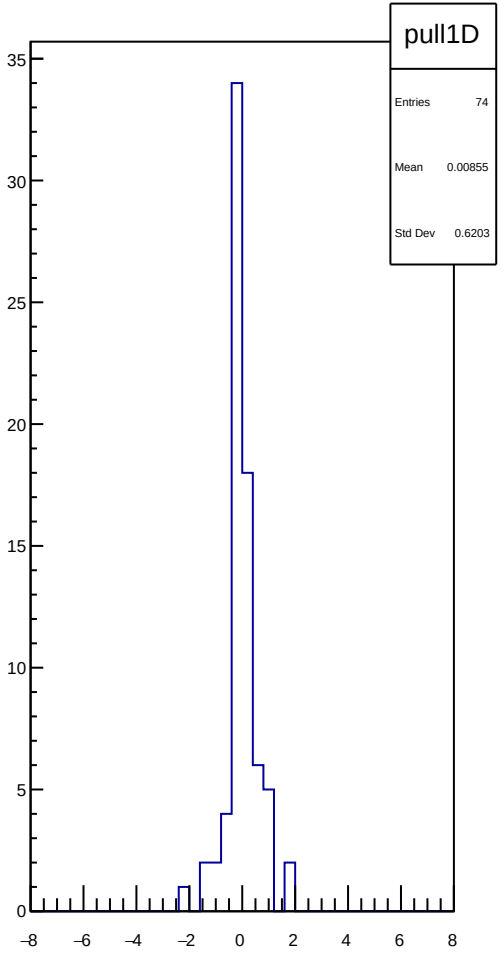

reg_asym_sam_15_26_dd_diff_bpm12X_slope vs run
χ² / ndf 1.777 / 73
p0 −1.314 ± 0.0813
pull
Entries 74
Mean −127.8
Std Dev 161.8
pull1D
Entries 74
Mean −0.002589
Std Dev 0.1549

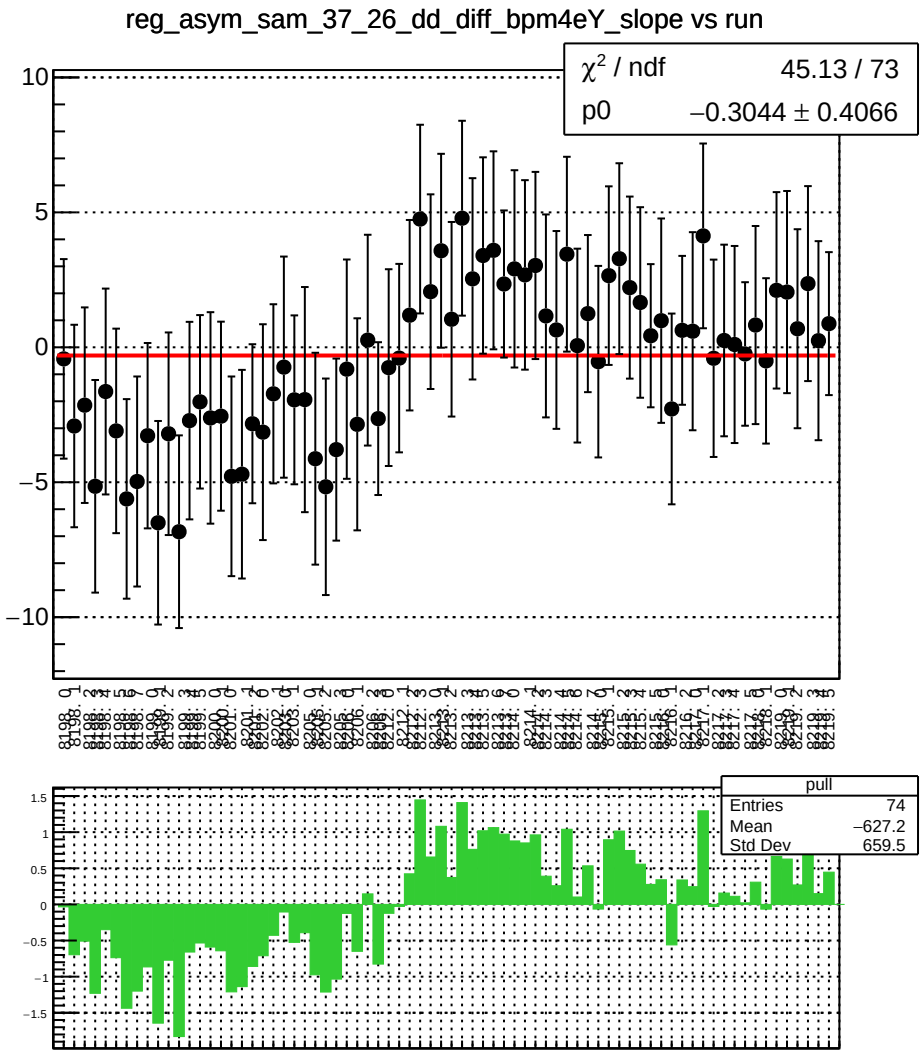

reg_asym_sam_37_26_dd_diff_bpm1X_slope vs run
χ² / ndf 24.65 / 73
p0 −5.35 ± 0.2275
pull
Entries 74
Mean −207.7
Std Dev 240.4

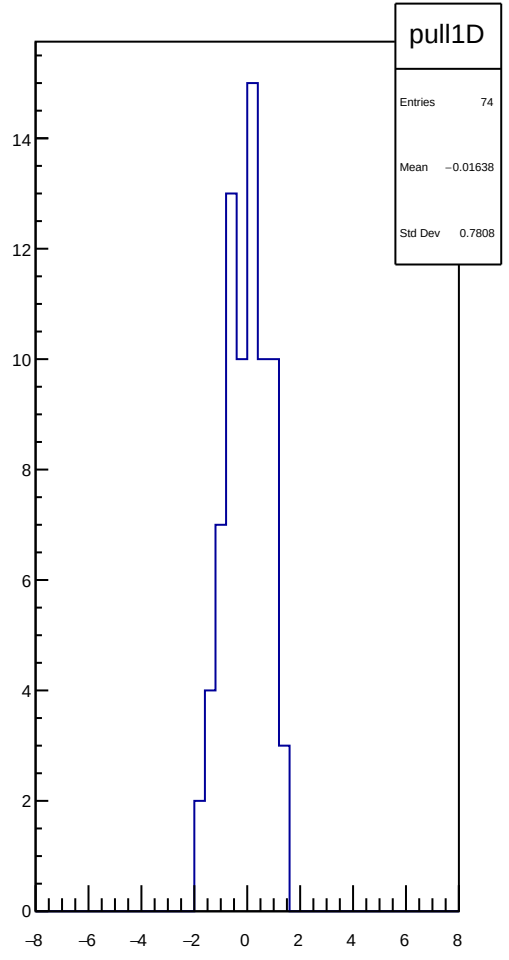

pull1D
Entries 74
Mean −0.01516
Std Dev 0.577

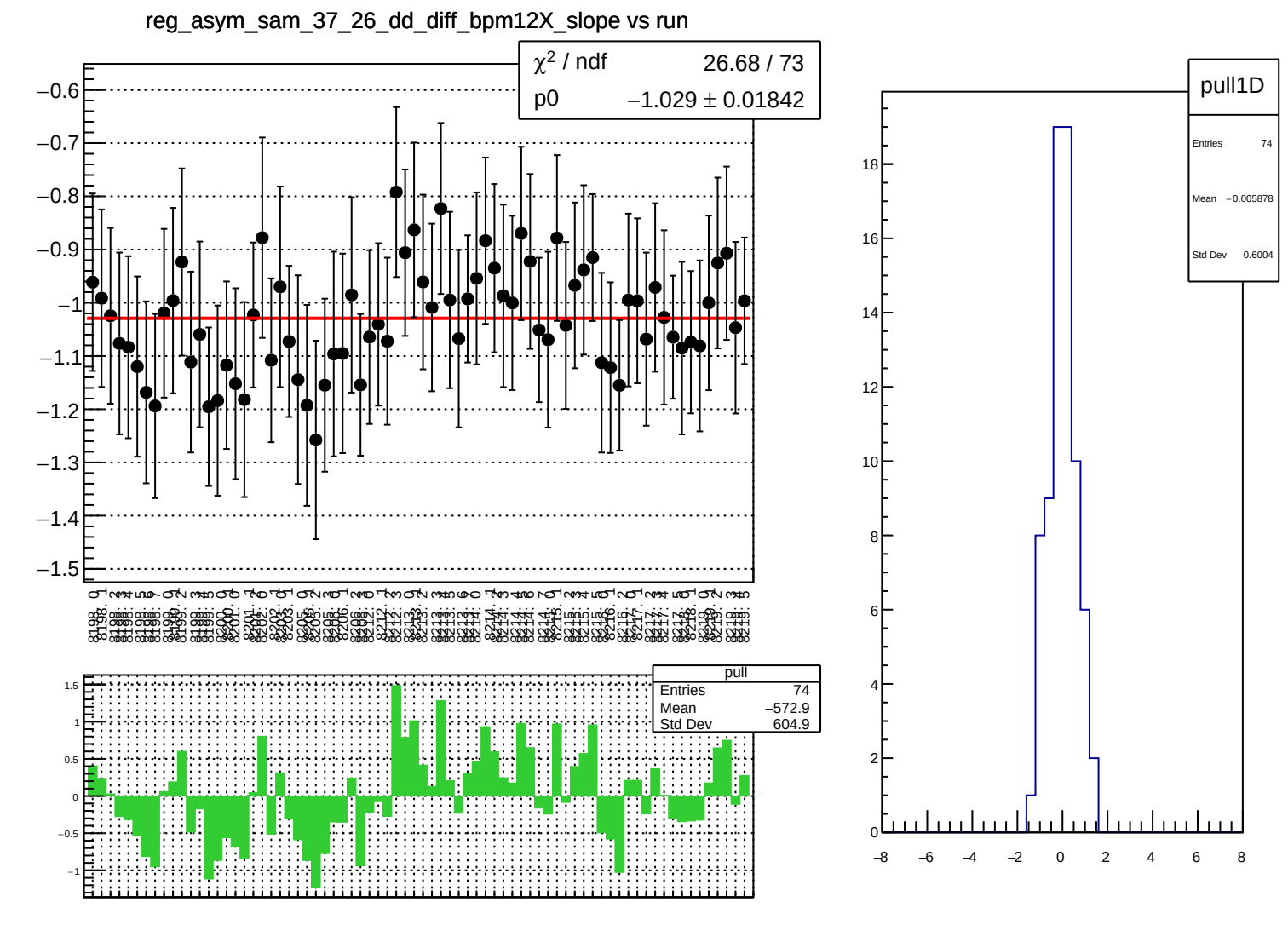

reg_asym_sam_37_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 40.21 / 73
p0 22.5 ± 0.3781
pull
Entries 74
Mean −789.6
Std Dev 824.8
pull1D
Entries 74
Mean 0.01346
Std Dev 0.737

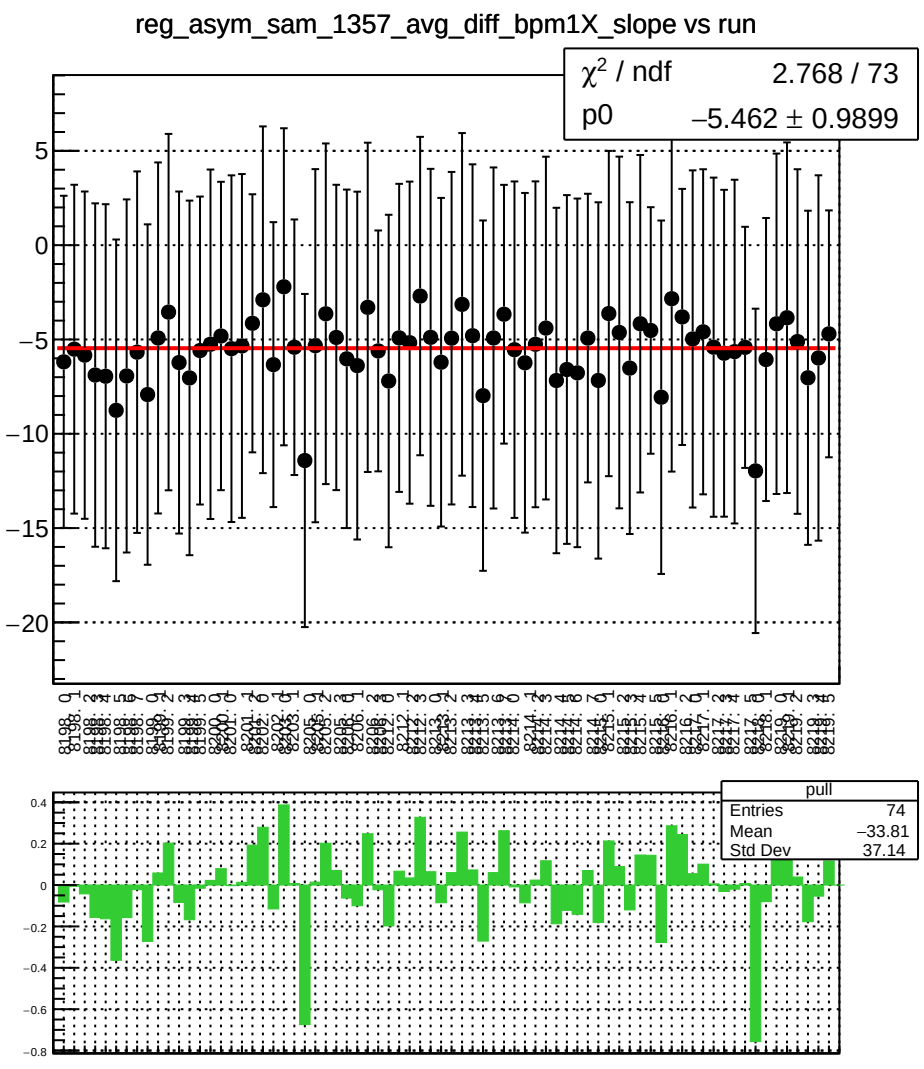

reg_asym_sam_37_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 28.48 / 73
p0 −3.574 ± 0.2277
pull
Entries 74
Mean −231.7
Std Dev 273.3

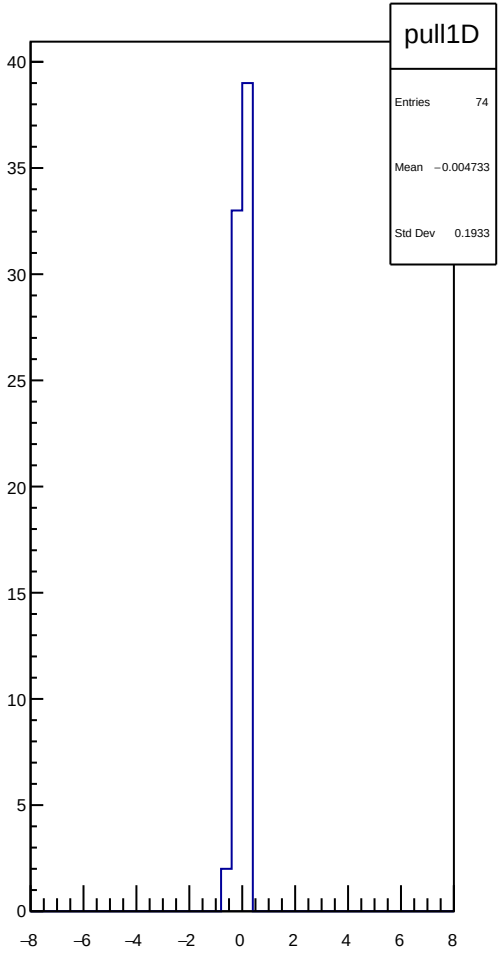

pull1D
Entries 74
Mean 0.00855
Std Dev 0.6203

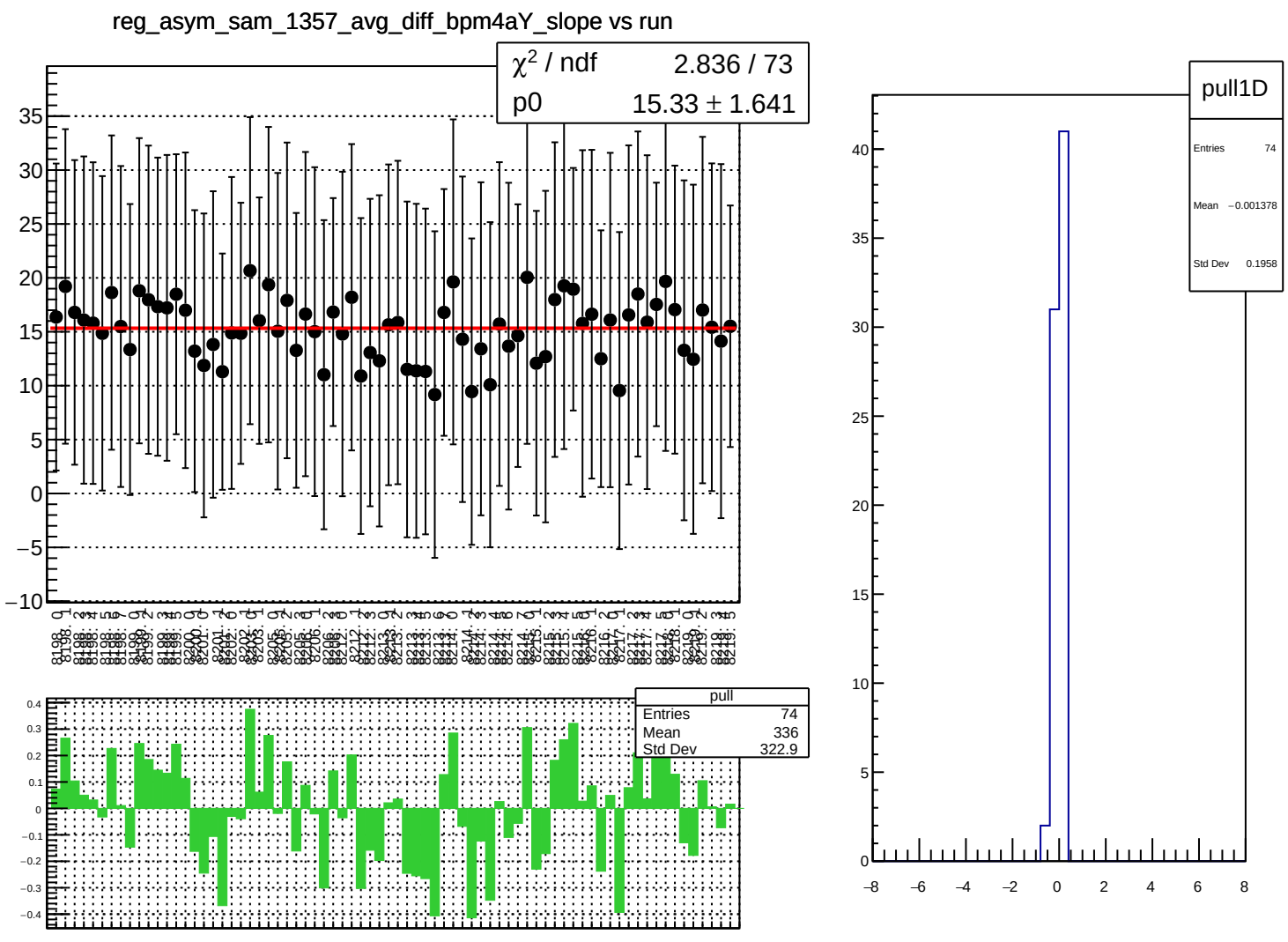

reg_asym_sam_37_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 45.13 / 73
p0 −0.3044 ± 0.4066
pull
Entries 74
Mean −627.2
Std Dev 659.5

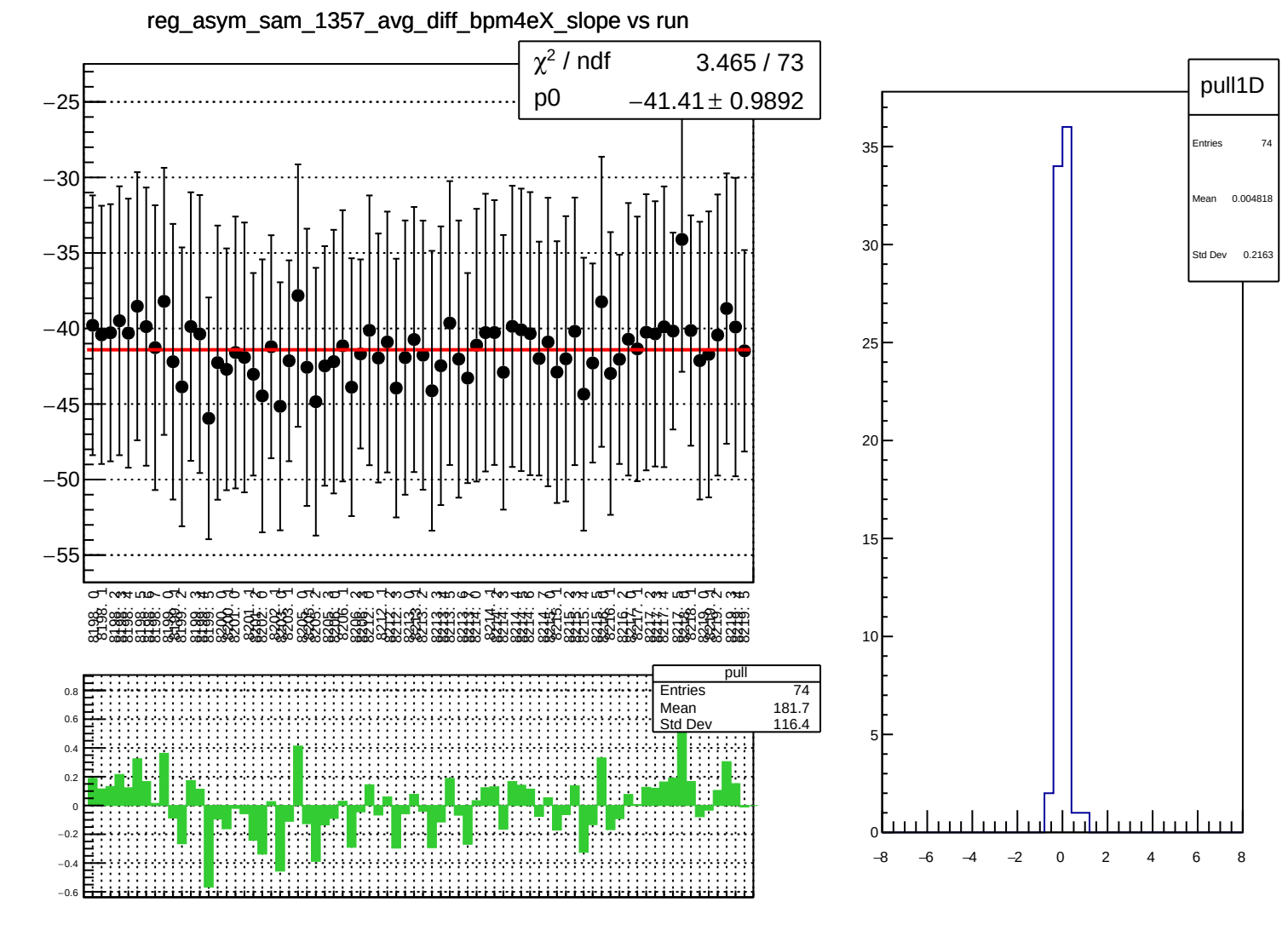

pull1D
Entries 74
Mean −0.01638
Std Dev 0.7808

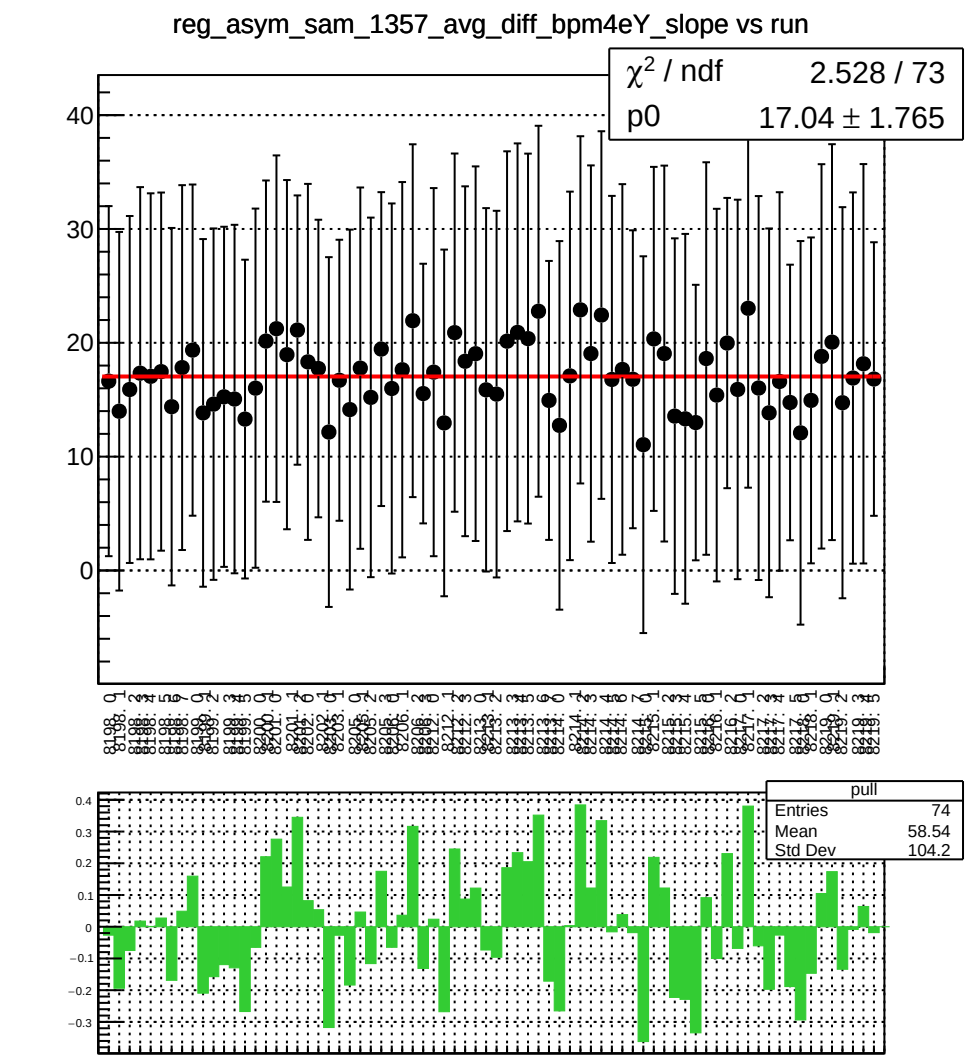

reg_asym_sam_37_26_dd_diff_bpm12X_slope vs run
χ² / ndf 26.68 / 73
p0 −1.029 ± 0.01842
pull
Entries 74
Mean −572.9
Std Dev 604.9
pull1D
Entries 74
Mean −0.005878
Std Dev 0.6004

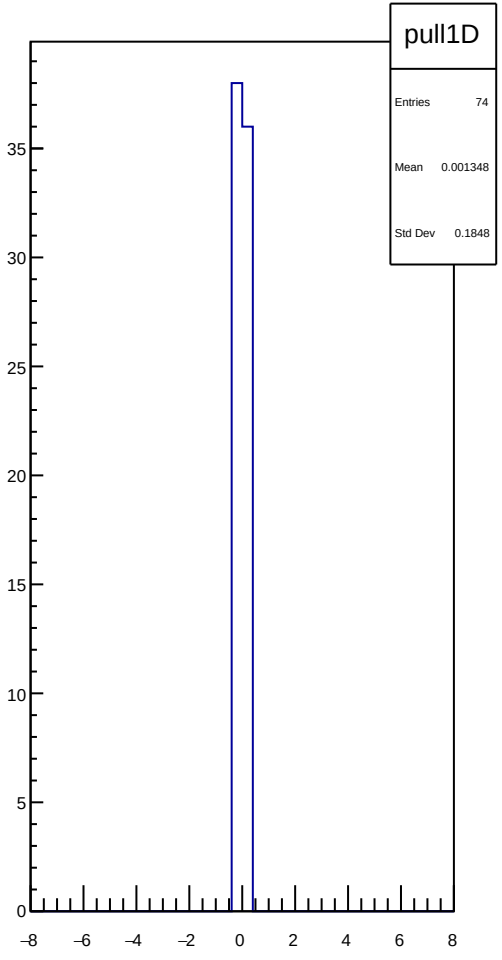

reg_asym_sam_1357_avg_diff_bpm1X_slope vs run
χ² / ndf 2.768 / 73
p0 −5.462 ± 0.9899
pull
Entries 74
Mean −33.81
Std Dev 37.14

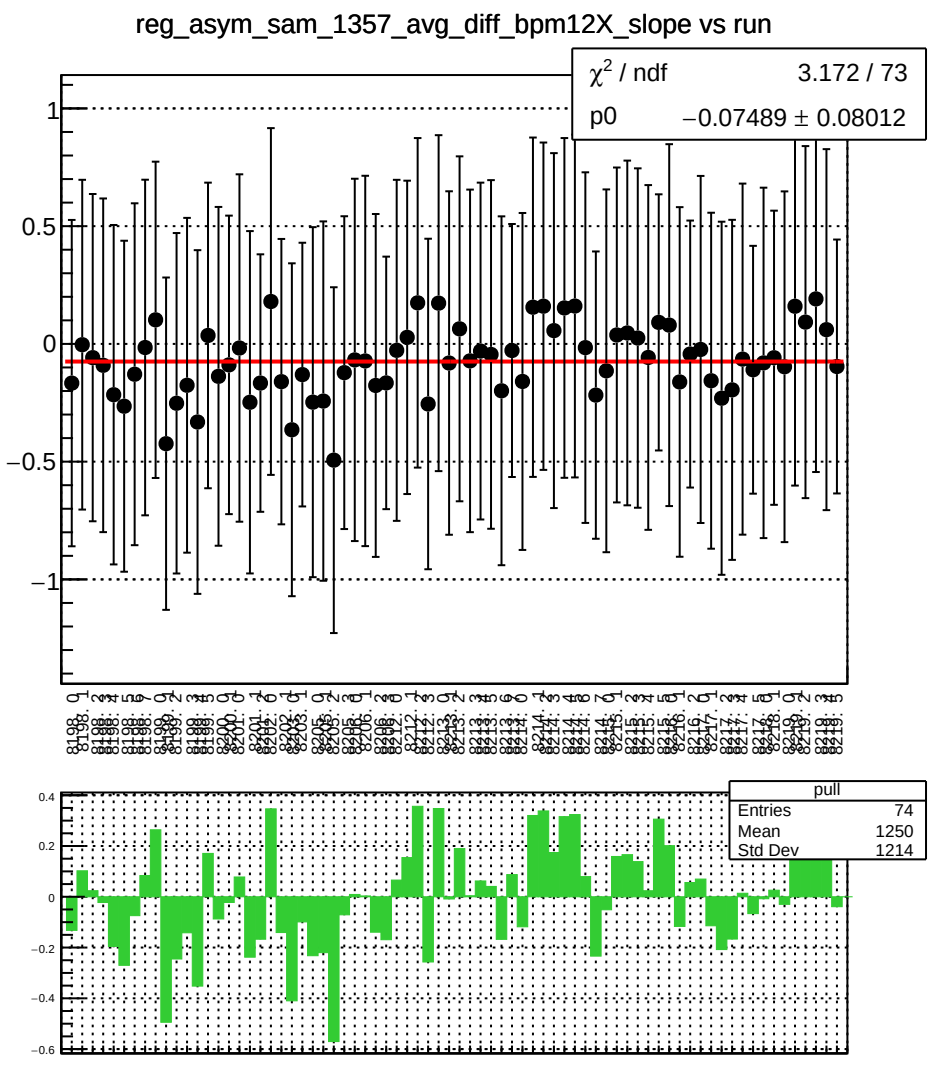

pull1D
Entries 74
Mean −0.004733
Std Dev 0.1933

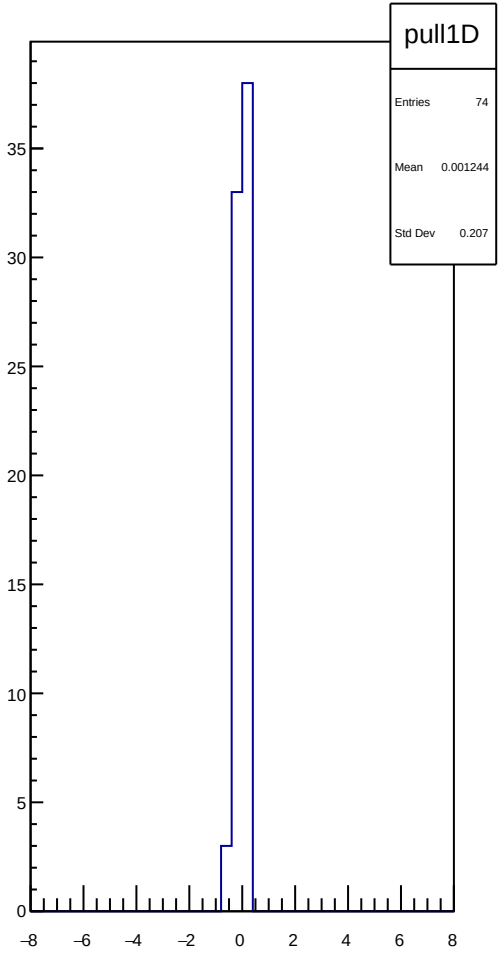

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.836 / 73
p0 15.33 ± 1.641
pull
Entries 74
Mean 336
Std Dev 322.9
pull1D
Entries 74
Mean −0.001378
Std Dev 0.1958

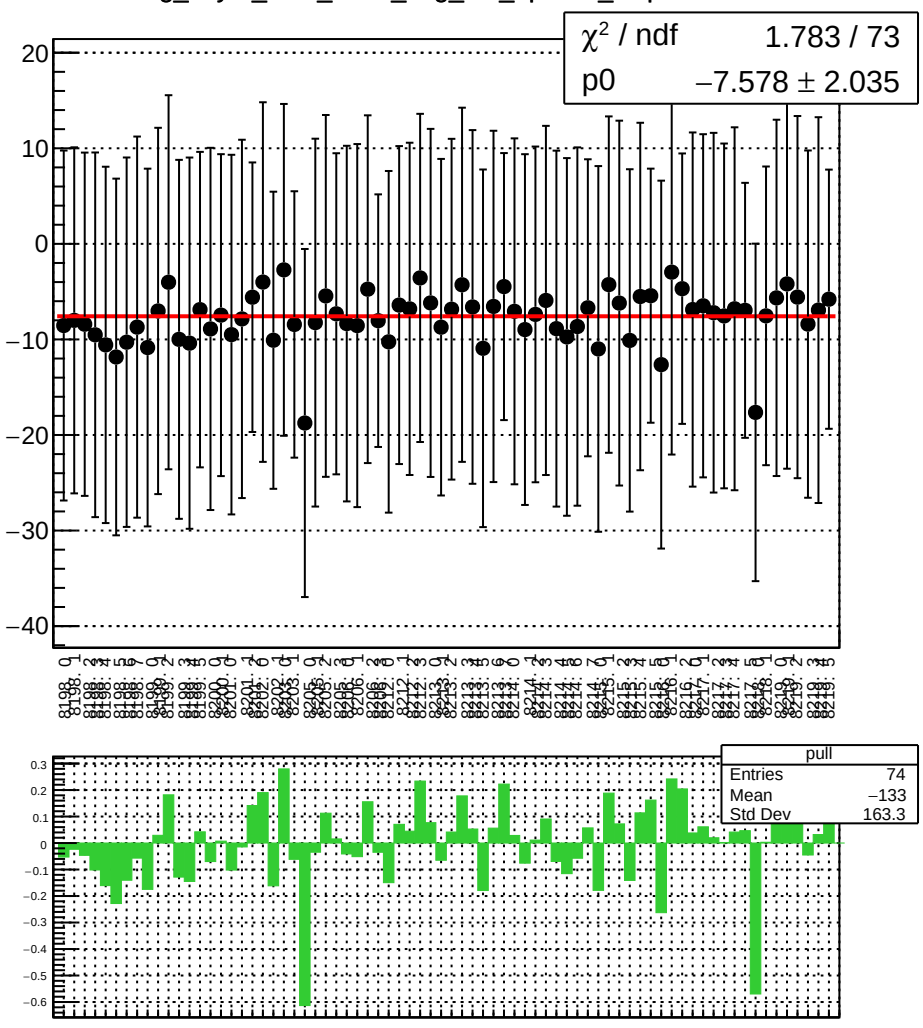

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 3.465 / 73
p0 −41.41 ± 0.9892
pull
Entries 74
Mean 181.7
Std Dev 116.4
pull1D
Entries 74
Mean 0.004818
Std Dev 0.2163

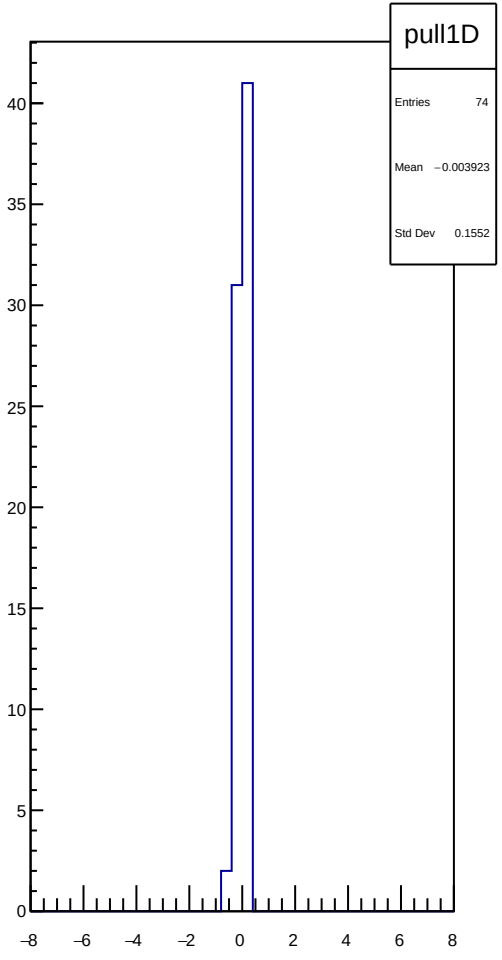

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.528 / 73
p0 17.04 ± 1.765
pull
Entries 74
Mean 58.54
Std Dev 104.2

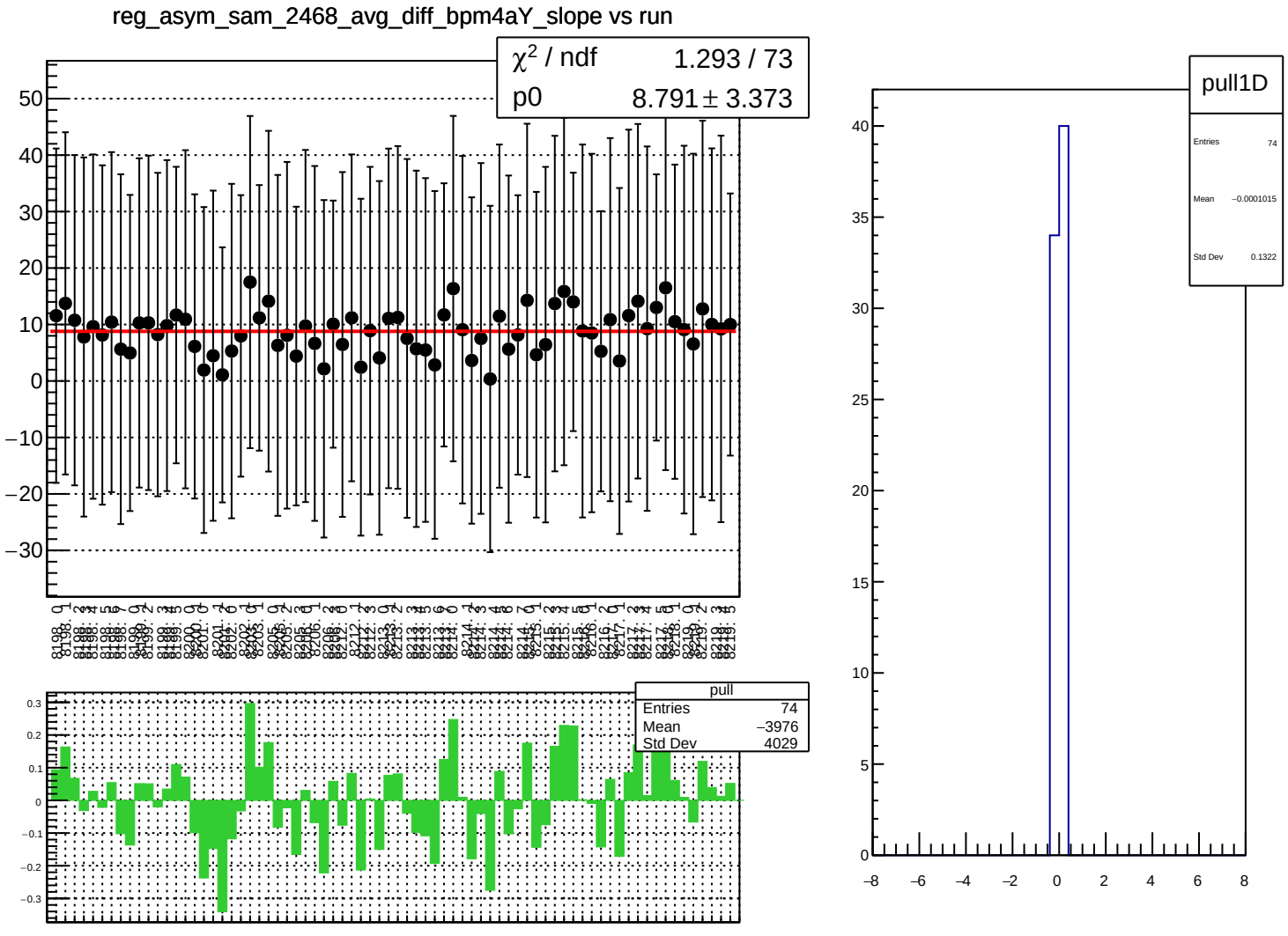

pull1D
Entries 74
Mean 0.001348
Std Dev 0.1848

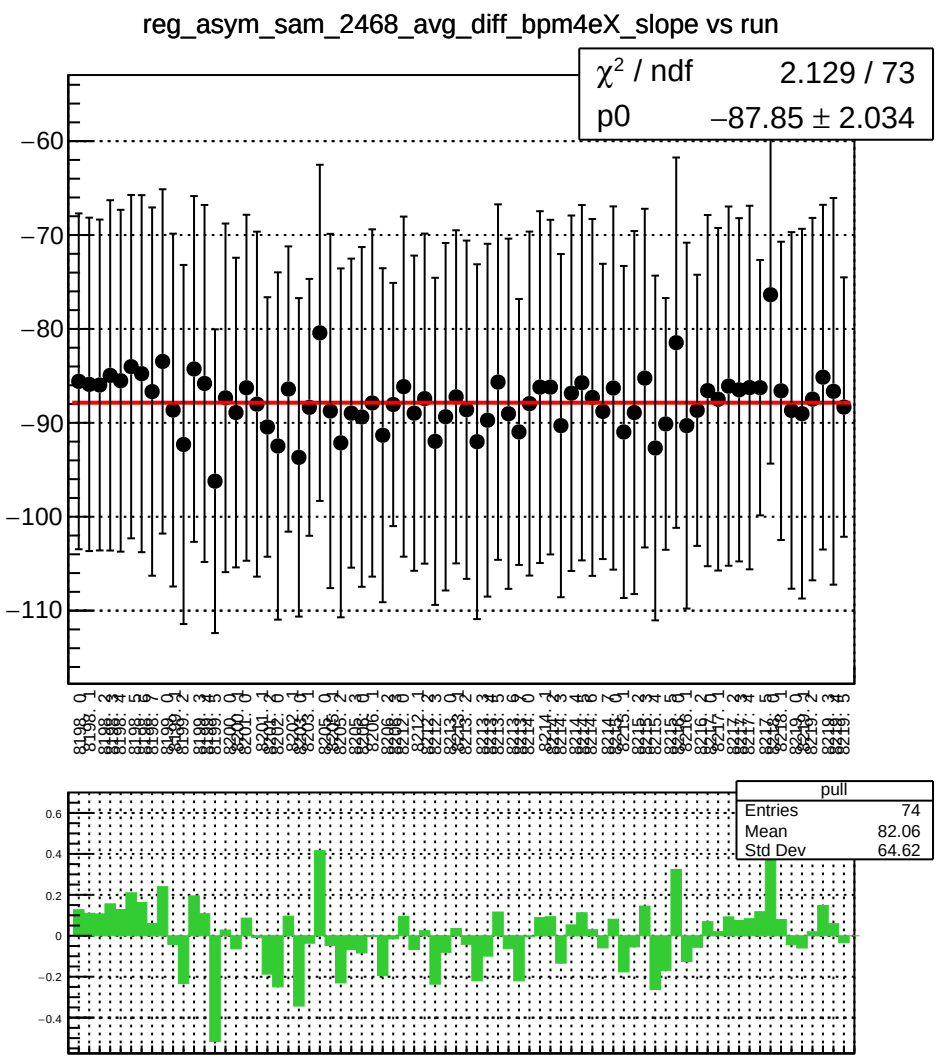

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 3.172 / 73
p0 −0.07489 ± 0.08012
pull
Entries 74
Mean 1250
Std Dev 1214

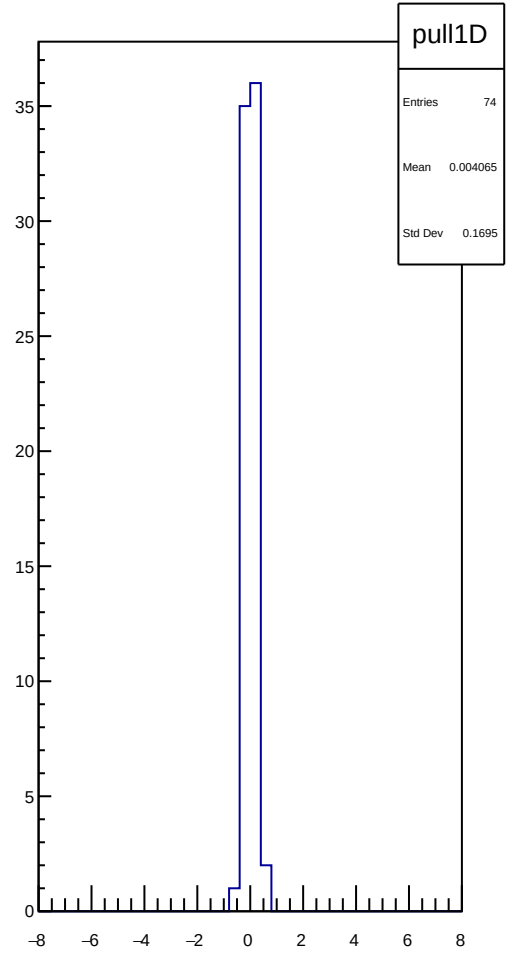

pull1D
Entries 74
Mean 0.001244
Std Dev 0.207

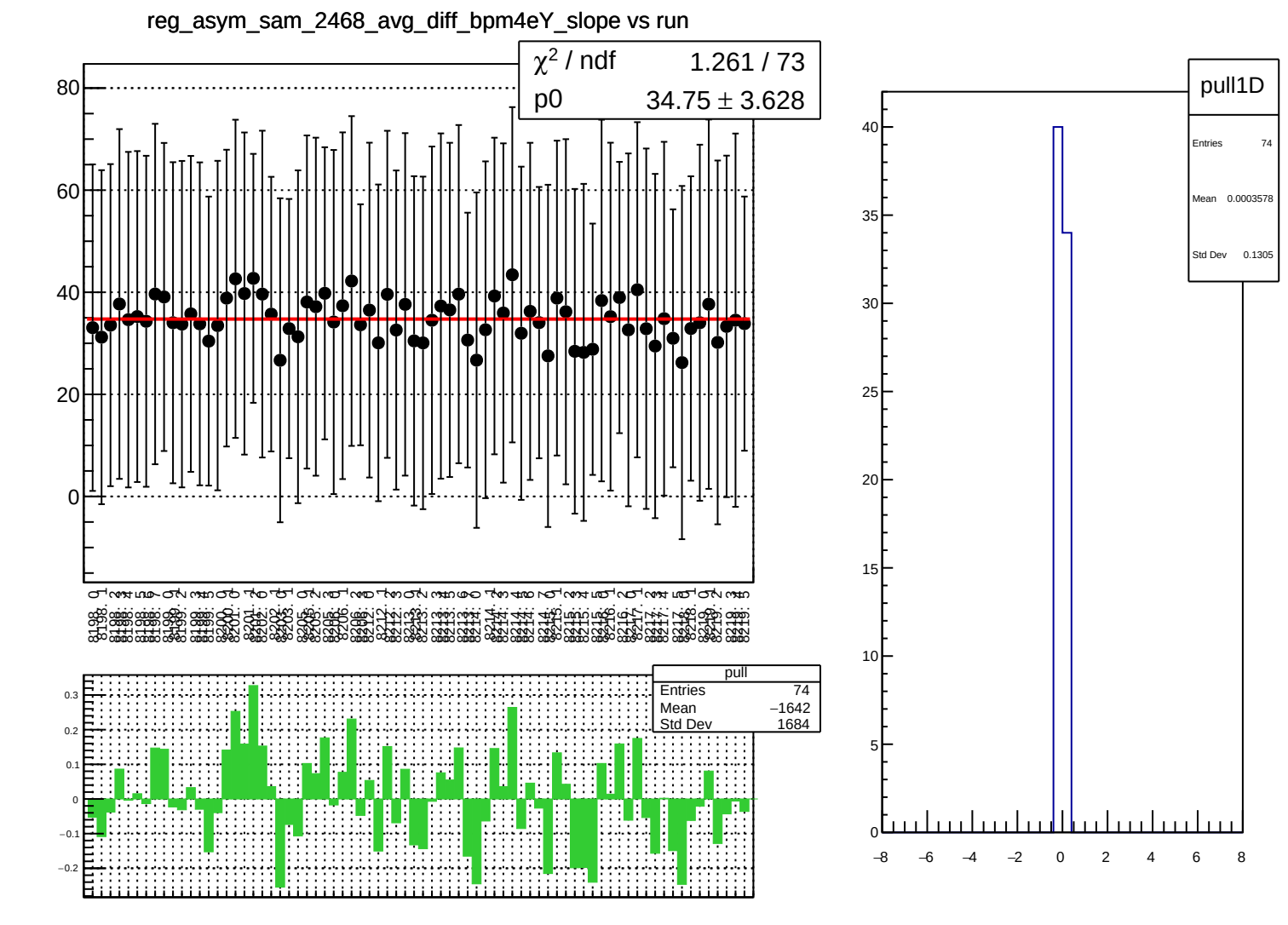

reg_asym_sam_2468_avg_diff_bpm1X_slope vs run
χ² / ndf 1.783 / 73
p0 −7.578 ± 2.035
pull
Entries 74
Mean −133
Std Dev 163.3

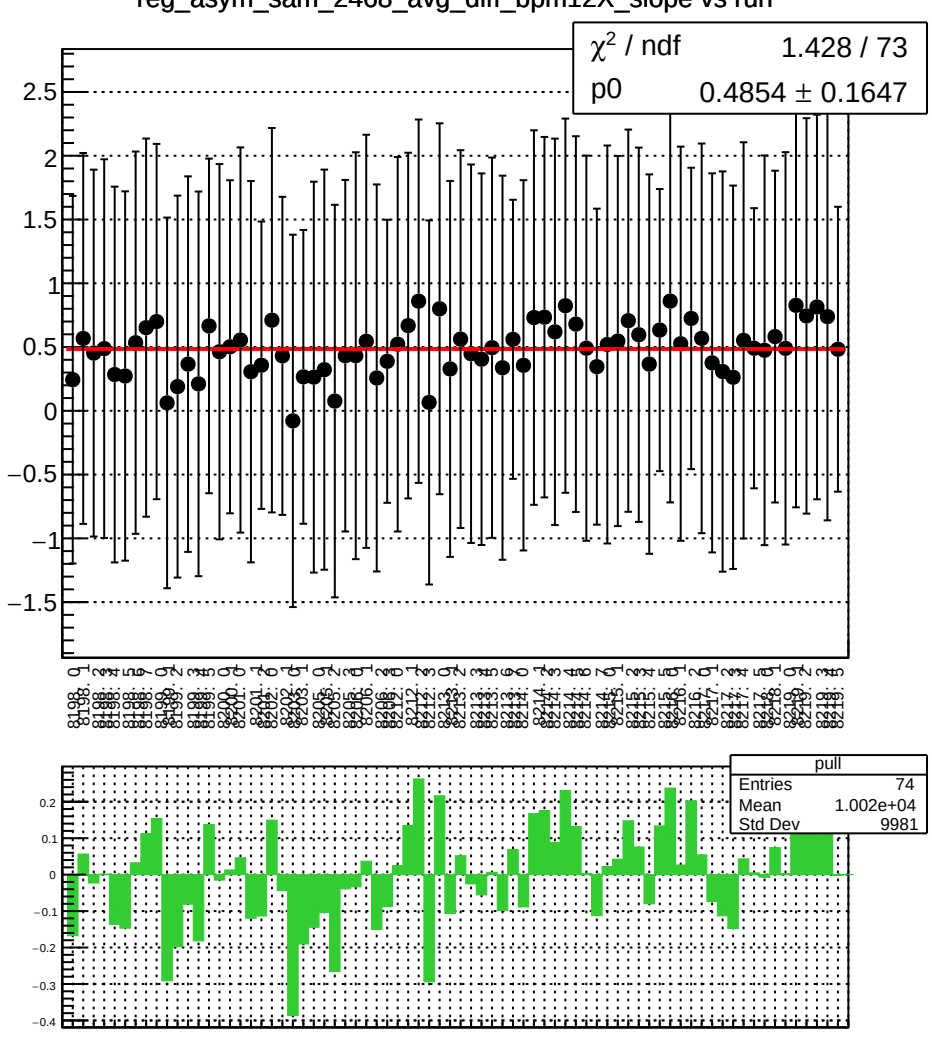

pull1D
Entries 74
Mean −0.003923
Std Dev 0.1552

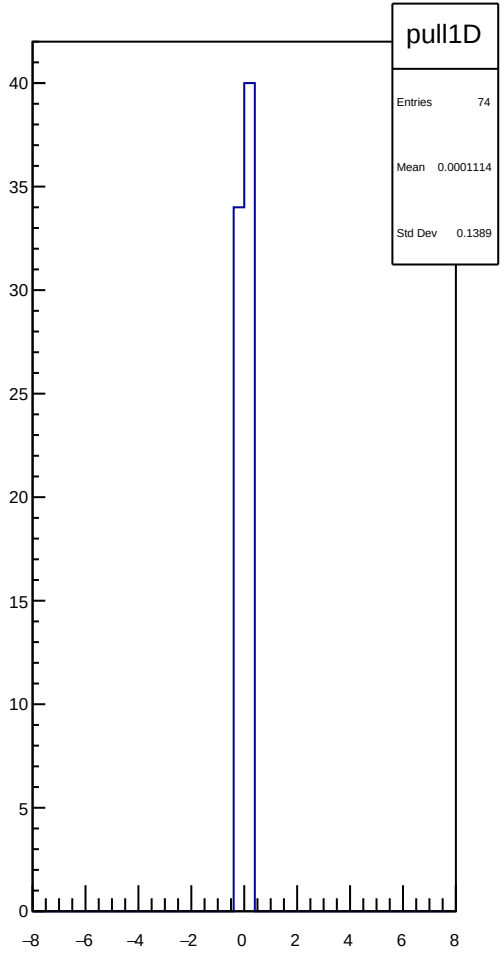

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.293 / 73
p0 8.791 ± 3.373
pull
Entries 74
Mean −3976
Std Dev 4029
pull1D
Entries 74
Mean −0.0001015
Std Dev 0.1322

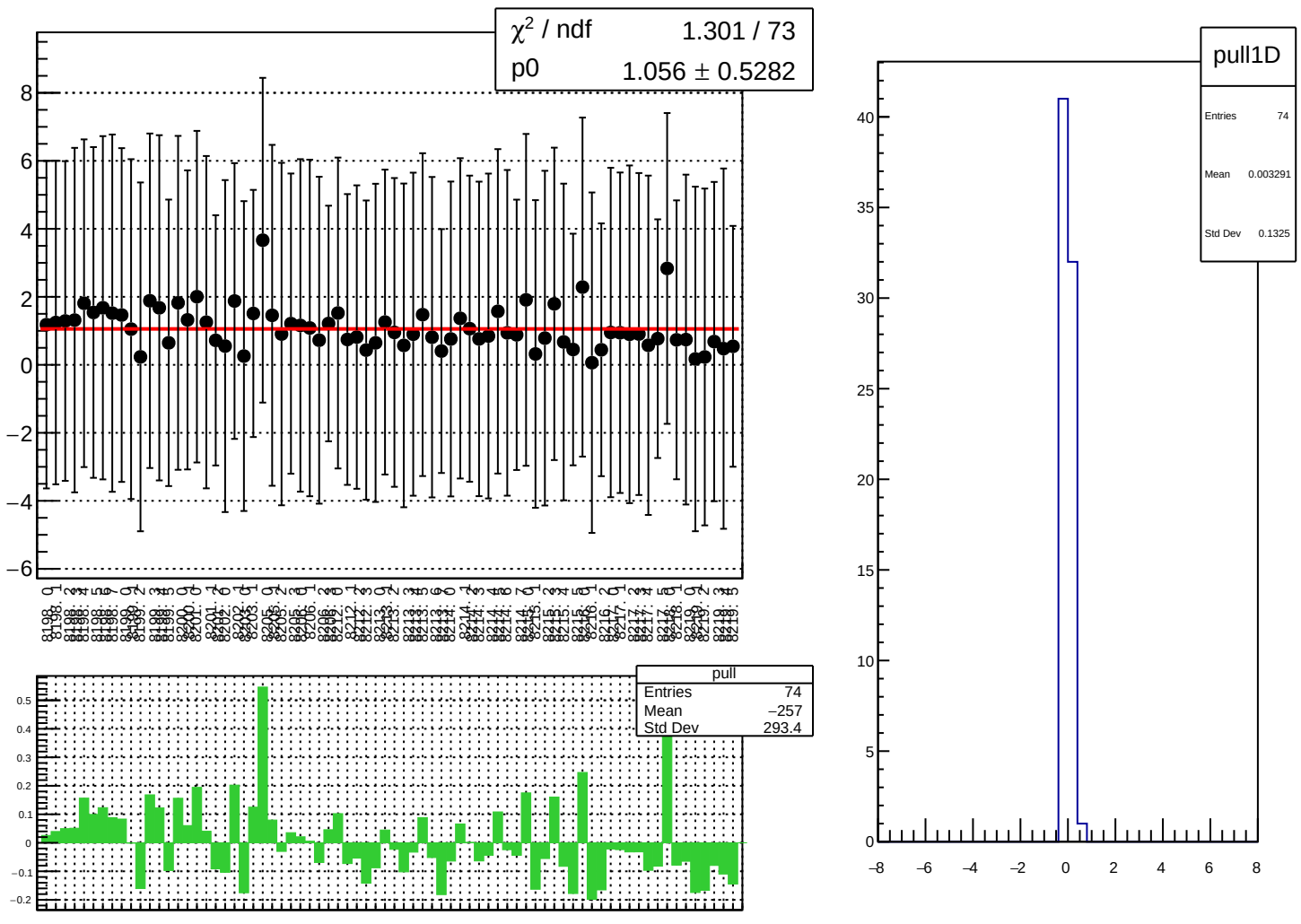

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.129 / 73
p0 −87.85 ± 2.034
pull
Entries 74
Mean 82.06
Std Dev 64.62

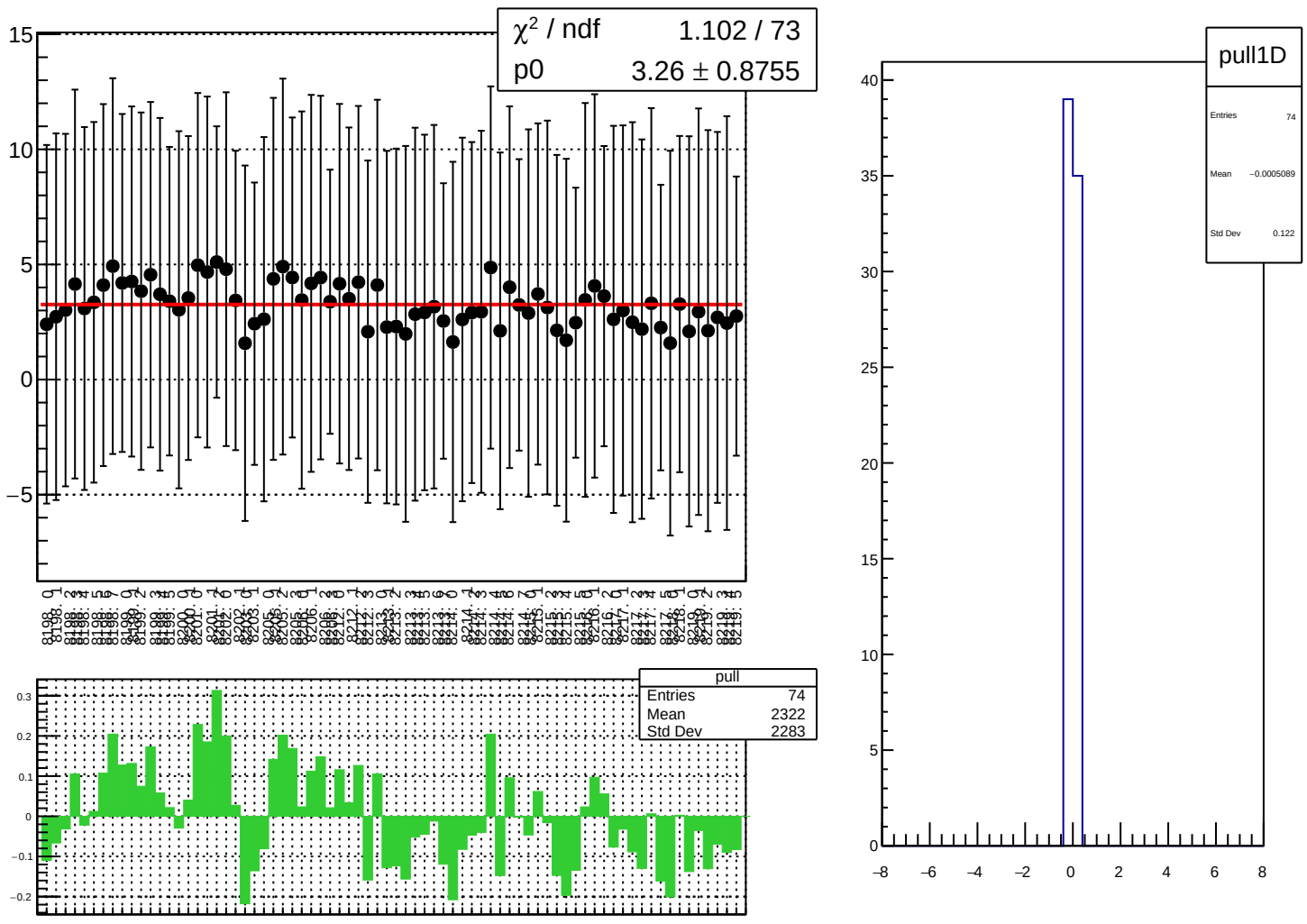

pull1D
Entries 74
Mean 0.004065
Std Dev 0.1695

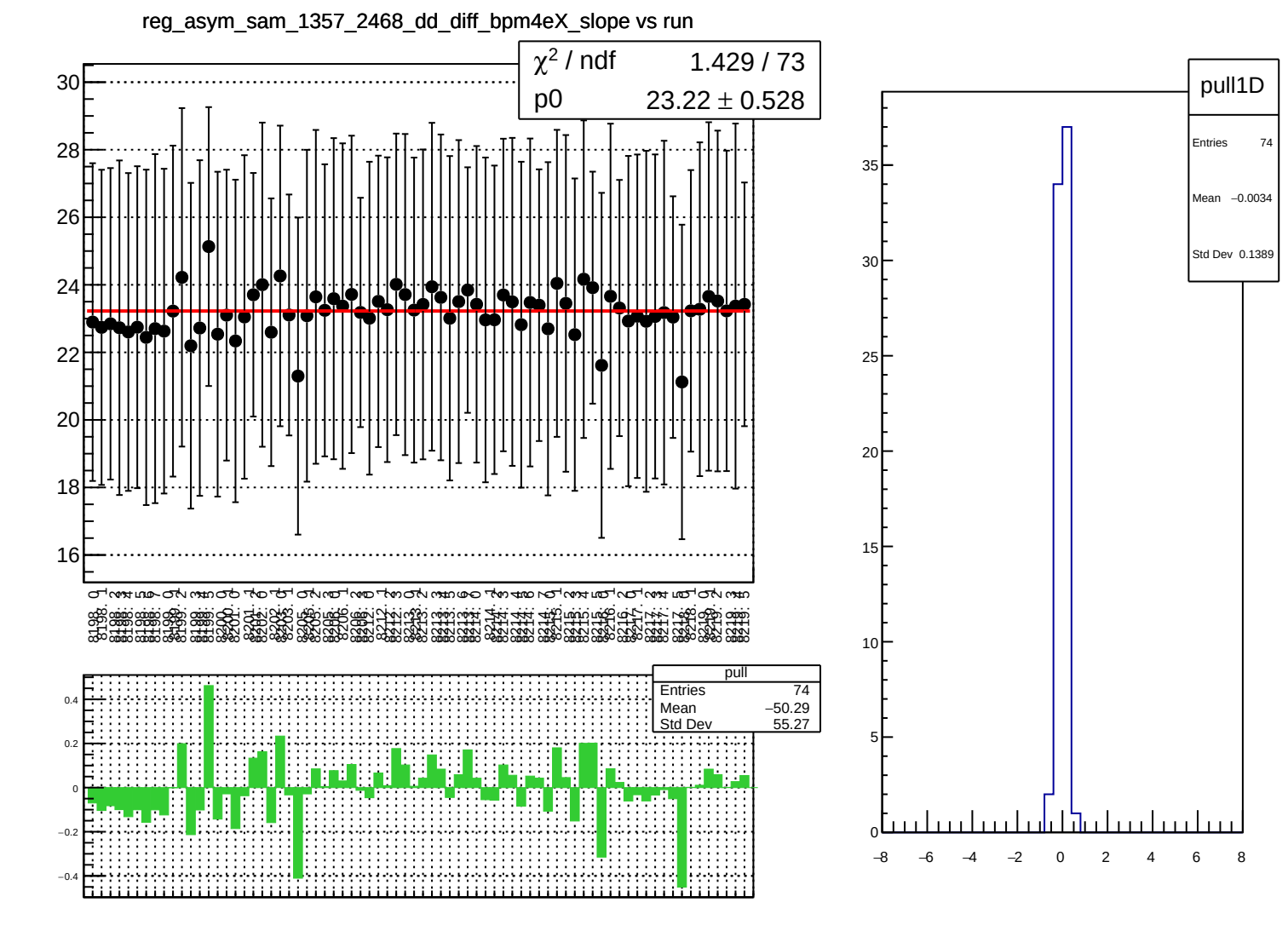

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.261 / 73
p0 34.75 ± 3.628
pull
Entries 74
Mean −1642
Std Dev 1684
pull1D
Entries 74
Mean 0.0003578
Std Dev 0.1305

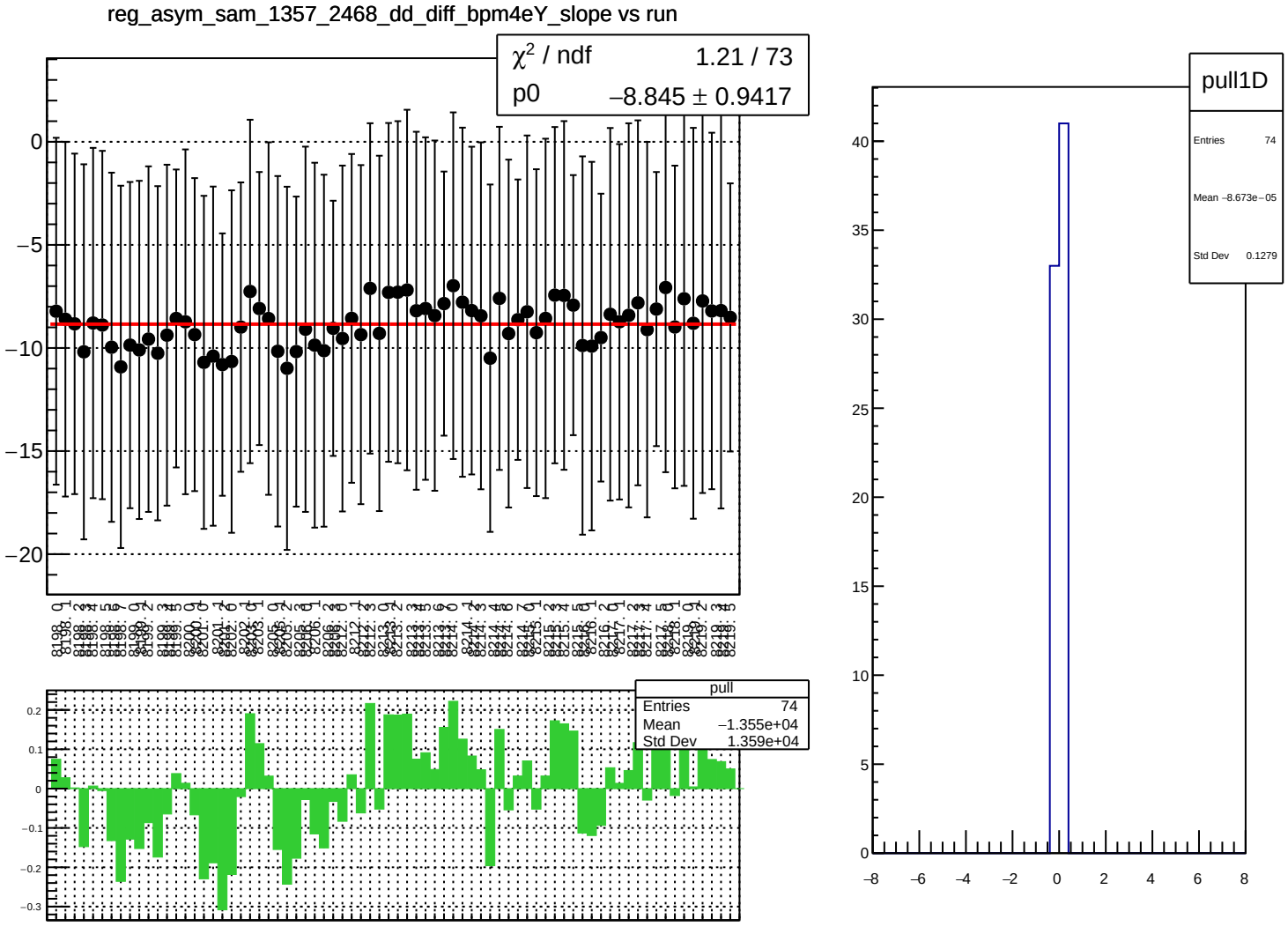

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 1.428 / 73
p0 0.4854 ± 0.1647
pull
Entries 74
Mean 1.002e+04
Std Dev 9981

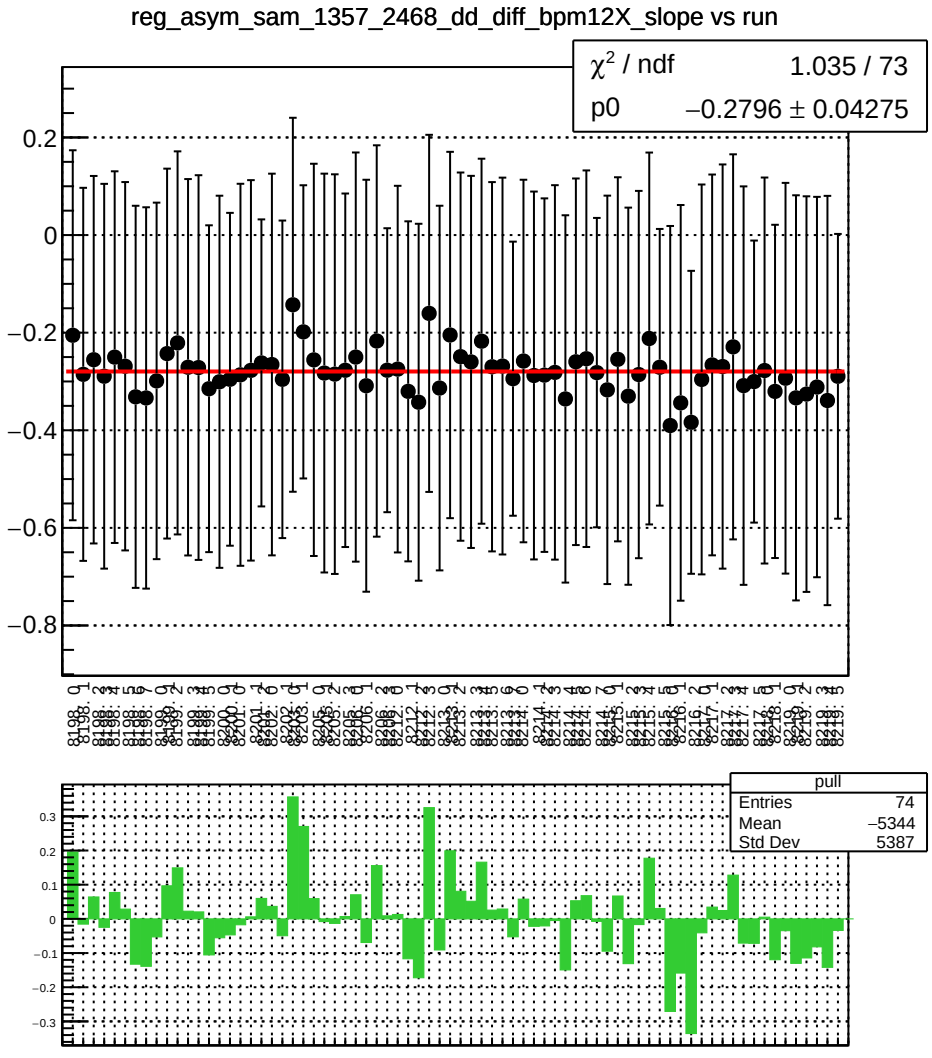

pull1D
Entries 74
Mean 0.0001114
Std Dev 0.1389

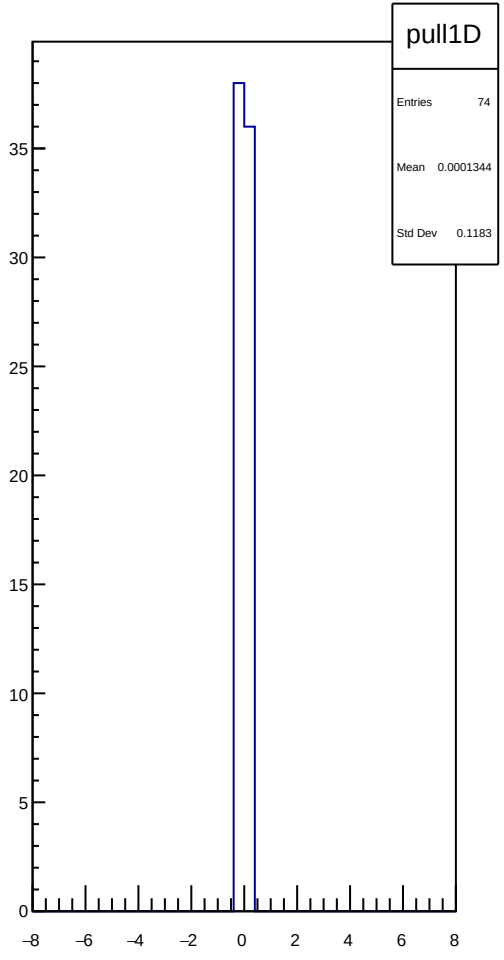

reg_asym_sam_1357_2468_dd_diff_bpm1X_slope vs run
χ² / ndf 1.301 / 73
p0 1.056 ± 0.5282
pull
Entries 74
Mean −257
Std Dev 293.4
pull1D
Entries 74
Mean 0.003291
Std Dev 0.1325

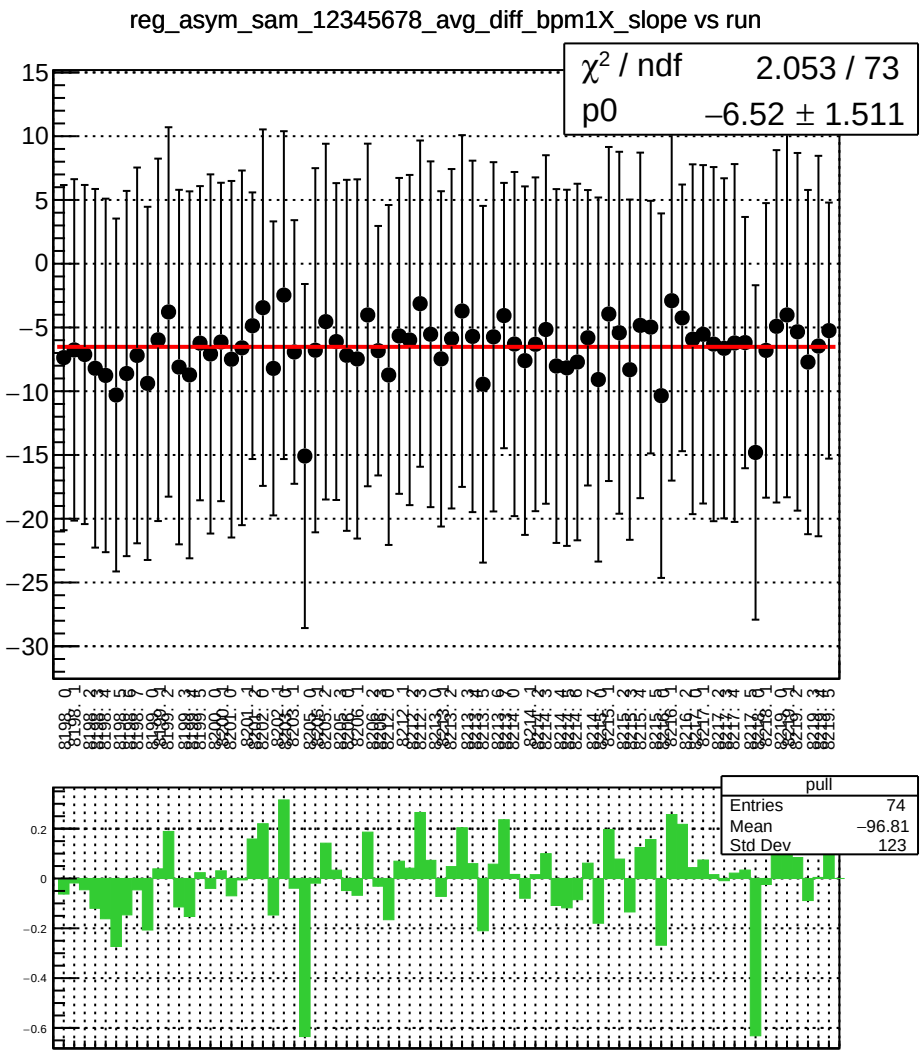

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.102 / 73
p0 3.26 ± 0.8755
pull
Entries 74
Mean 2322
Std Dev 2283
pull1D
Entries 74
Mean −0.0005089
Std Dev 0.122

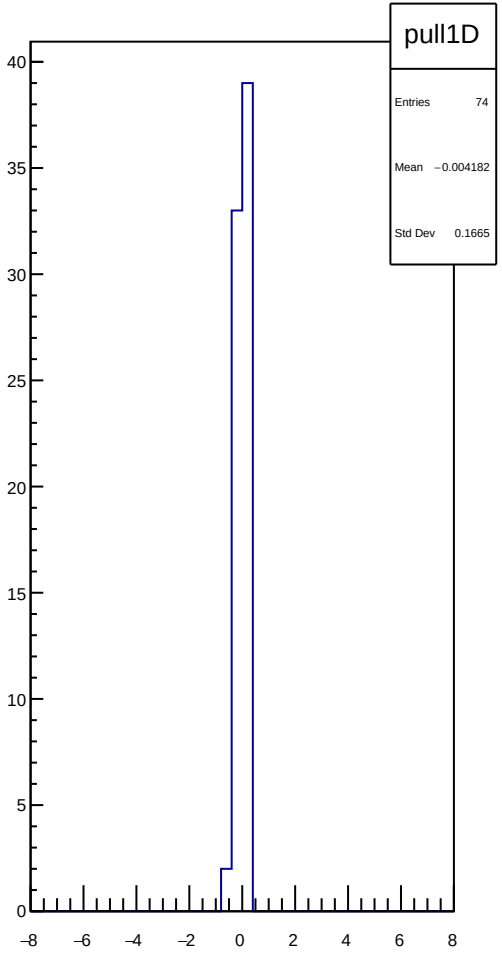

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.429 / 73
p0 23.22 ± 0.528
pull
Entries 74
Mean −50.29
Std Dev 55.27
pull1D
Entries 74
Mean −0.0034
Std Dev 0.1389

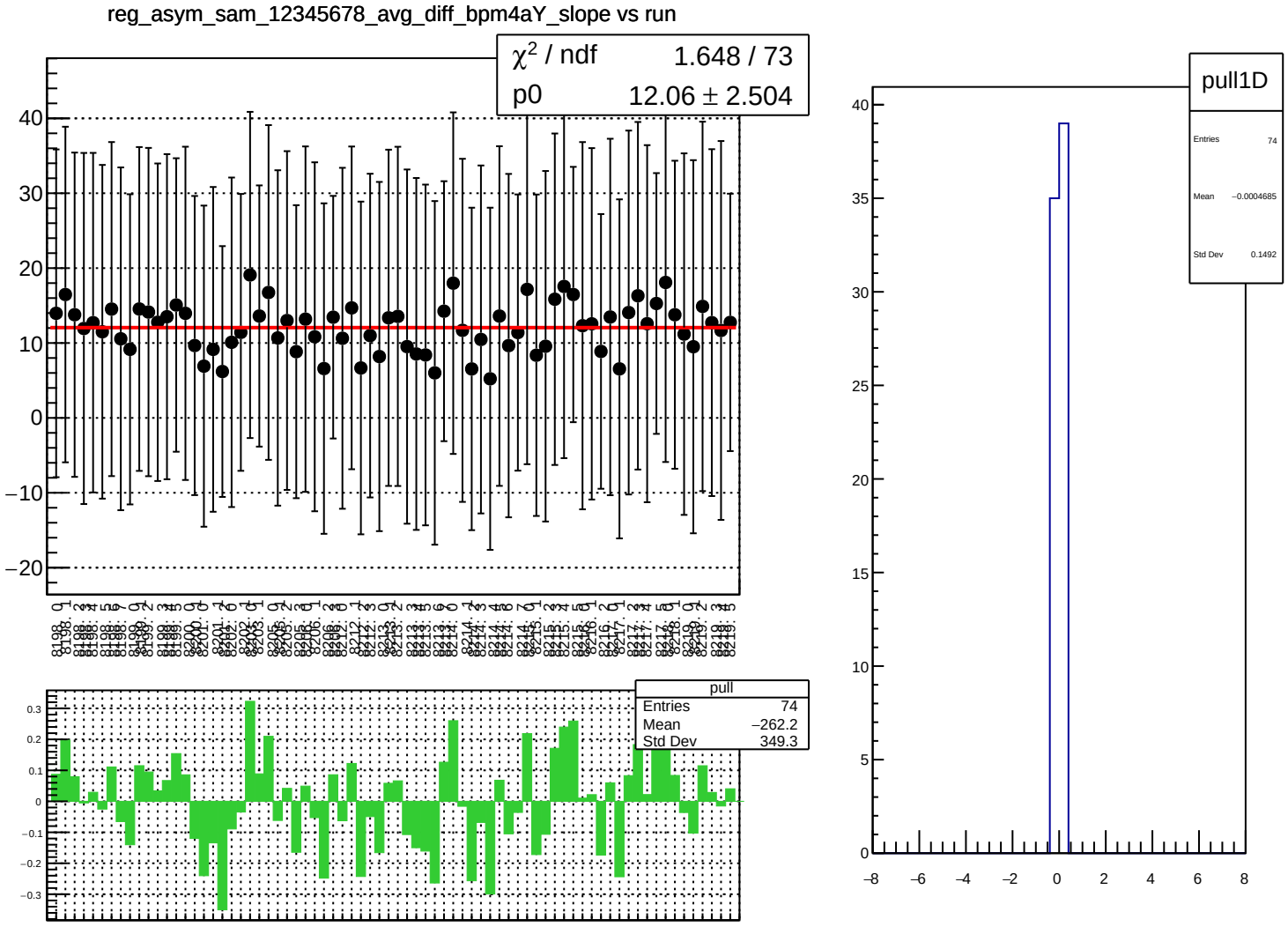

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.21 / 73
p0 −8.845 ± 0.9417
pull
Entries 74
Mean −1.355e+04
Std Dev 1.359e+04
pull1D
Entries 74
Mean −8.673e−05
Std Dev 0.1279

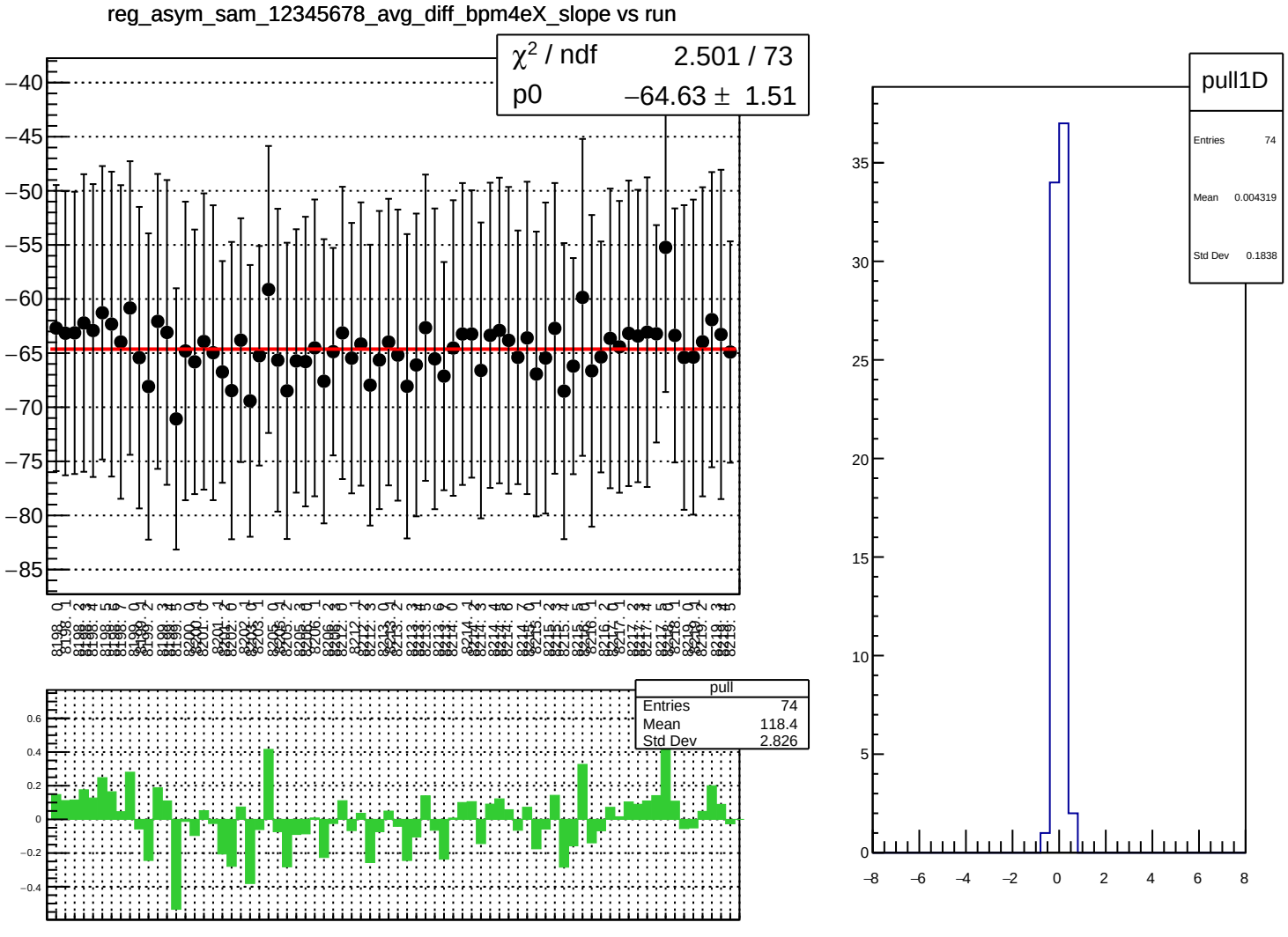

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 1.035 / 73
p0 −0.2796 ± 0.04275
pull
Entries 74
Mean −5344
Std Dev 5387

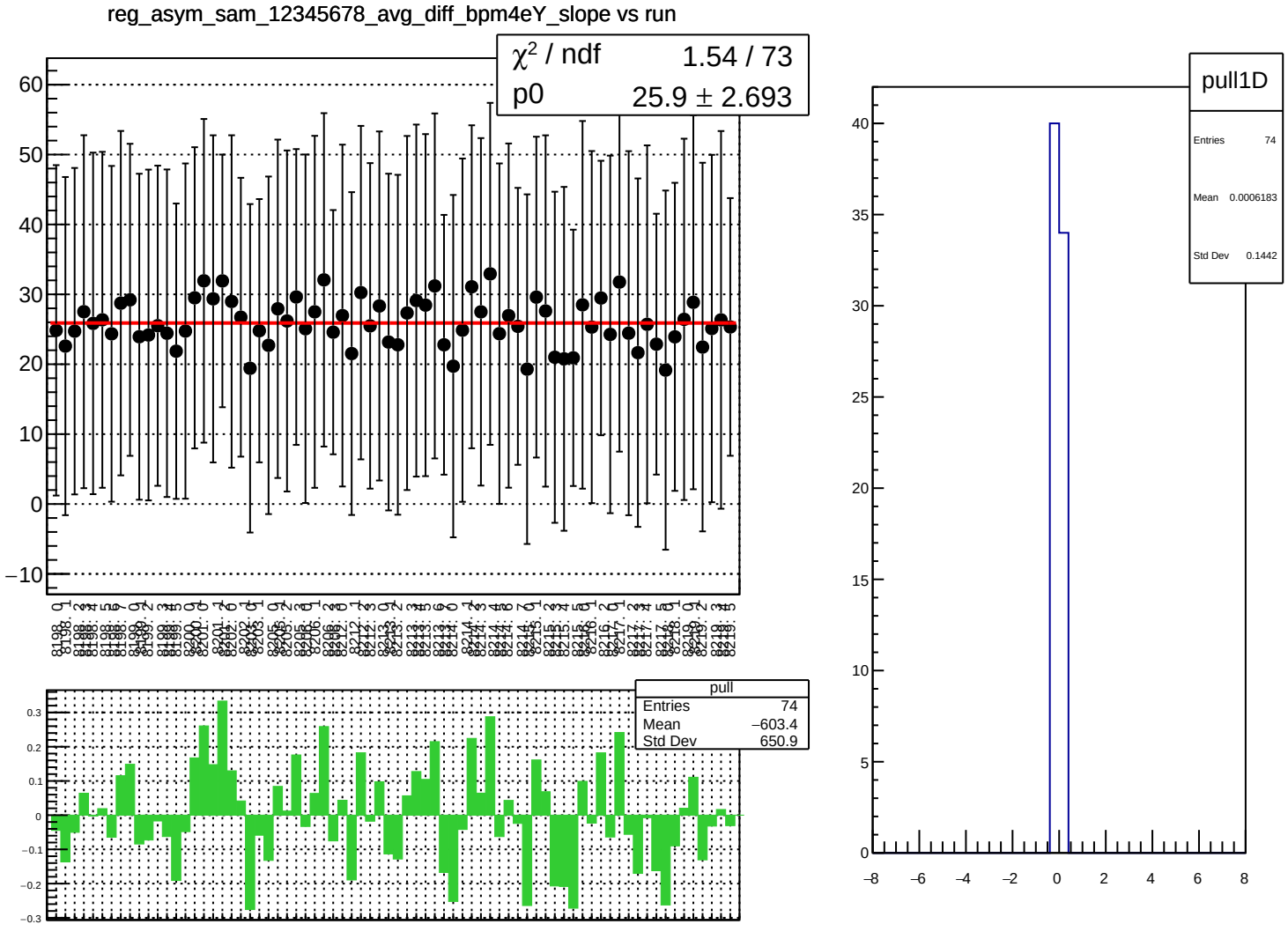

pull1D
Entries 74
Mean 0.0001344
Std Dev 0.1183

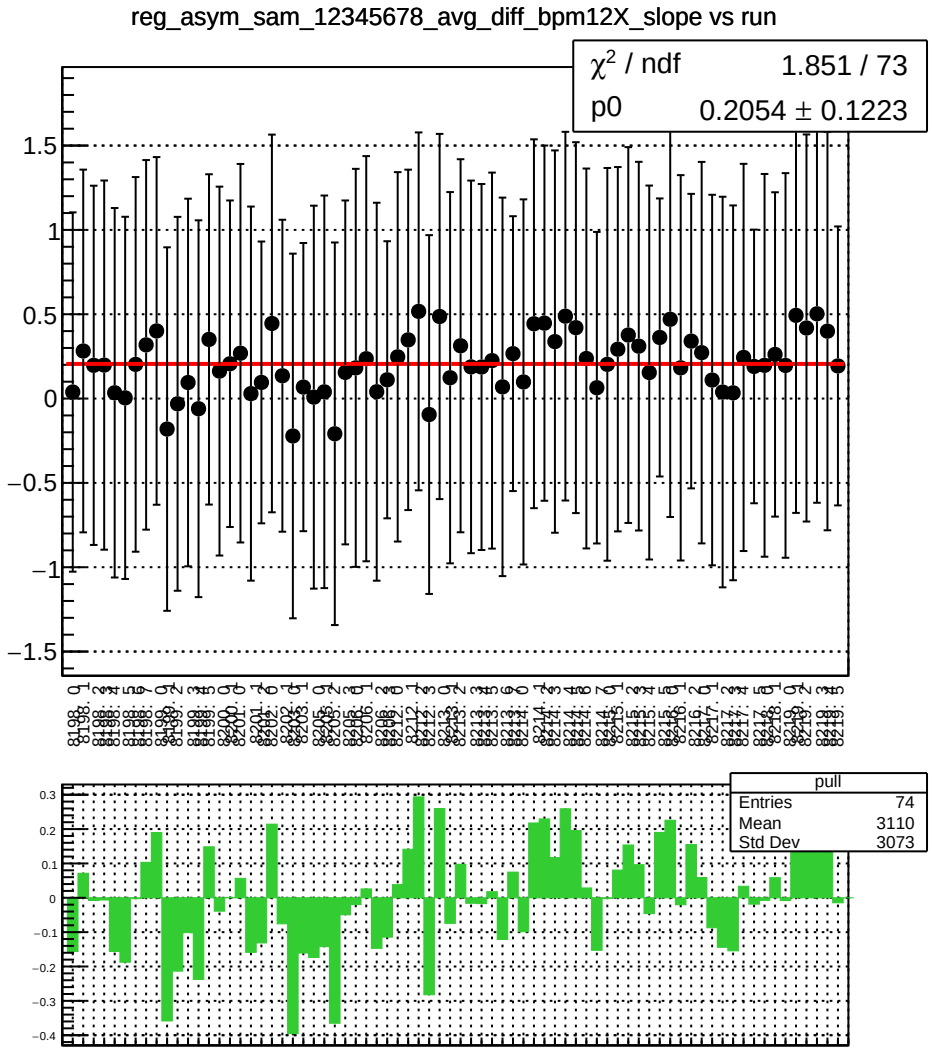

reg_asym_sam_12345678_avg_diff_bpm1X_slope vs run
χ² / ndf 2.053 / 73
p0 −6.52 ± 1.511
pull
Entries 74
Mean −96.81
Std Dev 123

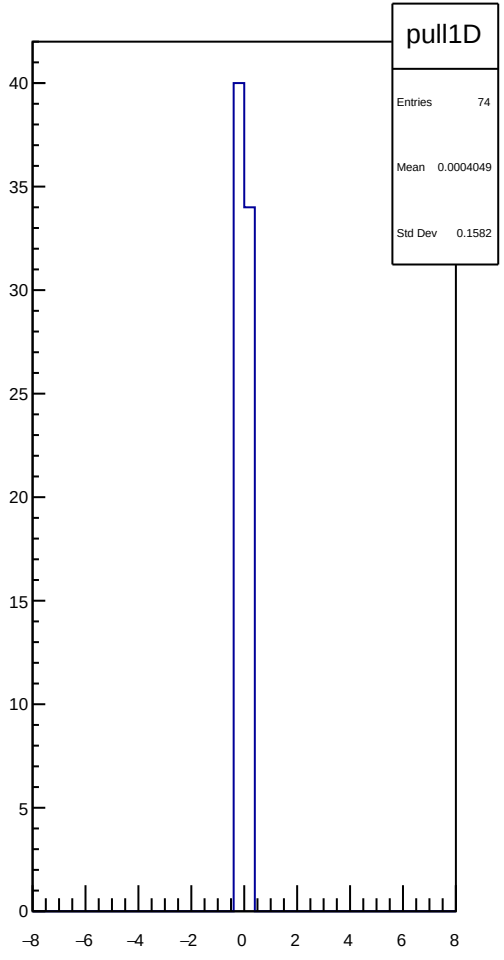

pull1D
Entries 74
Mean −0.004182
Std Dev 0.1665

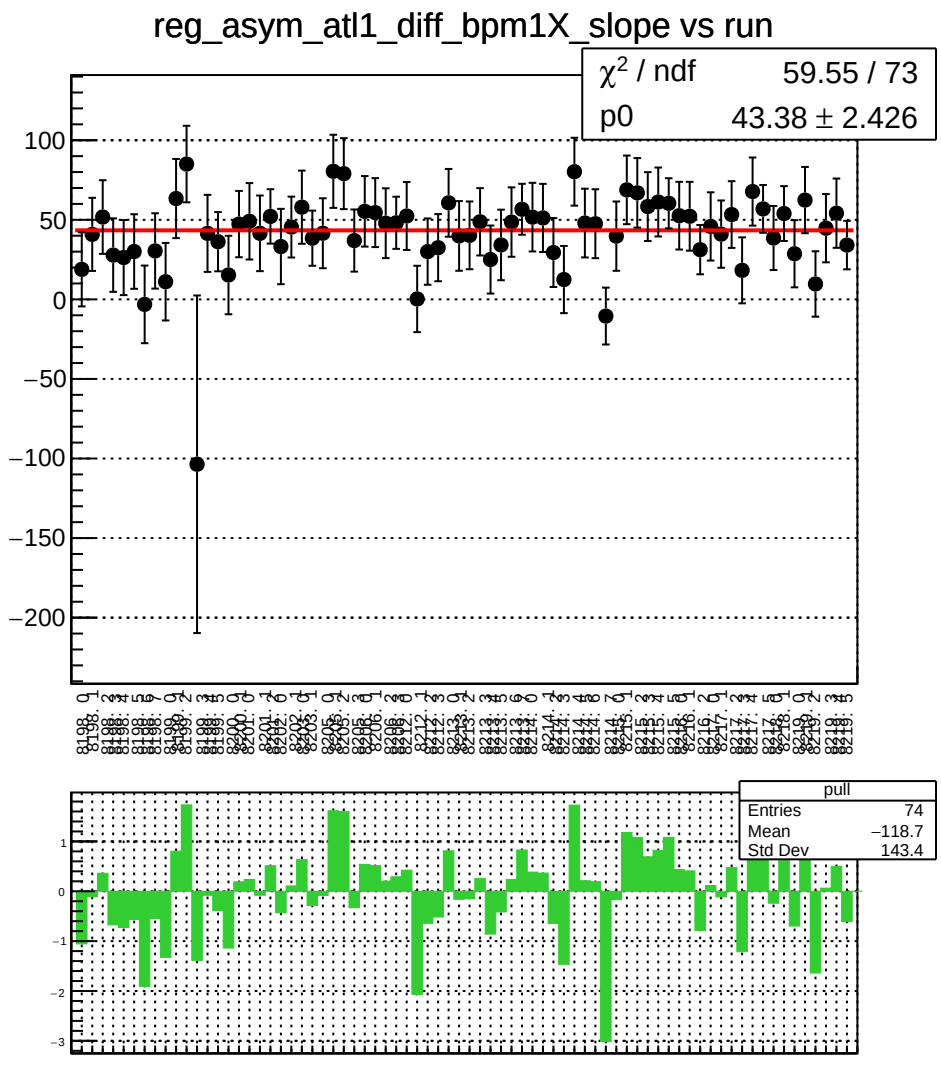

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.648 / 73
p0 12.06 ± 2.504
pull
Entries 74
Mean −262.2
Std Dev 349.3
pull1D
Entries 74
Mean −0.0004685
Std Dev 0.1492

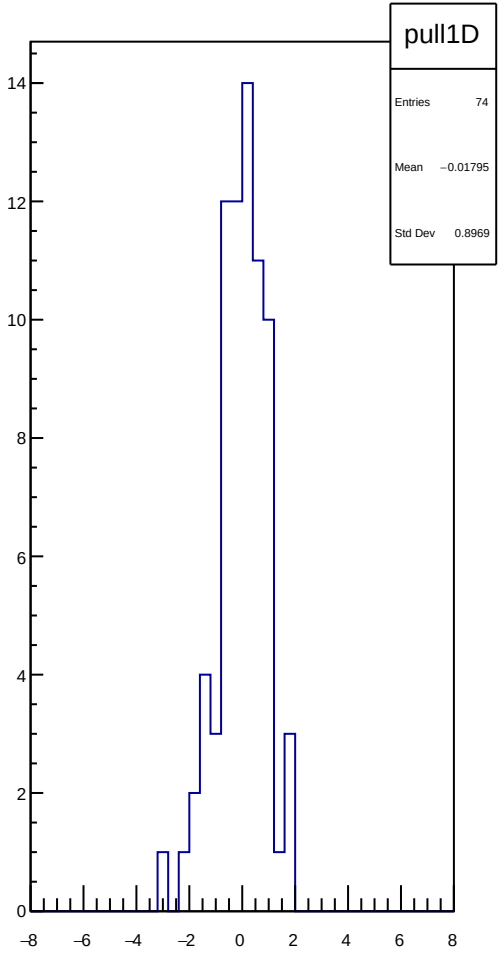

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.501 / 73
p0 −64.63 ± 1.51
pull
Entries 74
Mean 118.4
Std Dev 2.826
pull1D
Entries 74
Mean 0.004319
Std Dev 0.1838

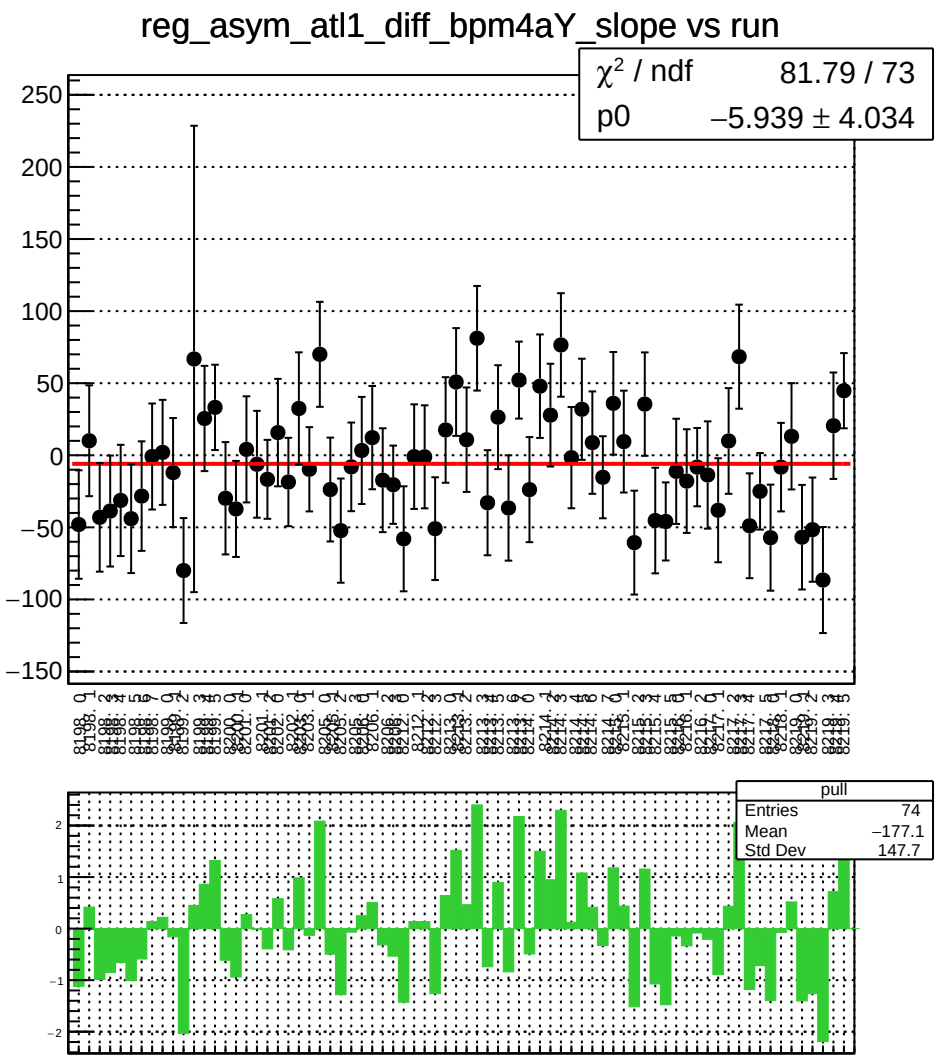

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.54 / 73
p0 25.9 ± 2.693
pull
Entries 74
Mean −603.4
Std Dev 650.9
pull1D
Entries 74
Mean 0.0006183
Std Dev 0.1442

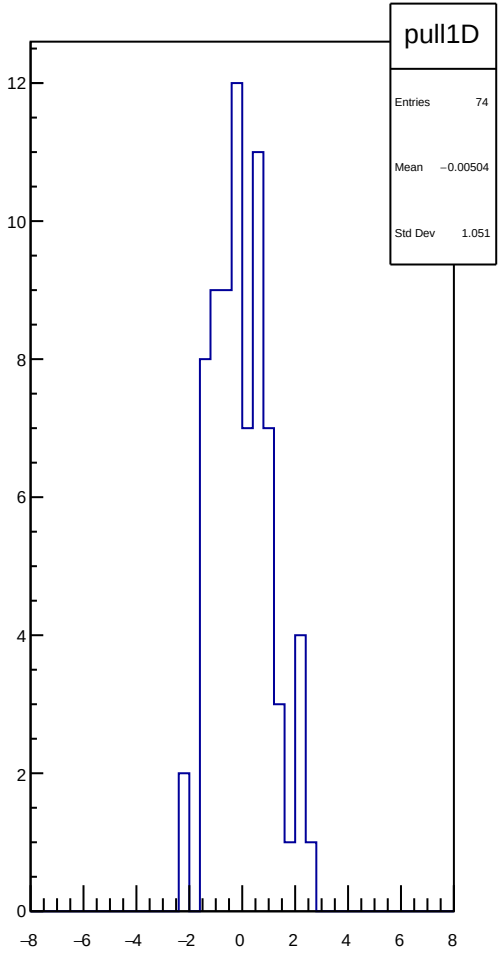

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 1.851 / 73
p0 0.2054 ± 0.1223
pull
Entries 74
Mean 3110
Std Dev 3073

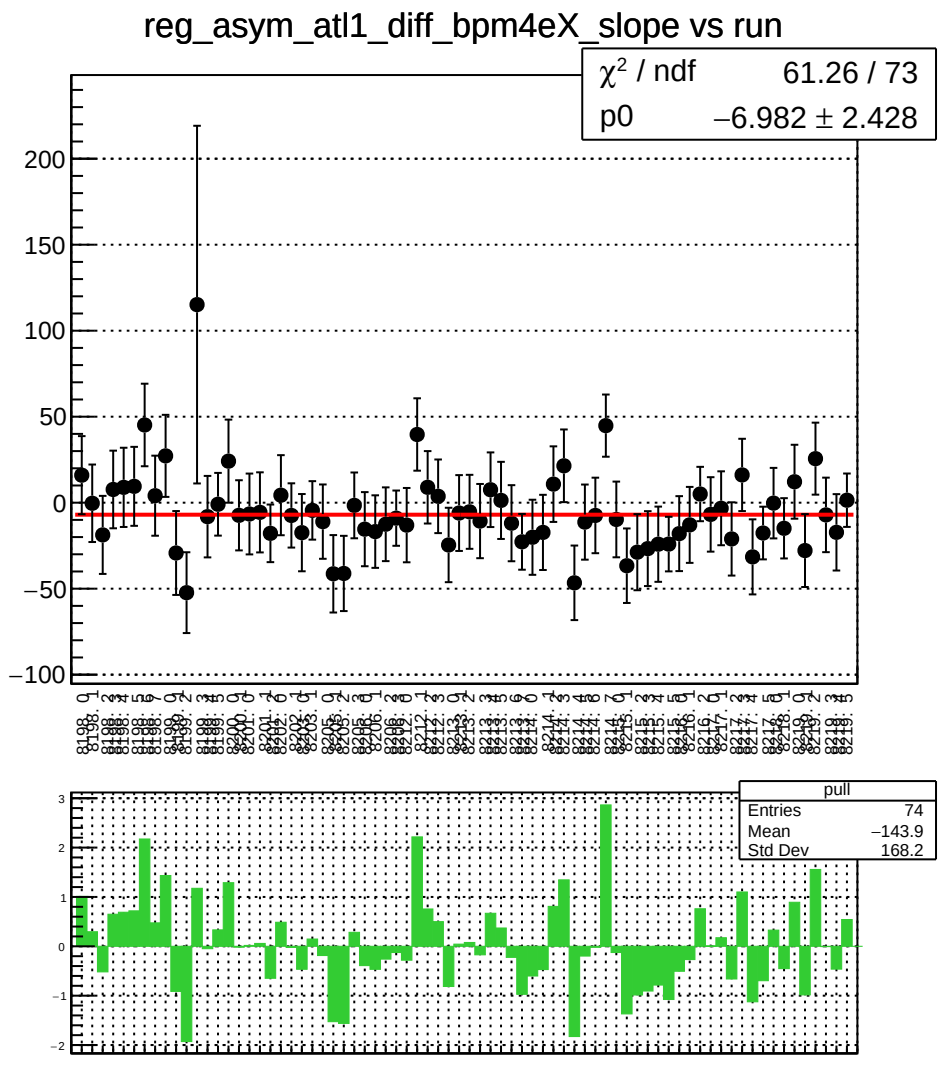

pull1D
Entries 74
Mean 0.0004049
Std Dev 0.1582

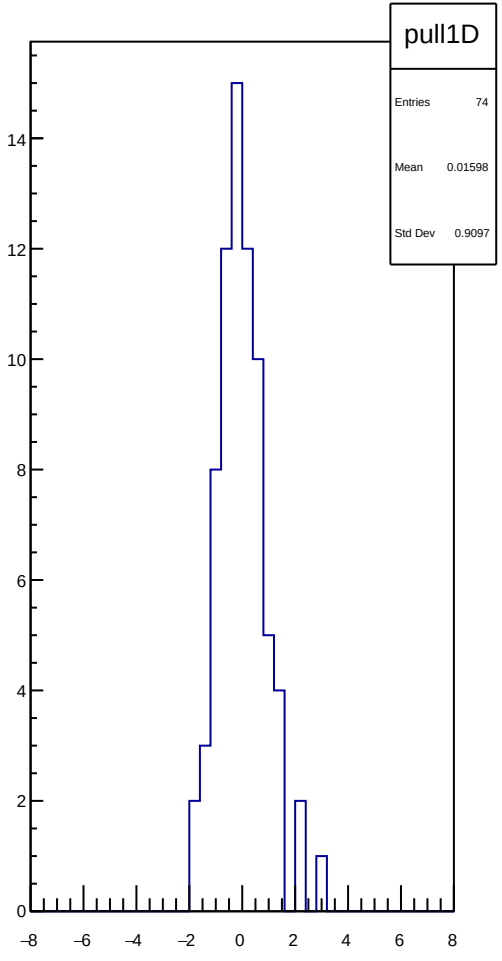

reg_asym_atl1_diff_bpm1X_slope vs run
χ² / ndf 59.55 / 73
p0 43.38 ± 2.426
pull
Entries 74
Mean −118.7
Std Dev 143.4

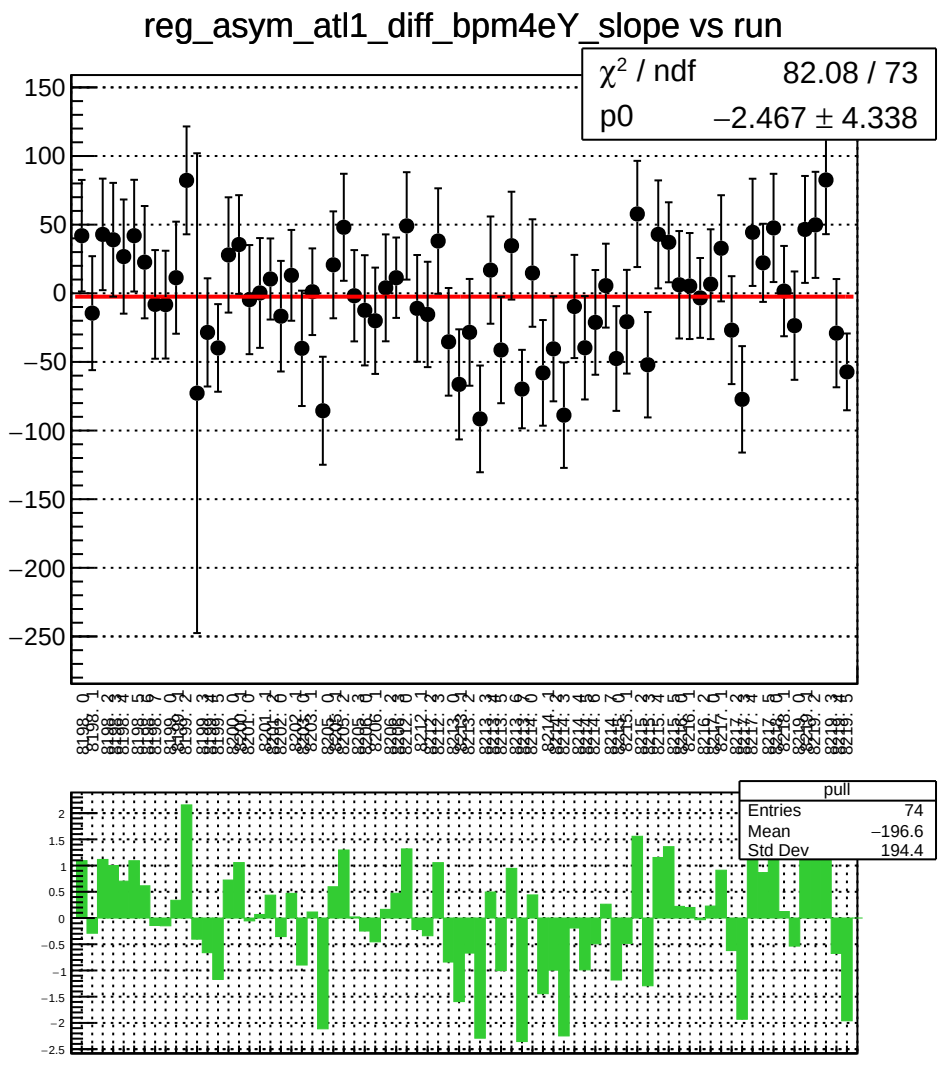

pull1D
Entries 74
Mean −0.01795
Std Dev 0.8969

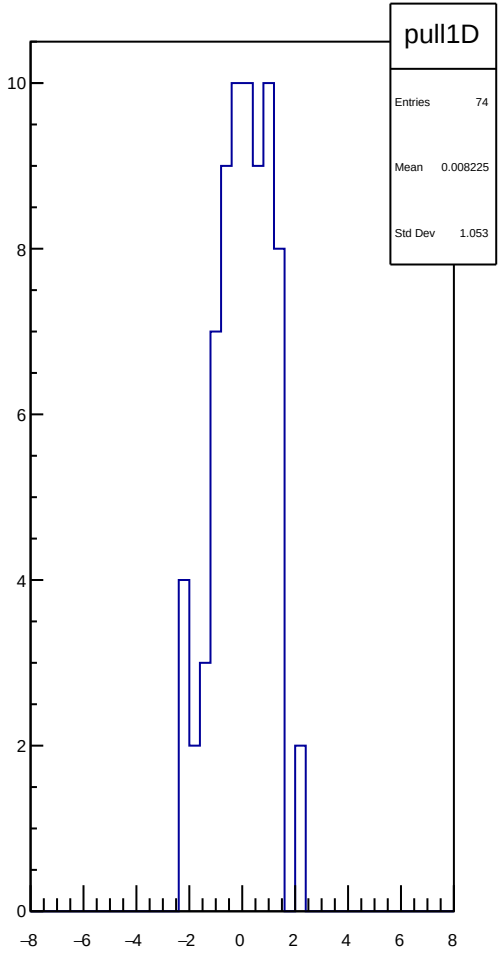

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 81.79 / 73
p0 −5.939 ± 4.034
pull
Entries 74
Mean −177.1
Std Dev 147.7

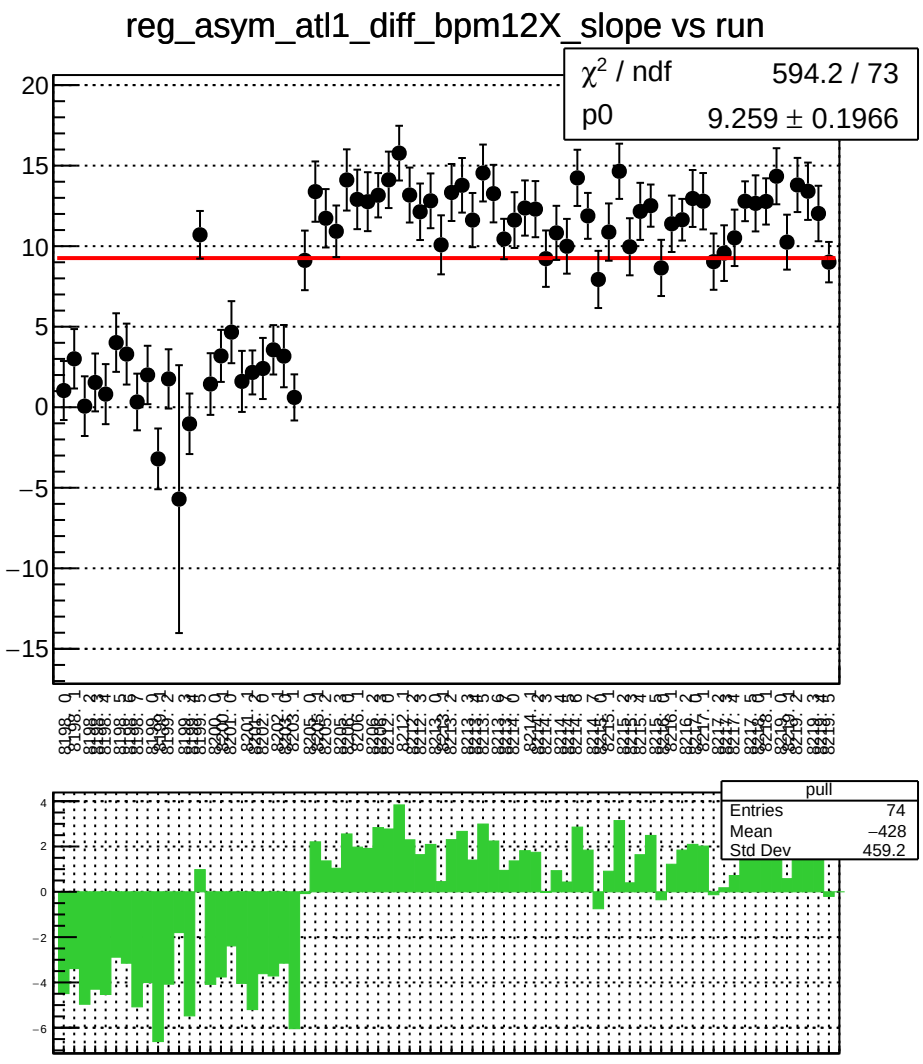

pull1D
Entries 74
Mean −0.00504
Std Dev 1.051

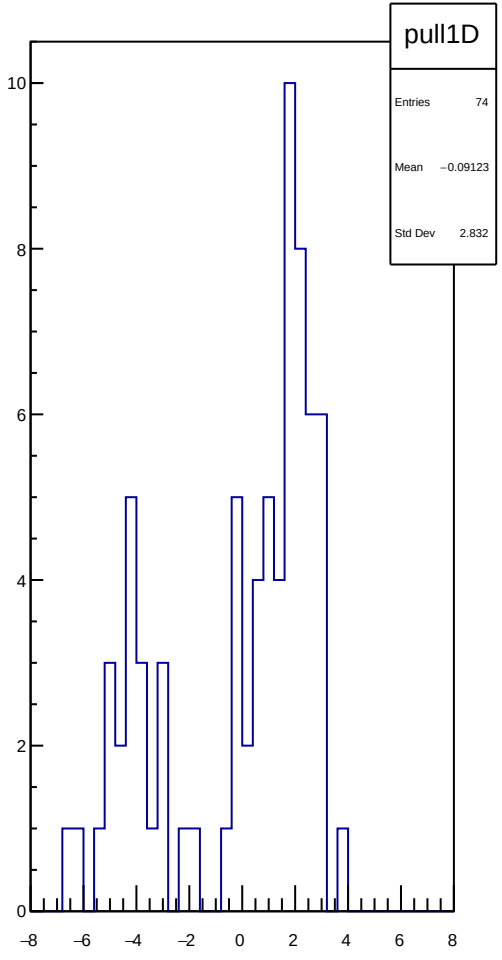

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 61.26 / 73
p0 −6.982 ± 2.428
pull
Entries 74
Mean −143.9
Std Dev 168.2

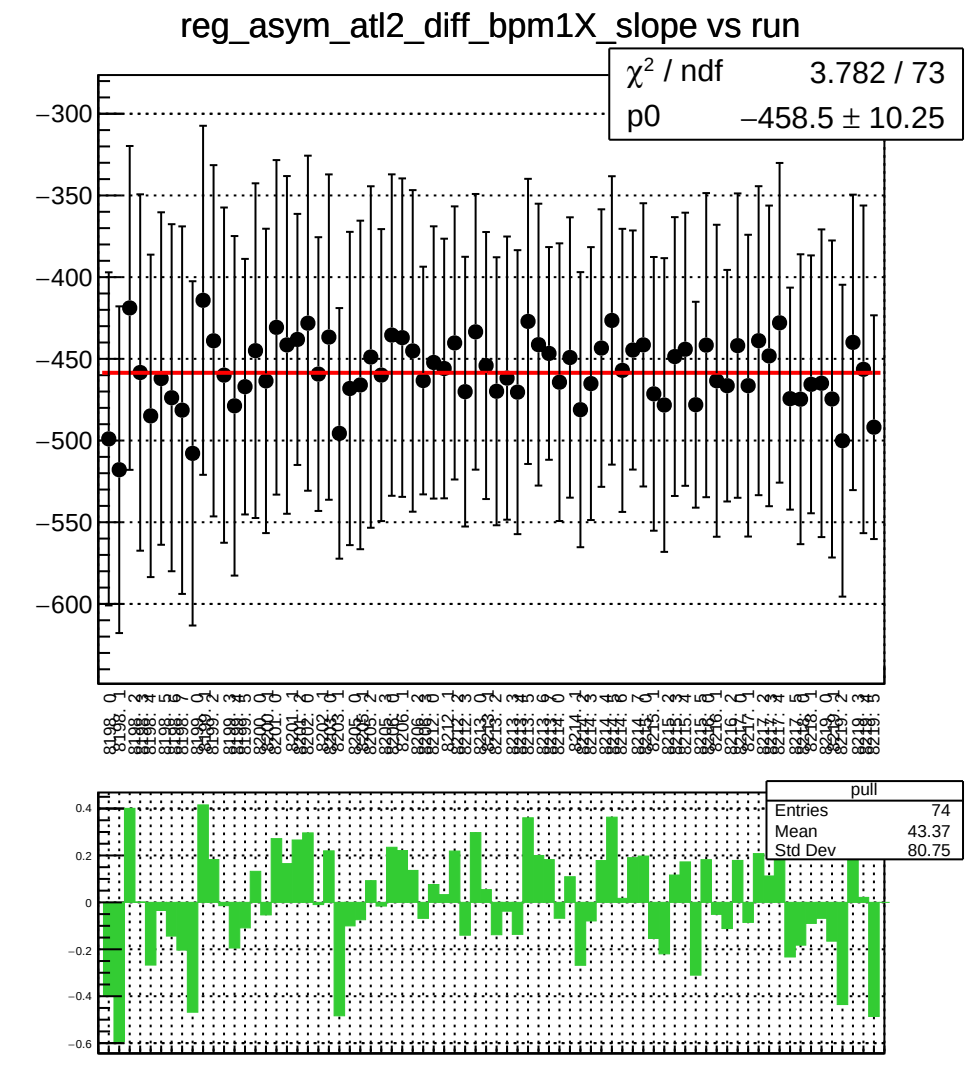

pull1D
Entries 74
Mean 0.01598
Std Dev 0.9097

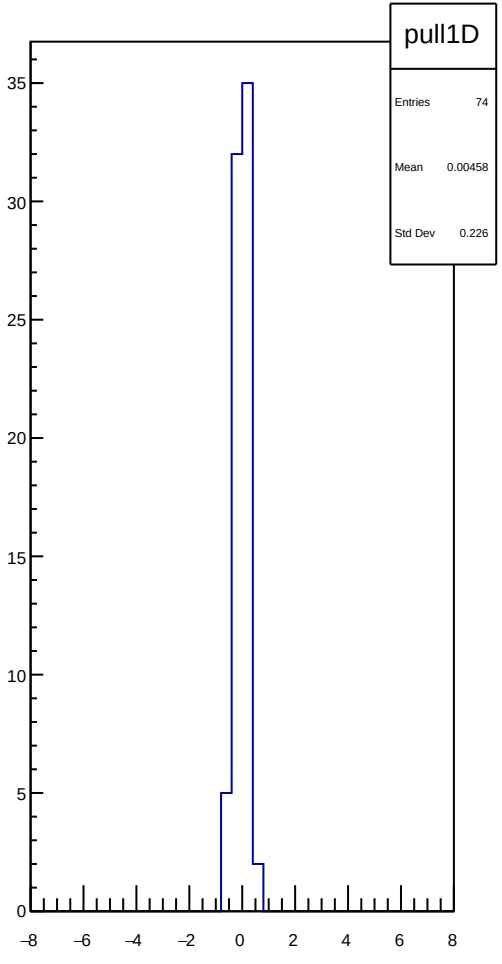

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 82.08 / 73
p0 −2.467 ± 4.338
pull
Entries 74
Mean −196.6
Std Dev 194.4

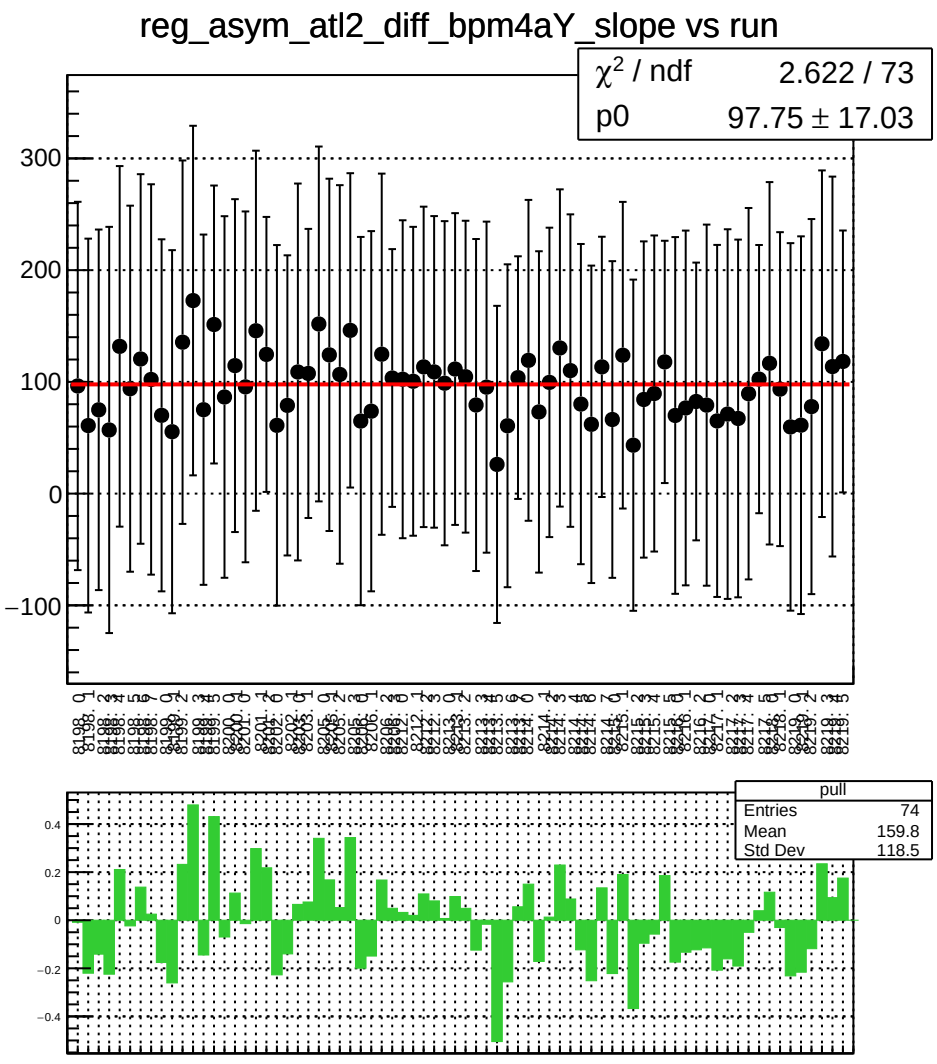

pull1D
Entries 74
Mean 0.008225
Std Dev 1.053

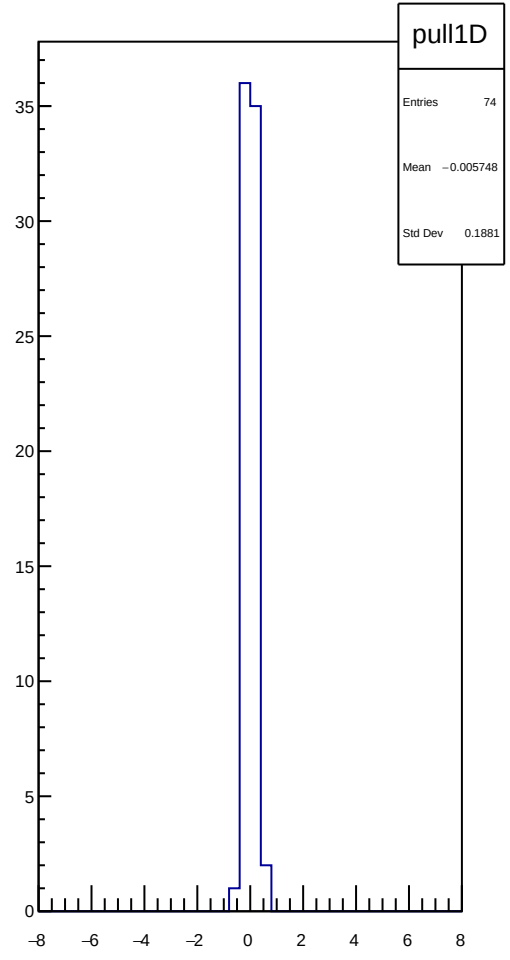

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 594.2 / 73
p0 9.259 ± 0.1966
pull
Entries 74
Mean −428
Std Dev 459.2

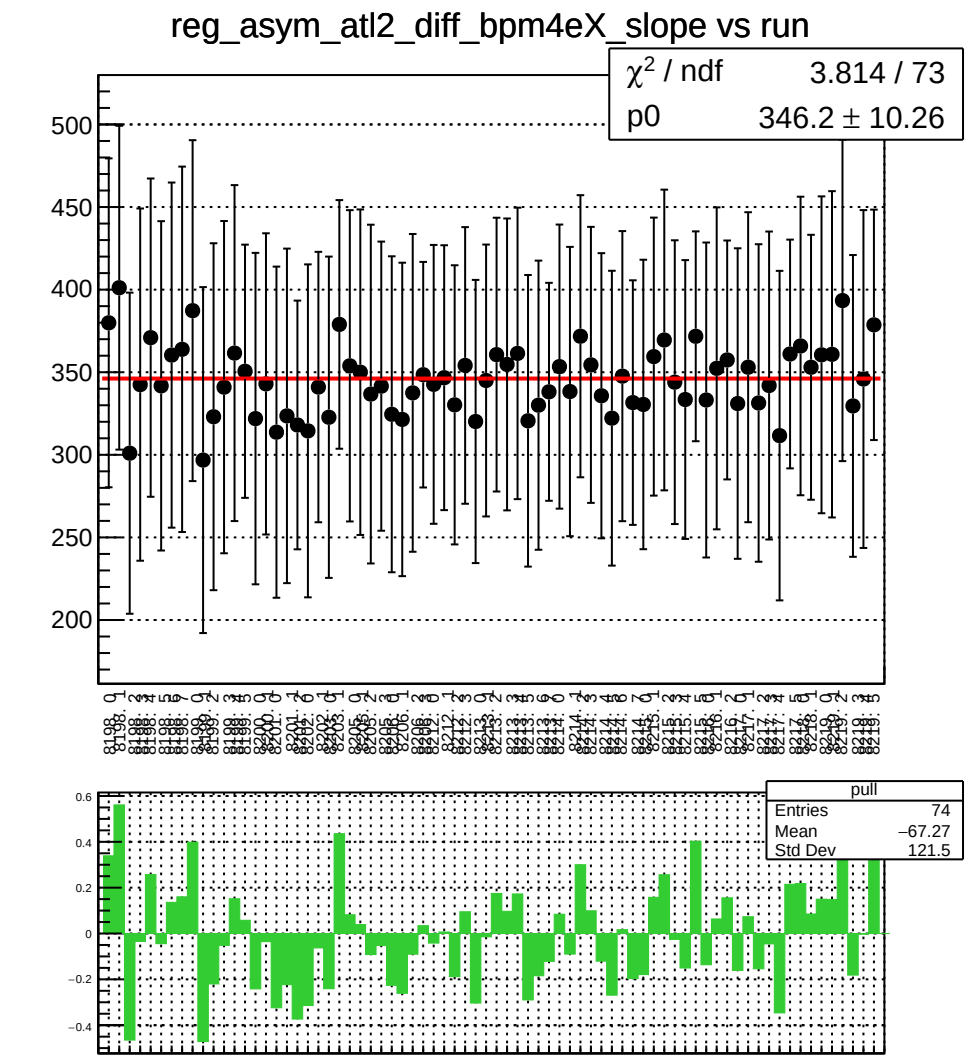

pull1D
Entries 74
Mean −0.09123
Std Dev 2.832

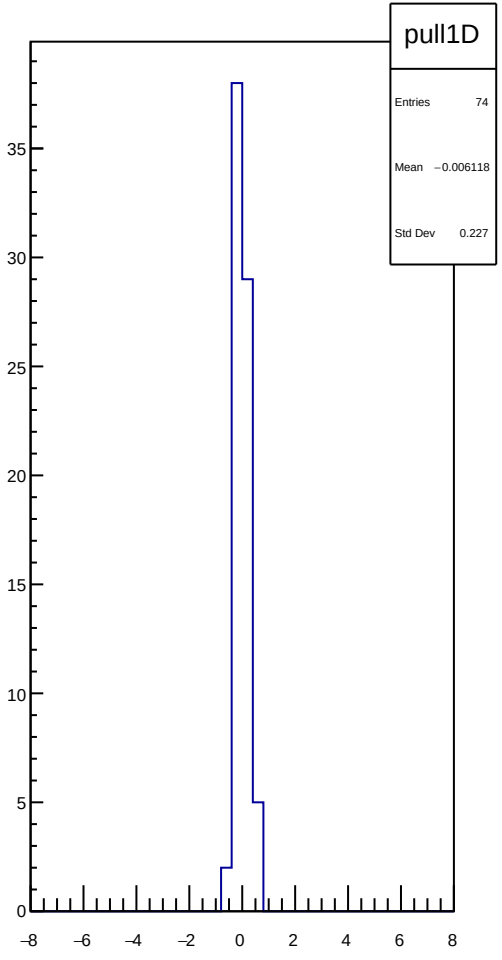

reg_asym_atl2_diff_bpm1X_slope vs run
χ² / ndf 3.782 / 73
p0 −458.5 ± 10.25
pull
Entries 74
Mean 43.37
Std Dev 80.75

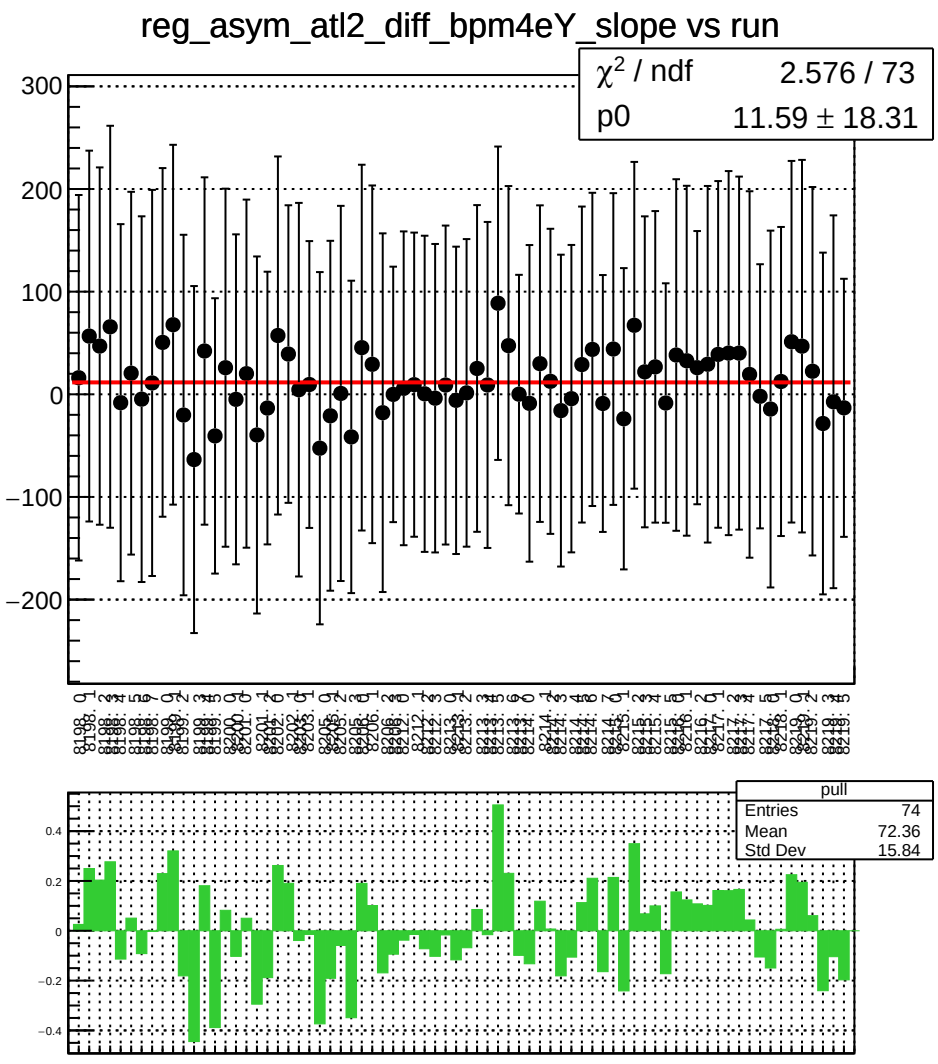

pull1D
Entries 74
Mean 0.00458
Std Dev 0.226

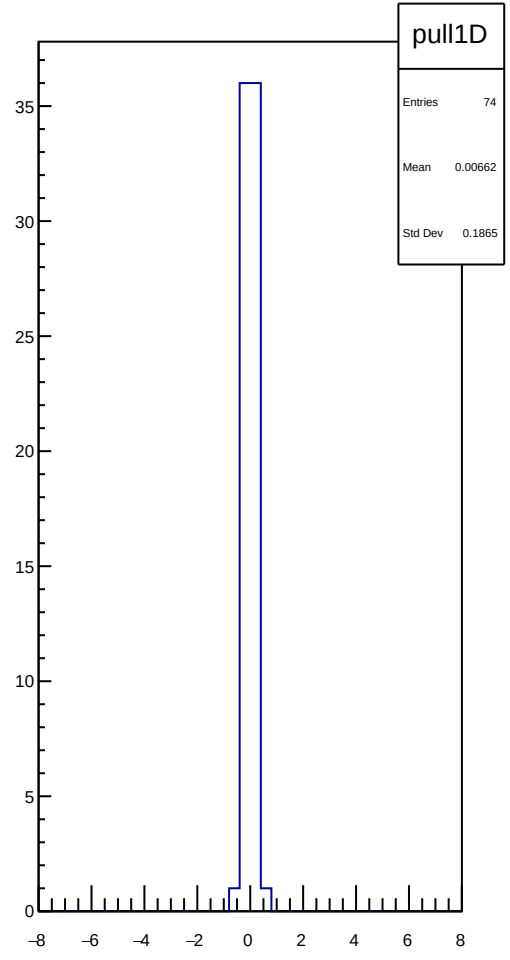

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 2.622 / 73
p0 97.75 ± 17.03
pull
Entries 74
Mean 159.8
Std Dev 118.5

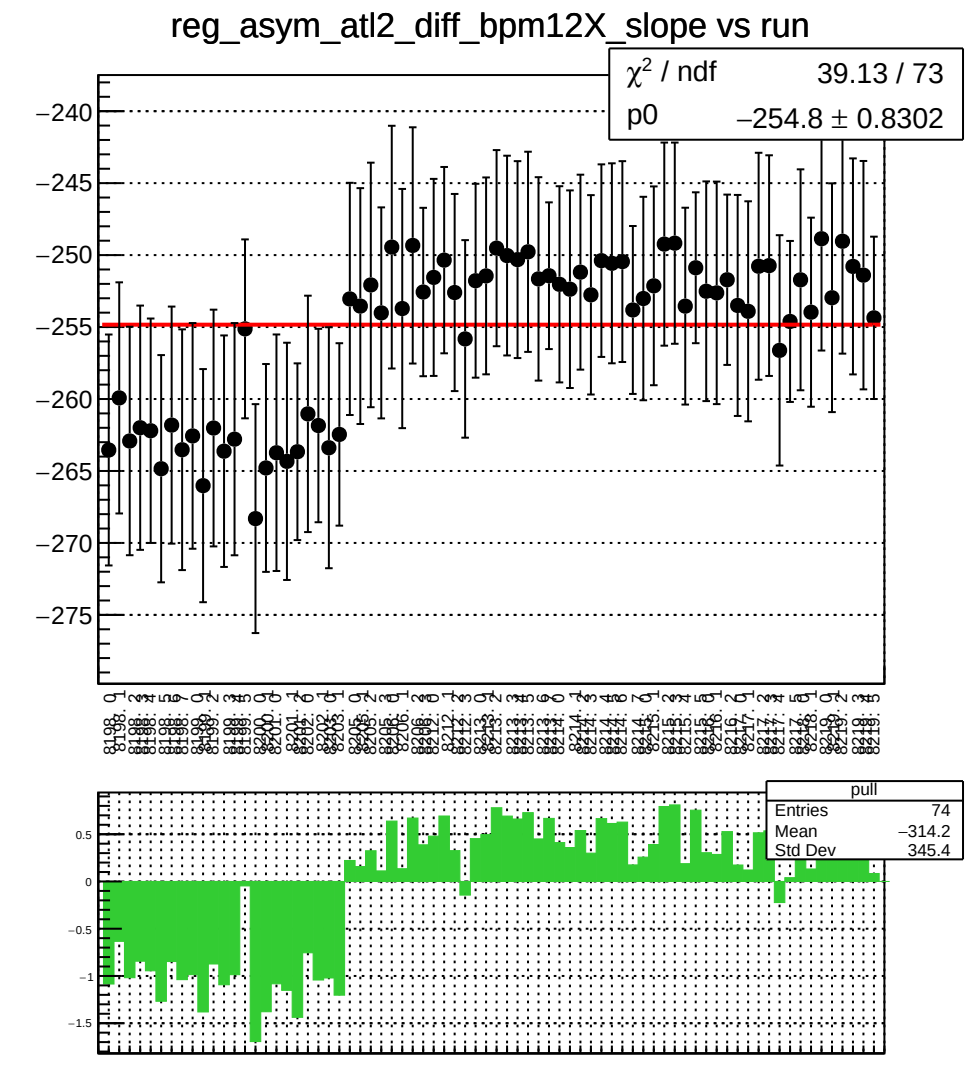

pull1D
Entries 74
Mean −0.005748
Std Dev 0.1881

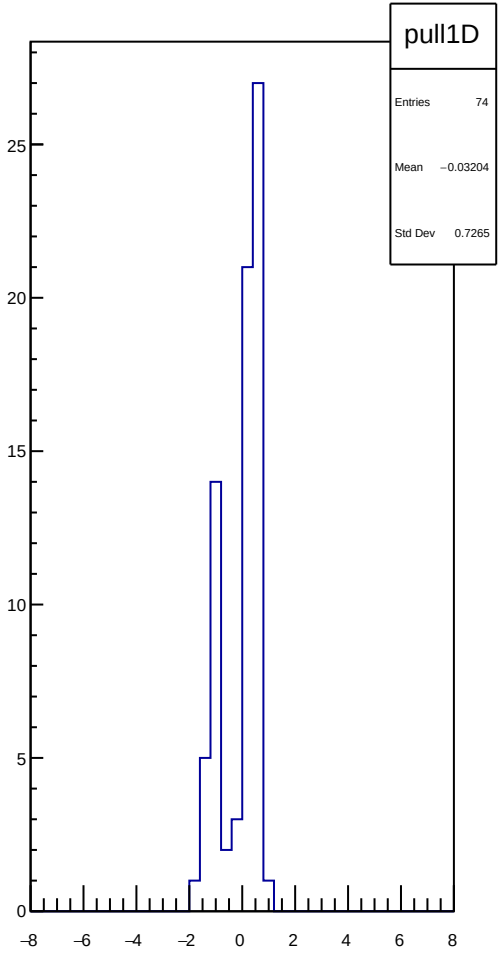

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 3.814 / 73
p0 346.2 ± 10.26
pull
Entries 74
Mean −67.27
Std Dev 121.5

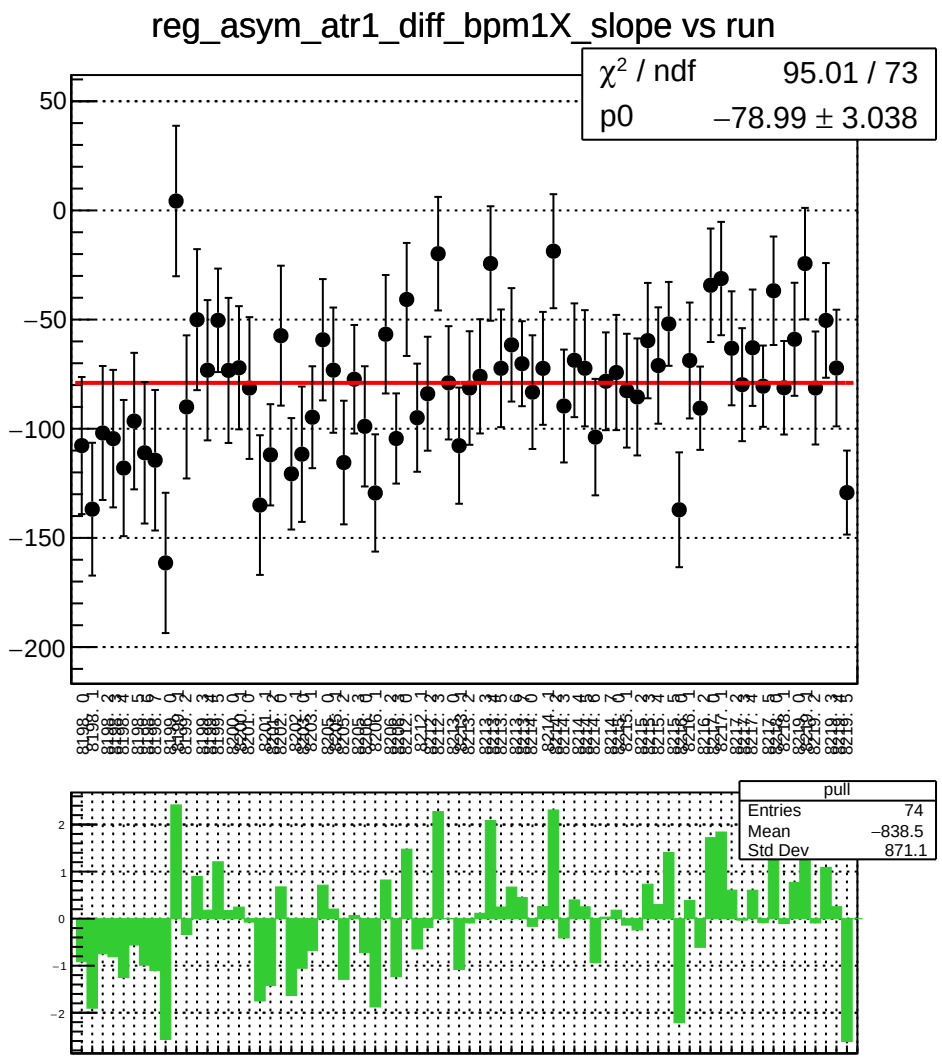

pull1D
Entries 74
Mean −0.006118
Std Dev 0.227

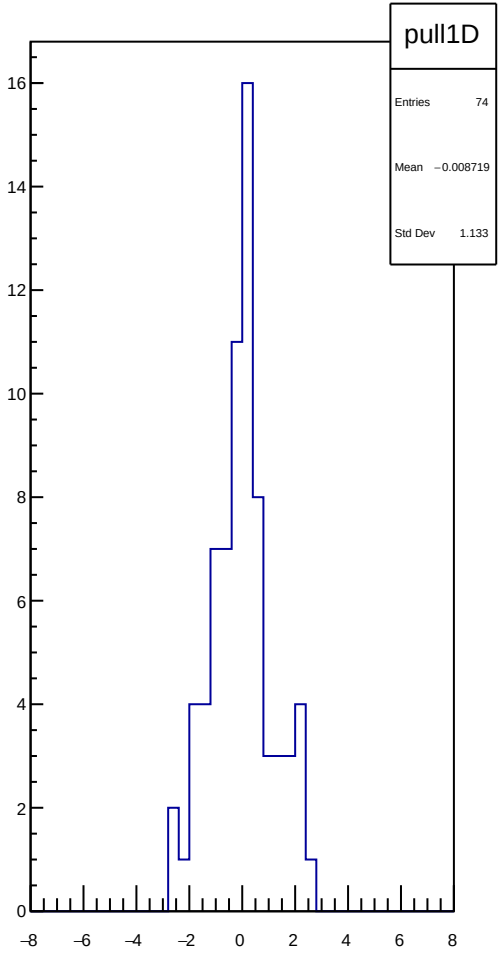

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 2.576 / 73
p0 11.59 ± 18.31
pull
Entries 74
Mean 72.36
Std Dev 15.84

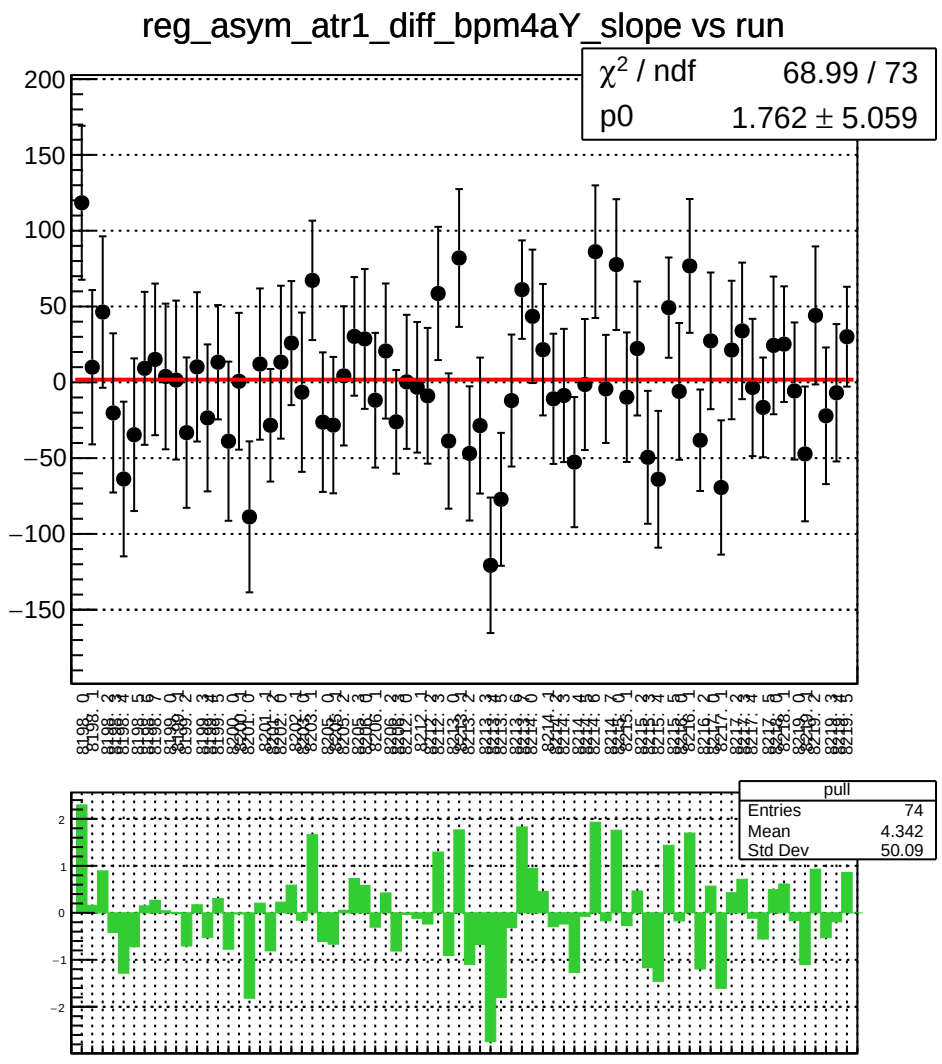

pull1D
Entries 74
Mean 0.00662
Std Dev 0.1865

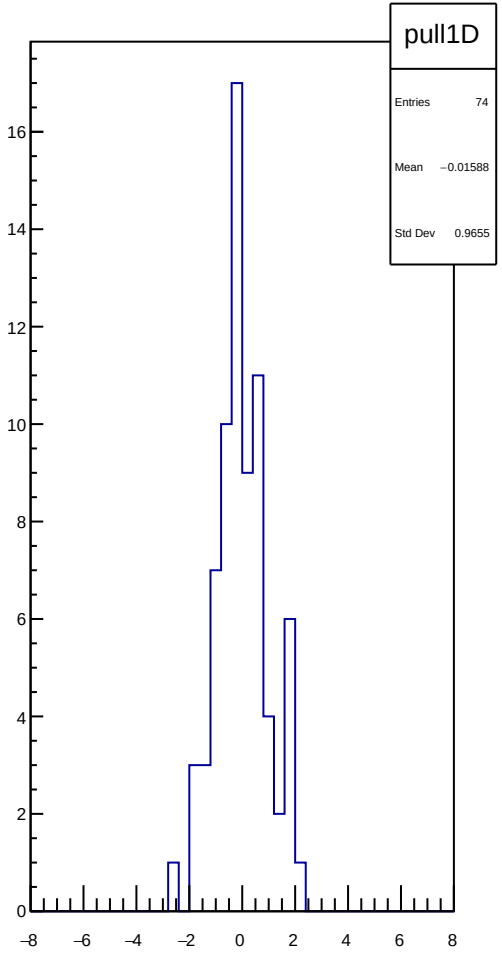

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 39.13 / 73
p0 −254.8 ± 0.8302
pull
Entries 74
Mean −314.2
Std Dev 345.4

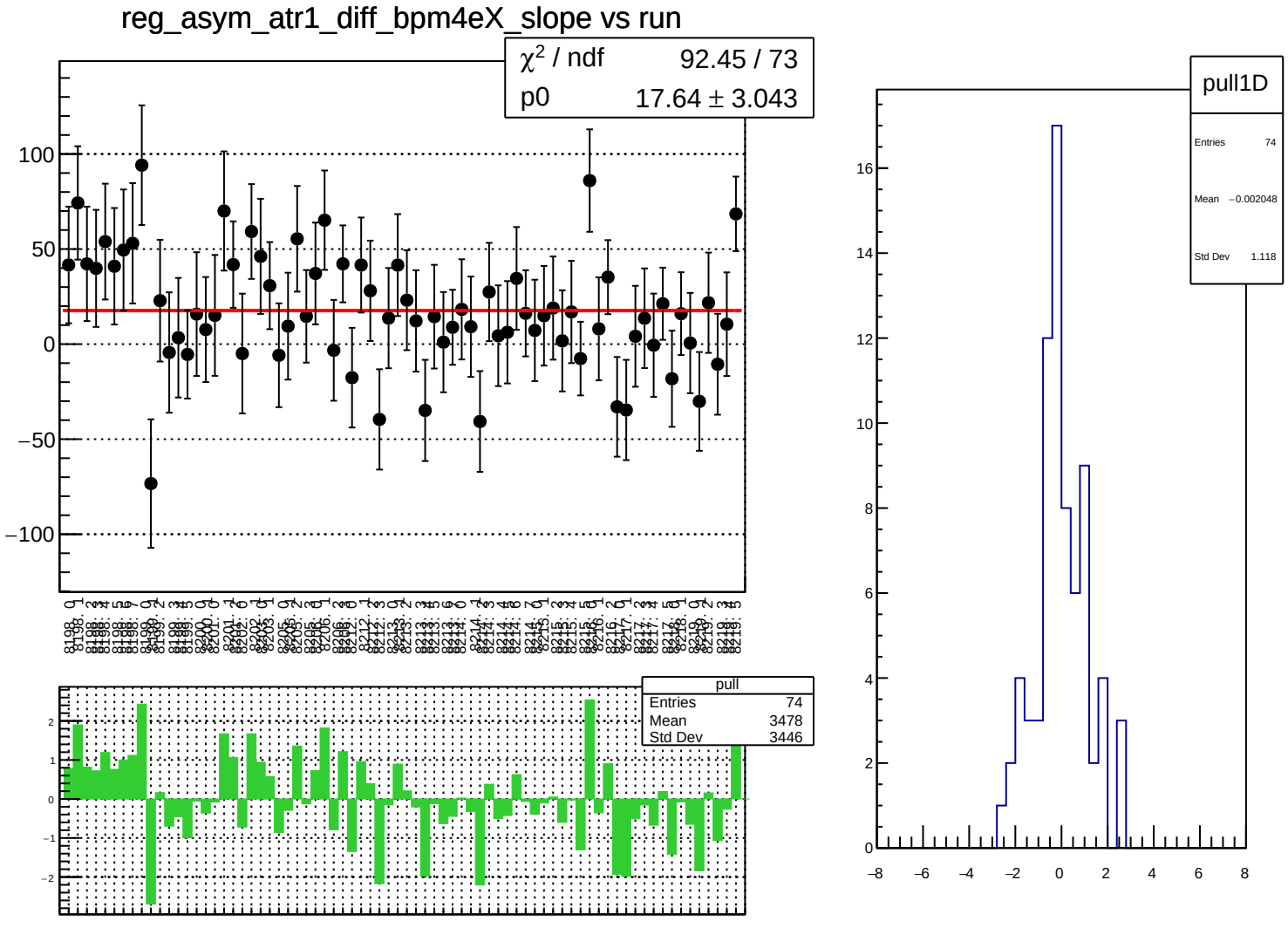

pull1D
Entries 74
Mean −0.03204
Std Dev 0.7265

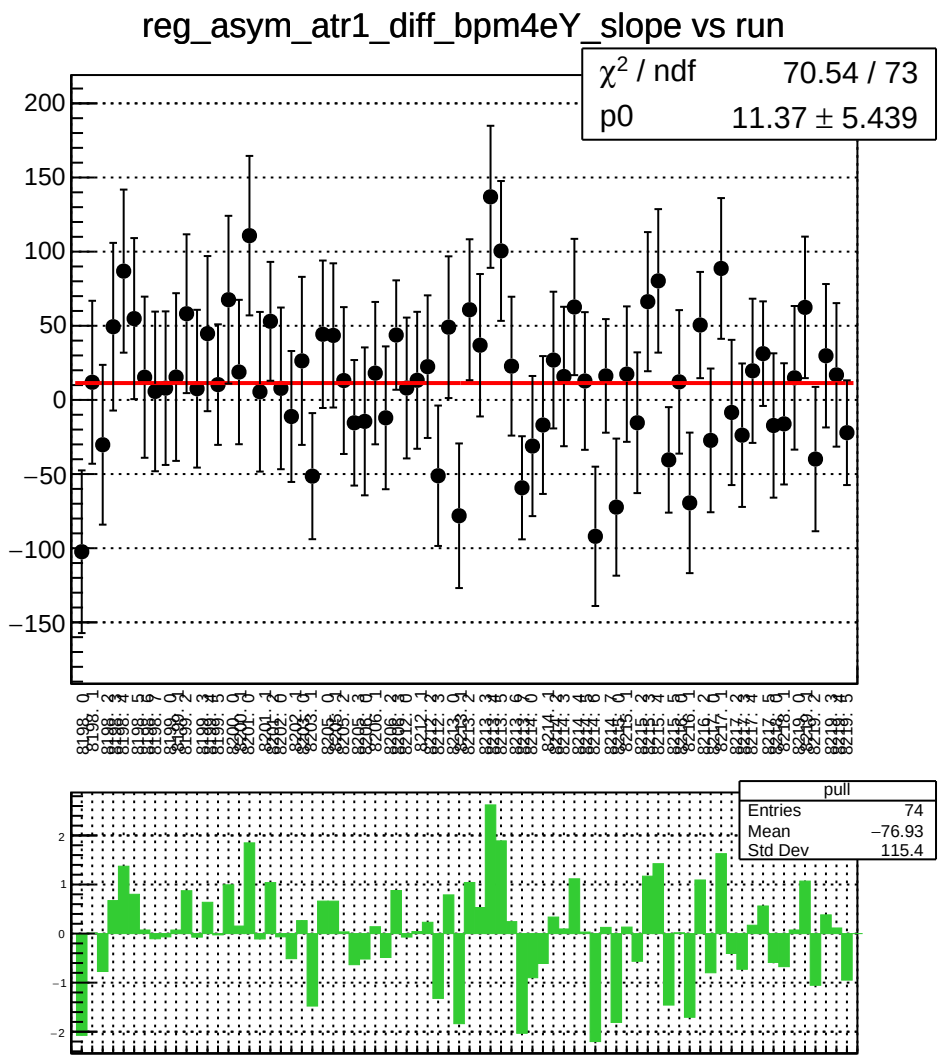

reg_asym_atr1_diff_bpm1X_slope vs run
χ² / ndf 95.01 / 73
p0 −78.99 ± 3.038
pull
Entries 74
Mean −838.5
Std Dev 871.1

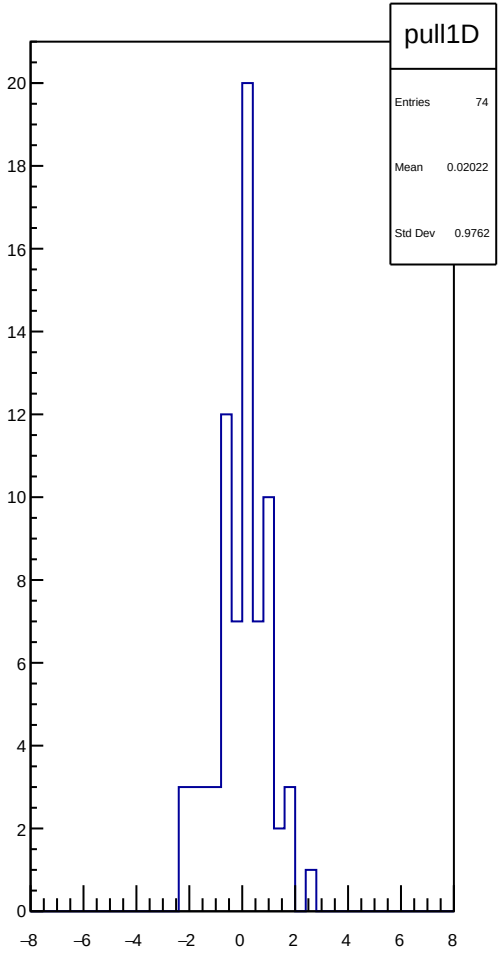

pull1D
Entries 74
Mean −0.008719
Std Dev 1.133

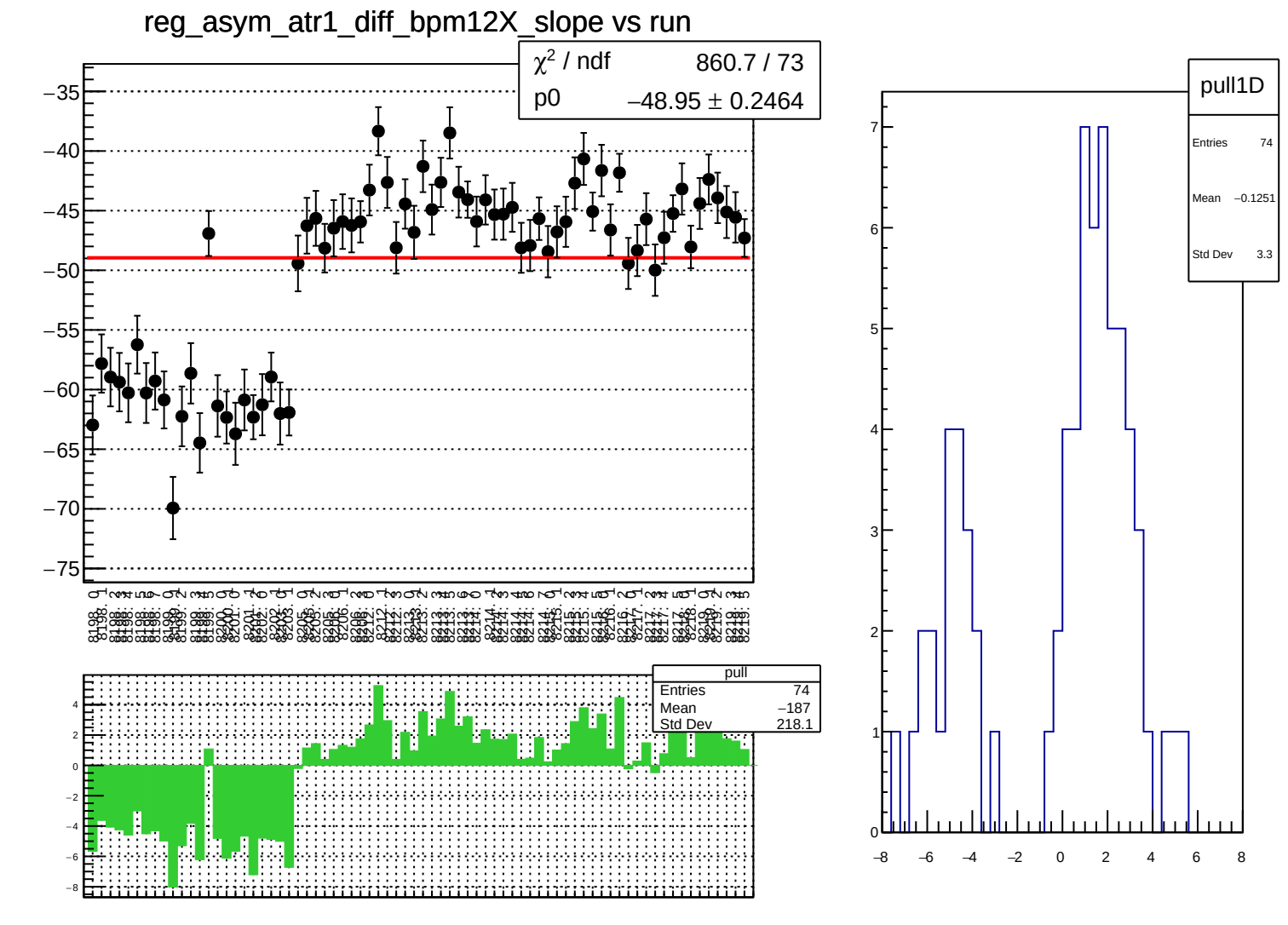

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 68.99 / 73
p0 1.762 ± 5.059
pull
Entries 74
Mean 4.342
Std Dev 50.09

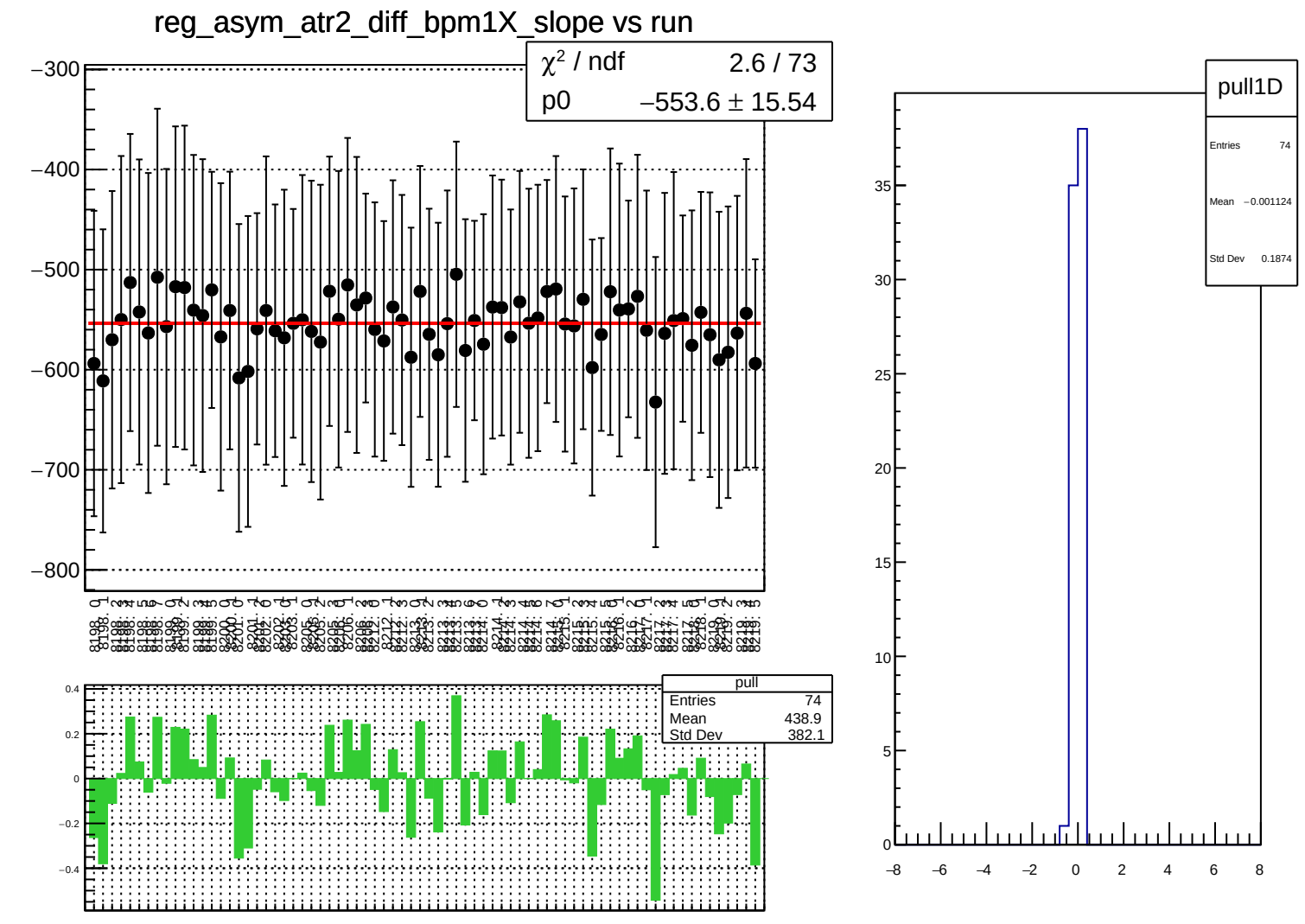

pull1D
Entries 74
Mean −0.01588
Std Dev 0.9655

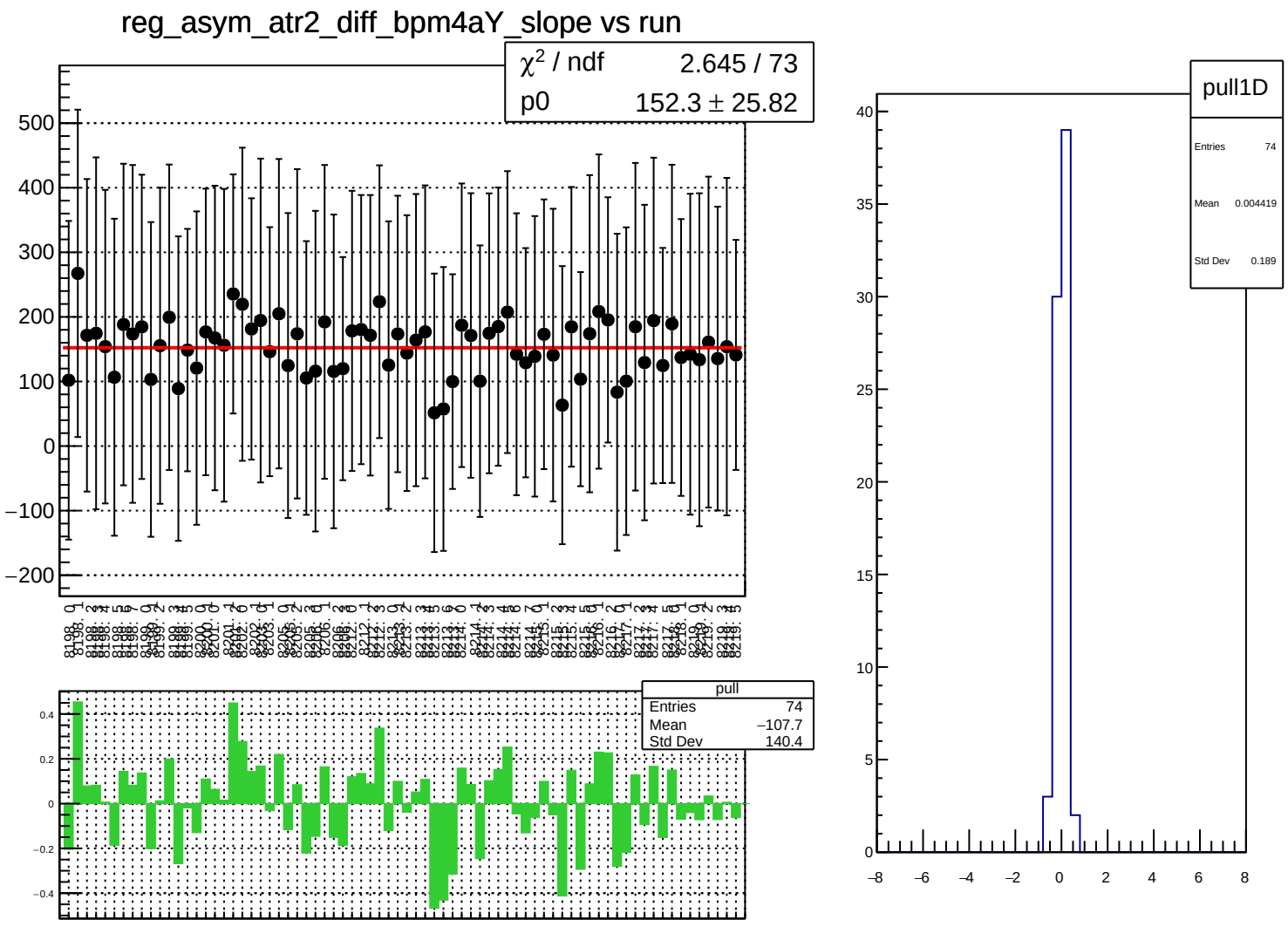

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 92.45 / 73
p0 17.64 ± 3.043
100
50
0
−50
−100
pull
Entries 74
Mean 3478
Std Dev 3446
pull1D
Entries 74
Mean −0.002048
Std Dev 1.118
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

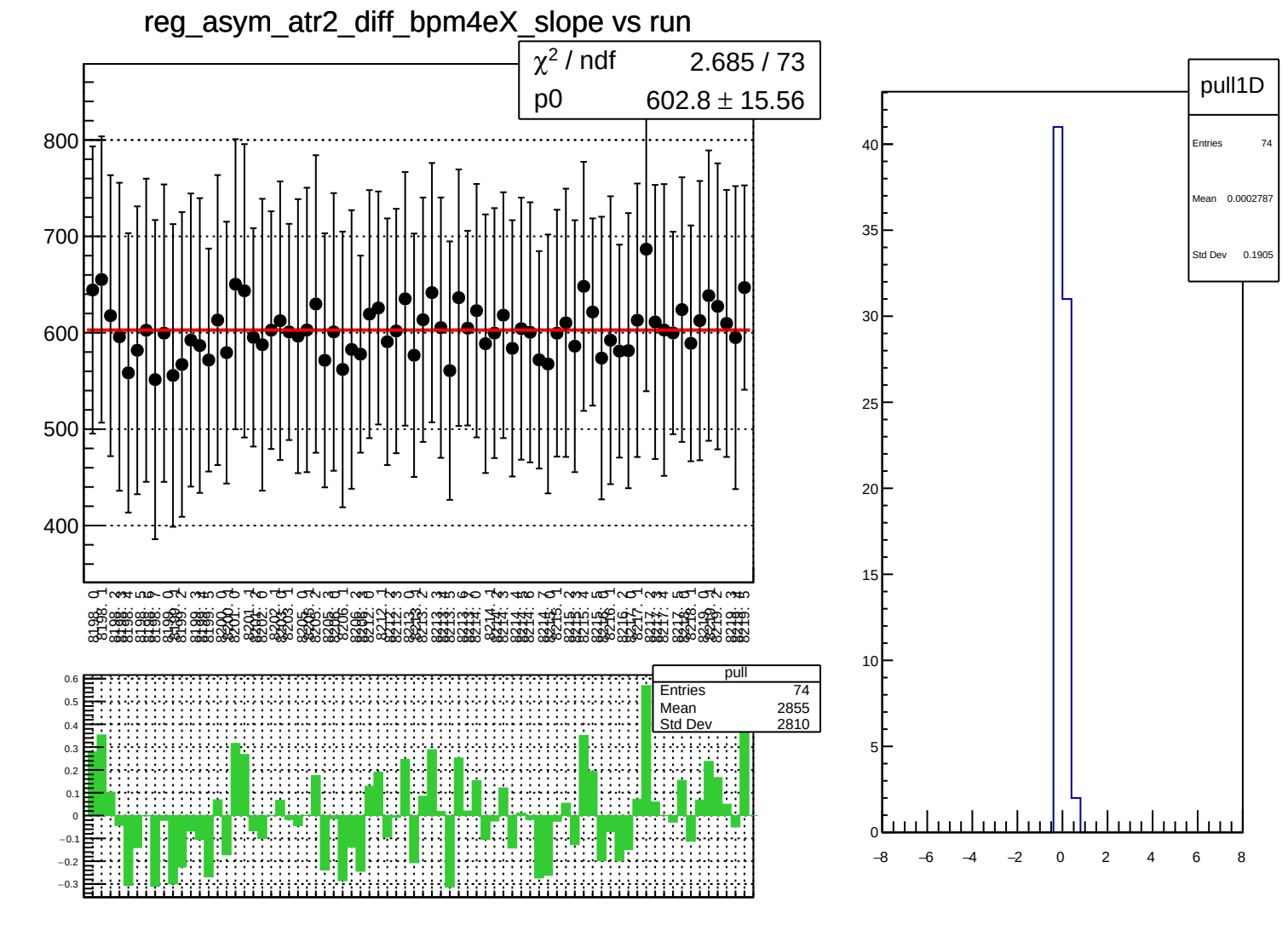

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 70.54 / 73
p0 11.37 ± 5.439
pull
Entries 74
Mean −76.93
Std Dev 115.4

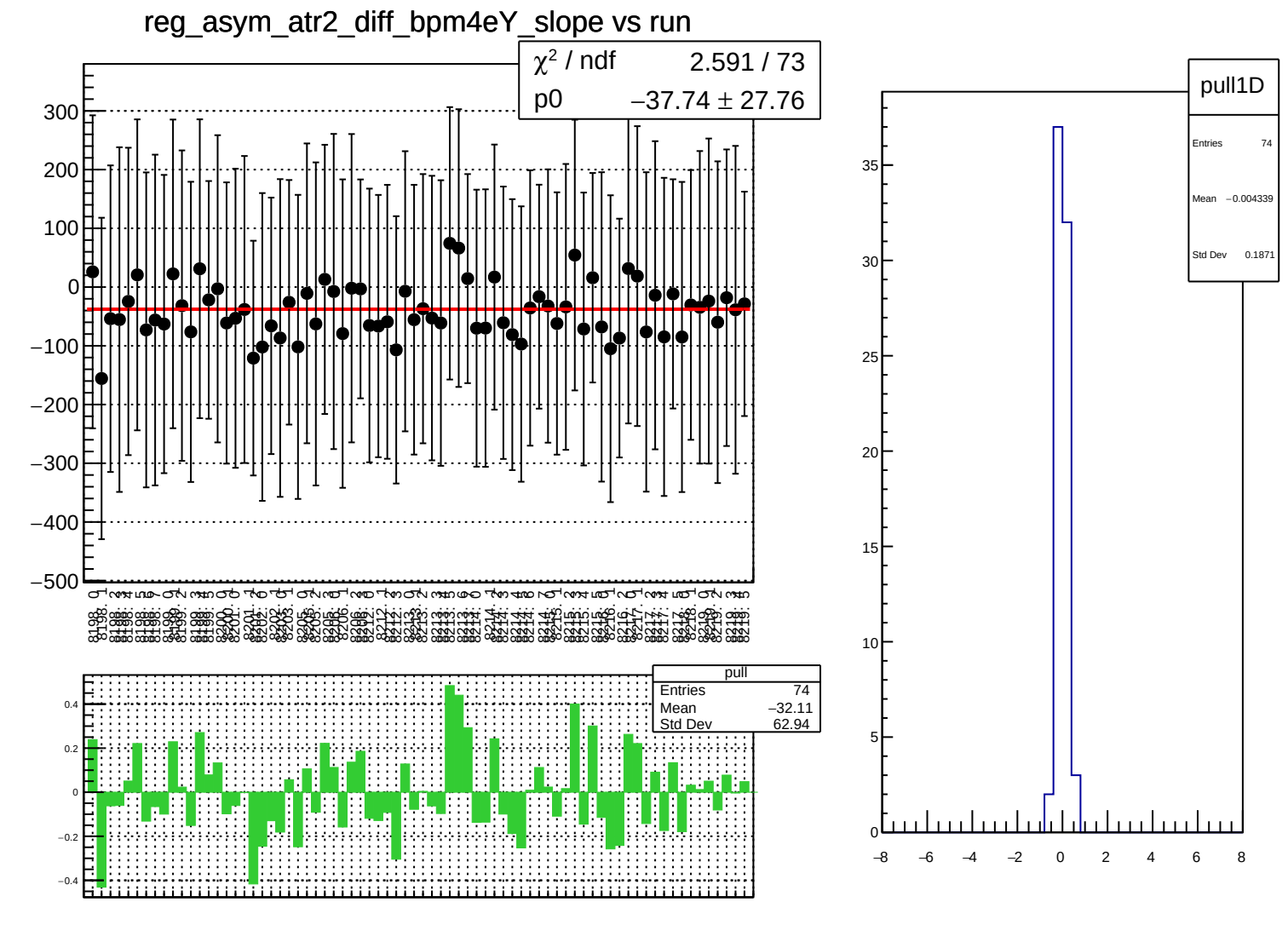

pull1D
Entries 74
Mean 0.02022
Std Dev 0.9762

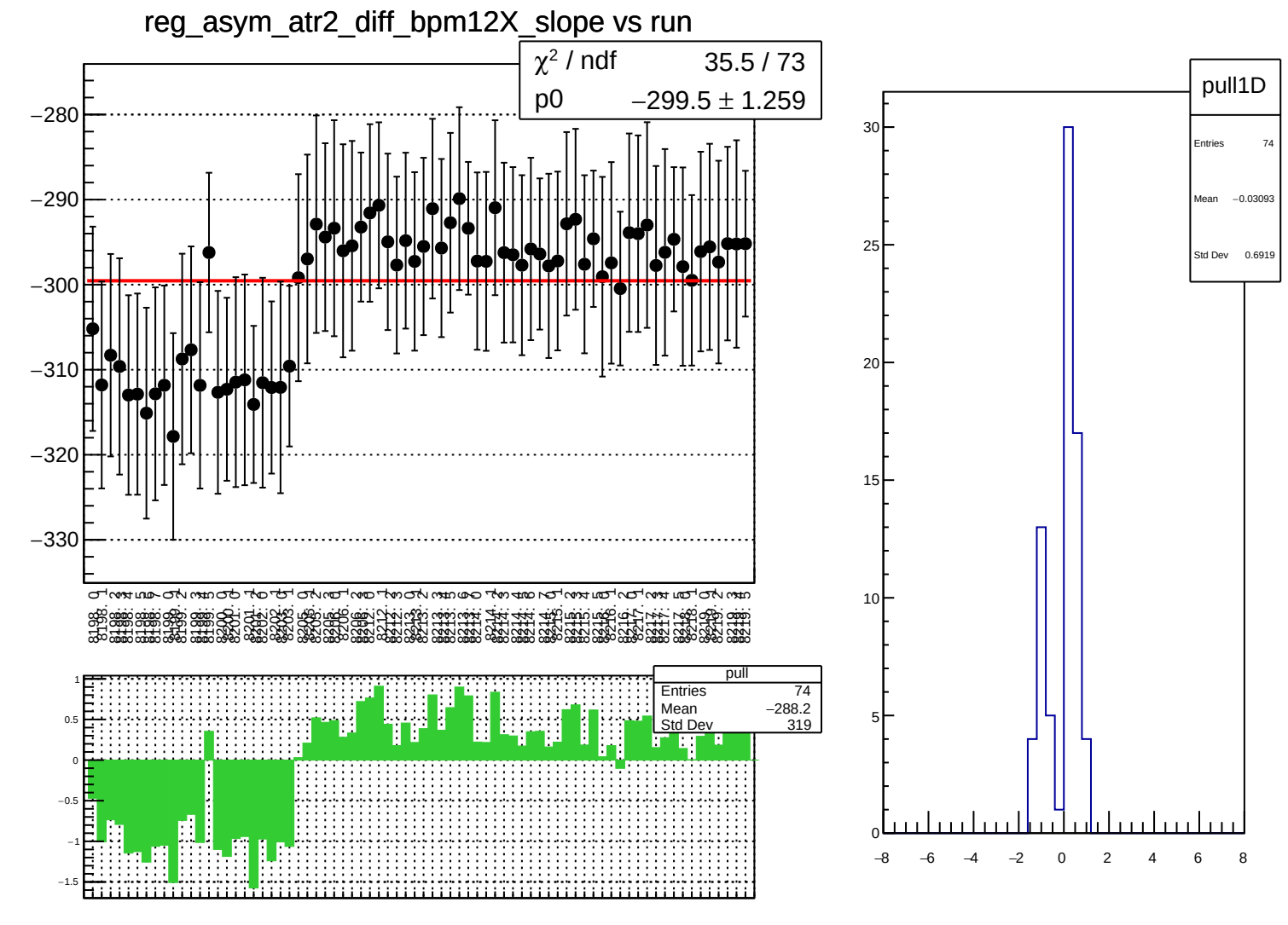

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 860.7 / 73
p0 −48.95 ± 0.2464
pull
Entries 74
Mean −187
Std Dev 218.1
pull1D
Entries 74
Mean −0.1251
Std Dev 3.3

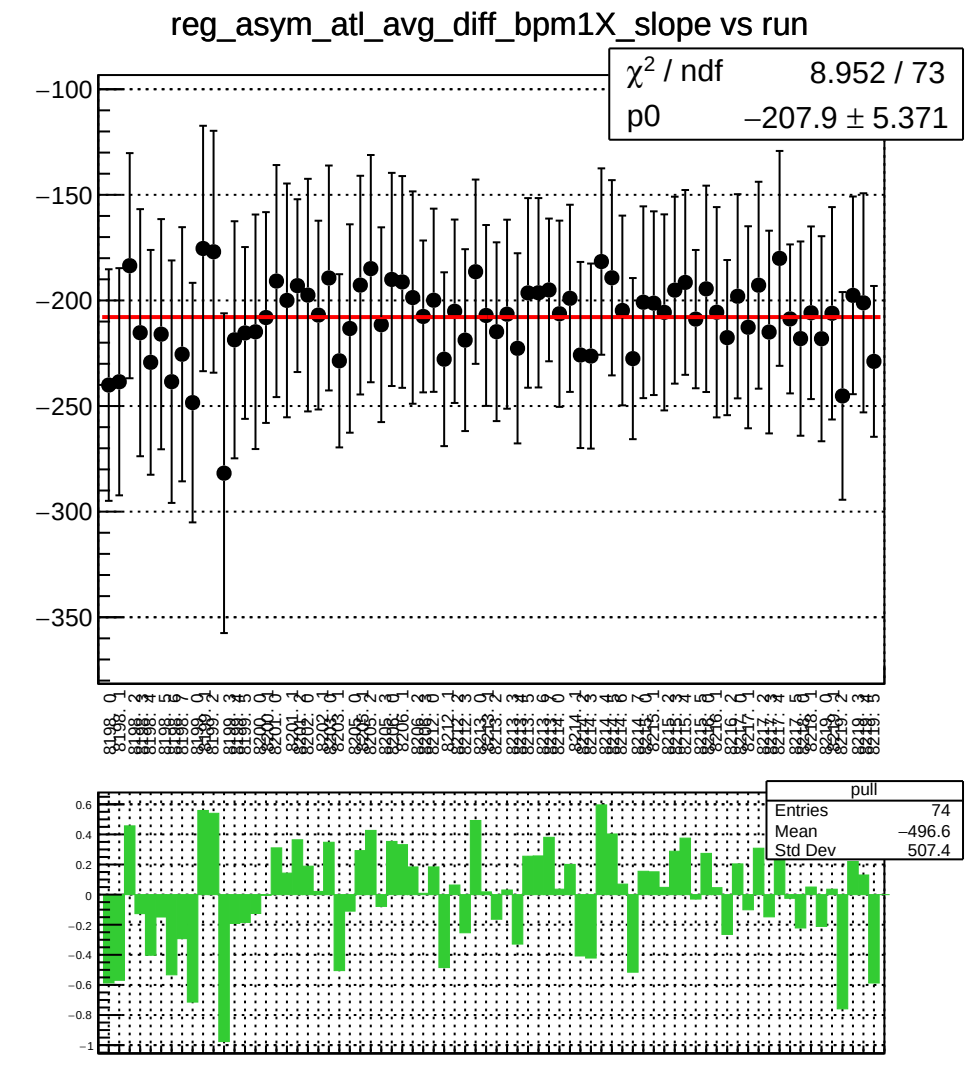

reg_asym_atr2_diff_bpm1X_slope vs run
χ² / ndf 2.6 / 73
p0 −553.6 ± 15.54
pull
Entries 74
Mean 438.9
Std Dev 382.1
pull1D
Entries 74
Mean −0.001124
Std Dev 0.1874

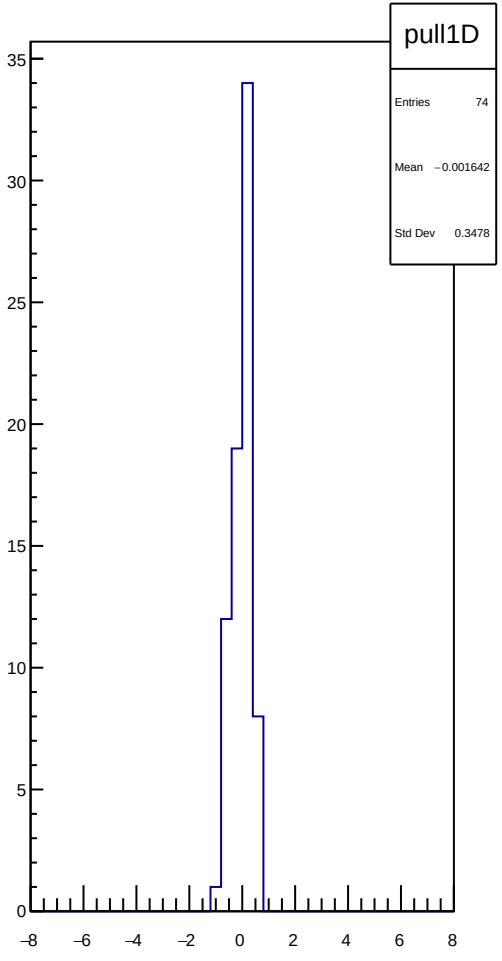

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 2.645 / 73
p0 152.3 ± 25.82
pull
Entries 74
Mean −107.7
Std Dev 140.4
pull1D
Entries 74
Mean 0.004419
Std Dev 0.189

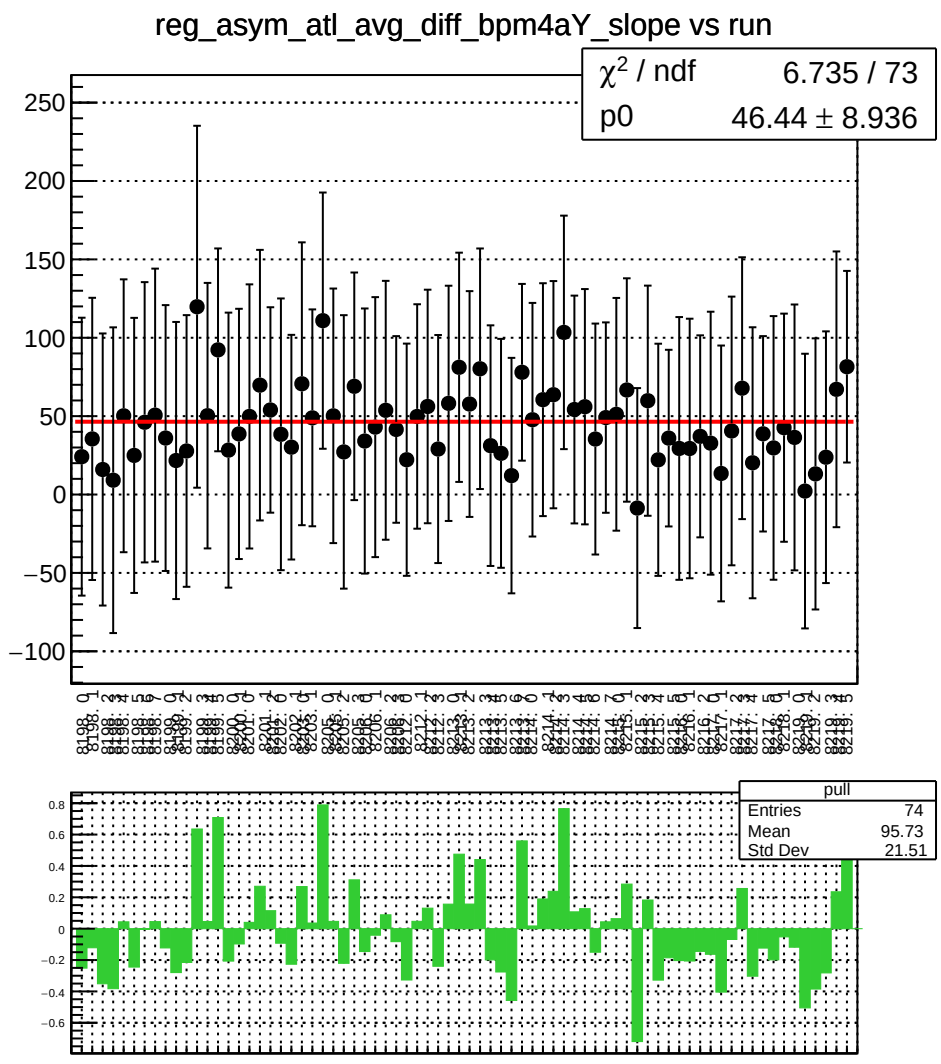

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 2.685 / 73
p0 602.8 ± 15.56
800
700
600
500
400
pull
Entries 74
Mean 2855
Std Dev 2810
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 74
Mean 0.0002787
Std Dev 0.1905
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

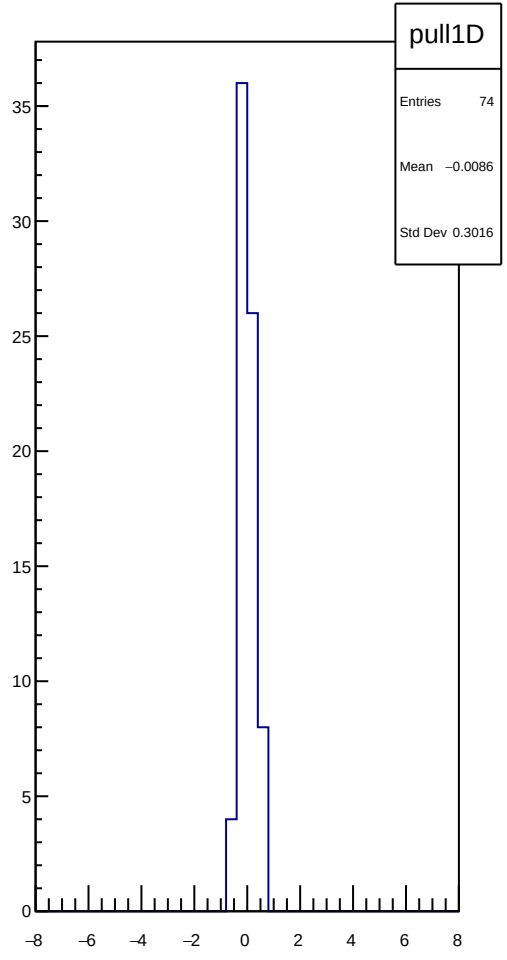

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 2.591 / 73
p0 −37.74 ± 27.76
pull
Entries 74
Mean −32.11
Std Dev 62.94
pull1D
Entries 74
Mean −0.004339
Std Dev 0.1871

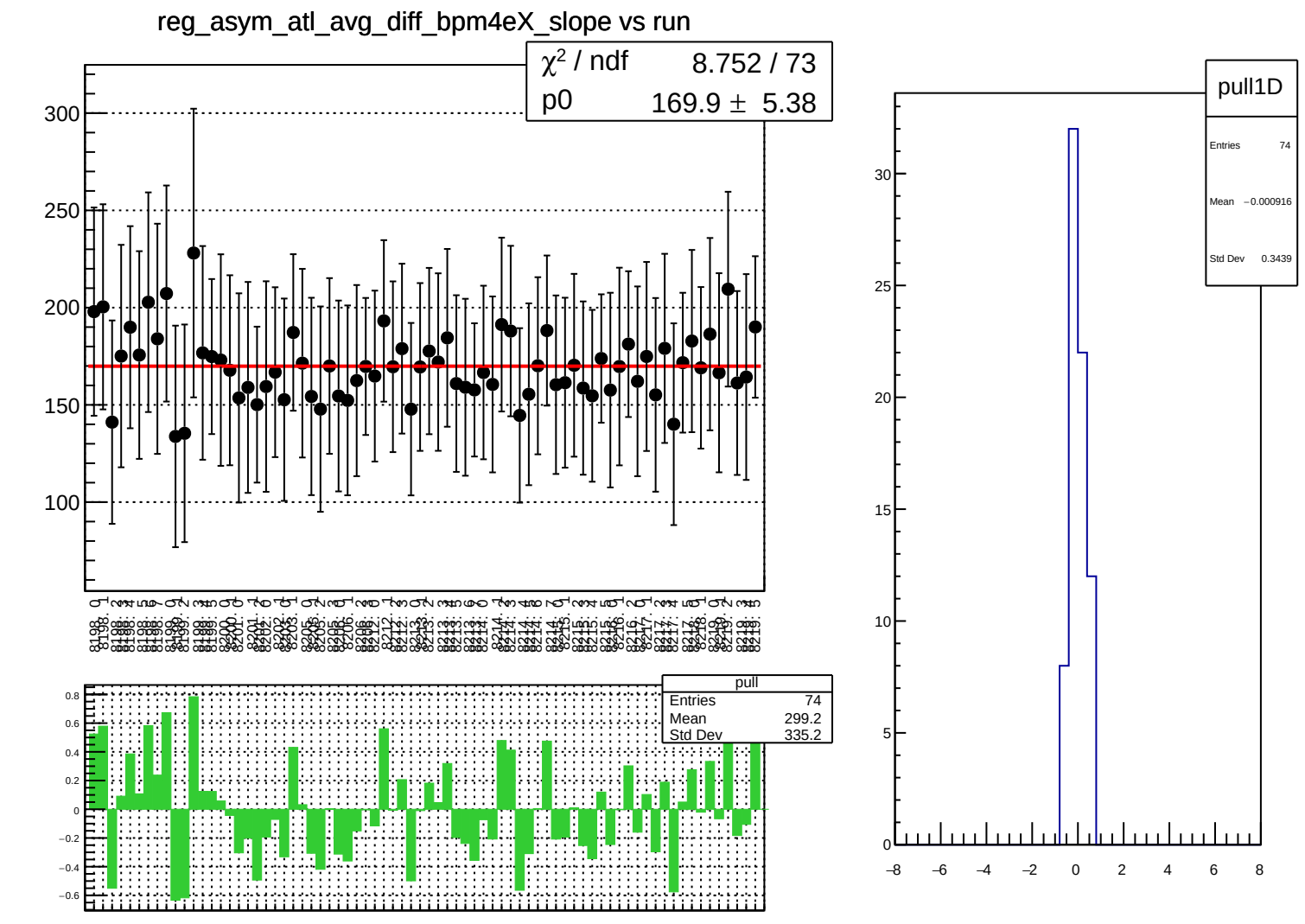

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 35.5 / 73
p0 −299.5 ± 1.259
−280
−290
−300
−310
−320
−330
pull
Entries 74
Mean −288.2
Std Dev 319
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 74
Mean −0.03093
Std Dev 0.6919
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

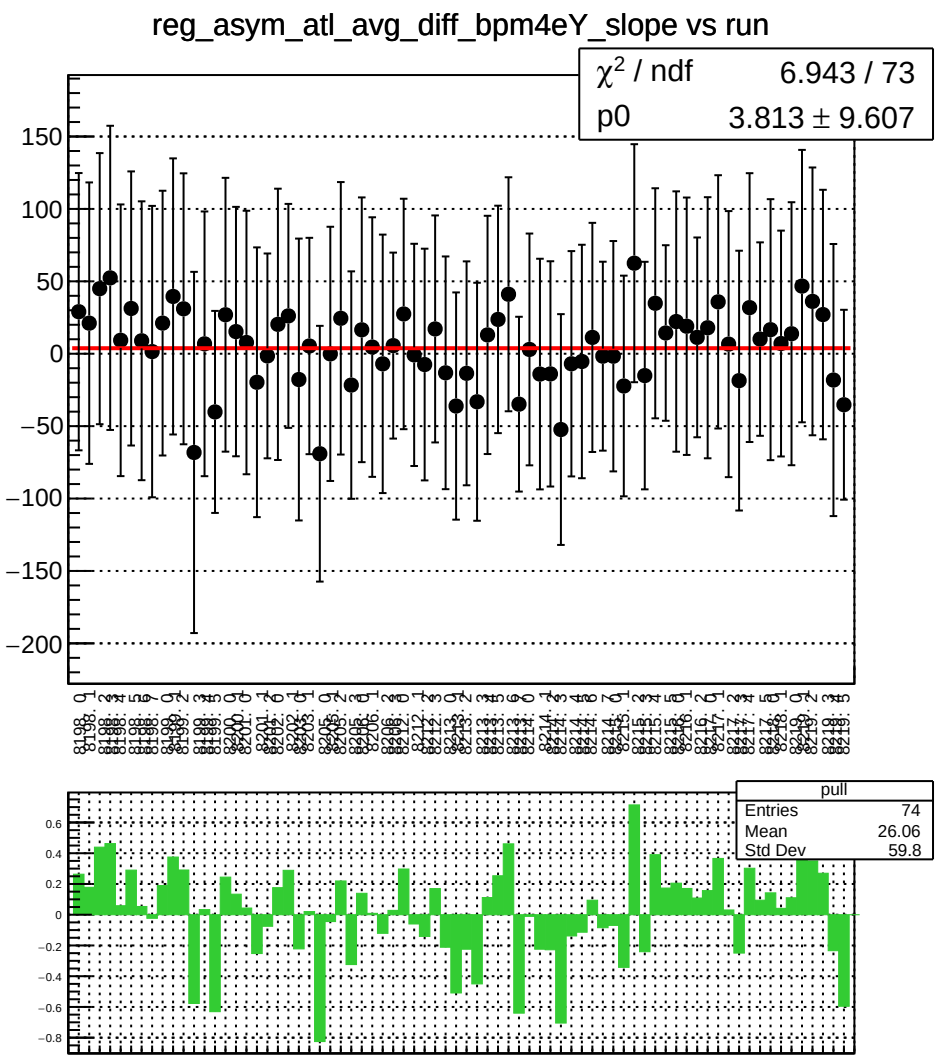

reg_asym_atl_avg_diff_bpm1X_slope vs run
χ² / ndf 8.952 / 73
p0 −207.9 ± 5.371
pull
Entries 74
Mean −496.6
Std Dev 507.4

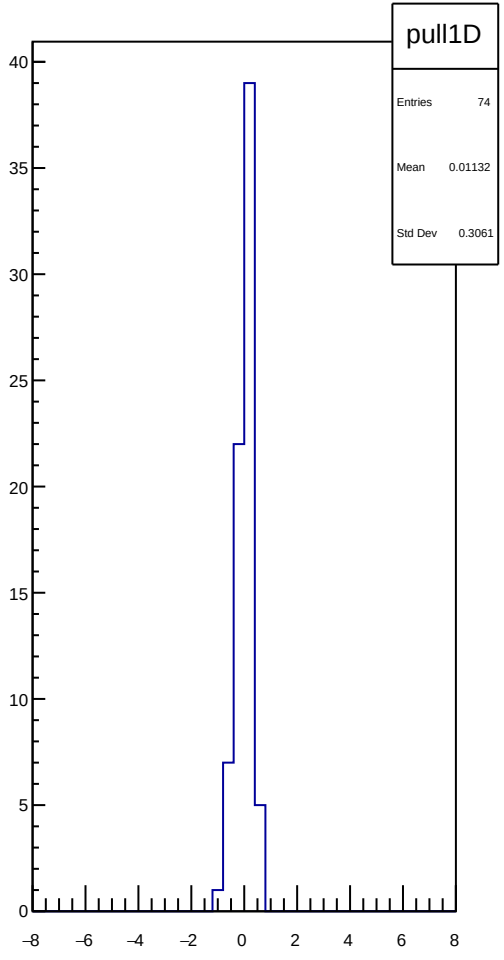

pull1D
Entries 74
Mean −0.001642
Std Dev 0.3478

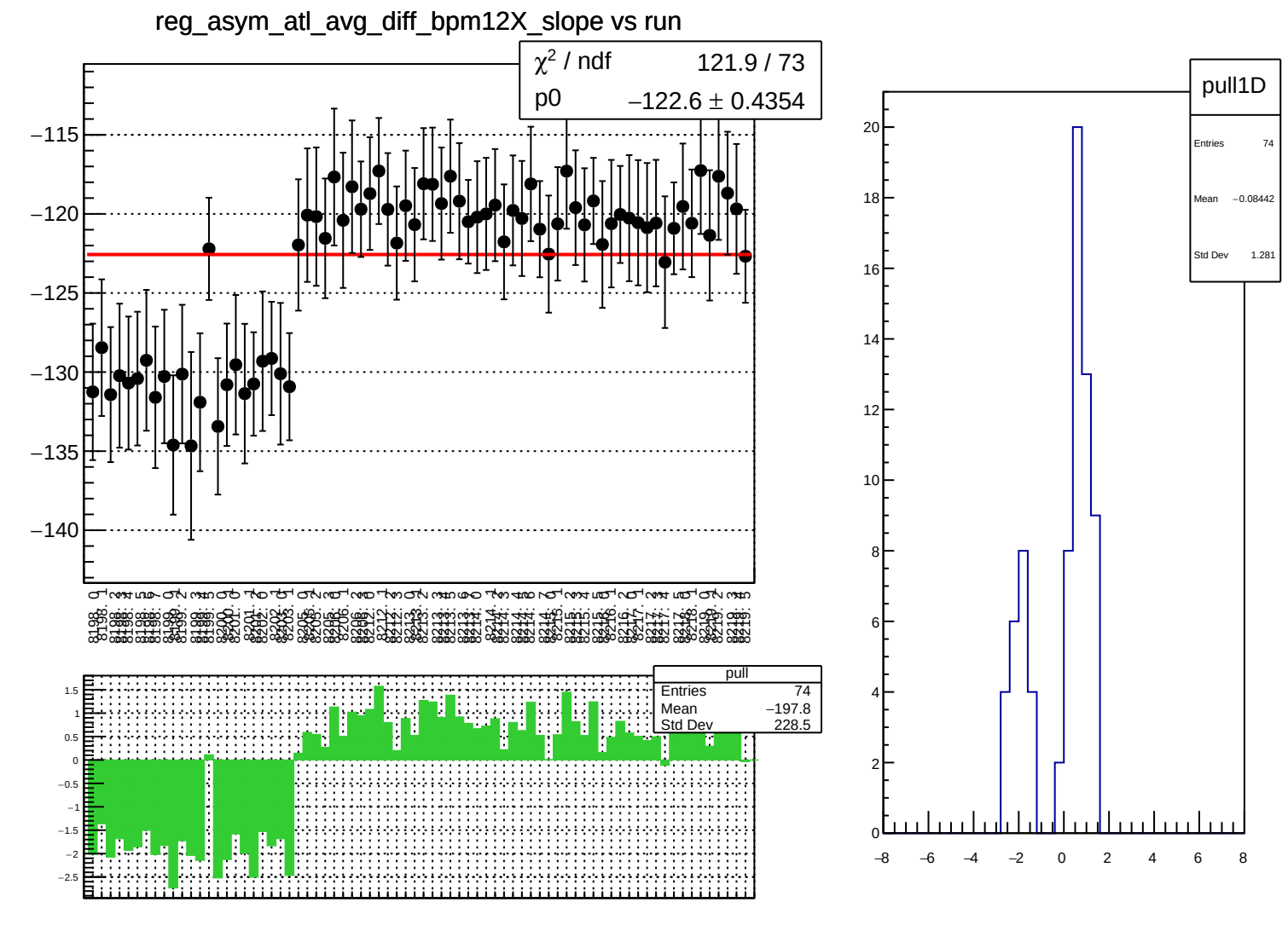

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.735 / 73
p0 46.44 ± 8.936
pull
Entries 74
Mean 95.73
Std Dev 21.51

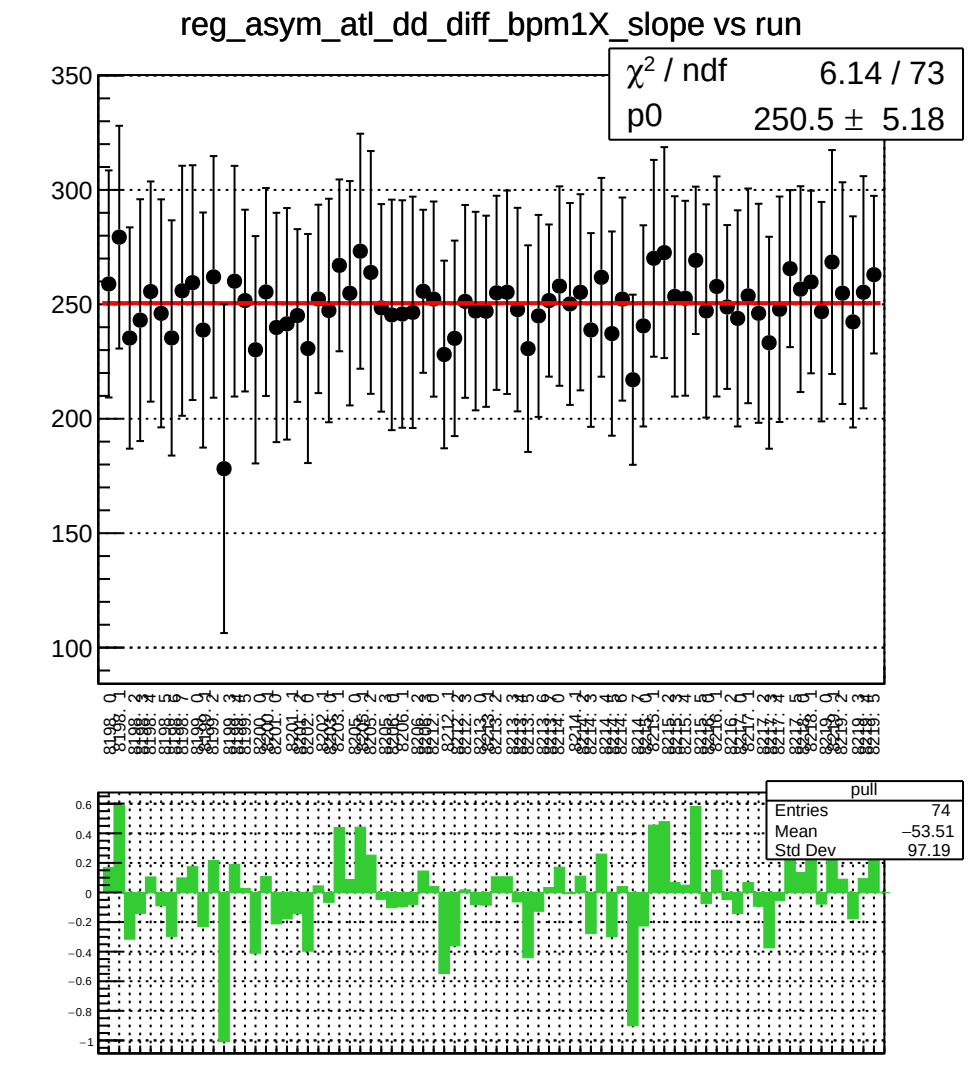

pull1D
Entries 74
Mean −0.0086
Std Dev 0.3016

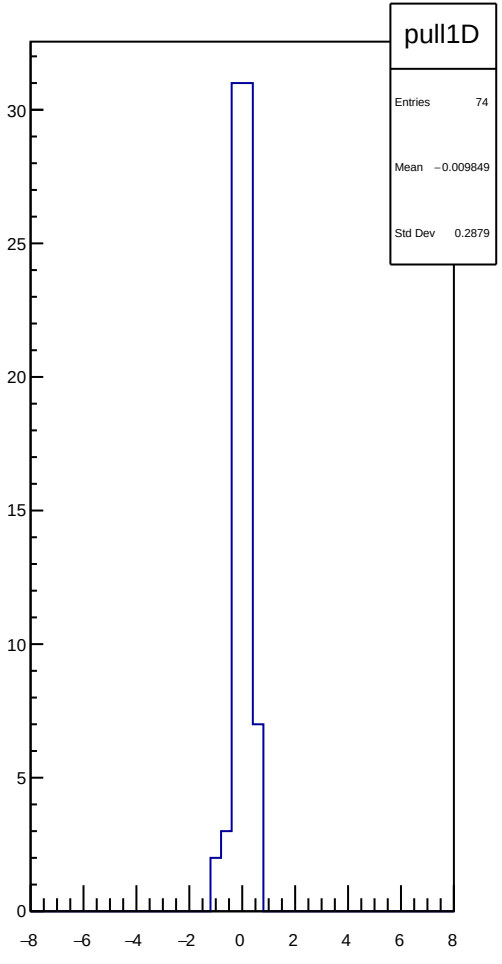

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 8.752 / 73
p0 169.9 ± 5.38
pull
Entries 74
Mean 299.2
Std Dev 335.2
pull1D
Entries 74
Mean −0.000916
Std Dev 0.3439

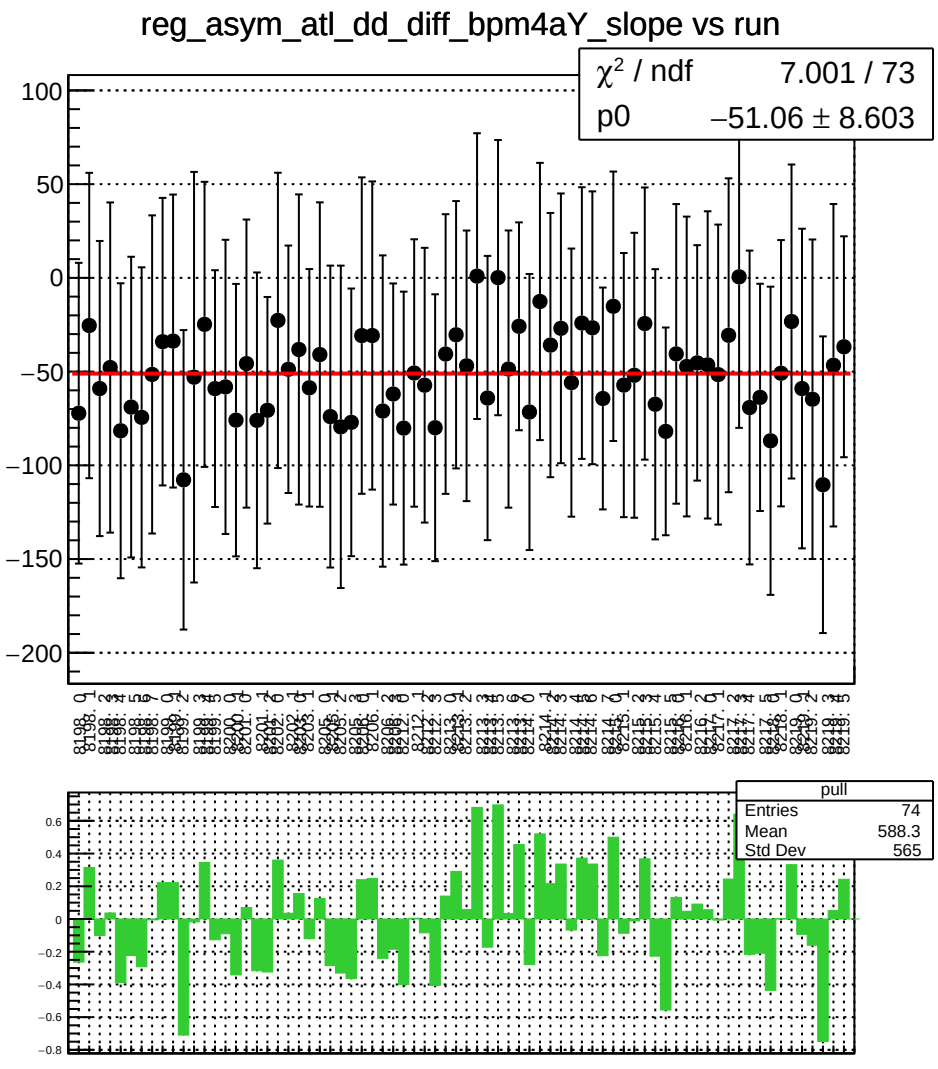

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.943 / 73
p0 3.813 ± 9.607
150
100
50
0
−50
−100
−150
−200
pull
Entries 74
Mean 26.06
Std Dev 59.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

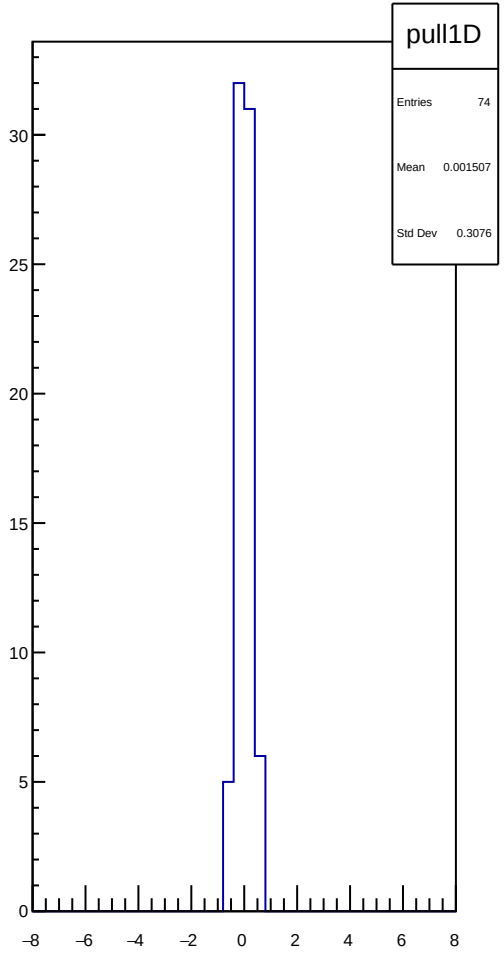

pull1D
Entries 74
Mean 0.01132
Std Dev 0.3061
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

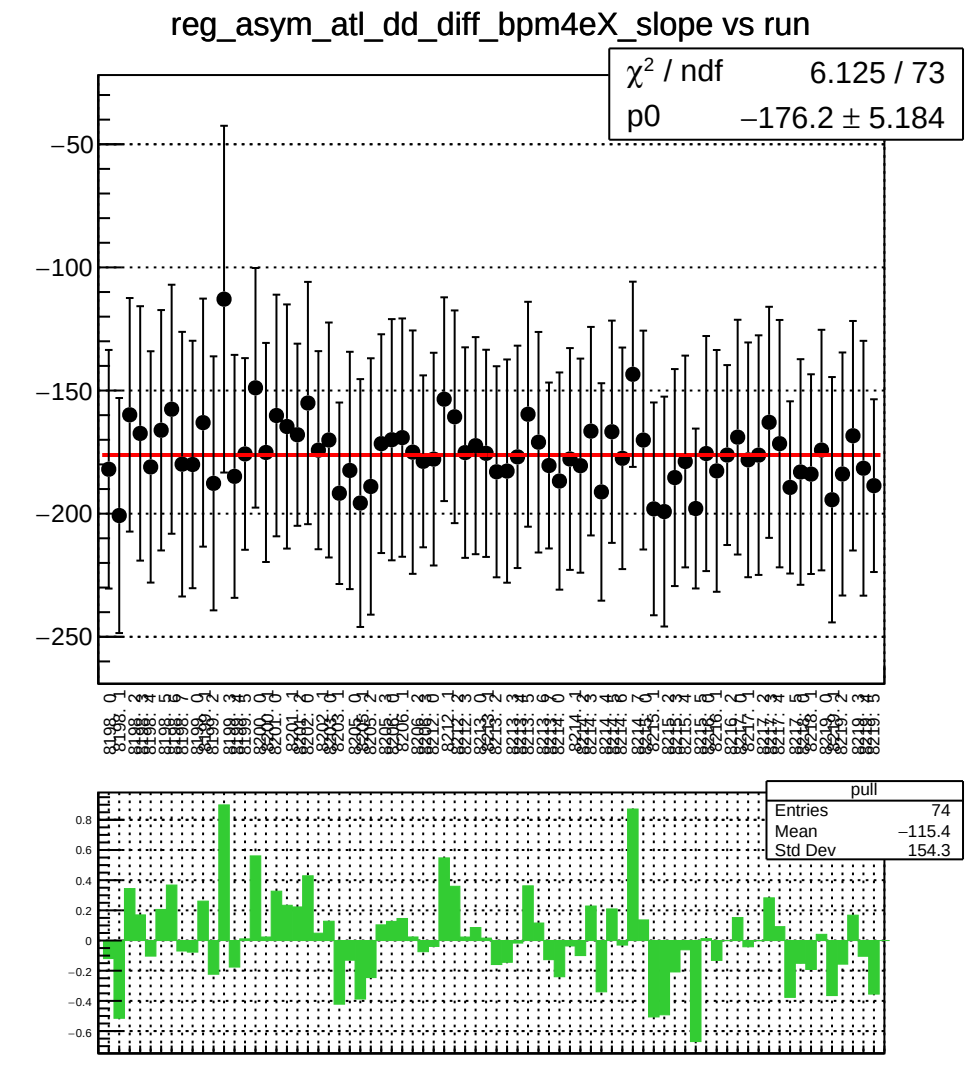

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 121.9 / 73
p0 −122.6 ± 0.4354
−115
−120
−125
−130
−135
−140
pull
Entries 74
Mean −197.8
Std Dev 228.5
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
pull1D
Entries 74
Mean −0.08442
Std Dev 1.281
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

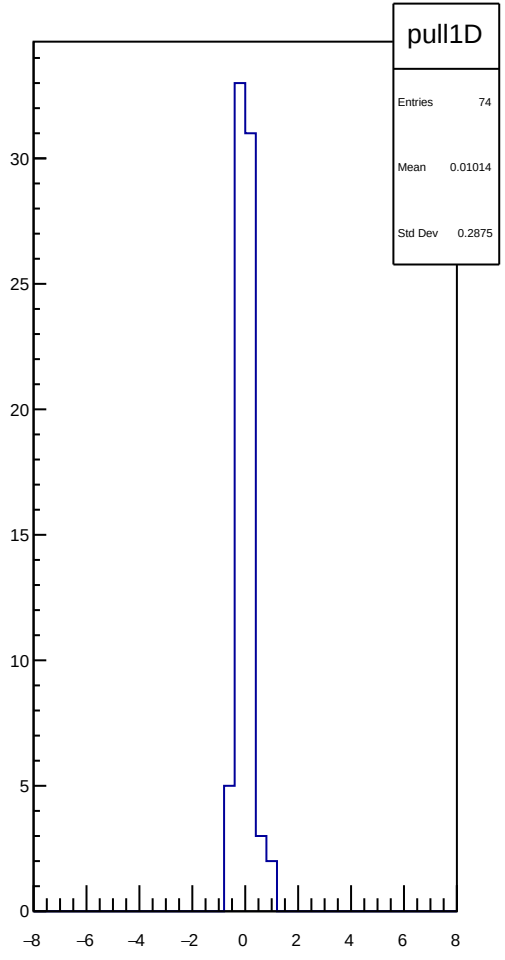

reg_asym_atl_dd_diff_bpm1X_slope vs run
χ² / ndf 6.14 / 73
p0 250.5 ± 5.18
pull
Entries 74
Mean −53.51
Std Dev 97.19

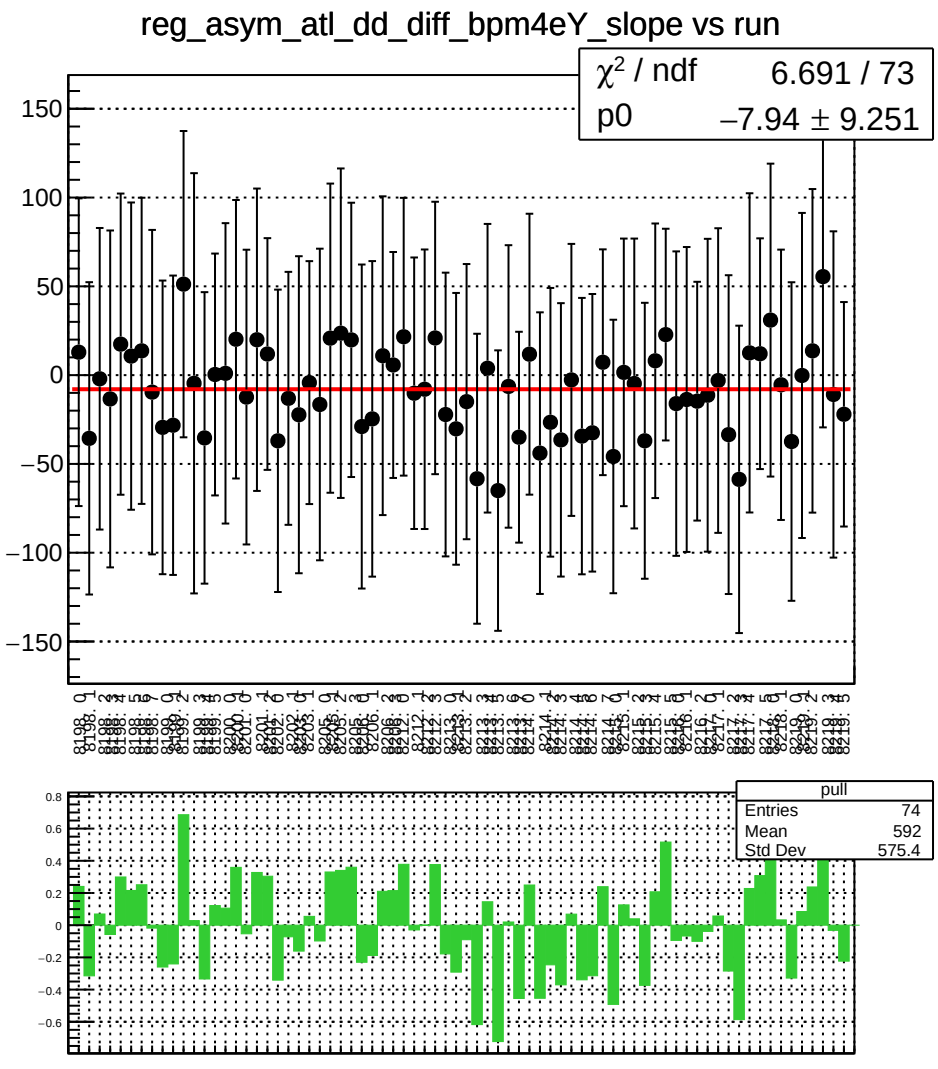

pull1D
Entries 74
Mean −0.009849
Std Dev 0.2879

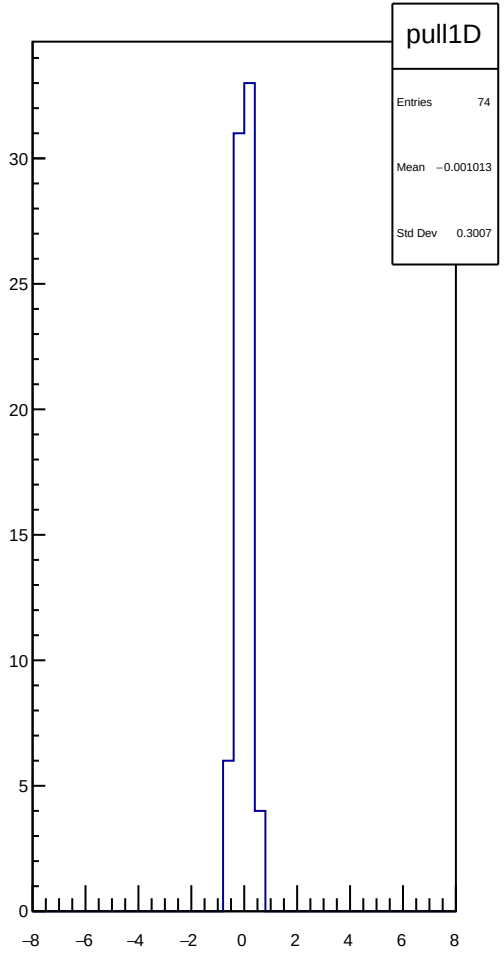

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 7.001 / 73
p0 −51.06 ± 8.603
pull
Entries 74
Mean 588.3
Std Dev 565

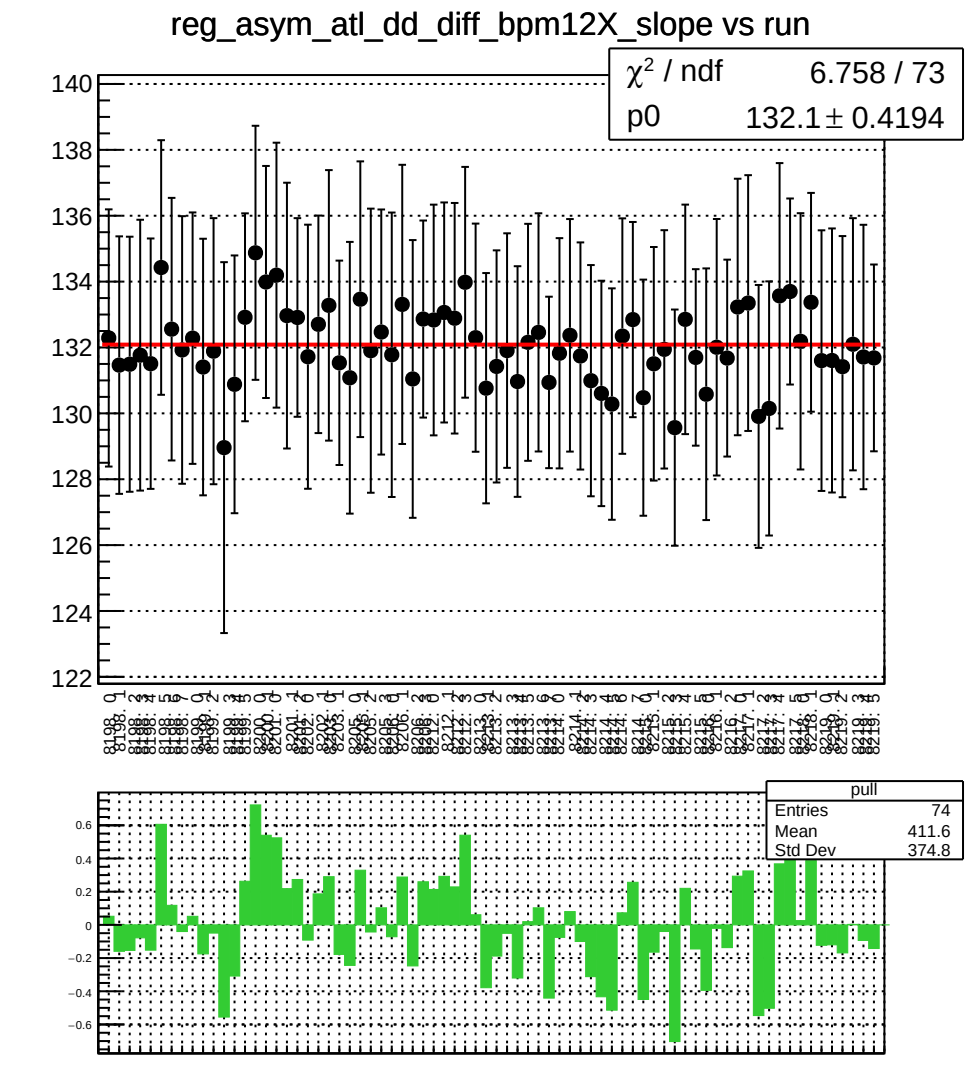

pull1D
Entries 74
Mean 0.001507
Std Dev 0.3076

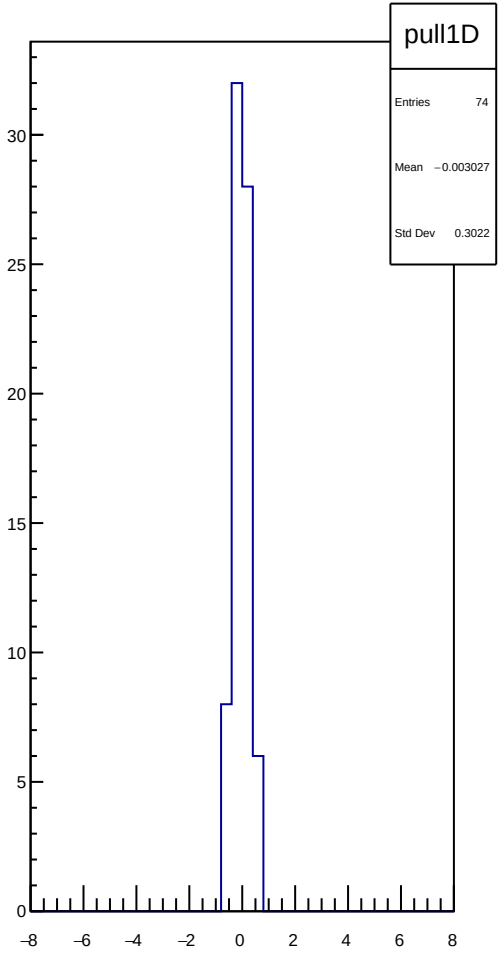

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 6.125 / 73
p0 −176.2 ± 5.184
−50
−100
−150
−200
−250
pull
Entries 74
Mean −115.4
Std Dev 154.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

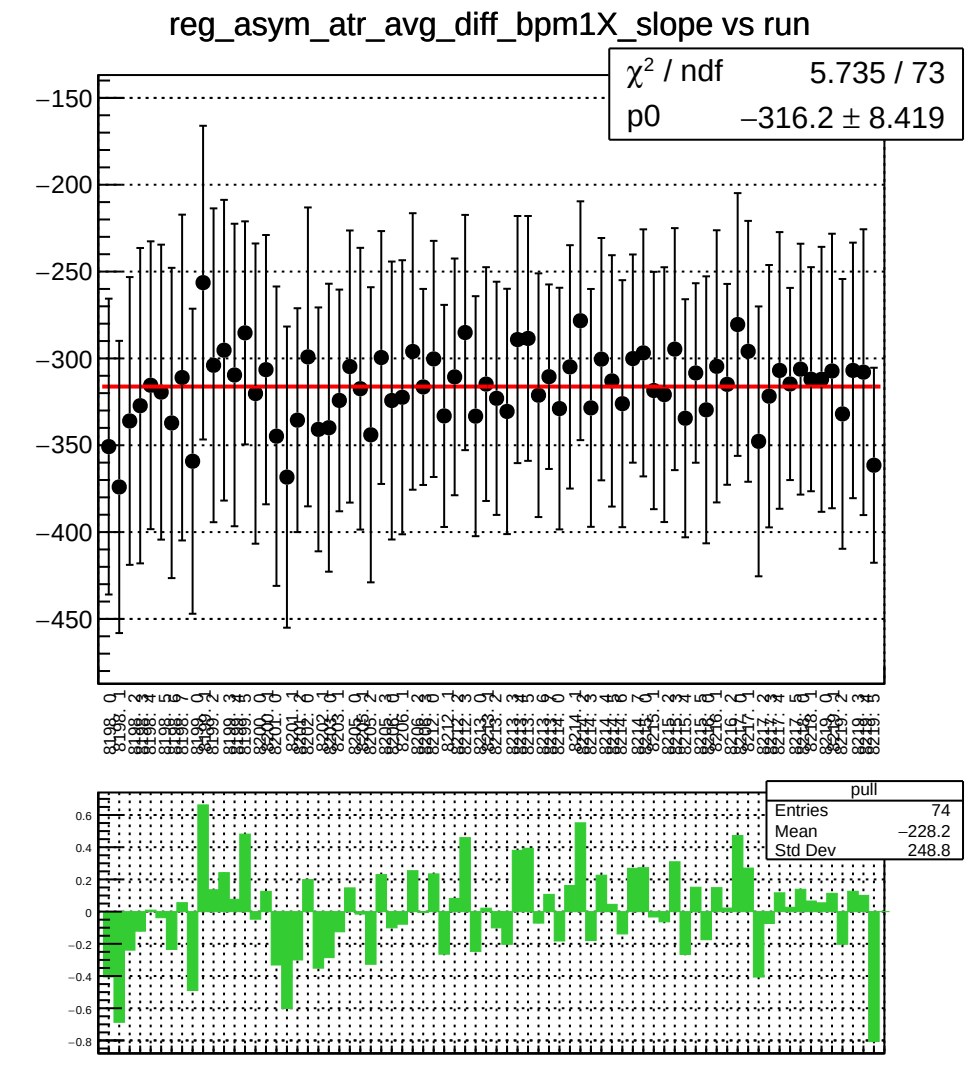

pull1D
Entries 74
Mean 0.01014
Std Dev 0.2875
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

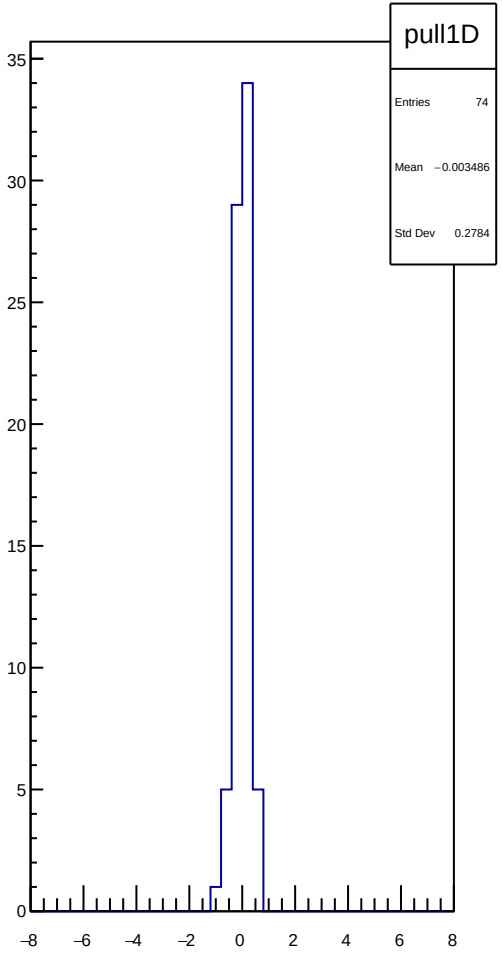

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.691 / 73
p0 −7.94 ± 9.251
150
100
50
0
−50
−100
−150
pull
Entries 74
Mean 592
Std Dev 575.4
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

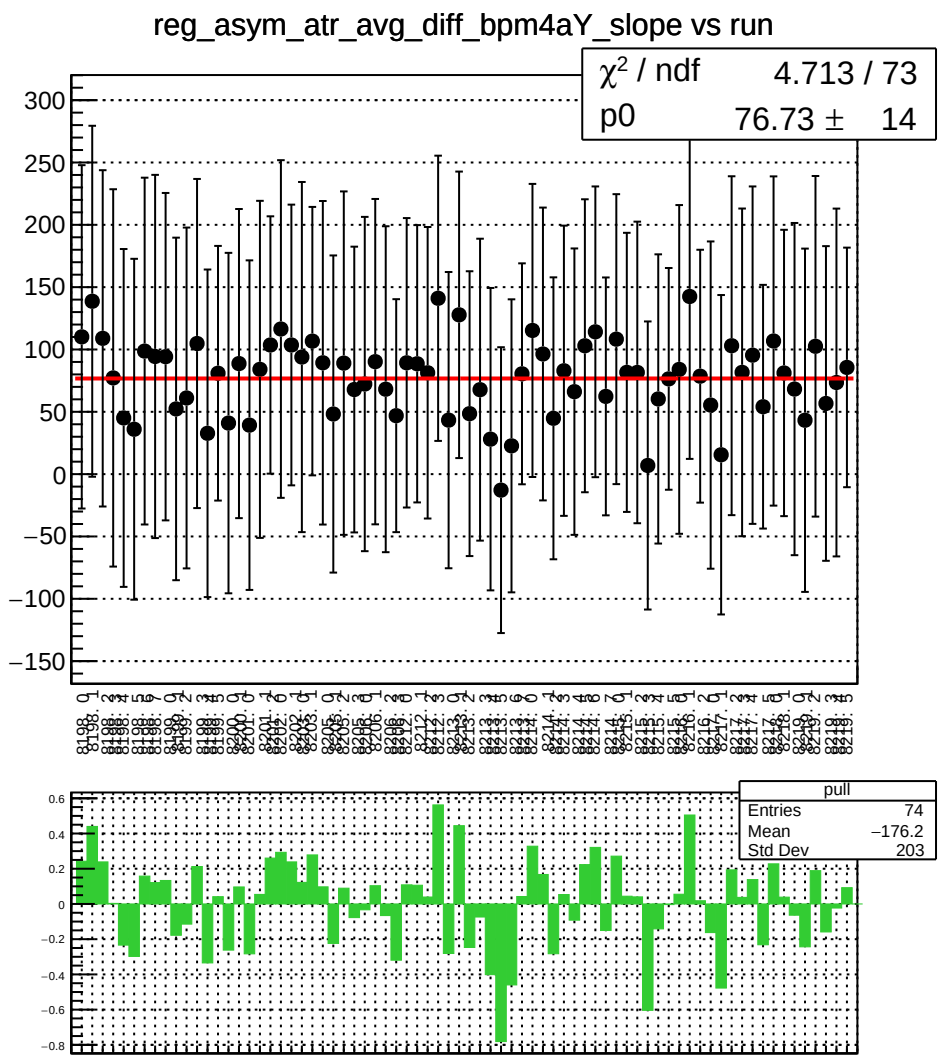

pull1D
Entries 74
Mean −0.001013
Std Dev 0.3007
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

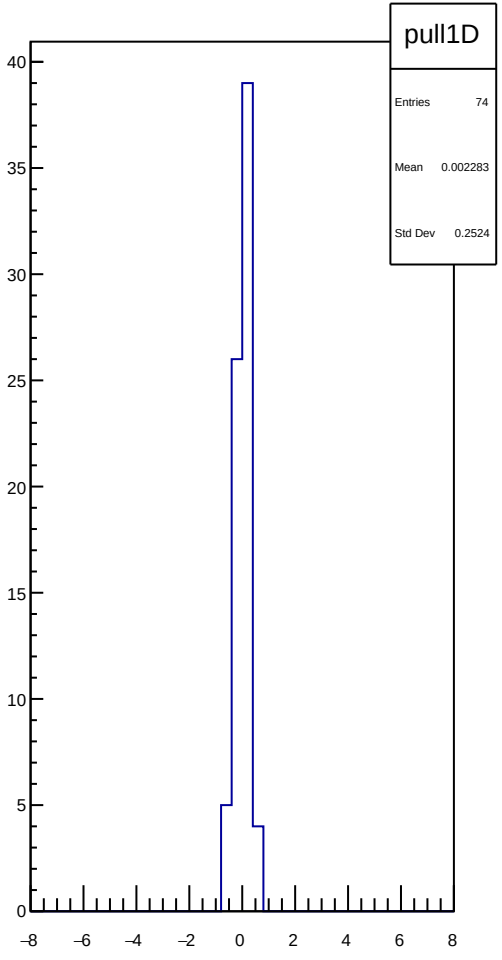

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 6.758 / 73
p0 132.1 ± 0.4194
pull
Entries 74
Mean 411.6
Std Dev 374.8

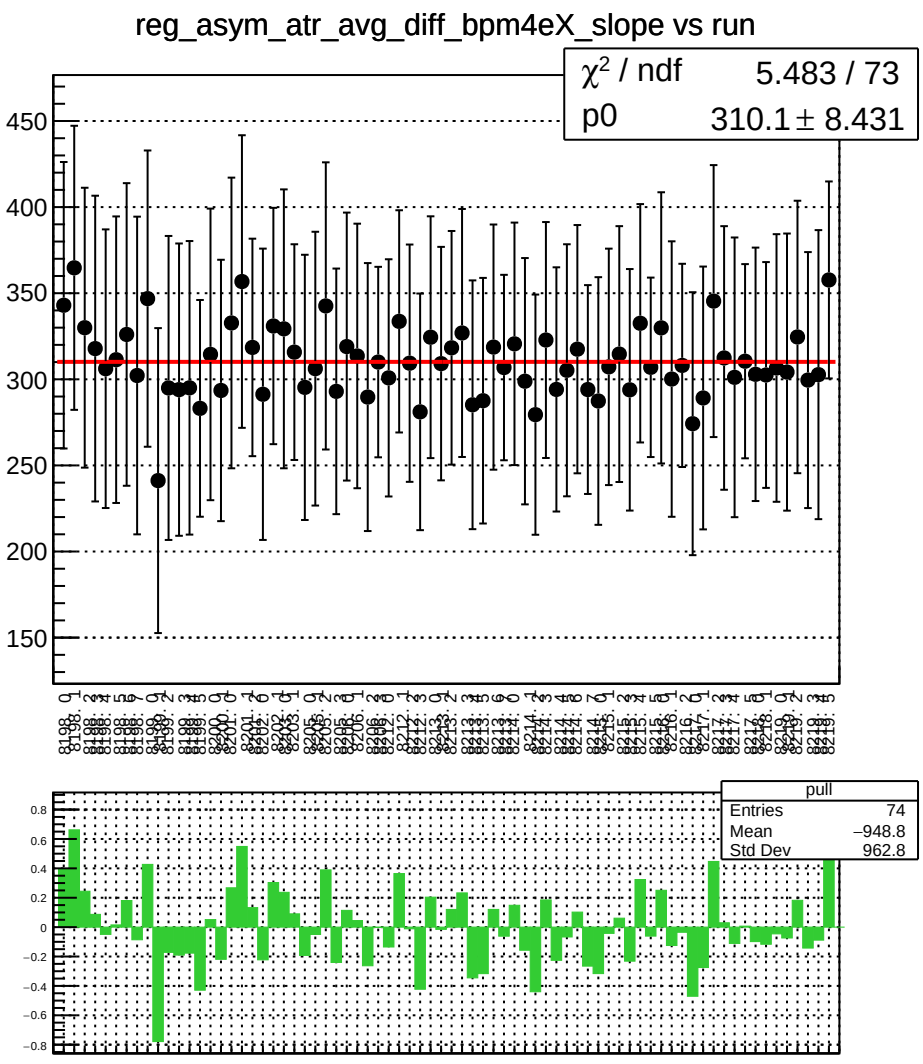

pull1D
Entries 74
Mean −0.003027
Std Dev 0.3022

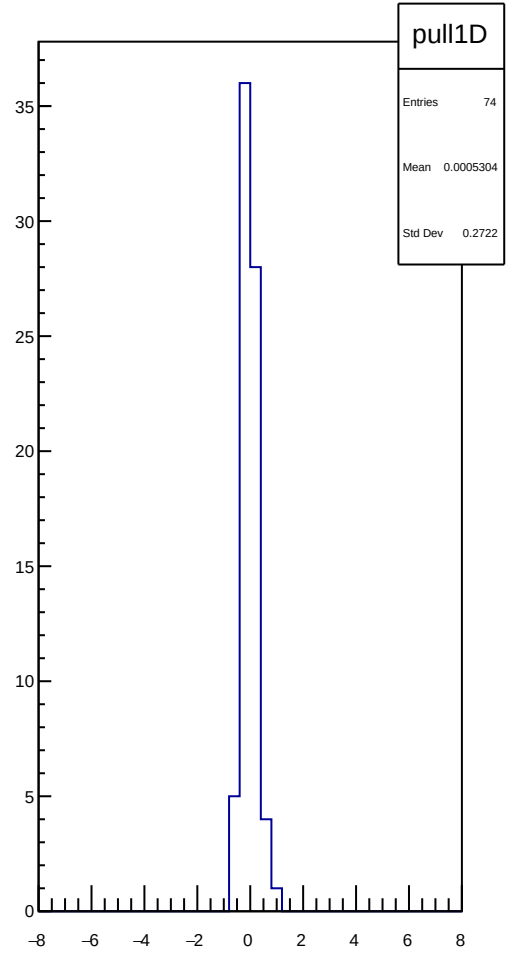

reg_asym_atr_avg_diff_bpm1X_slope vs run
χ² / ndf 5.735 / 73
p0 −316.2 ± 8.419
pull
Entries 74
Mean −228.2
Std Dev 248.8

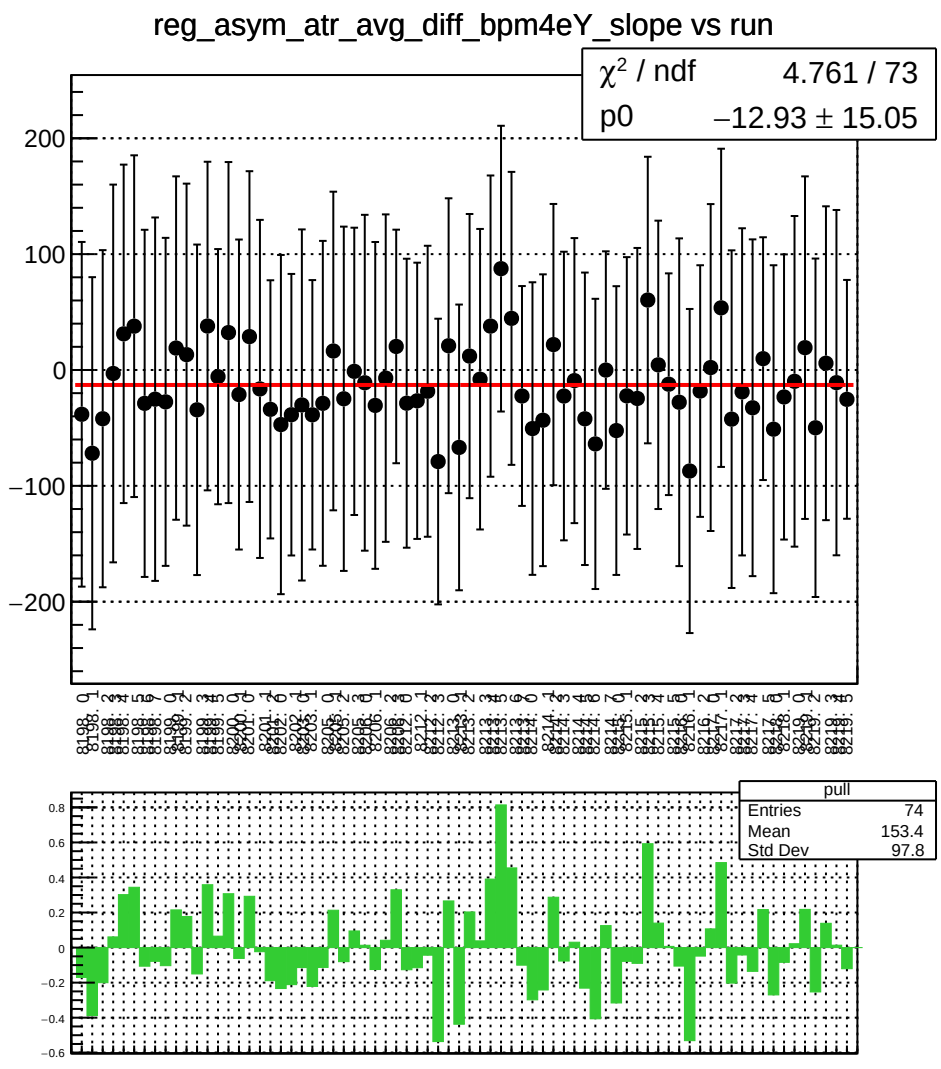

pull1D
Entries 74
Mean −0.003486
Std Dev 0.2784

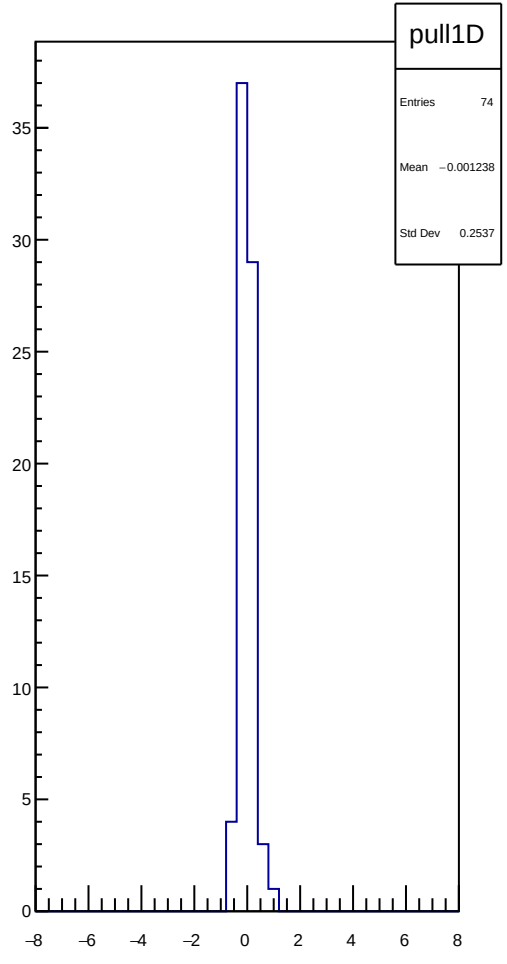

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.713 / 73
p0 76.73 ± 14
pull
Entries 74
Mean −176.2
Std Dev 203

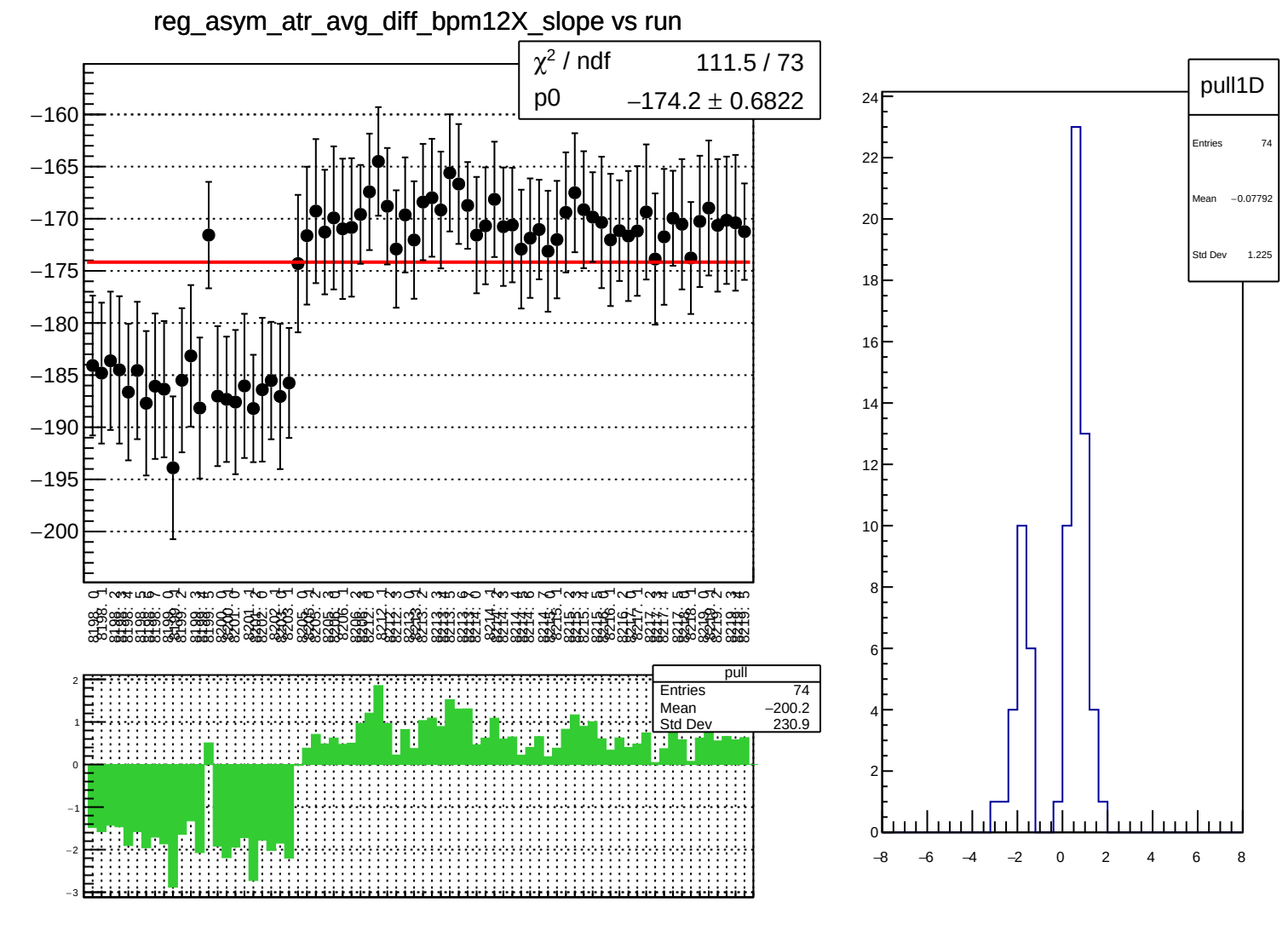

pull1D
Entries 74
Mean 0.002283
Std Dev 0.2524

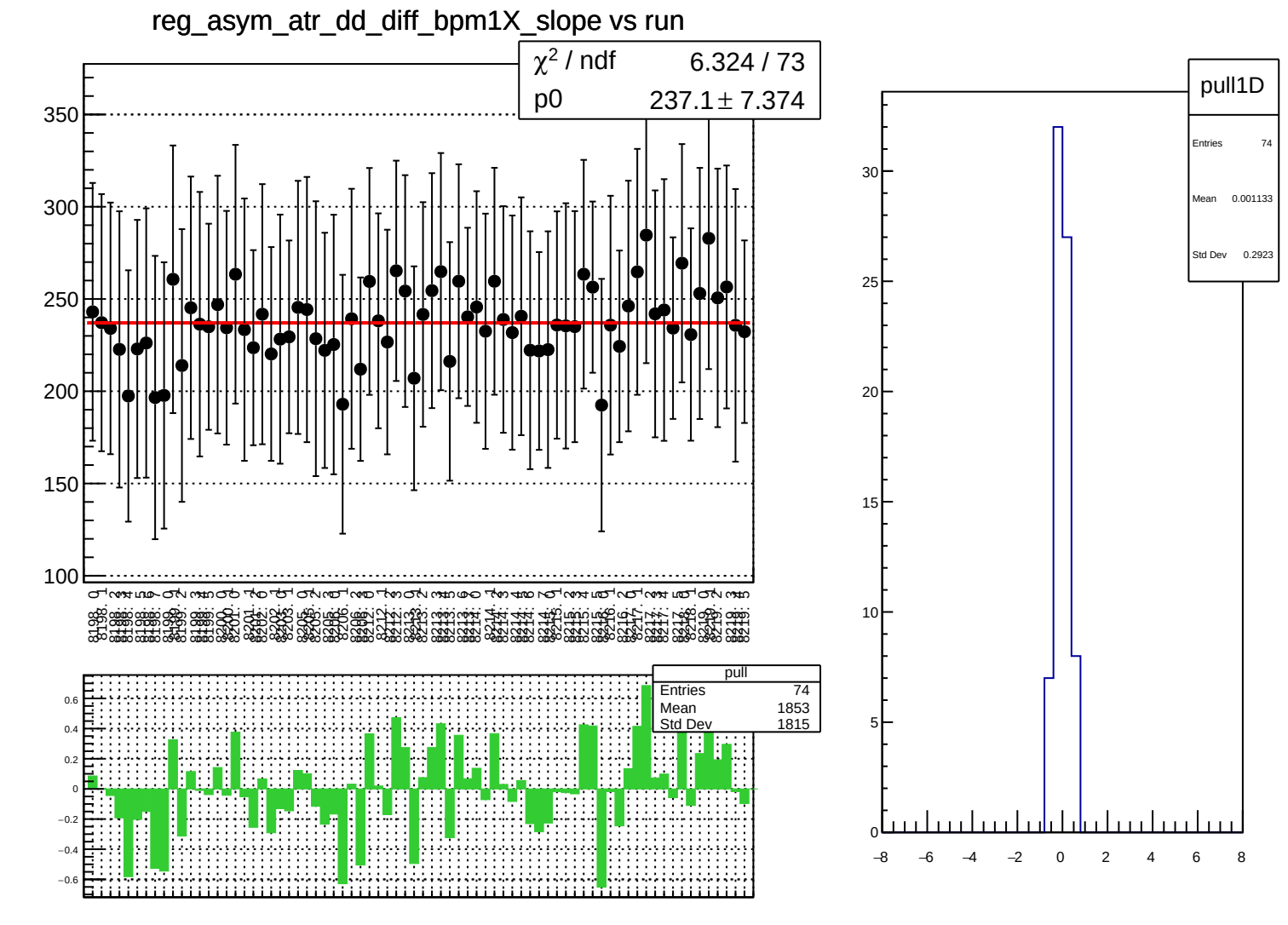

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 5.483 / 73
p0 310.1 ± 8.431
pull
Entries 74
Mean −948.8
Std Dev 962.8

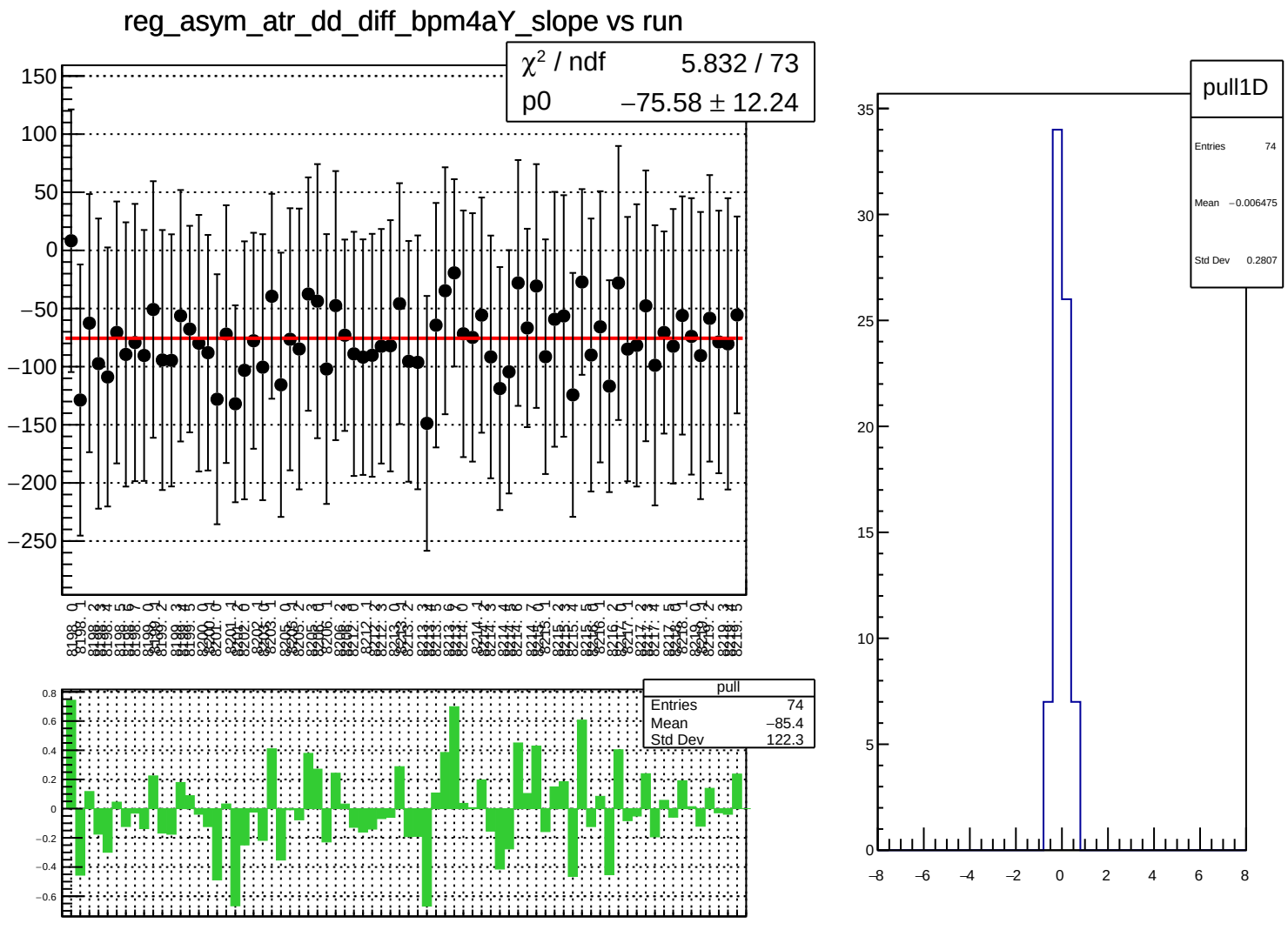

pull1D
Entries 74
Mean 0.0005304
Std Dev 0.2722

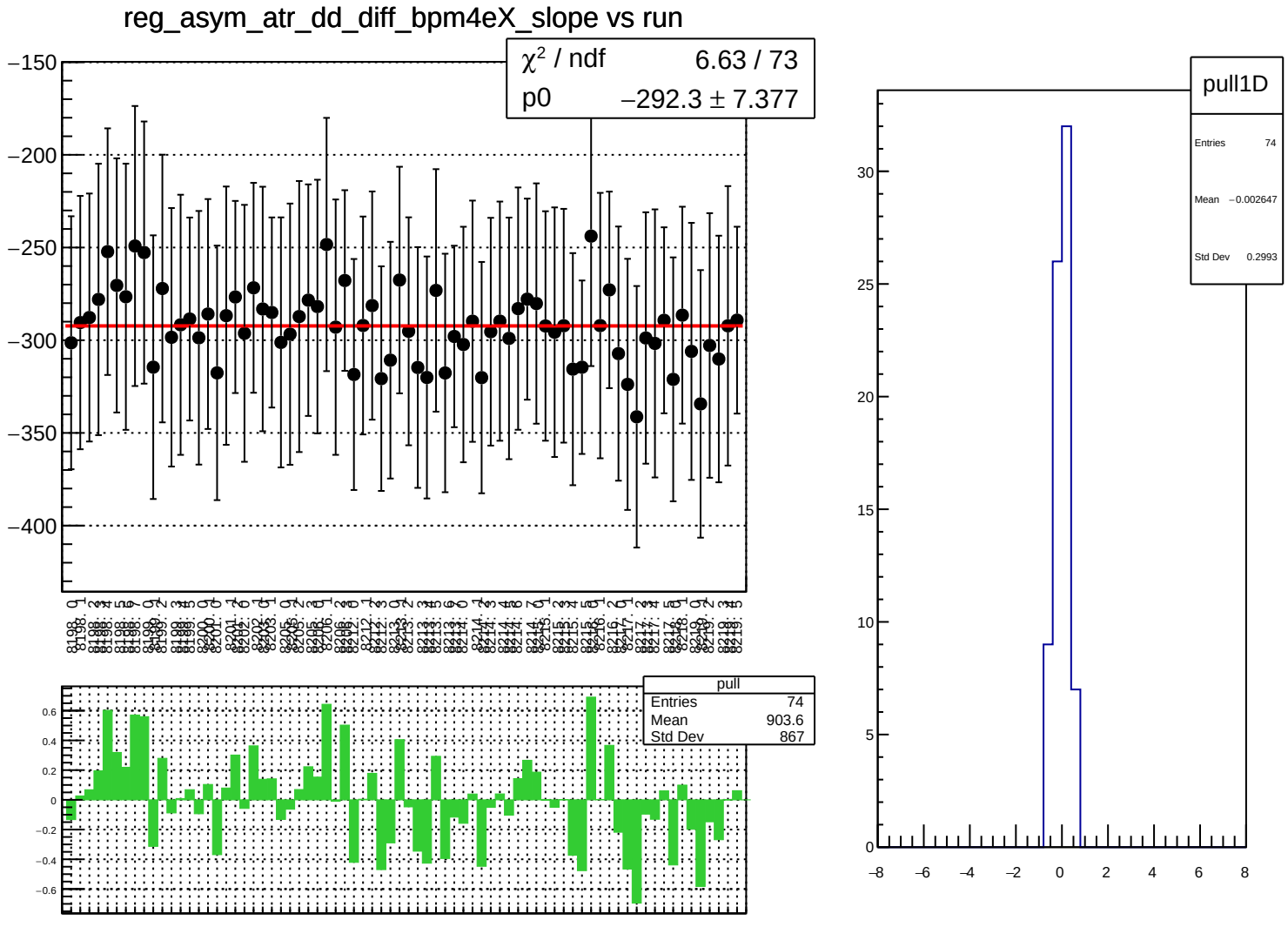

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.761 / 73
p0 −12.93 ± 15.05
200
100
0
−100
−200
pull
Entries 74
Mean 153.4
Std Dev 97.8
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

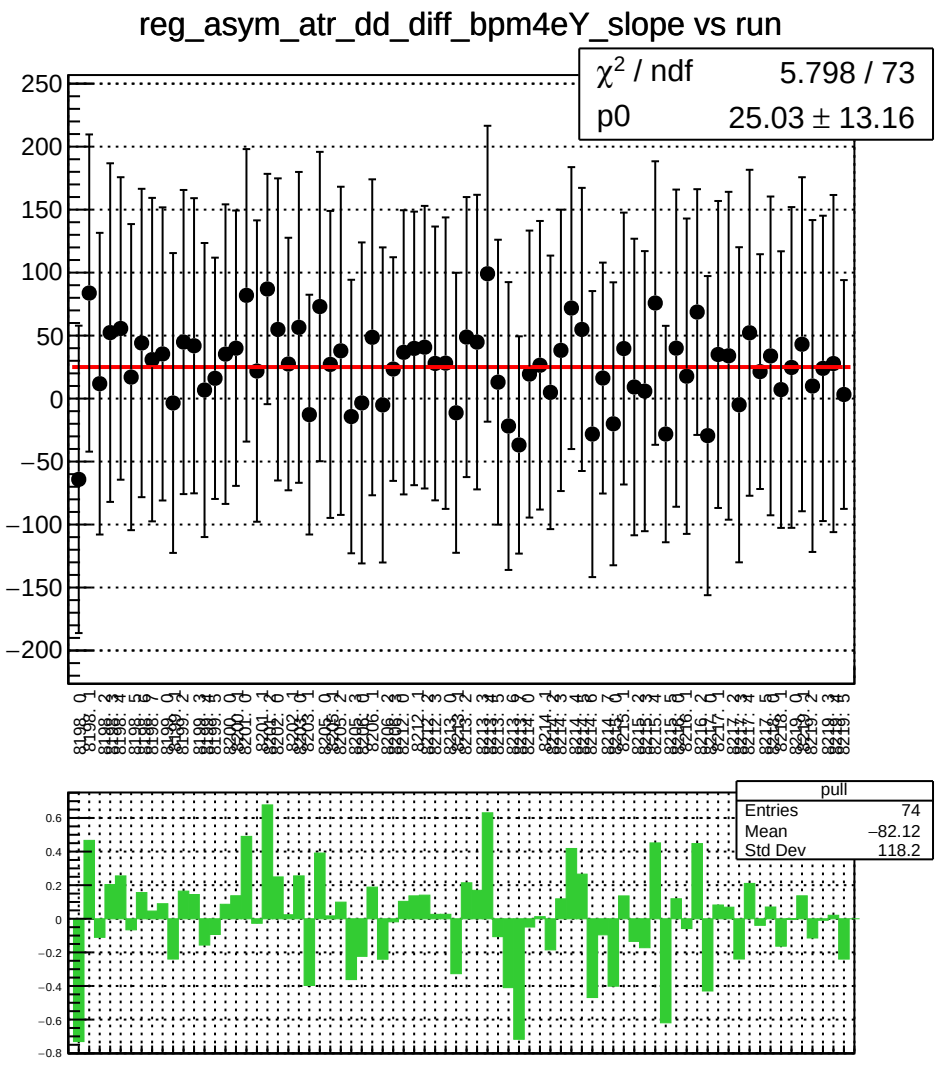

pull1D
Entries 74
Mean −0.001238
Std Dev 0.2537
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

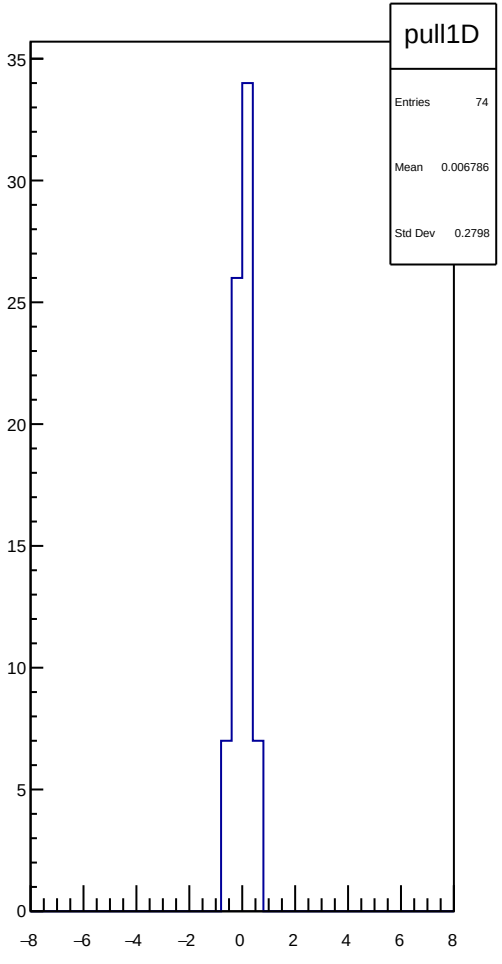

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 111.5 / 73
p0 −174.2 ± 0.6822
pull
Entries 74
Mean −200.2
Std Dev 230.9
pull1D
Entries 74
Mean −0.07792
Std Dev 1.225

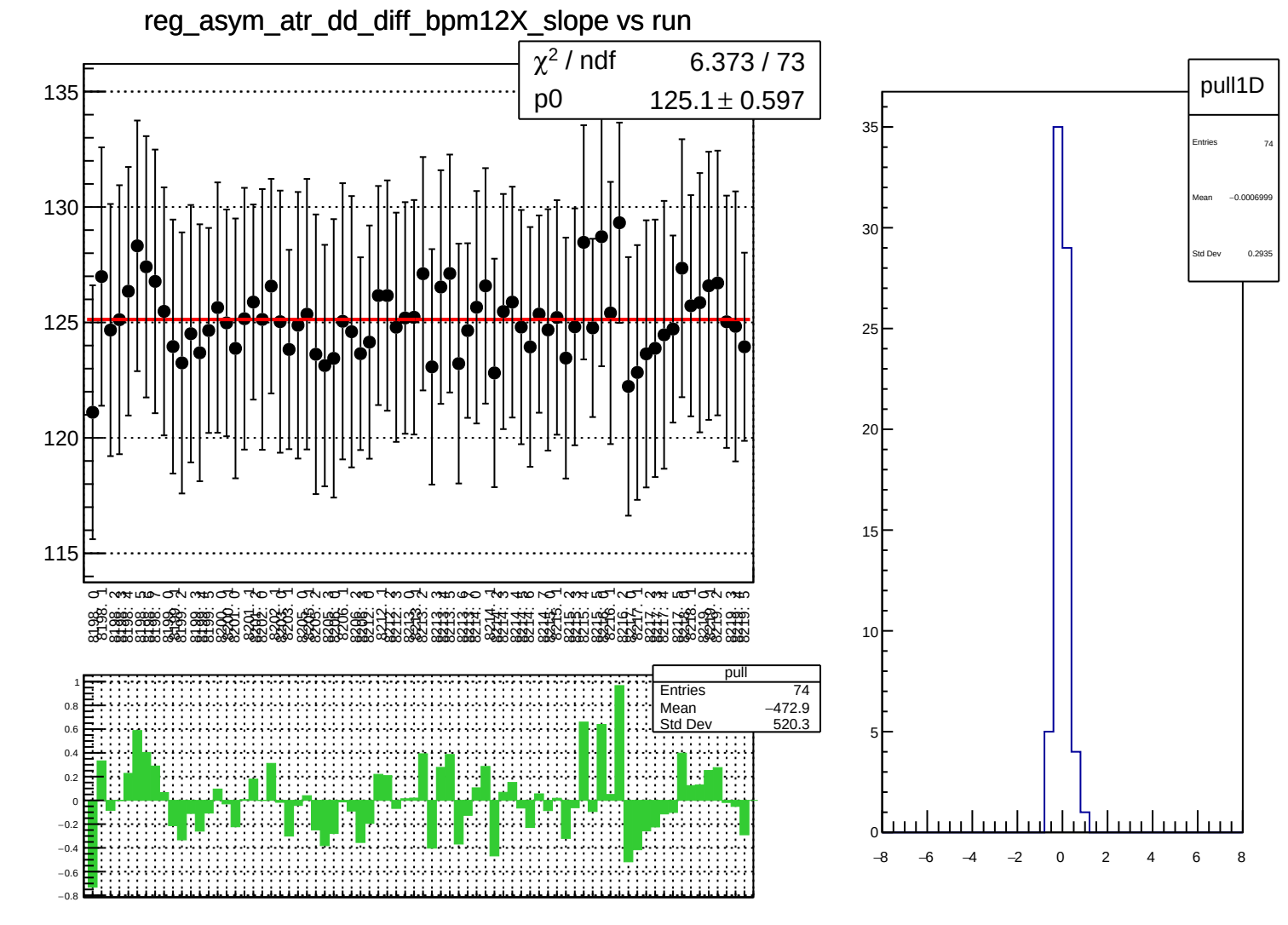

reg_asym_atr_dd_diff_bpm1X_slope vs run
χ² / ndf 6.324 / 73
p0 237.1 ± 7.374
pull
Entries 74
Mean 1853
Std Dev 1815
pull1D
Entries 74
Mean 0.001133
Std Dev 0.2923

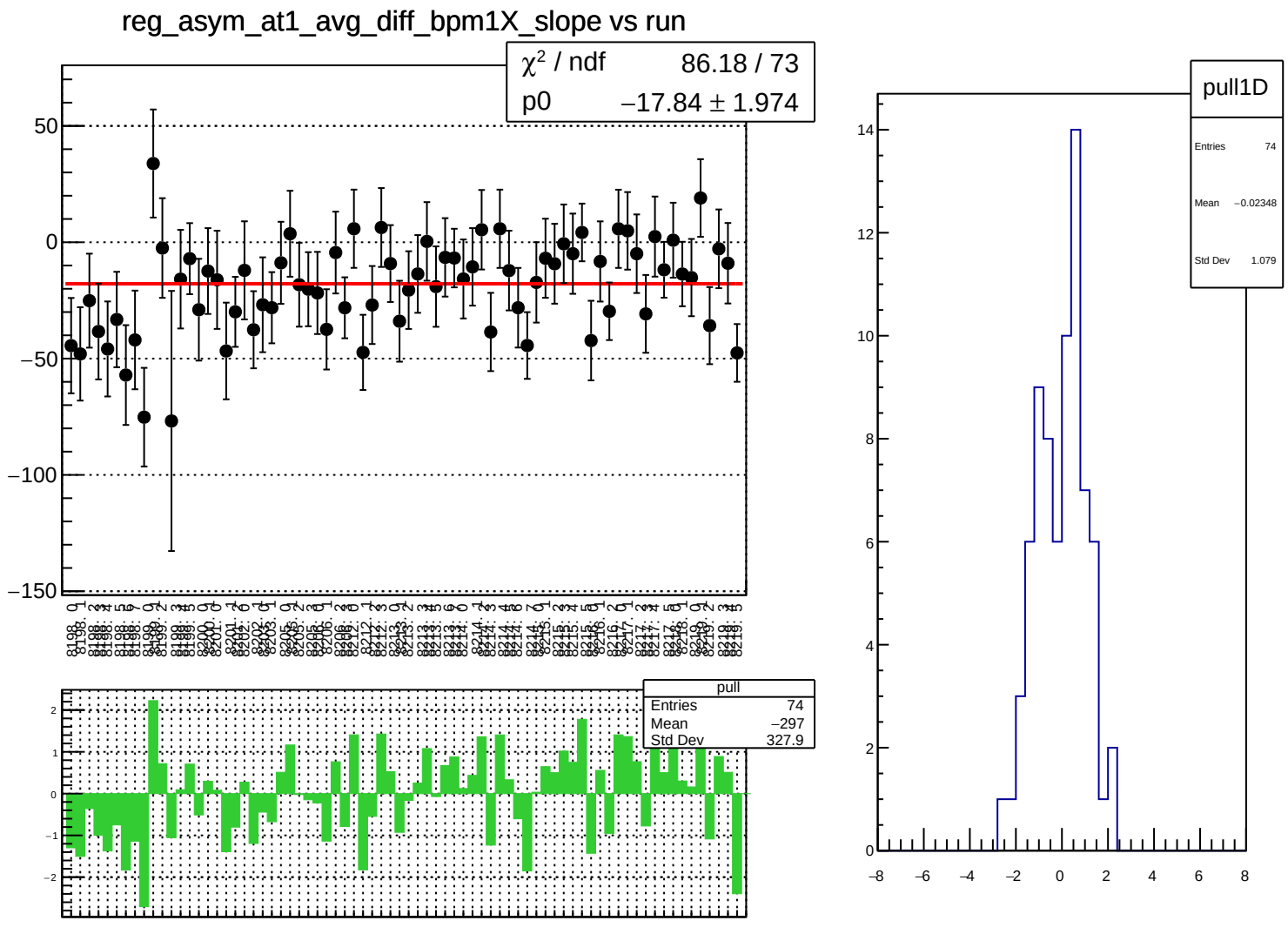

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.832 / 73
p0 −75.58 ± 12.24
pull
Entries 74
Mean −85.4
Std Dev 122.3
pull1D
Entries 74
Mean −0.006475
Std Dev 0.2807

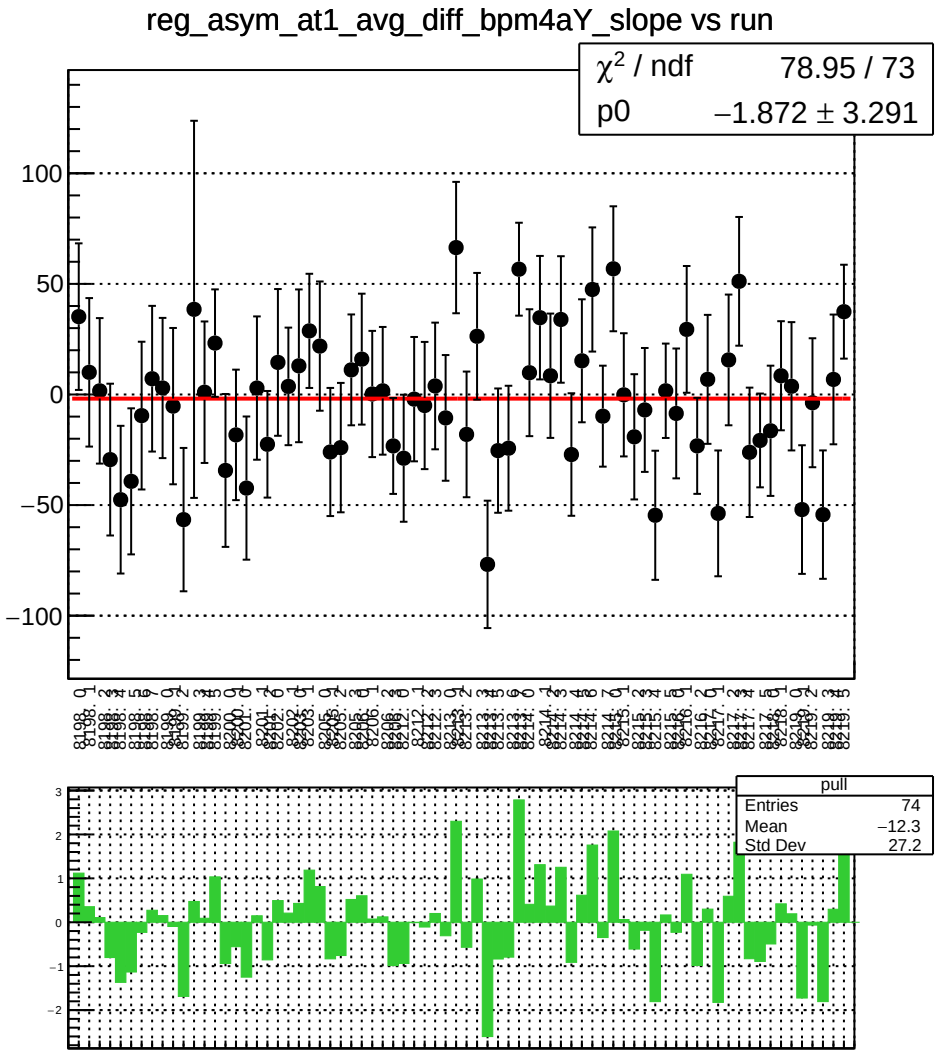

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 6.63 / 73
p0 −292.3 ± 7.377
pull
Entries 74
Mean 903.6
Std Dev 867
pull1D
Entries 74
Mean −0.002647
Std Dev 0.2993

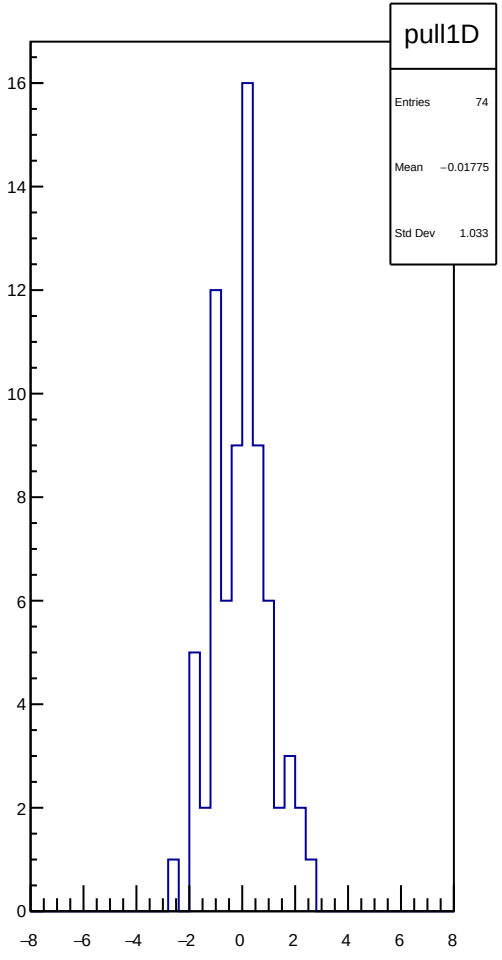

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.798 / 73
p0 25.03 ± 13.16
pull
Entries 74
Mean −82.12
Std Dev 118.2

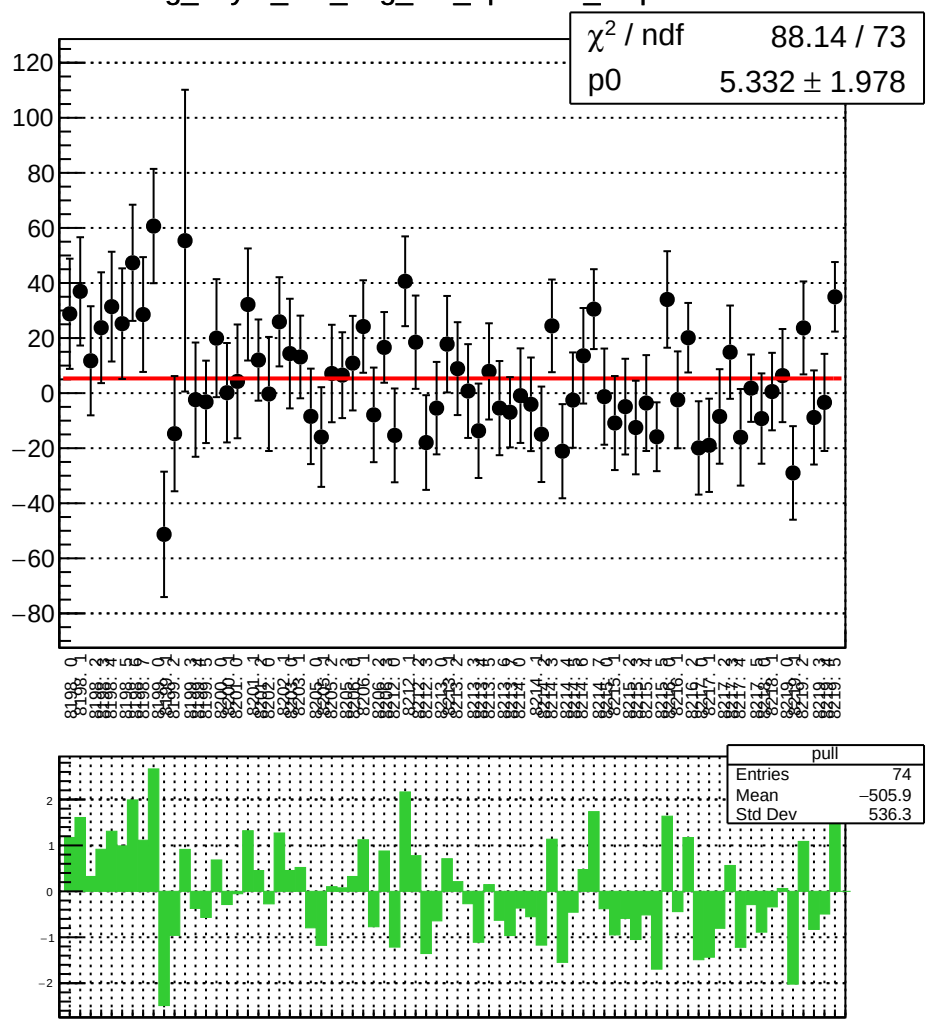

pull1D
Entries 74
Mean 0.006786
Std Dev 0.2798

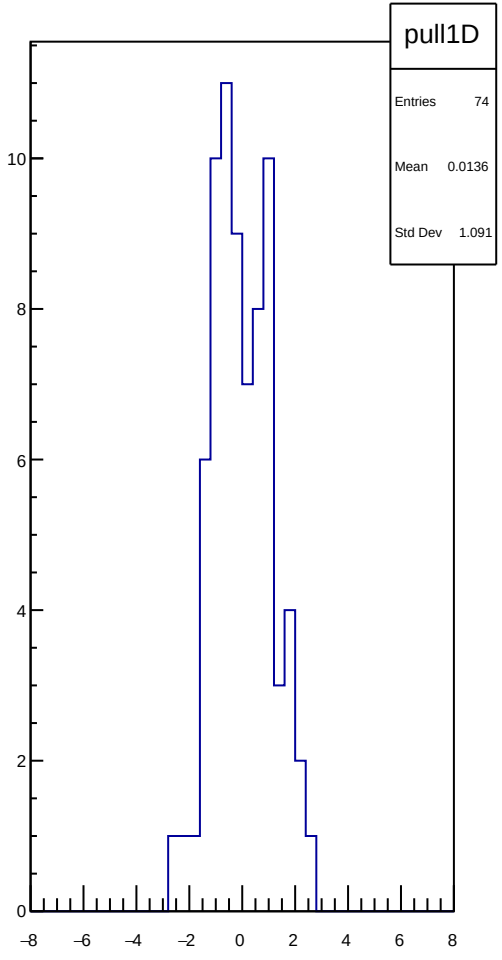

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ² / ndf 6.373 / 73
p0 125.1 ± 0.597
pull
Entries 74
Mean −472.9
Std Dev 520.3
pull1D
Entries 74
Mean −0.0006999
Std Dev 0.2935

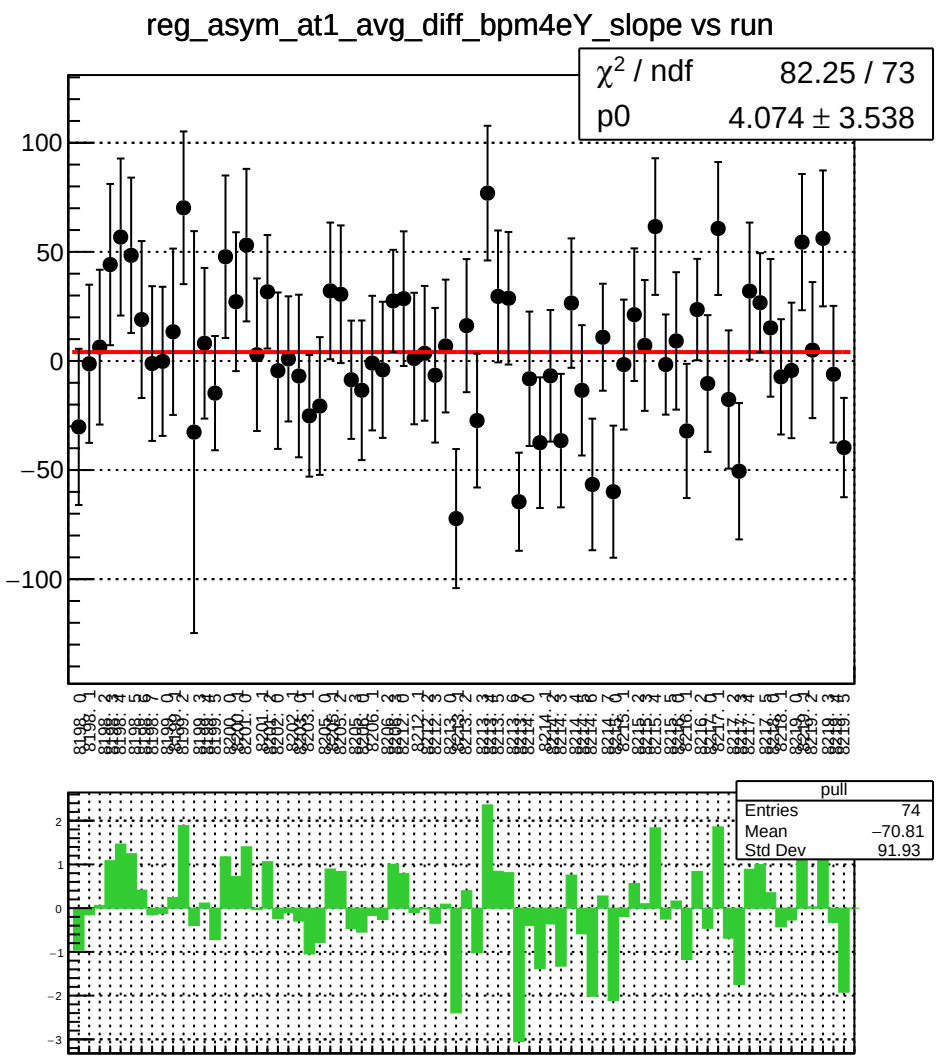

reg_asym_at1_avg_diff_bpm1X_slope vs run
χ² / ndf 86.18 / 73
p0 −17.84 ± 1.974
50
0
−50
−100
−150
pull
Entries 74
Mean −297
Std Dev 327.9
2
1
0
−1
−2
pull1D
Entries 74
Mean −0.02348
Std Dev 1.079
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

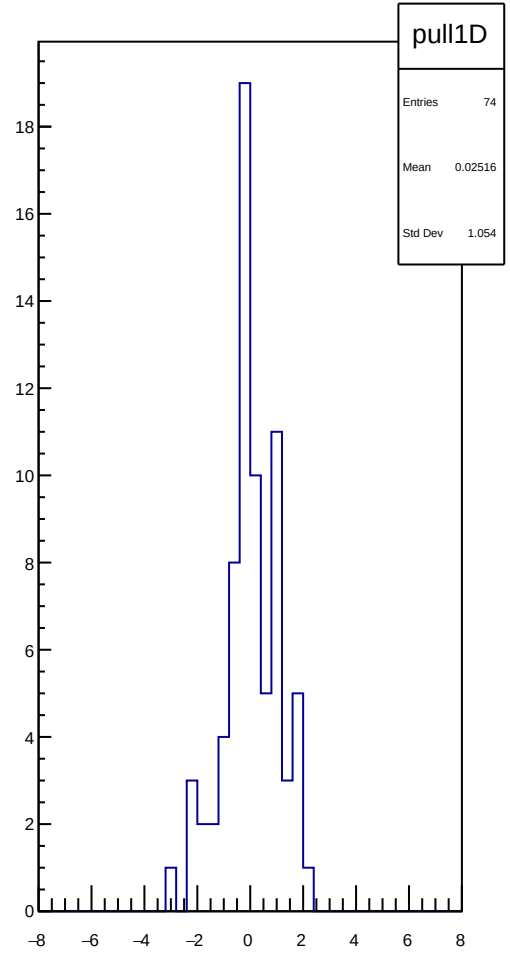

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 78.95 / 73
p0 −1.872 ± 3.291
pull
Entries 74
Mean −12.3
Std Dev 27.2

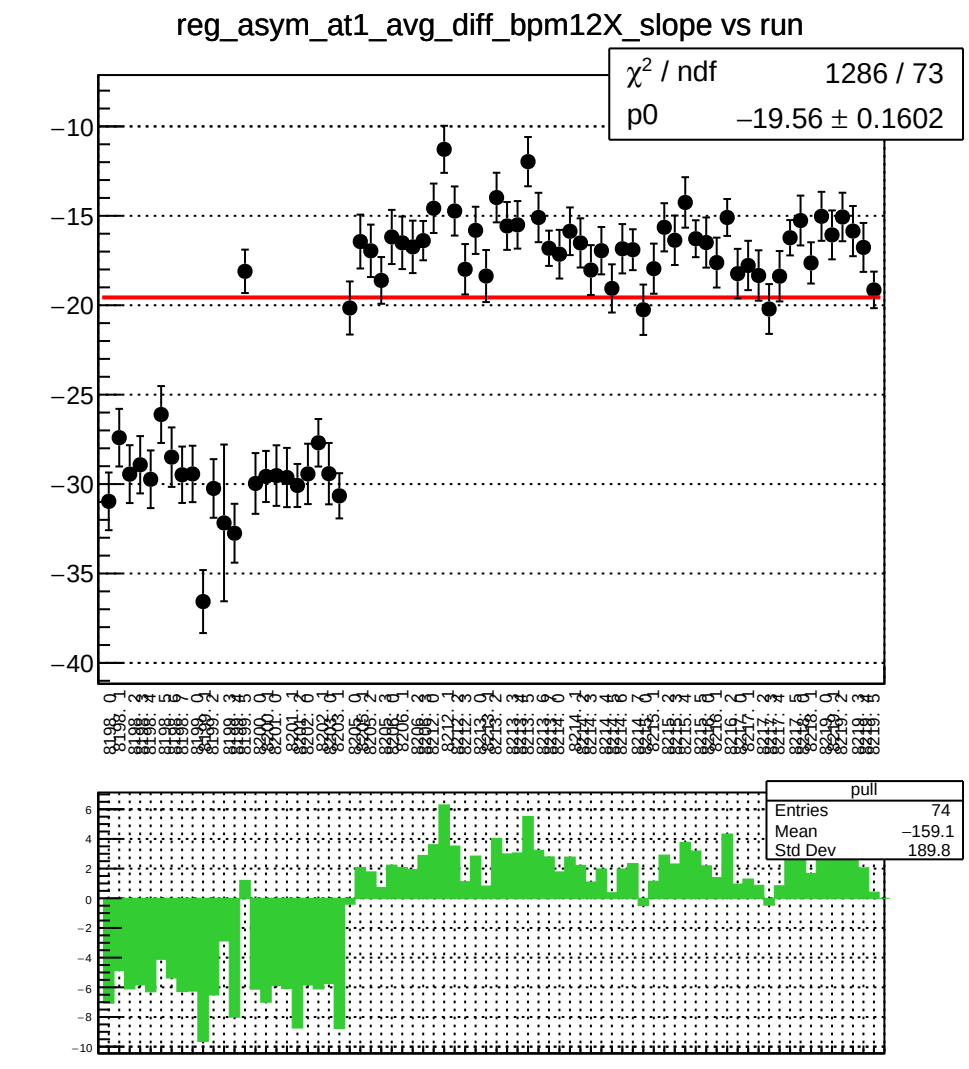

pull1D
Entries 74
Mean −0.01775
Std Dev 1.033

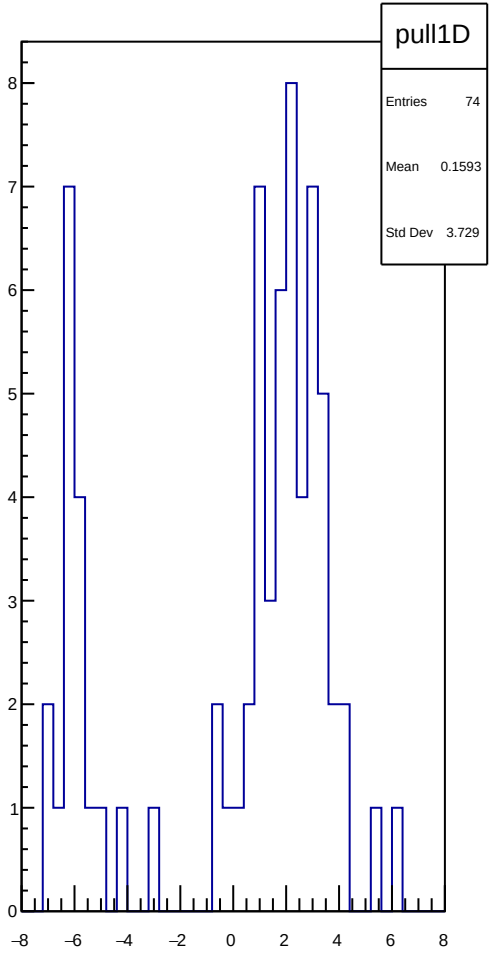

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ^2 / ndf 88.14 / 73
p0 5.332 ± 1.978
pull
Entries 74
Mean −505.9
Std Dev 536.3

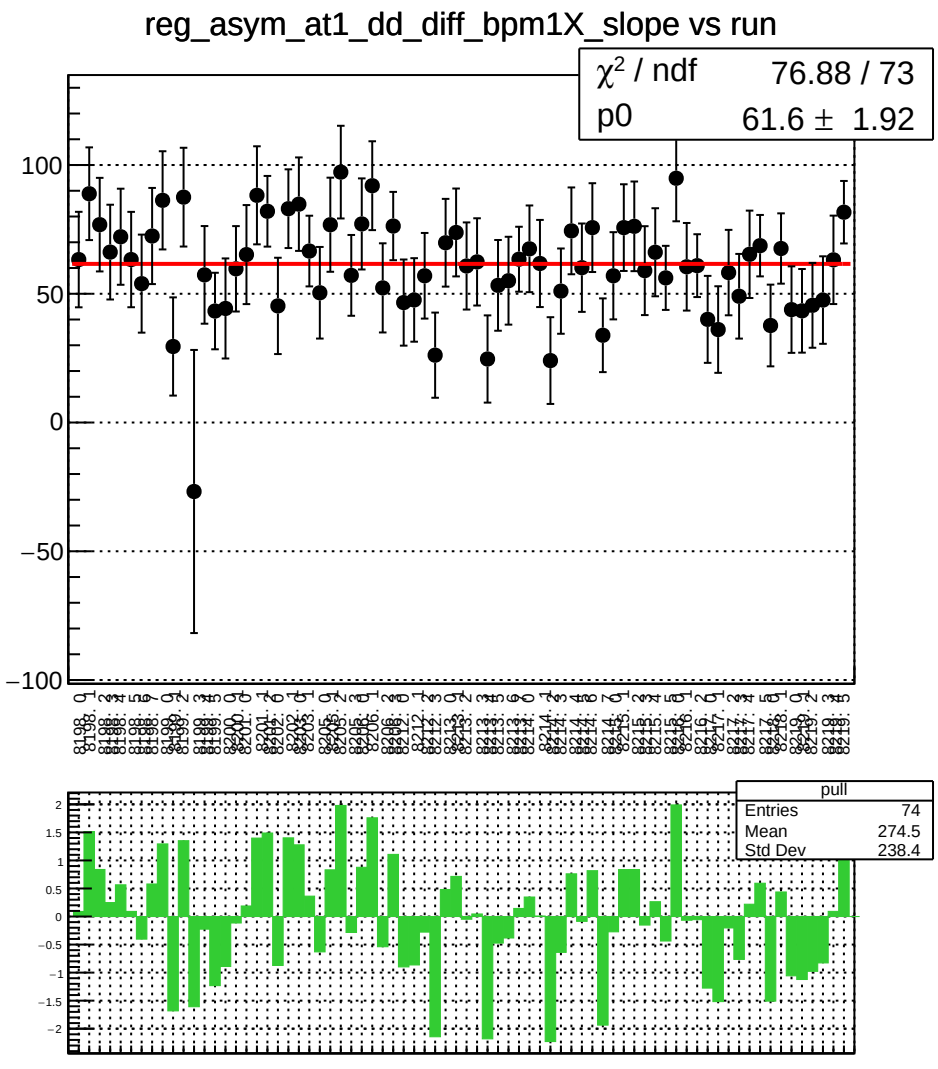

pull1D
Entries 74
Mean 0.0136
Std Dev 1.091

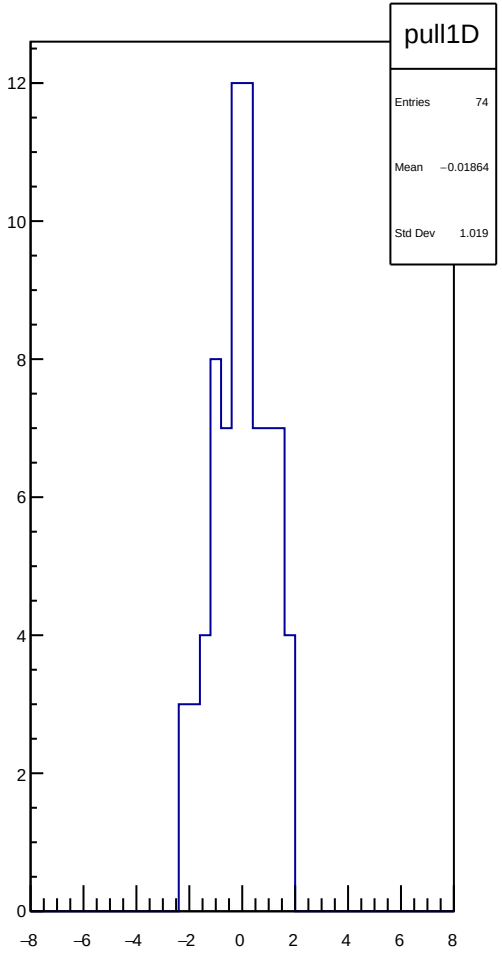

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 82.25 / 73
p0 4.074 ± 3.538
100
50
0
−50
−100
pull
Entries 74
Mean −70.81
Std Dev 91.93
2
1
0
−1
−2
−3

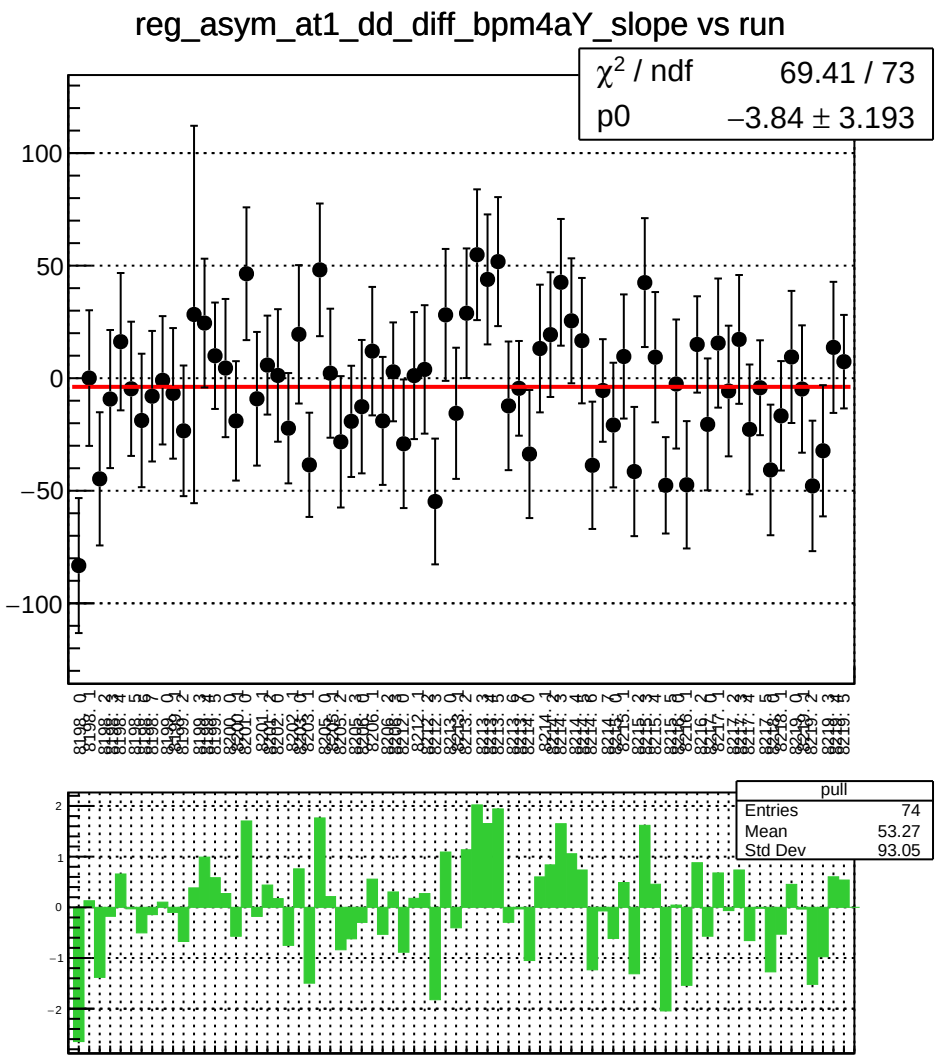

pull1D
Entries 74
Mean 0.02516
Std Dev 1.054
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

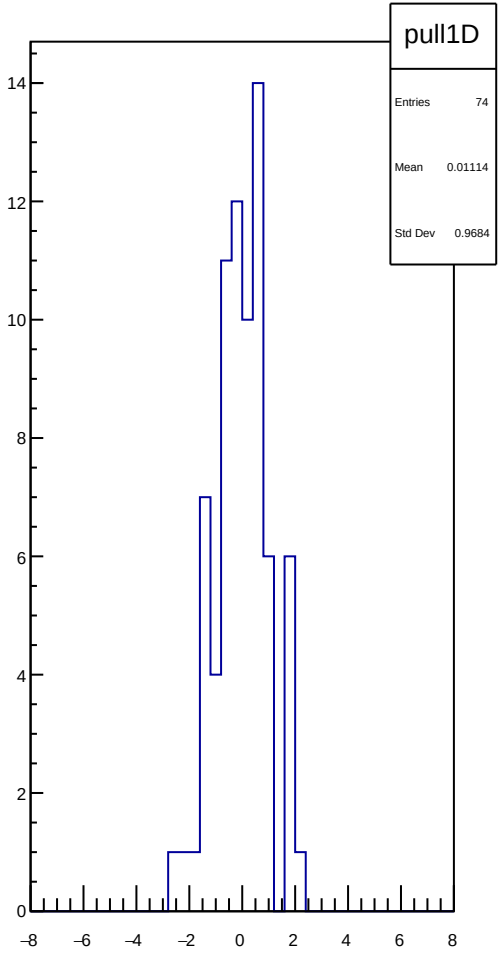

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 1286 / 73
p0 −19.56 ± 0.1602
pull
Entries 74
Mean −159.1
Std Dev 189.8

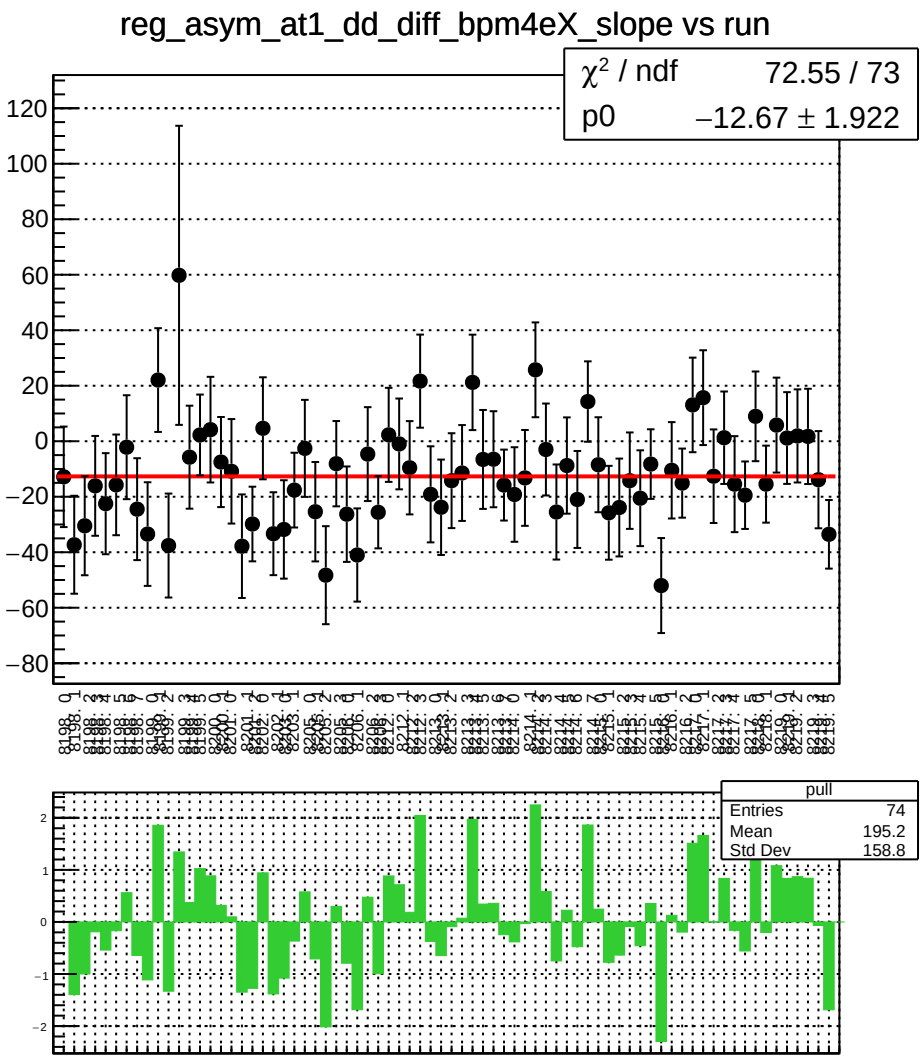

pull1D
Entries 74
Mean 0.1593
Std Dev 3.729

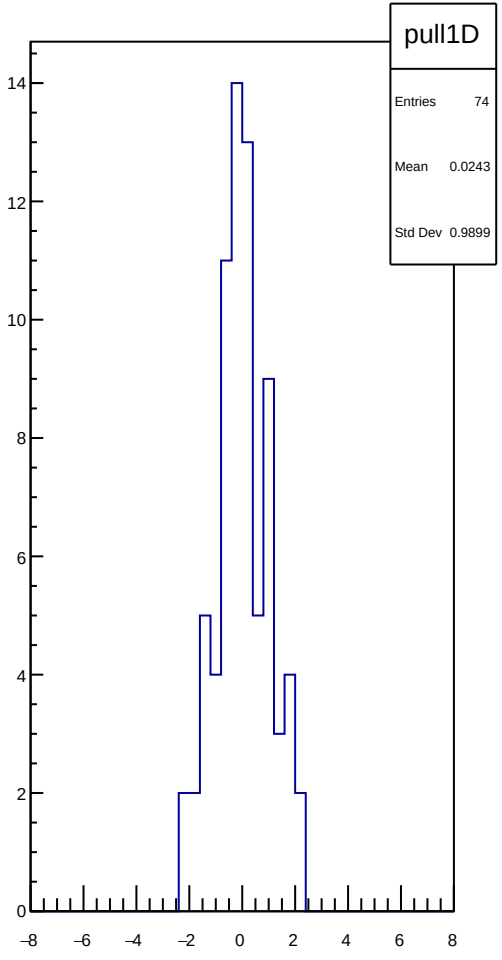

reg_asym_at1_dd_diff_bpm1X_slope vs run
χ² / ndf 76.88 / 73
p0 61.6 ± 1.92
pull
Entries 74
Mean 274.5
Std Dev 238.4

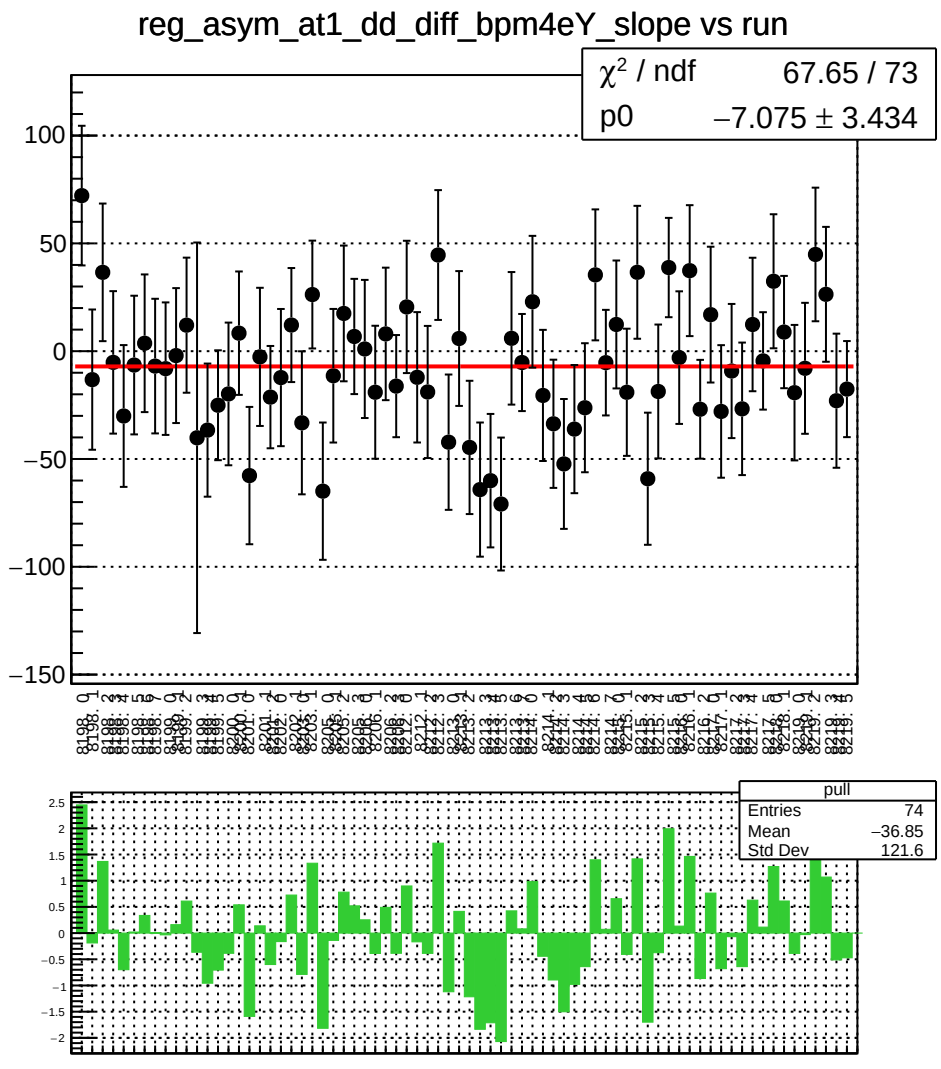

pull1D
Entries 74
Mean −0.01864
Std Dev 1.019

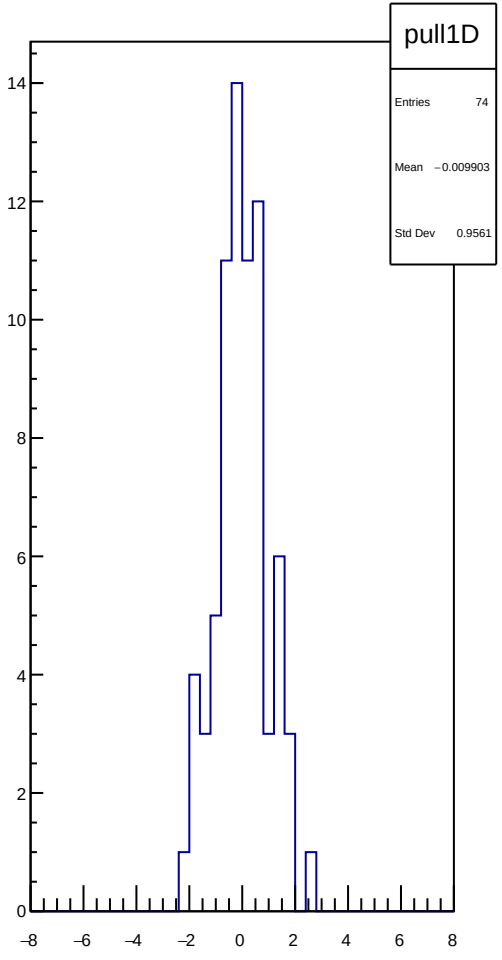

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 69.41 / 73
p0 −3.84 ± 3.193
pull
Entries 74
Mean 53.27
Std Dev 93.05

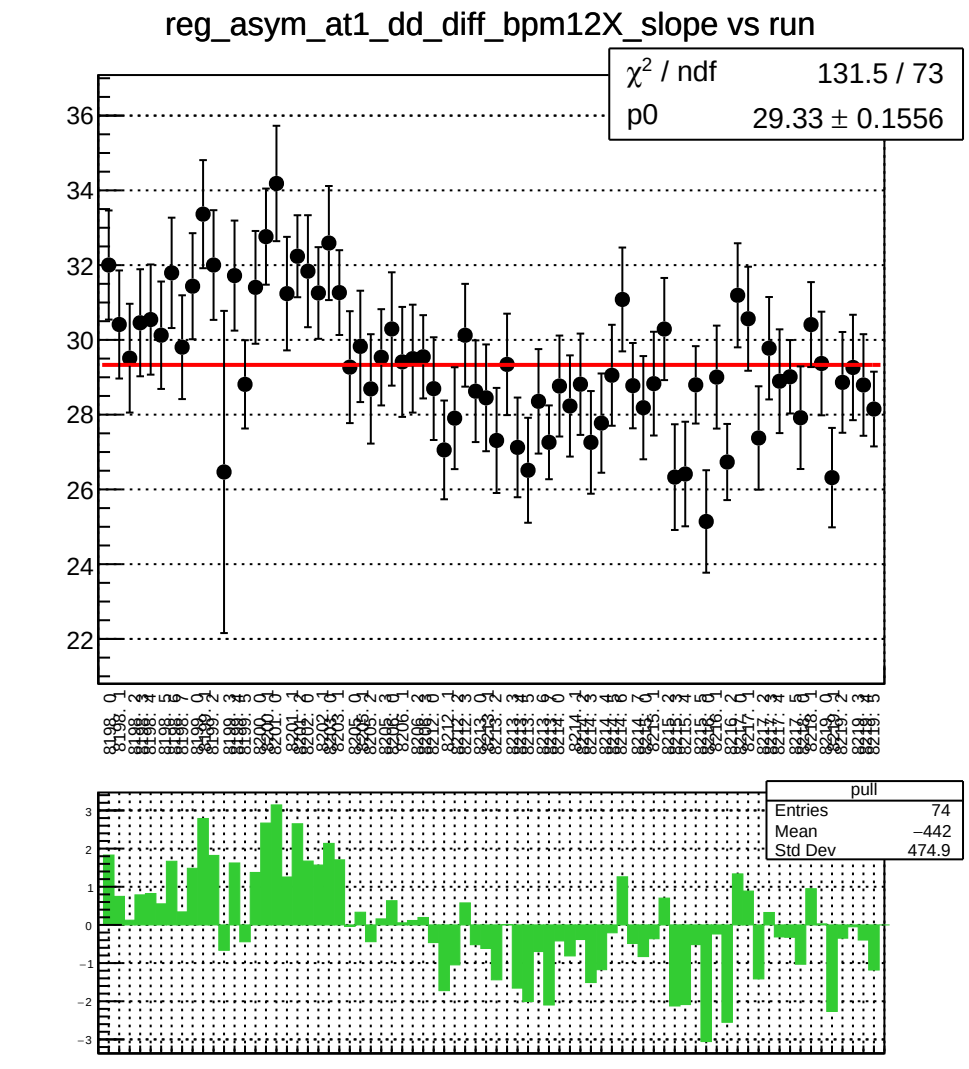

pull1D
Entries 74
Mean 0.01114
Std Dev 0.9684

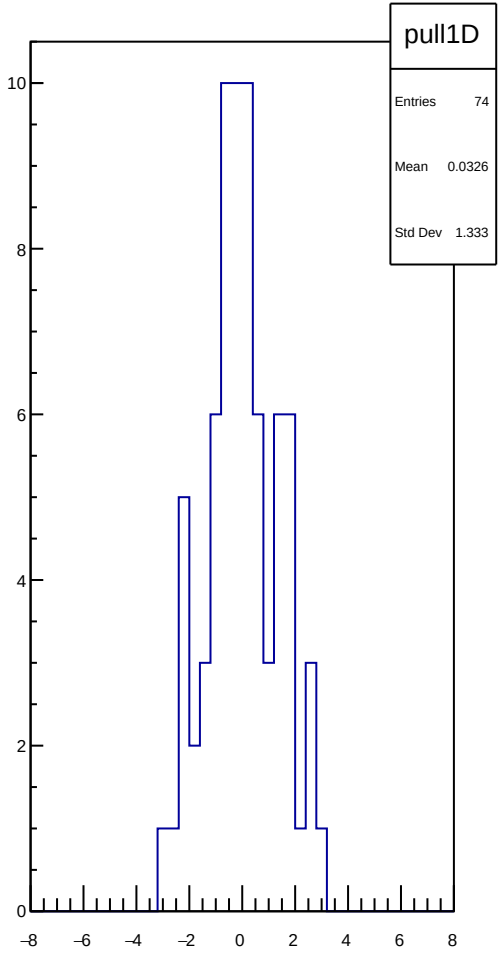

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 72.55 / 73
p0 −12.67 ± 1.922
pull
Entries 74
Mean 195.2
Std Dev 158.8

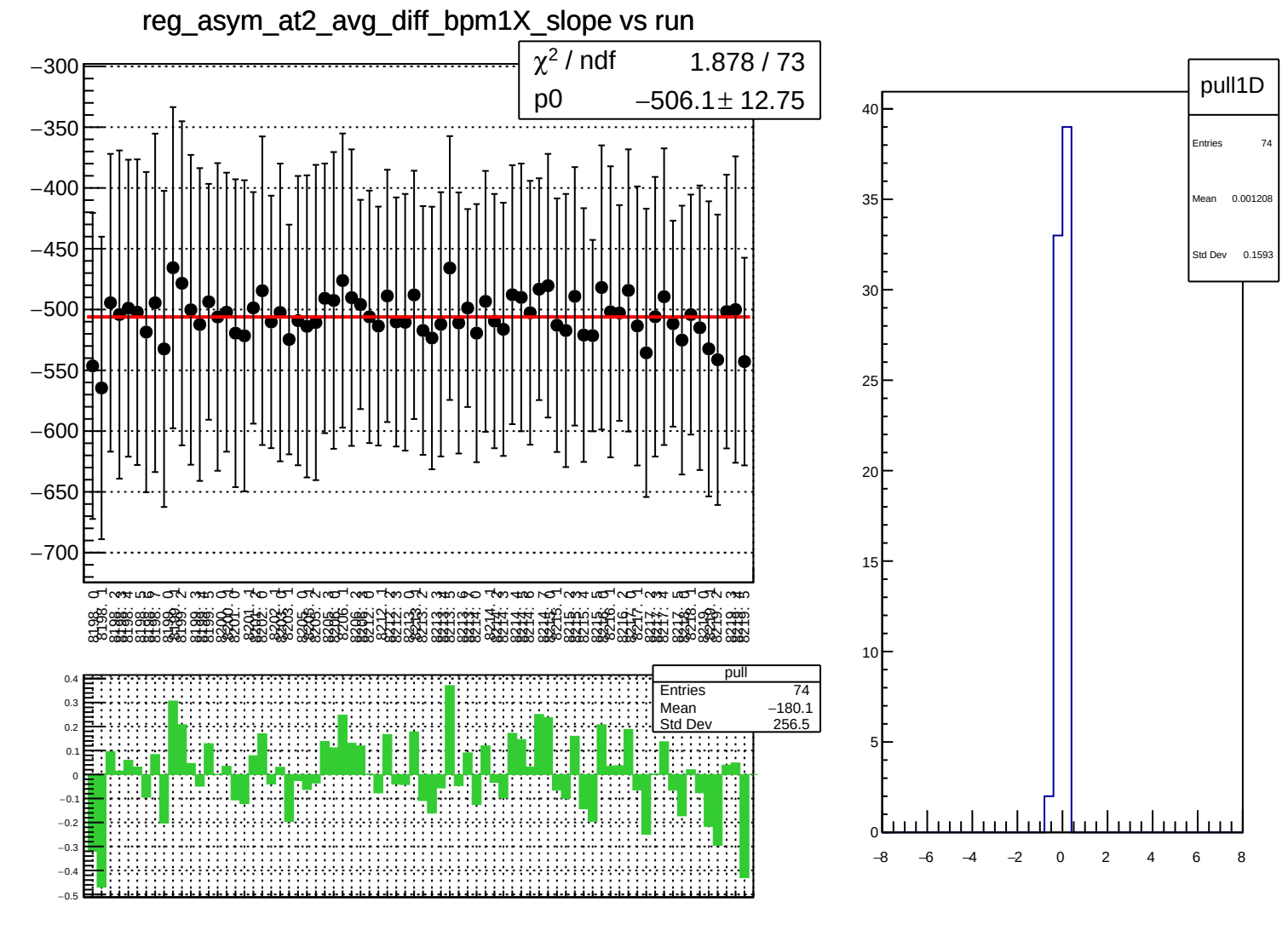

pull1D
Entries 74
Mean 0.0243
Std Dev 0.9899

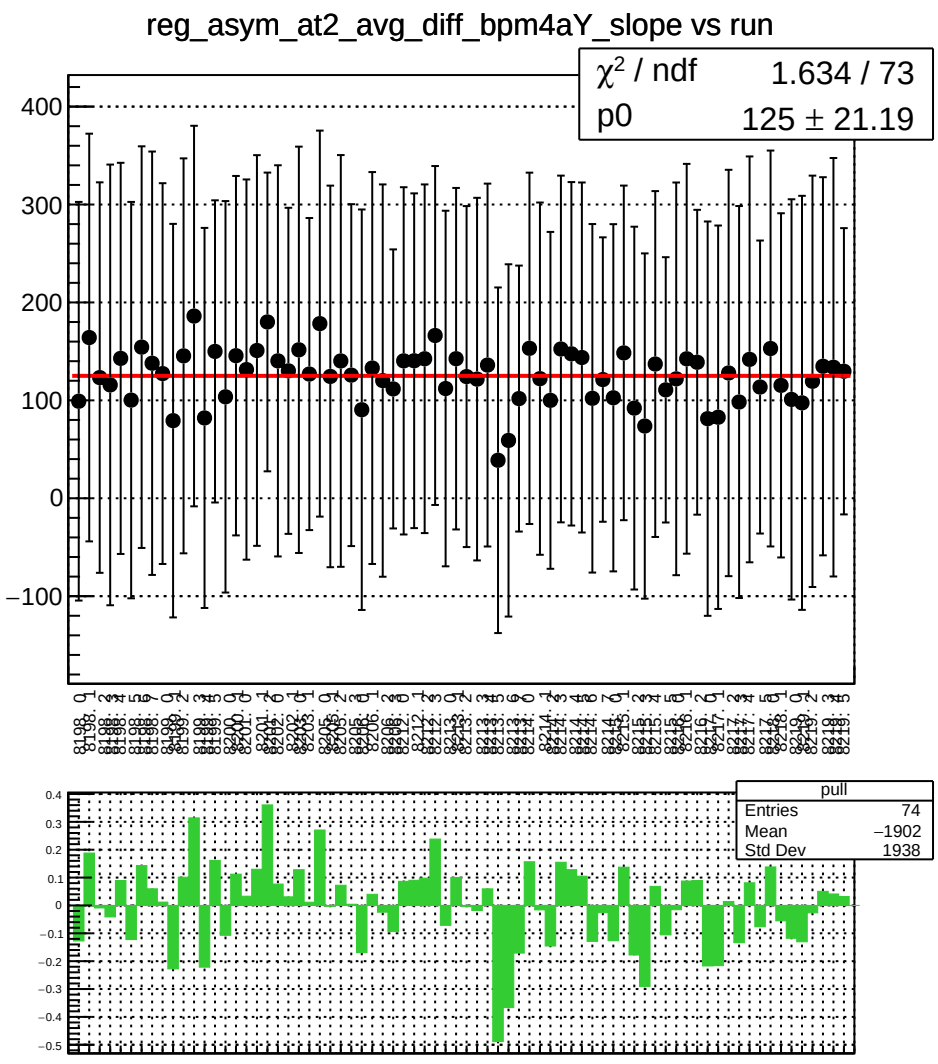

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 67.65 / 73
p0 −7.075 ± 3.434
pull
Entries 74
Mean −36.85
Std Dev 121.6

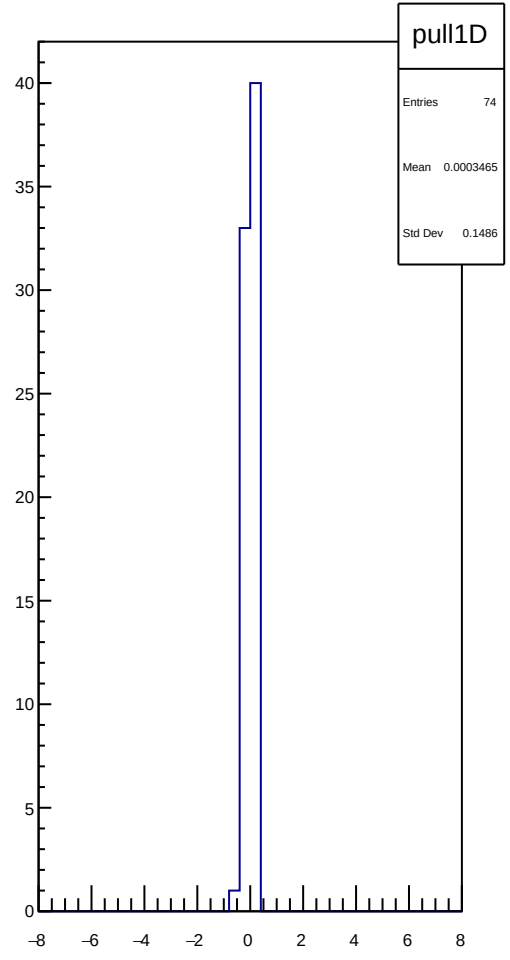

pull1D
Entries 74
Mean −0.009903
Std Dev 0.9561

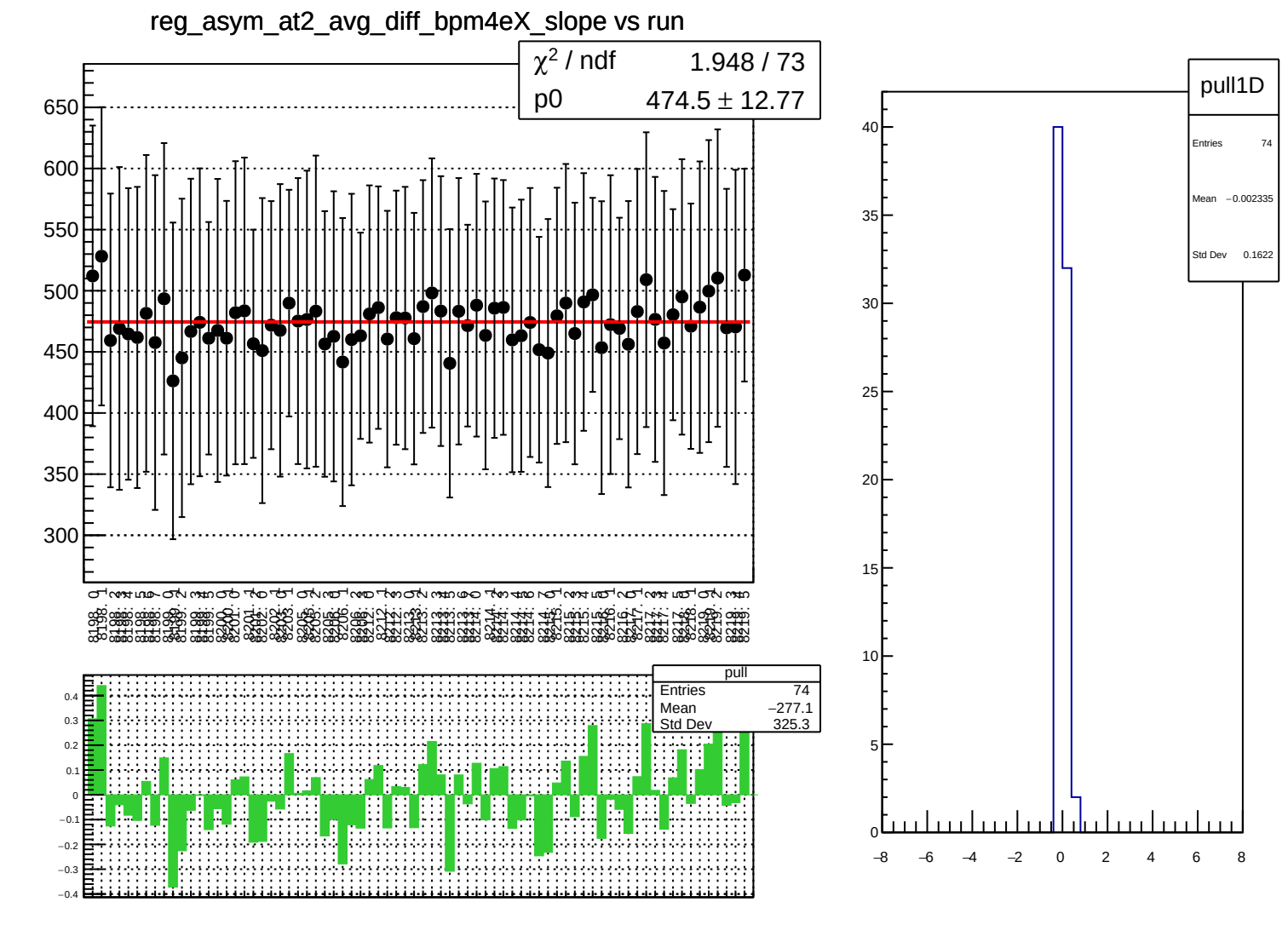

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 131.5 / 73
p0 29.33 ± 0.1556
pull
Entries 74
Mean −442
Std Dev 474.9

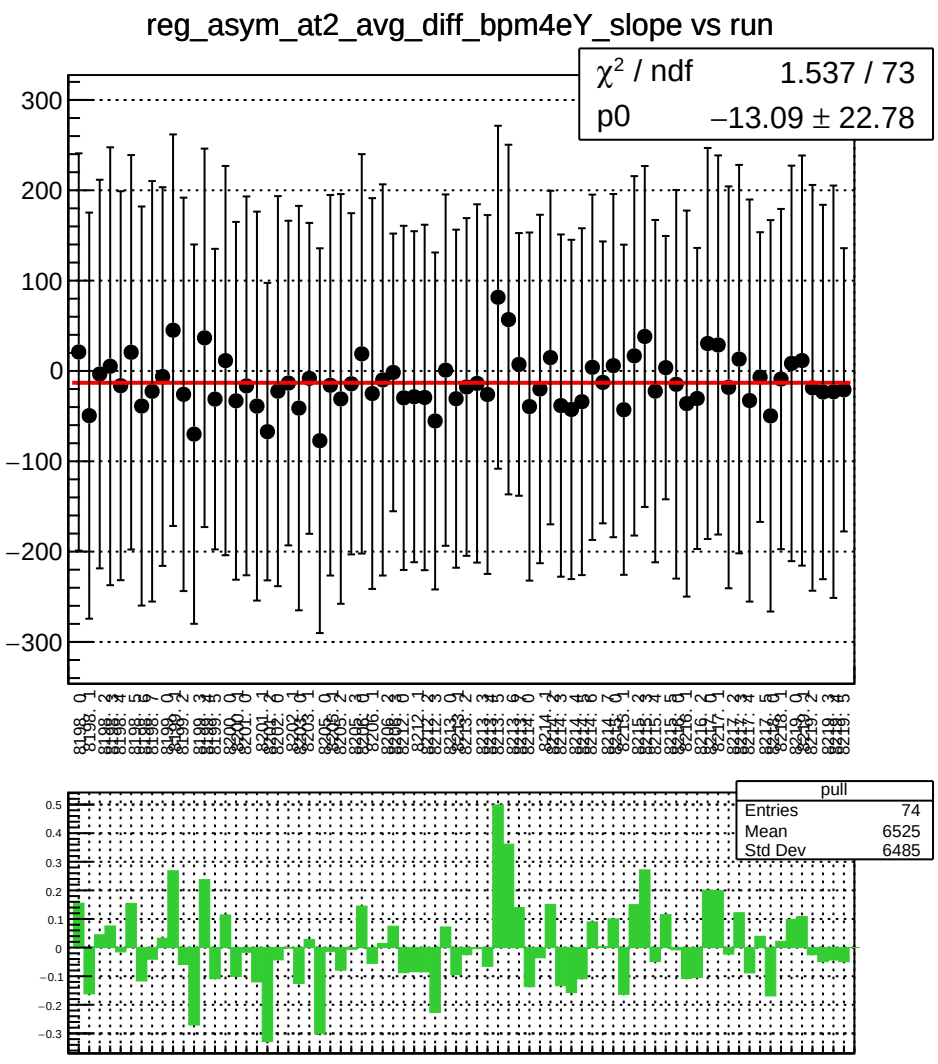

pull1D
Entries 74
Mean 0.0326
Std Dev 1.333

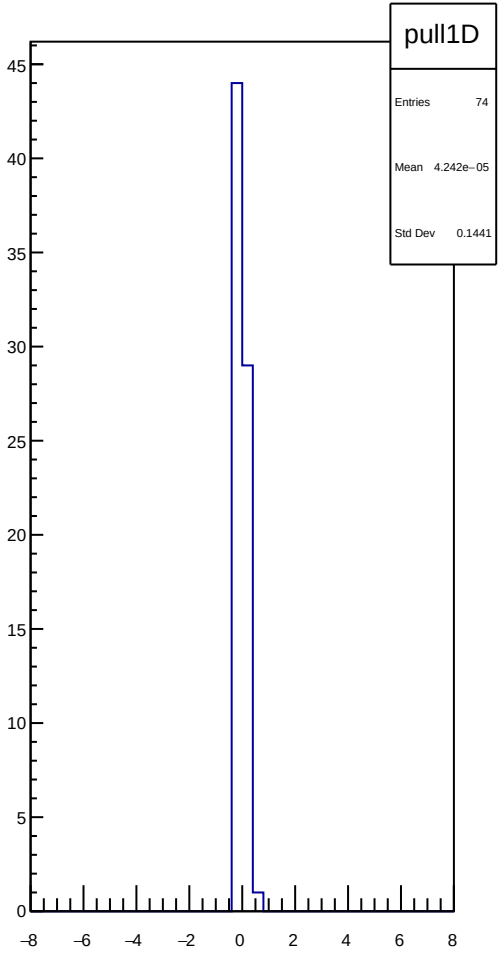

reg_asym_at2_avg_diff_bpm1X_slope vs run
χ² / ndf 1.878 / 73
p0 −506.1± 12.75
pull
Entries 74
Mean −180.1
Std Dev 256.5
pull1D
Entries 74
Mean 0.001208
Std Dev 0.1593

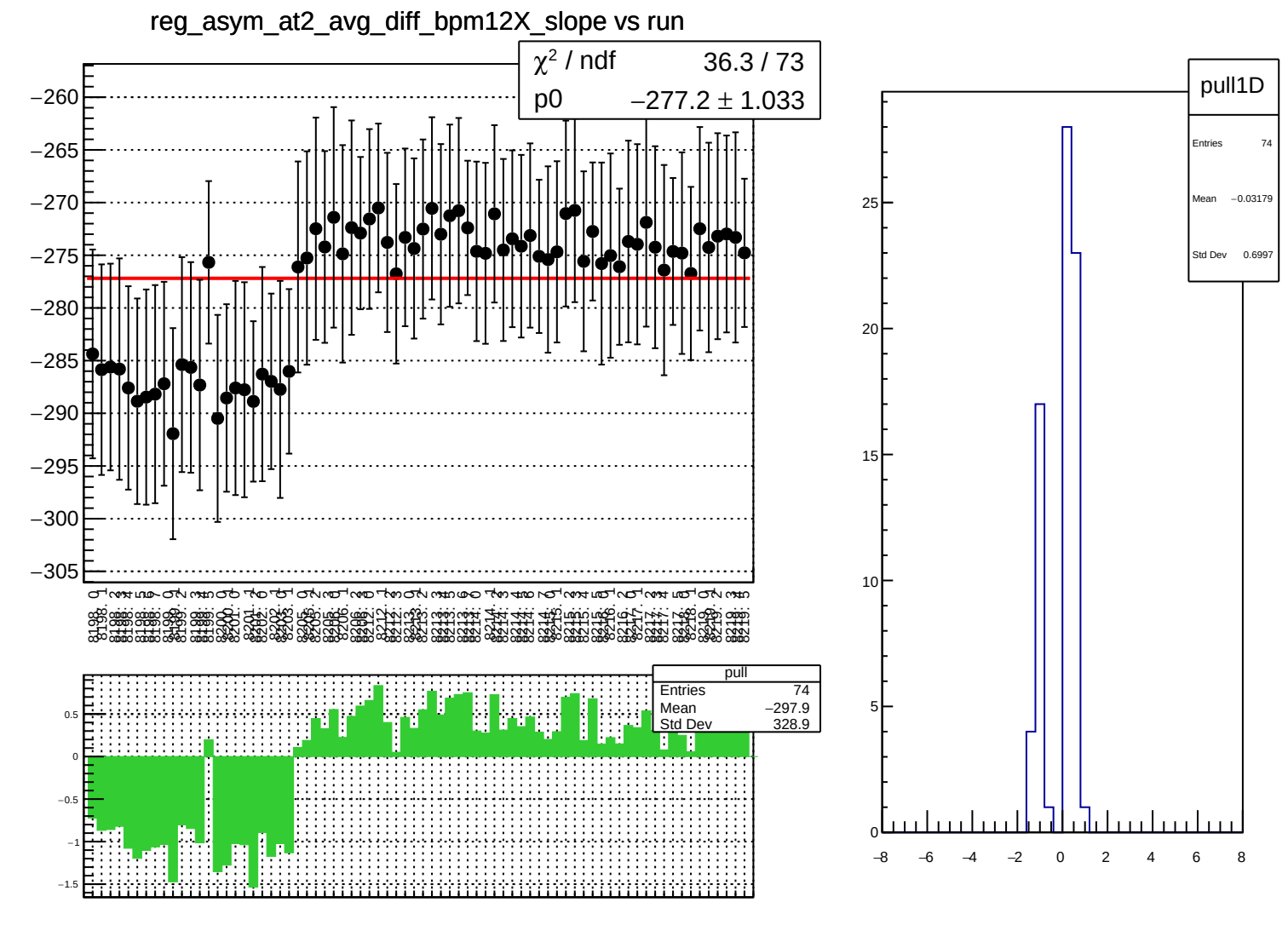

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 1.634 / 73
p0 125 ± 21.19
400
300
200
100
0
−100
pull
Entries 74
Mean −1902
Std Dev 1938
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

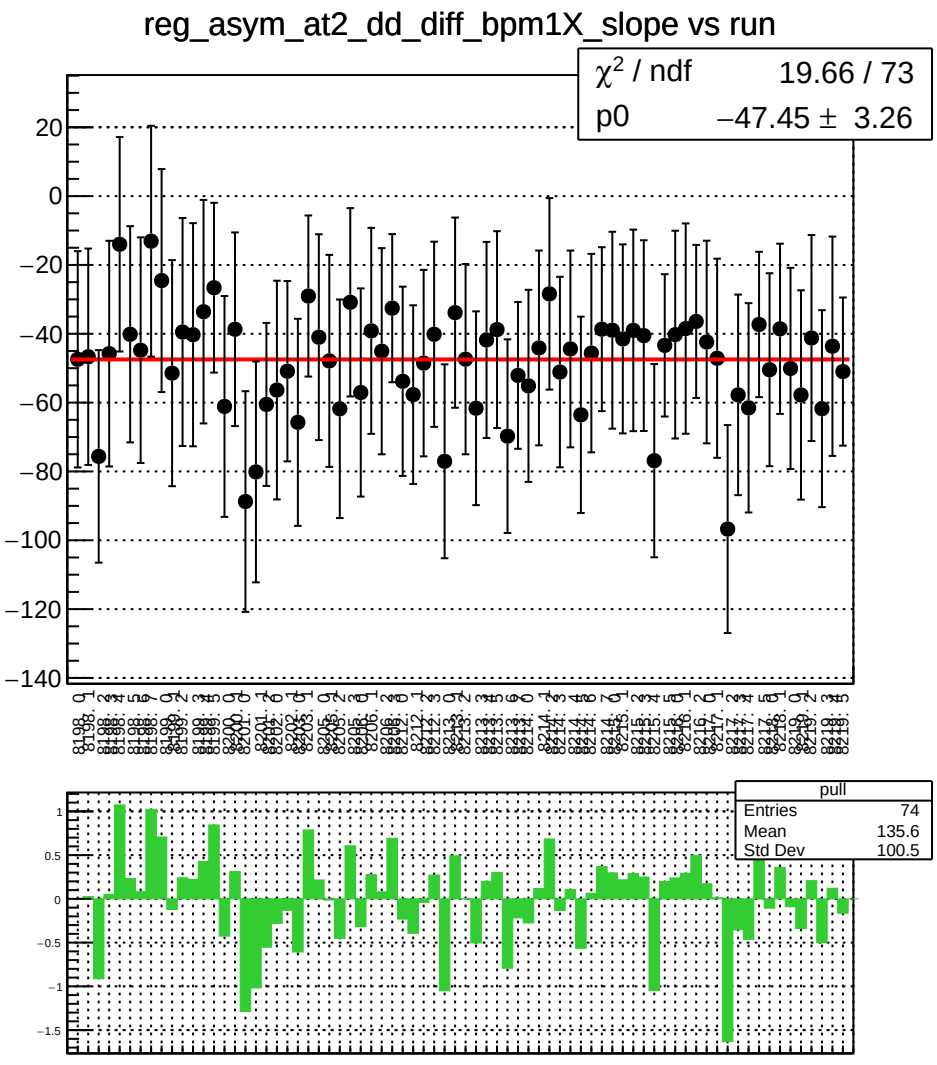

pull1D
Entries 74
Mean 0.0003465
Std Dev 0.1486
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

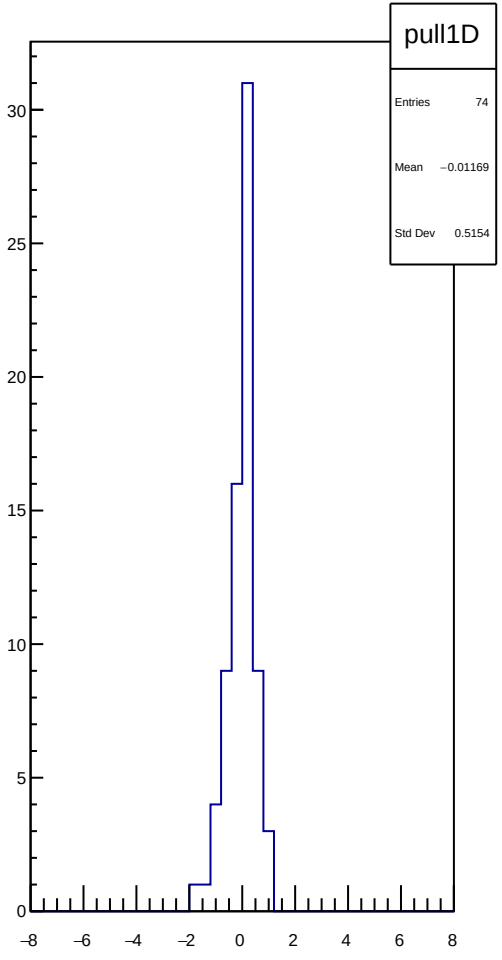

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.948 / 73
p0 474.5 ± 12.77
650
600
550
500
450
400
350
300
pull
Entries 74
Mean −277.1
Std Dev 325.3
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
pull1D
Entries 74
Mean −0.002335
Std Dev 0.1622
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

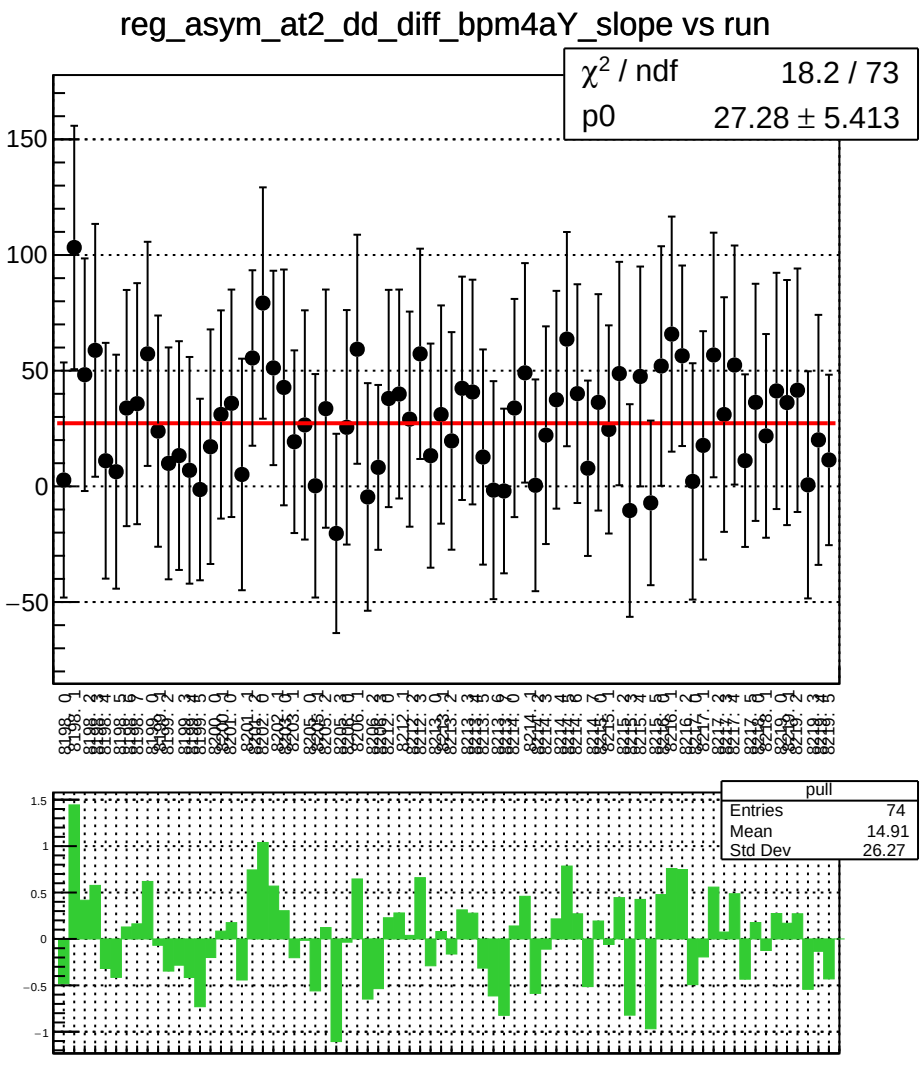

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.537 / 73
p0 −13.09 ± 22.78
pull
Entries 74
Mean 6525
Std Dev 6485

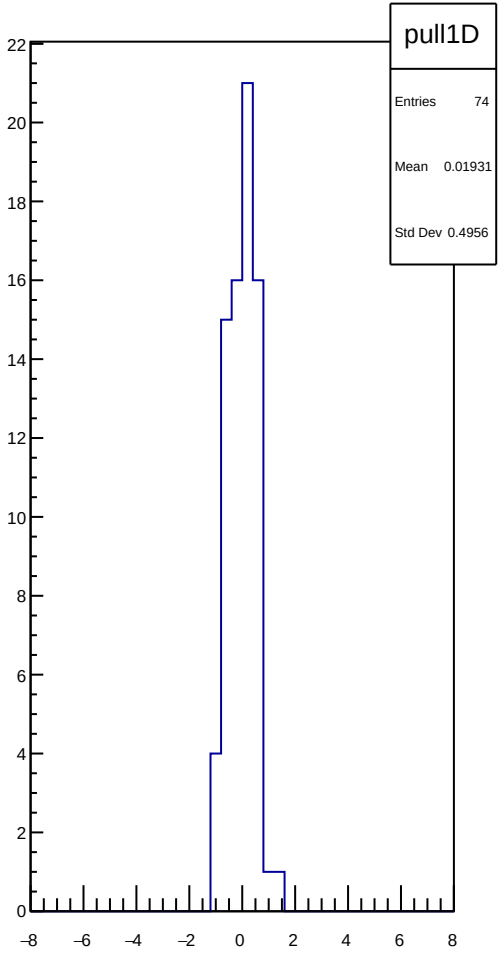

pull1D
Entries 74
Mean 4.242e−05
Std Dev 0.1441

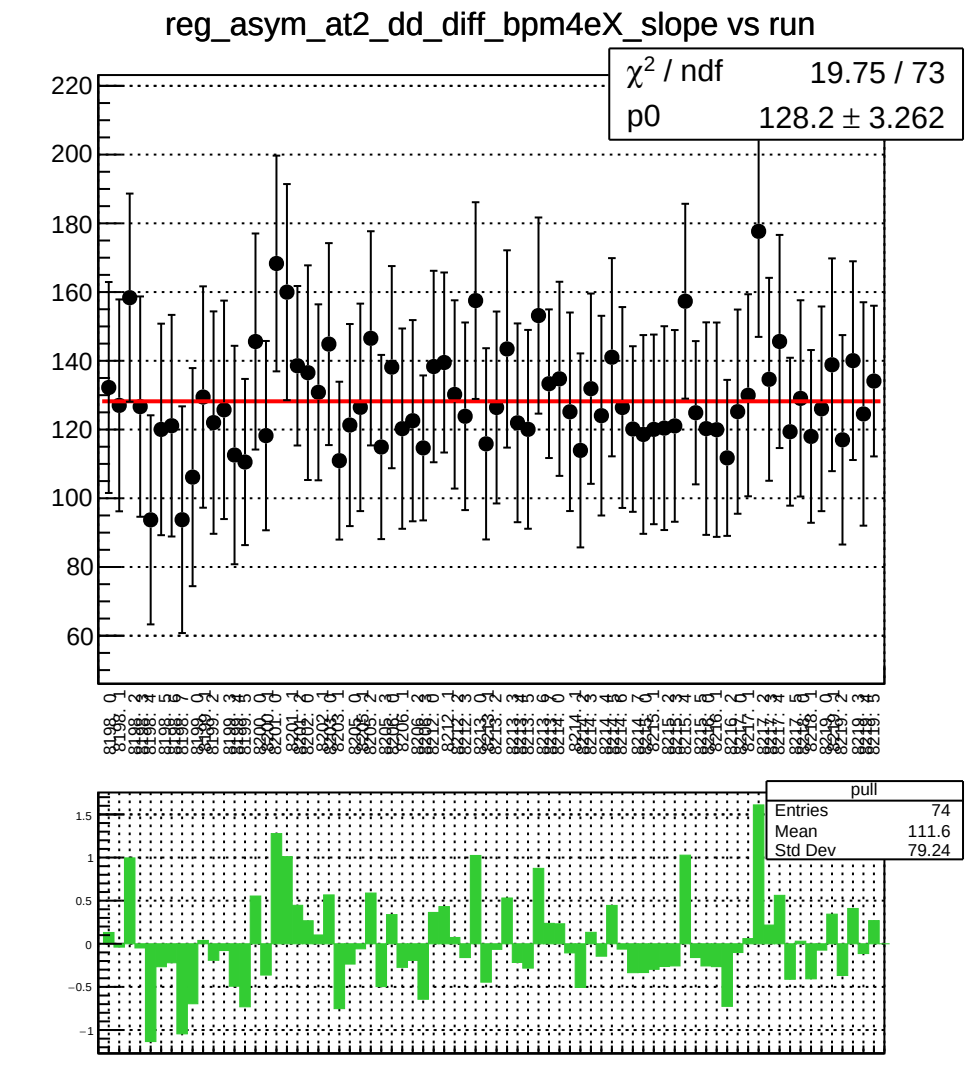

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 36.3 / 73
p0 −277.2 ± 1.033
pull
Entries 74
Mean −297.9
Std Dev 328.9
pull1D
Entries 74
Mean −0.03179
Std Dev 0.6997

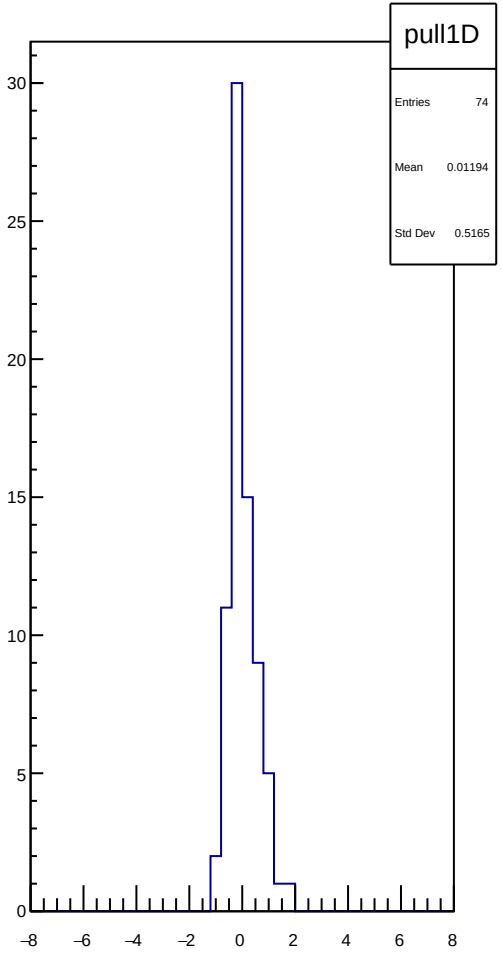

reg_asym_at2_dd_diff_bpm1X_slope vs run
χ² / ndf 19.66 / 73
p0 −47.45 ± 3.26
pull
Entries 74
Mean 135.6
Std Dev 100.5

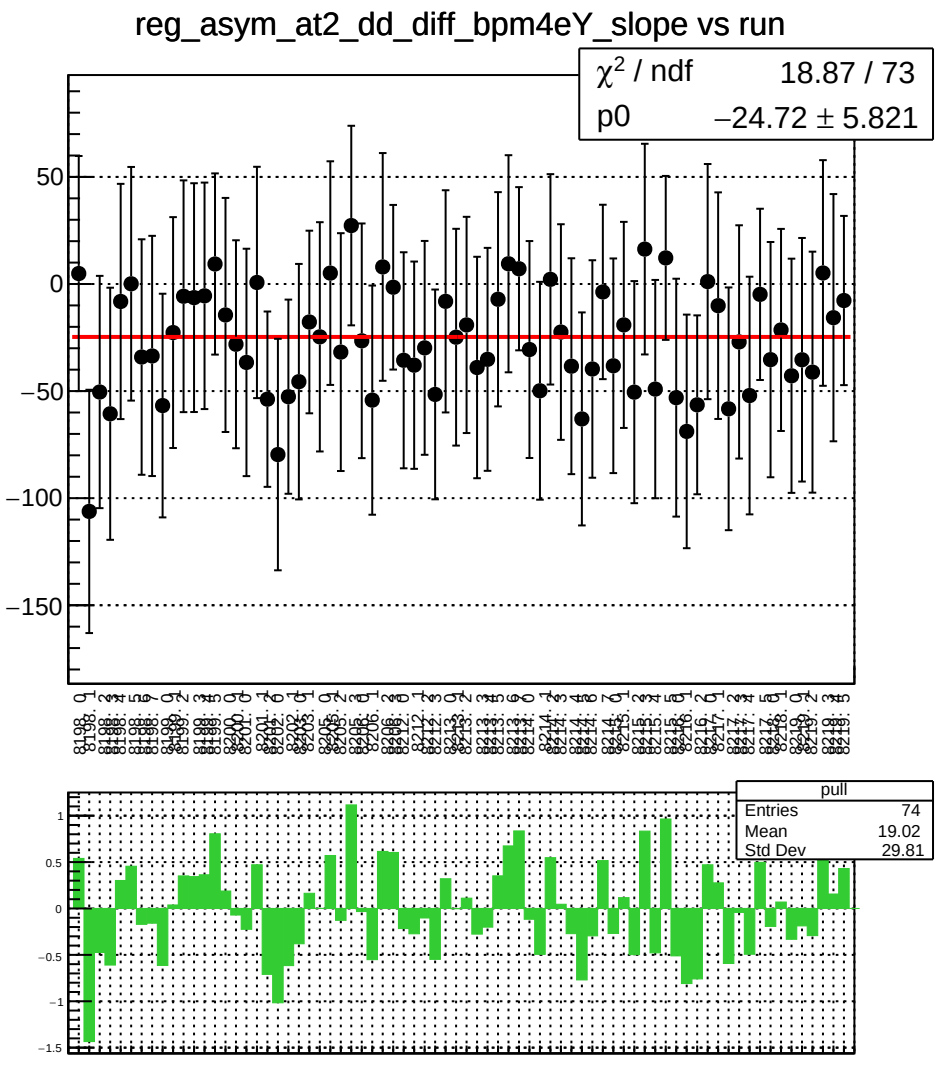

pull1D
Entries 74
Mean −0.01169
Std Dev 0.5154

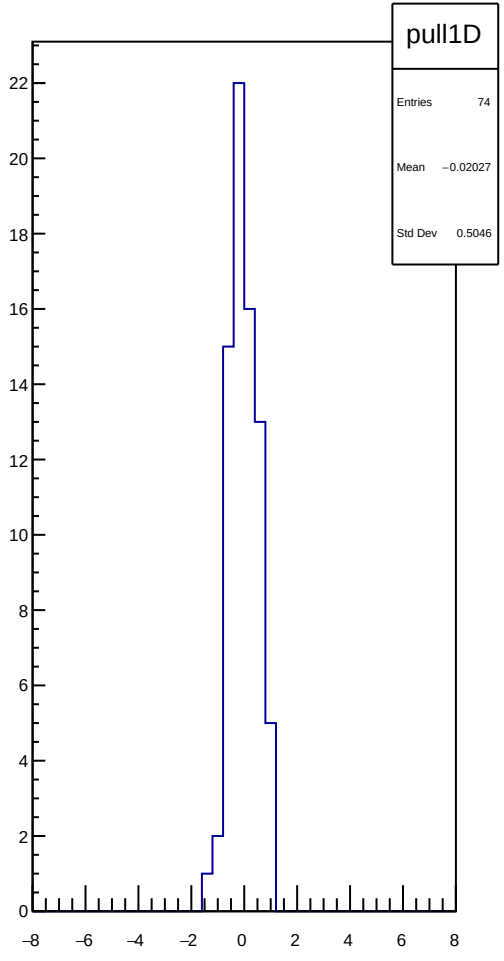

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 18.2 / 73
p0 27.28 ± 5.413
150
100
50
0
−50
pull
Entries 74
Mean 14.91
Std Dev 26.27
1.5
1
0.5
0
−0.5
−1

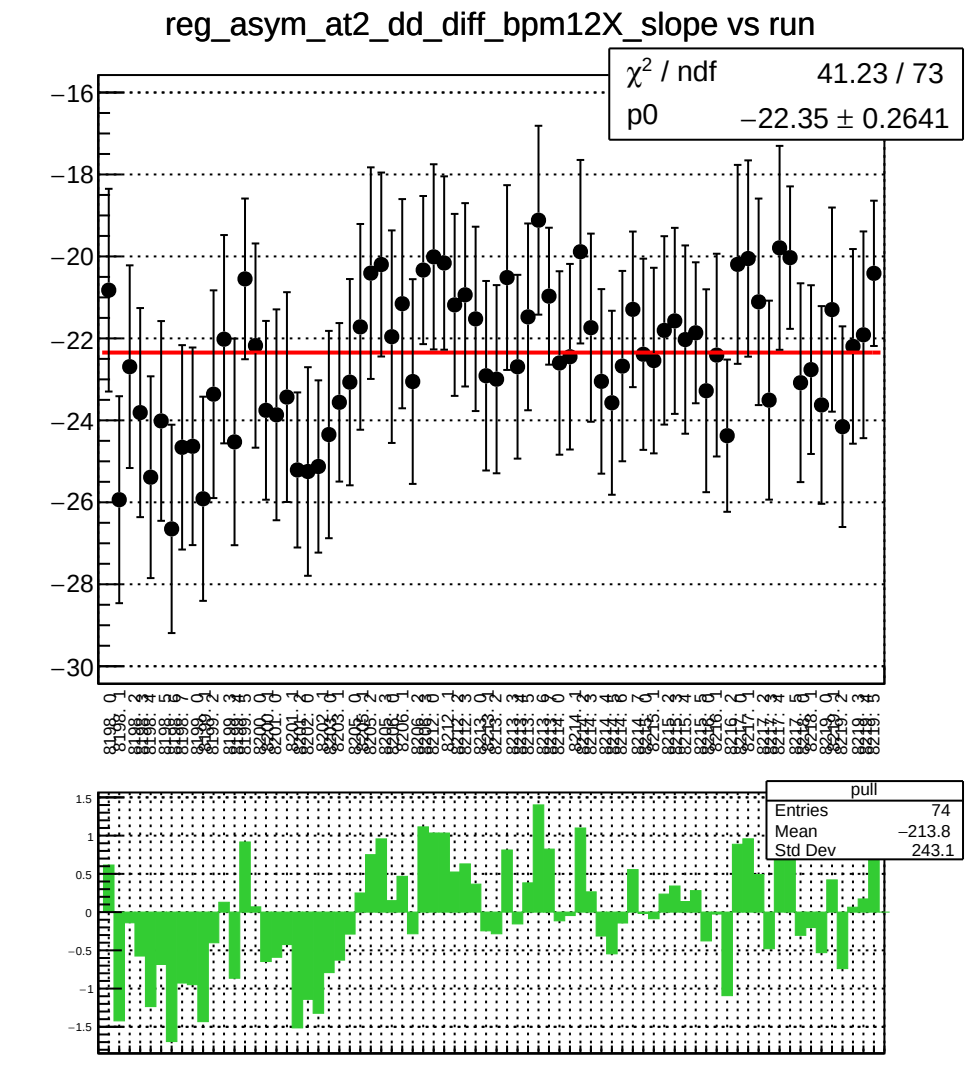

pull1D
Entries 74
Mean 0.01931
Std Dev 0.4956
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

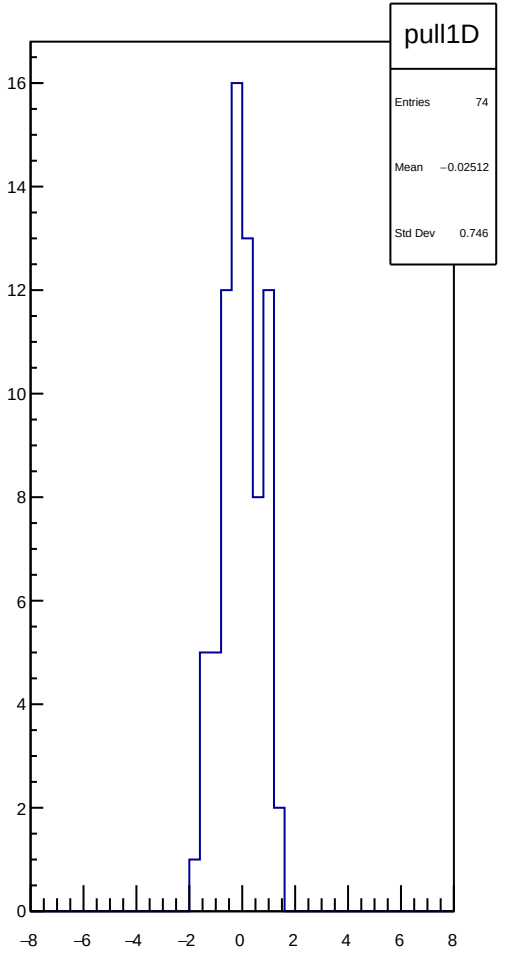

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 19.75 / 73
p0 128.2 ± 3.262
pull
Entries 74
Mean 111.6
Std Dev 79.24

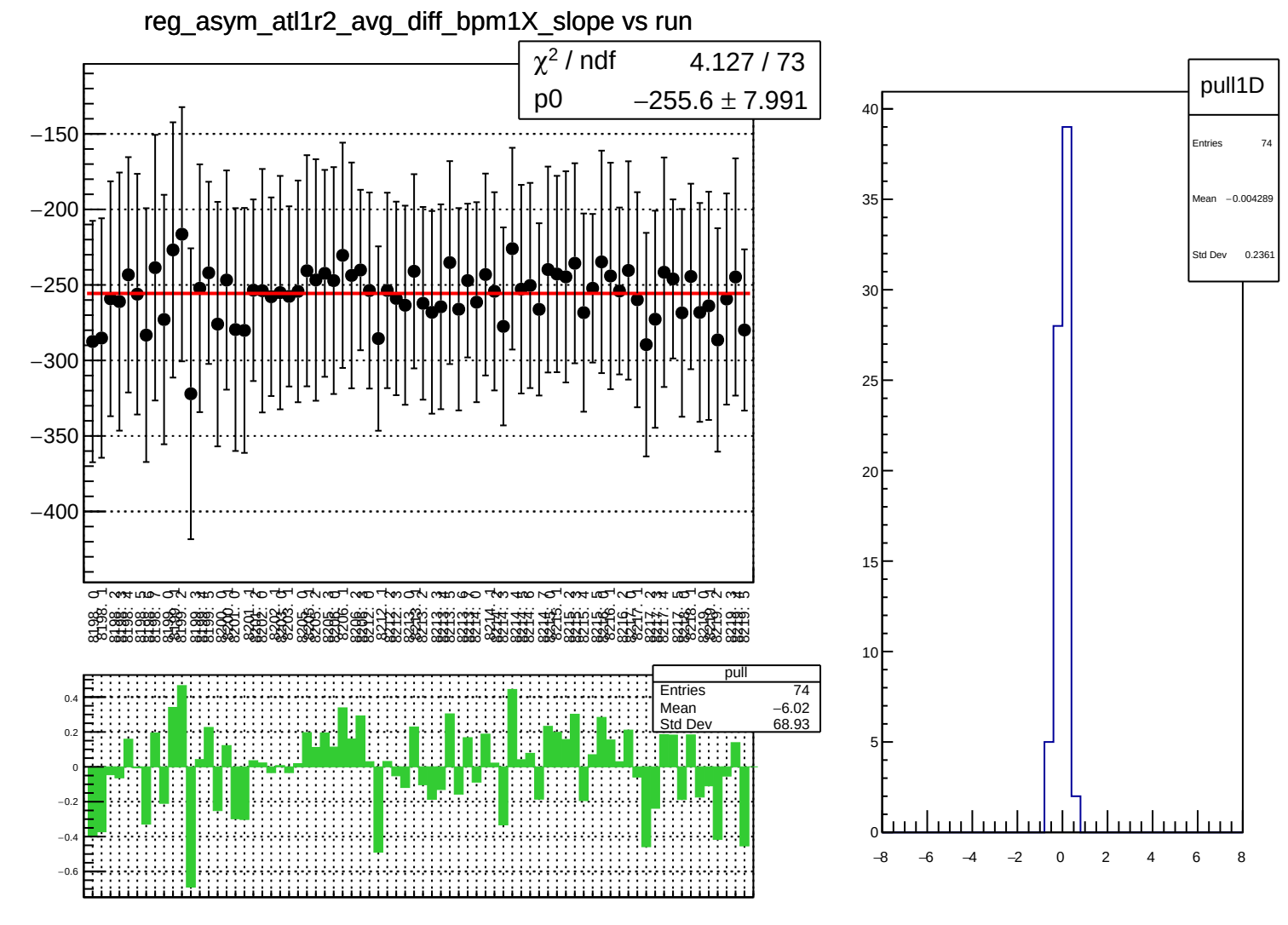

pull1D
Entries 74
Mean 0.01194
Std Dev 0.5165

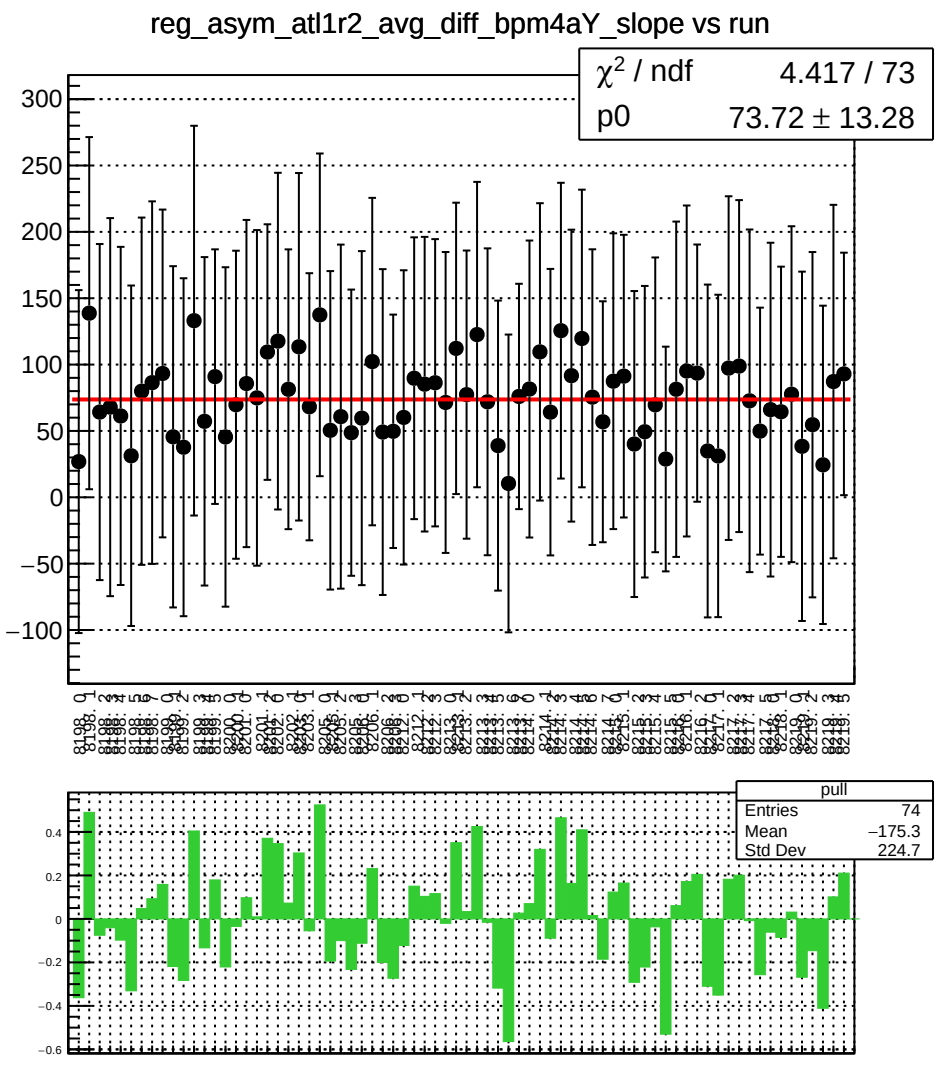

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 18.87 / 73
p0 −24.72 ± 5.821
50
0
−50
−100
−150
pull
Entries 74
Mean 19.02
Std Dev 29.81
1
0.5
0
−0.5
−1
−1.5

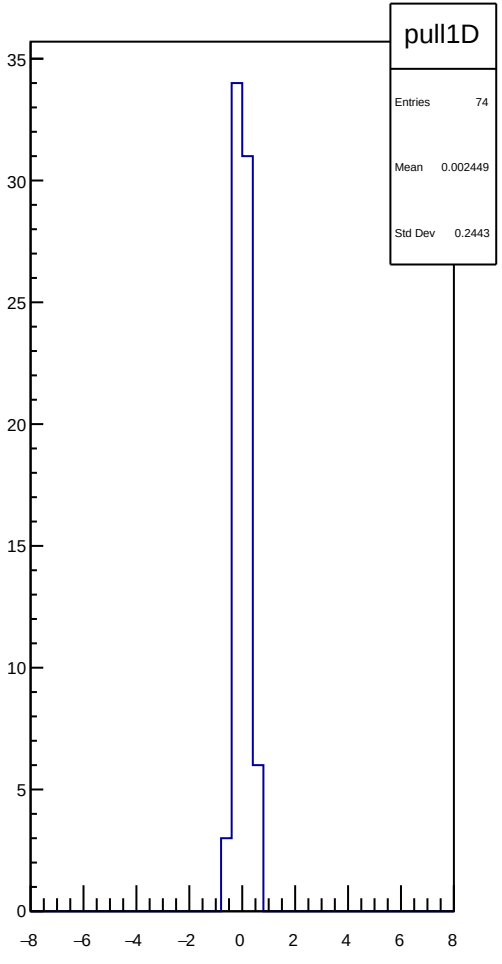

pull1D
Entries 74
Mean −0.02027
Std Dev 0.5046
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

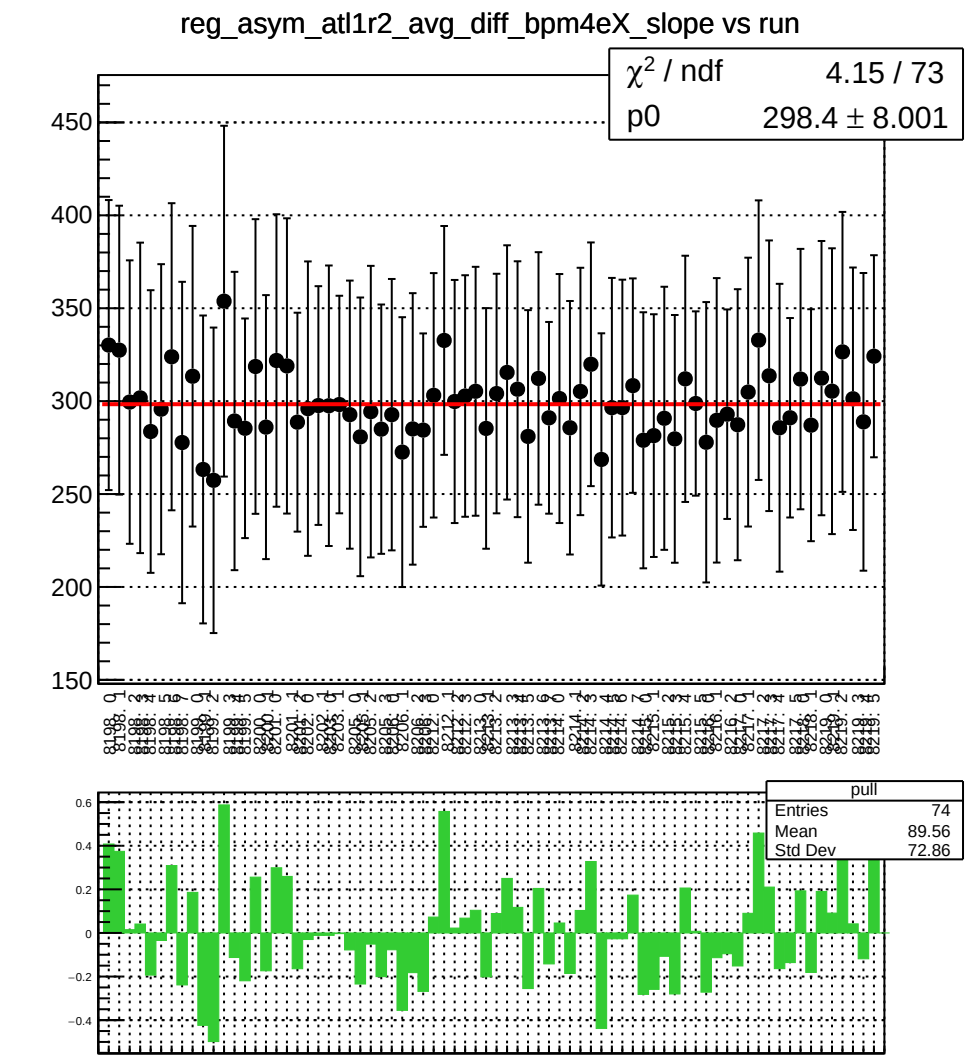

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 41.23 / 73
p0 −22.35 ± 0.2641
pull
Entries 74
Mean −213.8
Std Dev 243.1

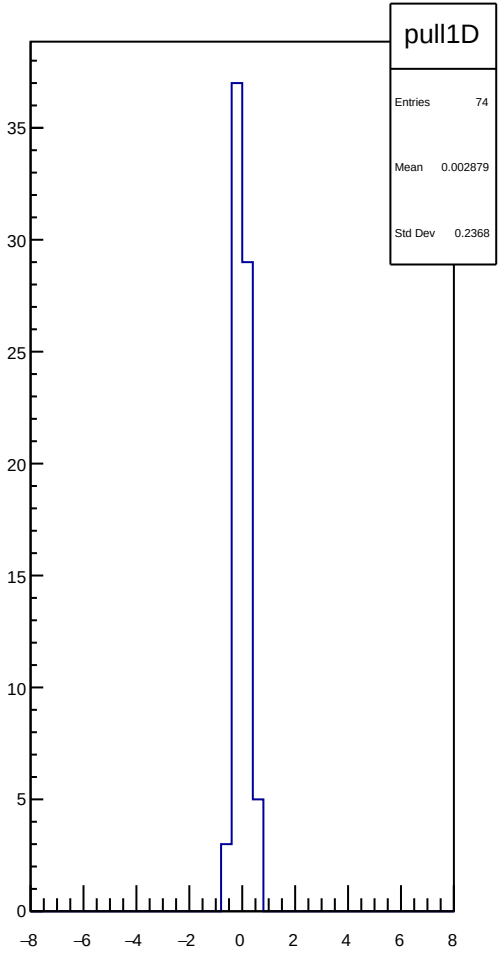

pull1D
Entries 74
Mean −0.02512
Std Dev 0.746

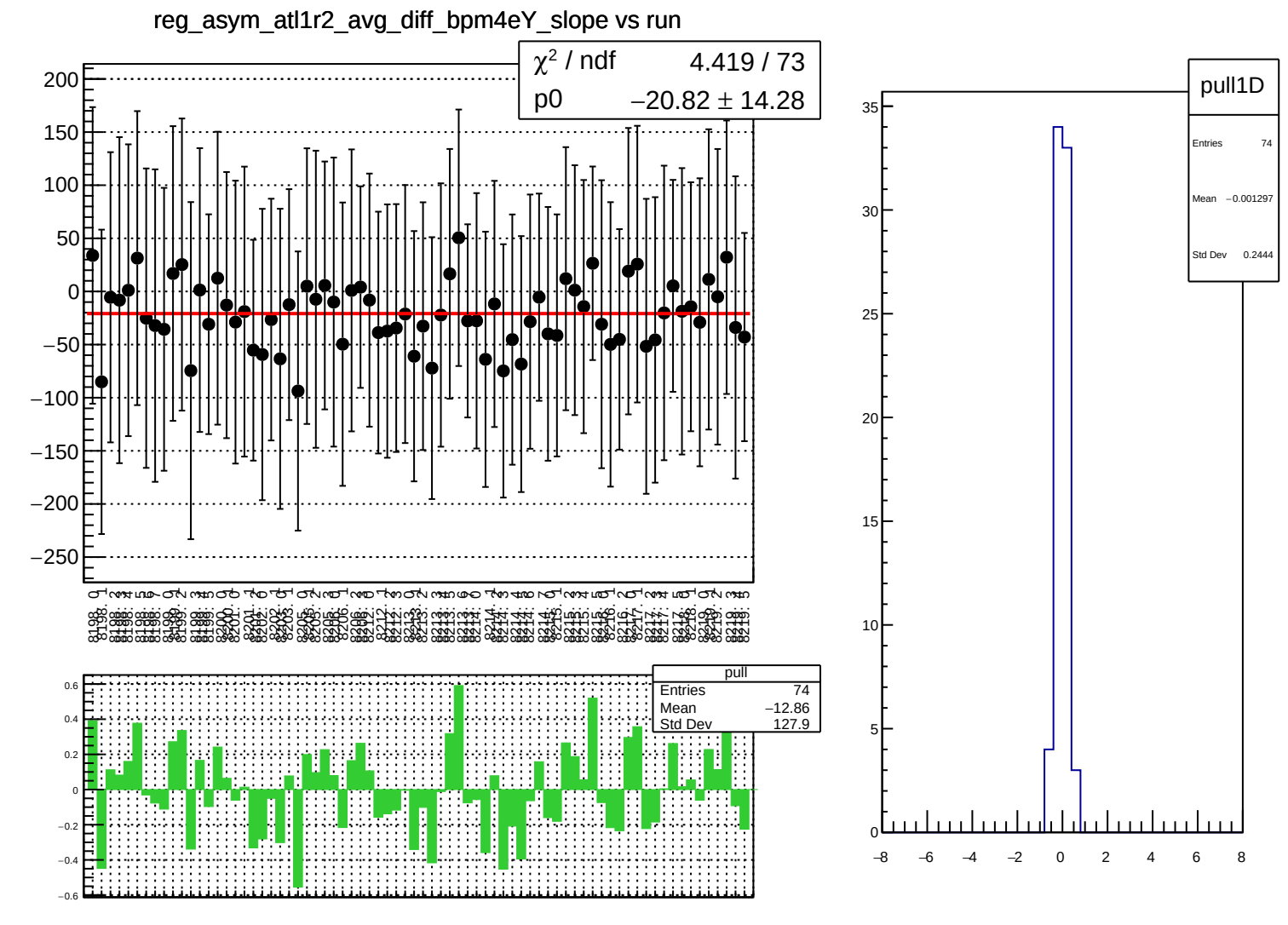

reg_asym_atl1r2_avg_diff_bpm1X_slope vs run
χ² / ndf 4.127 / 73
p0 −255.6 ± 7.991
pull
Entries 74
Mean −6.02
Std Dev 68.93
pull1D
Entries 74
Mean −0.004289
Std Dev 0.2361

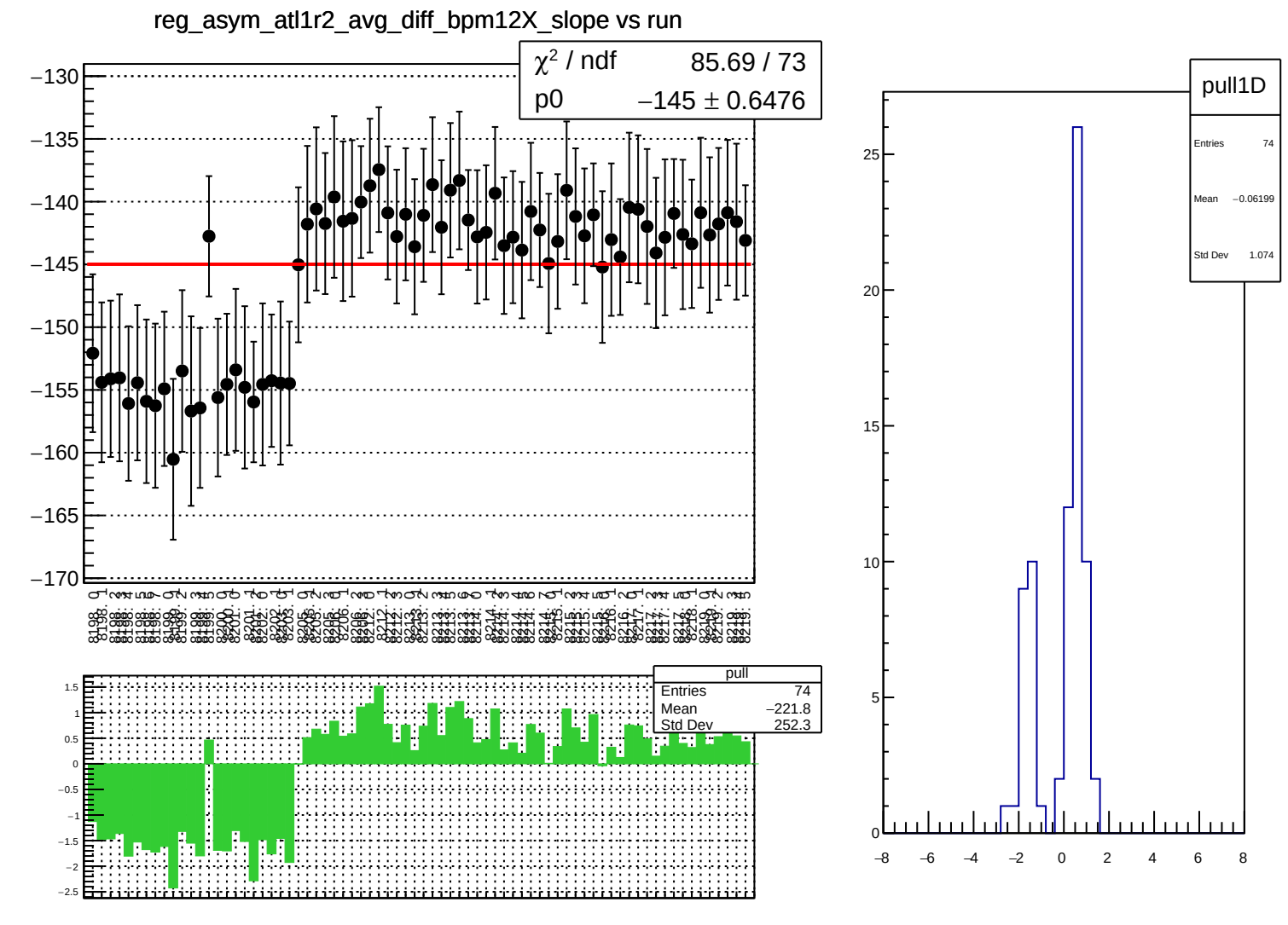

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.417 / 73
p0 73.72 ± 13.28
pull
Entries 74
Mean −175.3
Std Dev 224.7

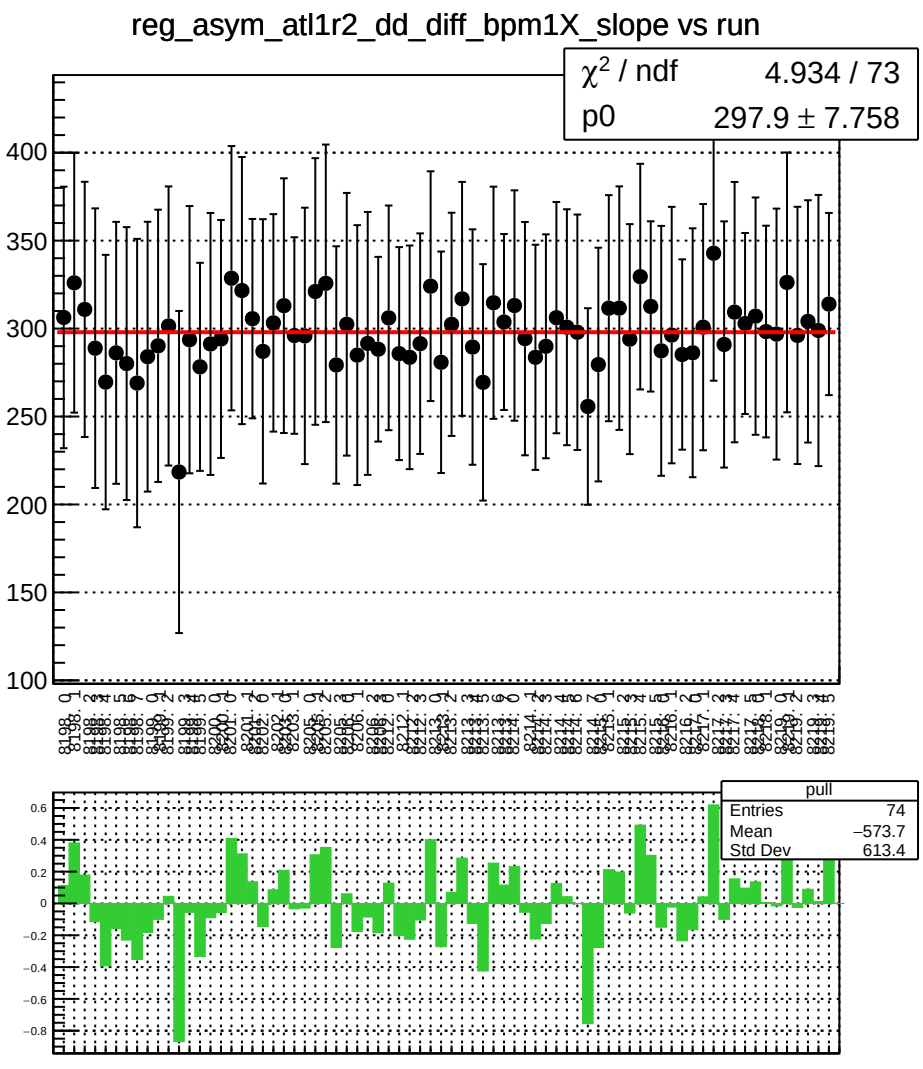

pull1D
Entries 74
Mean 0.002449
Std Dev 0.2443

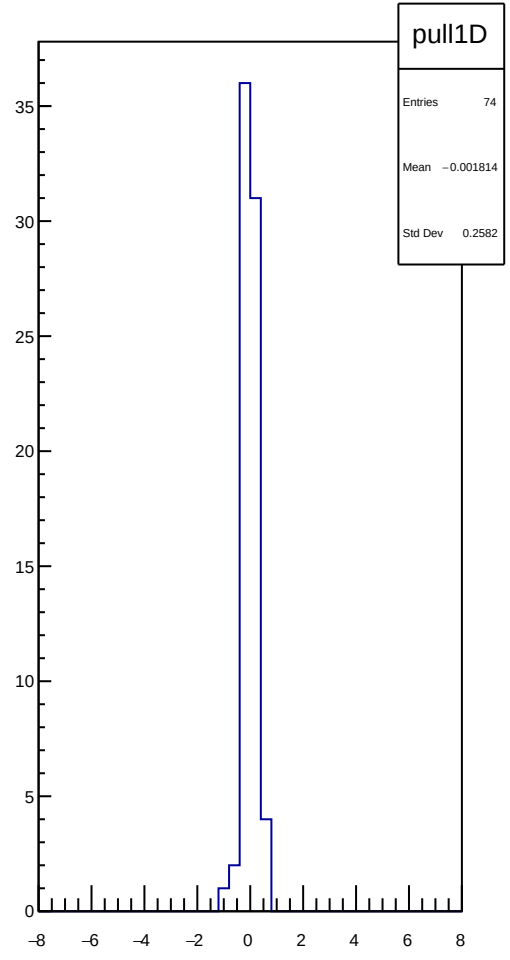

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 4.15 / 73
p0 298.4 ± 8.001
pull
Entries 74
Mean 89.56
Std Dev 72.86

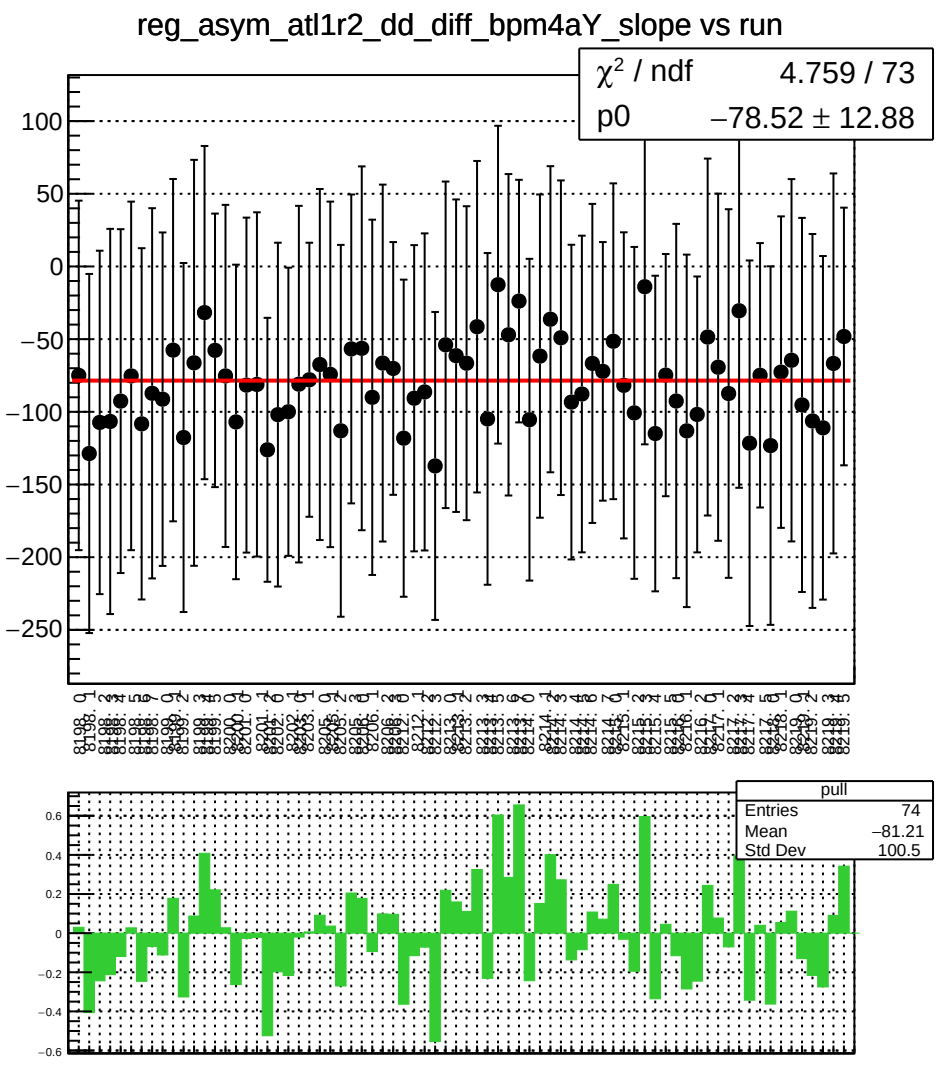

pull1D
Entries 74
Mean 0.002879
Std Dev 0.2368

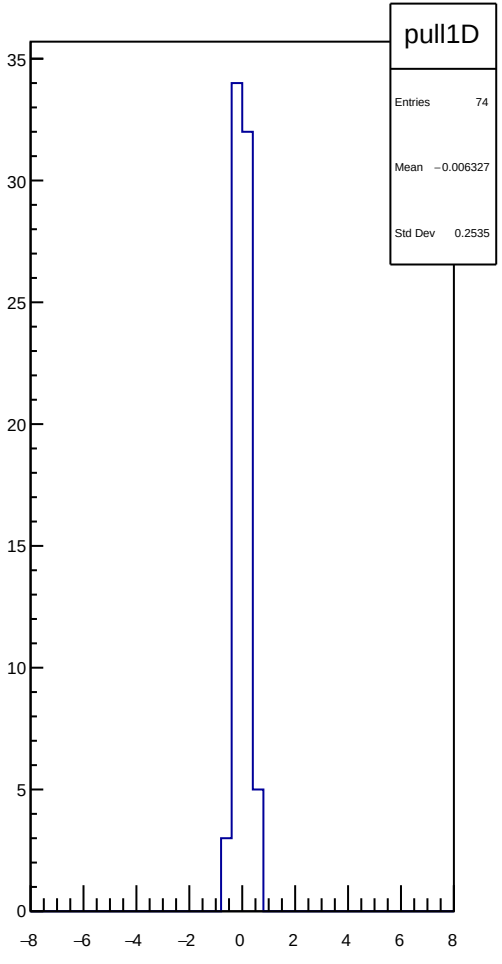

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.419 / 73
p0 −20.82 ± 14.28
pull
Entries 74
Mean −12.86
Std Dev 127.9
pull1D
Entries 74
Mean −0.001297
Std Dev 0.2444

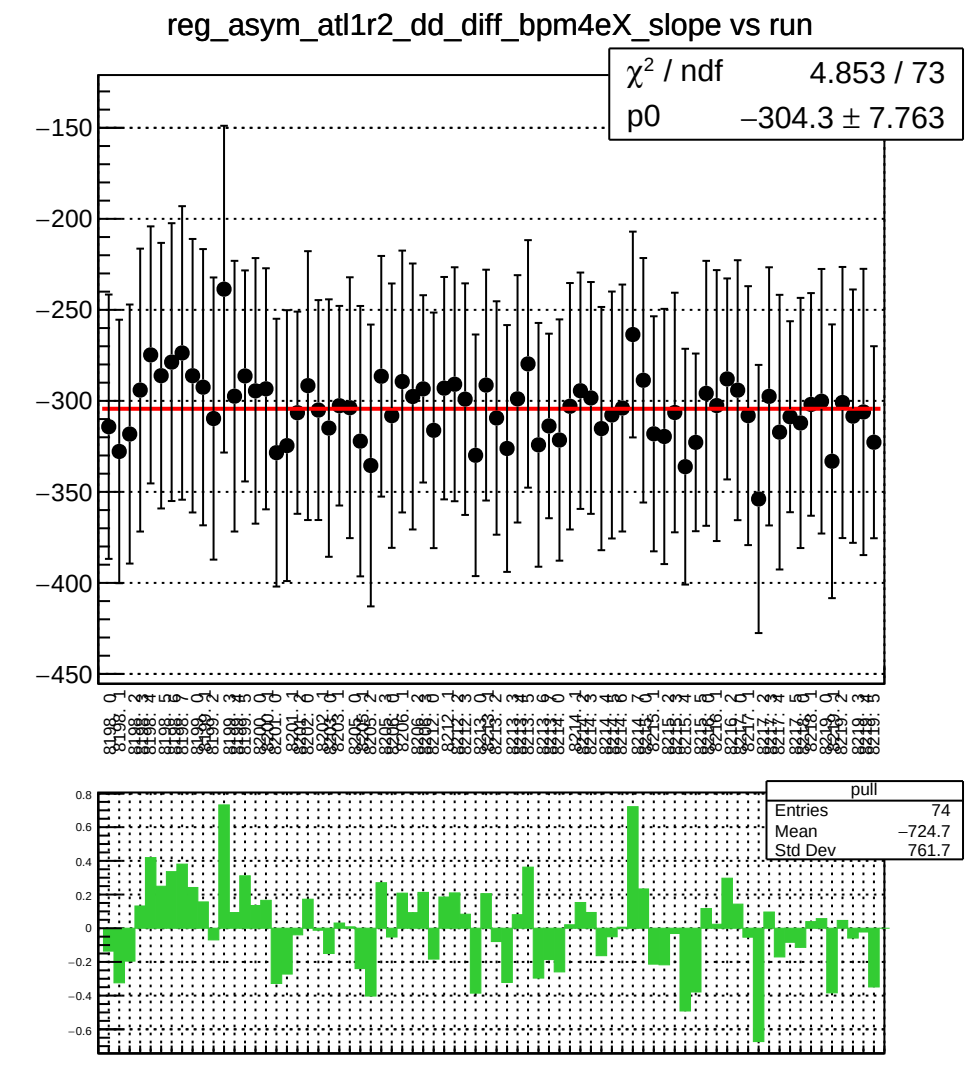

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 85.69 / 73
p0 −145 ± 0.6476
pull
Entries 74
Mean −221.8
Std Dev 252.3
pull1D
Entries 74
Mean −0.06199
Std Dev 1.074

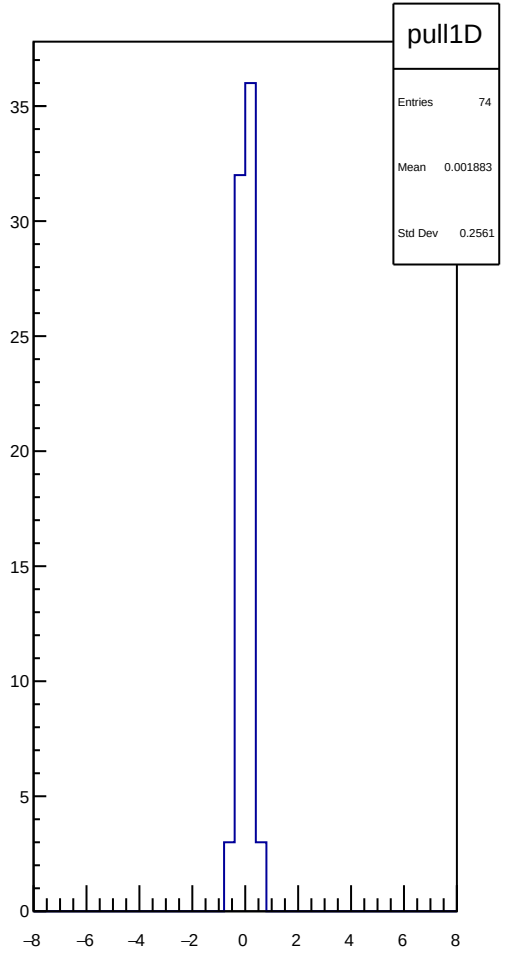

reg_asym_atl1r2_dd_diff_bpm1X_slope vs run
χ² / ndf 4.934 / 73
p0 297.9 ± 7.758
pull
Entries 74
Mean −573.7
Std Dev 613.4

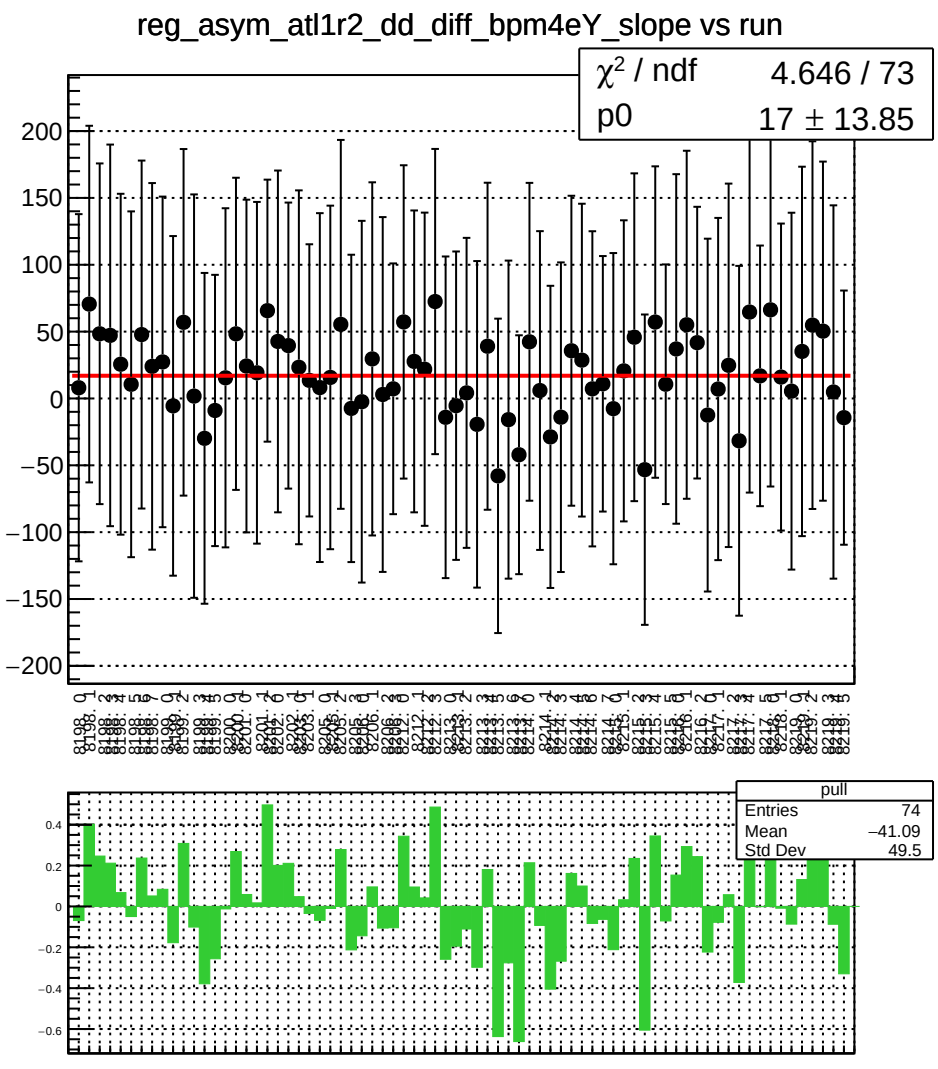

pull1D
Entries 74
Mean −0.001814
Std Dev 0.2582

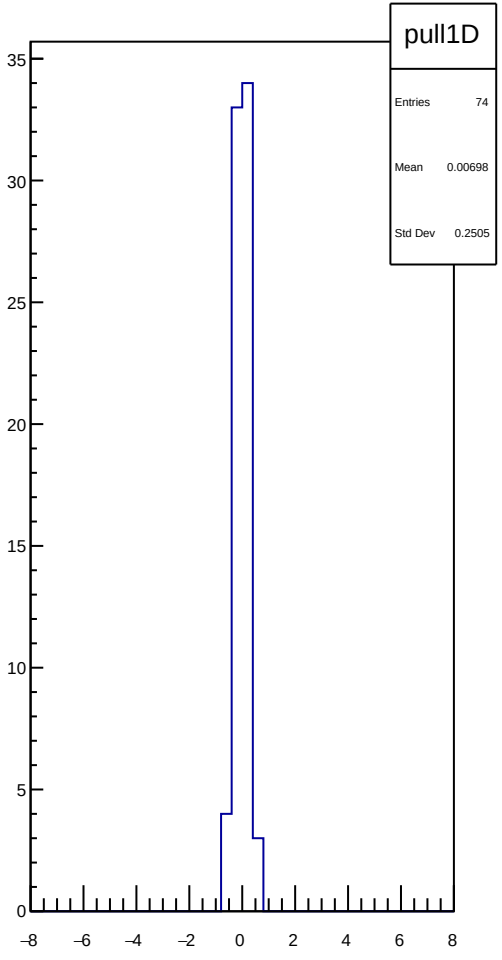

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.759 / 73
p0 −78.52 ± 12.88
pull
Entries 74
Mean −81.21
Std Dev 100.5

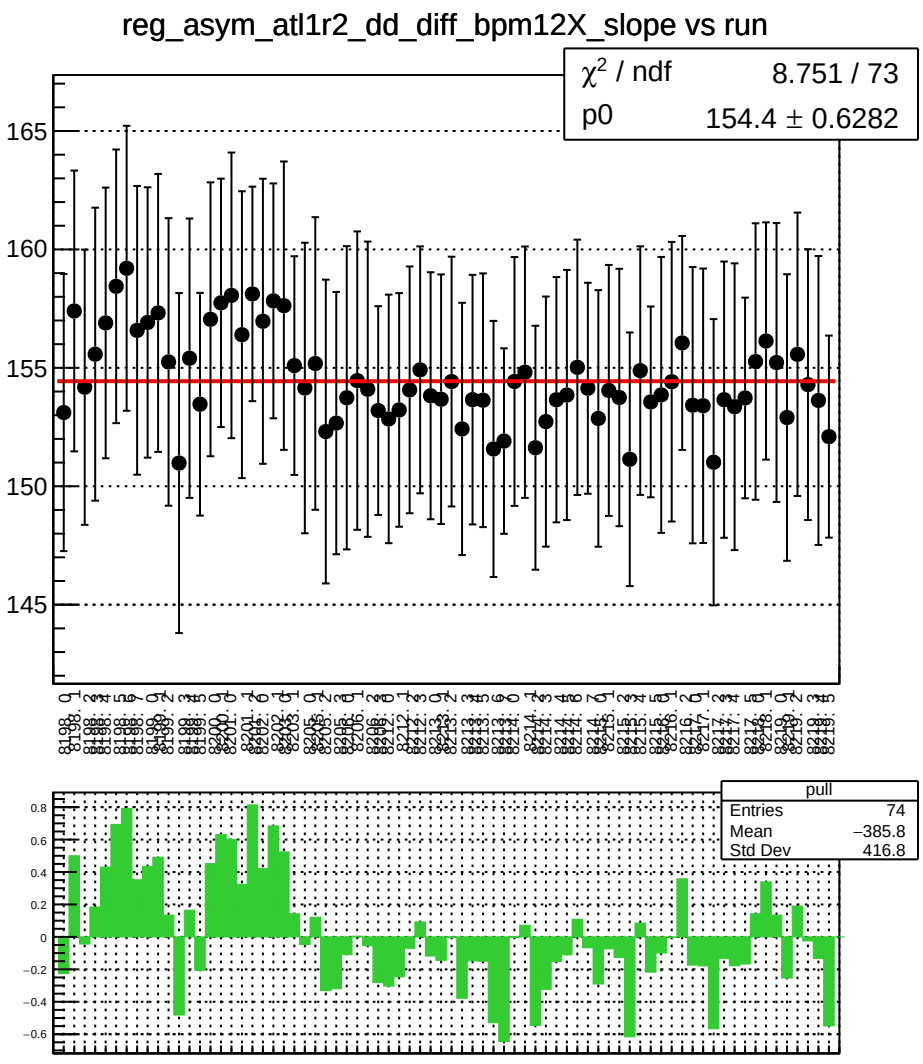

pull1D
Entries 74
Mean −0.006327
Std Dev 0.2535

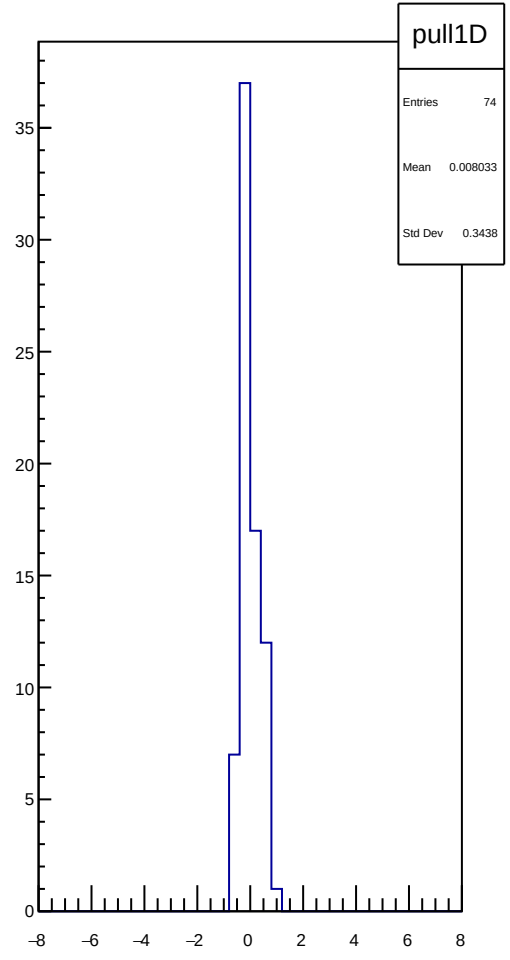

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 4.853 / 73
p0 −304.3 ± 7.763
pull
Entries 74
Mean −724.7
Std Dev 761.7

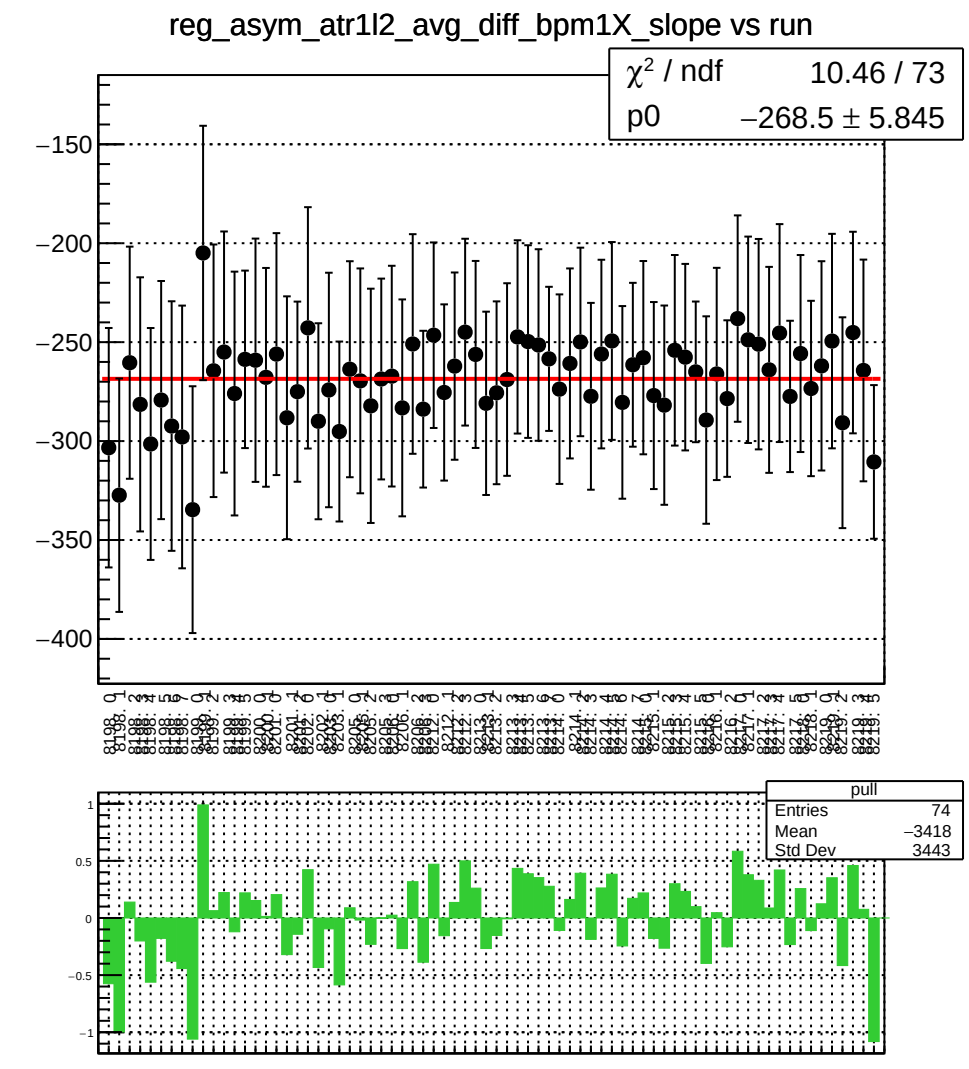

pull1D
Entries 74
Mean 0.001883
Std Dev 0.2561

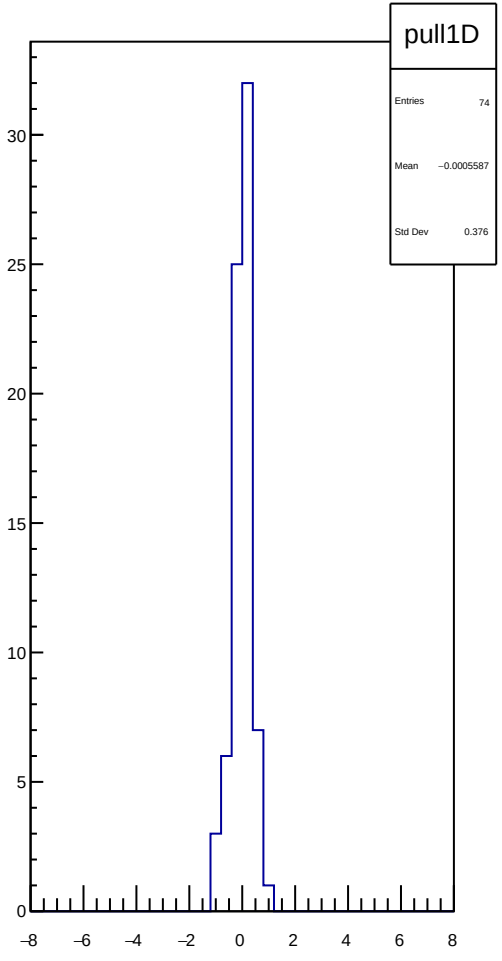

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 4.646 / 73
p0 17 ± 13.85
pull
Entries 74
Mean −41.09
Std Dev 49.5

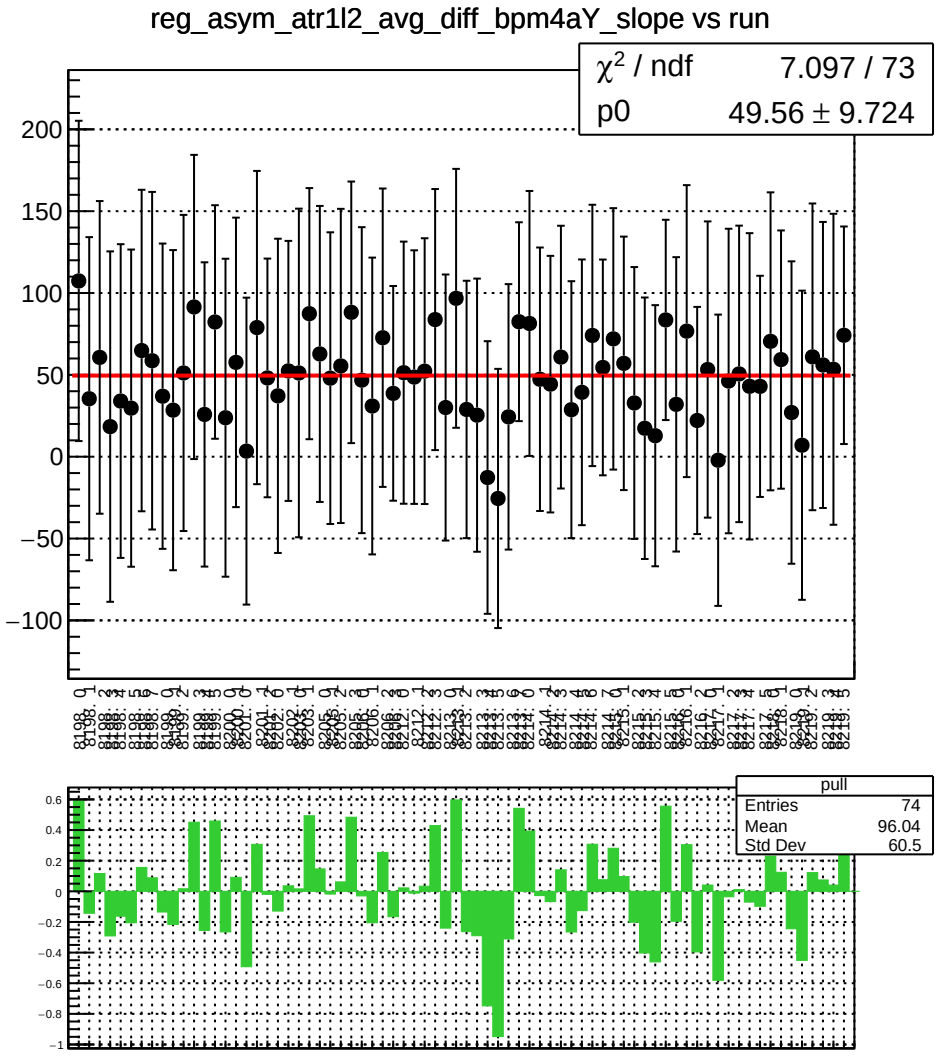

pull1D
Entries 74
Mean 0.00698
Std Dev 0.2505

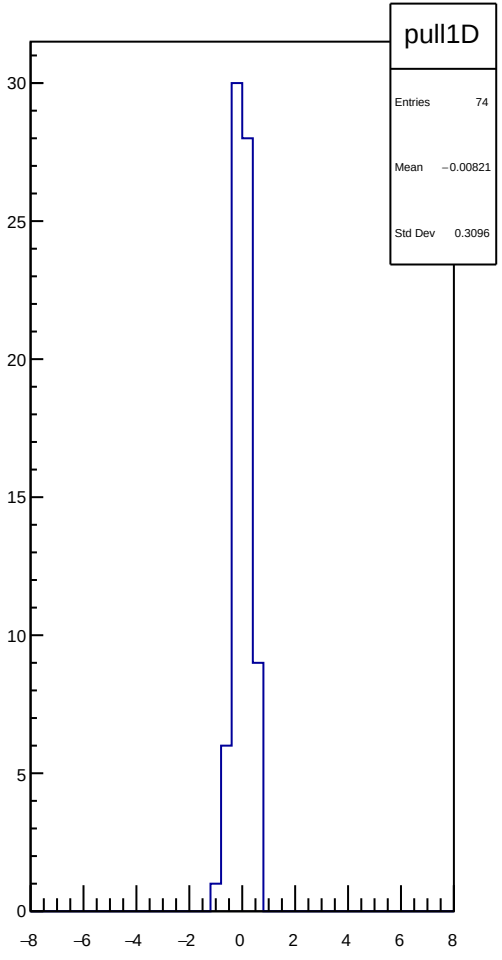

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 8.751 / 73
p0 154.4 ± 0.6282
165
160
155
150
145
pull
Entries 74
Mean −385.8
Std Dev 416.8
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

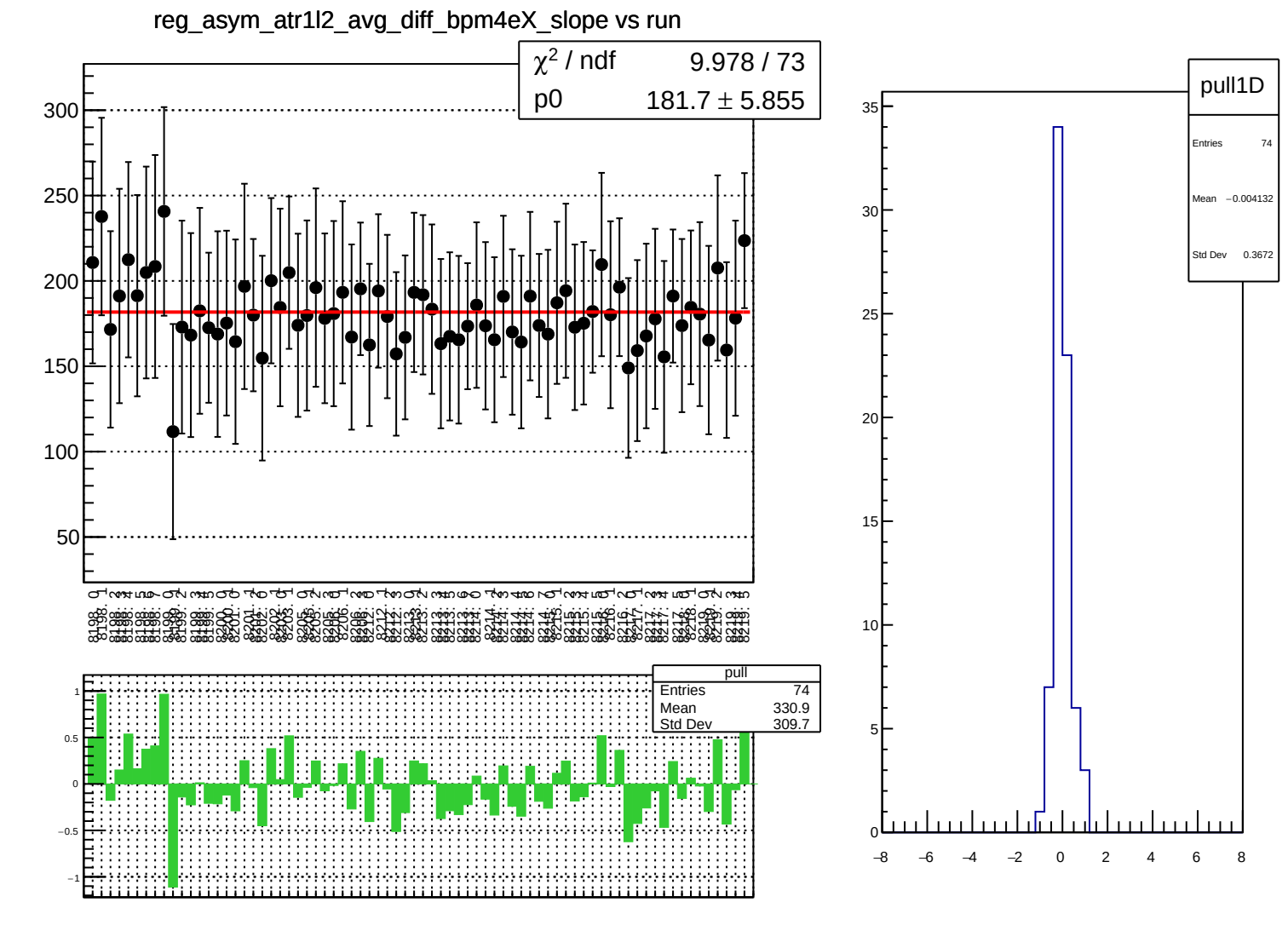

pull1D
Entries 74
Mean 0.008033
Std Dev 0.3438
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

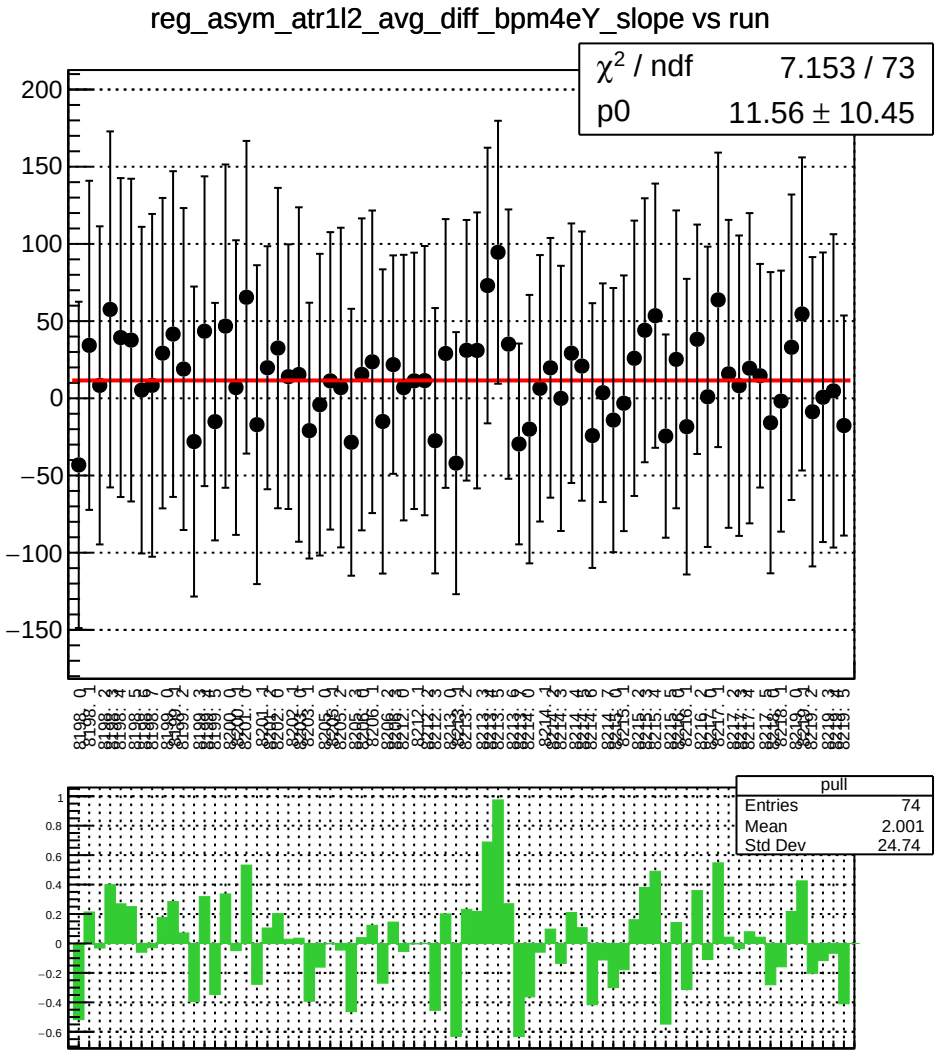

reg_asym_atr1l2_avg_diff_bpm1X_slope vs run
χ² / ndf 10.46 / 73
p0 −268.5 ± 5.845
pull
Entries 74
Mean −3418
Std Dev 3443

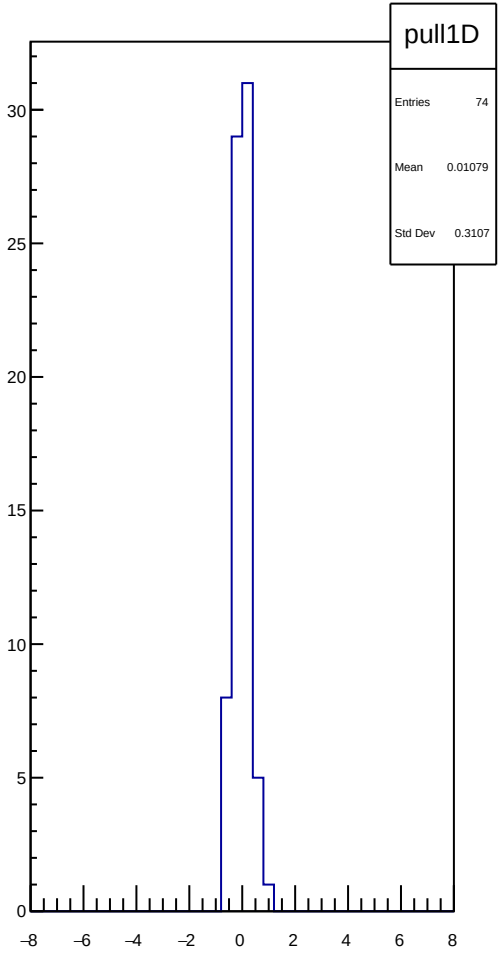

pull1D
Entries 74
Mean −0.0005587
Std Dev 0.376

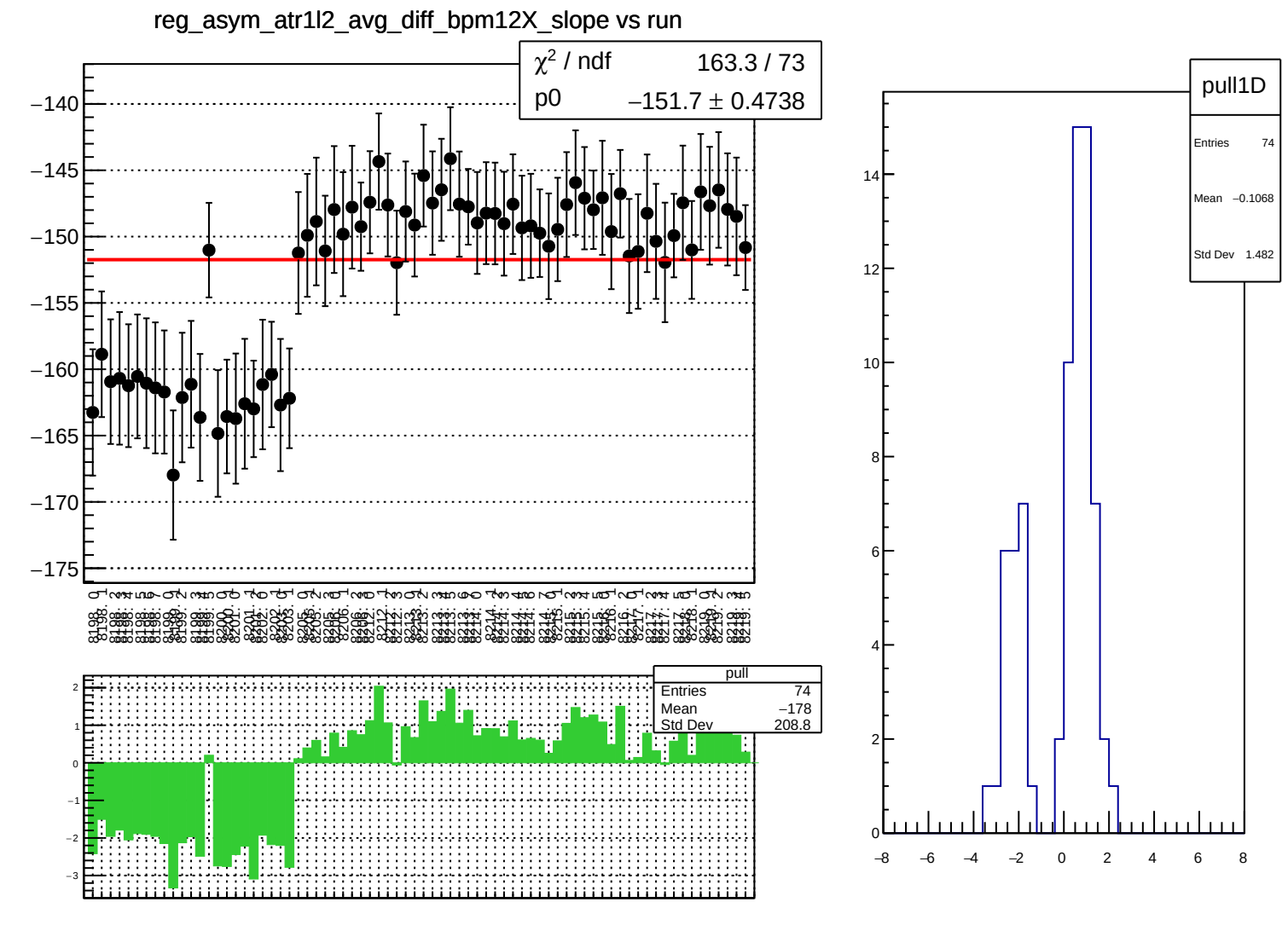

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 7.097 / 73
p0 49.56 ± 9.724
pull
Entries 74
Mean 96.04
Std Dev 60.5

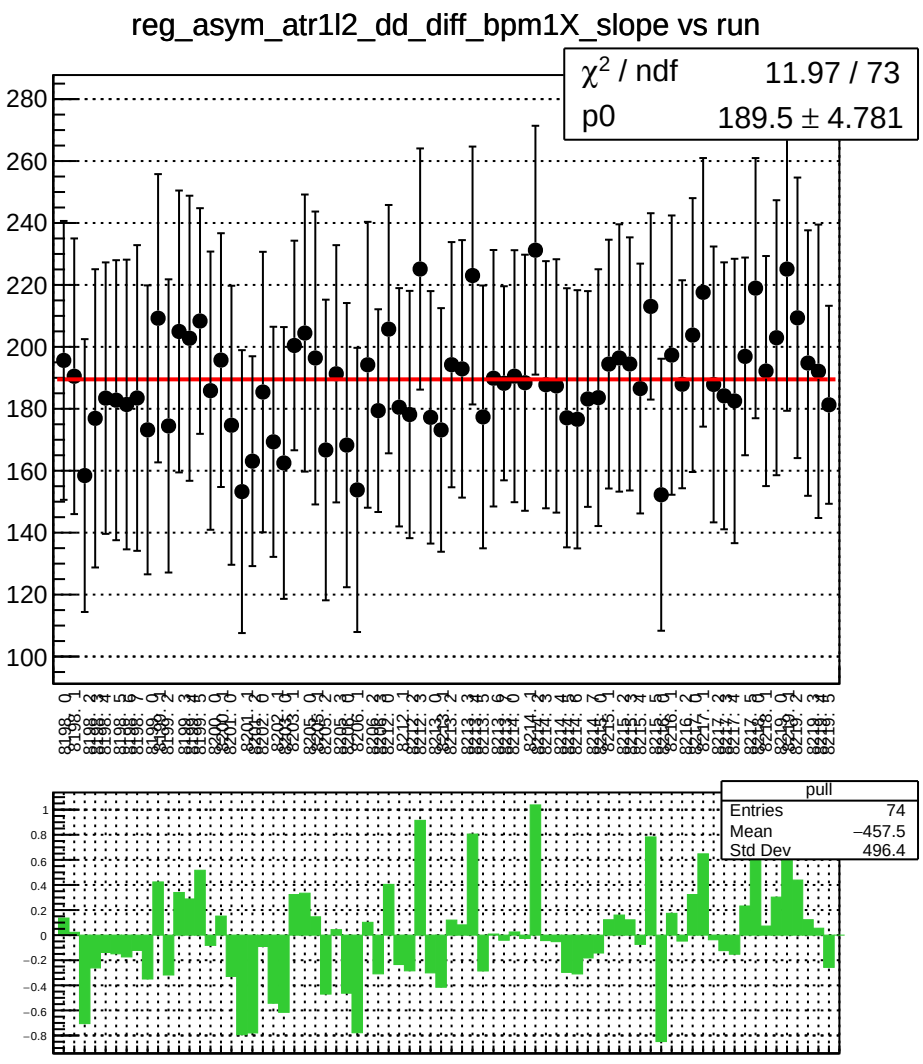

pull1D
Entries 74
Mean −0.00821
Std Dev 0.3096

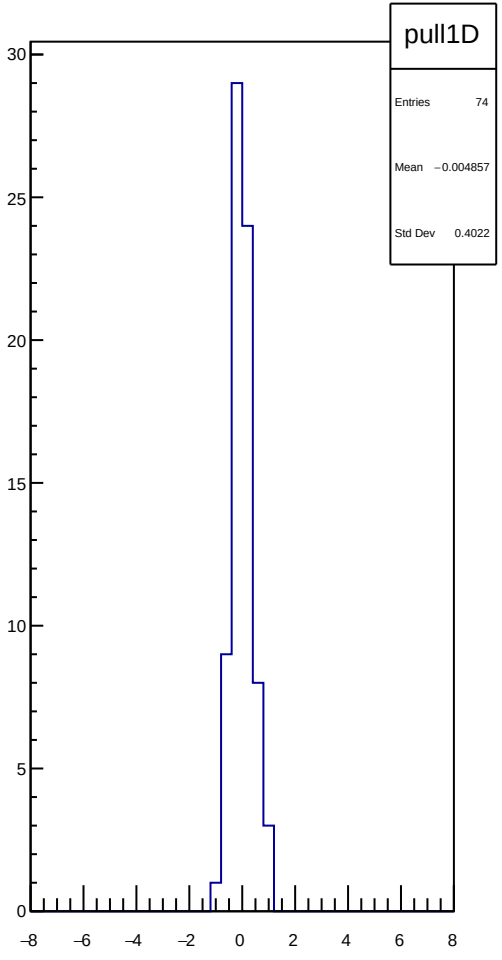

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 9.978 / 73
p0 181.7 ± 5.855
pull
Entries 74
Mean 330.9
Std Dev 309.7
pull1D
Entries 74
Mean −0.004132
Std Dev 0.3672

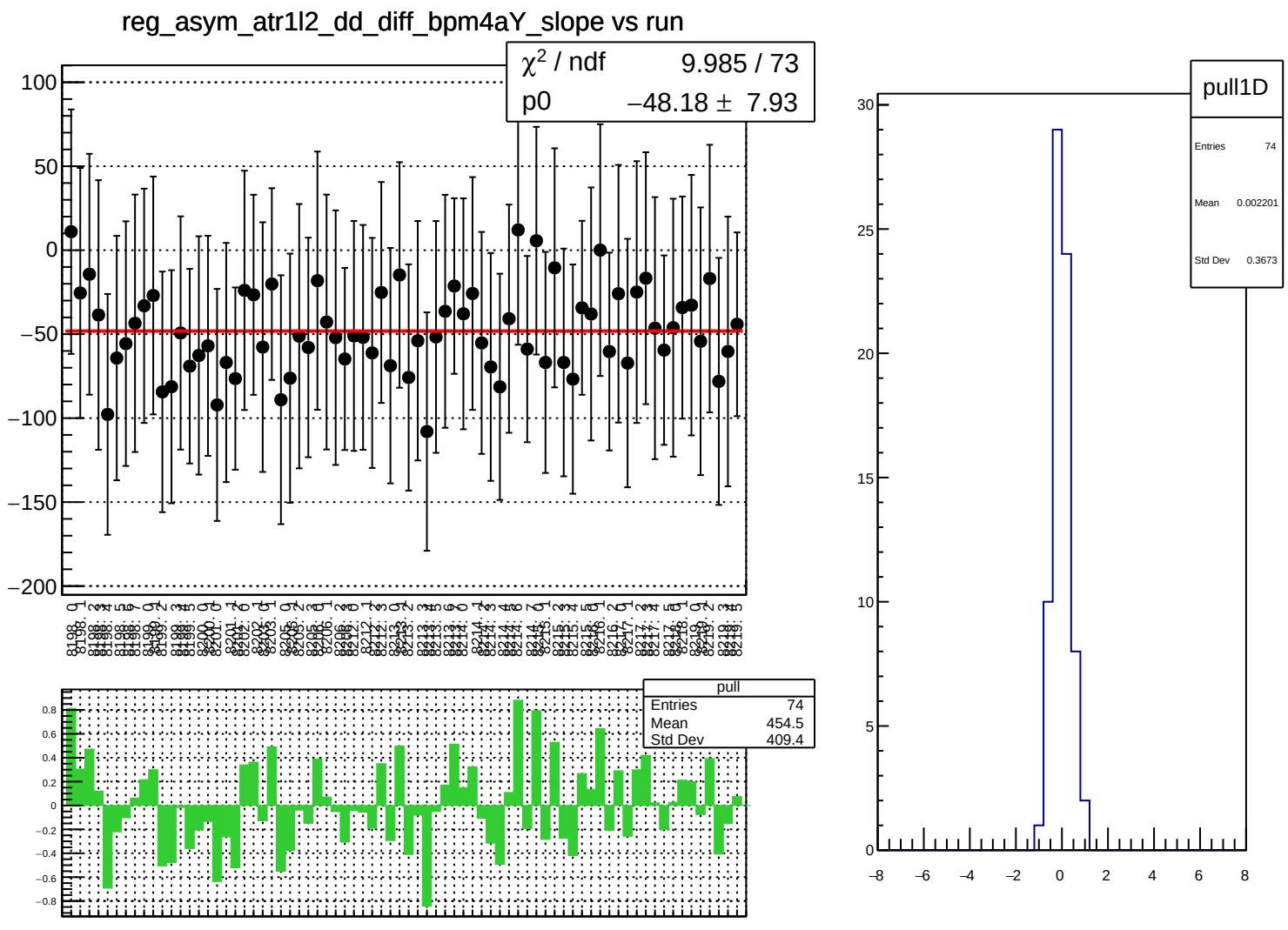

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 7.153 / 73
p0 11.56 ± 10.45
pull
Entries 74
Mean 2.001
Std Dev 24.74

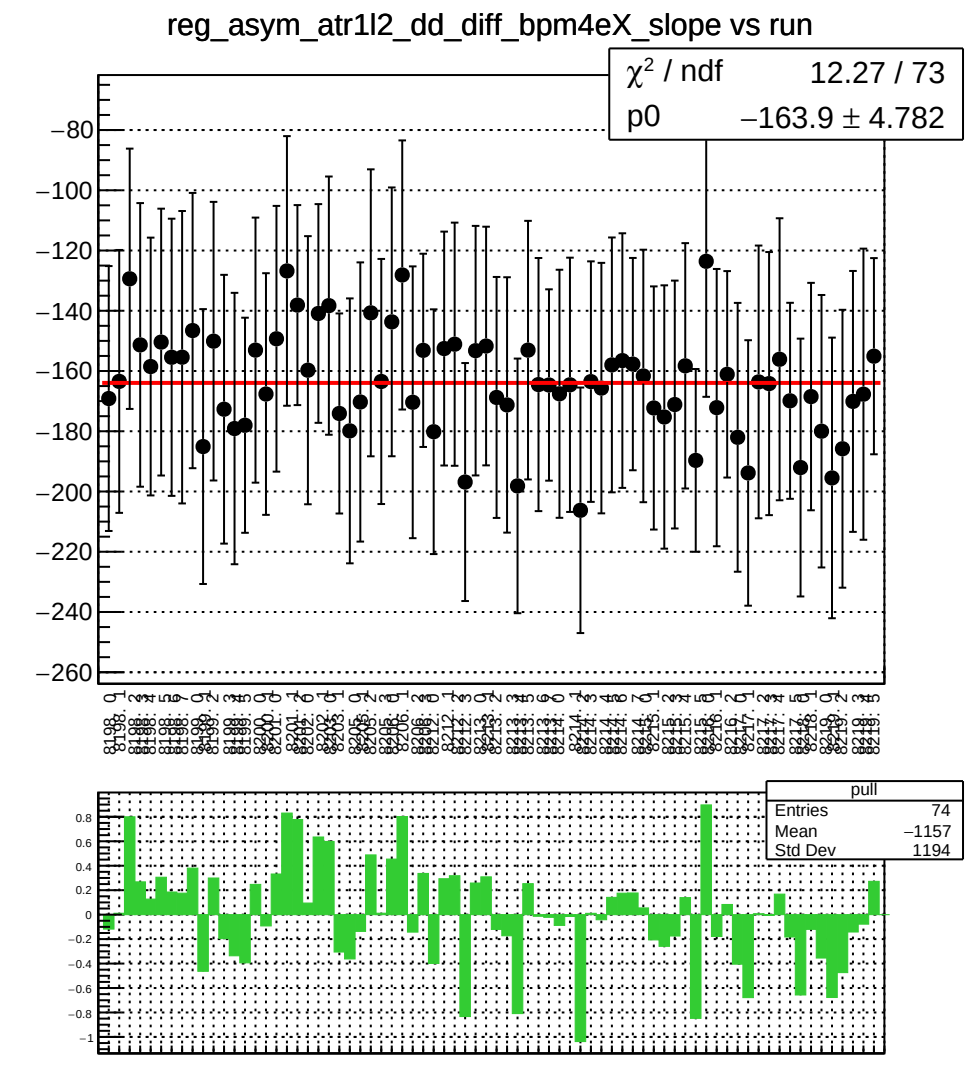

pull1D
Entries 74
Mean 0.01079
Std Dev 0.3107

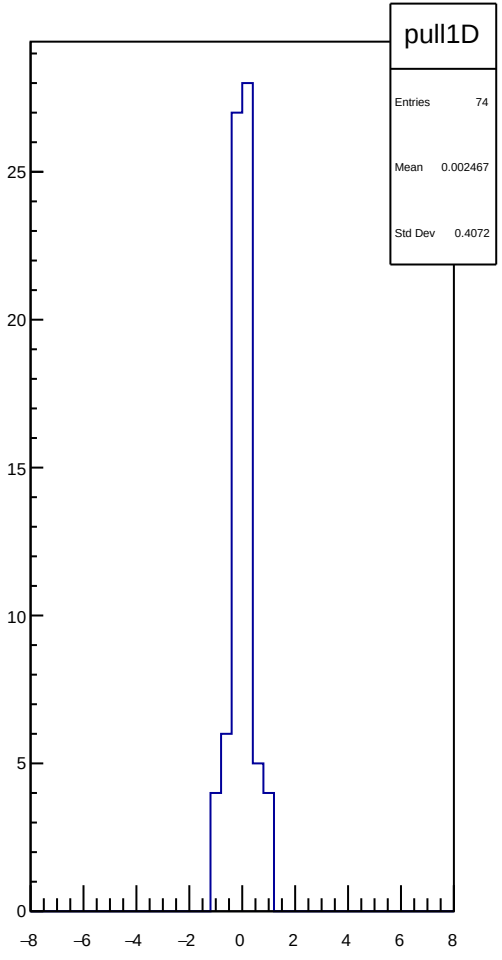

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 163.3 / 73
p0 −151.7 ± 0.4738
pull
Entries 74
Mean −178
Std Dev 208.8
pull1D
Entries 74
Mean −0.1068
Std Dev 1.482

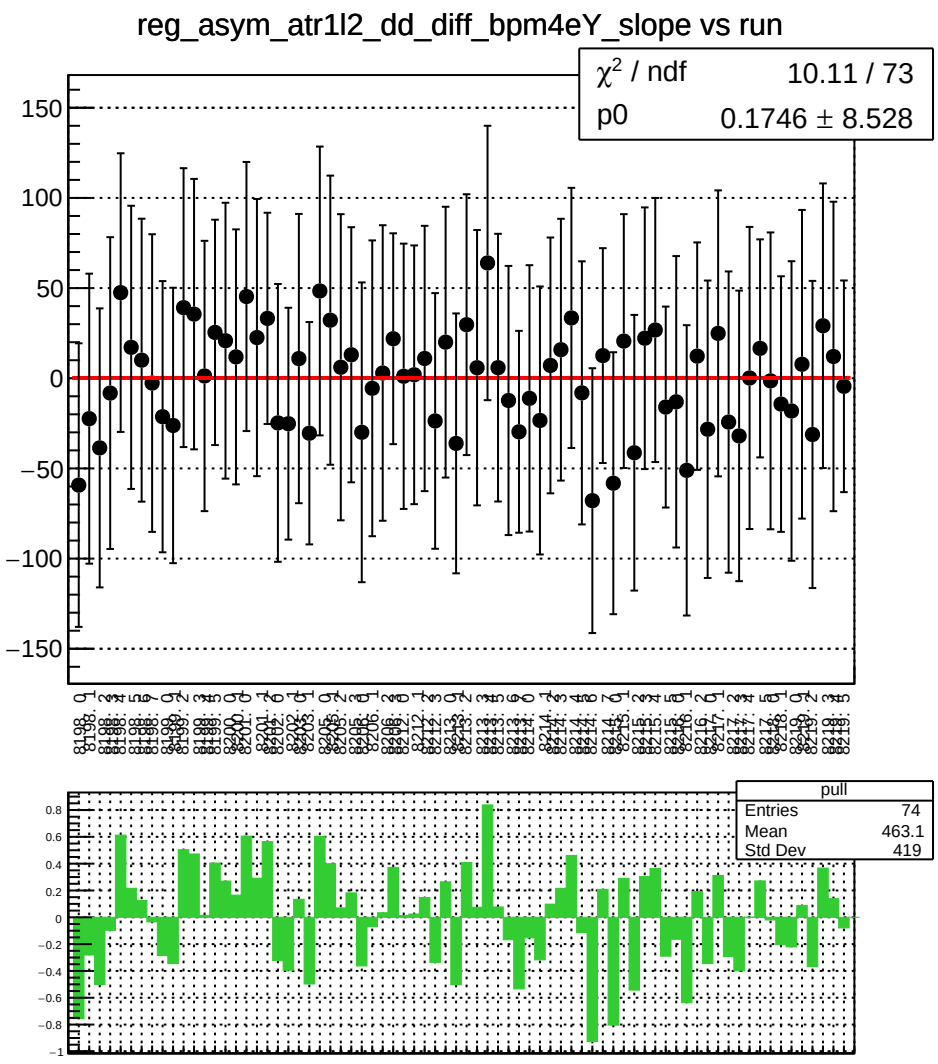

reg_asym_atr1l2_dd_diff_bpm1X_slope vs run
χ² / ndf 11.97 / 73
p0 189.5 ± 4.781
pull
Entries 74
Mean −457.5
Std Dev 496.4

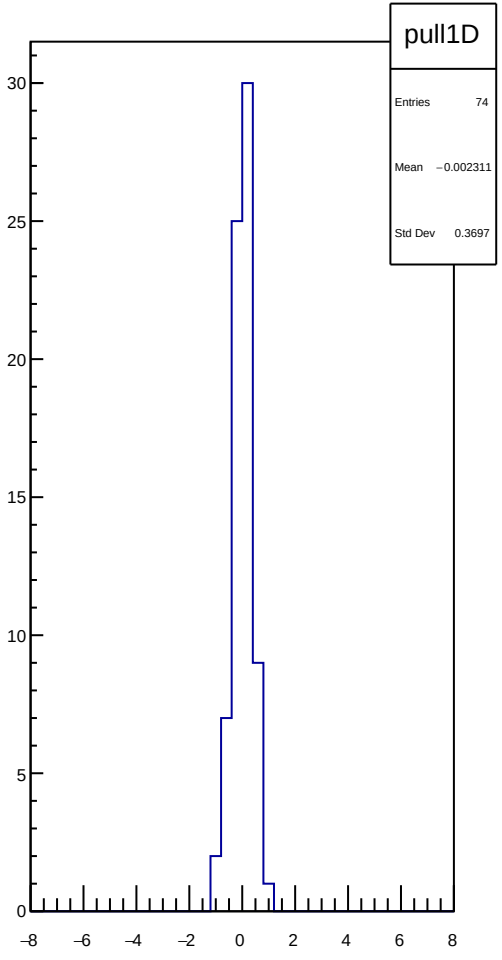

pull1D
Entries 74
Mean −0.004857
Std Dev 0.4022

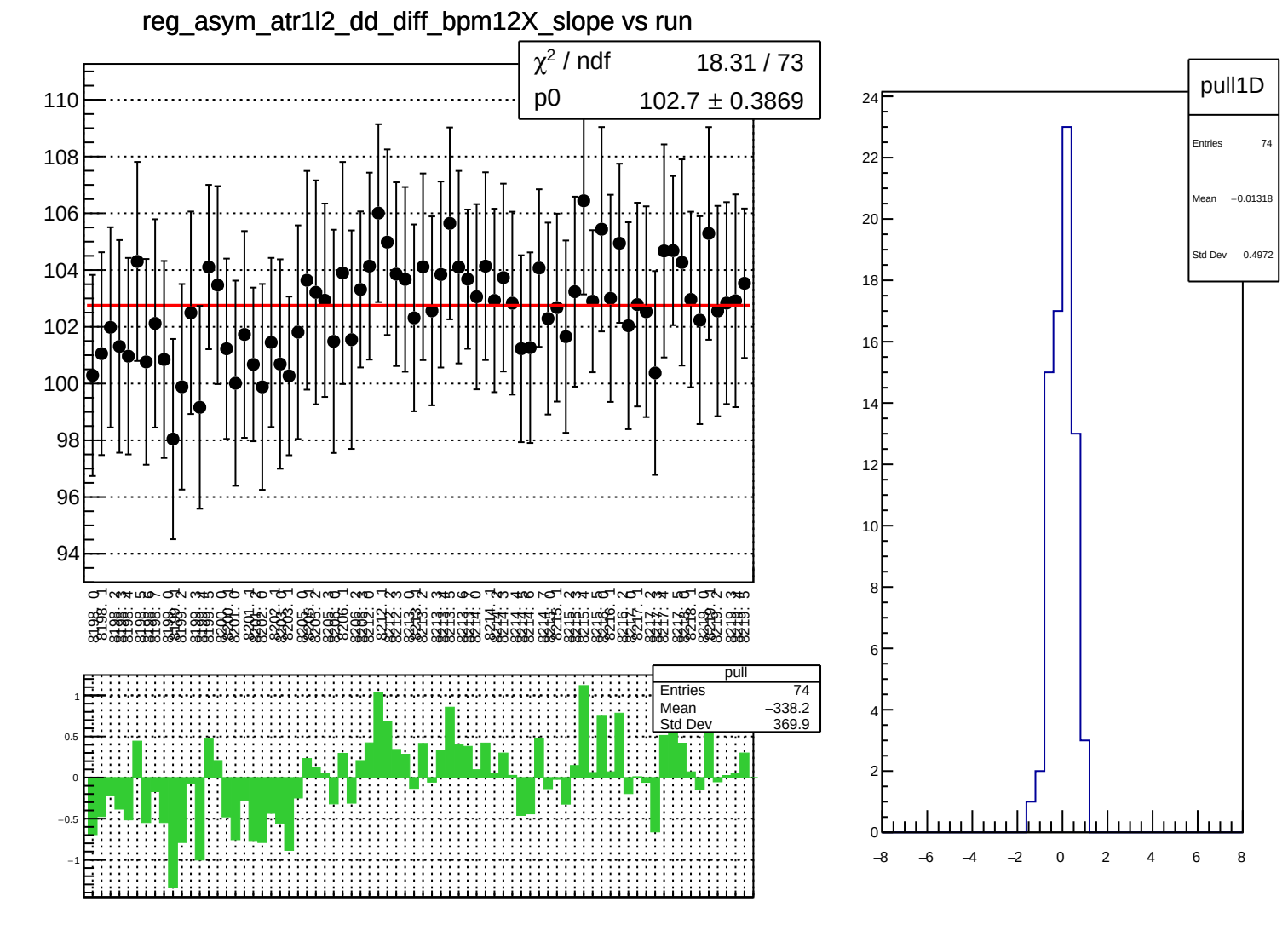

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 9.985 / 73
p0 −48.18 ± 7.93
pull
Entries 74
Mean 454.5
Std Dev 409.4
pull1D
Entries 74
Mean 0.002201
Std Dev 0.3673

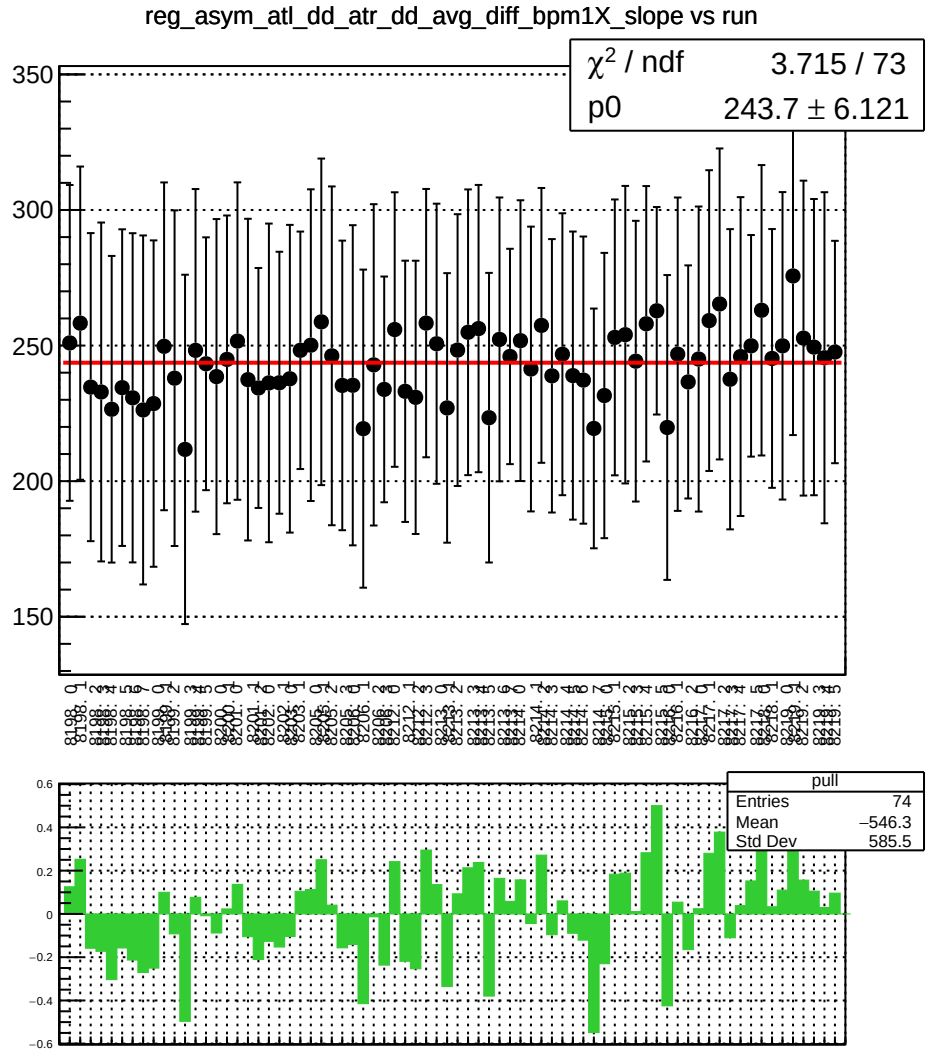

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 12.27 / 73
p0 −163.9 ± 4.782
pull
Entries 74
Mean −1157
Std Dev 1194

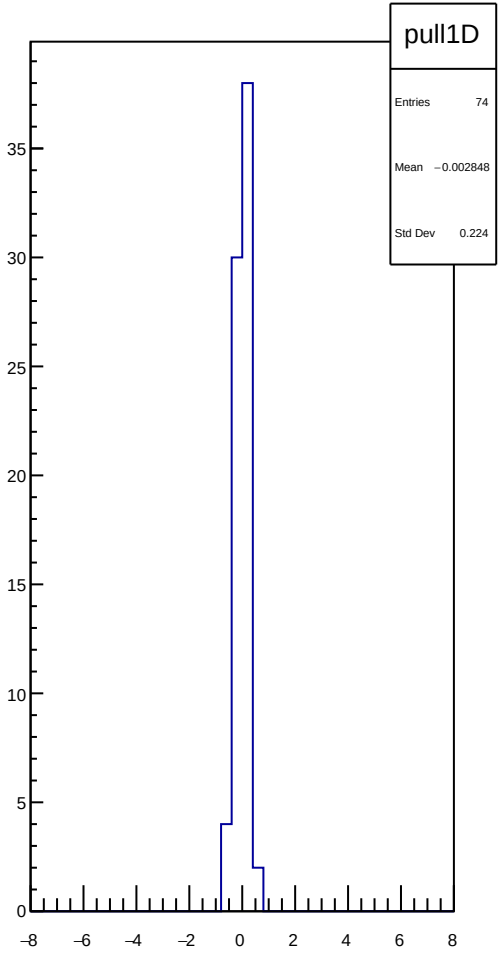

pull1D
Entries 74
Mean 0.002467
Std Dev 0.4072

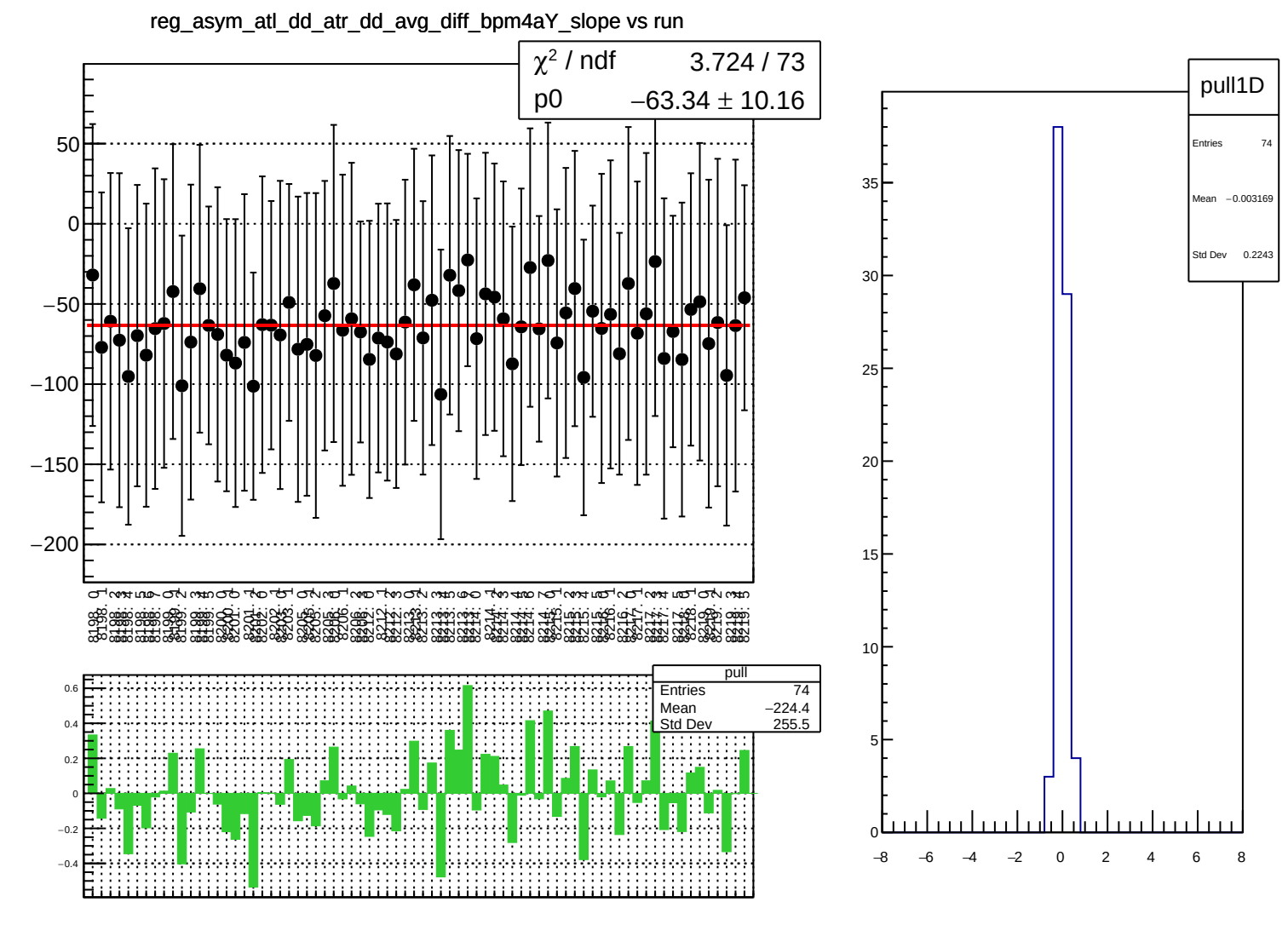

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 10.11 / 73
p0 0.1746 ± 8.528
150
100
50
0
−50
−100
−150
pull
Entries 74
Mean 463.1
Std Dev 419
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

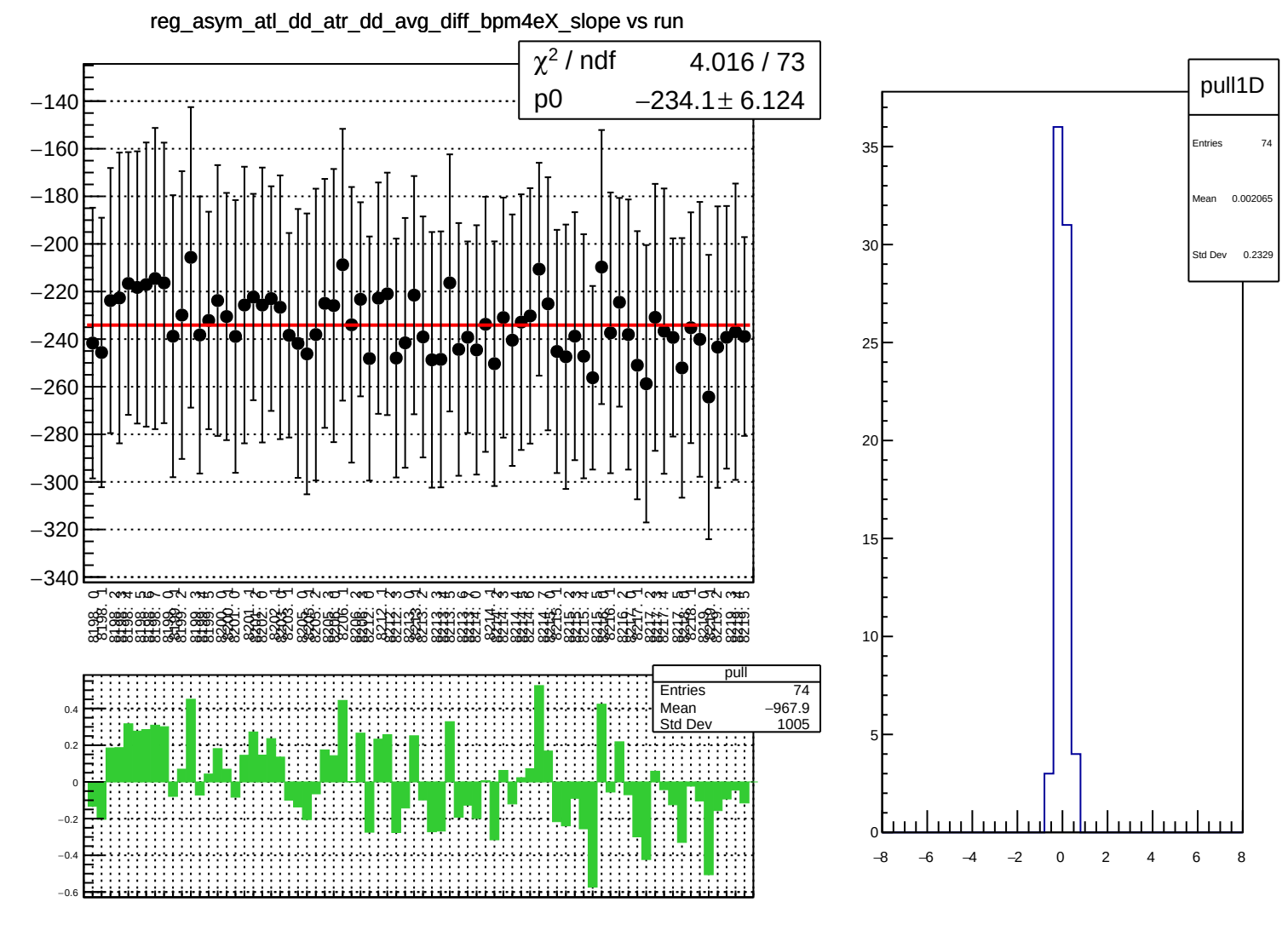

pull1D
Entries 74
Mean −0.002311
Std Dev 0.3697
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

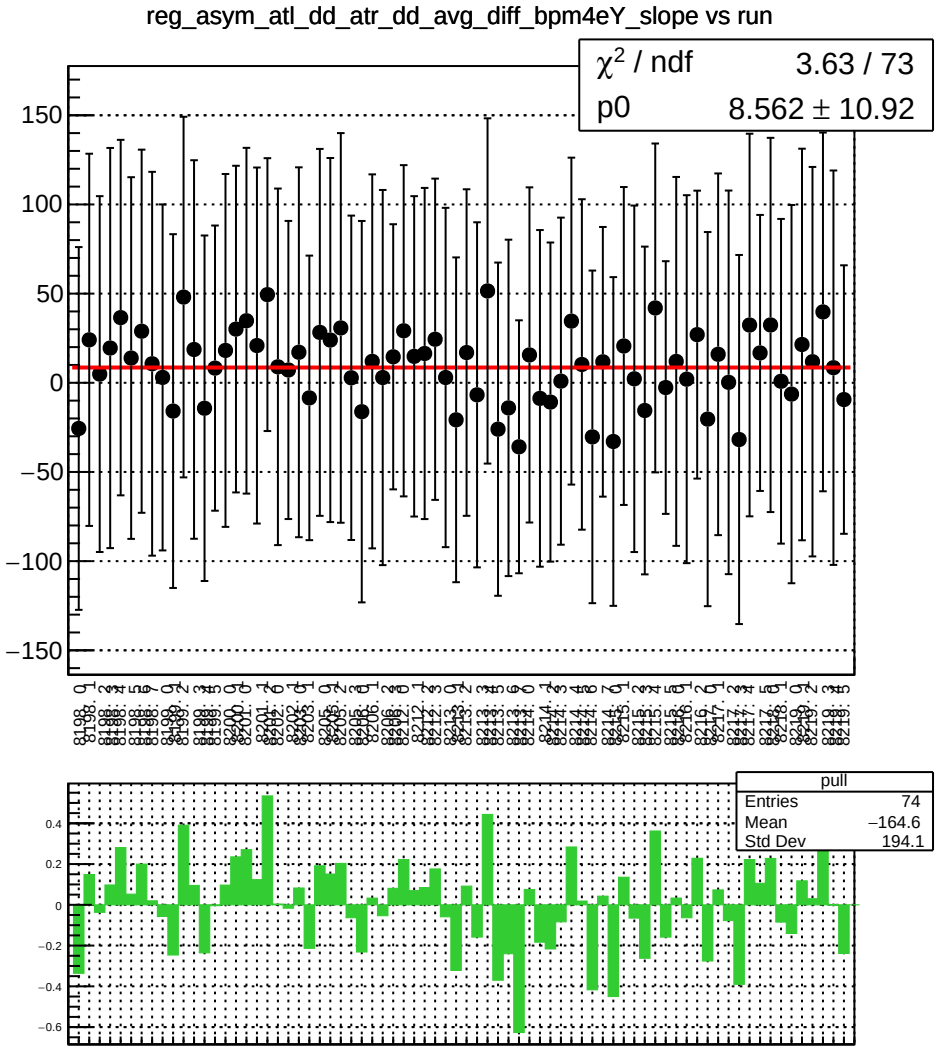

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 18.31 / 73
p0 102.7 ± 0.3869
pull
Entries 74
Mean −338.2
Std Dev 369.9
pull1D
Entries 74
Mean −0.01318
Std Dev 0.4972

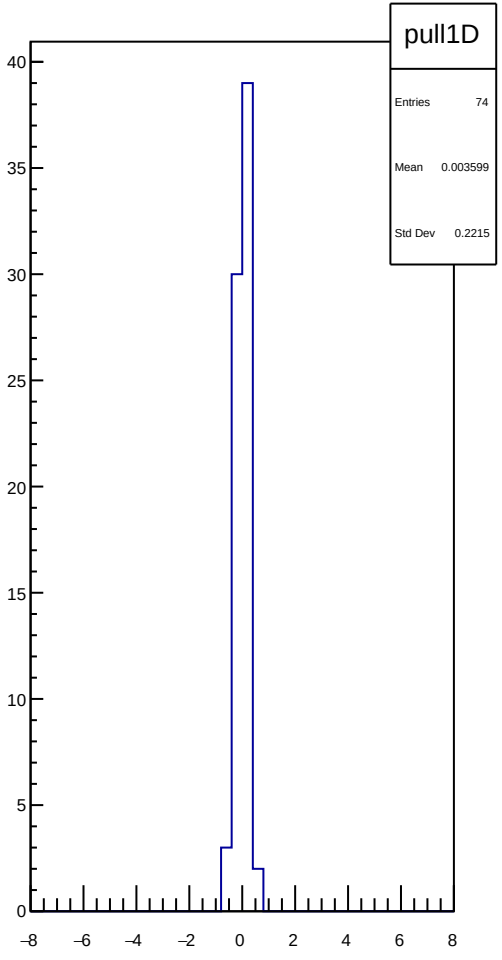

reg_asym_atl_dd_atr_dd_avg_diff_bpm1X_slope vs run
χ² / ndf 3.715 / 73
p0 243.7 ± 6.121
pull
Entries 74
Mean −546.3
Std Dev 585.5

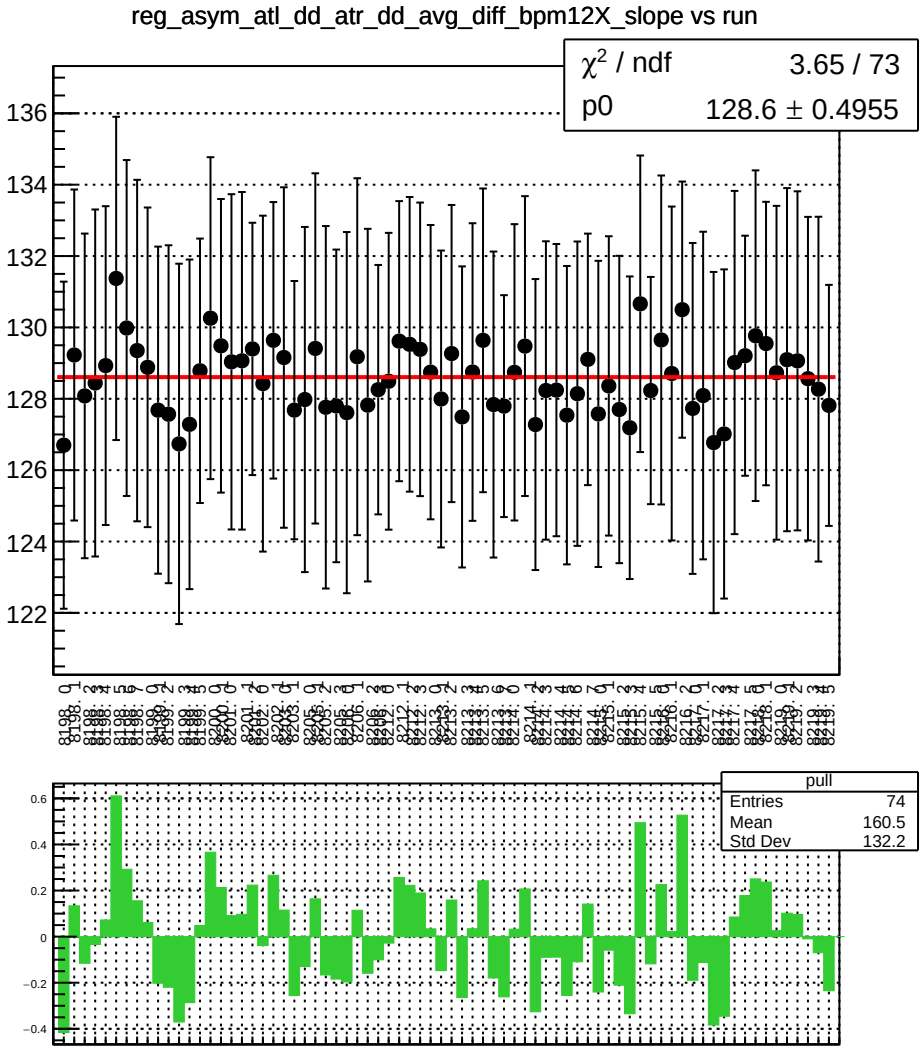

pull1D
Entries 74
Mean −0.002848
Std Dev 0.224

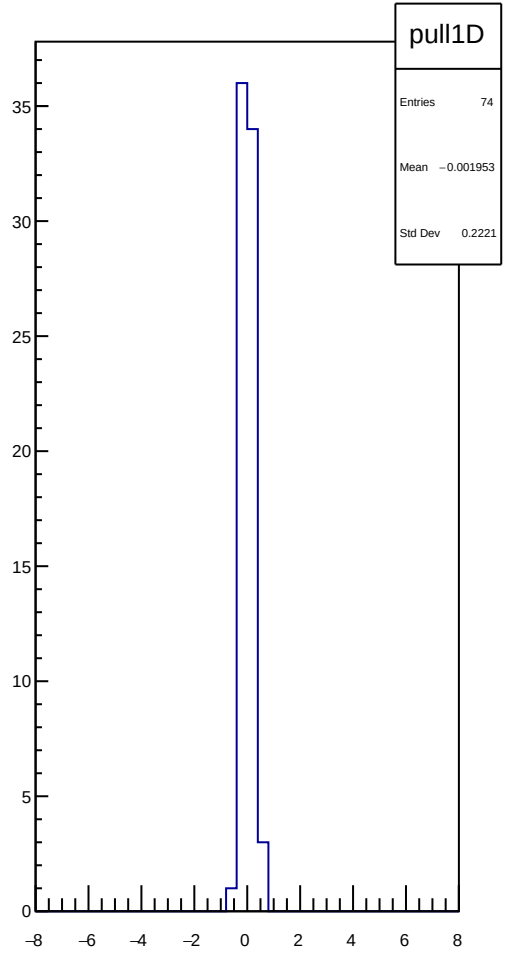

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.724 / 73
p0 −63.34 ± 10.16
pull
Entries 74
Mean −224.4
Std Dev 255.5
pull1D
Entries 74
Mean −0.003169
Std Dev 0.2243

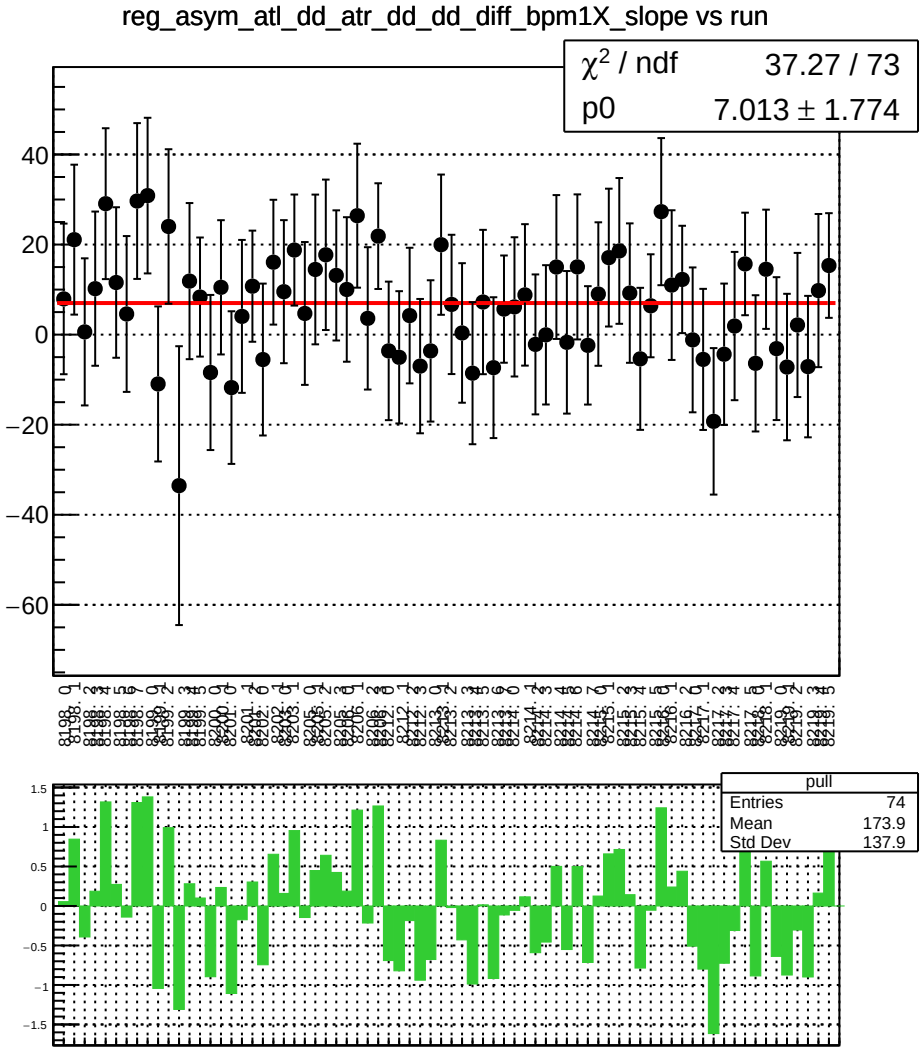

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 4.016 / 73
p0 −234.1 ± 6.124
pull
Entries 74
Mean −967.9
Std Dev 1005
pull1D
Entries 74
Mean 0.002065
Std Dev 0.2329

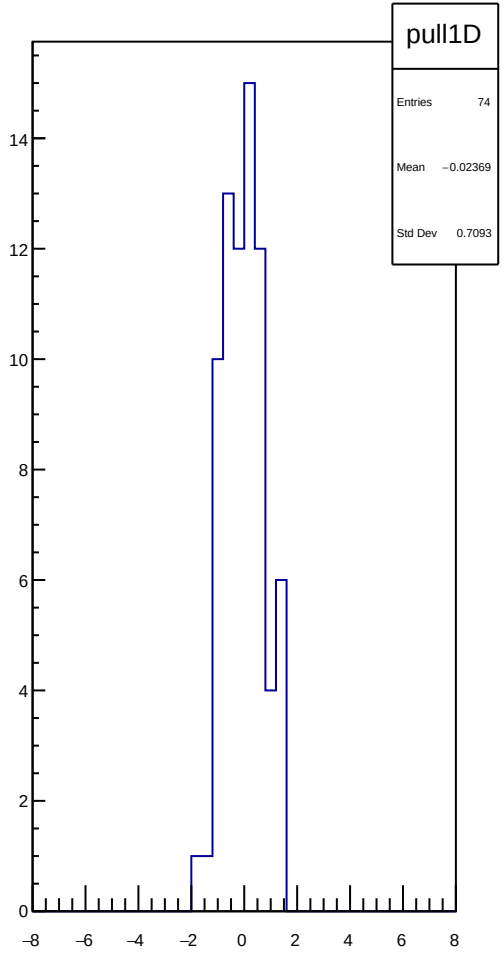

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.63 / 73
p0 8.562 ± 10.92
150
100
50
0
−50
−100
−150
pull
Entries 74
Mean −164.6
Std Dev 194.1
0.4
0.2
0
−0.2
−0.4
−0.6

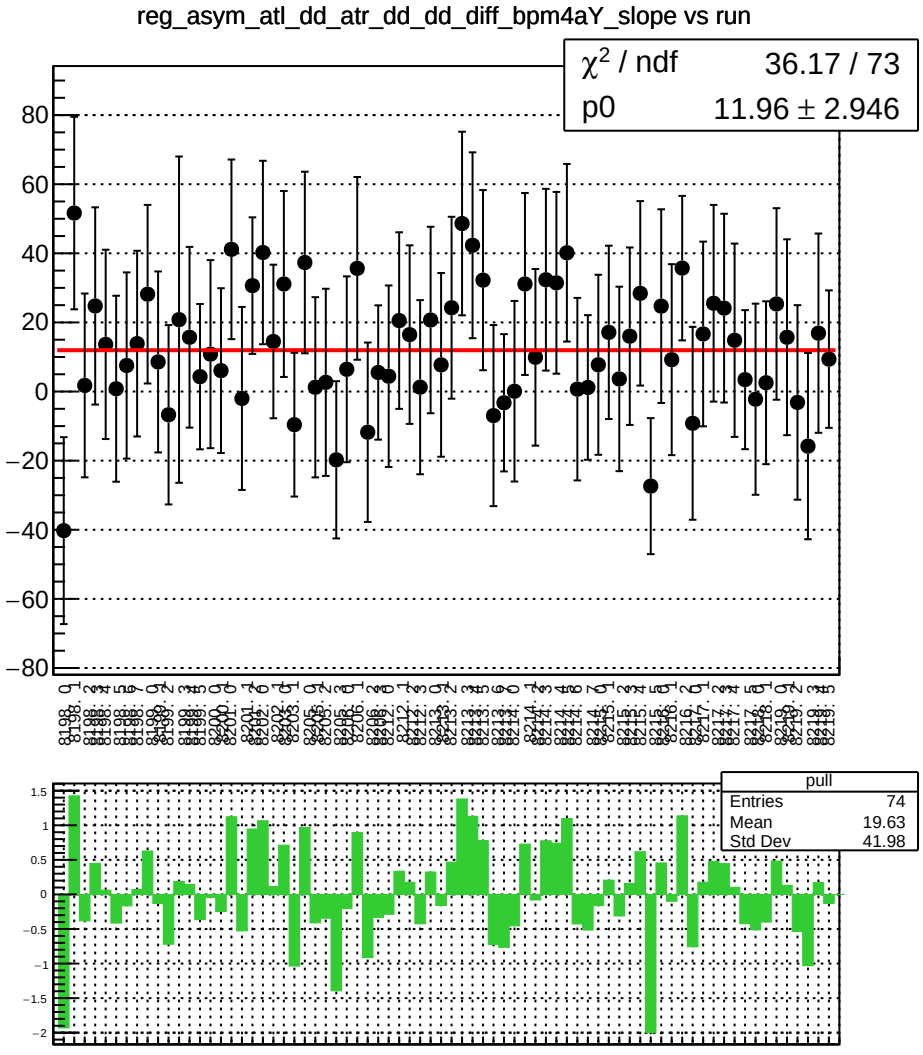

pull1D
Entries 74
Mean 0.003599
Std Dev 0.2215
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

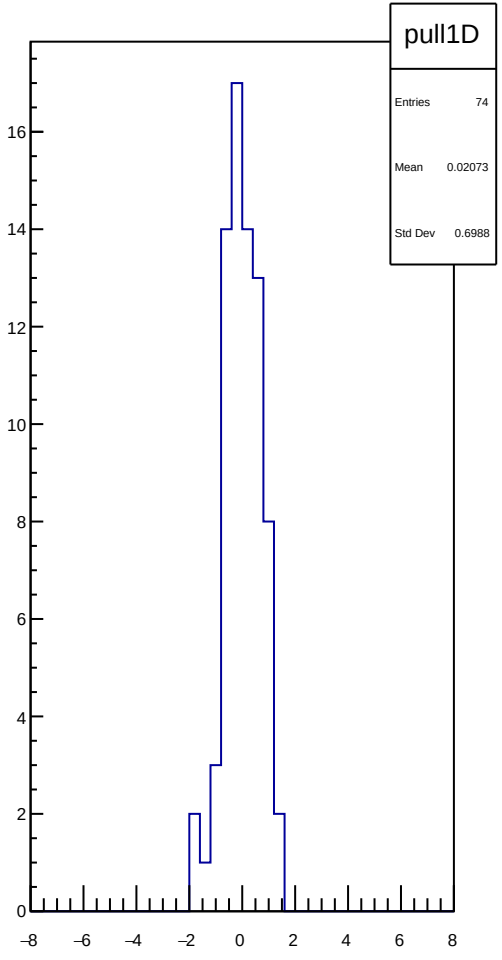

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 3.65 / 73
p0 128.6 ± 0.4955
pull
Entries 74
Mean 160.5
Std Dev 132.2

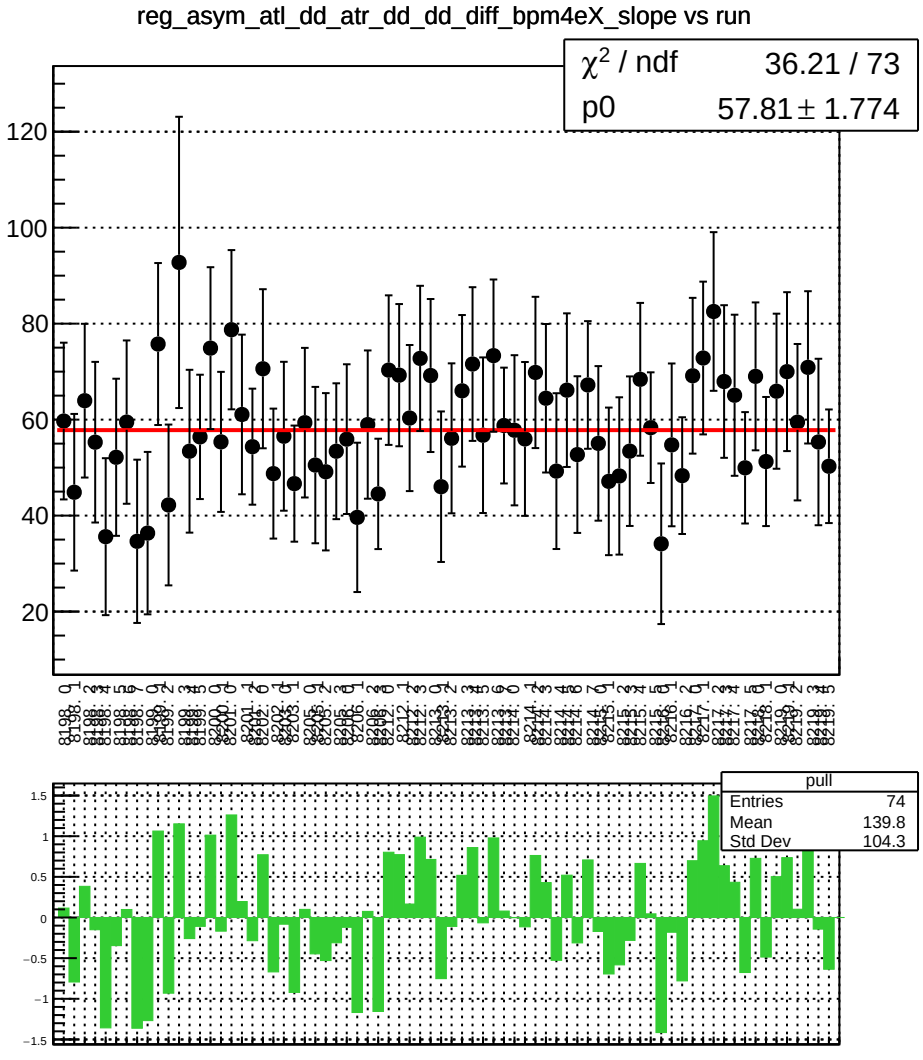

pull1D
Entries 74
Mean −0.001953
Std Dev 0.2221

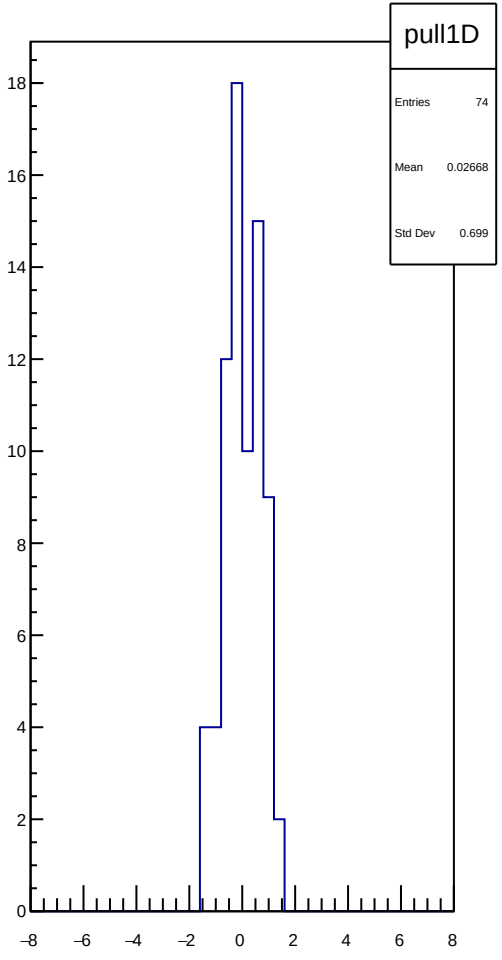

reg_asym_atl_dd_atr_dd_dd_diff_bpm1X_slope vs run
χ² / ndf 37.27 / 73
p0 7.013 ± 1.774
pull
Entries 74
Mean 173.9
Std Dev 137.9

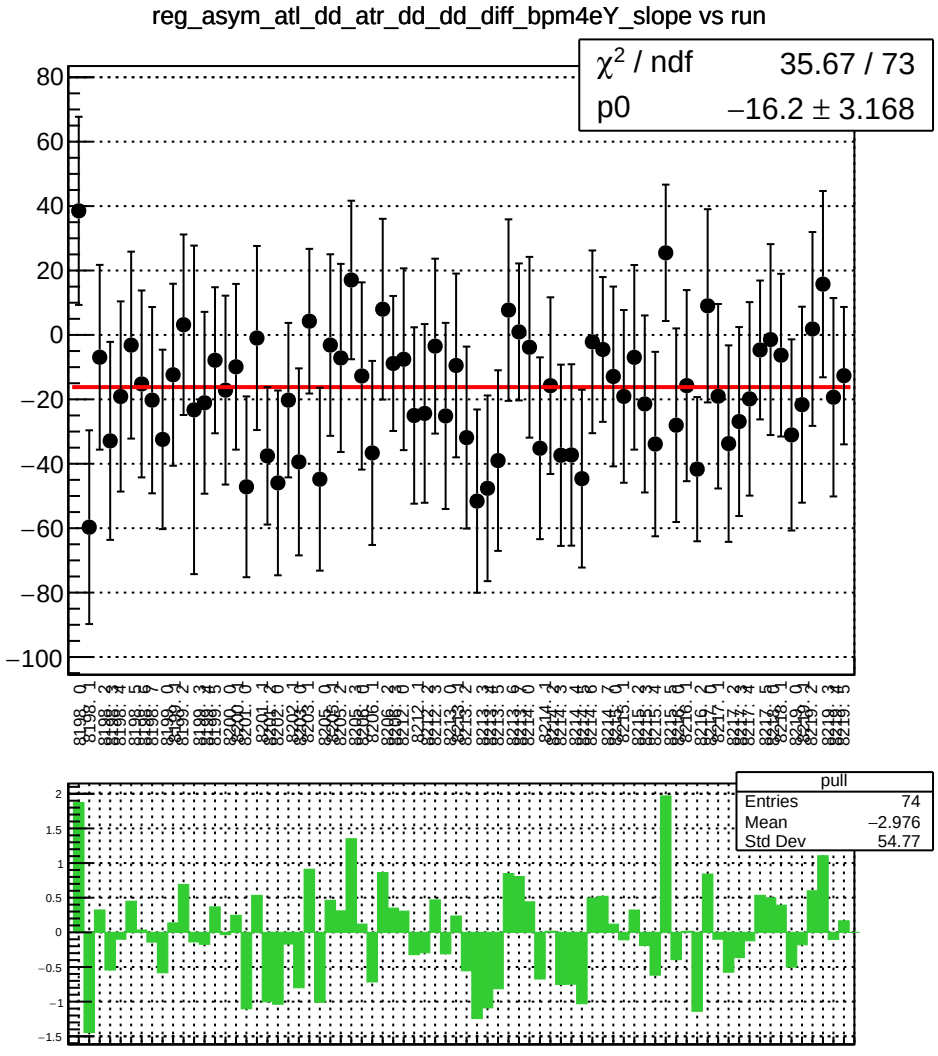

pull1D
Entries 74
Mean −0.02369
Std Dev 0.7093

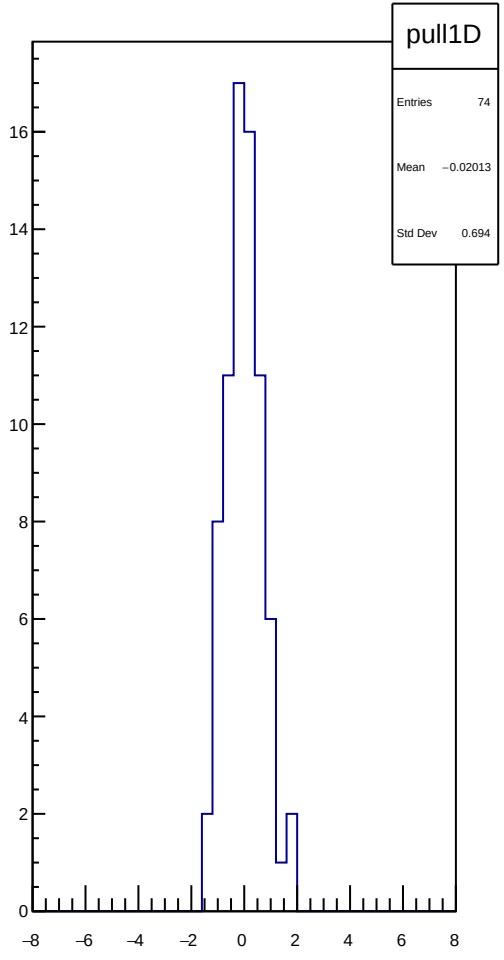

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 36.17 / 73
p0 11.96 ± 2.946
pull
Entries 74
Mean 19.63
Std Dev 41.98

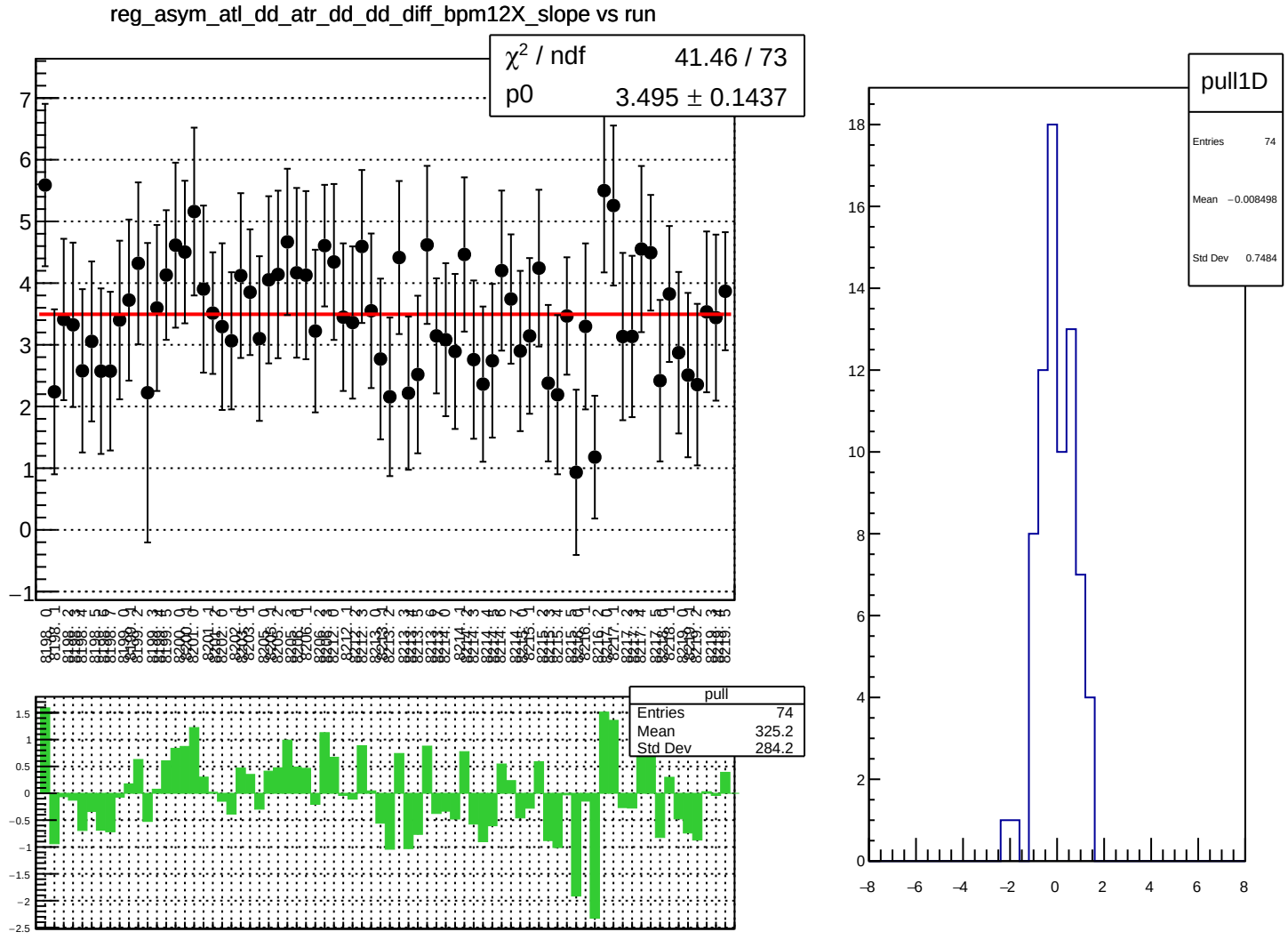

pull1D
Entries 74
Mean 0.02073
Std Dev 0.6988

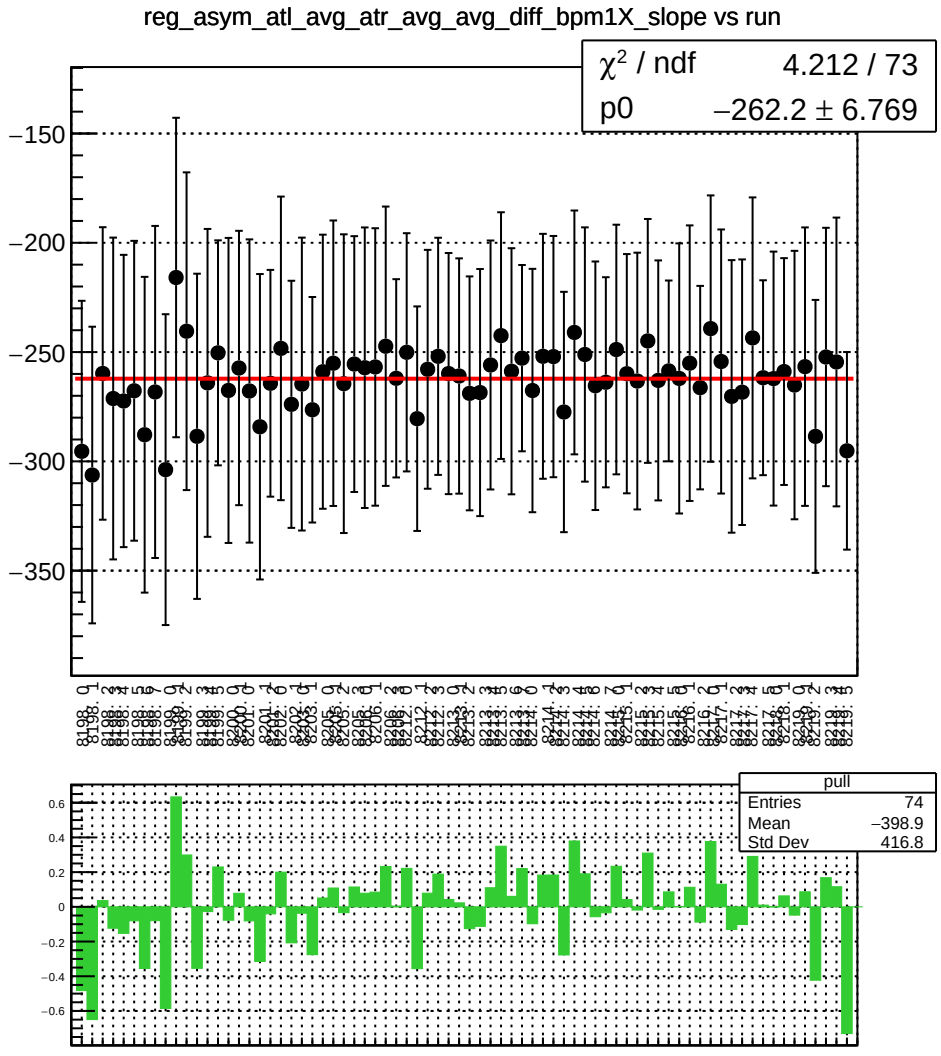

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 36.21 / 73
p0 57.81 ± 1.774
pull
Entries 74
Mean 139.8
Std Dev 104.3

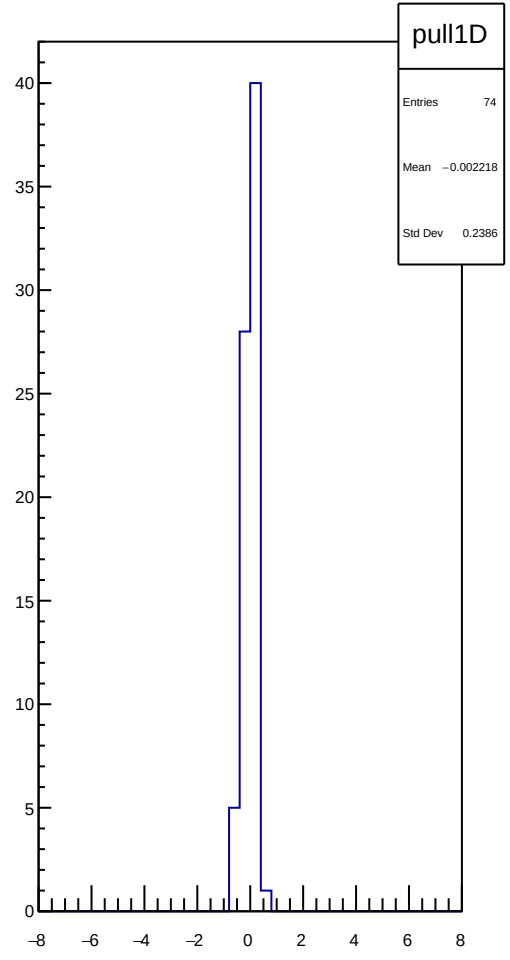

pull1D
Entries 74
Mean 0.02668
Std Dev 0.699

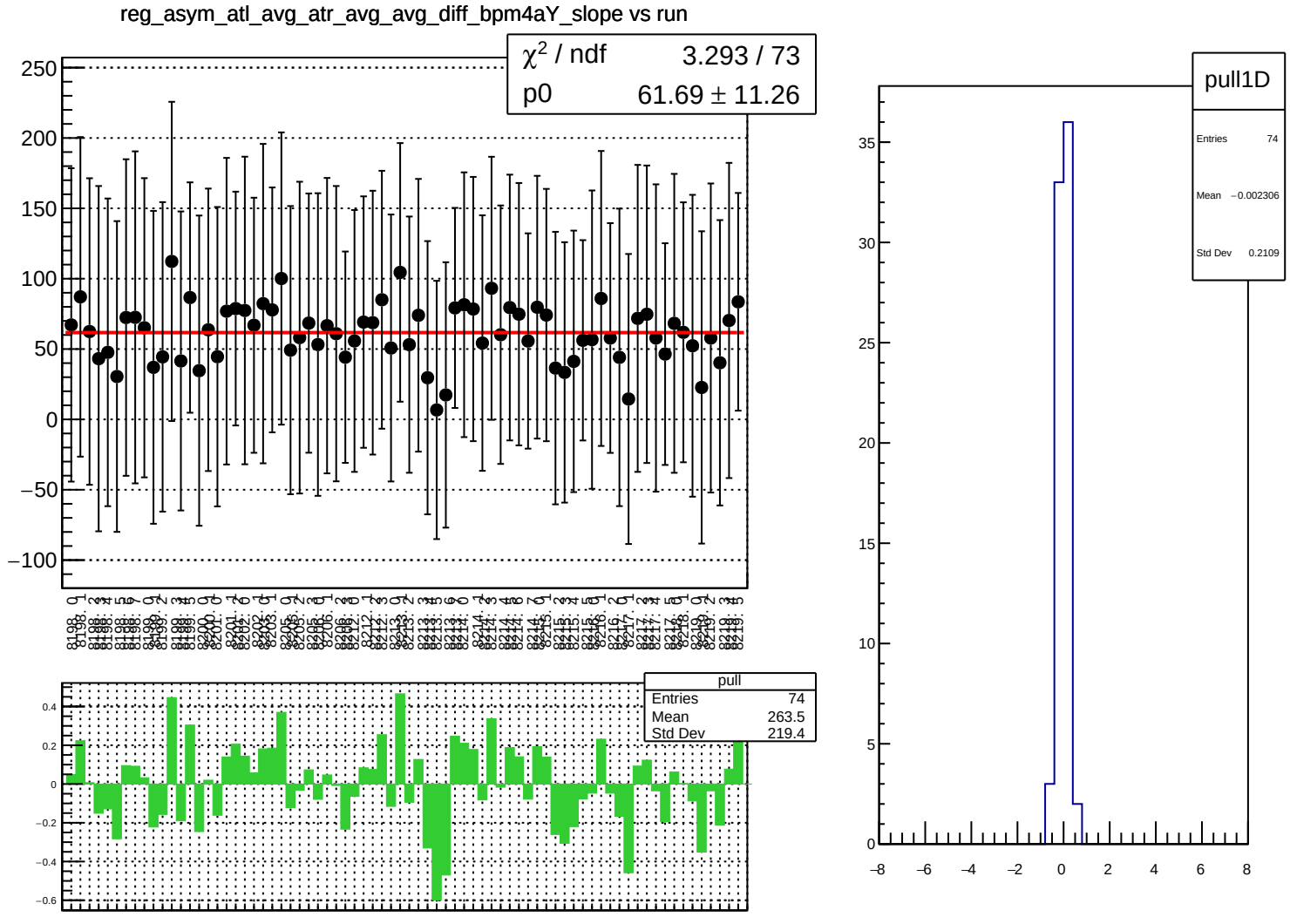

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 35.67 / 73
p0 −16.2 ± 3.168
pull
Entries 74
Mean −2.976
Std Dev 54.77

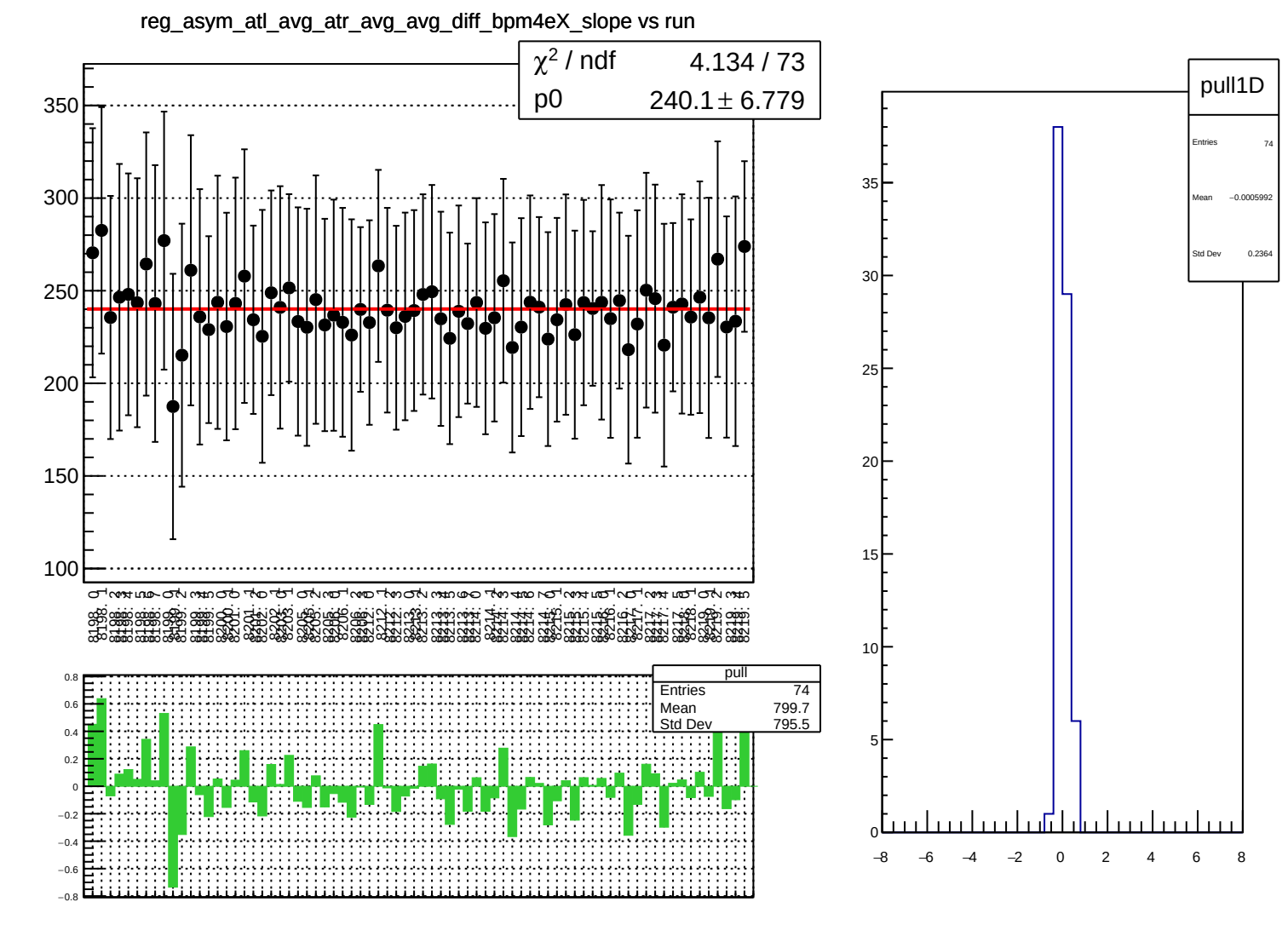

pull1D
Entries 74
Mean −0.02013
Std Dev 0.694

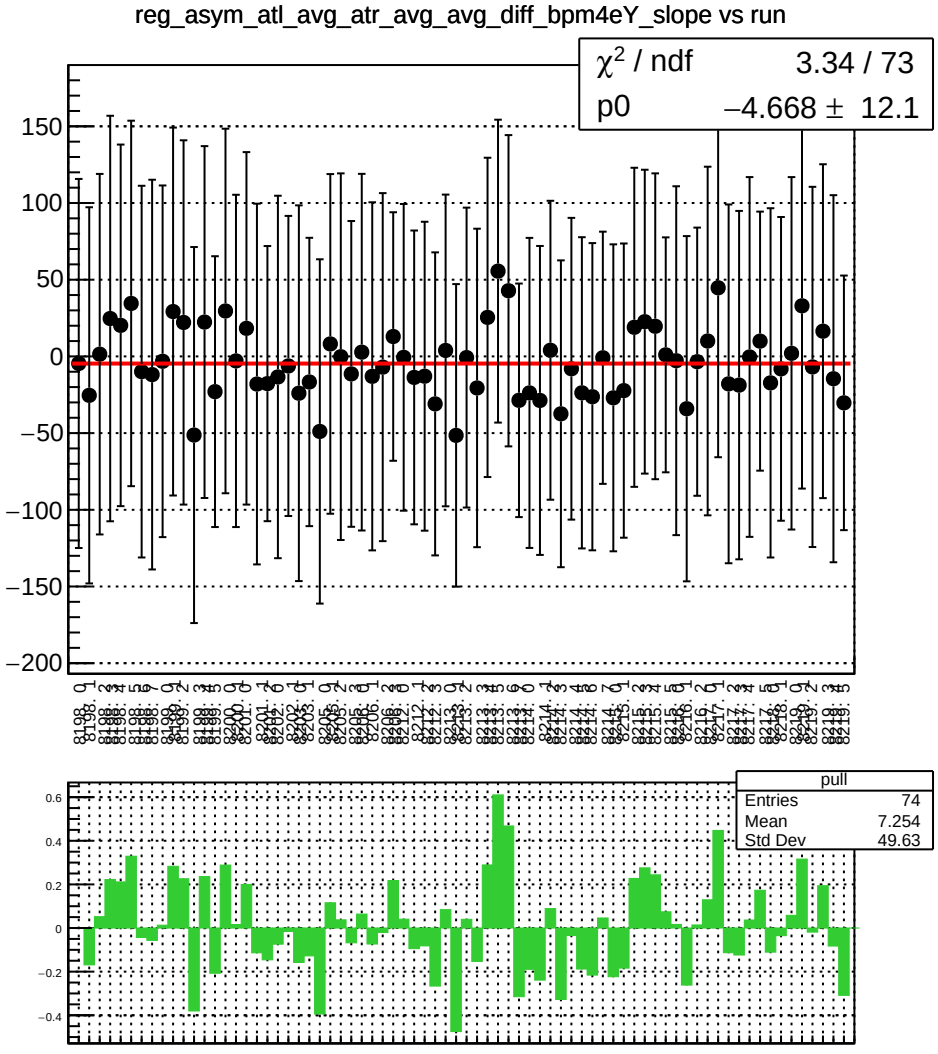

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 41.46 / 73
p0 3.495 ± 0.1437
pull
Entries 74
Mean 325.2
Std Dev 284.2
pull1D
Entries 74
Mean −0.008498
Std Dev 0.7484

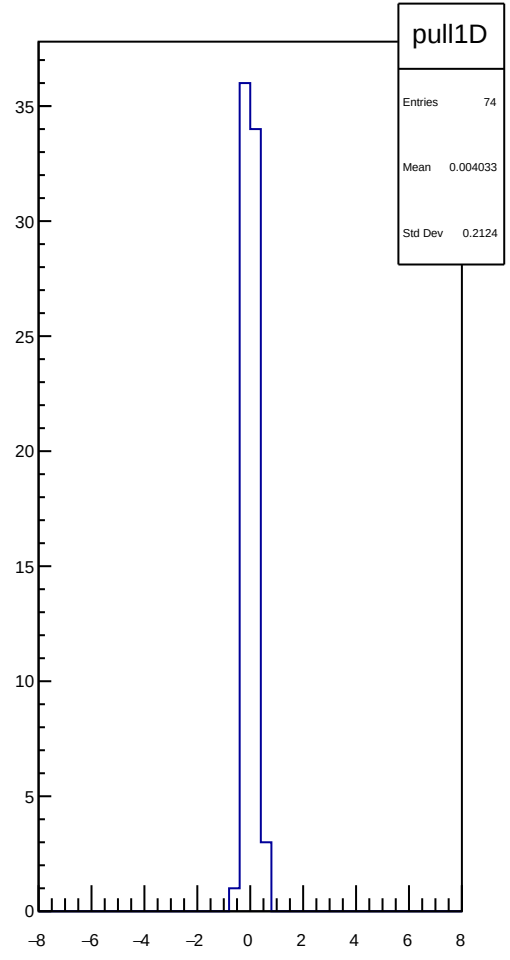

reg_asym_atl_avg_atr_avg_avg_diff_bpm1X_slope vs run
χ² / ndf 4.212 / 73
p0 −262.2 ± 6.769
−150
−200
−250
−300
−350
pull
Entries 74
Mean −398.9
Std Dev 416.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

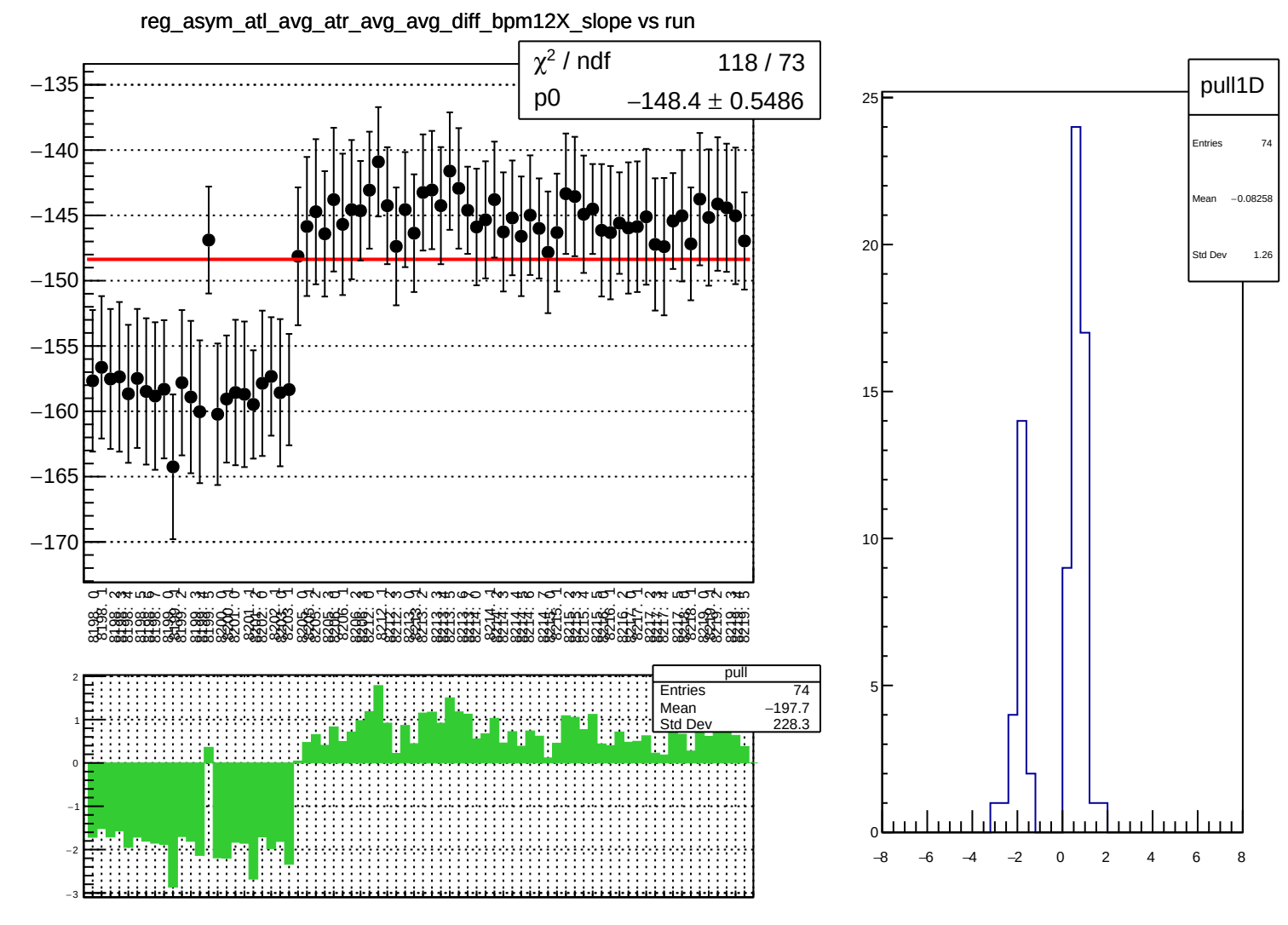

pull1D
Entries 74
Mean −0.002218
Std Dev 0.2386
40
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

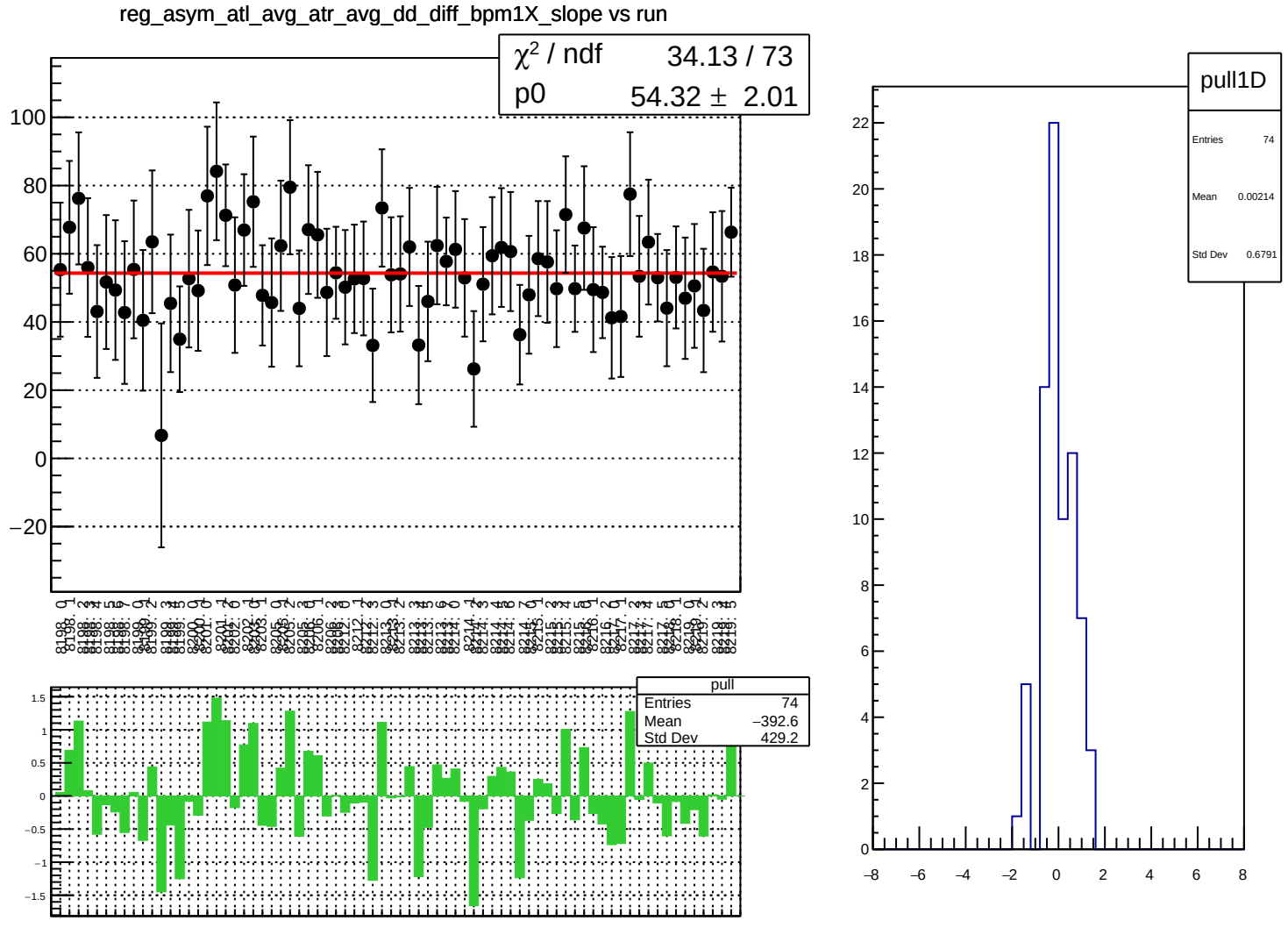

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.293 / 73
p0 61.69 ± 11.26
pull
Entries 74
Mean 263.5
Std Dev 219.4
pull1D
Entries 74
Mean −0.002306
Std Dev 0.2109

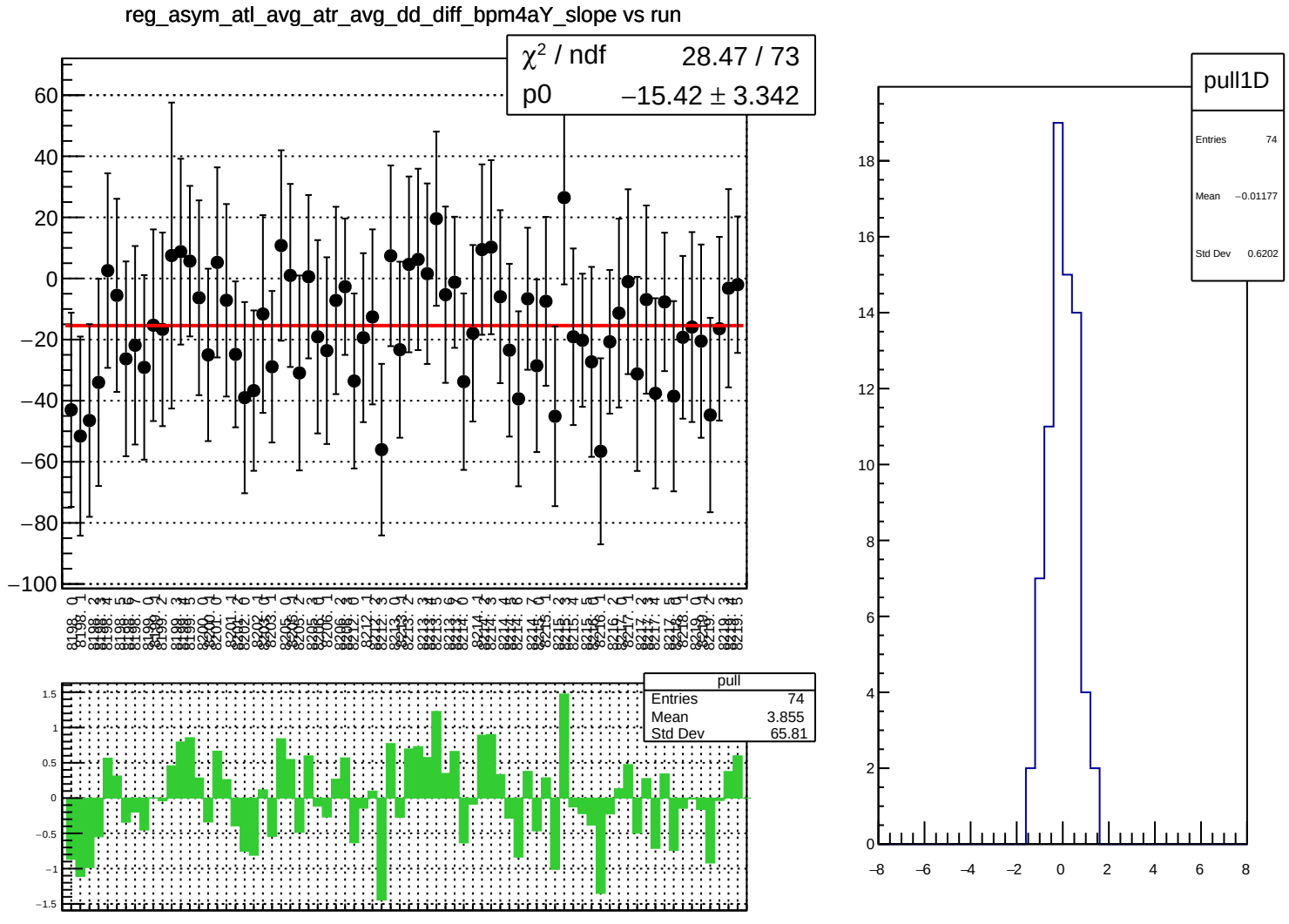

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 4.134 / 73
p0 240.1 ± 6.779
pull
Entries 74
Mean 799.7
Std Dev 795.5
pull1D
Entries 74
Mean −0.0005992
Std Dev 0.2364

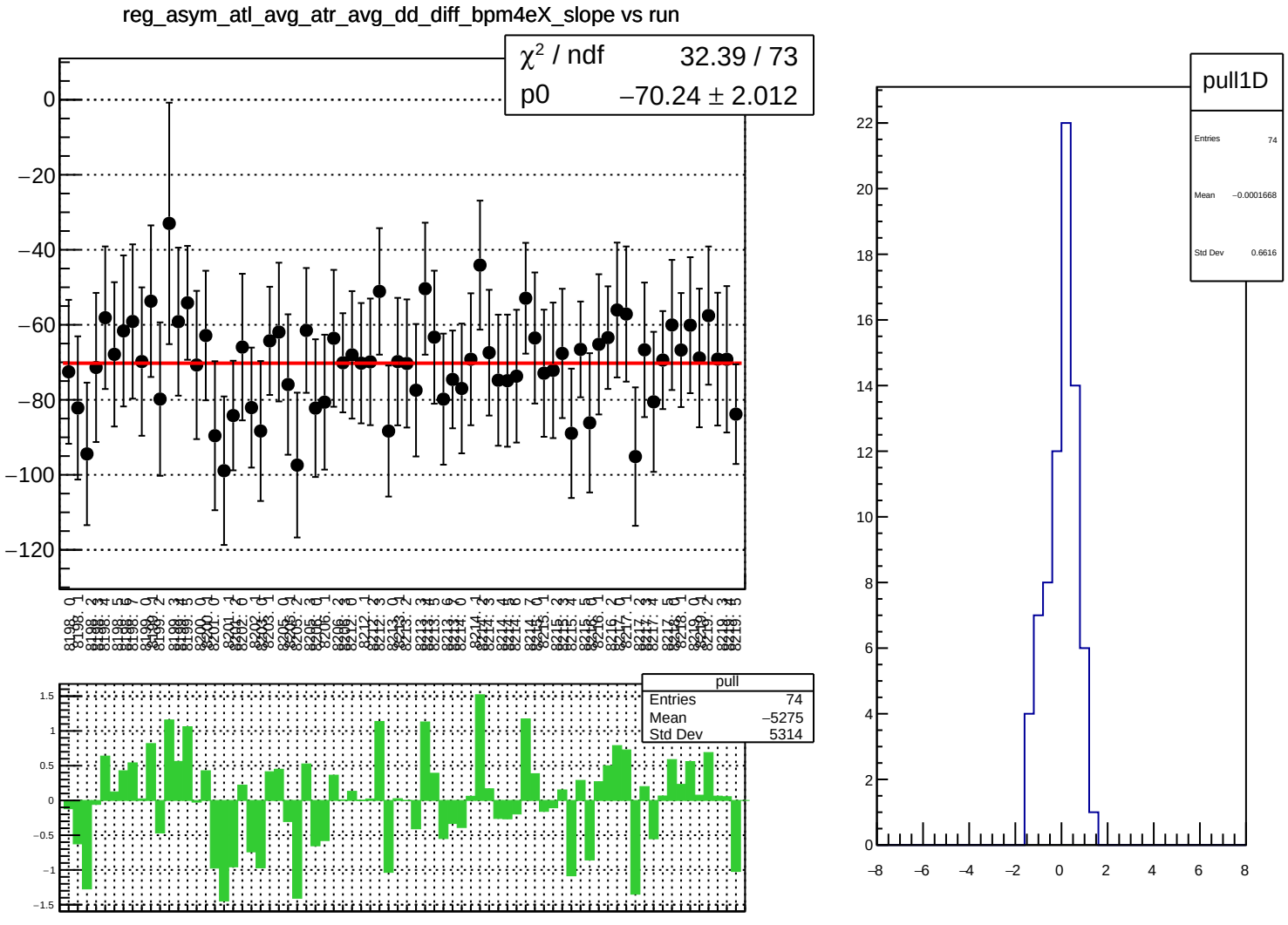

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.34 / 73
p0 −4.668 ± 12.1
pull
Entries 74
Mean 7.254
Std Dev 49.63

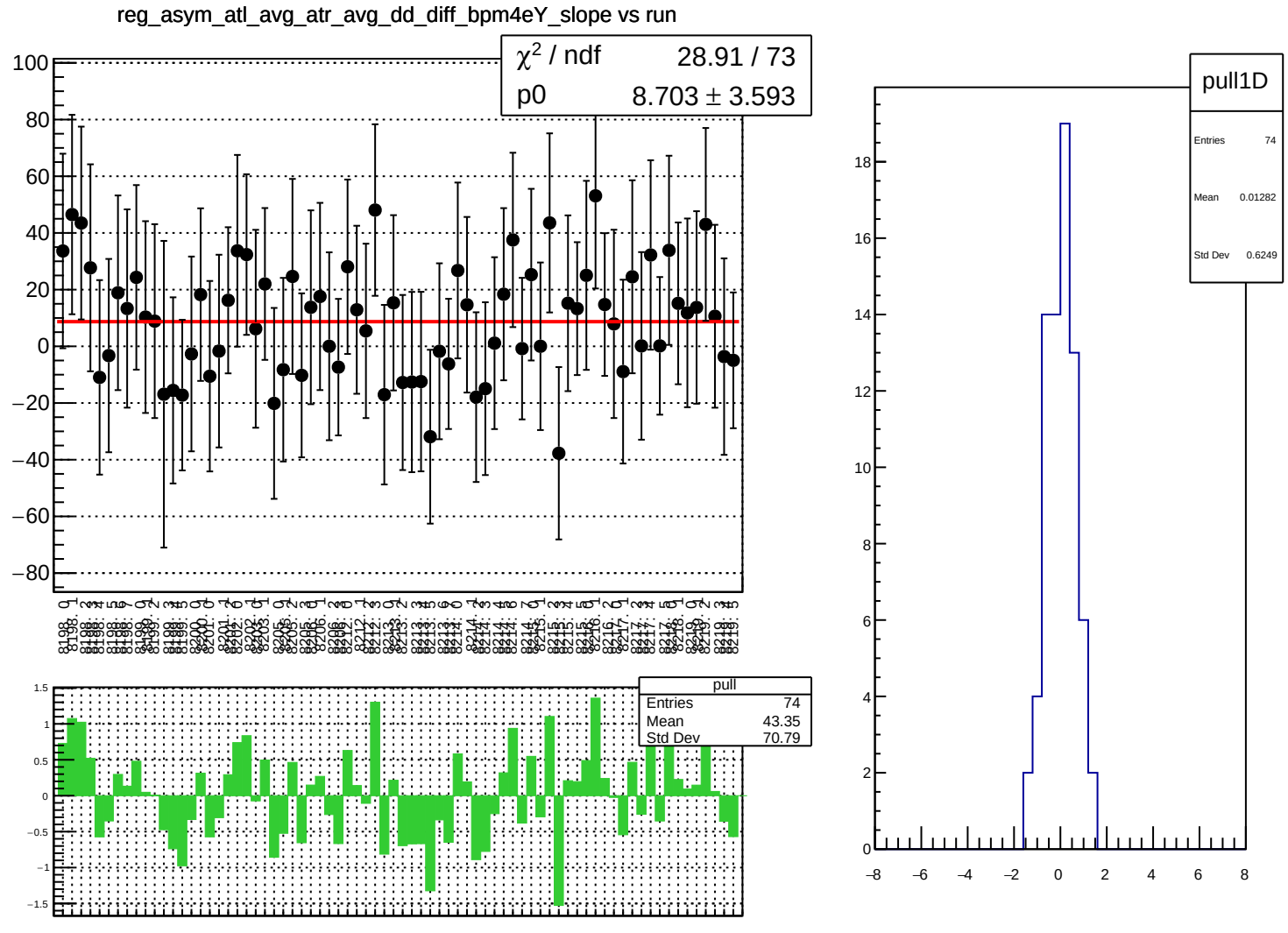

pull1D
Entries 74
Mean 0.004033
Std Dev 0.2124

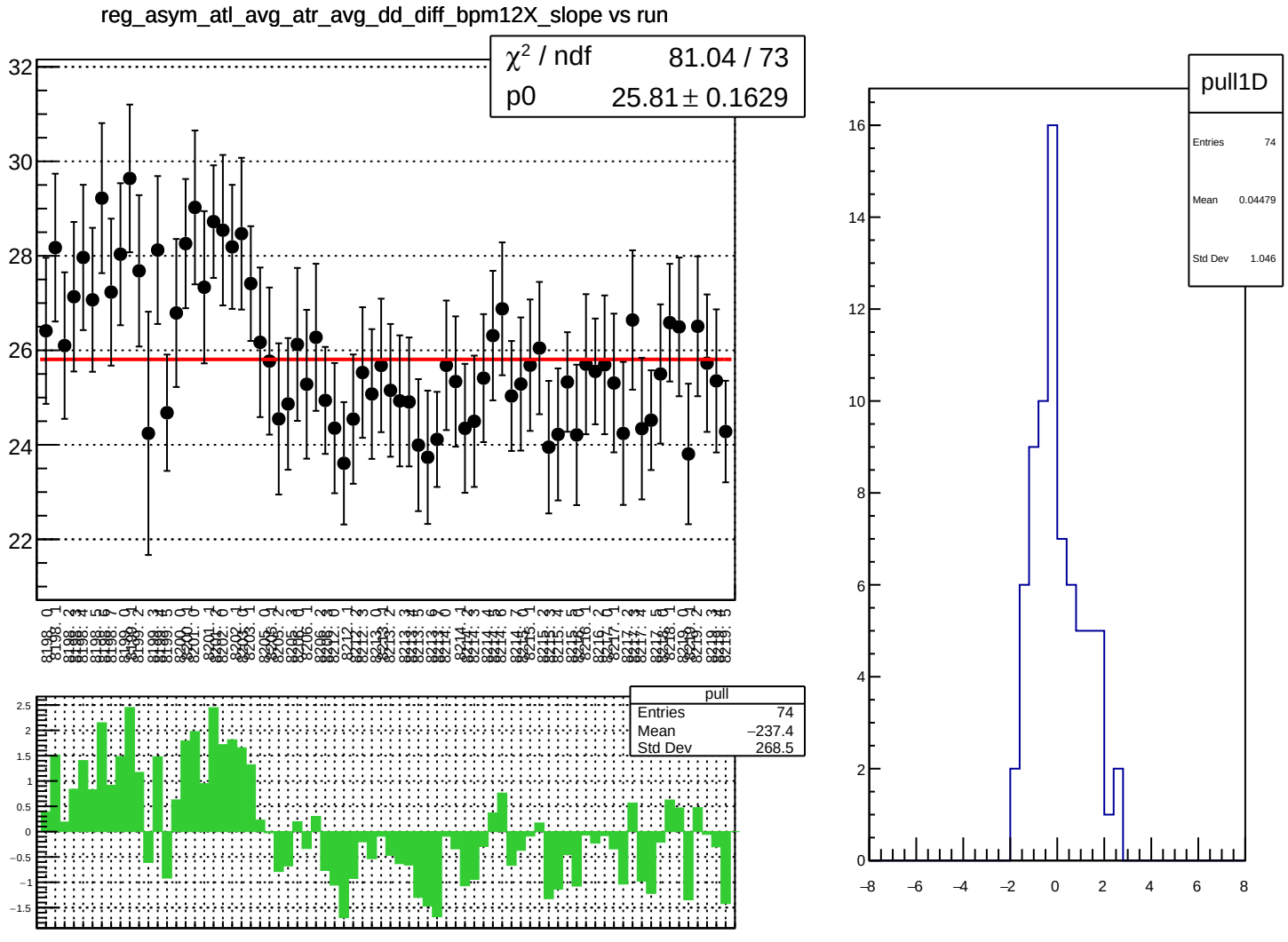

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 118 / 73
p0 −148.4 ± 0.5486
pull
Entries 74
Mean −197.7
Std Dev 228.3
pull1D
Entries 74
Mean −0.08258
Std Dev 1.26

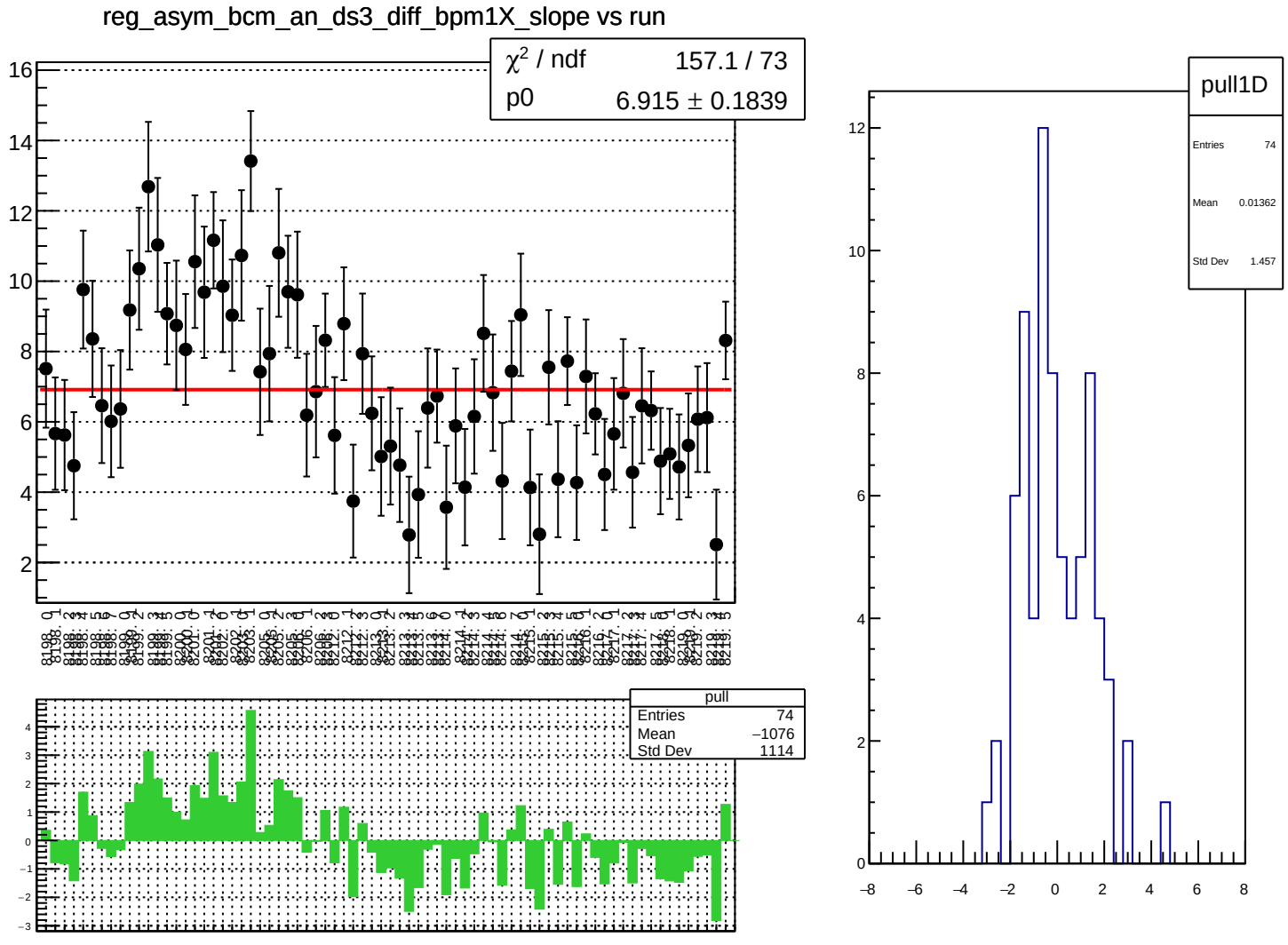

reg_asym_atl_avg_atr_avg_dd_diff_bpm1X_slope vs run
χ² / ndf 34.13 / 73
p0 54.32 ± 2.01
pull
Entries 74
Mean −392.6
Std Dev 429.2
pull1D
Entries 74
Mean 0.00214
Std Dev 0.6791

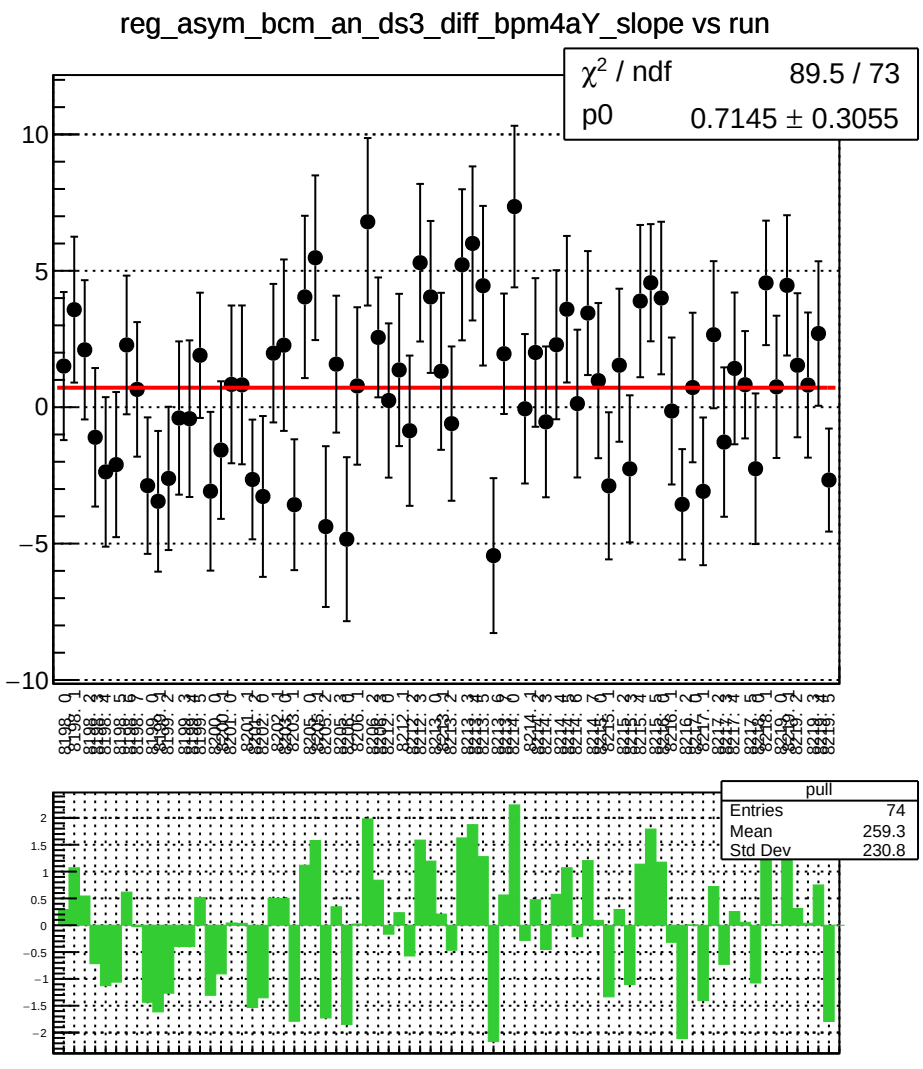

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 28.47 / 73
p0 −15.42 ± 3.342
pull
Entries 74
Mean 3.855
Std Dev 65.81
pull1D
Entries 74
Mean −0.01177
Std Dev 0.6202

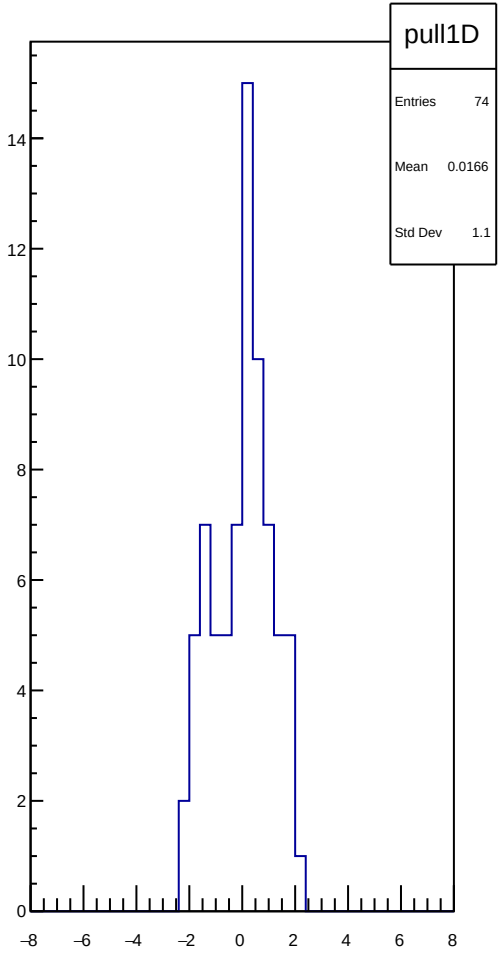

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 32.39 / 73
p0 −70.24 ± 2.012
pull
Entries 74
Mean −5275
Std Dev 5314
pull1D
Entries 74
Mean −0.0001668
Std Dev 0.6616

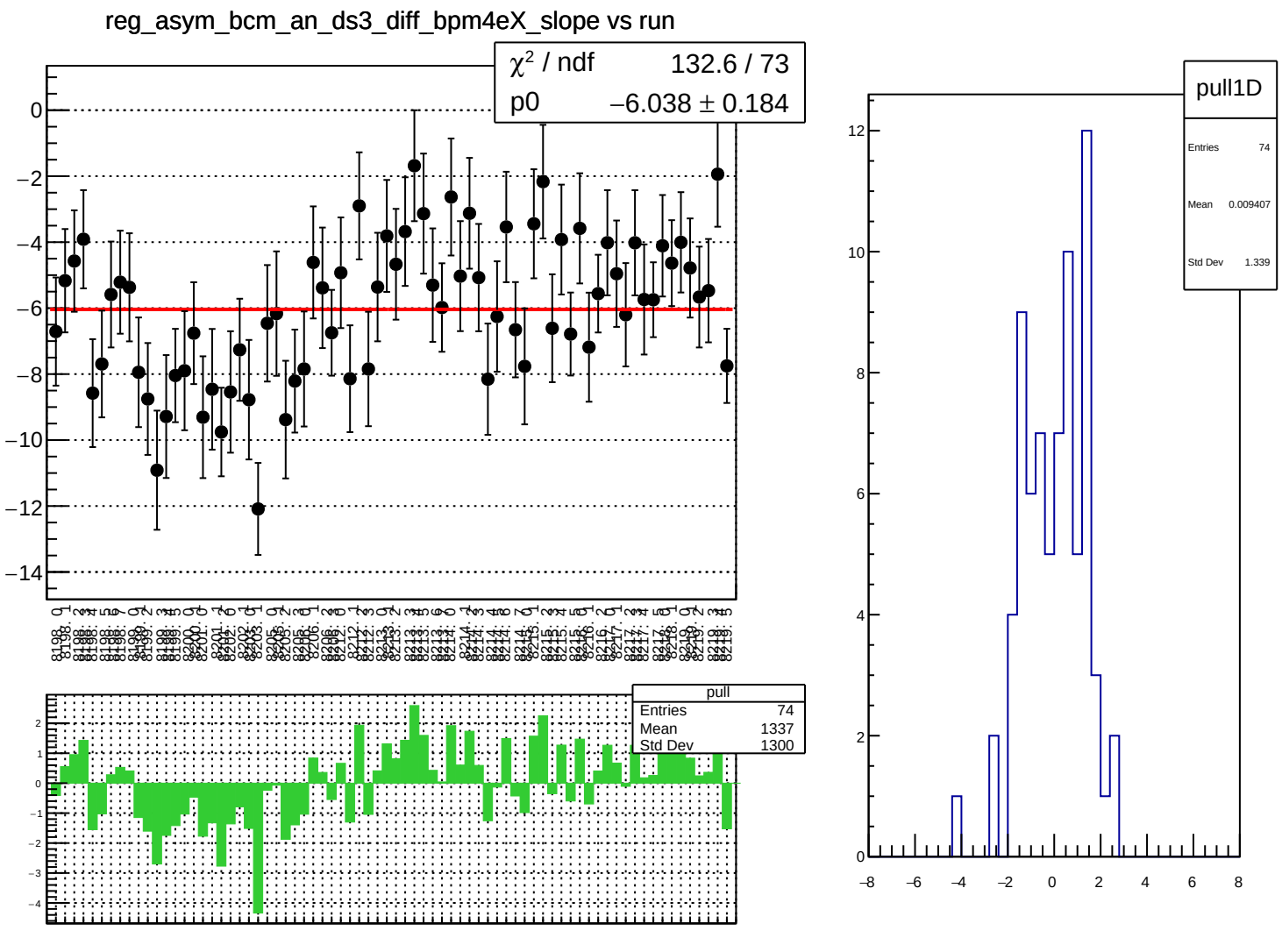

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 28.91 / 73
p0 8.703 ± 3.593
pull
Entries 74
Mean 43.35
Std Dev 70.79
pull1D
Entries 74
Mean 0.01282
Std Dev 0.6249

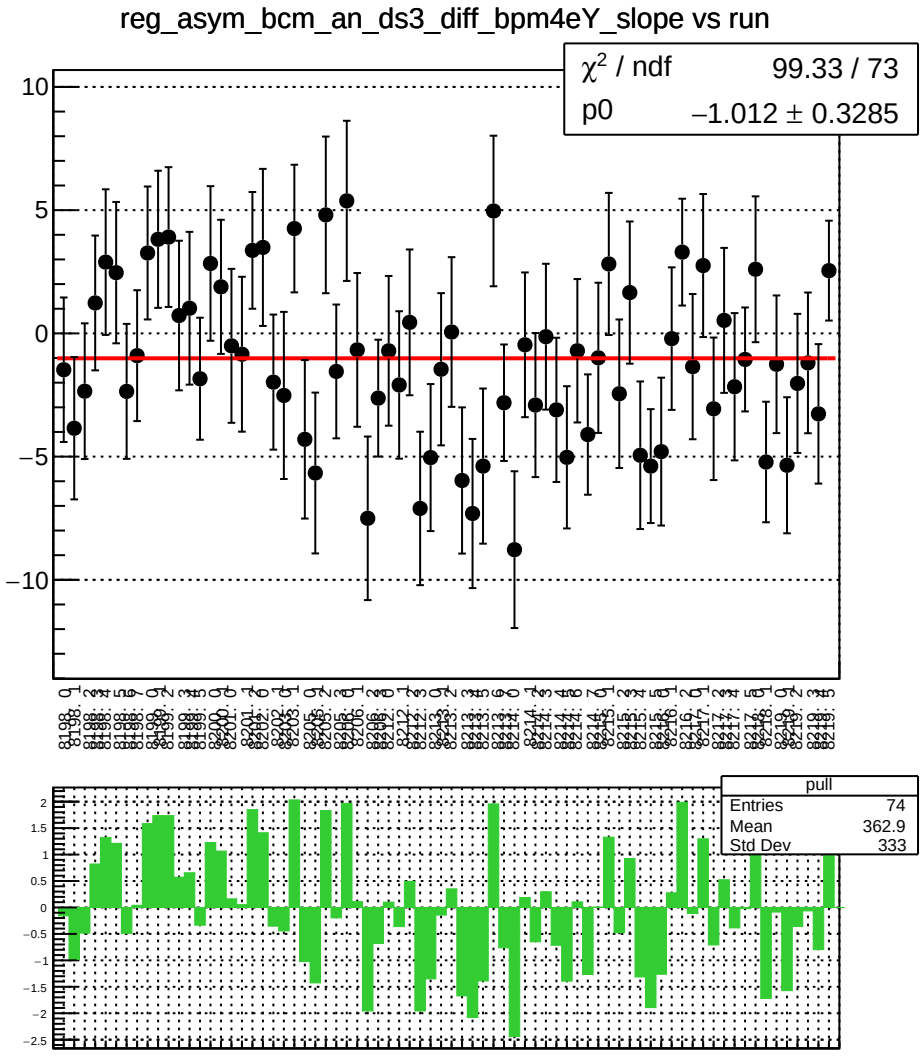

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 81.04 / 73
p0 25.81 ± 0.1629
pull
Entries 74
Mean −237.4
Std Dev 268.5
pull1D
Entries 74
Mean 0.04479
Std Dev 1.046

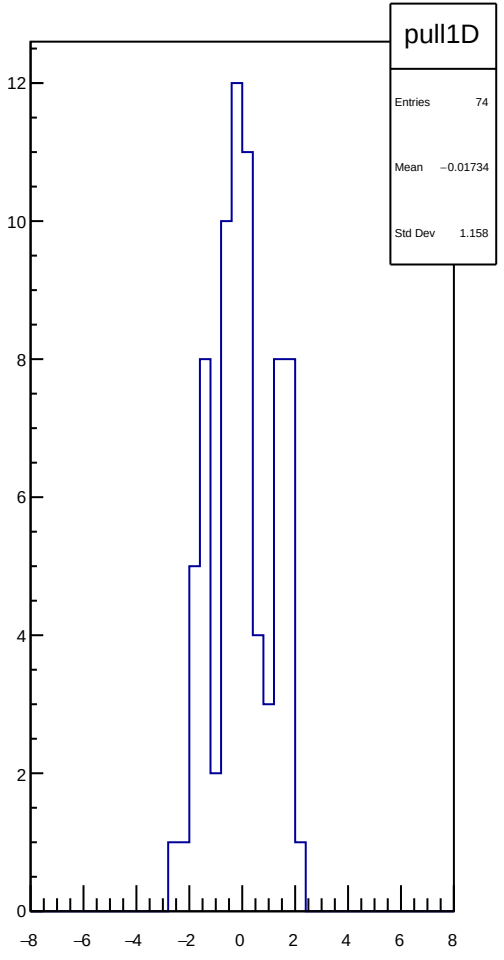

reg_asym_bcm_an_ds3_diff_bpm1X_slope vs run
χ² / ndf 157.1 / 73
p0 6.915 ± 0.1839
pull
Entries 74
Mean −1076
Std Dev 1114
pull1D
Entries 74
Mean 0.01362
Std Dev 1.457

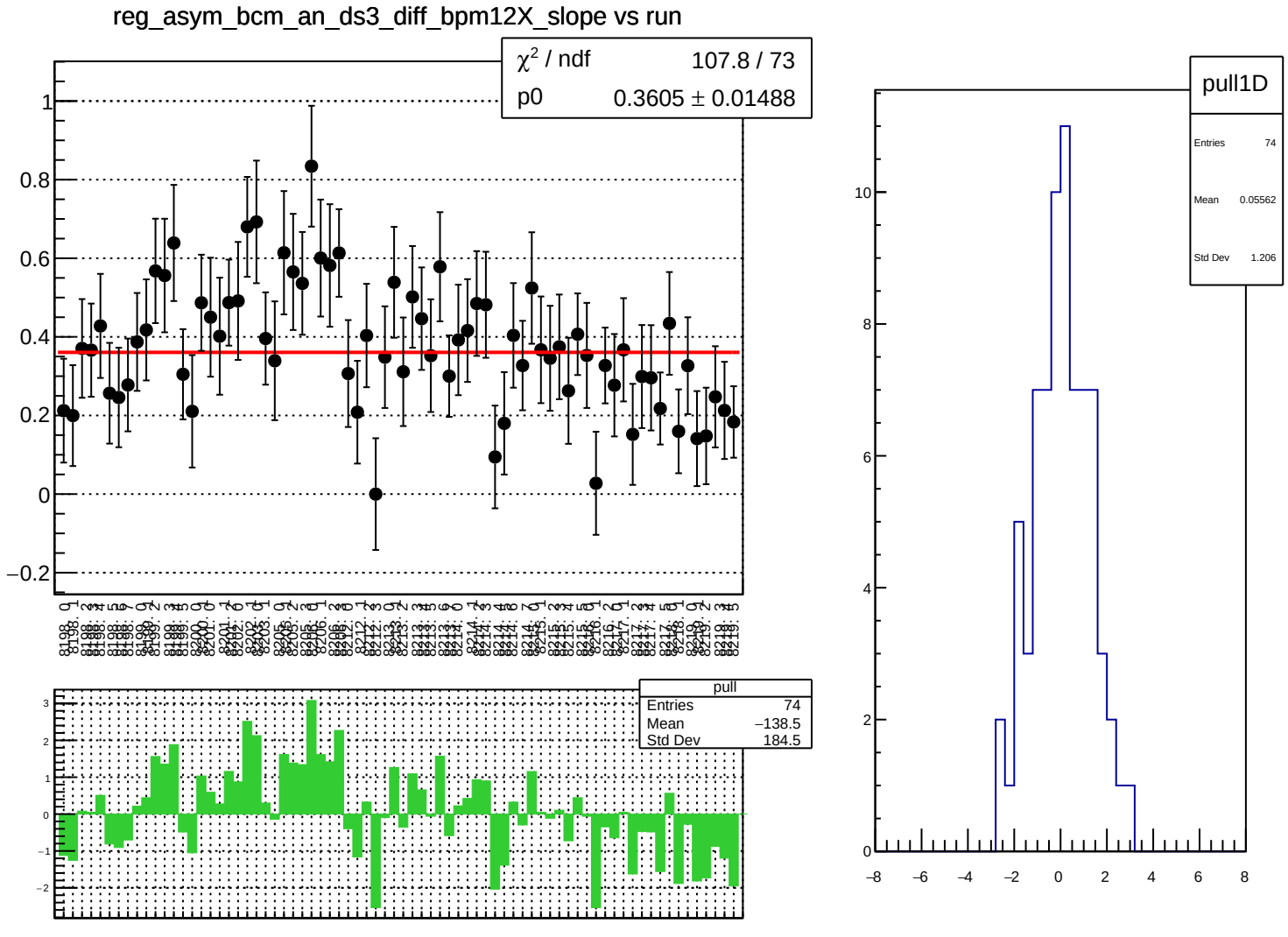

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 89.5 / 73
p0 0.7145 ± 0.3055
pull
Entries 74
Mean 259.3
Std Dev 230.8

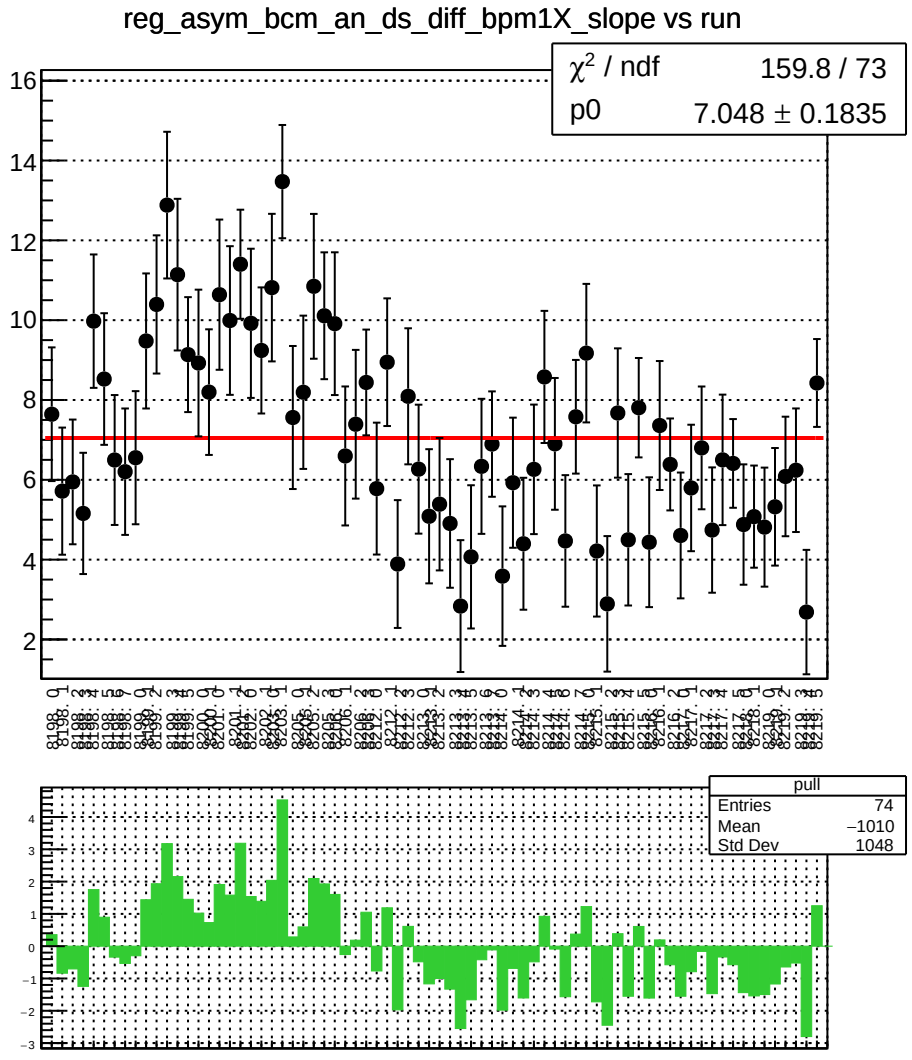

pull1D
Entries 74
Mean 0.0166
Std Dev 1.1

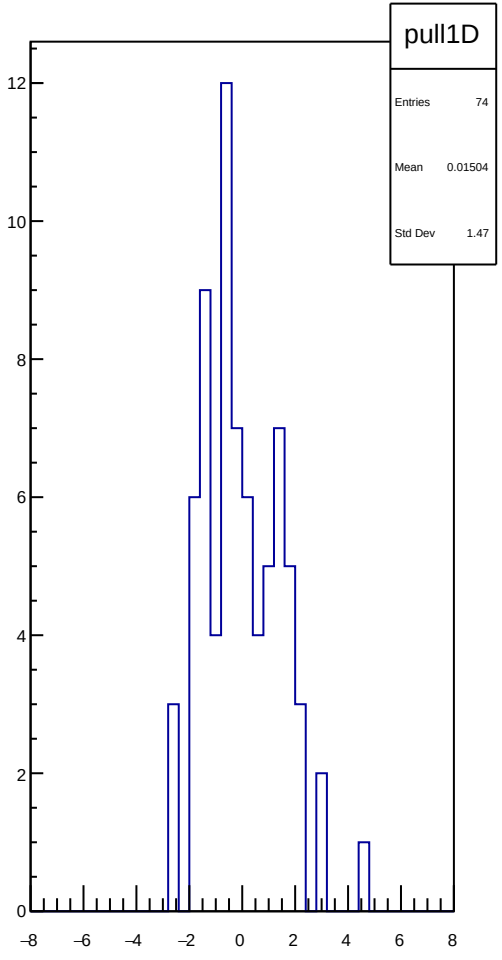

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 132.6 / 73
p0 −6.038 ± 0.184
pull
Entries 74
Mean 1337
Std Dev 1300
pull1D
Entries 74
Mean 0.009407
Std Dev 1.339

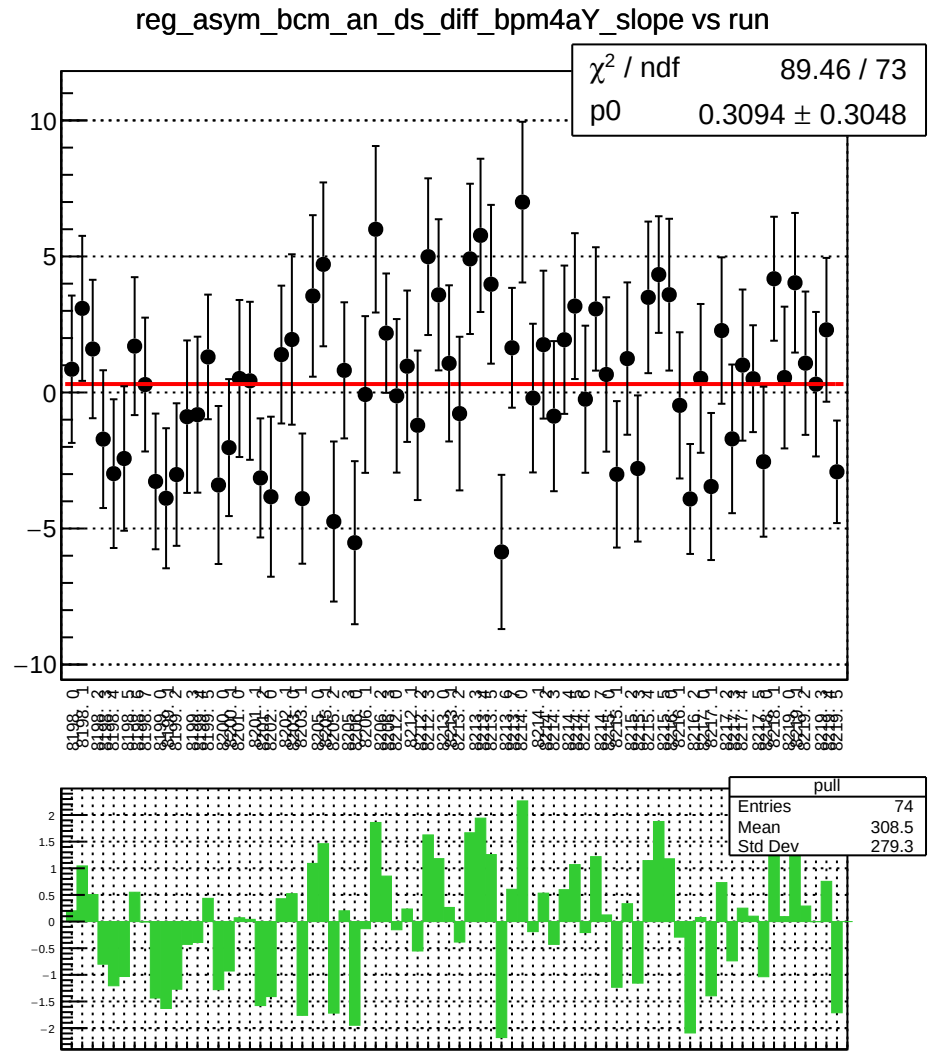

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 99.33 / 73
p0 −1.012 ± 0.3285
pull
Entries 74
Mean 362.9
Std Dev 333

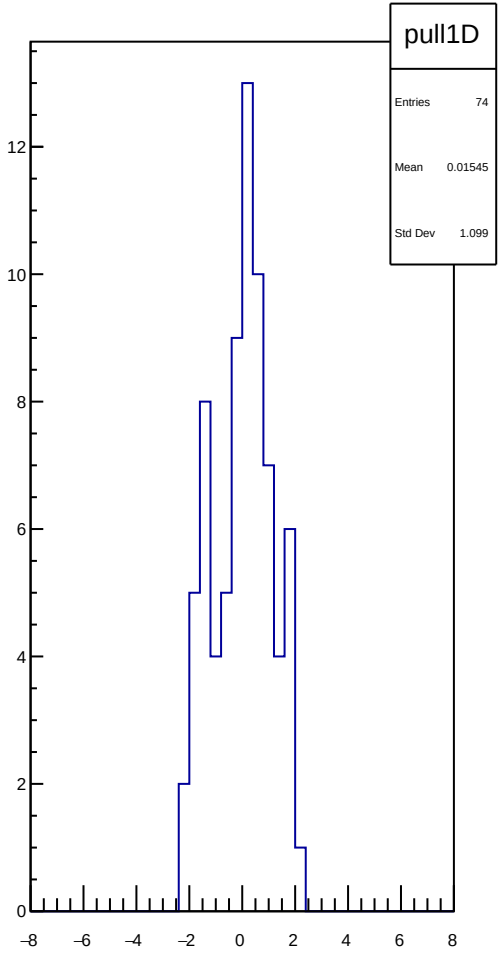

pull1D
Entries 74
Mean −0.01734
Std Dev 1.158

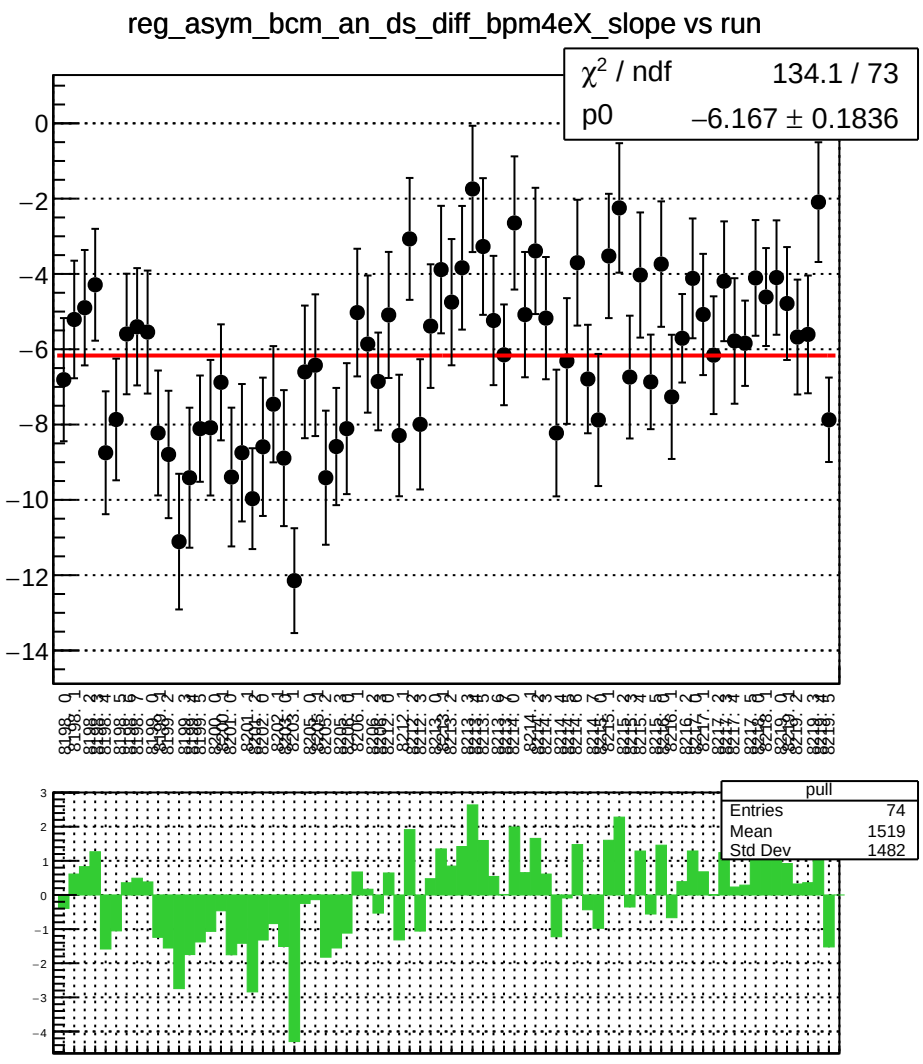

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 107.8 / 73
p0 0.3605 ± 0.01488
pull
Entries 74
Mean −138.5
Std Dev 184.5
pull1D
Entries 74
Mean 0.05562
Std Dev 1.206

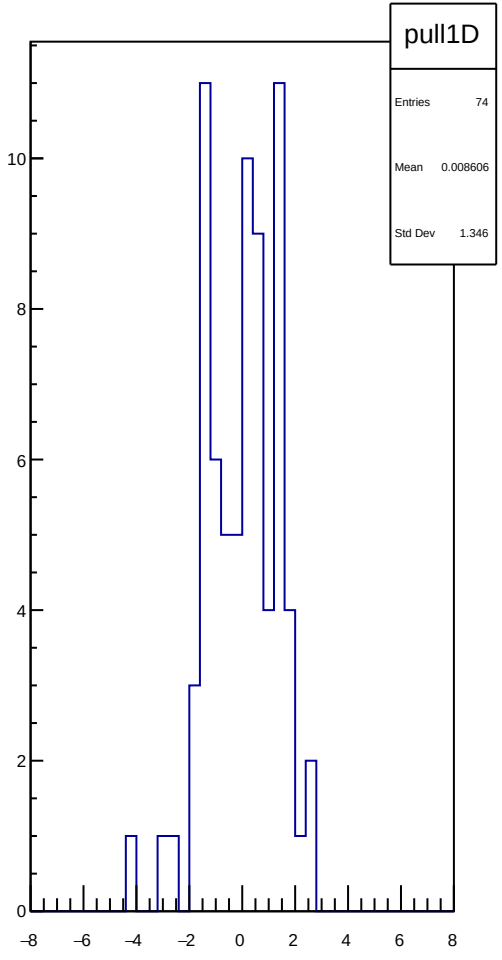

reg_asym_bcm_an_ds_diff_bpm1X_slope vs run
χ² / ndf 159.8 / 73
p0 7.048 ± 0.1835
pull
Entries 74
Mean −1010
Std Dev 1048

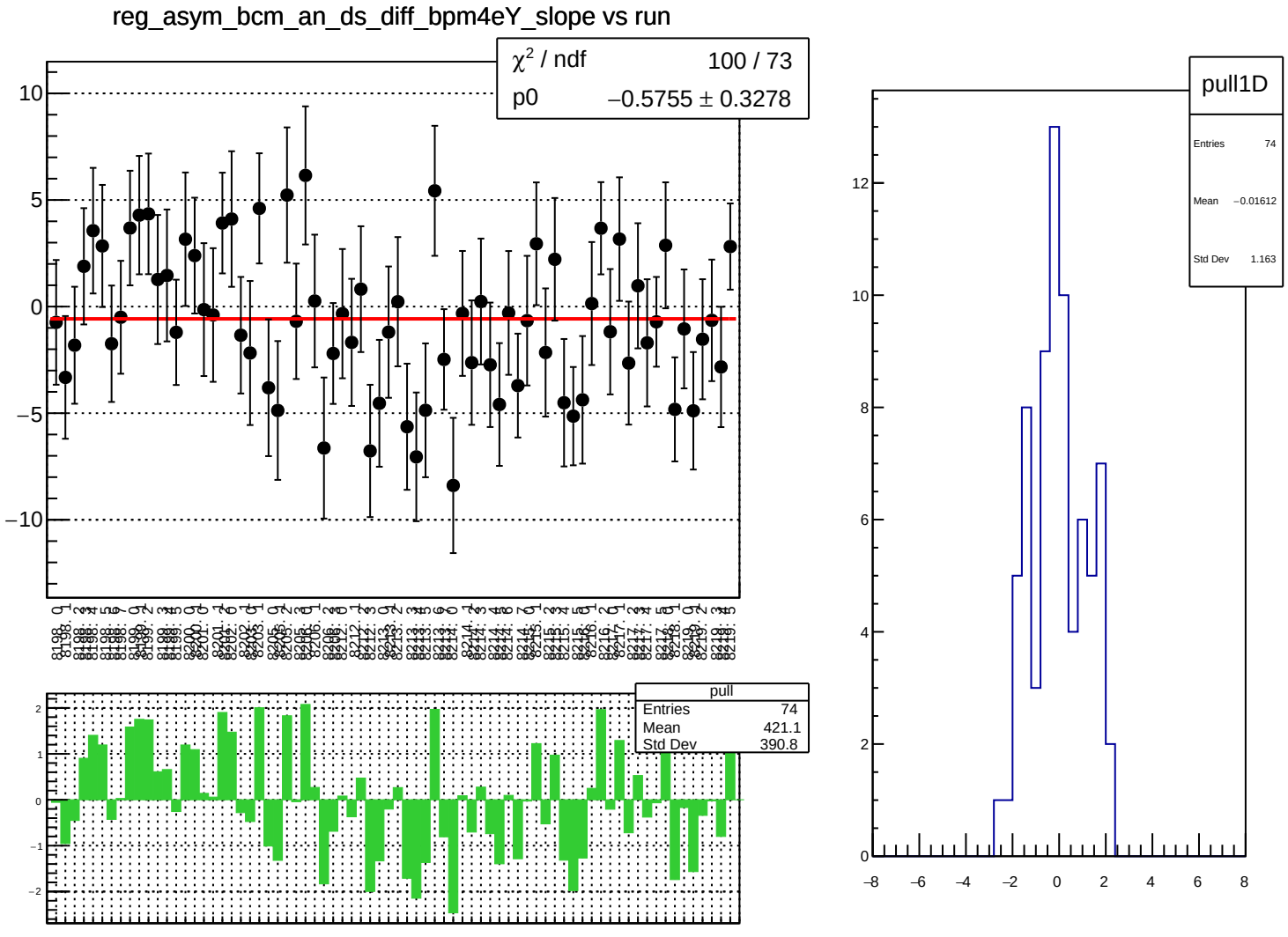

pull1D
Entries 74
Mean 0.01504
Std Dev 1.47

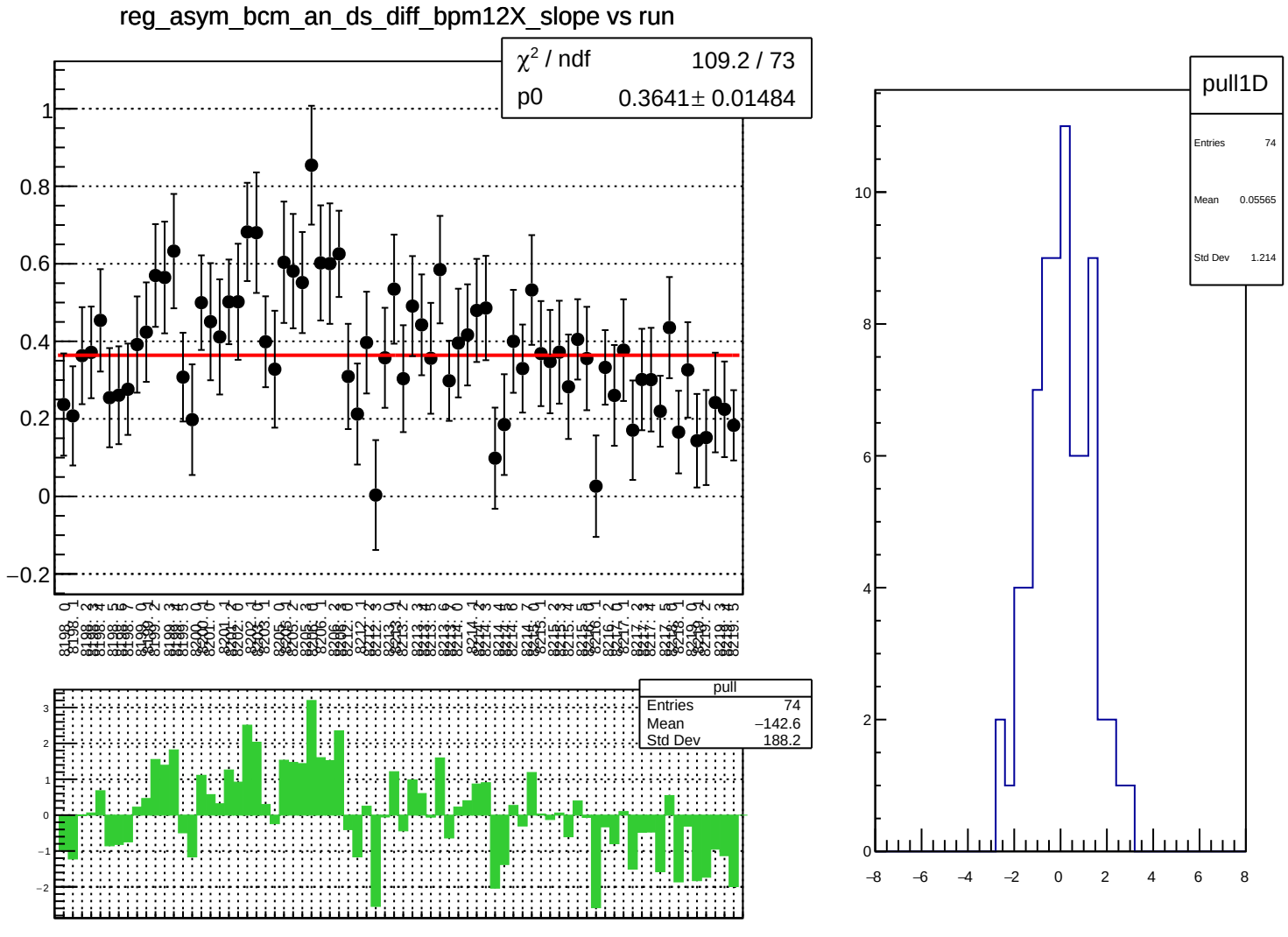

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 89.46 / 73
p0 0.3094 ± 0.3048
pull
Entries 74
Mean 308.5
Std Dev 279.3

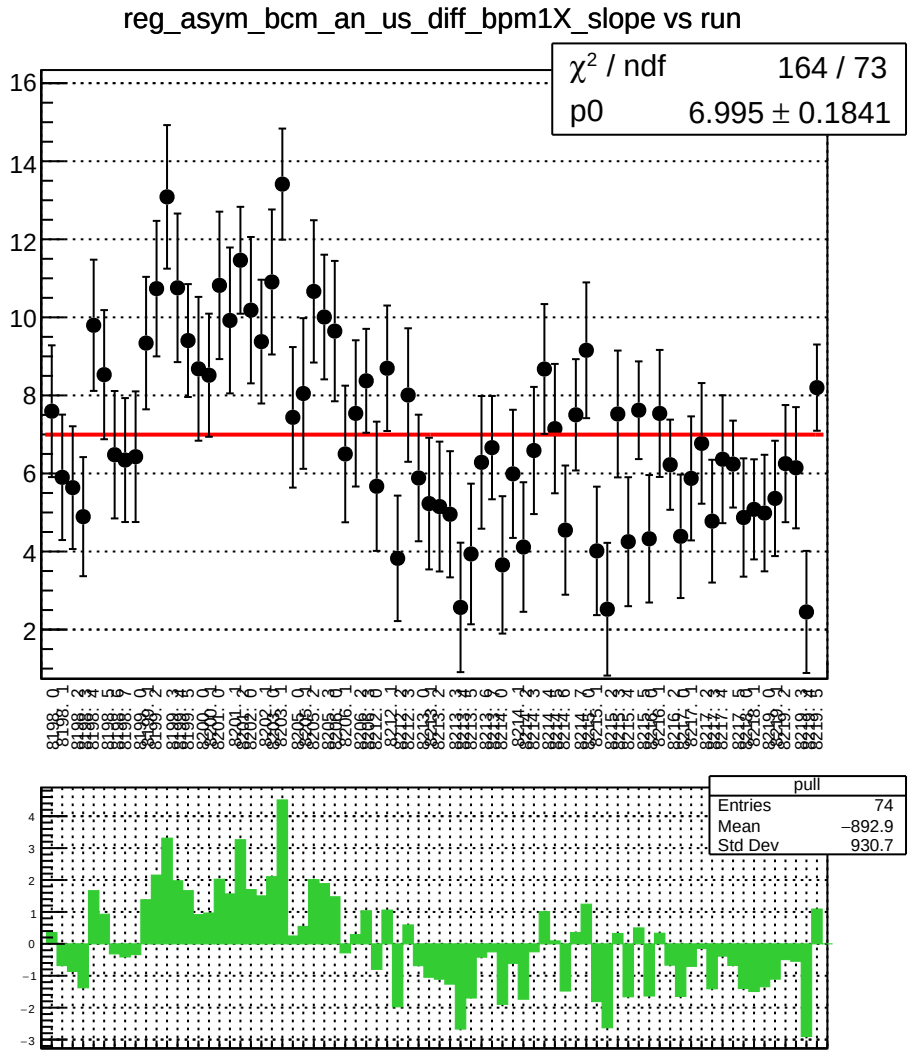

pull1D
Entries 74
Mean 0.01545
Std Dev 1.099

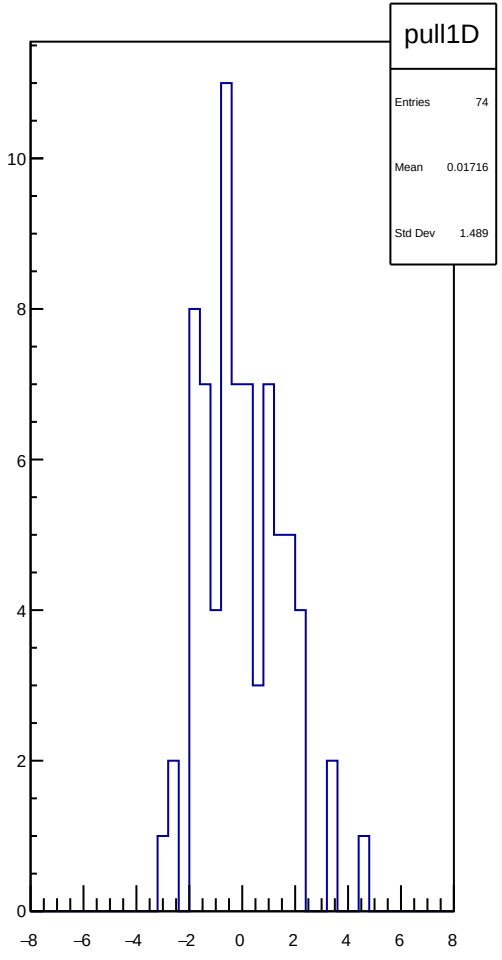

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 134.1 / 73
p0 −6.167 ± 0.1836
pull
Entries 74
Mean 1519
Std Dev 1482

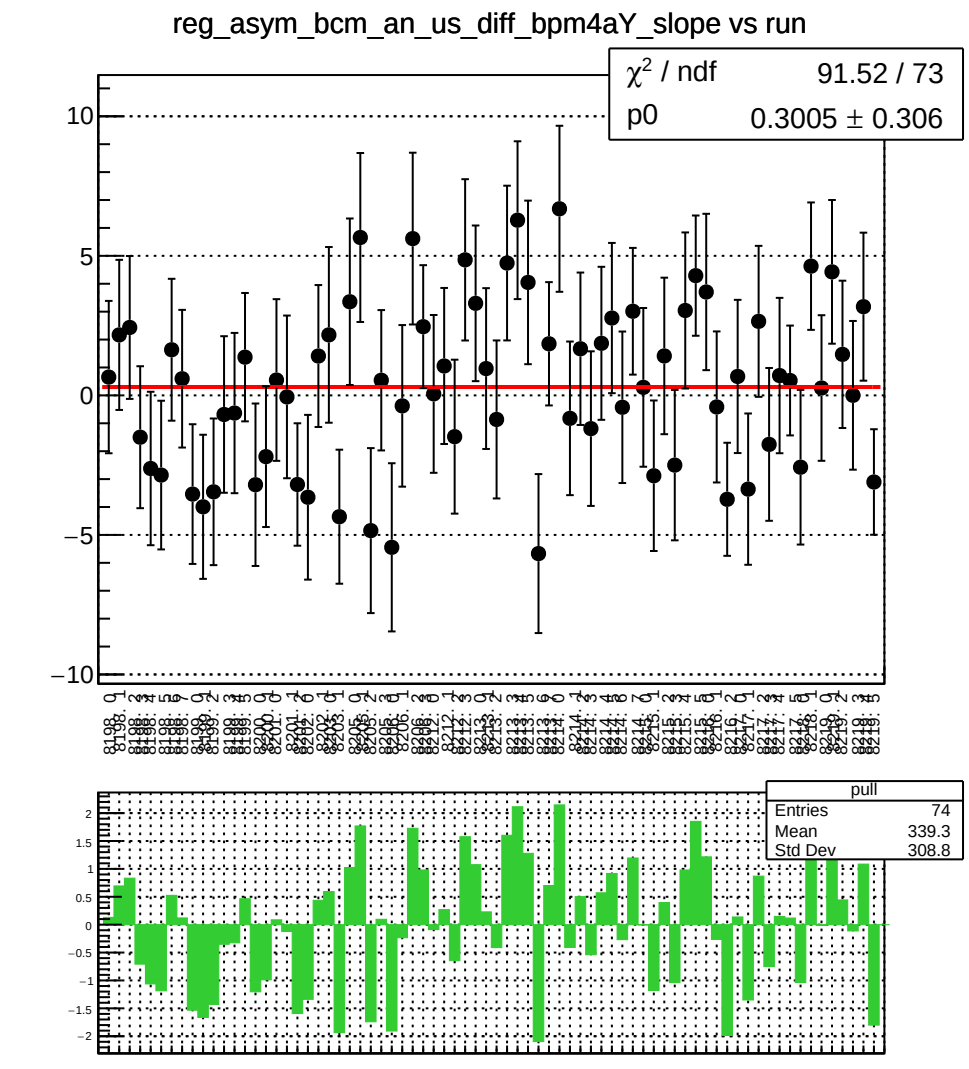

pull1D
Entries 74
Mean 0.008606
Std Dev 1.346

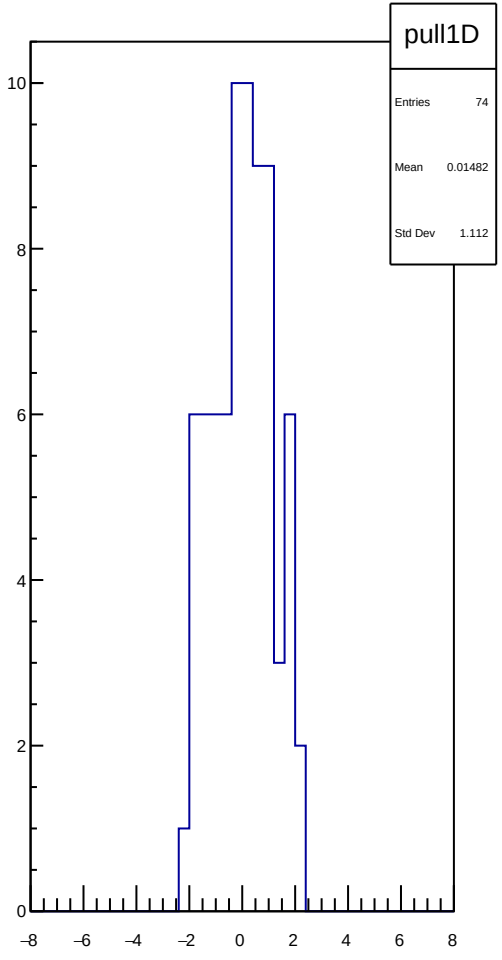

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 100 / 73
p0 −0.5755 ± 0.3278
pull
Entries 74
Mean 421.1
Std Dev 390.8
pull1D
Entries 74
Mean −0.01612
Std Dev 1.163

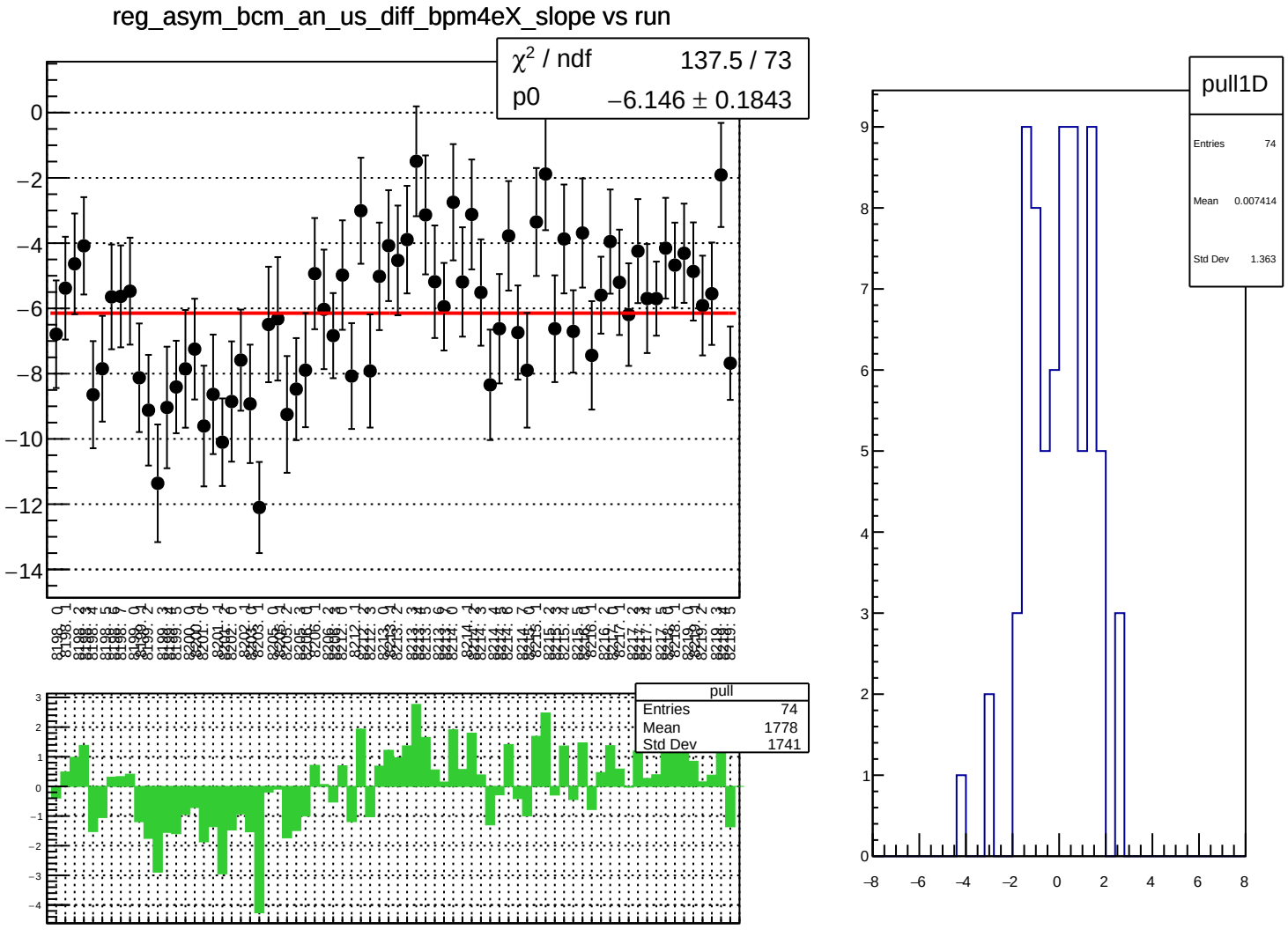

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 109.2 / 73
p0 0.3641± 0.01484
pull
Entries 74
Mean −142.6
Std Dev 188.2
pull1D
Entries 74
Mean 0.05565
Std Dev 1.214

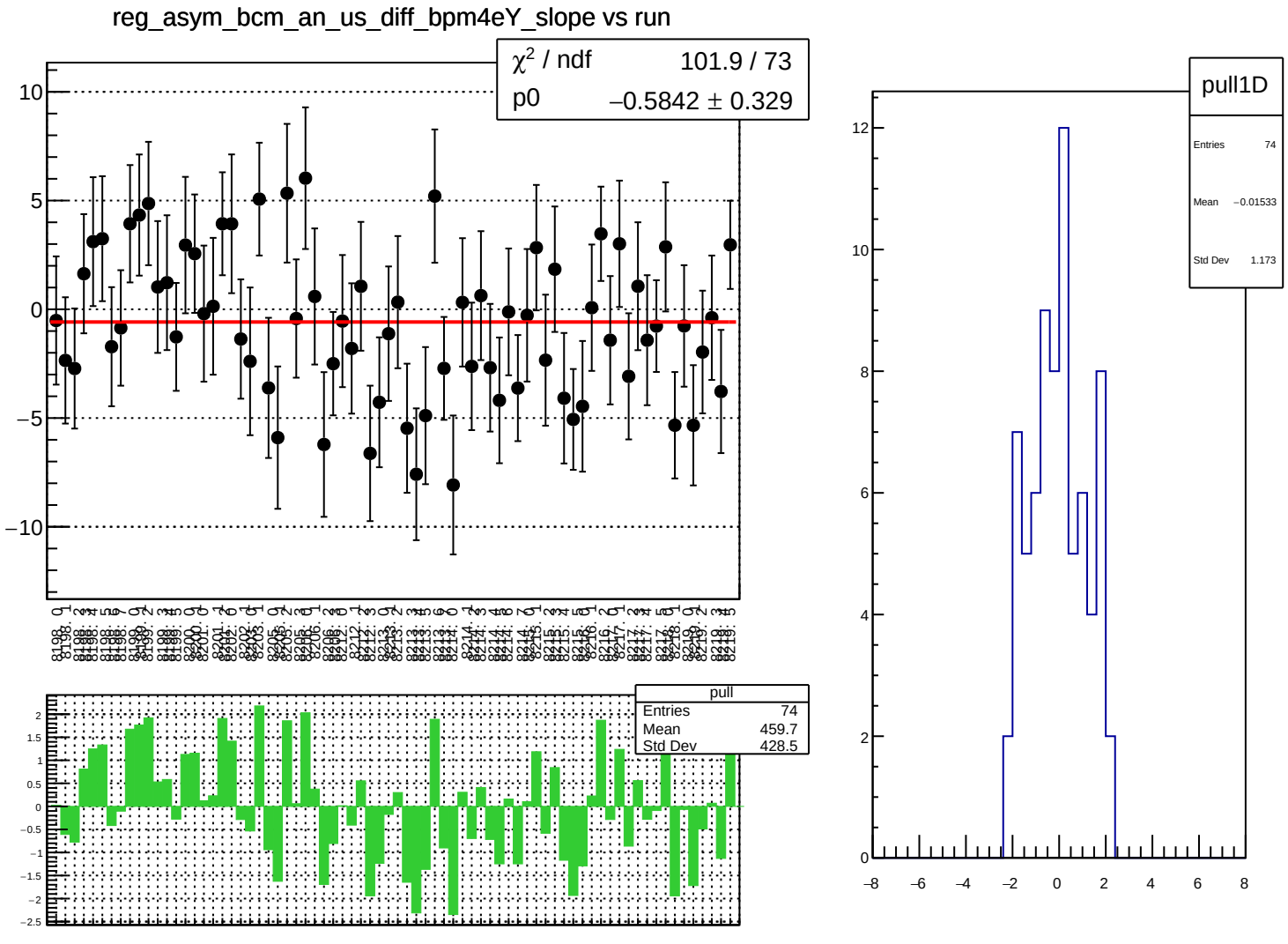

reg_asym_bcm_an_us_diff_bpm1X_slope vs run
χ² / ndf 164 / 73
p0 6.995 ± 0.1841
pull
Entries 74
Mean −892.9
Std Dev 930.7

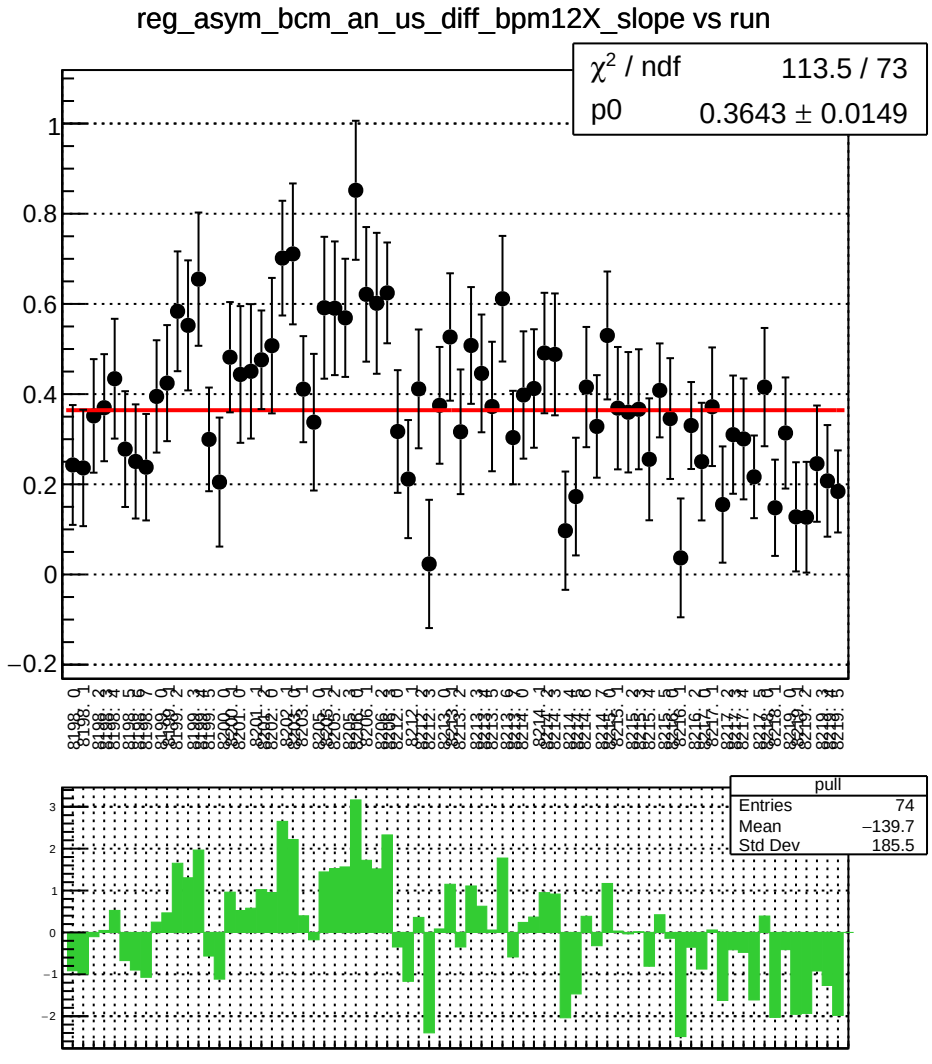

pull1D
Entries 74
Mean 0.01716
Std Dev 1.489

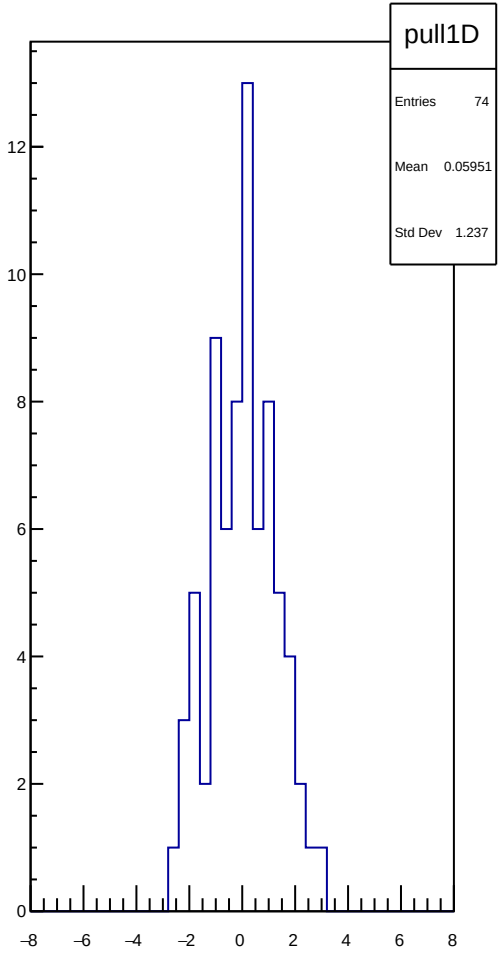

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 91.52 / 73
p0 0.3005 ± 0.306
pull
Entries 74
Mean 339.3
Std Dev 308.8

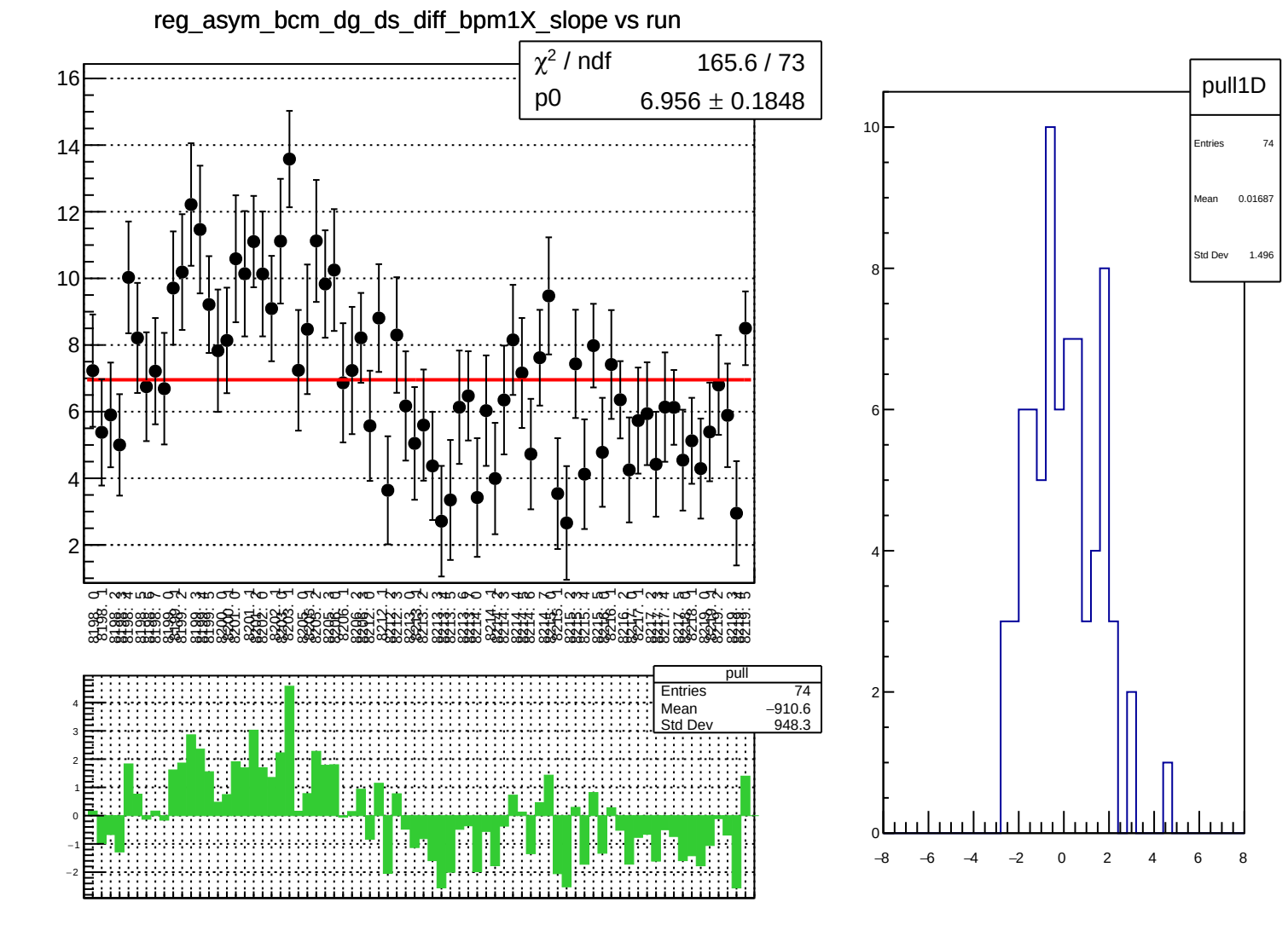

pull1D
Entries 74
Mean 0.01482
Std Dev 1.112

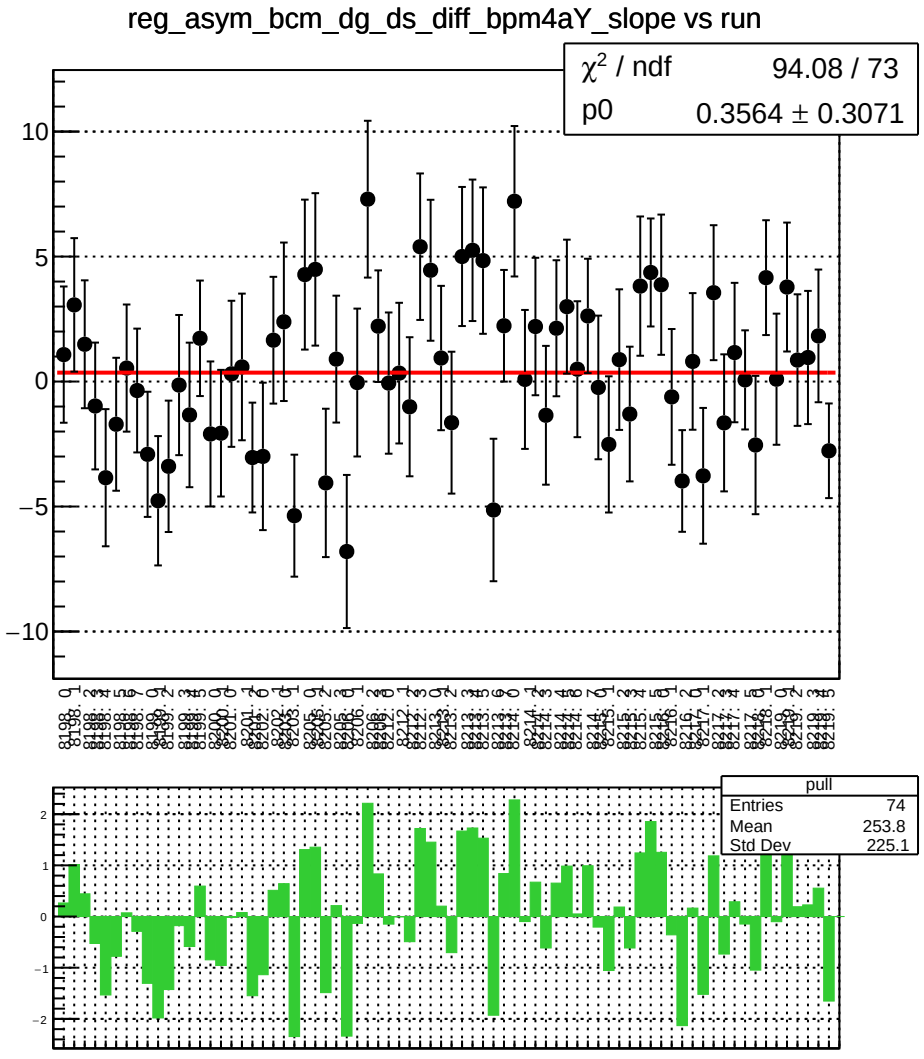

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 137.5 / 73
p0 −6.146 ± 0.1843
pull
Entries 74
Mean 1778
Std Dev 1741
pull1D
Entries 74
Mean 0.007414
Std Dev 1.363

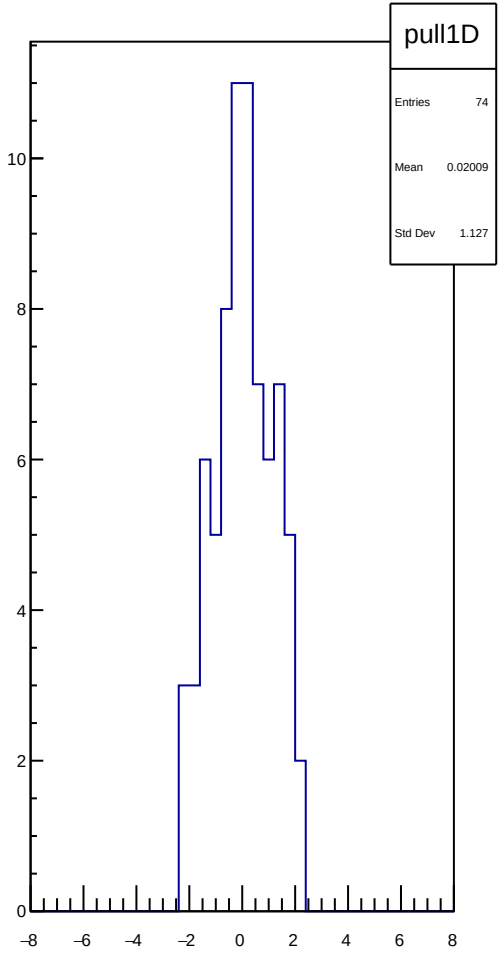

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 101.9 / 73
p0 −0.5842 ± 0.329
pull
Entries 74
Mean 459.7
Std Dev 428.5
pull1D
Entries 74
Mean −0.01533
Std Dev 1.173

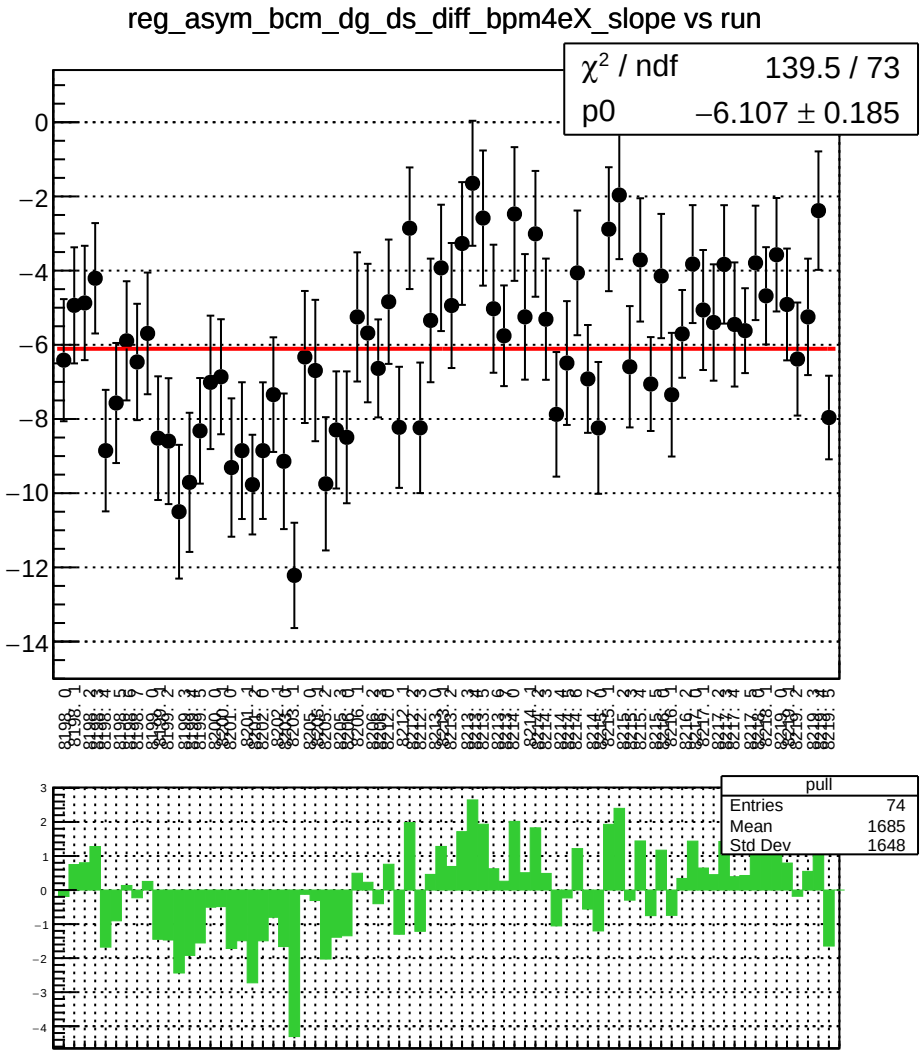

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 113.5 / 73
p0 0.3643 ± 0.0149
pull
Entries 74
Mean −139.7
Std Dev 185.5

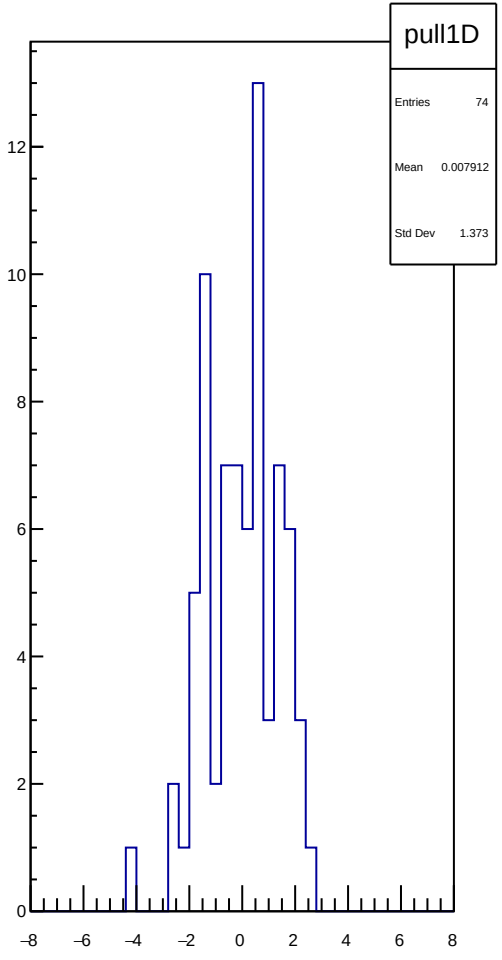

pull1D
Entries 74
Mean 0.05951
Std Dev 1.237

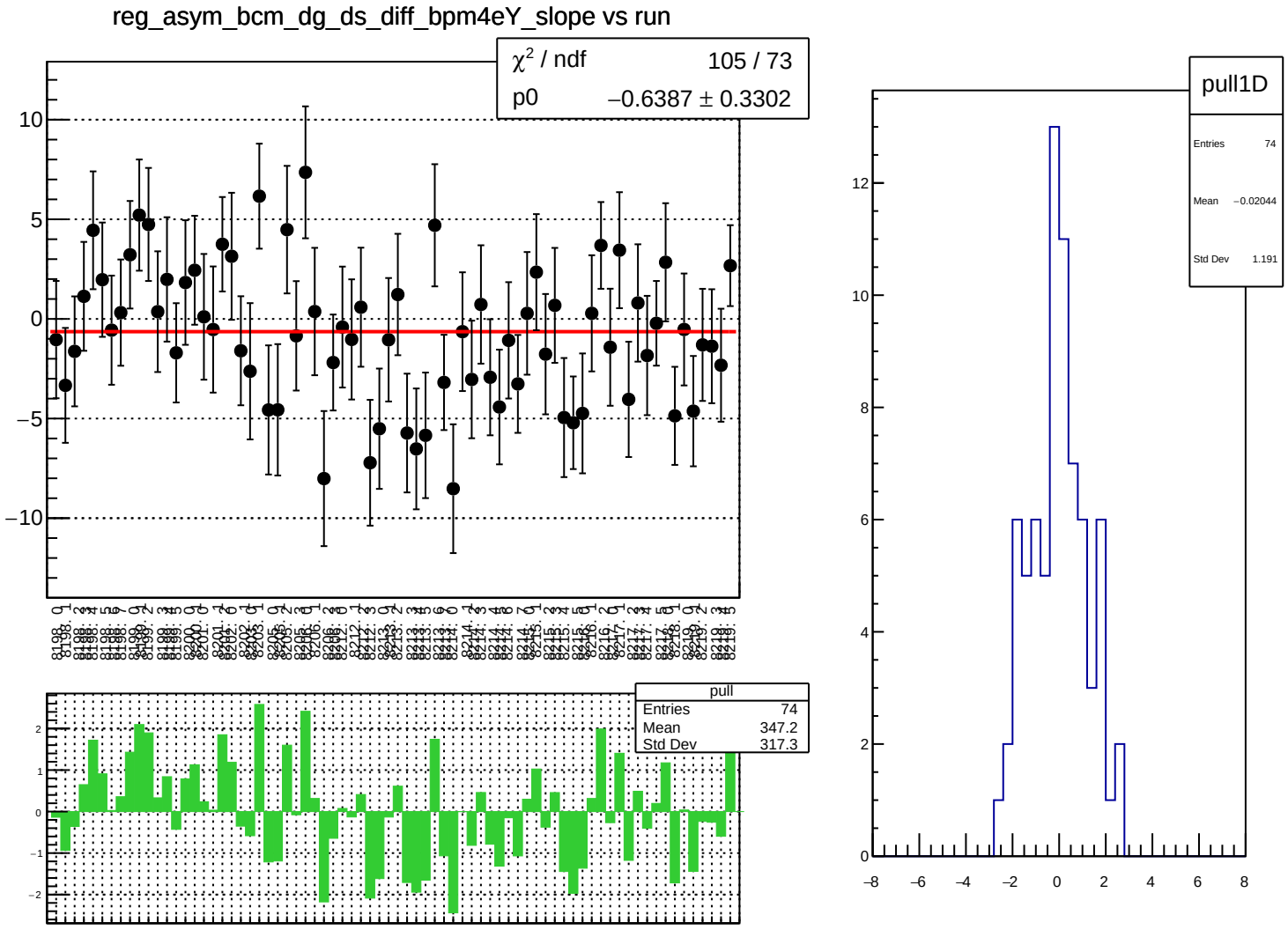

reg_asym_bcm_dg_ds_diff_bpm1X_slope vs run
χ² / ndf 165.6 / 73
p0 6.956 ± 0.1848
pull
Entries 74
Mean −910.6
Std Dev 948.3
pull1D
Entries 74
Mean 0.01687
Std Dev 1.496

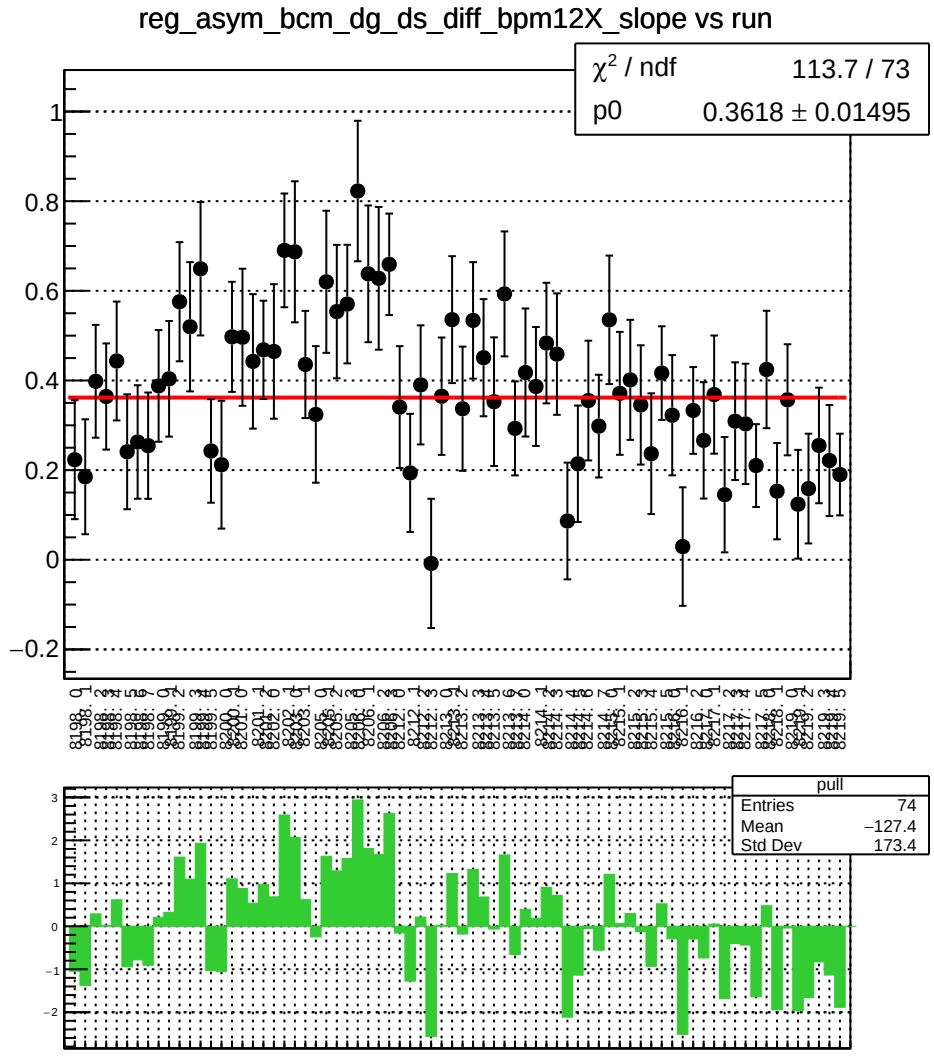

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 94.08 / 73
p0 0.3564 ± 0.3071
pull
Entries 74
Mean 253.8
Std Dev 225.1

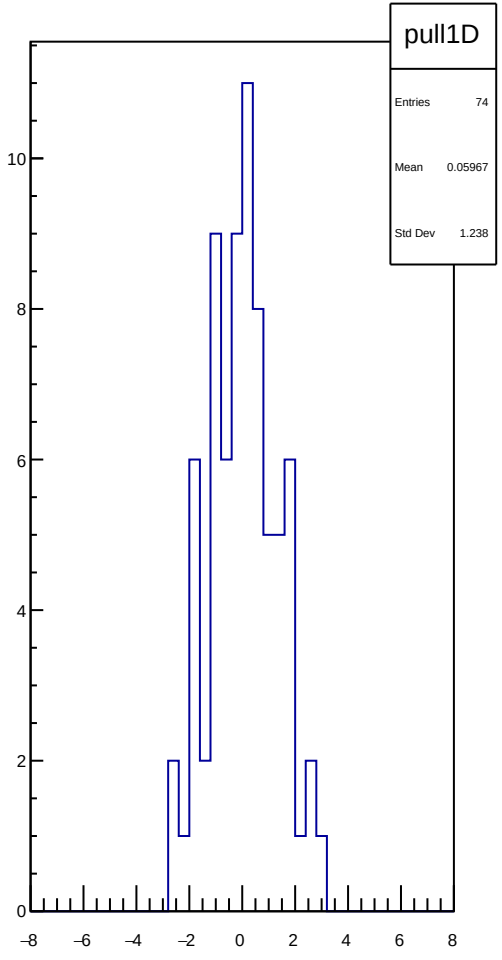

pull1D
Entries 74
Mean 0.02009
Std Dev 1.127

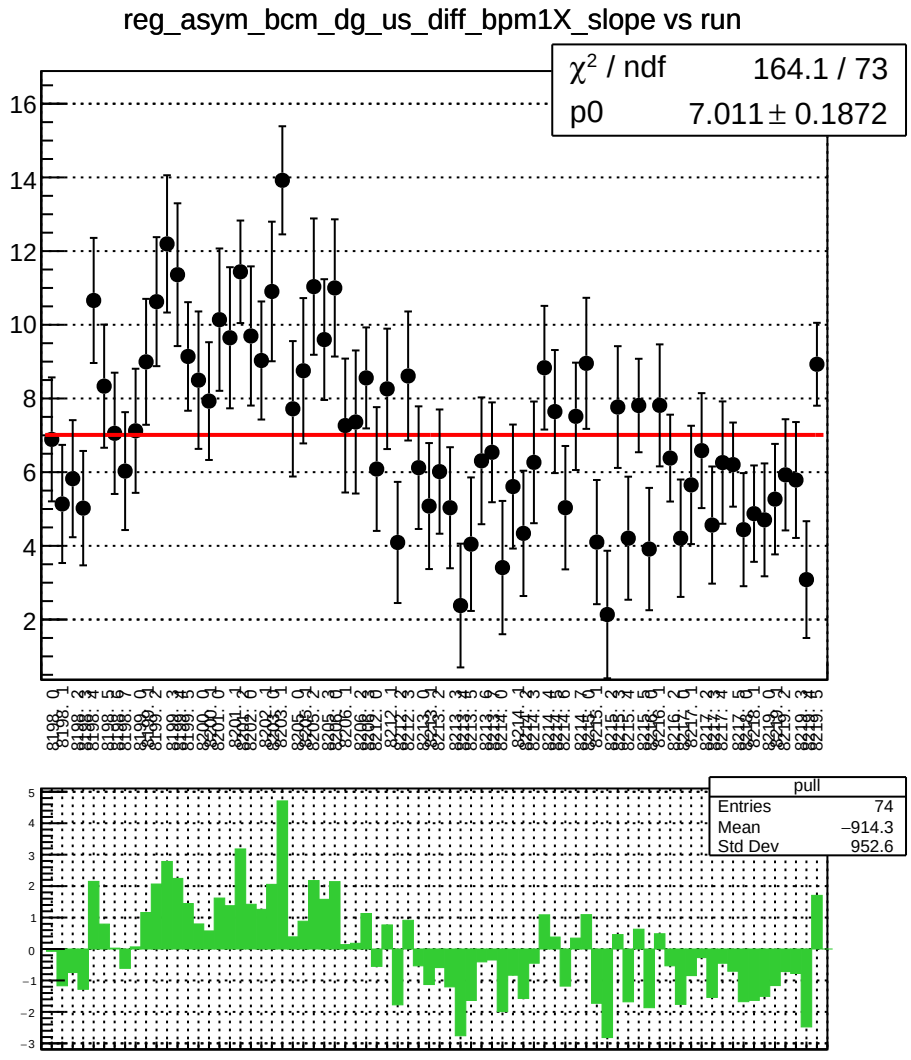

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 139.5 / 73
p0 −6.107 ± 0.185
pull
Entries 74
Mean 1685
Std Dev 1648

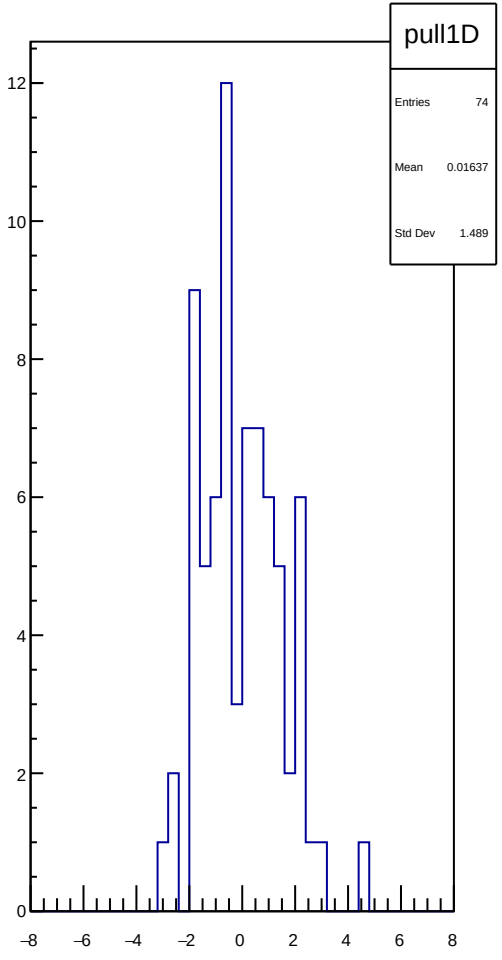

pull1D
Entries 74
Mean 0.007912
Std Dev 1.373

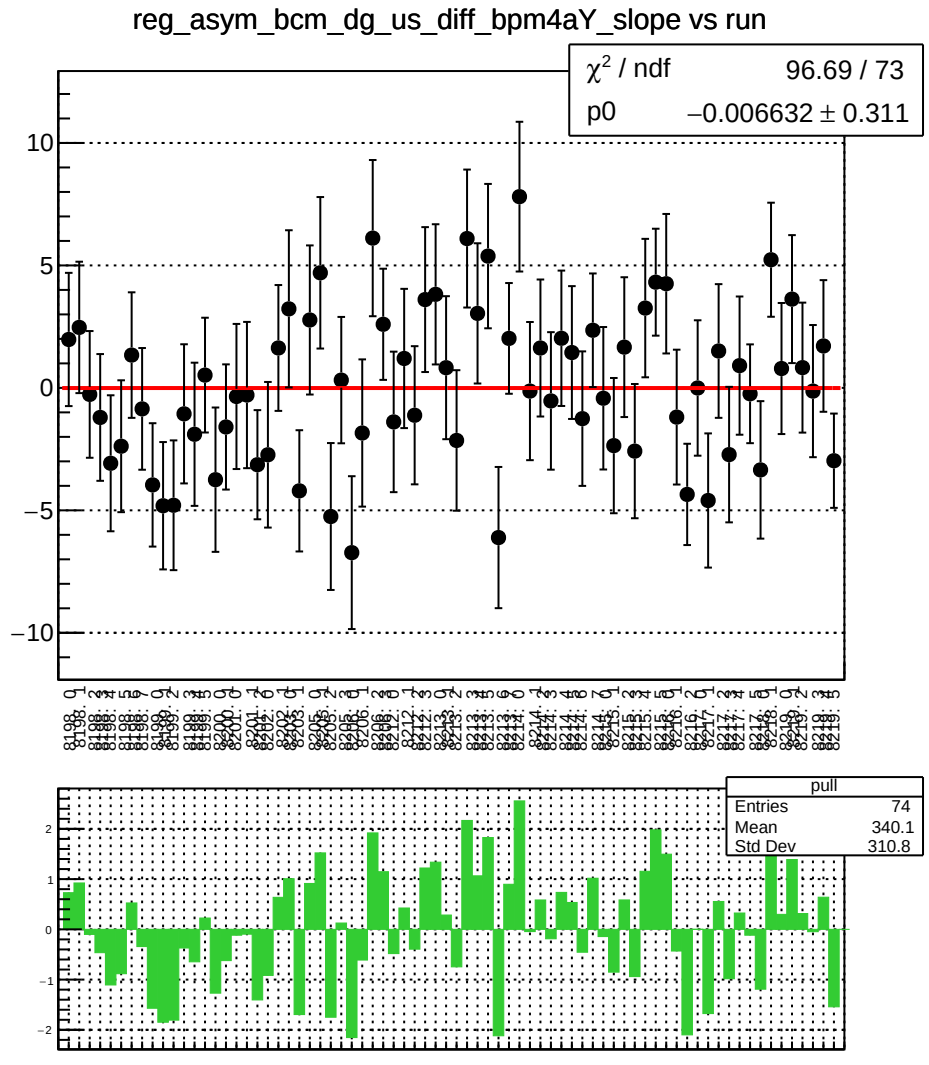

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 105 / 73
p0 −0.6387 ± 0.3302
pull
Entries 74
Mean 347.2
Std Dev 317.3
pull1D
Entries 74
Mean −0.02044
Std Dev 1.191

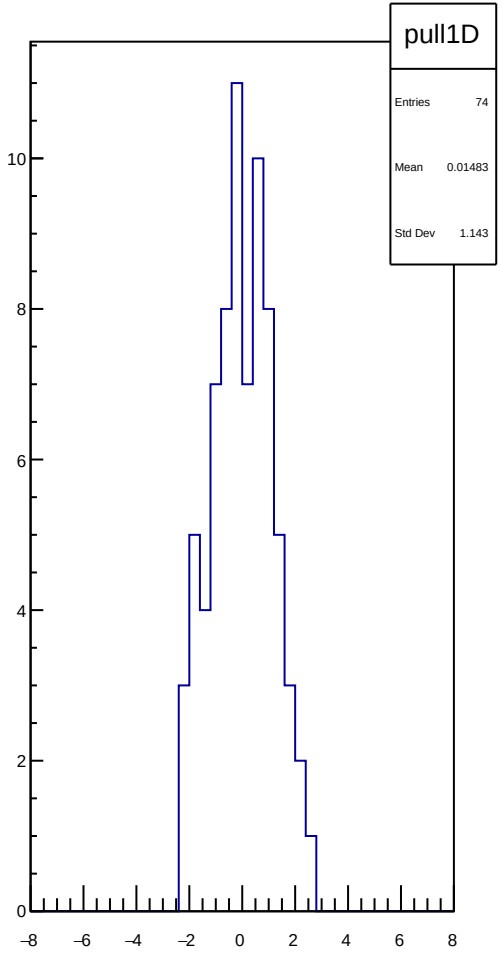

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 113.7 / 73
p0 0.3618 ± 0.01495
pull
Entries 74
Mean −127.4
Std Dev 173.4

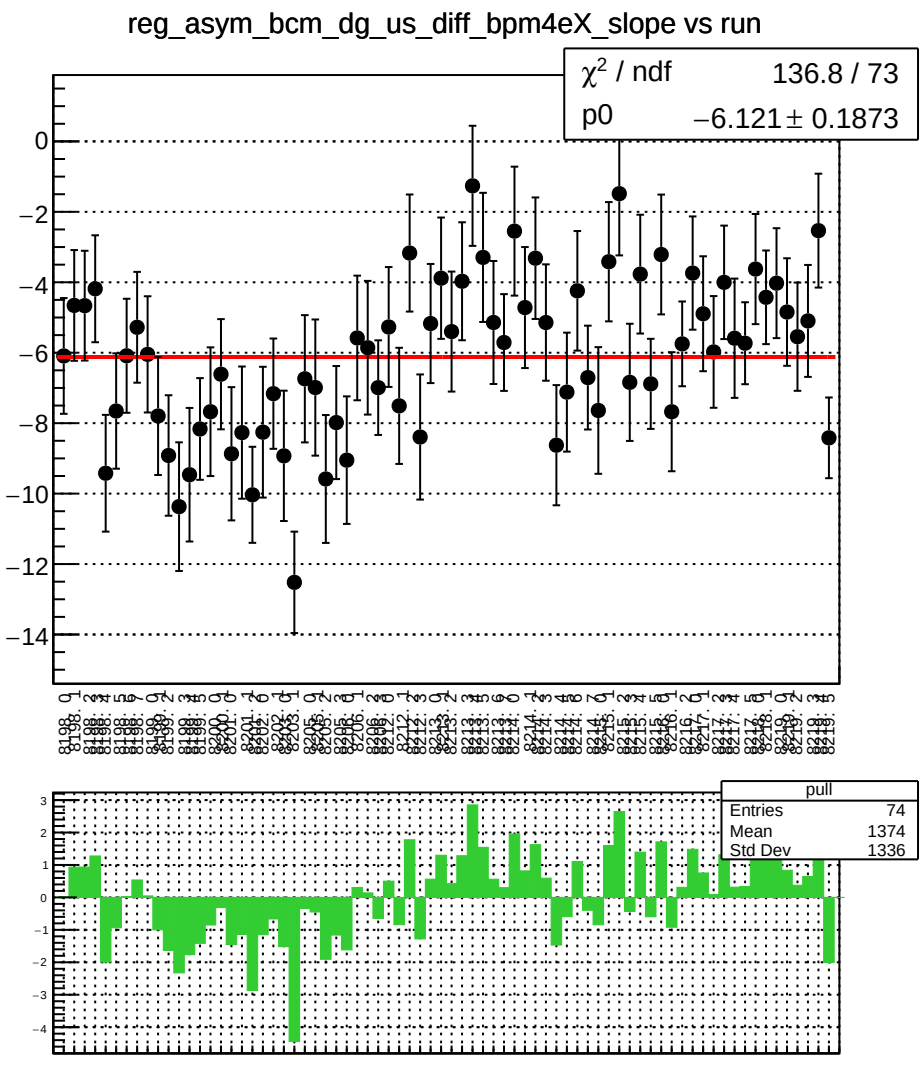

pull1D
Entries 74
Mean 0.05967
Std Dev 1.238

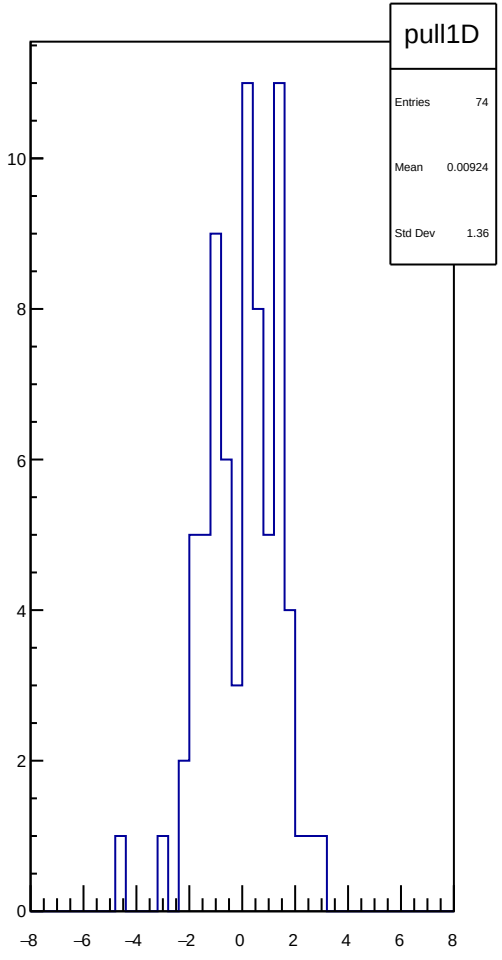

reg_asym_bcm_dg_us_diff_bpm1X_slope vs run
χ² / ndf 164.1 / 73
p0 7.011 ± 0.1872
pull
Entries 74
Mean −914.3
Std Dev 952.6

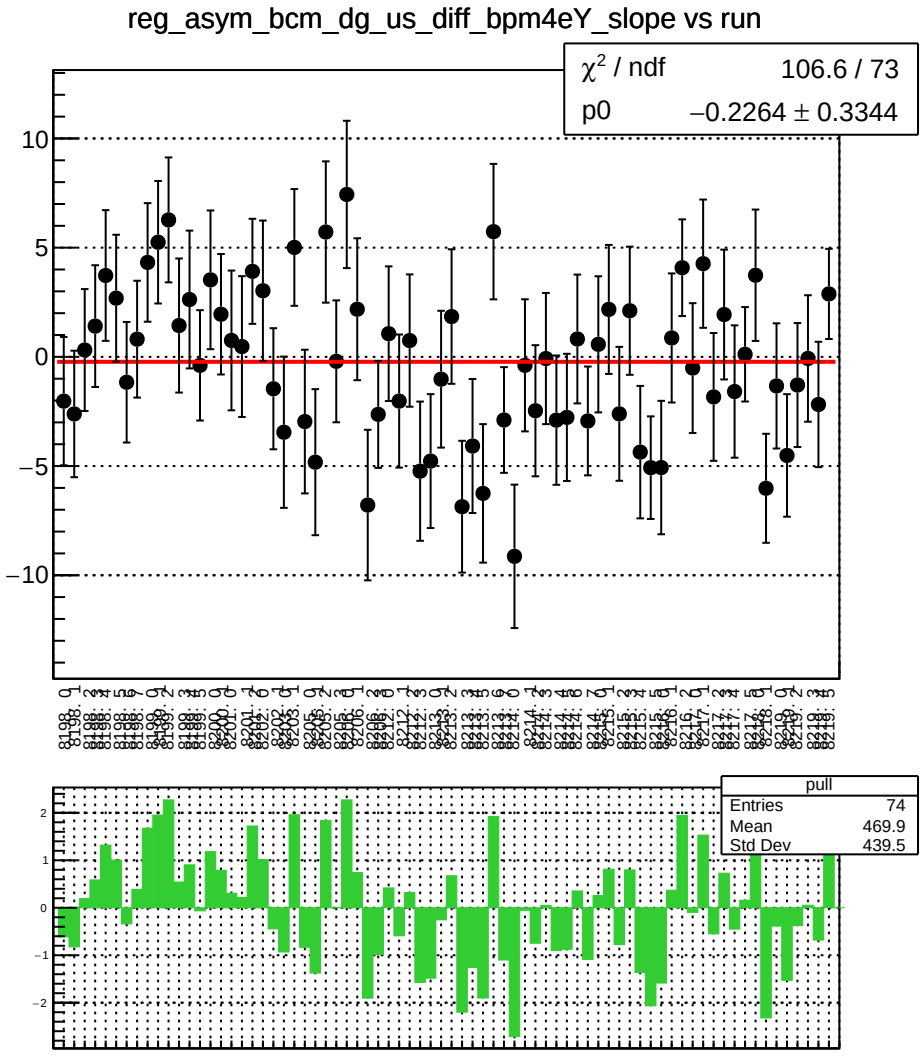

pull1D
Entries 74
Mean 0.01637
Std Dev 1.489

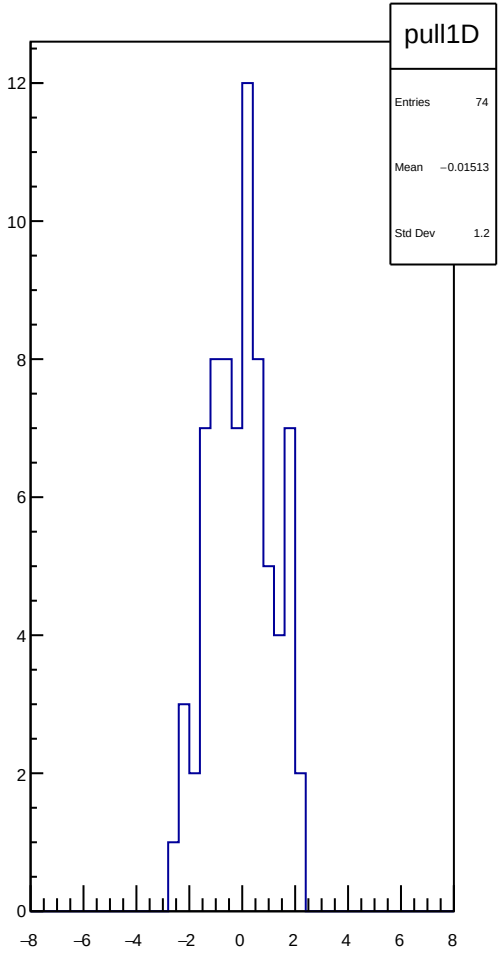

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ^2 / ndf 96.69 / 73
p0 −0.006632 ± 0.311
pull
Entries 74
Mean 340.1
Std Dev 310.8

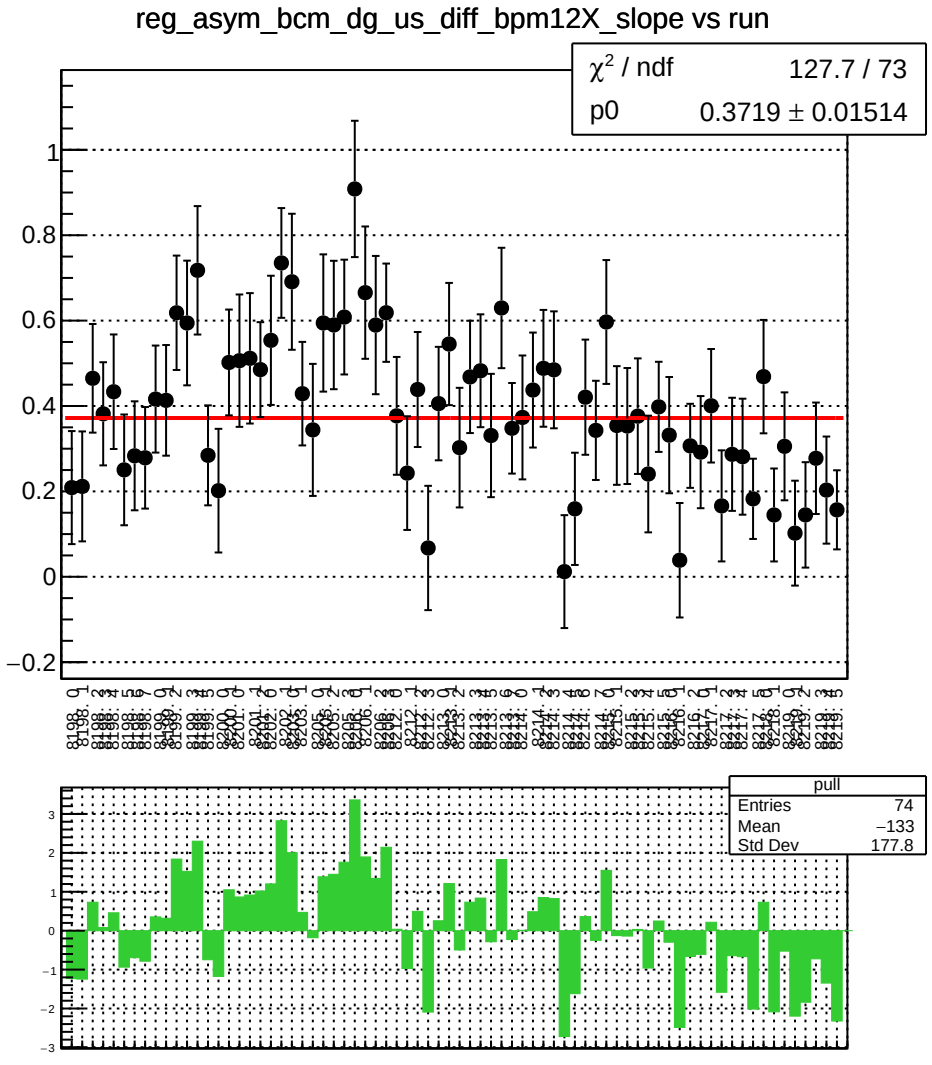

pull1D
Entries 74
Mean 0.01483
Std Dev 1.143

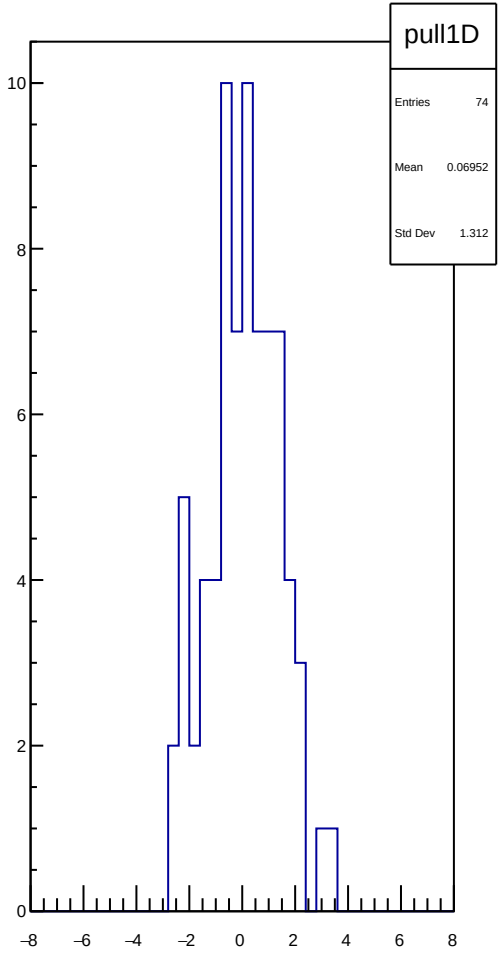

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 136.8 / 73
p0 −6.121 ± 0.1873
pull
Entries 74
Mean 1374
Std Dev 1336

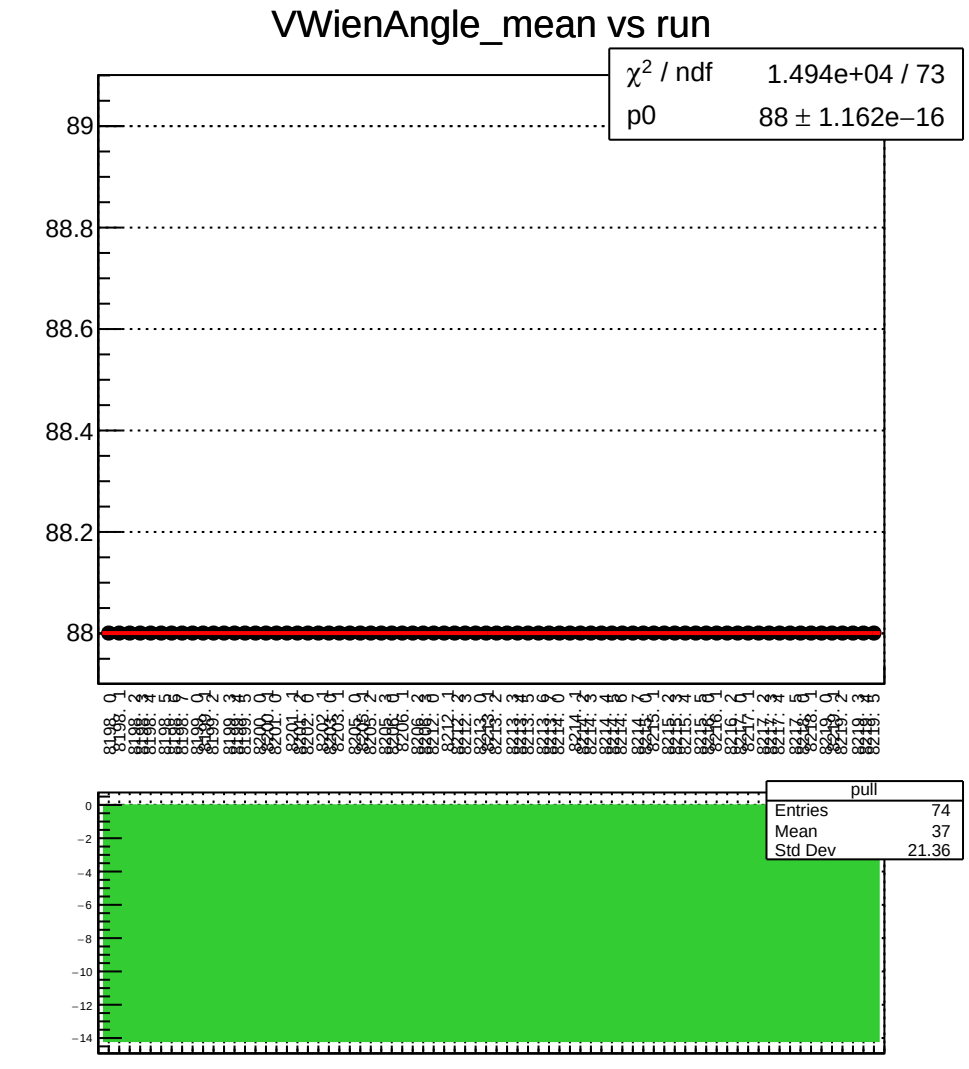

pull1D
Entries 74
Mean 0.00924
Std Dev 1.36

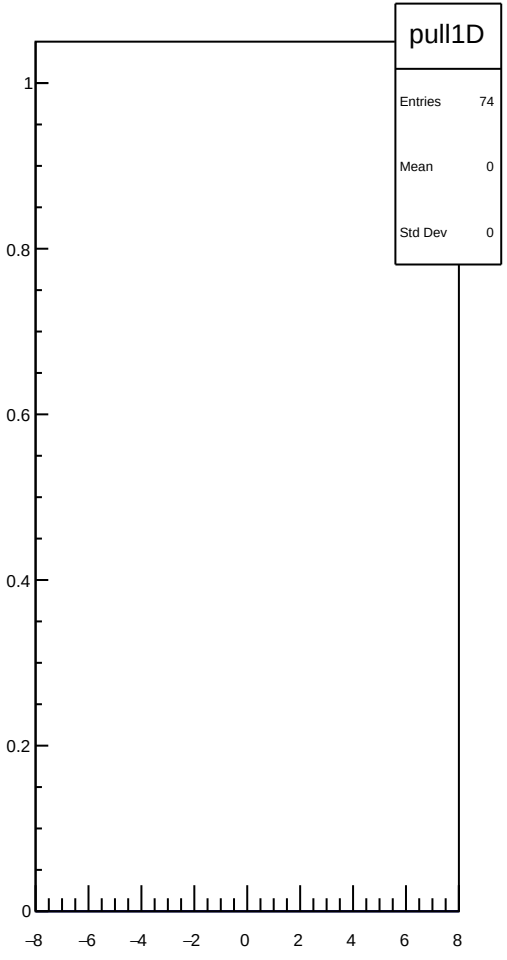

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 106.6 / 73
p0 −0.2264 ± 0.3344
pull
Entries 74
Mean 469.9
Std Dev 439.5

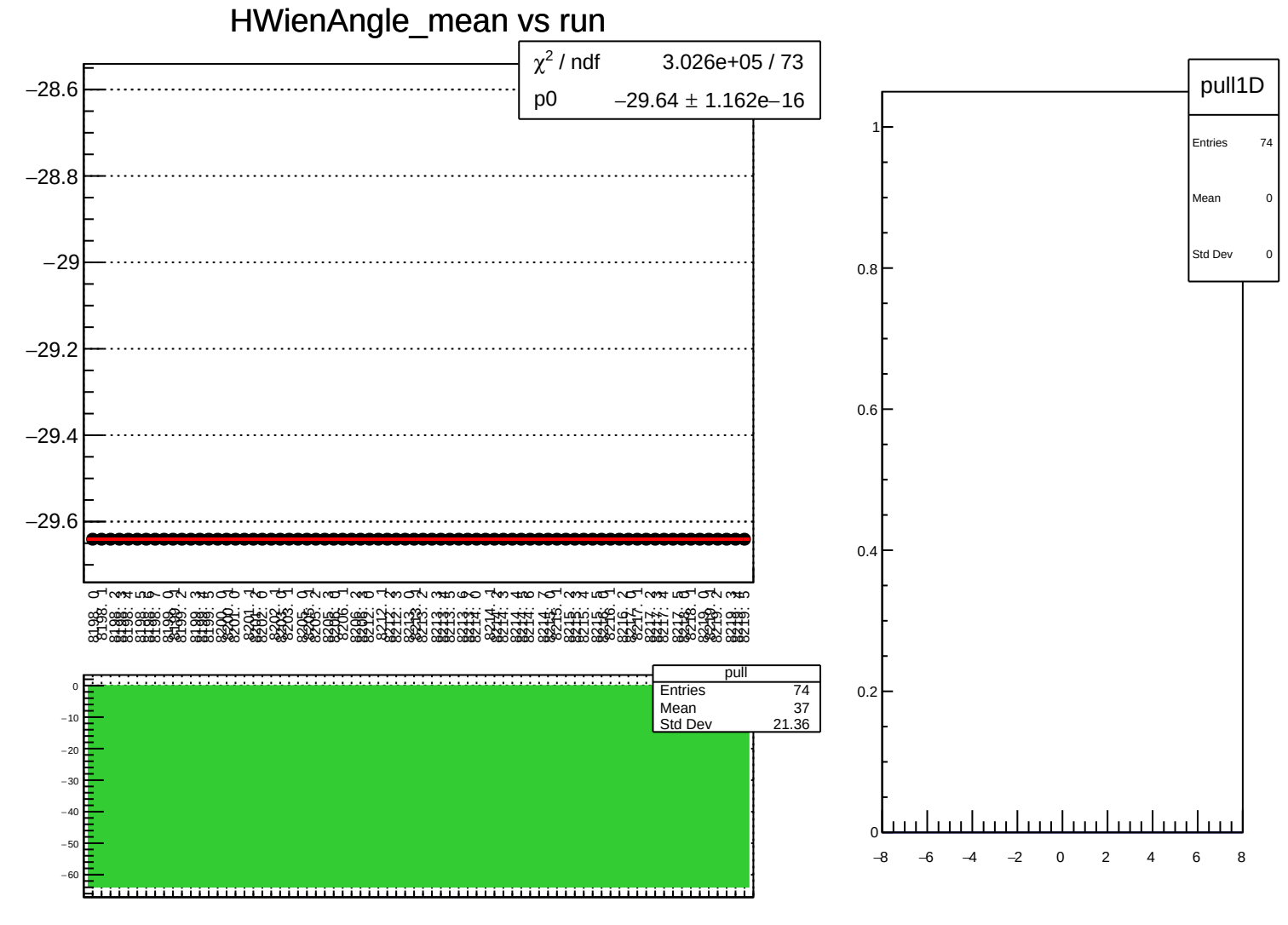

pull1D
Entries 74
Mean −0.01513
Std Dev 1.2

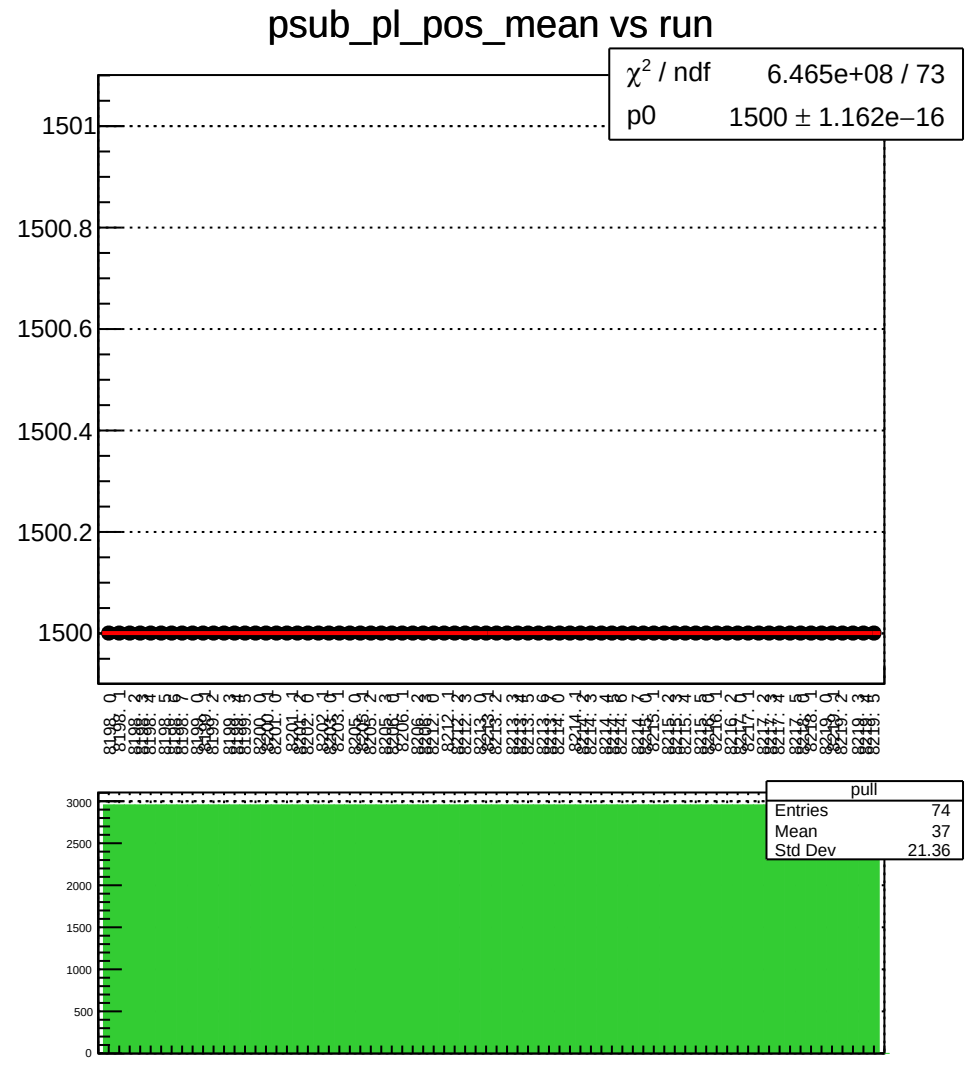

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 127.7 / 73
p0 0.3719 ± 0.01514
pull
Entries 74
Mean −133
Std Dev 177.8

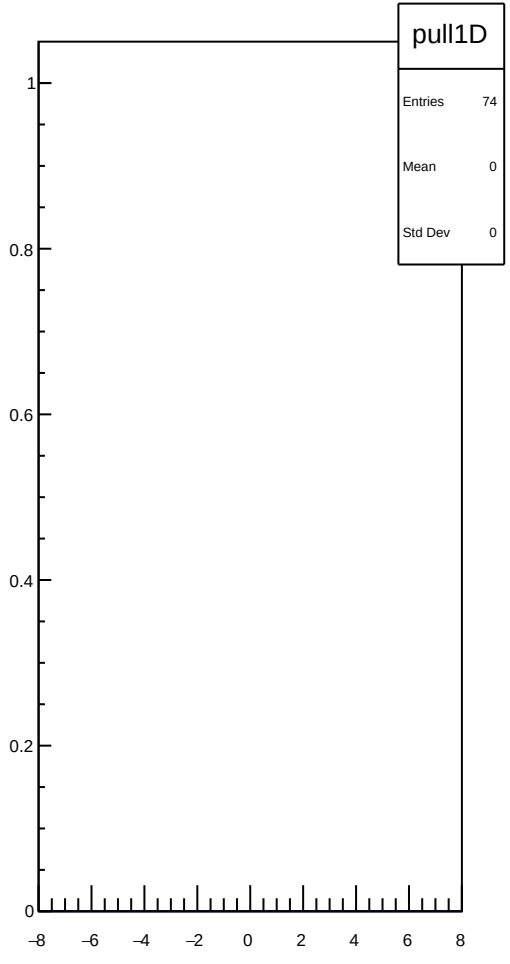

pull1D
Entries 74
Mean 0.06952
Std Dev 1.312

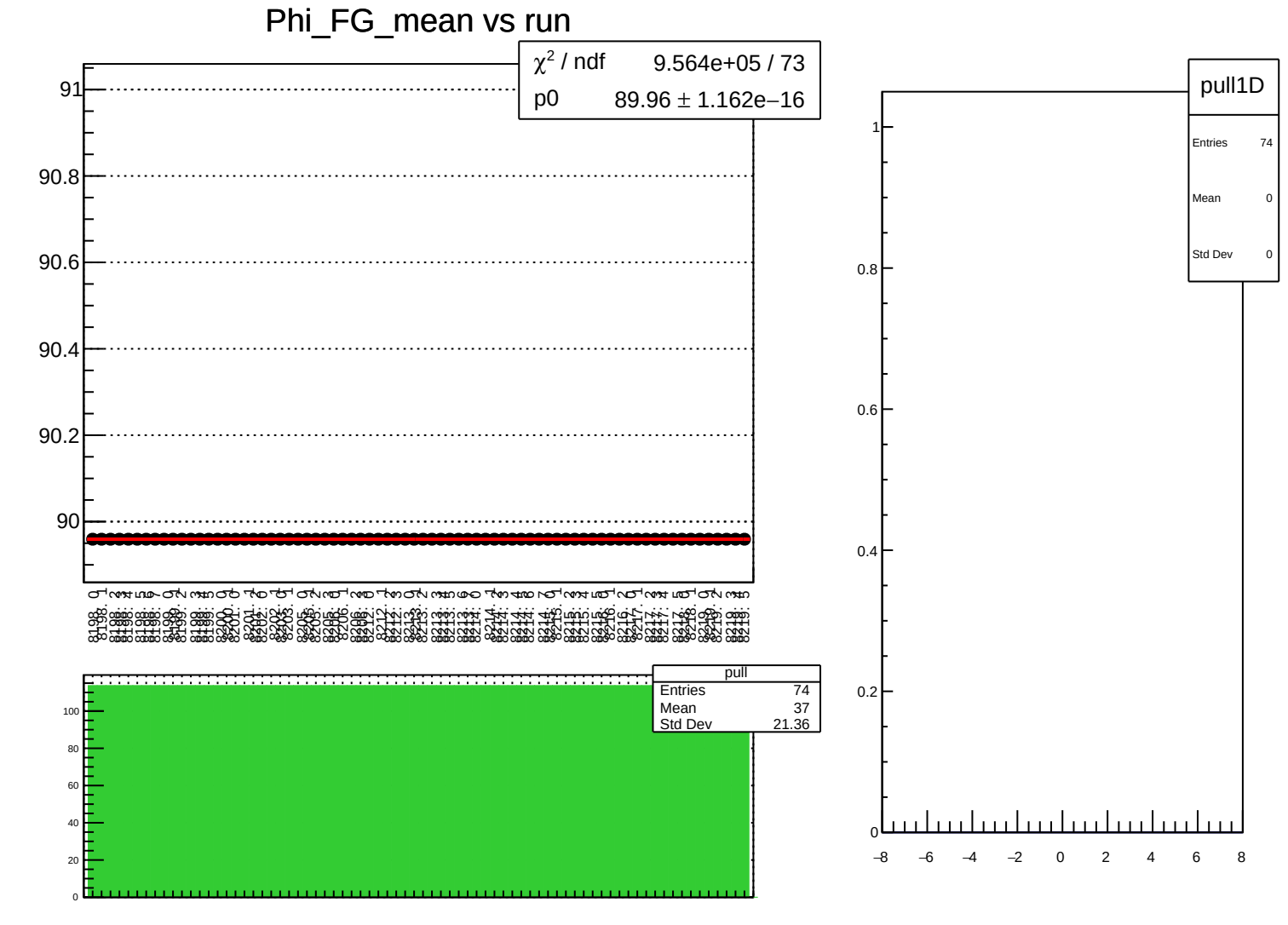

VWienAngle_mean vs run
χ² / ndf 1.494e+04 / 73
p0 88 ± 1.162e−16
89
88.8
88.6
88.4
88.2
88
pull
Entries 74
Mean 37
Std Dev 21.36
0
−2
−4
−6
−8
−10
−12
−14

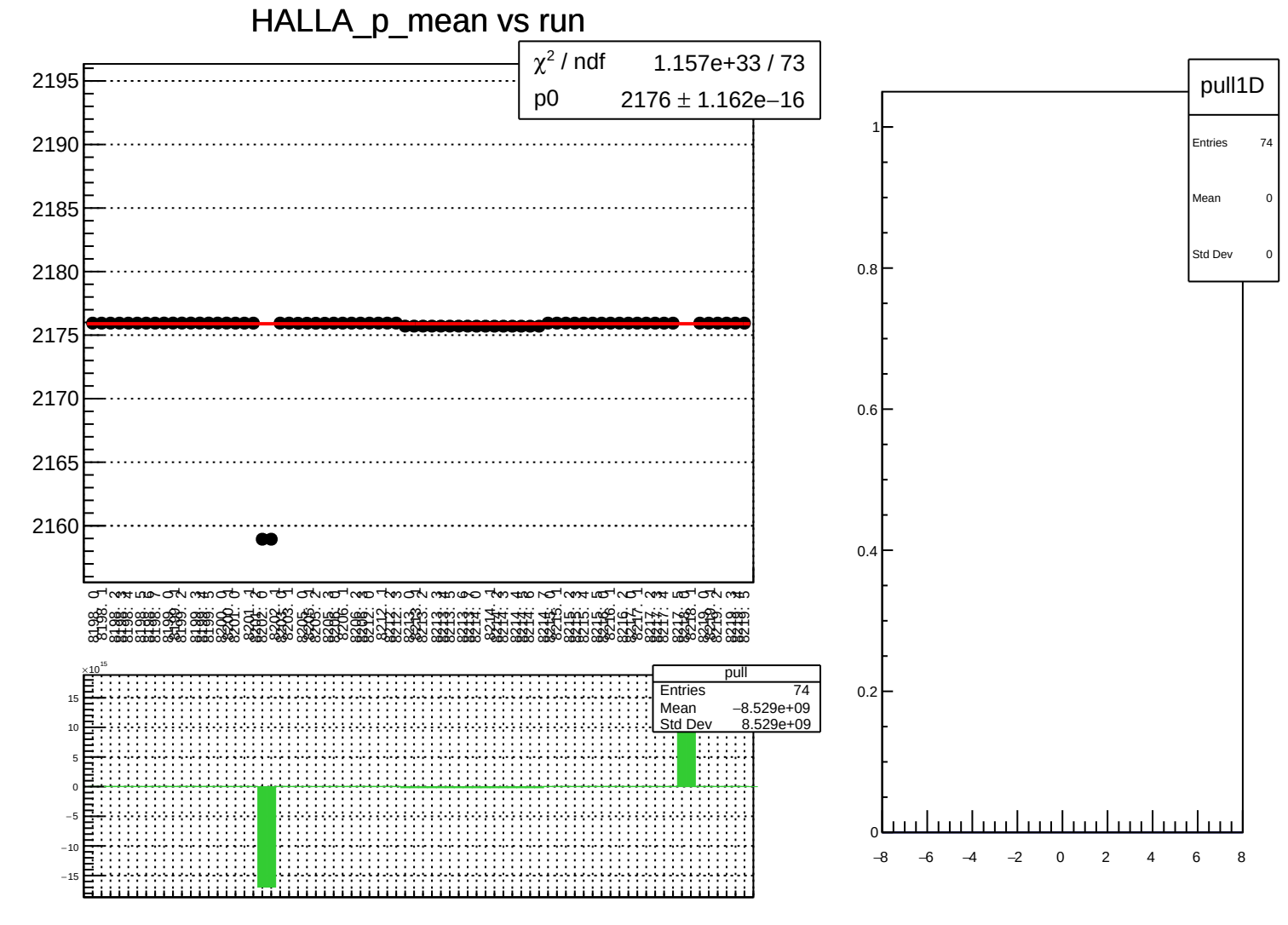

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

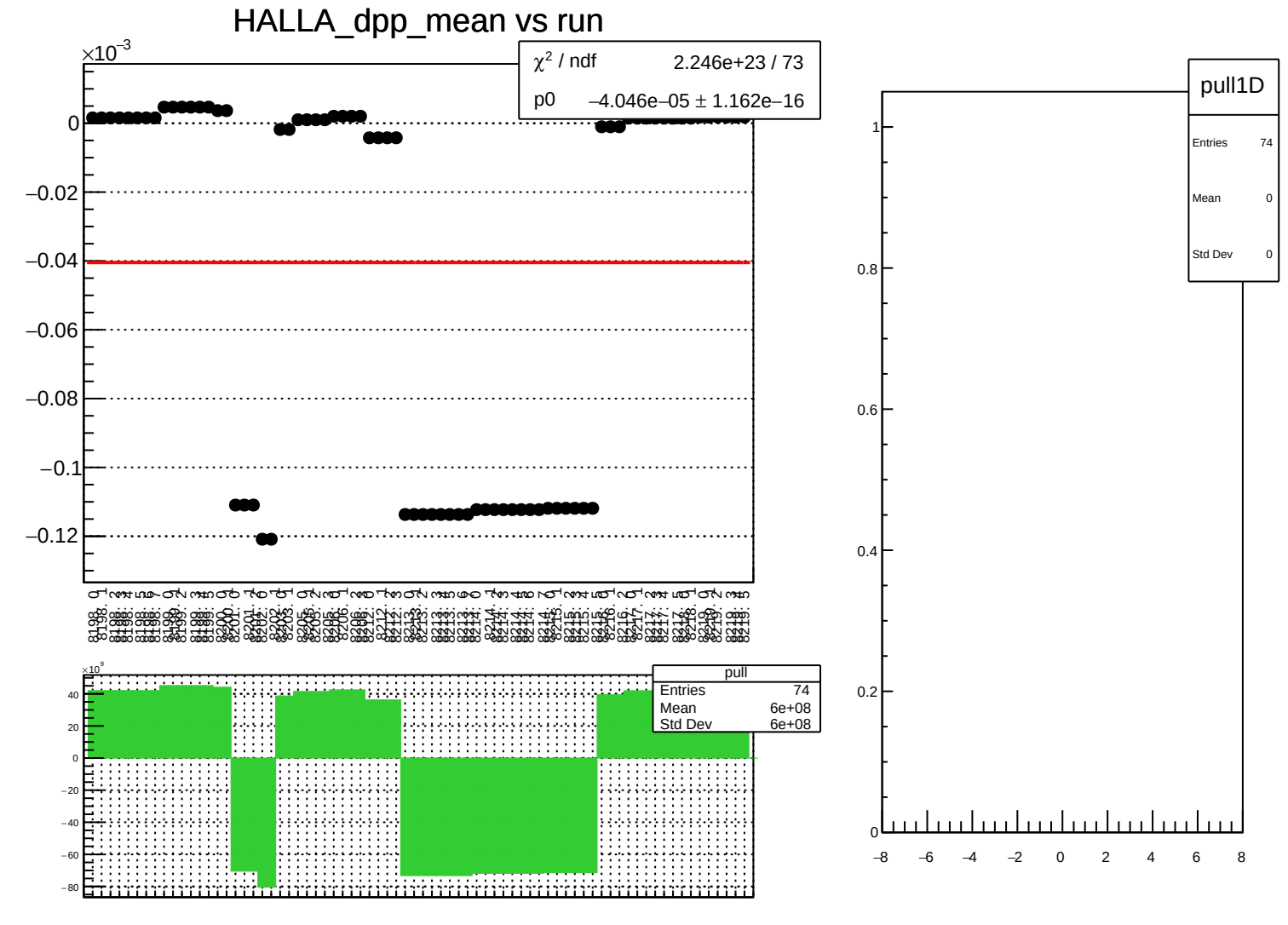

HWienAngle_mean vs run
χ² / ndf 3.026e+05 / 73
p0 −29.64 ± 1.162e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
pull
Entries 74
Mean 37
Std Dev 21.36
0
−10
−20
−30
−40
−50
−60
pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

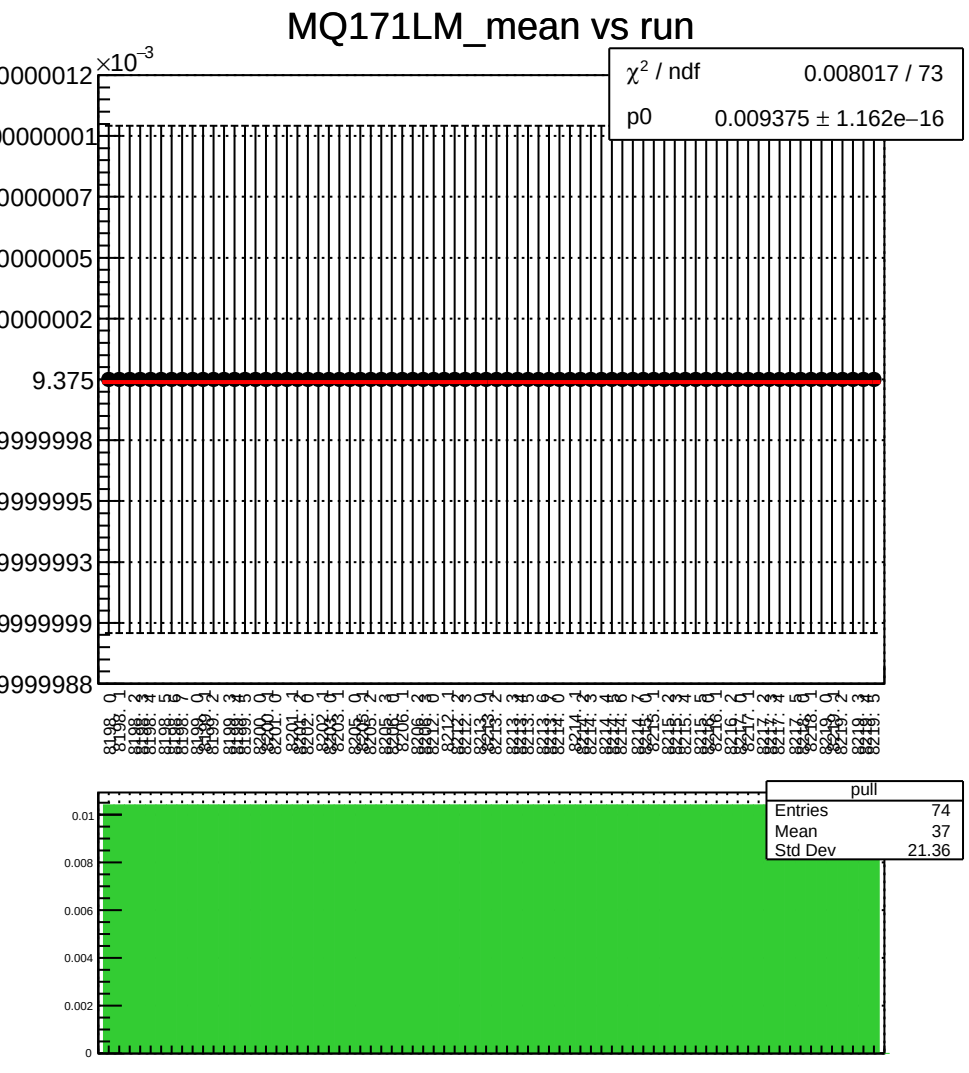

psub_pl_pos_mean vs run
χ² / ndf 6.465e+08 / 73
p0 1500 ± 1.162e−16
1501
1500.8
1500.6
1500.4
1500.2
1500
pull
Entries 74
Mean 37
Std Dev 21.36
3000
2500
2000
1500
1000
500
0

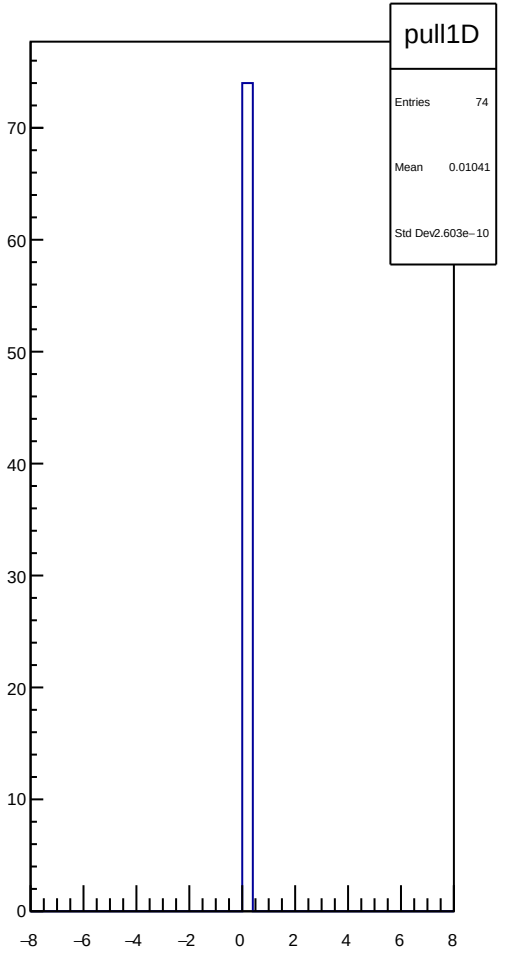

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

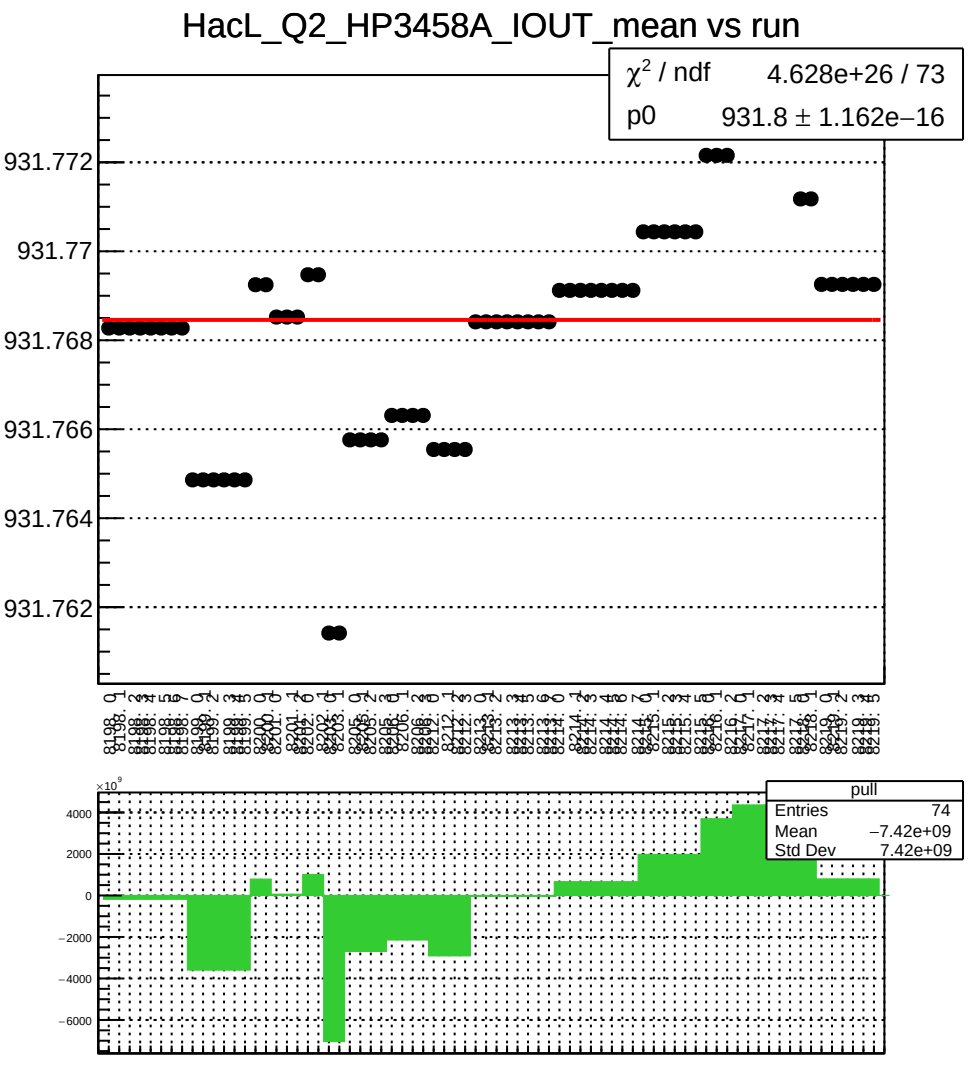

Phi_FG_mean vs run
χ² / ndf 9.564e+05 / 73
p0 89.96 ± 1.162e−16
91
90.8
90.6
90.4
90.2
90
pull
Entries 74
Mean 37
Std Dev 21.36
100
80
60
40
20
0
pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

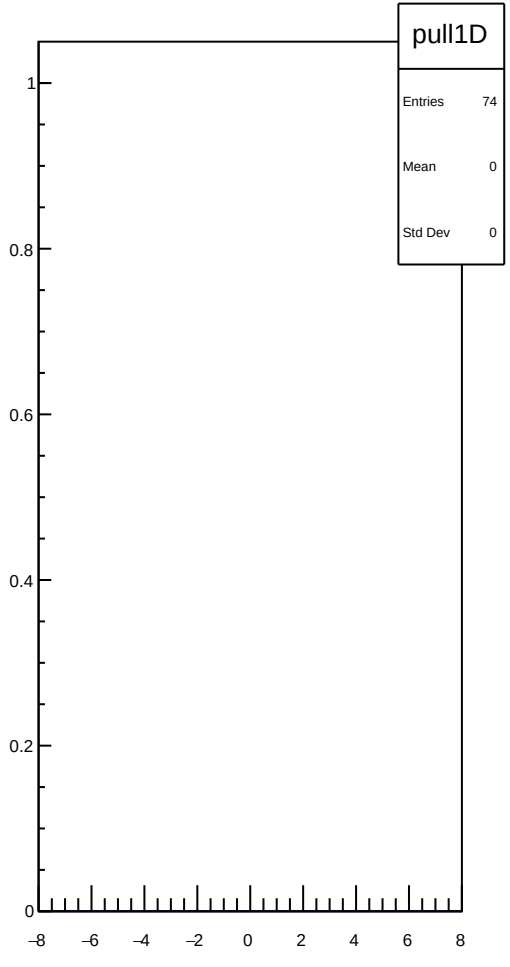

HALLA_p_mean vs run
χ² / ndf 1.157e+33 / 73
p0 2176 ± 1.162e−16
2195
2190
2185
2180
2175
2170
2165
2160
pull
Entries 74
Mean −8.529e+09
Std Dev 8.529e+09
×10¹⁵
15
10
5
0
−5
−10
−15
pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

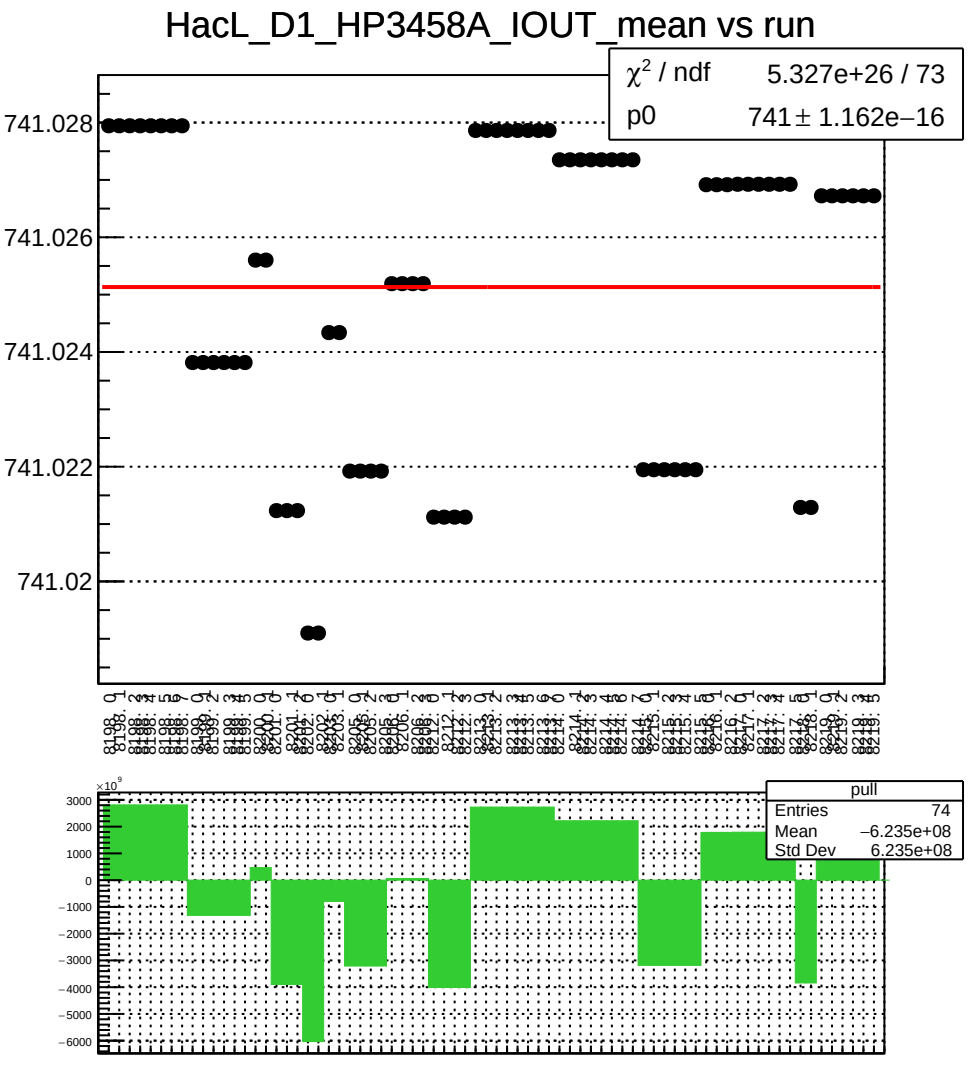

HALLA_dpp_mean vs run
χ² / ndf 2.246e+23 / 73
p0 −4.046e−05 ± 1.162e−16
×10⁻³
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
×10⁹
40
20
0
−20
−40
−60
−80
pull
Entries 74
Mean 6e+08
Std Dev 6e+08
pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

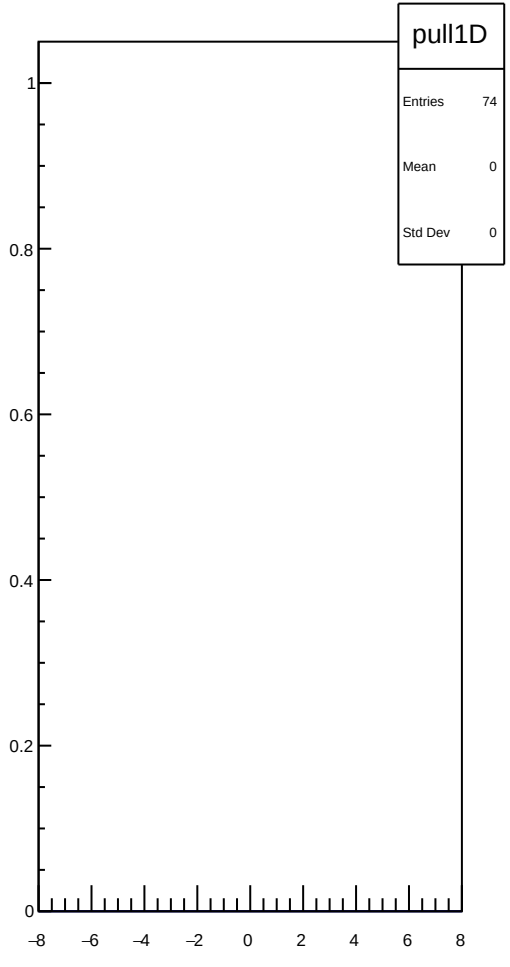

MQ171LM_mean vs run
×10⁻³
χ² / ndf 0.008017 / 73
p0 0.009375 ± 1.162e−16
pull
Entries 74
Mean 37
Std Dev 21.36

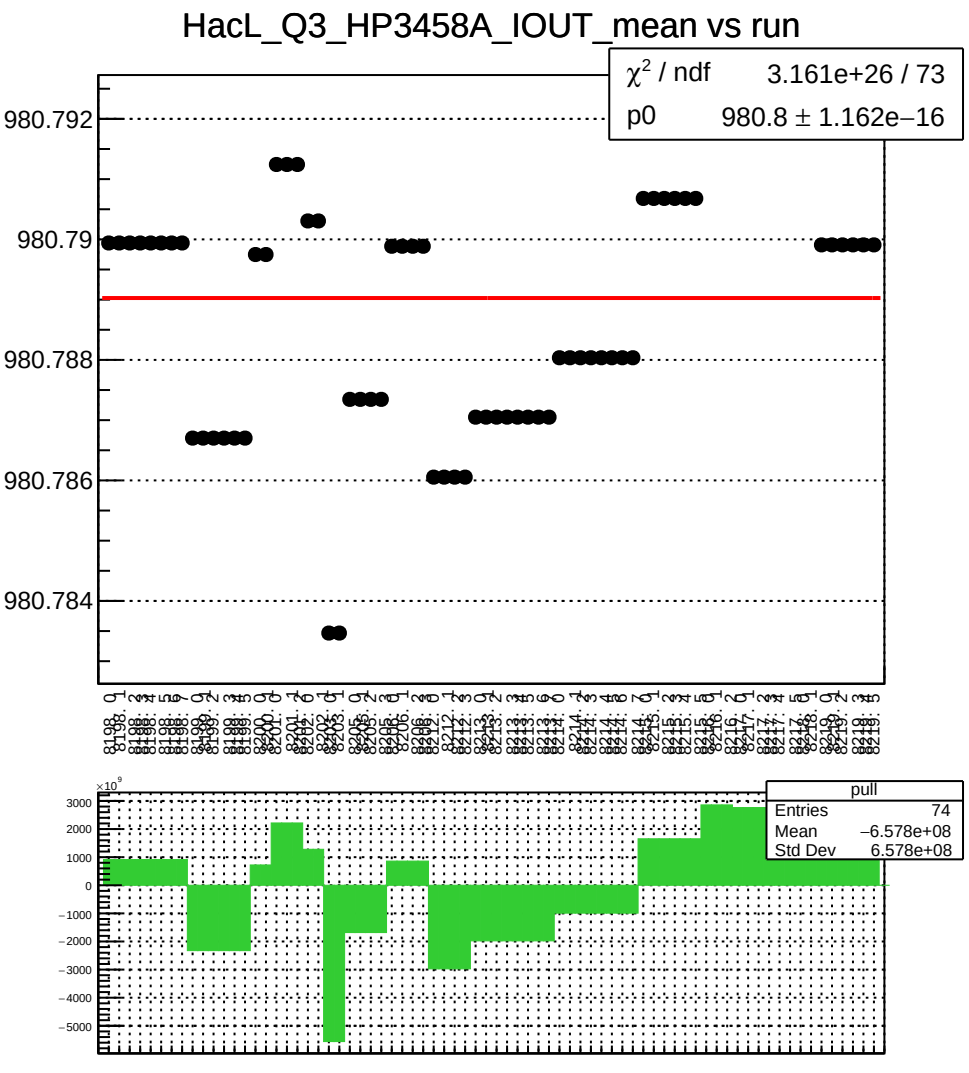

pull1D
Entries 74
Mean 0.01041
Std Dev 2.603e−10

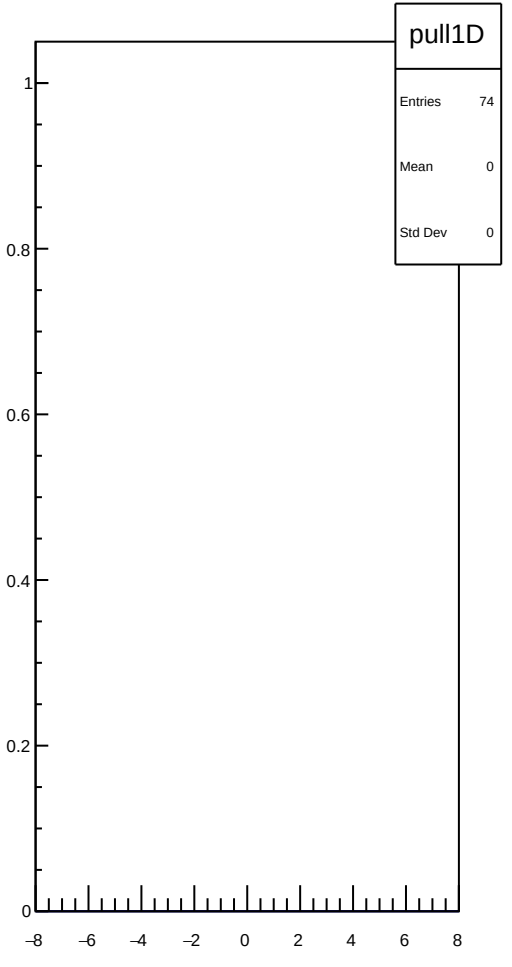

HacL_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 4.628e+26 / 73
p0 931.8 ± 1.162e−16
931.772
931.77
931.768
931.766
931.764
931.762
×10⁹
4000
2000
0
−2000
−4000
−6000
pull
Entries 74
Mean −7.42e+09
Std Dev 7.42e+09

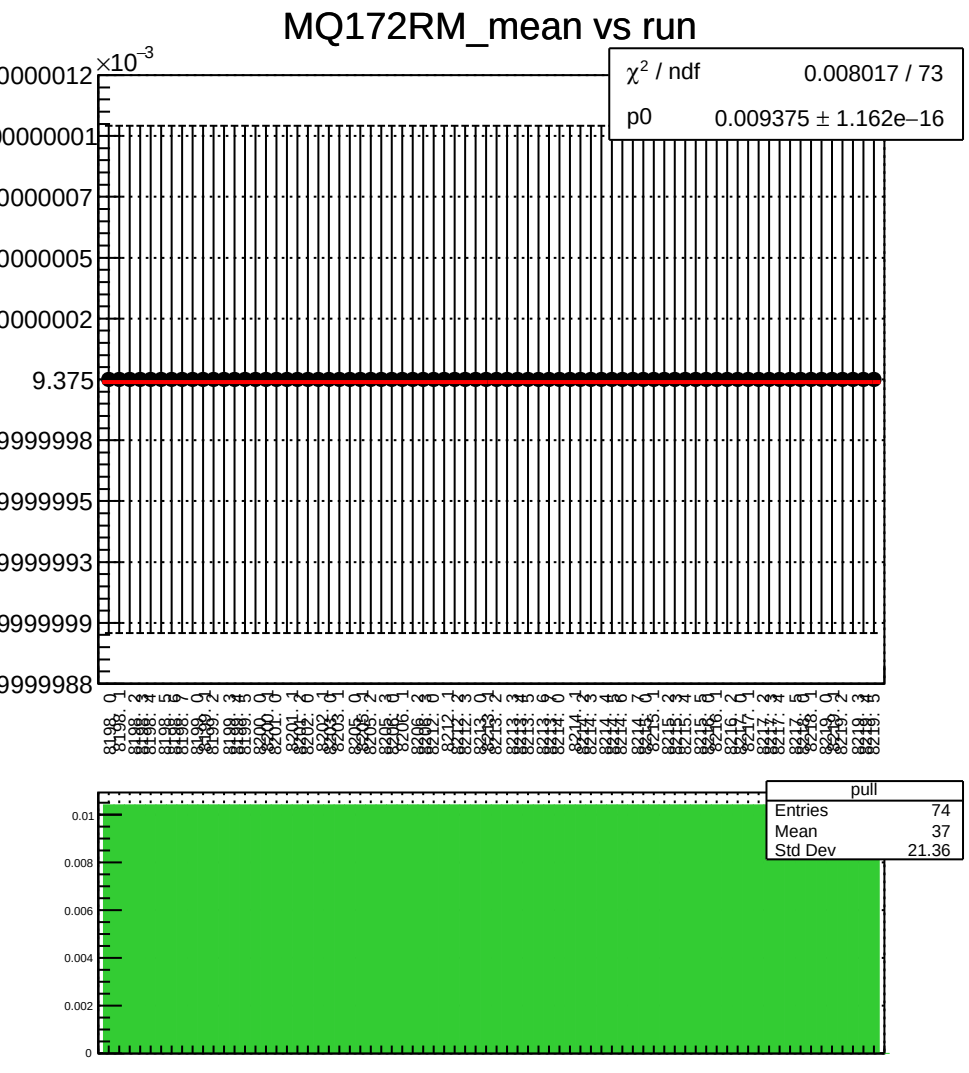

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

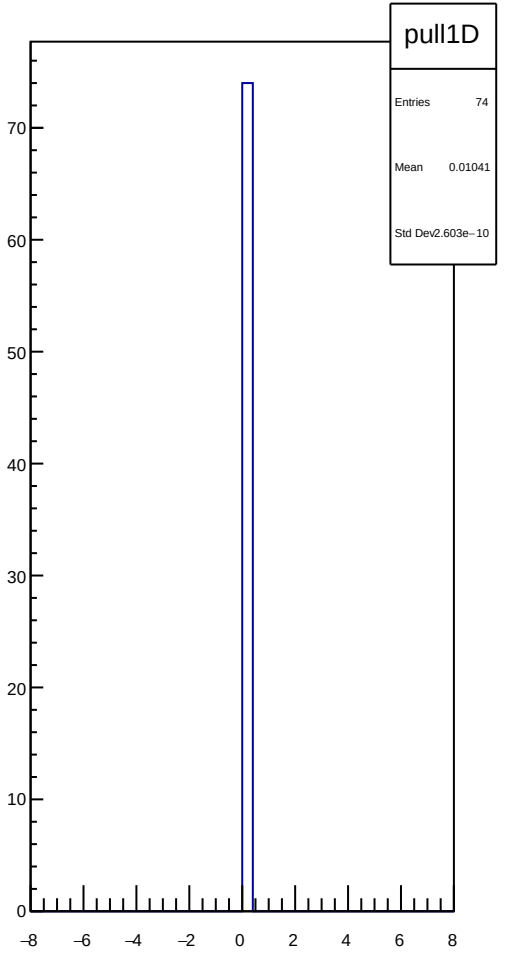

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 5.327e+26 / 73
p0 741 ± 1.162e−16
741.028
741.026
741.024
741.022
741.02
pull
Entries 74
Mean −6.235e+08
Std Dev 6.235e+08
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000
−6000

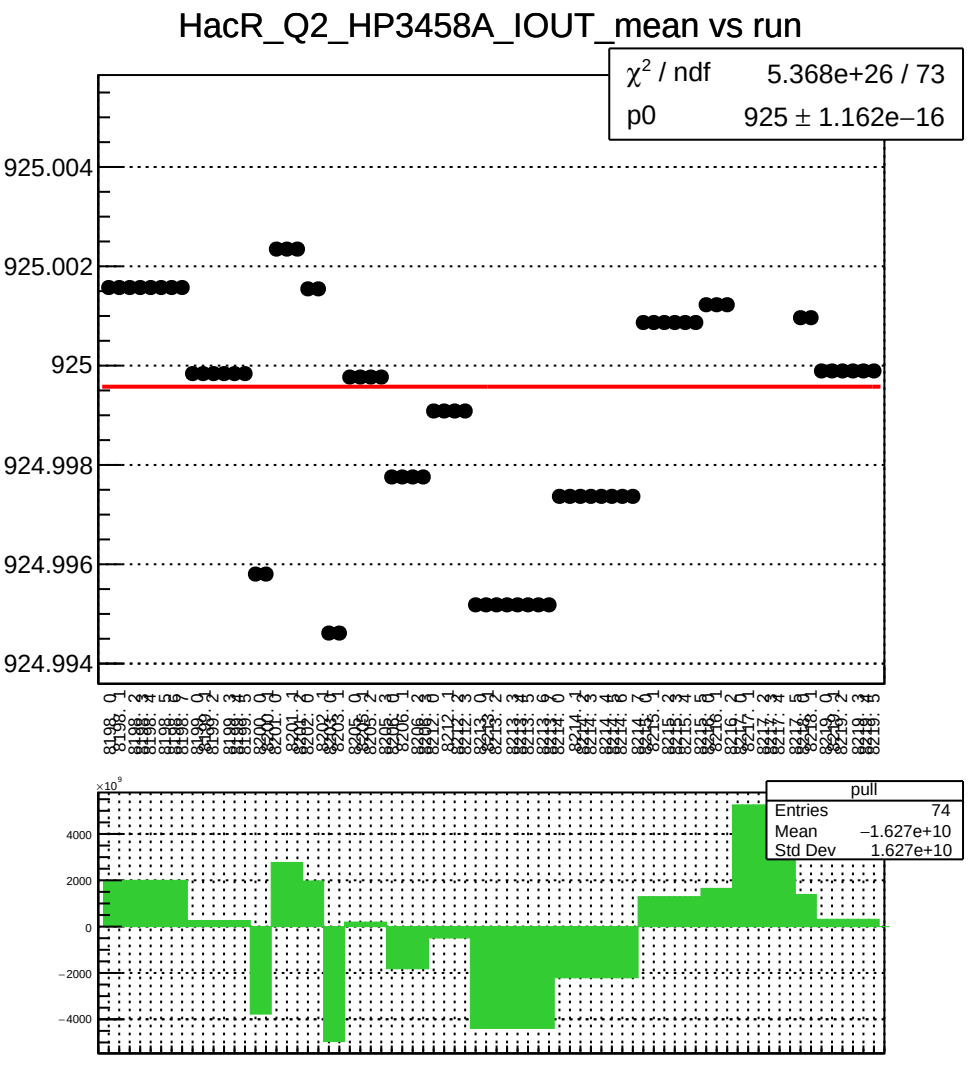

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

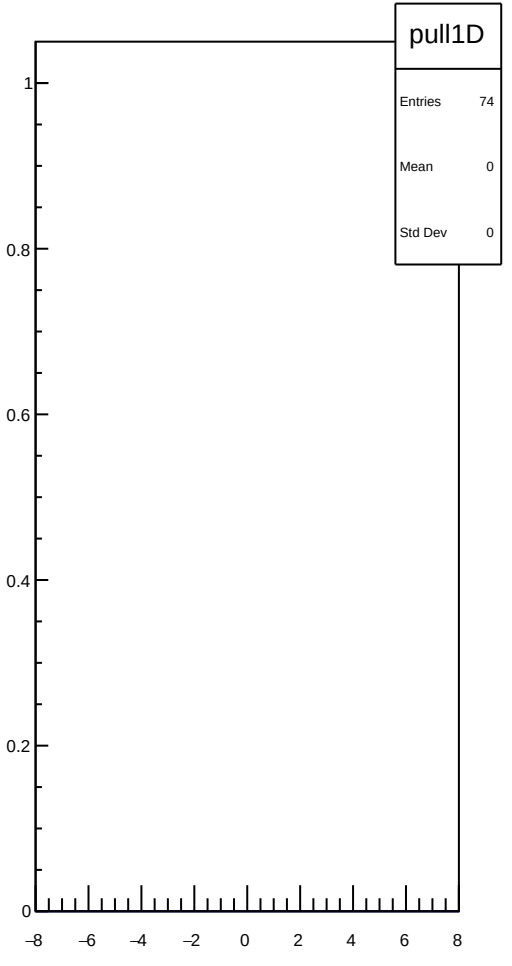

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 3.161e+26 / 73
p0 980.8 ± 1.162e−16
980.792
980.79
980.788
980.786
980.784
pull
Entries 74
Mean −6.578e+08
Std Dev 6.578e+08
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000

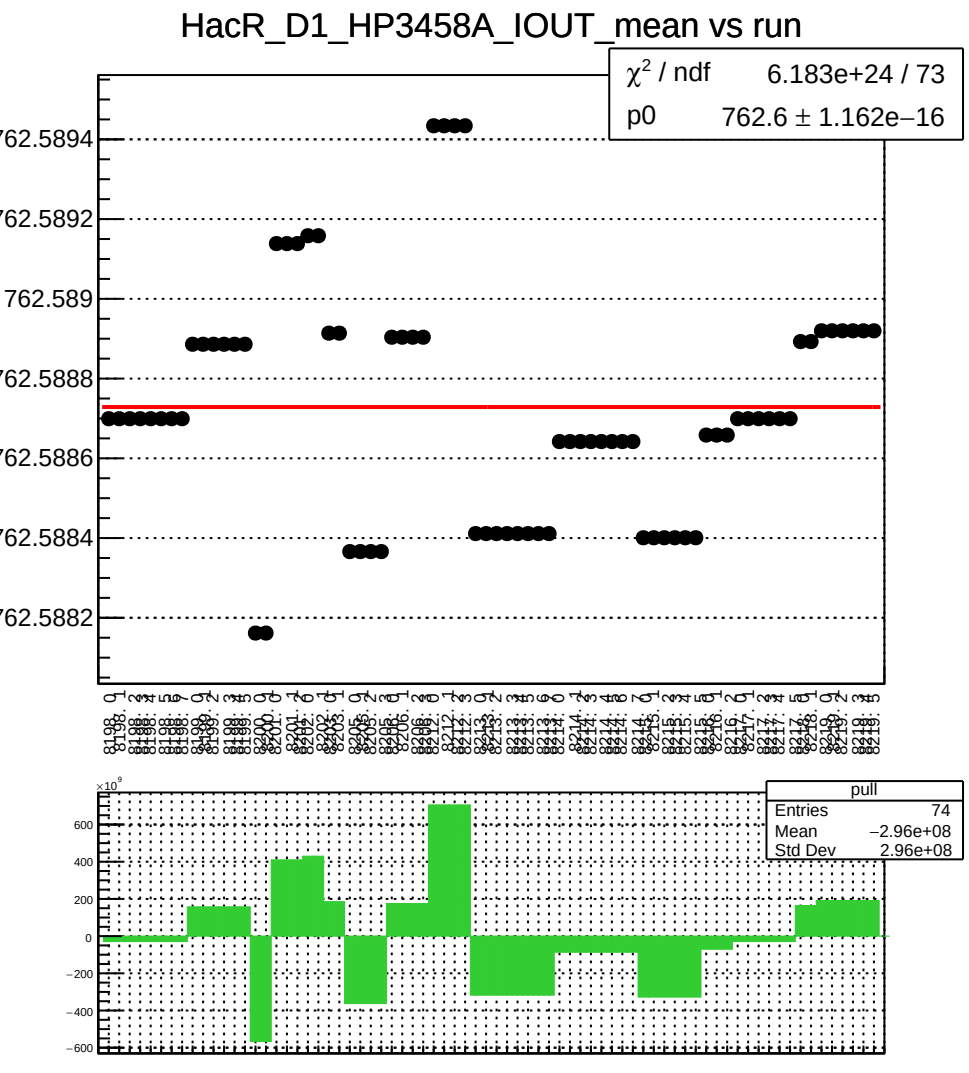

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

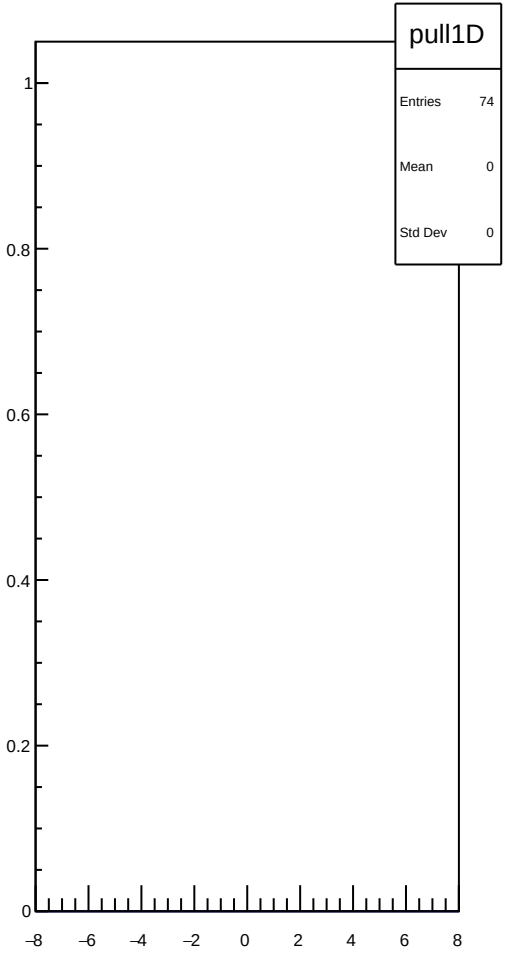

MQ172RM_mean vs run
χ² / ndf 0.008017 / 73
p0 0.009375 ± 1.162e−16
×10⁻³
pull
Entries 74
Mean 37
Std Dev 21.36

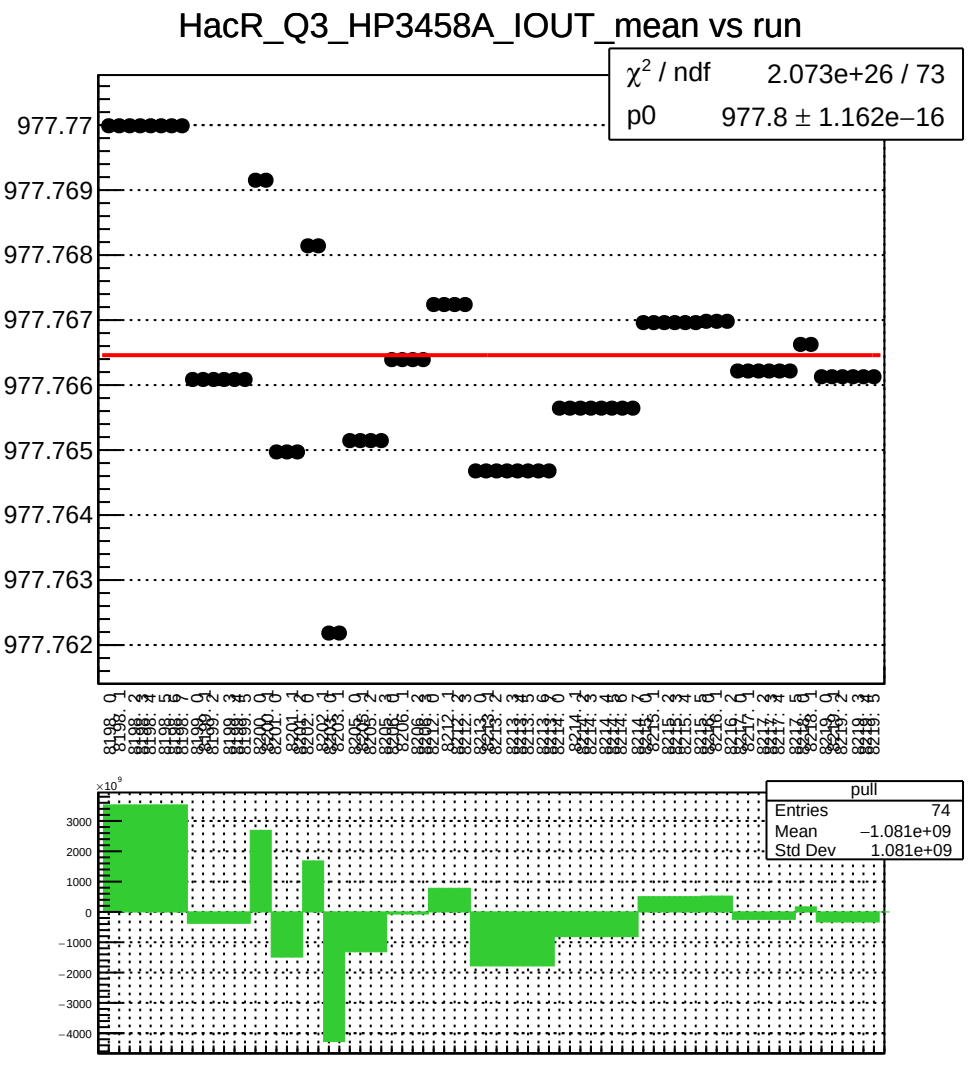

pull1D
Entries 74
Mean 0.01041
Std Dev 2.603e−10

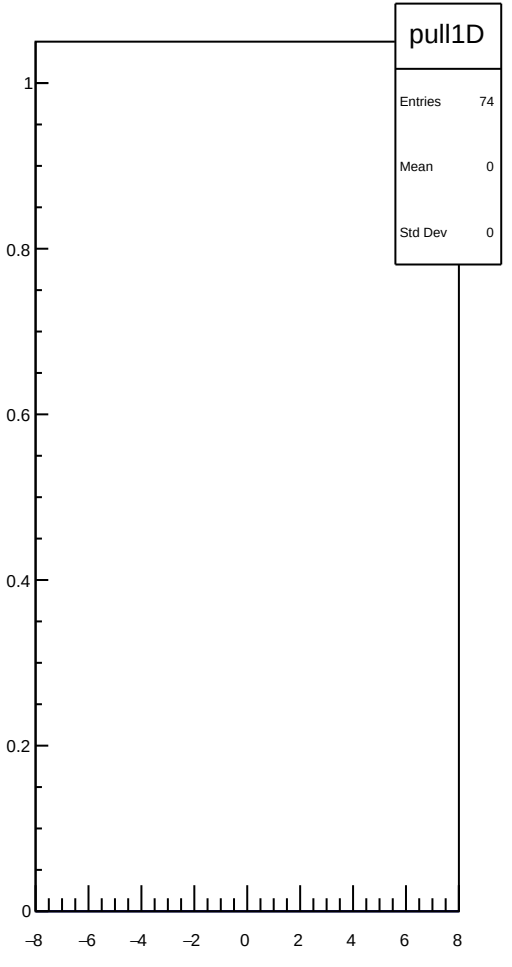

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 5.368e+26 / 73
p0 925 ± 1.162e−16
925.004
925.002
925
924.998
924.996
924.994
×10⁹
4000
2000
0
−2000
−4000
pull
Entries 74
Mean −1.627e+10
Std Dev 1.627e+10

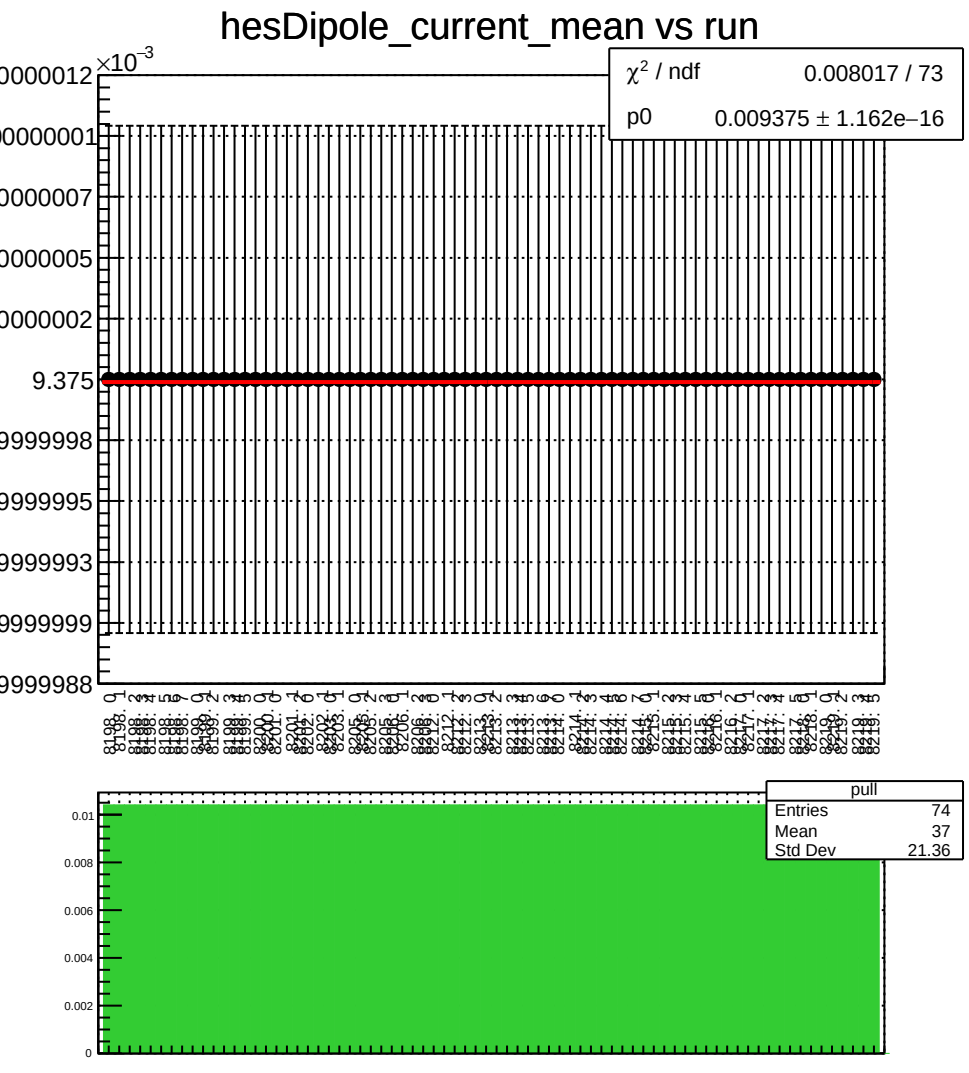

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

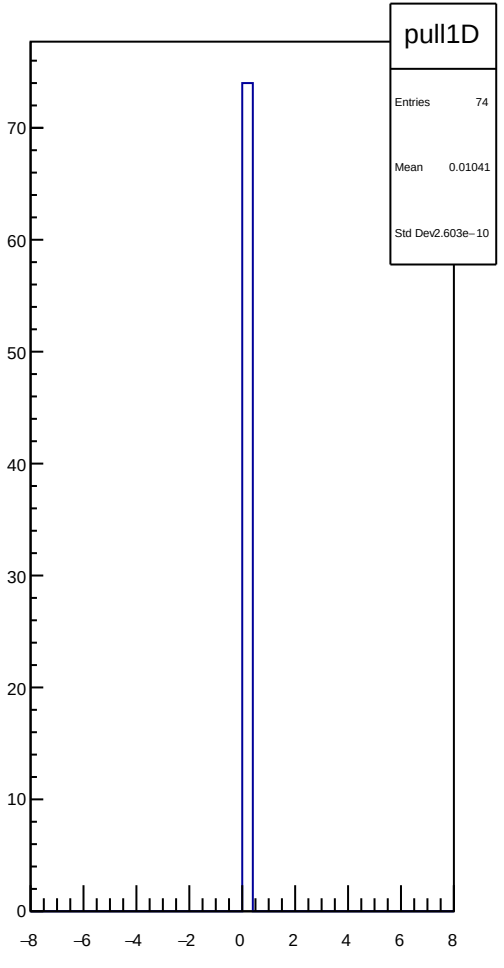

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 6.183e+24 / 73
p0 762.6 ± 1.162e−16
762.5894
762.5892
762.589
762.5888
762.5886
762.5884
762.5882
×10⁹
600
400
200
0
−200
−400
−600
pull
Entries 74
Mean −2.96e+08
Std Dev 2.96e+08

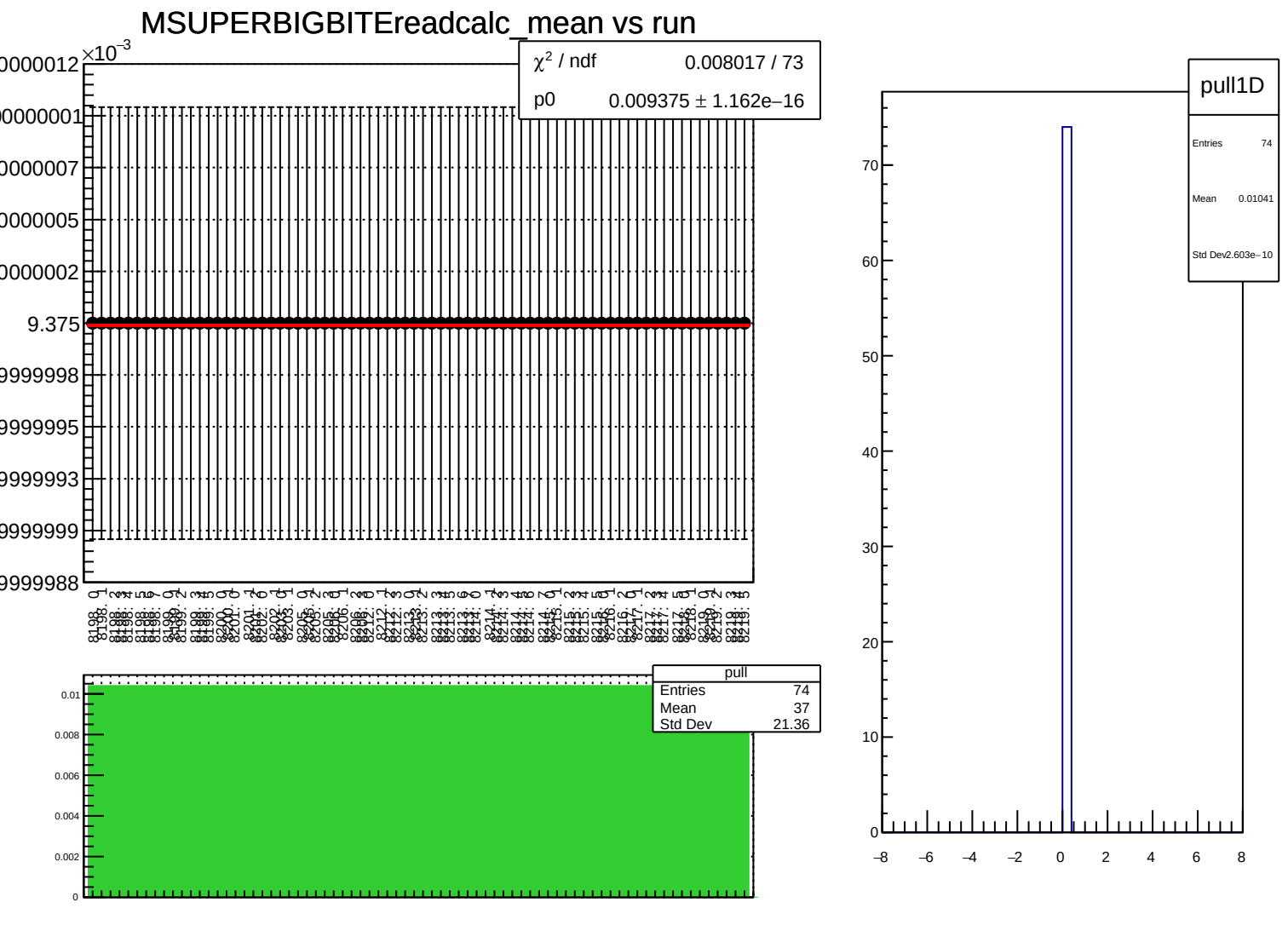

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

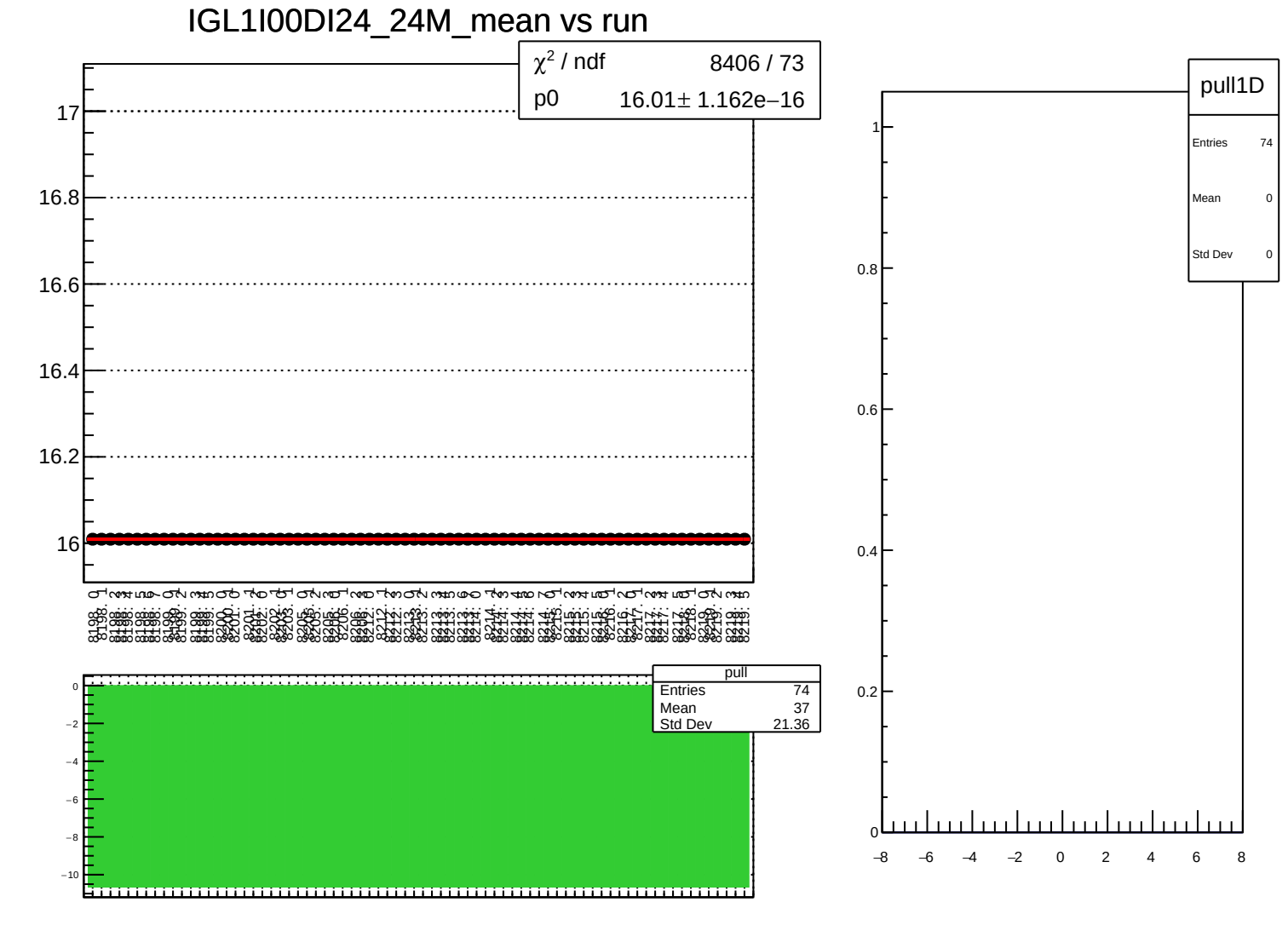

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 2.073e+26 / 73
p0 977.8 ± 1.162e−16
977.77
977.769
977.768
977.767
977.766
977.765
977.764
977.763
977.762
×10⁹
3000
2000
1000
0
−1000
−2000
−3000
−4000
pull
Entries 74
Mean −1.081e+09
Std Dev 1.081e+09

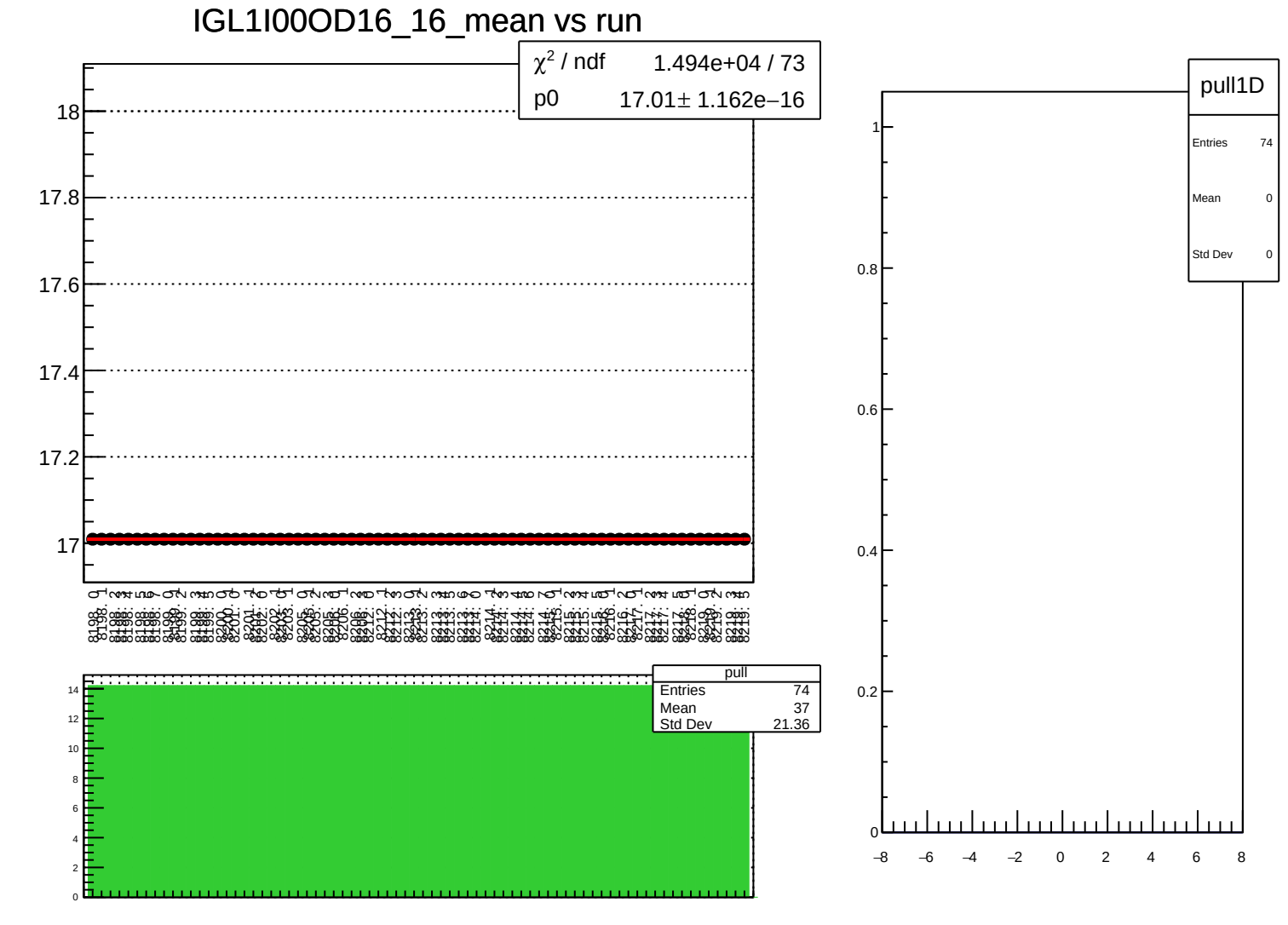

pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

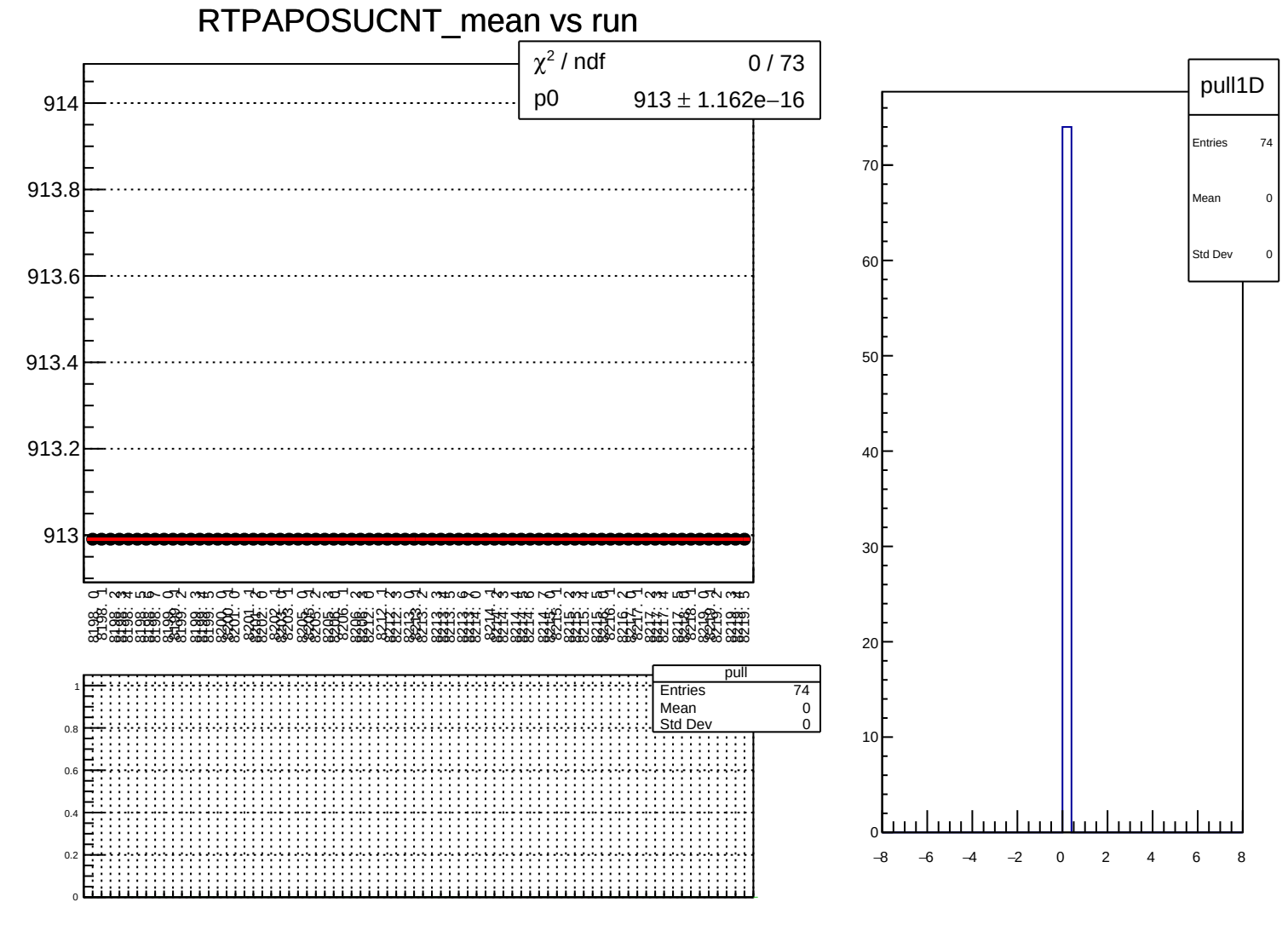

hesDipole_current_mean vs run
χ² / ndf 0.008017 / 73
p0 0.009375 ± 1.162e−16
×10⁻³
pull
Entries 74
Mean 37
Std Dev 21.36

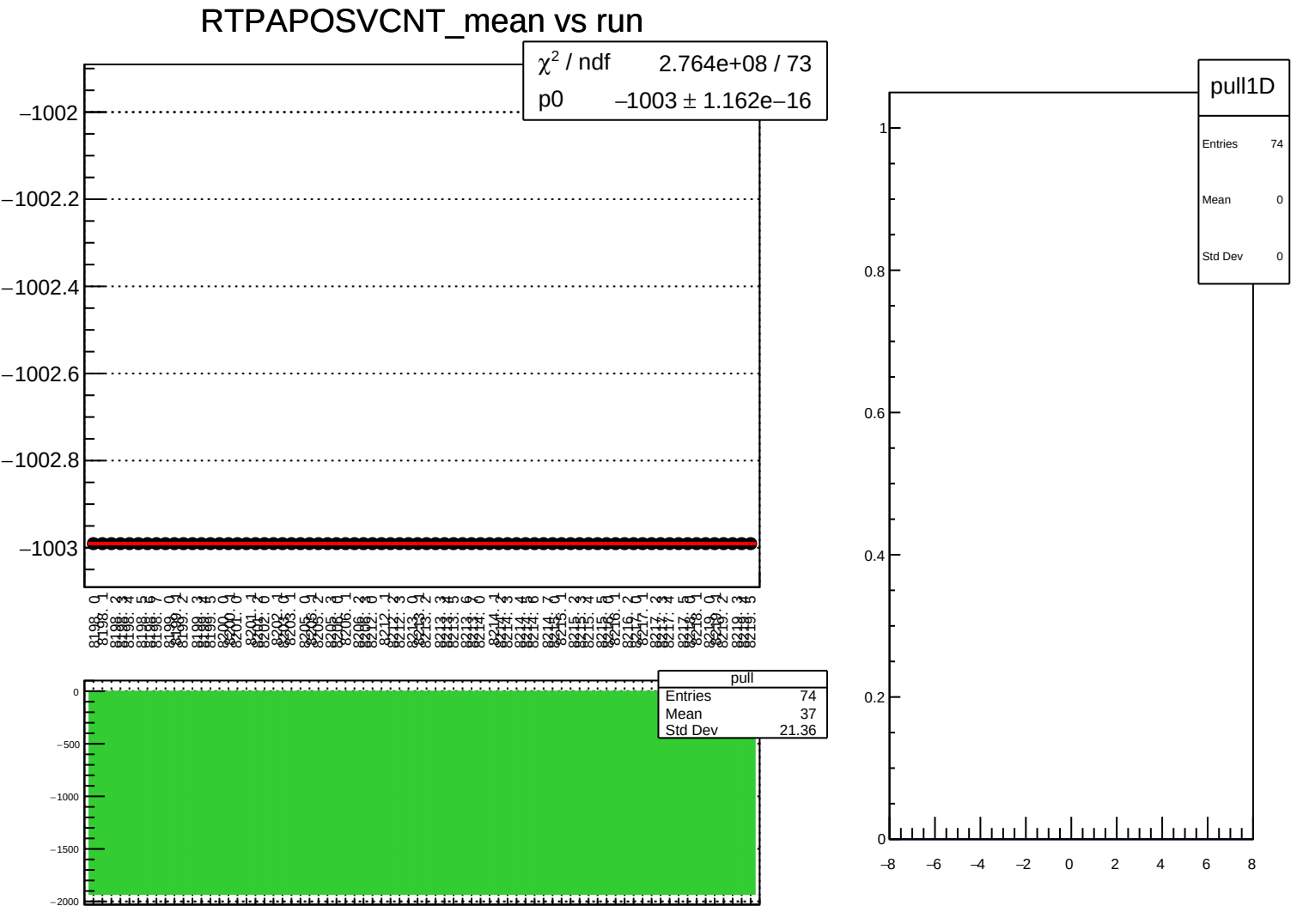

pull1D
Entries 74
Mean 0.01041
Std Dev 2.603e−10

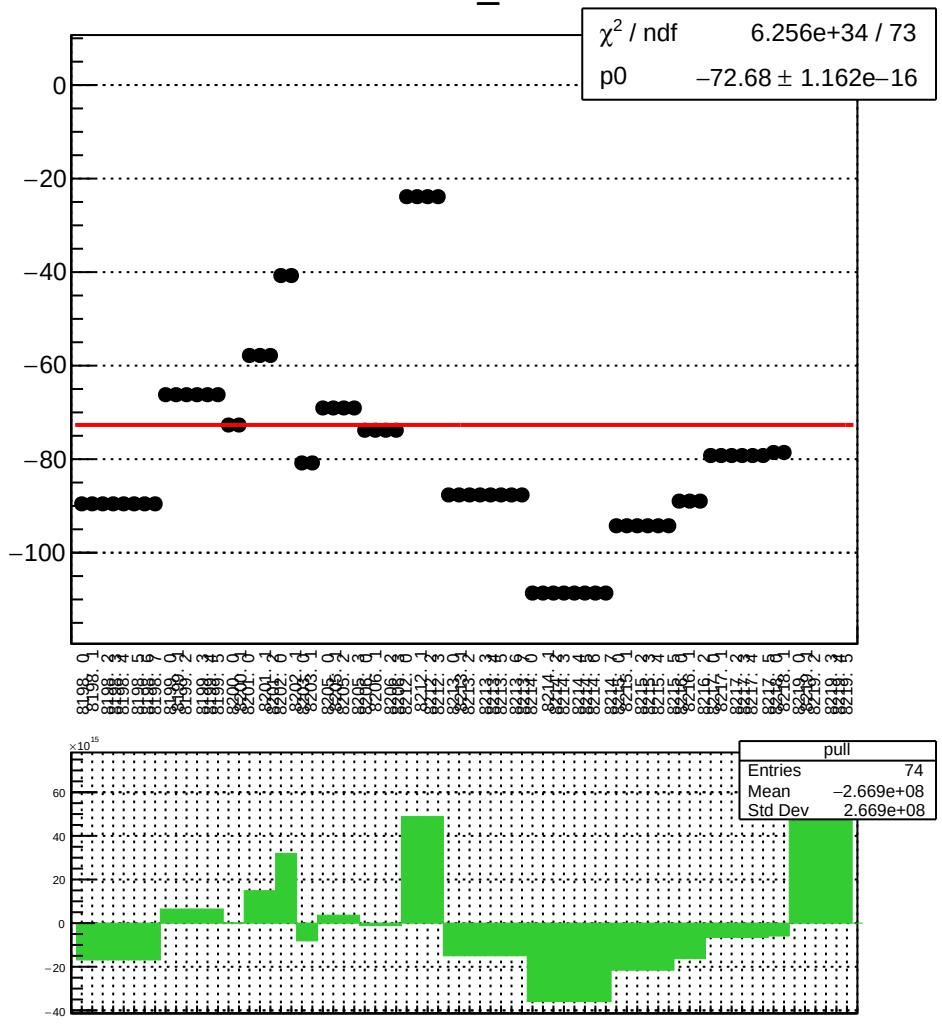

MSUPERBIGBITEreadcalc_mean vs run
χ² / ndf 0.008017 / 73
p0 0.009375 ± 1.162e−16
×10⁻³
pull
Entries 74
Mean 37
Std Dev 21.36
pull1D
Entries 74
Mean 0.01041
Std Dev 2.603e−10

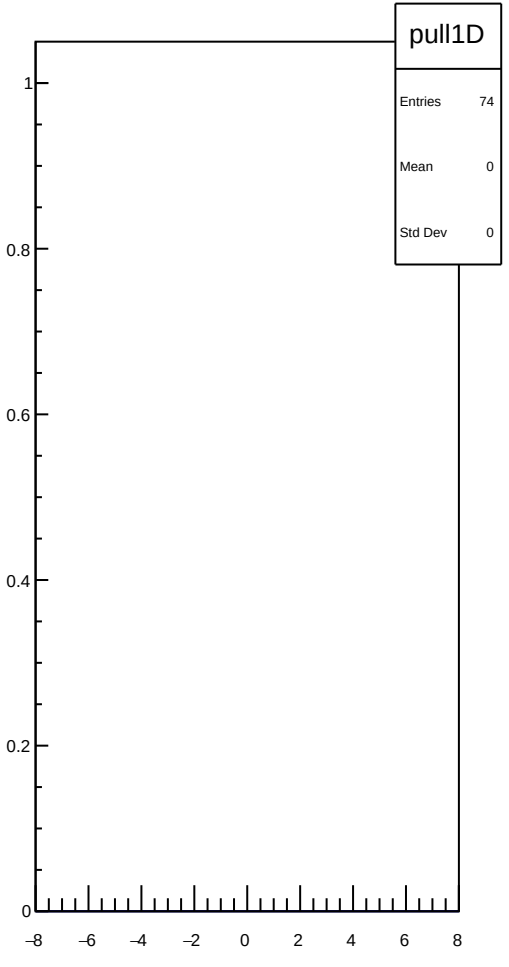

IGL1I00DI24_24M_mean vs run
χ² / ndf 8406 / 73
p0 16.01± 1.162e−16
17
16.8
16.6
16.4
16.2
16
pull
Entries 74
Mean 37
Std Dev 21.36
0
−2
−4
−6
−8
−10
pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

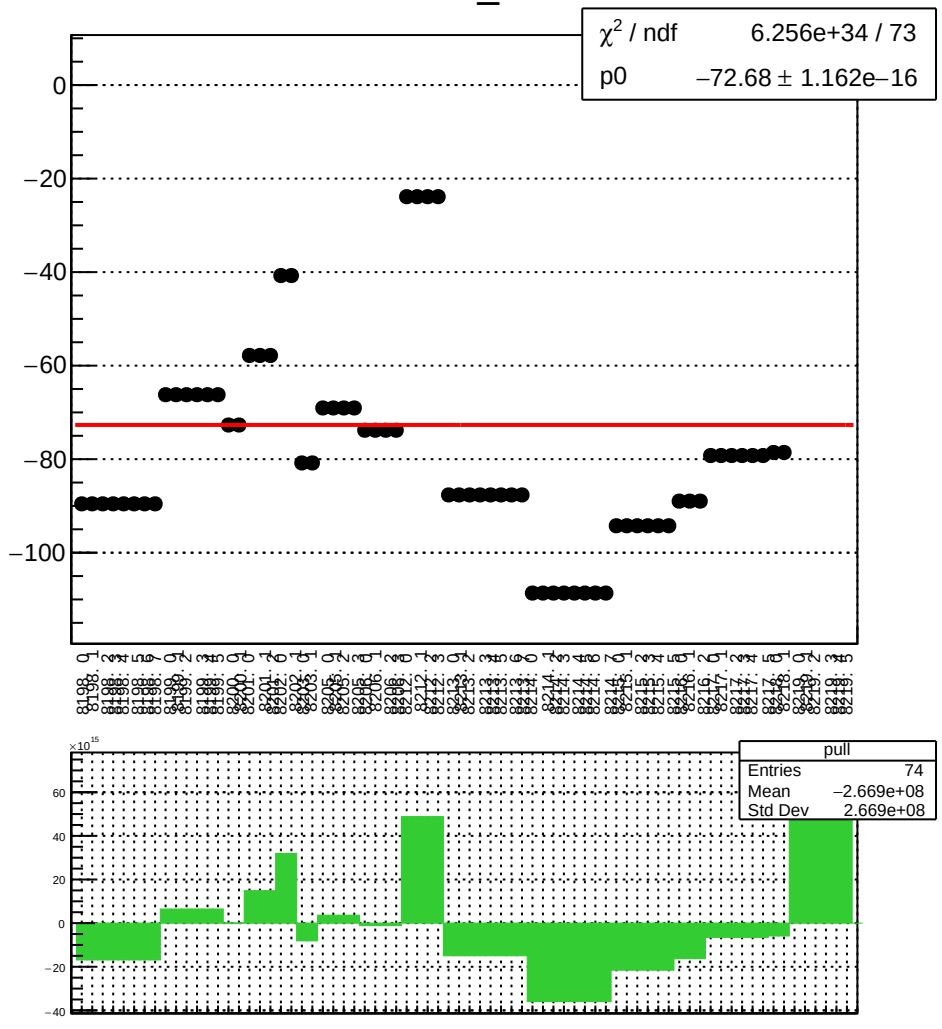

IGL1I00OD16_16_mean vs run
χ² / ndf 1.494e+04 / 73
p0 17.01± 1.162e−16
18
17.8
17.6
17.4
17.2
17
pull
Entries 74
Mean 37
Std Dev 21.36
14
12
10
8
6
4
2
0
pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

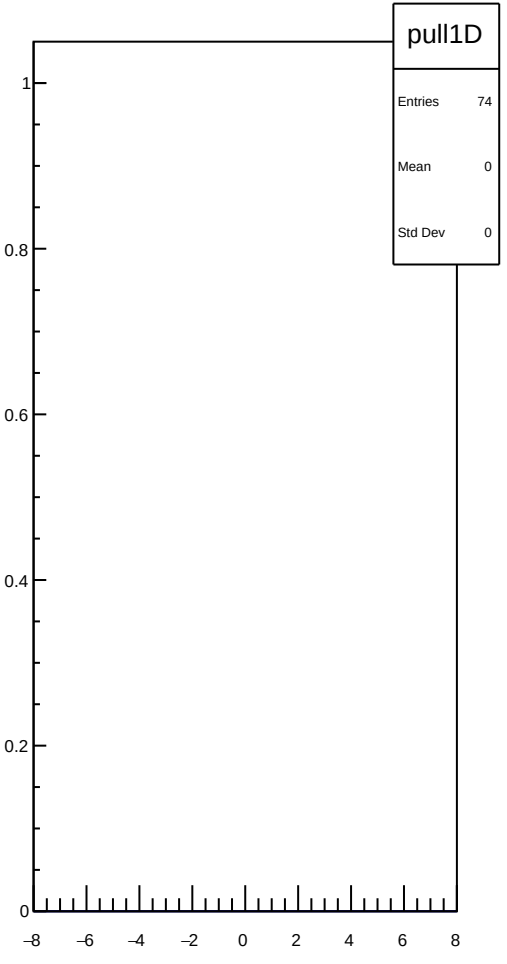

RTPAPOSUCNT_mean vs run
χ² / ndf 0 / 73
p0 913 ± 1.162e−16
914
913.8
913.6
913.4
913.2
913
pull
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 74
Mean 0
Std Dev 0
70
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSVCNT_mean vs run
χ² / ndf 2.764e+08 / 73
p0 −1003 ± 1.162e−16
−1002
−1002.2
−1002.4
−1002.6
−1002.8
−1003
pull
Entries 74
Mean 37
Std Dev 21.36
0
−500
−1000
−1500
−2000
pull1D
Entries 74
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


RTPPITA1CNT_mean vs run
χ² / ndf 6.256e+34 / 73
p0 −72.68 ± 1.162e−16
pull
Entries 74
Mean −2.669e+08
Std Dev 2.669e+08
×10¹⁵


pull1D
Entries 74
Mean 0
Std Dev 0


RTPPITA2CNT_mean vs run
χ² / ndf 6.256e+34 / 73
p0 −72.68 ± 1.162e−16
pull
Entries 74
Mean −2.669e+08
Std Dev 2.669e+08


pull1D
Entries 74
Mean 0
Std Dev 0