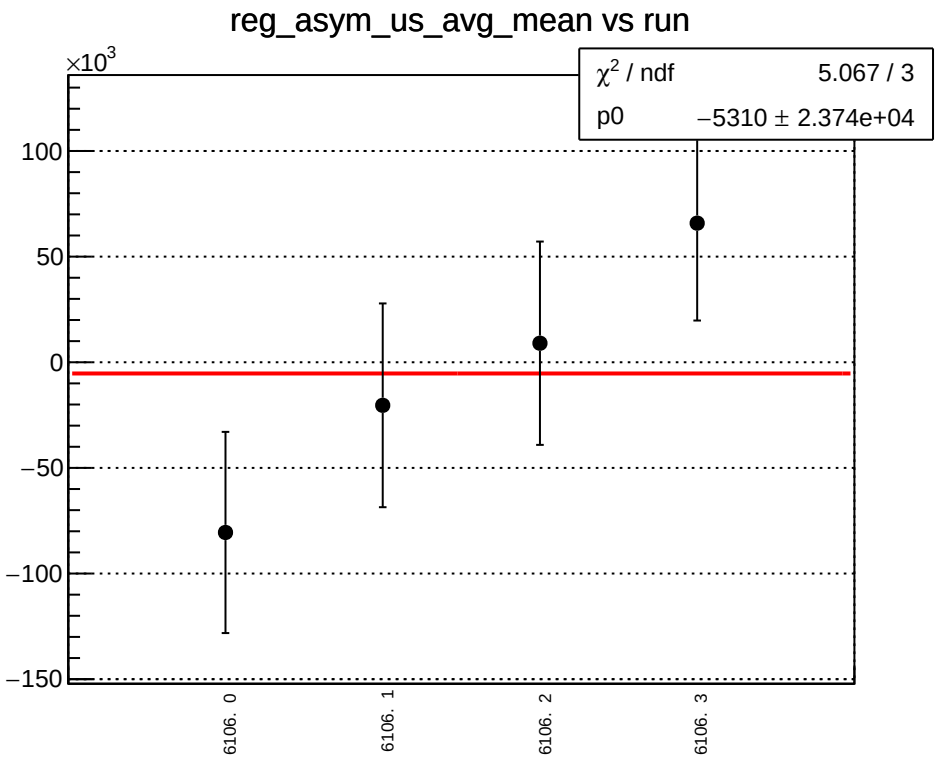
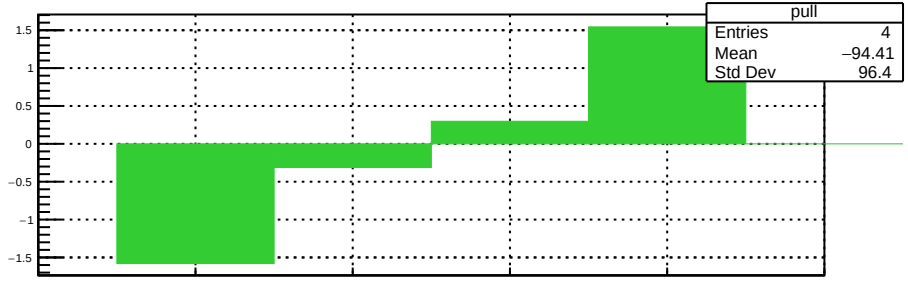
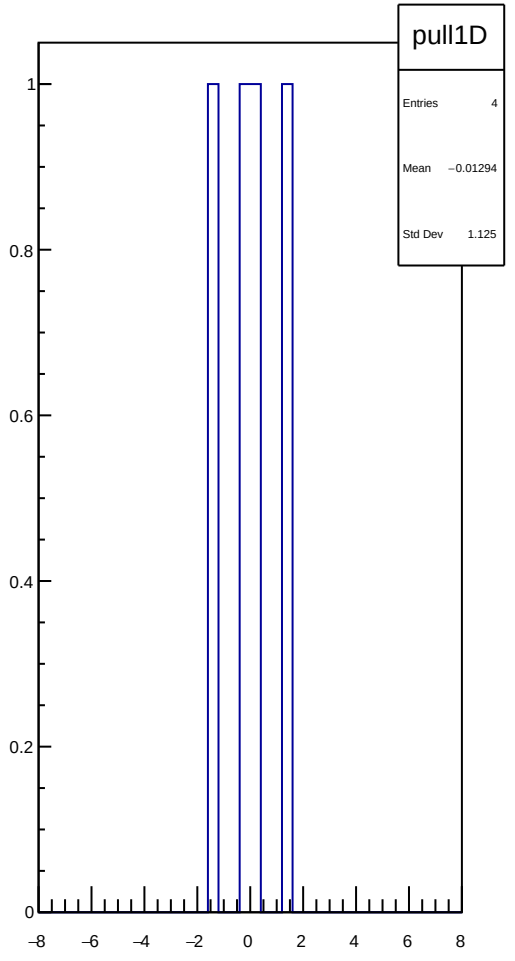
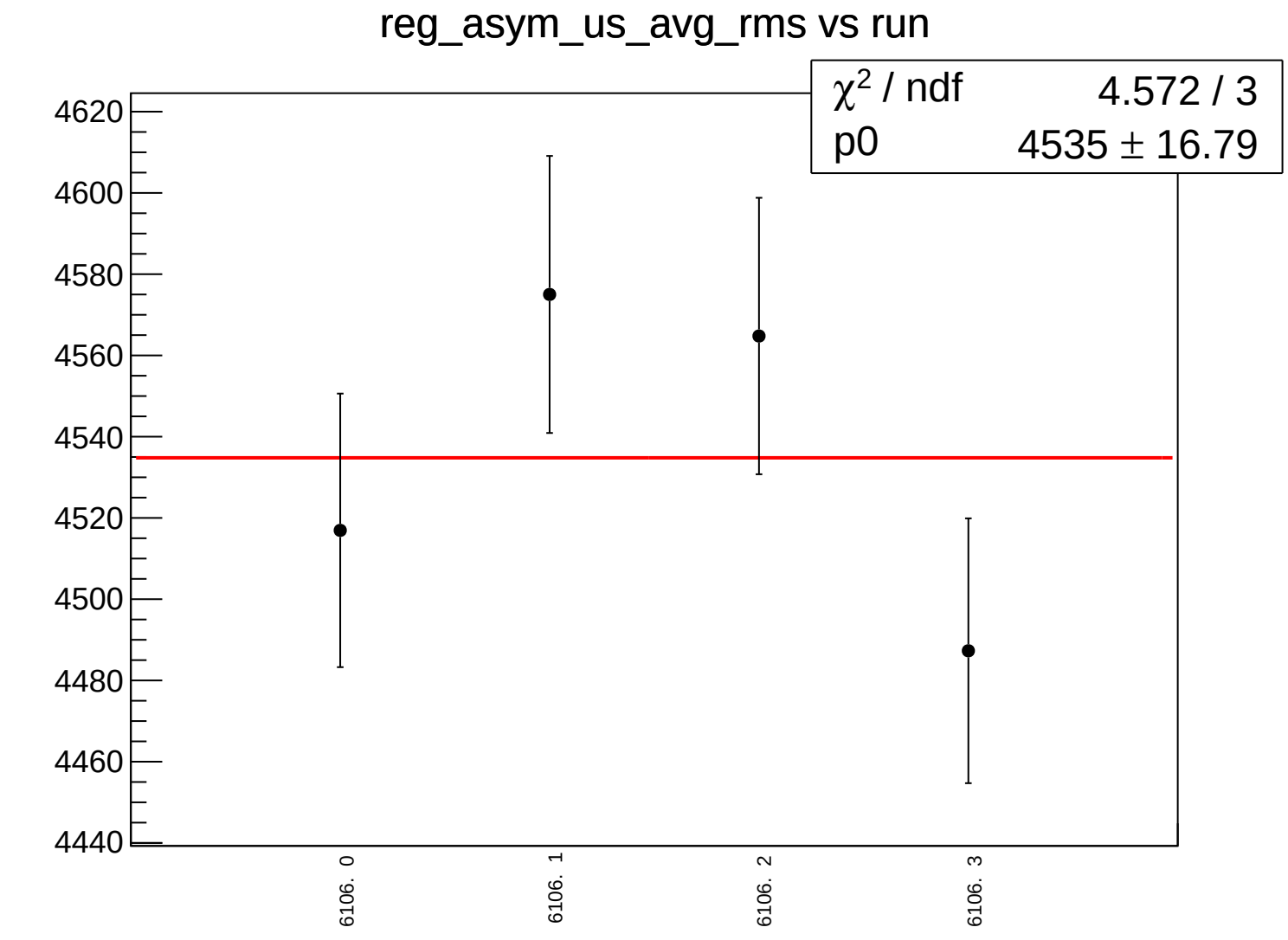
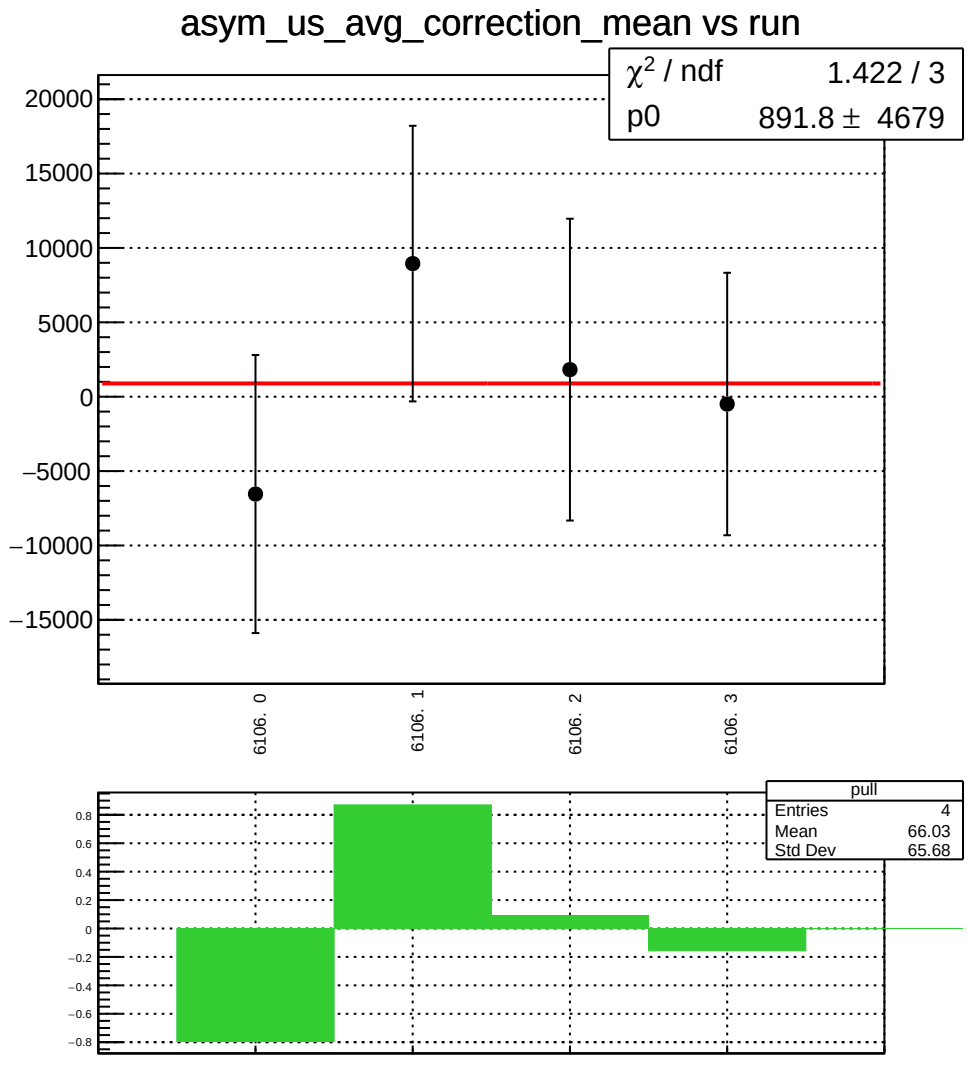
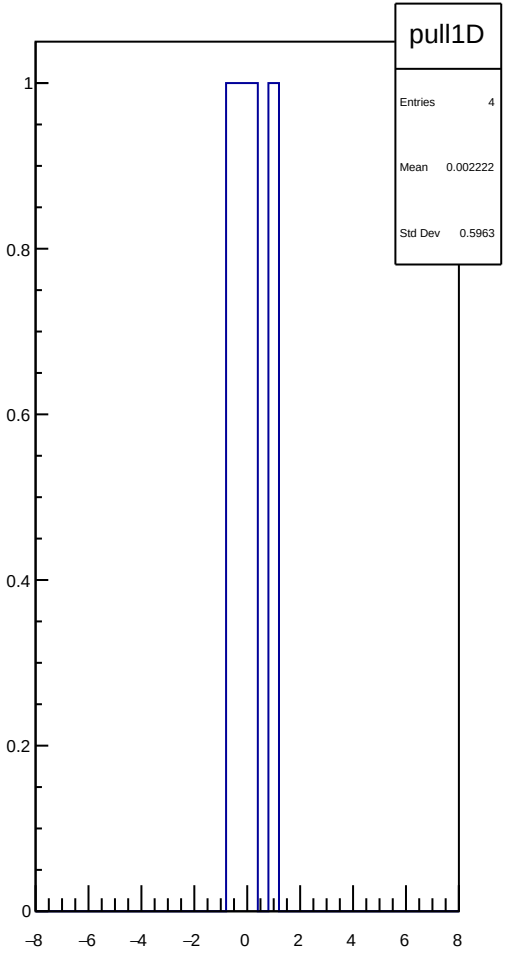

reg_asym_us_avg_mean vs run
×10^3
χ^2 / ndf 5.067 / 3
p0 −5310 ± 2.374e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3

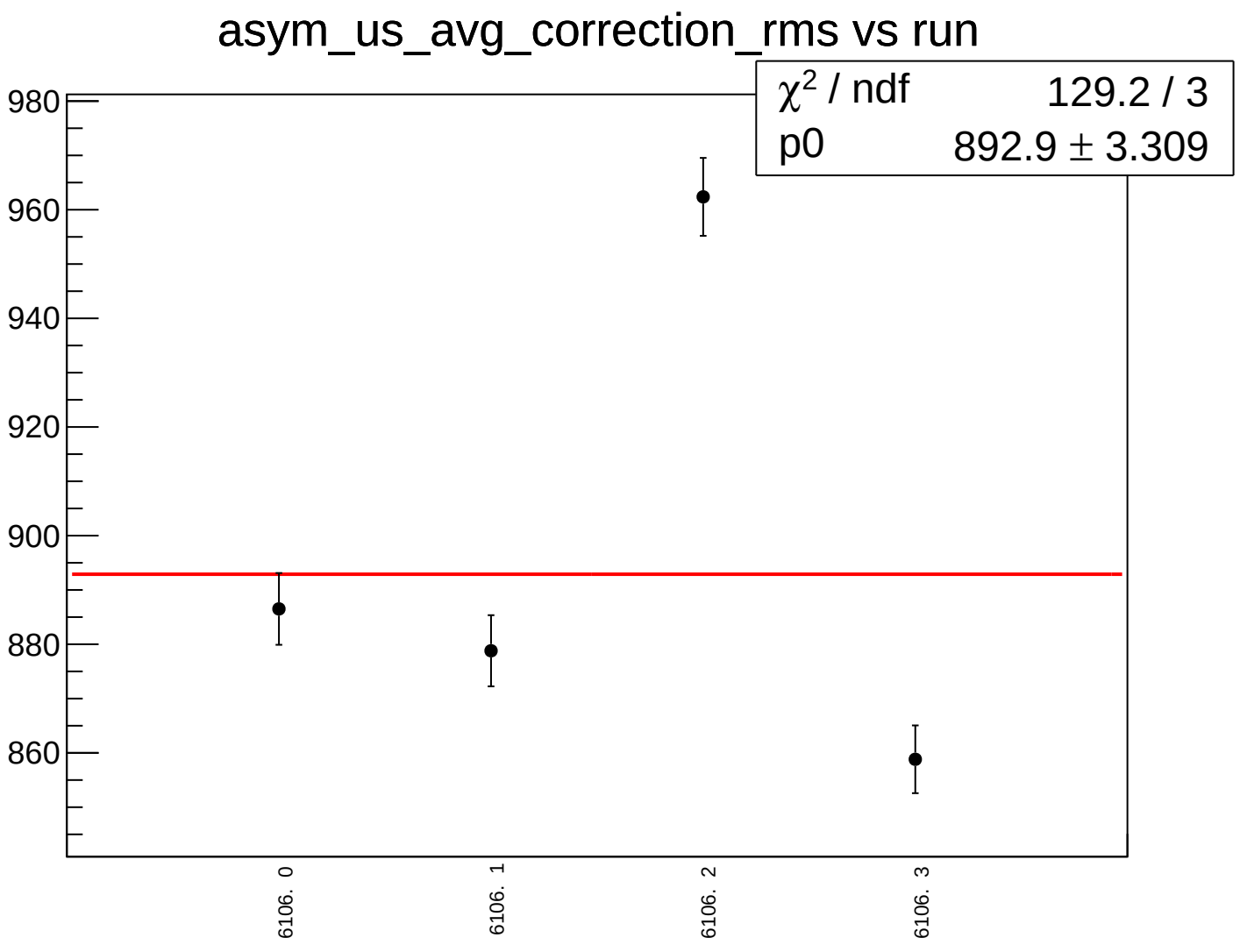

pull
Entries 4
Mean −94.41
Std Dev 96.4
1.5
1
0.5
0
−0.5
−1
−1.5

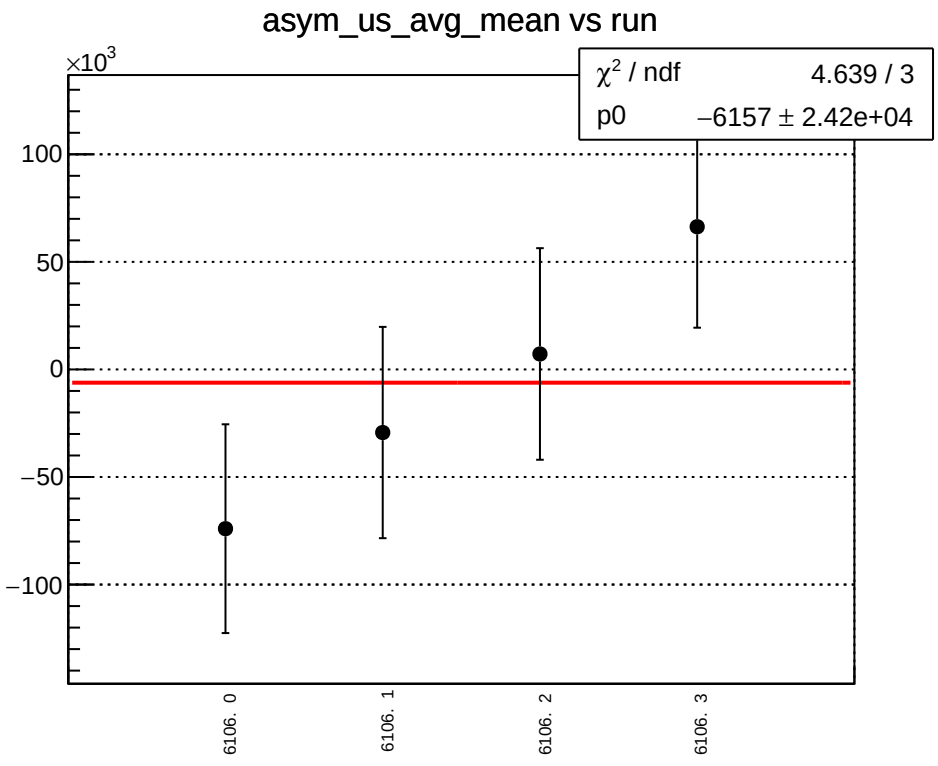

pull1D
Entries 4
Mean −0.01294
Std Dev 1.125
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

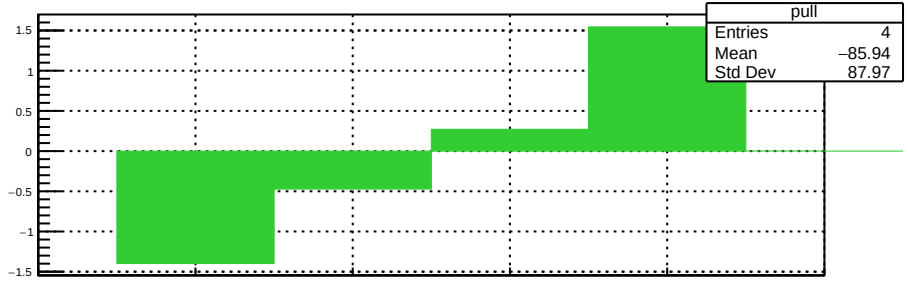

reg_asym_us_avg_rms vs run
χ^2 / ndf 4.572 / 3
p0 4535 ± 16.79
4620
4600
4580
4560
4540
4520
4500
4480
4460
4440
6106. 0
6106. 1
6106. 2
6106. 3

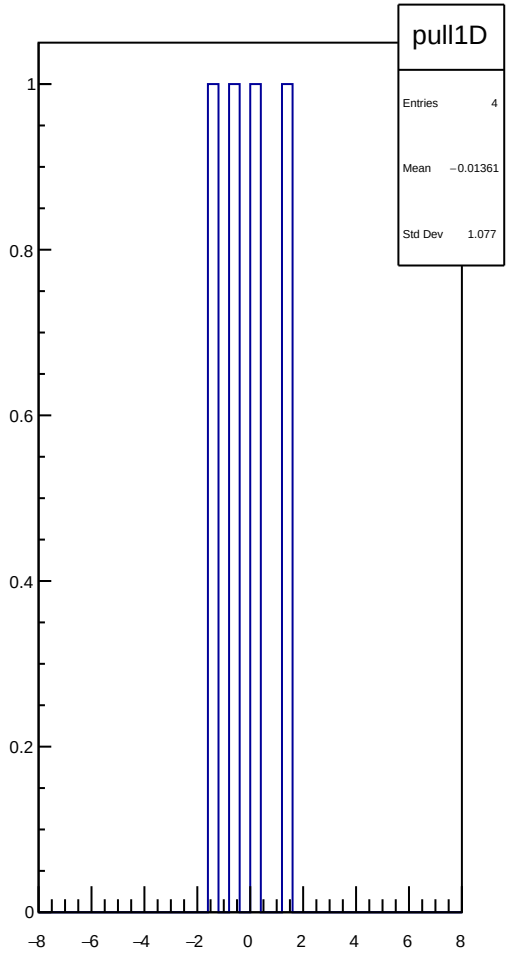

asym_us_avg_correction_mean vs run
χ² / ndf 1.422 / 3
p0 891.8 ± 4679
20000
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 66.03
Std Dev 65.68
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

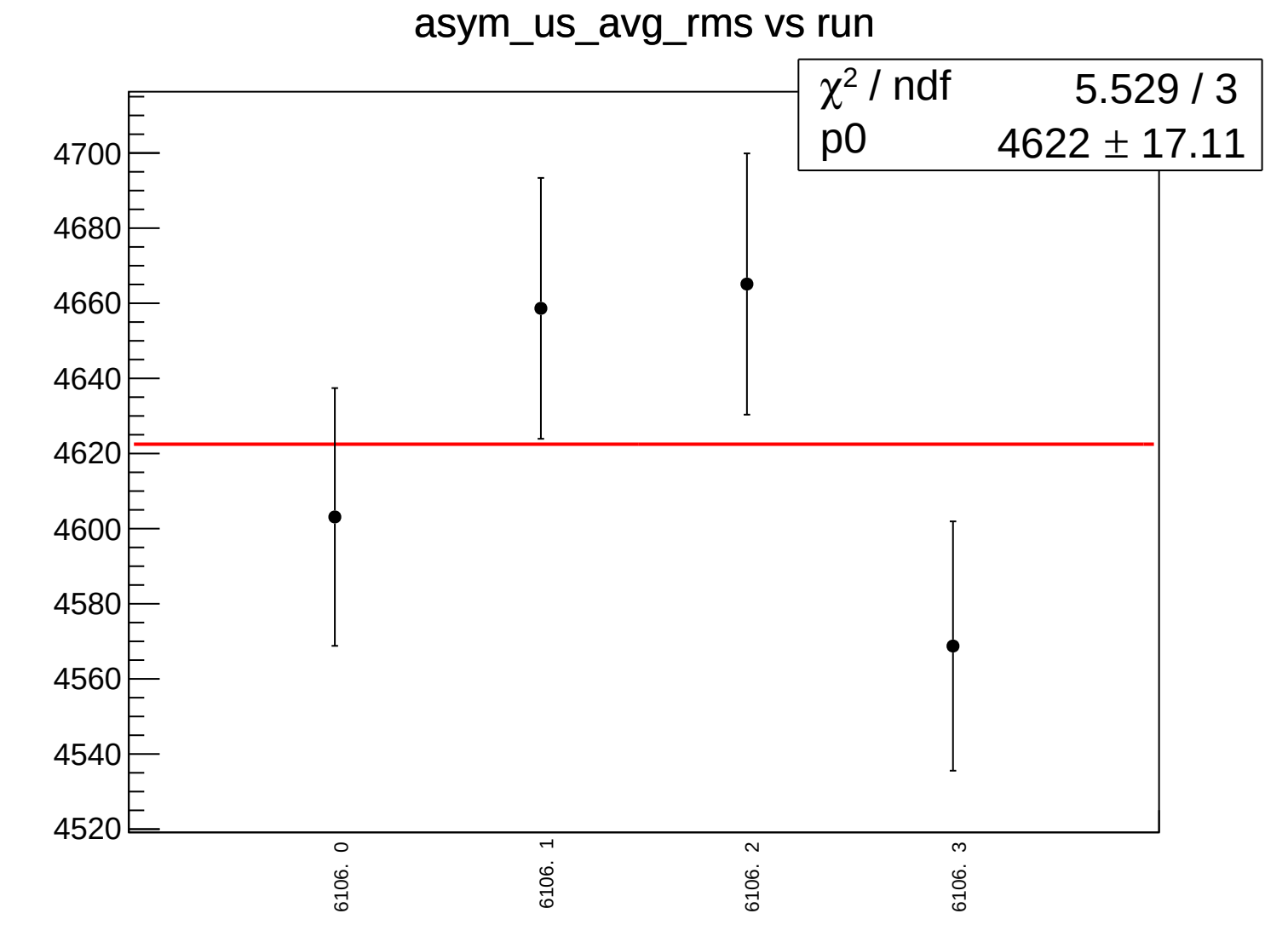

pull1D
Entries 4
Mean 0.002222
Std Dev 0.5963
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

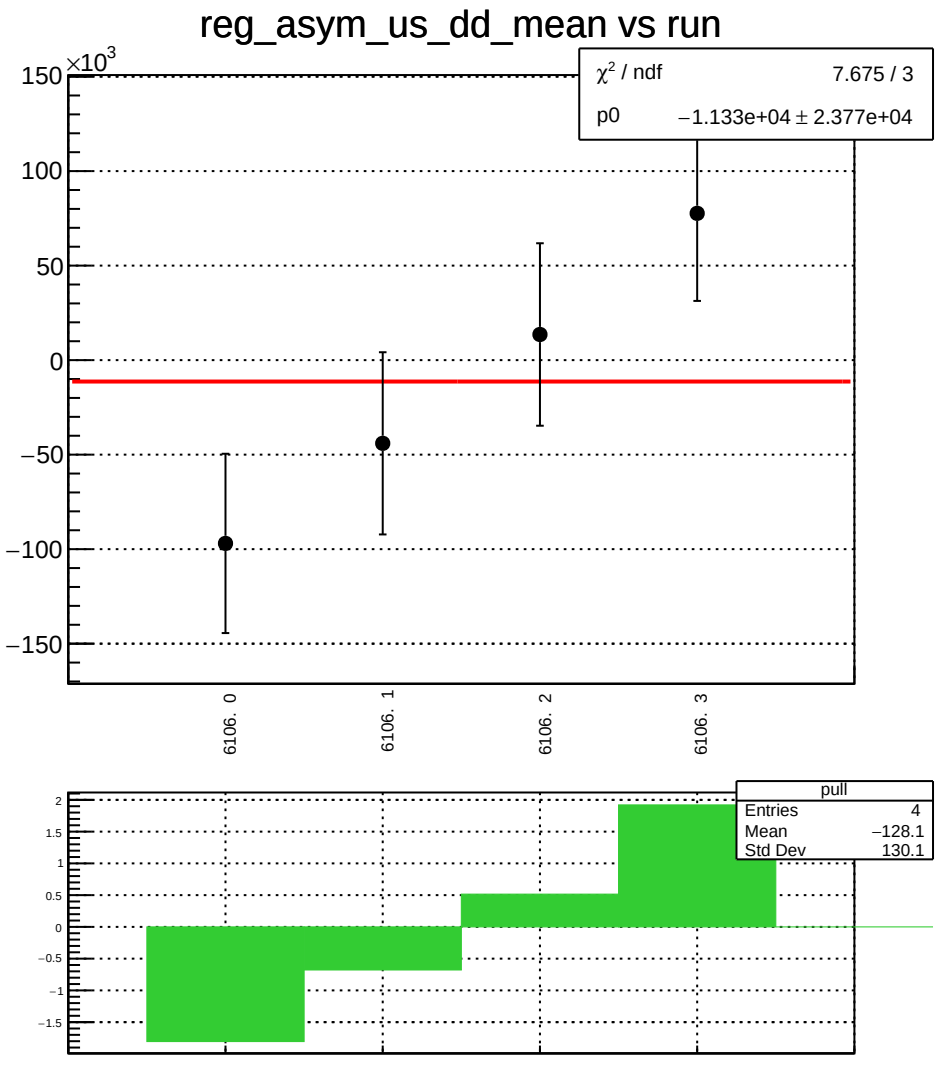

asym_us_avg_correction_rms vs run
χ² / ndf 129.2 / 3
p0 892.9 ± 3.309
980
960
940
920
900
880
860
6106. 0
6106. 1
6106. 2
6106. 3

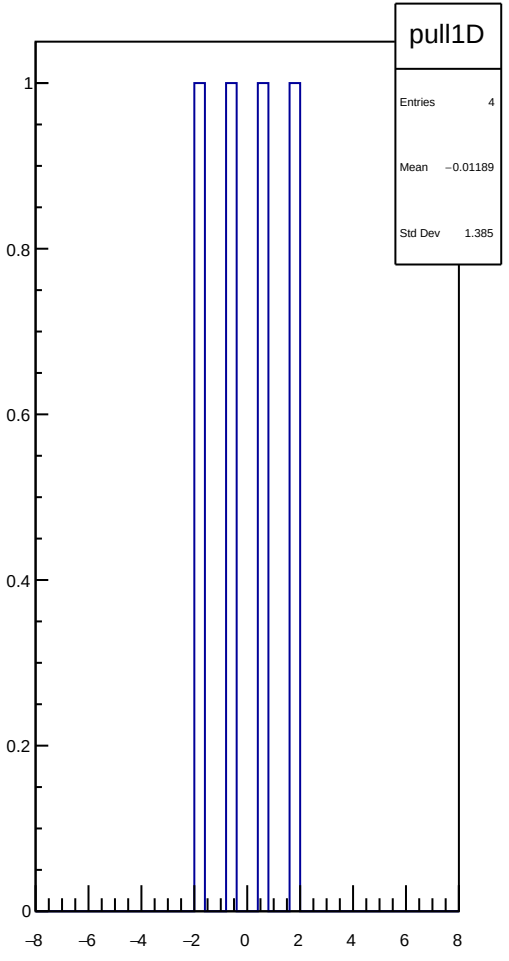

asym_us_avg_mean vs run
×10^3
χ² / ndf 4.639 / 3
p0 −6157 ± 2.42e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3

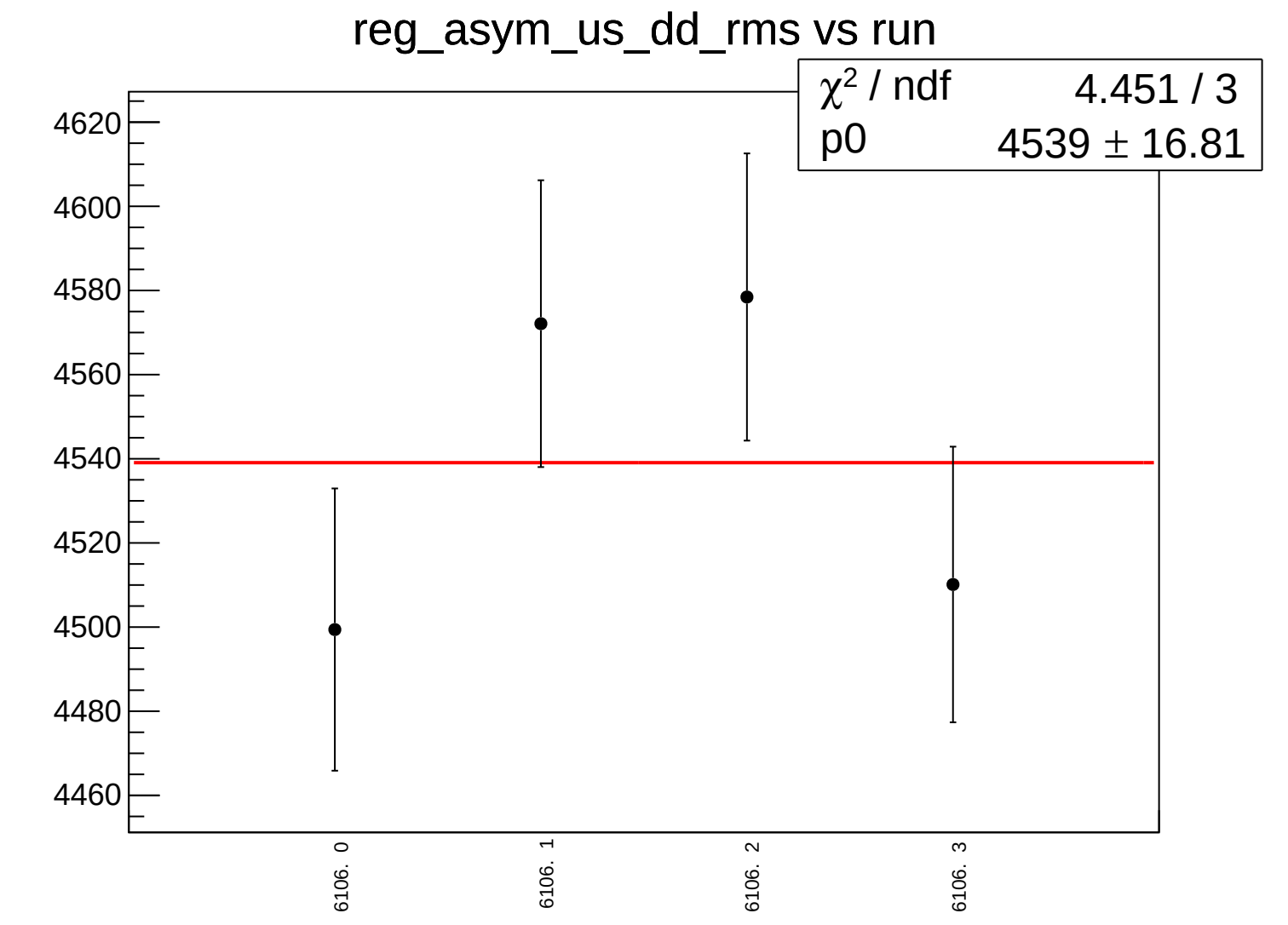

pull
Entries 4
Mean −85.94
Std Dev 87.97
1.5
1
0.5
0
−0.5
−1
−1.5

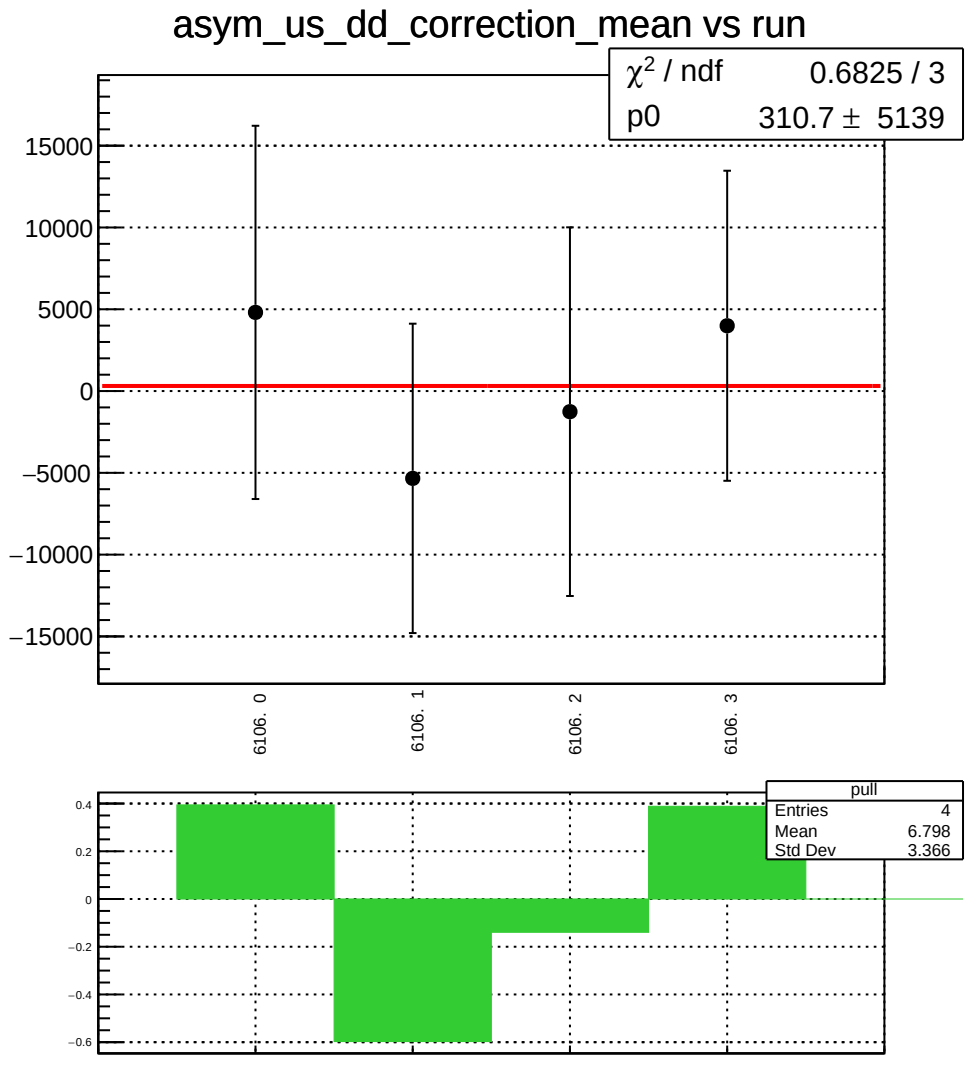

pull1D
Entries 4
Mean −0.01361
Std Dev 1.077
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

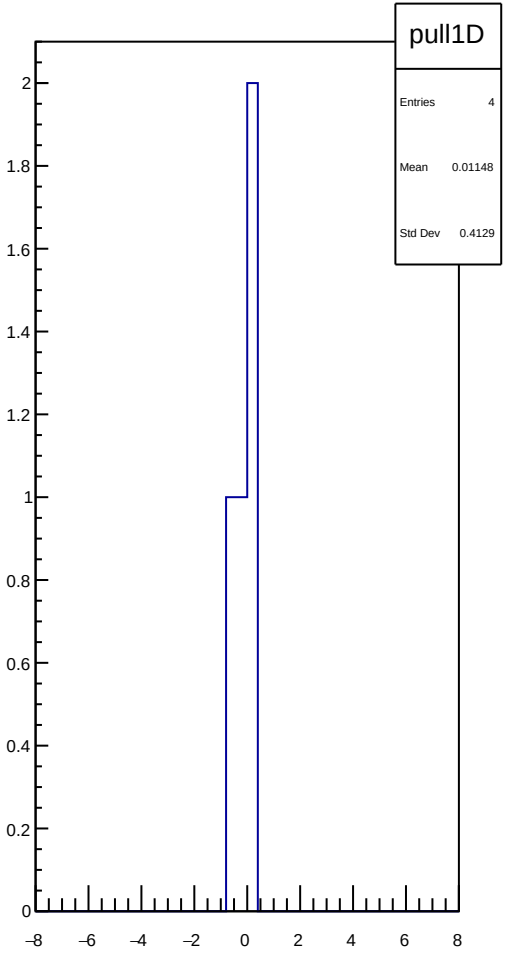

asym_us_avg_rms vs run
χ² / ndf 5.529 / 3
p0 4622 ± 17.11
4700
4680
4660
4640
4620
4600
4580
4560
4540
4520
6106. 0
6106. 1
6106. 2
6106. 3

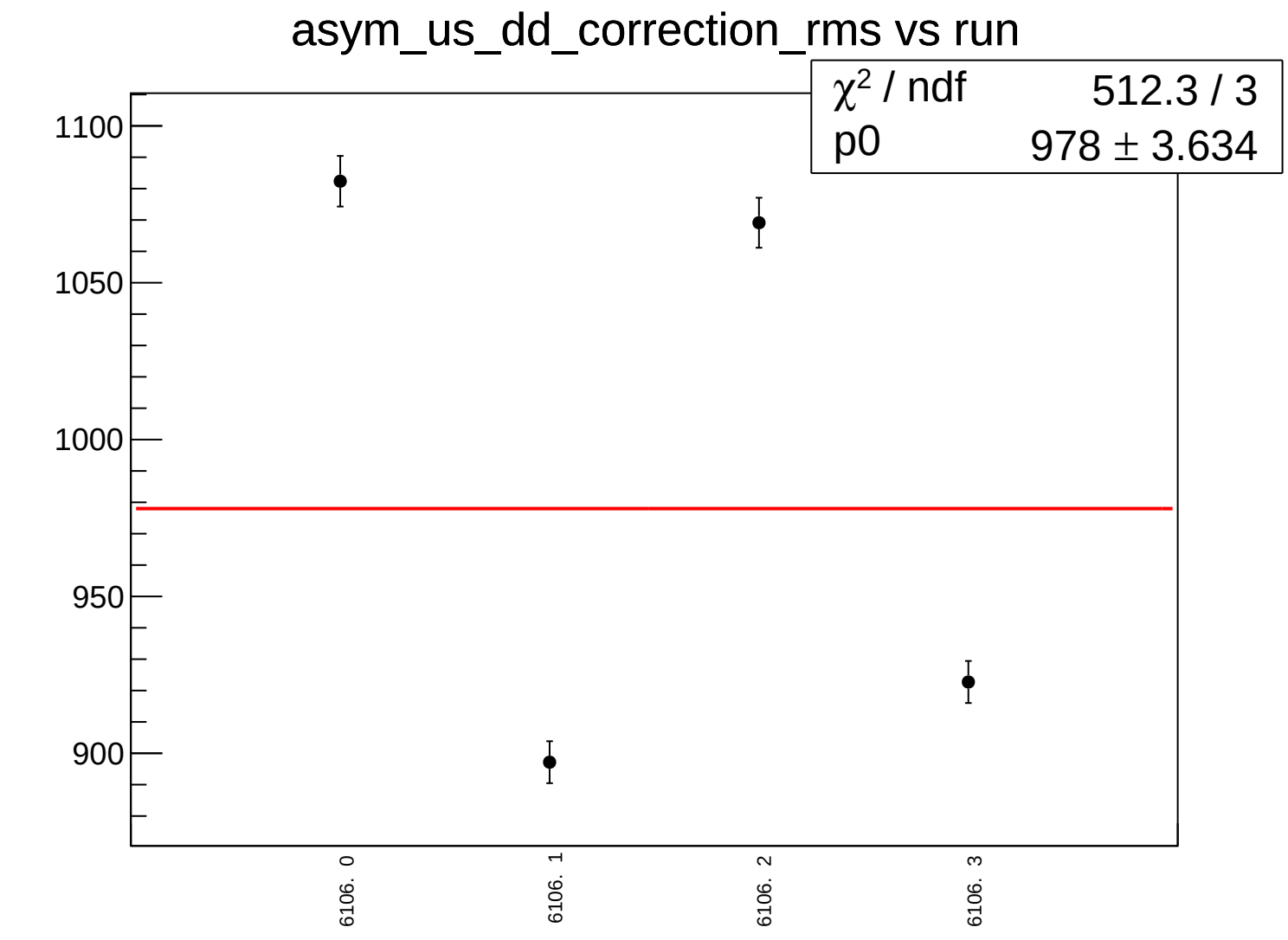

reg_asym_us_dd_mean vs run
×10^3
χ² / ndf 7.675 / 3
p0 −1.133e+04 ± 2.377e+04
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −128.1
Std Dev 130.1
2
1.5
1
0.5
0
−0.5
−1
−1.5

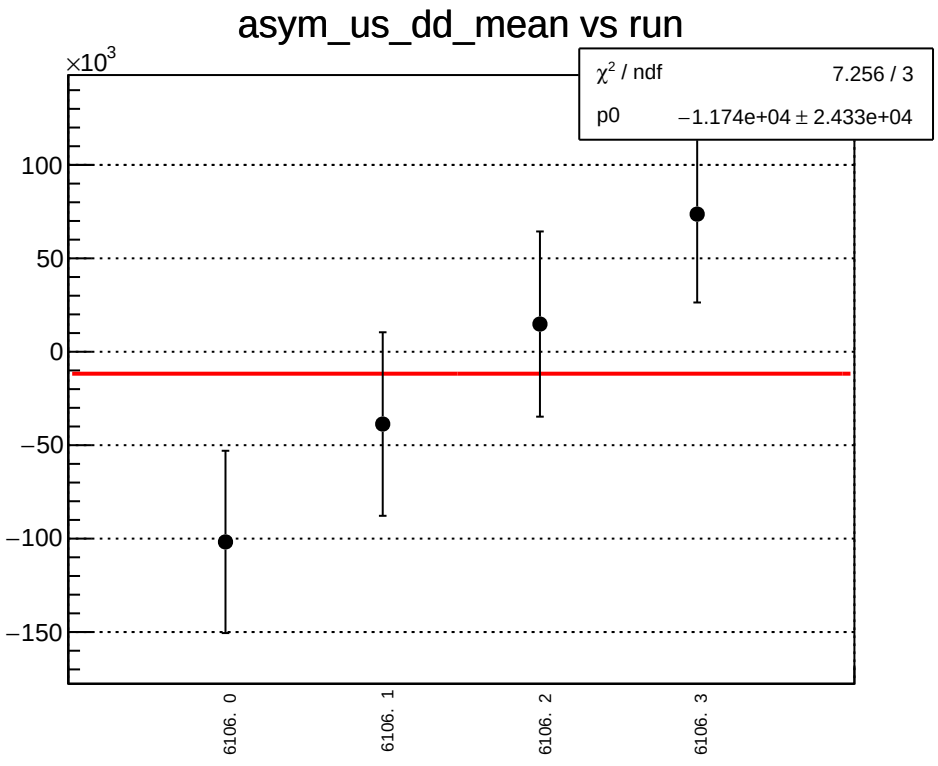

pull1D
Entries 4
Mean −0.01189
Std Dev 1.385
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

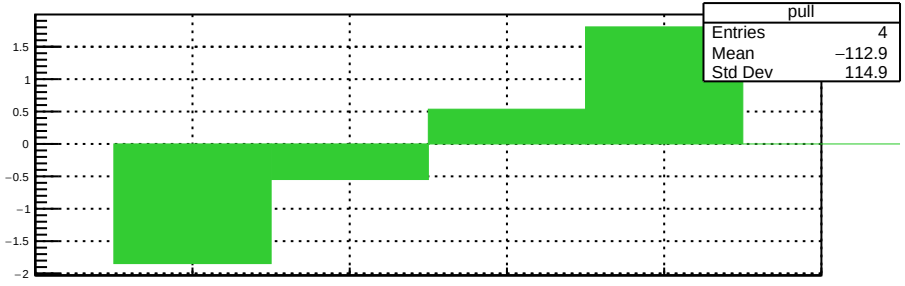

reg_asym_us_dd_rms vs run
χ² / ndf 4.451 / 3
p0 4539 ± 16.81
4620
4600
4580
4560
4540
4520
4500
4480
4460
6106. 0
6106. 1
6106. 2
6106. 3

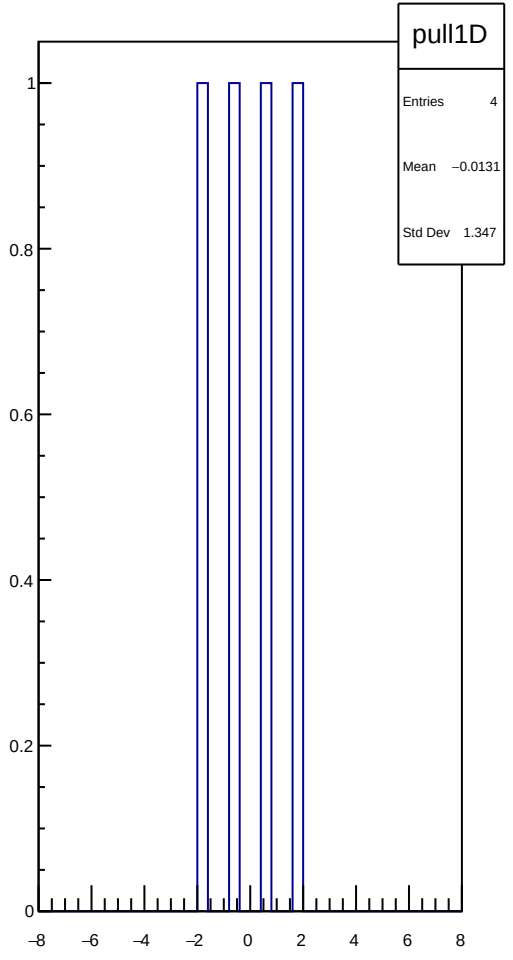

asym_us_dd_correction_mean vs run
χ² / ndf 0.6825 / 3
p0 310.7 ± 5139
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 6.798
Std Dev 3.366
0.4
0.2
0
−0.2
−0.4
−0.6

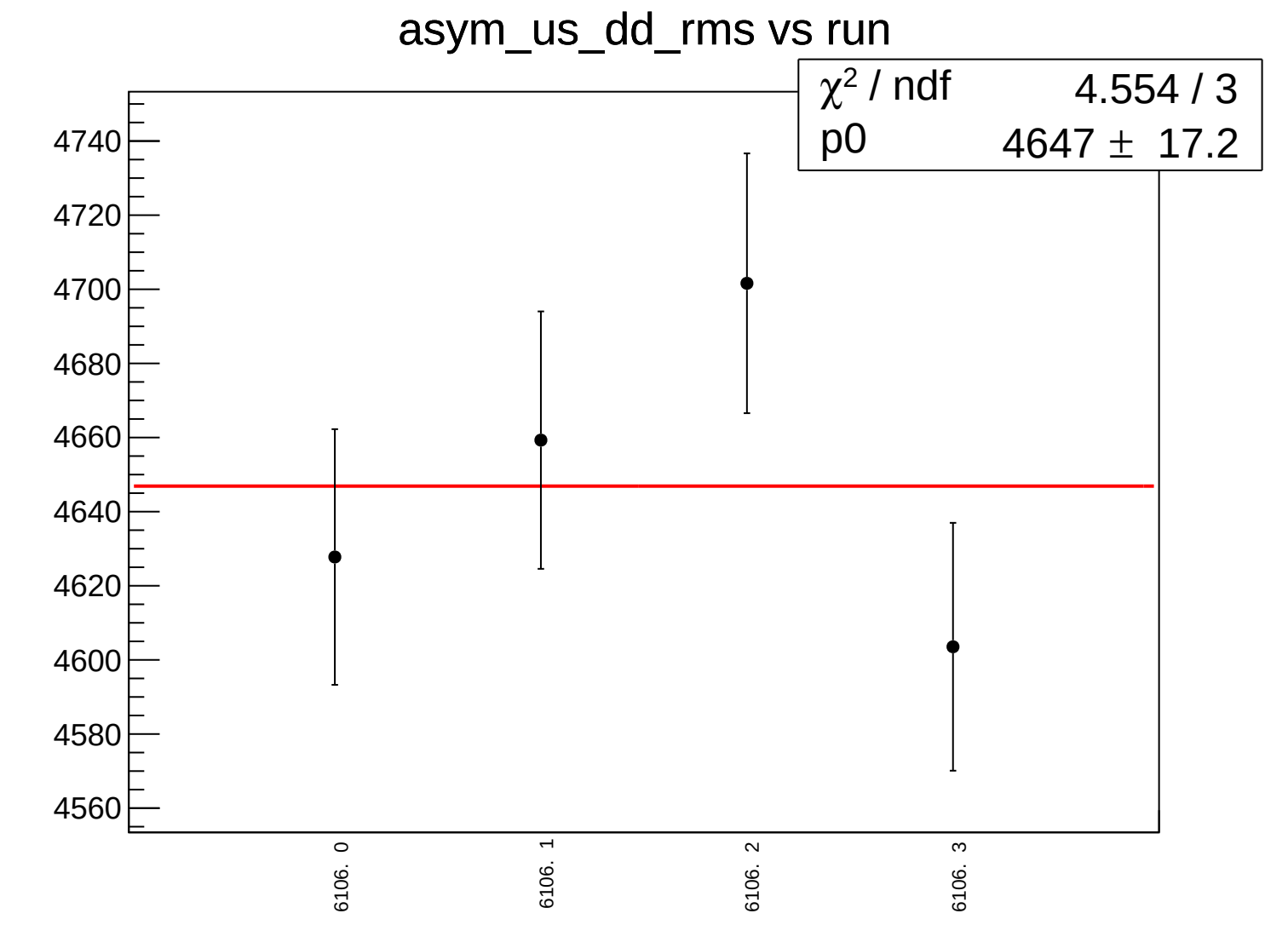

pull1D
Entries 4
Mean 0.01148
Std Dev 0.4129
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

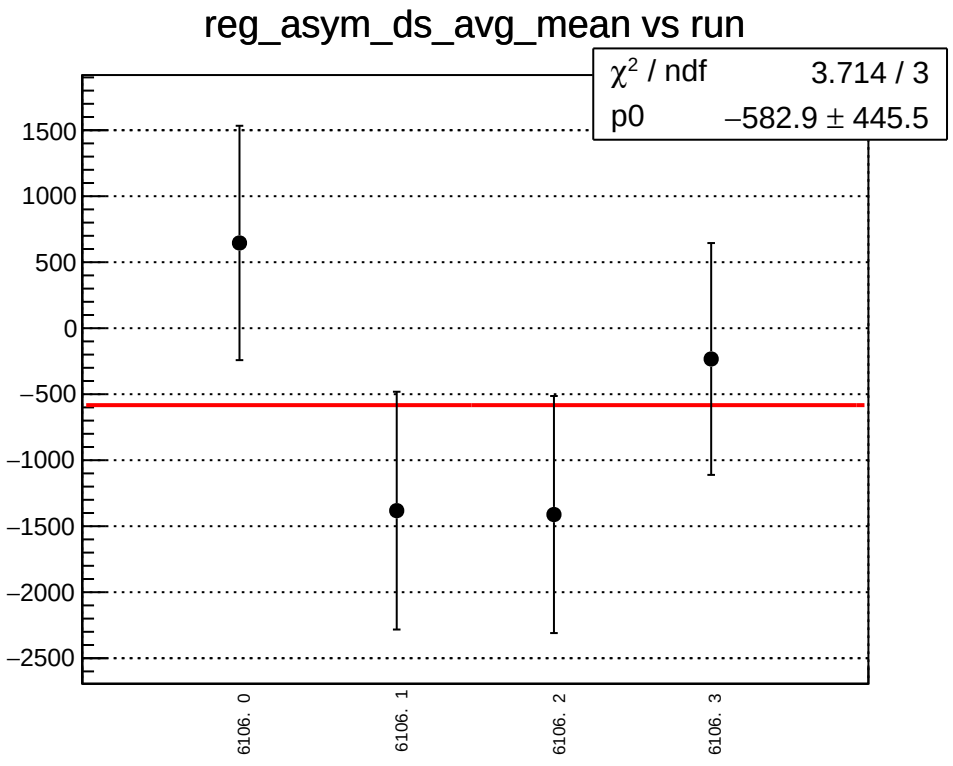

asym_us_dd_correction_rms vs run
χ² / ndf 512.3 / 3
p0 978 ± 3.634
1100
1050
1000
950
900
6106. 0
6106. 1
6106. 2
6106. 3

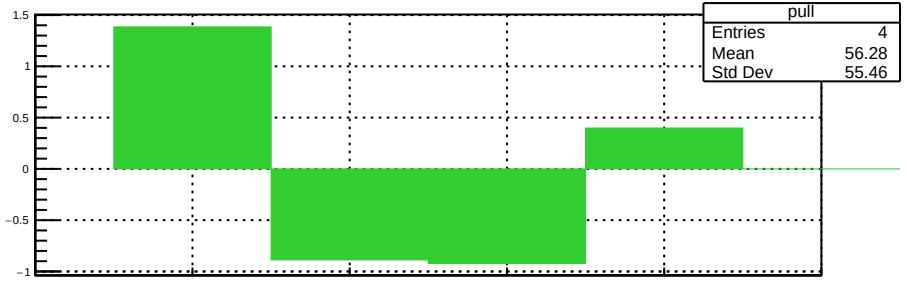

asym_us_dd_mean vs run
×10^3
χ² / ndf 7.256 / 3
p0 −1.174e+04 ± 2.433e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3

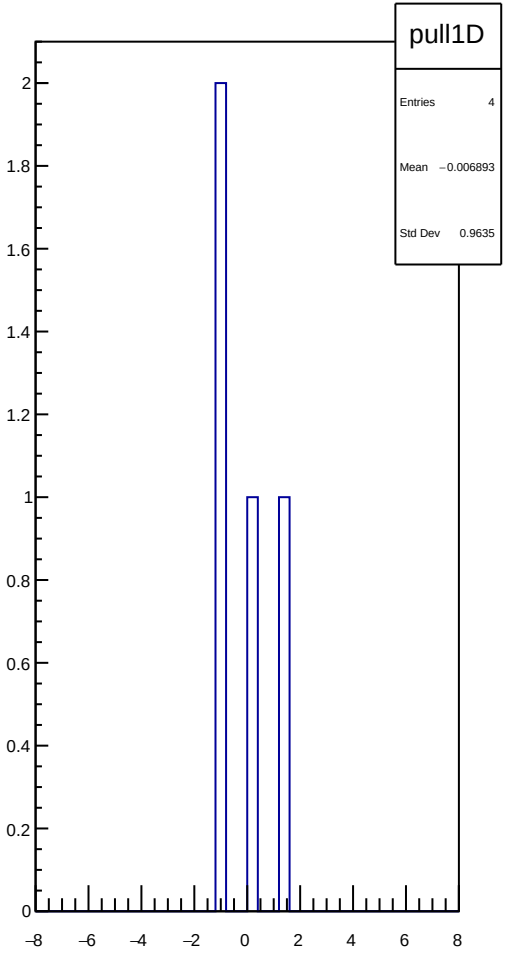

pull
Entries 4
Mean −112.9
Std Dev 114.9
1.5
1
0.5
0
−0.5
−1
−1.5
−2

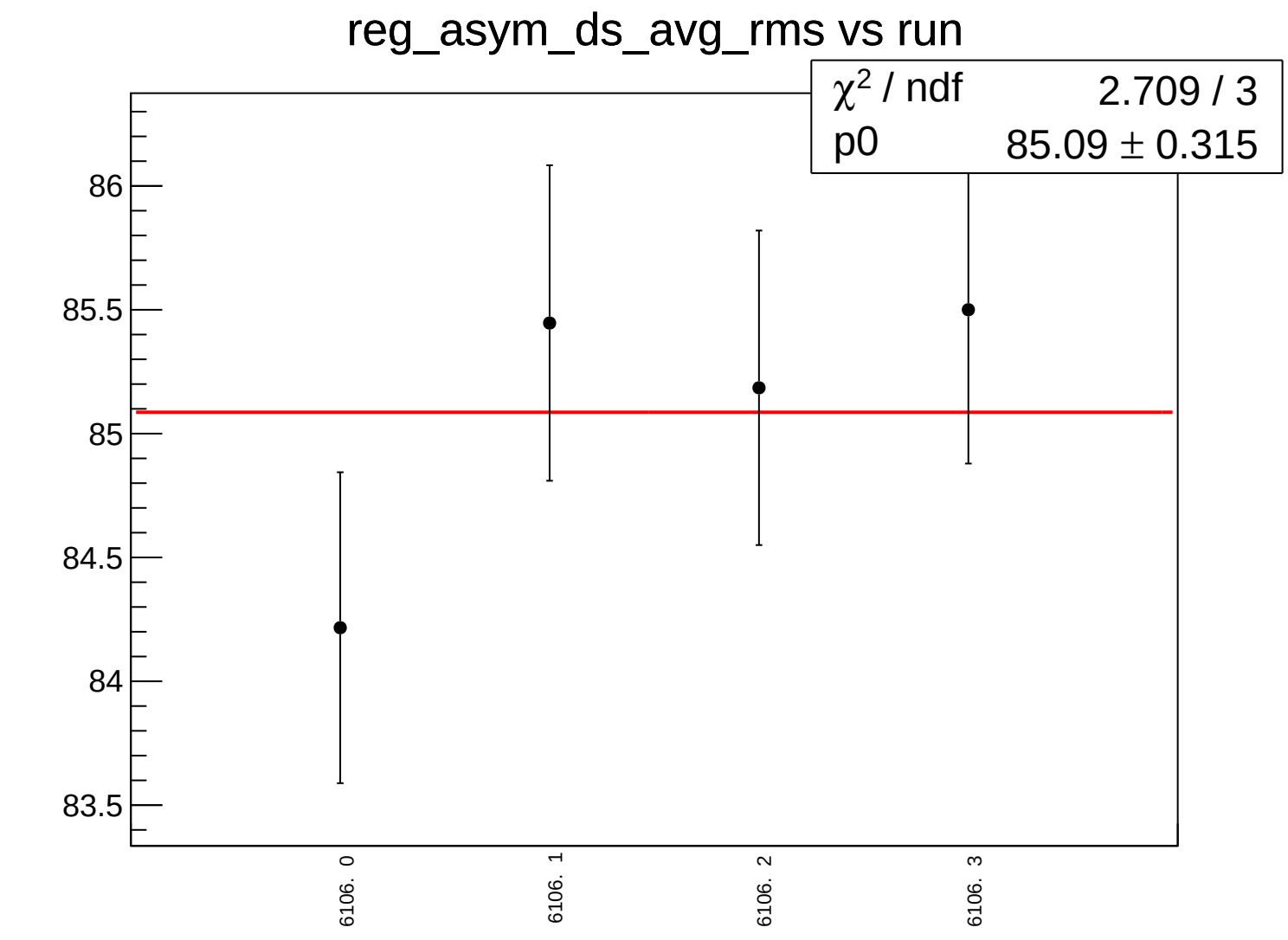

pull1D
Entries 4
Mean −0.0131
Std Dev 1.347
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

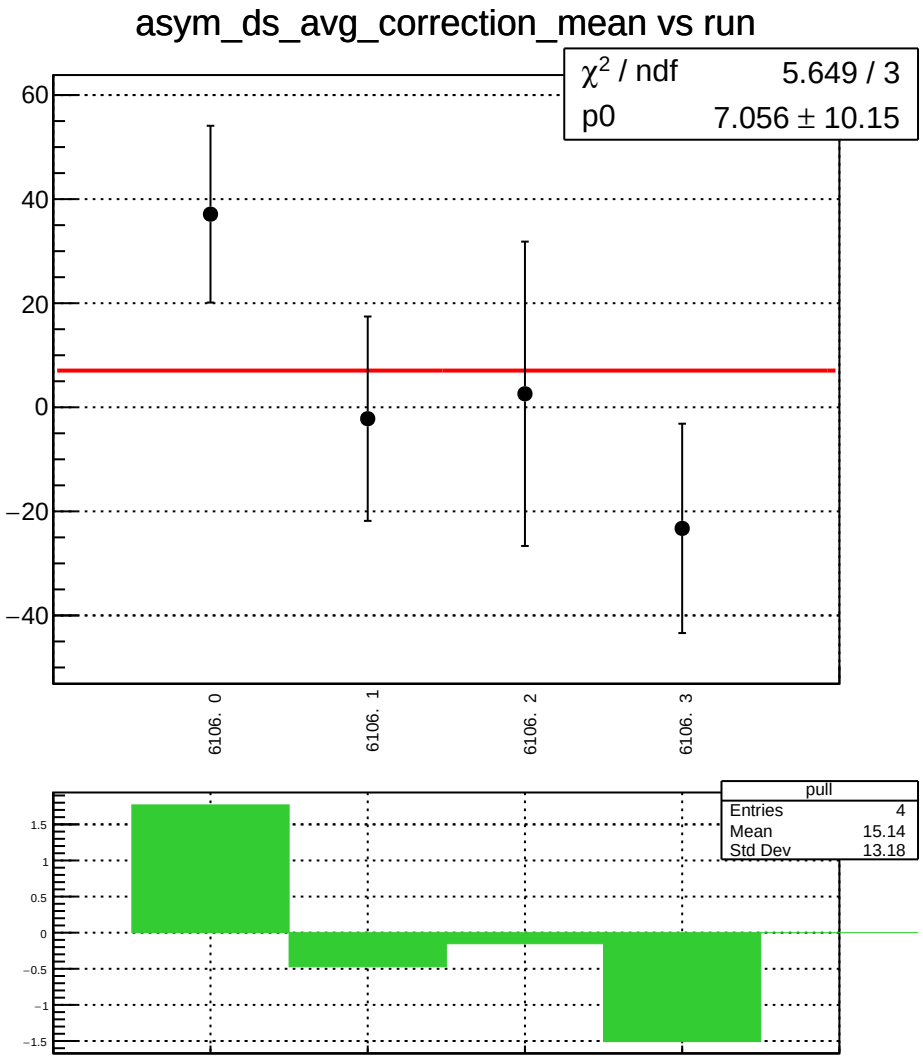

asym_us_dd_rms vs run
χ² / ndf 4.554 / 3
p0 4647 ± 17.2
4740
4720
4700
4680
4660
4640
4620
4600
4580
4560
6106. 0
6106. 1
6106. 2
6106. 3

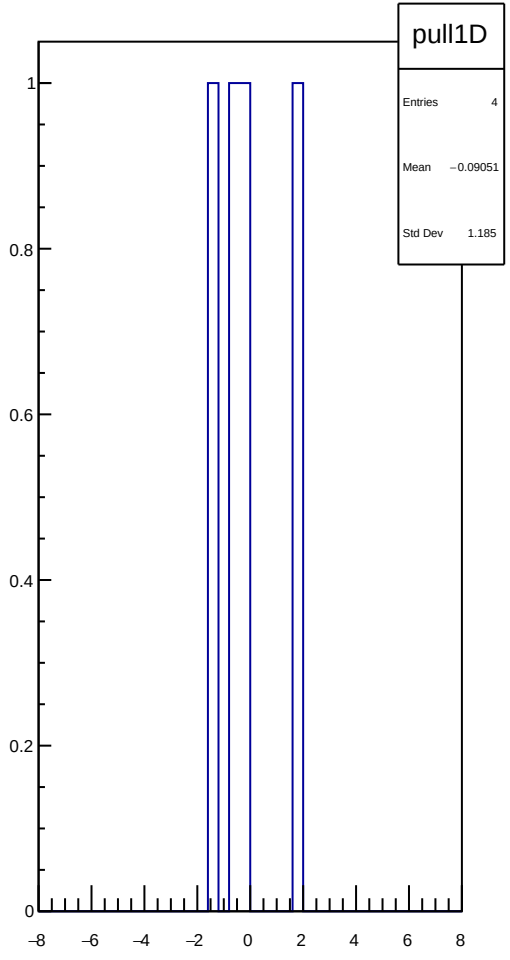

reg_asym_ds_avg_mean vs run
χ² / ndf 3.714 / 3
p0 −582.9 ± 445.5
1500
1000
500
0
−500
−1000
−1500
−2000
−2500
6106. 0
6106. 1
6106. 2
6106. 3

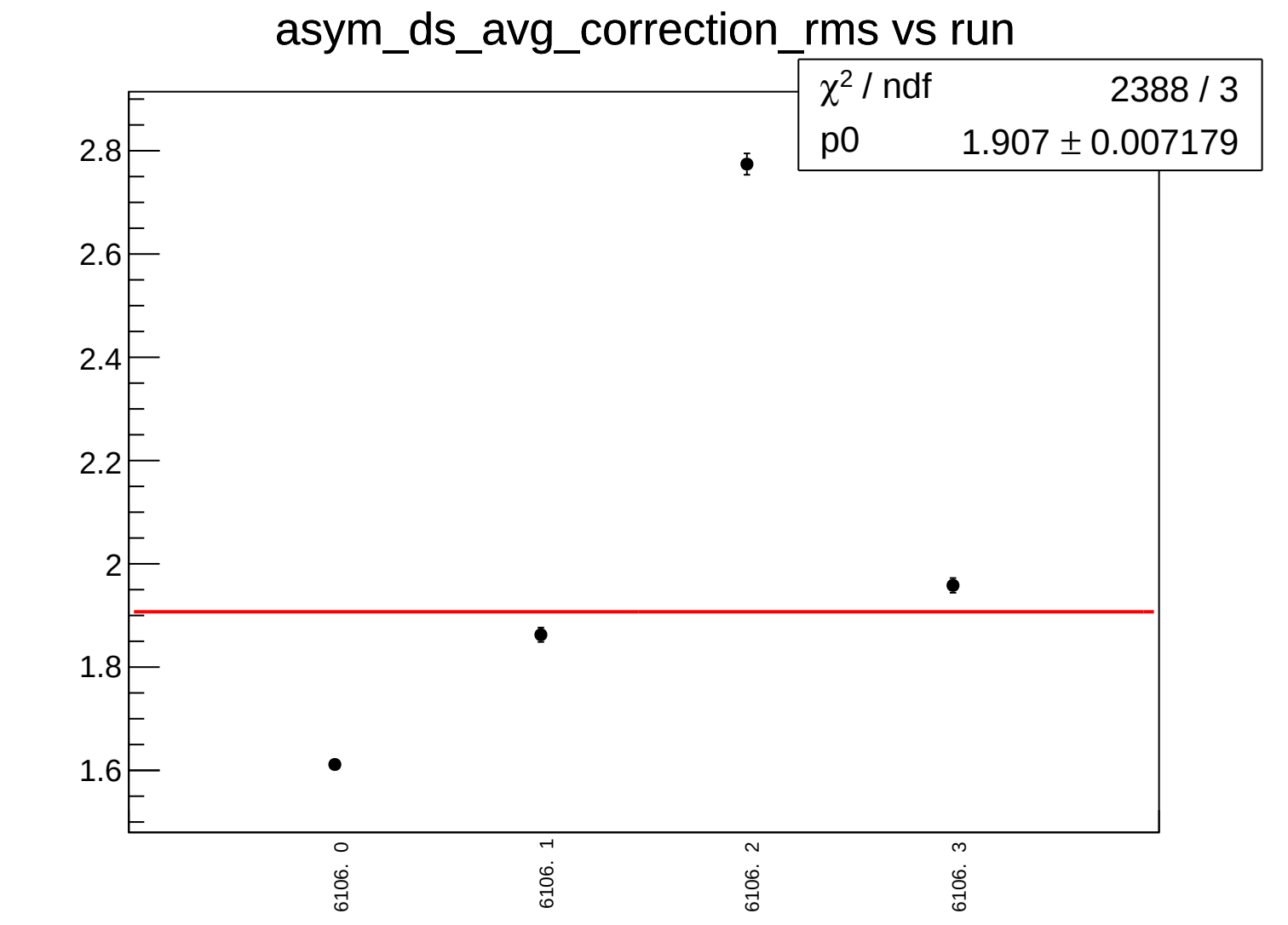

pull
Entries 4
Mean 56.28
Std Dev 55.46
1.5
1
0.5
0
−0.5
−1

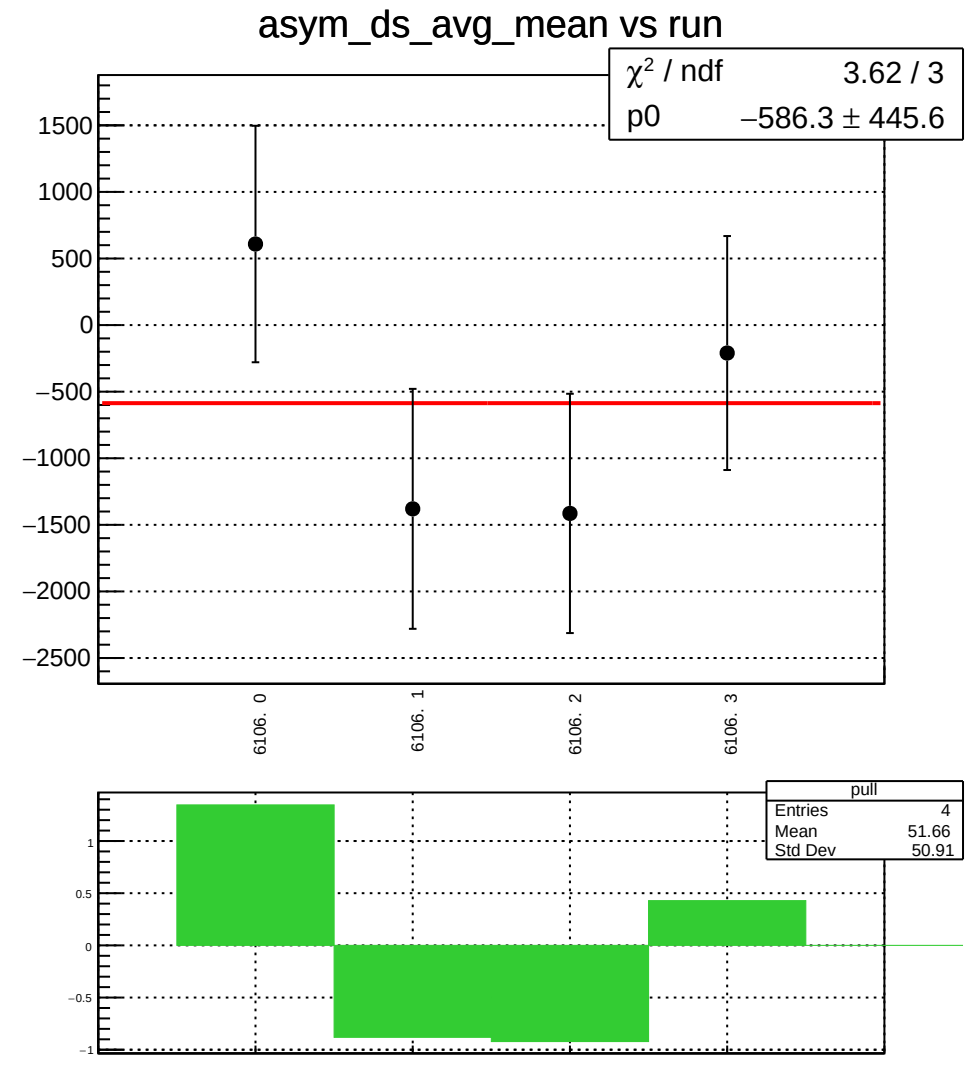

pull1D
Entries 4
Mean −0.006893
Std Dev 0.9635
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

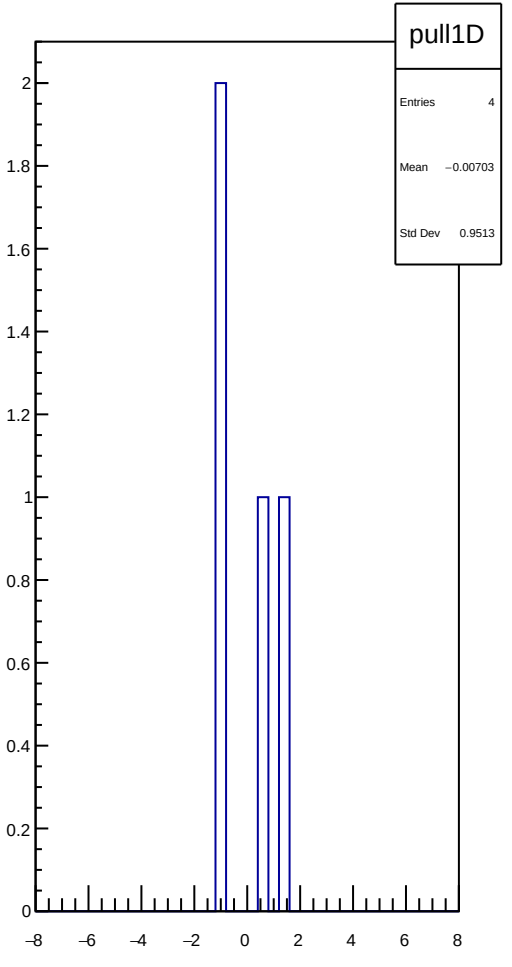

reg_asym_ds_avg_rms vs run
χ² / ndf 2.709 / 3
p0 85.09 ± 0.315
86
85.5
85
84.5
84
83.5
6106. 0
6106. 1
6106. 2
6106. 3

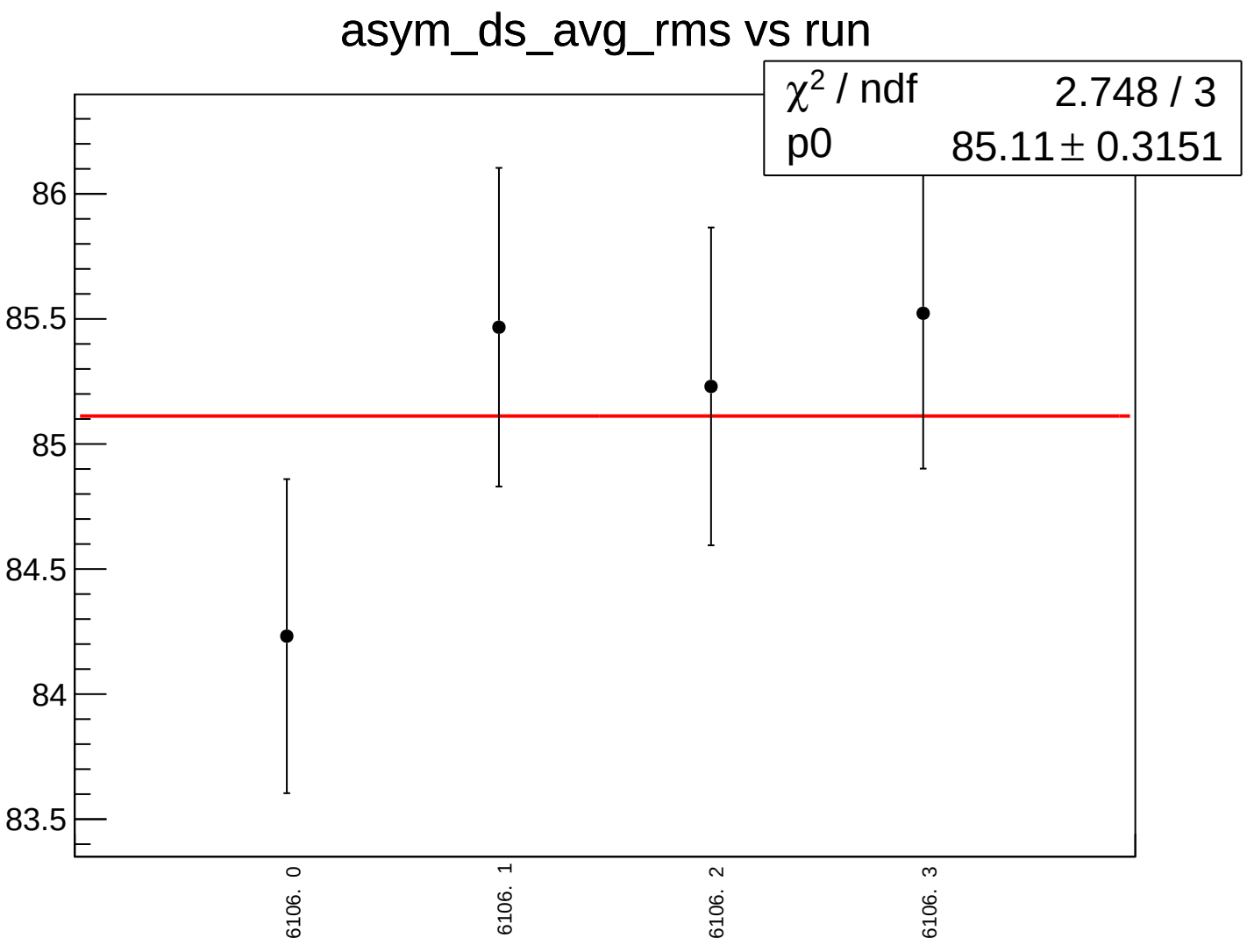

asym_ds_avg_correction_mean vs run
χ² / ndf 5.649 / 3
p0 7.056 ± 10.15
60
40
20
0
−20
−40
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 15.14
Std Dev 13.18
1.5
1
0.5
0
−0.5
−1
−1.5

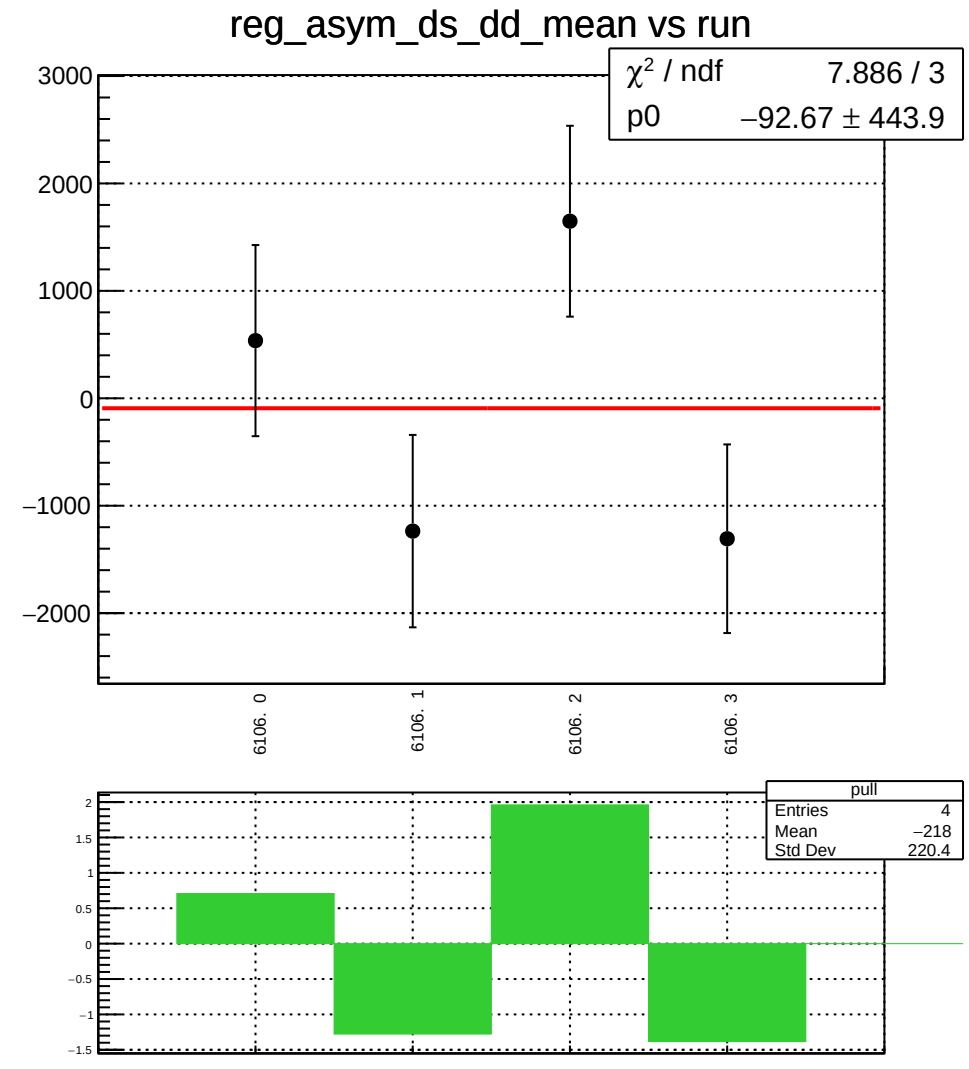

pull1D
Entries 4
Mean −0.09051
Std Dev 1.185
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

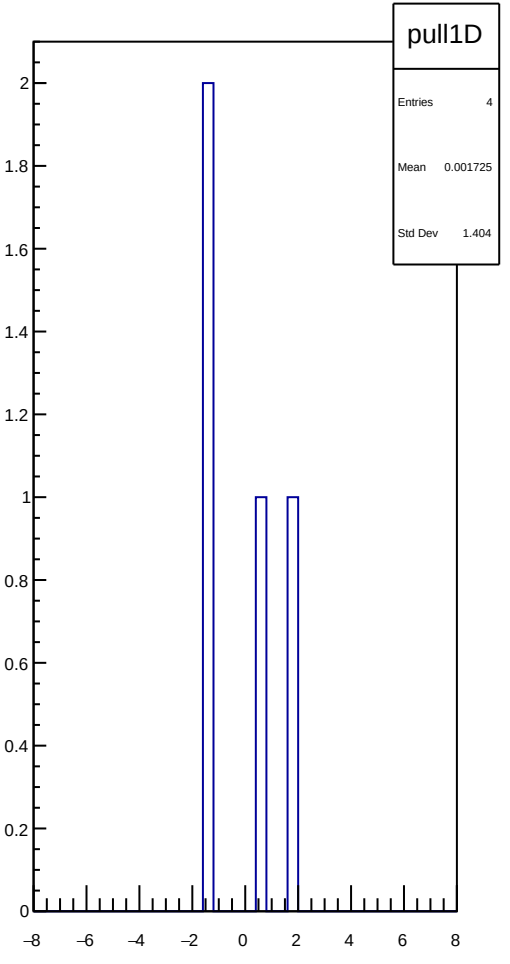

asym_ds_avg_correction_rms vs run
χ² / ndf 2388 / 3
p0 1.907 ± 0.007179
2.8
2.6
2.4
2.2
2
1.8
1.6
6106. 0
6106. 1
6106. 2
6106. 3

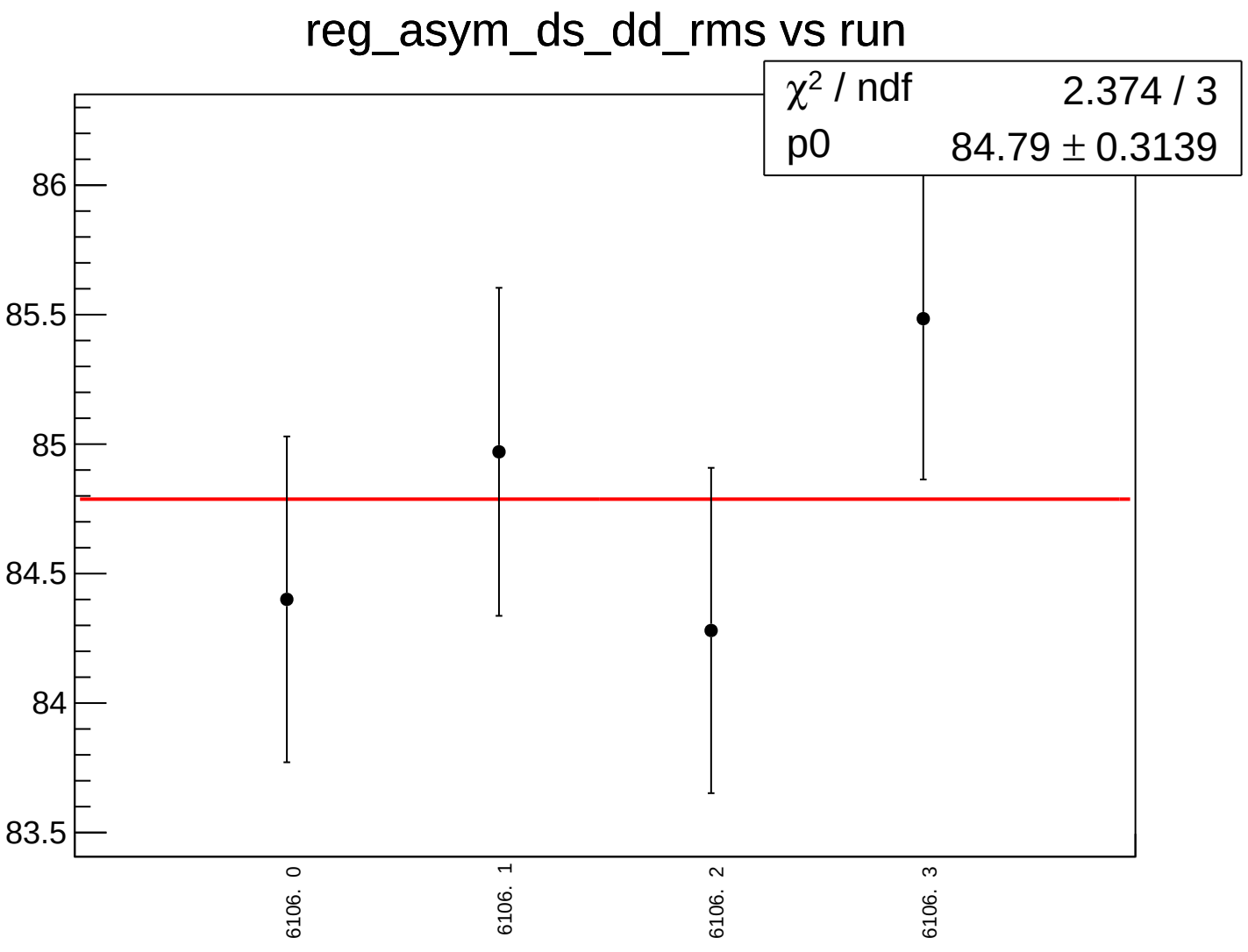

asym_ds_avg_mean vs run
χ² / ndf 3.62 / 3
p0 −586.3 ± 445.6
1500
1000
500
0
−500
−1000
−1500
−2000
−2500
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 51.66
Std Dev 50.91
1
0.5
0
−0.5
−1

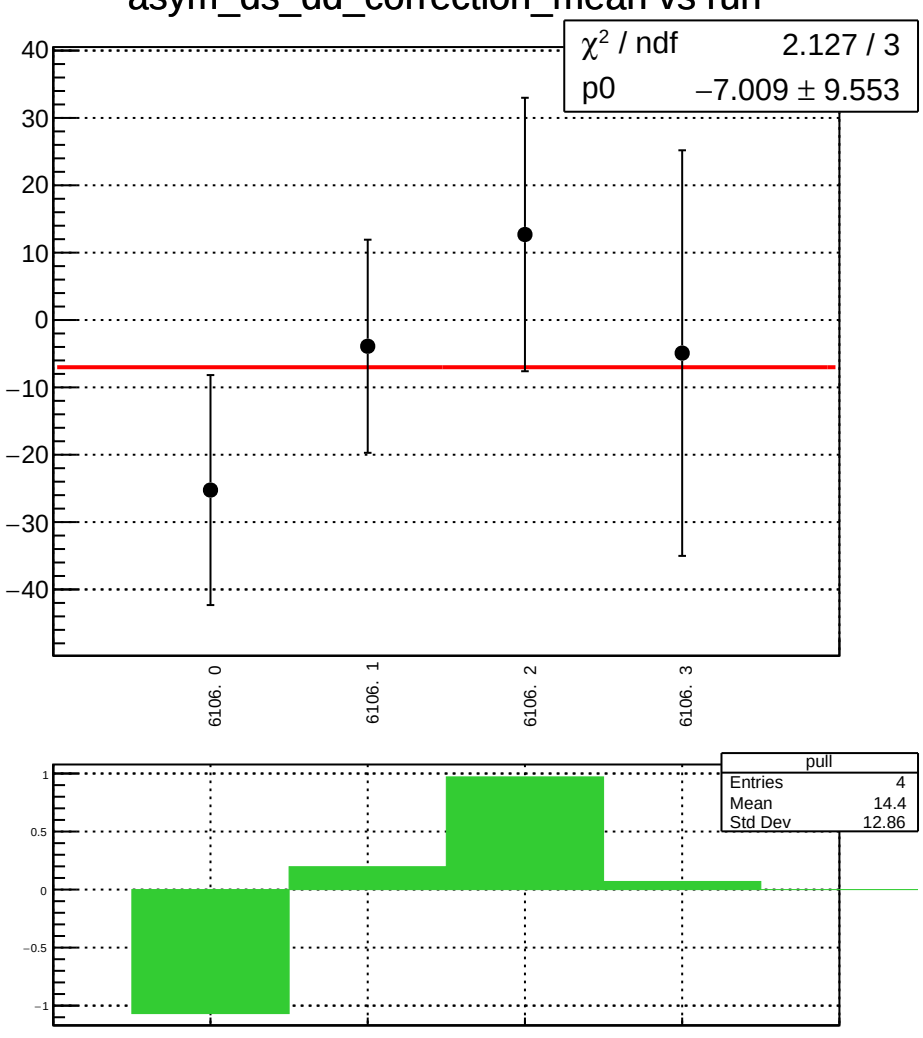

pull1D
Entries 4
Mean −0.00703
Std Dev 0.9513
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

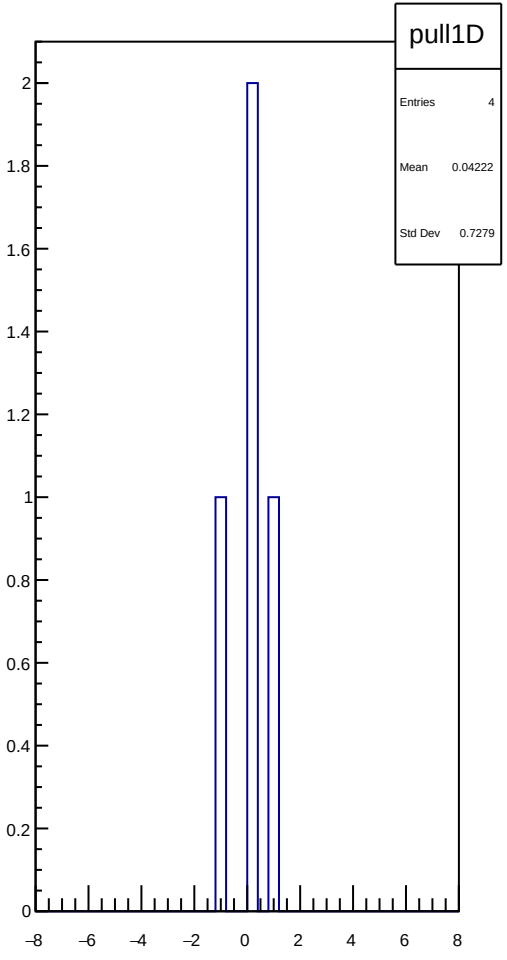

asym_ds_avg_rms vs run
χ² / ndf 2.748 / 3
p0 85.11 ± 0.3151
86
85.5
85
84.5
84
83.5
6106. 0
6106. 1
6106. 2
6106. 3

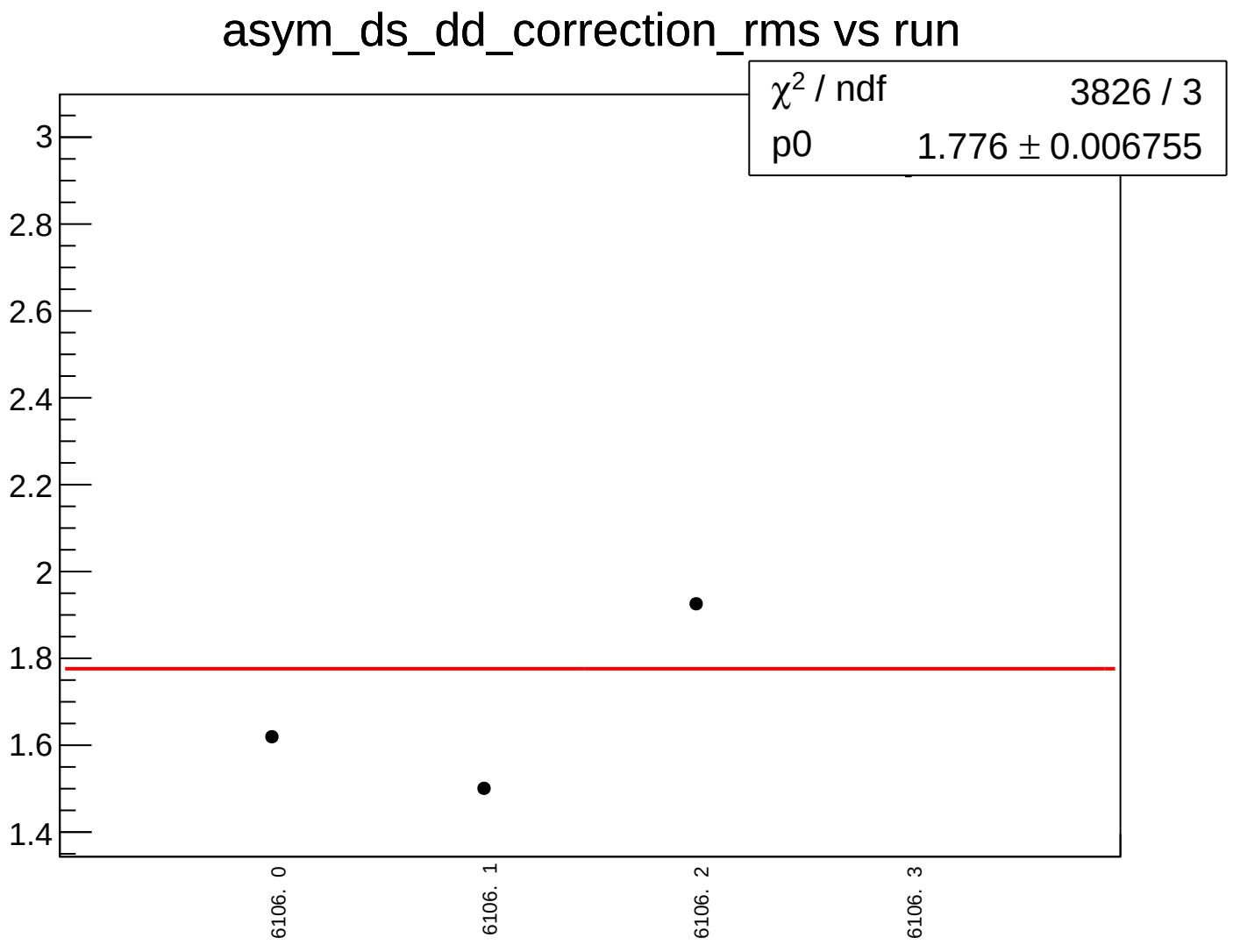

reg_asym_ds_dd_mean vs run
χ² / ndf 7.886 / 3
p0 −92.67 ± 443.9
3000
2000
1000
0
−1000
−2000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −218
Std Dev 220.4
2
1.5
1
0.5
0
−0.5
−1
−1.5

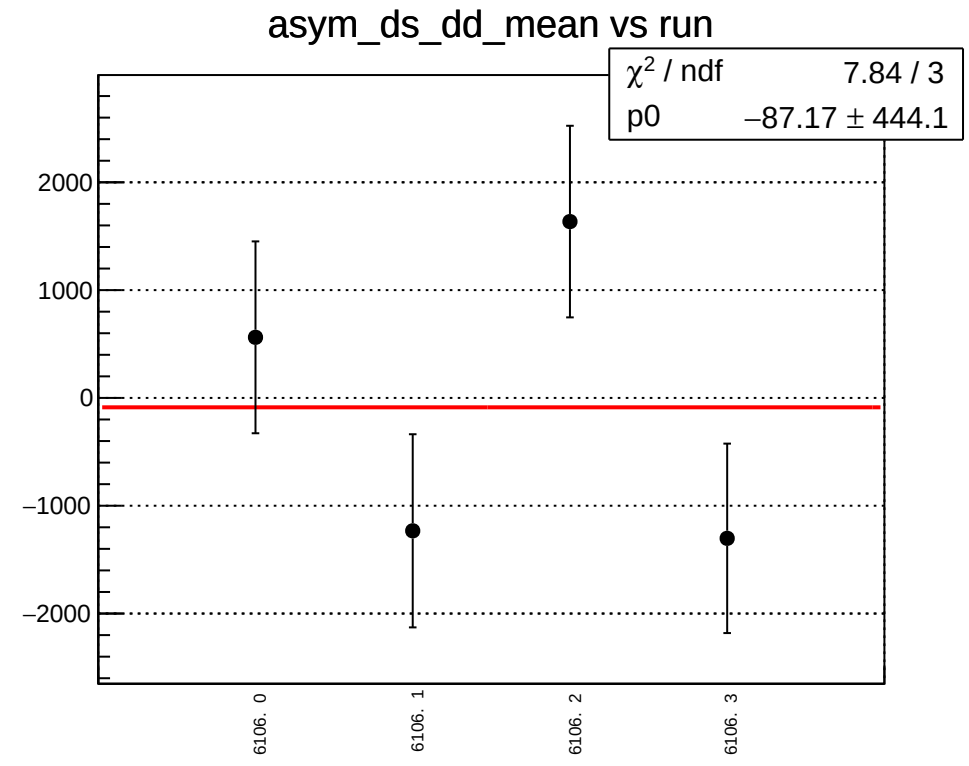

pull1D
Entries 4
Mean 0.001725
Std Dev 1.404
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

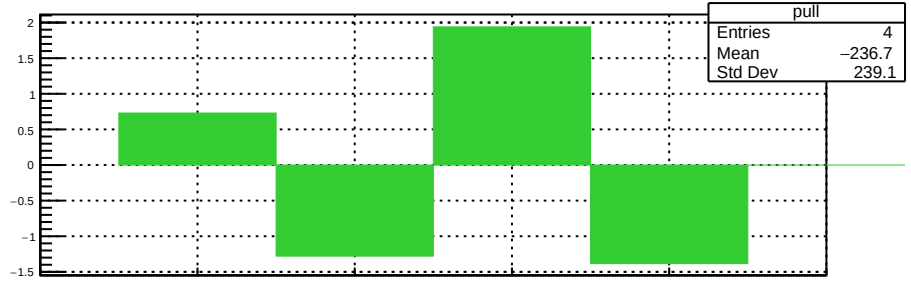

reg_asym_ds_dd_rms vs run
χ² / ndf 2.374 / 3
p0 84.79 ± 0.3139
86
85.5
85
84.5
84
83.5
6106. 0
6106. 1
6106. 2
6106. 3

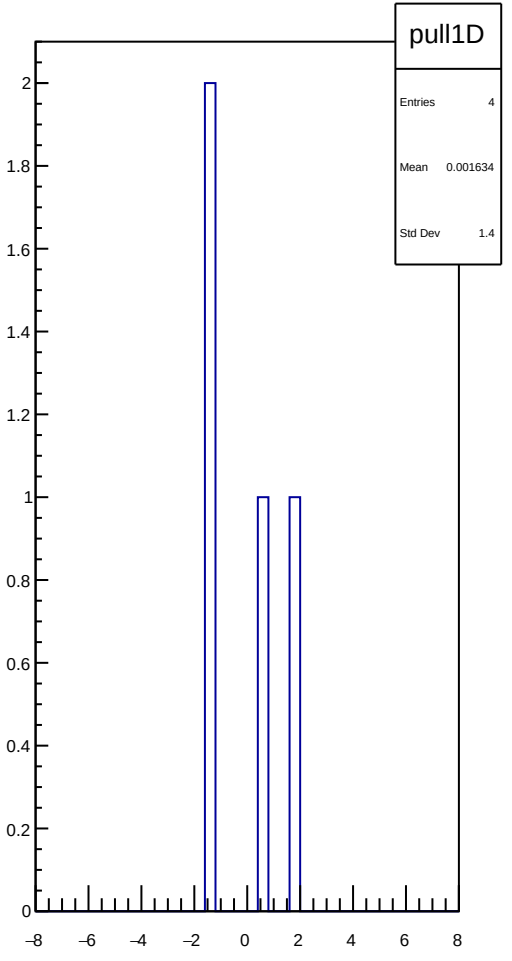

asym_ds_dd_correction_mean vs run
χ² / ndf 2.127 / 3
p0 −7.009 ± 9.553
40
30
20
10
0
−10
−20
−30
−40
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 14.4
Std Dev 12.86
1
0.5
0
−0.5
−1

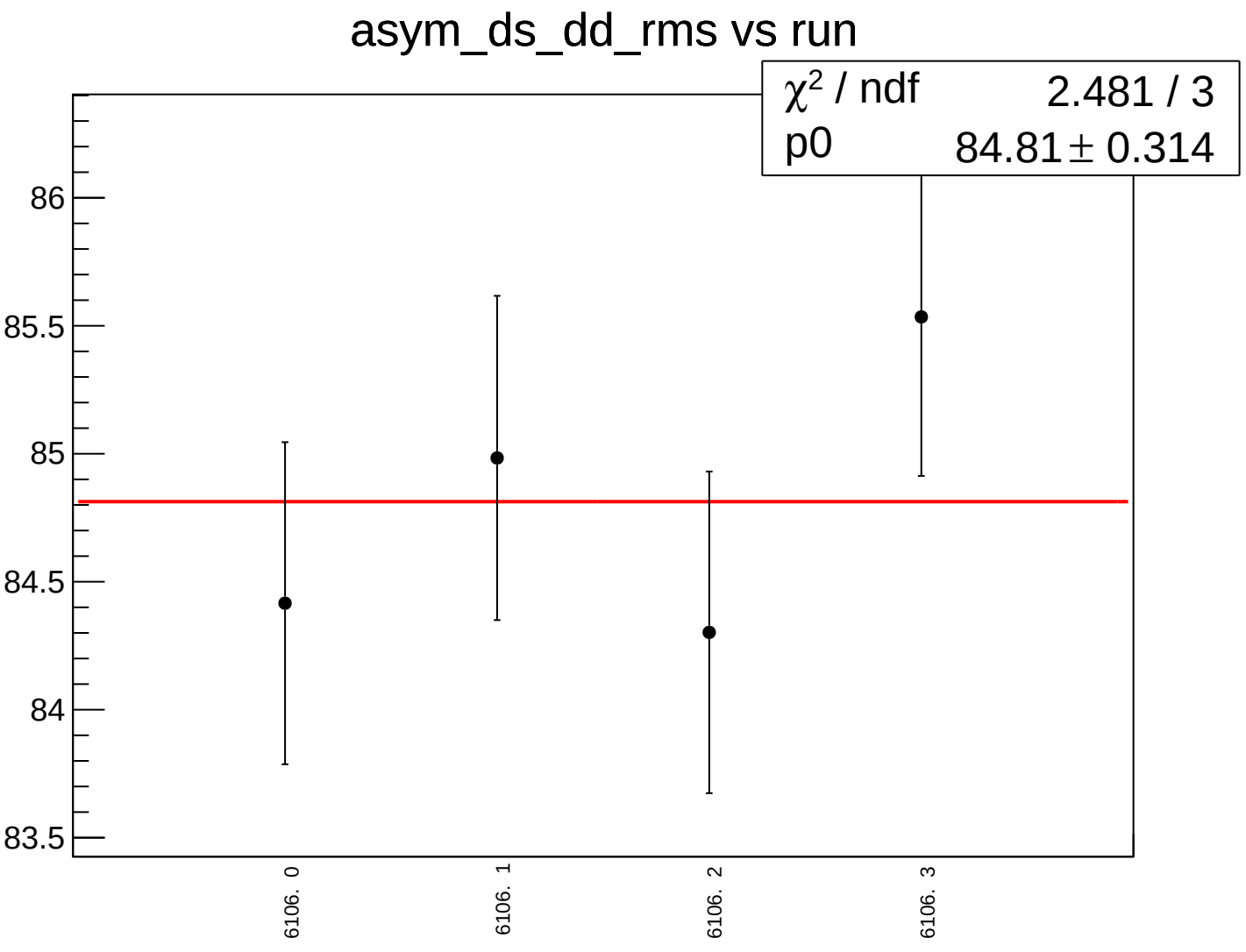

pull1D
Entries 4
Mean 0.04222
Std Dev 0.7279
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

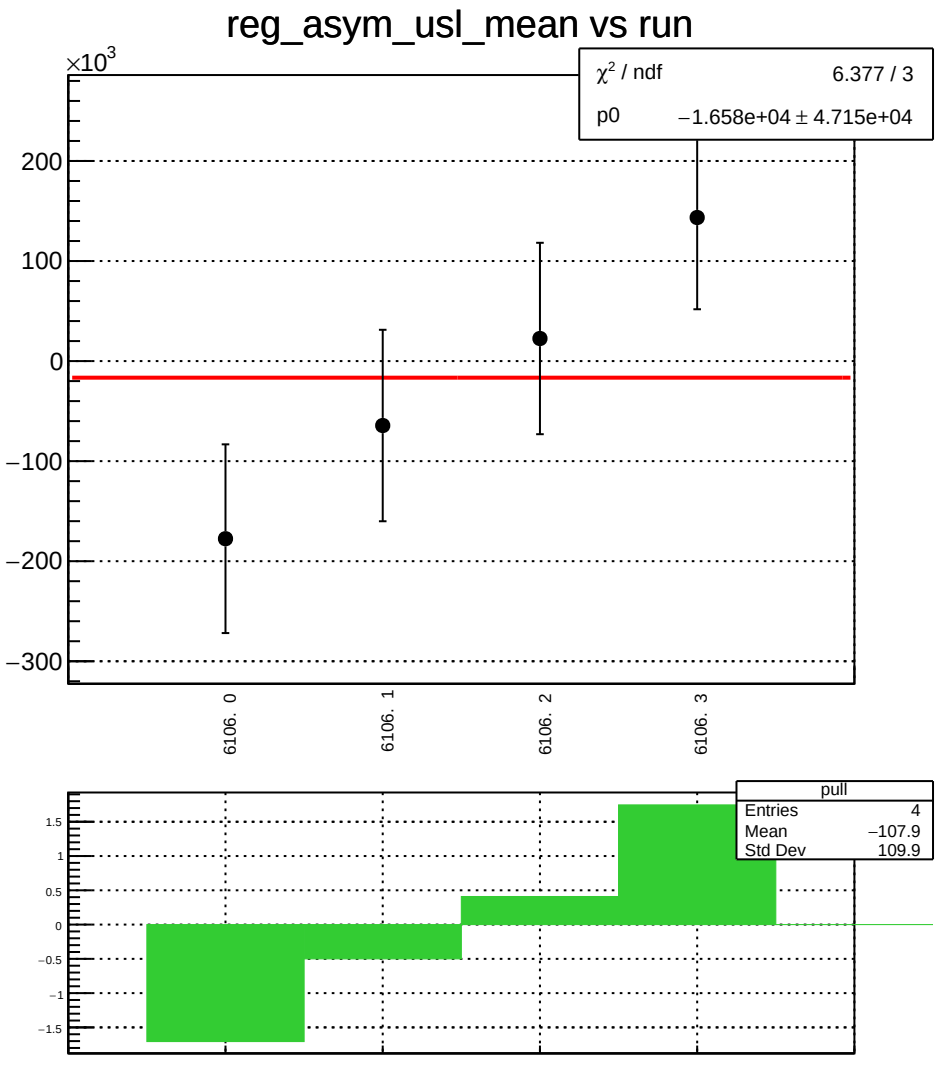

asym_ds_dd_correction_rms vs run
χ² / ndf 3826 / 3
p0 1.776 ± 0.006755
3
2.8
2.6
2.4
2.2
2
1.8
1.6
1.4
6106. 0
6106. 1
6106. 2
6106. 3

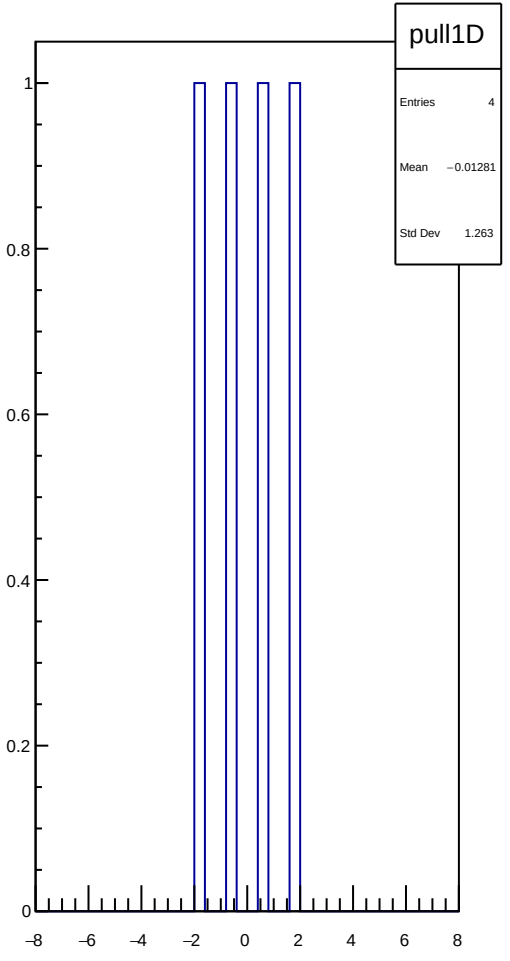

asym_ds_dd_mean vs run
χ² / ndf 7.84 / 3
p0 −87.17 ± 444.1
2000
1000
0
−1000
−2000
6106. 0
6106. 1
6106. 2
6106. 3

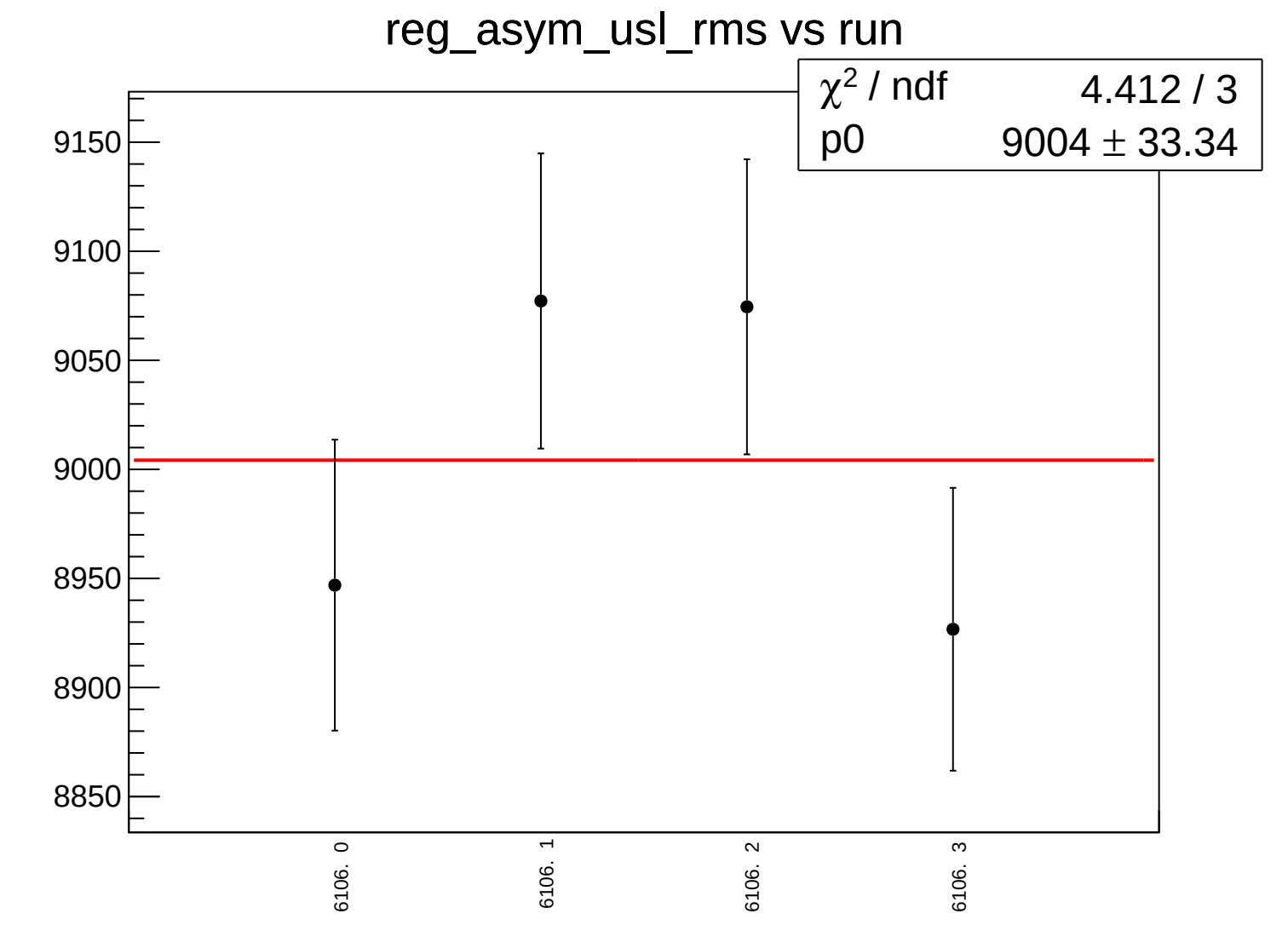

pull
Entries 4
Mean −236.7
Std Dev 239.1
2
1.5
1
0.5
0
−0.5
−1
−1.5

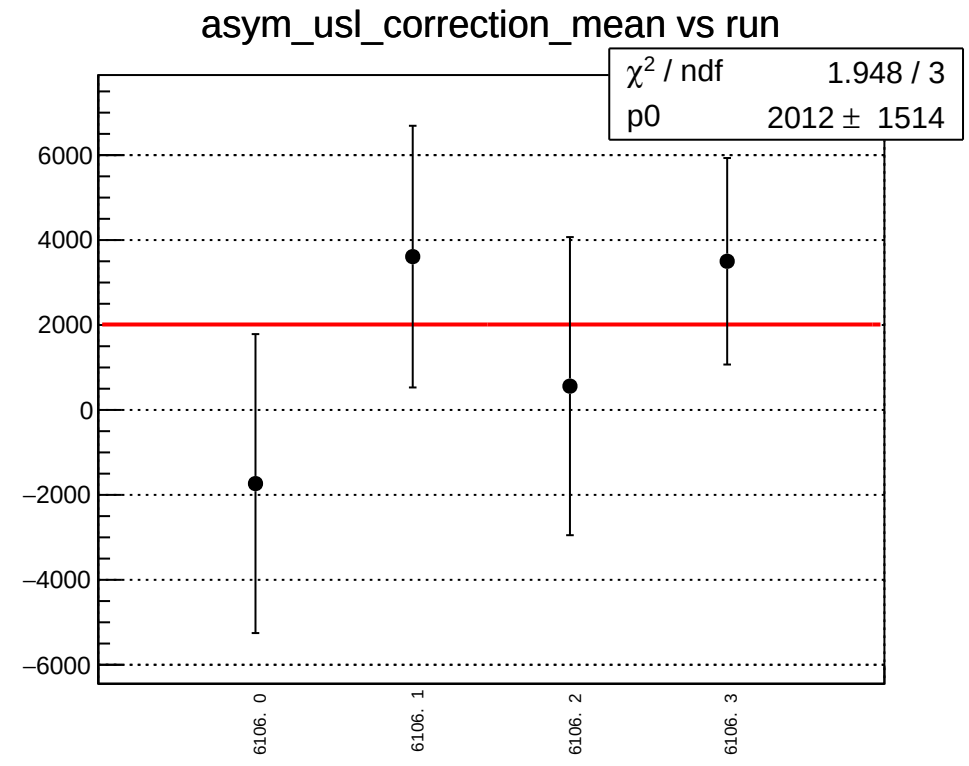

pull1D
Entries 4
Mean 0.001634
Std Dev 1.4
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

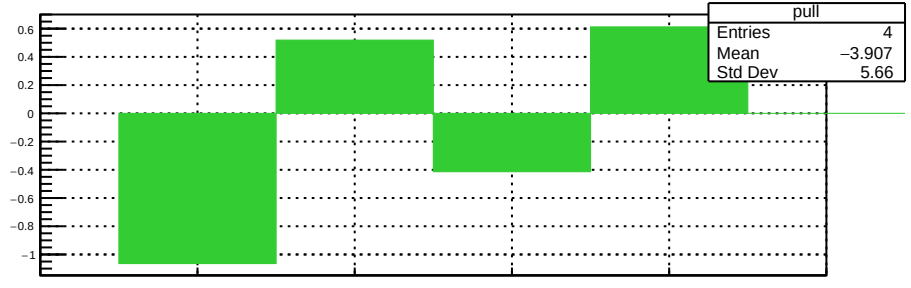

asym_ds_dd_rms vs run
χ² / ndf 2.481 / 3
p0 84.81 ± 0.314
86
85.5
85
84.5
84
83.5
6106. 0
6106. 1
6106. 2
6106. 3

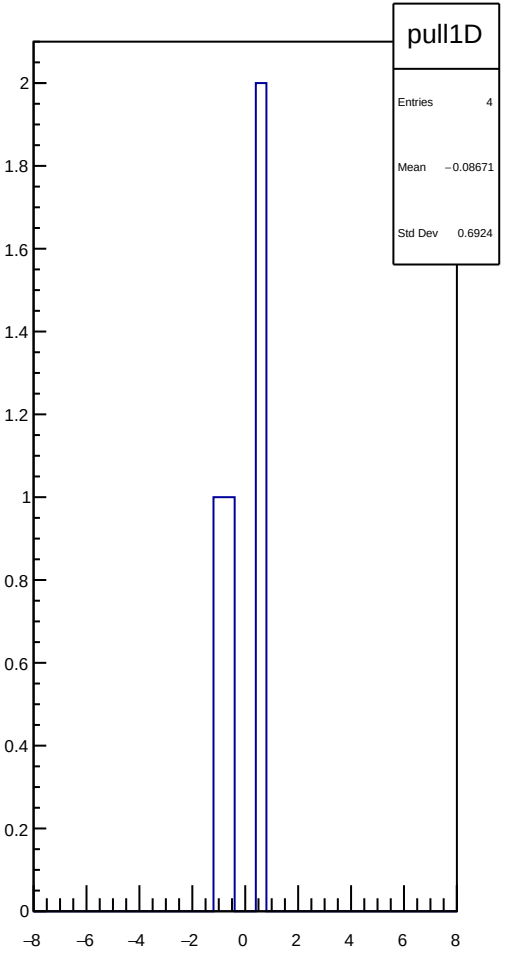

reg_asym_usl_mean vs run
×10^3
χ² / ndf 6.377 / 3
p0 −1.658e+04 ± 4.715e+04
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −107.9
Std Dev 109.9
1.5
1
0.5
0
−0.5
−1
−1.5

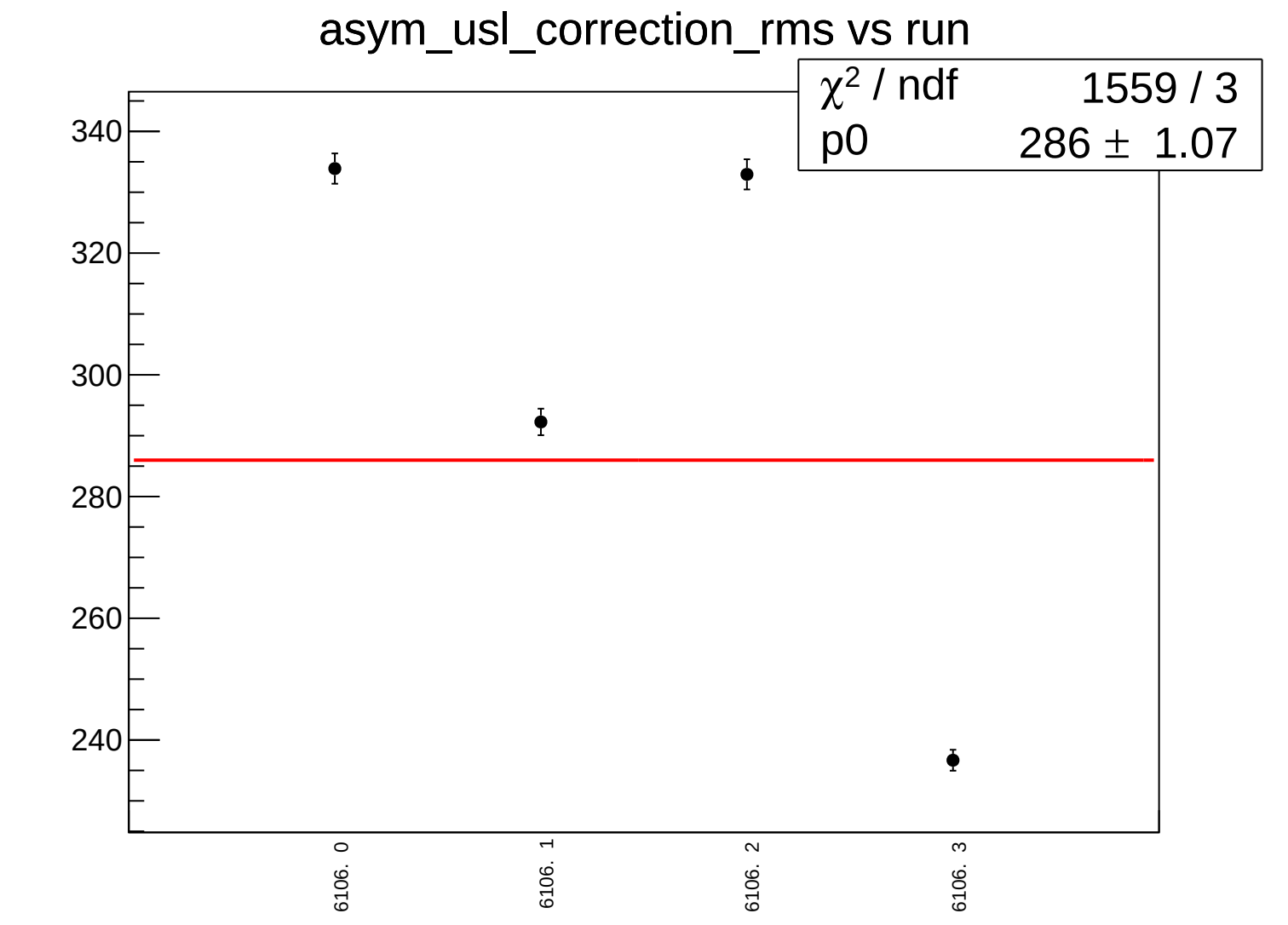

pull1D
Entries 4
Mean −0.01281
Std Dev 1.263
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

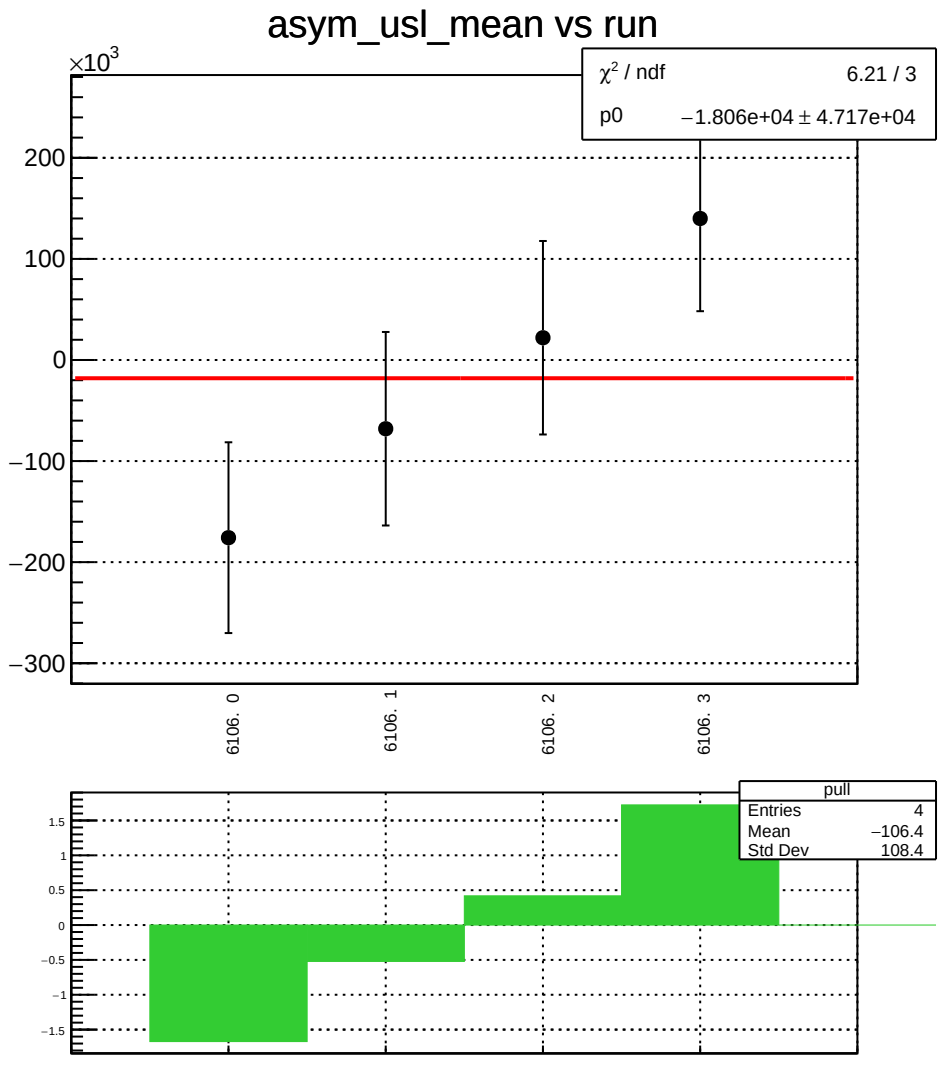

reg_asym_usl_rms vs run
χ² / ndf 4.412 / 3
p0 9004 ± 33.34
9150
9100
9050
9000
8950
8900
8850
6106. 0
6106. 1
6106. 2
6106. 3

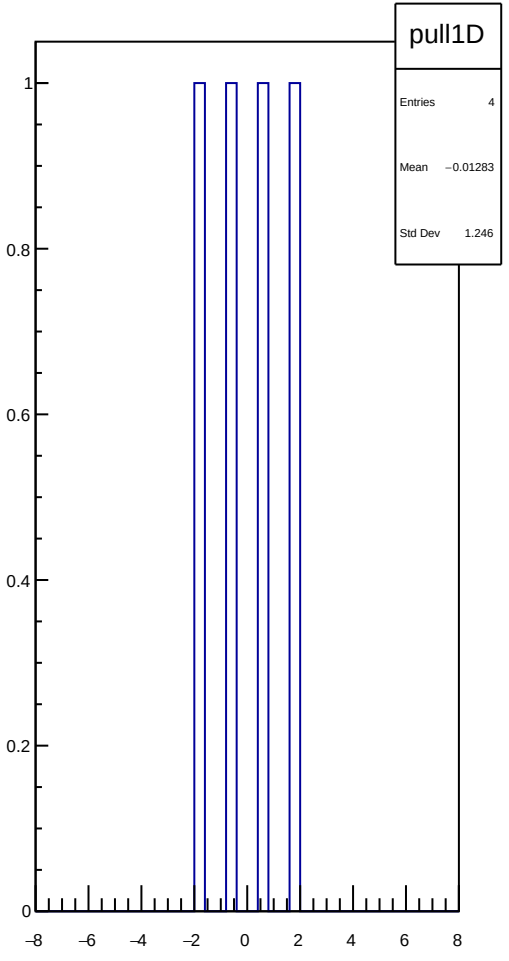

asym_usl_correction_mean vs run
χ² / ndf 1.948 / 3
p0 2012 ± 1514
6000
4000
2000
0
−2000
−4000
−6000
6106. 0
6106. 1
6106. 2
6106. 3

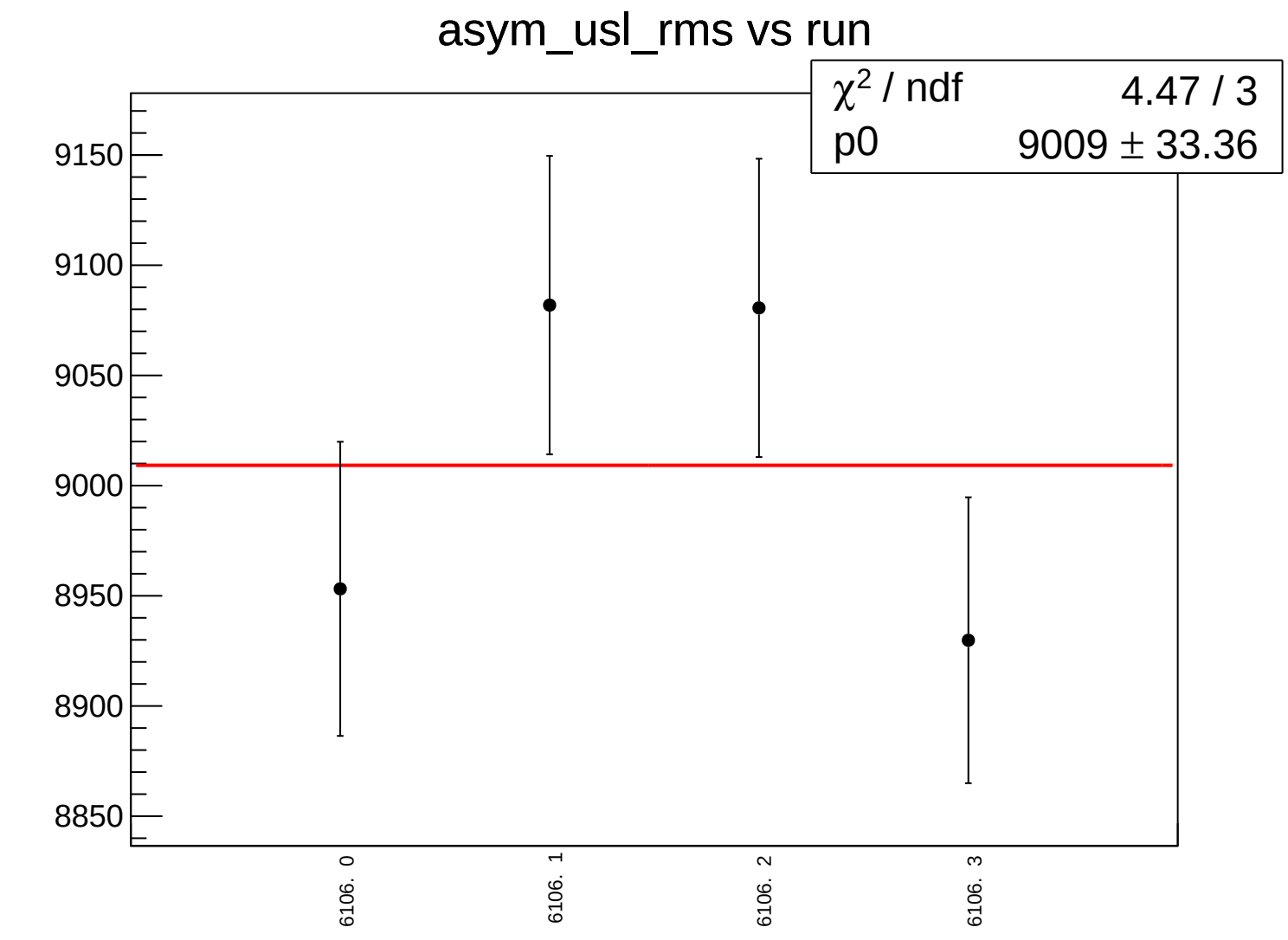

pull
Entries 4
Mean −3.907
Std Dev 5.66
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

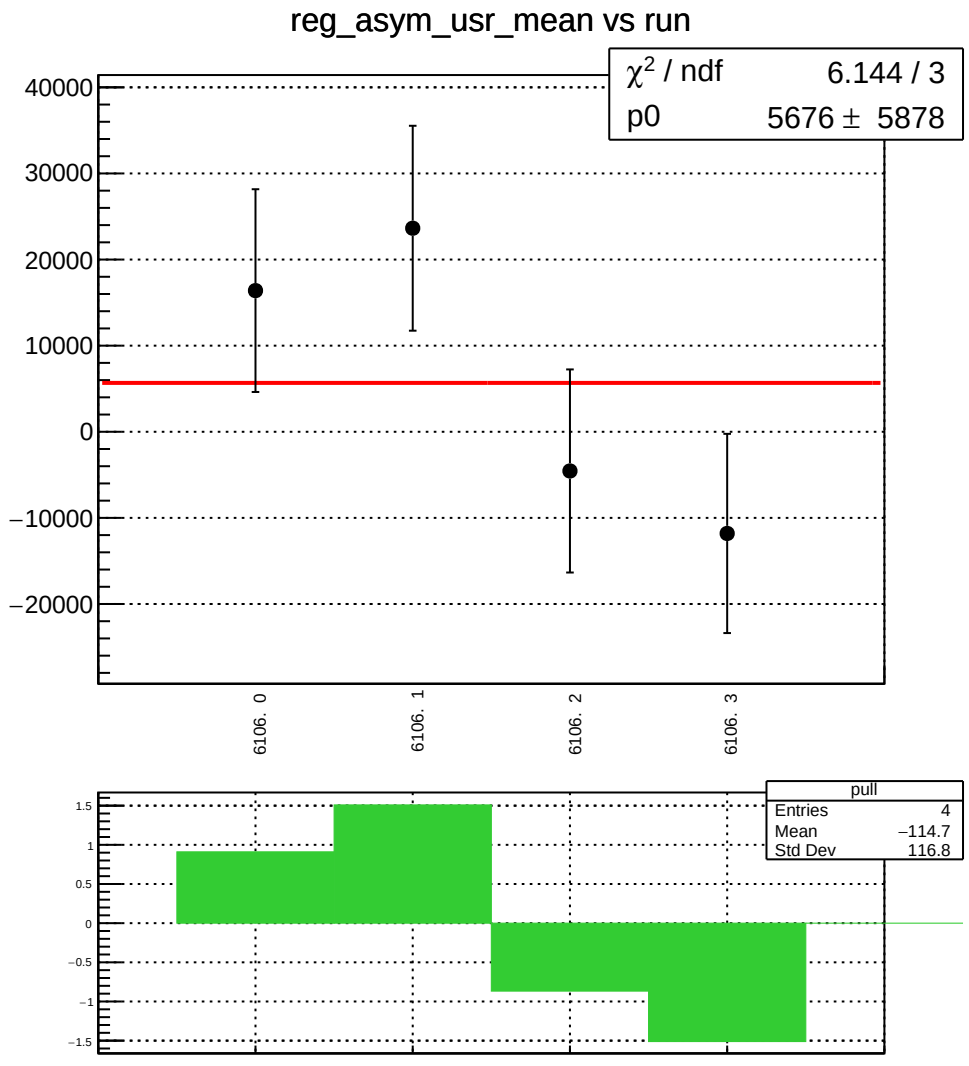

pull1D
Entries 4
Mean −0.08671
Std Dev 0.6924
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

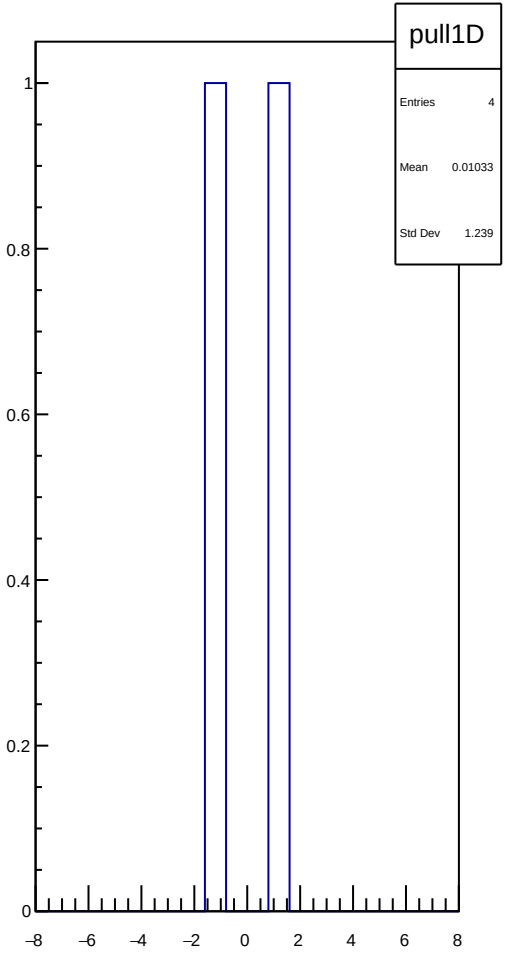

asym_usl_correction_rms vs run
χ² / ndf 1559 / 3
p0 286 ± 1.07
340
320
300
280
260
240
6106. 0
6106. 1
6106. 2
6106. 3

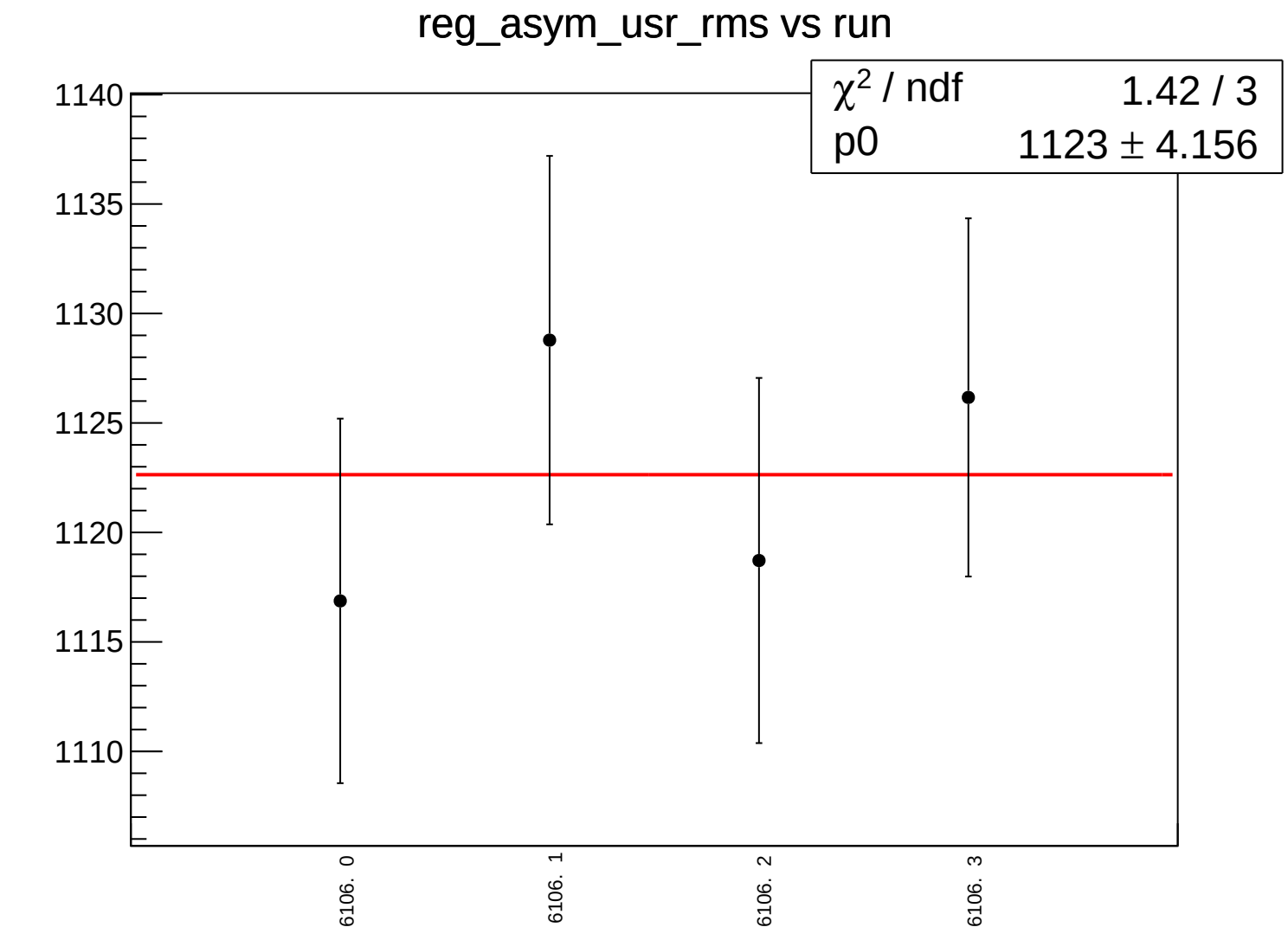

asym_usl_mean vs run
×10^3
χ² / ndf 6.21 / 3
p0 −1.806e+04 ± 4.717e+04
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −106.4
Std Dev 108.4
1.5
1
0.5
0
−0.5
−1
−1.5

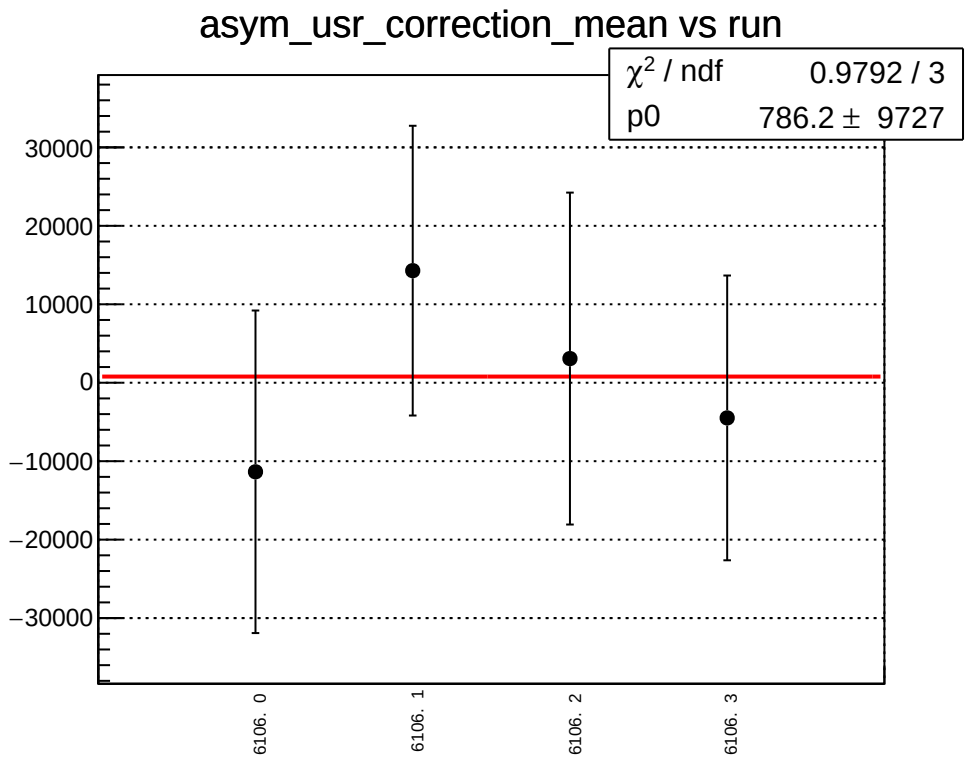

pull1D
Entries 4
Mean −0.01283
Std Dev 1.246
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

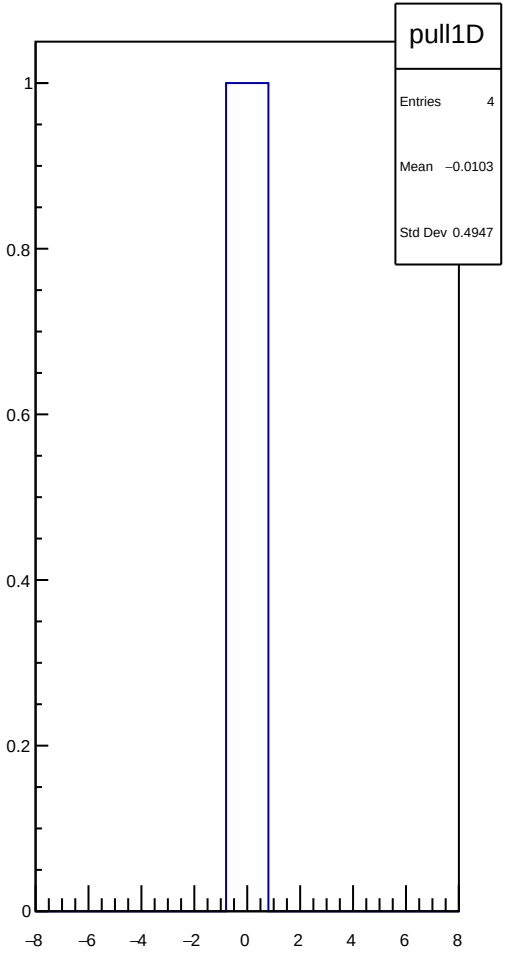

asym_usl_rms vs run
χ² / ndf 4.47 / 3
p0 9009 ± 33.36
9150
9100
9050
9000
8950
8900
8850
6106. 0
6106. 1
6106. 2
6106. 3

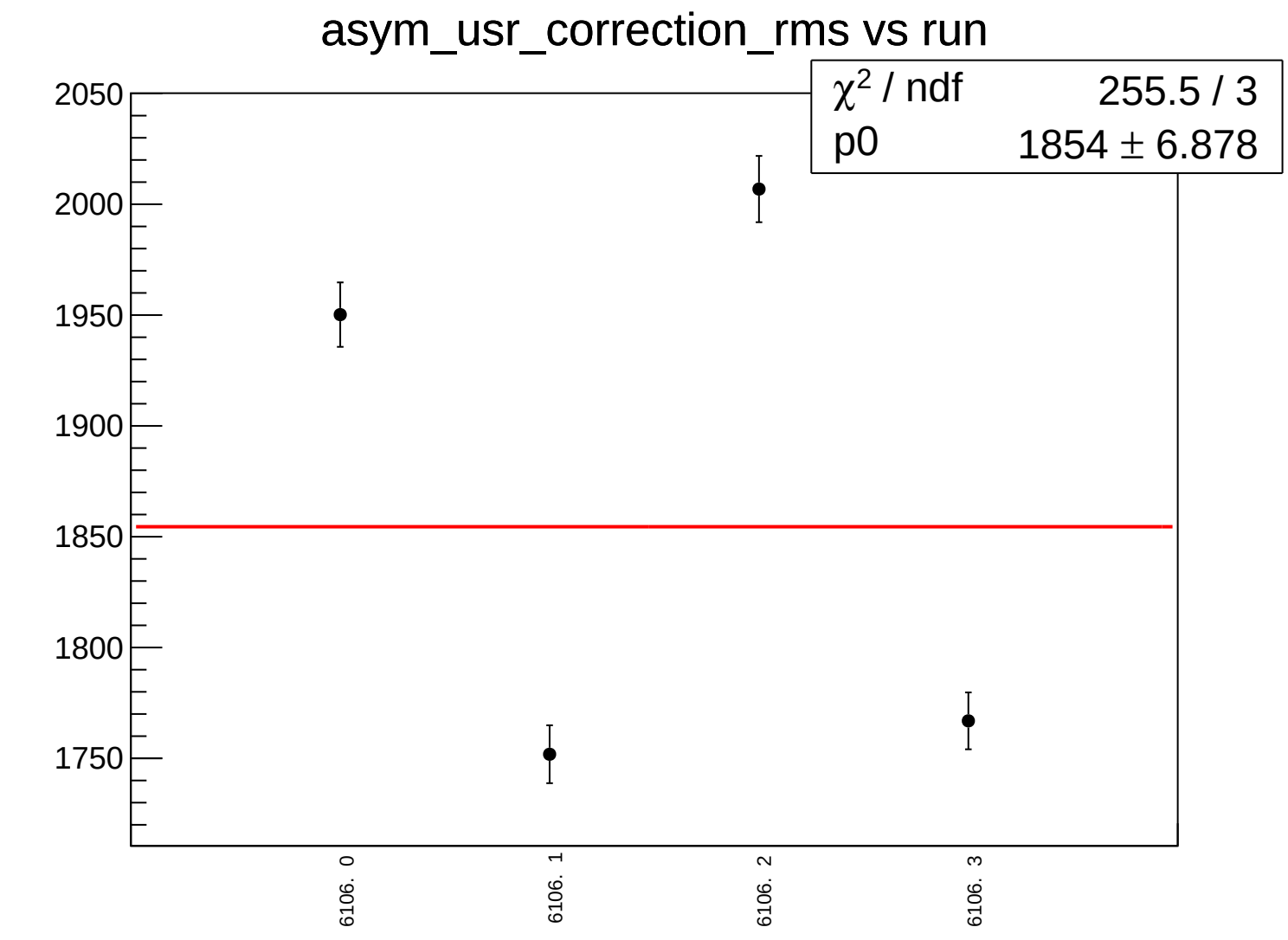

reg_asym_usr_mean vs run
χ² / ndf 6.144 / 3
p0 5676 ± 5878
40000
30000
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −114.7
Std Dev 116.8
1.5
1
0.5
0
−0.5
−1
−1.5

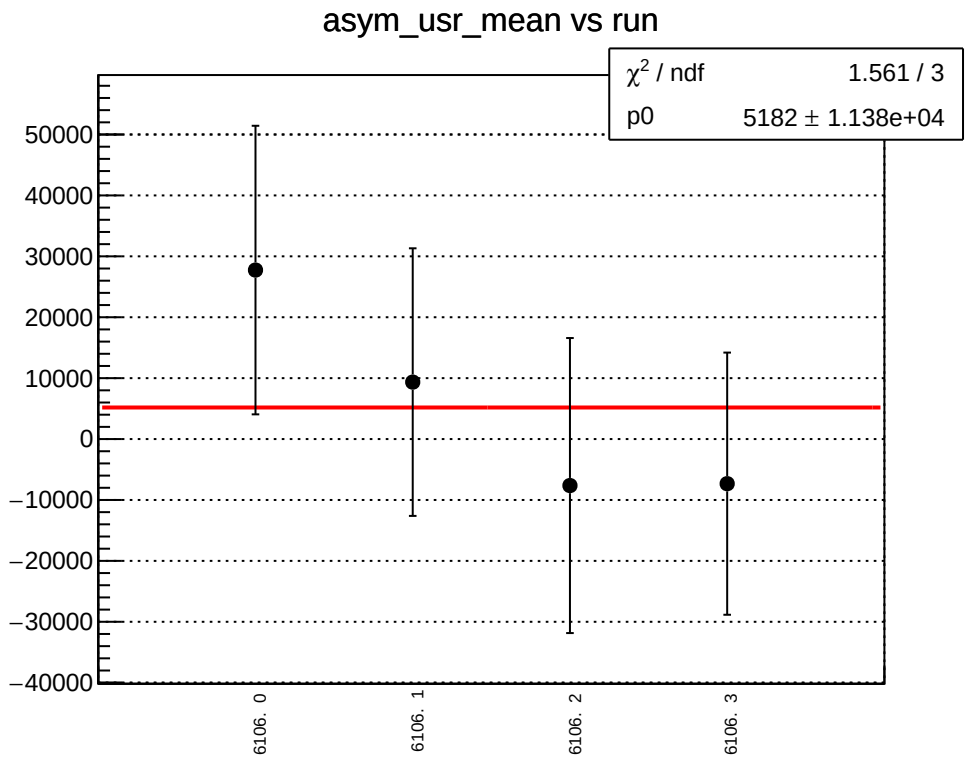

pull1D
Entries 4
Mean 0.01033
Std Dev 1.239
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

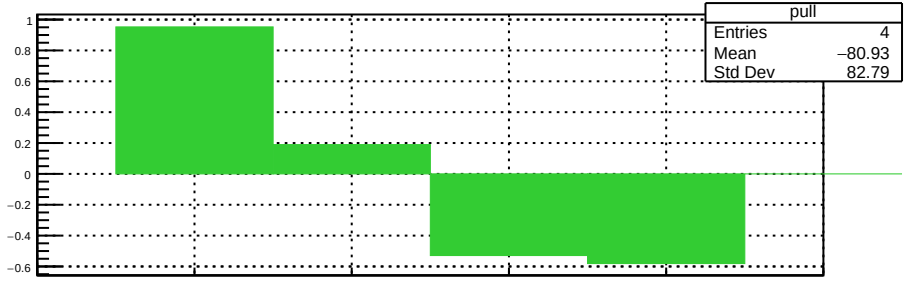

reg_asym_usr_rms vs run
χ² / ndf 1.42 / 3
p0 1123 ± 4.156
1140
1135
1130
1125
1120
1115
1110
6106. 0
6106. 1
6106. 2
6106. 3

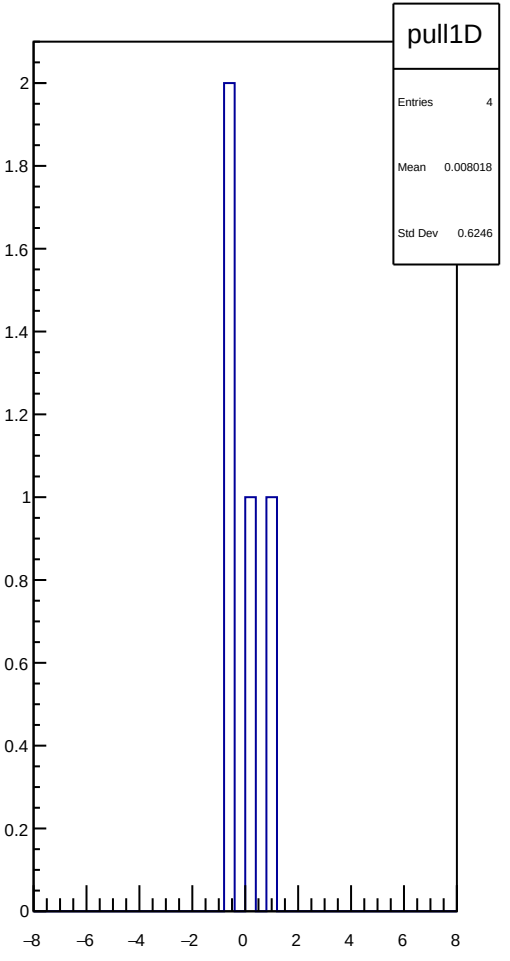

asym_usr_correction_mean vs run
χ² / ndf 0.9792 / 3
p0 786.2 ± 9727
30000
20000
10000
0
−10000
−20000
−30000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.368
Std Dev 5.627
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

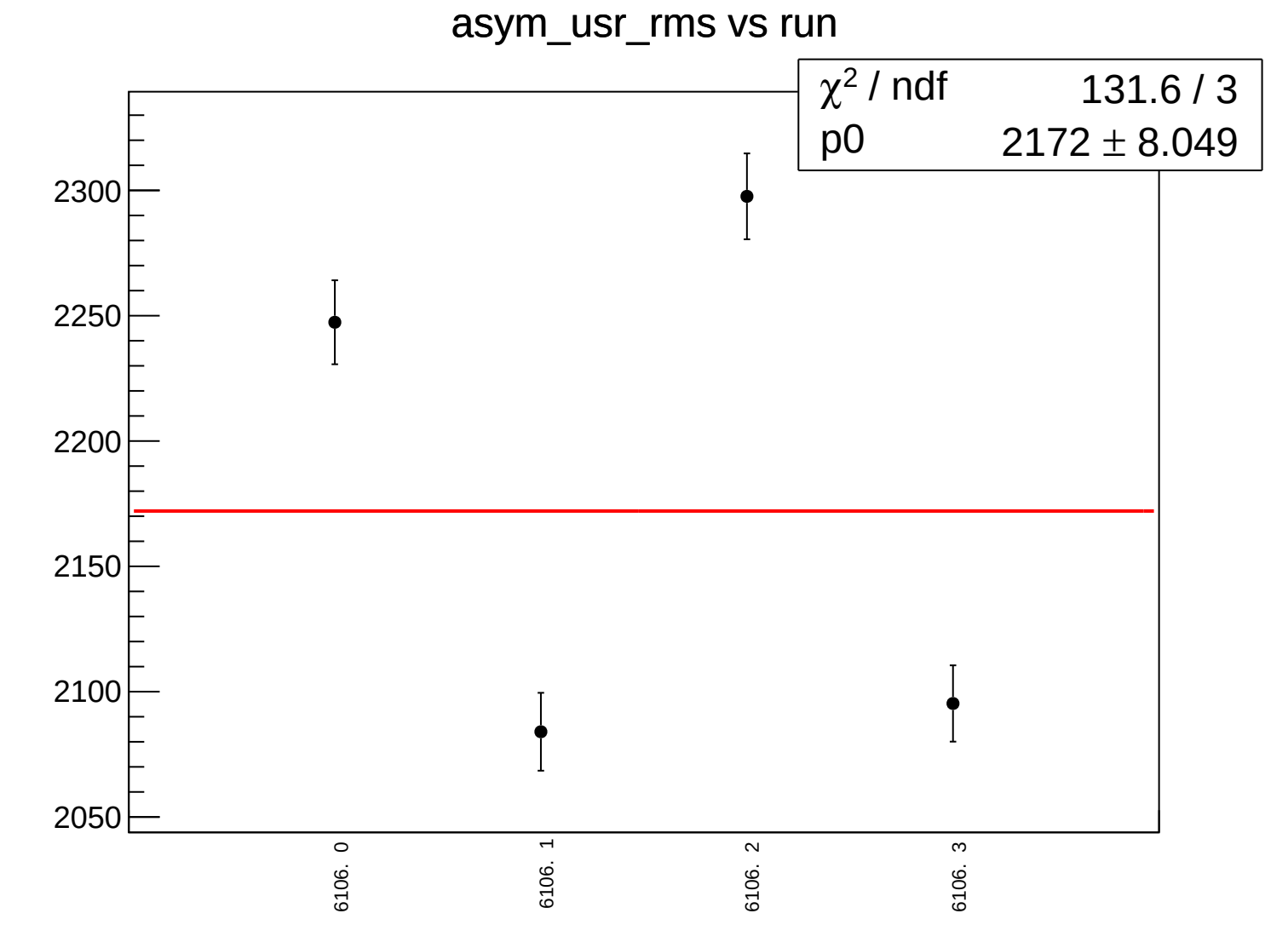

pull1D
Entries 4
Mean −0.0103
Std Dev 0.4947
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

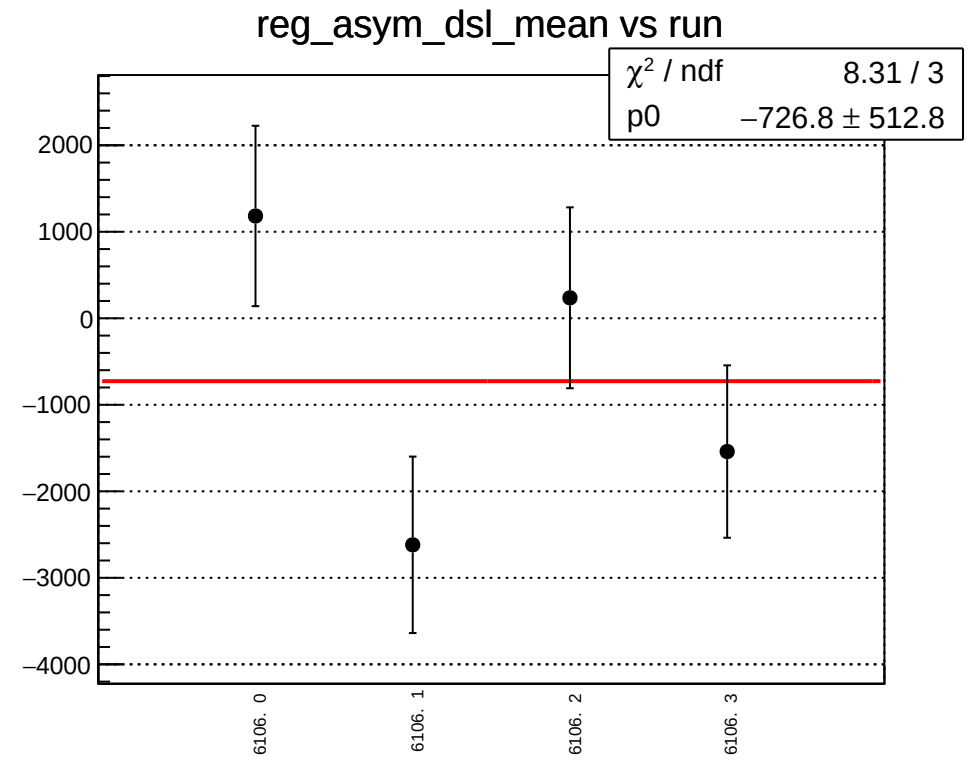

asym_usr_correction_rms vs run
χ² / ndf 255.5 / 3
p0 1854 ± 6.878
2050
2000
1950
1900
1850
1800
1750
6106. 0
6106. 1
6106. 2
6106. 3

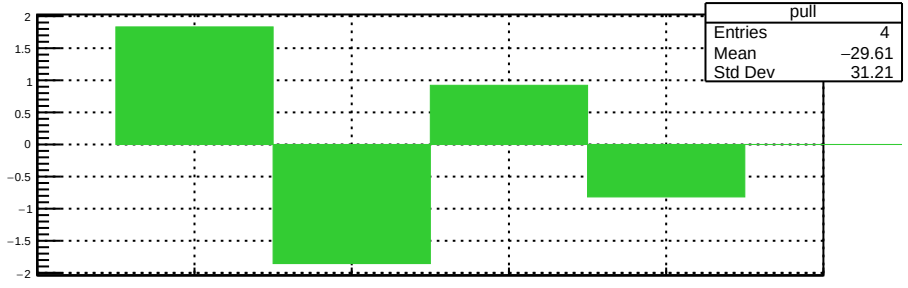

asym_usr_mean vs run
χ² / ndf 1.561 / 3
p0 5182 ± 1.138e+04
50000
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
6106. 0
6106. 1
6106. 2
6106. 3

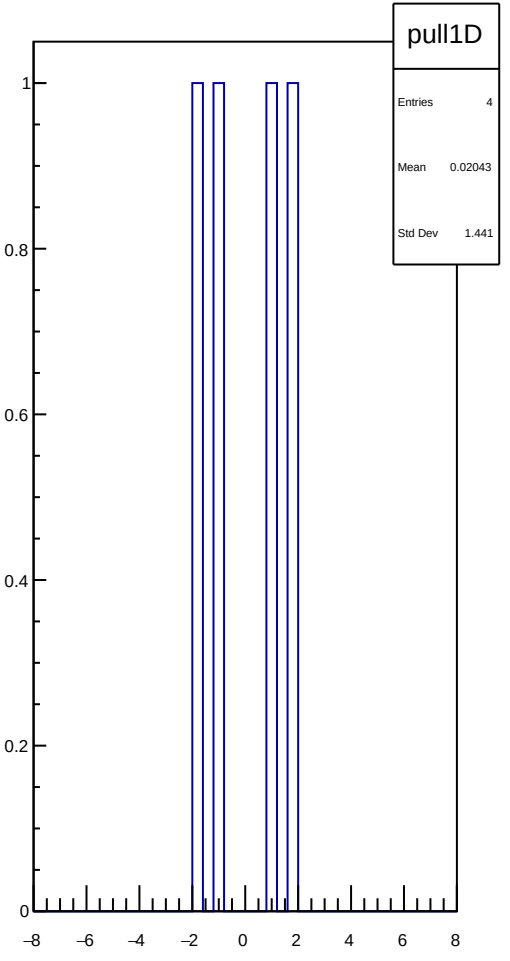

pull
Entries 4
Mean −80.93
Std Dev 82.79
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

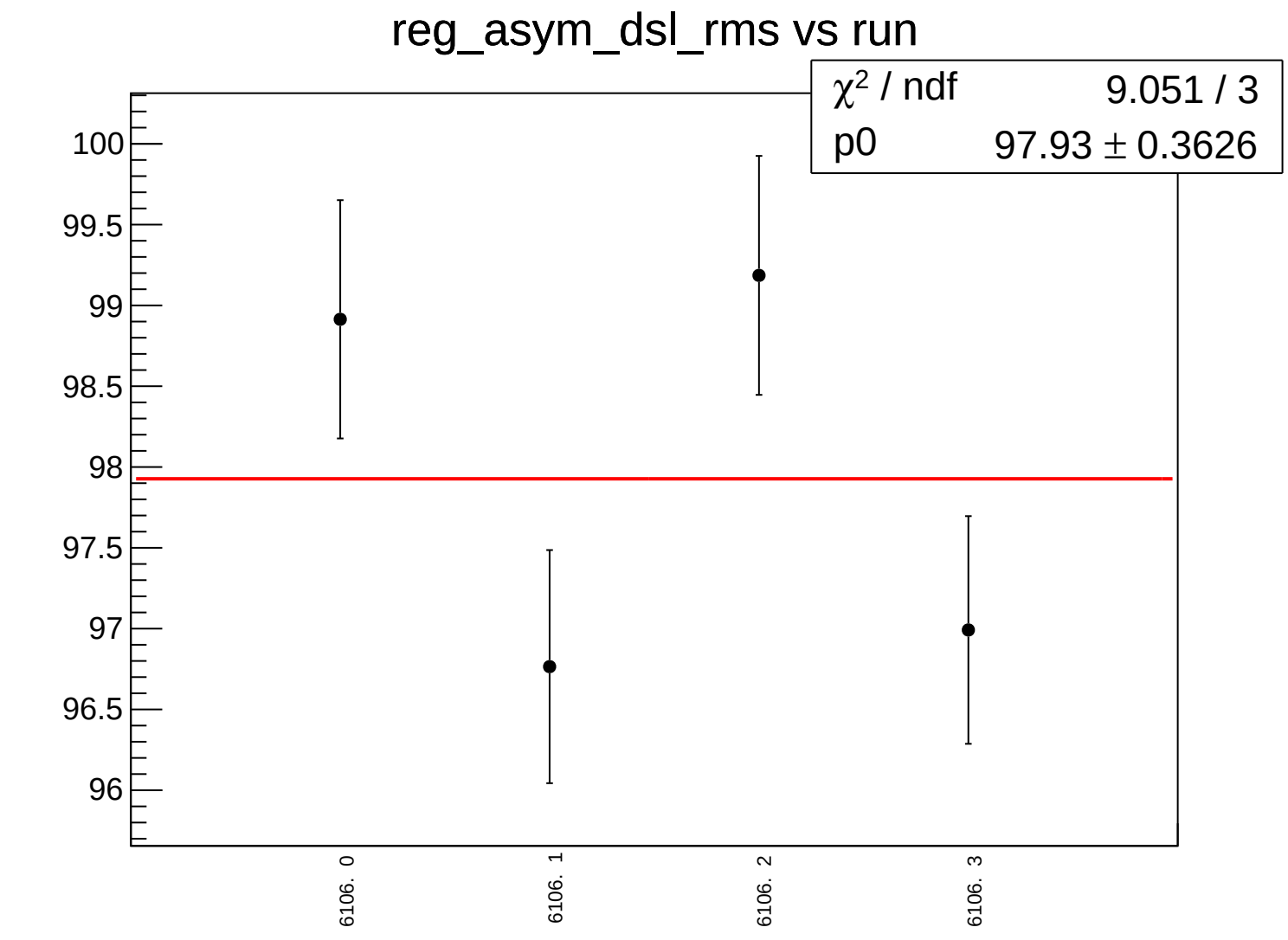

pull1D
Entries 4
Mean 0.008018
Std Dev 0.6246
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

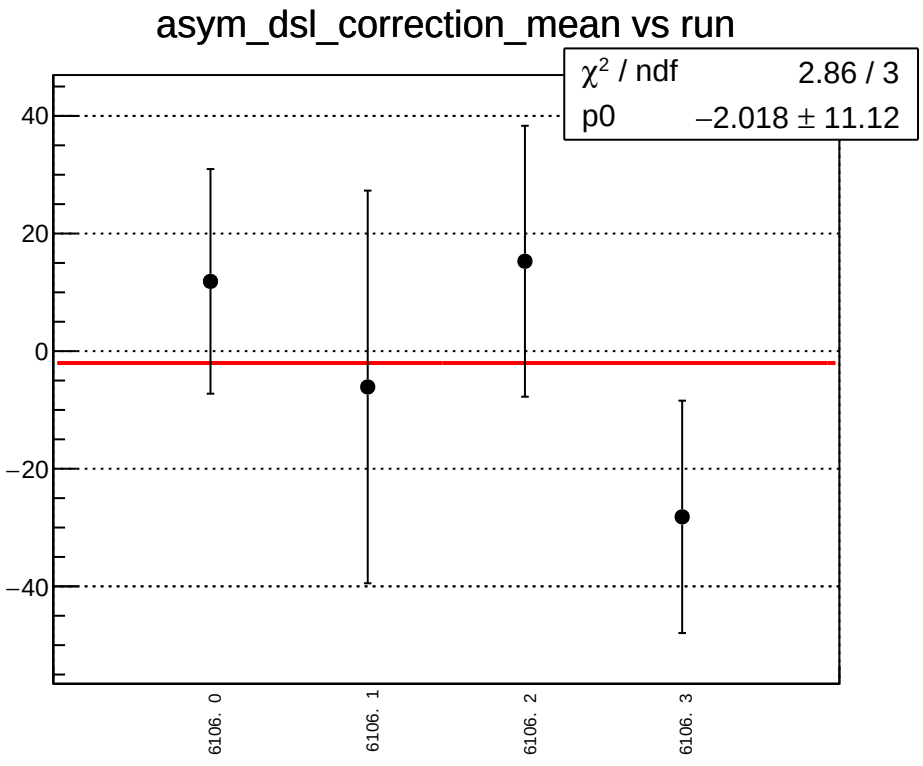

asym_usr_rms vs run
χ² / ndf 131.6 / 3
p0 2172 ± 8.049
2300
2250
2200
2150
2100
2050
6106. 0
6106. 1
6106. 2
6106. 3

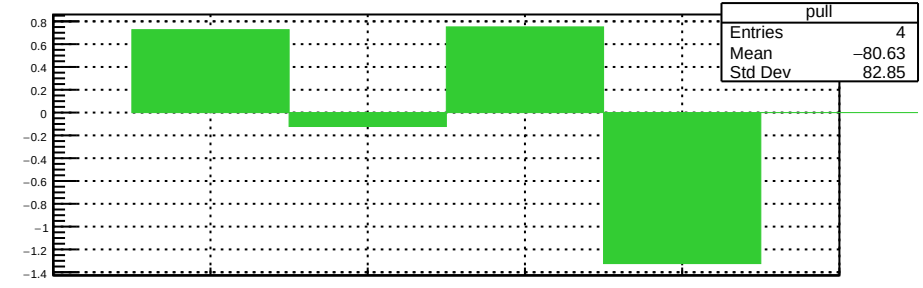

reg_asym_dsl_mean vs run
χ² / ndf 8.31 / 3
p0 −726.8 ± 512.8
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3

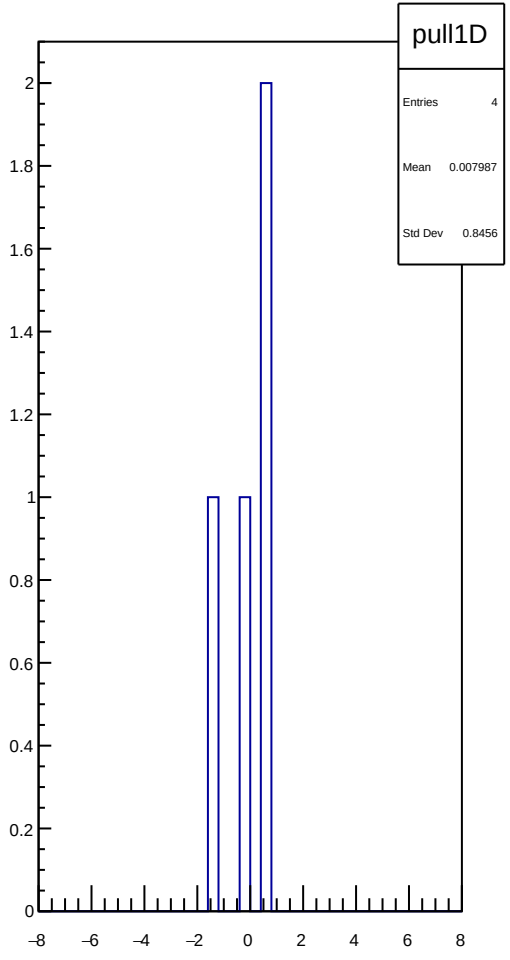

pull
Entries 4
Mean −29.61
Std Dev 31.21
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

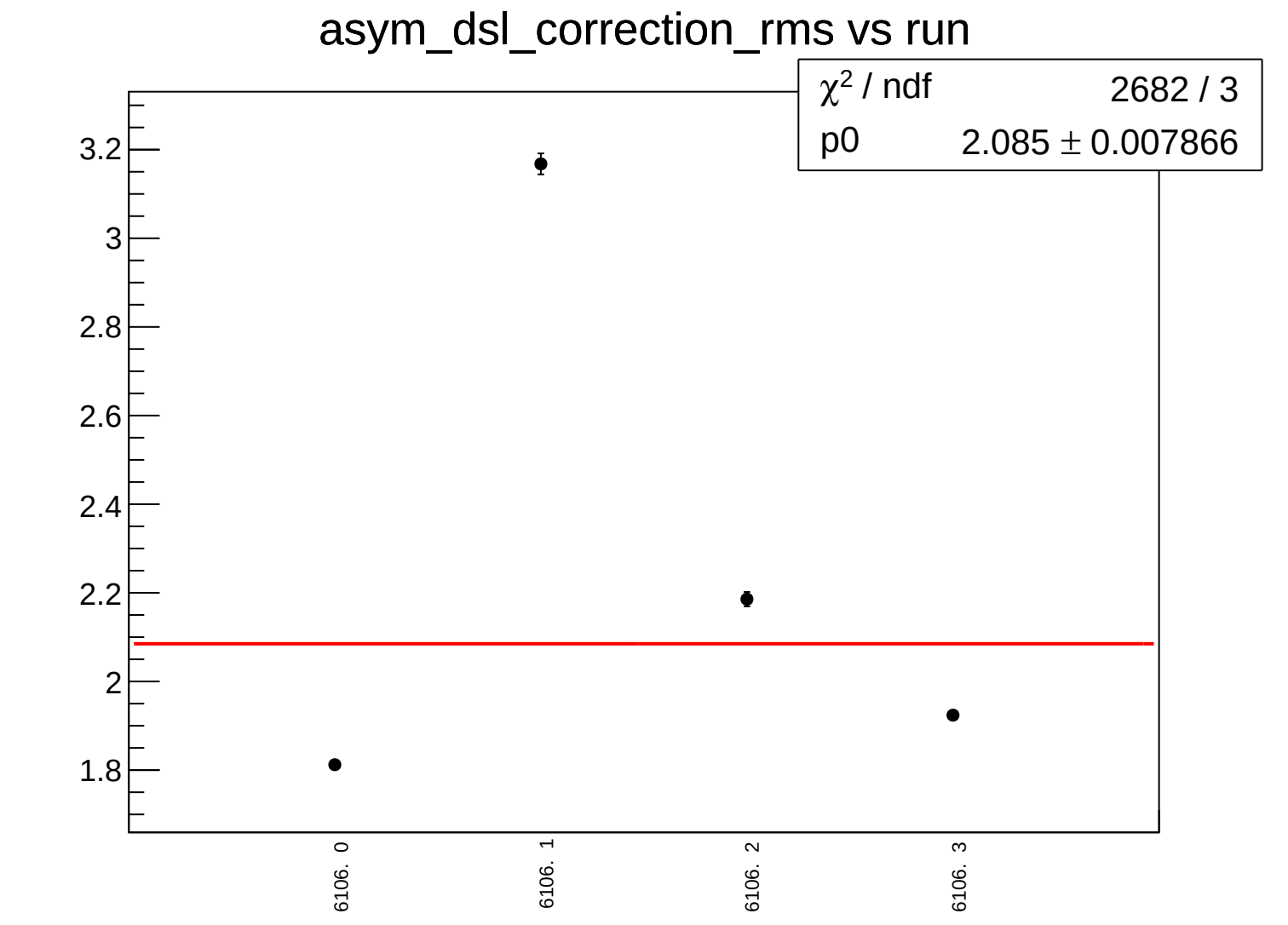

pull1D
Entries 4
Mean 0.02043
Std Dev 1.441
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

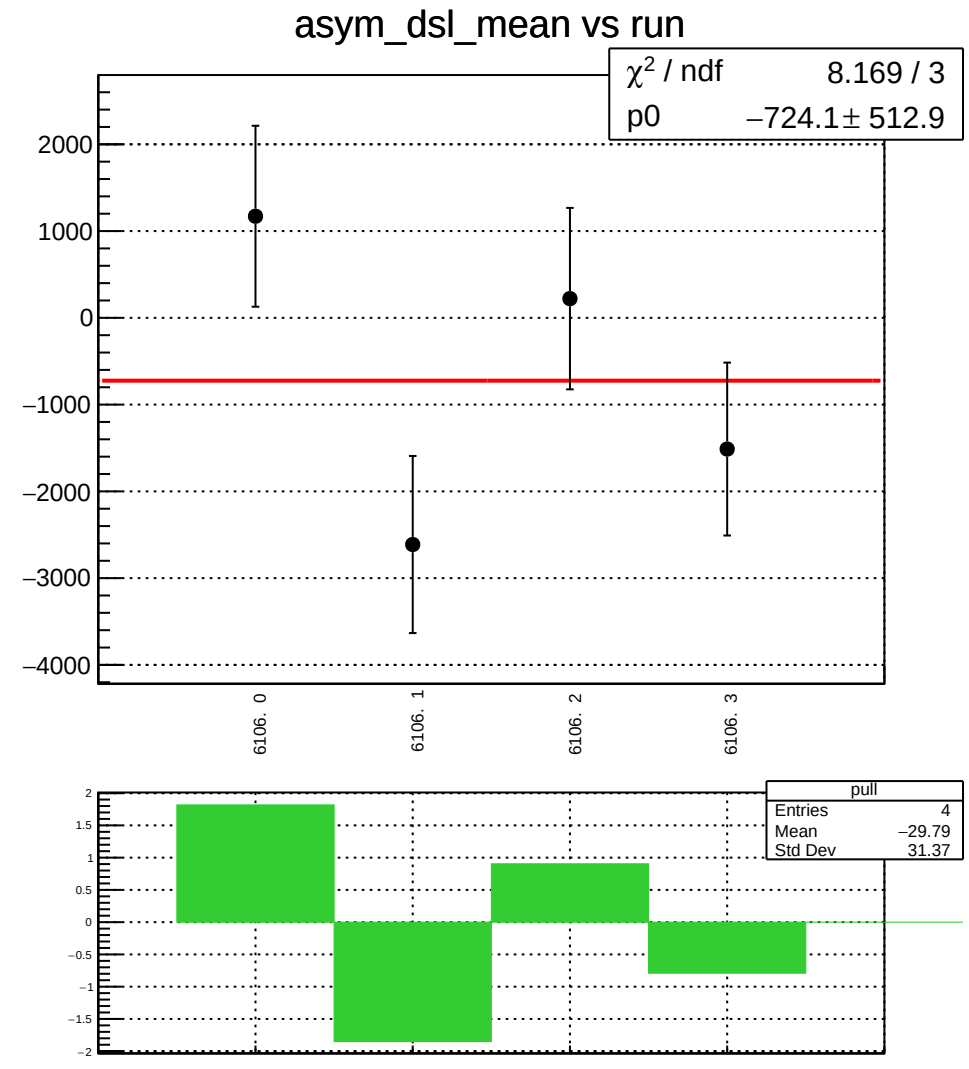

reg_asym_dsl_rms vs run
χ² / ndf 9.051 / 3
p0 97.93 ± 0.3626
100
99.5
99
98.5
98
97.5
97
96.5
96
6106. 0
6106. 1
6106. 2
6106. 3

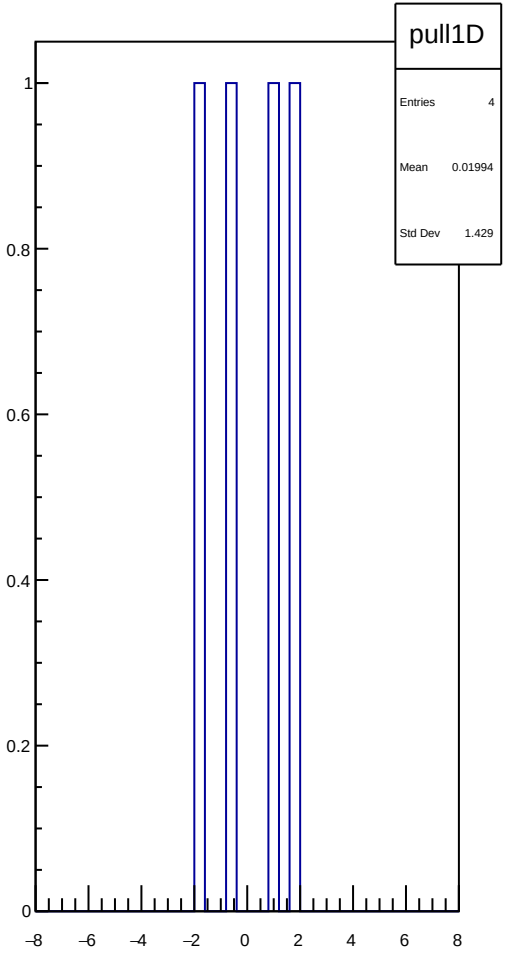

asym_dsl_correction_mean vs run
χ² / ndf 2.86 / 3
p0 −2.018 ± 11.12
40
20
0
−20
−40
6106. 0
6106. 1
6106. 2
6106. 3

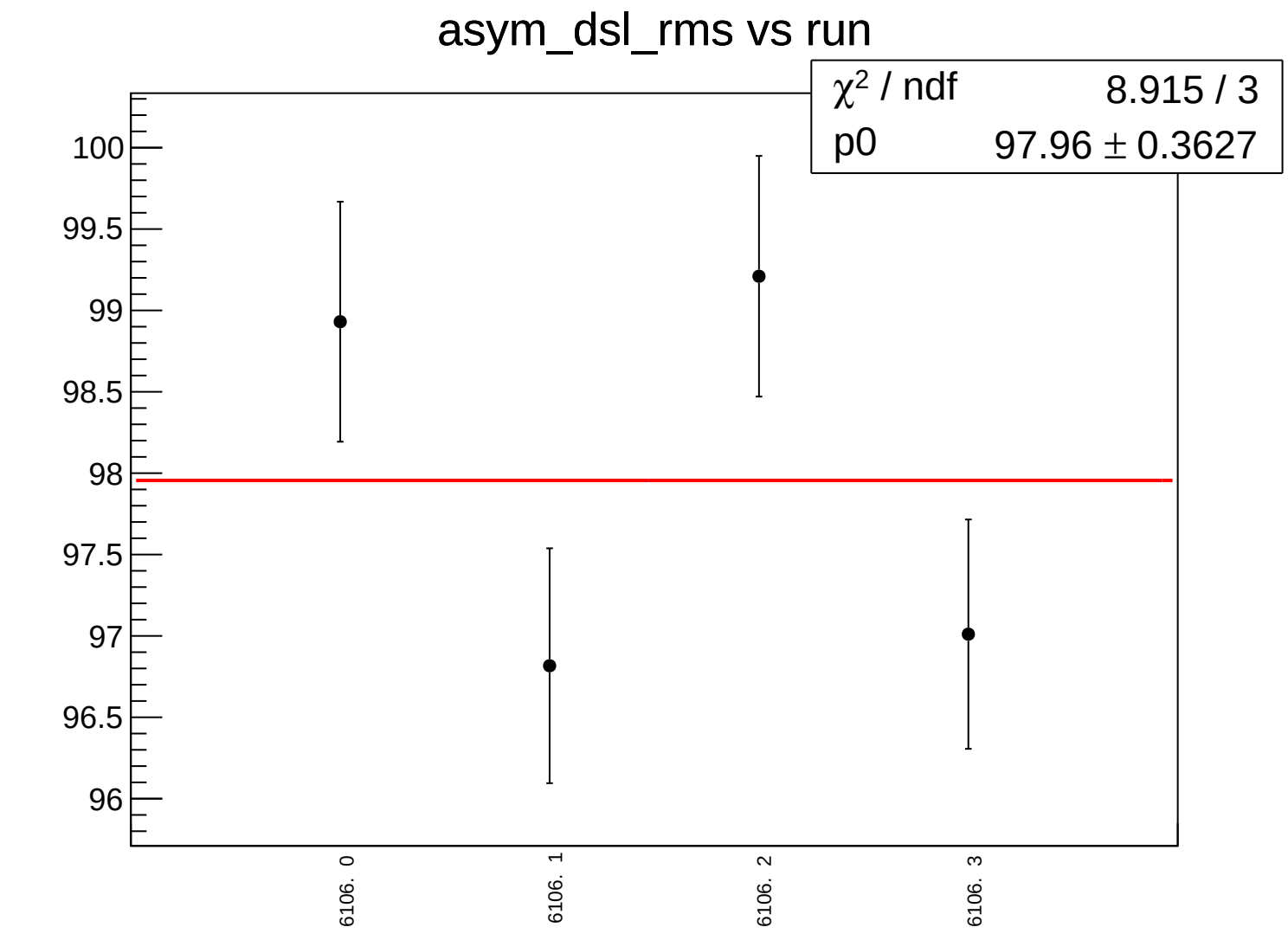

pull
Entries 4
Mean −80.63
Std Dev 82.85
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4

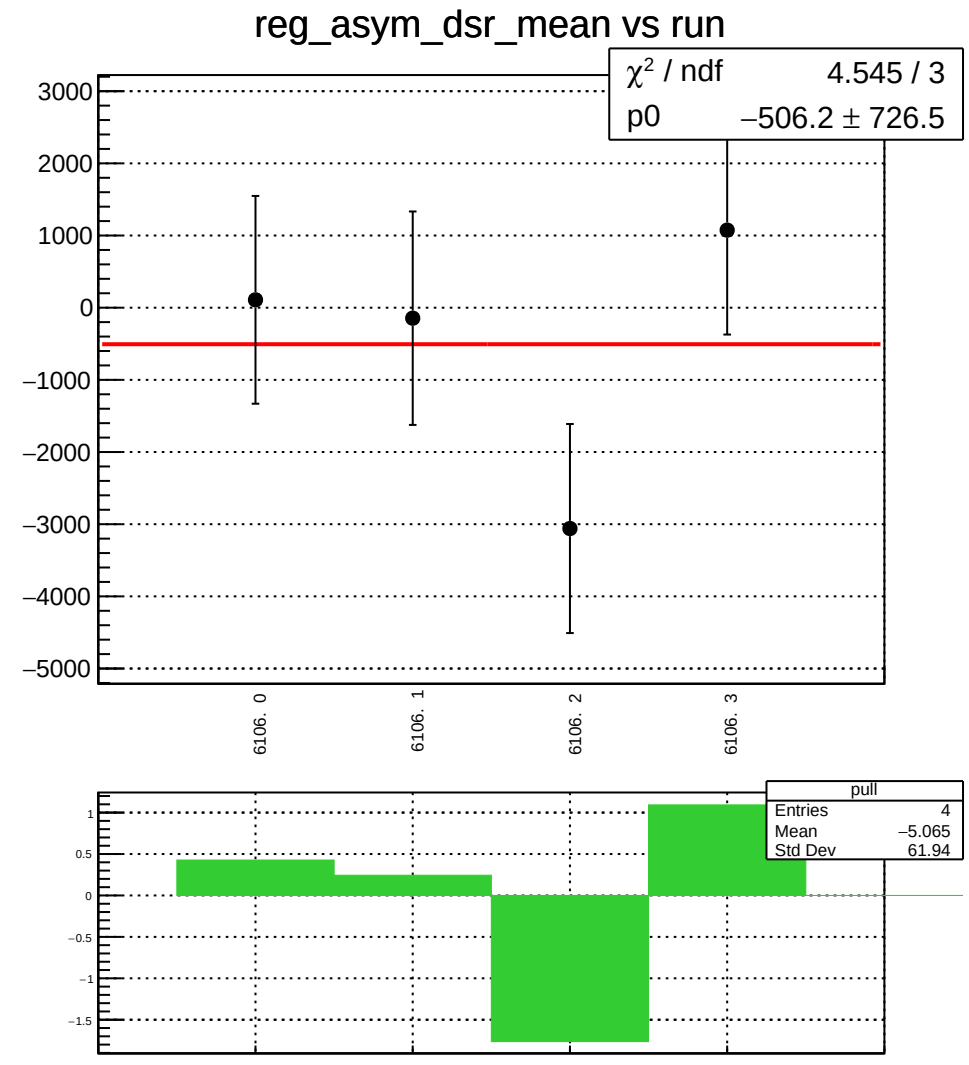

pull1D
Entries 4
Mean 0.007987
Std Dev 0.8456
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

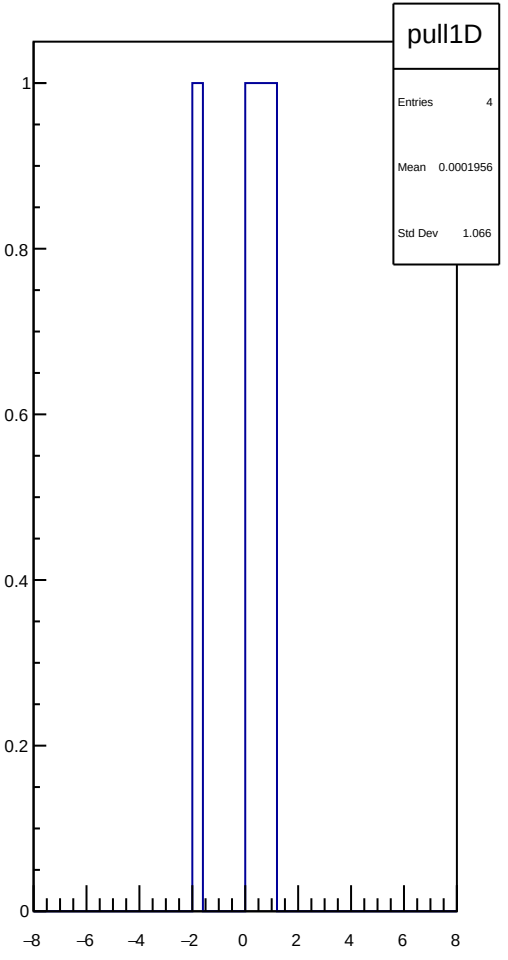

asym_dsl_correction_rms vs run
χ² / ndf 2682 / 3
p0 2.085 ± 0.007866
3.2
3
2.8
2.6
2.4
2.2
2
1.8
6106. 0
6106. 1
6106. 2
6106. 3

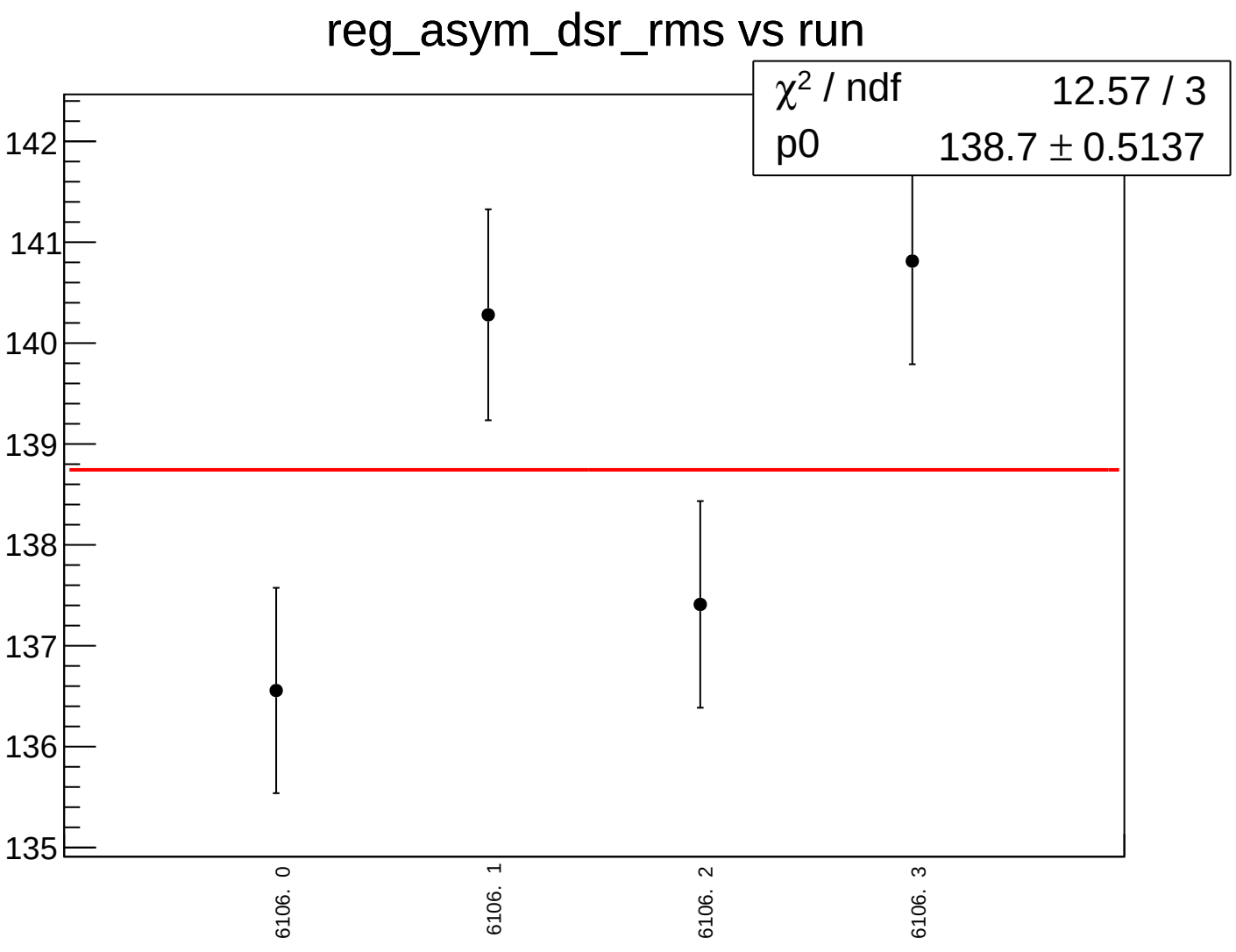

asym_dsl_mean vs run
χ² / ndf 8.169 / 3
p0 −724.1 ± 512.9
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −29.79
Std Dev 31.37
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

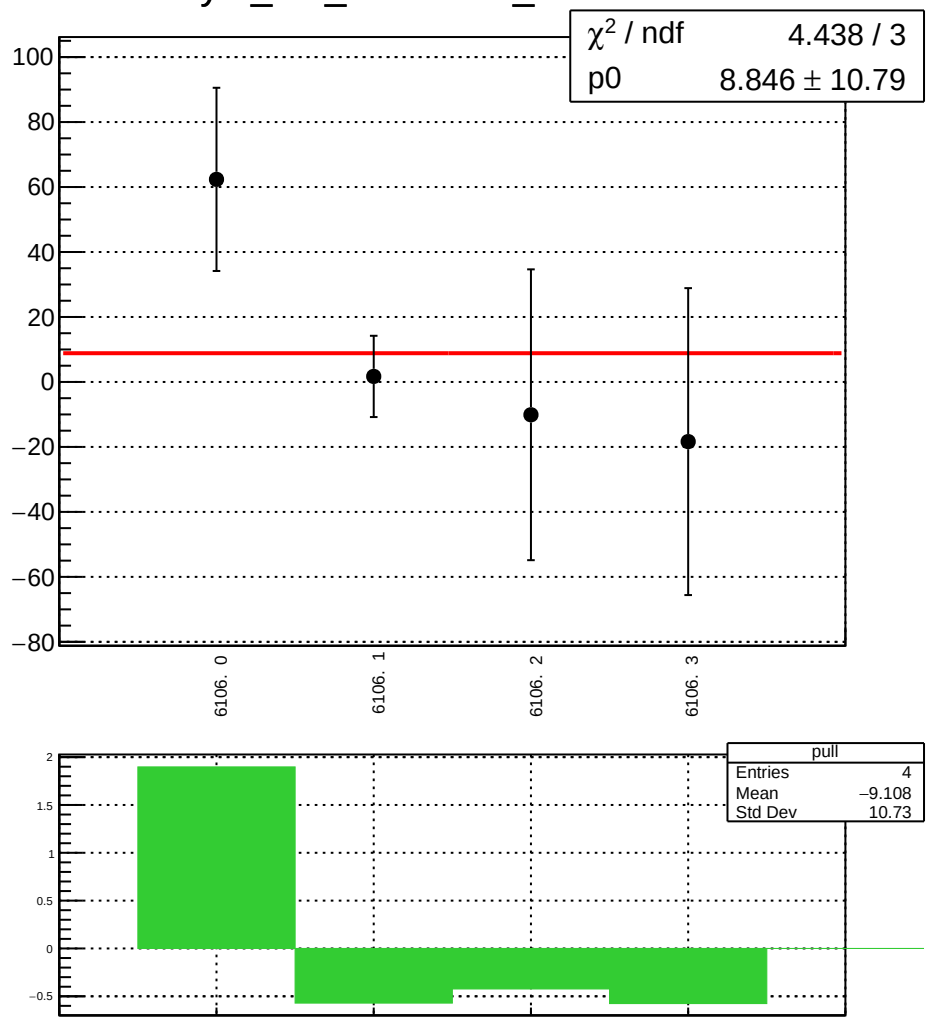

pull1D
Entries 4
Mean 0.01994
Std Dev 1.429
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

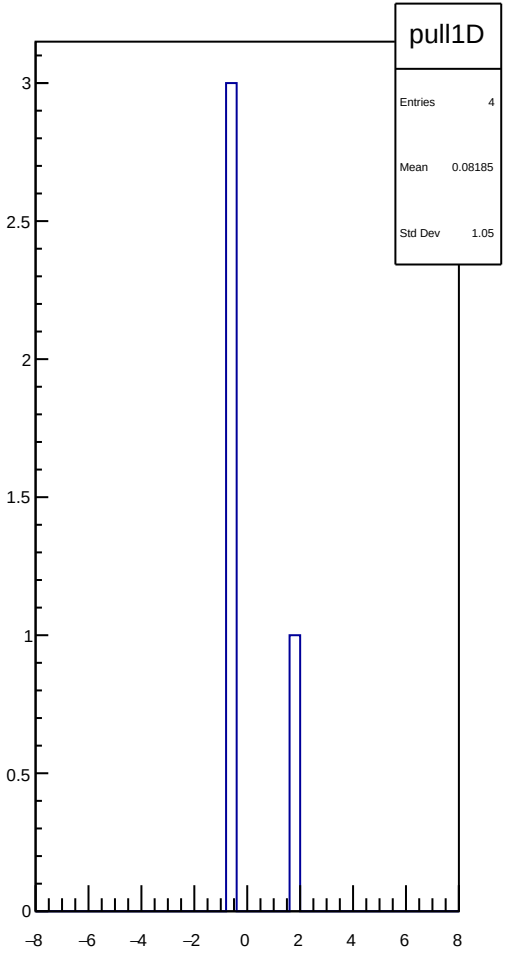

asym_dsl_rms vs run
χ² / ndf 8.915 / 3
p0 97.96 ± 0.3627
100
99.5
99
98.5
98
97.5
97
96.5
96
6106. 0
6106. 1
6106. 2
6106. 3

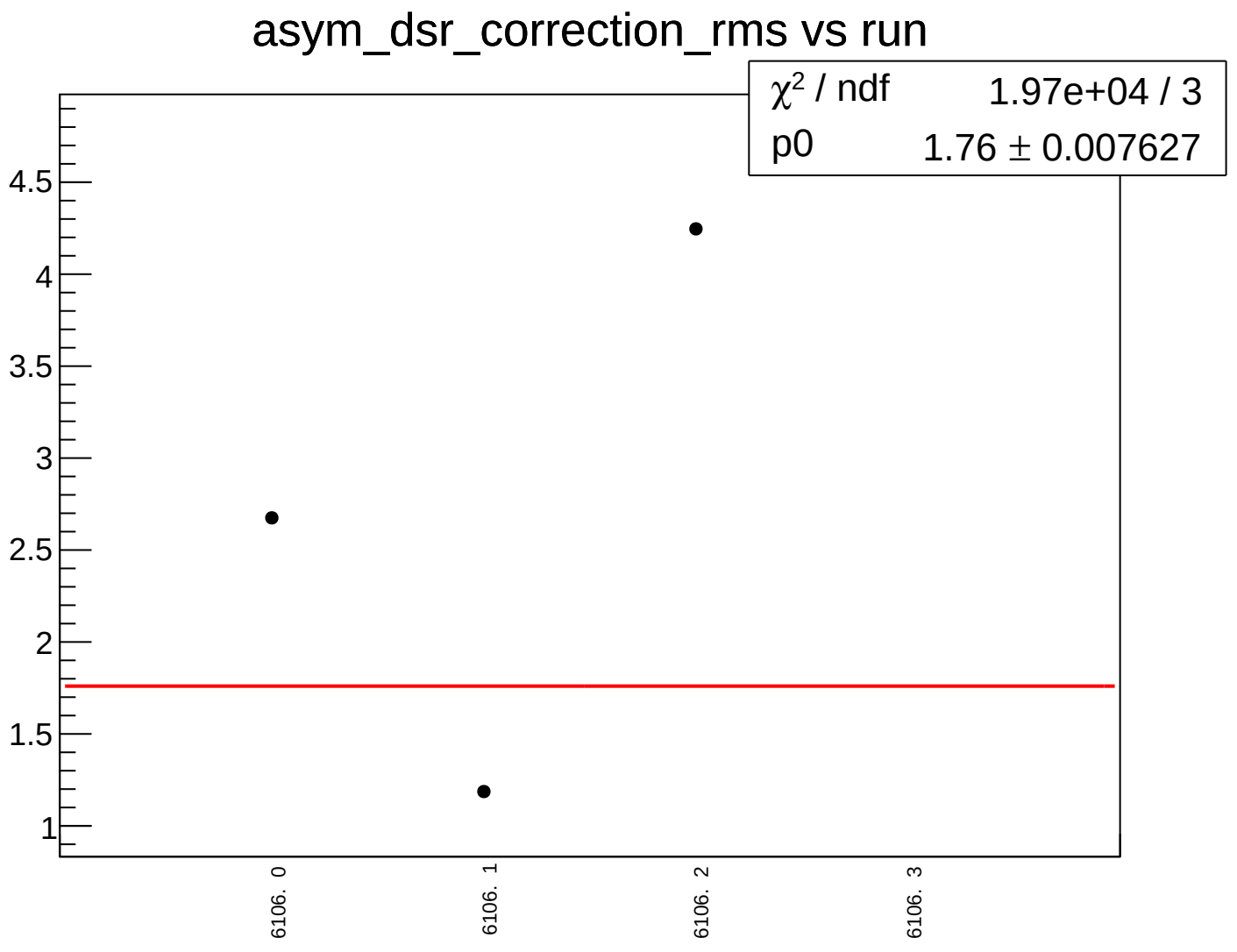

reg_asym_dsr_mean vs run
χ² / ndf 4.545 / 3
p0 −506.2 ± 726.5
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.065
Std Dev 61.94
1
0.5
0
−0.5
−1
−1.5

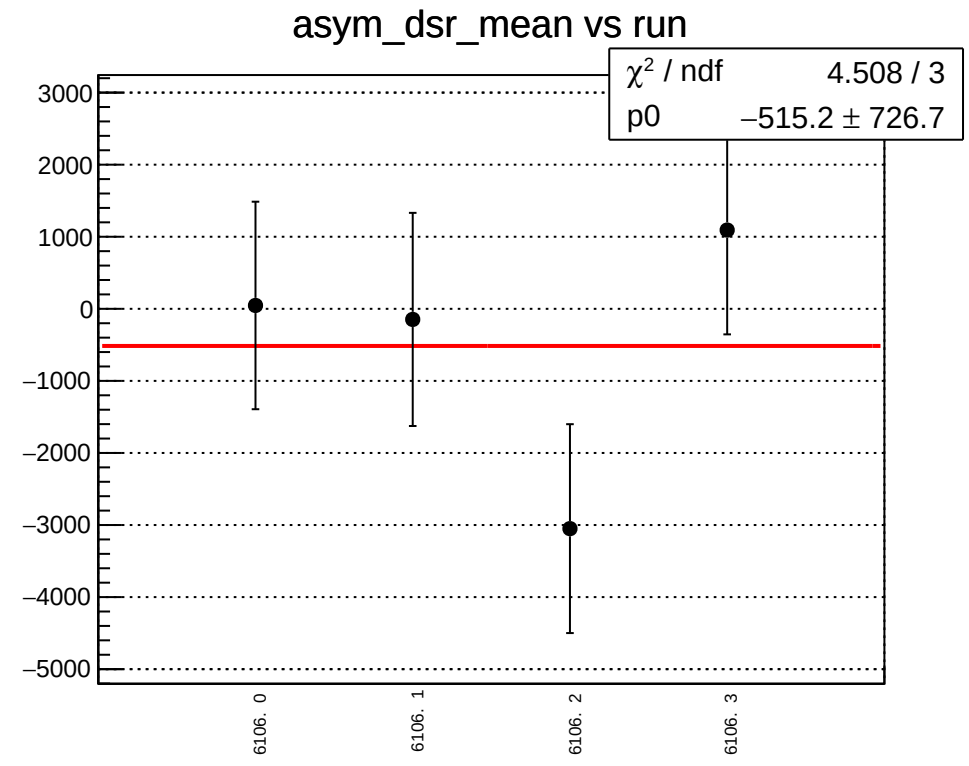

pull1D
Entries 4
Mean 0.0001956
Std Dev 1.066
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

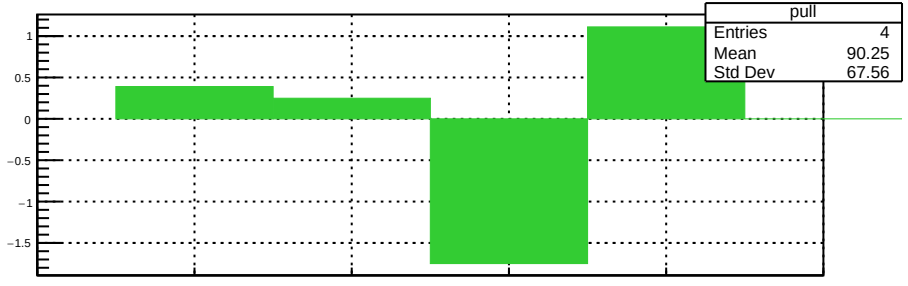

reg_asym_dsr_rms vs run
χ² / ndf 12.57 / 3
p0 138.7 ± 0.5137
142
141
140
139
138
137
136
135
6106. 0
6106. 1
6106. 2
6106. 3

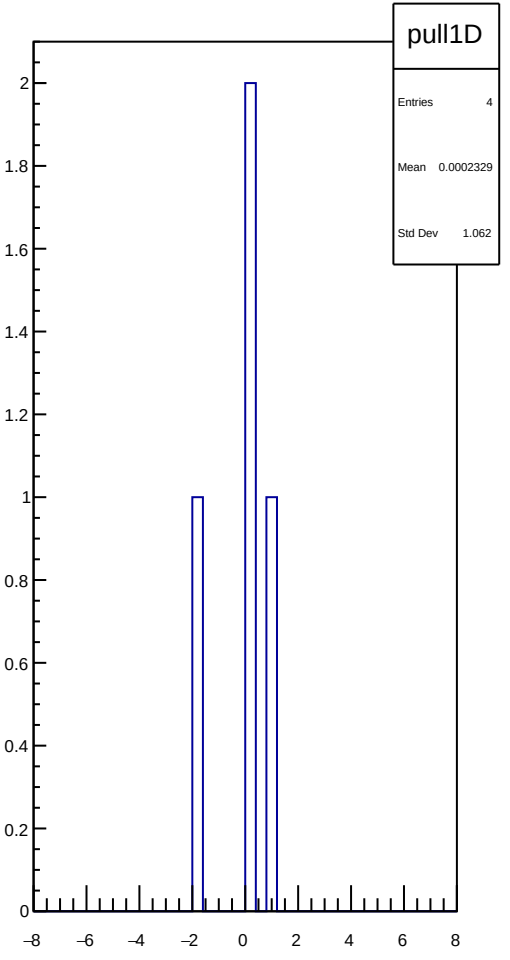

asym_dsr_correction_mean vs run
χ² / ndf 4.438 / 3
p0 8.846 ± 10.79
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.108
Std Dev 10.73
2
1.5
1
0.5
0
−0.5

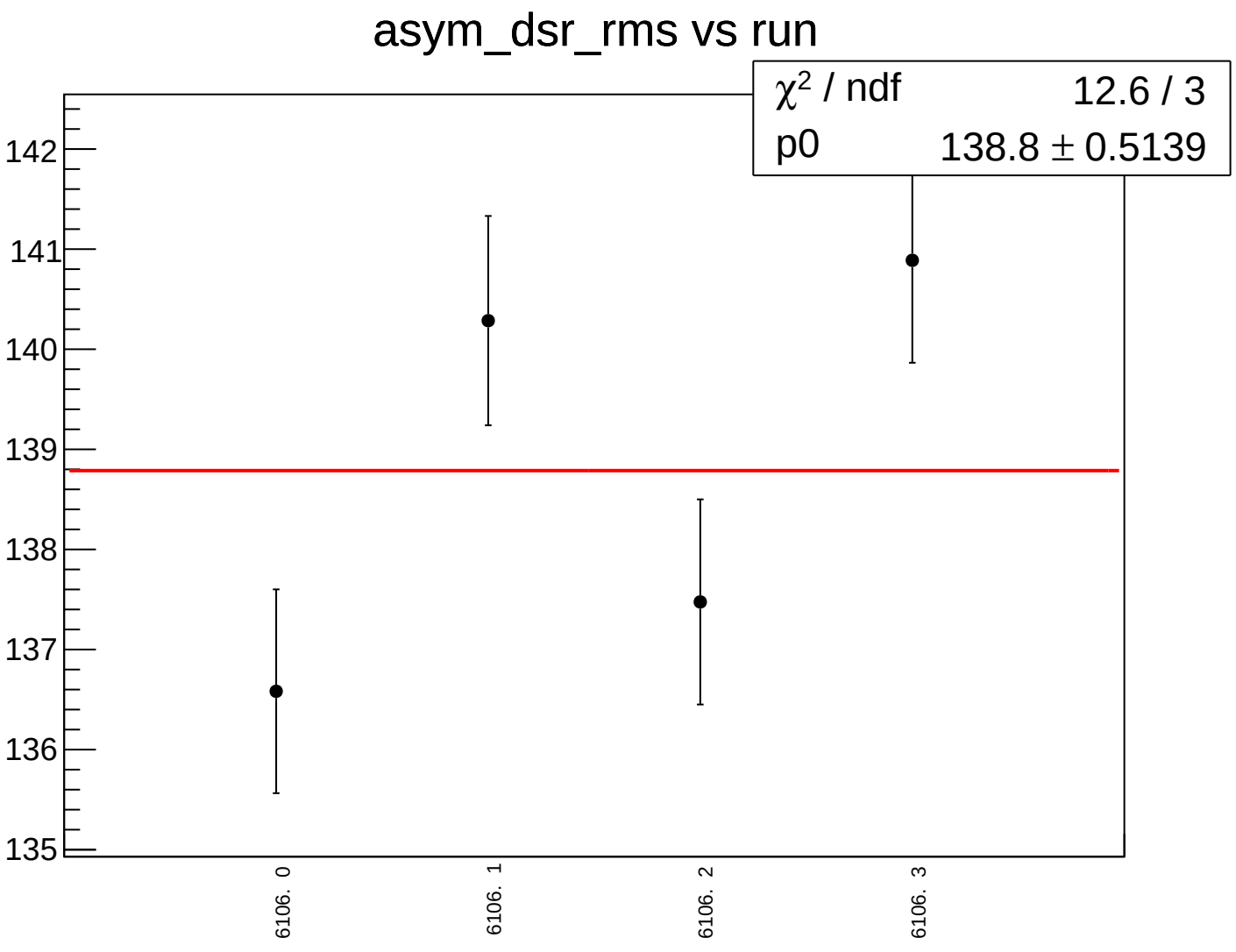

pull1D
Entries 4
Mean 0.08185
Std Dev 1.05
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

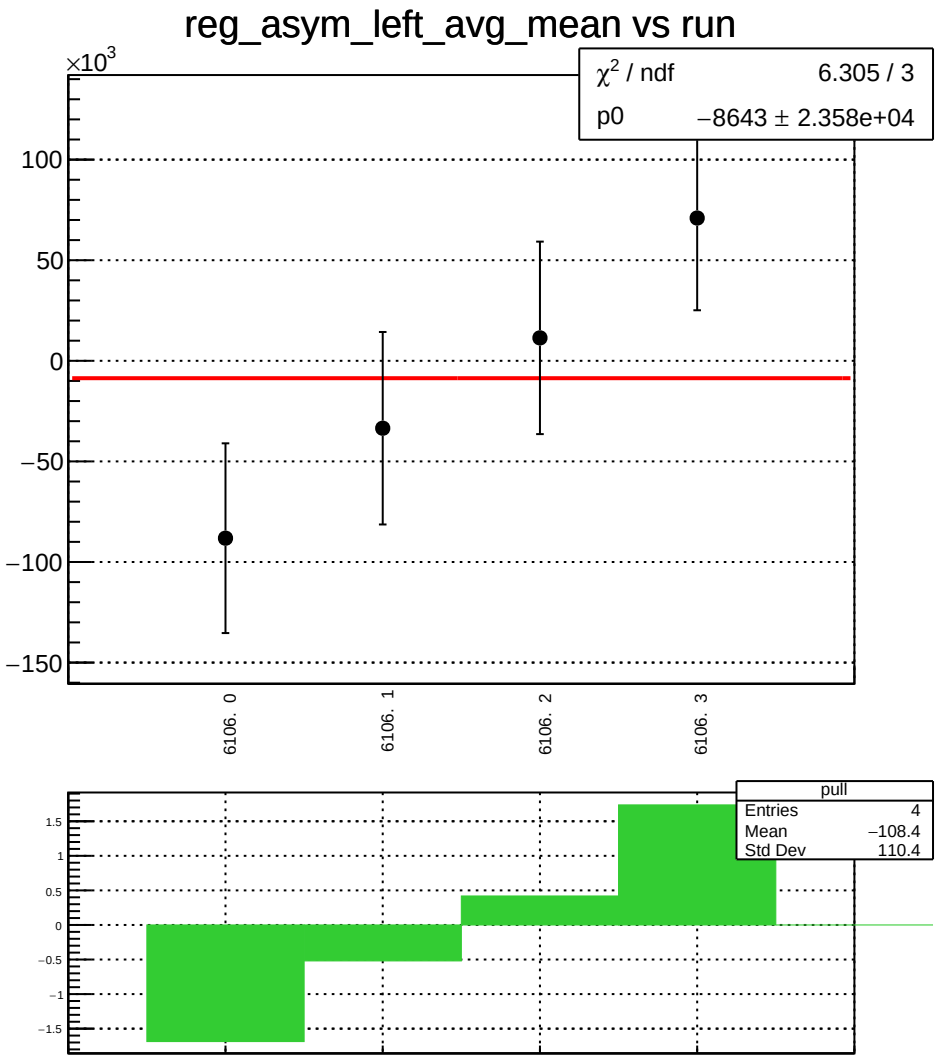

asym_dsr_correction_rms vs run
χ² / ndf 1.97e+04 / 3
p0 1.76 ± 0.007627
4.5
4
3.5
3
2.5
2
1.5
1
6106. 0
6106. 1
6106. 2
6106. 3

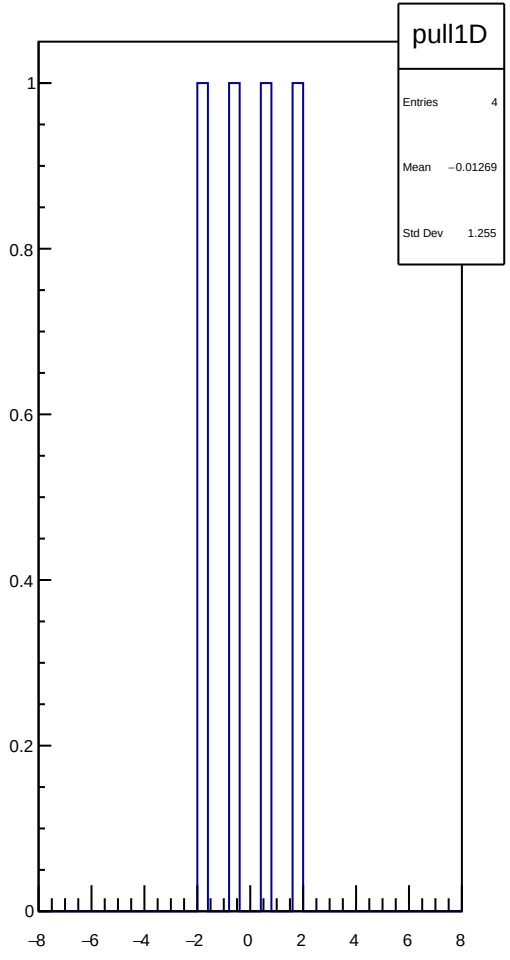

asym_dsr_mean vs run
χ² / ndf 4.508 / 3
p0 −515.2 ± 726.7
3000
2000
1000
0
−1000
−2000
−3000
−4000
−5000
6106. 0
6106. 1
6106. 2
6106. 3

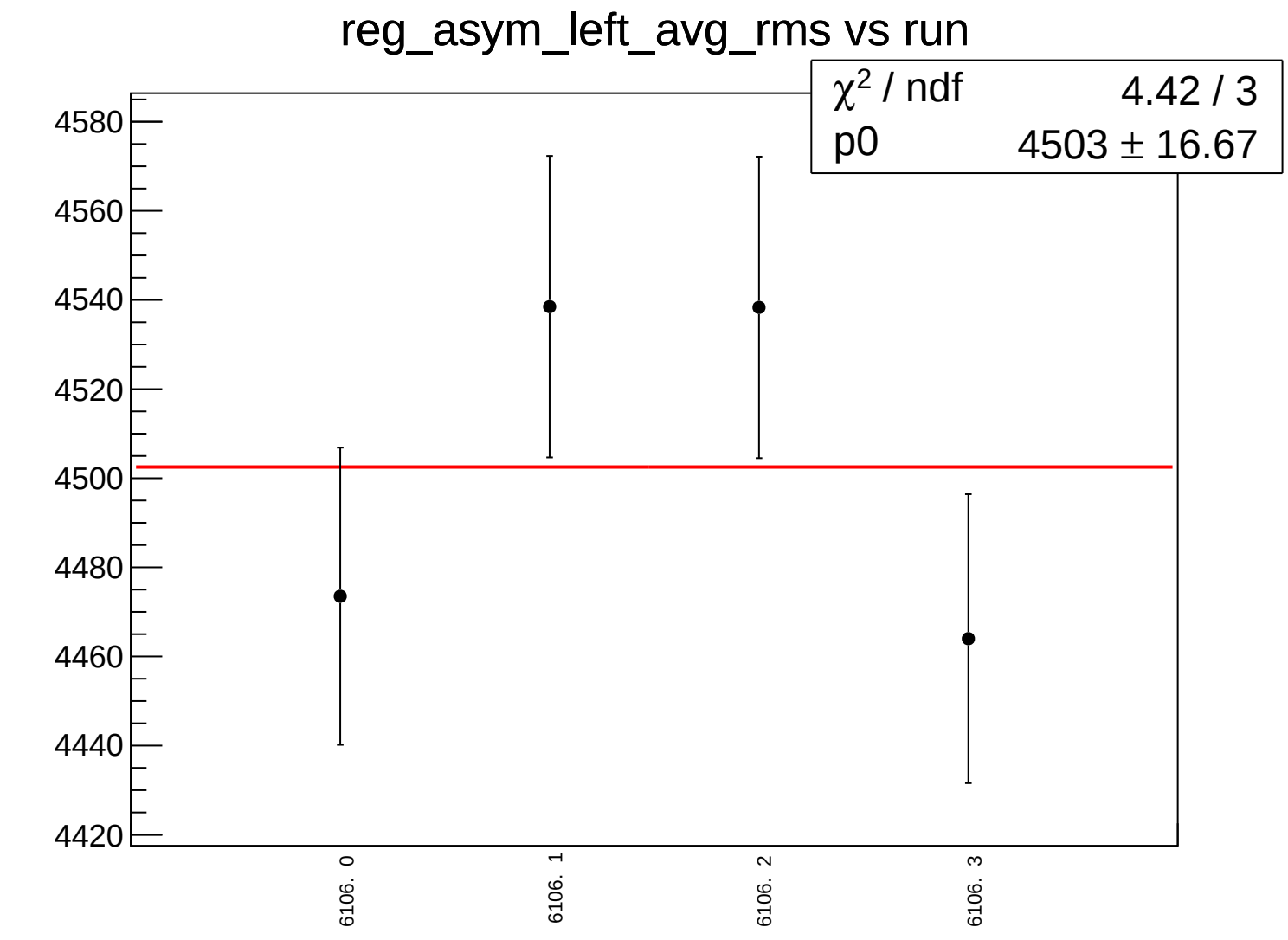

pull
Entries 4
Mean 90.25
Std Dev 67.56
1
0.5
0
−0.5
−1
−1.5

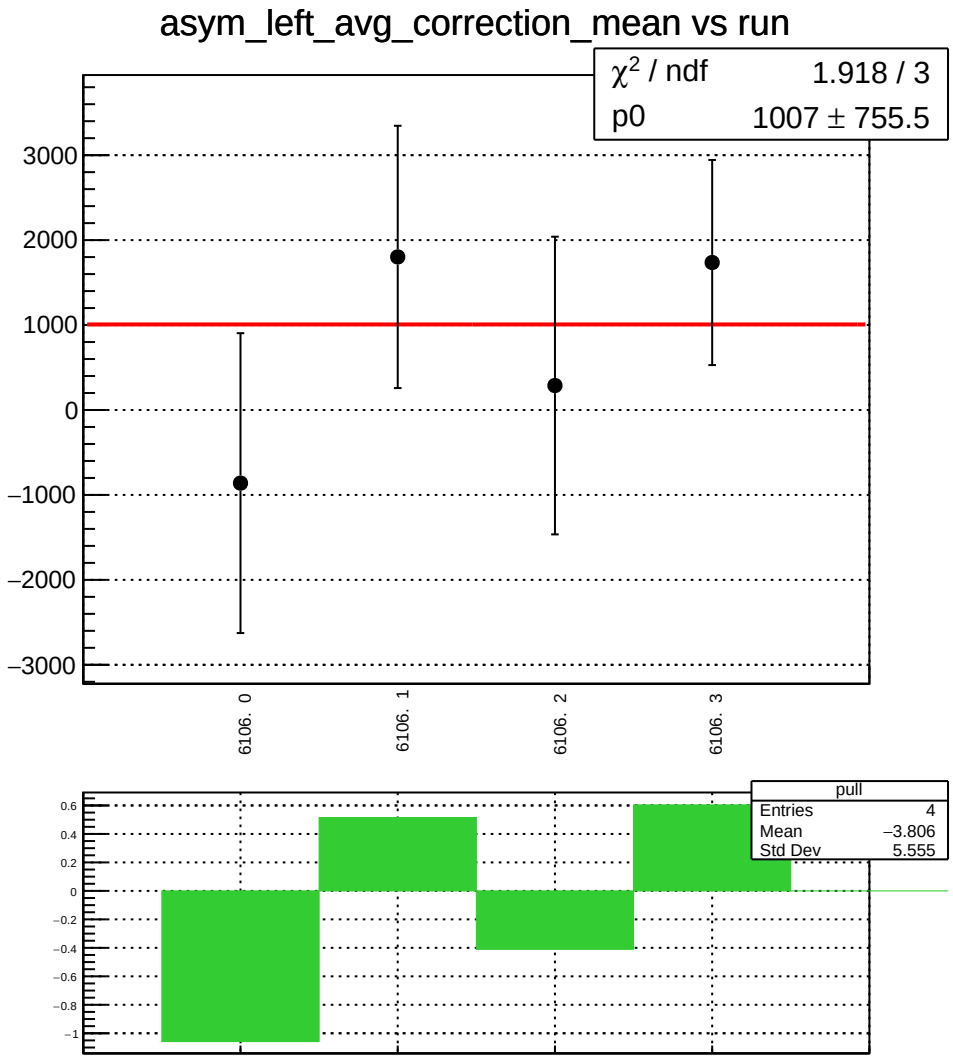

pull1D
Entries 4
Mean 0.0002329
Std Dev 1.062
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

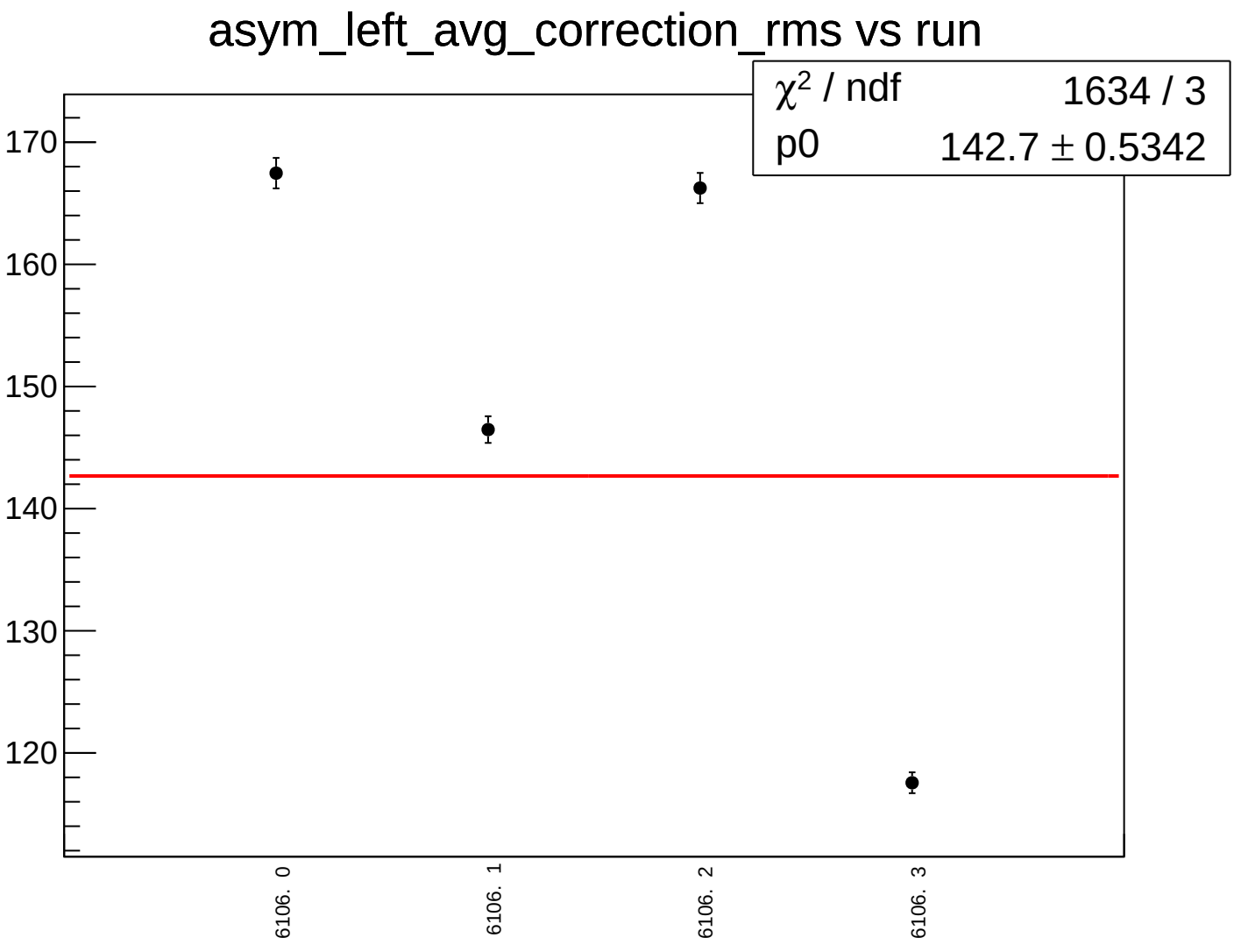

asym_dsr_rms vs run
χ² / ndf 12.6 / 3
p0 138.8 ± 0.5139
142
141
140
139
138
137
136
135
6106. 0
6106. 1
6106. 2
6106. 3

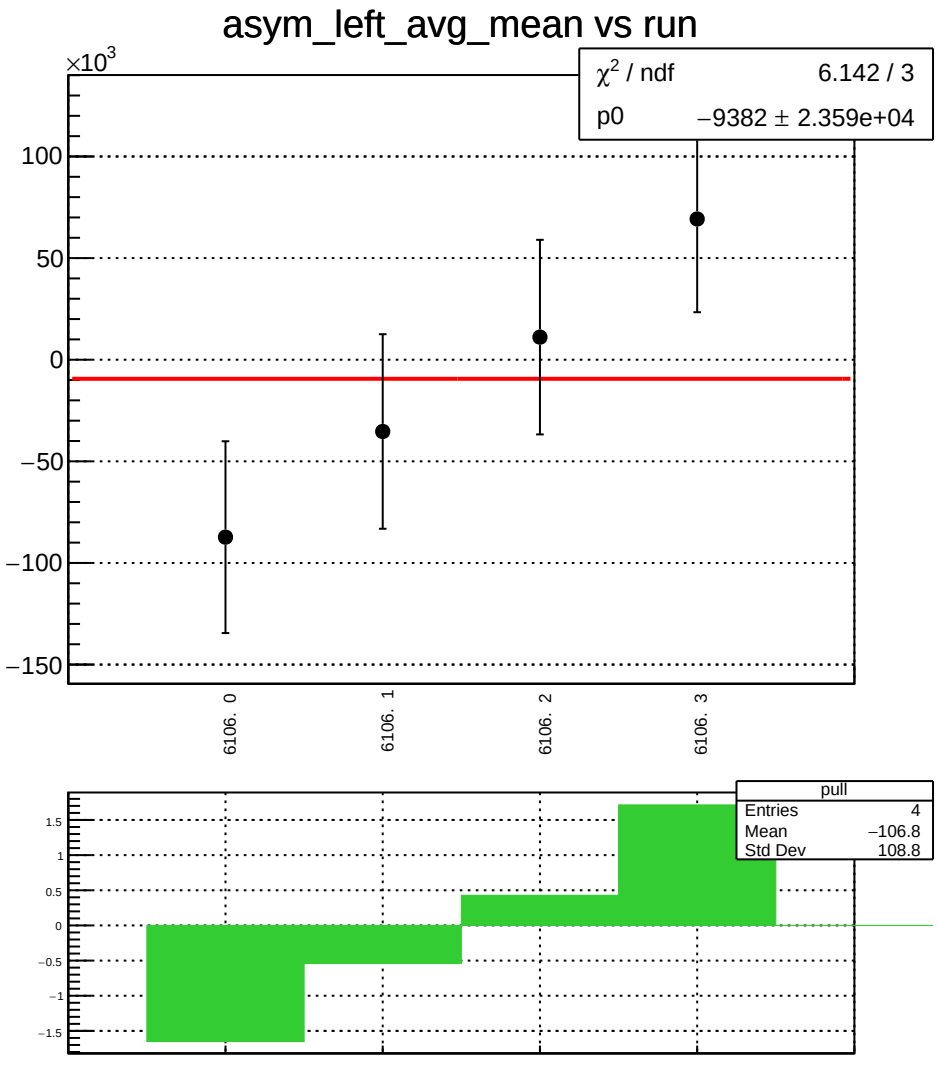

reg_asym_left_avg_mean vs run
×10^3
χ^2 / ndf 6.305 / 3
p0 −8643 ± 2.358e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −108.4
Std Dev 110.4
1.5
1
0.5
0
−0.5
−1
−1.5

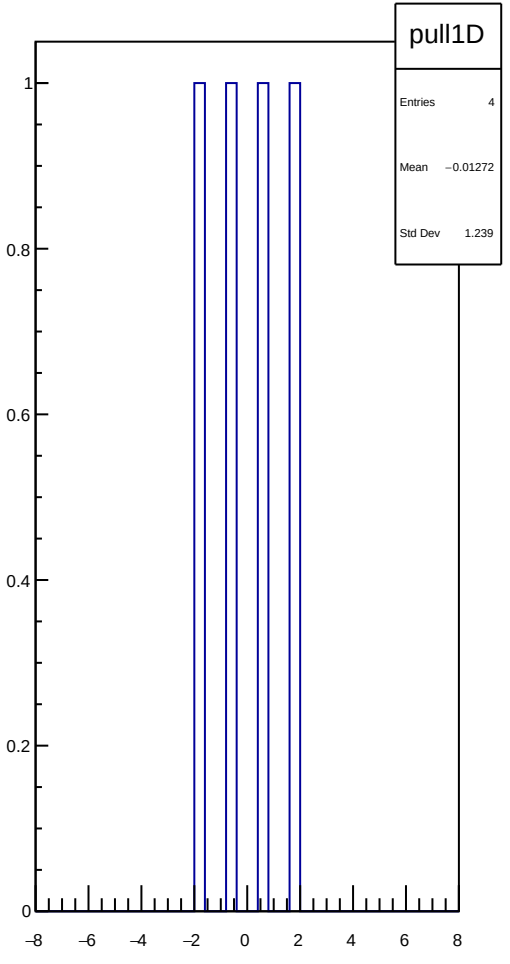

pull1D
Entries 4
Mean −0.01269
Std Dev 1.255
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

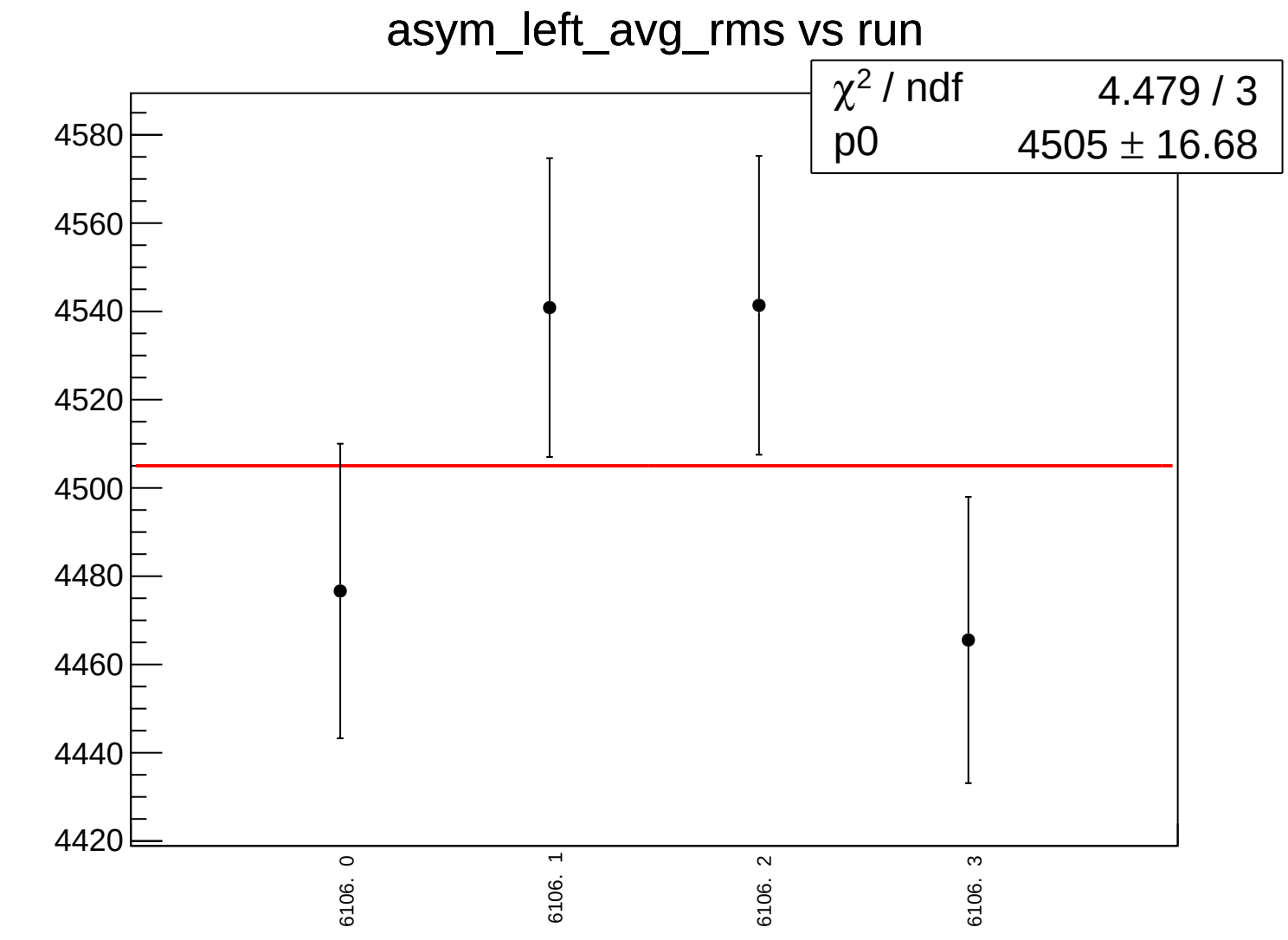

reg_asym_left_avg_rms vs run
χ² / ndf 4.42 / 3
p0 4503 ± 16.67
4580
4560
4540
4520
4500
4480
4460
4440
4420
6106. 0
6106. 1
6106. 2
6106. 3

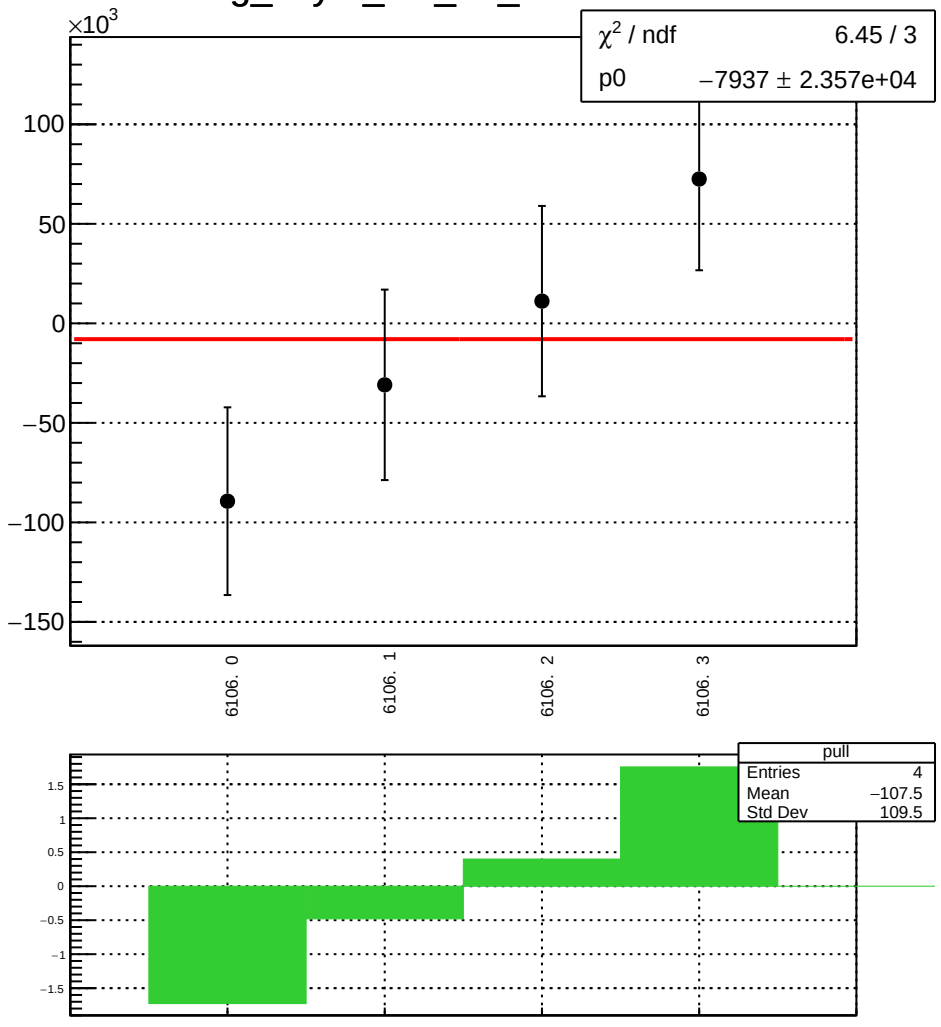

asym_left_avg_correction_mean vs run
χ² / ndf 1.918 / 3
p0 1007 ± 755.5
3000
2000
1000
0
−1000
−2000
−3000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.806
Std Dev 5.555
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 4
Mean −0.08743
Std Dev 0.6869
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

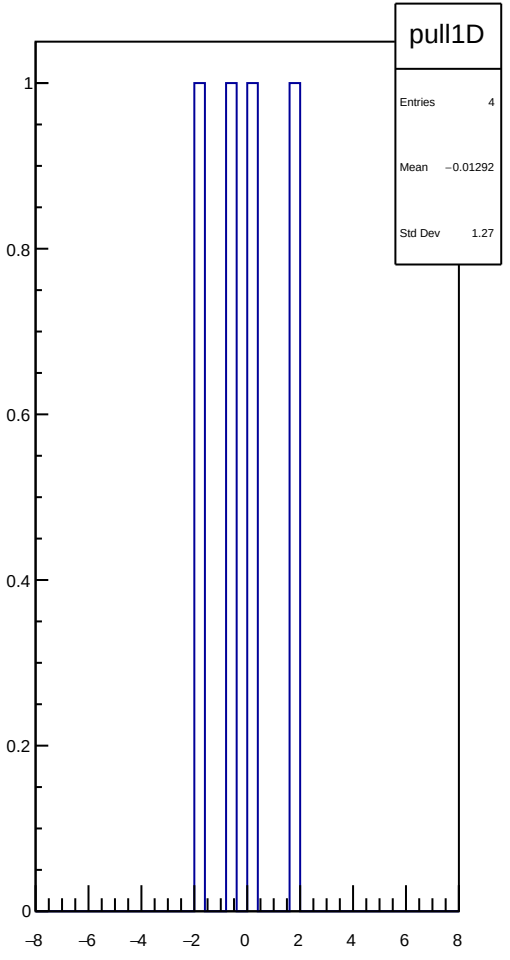

asym_left_avg_correction_rms vs run
χ² / ndf 1634 / 3
p0 142.7 ± 0.5342
170
160
150
140
130
120
6106. 0
6106. 1
6106. 2
6106. 3

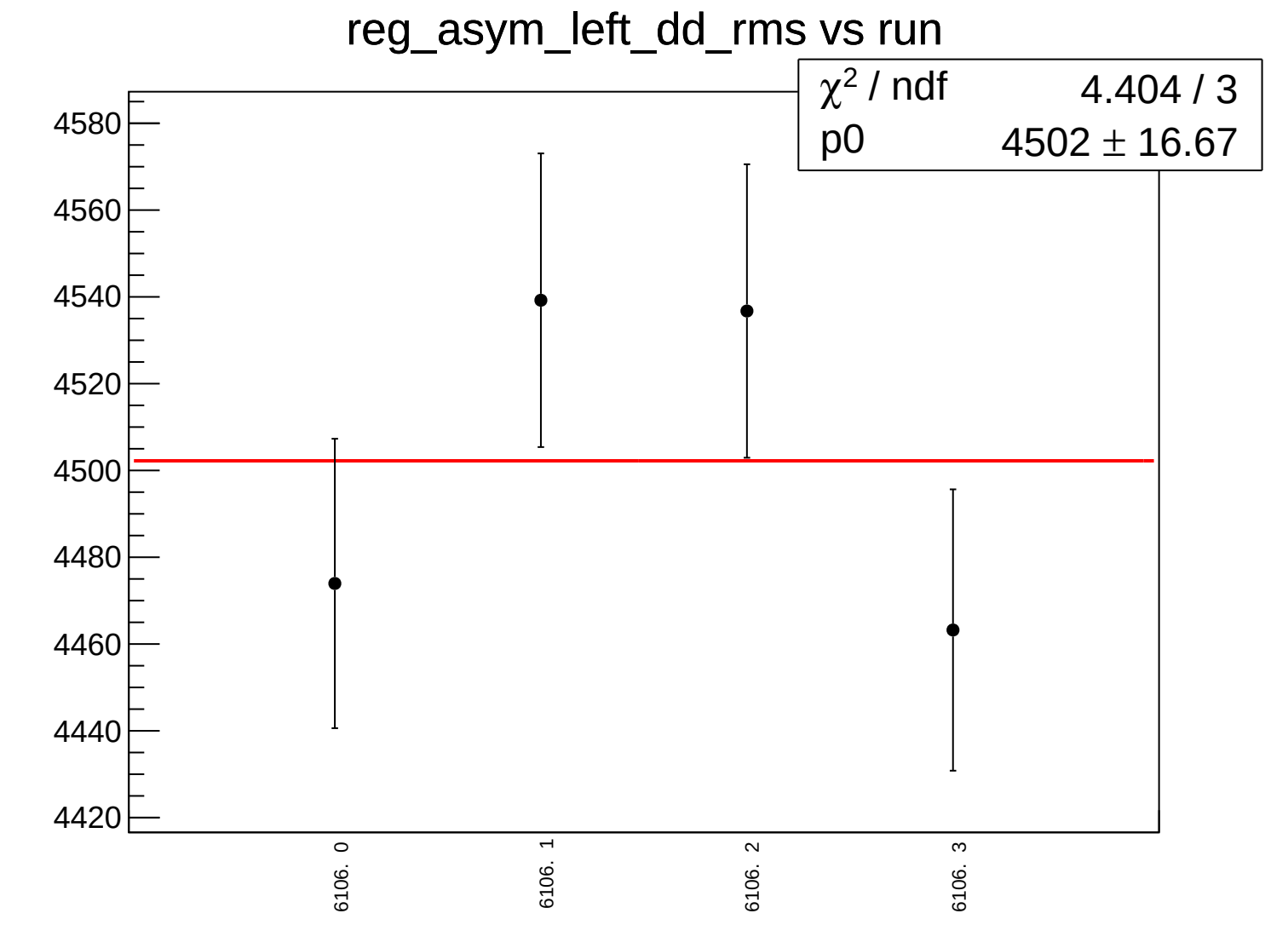

asym_left_avg_mean vs run
×10^3
χ² / ndf 6.142 / 3
p0 −9382 ± 2.359e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −106.8
Std Dev 108.8
1.5
1
0.5
0
−0.5
−1
−1.5

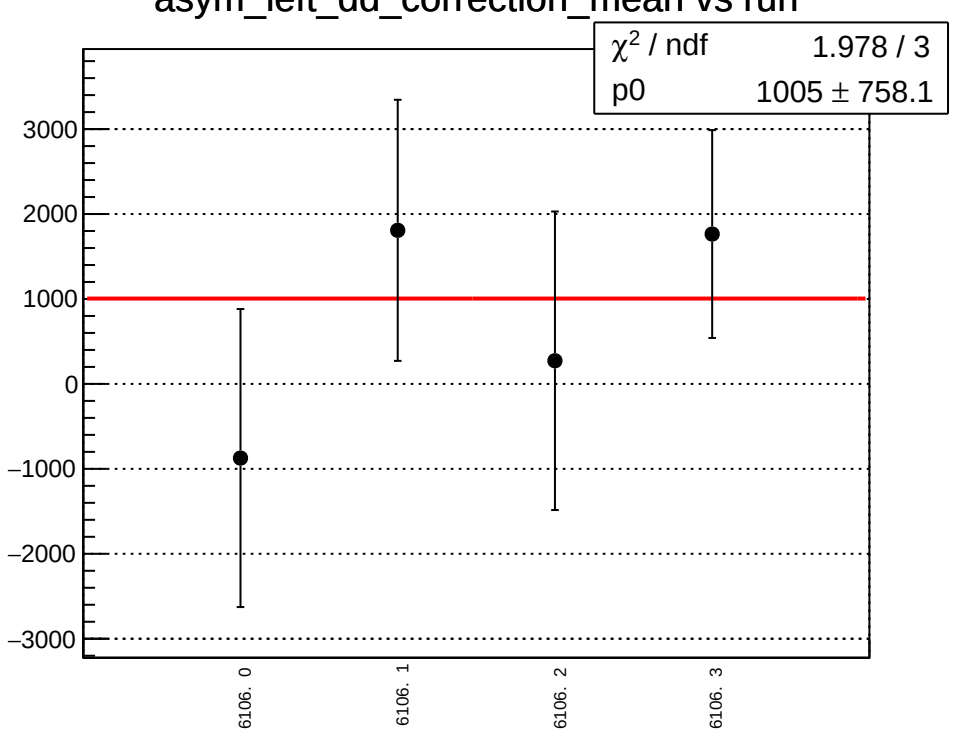

pull1D
Entries 4
Mean −0.01272
Std Dev 1.239
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

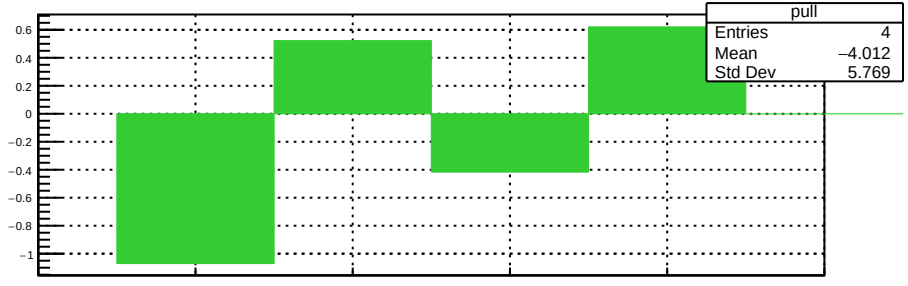

asym_left_avg_rms vs run
χ^2 / ndf 4.479 / 3
p0 4505 ± 16.68
4580
4560
4540
4520
4500
4480
4460
4440
4420
6106. 0
6106. 1
6106. 2
6106. 3

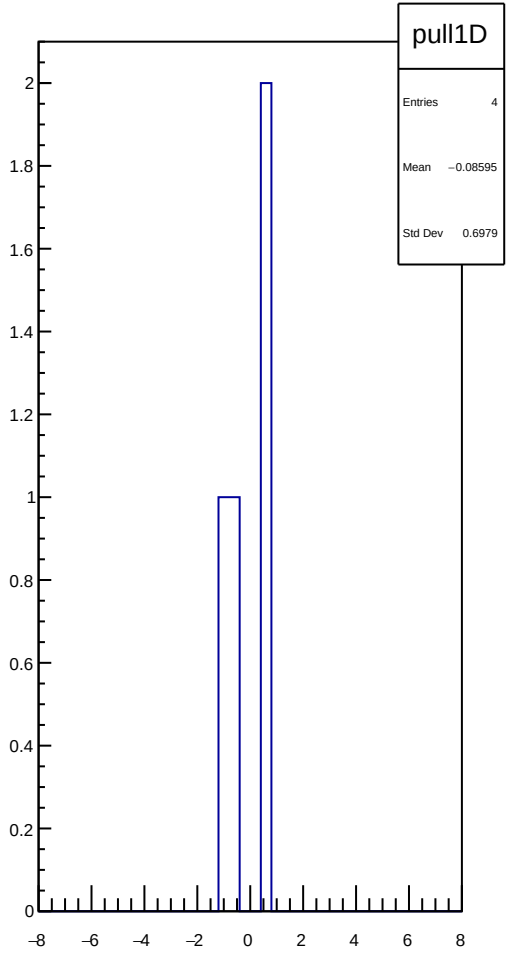

reg_asym_left_dd_mean vs run
×10^3
χ² / ndf 6.45 / 3
p0 −7937 ± 2.357e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −107.5
Std Dev 109.5
1.5
1
0.5
0
−0.5
−1
−1.5

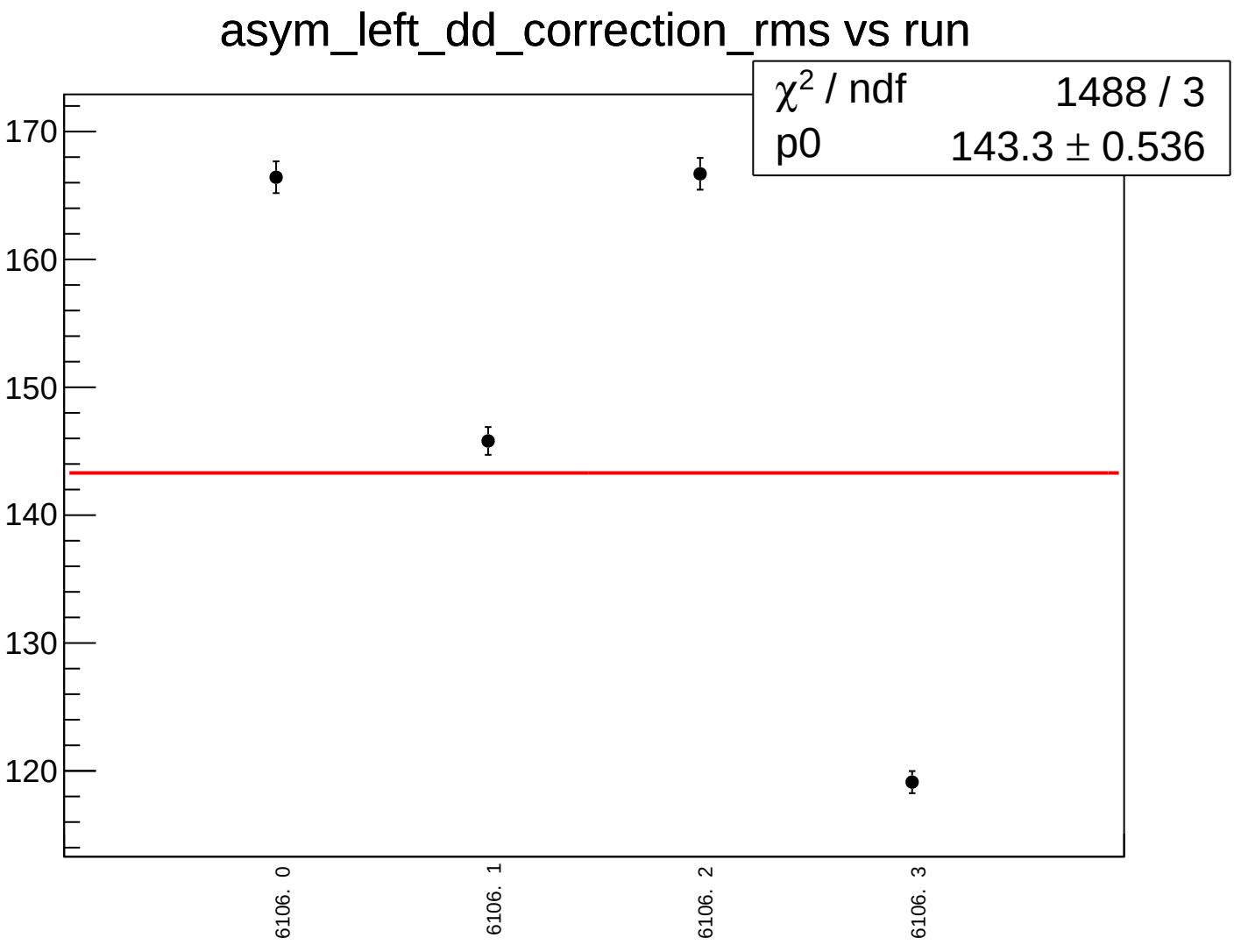

pull1D
Entries 4
Mean −0.01292
Std Dev 1.27
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

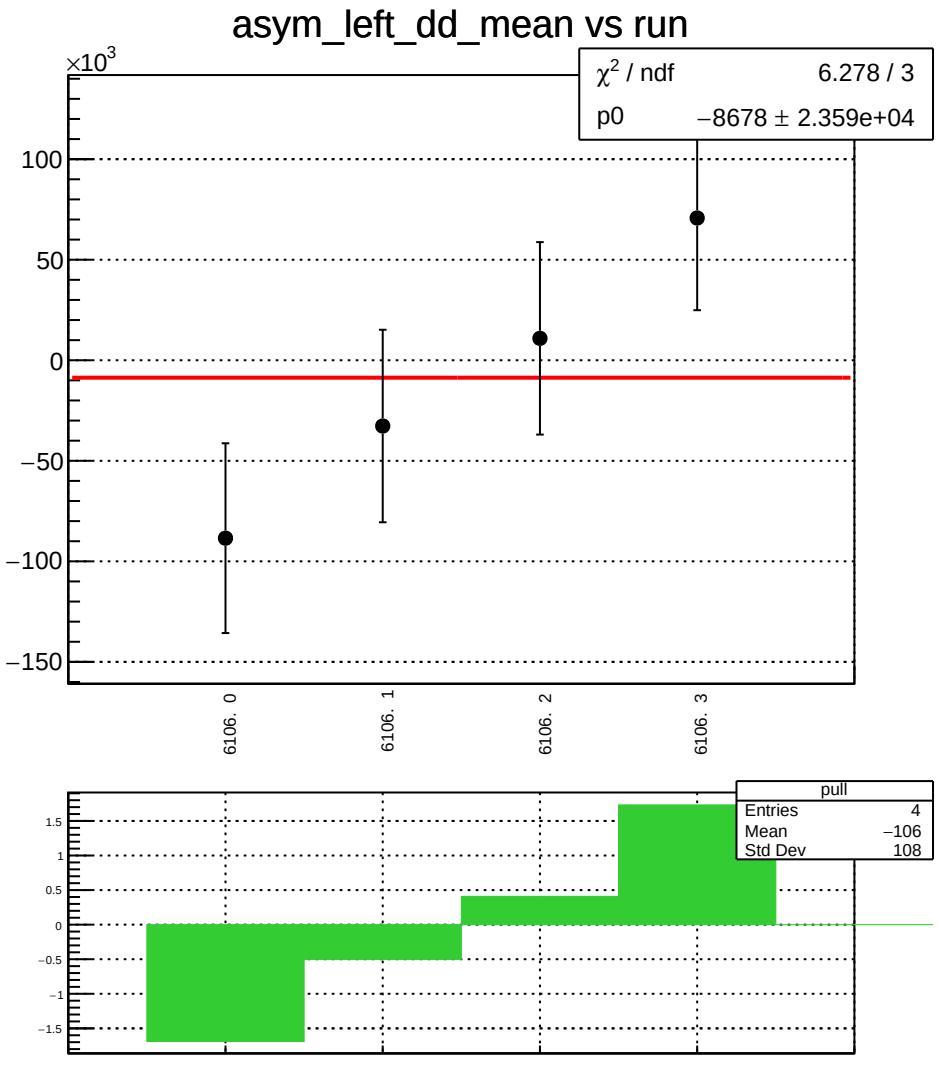

reg_asym_left_dd_rms vs run
χ^2 / ndf 4.404 / 3
p0 4502 ± 16.67
4580
4560
4540
4520
4500
4480
4460
4440
4420
6106. 0
6106. 1
6106. 2
6106. 3

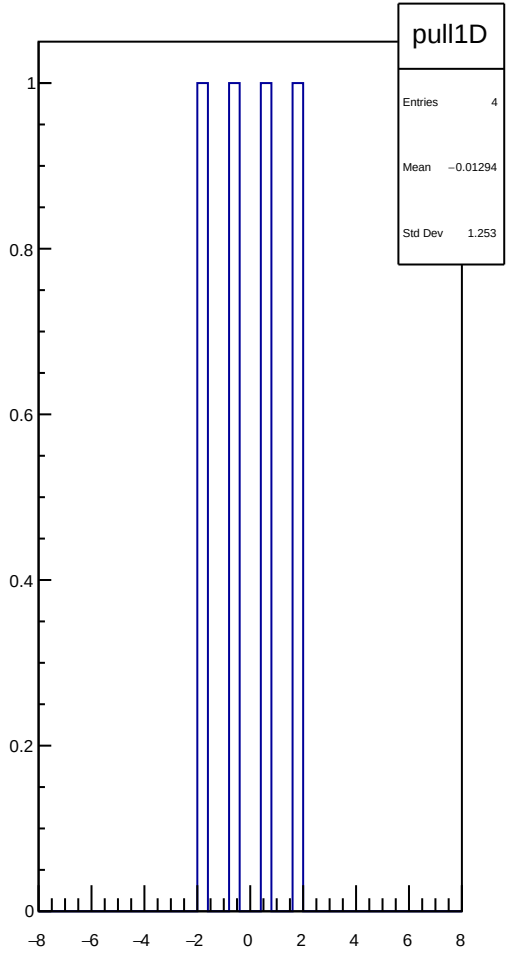

asym_left_dd_correction_mean vs run
χ² / ndf 1.978 / 3
p0 1005 ± 758.1
3000
2000
1000
0
−1000
−2000
−3000
6106. 0
6106. 1
6106. 2
6106. 3

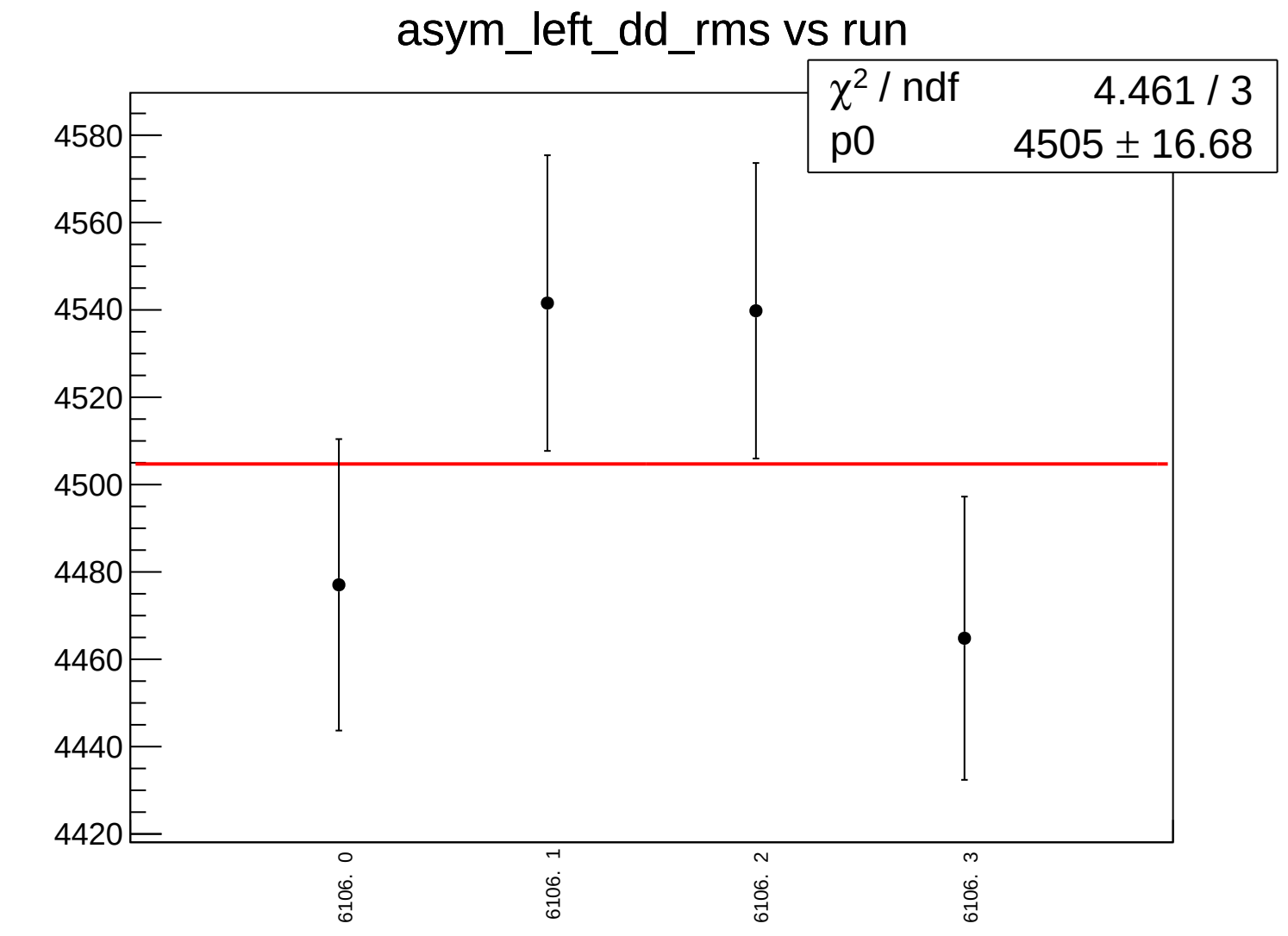

pull
Entries 4
Mean −4.012
Std Dev 5.769
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

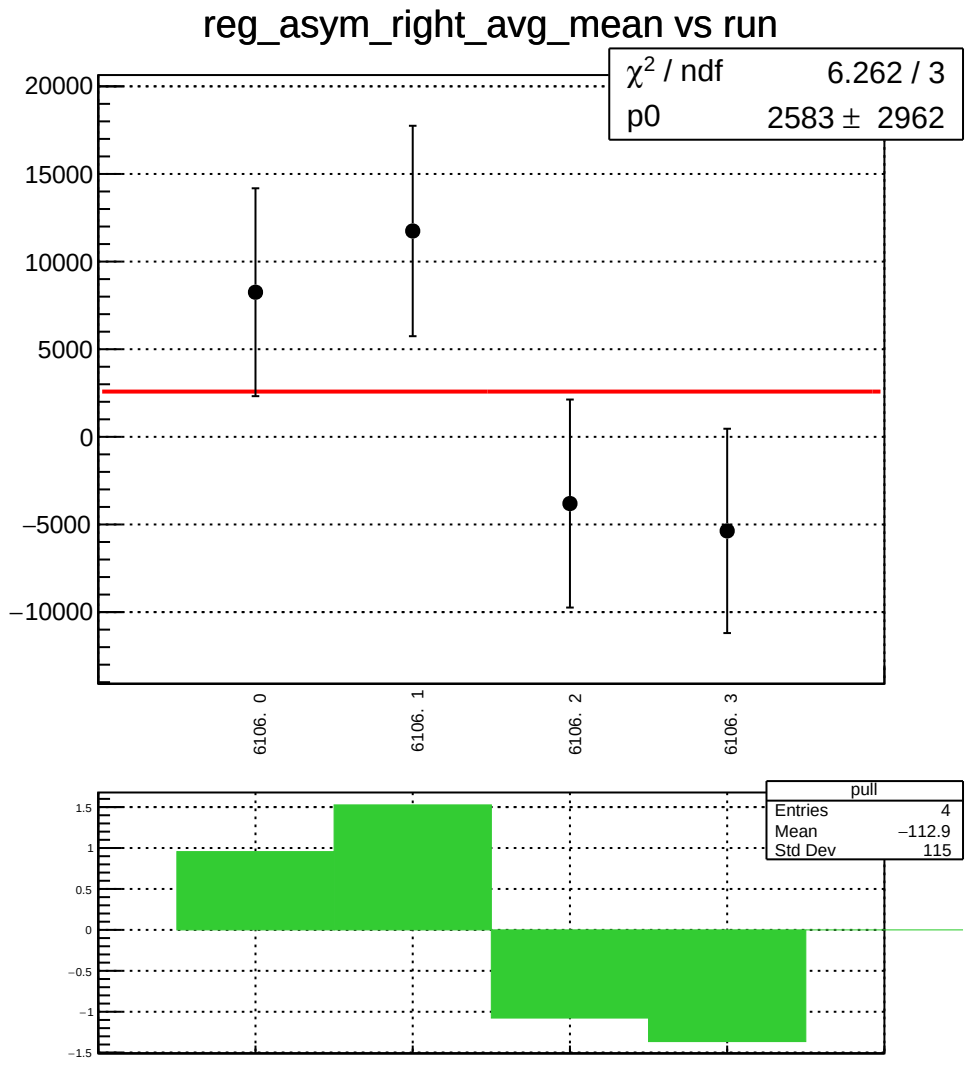

pull1D
Entries 4
Mean −0.08595
Std Dev 0.6979
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

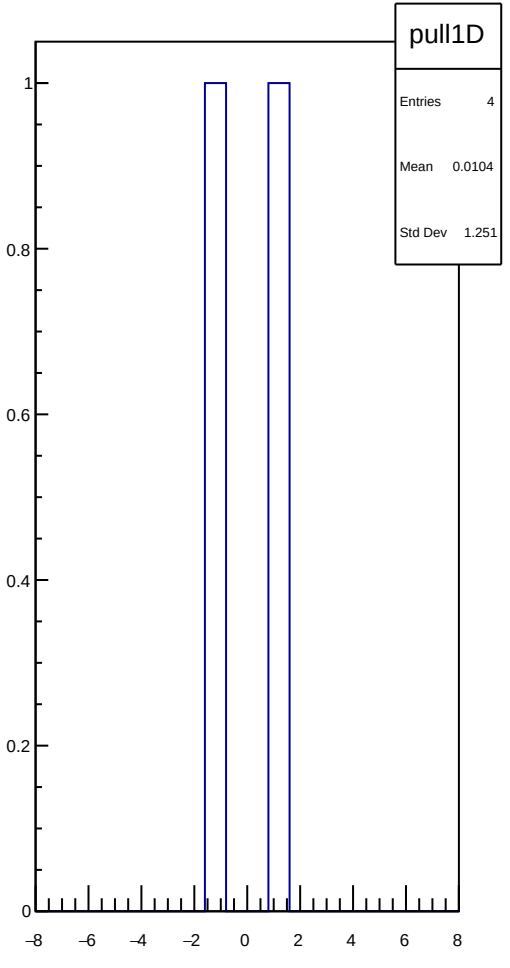

asym_left_dd_correction_rms vs run
χ² / ndf 1488 / 3
p0 143.3 ± 0.536
170
160
150
140
130
120
6106. 0
6106. 1
6106. 2
6106. 3

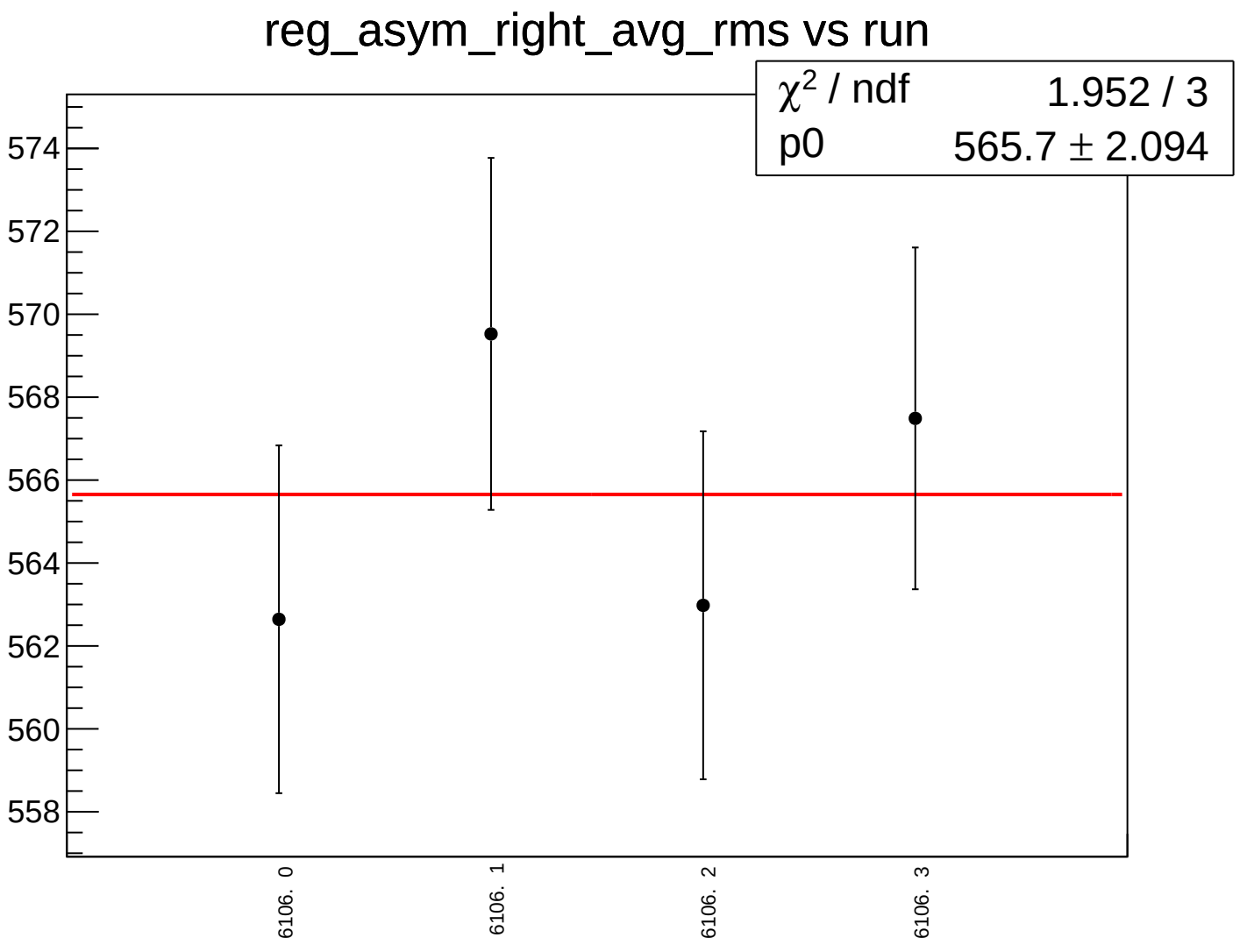

asym_left_dd_mean vs run
×10^3
χ^2 / ndf 6.278 / 3
p0 −8678 ± 2.359e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −106
Std Dev 108
1.5
1
0.5
0
−0.5
−1
−1.5

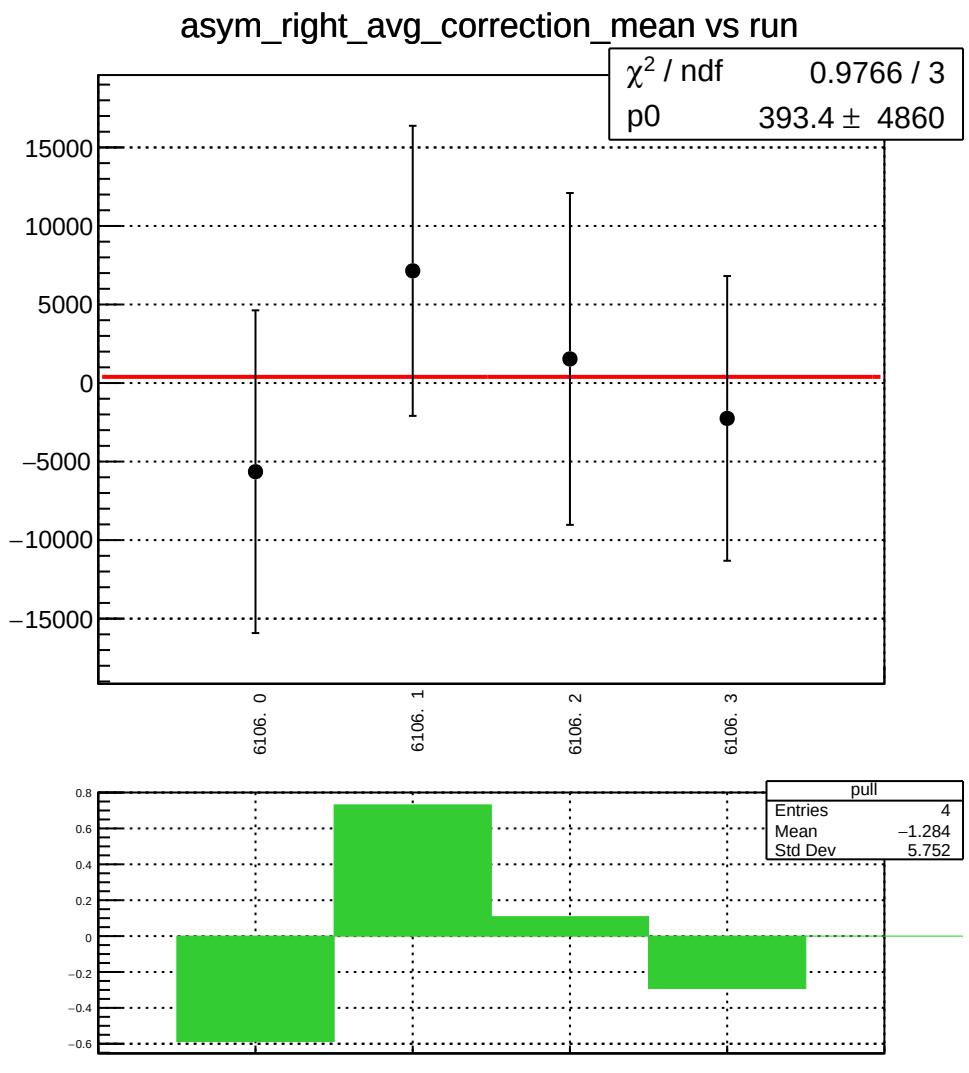

pull1D
Entries 4
Mean −0.01294
Std Dev 1.253
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

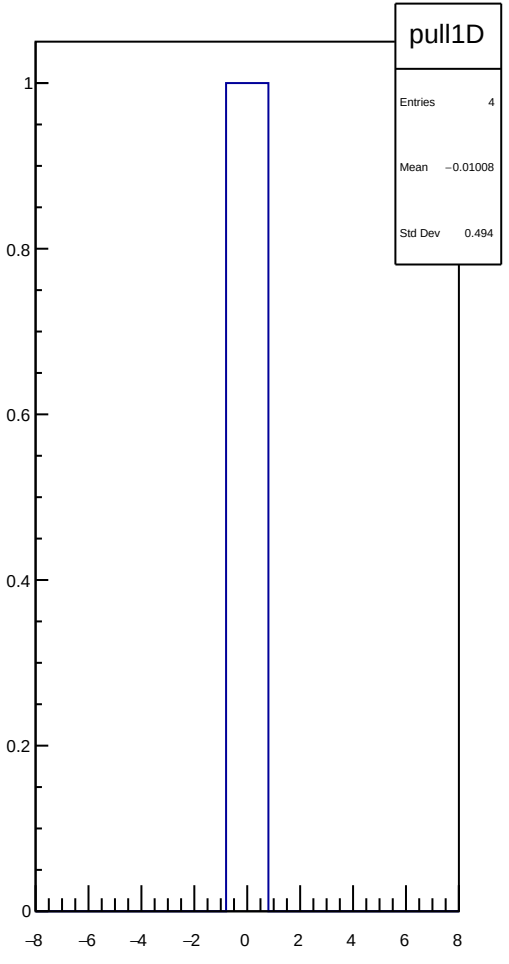

asym_left_dd_rms vs run
χ² / ndf 4.461 / 3
p0 4505 ± 16.68
4580
4560
4540
4520
4500
4480
4460
4440
4420
6106. 0
6106. 1
6106. 2
6106. 3

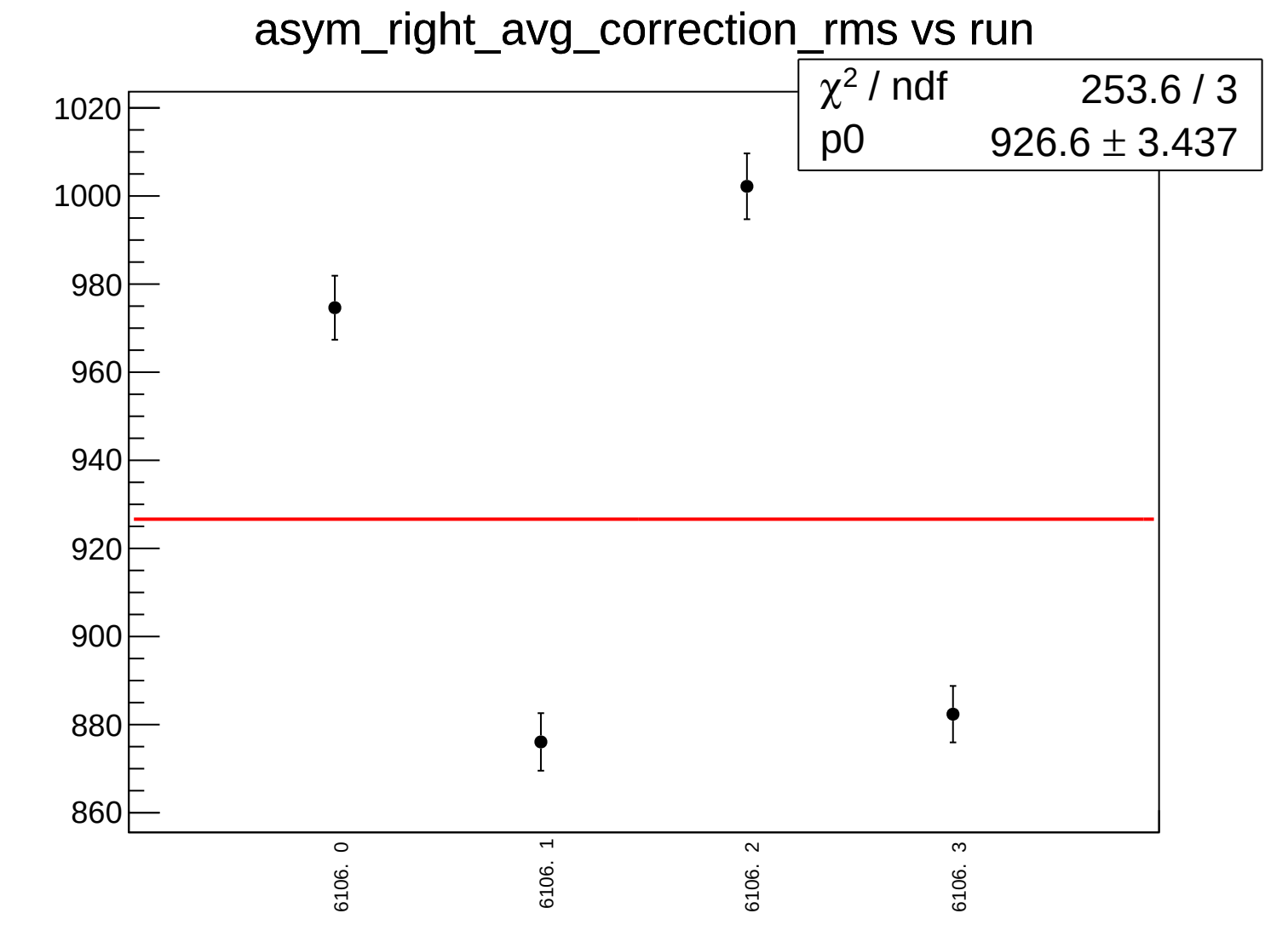

reg_asym_right_avg_mean vs run
χ² / ndf 6.262 / 3
p0 2583 ± 2962
20000
15000
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −112.9
Std Dev 115
1.5
1
0.5
0
−0.5
−1
−1.5

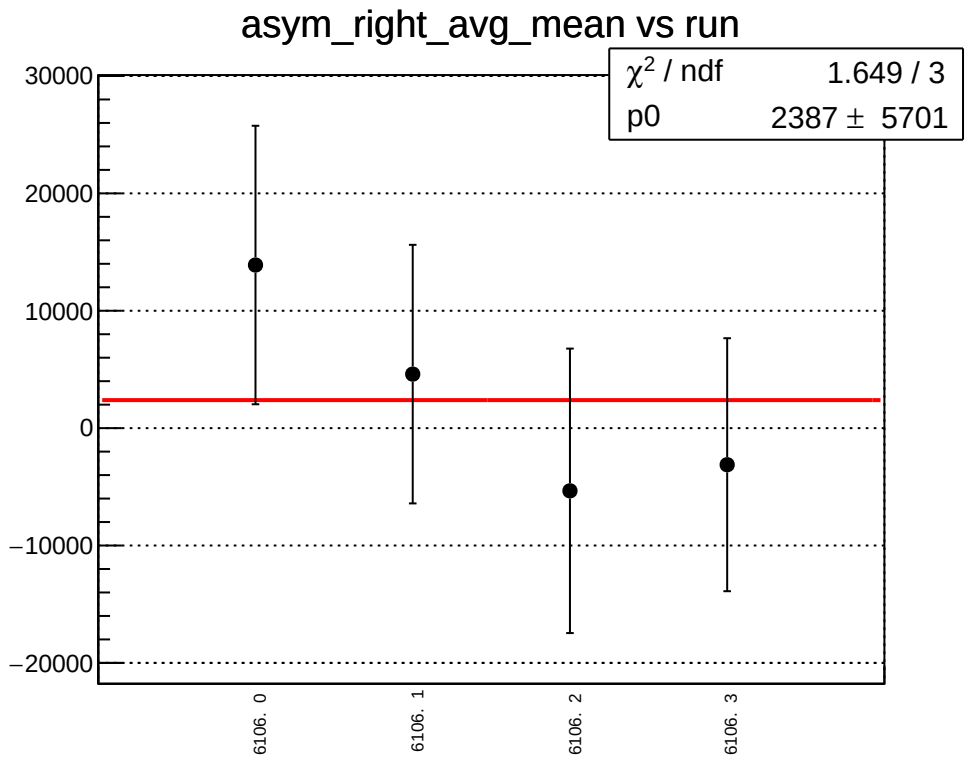

pull1D
Entries 4
Mean 0.0104
Std Dev 1.251
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

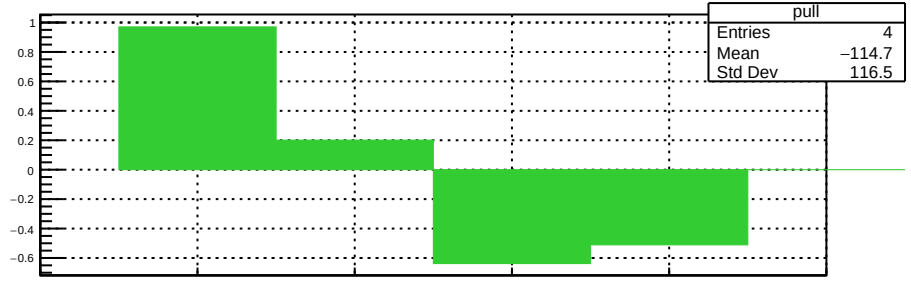

reg_asym_right_avg_rms vs run
χ^2 / ndf 1.952 / 3
p0 565.7 ± 2.094
574
572
570
568
566
564
562
560
558
6106. 0
6106. 1
6106. 2
6106. 3

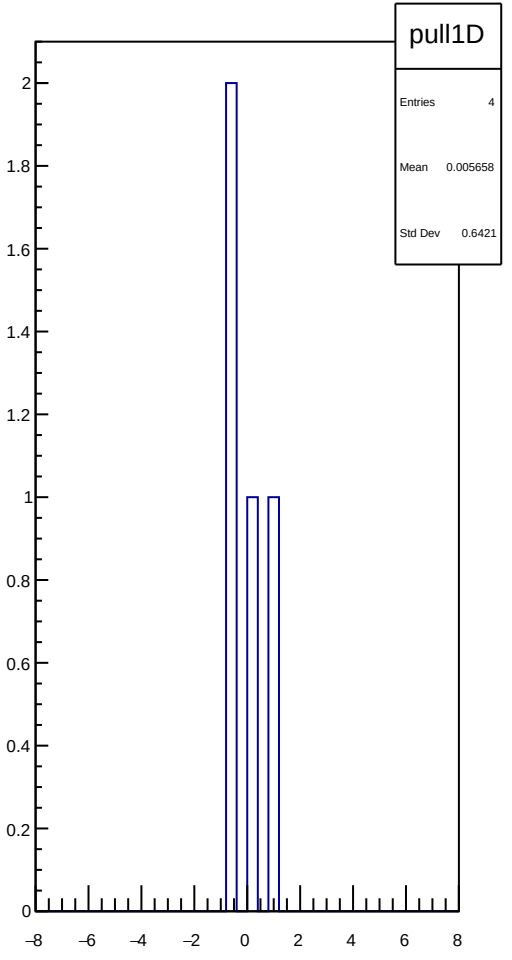

asym_right_avg_correction_mean vs run
χ² / ndf 0.9766 / 3
p0 393.4 ± 4860
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.284
Std Dev 5.752
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

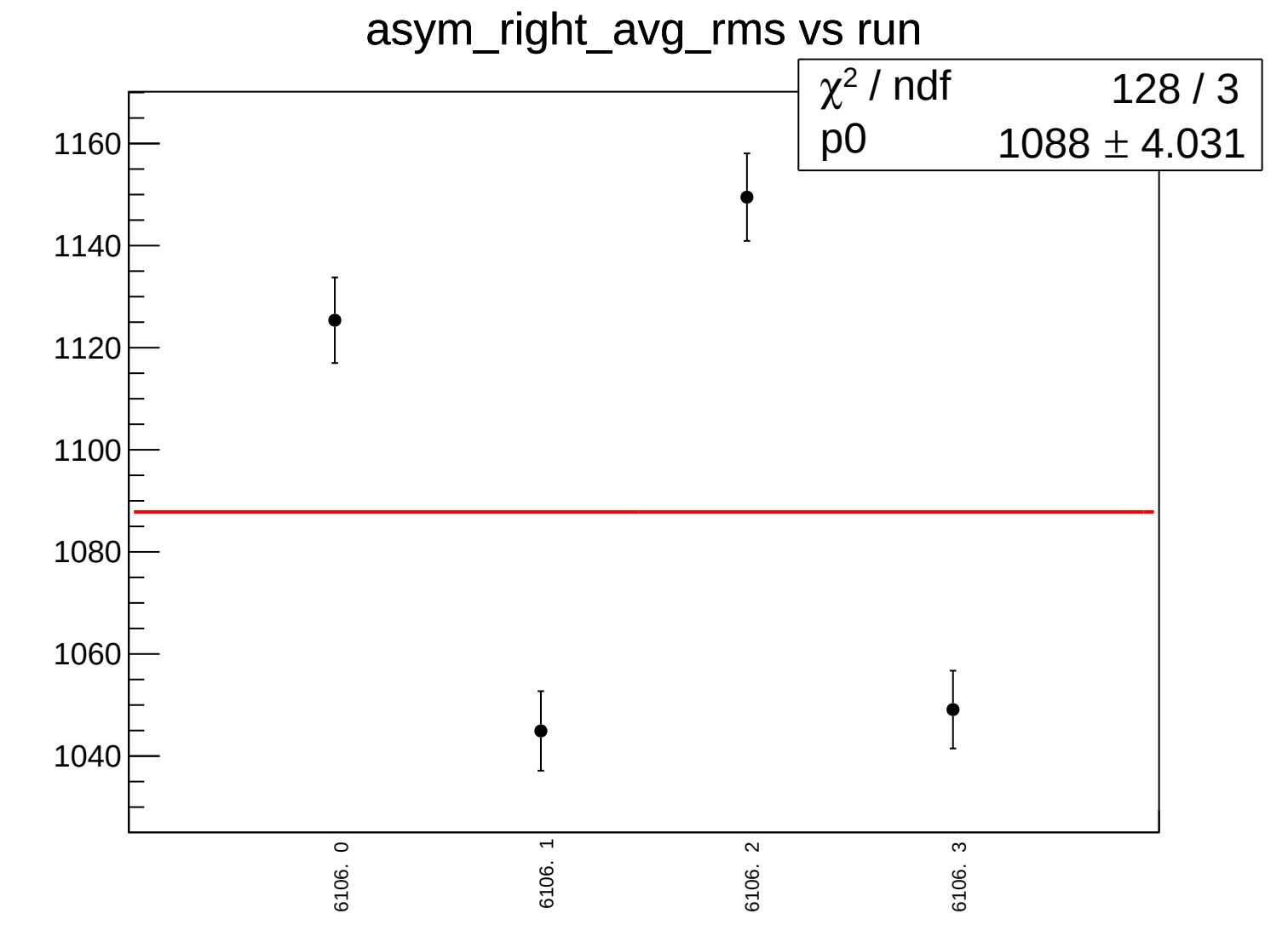

pull1D
Entries 4
Mean −0.01008
Std Dev 0.494
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

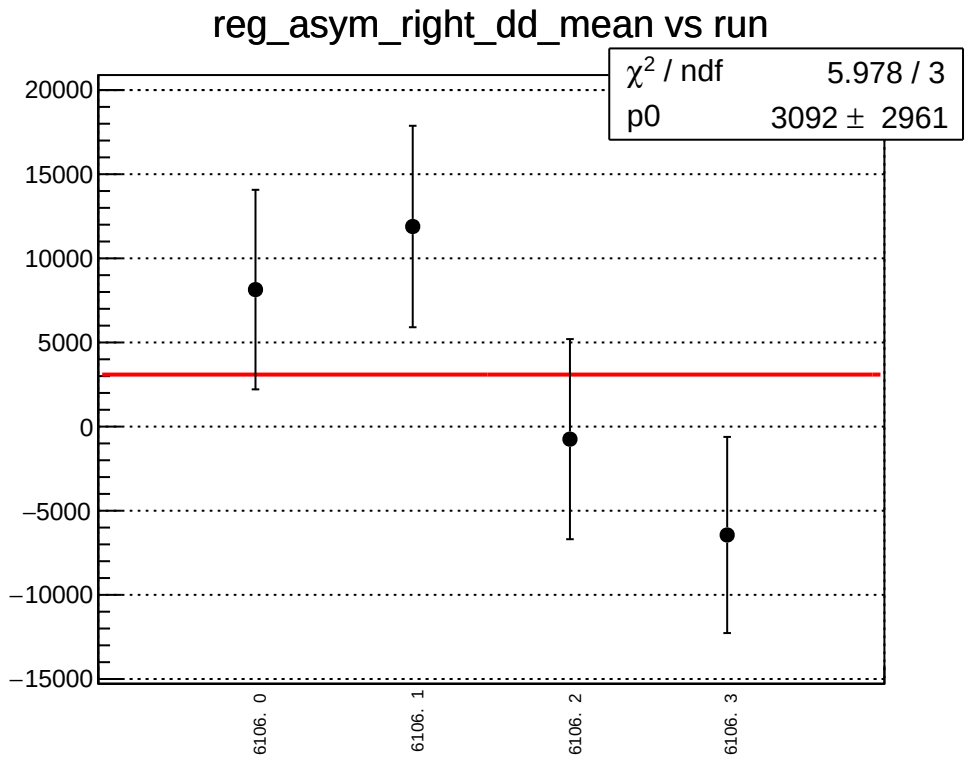

asym_right_avg_correction_rms vs run
χ² / ndf 253.6 / 3
p0 926.6 ± 3.437
1020
1000
980
960
940
920
900
880
860
6106. 0
6106. 1
6106. 2
6106. 3

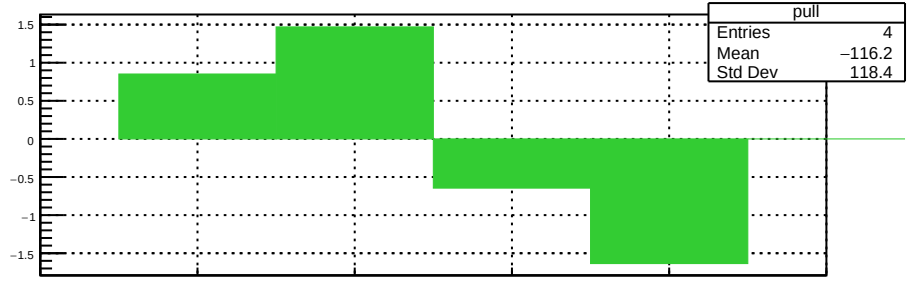

asym_right_avg_mean vs run
χ² / ndf 1.649 / 3
p0 2387 ± 5701
30000
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3

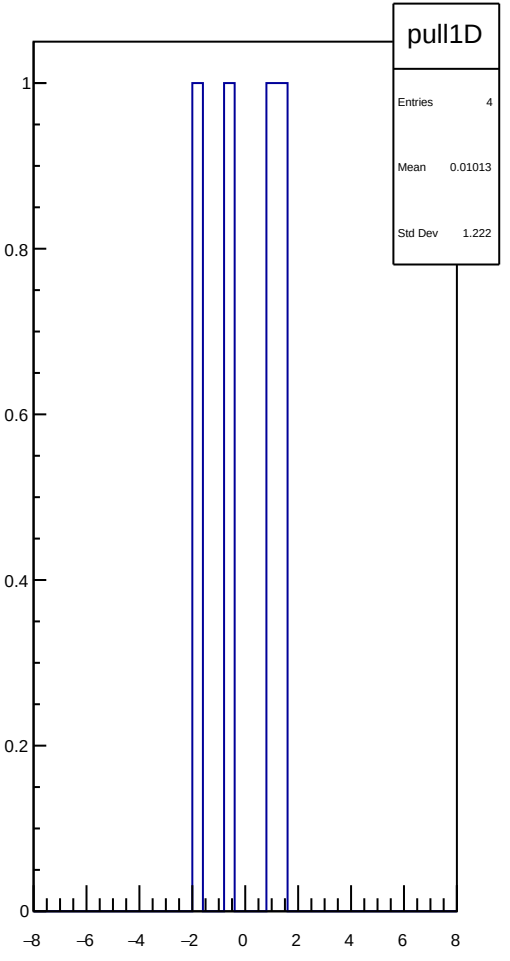

pull
Entries 4
Mean −114.7
Std Dev 116.5
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

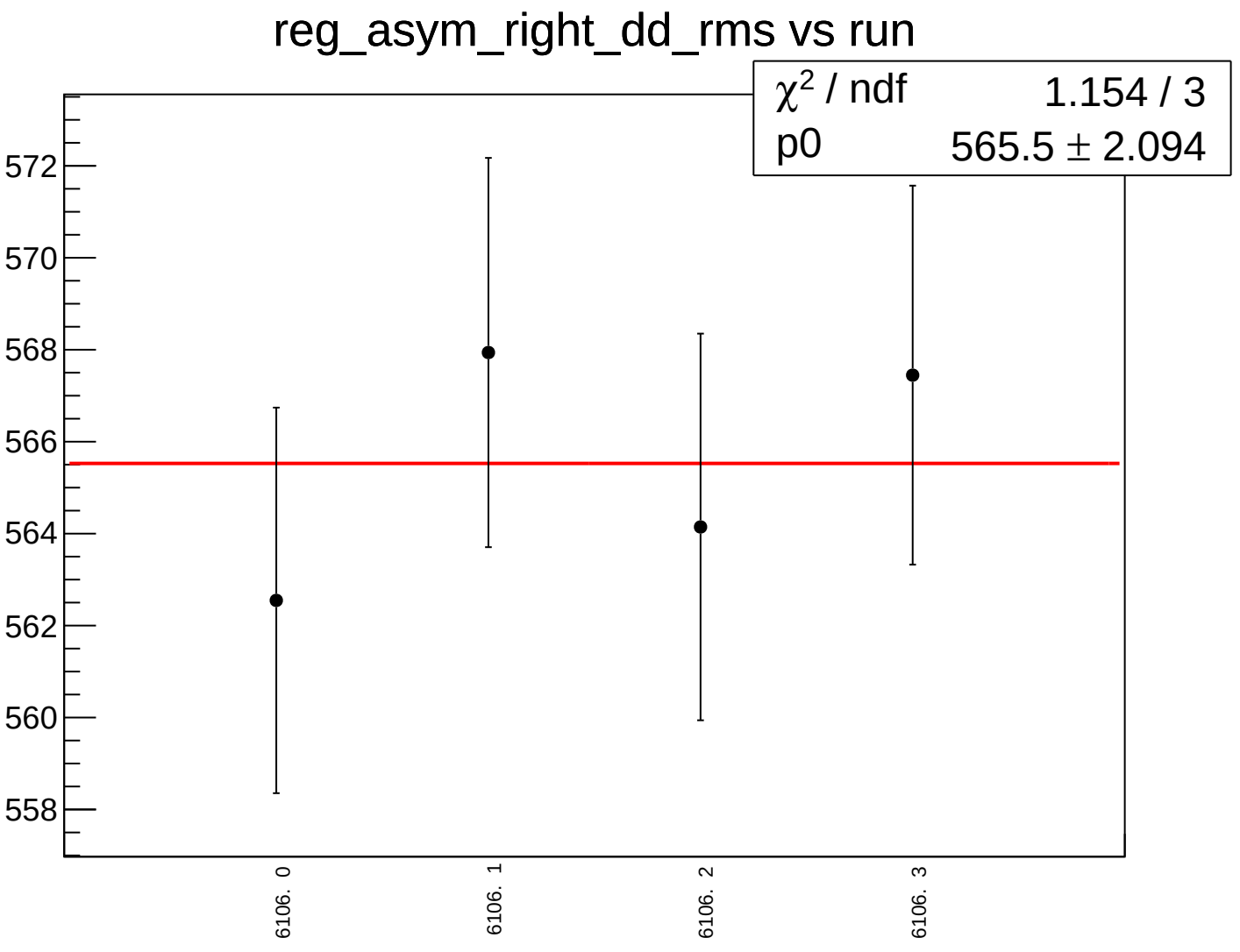

pull1D
Entries 4
Mean 0.005658
Std Dev 0.6421
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

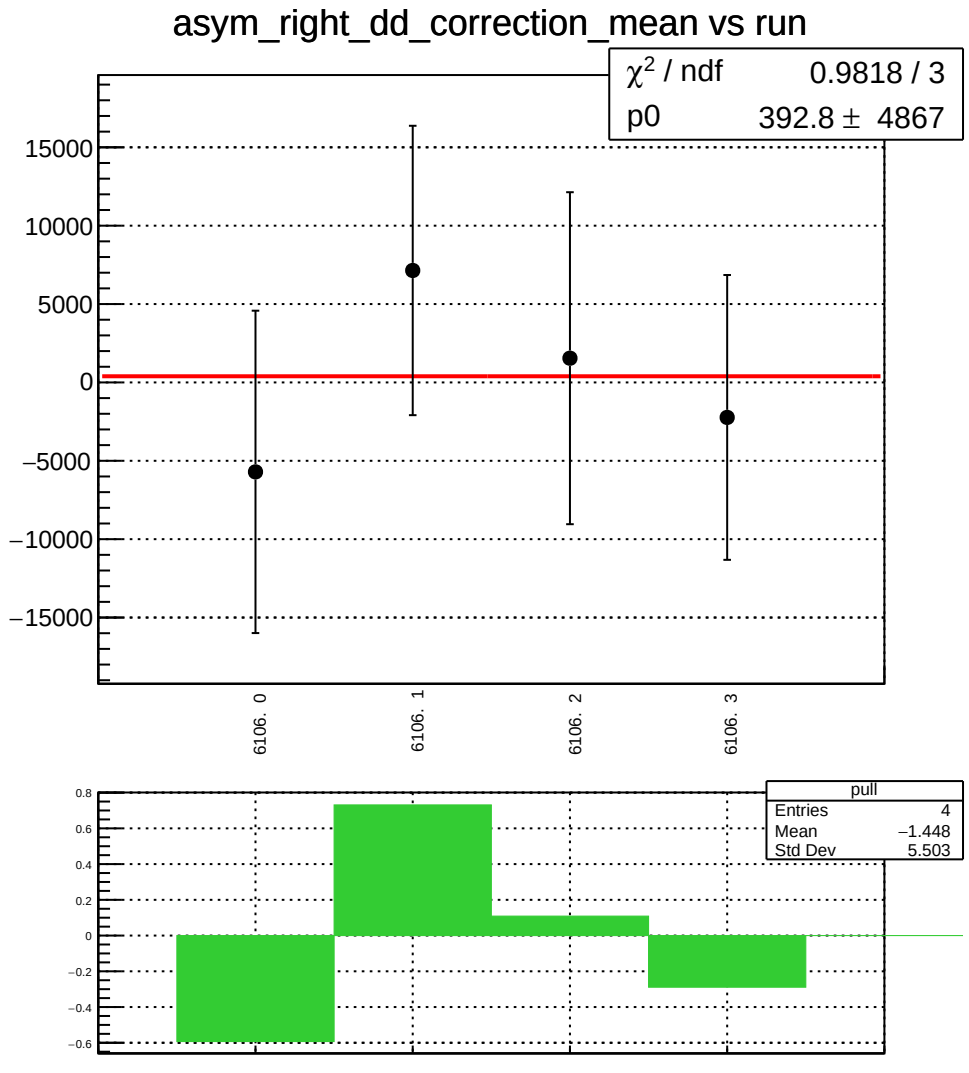

asym_right_avg_rms vs run
χ² / ndf 128 / 3
p0 1088 ± 4.031
1160
1140
1120
1100
1080
1060
1040
6106. 0
6106. 1
6106. 2
6106. 3

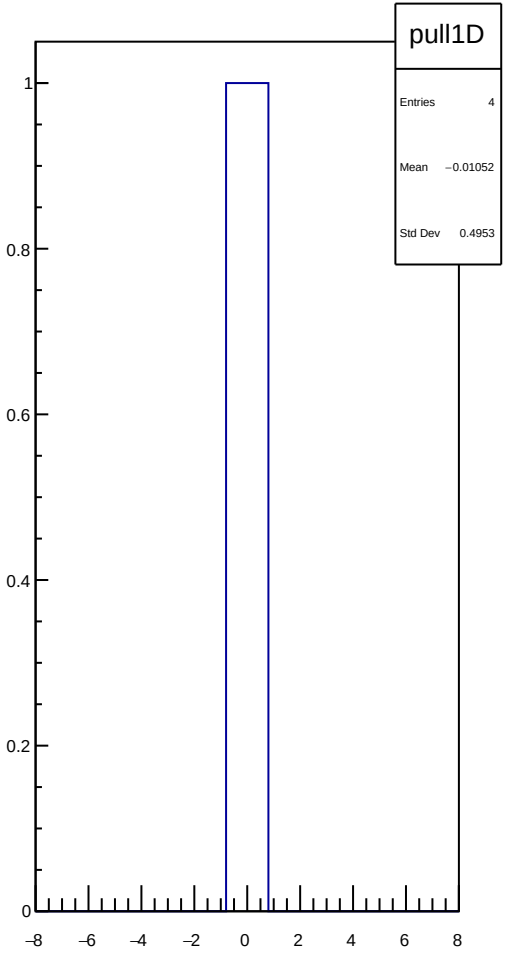

reg_asym_right_dd_mean vs run
χ² / ndf 5.978 / 3
p0 3092 ± 2961
20000
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3

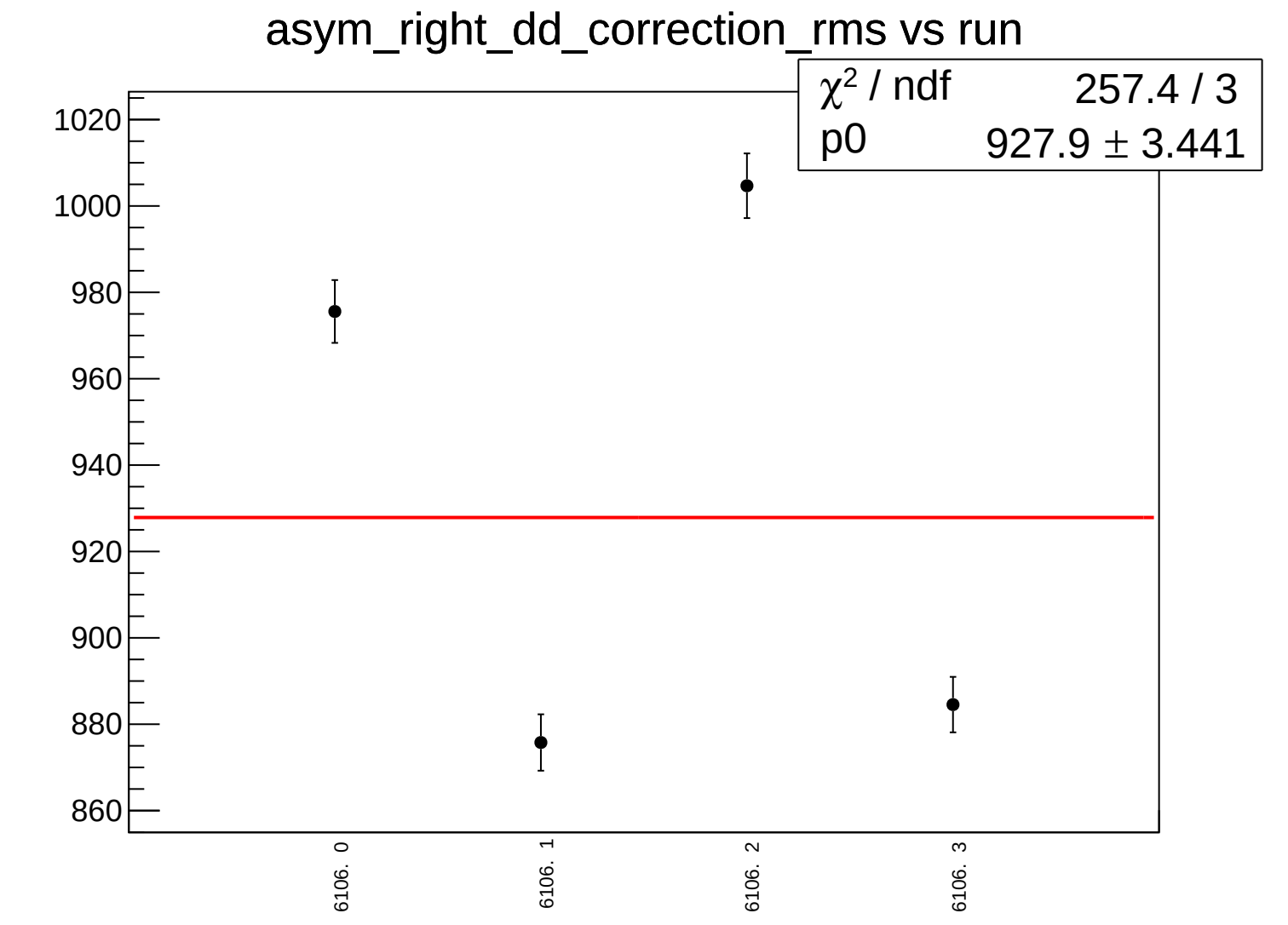

pull
Entries 4
Mean −116.2
Std Dev 118.4
1.5
1
0.5
0
−0.5
−1
−1.5

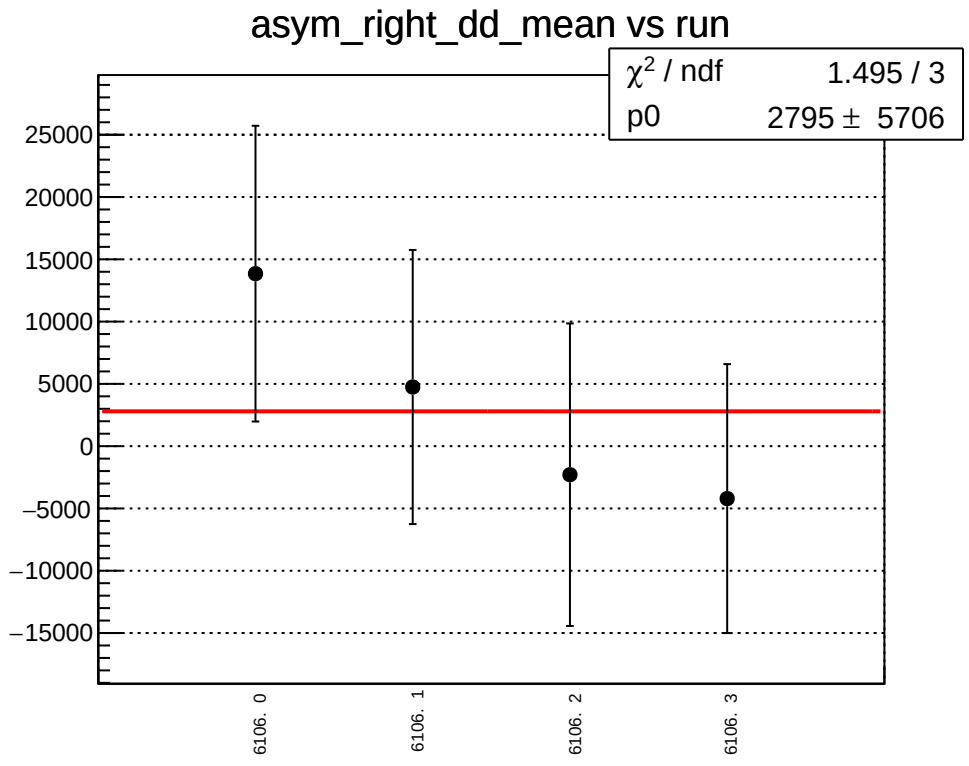

pull1D
Entries 4
Mean 0.01013
Std Dev 1.222
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

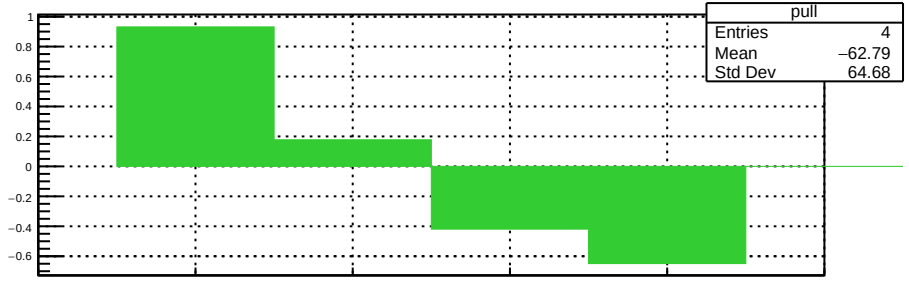

reg_asym_right_dd_rms vs run
χ² / ndf 1.154 / 3
p0 565.5 ± 2.094
572
570
568
566
564
562
560
558
6106. 0
6106. 1
6106. 2
6106. 3

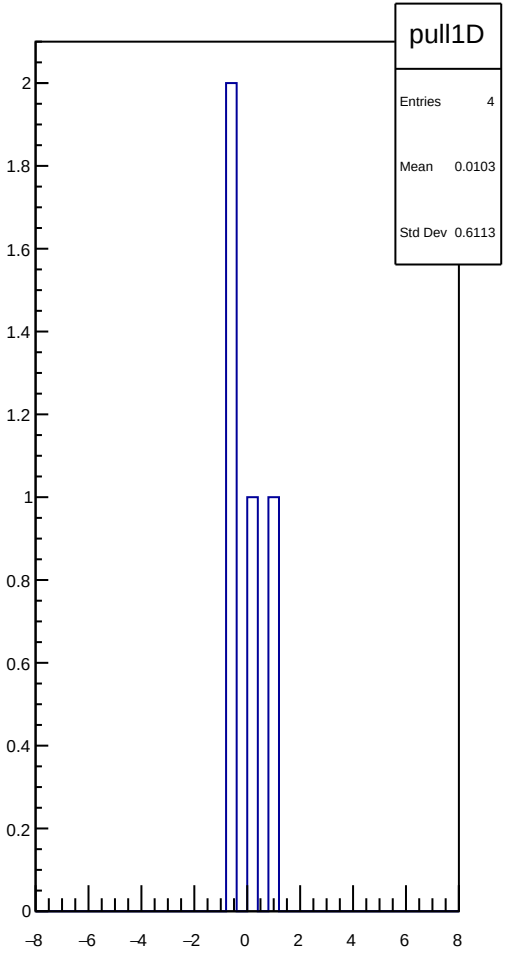

asym_right_dd_correction_mean vs run
χ² / ndf 0.9818 / 3
p0 392.8 ± 4867
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.448
Std Dev 5.503
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

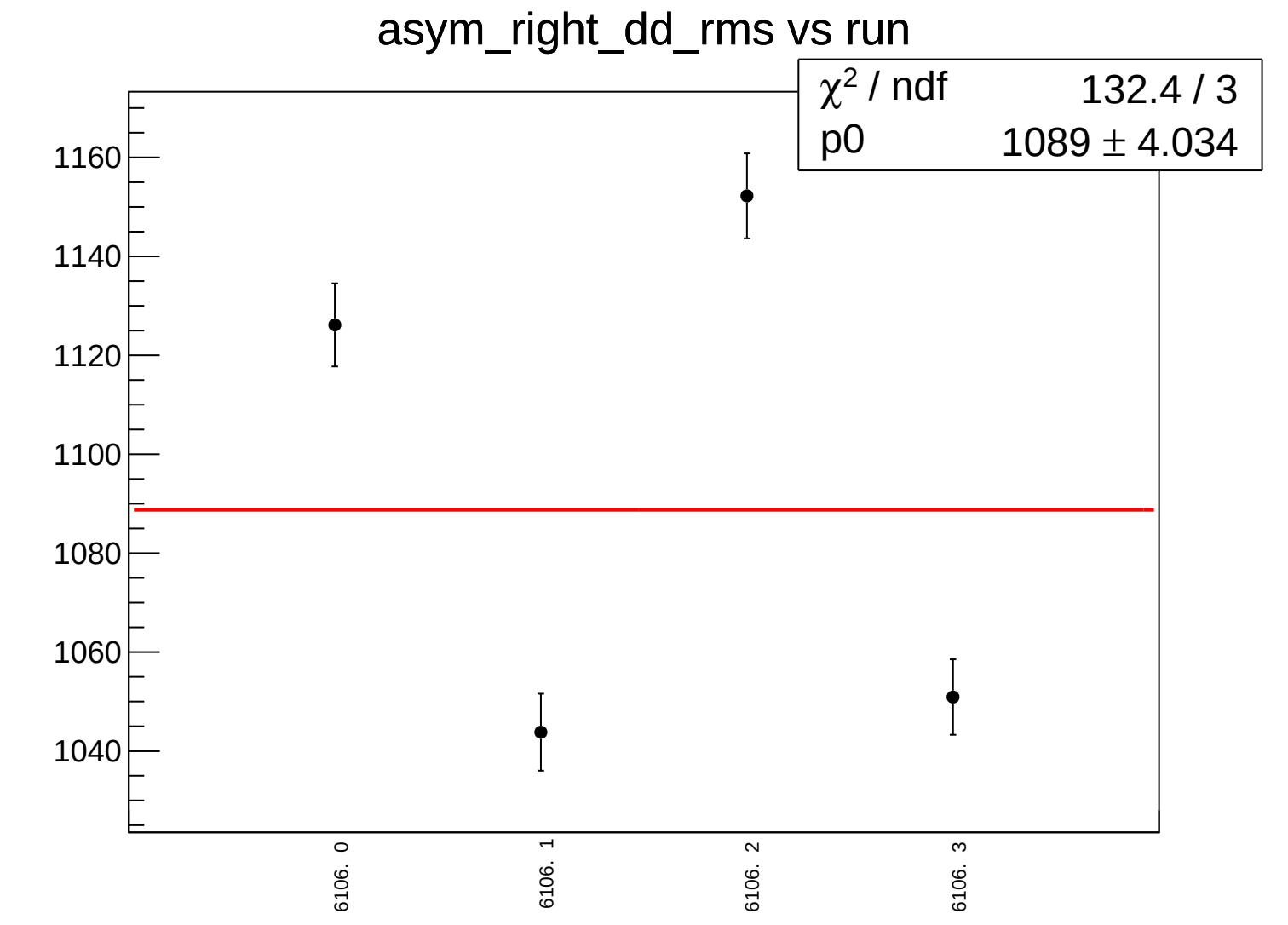

pull1D
Entries 4
Mean −0.01052
Std Dev 0.4953
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

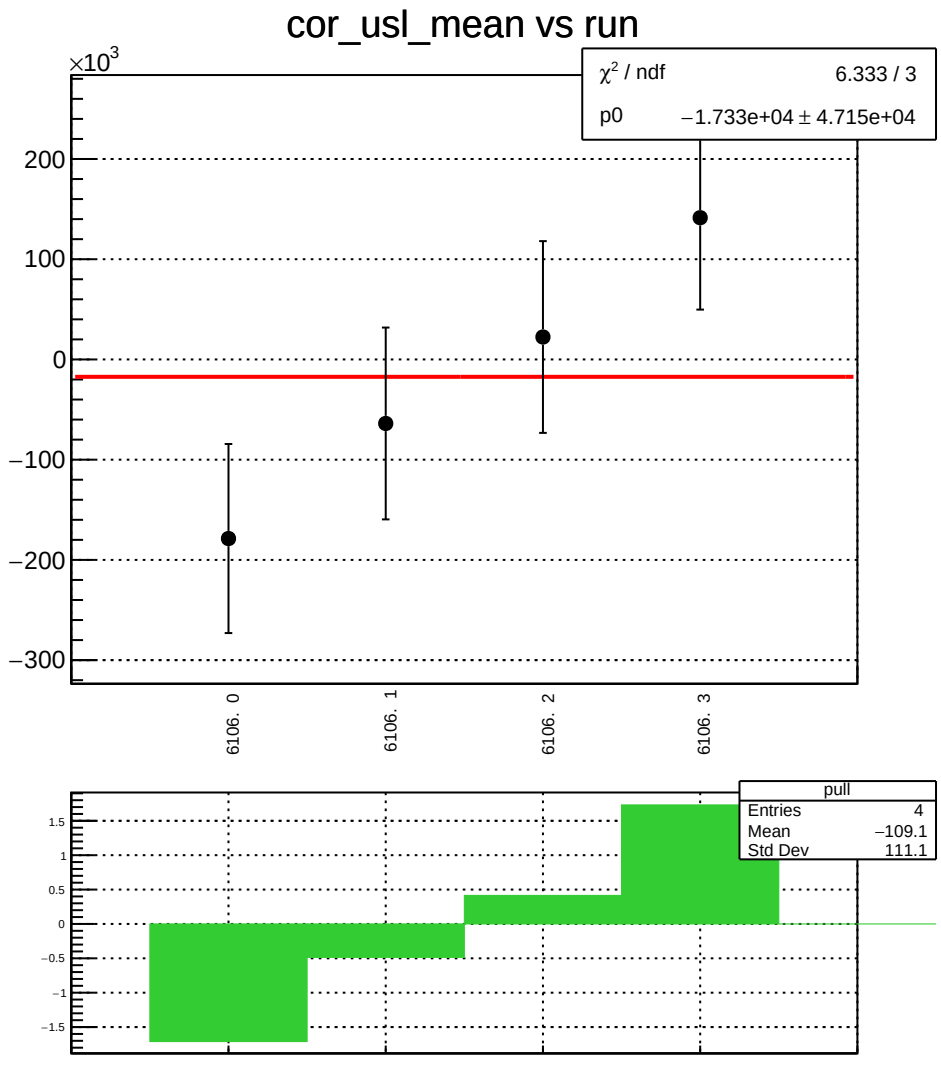

asym_right_dd_correction_rms vs run
χ² / ndf 257.4 / 3
p0 927.9 ± 3.441
1020
1000
980
960
940
920
900
880
860
6106. 0
6106. 1
6106. 2
6106. 3

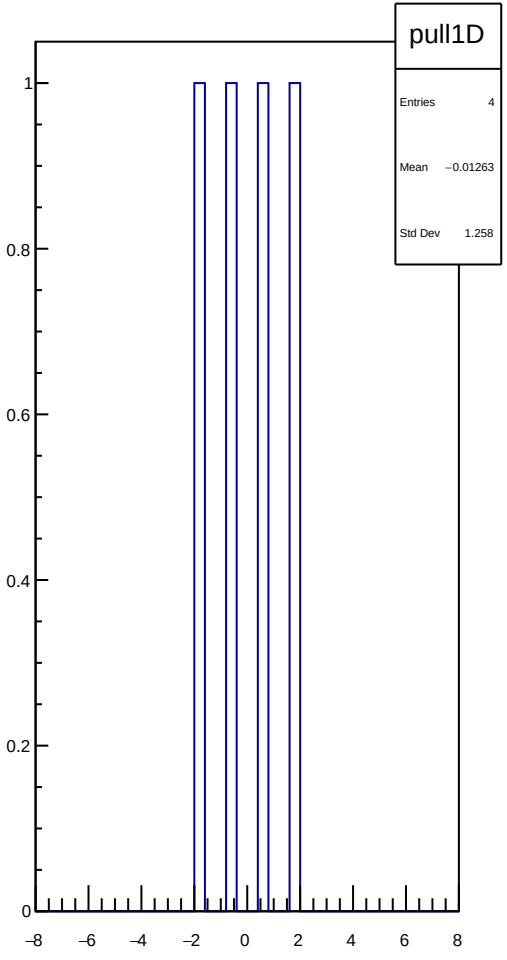

asym_right_dd_mean vs run
χ² / ndf 1.495 / 3
p0 2795 ± 5706
25000
20000
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3

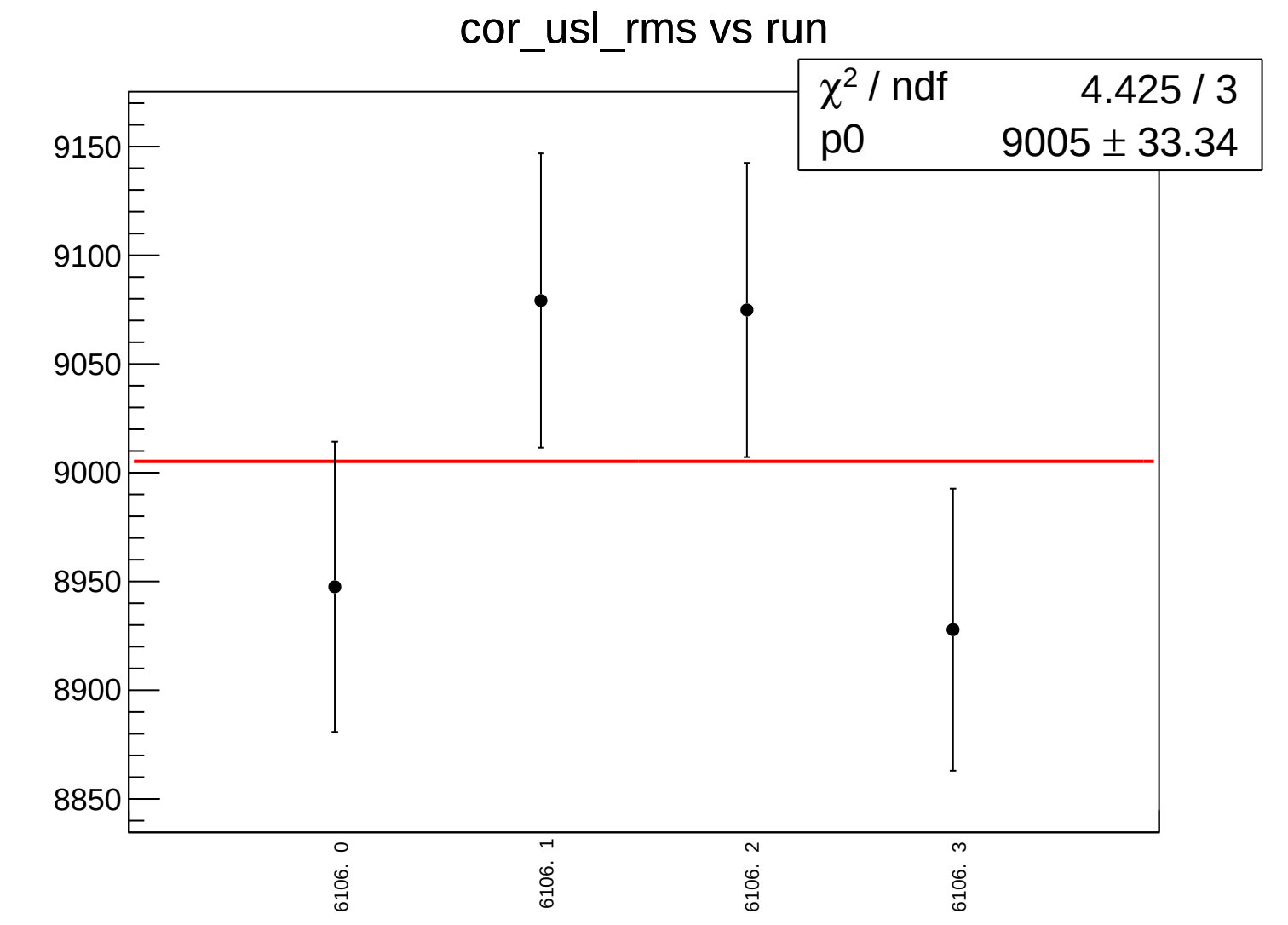

pull
Entries 4
Mean −62.79
Std Dev 64.68
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

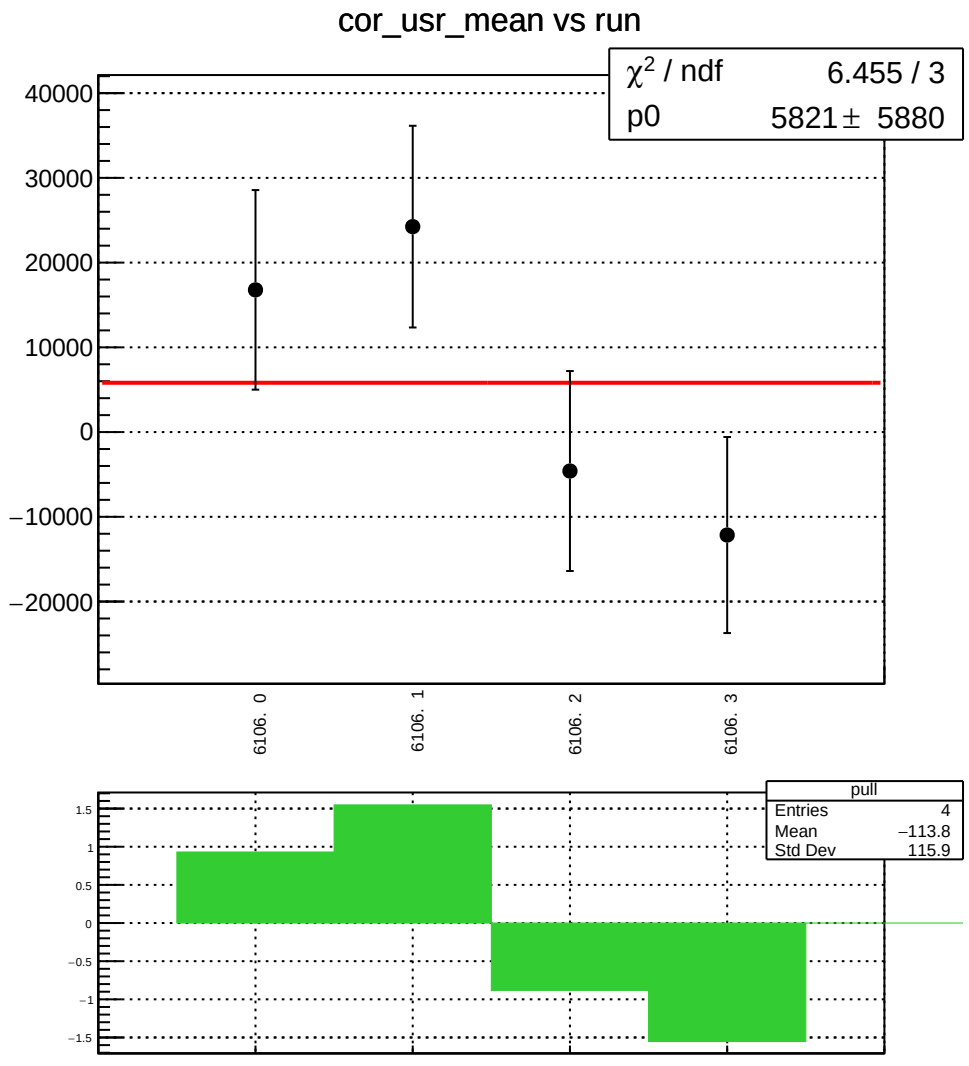

pull1D
Entries 4
Mean 0.0103
Std Dev 0.6113
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

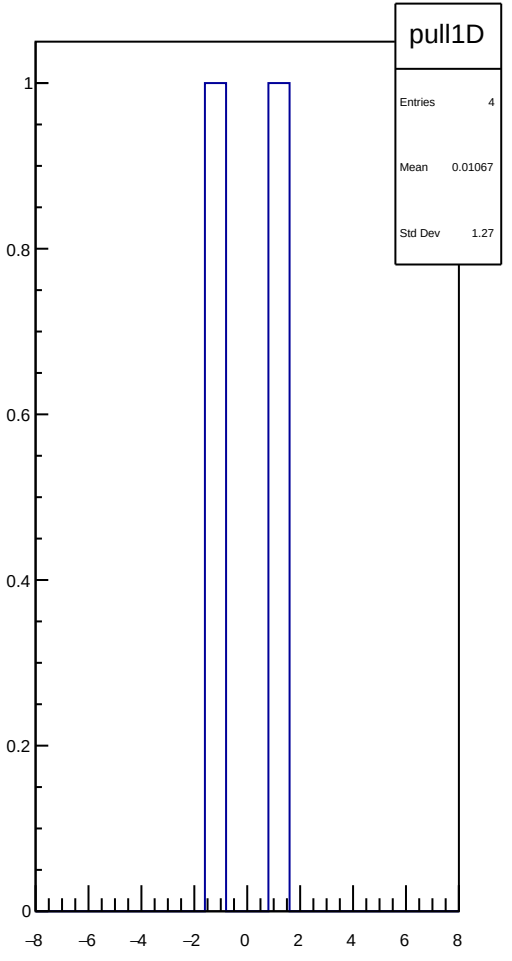

asym_right_dd_rms vs run
χ² / ndf 132.4 / 3
p0 1089 ± 4.034
1160
1140
1120
1100
1080
1060
1040
6106. 0
6106. 1
6106. 2
6106. 3

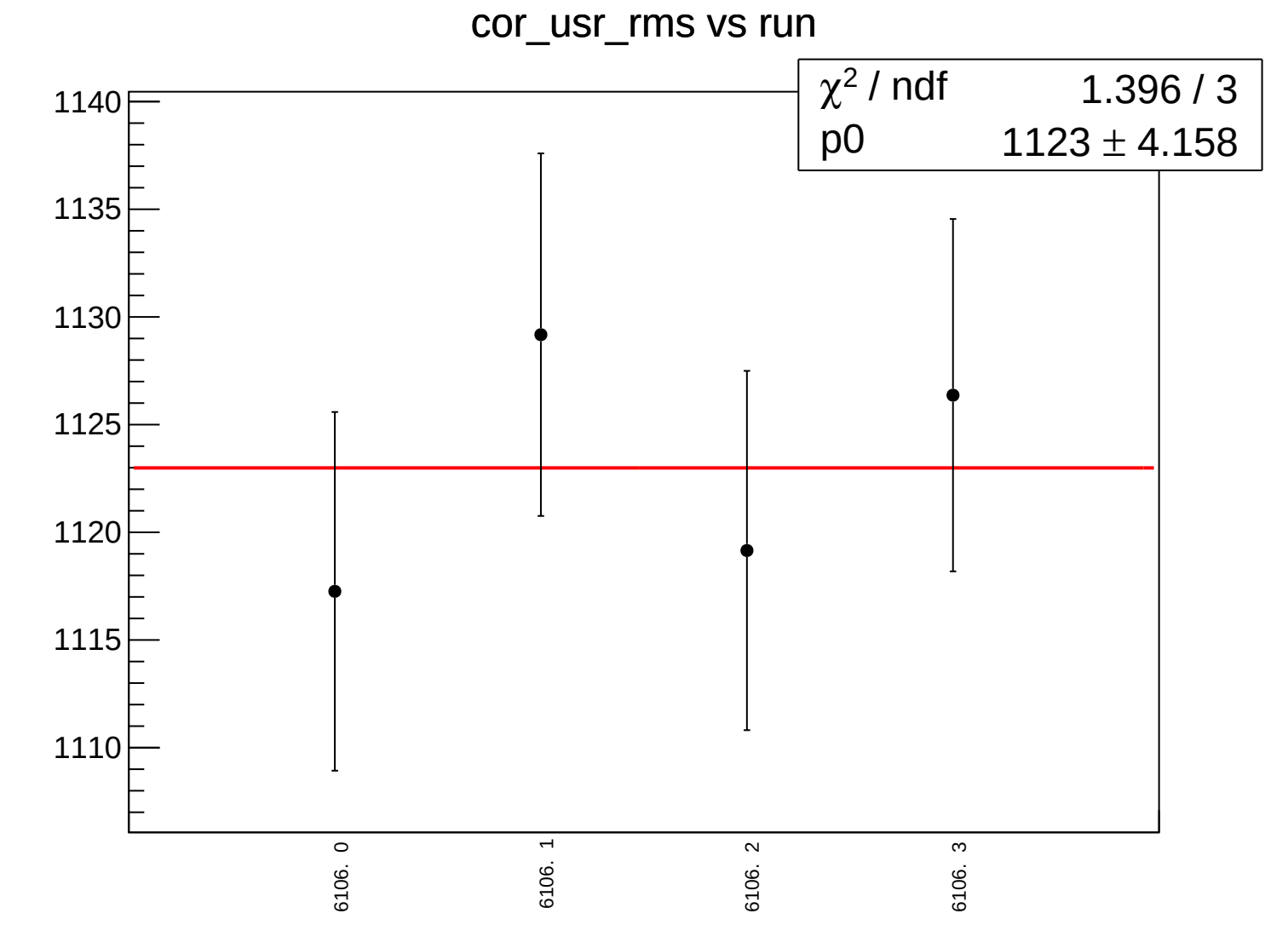

cor_usl_mean vs run
×10^3
χ² / ndf 6.333 / 3
p0 −1.733e+04 ± 4.715e+04
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −109.1
Std Dev 111.1
1.5
1
0.5
0
−0.5
−1
−1.5

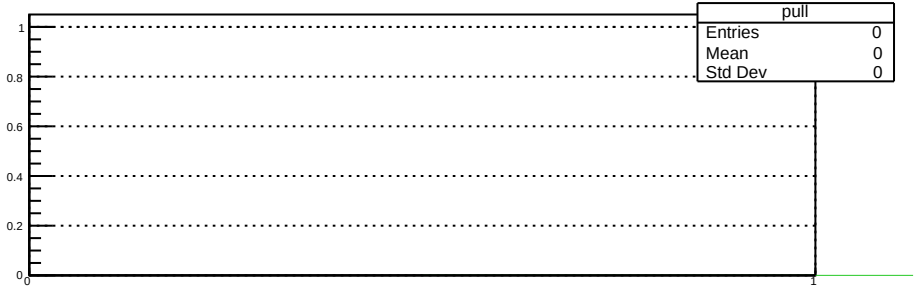

pull1D
Entries 4
Mean −0.01263
Std Dev 1.258
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

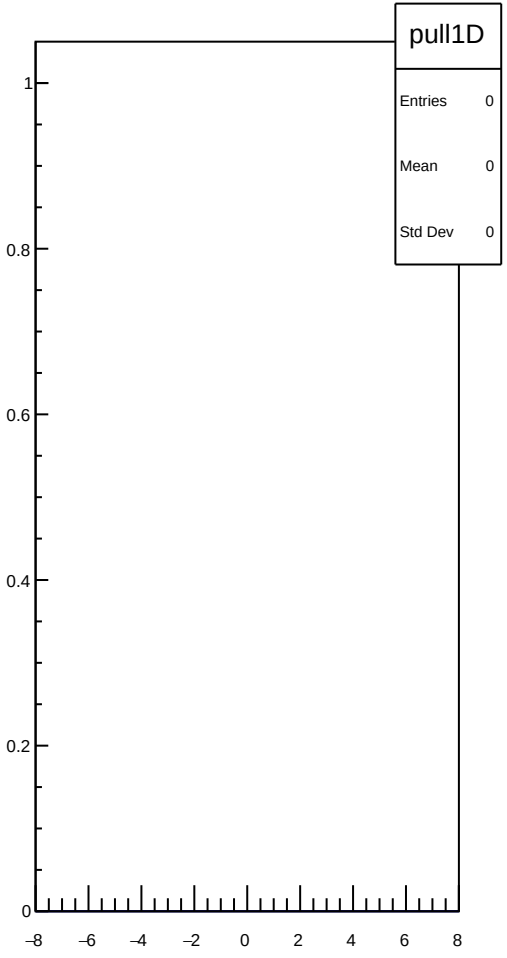

cor_usl_rms vs run
χ² / ndf 4.425 / 3
p0 9005 ± 33.34
9150
9100
9050
9000
8950
8900
8850
6106. 0
6106. 1
6106. 2
6106. 3

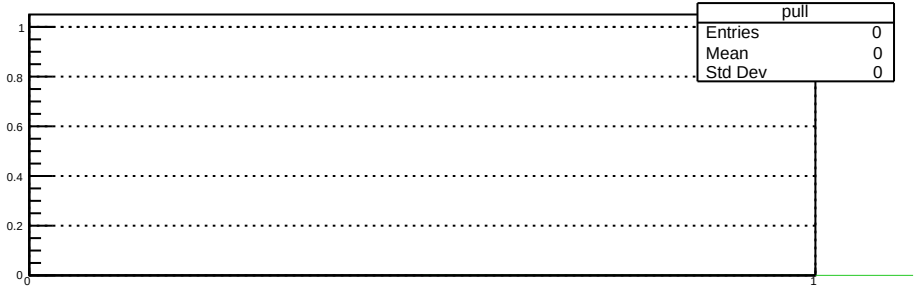

cor_usr_mean vs run
χ² / ndf 6.455 / 3
p0 5821 ± 5880
40000
30000
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −113.8
Std Dev 115.9
1.5
1
0.5
0
−0.5
−1
−1.5

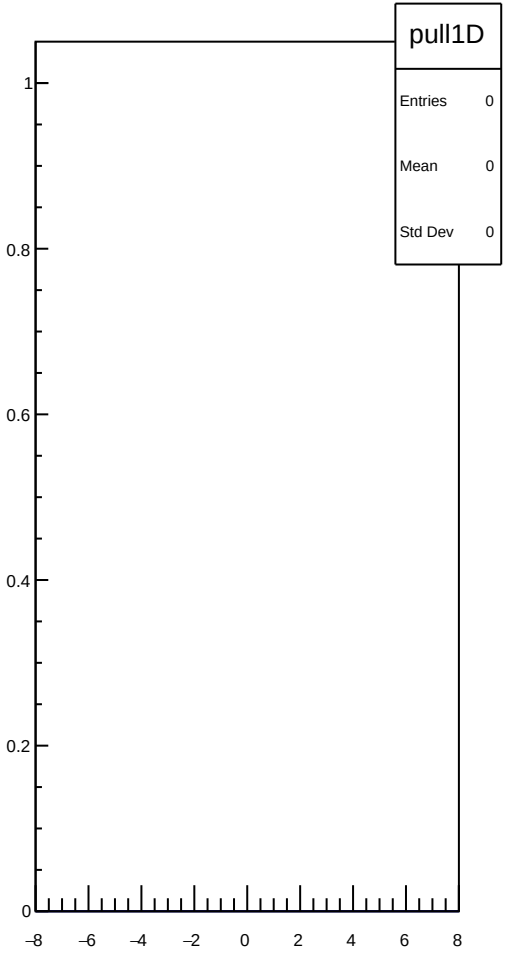

pull1D
Entries 4
Mean 0.01067
Std Dev 1.27
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

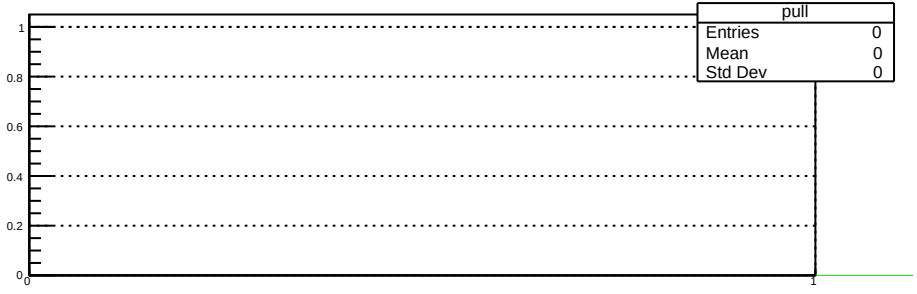

cor_usr_rms vs run
χ² / ndf 1.396 / 3
p0 1123 ± 4.158
1140
1135
1130
1125
1120
1115
1110
6106. 0
6106. 1
6106. 2
6106. 3

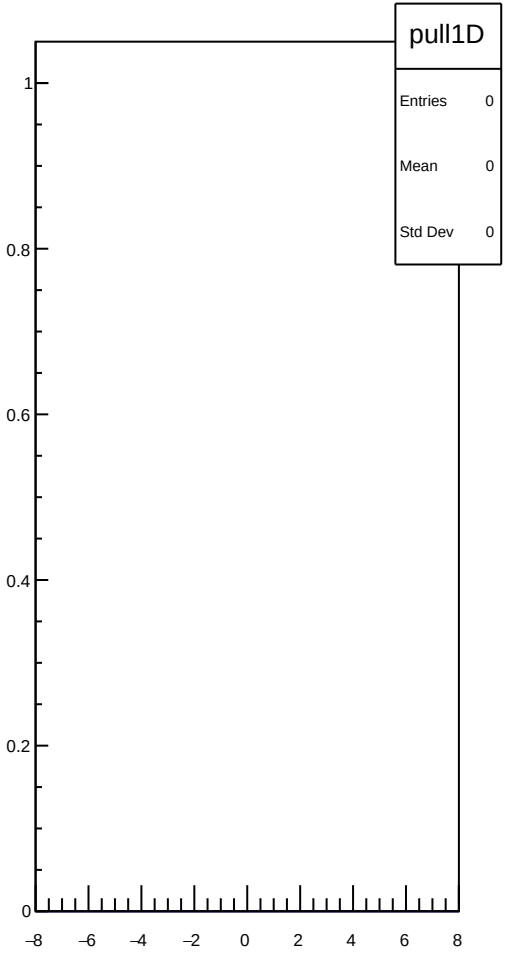

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

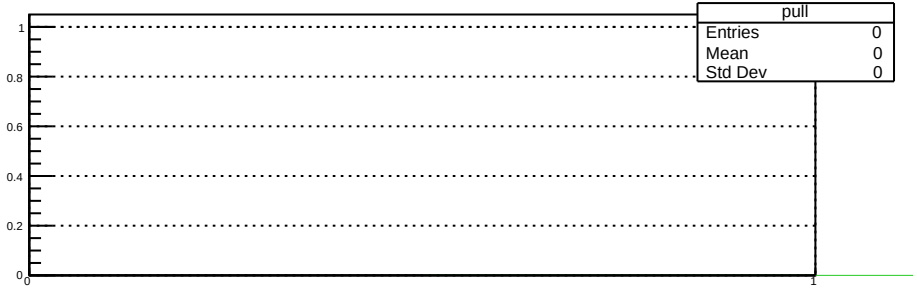

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

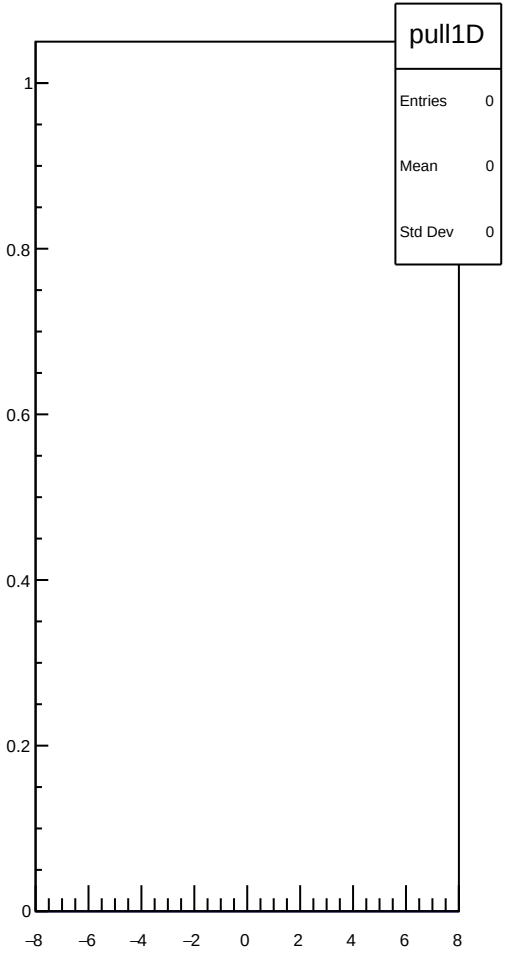

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

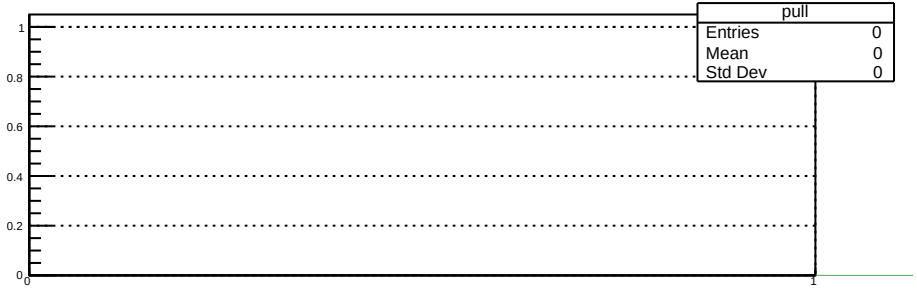

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

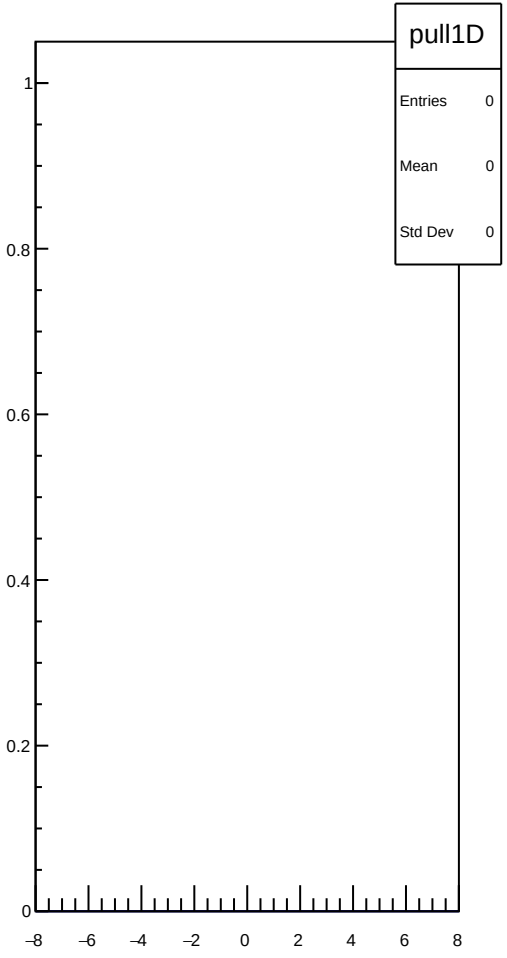

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

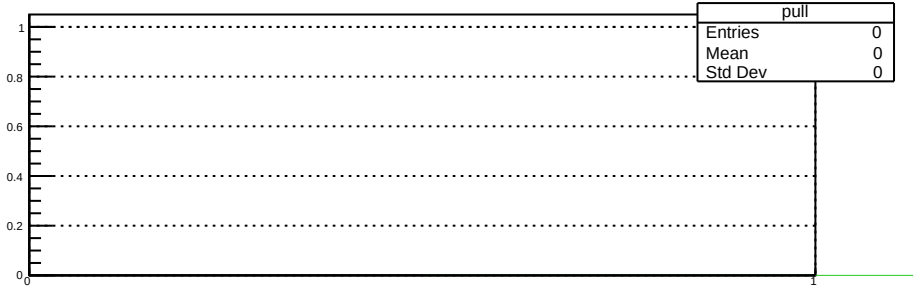

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

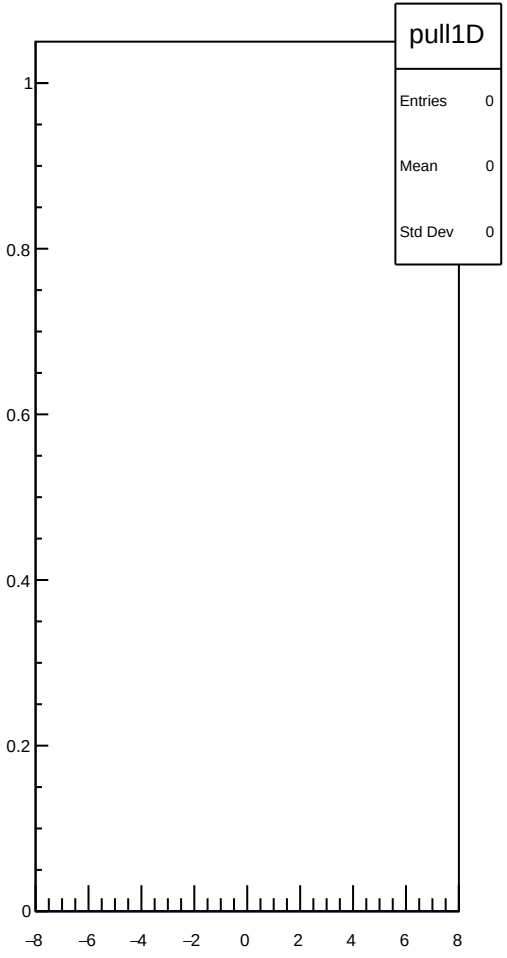

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

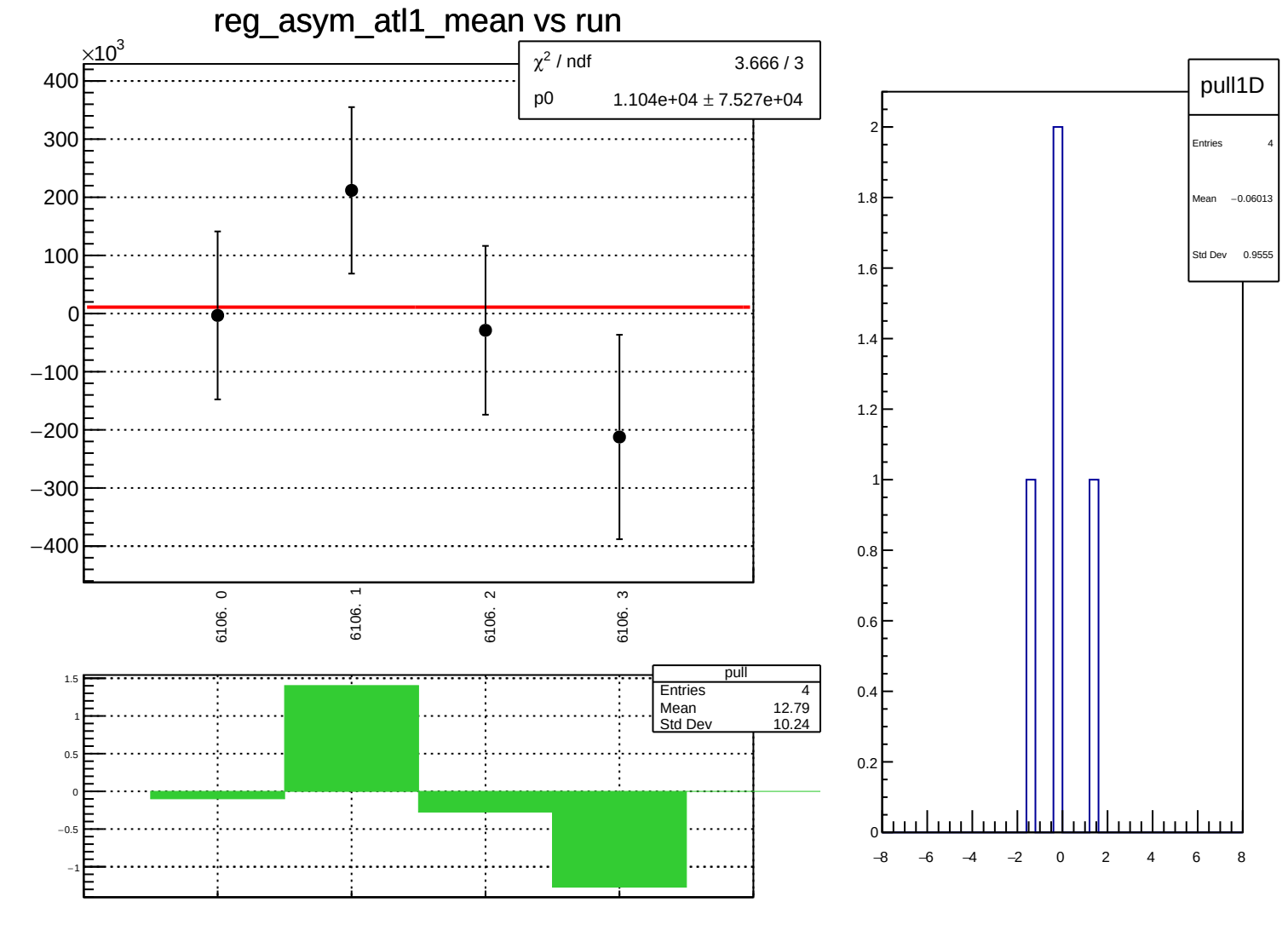

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

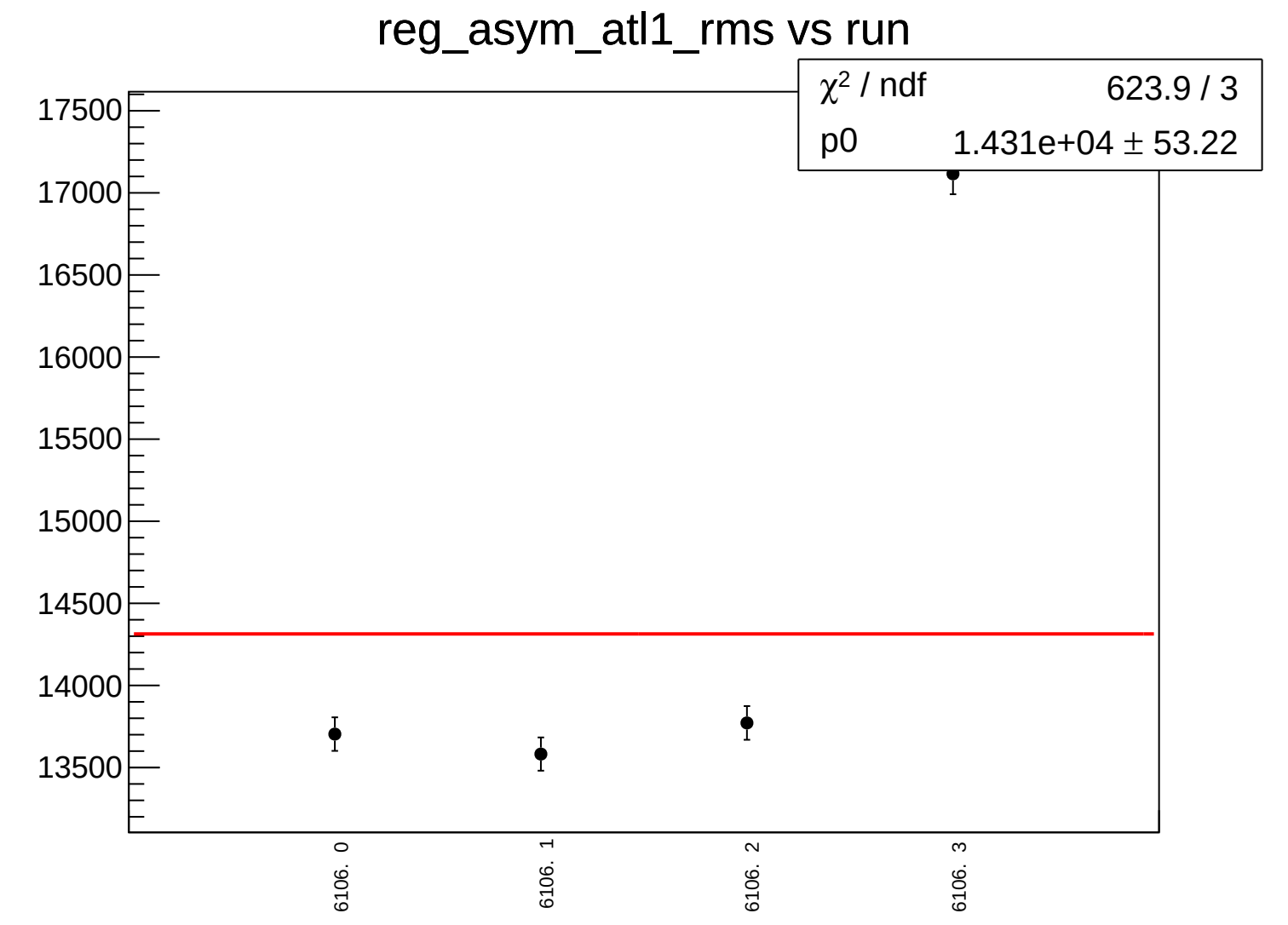

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

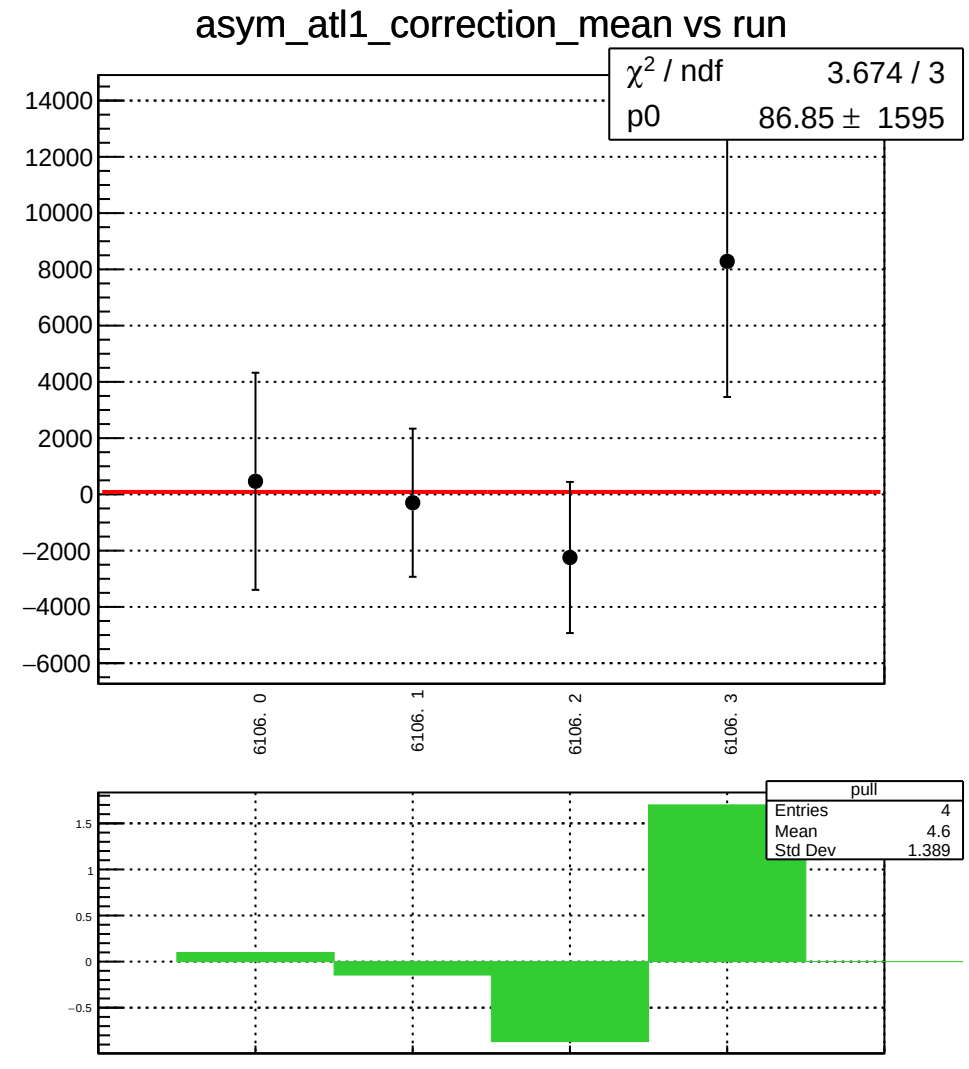

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

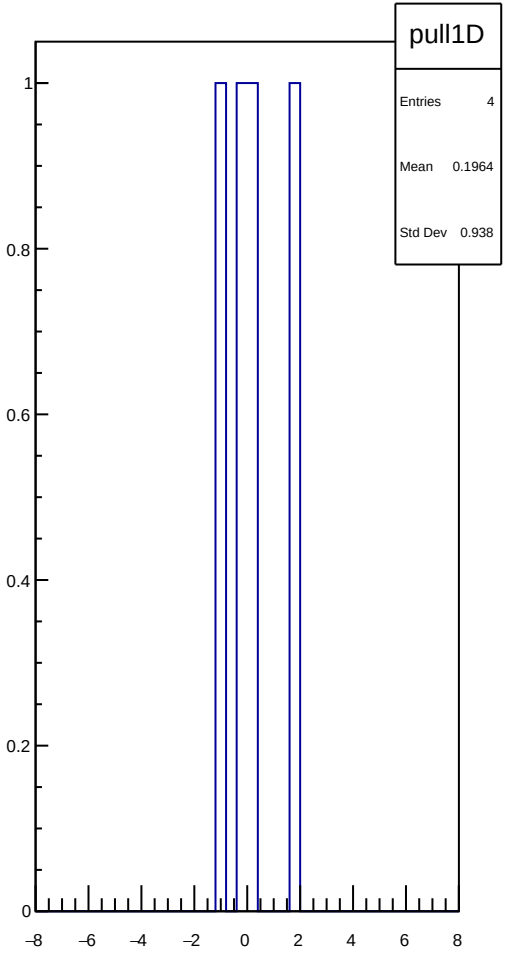

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

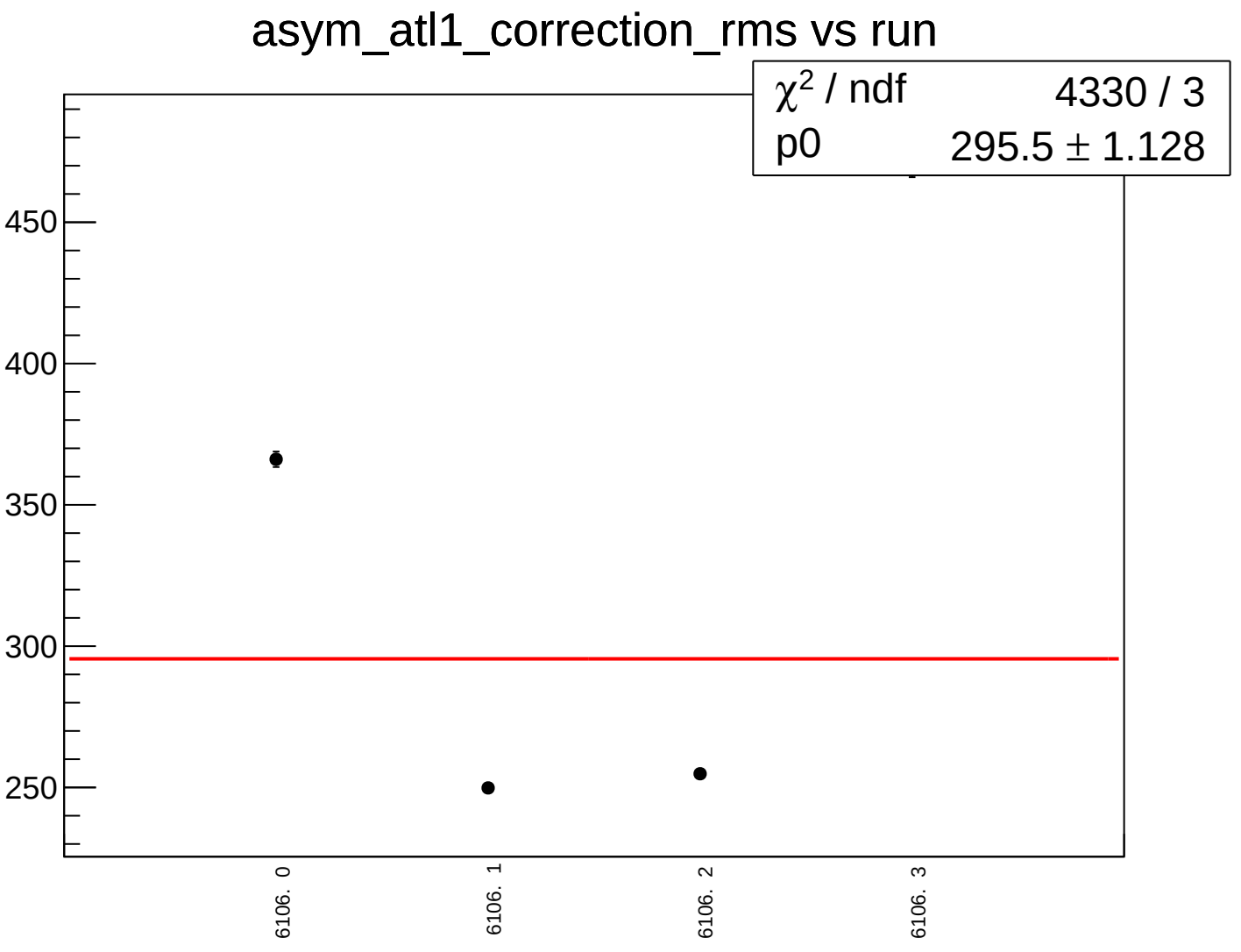

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

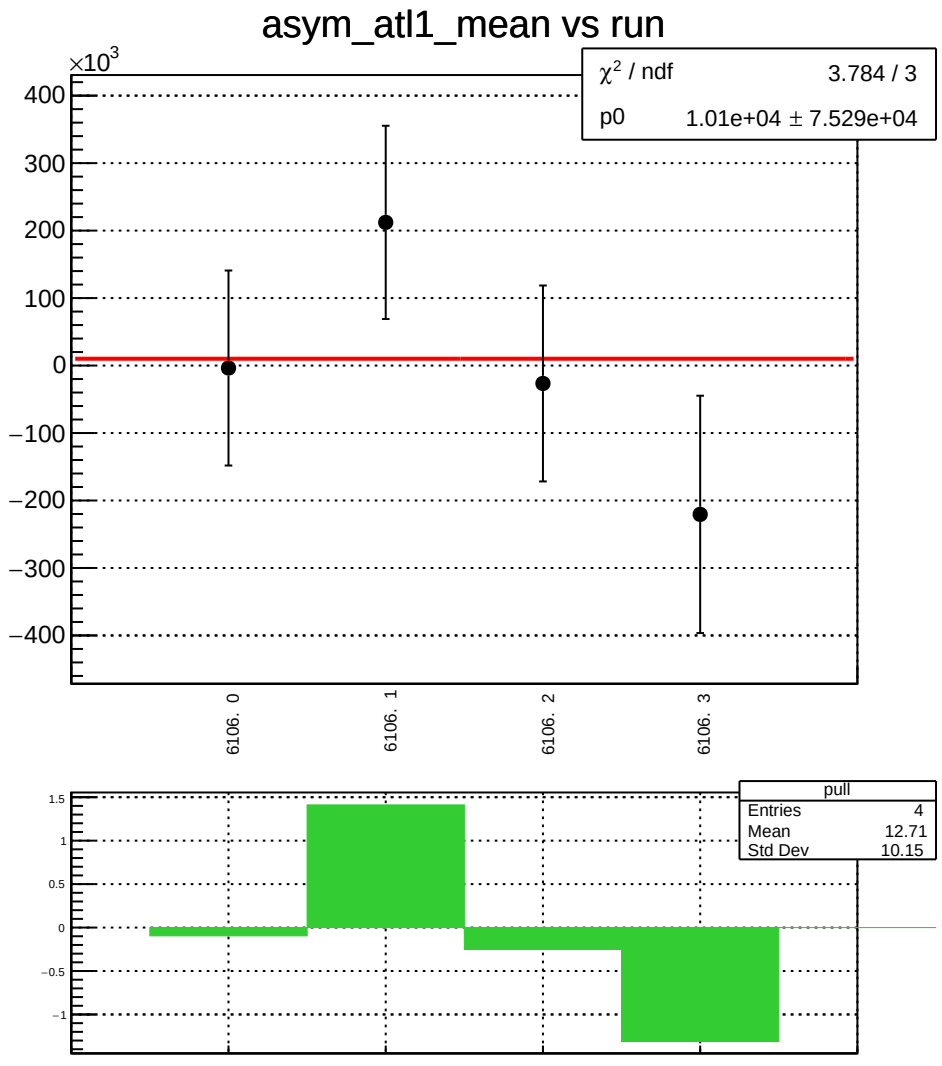

reg_asym_atl1_mean vs run
×10^3
χ^2 / ndf 3.666 / 3
p0 1.104e+04 ± 7.527e+04
400
300
200
100
0
−100
−200
−300
−400
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.79
Std Dev 10.24
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.06013
Std Dev 0.9555
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

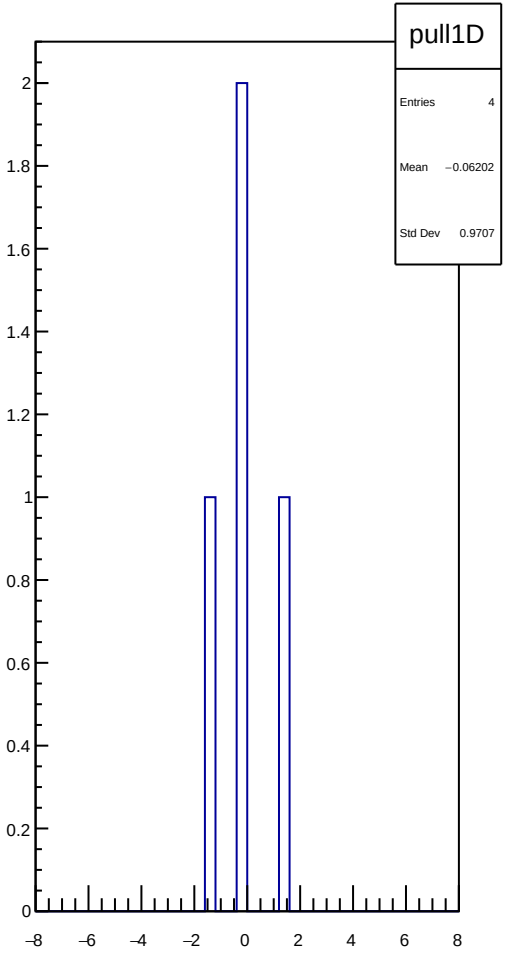

reg_asym_atl1_rms vs run
χ² / ndf 623.9 / 3
p0 1.431e+04 ± 53.22
17500
17000
16500
16000
15500
15000
14500
14000
13500
6106. 0
6106. 1
6106. 2
6106. 3

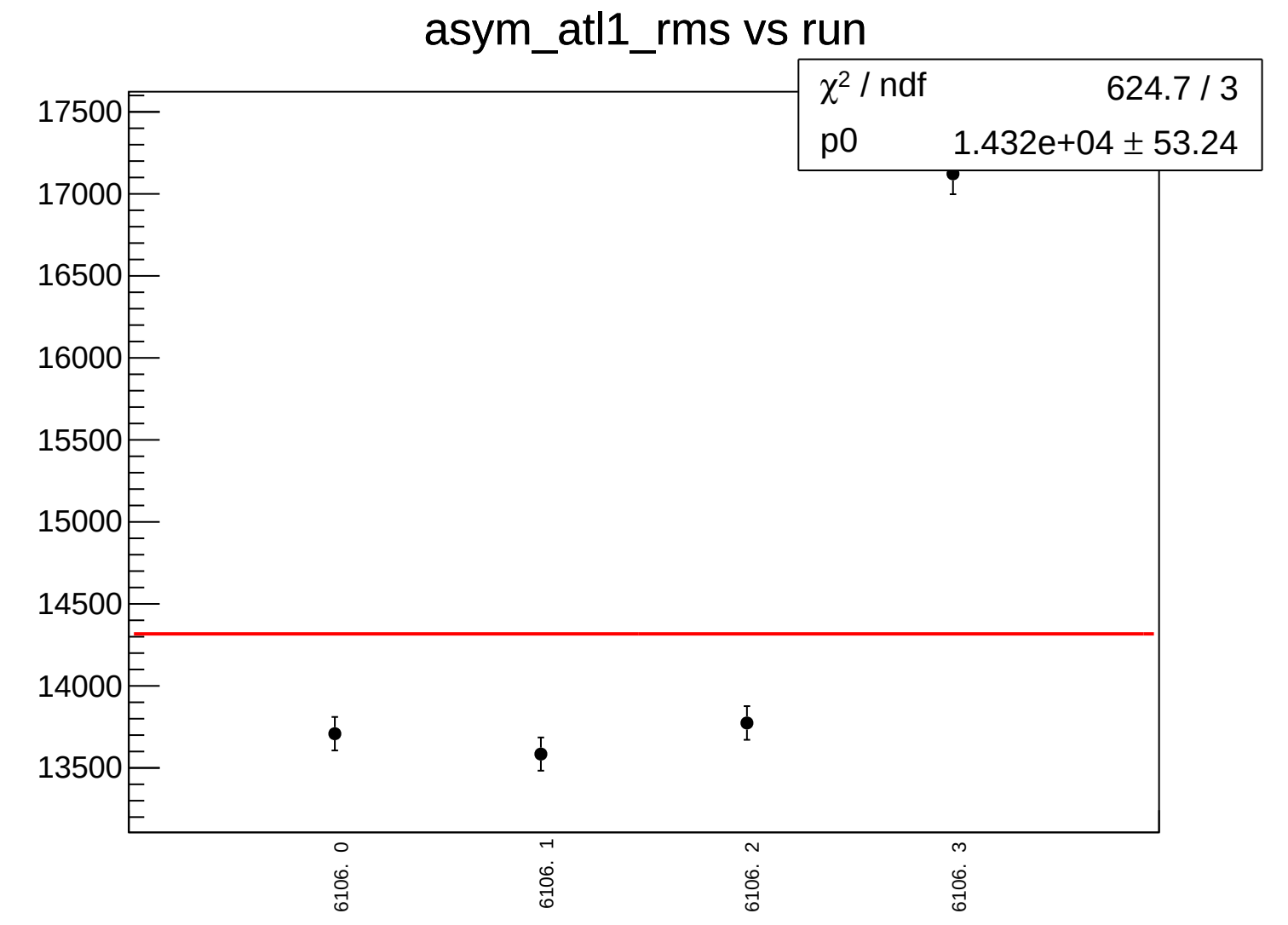

asym_atl1_correction_mean vs run
χ² / ndf 3.674 / 3
p0 86.85 ± 1595
14000
12000
10000
8000
6000
4000
2000
0
−2000
−4000
−6000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 4.6
Std Dev 1.389
1.5
1
0.5
0
−0.5

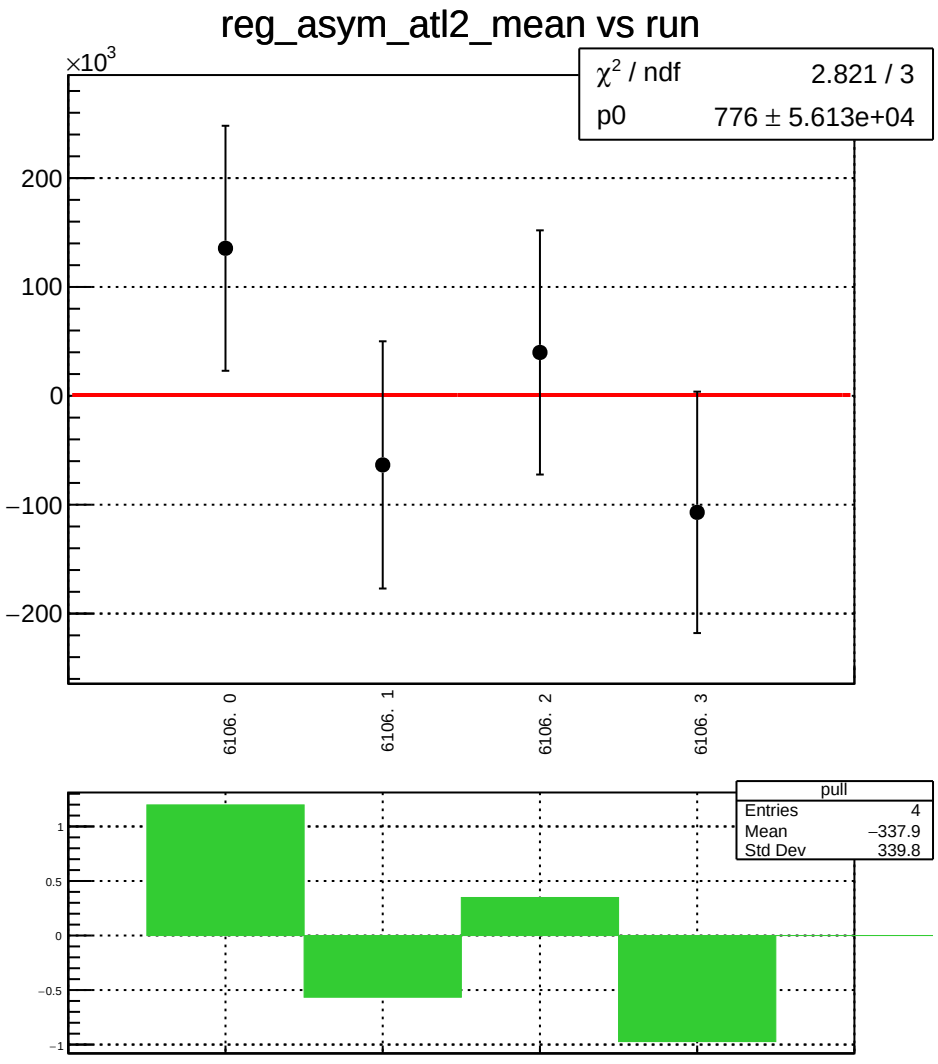

pull1D
Entries 4
Mean 0.1964
Std Dev 0.938
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

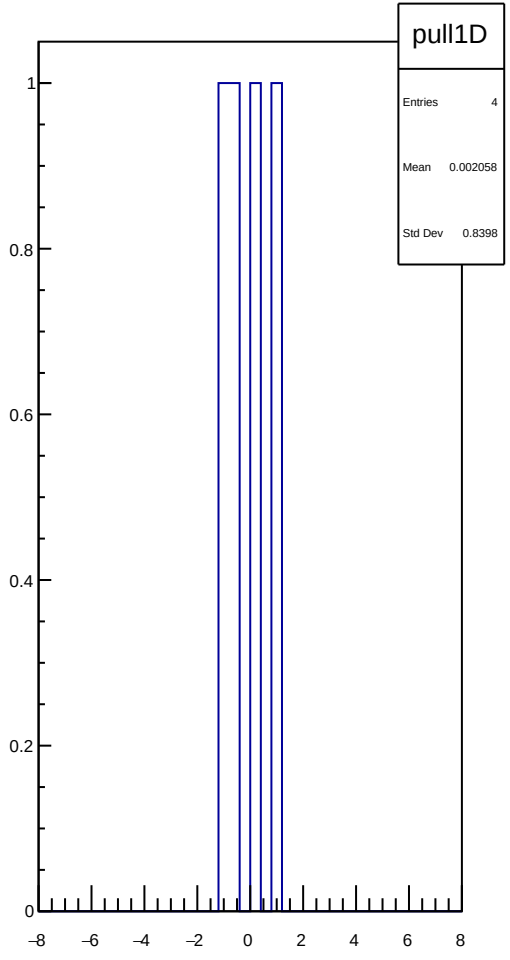

asym_atl1_correction_rms vs run
χ² / ndf 4330 / 3
p0 295.5 ± 1.128
450
400
350
300
250
6106. 0
6106. 1
6106. 2
6106. 3

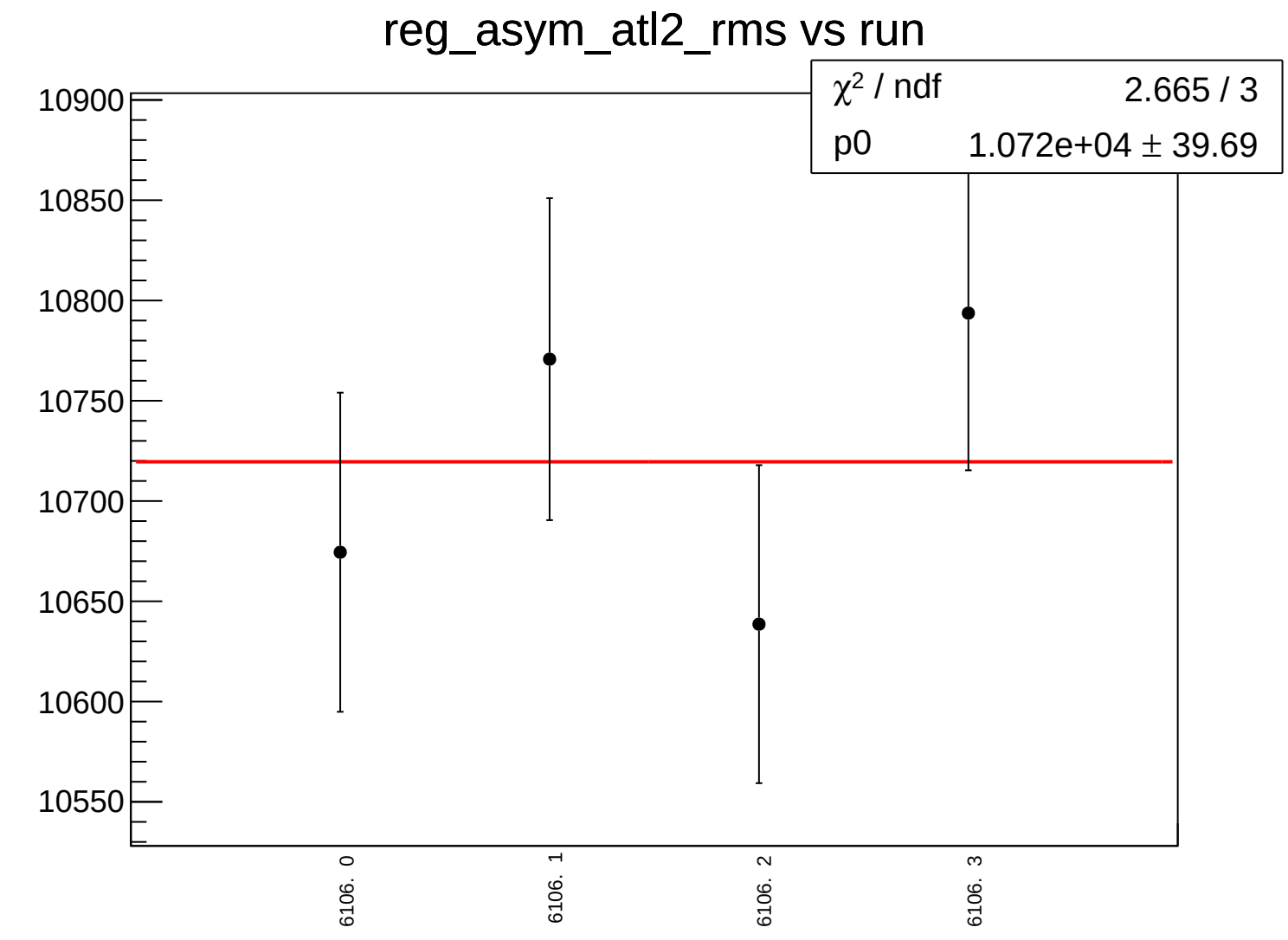

asym_atl1_mean vs run
×10^3
χ² / ndf 3.784 / 3
p0 1.01e+04 ± 7.529e+04
400
300
200
100
0
−100
−200
−300
−400
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.71
Std Dev 10.15
1.5
1
0.5
0
−0.5
−1

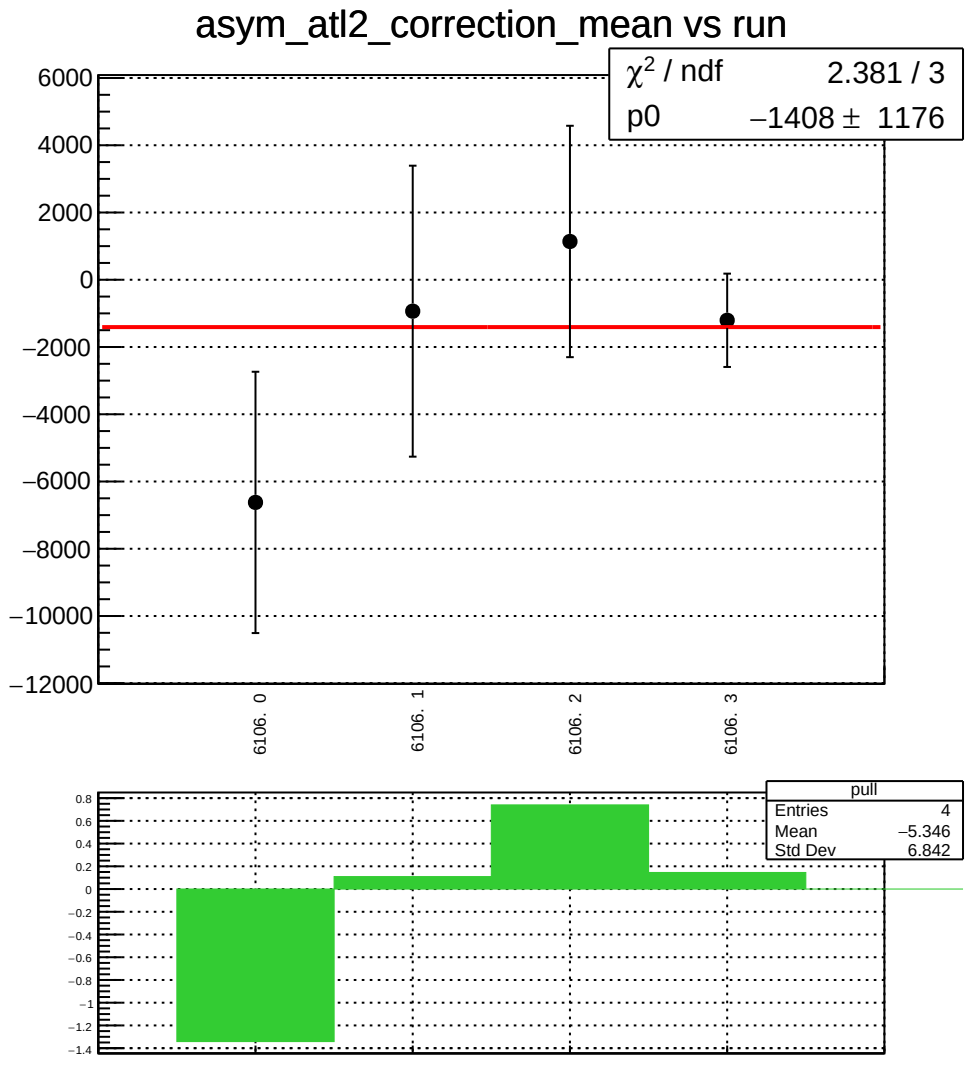

pull1D
Entries 4
Mean −0.06202
Std Dev 0.9707
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

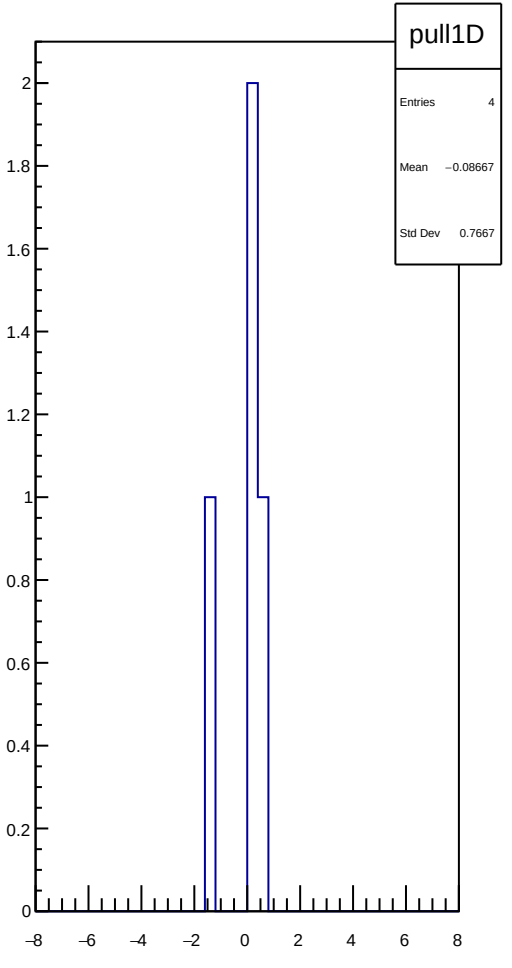

asym_atl1_rms vs run
χ² / ndf 624.7 / 3
p0 1.432e+04 ± 53.24
17500
17000
16500
16000
15500
15000
14500
14000
13500
6106. 0
6106. 1
6106. 2
6106. 3

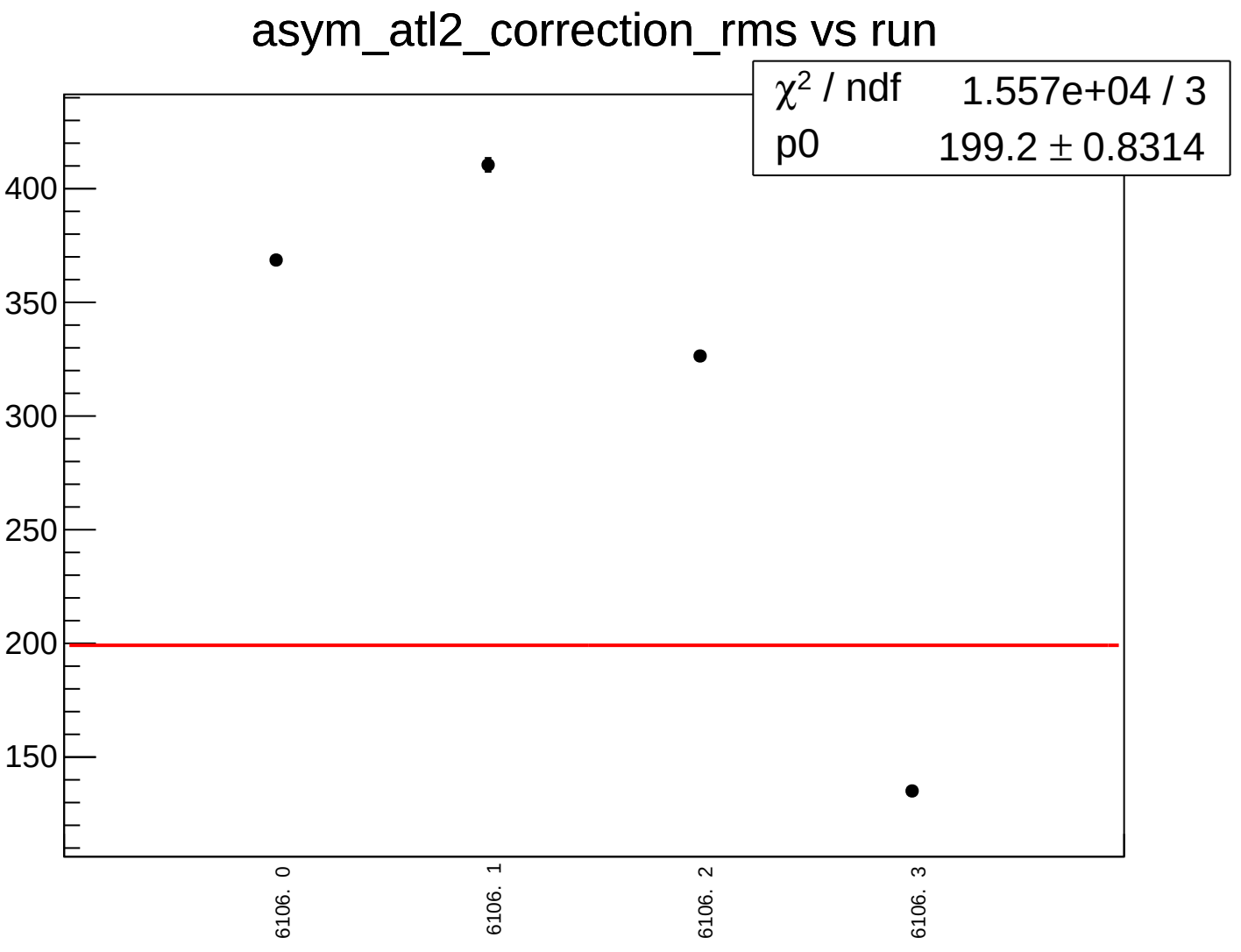

reg_asym_atl2_mean vs run
×10^3
χ² / ndf 2.821 / 3
p0 776 ± 5.613e+04
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −337.9
Std Dev 339.8
1
0.5
0
−0.5
−1

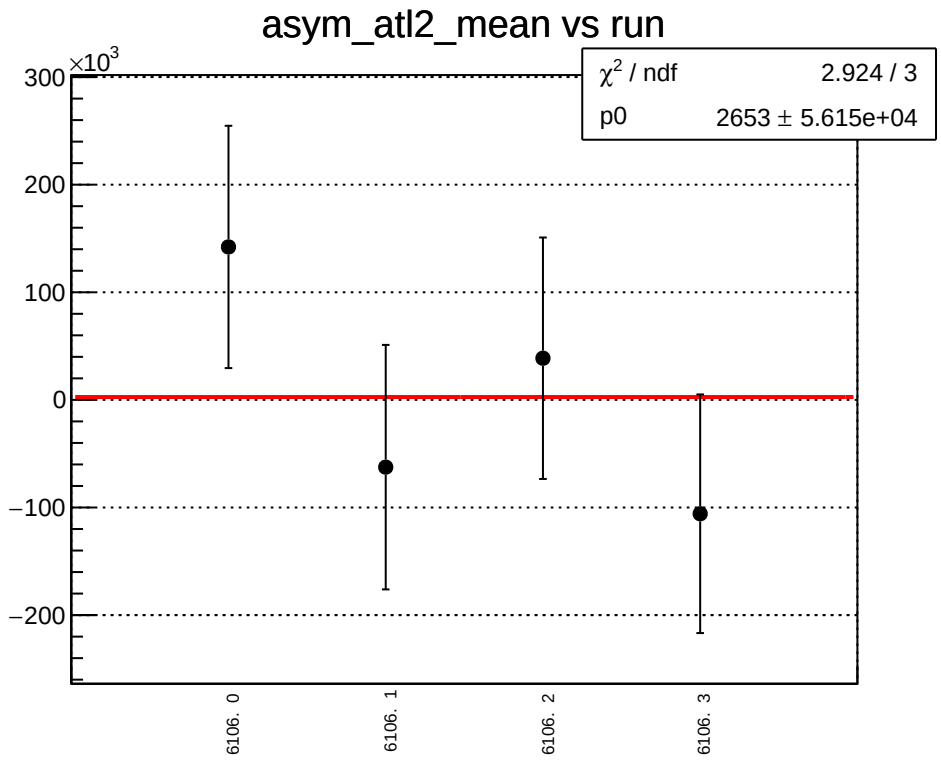

pull1D
Entries 4
Mean 0.002058
Std Dev 0.8398
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

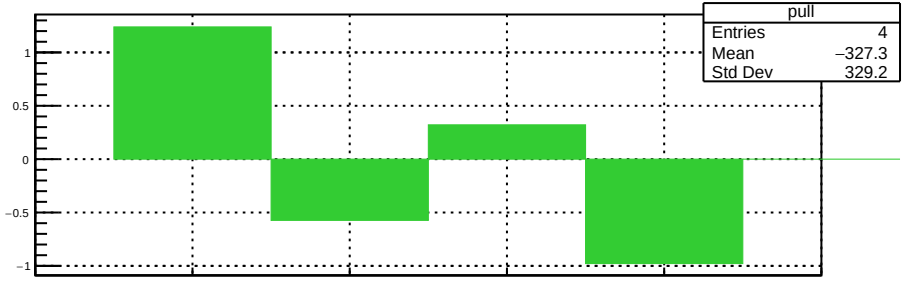

reg_asym_atl2_rms vs run
χ² / ndf 2.665 / 3
p0 1.072e+04 ± 39.69
10900
10850
10800
10750
10700
10650
10600
10550
6106. 0
6106. 1
6106. 2
6106. 3

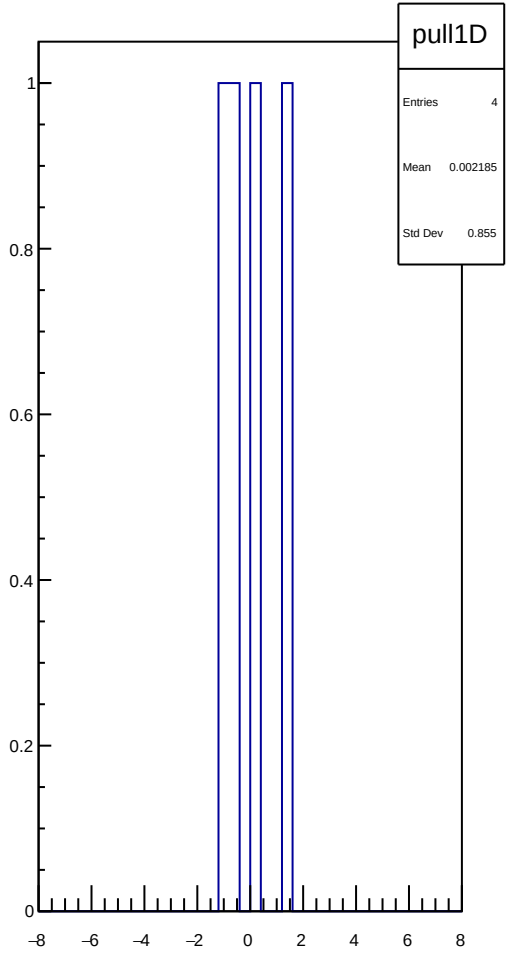

asym_atl2_correction_mean vs run
χ² / ndf 2.381 / 3
p0 −1408 ± 1176
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
−12000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.346
Std Dev 6.842
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4

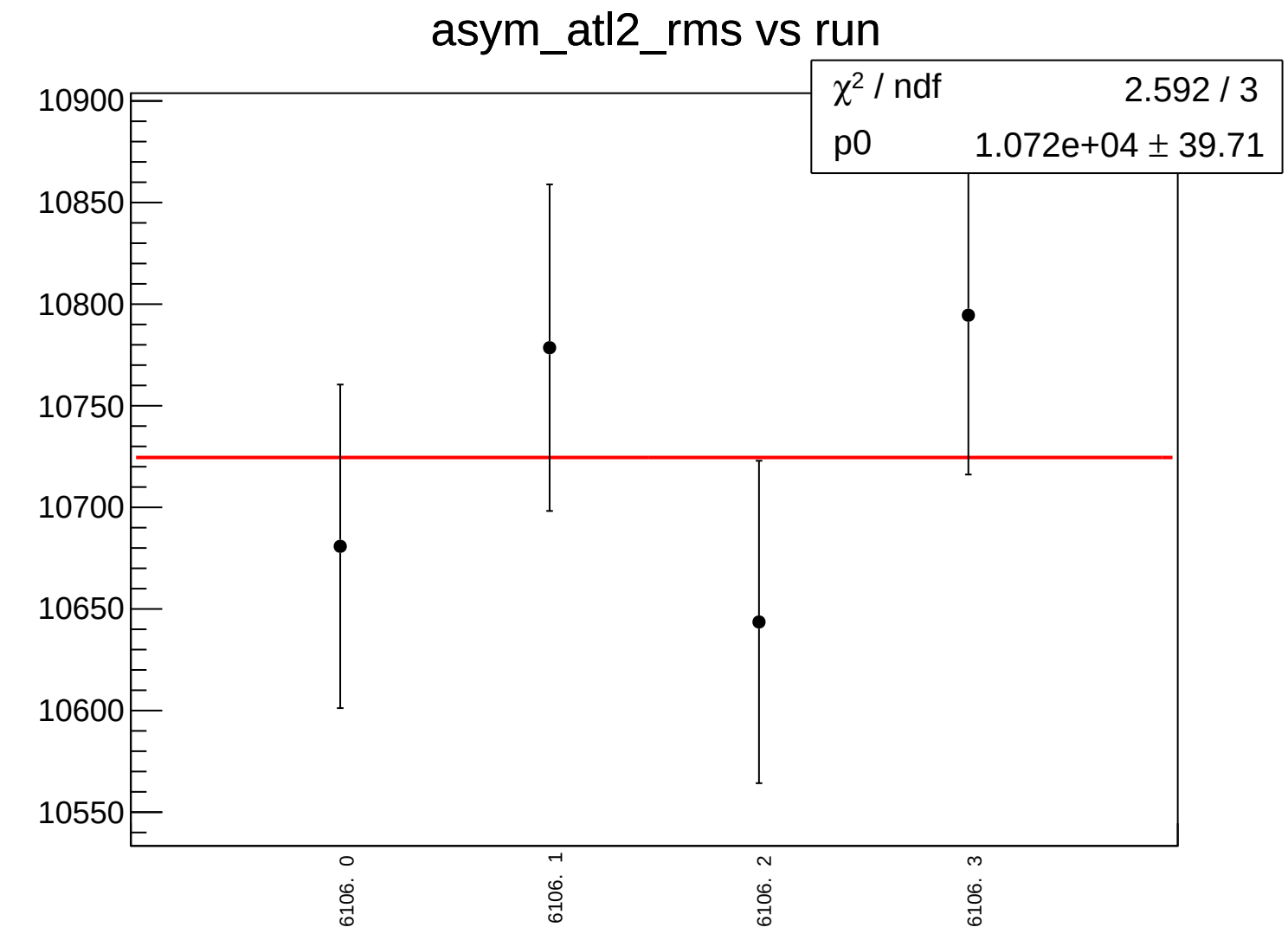

pull1D
Entries 4
Mean −0.08667
Std Dev 0.7667
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

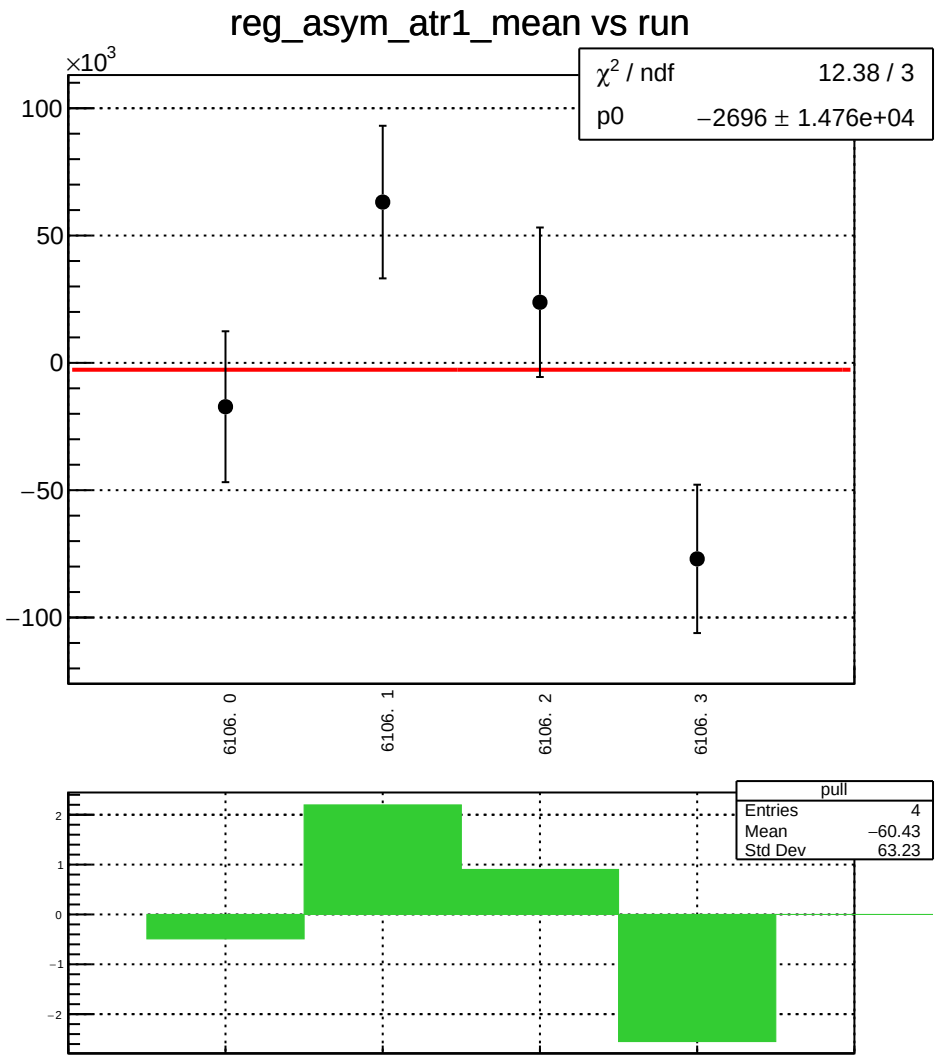

asym_atl2_correction_rms vs run
χ² / ndf 1.557e+04 / 3
p0 199.2 ± 0.8314
400
350
300
250
200
150
6106. 0
6106. 1
6106. 2
6106. 3

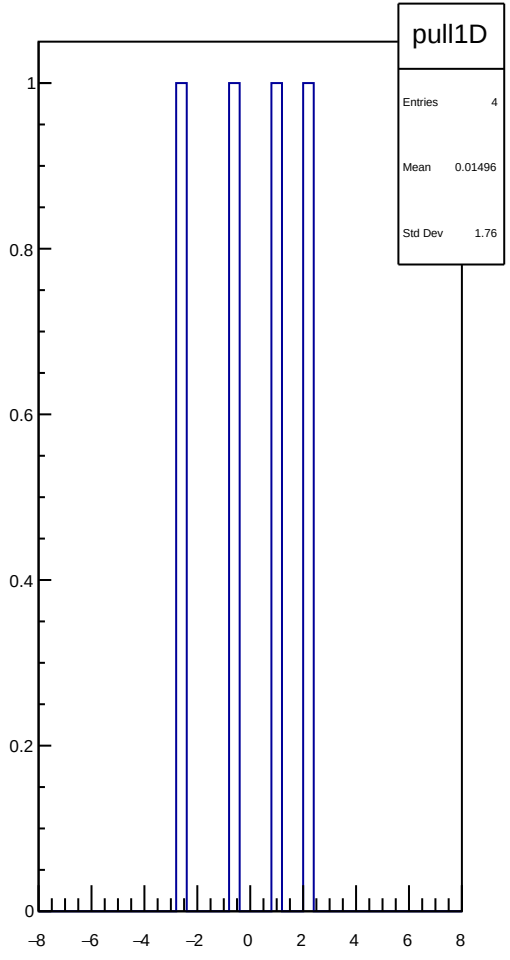

asym_atl2_mean vs run
×10^3
χ² / ndf 2.924 / 3
p0 2653 ± 5.615e+04
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3

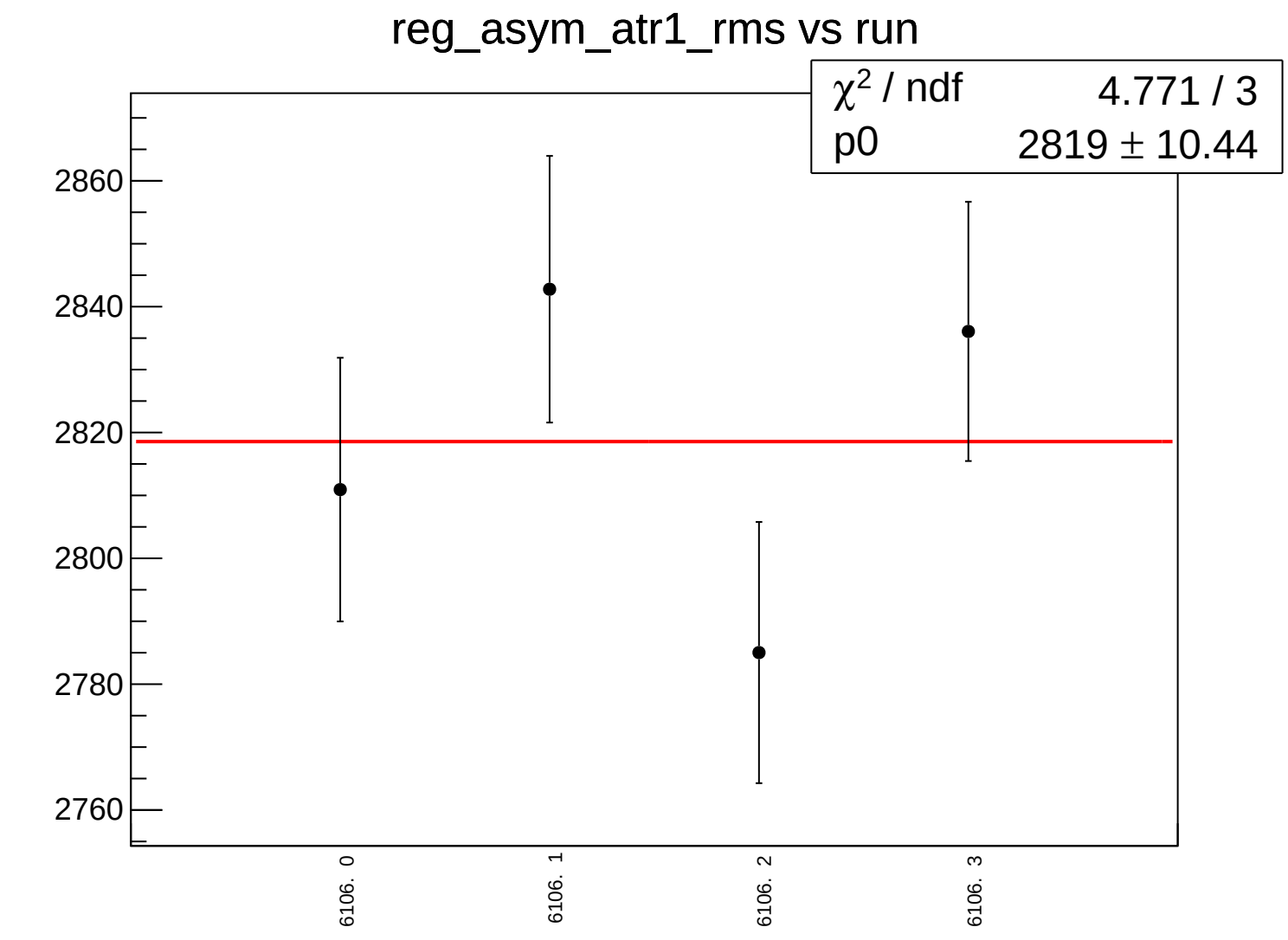

pull
Entries 4
Mean −327.3
Std Dev 329.2
1
0.5
0
−0.5
−1

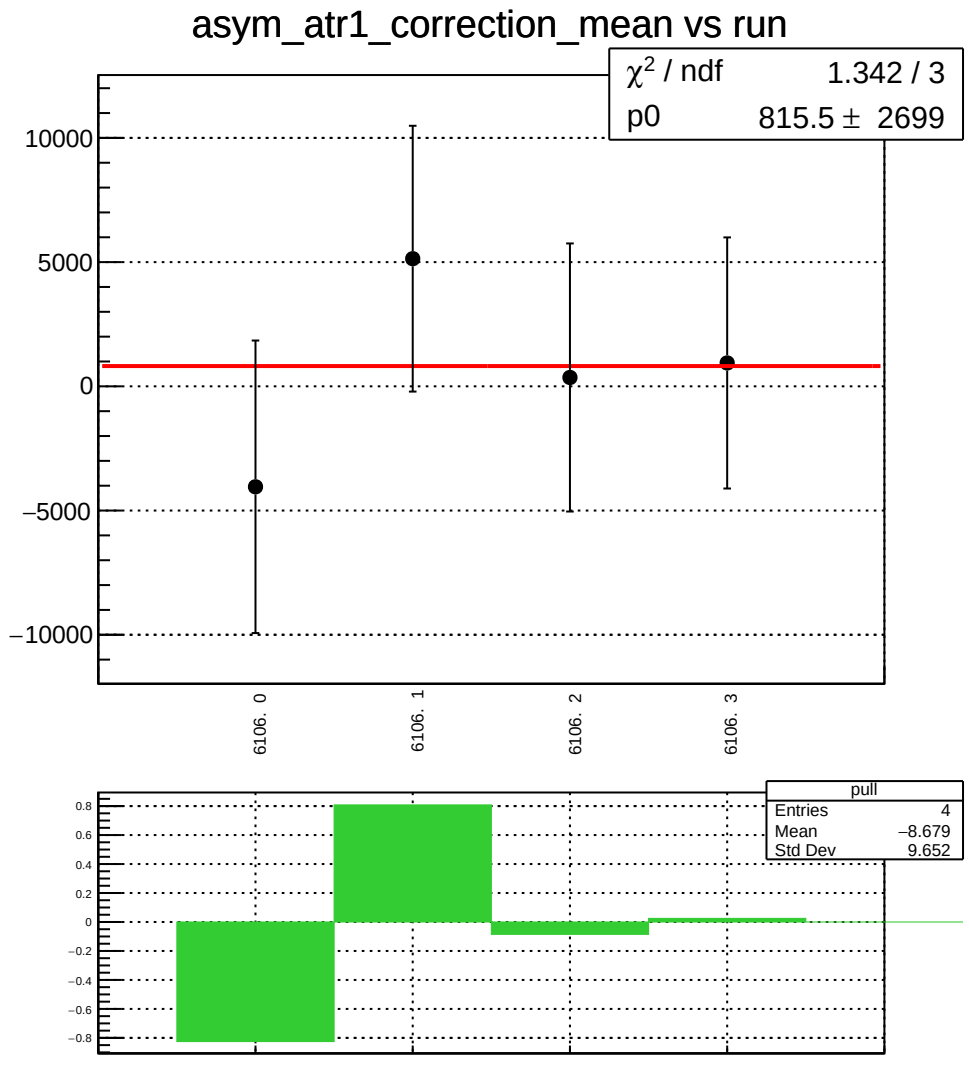

pull1D
Entries 4
Mean 0.002185
Std Dev 0.855
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

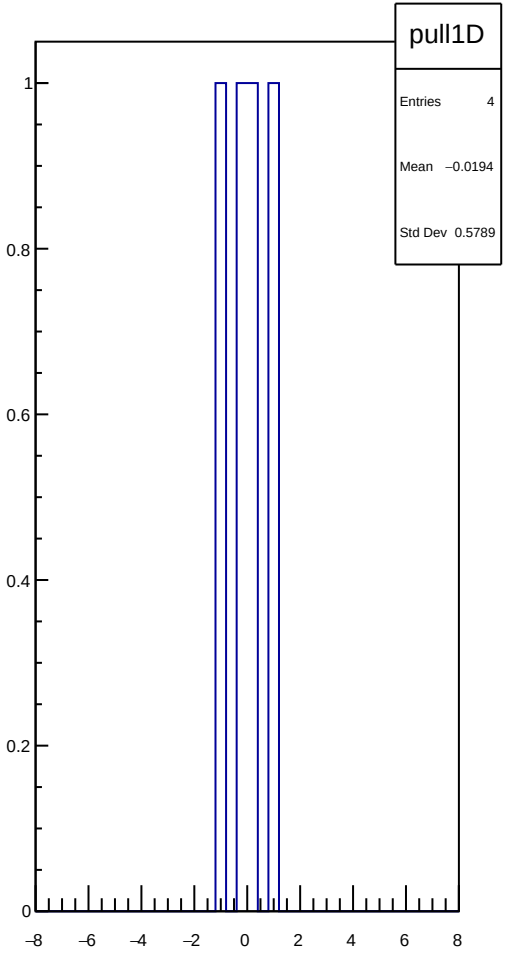

asym_atl2_rms vs run
χ² / ndf 2.592 / 3
p0 1.072e+04 ± 39.71
10900
10850
10800
10750
10700
10650
10600
10550
6106. 0
6106. 1
6106. 2
6106. 3

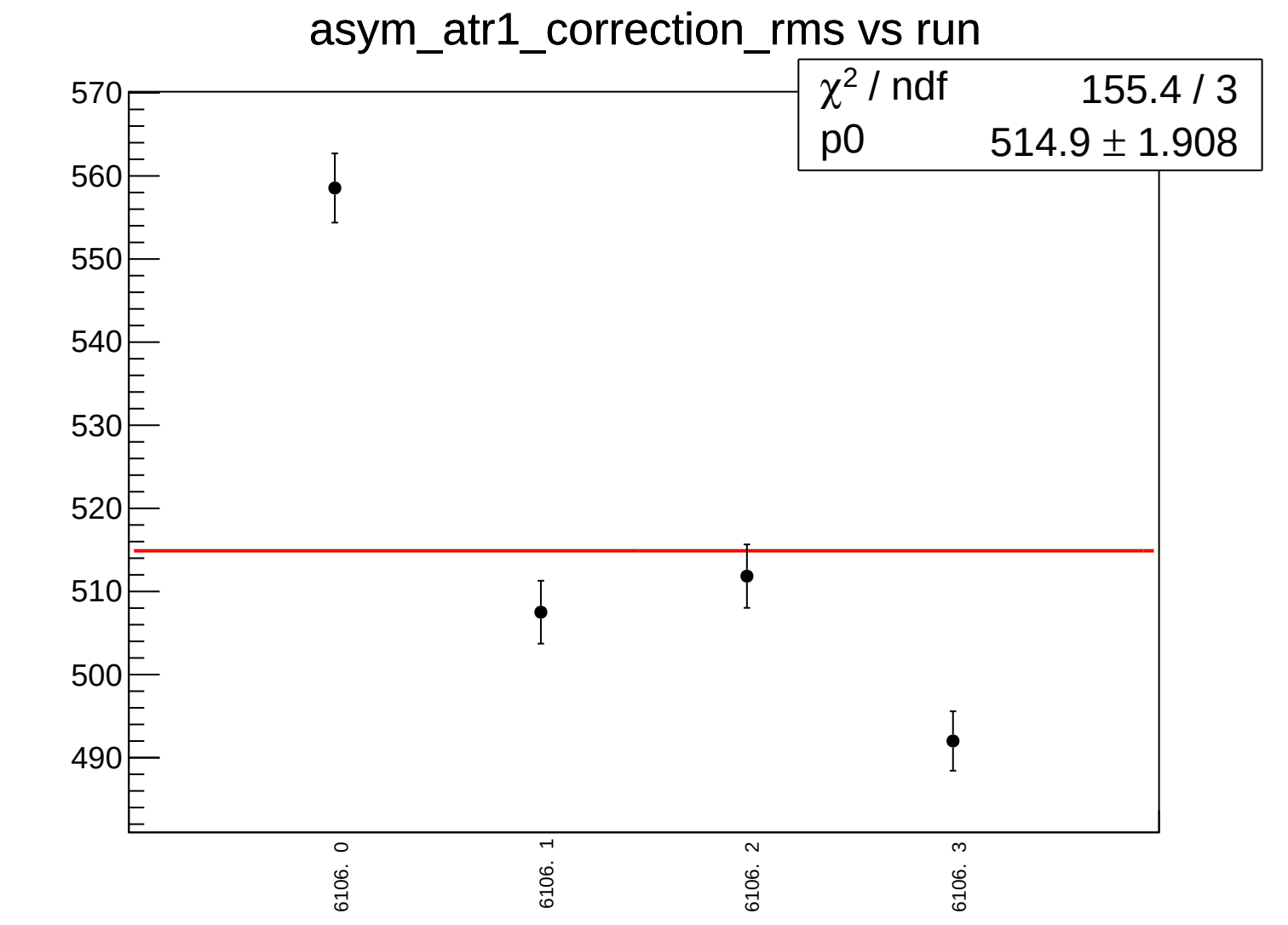

reg_asym_atr1_mean vs run
×10^3
χ² / ndf 12.38 / 3
p0 −2696 ± 1.476e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −60.43
Std Dev 63.23
2
1
0
−1
−2

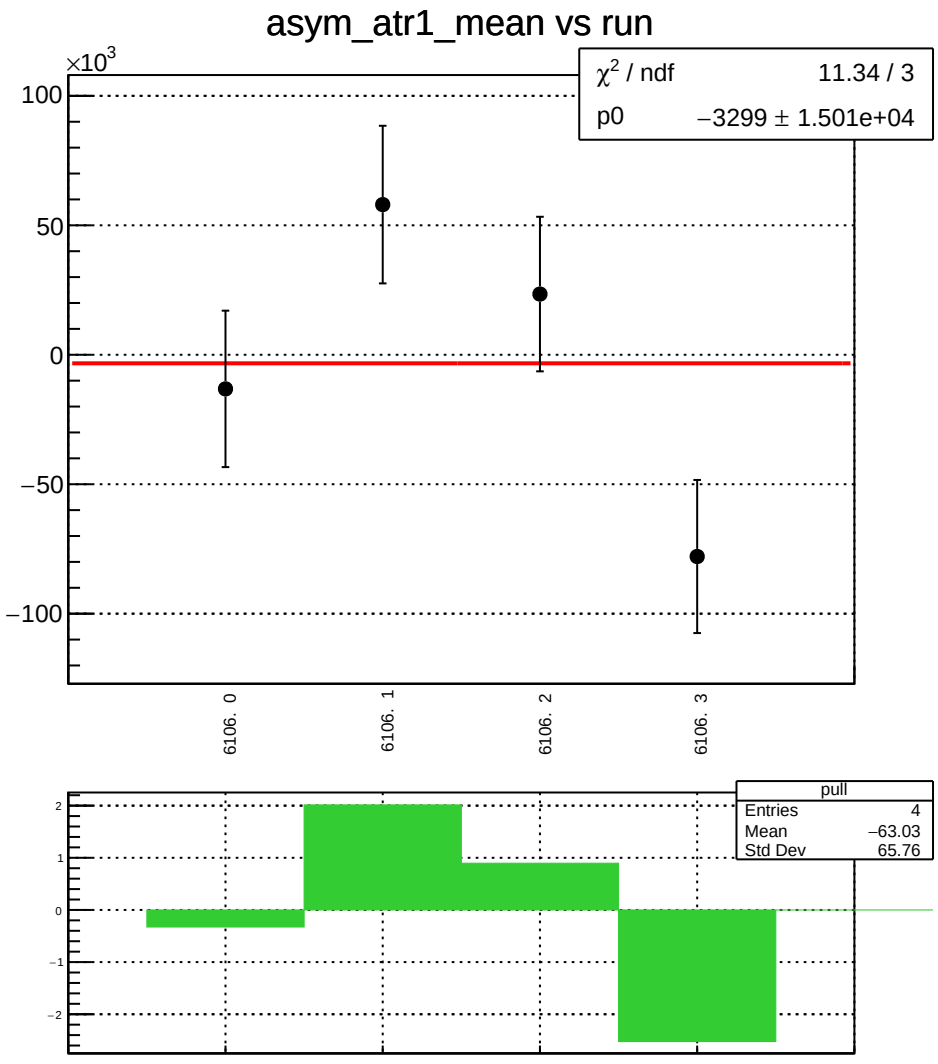

pull1D
Entries 4
Mean 0.01496
Std Dev 1.76
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

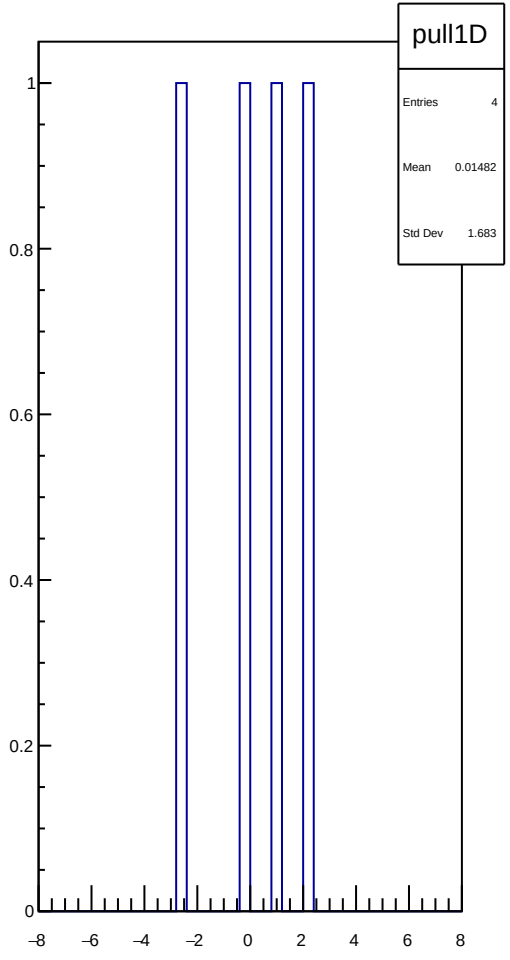

reg_asym_atr1_rms vs run
χ² / ndf 4.771 / 3
p0 2819 ± 10.44
2860
2840
2820
2800
2780
2760
6106. 0
6106. 1
6106. 2
6106. 3

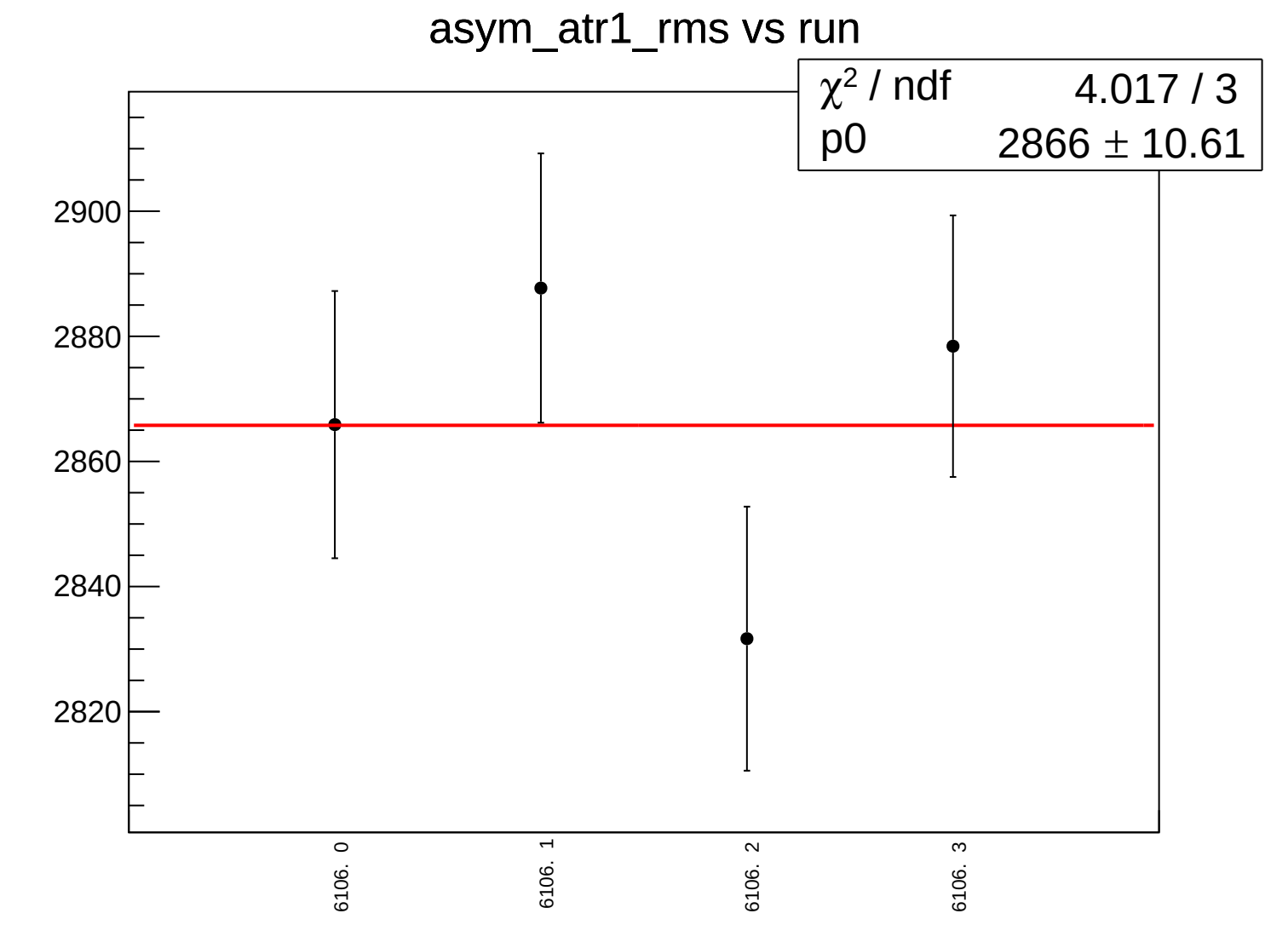

asym_atr1_correction_mean vs run
χ² / ndf 1.342 / 3
p0 815.5 ± 2699
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −8.679
Std Dev 9.652
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

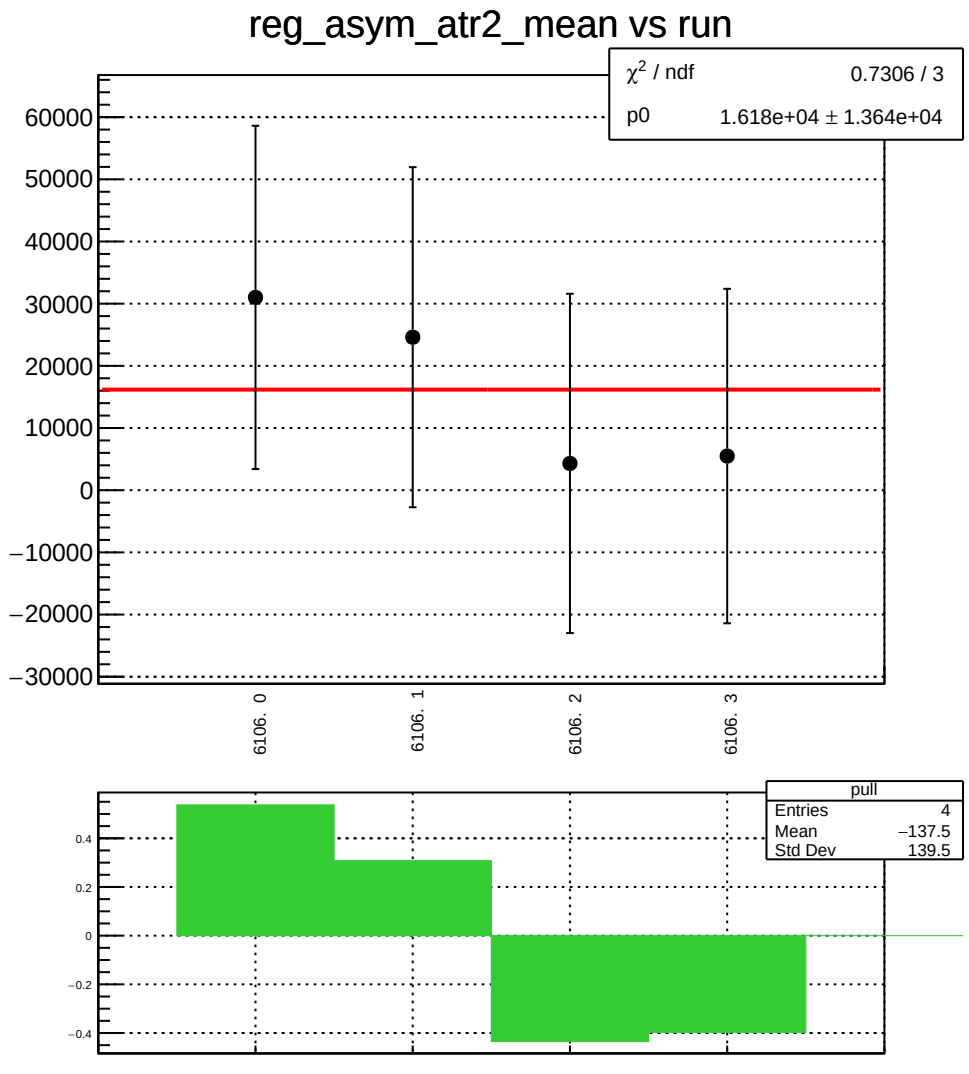

pull1D
Entries 4
Mean −0.0194
Std Dev 0.5789
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

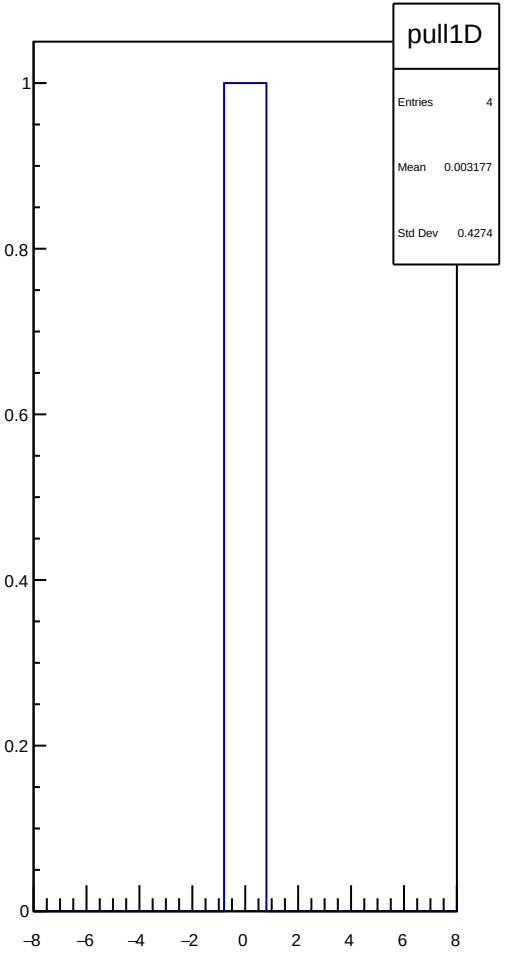

asym_atr1_correction_rms vs run
χ² / ndf 155.4 / 3
p0 514.9 ± 1.908
570
560
550
540
530
520
510
500
490
6106. 0
6106. 1
6106. 2
6106. 3

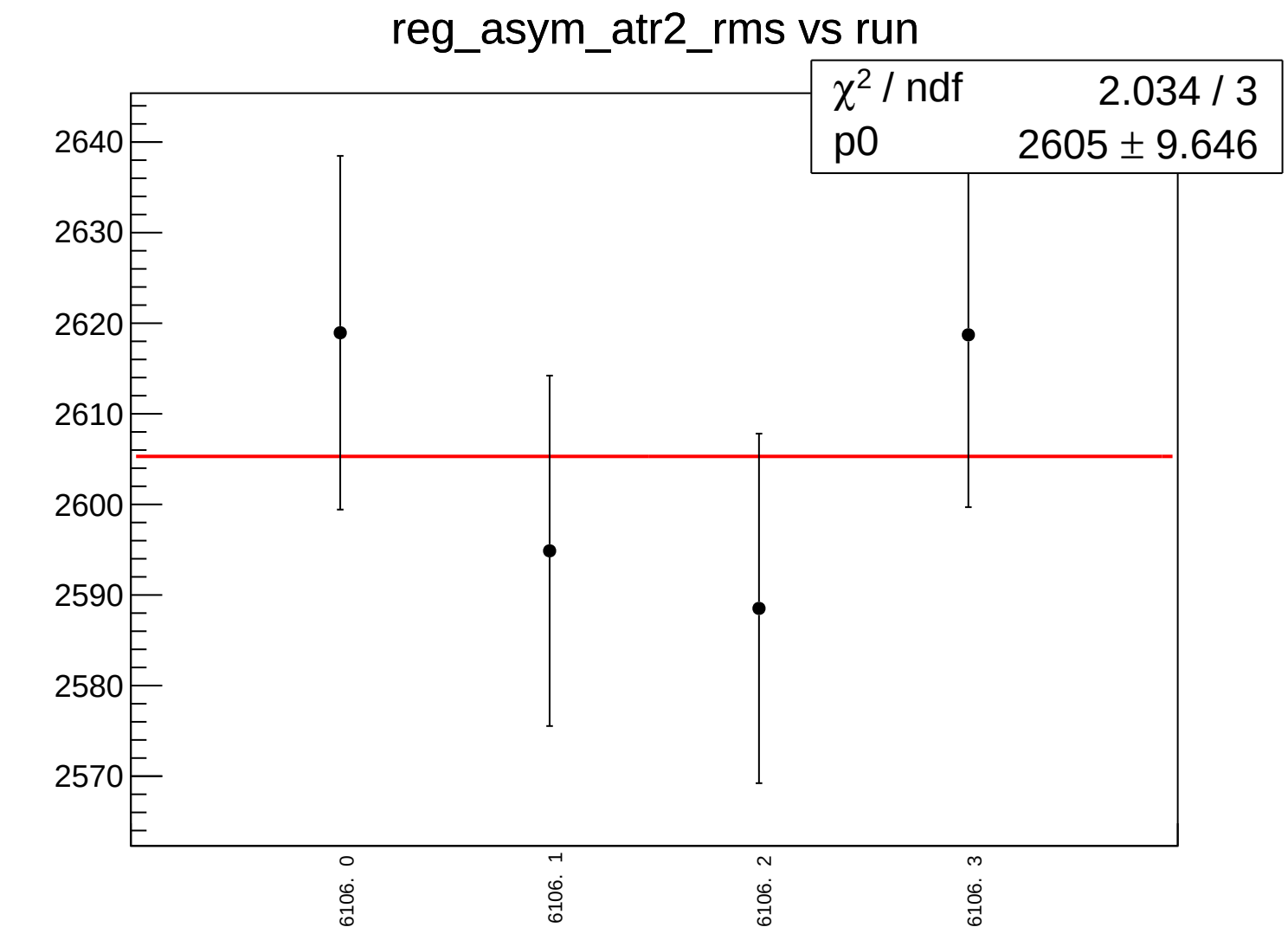

asym_atr1_mean vs run
×10^3
χ² / ndf 11.34 / 3
p0 −3299 ± 1.501e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −63.03
Std Dev 65.76
2
1
0
−1
−2

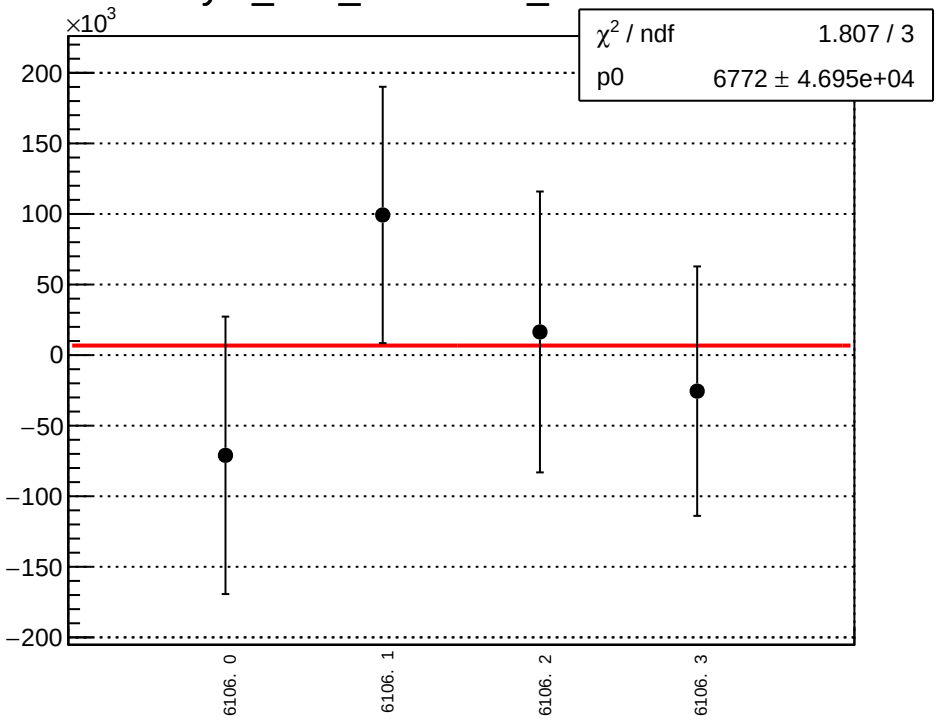

pull1D
Entries 4
Mean 0.01482
Std Dev 1.683
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

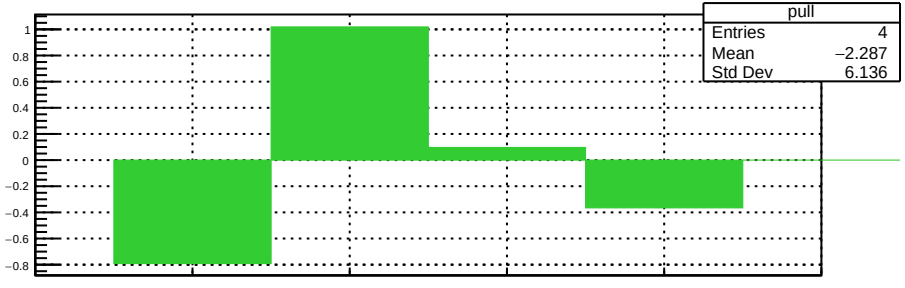

asym_atr1_rms vs run
χ² / ndf 4.017 / 3
p0 2866 ± 10.61
2900
2880
2860
2840
2820
6106. 0
6106. 1
6106. 2
6106. 3

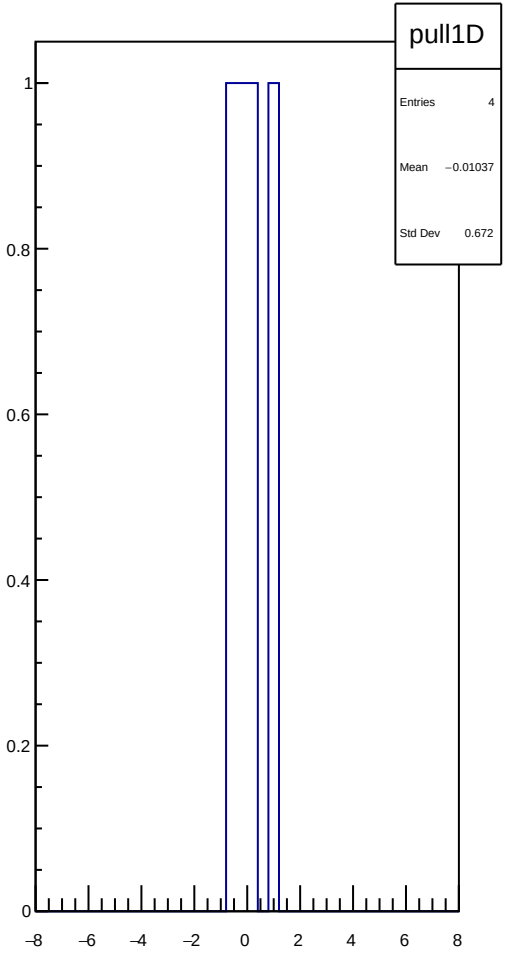

reg_asym_atr2_mean vs run
χ² / ndf 0.7306 / 3
p0 1.618e+04 ± 1.364e+04
60000
50000
40000
30000
20000
10000
0
−10000
−20000
−30000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −137.5
Std Dev 139.5
0.4
0.2
0
−0.2
−0.4

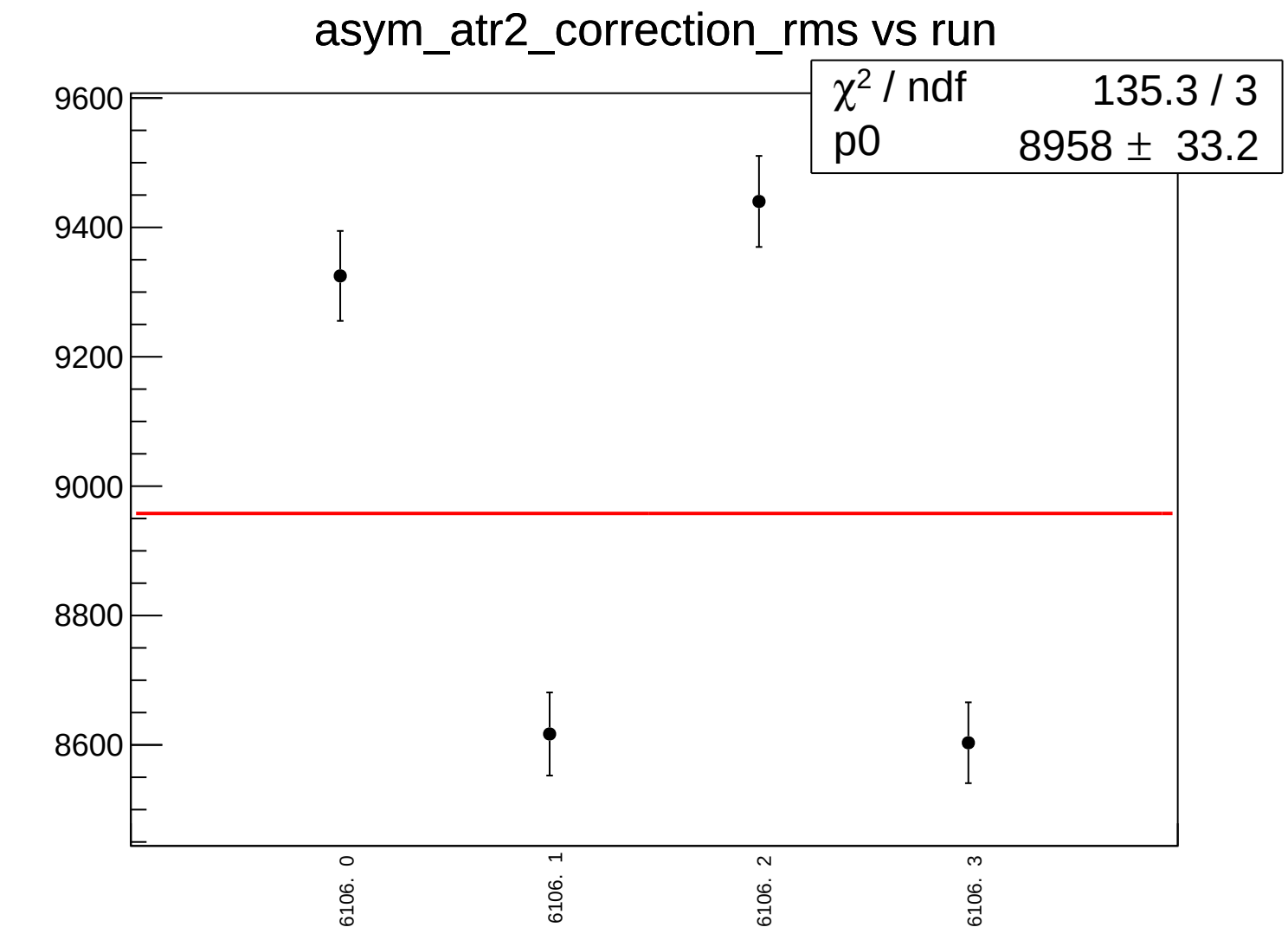

pull1D
Entries 4
Mean 0.003177
Std Dev 0.4274
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

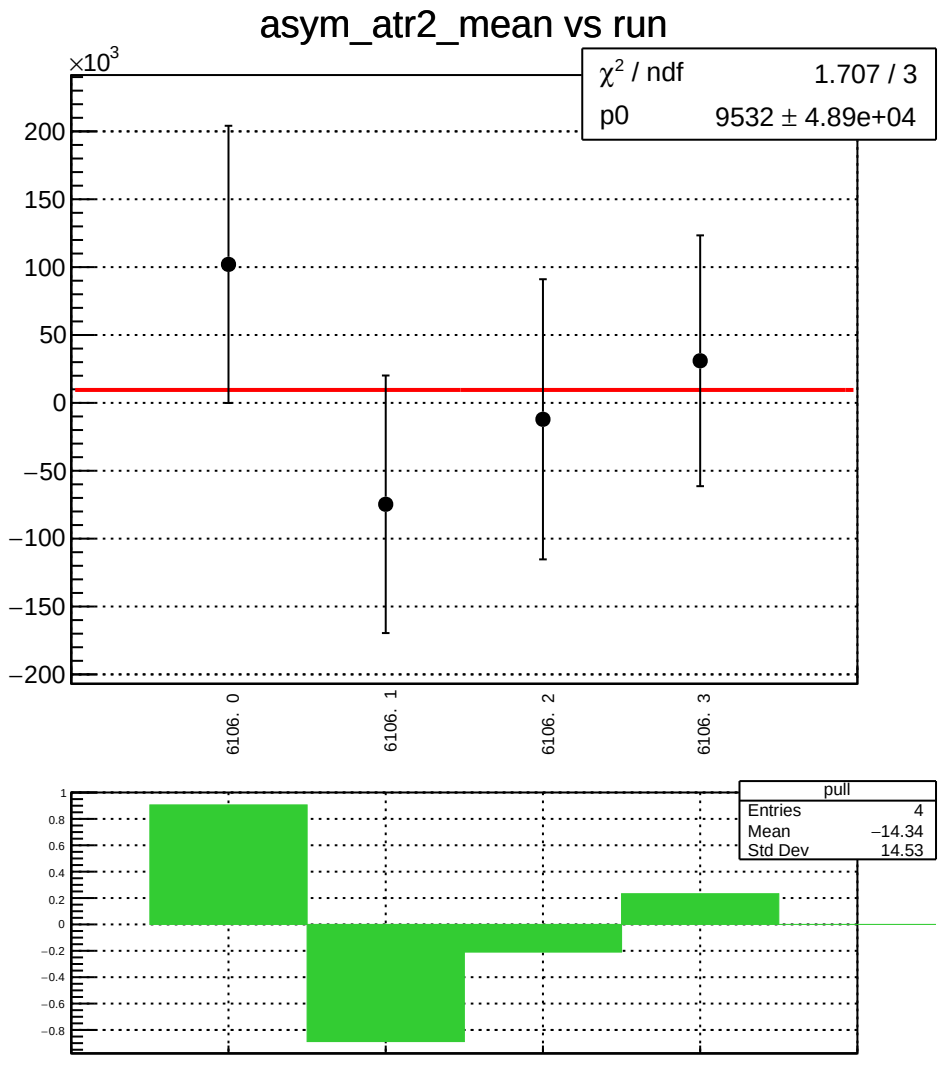

reg_asym_atr2_rms vs run
χ² / ndf 2.034 / 3
p0 2605 ± 9.646
2640
2630
2620
2610
2600
2590
2580
2570
6106. 0
6106. 1
6106. 2
6106. 3

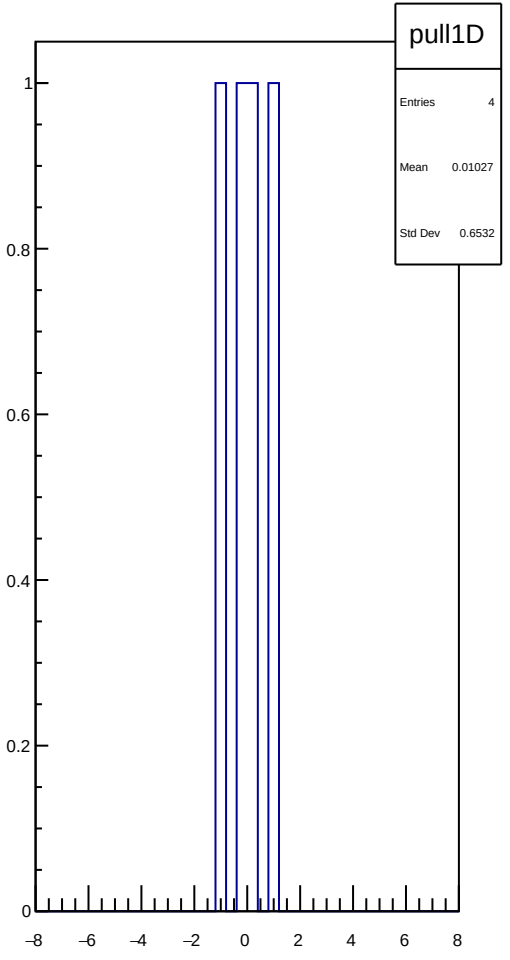

asym_atr2_correction_mean vs run
×10^3
χ² / ndf 1.807 / 3
p0 6772 ± 4.695e+04
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3

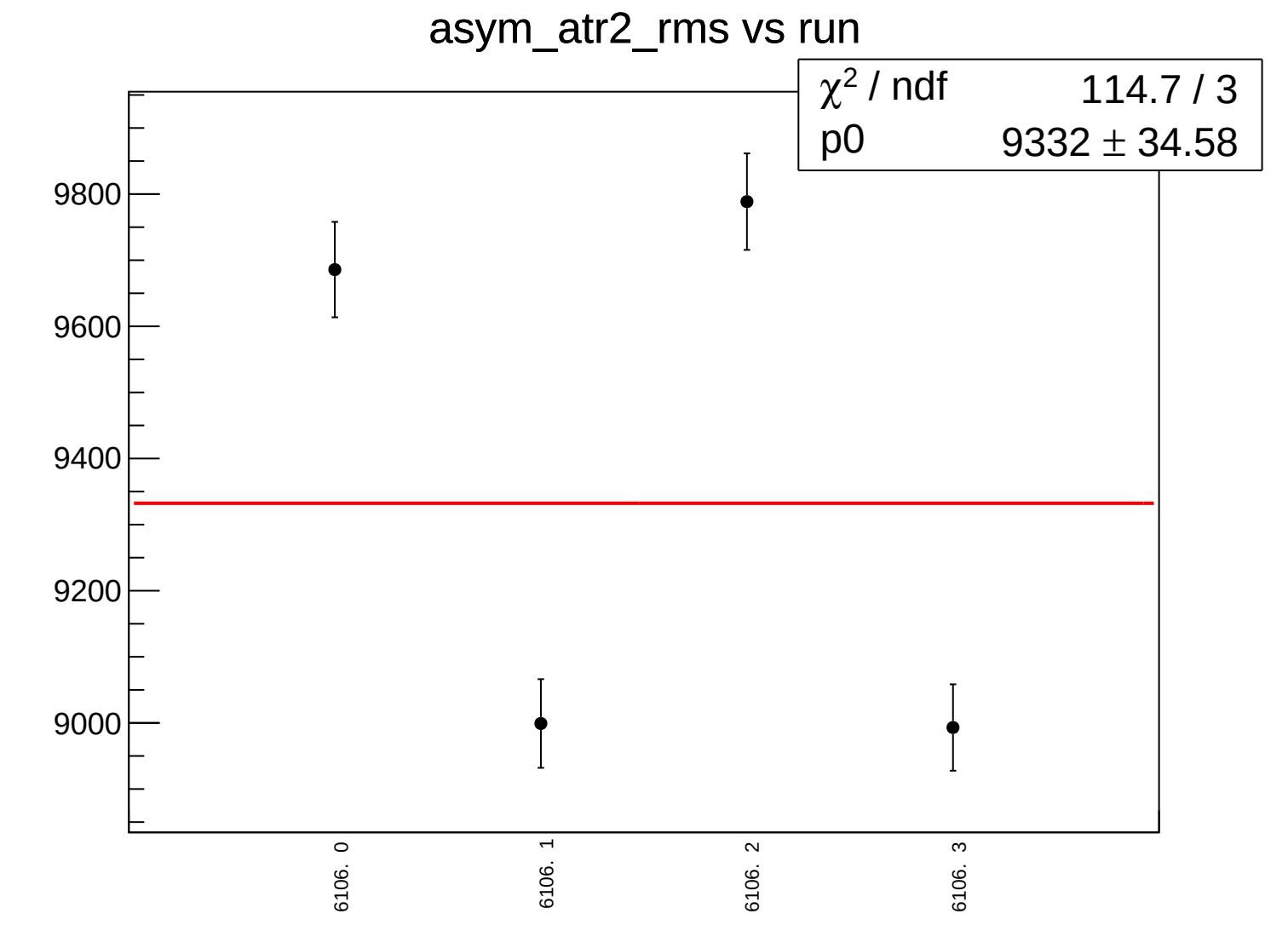

pull
Entries 4
Mean −2.287
Std Dev 6.136
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

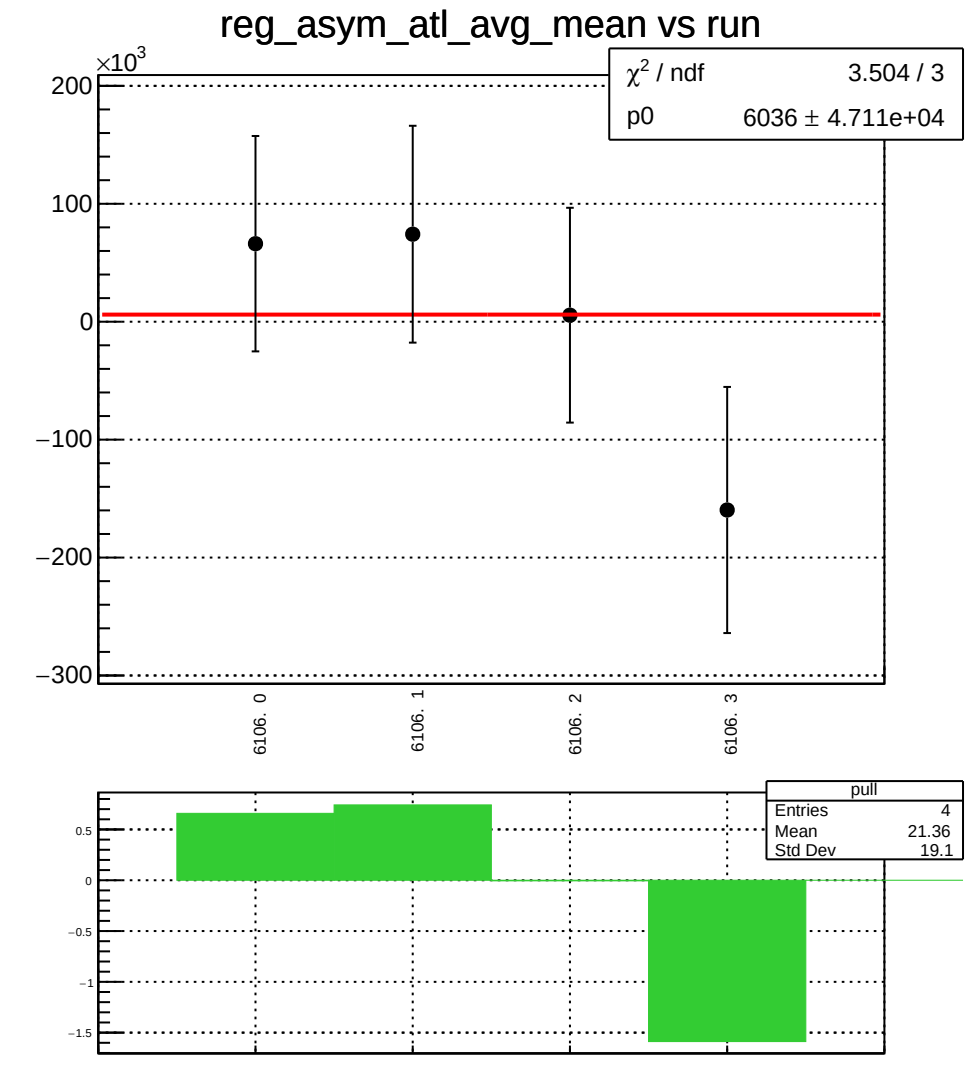

pull1D
Entries 4
Mean −0.01037
Std Dev 0.672
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

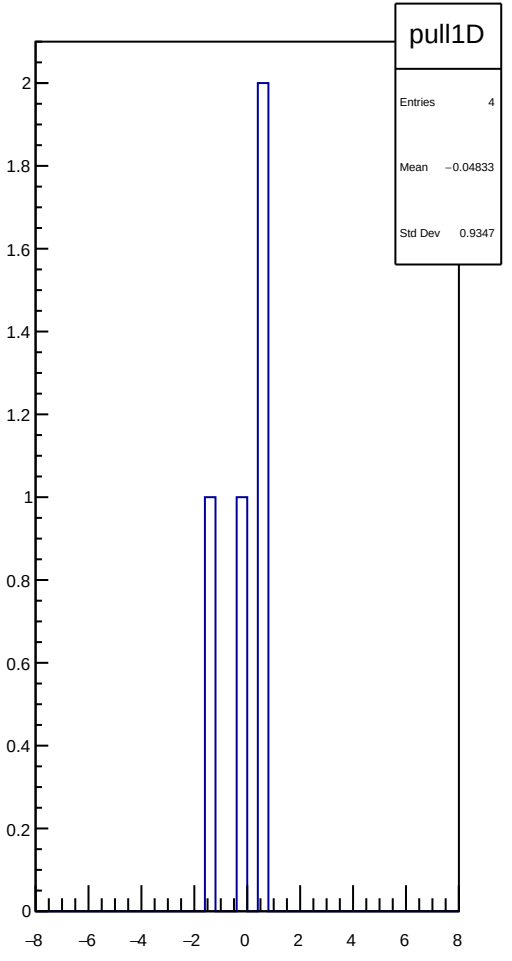

asym_atr2_correction_rms vs run
χ² / ndf 135.3 / 3
p0 8958 ± 33.2
9600
9400
9200
9000
8800
8600
6106. 0
6106. 1
6106. 2
6106. 3

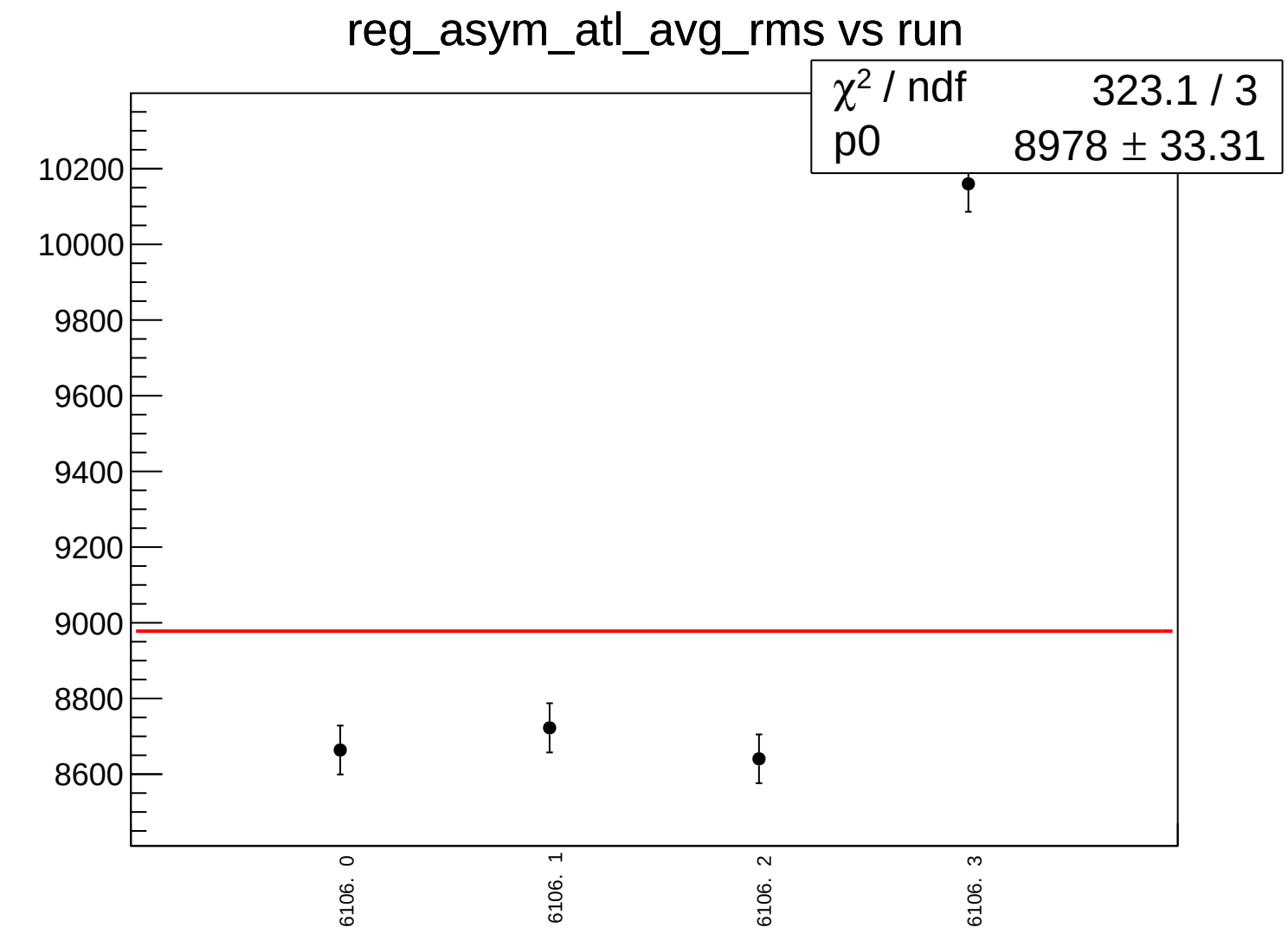

asym_atr2_mean vs run
×10^3
χ² / ndf 1.707 / 3
p0 9532 ± 4.89e+04
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −14.34
Std Dev 14.53
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

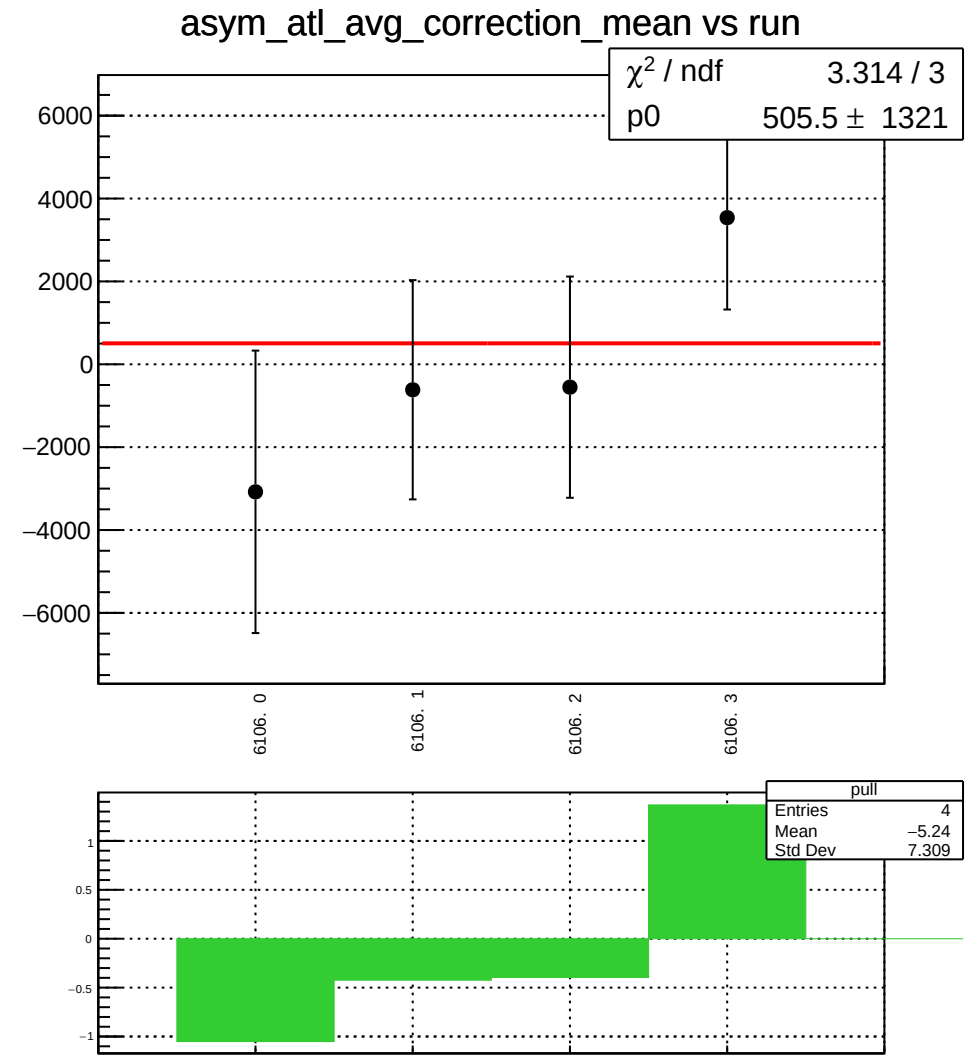

pull1D
Entries 4
Mean 0.01027
Std Dev 0.6532
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

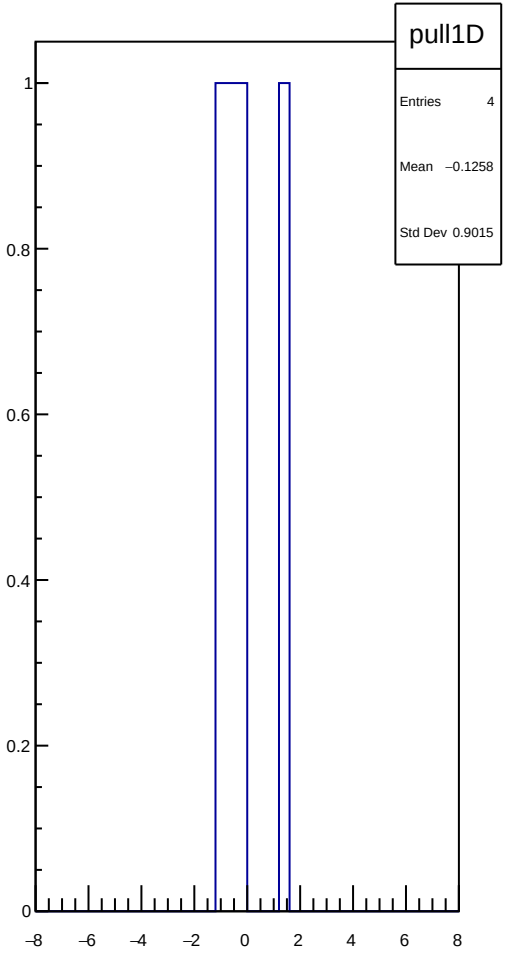

asym_atr2_rms vs run
χ² / ndf 114.7 / 3
p0 9332 ± 34.58
9800
9600
9400
9200
9000
6106. 0
6106. 1
6106. 2
6106. 3

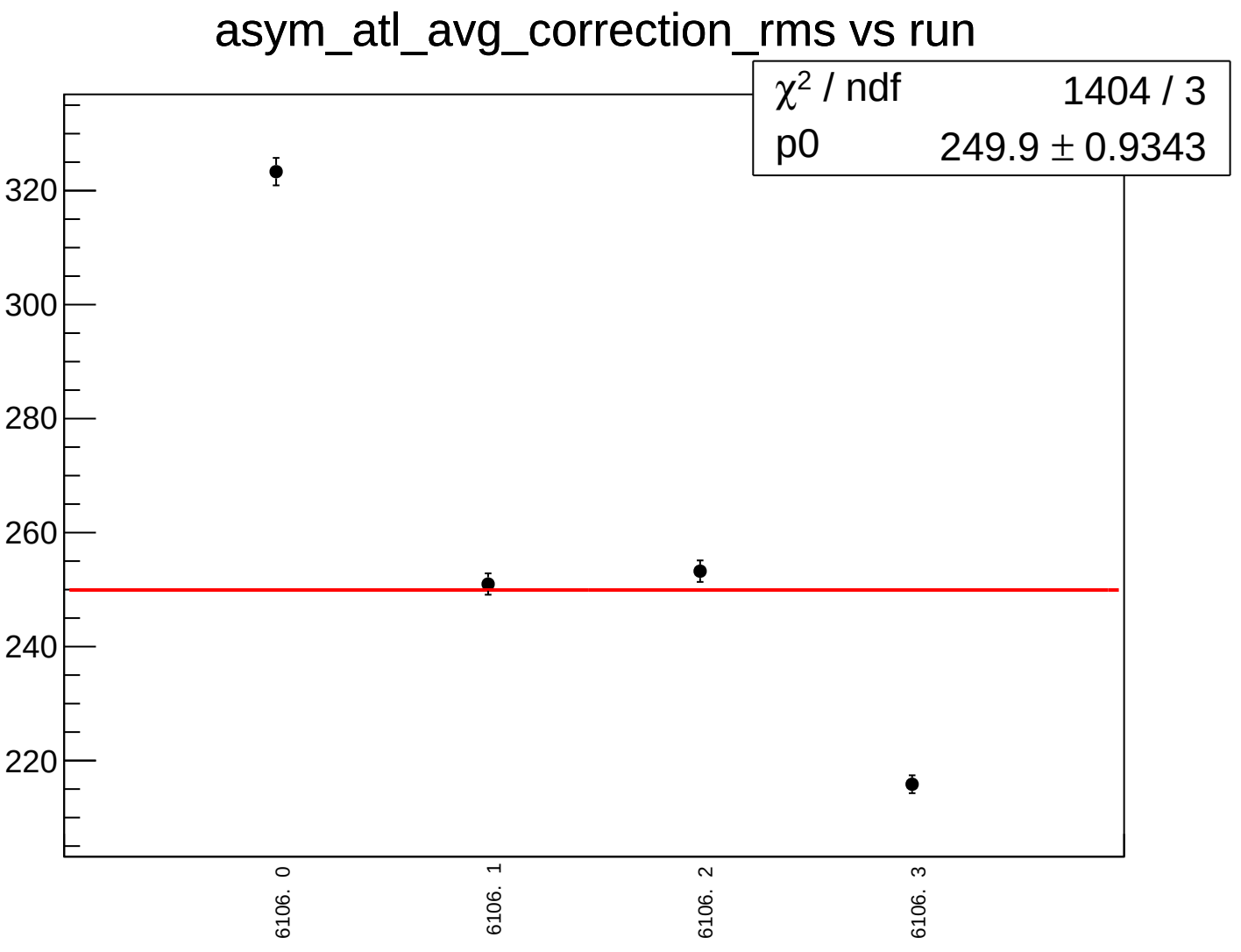

reg_asym_atl_avg_mean vs run
×10^3
χ² / ndf 3.504 / 3
p0 6036 ± 4.711e+04
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 21.36
Std Dev 19.1
0.5
0
−0.5
−1
−1.5

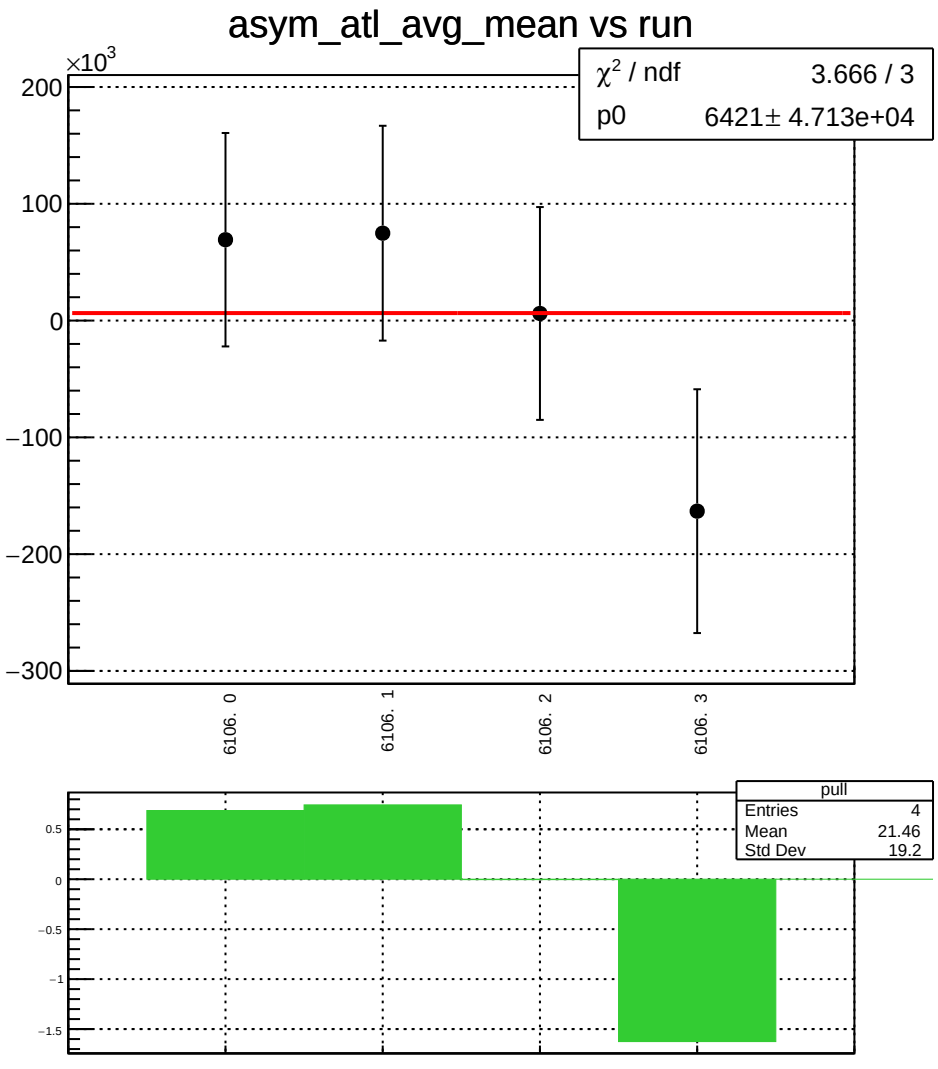

pull1D
Entries 4
Mean −0.04833
Std Dev 0.9347
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

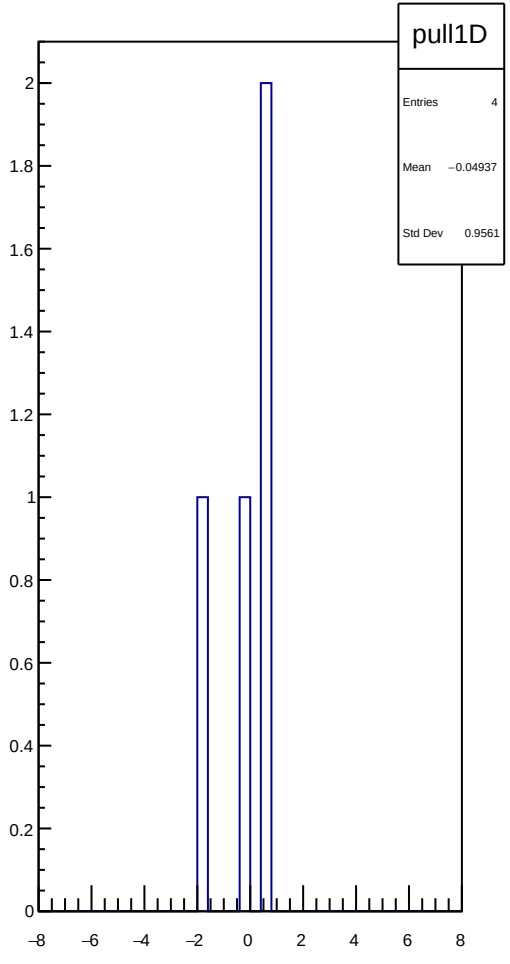

reg_asym_atl_avg_rms vs run
χ² / ndf 323.1 / 3
p0 8978 ± 33.31
10200
10000
9800
9600
9400
9200
9000
8800
8600
6106. 0
6106. 1
6106. 2
6106. 3

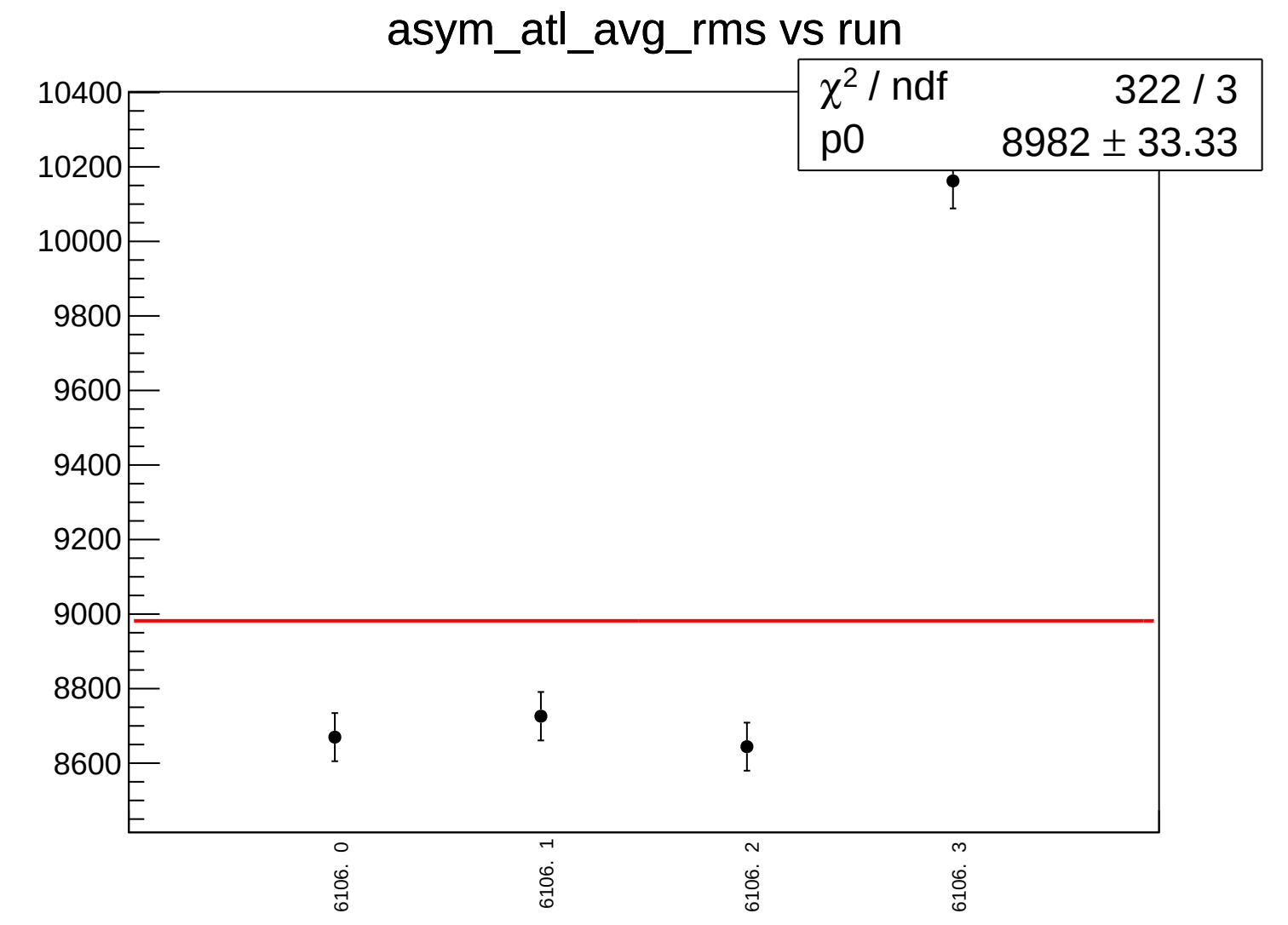

asym_atl_avg_correction_mean vs run
χ² / ndf 3.314 / 3
p0 505.5 ± 1321
6000
4000
2000
0
−2000
−4000
−6000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.24
Std Dev 7.309
1
0.5
0
−0.5
−1

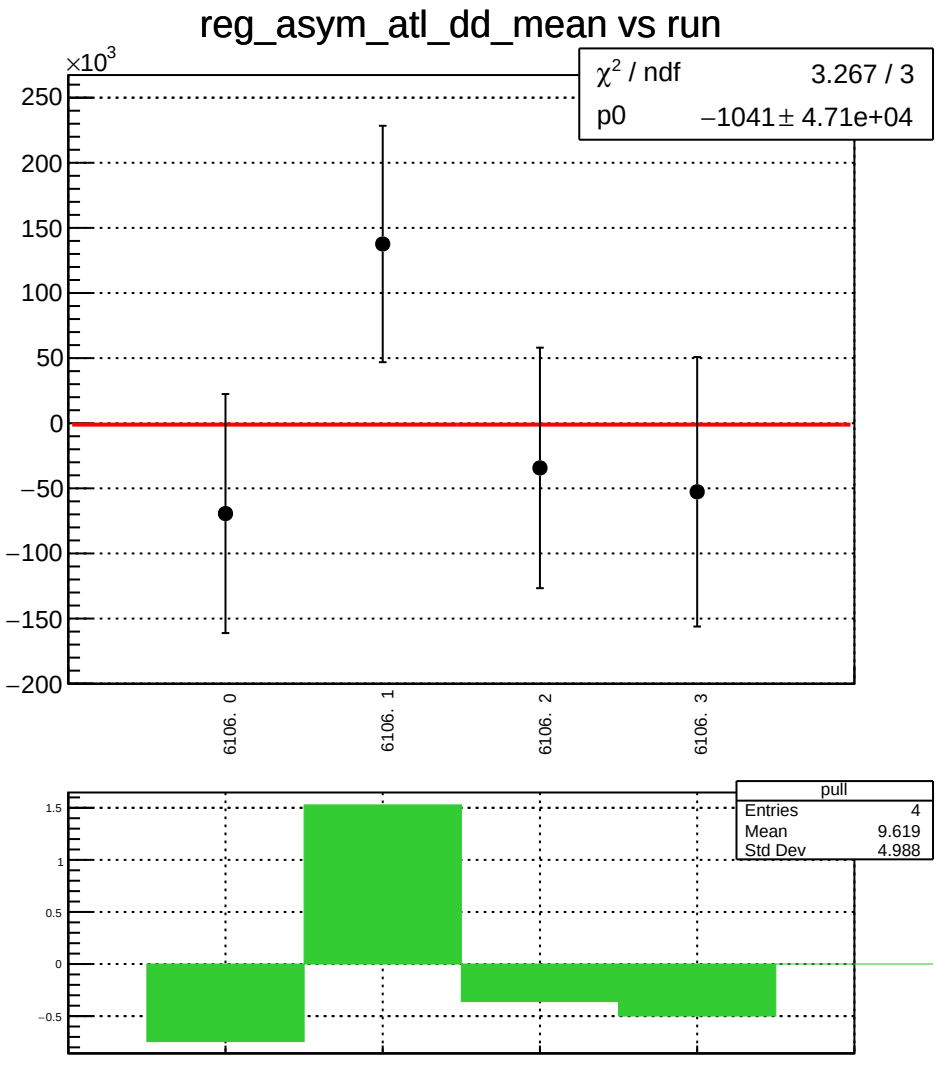

pull1D
Entries 4
Mean −0.1258
Std Dev 0.9015
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

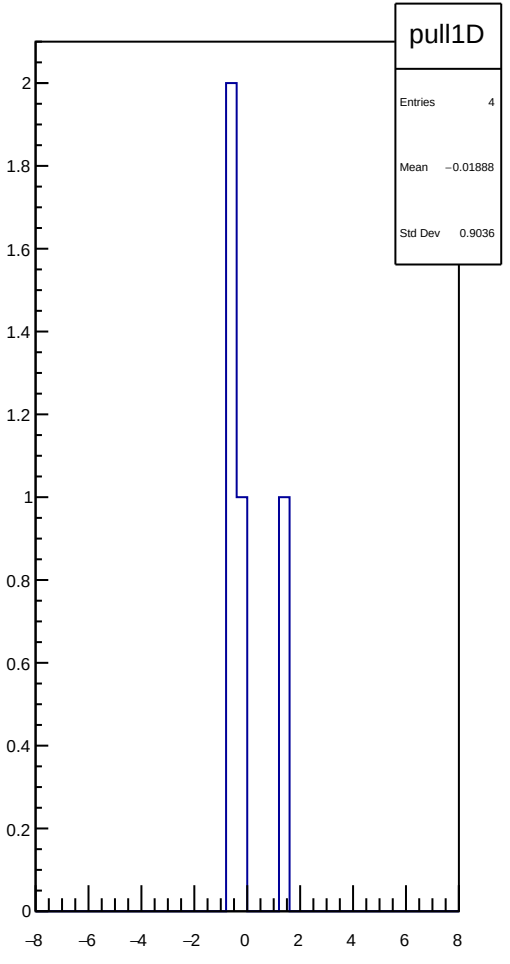

asym_atl_avg_correction_rms vs run
χ² / ndf 1404 / 3
p0 249.9 ± 0.9343
320
300
280
260
240
220
6106. 0
6106. 1
6106. 2
6106. 3

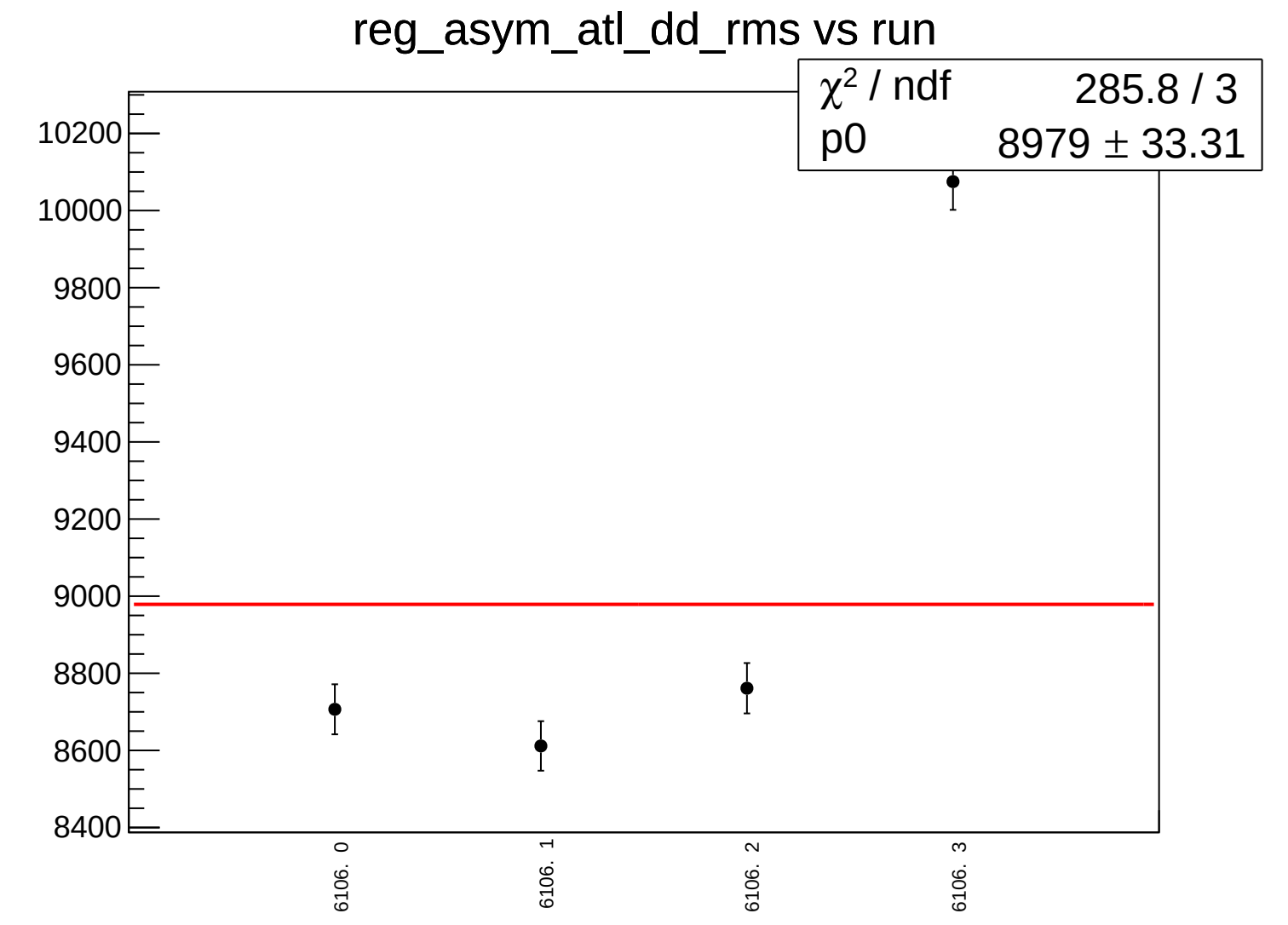

asym_atl_avg_mean vs run
×10^3
χ² / ndf 3.666 / 3
p0 6421± 4.713e+04
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 21.46
Std Dev 19.2
0.5
0
−0.5
−1
−1.5

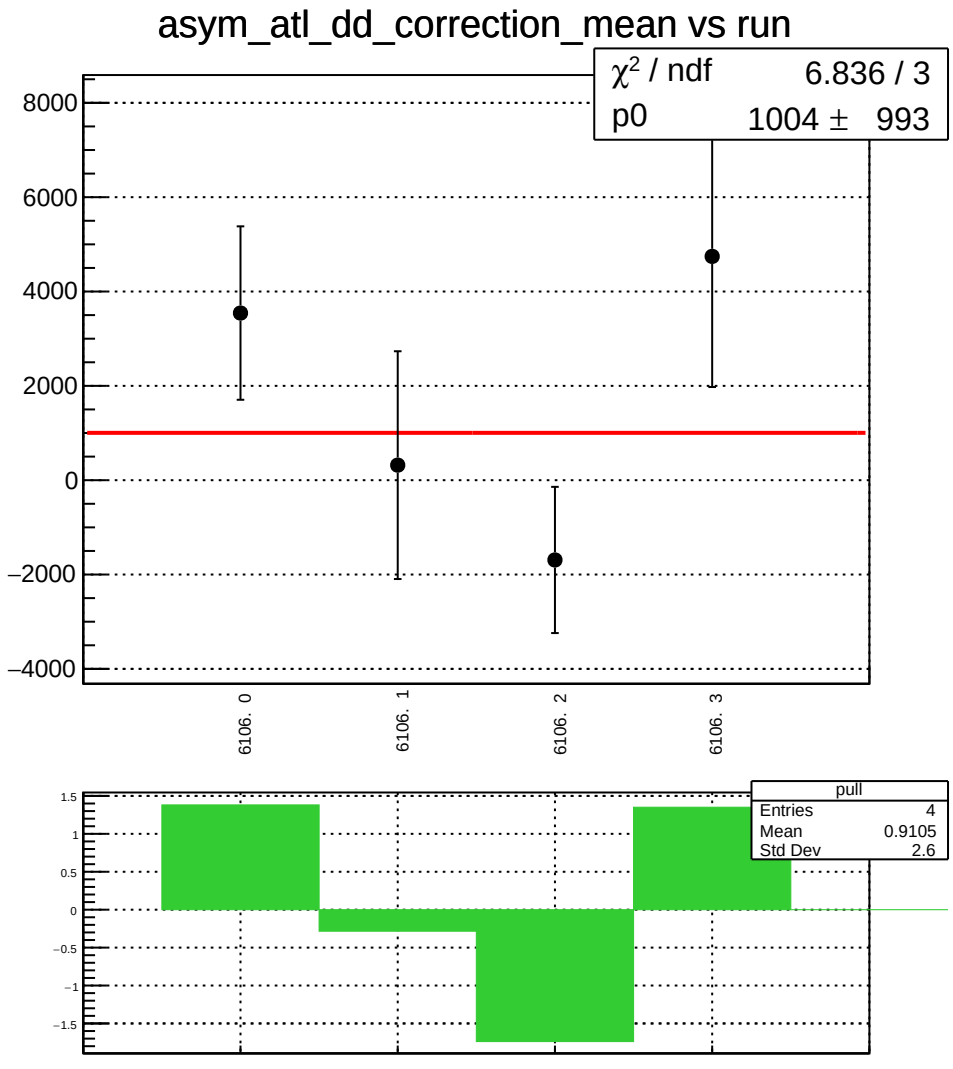

pull1D
Entries 4
Mean −0.04937
Std Dev 0.9561
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

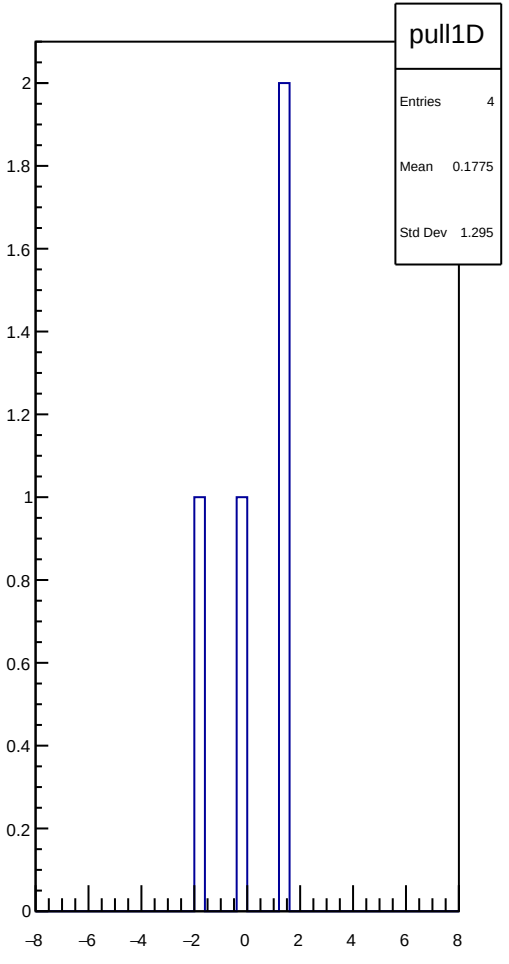

asym_atl_avg_rms vs run
χ² / ndf 322 / 3
p0 8982 ± 33.33
10400
10200
10000
9800
9600
9400
9200
9000
8800
8600
6106. 0
6106. 1
6106. 2
6106. 3

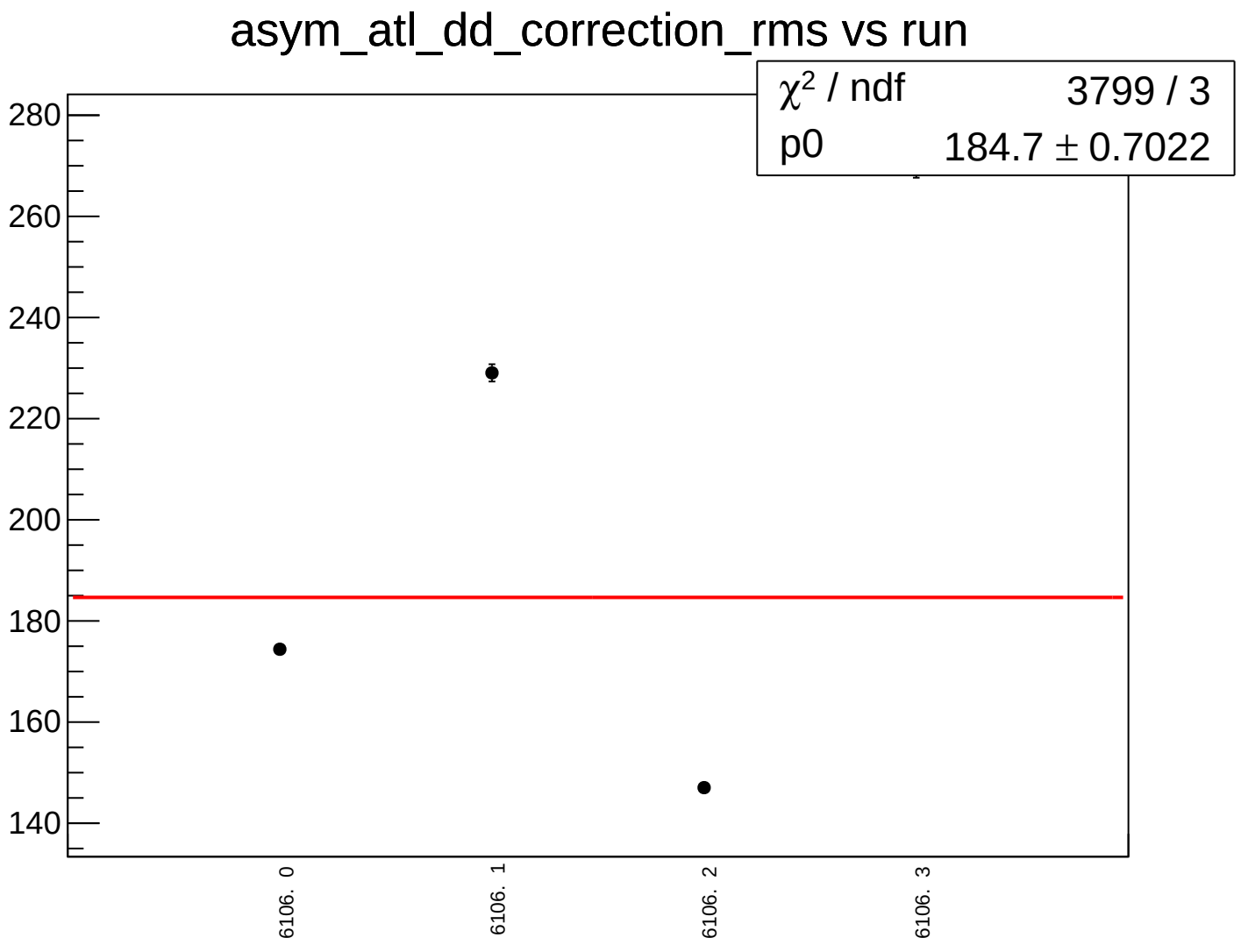

reg_asym_atl_dd_mean vs run
×10^3
χ² / ndf 3.267 / 3
p0 −1041 ± 4.71e+04
250
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 9.619
Std Dev 4.988
1.5
1
0.5
0
−0.5

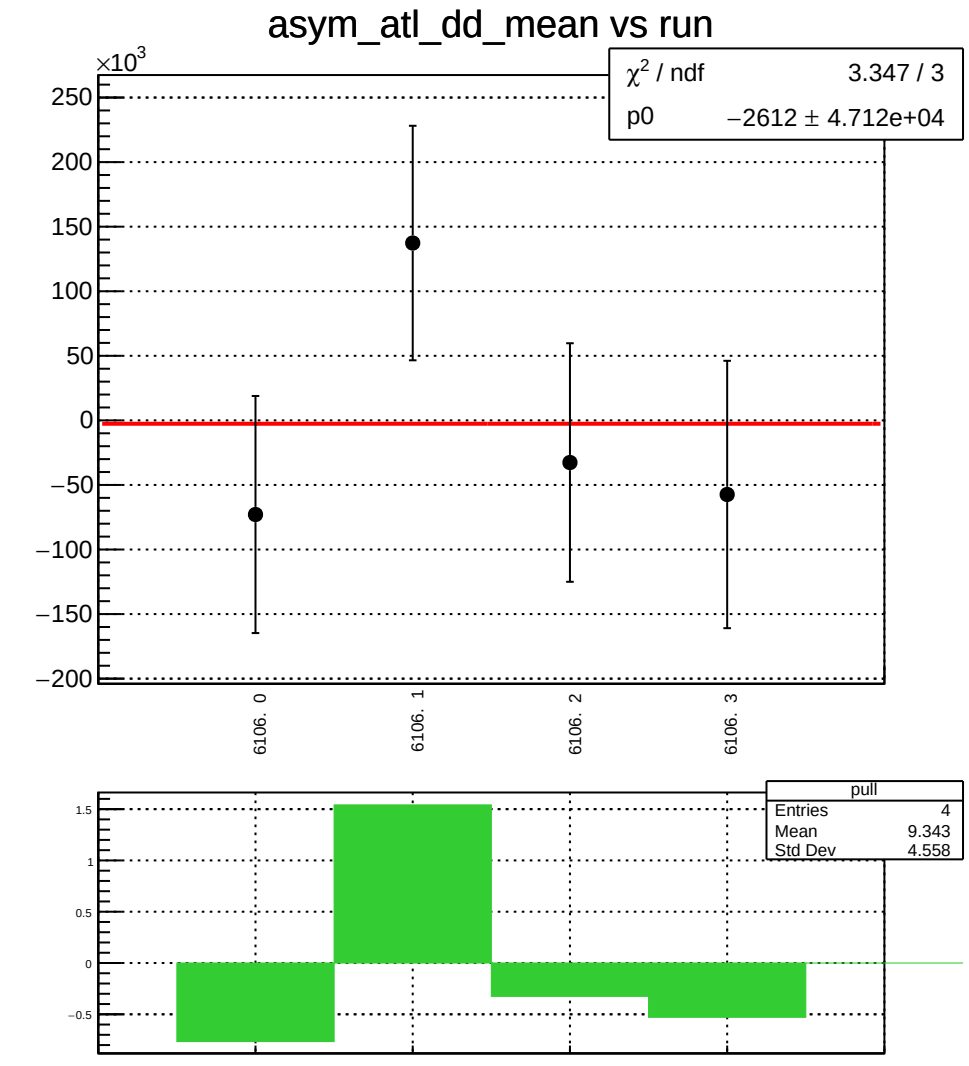

pull1D
Entries 4
Mean −0.01888
Std Dev 0.9036
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

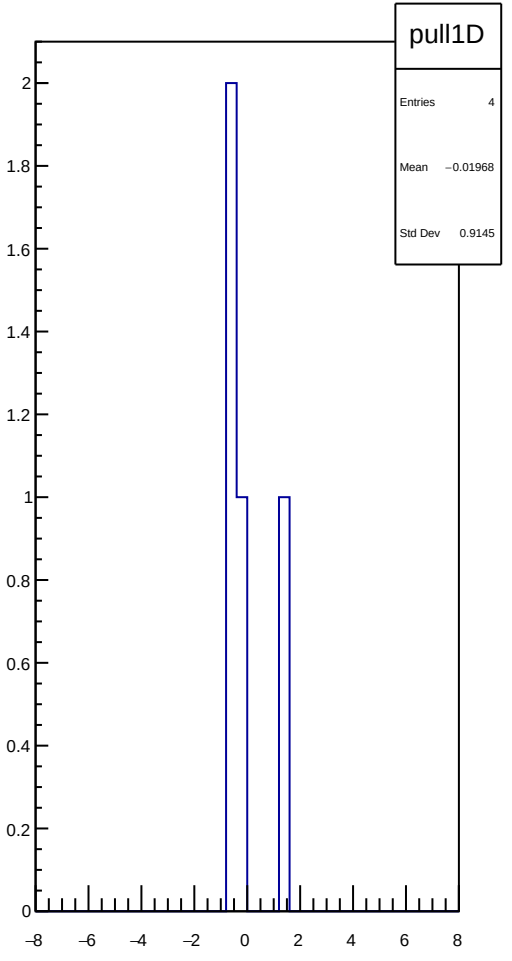

reg_asym_atl_dd_rms vs run
χ² / ndf 285.8 / 3
p0 8979 ± 33.31
10200
10000
9800
9600
9400
9200
9000
8800
8600
8400
6106. 0
6106. 1
6106. 2
6106. 3

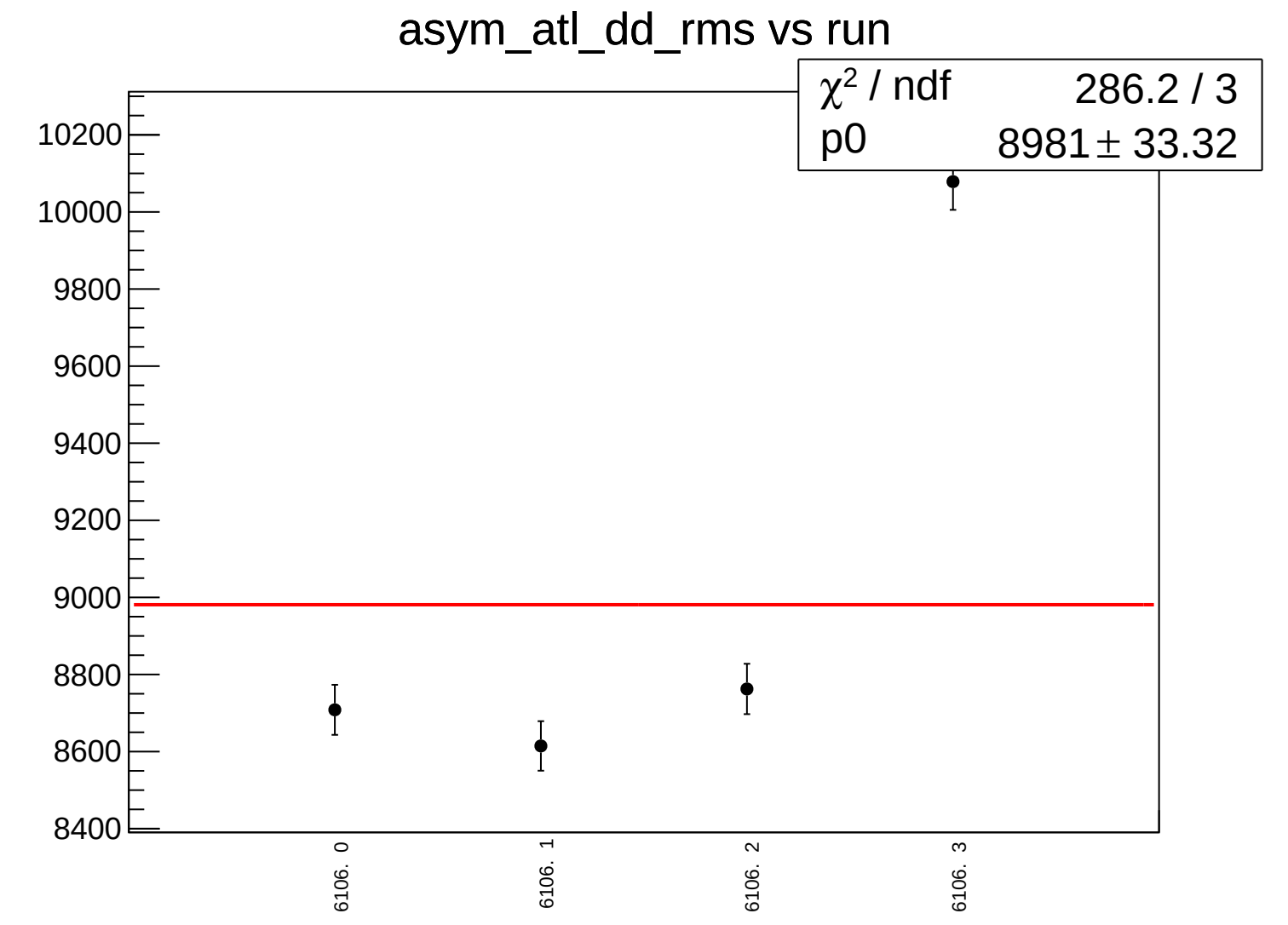

asym_atl_dd_correction_mean vs run
χ² / ndf 6.836 / 3
p0 1004 ± 993
8000
6000
4000
2000
0
−2000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.9105
Std Dev 2.6
1.5
1
0.5
0
−0.5
−1
−1.5

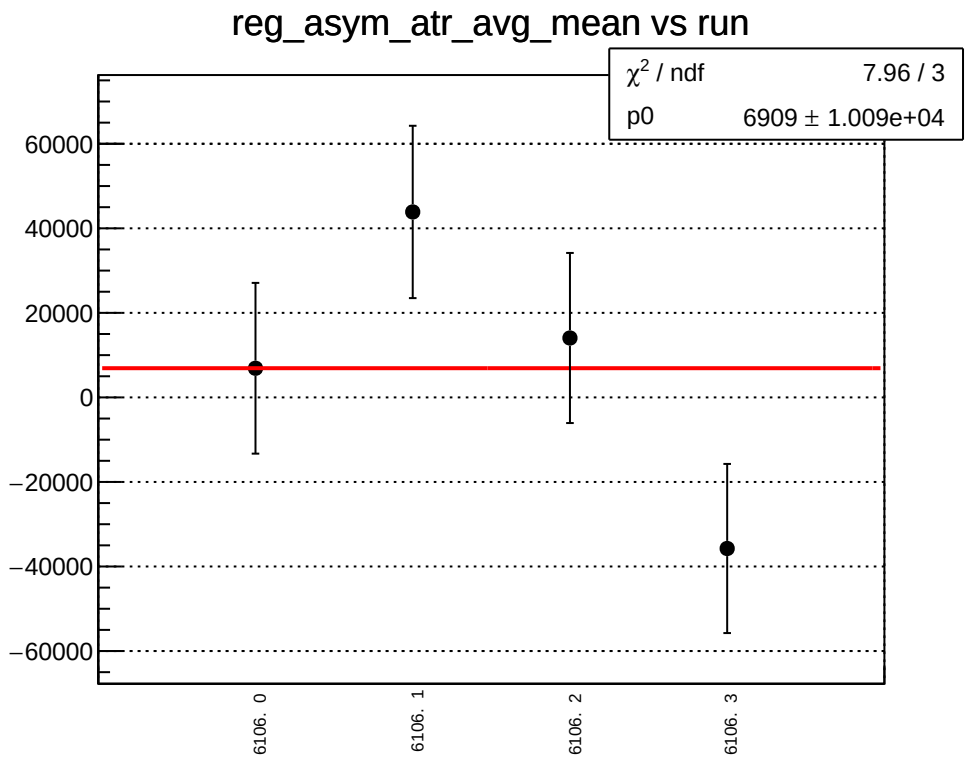

pull1D
Entries 4
Mean 0.1775
Std Dev 1.295
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

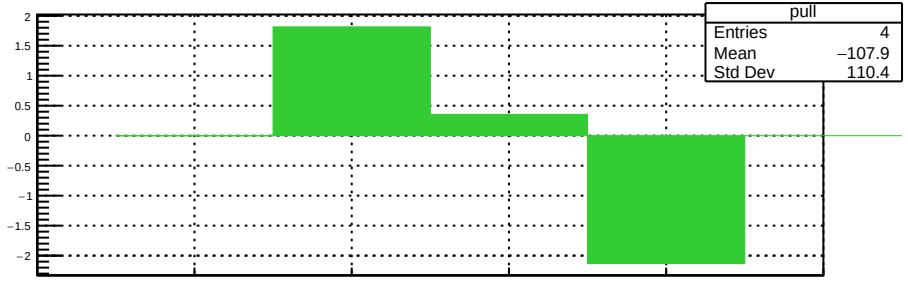

asym_atl_dd_correction_rms vs run
χ² / ndf 3799 / 3
p0 184.7 ± 0.7022
280
260
240
220
200
180
160
140
6106. 0
6106. 1
6106. 2
6106. 3

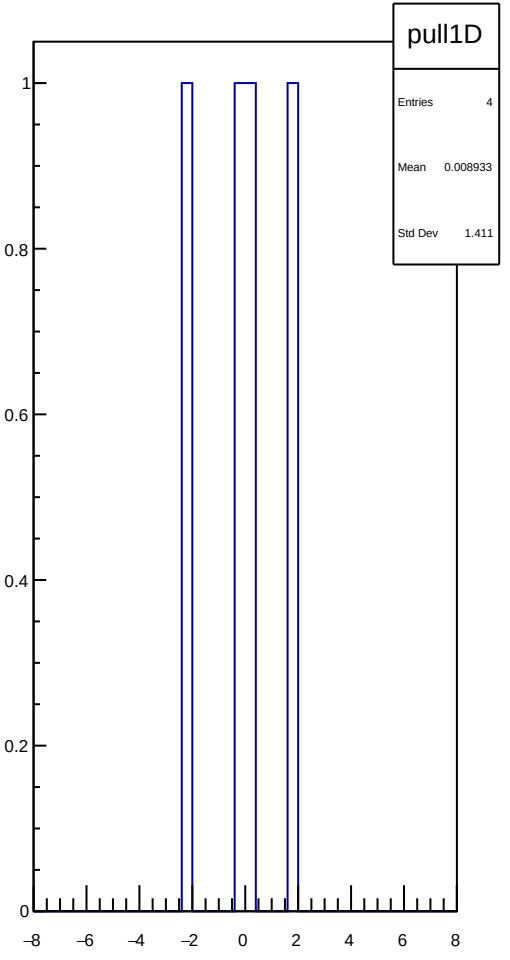

asym_atl_dd_mean vs run
×10^3
χ² / ndf 3.347 / 3
p0 −2612 ± 4.712e+04
250
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 9.343
Std Dev 4.558
1.5
1
0.5
0
−0.5

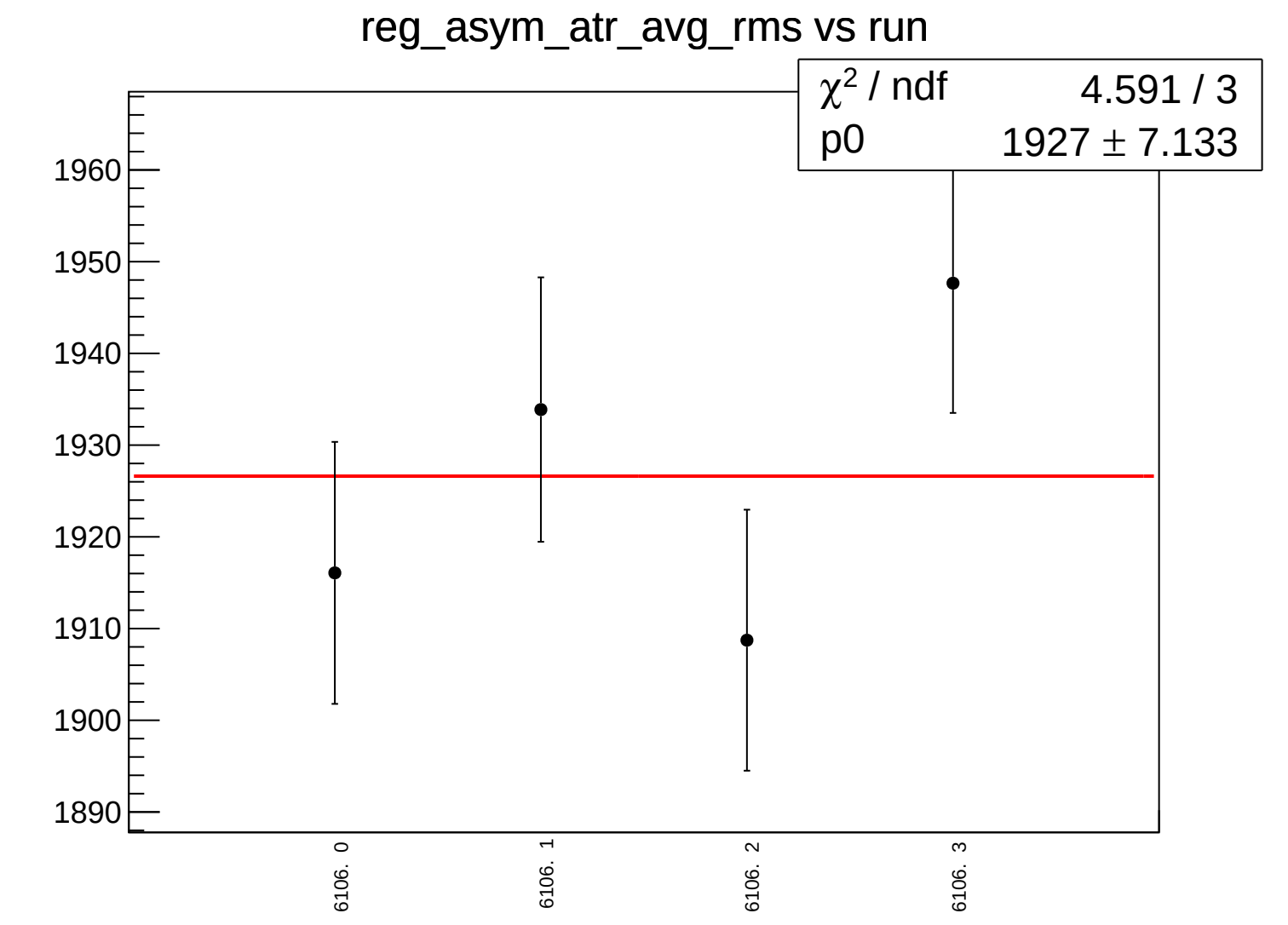

pull1D
Entries 4
Mean −0.01968
Std Dev 0.9145
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

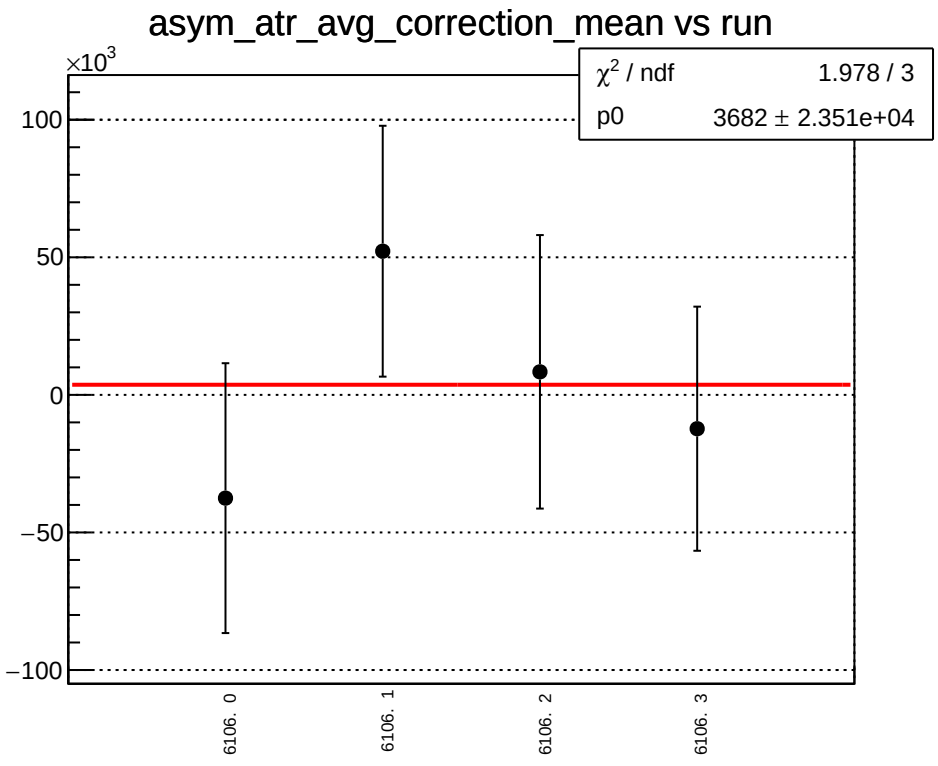

asym_atl_dd_rms vs run
χ² / ndf 286.2 / 3
p0 8981 ± 33.32
10200
10000
9800
9600
9400
9200
9000
8800
8600
8400
6106. 0
6106. 1
6106. 2
6106. 3

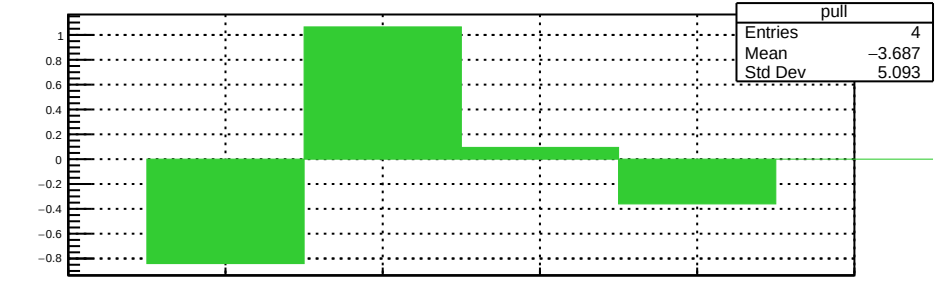

reg_asym_atr_avg_mean vs run
χ² / ndf 7.96 / 3
p0 6909 ± 1.009e+04
60000
40000
20000
0
−20000
−40000
−60000
6106. 0
6106. 1
6106. 2
6106. 3

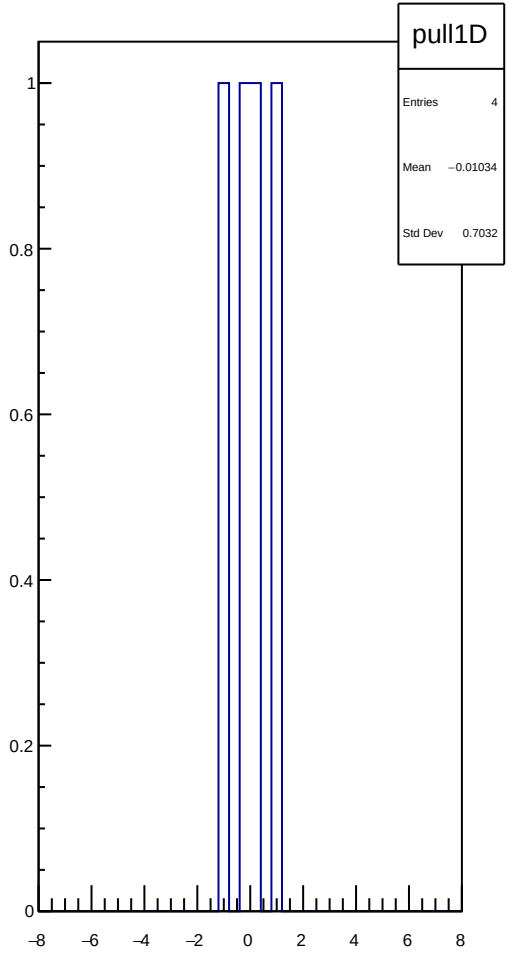

pull
Entries 4
Mean −107.9
Std Dev 110.4
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

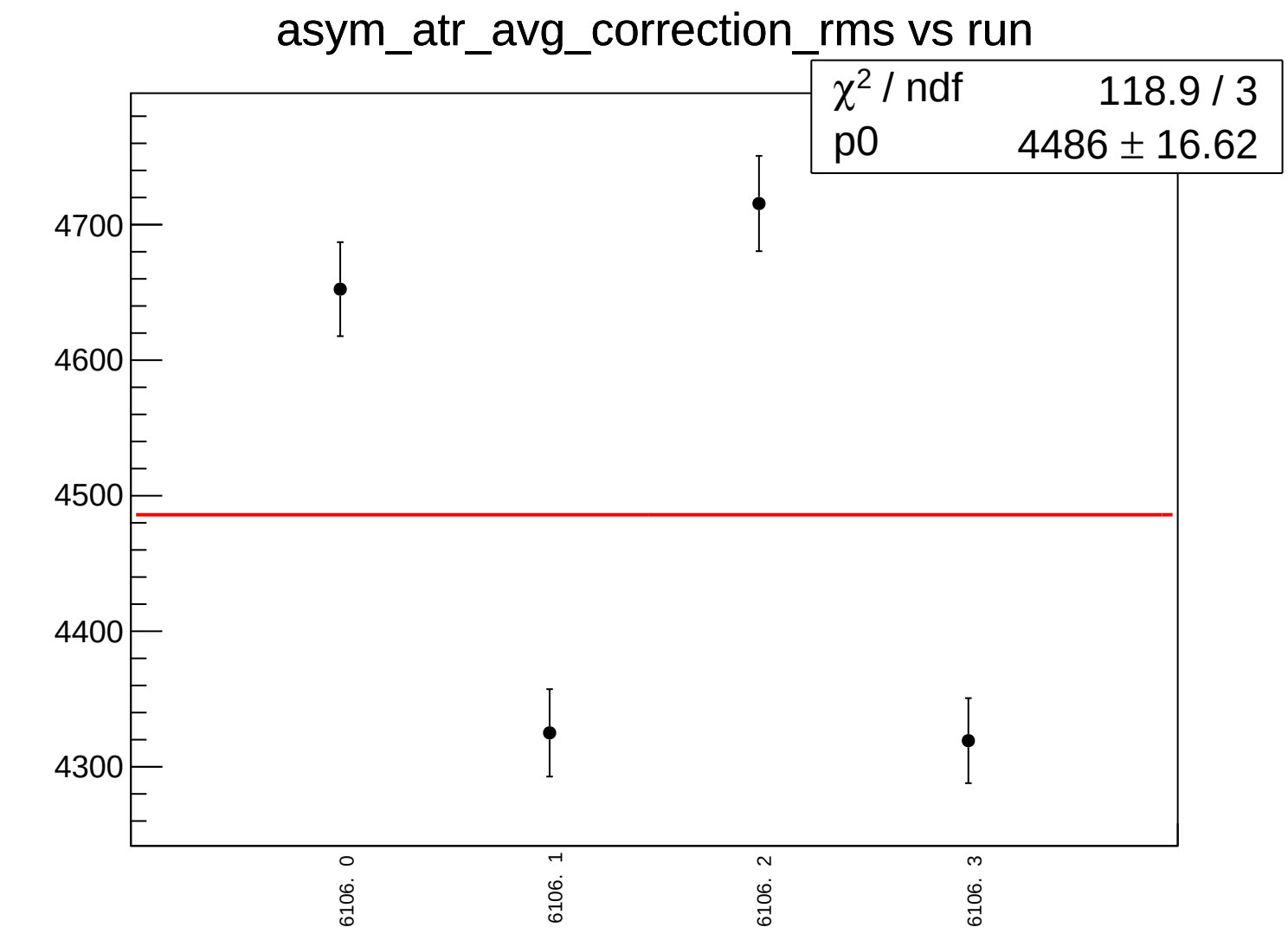

pull1D
Entries 4
Mean 0.008933
Std Dev 1.411
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

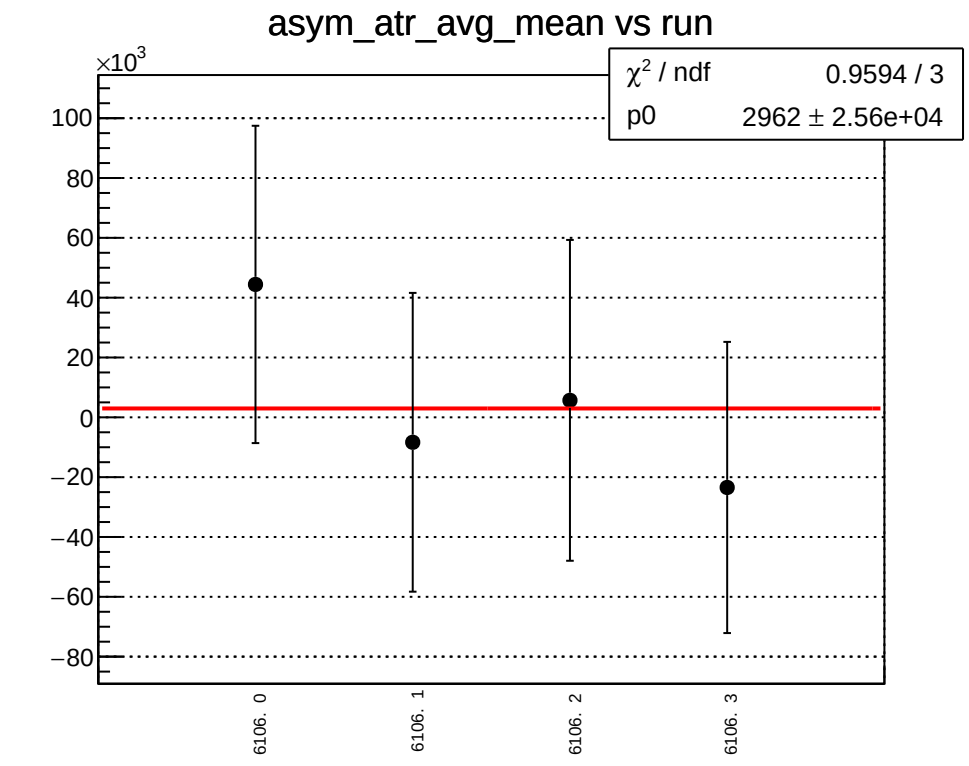

reg_asym_atr_avg_rms vs run
χ² / ndf 4.591 / 3
p0 1927 ± 7.133
1960
1950
1940
1930
1920
1910
1900
1890
6106. 0
6106. 1
6106. 2
6106. 3

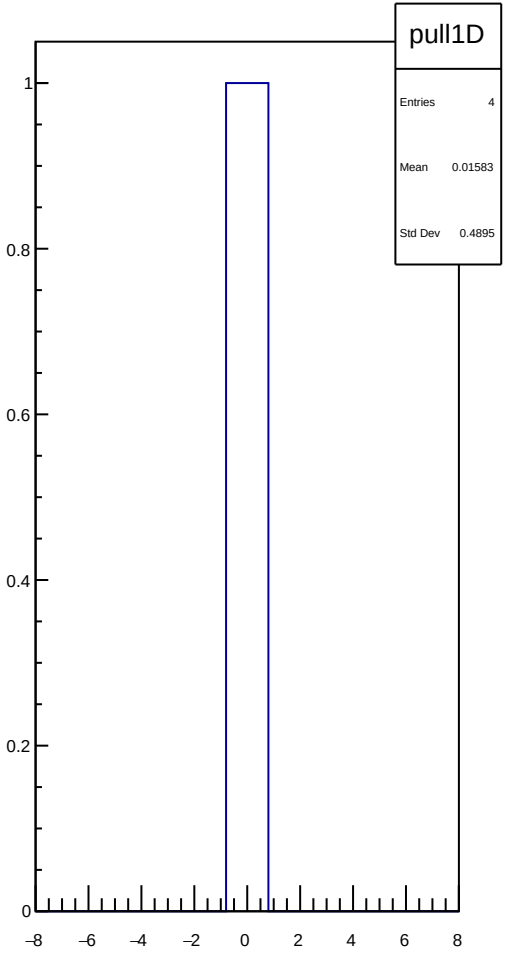

asym_atr_avg_correction_mean vs run
×10^3
χ² / ndf 1.978 / 3
p0 3682 ± 2.351e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3

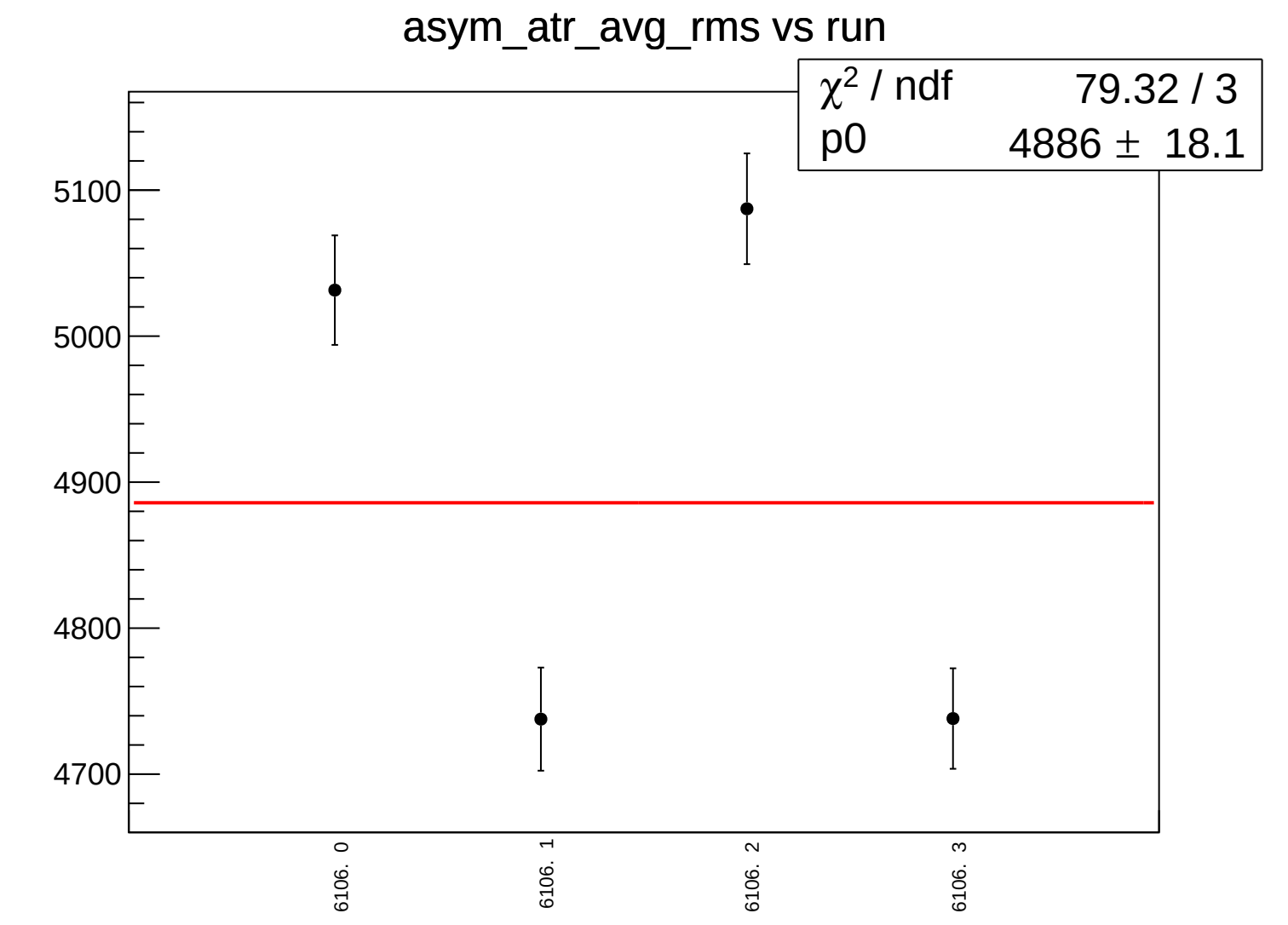

pull
Entries 4
Mean −3.687
Std Dev 5.093
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

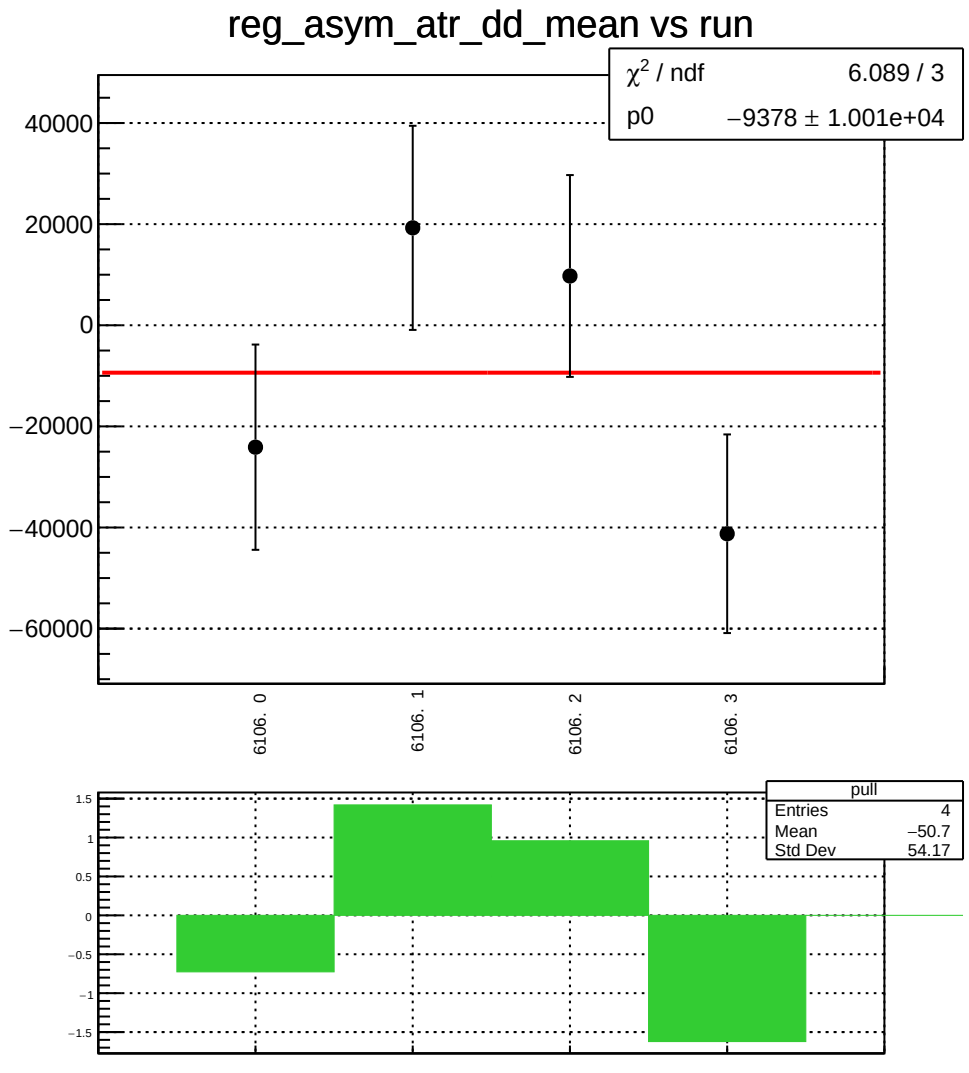

pull1D
Entries 4
Mean −0.01034
Std Dev 0.7032
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

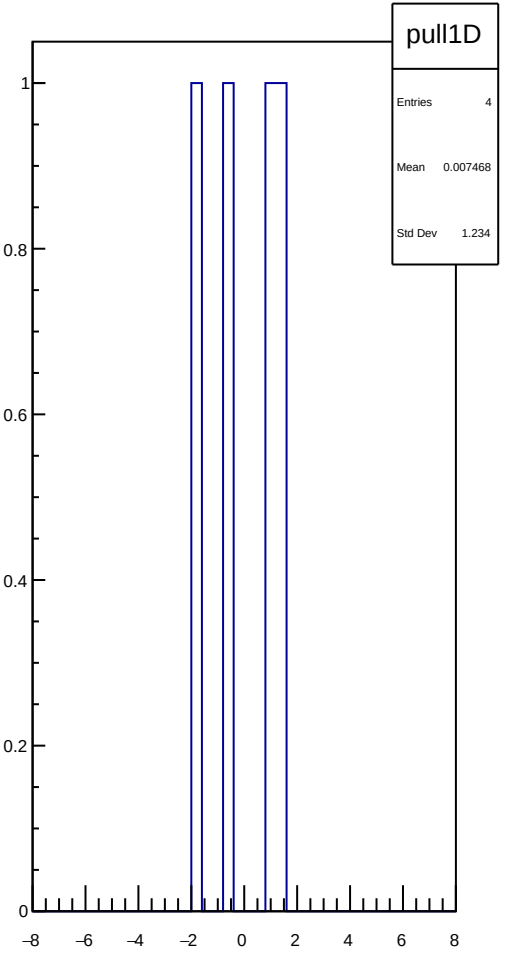

asym_atr_avg_correction_rms vs run
χ^2 / ndf 118.9 / 3
p0 4486 ± 16.62
4700
4600
4500
4400
4300
6106. 0
6106. 1
6106. 2
6106. 3

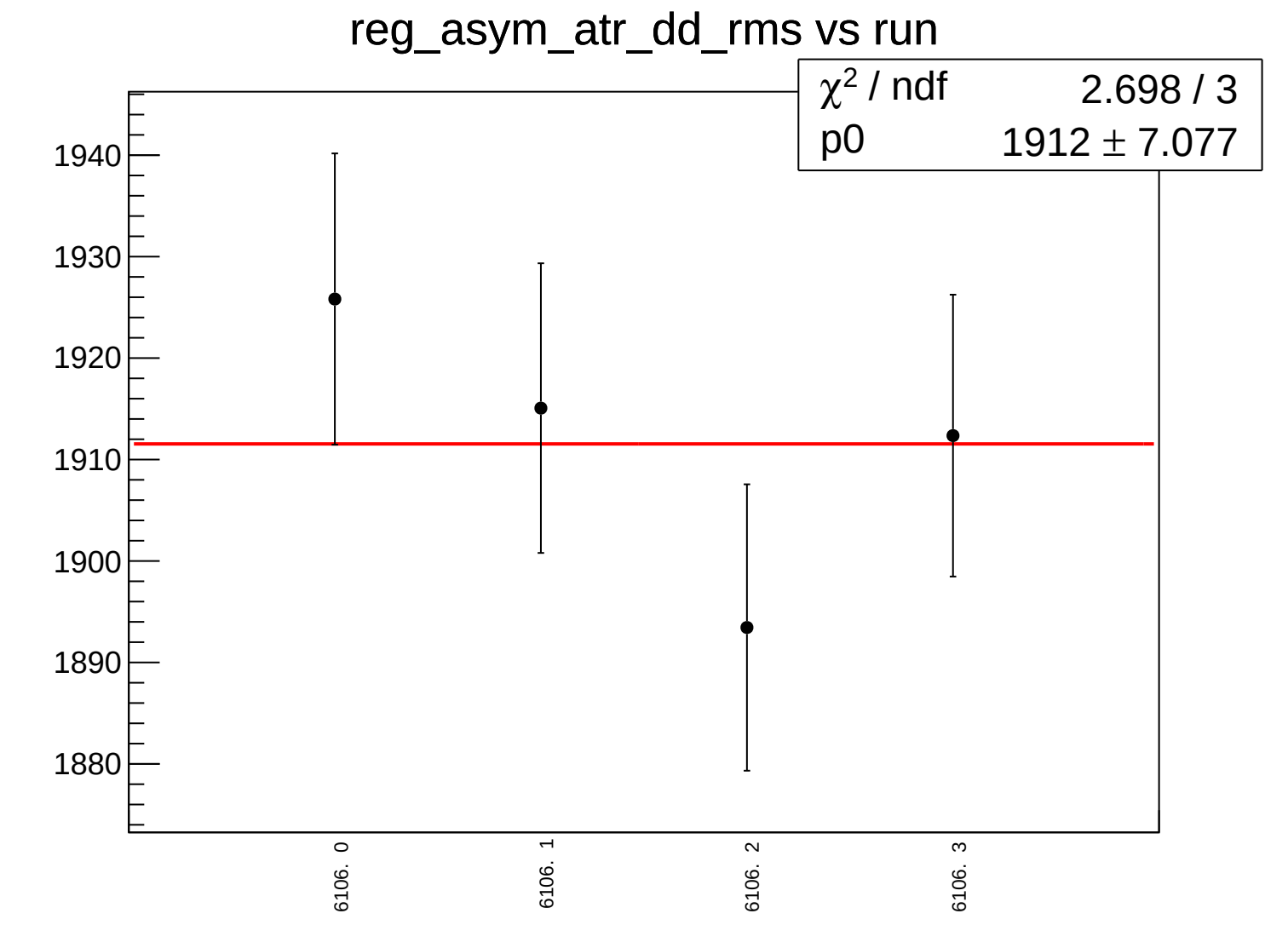

asym_atr_avg_mean vs run
×10^3
χ² / ndf 0.9594 / 3
p0 2962 ± 2.56e+04
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −27.19
Std Dev 29.06
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

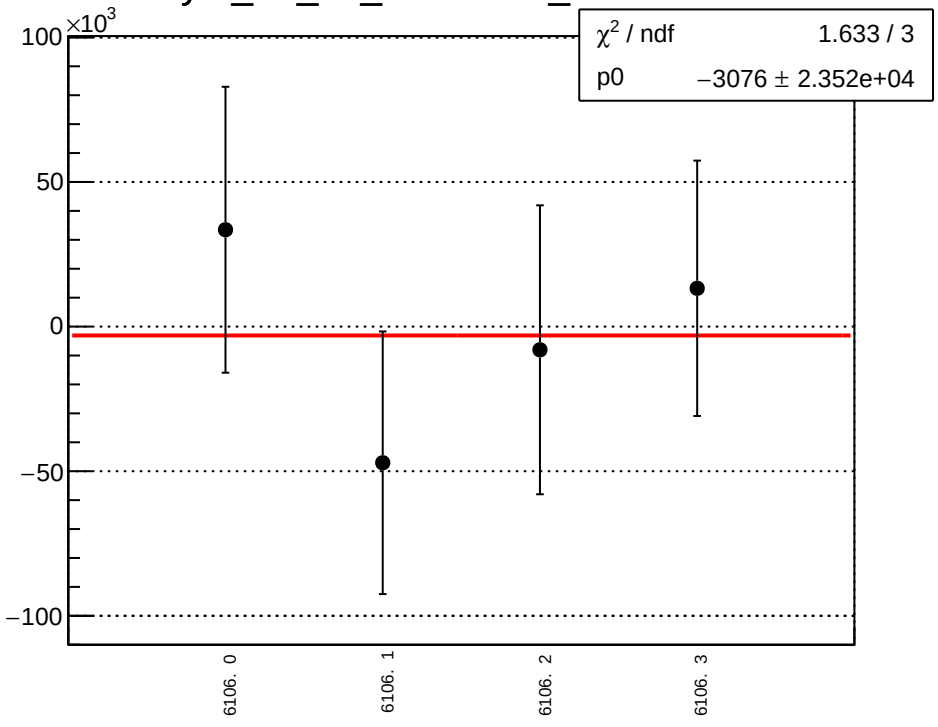

pull1D
Entries 4
Mean 0.01583
Std Dev 0.4895
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

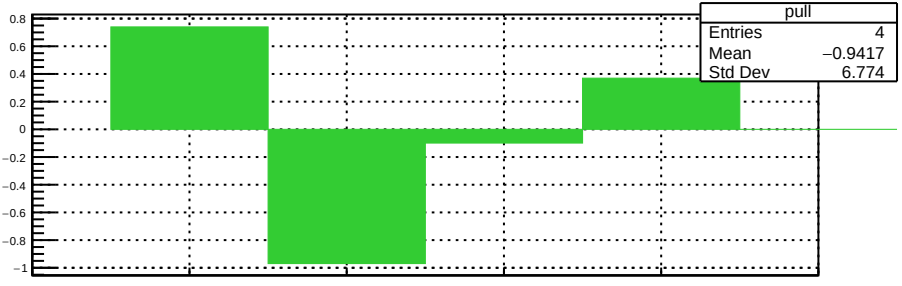

asym_atr_avg_rms vs run
χ² / ndf 79.32 / 3
p0 4886 ± 18.1
5100
5000
4900
4800
4700
6106. 0
6106. 1
6106. 2
6106. 3

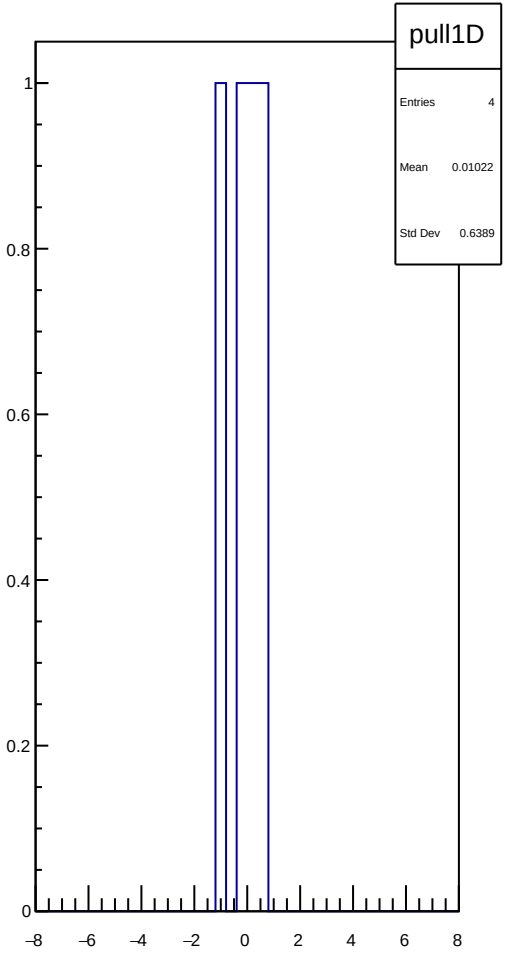

reg_asym_atr_dd_mean vs run
χ² / ndf 6.089 / 3
p0 −9378 ± 1.001e+04
40000
20000
0
−20000
−40000
−60000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −50.7
Std Dev 54.17
1.5
1
0.5
0
−0.5
−1
−1.5

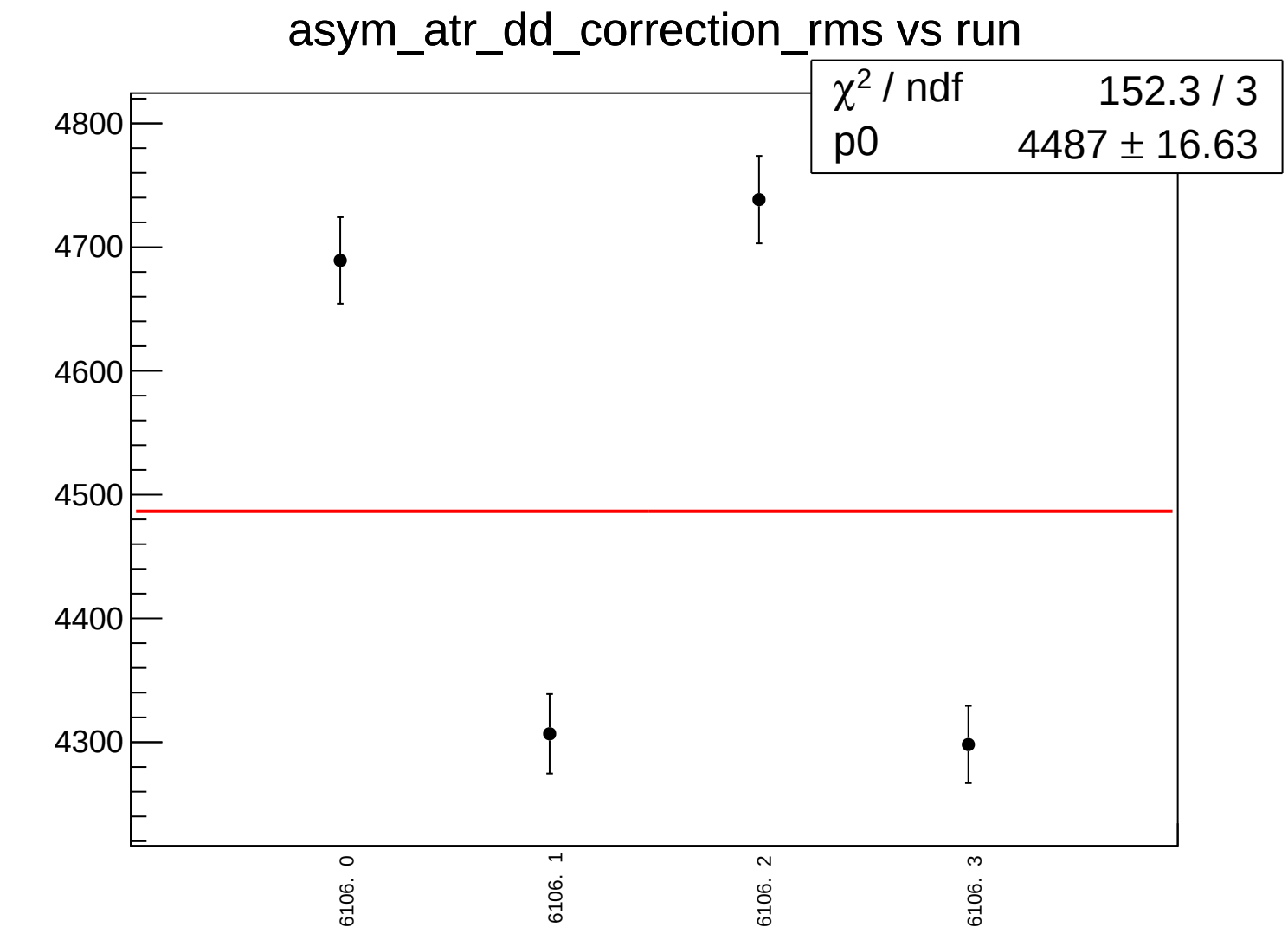

pull1D
Entries 4
Mean 0.007468
Std Dev 1.234
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

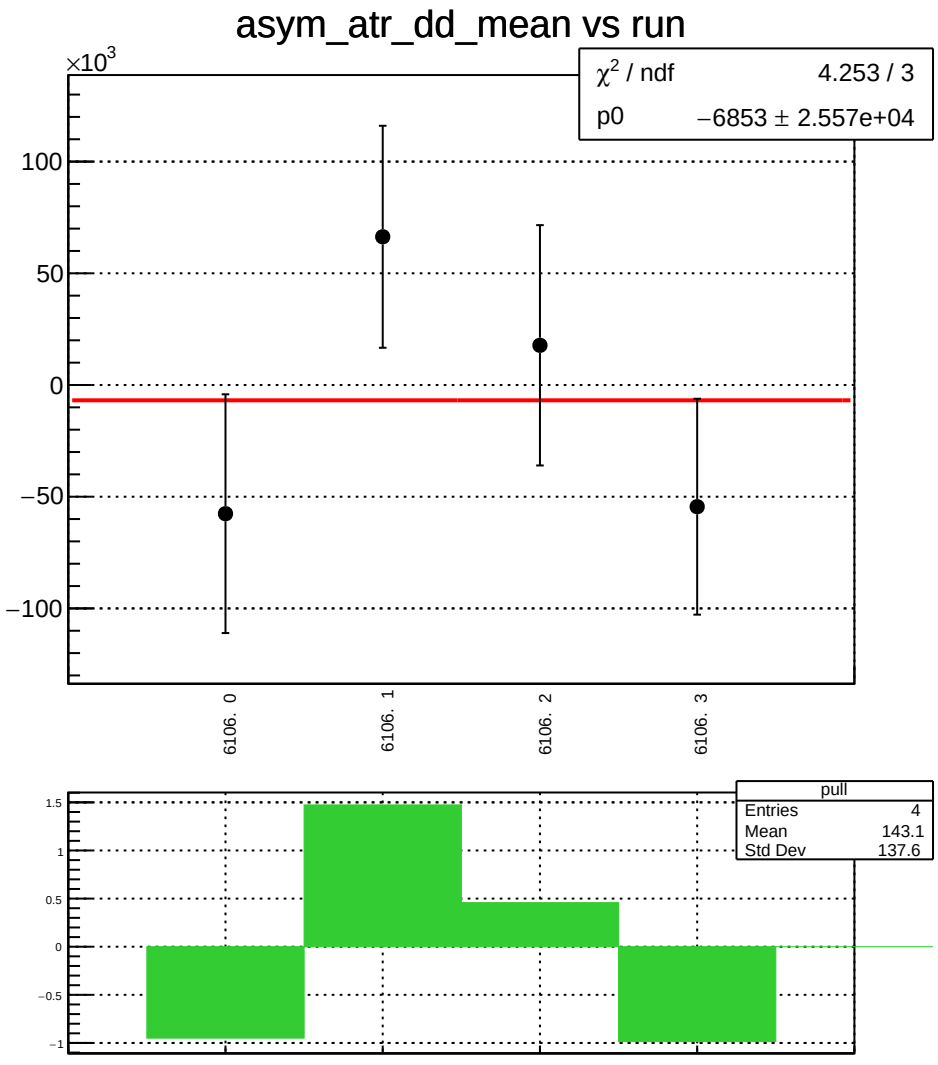

reg_asym_atr_dd_rms vs run
χ² / ndf 2.698 / 3
p0 1912 ± 7.077
1940
1930
1920
1910
1900
1890
1880
6106. 0
6106. 1
6106. 2
6106. 3

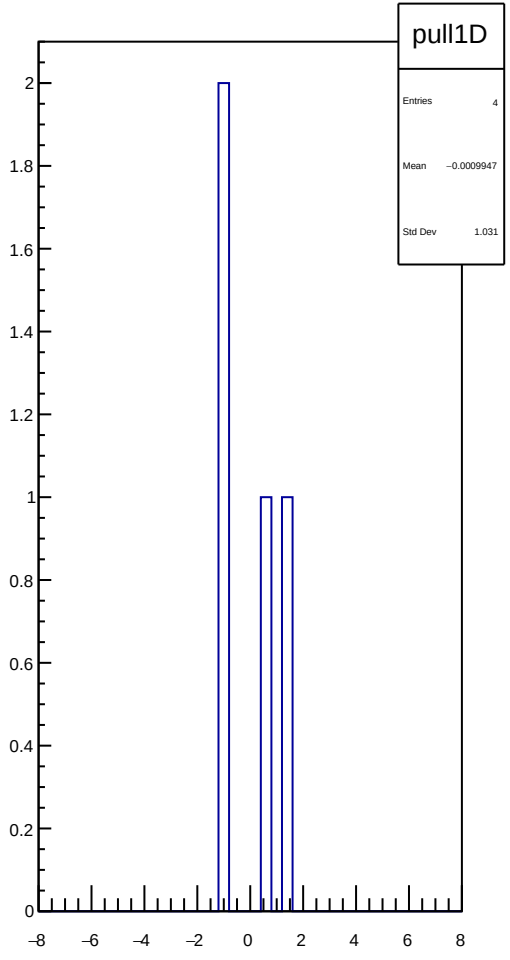

asym_atr_dd_correction_mean vs run
×10^3
100
50
0
−50
−100
χ² / ndf 1.633 / 3
p0 −3076 ± 2.352e+04
6106. 0
6106. 1
6106. 2
6106. 3

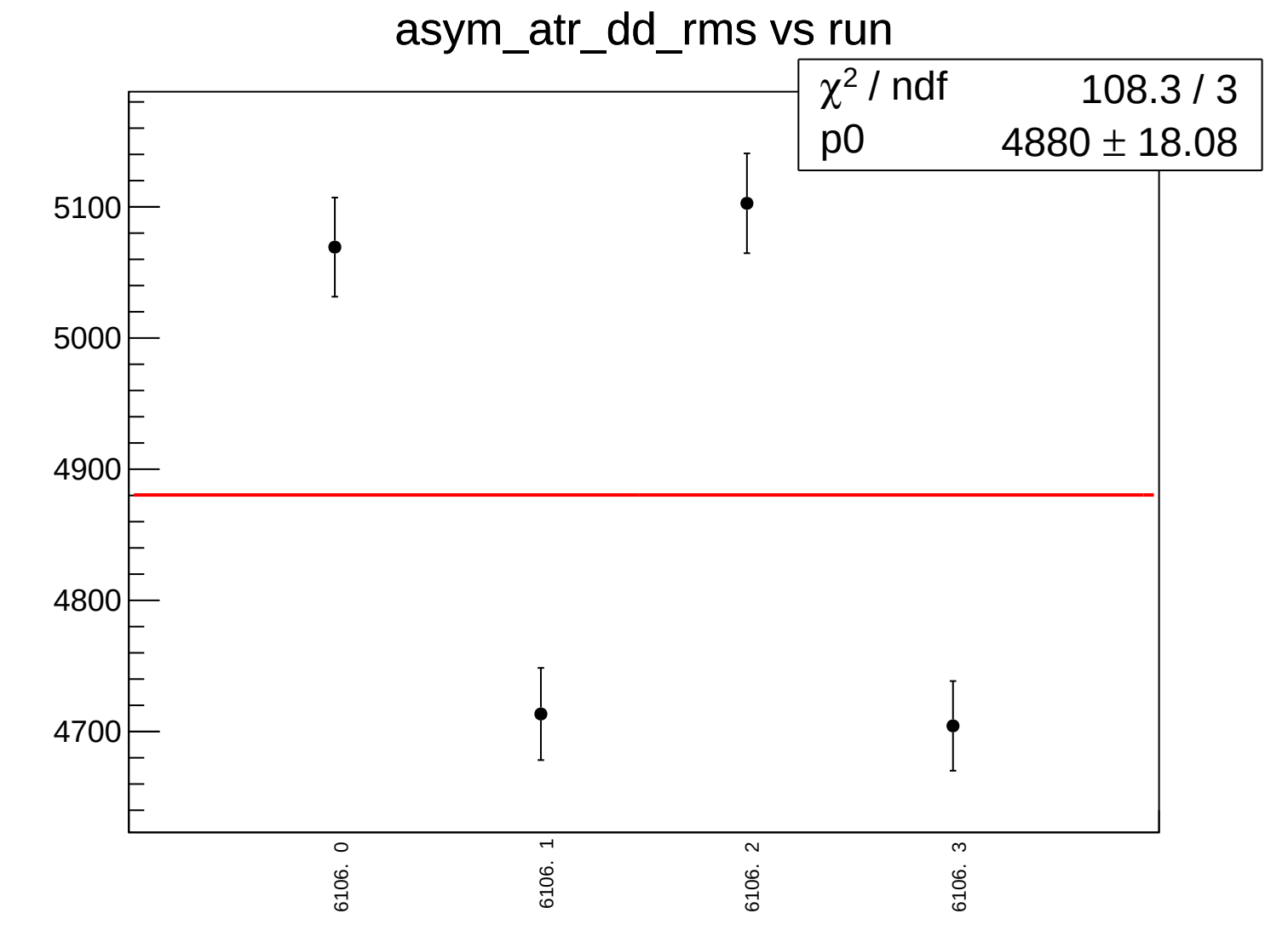

pull
Entries 4
Mean −0.9417
Std Dev 6.774
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

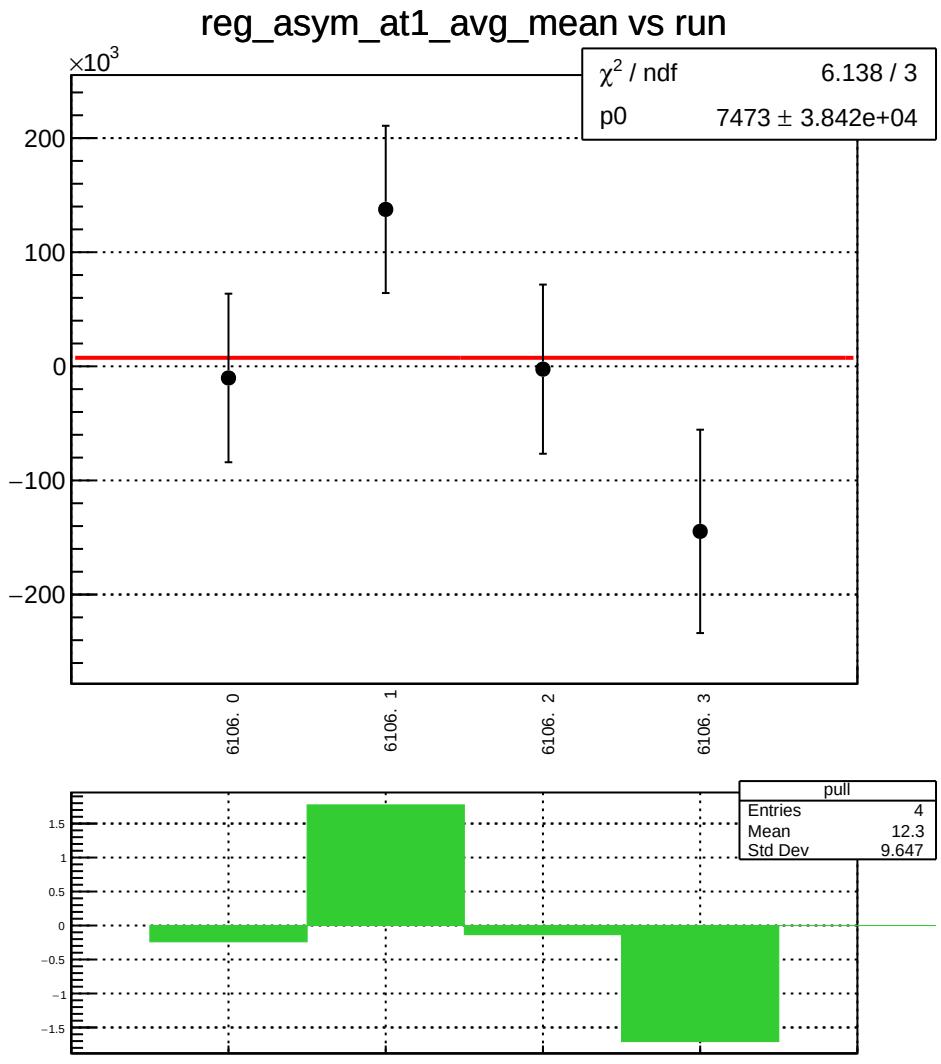

pull1D
Entries 4
Mean 0.01022
Std Dev 0.6389
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

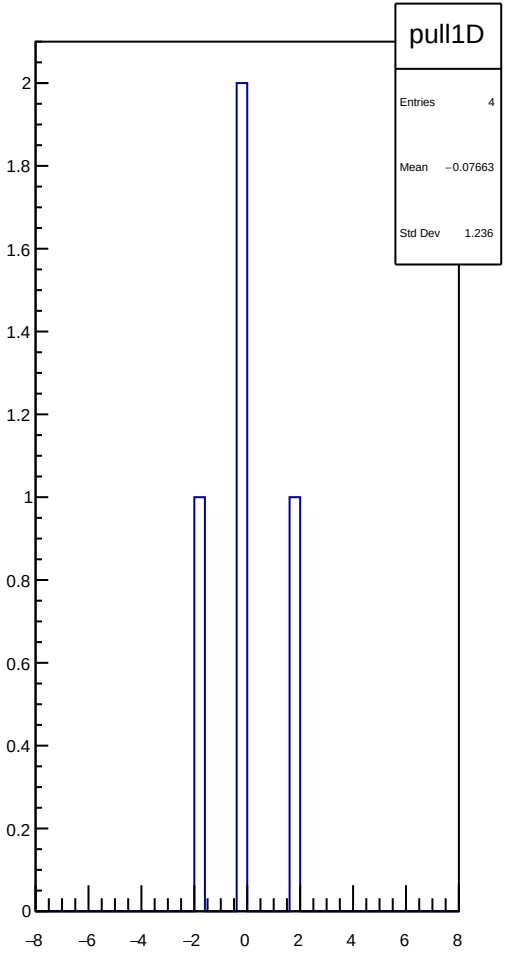

asym_atr_dd_correction_rms vs run
χ² / ndf 152.3 / 3
p0 4487 ± 16.63
4800
4700
4600
4500
4400
4300
6106. 0
6106. 1
6106. 2
6106. 3

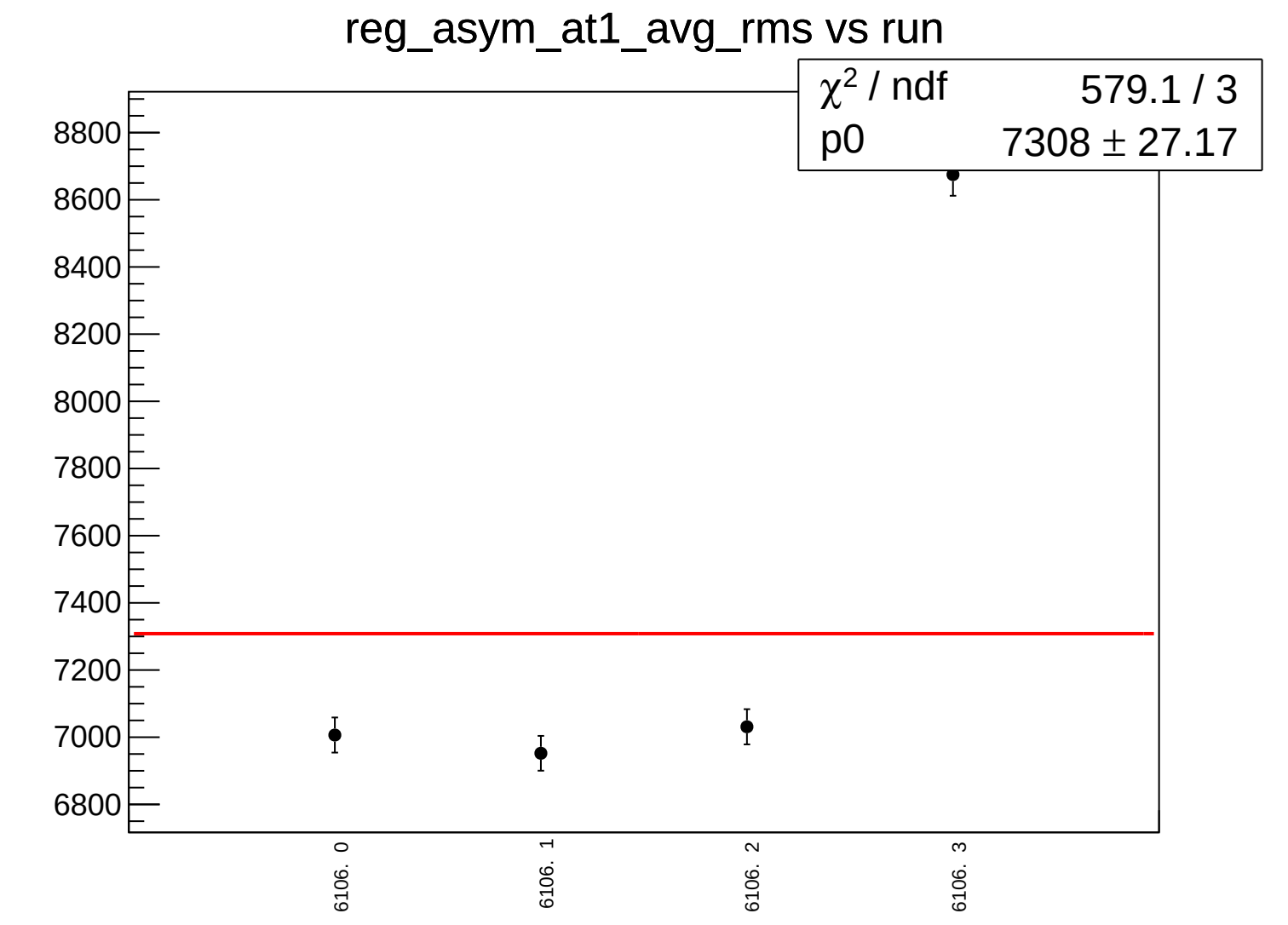

asym_atr_dd_mean vs run
×10^3
χ² / ndf 4.253 / 3
p0 −6853 ± 2.557e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 143.1
Std Dev 137.6
1.5
1
0.5
0
−0.5
−1

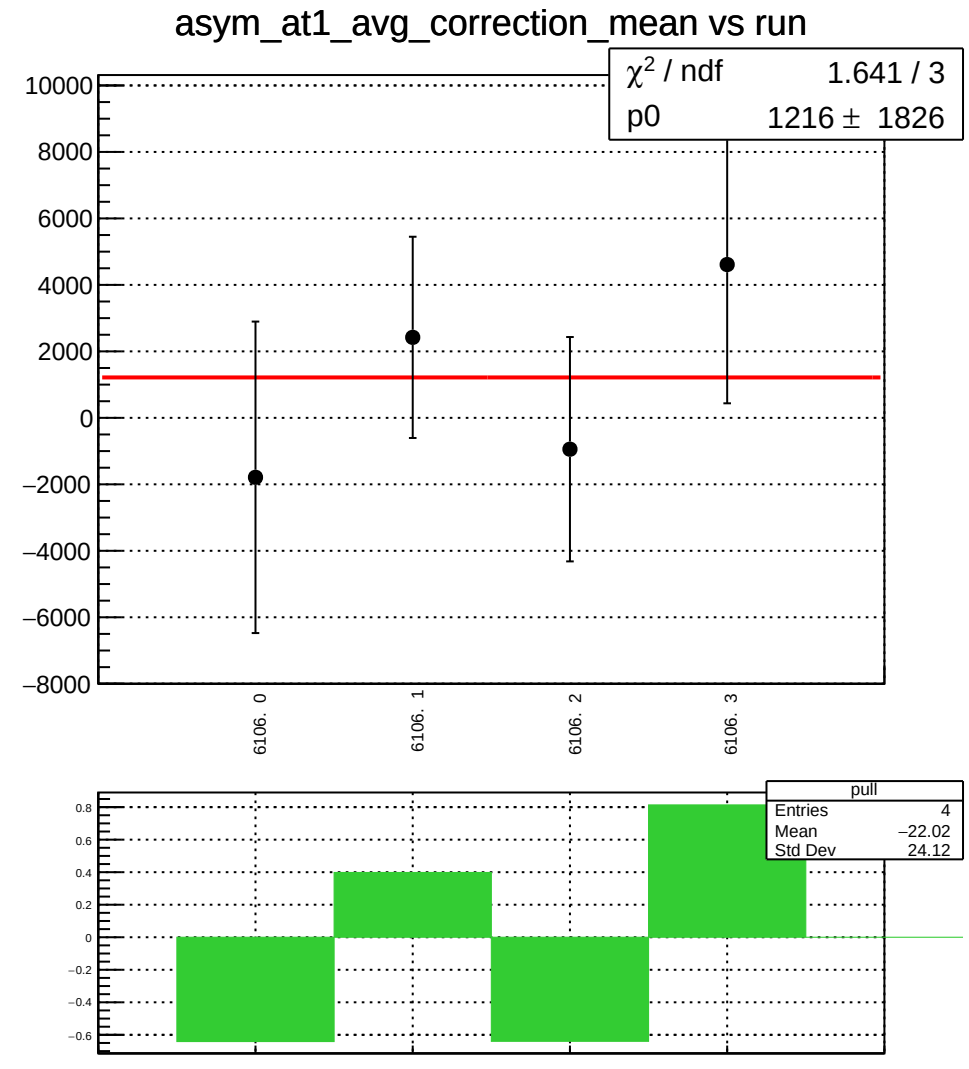

pull1D
Entries 4
Mean −0.0009947
Std Dev 1.031
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

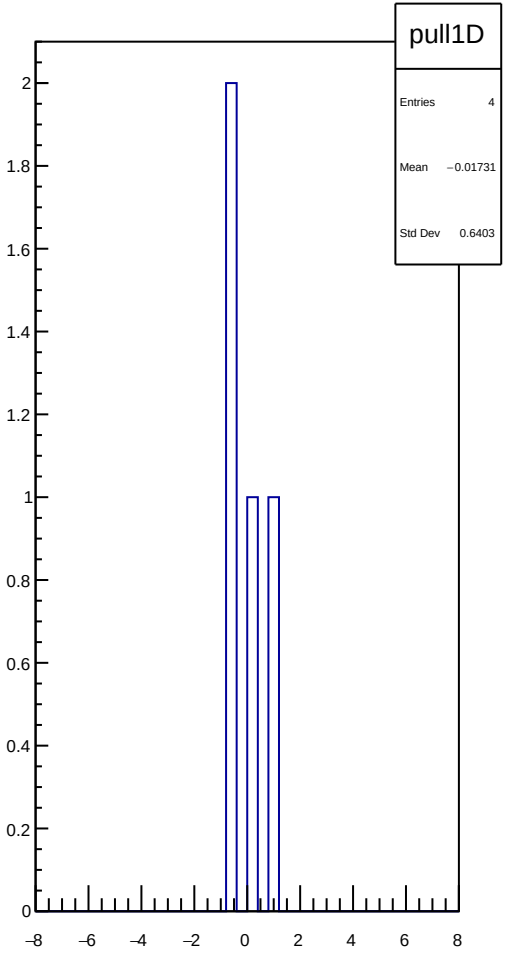

asym_atr_dd_rms vs run
χ² / ndf 108.3 / 3
p0 4880 ± 18.08
5100
5000
4900
4800
4700
6106. 0
6106. 1
6106. 2
6106. 3

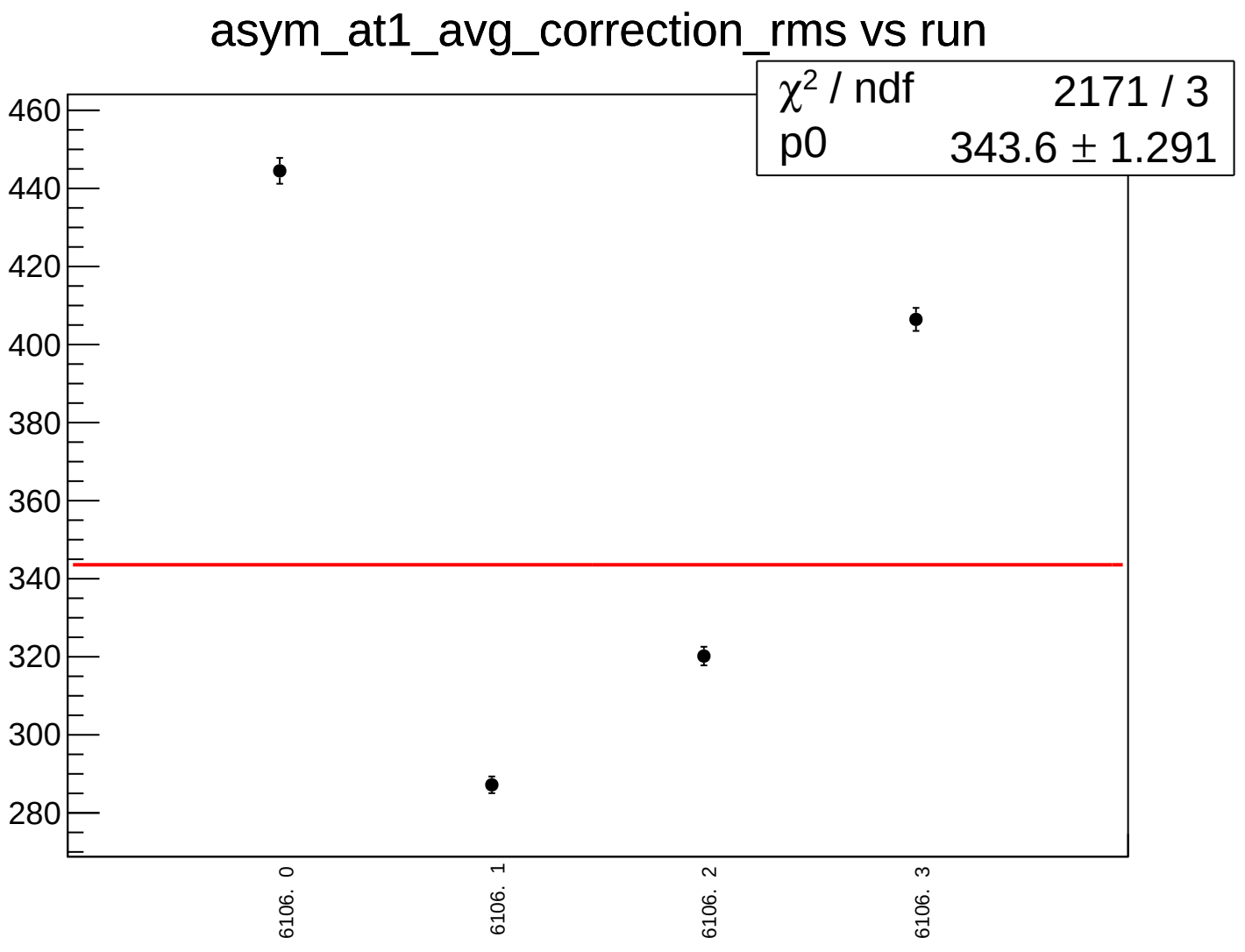

reg_asym_at1_avg_mean vs run
×10^3
χ^2 / ndf 6.138 / 3
p0 7473 ± 3.842e+04
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.3
Std Dev 9.647
1.5
1
0.5
0
−0.5
−1
−1.5

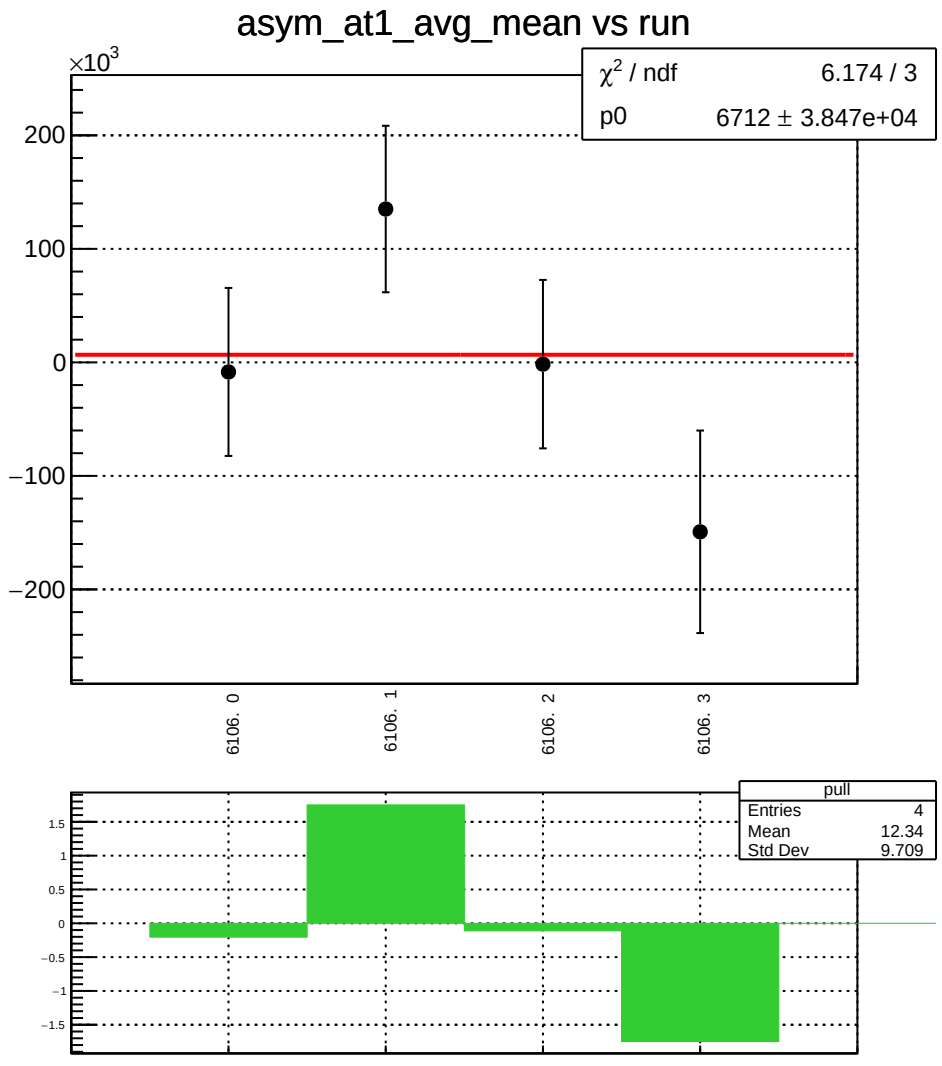

pull1D
Entries 4
Mean −0.07663
Std Dev 1.236
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

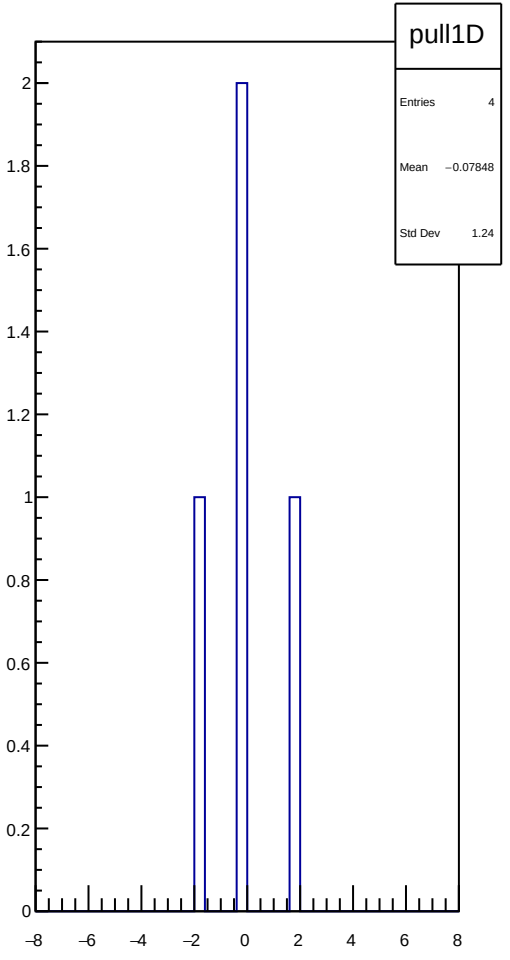

reg_asym_at1_avg_rms vs run
χ² / ndf 579.1 / 3
p0 7308 ± 27.17
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000
6800
6106. 0
6106. 1
6106. 2
6106. 3

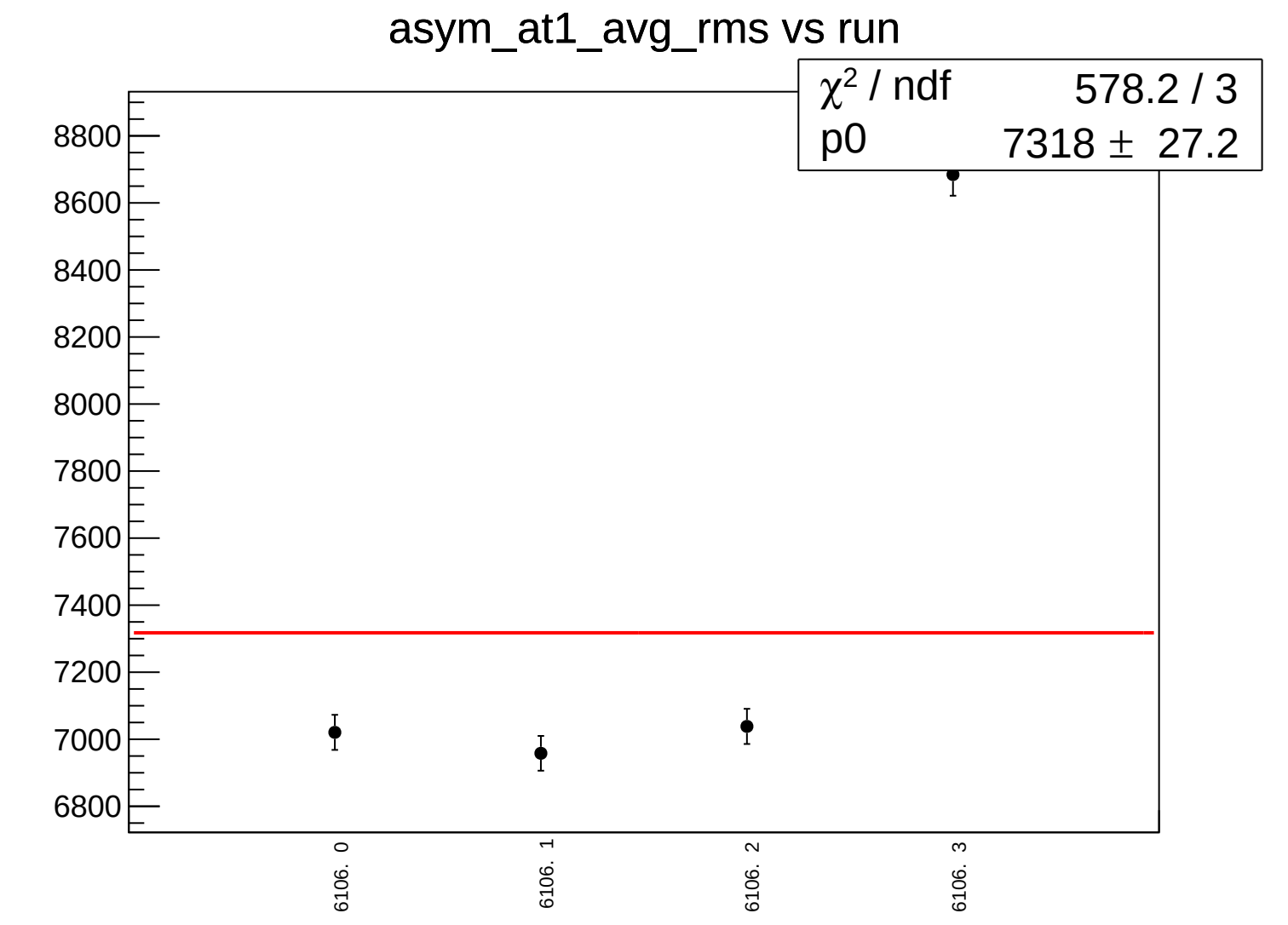

asym_at1_avg_correction_mean vs run
χ² / ndf 1.641 / 3
p0 1216 ± 1826
10000
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −22.02
Std Dev 24.12
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

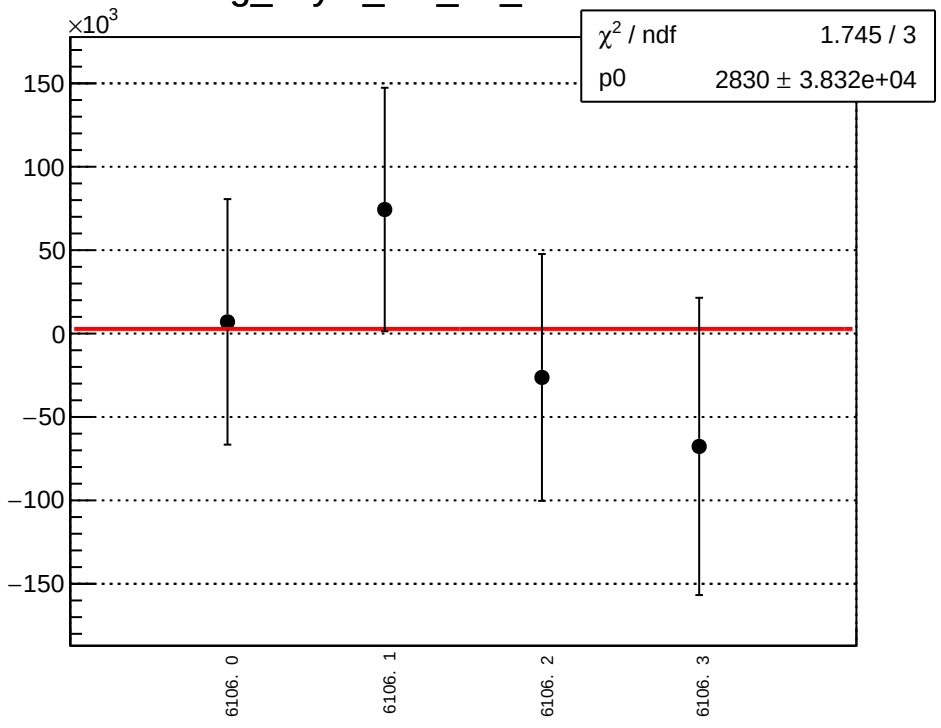

pull1D
Entries 4
Mean −0.01731
Std Dev 0.6403
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

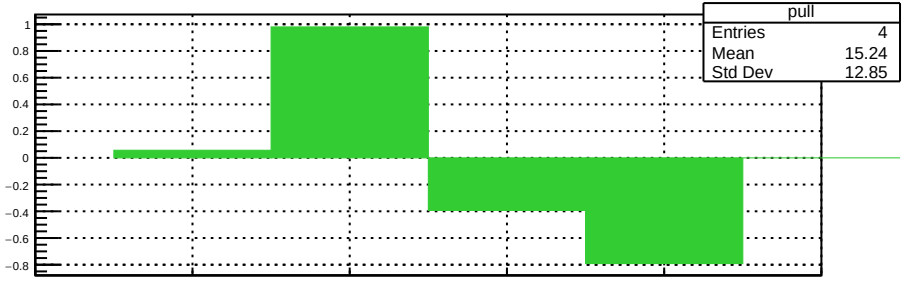

asym_at1_avg_correction_rms vs run
χ² / ndf 2171 / 3
p0 343.6 ± 1.291
460
440
420
400
380
360
340
320
300
280
6106. 0
6106. 1
6106. 2
6106. 3

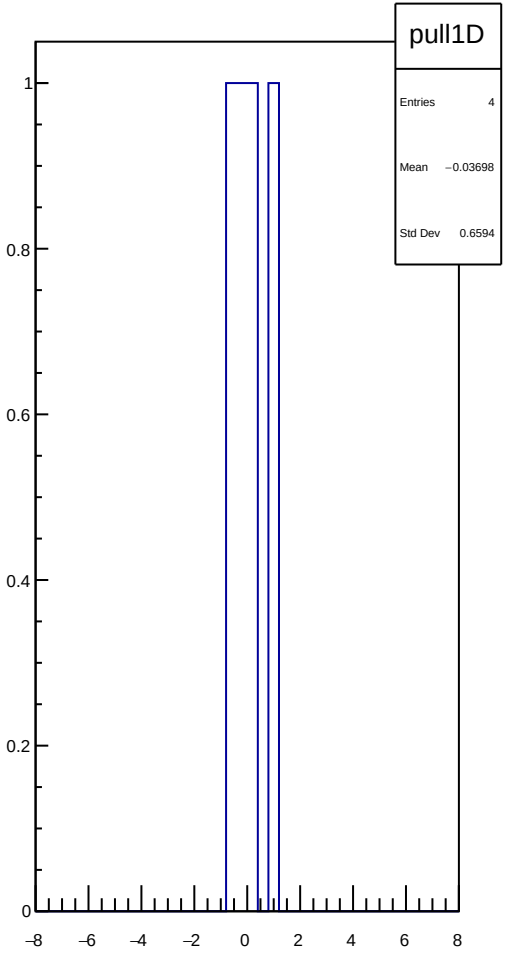

asym_at1_avg_mean vs run
×10^3
χ² / ndf 6.174 / 3
p0 6712 ± 3.847e+04
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.34
Std Dev 9.709
1.5
1
0.5
0
−0.5
−1
−1.5

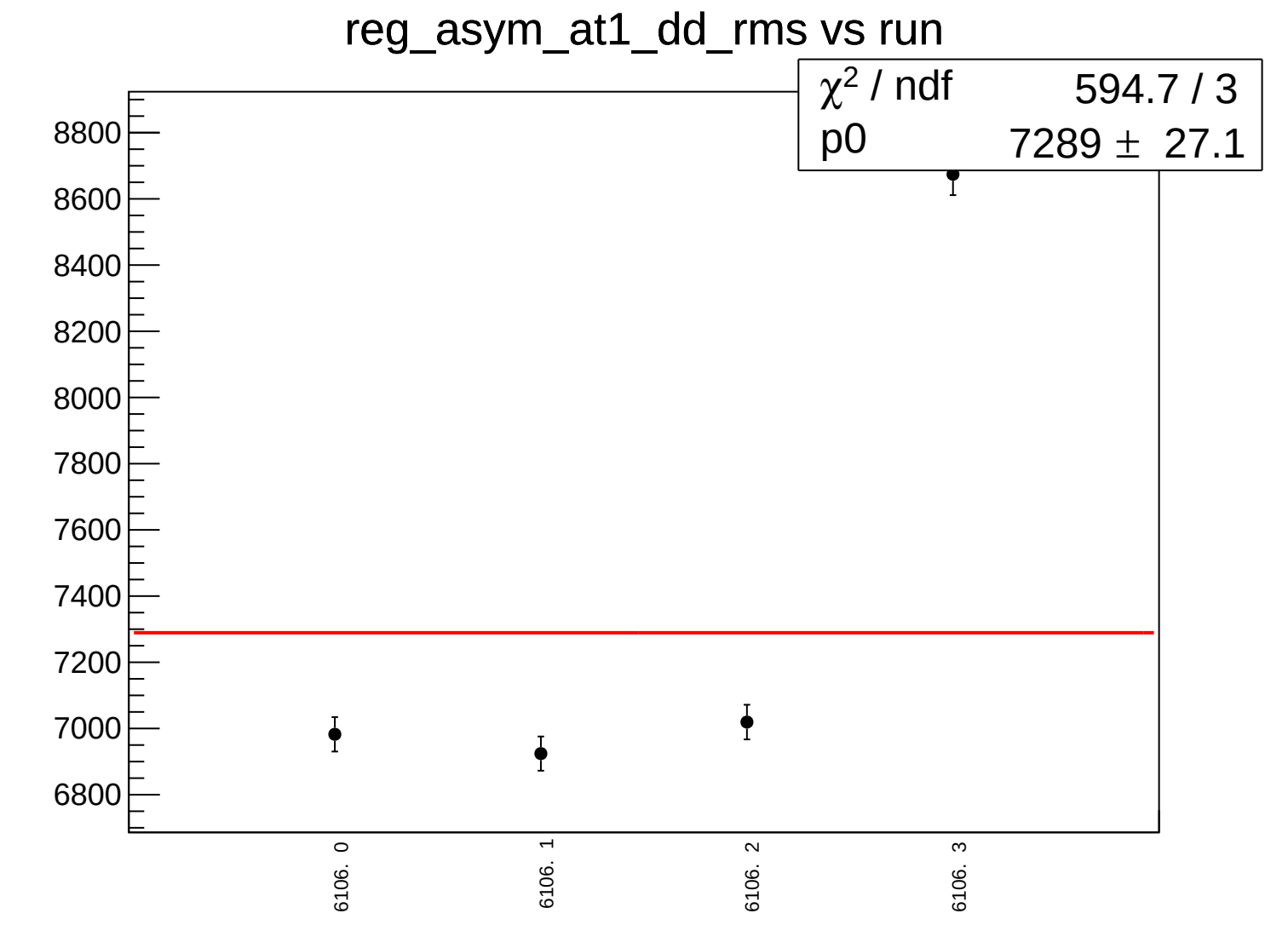

pull1D
Entries 4
Mean −0.07848
Std Dev 1.24
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

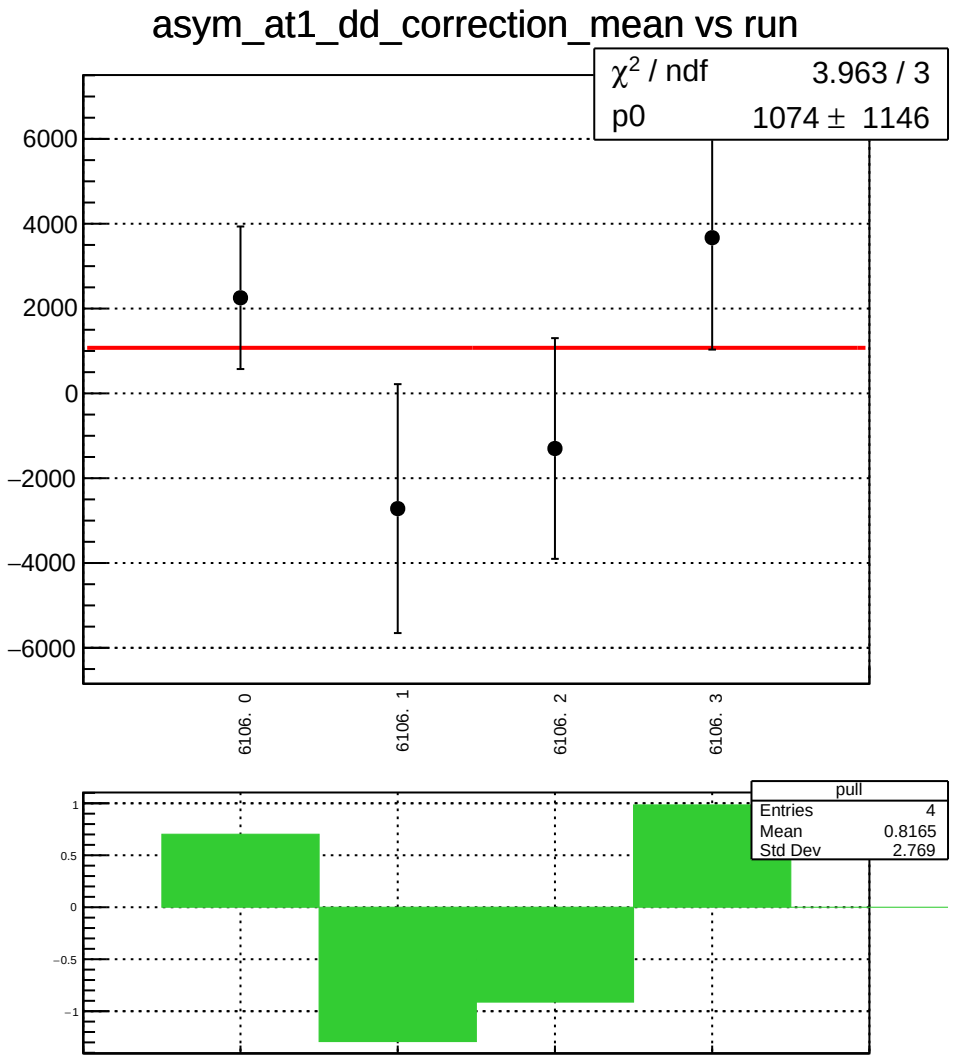

asym_at1_avg_rms vs run
χ² / ndf 578.2 / 3
p0 7318 ± 27.2
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000
6800
6106. 0
6106. 1
6106. 2
6106. 3

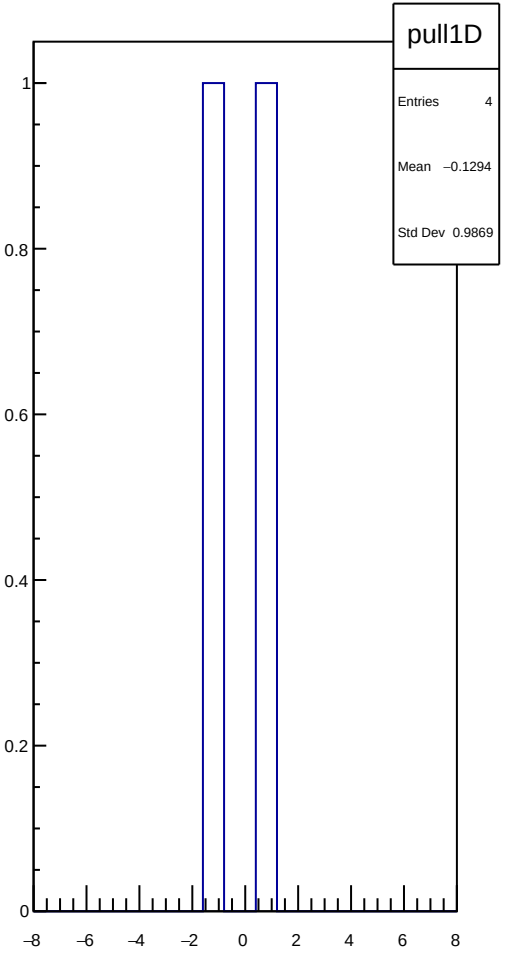

reg_asym_at1_dd_mean vs run
×10^3
χ² / ndf 1.745 / 3
p0 2830 ± 3.832e+04
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3

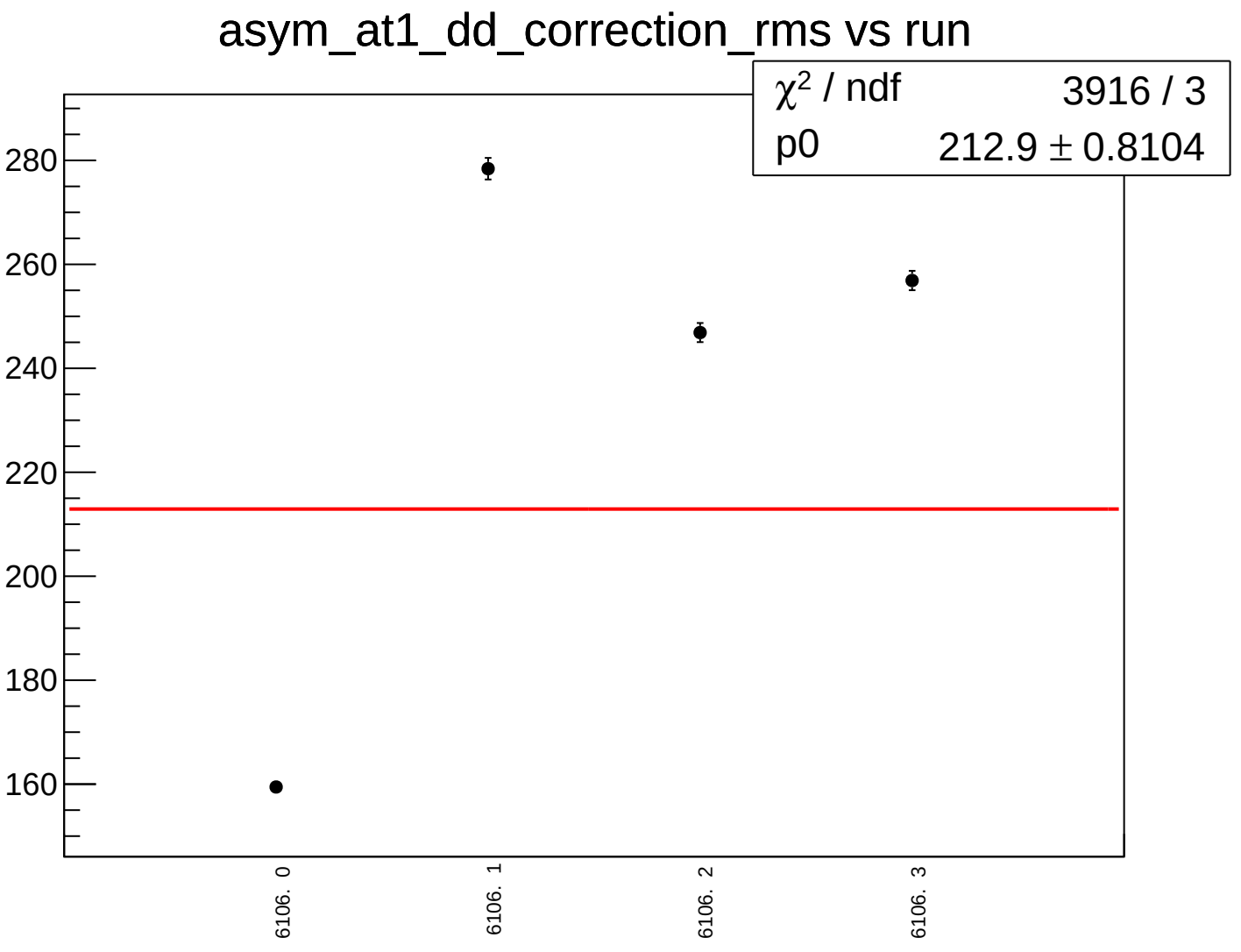

pull
Entries 4
Mean 15.24
Std Dev 12.85
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

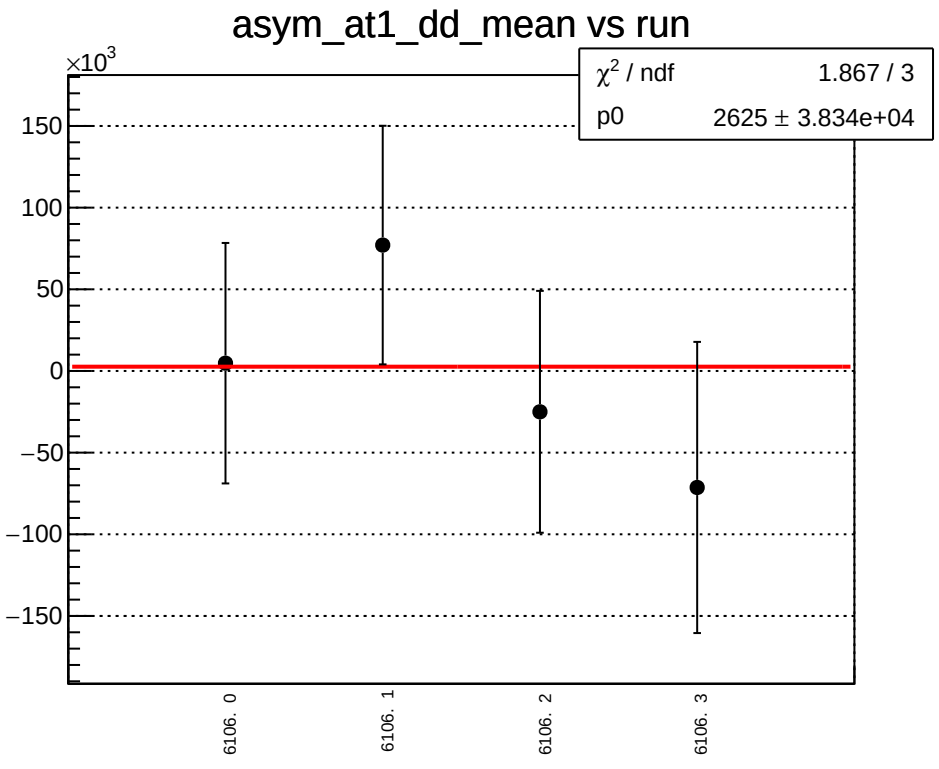

pull1D
Entries 4
Mean −0.03698
Std Dev 0.6594
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

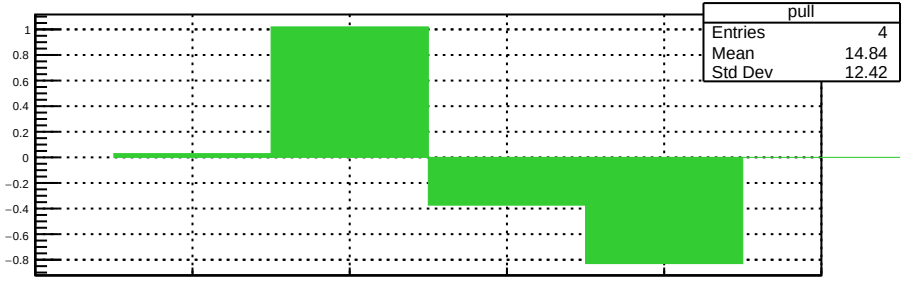

reg_asym_at1_dd_rms vs run
χ² / ndf 594.7 / 3
p0 7289 ± 27.1
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000
6800
6106. 0
6106. 1
6106. 2
6106. 3

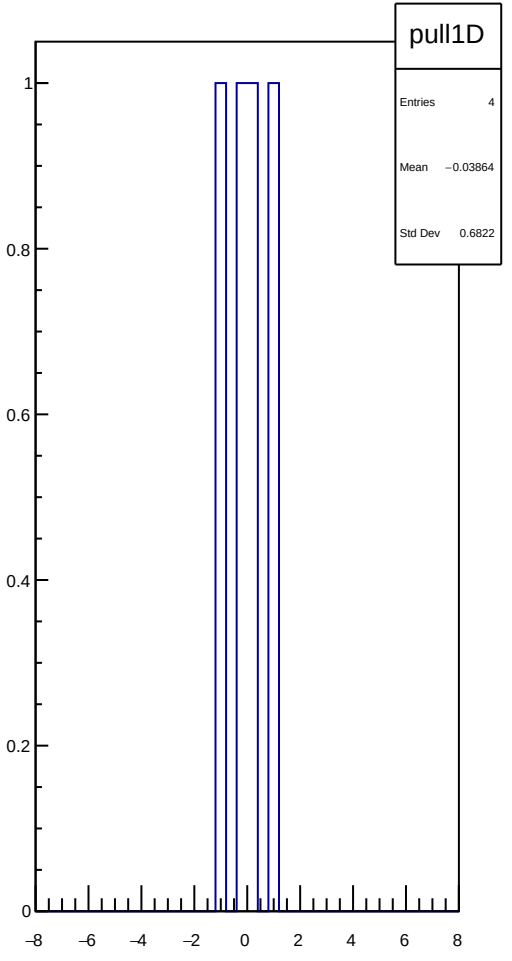

asym_at1_dd_correction_mean vs run
χ² / ndf 3.963 / 3
p0 1074 ± 1146
6000
4000
2000
0
−2000
−4000
−6000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.8165
Std Dev 2.769
1
0.5
0
−0.5
−1

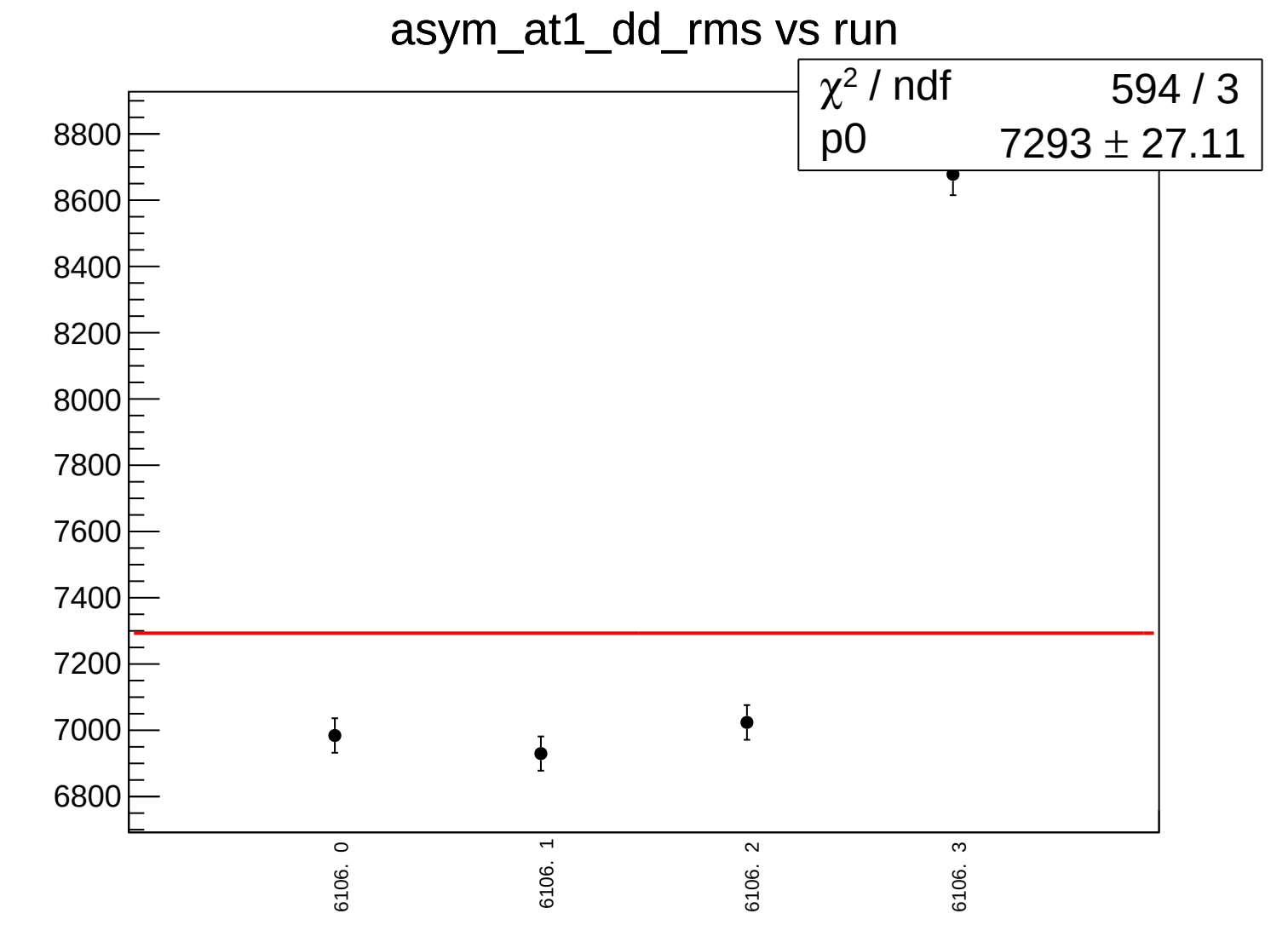

pull1D
Entries 4
Mean −0.1294
Std Dev 0.9869
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

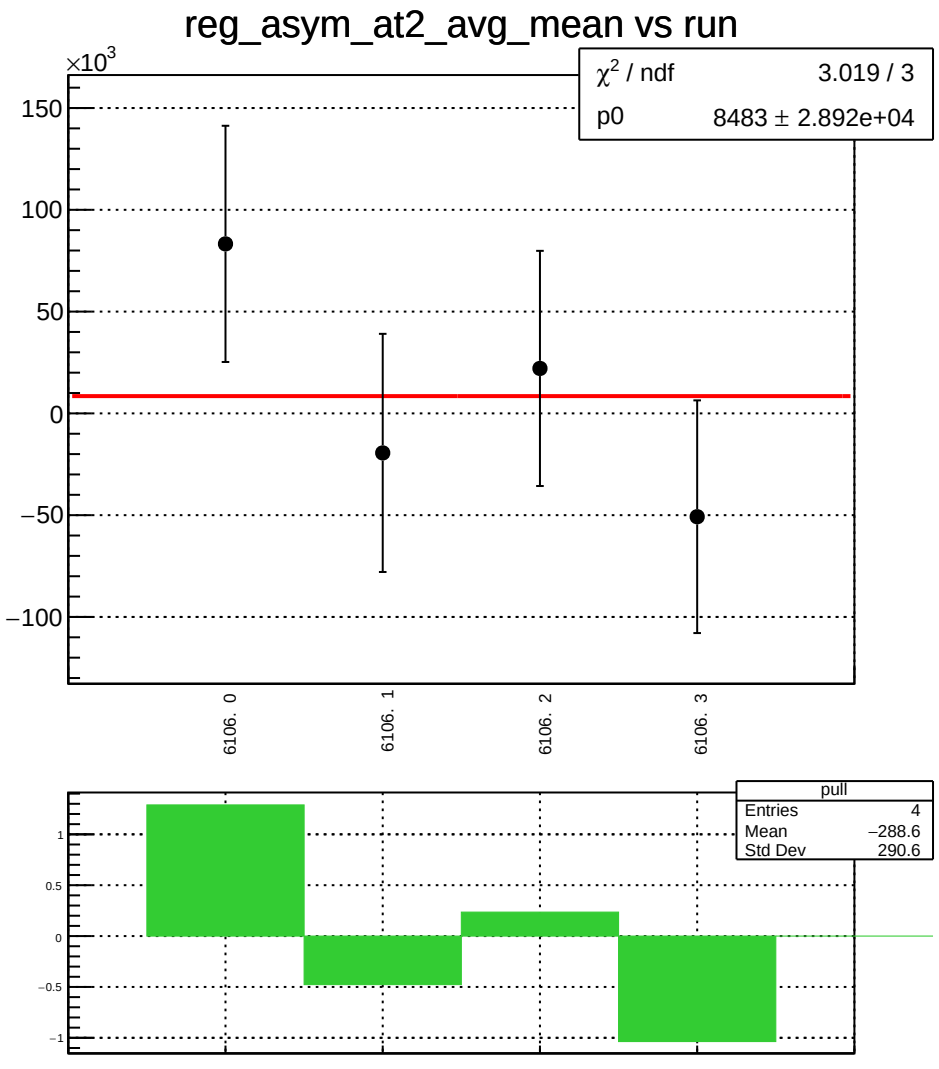

asym_at1_dd_correction_rms vs run
χ² / ndf 3916 / 3
p0 212.9 ± 0.8104
280
260
240
220
200
180
160
6106. 0
6106. 1
6106. 2
6106. 3

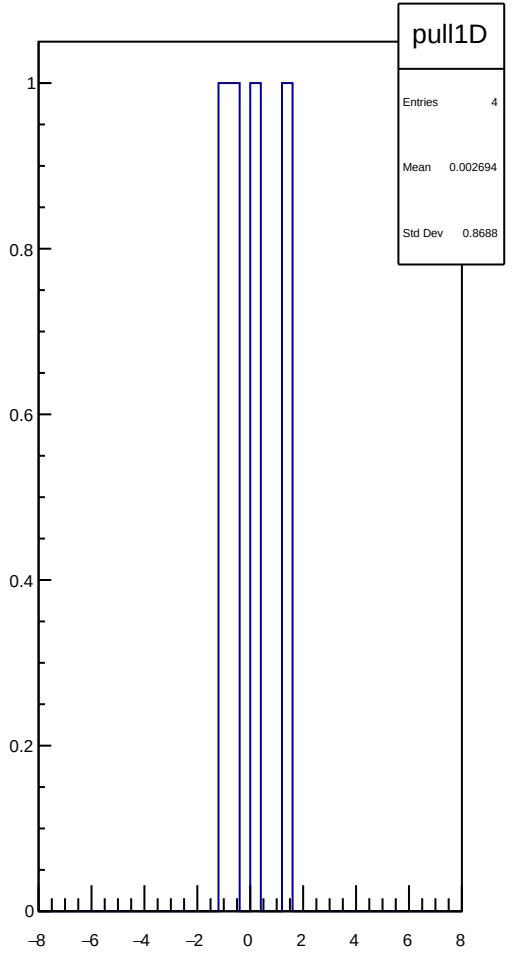

asym_at1_dd_mean vs run
×10^3
χ² / ndf 1.867 / 3
p0 2625 ± 3.834e+04
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3

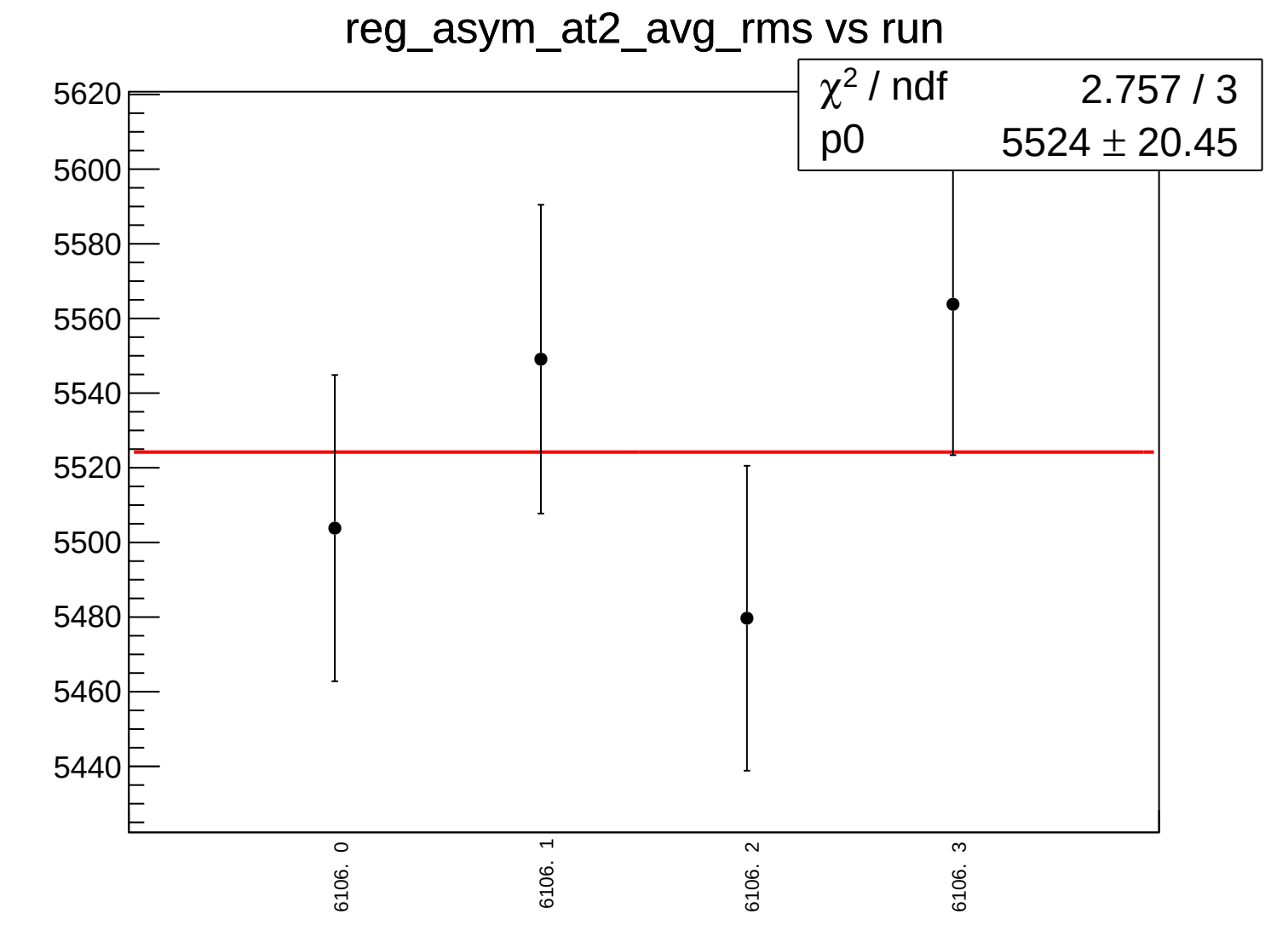

pull
Entries 4
Mean 14.84
Std Dev 12.42
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

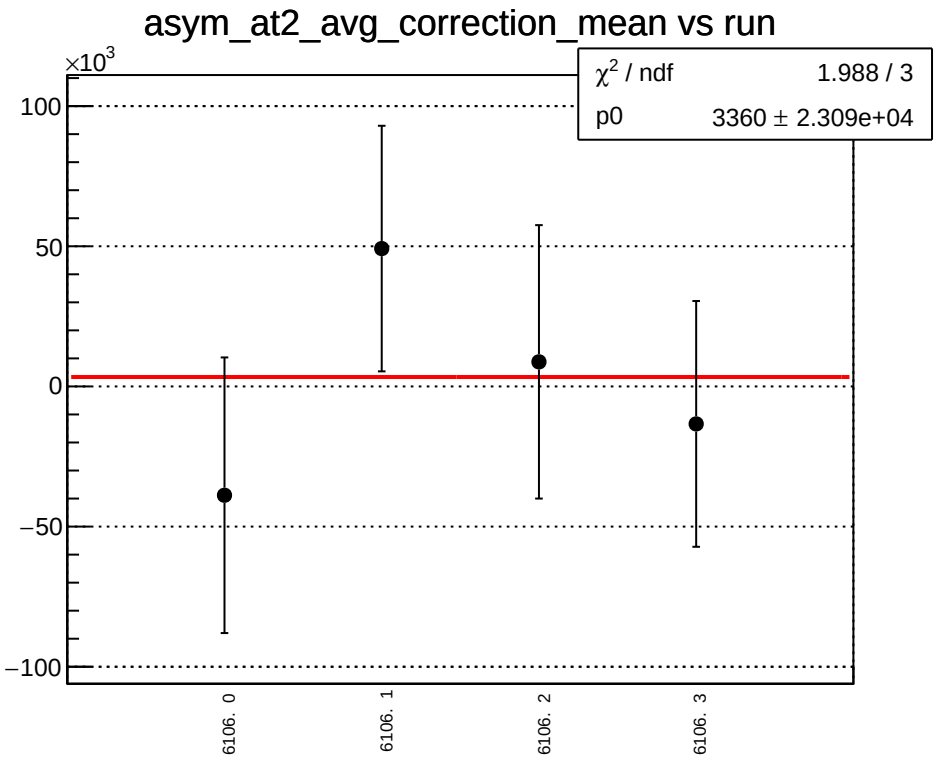

pull1D
Entries 4
Mean −0.03864
Std Dev 0.6822
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

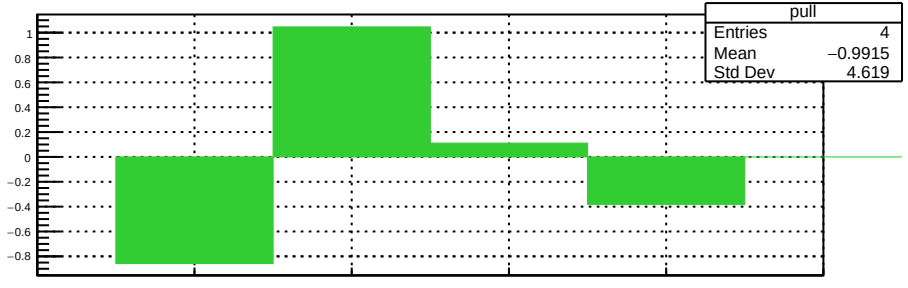

asym_at1_dd_rms vs run
χ² / ndf 594 / 3
p0 7293 ± 27.11
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000
6800
6106. 0
6106. 1
6106. 2
6106. 3

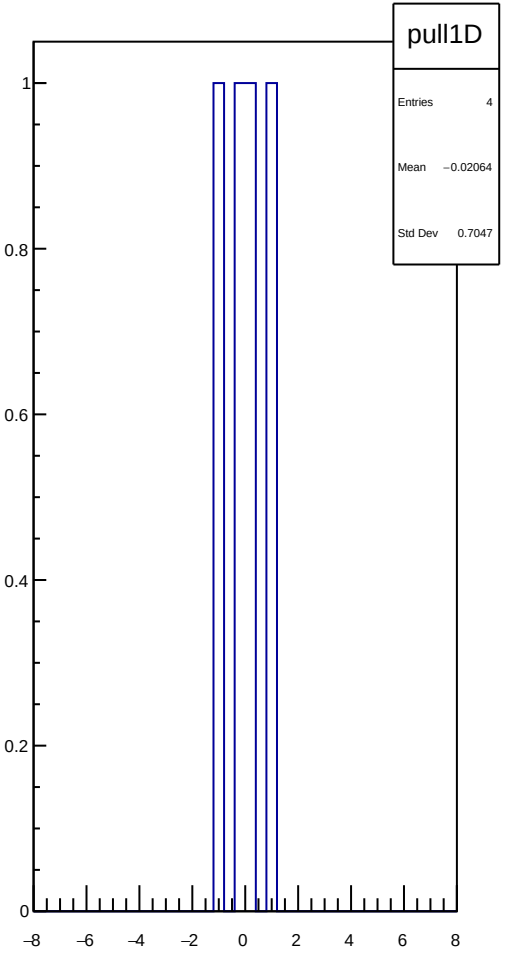

reg_asym_at2_avg_mean vs run
×10^3
χ² / ndf 3.019 / 3
p0 8483 ± 2.892e+04
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −288.6
Std Dev 290.6
1
0.5
0
−0.5
−1

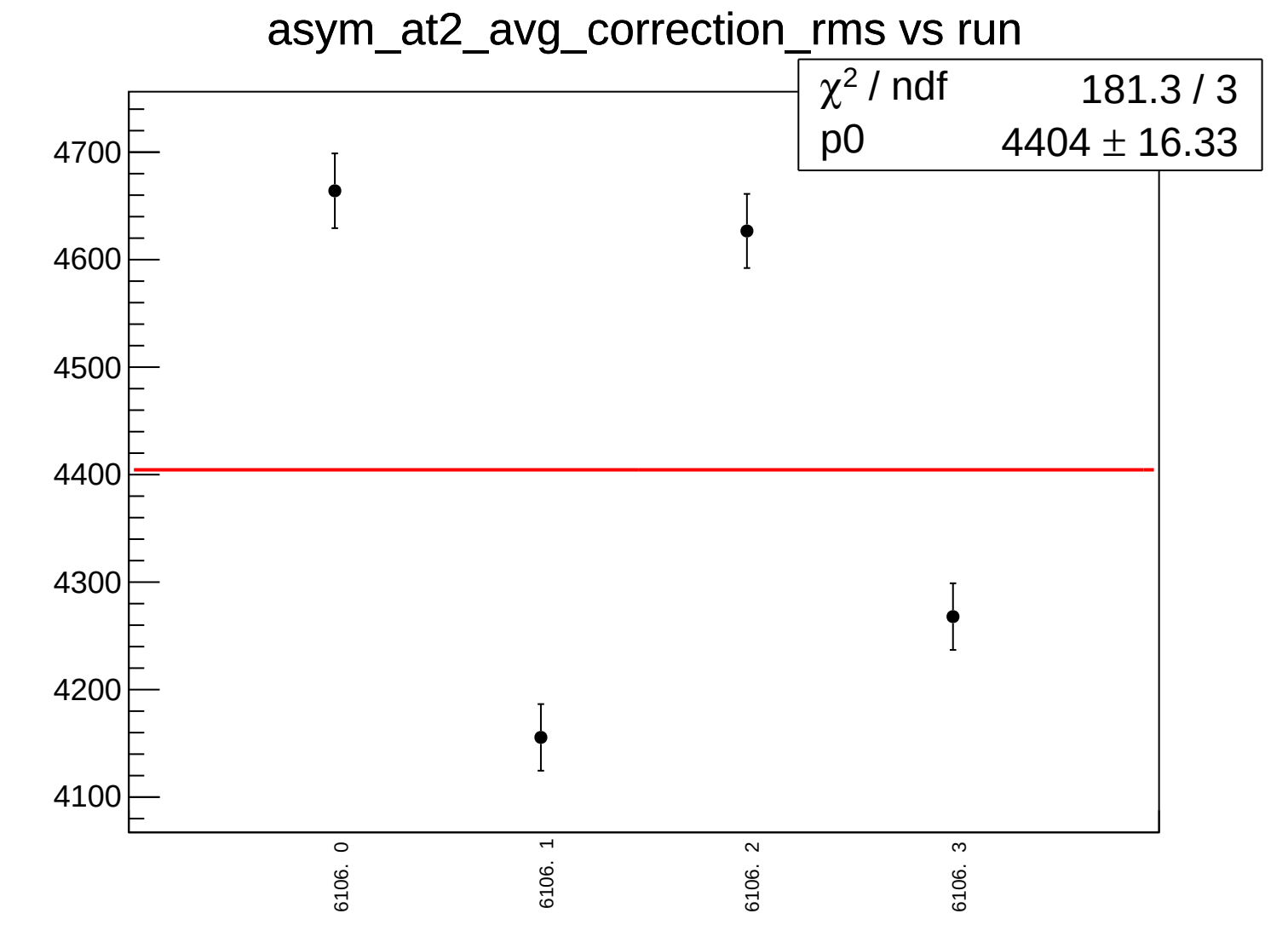

pull1D
Entries 4
Mean 0.002694
Std Dev 0.8688
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

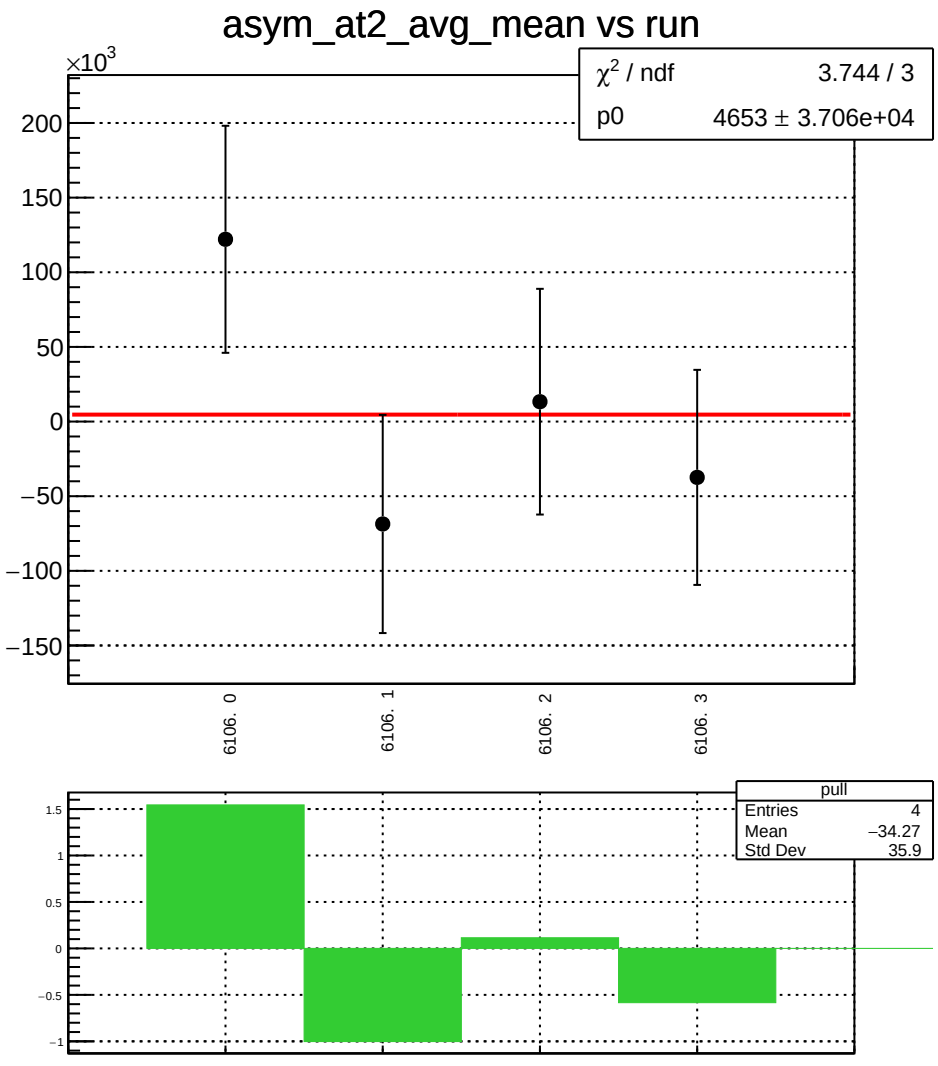

reg_asym_at2_avg_rms vs run
χ² / ndf 2.757 / 3
p0 5524 ± 20.45
5620
5600
5580
5560
5540
5520
5500
5480
5460
5440
6106. 0
6106. 1
6106. 2
6106. 3

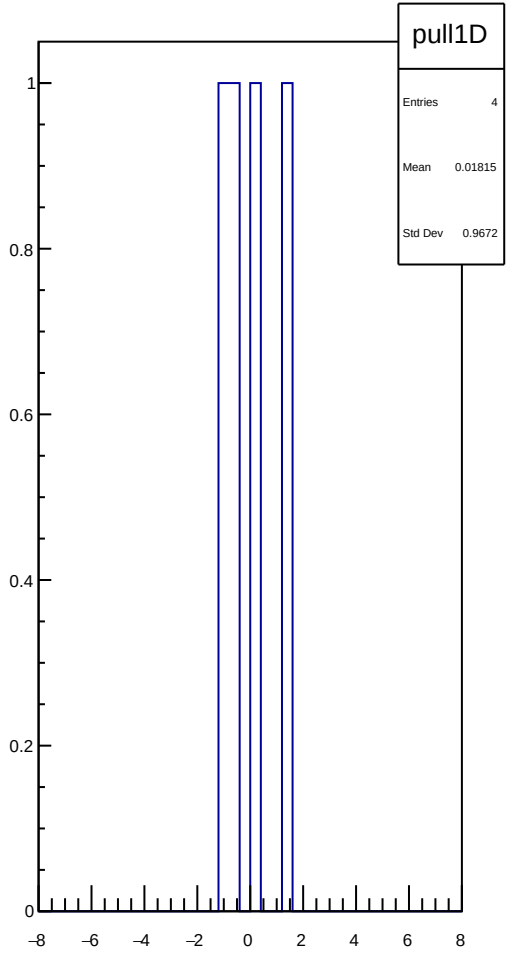

asym_at2_avg_correction_mean vs run
×10^3
χ² / ndf 1.988 / 3
p0 3360 ± 2.309e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3

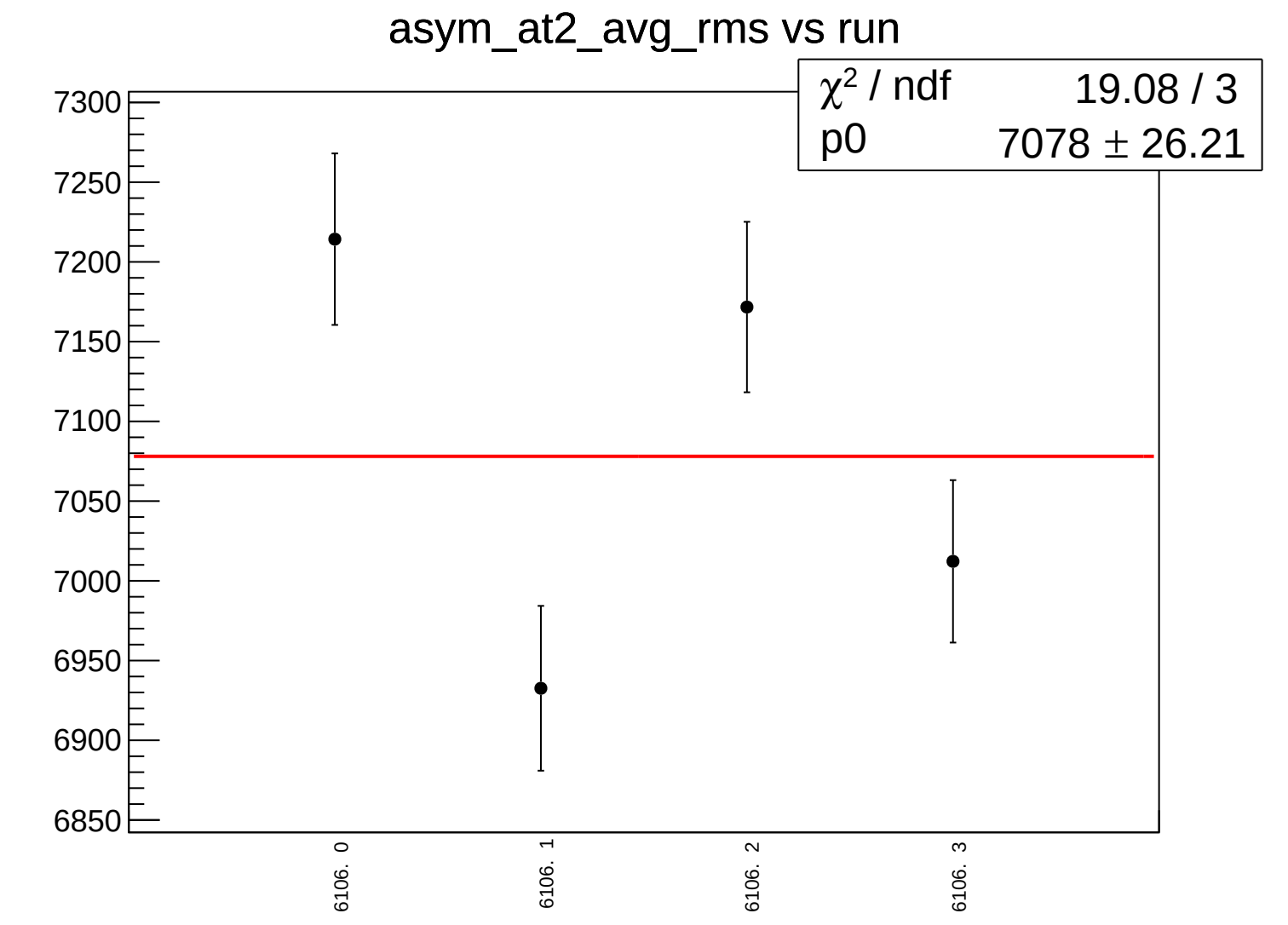

pull
Entries 4
Mean −0.9915
Std Dev 4.619
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

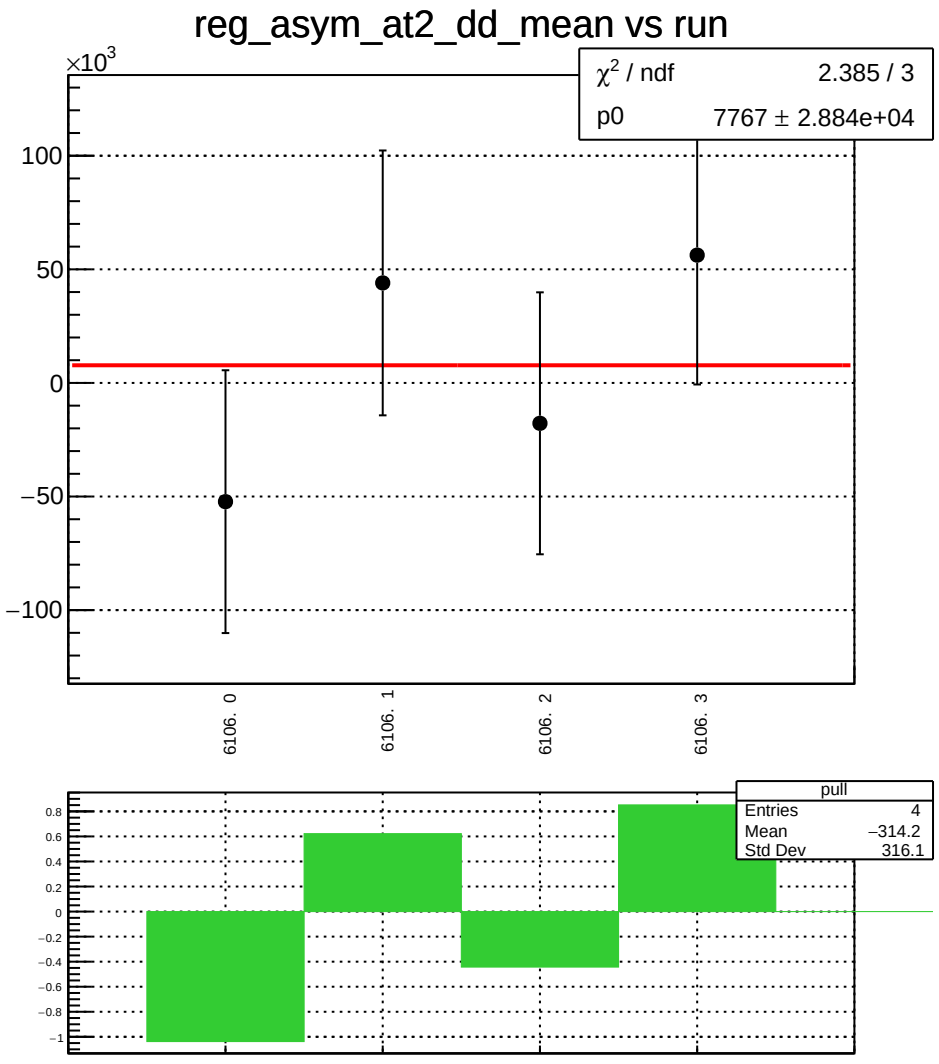

pull1D
Entries 4
Mean −0.02064
Std Dev 0.7047
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

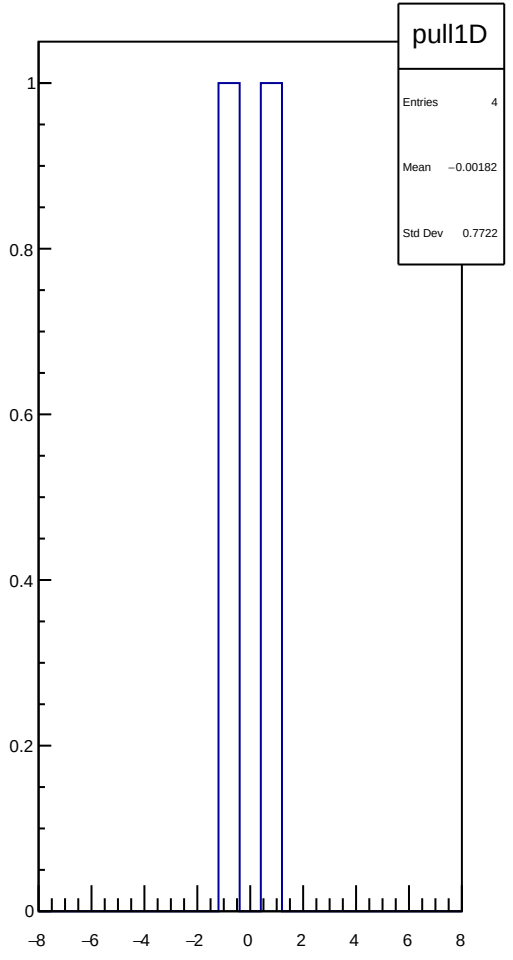

asym_at2_avg_correction_rms vs run
χ² / ndf 181.3 / 3
p0 4404 ± 16.33
4700
4600
4500
4400
4300
4200
4100
6106. 0
6106. 1
6106. 2
6106. 3

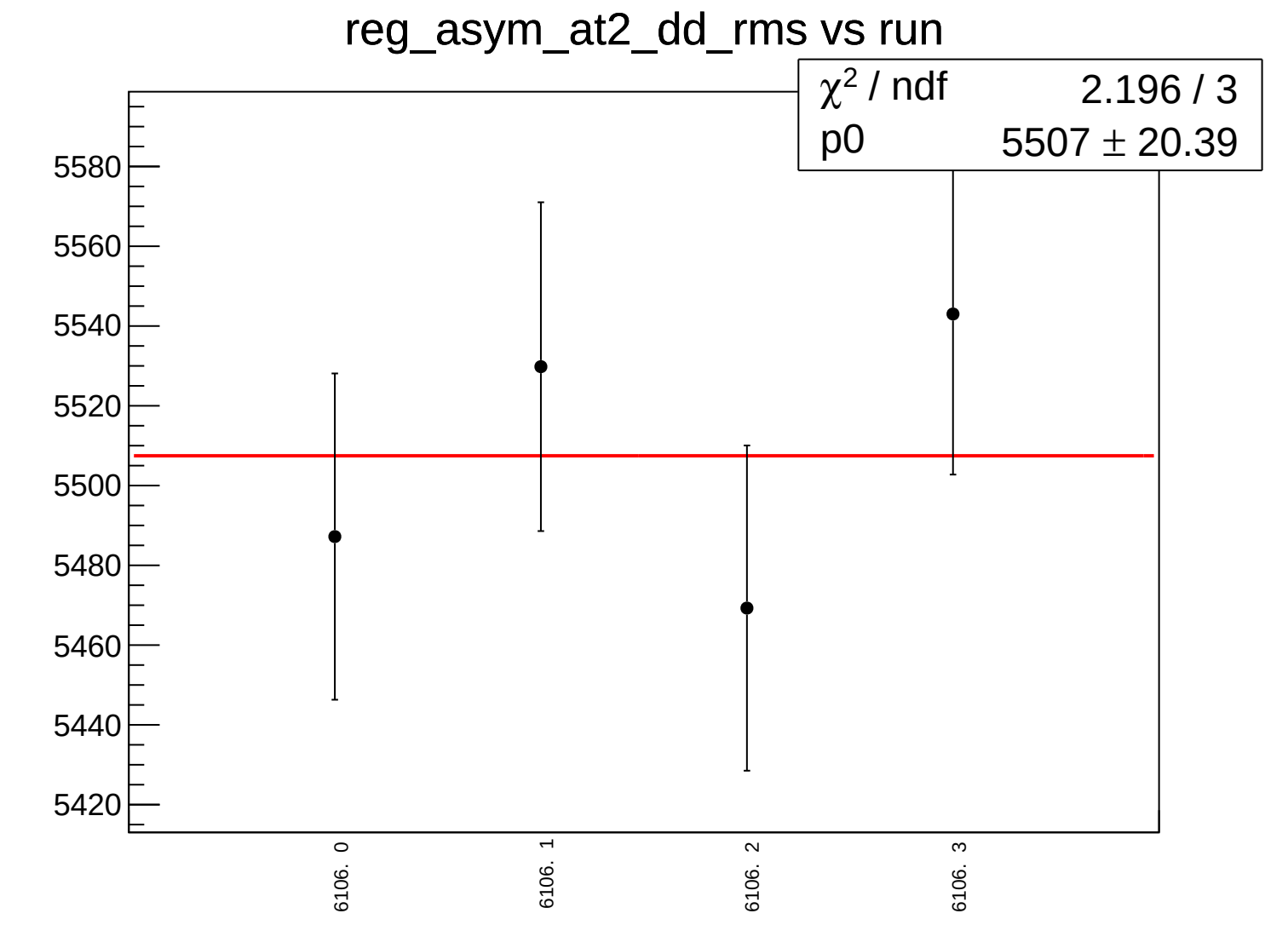

asym_at2_avg_mean vs run
×10^3
χ² / ndf 3.744 / 3
p0 4653 ± 3.706e+04
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −34.27
Std Dev 35.9
1.5
1
0.5
0
−0.5
−1

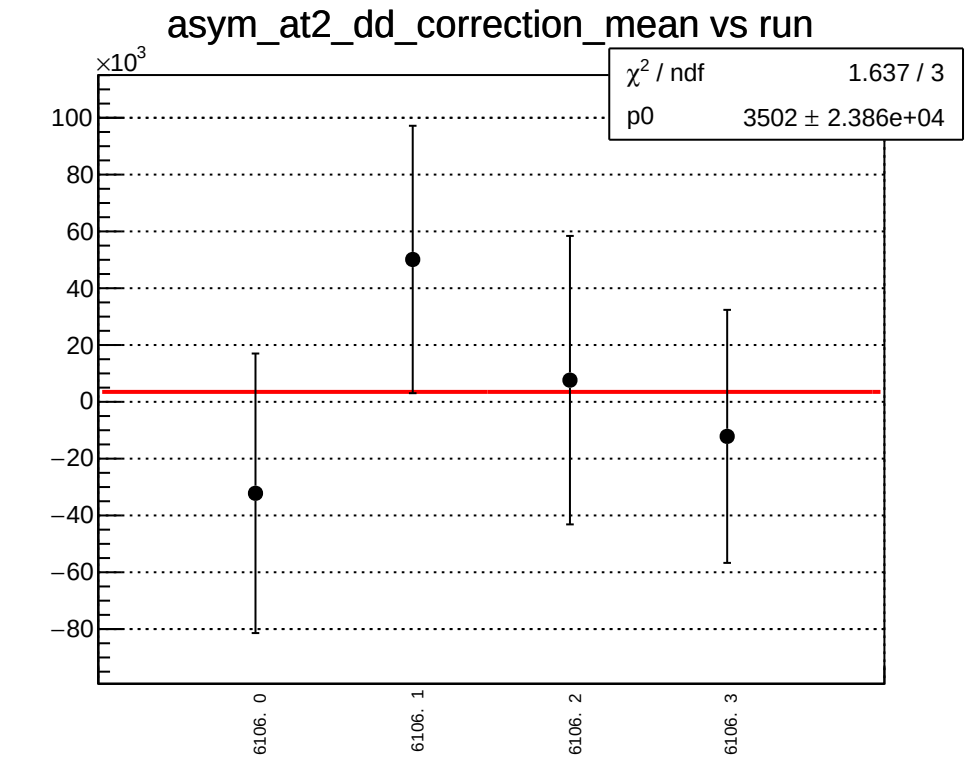

pull1D
Entries 4
Mean 0.01815
Std Dev 0.9672
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

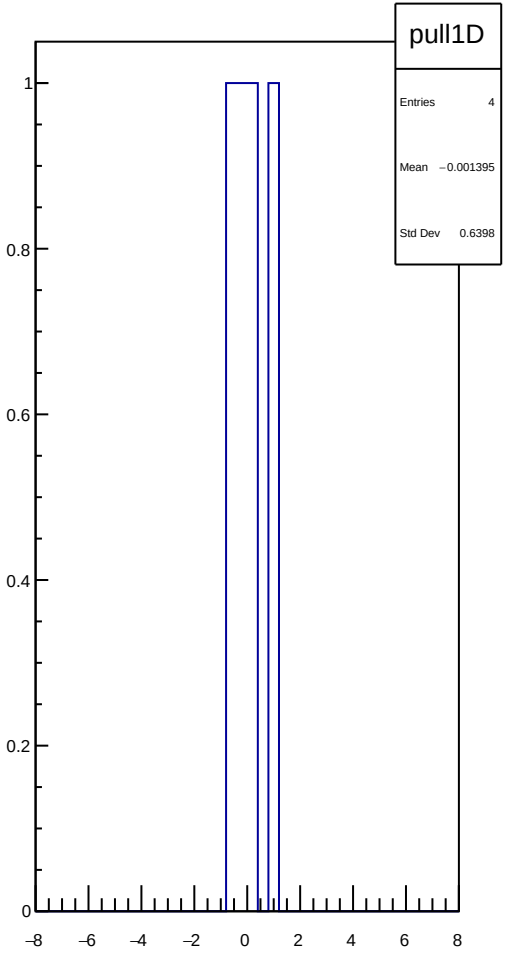

asym_at2_avg_rms vs run
χ² / ndf 19.08 / 3
p0 7078 ± 26.21
7300
7250
7200
7150
7100
7050
7000
6950
6900
6850
6106. 0
6106. 1
6106. 2
6106. 3

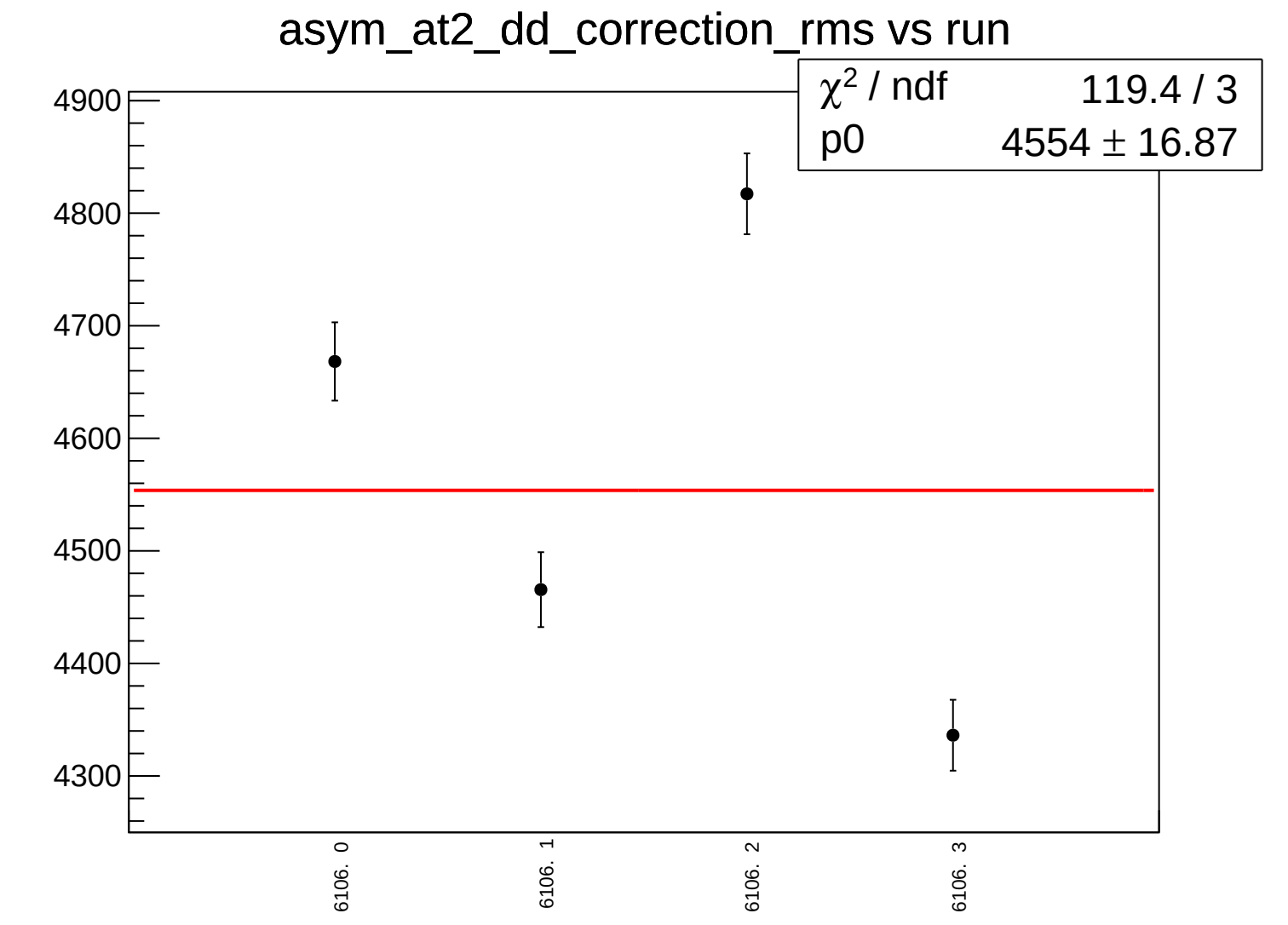

reg_asym_at2_dd_mean vs run
×10^3
χ² / ndf 2.385 / 3
p0 7767 ± 2.884e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −314.2
Std Dev 316.1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

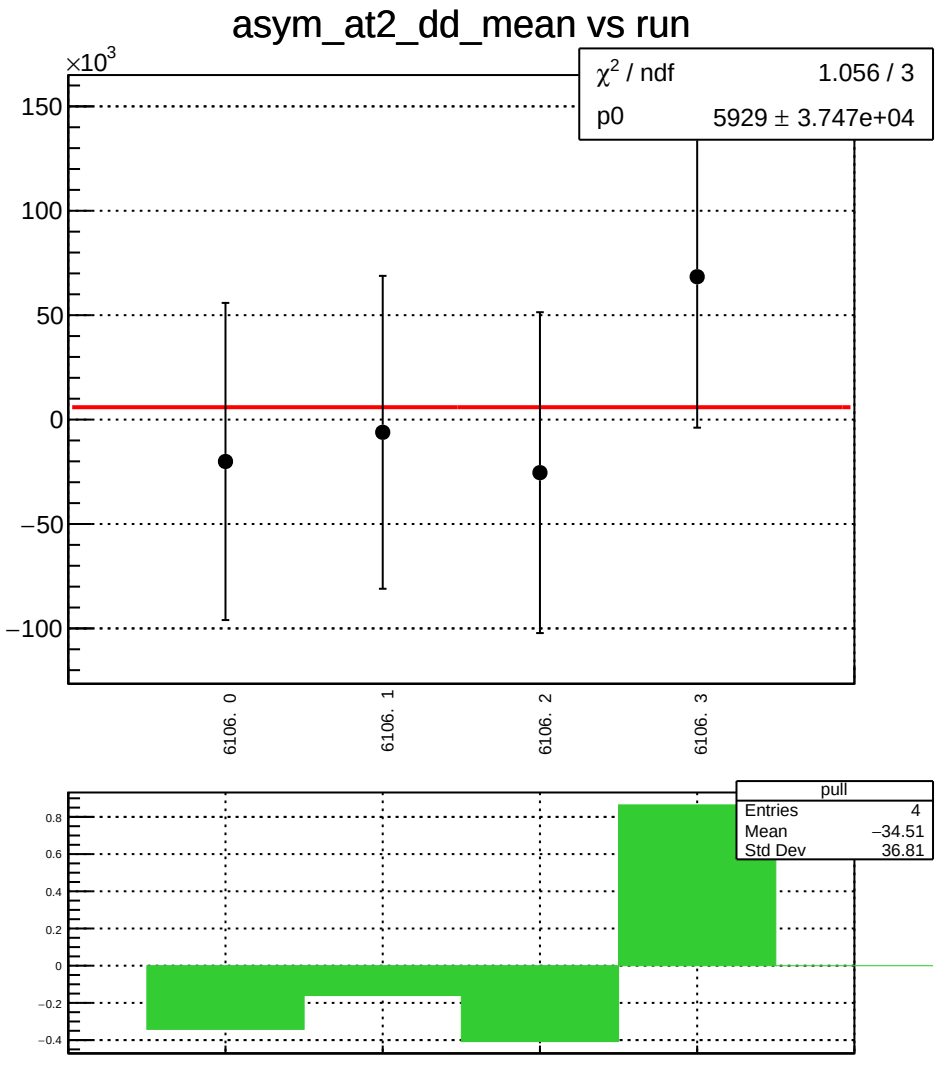

pull1D
Entries 4
Mean −0.00182
Std Dev 0.7722
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

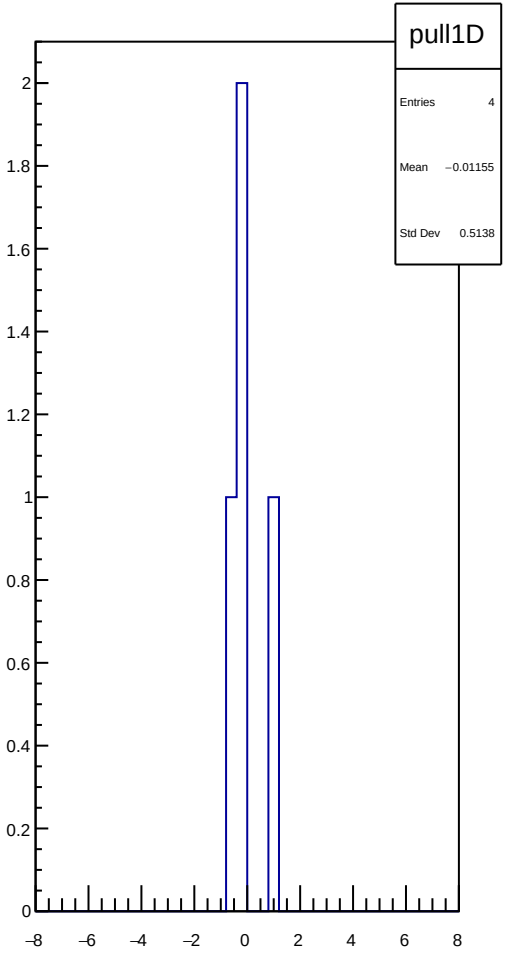

reg_asym_at2_dd_rms vs run
χ² / ndf 2.196 / 3
p0 5507 ± 20.39
5580
5560
5540
5520
5500
5480
5460
5440
5420
6106. 0
6106. 1
6106. 2
6106. 3

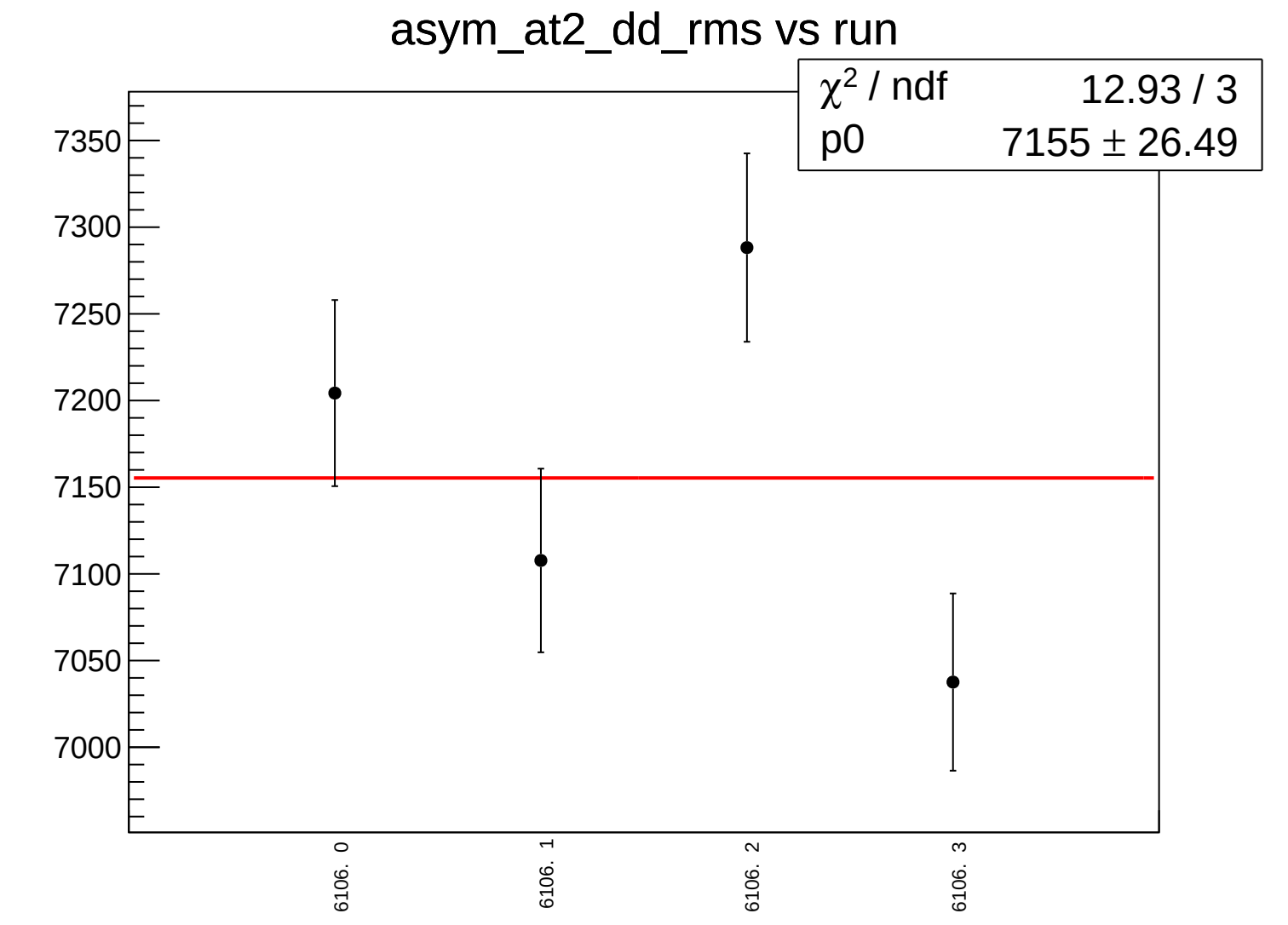

asym_at2_dd_correction_mean vs run
×10^3
χ² / ndf 1.637 / 3
p0 3502 ± 2.386e+04
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.03
Std Dev 4.907
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

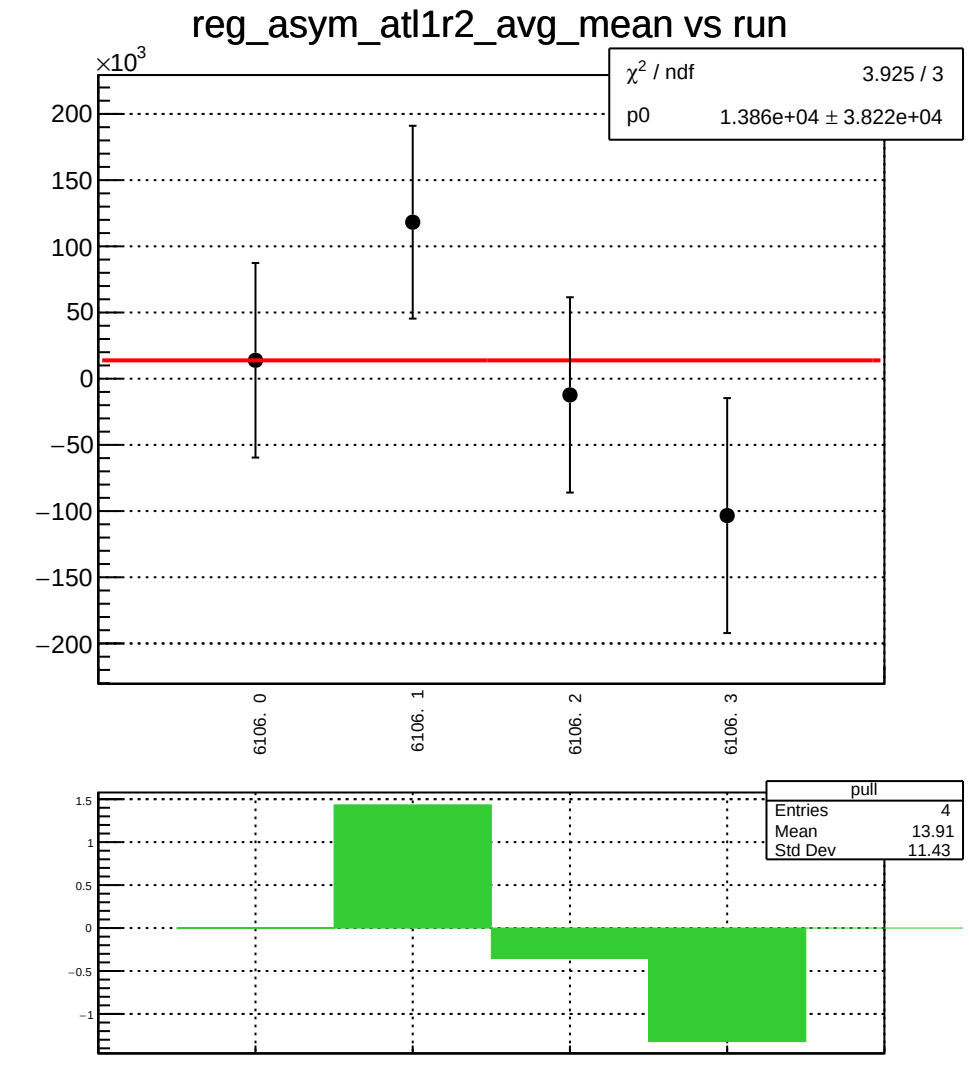

pull1D
Entries 4
Mean −0.001395
Std Dev 0.6398
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

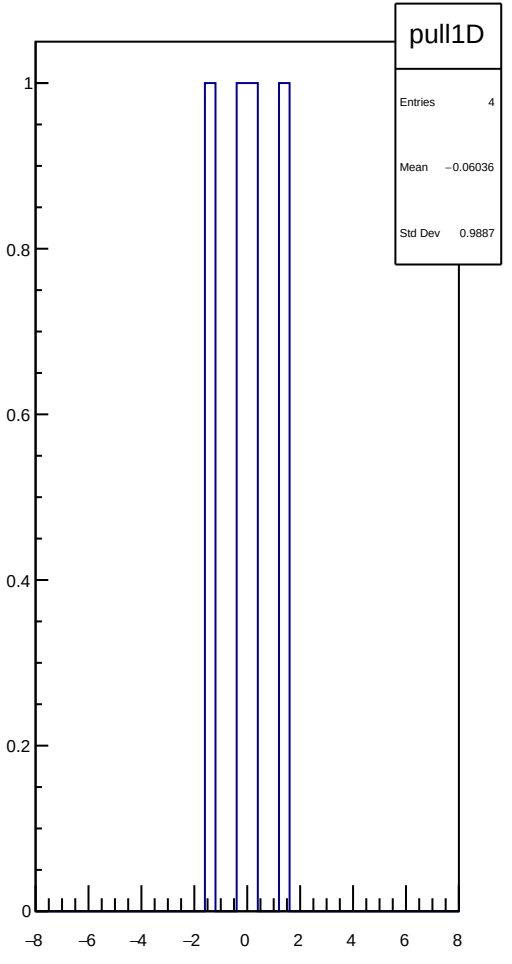

asym_at2_dd_correction_rms vs run
χ² / ndf 119.4 / 3
p0 4554 ± 16.87
4900
4800
4700
4600
4500
4400
4300
6106. 0
6106. 1
6106. 2
6106. 3

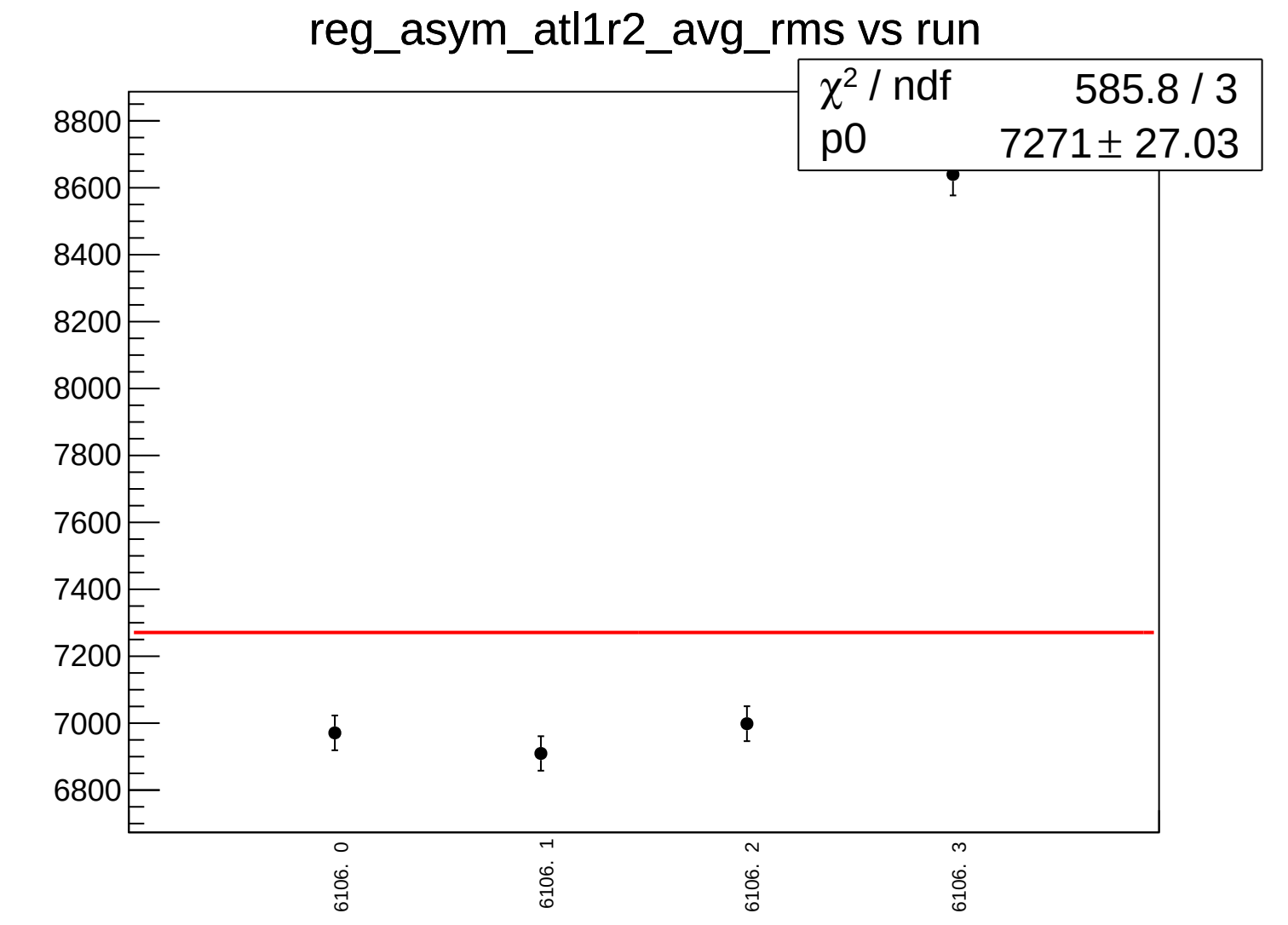

asym_at2_dd_mean vs run
×10^3
χ² / ndf 1.056 / 3
p0 5929 ± 3.747e+04
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −34.51
Std Dev 36.81
0.8
0.6
0.4
0.2
0
−0.2
−0.4

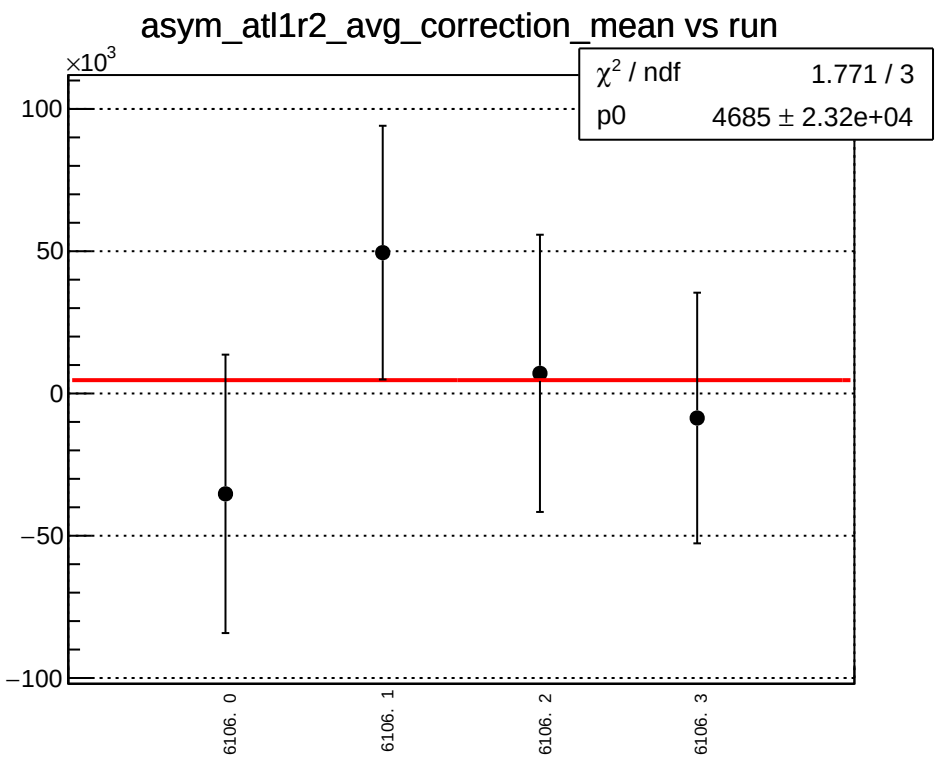

pull1D
Entries 4
Mean −0.01155
Std Dev 0.5138
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

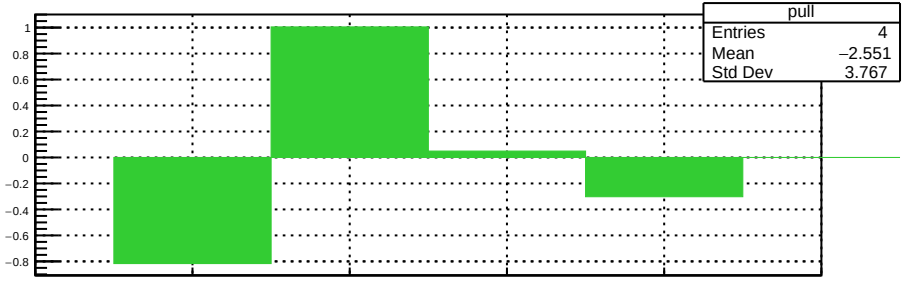

asym_at2_dd_rms vs run
χ² / ndf 12.93 / 3
p0 7155 ± 26.49
7350
7300
7250
7200
7150
7100
7050
7000
6106. 0
6106. 1
6106. 2
6106. 3

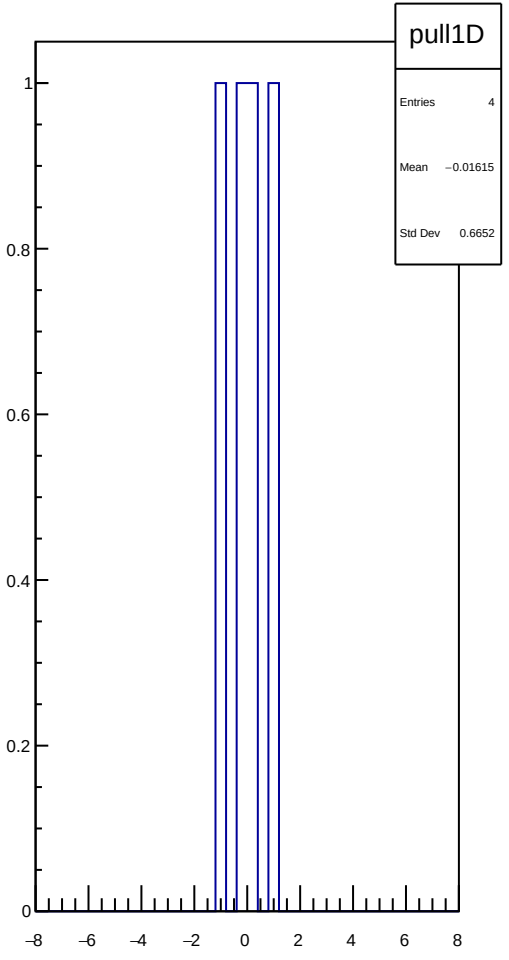

reg_asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 3.925 / 3
p0 1.386e+04 ± 3.822e+04
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 13.91
Std Dev 11.43
1.5
1
0.5
0
−0.5
−1

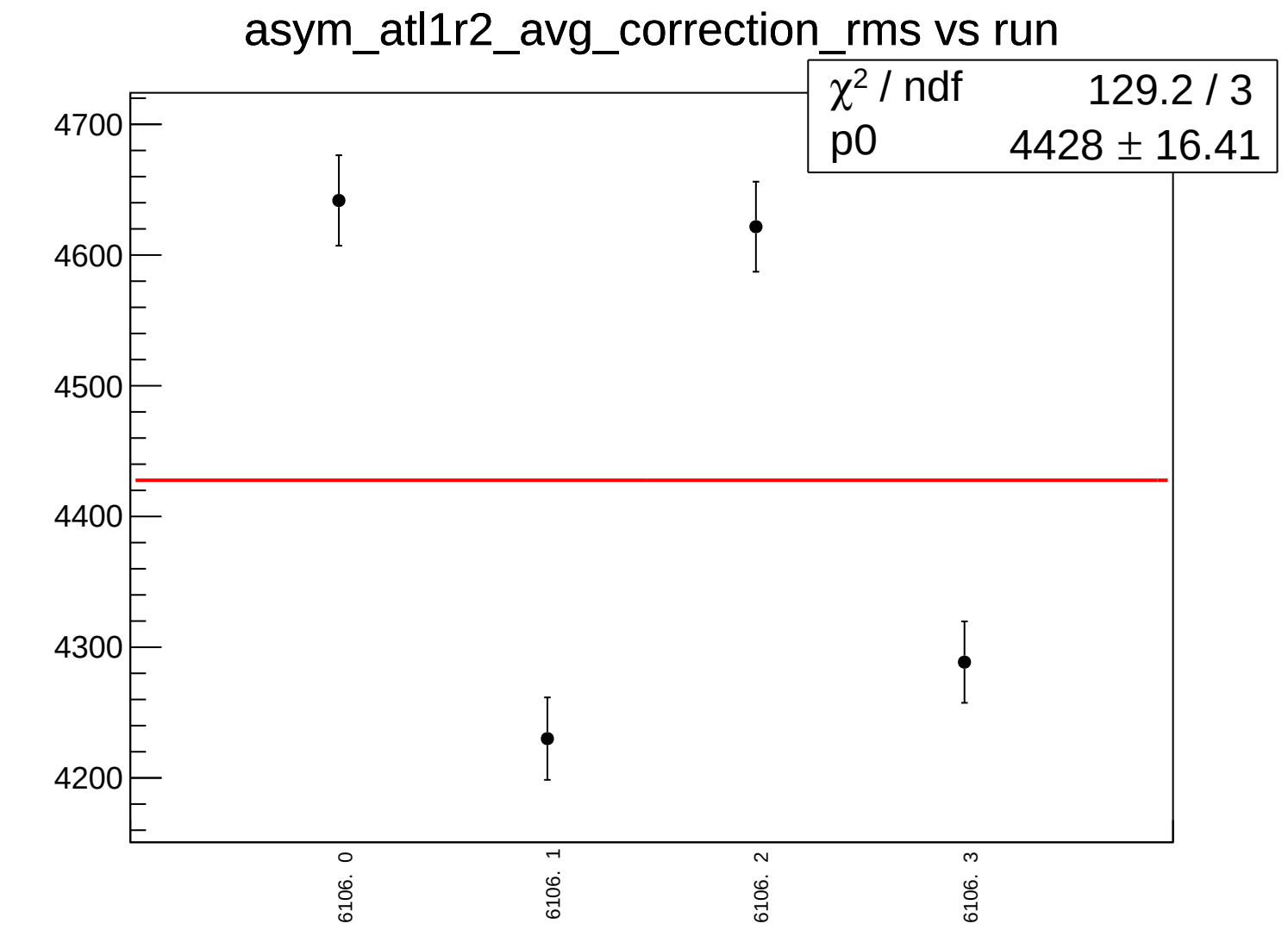

pull1D
Entries 4
Mean −0.06036
Std Dev 0.9887
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

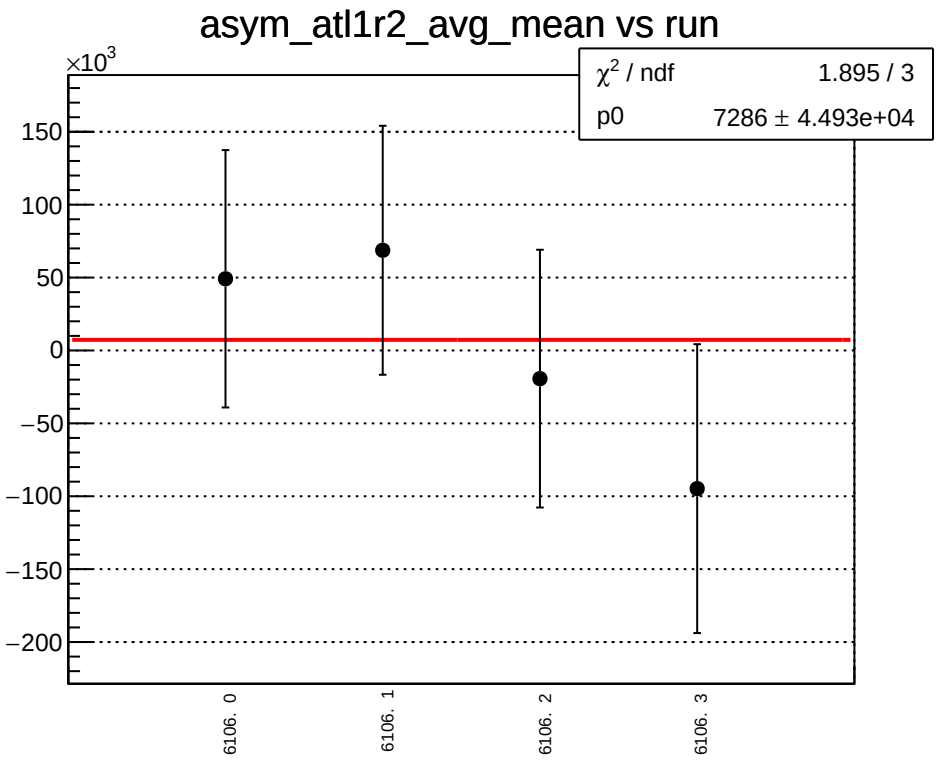

reg_asym_atl1r2_avg_rms vs run
χ² / ndf 585.8 / 3
p0 7271 ± 27.03
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000
6800
6106. 0
6106. 1
6106. 2
6106. 3

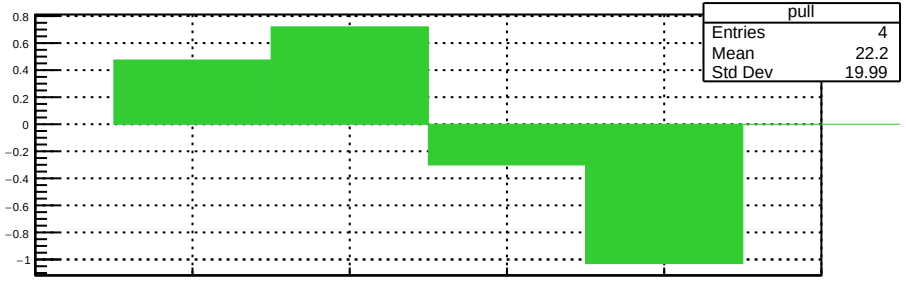

asym_atl1r2_avg_correction_mean vs run
×10^3
χ² / ndf 1.771 / 3
p0 4685 ± 2.32e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3

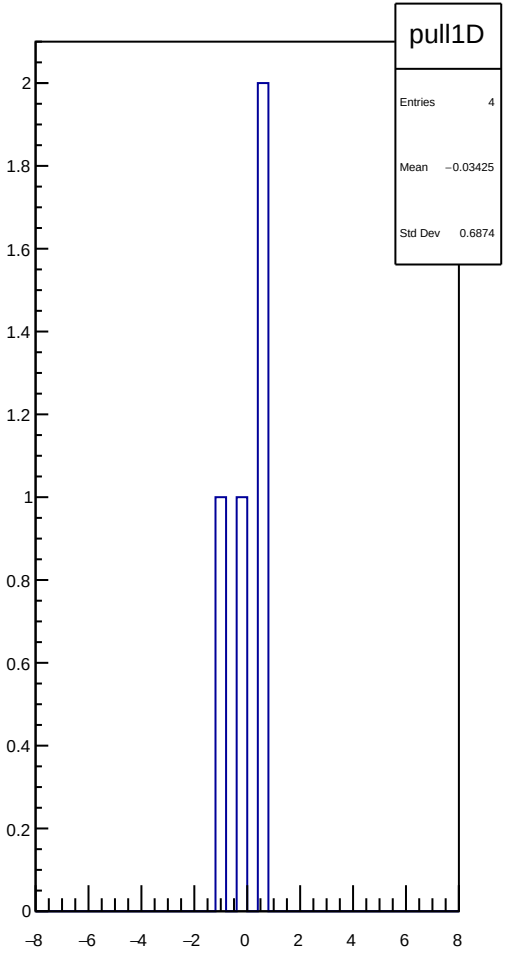

pull
Entries 4
Mean −2.551
Std Dev 3.767
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

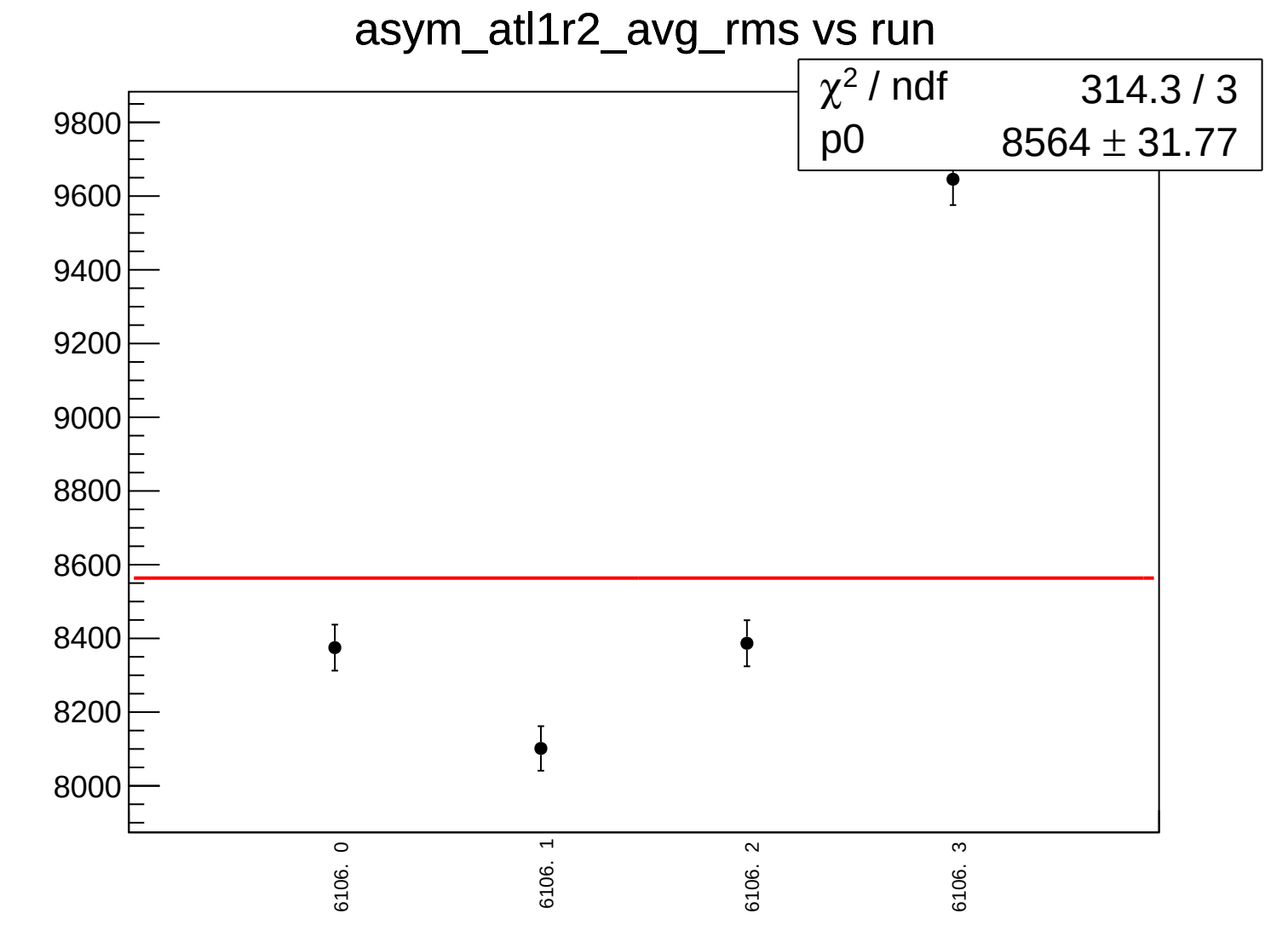

pull1D
Entries 4
Mean −0.01615
Std Dev 0.6652
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

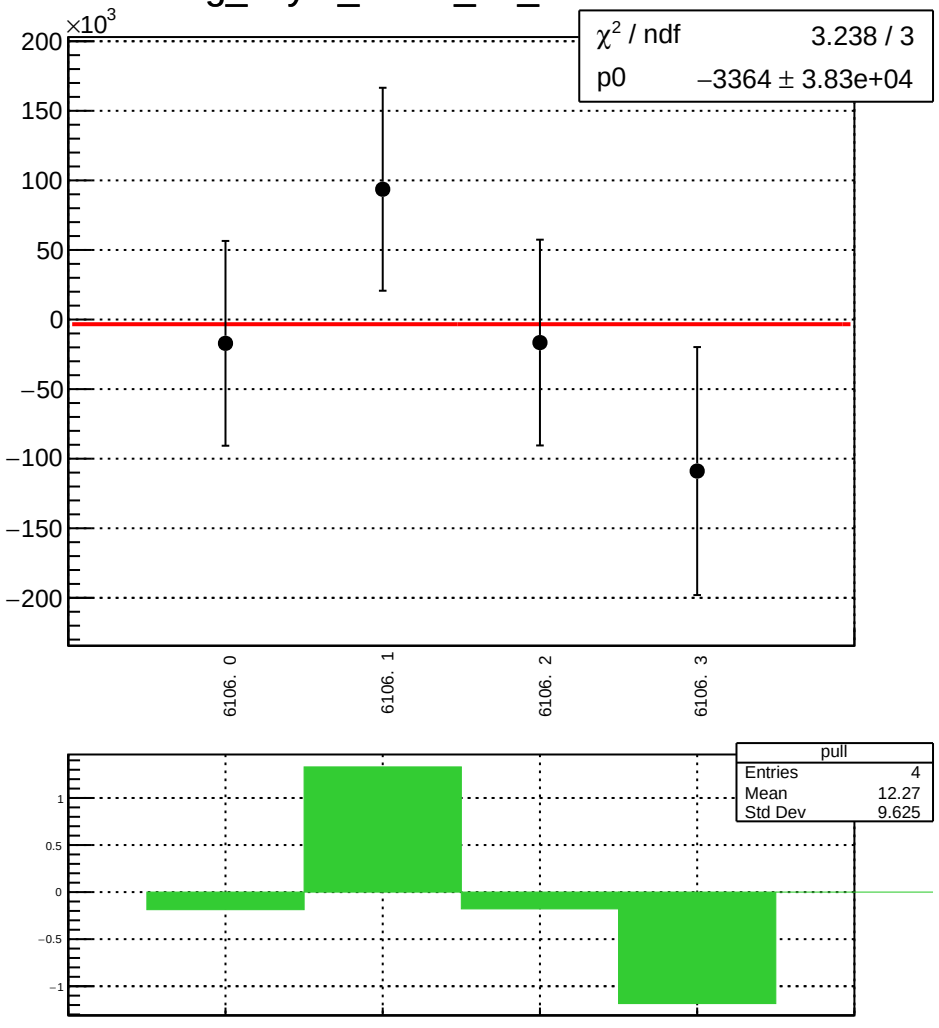

asym_atl1r2_avg_correction_rms vs run
χ² / ndf 129.2 / 3
p0 4428 ± 16.41
4700
4600
4500
4400
4300
4200
6106. 0
6106. 1
6106. 2
6106. 3

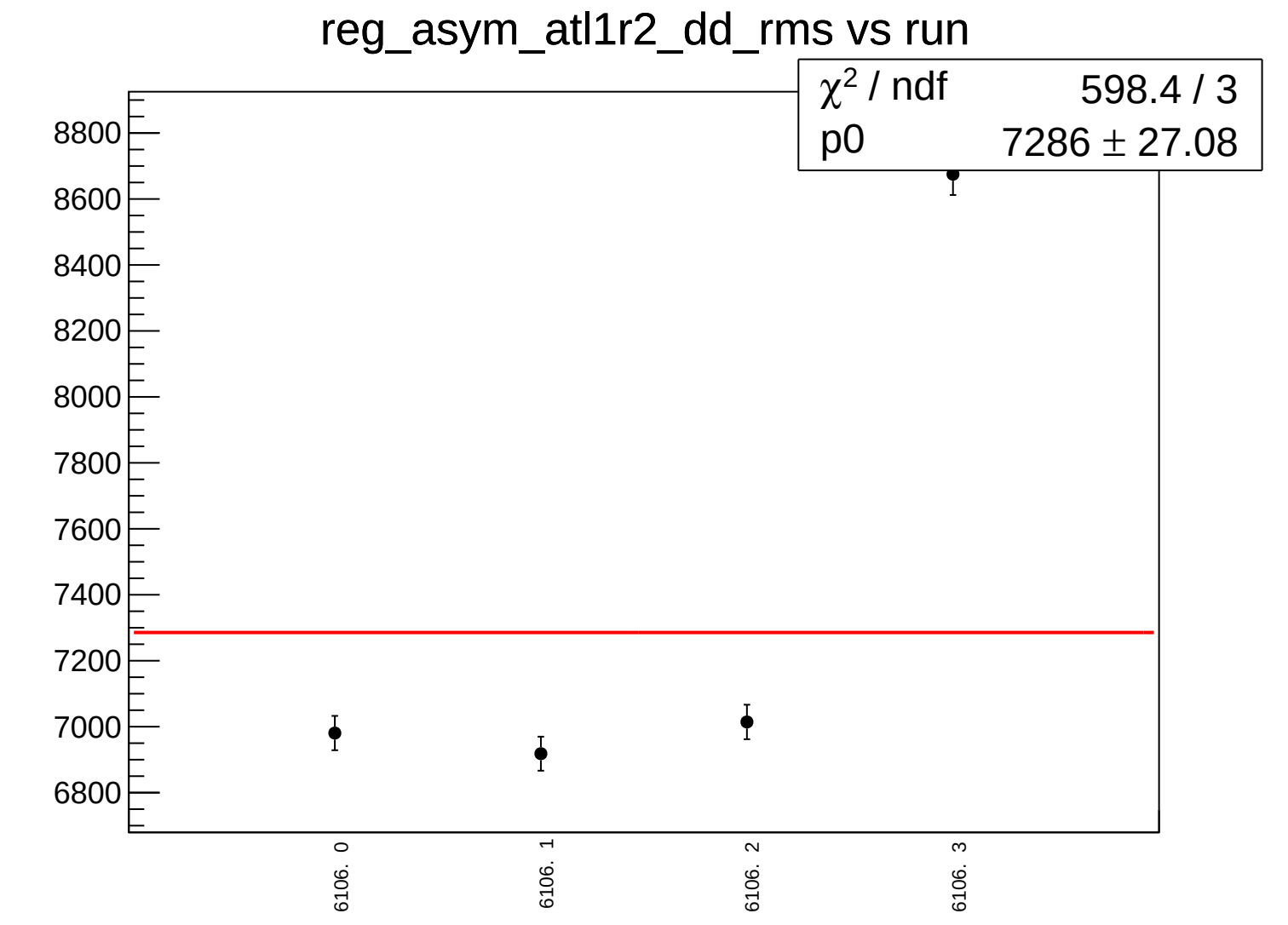

asym_atl1r2_avg_mean vs run
×10^3
χ² / ndf 1.895 / 3
p0 7286 ± 4.493e+04
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3

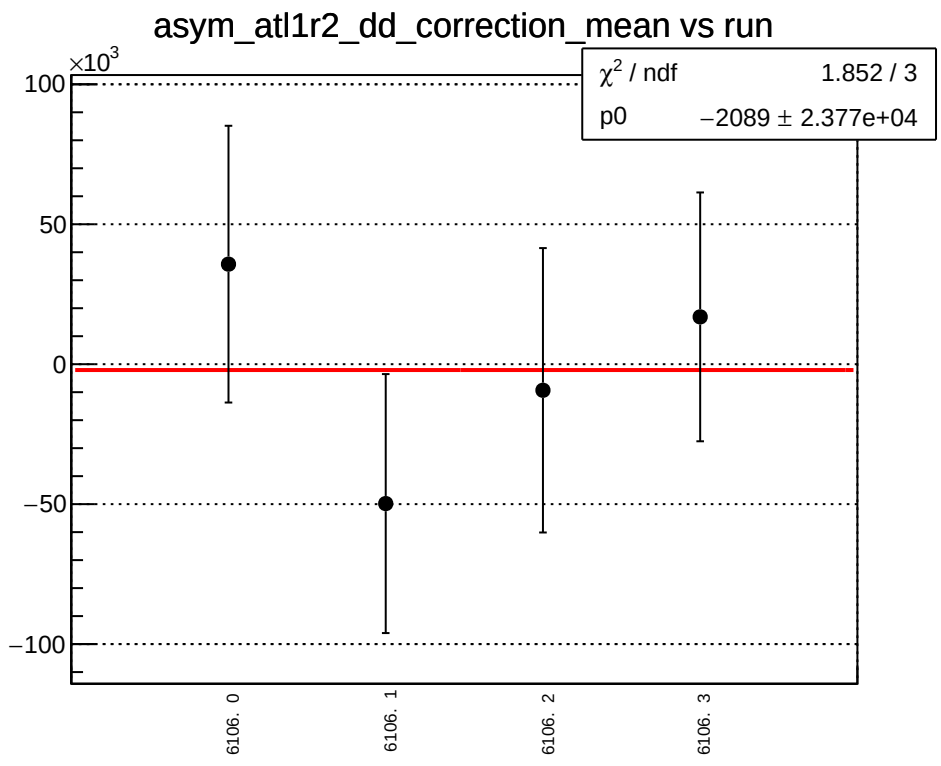

pull
Entries 4
Mean 22.2
Std Dev 19.99
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

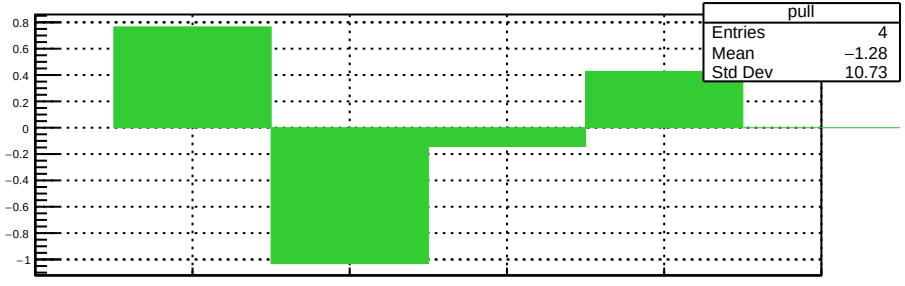

pull1D
Entries 4
Mean −0.03425
Std Dev 0.6874
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

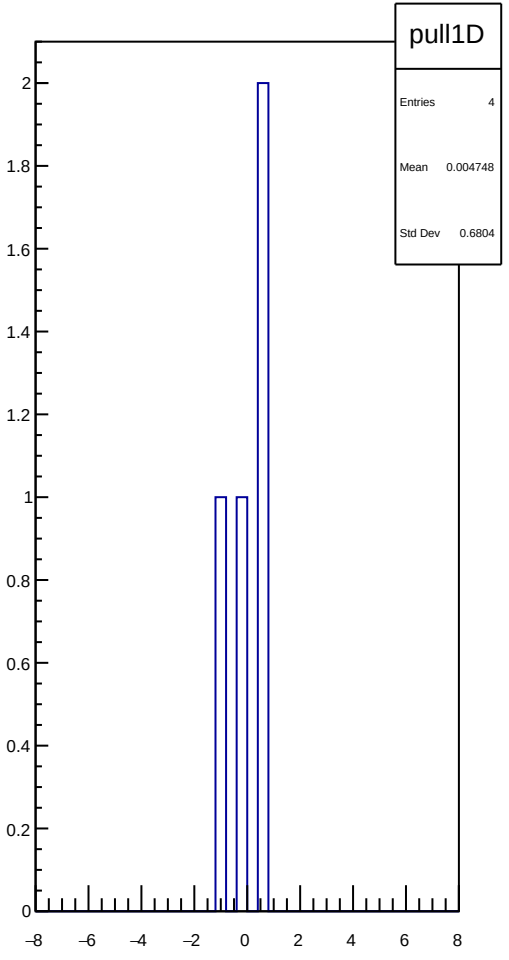

asym_atl1r2_avg_rms vs run
χ² / ndf 314.3 / 3
p0 8564 ± 31.77
9800
9600
9400
9200
9000
8800
8600
8400
8200
8000
6106. 0
6106. 1
6106. 2
6106. 3

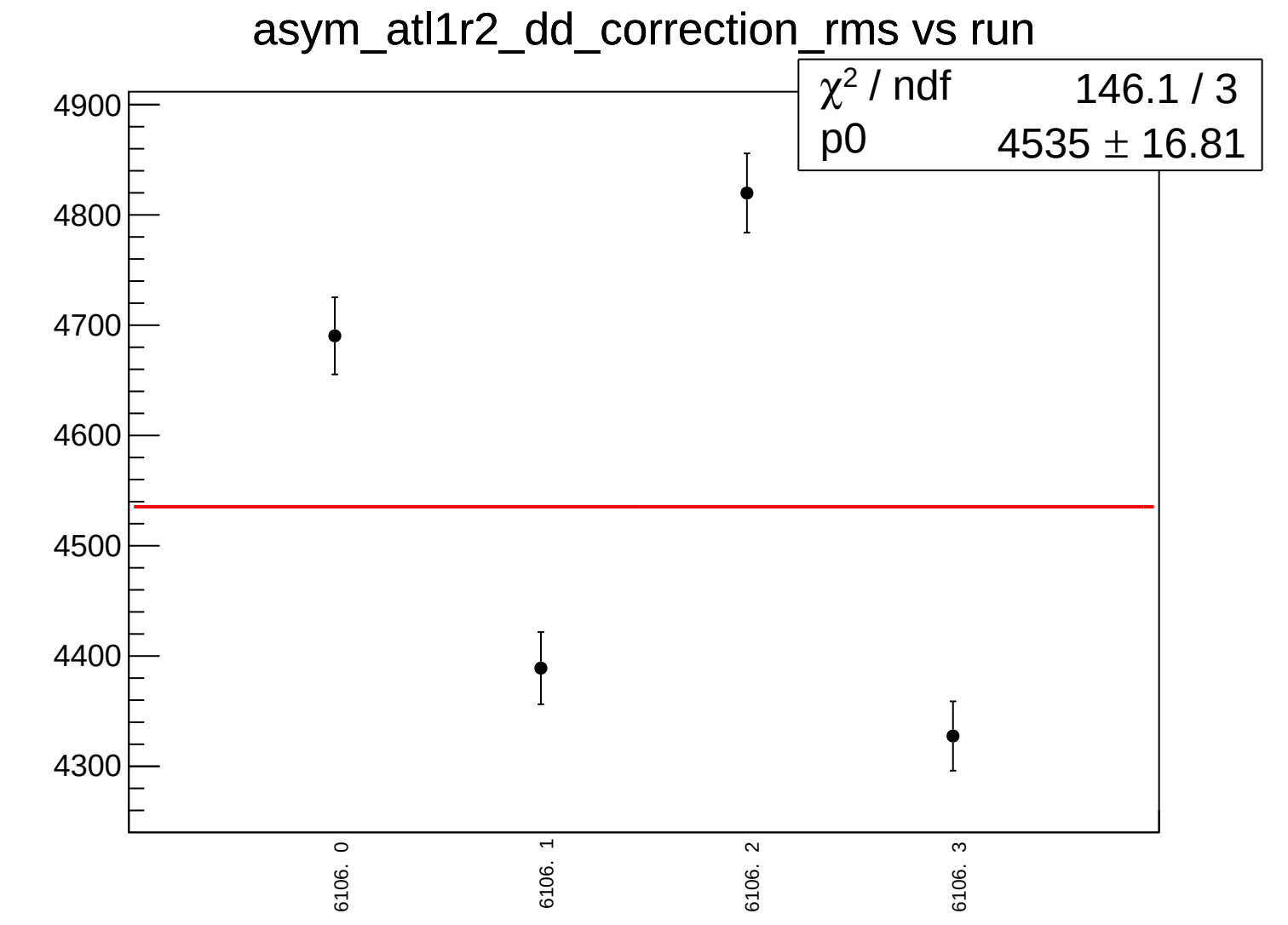

reg_asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 3.238 / 3
p0 −3364 ± 3.83e+04
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.27
Std Dev 9.625
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.0548
Std Dev 0.8981
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

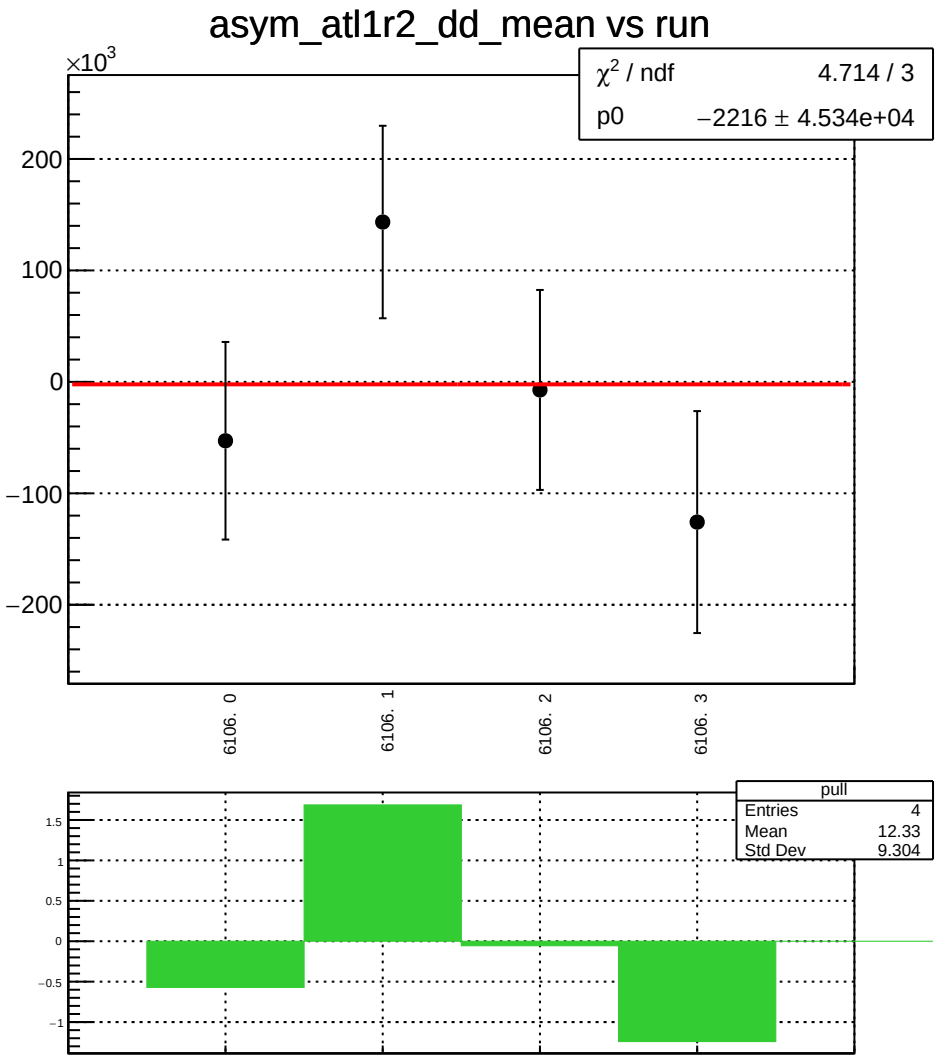

reg_asym_atl1r2_dd_rms vs run
χ² / ndf 598.4 / 3
p0 7286 ± 27.08
8800
8600
8400
8200
8000
7800
7600
7400
7200
7000
6800
6106. 0
6106. 1
6106. 2
6106. 3

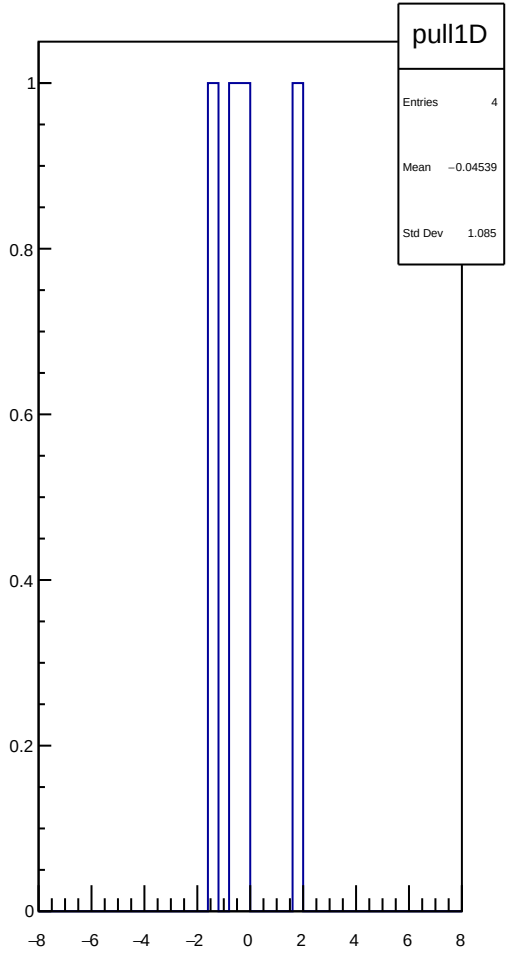

asym_atl1r2_dd_correction_mean vs run
×10^3
χ² / ndf 1.852 / 3
p0 −2089 ± 2.377e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3

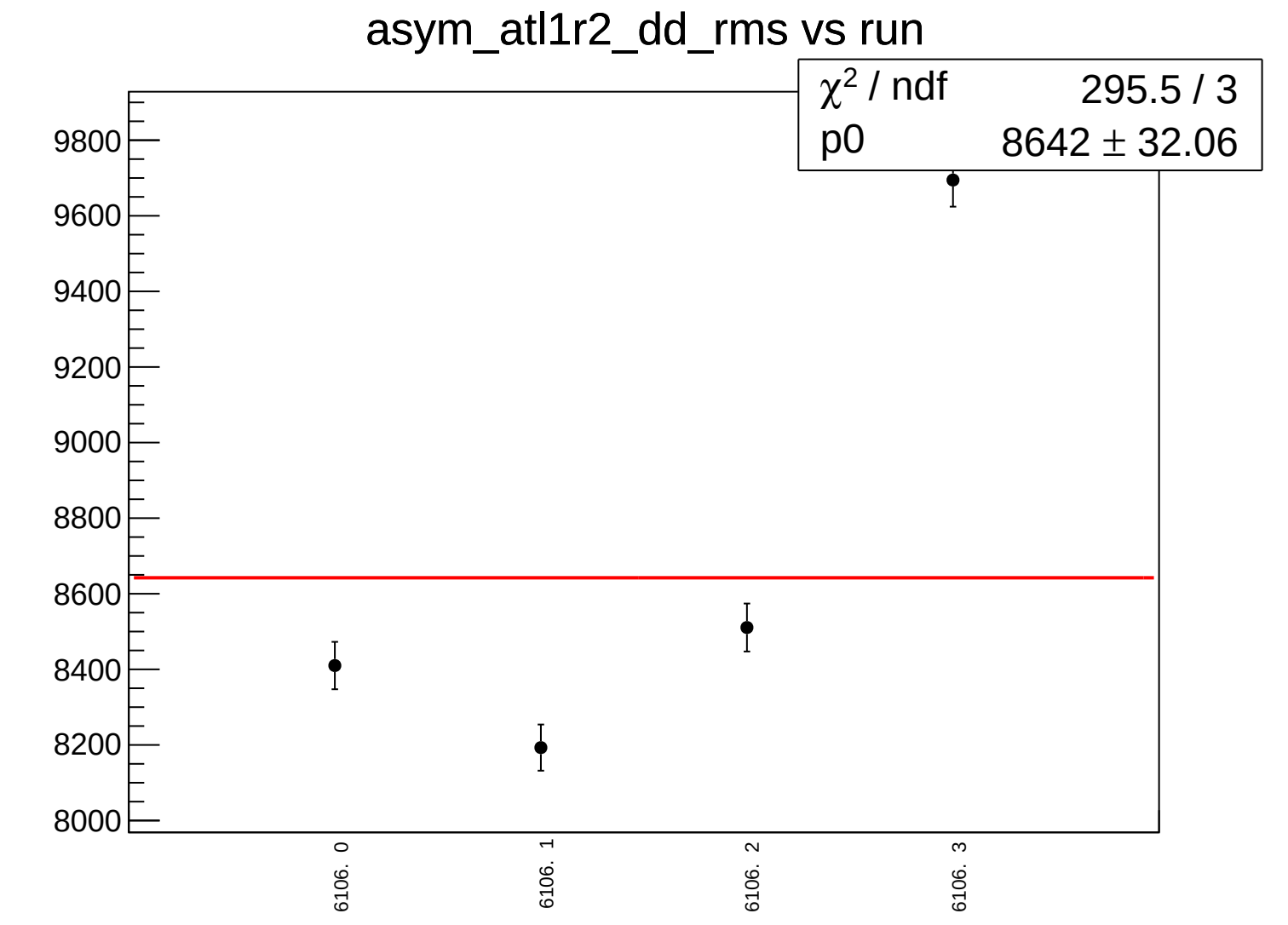

pull
Entries 4
Mean −1.28
Std Dev 10.73
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

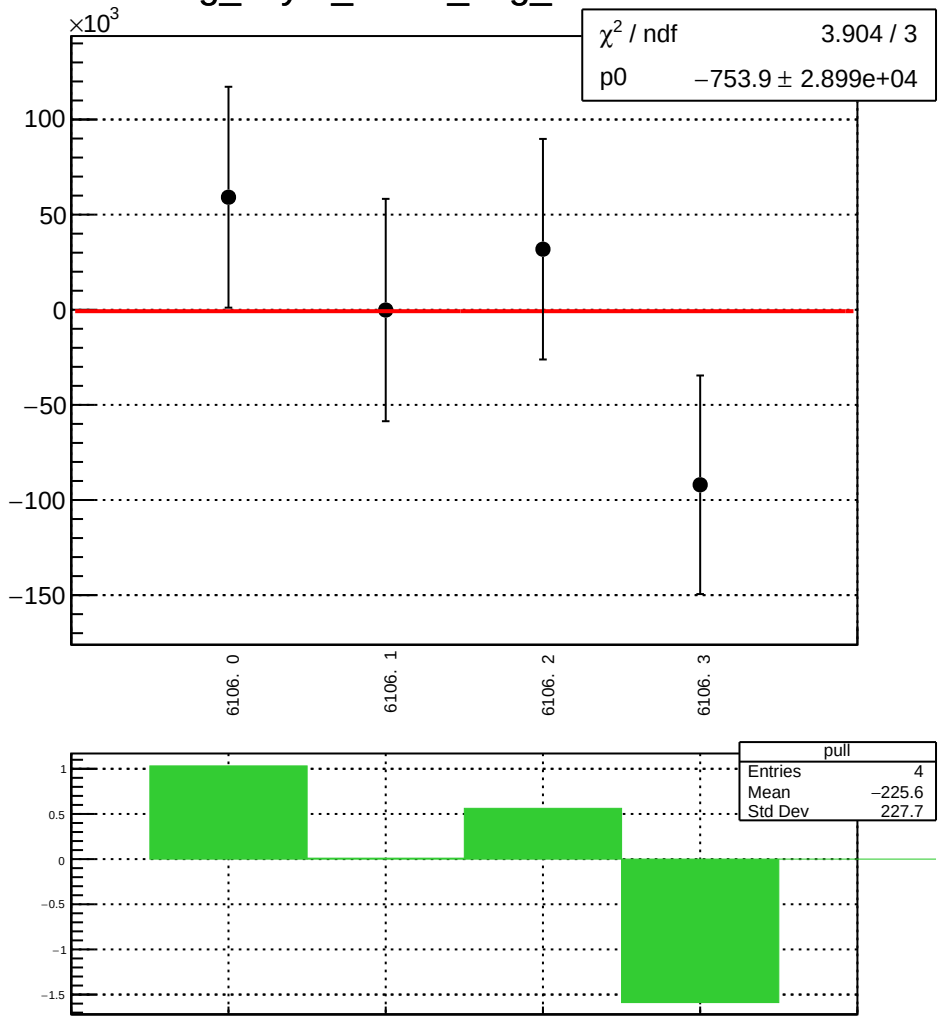

pull1D
Entries 4
Mean 0.004748
Std Dev 0.6804
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

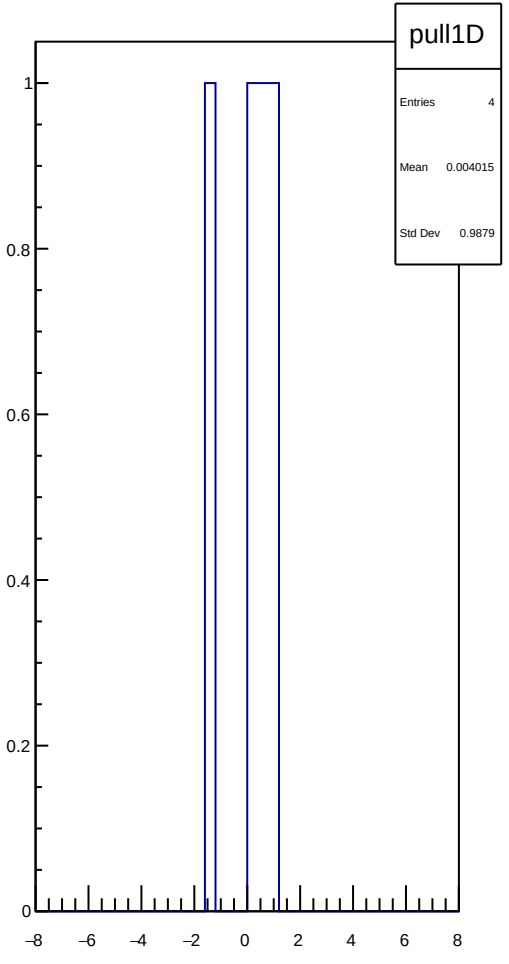

asym_atl1r2_dd_correction_rms vs run
χ² / ndf 146.1 / 3
p0 4535 ± 16.81
4900
4800
4700
4600
4500
4400
4300
6106. 0
6106. 1
6106. 2
6106. 3

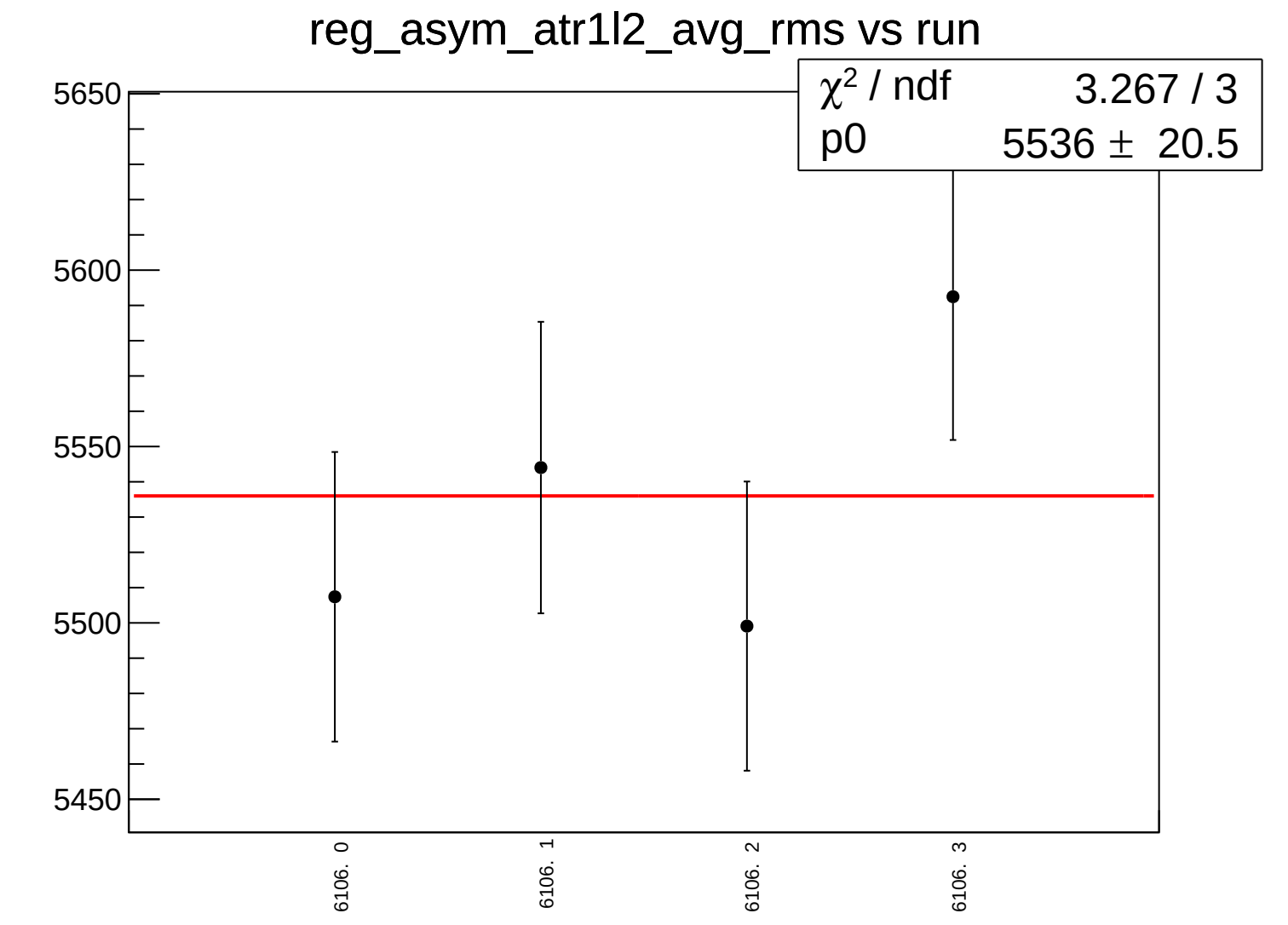

asym_atl1r2_dd_mean vs run
×10^3
χ² / ndf 4.714 / 3
p0 −2216 ± 4.534e+04
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.33
Std Dev 9.304
1.5
1
0.5
0
−0.5
−1

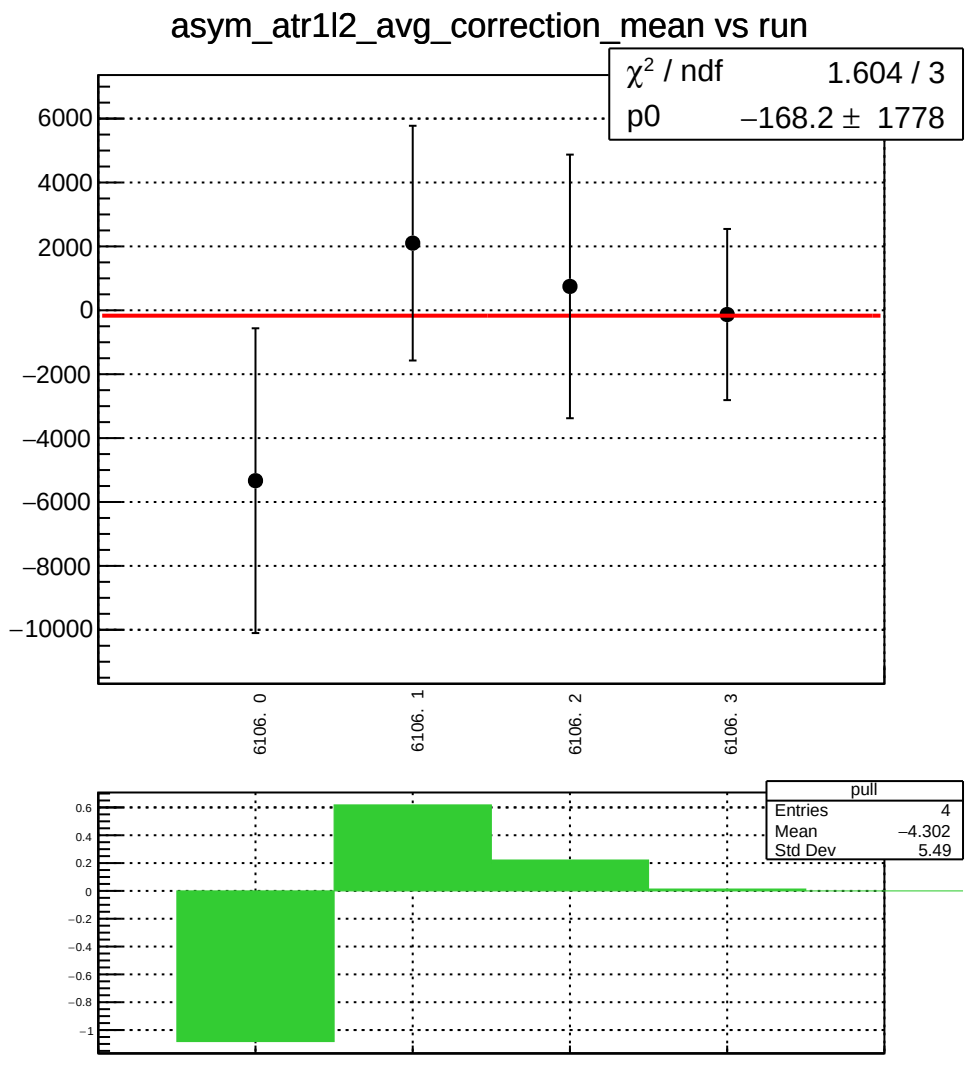

pull1D
Entries 4
Mean −0.04539
Std Dev 1.085
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

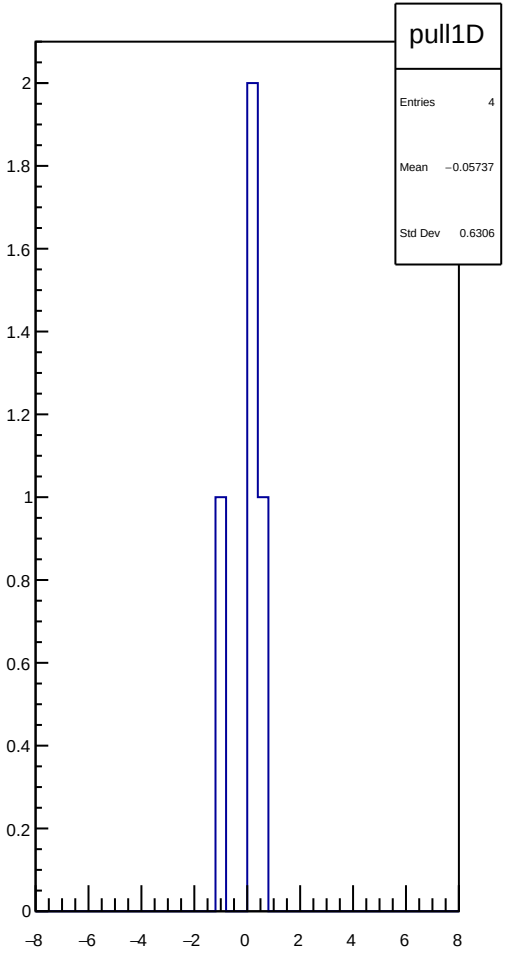

asym_atl1r2_dd_rms vs run
χ² / ndf 295.5 / 3
p0 8642 ± 32.06
9800
9600
9400
9200
9000
8800
8600
8400
8200
8000
6106. 0
6106. 1
6106. 2
6106. 3

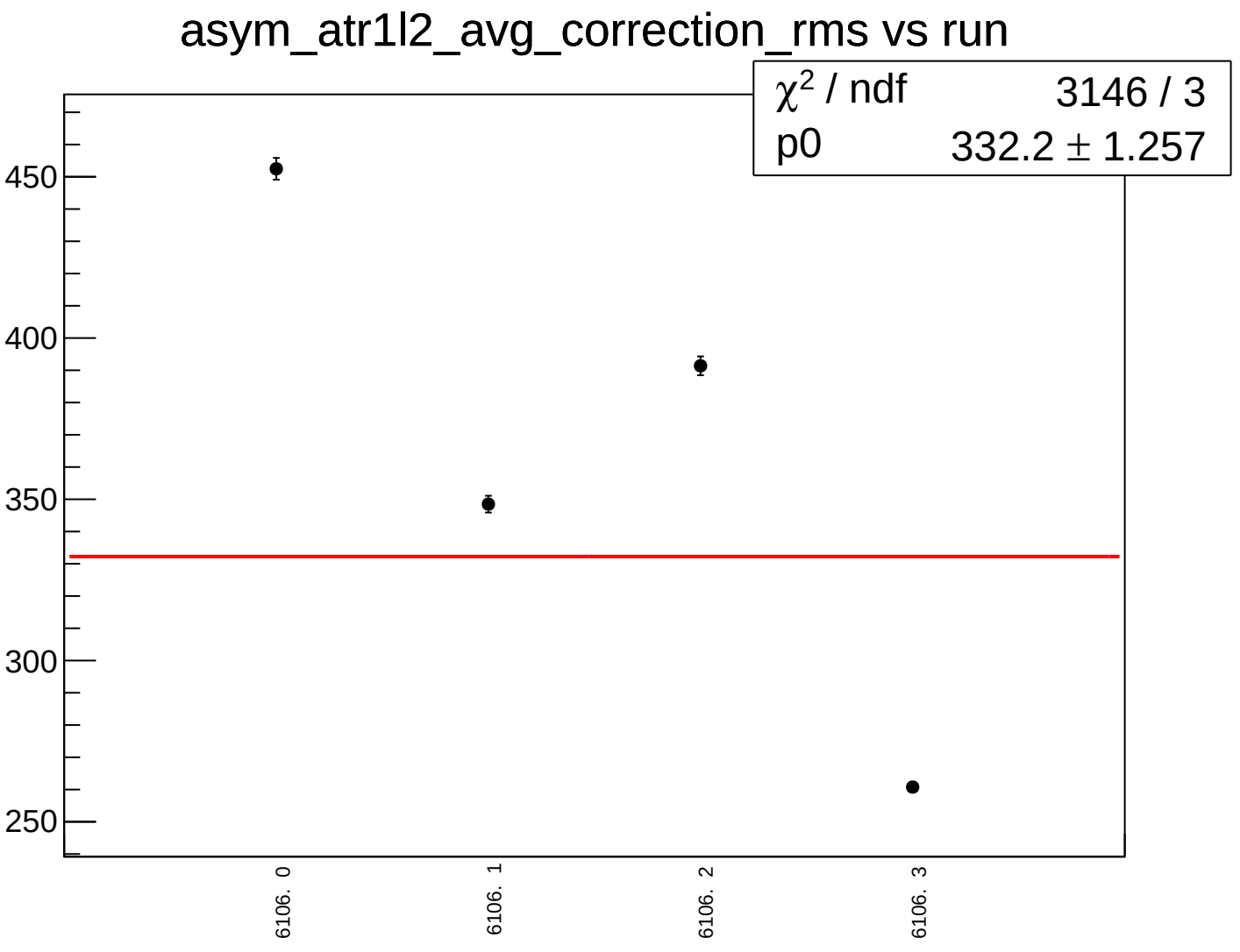

reg_asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 3.904 / 3
p0 −753.9 ± 2.899e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −225.6
Std Dev 227.7
1
0.5
0
−0.5
−1
−1.5

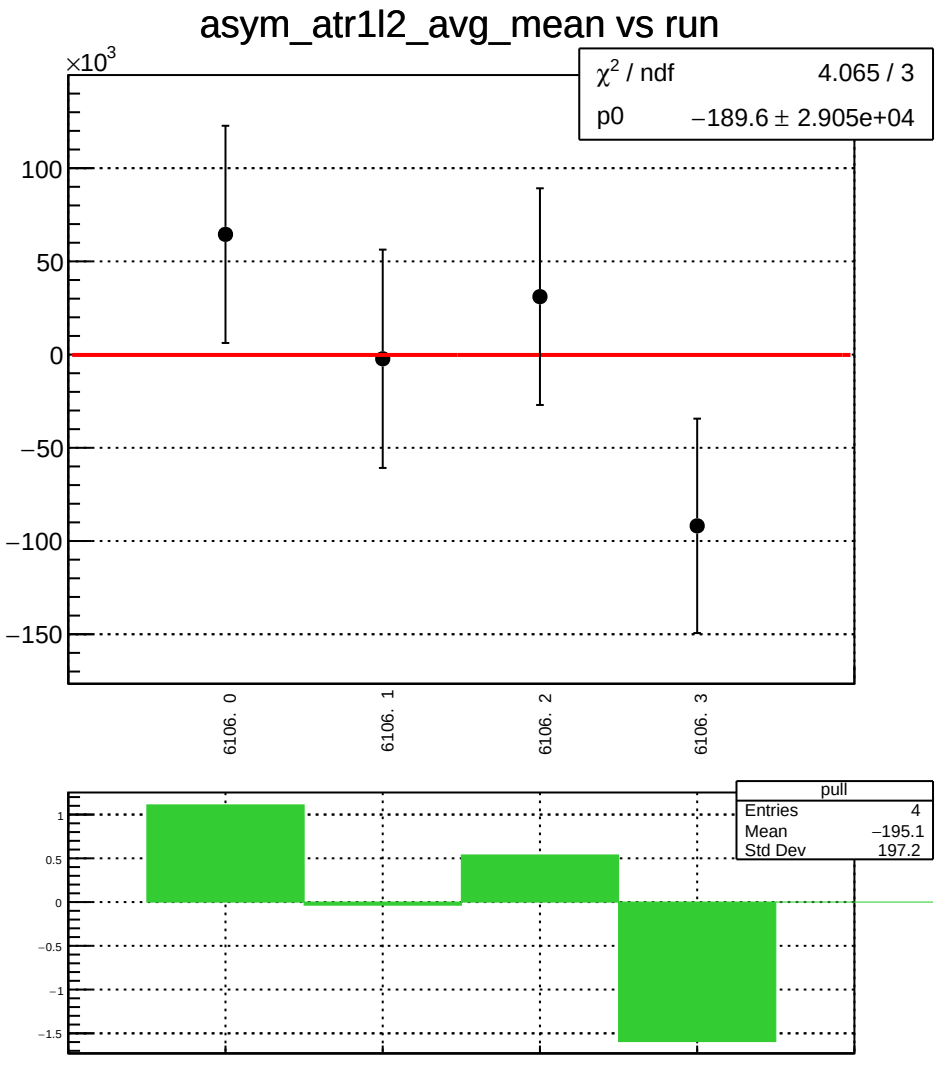

pull1D
Entries 4
Mean 0.004015
Std Dev 0.9879
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

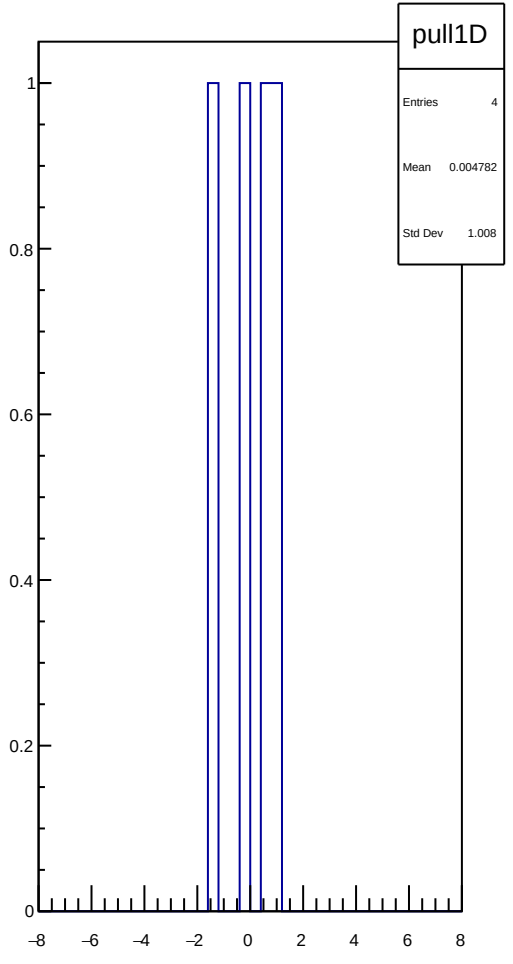

reg_asym_atr1l2_avg_rms vs run
χ² / ndf 3.267 / 3
p0 5536 ± 20.5
5650
5600
5550
5500
5450
6106. 0
6106. 1
6106. 2
6106. 3

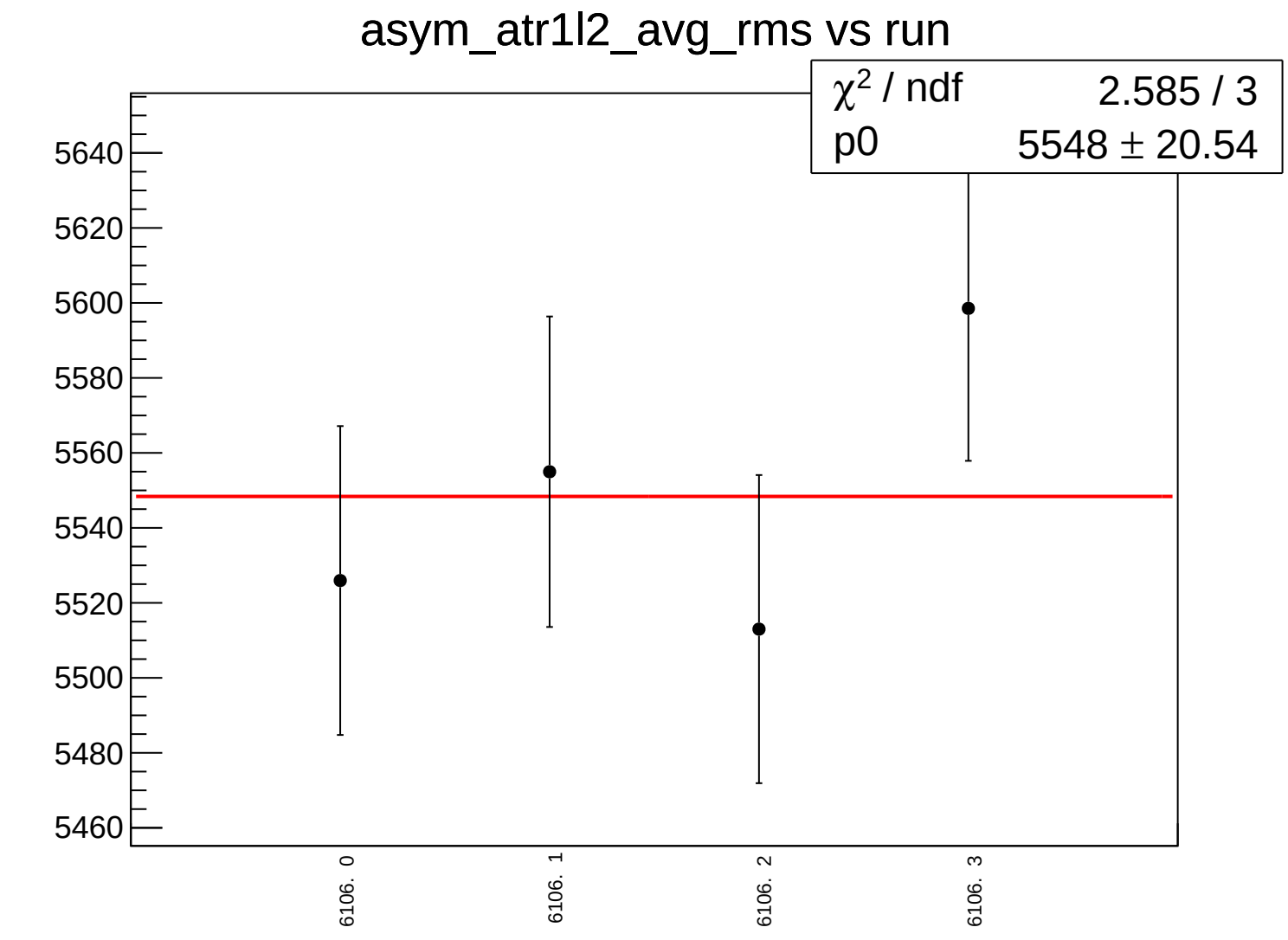

asym_atr1l2_avg_correction_mean vs run
χ² / ndf 1.604 / 3
p0 −168.2 ± 1778
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.302
Std Dev 5.49
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

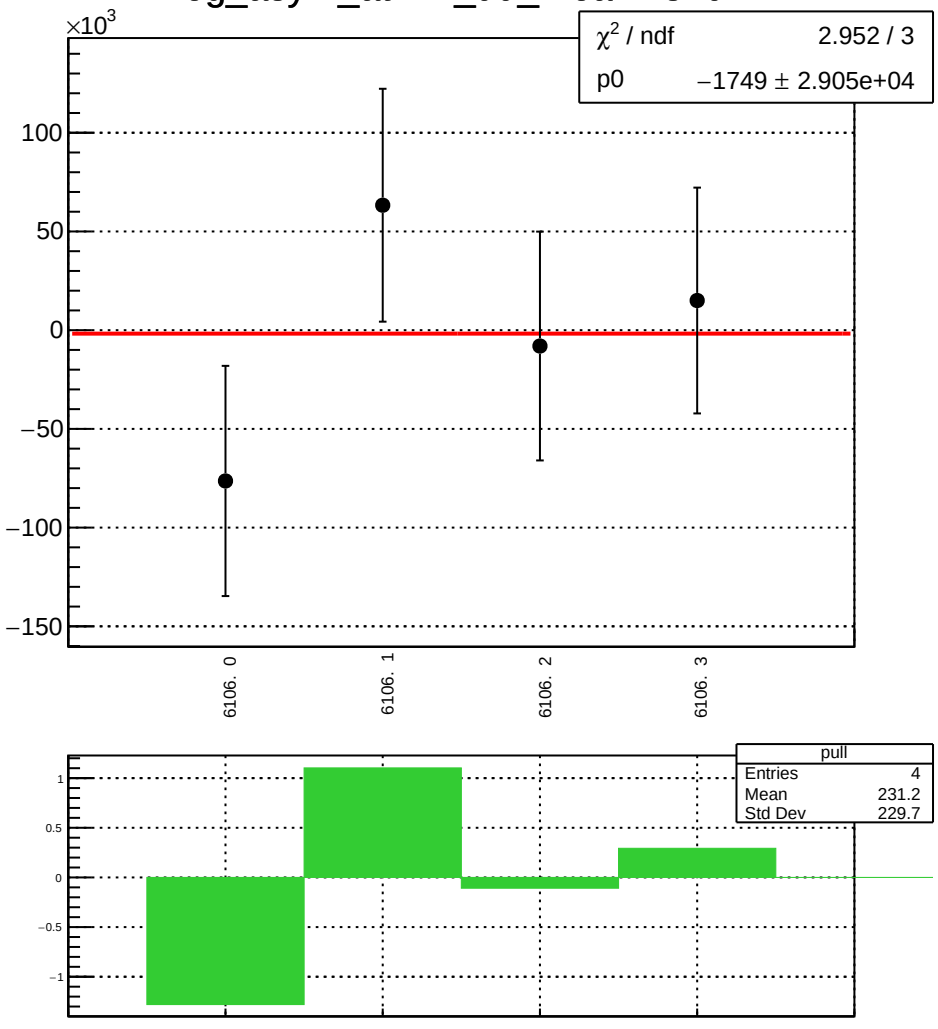

pull1D
Entries 4
Mean −0.05737
Std Dev 0.6306
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

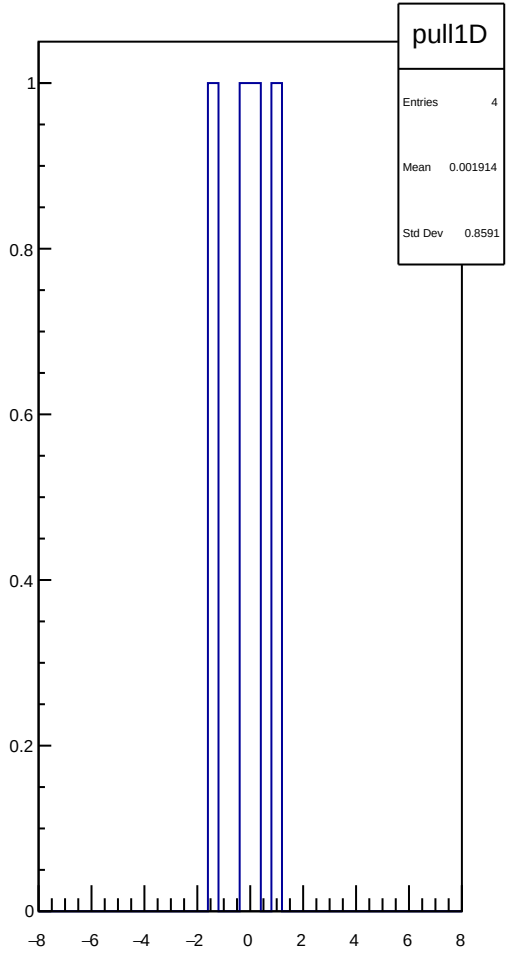

asym_atr1l2_avg_correction_rms vs run
χ² / ndf 3146 / 3
p0 332.2 ± 1.257
450
400
350
300
250
6106. 0
6106. 1
6106. 2
6106. 3

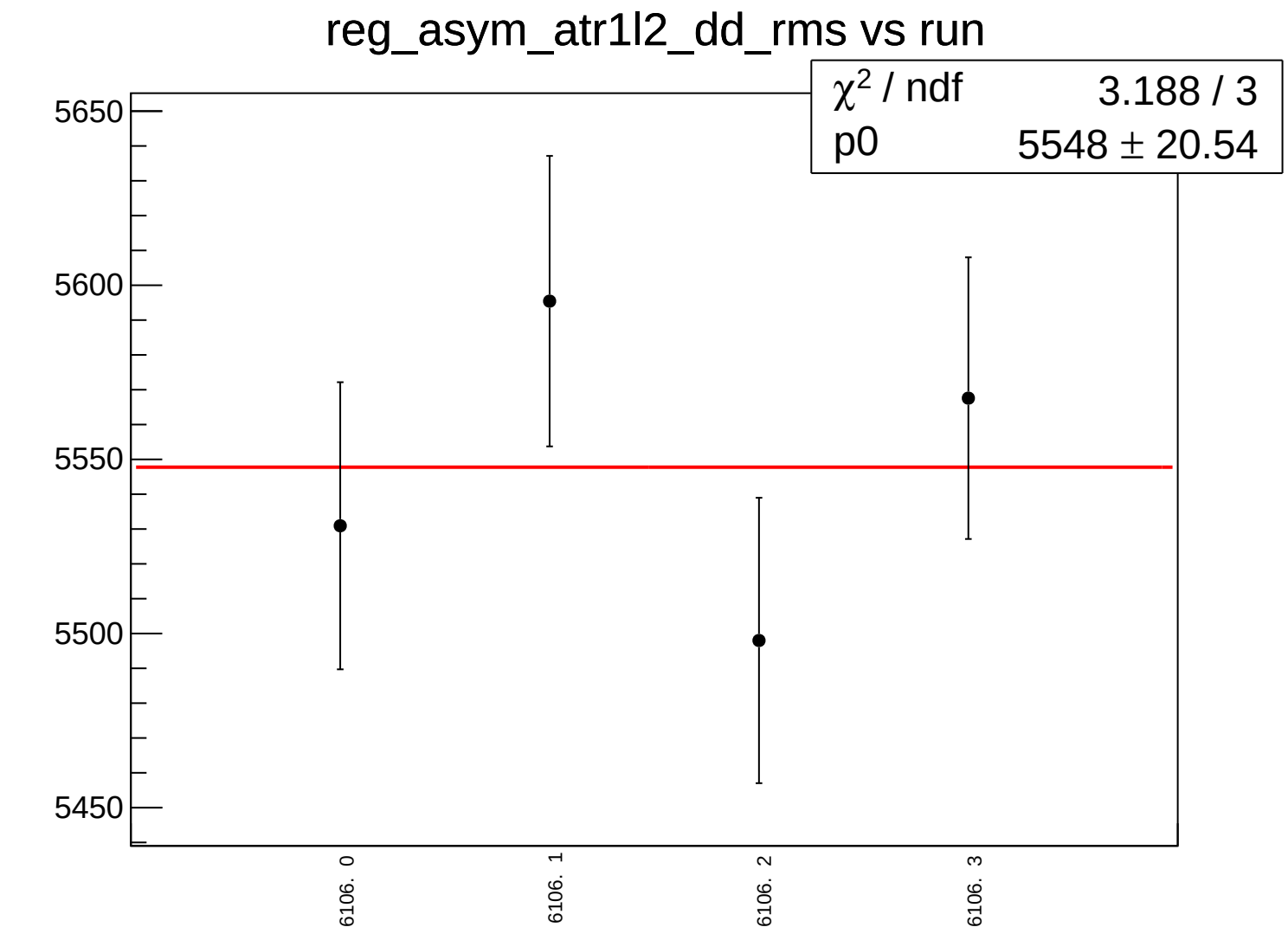

asym_atr1l2_avg_mean vs run
×10^3
χ² / ndf 4.065 / 3
p0 −189.6 ± 2.905e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −195.1
Std Dev 197.2
1
0.5
0
−0.5
−1
−1.5

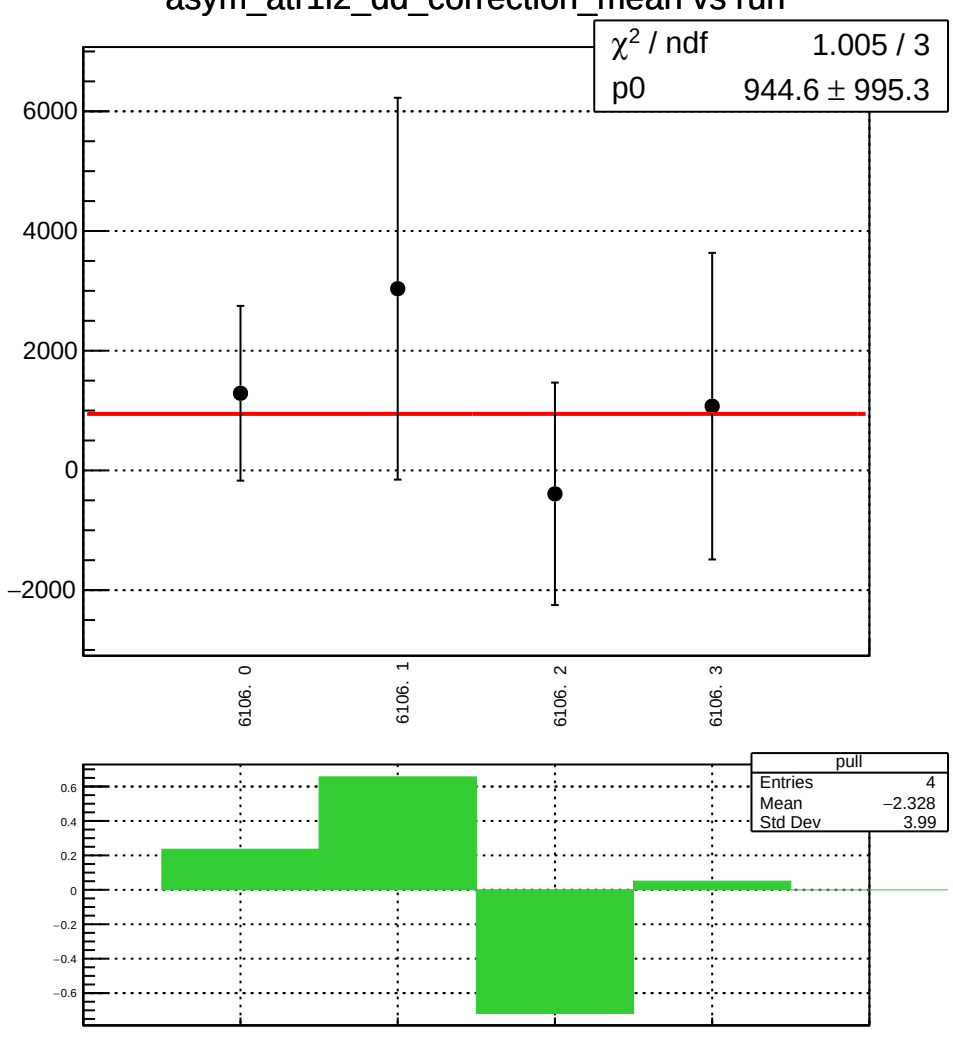

pull1D
Entries 4
Mean 0.004782
Std Dev 1.008
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

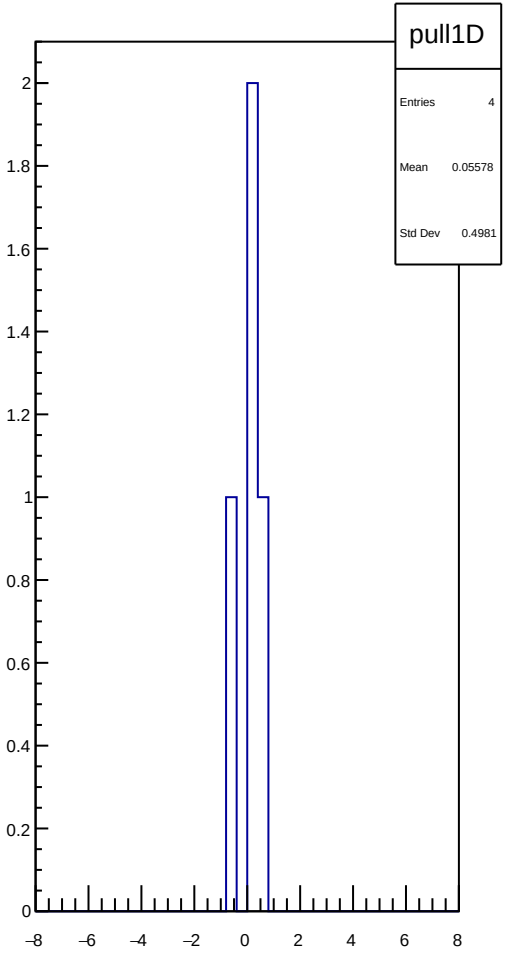

asym_atr1l2_avg_rms vs run
χ² / ndf 2.585 / 3
p0 5548 ± 20.54
5640
5620
5600
5580
5560
5540
5520
5500
5480
5460
6106. 0
6106. 1
6106. 2
6106. 3

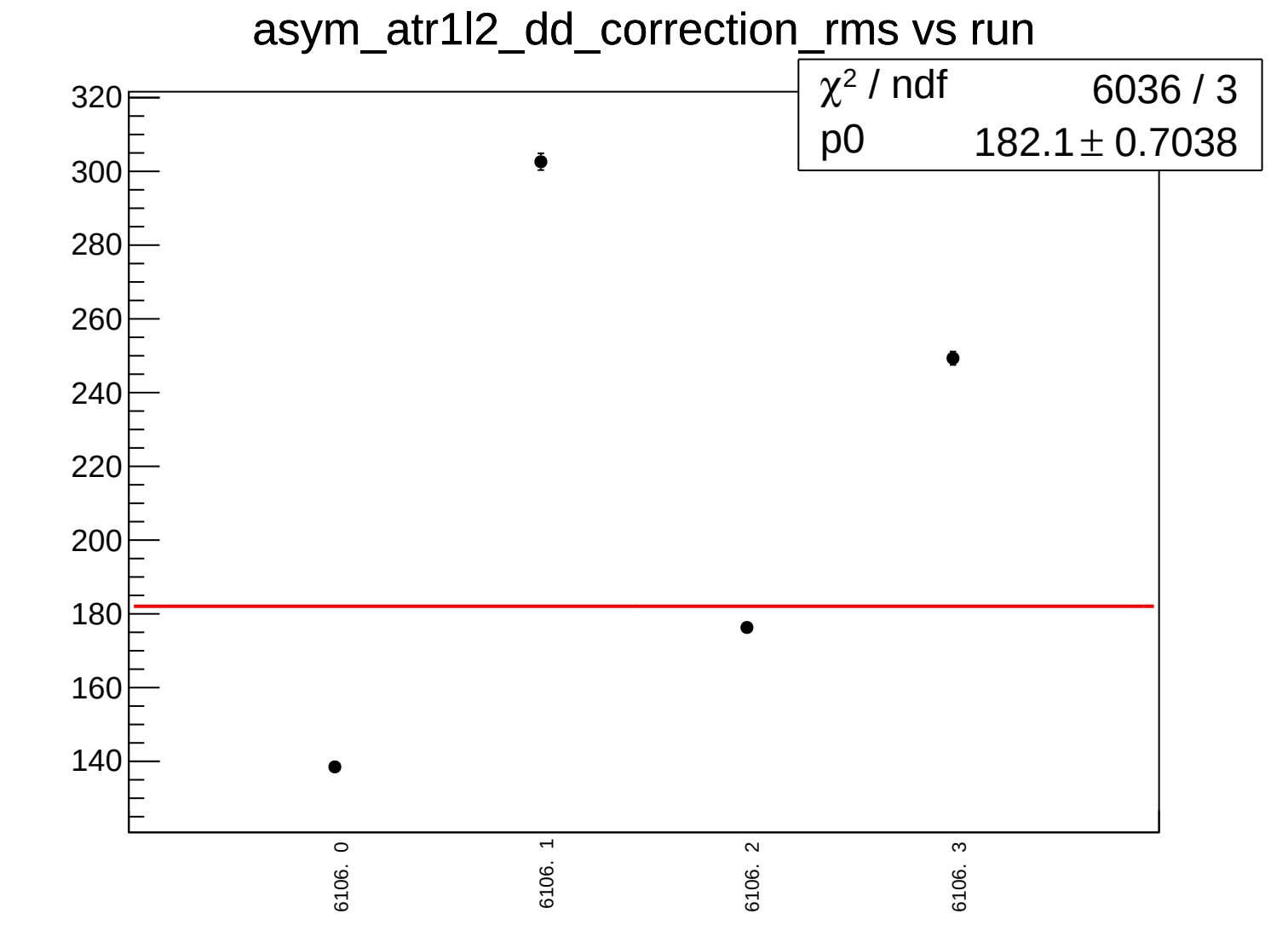

reg_asym_atr1l2_dd_mean vs run
χ² / ndf 2.952 / 3
p0 −1749 ± 2.905e+04
×10³
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 231.2
Std Dev 229.7
1
0.5
0
−0.5
−1

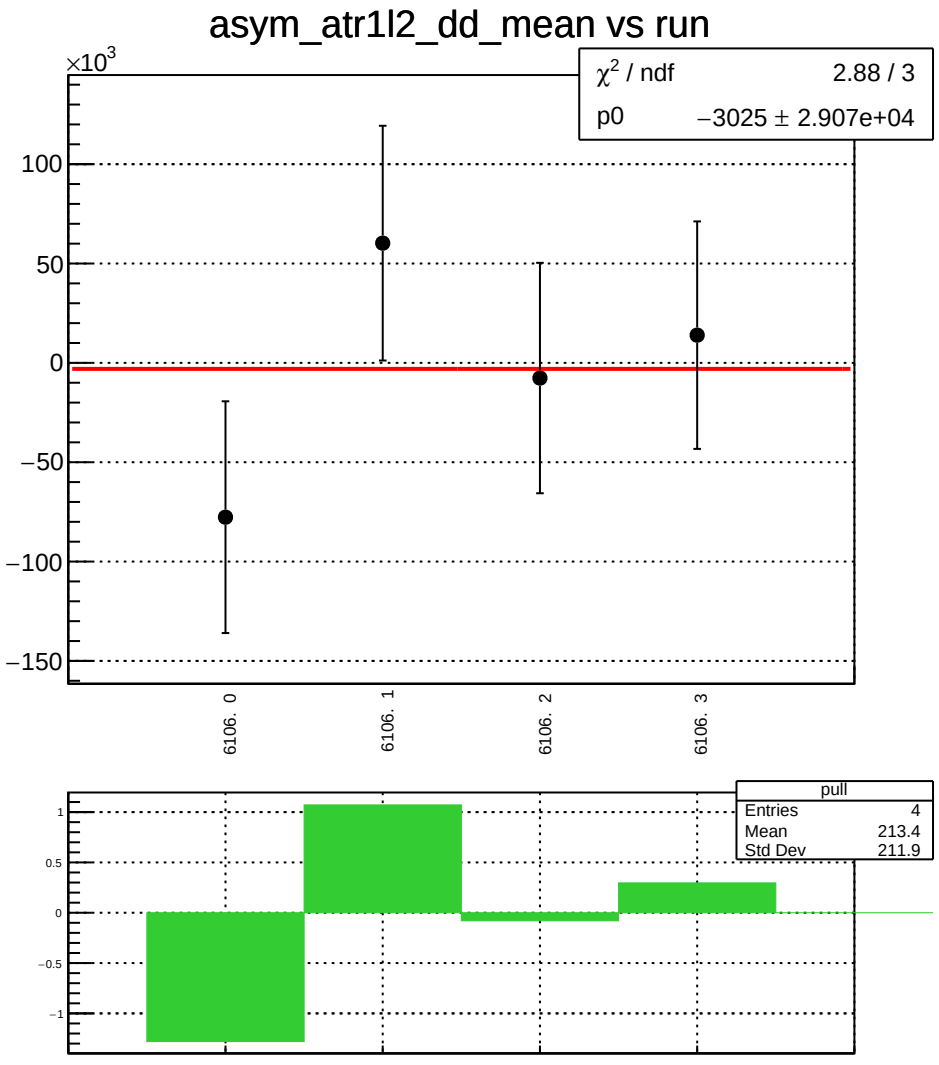

pull1D
Entries 4
Mean 0.001914
Std Dev 0.8591
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

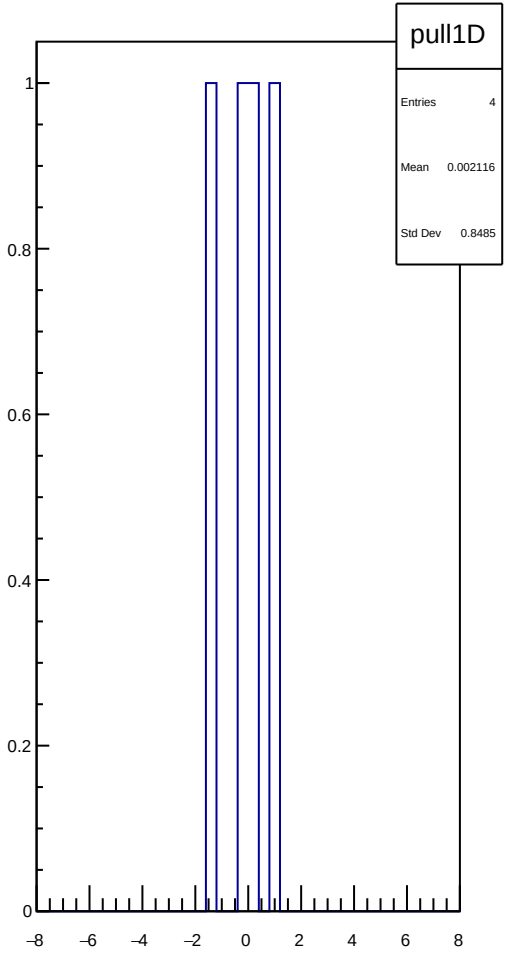

reg_asym_atr1l2_dd_rms vs run
χ² / ndf 3.188 / 3
p0 5548 ± 20.54
5650
5600
5550
5500
5450
6106. 0
6106. 1
6106. 2
6106. 3

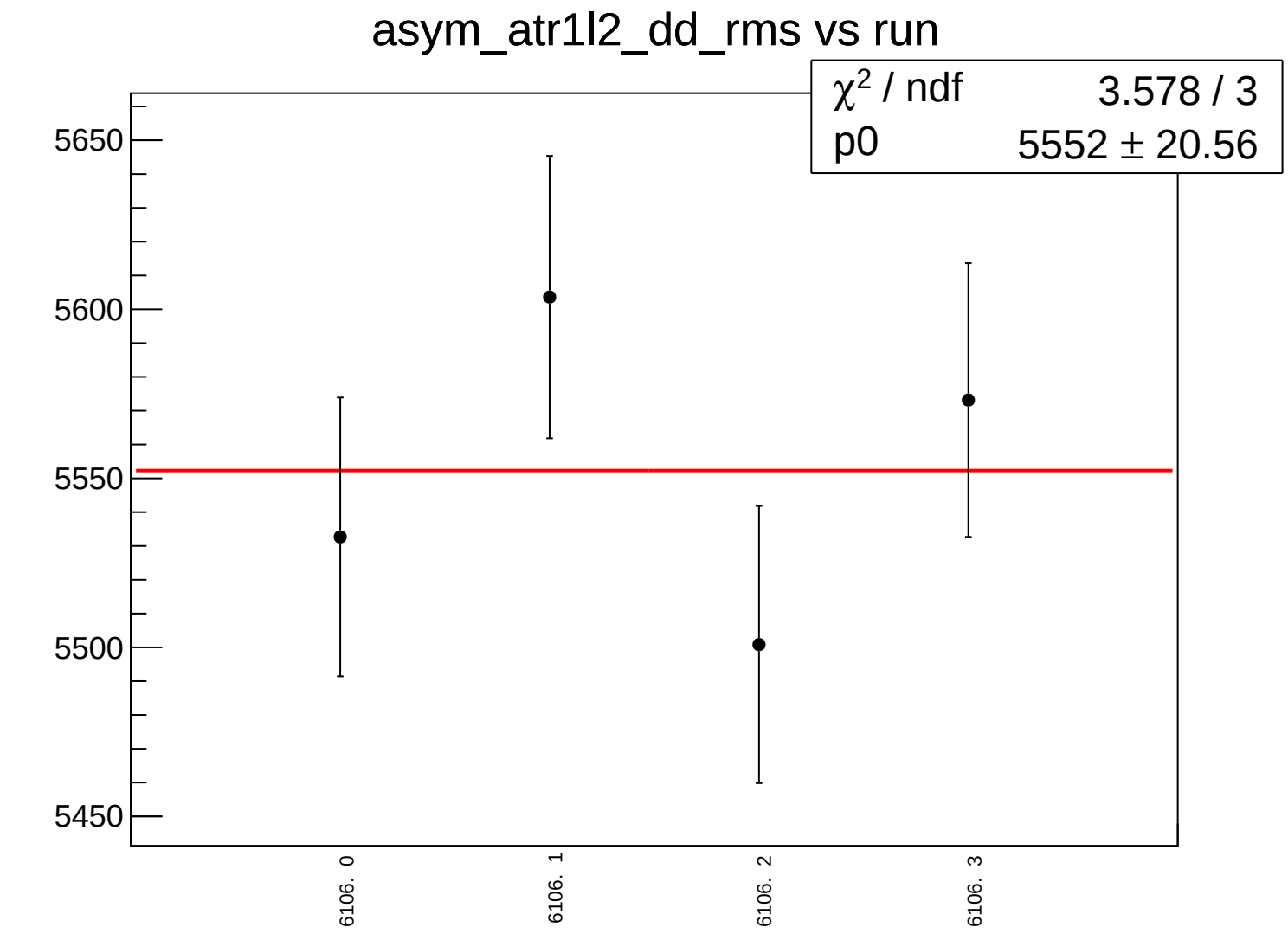

asym_atr1l2_dd_correction_mean vs run
χ² / ndf 1.005 / 3
p0 944.6 ± 995.3
6000
4000
2000
0
−2000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.328
Std Dev 3.99
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

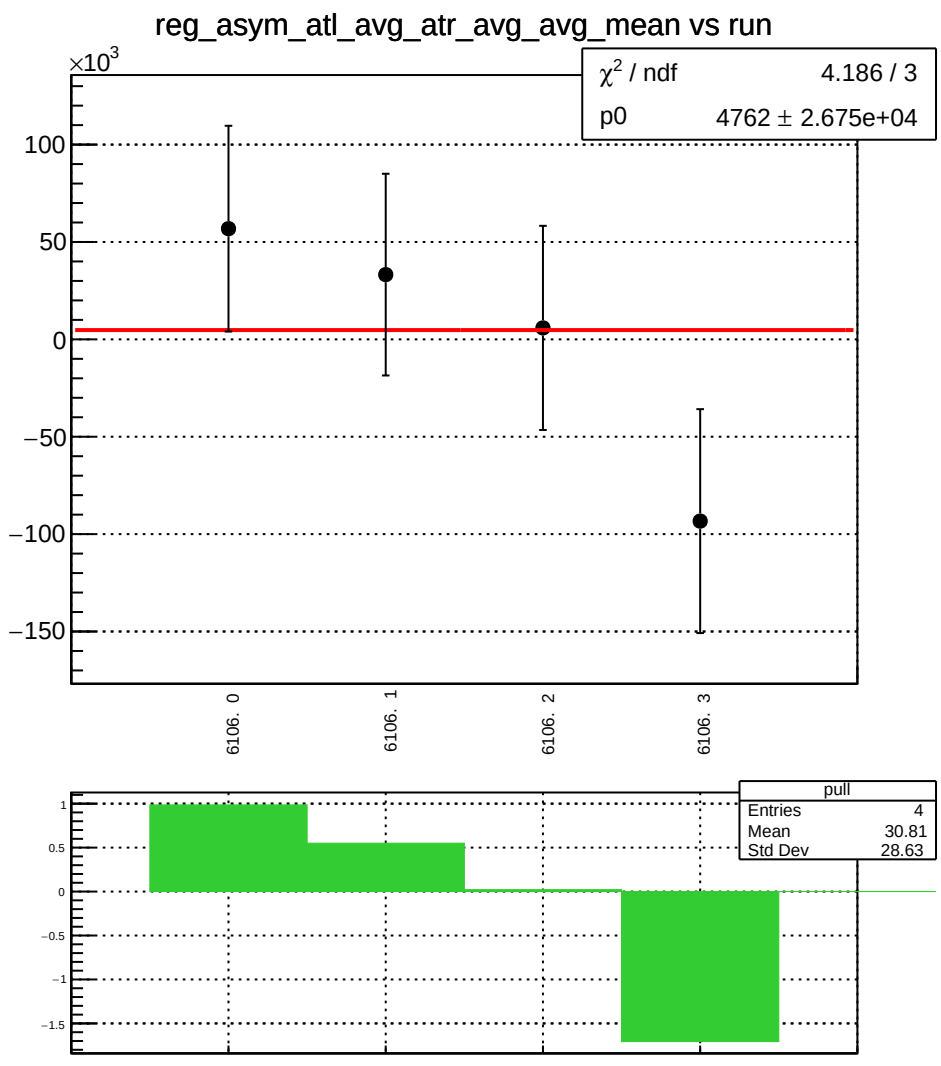

pull1D
Entries 4
Mean 0.05578
Std Dev 0.4981
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

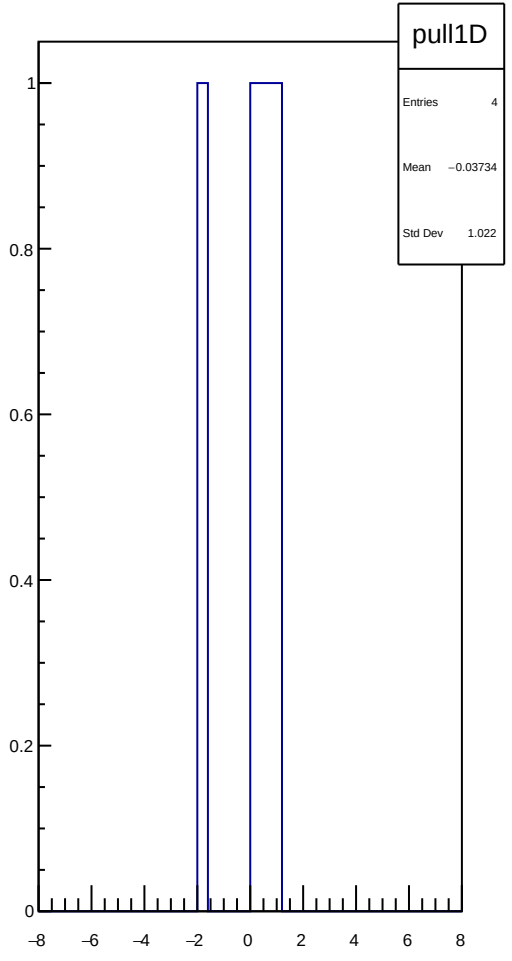

asym_atr1l2_dd_correction_rms vs run
χ² / ndf 6036 / 3
p0 182.1 ± 0.7038
320
300
280
260
240
220
200
180
160
140
6106. 0
6106. 1
6106. 2
6106. 3

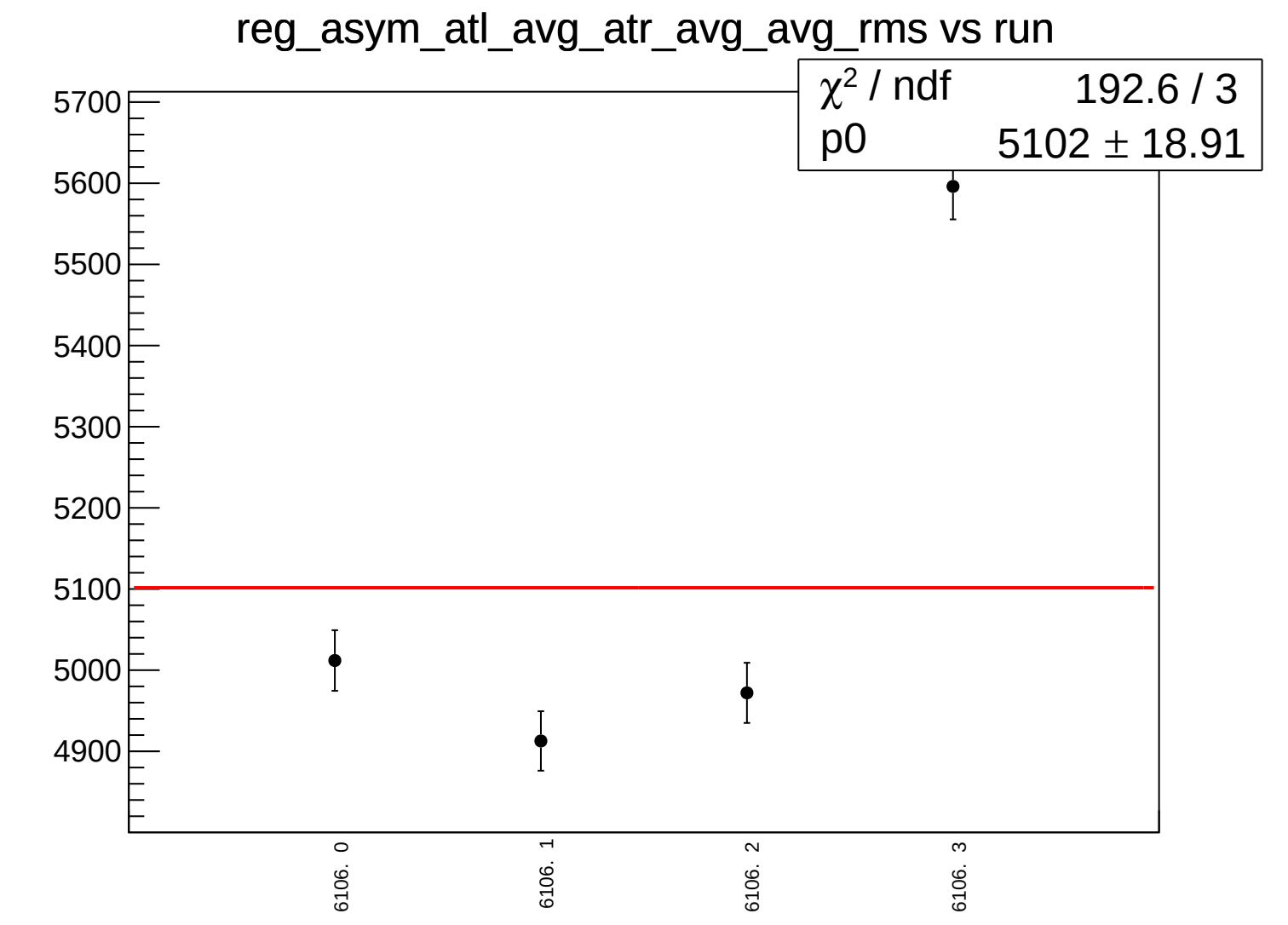

asym_atr1l2_dd_mean vs run
×10^3
χ² / ndf 2.88 / 3
p0 −3025 ± 2.907e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 213.4
Std Dev 211.9
1
0.5
0
−0.5
−1

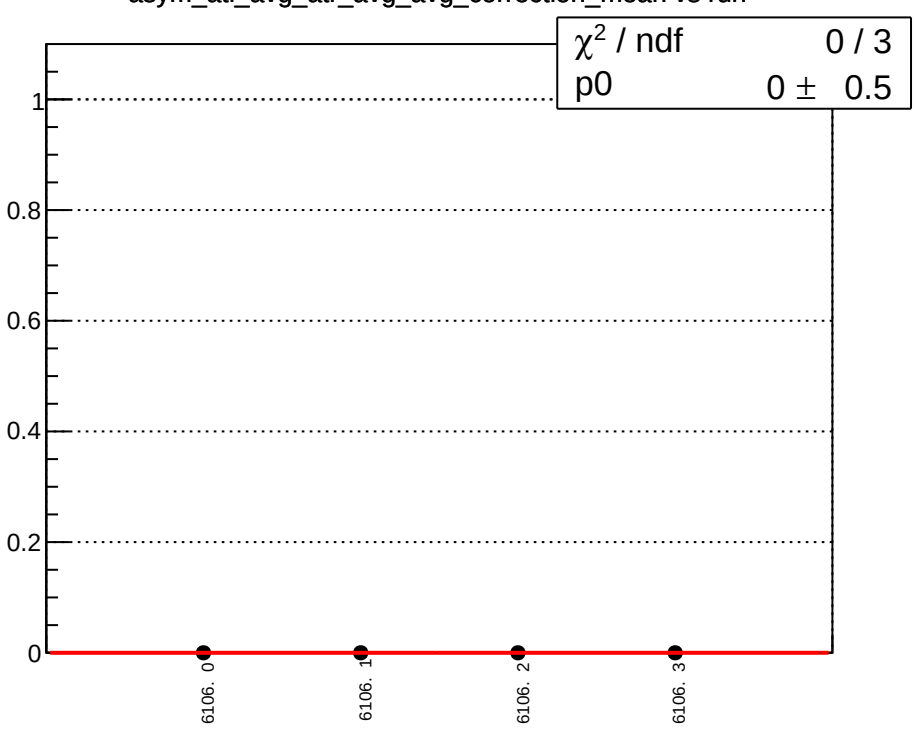

pull1D
Entries 4
Mean 0.002116
Std Dev 0.8485
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

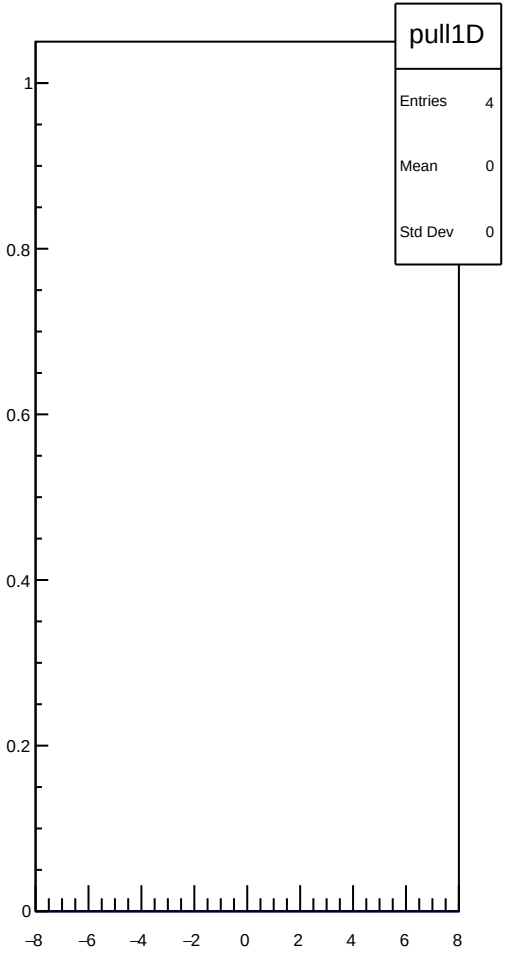

asym_atr1l2_dd_rms vs run
χ² / ndf 3.578 / 3
p0 5552 ± 20.56
5650
5600
5550
5500
5450
6106. 0
6106. 1
6106. 2
6106. 3

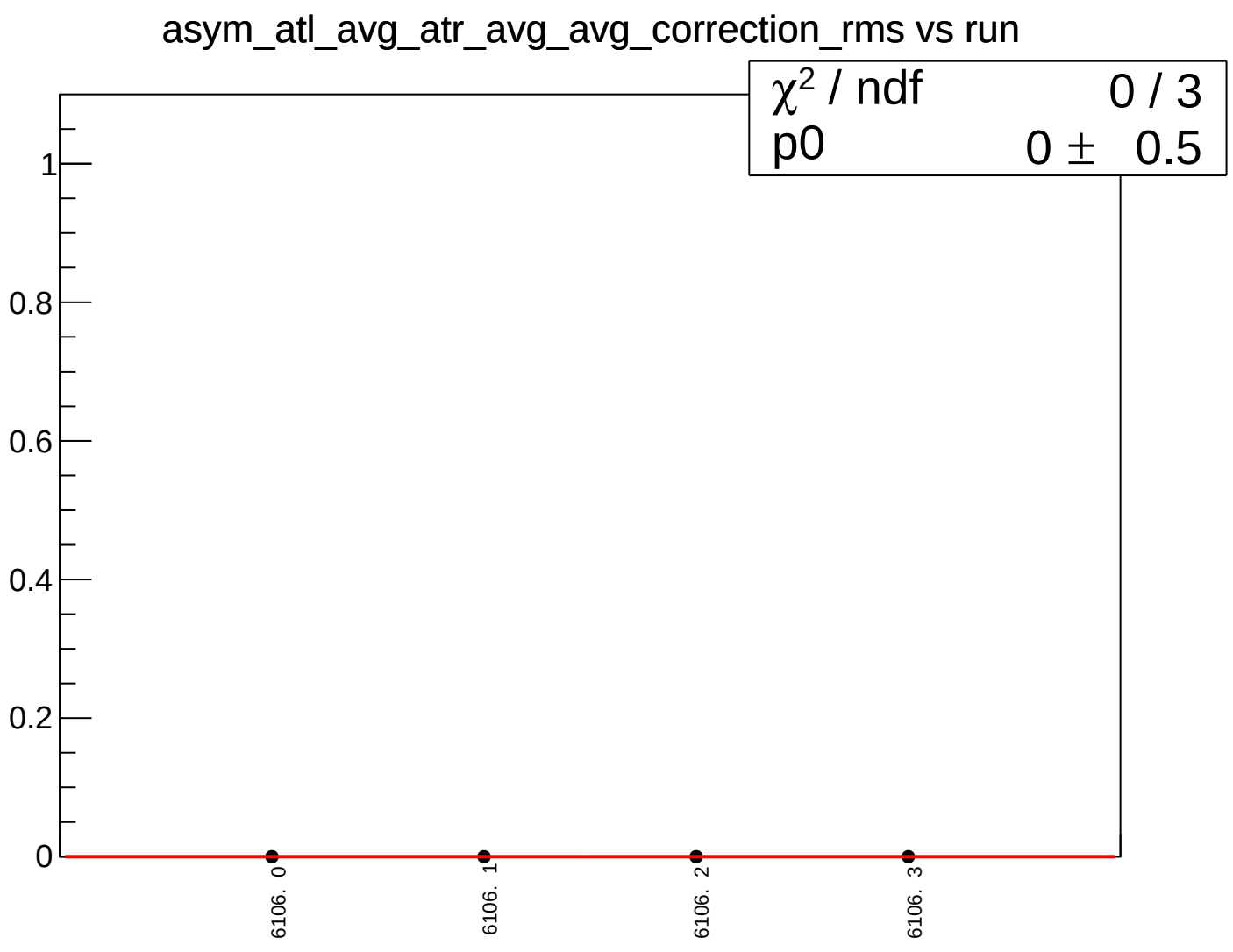

reg_asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 4.186 / 3
p0 4762 ± 2.675e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 30.81
Std Dev 28.63
1
0.5
0
−0.5
−1
−1.5

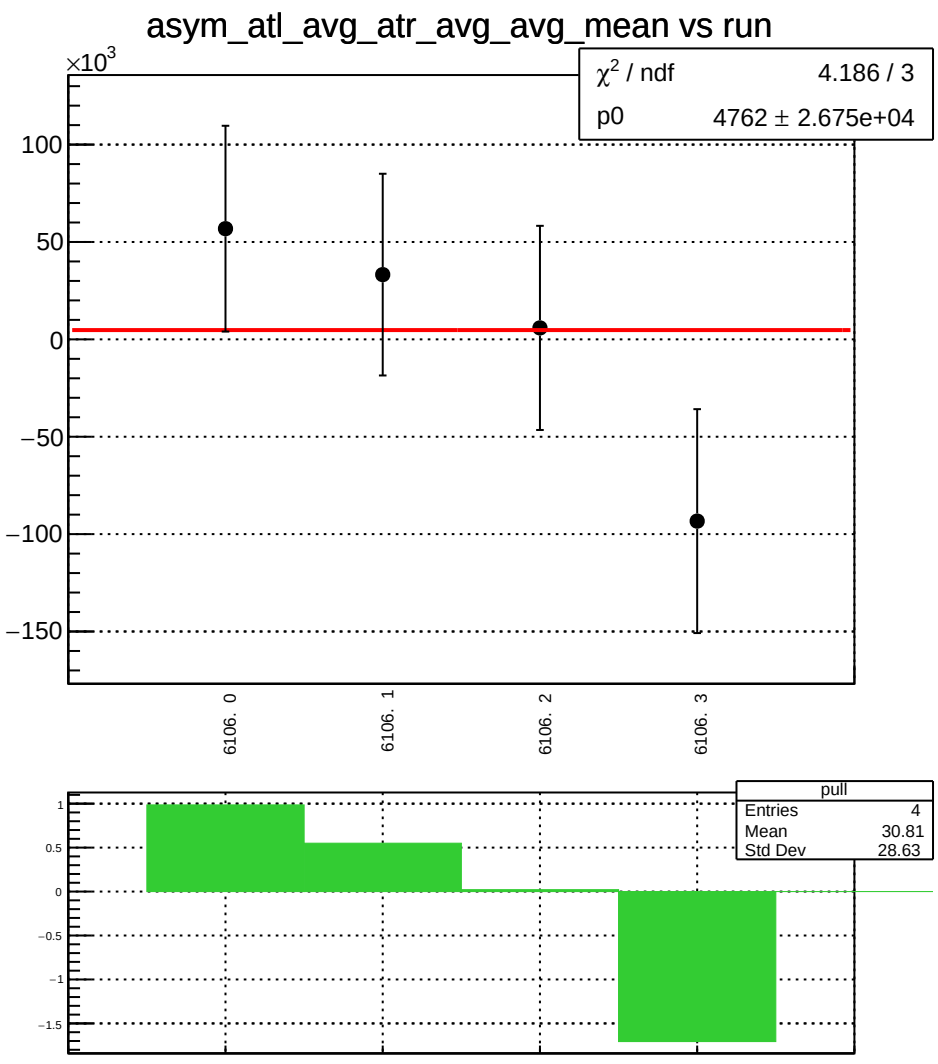

pull1D
Entries 4
Mean −0.03734
Std Dev 1.022
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

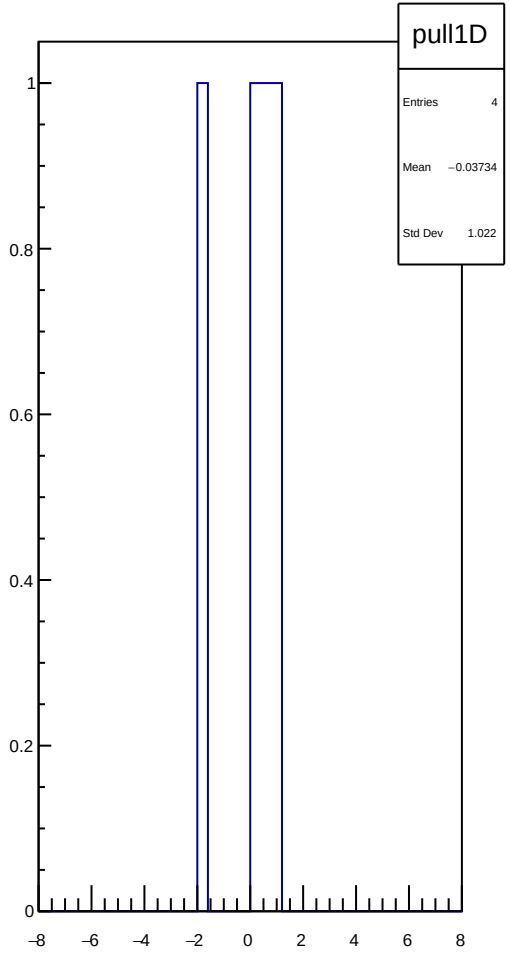

reg_asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 192.6 / 3
p0 5102 ± 18.91
5700
5600
5500
5400
5300
5200
5100
5000
4900
6106. 0
6106. 1
6106. 2
6106. 3

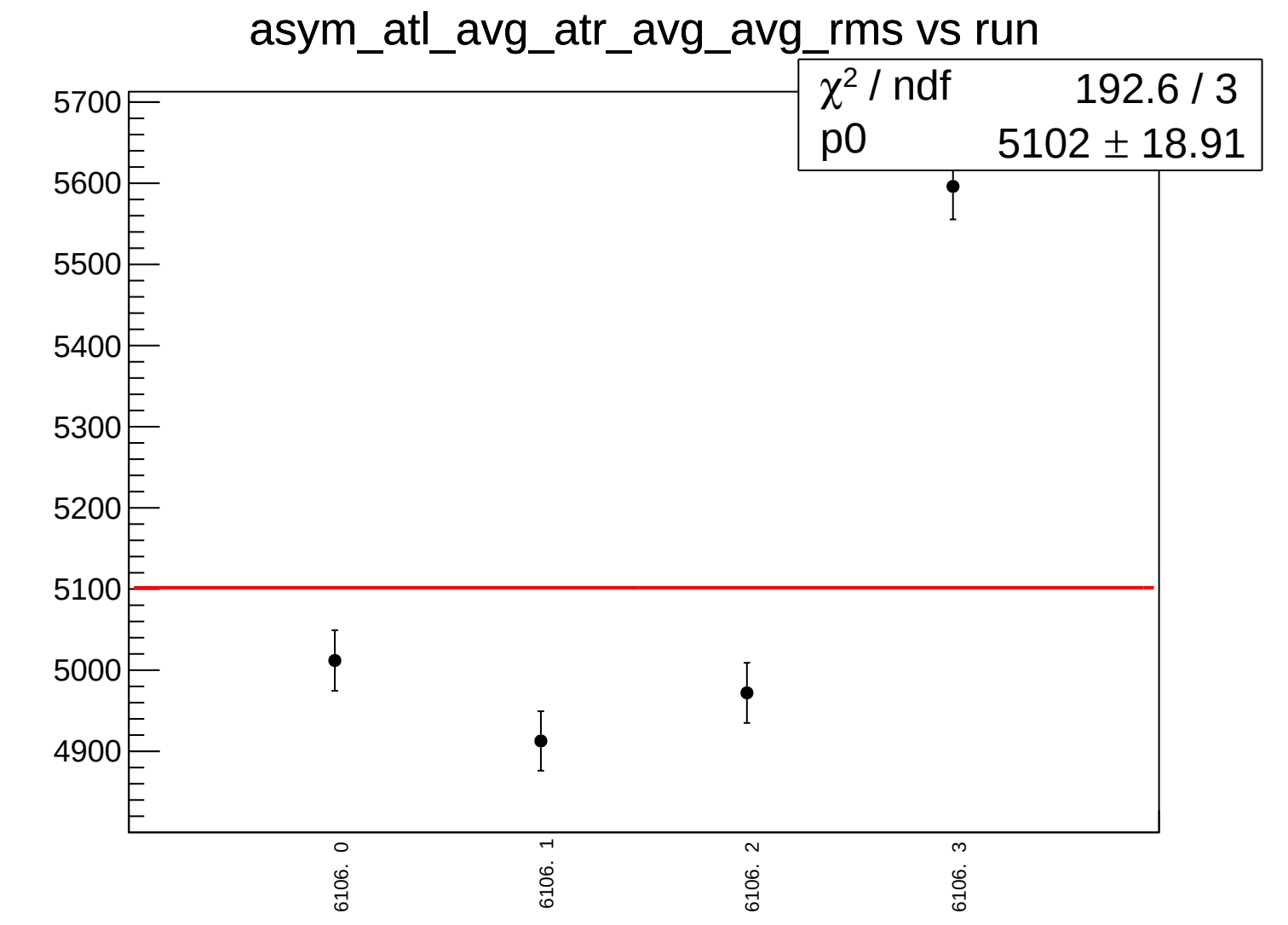

asym_atl_avg_atr_avg_avg_correction_mean vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

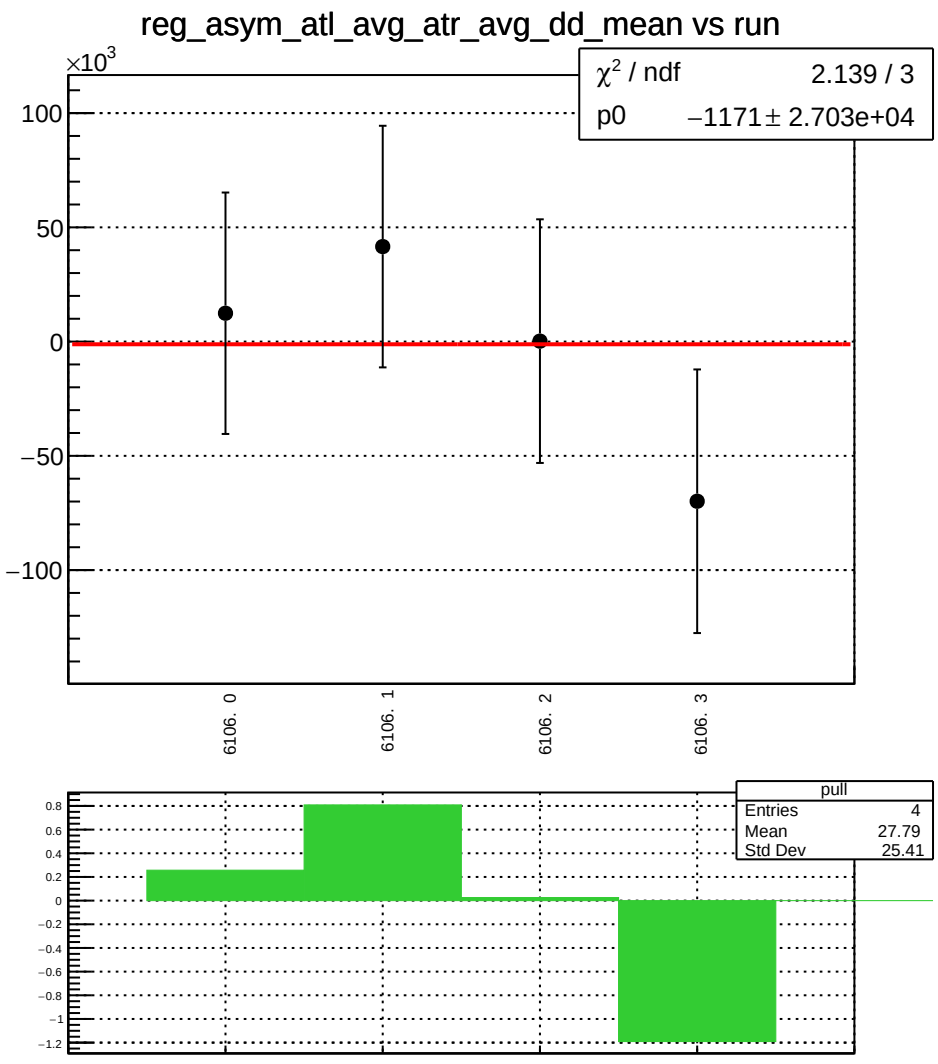

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

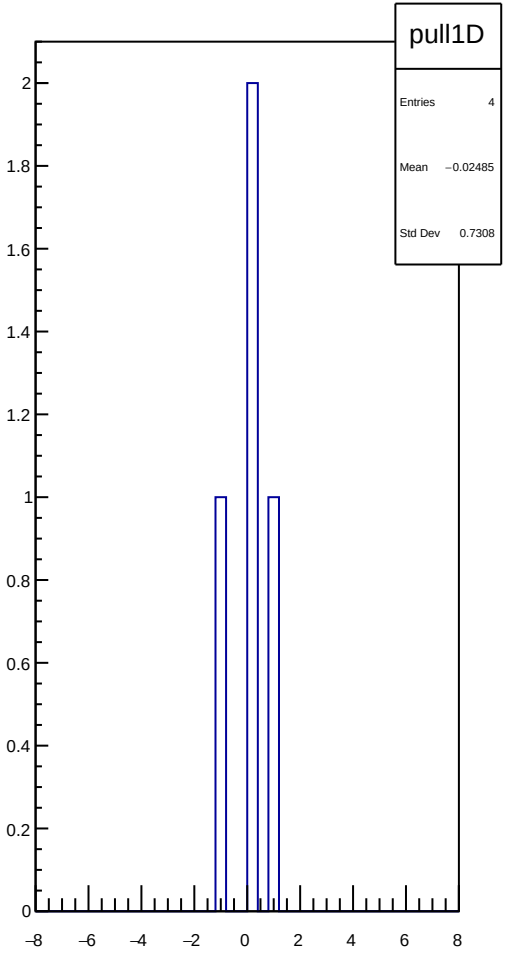

asym_atl_avg_atr_avg_avg_correction_rms vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

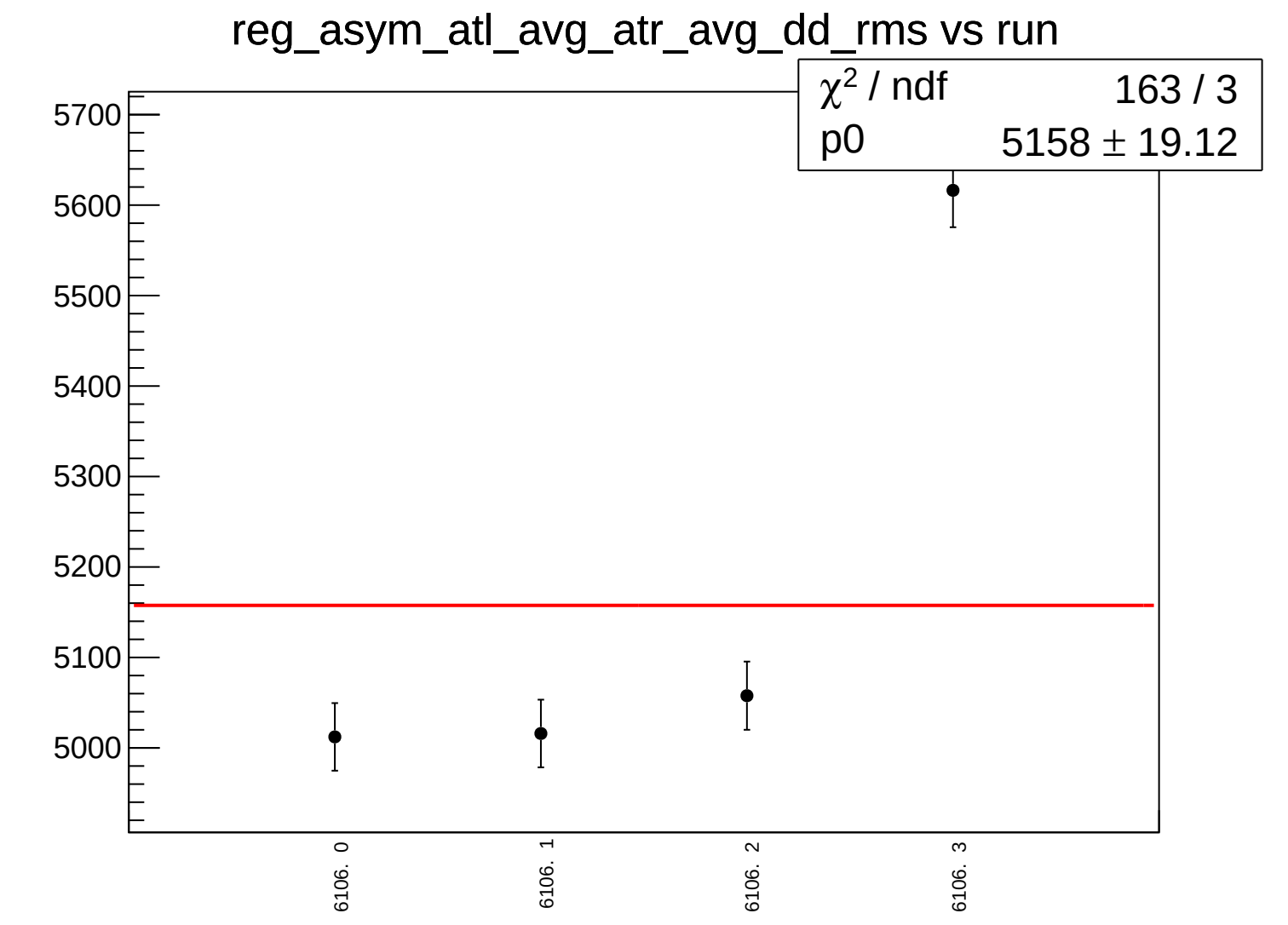

asym_atl_avg_atr_avg_avg_mean vs run
×10^3
χ² / ndf 4.186 / 3
p0 4762 ± 2.675e+04
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 30.81
Std Dev 28.63
1
0.5
0
−0.5
−1
−1.5

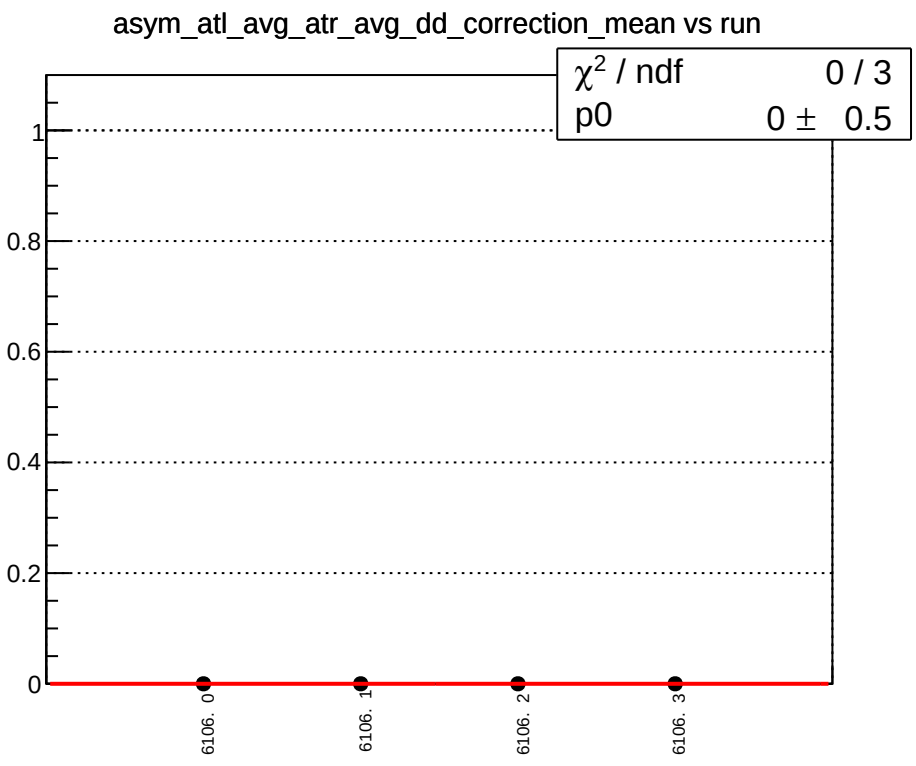

pull1D
Entries 4
Mean −0.03734
Std Dev 1.022
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

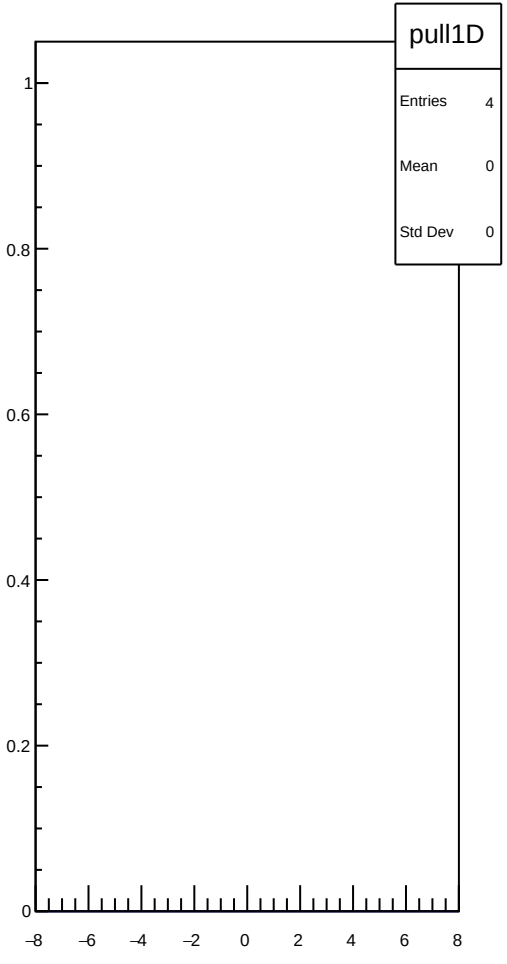

asym_atl_avg_atr_avg_avg_rms vs run
χ² / ndf 192.6 / 3
p0 5102 ± 18.91
5700
5600
5500
5400
5300
5200
5100
5000
4900
6106. 0
6106. 1
6106. 2
6106. 3

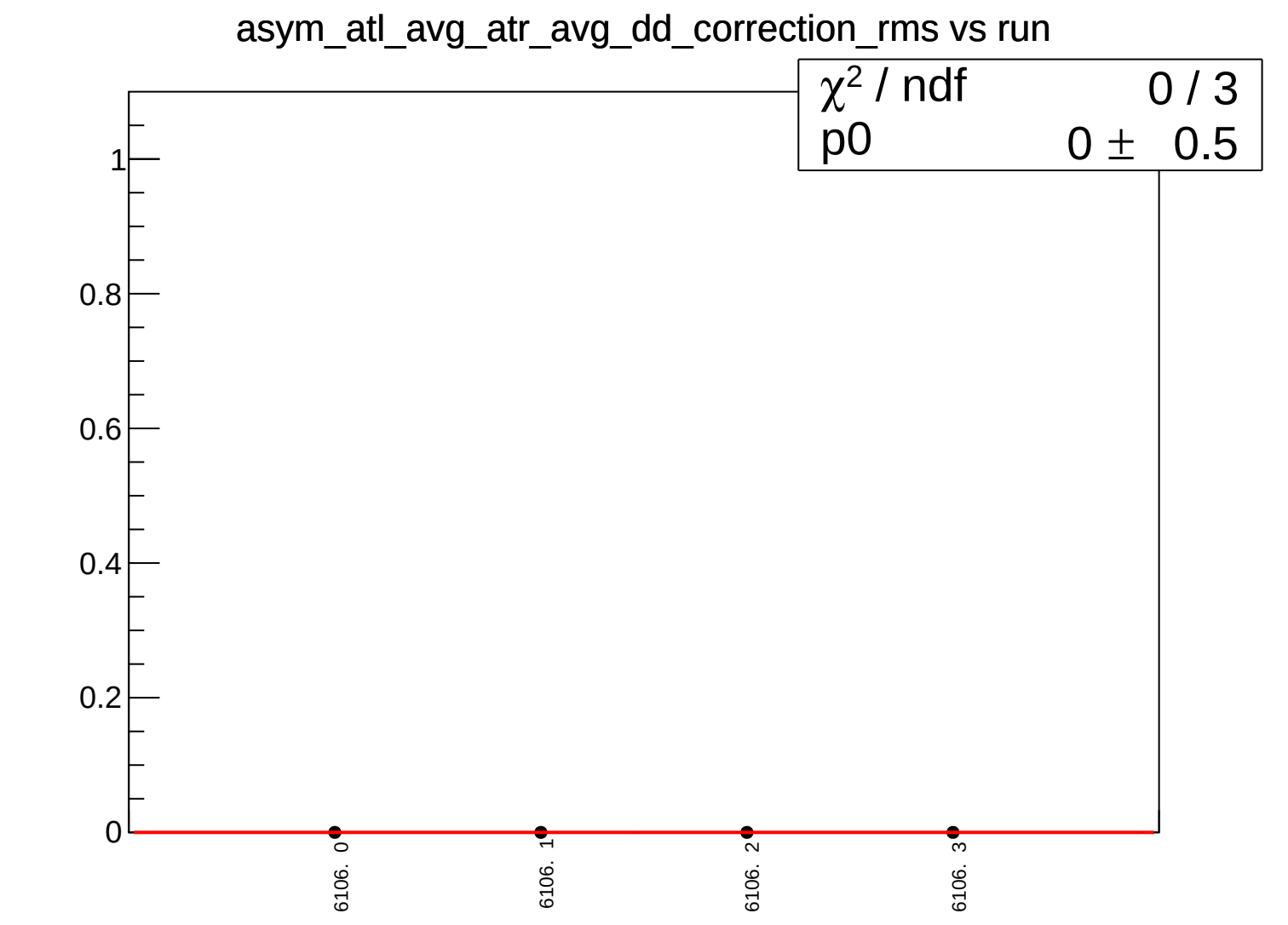

reg_asym_atl_avg_atr_avg_dd_mean vs run
×10^3
χ² / ndf 2.139 / 3
p0 −1171 ± 2.703e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 27.79
Std Dev 25.41
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

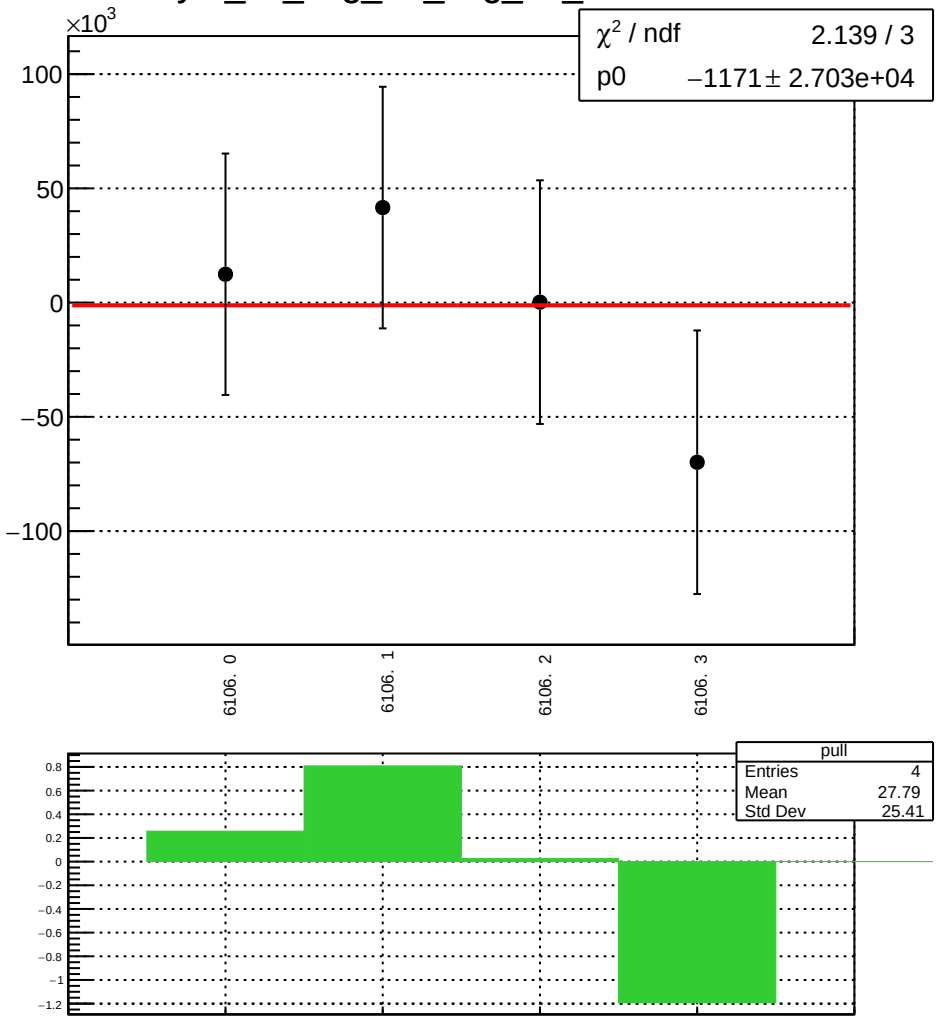

pull1D
Entries 4
Mean −0.02485
Std Dev 0.7308
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

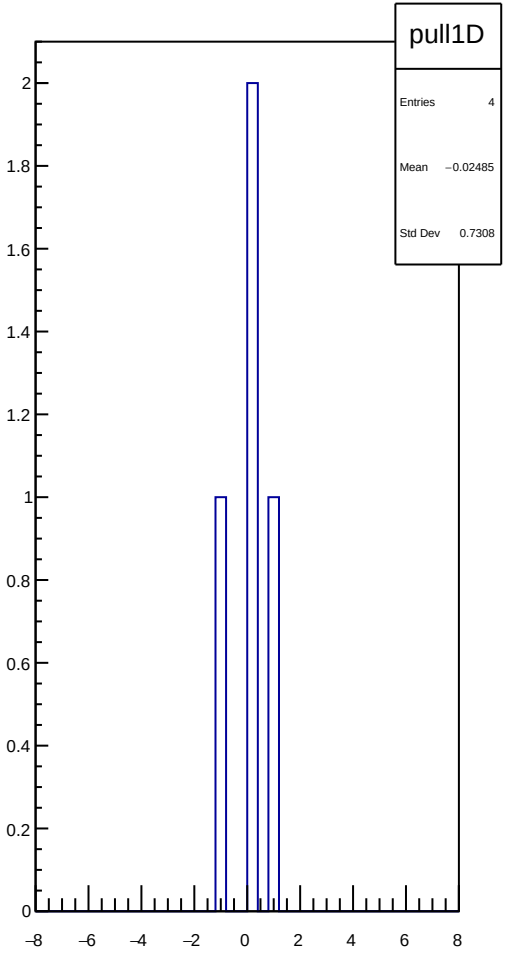

reg_asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 163 / 3
p0 5158 ± 19.12
5700
5600
5500
5400
5300
5200
5100
5000
6106. 0
6106. 1
6106. 2
6106. 3

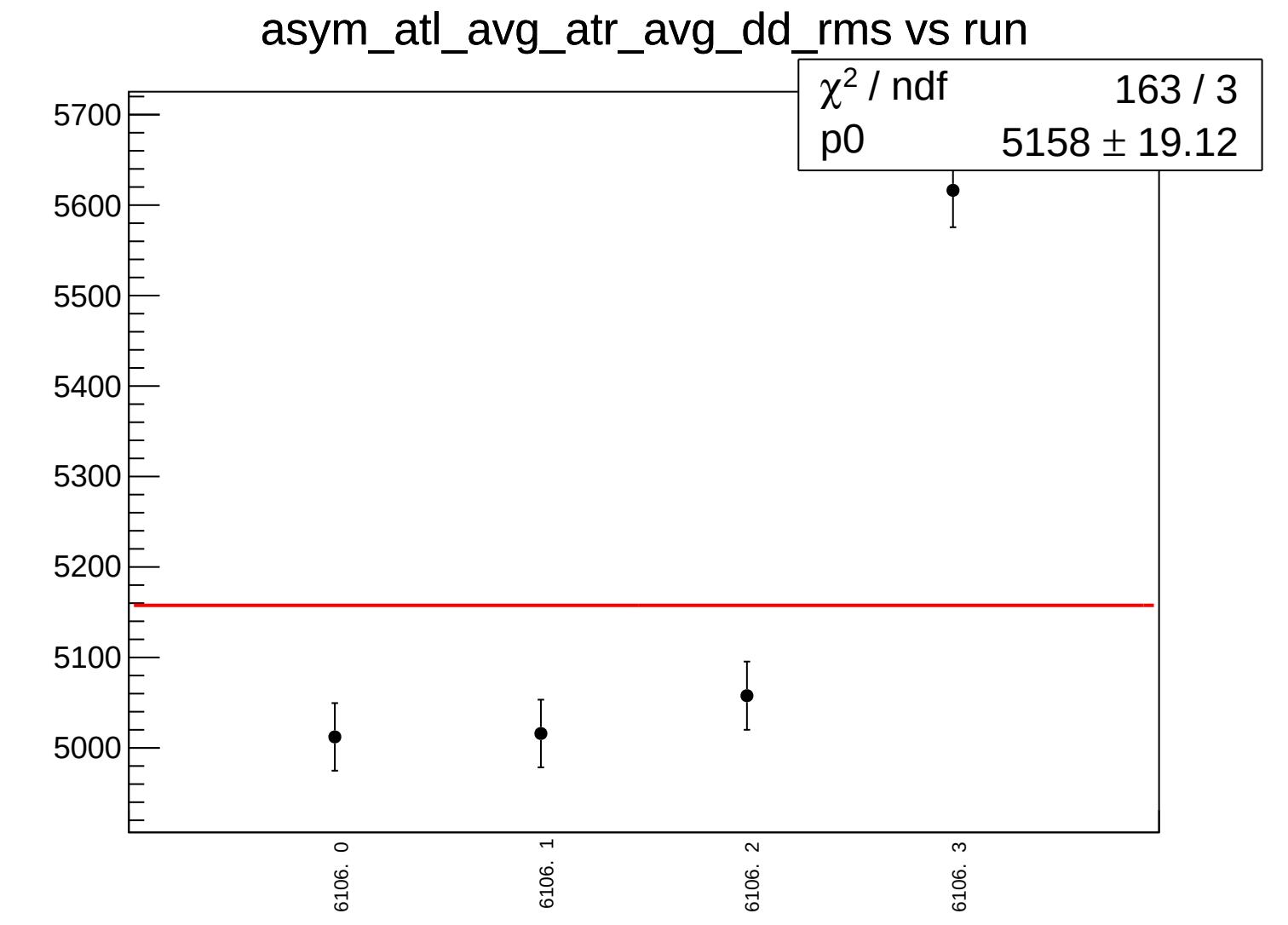

asym_atl_avg_atr_avg_dd_correction_mean vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

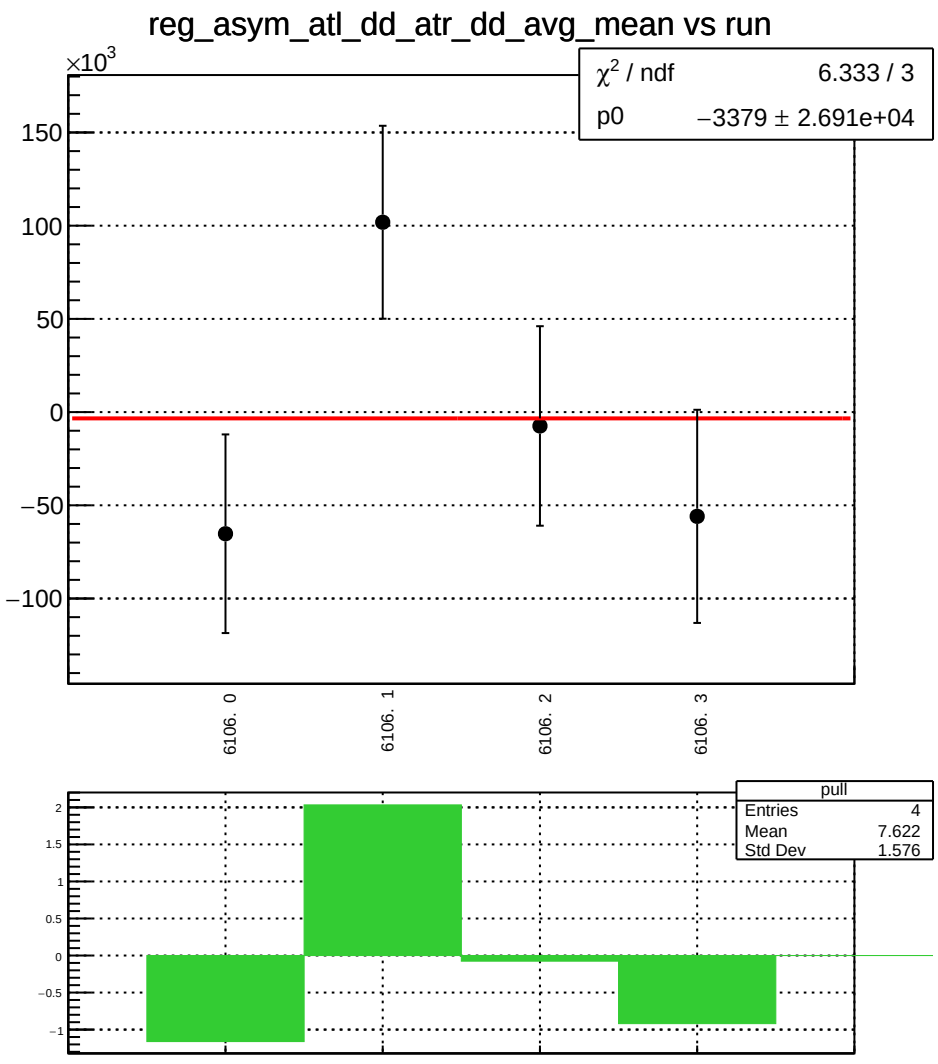

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

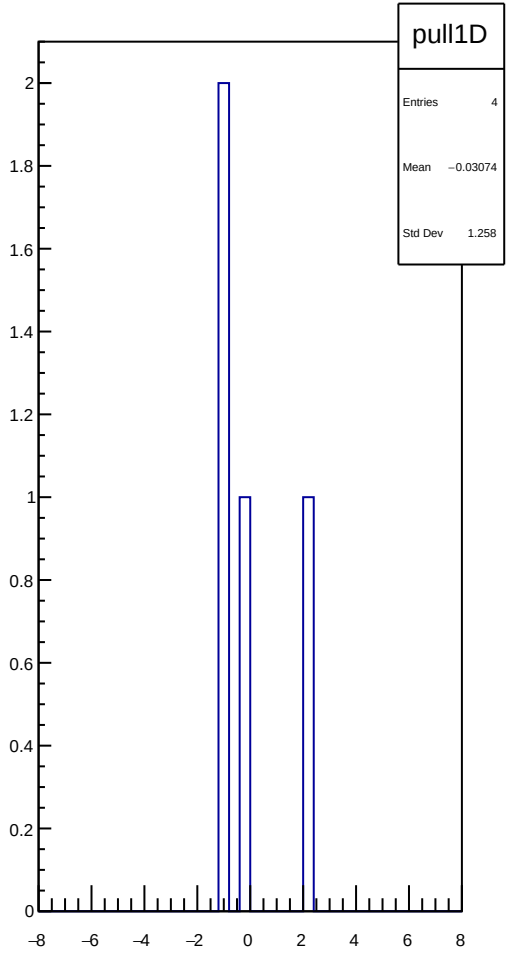

asym_atl_avg_atr_avg_dd_correction_rms vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

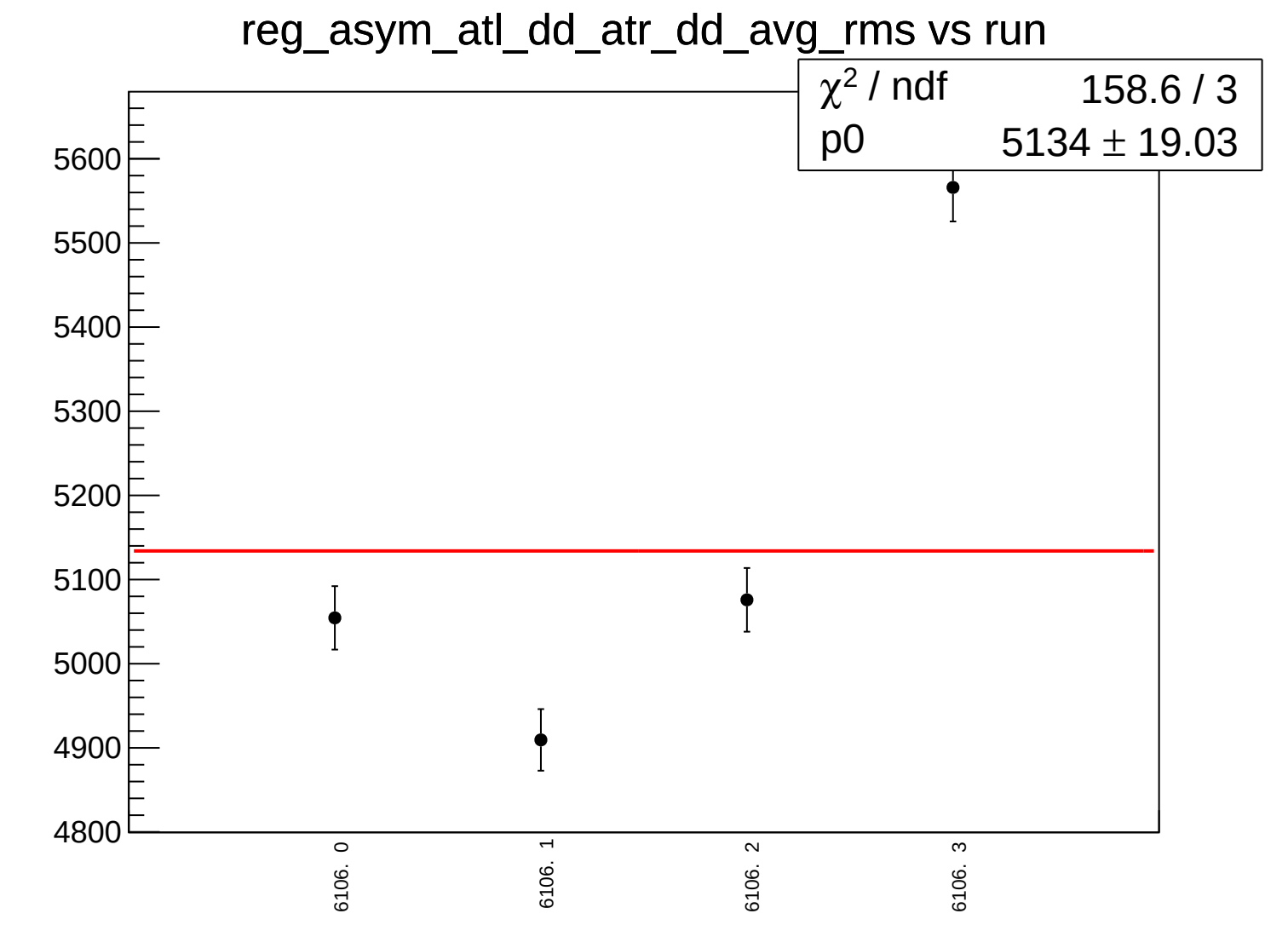

asym_atl_avg_atr_avg_dd_mean vs run
×10^3
χ² / ndf 2.139 / 3
p0 −1171 ± 2.703e+04
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 27.79
Std Dev 25.41
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

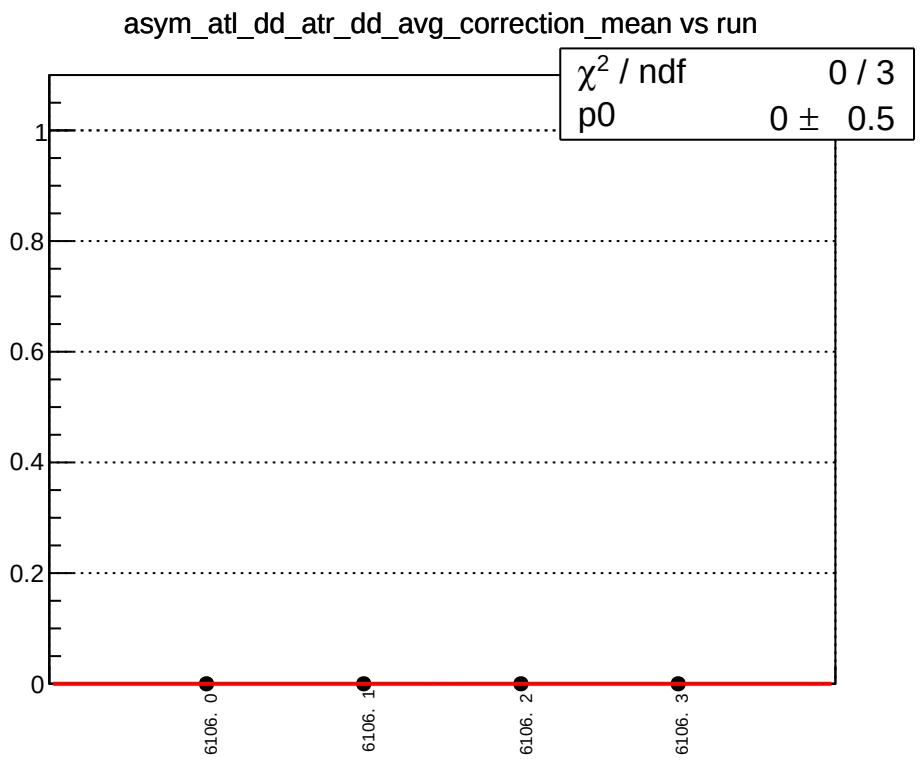

pull1D
Entries 4
Mean −0.02485
Std Dev 0.7308
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

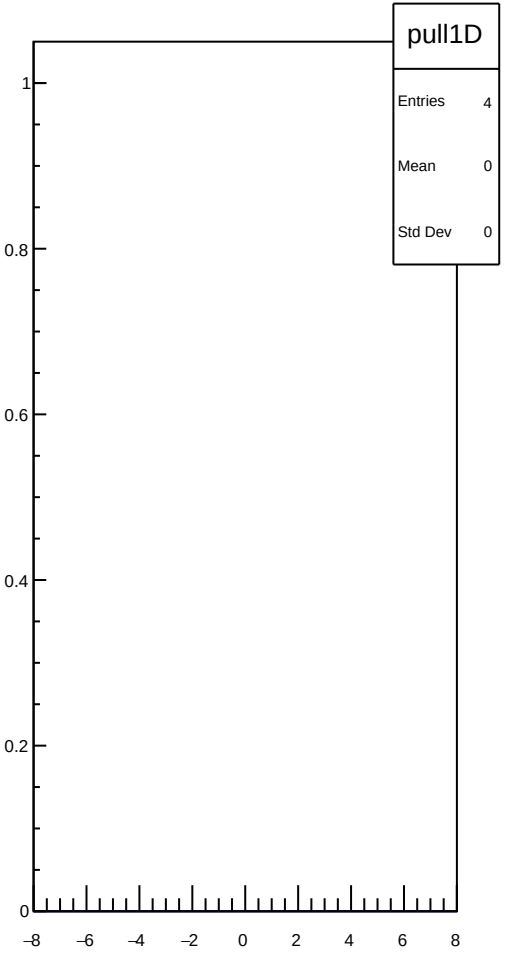

asym_atl_avg_atr_avg_dd_rms vs run
χ² / ndf 163 / 3
p0 5158 ± 19.12
5700
5600
5500
5400
5300
5200
5100
5000
6106. 0
6106. 1
6106. 2
6106. 3

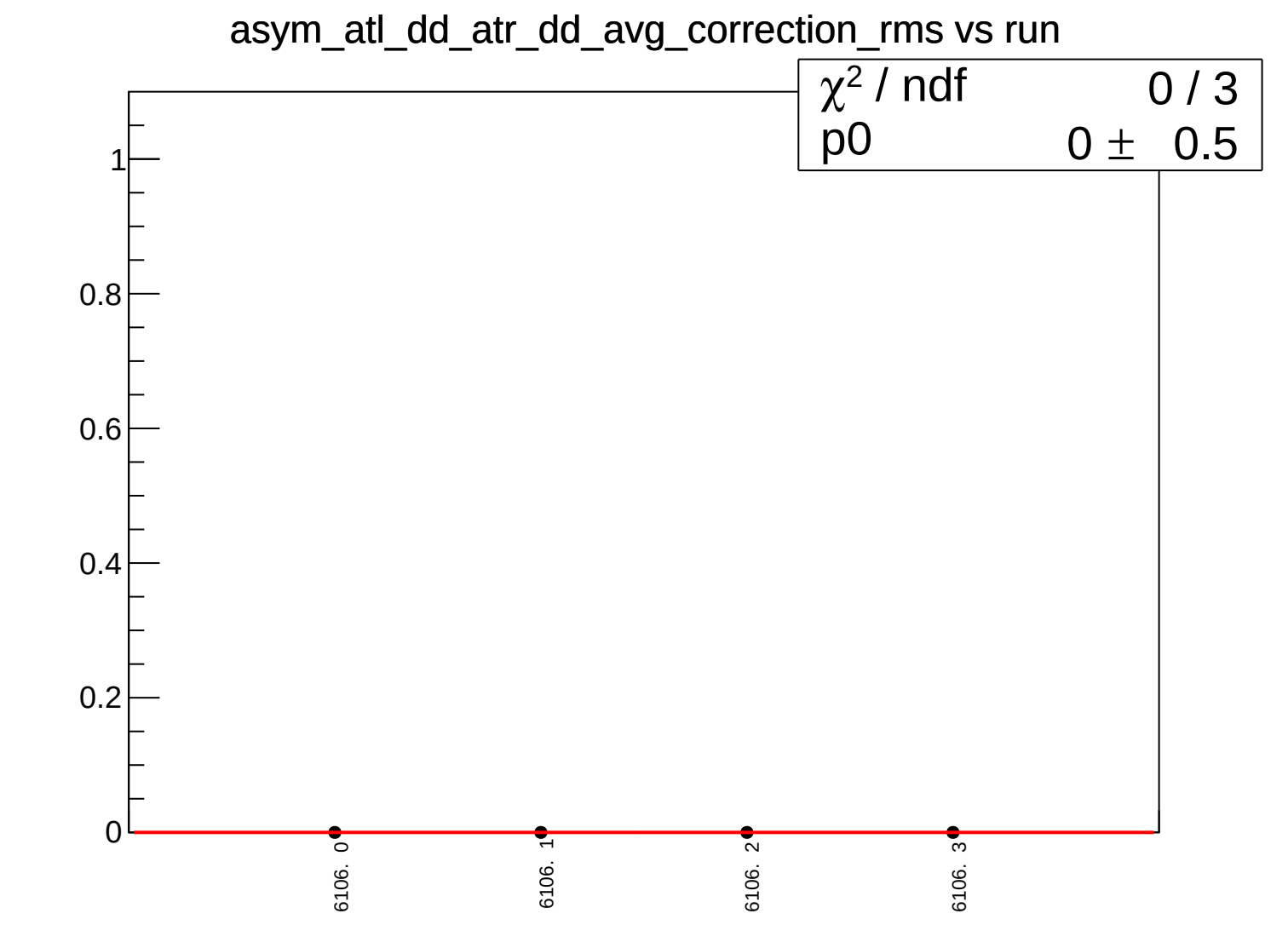

reg_asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 6.333 / 3
p0 −3379 ± 2.691e+04
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 7.622
Std Dev 1.576
2
1.5
1
0.5
0
−0.5
−1

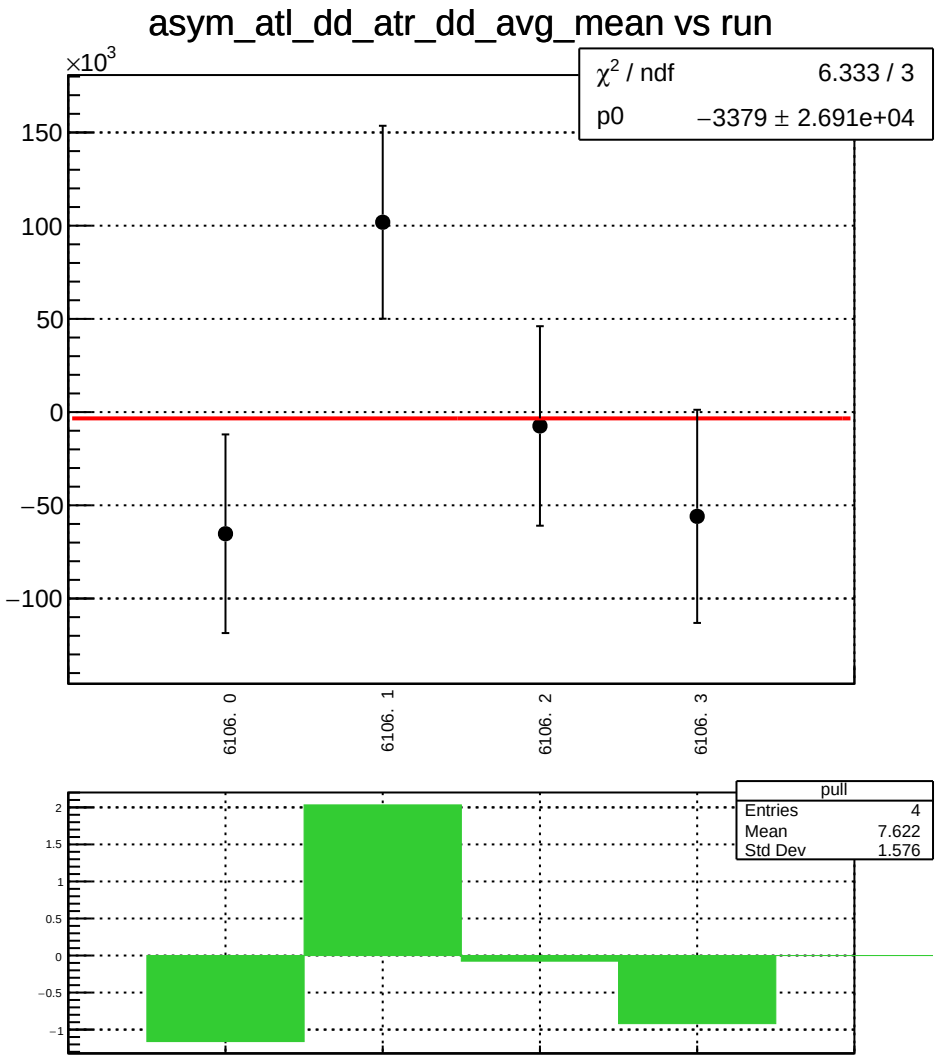

pull1D
Entries 4
Mean −0.03074
Std Dev 1.258
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

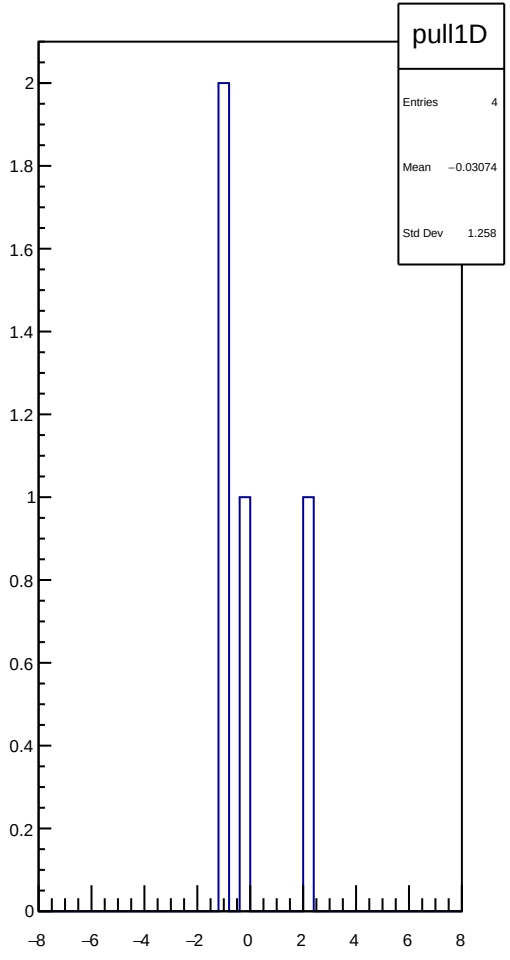

reg_asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 158.6 / 3
p0 5134 ± 19.03
5600
5500
5400
5300
5200
5100
5000
4900
4800
6106. 0
6106. 1
6106. 2
6106. 3

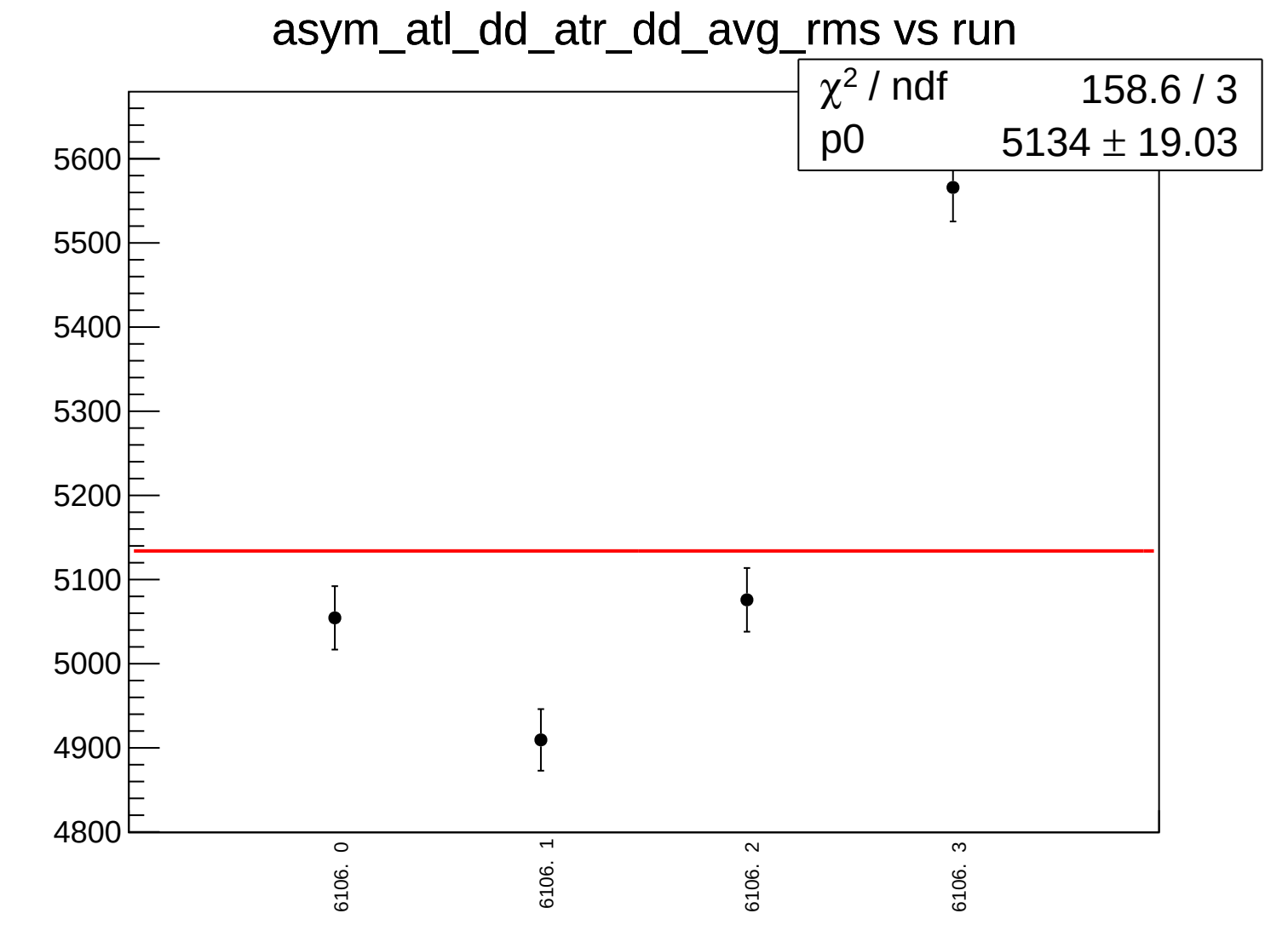

asym_atl_dd_atr_dd_avg_correction_mean vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

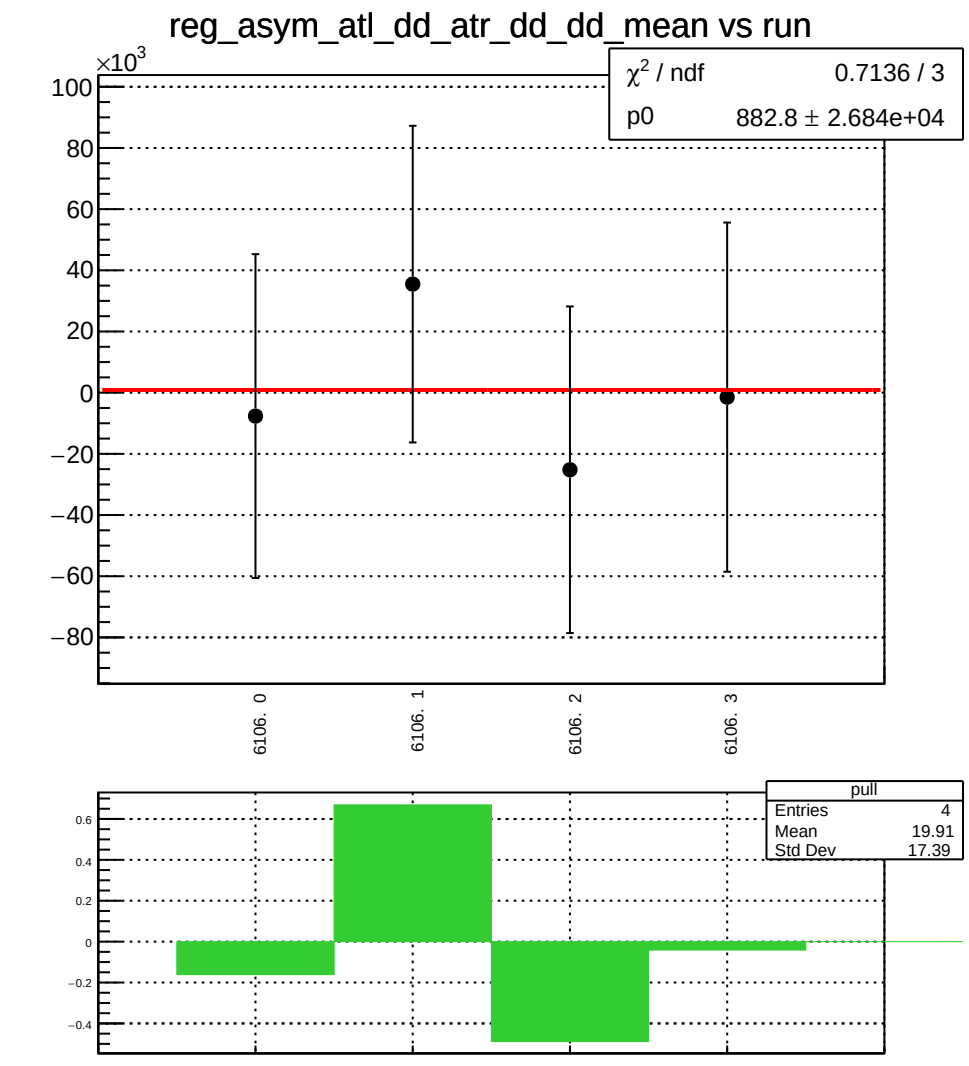

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

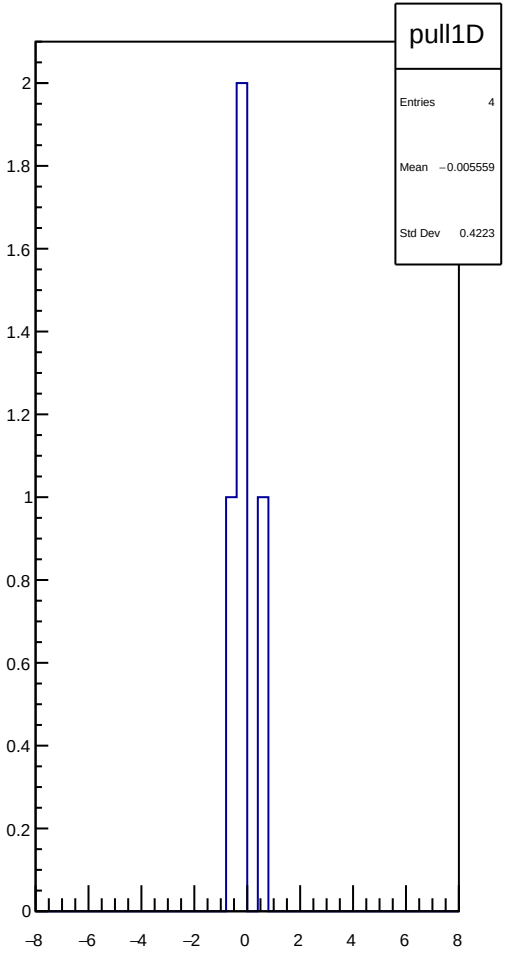

asym_atl_dd_atr_dd_avg_correction_rms vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

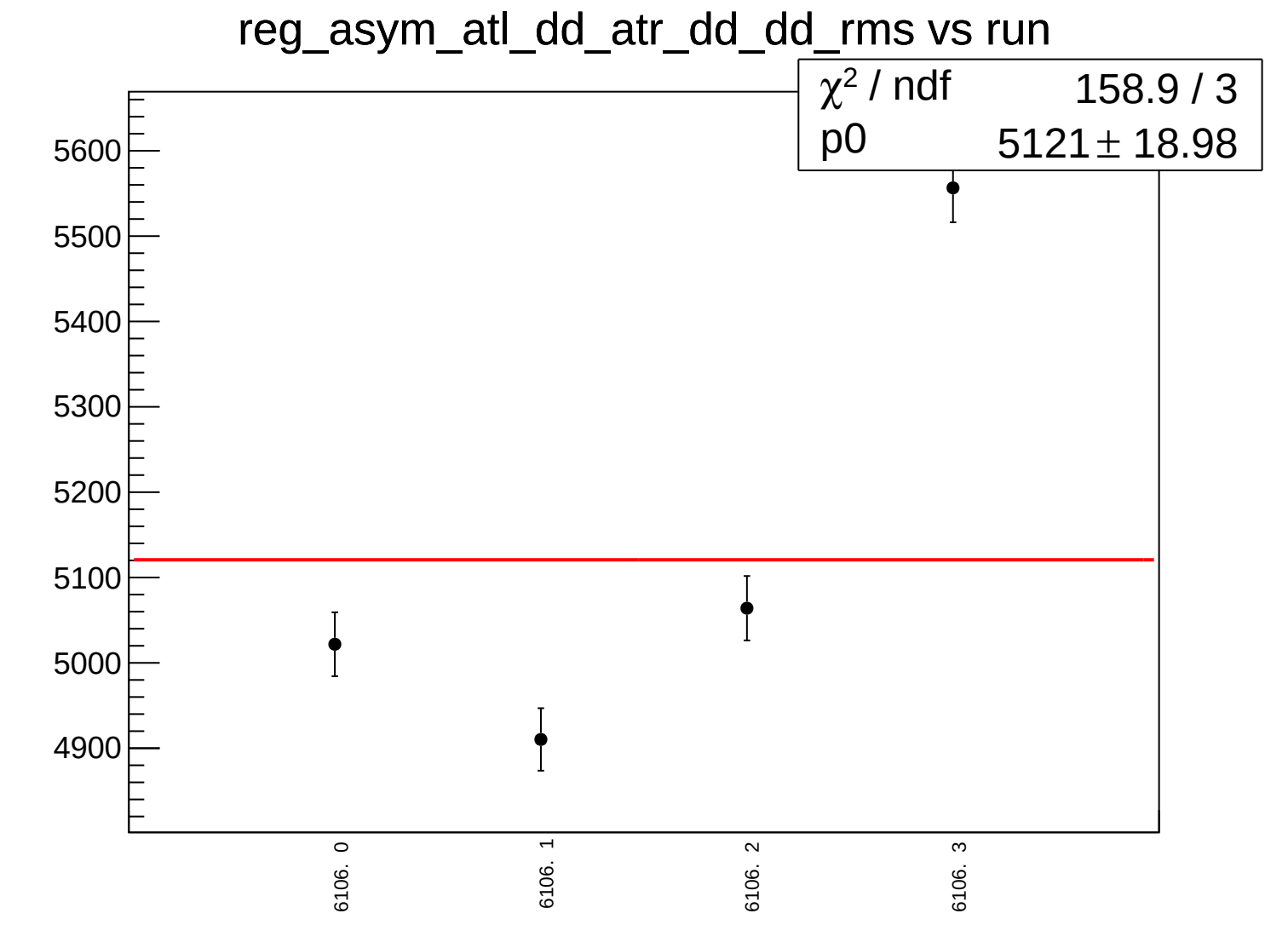

asym_atl_dd_atr_dd_avg_mean vs run
×10^3
χ² / ndf 6.333 / 3
p0 −3379 ± 2.691e+04
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 7.622
Std Dev 1.576
2
1.5
1
0.5
0
−0.5
−1

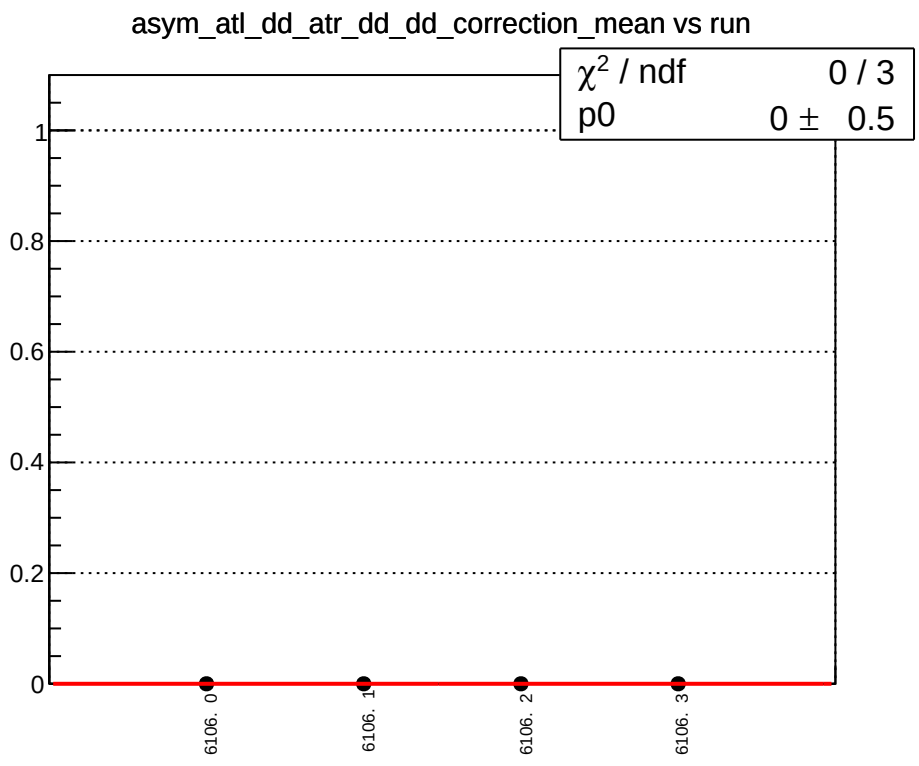

pull1D
Entries 4
Mean −0.03074
Std Dev 1.258
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

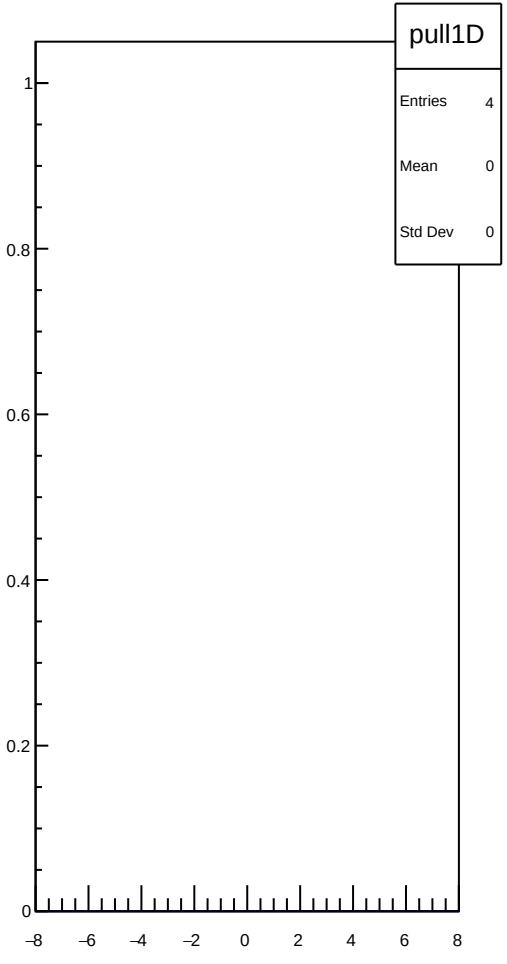

asym_atl_dd_atr_dd_avg_rms vs run
χ² / ndf 158.6 / 3
p0 5134 ± 19.03
5600
5500
5400
5300
5200
5100
5000
4900
4800
6106. 0
6106. 1
6106. 2
6106. 3

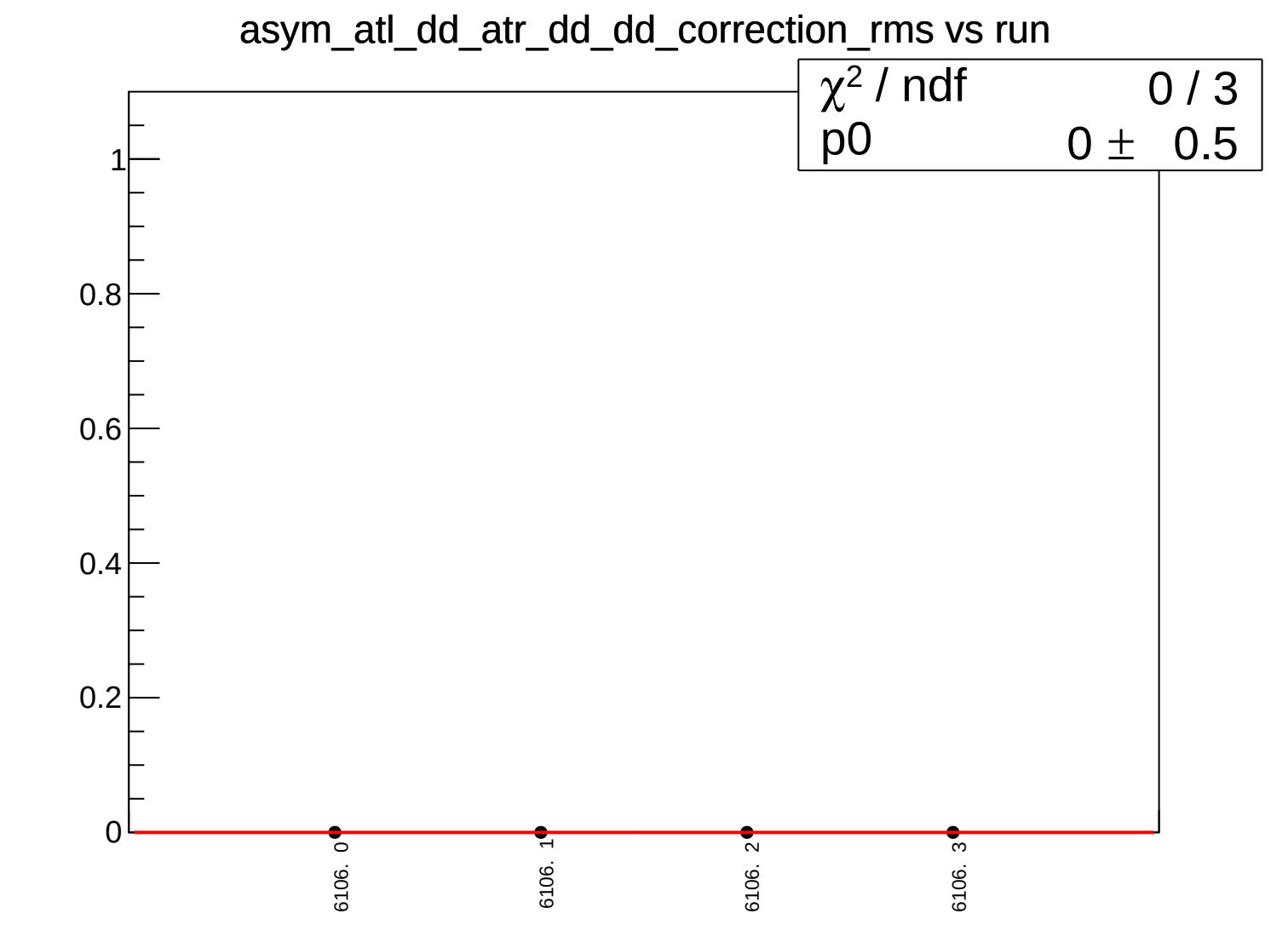

reg_asym_atl_dd_atr_dd_dd_mean vs run
×10^3
χ² / ndf 0.7136 / 3
p0 882.8 ± 2.684e+04
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 19.91
Std Dev 17.39
0.6
0.4
0.2
0
−0.2
−0.4

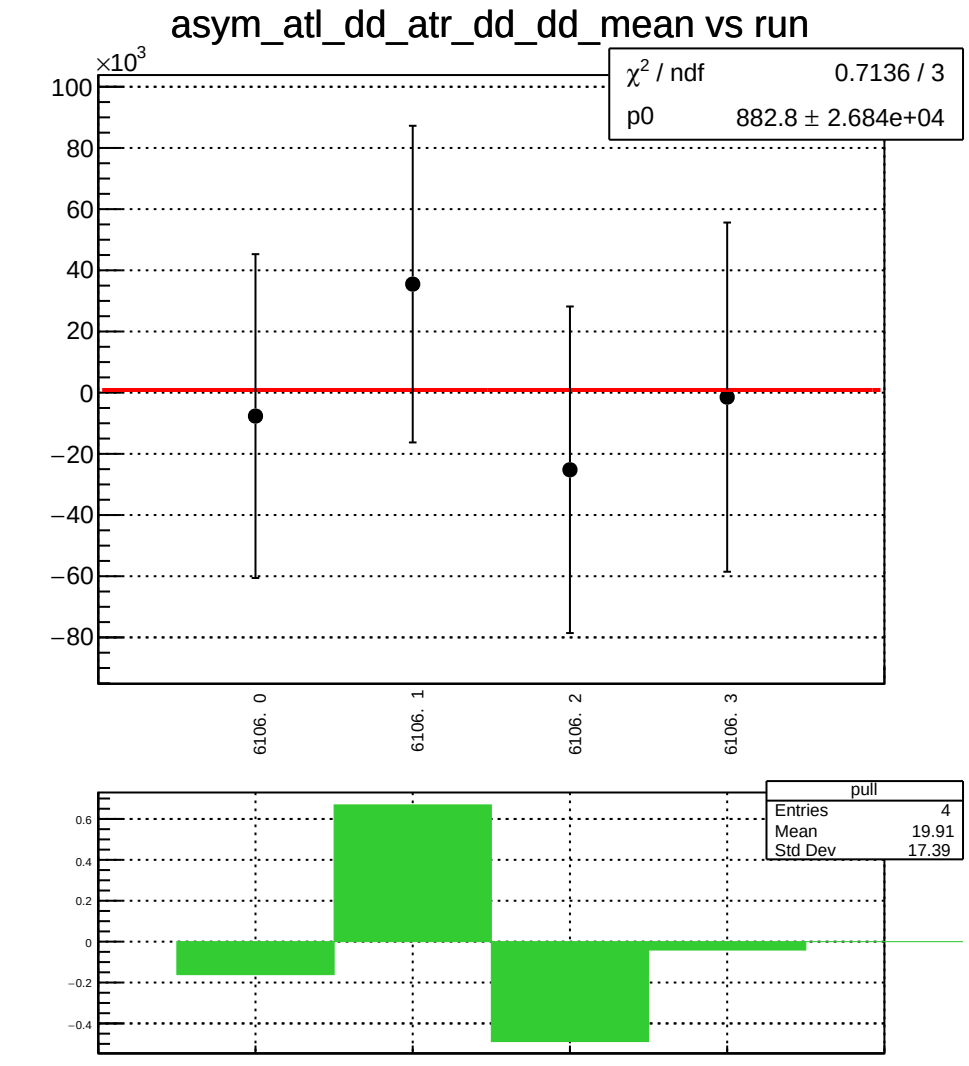

pull1D
Entries 4
Mean −0.005559
Std Dev 0.4223
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

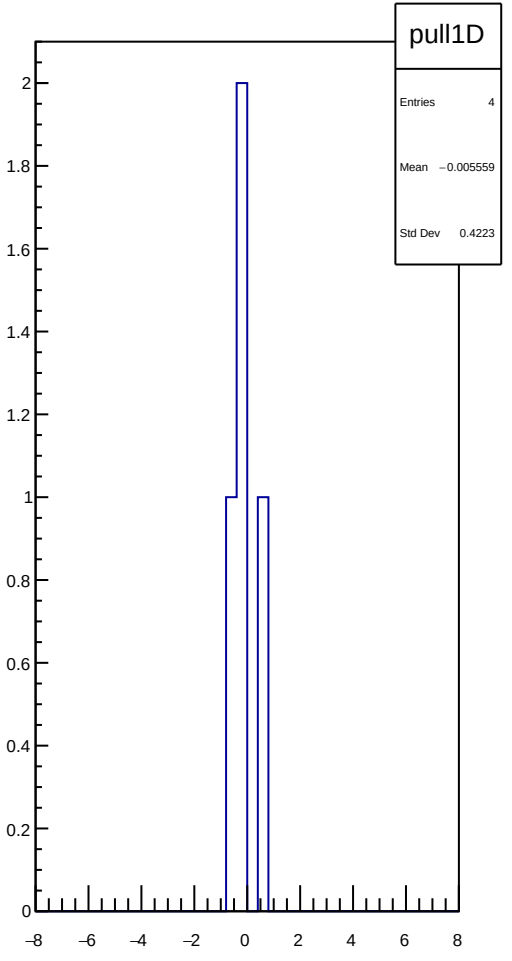

reg_asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 158.9 / 3
p0 5121 ± 18.98
5600
5500
5400
5300
5200
5100
5000
4900
6106. 0
6106. 1
6106. 2
6106. 3

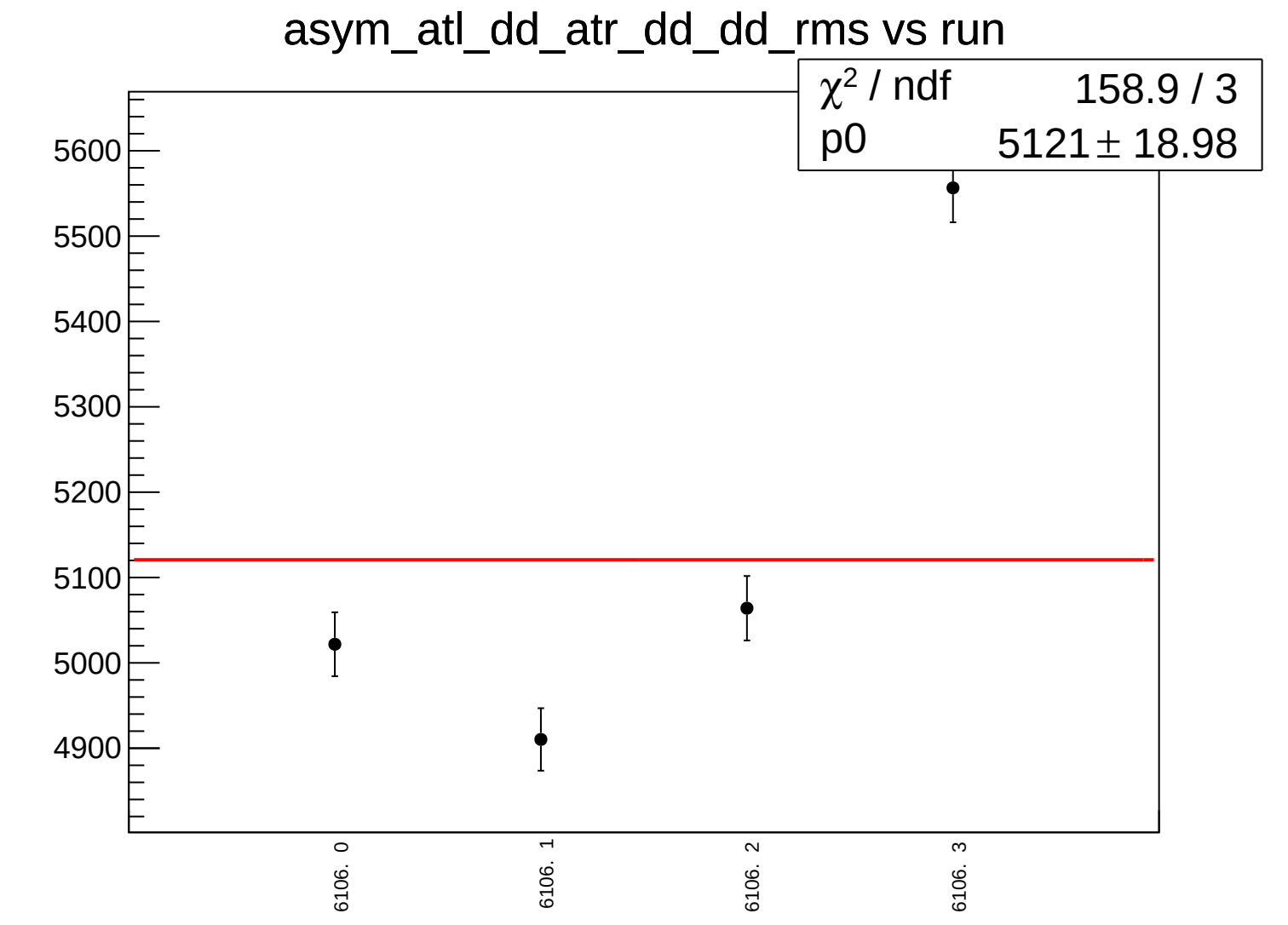

asym_atl_dd_atr_dd_dd_correction_mean vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

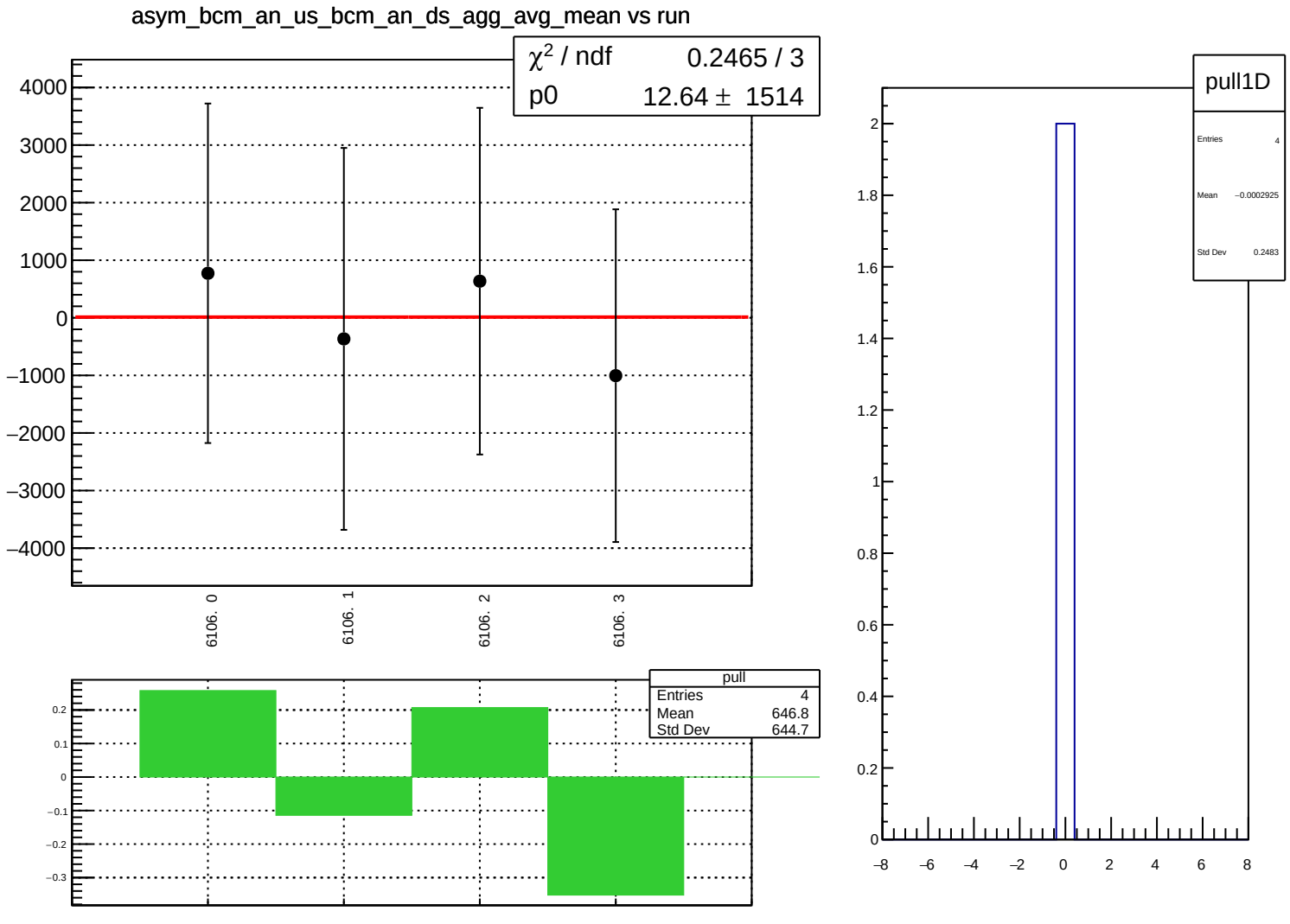

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

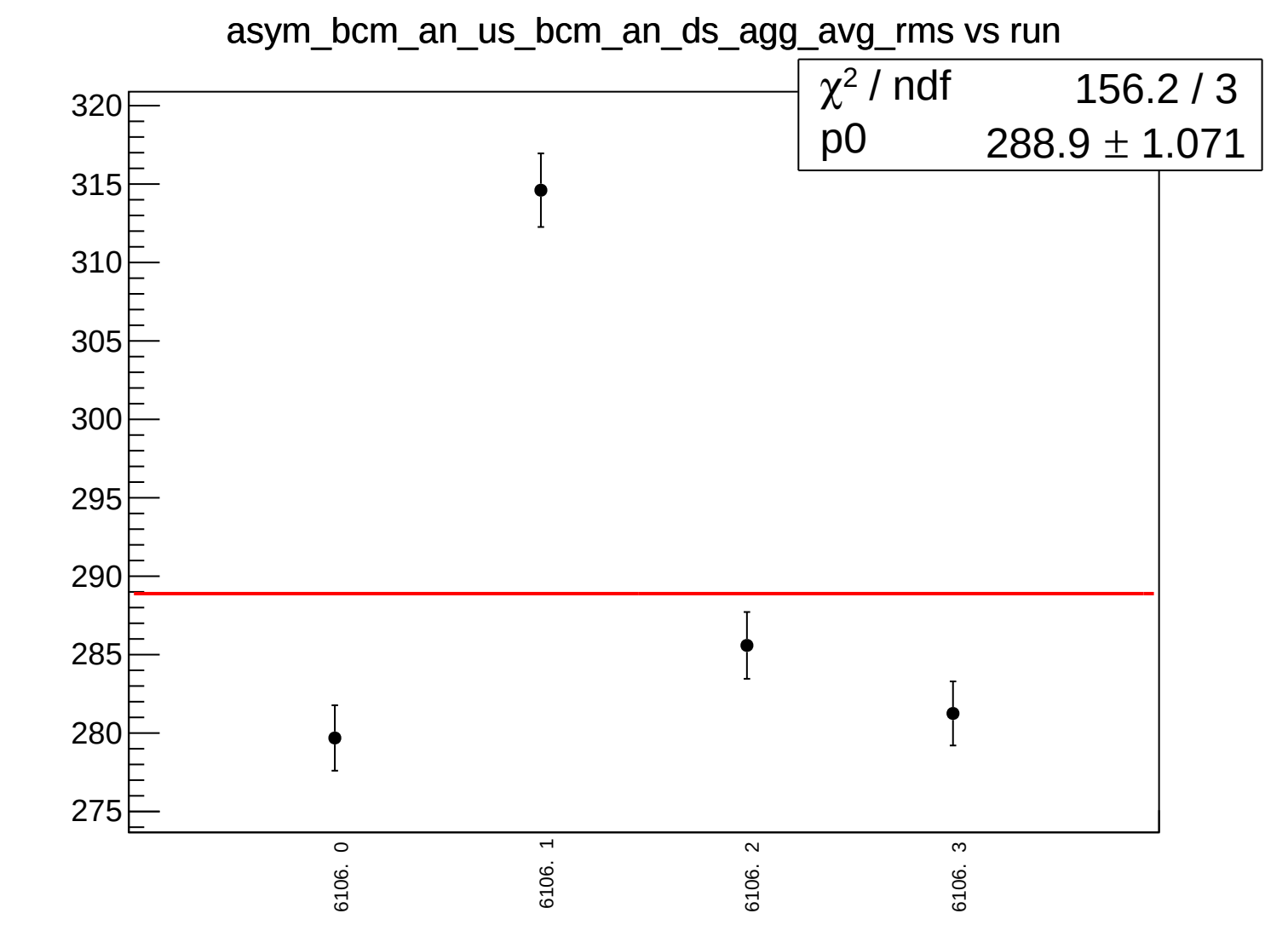

asym_atl_dd_atr_dd_dd_correction_rms vs run
χ² / ndf 0 / 3
p0 0 ± 0.5
1
0.8
0.6
0.4
0.2
0
6106. 0
6106. 1
6106. 2
6106. 3

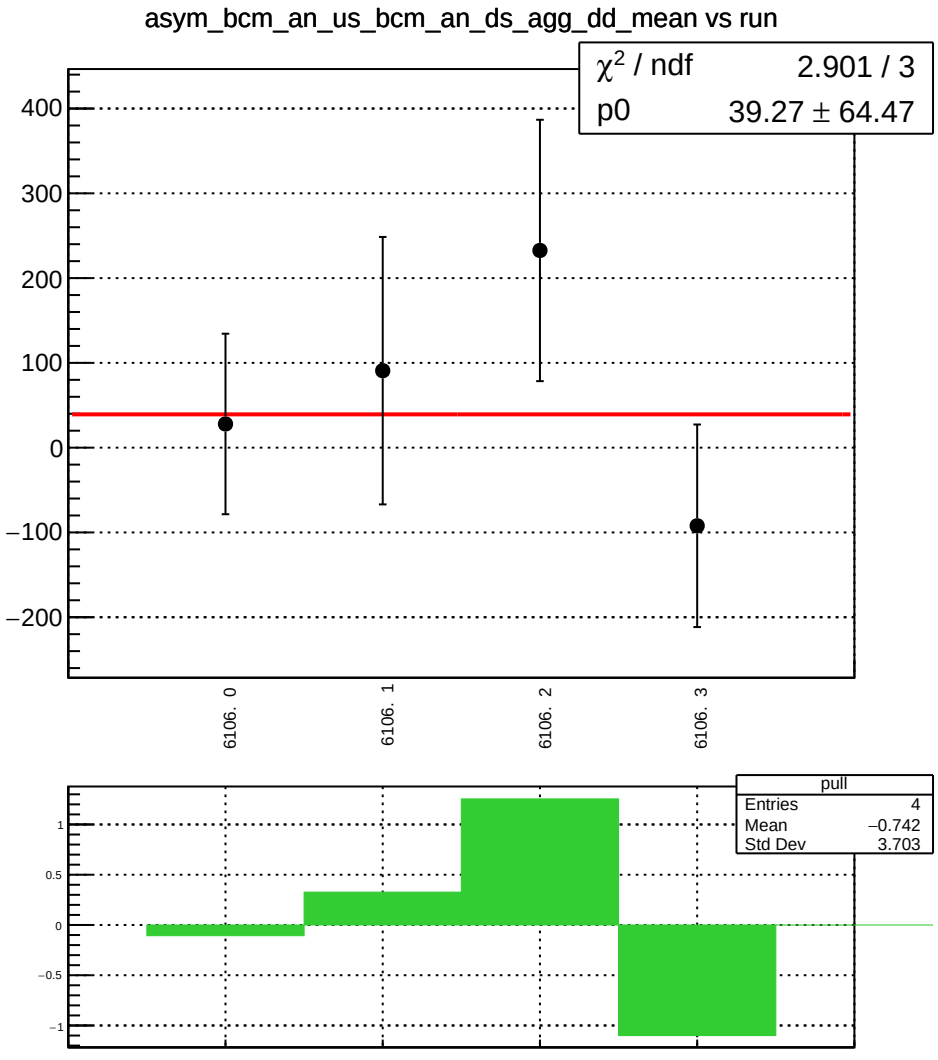

asym_atl_dd_atr_dd_dd_mean vs run
×10^3
χ² / ndf 0.7136 / 3
p0 882.8 ± 2.684e+04
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 19.91
Std Dev 17.39
0.6
0.4
0.2
0
−0.2
−0.4

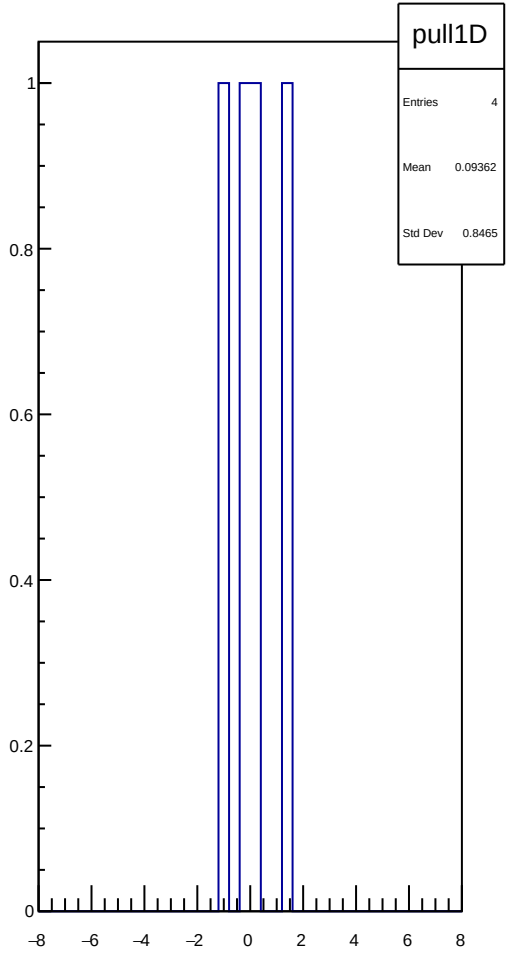

pull1D
Entries 4
Mean −0.005559
Std Dev 0.4223
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

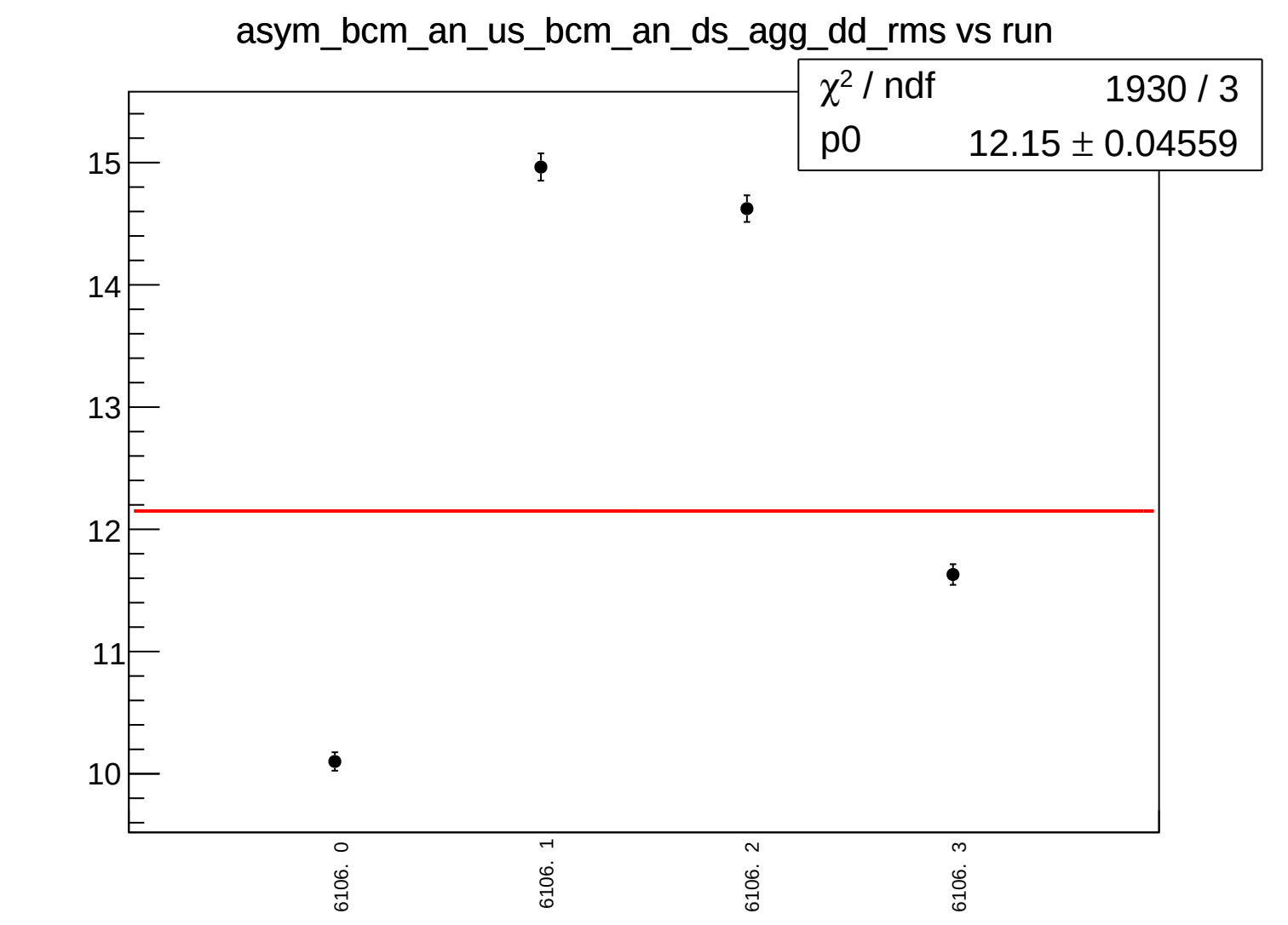

asym_atl_dd_atr_dd_dd_rms vs run
χ² / ndf 158.9 / 3
p0 5121 ± 18.98
5600
5500
5400
5300
5200
5100
5000
4900
6106. 0
6106. 1
6106. 2
6106. 3

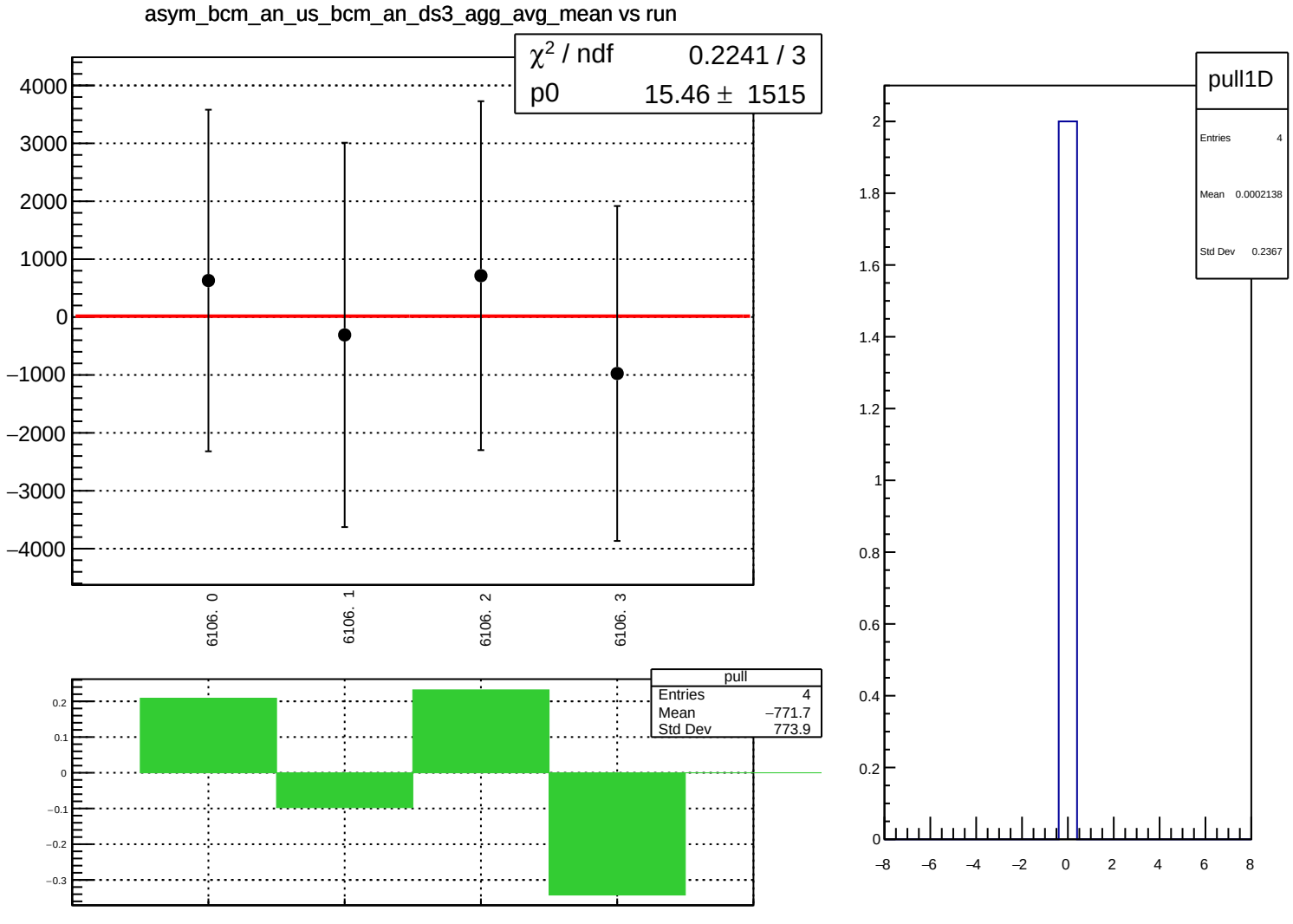

asym_bcm_an_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 0.2465 / 3
p0 12.64 ± 1514
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 646.8
Std Dev 644.7
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean −0.0002925
Std Dev 0.2483
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

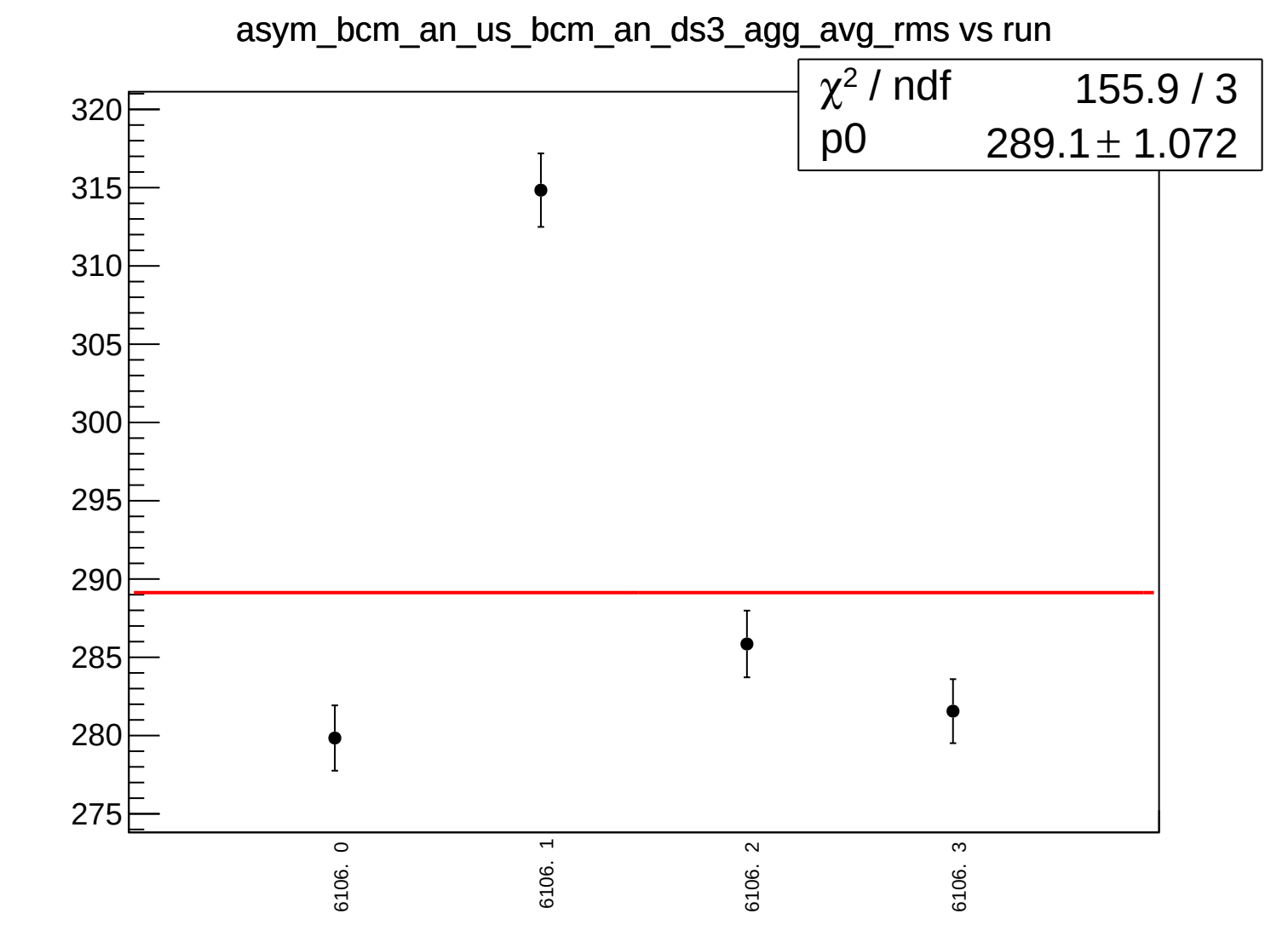

asym_bcm_an_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 156.2 / 3
p0 288.9 ± 1.071
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

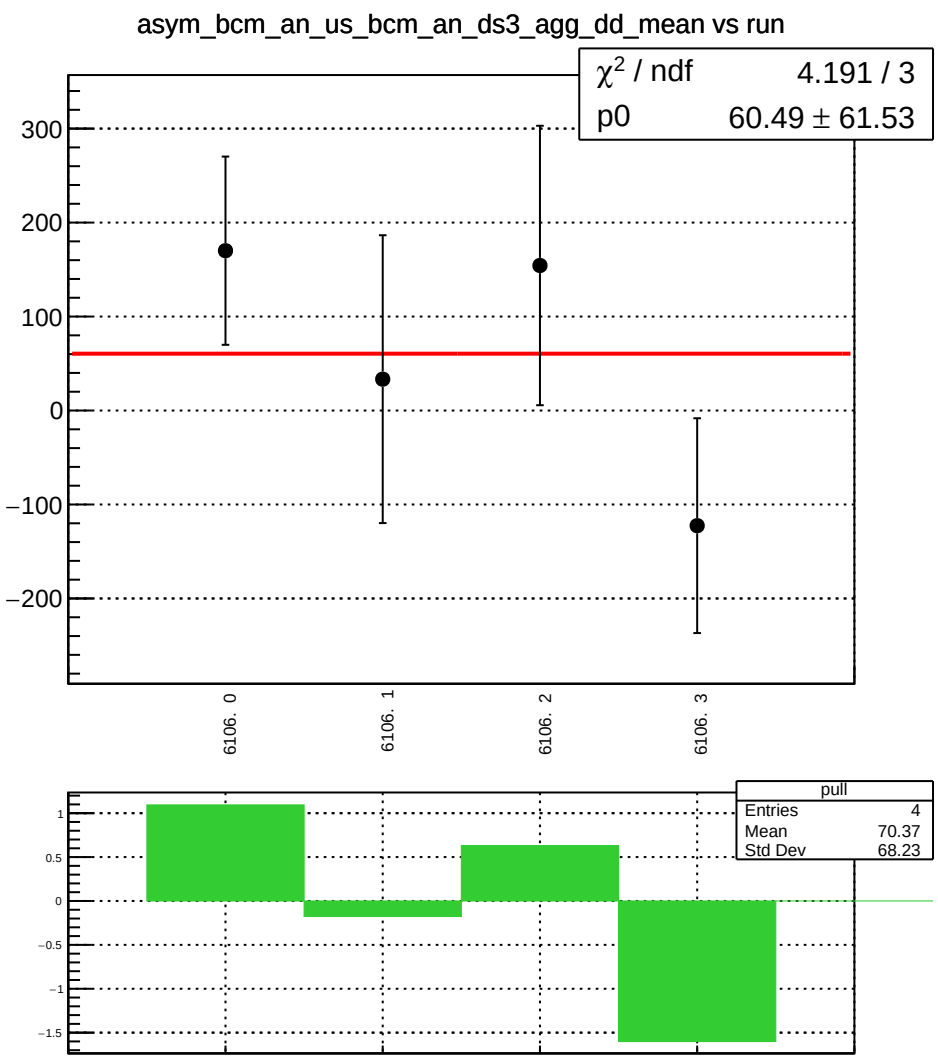

asym_bcm_an_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 2.901 / 3
p0 39.27 ± 64.47
400
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −0.742
Std Dev 3.703
1
0.5
0
−0.5
−1

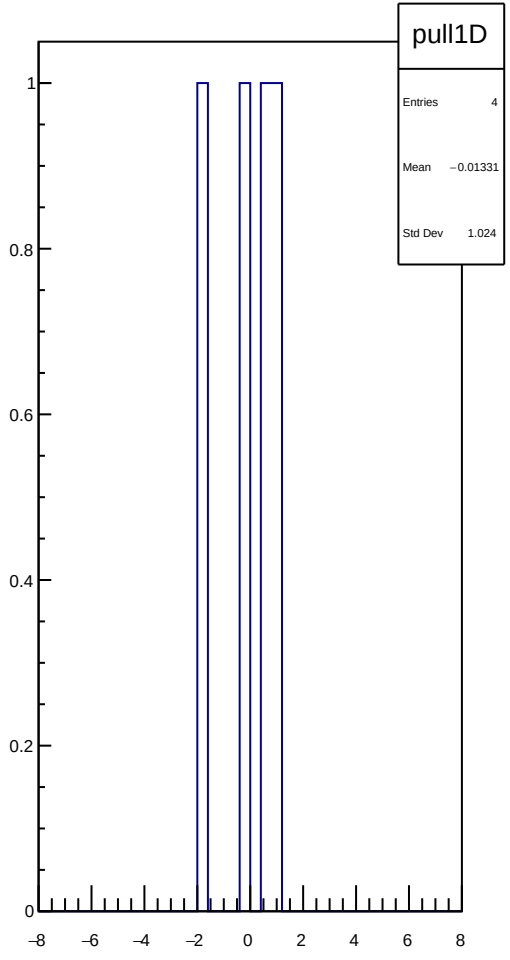

pull1D
Entries 4
Mean 0.09362
Std Dev 0.8465
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

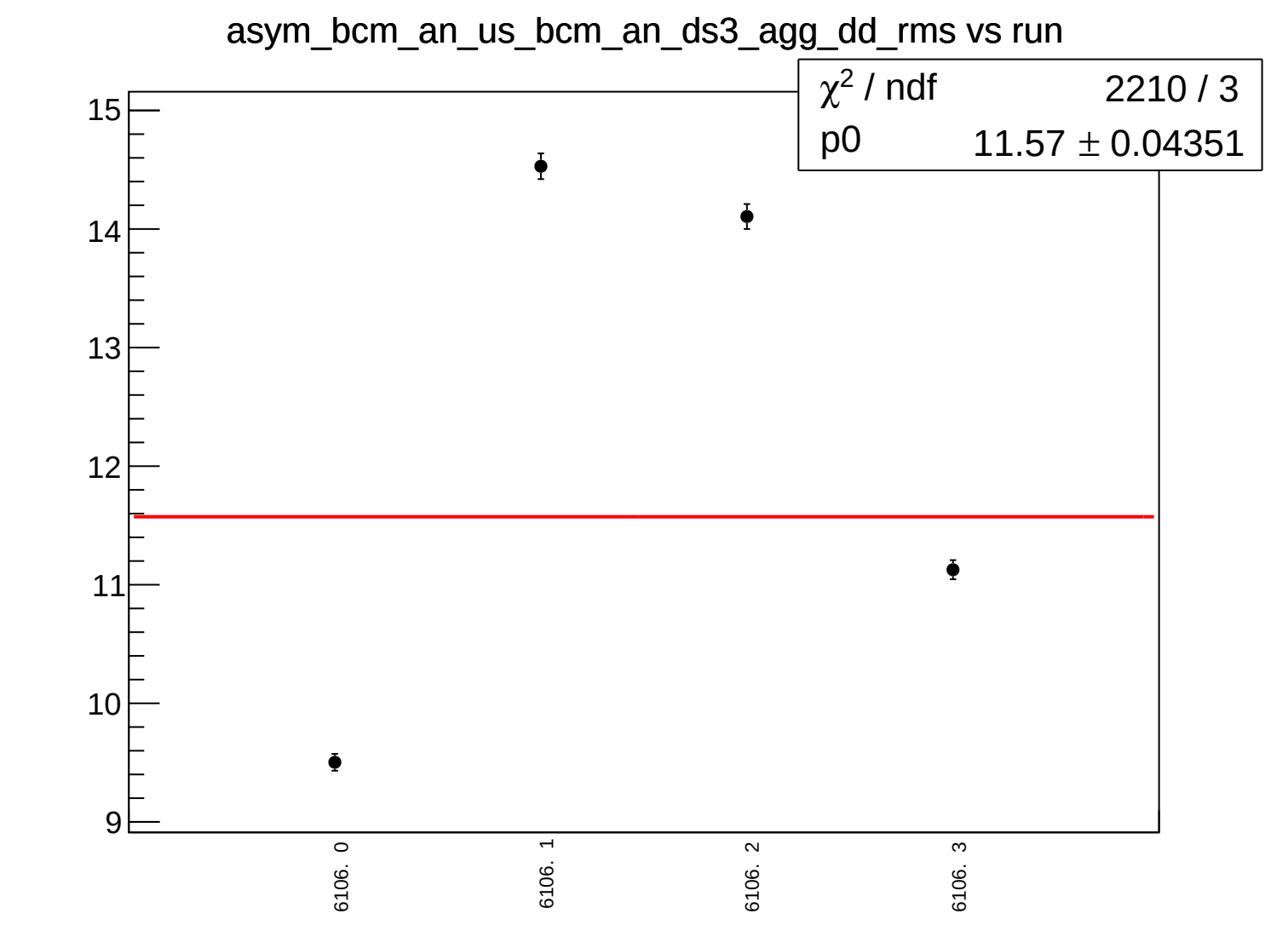

asym_bcm_an_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 1930 / 3
p0 12.15 ± 0.04559
15
14
13
12
11
10
6106. 0
6106. 1
6106. 2
6106. 3

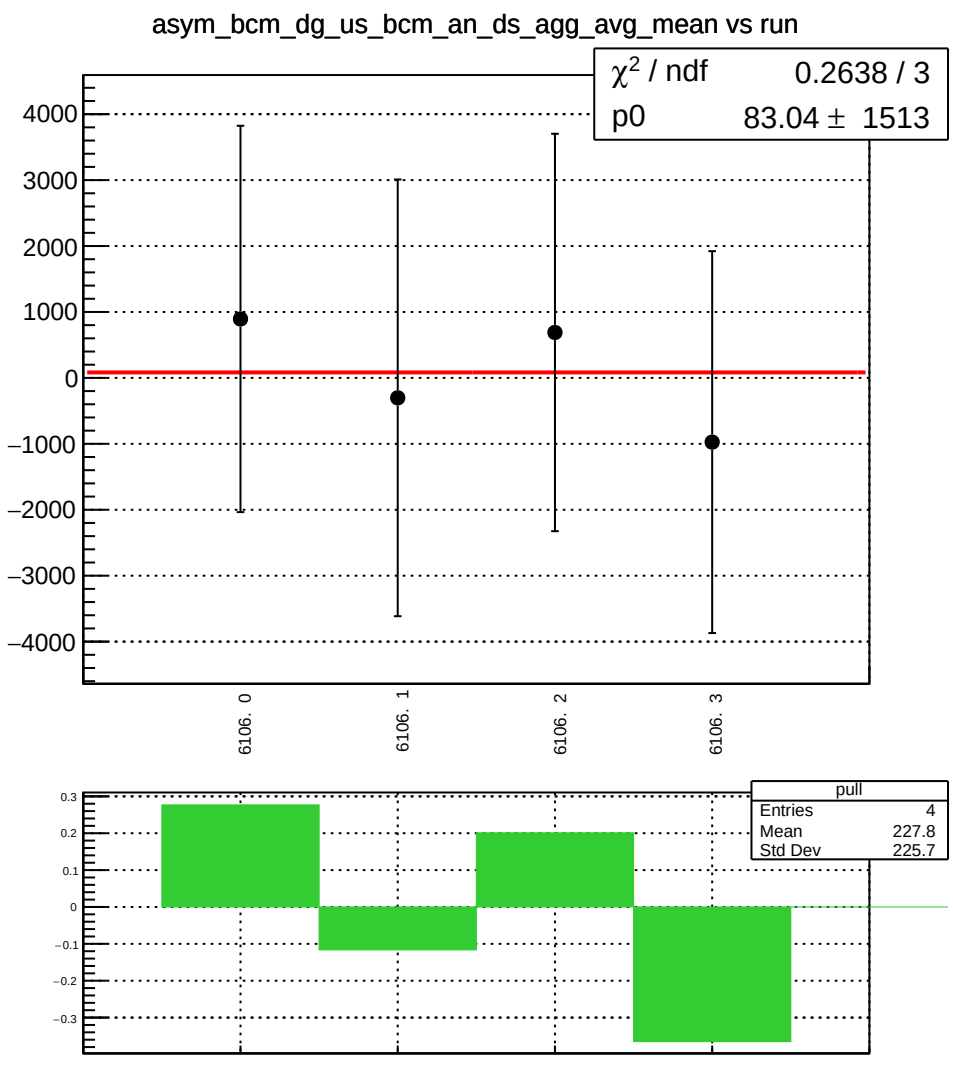

asym_bcm_an_us_bcm_an_ds3_agg_avg_mean vs run
χ² / ndf 0.2241 / 3
p0 15.46 ± 1515
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −771.7
Std Dev 773.9
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean 0.0002138
Std Dev 0.2367
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

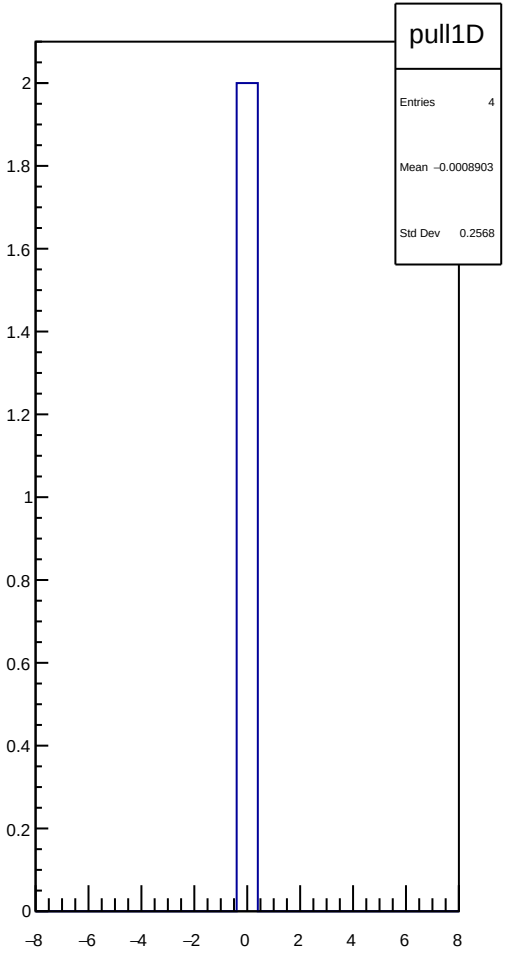

asym_bcm_an_us_bcm_an_ds3_agg_avg_rms vs run
χ² / ndf 155.9 / 3
p0 289.1 ± 1.072
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

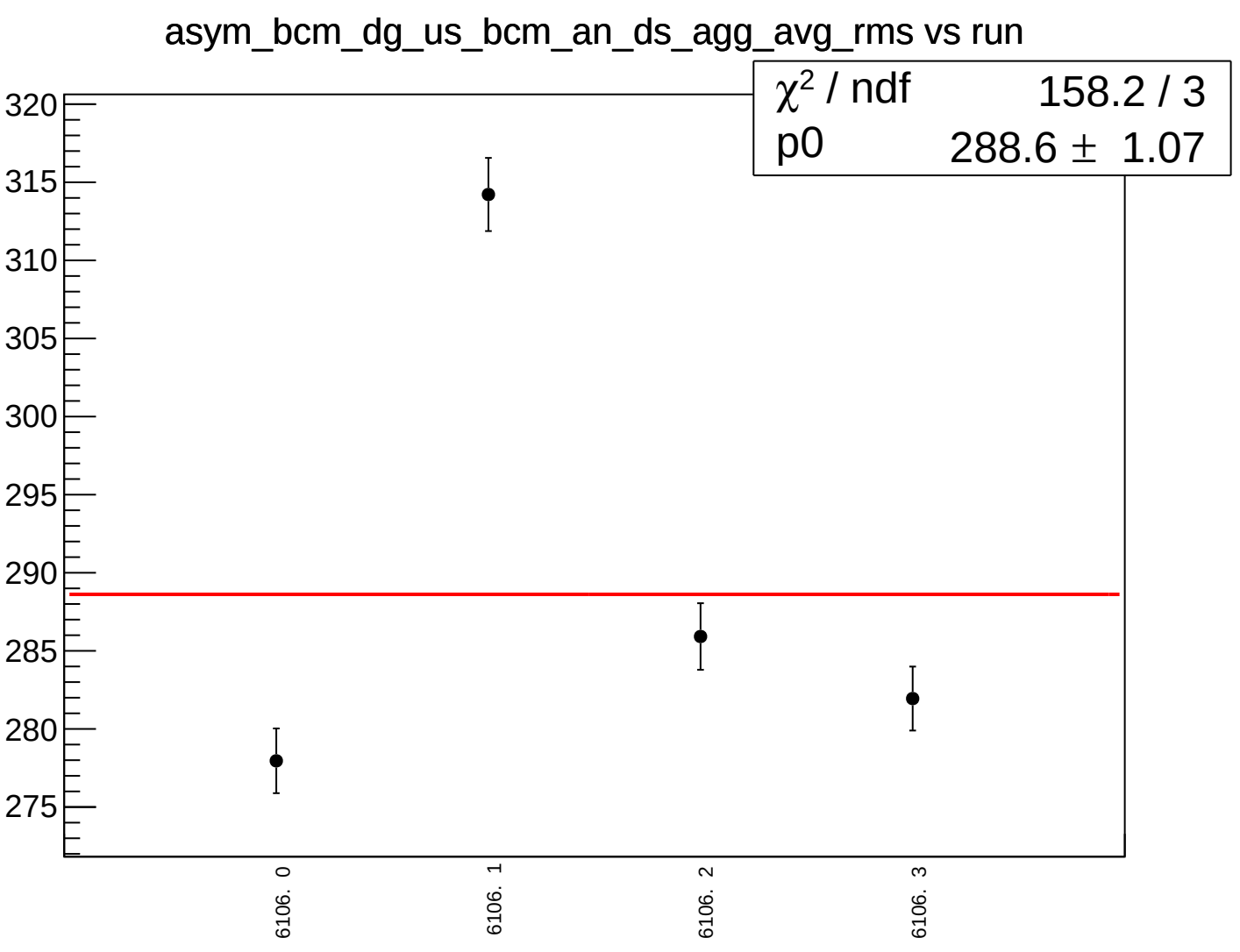

asym_bcm_an_us_bcm_an_ds3_agg_dd_mean vs run
χ² / ndf 4.191 / 3
p0 60.49 ± 61.53
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 70.37
Std Dev 68.23
1
0.5
0
−0.5
−1
−1.5

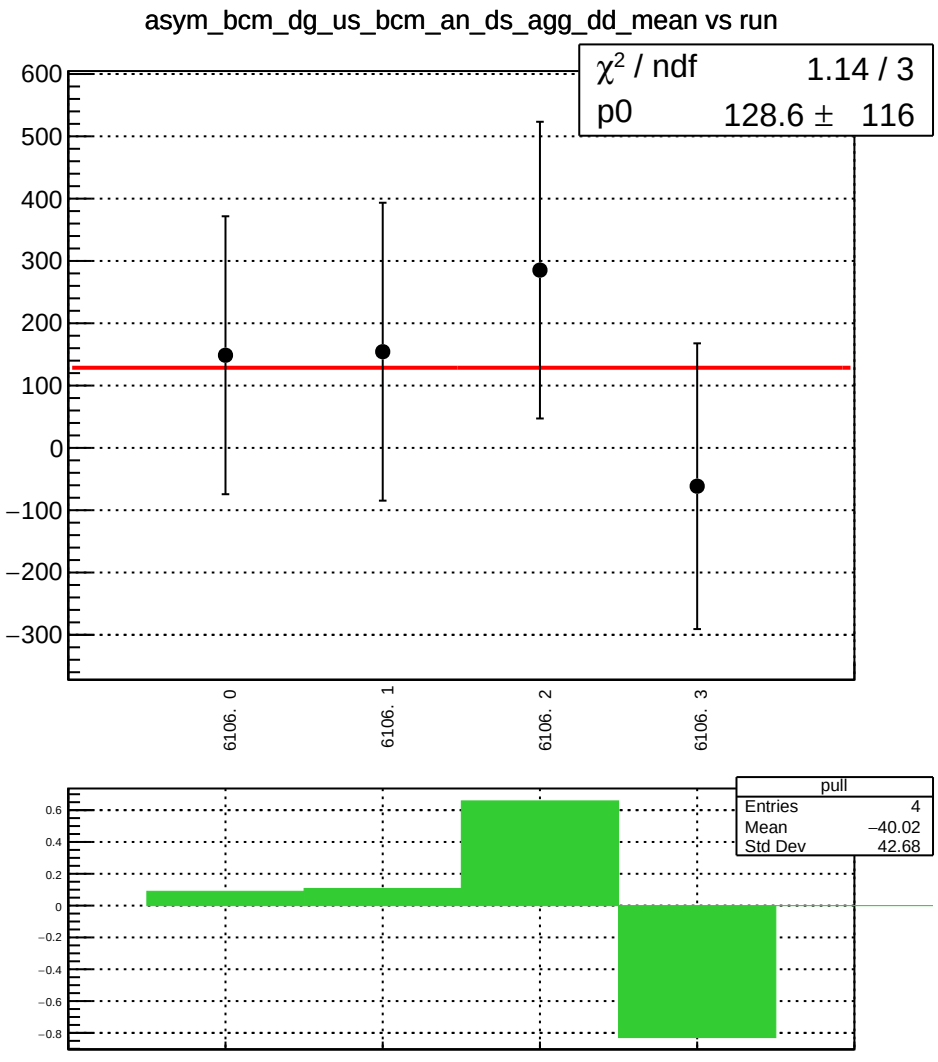

pull1D
Entries 4
Mean −0.01331
Std Dev 1.024
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

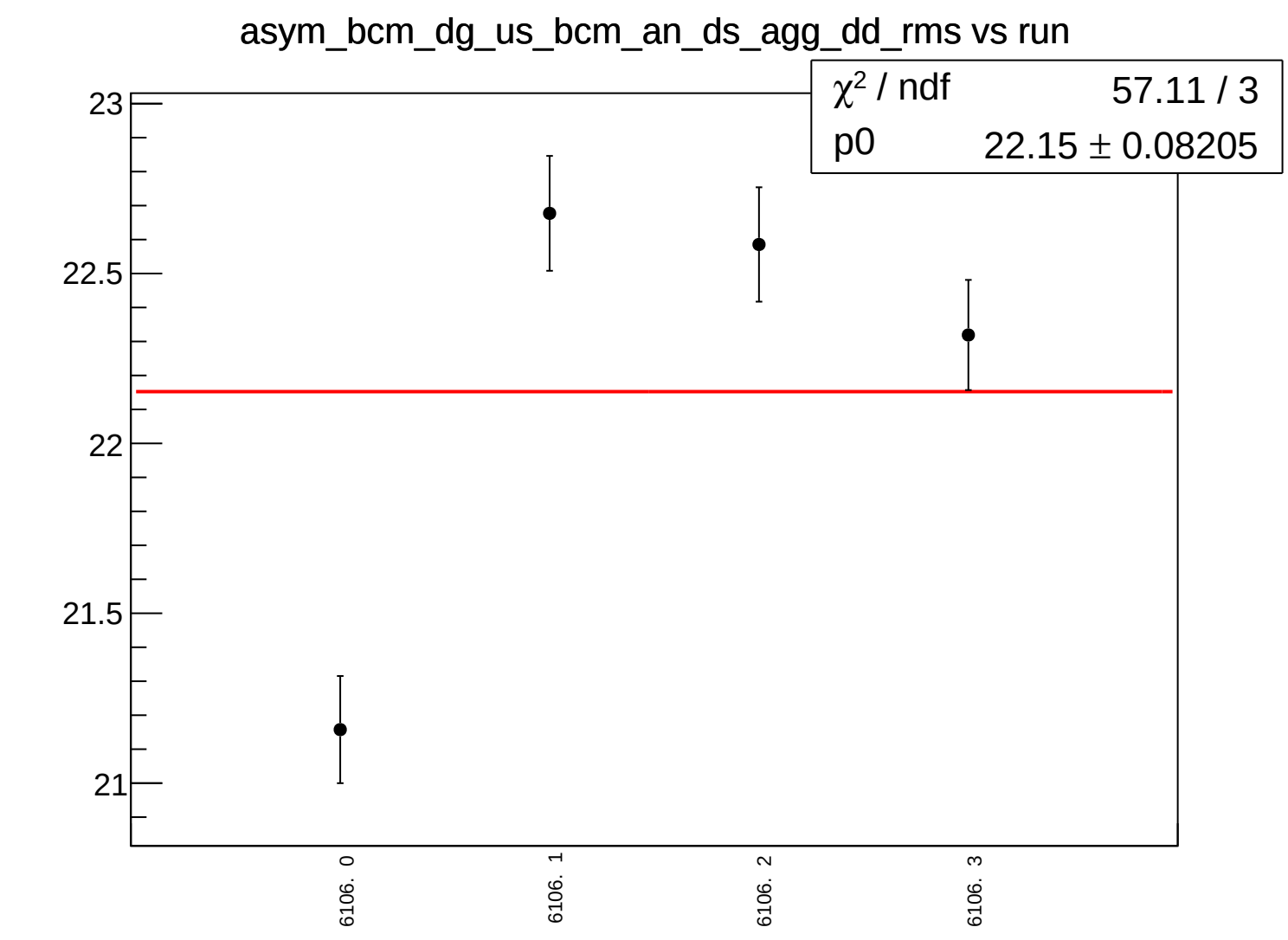

asym_bcm_an_us_bcm_an_ds3_agg_dd_rms vs run
χ² / ndf 2210 / 3
p0 11.57 ± 0.04351
15
14
13
12
11
10
9
6106. 0
6106. 1
6106. 2
6106. 3

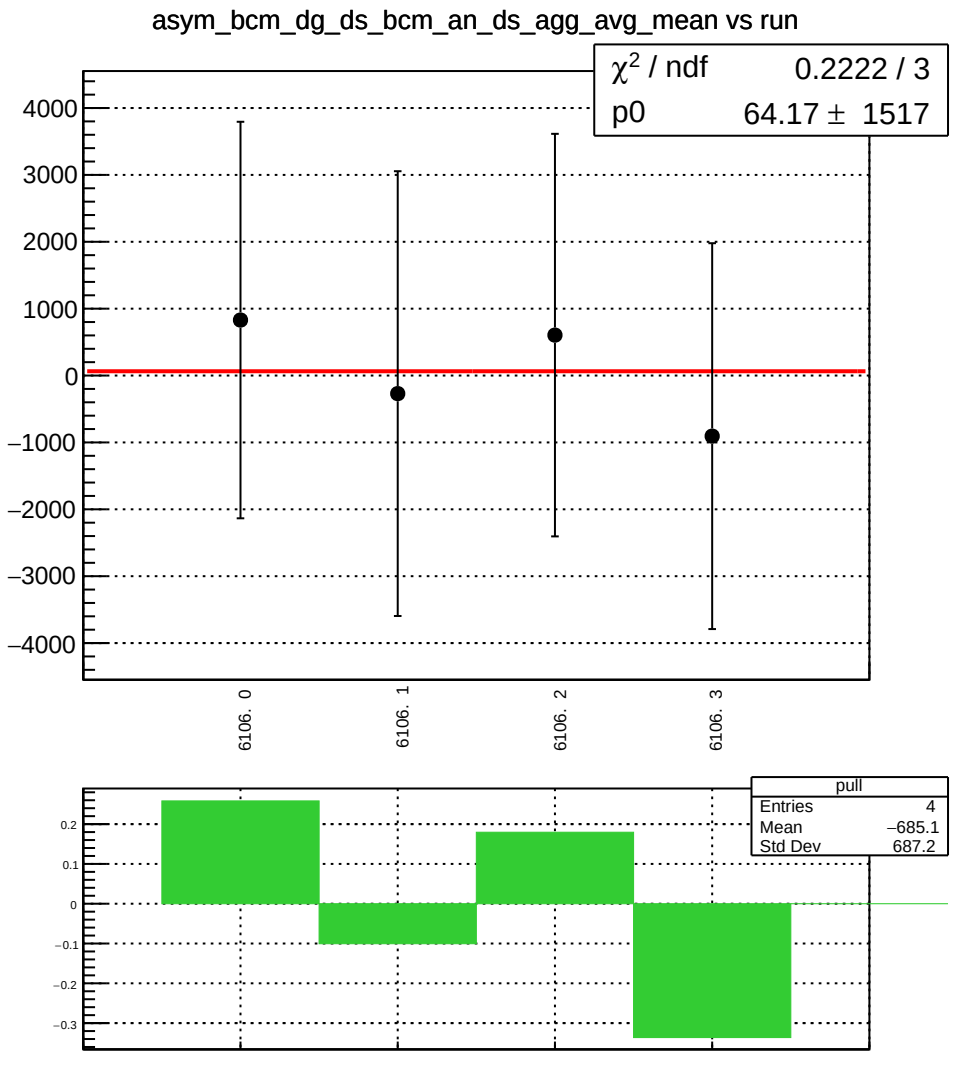

asym_bcm_dg_us_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 0.2638 / 3
p0 83.04 ± 1513
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 227.8
Std Dev 225.7
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

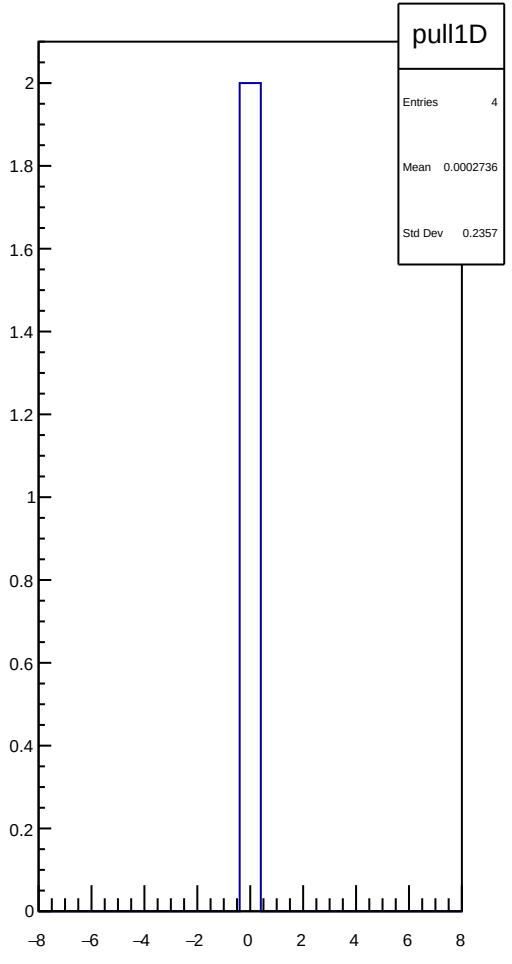

pull1D
Entries 4
Mean −0.0008903
Std Dev 0.2568
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

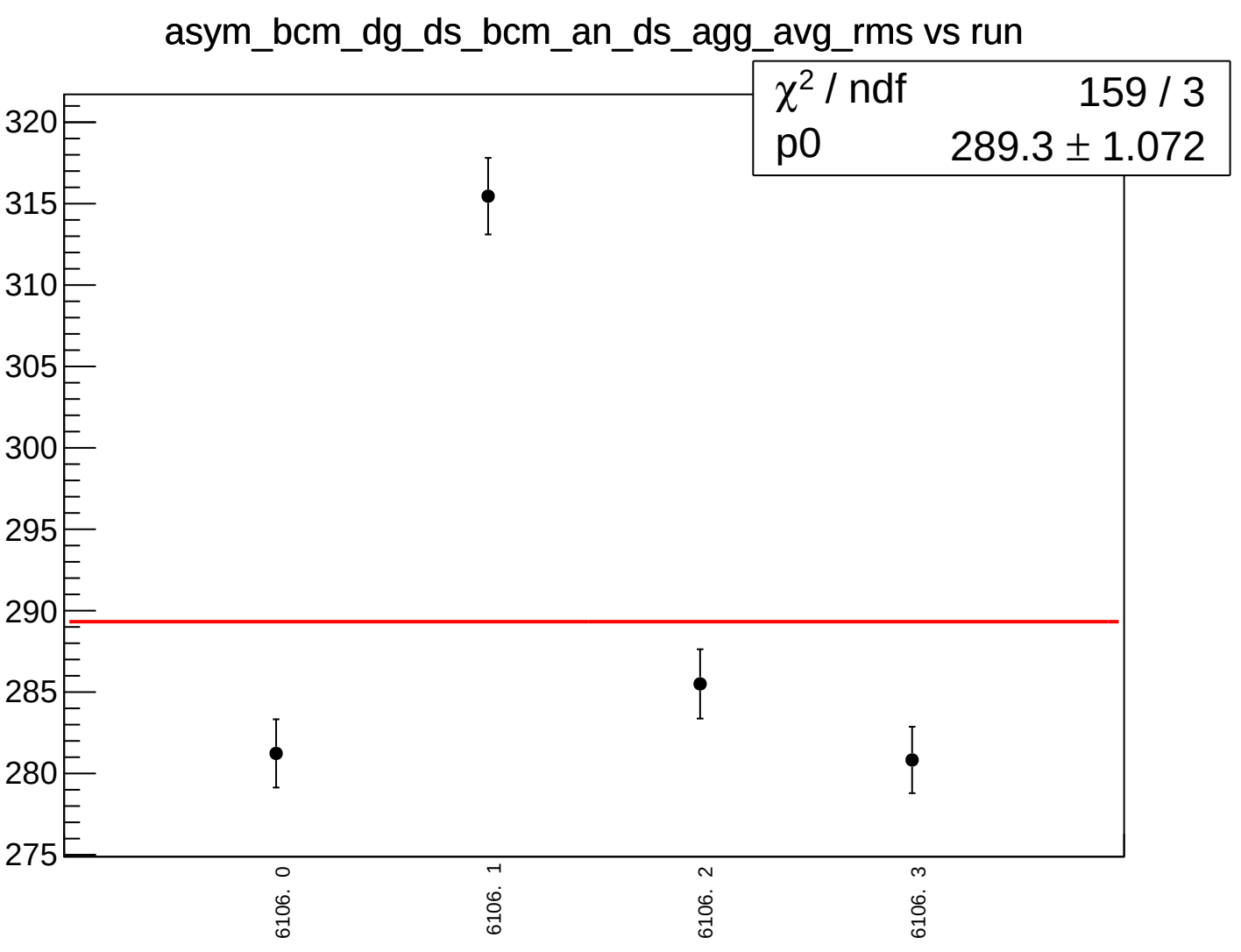

asym_bcm_dg_us_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 158.2 / 3
p0 288.6 ± 1.07
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

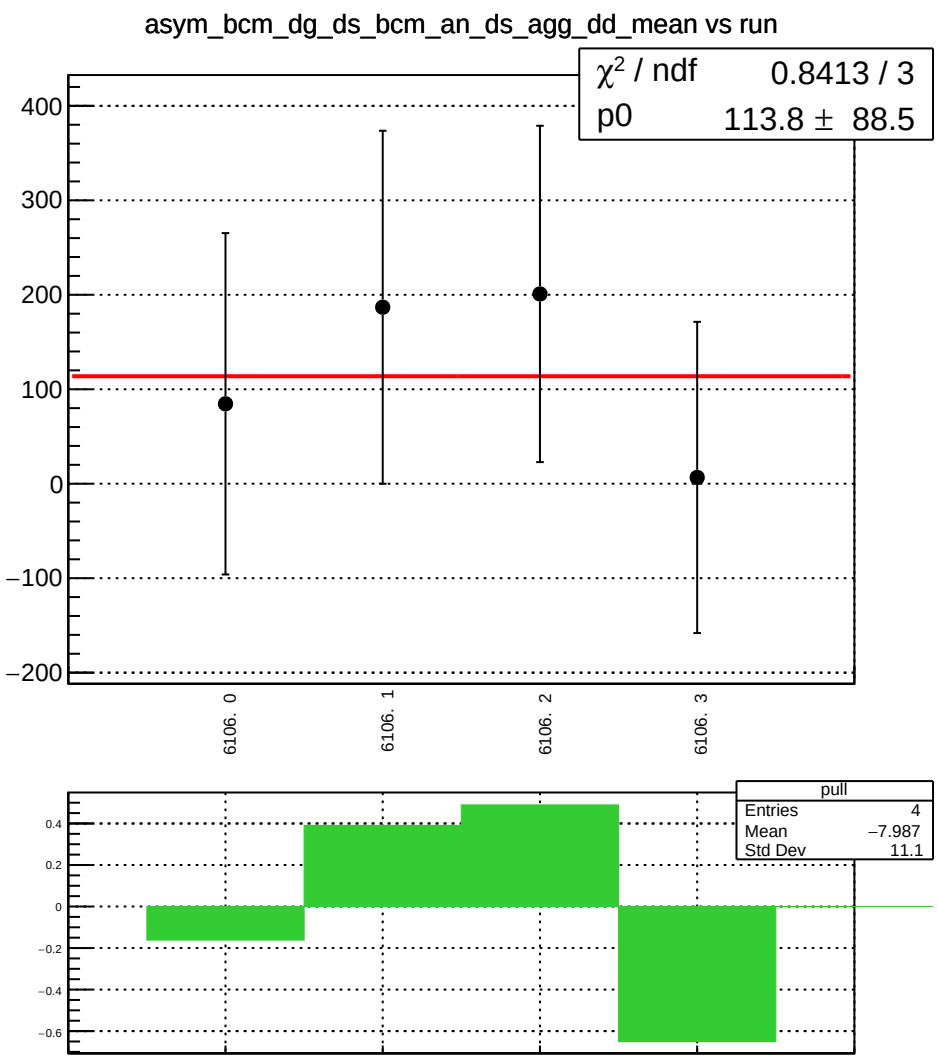

asym_bcm_dg_us_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 1.14 / 3
p0 128.6 ± 116
600
500
400
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −40.02
Std Dev 42.68
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean 0.006566
Std Dev 0.5339
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

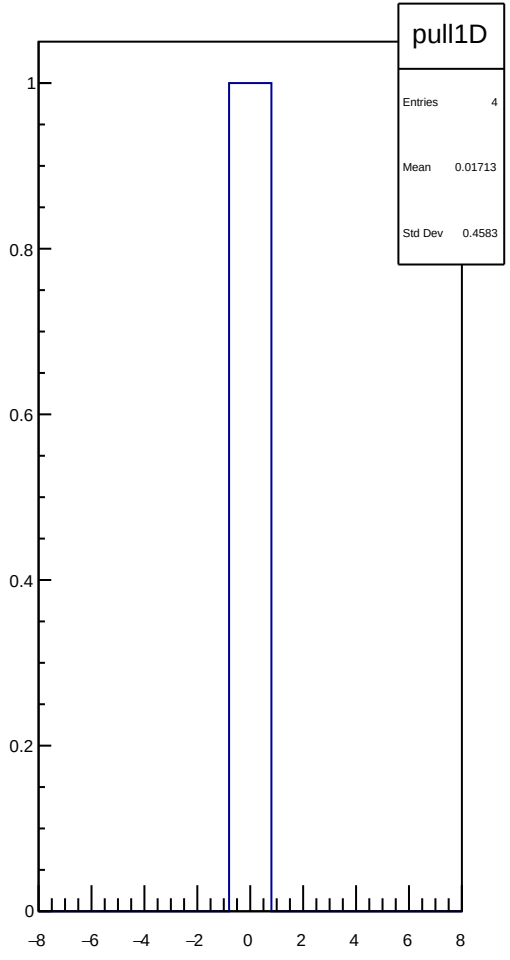

asym_bcm_dg_us_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 57.11 / 3
p0 22.15 ± 0.08205
23
22.5
22
21.5
21
6106. 0
6106. 1
6106. 2
6106. 3

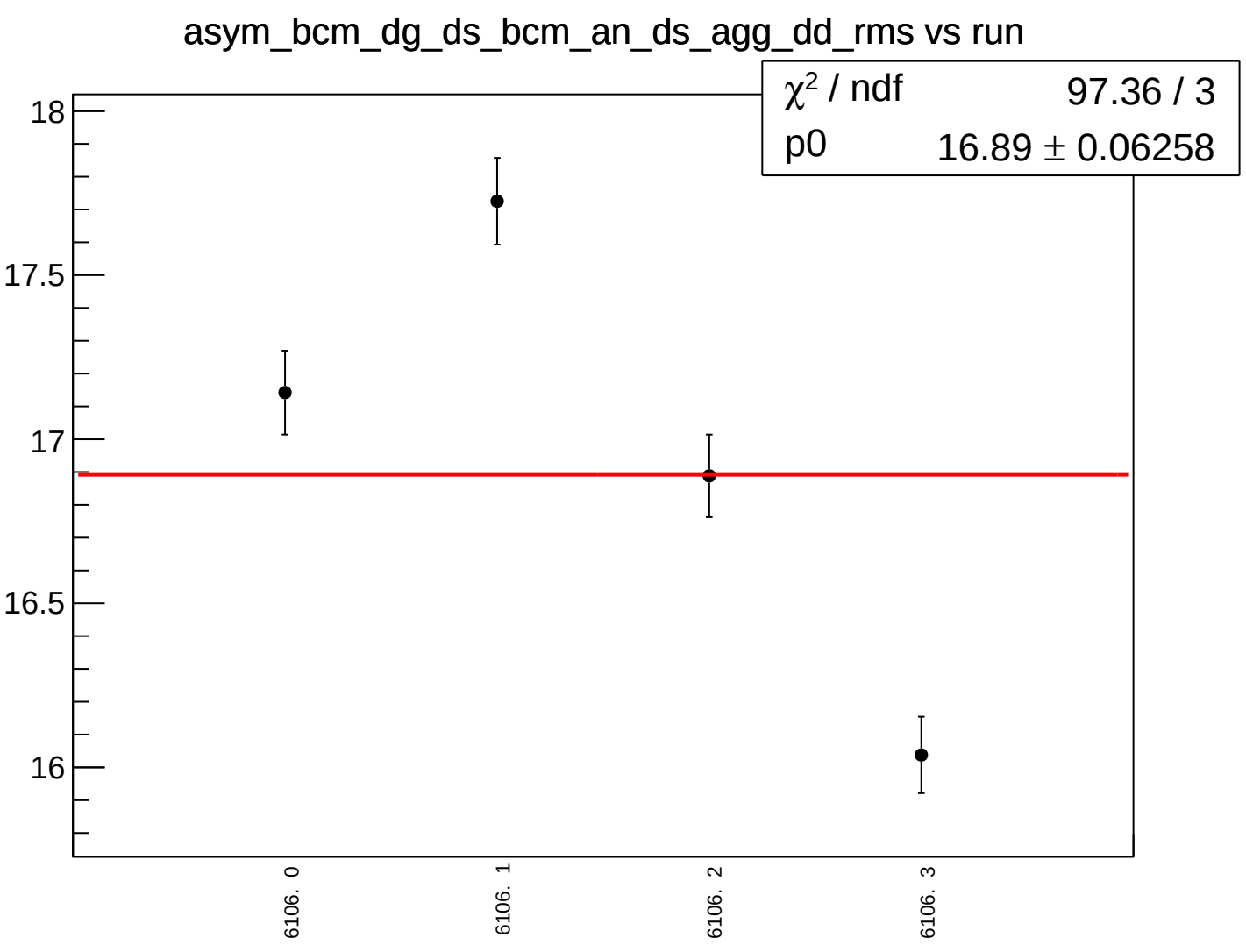

asym_bcm_dg_ds_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 0.2222 / 3
p0 64.17 ± 1517
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −685.1
Std Dev 687.2
0.2
0.1
0
−0.1
−0.2
−0.3

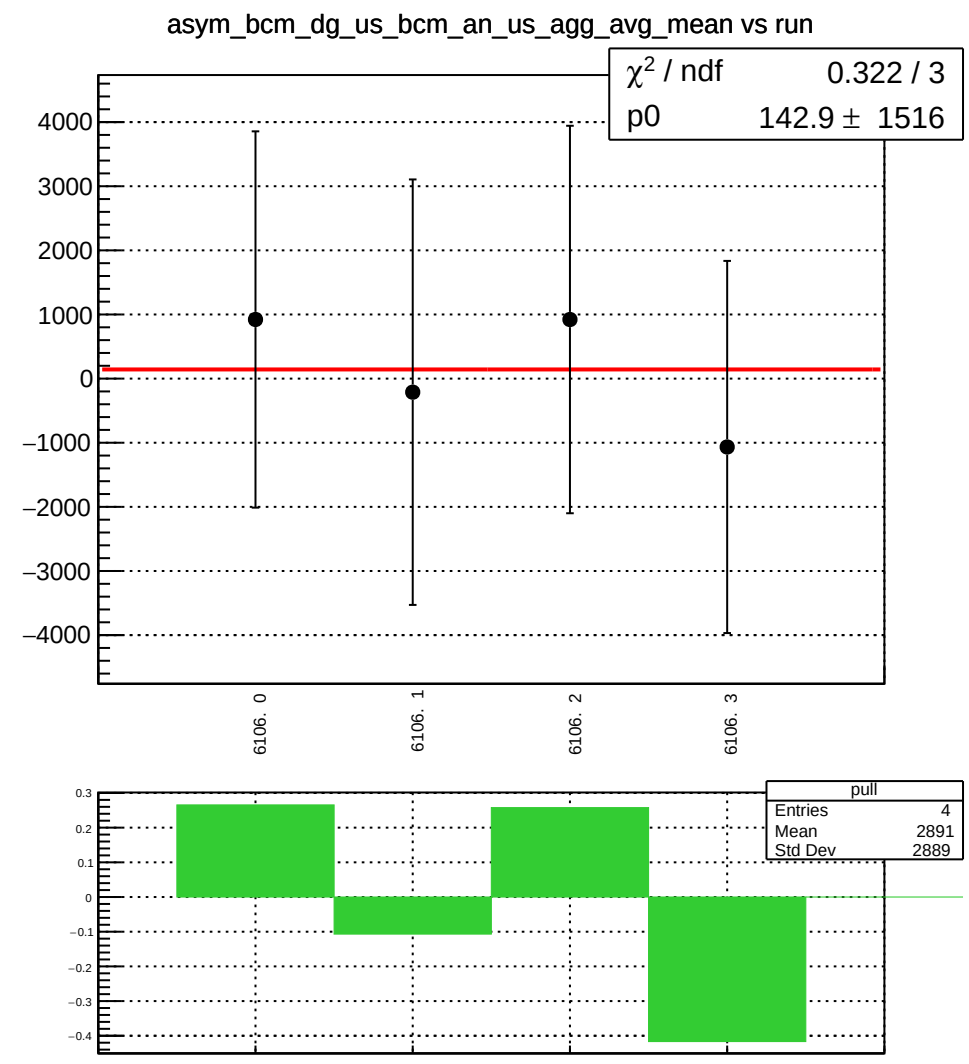

pull1D
Entries 4
Mean 0.0002736
Std Dev 0.2357
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

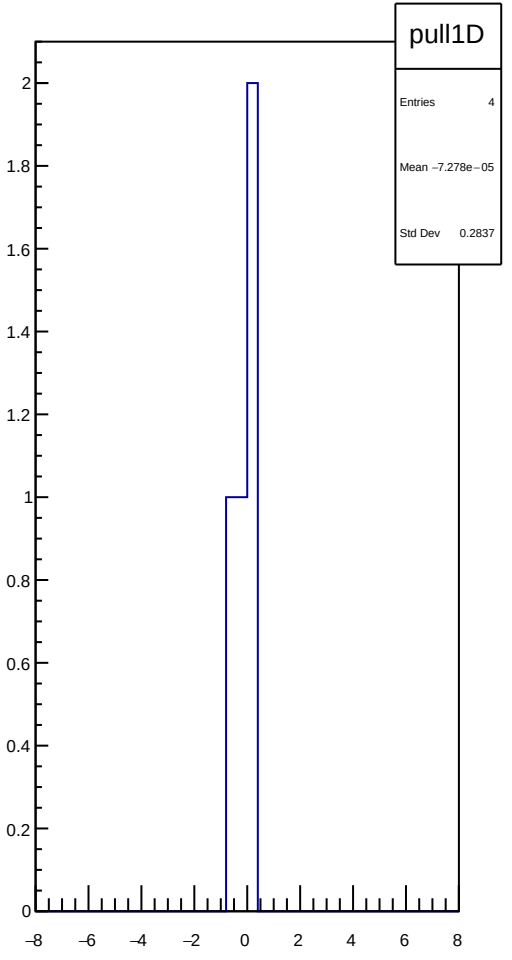

asym_bcm_dg_ds_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 159 / 3
p0 289.3 ± 1.072
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

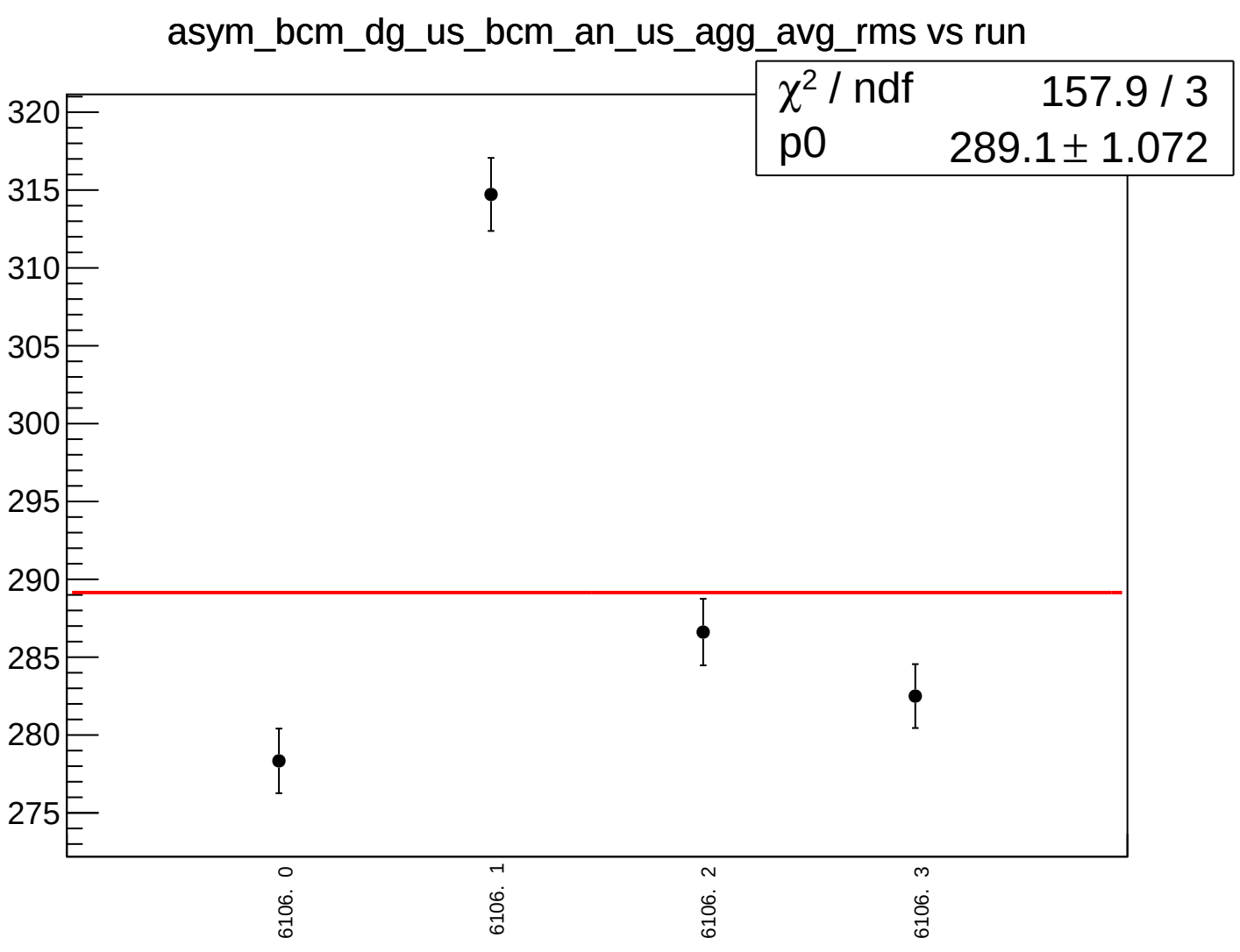

asym_bcm_dg_ds_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 0.8413 / 3
p0 113.8 ± 88.5
400
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −7.987
Std Dev 11.1
0.4
0.2
0
−0.2
−0.4
−0.6

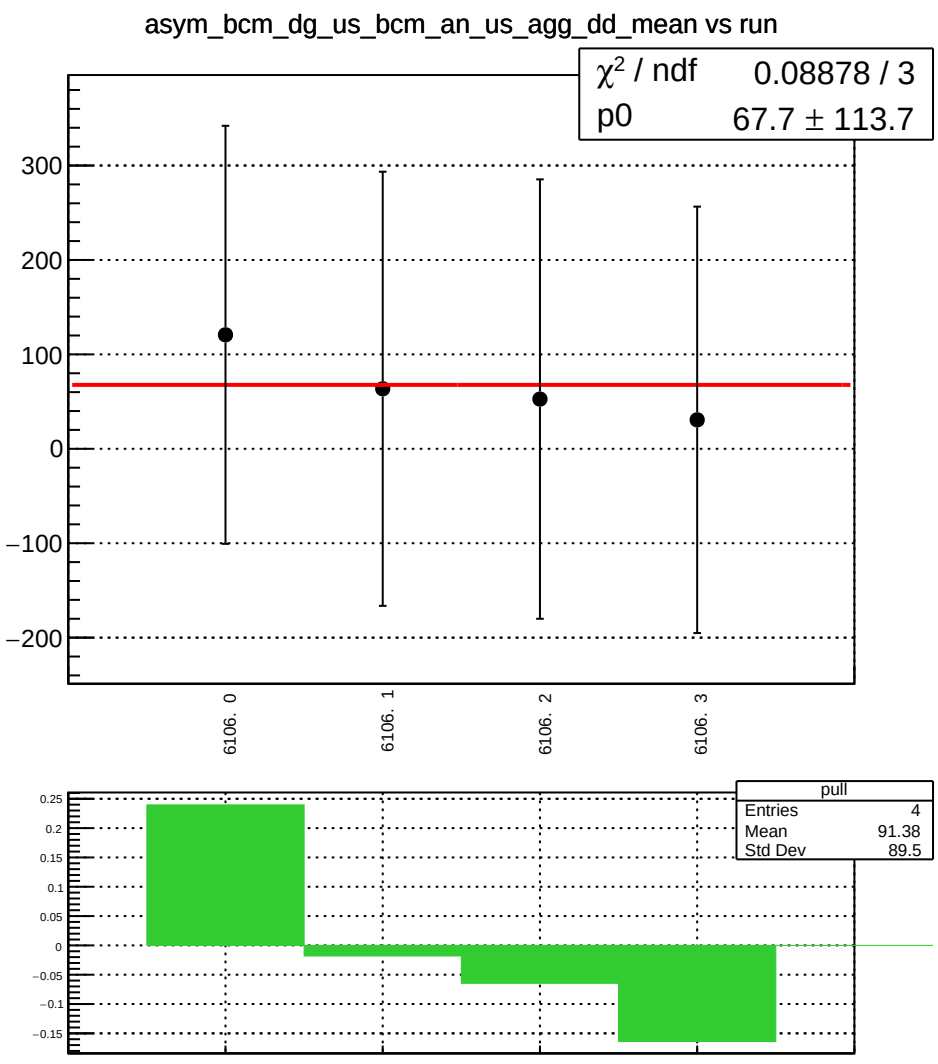

pull1D
Entries 4
Mean 0.01713
Std Dev 0.4583
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

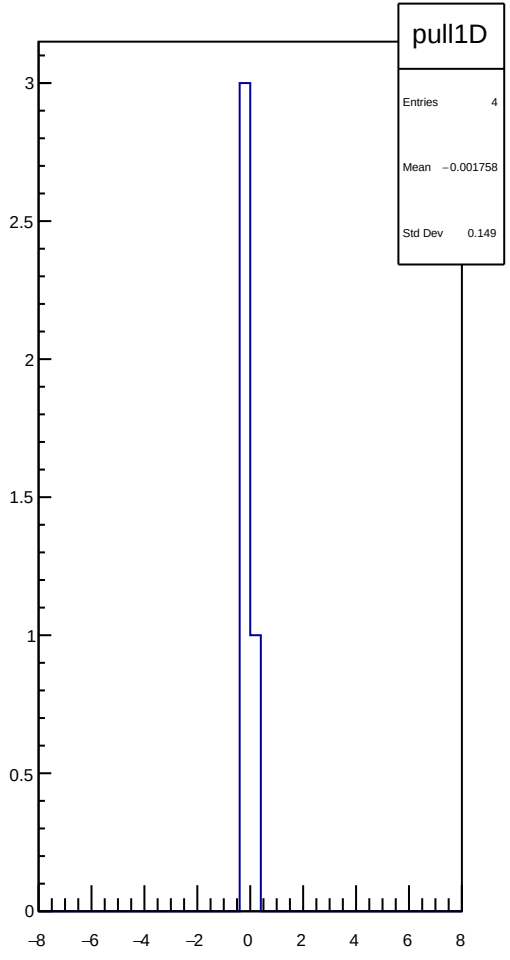

asym_bcm_dg_ds_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 97.36 / 3
p0 16.89 ± 0.06258
18
17.5
17
16.5
16
6106. 0
6106. 1
6106. 2
6106. 3

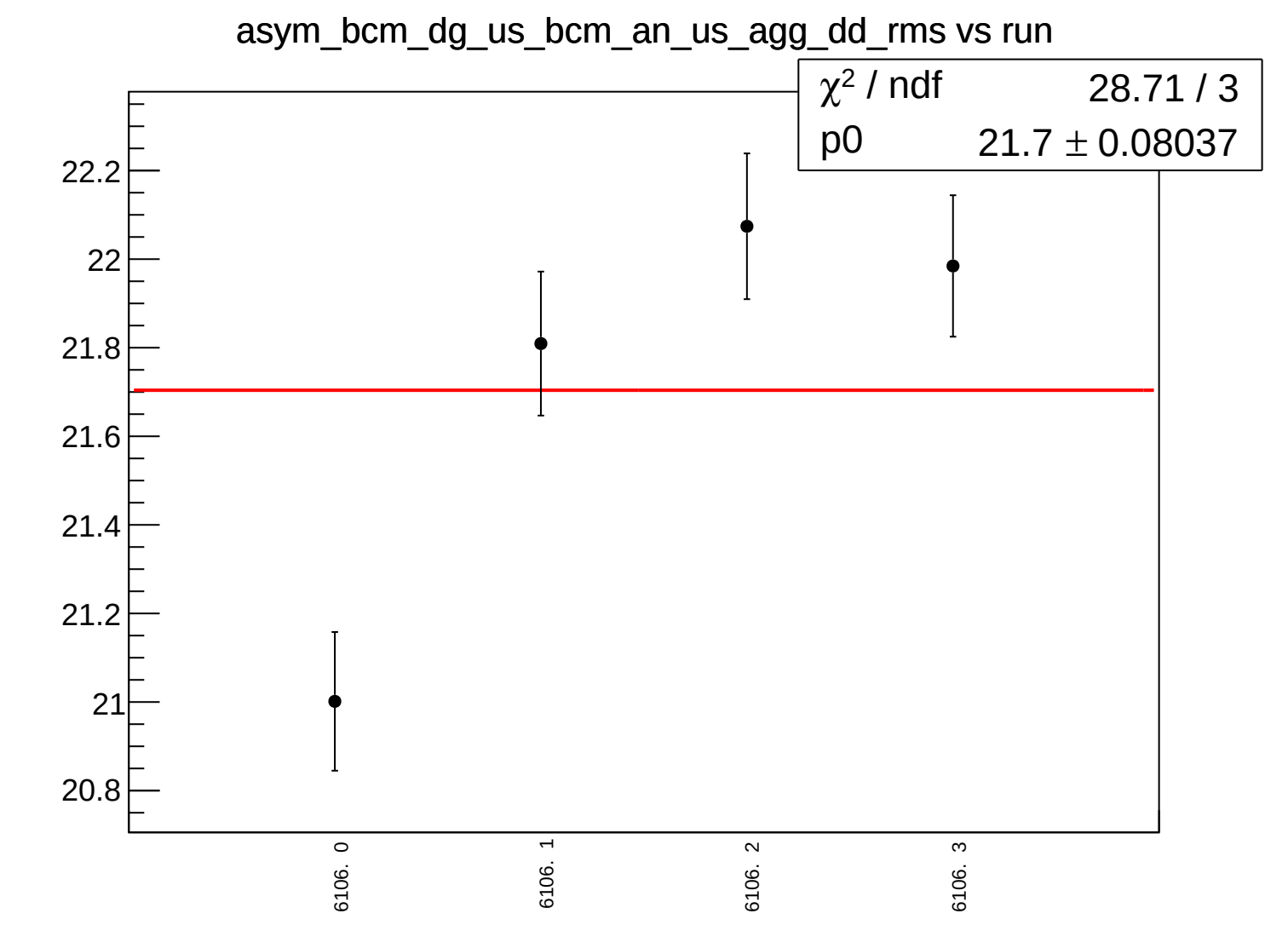

asym_bcm_dg_us_bcm_an_us_agg_avg_mean vs run
χ² / ndf 0.322 / 3
p0 142.9 ± 1516
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2891
Std Dev 2889
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

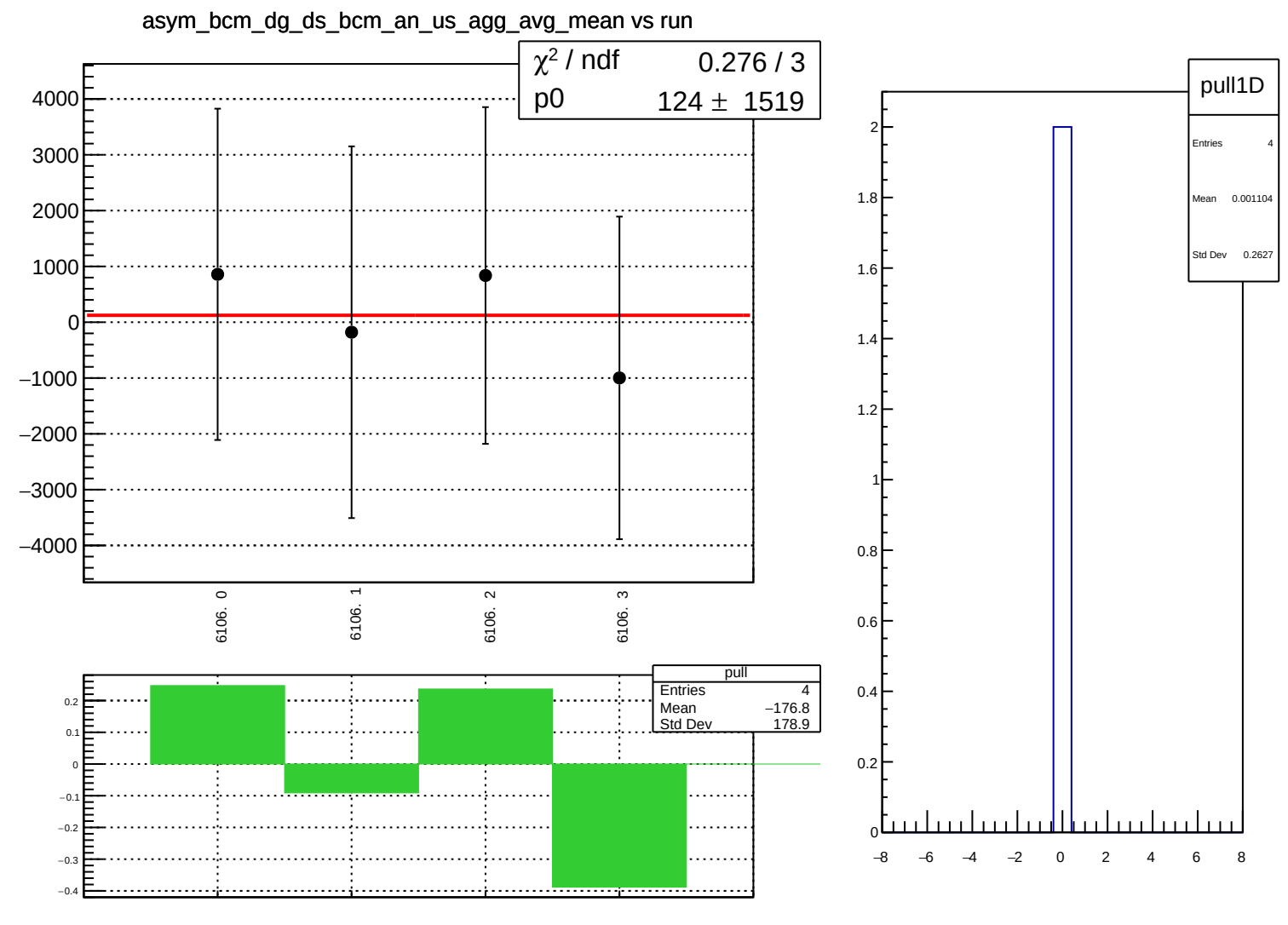

pull1D
Entries 4
Mean −7.278e−05
Std Dev 0.2837
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

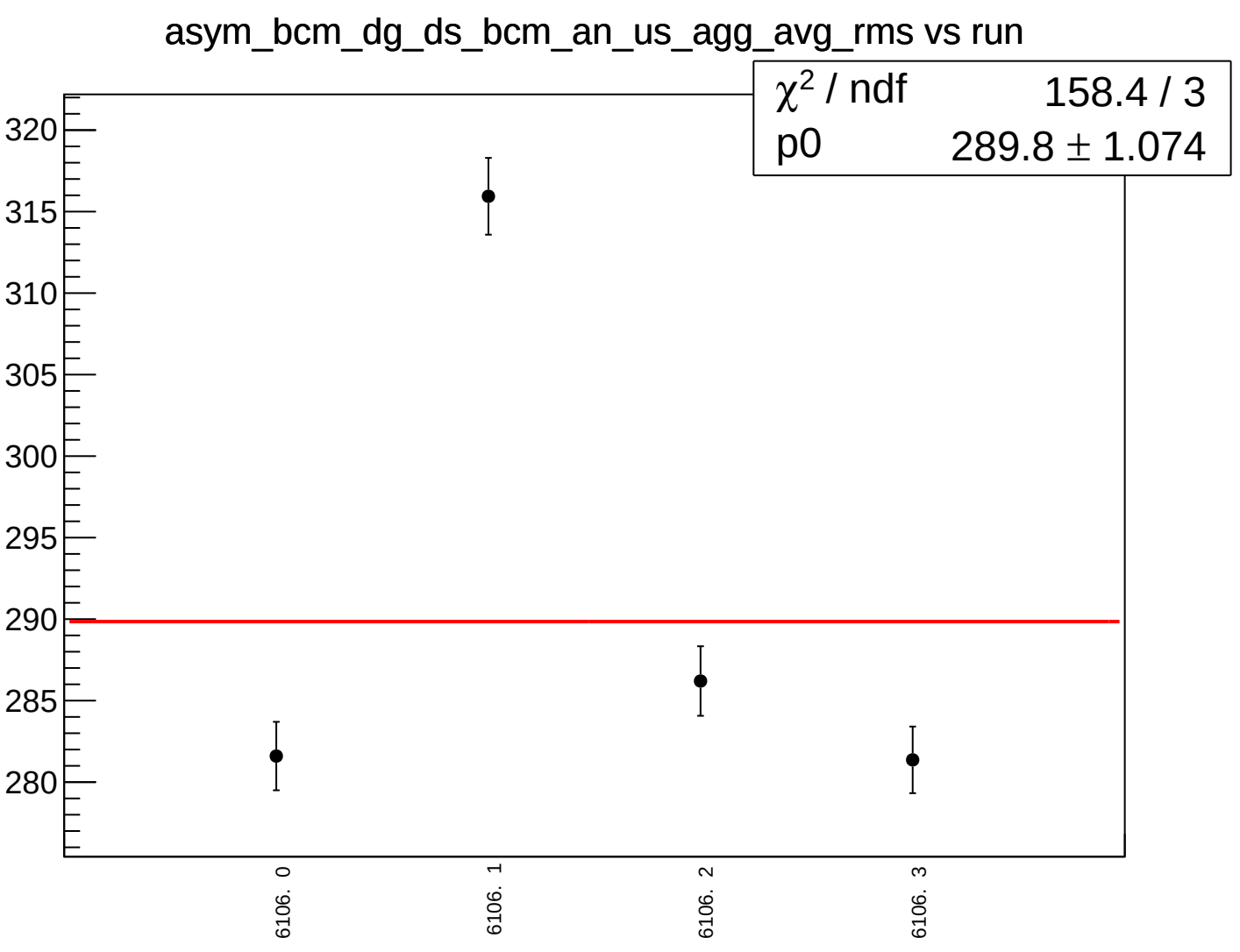

asym_bcm_dg_us_bcm_an_us_agg_avg_rms vs run
χ² / ndf 157.9 / 3
p0 289.1 ± 1.072
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

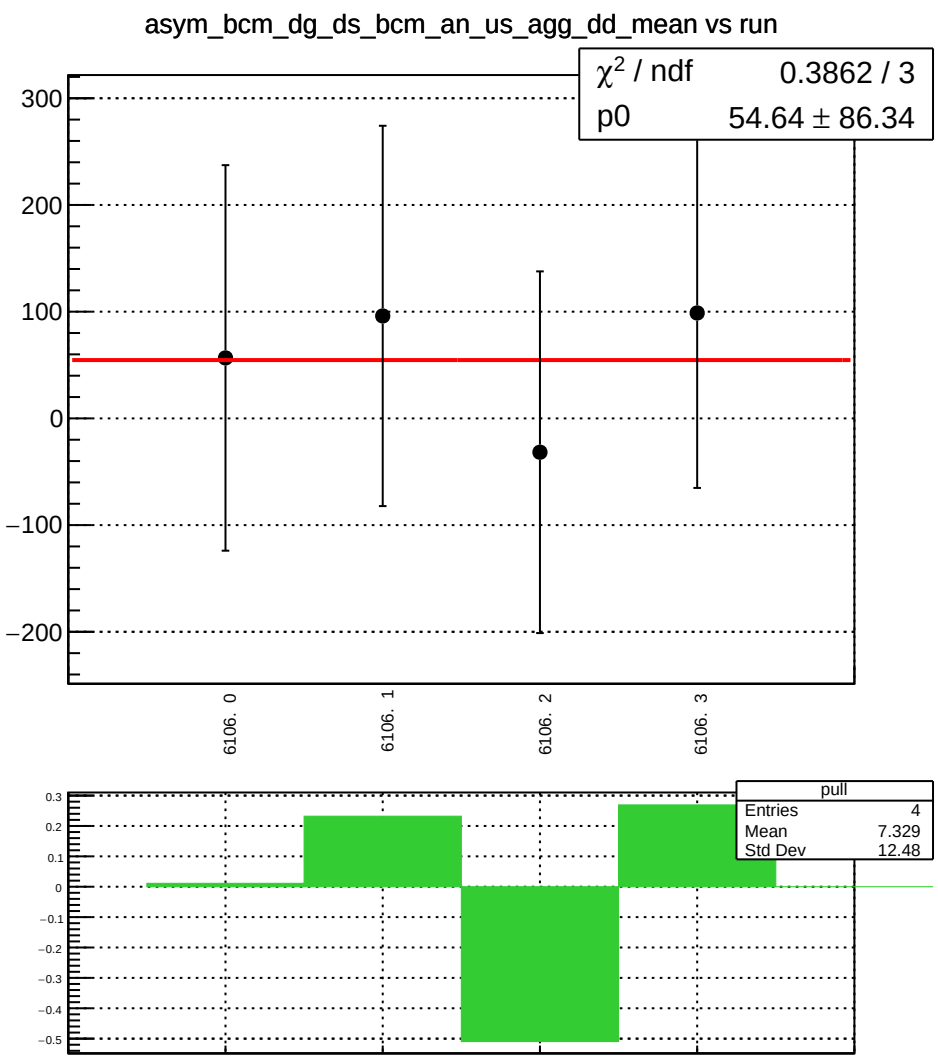

asym_bcm_dg_us_bcm_an_us_agg_dd_mean vs run
χ² / ndf 0.08878 / 3
p0 67.7 ± 113.7
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 91.38
Std Dev 89.5
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

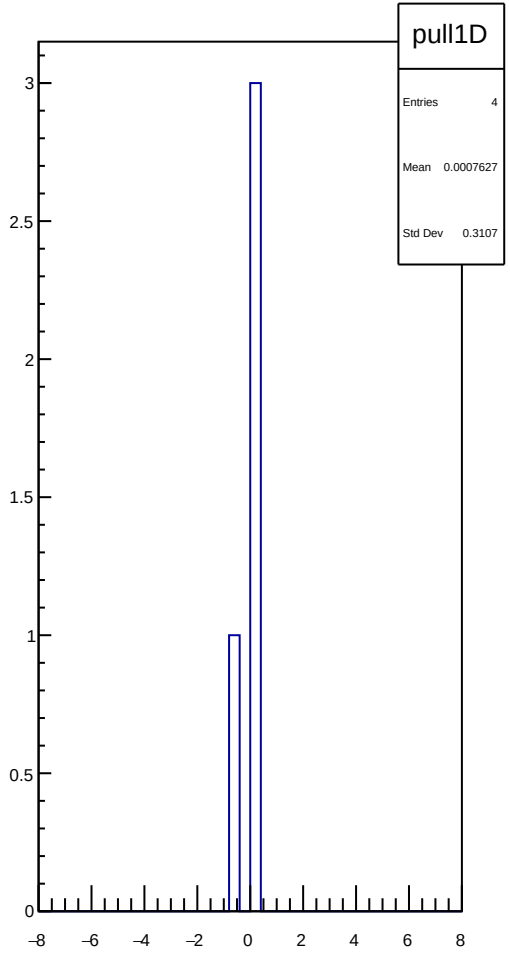

pull1D
Entries 4
Mean −0.001758
Std Dev 0.149
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

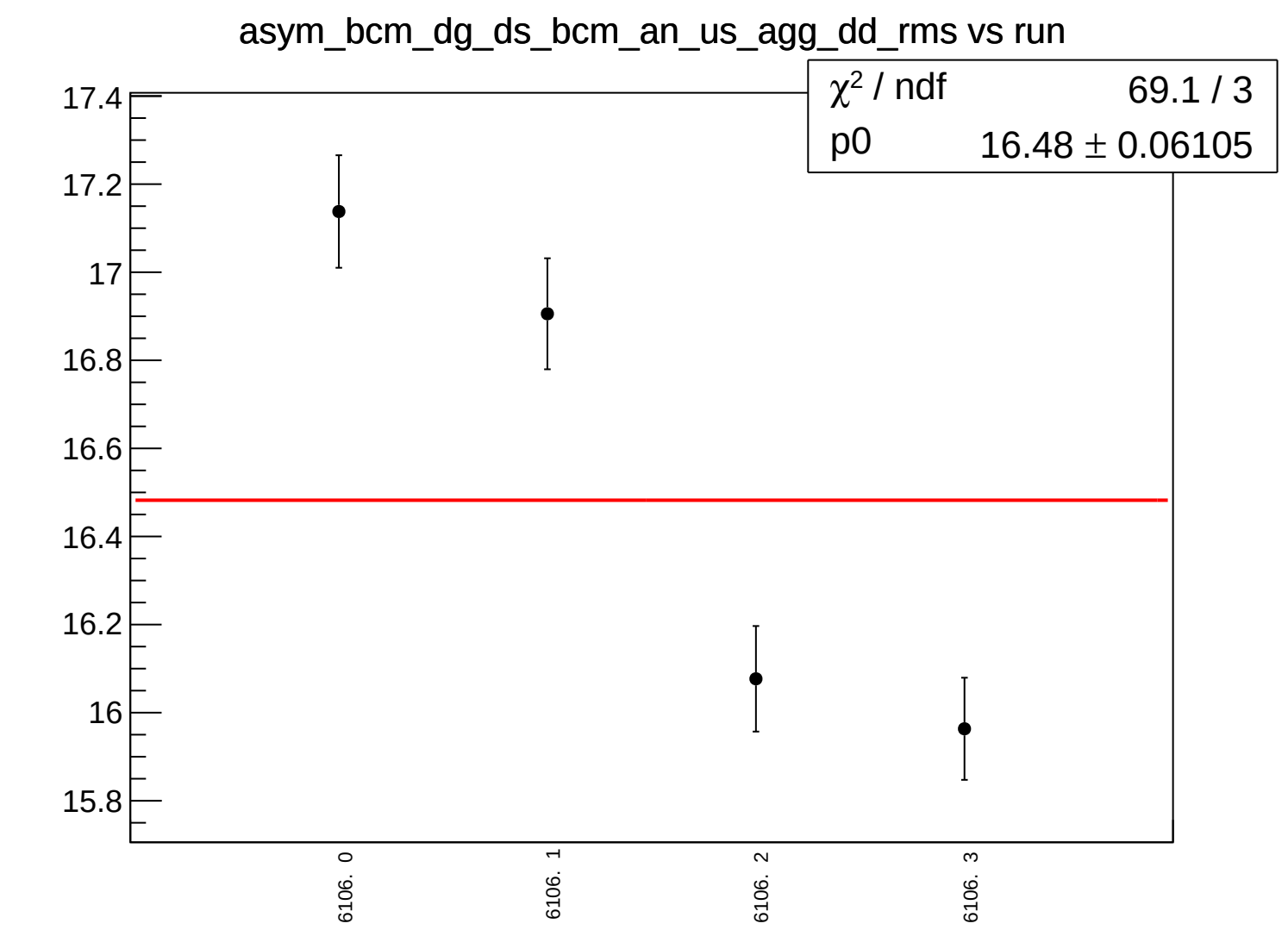

asym_bcm_dg_us_bcm_an_us_agg_dd_rms vs run
χ² / ndf 28.71 / 3
p0 21.7 ± 0.08037
22.2
22
21.8
21.6
21.4
21.2
21
20.8
6106. 0
6106. 1
6106. 2
6106. 3

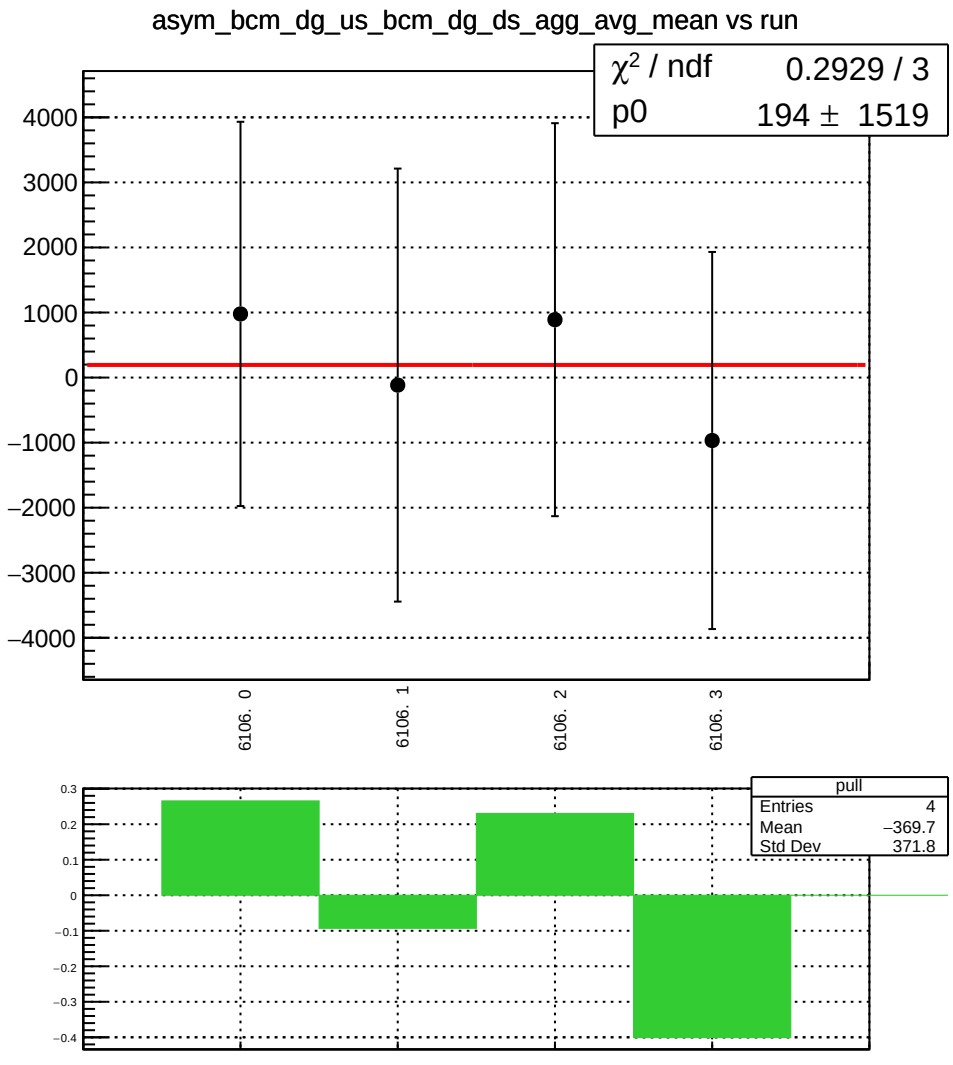

asym_bcm_dg_ds_bcm_an_us_agg_avg_mean vs run
χ² / ndf 0.276 / 3
p0 124 ± 1519
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −176.8
Std Dev 178.9
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
pull1D
Entries 4
Mean 0.001104
Std Dev 0.2627
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

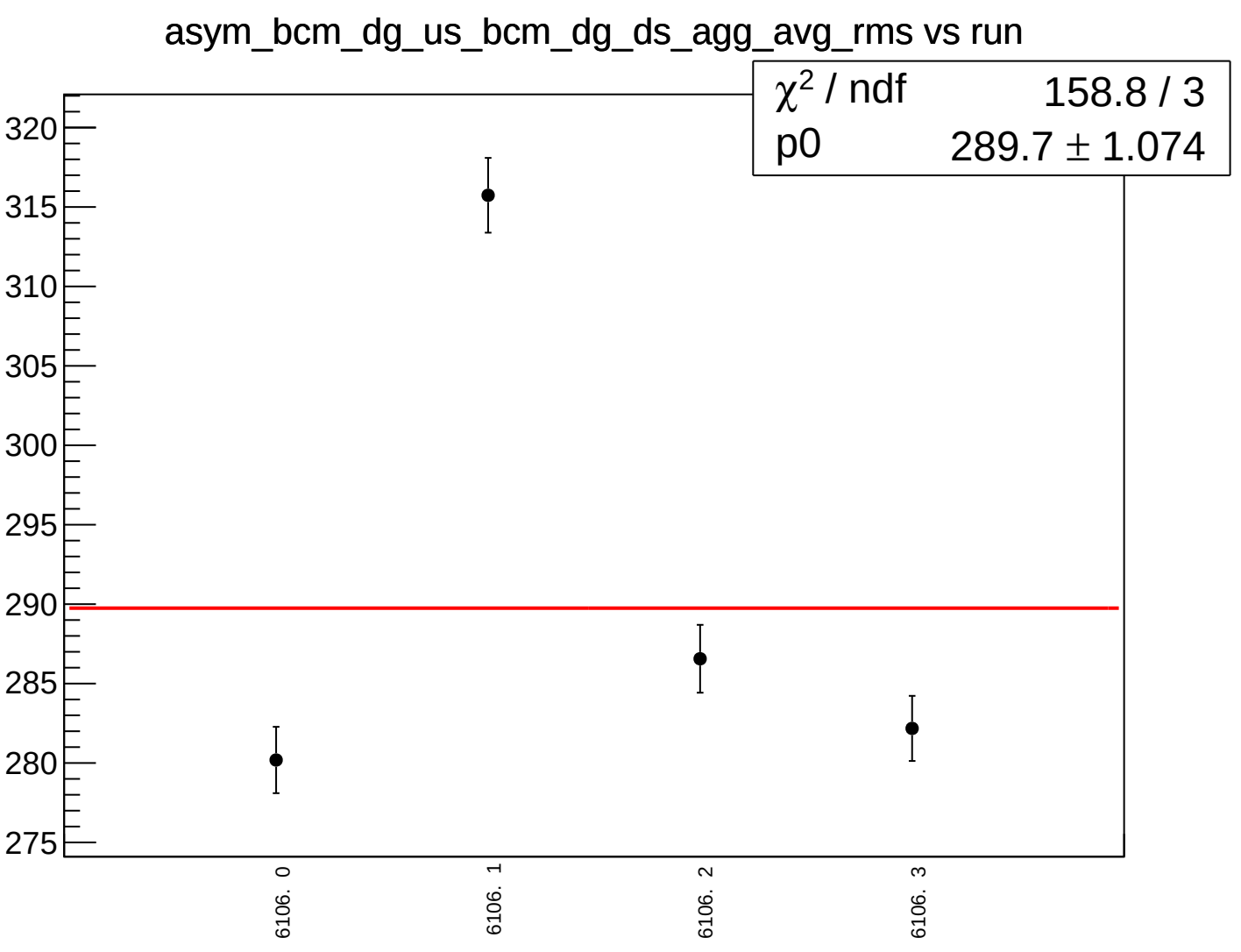

asym_bcm_dg_ds_bcm_an_us_agg_avg_rms vs run
χ² / ndf 158.4 / 3
p0 289.8 ± 1.074
320
315
310
305
300
295
290
285
280
6106. 0
6106. 1
6106. 2
6106. 3

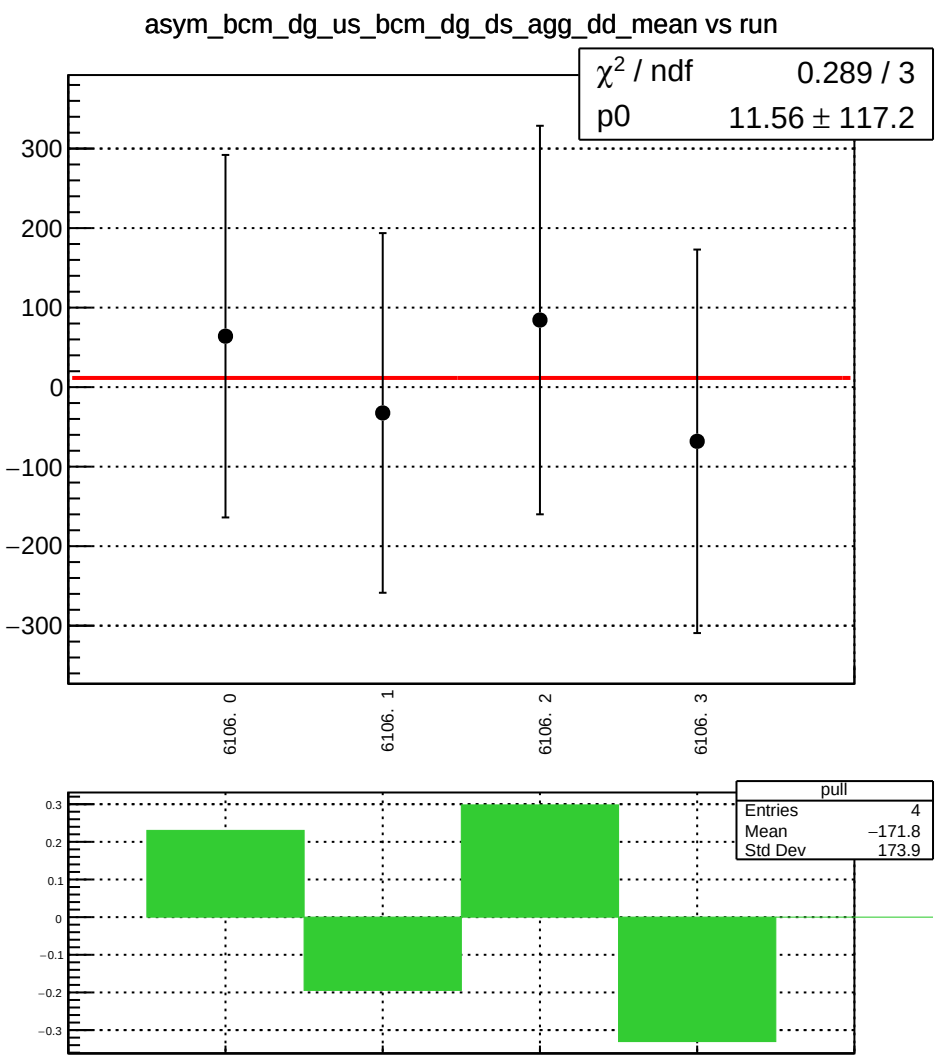

asym_bcm_dg_ds_bcm_an_us_agg_dd_mean vs run
χ² / ndf 0.3862 / 3
p0 54.64 ± 86.34
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 7.329
Std Dev 12.48
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

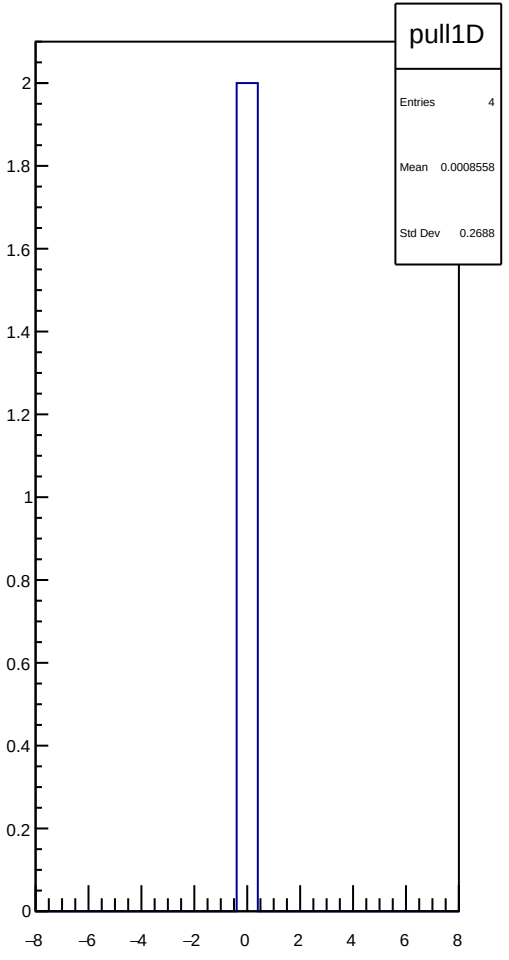

pull1D
Entries 4
Mean 0.0007627
Std Dev 0.3107
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

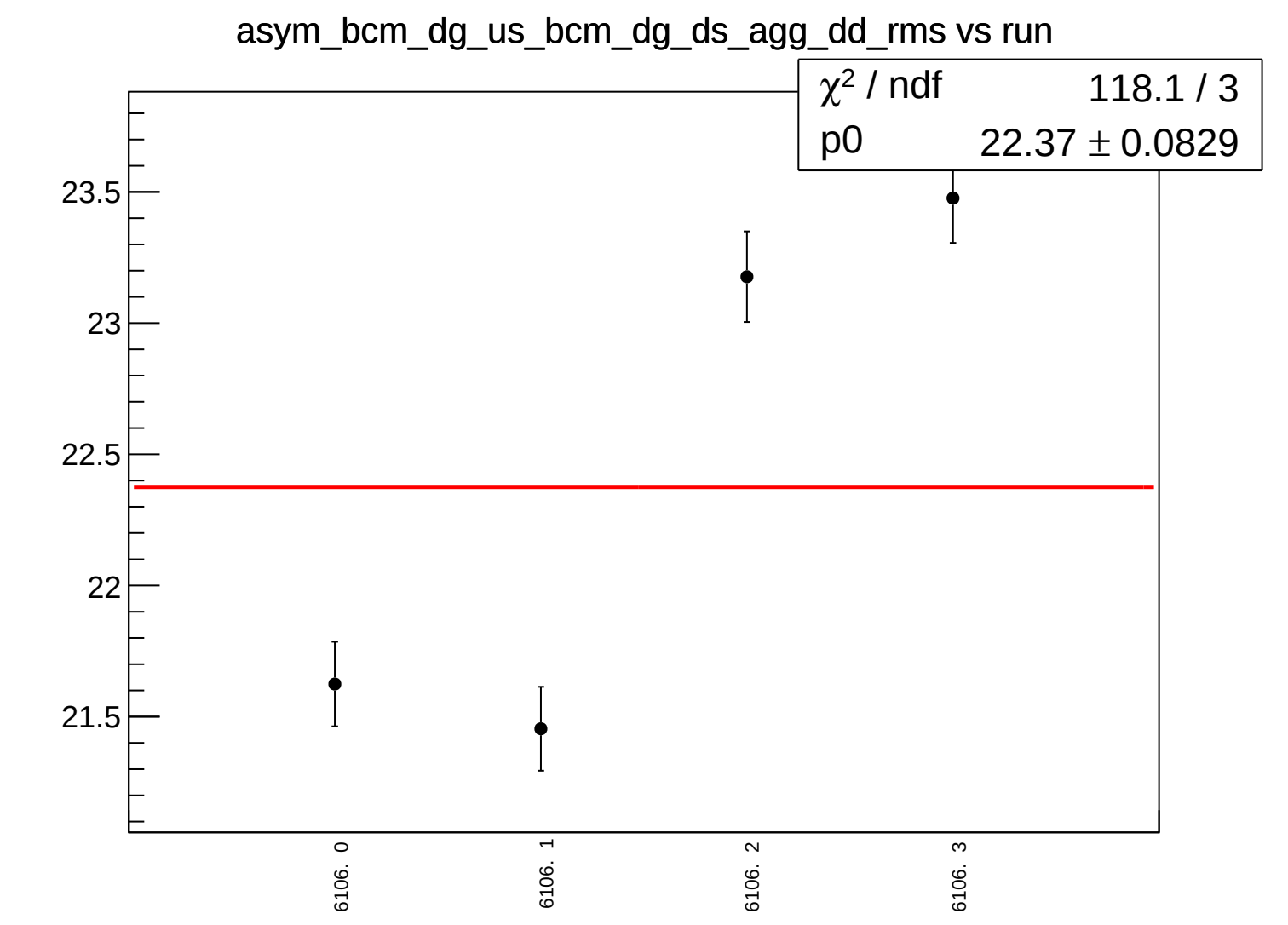

asym_bcm_dg_ds_bcm_an_us_agg_dd_rms vs run
χ² / ndf 69.1 / 3
p0 16.48 ± 0.06105
17.4
17.2
17
16.8
16.6
16.4
16.2
16
15.8
6106. 0
6106. 1
6106. 2
6106. 3

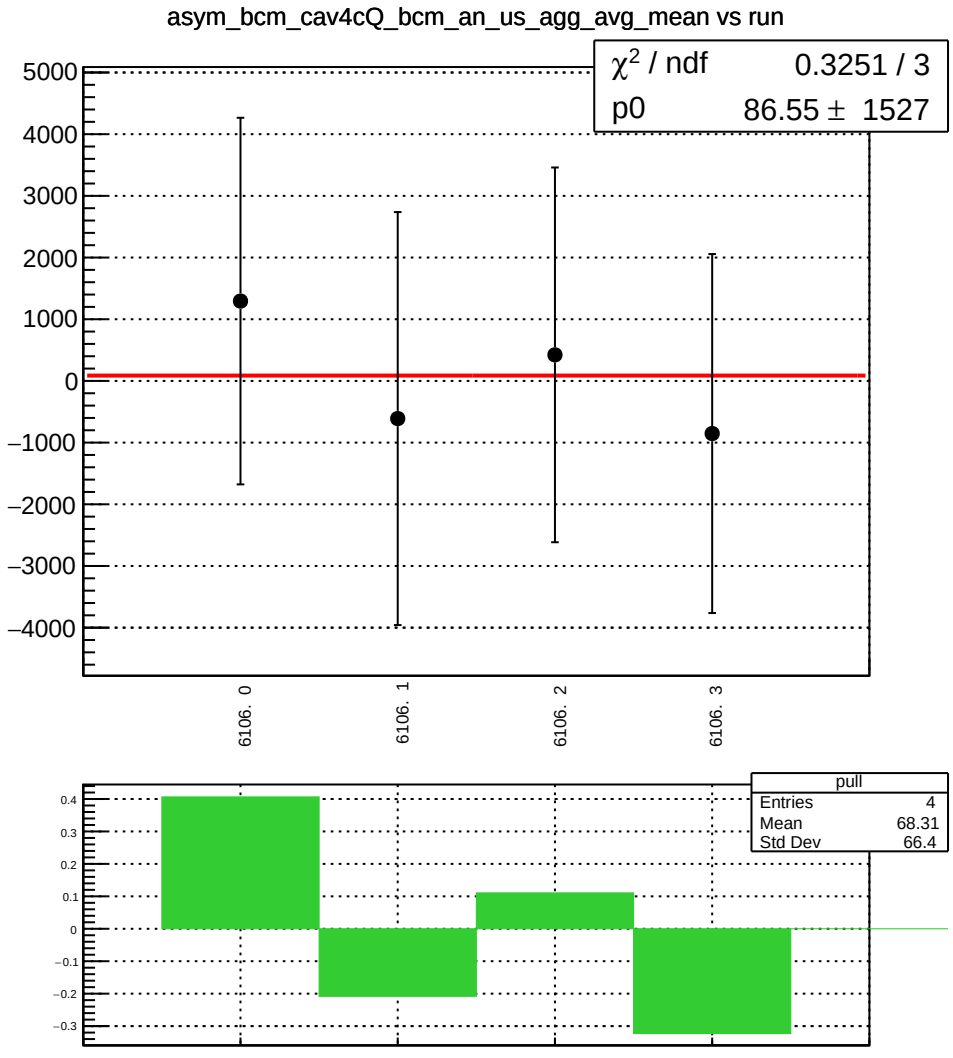

asym_bcm_dg_us_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 0.2929 / 3
p0 194 ± 1519
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −369.7
Std Dev 371.8
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
pull1D
Entries 4
Mean 0.0005635
Std Dev 0.2706
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

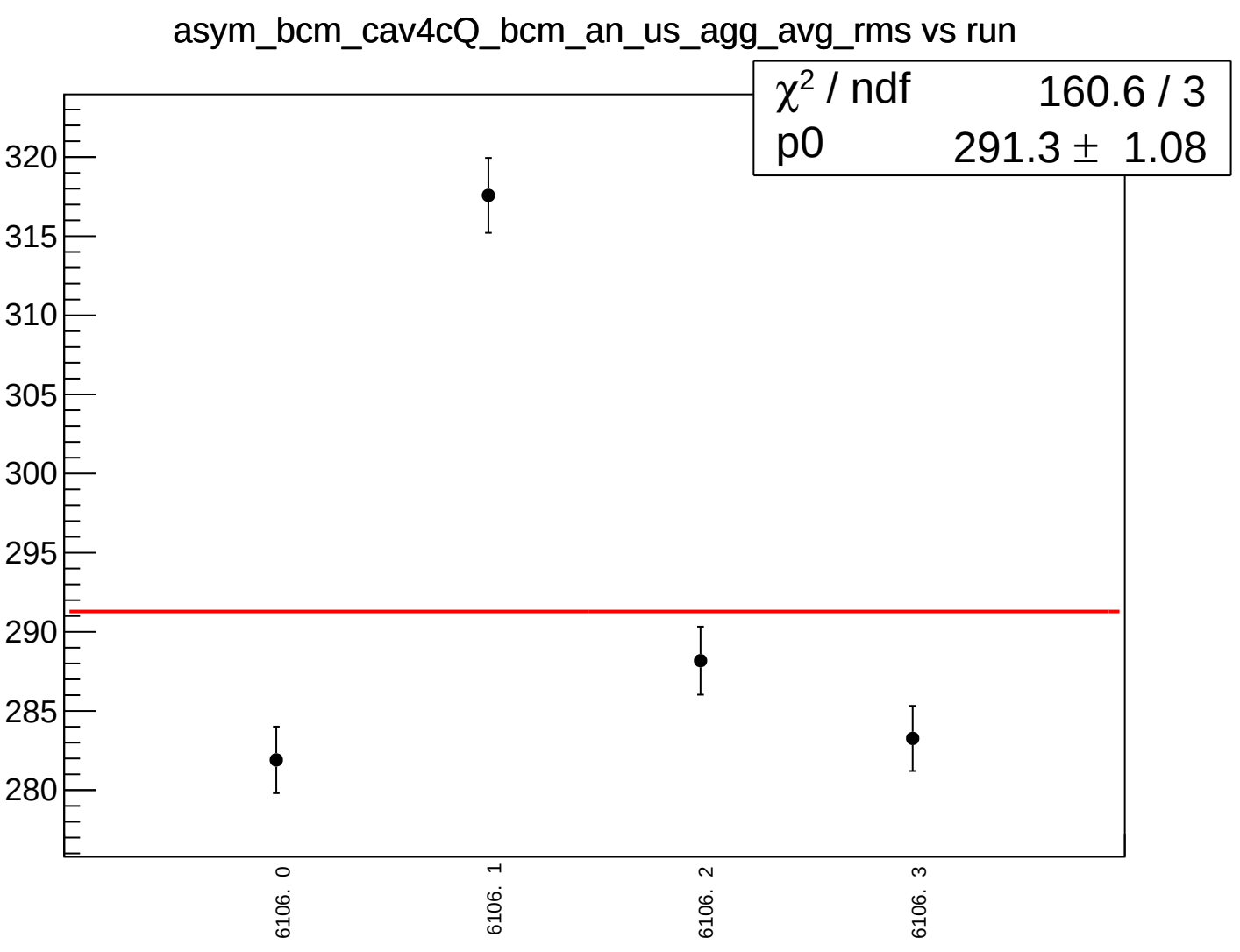

asym_bcm_dg_us_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 158.8 / 3
p0 289.7 ± 1.074
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

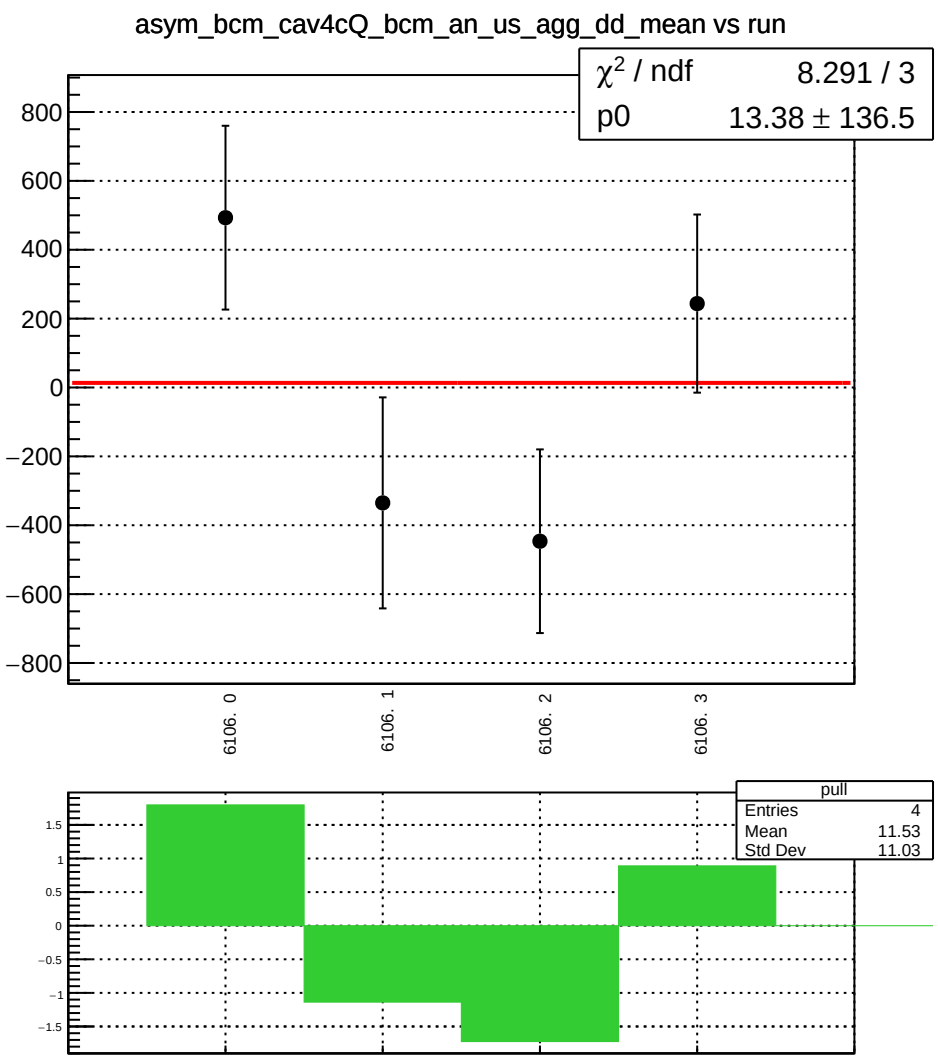

asym_bcm_dg_us_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 0.289 / 3
p0 11.56 ± 117.2
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −171.8
Std Dev 173.9
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

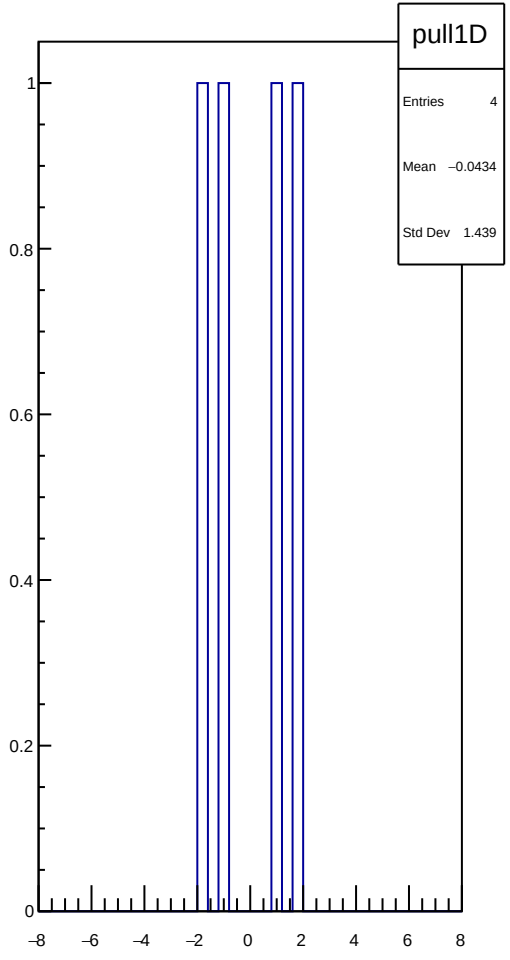

pull1D
Entries 4
Mean 0.0008558
Std Dev 0.2688
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

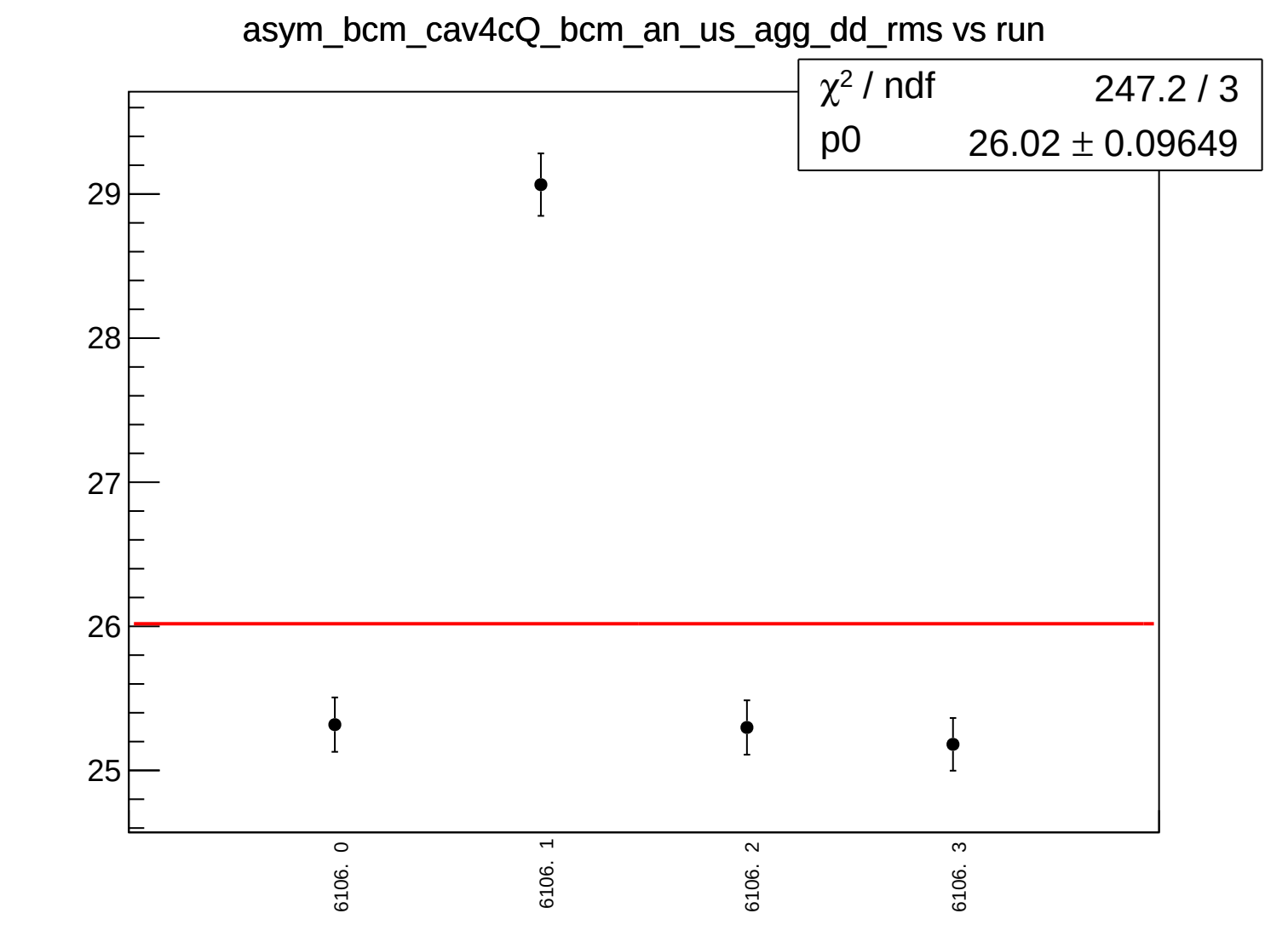

asym_bcm_dg_us_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 118.1 / 3
p0 22.37 ± 0.0829
23.5
23
22.5
22
21.5
6106. 0
6106. 1
6106. 2
6106. 3

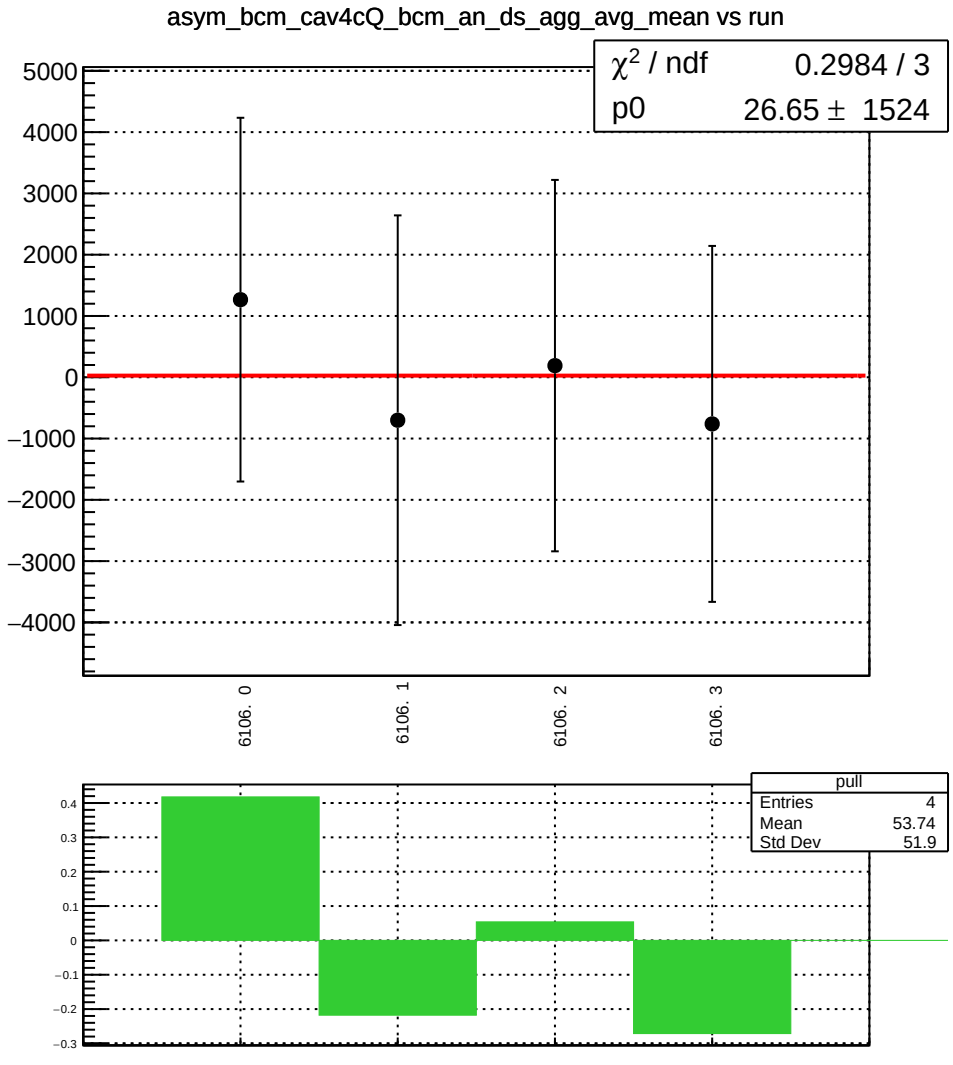

asym_bcm_cav4cQ_bcm_an_us_agg_avg_mean vs run
χ² / ndf 0.3251 / 3
p0 86.55 ± 1527
5000
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 68.31
Std Dev 66.4
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean −0.003524
Std Dev 0.2851
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

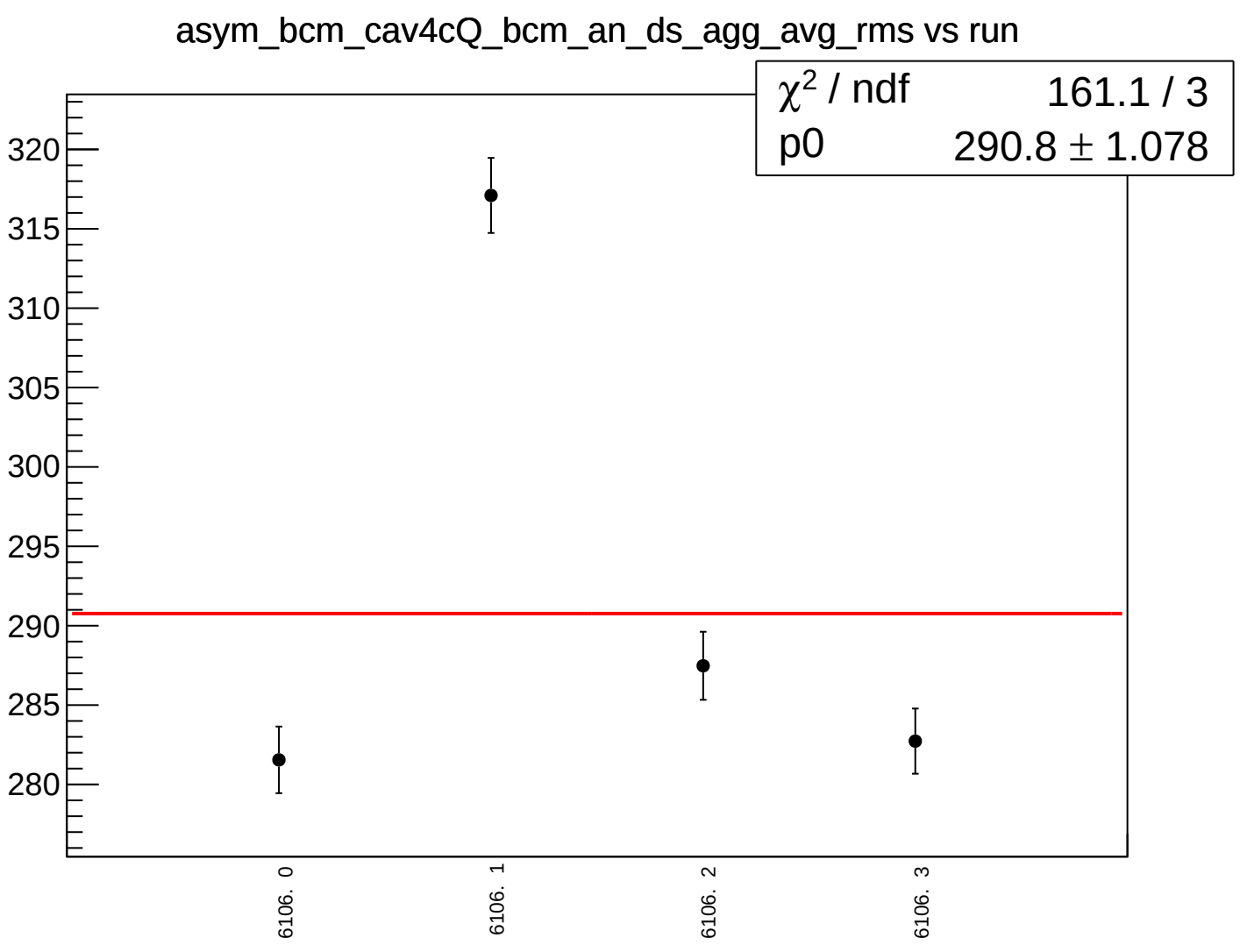

asym_bcm_cav4cQ_bcm_an_us_agg_avg_rms vs run
χ² / ndf 160.6 / 3
p0 291.3 ± 1.08
320
315
310
305
300
295
290
285
280
6106. 0
6106. 1
6106. 2
6106. 3

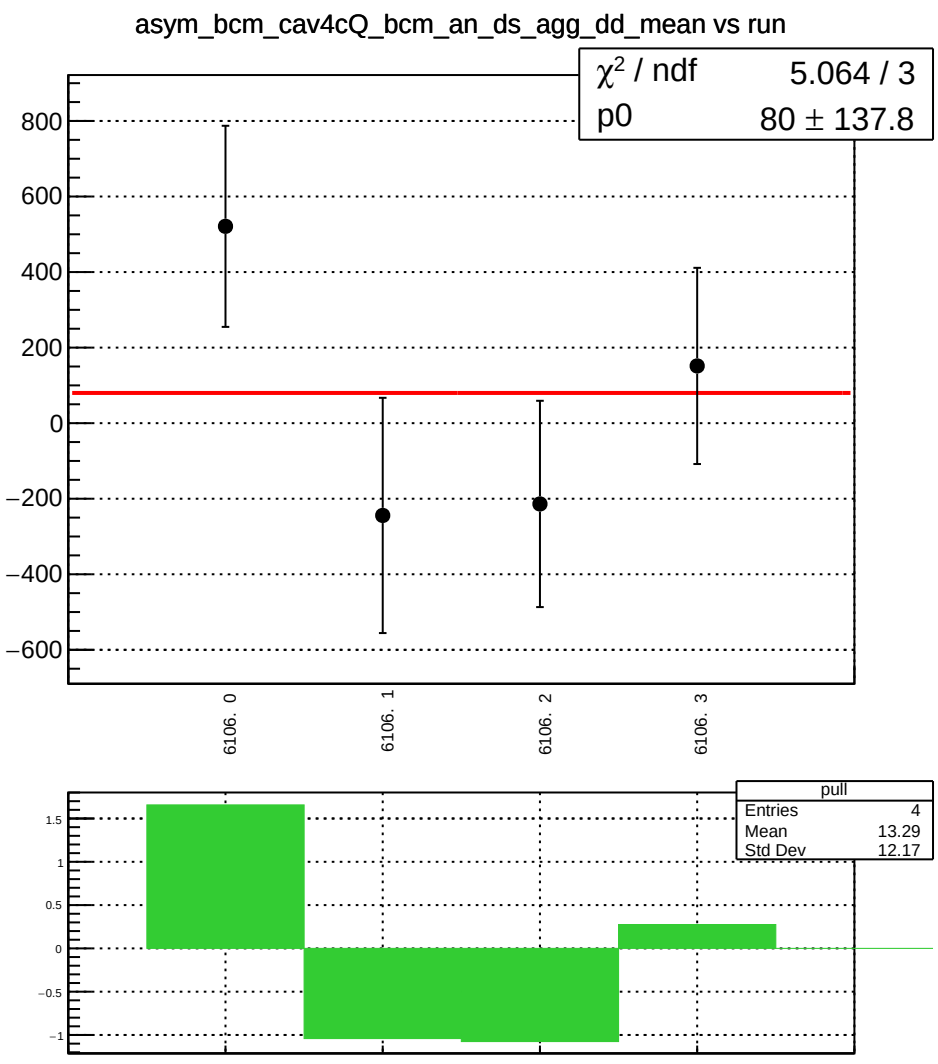

asym_bcm_cav4cQ_bcm_an_us_agg_dd_mean vs run
χ² / ndf 8.291 / 3
p0 13.38 ± 136.5
800
600
400
200
0
−200
−400
−600
−800
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 11.53
Std Dev 11.03
1.5
1
0.5
0
−0.5
−1
−1.5

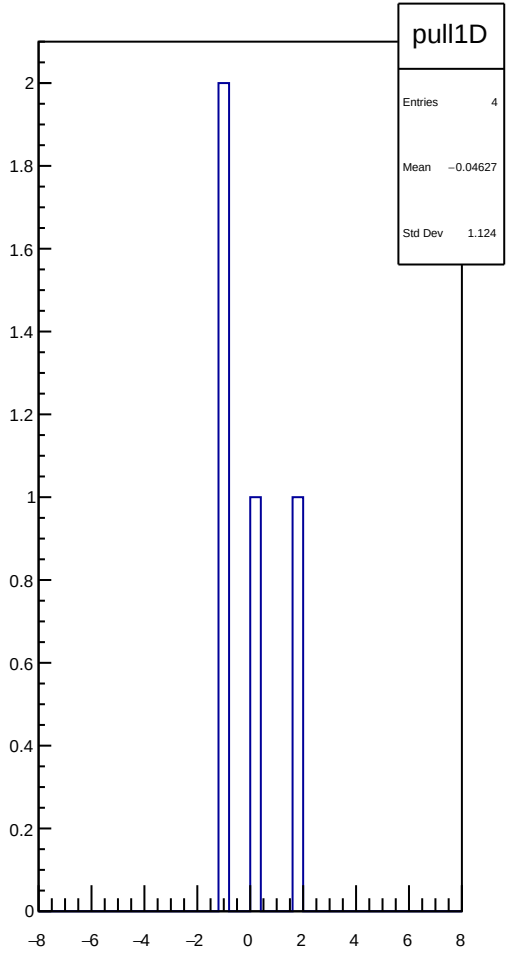

pull1D
Entries 4
Mean −0.0434
Std Dev 1.439
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

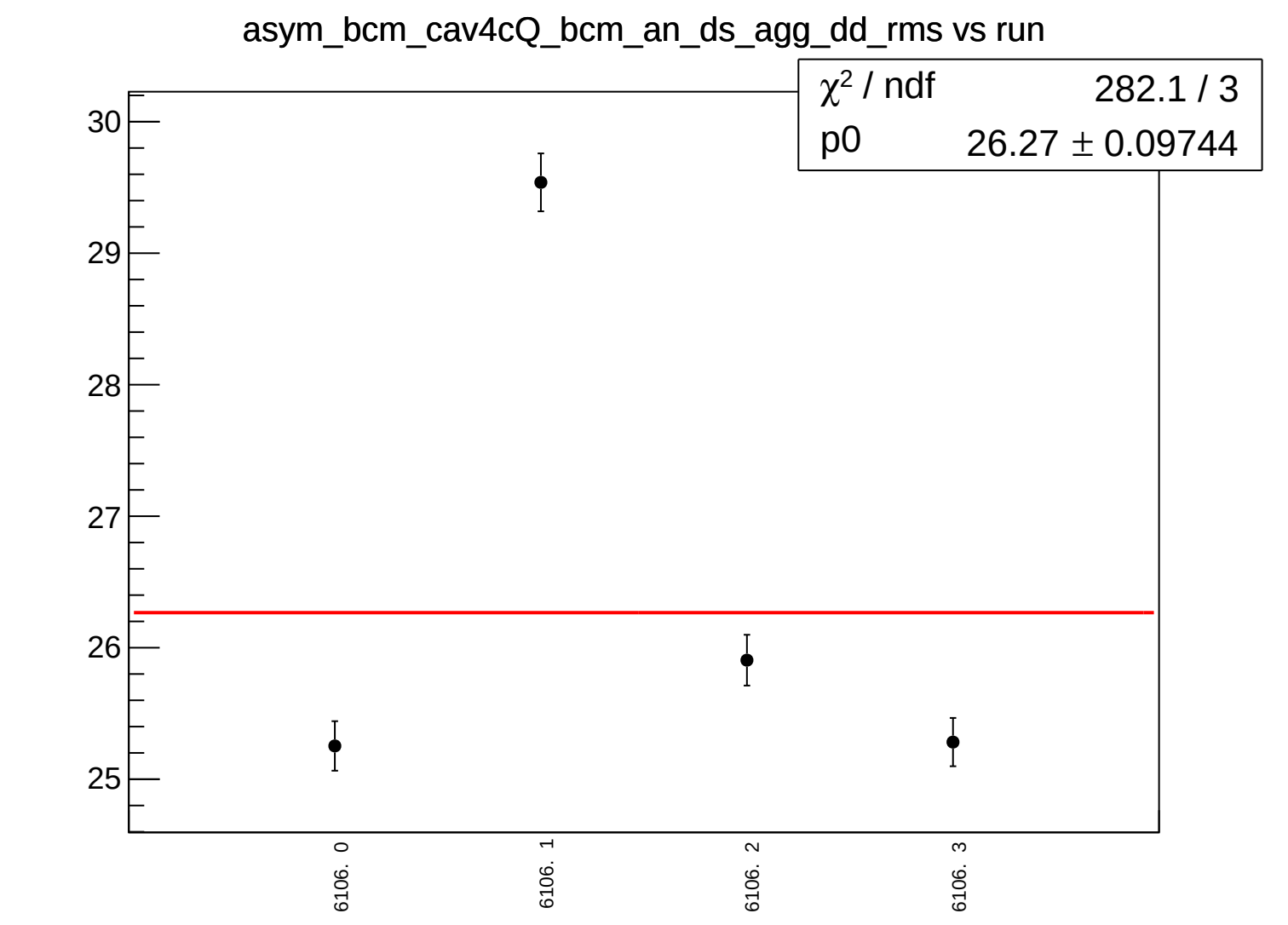

asym_bcm_cav4cQ_bcm_an_us_agg_dd_rms vs run
χ² / ndf 247.2 / 3
p0 26.02 ± 0.09649
29
28
27
26
25
6106. 0
6106. 1
6106. 2
6106. 3

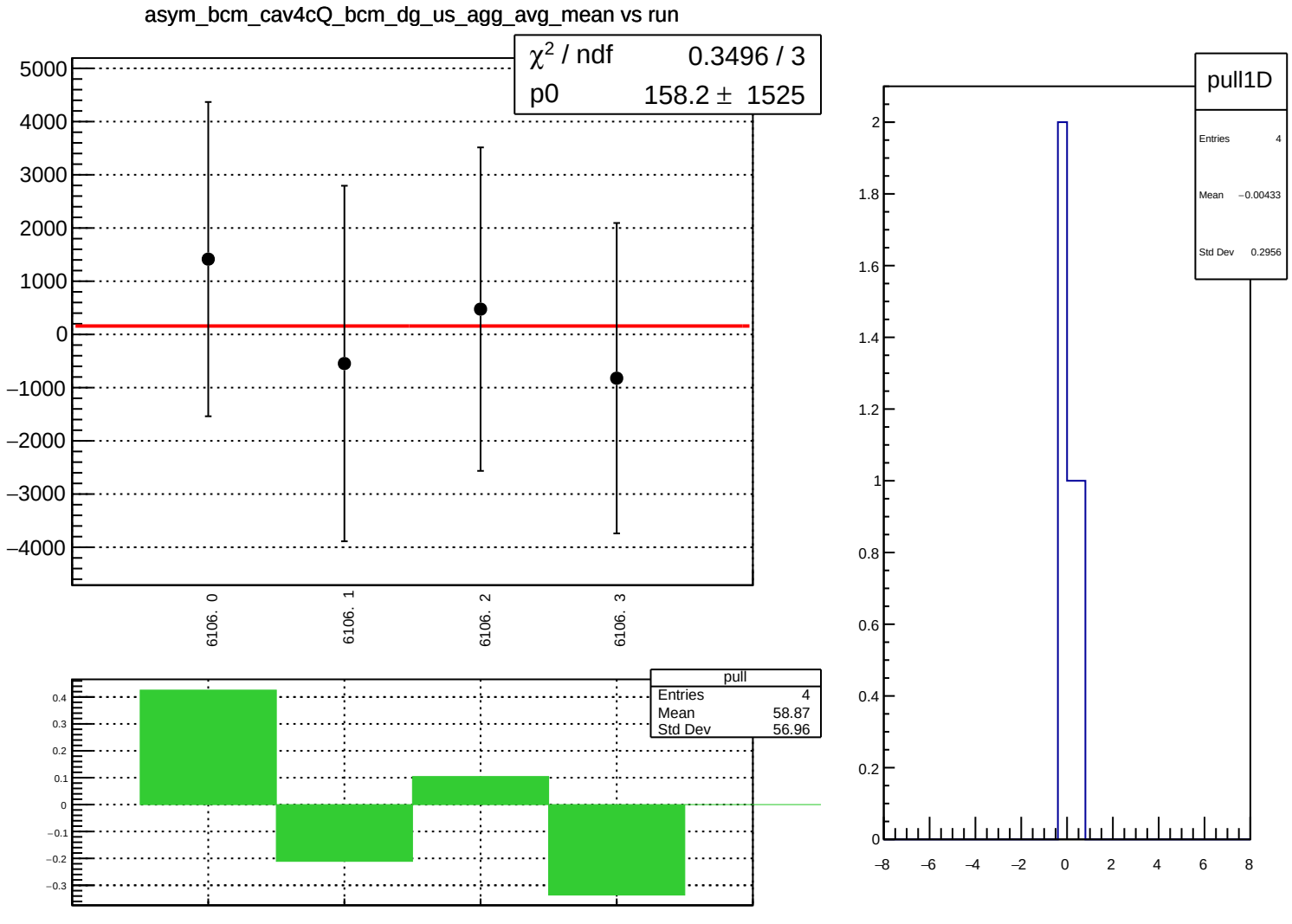

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_mean vs run
χ² / ndf 0.2984 / 3
p0 26.65 ± 1524
5000
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 53.74
Std Dev 51.9
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean −0.004338
Std Dev 0.2731
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

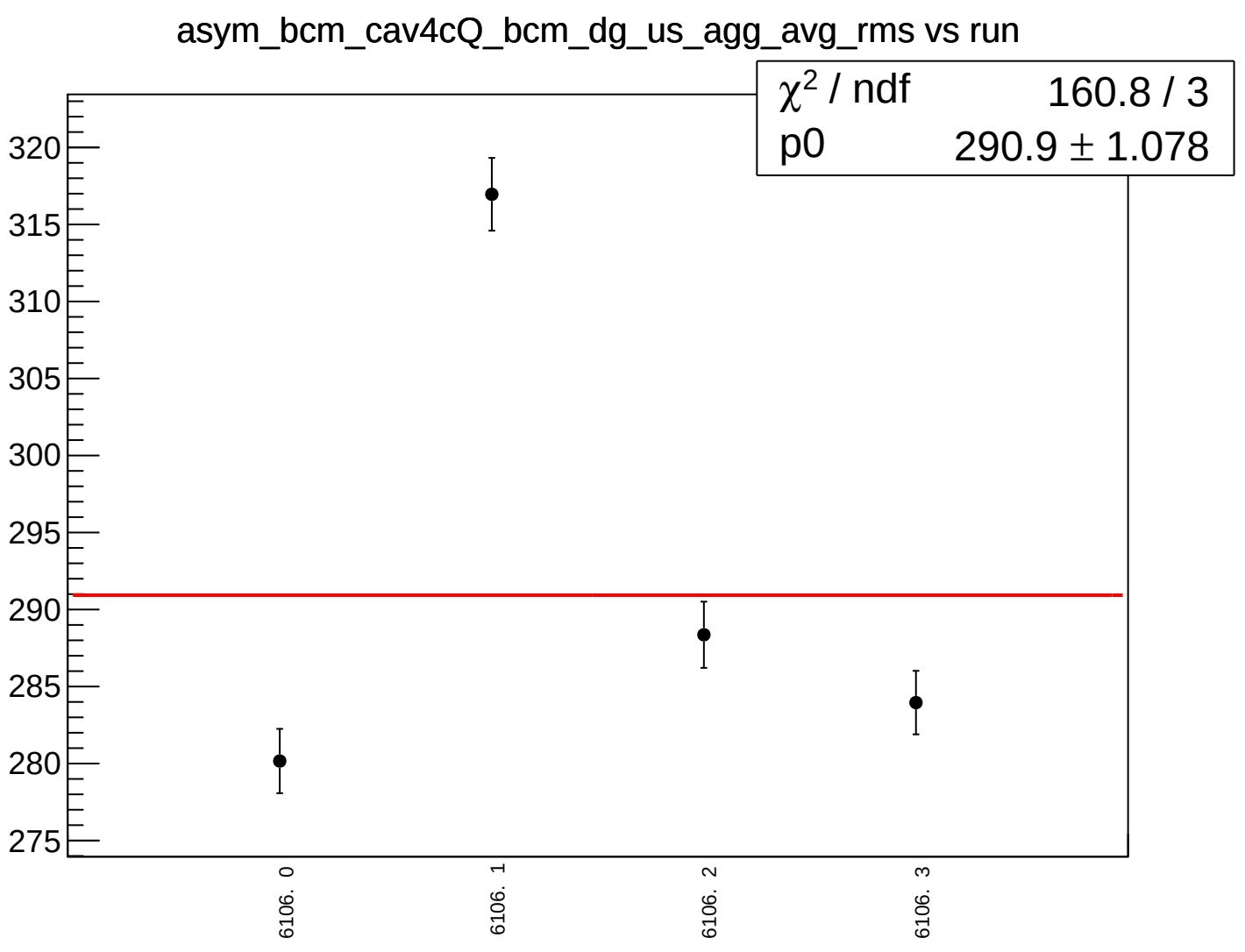

asym_bcm_cav4cQ_bcm_an_ds_agg_avg_rms vs run
χ² / ndf 161.1 / 3
p0 290.8 ± 1.078
320
315
310
305
300
295
290
285
280
6106. 0
6106. 1
6106. 2
6106. 3

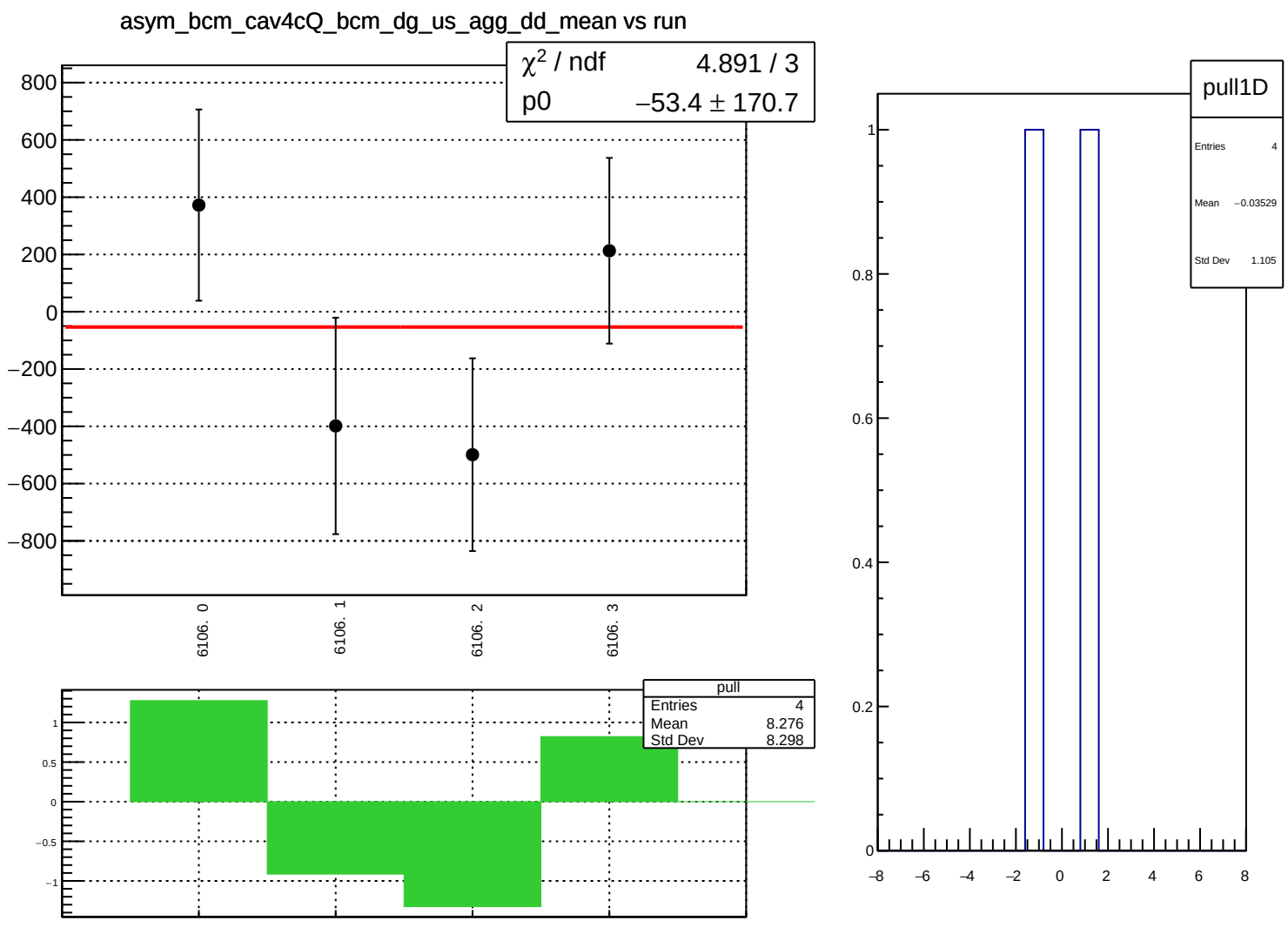

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_mean vs run
χ² / ndf 5.064 / 3
p0 80 ± 137.8
800
600
400
200
0
−200
−400
−600
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 13.29
Std Dev 12.17
1.5
1
0.5
0
−0.5
−1

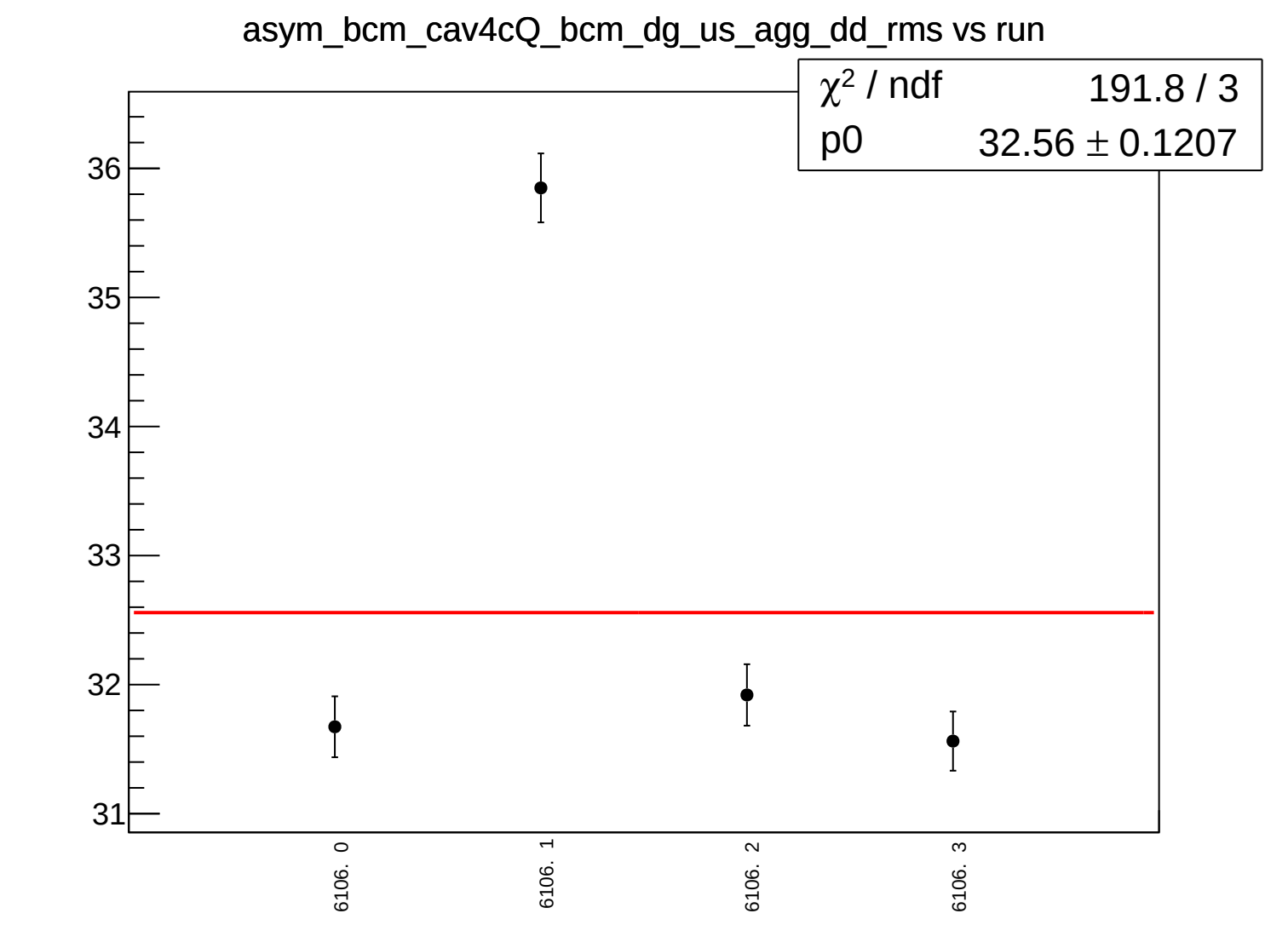

pull1D
Entries 4
Mean −0.04627
Std Dev 1.124
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

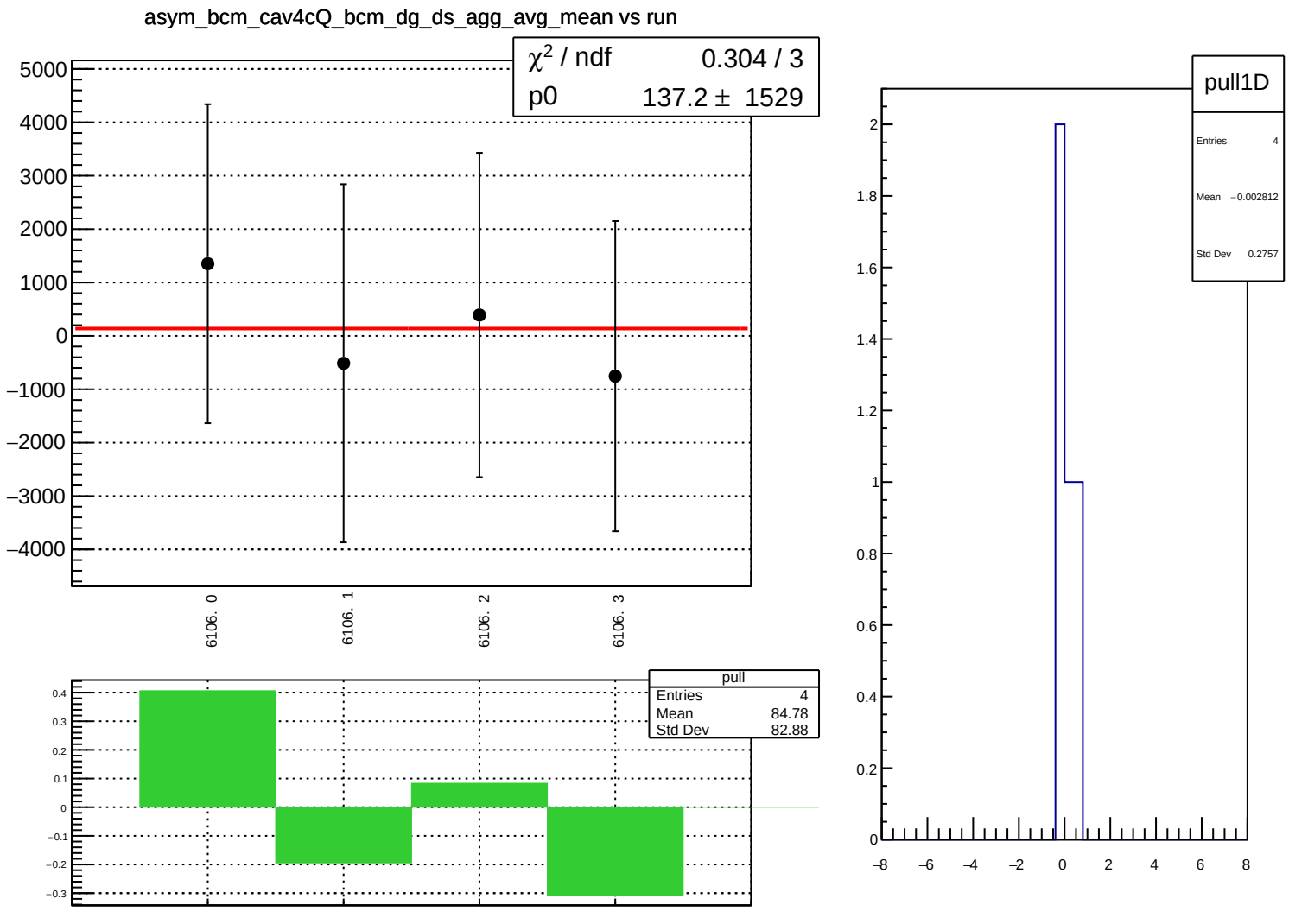

asym_bcm_cav4cQ_bcm_an_ds_agg_dd_rms vs run
χ² / ndf 282.1 / 3
p0 26.27 ± 0.09744
30
29
28
27
26
25
6106. 0
6106. 1
6106. 2
6106. 3

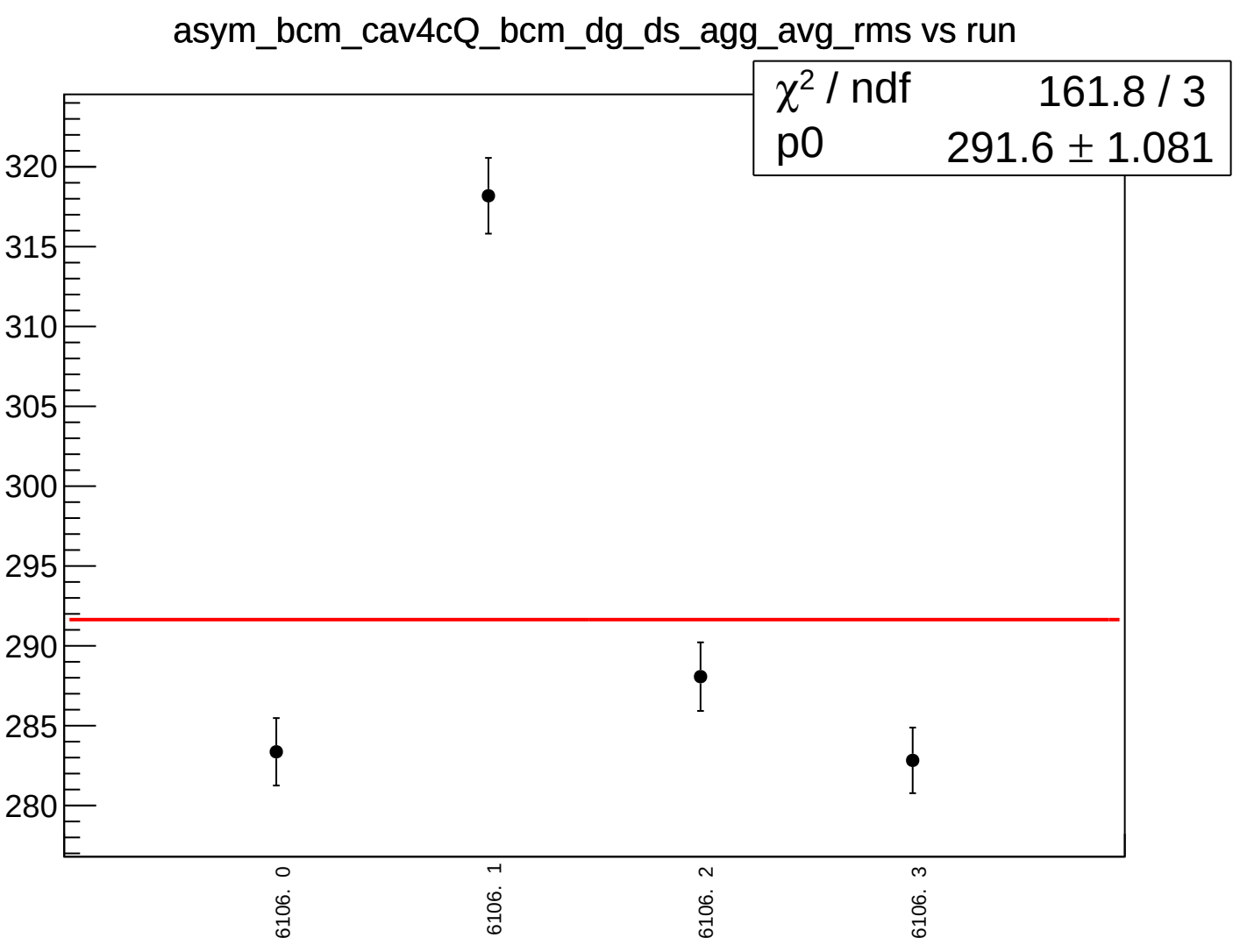

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_mean vs run
χ² / ndf 0.3496 / 3
p0 158.2 ± 1525
5000
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 58.87
Std Dev 56.96
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean −0.00433
Std Dev 0.2956
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

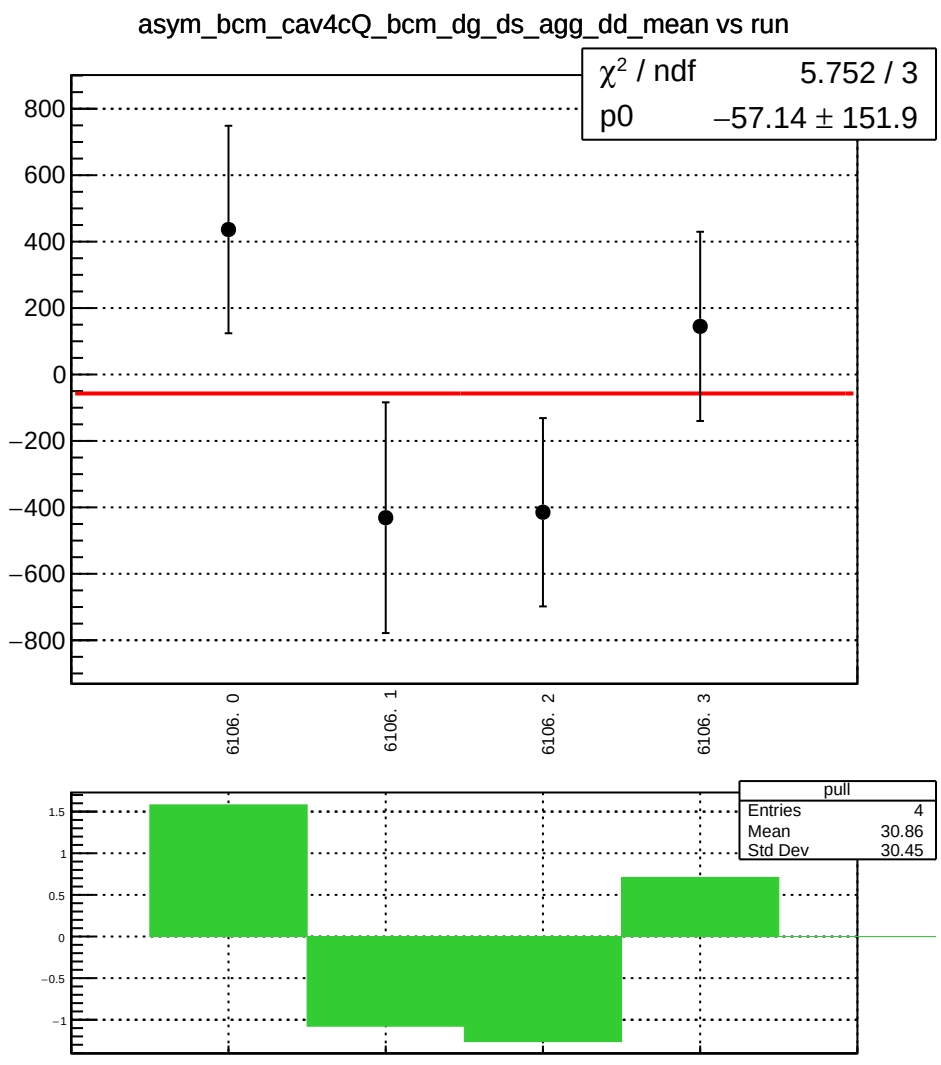

asym_bcm_cav4cQ_bcm_dg_us_agg_avg_rms vs run
χ² / ndf 160.8 / 3
p0 290.9 ± 1.078
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

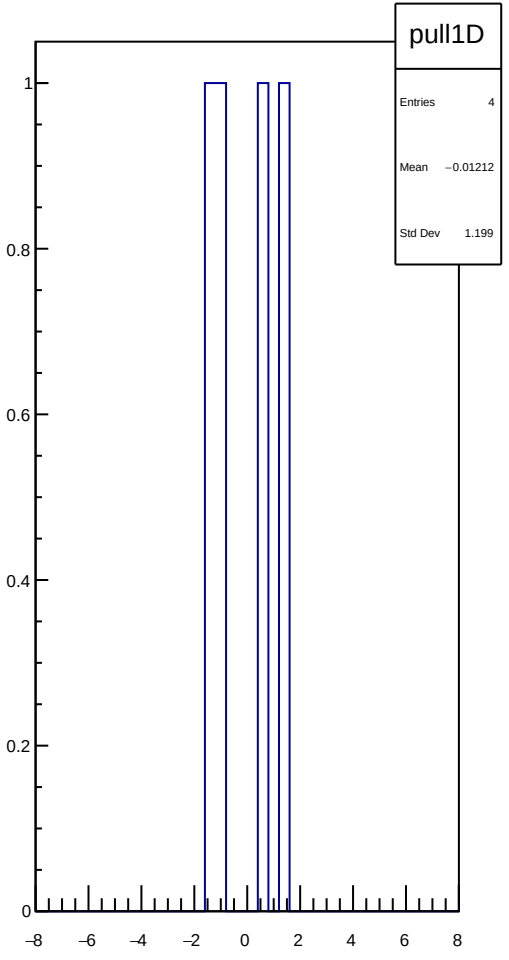

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_mean vs run
χ² / ndf 4.891 / 3
p0 −53.4 ± 170.7
800
600
400
200
0
−200
−400
−600
−800
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 8.276
Std Dev 8.298
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.03529
Std Dev 1.105
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

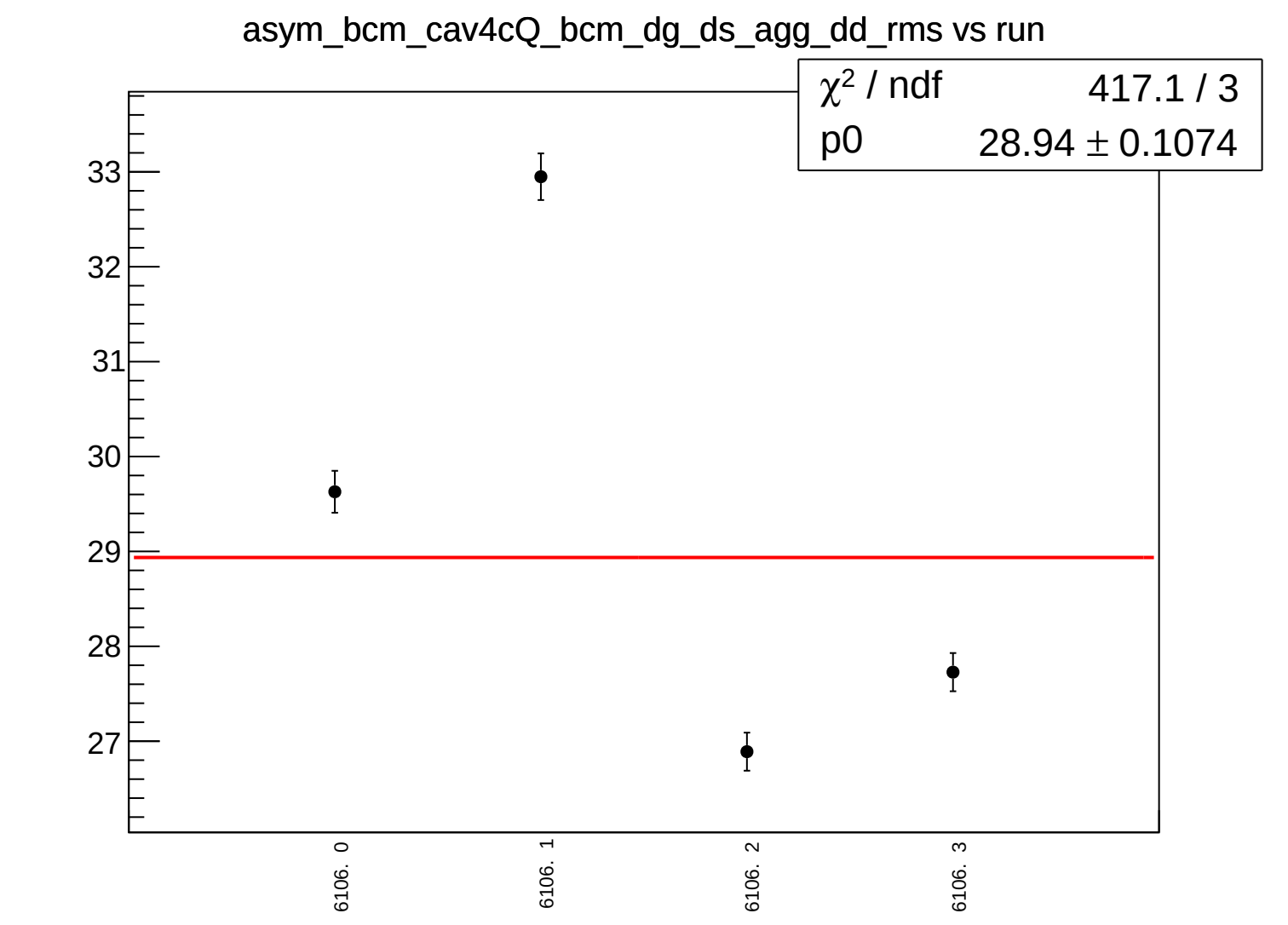

asym_bcm_cav4cQ_bcm_dg_us_agg_dd_rms vs run
χ² / ndf 191.8 / 3
p0 32.56 ± 0.1207
36
35
34
33
32
31
6106. 0
6106. 1
6106. 2
6106. 3

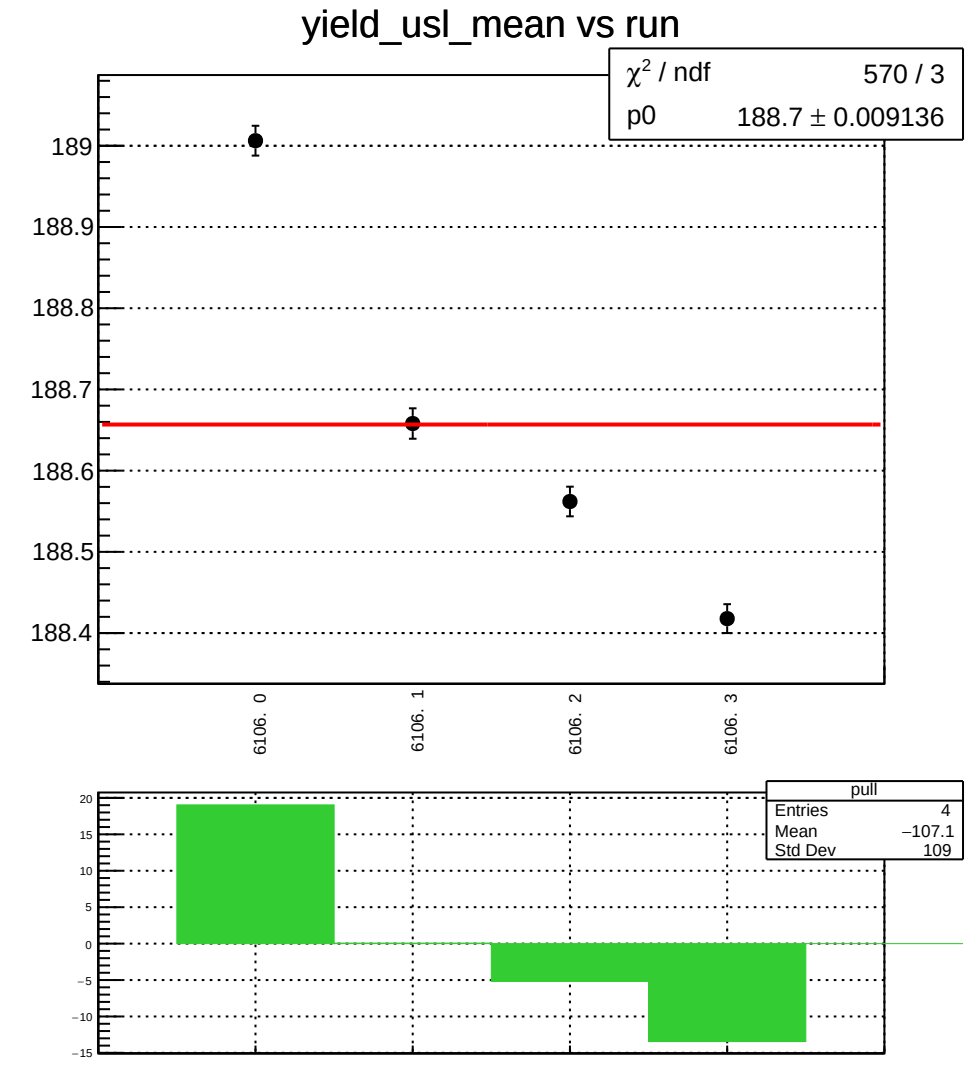

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_mean vs run
χ² / ndf 0.304 / 3
p0 137.2 ± 1529
5000
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 84.78
Std Dev 82.88
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean −0.002812
Std Dev 0.2757
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

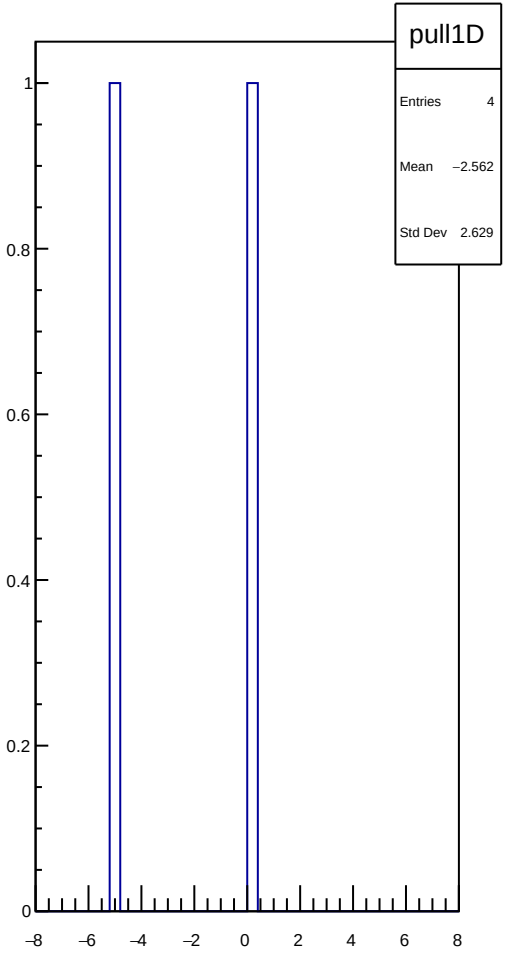

asym_bcm_cav4cQ_bcm_dg_ds_agg_avg_rms vs run
χ² / ndf 161.8 / 3
p0 291.6 ± 1.081
320
315
310
305
300
295
290
285
280
6106. 0
6106. 1
6106. 2
6106. 3

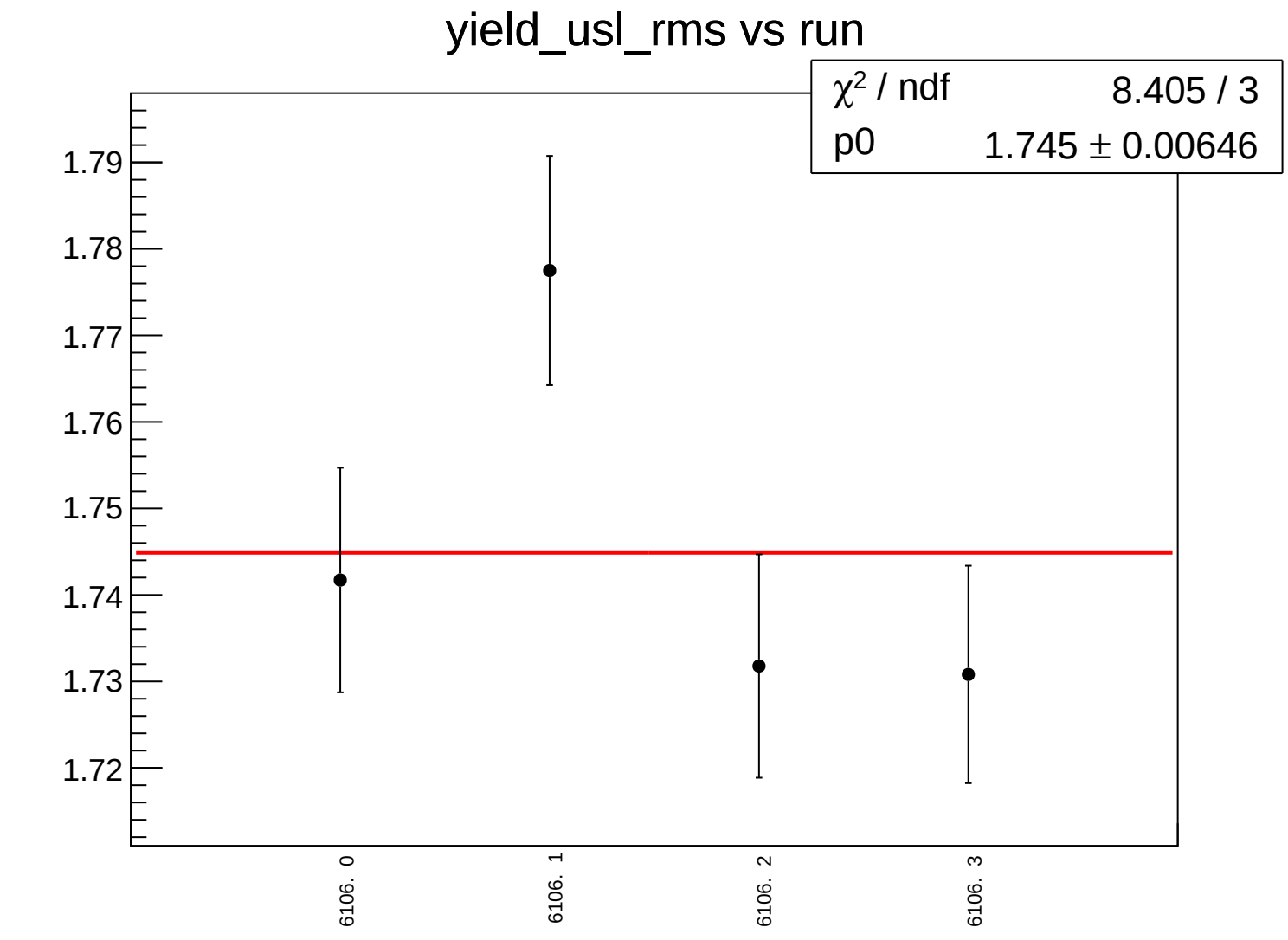

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_mean vs run
χ² / ndf 5.752 / 3
p0 −57.14 ± 151.9
800
600
400
200
0
−200
−400
−600
−800
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 30.86
Std Dev 30.45
1.5
1
0.5
0
−0.5
−1

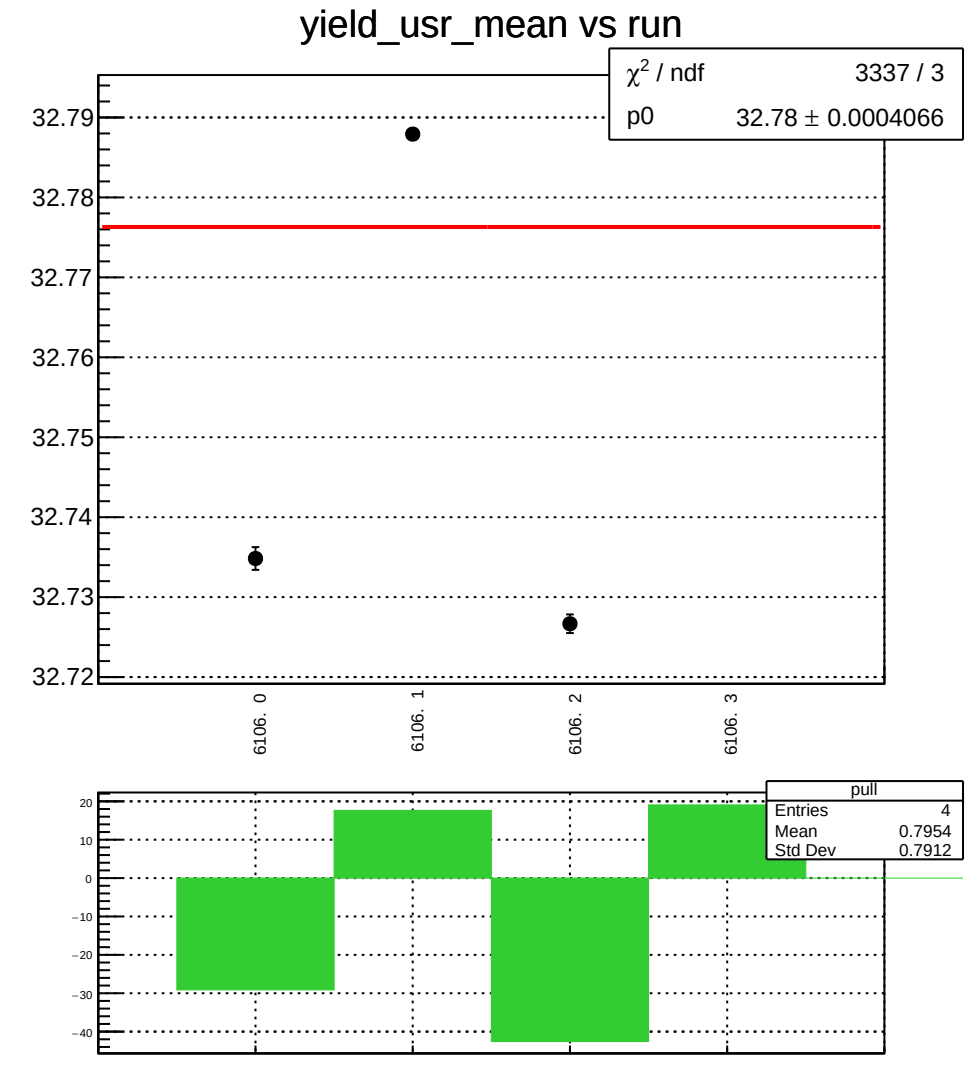

pull1D
Entries 4
Mean −0.01212
Std Dev 1.199
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

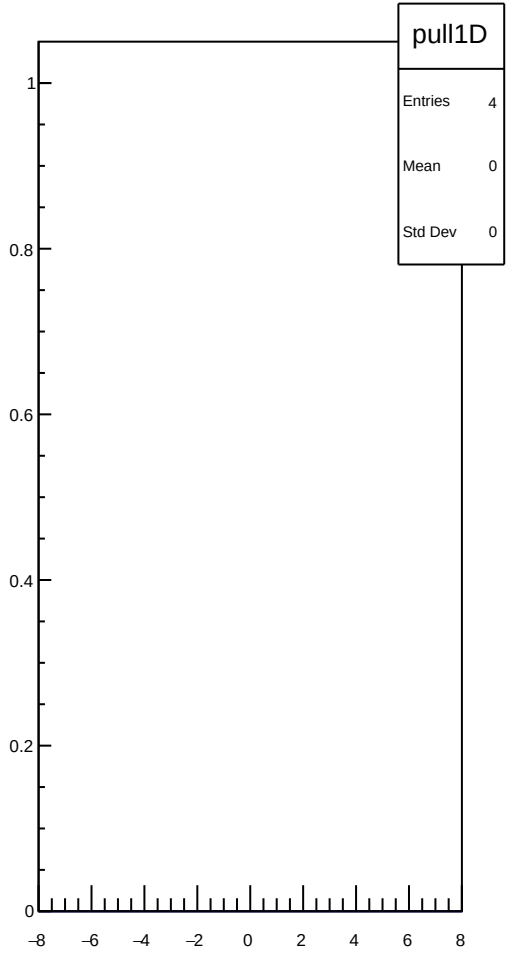

asym_bcm_cav4cQ_bcm_dg_ds_agg_dd_rms vs run
χ² / ndf 417.1 / 3
p0 28.94 ± 0.1074
33
32
31
30
29
28
27
6106. 0
6106. 1
6106. 2
6106. 3

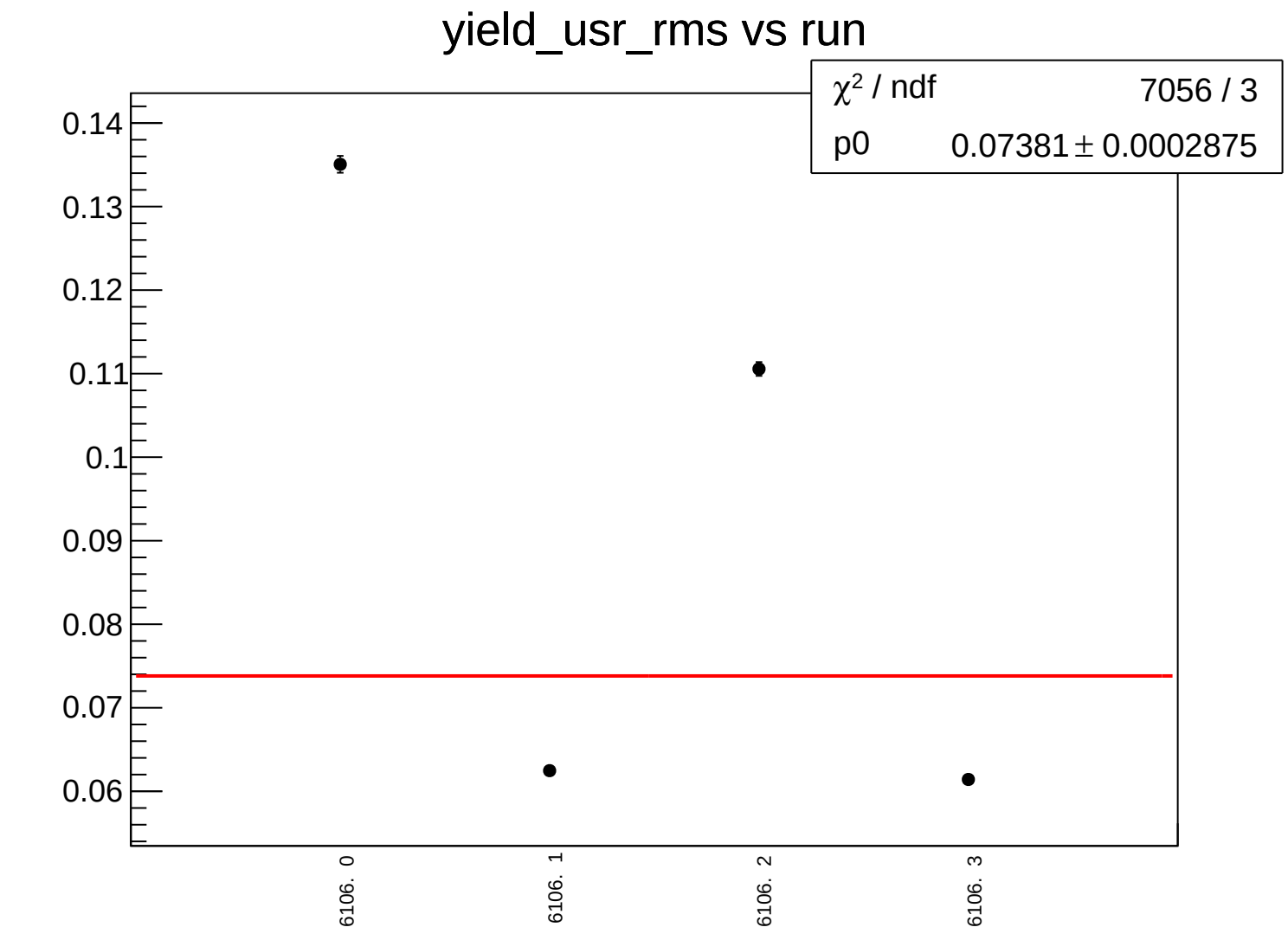

yield_usl_mean vs run
χ² / ndf 570 / 3
p0 188.7 ± 0.009136
189
188.9
188.8
188.7
188.6
188.5
188.4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −107.1
Std Dev 109
20
15
10
5
0
−5
−10
−15

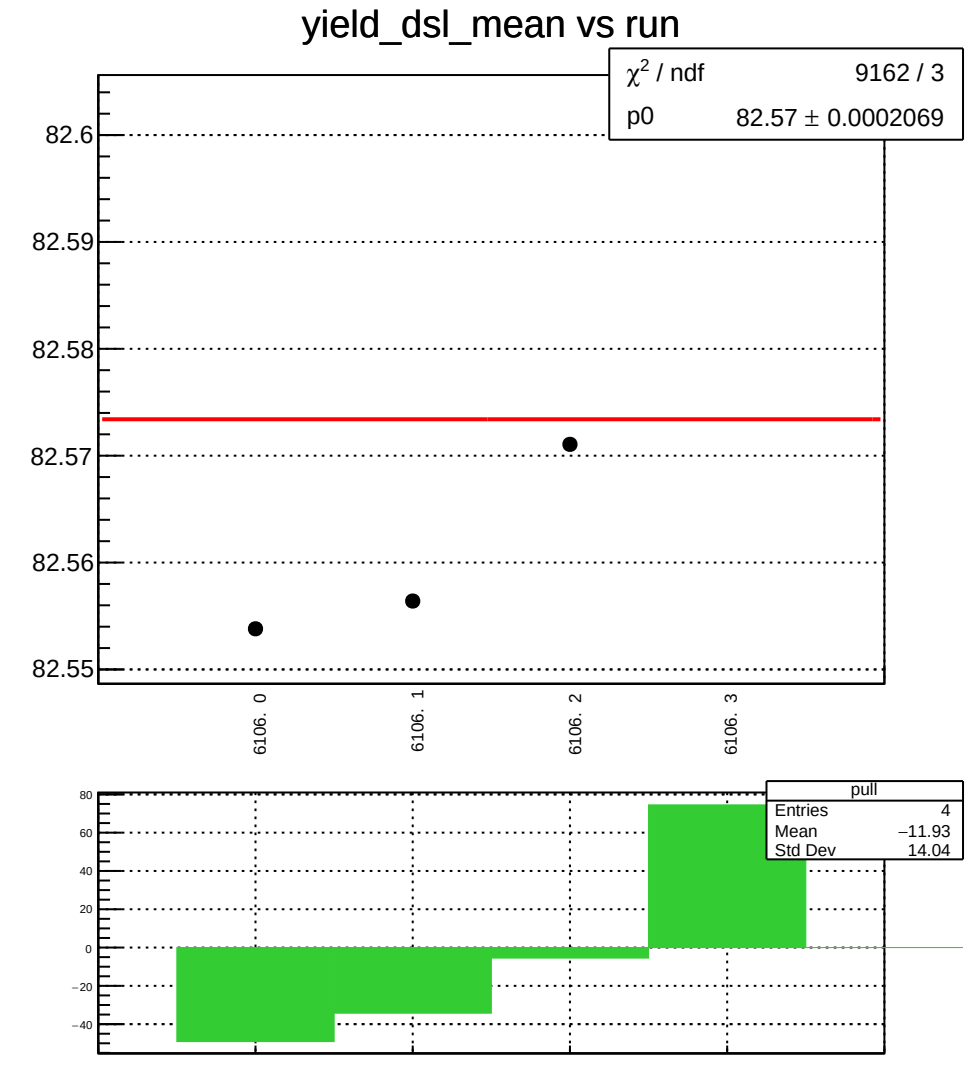

pull1D
Entries 4
Mean −2.562
Std Dev 2.629
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

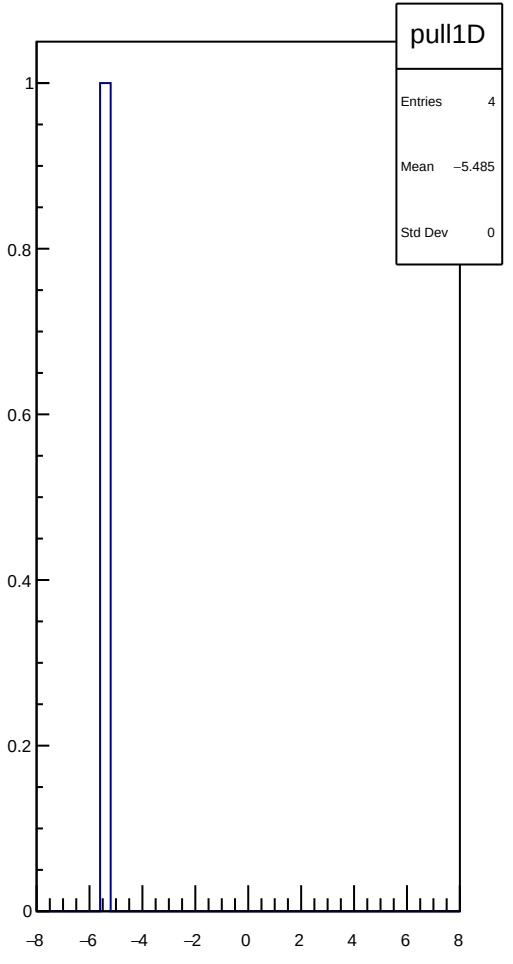

yield_usl_rms vs run
χ² / ndf 8.405 / 3
p0 1.745 ± 0.00646
1.79
1.78
1.77
1.76
1.75
1.74
1.73
1.72
6106. 0
6106. 1
6106. 2
6106. 3

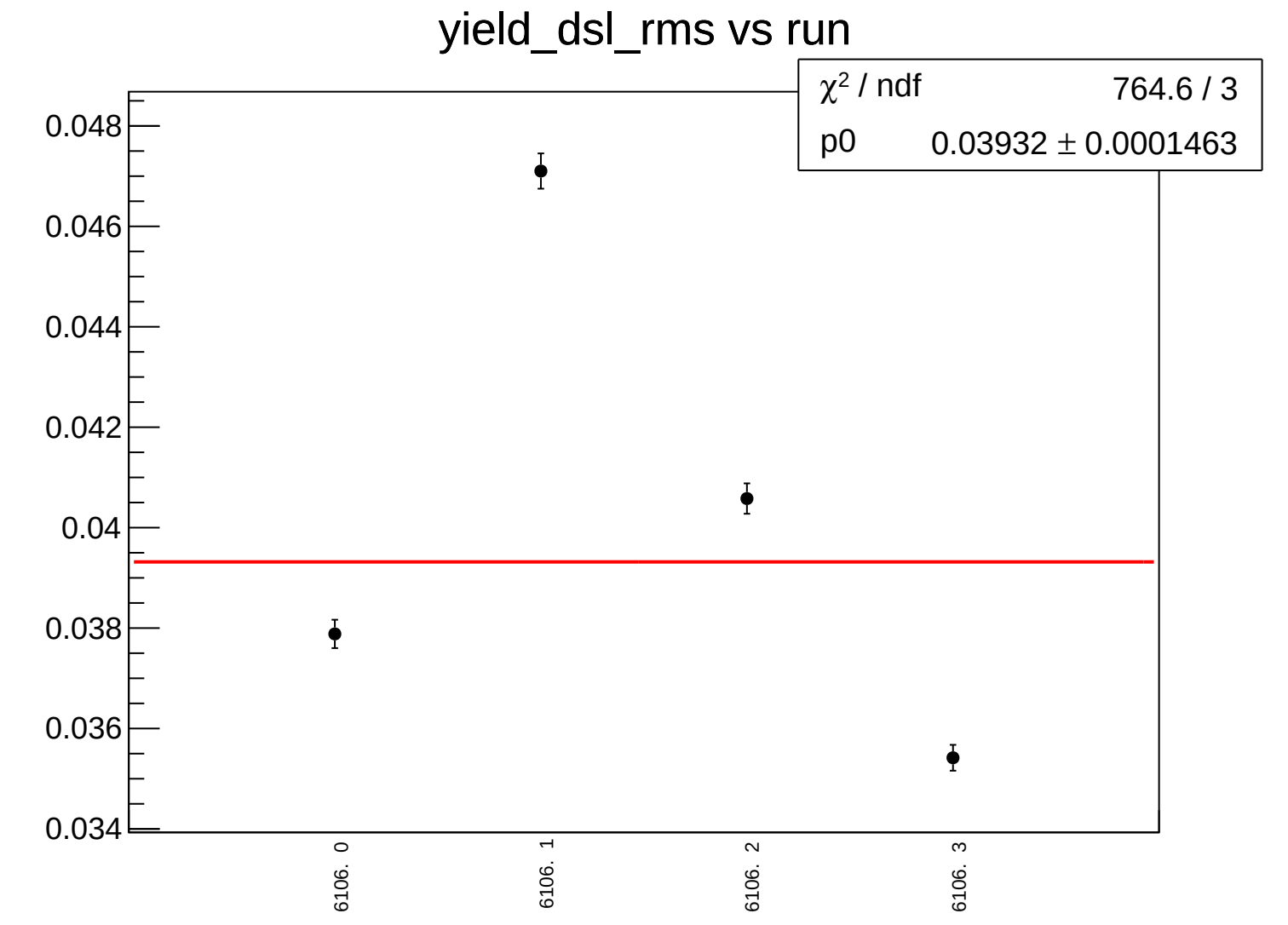

yield_usr_mean vs run
χ² / ndf 3337 / 3
p0 32.78 ± 0.0004066
32.79
32.78
32.77
32.76
32.75
32.74
32.73
32.72
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.7954
Std Dev 0.7912
20
10
0
−10
−20
−30
−40

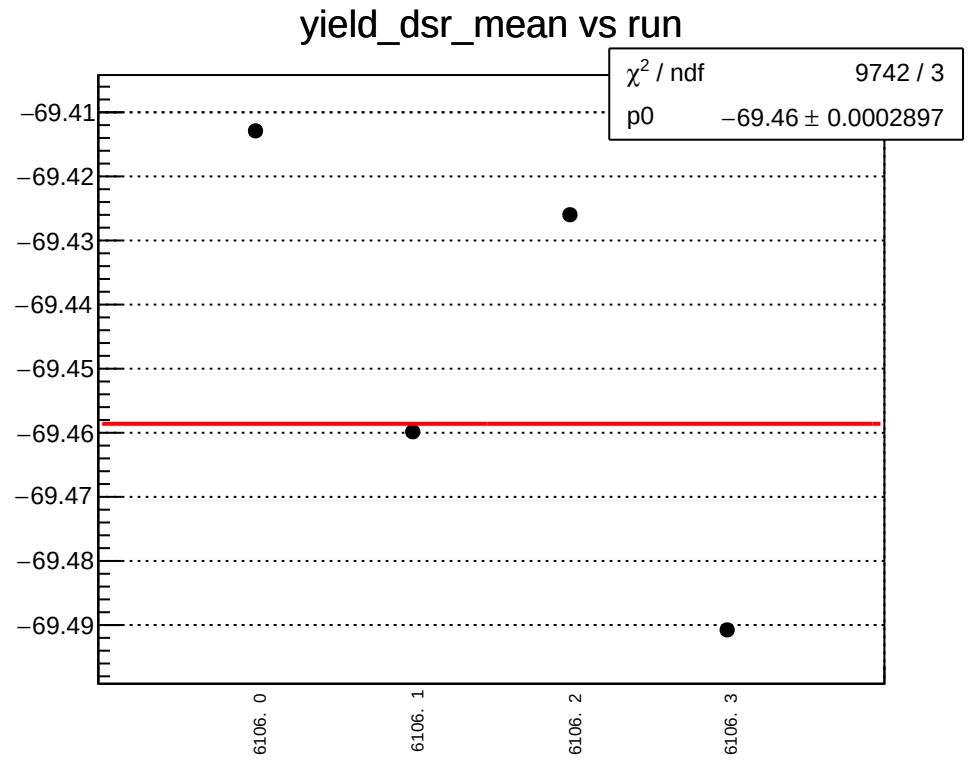

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

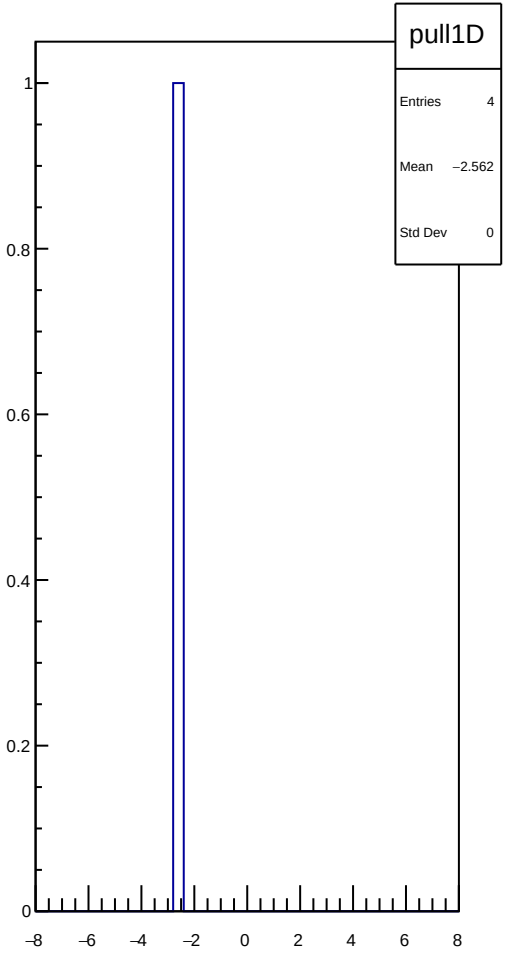

yield_usr_rms vs run
χ² / ndf 7056 / 3
p0 0.07381 ± 0.0002875
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
6106. 0
6106. 1
6106. 2
6106. 3

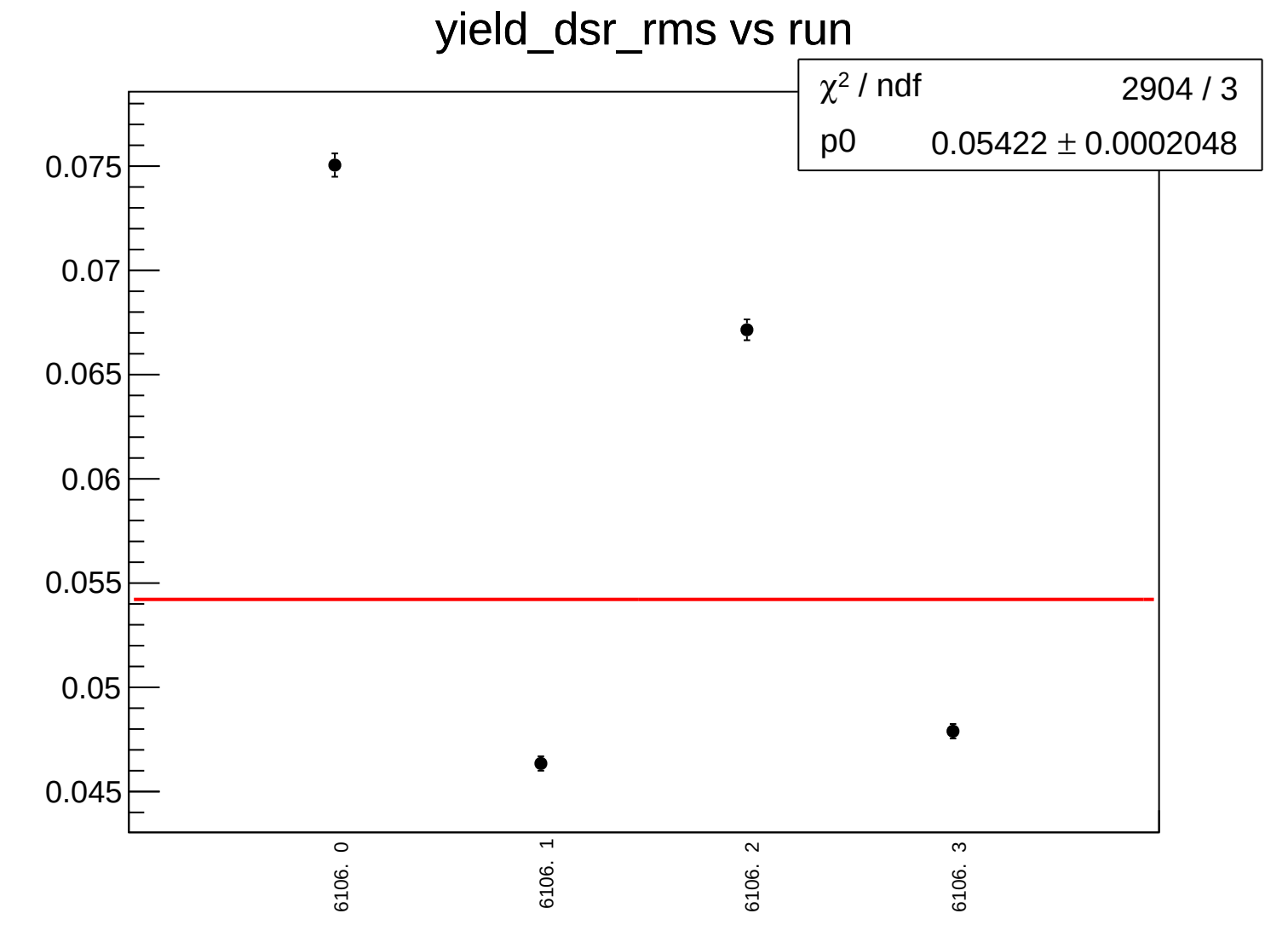

yield_dsl_mean vs run
χ² / ndf 9162 / 3
p0 82.57 ± 0.0002069
82.6
82.59
82.58
82.57
82.56
82.55
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −11.93
Std Dev 14.04
80
60
40
20
0
−20
−40

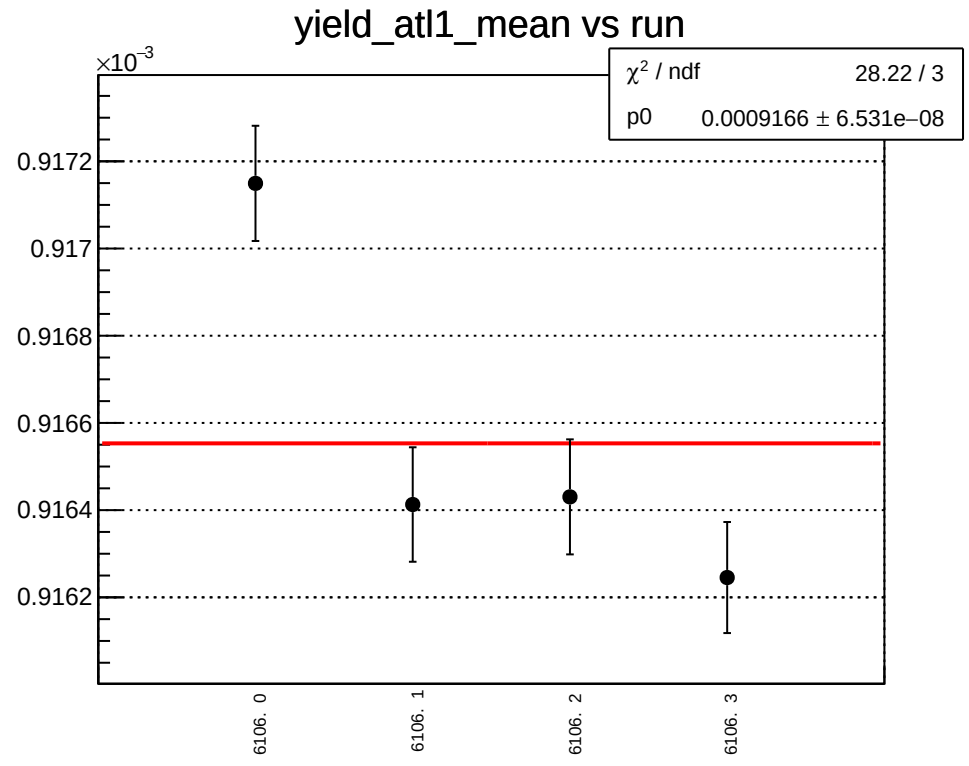

pull1D
Entries 4
Mean −5.485
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

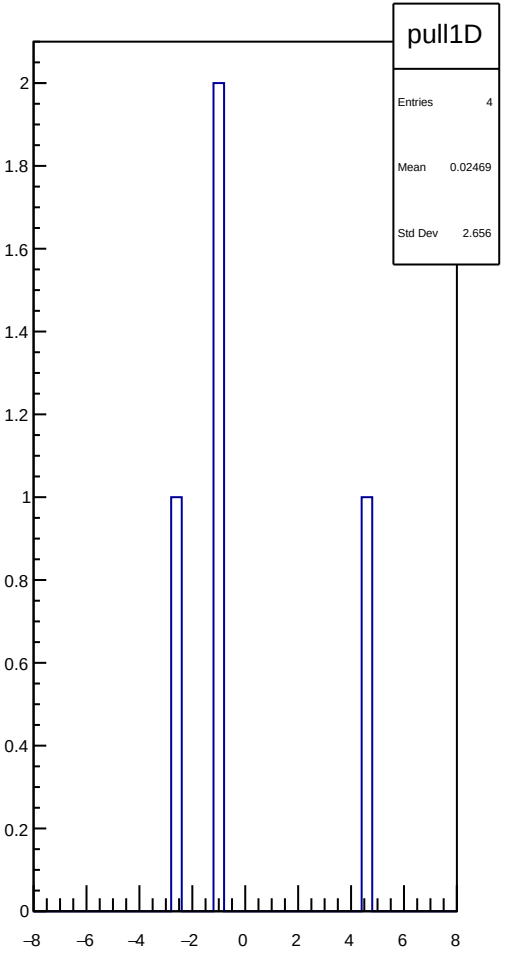

yield_dsl_rms vs run
χ² / ndf 764.6 / 3
p0 0.03932 ± 0.0001463
0.048
0.046
0.044
0.042
0.04
0.038
0.036
0.034
6106. 0
6106. 1
6106. 2
6106. 3

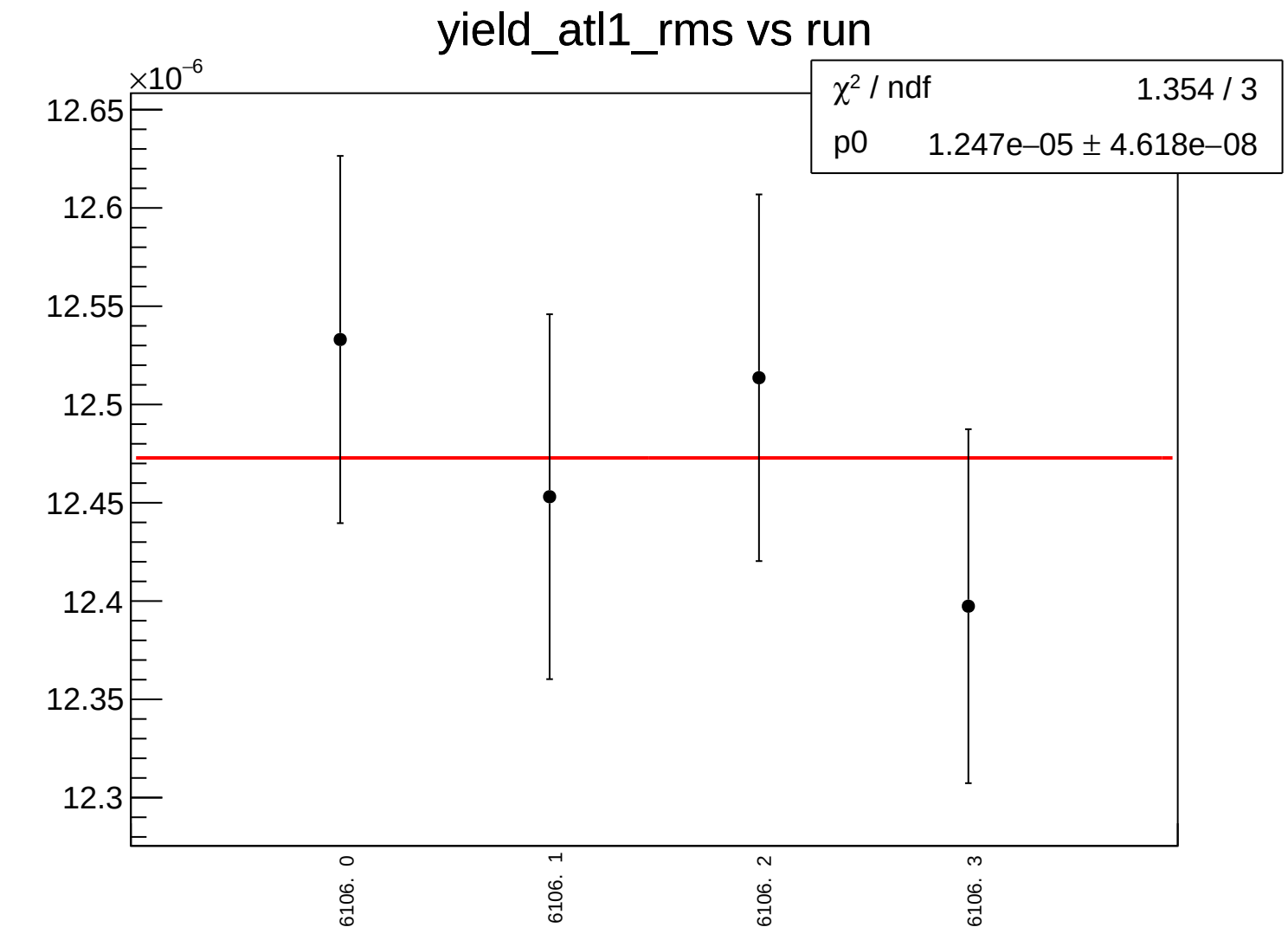

yield_dsr_mean vs run
χ² / ndf 9742 / 3
p0 −69.46 ± 0.0002897
−69.41
−69.42
−69.43
−69.44
−69.45
−69.46
−69.47
−69.48
−69.49
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.466
Std Dev 4.485
60
40
20
0
−20
−40
−60

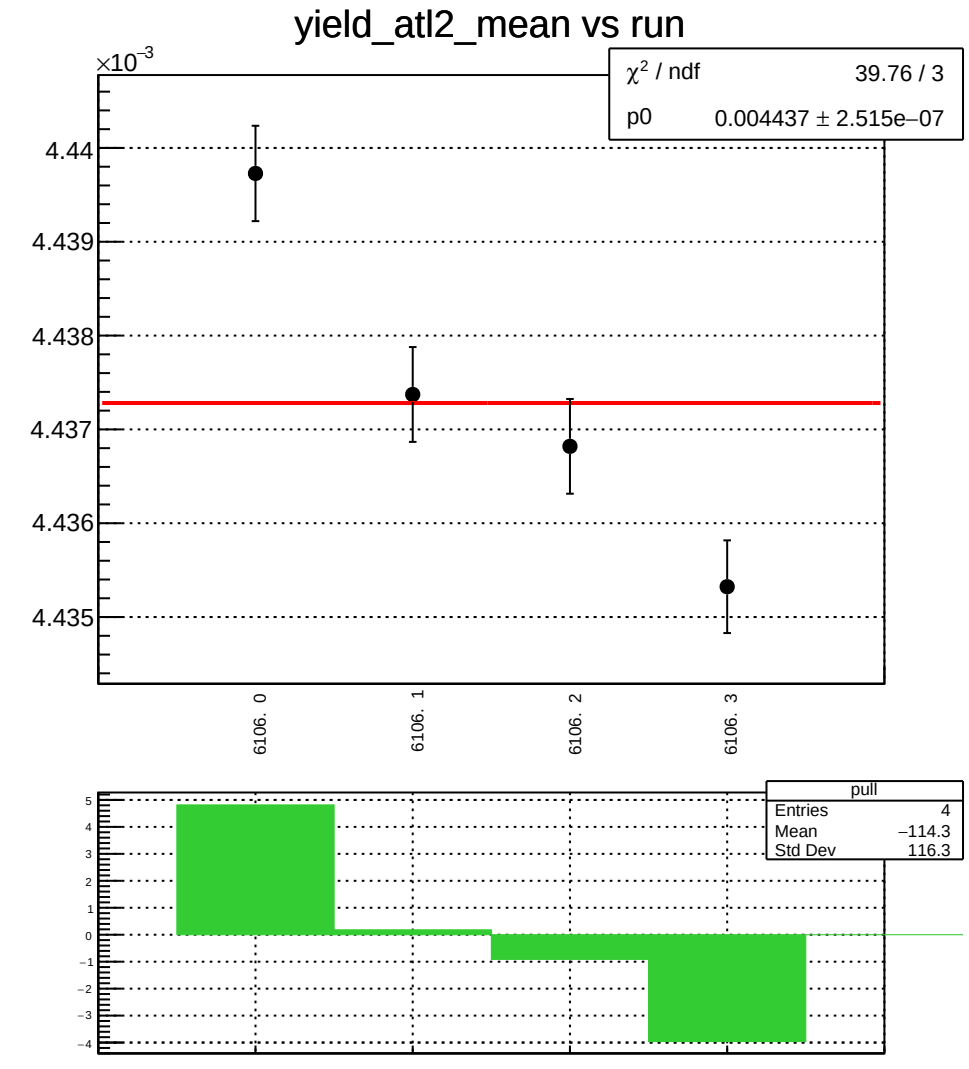

pull1D
Entries 4
Mean −2.562
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

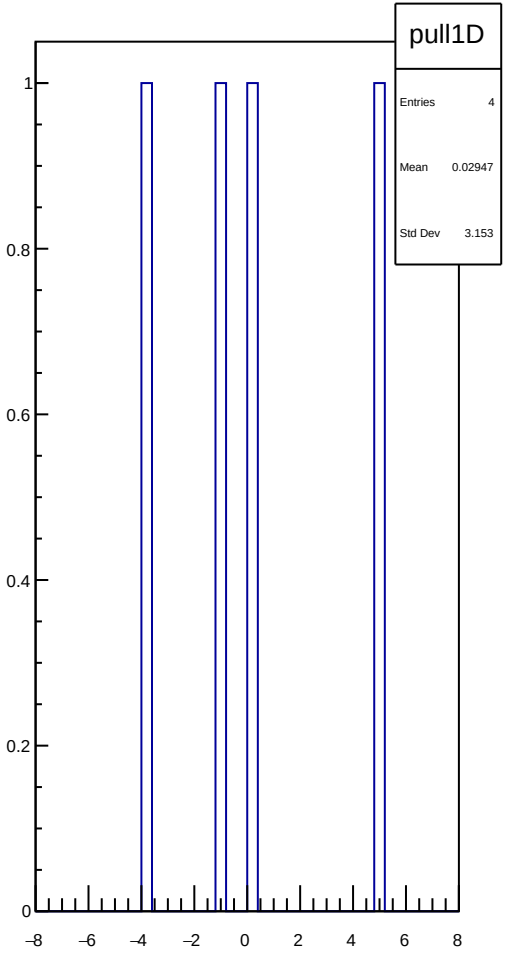

yield_dsr_rms vs run
χ² / ndf 2904 / 3
p0 0.05422 ± 0.0002048
0.075
0.07
0.065
0.06
0.055
0.05
0.045
6106. 0
6106. 1
6106. 2
6106. 3

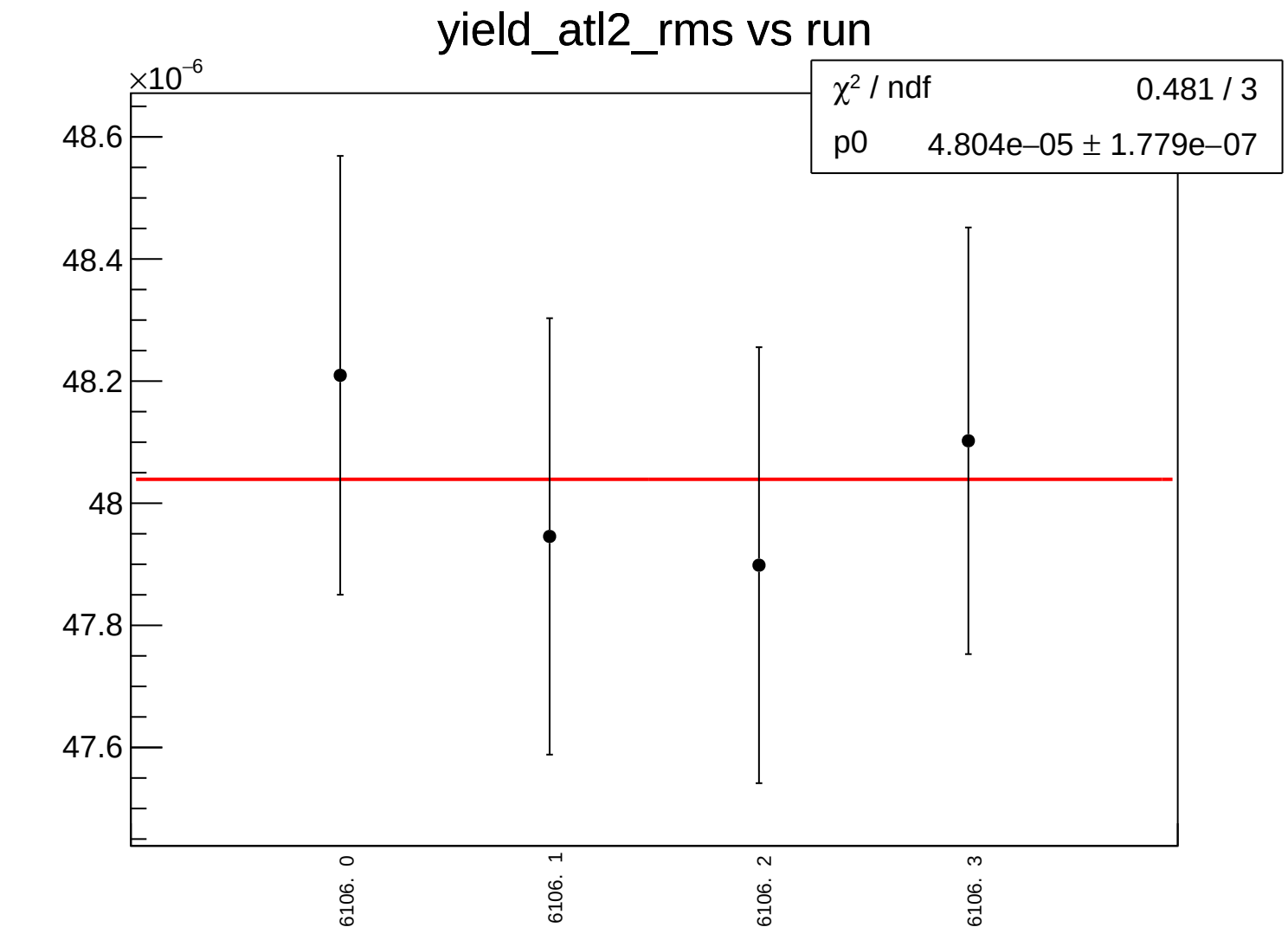

yield_atl1_mean vs run
×10⁻³
χ² / ndf 28.22 / 3
p0 0.0009166 ± 6.531e−08
0.9172
0.917
0.9168
0.9166
0.9164
0.9162
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −102.5
Std Dev 104.3
4
3
2
1
0
−1
−2

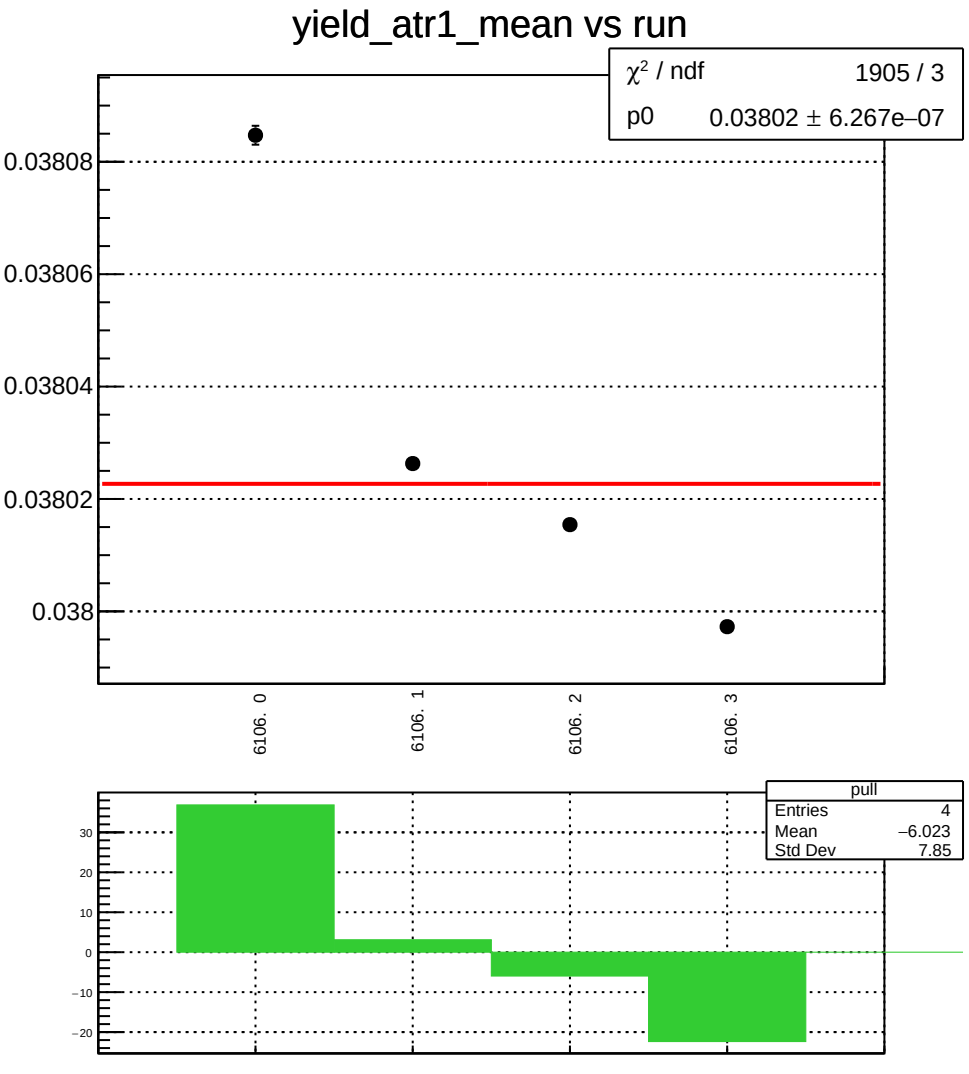

pull1D
Entries 4
Mean 0.02469
Std Dev 2.656
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

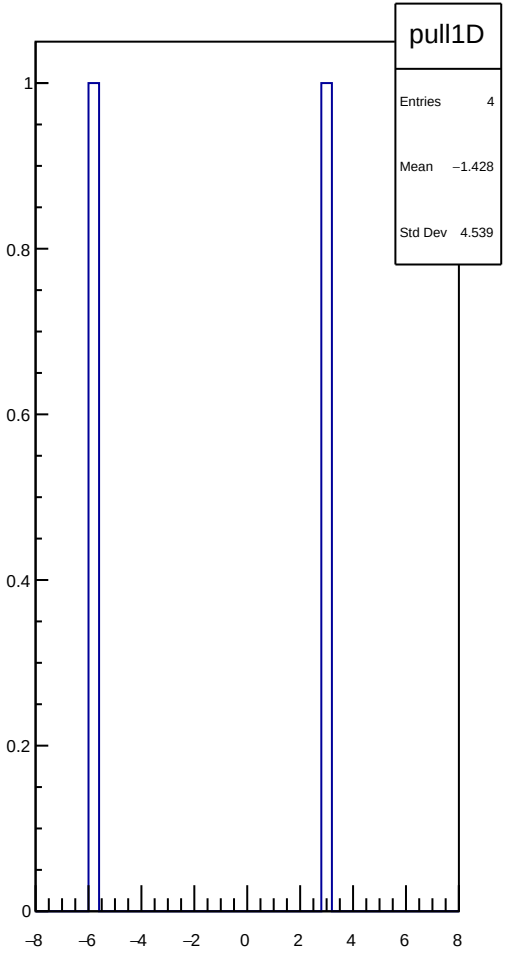

yield_atl1_rms vs run
×10⁻⁶
χ² / ndf 1.354 / 3
p0 1.247e−05 ± 4.618e−08
12.65
12.6
12.55
12.5
12.45
12.4
12.35
12.3
6106. 0
6106. 1
6106. 2
6106. 3

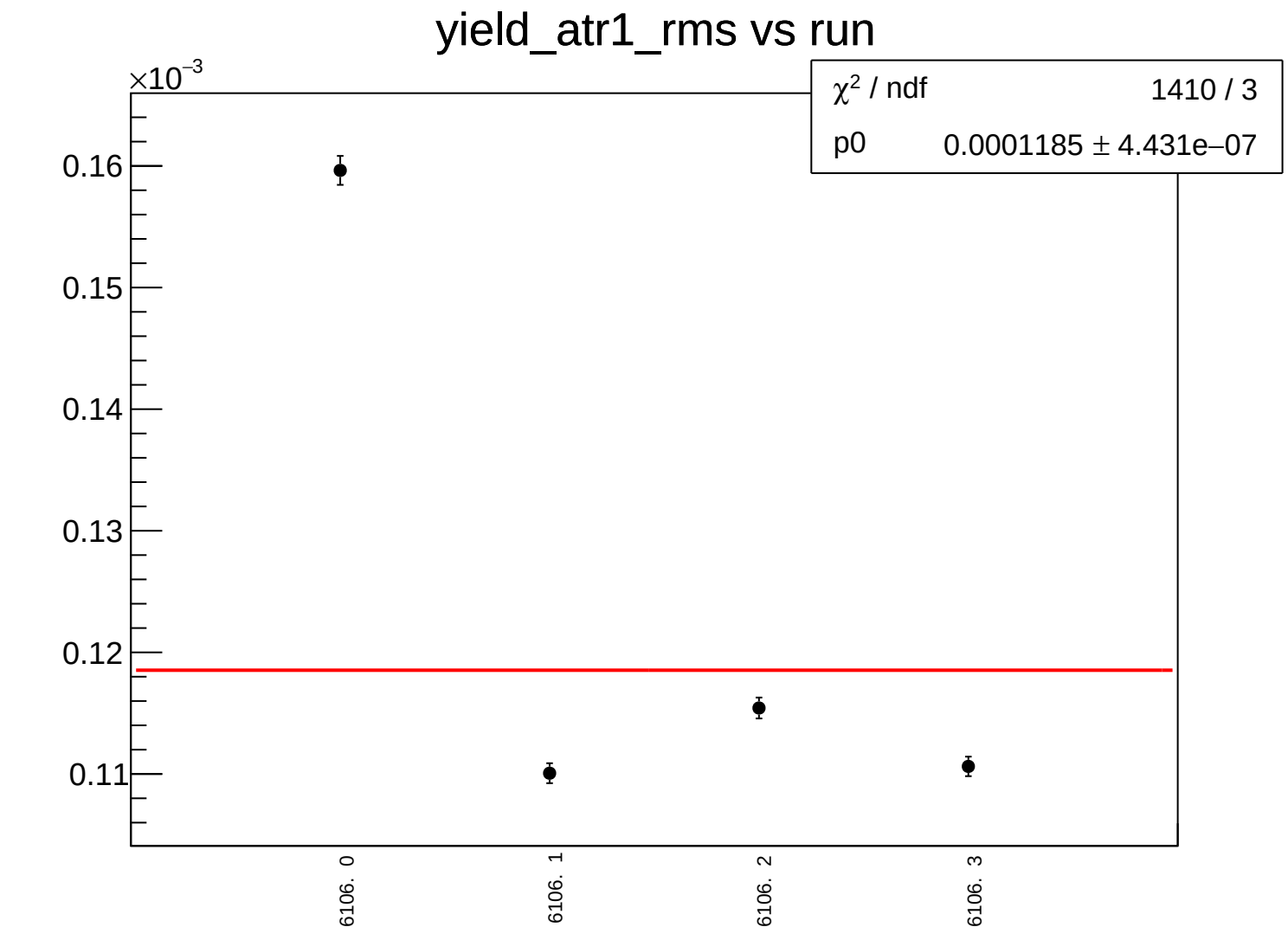

yield_atl2_mean vs run
×10⁻³
χ² / ndf 39.76 / 3
p0 0.004437 ± 2.515e−07
4.44
4.439
4.438
4.437
4.436
4.435
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −114.3
Std Dev 116.3
5
4
3
2
1
0
−1
−2
−3
−4

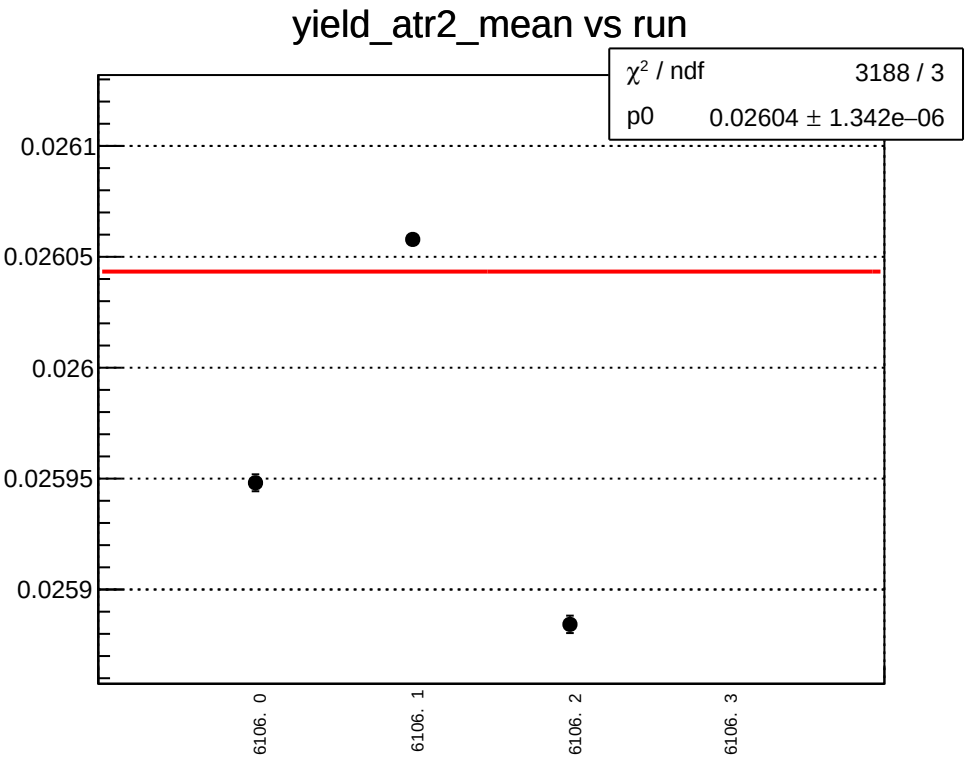

pull1D
Entries 4
Mean 0.02947
Std Dev 3.153
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

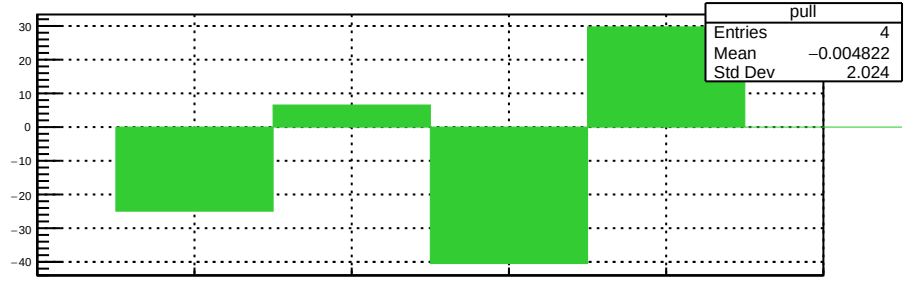

yield_atl2_rms vs run
×10⁻⁶
48.6
48.4
48.2
48
47.8
47.6
χ² / ndf 0.481 / 3
p0 4.804e−05 ± 1.779e−07
6106. 0
6106. 1
6106. 2
6106. 3

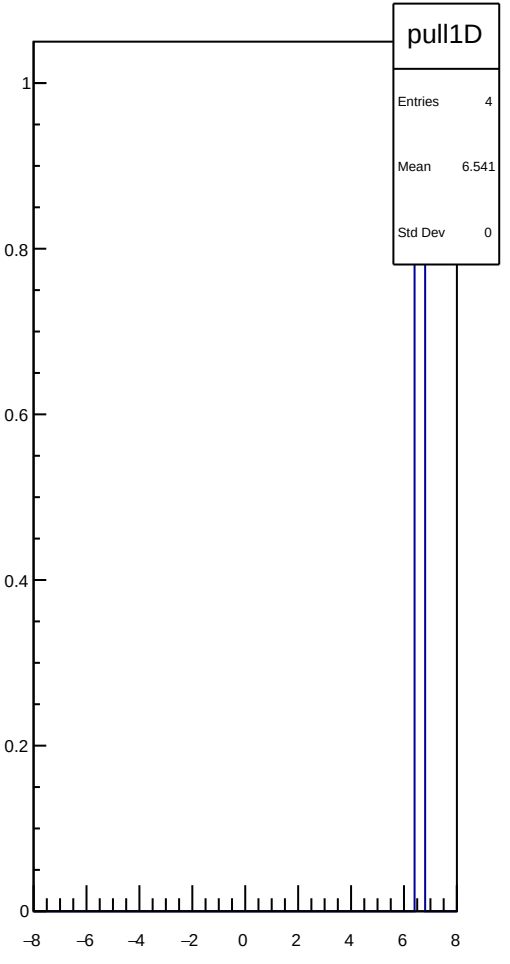

yield_atr1_mean vs run
χ² / ndf 1905 / 3
p0 0.03802 ± 6.267e−07
0.03808
0.03806
0.03804
0.03802
0.038
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.023
Std Dev 7.85
30
20
10
0
−10
−20

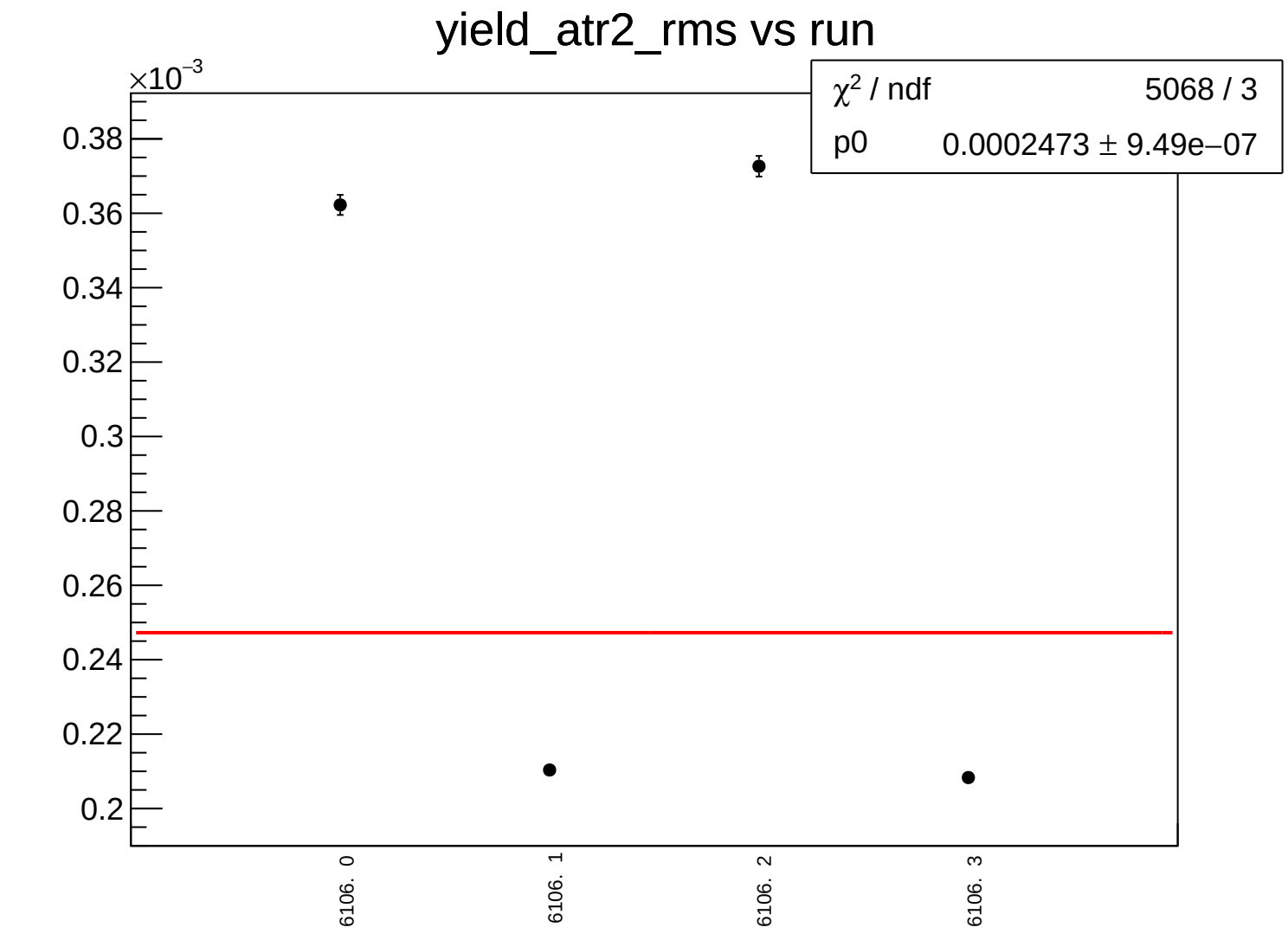

pull1D
Entries 4
Mean −1.428
Std Dev 4.539
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

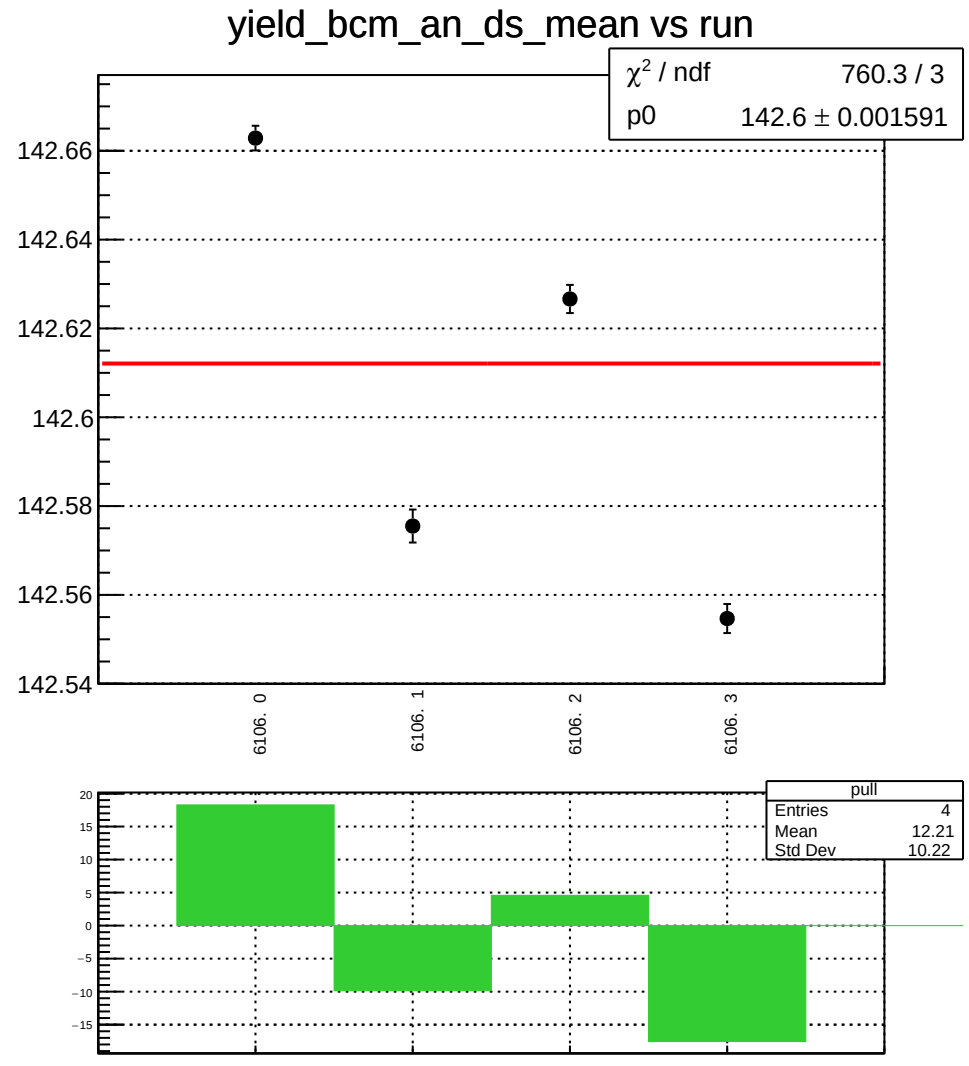

yield_atr1_rms vs run
×10⁻³
χ² / ndf 1410 / 3
p0 0.0001185 ± 4.431e−07
0.16
0.15
0.14
0.13
0.12
0.11
6106. 0
6106. 1
6106. 2
6106. 3

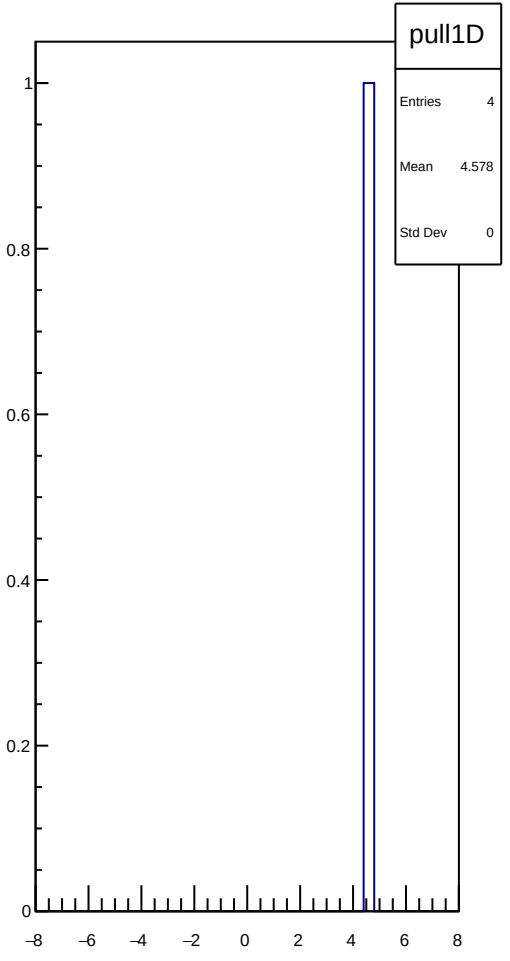

yield_atr2_mean vs run
χ² / ndf 3188 / 3
p0 0.02604 ± 1.342e−06
0.0261
0.02605
0.026
0.02595
0.0259
6106. 0
6106. 1
6106. 2
6106. 3

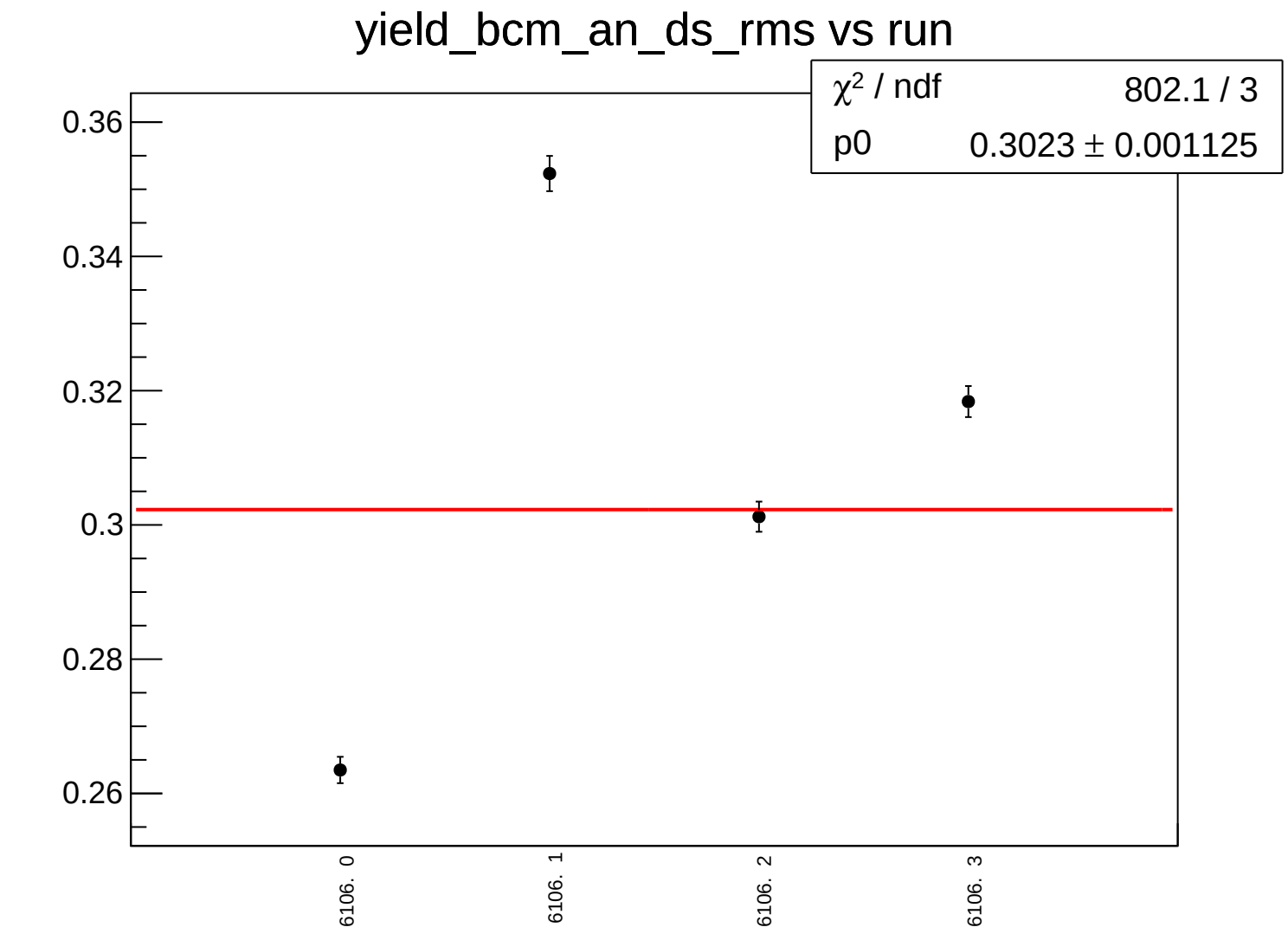

pull
Entries 4
Mean −0.004822
Std Dev 2.024
30
20
10
0
−10
−20
−30
−40

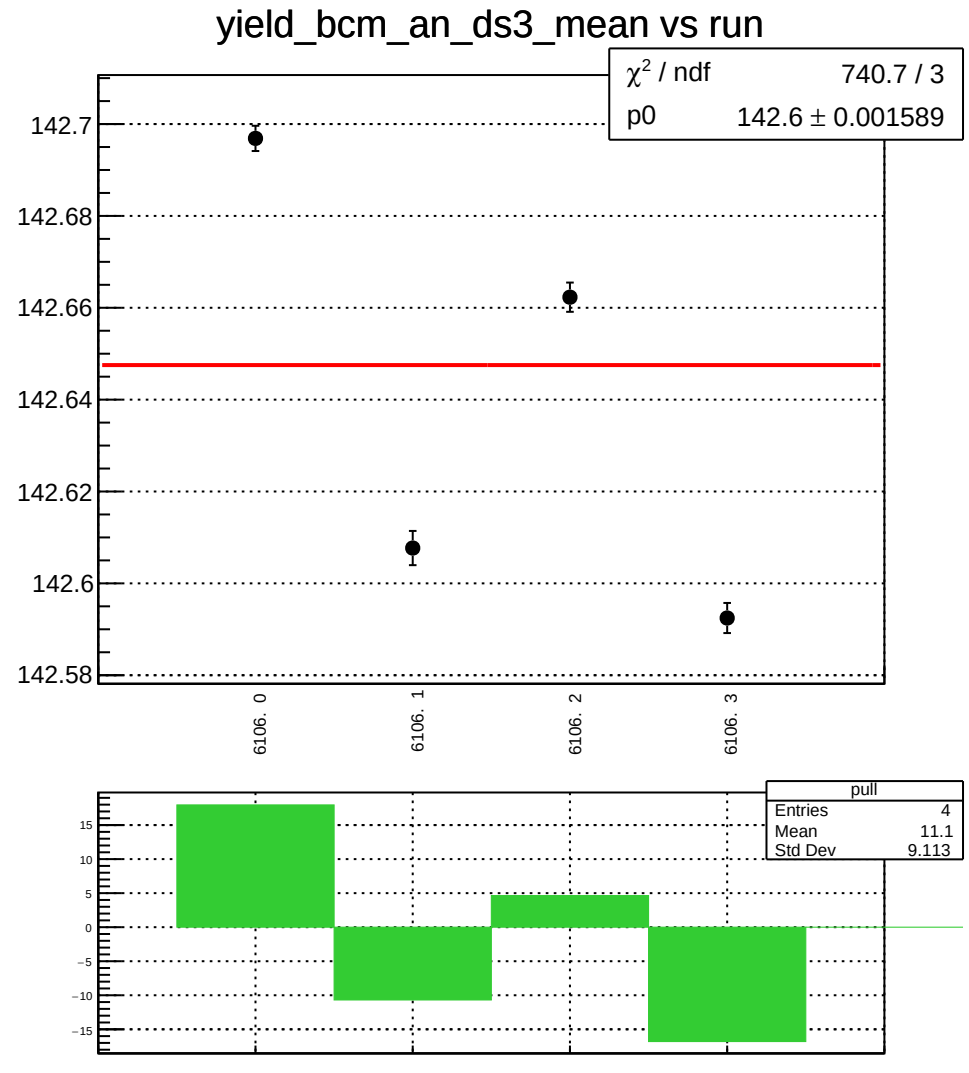

pull1D
Entries 4
Mean 6.541
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

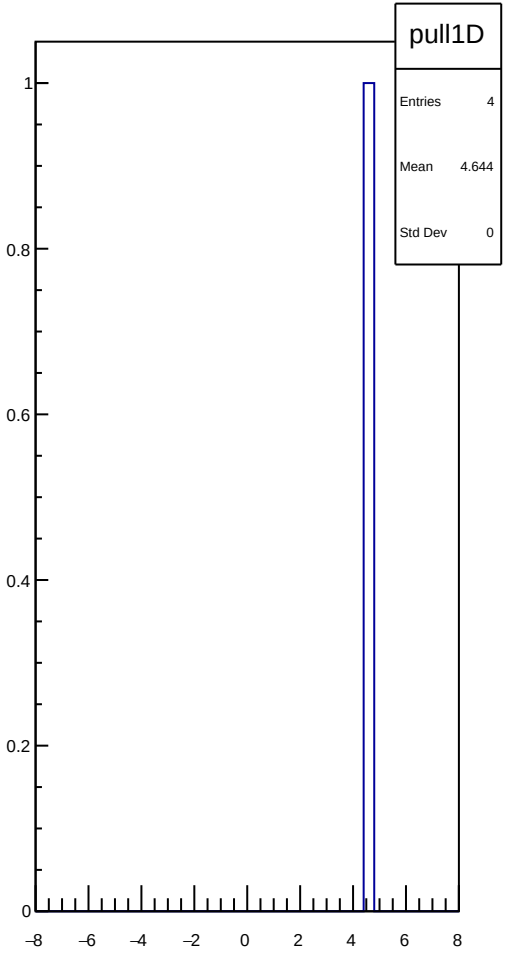

yield_atr2_rms vs run
×10⁻³
0.38
0.36
0.34
0.32
0.3
0.28
0.26
0.24
0.22
0.2
χ² / ndf 5068 / 3
p0 0.0002473 ± 9.49e−07
6106. 0
6106. 1
6106. 2
6106. 3

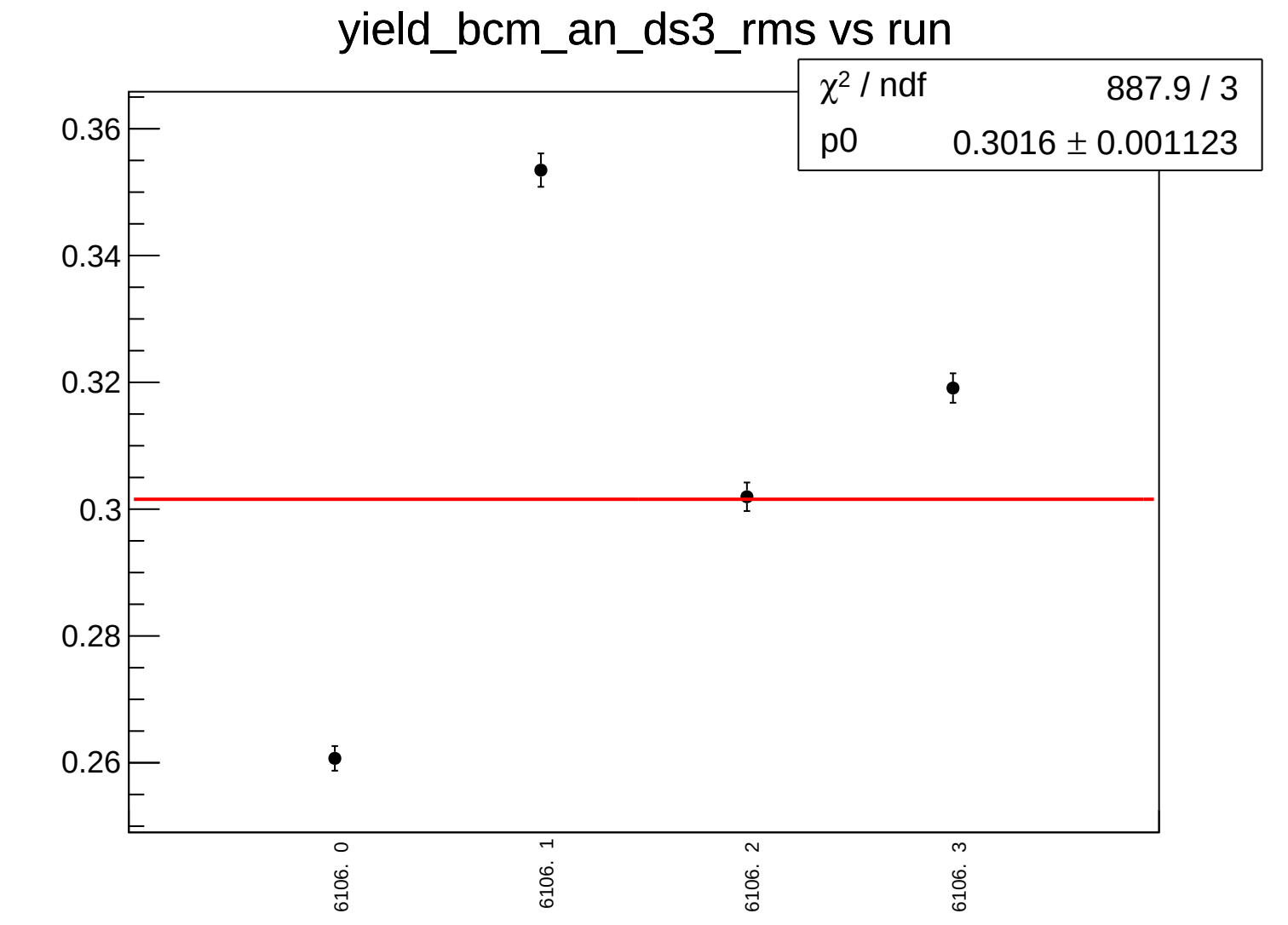

yield_bcm_an_ds_mean vs run
χ² / ndf 760.3 / 3
p0 142.6 ± 0.001591
142.66
142.64
142.62
142.6
142.58
142.56
142.54
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.21
Std Dev 10.22
20
15
10
5
0
−5
−10
−15

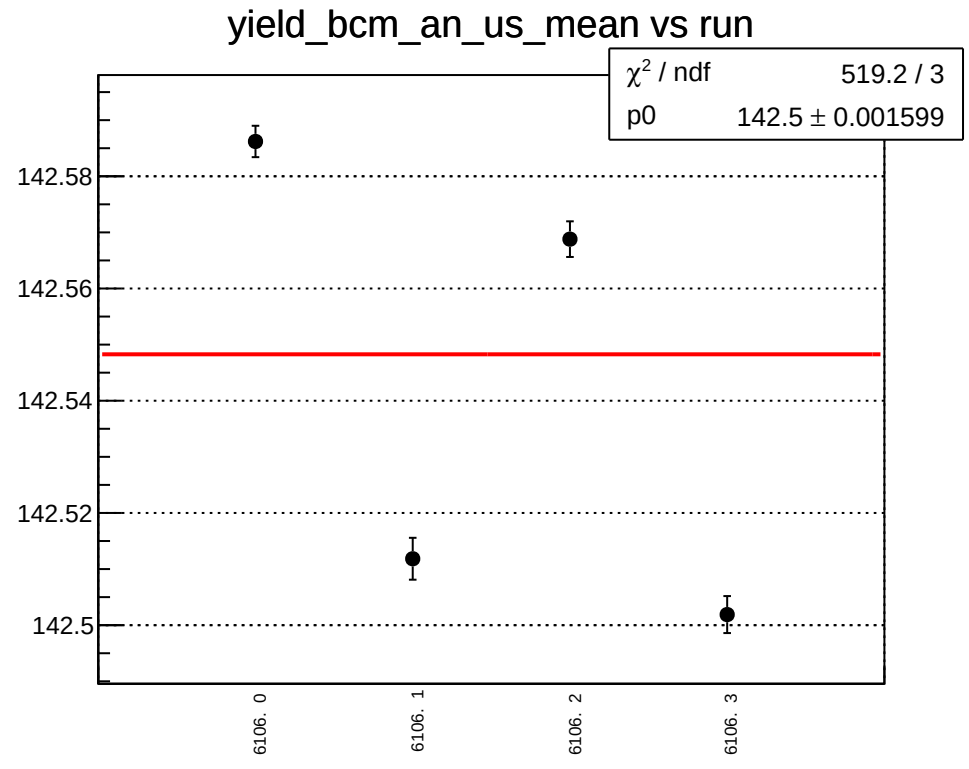

pull1D
Entries 4
Mean 4.578
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

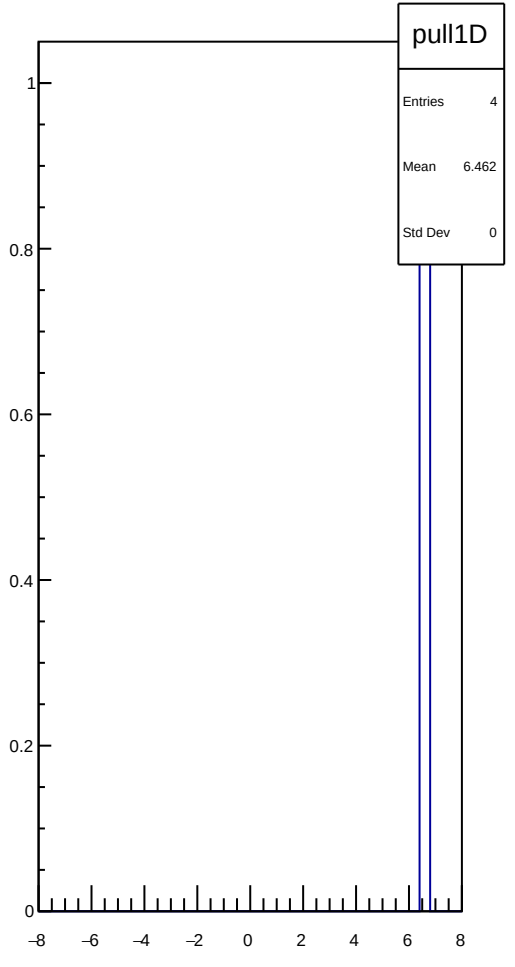

yield_bcm_an_ds_rms vs run
χ² / ndf 802.1 / 3
p0 0.3023 ± 0.001125
0.36
0.34
0.32
0.3
0.28
0.26
6106. 0
6106. 1
6106. 2
6106. 3

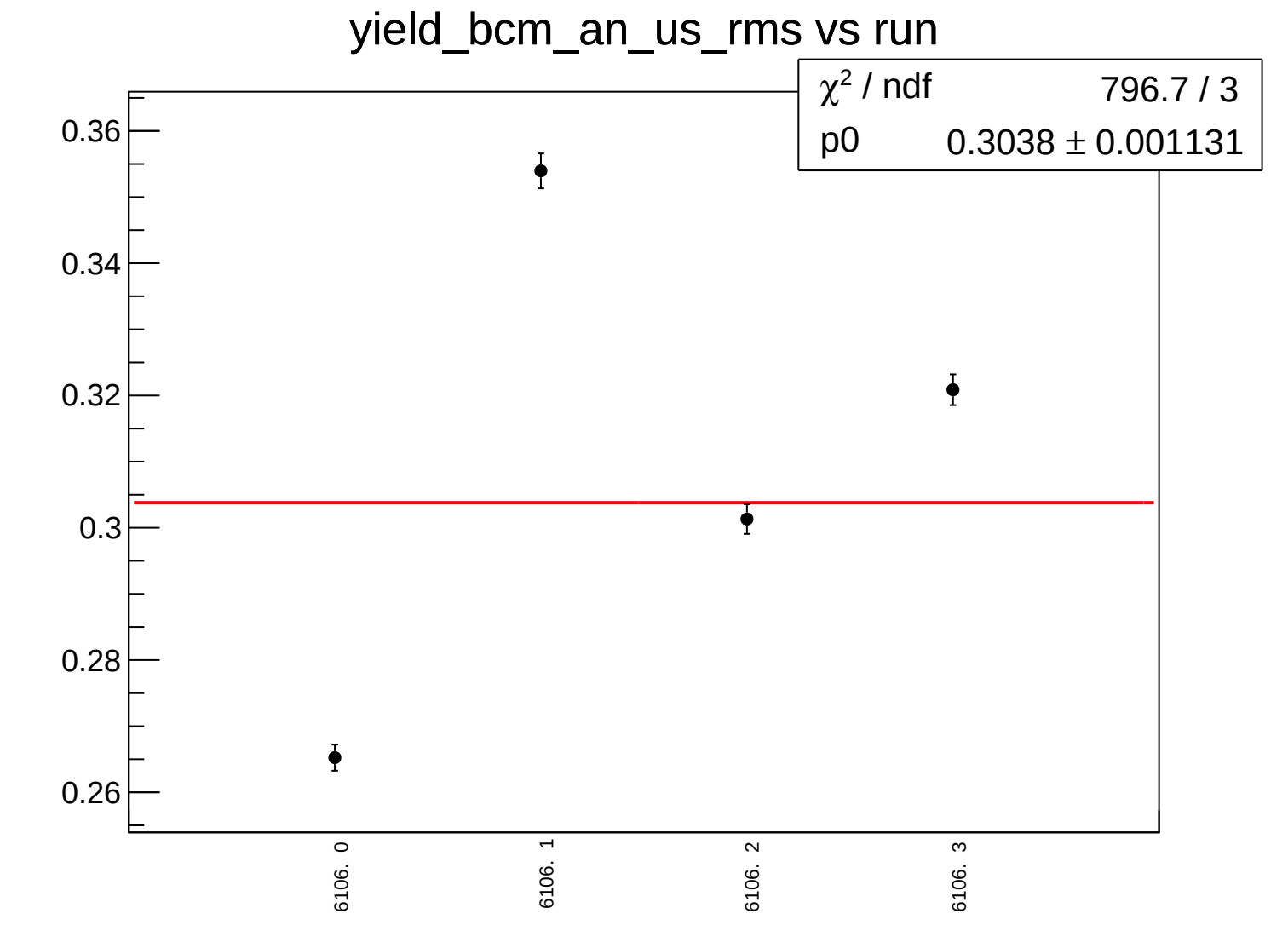

yield_bcm_an_ds3_mean vs run
χ² / ndf 740.7 / 3
p0 142.6 ± 0.001589
142.7
142.68
142.66
142.64
142.62
142.6
142.58
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 11.1
Std Dev 9.113
15
10
5
0
−5
−10
−15

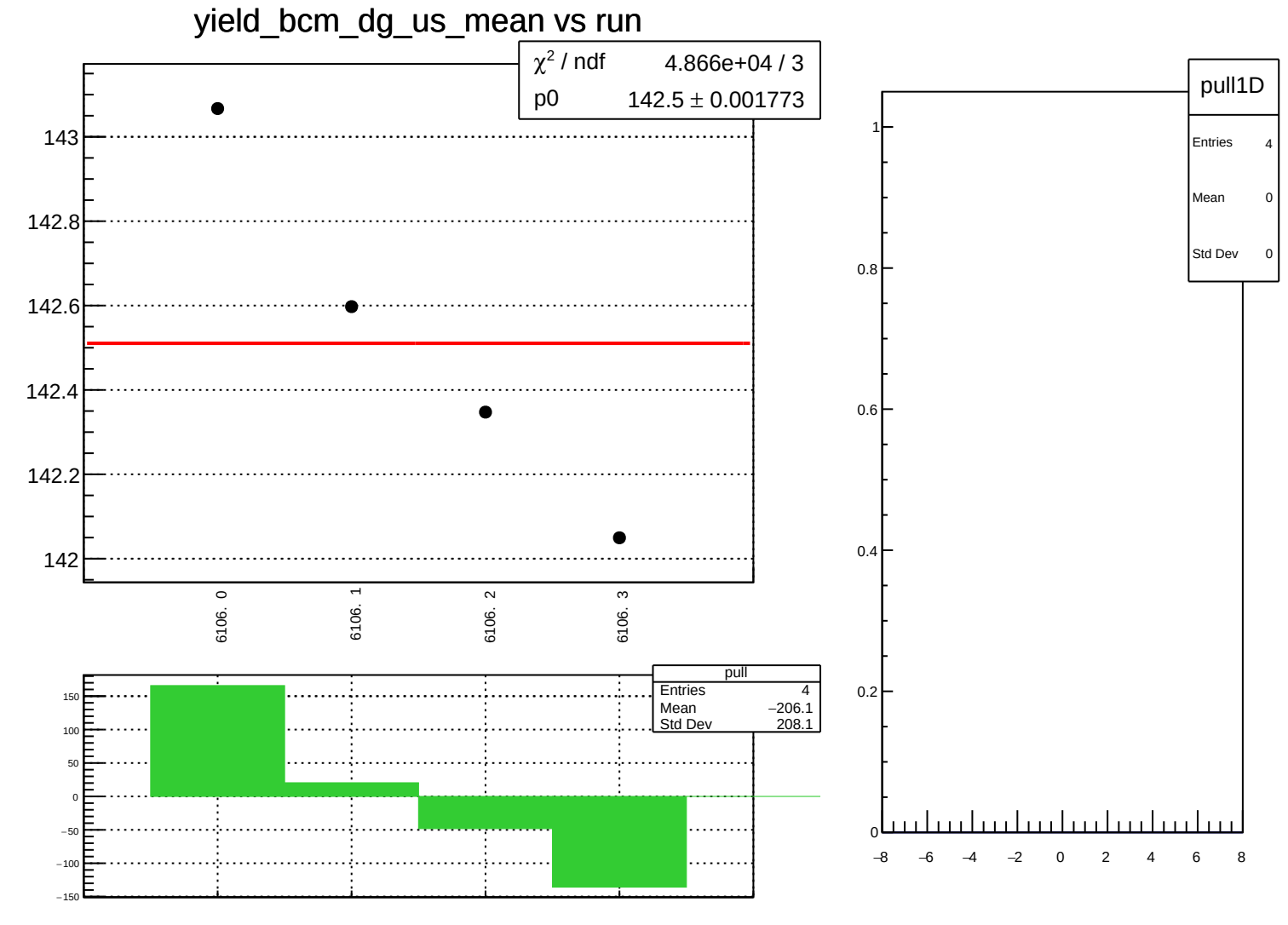

pull1D
Entries 4
Mean 4.644
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

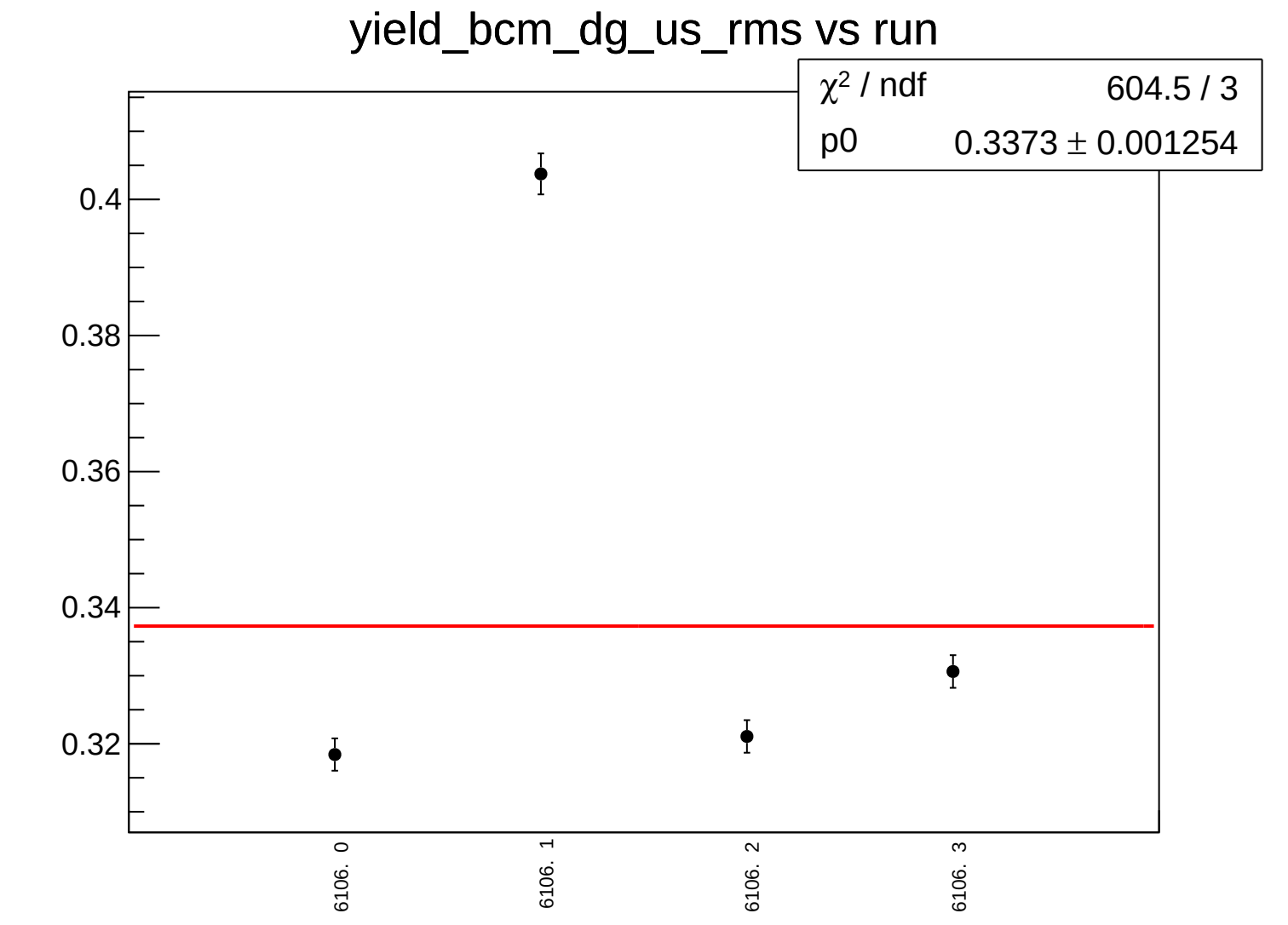

yield_bcm_an_ds3_rms vs run
χ² / ndf 887.9 / 3
p0 0.3016 ± 0.001123
0.36
0.34
0.32
0.3
0.28
0.26
6106. 0
6106. 1
6106. 2
6106. 3

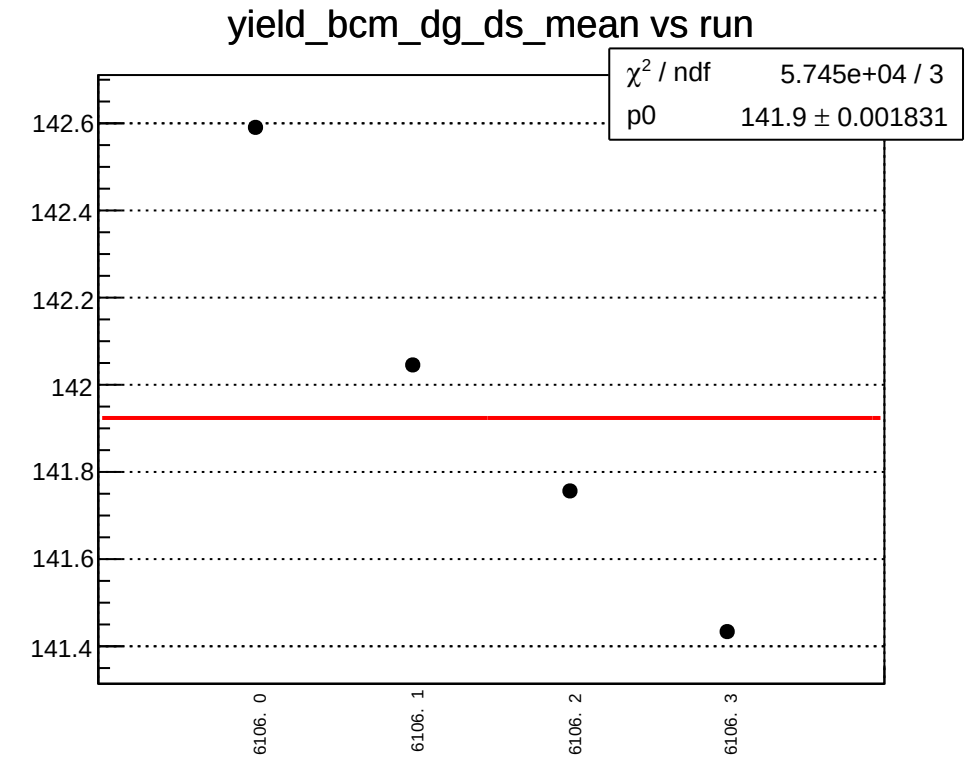

yield_bcm_an_us_mean vs run
χ² / ndf 519.2 / 3
p0 142.5 ± 0.001599
142.58
142.56
142.54
142.52
142.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 10.76
Std Dev 8.726
15
10
5
0
−5
−10
−15

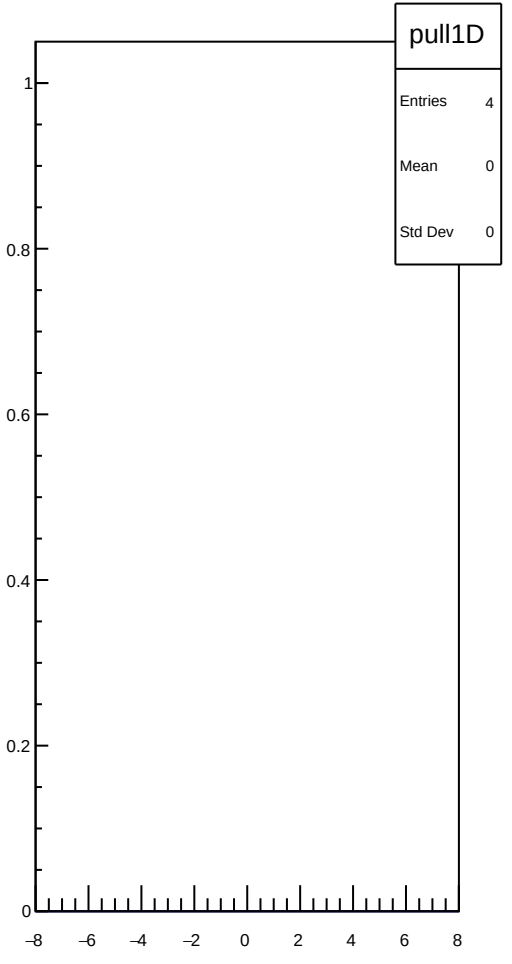

pull1D
Entries 4
Mean 6.462
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

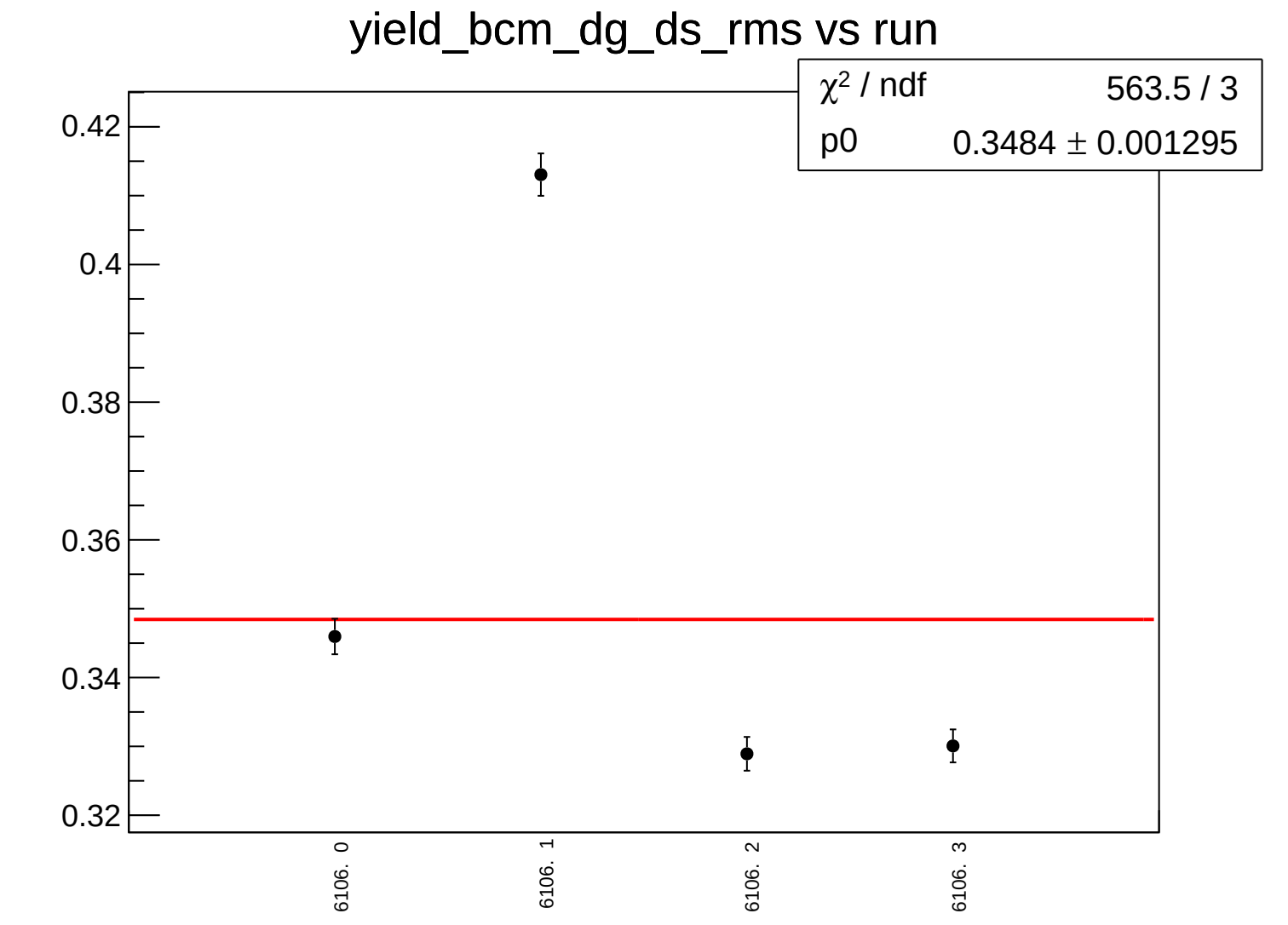

yield_bcm_an_us_rms vs run
χ² / ndf 796.7 / 3
p0 0.3038 ± 0.001131
0.36
0.34
0.32
0.3
0.28
0.26
6106. 0
6106. 1
6106. 2
6106. 3

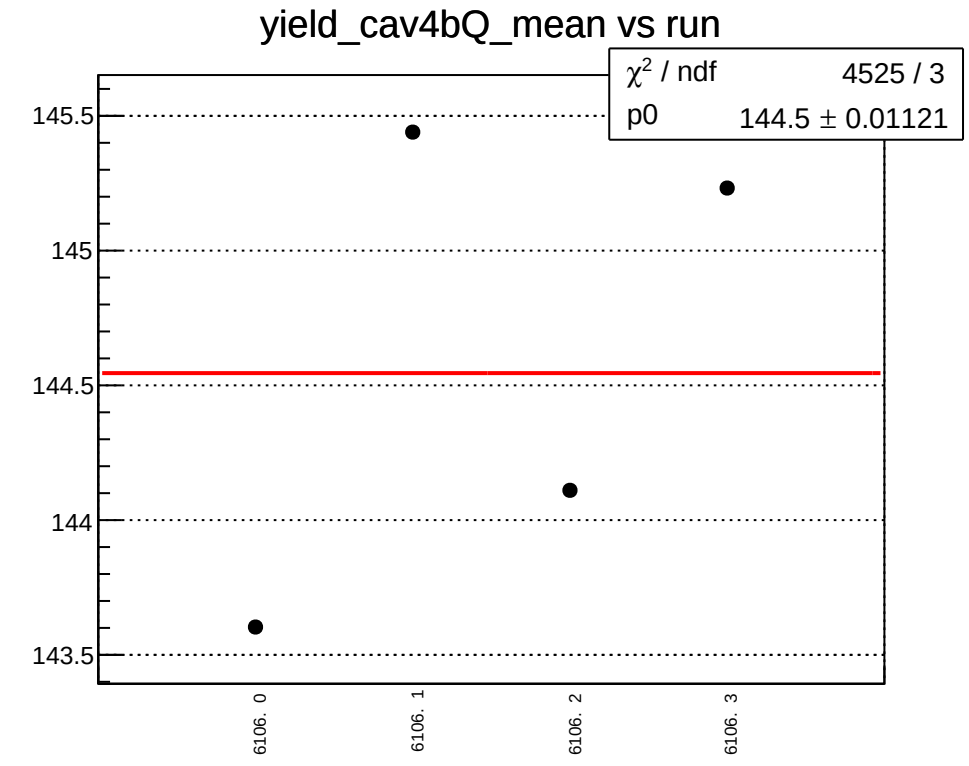

yield_bcm_dg_us_mean vs run
χ² / ndf 4.866e+04 / 3
p0 142.5 ± 0.001773
143
142.8
142.6
142.4
142.2
142
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −206.1
Std Dev 208.1
150
100
50
0
−50
−100
−150
pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

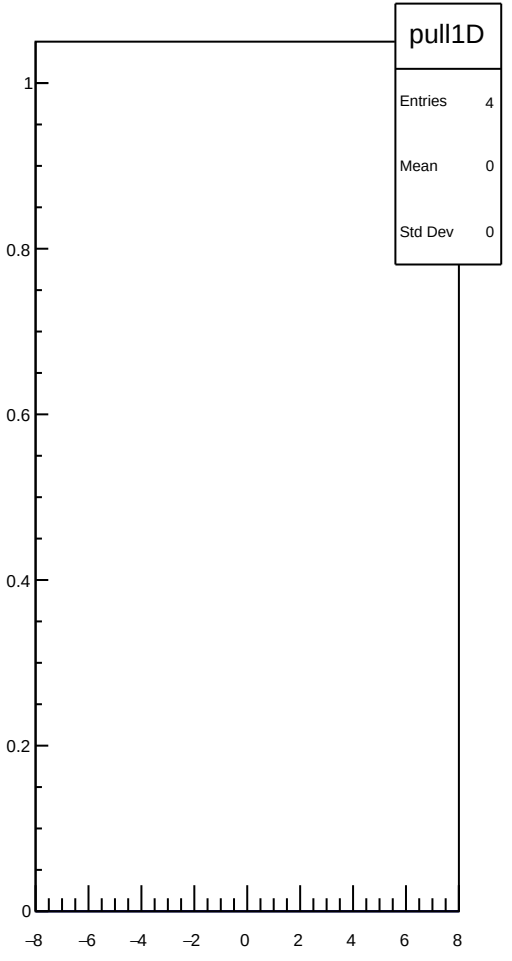

yield_bcm_dg_us_rms vs run
χ² / ndf 604.5 / 3
p0 0.3373 ± 0.001254
0.4
0.38
0.36
0.34
0.32
6106. 0
6106. 1
6106. 2
6106. 3

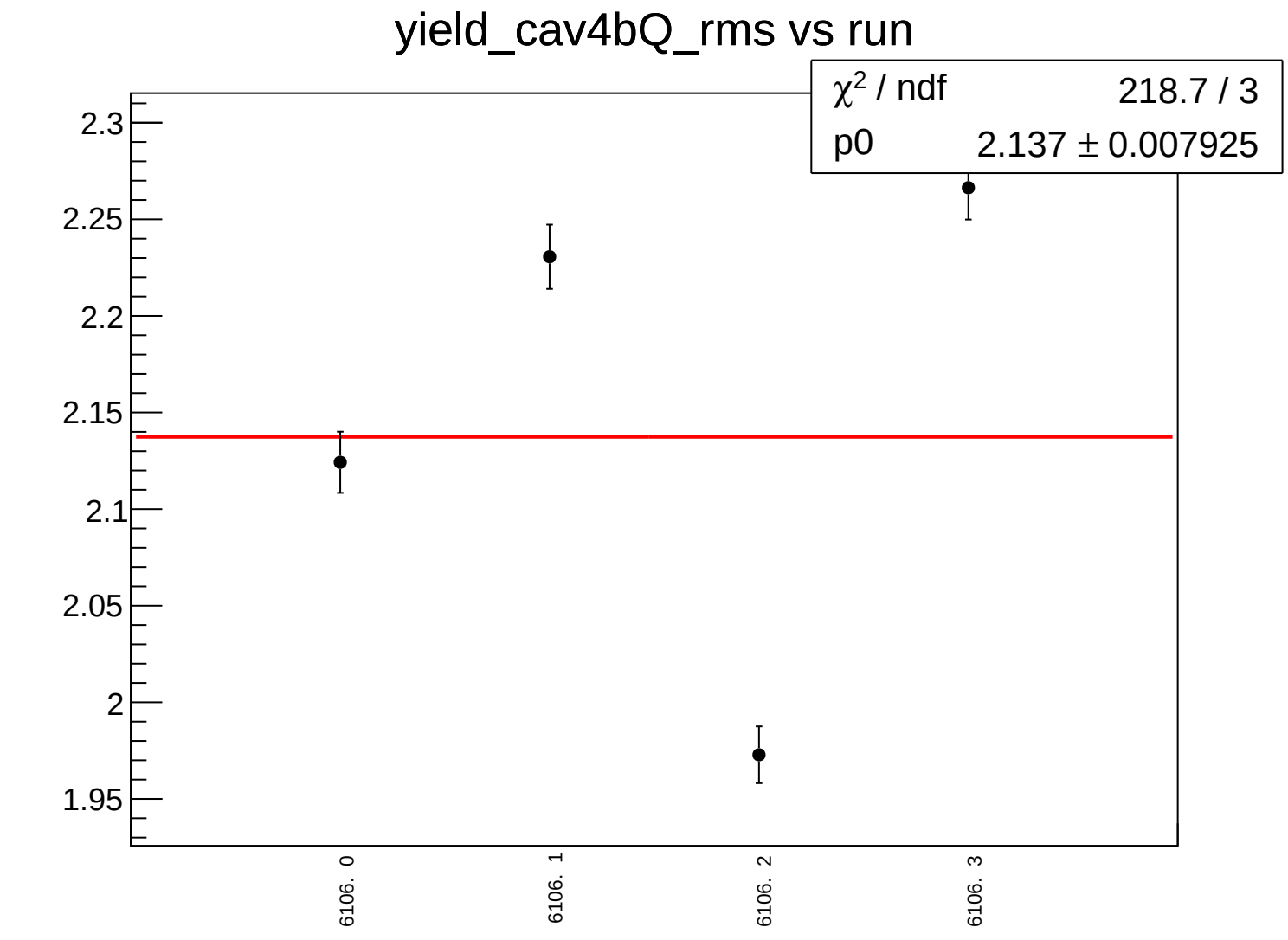

yield_bcm_dg_ds_mean vs run
χ² / ndf 5.745e+04 / 3
p0 141.9 ± 0.001831
142.6
142.4
142.2
142
141.8
141.6
141.4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −27.44
Std Dev 29.37
200
150
100
50
0
−50
−100
−150

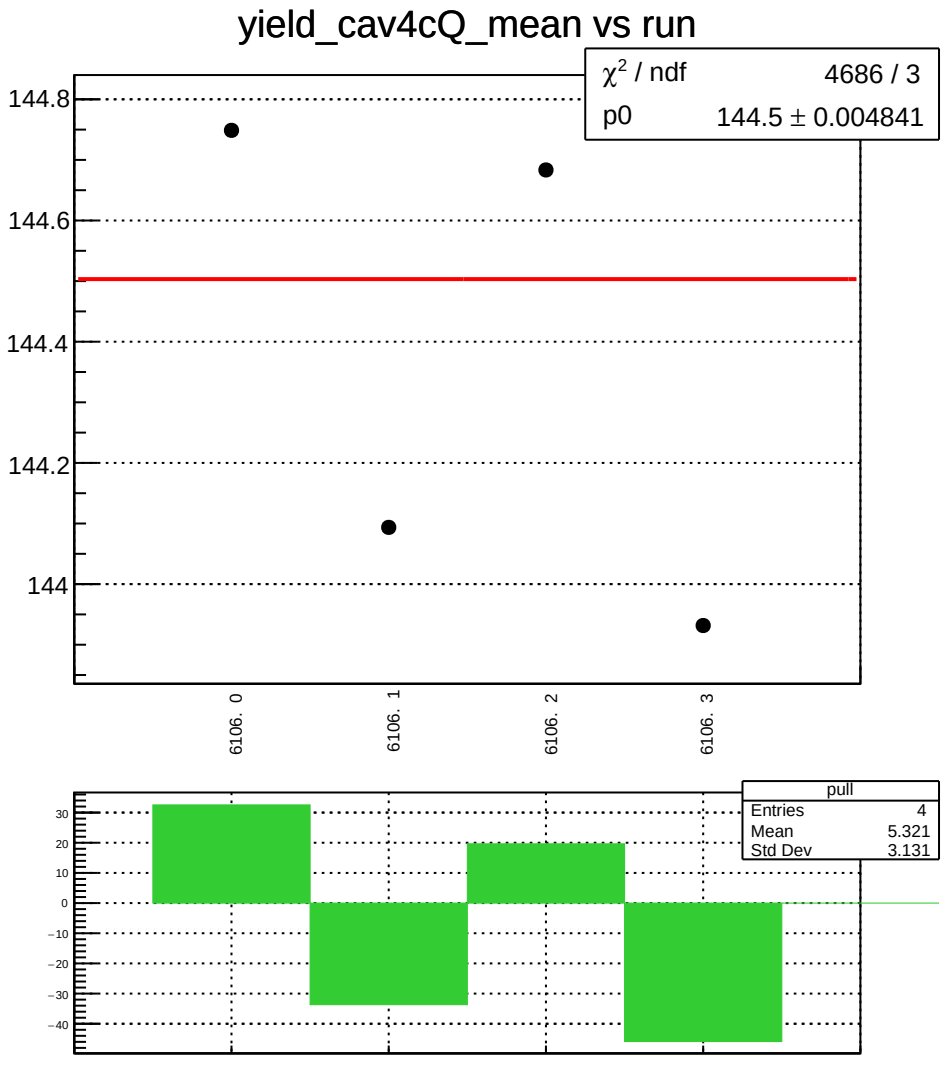

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

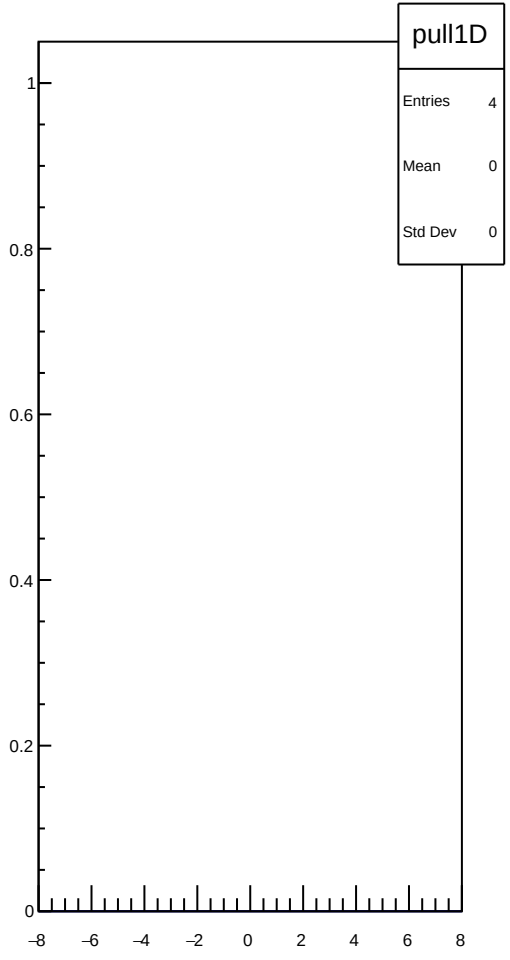

yield_bcm_dg_ds_rms vs run
χ² / ndf 563.5 / 3
p0 0.3484 ± 0.001295
0.42
0.4
0.38
0.36
0.34
0.32
6106. 0
6106. 1
6106. 2
6106. 3

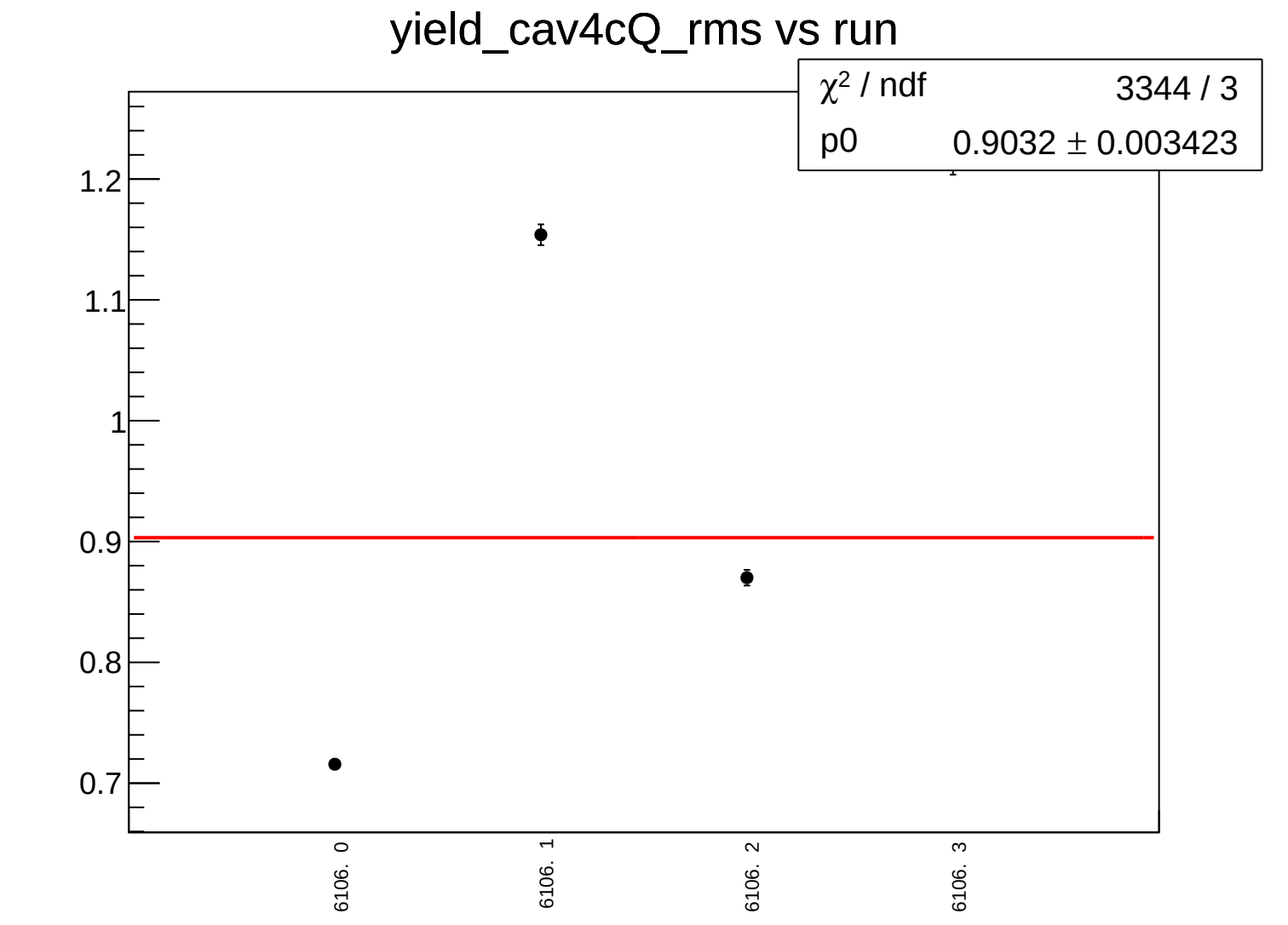

yield_cav4bQ_mean vs run
χ² / ndf 4525 / 3
p0 144.5 ± 0.01121
145.5
145
144.5
144
143.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 19.14
Std Dev 17.3
40
30
20
10
0
−10
−20
−30
−40

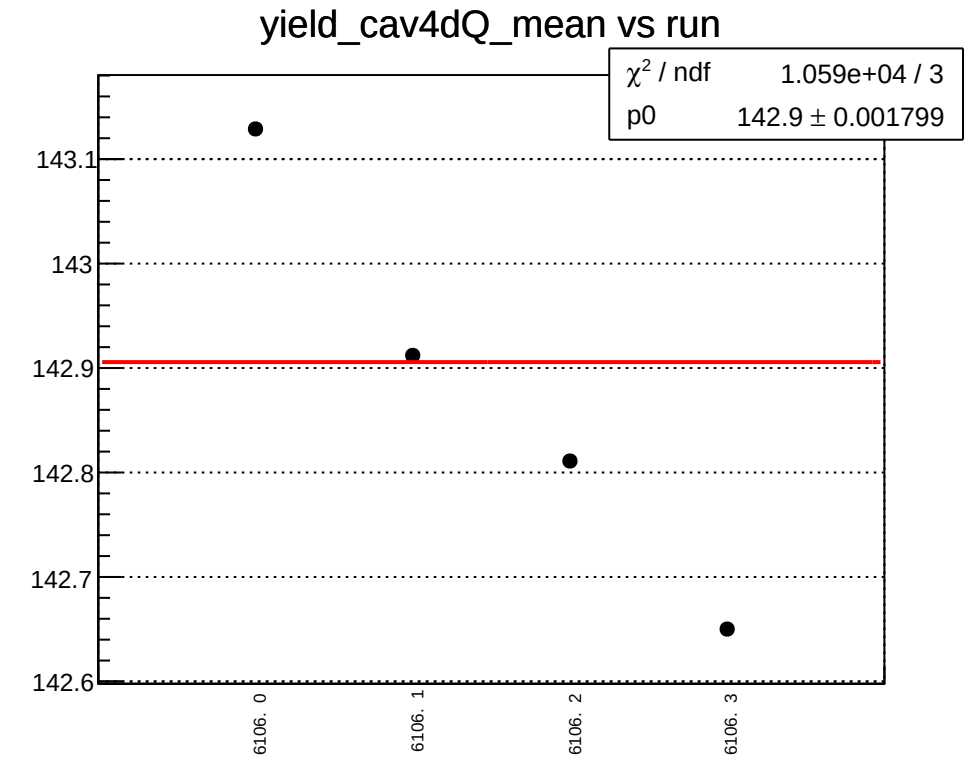

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

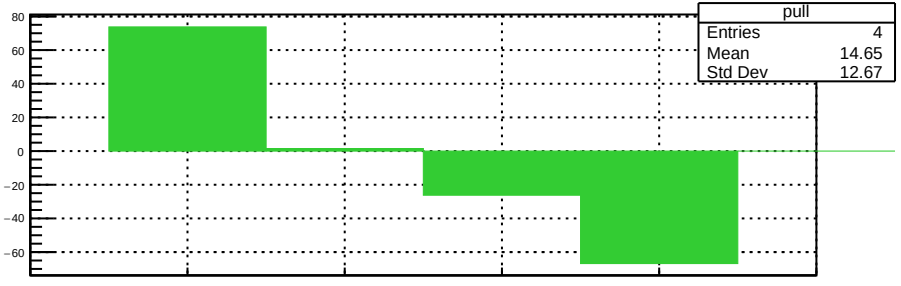

yield_cav4bQ_rms vs run
χ² / ndf 218.7 / 3
p0 2.137 ± 0.007925
2.3
2.25
2.2
2.15
2.1
2.05
2
1.95
6106. 0
6106. 1
6106. 2
6106. 3

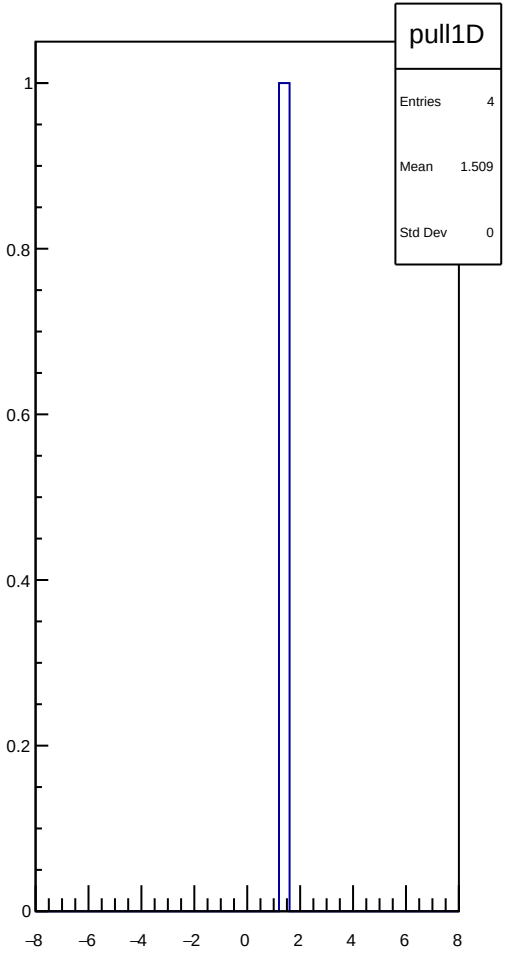

yield_cav4cQ_mean vs run
χ² / ndf 4686 / 3
p0 144.5 ± 0.004841
144.8
144.6
144.4
144.2
144
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 5.321
Std Dev 3.131
30
20
10
0
−10
−20
−30
−40

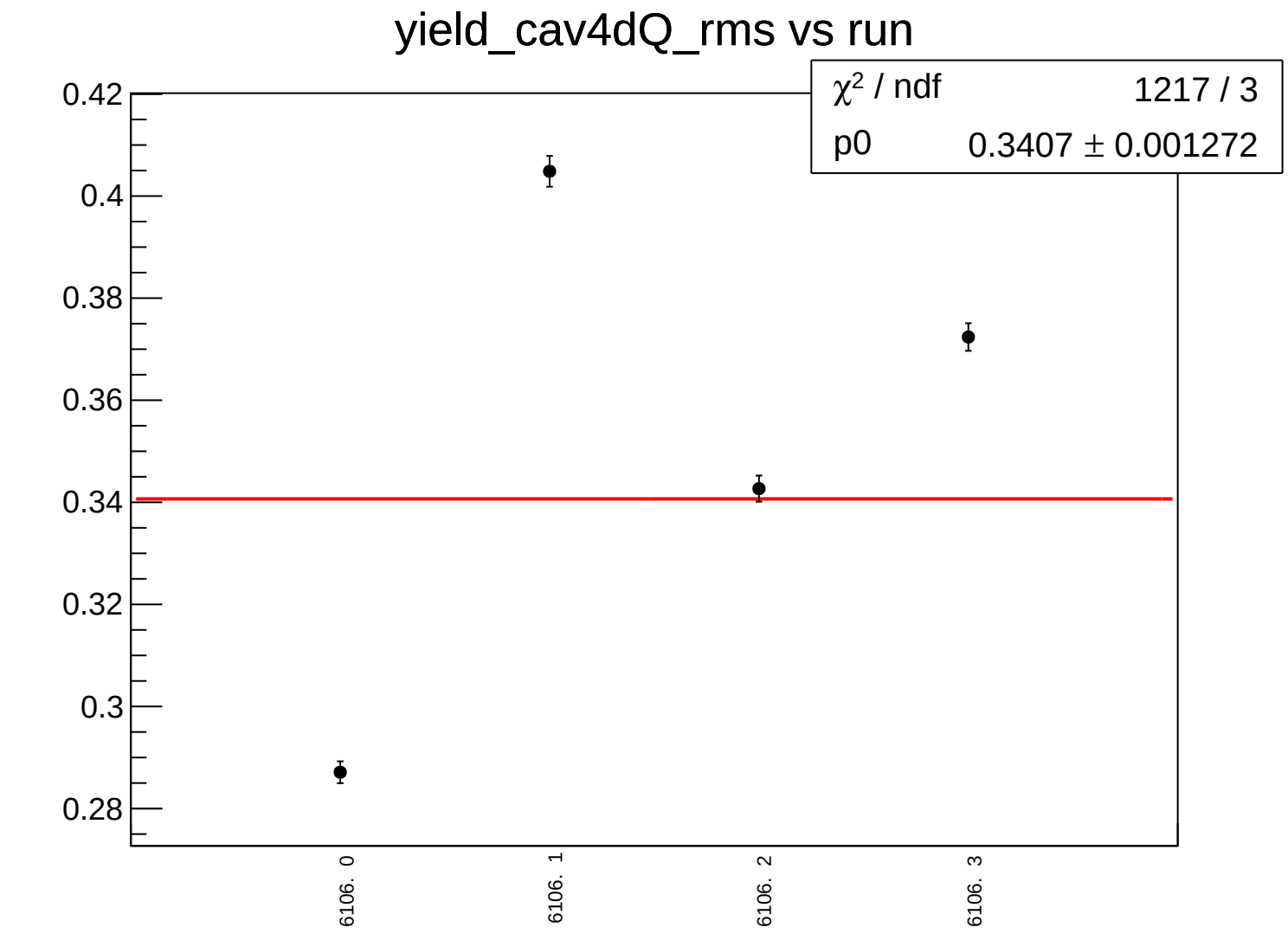

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

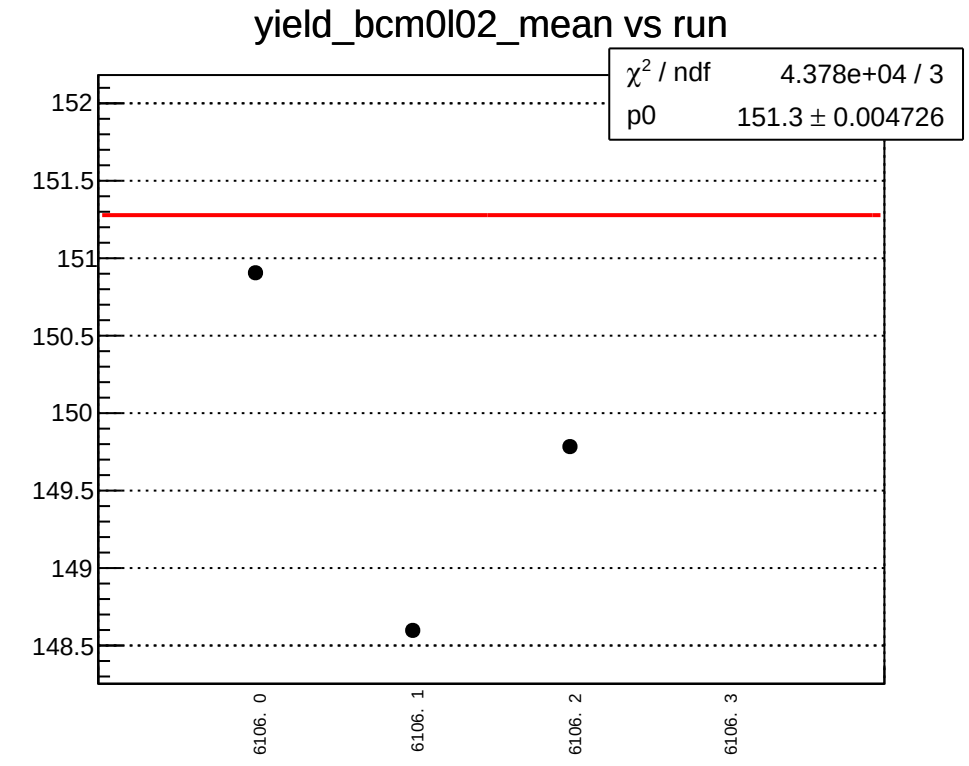

yield_cav4cQ_rms vs run
χ² / ndf 3344 / 3
p0 0.9032 ± 0.003423
1.2
1.1
1
0.9
0.8
0.7
6106. 0
6106. 1
6106. 2
6106. 3

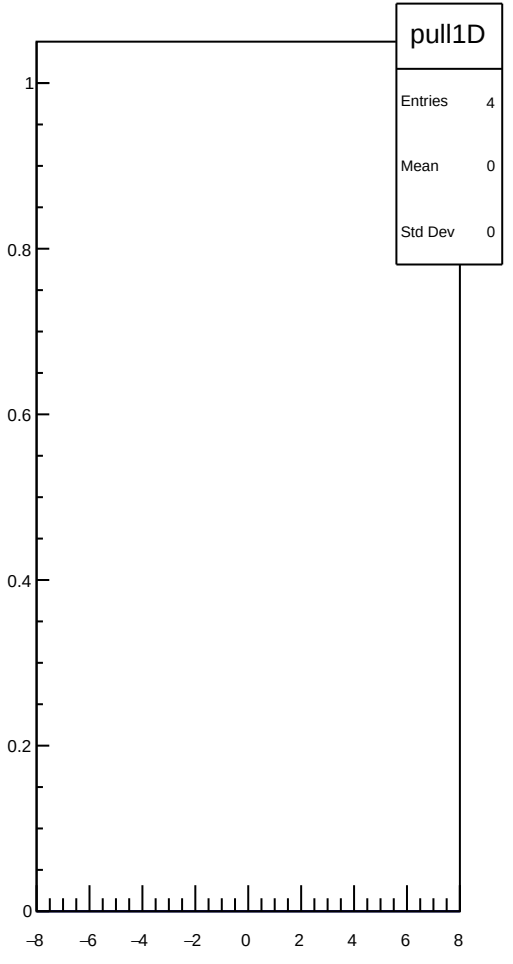

yield_cav4dQ_mean vs run
χ² / ndf 1.059e+04 / 3
p0 142.9 ± 0.001799
143.1
143
142.9
142.8
142.7
142.6
6106. 0
6106. 1
6106. 2
6106. 3

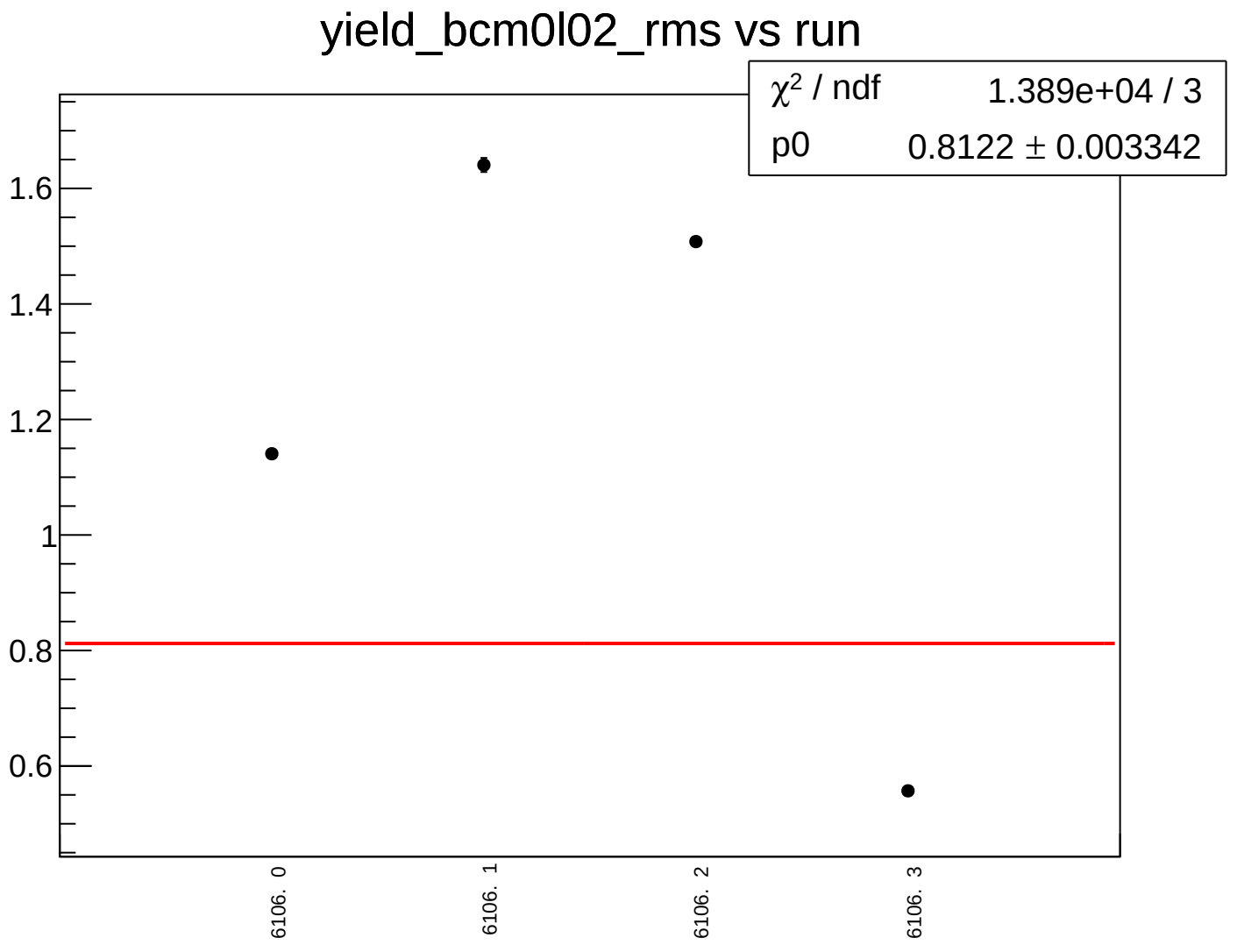

pull
Entries 4
Mean 14.65
Std Dev 12.67
80
60
40
20
0
−20
−40
−60

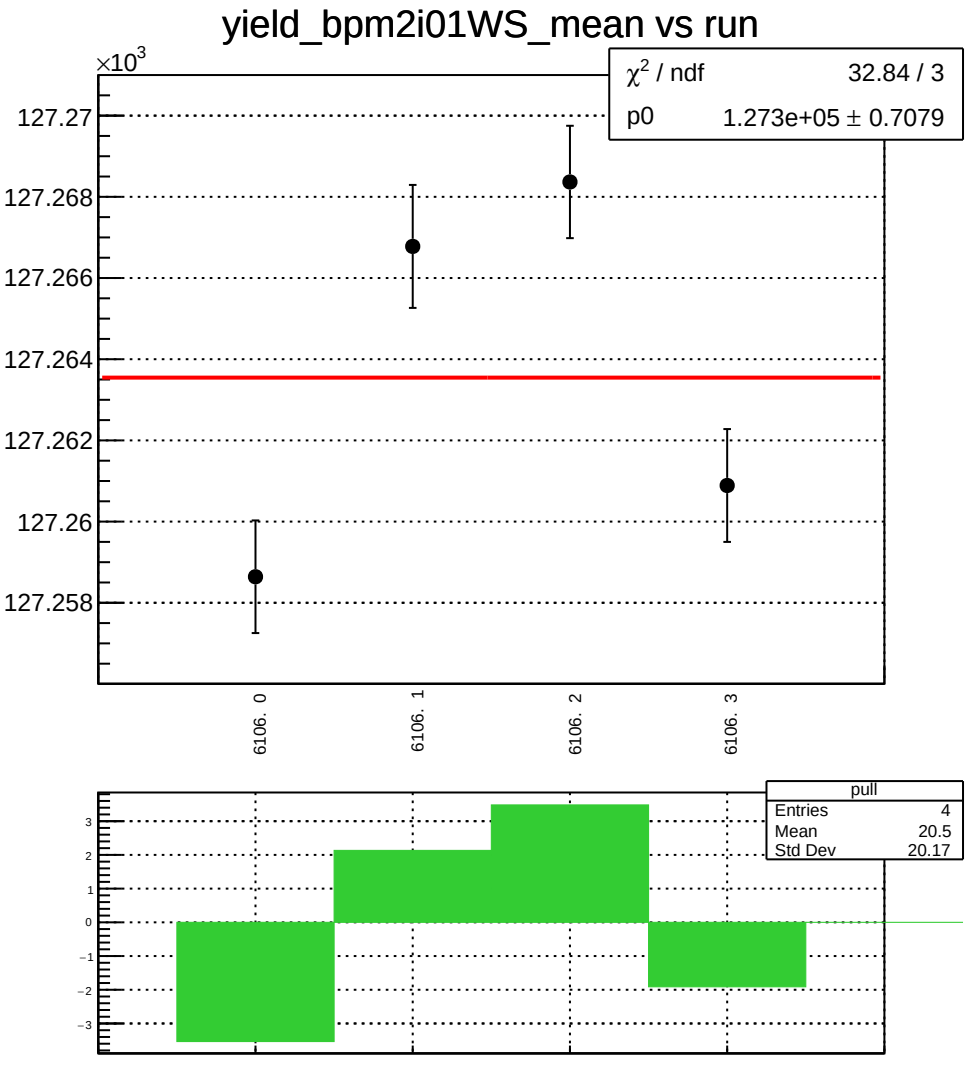

pull1D
Entries 4
Mean 1.509
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

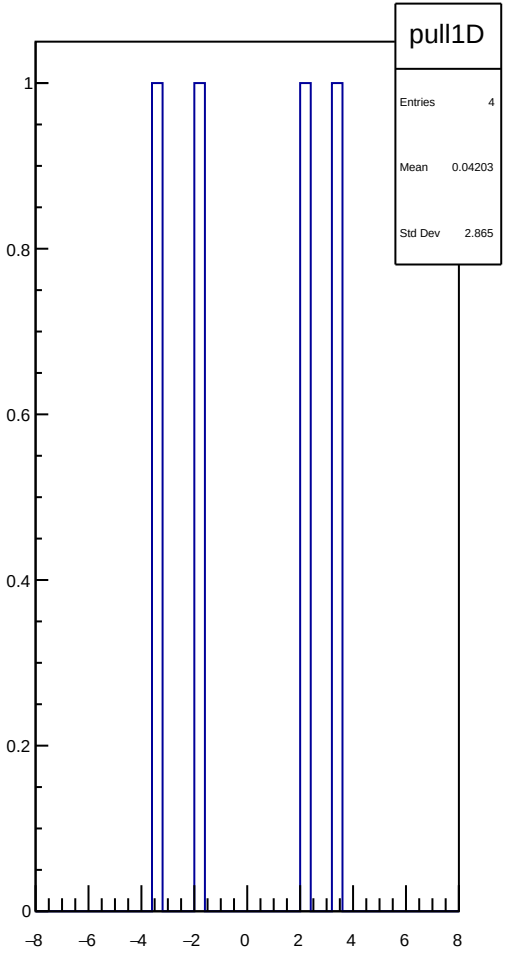

yield_cav4dQ_rms vs run
χ² / ndf 1217 / 3
p0 0.3407 ± 0.001272
0.42
0.4
0.38
0.36
0.34
0.32
0.3
0.28
6106. 0
6106. 1
6106. 2
6106. 3

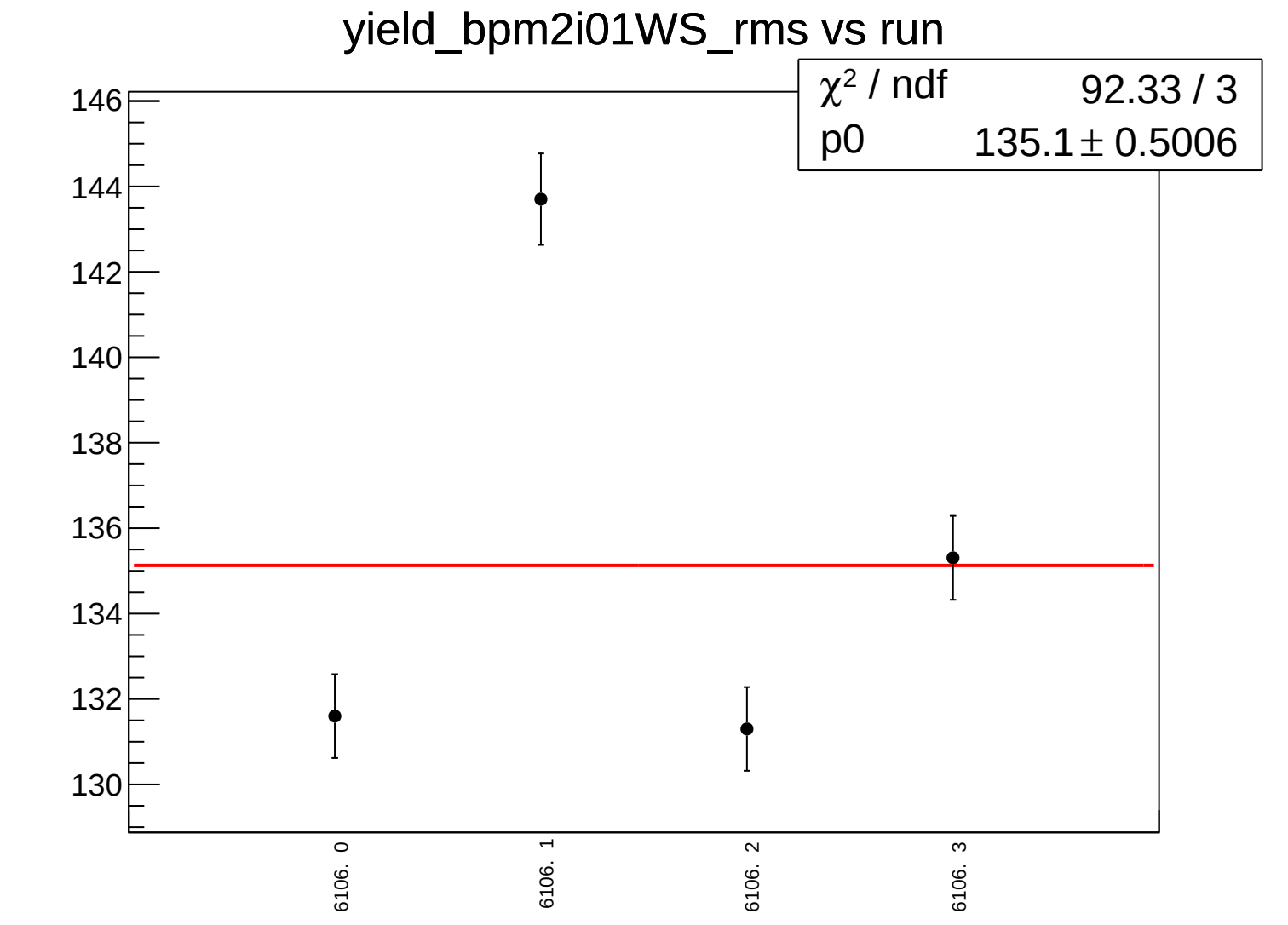

yield_bcm0l02_mean vs run
χ² / ndf 4.378e+04 / 3
p0 151.3 ± 0.004726
152
151.5
151
150.5
150
149.5
149
148.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.7415
Std Dev 1.449
100
50
0
−50
−100
−150

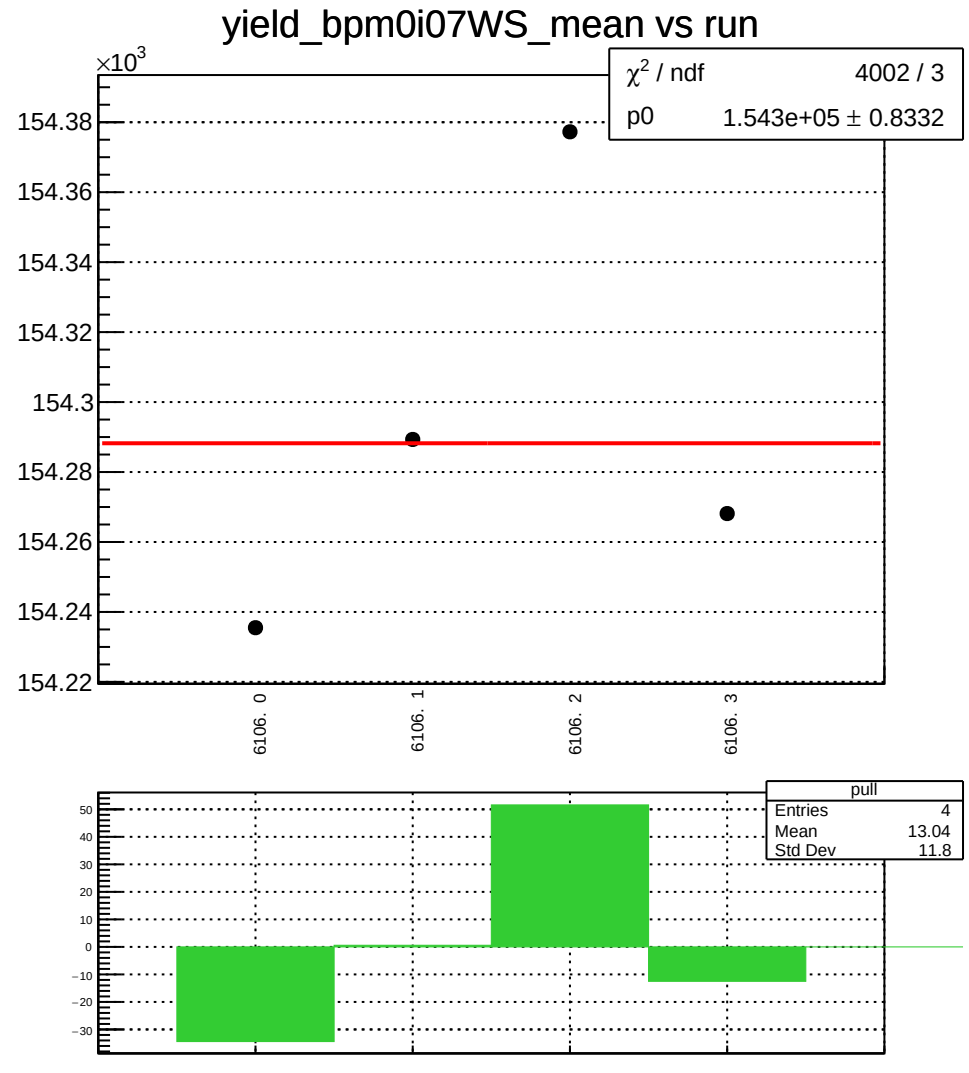

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

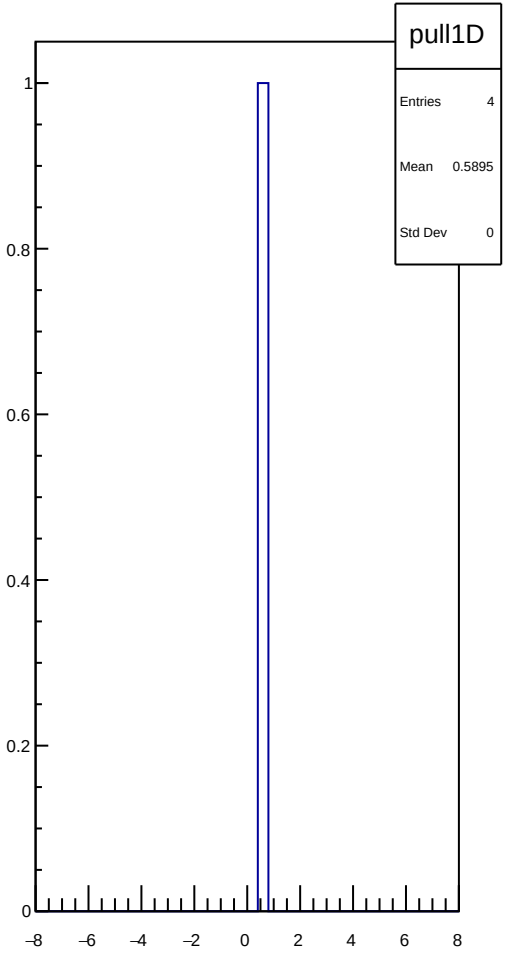

yield_bcm0l02_rms vs run
χ² / ndf 1.389e+04 / 3
p0 0.8122 ± 0.003342
1.6
1.4
1.2
1
0.8
0.6
6106. 0
6106. 1
6106. 2
6106. 3

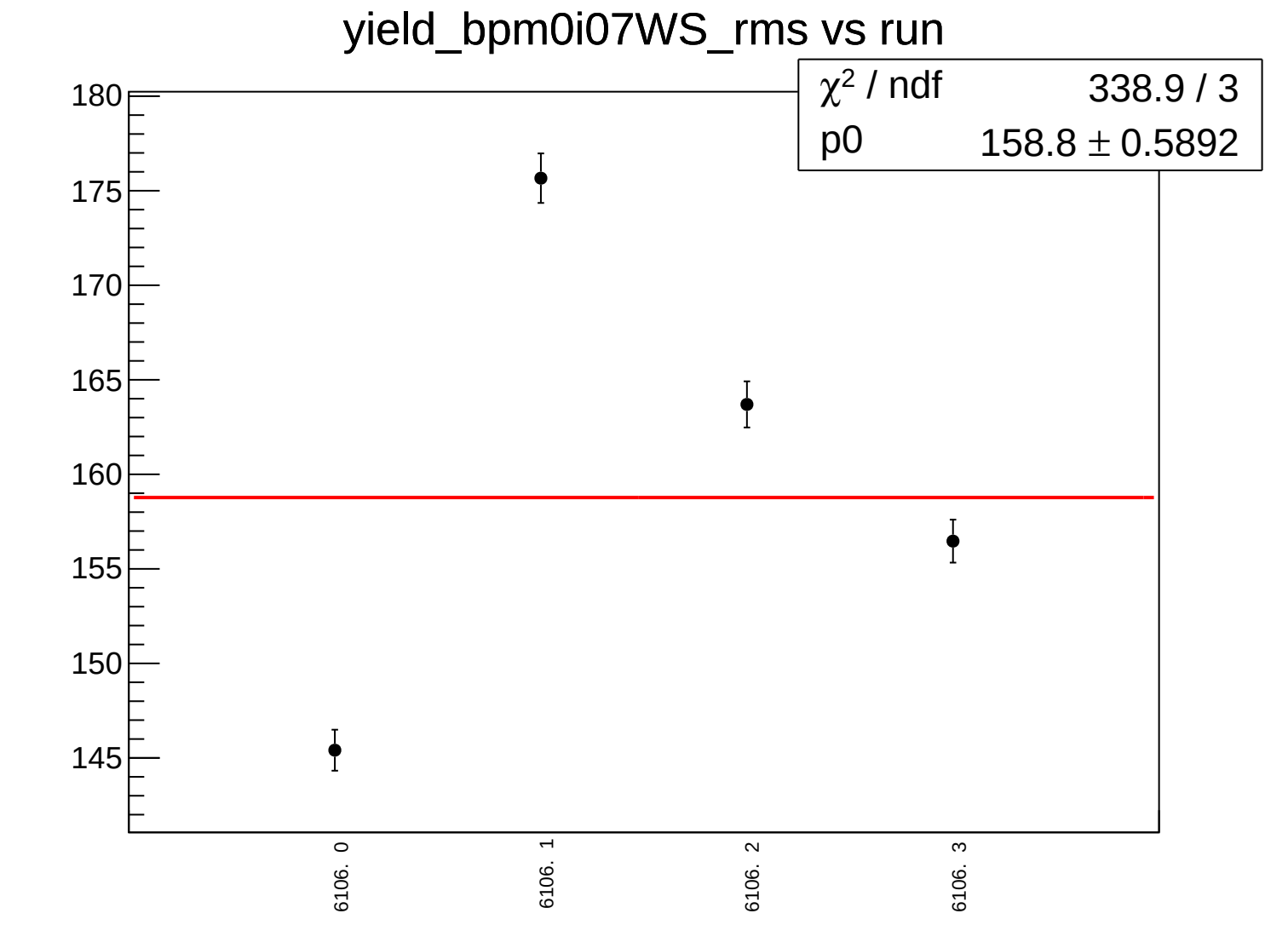

yield_bpm2i01WS_mean vs run
×10^3
χ² / ndf 32.84 / 3
p0 1.273e+05 ± 0.7079
127.27
127.268
127.266
127.264
127.262
127.26
127.258
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 20.5
Std Dev 20.17
3
2
1
0
−1
−2
−3

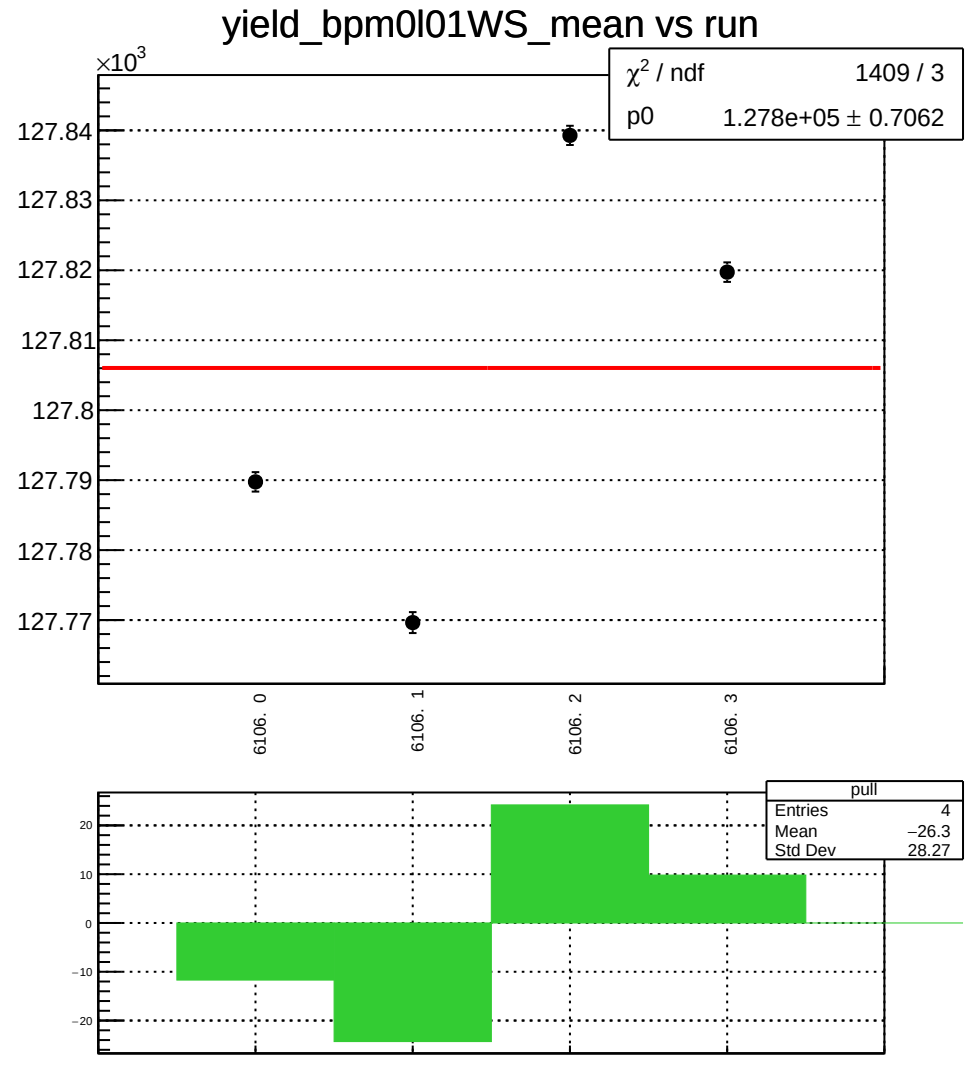

pull1D
Entries 4
Mean 0.04203
Std Dev 2.865
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

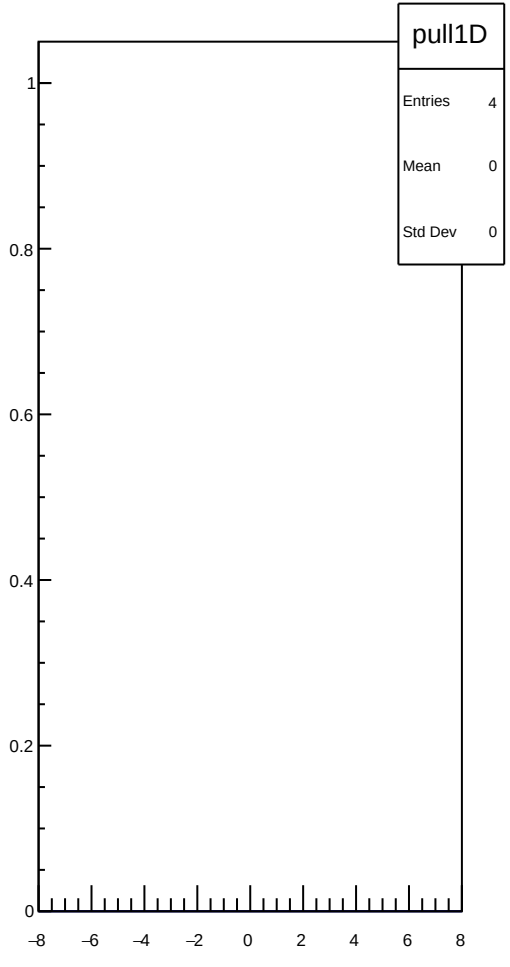

yield_bpm2i01WS_rms vs run
χ² / ndf 92.33 / 3
p0 135.1 ± 0.5006
146
144
142
140
138
136
134
132
130
6106. 0
6106. 1
6106. 2
6106. 3

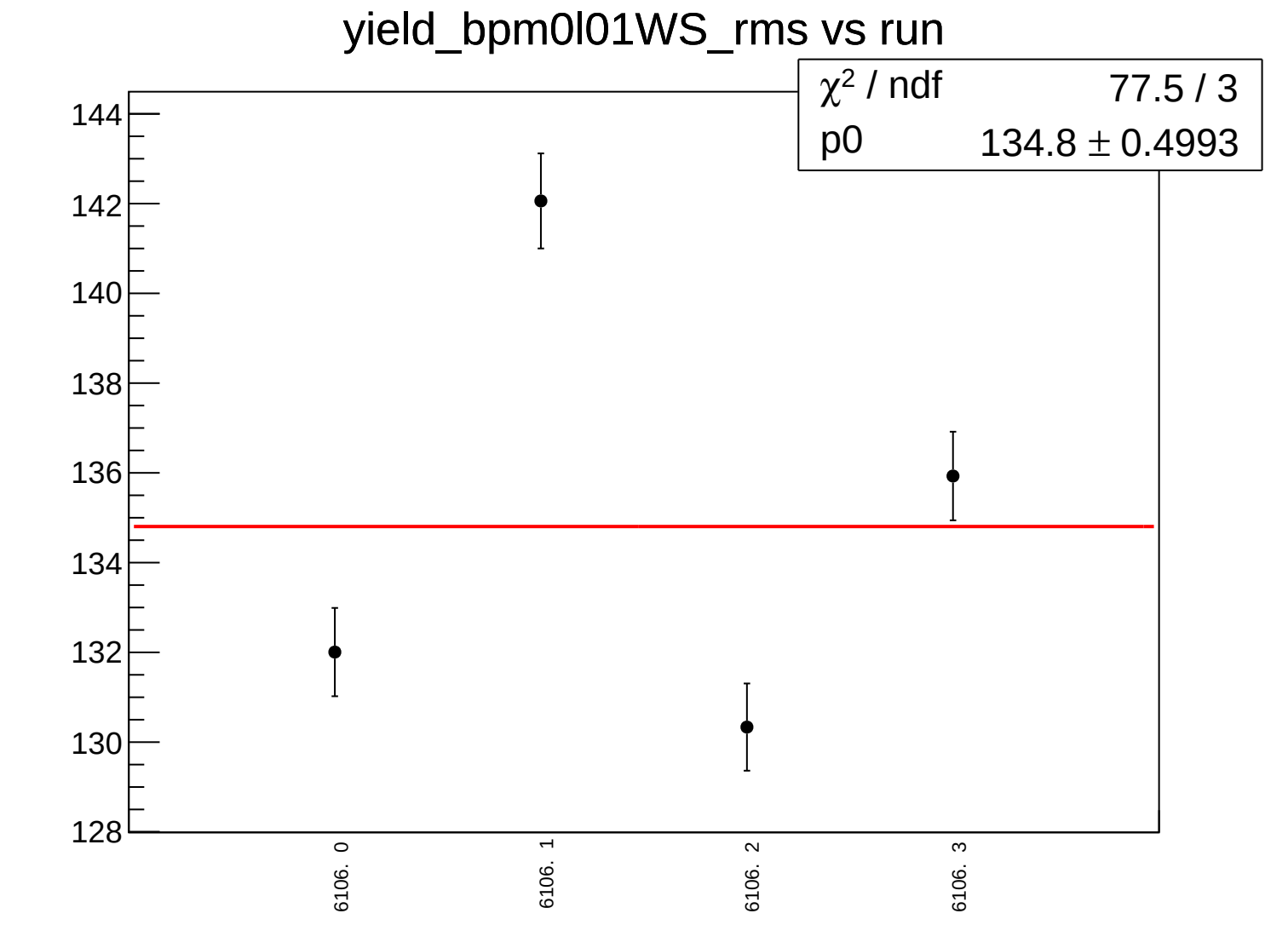

yield_bpm0i07WS_mean vs run
×10^3
χ^2 / ndf 4002 / 3
p0 1.543e+05 ± 0.8332
154.38
154.36
154.34
154.32
154.3
154.28
154.26
154.24
154.22
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 13.04
Std Dev 11.8
50
40
30
20
10
0
−10
−20
−30

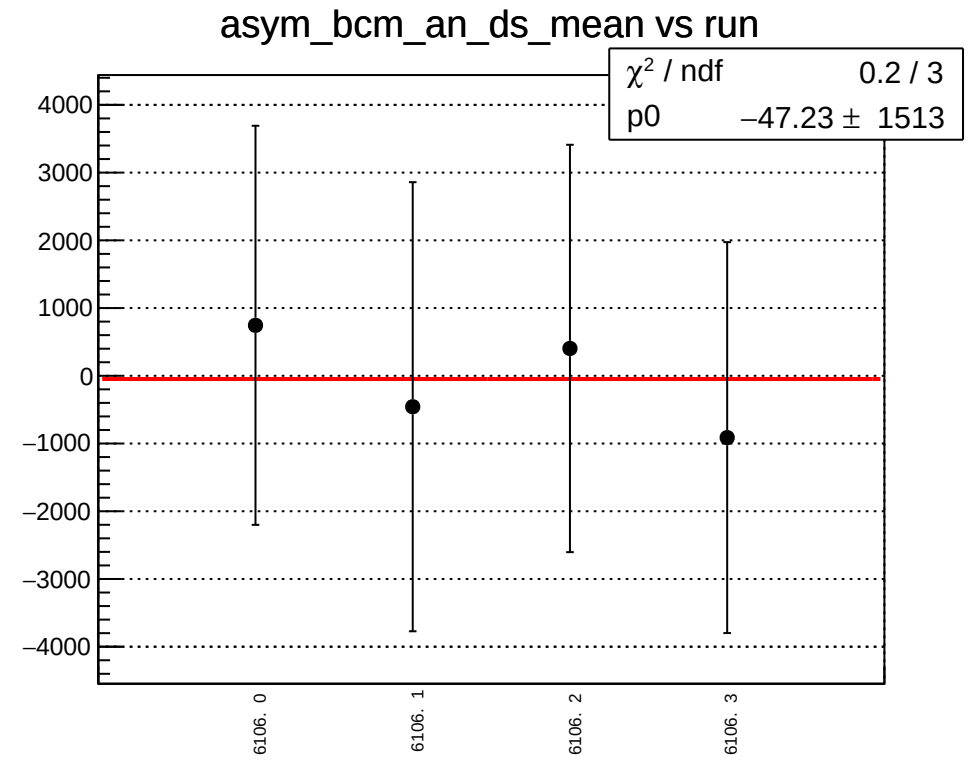

pull1D
Entries 4
Mean 0.5895
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

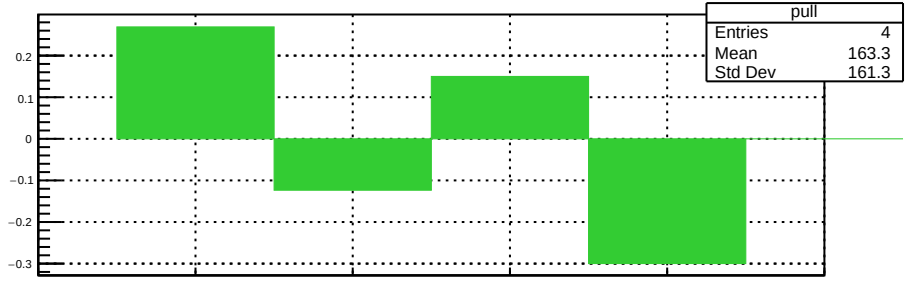

yield_bpm0i07WS_rms vs run
χ² / ndf 338.9 / 3
p0 158.8 ± 0.5892
180
175
170
165
160
155
150
145
6106. 0
6106. 1
6106. 2
6106. 3

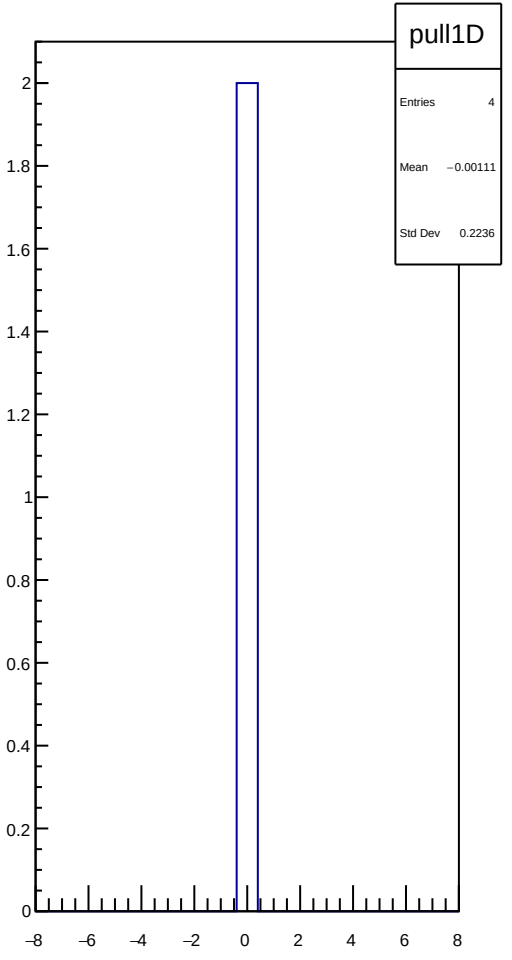

yield_bpm0l01WS_mean vs run
×10^3
χ^2 / ndf 1409 / 3
p0 1.278e+05 ± 0.7062
127.84
127.83
127.82
127.81
127.8
127.79
127.78
127.77
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −26.3
Std Dev 28.27
20
10
0
−10
−20

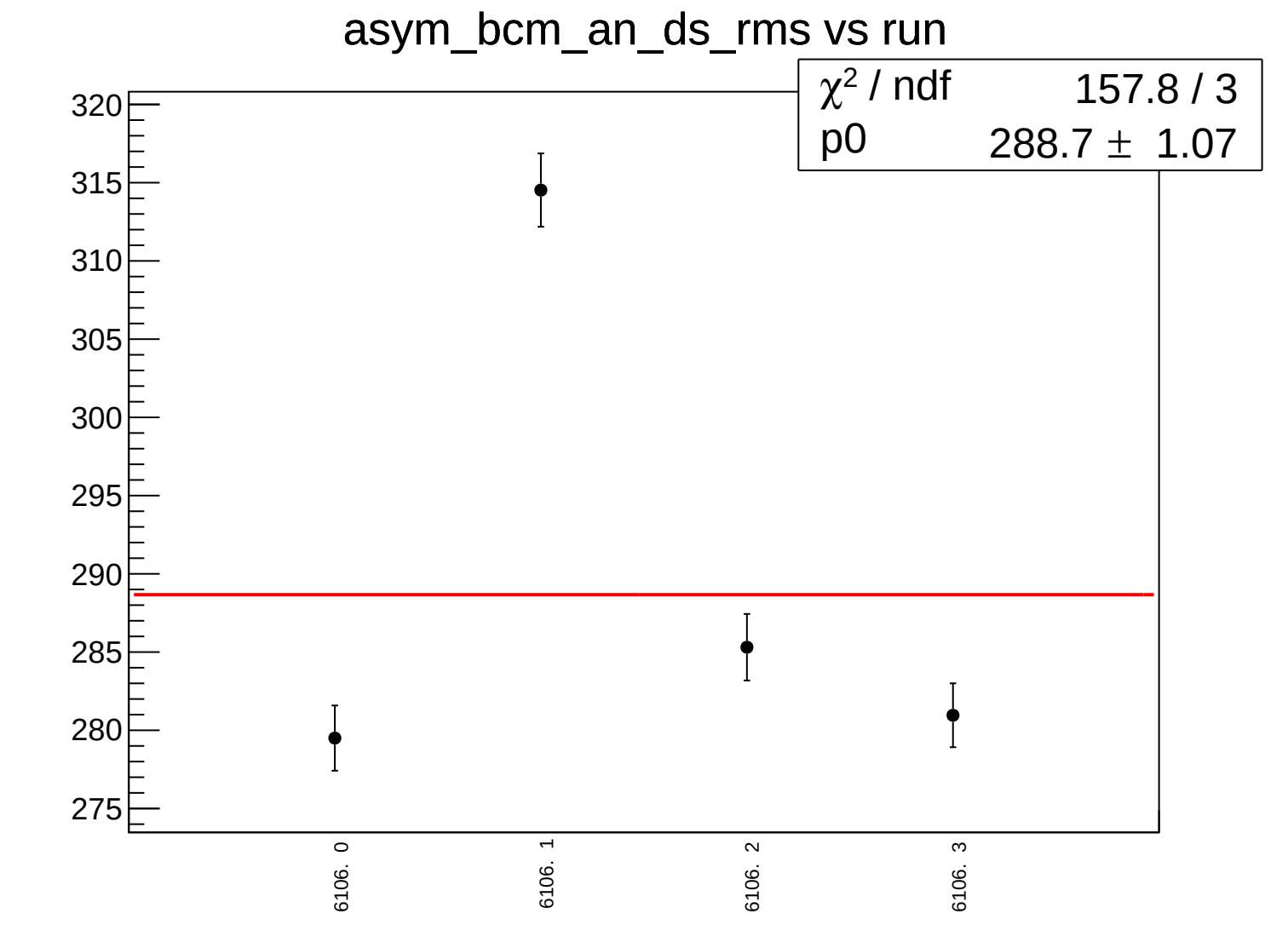

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

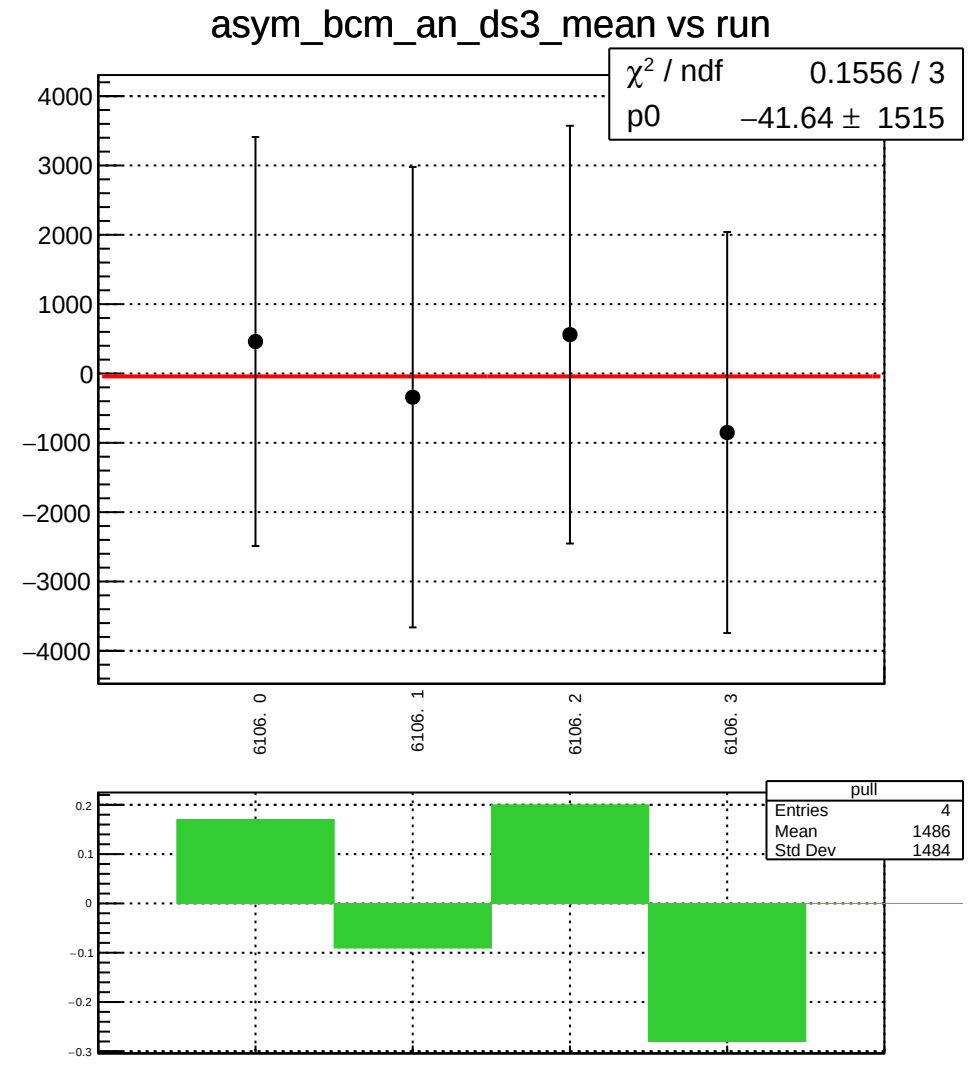

yield_bpm0l01WS_rms vs run
χ² / ndf 77.5 / 3
p0 134.8 ± 0.4993
144
142
140
138
136
134
132
130
128
6106. 0
6106. 1
6106. 2
6106. 3

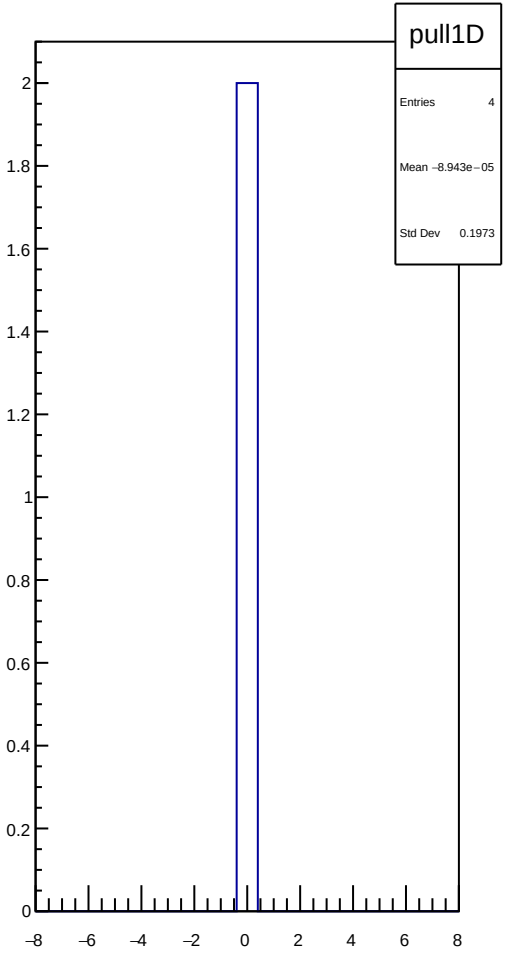

asym_bcm_an_ds_mean vs run
χ² / ndf 0.2 / 3
p0 −47.23 ± 1513
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3

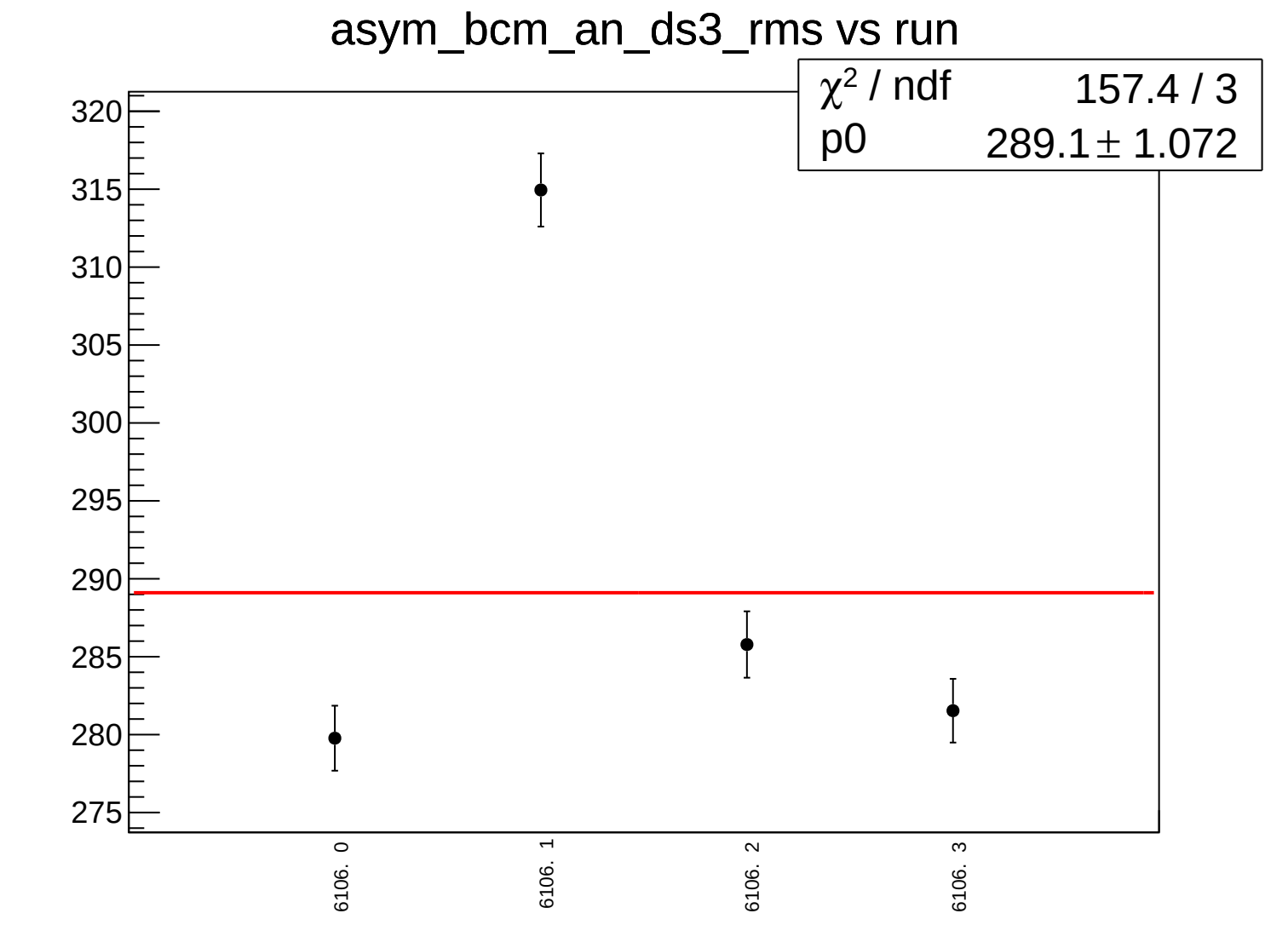

pull
Entries 4
Mean 163.3
Std Dev 161.3
0.2
0.1
0
−0.1
−0.2
−0.3

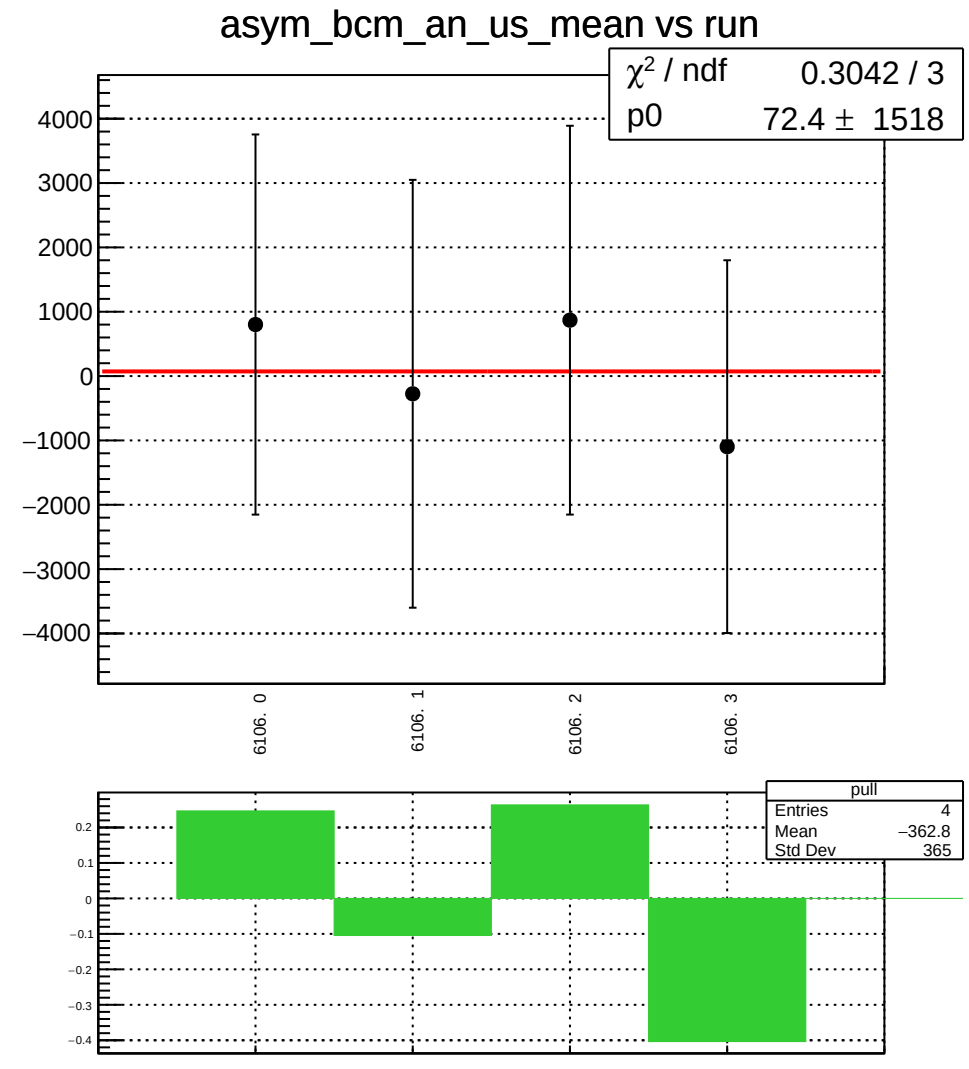

pull1D
Entries 4
Mean −0.00111
Std Dev 0.2236
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

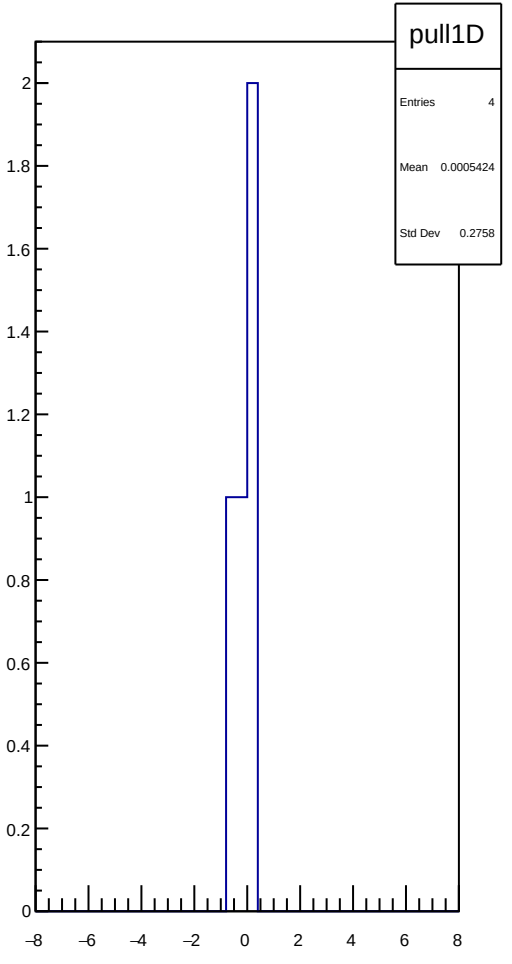

asym_bcm_an_ds_rms vs run
χ² / ndf 157.8 / 3
p0 288.7 ± 1.07
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

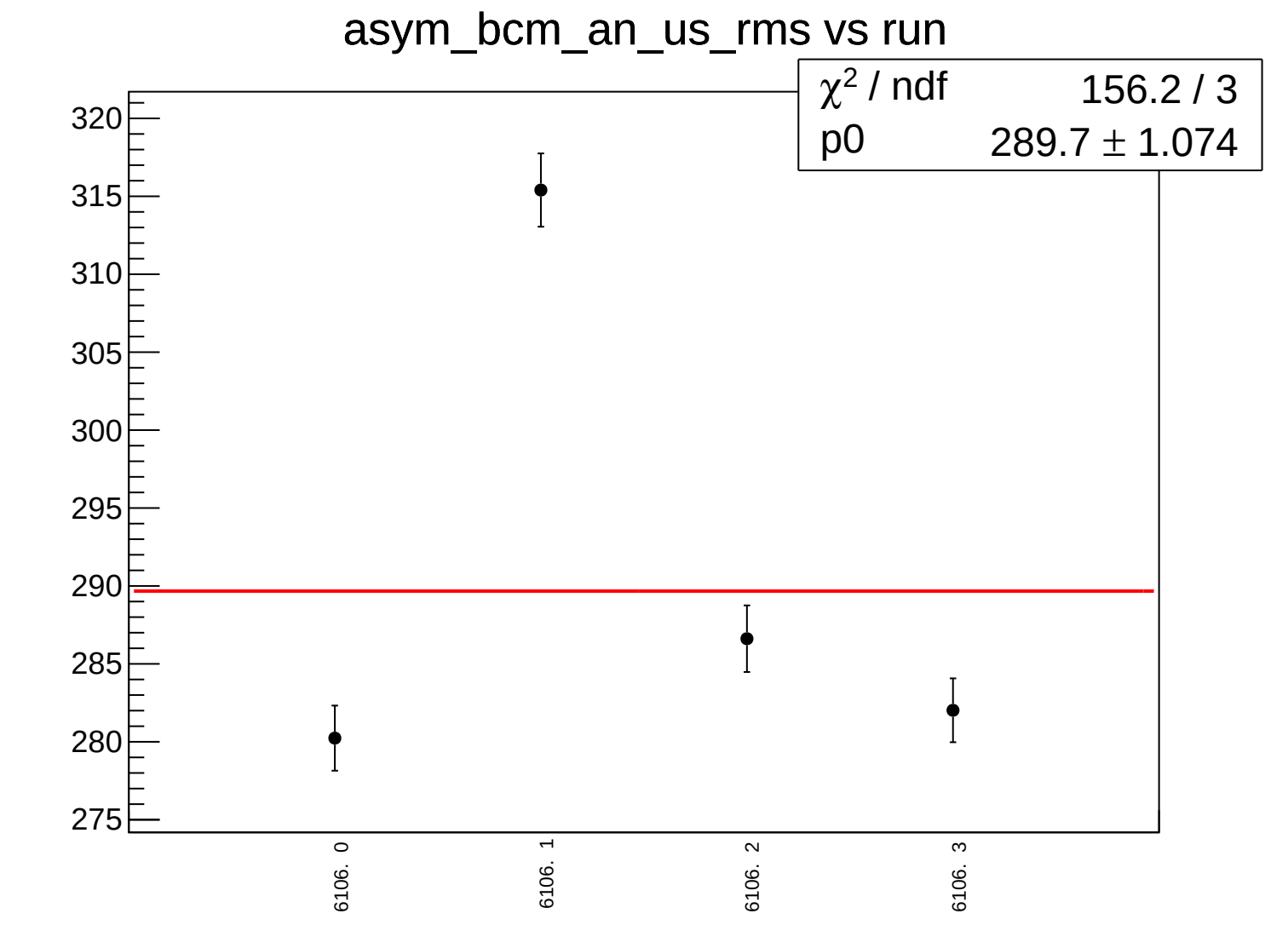

asym_bcm_an_ds3_mean vs run
χ² / ndf 0.1556 / 3
p0 −41.64 ± 1515
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 1486
Std Dev 1484
0.2
0.1
0
−0.1
−0.2
−0.3

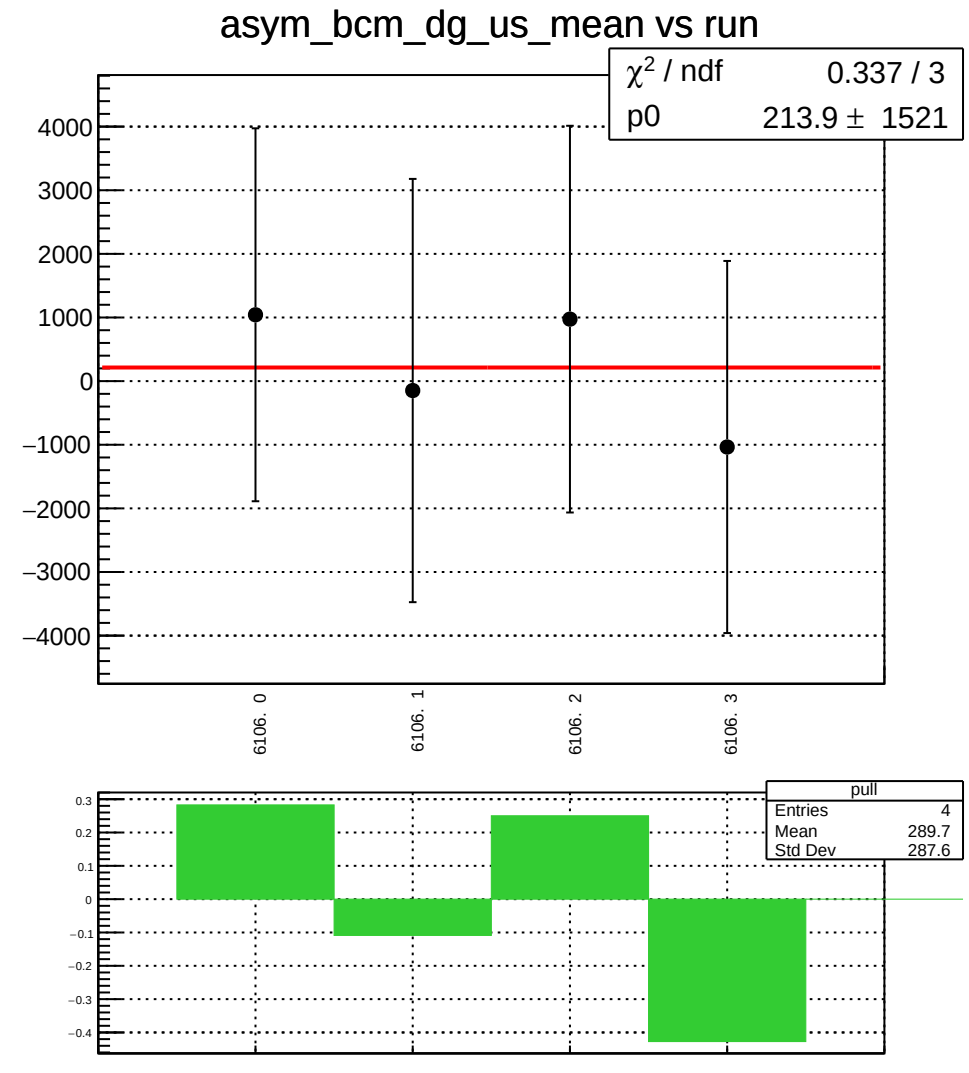

pull1D
Entries 4
Mean −8.943e−05
Std Dev 0.1973
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

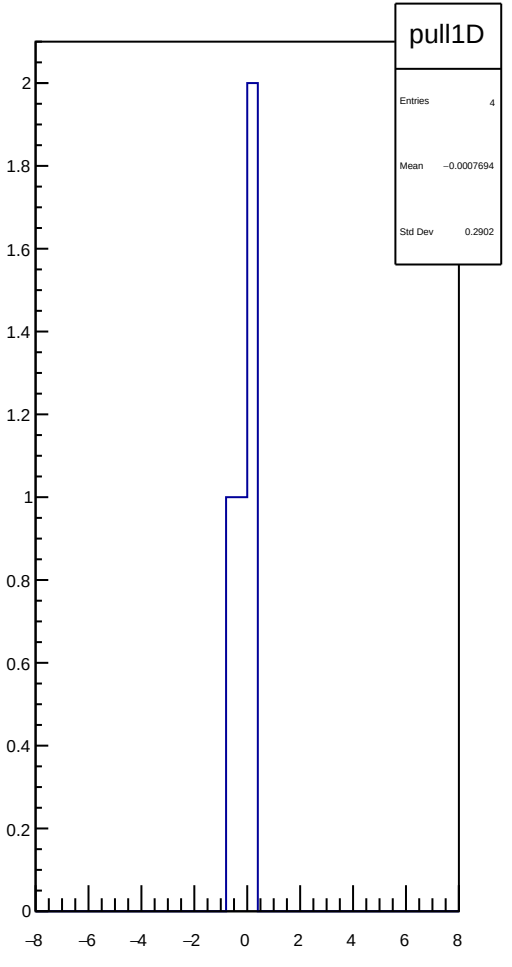

asym_bcm_an_ds3_rms vs run
χ² / ndf 157.4 / 3
p0 289.1 ± 1.072
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

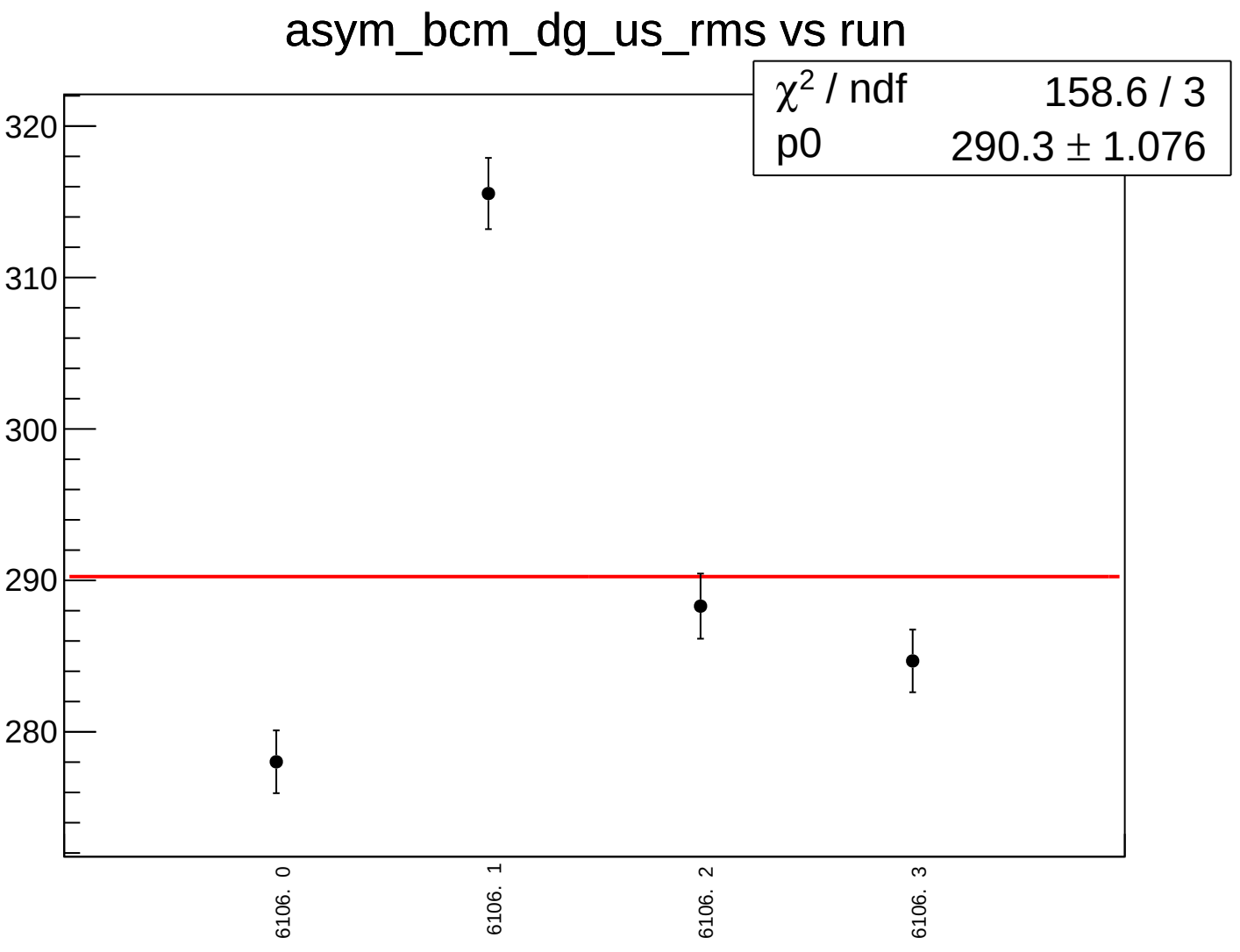

asym_bcm_an_us_mean vs run
χ² / ndf 0.3042 / 3
p0 72.4 ± 1518
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −362.8
Std Dev 365
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

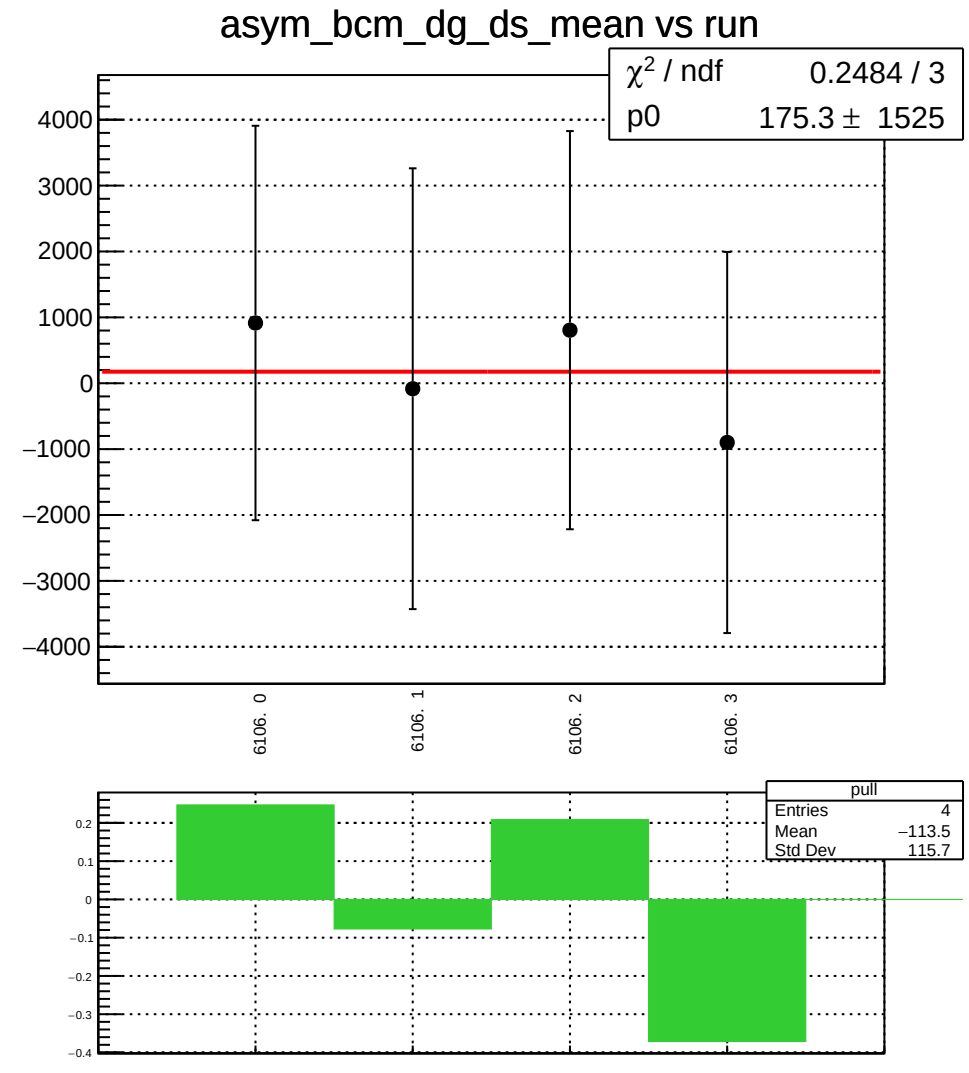

pull1D
Entries 4
Mean 0.0005424
Std Dev 0.2758
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

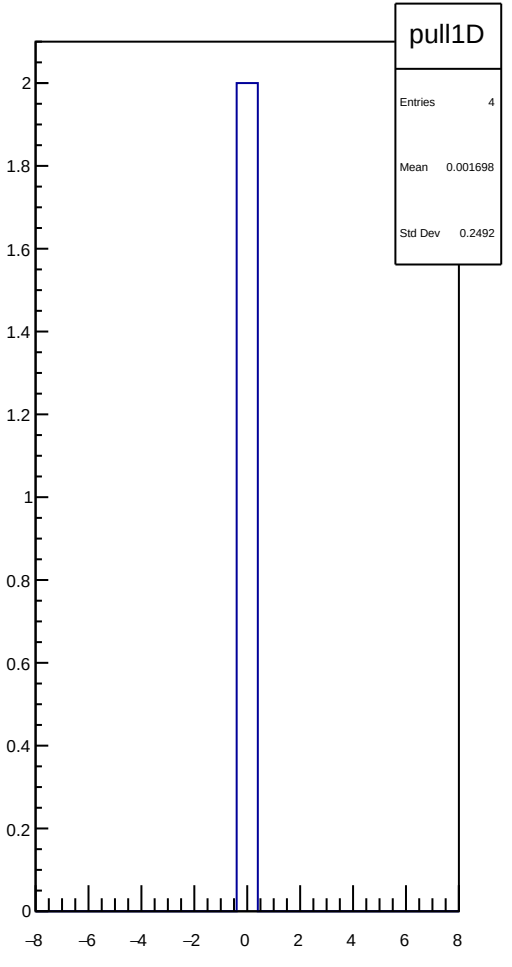

asym_bcm_an_us_rms vs run
χ² / ndf 156.2 / 3
p0 289.7 ± 1.074
320
315
310
305
300
295
290
285
280
275
6106. 0
6106. 1
6106. 2
6106. 3

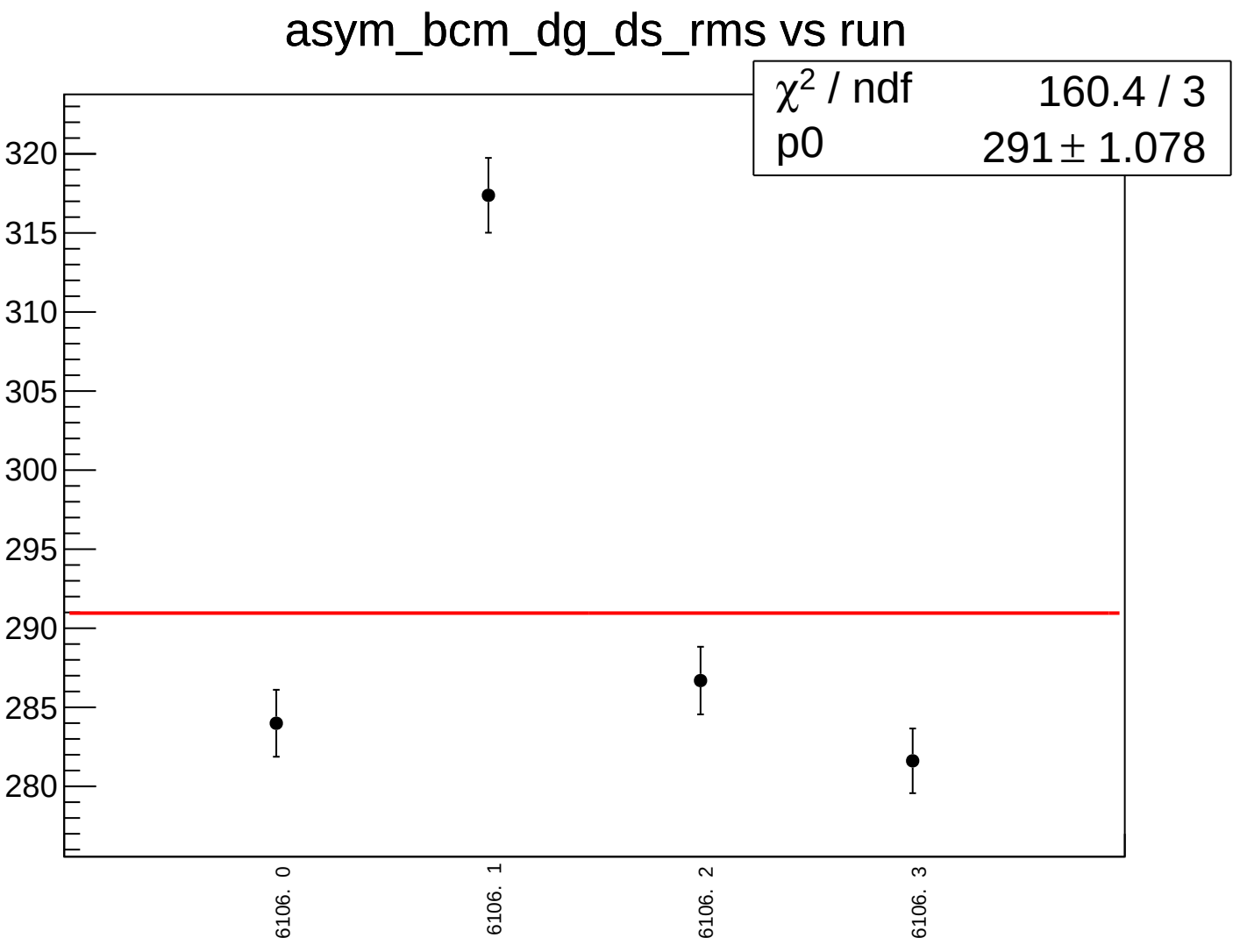

asym_bcm_dg_us_mean vs run
χ² / ndf 0.337 / 3
p0 213.9 ± 1521
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 289.7
Std Dev 287.6
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

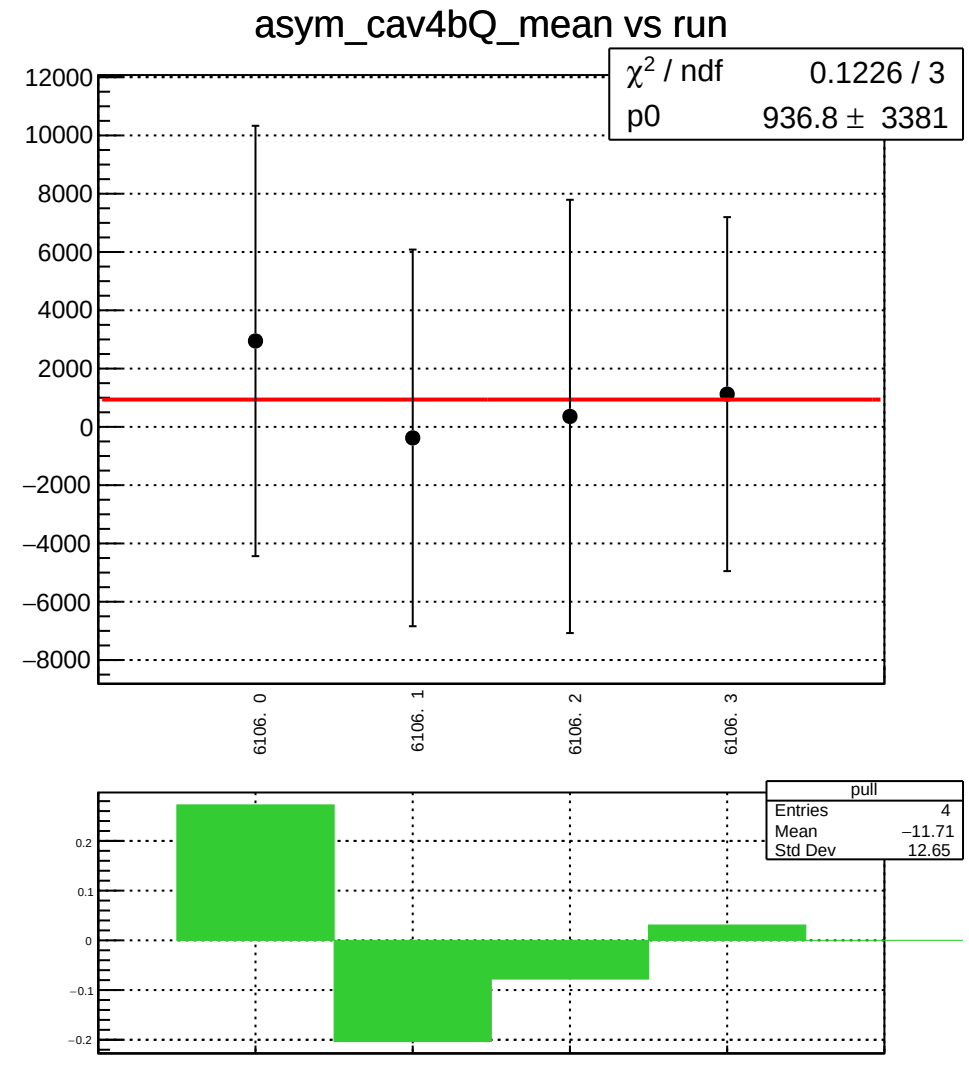

pull1D
Entries 4
Mean −0.0007694
Std Dev 0.2902
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

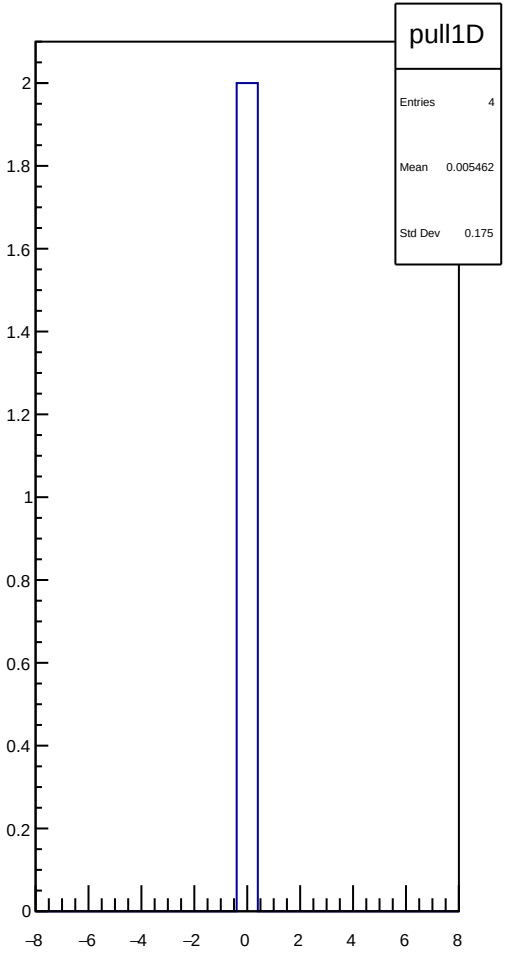

asym_bcm_dg_us_rms vs run
χ² / ndf 158.6 / 3
p0 290.3 ± 1.076
320
310
300
290
280
6106. 0
6106. 1
6106. 2
6106. 3

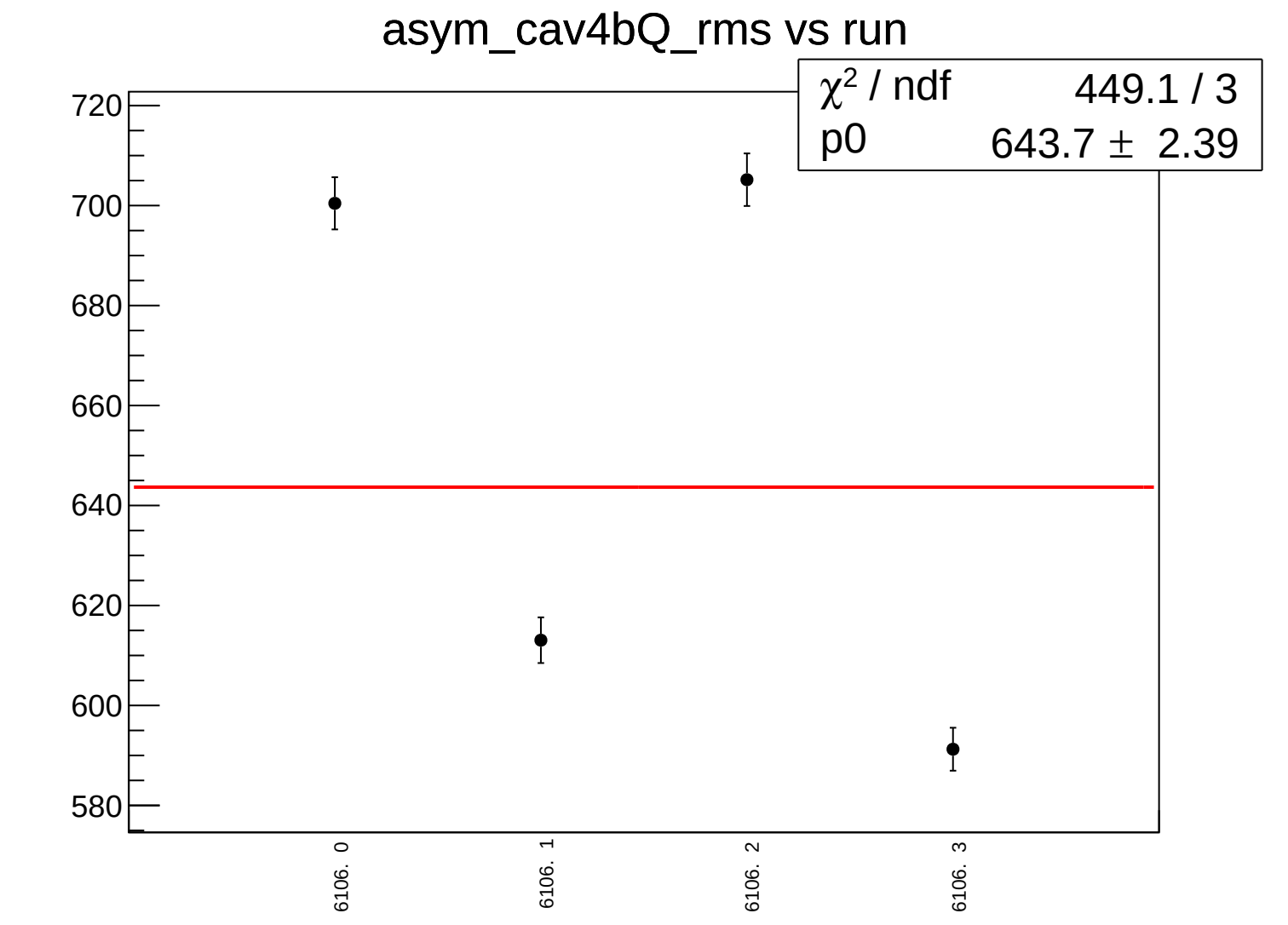

asym_bcm_dg_ds_mean vs run
χ² / ndf 0.2484 / 3
p0 175.3 ± 1525
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −113.5
Std Dev 115.7
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

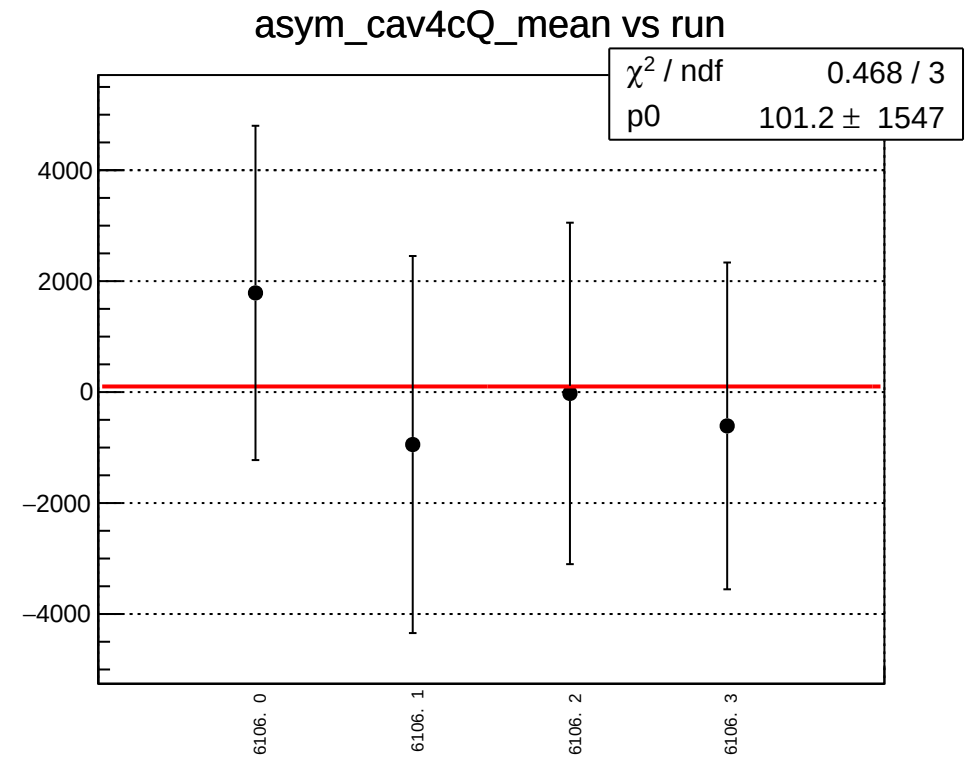

pull1D
Entries 4
Mean 0.001698
Std Dev 0.2492
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

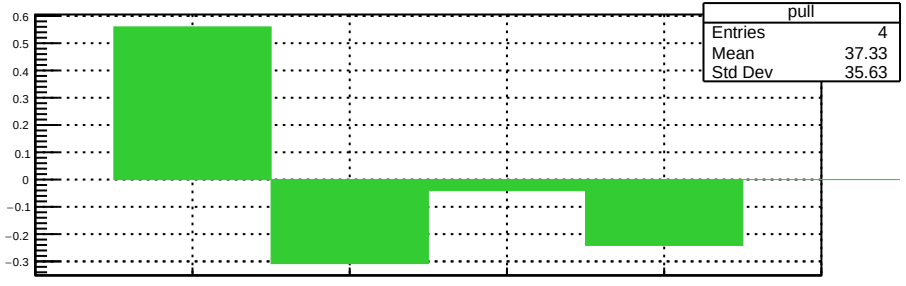

asym_bcm_dg_ds_rms vs run
χ² / ndf 160.4 / 3
p0 291 ± 1.078
320
315
310
305
300
295
290
285
280
6106. 0
6106. 1
6106. 2
6106. 3

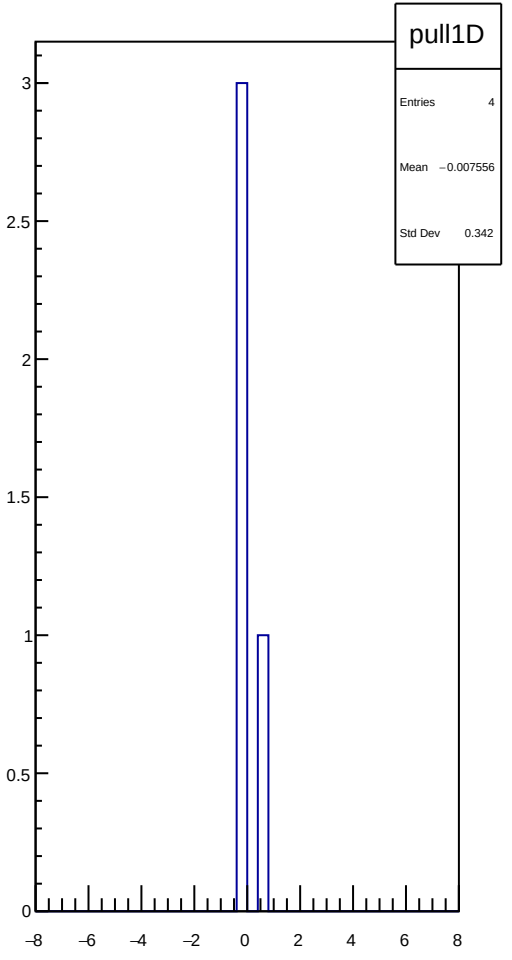

asym_cav4bQ_mean vs run
χ² / ndf 0.1226 / 3
p0 936.8 ± 3381
12000
10000
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −11.71
Std Dev 12.65
0.2
0.1
0
−0.1
−0.2

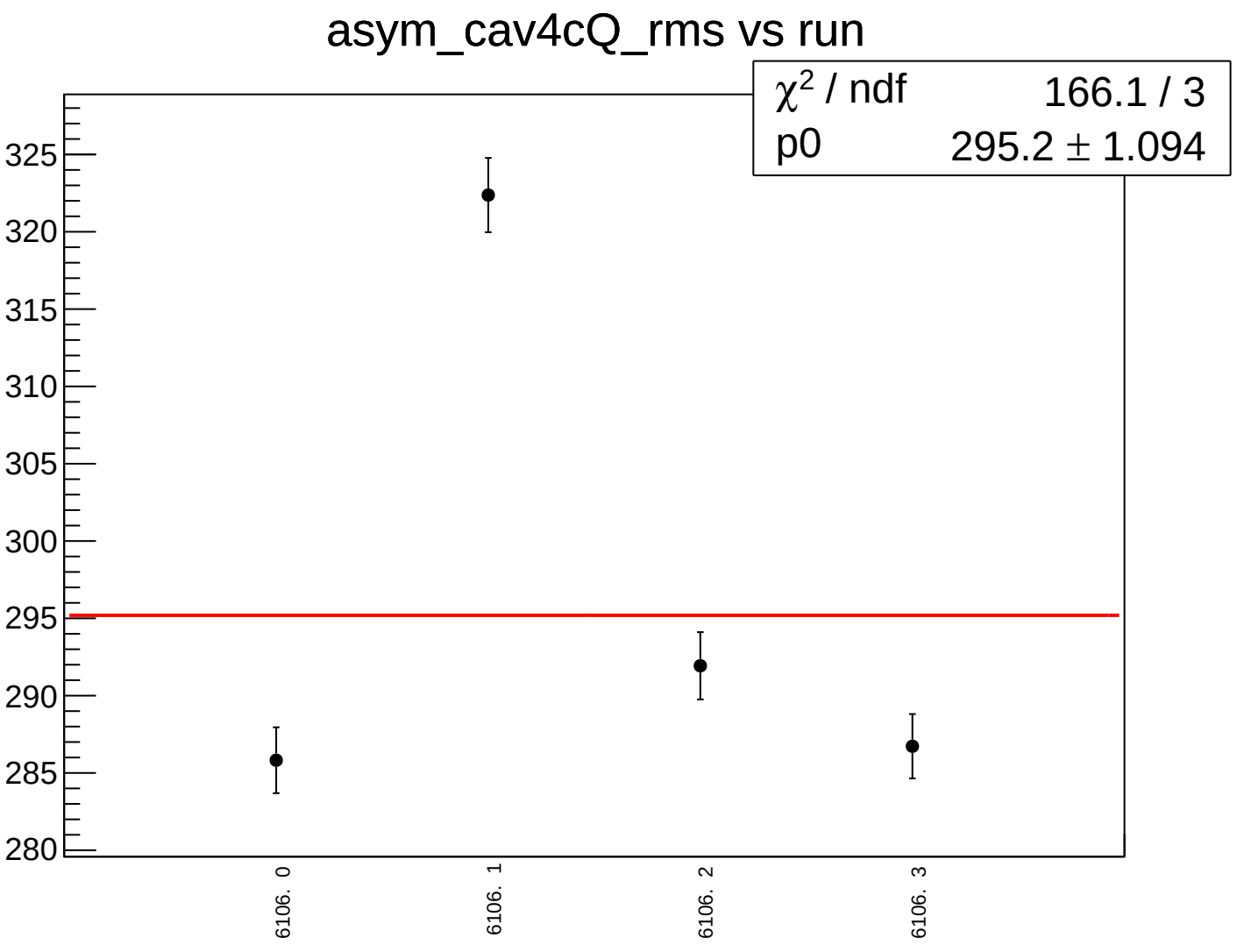

pull1D
Entries 4
Mean 0.005462
Std Dev 0.175
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

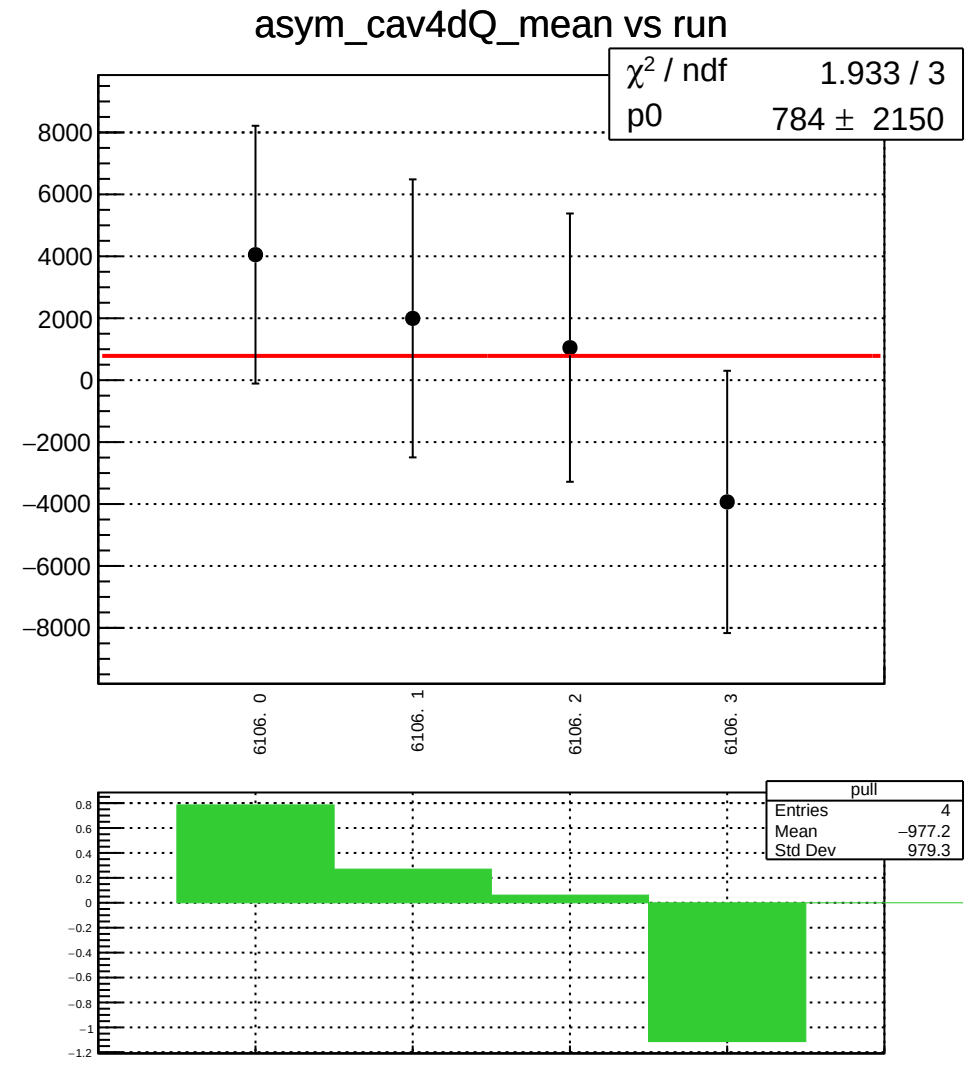

asym_cav4bQ_rms vs run
χ² / ndf 449.1 / 3
p0 643.7 ± 2.39
720
700
680
660
640
620
600
580
6106. 0
6106. 1
6106. 2
6106. 3

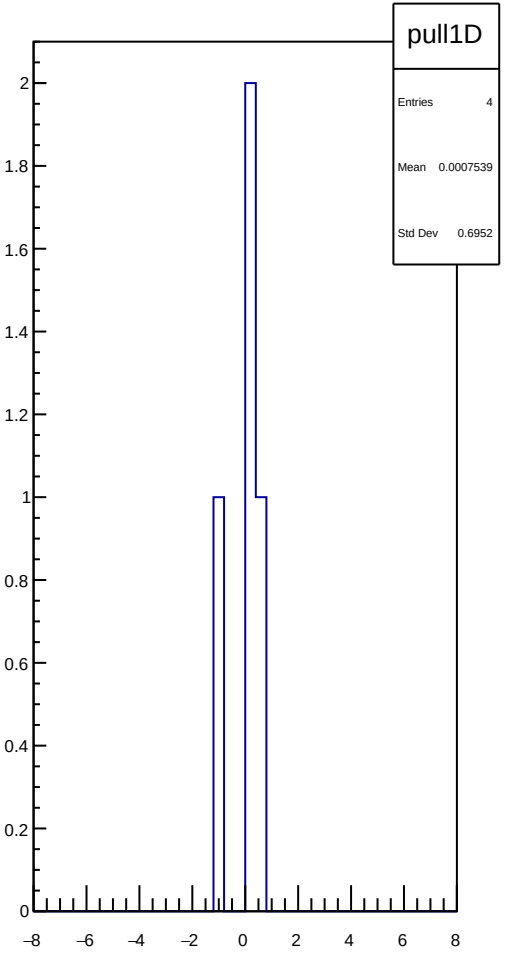

asym_cav4cQ_mean vs run
χ² / ndf 0.468 / 3
p0 101.2 ± 1547
4000
2000
0
−2000
−4000
6106. 0
6106. 1
6106. 2
6106. 3

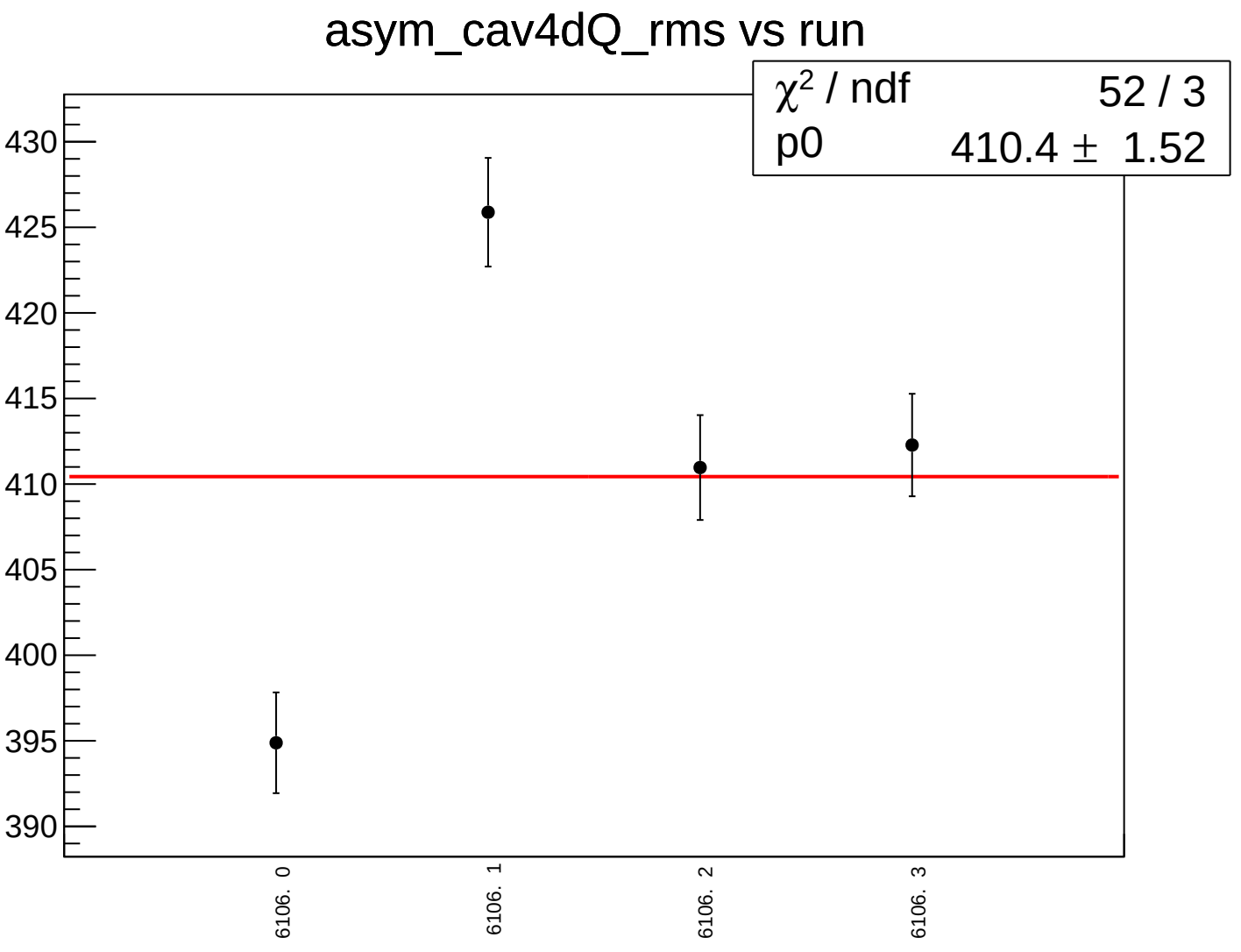

pull
Entries 4
Mean 37.33
Std Dev 35.63
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

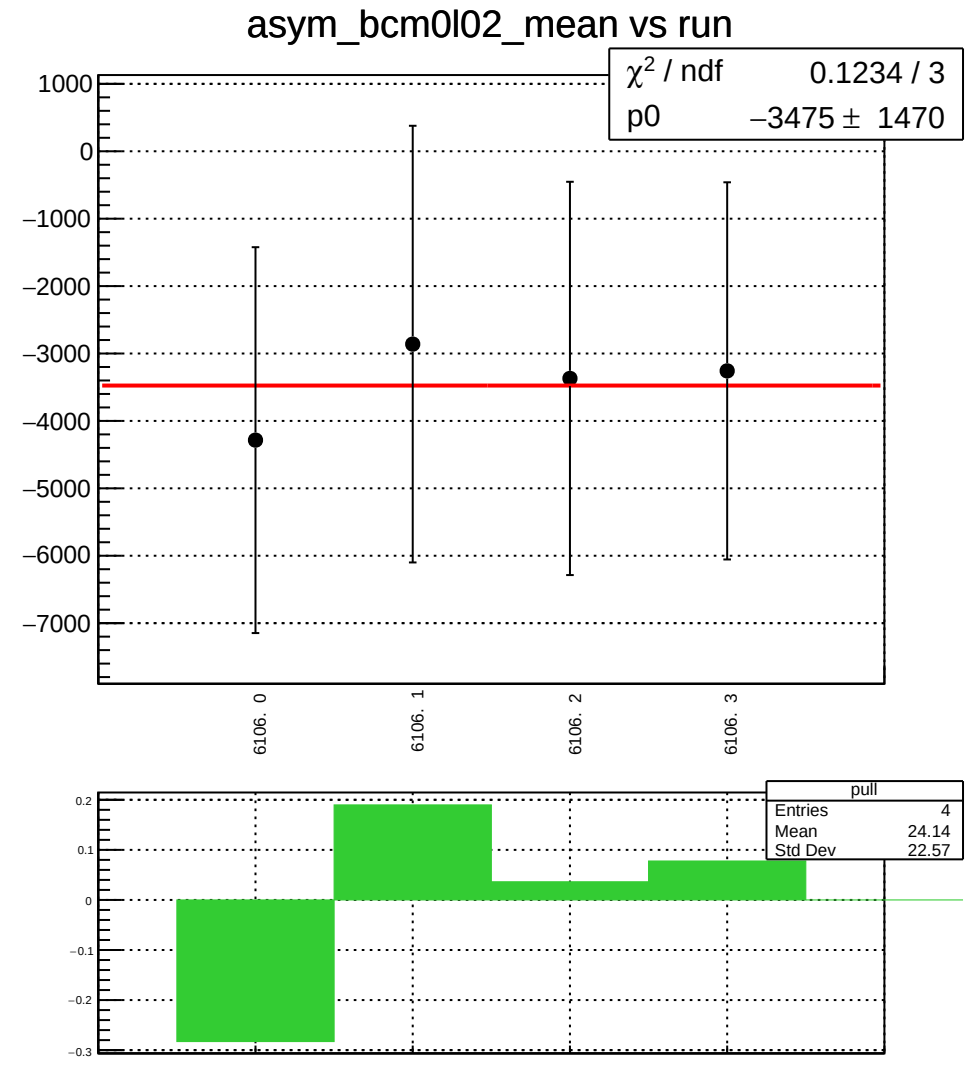

pull1D
Entries 4
Mean −0.007556
Std Dev 0.342
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

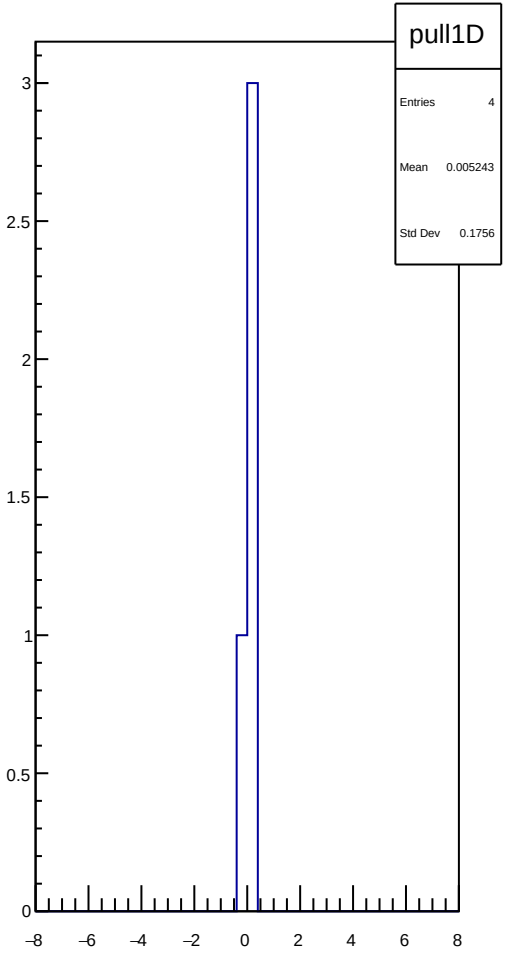

asym_cav4cQ_rms vs run
χ² / ndf 166.1 / 3
p0 295.2 ± 1.094
325
320
315
310
305
300
295
290
285
280
6106. 0
6106. 1
6106. 2
6106. 3

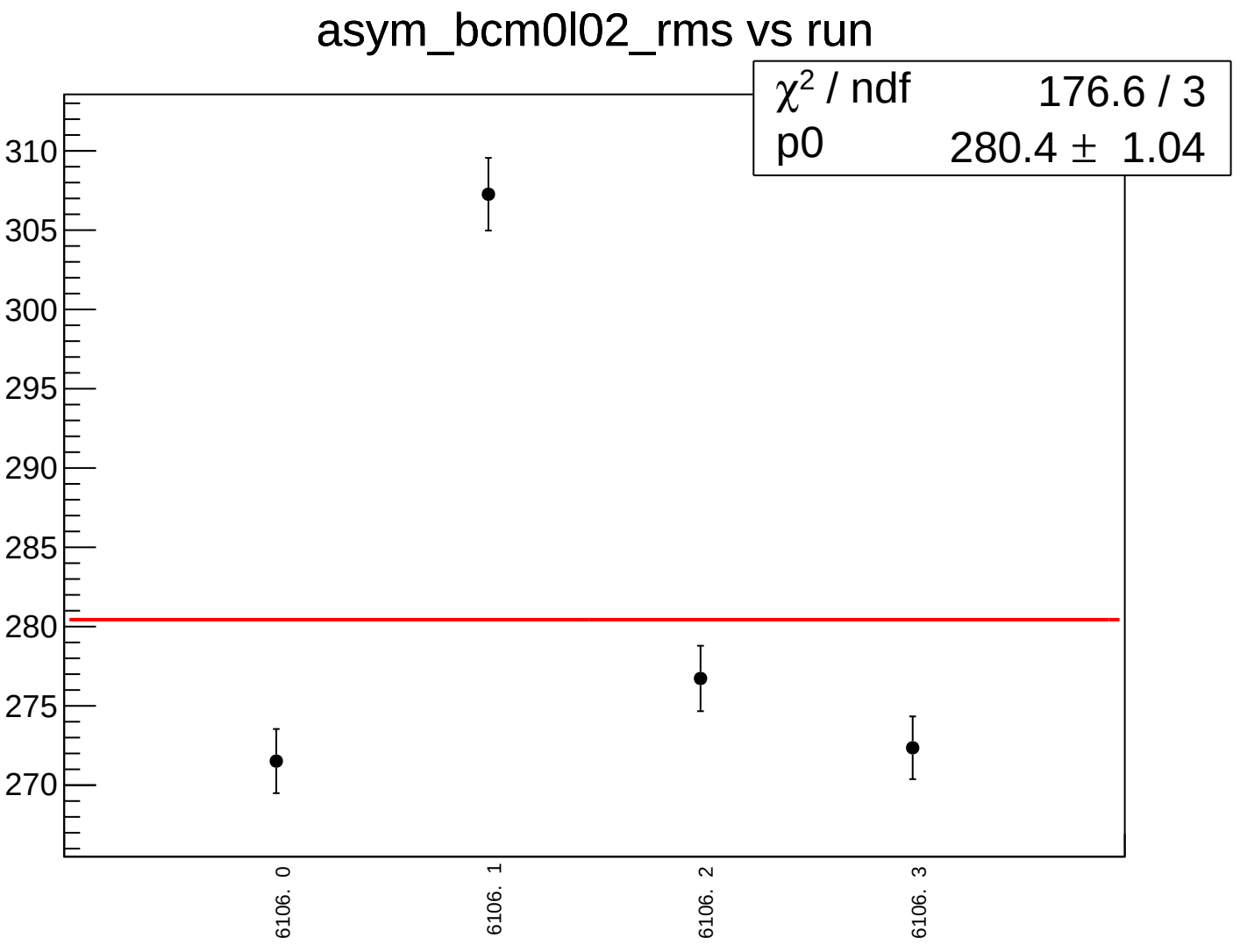

asym_cav4dQ_mean vs run
χ² / ndf 1.933 / 3
p0 784 ± 2150
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −977.2
Std Dev 979.3
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

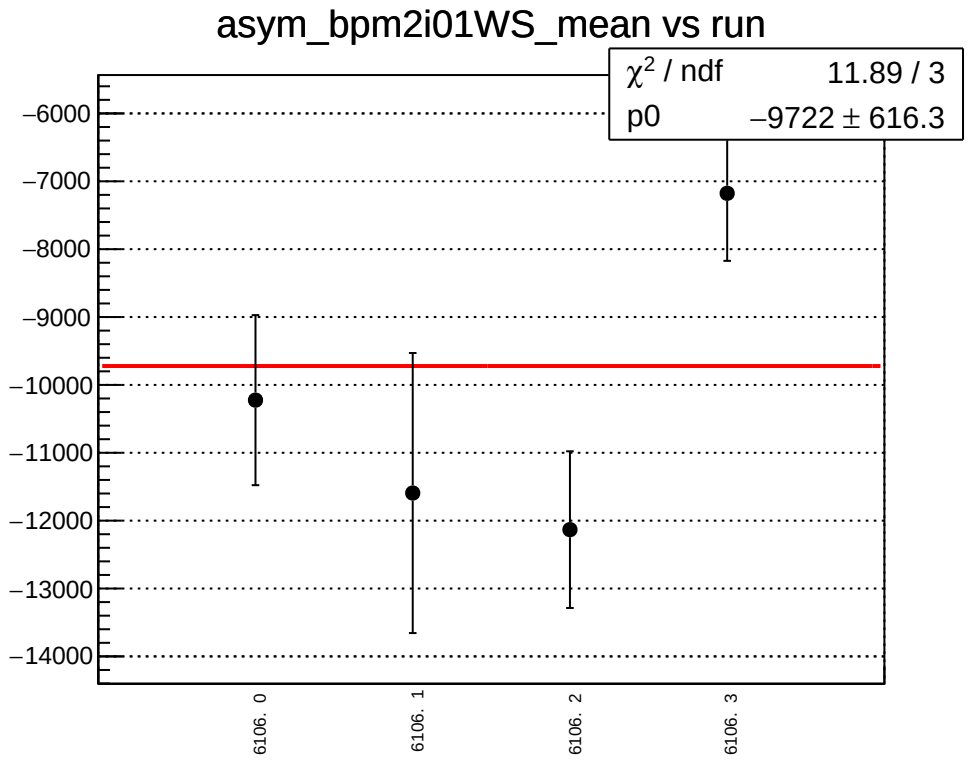

pull1D
Entries 4
Mean 0.0007539
Std Dev 0.6952
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

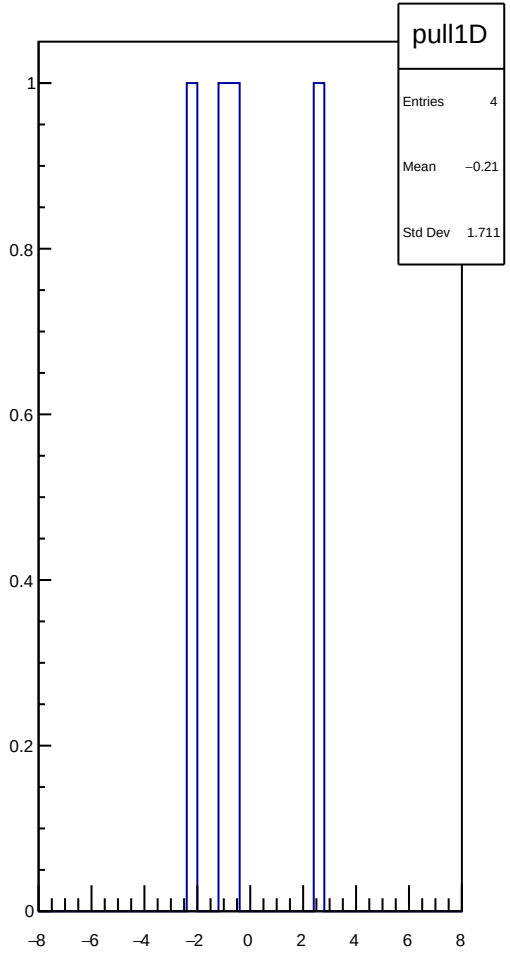

asym_cav4dQ_rms vs run
χ² / ndf 52 / 3
p0 410.4 ± 1.52
430
425
420
415
410
405
400
395
390
6106. 0
6106. 1
6106. 2
6106. 3

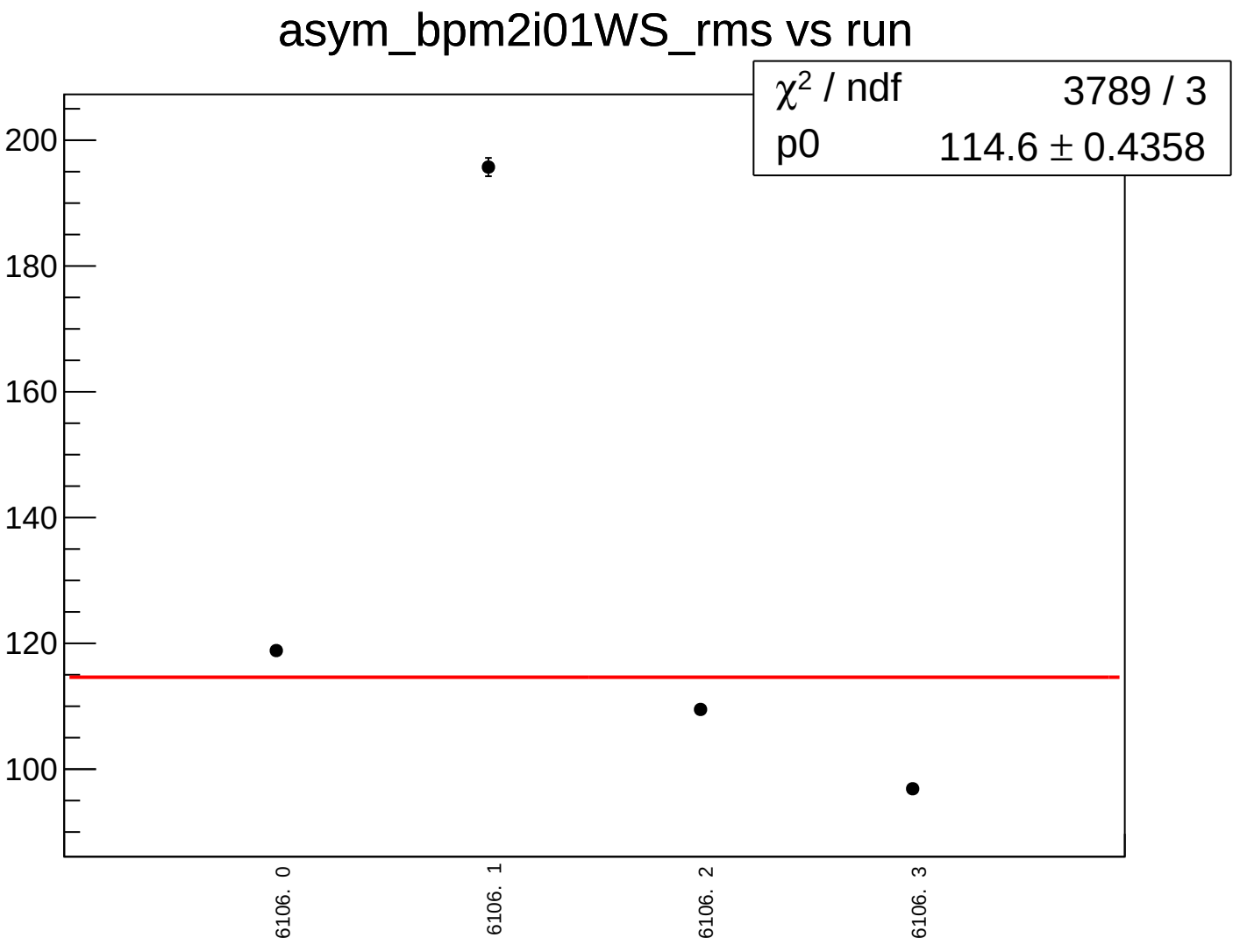

asym_bcm0l02_mean vs run
χ² / ndf 0.1234 / 3
p0 −3475 ± 1470
1000
0
−1000
−2000
−3000
−4000
−5000
−6000
−7000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 24.14
Std Dev 22.57
0.2
0.1
0
−0.1
−0.2
−0.3

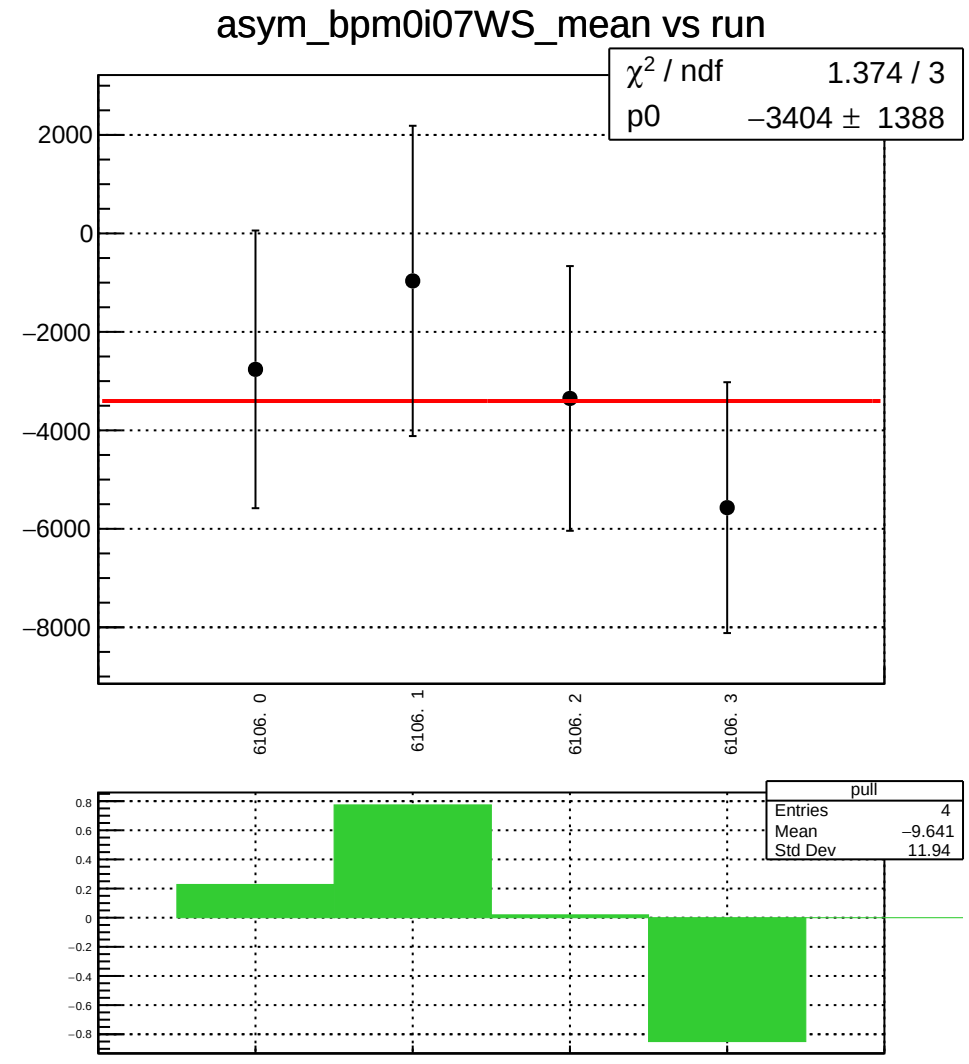

pull1D
Entries 4
Mean 0.005243
Std Dev 0.1756
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

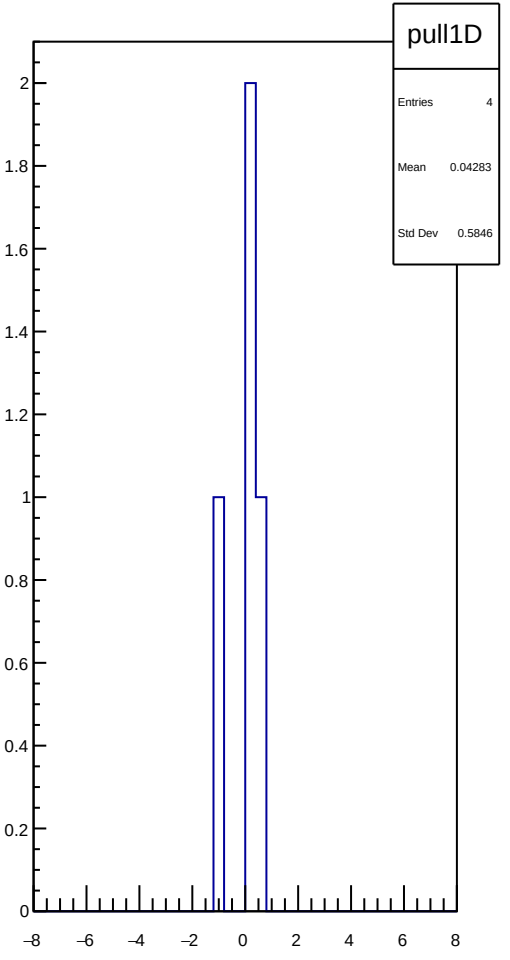

asym_bcm0l02_rms vs run
χ² / ndf 176.6 / 3
p0 280.4 ± 1.04
310
305
300
295
290
285
280
275
270
6106. 0
6106. 1
6106. 2
6106. 3

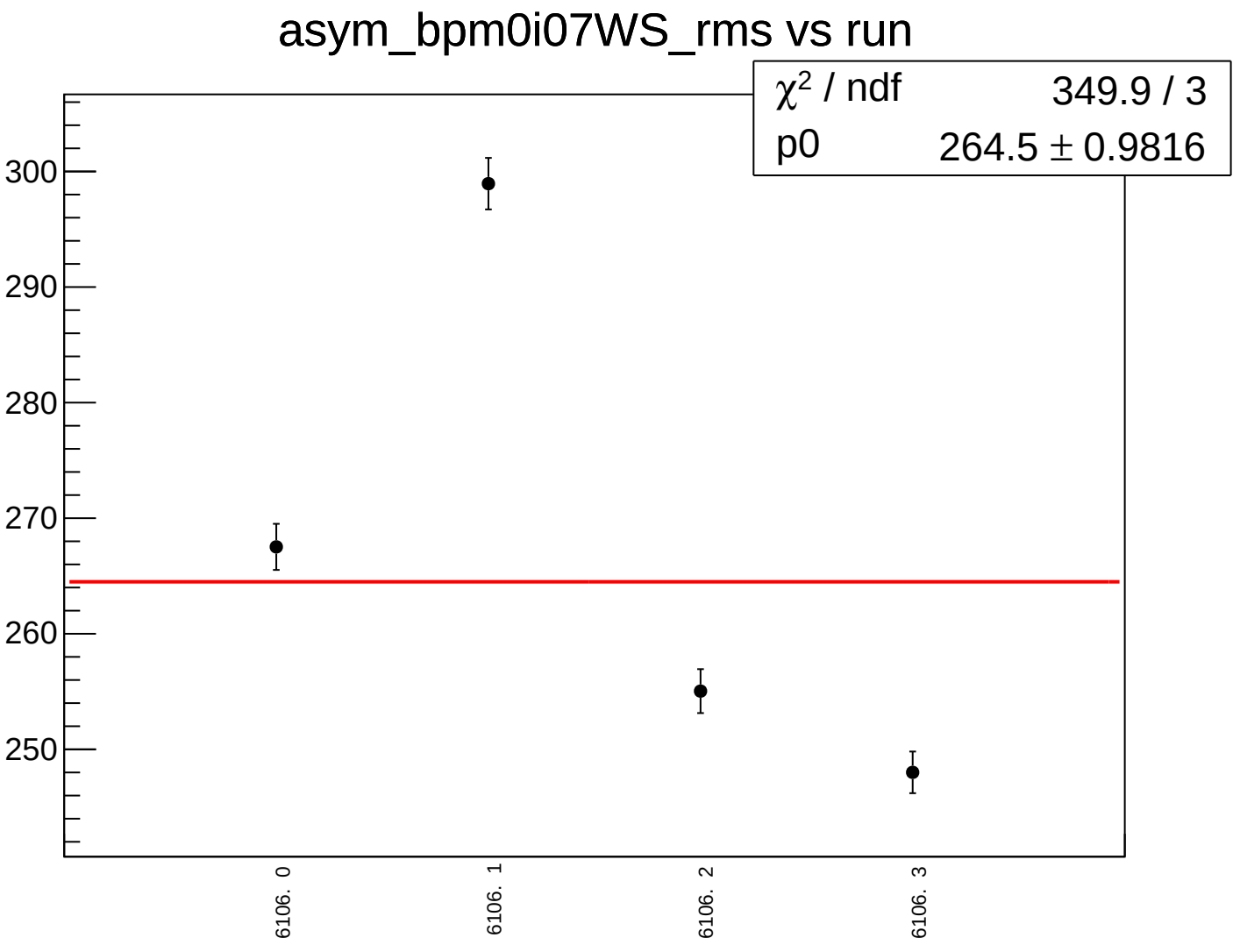

asym_bpm2i01WS_mean vs run
χ² / ndf 11.89 / 3
p0 −9722 ± 616.3
−6000
−7000
−8000
−9000
−10000
−11000
−12000
−13000
−14000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.58
Std Dev 5.086
2
1
0
−1
−2

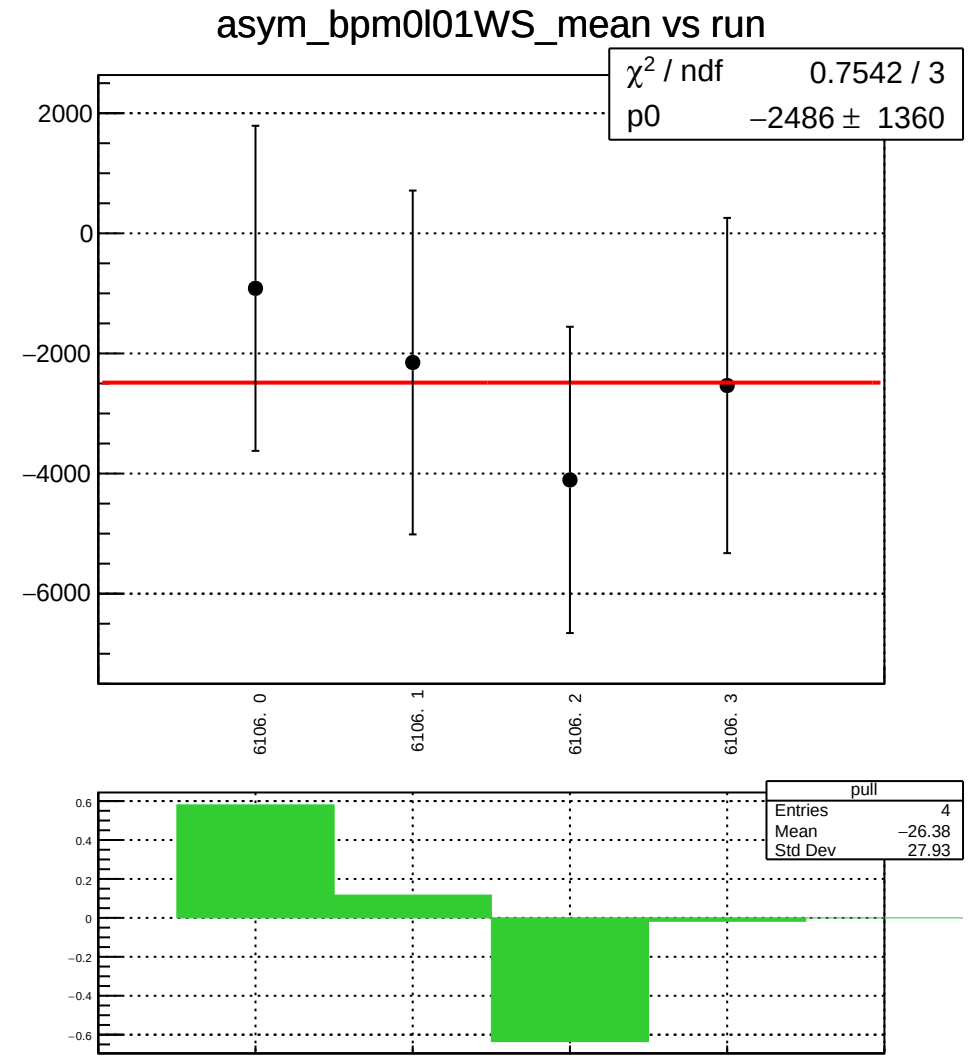

pull1D
Entries 4
Mean −0.21
Std Dev 1.711
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

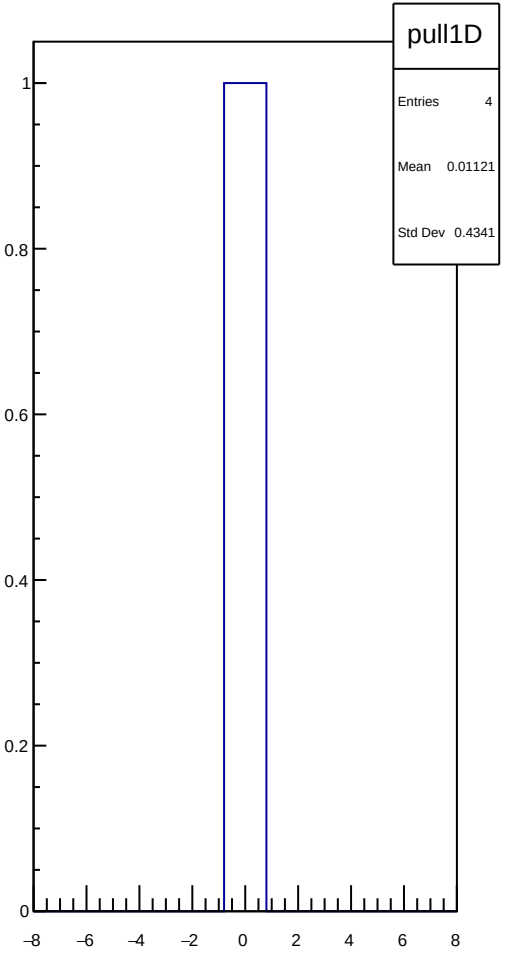

asym_bpm2i01WS_rms vs run
χ² / ndf 3789 / 3
p0 114.6 ± 0.4358
200
180
160
140
120
100
6106. 0
6106. 1
6106. 2
6106. 3

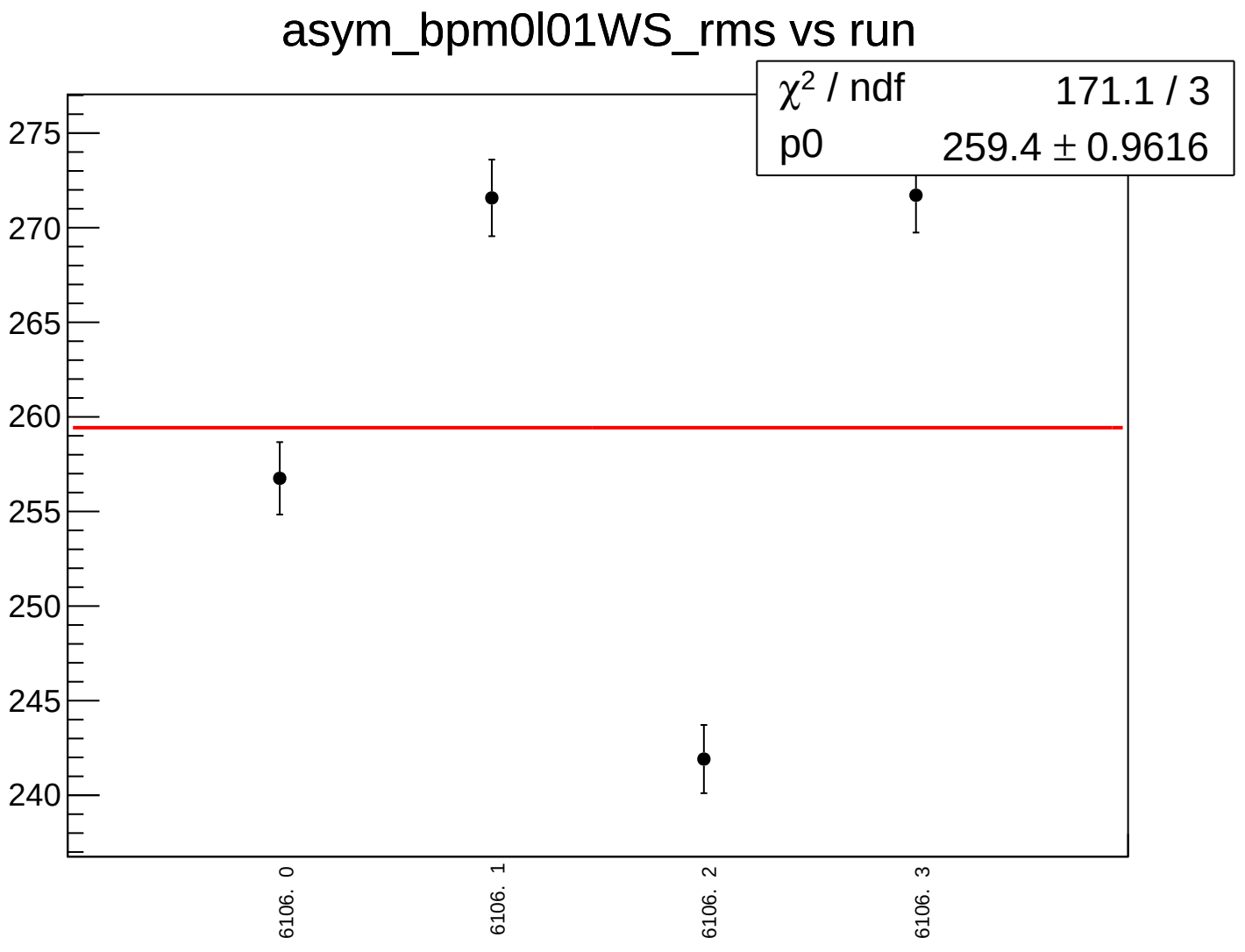

asym_bpm0i07WS_mean vs run
χ² / ndf 1.374 / 3
p0 −3404 ± 1388
2000
0
−2000
−4000
−6000
−8000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.641
Std Dev 11.94
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

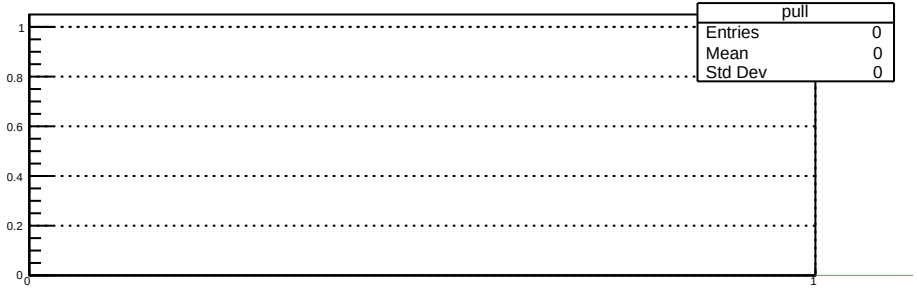

pull1D
Entries 4
Mean 0.04283
Std Dev 0.5846
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

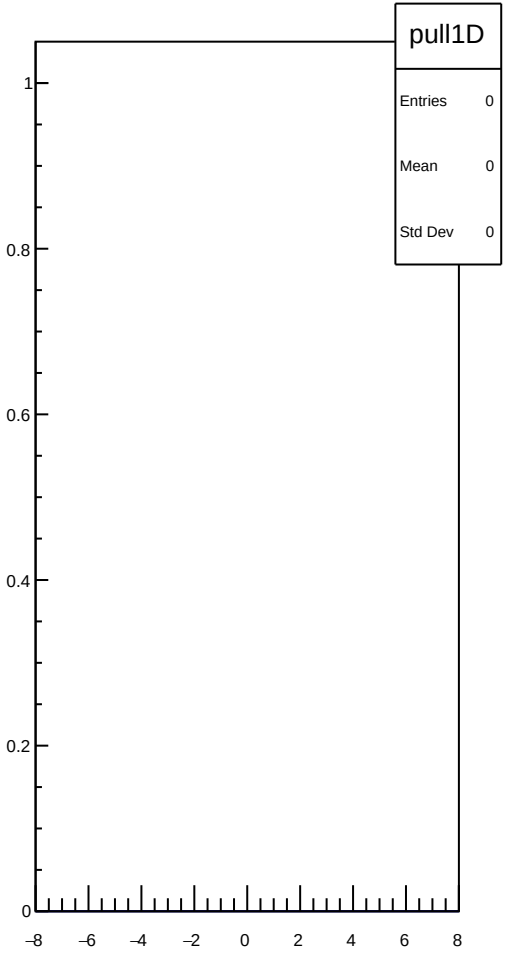

asym_bpm0i07WS_rms vs run
χ² / ndf 349.9 / 3
p0 264.5 ± 0.9816
300
290
280
270
260
250
6106. 0
6106. 1
6106. 2
6106. 3

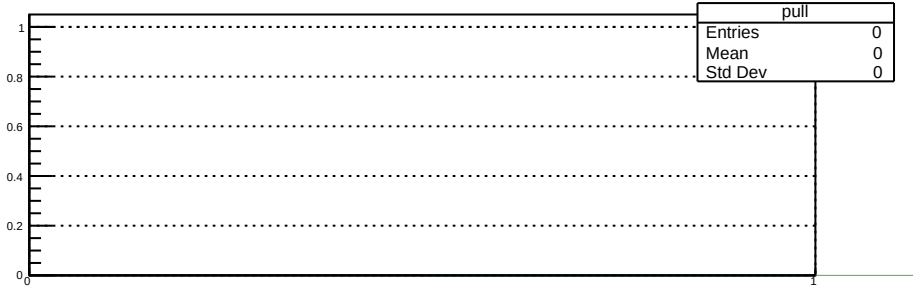

asym_bpm0l01WS_mean vs run
χ² / ndf 0.7542 / 3
p0 −2486 ± 1360
2000
0
−2000
−4000
−6000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −26.38
Std Dev 27.93
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

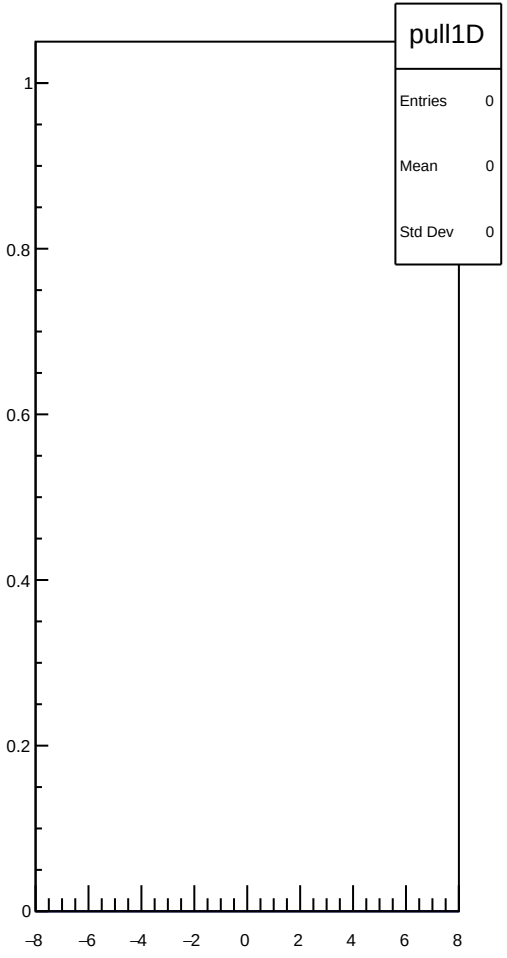

pull1D
Entries 4
Mean 0.01121
Std Dev 0.4341
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

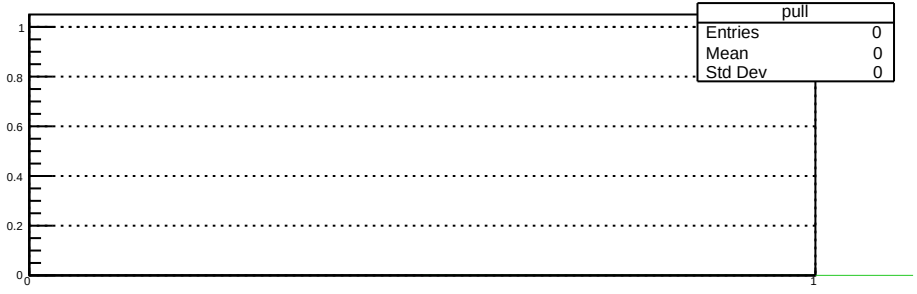

asym_bpm0l01WS_rms vs run
χ² / ndf 171.1 / 3
p0 259.4 ± 0.9616
275
270
265
260
255
250
245
240
6106. 0
6106. 1
6106. 2
6106. 3

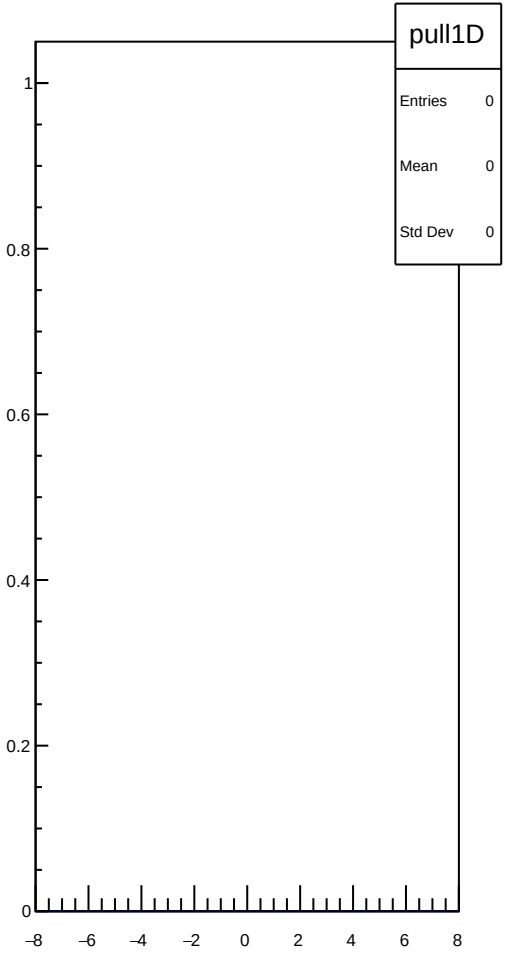

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

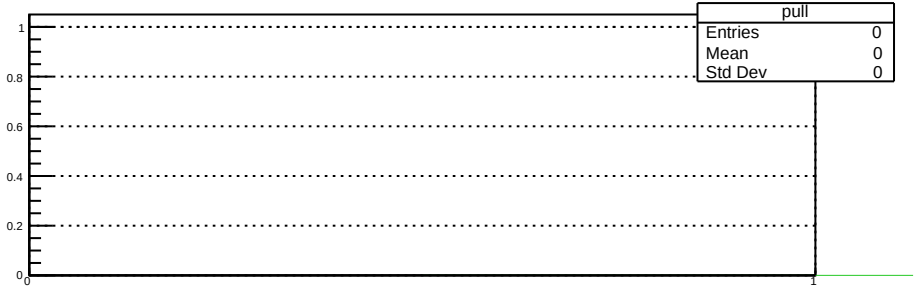

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

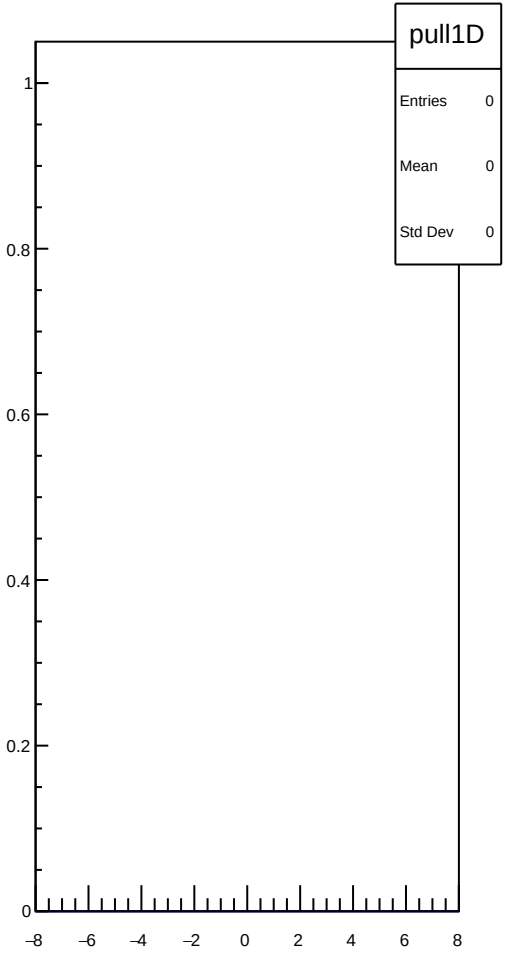

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

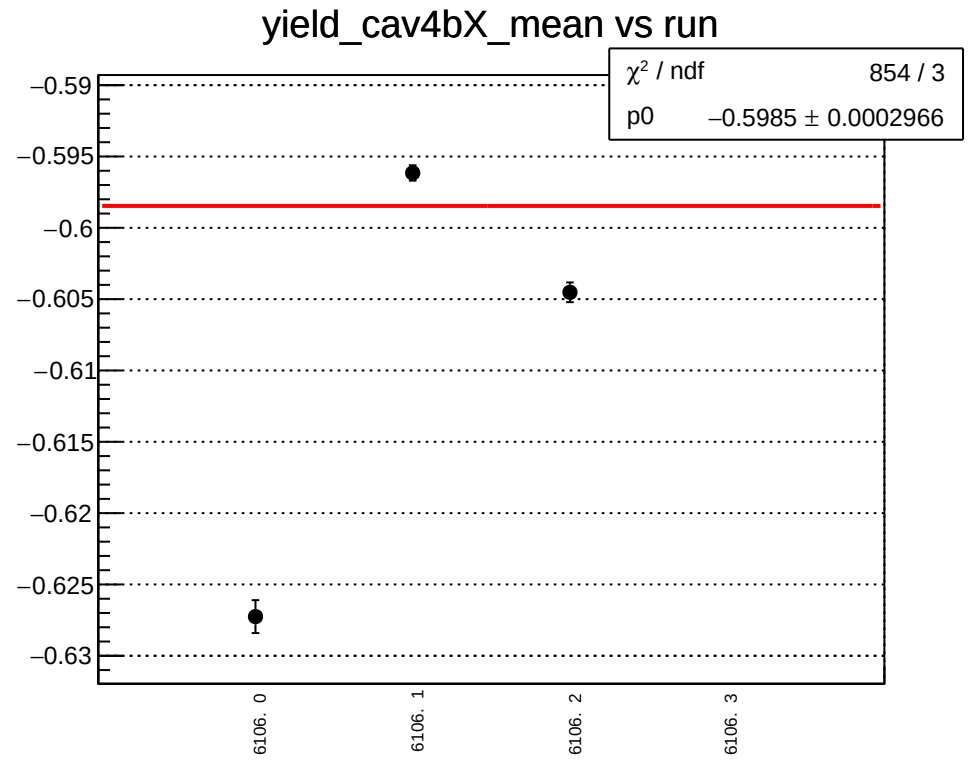

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

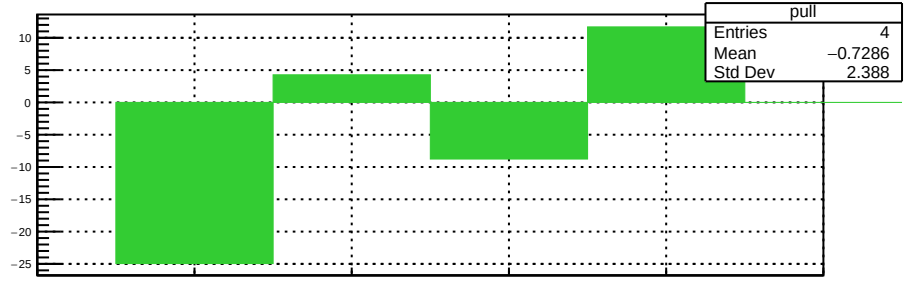

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

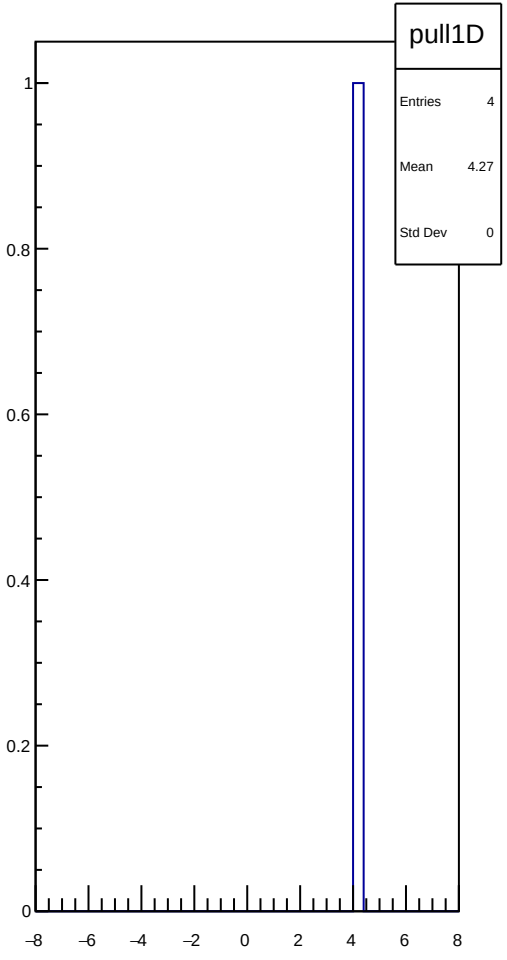

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

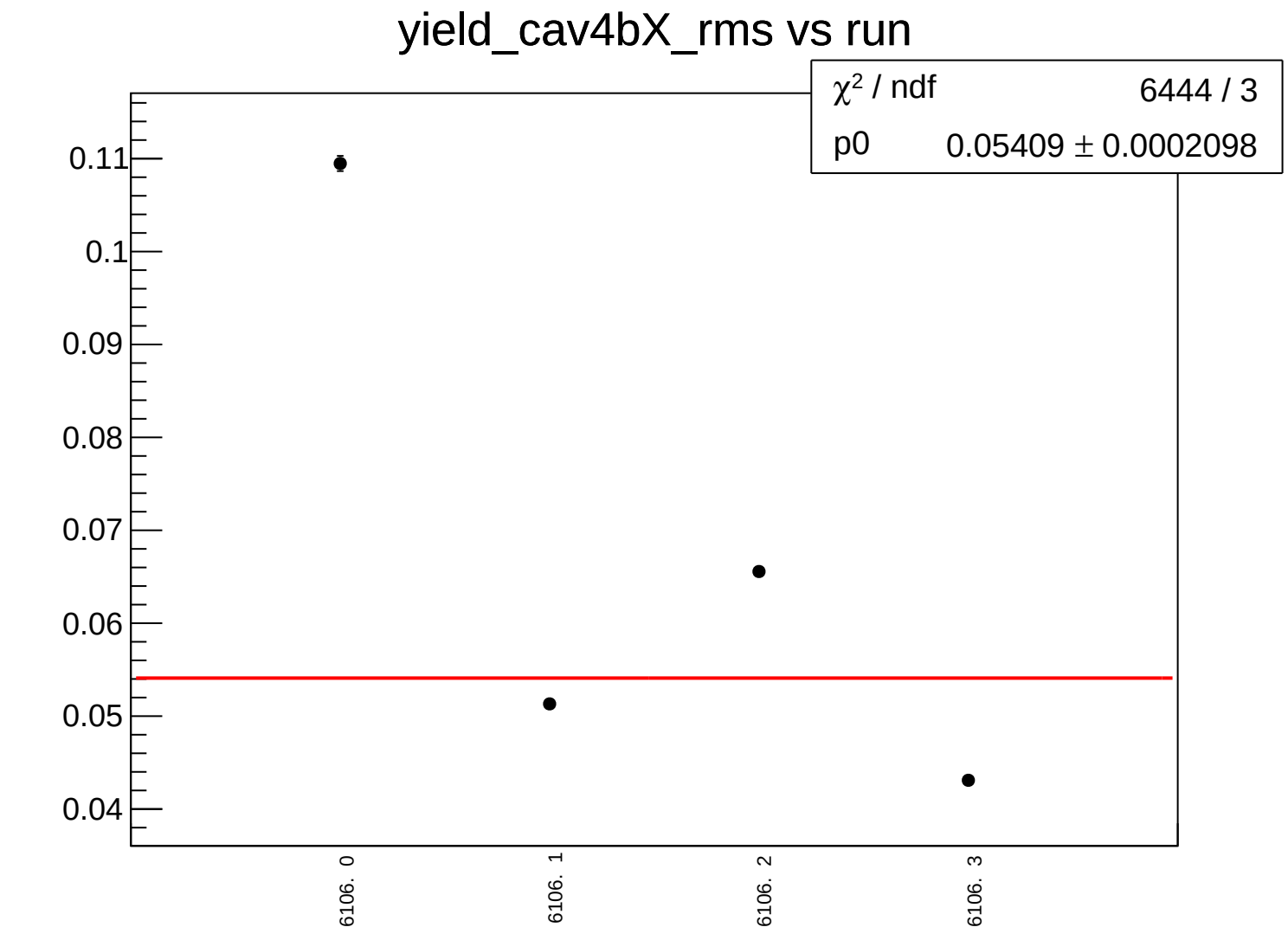

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

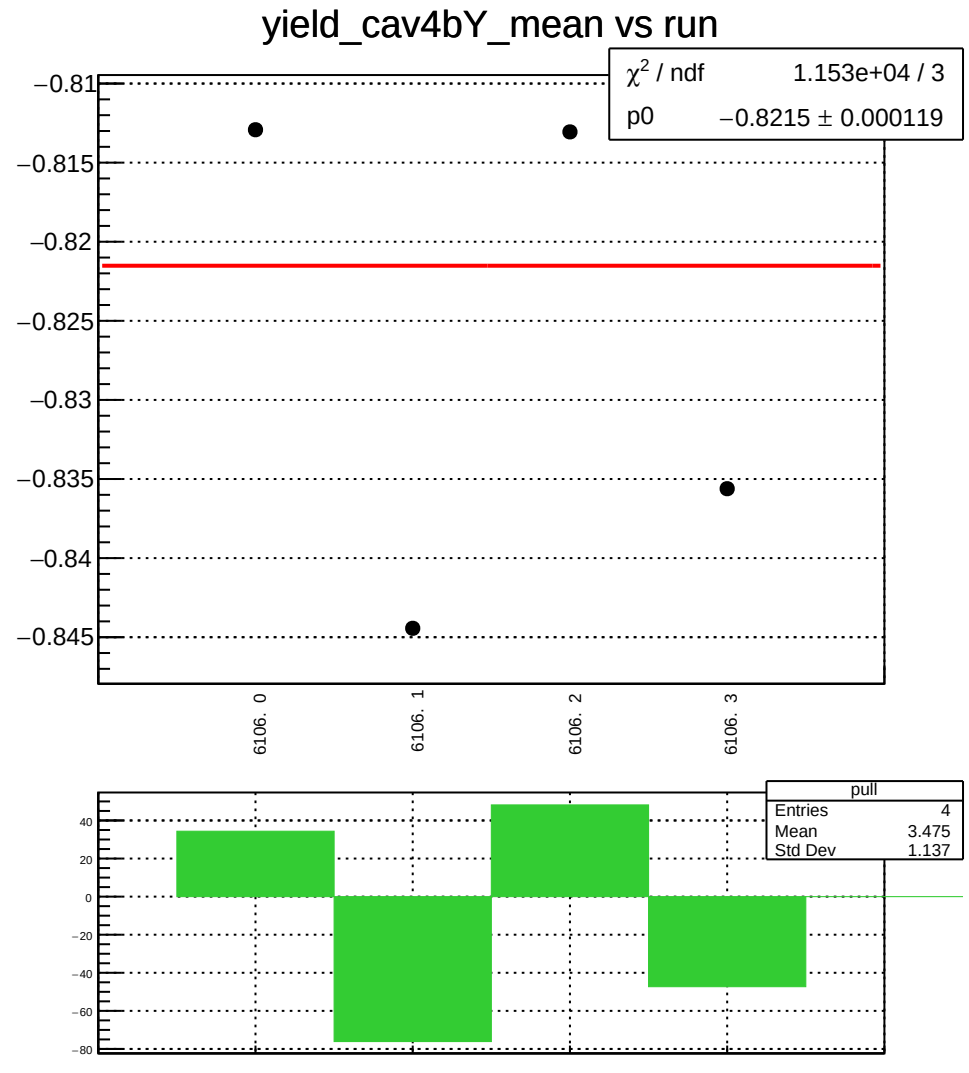

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

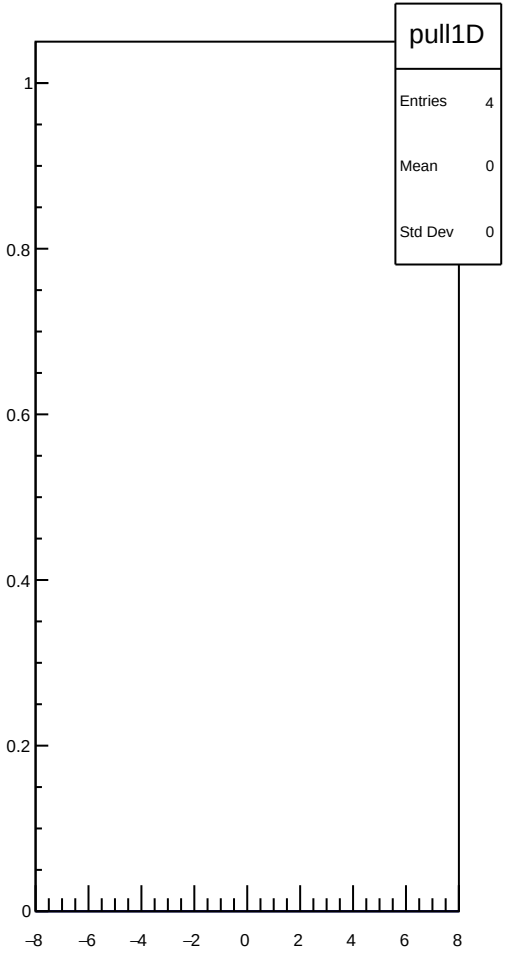

yield_cav4bX_mean vs run
χ² / ndf 854 / 3
p0 −0.5985 ± 0.0002966
−0.59
−0.595
−0.6
−0.605
−0.61
−0.615
−0.62
−0.625
−0.63
6106. 0
6106. 1
6106. 2
6106. 3

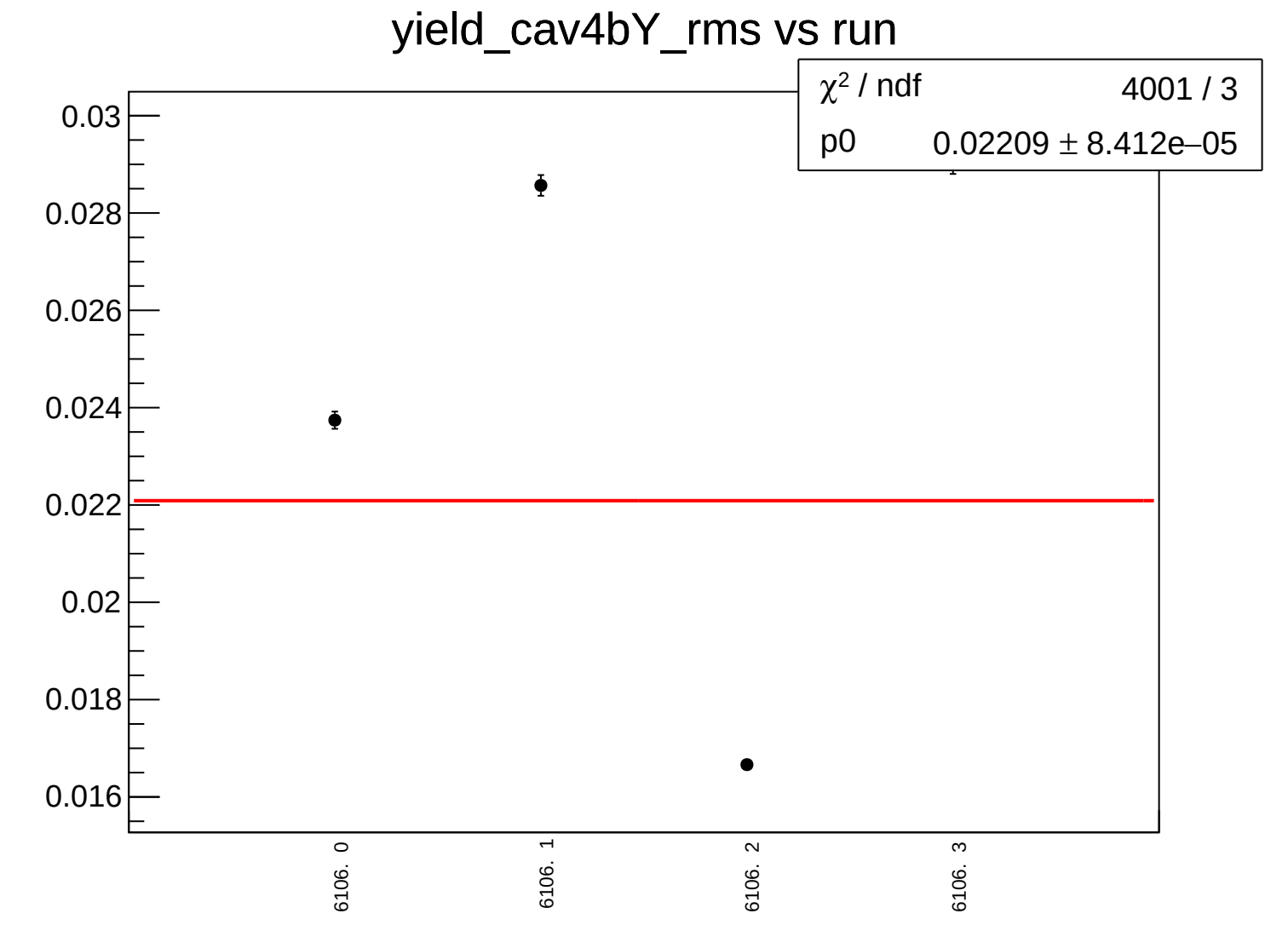

pull
Entries 4
Mean −0.7286
Std Dev 2.388
10
5
0
−5
−10
−15
−20
−25

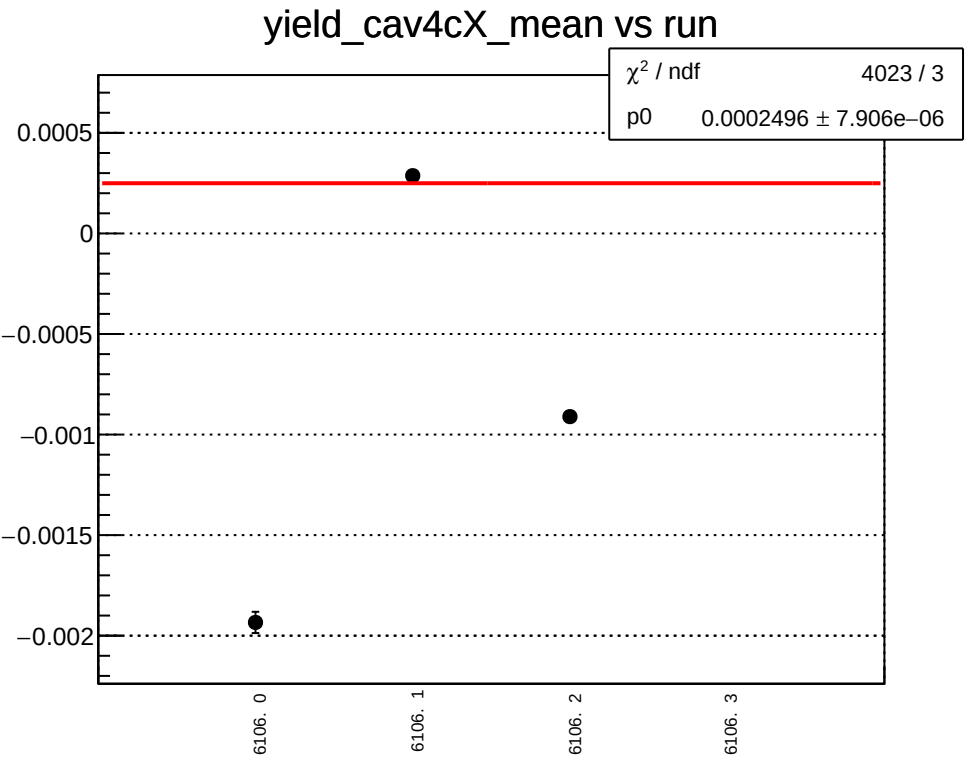

pull1D
Entries 4
Mean 4.27
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

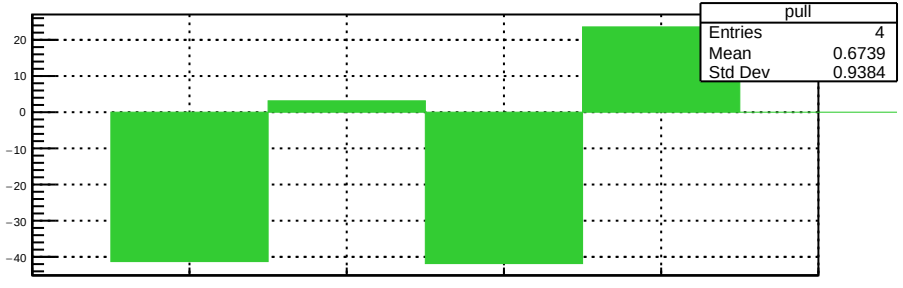

yield_cav4bX_rms vs run
χ² / ndf 6444 / 3
p0 0.05409 ± 0.0002098
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
6106. 0
6106. 1
6106. 2
6106. 3

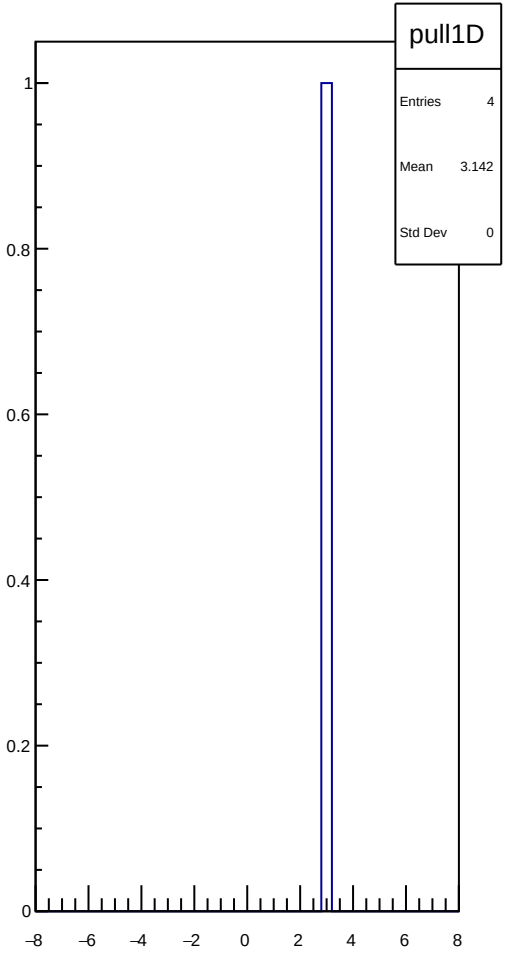

yield_cav4bY_mean vs run
χ² / ndf 1.153e+04 / 3
p0 −0.8215 ± 0.000119
−0.81
−0.815
−0.82
−0.825
−0.83
−0.835
−0.84
−0.845
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 3.475
Std Dev 1.137
40
20
0
−20
−40
−60
−80

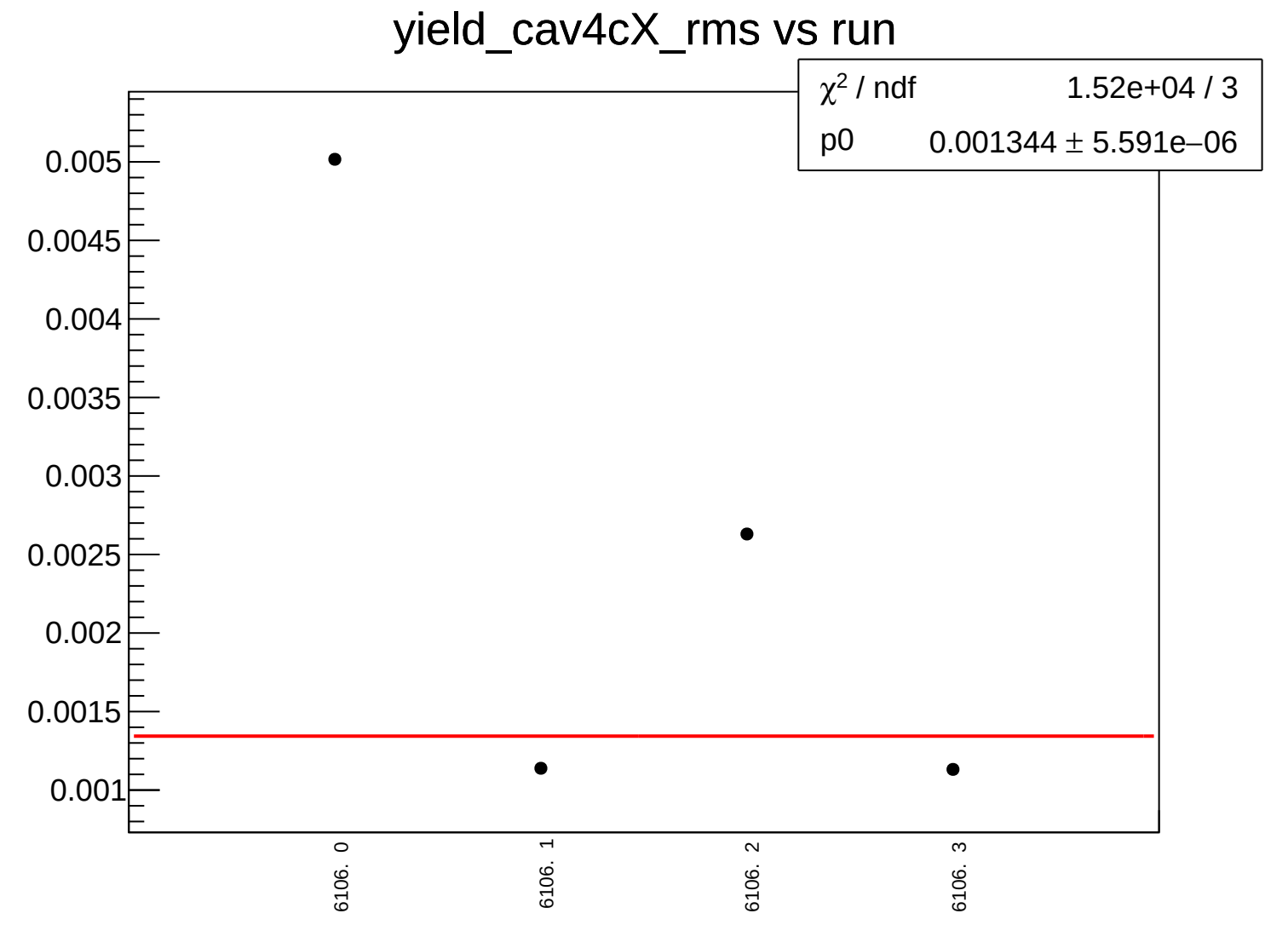

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

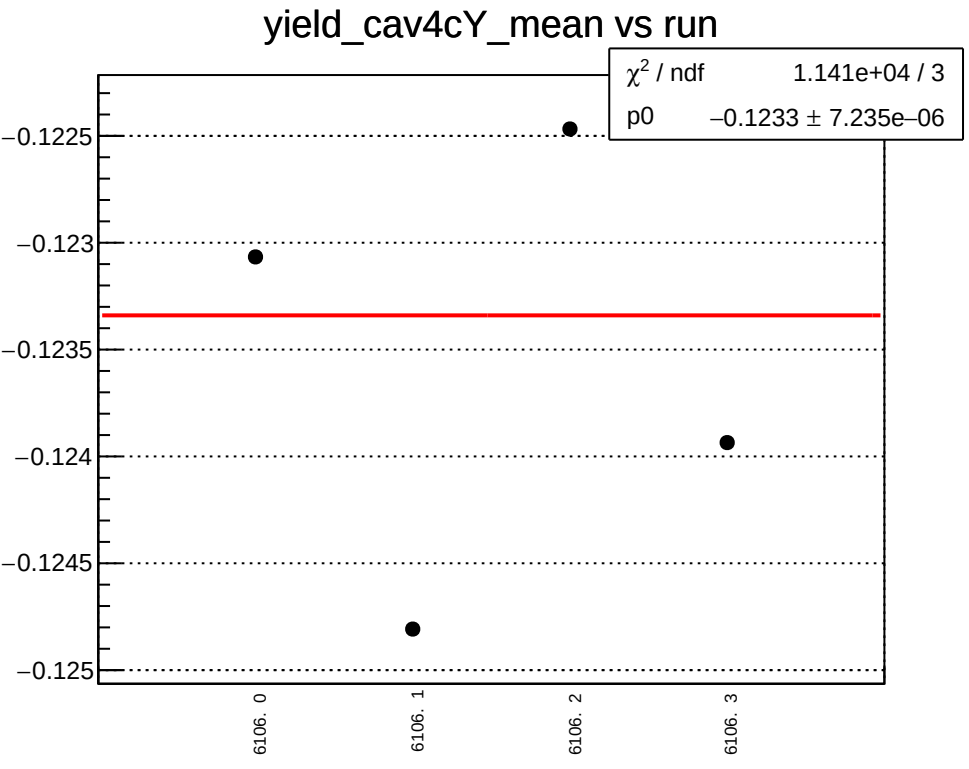

yield_cav4bY_rms vs run
χ² / ndf 4001 / 3
p0 0.02209 ± 8.412e–05
0.03
0.028
0.026
0.024
0.022
0.02
0.018
0.016
6106. 0
6106. 1
6106. 2
6106. 3

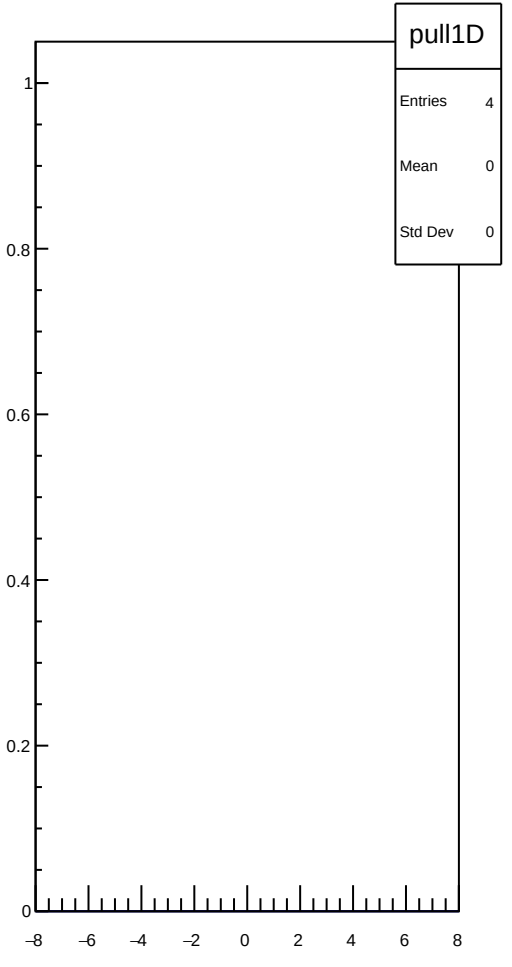

yield_cav4cX_mean vs run
χ² / ndf 4023 / 3
p0 0.0002496 ± 7.906e−06
0.0005
0
−0.0005
−0.001
−0.0015
−0.002
6106. 0
6106. 1
6106. 2
6106. 3

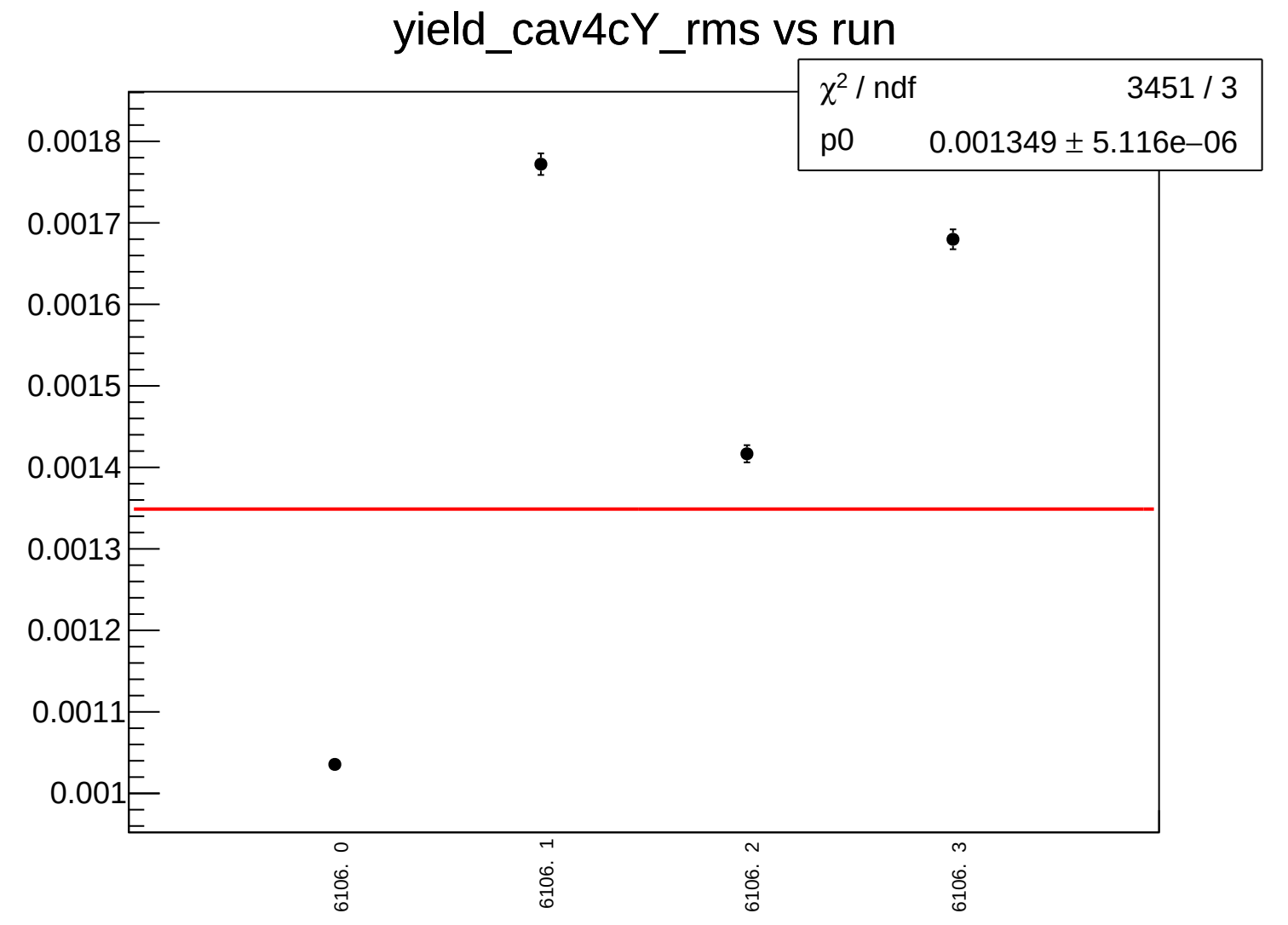

pull
Entries 4
Mean 0.6739
Std Dev 0.9384
20
10
0
−10
−20
−30
−40

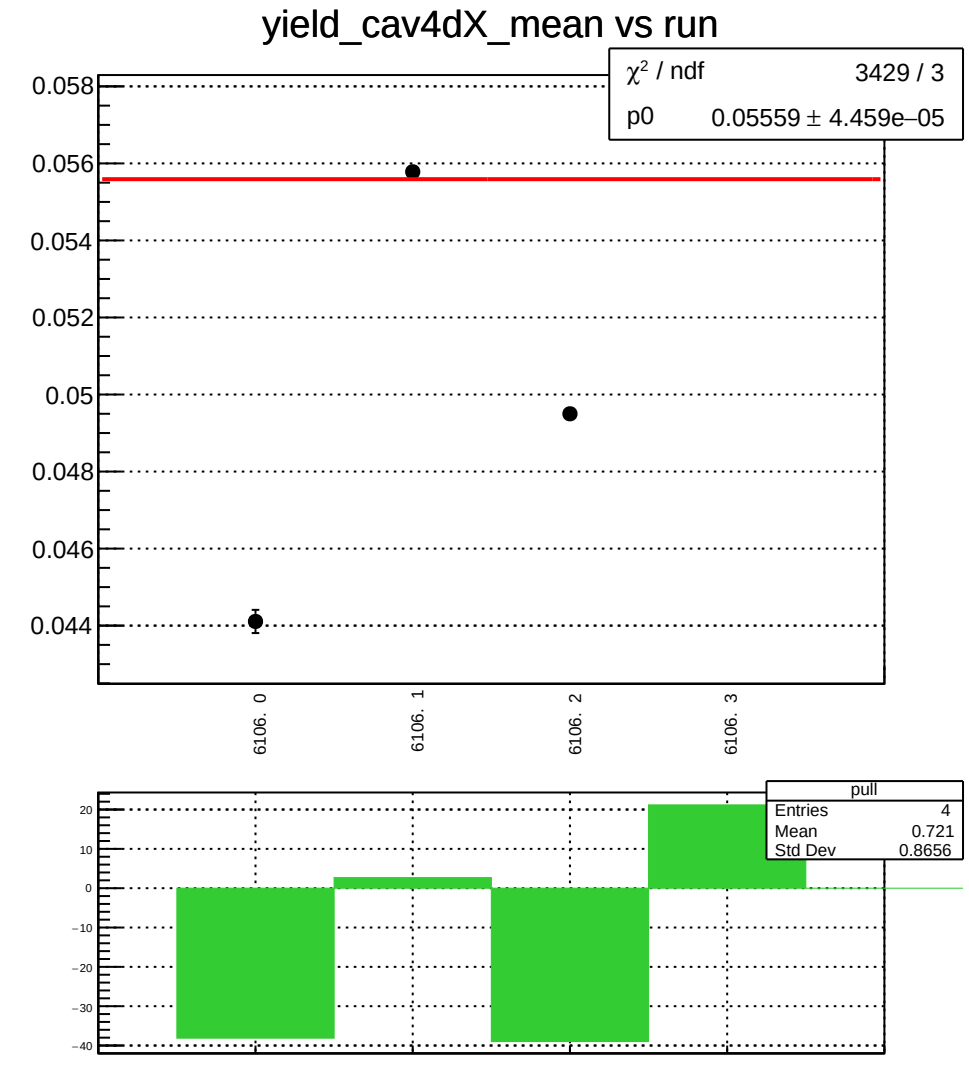

pull1D
Entries 4
Mean 3.142
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

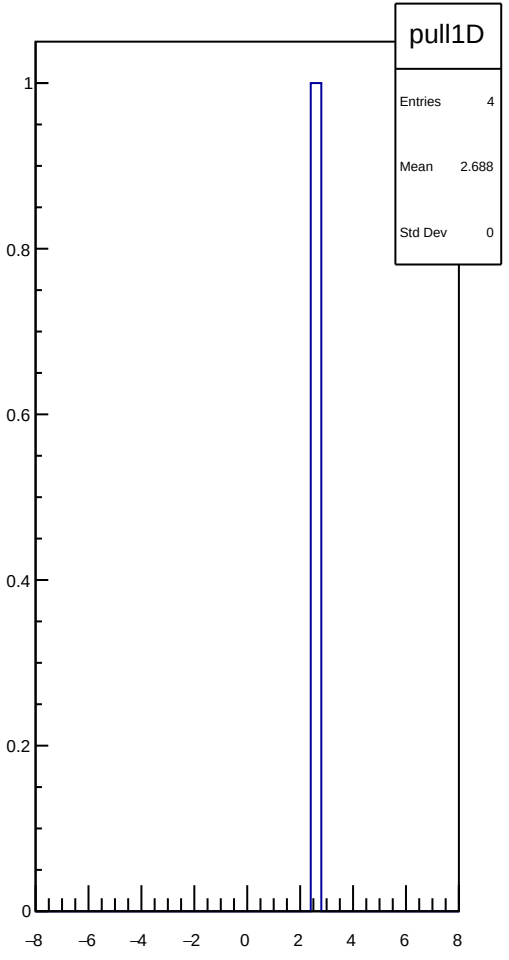

yield_cav4cX_rms vs run
χ² / ndf 1.52e+04 / 3
p0 0.001344 ± 5.591e−06
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
6106. 0
6106. 1
6106. 2
6106. 3

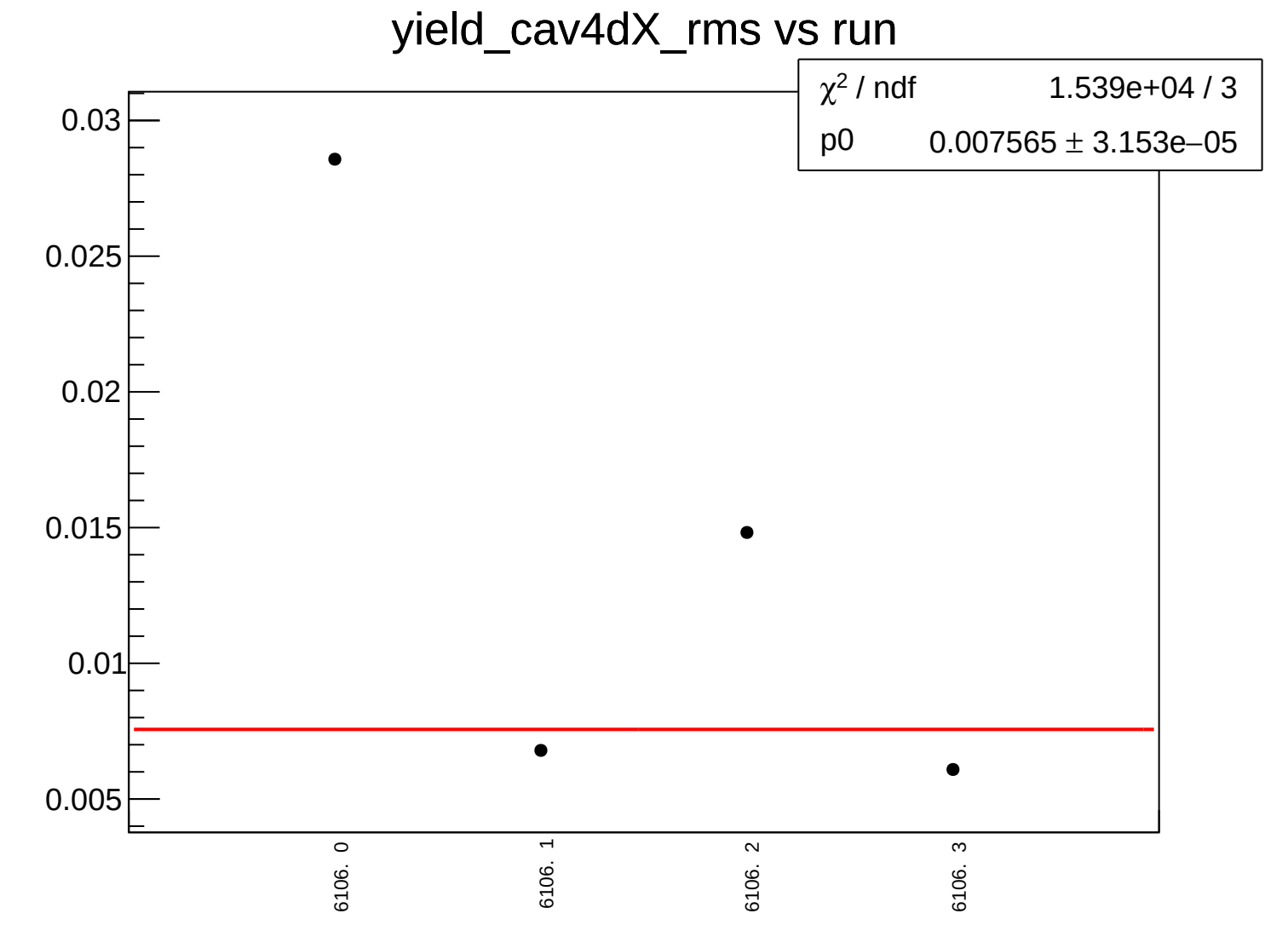

yield_cav4cY_mean vs run
χ² / ndf 1.141e+04 / 3
p0 −0.1233 ± 7.235e−06
−0.1225
−0.123
−0.1235
−0.124
−0.1245
−0.125
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2.703
Std Dev 0.6267
60
40
20
0
−20
−40
−60
−80

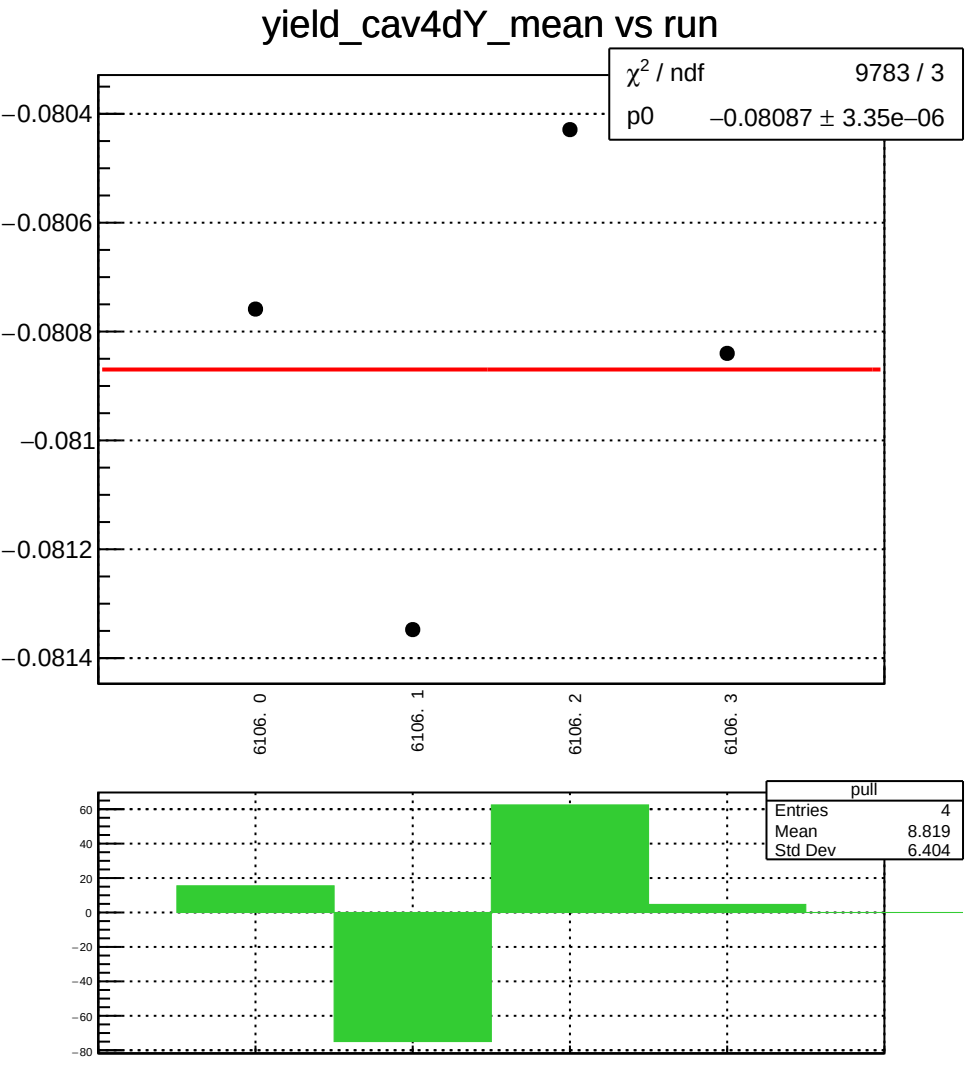

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

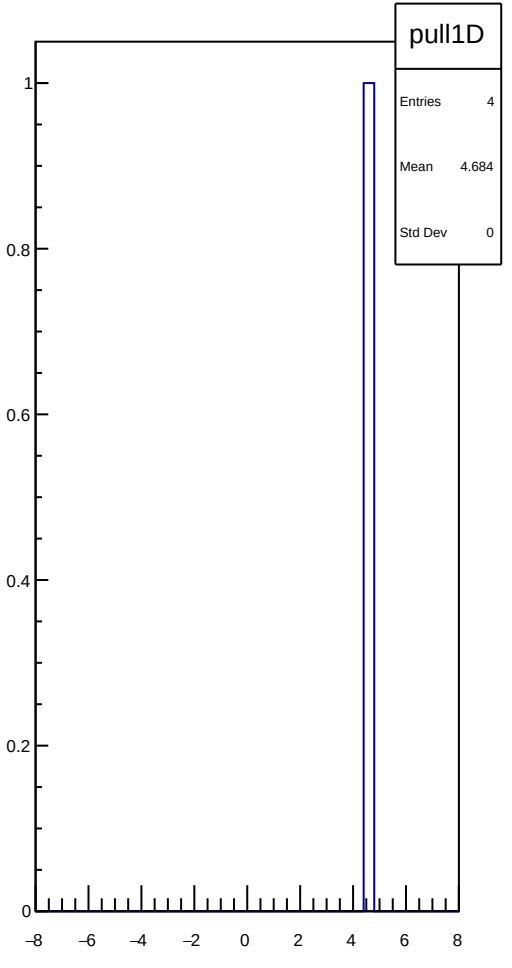

yield_cav4cY_rms vs run
χ² / ndf 3451 / 3
p0 0.001349 ± 5.116e−06
0.0018
0.0017
0.0016
0.0015
0.0014
0.0013
0.0012
0.0011
0.001
6106. 0
6106. 1
6106. 2
6106. 3

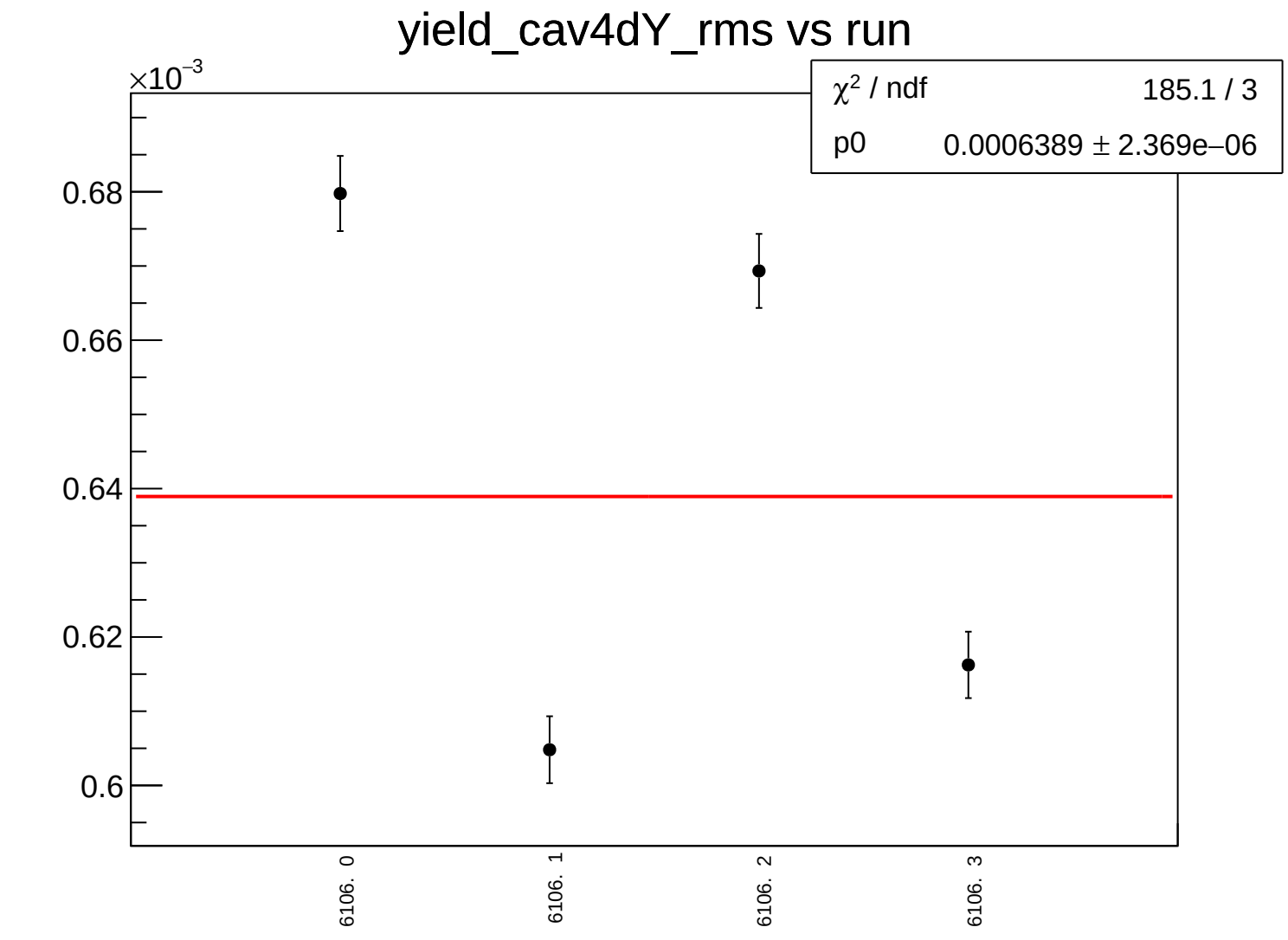

yield_cav4dX_mean vs run
χ² / ndf 3429 / 3
p0 0.05559 ± 4.459e−05
0.058
0.056
0.054
0.052
0.05
0.048
0.046
0.044
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.721
Std Dev 0.8656
20
10
0
−10
−20
−30
−40

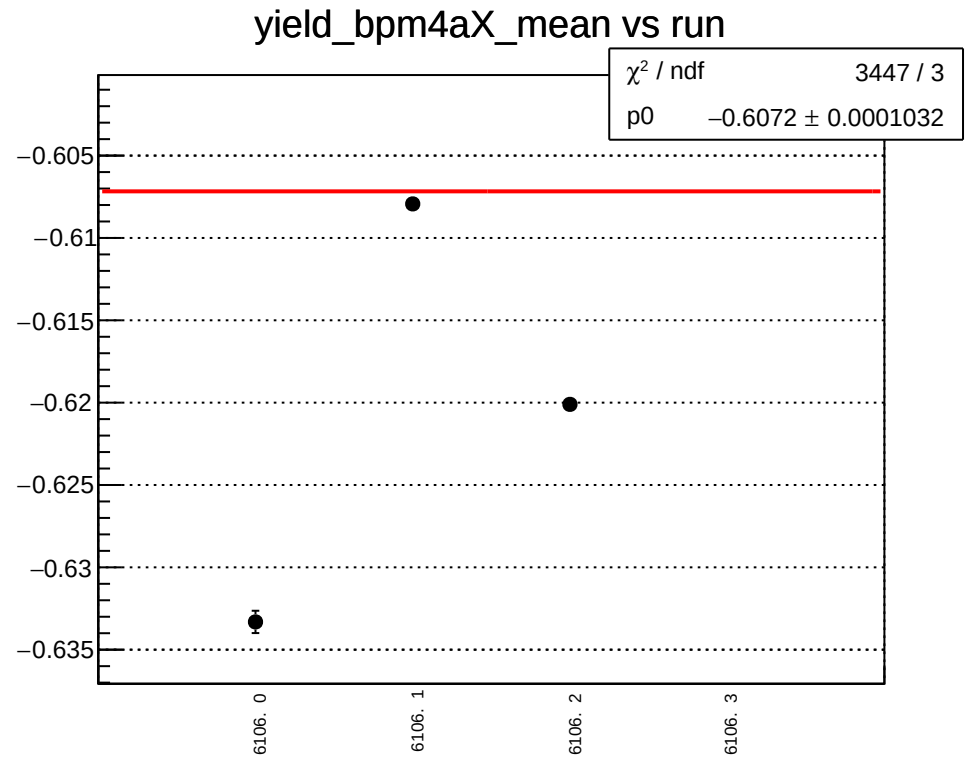

pull1D
Entries 4
Mean 2.688
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

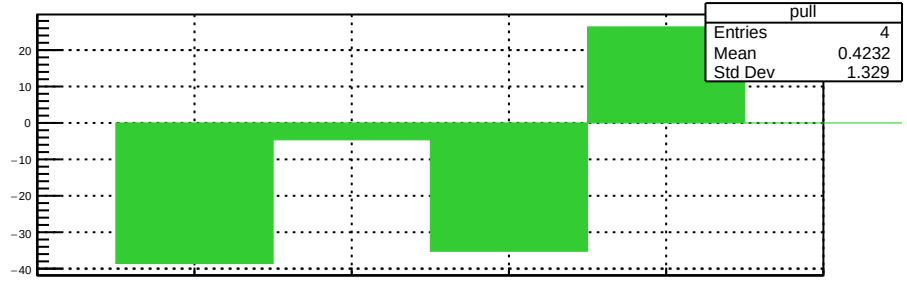

yield_cav4dX_rms vs run
χ² / ndf 1.539e+04 / 3
p0 0.007565 ± 3.153e−05
0.03
0.025
0.02
0.015
0.01
0.005
6106. 0
6106. 1
6106. 2
6106. 3

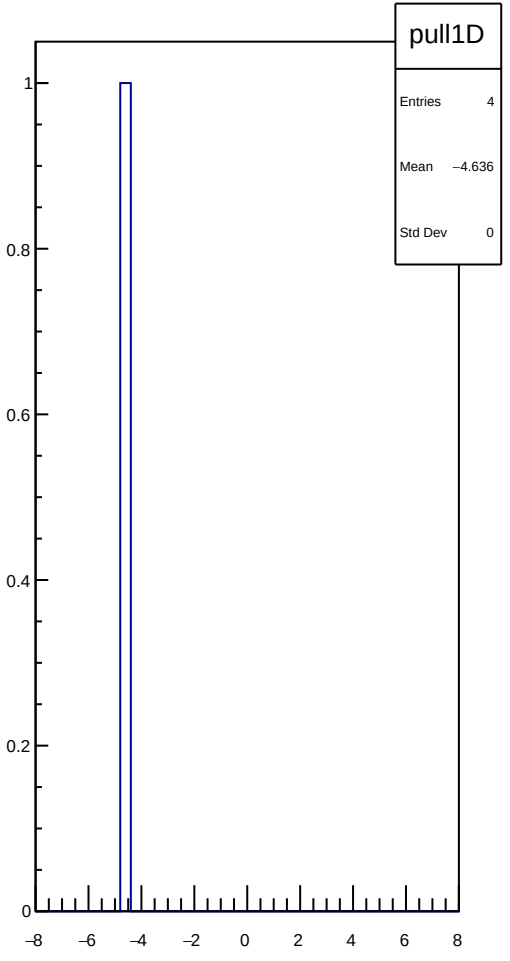

yield_cav4dY_mean vs run
χ² / ndf 9783 / 3
p0 −0.08087 ± 3.35e−06
−0.0804
−0.0806
−0.0808
−0.081
−0.0812
−0.0814
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 8.819
Std Dev 6.404
60
40
20
0
−20
−40
−60
−80

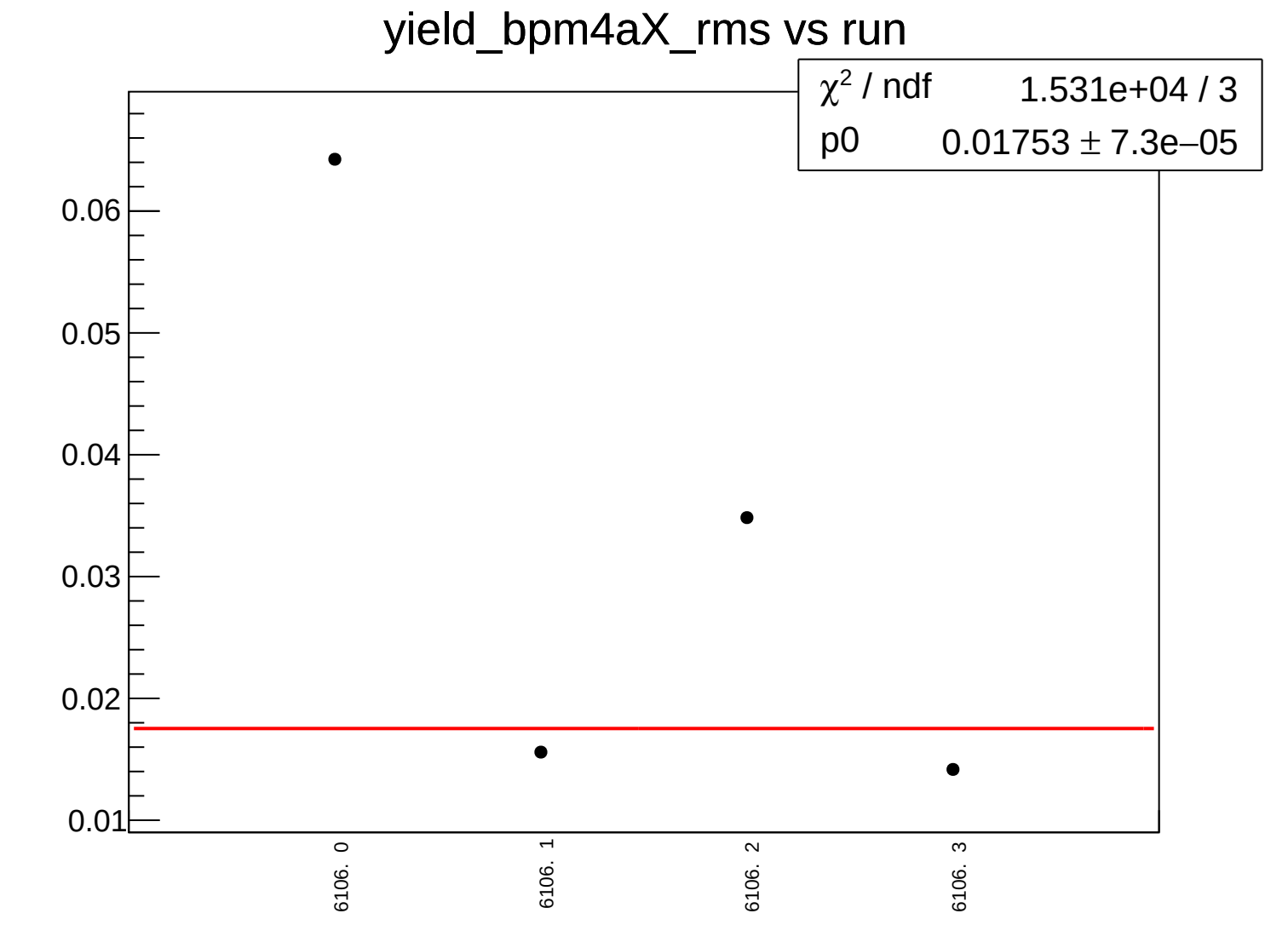

pull1D
Entries 4
Mean 4.684
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

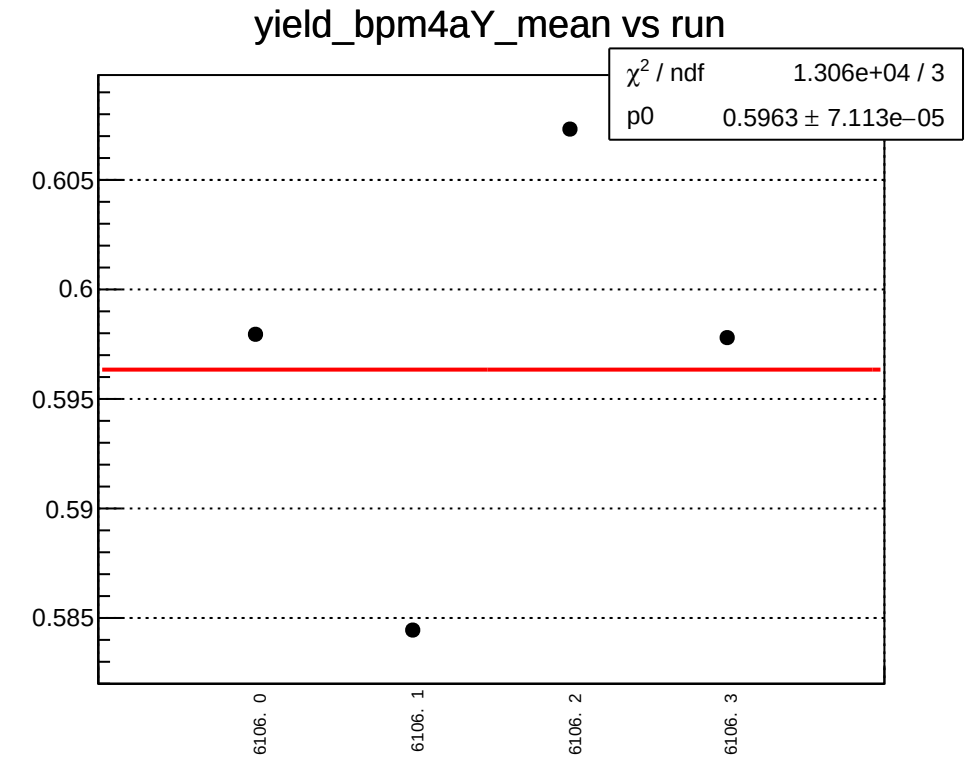

yield_cav4dY_rms vs run
×10⁻³
χ² / ndf 185.1 / 3
p0 0.0006389 ± 2.369e−06
0.68
0.66
0.64
0.62
0.6
6106. 0
6106. 1
6106. 2
6106. 3

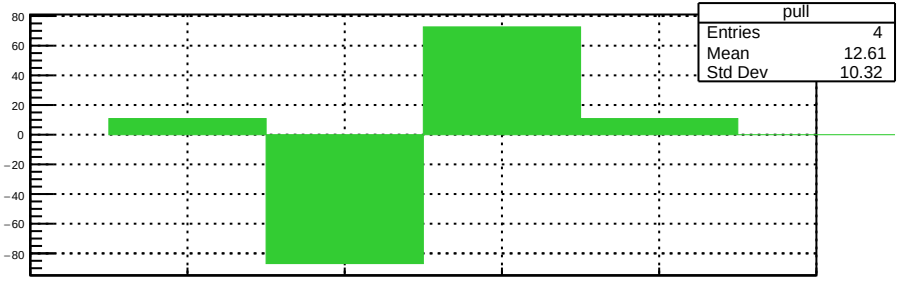

yield_bpm4aX_mean vs run
χ² / ndf 3447 / 3
p0 −0.6072 ± 0.0001032
−0.605
−0.61
−0.615
−0.62
−0.625
−0.63
−0.635
6106. 0
6106. 1
6106. 2
6106. 3

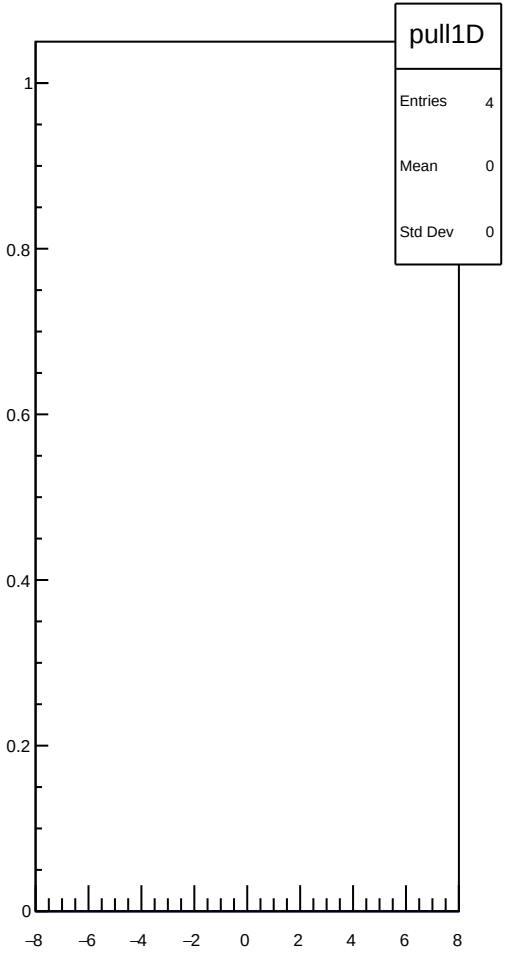

pull
Entries 4
Mean 0.4232
Std Dev 1.329
20
10
0
−10
−20
−30
−40

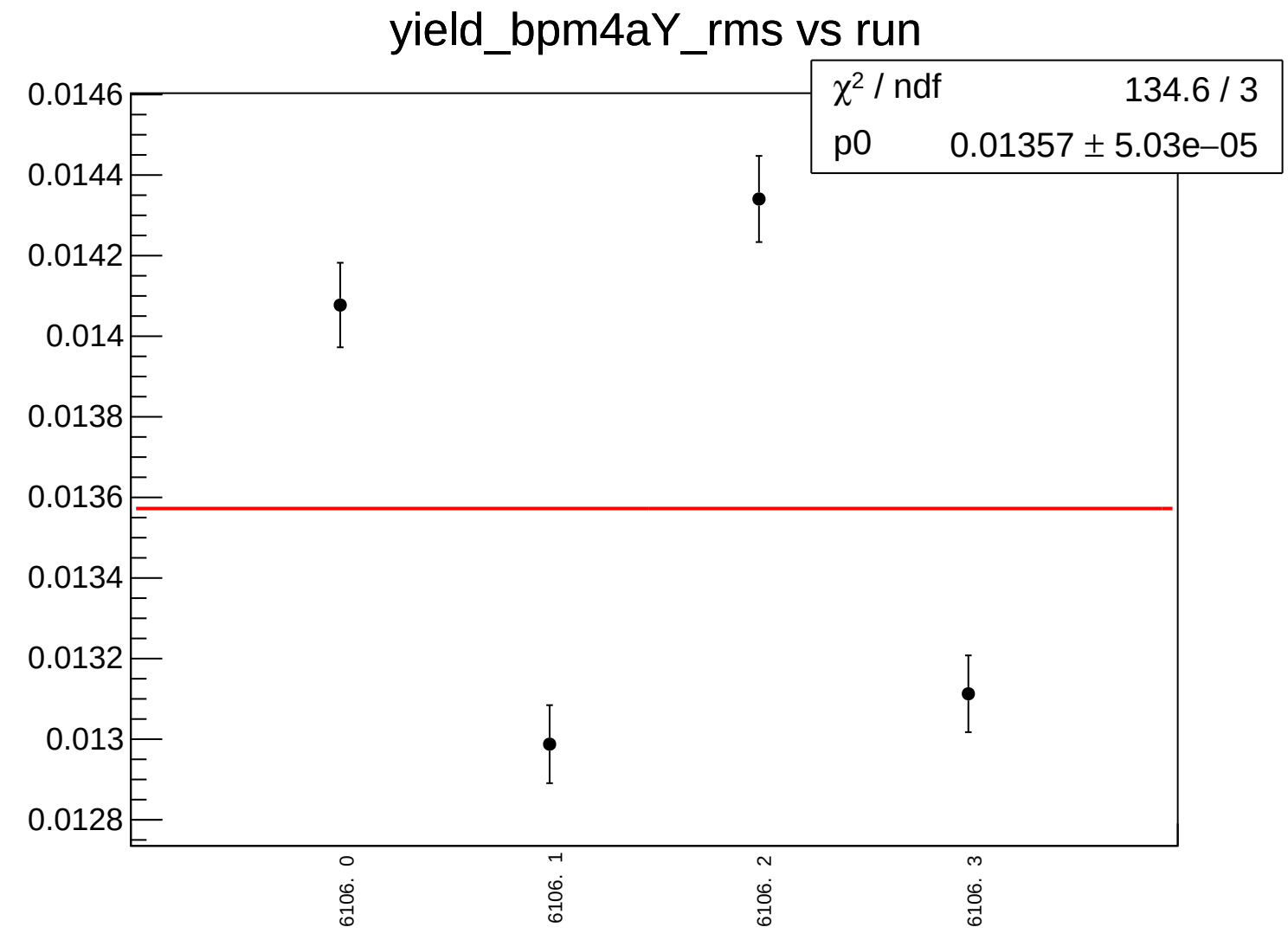

pull1D
Entries 4
Mean −4.636
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

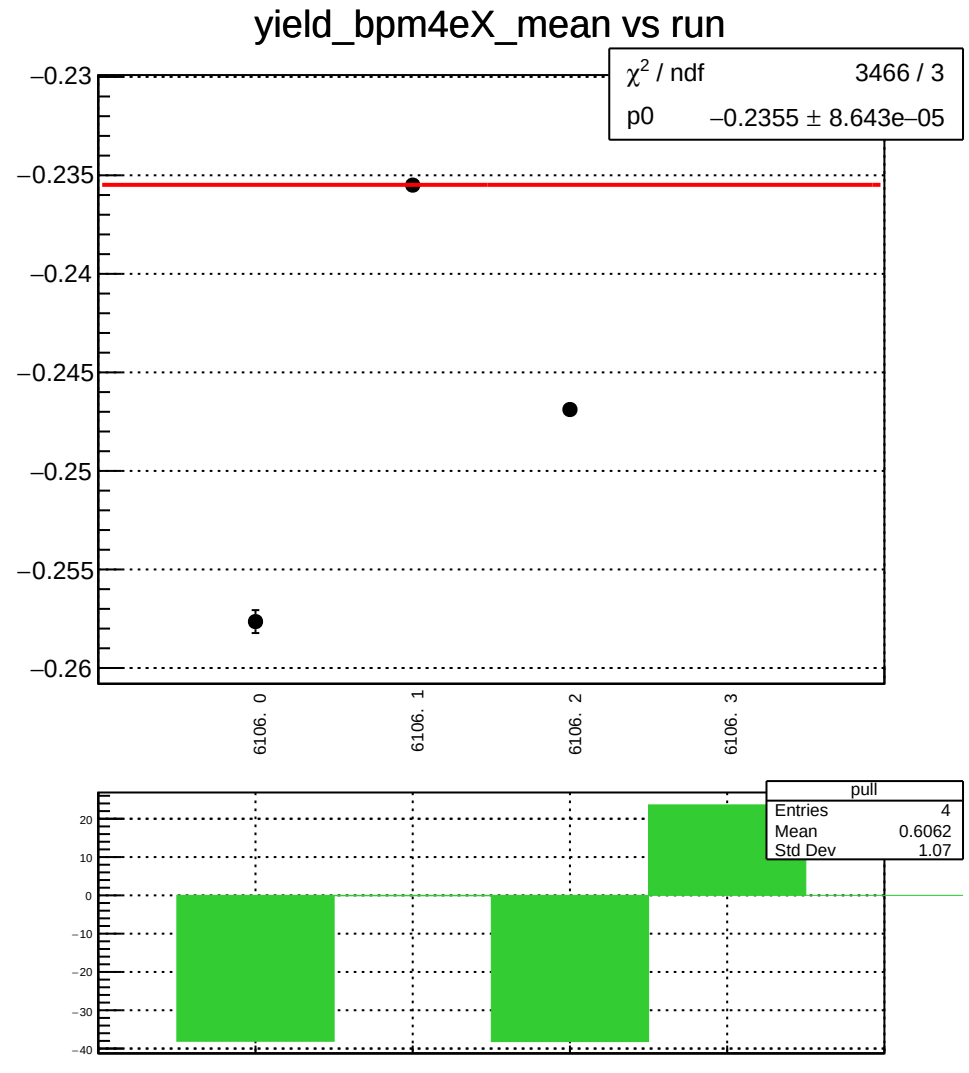

yield_bpm4aX_rms vs run
χ² / ndf 1.531e+04 / 3
p0 0.01753 ± 7.3e−05
0.06
0.05
0.04
0.03
0.02
0.01
6106. 0
6106. 1
6106. 2
6106. 3

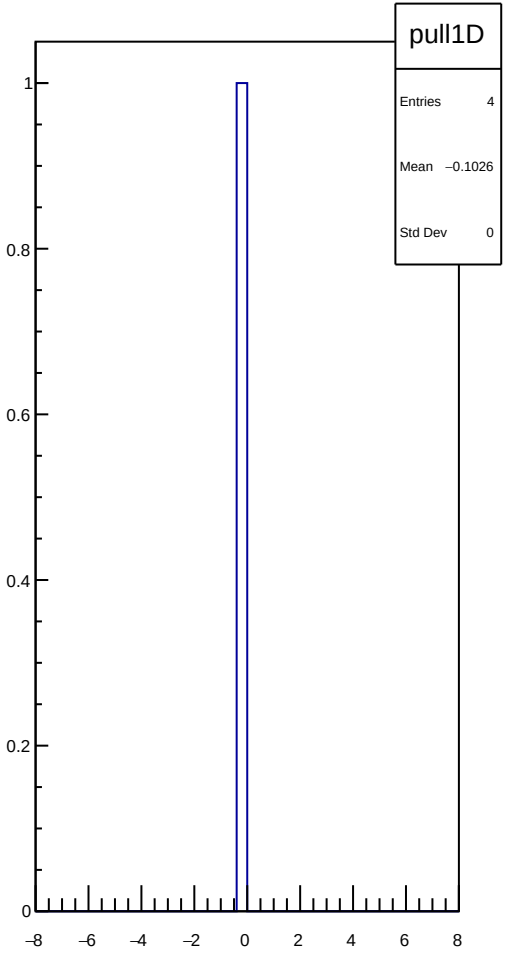

yield_bpm4aY_mean vs run
χ² / ndf 1.306e+04 / 3
p0 0.5963 ± 7.113e−05
0.605
0.6
0.595
0.59
0.585
6106. 0
6106. 1
6106. 2
6106. 3

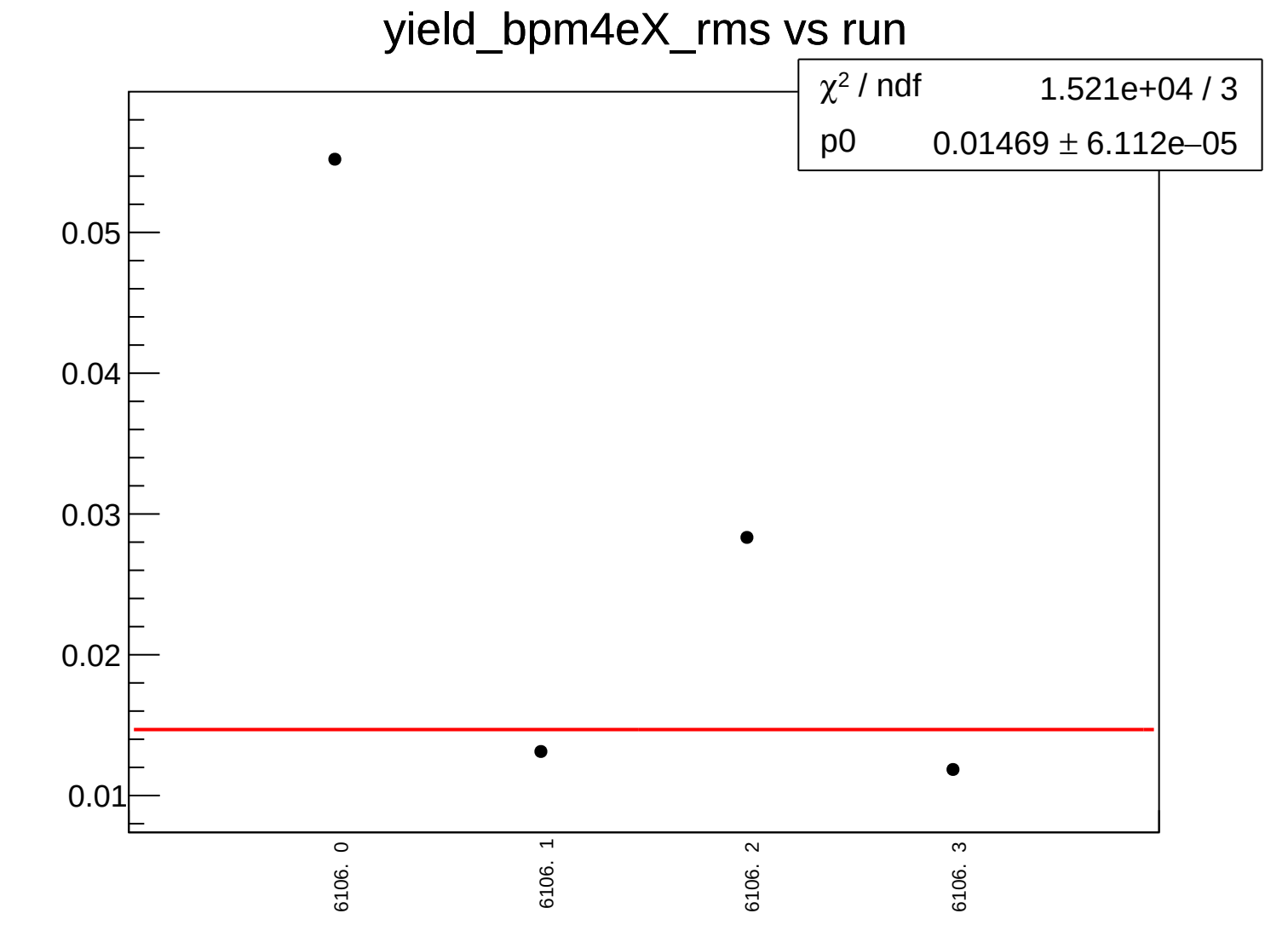

pull
Entries 4
Mean 12.61
Std Dev 10.32
80
60
40
20
0
−20
−40
−60
−80

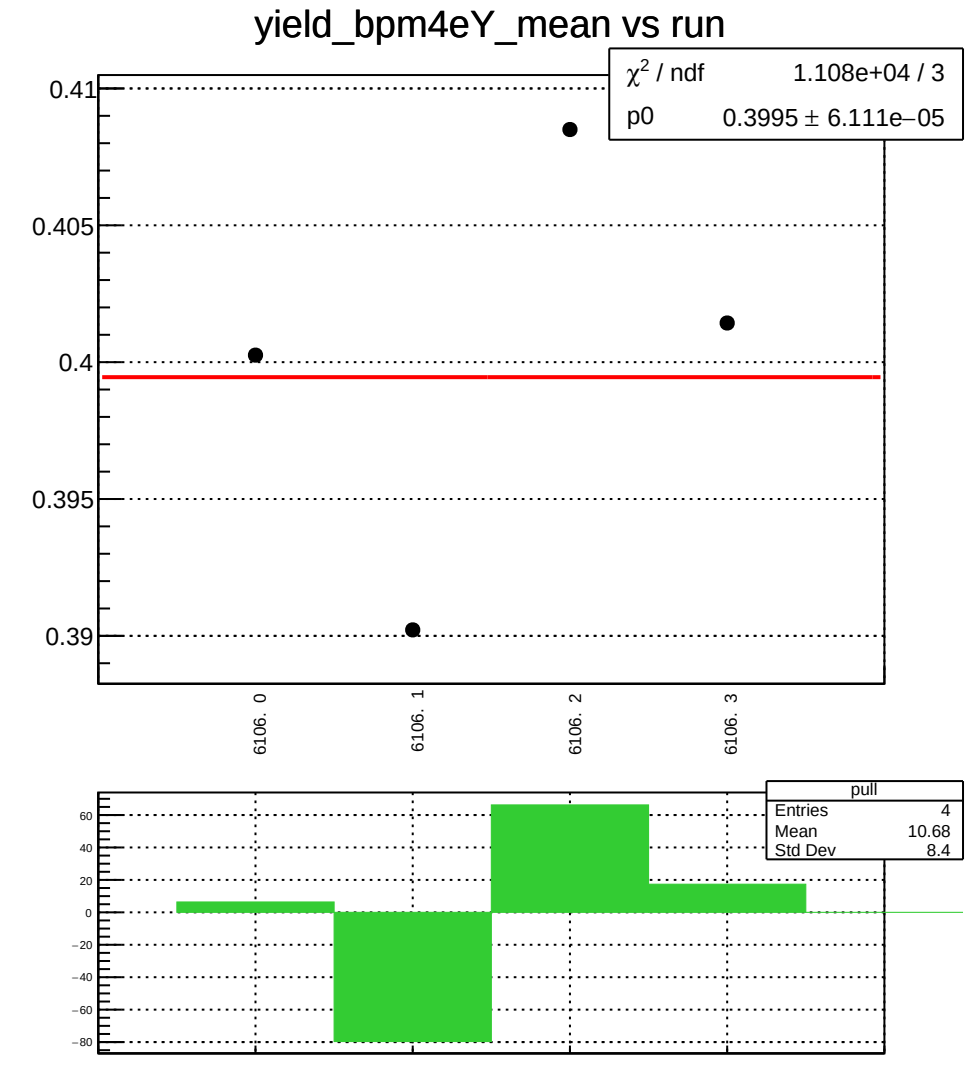

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

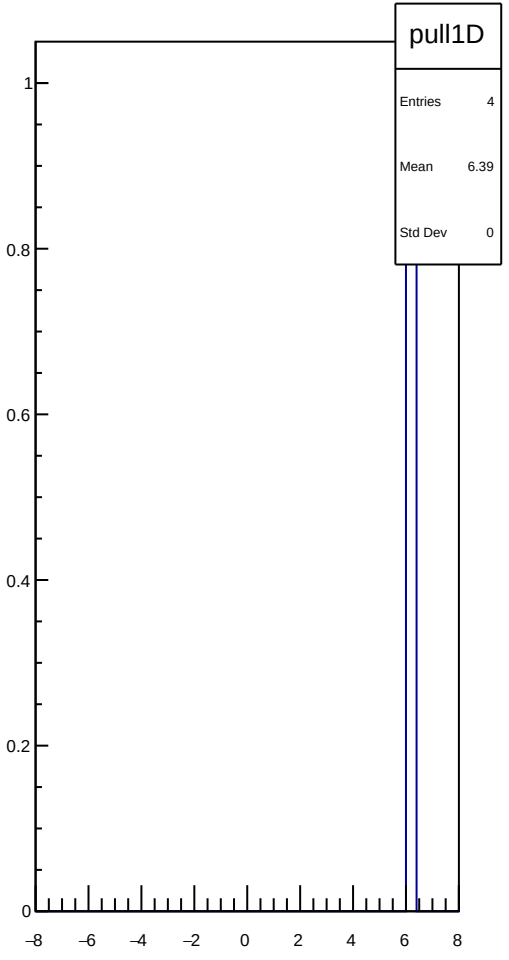

yield_bpm4aY_rms vs run
χ² / ndf 134.6 / 3
p0 0.01357 ± 5.03e–05
0.0146
0.0144
0.0142
0.014
0.0138
0.0136
0.0134
0.0132
0.013
0.0128
6106. 0
6106. 1
6106. 2
6106. 3

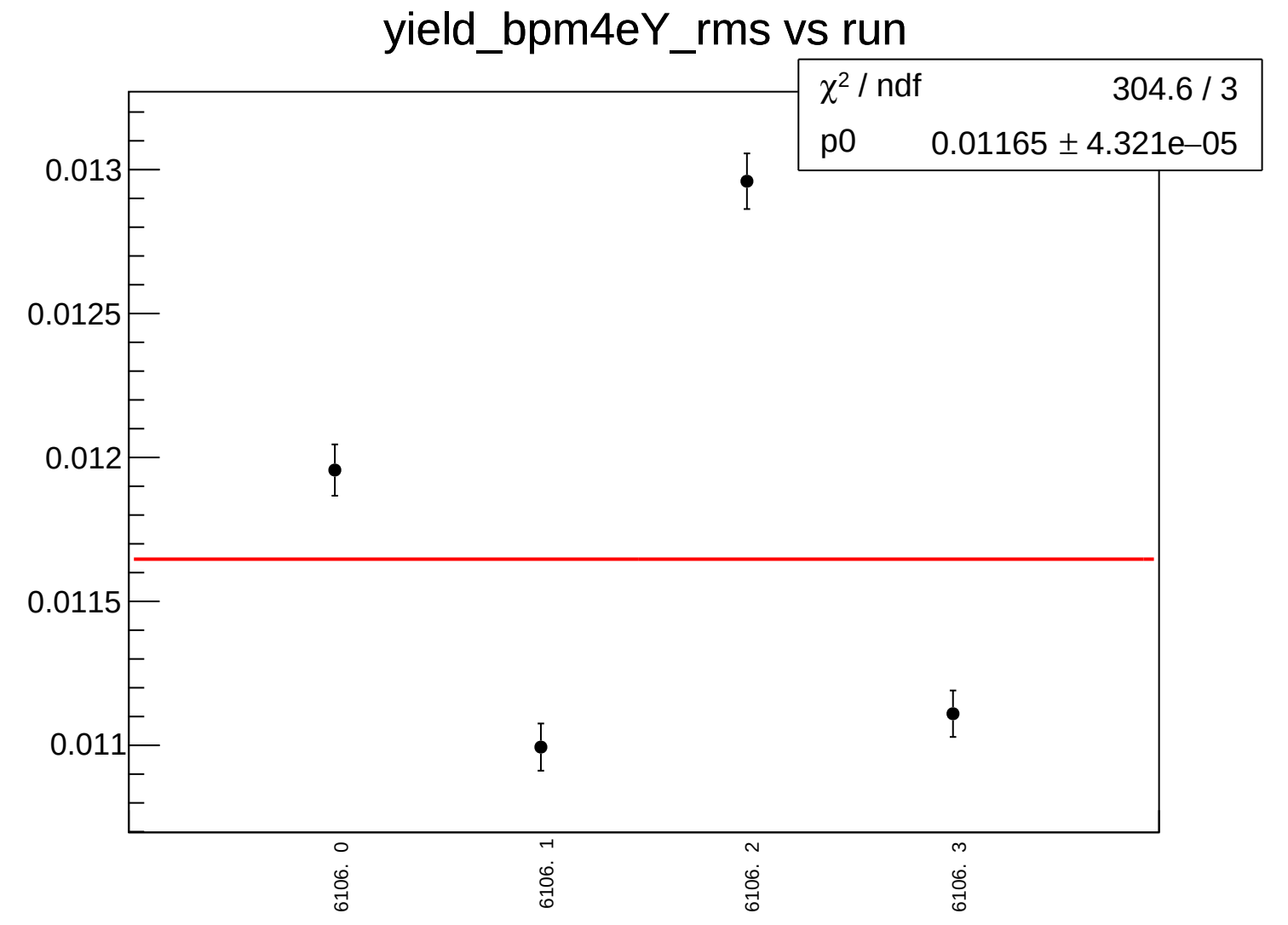

yield_bpm4eX_mean vs run
χ² / ndf 3466 / 3
p0 −0.2355 ± 8.643e−05
−0.23
−0.235
−0.24
−0.245
−0.25
−0.255
−0.26
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.6062
Std Dev 1.07
20
10
0
−10
−20
−30
−40

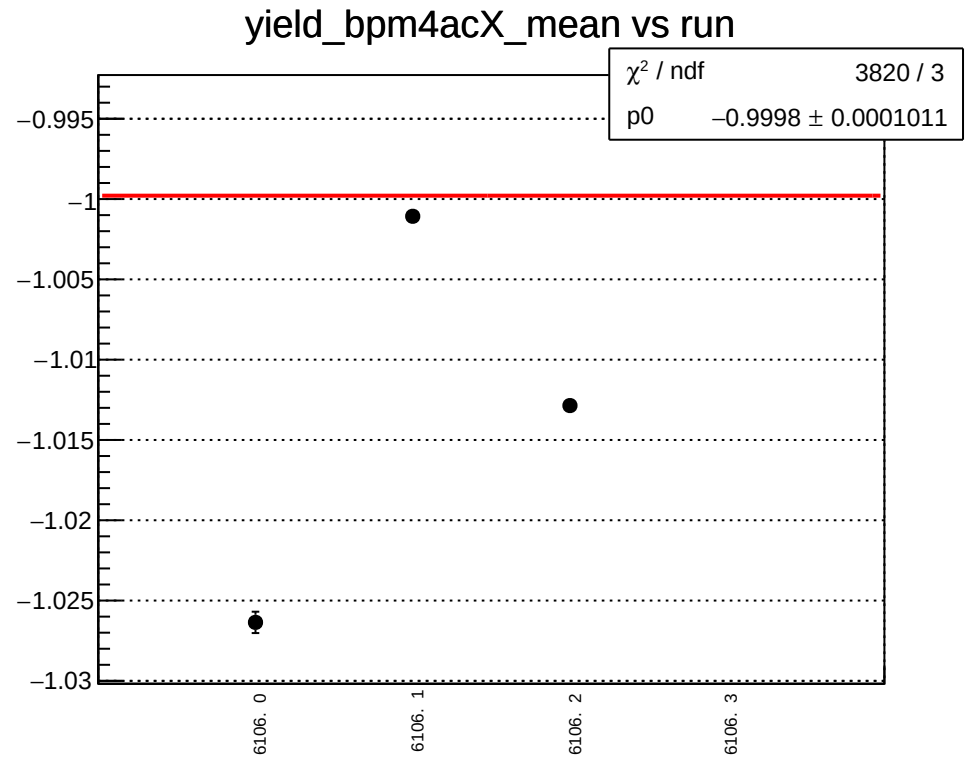

pull1D
Entries 4
Mean −0.1026
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

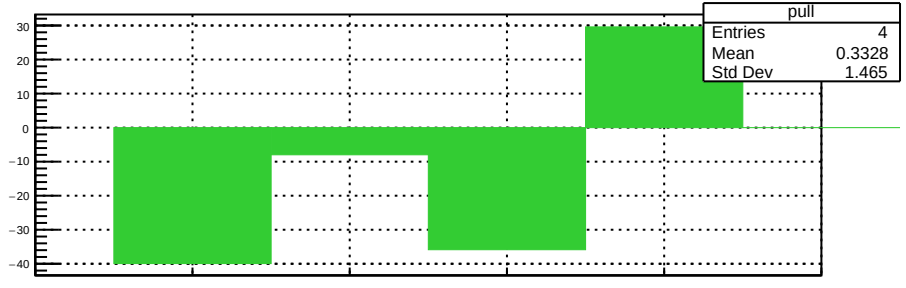

yield_bpm4eX_rms vs run
χ² / ndf 1.521e+04 / 3
p0 0.01469 ± 6.112e−05
0.05
0.04
0.03
0.02
0.01
6106. 0
6106. 1
6106. 2
6106. 3

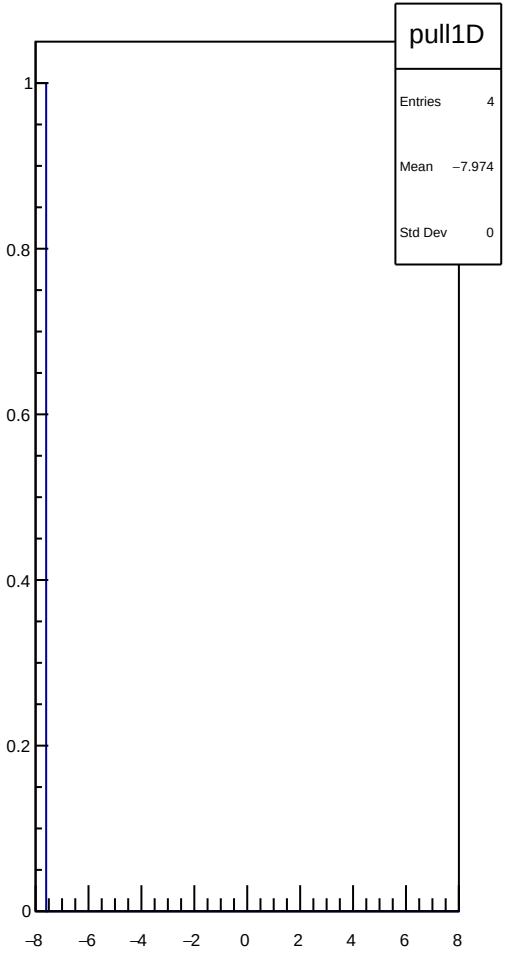

yield_bpm4eY_mean vs run
χ² / ndf 1.108e+04 / 3
p0 0.3995 ± 6.111e−05
0.41
0.405
0.4
0.395
0.39
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 10.68
Std Dev 8.4
60
40
20
0
−20
−40
−60
−80

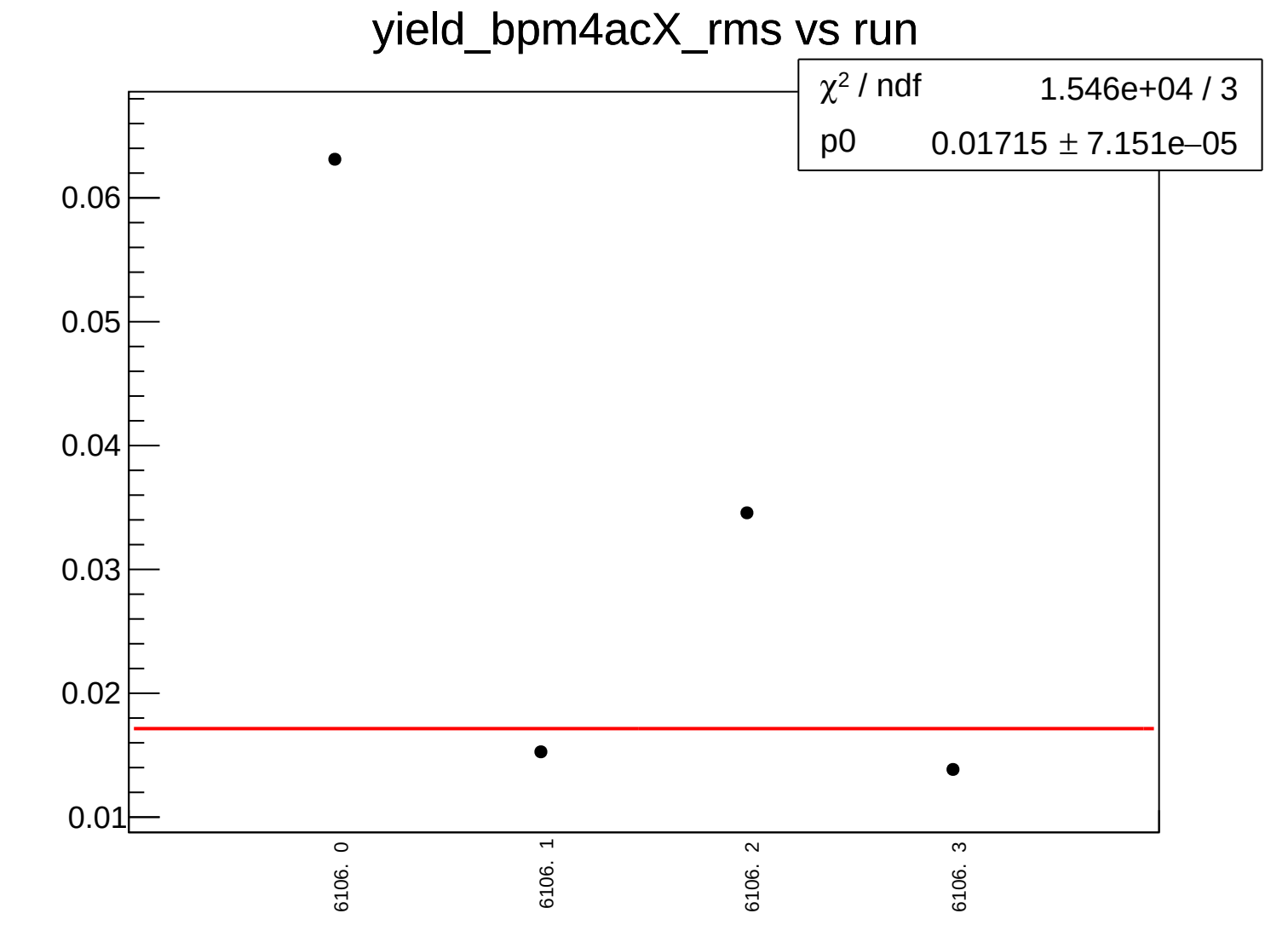

pull1D
Entries 4
Mean 6.39
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

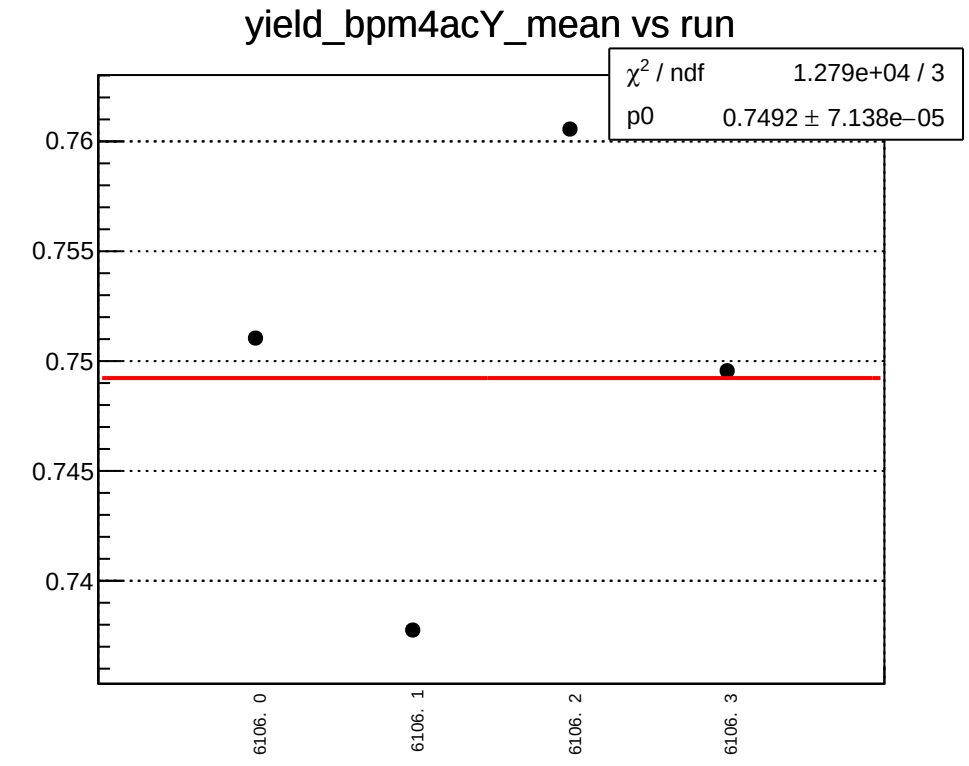

yield_bpm4eY_rms vs run
χ² / ndf 304.6 / 3
p0 0.01165 ± 4.321e–05
0.013
0.0125
0.012
0.0115
0.011
6106. 0
6106. 1
6106. 2
6106. 3

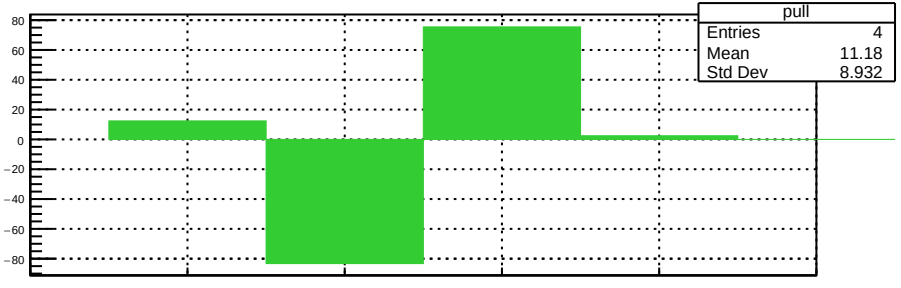

yield_bpm4acX_mean vs run
χ² / ndf 3820 / 3
p0 −0.9998 ± 0.0001011
−0.995
−1
−1.005
−1.01
−1.015
−1.02
−1.025
−1.03
6106. 0
6106. 1
6106. 2
6106. 3

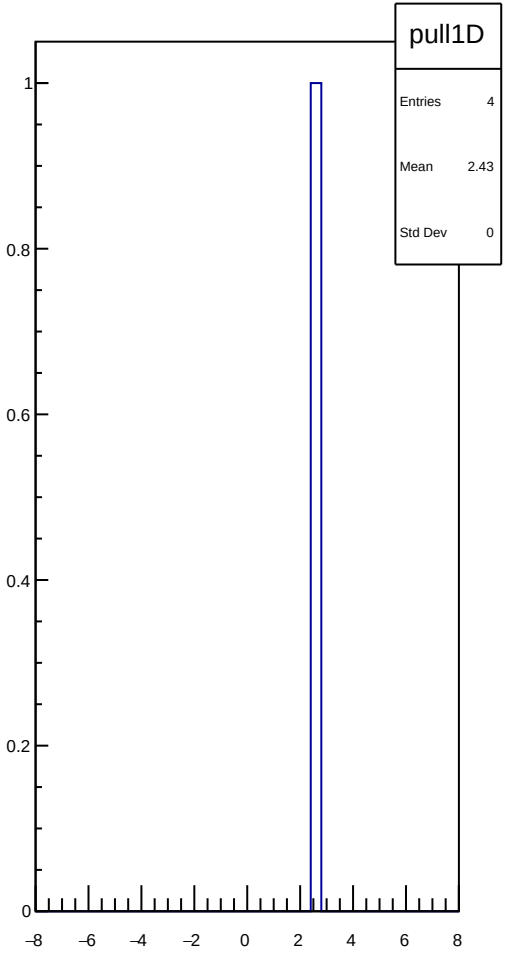

pull
Entries 4
Mean 0.3328
Std Dev 1.465
30
20
10
0
−10
−20
−30
−40

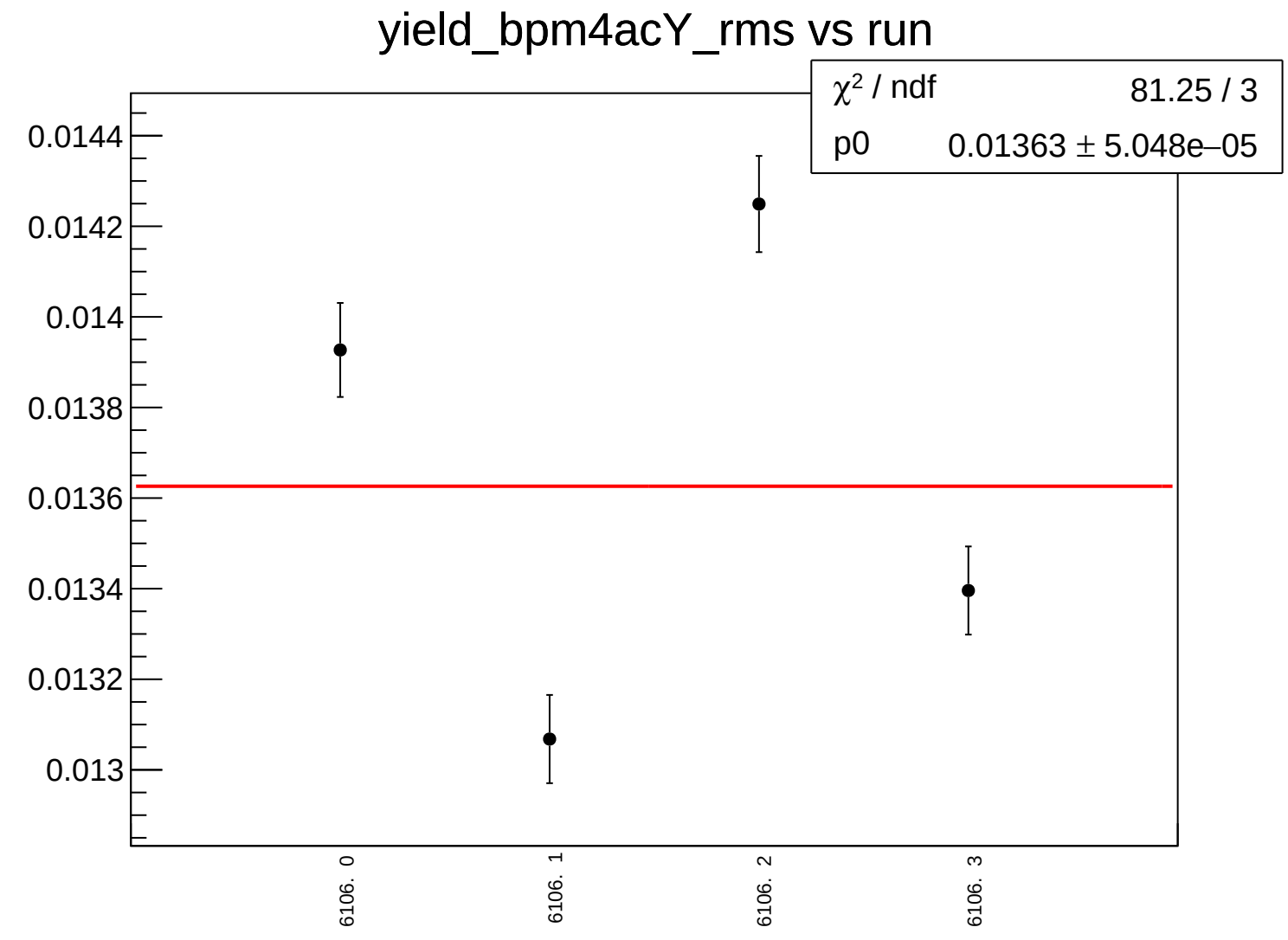

pull1D
Entries 4
Mean −7.974
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

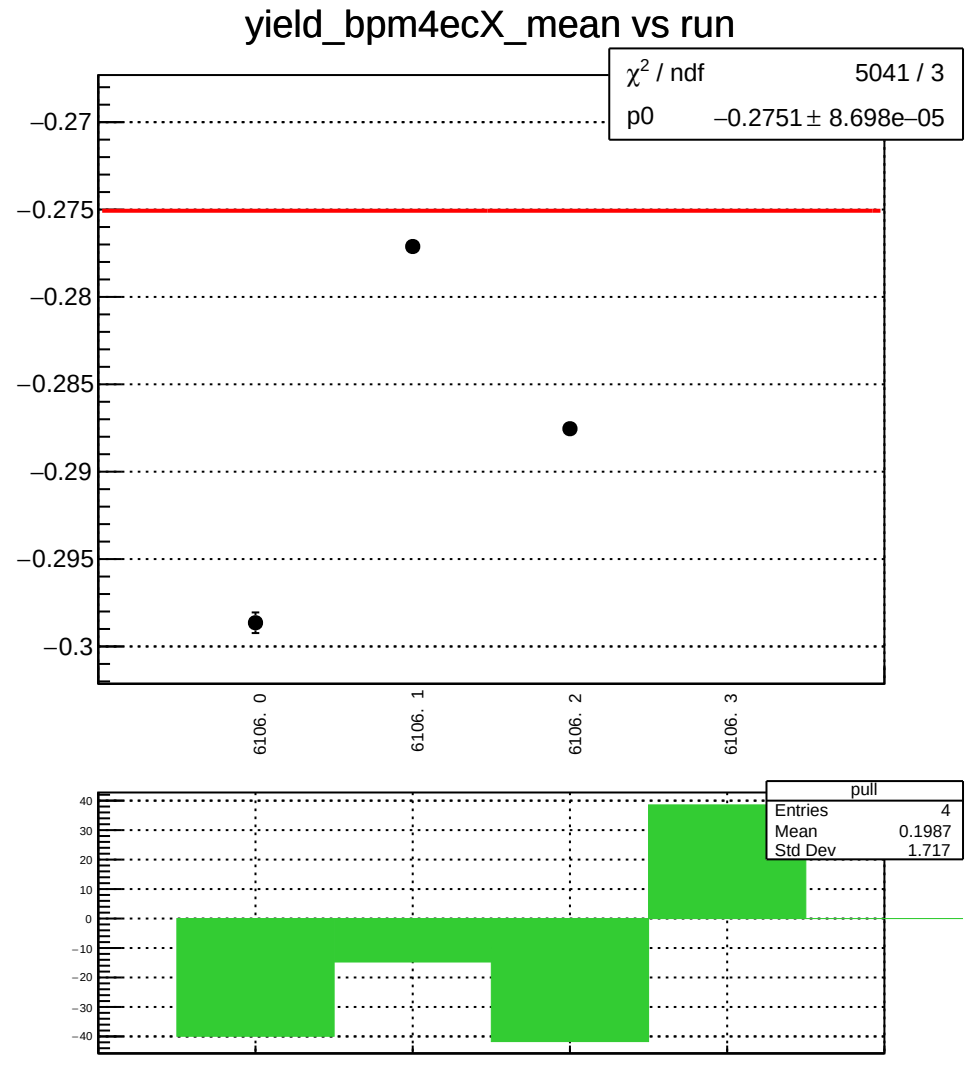

yield_bpm4acX_rms vs run
χ² / ndf 1.546e+04 / 3
p0 0.01715 ± 7.151e–05
0.06
0.05
0.04
0.03
0.02
0.01
6106. 0
6106. 1
6106. 2
6106. 3

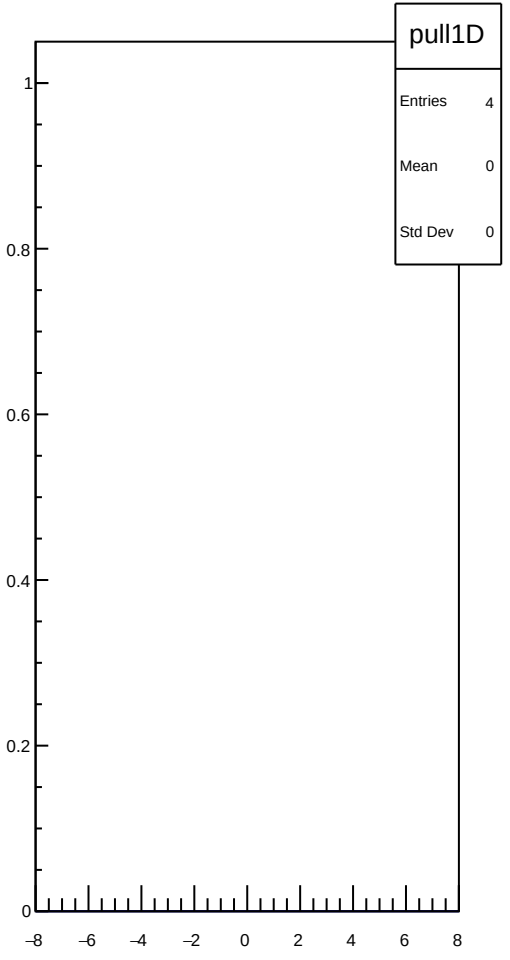

yield_bpm4acY_mean vs run
χ² / ndf 1.279e+04 / 3
p0 0.7492 ± 7.138e−05
0.76
0.755
0.75
0.745
0.74
6106. 0
6106. 1
6106. 2
6106. 3

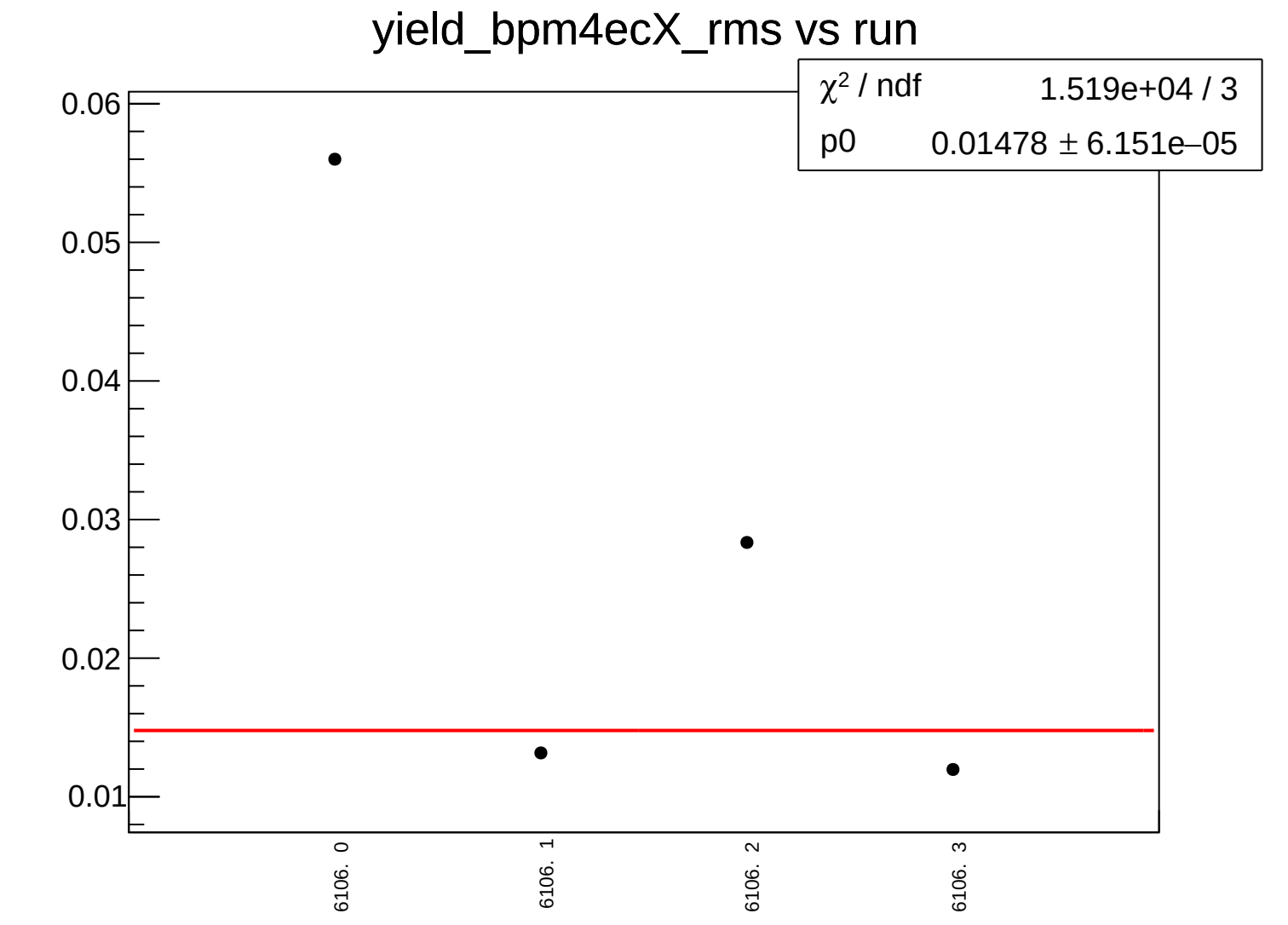

pull
Entries 4
Mean 11.18
Std Dev 8.932
80
60
40
20
0
−20
−40
−60
−80

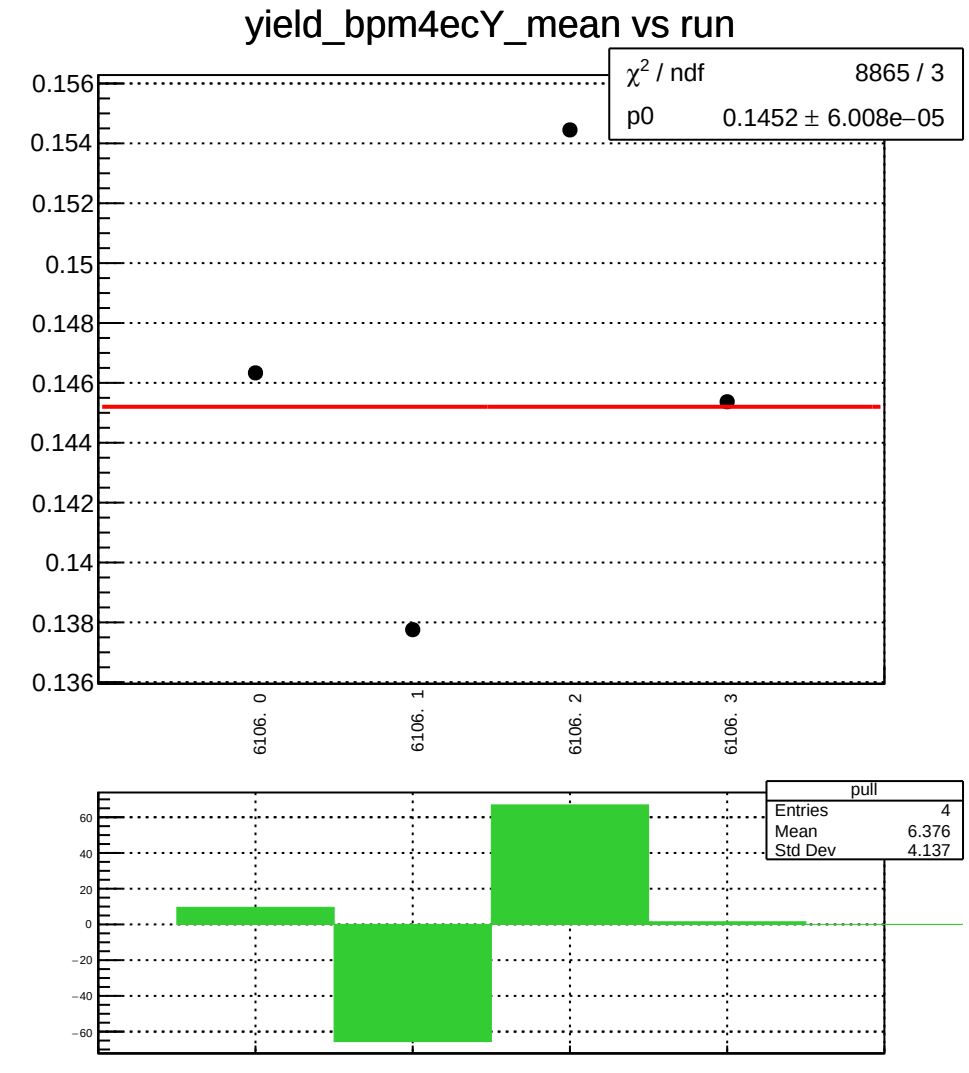

pull1D
Entries 4
Mean 2.43
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

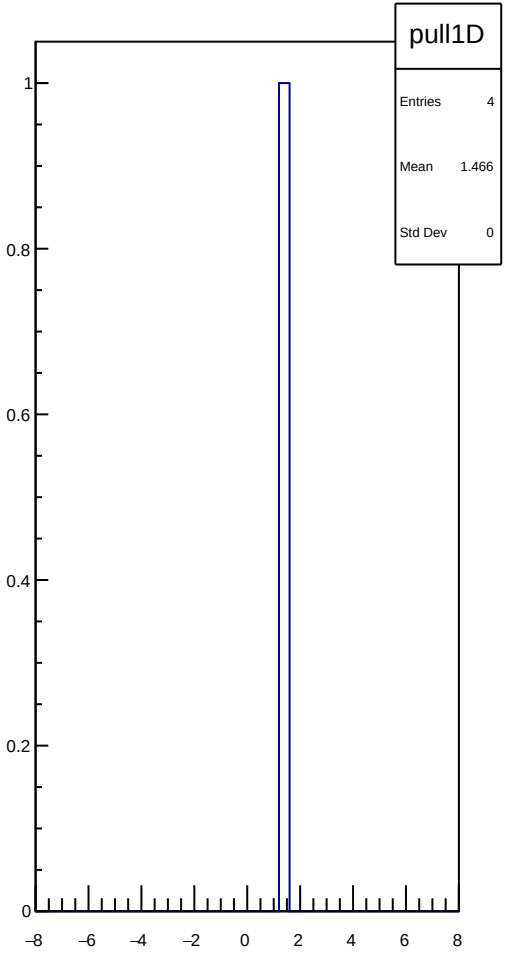

yield_bpm4acY_rms vs run
χ² / ndf 81.25 / 3
p0 0.01363 ± 5.048e–05
0.0144
0.0142
0.014
0.0138
0.0136
0.0134
0.0132
0.013
6106. 0
6106. 1
6106. 2
6106. 3

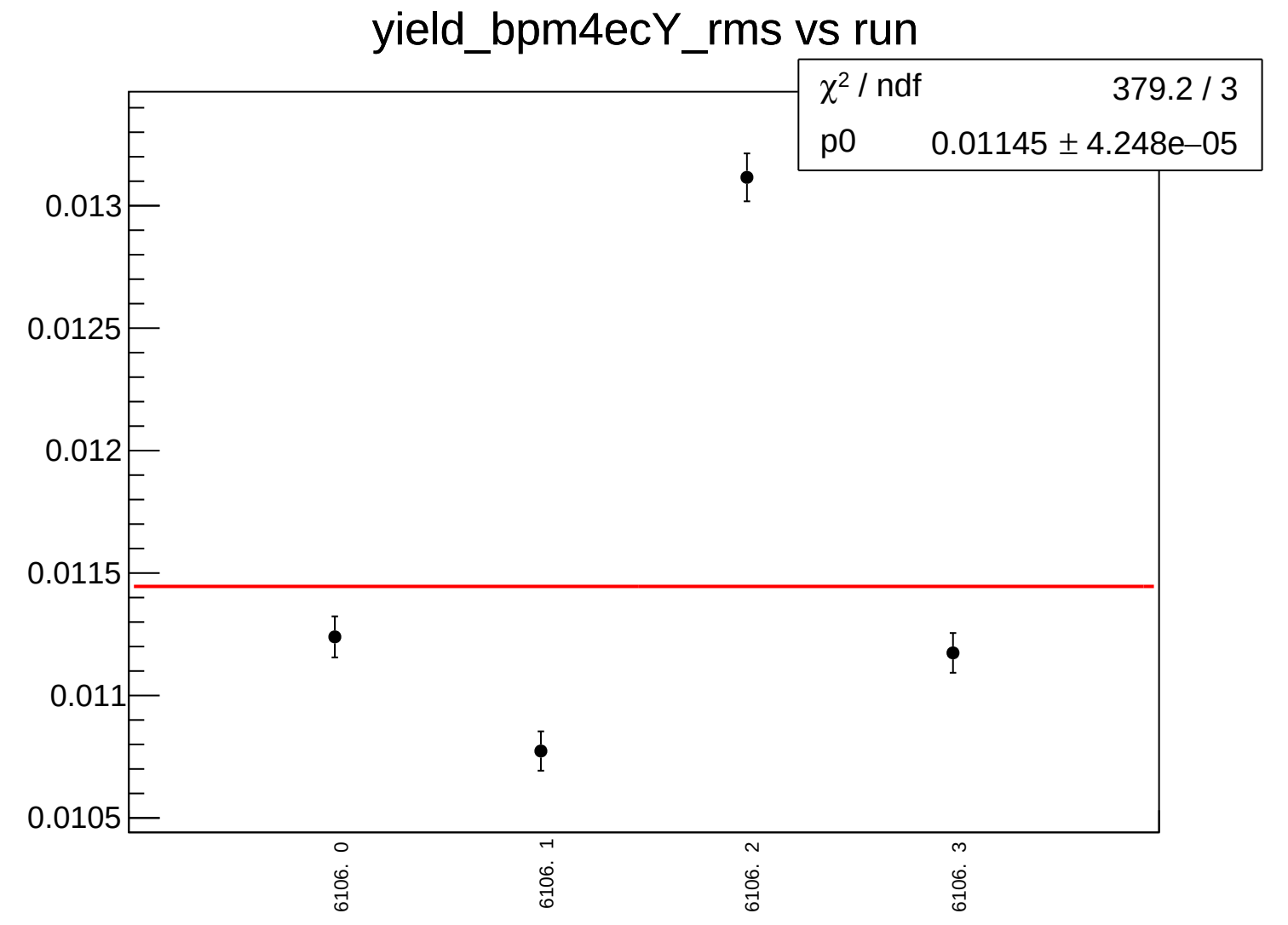

yield_bpm4ecX_mean vs run
χ² / ndf 5041 / 3
p0 −0.2751 ± 8.698e−05
−0.27
−0.275
−0.28
−0.285
−0.29
−0.295
−0.3
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.1987
Std Dev 1.717
40
30
20
10
0
−10
−20
−30
−40

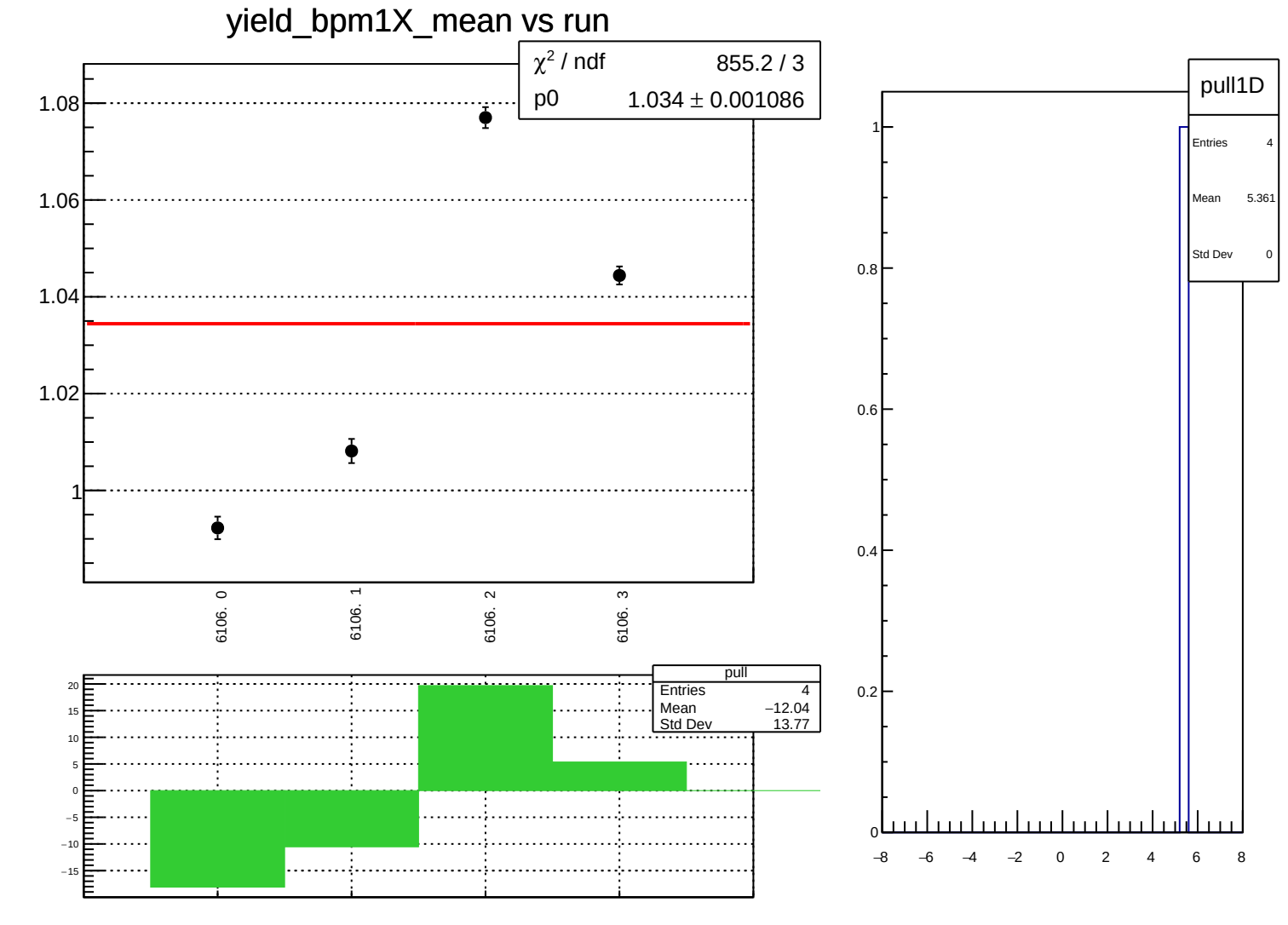

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

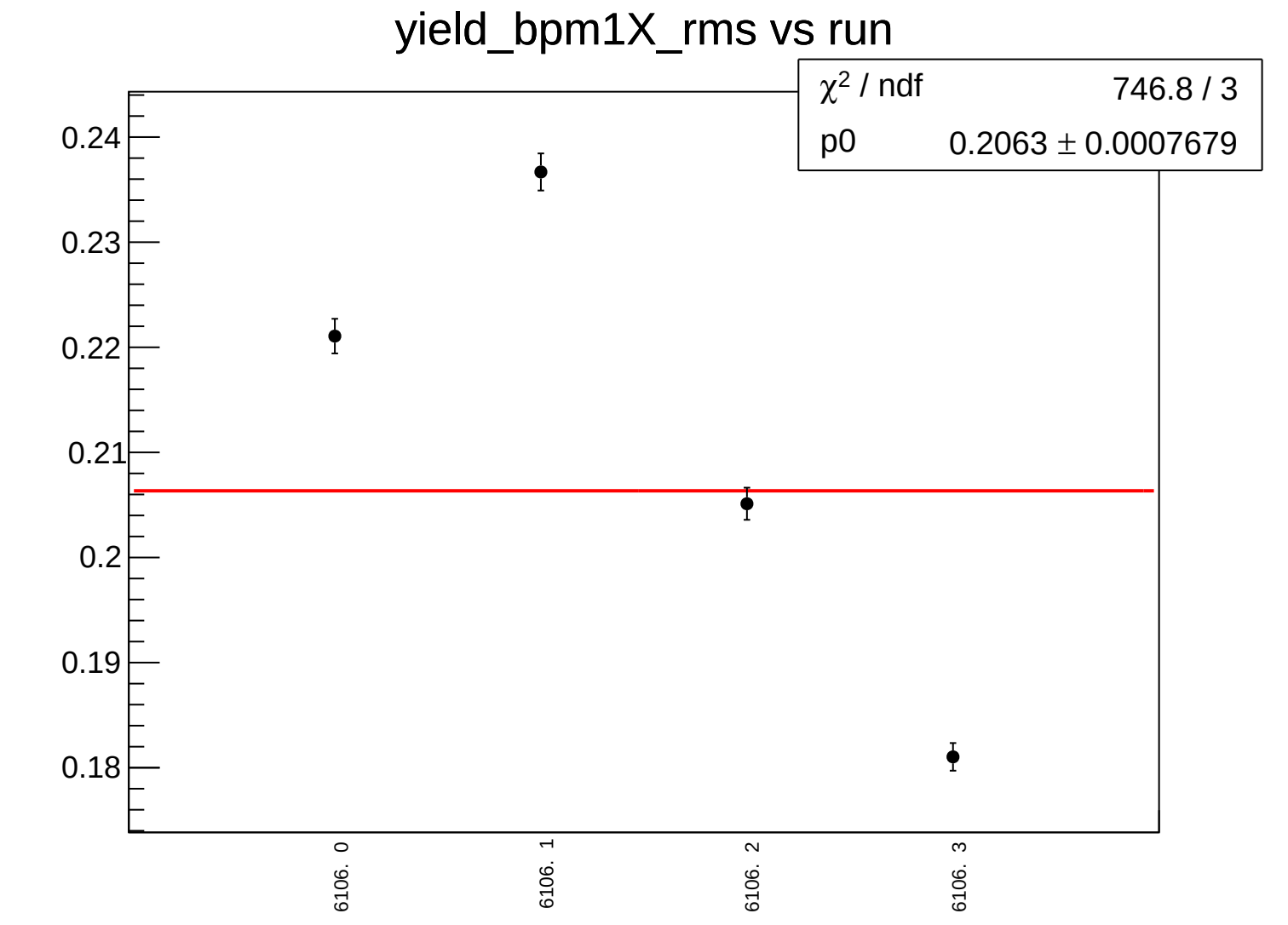

yield_bpm4ecX_rms vs run
χ² / ndf 1.519e+04 / 3
p0 0.01478 ± 6.151e–05
0.06
0.05
0.04
0.03
0.02
0.01
6106. 0
6106. 1
6106. 2
6106. 3

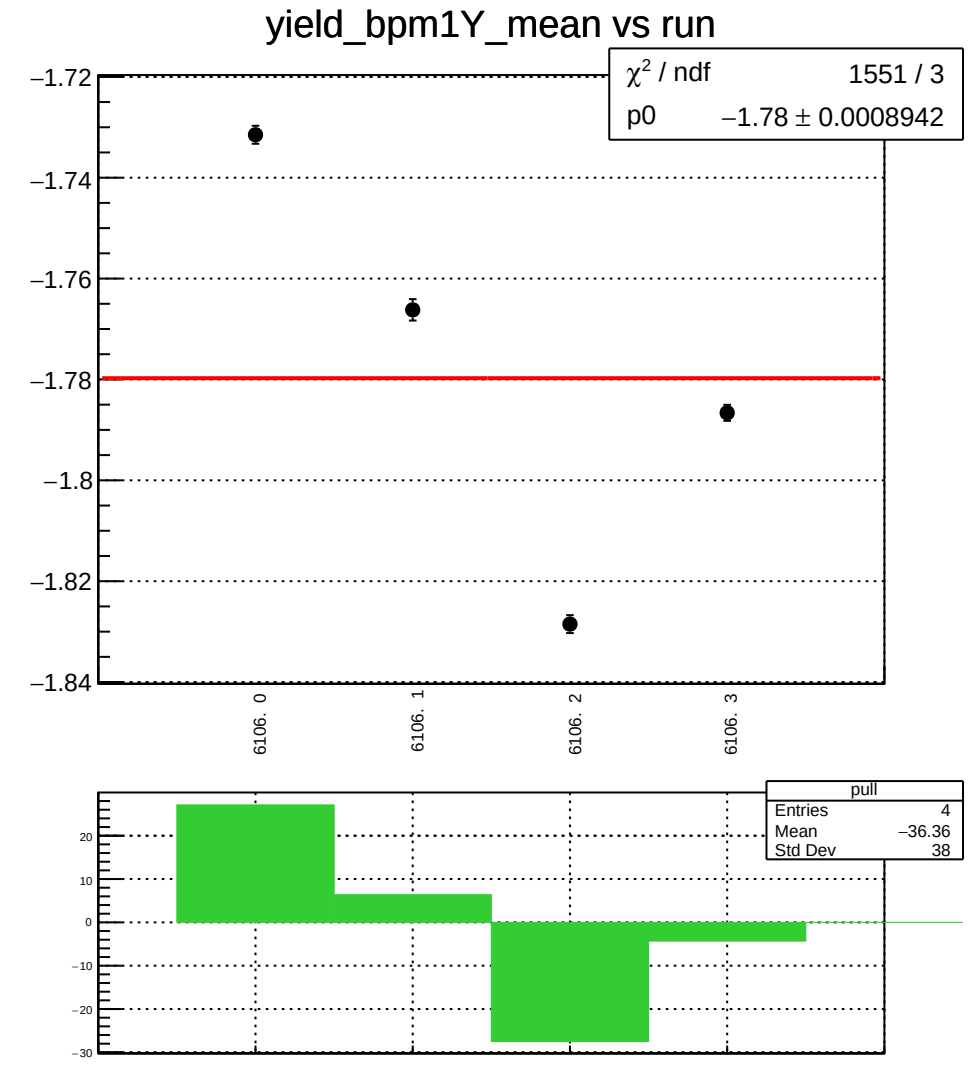

yield_bpm4ecY_mean vs run
χ² / ndf 8865 / 3
p0 0.1452 ± 6.008e−05
0.156
0.154
0.152
0.15
0.148
0.146
0.144
0.142
0.14
0.138
0.136
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 6.376
Std Dev 4.137
60
40
20
0
−20
−40
−60

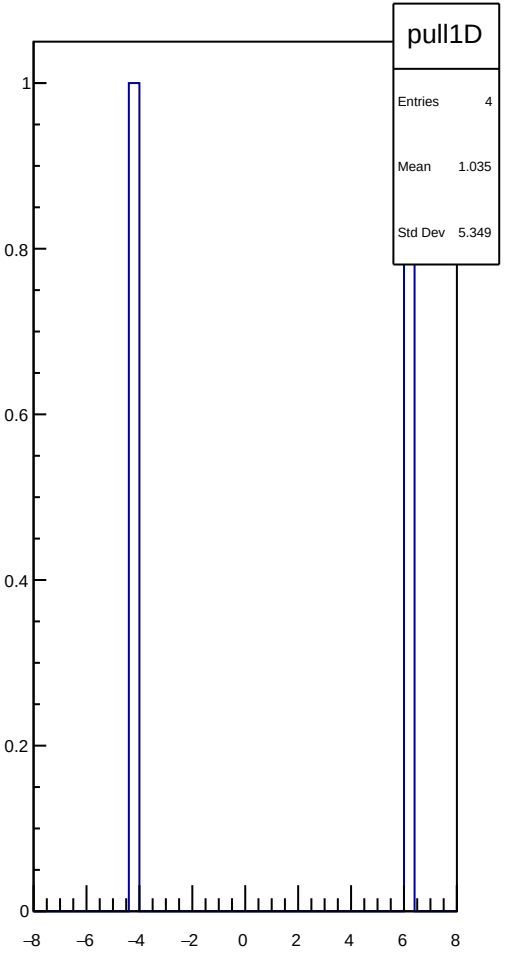

pull1D
Entries 4
Mean 1.466
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

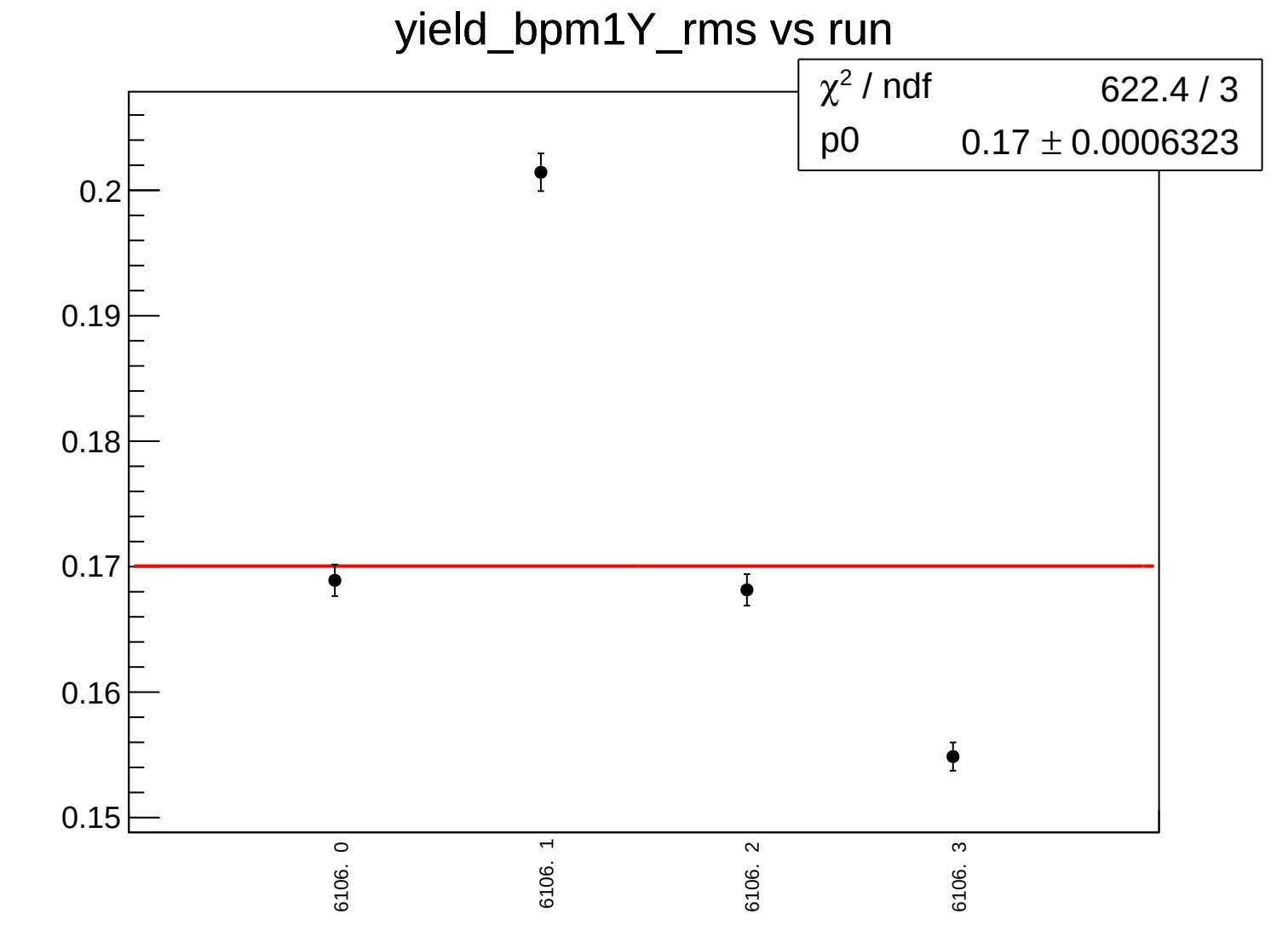

yield_bpm4ecY_rms vs run
χ² / ndf 379.2 / 3
p0 0.01145 ± 4.248e–05
0.013
0.0125
0.012
0.0115
0.011
0.0105
6106. 0
6106. 1
6106. 2
6106. 3

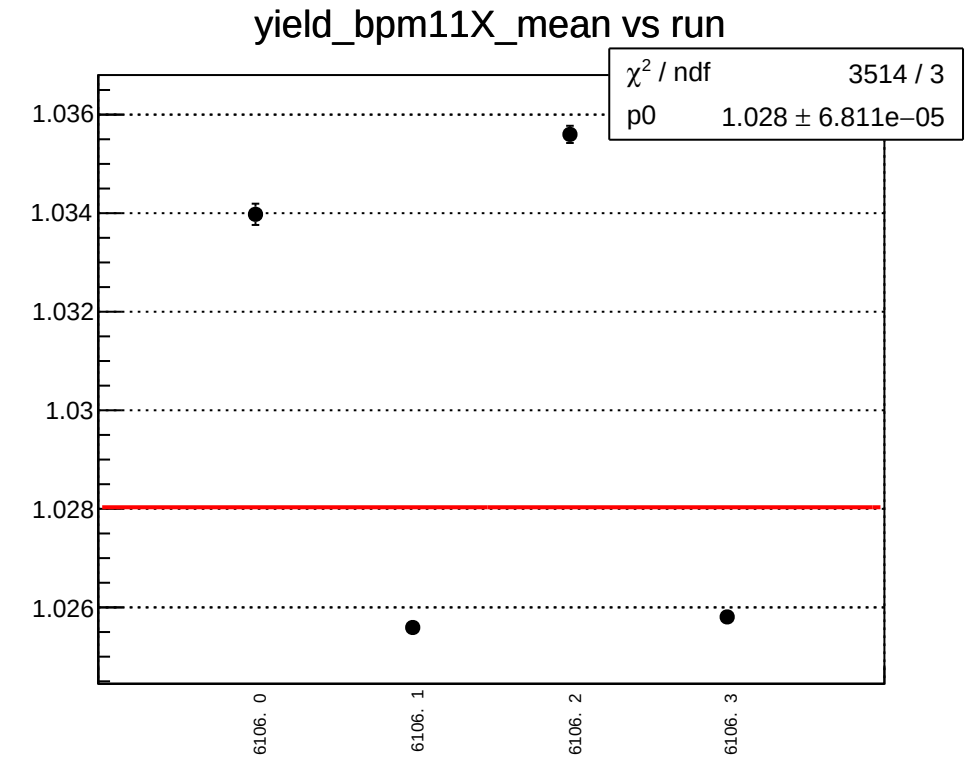

yield_bpm1X_mean vs run
χ² / ndf 855.2 / 3
p0 1.034 ± 0.001086
1.08
1.06
1.04
1.02
1
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −12.04
Std Dev 13.77
20
15
10
5
0
−5
−10
−15
pull1D
Entries 4
Mean 5.361
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

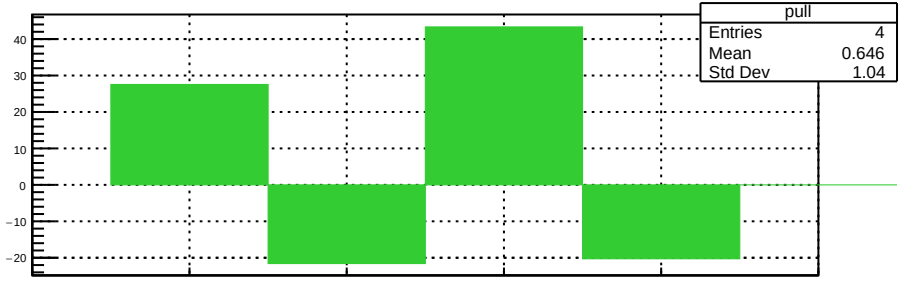

yield_bpm1X_rms vs run
χ² / ndf 746.8 / 3
p0 0.2063 ± 0.0007679
0.24
0.23
0.22
0.21
0.2
0.19
0.18
6106. 0
6106. 1
6106. 2
6106. 3

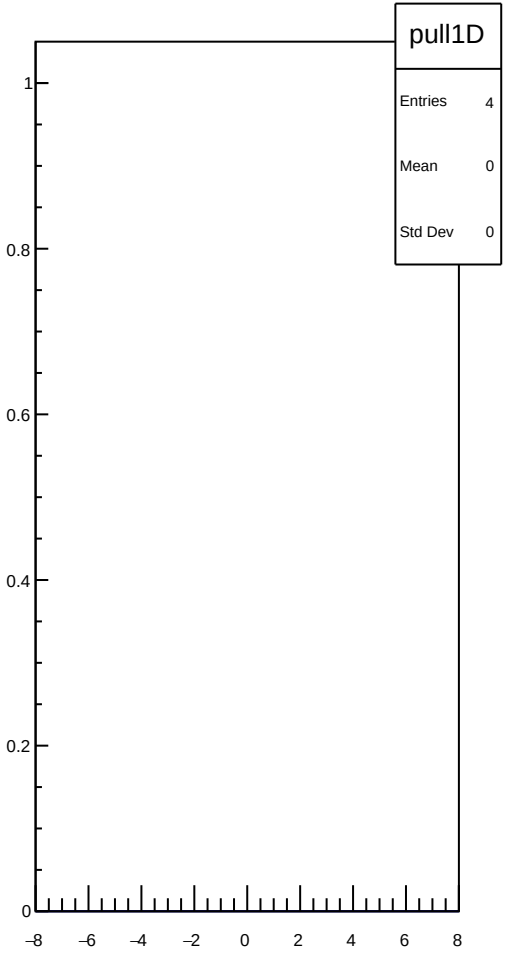

yield_bpm1Y_mean vs run
χ² / ndf 1551 / 3
p0 −1.78 ± 0.0008942
−1.72
−1.74
−1.76
−1.78
−1.8
−1.82
−1.84
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −36.36
Std Dev 38
20
10
0
−10
−20
−30

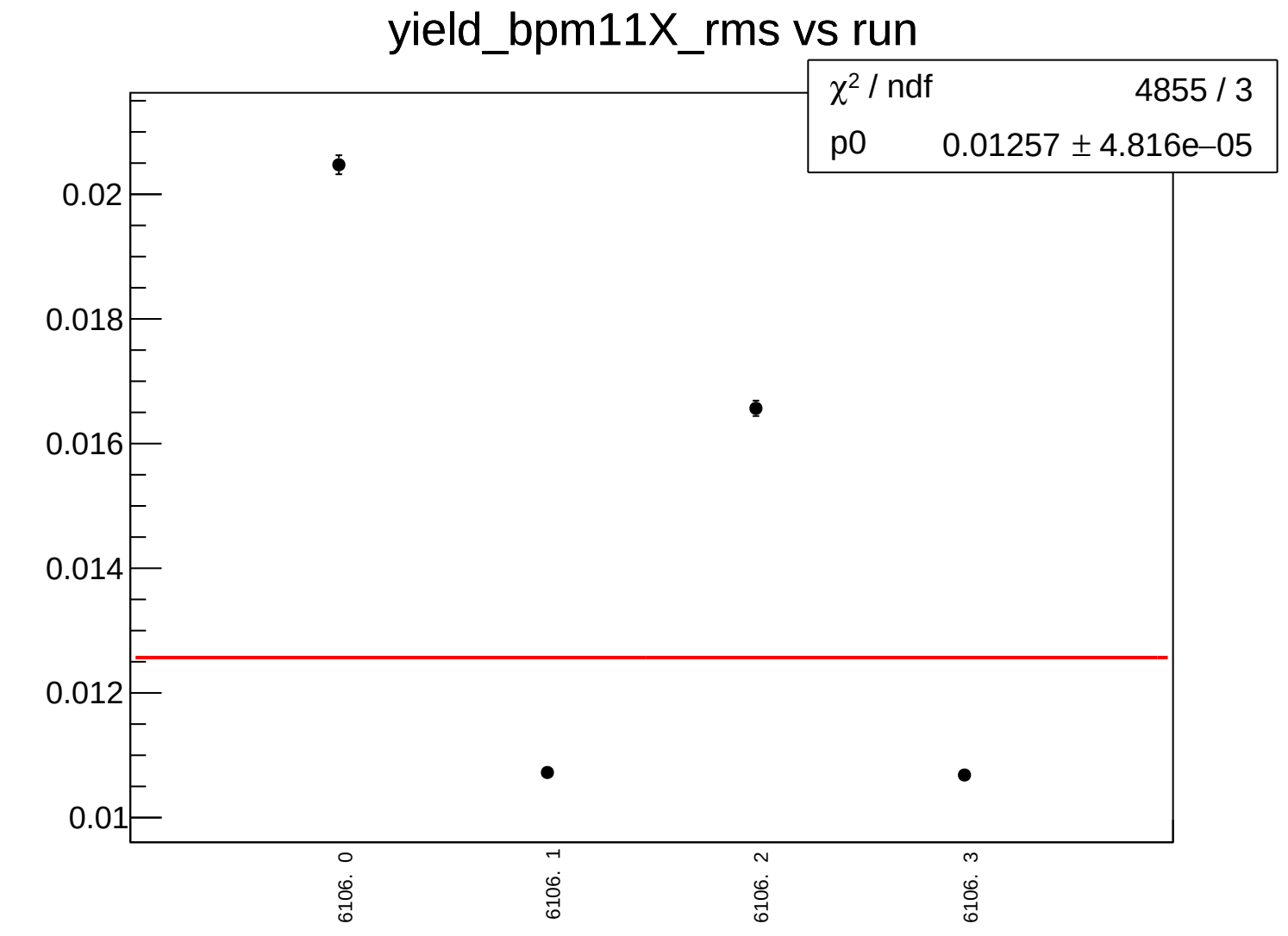

pull1D
Entries 4
Mean 1.035
Std Dev 5.349
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

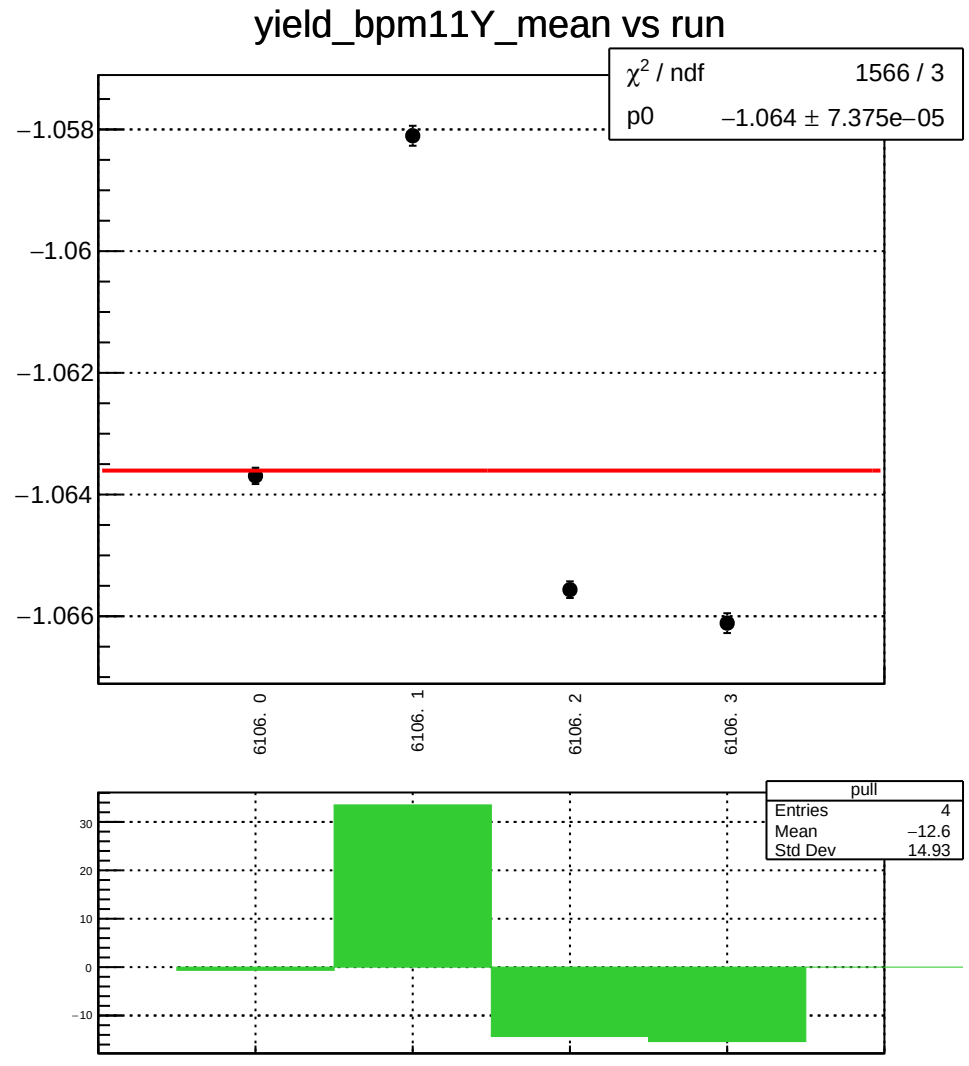

yield_bpm1Y_rms vs run
χ² / ndf 622.4 / 3
p0 0.17 ± 0.0006323
0.2
0.19
0.18
0.17
0.16
0.15
6106. 0
6106. 1
6106. 2
6106. 3

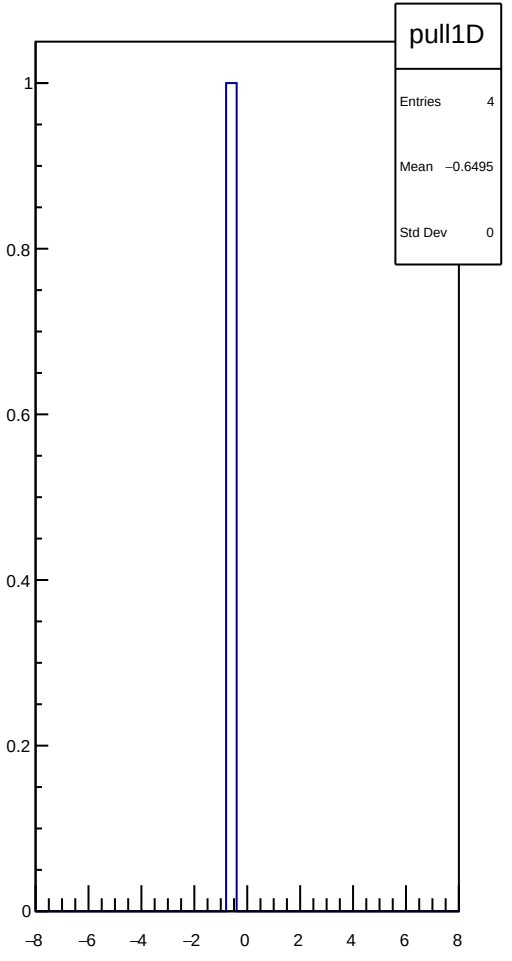

yield_bpm11X_mean vs run
χ² / ndf 3514 / 3
p0 1.028 ± 6.811e−05
1.036
1.034
1.032
1.03
1.028
1.026
6106. 0
6106. 1
6106. 2
6106. 3

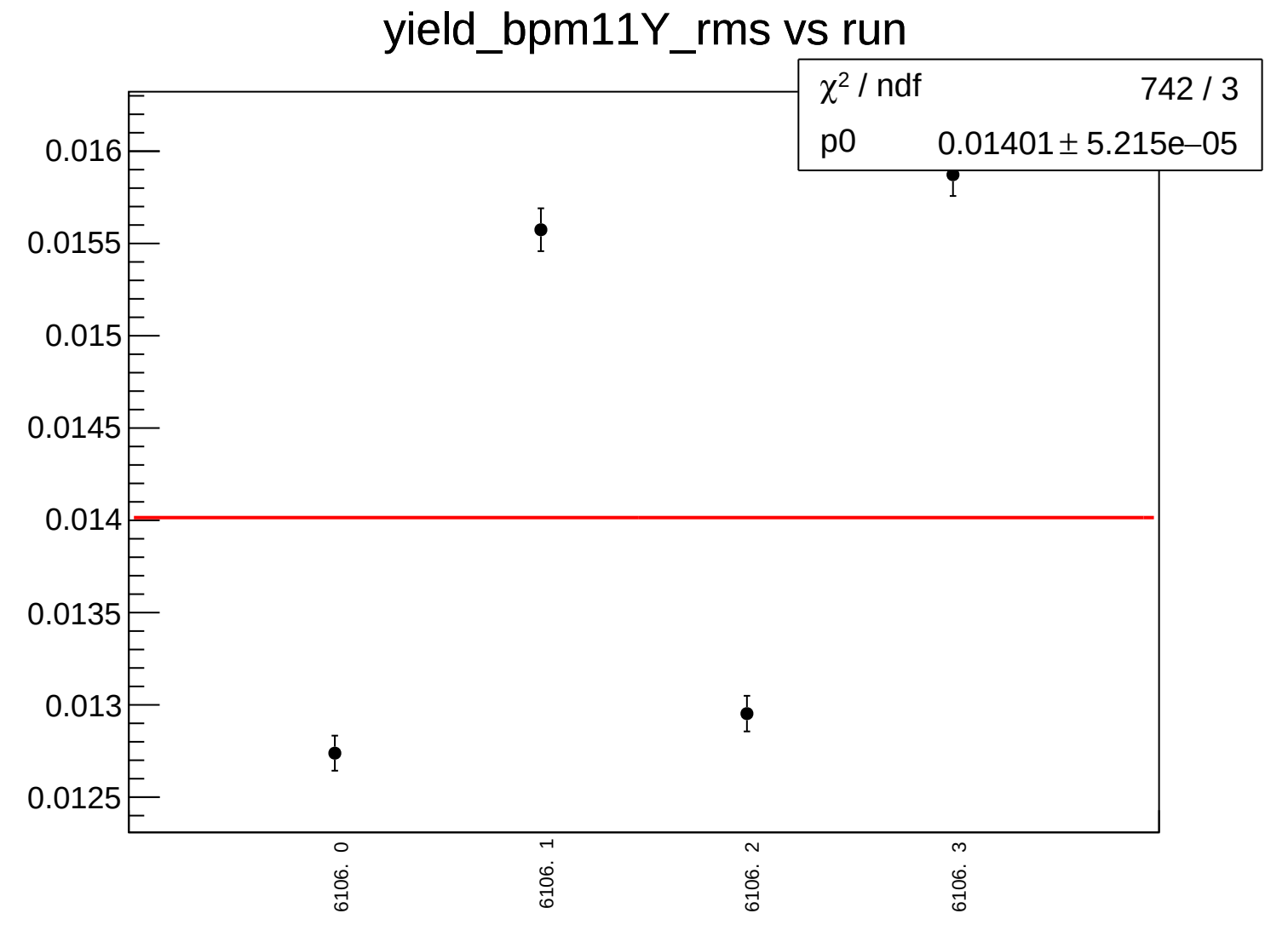

pull
Entries 4
Mean 0.646
Std Dev 1.04
40
30
20
10
0
−10
−20

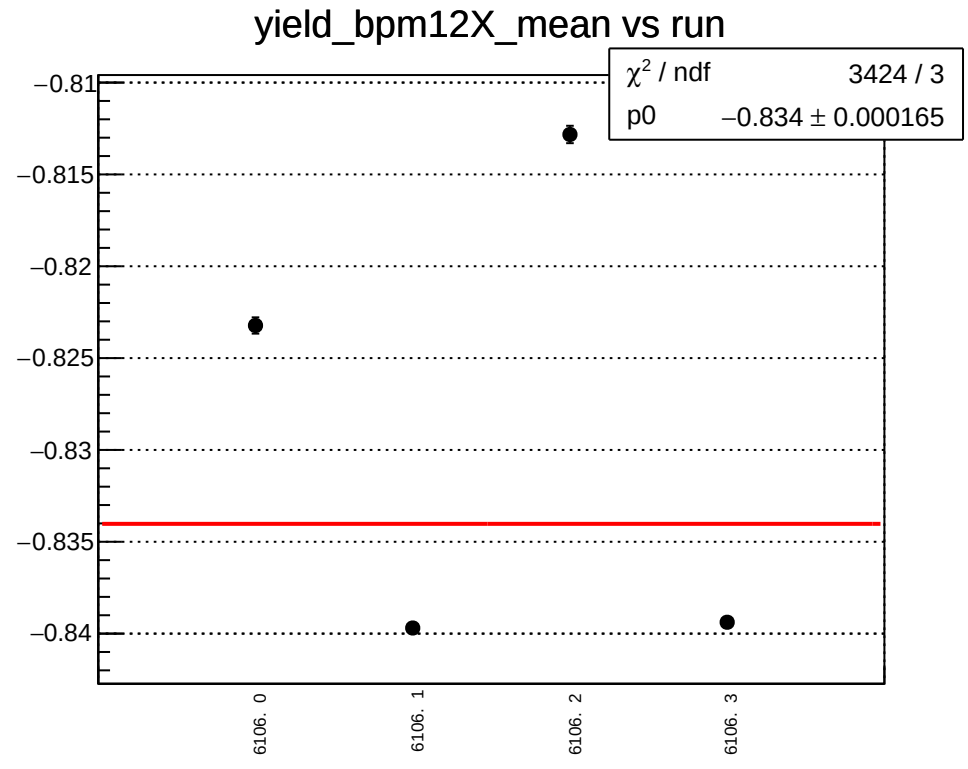

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

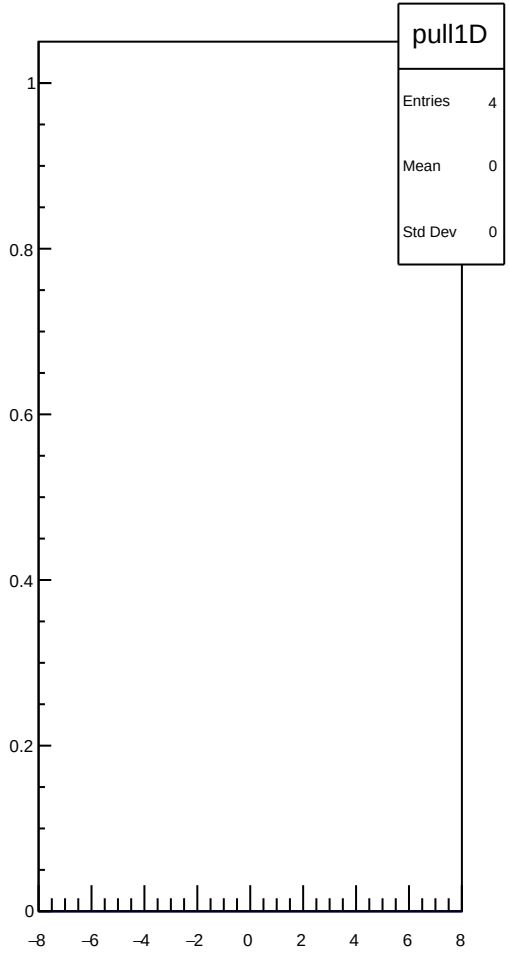

yield_bpm11X_rms vs run
χ² / ndf 4855 / 3
p0 0.01257 ± 4.816e–05
0.02
0.018
0.016
0.014
0.012
0.01
6106. 0
6106. 1
6106. 2
6106. 3

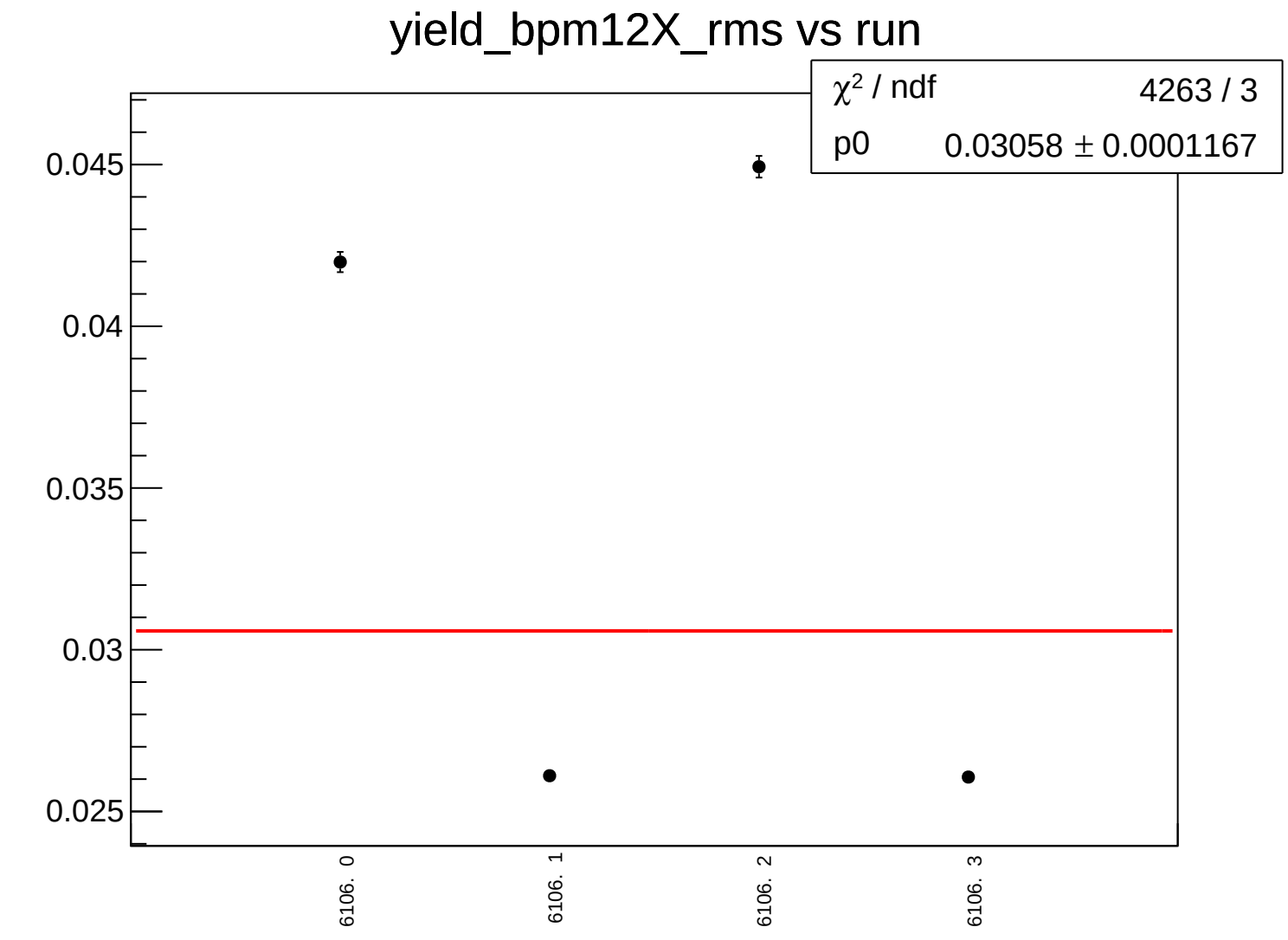

yield_bpm11Y_mean vs run
χ² / ndf 1566 / 3
p0 −1.064 ± 7.375e−05
−1.058
−1.06
−1.062
−1.064
−1.066
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −12.6
Std Dev 14.93
30
20
10
0
−10

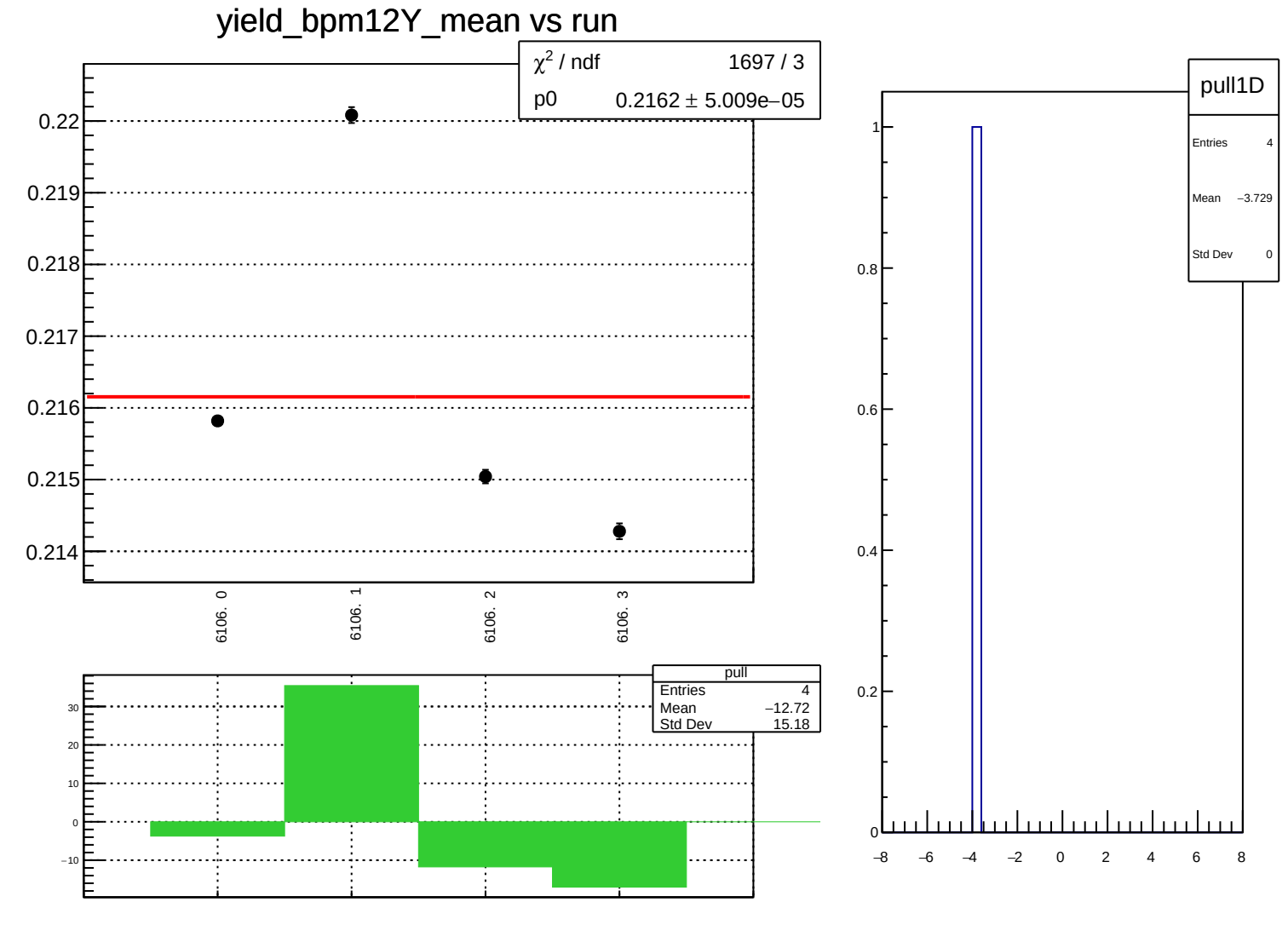

pull1D
Entries 4
Mean −0.6495
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

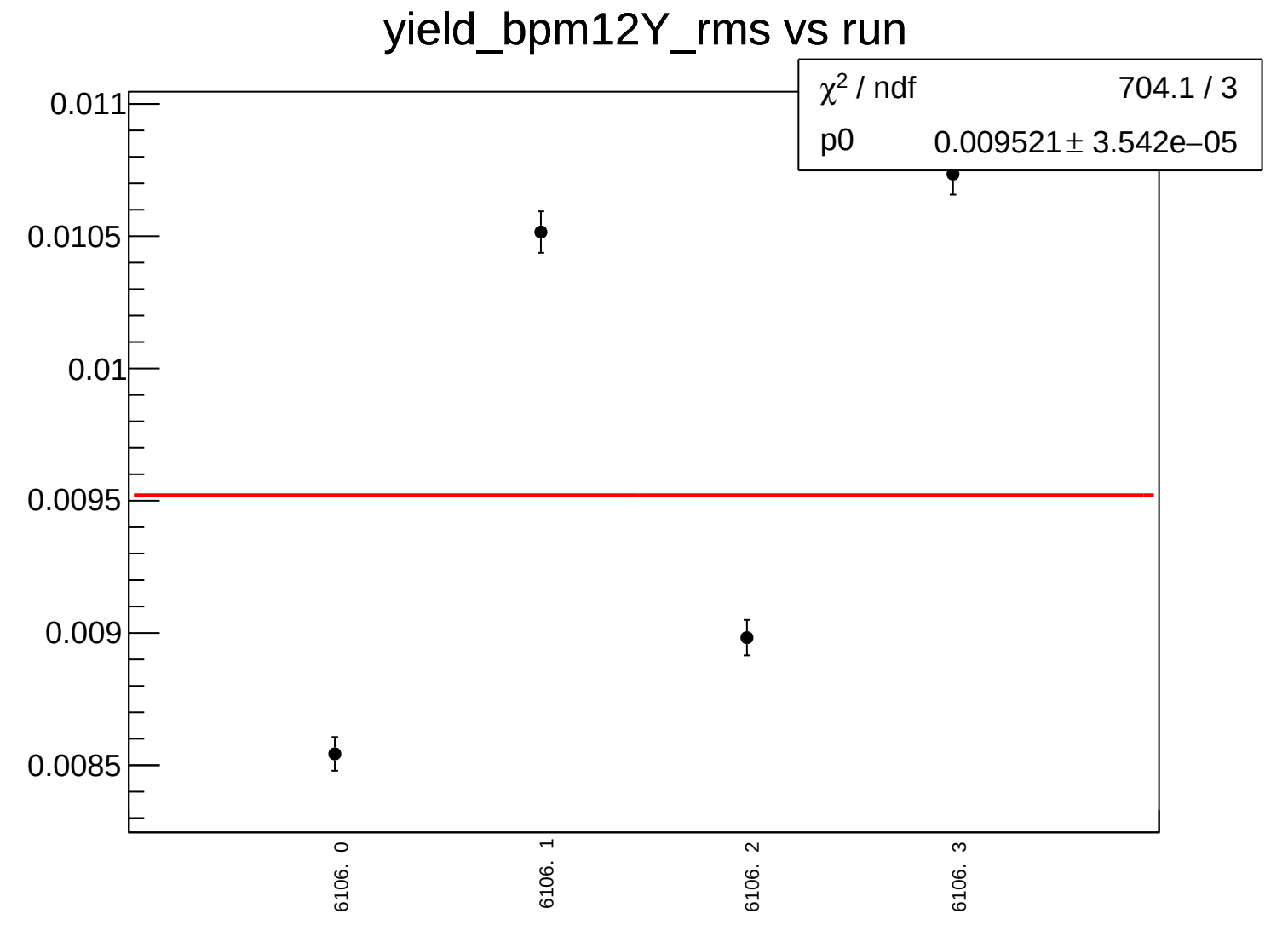

yield_bpm11Y_rms vs run
χ² / ndf 742 / 3
p0 0.01401 ± 5.215e−05
0.016
0.0155
0.015
0.0145
0.014
0.0135
0.013
0.0125
6106. 0
6106. 1
6106. 2
6106. 3

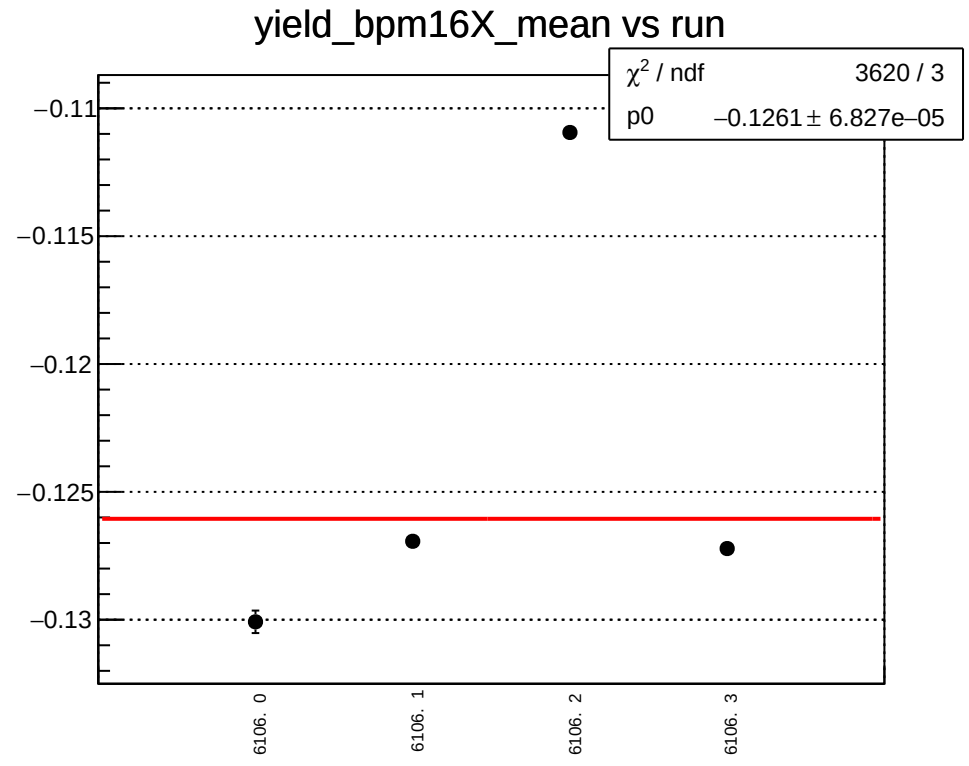

yield_bpm12X_mean vs run
χ² / ndf 3424 / 3
p0 −0.834 ± 0.000165
−0.81
−0.815
−0.82
−0.825
−0.83
−0.835
−0.84
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.811
Std Dev 0.9252
40
30
20
10
0
−10
−20

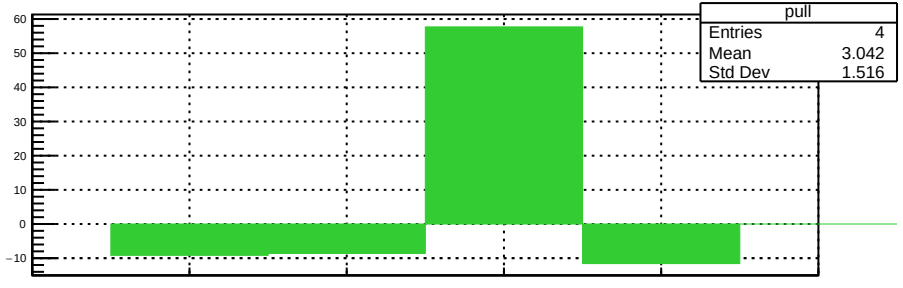

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

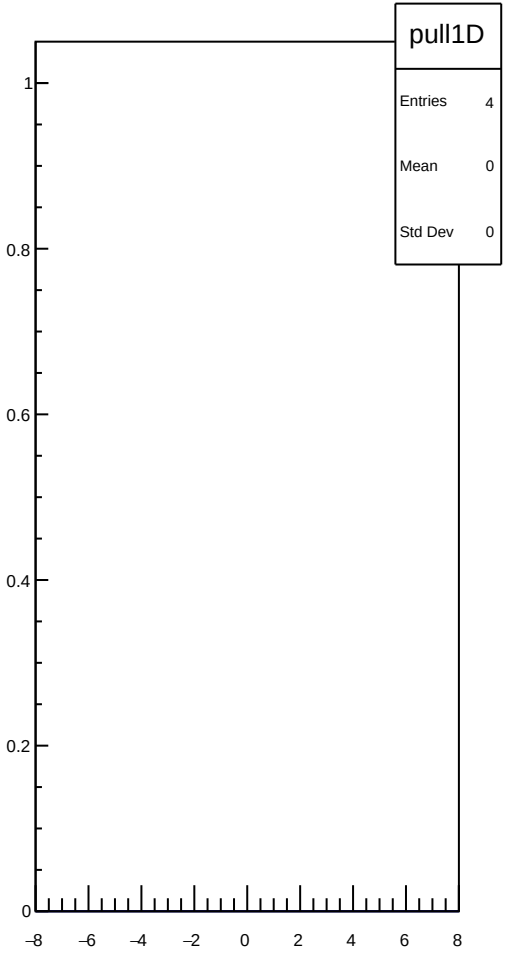

yield_bpm12X_rms vs run
χ² / ndf 4263 / 3
p0 0.03058 ± 0.0001167
0.045
0.04
0.035
0.03
0.025
6106. 0
6106. 1
6106. 2
6106. 3

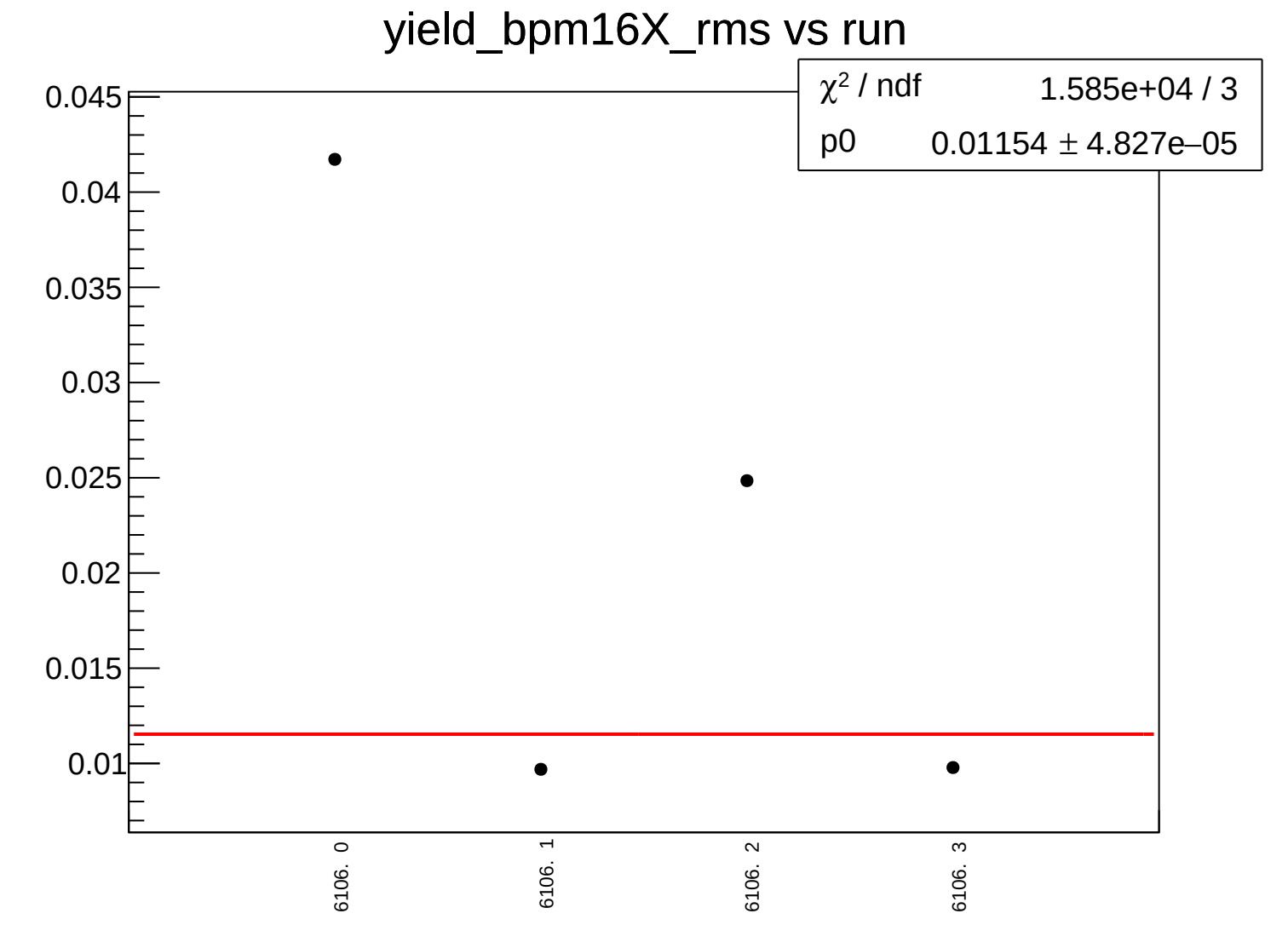

yield_bpm12Y_mean vs run
χ² / ndf 1697 / 3
p0 0.2162 ± 5.009e−05
0.22
0.219
0.218
0.217
0.216
0.215
0.214
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −12.72
Std Dev 15.18
30
20
10
0
−10
pull1D
Entries 4
Mean −3.729
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

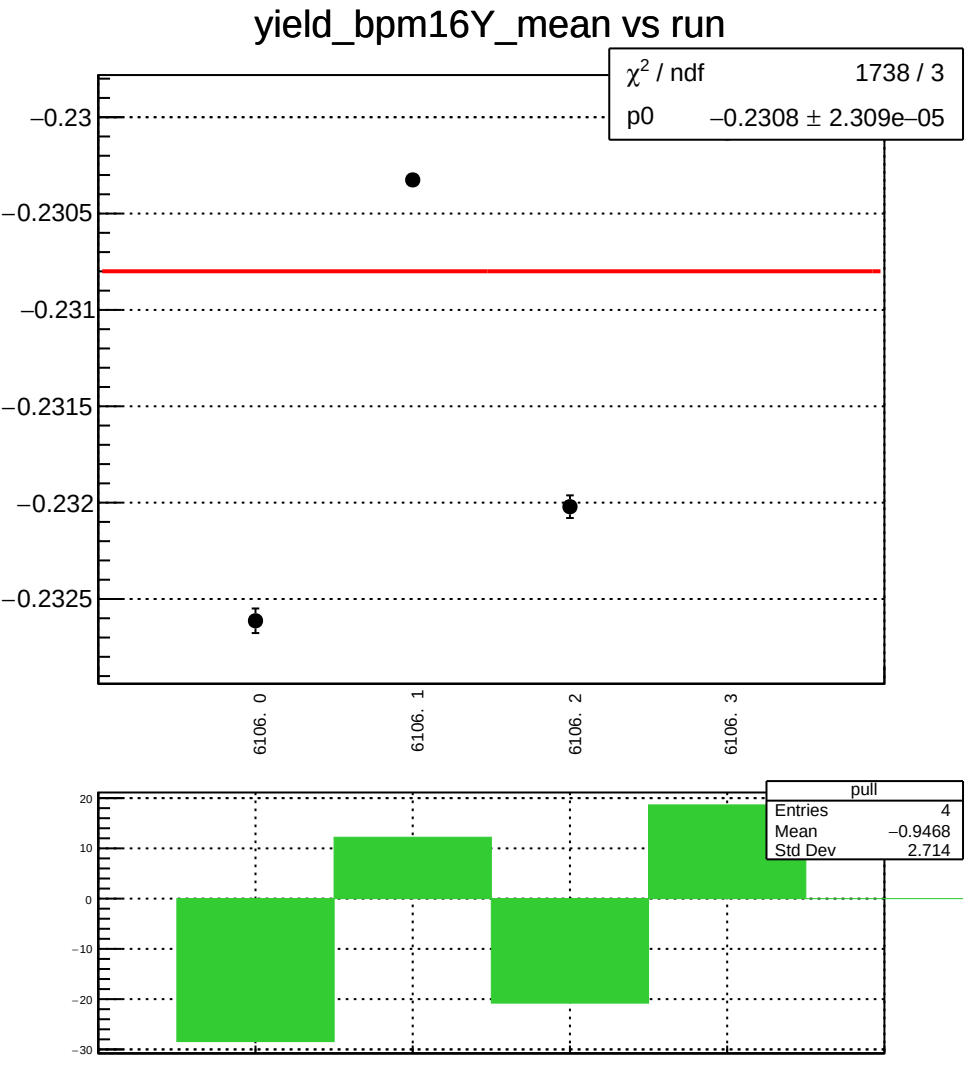

yield_bpm12Y_rms vs run
χ² / ndf 704.1 / 3
p0 0.009521 ± 3.542e−05
0.011
0.0105
0.01
0.0095
0.009
0.0085
6106. 0
6106. 1
6106. 2
6106. 3

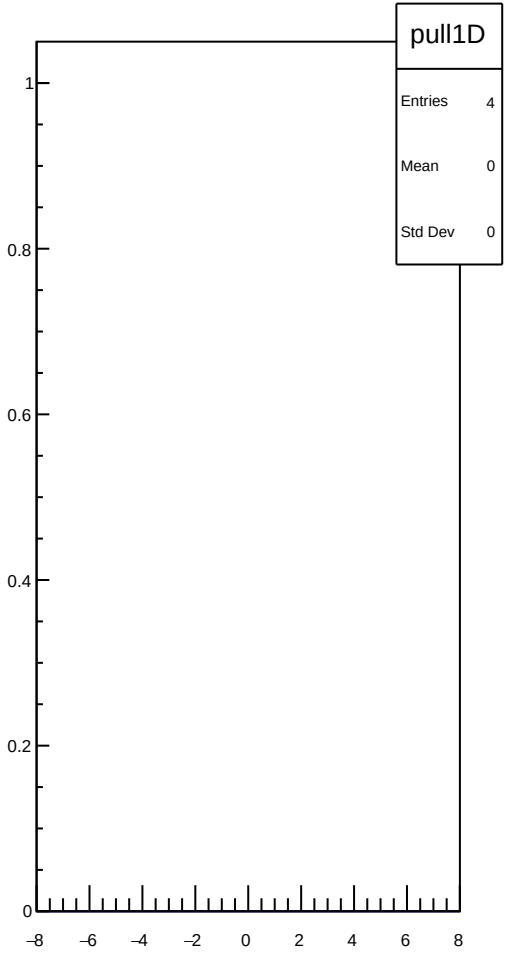

yield_bpm16X_mean vs run
χ² / ndf 3620 / 3
p0 −0.1261 ± 6.827e−05
−0.11
−0.115
−0.12
−0.125
−0.13
6106. 0
6106. 1
6106. 2
6106. 3

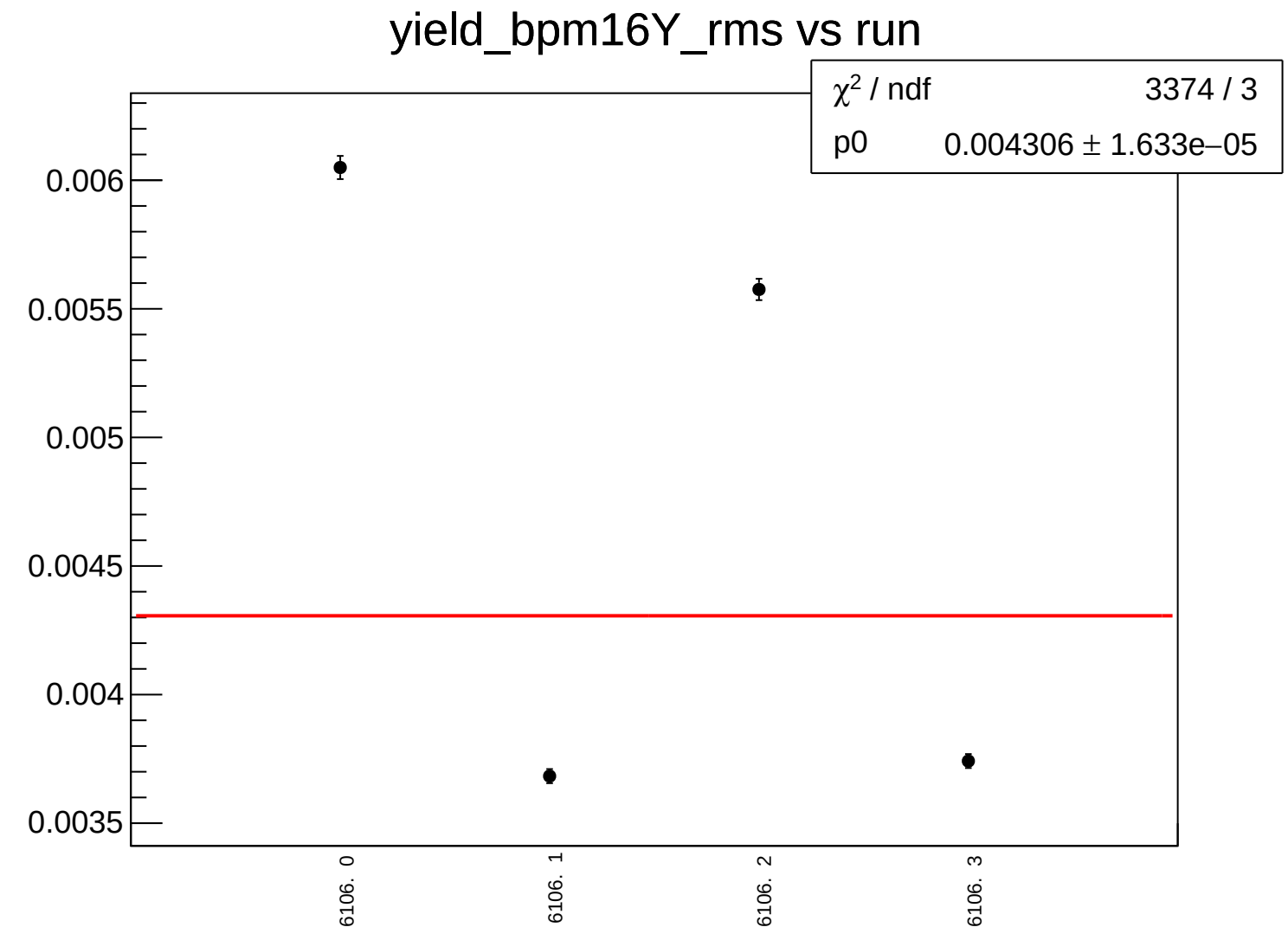

pull
Entries 4
Mean 3.042
Std Dev 1.516
60
50
40
30
20
10
0
−10

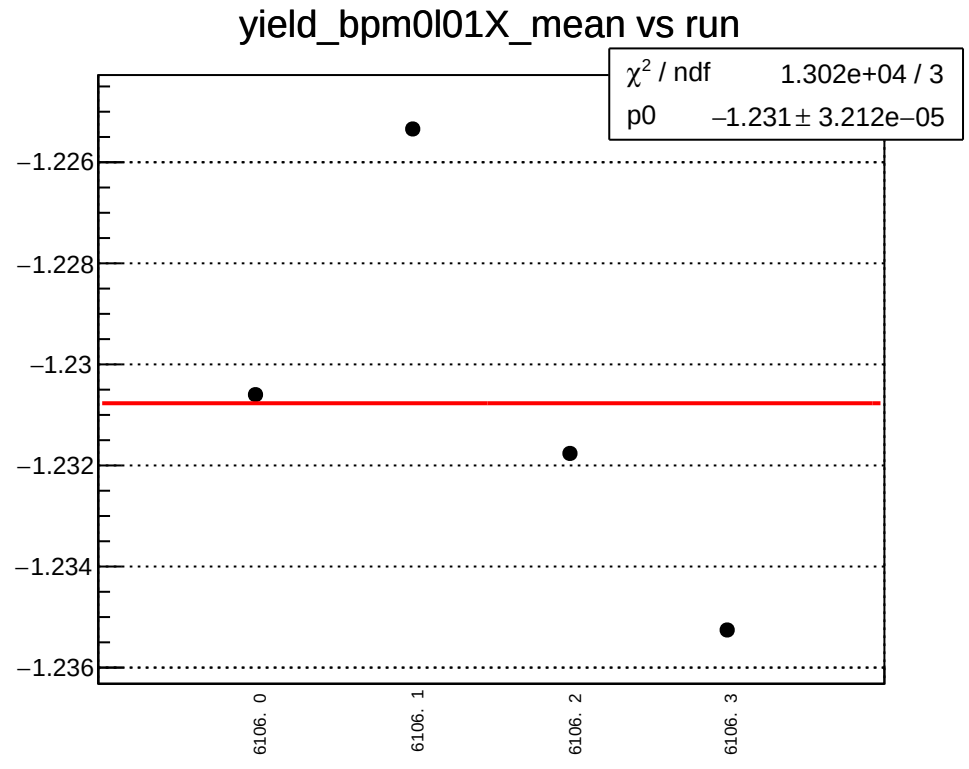

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

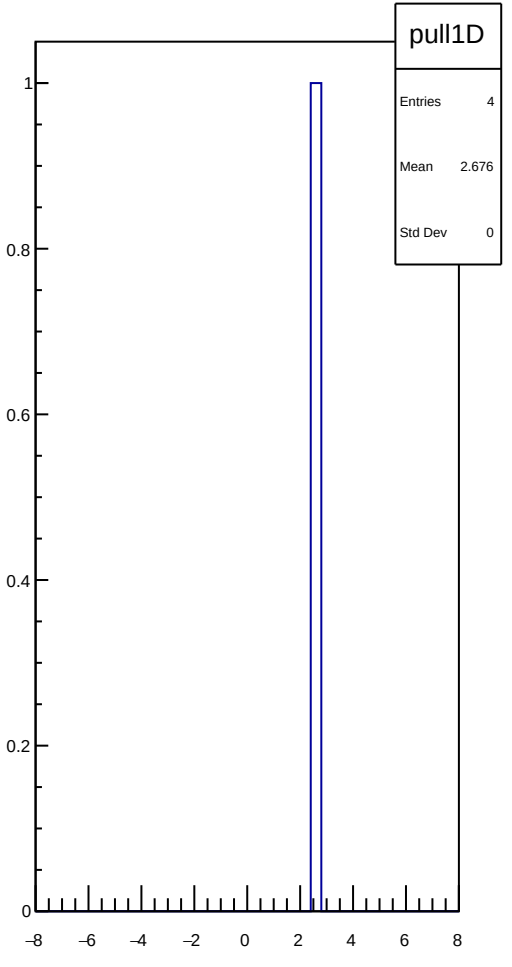

yield_bpm16X_rms vs run
χ² / ndf 1.585e+04 / 3
p0 0.01154 ± 4.827e–05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
6106. 0
6106. 1
6106. 2
6106. 3

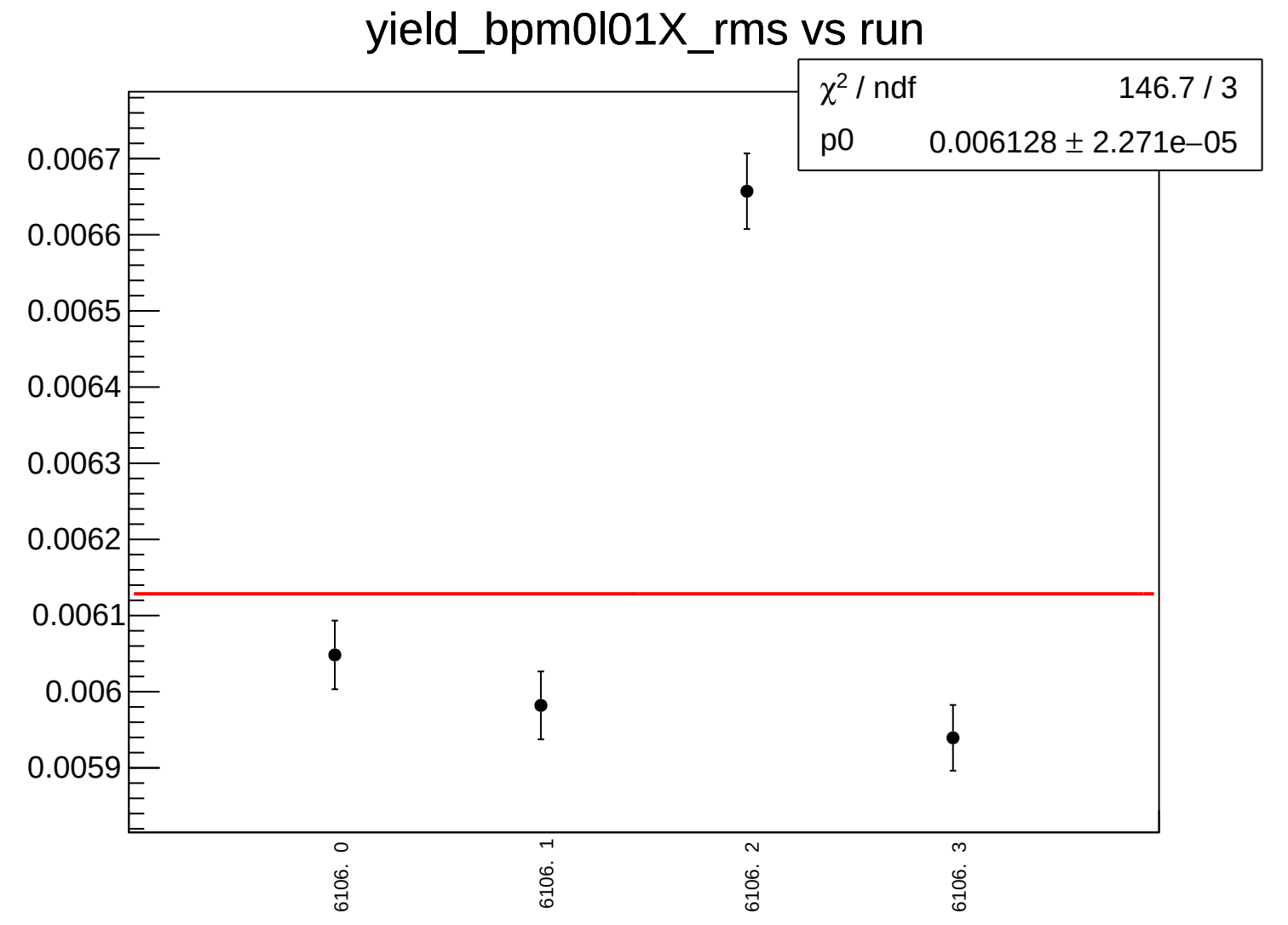

yield_bpm16Y_mean vs run
χ² / ndf 1738 / 3
p0 −0.2308 ± 2.309e−05
−0.23
−0.2305
−0.231
−0.2315
−0.232
−0.2325
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −0.9468
Std Dev 2.714
20
10
0
−10
−20
−30

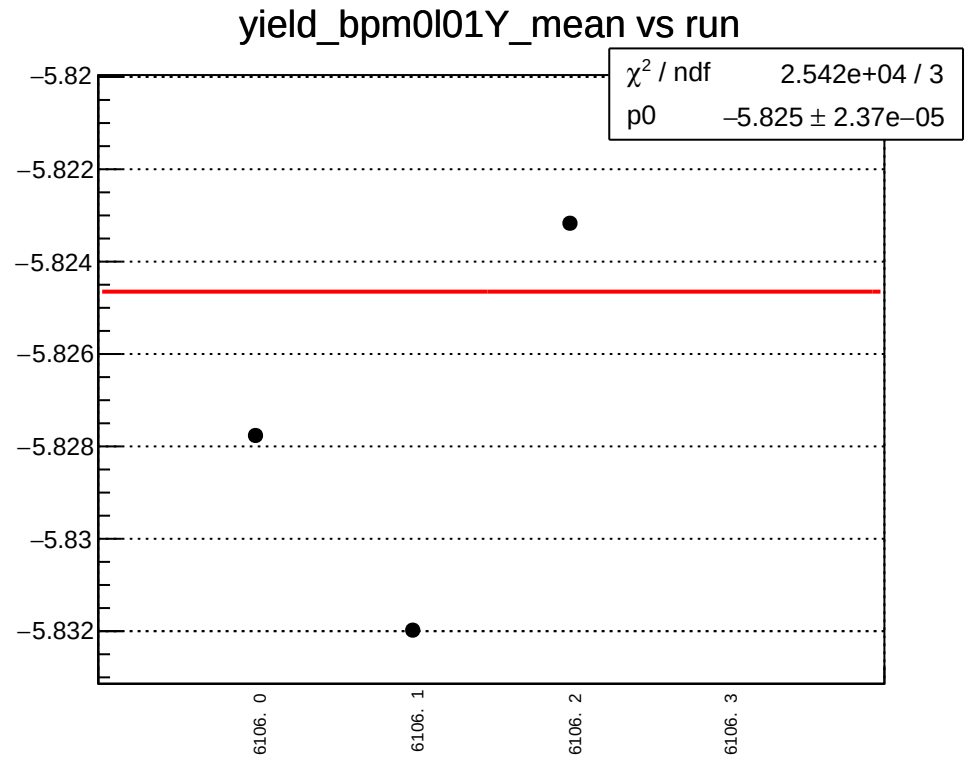

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

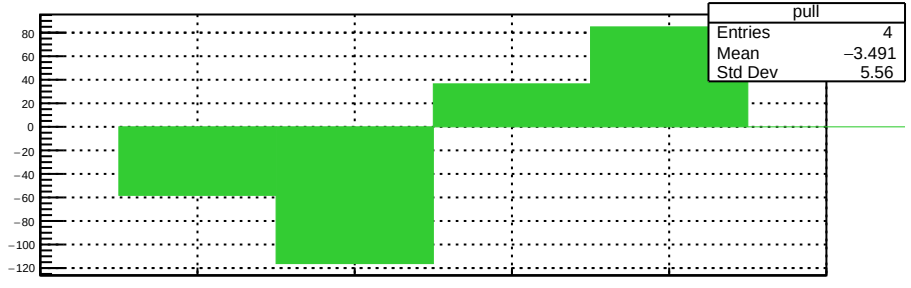

yield_bpm16Y_rms vs run
χ² / ndf 3374 / 3
p0 0.004306 ± 1.633e−05
0.006
0.0055
0.005
0.0045
0.004
0.0035
6106. 0
6106. 1
6106. 2
6106. 3

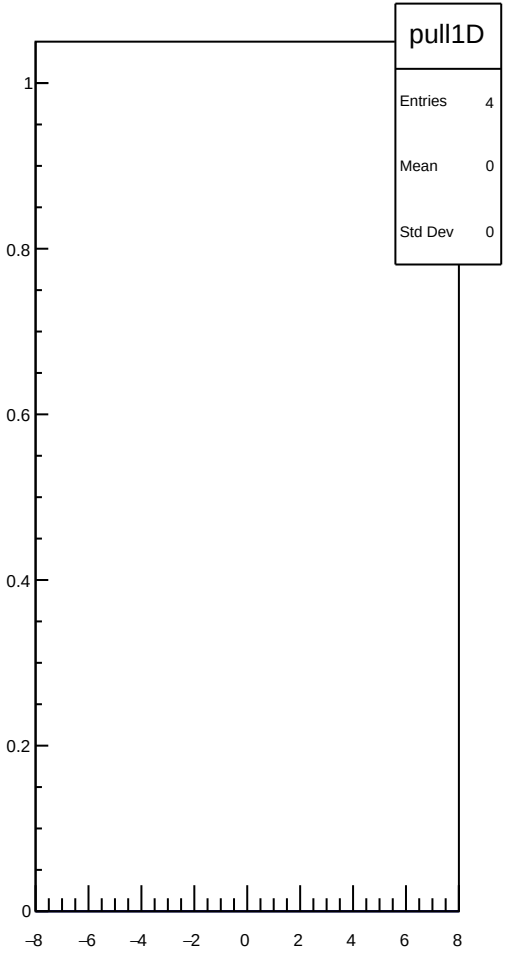

yield_bpm0l01X_mean vs run
χ² / ndf 1.302e+04 / 3
p0 −1.231 ± 3.212e−05
−1.226
−1.228
−1.23
−1.232
−1.234
−1.236
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −152.7
Std Dev 155.1
80
60
40
20
0
−20
−40
−60
−80

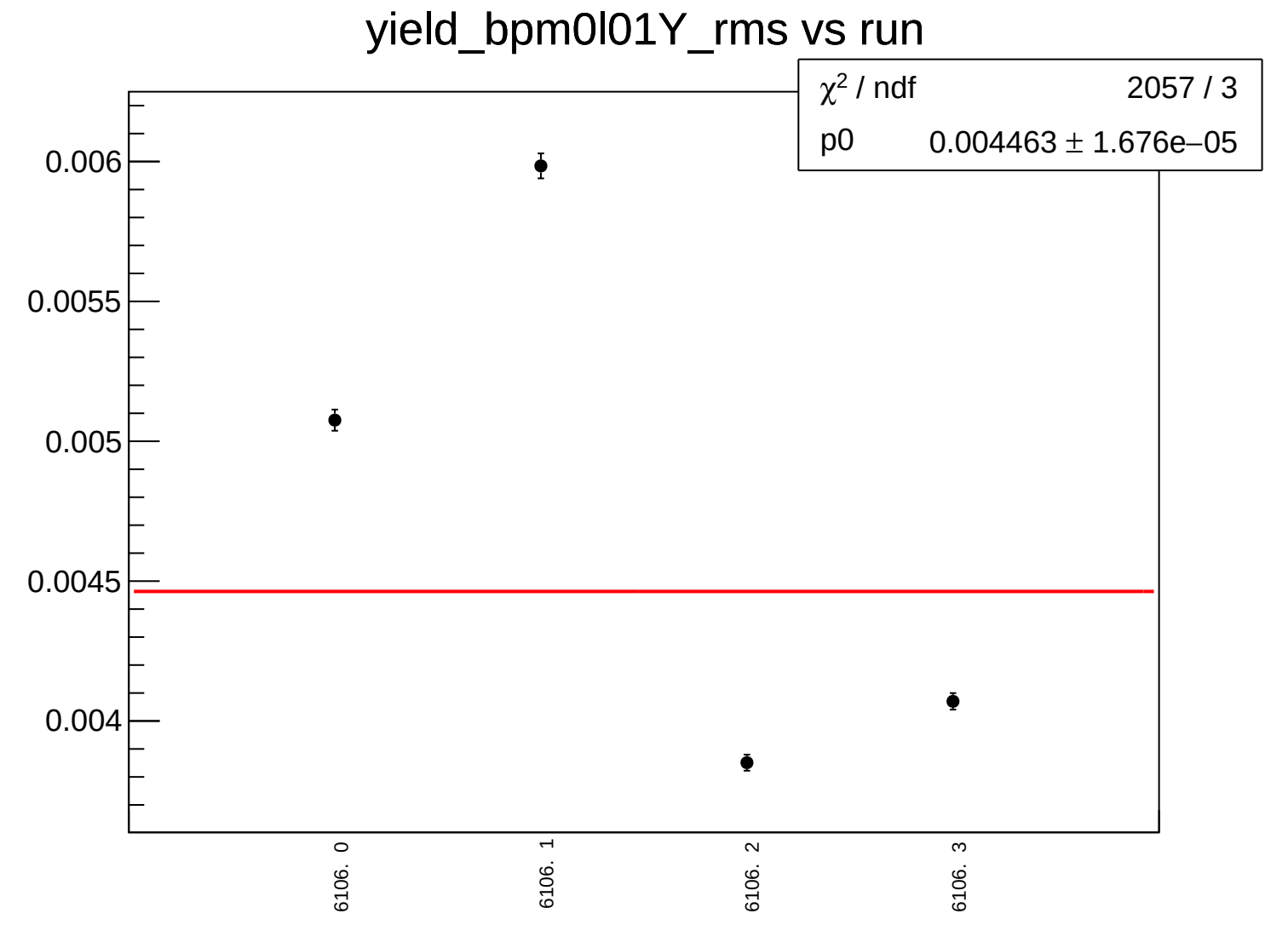

pull1D
Entries 4
Mean 2.676
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

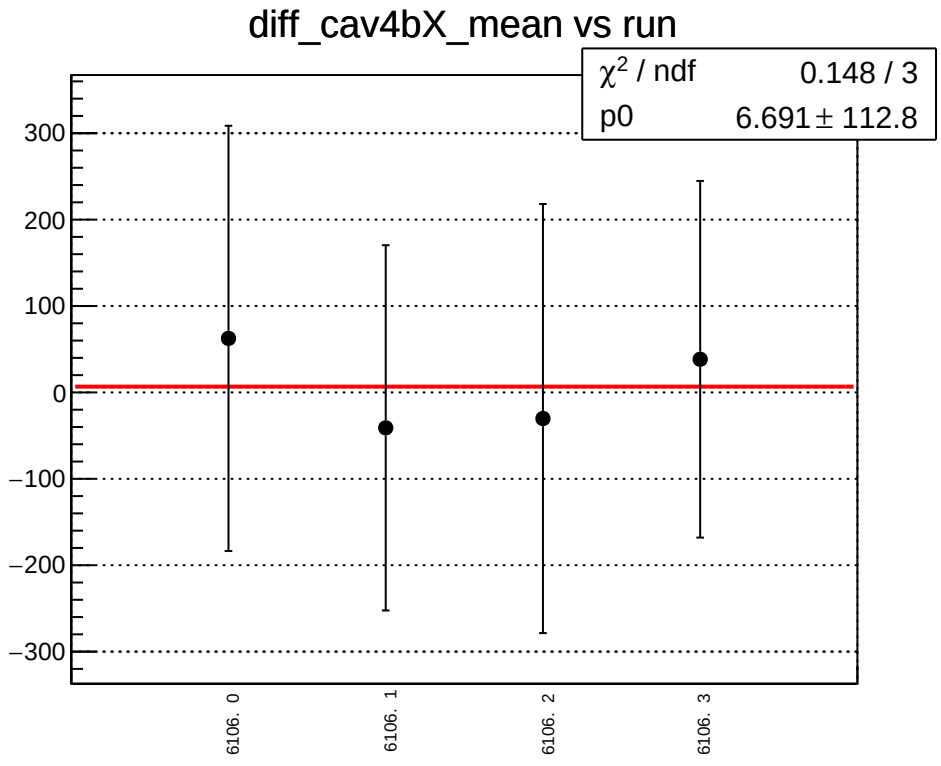

yield_bpm0l01X_rms vs run
χ² / ndf 146.7 / 3
p0 0.006128 ± 2.271e−05
0.0067
0.0066
0.0065
0.0064
0.0063
0.0062
0.0061
0.006
0.0059
6106. 0
6106. 1
6106. 2
6106. 3

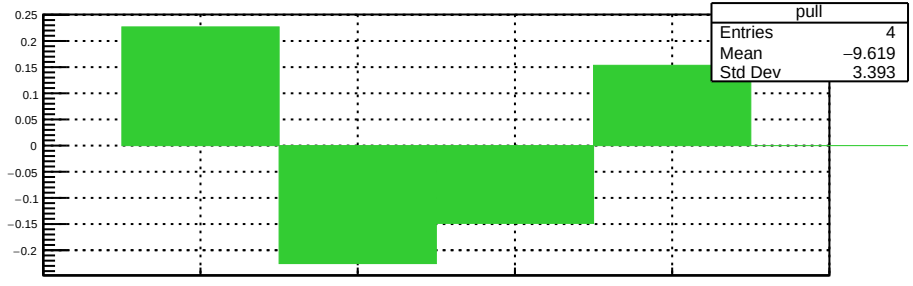

yield_bpm0l01Y_mean vs run
χ² / ndf 2.542e+04 / 3
p0 −5.825 ± 2.37e−05
−5.82
−5.822
−5.824
−5.826
−5.828
−5.83
−5.832
6106. 0
6106. 1
6106. 2
6106. 3

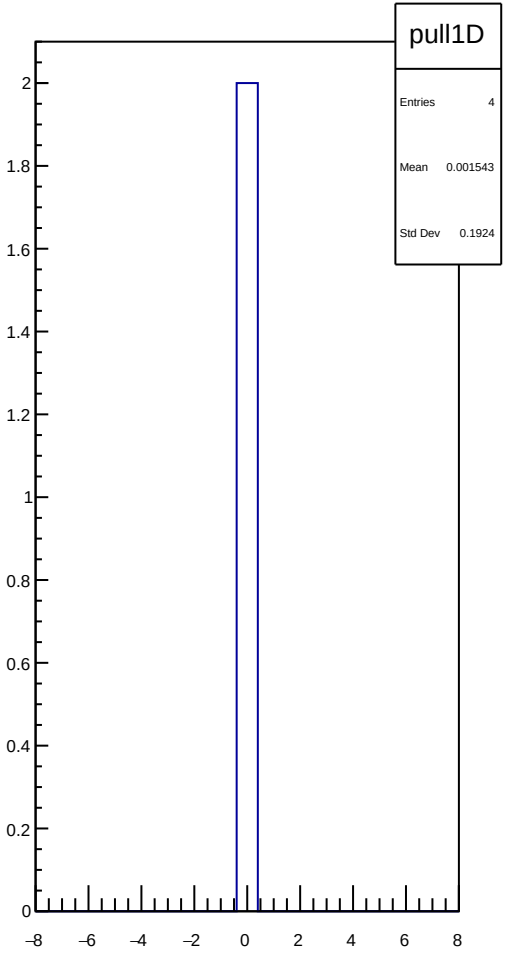

pull
Entries 4
Mean −3.491
Std Dev 5.56
80
60
40
20
0
−20
−40
−60
−80
−100
−120

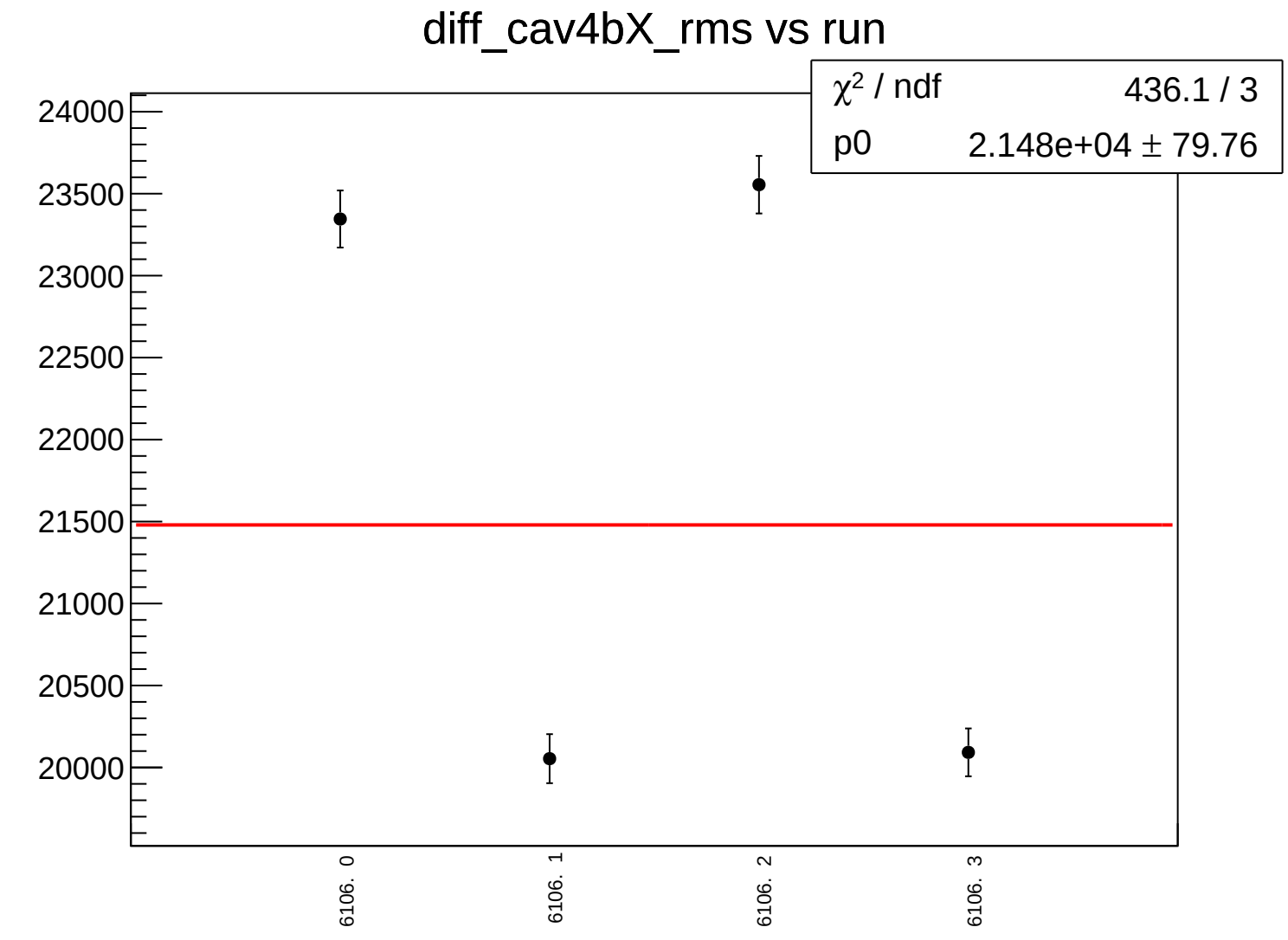

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

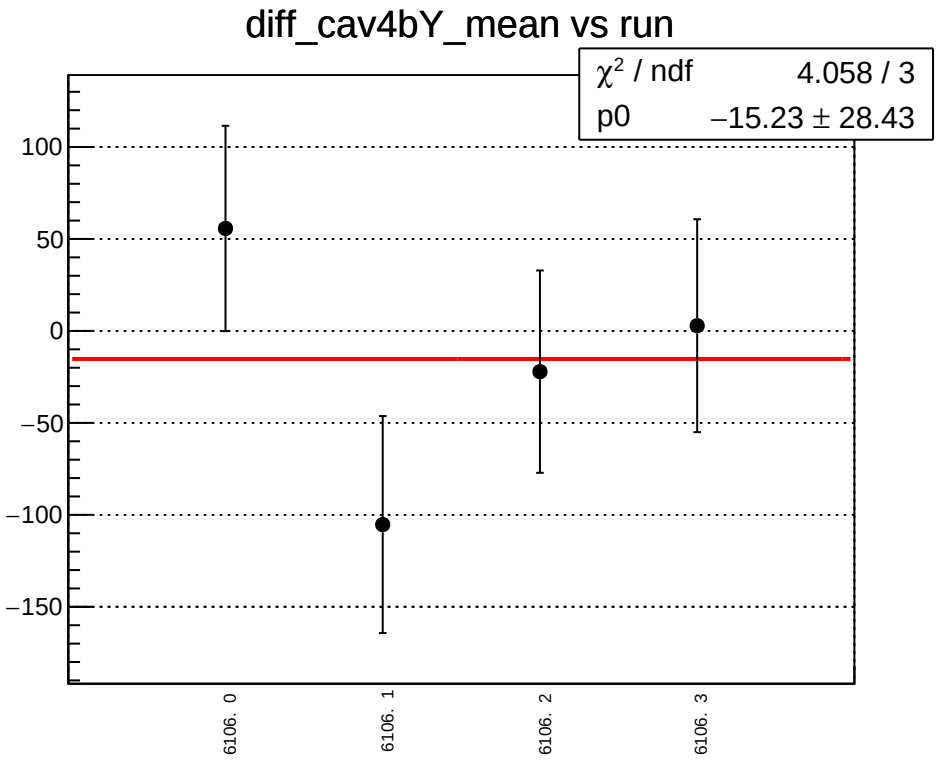

yield_bpm0l01Y_rms vs run
χ² / ndf 2057 / 3
p0 0.004463 ± 1.676e−05
0.006
0.0055
0.005
0.0045
0.004
6106. 0
6106. 1
6106. 2
6106. 3

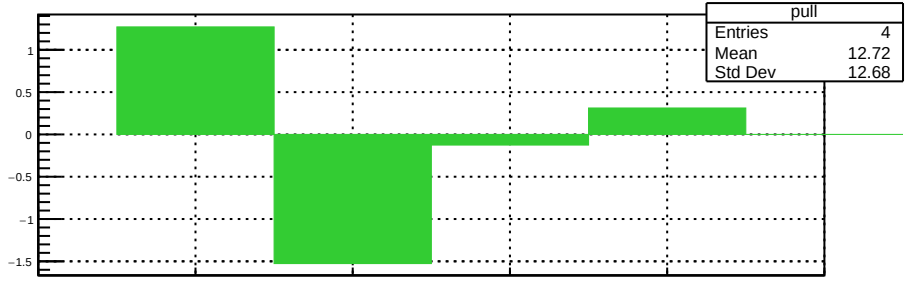

diff_cav4bX_mean vs run
χ² / ndf 0.148 / 3
p0 6.691 ± 112.8
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3

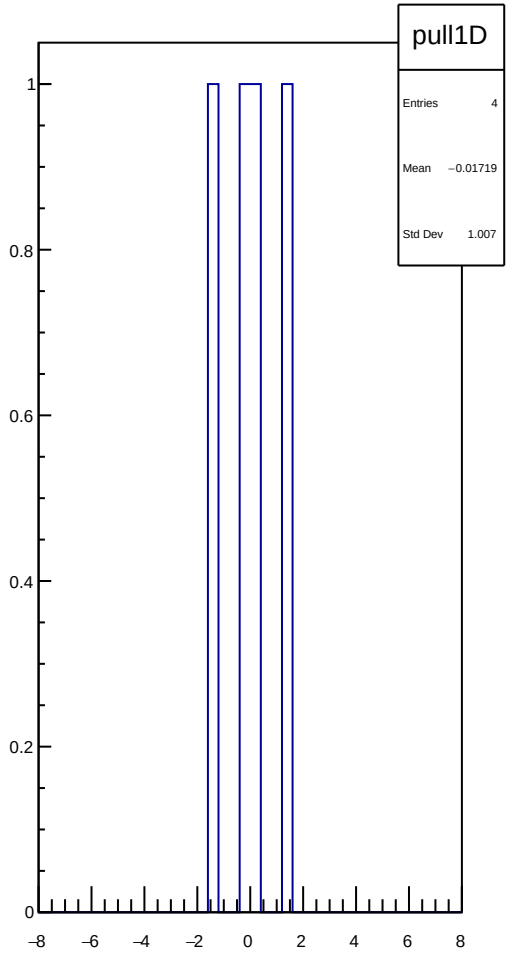

pull
Entries 4
Mean −9.619
Std Dev 3.393
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

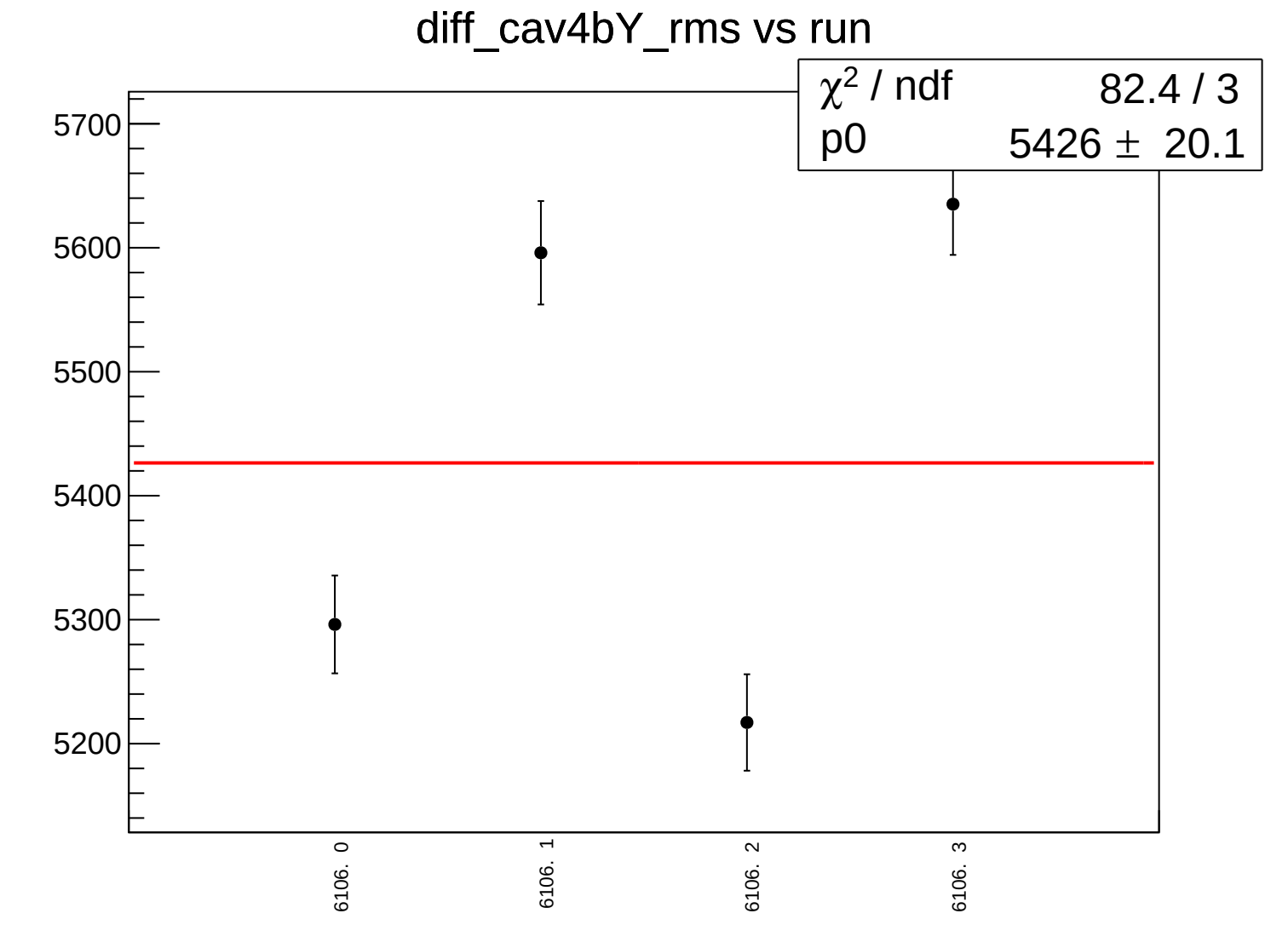

pull1D
Entries 4
Mean 0.001543
Std Dev 0.1924
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

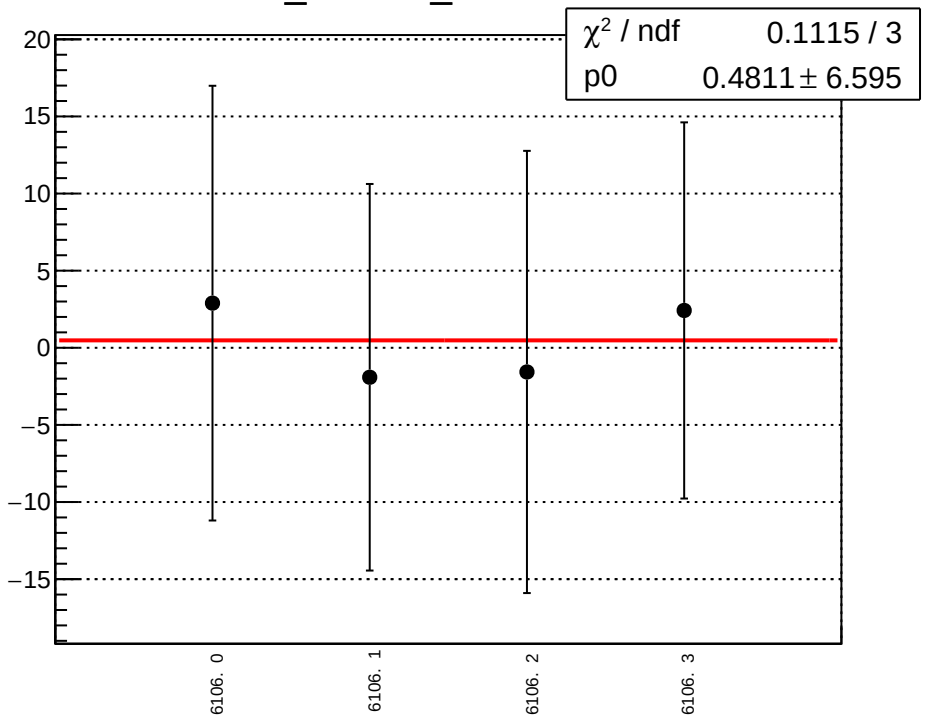

diff_cav4bX_rms vs run
χ² / ndf 436.1 / 3
p0 2.148e+04 ± 79.76
24000
23500
23000
22500
22000
21500
21000
20500
20000
6106. 0
6106. 1
6106. 2
6106. 3

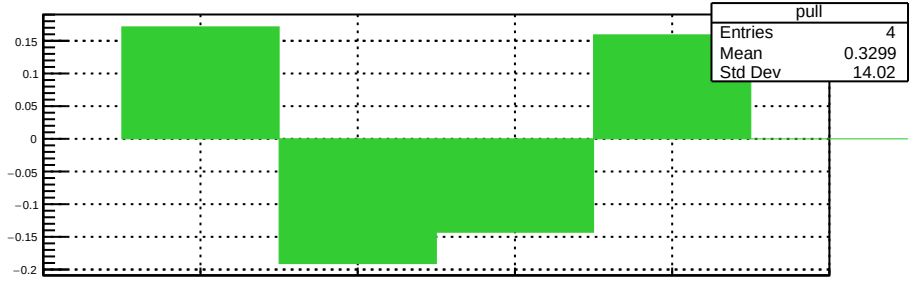

diff_cav4bY_mean vs run
χ² / ndf 4.058 / 3
p0 −15.23 ± 28.43
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3

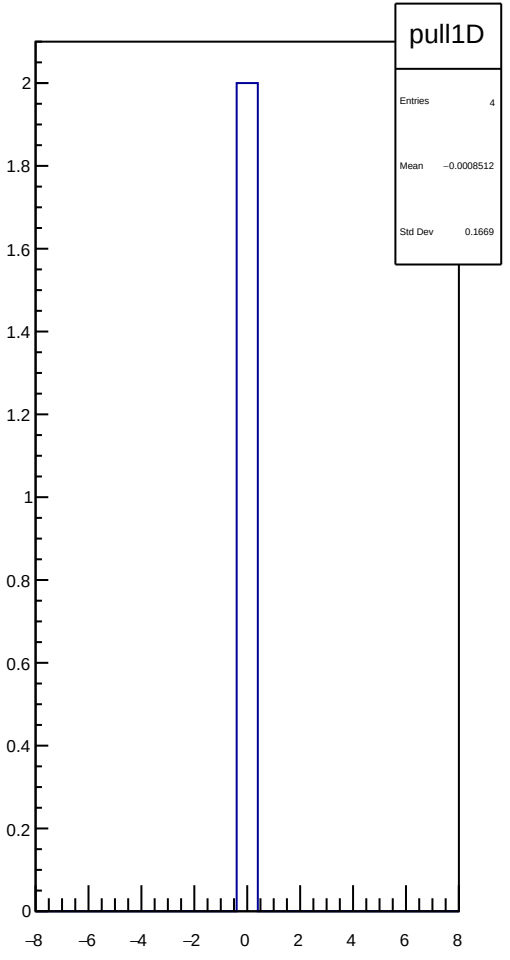

pull
Entries 4
Mean 12.72
Std Dev 12.68
1
0.5
0
−0.5
−1
−1.5

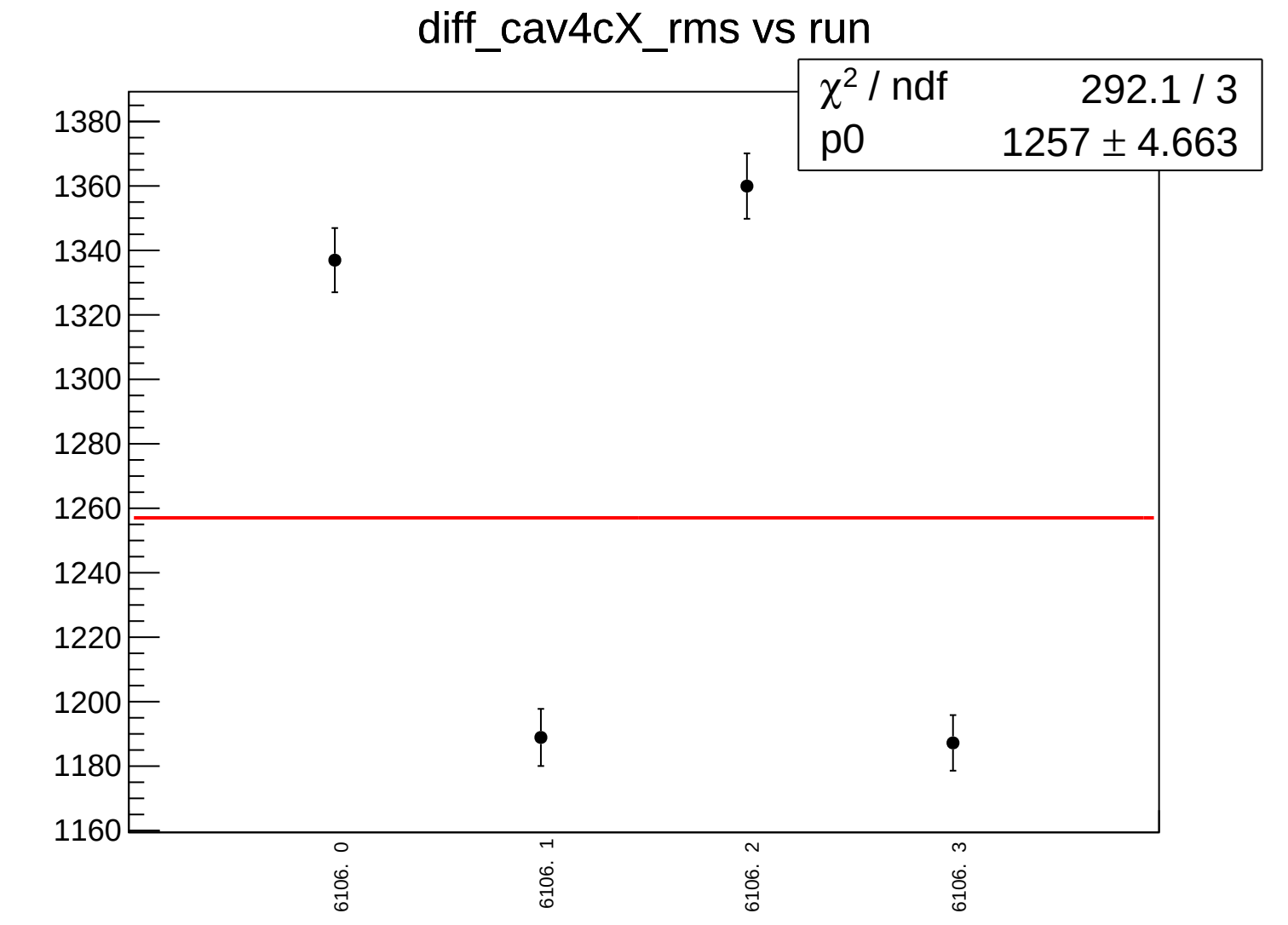

pull1D
Entries 4
Mean −0.01719
Std Dev 1.007
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

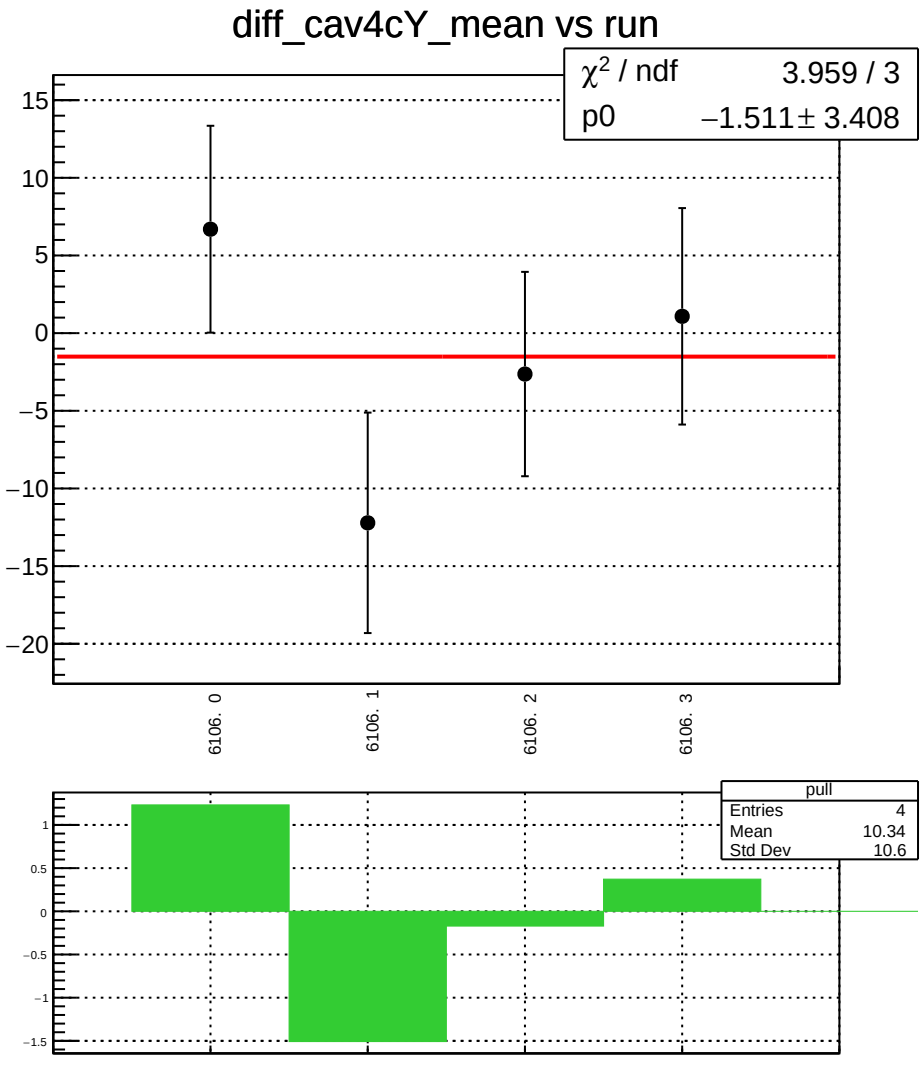

diff_cav4bY_rms vs run
χ² / ndf 82.4 / 3
p0 5426 ± 20.1
5700
5600
5500
5400
5300
5200
6106. 0
6106. 1
6106. 2
6106. 3

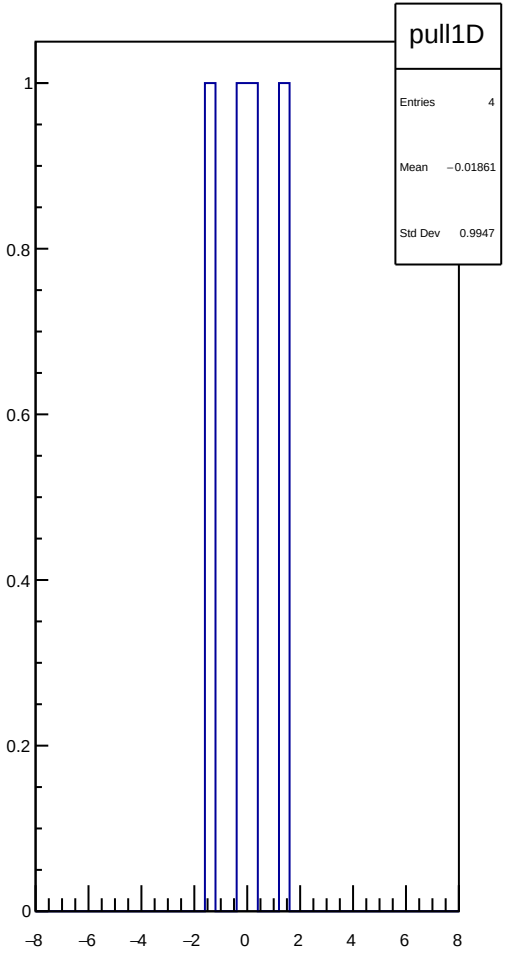

diff_cav4cX_mean vs run
χ² / ndf 0.1115 / 3
p0 0.4811 ± 6.595
20
15
10
5
0
−5
−10
−15
6106. 0
6106. 1
6106. 2
6106. 3

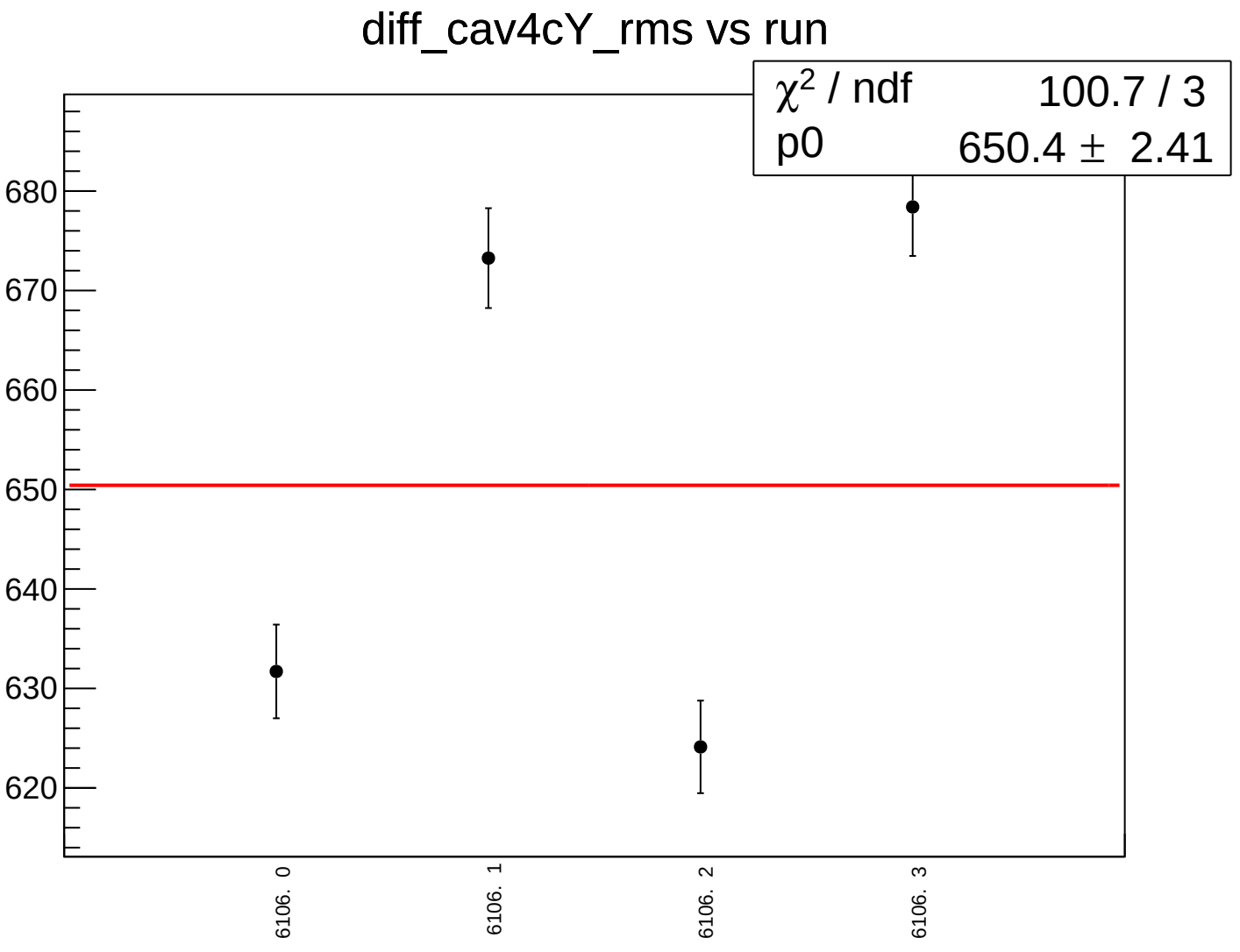

pull
Entries 4
Mean 0.3299
Std Dev 14.02
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

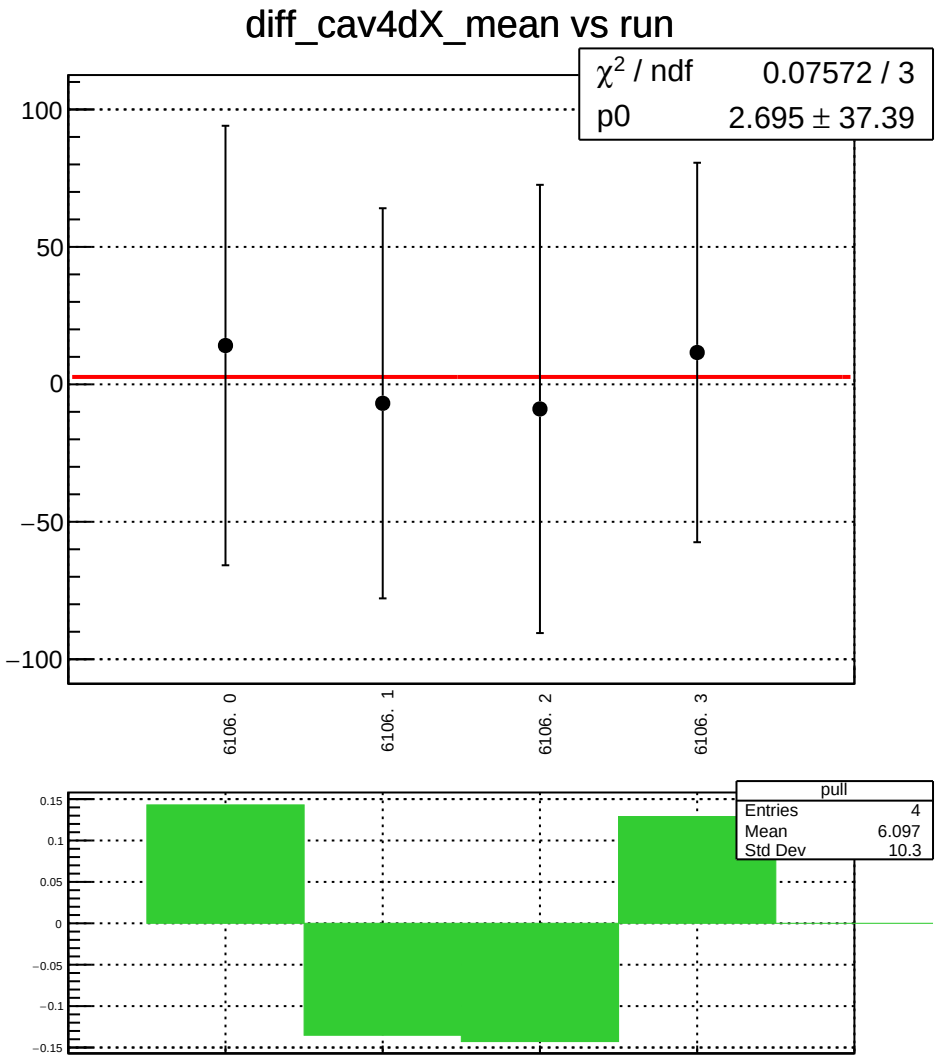

pull1D
Entries 4
Mean −0.0008512
Std Dev 0.1669
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

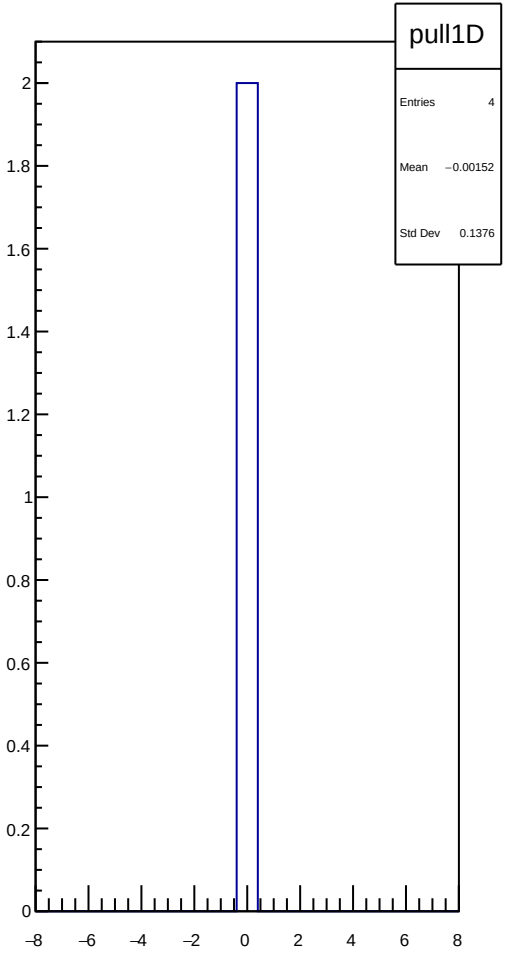

diff_cav4cX_rms vs run
χ² / ndf 292.1 / 3
p0 1257 ± 4.663
1380
1360
1340
1320
1300
1280
1260
1240
1220
1200
1180
1160
6106. 0
6106. 1
6106. 2
6106. 3

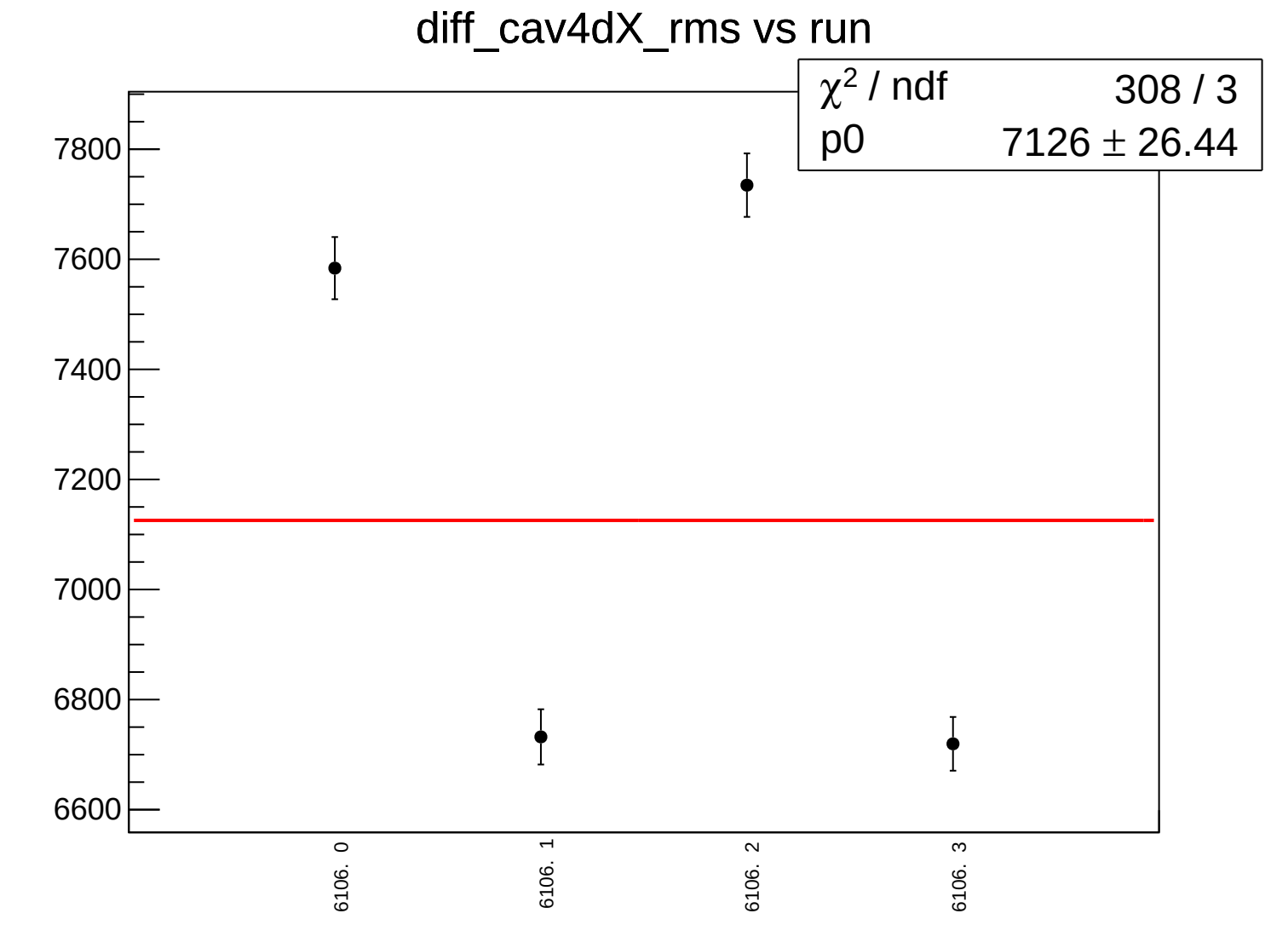

diff_cav4cY_mean vs run
χ² / ndf 3.959 / 3
p0 −1.511± 3.408
15
10
5
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 10.34
Std Dev 10.6
1
0.5
0
−0.5
−1
−1.5

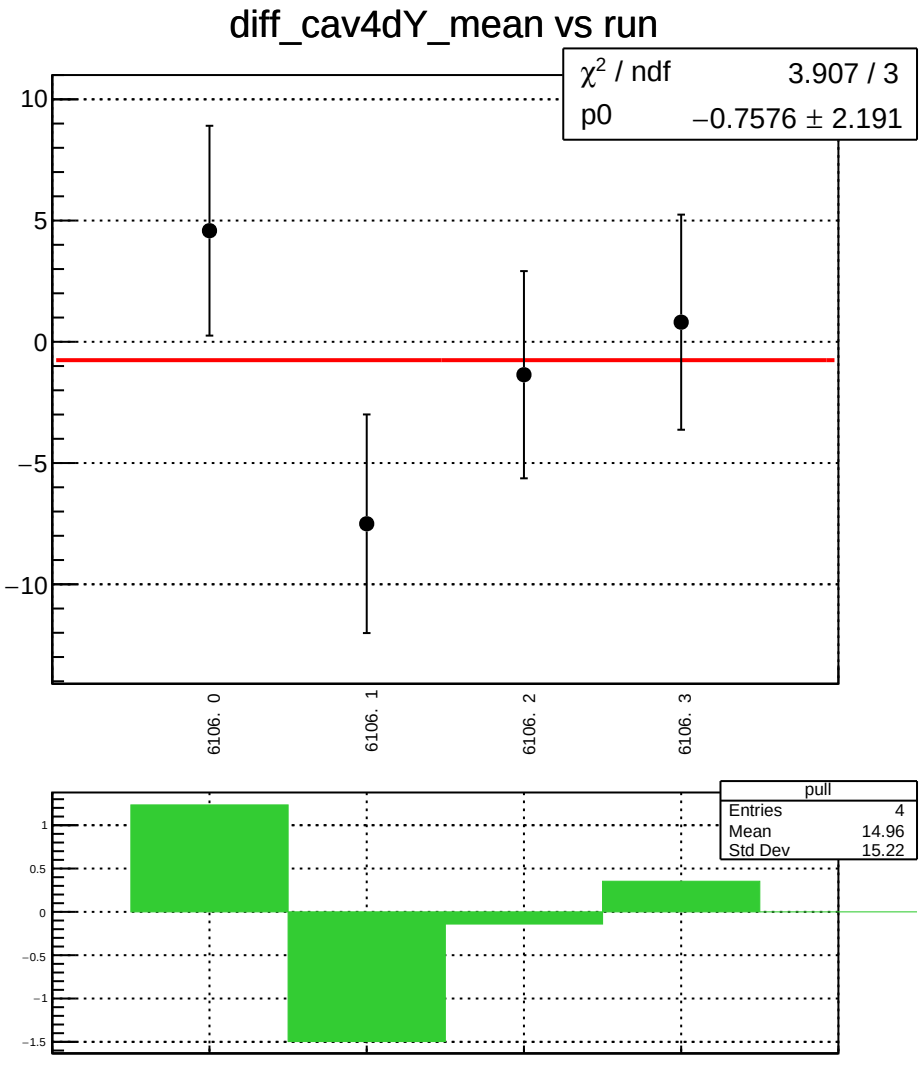

pull1D
Entries 4
Mean −0.01861
Std Dev 0.9947
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

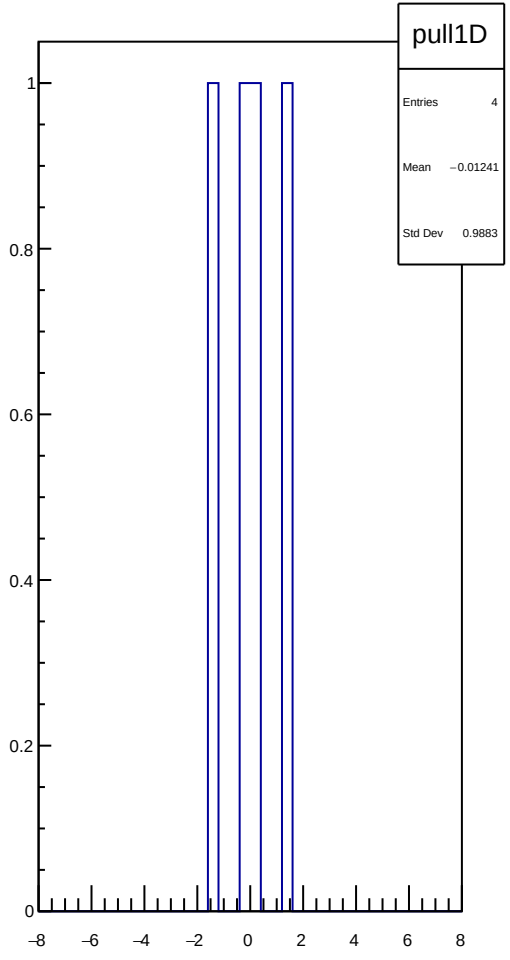

diff_cav4cY_rms vs run
χ² / ndf 100.7 / 3
p0 650.4 ± 2.41
680
670
660
650
640
630
620
6106. 0
6106. 1
6106. 2
6106. 3

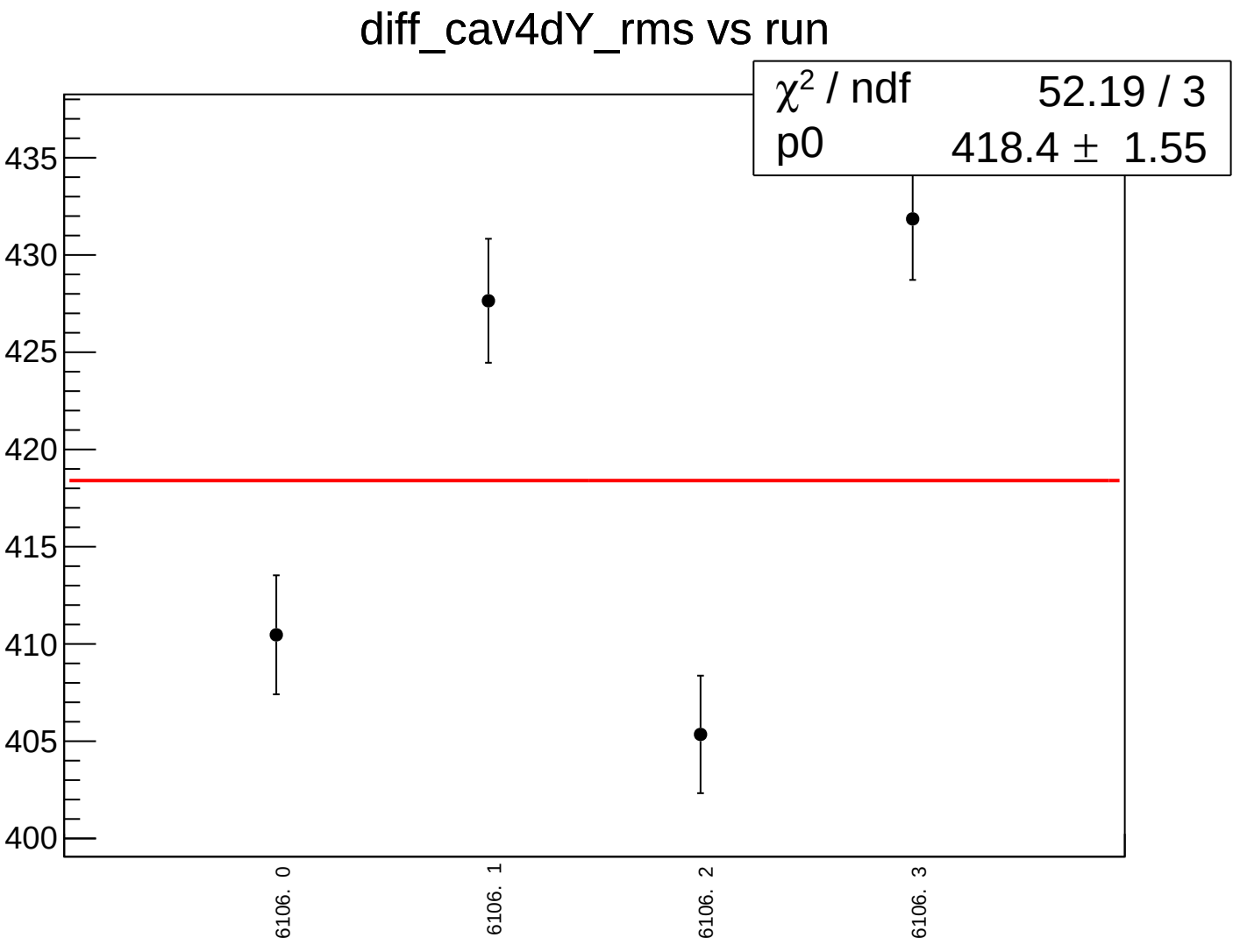

diff_cav4dX_mean vs run
χ² / ndf 0.07572 / 3
p0 2.695 ± 37.39
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 6.097
Std Dev 10.3
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

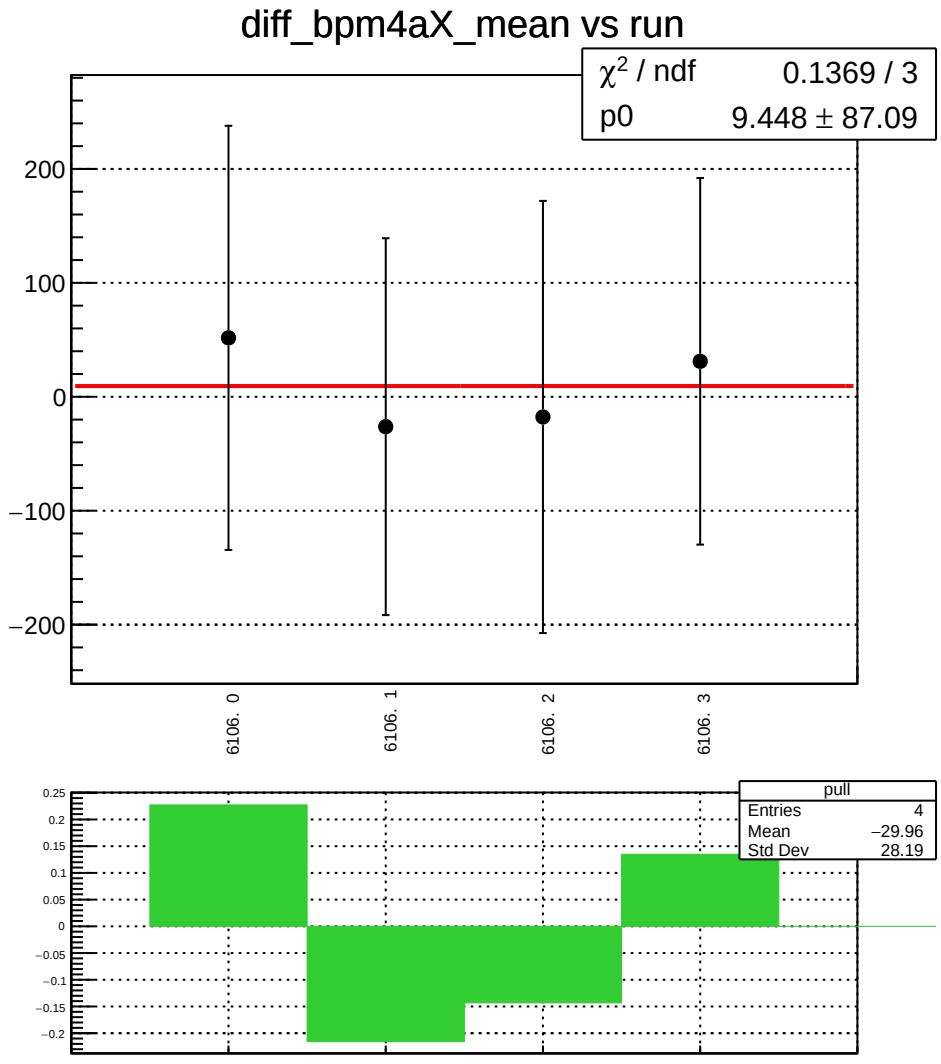

pull1D
Entries 4
Mean −0.00152
Std Dev 0.1376
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

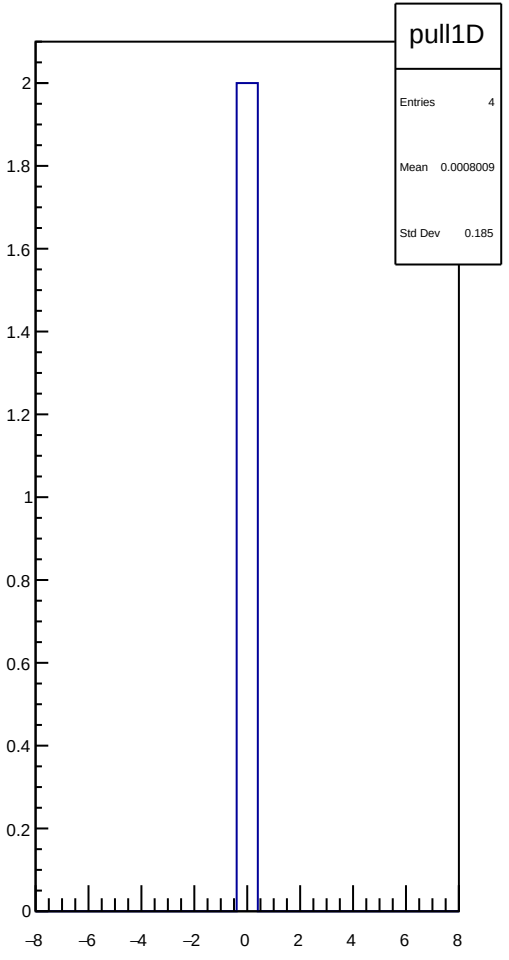

diff_cav4dX_rms vs run
χ² / ndf 308 / 3
p0 7126 ± 26.44
7800
7600
7400
7200
7000
6800
6600
6106. 0
6106. 1
6106. 2
6106. 3

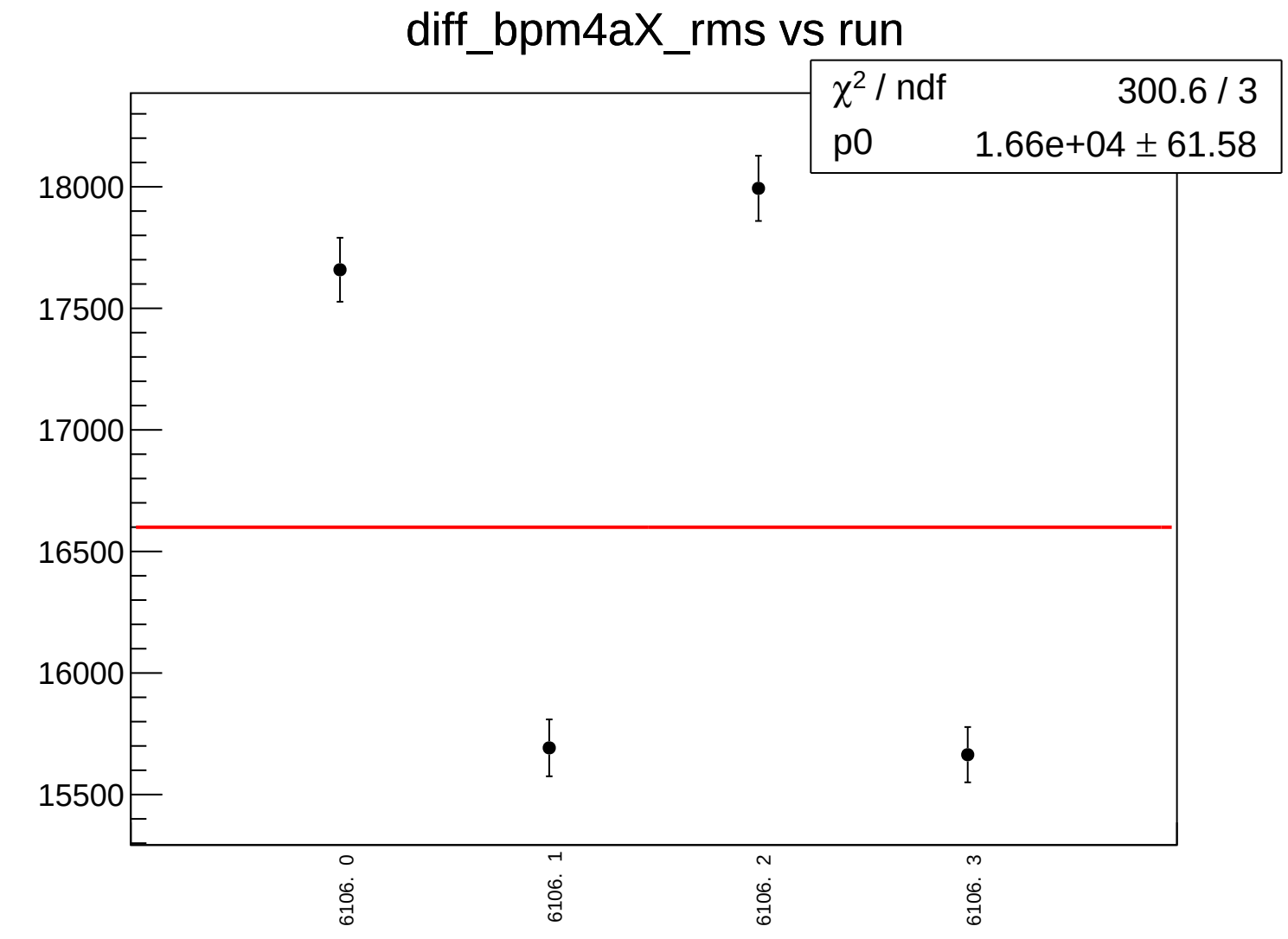

diff_cav4dY_mean vs run
χ² / ndf 3.907 / 3
p0 −0.7576 ± 2.191
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 14.96
Std Dev 15.22
1
0.5
0
−0.5
−1
−1.5

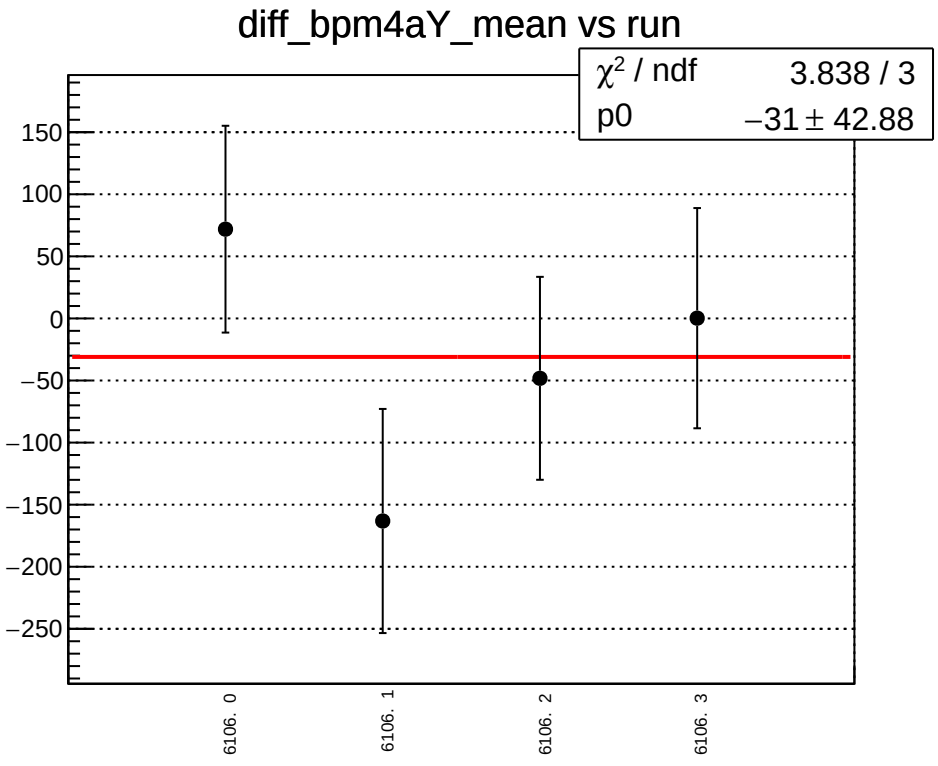

pull1D
Entries 4
Mean −0.01241
Std Dev 0.9883
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

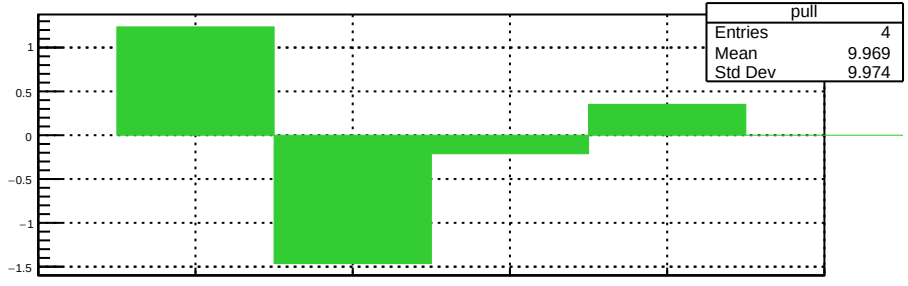

diff_cav4dY_rms vs run
χ² / ndf 52.19 / 3
p0 418.4 ± 1.55
435
430
425
420
415
410
405
400
6106. 0
6106. 1
6106. 2
6106. 3

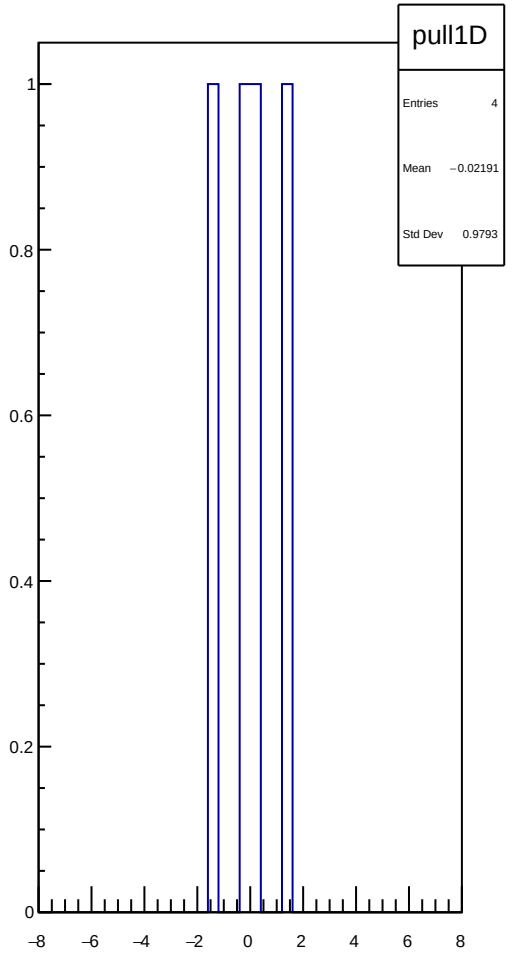

diff_bpm4aX_mean vs run
χ² / ndf 0.1369 / 3
p0 9.448 ± 87.09
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −29.96
Std Dev 28.19
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

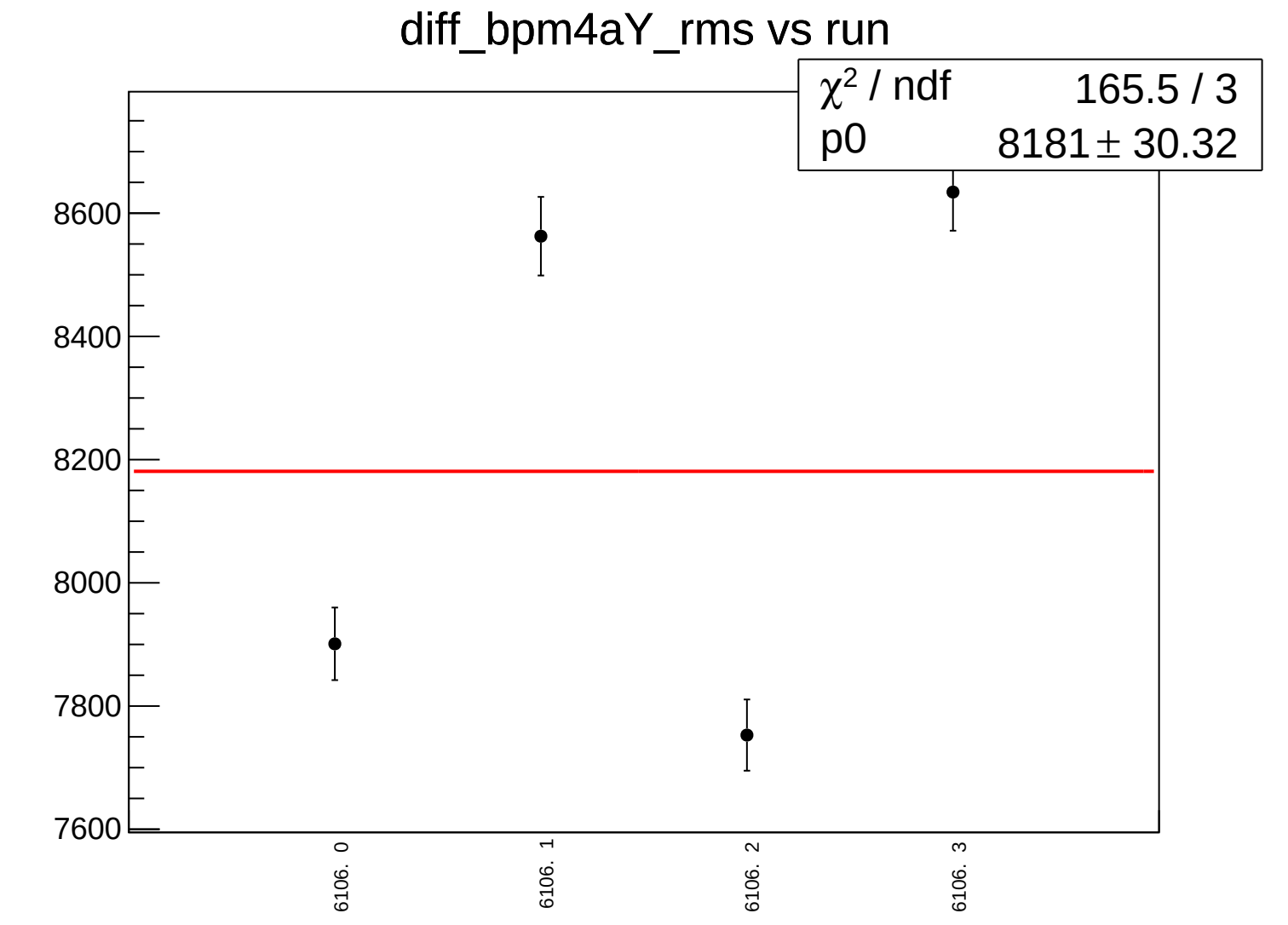

pull1D
Entries 4
Mean 0.0008009
Std Dev 0.185
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

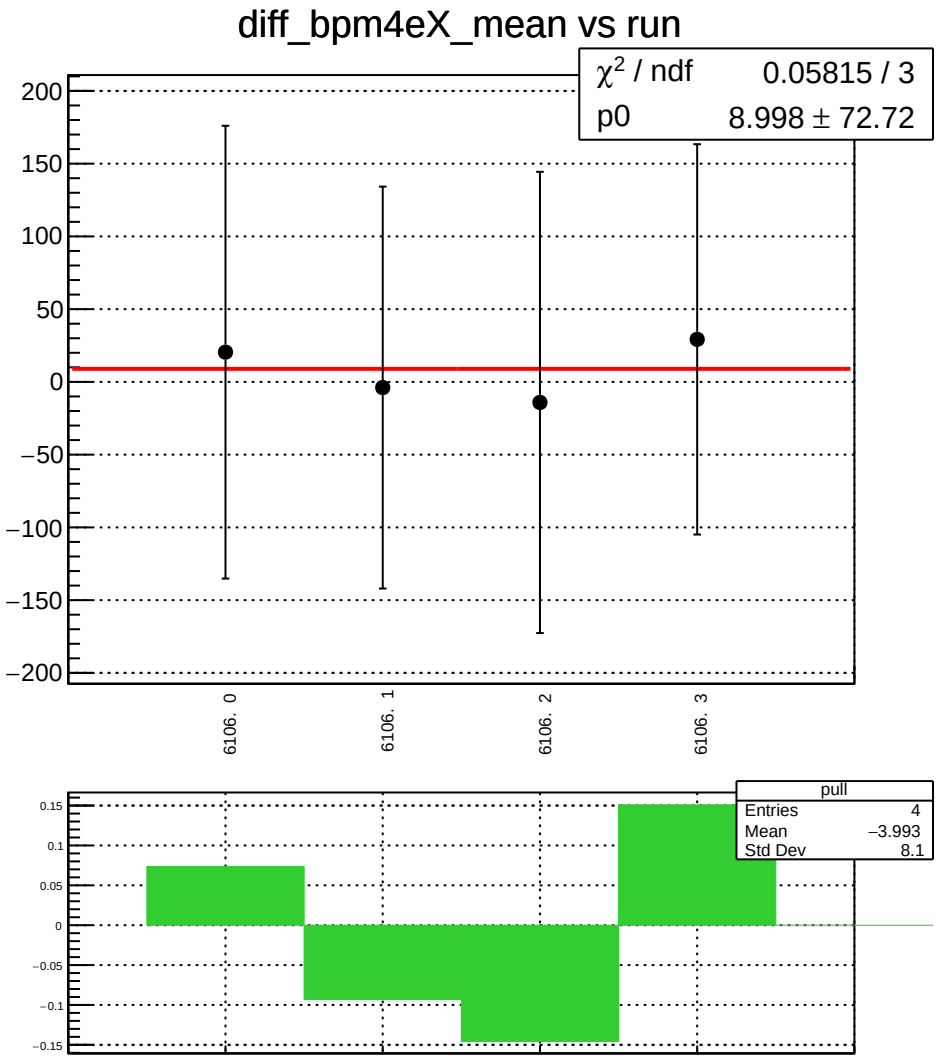

diff_bpm4aX_rms vs run
χ² / ndf 300.6 / 3
p0 1.66e+04 ± 61.58
18000
17500
17000
16500
16000
15500
6106. 0
6106. 1
6106. 2
6106. 3

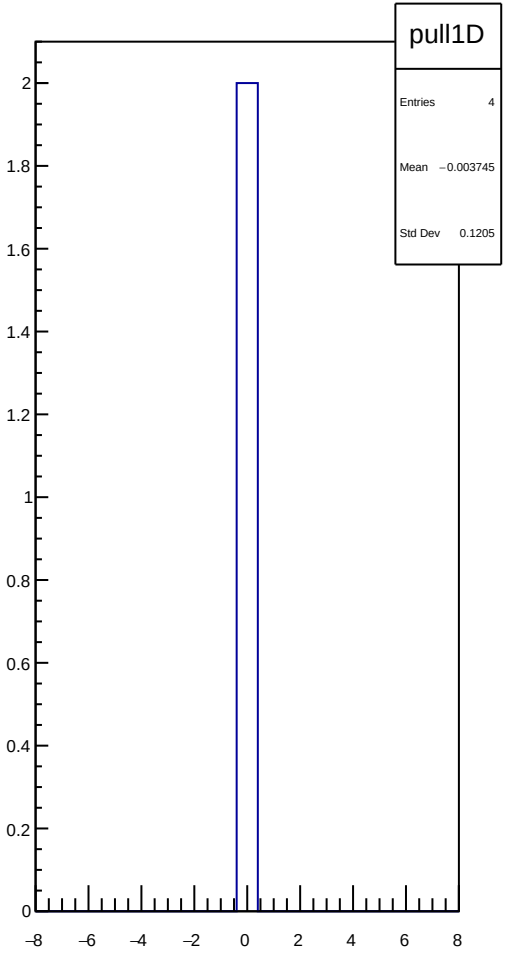

diff_bpm4aY_mean vs run
χ² / ndf 3.838 / 3
p0 −31 ± 42.88
150
100
50
0
−50
−100
−150
−200
−250
6106. 0
6106. 1
6106. 2
6106. 3

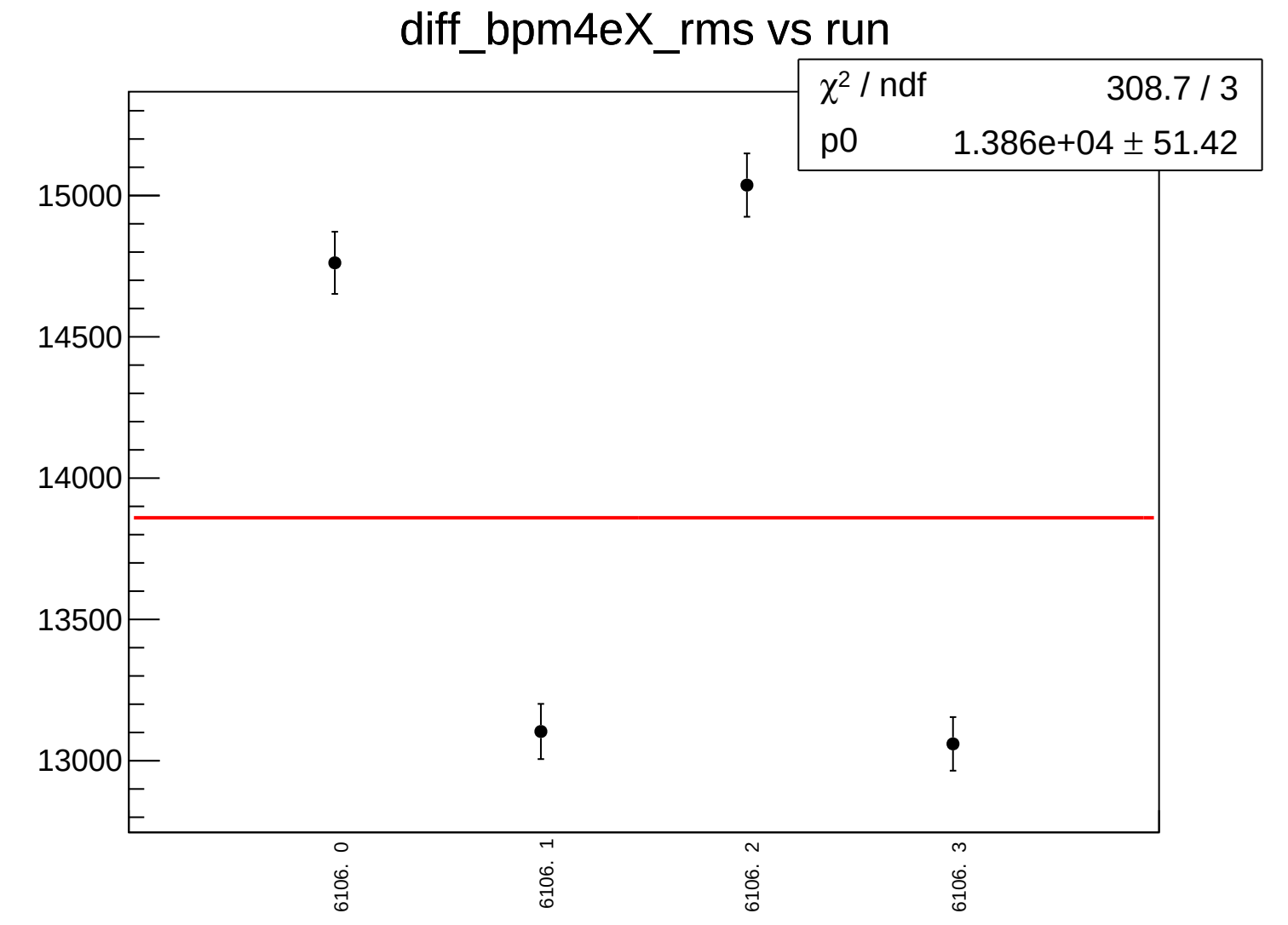

pull
Entries 4
Mean 9.969
Std Dev 9.974
1
0.5
0
−0.5
−1
−1.5

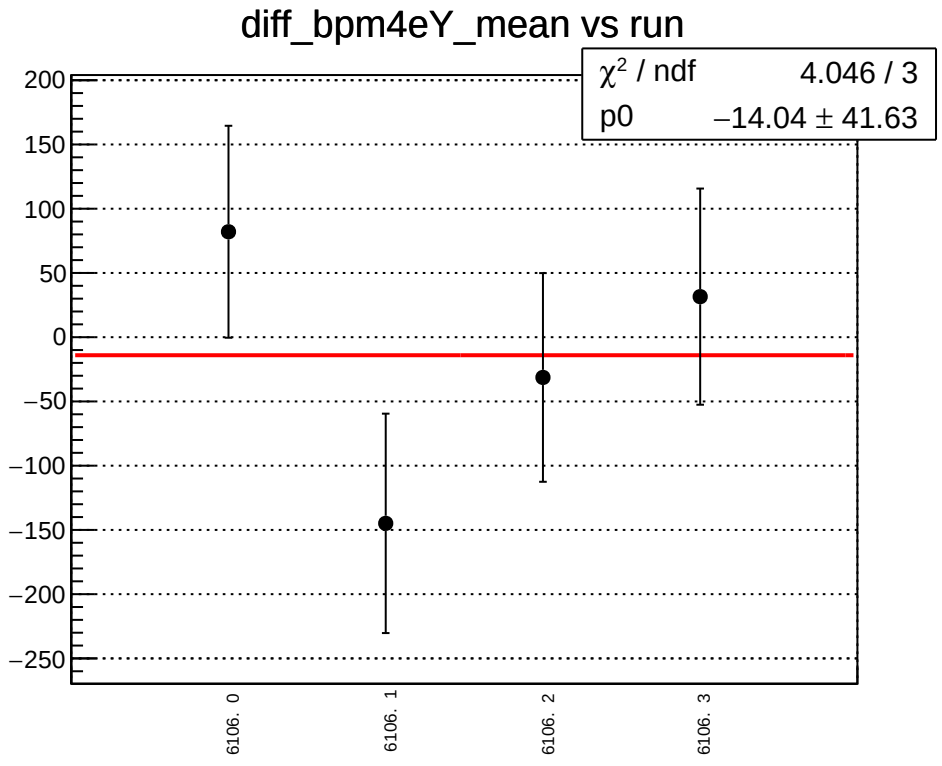

pull1D
Entries 4
Mean −0.02191
Std Dev 0.9793
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

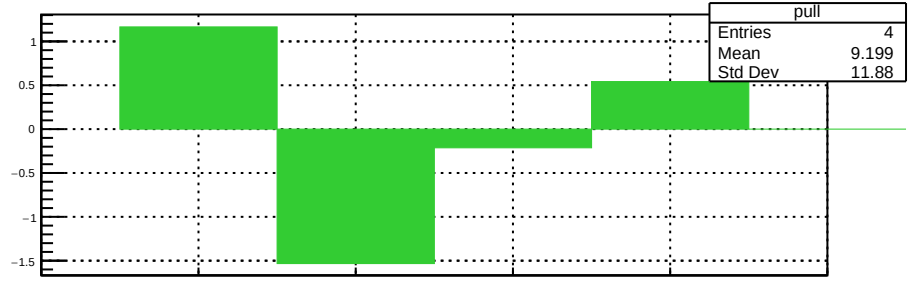

diff_bpm4aY_rms vs run
χ² / ndf 165.5 / 3
p0 8181 ± 30.32
8600
8400
8200
8000
7800
7600
6106. 0
6106. 1
6106. 2
6106. 3

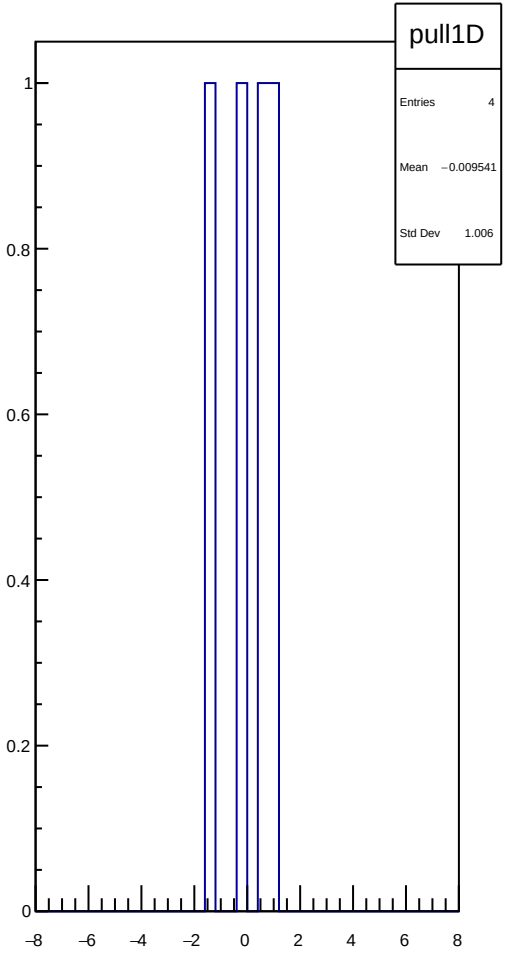

diff_bpm4eX_mean vs run
χ² / ndf 0.05815 / 3
p0 8.998 ± 72.72
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.993
Std Dev 8.1
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

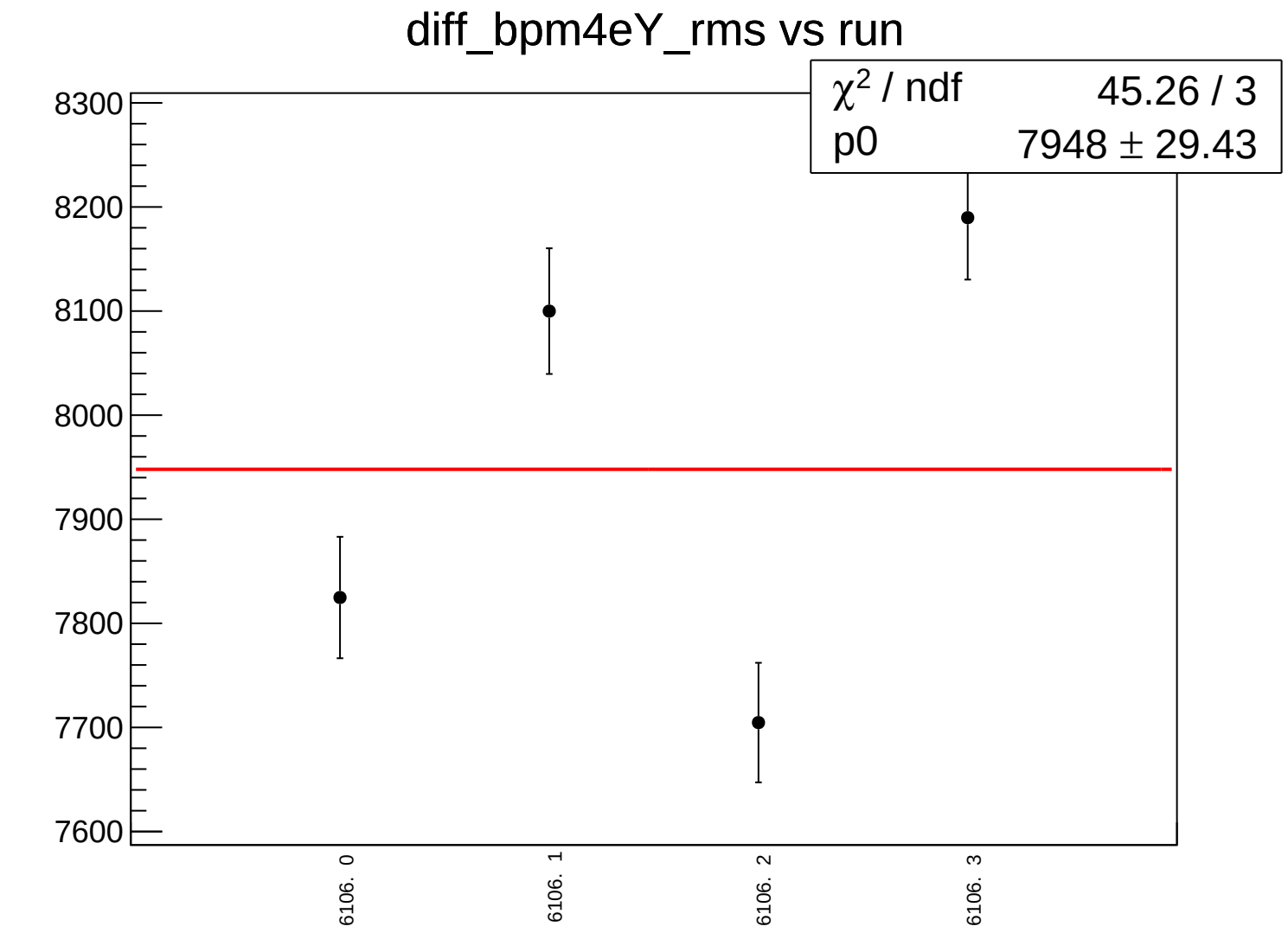

pull1D
Entries 4
Mean −0.003745
Std Dev 0.1205
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

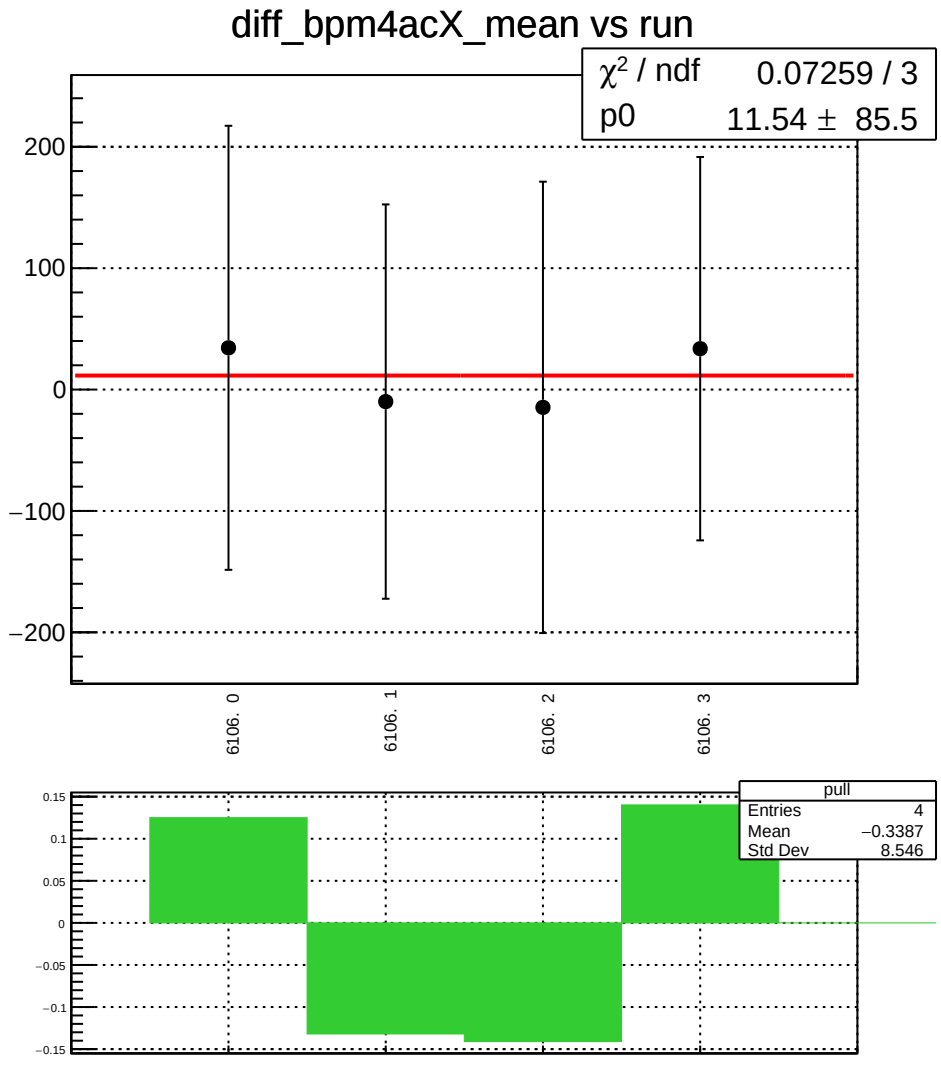

diff_bpm4eX_rms vs run
χ² / ndf 308.7 / 3
p0 1.386e+04 ± 51.42
15000
14500
14000
13500
13000
6106. 0
6106. 1
6106. 2
6106. 3

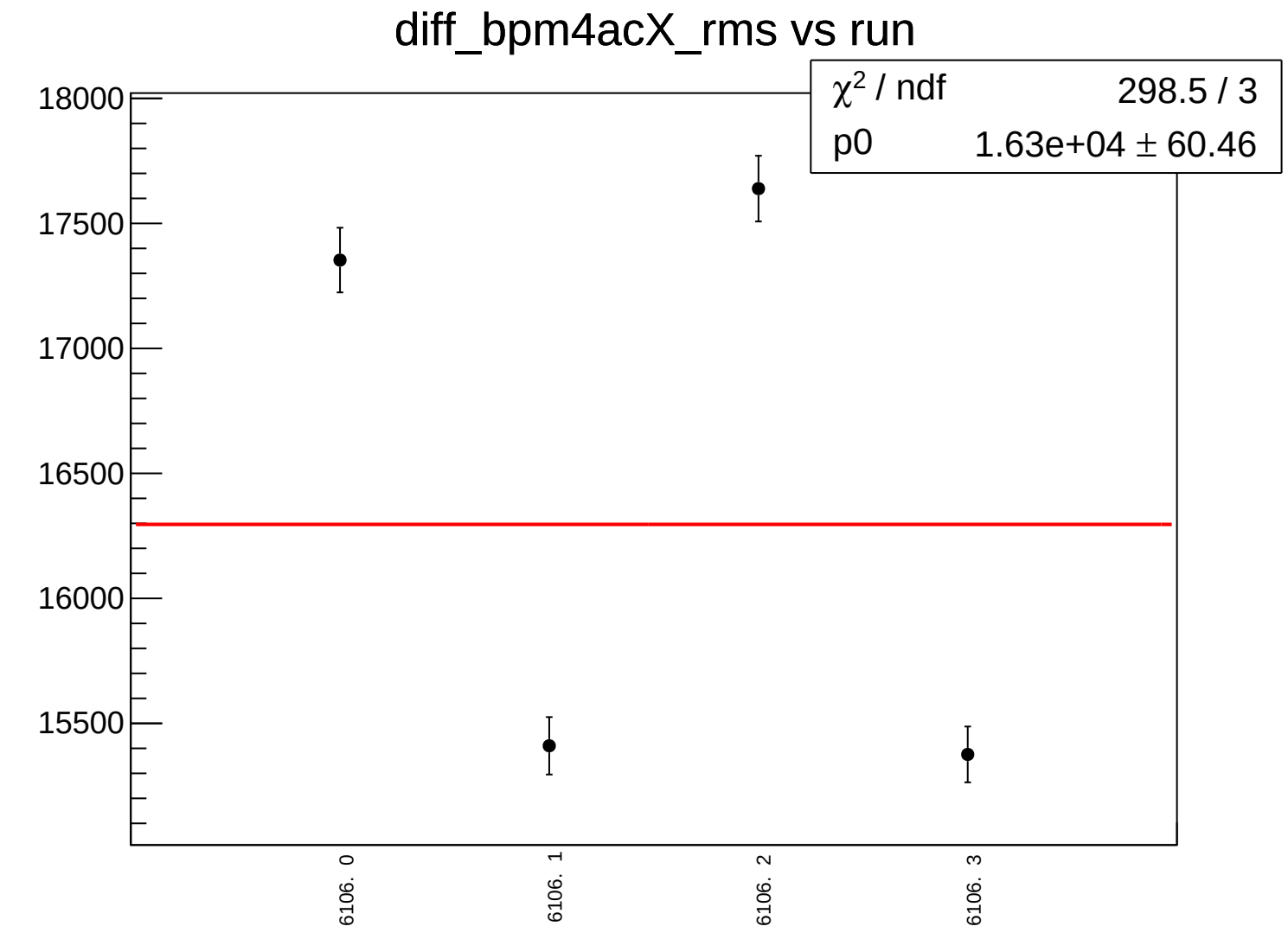

diff_bpm4eY_mean vs run
χ² / ndf 4.046 / 3
p0 −14.04 ± 41.63
200
150
100
50
0
−50
−100
−150
−200
−250
6106. 0
6106. 1
6106. 2
6106. 3

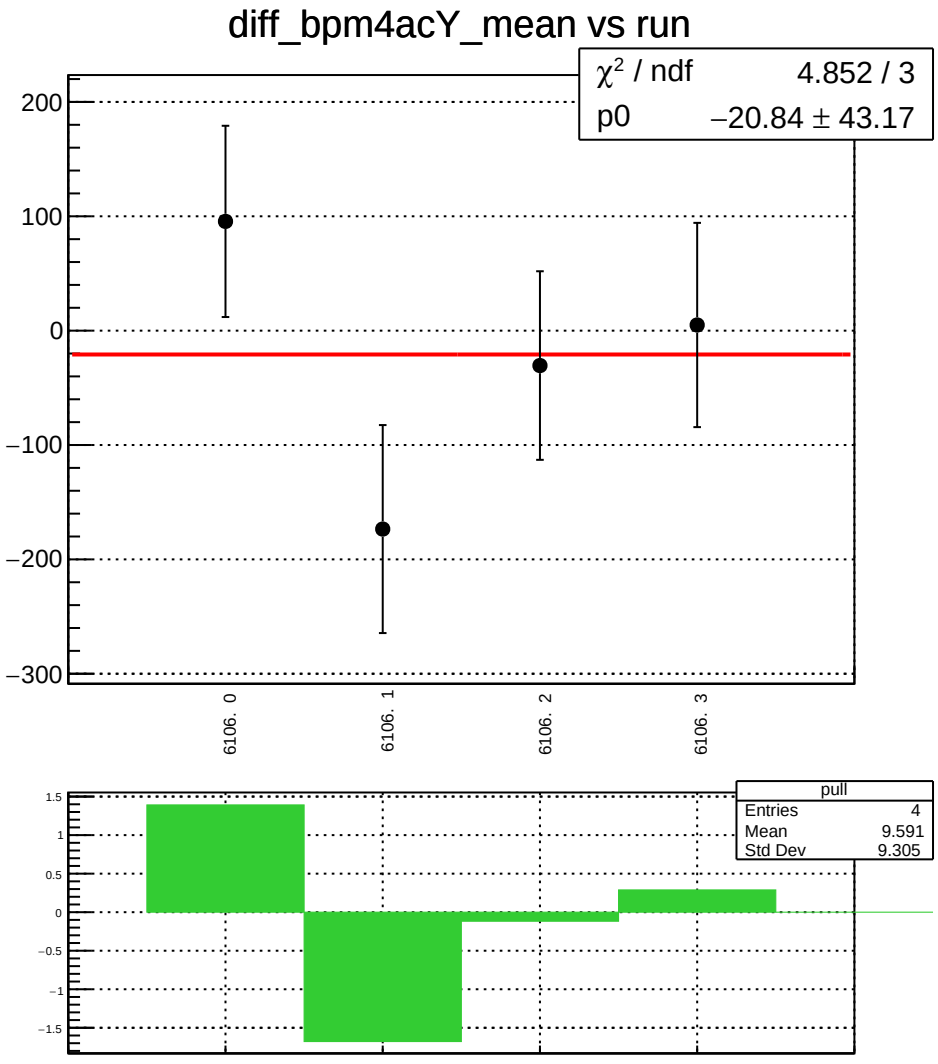

pull
Entries 4
Mean 9.199
Std Dev 11.88
1
0.5
0
−0.5
−1
−1.5

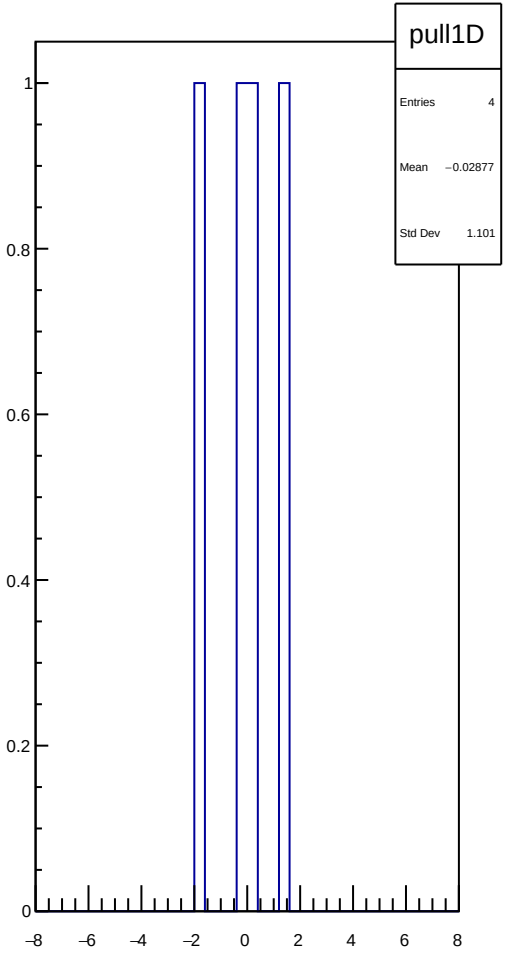

pull1D
Entries 4
Mean −0.009541
Std Dev 1.006
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

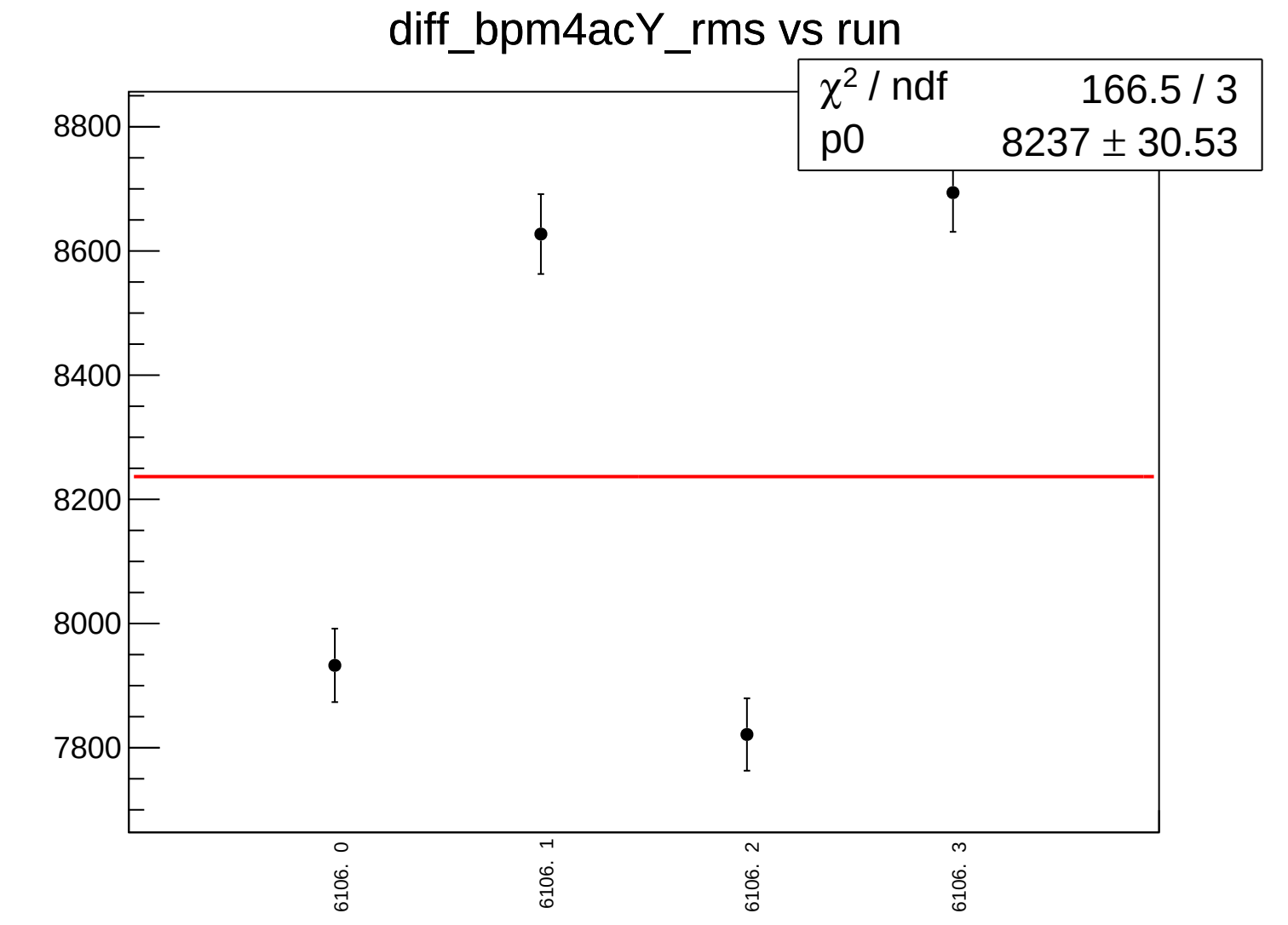

diff_bpm4eY_rms vs run
χ² / ndf 45.26 / 3
p0 7948 ± 29.43
8300
8200
8100
8000
7900
7800
7700
7600
6106. 0
6106. 1
6106. 2
6106. 3

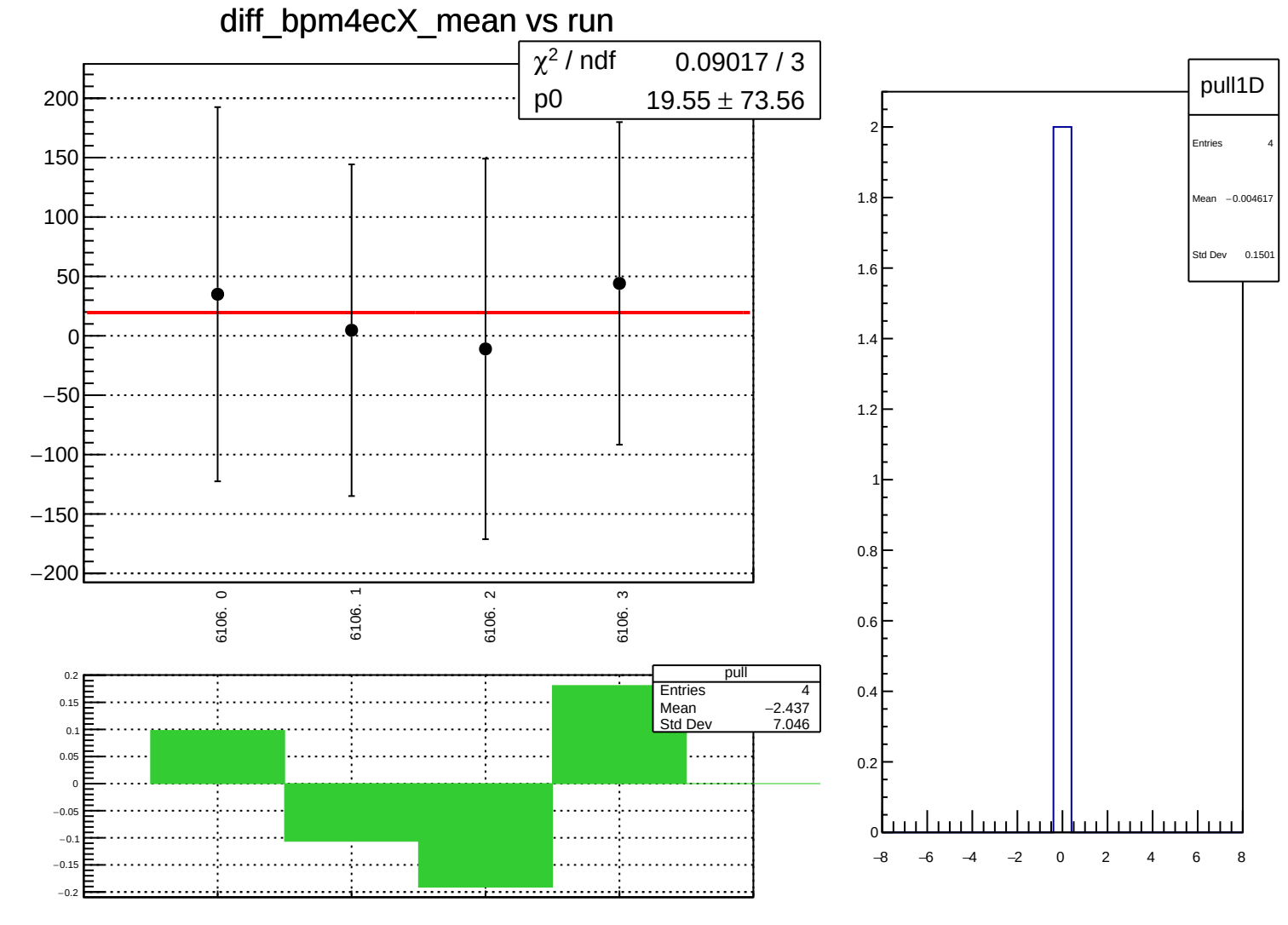

diff_bpm4acX_mean vs run
χ² / ndf 0.07259 / 3
p0 11.54 ± 85.5
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −0.3387
Std Dev 8.546
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean −0.001955
Std Dev 0.1347
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

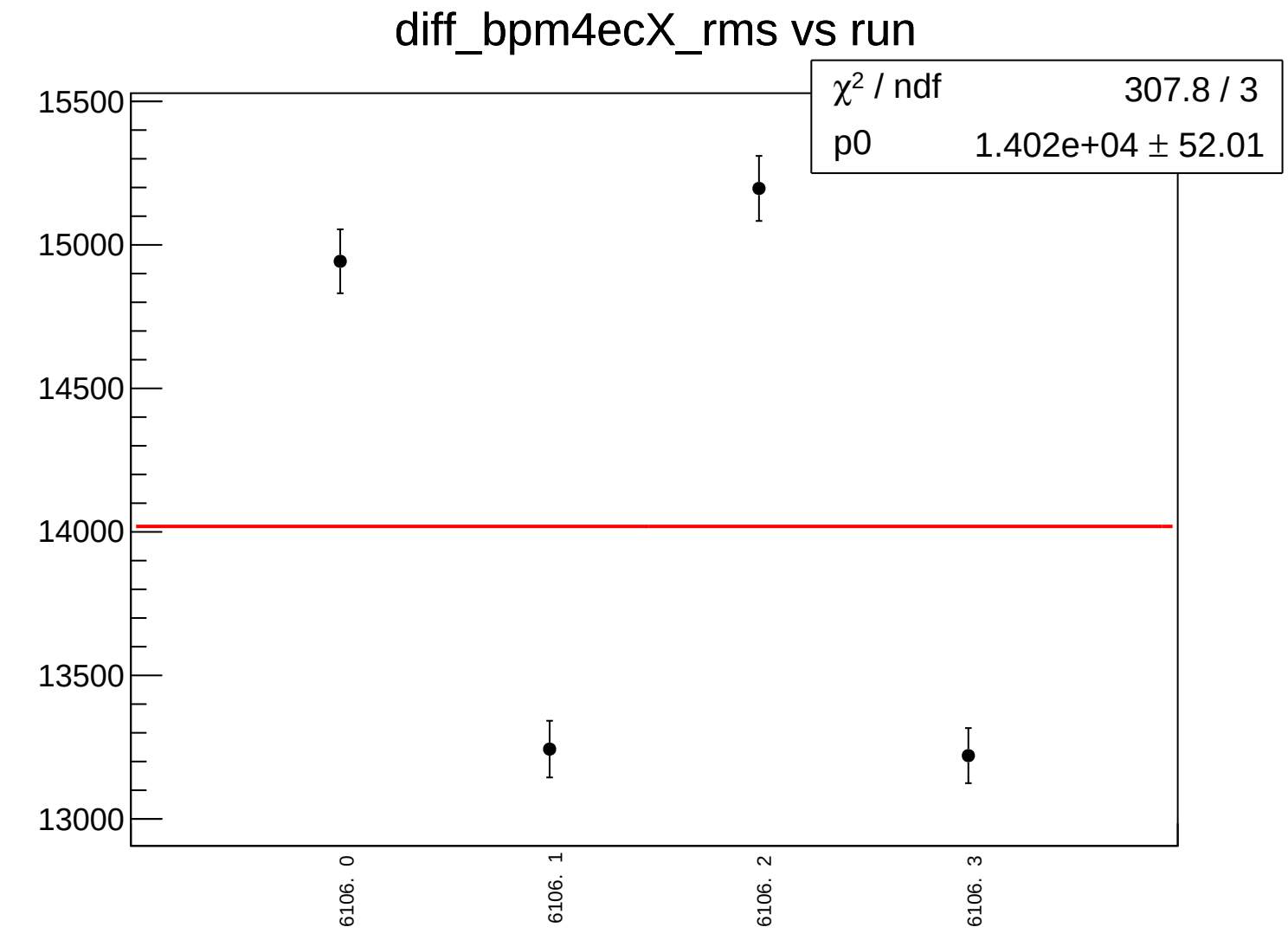

diff_bpm4acX_rms vs run
χ² / ndf 298.5 / 3
p0 1.63e+04 ± 60.46
18000
17500
17000
16500
16000
15500
6106. 0
6106. 1
6106. 2
6106. 3

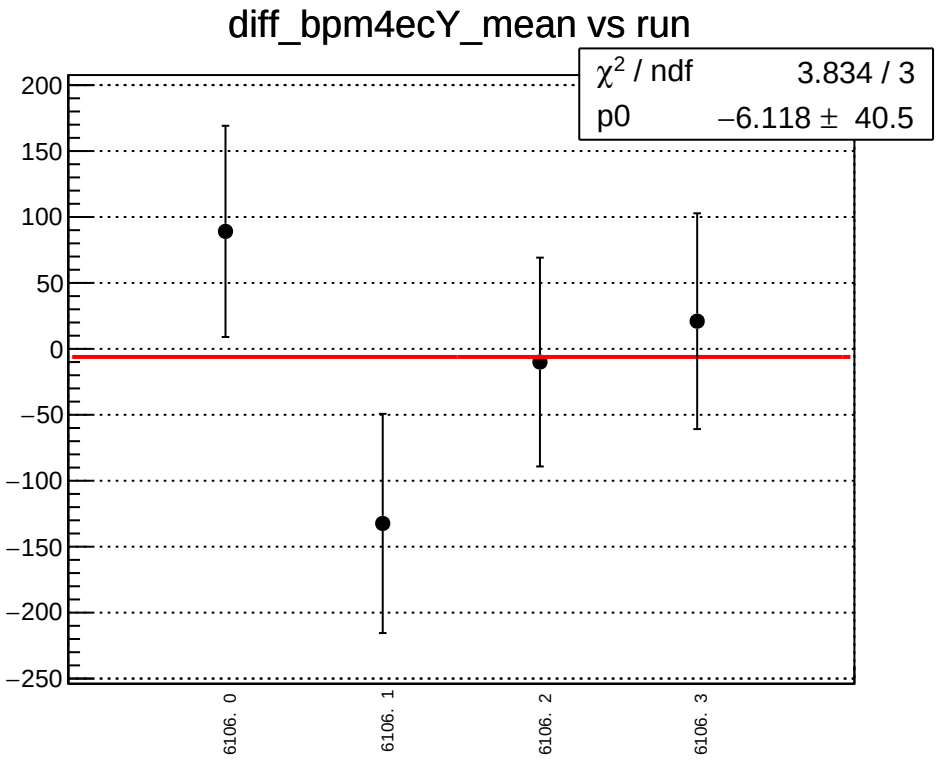

diff_bpm4acY_mean vs run
χ² / ndf 4.852 / 3
p0 −20.84 ± 43.17
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 9.591
Std Dev 9.305
1.5
1
0.5
0
−0.5
−1
−1.5

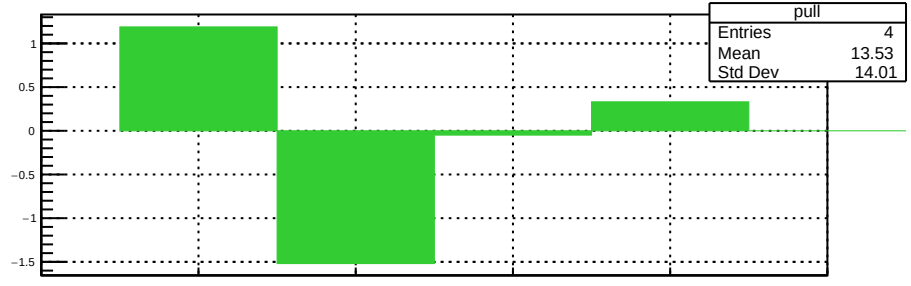

pull1D
Entries 4
Mean −0.02877
Std Dev 1.101
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

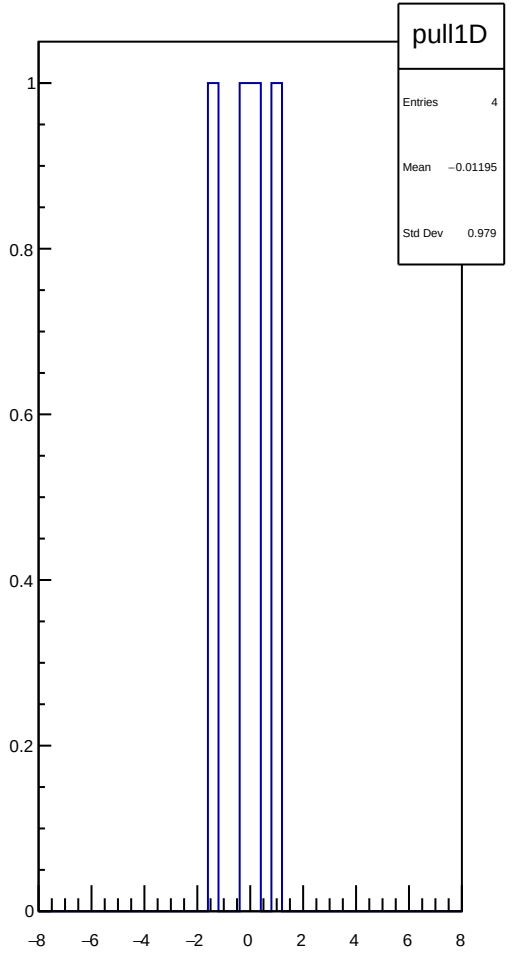

diff_bpm4acY_rms vs run
χ² / ndf 166.5 / 3
p0 8237 ± 30.53
8800
8600
8400
8200
8000
7800
6106. 0
6106. 1
6106. 2
6106. 3

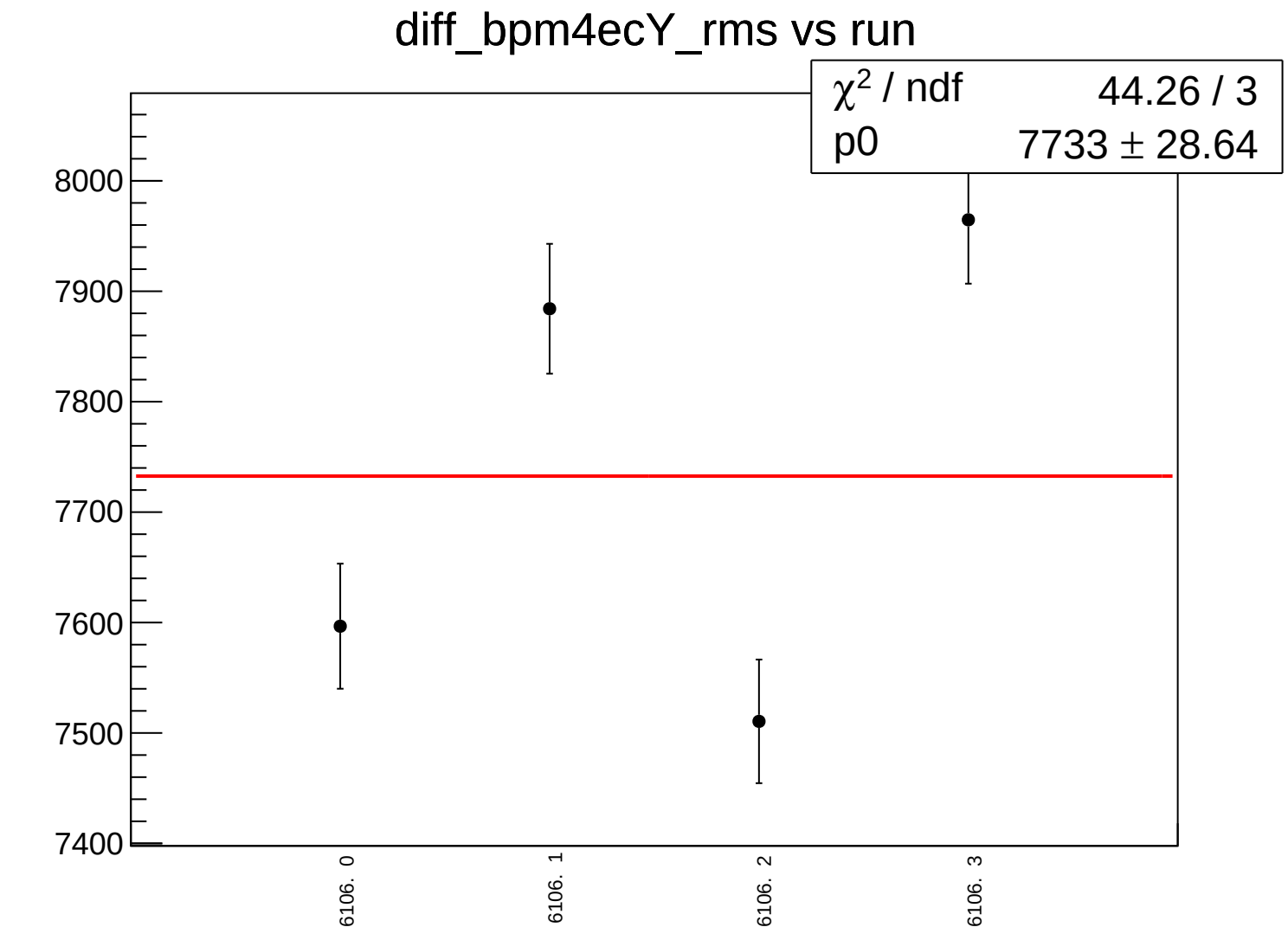

diff_bpm4ecX_mean vs run
χ² / ndf 0.09017 / 3
p0 19.55 ± 73.56
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.437
Std Dev 7.046
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
pull1D
Entries 4
Mean −0.004617
Std Dev 0.1501
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

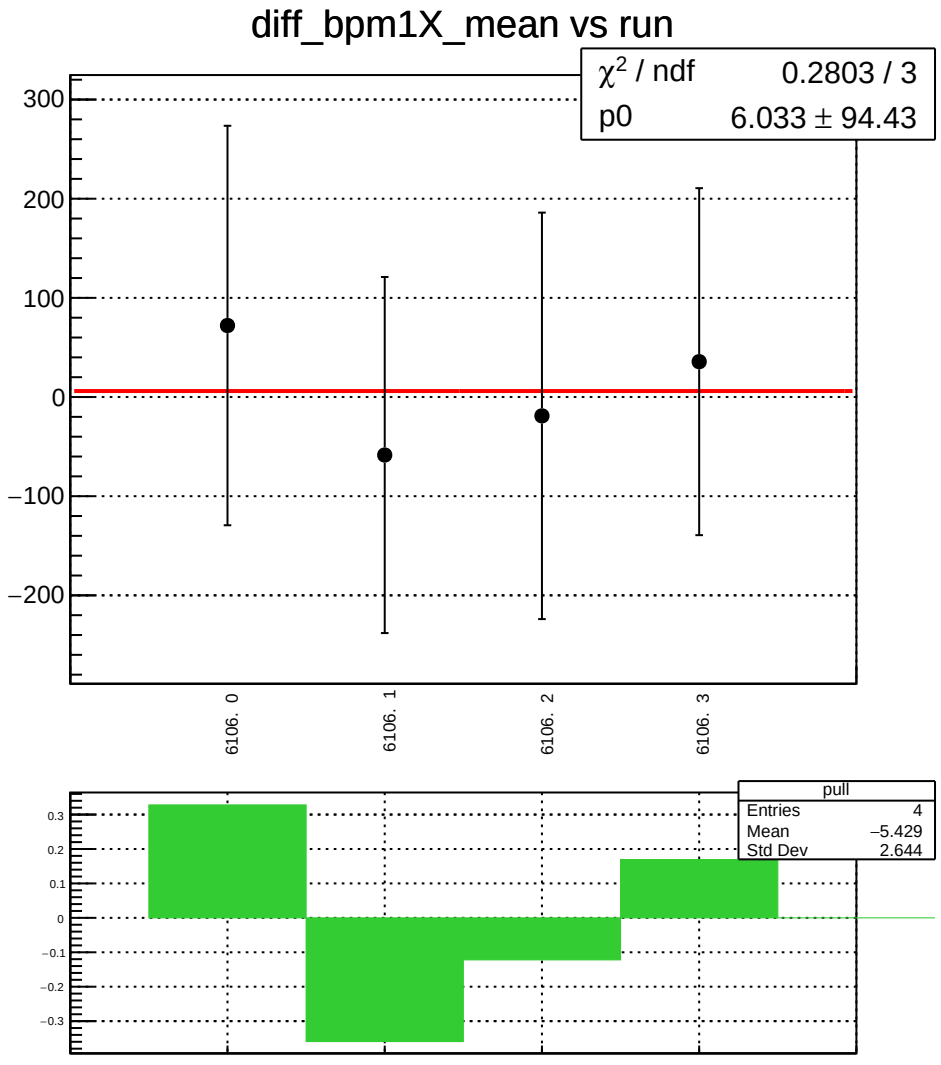

diff_bpm4ecX_rms vs run
χ² / ndf 307.8 / 3
p0 1.402e+04 ± 52.01
15500
15000
14500
14000
13500
13000
6106. 0
6106. 1
6106. 2
6106. 3

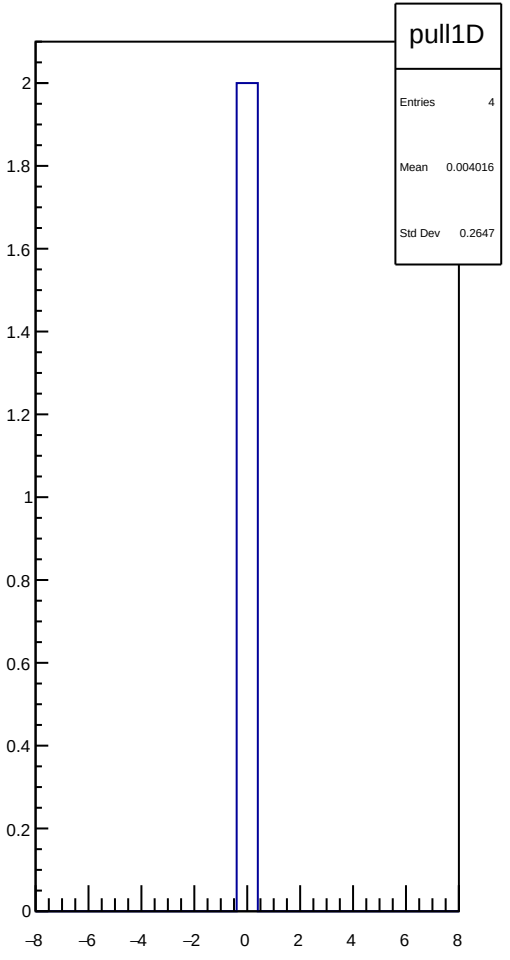

diff_bpm4ecY_mean vs run
χ² / ndf 3.834 / 3
p0 −6.118 ± 40.5
200
150
100
50
0
−50
−100
−150
−200
−250
6106. 0
6106. 1
6106. 2
6106. 3

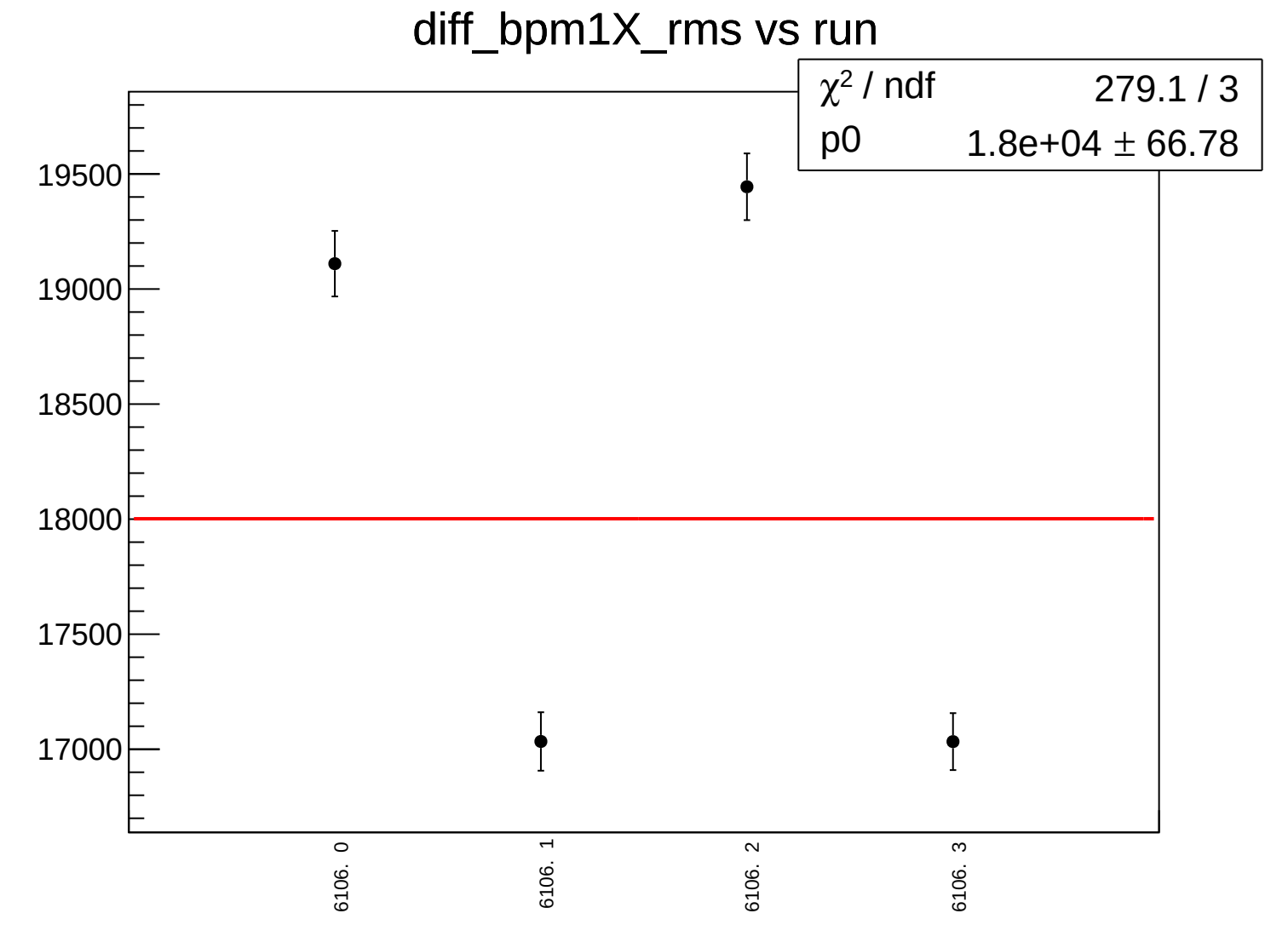

pull
Entries 4
Mean 13.53
Std Dev 14.01
1
0.5
0
−0.5
−1
−1.5

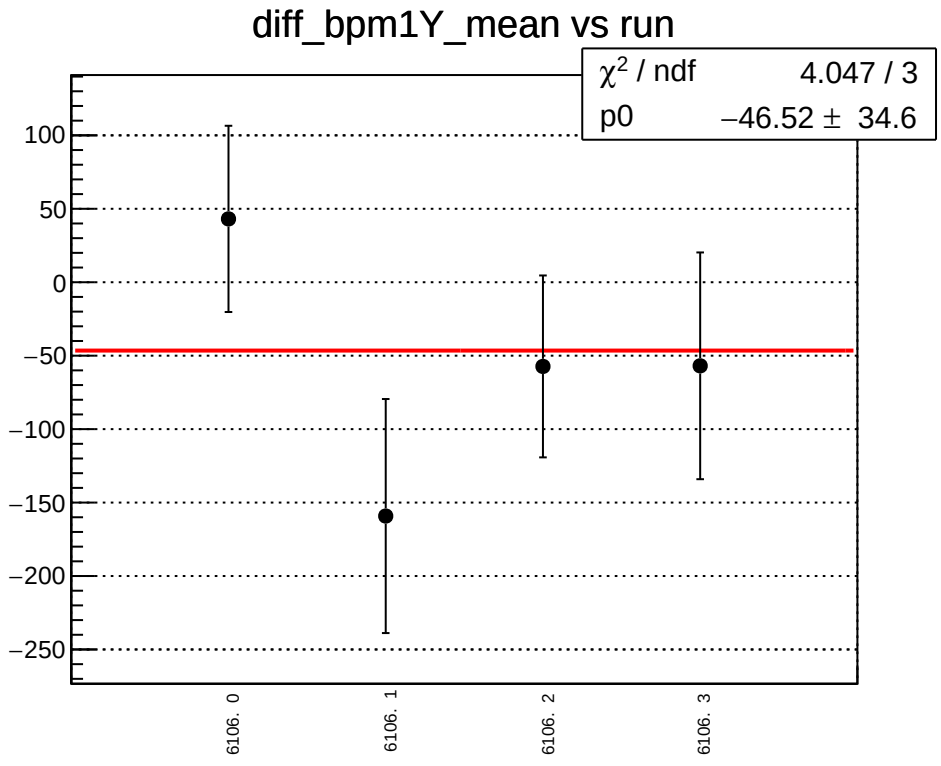

pull1D
Entries 4
Mean −0.01195
Std Dev 0.979
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

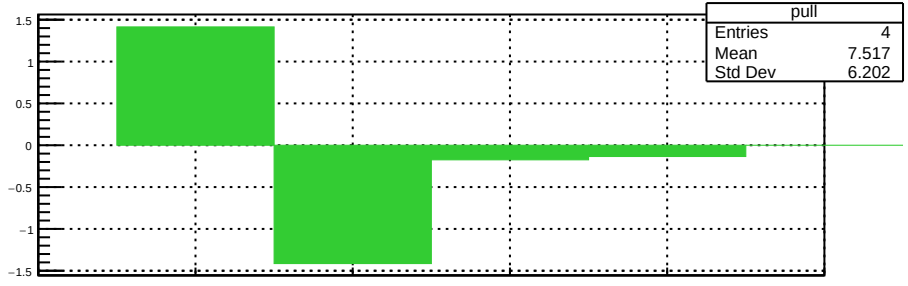

diff_bpm4ecY_rms vs run
χ² / ndf 44.26 / 3
p0 7733 ± 28.64
8000
7900
7800
7700
7600
7500
7400
6106. 0
6106. 1
6106. 2
6106. 3

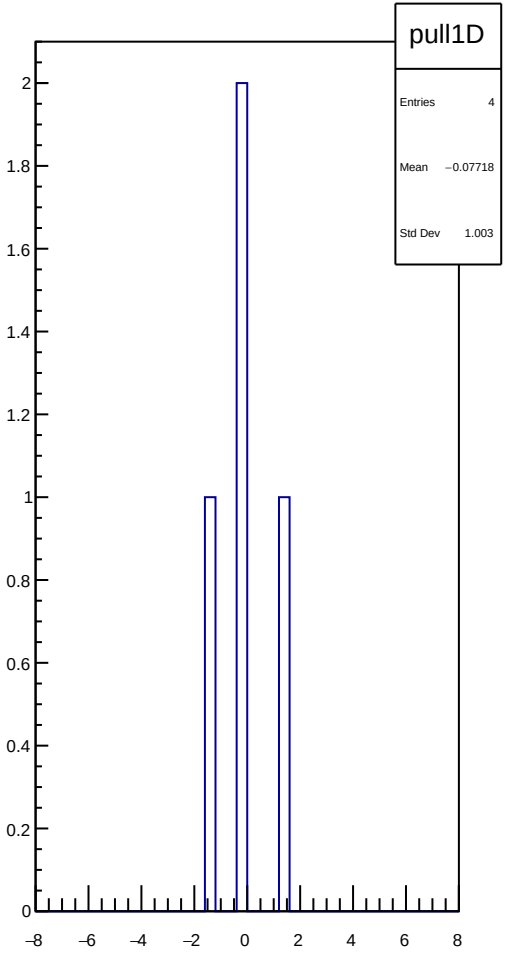

diff_bpm1X_mean vs run
χ² / ndf 0.2803 / 3
p0 6.033 ± 94.43
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.429
Std Dev 2.644
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

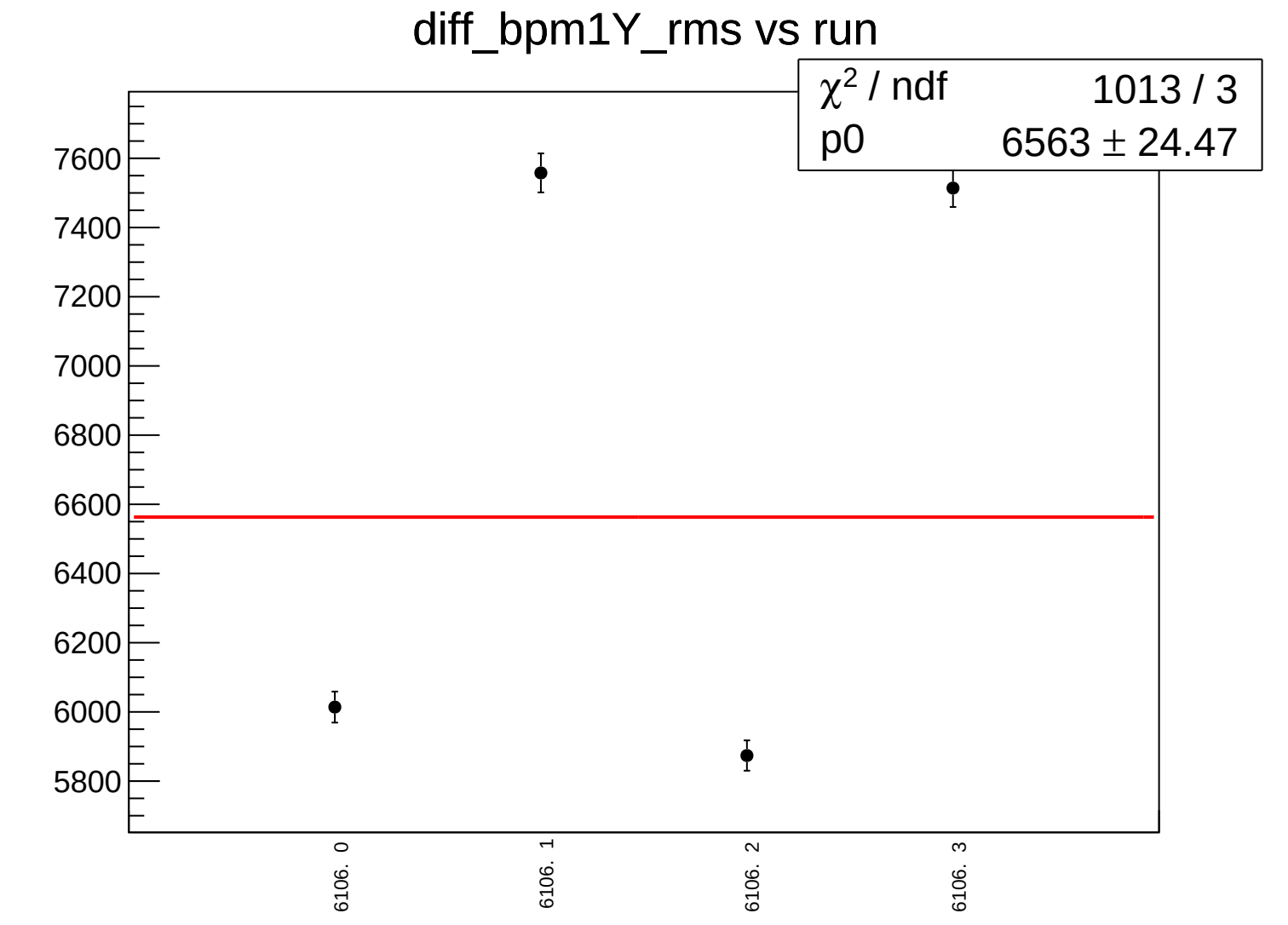

pull1D
Entries 4
Mean 0.004016
Std Dev 0.2647
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

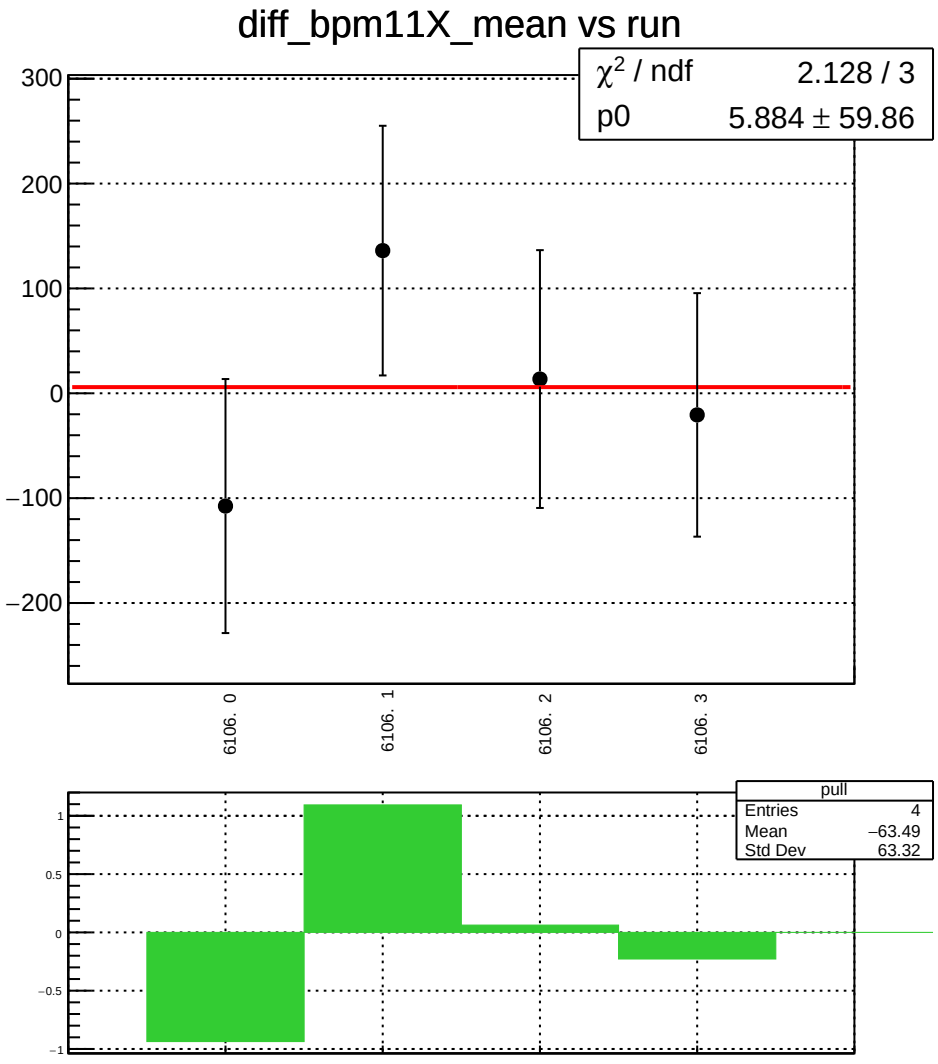

diff_bpm1X_rms vs run
χ² / ndf 279.1 / 3
p0 1.8e+04 ± 66.78
19500
19000
18500
18000
17500
17000
6106. 0
6106. 1
6106. 2
6106. 3

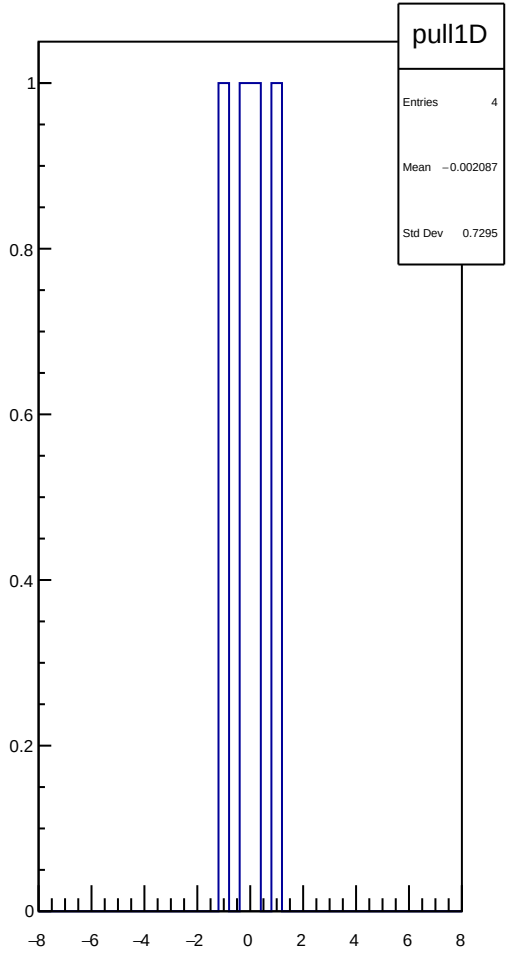

diff_bpm1Y_mean vs run
χ² / ndf 4.047 / 3
p0 −46.52 ± 34.6
100
50
0
−50
−100
−150
−200
−250
6106. 0
6106. 1
6106. 2
6106. 3

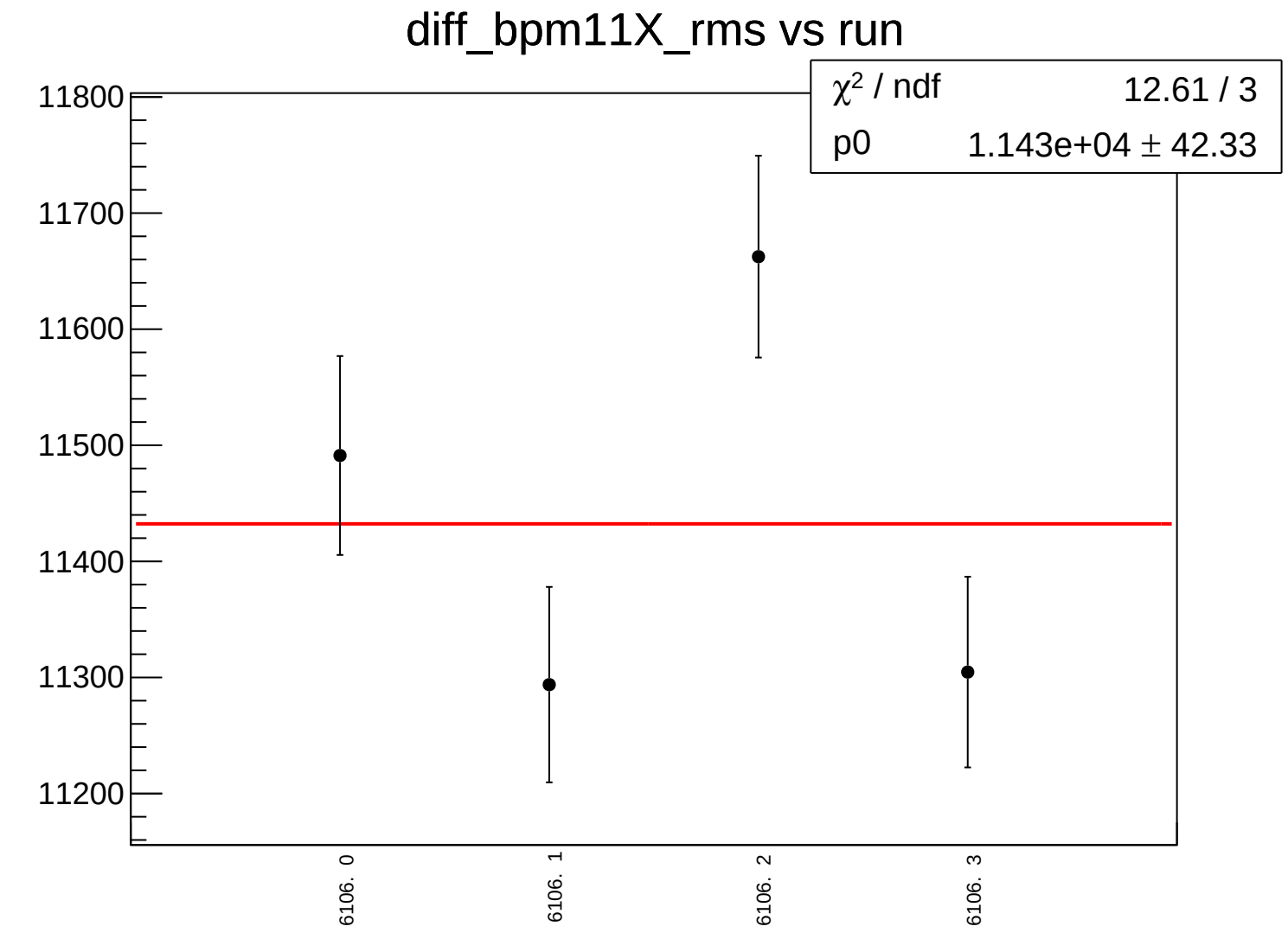

pull
Entries 4
Mean 7.517
Std Dev 6.202
1.5
1
0.5
0
−0.5
−1
−1.5

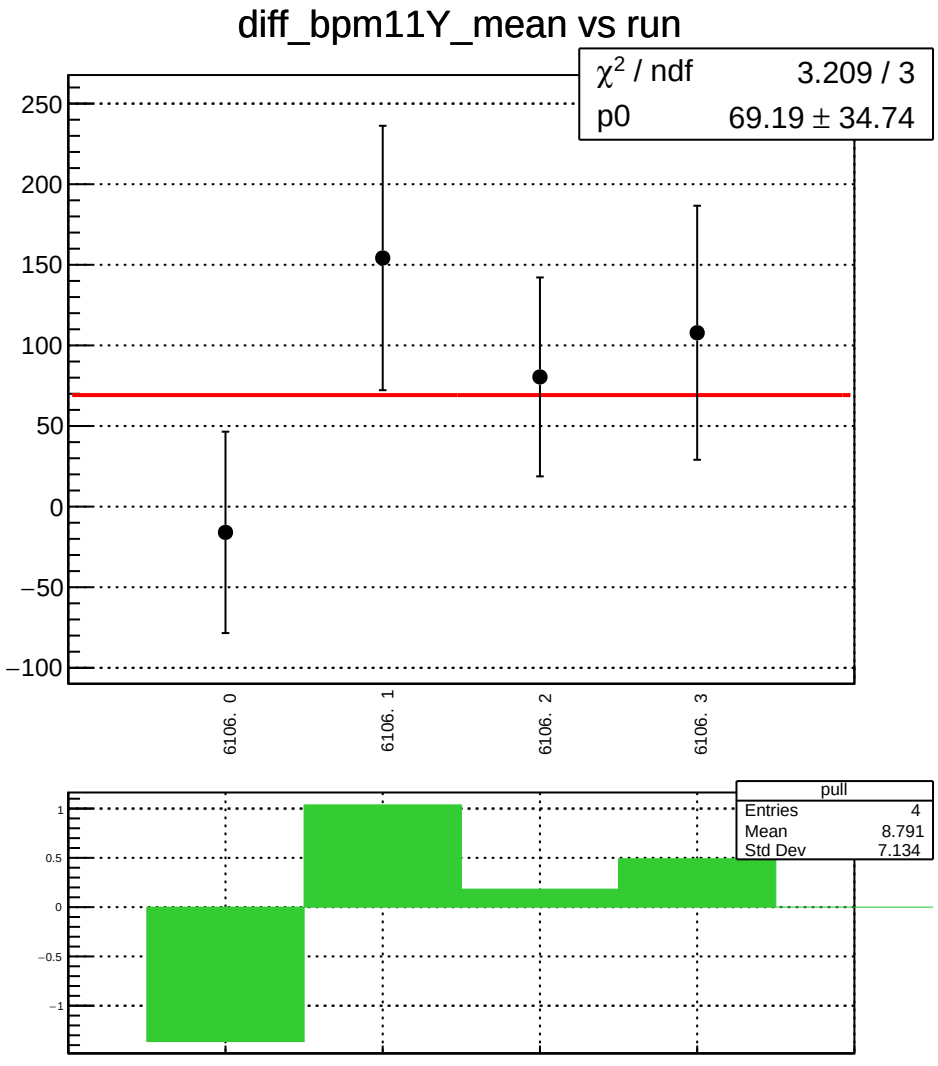

pull1D
Entries 4
Mean −0.07718
Std Dev 1.003
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

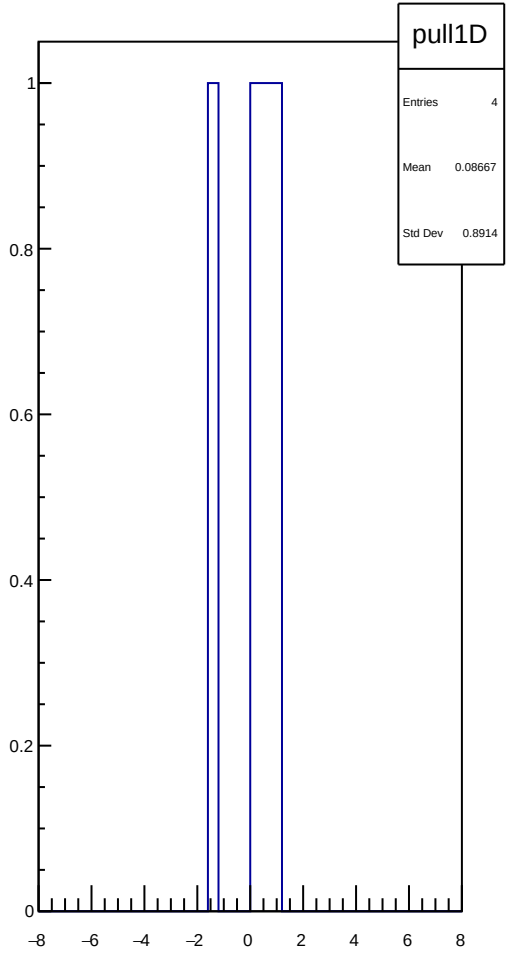

diff_bpm1Y_rms vs run
χ² / ndf 1013 / 3
p0 6563 ± 24.47
7600
7400
7200
7000
6800
6600
6400
6200
6000
5800
6106. 0
6106. 1
6106. 2
6106. 3

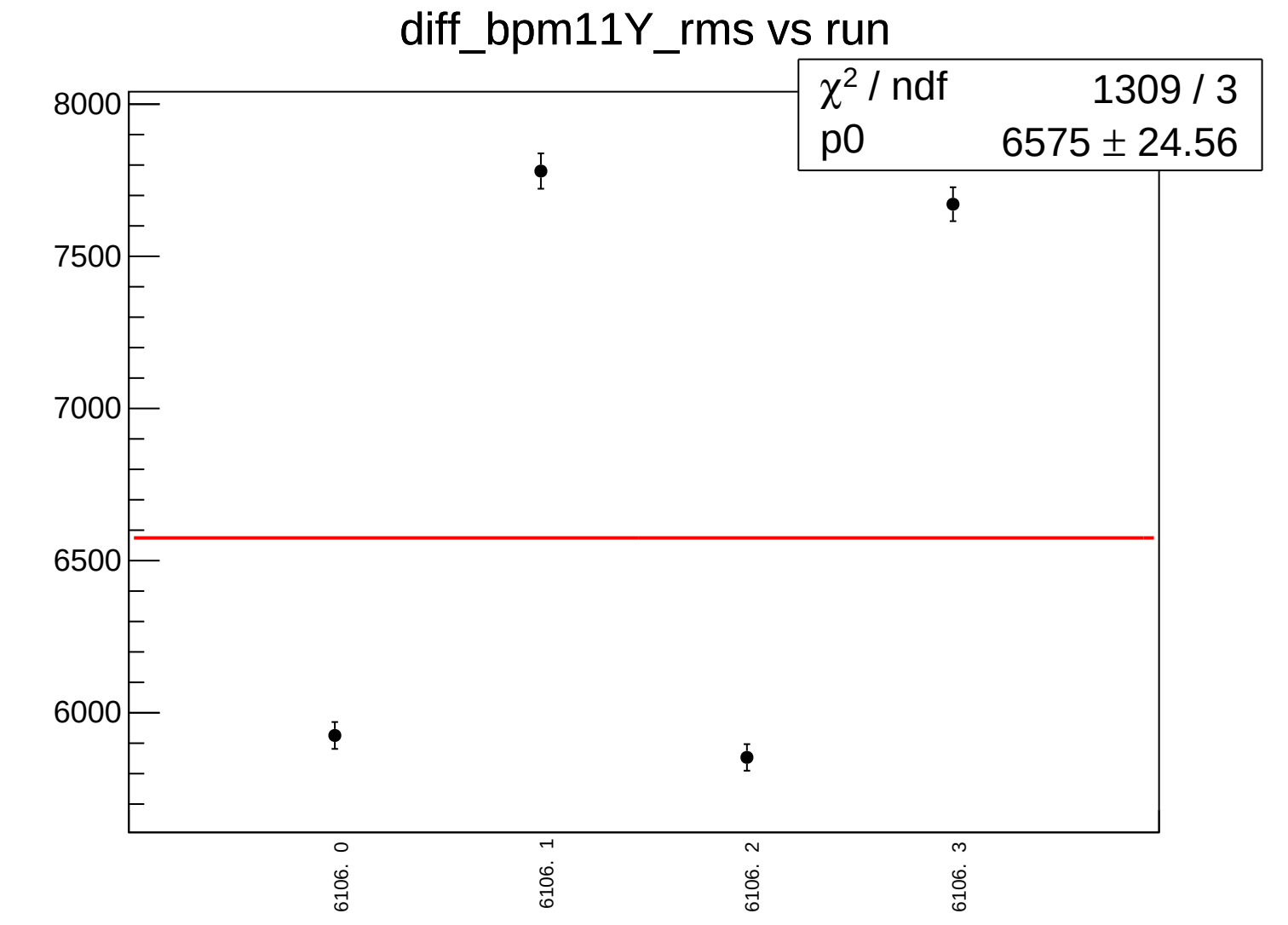

diff_bpm11X_mean vs run
χ² / ndf 2.128 / 3
p0 5.884 ± 59.86
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −63.49
Std Dev 63.32
1
0.5
0
−0.5
−1

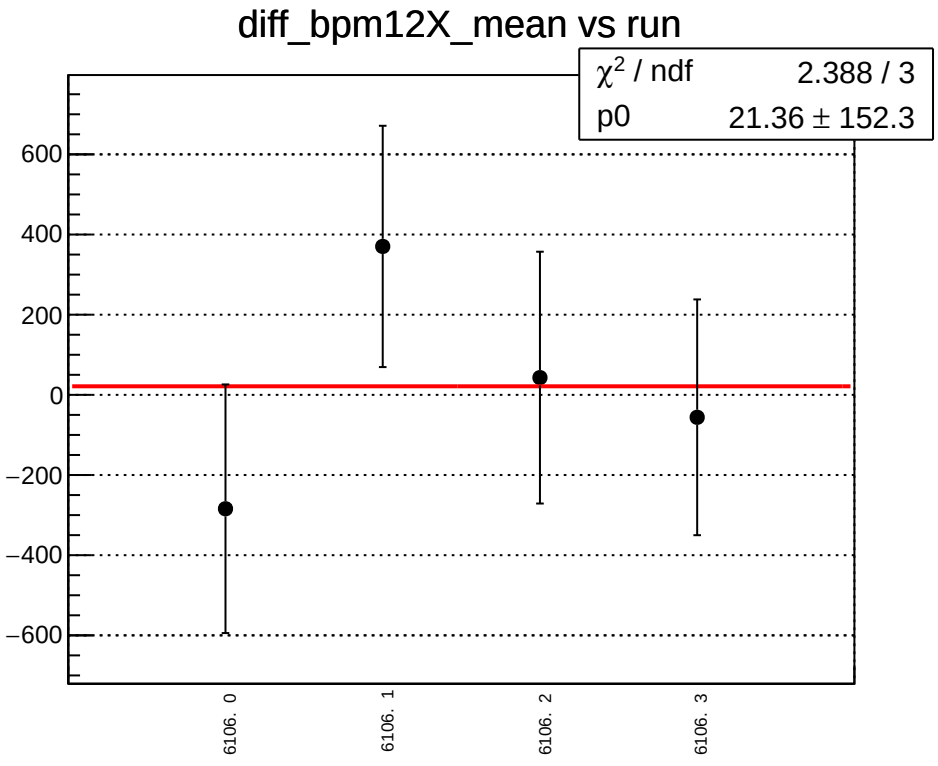

pull1D
Entries 4
Mean −0.002087
Std Dev 0.7295
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

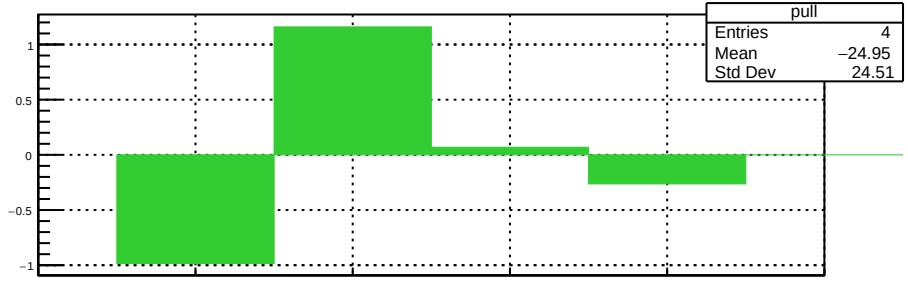

diff_bpm11X_rms vs run
χ² / ndf 12.61 / 3
p0 1.143e+04 ± 42.33
11800
11700
11600
11500
11400
11300
11200
6106. 0
6106. 1
6106. 2
6106. 3

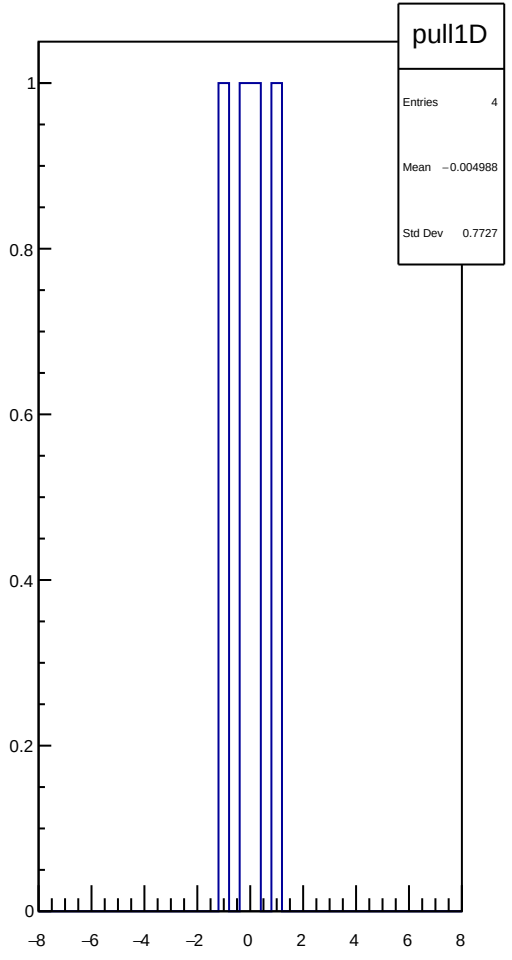

diff_bpm11Y_mean vs run
χ² / ndf 3.209 / 3
p0 69.19 ± 34.74
250
200
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 8.791
Std Dev 7.134
1
0.5
0
−0.5
−1

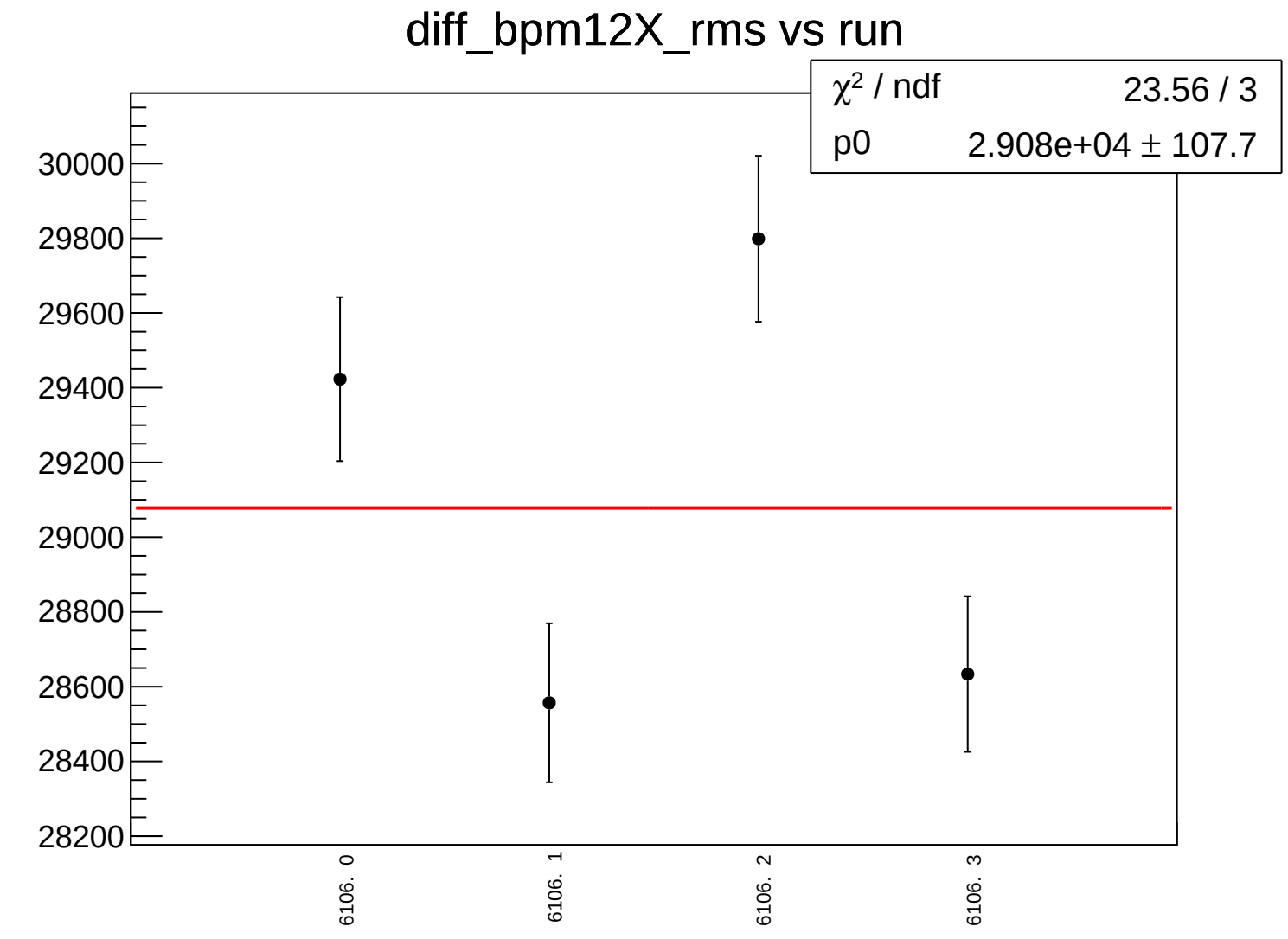

pull1D
Entries 4
Mean 0.08667
Std Dev 0.8914
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

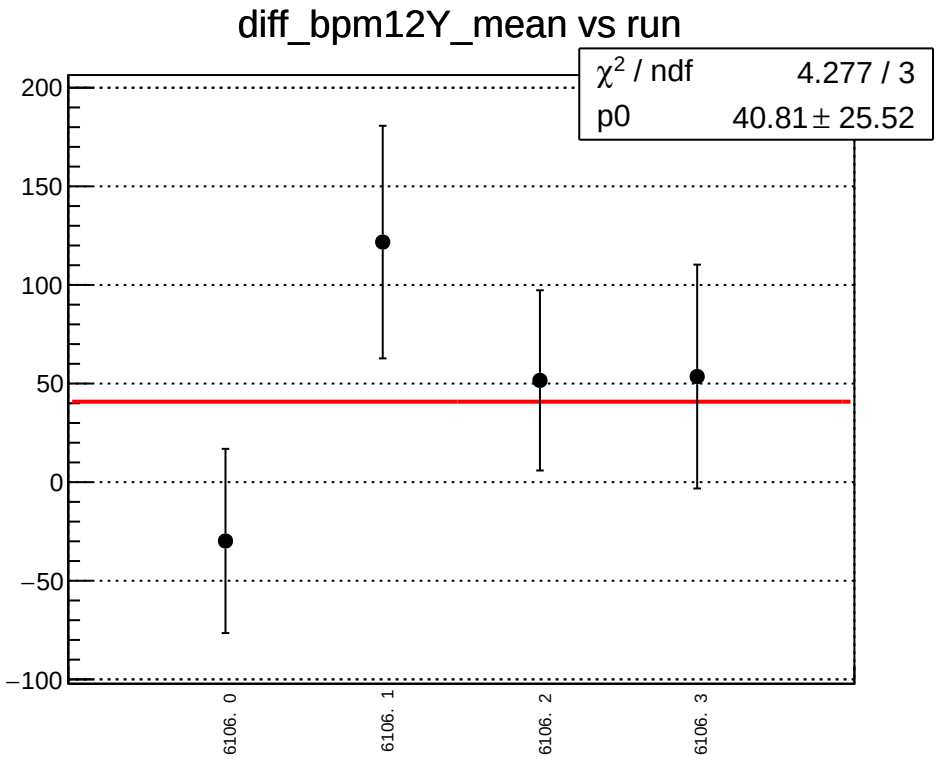

diff_bpm11Y_rms vs run
χ² / ndf 1309 / 3
p0 6575 ± 24.56
8000
7500
7000
6500
6000
6106. 0
6106. 1
6106. 2
6106. 3

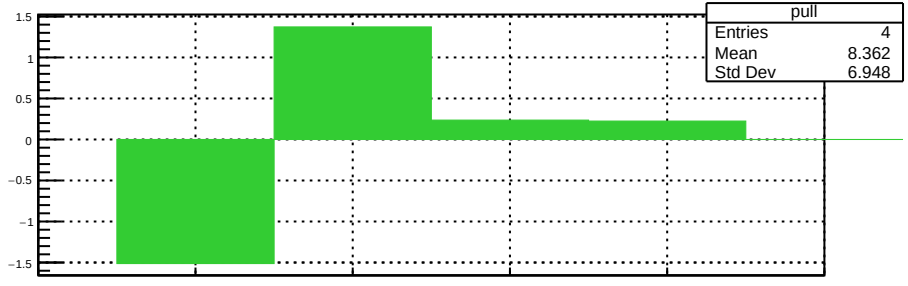

diff_bpm12X_mean vs run
χ² / ndf 2.388 / 3
p0 21.36 ± 152.3
600
400
200
0
−200
−400
−600
6106. 0
6106. 1
6106. 2
6106. 3

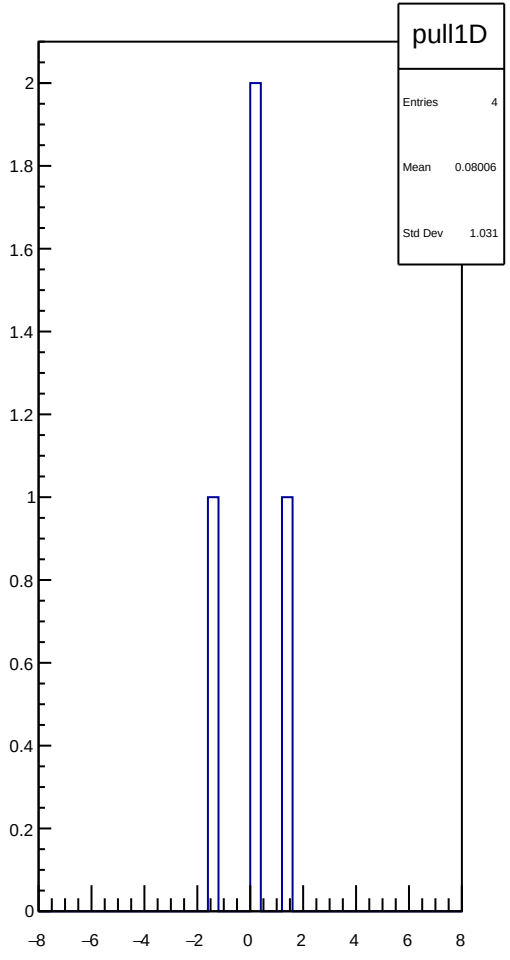

pull
Entries 4
Mean −24.95
Std Dev 24.51
1
0.5
0
−0.5
−1

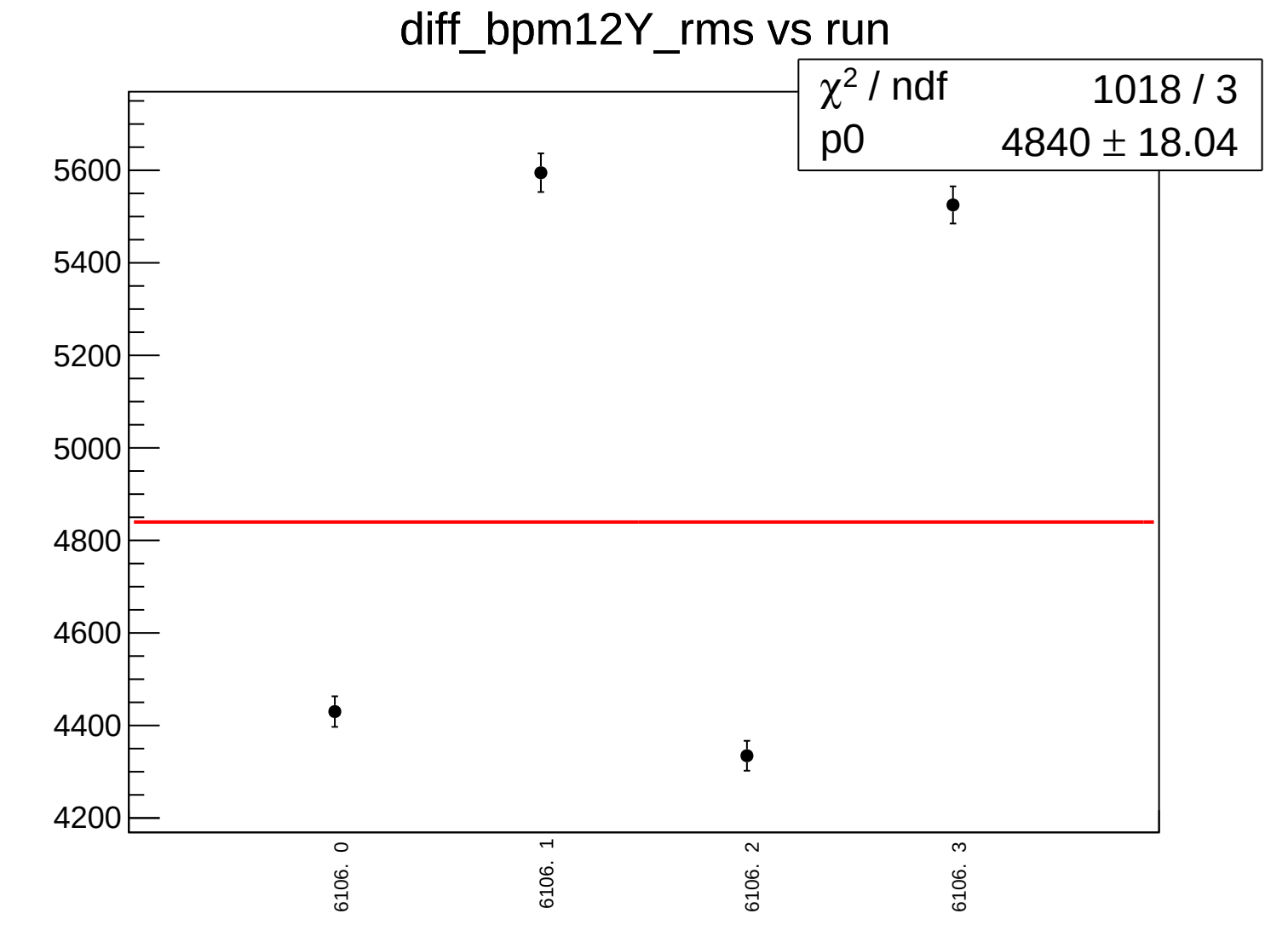

pull1D
Entries 4
Mean −0.004988
Std Dev 0.7727
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

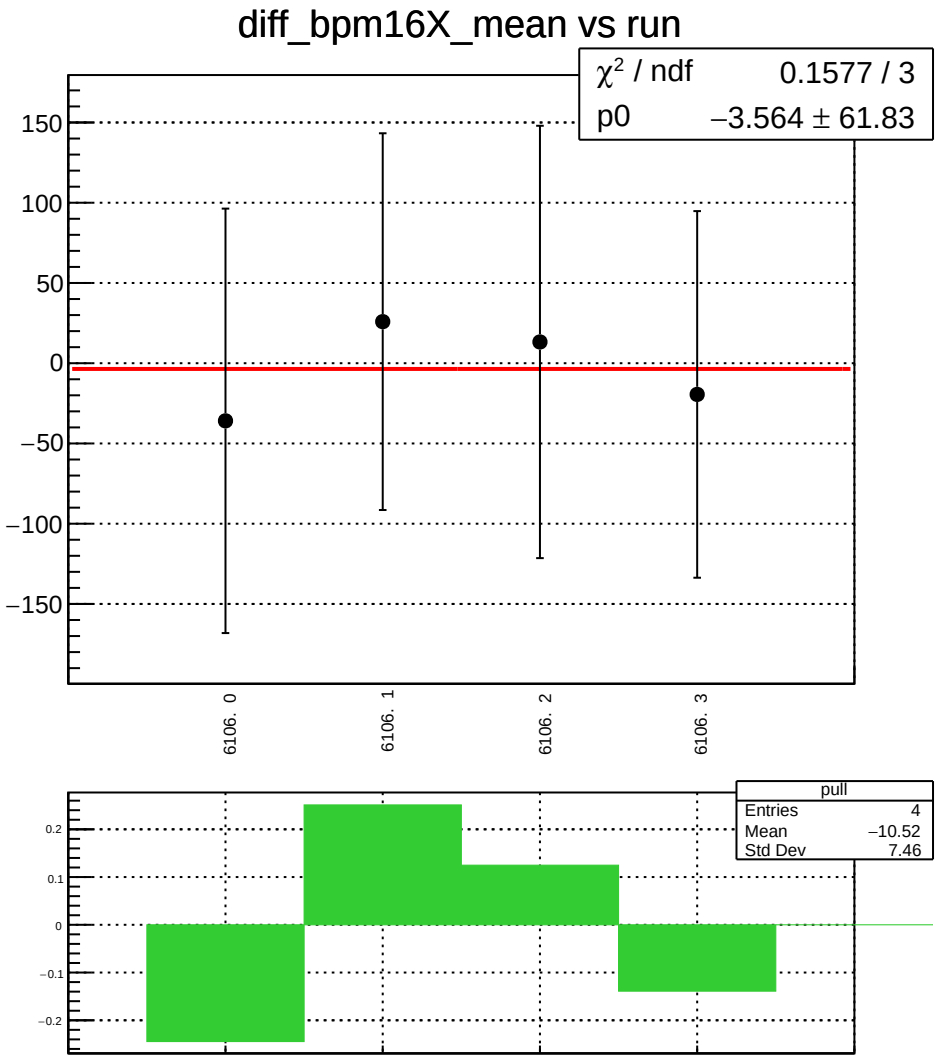

diff_bpm12X_rms vs run
χ² / ndf 23.56 / 3
p0 2.908e+04 ± 107.7
30000
29800
29600
29400
29200
29000
28800
28600
28400
28200
6106. 0
6106. 1
6106. 2
6106. 3

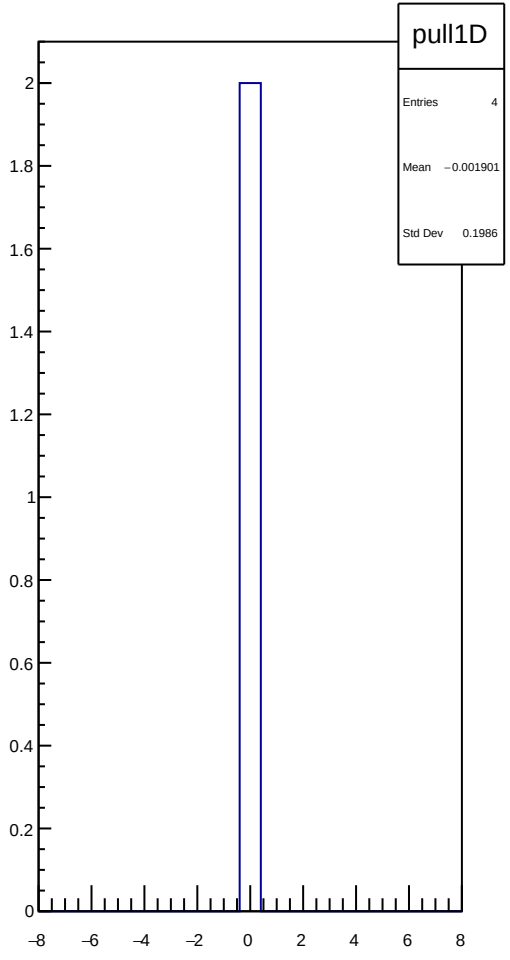

diff_bpm12Y_mean vs run
χ² / ndf 4.277 / 3
p0 40.81 ± 25.52
200
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3

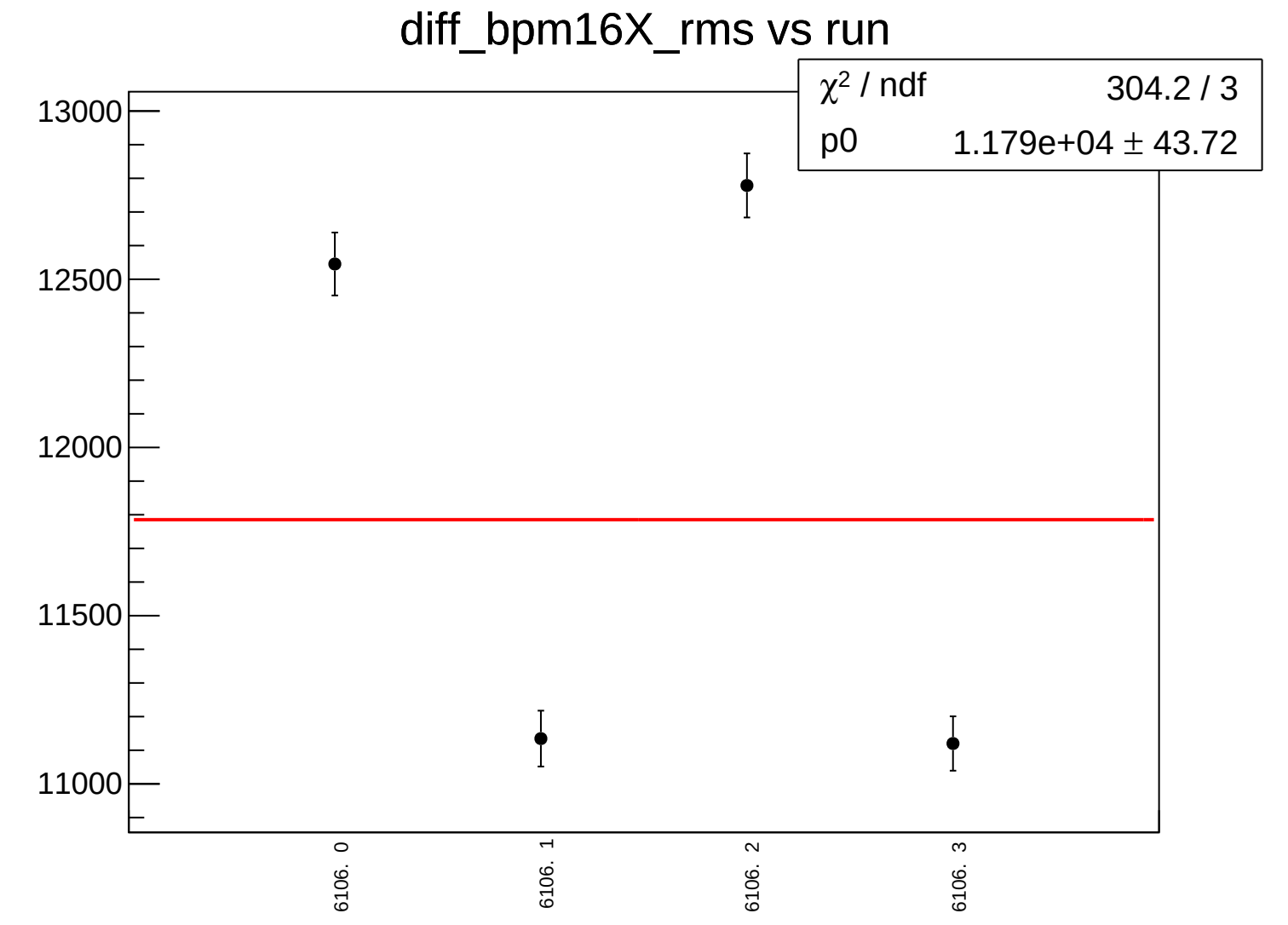

pull
Entries 4
Mean 8.362
Std Dev 6.948
1.5
1
0.5
0
−0.5
−1
−1.5

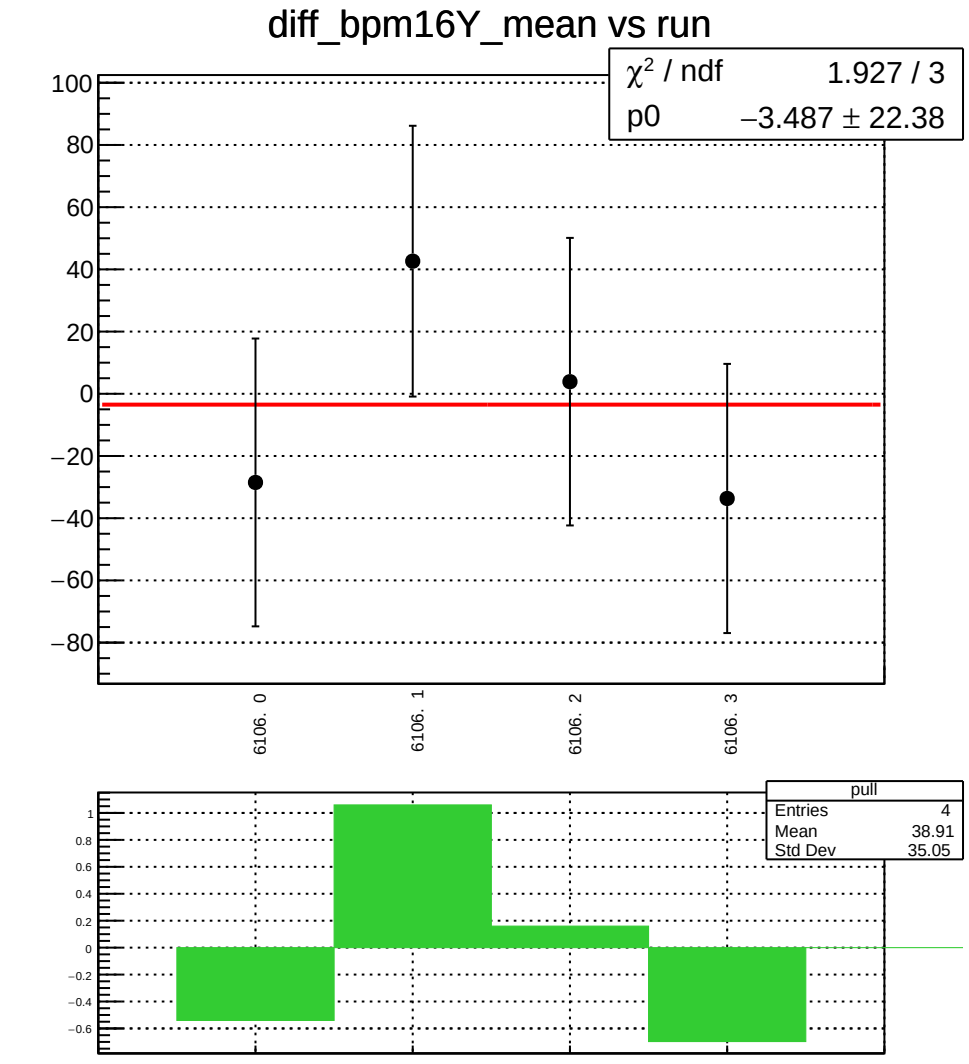

pull1D
Entries 4
Mean 0.08006
Std Dev 1.031
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

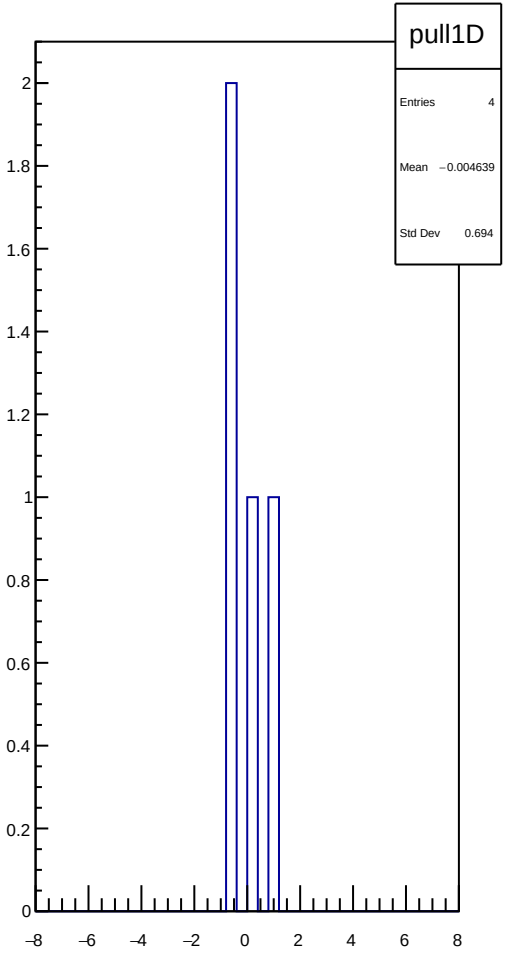

diff_bpm12Y_rms vs run
χ² / ndf 1018 / 3
p0 4840 ± 18.04
5600
5400
5200
5000
4800
4600
4400
4200
6106. 0
6106. 1
6106. 2
6106. 3

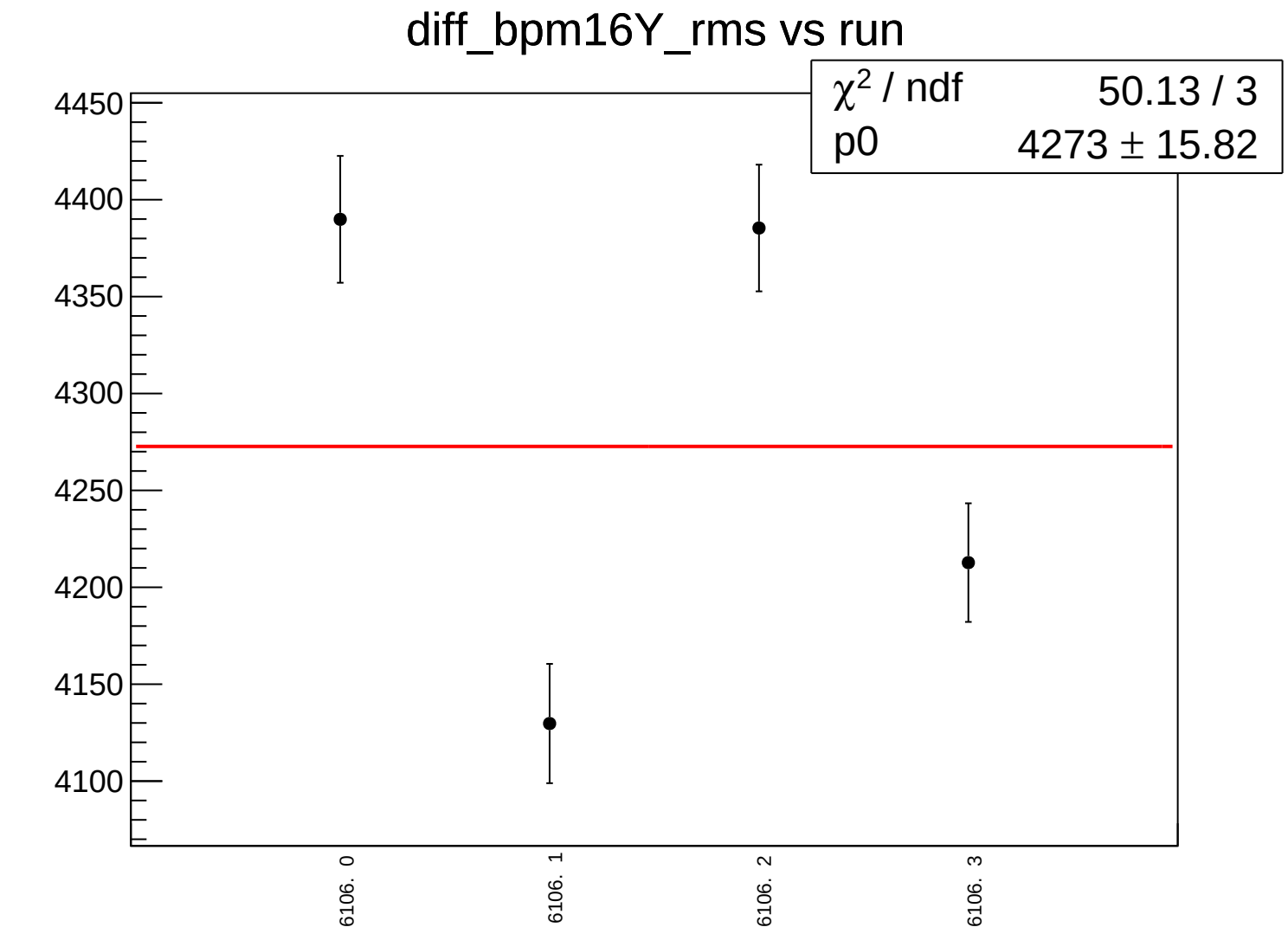

diff_bpm16X_mean vs run
χ² / ndf 0.1577 / 3
p0 −3.564 ± 61.83
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −10.52
Std Dev 7.46
0.2
0.1
0
−0.1
−0.2

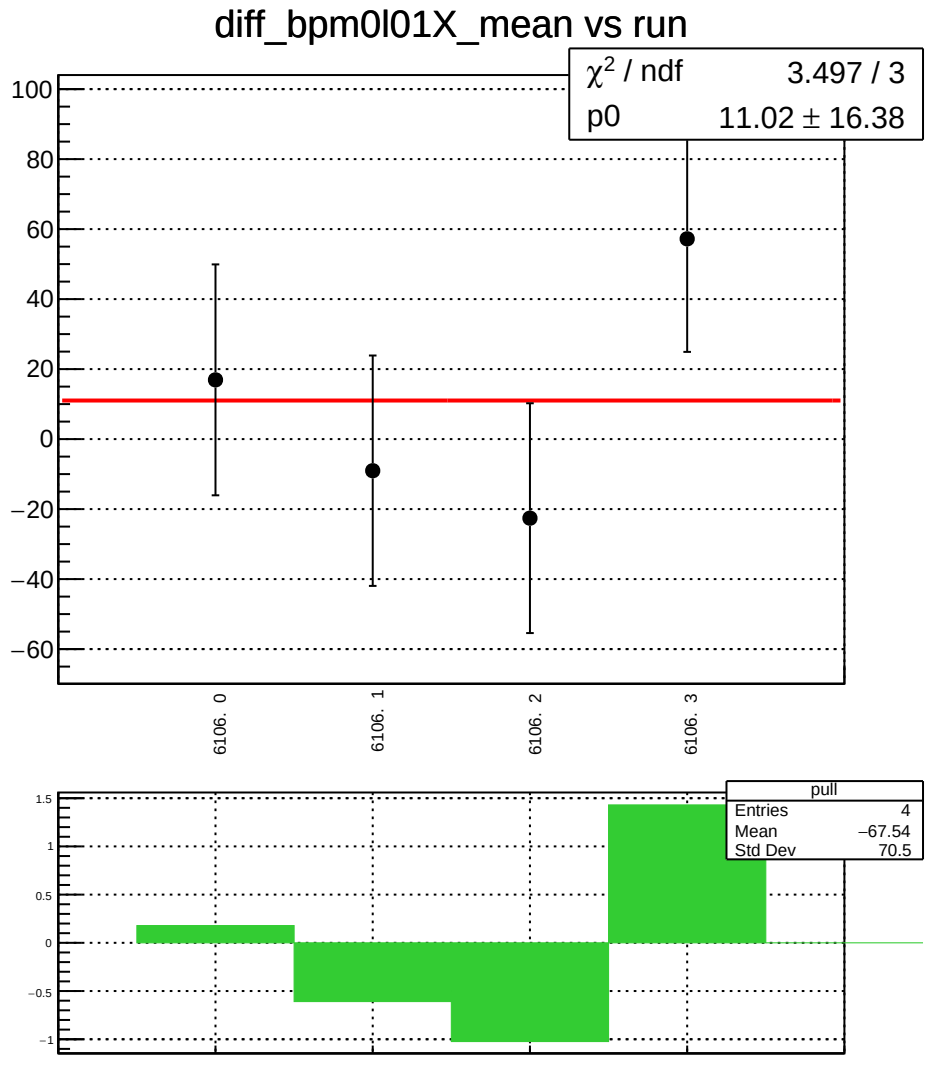

pull1D
Entries 4
Mean −0.001901
Std Dev 0.1986
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

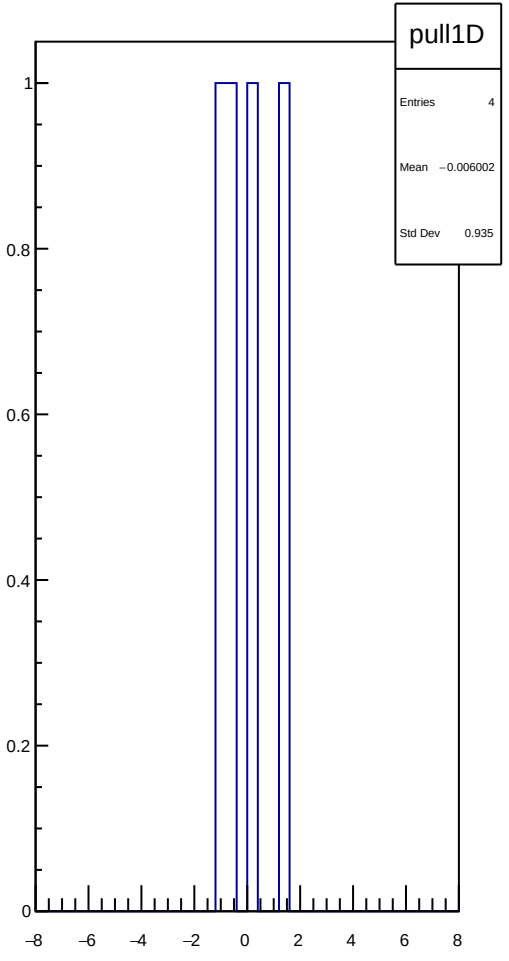

diff_bpm16X_rms vs run
χ² / ndf 304.2 / 3
p0 1.179e+04 ± 43.72
13000
12500
12000
11500
11000
6106. 0
6106. 1
6106. 2
6106. 3

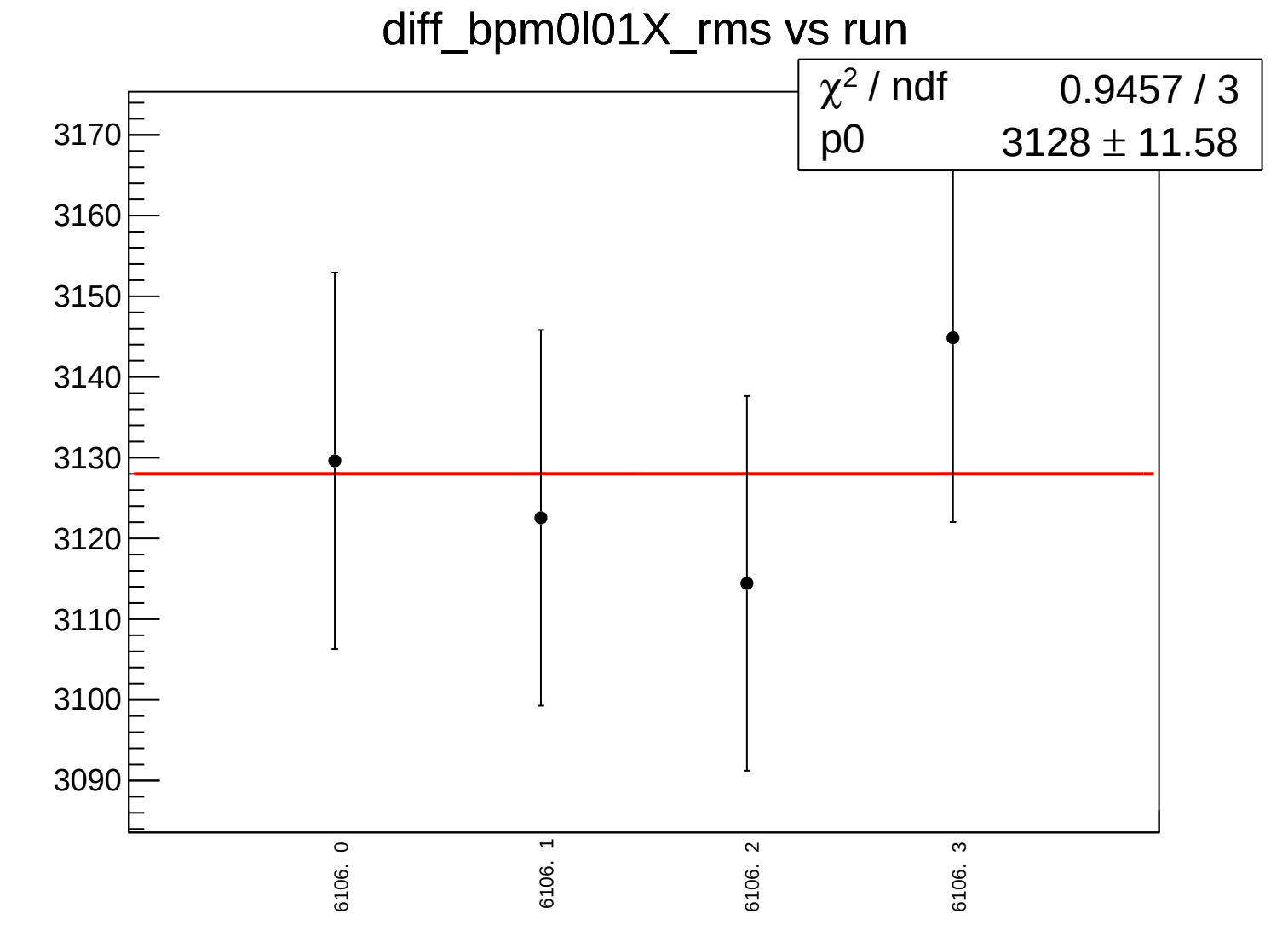

diff_bpm16Y_mean vs run
χ² / ndf 1.927 / 3
p0 −3.487 ± 22.38
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 38.91
Std Dev 35.05
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

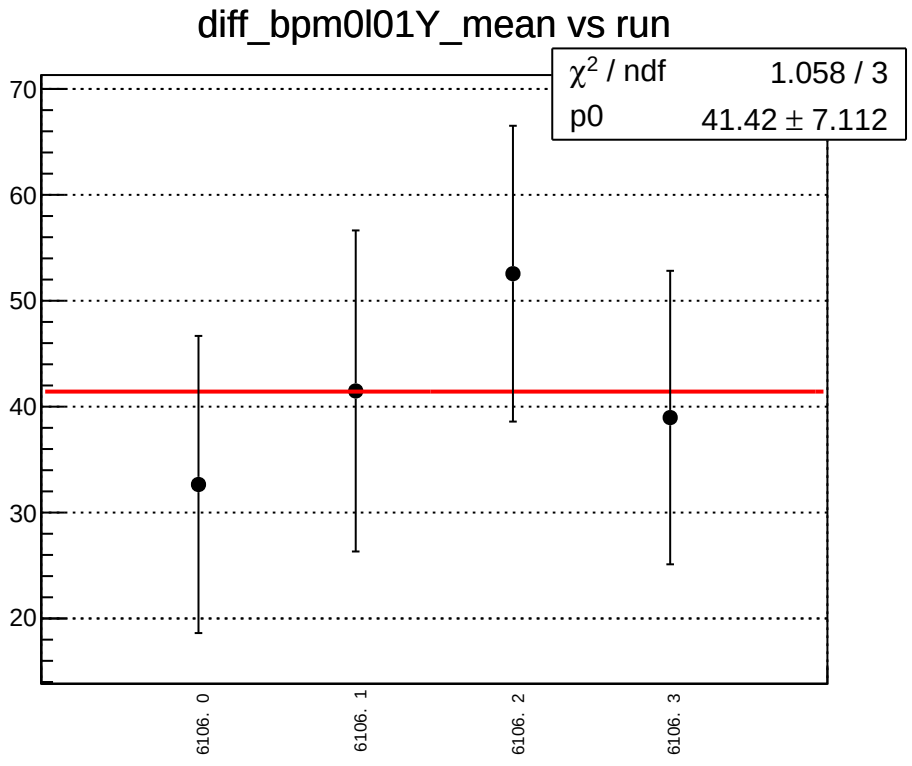

pull1D
Entries 4
Mean −0.004639
Std Dev 0.694
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

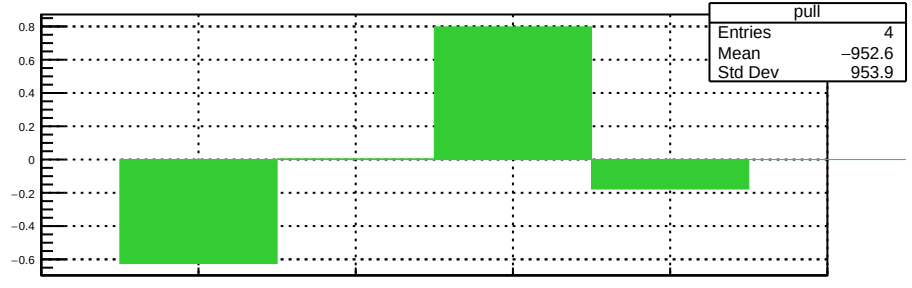

diff_bpm16Y_rms vs run
χ² / ndf 50.13 / 3
p0 4273 ± 15.82
4450
4400
4350
4300
4250
4200
4150
4100
6106. 0
6106. 1
6106. 2
6106. 3

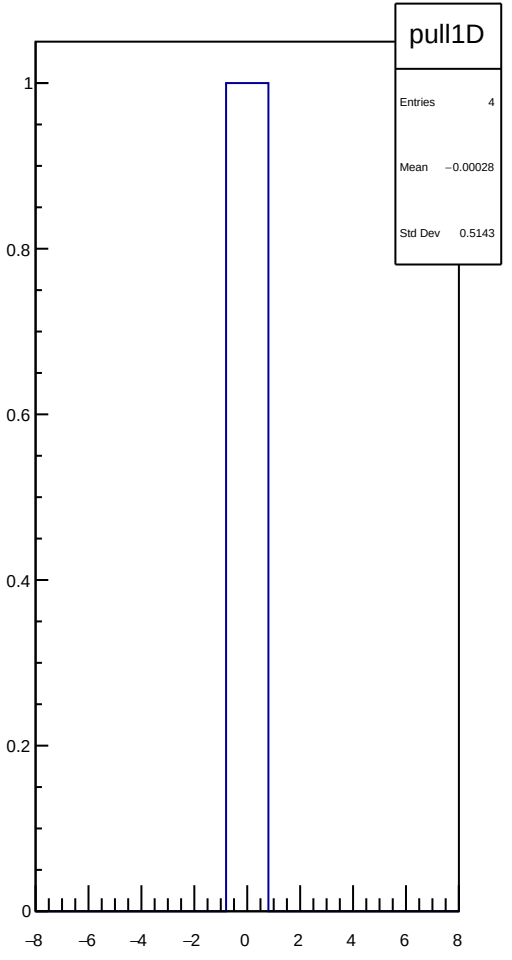

diff_bpm0l01X_mean vs run
χ² / ndf 3.497 / 3
p0 11.02 ± 16.38
100
80
60
40
20
0
−20
−40
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −67.54
Std Dev 70.5
1.5
1
0.5
0
−0.5
−1

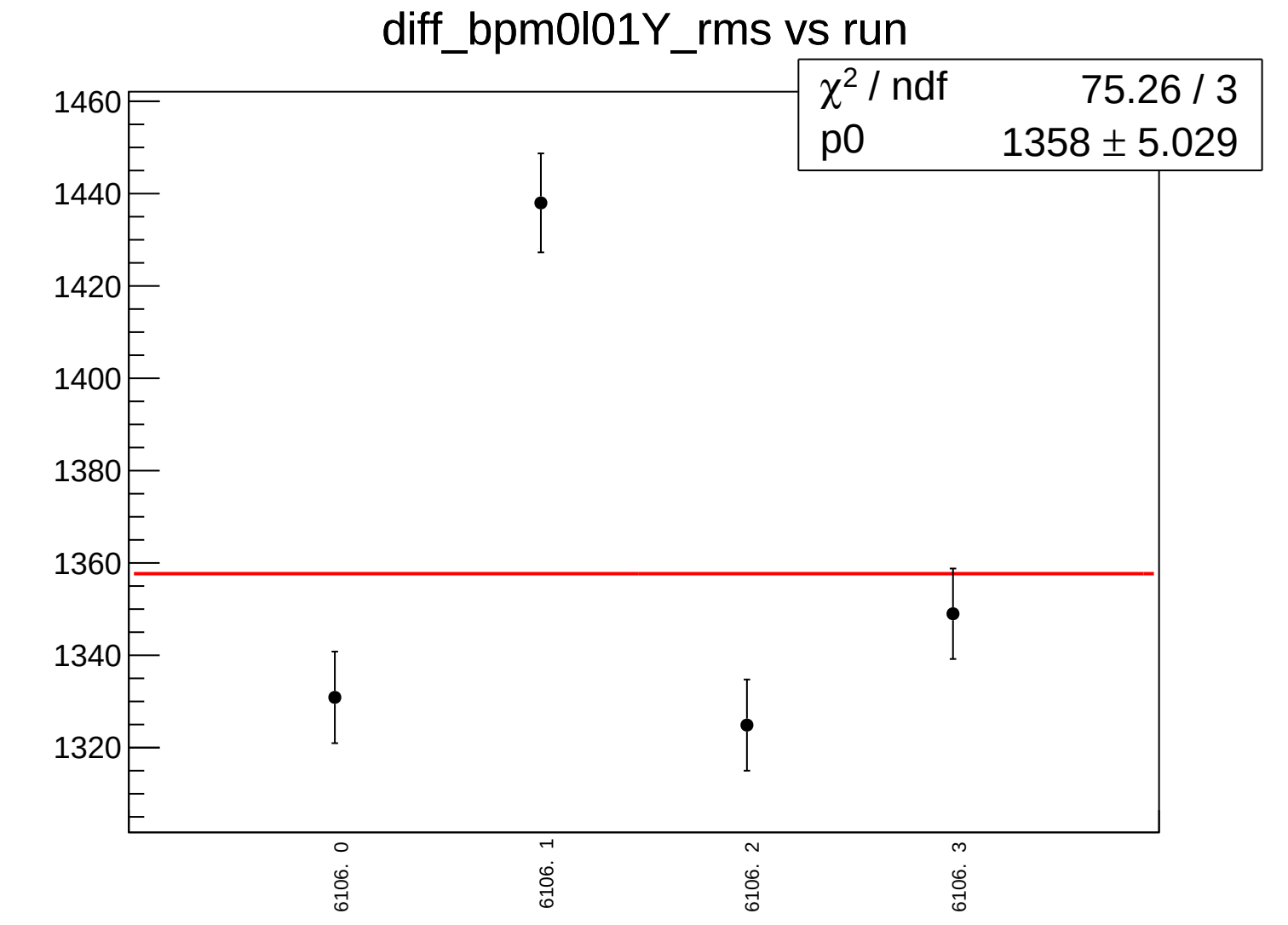

pull1D
Entries 4
Mean −0.006002
Std Dev 0.935
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

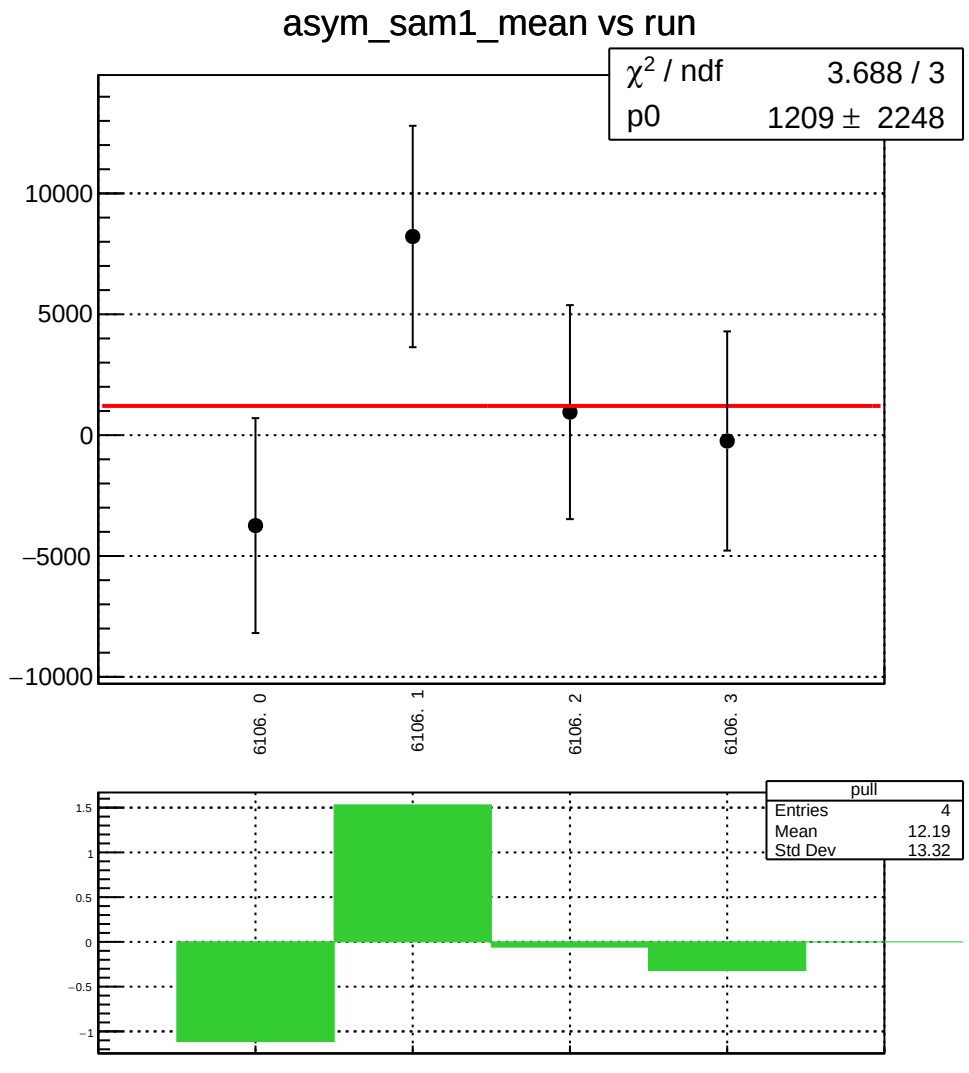

diff_bpm0l01X_rms vs run
χ² / ndf 0.9457 / 3
p0 3128 ± 11.58
3170
3160
3150
3140
3130
3120
3110
3100
3090
6106. 0
6106. 1
6106. 2
6106. 3

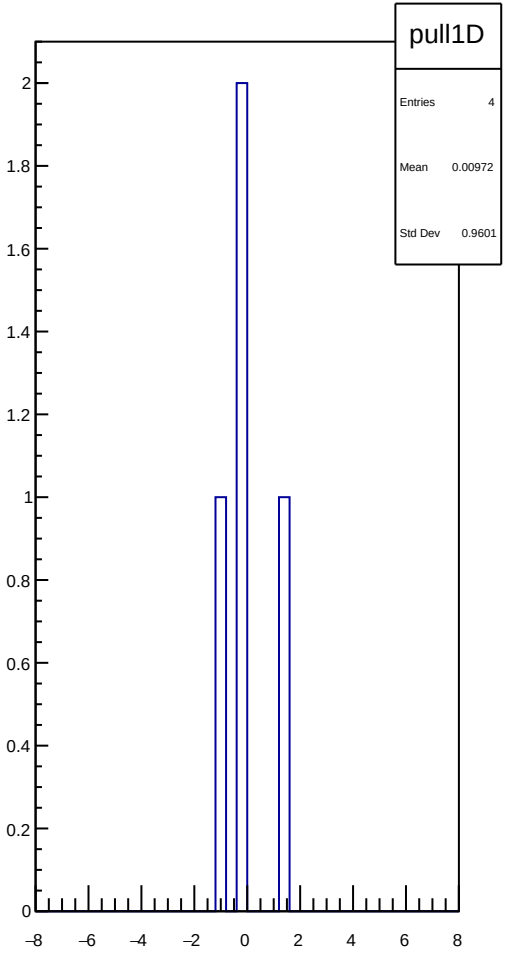

diff_bpm0l01Y_mean vs run
χ² / ndf 1.058 / 3
p0 41.42 ± 7.112
70
60
50
40
30
20
6106. 0
6106. 1
6106. 2
6106. 3

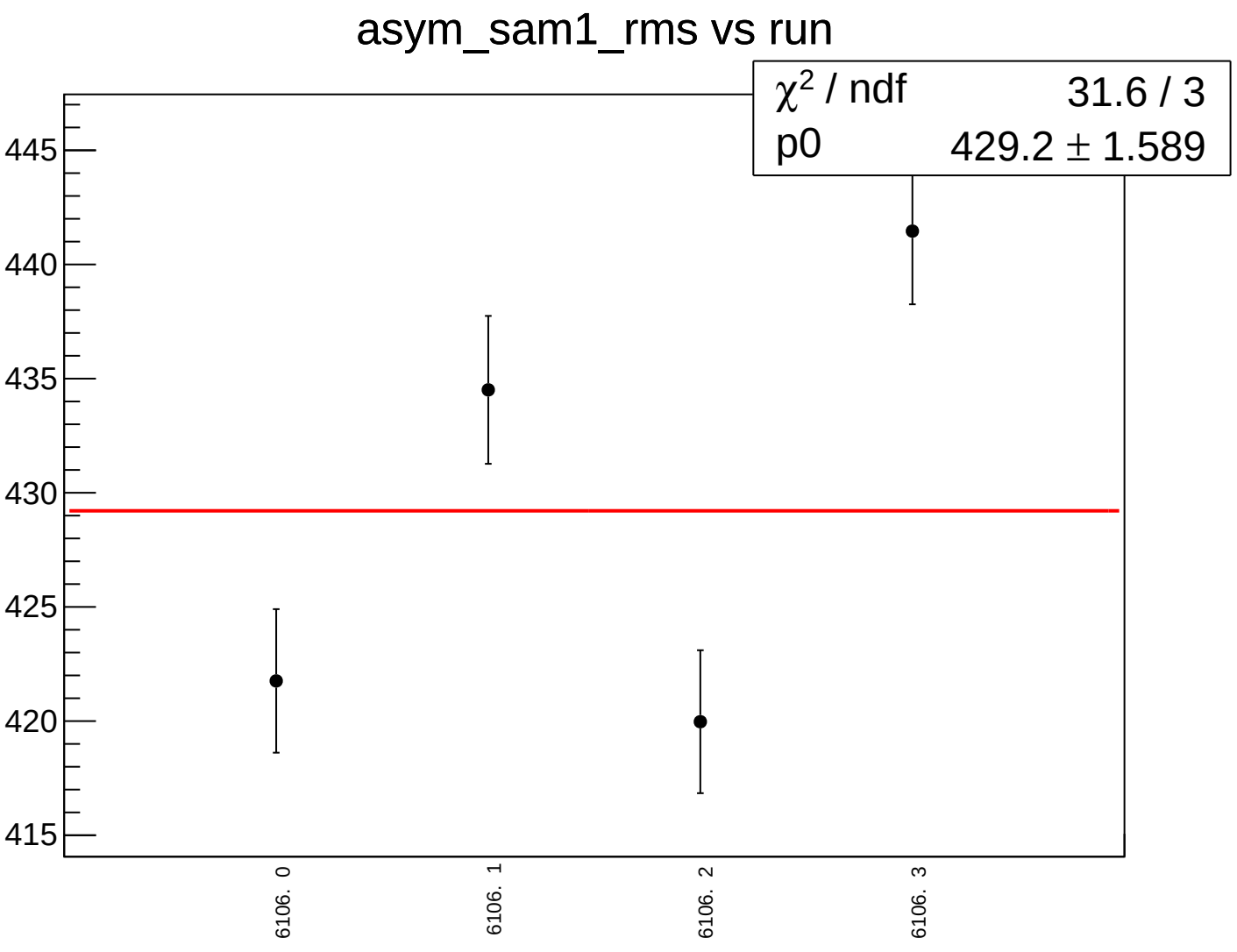

pull
Entries 4
Mean −952.6
Std Dev 953.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

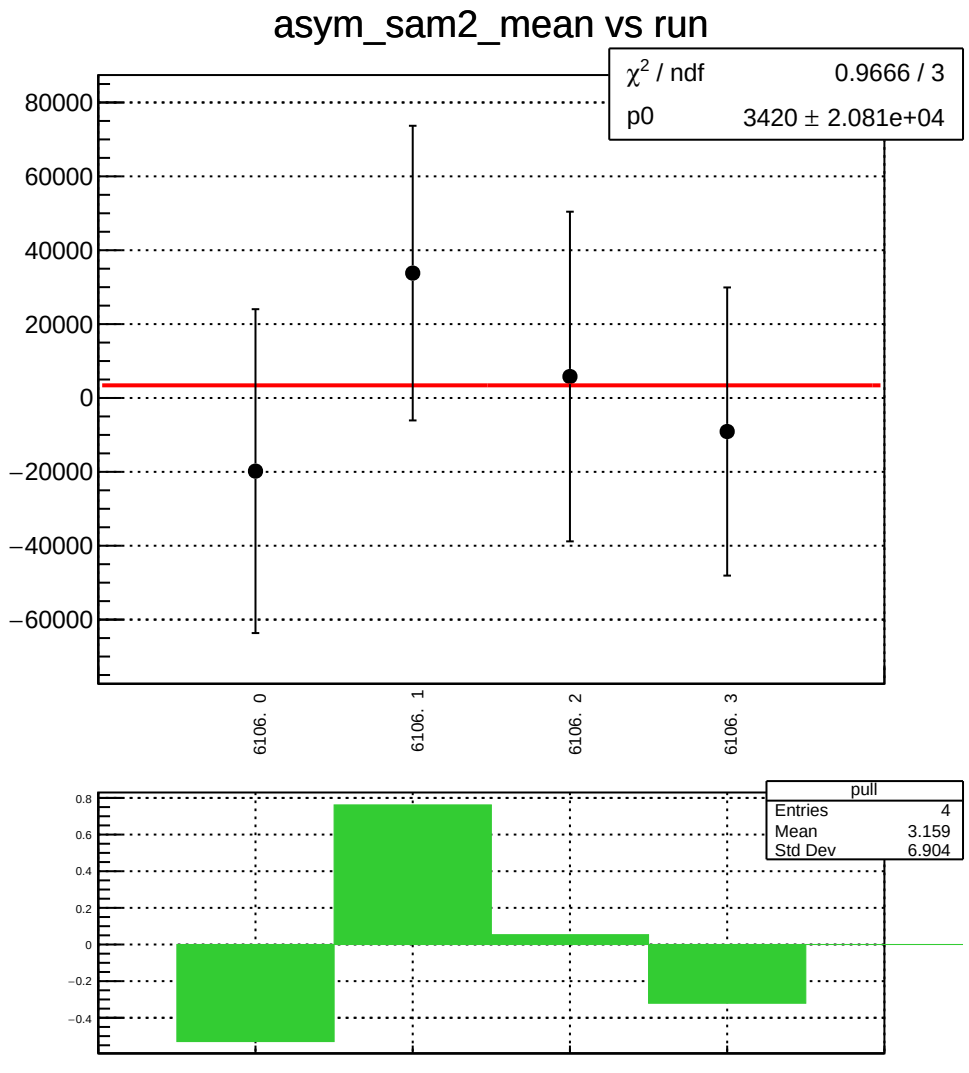

pull1D
Entries 4
Mean −0.00028
Std Dev 0.5143
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

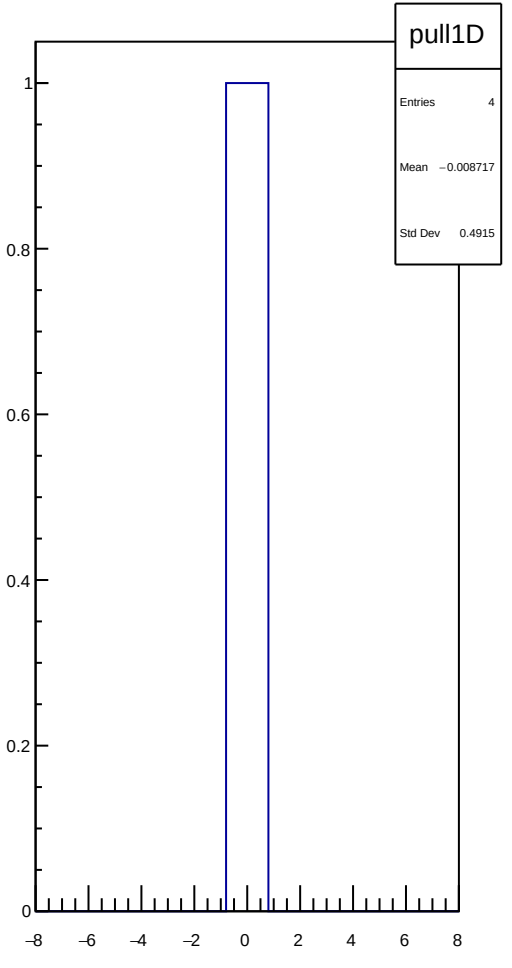

diff_bpm0l01Y_rms vs run
χ² / ndf 75.26 / 3
p0 1358 ± 5.029
1460
1440
1420
1400
1380
1360
1340
1320
6106. 0
6106. 1
6106. 2
6106. 3

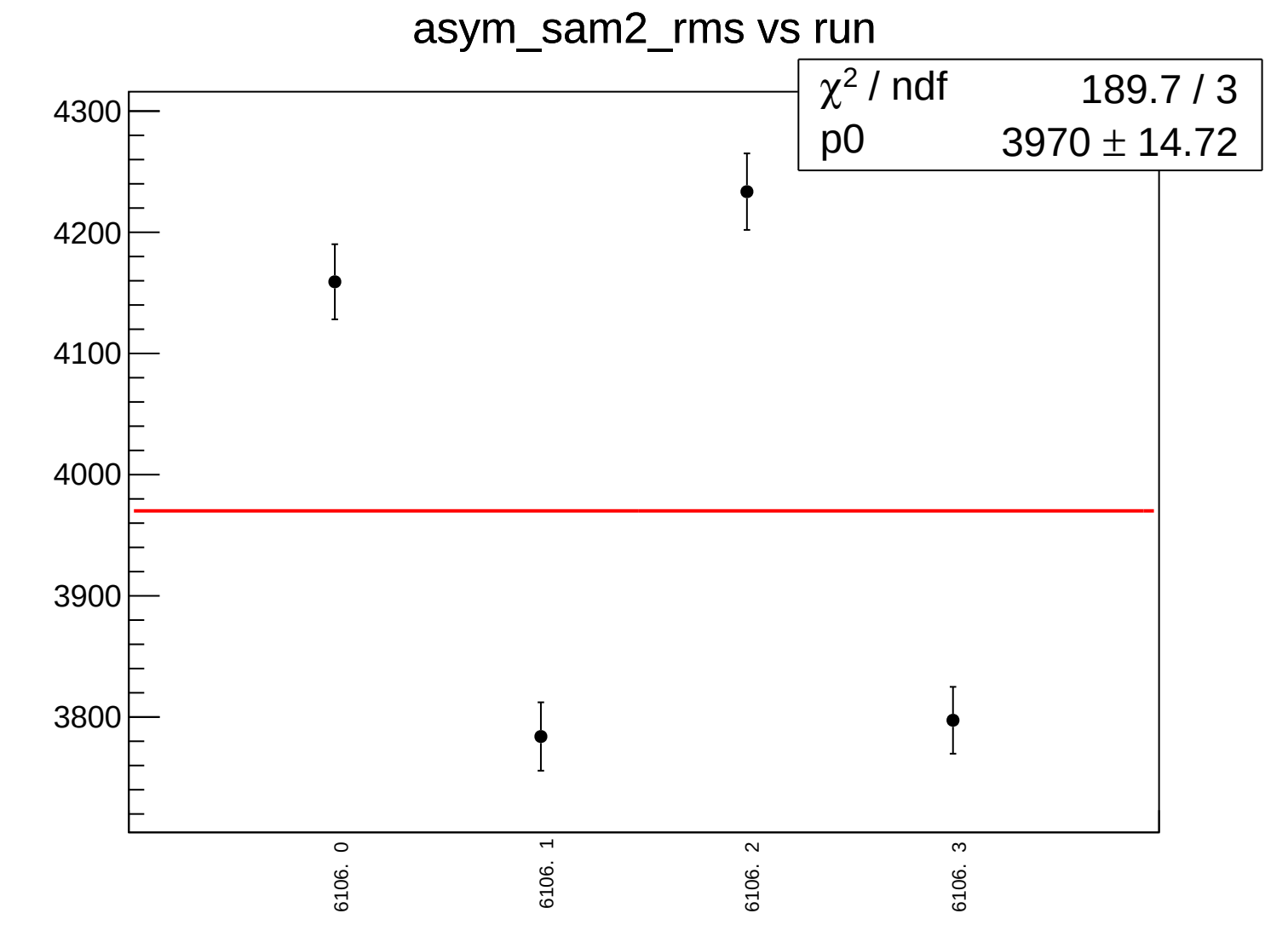

asym_sam1_mean vs run
χ² / ndf 3.688 / 3
p0 1209 ± 2248
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.19
Std Dev 13.32
1.5
1
0.5
0
−0.5
−1

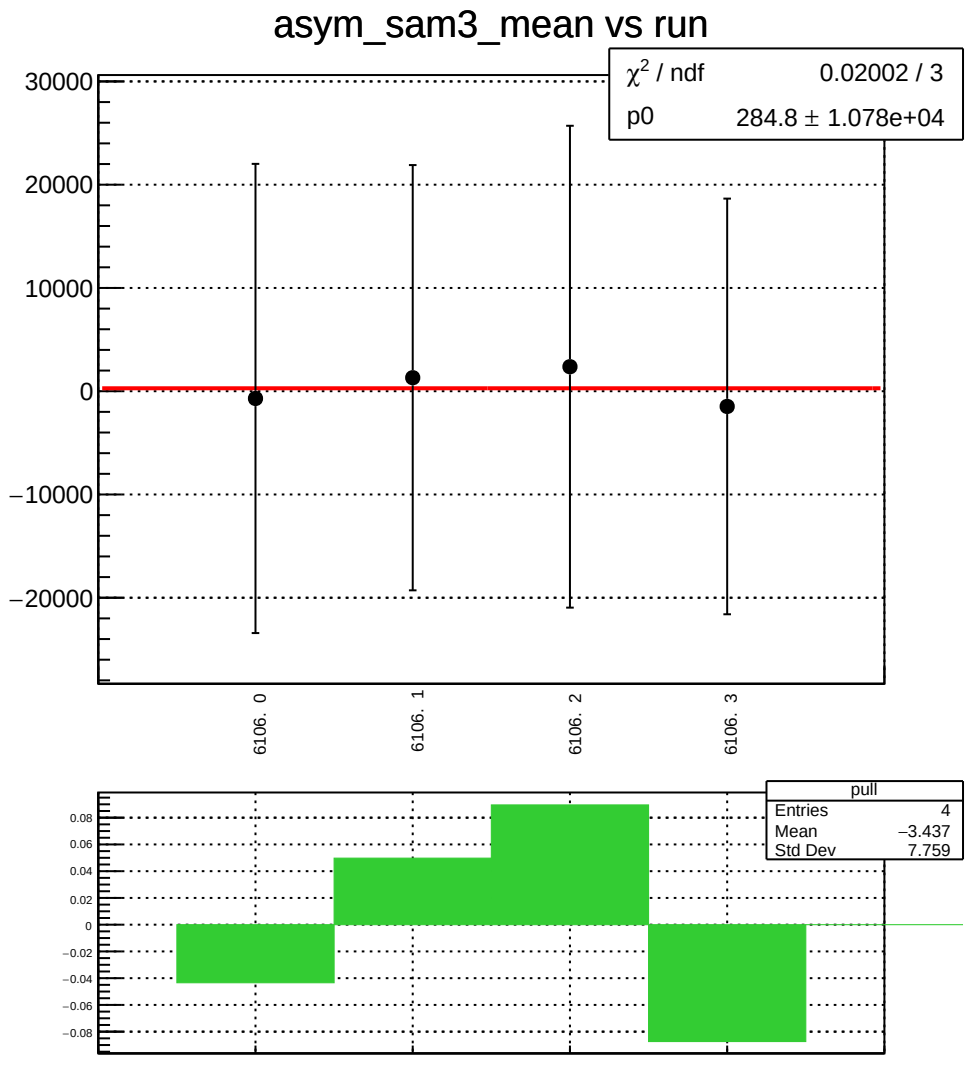

pull1D
Entries 4
Mean 0.00972
Std Dev 0.9601
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

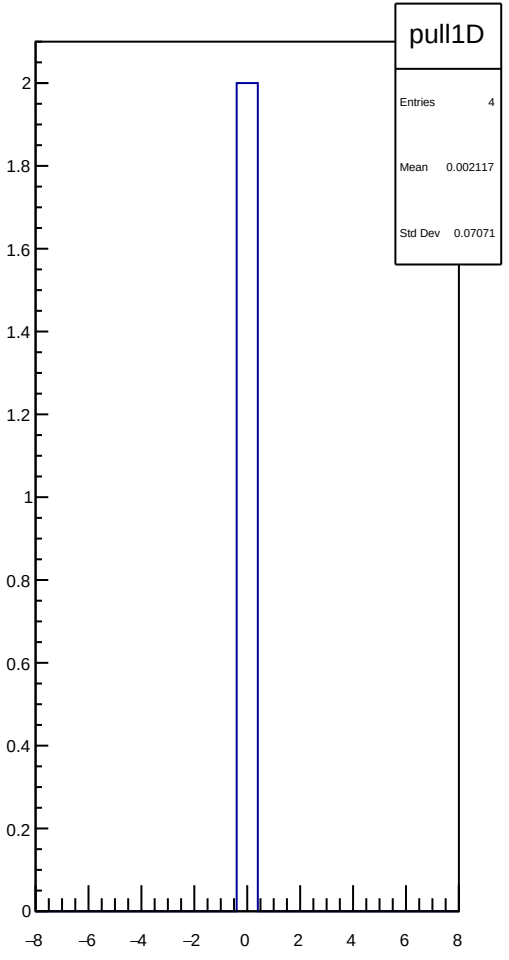

asym_sam1_rms vs run
χ² / ndf 31.6 / 3
p0 429.2 ± 1.589
445
440
435
430
425
420
415
6106. 0
6106. 1
6106. 2
6106. 3

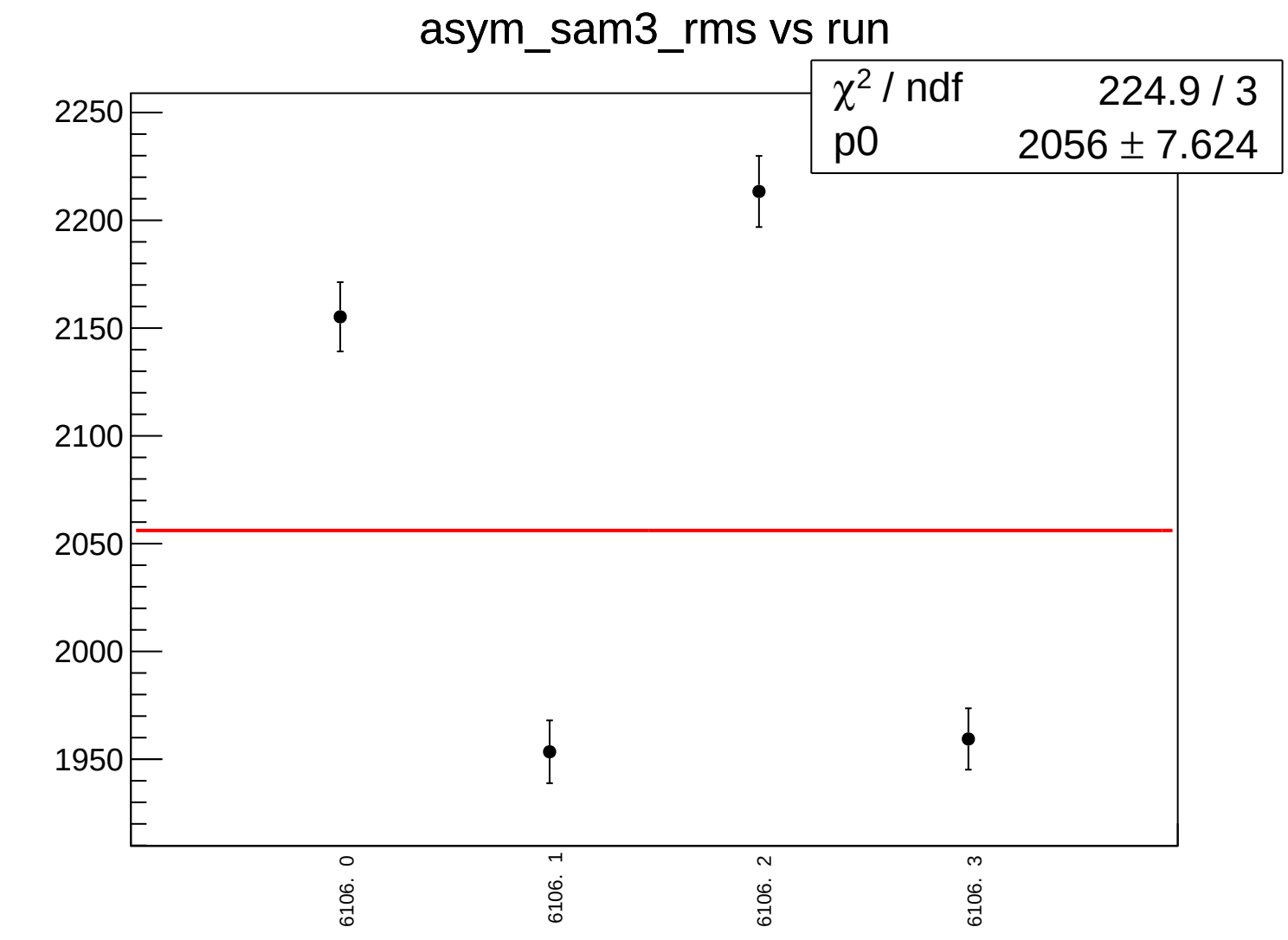

asym_sam2_mean vs run
χ² / ndf 0.9666 / 3
p0 3420 ± 2.081e+04
80000
60000
40000
20000
0
−20000
−40000
−60000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 3.159
Std Dev 6.904
0.8
0.6
0.4
0.2
0
−0.2
−0.4

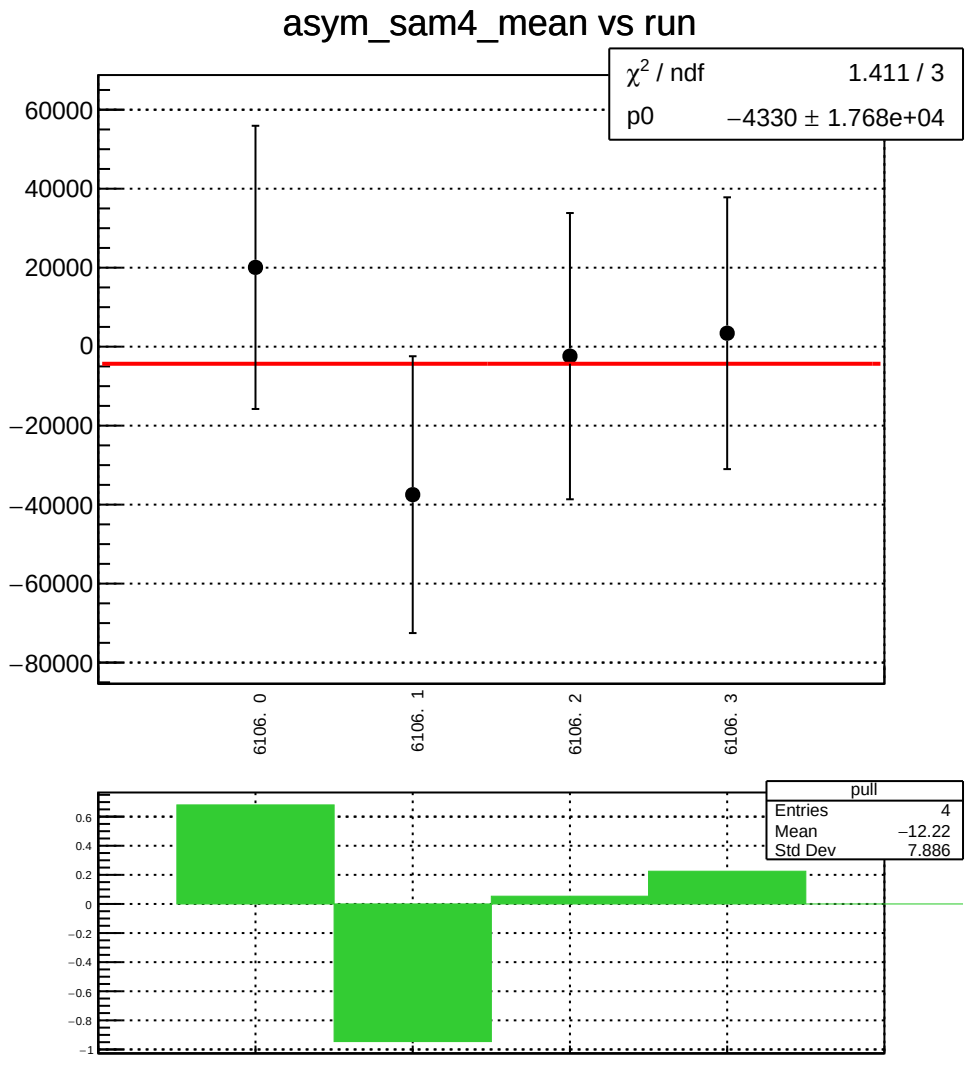

pull1D
Entries 4
Mean −0.008717
Std Dev 0.4915
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

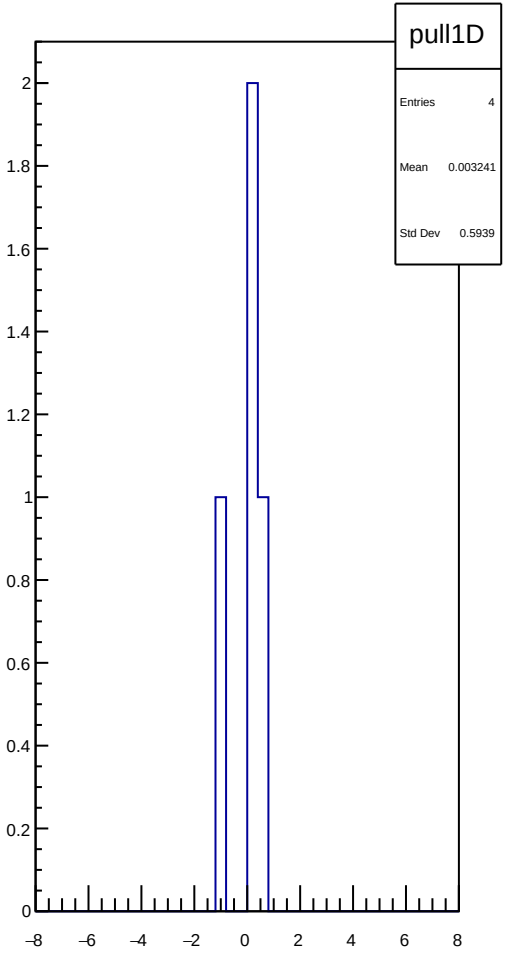

asym_sam2_rms vs run
χ² / ndf 189.7 / 3
p0 3970 ± 14.72
4300
4200
4100
4000
3900
3800
6106. 0
6106. 1
6106. 2
6106. 3

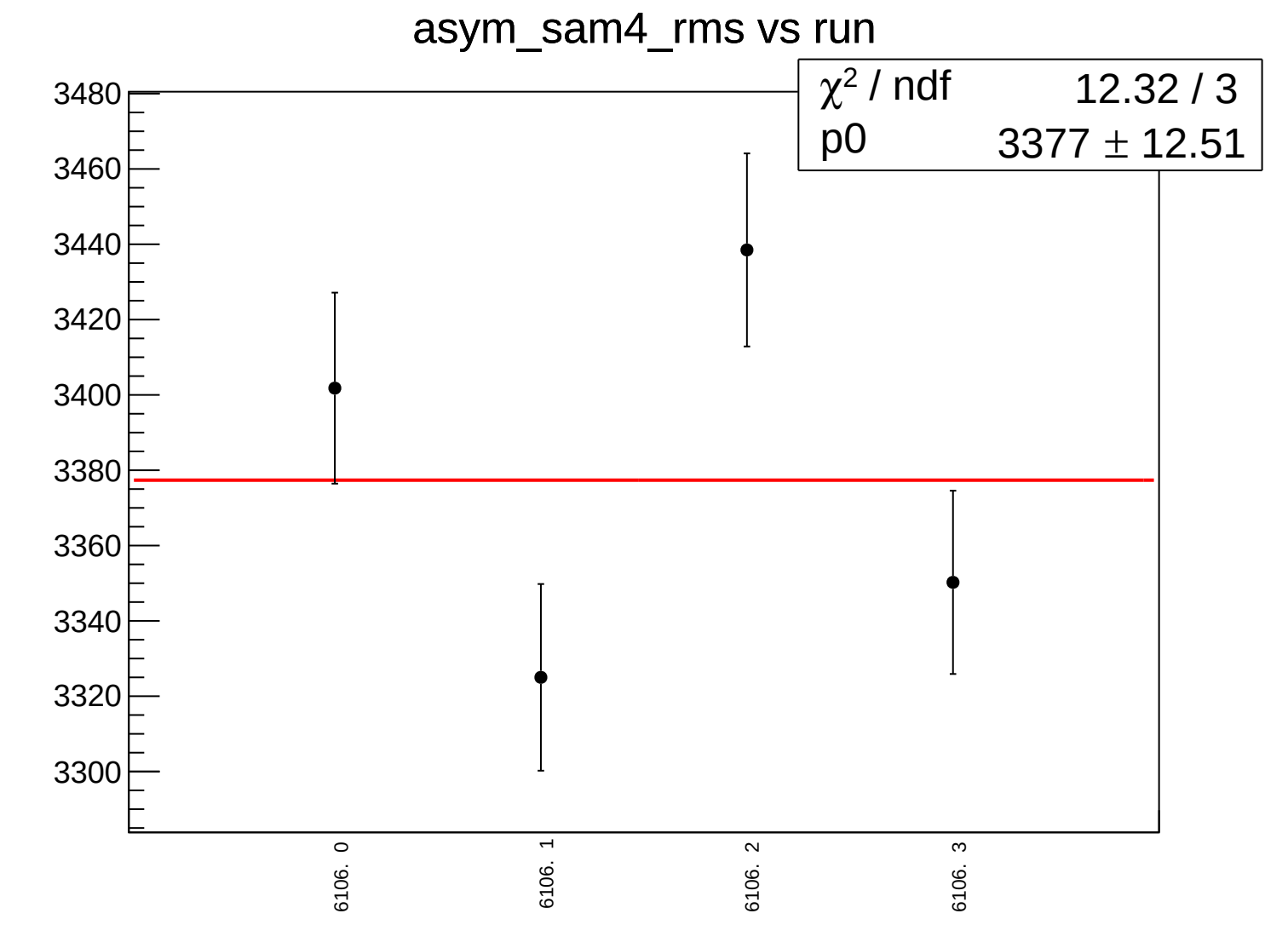

asym_sam3_mean vs run
χ² / ndf 0.02002 / 3
p0 284.8 ± 1.078e+04
30000
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.437
Std Dev 7.759
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08

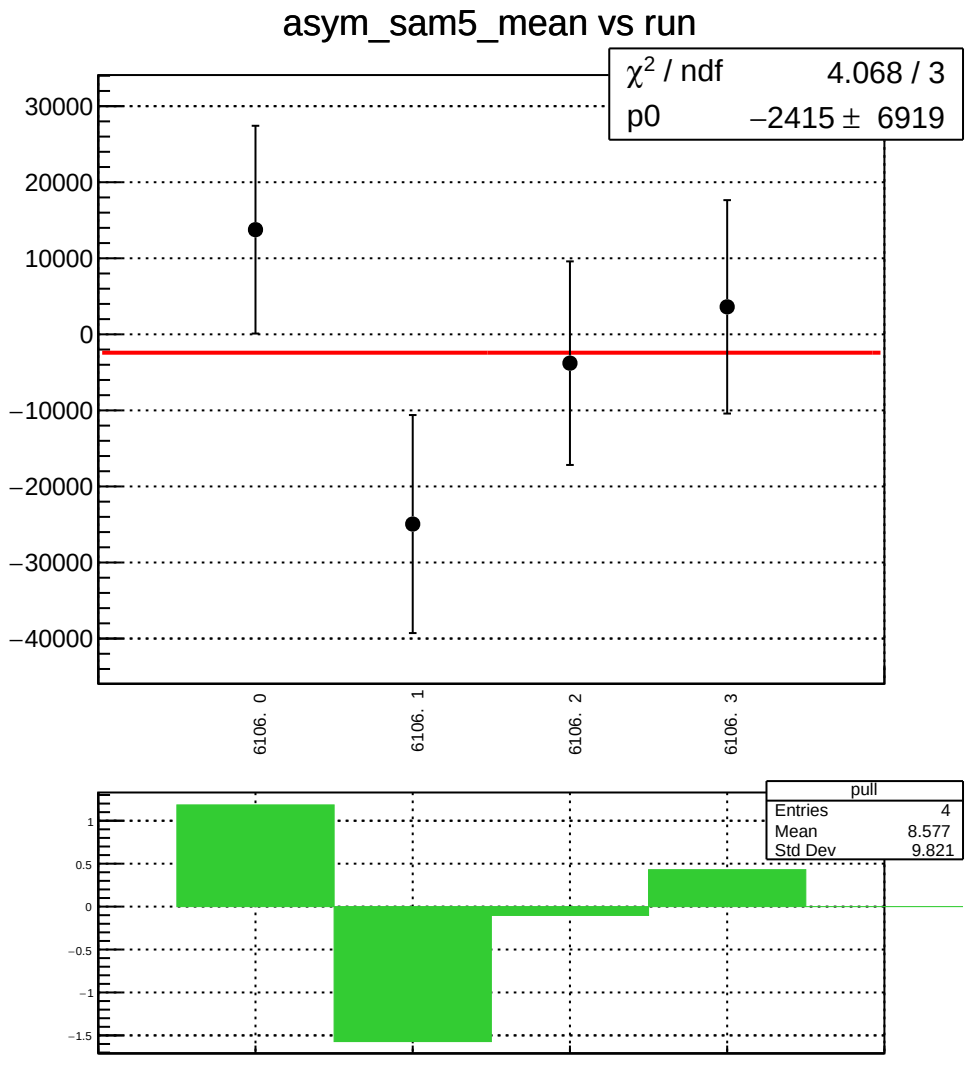

pull1D
Entries 4
Mean 0.002117
Std Dev 0.07071
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

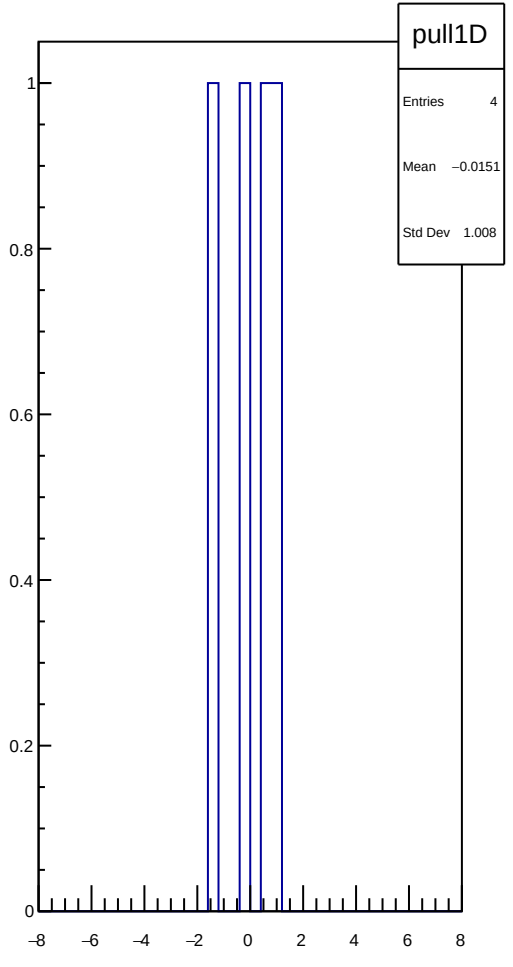

asym_sam3_rms vs run
χ² / ndf 224.9 / 3
p0 2056 ± 7.624
2250
2200
2150
2100
2050
2000
1950
6106. 0
6106. 1
6106. 2
6106. 3

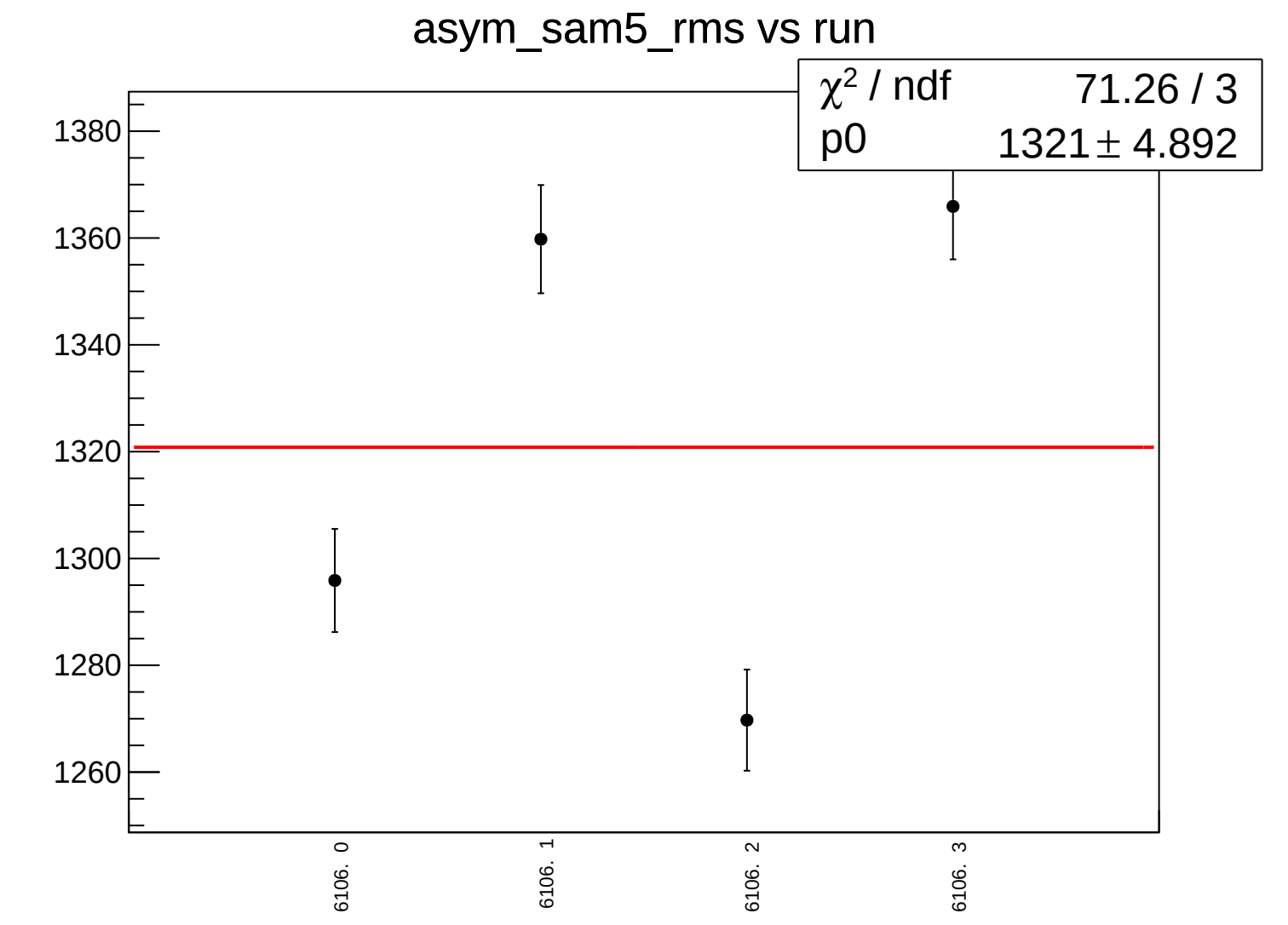

asym_sam4_mean vs run
χ² / ndf 1.411 / 3
p0 −4330 ± 1.768e+04
60000
40000
20000
0
−20000
−40000
−60000
−80000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −12.22
Std Dev 7.886
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

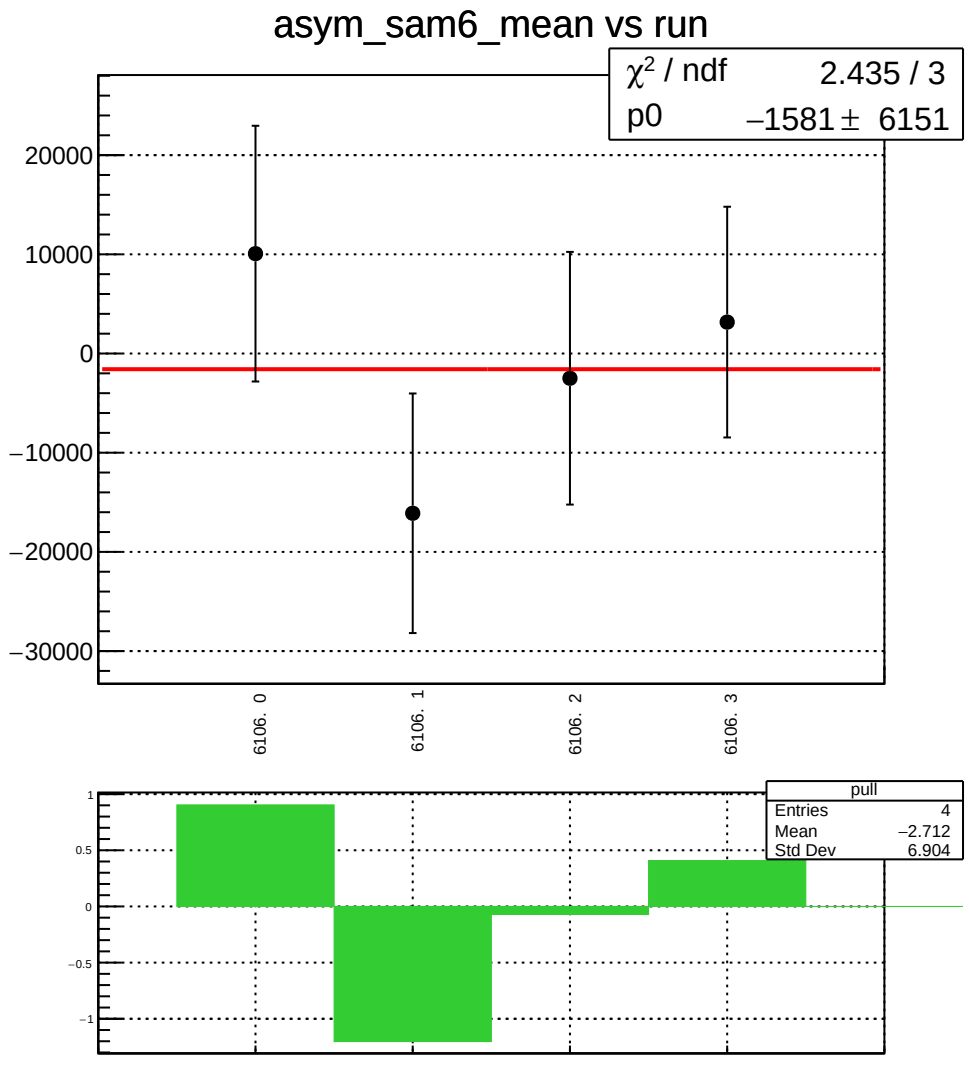

pull1D
Entries 4
Mean 0.003241
Std Dev 0.5939
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

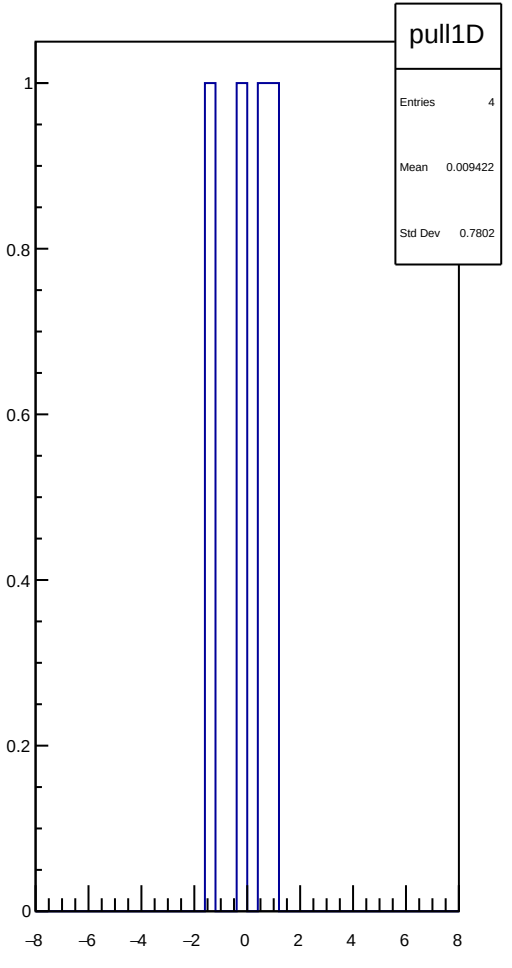

asym_sam4_rms vs run
χ² / ndf 12.32 / 3
p0 3377 ± 12.51
3480
3460
3440
3420
3400
3380
3360
3340
3320
3300
6106. 0
6106. 1
6106. 2
6106. 3

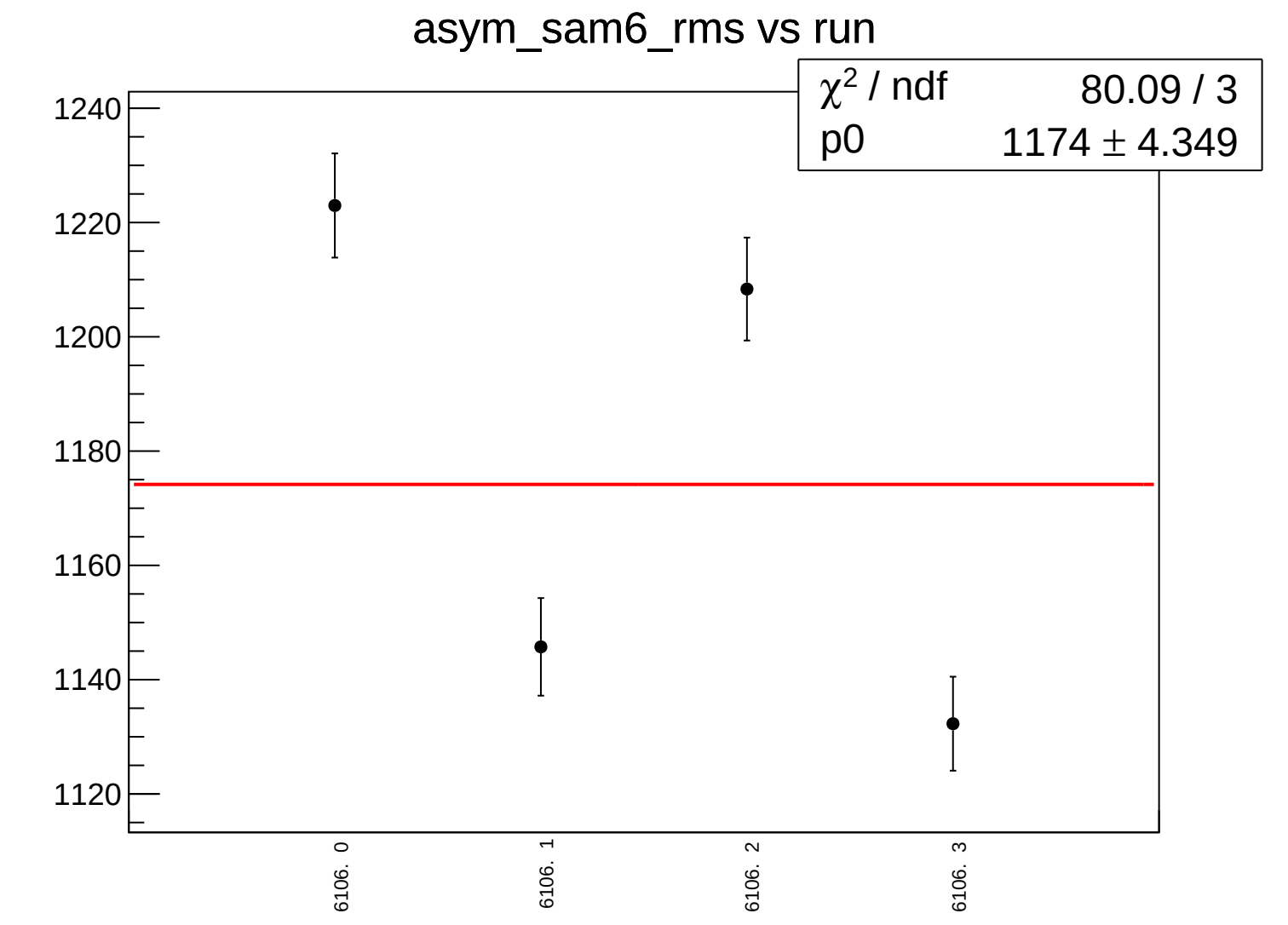

asym_sam5_mean vs run
χ² / ndf 4.068 / 3
p0 −2415 ± 6919
30000
20000
10000
0
−10000
−20000
−30000
−40000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 8.577
Std Dev 9.821
1
0.5
0
−0.5
−1
−1.5

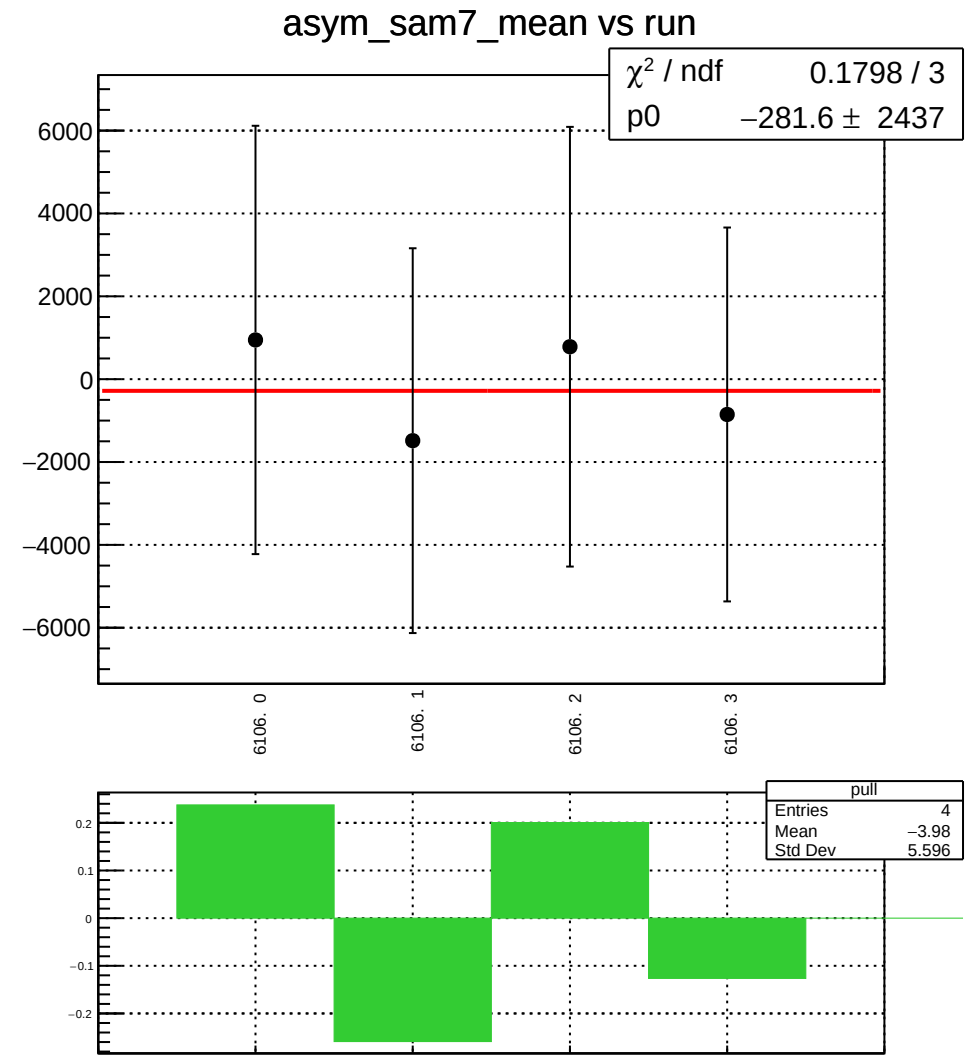

pull1D
Entries 4
Mean −0.0151
Std Dev 1.008
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

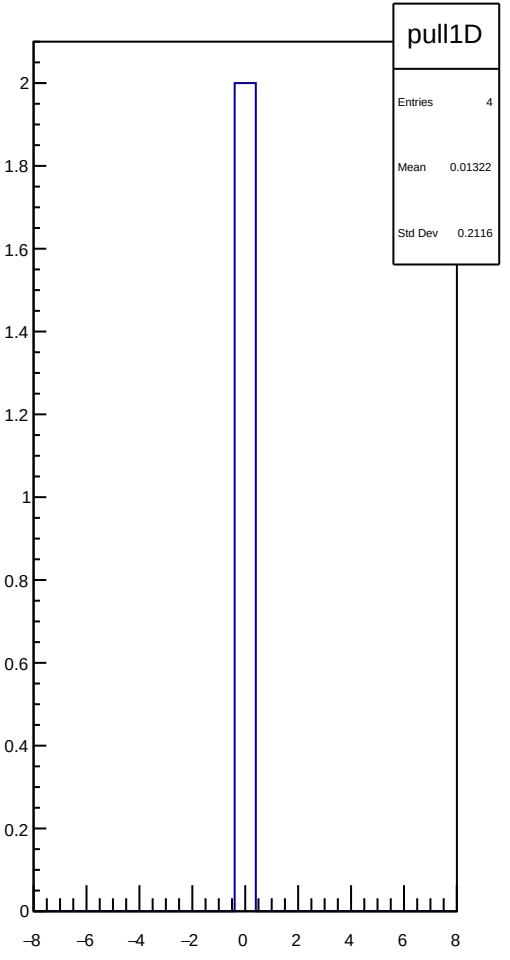

asym_sam5_rms vs run
χ² / ndf 71.26 / 3
p0 1321 ± 4.892
1380
1360
1340
1320
1300
1280
1260
6106. 0
6106. 1
6106. 2
6106. 3

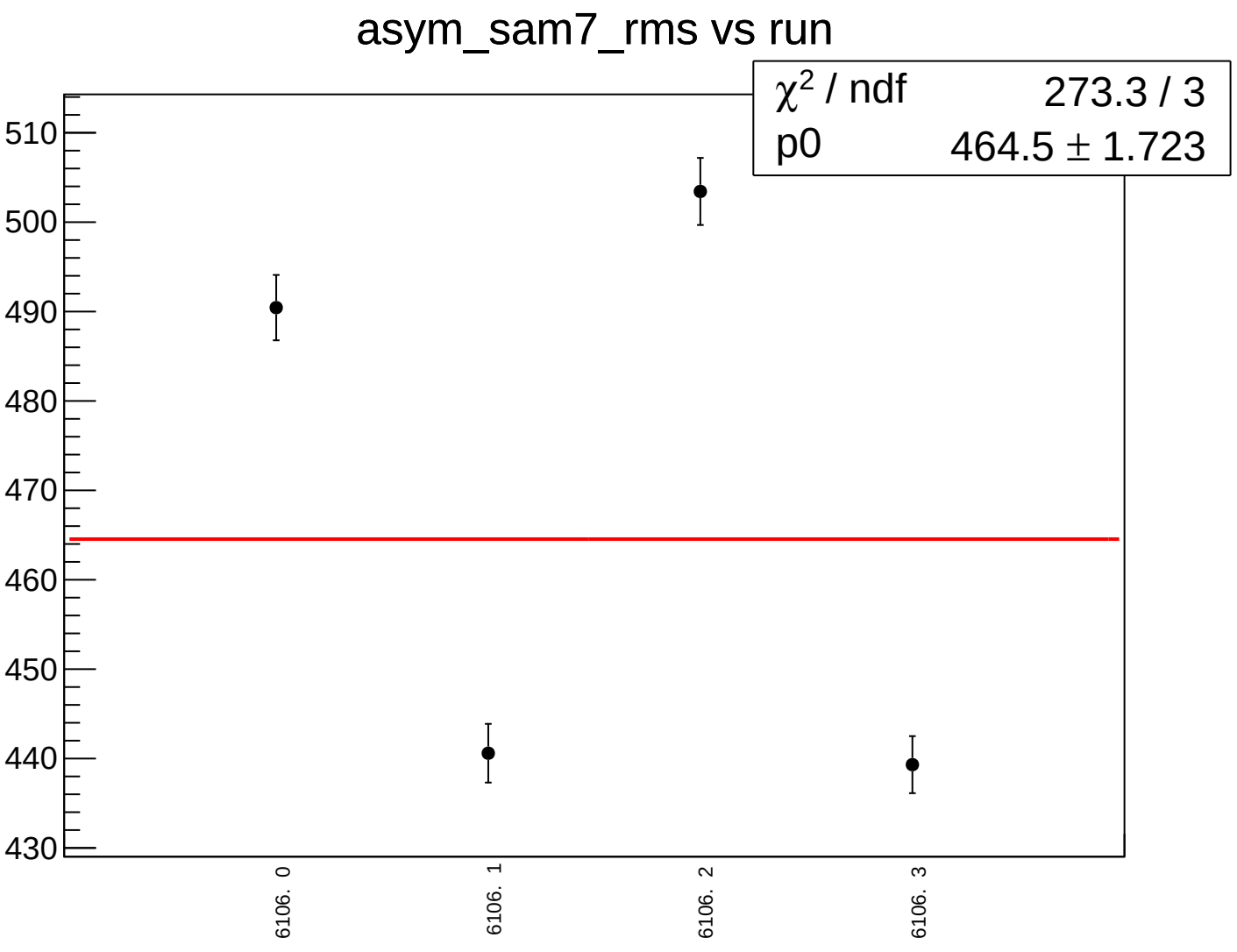

asym_sam6_mean vs run
χ² / ndf 2.435 / 3
p0 −1581 ± 6151
20000
10000
0
−10000
−20000
−30000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.712
Std Dev 6.904
1
0.5
0
−0.5
−1

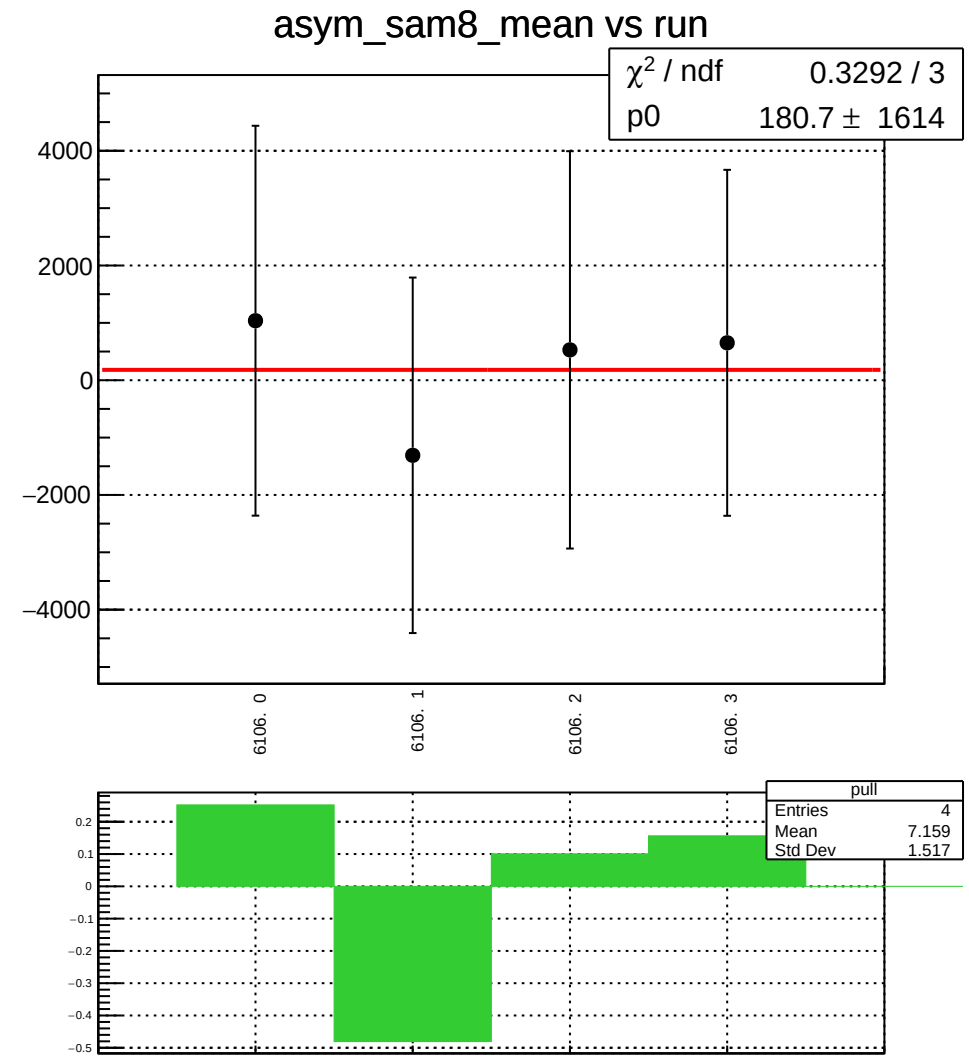

pull1D
Entries 4
Mean 0.009422
Std Dev 0.7802
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

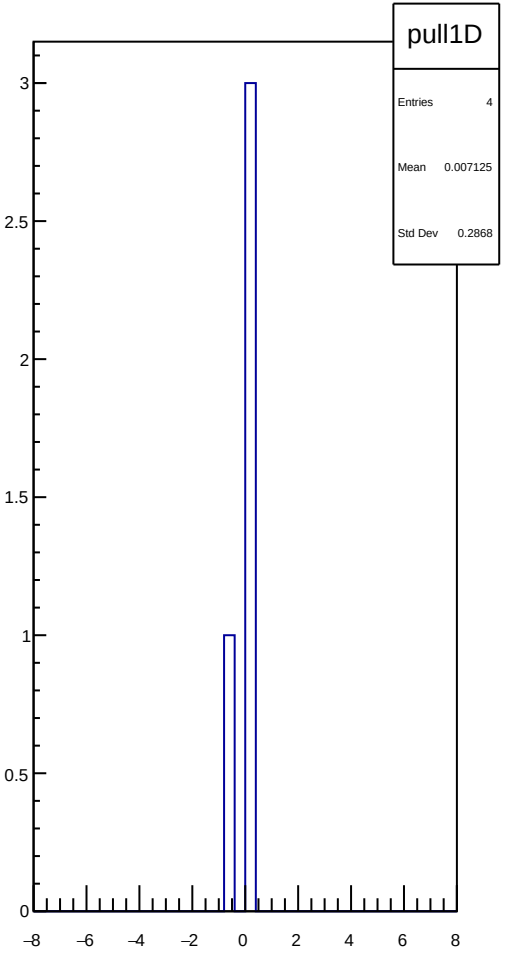

asym_sam6_rms vs run
χ² / ndf 80.09 / 3
p0 1174 ± 4.349
1240
1220
1200
1180
1160
1140
1120
6106. 0
6106. 1
6106. 2
6106. 3

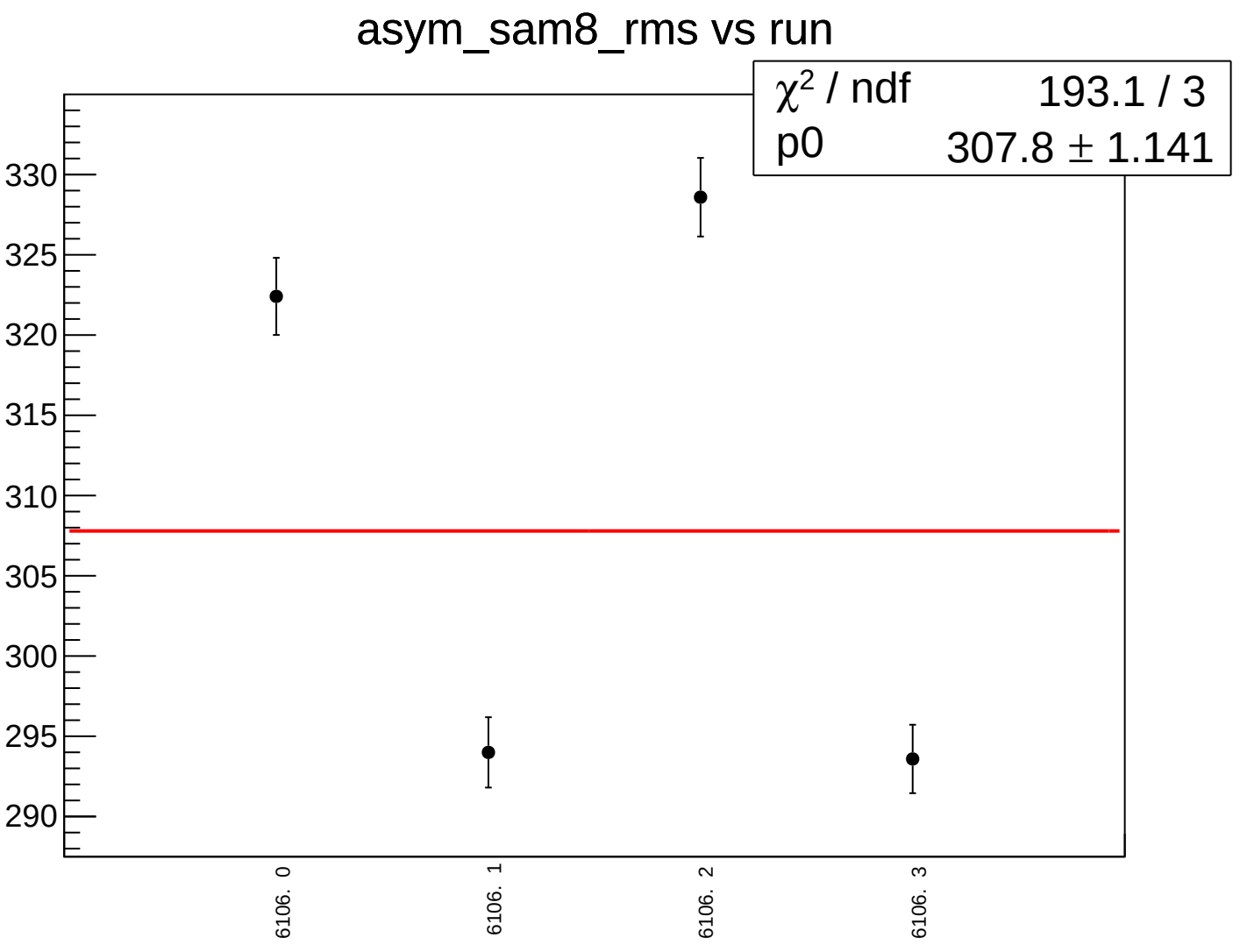

asym_sam7_mean vs run
χ² / ndf 0.1798 / 3
p0 −281.6 ± 2437
6000
4000
2000
0
−2000
−4000
−6000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.98
Std Dev 5.596
0.2
0.1
0
−0.1
−0.2

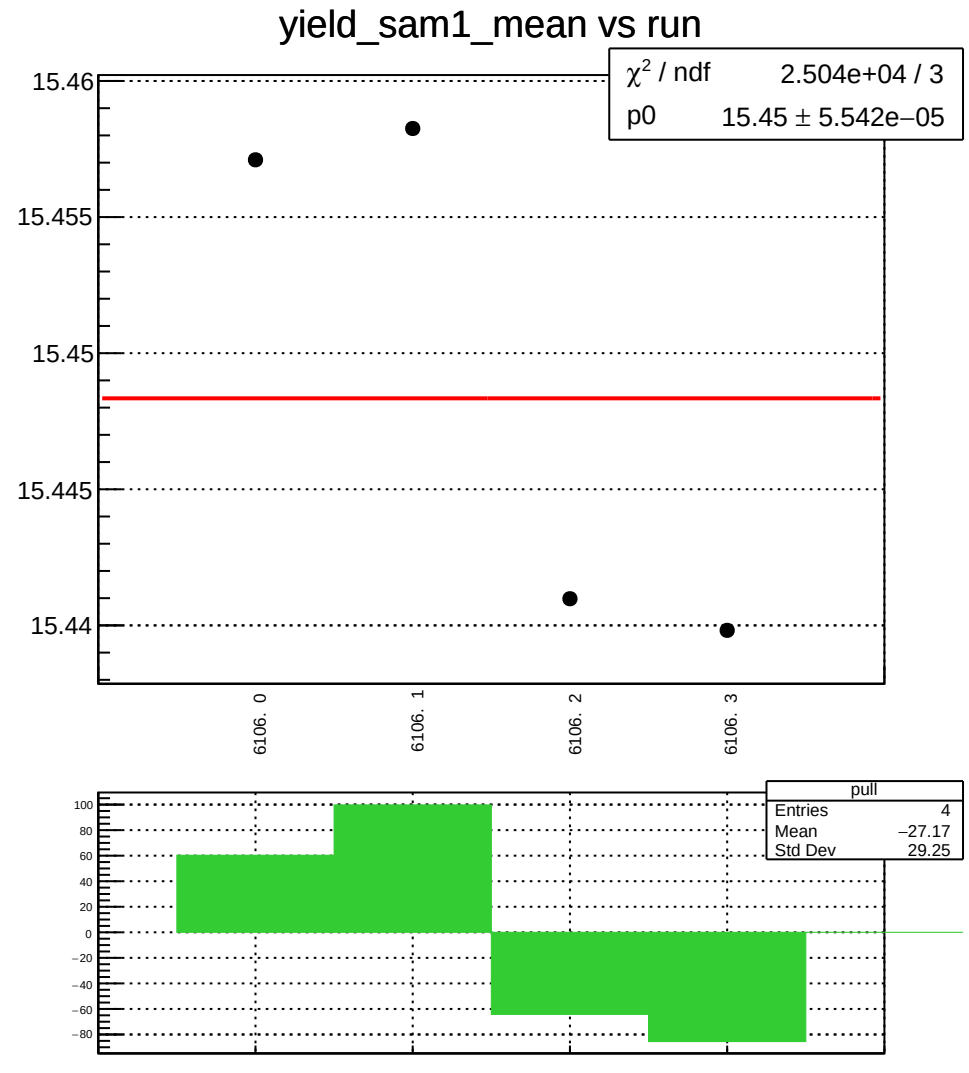

pull1D
Entries 4
Mean 0.01322
Std Dev 0.2116
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

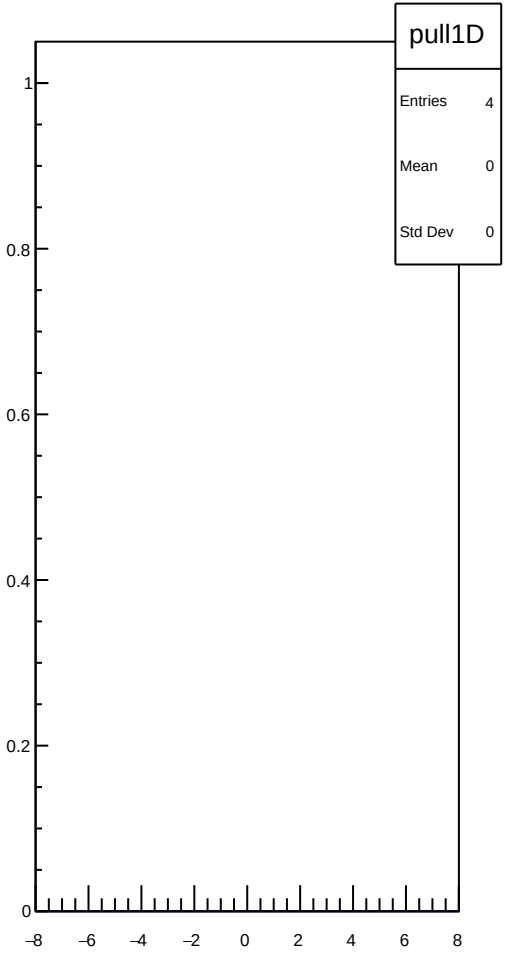

asym_sam7_rms vs run
χ² / ndf 273.3 / 3
p0 464.5 ± 1.723
510
500
490
480
470
460
450
440
430
6106. 0
6106. 1
6106. 2
6106. 3

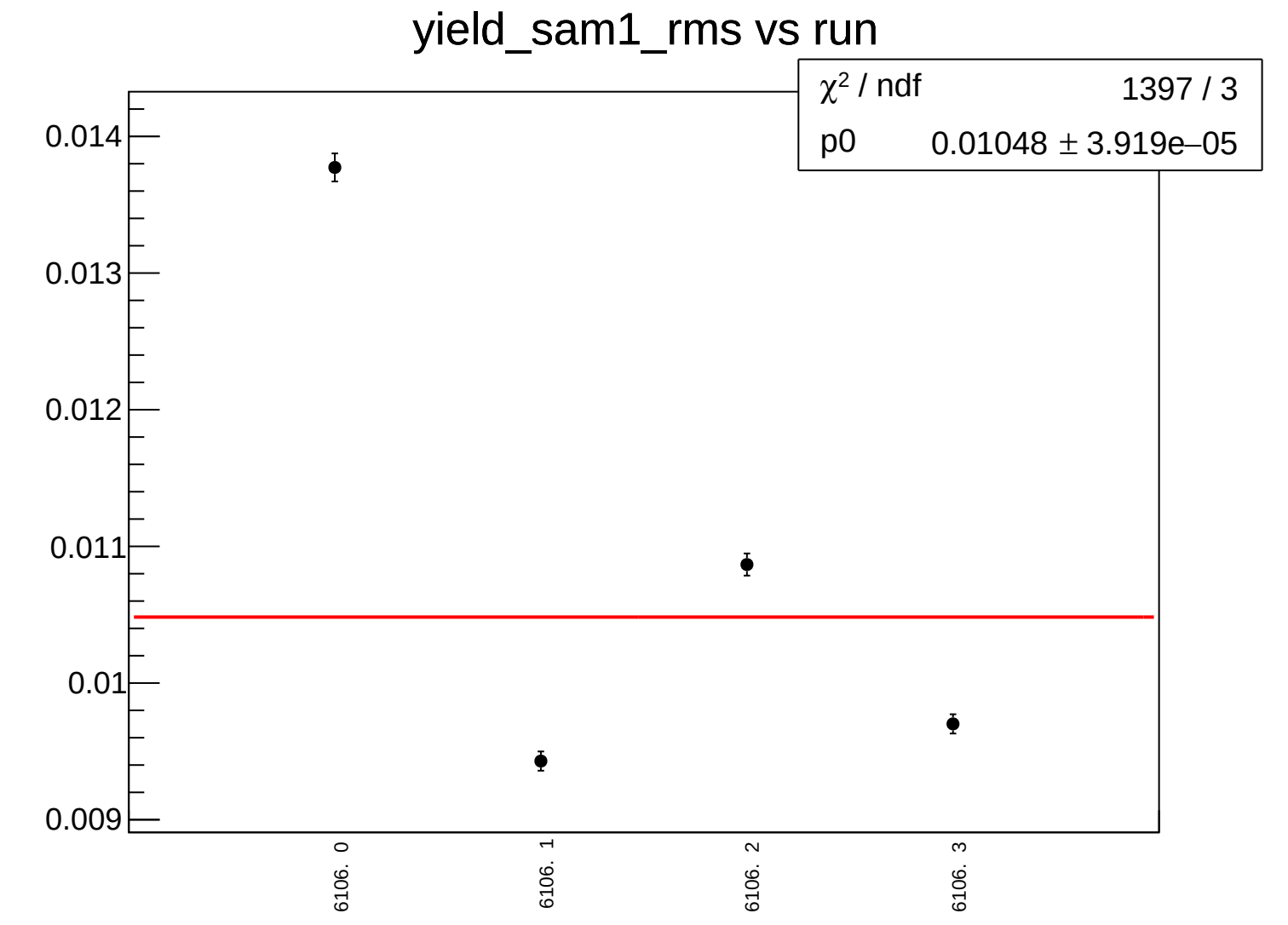

asym_sam8_mean vs run
χ² / ndf 0.3292 / 3
p0 180.7 ± 1614
4000
2000
0
−2000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 7.159
Std Dev 1.517
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

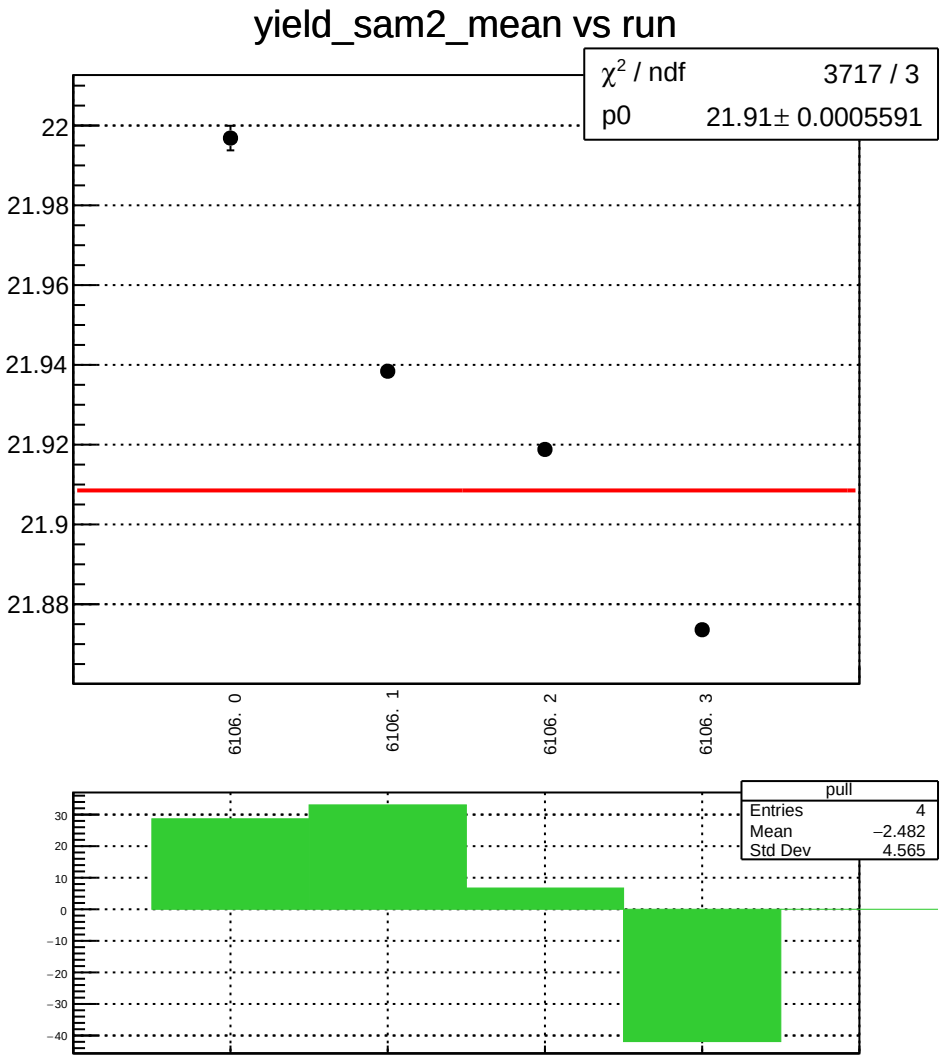

pull1D
Entries 4
Mean 0.007125
Std Dev 0.2868
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

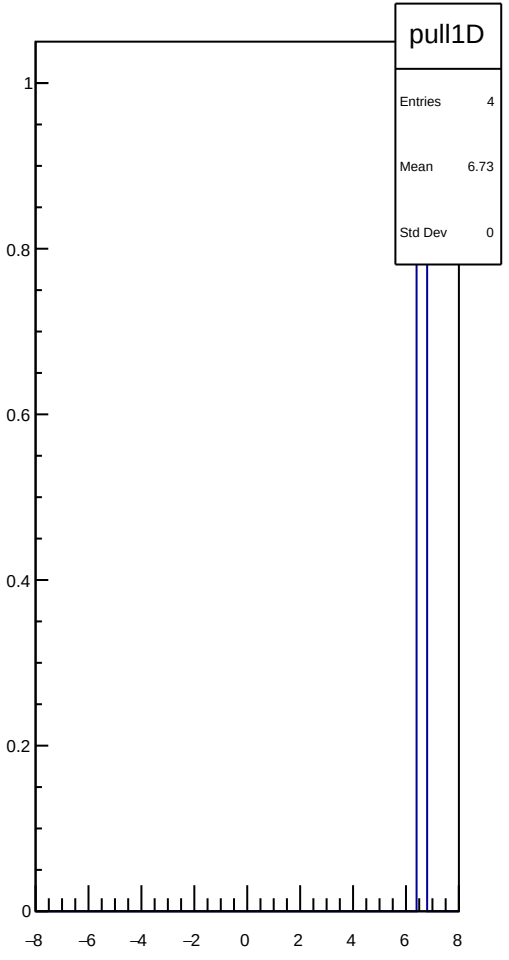

asym_sam8_rms vs run
χ² / ndf 193.1 / 3
p0 307.8 ± 1.141
330
325
320
315
310
305
300
295
290
6106. 0
6106. 1
6106. 2
6106. 3

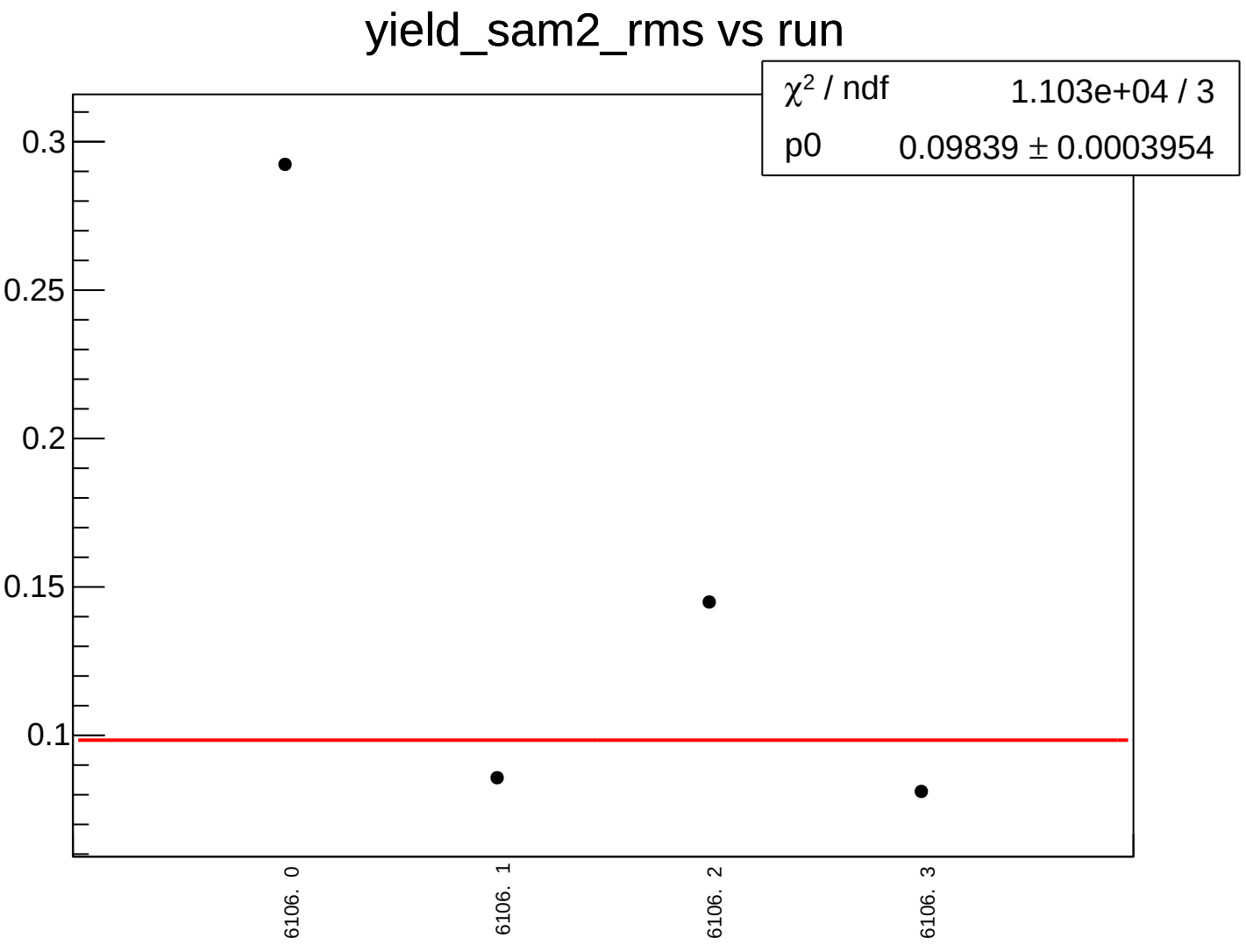

yield_sam1_mean vs run
χ² / ndf 2.504e+04 / 3
p0 15.45 ± 5.542e−05
15.46
15.455
15.45
15.445
15.44
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −27.17
Std Dev 29.25
100
80
60
40
20
0
−20
−40
−60
−80

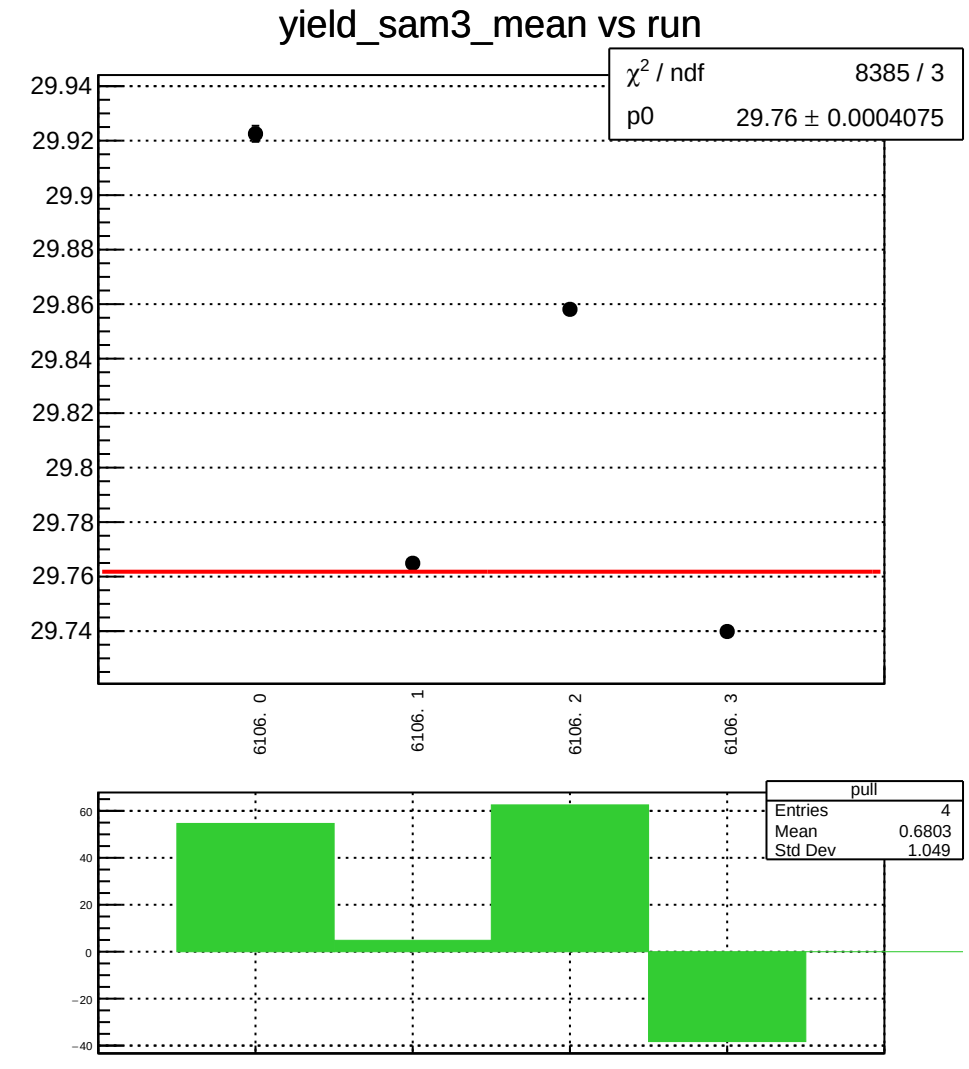

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

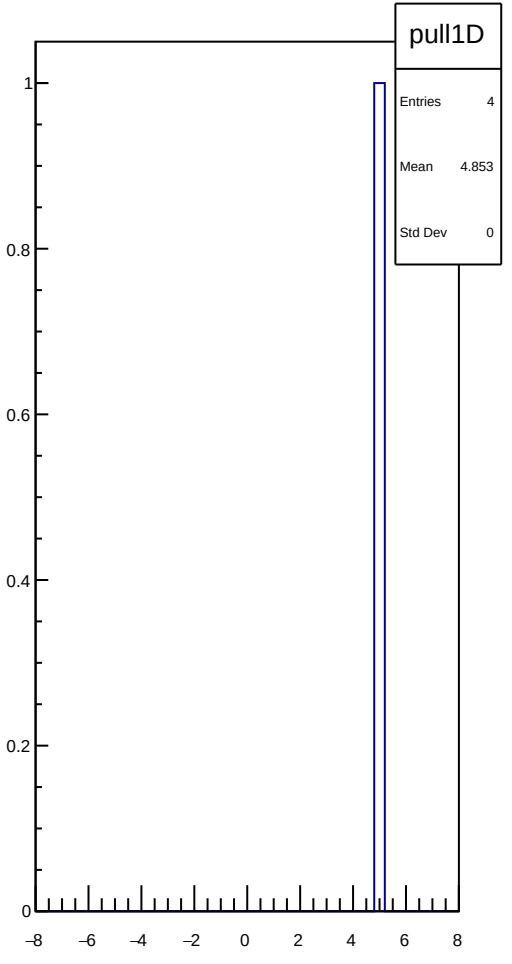

yield_sam1_rms vs run
χ² / ndf 1397 / 3
p0 0.01048 ± 3.919e–05
0.014
0.013
0.012
0.011
0.01
0.009
6106. 0
6106. 1
6106. 2
6106. 3

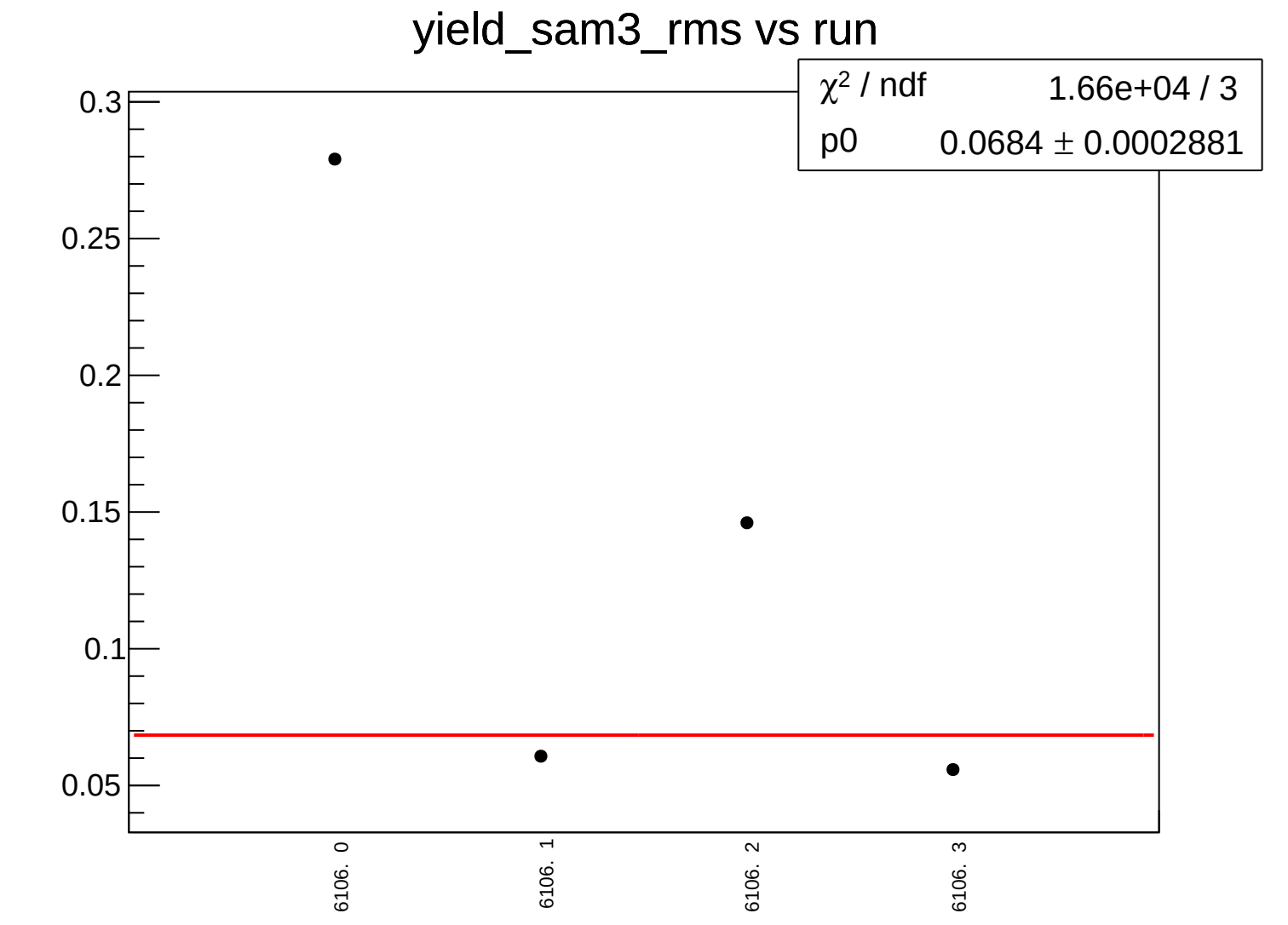

yield_sam2_mean vs run
χ² / ndf 3717 / 3
p0 21.91± 0.0005591
22
21.98
21.96
21.94
21.92
21.9
21.88
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.482
Std Dev 4.565
30
20
10
0
−10
−20
−30
−40

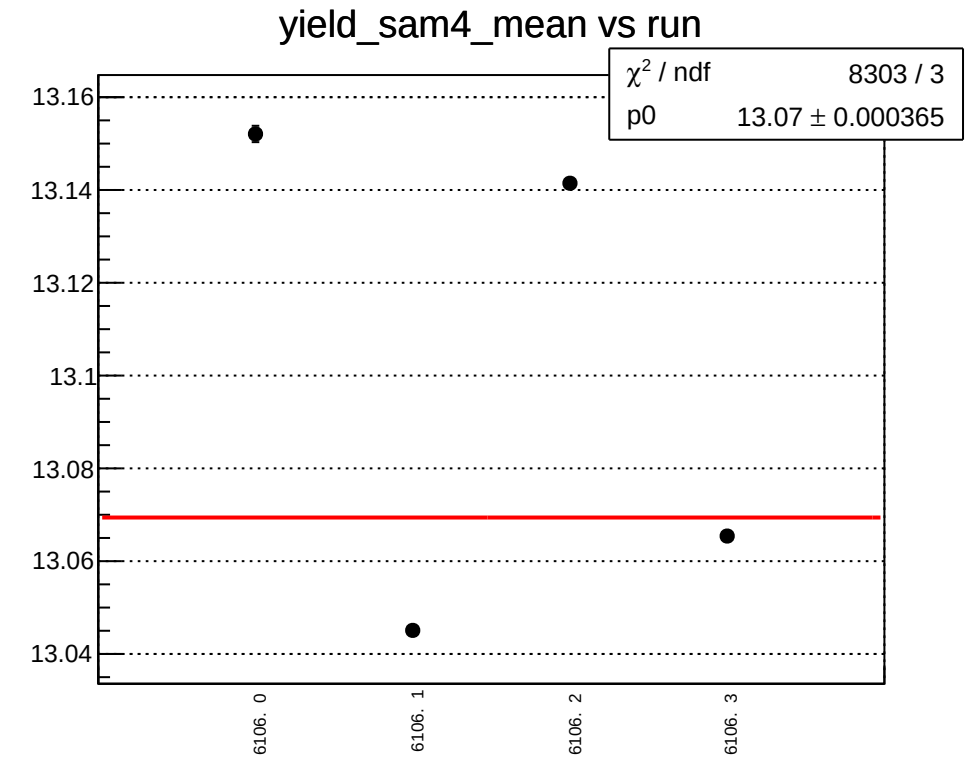

pull1D
Entries 4
Mean 6.73
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

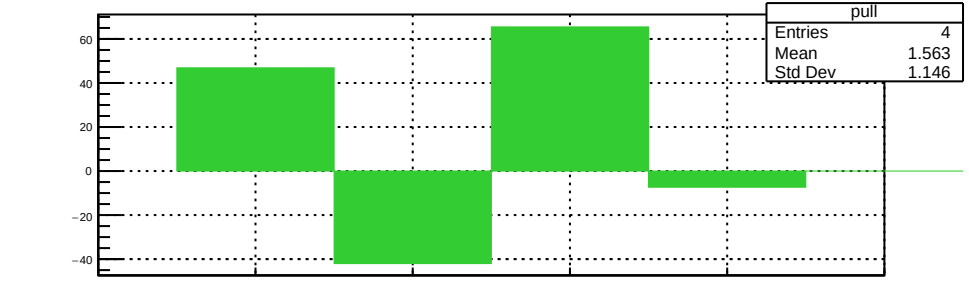

yield_sam2_rms vs run
χ² / ndf 1.103e+04 / 3
p0 0.09839 ± 0.0003954
0.3
0.25
0.2
0.15
0.1
6106. 0
6106. 1
6106. 2
6106. 3

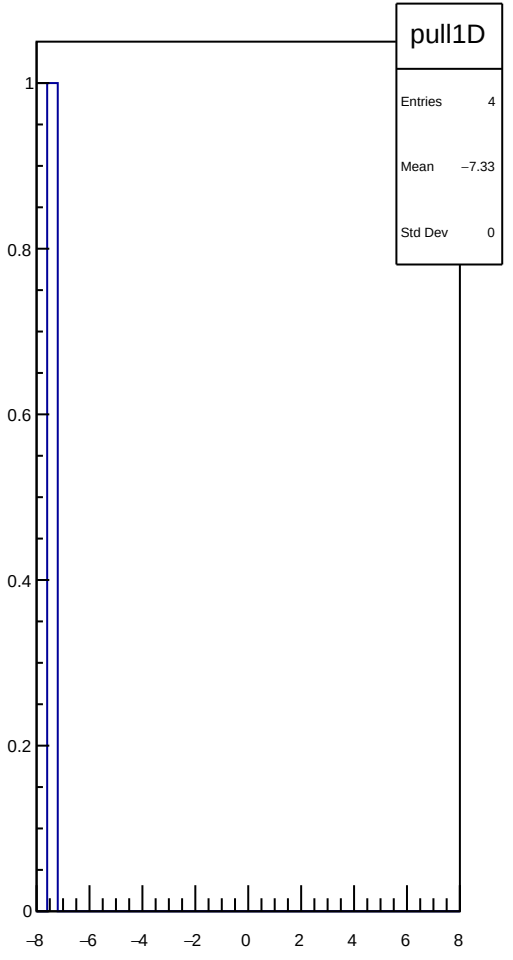

yield_sam3_mean vs run
χ² / ndf 8385 / 3
p0 29.76 ± 0.0004075
29.94
29.92
29.9
29.88
29.86
29.84
29.82
29.8
29.78
29.76
29.74
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.6803
Std Dev 1.049
60
40
20
0
−20
−40

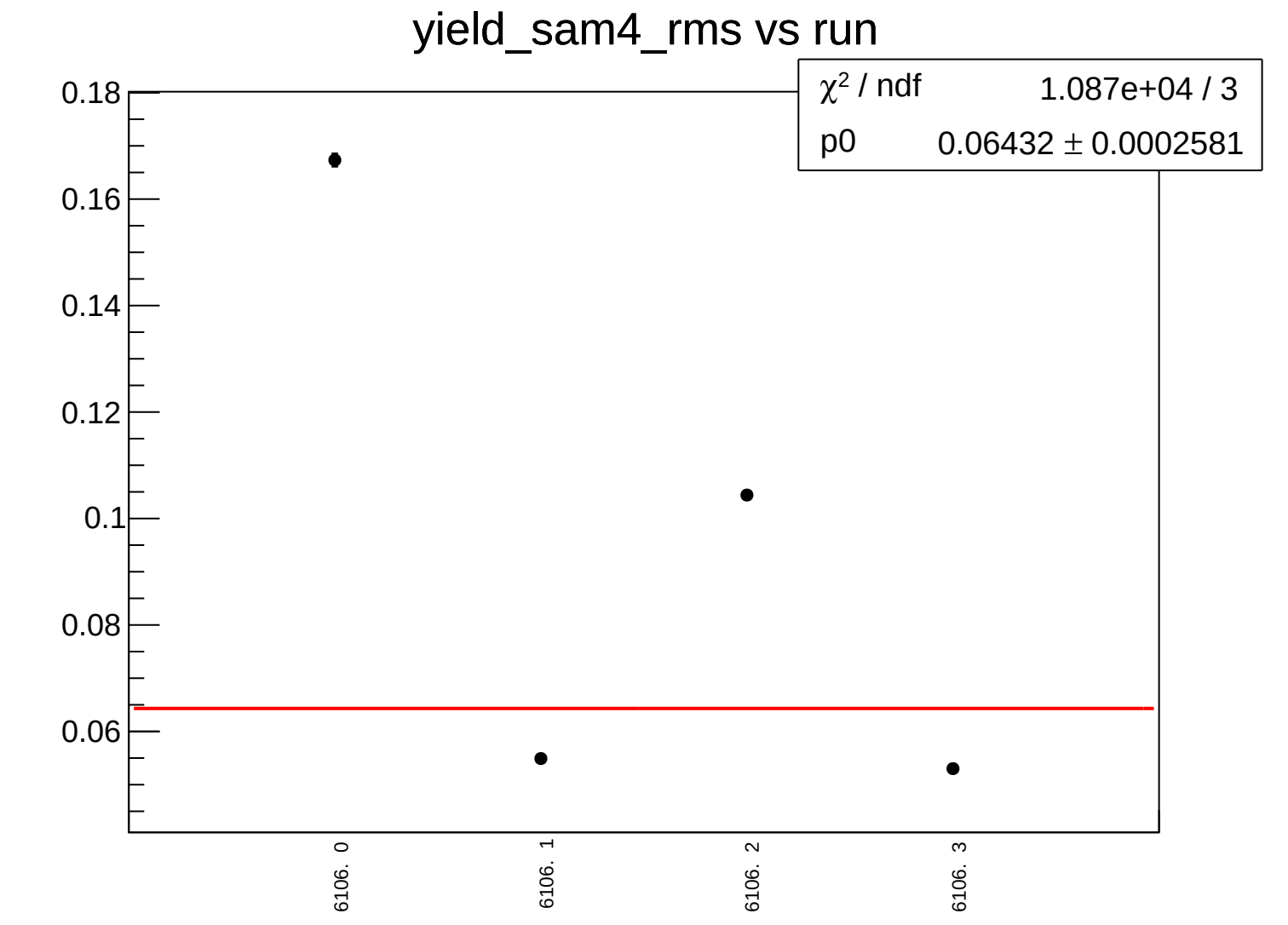

pull1D
Entries 4
Mean 4.853
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

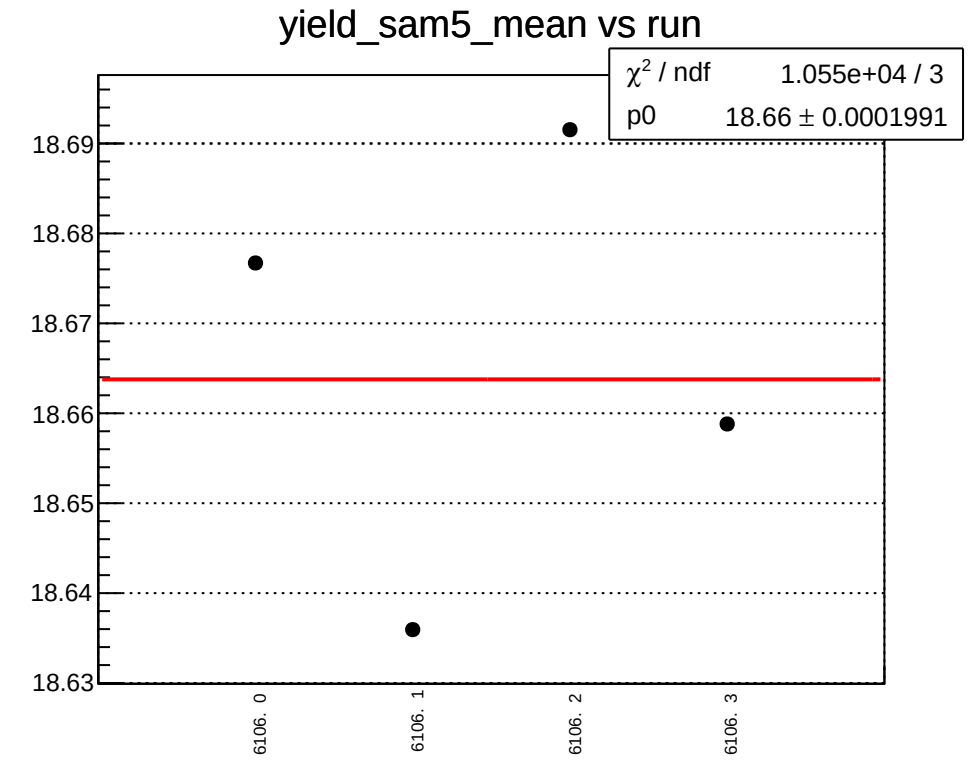

yield_sam3_rms vs run
χ² / ndf 1.66e+04 / 3
p0 0.0684 ± 0.0002881
0.3
0.25
0.2
0.15
0.1
0.05
6106. 0
6106. 1
6106. 2
6106. 3

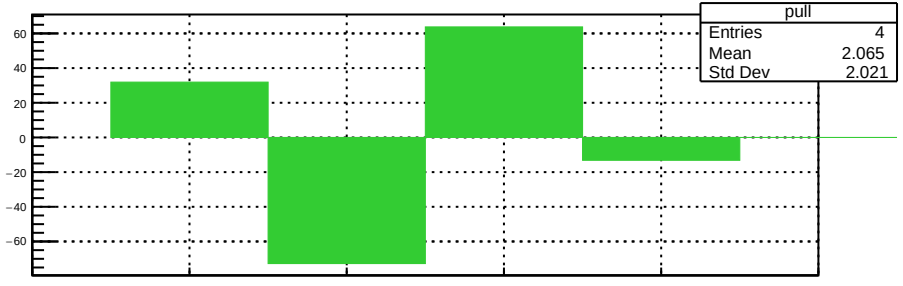

yield_sam4_mean vs run
χ² / ndf 8303 / 3
p0 13.07 ± 0.000365
13.16
13.14
13.12
13.1
13.08
13.06
13.04
6106. 0
6106. 1
6106. 2
6106. 3

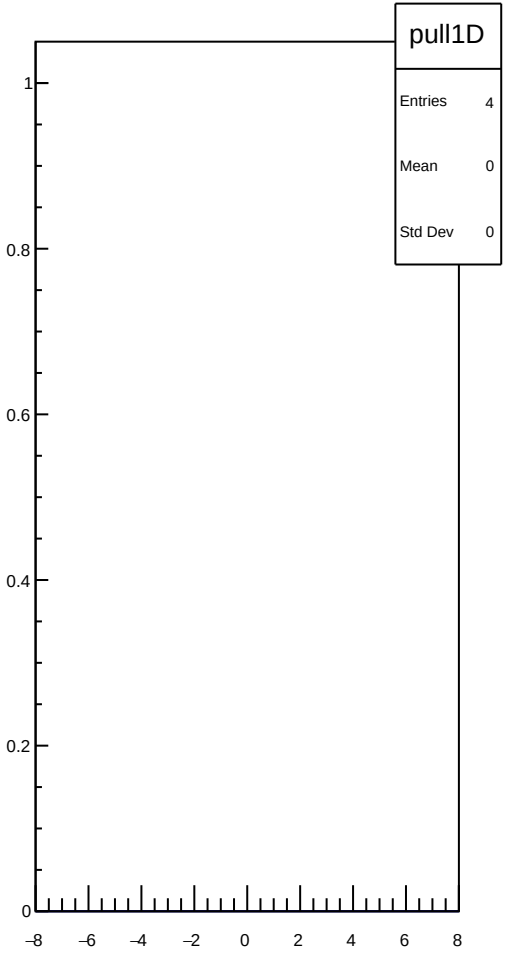

pull
Entries 4
Mean 1.563
Std Dev 1.146
60
40
20
0
−20
−40

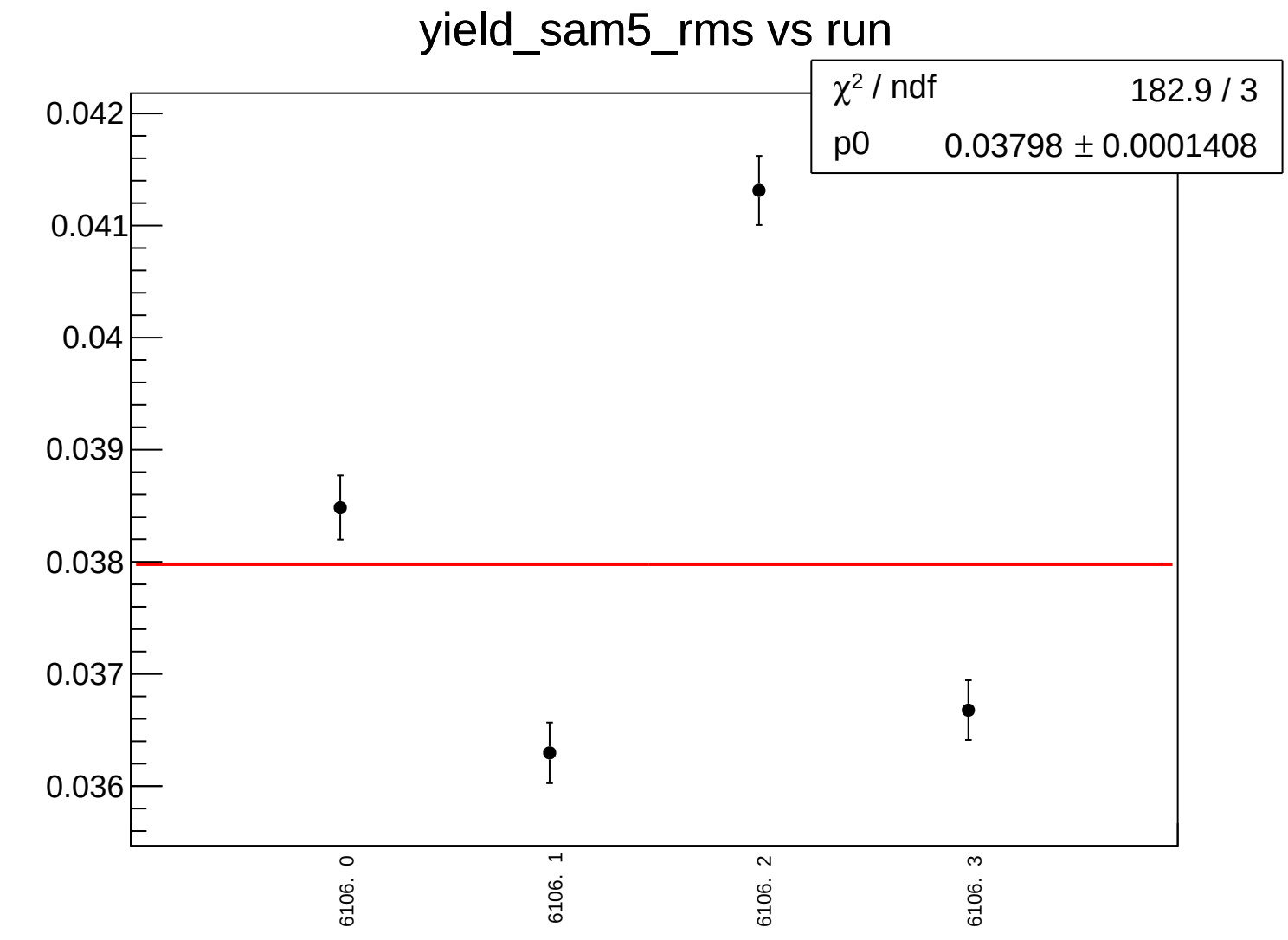

pull1D
Entries 4
Mean −7.33
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

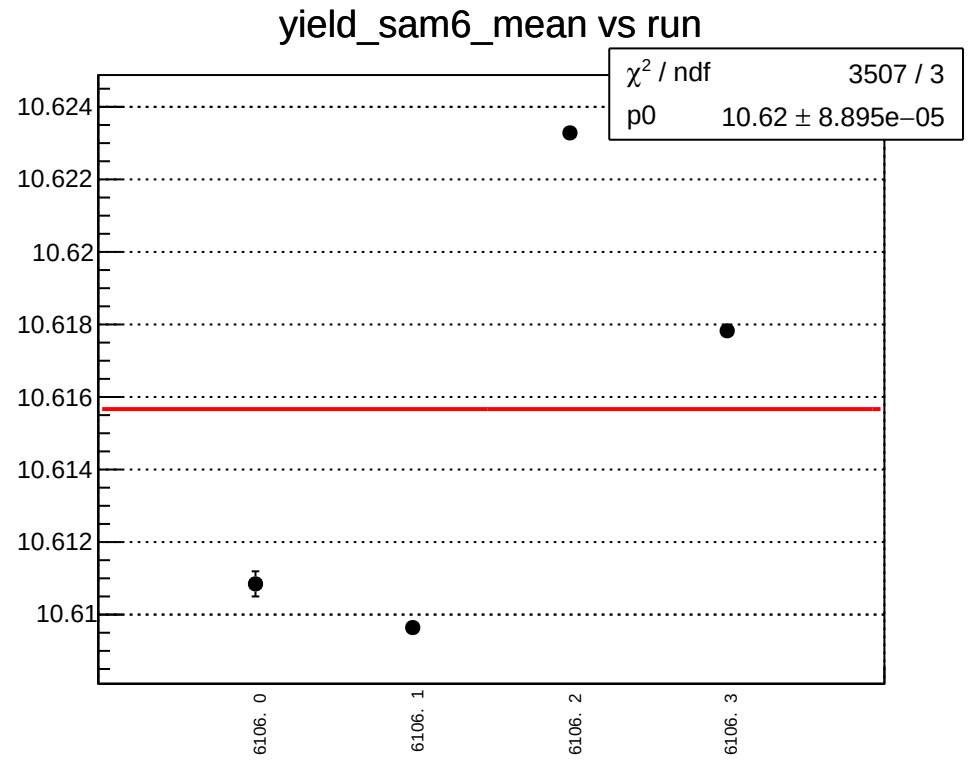

yield_sam4_rms vs run
χ² / ndf 1.087e+04 / 3
p0 0.06432 ± 0.0002581
0.18
0.16
0.14
0.12
0.1
0.08
0.06
6106. 0
6106. 1
6106. 2
6106. 3

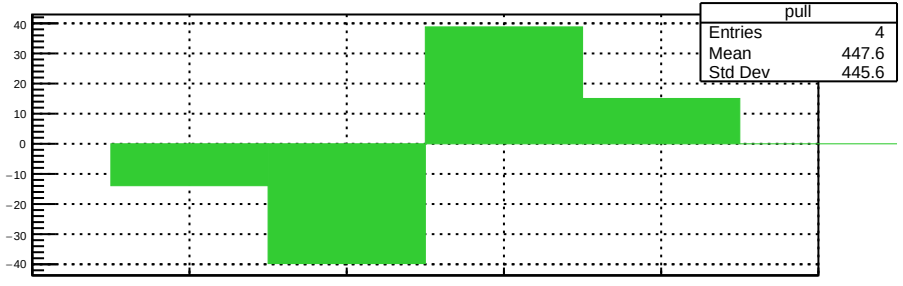

yield_sam5_mean vs run
χ² / ndf 1.055e+04 / 3
p0 18.66 ± 0.0001991
18.69
18.68
18.67
18.66
18.65
18.64
18.63
6106. 0
6106. 1
6106. 2
6106. 3

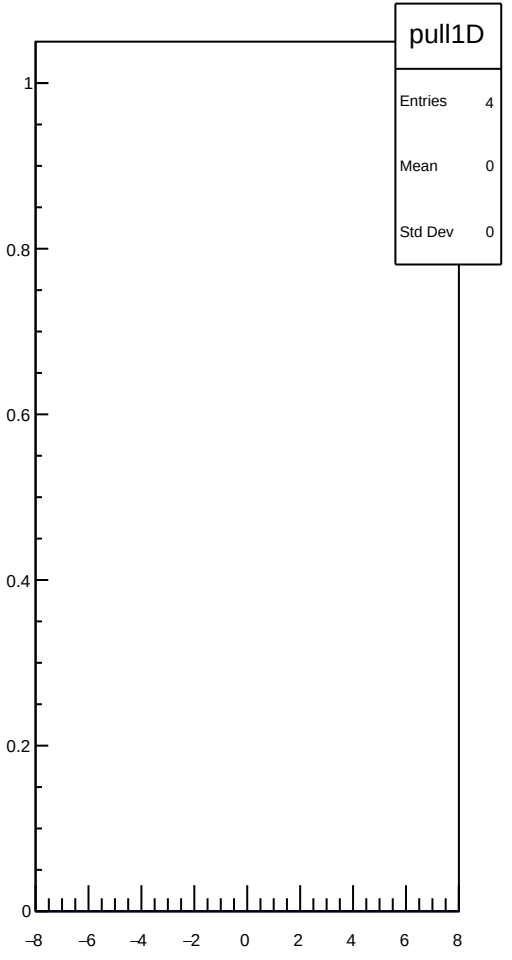

pull
Entries 4
Mean 2.065
Std Dev 2.021
60
40
20
0
−20
−40
−60

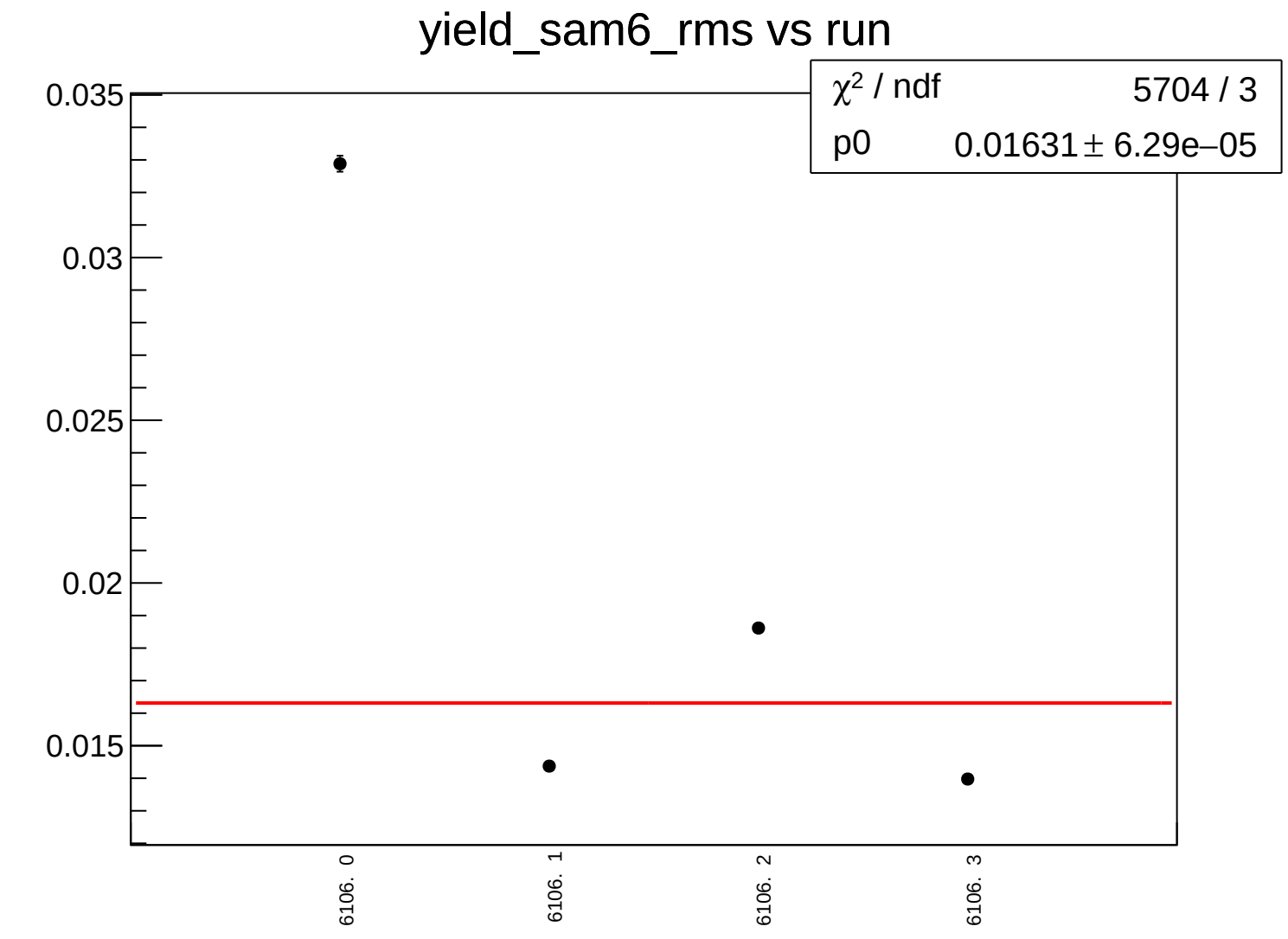

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

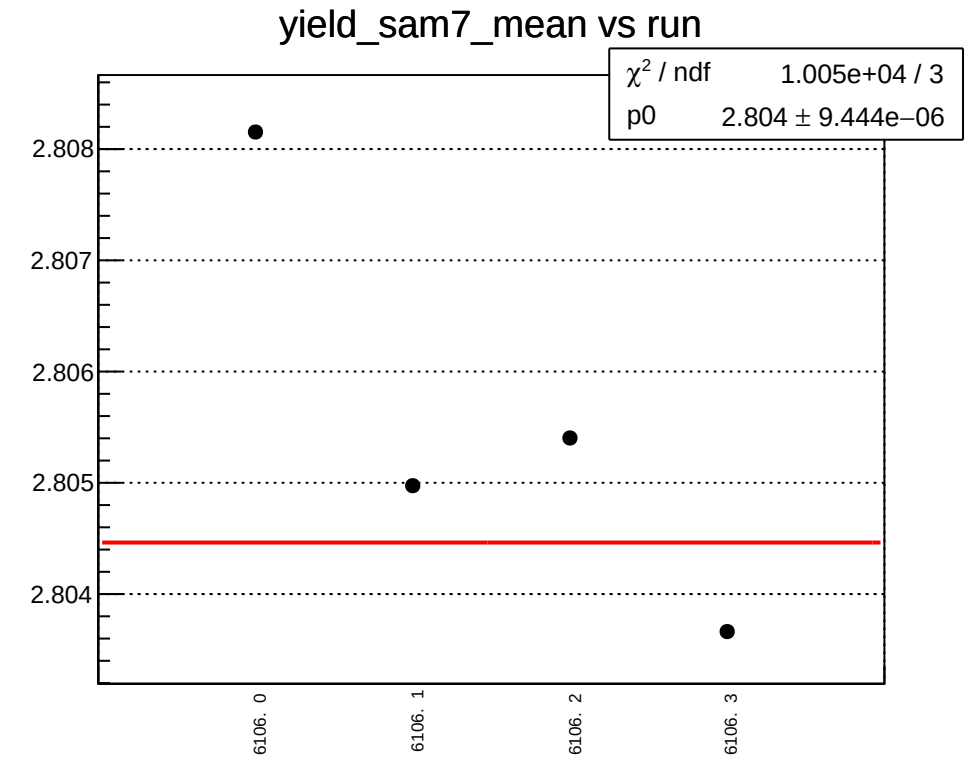

yield_sam5_rms vs run
χ² / ndf 182.9 / 3
p0 0.03798 ± 0.0001408
0.042
0.041
0.04
0.039
0.038
0.037
0.036
6106. 0
6106. 1
6106. 2
6106. 3

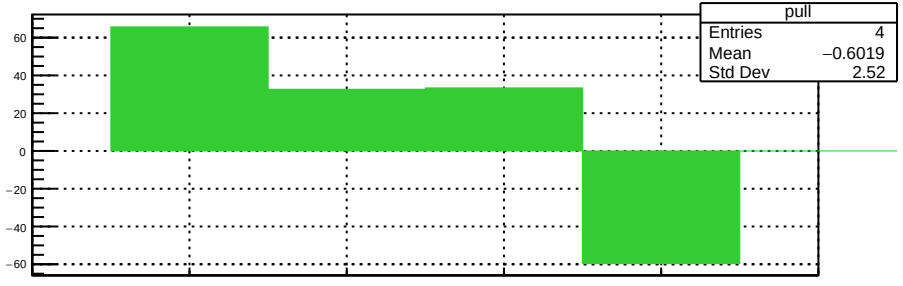

yield_sam6_mean vs run
χ² / ndf 3507 / 3
p0 10.62 ± 8.895e−05
10.624
10.622
10.62
10.618
10.616
10.614
10.612
10.61
6106. 0
6106. 1
6106. 2
6106. 3

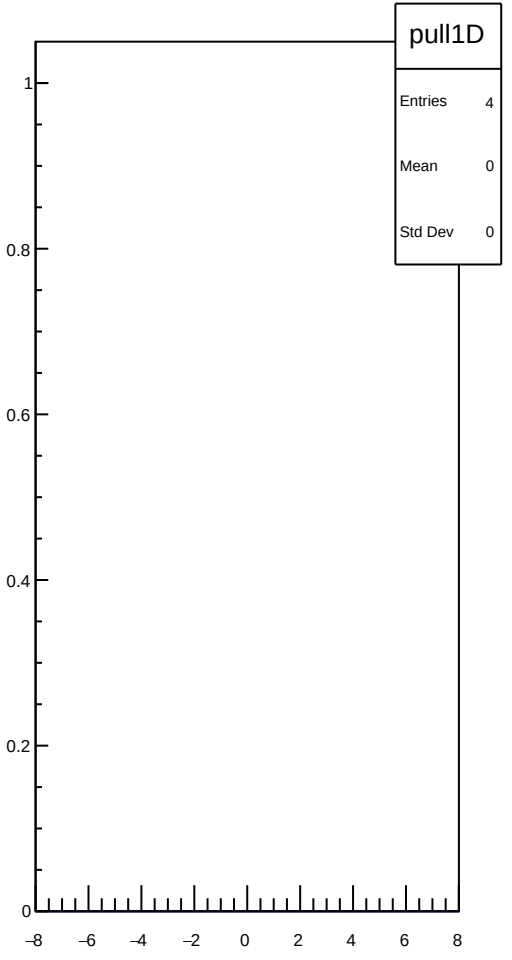

pull
Entries 4
Mean 447.6
Std Dev 445.6
40
30
20
10
0
−10
−20
−30
−40

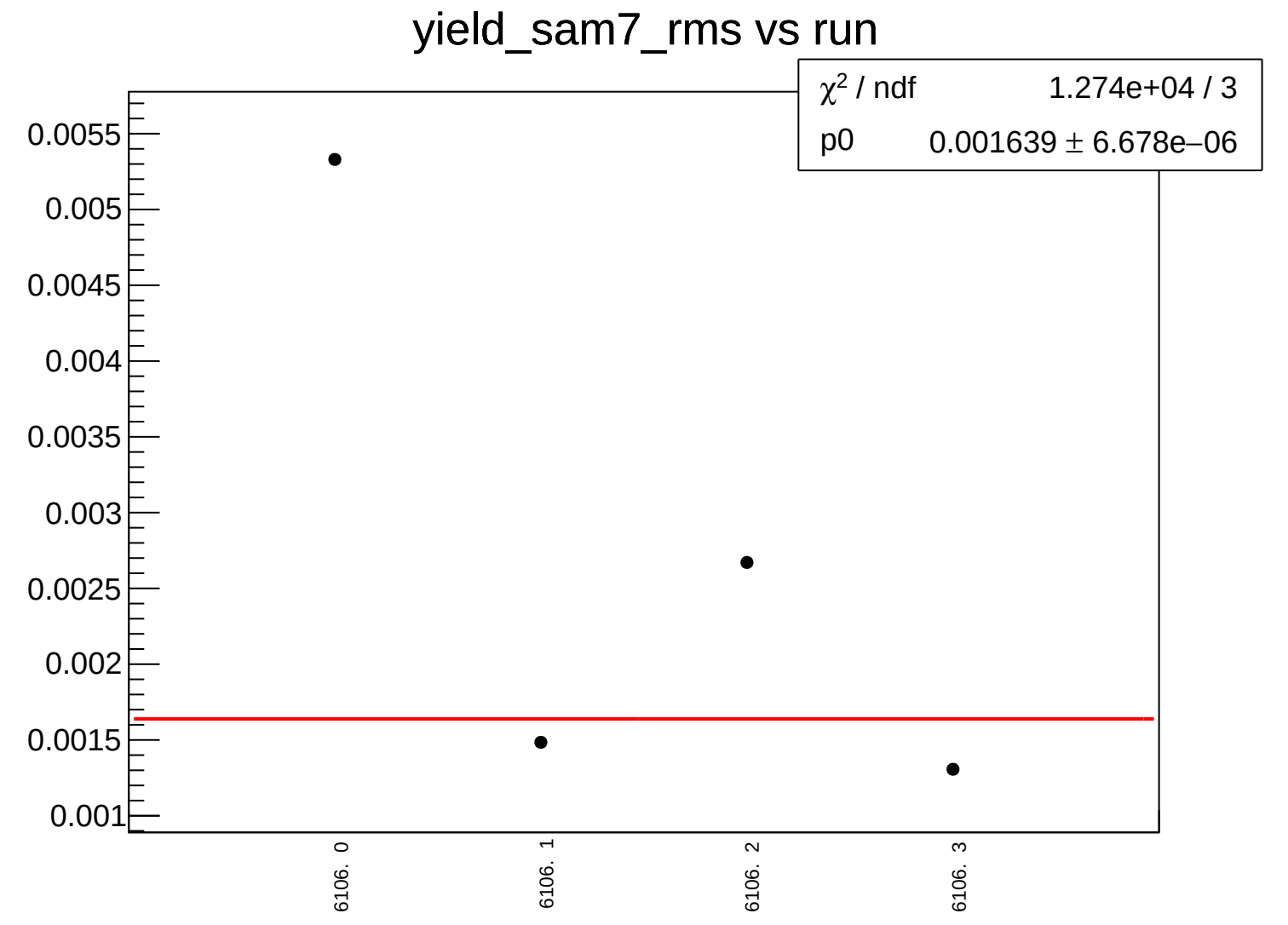

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

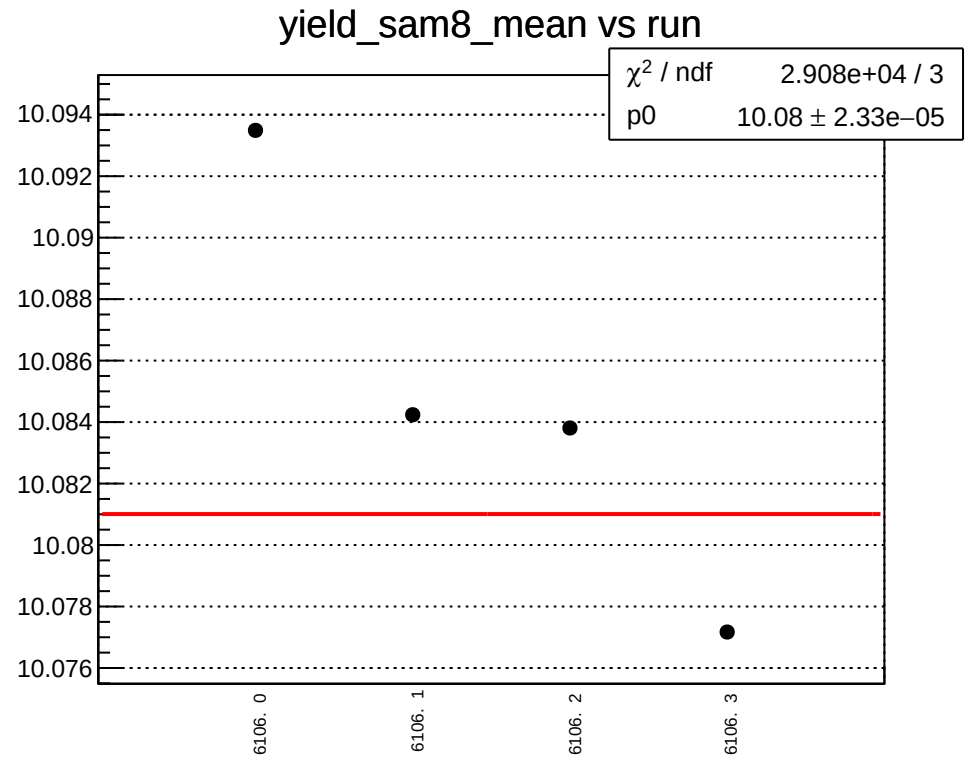

yield_sam6_rms vs run
χ² / ndf 5704 / 3
p0 0.01631 ± 6.29e–05
0.035
0.03
0.025
0.02
0.015
6106. 0
6106. 1
6106. 2
6106. 3

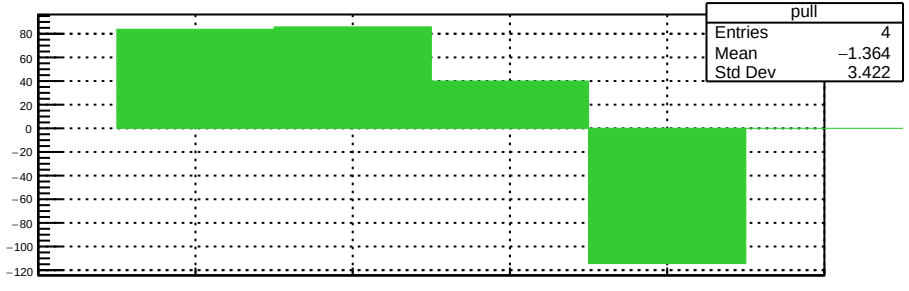

yield_sam7_mean vs run
χ² / ndf 1.005e+04 / 3
p0 2.804 ± 9.444e−06
2.808
2.807
2.806
2.805
2.804
6106. 0
6106. 1
6106. 2
6106. 3

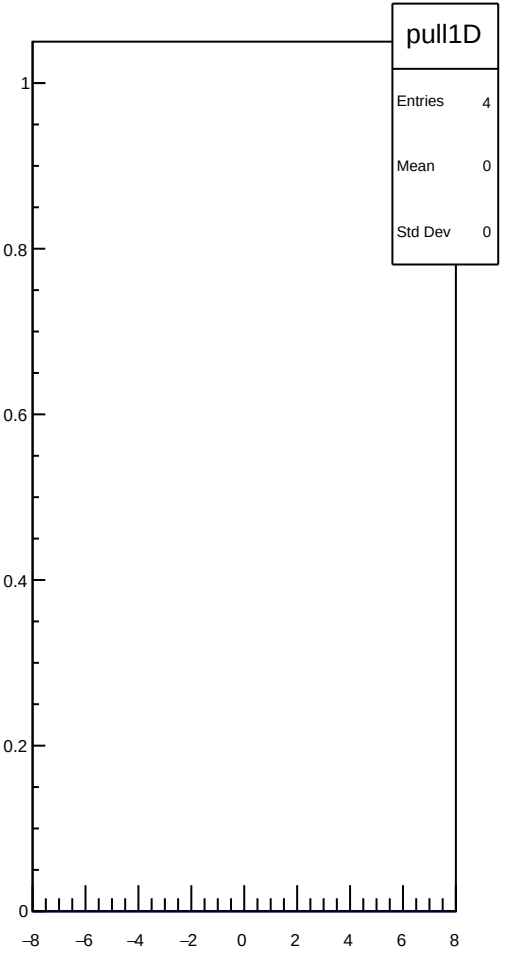

pull
Entries 4
Mean −0.6019
Std Dev 2.52
60
40
20
0
−20
−40
−60

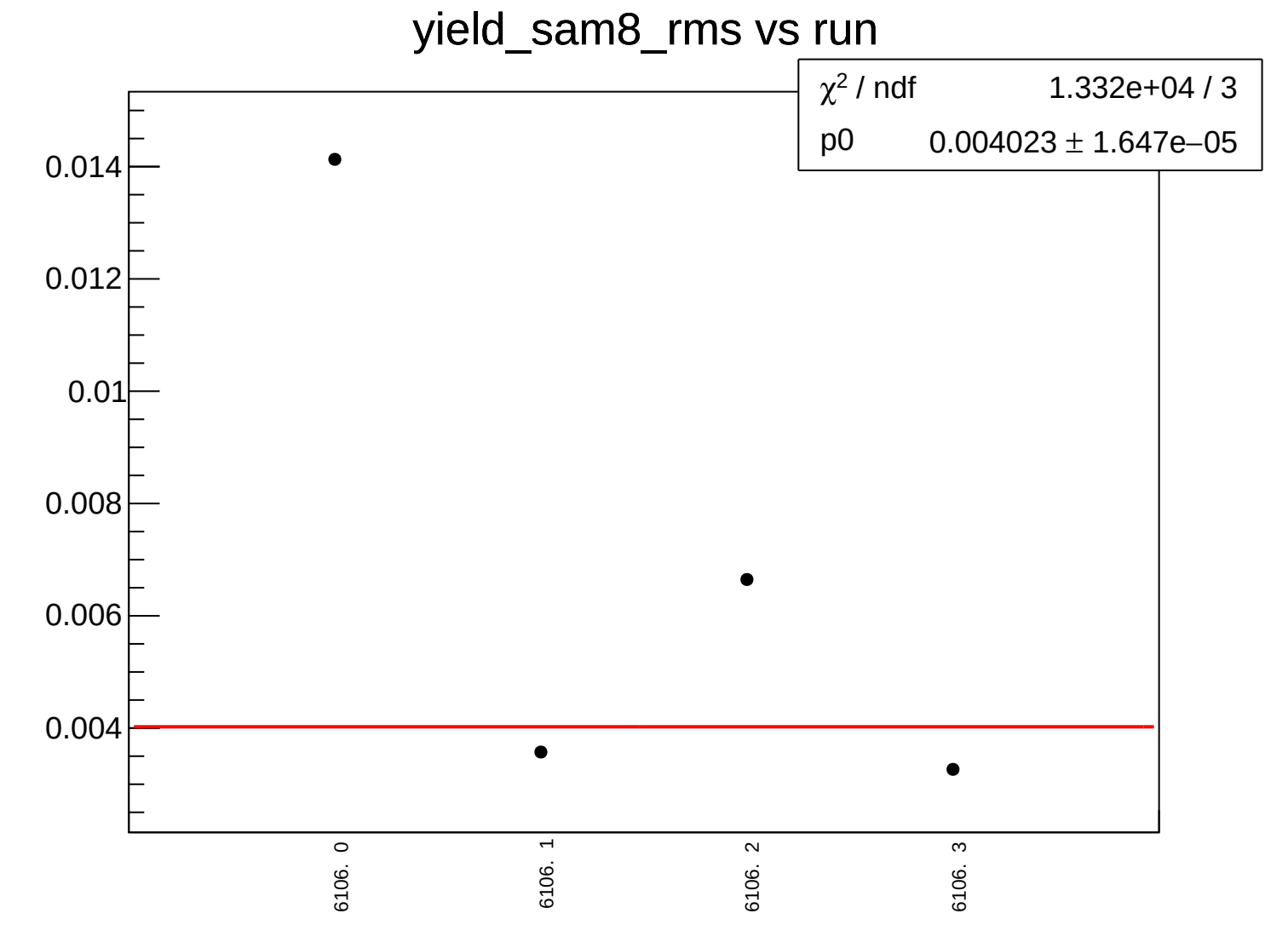

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

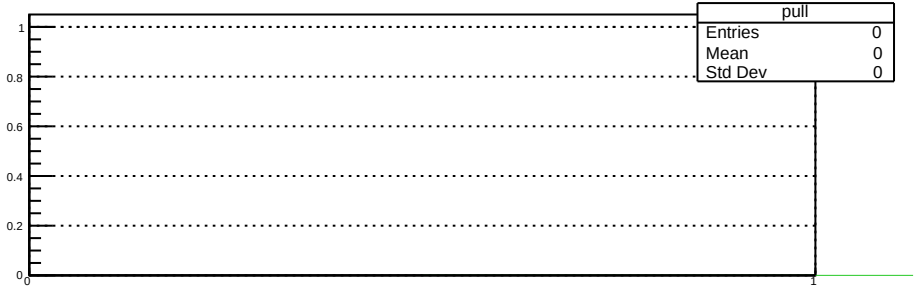

yield_sam7_rms vs run
χ² / ndf 1.274e+04 / 3
p0 0.001639 ± 6.678e−06
0.0055
0.005
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
6106. 0
6106. 1
6106. 2
6106. 3

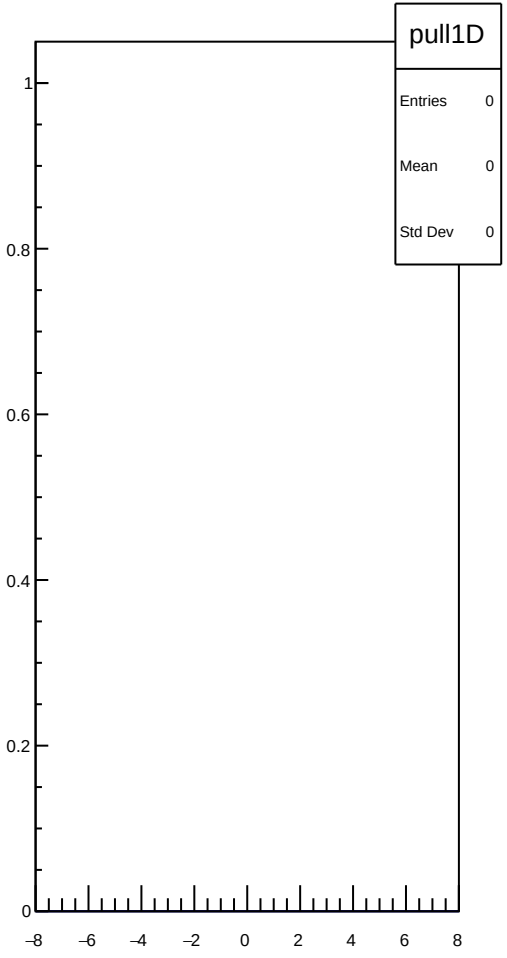

yield_sam8_mean vs run
χ² / ndf 2.908e+04 / 3
p0 10.08 ± 2.33e−05
10.094
10.092
10.09
10.088
10.086
10.084
10.082
10.08
10.078
10.076
6106. 0
6106. 1
6106. 2
6106. 3

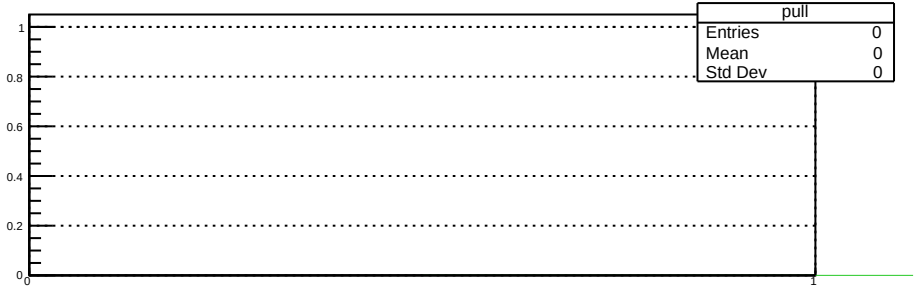

pull
Entries 4
Mean −1.364
Std Dev 3.422
80
60
40
20
0
−20
−40
−60
−80
−100
−120

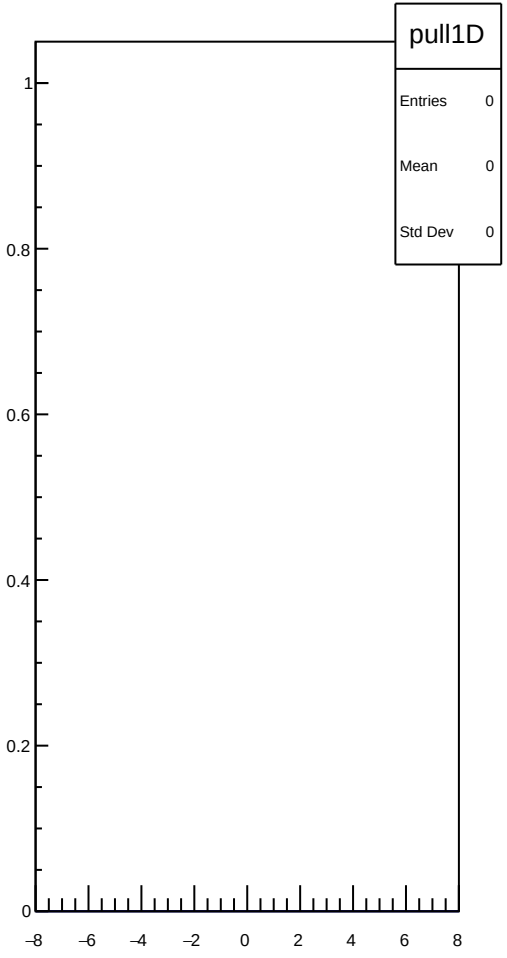

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

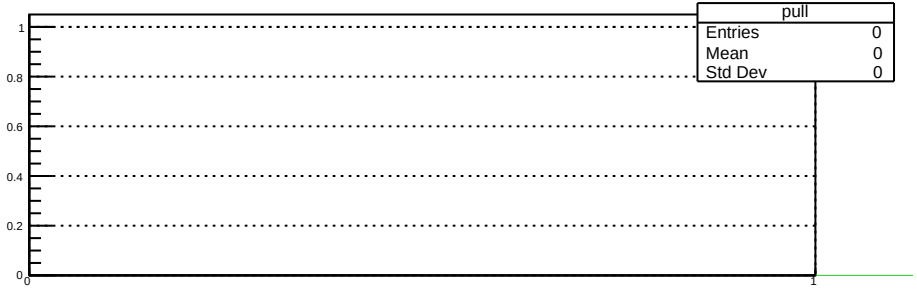

yield_sam8_rms vs run
χ² / ndf 1.332e+04 / 3
p0 0.004023 ± 1.647e−05
0.014
0.012
0.01
0.008
0.006
0.004
6106. 0
6106. 1
6106. 2
6106. 3

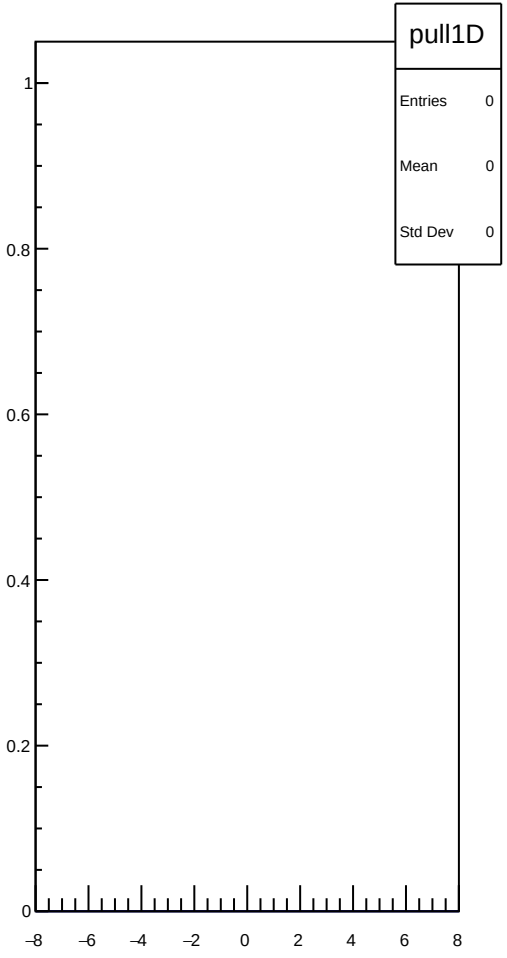

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

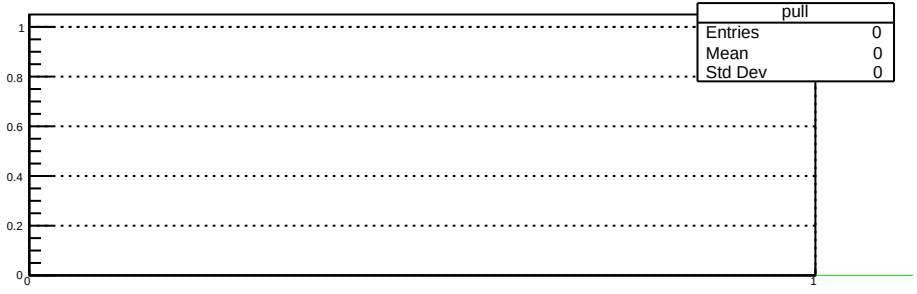

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

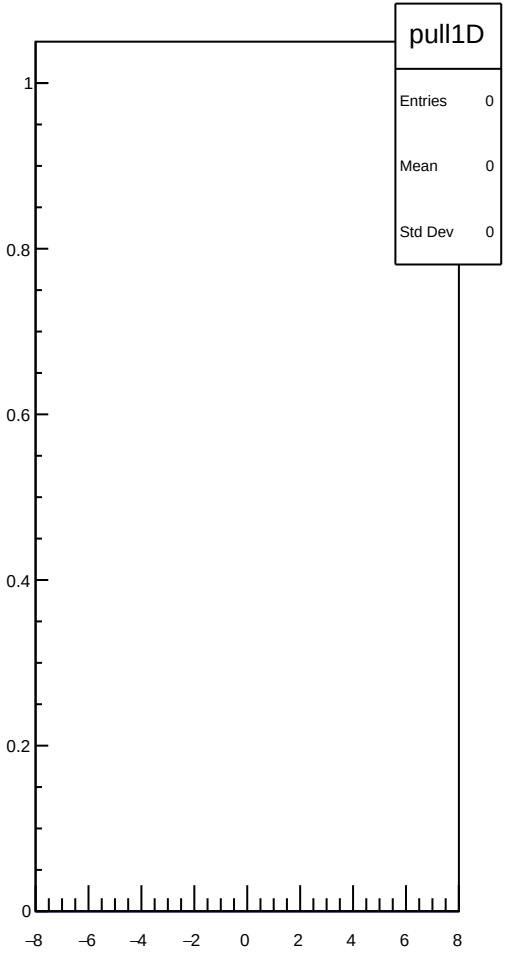

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

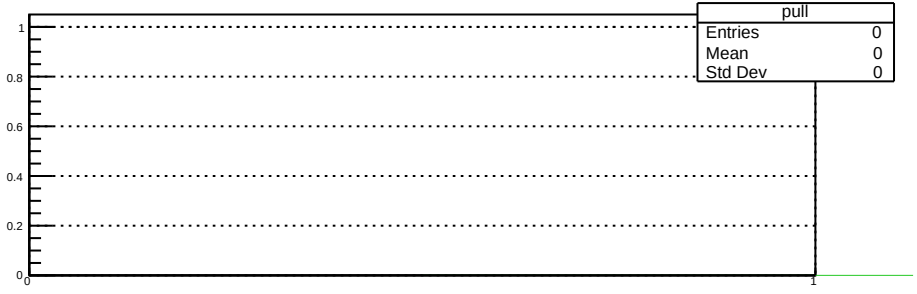

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

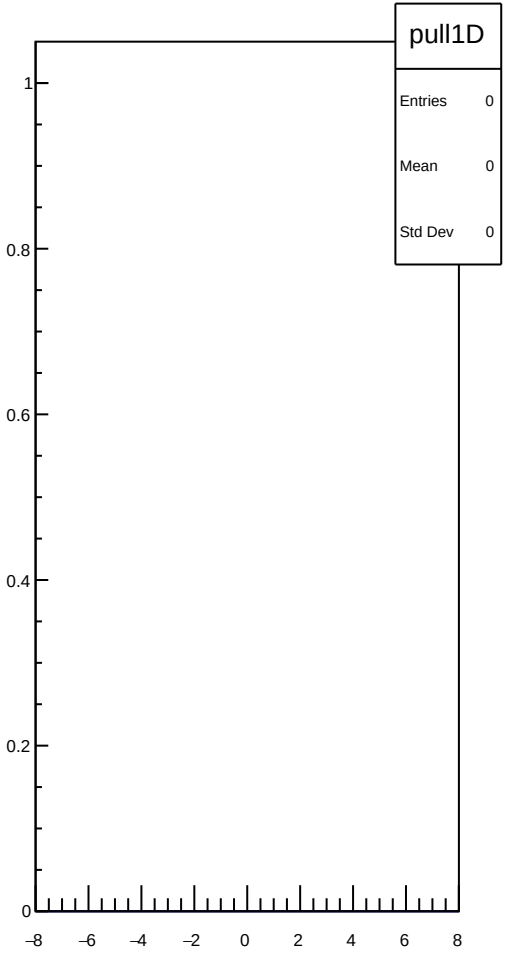

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

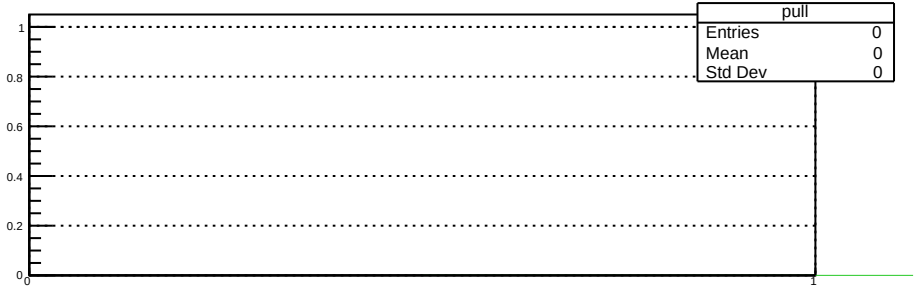

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

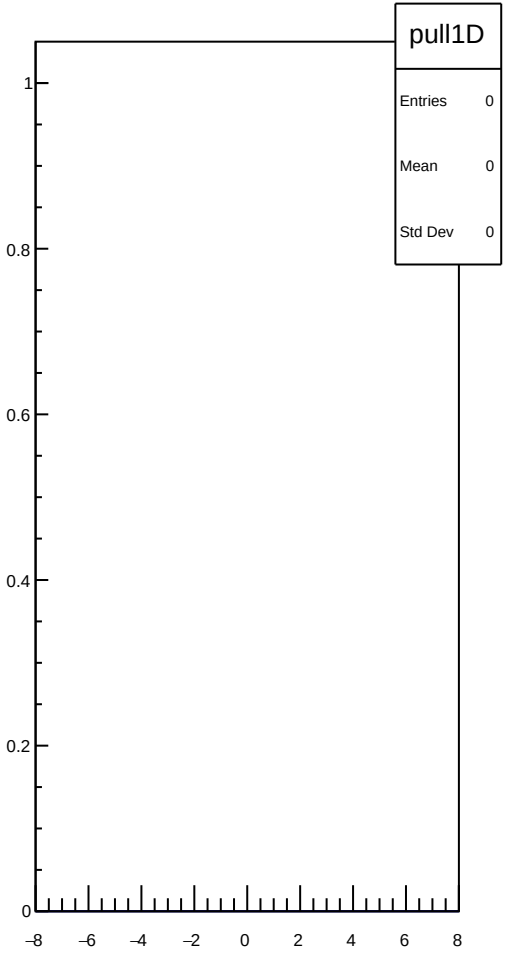

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

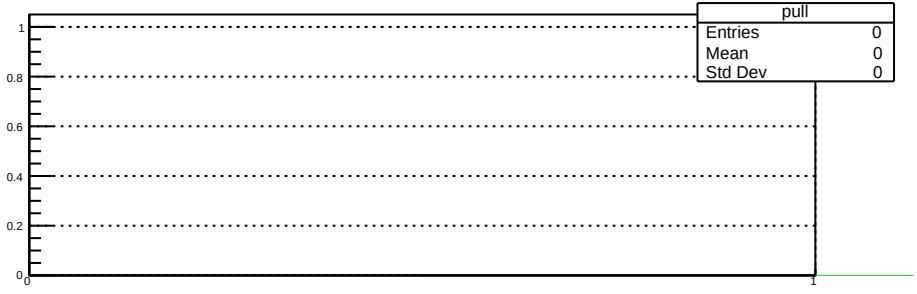

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

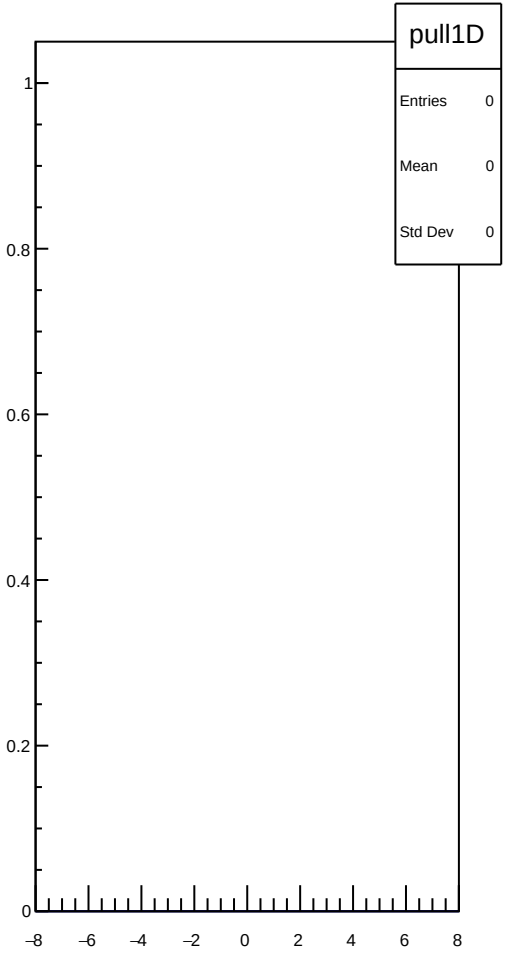

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

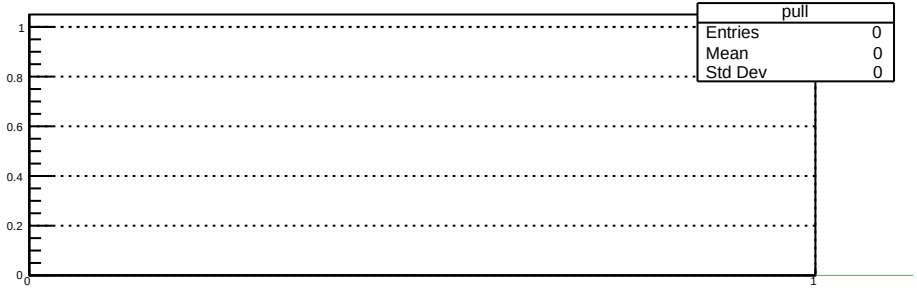

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

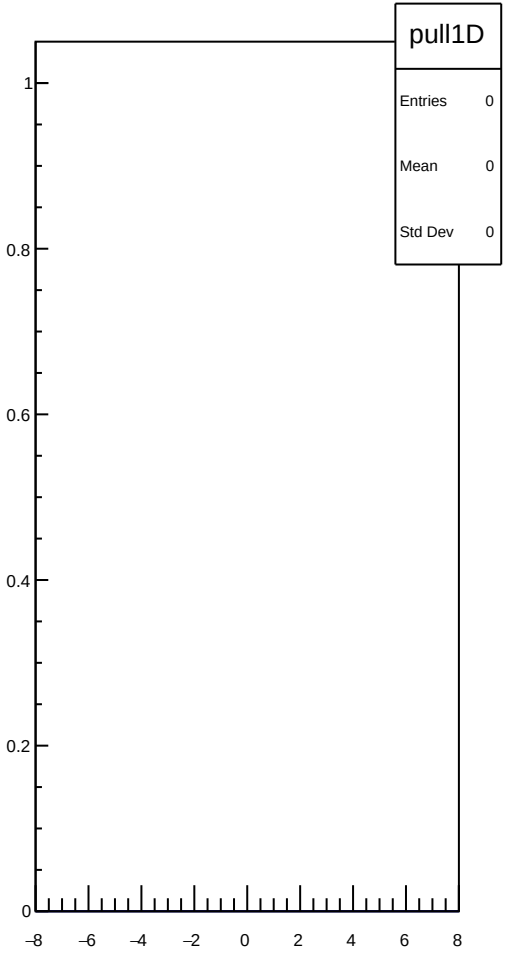

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

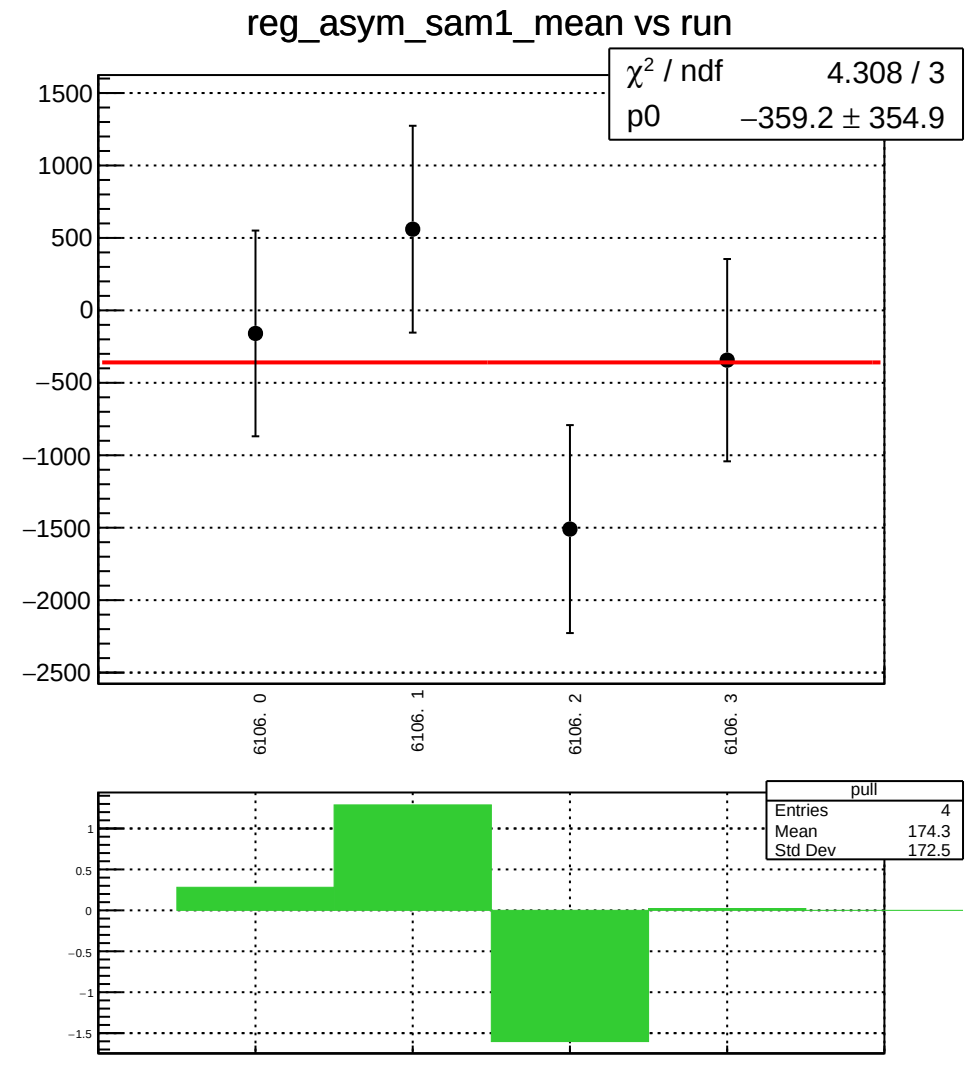

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

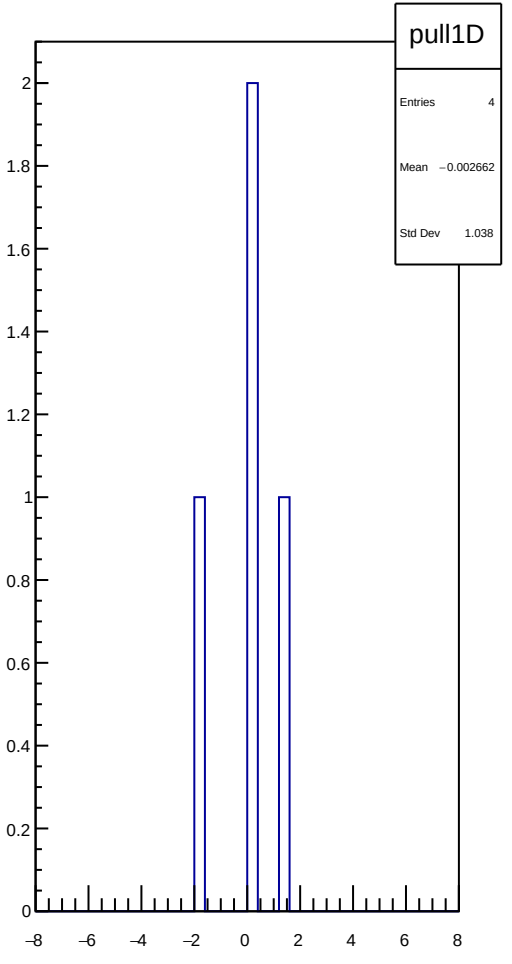

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

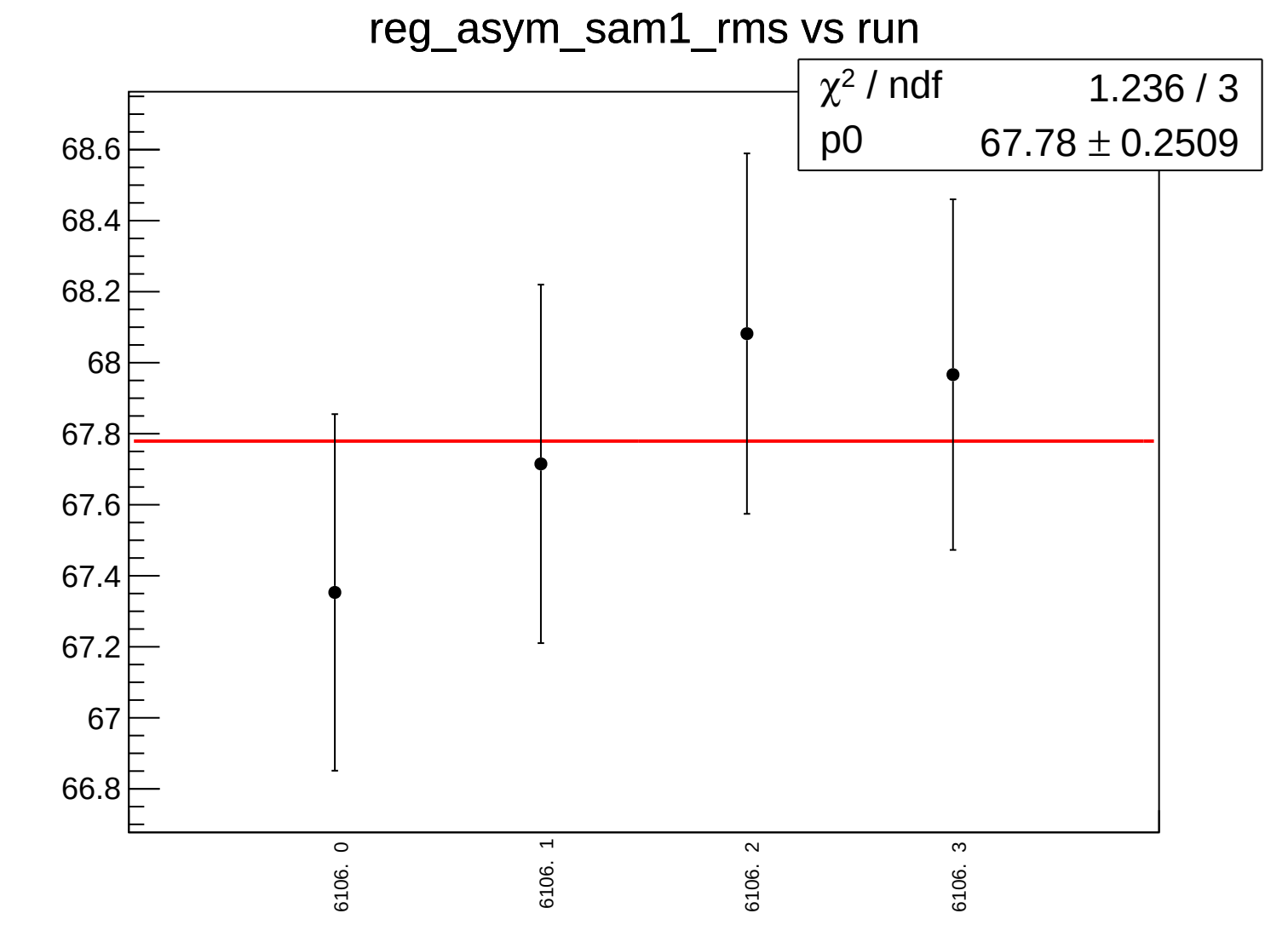

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

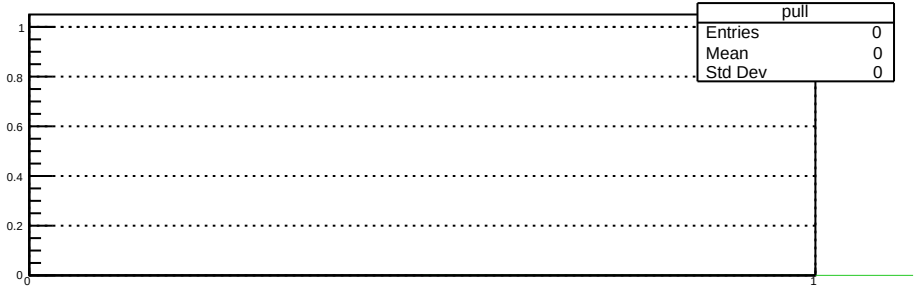

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

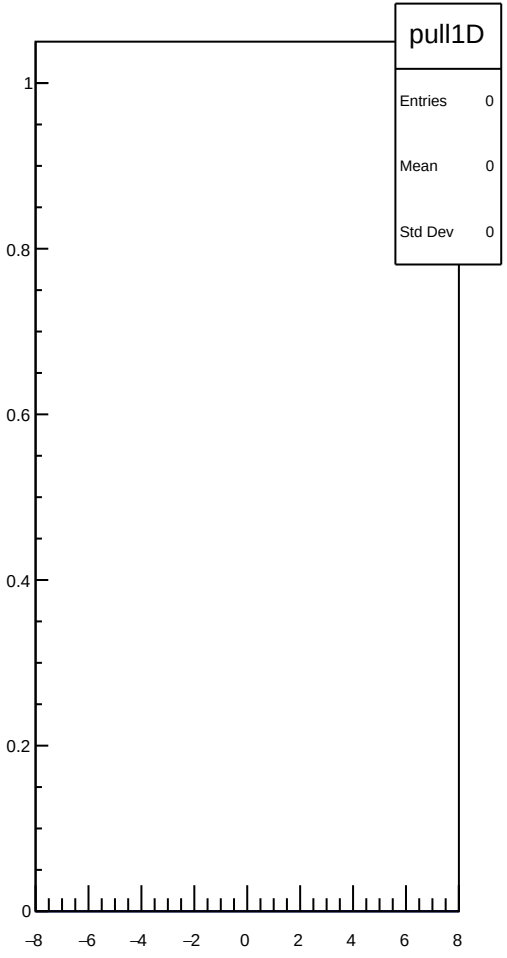

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

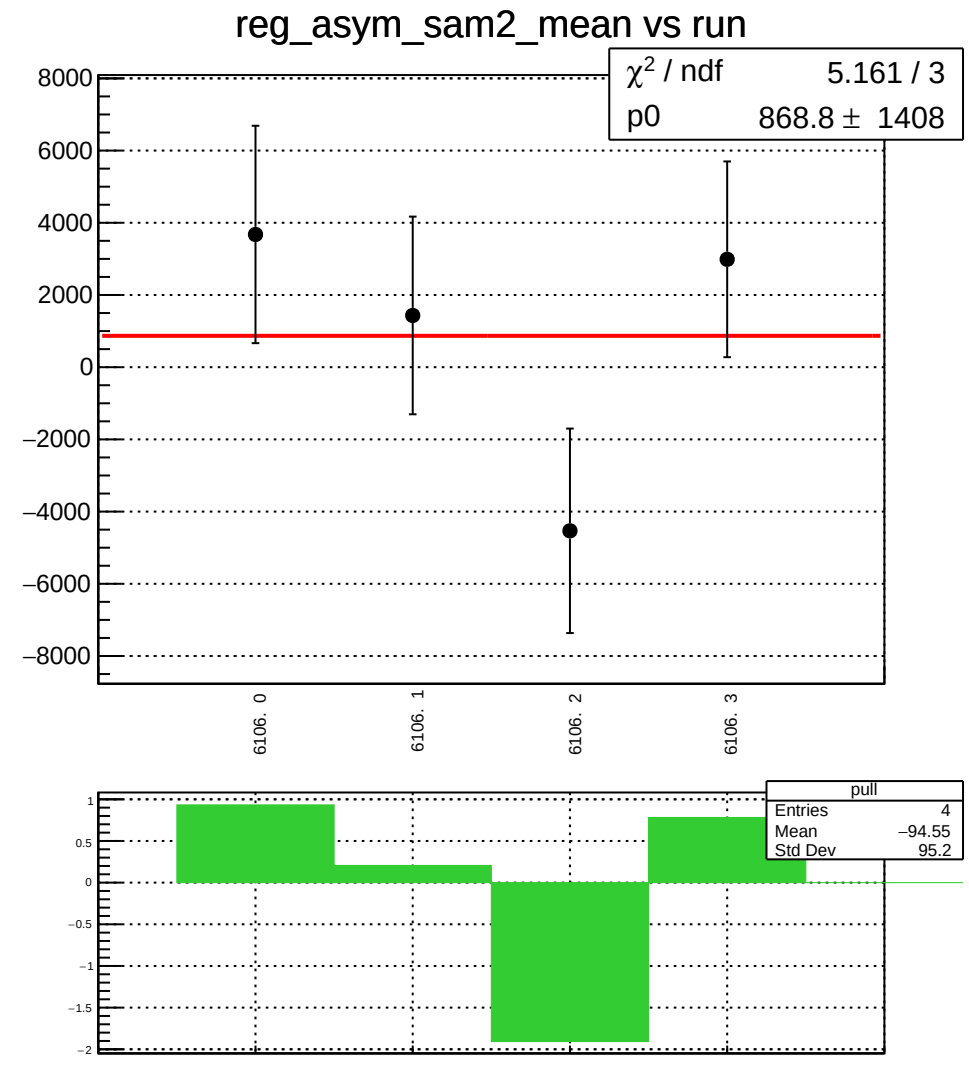

reg_asym_sam1_mean vs run
χ² / ndf 4.308 / 3
p0 −359.2 ± 354.9
1500
1000
500
0
−500
−1000
−1500
−2000
−2500
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 174.3
Std Dev 172.5
1
0.5
0
−0.5
−1
−1.5

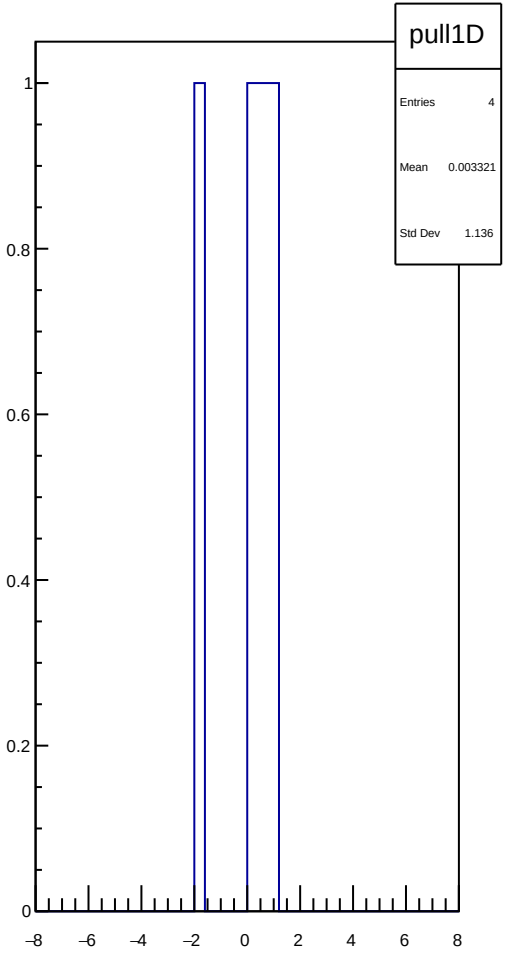

pull1D
Entries 4
Mean −0.002662
Std Dev 1.038
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

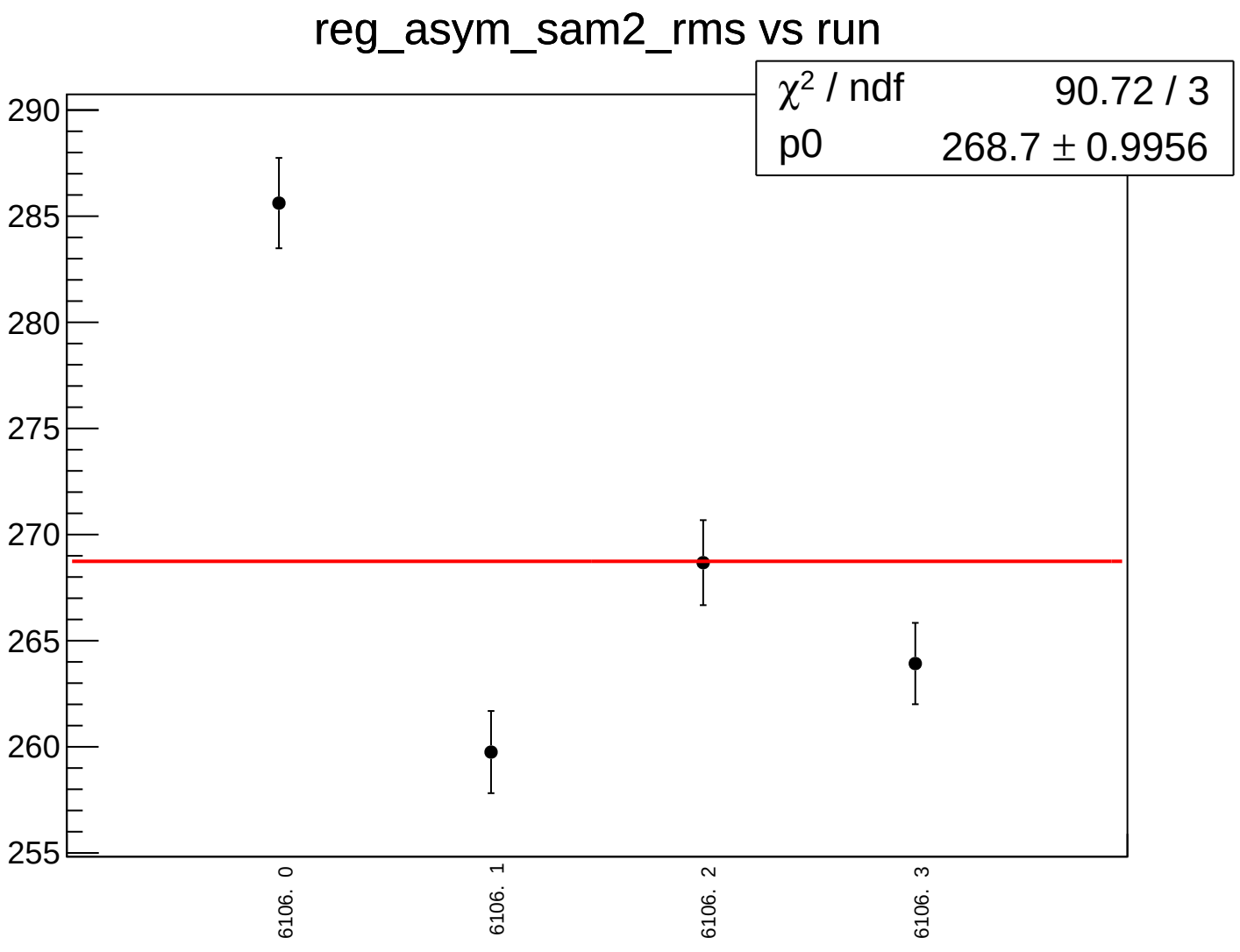

reg_asym_sam1_rms vs run
χ² / ndf 1.236 / 3
p0 67.78 ± 0.2509
68.6
68.4
68.2
68
67.8
67.6
67.4
67.2
67
66.8
6106. 0
6106. 1
6106. 2
6106. 3

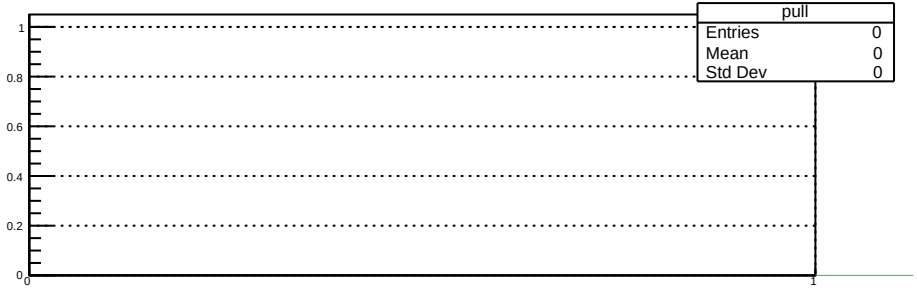

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

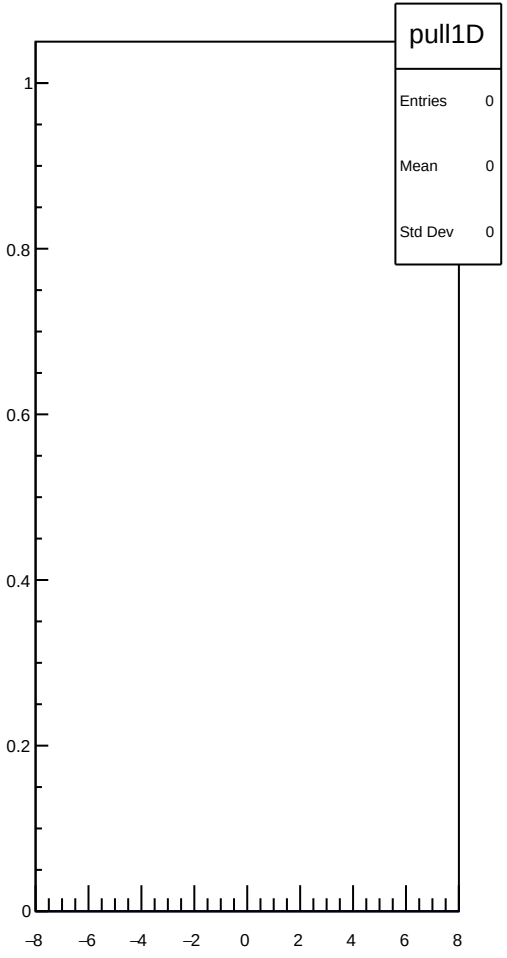

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

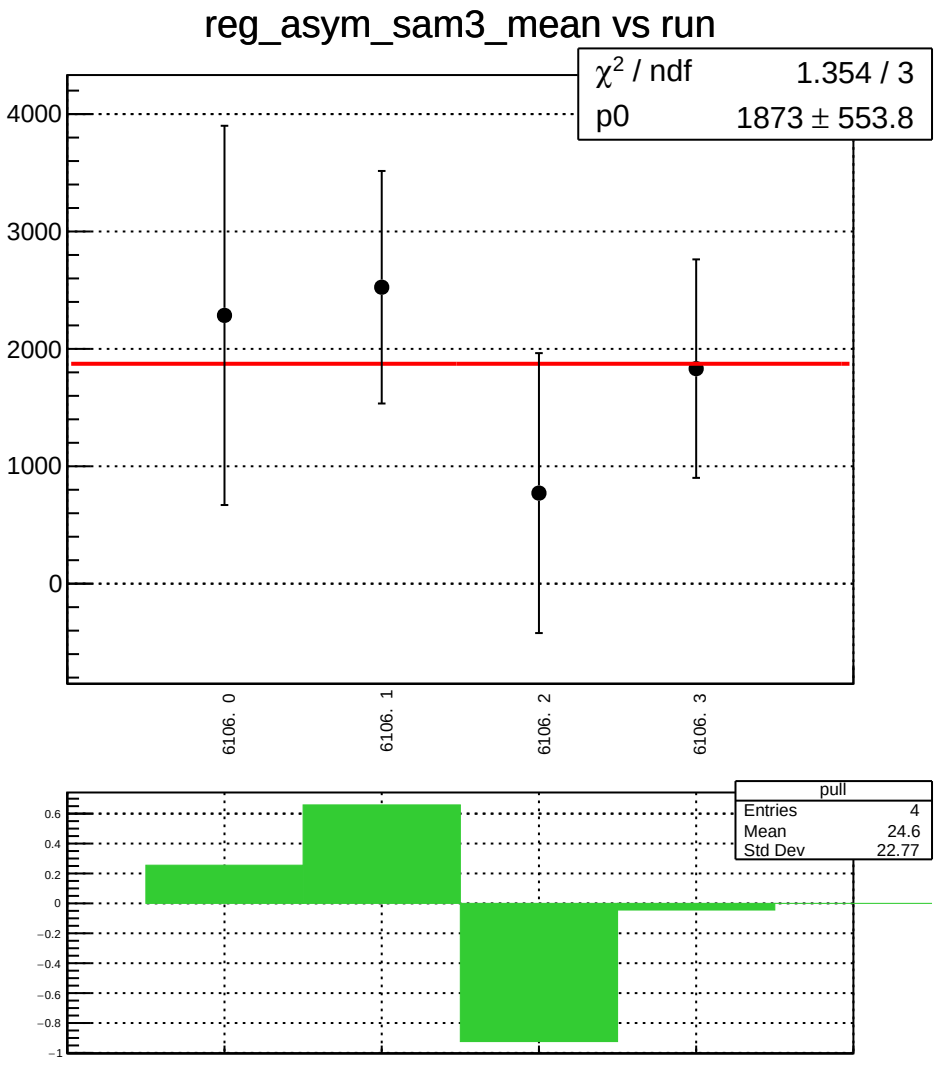

reg_asym_sam2_mean vs run
χ² / ndf 5.161 / 3
p0 868.8 ± 1408
8000
6000
4000
2000
0
−2000
−4000
−6000
−8000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −94.55
Std Dev 95.2
1
0.5
0
−0.5
−1
−1.5
−2

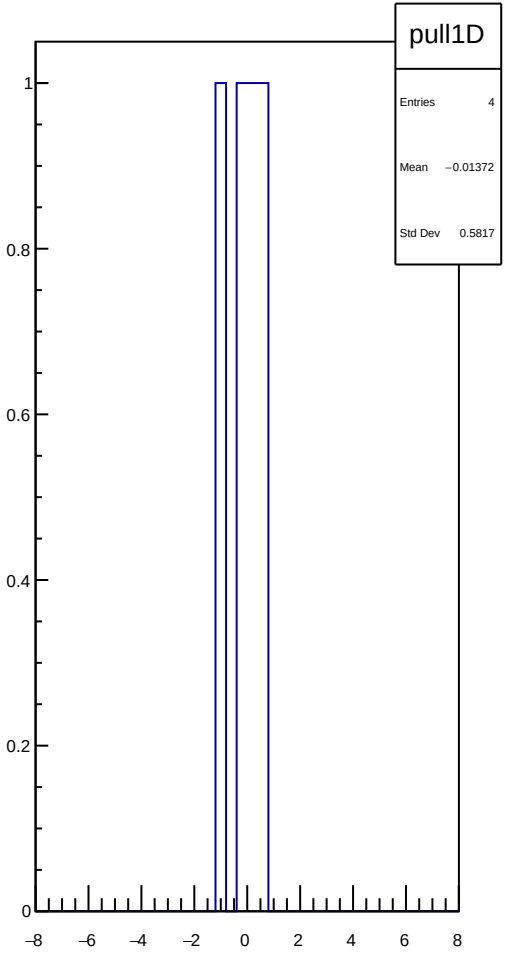

pull1D
Entries 4
Mean 0.003321
Std Dev 1.136
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

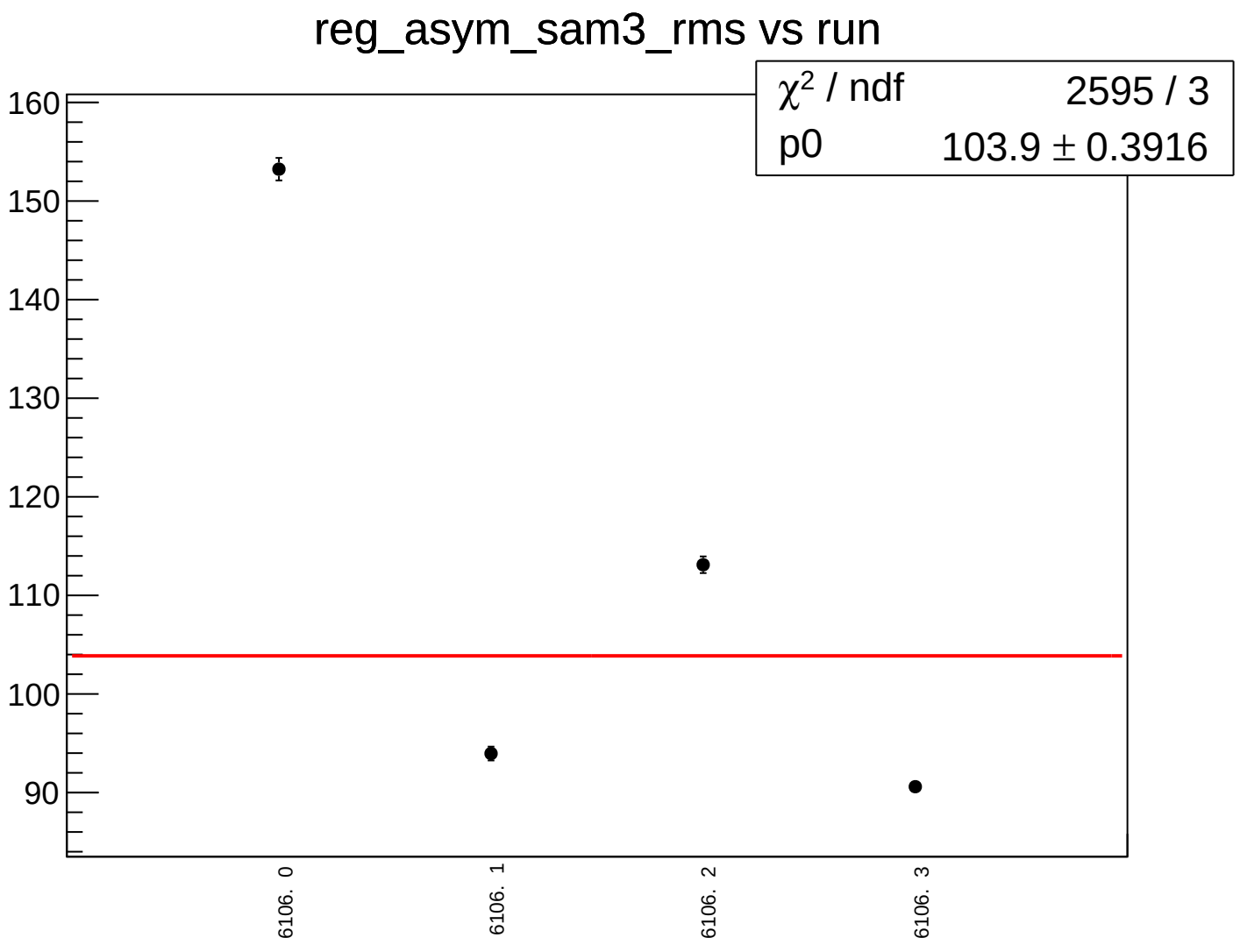

reg_asym_sam2_rms vs run
χ² / ndf 90.72 / 3
p0 268.7 ± 0.9956
290
285
280
275
270
265
260
255
6106. 0
6106. 1
6106. 2
6106. 3

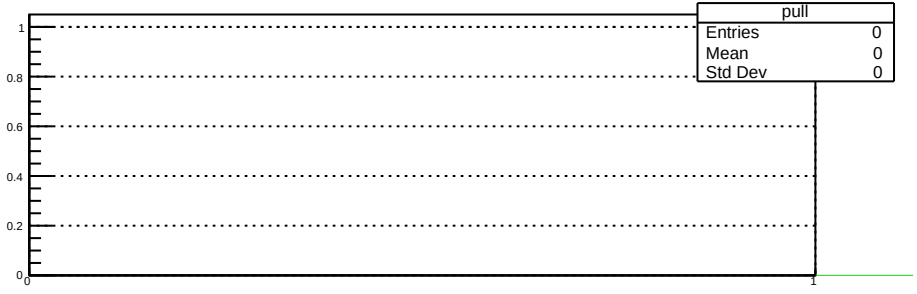

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

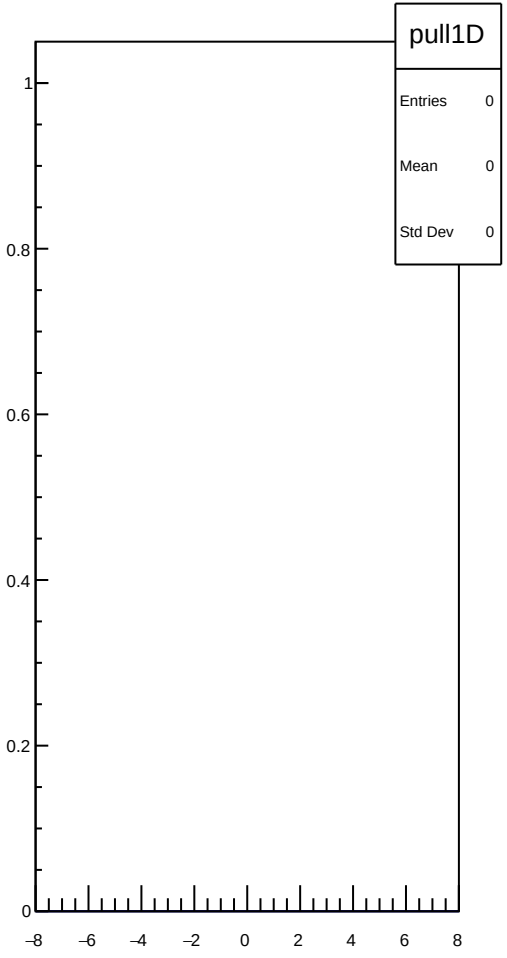

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

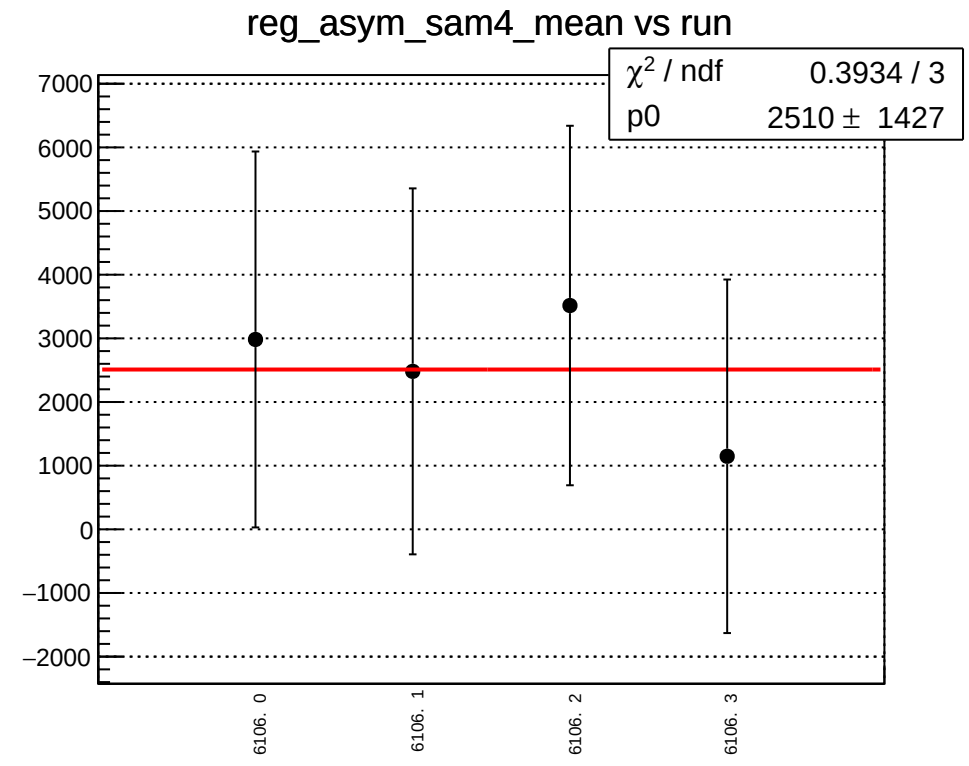

reg_asym_sam3_mean vs run
χ² / ndf 1.354 / 3
p0 1873 ± 553.8
4000
3000
2000
1000
0
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 24.6
Std Dev 22.77
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

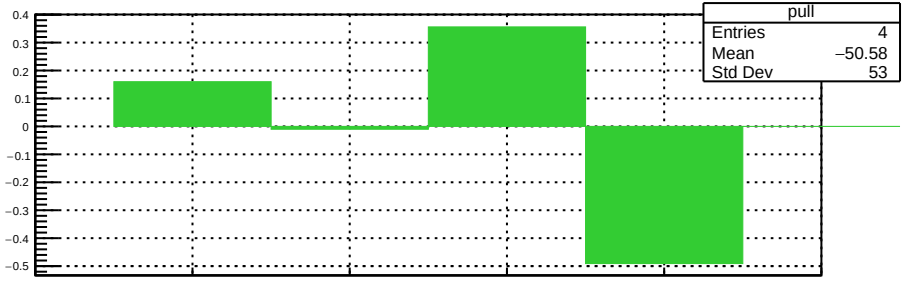

pull1D
Entries 4
Mean −0.01372
Std Dev 0.5817
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

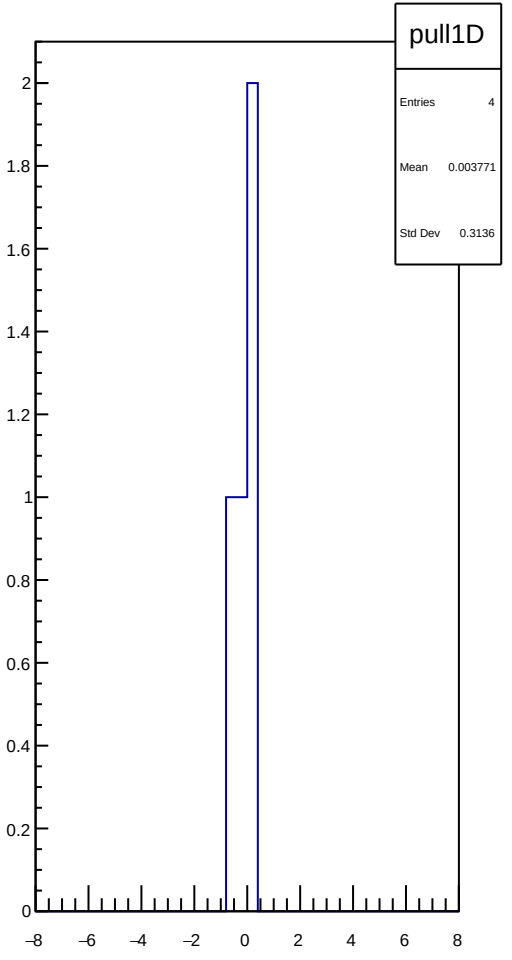

reg_asym_sam3_rms vs run
χ² / ndf 2595 / 3
p0 103.9 ± 0.3916
160
150
140
130
120
110
100
90
6106. 0
6106. 1
6106. 2
6106. 3

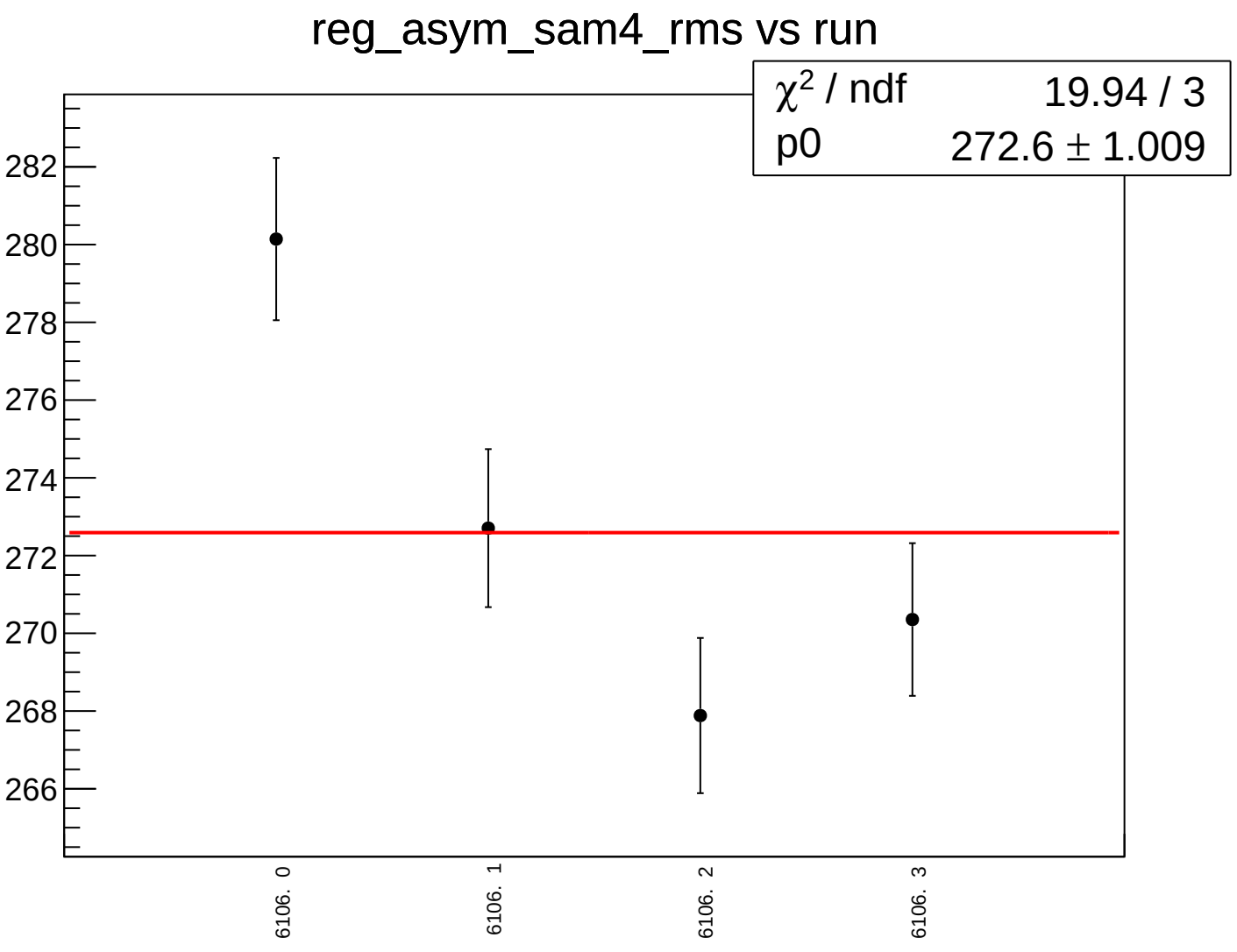

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

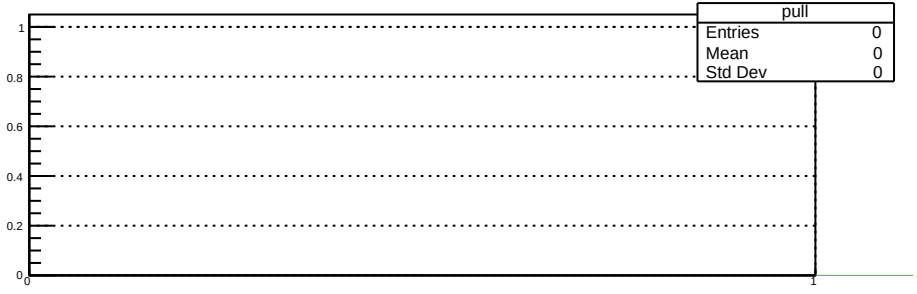

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

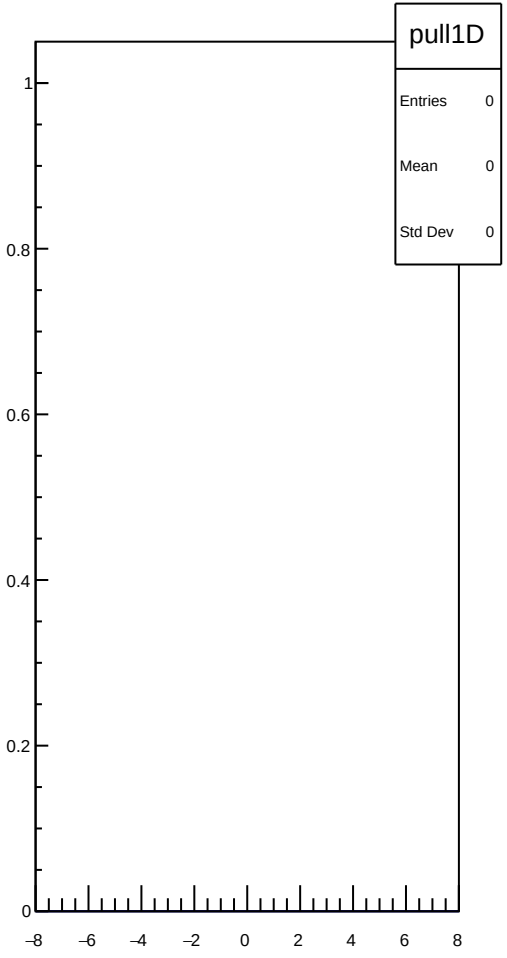

reg_asym_sam4_mean vs run
χ² / ndf 0.3934 / 3
p0 2510 ± 1427
7000
6000
5000
4000
3000
2000
1000
0
−1000
−2000
6106. 0
6106. 1
6106. 2
6106. 3

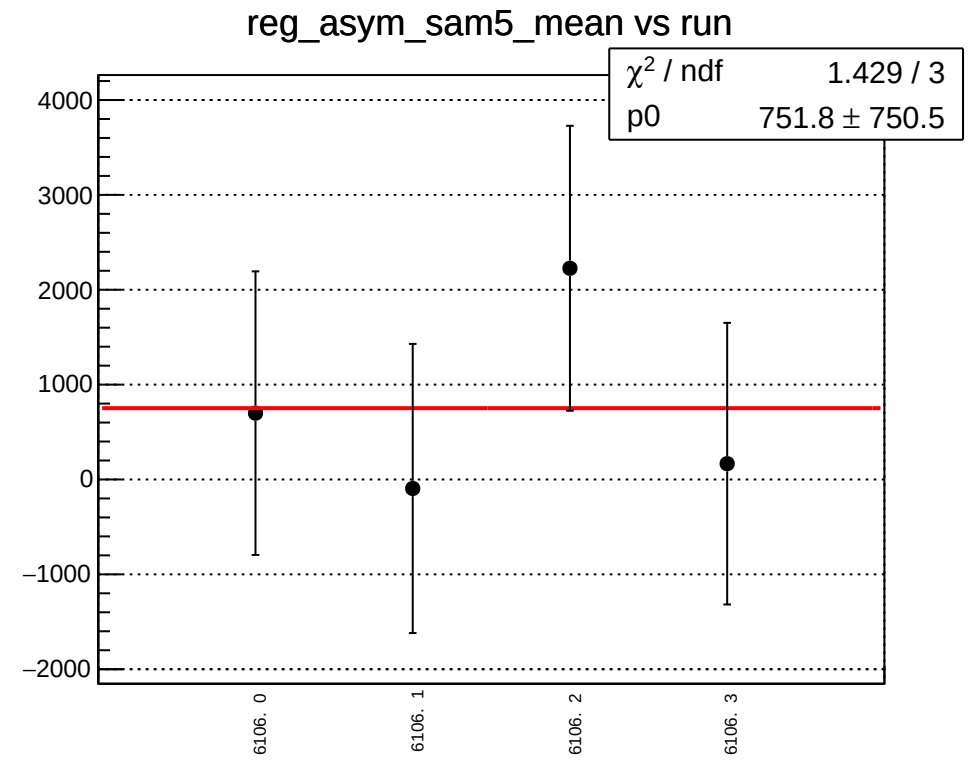

pull
Entries 4
Mean −50.58
Std Dev 53
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

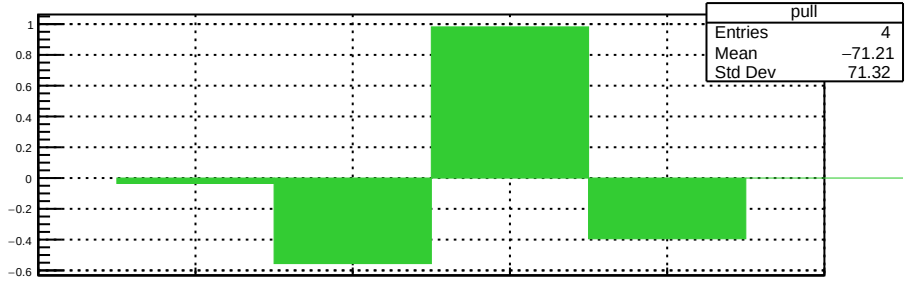

pull1D
Entries 4
Mean 0.003771
Std Dev 0.3136
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

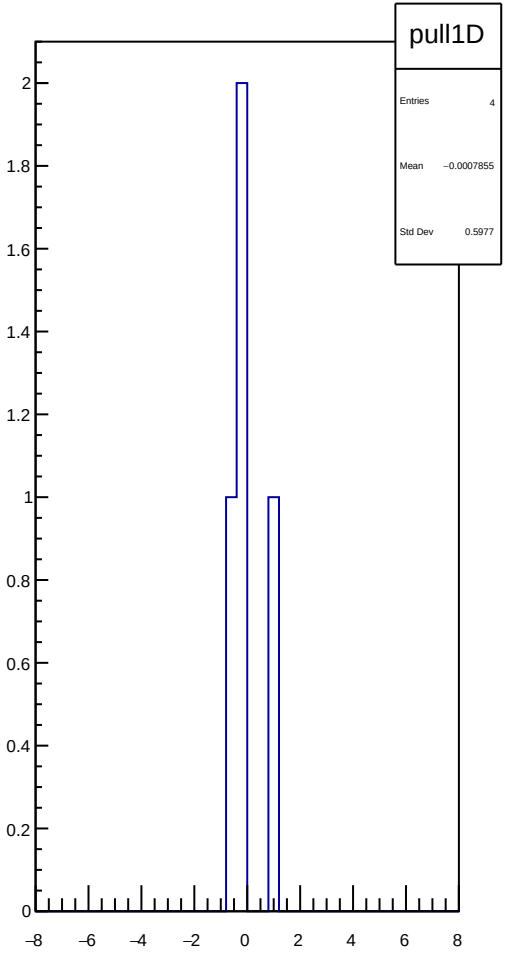

reg_asym_sam4_rms vs run
χ² / ndf 19.94 / 3
p0 272.6 ± 1.009
282
280
278
276
274
272
270
268
266
6106. 0
6106. 1
6106. 2
6106. 3

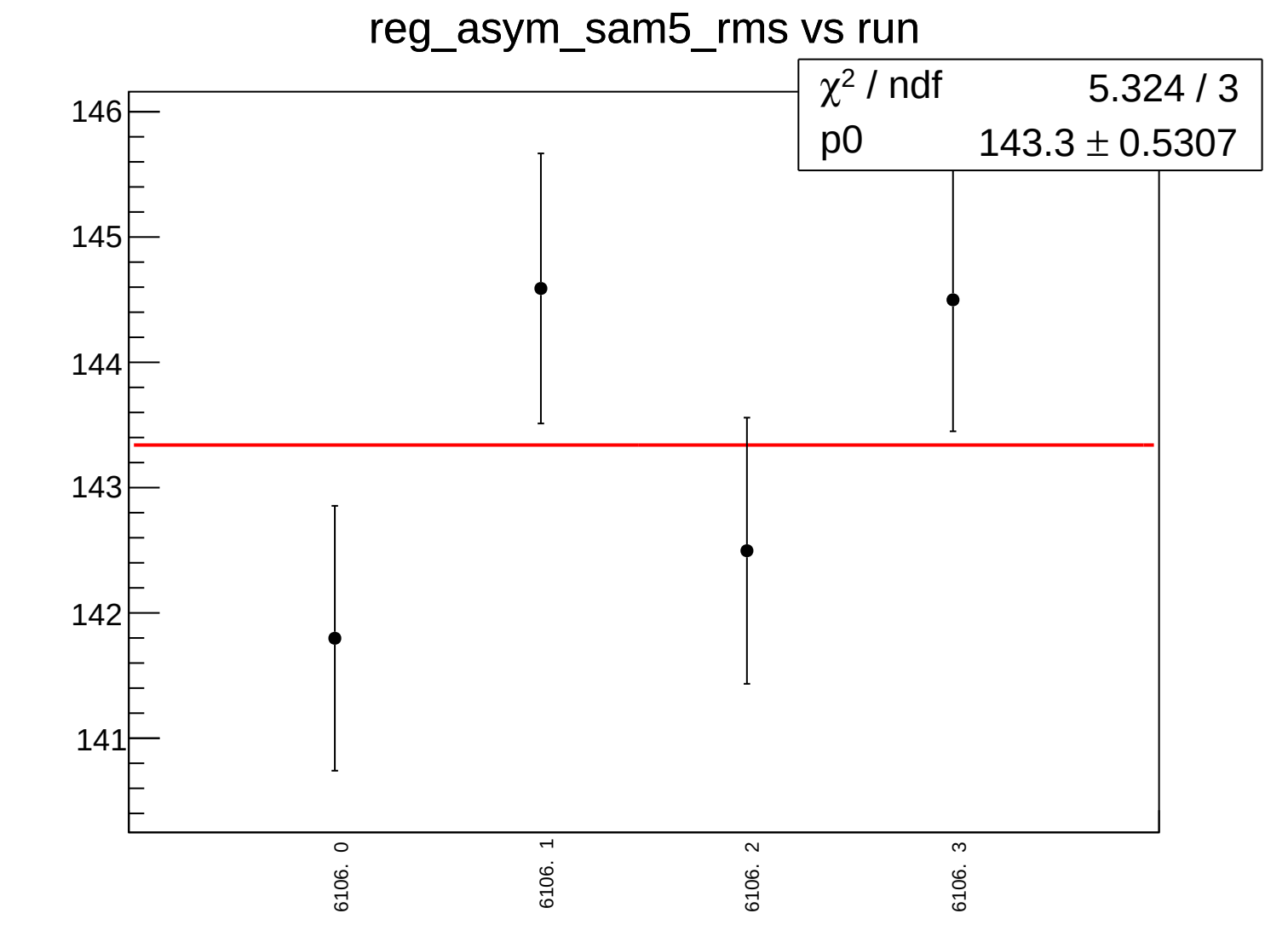

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

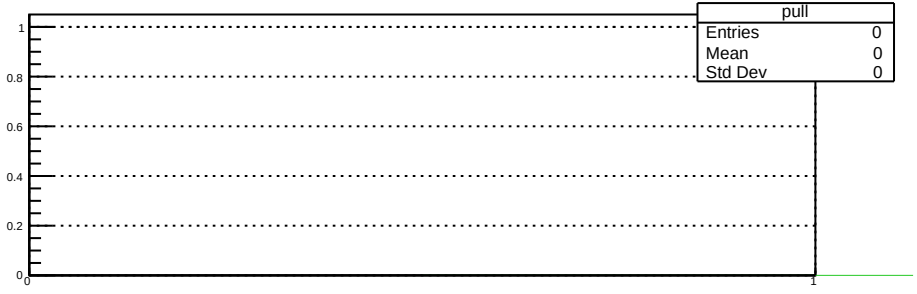

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

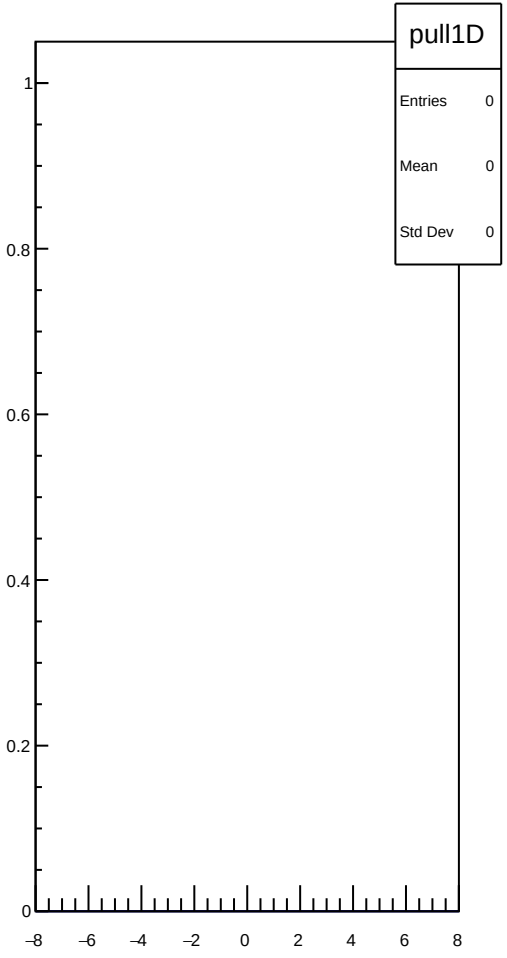

reg_asym_sam5_mean vs run
χ² / ndf 1.429 / 3
p0 751.8 ± 750.5
4000
3000
2000
1000
0
−1000
−2000
6106. 0
6106. 1
6106. 2
6106. 3

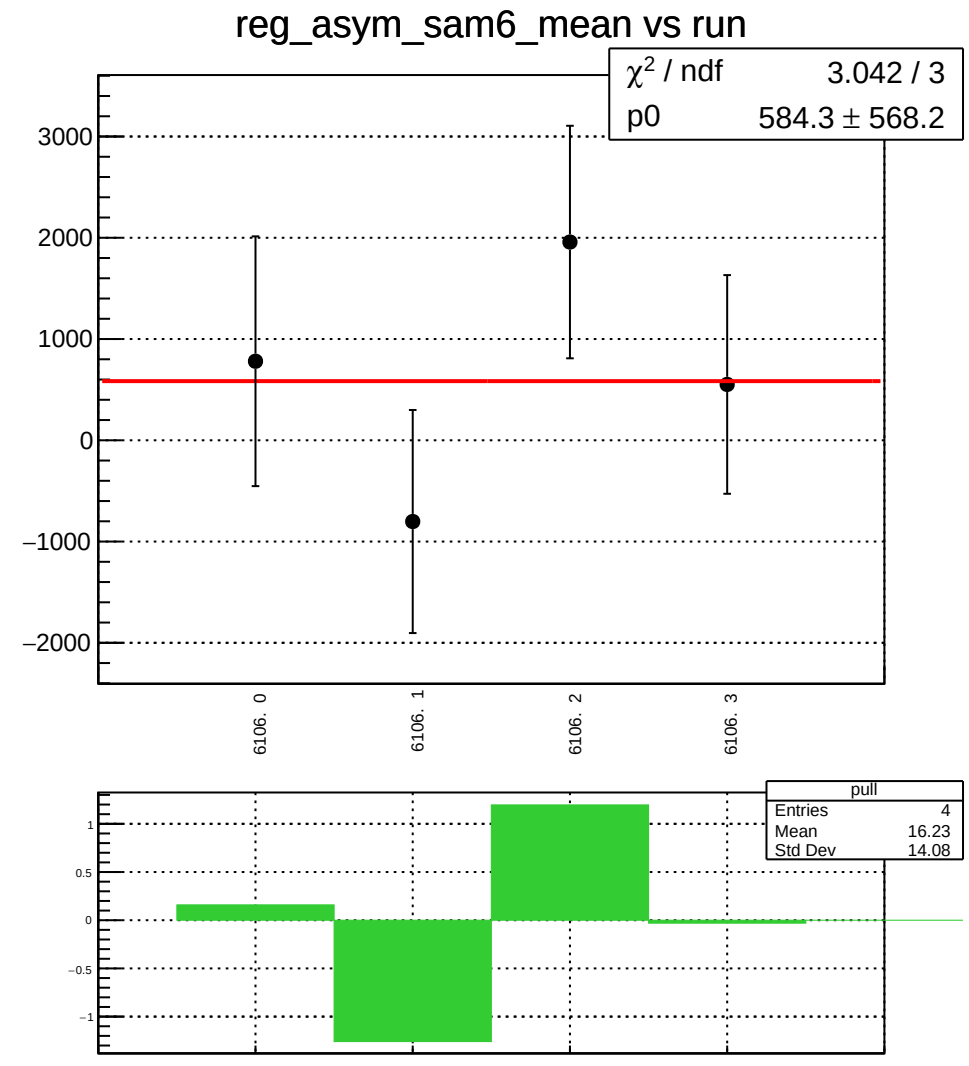

pull
Entries 4
Mean −71.21
Std Dev 71.32
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

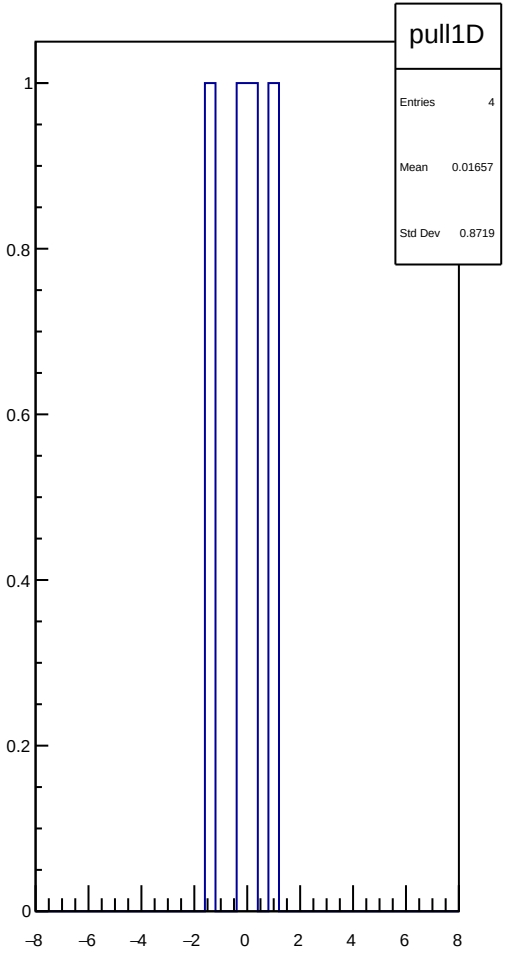

pull1D
Entries 4
Mean −0.0007855
Std Dev 0.5977
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

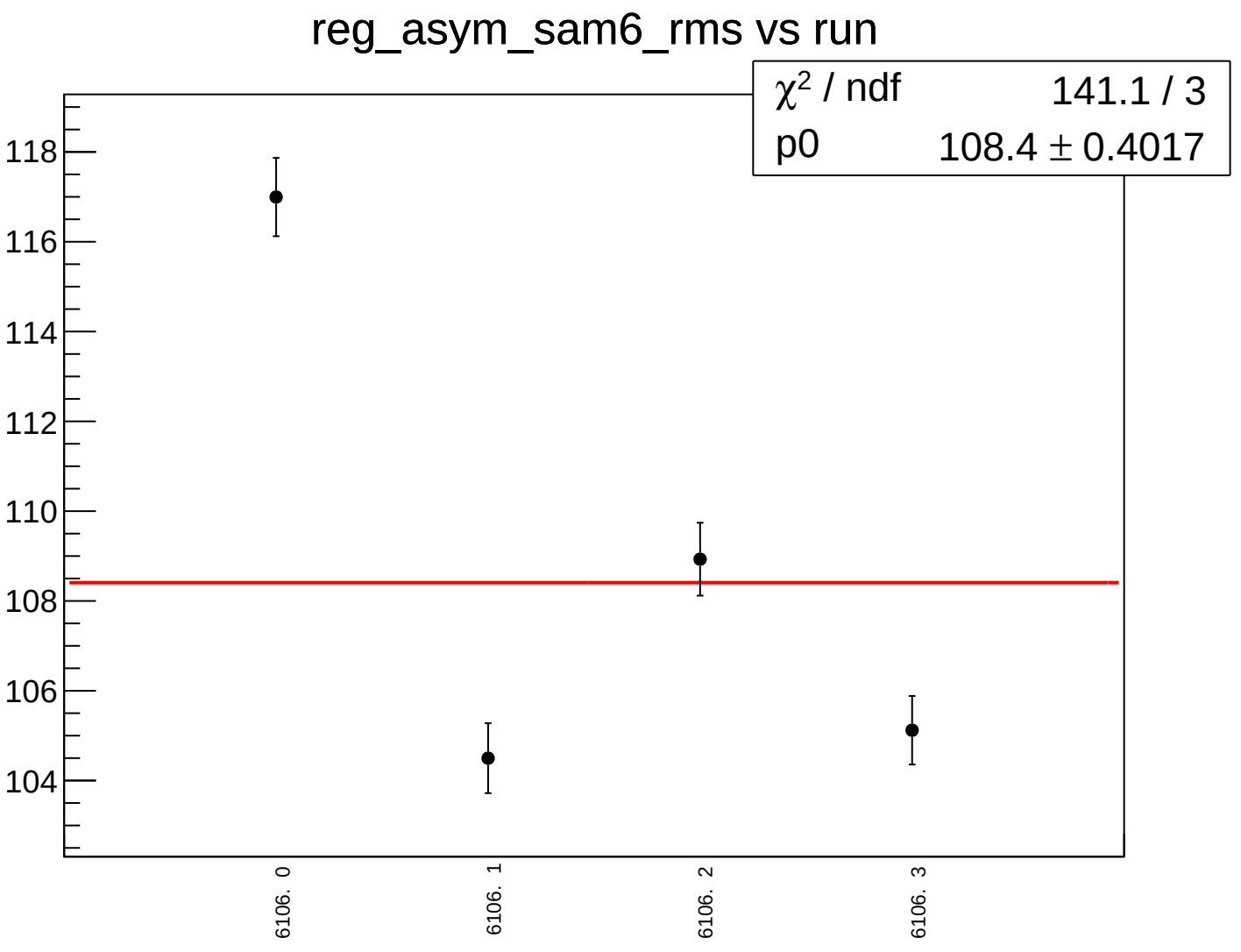

reg_asym_sam5_rms vs run
χ² / ndf 5.324 / 3
p0 143.3 ± 0.5307
146
145
144
143
142
141
6106. 0
6106. 1
6106. 2
6106. 3

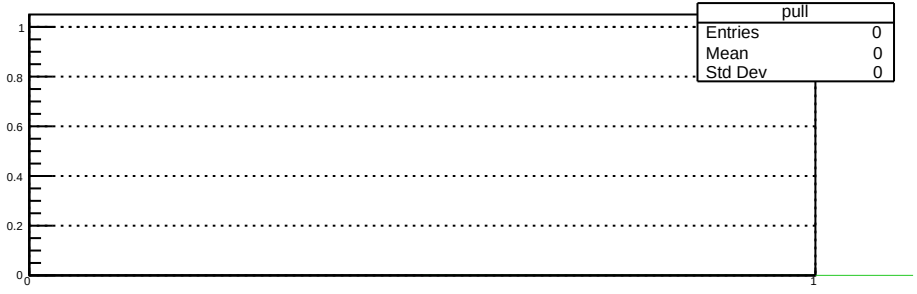

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

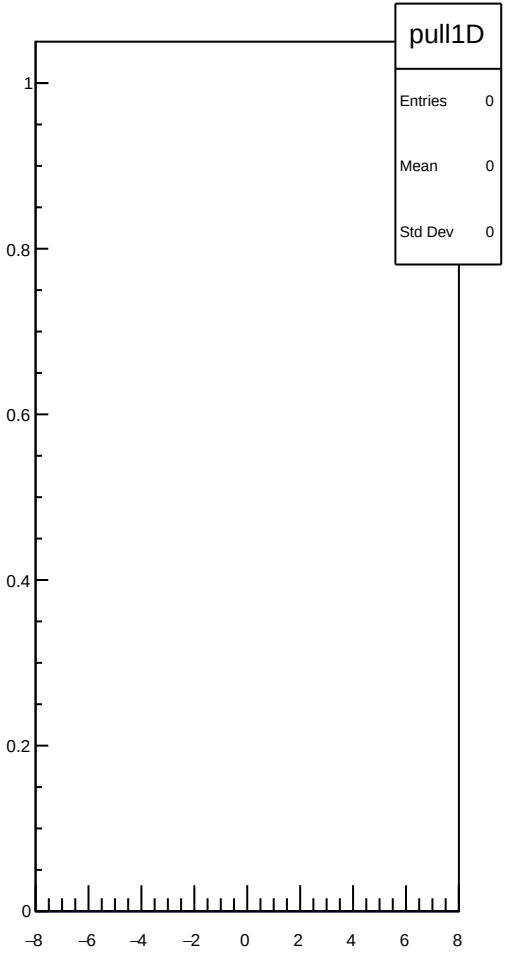

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

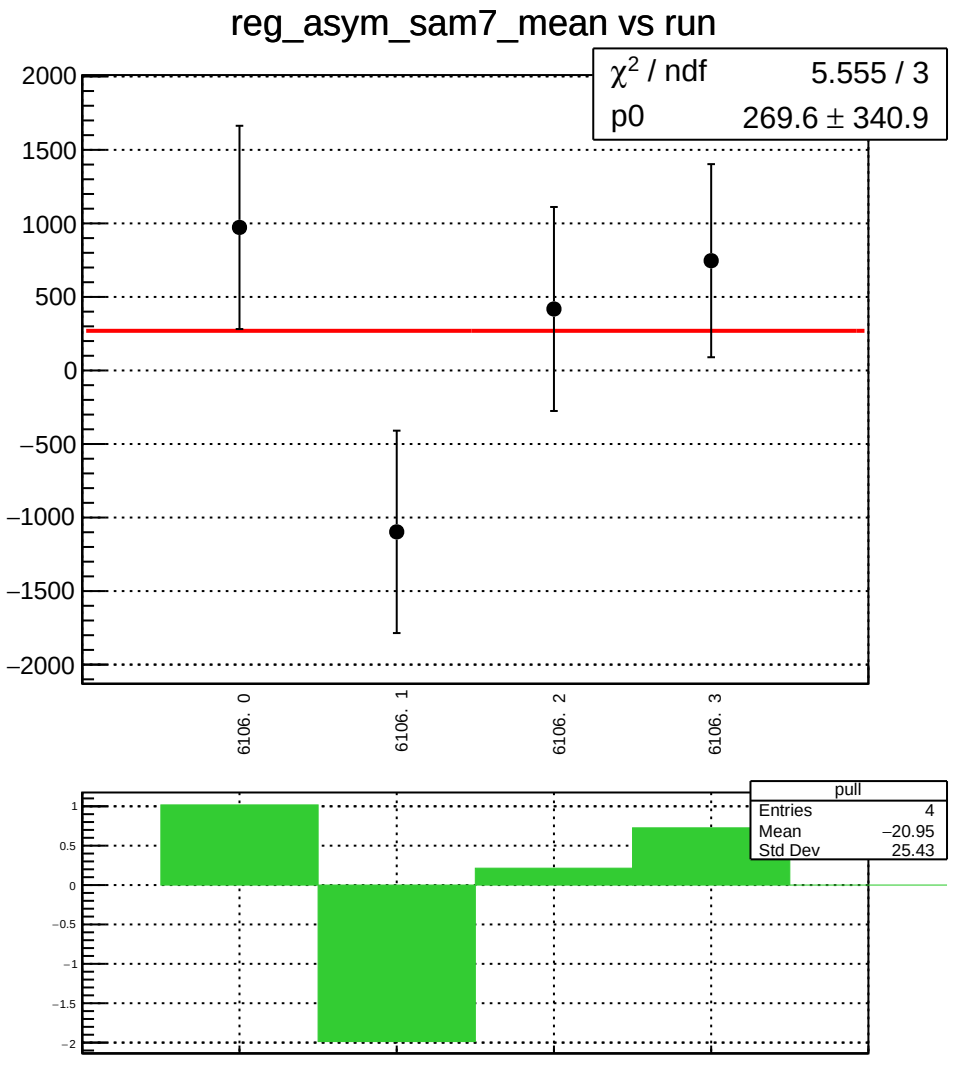

reg_asym_sam6_mean vs run
χ² / ndf 3.042 / 3
p0 584.3 ± 568.2
3000
2000
1000
0
−1000
−2000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 16.23
Std Dev 14.08
1
0.5
0
−0.5
−1

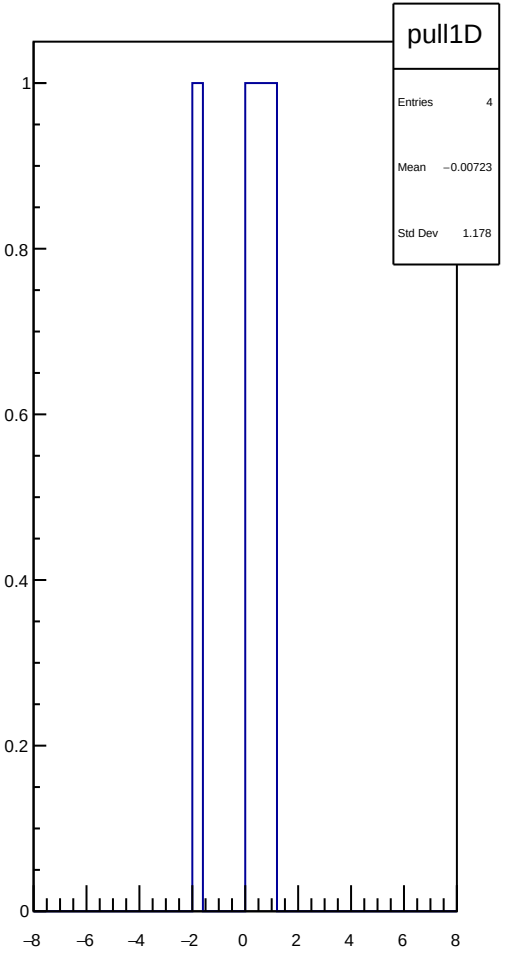

pull1D
Entries 4
Mean 0.01657
Std Dev 0.8719
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

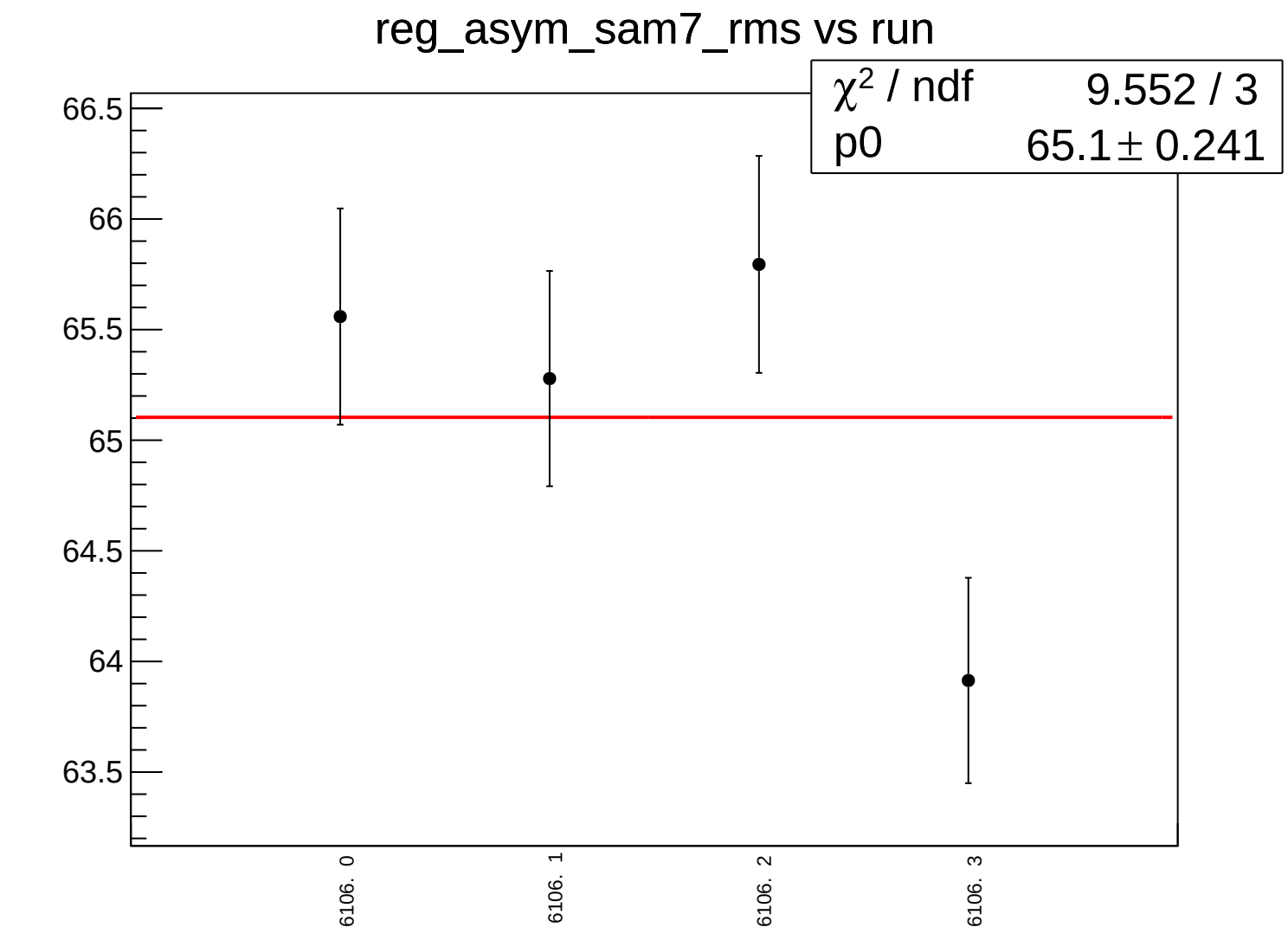

reg_asym_sam6_rms vs run
χ² / ndf 141.1 / 3
p0 108.4 ± 0.4017
118
116
114
112
110
108
106
104
6106. 0
6106. 1
6106. 2
6106. 3

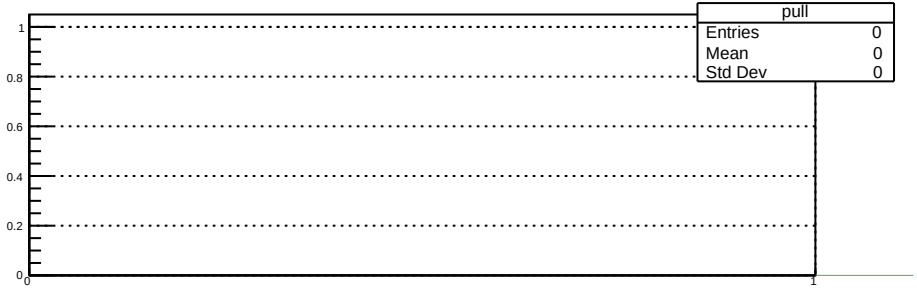

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

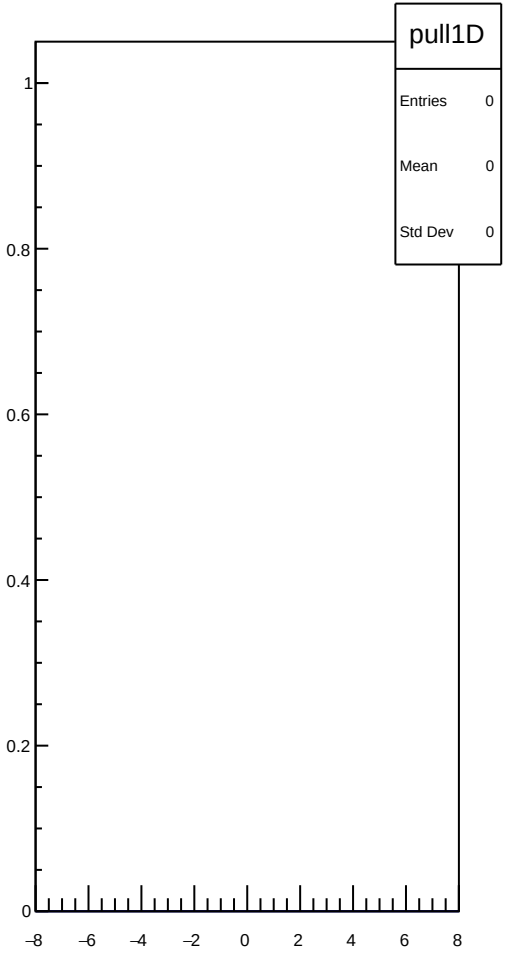

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

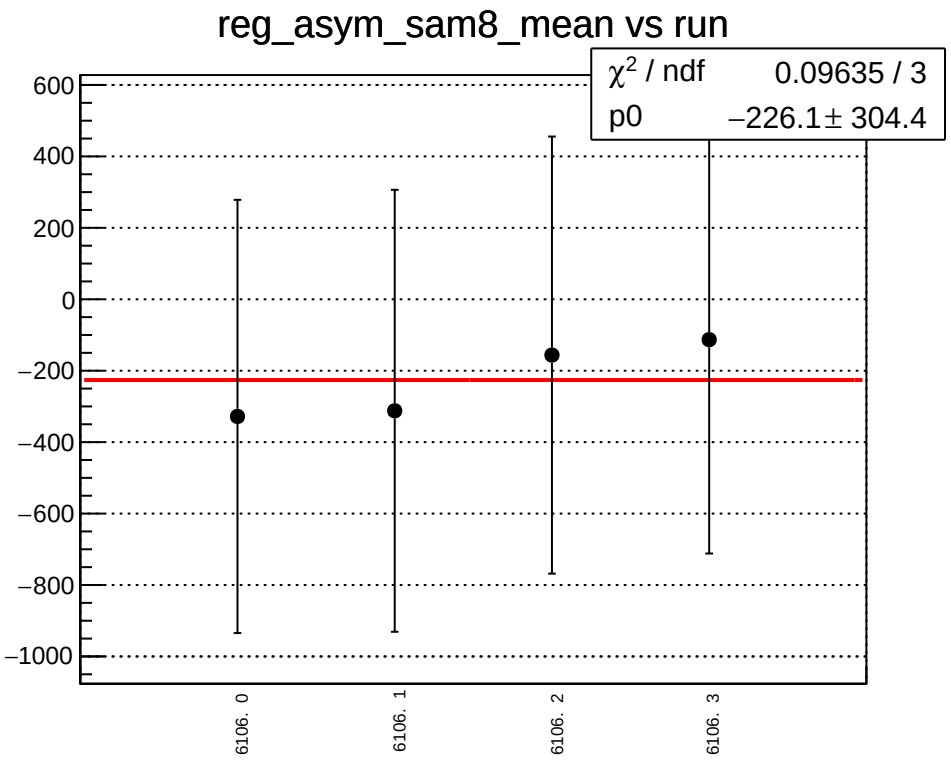

reg_asym_sam7_mean vs run
χ² / ndf 5.555 / 3
p0 269.6 ± 340.9
2000
1500
1000
500
0
−500
−1000
−1500
−2000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −20.95
Std Dev 25.43
1
0.5
0
−0.5
−1
−1.5
−2

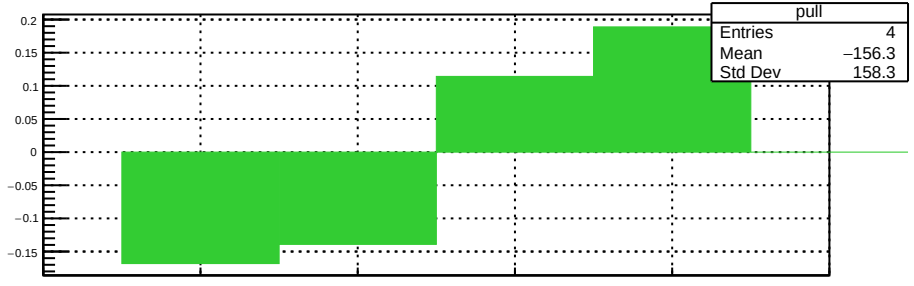

pull1D
Entries 4
Mean −0.00723
Std Dev 1.178
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

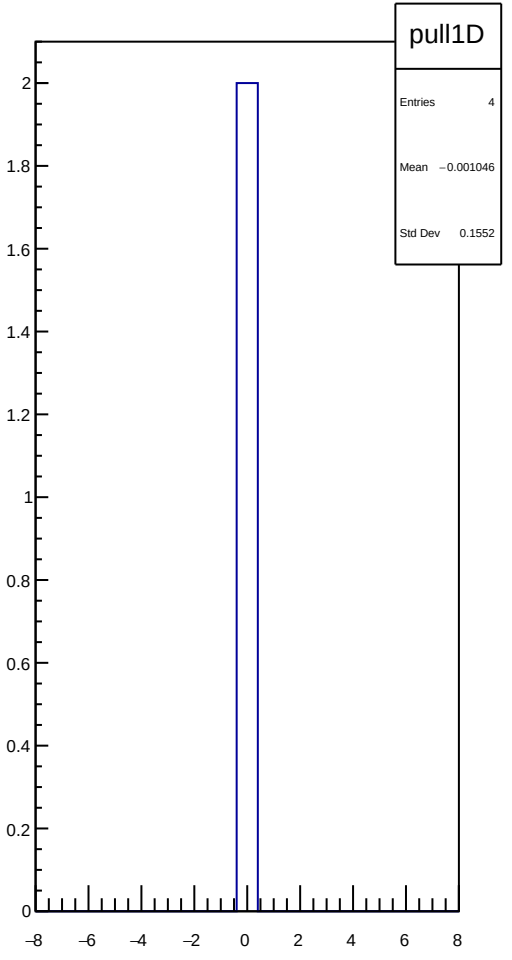

reg_asym_sam7_rms vs run
χ² / ndf 9.552 / 3
p0 65.1 ± 0.241
66.5
66
65.5
65
64.5
64
63.5
6106. 0
6106. 1
6106. 2
6106. 3

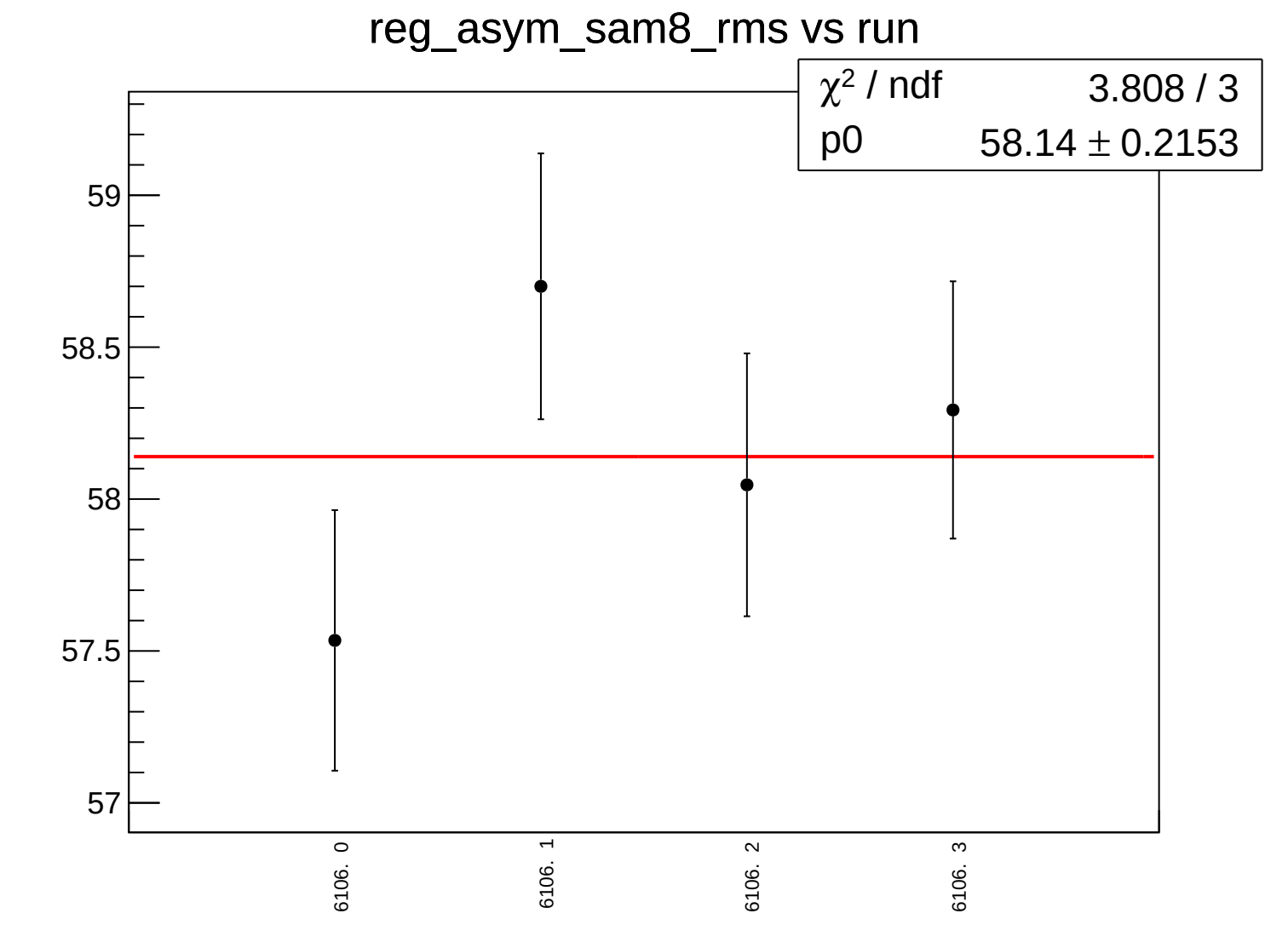

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

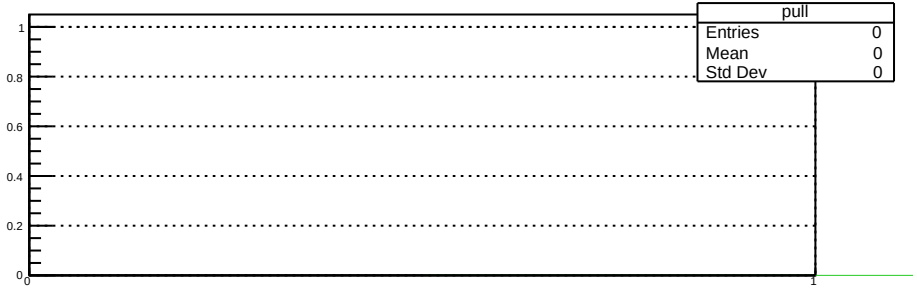

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

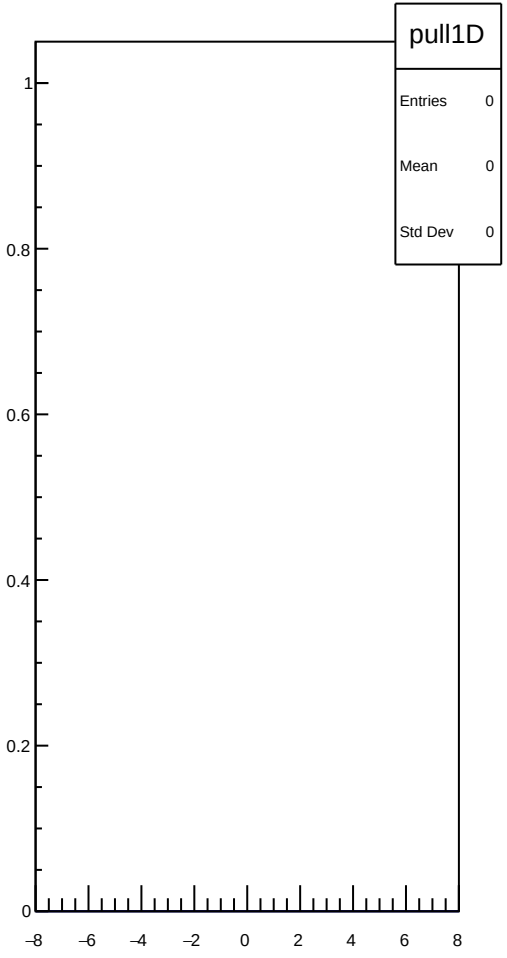

reg_asym_sam8_mean vs run
χ² / ndf 0.09635 / 3
p0 −226.1± 304.4
600
400
200
0
−200
−400
−600
−800
−1000
6106. 0
6106. 1
6106. 2
6106. 3

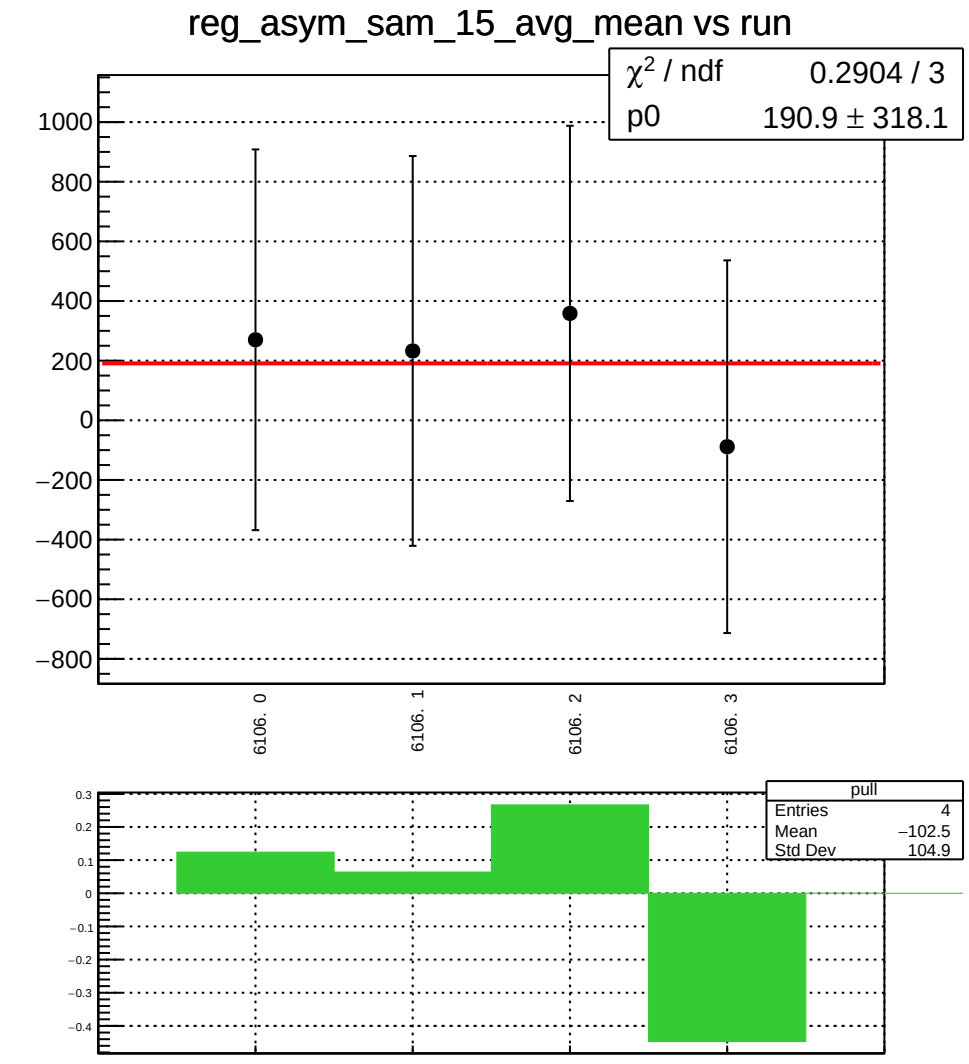

pull
Entries 4
Mean −156.3
Std Dev 158.3
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

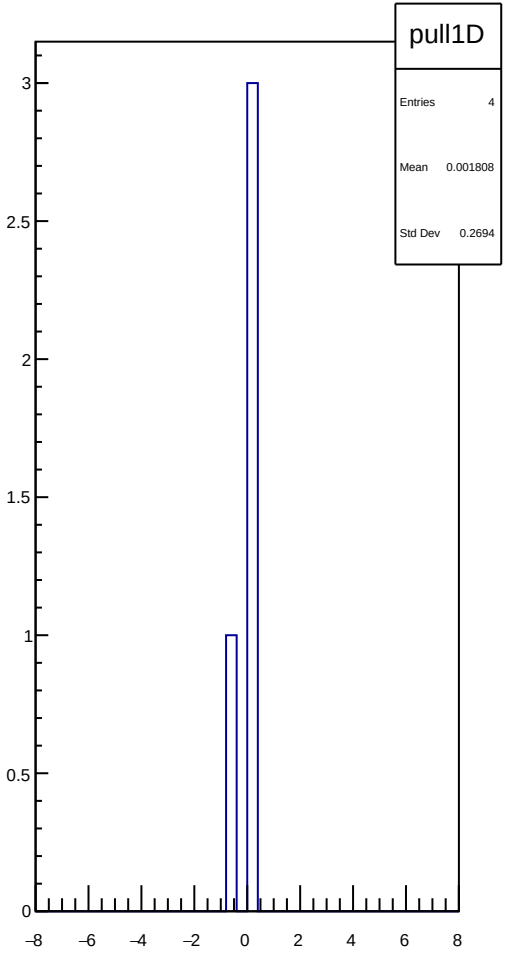

pull1D
Entries 4
Mean −0.001046
Std Dev 0.1552
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

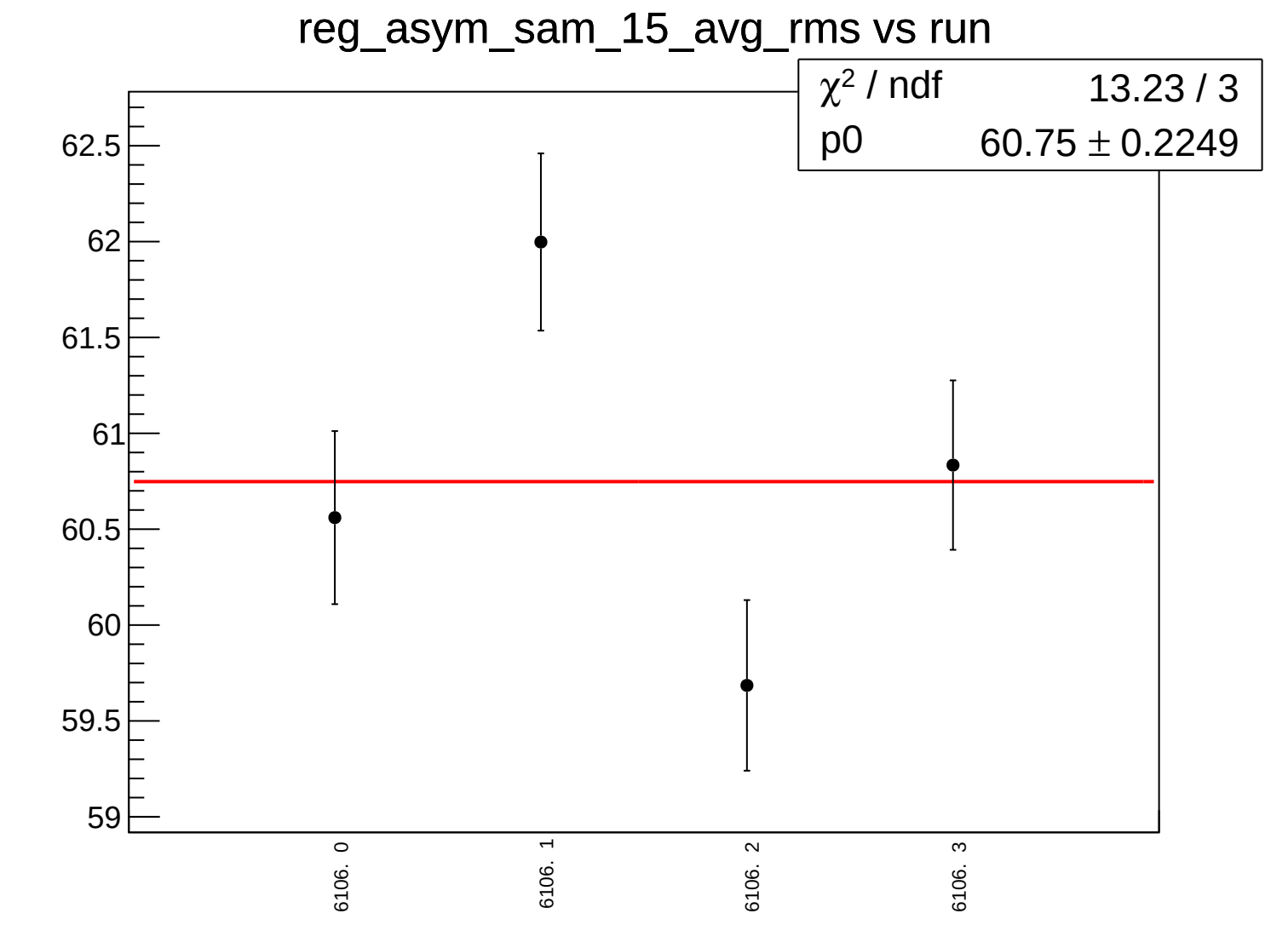

reg_asym_sam8_rms vs run
χ² / ndf 3.808 / 3
p0 58.14 ± 0.2153
59
58.5
58
57.5
57
6106. 0
6106. 1
6106. 2
6106. 3

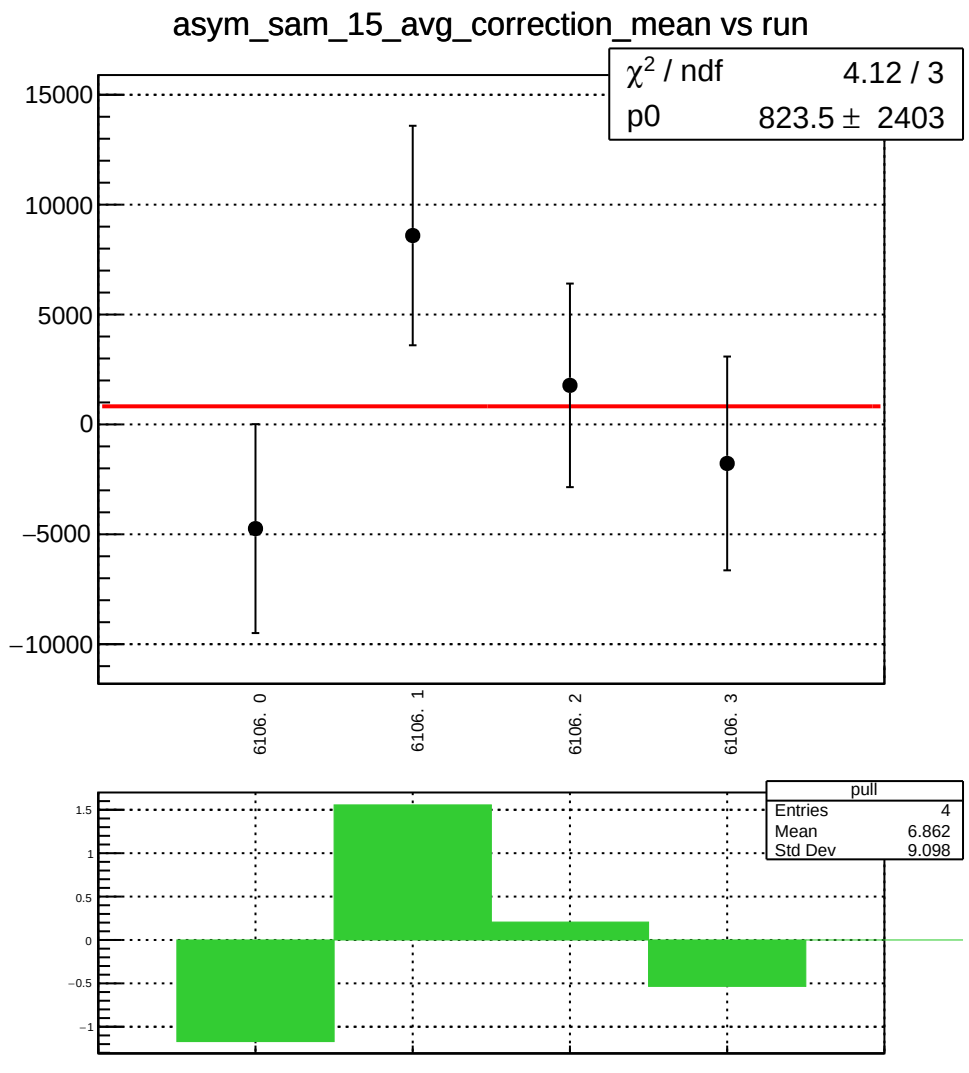

pull
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
0
1

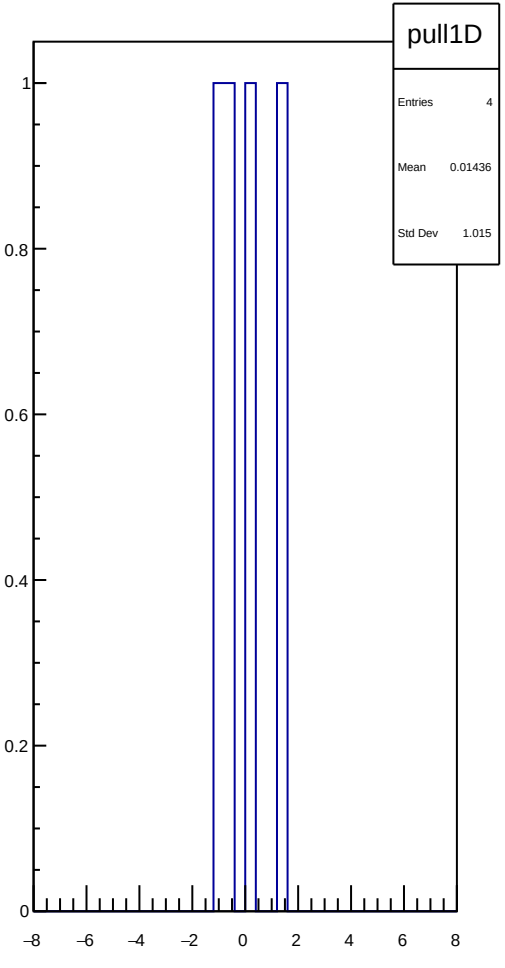

pull1D
Entries 0
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
–8
–6
–4
–2
0
2
4
6
8

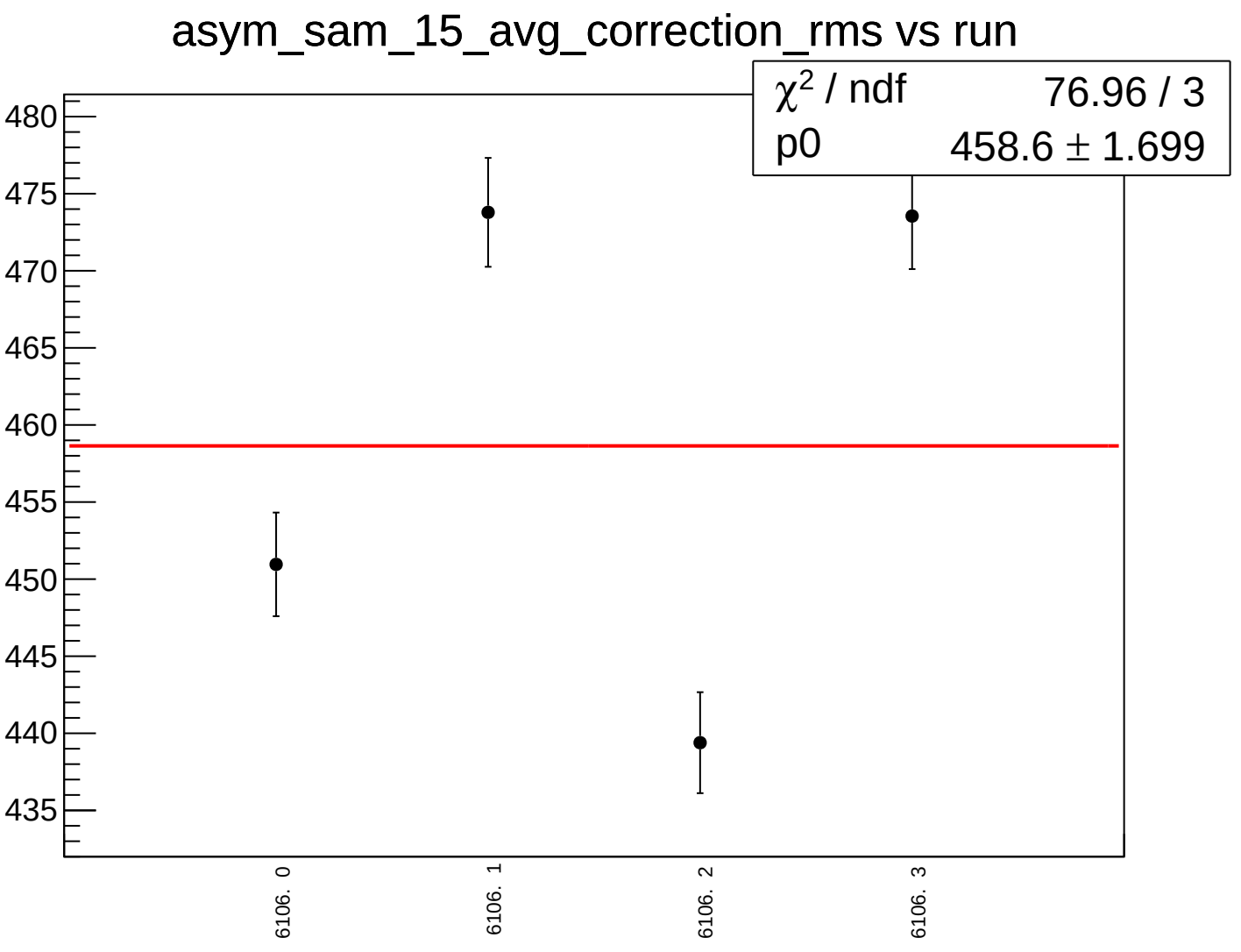

reg_asym_sam_15_avg_mean vs run
χ² / ndf 0.2904 / 3
p0 190.9 ± 318.1
1000
800
600
400
200
0
−200
−400
−600
−800
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −102.5
Std Dev 104.9
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

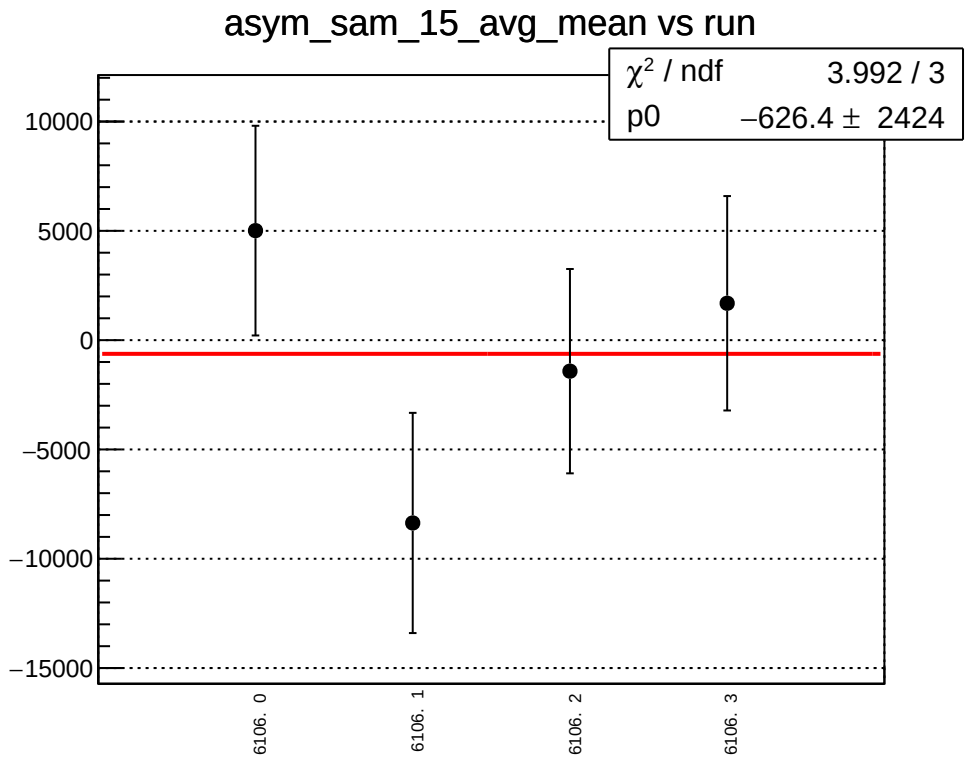

pull1D
Entries 4
Mean 0.001808
Std Dev 0.2694
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

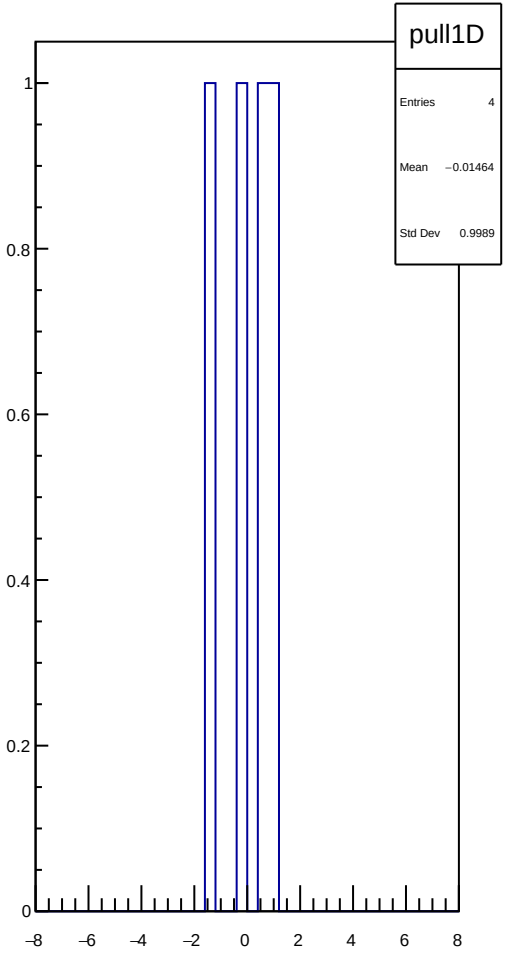

reg_asym_sam_15_avg_rms vs run
χ² / ndf 13.23 / 3
p0 60.75 ± 0.2249
62.5
62
61.5
61
60.5
60
59.5
59
6106. 0
6106. 1
6106. 2
6106. 3

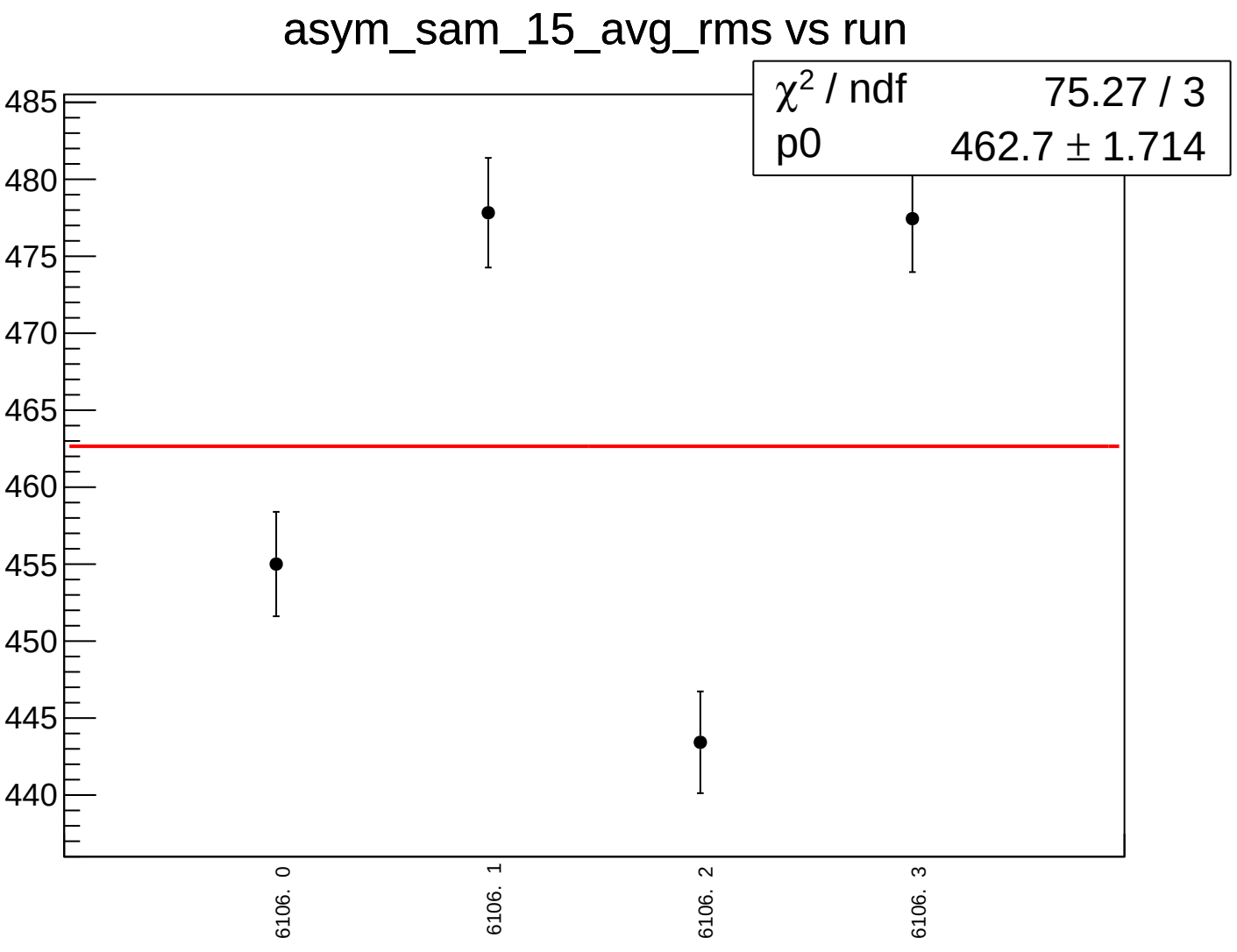

asym_sam_15_avg_correction_mean vs run
χ² / ndf 4.12 / 3
p0 823.5 ± 2403
15000
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 6.862
Std Dev 9.098
1.5
1
0.5
0
−0.5
−1

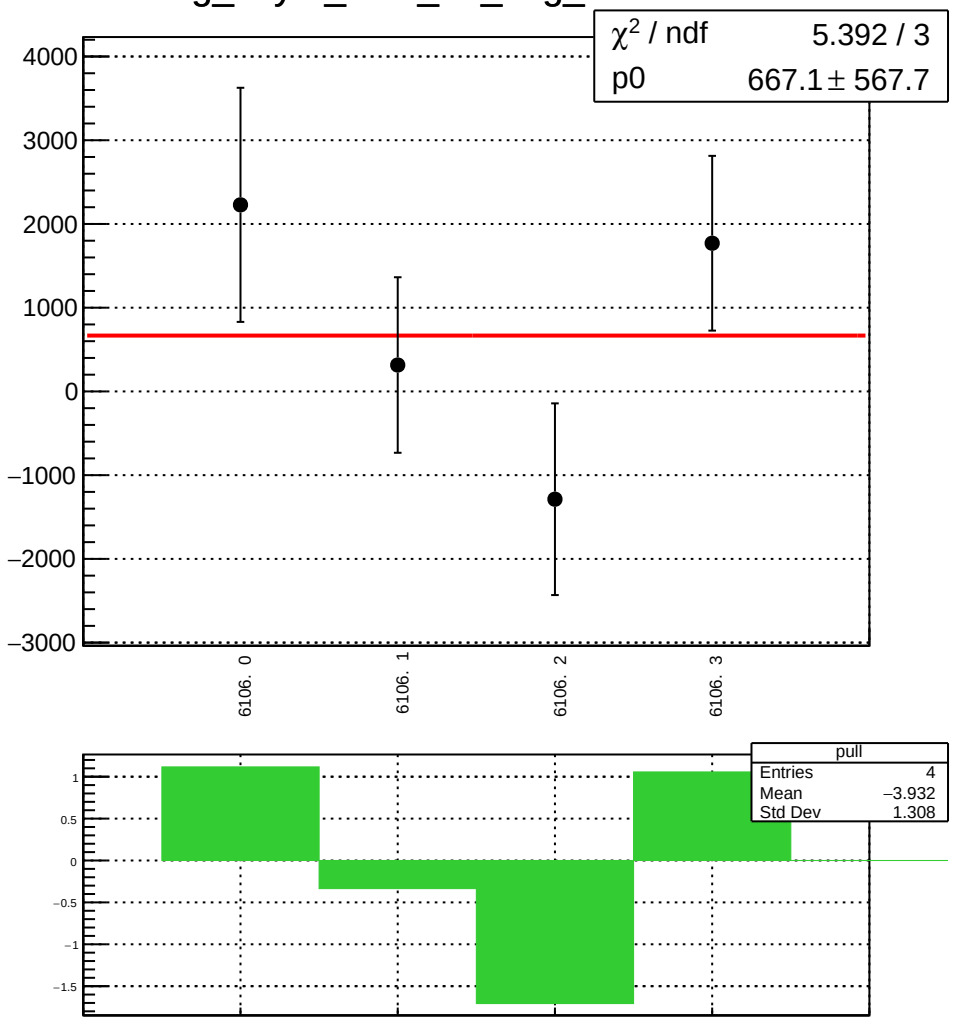

pull1D
Entries 4
Mean 0.01436
Std Dev 1.015
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

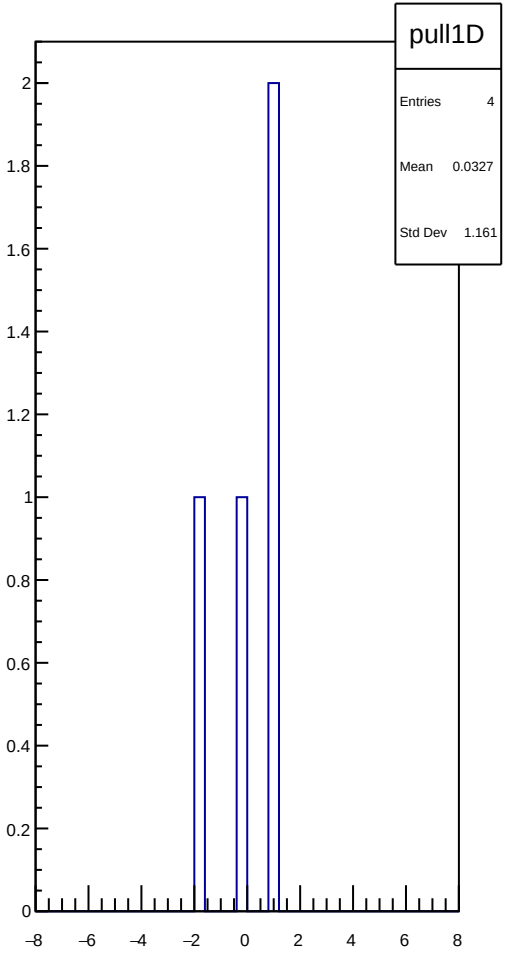

asym_sam_15_avg_correction_rms vs run
χ² / ndf 76.96 / 3
p0 458.6 ± 1.699
480
475
470
465
460
455
450
445
440
435
6106. 0
6106. 1
6106. 2
6106. 3

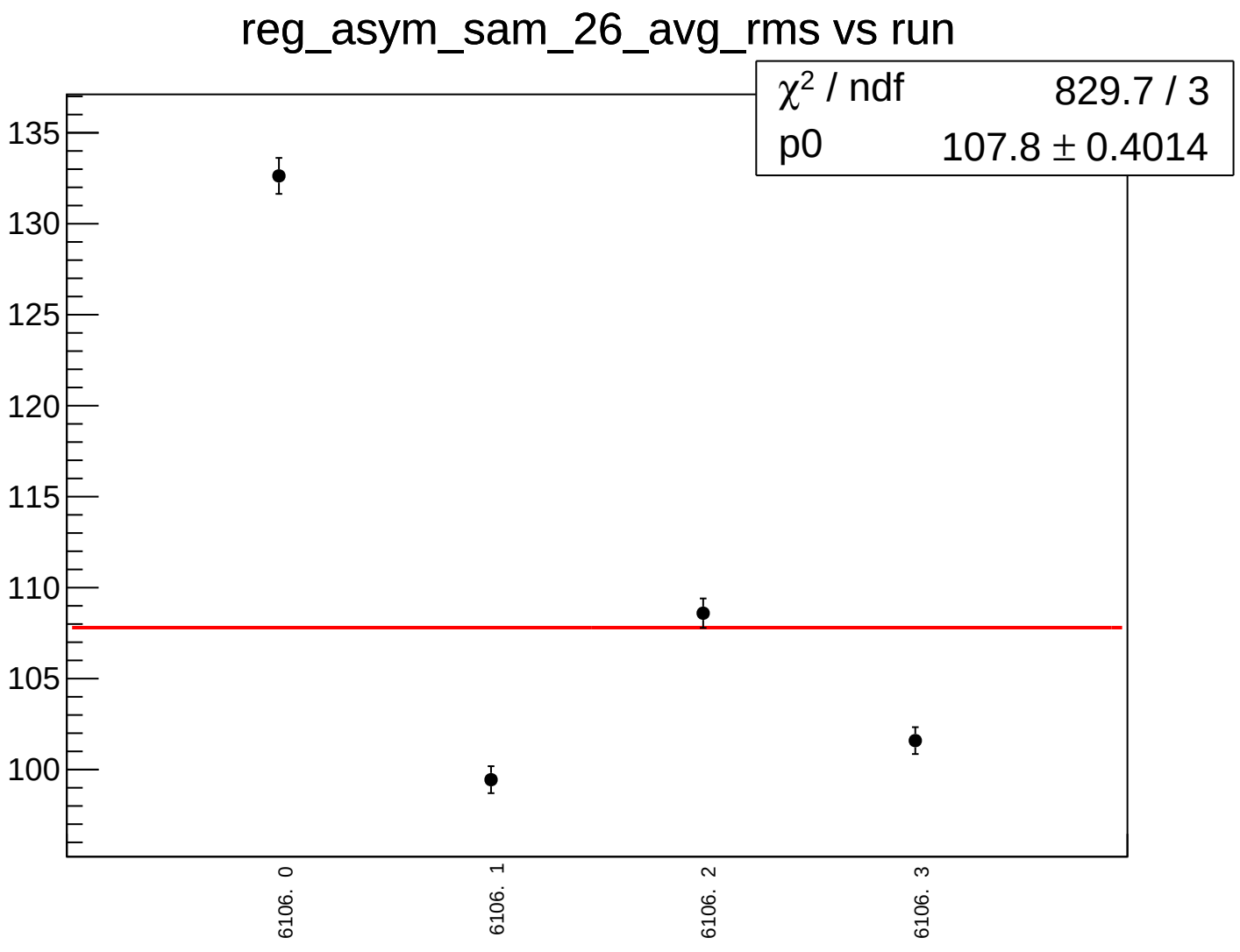

asym_sam_15_avg_mean vs run
χ² / ndf 3.992 / 3
p0 −626.4 ± 2424
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 8.355
Std Dev 9.818
1
0.5
0
−0.5
−1
−1.5

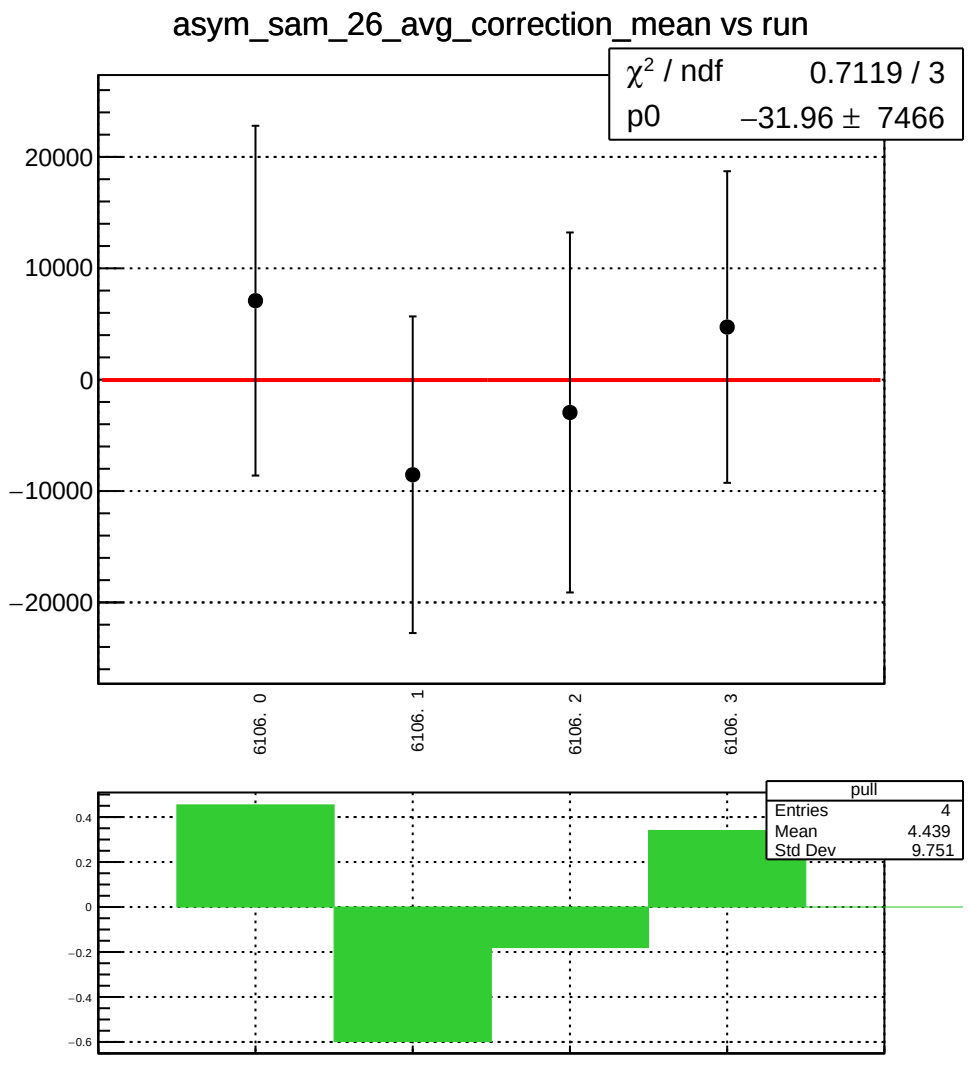

pull1D
Entries 4
Mean −0.01464
Std Dev 0.9989
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

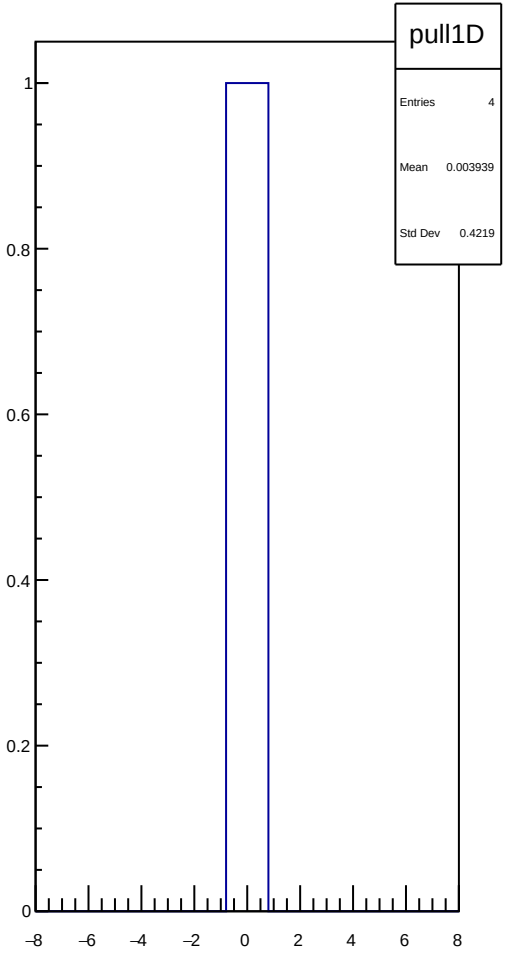

asym_sam_15_avg_rms vs run
χ² / ndf 75.27 / 3
p0 462.7 ± 1.714
485
480
475
470
465
460
455
450
445
440
6106. 0
6106. 1
6106. 2
6106. 3

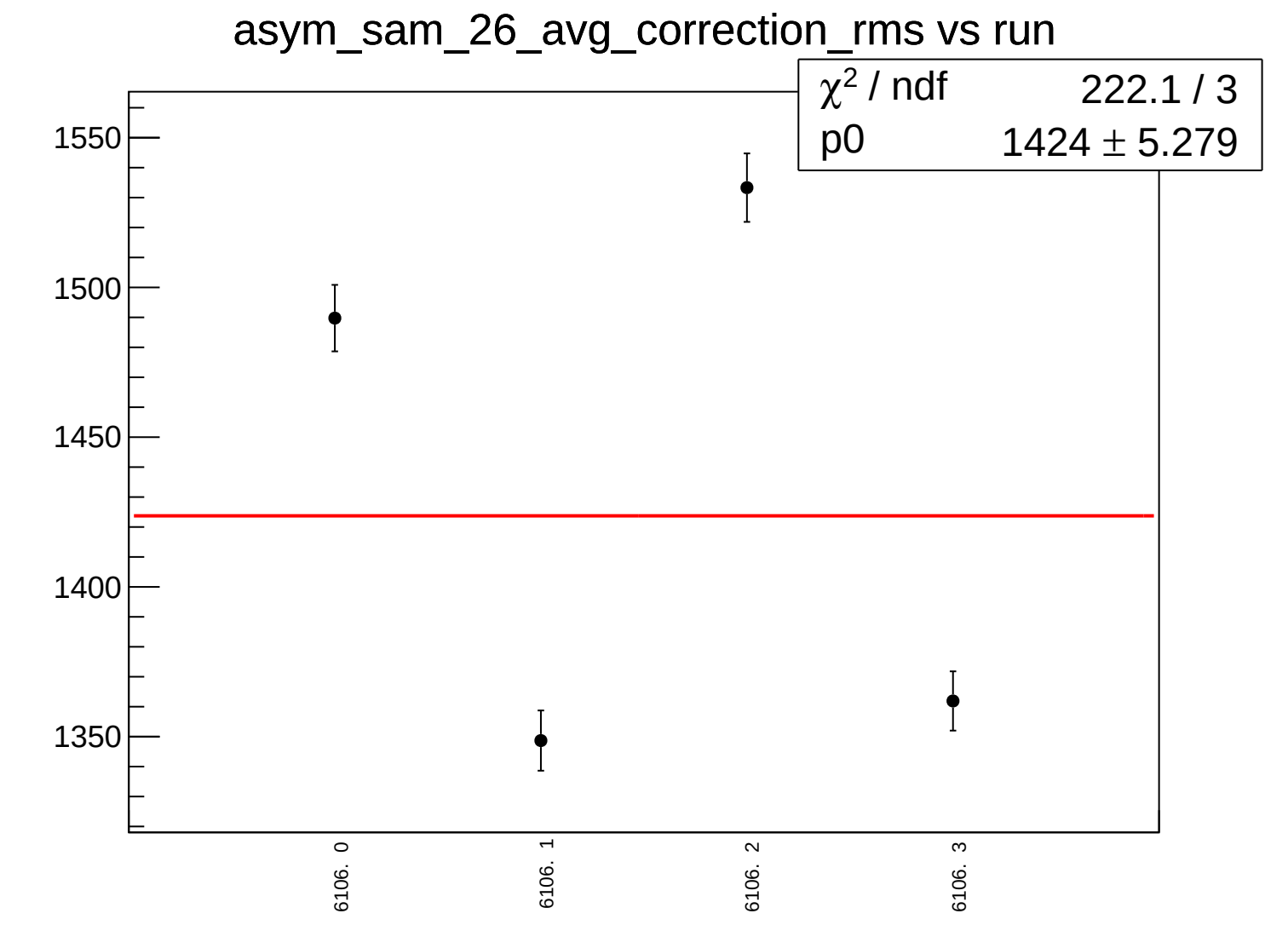

reg_asym_sam_26_avg_mean vs run
χ² / ndf 5.392 / 3
p0 667.1 ± 567.7
4000
3000
2000
1000
0
−1000
−2000
−3000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.932
Std Dev 1.308
1
0.5
0
−0.5
−1
−1.5

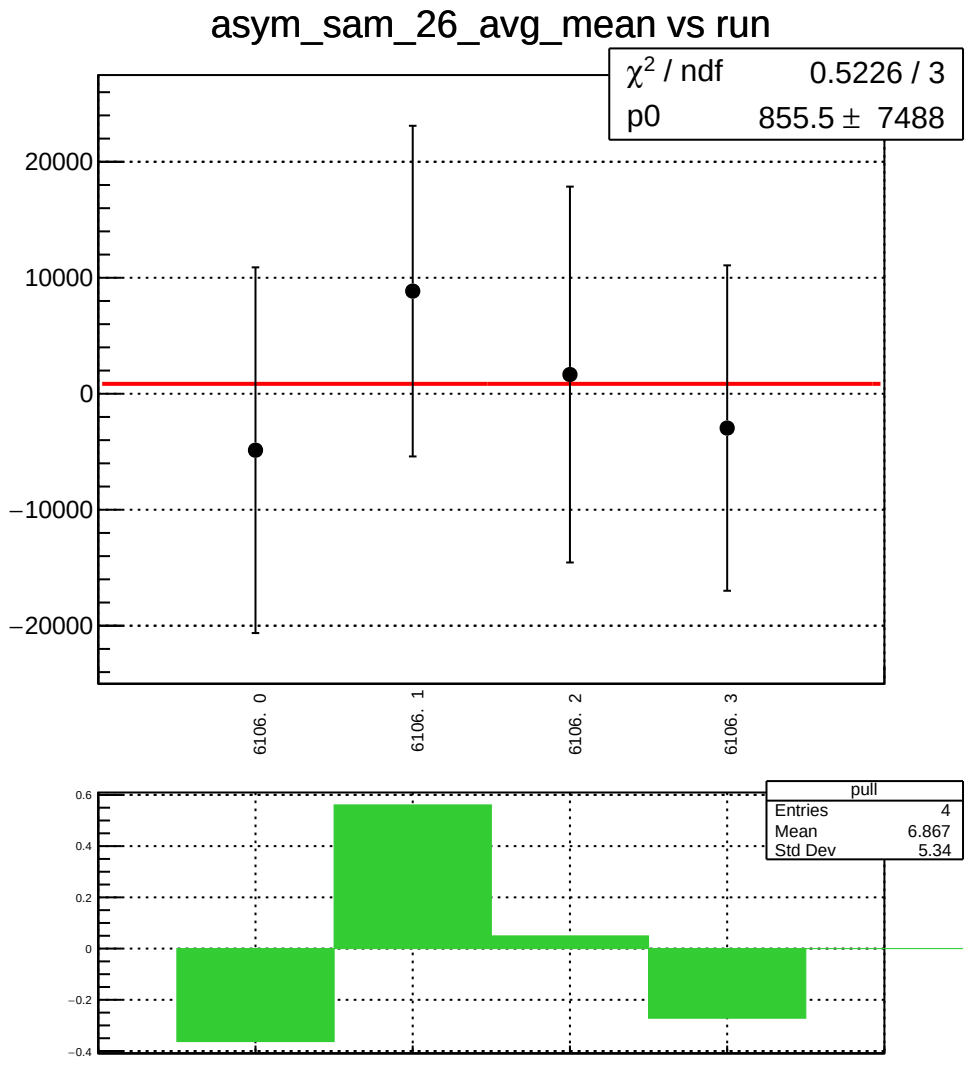

pull1D
Entries 4
Mean 0.0327
Std Dev 1.161
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

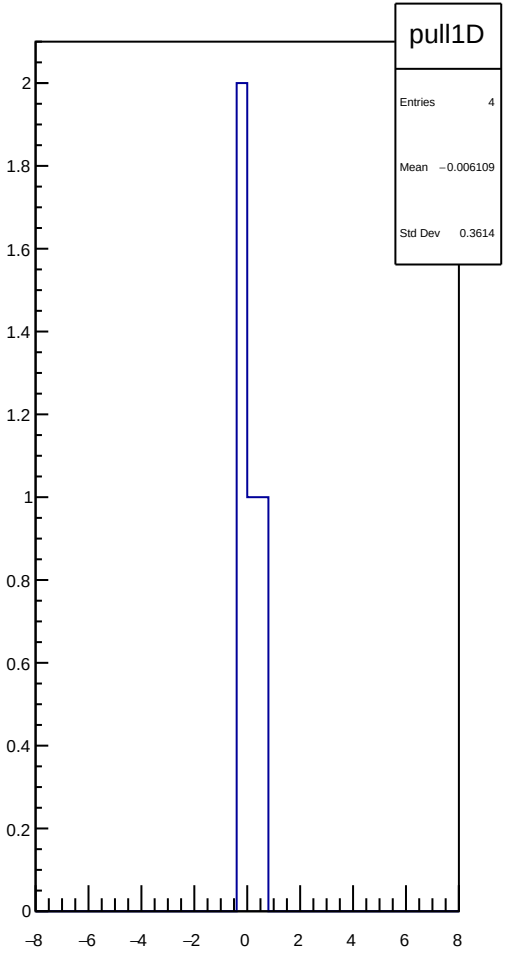

reg_asym_sam_26_avg_rms vs run
χ² / ndf 829.7 / 3
p0 107.8 ± 0.4014
135
130
125
120
115
110
105
100
6106. 0
6106. 1
6106. 2
6106. 3

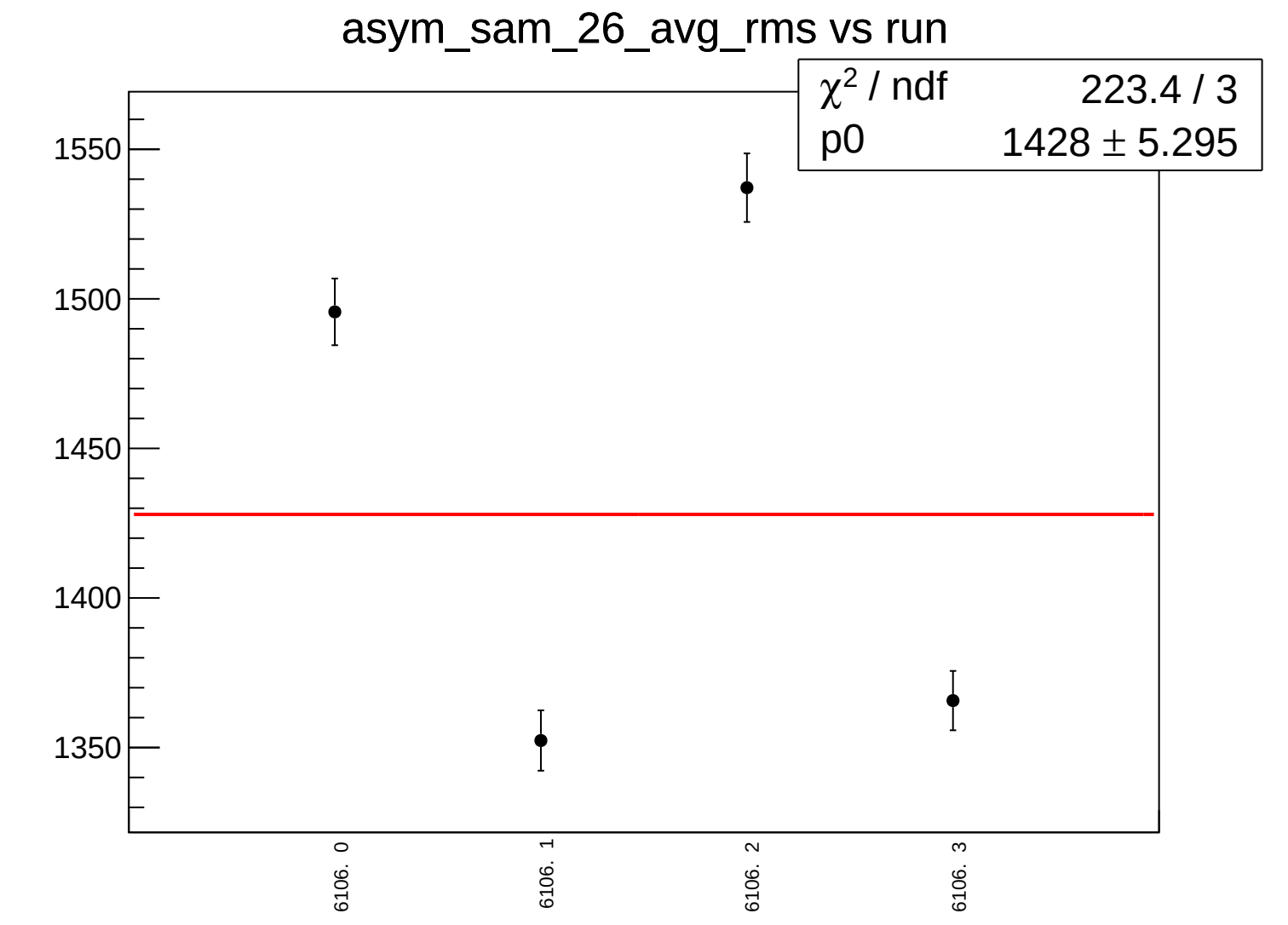

asym_sam_26_avg_correction_mean vs run
χ² / ndf 0.7119 / 3
p0 −31.96 ± 7466
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 4.439
Std Dev 9.751
0.4
0.2
0
−0.2
−0.4
−0.6

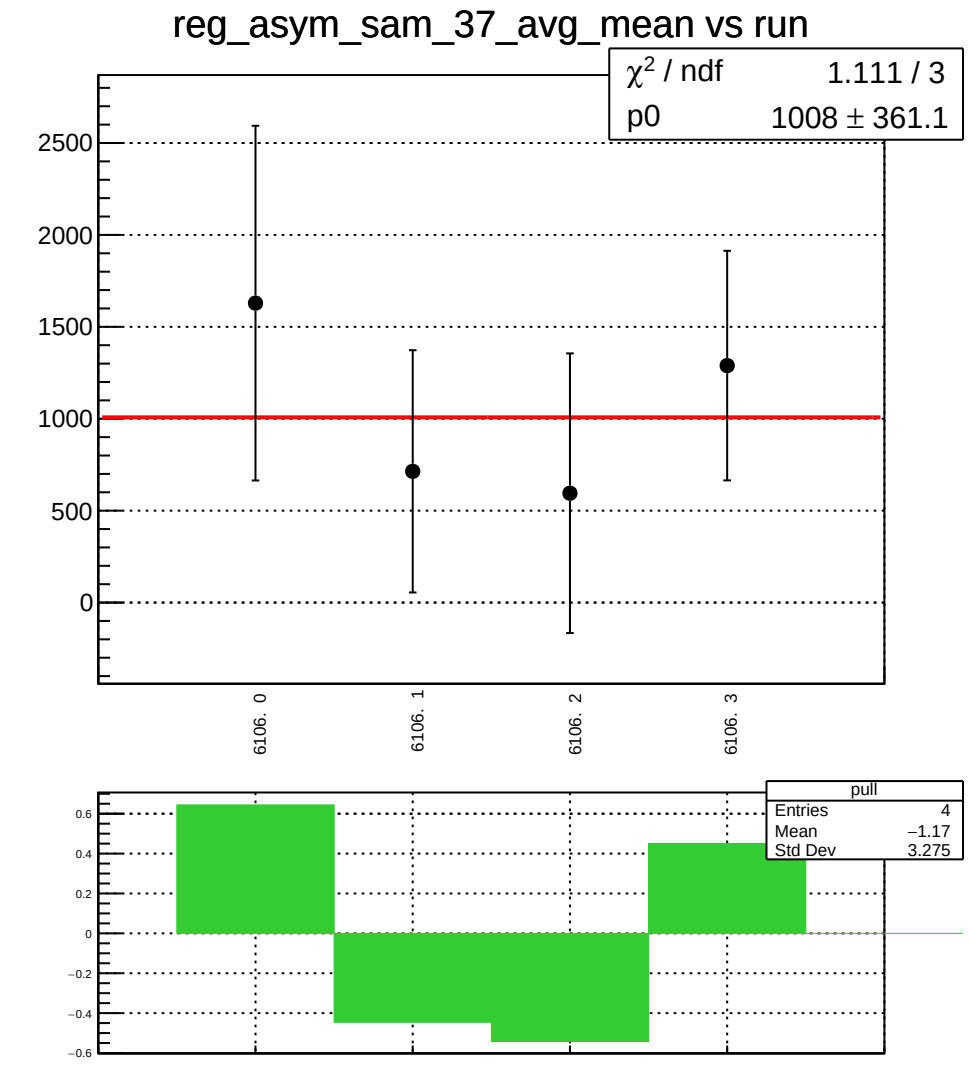

pull1D
Entries 4
Mean 0.003939
Std Dev 0.4219
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

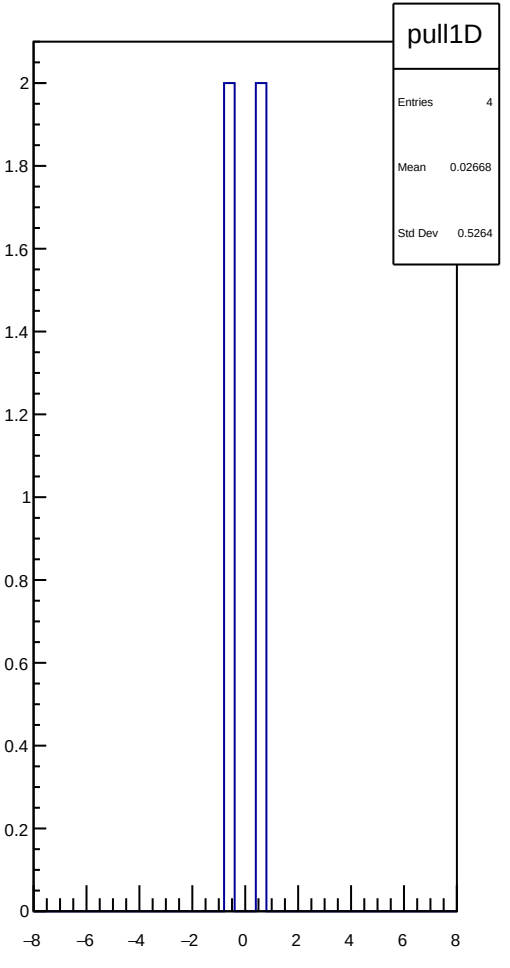

asym_sam_26_avg_correction_rms vs run
χ² / ndf 222.1 / 3
p0 1424 ± 5.279
1550
1500
1450
1400
1350
6106. 0
6106. 1
6106. 2
6106. 3

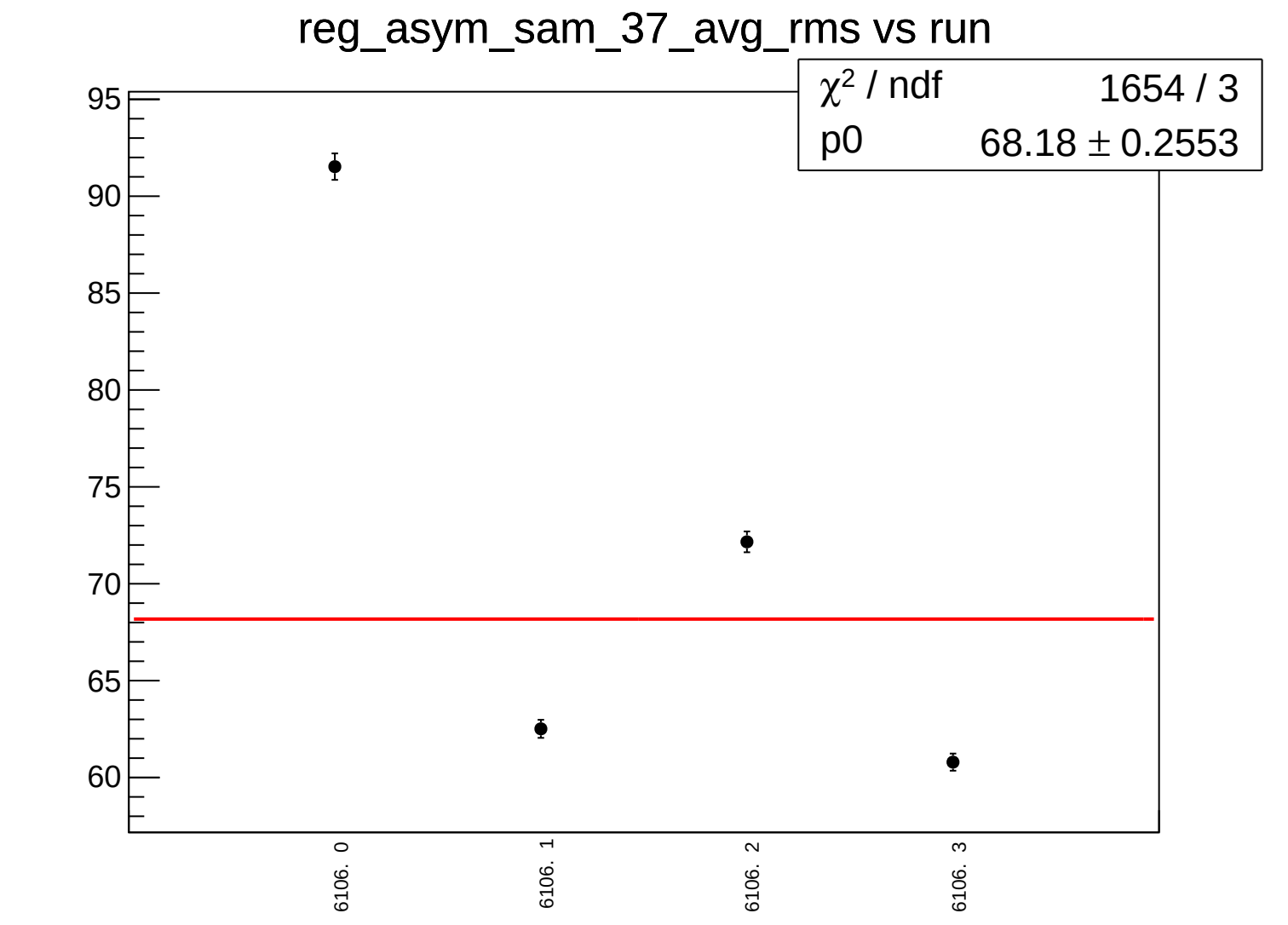

asym_sam_26_avg_mean vs run
χ² / ndf 0.5226 / 3
p0 855.5 ± 7488
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 6.867
Std Dev 5.34
0.6
0.4
0.2
0
−0.2
−0.4

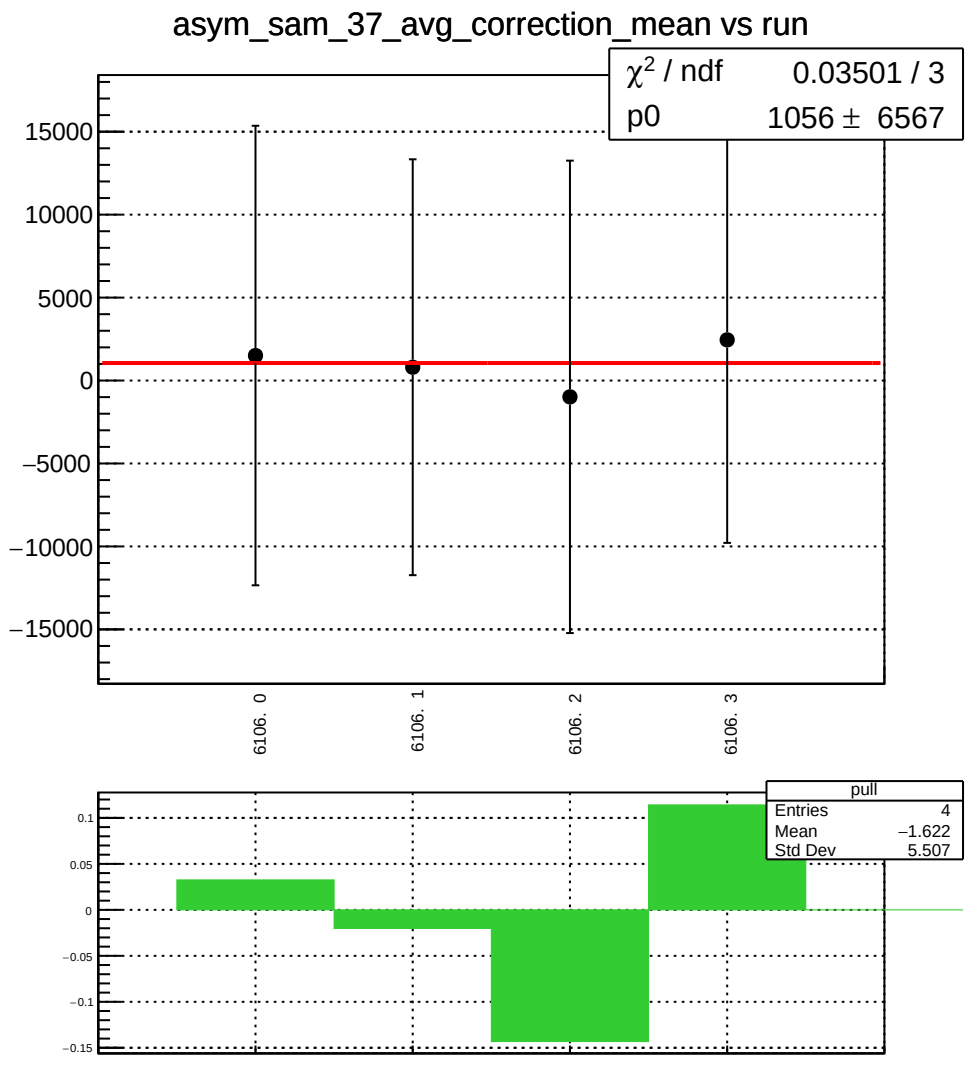

pull1D
Entries 4
Mean −0.006109
Std Dev 0.3614
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

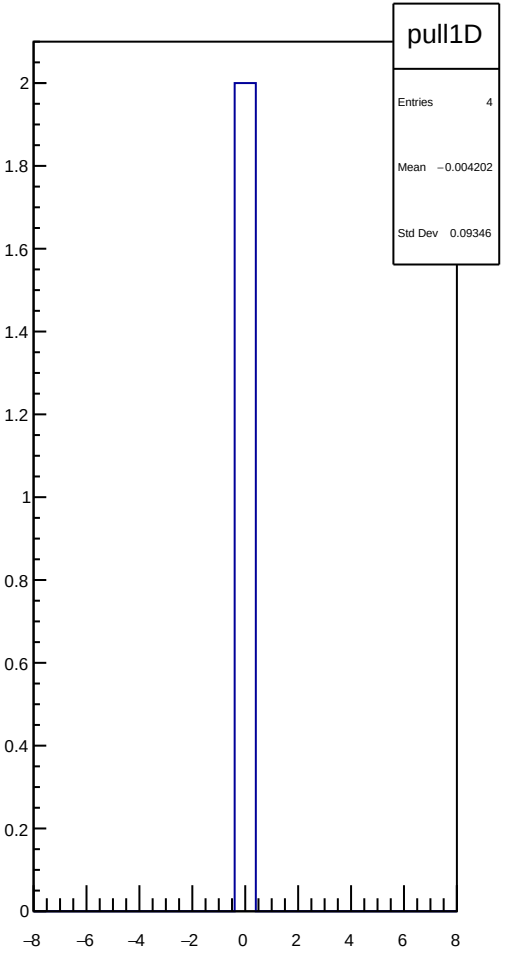

asym_sam_26_avg_rms vs run
χ² / ndf 223.4 / 3
p0 1428 ± 5.295
1550
1500
1450
1400
1350
6106. 0
6106. 1
6106. 2
6106. 3

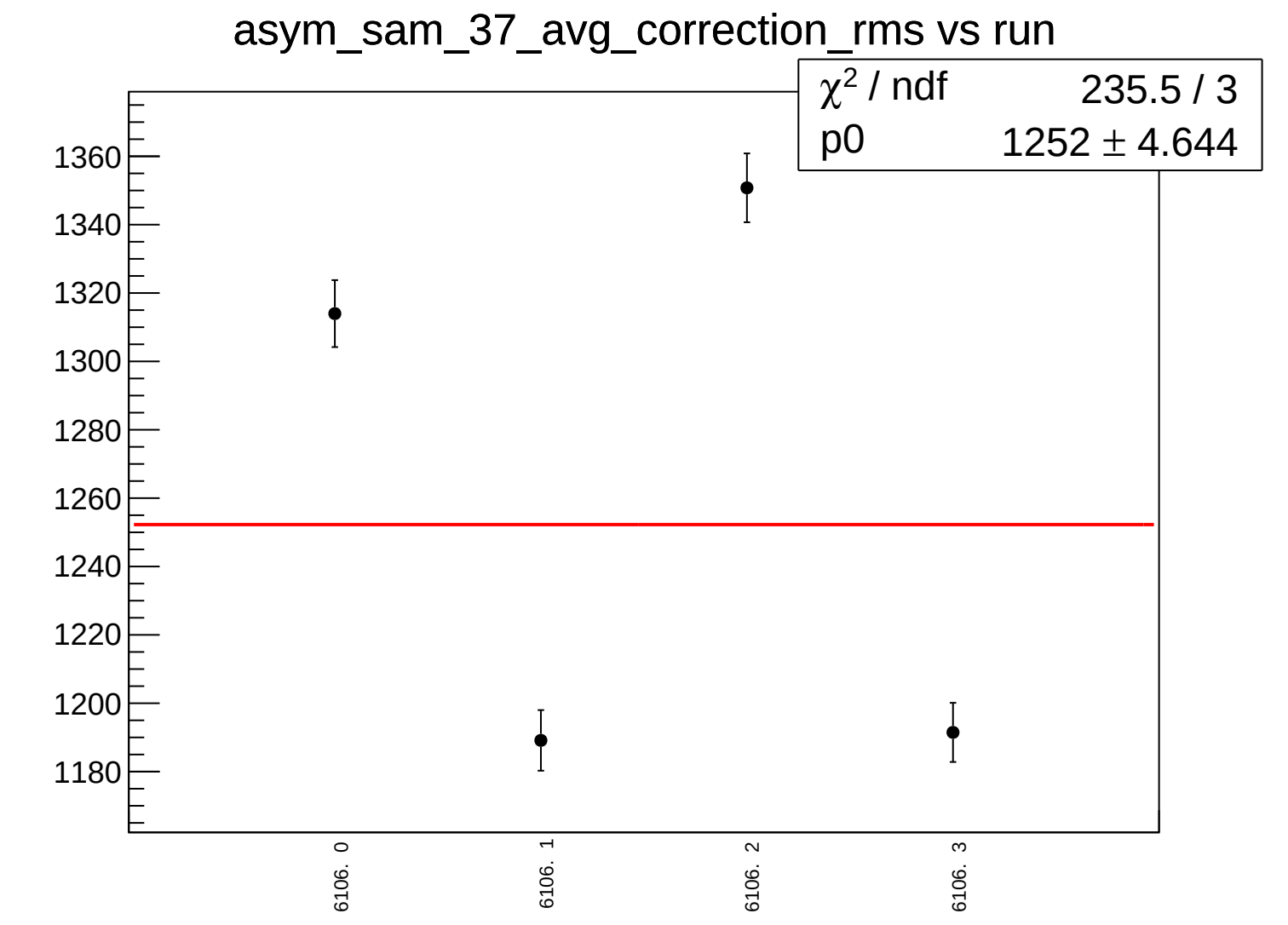

reg_asym_sam_37_avg_mean vs run
χ² / ndf 1.111 / 3
p0 1008 ± 361.1
2500
2000
1500
1000
500
0
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.17
Std Dev 3.275
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

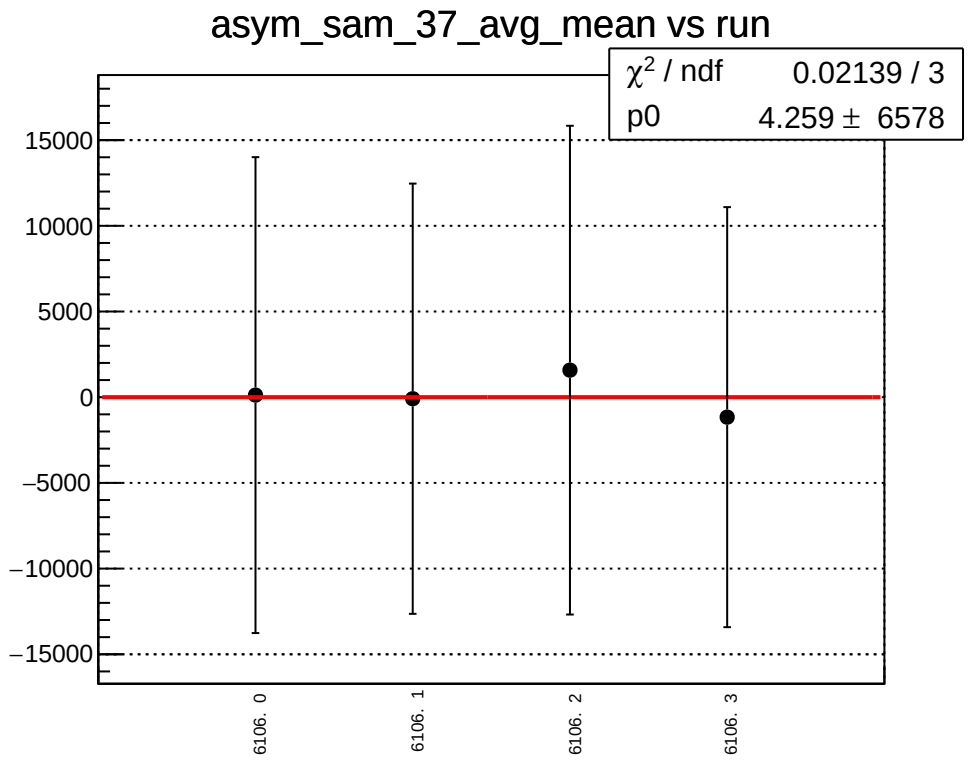

pull1D
Entries 4
Mean 0.02668
Std Dev 0.5264
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

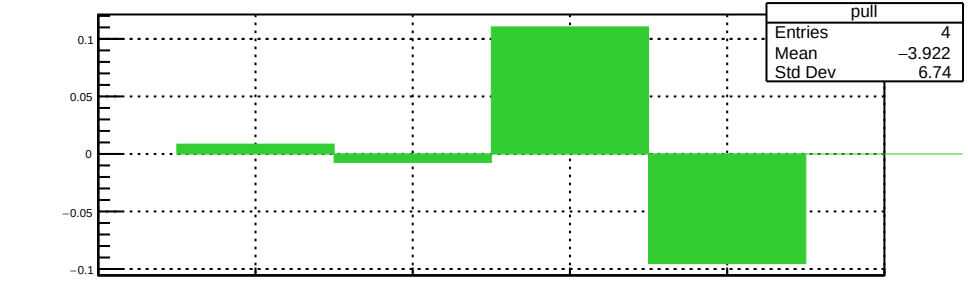

reg_asym_sam_37_avg_rms vs run
χ² / ndf 1654 / 3
p0 68.18 ± 0.2553
95
90
85
80
75
70
65
60
6106. 0
6106. 1
6106. 2
6106. 3

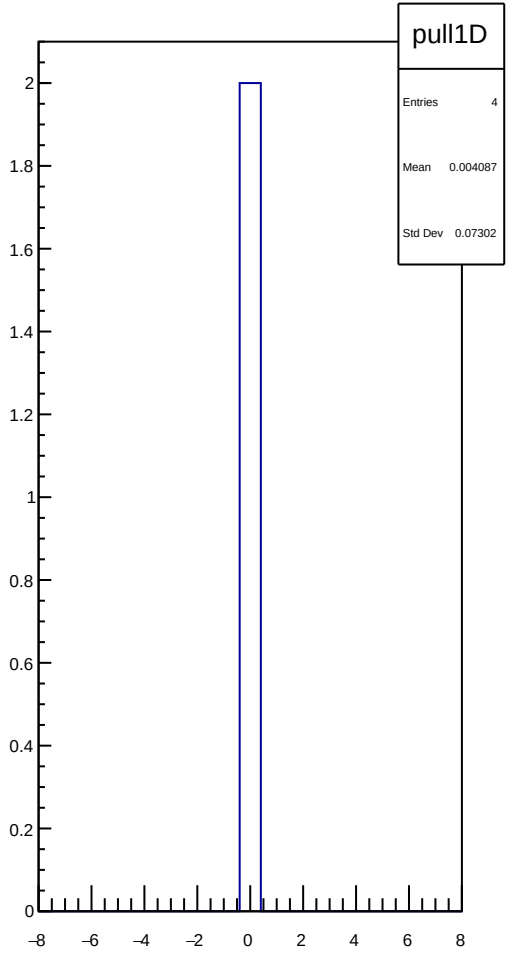

asym_sam_37_avg_correction_mean vs run
χ² / ndf 0.03501 / 3
p0 1056 ± 6567
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.622
Std Dev 5.507
0.1
0.05
0
−0.05
−0.1
−0.15

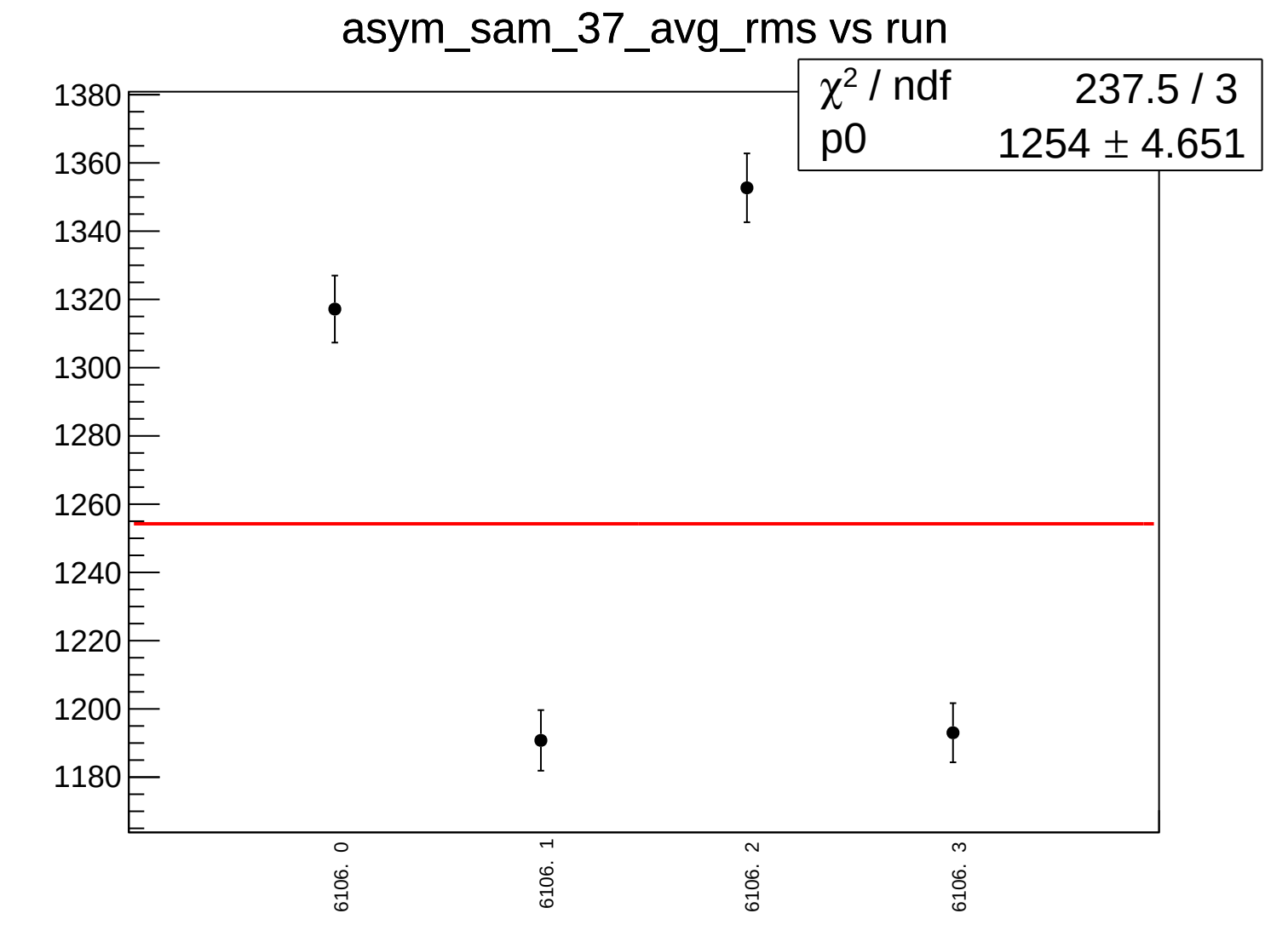

pull1D
Entries 4
Mean −0.004202
Std Dev 0.09346
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

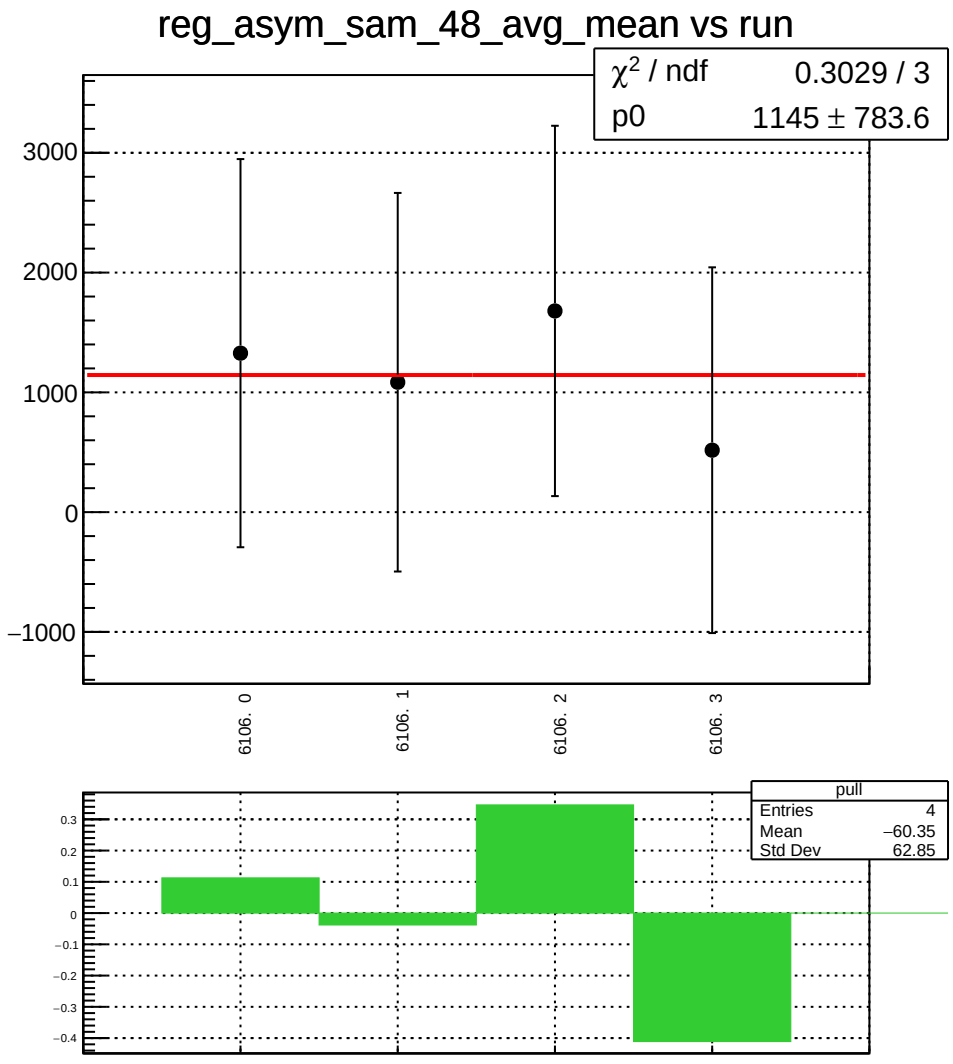

asym_sam_37_avg_correction_rms vs run
χ² / ndf 235.5 / 3
p0 1252 ± 4.644
1360
1340
1320
1300
1280
1260
1240
1220
1200
1180
6106. 0
6106. 1
6106. 2
6106. 3

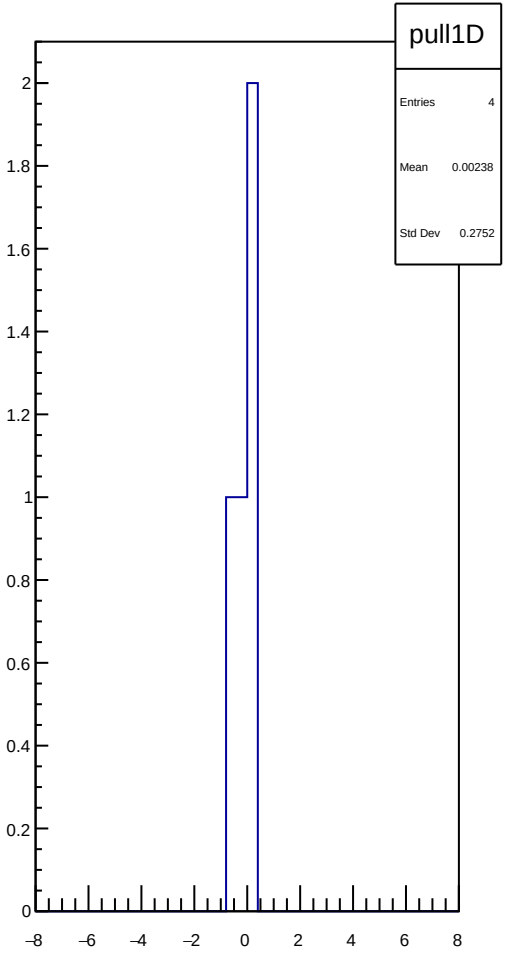

asym_sam_37_avg_mean vs run
χ² / ndf 0.02139 / 3
p0 4.259 ± 6578
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3

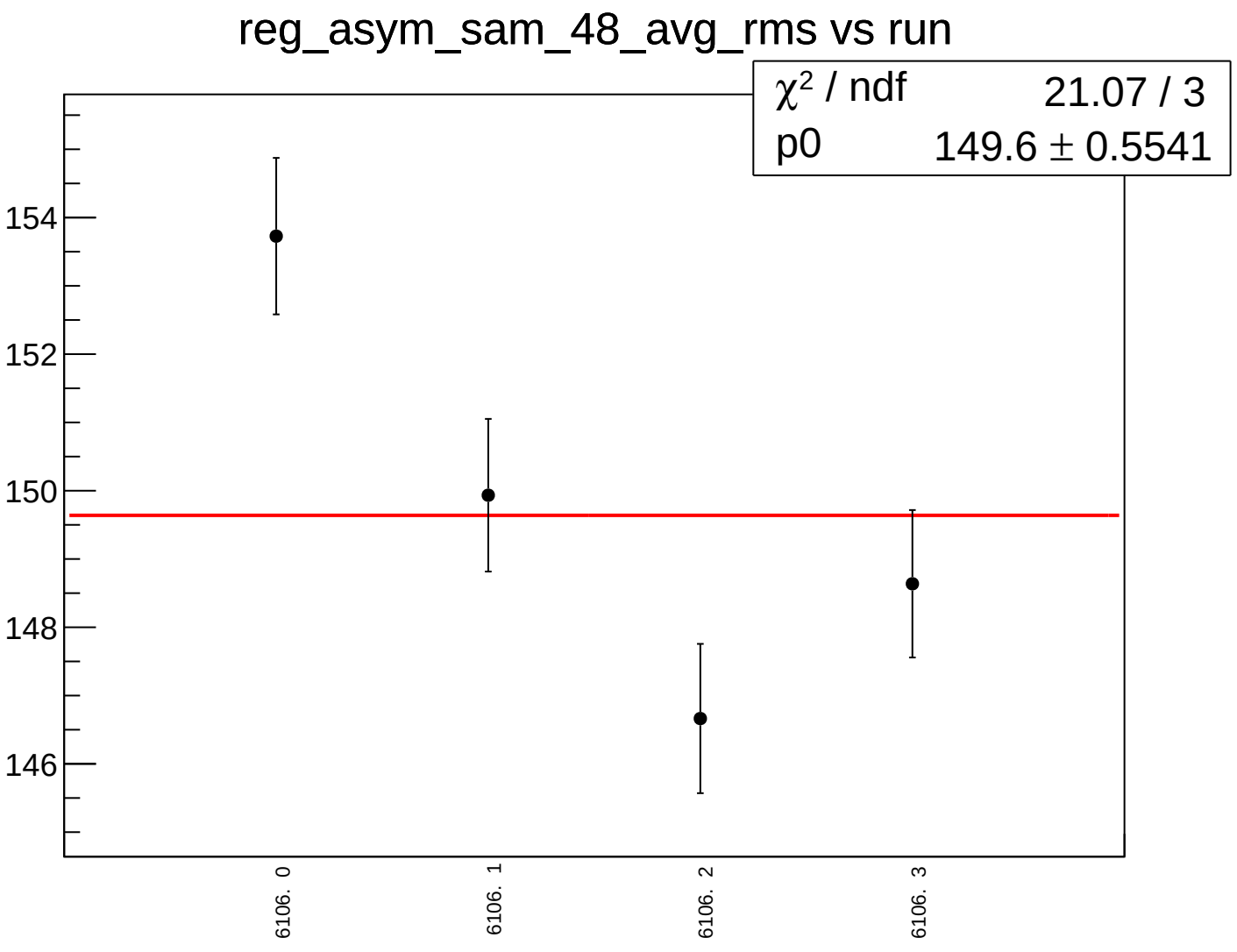

pull
Entries 4
Mean −3.922
Std Dev 6.74
0.1
0.05
0
−0.05
−0.1

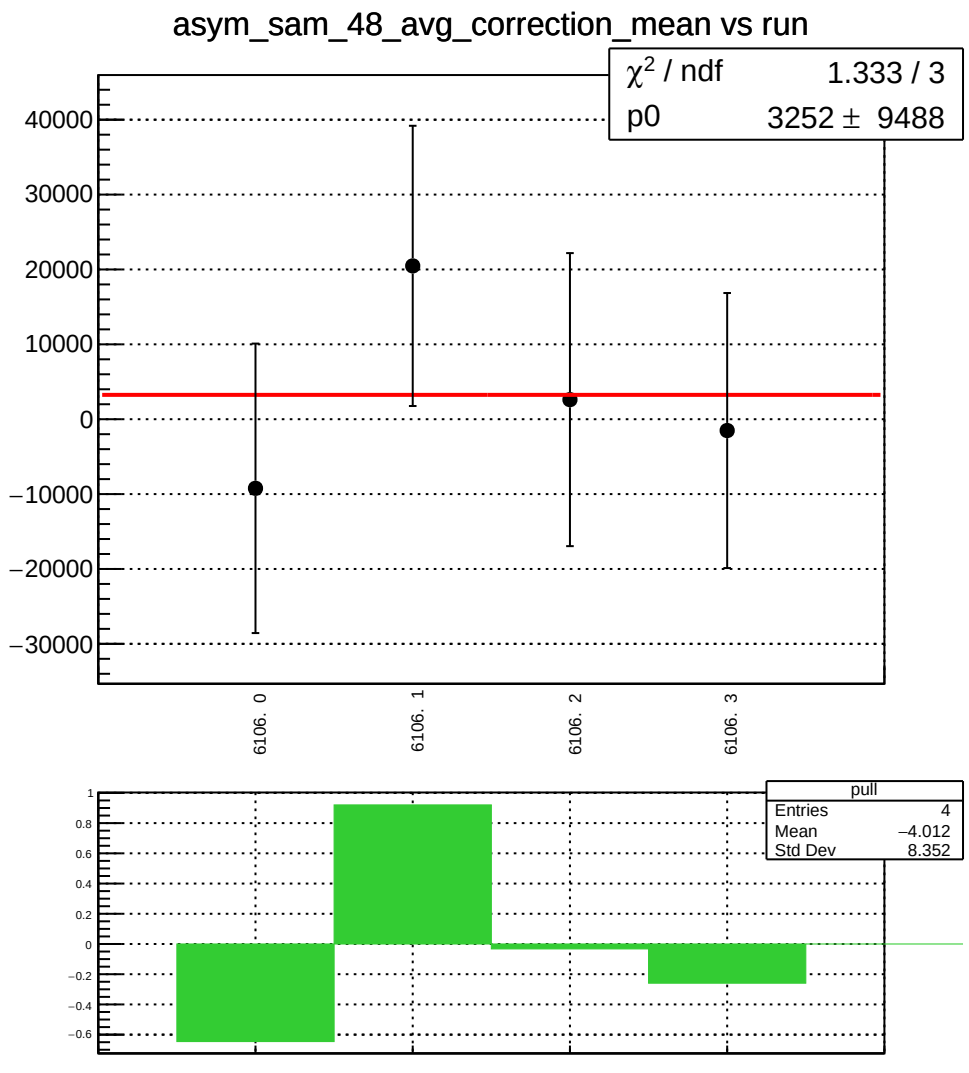

pull1D
Entries 4
Mean 0.004087
Std Dev 0.07302
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

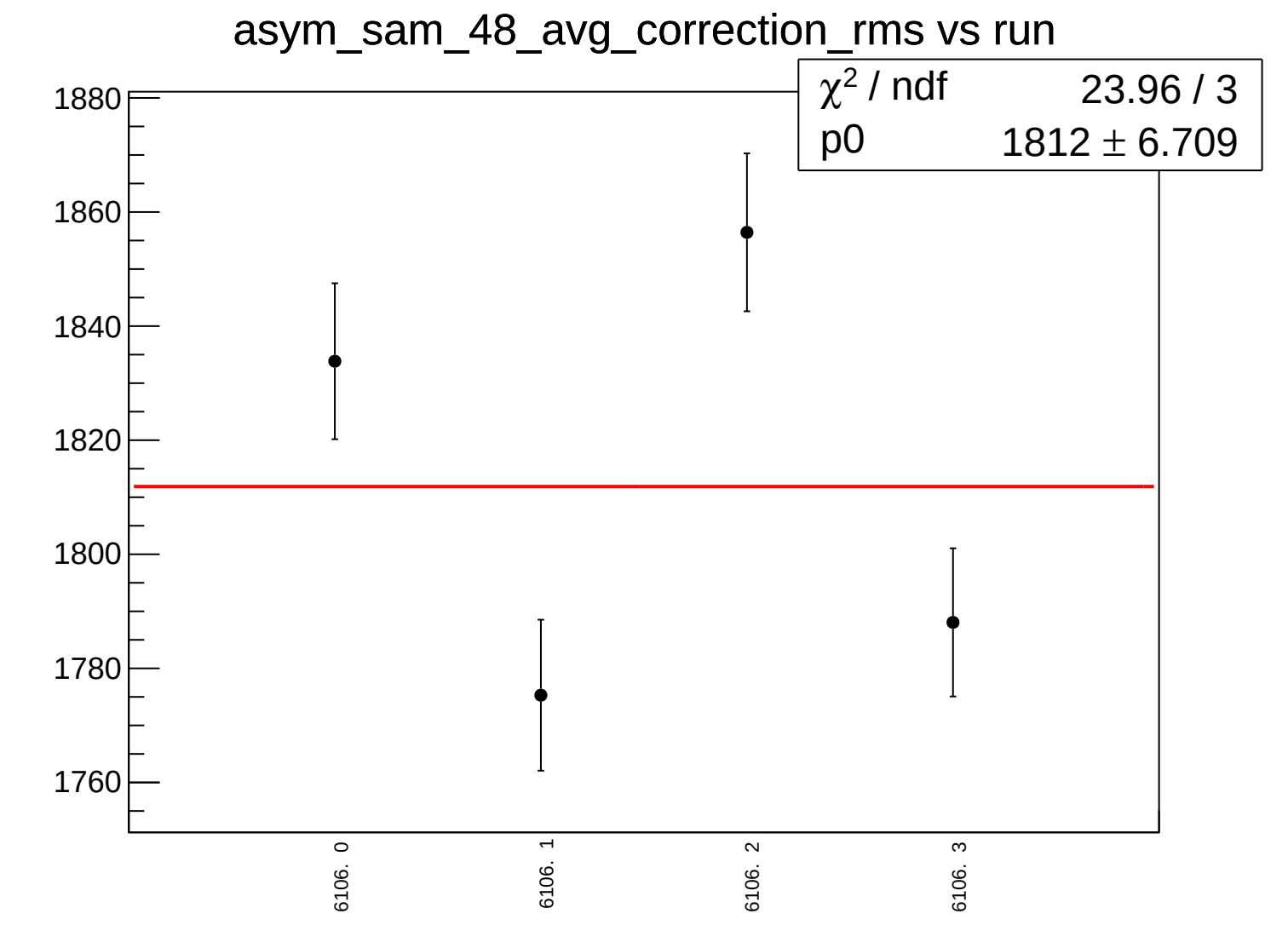

asym_sam_37_avg_rms vs run
χ² / ndf 237.5 / 3
p0 1254 ± 4.651
1380
1360
1340
1320
1300
1280
1260
1240
1220
1200
1180
6106. 0
6106. 1
6106. 2
6106. 3

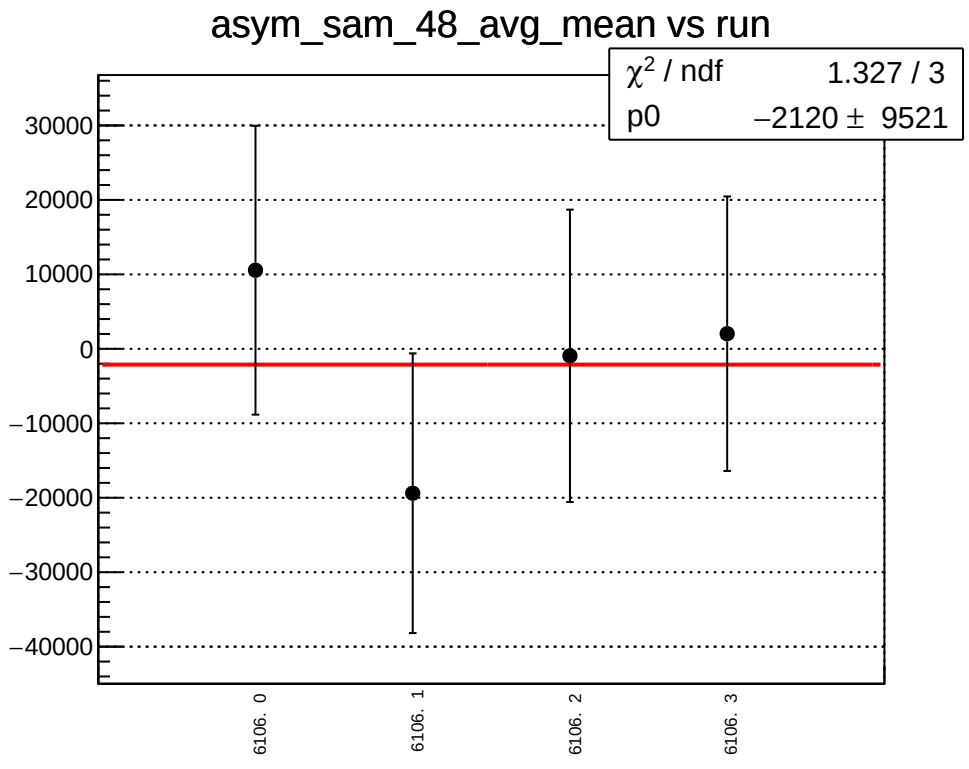

reg_asym_sam_48_avg_mean vs run
χ² / ndf 0.3029 / 3
p0 1145 ± 783.6
3000
2000
1000
0
−1000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −60.35
Std Dev 62.85
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

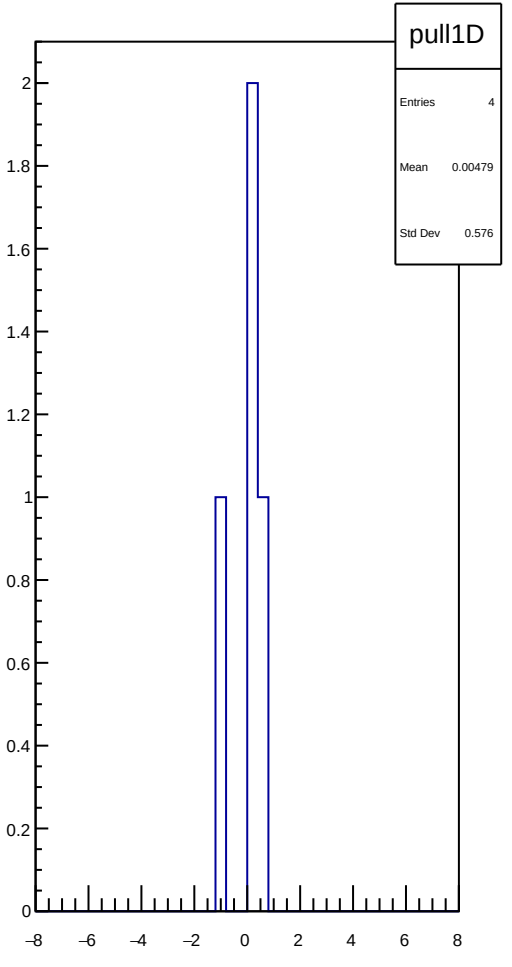

pull1D
Entries 4
Mean 0.00238
Std Dev 0.2752
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

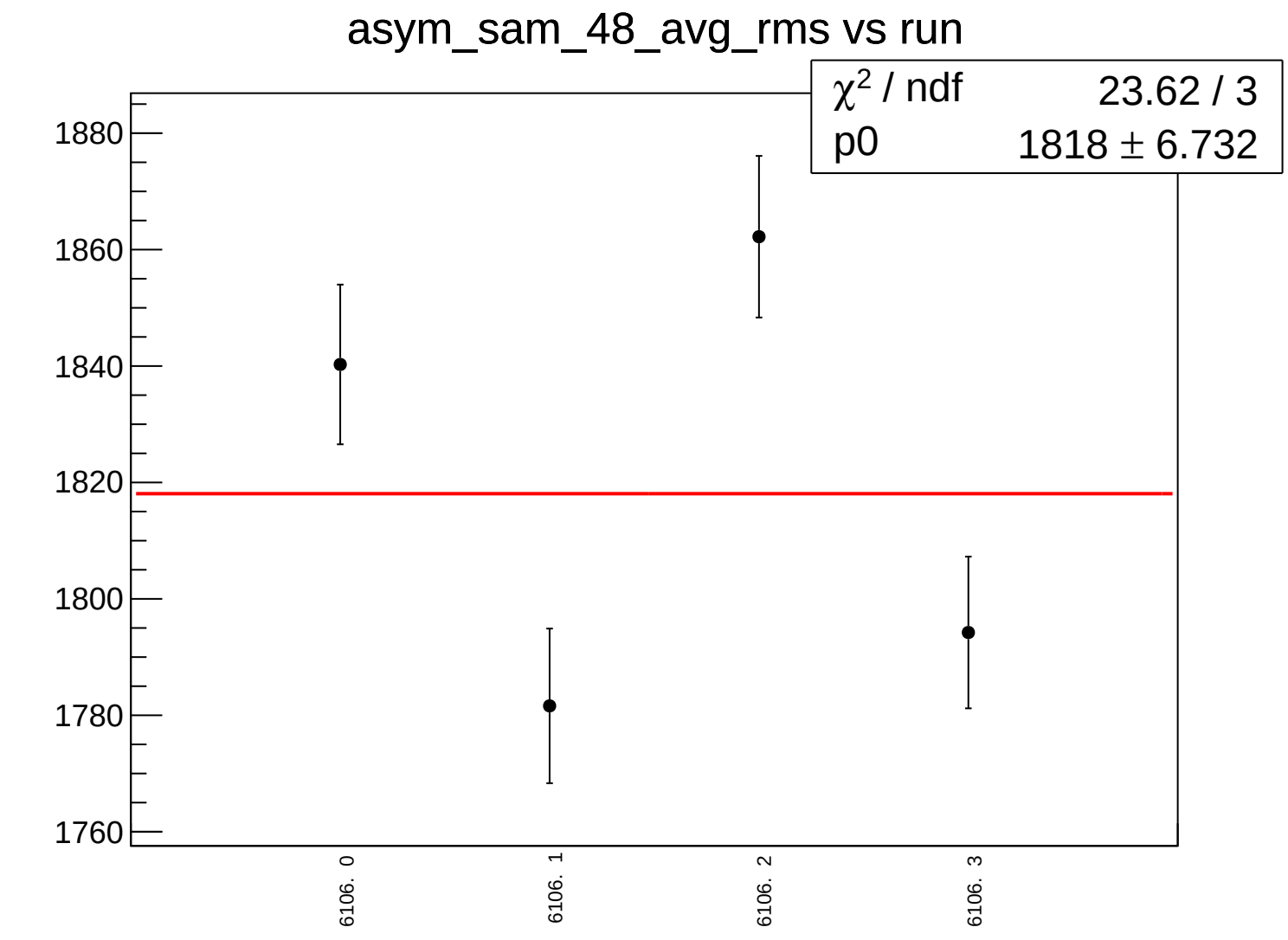

reg_asym_sam_48_avg_rms vs run
χ² / ndf 21.07 / 3
p0 149.6 ± 0.5541
154
152
150
148
146
6106. 0
6106. 1
6106. 2
6106. 3

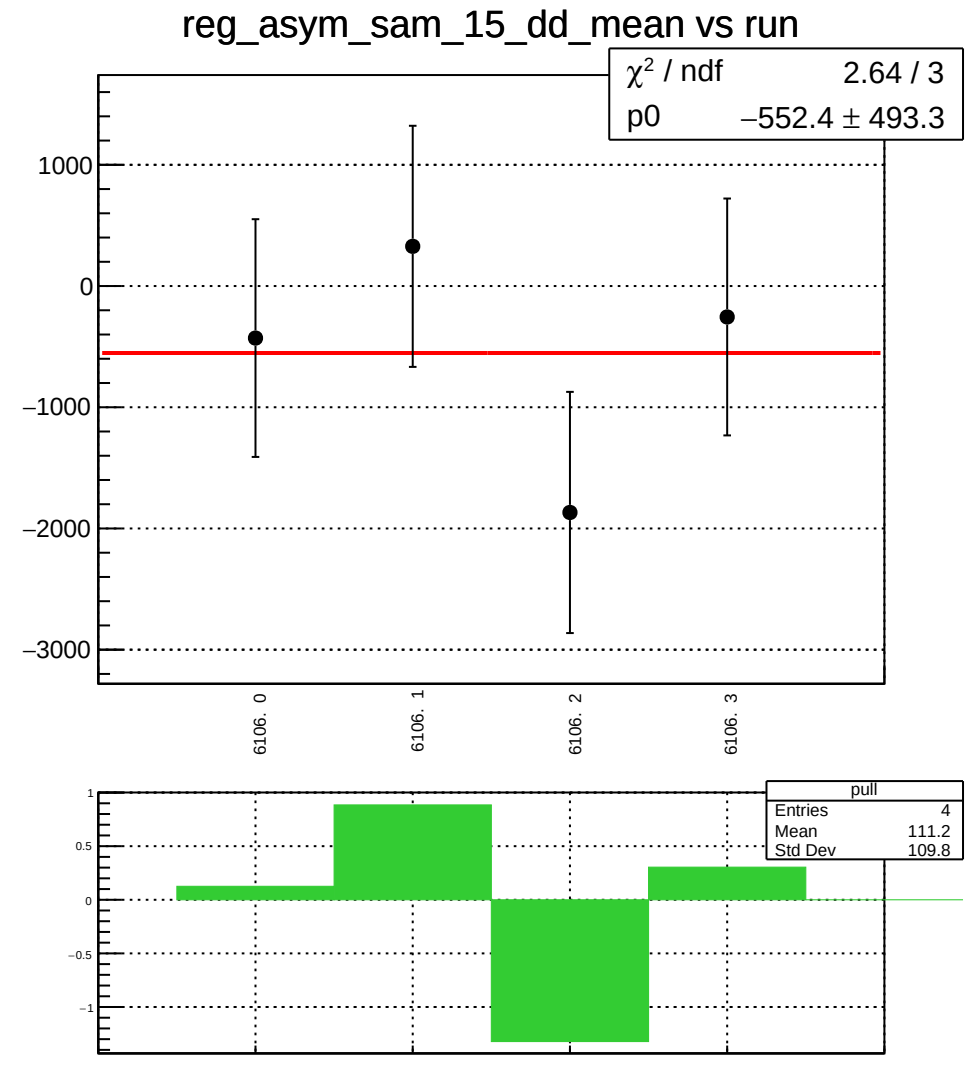

asym_sam_48_avg_correction_mean vs run
χ² / ndf 1.333 / 3
p0 3252 ± 9488
40000
30000
20000
10000
0
−10000
−20000
−30000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.012
Std Dev 8.352
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean −0.004284
Std Dev 0.5772
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

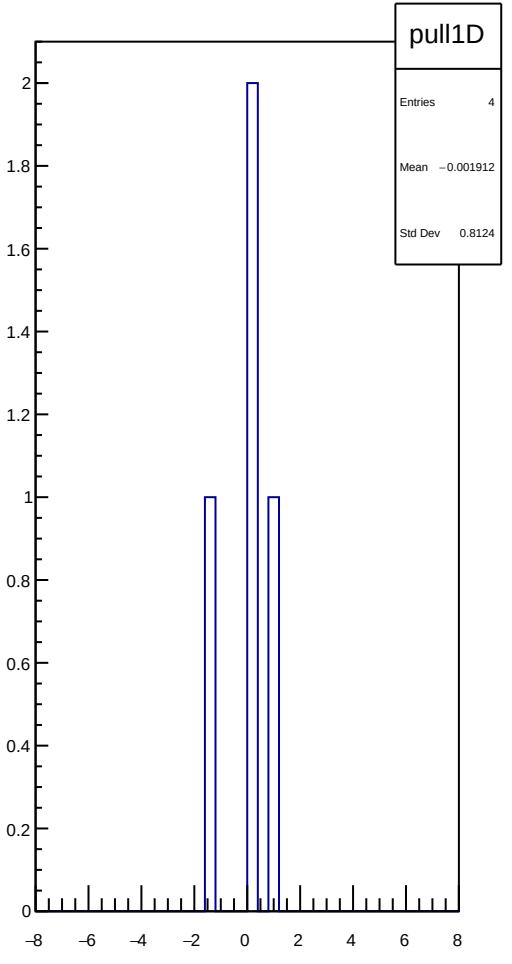

asym_sam_48_avg_correction_rms vs run
χ² / ndf 23.96 / 3
p0 1812 ± 6.709
1880
1860
1840
1820
1800
1780
1760
6106. 0
6106. 1
6106. 2
6106. 3

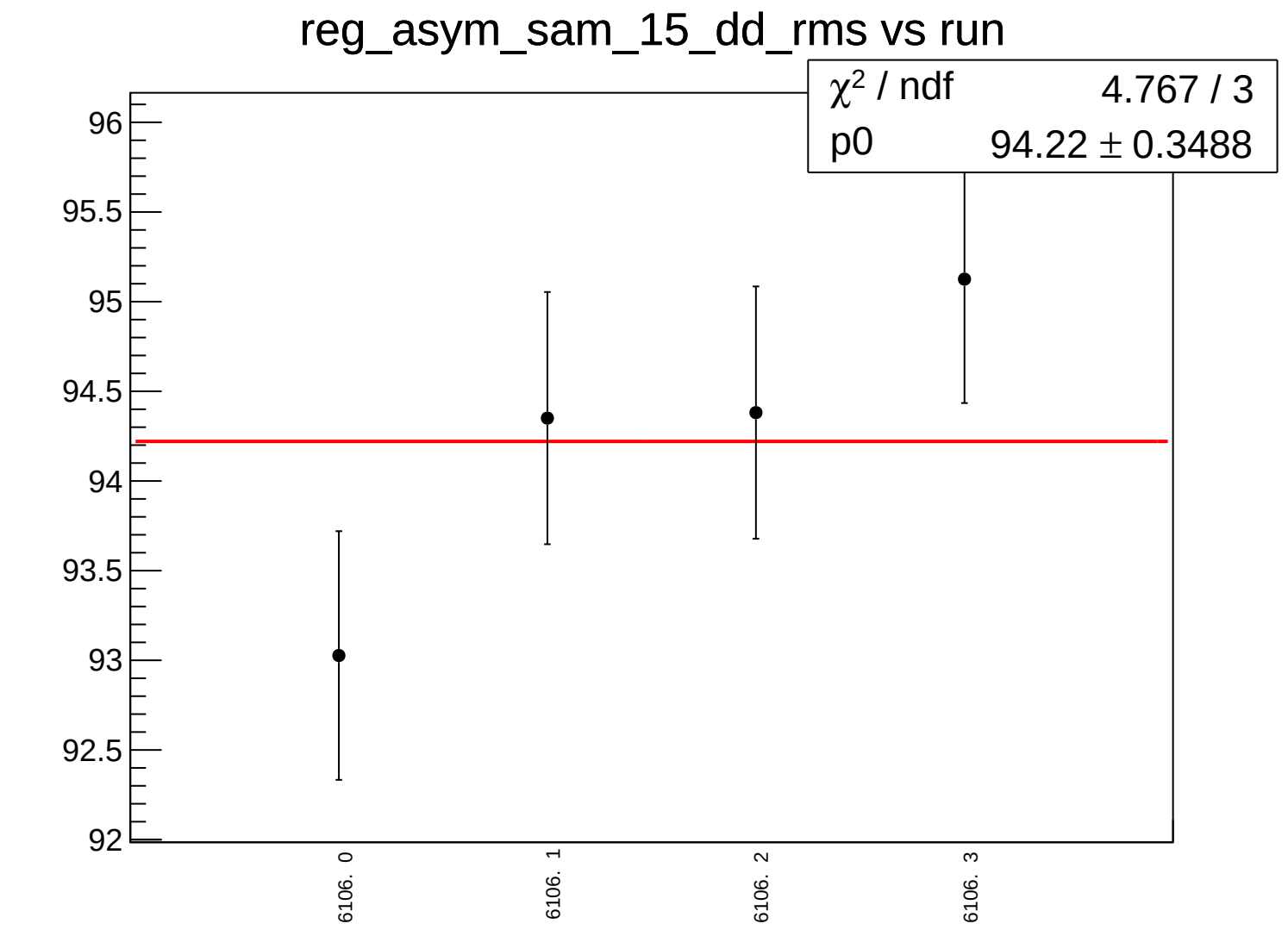

asym_sam_48_avg_mean vs run
χ² / ndf 1.327 / 3
p0 −2120 ± 9521
30000
20000
10000
0
−10000
−20000
−30000
−40000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.963
Std Dev 5.343
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

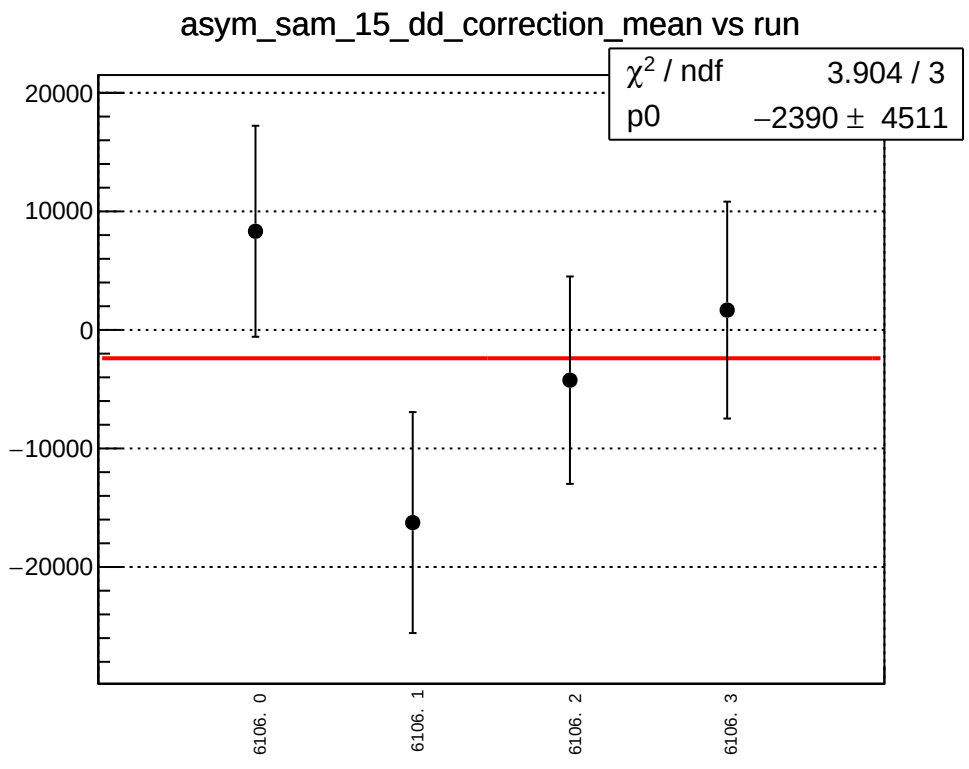

pull1D
Entries 4
Mean 0.00479
Std Dev 0.576
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

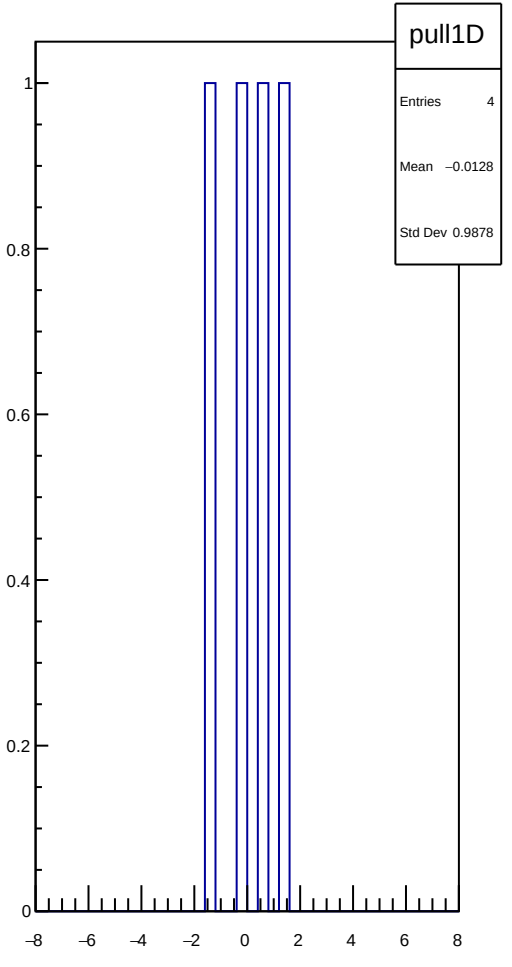

asym_sam_48_avg_rms vs run
χ² / ndf 23.62 / 3
p0 1818 ± 6.732
1880
1860
1840
1820
1800
1780
1760
6106. 0
6106. 1
6106. 2
6106. 3

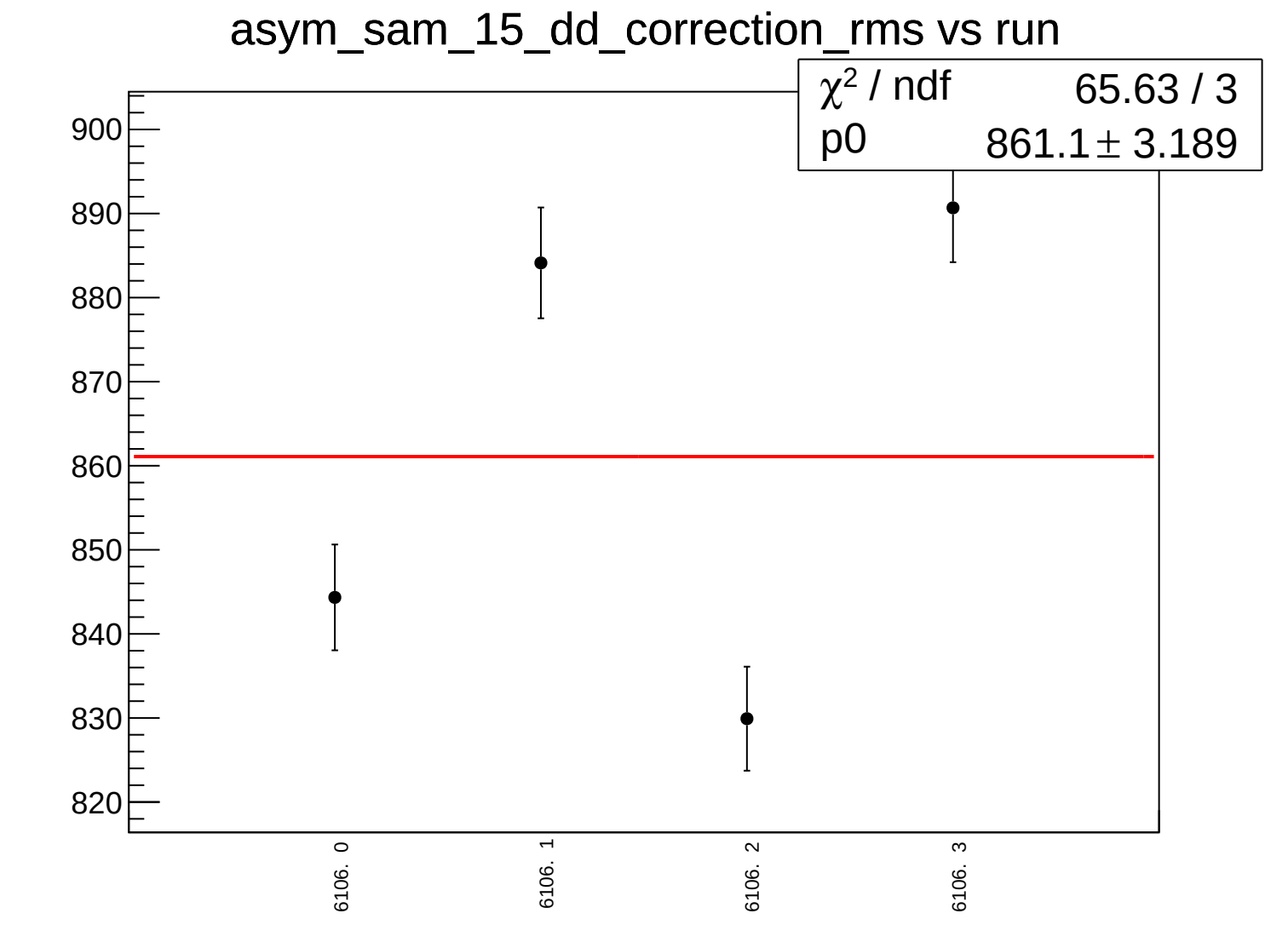

reg_asym_sam_15_dd_mean vs run
χ² / ndf 2.64 / 3
p0 −552.4 ± 493.3
1000
0
−1000
−2000
−3000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 111.2
Std Dev 109.8
1
0.5
0
−0.5
−1

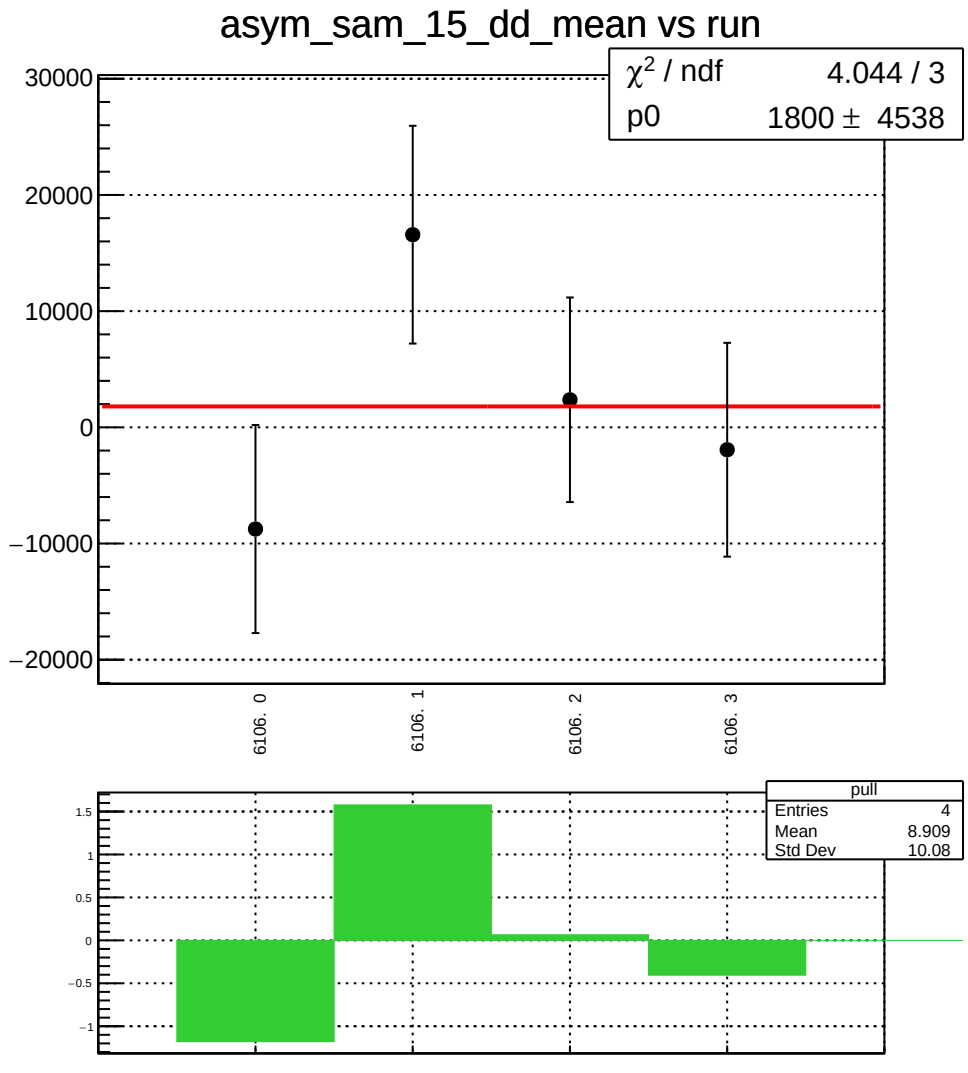

pull1D
Entries 4
Mean −0.001912
Std Dev 0.8124
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

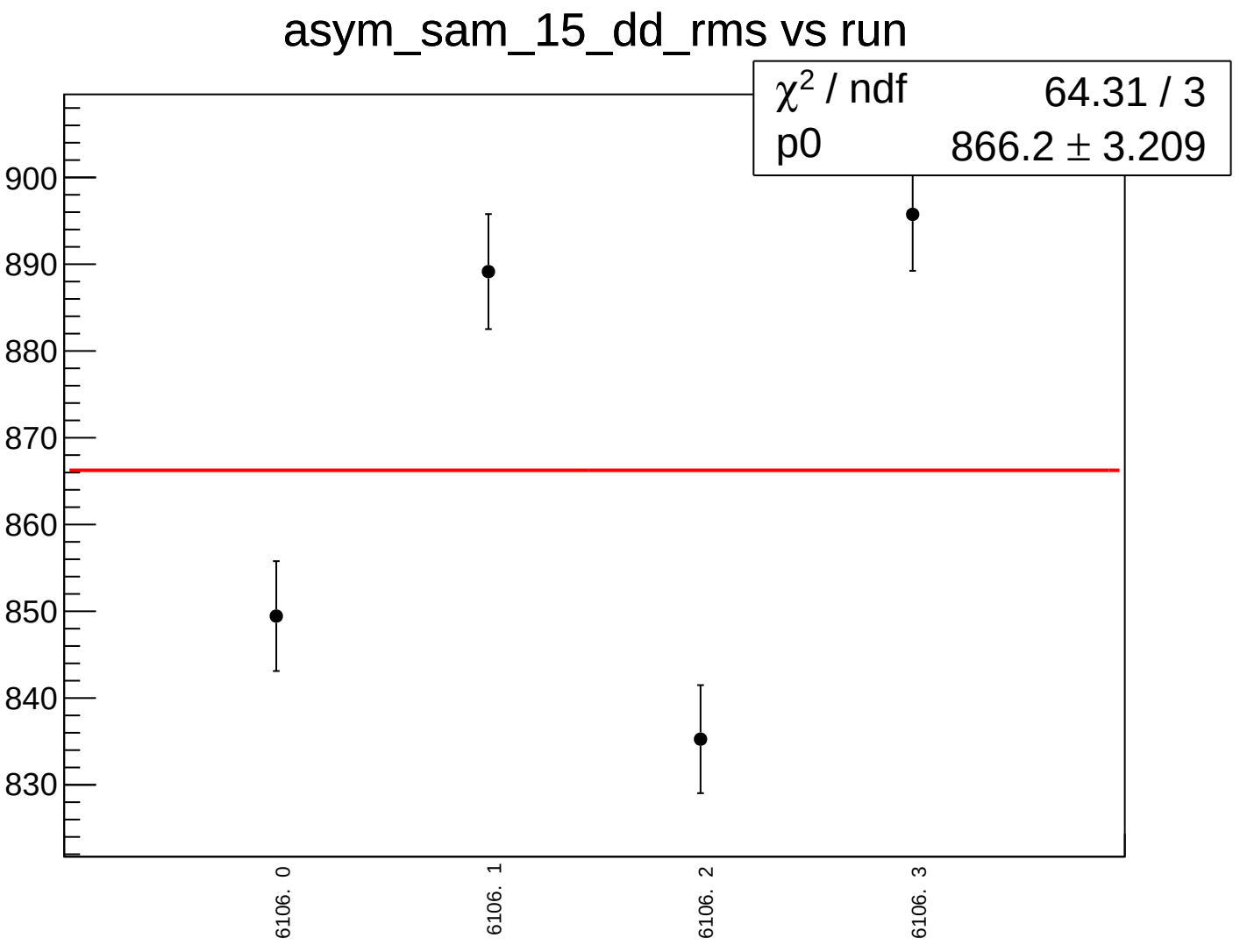

reg_asym_sam_15_dd_rms vs run
χ² / ndf 4.767 / 3
p0 94.22 ± 0.3488
96
95.5
95
94.5
94
93.5
93
92.5
92
6106. 0
6106. 1
6106. 2
6106. 3

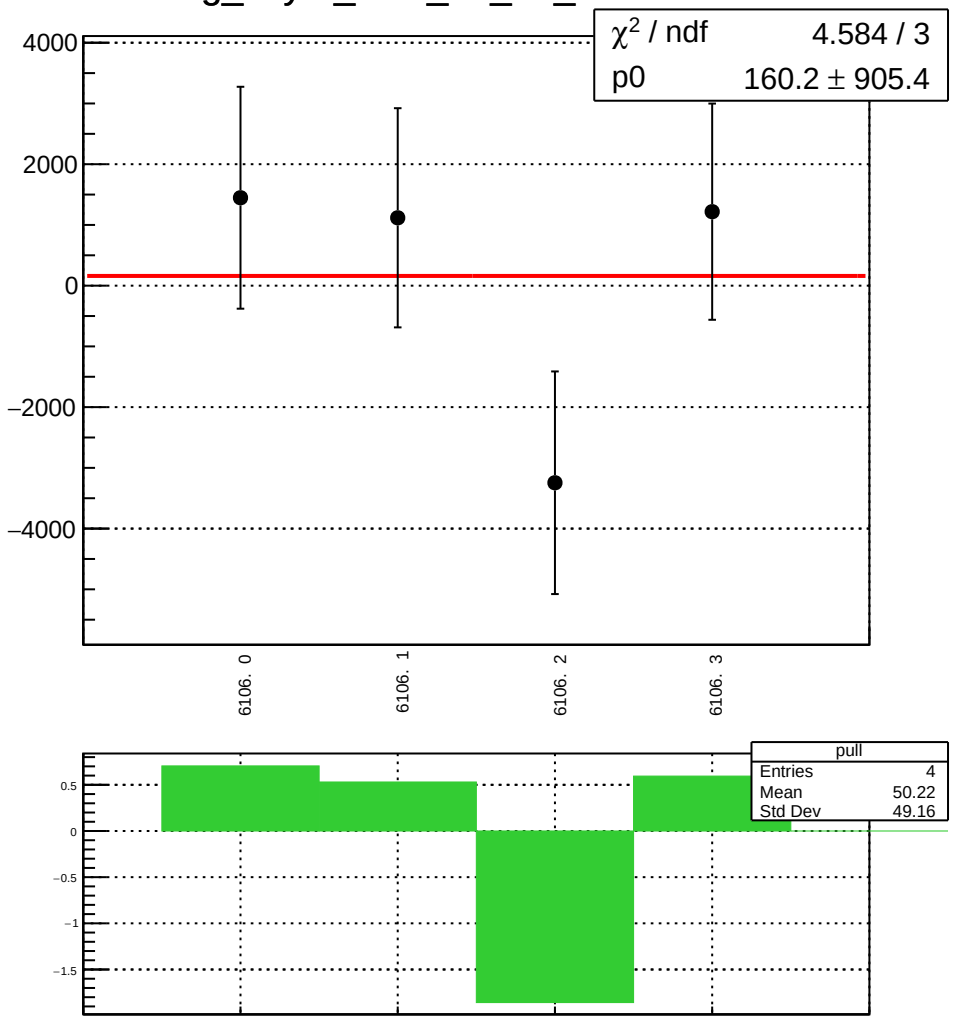

asym_sam_15_dd_correction_mean vs run
χ² / ndf 3.904 / 3
p0 −2390 ± 4511
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 11.79
Std Dev 12.65
1
0.5
0
−0.5
−1
−1.5

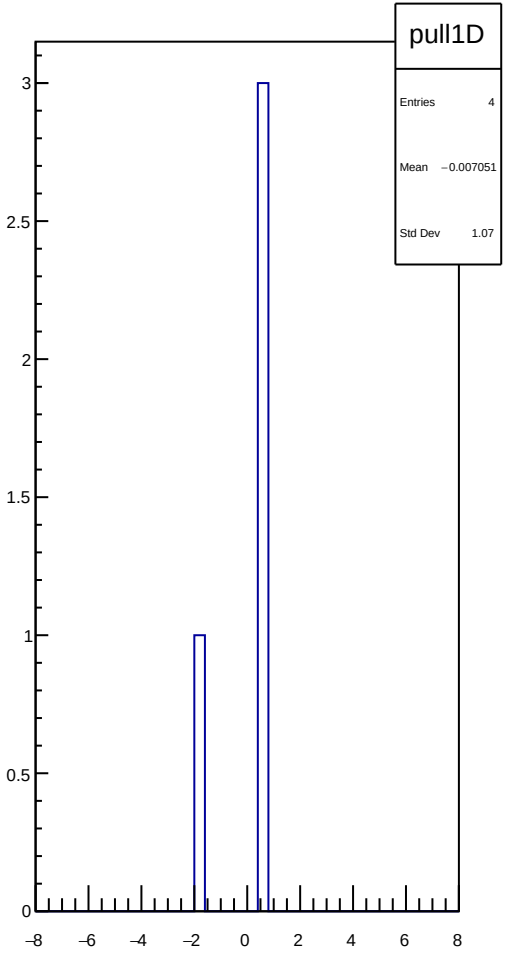

pull1D
Entries 4
Mean −0.0128
Std Dev 0.9878
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

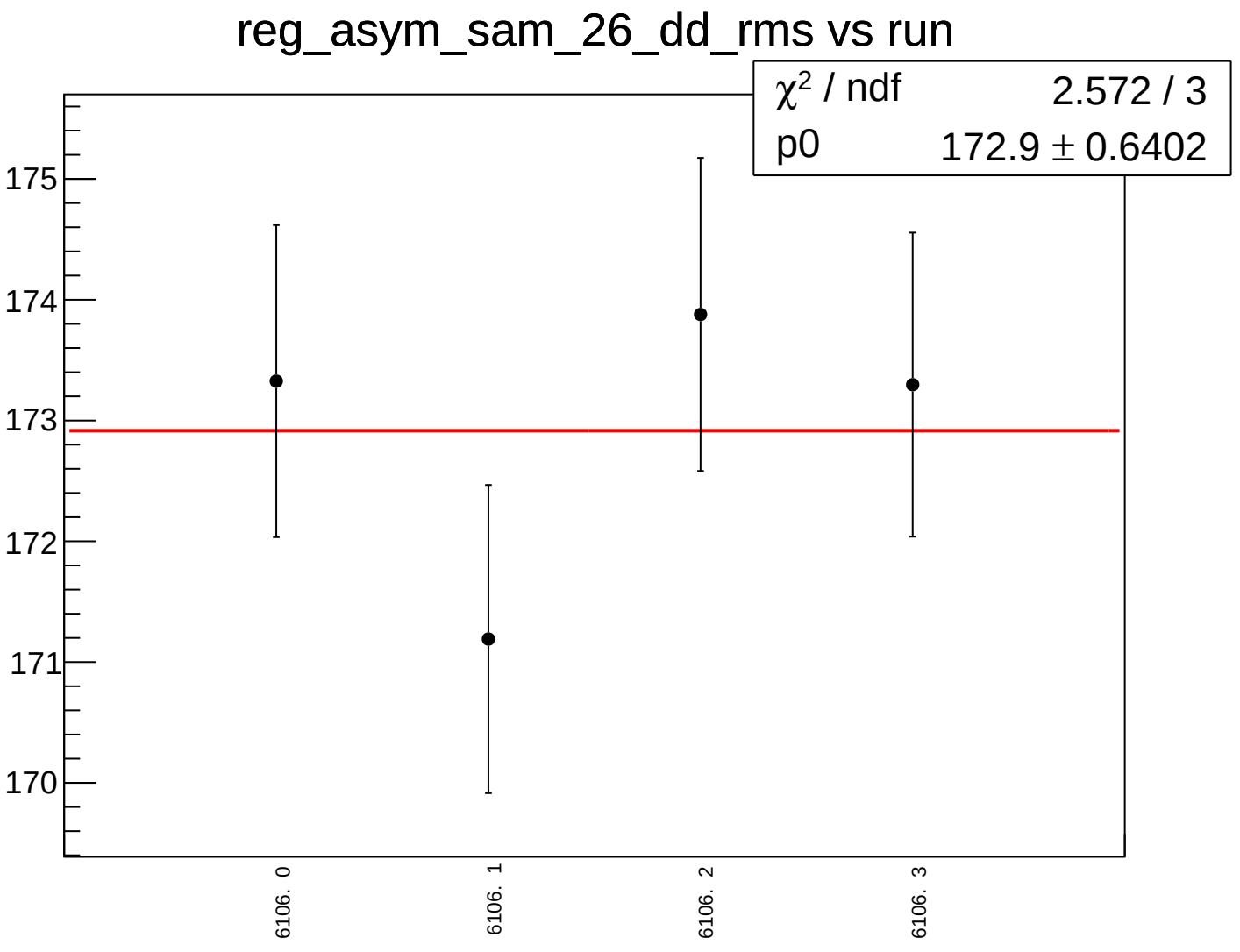

asym_sam_15_dd_correction_rms vs run
χ² / ndf 65.63 / 3
p0 861.1 ± 3.189
900
890
880
870
860
850
840
830
820
6106. 0
6106. 1
6106. 2
6106. 3

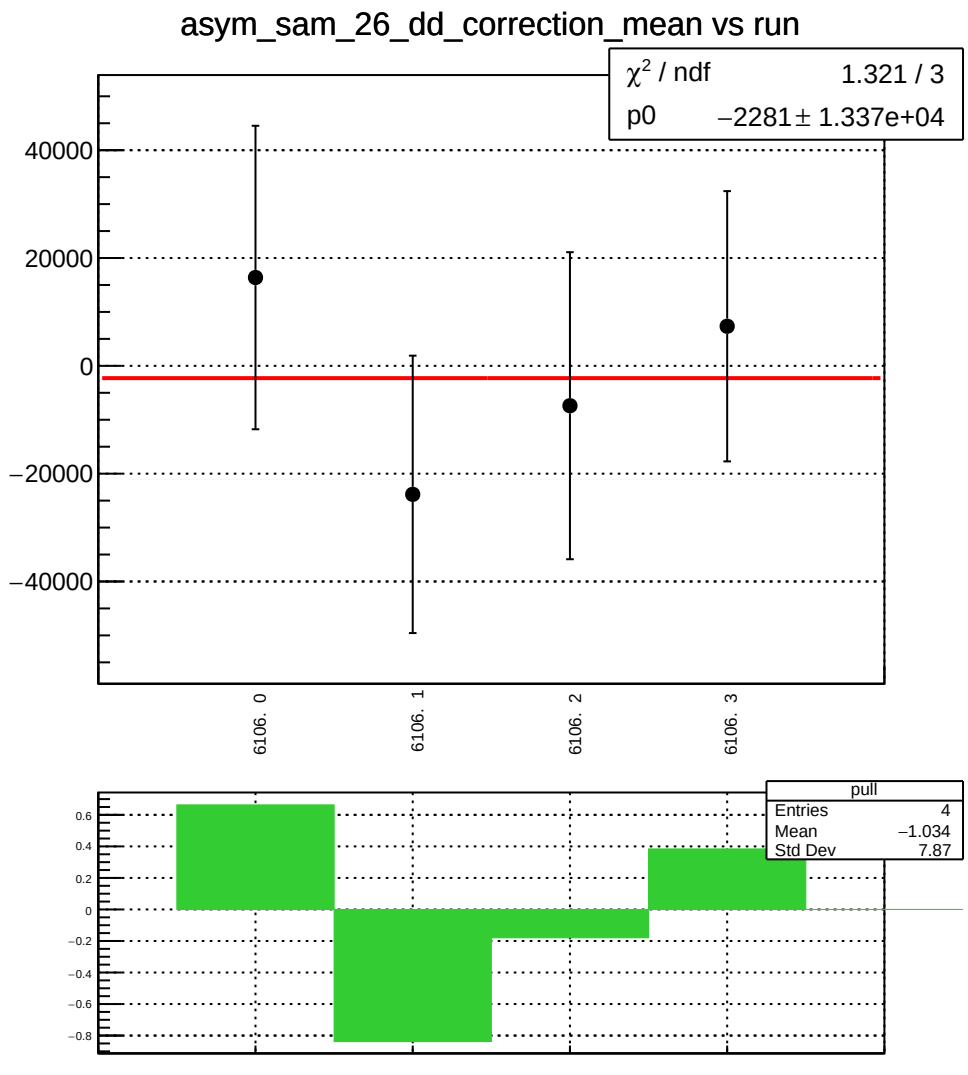

asym_sam_15_dd_mean vs run
χ² / ndf 4.044 / 3
p0 1800 ± 4538
30000
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 8.909
Std Dev 10.08
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean 0.01461
Std Dev 1.005
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

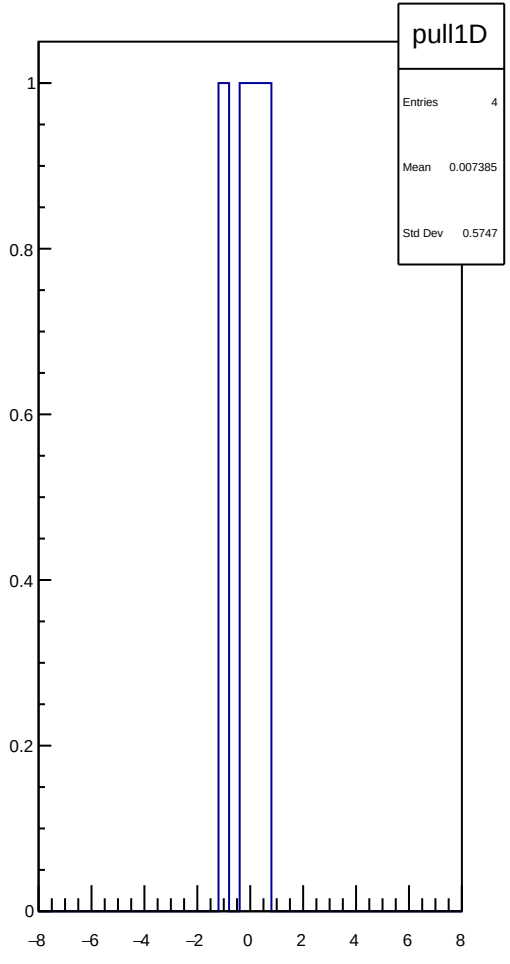

asym_sam_15_dd_rms vs run
χ² / ndf 64.31 / 3
p0 866.2 ± 3.209
900
890
880
870
860
850
840
830
6106. 0
6106. 1
6106. 2
6106. 3

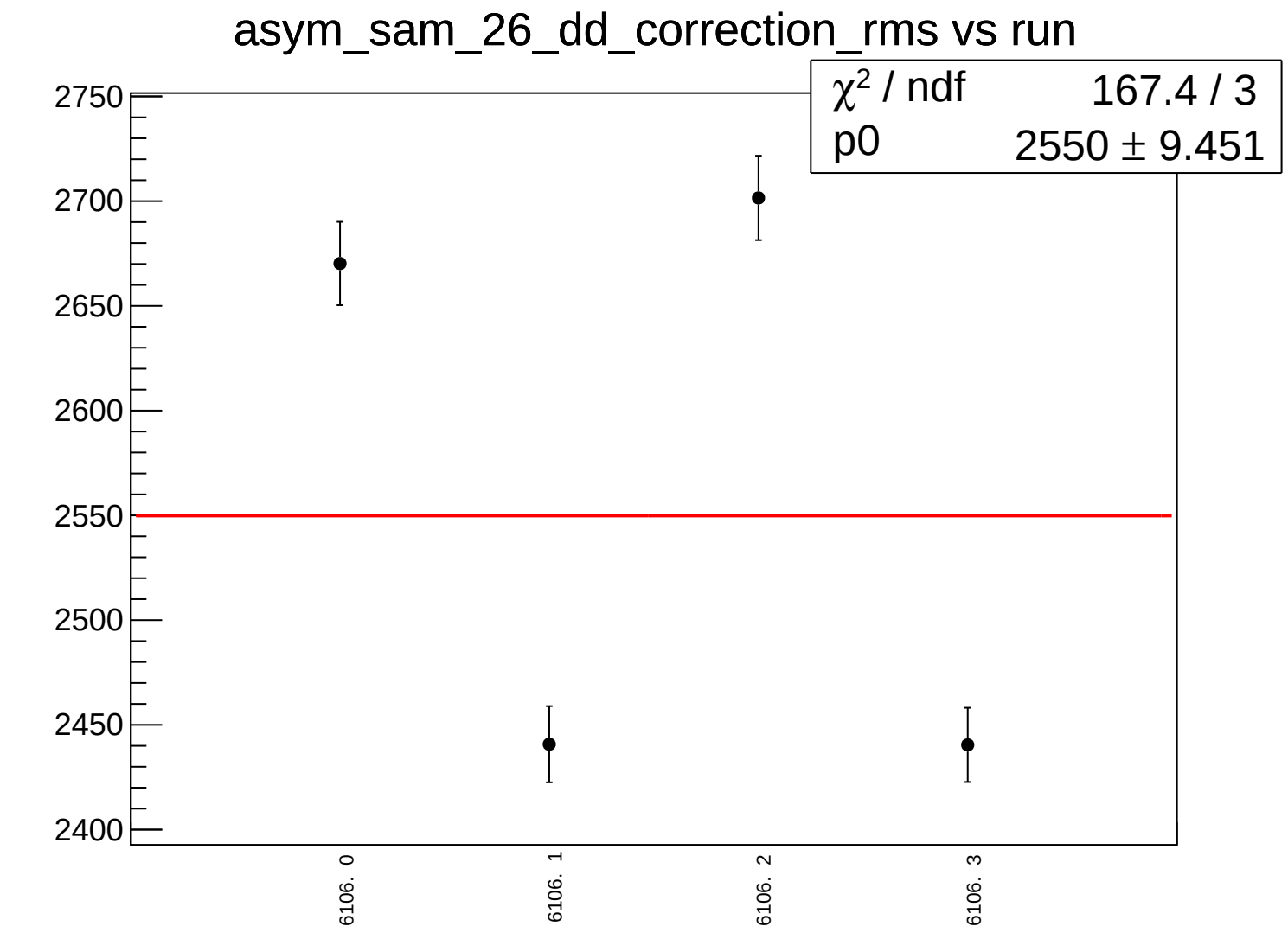

reg_asym_sam_26_dd_mean vs run
χ² / ndf 4.584 / 3
p0 160.2 ± 905.4
4000
2000
0
−2000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 50.22
Std Dev 49.16
0.5
0
−0.5
−1
−1.5

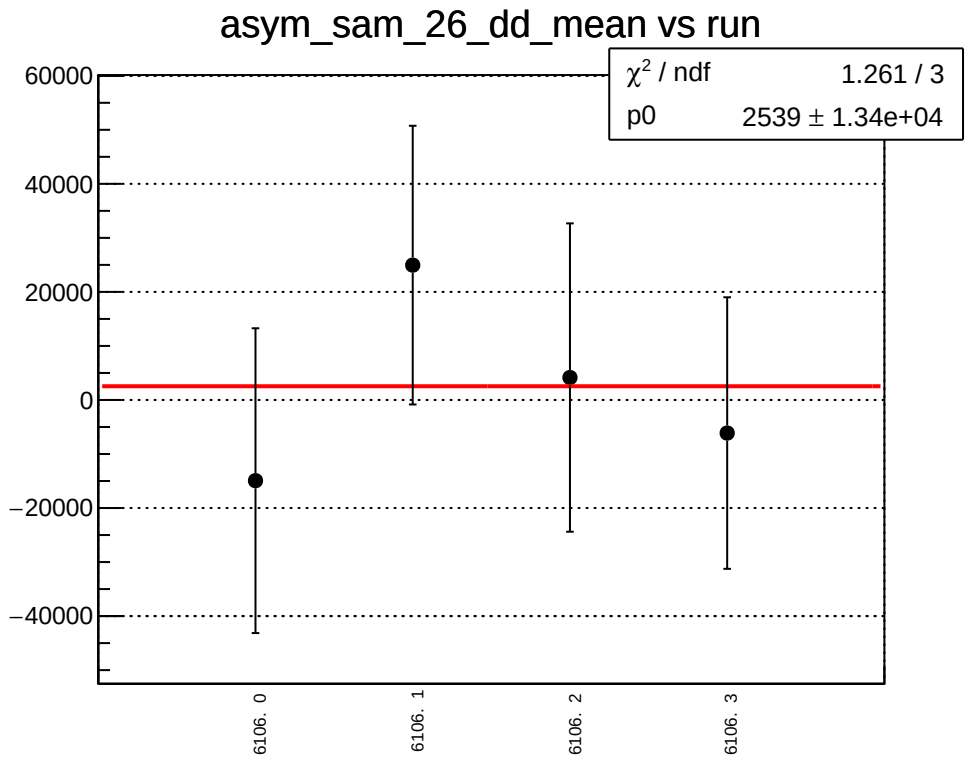

pull1D
Entries 4
Mean −0.007051
Std Dev 1.07
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

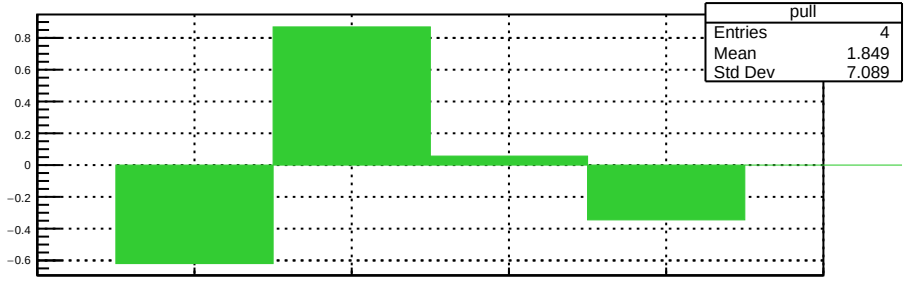

reg_asym_sam_26_dd_rms vs run
χ² / ndf 2.572 / 3
p0 172.9 ± 0.6402
175
174
173
172
171
170
6106. 0
6106. 1
6106. 2
6106. 3

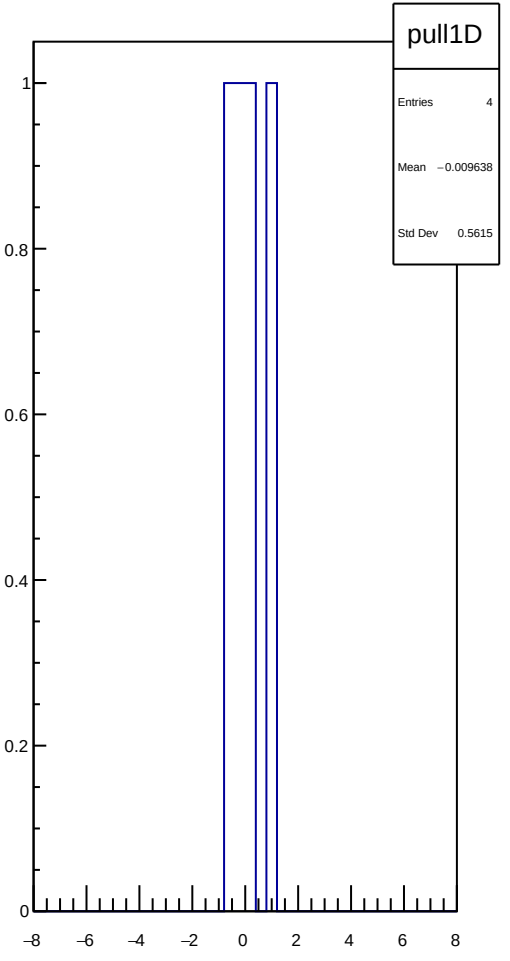

asym_sam_26_dd_correction_mean vs run
χ² / ndf 1.321 / 3
p0 −2281 ± 1.337e+04
40000
20000
0
−20000
−40000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.034
Std Dev 7.87
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

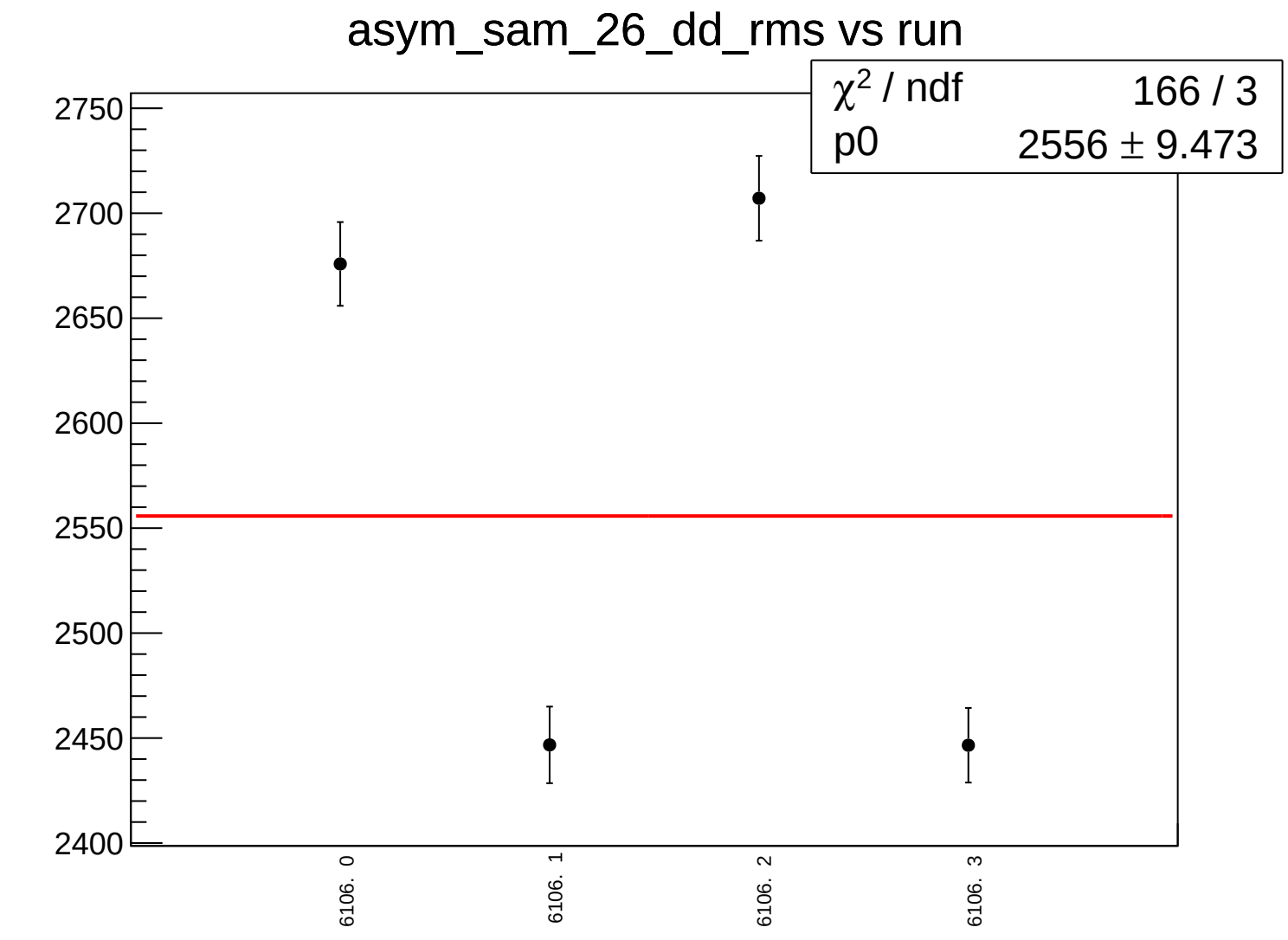

pull1D
Entries 4
Mean 0.007385
Std Dev 0.5747
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

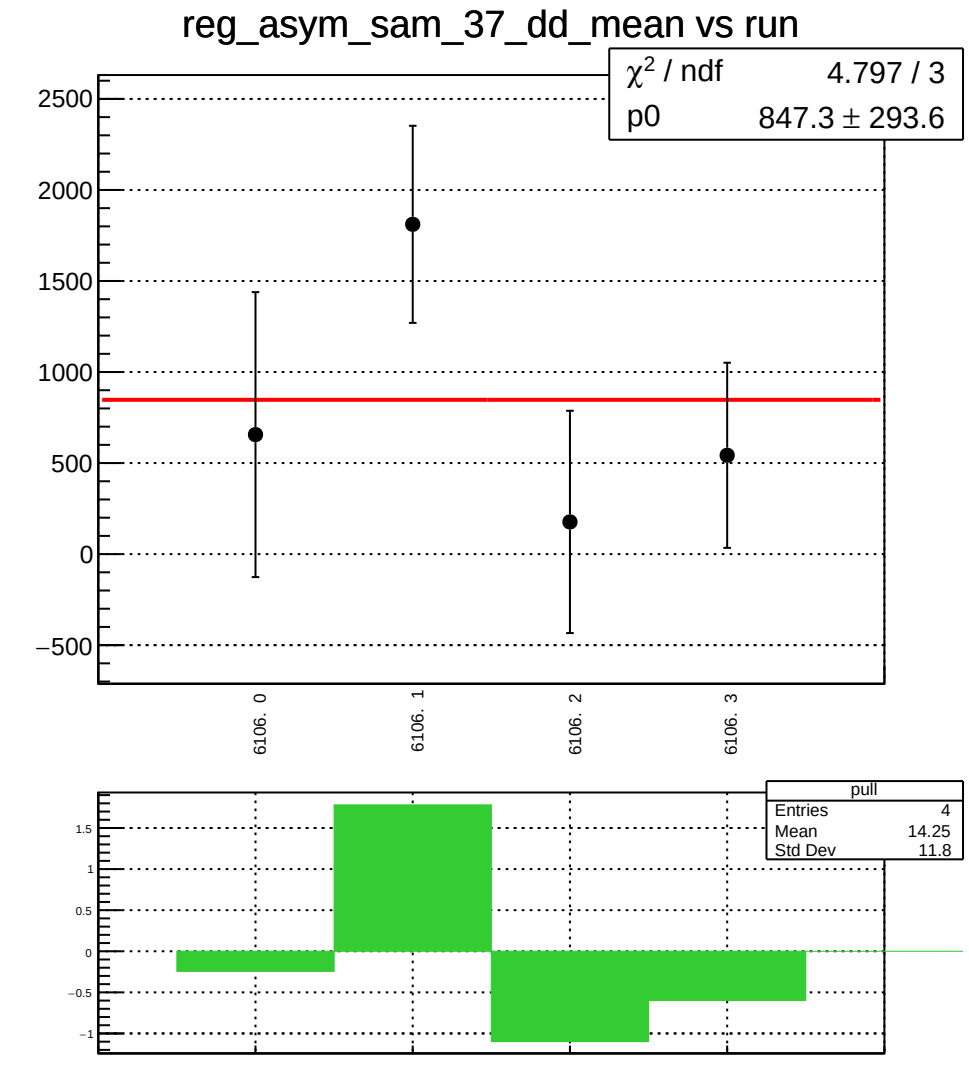

asym_sam_26_dd_correction_rms vs run
χ² / ndf 167.4 / 3
p0 2550 ± 9.451
2750
2700
2650
2600
2550
2500
2450
2400
6106. 0
6106. 1
6106. 2
6106. 3

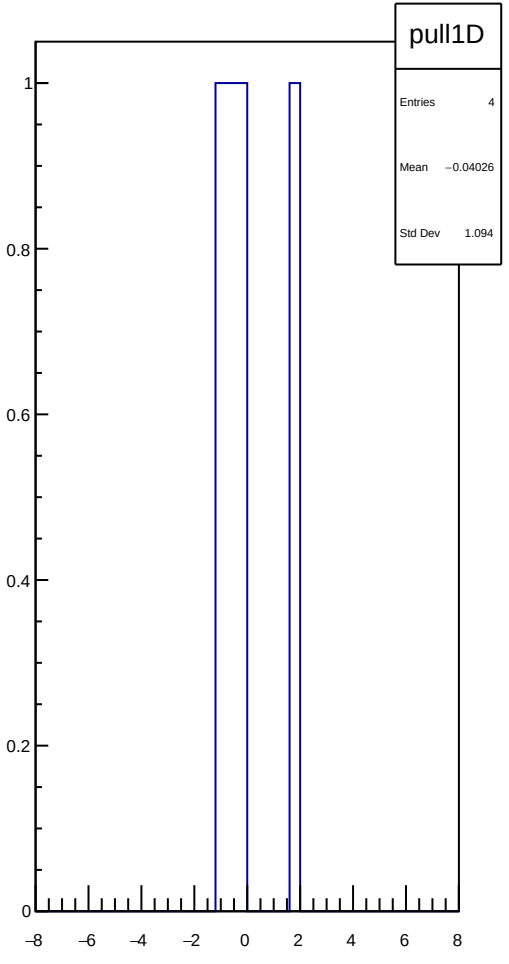

asym_sam_26_dd_mean vs run
χ² / ndf 1.261 / 3
p0 2539 ± 1.34e+04
60000
40000
20000
0
−20000
−40000
6106. 0
6106. 1
6106. 2
6106. 3

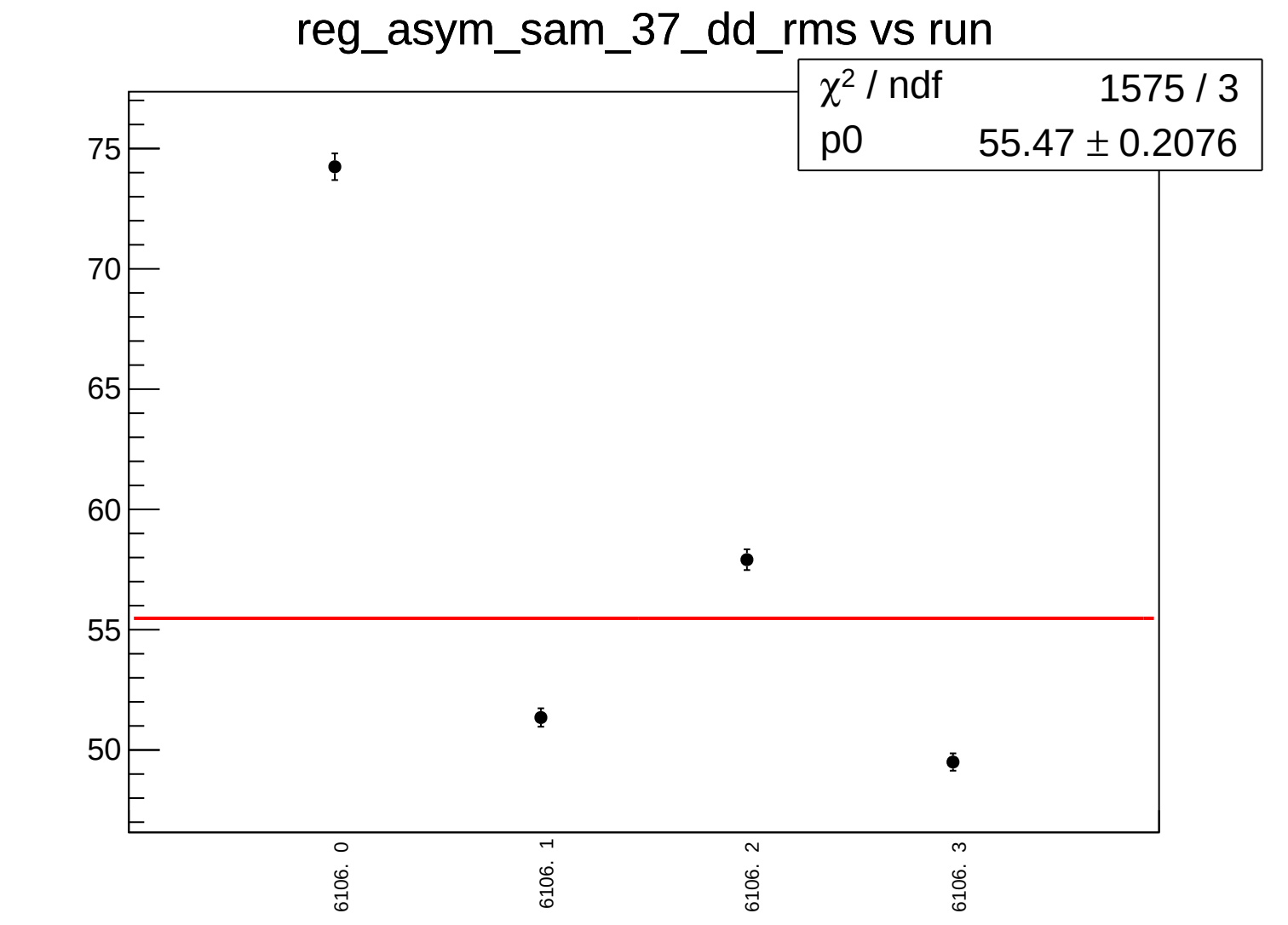

pull
Entries 4
Mean 1.849
Std Dev 7.089
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

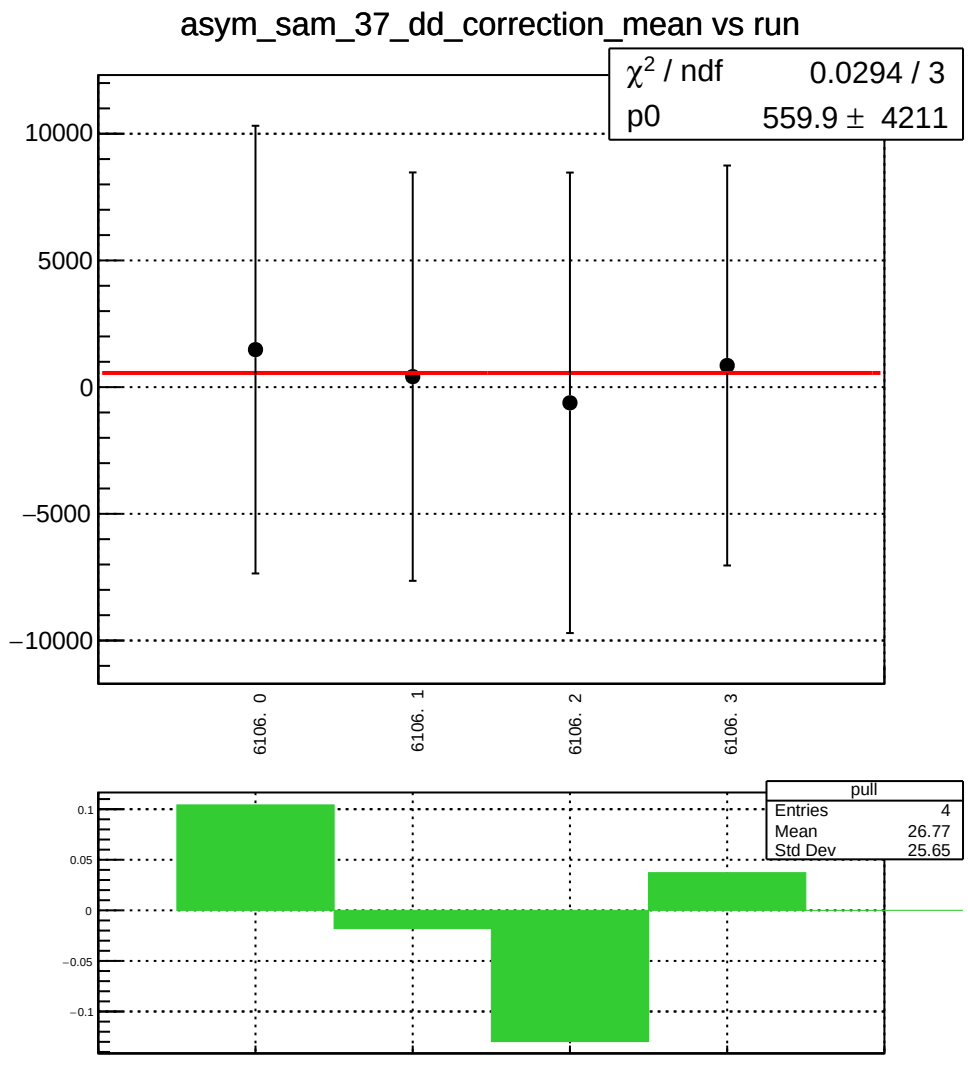

pull1D
Entries 4
Mean −0.009638
Std Dev 0.5615
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

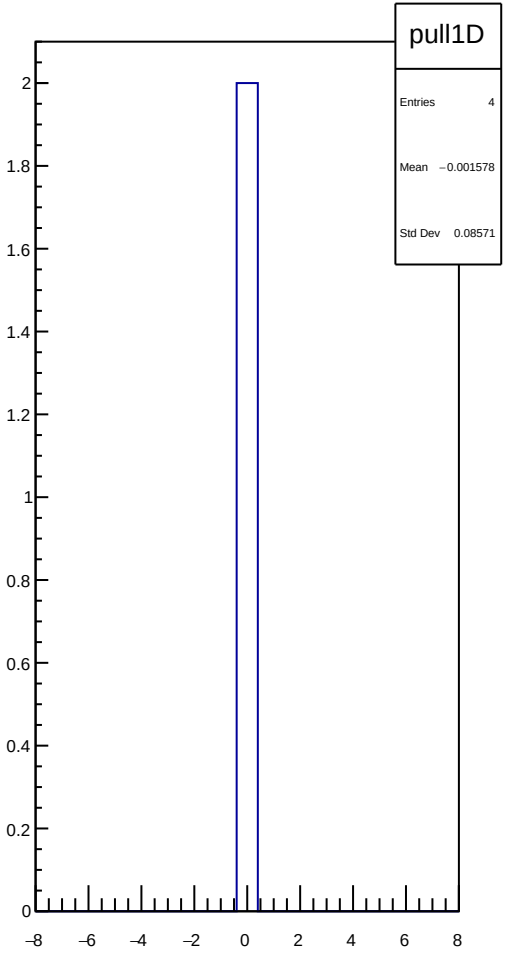

asym_sam_26_dd_rms vs run
χ² / ndf 166 / 3
p0 2556 ± 9.473
2750
2700
2650
2600
2550
2500
2450
2400
6106. 0
6106. 1
6106. 2
6106. 3

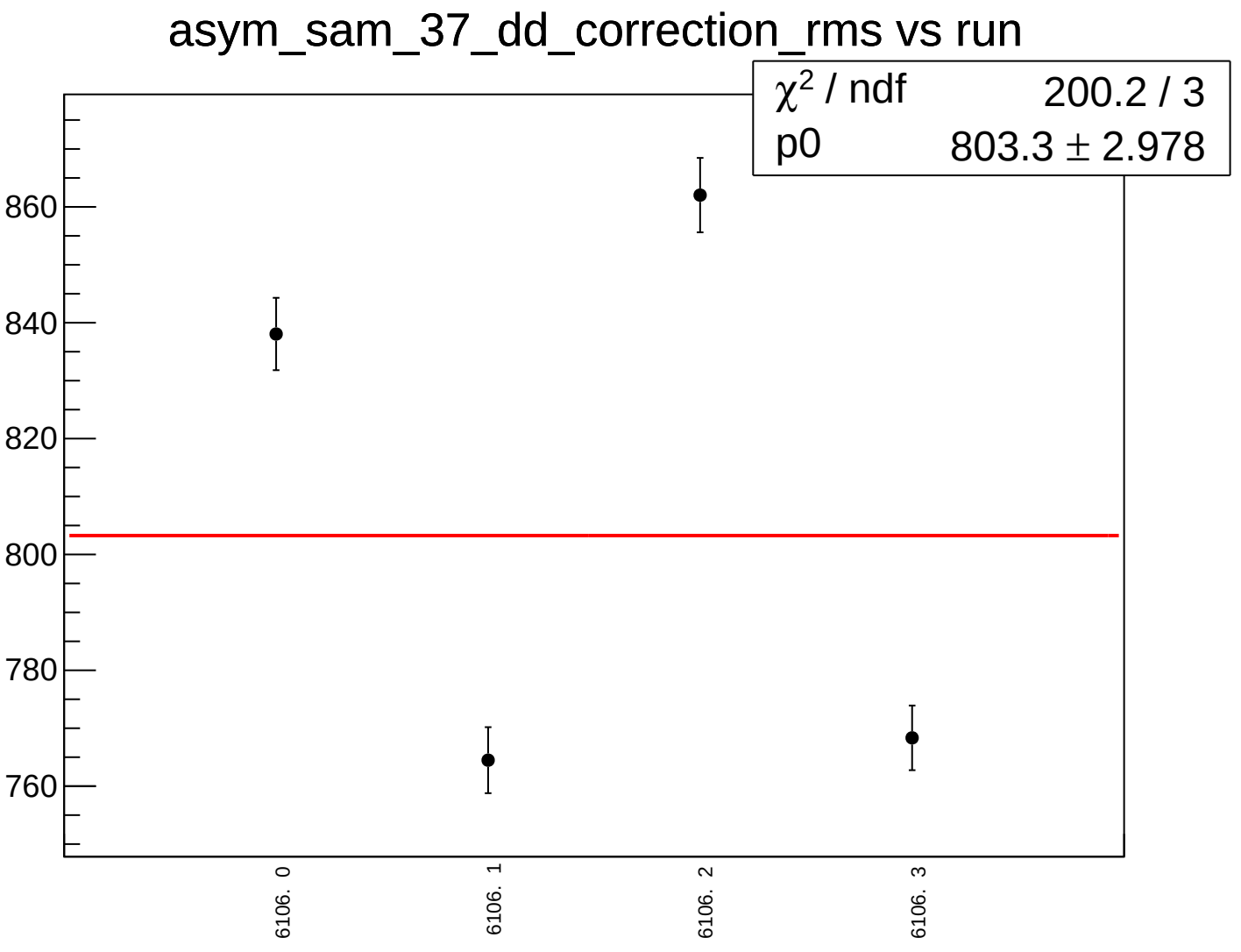

reg_asym_sam_37_dd_mean vs run
χ² / ndf 4.797 / 3
p0 847.3 ± 293.6
2500
2000
1500
1000
500
0
−500
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 14.25
Std Dev 11.8
1.5
1
0.5
0
−0.5
−1

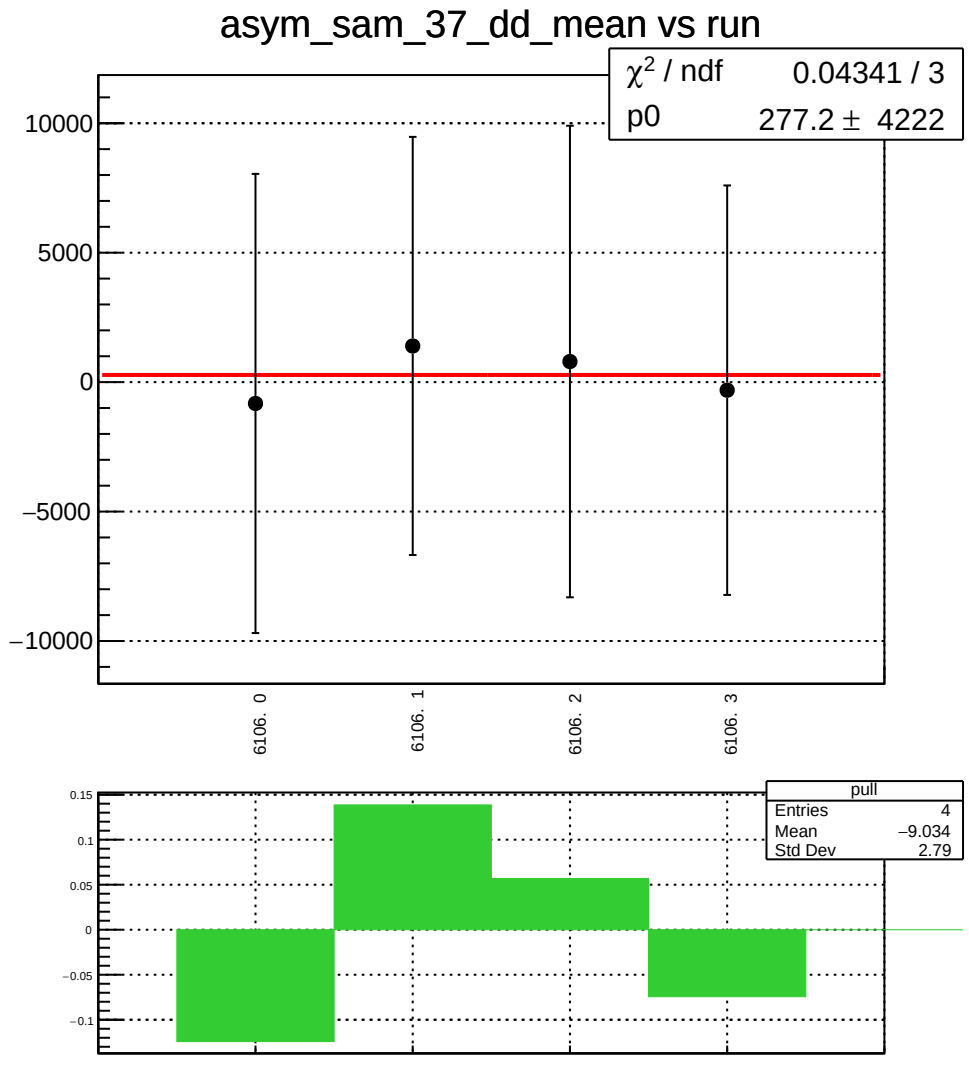

pull1D
Entries 4
Mean −0.04026
Std Dev 1.094
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_sam_37_dd_rms vs run
χ² / ndf 1575 / 3
p0 55.47 ± 0.2076
75
70
65
60
55
50
6106. 0
6106. 1
6106. 2
6106. 3


asym_sam_37_dd_correction_mean vs run
χ² / ndf 0.0294 / 3
p0 559.9 ± 4211
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 26.77
Std Dev 25.65
0.1
0.05
0
−0.05
−0.1


pull1D
Entries 4
Mean −0.001578
Std Dev 0.08571
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_sam_37_dd_correction_rms vs run
χ² / ndf 200.2 / 3
p0 803.3 ± 2.978
860
840
820
800
780
760
6106. 0
6106. 1
6106. 2
6106. 3


asym_sam_37_dd_mean vs run
χ² / ndf 0.04341 / 3
p0 277.2 ± 4222
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.034
Std Dev 2.79
0.15
0.1
0.05
0
−0.05
−0.1
pull1D
Entries 4
Mean −0.0007681
Std Dev 0.1042
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
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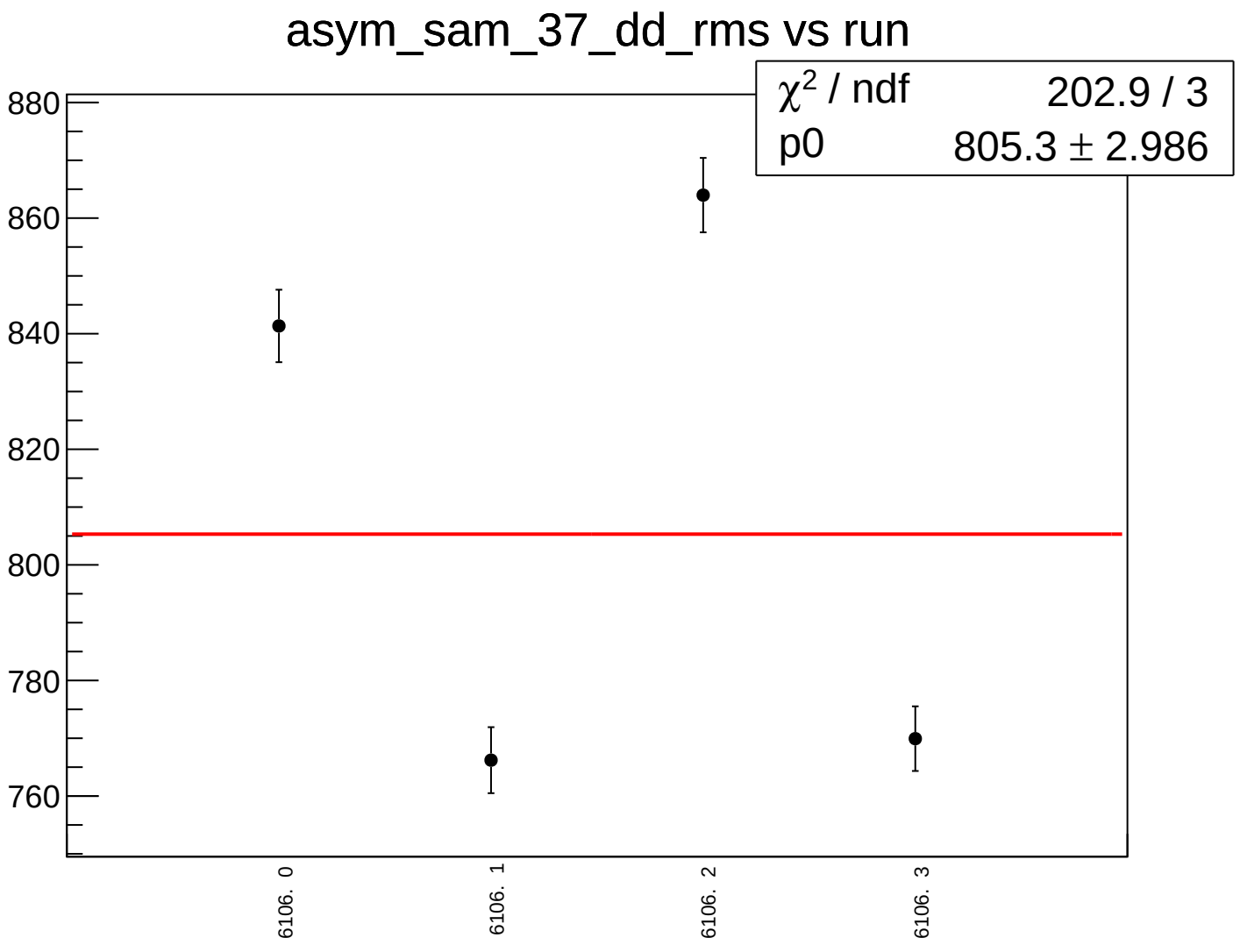
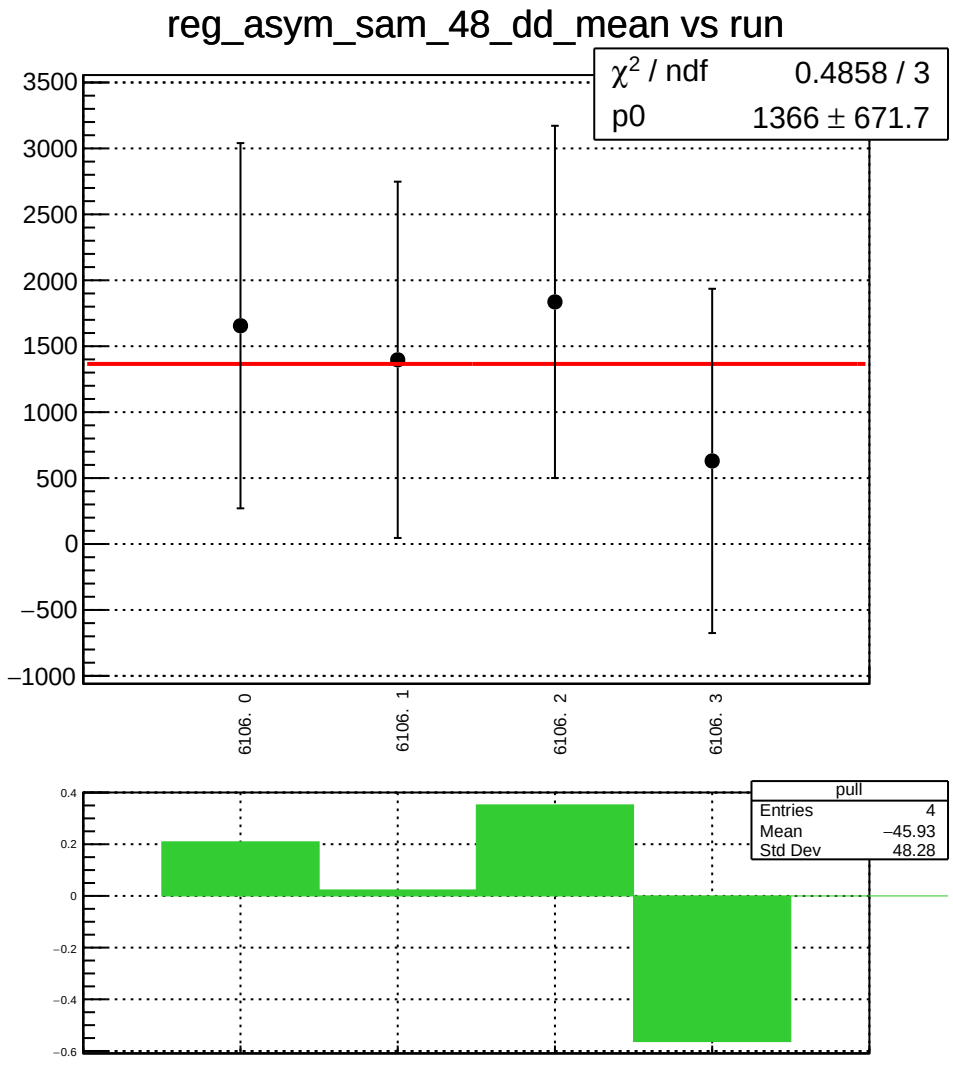
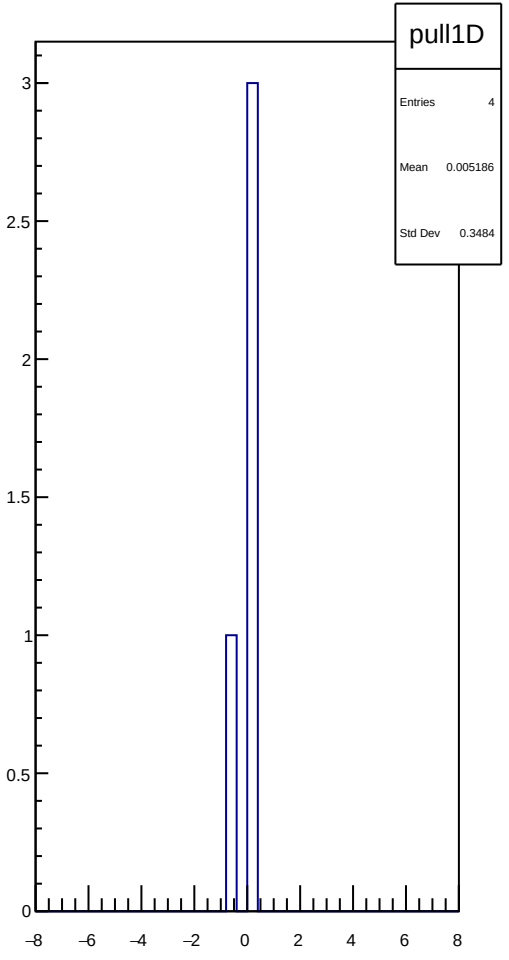
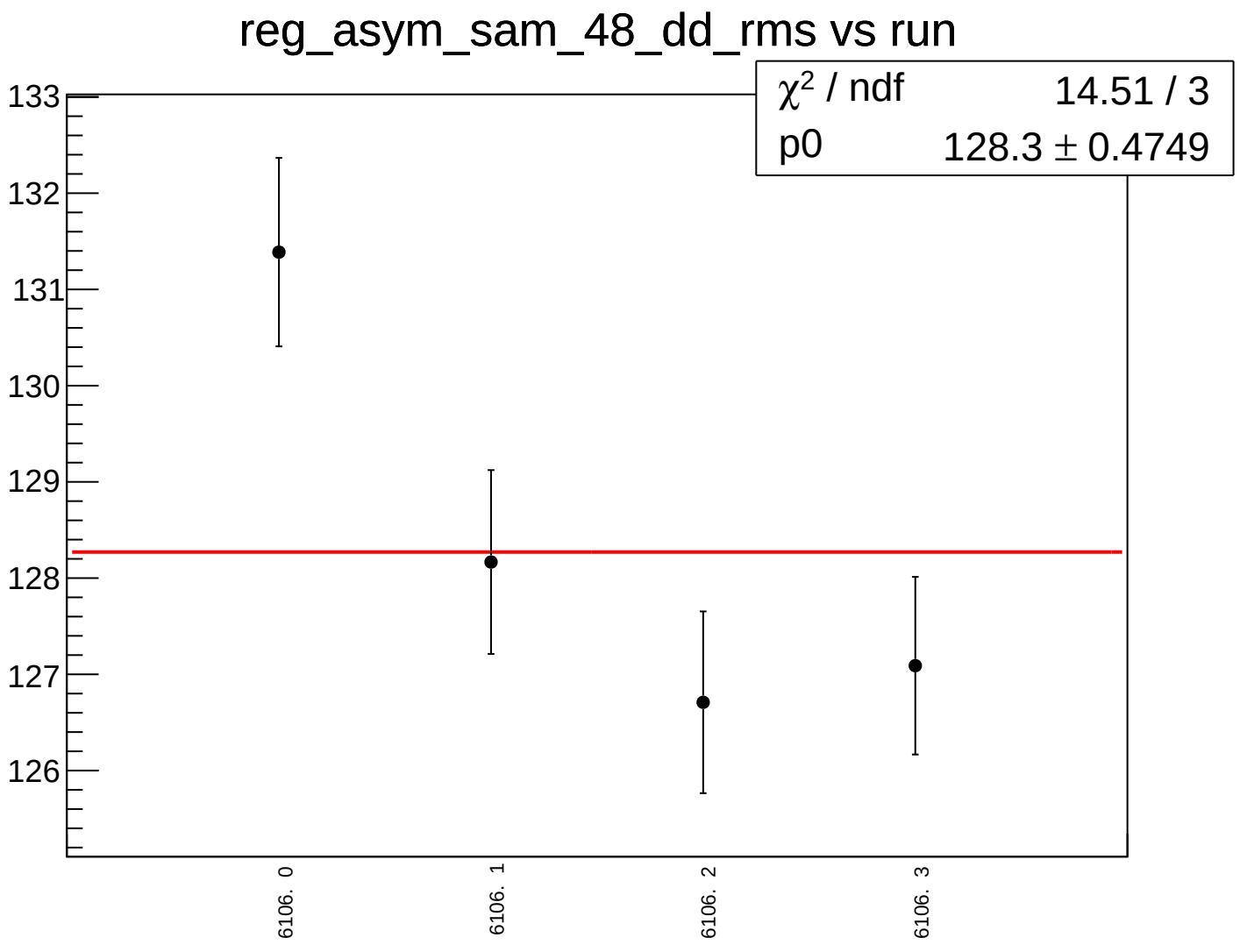
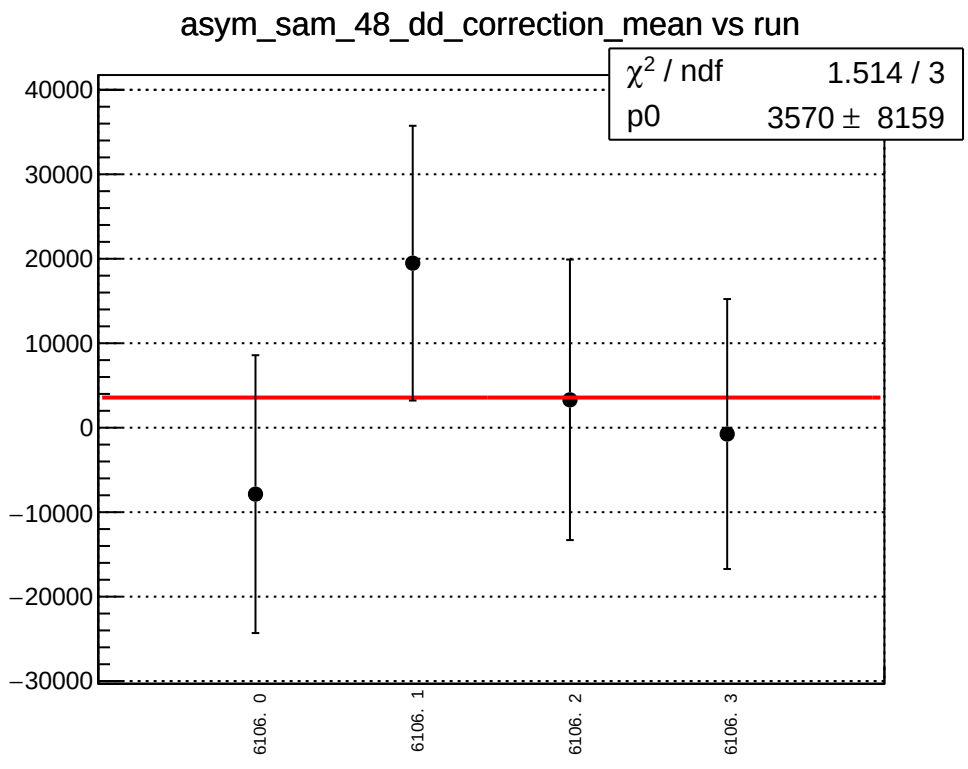
0
2
4
6
8

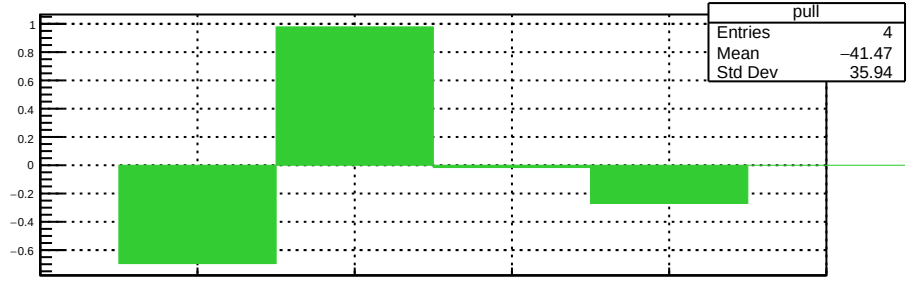

asym_sam_37_dd_rms vs run
χ² / ndf 202.9 / 3
p0 805.3 ± 2.986
880
860
840
820
800
780
760
6106. 0
6106. 1
6106. 2
6106. 3

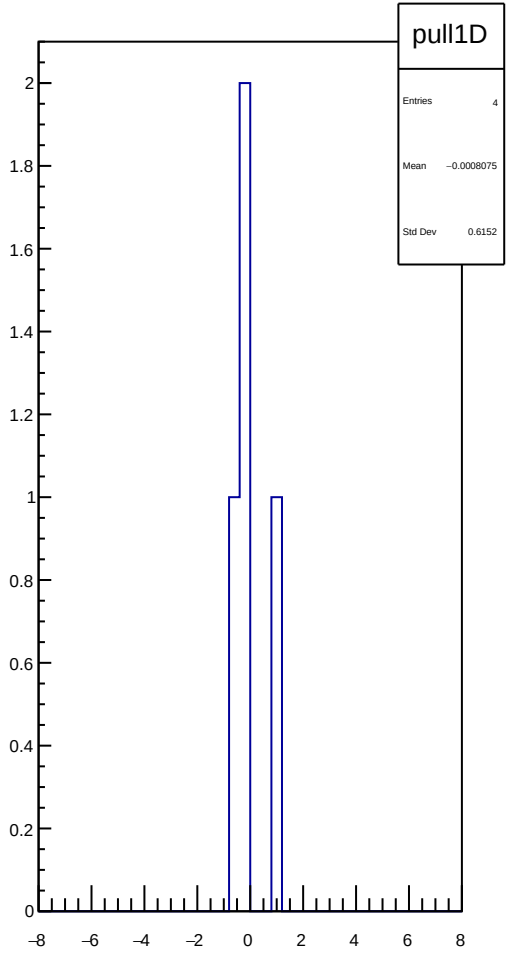

reg_asym_sam_48_dd_mean vs run
χ² / ndf 0.4858 / 3
p0 1366 ± 671.7
3500
3000
2500
2000
1500
1000
500
0
−500
−1000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −45.93
Std Dev 48.28
0.4
0.2
0
−0.2
−0.4
−0.6

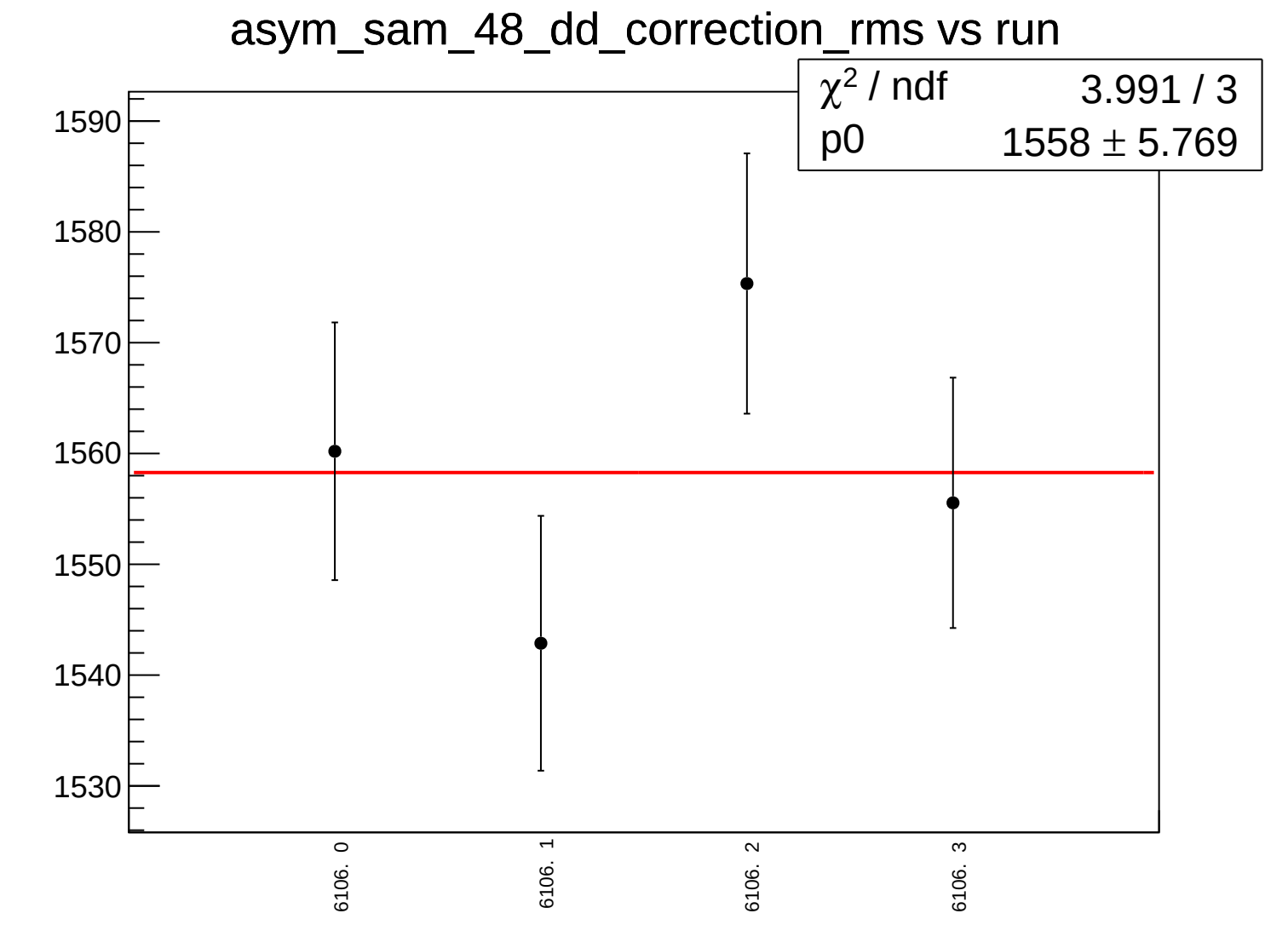

pull1D
Entries 4
Mean 0.005186
Std Dev 0.3484
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

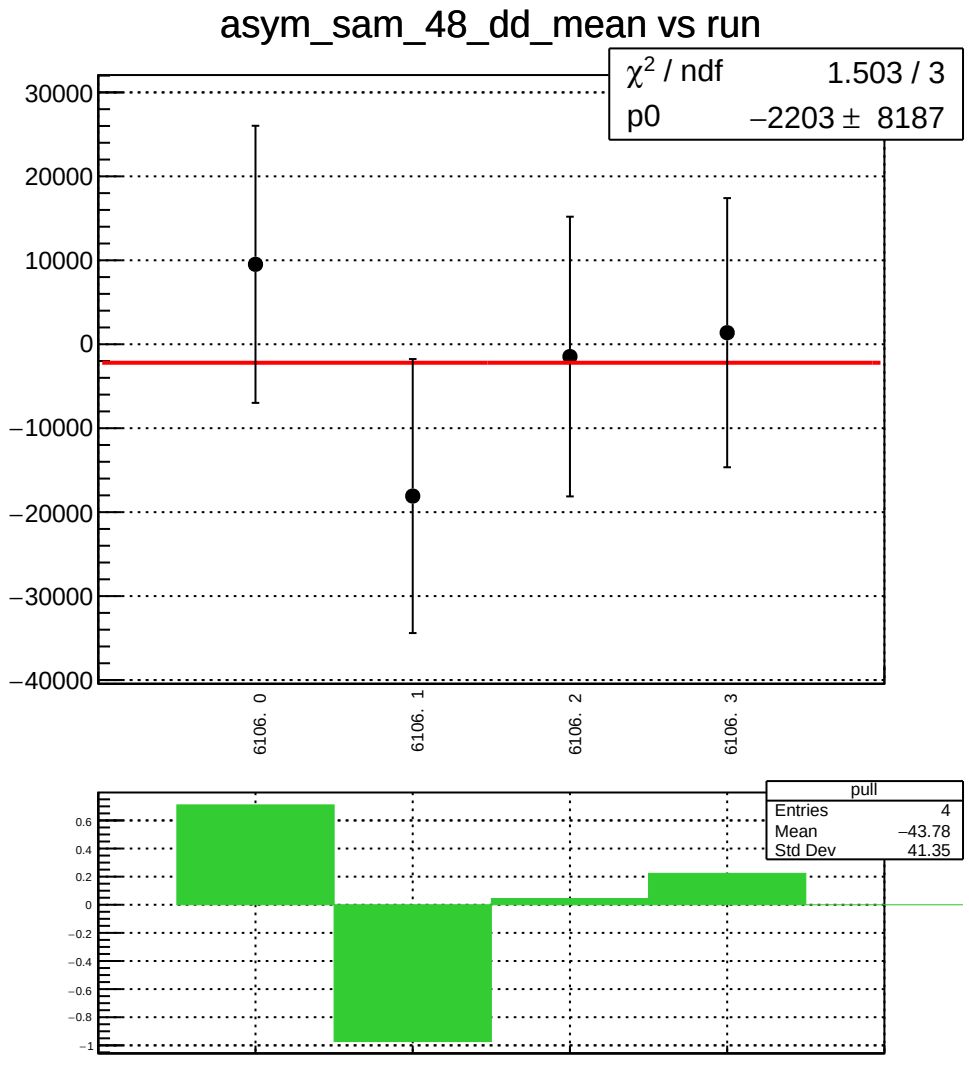

reg_asym_sam_48_dd_rms vs run
χ² / ndf 14.51 / 3
p0 128.3 ± 0.4749
133
132
131
130
129
128
127
126
6106. 0
6106. 1
6106. 2
6106. 3

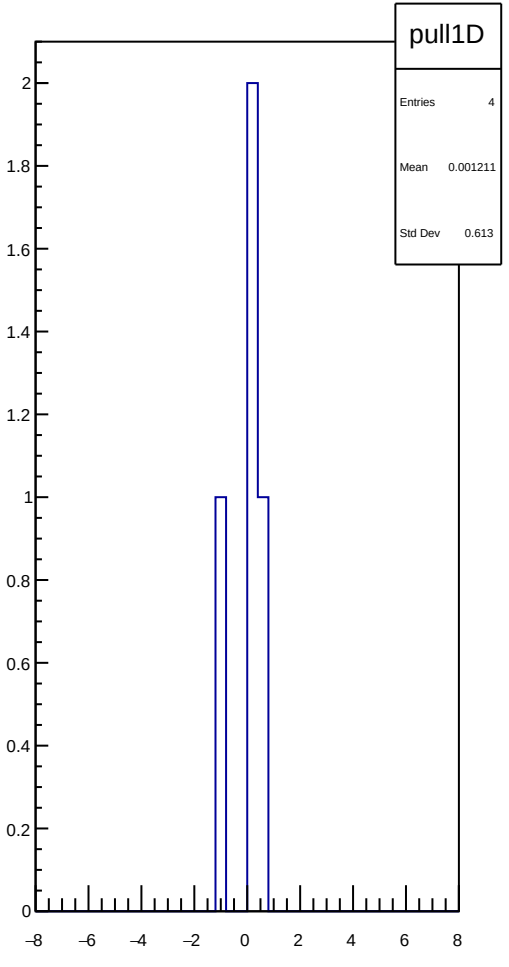

asym_sam_48_dd_correction_mean vs run
χ² / ndf 1.514 / 3
p0 3570 ± 8159
40000
30000
20000
10000
0
−10000
−20000
−30000
6106. 0
6106. 1
6106. 2
6106. 3

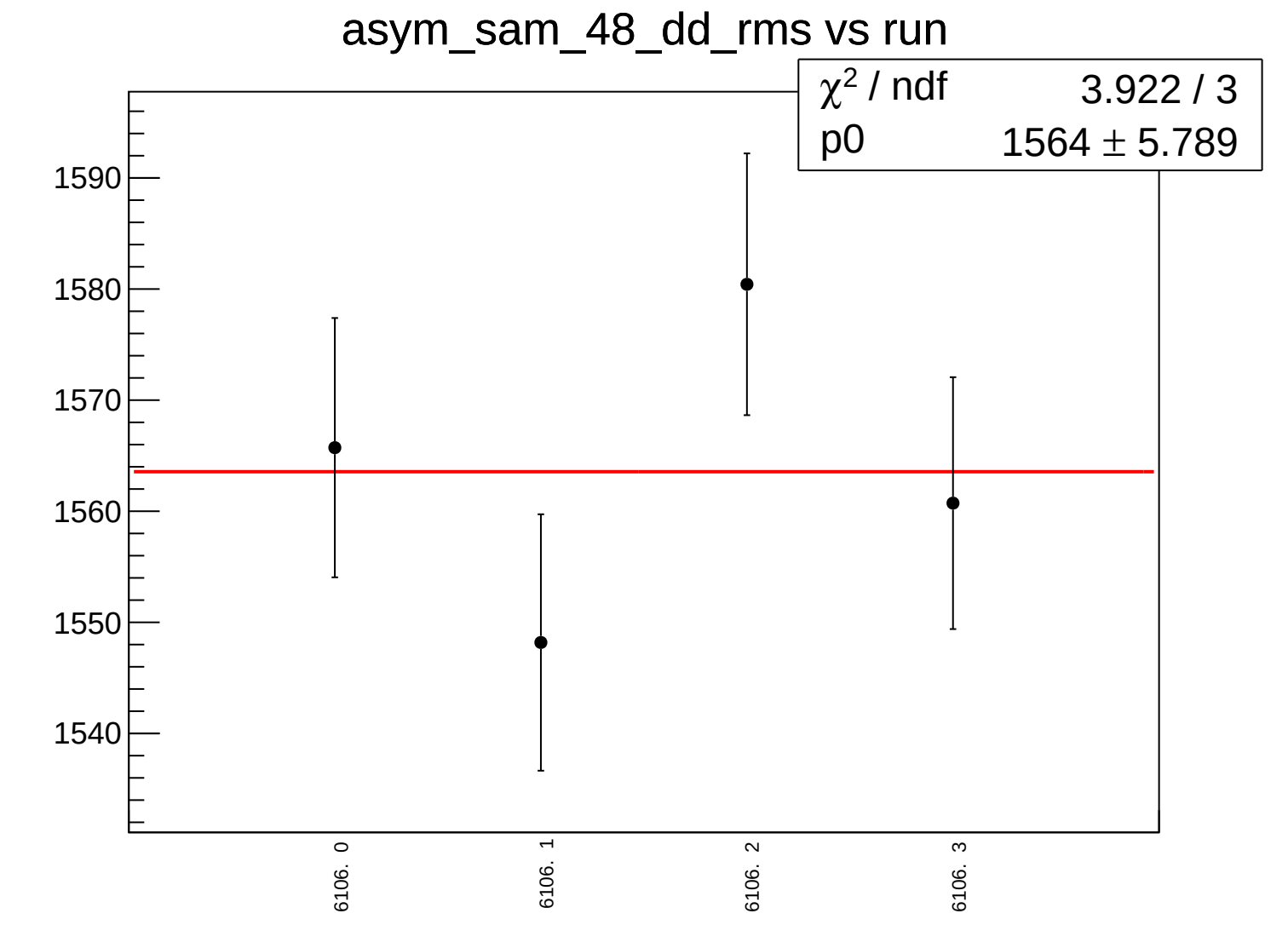

pull
Entries 4
Mean −41.47
Std Dev 35.94
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

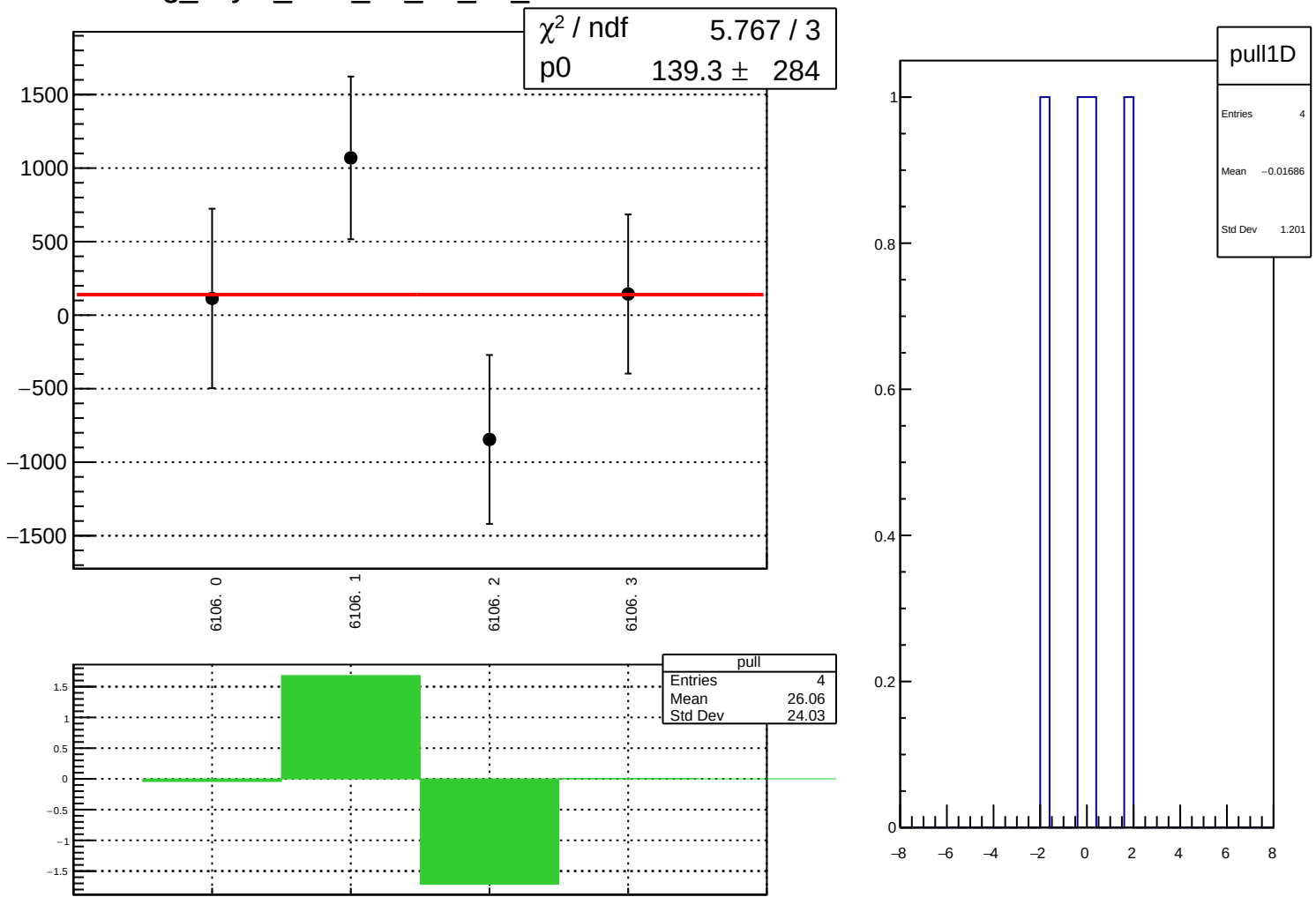

pull1D
Entries 4
Mean −0.0008075
Std Dev 0.6152
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

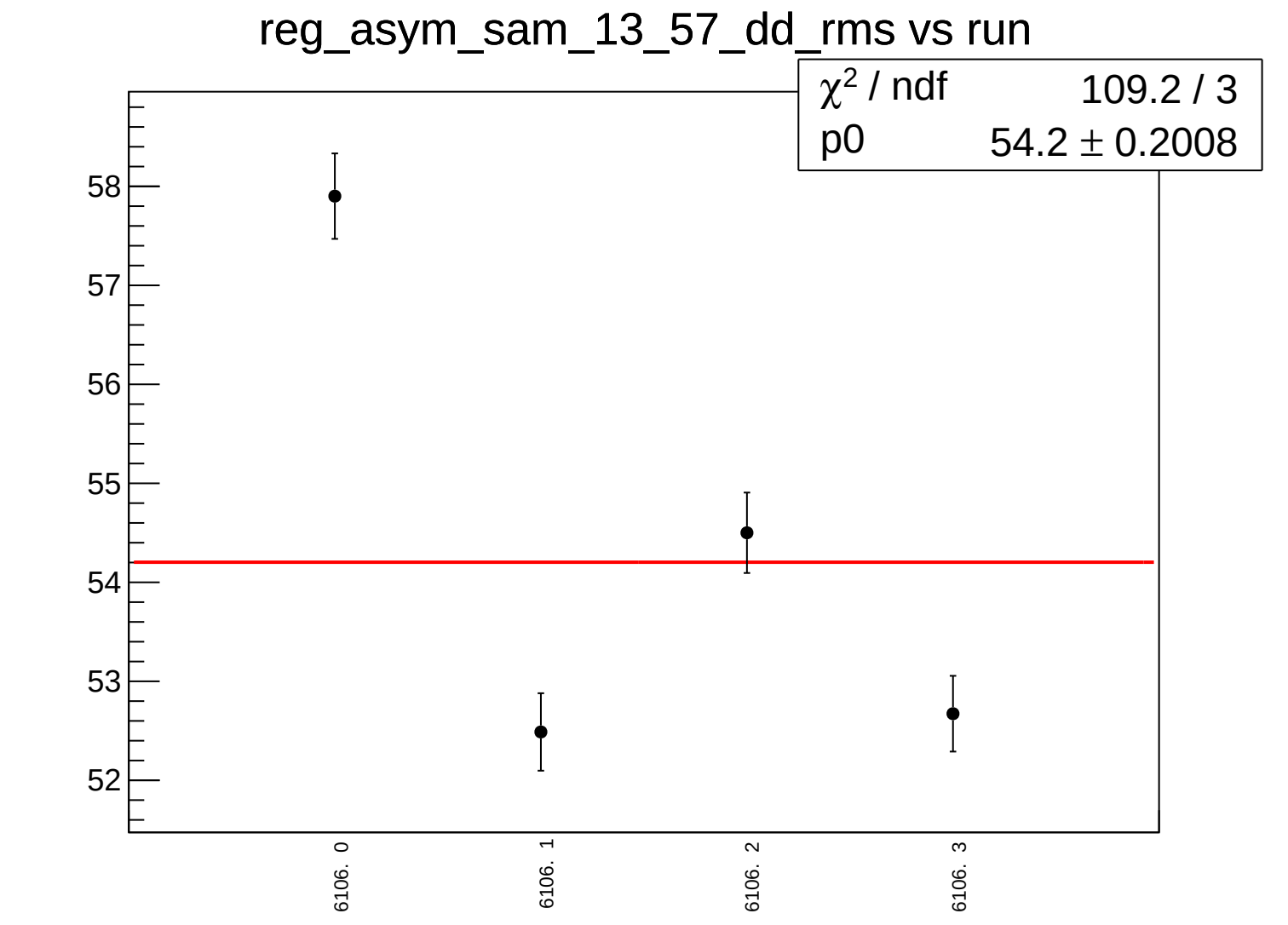

asym_sam_48_dd_correction_rms vs run
χ² / ndf 3.991 / 3
p0 1558 ± 5.769
1590
1580
1570
1560
1550
1540
1530
6106. 0
6106. 1
6106. 2
6106. 3

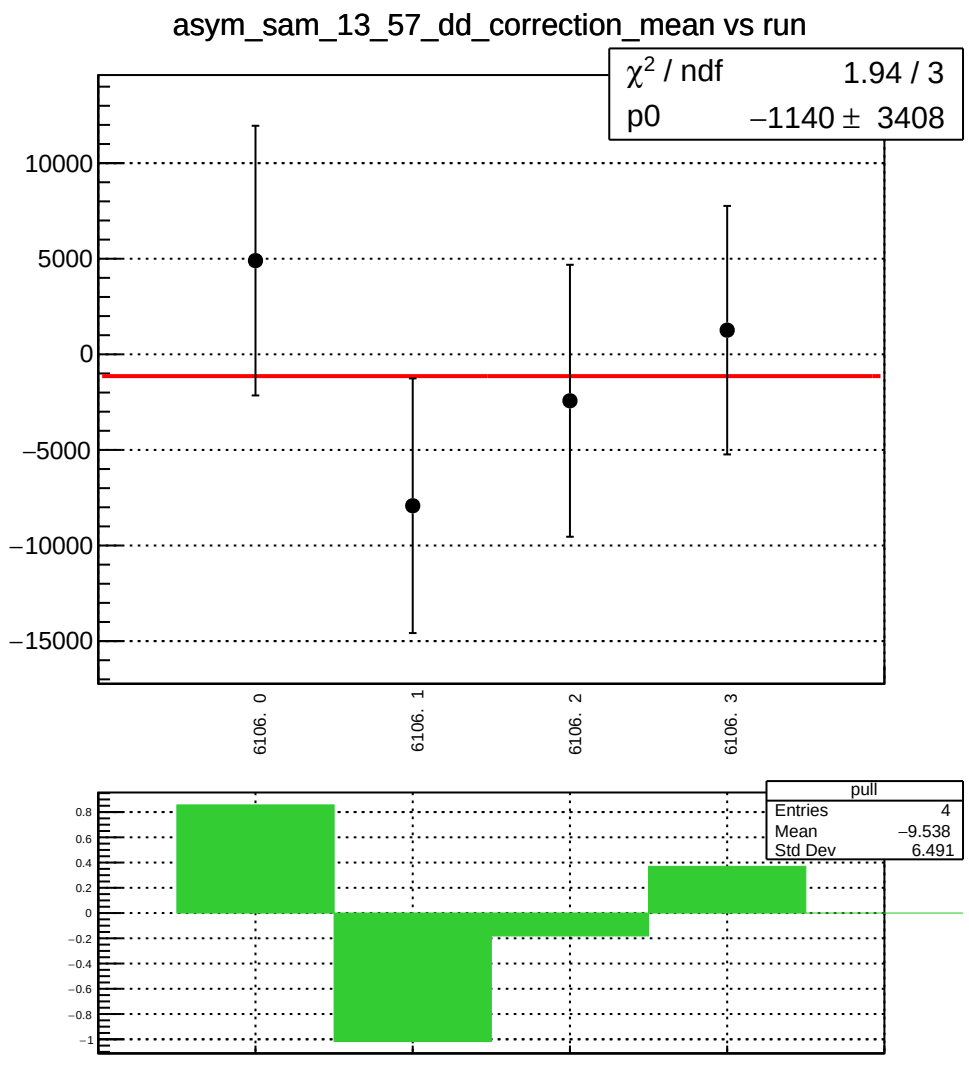

asym_sam_48_dd_mean vs run
χ² / ndf 1.503 / 3
p0 −2203 ± 8187
30000
20000
10000
0
−10000
−20000
−30000
−40000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −43.78
Std Dev 41.35
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

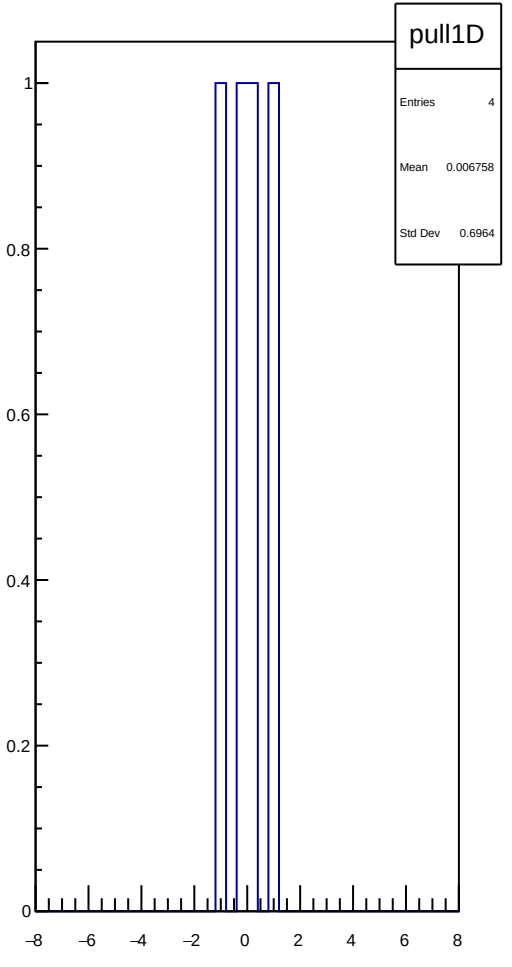

pull1D
Entries 4
Mean 0.001211
Std Dev 0.613
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

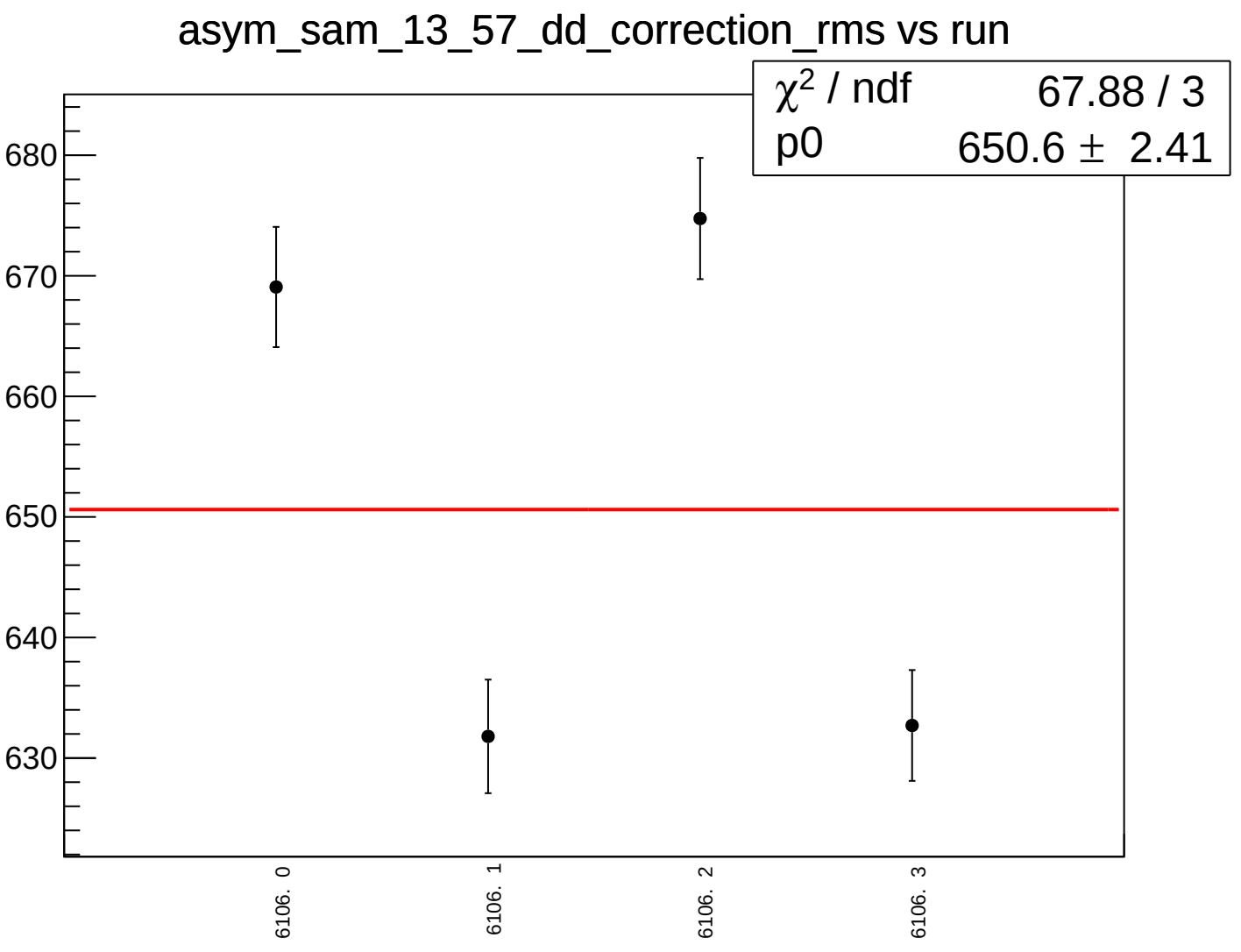

asym_sam_48_dd_rms vs run
χ² / ndf 3.922 / 3
p0 1564 ± 5.789
1590
1580
1570
1560
1550
1540
6106. 0
6106. 1
6106. 2
6106. 3

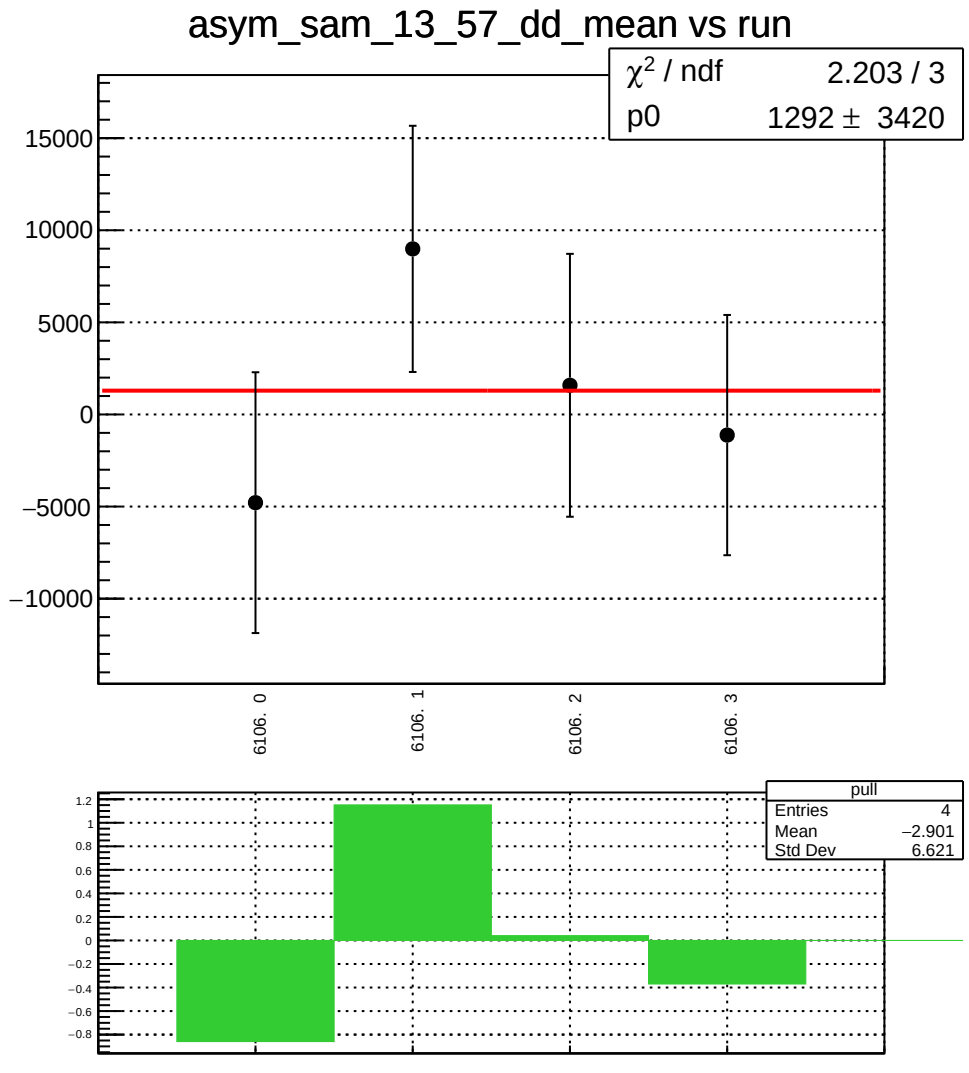

reg_asym_sam_13_57_dd_mean vs run
χ² / ndf 5.767 / 3
p0 139.3 ± 284
1500
1000
500
0
−500
−1000
−1500
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 26.06
Std Dev 24.03
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 4
Mean −0.01686
Std Dev 1.201
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

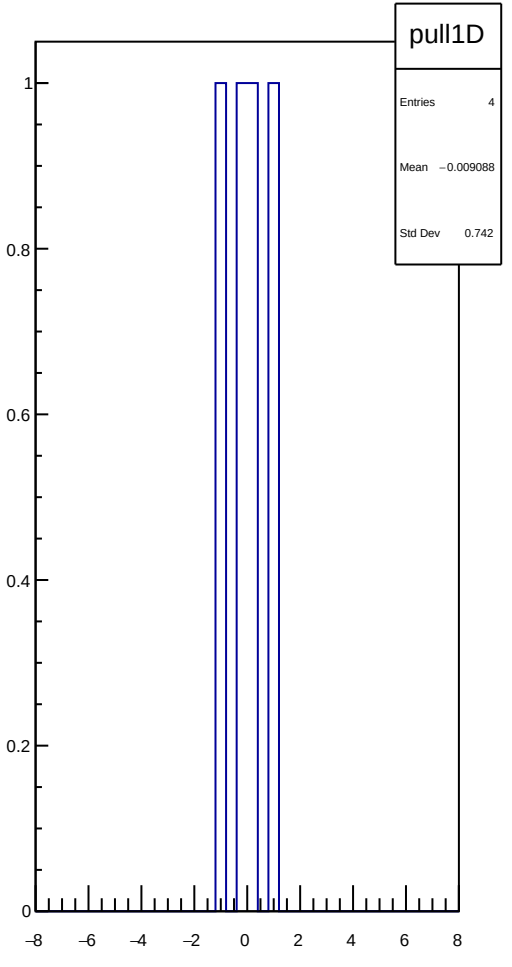

reg_asym_sam_13_57_dd_rms vs run
χ² / ndf 109.2 / 3
p0 54.2 ± 0.2008
58
57
56
55
54
53
52
6106. 0
6106. 1
6106. 2
6106. 3

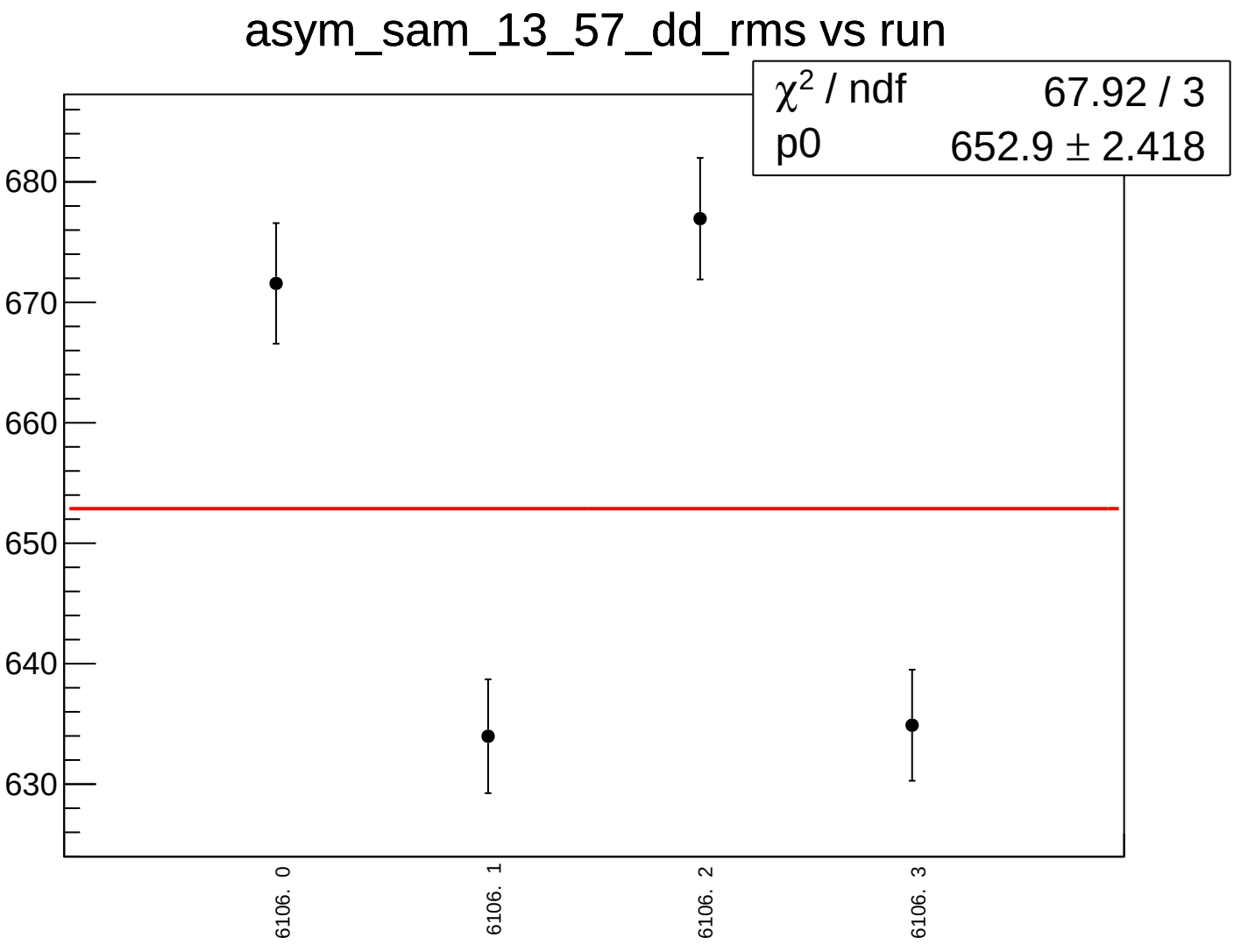

asym_sam_13_57_dd_correction_mean vs run
χ² / ndf 1.94 / 3
p0 −1140 ± 3408
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.538
Std Dev 6.491
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

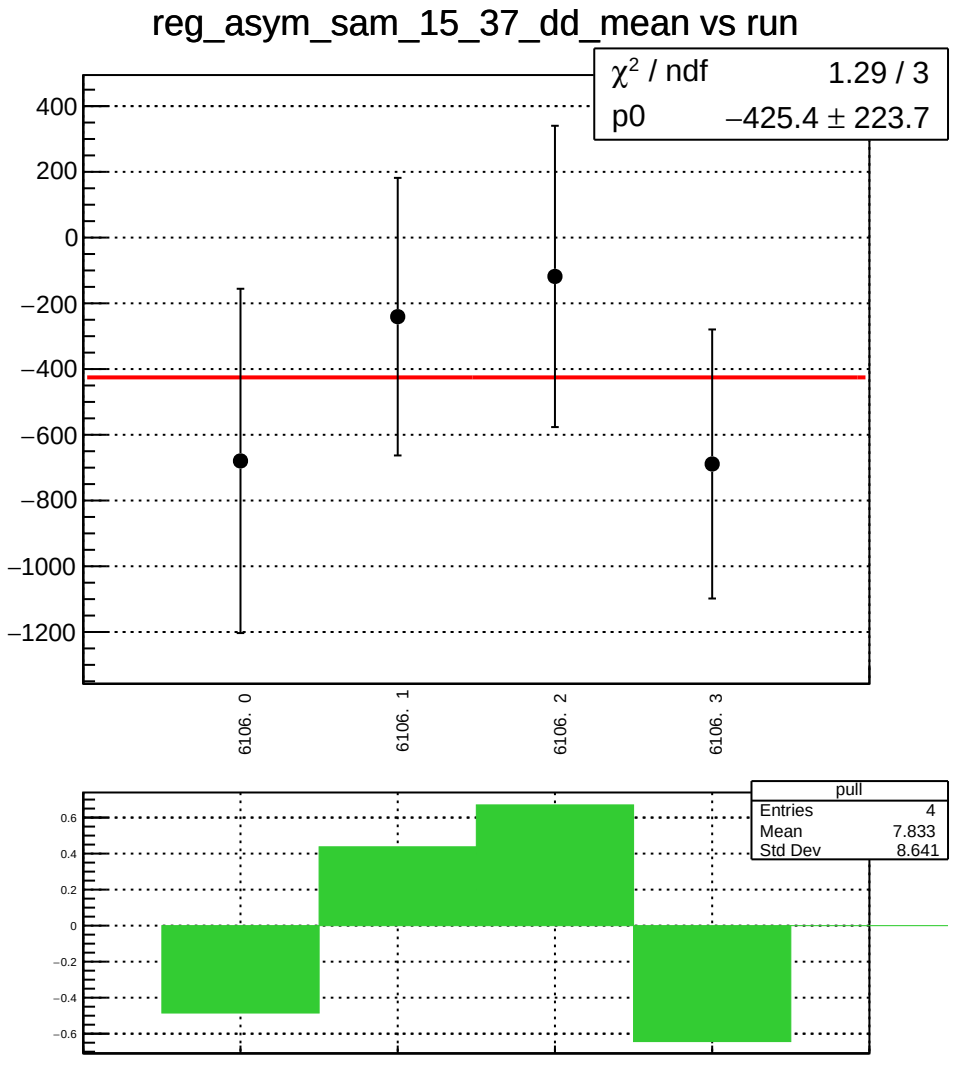

pull1D
Entries 4
Mean 0.006758
Std Dev 0.6964
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

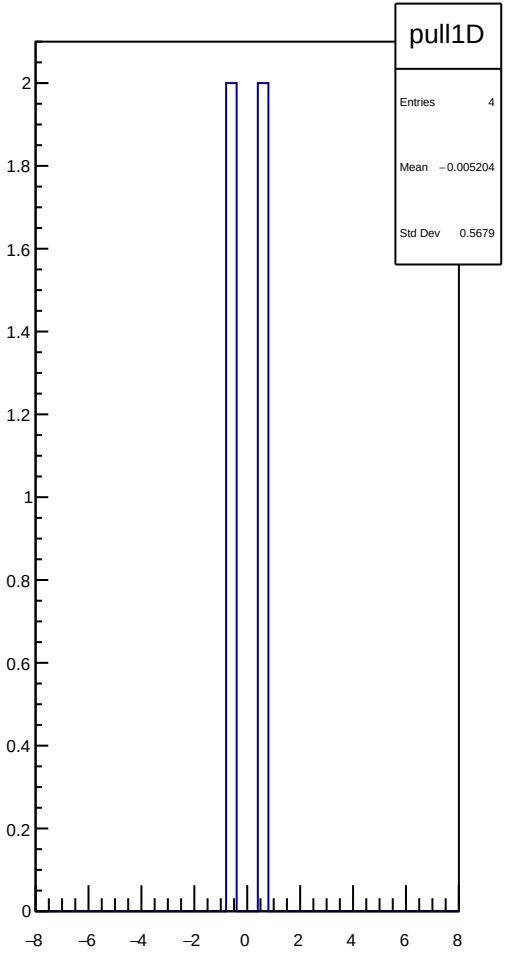

asym_sam_13_57_dd_correction_rms vs run
χ² / ndf 67.88 / 3
p0 650.6 ± 2.41
680
670
660
650
640
630
6106. 0
6106. 1
6106. 2
6106. 3

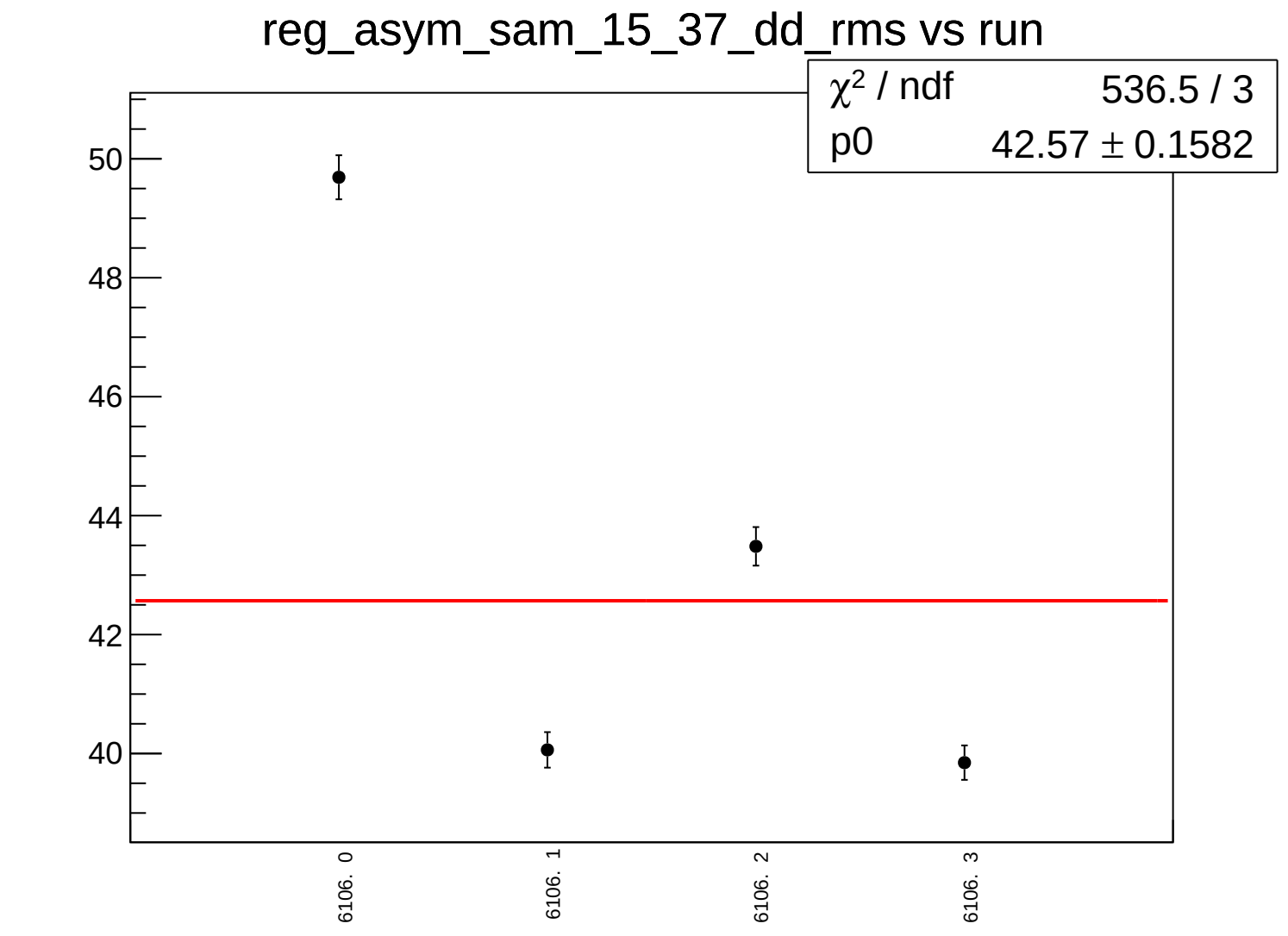

asym_sam_13_57_dd_mean vs run
χ² / ndf 2.203 / 3
p0 1292 ± 3420
15000
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.901
Std Dev 6.621
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

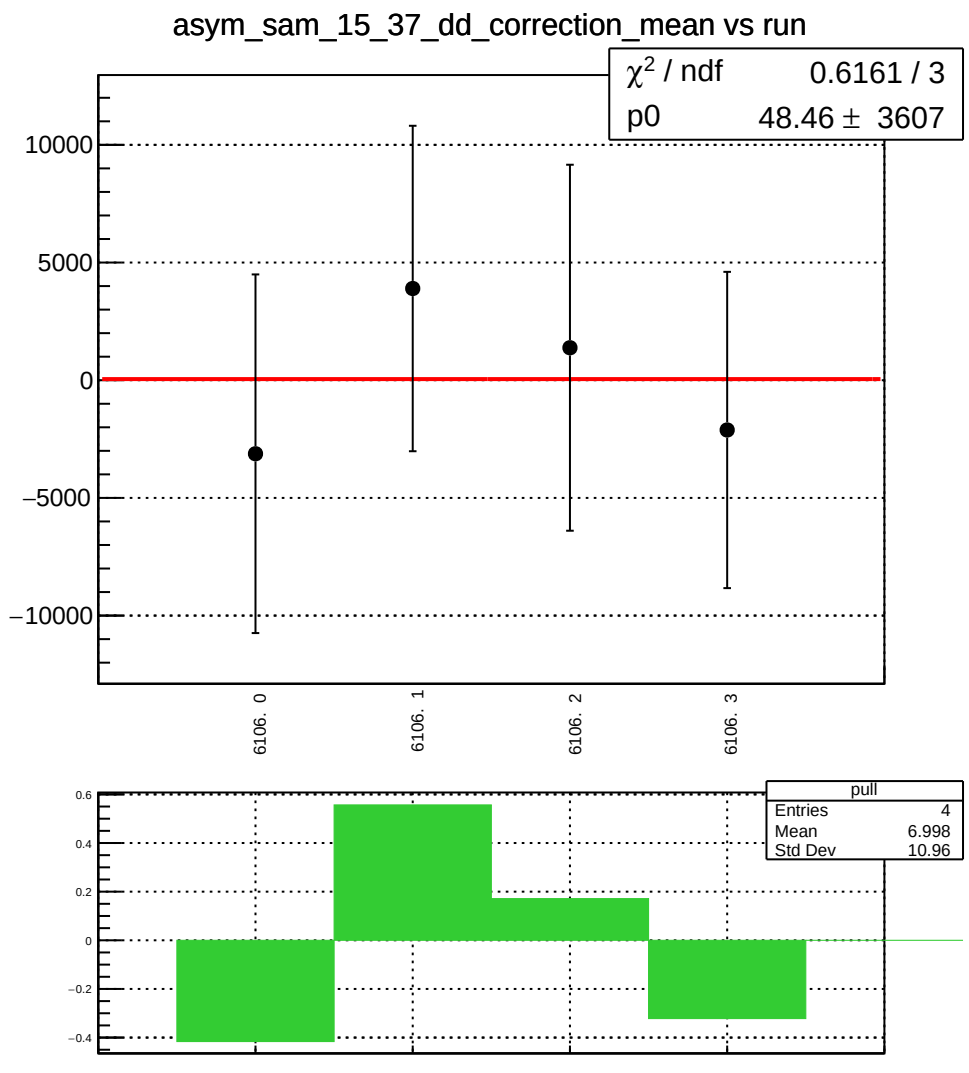

pull1D
Entries 4
Mean −0.009088
Std Dev 0.742
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

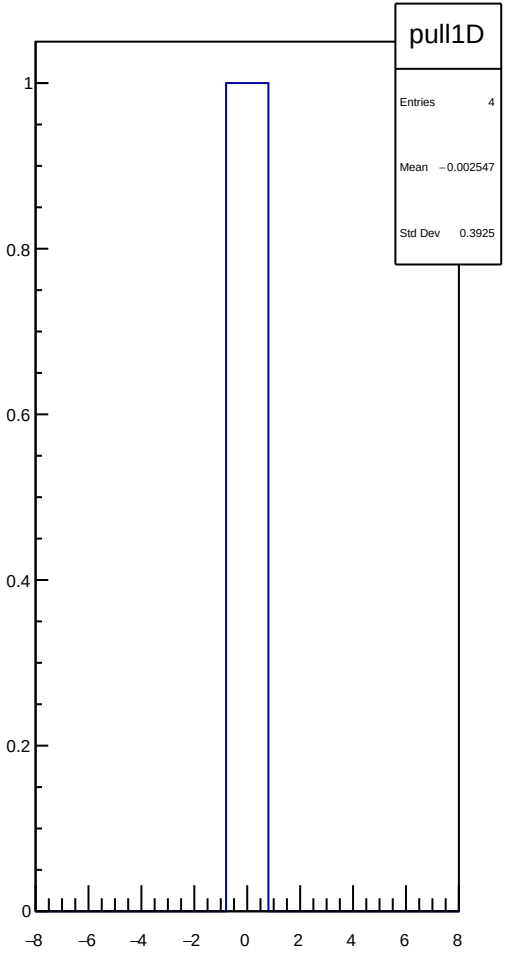

asym_sam_13_57_dd_rms vs run
χ² / ndf 67.92 / 3
p0 652.9 ± 2.418
680
670
660
650
640
630
6106. 0
6106. 1
6106. 2
6106. 3

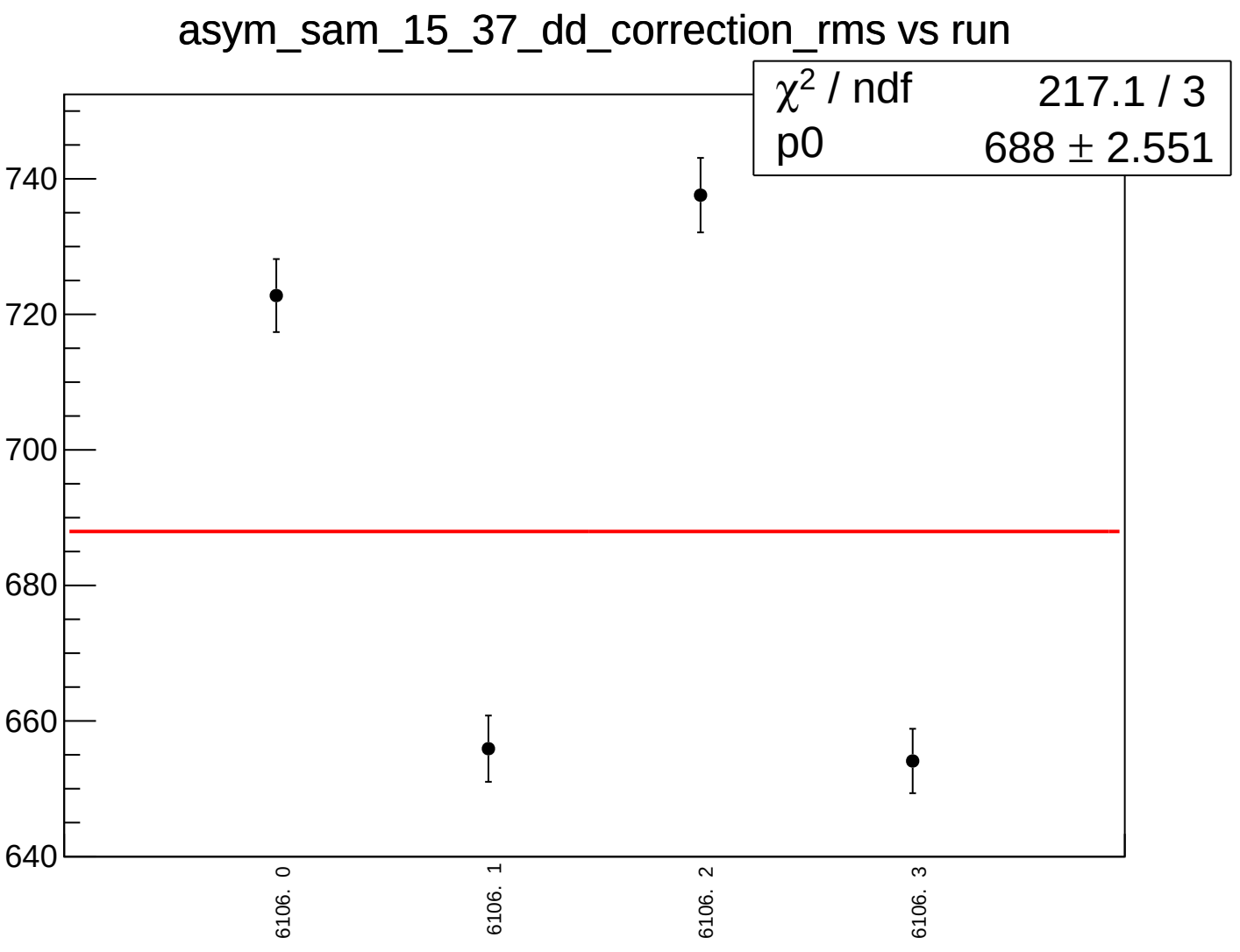

reg_asym_sam_15_37_dd_mean vs run
χ² / ndf 1.29 / 3
p0 −425.4 ± 223.7
400
200
0
−200
−400
−600
−800
−1000
−1200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 7.833
Std Dev 8.641
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

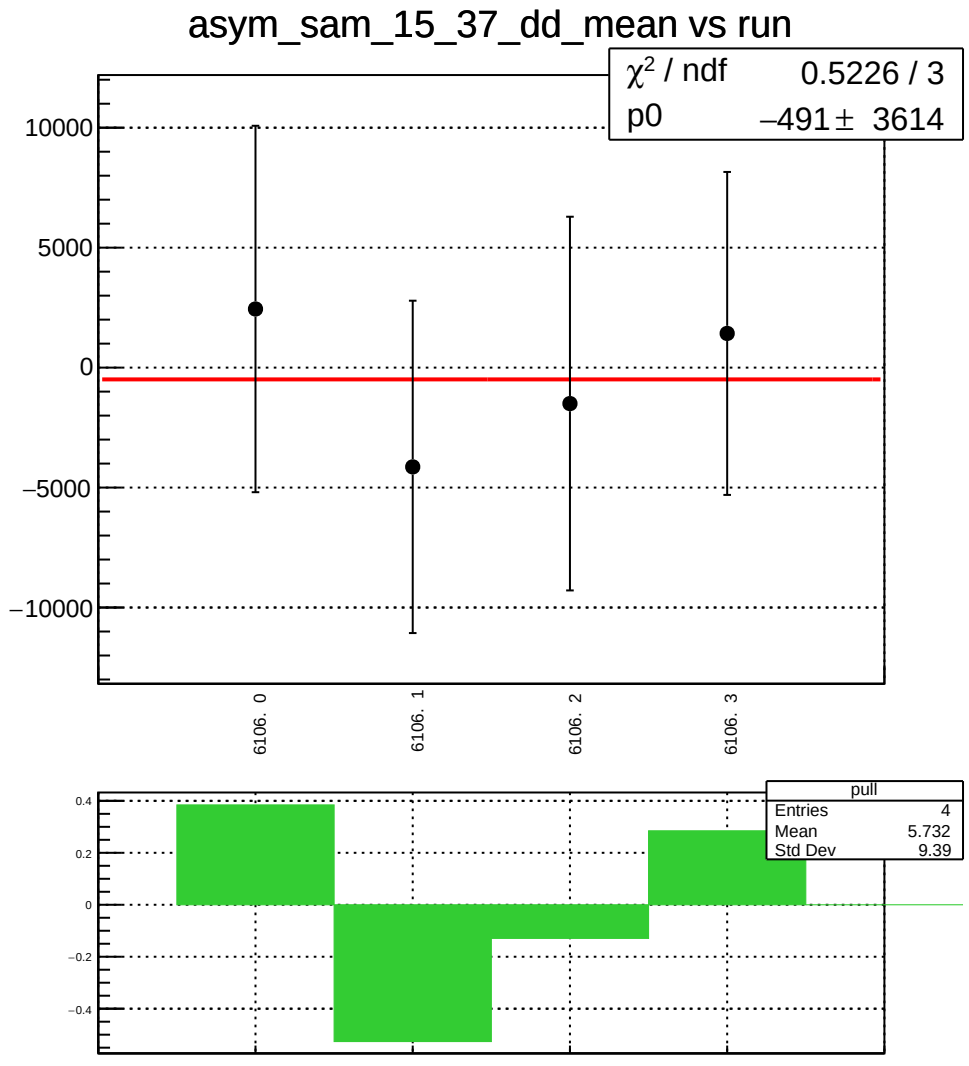

pull1D
Entries 4
Mean −0.005204
Std Dev 0.5679
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

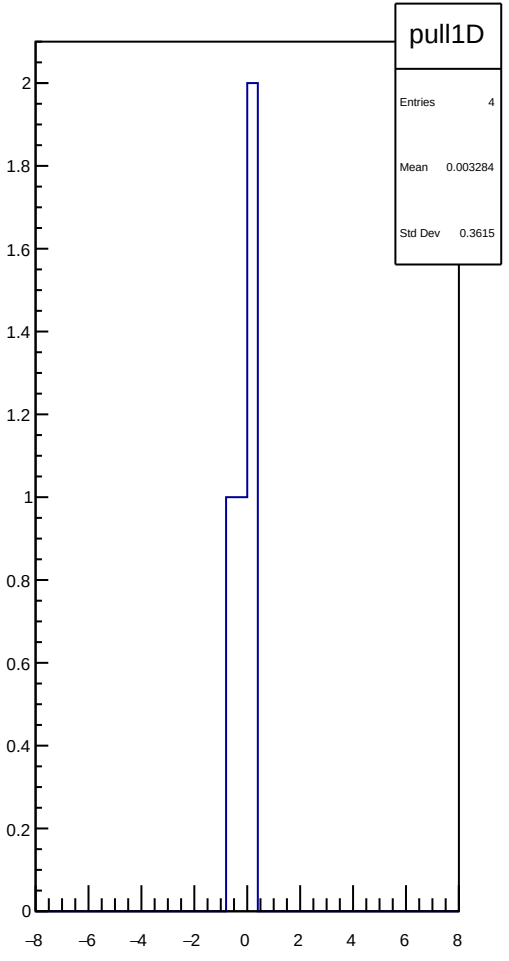

reg_asym_sam_15_37_dd_rms vs run
χ² / ndf 536.5 / 3
p0 42.57 ± 0.1582
50
48
46
44
42
40
6106. 0
6106. 1
6106. 2
6106. 3

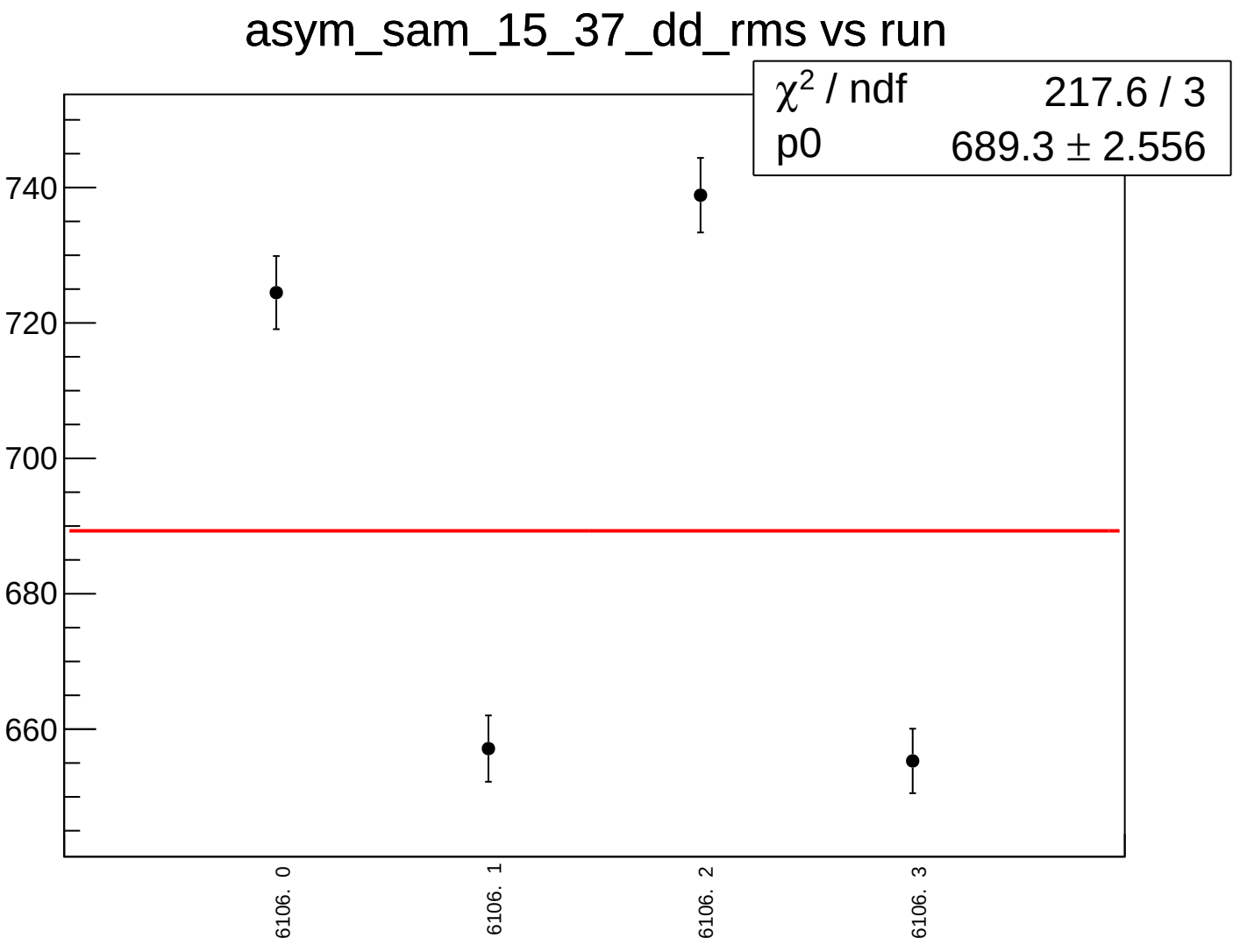

asym_sam_15_37_dd_correction_mean vs run
χ² / ndf 0.6161 / 3
p0 48.46 ± 3607
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 6.998
Std Dev 10.96
0.6
0.4
0.2
0
−0.2
−0.4

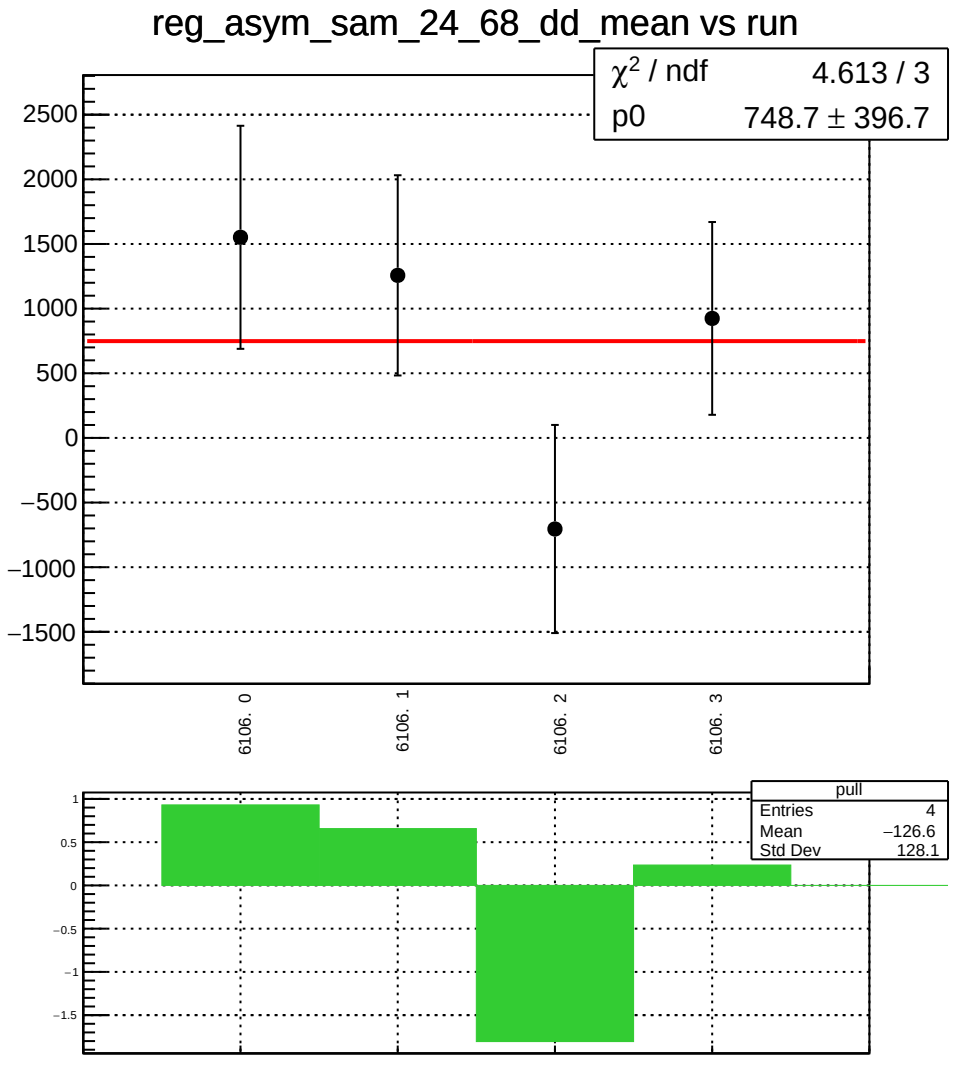

pull1D
Entries 4
Mean −0.002547
Std Dev 0.3925
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

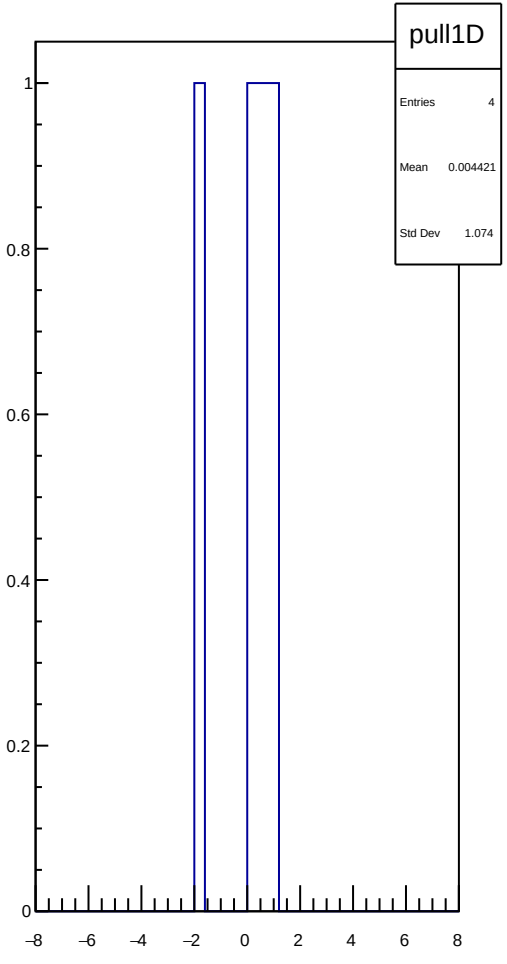

asym_sam_15_37_dd_correction_rms vs run
χ² / ndf 217.1 / 3
p0 688 ± 2.551
740
720
700
680
660
640
6106. 0
6106. 1
6106. 2
6106. 3

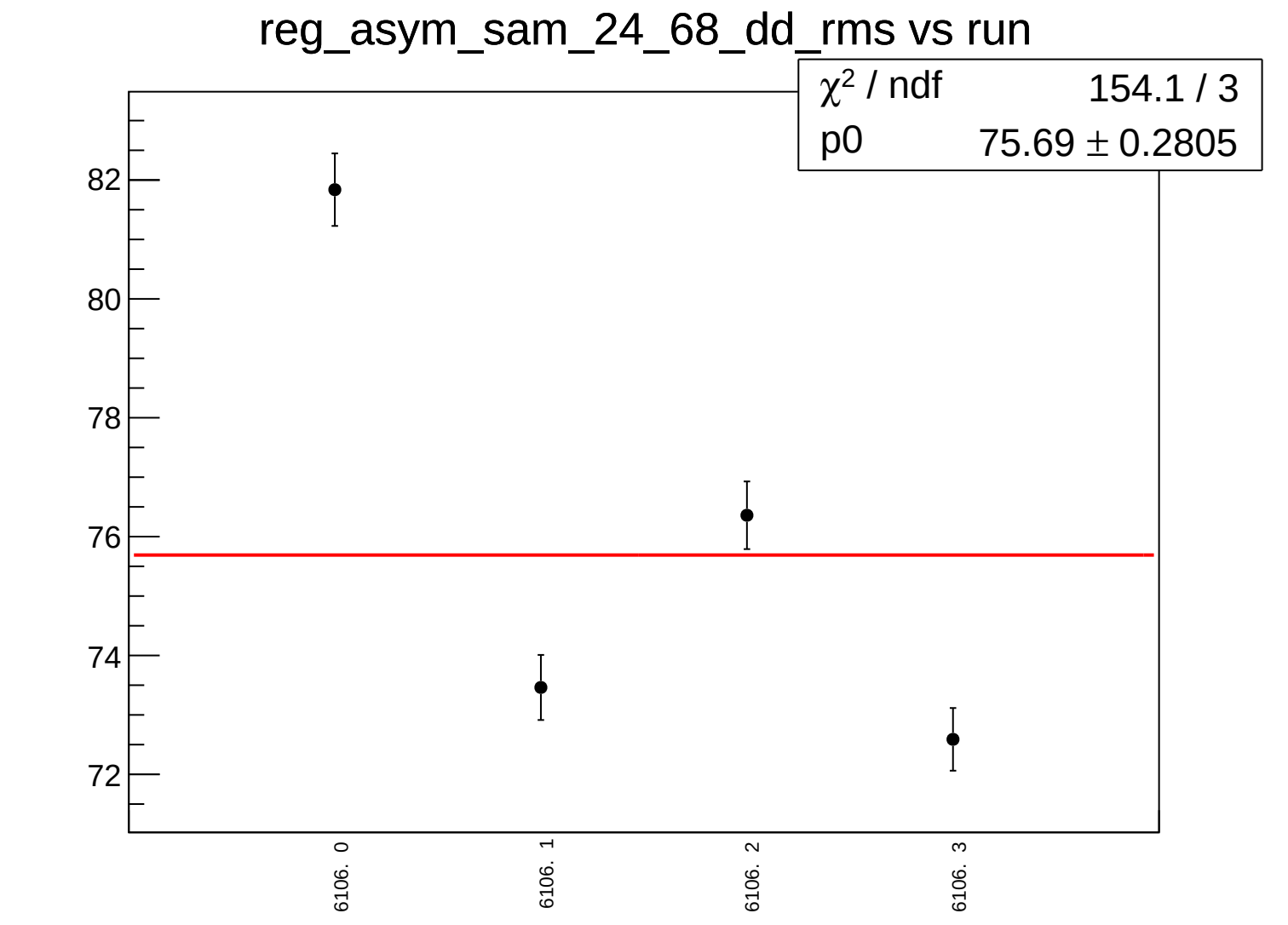

asym_sam_15_37_dd_mean vs run
χ² / ndf 0.5226 / 3
p0 −491 ± 3614
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 5.732
Std Dev 9.39
0.4
0.2
0
−0.2
−0.4

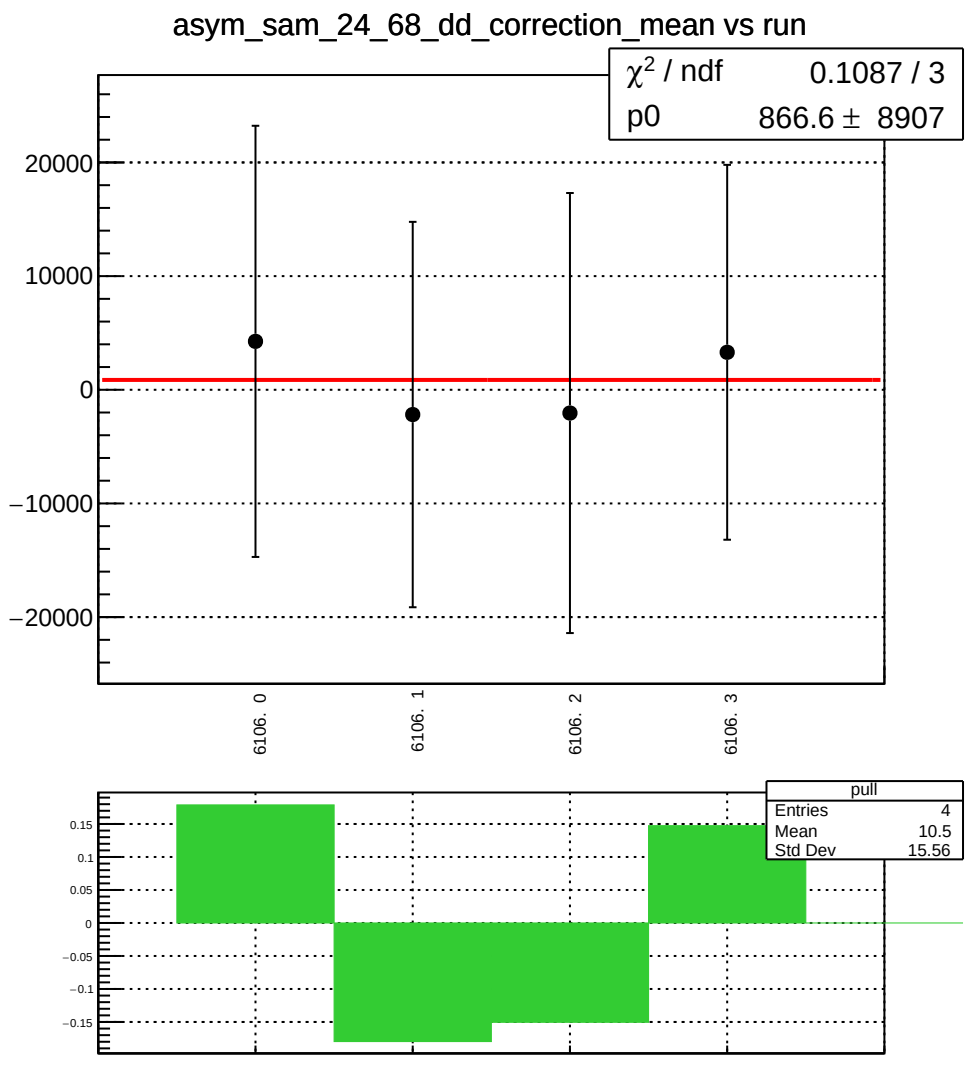

pull1D
Entries 4
Mean 0.003284
Std Dev 0.3615
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

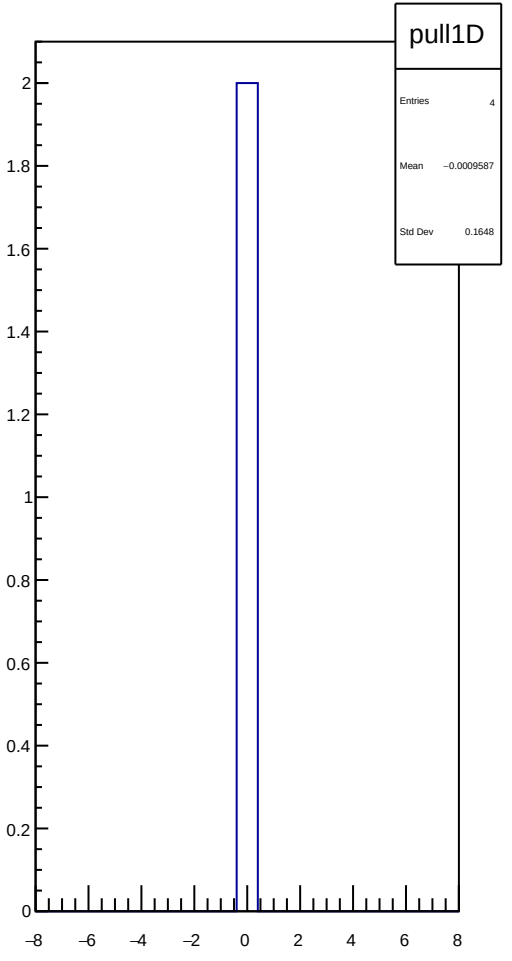

asym_sam_15_37_dd_rms vs run
χ² / ndf 217.6 / 3
p0 689.3 ± 2.556
740
720
700
680
660
6106. 0
6106. 1
6106. 2
6106. 3

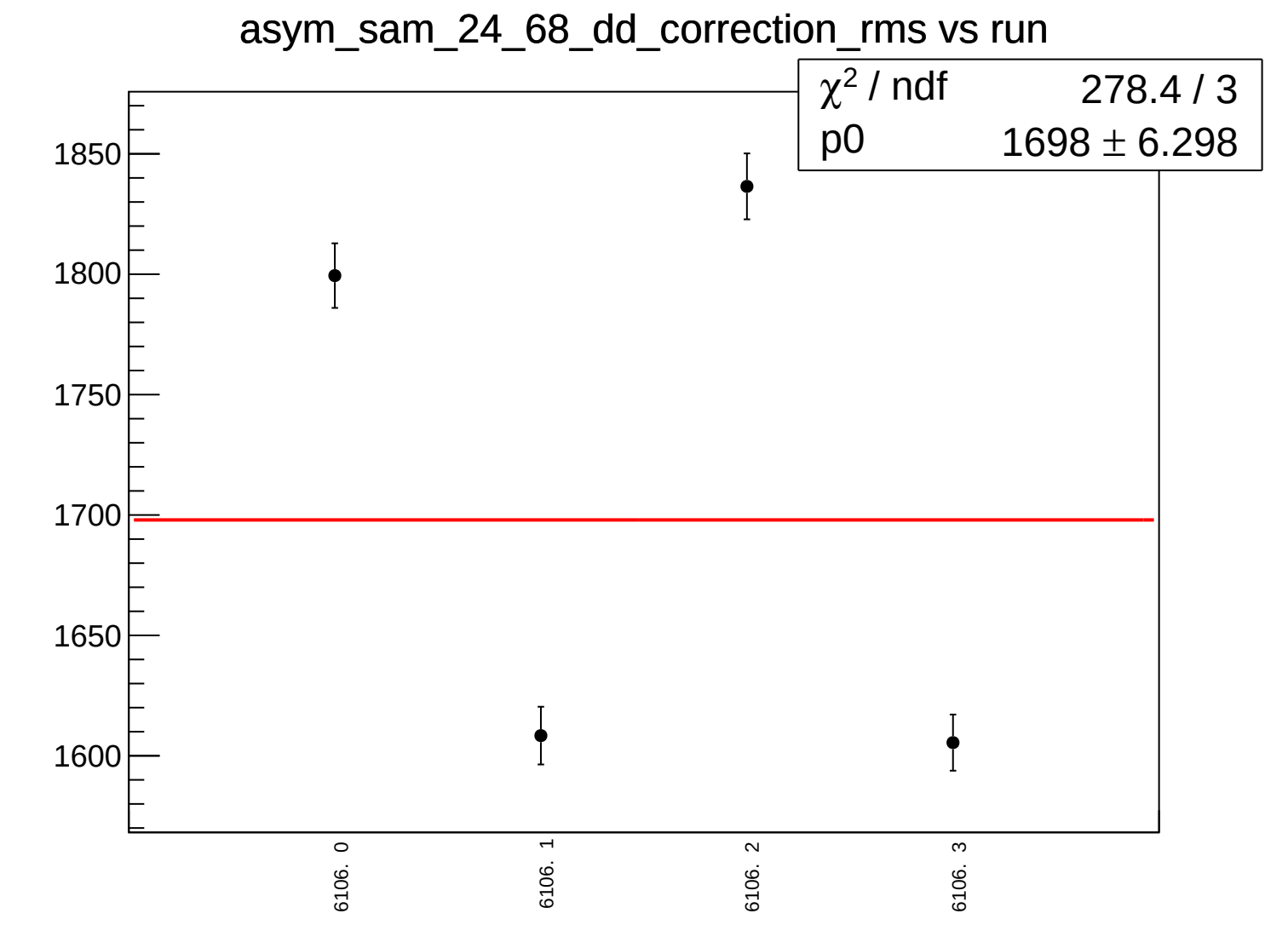

reg_asym_sam_24_68_dd_mean vs run
χ² / ndf 4.613 / 3
p0 748.7 ± 396.7
2500
2000
1500
1000
500
0
−500
−1000
−1500
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −126.6
Std Dev 128.1
1
0.5
0
−0.5
−1
−1.5

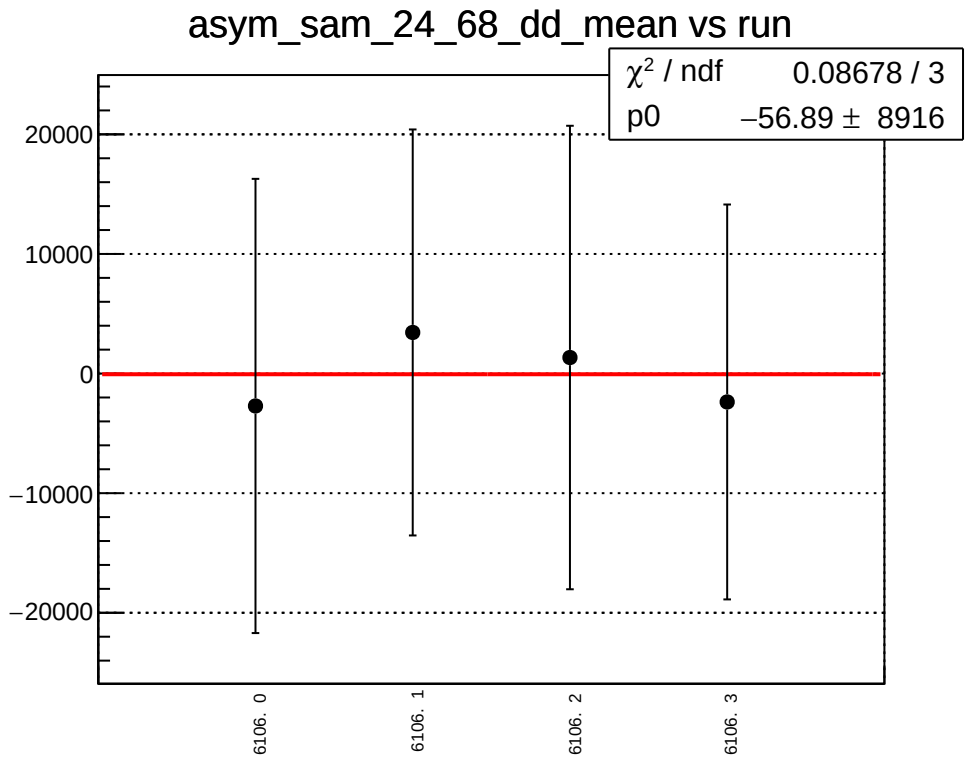

pull1D
Entries 4
Mean 0.004421
Std Dev 1.074
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

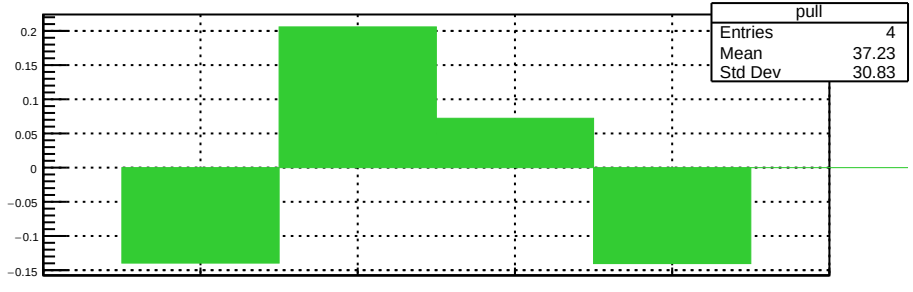

reg_asym_sam_24_68_dd_rms vs run
χ² / ndf 154.1 / 3
p0 75.69 ± 0.2805
82
80
78
76
74
72
6106. 0
6106. 1
6106. 2
6106. 3

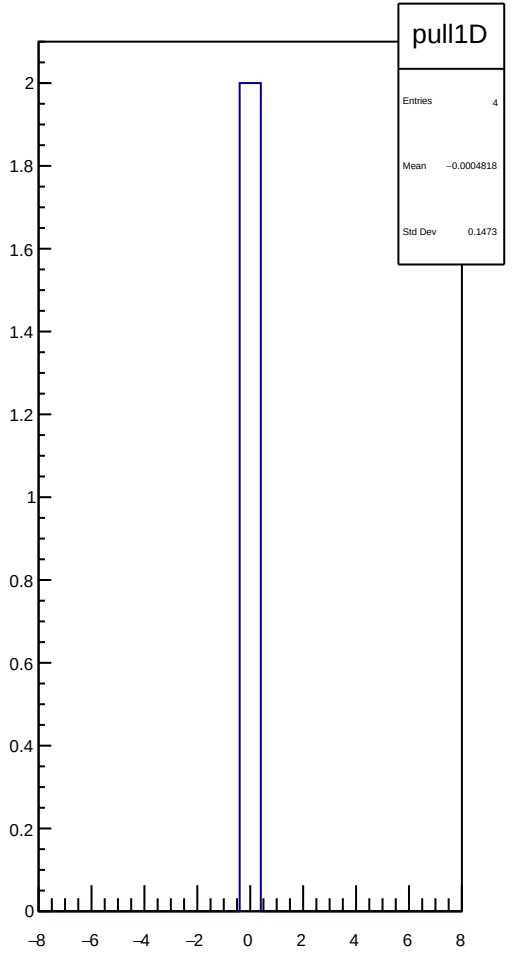

asym_sam_24_68_dd_correction_mean vs run
χ² / ndf 0.1087 / 3
p0 866.6 ± 8907
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 10.5
Std Dev 15.56
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

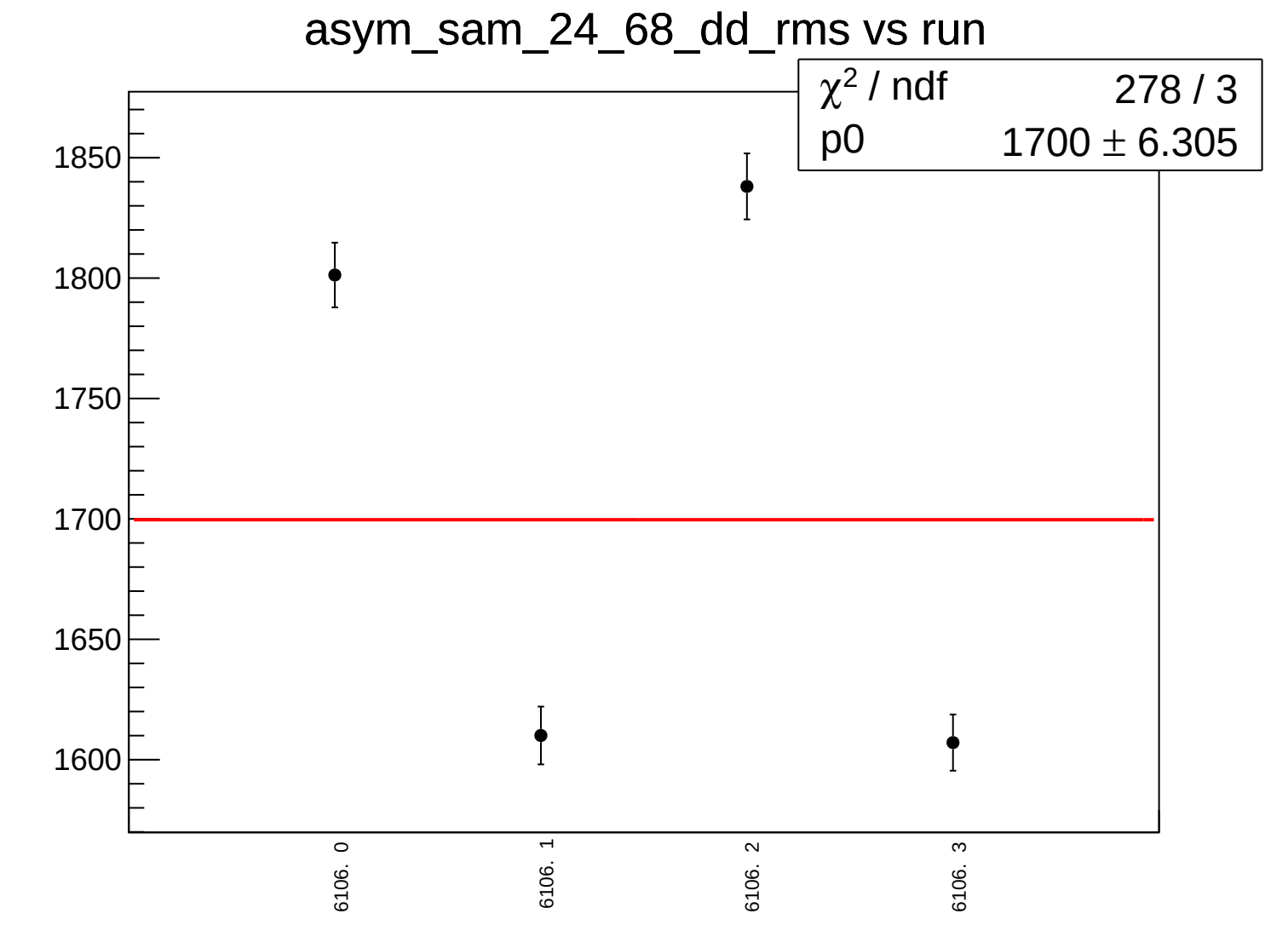

pull1D
Entries 4
Mean −0.0009587
Std Dev 0.1648
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

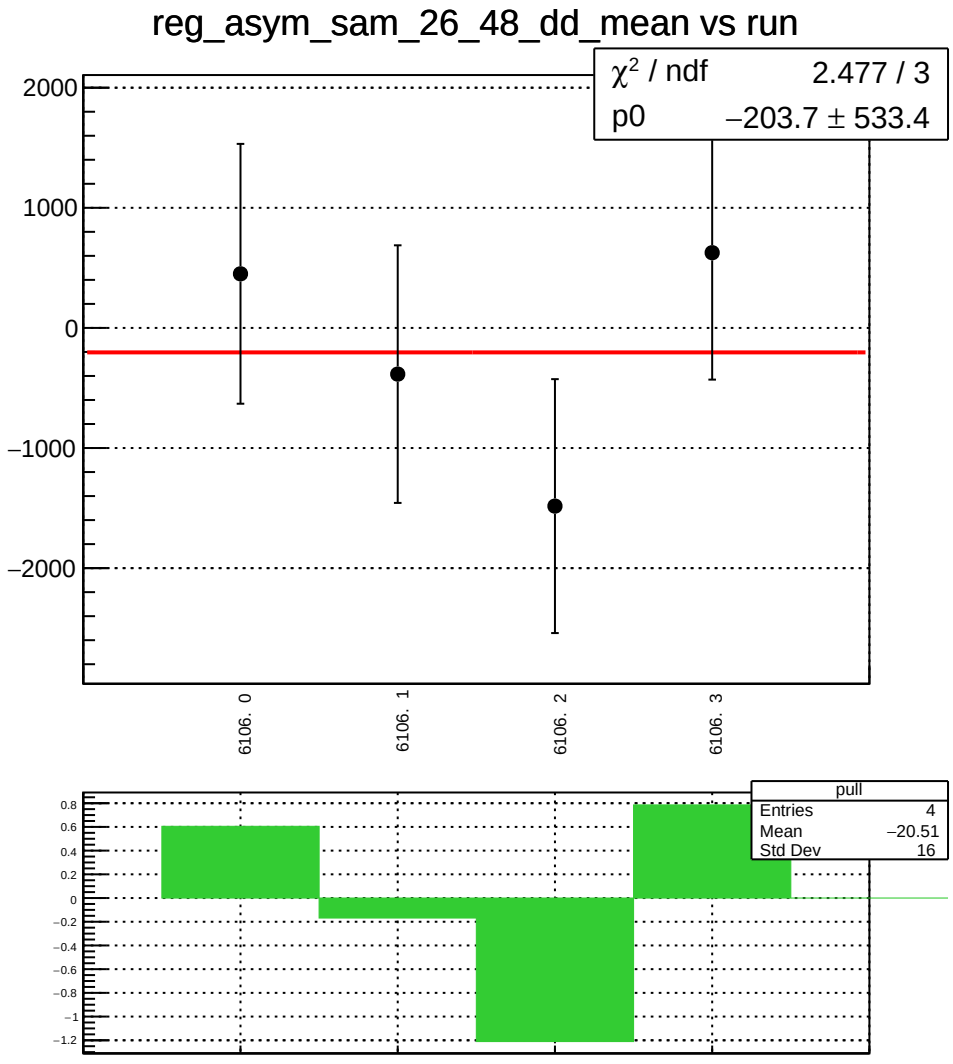

asym_sam_24_68_dd_correction_rms vs run
χ² / ndf 278.4 / 3
p0 1698 ± 6.298
1850
1800
1750
1700
1650
1600
6106. 0
6106. 1
6106. 2
6106. 3

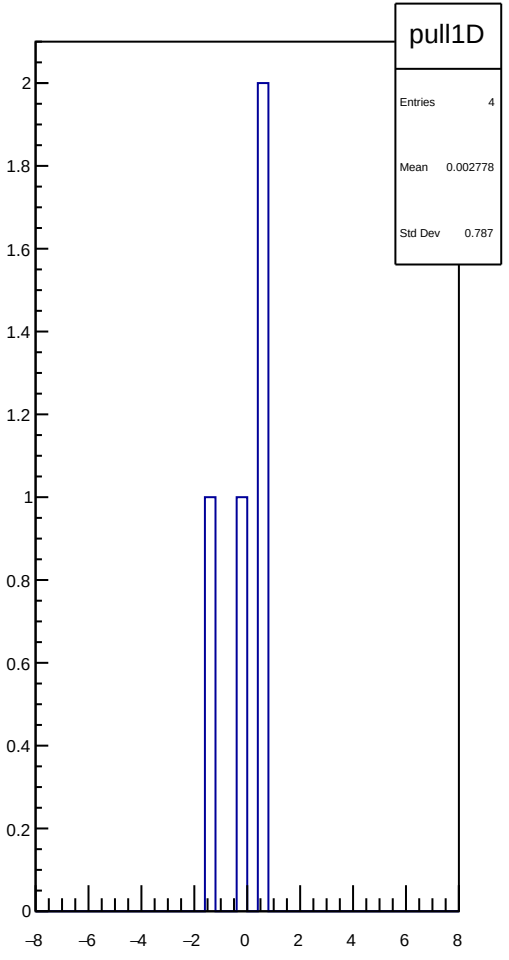

asym_sam_24_68_dd_mean vs run
χ² / ndf 0.08678 / 3
p0 −56.89 ± 8916
20000
10000
0
−10000
−20000
6106. 0
6106. 1
6106. 2
6106. 3

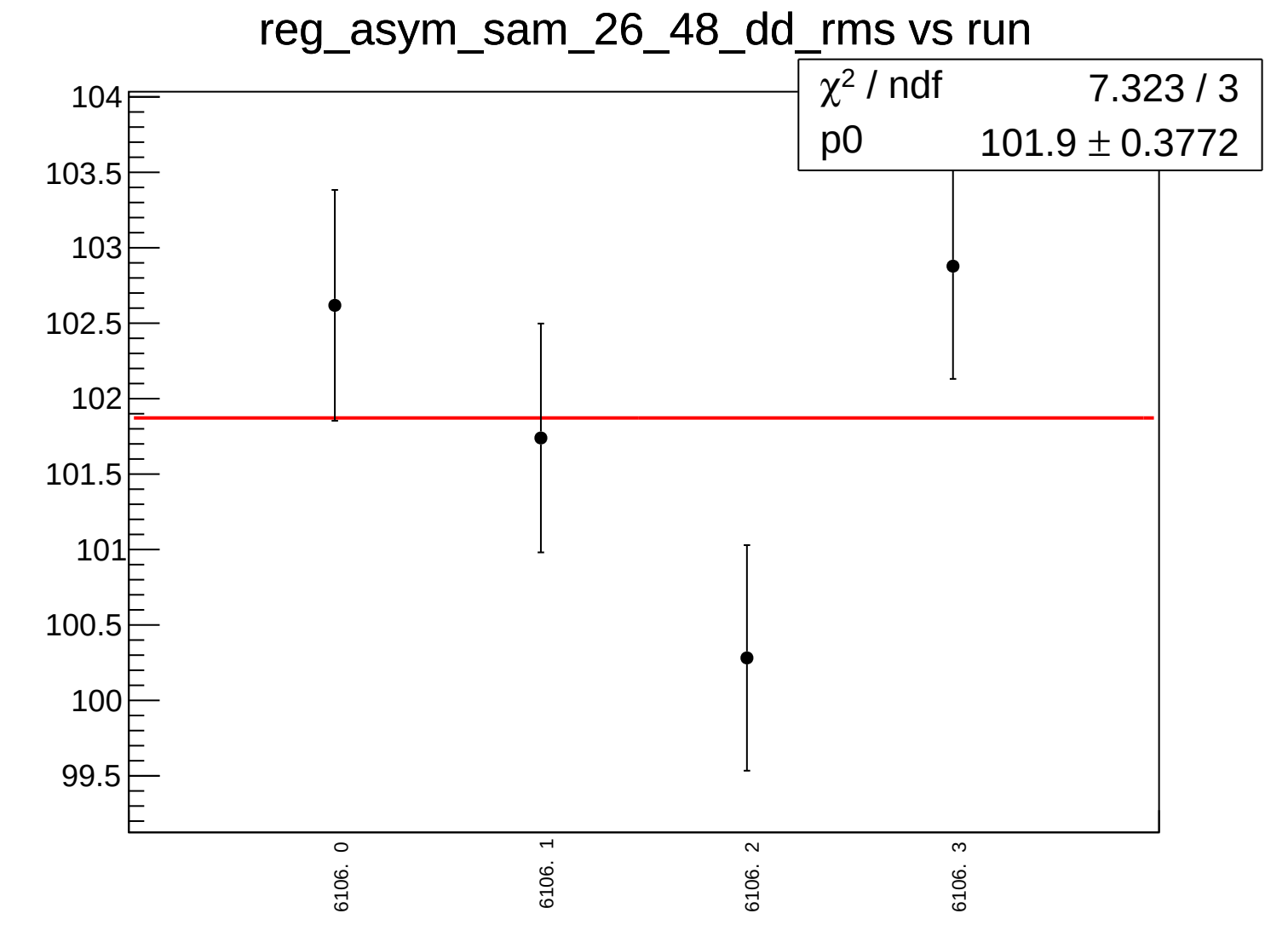

pull
Entries 4
Mean 37.23
Std Dev 30.83
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

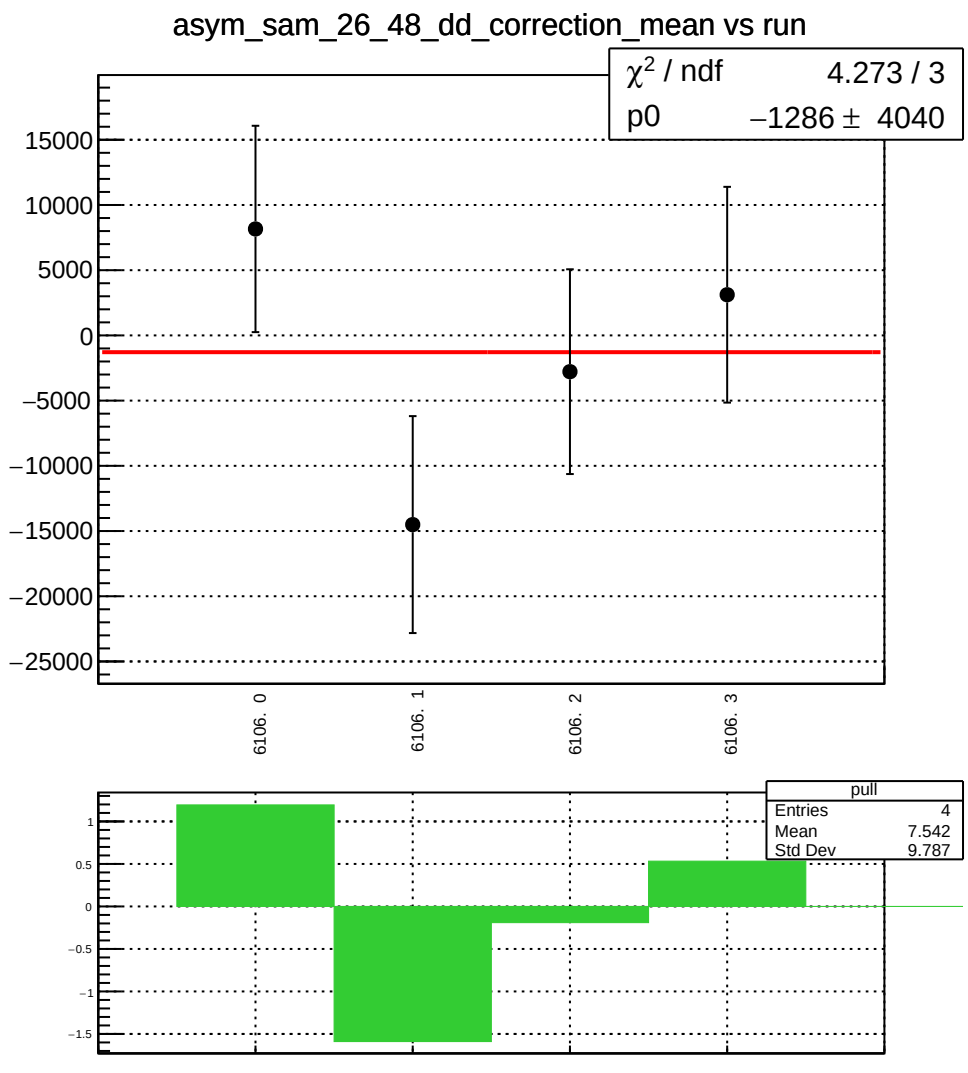

pull1D
Entries 4
Mean −0.0004818
Std Dev 0.1473
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

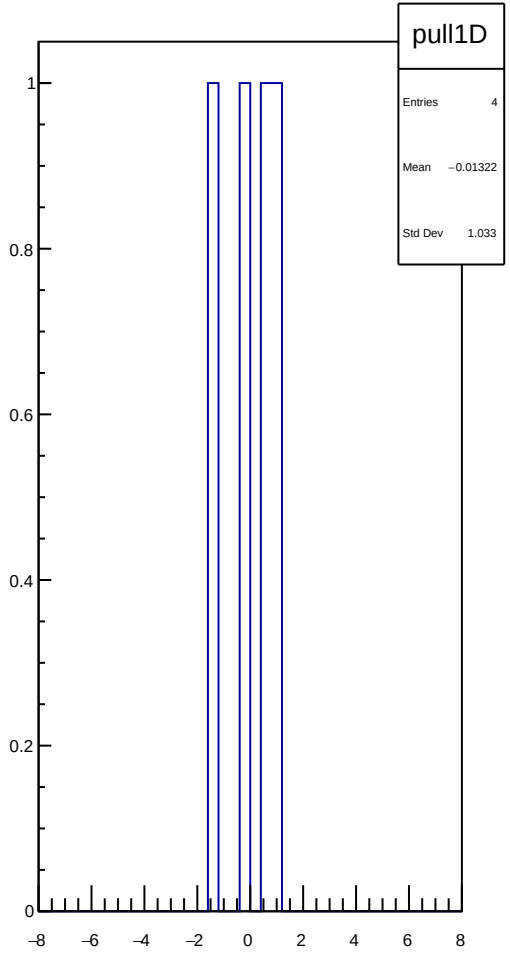

asym_sam_24_68_dd_rms vs run
χ² / ndf 278 / 3
p0 1700 ± 6.305
1850
1800
1750
1700
1650
1600
6106. 0
6106. 1
6106. 2
6106. 3

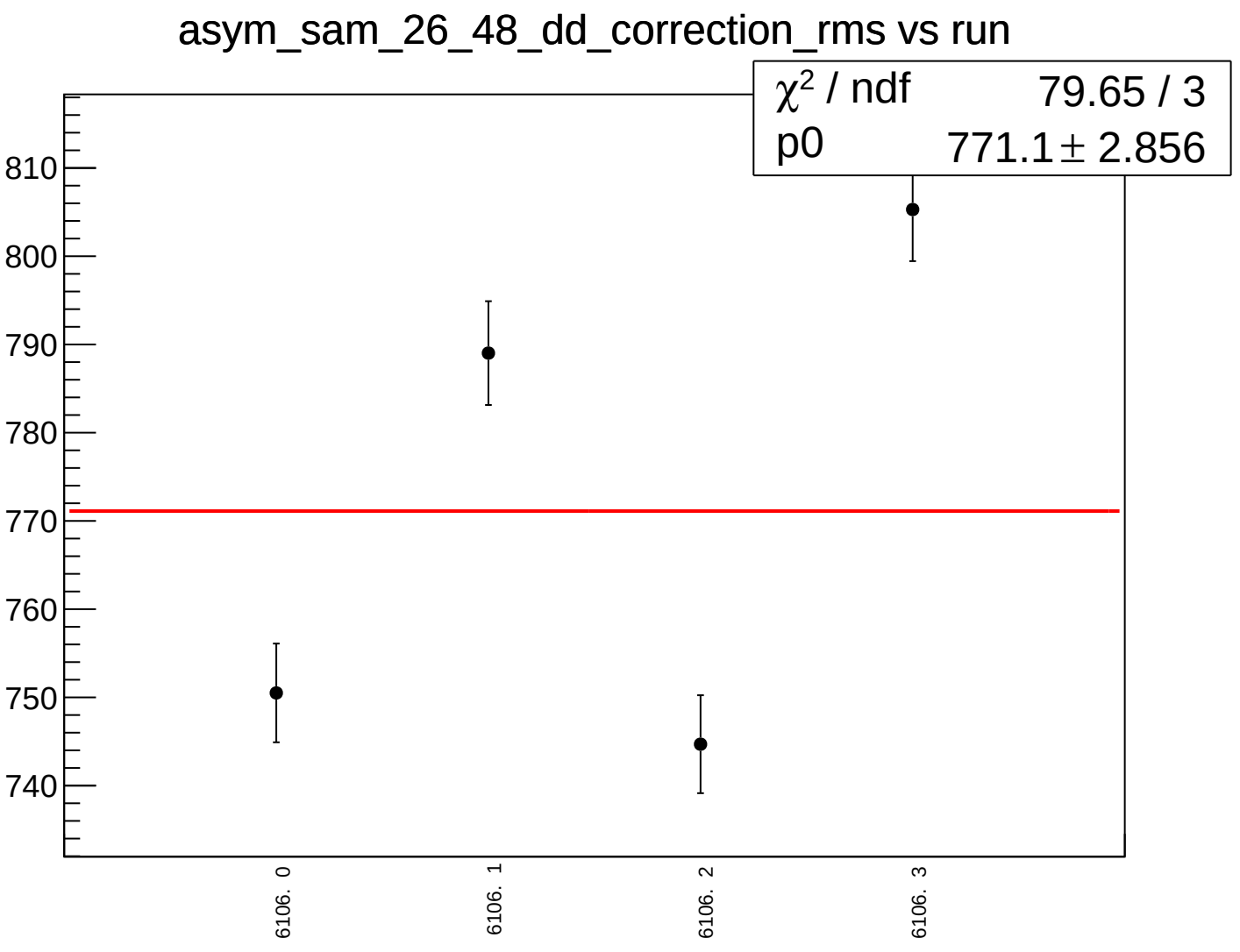

reg_asym_sam_26_48_dd_mean vs run
χ² / ndf 2.477 / 3
p0 −203.7 ± 533.4
2000
1000
0
−1000
−2000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −20.51
Std Dev 16
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

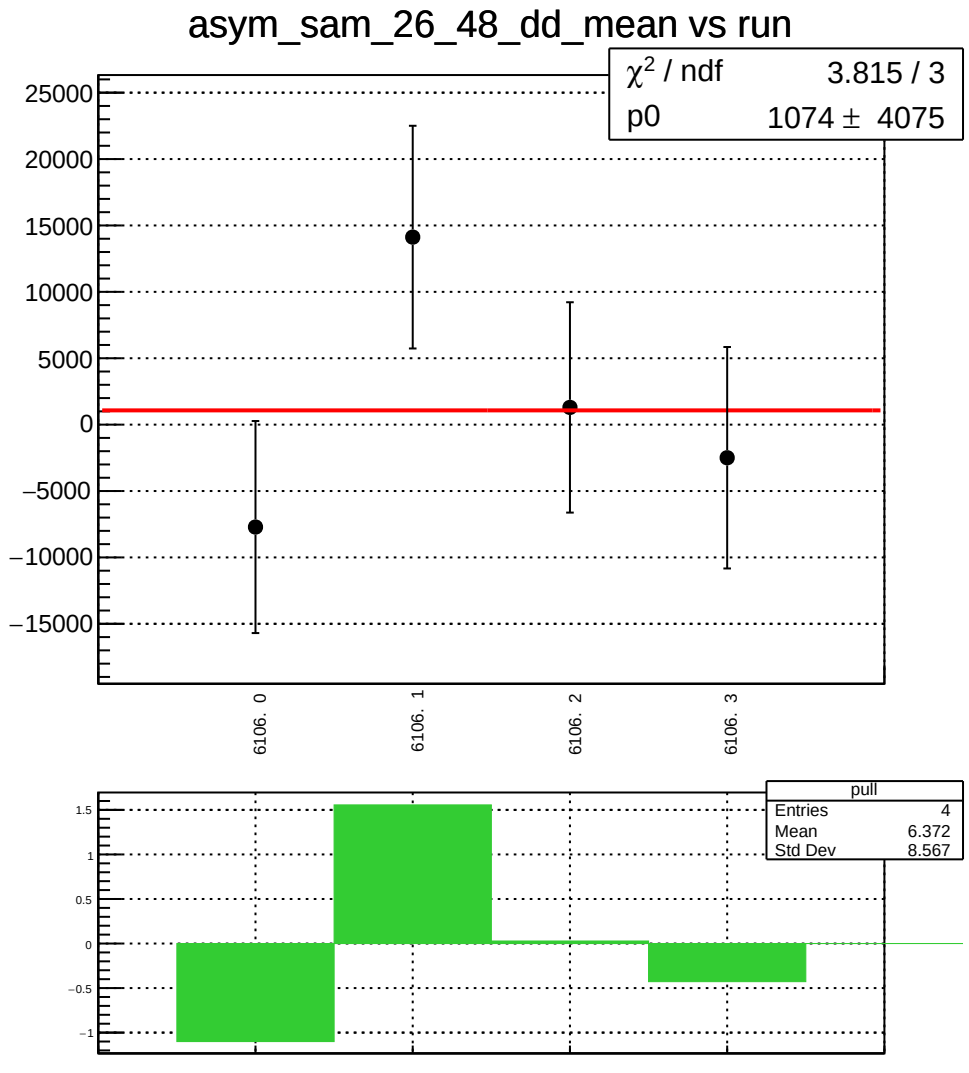

pull1D
Entries 4
Mean 0.002778
Std Dev 0.787
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

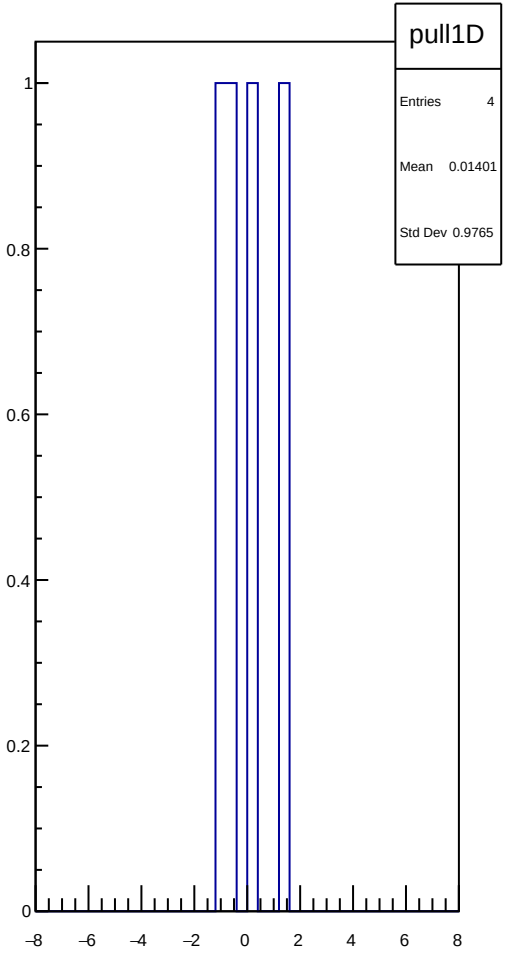

reg_asym_sam_26_48_dd_rms vs run
χ² / ndf 7.323 / 3
p0 101.9 ± 0.3772
104
103.5
103
102.5
102
101.5
101
100.5
100
99.5
6106. 0
6106. 1
6106. 2
6106. 3

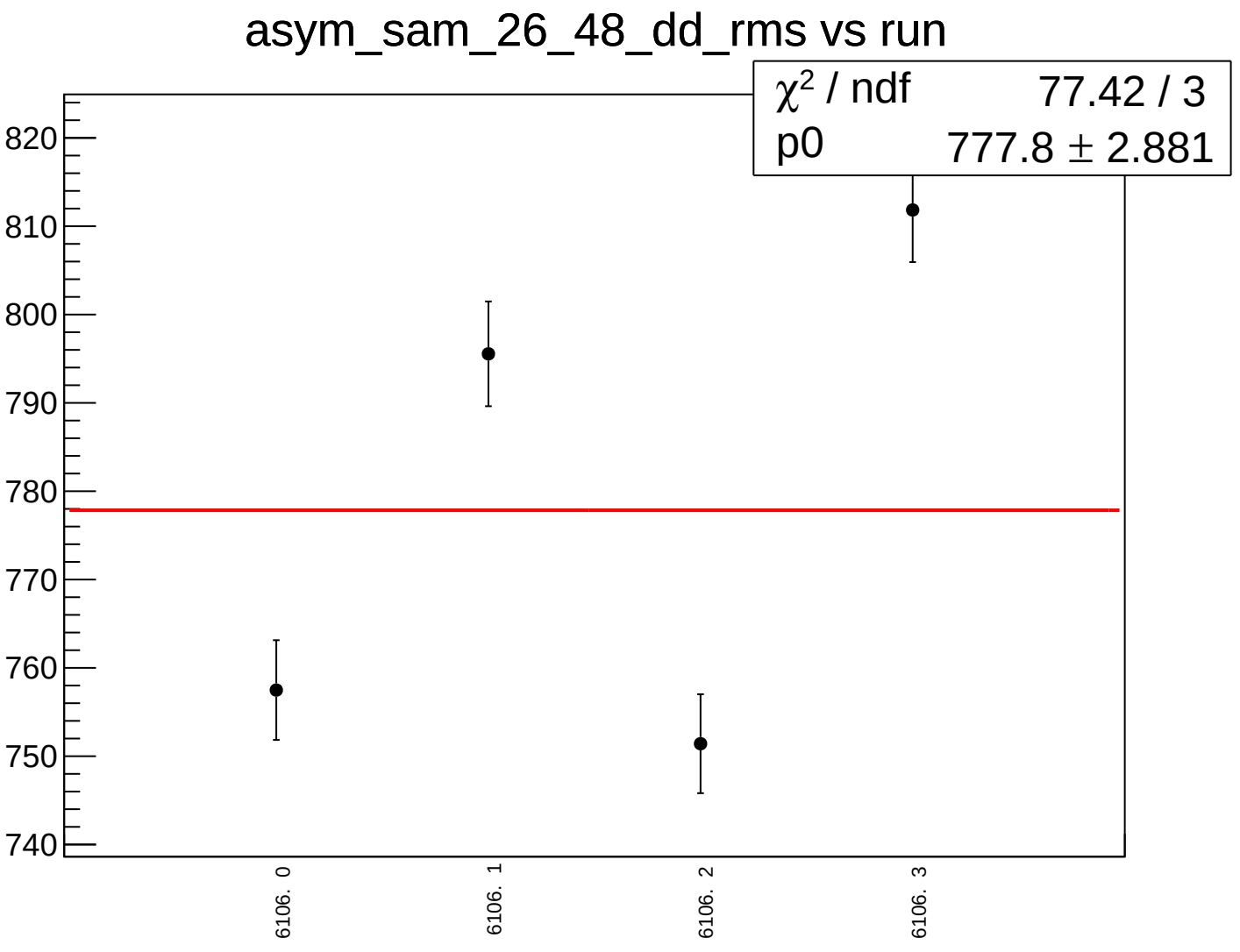

asym_sam_26_48_dd_correction_mean vs run
χ² / ndf 4.273 / 3
p0 −1286 ± 4040
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 7.542
Std Dev 9.787
1
0.5
0
−0.5
−1
−1.5

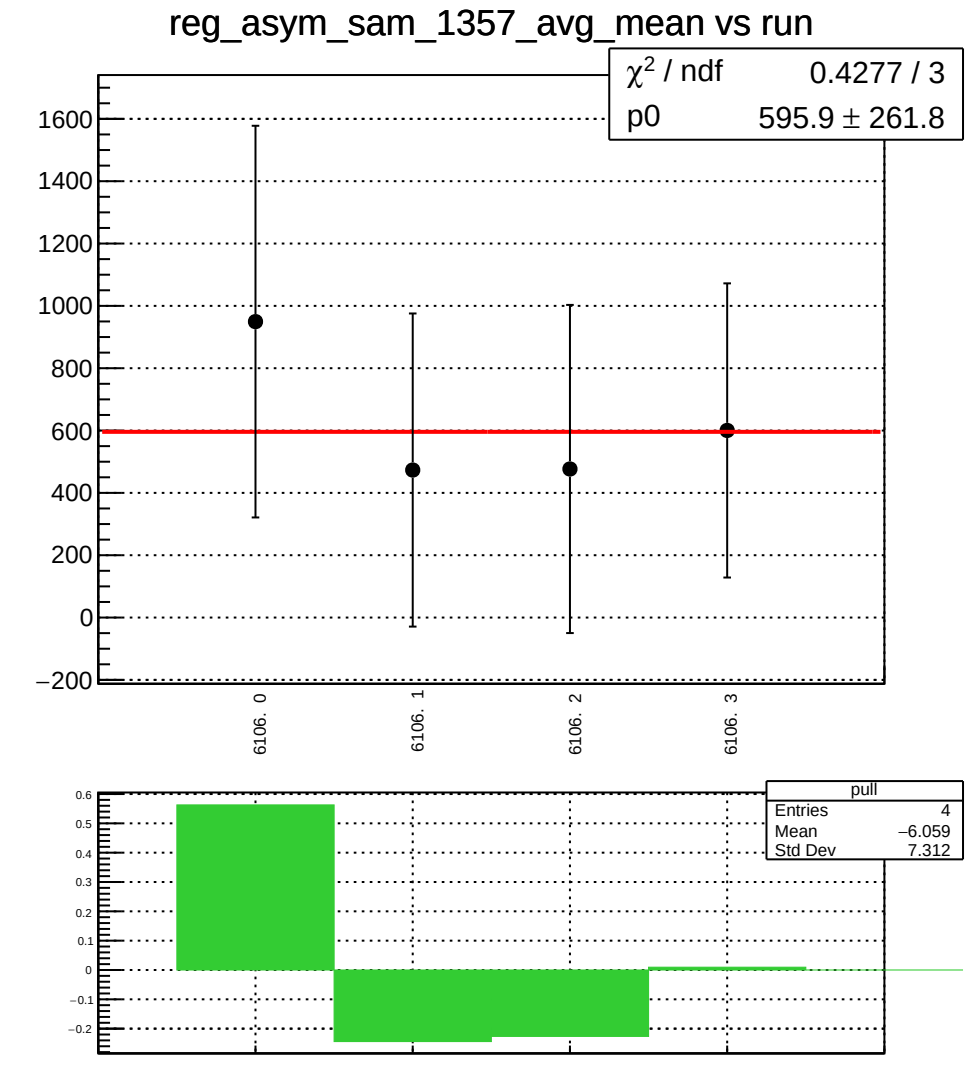

pull1D
Entries 4
Mean −0.01322
Std Dev 1.033
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

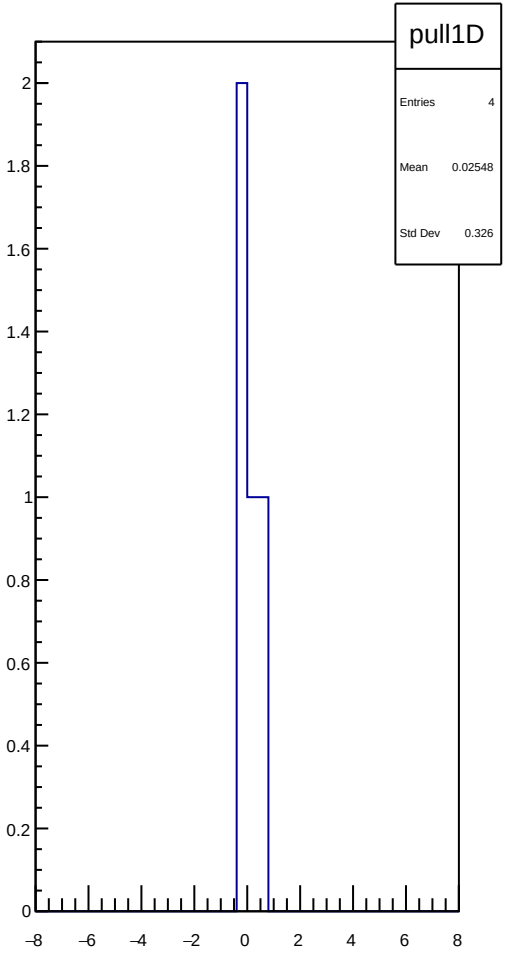

asym_sam_26_48_dd_correction_rms vs run
χ² / ndf 79.65 / 3
p0 771.1 ± 2.856
810
800
790
780
770
760
750
740
6106. 0
6106. 1
6106. 2
6106. 3

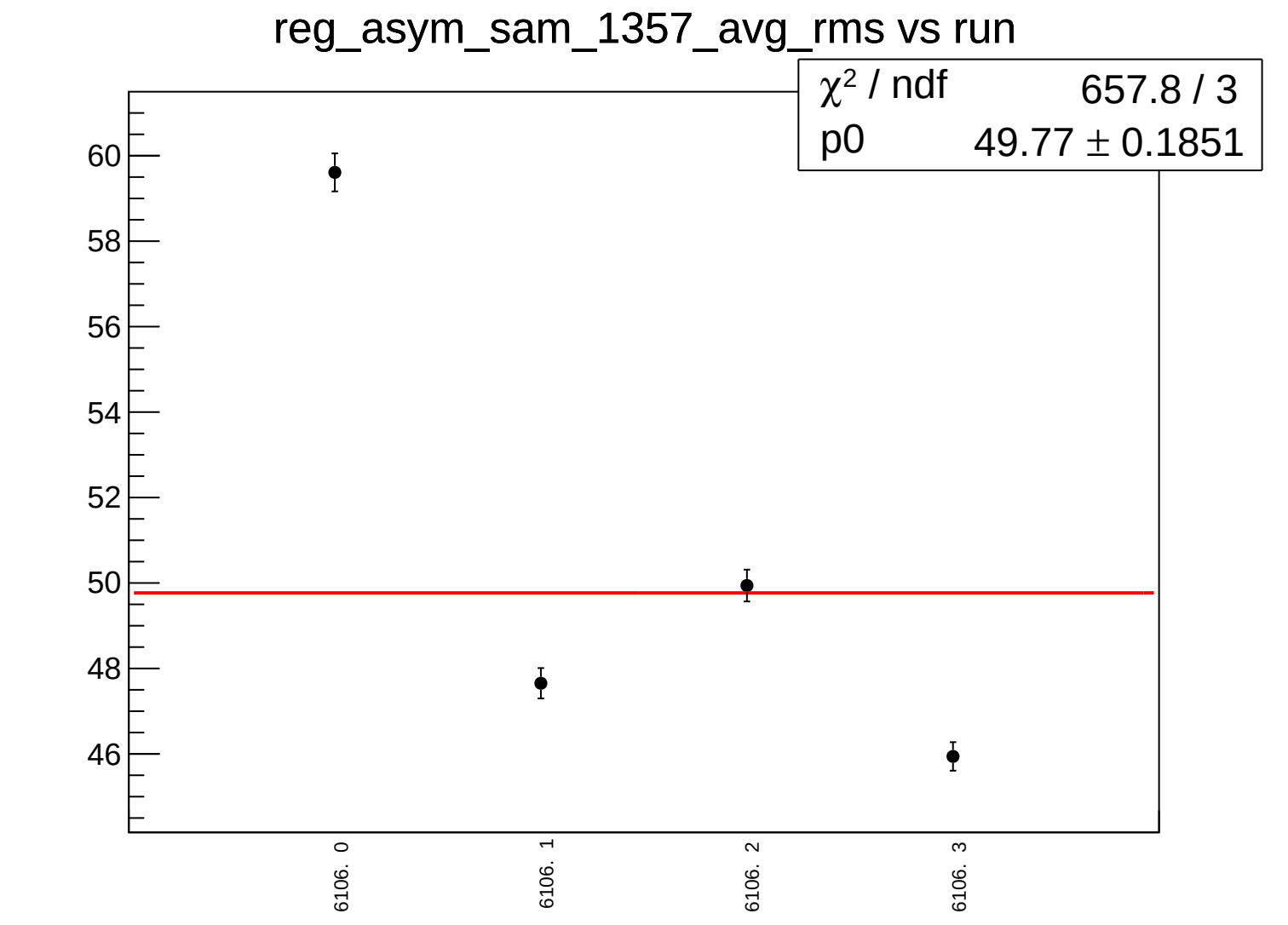

asym_sam_26_48_dd_mean vs run
χ² / ndf 3.815 / 3
p0 1074 ± 4075
25000
20000
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 6.372
Std Dev 8.567
1.5
1
0.5
0
−0.5
−1

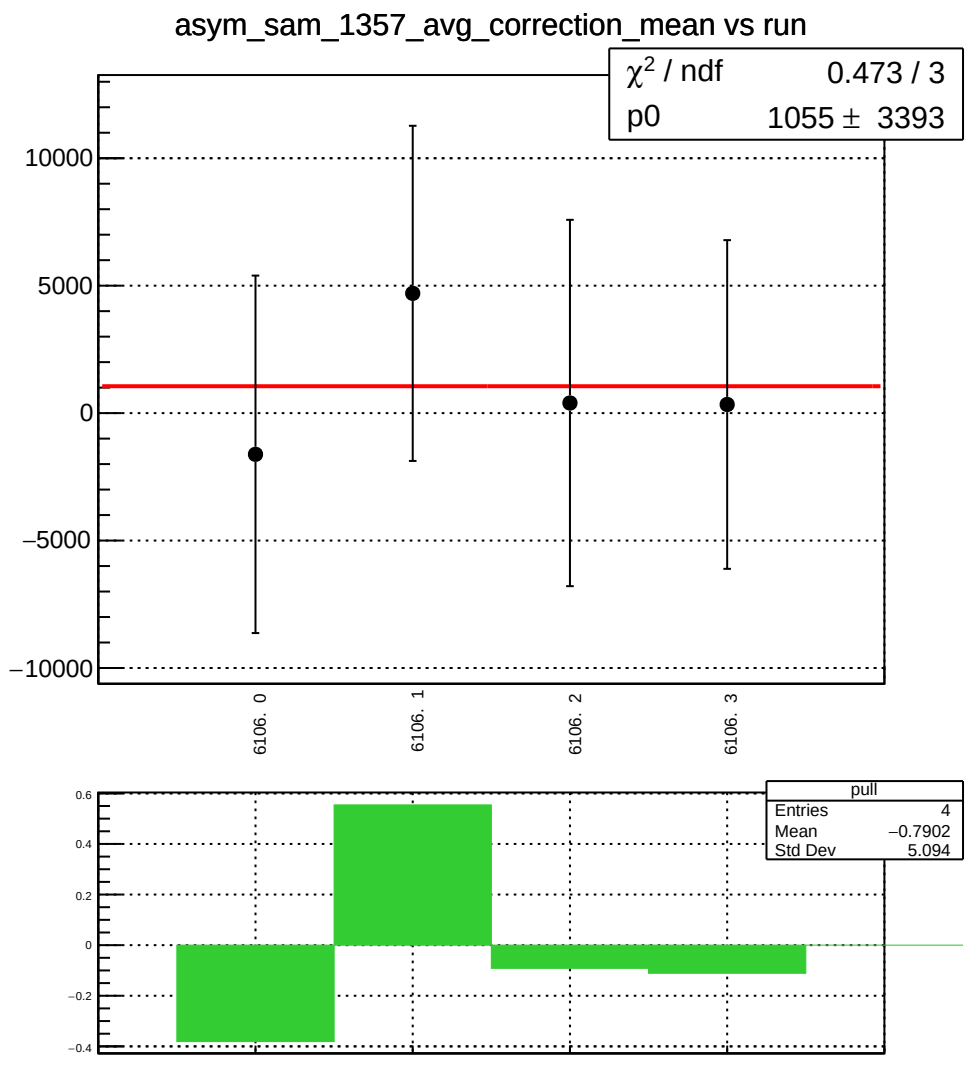

pull1D
Entries 4
Mean 0.01401
Std Dev 0.9765
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

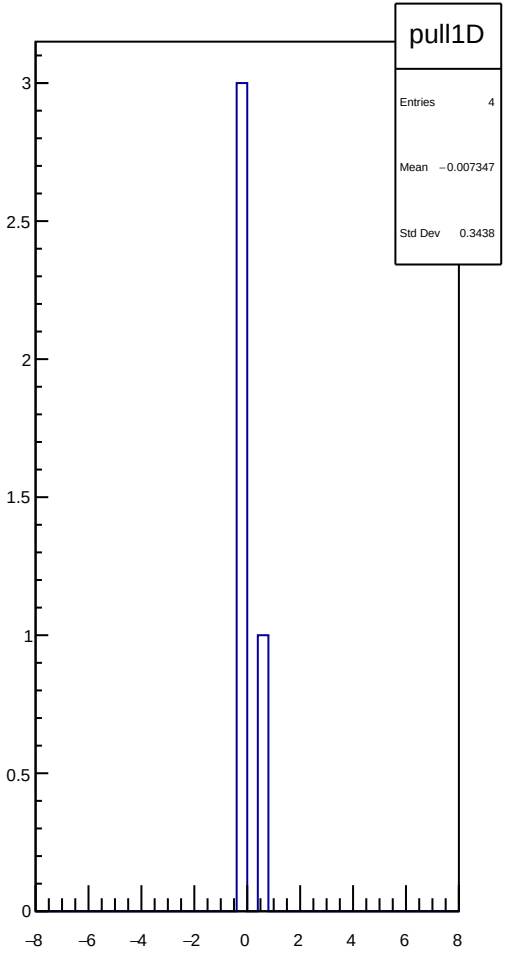

asym_sam_26_48_dd_rms vs run
χ² / ndf 77.42 / 3
p0 777.8 ± 2.881
820
810
800
790
780
770
760
750
740
6106. 0
6106. 1
6106. 2
6106. 3

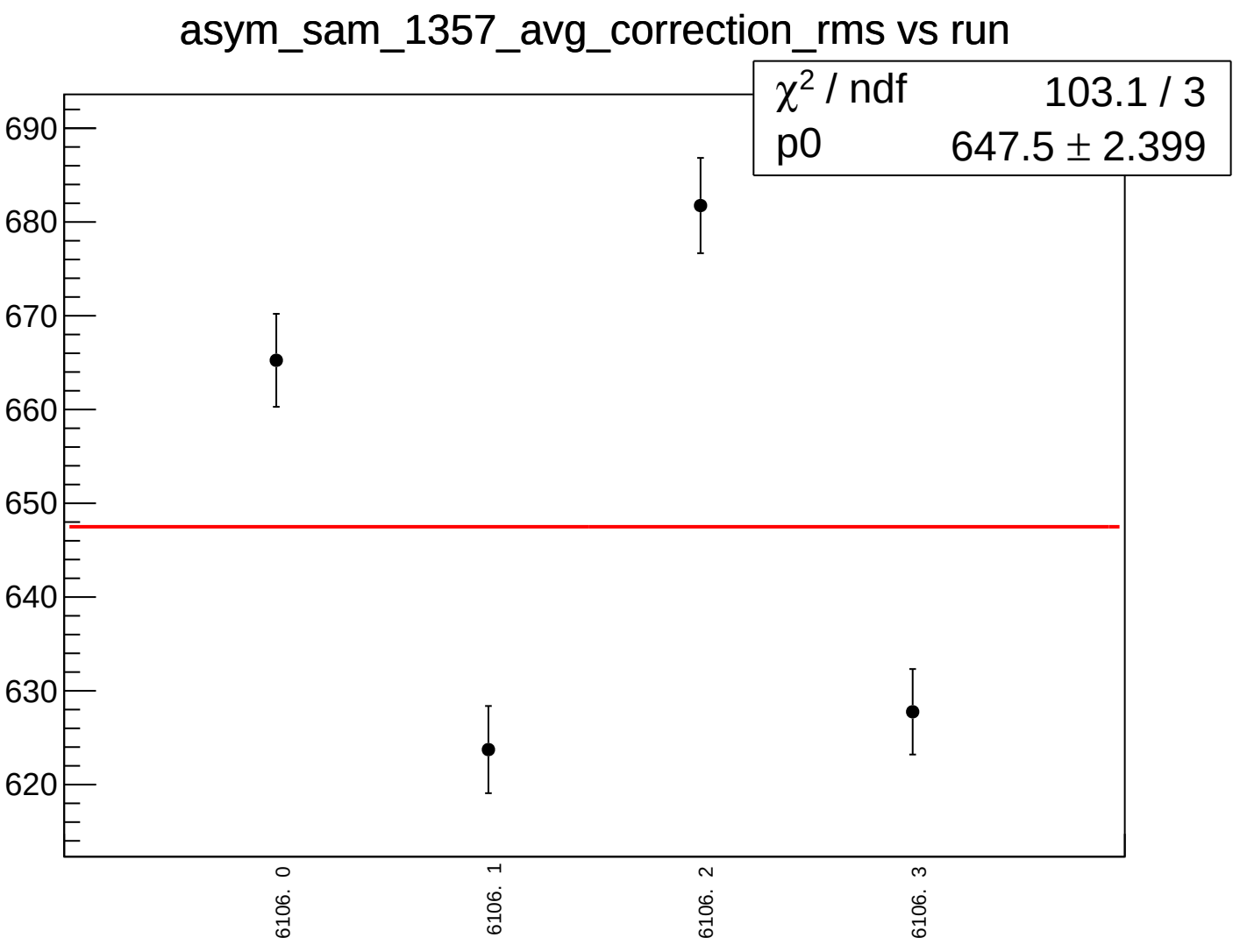

reg_asym_sam_1357_avg_mean vs run
χ² / ndf 0.4277 / 3
p0 595.9 ± 261.8
1600
1400
1200
1000
800
600
400
200
0
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.059
Std Dev 7.312
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2

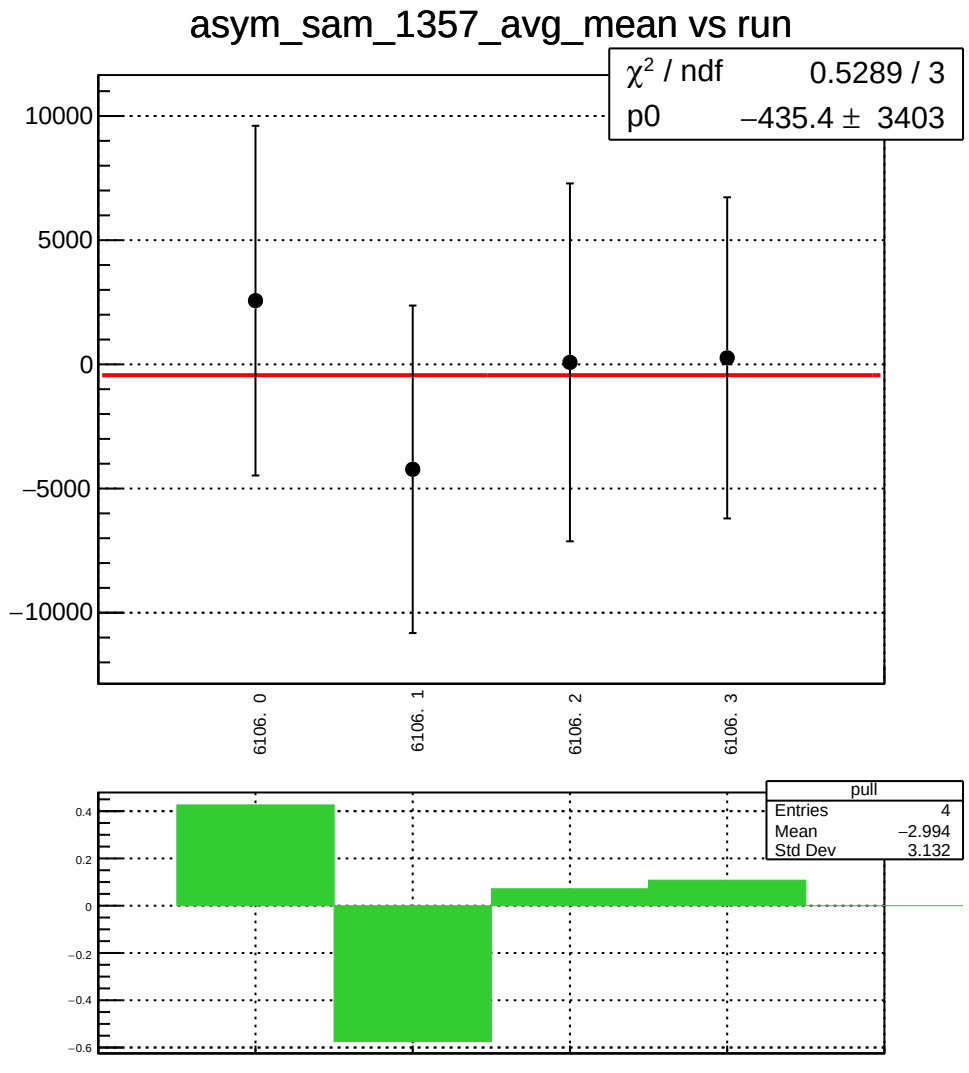

pull1D
Entries 4
Mean 0.02548
Std Dev 0.326
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

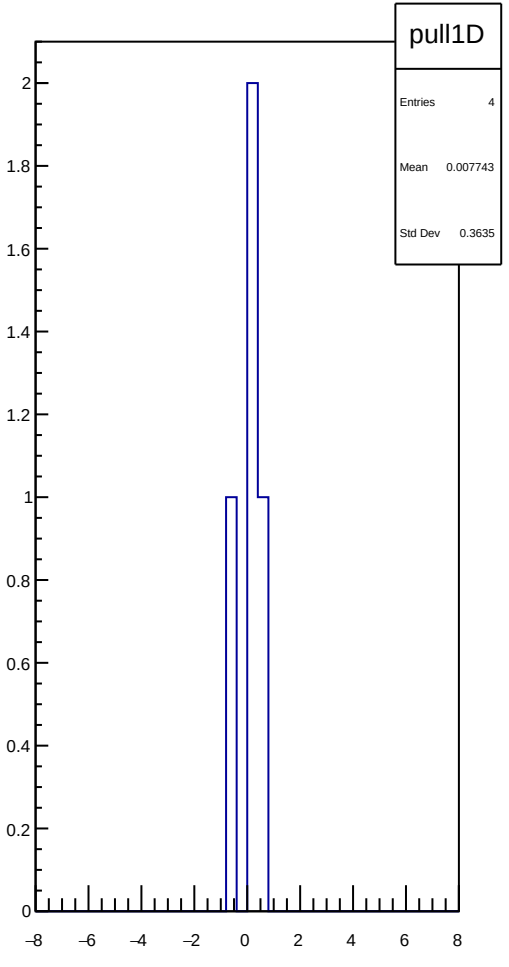

reg_asym_sam_1357_avg_rms vs run
χ² / ndf 657.8 / 3
p0 49.77 ± 0.1851
60
58
56
54
52
50
48
46
6106. 0
6106. 1
6106. 2
6106. 3

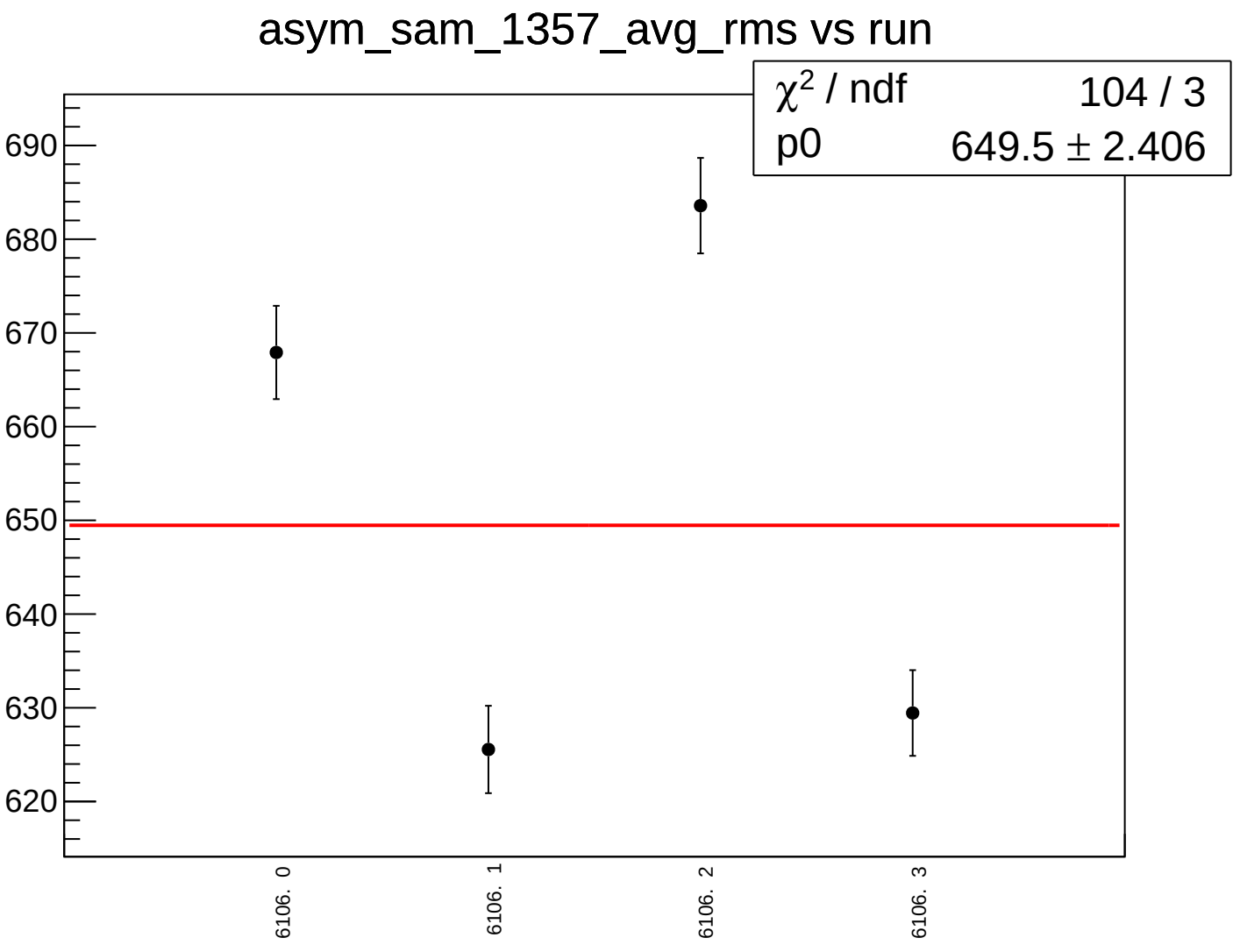

asym_sam_1357_avg_correction_mean vs run
χ² / ndf 0.473 / 3
p0 1055 ± 3393
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −0.7902
Std Dev 5.094
0.6
0.4
0.2
0
−0.2
−0.4

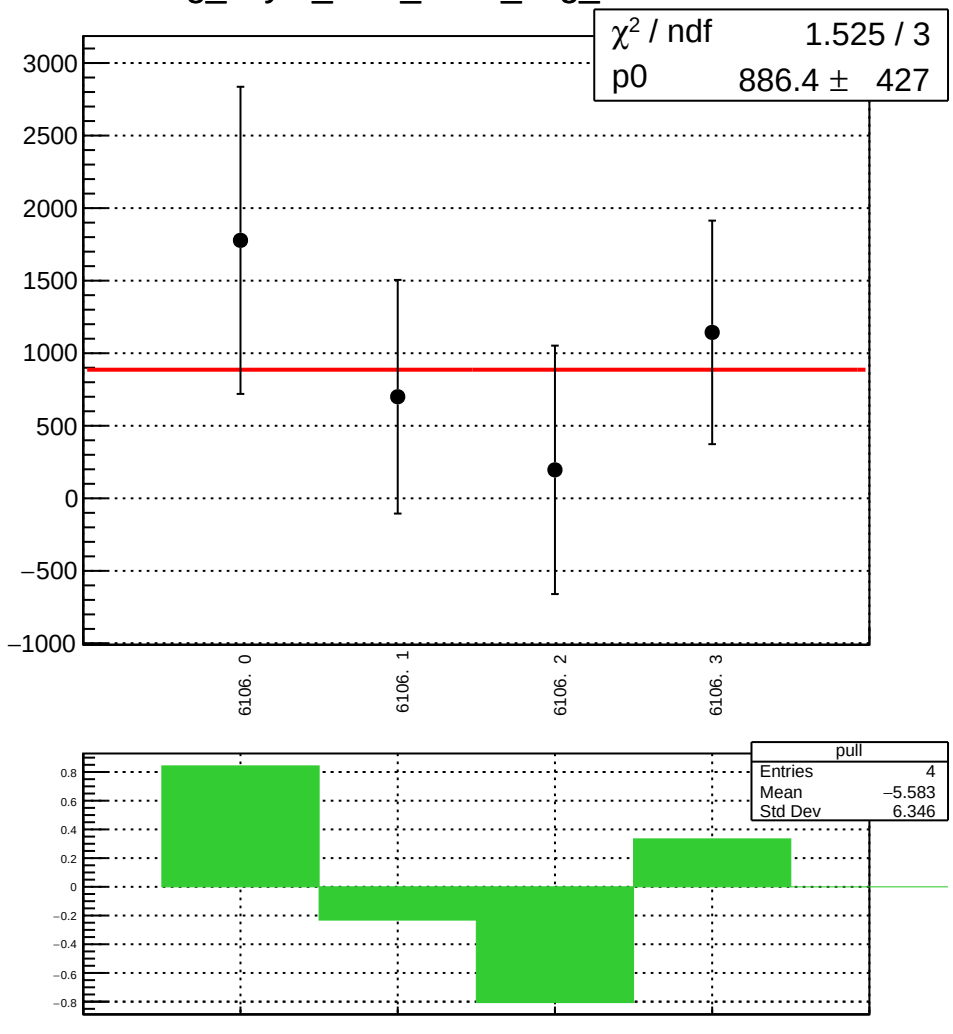

pull1D
Entries 4
Mean −0.007347
Std Dev 0.3438
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

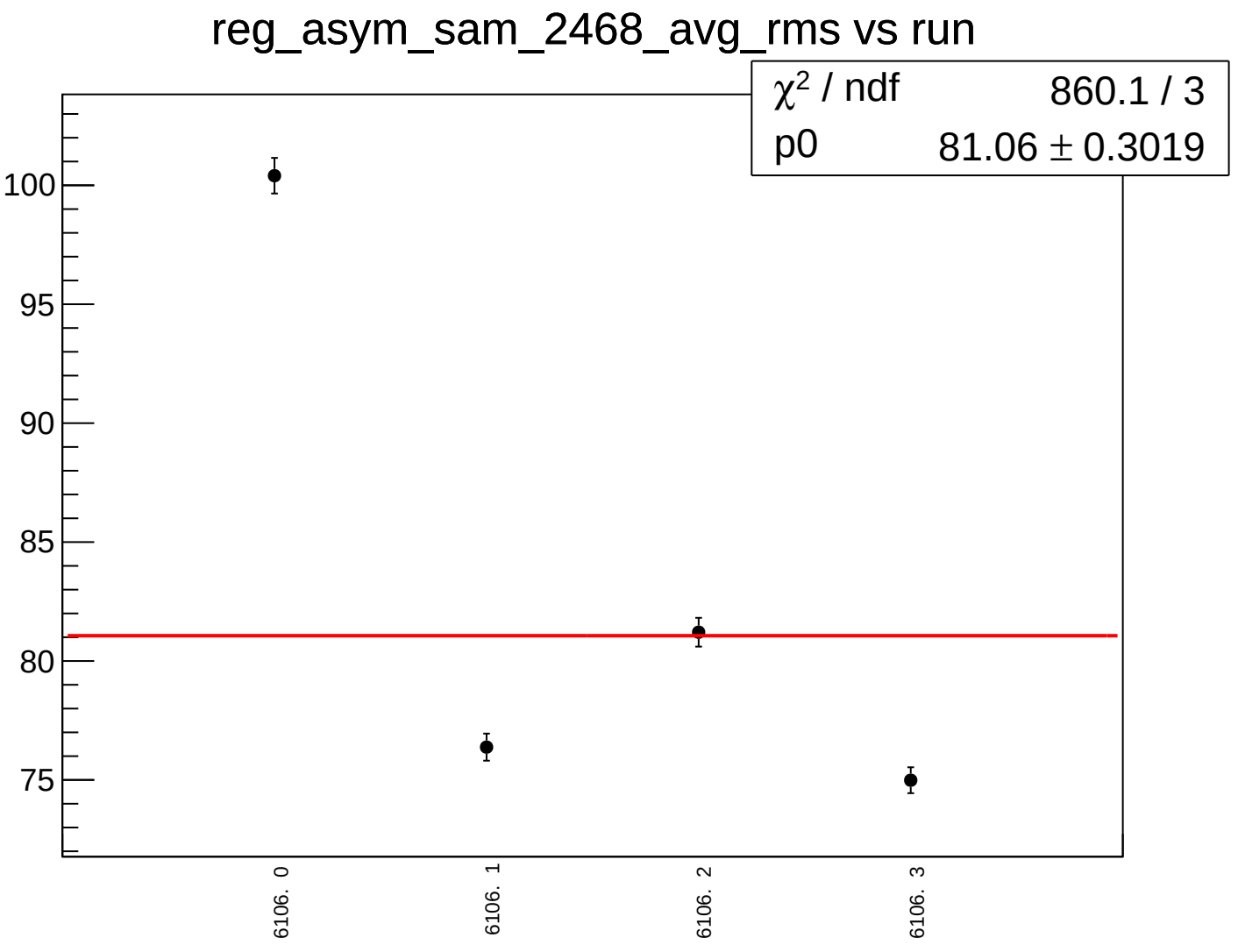

asym_sam_1357_avg_correction_rms vs run
χ² / ndf 103.1 / 3
p0 647.5 ± 2.399
690
680
670
660
650
640
630
620
6106. 0
6106. 1
6106. 2
6106. 3

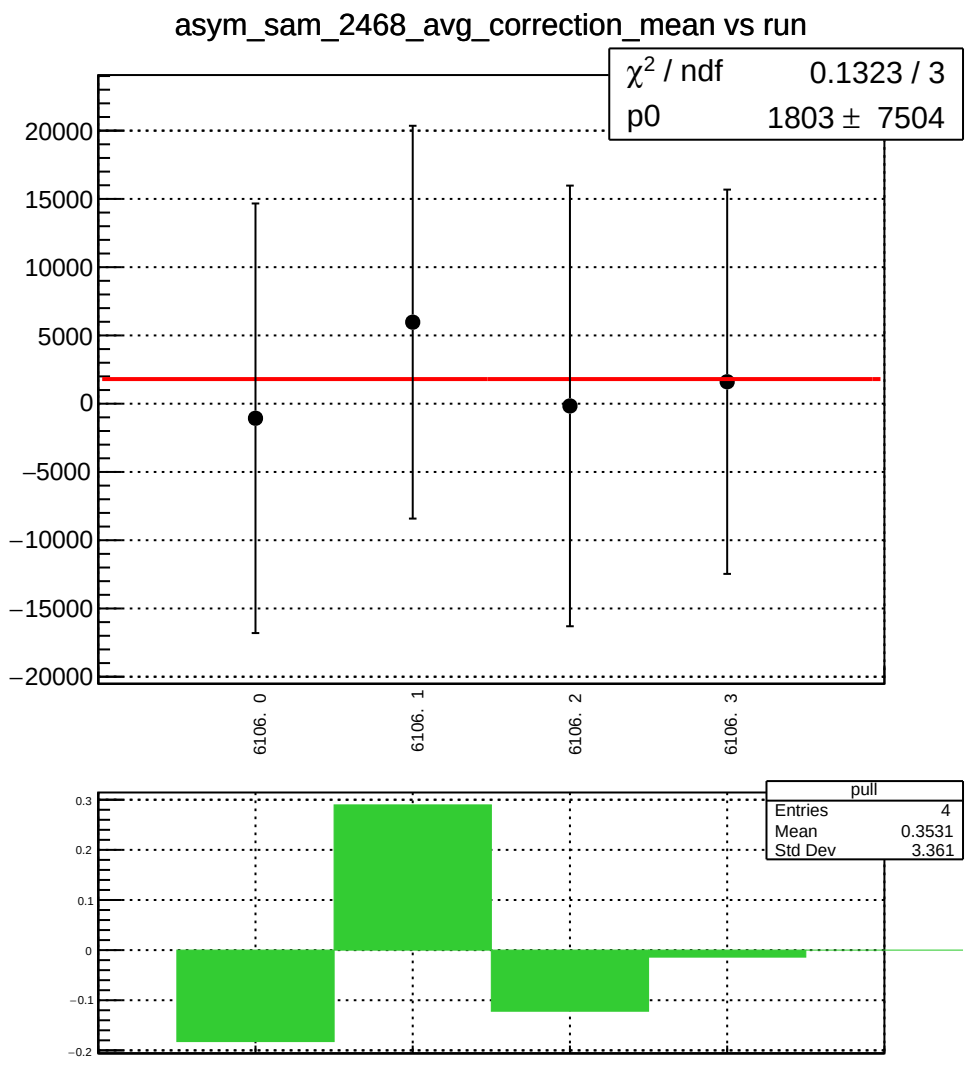

asym_sam_1357_avg_mean vs run
χ² / ndf 0.5289 / 3
p0 −435.4 ± 3403
10000
5000
0
−5000
−10000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.994
Std Dev 3.132
0.4
0.2
0
−0.2
−0.4
−0.6

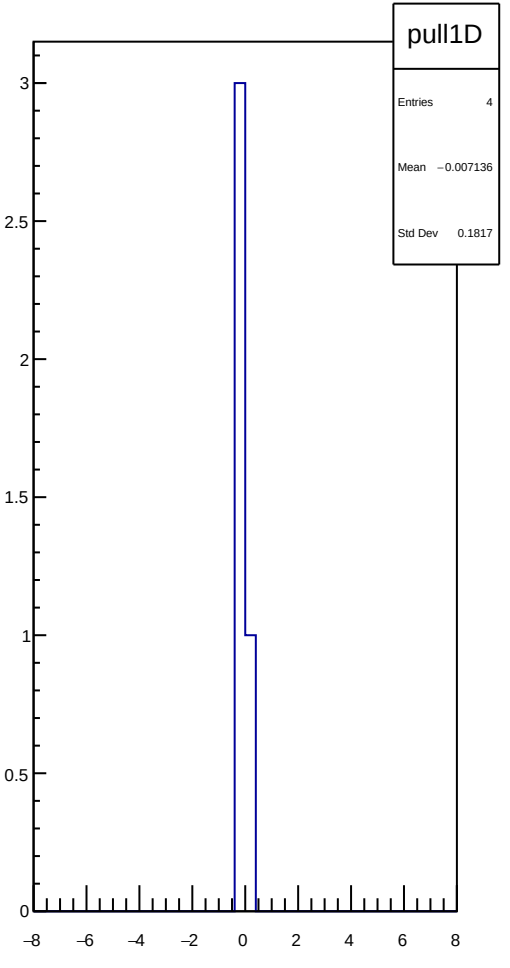

pull1D
Entries 4
Mean 0.007743
Std Dev 0.3635
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

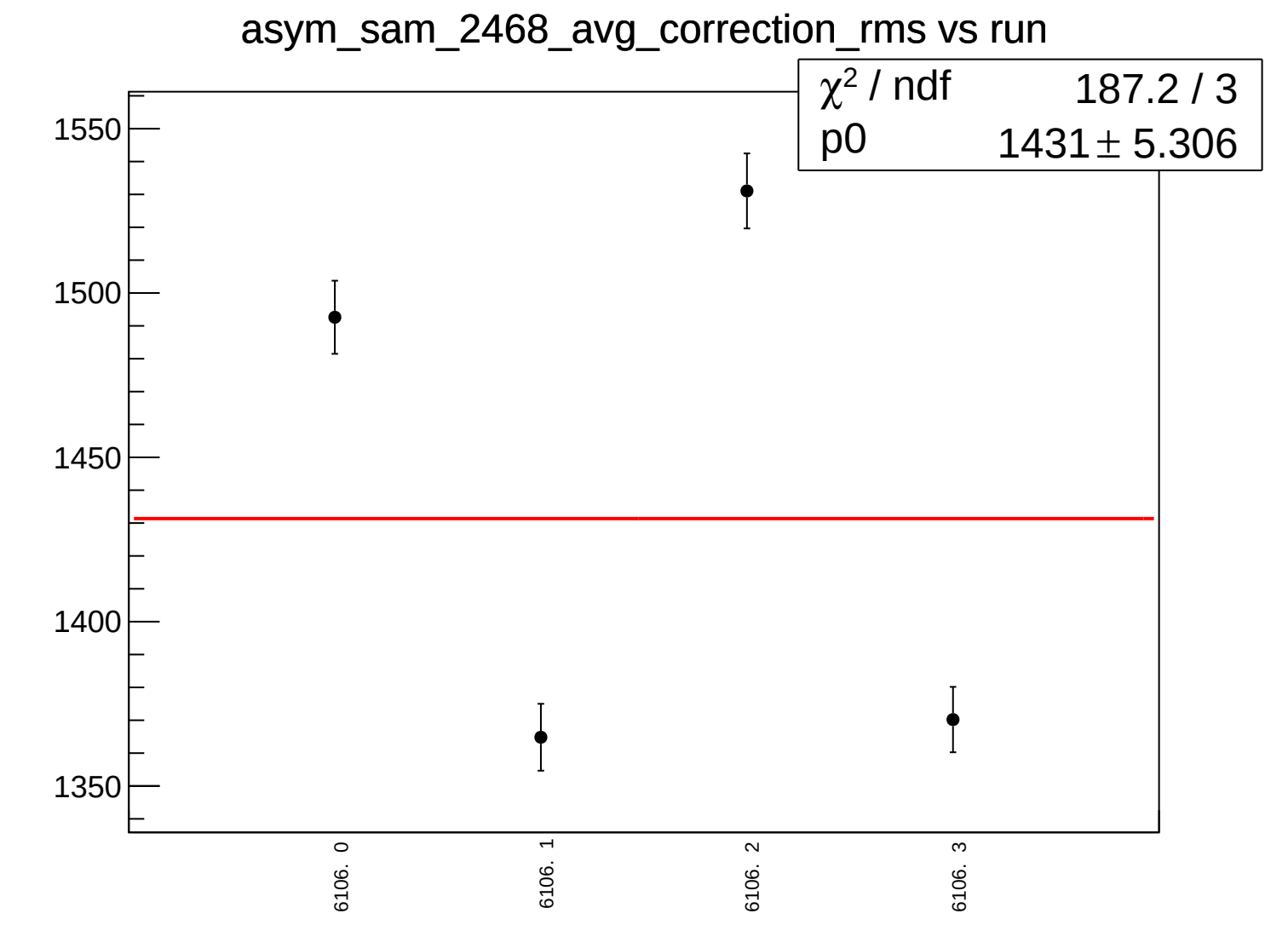

asym_sam_1357_avg_rms vs run
χ² / ndf 104 / 3
p0 649.5 ± 2.406
690
680
670
660
650
640
630
620
6106. 0
6106. 1
6106. 2
6106. 3

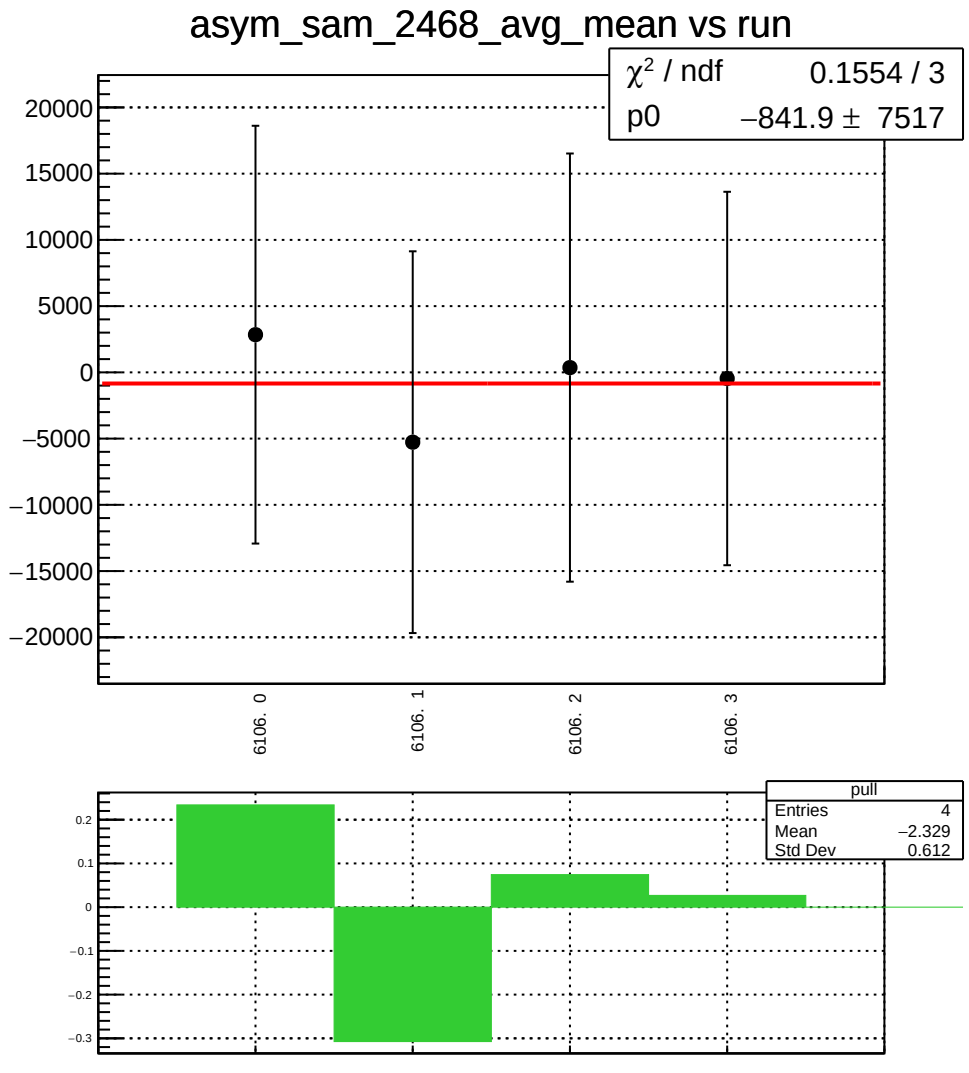

reg_asym_sam_2468_avg_mean vs run
χ² / ndf 1.525 / 3
p0 886.4 ± 427
3000
2500
2000
1500
1000
500
0
−500
−1000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.583
Std Dev 6.346
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean 0.03462
Std Dev 0.6164
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

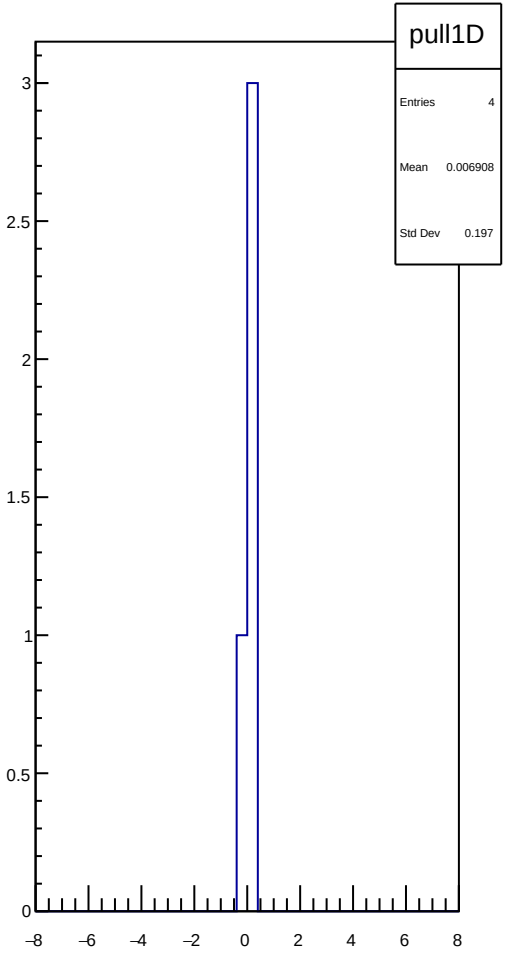

reg_asym_sam_2468_avg_rms vs run
χ² / ndf 860.1 / 3
p0 81.06 ± 0.3019
100
95
90
85
80
75
6106. 0
6106. 1
6106. 2
6106. 3

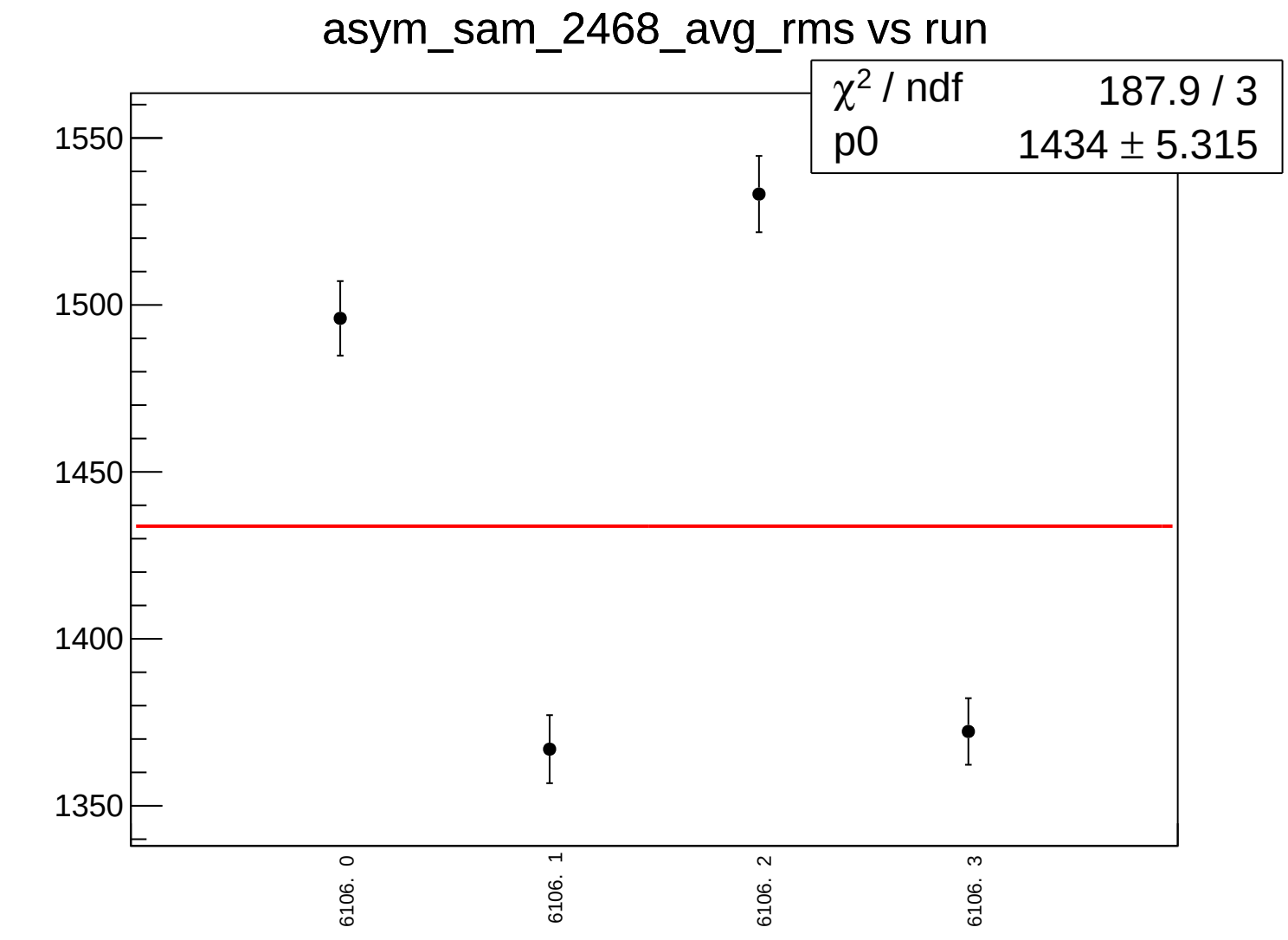

asym_sam_2468_avg_correction_mean vs run
χ² / ndf 0.1323 / 3
p0 1803 ± 7504
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.3531
Std Dev 3.361
0.3
0.2
0.1
0
−0.1
−0.2

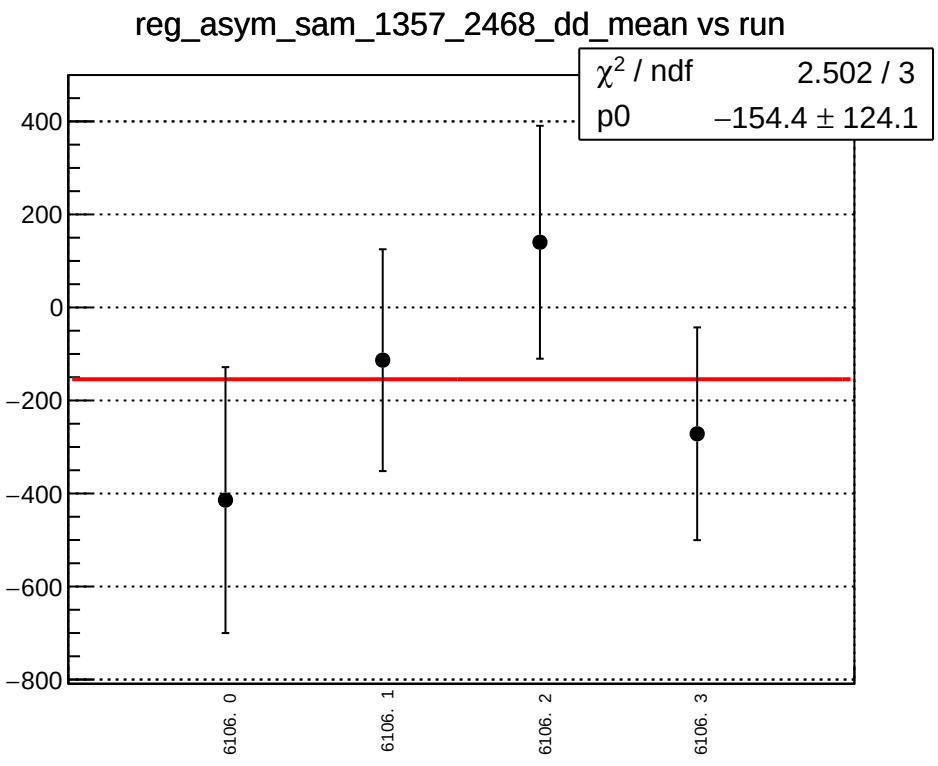

pull1D
Entries 4
Mean −0.007136
Std Dev 0.1817
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

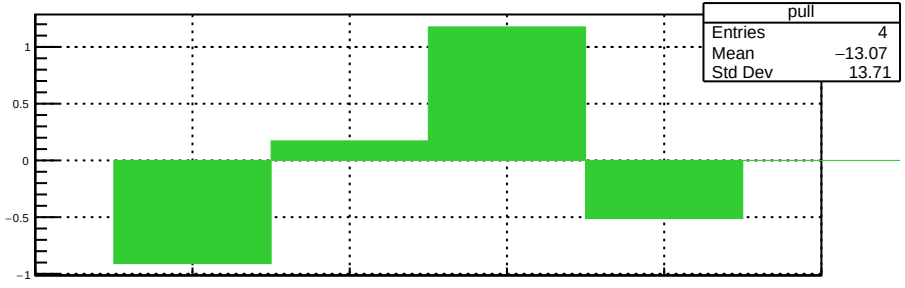

asym_sam_2468_avg_correction_rms vs run
χ² / ndf 187.2 / 3
p0 1431 ± 5.306
1550
1500
1450
1400
1350
6106. 0
6106. 1
6106. 2
6106. 3

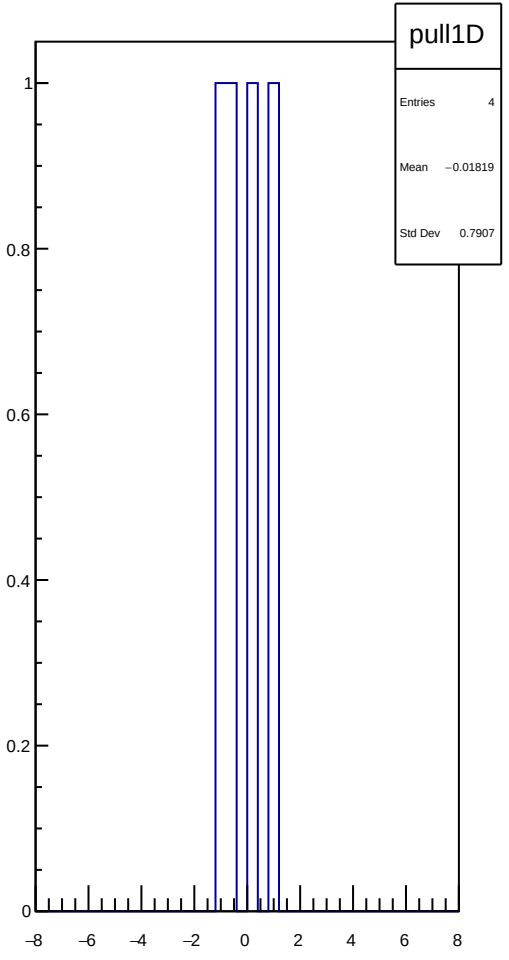

asym_sam_2468_avg_mean vs run
χ² / ndf 0.1554 / 3
p0 −841.9 ± 7517
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.329
Std Dev 0.612
0.2
0.1
0
−0.1
−0.2
−0.3

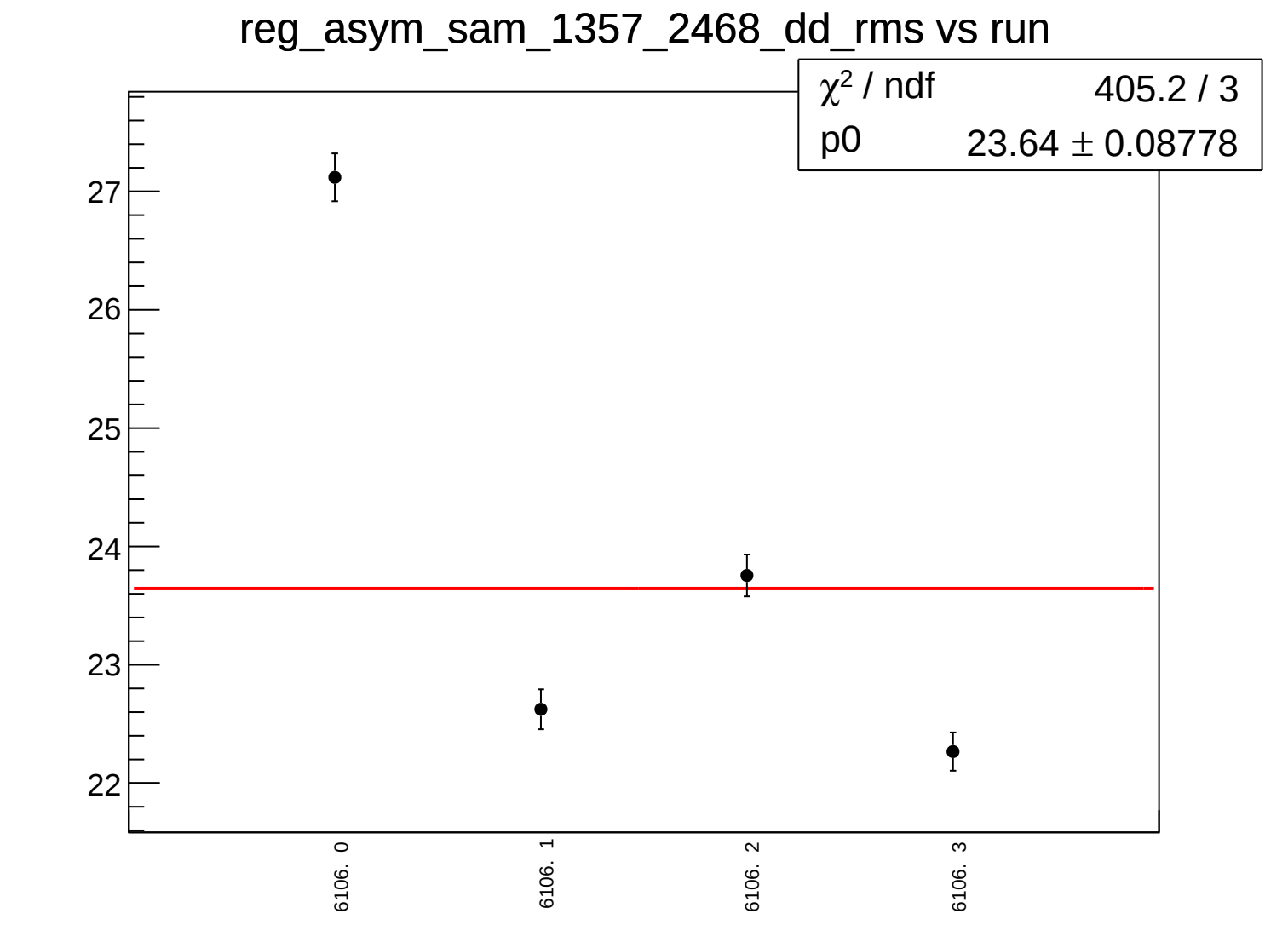

pull1D
Entries 4
Mean 0.006908
Std Dev 0.197
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

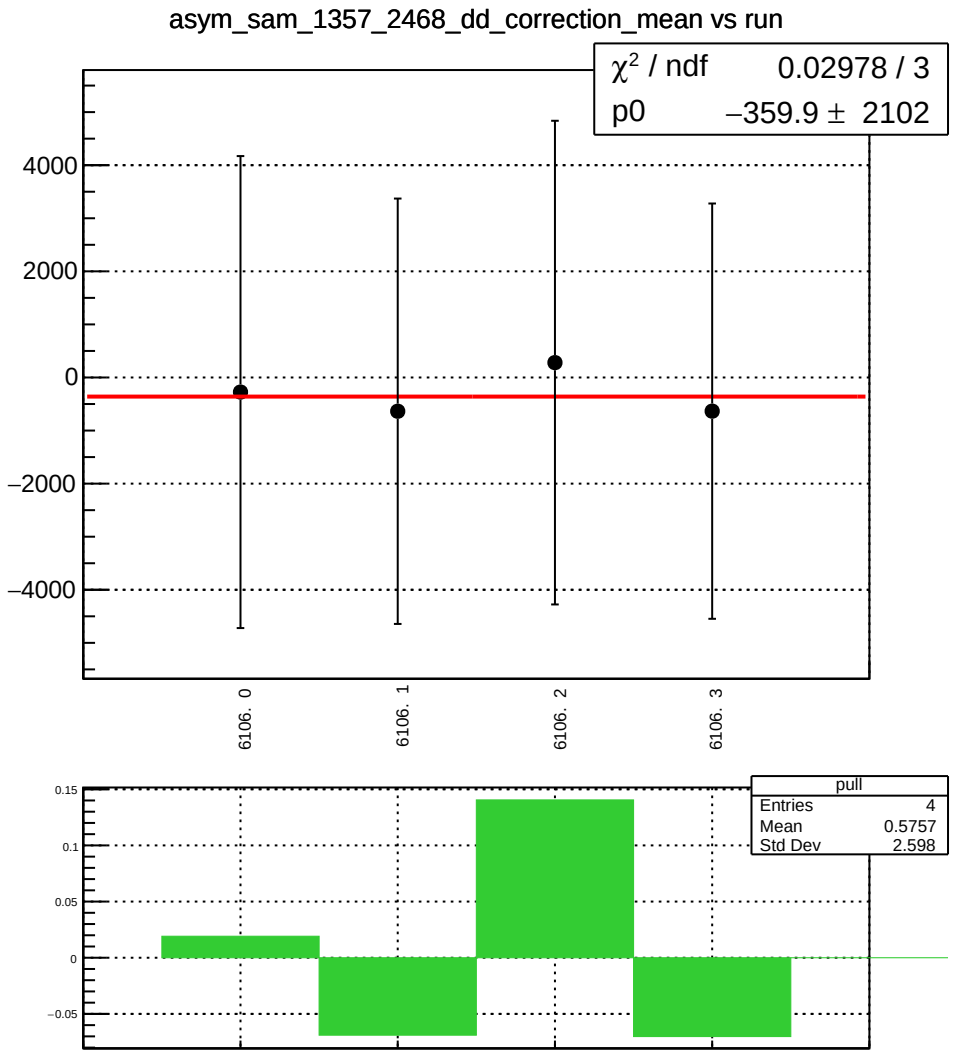

asym_sam_2468_avg_rms vs run
χ² / ndf 187.9 / 3
p0 1434 ± 5.315
1550
1500
1450
1400
1350
6106. 0
6106. 1
6106. 2
6106. 3

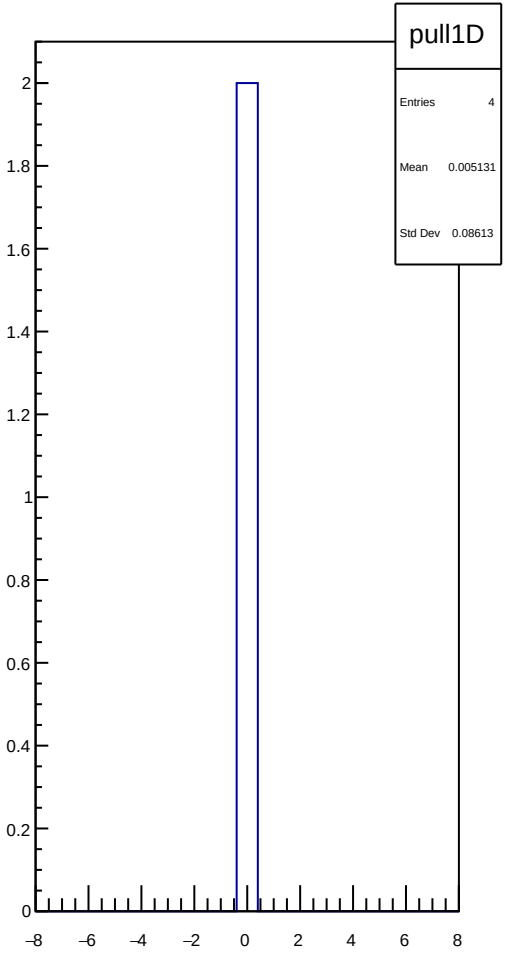

reg_asym_sam_1357_2468_dd_mean vs run
χ² / ndf 2.502 / 3
p0 −154.4 ± 124.1
400
200
0
−200
−400
−600
−800
6106. 0
6106. 1
6106. 2
6106. 3

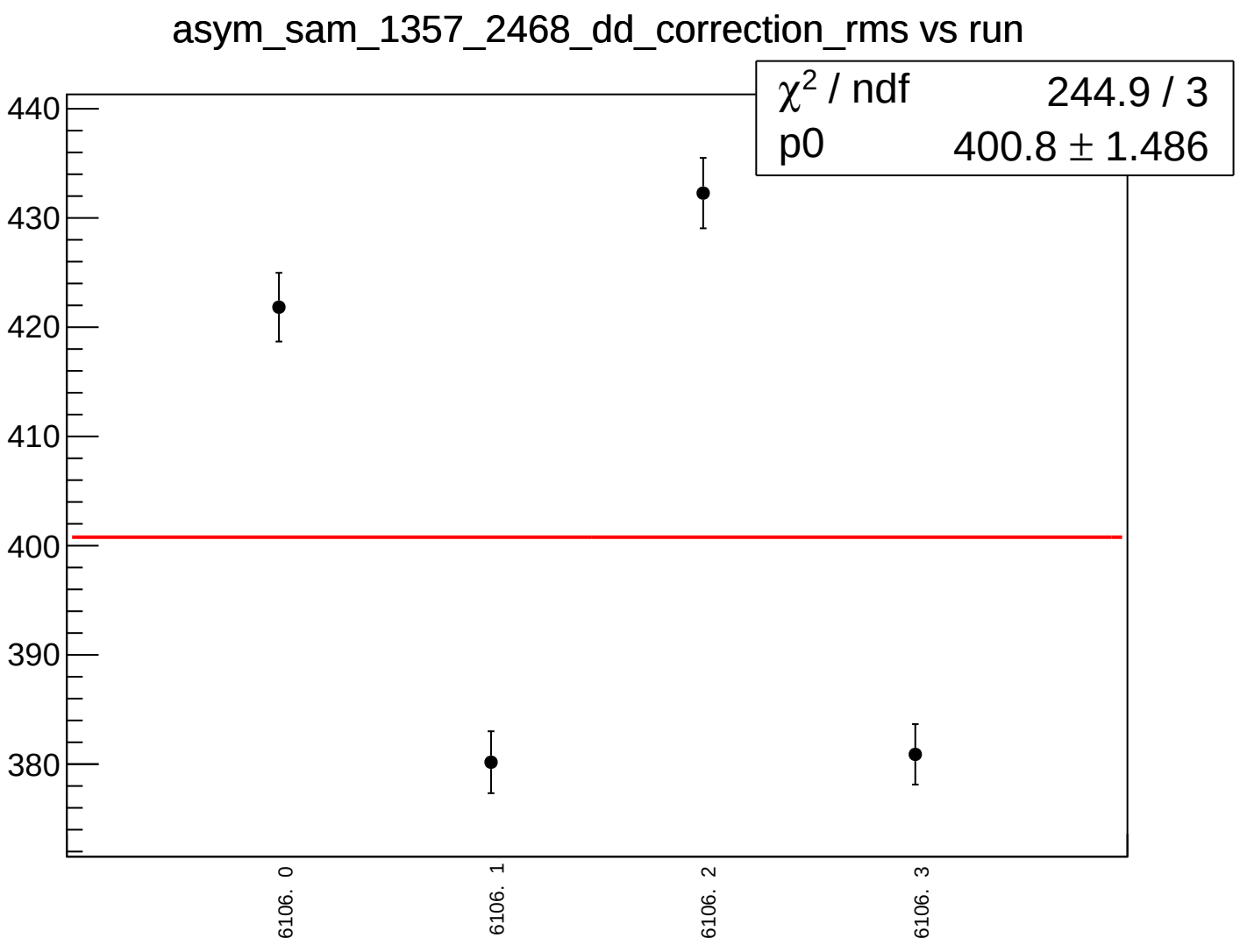

pull
Entries 4
Mean −13.07
Std Dev 13.71
1
0.5
0
−0.5
−1

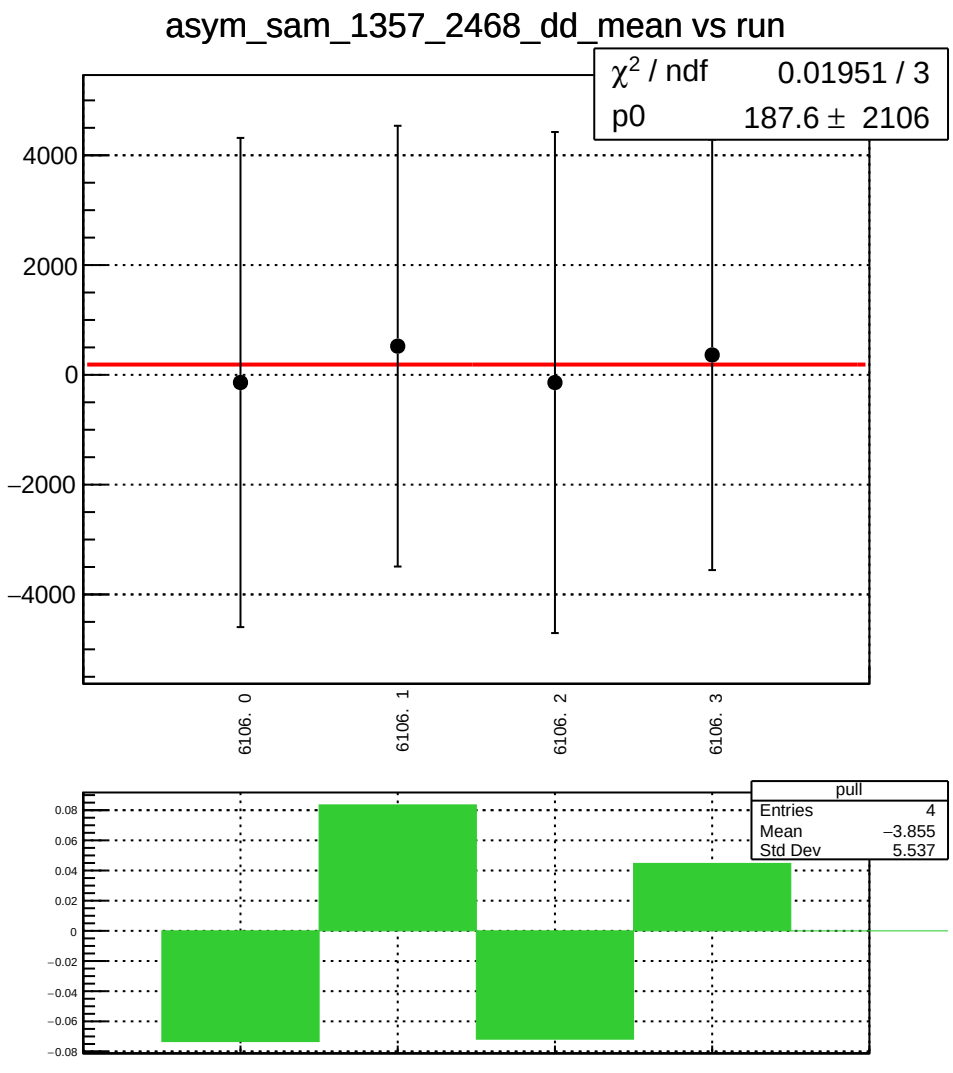

pull1D
Entries 4
Mean −0.01819
Std Dev 0.7907
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

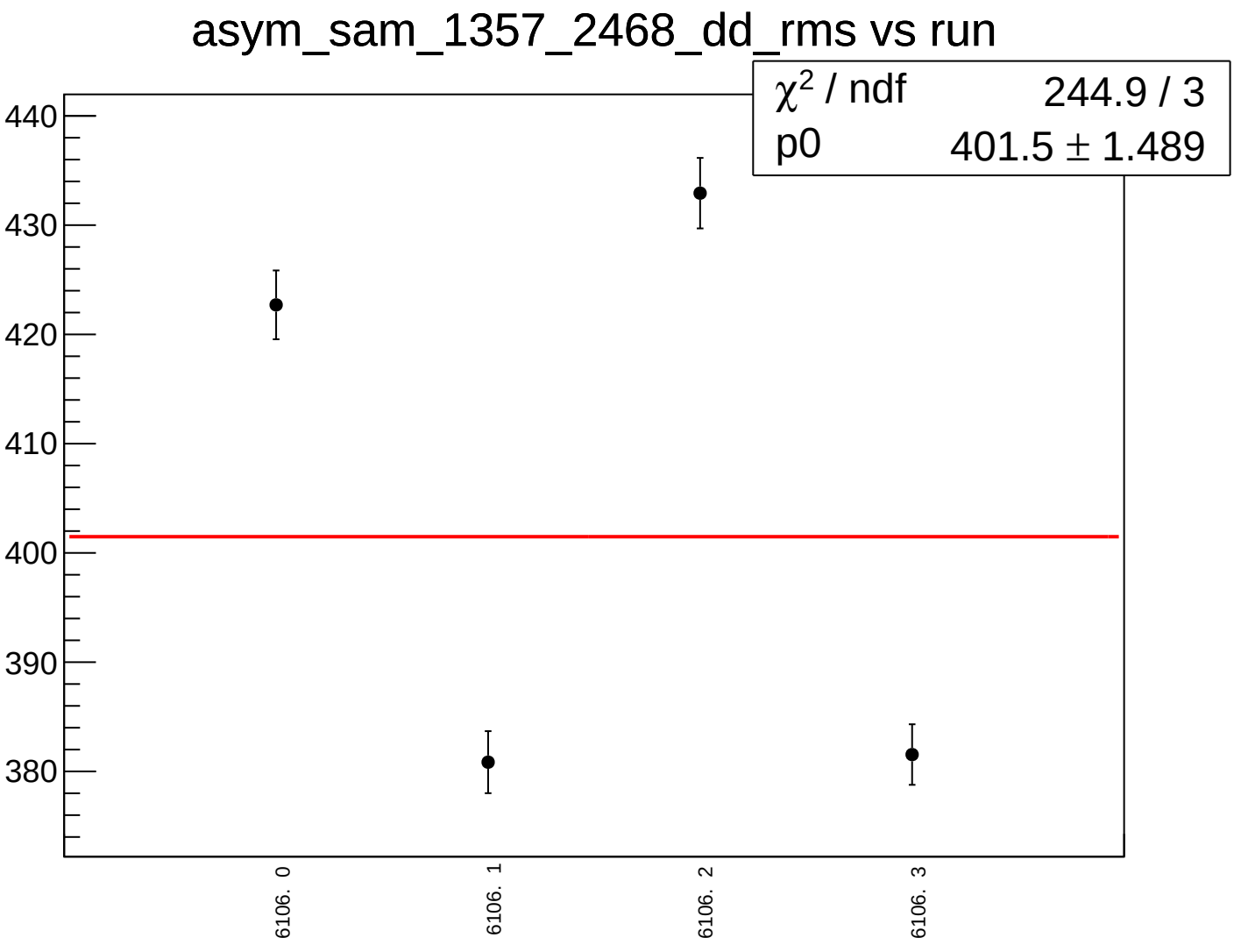

reg_asym_sam_1357_2468_dd_rms vs run
χ² / ndf 405.2 / 3
p0 23.64 ± 0.08778
27
26
25
24
23
22
6106. 0
6106. 1
6106. 2
6106. 3

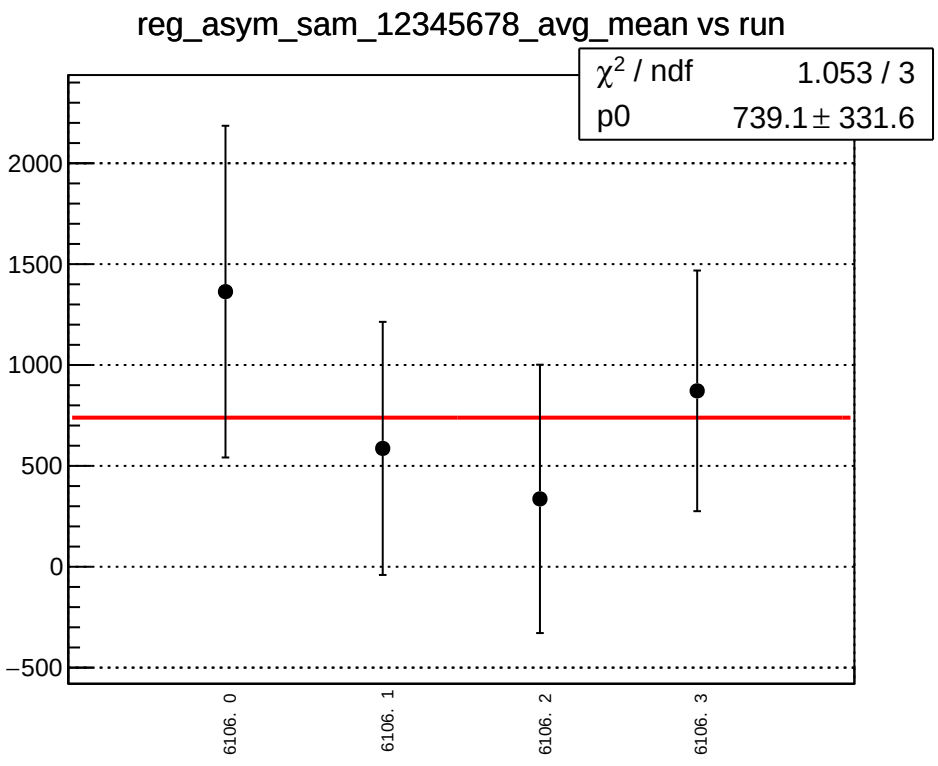

asym_sam_1357_2468_dd_correction_mean vs run
χ² / ndf 0.02978 / 3
p0 −359.9 ± 2102
4000
2000
0
−2000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.5757
Std Dev 2.598
0.15
0.1
0.05
0
−0.05

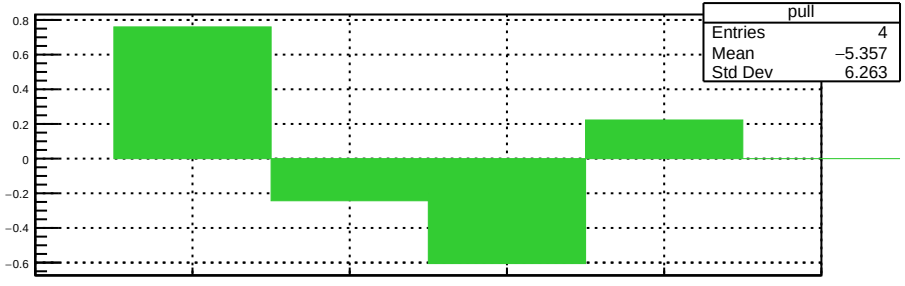

pull1D
Entries 4
Mean 0.005131
Std Dev 0.08613
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

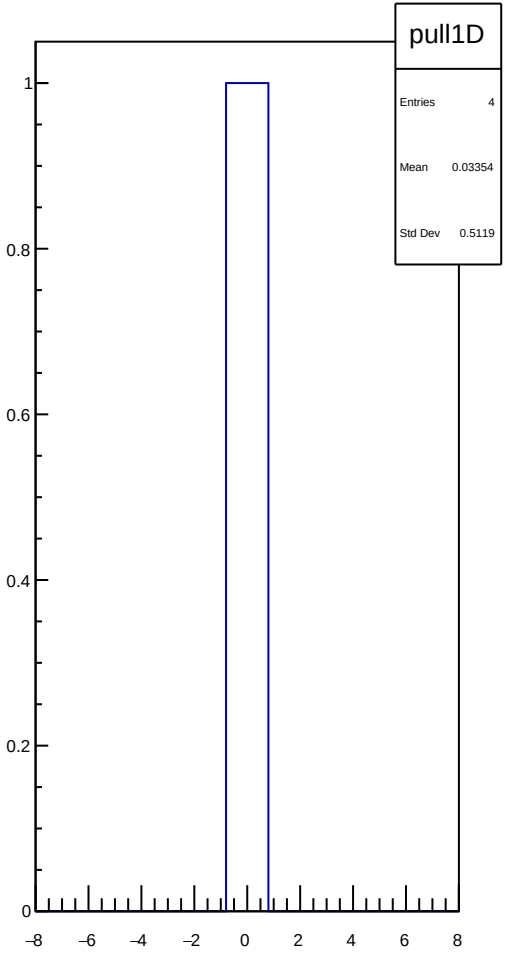

asym_sam_1357_2468_dd_correction_rms vs run
χ² / ndf 244.9 / 3
p0 400.8 ± 1.486
440
430
420
410
400
390
380
6106. 0
6106. 1
6106. 2
6106. 3

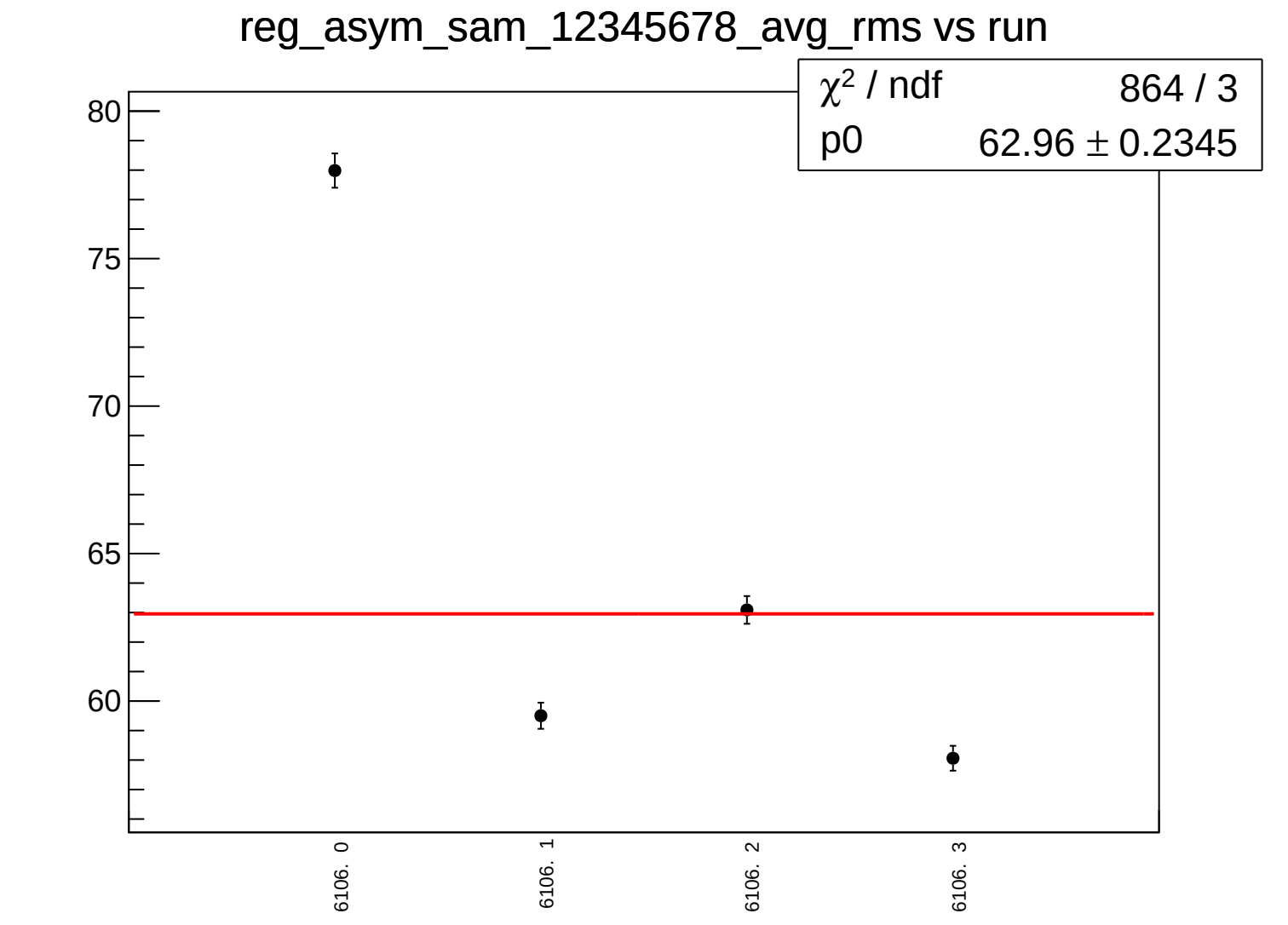

asym_sam_1357_2468_dd_mean vs run
χ² / ndf 0.01951 / 3
p0 187.6 ± 2106
4000
2000
0
−2000
−4000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.855
Std Dev 5.537
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull1D
Entries 4
Mean −0.004248
Std Dev 0.06971
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

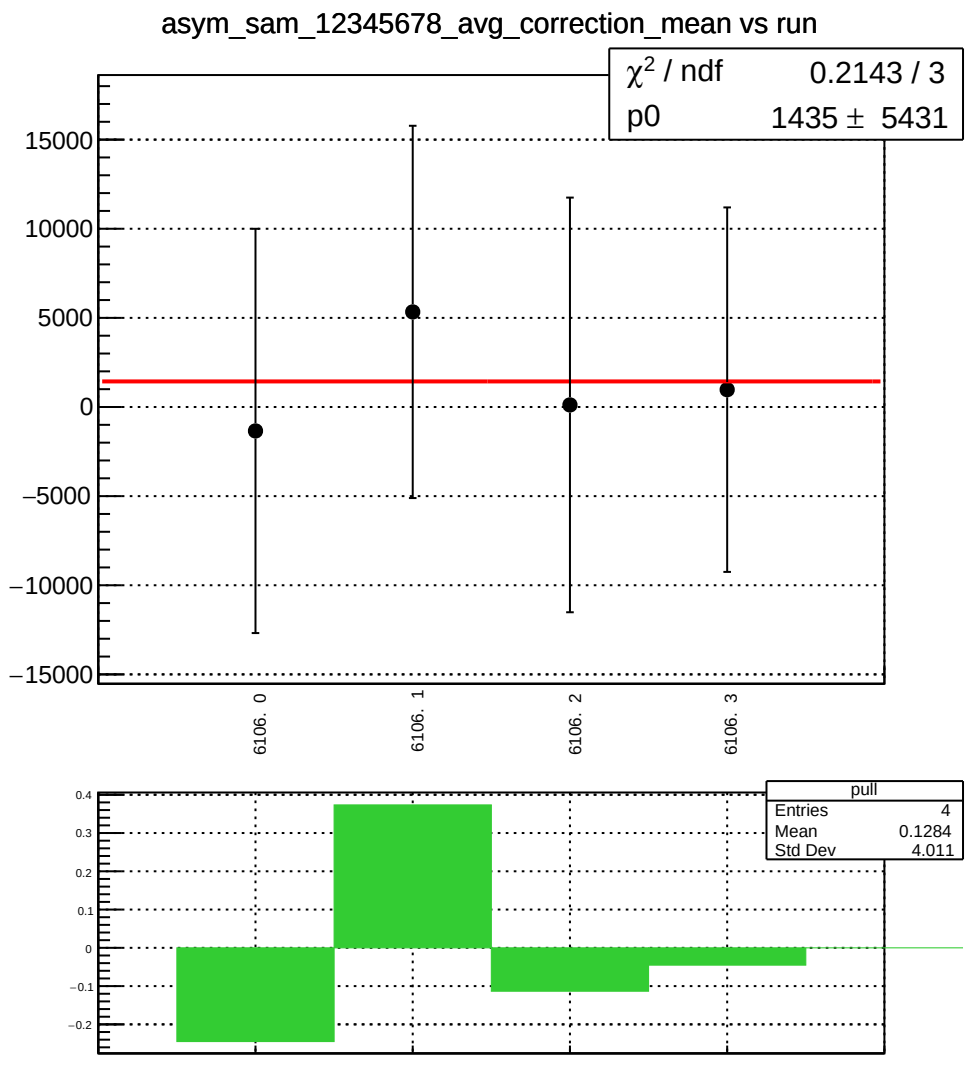

asym_sam_1357_2468_dd_rms vs run
χ² / ndf 244.9 / 3
p0 401.5 ± 1.489
440
430
420
410
400
390
380
6106. 0
6106. 1
6106. 2
6106. 3

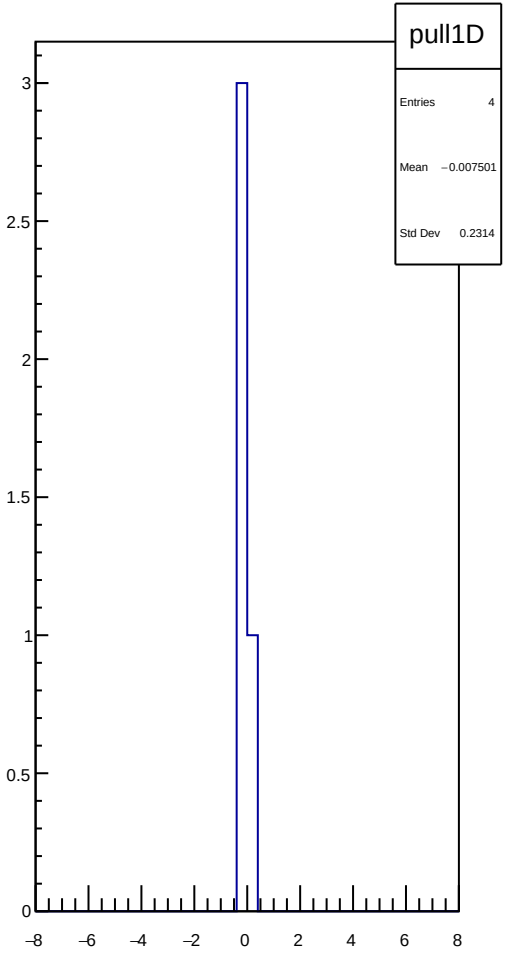

reg_asym_sam_12345678_avg_mean vs run
χ² / ndf 1.053 / 3
p0 739.1 ± 331.6
2000
1500
1000
500
0
−500
6106. 0
6106. 1
6106. 2
6106. 3

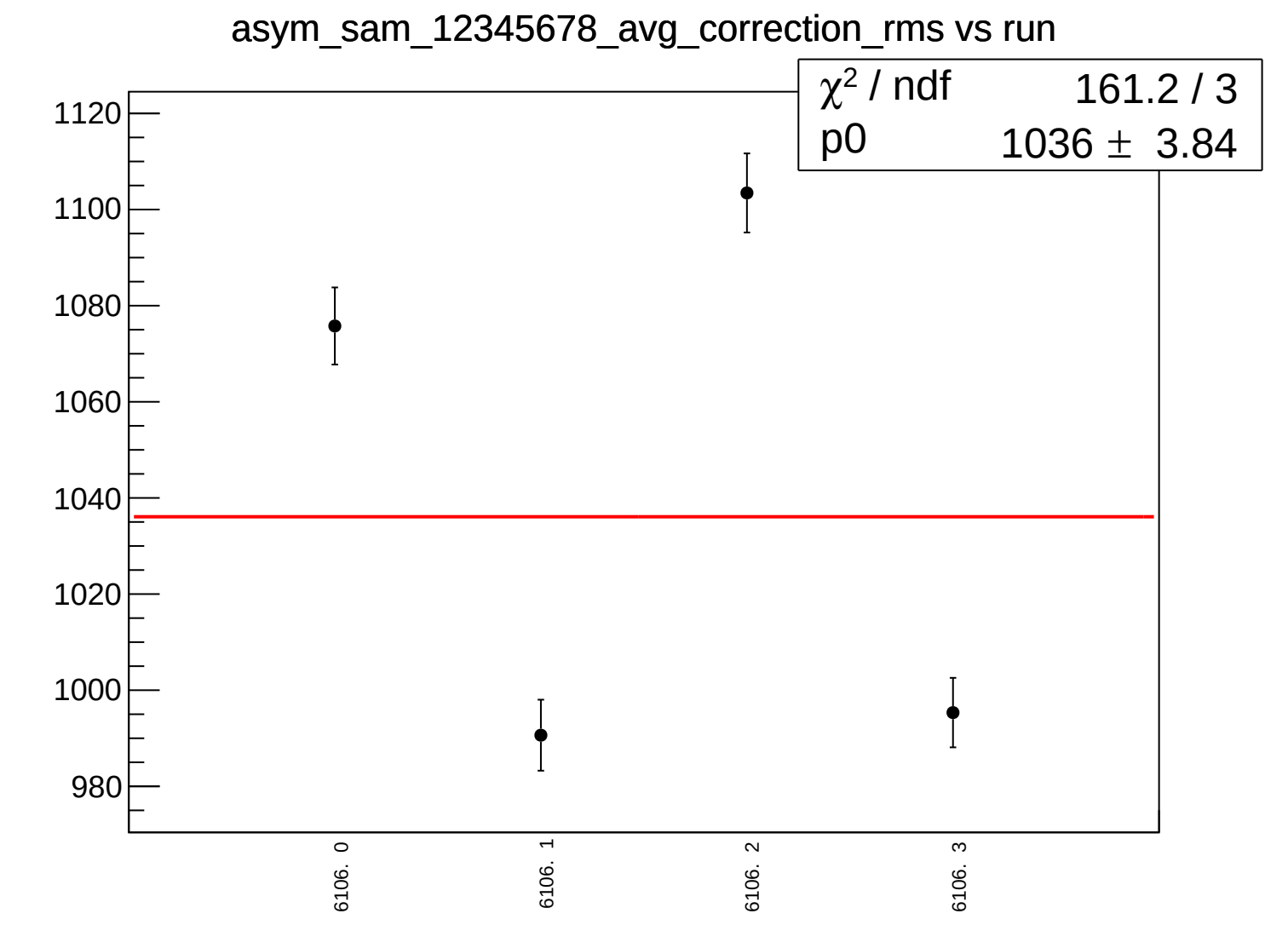

pull
Entries 4
Mean −5.357
Std Dev 6.263
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

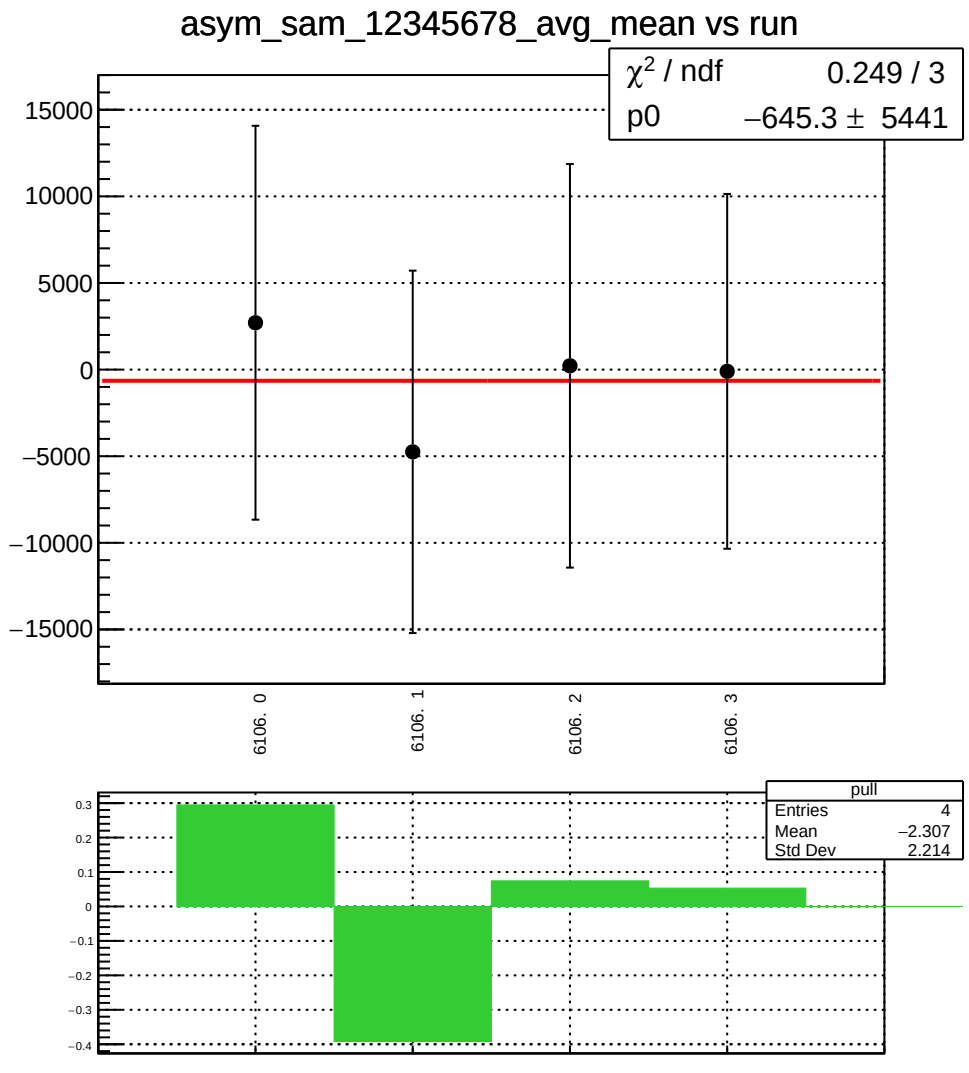

pull1D
Entries 4
Mean 0.03354
Std Dev 0.5119
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

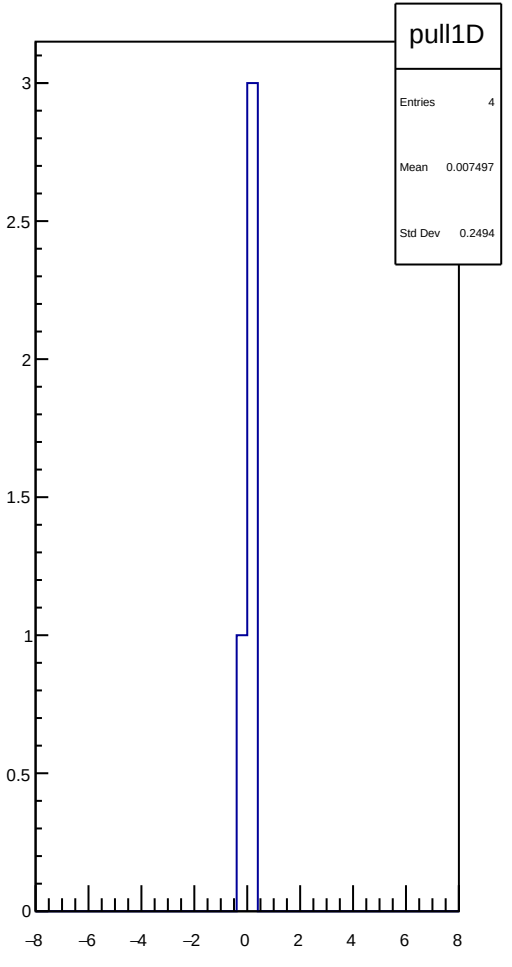

reg_asym_sam_12345678_avg_rms vs run
χ² / ndf 864 / 3
p0 62.96 ± 0.2345
80
75
70
65
60
6106. 0
6106. 1
6106. 2
6106. 3

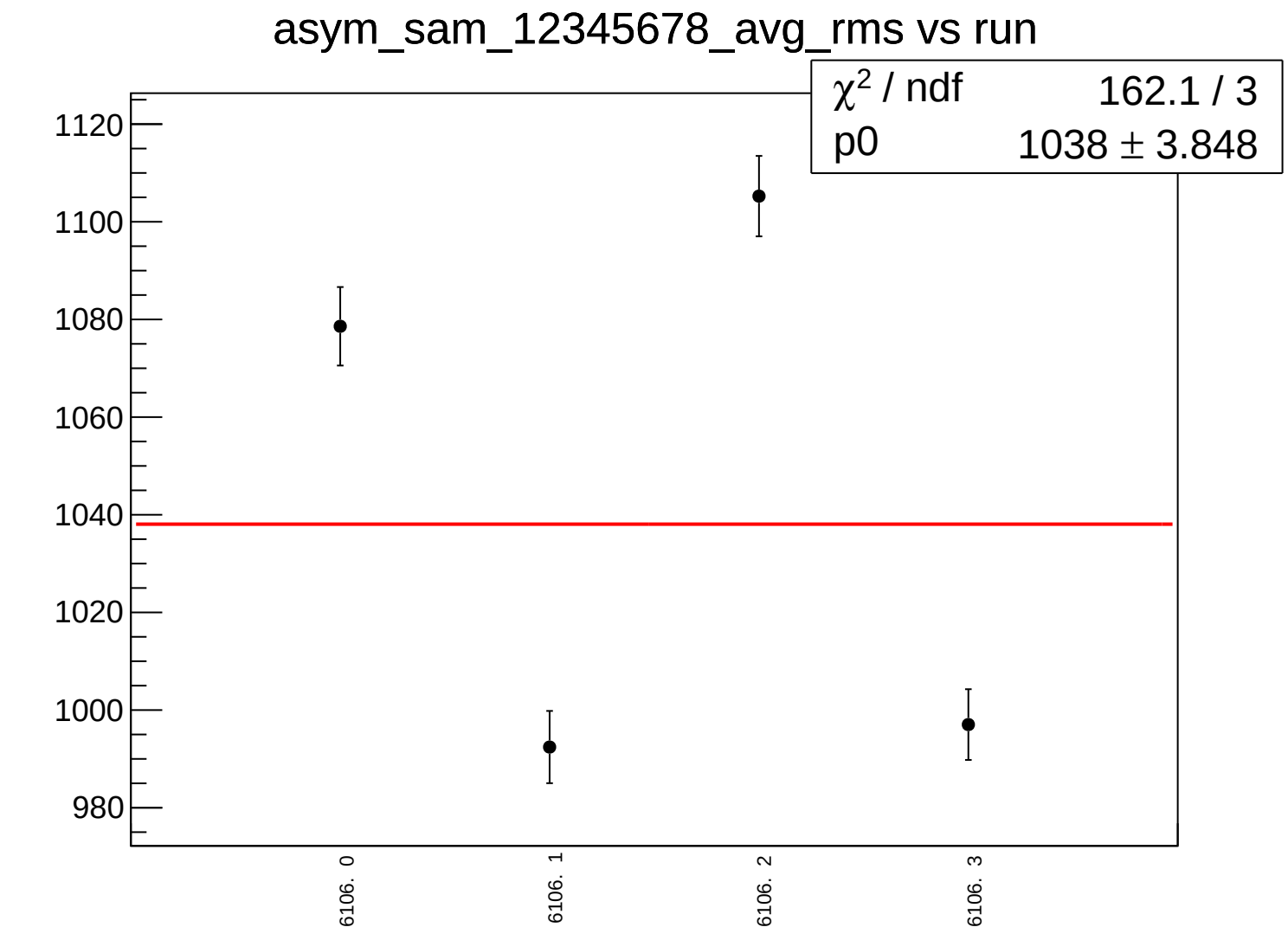

asym_sam_12345678_avg_correction_mean vs run
χ² / ndf 0.2143 / 3
p0 1435 ± 5431
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.1284
Std Dev 4.011
0.4
0.3
0.2
0.1
0
−0.1
−0.2

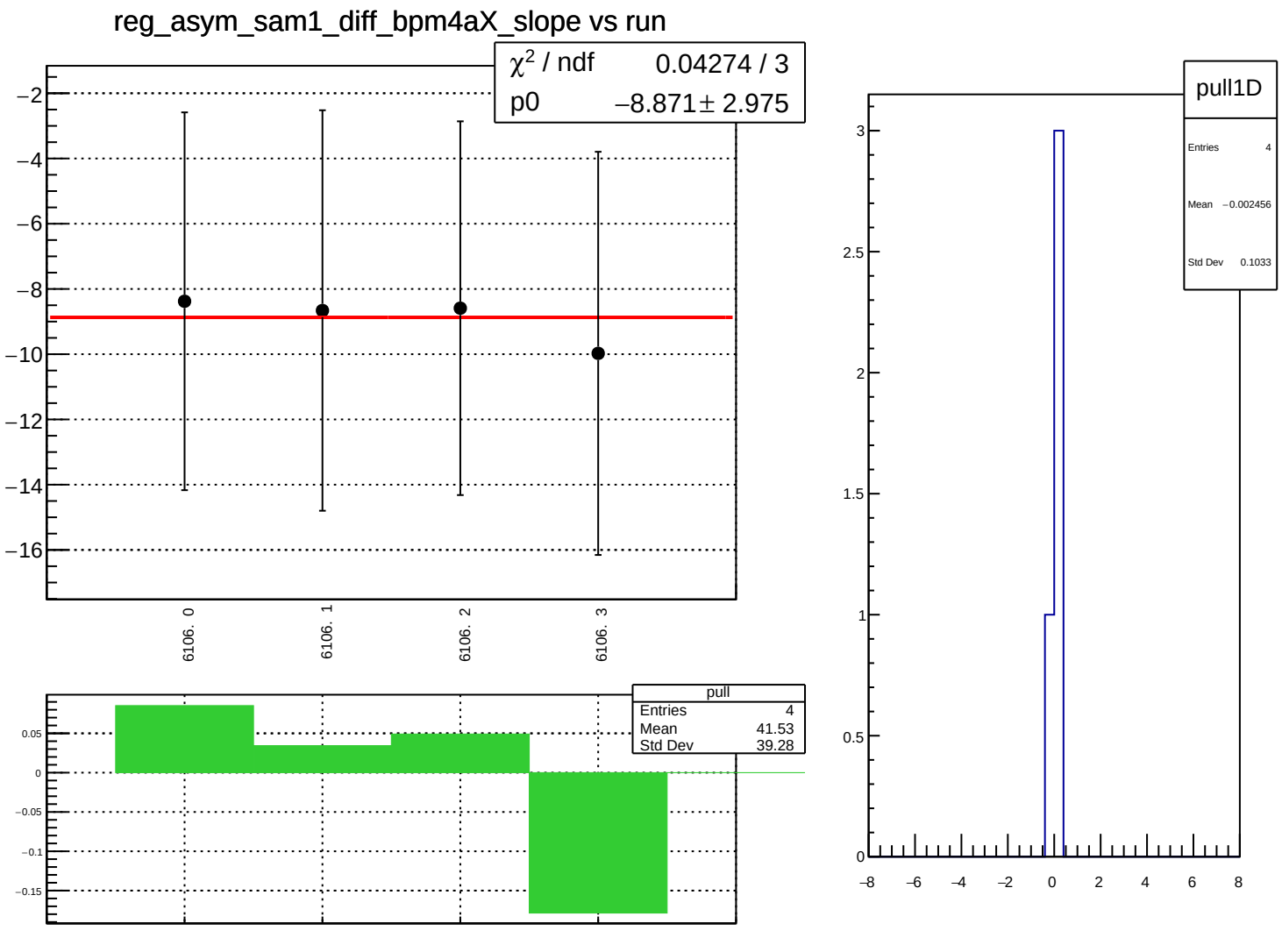

pull1D
Entries 4
Mean −0.007501
Std Dev 0.2314
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

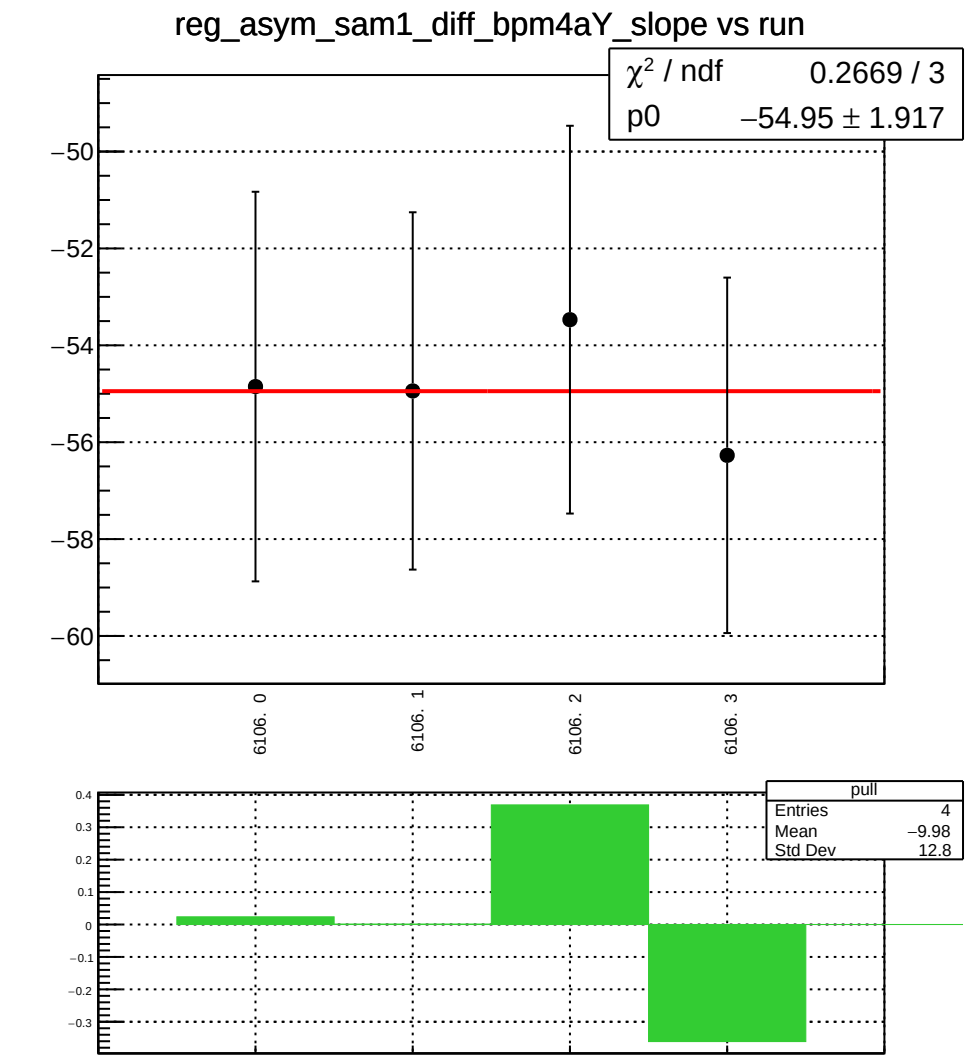

asym_sam_12345678_avg_correction_rms vs run
χ² / ndf 161.2 / 3
p0 1036 ± 3.84
1120
1100
1080
1060
1040
1020
1000
980
6106. 0
6106. 1
6106. 2
6106. 3

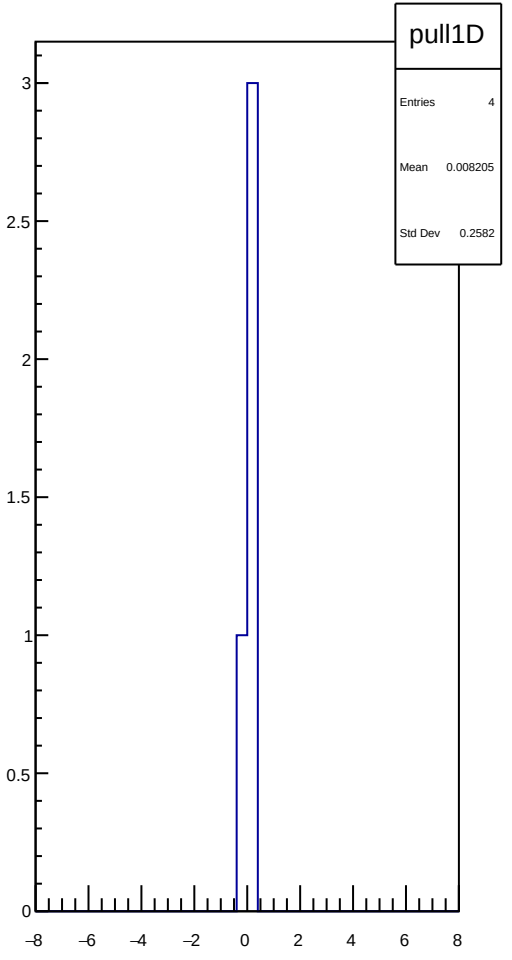

asym_sam_12345678_avg_mean vs run
χ² / ndf 0.249 / 3
p0 −645.3 ± 5441
15000
10000
5000
0
−5000
−10000
−15000
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.307
Std Dev 2.214
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

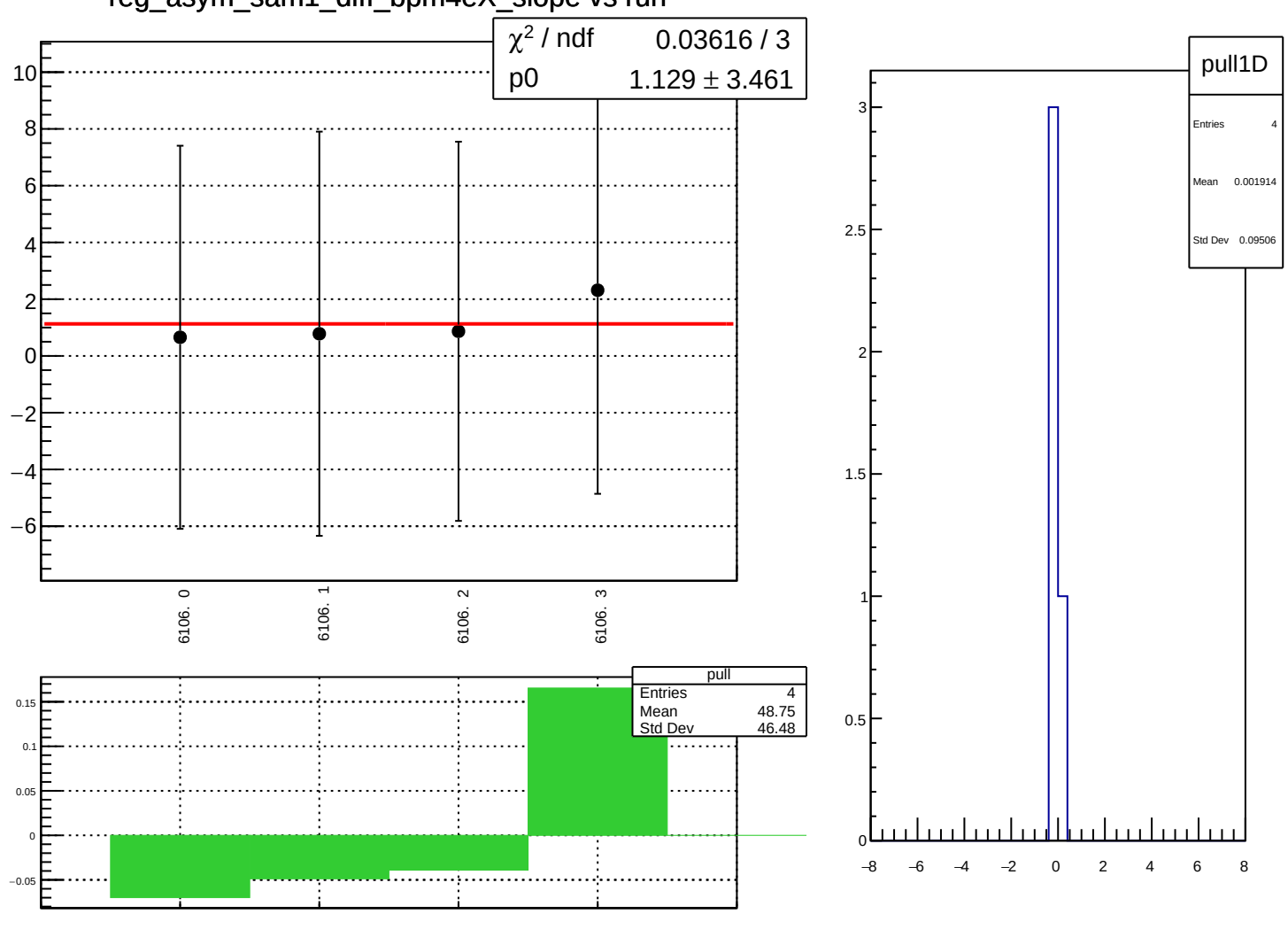

pull1D
Entries 4
Mean 0.007497
Std Dev 0.2494
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

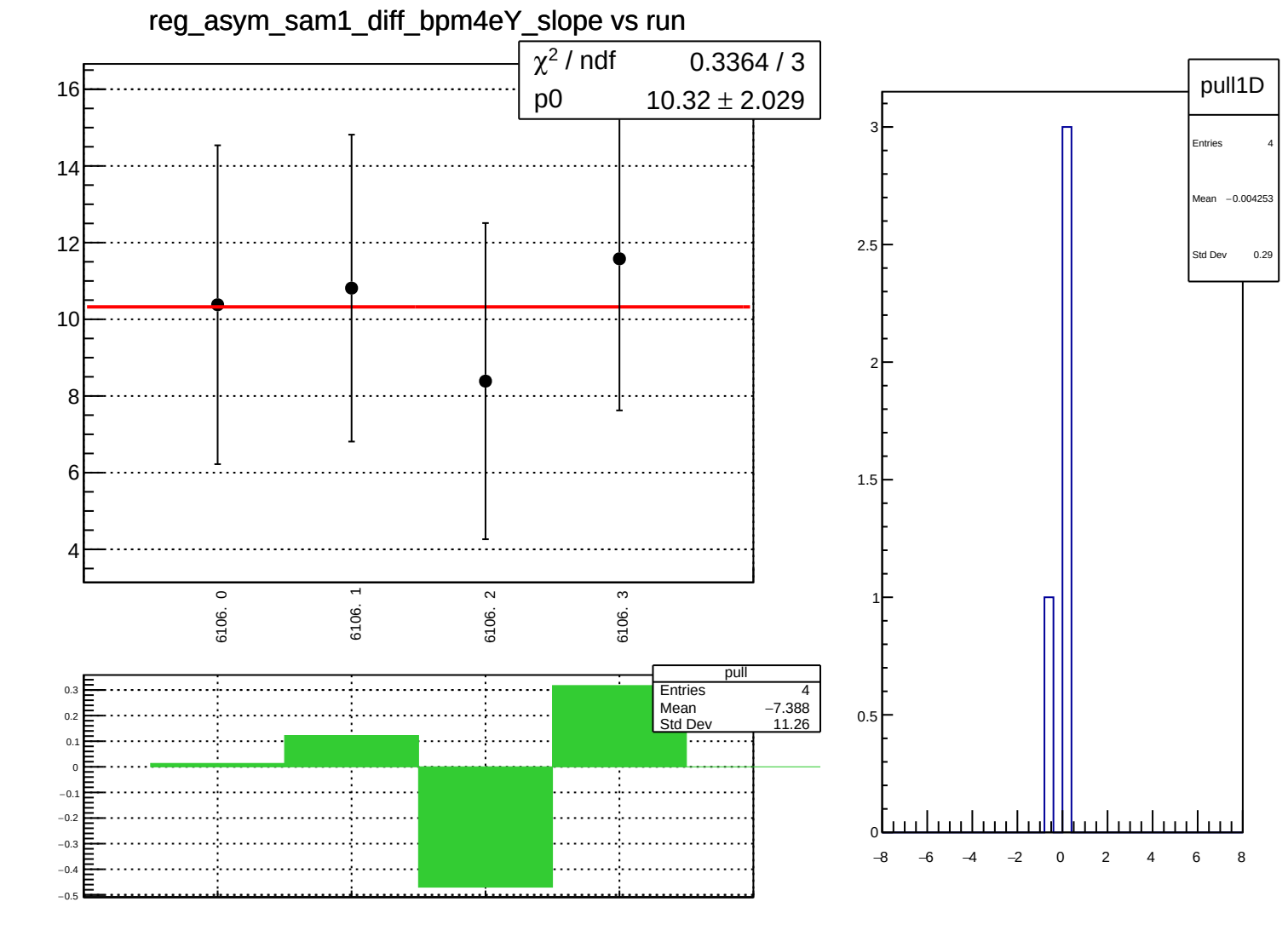

asym_sam_12345678_avg_rms vs run
χ² / ndf 162.1 / 3
p0 1038 ± 3.848
1120
1100
1080
1060
1040
1020
1000
980
6106. 0
6106. 1
6106. 2
6106. 3

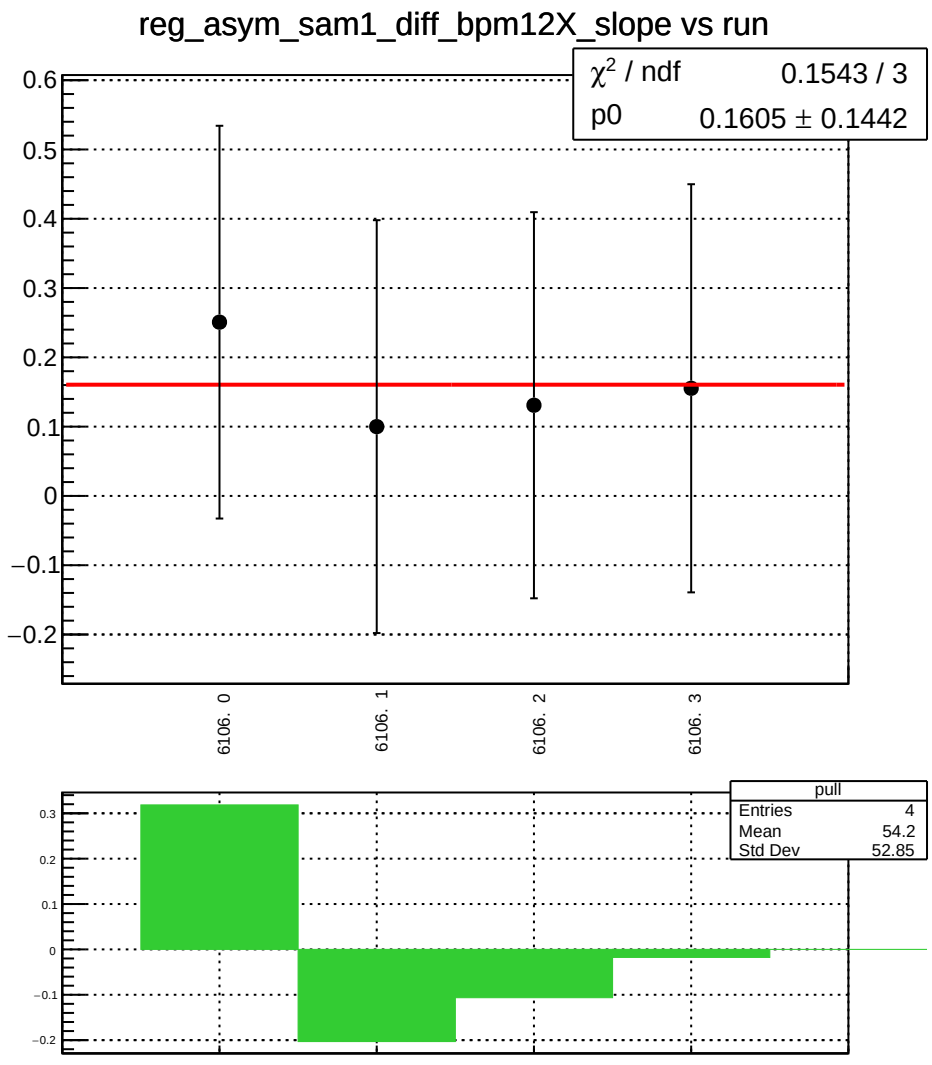

reg_asym_sam1_diff_bpm4aX_slope vs run
χ² / ndf 0.04274 / 3
p0 −8.871 ± 2.975
−2
−4
−6
−8
−10
−12
−14
−16
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 41.53
Std Dev 39.28
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean −0.002456
Std Dev 0.1033
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

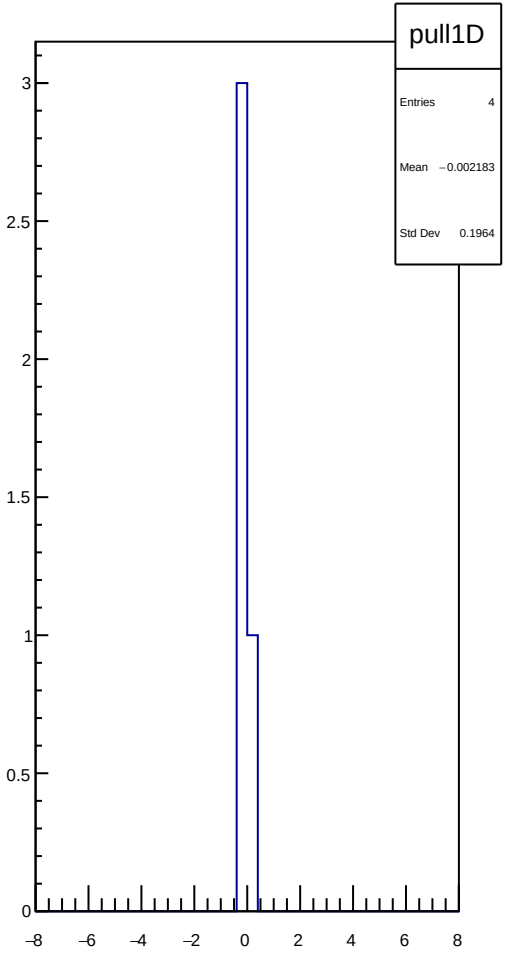

reg_asym_sam1_diff_bpm4aY_slope vs run
χ² / ndf 0.2669 / 3
p0 −54.95 ± 1.917
−50
−52
−54
−56
−58
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.98
Std Dev 12.8
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

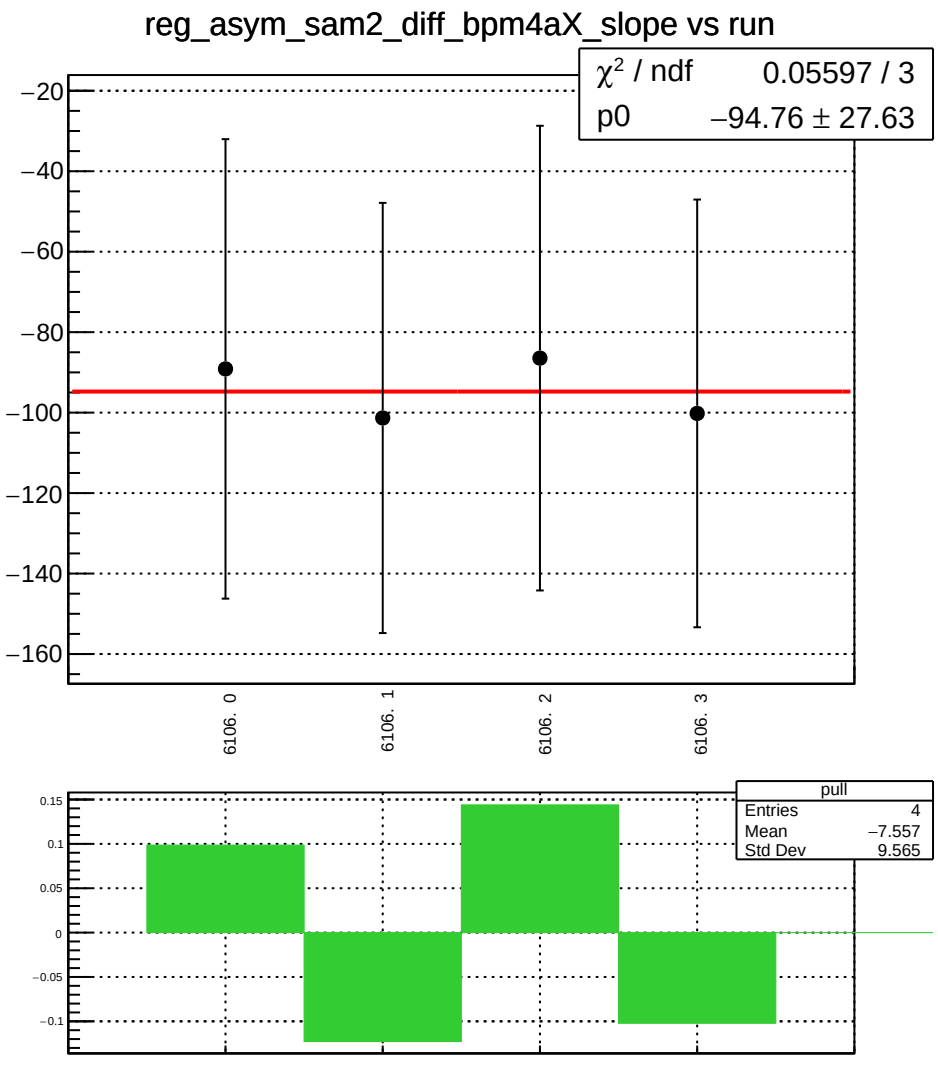

pull1D
Entries 4
Mean 0.008205
Std Dev 0.2582
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

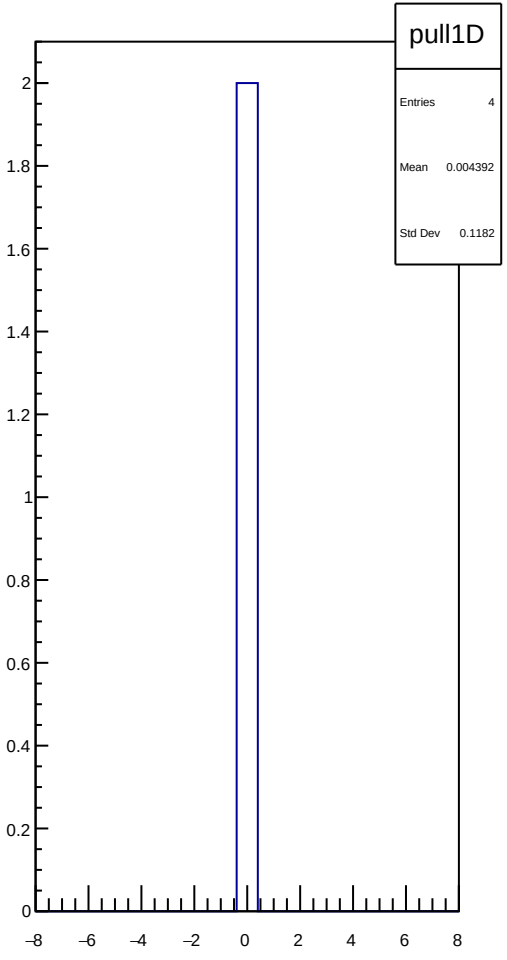

reg_asym_sam1_diff_bpm4eX_slope vs run
χ² / ndf 0.03616 / 3
p0 1.129 ± 3.461
10
8
6
4
2
0
−2
−4
−6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 48.75
Std Dev 46.48
0.15
0.1
0.05
0
−0.05
pull1D
Entries 4
Mean 0.001914
Std Dev 0.09506
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

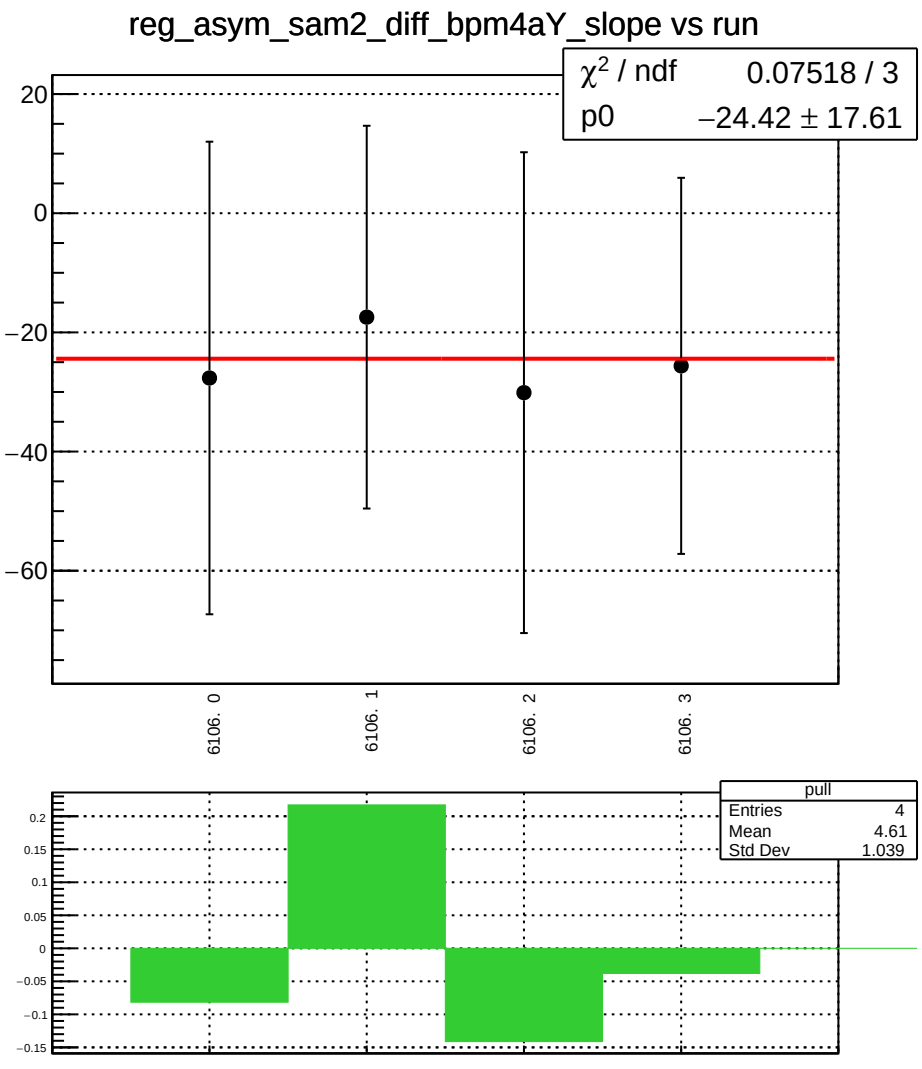

reg_asym_sam1_diff_bpm4eY_slope vs run
χ² / ndf 0.3364 / 3
p0 10.32 ± 2.029
16
14
12
10
8
6
4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −7.388
Std Dev 11.26
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
pull1D
Entries 4
Mean −0.004253
Std Dev 0.29
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

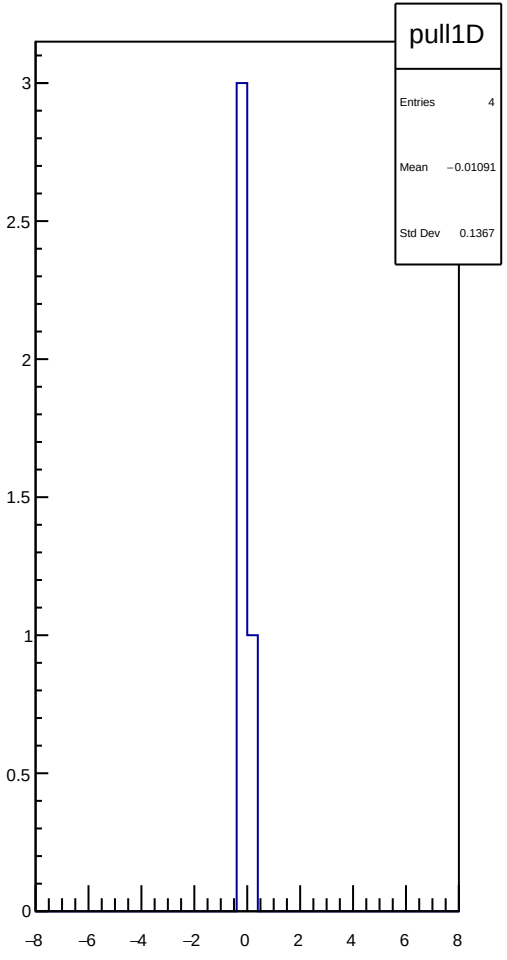

reg_asym_sam1_diff_bpm12X_slope vs run
χ² / ndf 0.1543 / 3
p0 0.1605 ± 0.1442
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 54.2
Std Dev 52.85
0.3
0.2
0.1
0
−0.1
−0.2

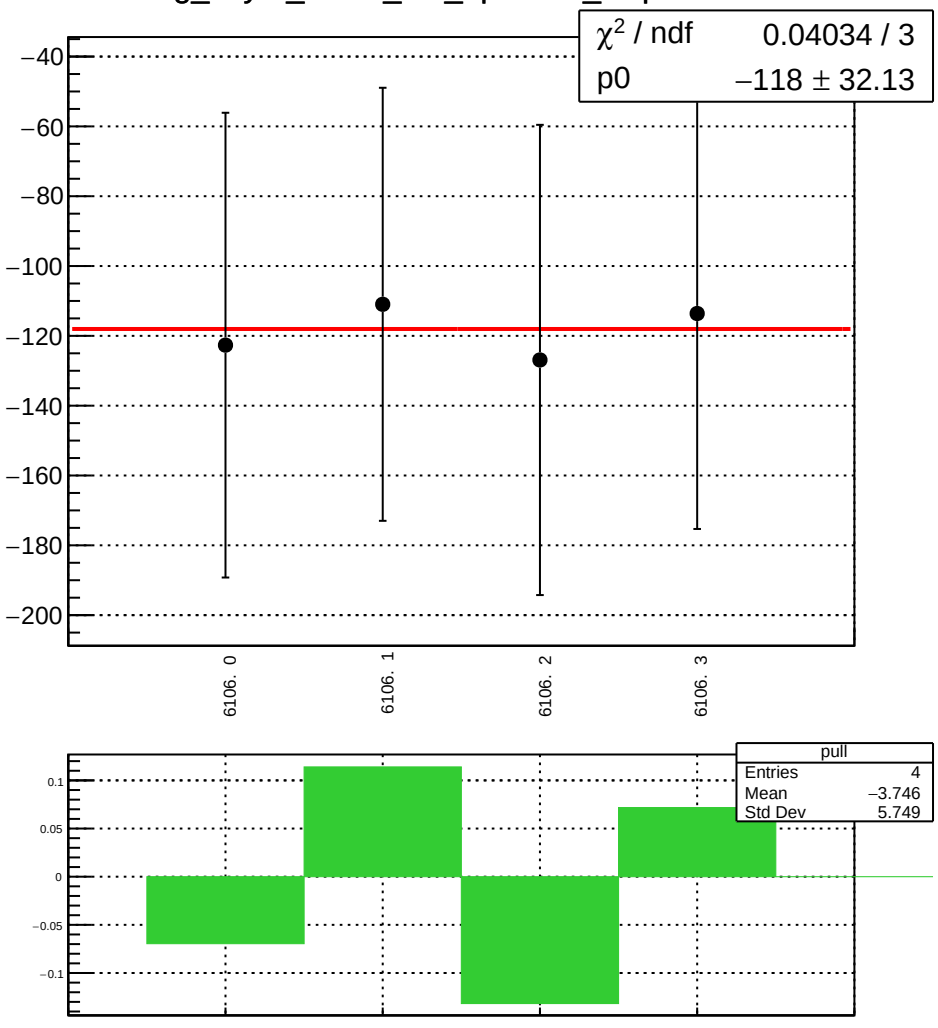

pull1D
Entries 4
Mean −0.002183
Std Dev 0.1964
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

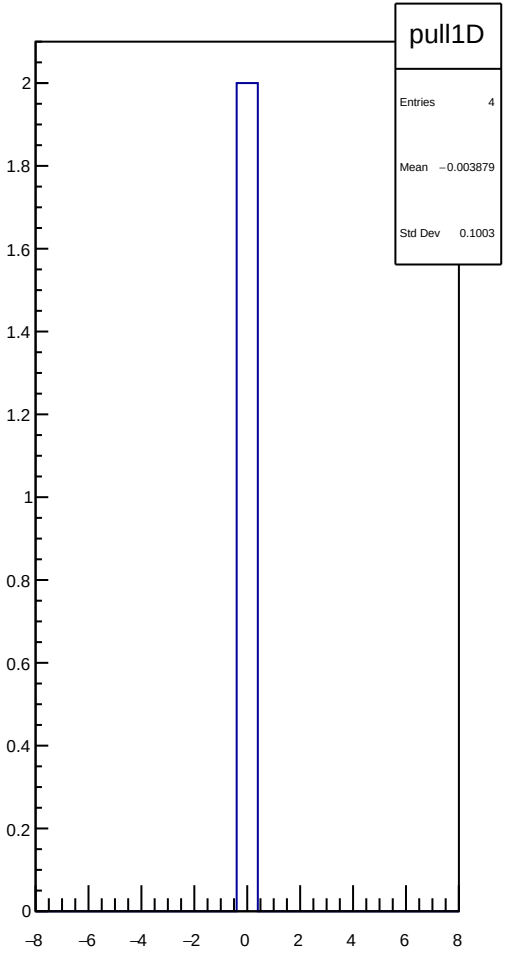

reg_asym_sam2_diff_bpm4aX_slope vs run
χ² / ndf 0.05597 / 3
p0 −94.76 ± 27.63
−20
−40
−60
−80
−100
−120
−140
−160
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −7.557
Std Dev 9.565
0.15
0.1
0.05
0
−0.05
−0.1

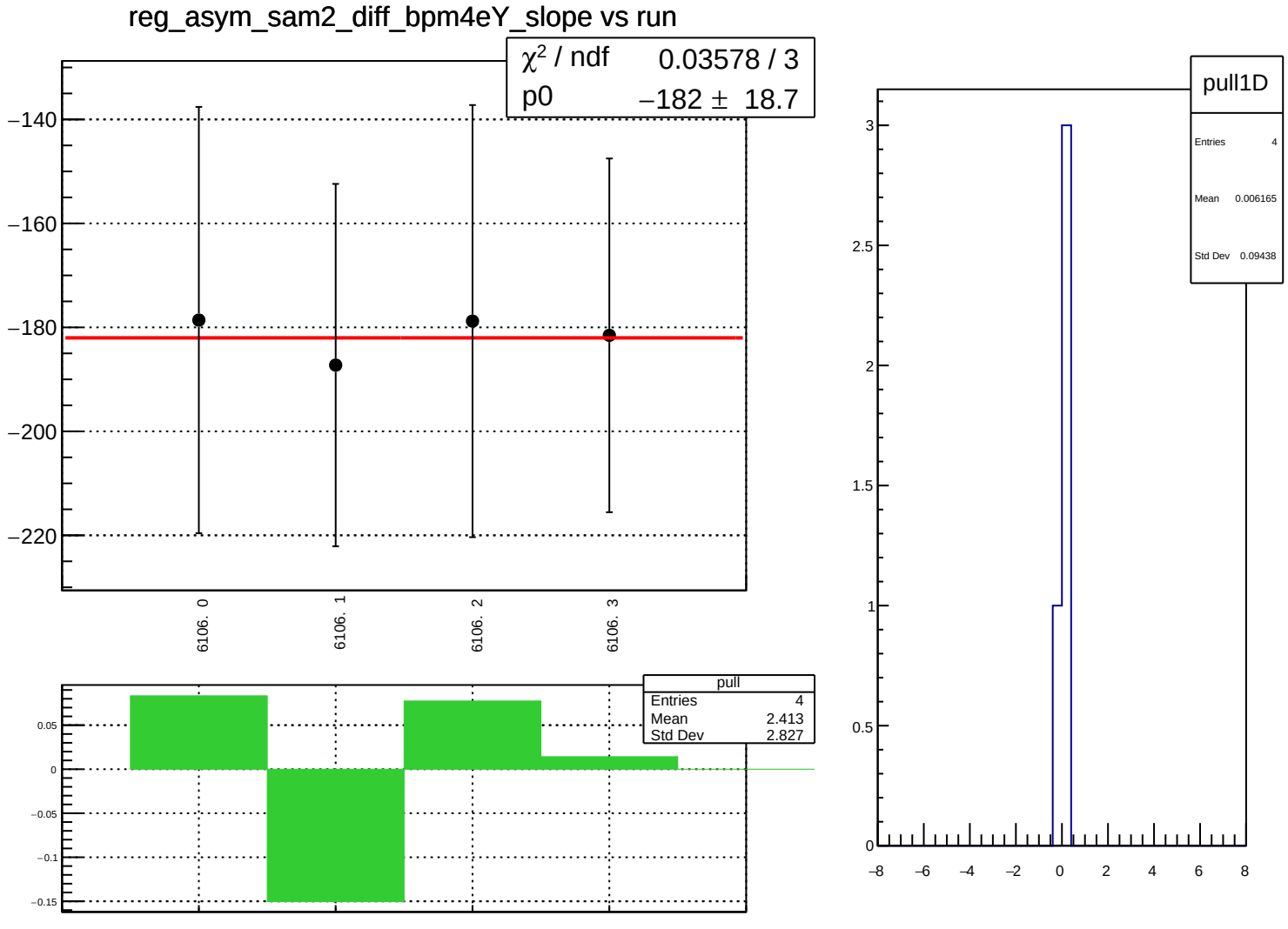

pull1D
Entries 4
Mean 0.004392
Std Dev 0.1182
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

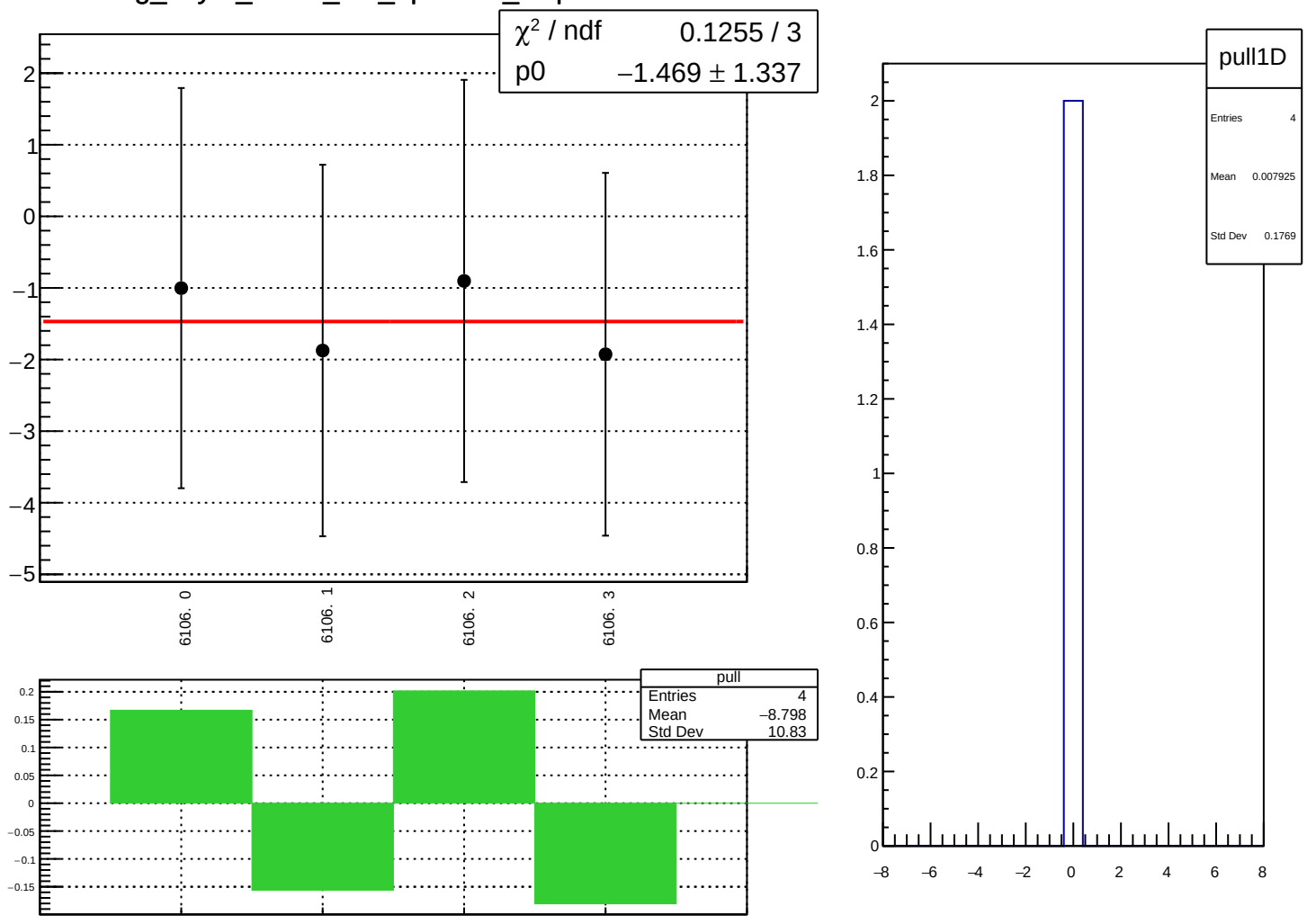

reg_asym_sam2_diff_bpm4aY_slope vs run
χ² / ndf 0.07518 / 3
p0 −24.42 ± 17.61
20
0
−20
−40
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 4.61
Std Dev 1.039
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

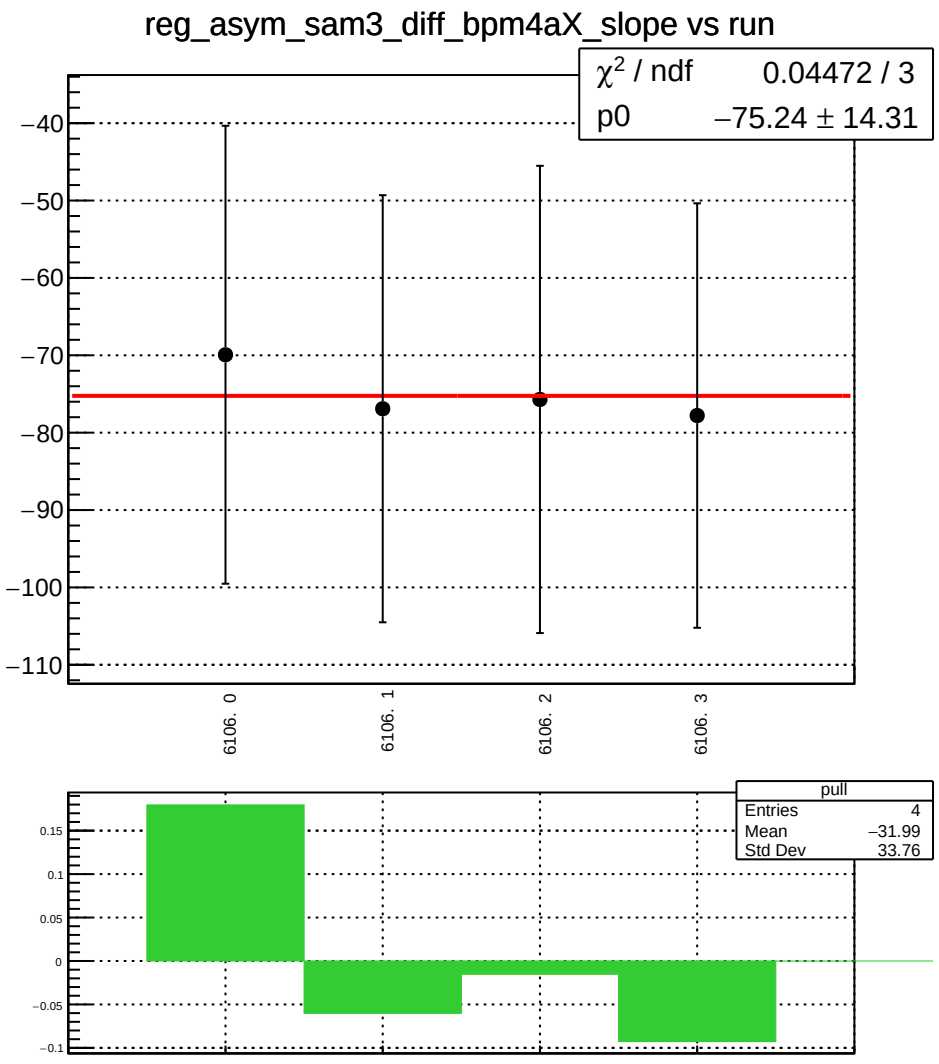

pull1D
Entries 4
Mean −0.01091
Std Dev 0.1367
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

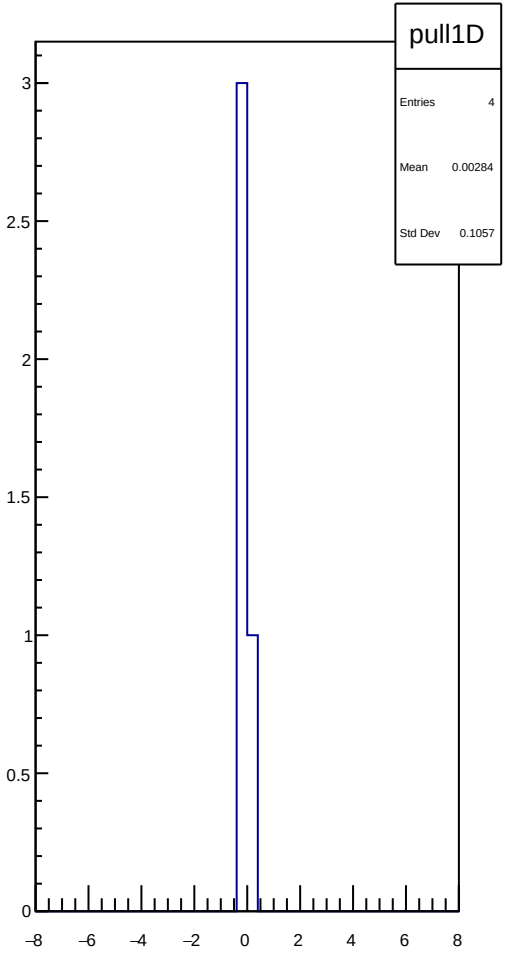

reg_asym_sam2_diff_bpm4eX_slope vs run
χ² / ndf 0.04034 / 3
p0 −118 ± 32.13
−40
−60
−80
−100
−120
−140
−160
−180
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.746
Std Dev 5.749
0.1
0.05
0
−0.05
−0.1

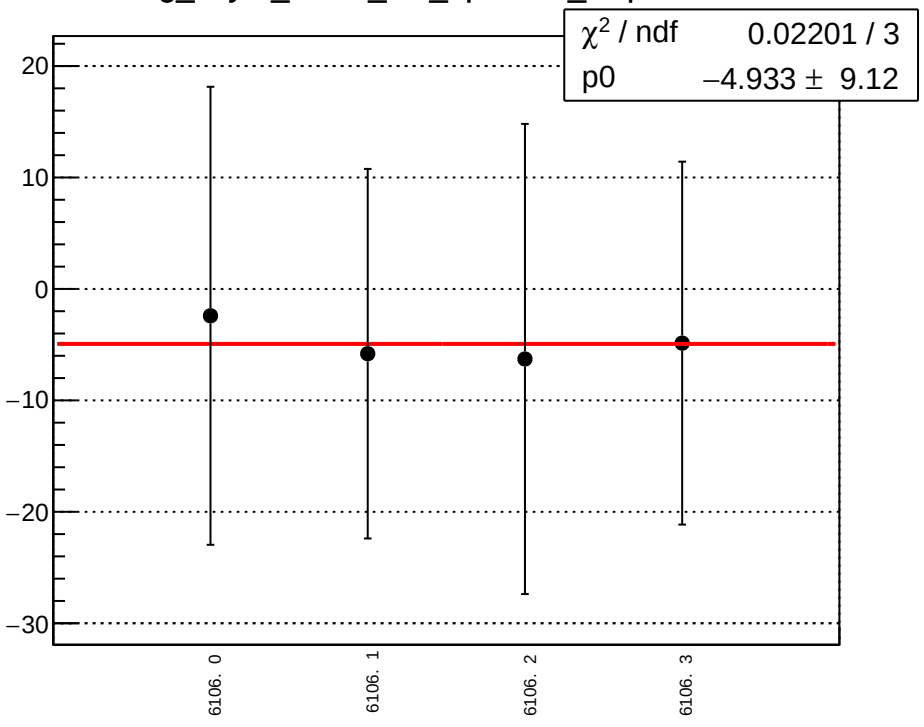

pull1D
Entries 4
Mean −0.003879
Std Dev 0.1003
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

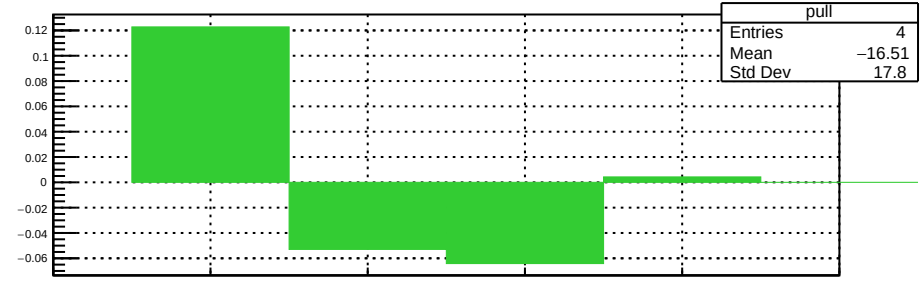

reg_asym_sam2_diff_bpm4eY_slope vs run
χ² / ndf 0.03578 / 3
p0 −182 ± 18.7
−140
−160
−180
−200
−220
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2.413
Std Dev 2.827
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean 0.006165
Std Dev 0.09438
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

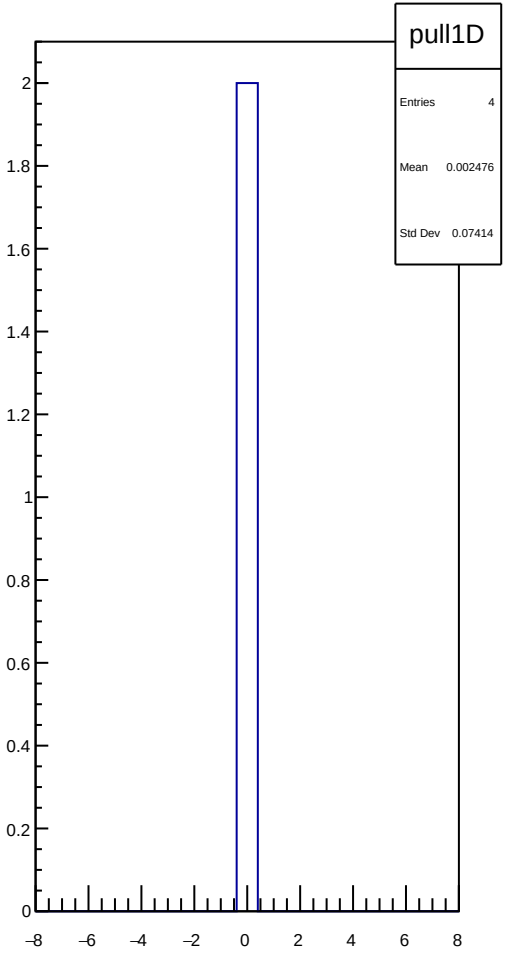

reg_asym_sam2_diff_bpm12X_slope vs run
χ² / ndf 0.1255 / 3
p0 −1.469 ± 1.337
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −8.798
Std Dev 10.83
pull1D
Entries 4
Mean 0.007925
Std Dev 0.1769

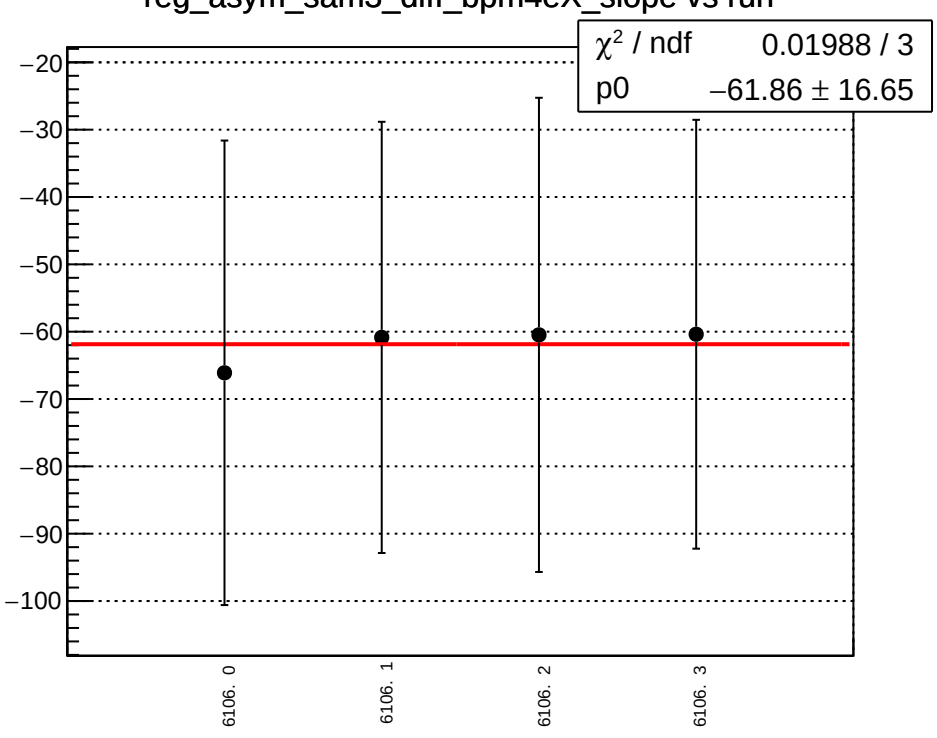

reg_asym_sam3_diff_bpm4aX_slope vs run
χ² / ndf 0.04472 / 3
p0 −75.24 ± 14.31
−40
−50
−60
−70
−80
−90
−100
−110
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −31.99
Std Dev 33.76
0.15
0.1
0.05
0
−0.05
−0.1

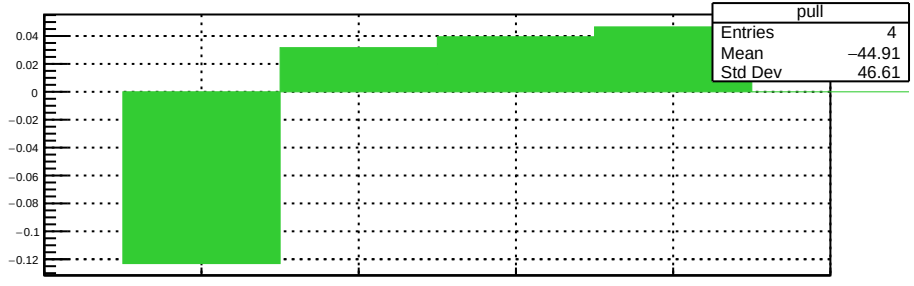

pull1D
Entries 4
Mean 0.00284
Std Dev 0.1057
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

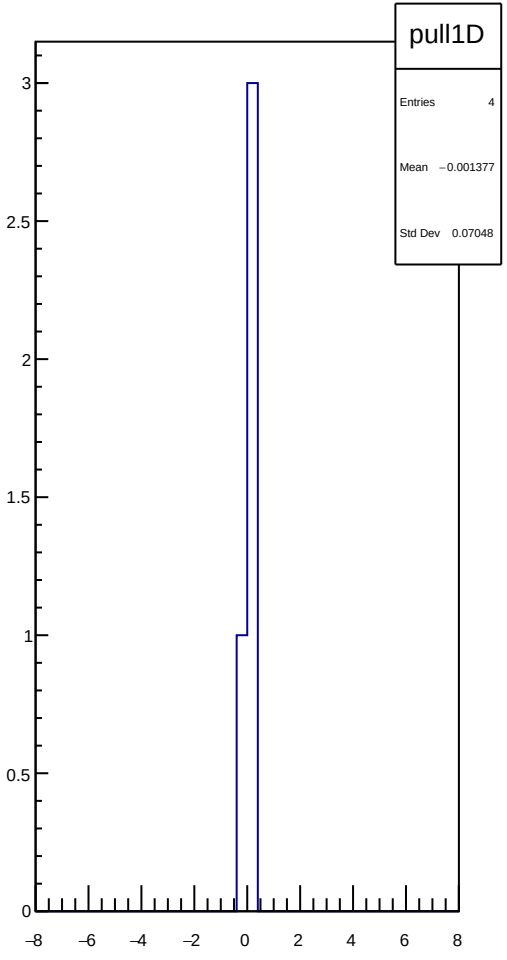

reg_asym_sam3_diff_bpm4aY_slope vs run
χ² / ndf 0.02201 / 3
p0 −4.933 ± 9.12
20
10
0
−10
−20
−30
6106. 0
6106. 1
6106. 2
6106. 3

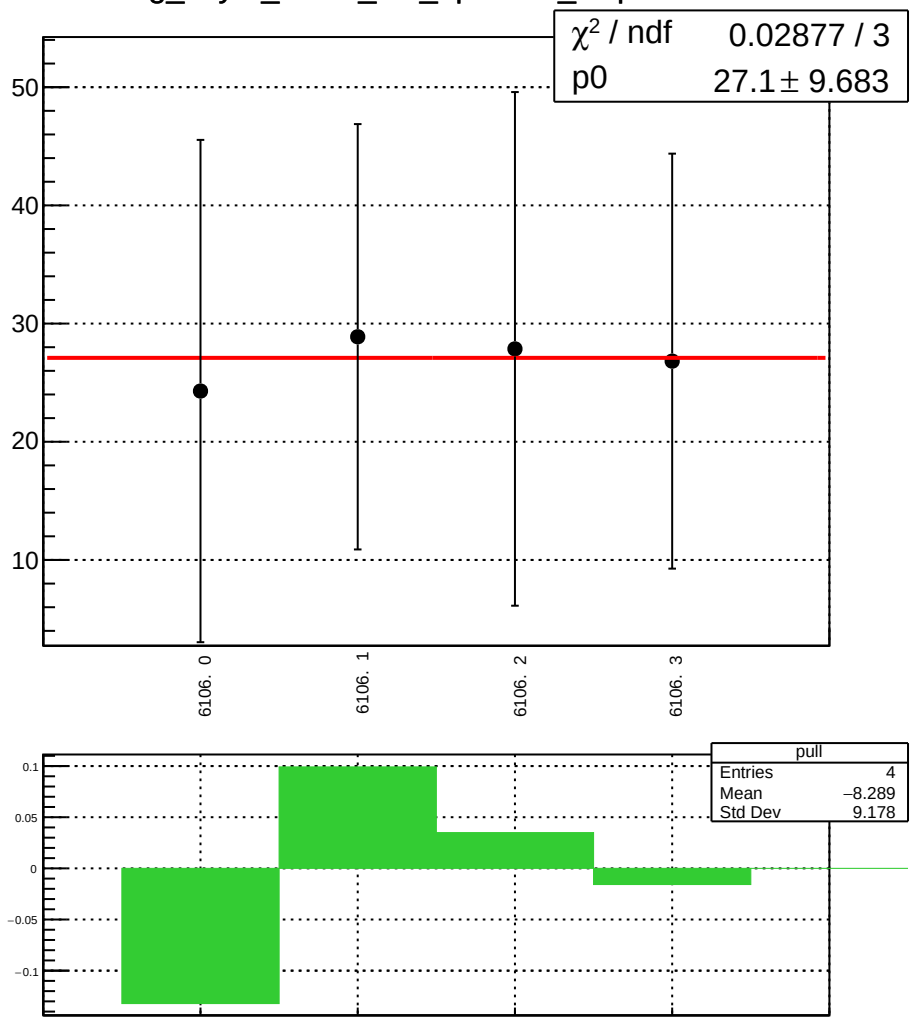

pull
Entries 4
Mean −16.51
Std Dev 17.8
0.12
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06

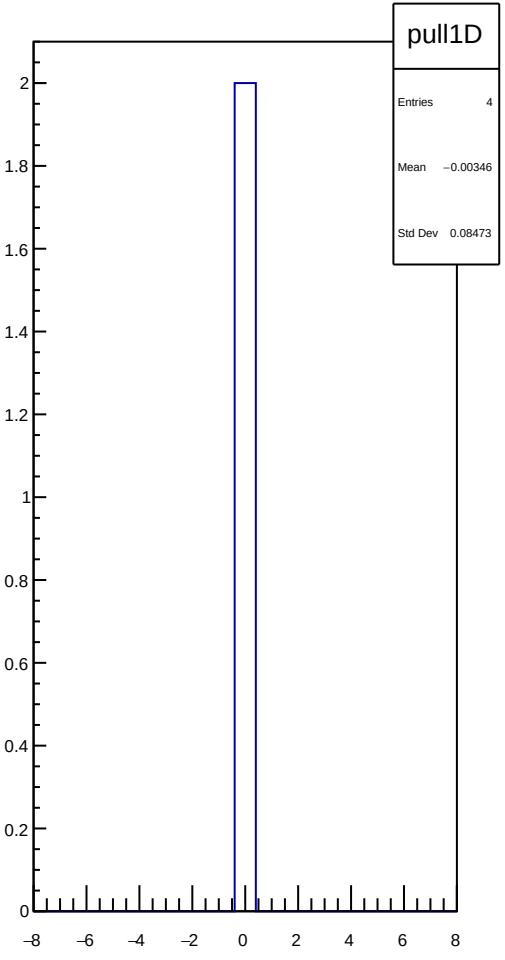

pull1D
Entries 4
Mean 0.002476
Std Dev 0.07414
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

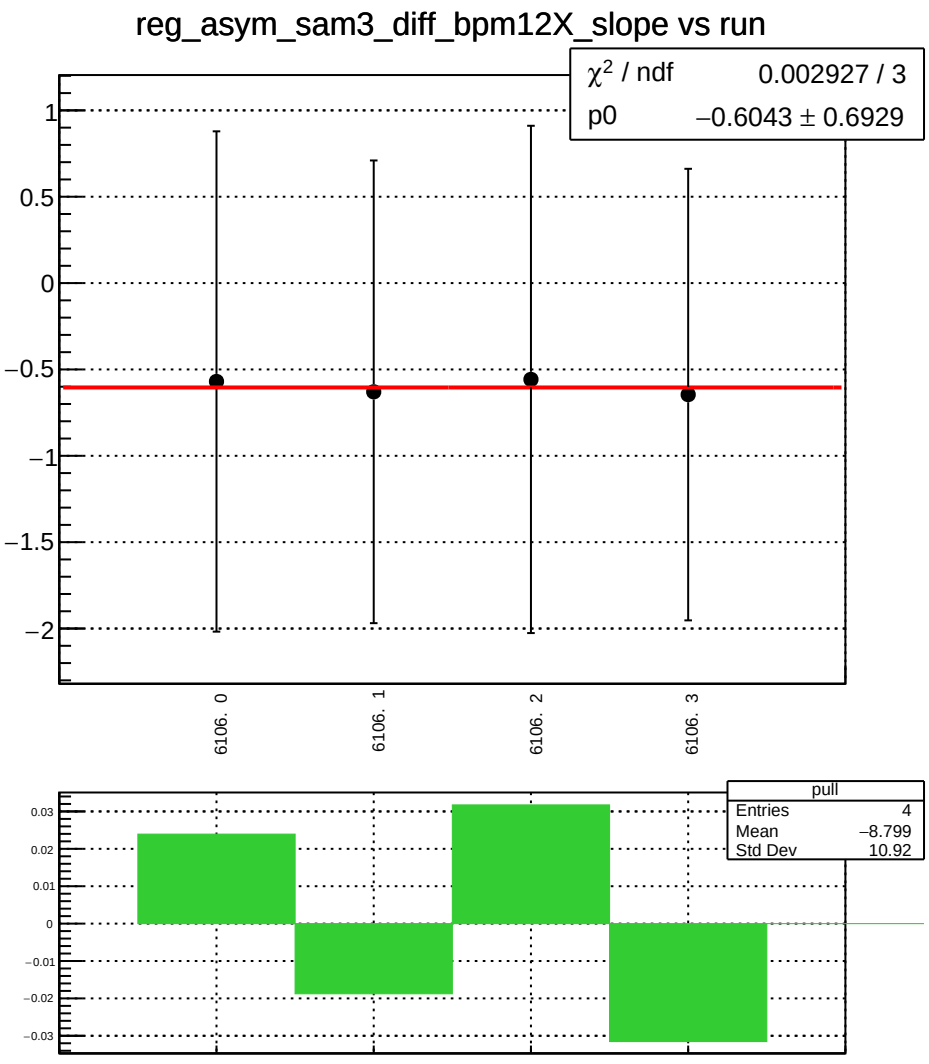

reg_asym_sam3_diff_bpm4eX_slope vs run
χ² / ndf 0.01988 / 3
p0 −61.86 ± 16.65
−20
−30
−40
−50
−60
−70
−80
−90
−100
6106. 0
6106. 1
6106. 2
6106. 3

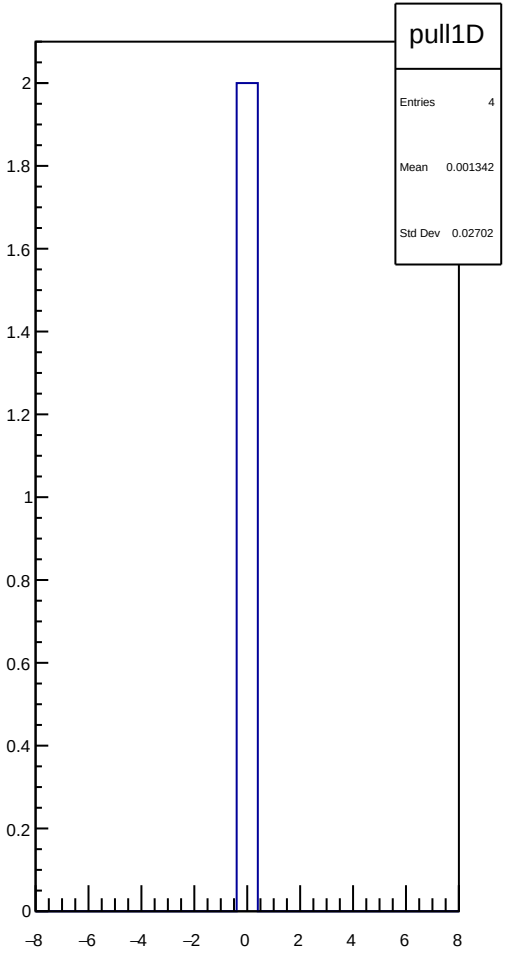

pull
Entries 4
Mean −44.91
Std Dev 46.61
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12

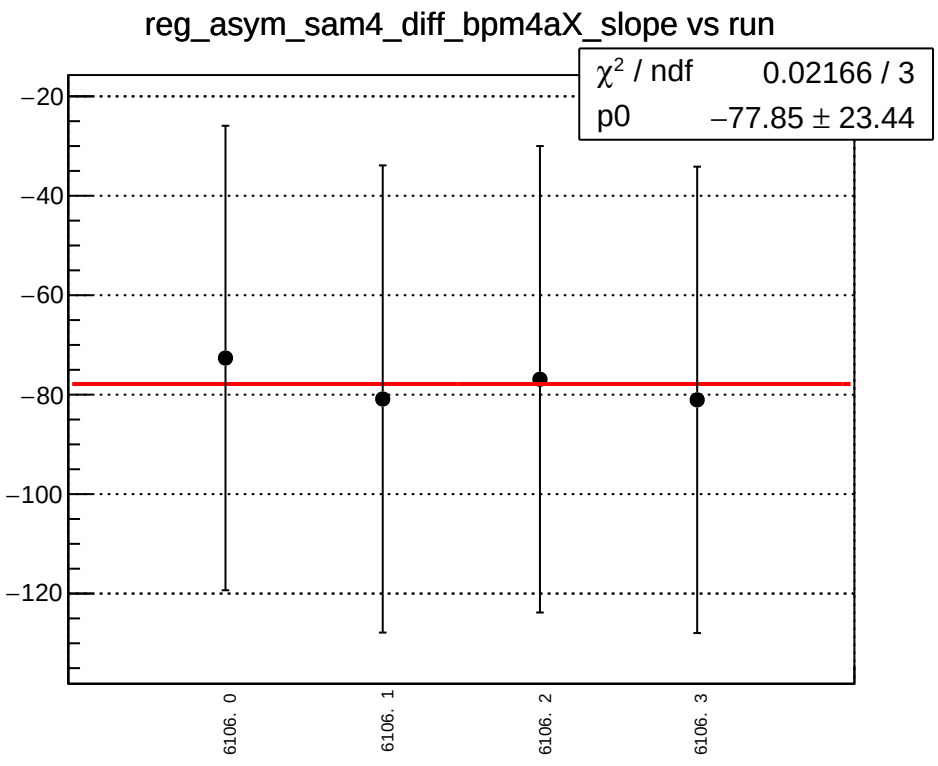

pull1D
Entries 4
Mean −0.001377
Std Dev 0.07048
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

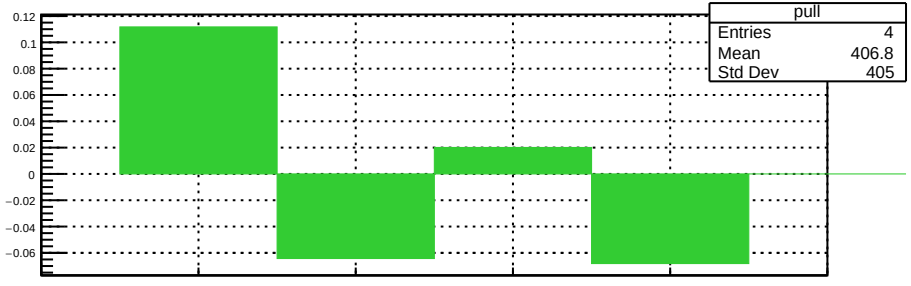

reg_asym_sam3_diff_bpm4eY_slope vs run
χ² / ndf 0.02877 / 3
p0 27.1 ± 9.683
50
40
30
20
10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −8.289
Std Dev 9.178
0.1
0.05
0
−0.05
−0.1

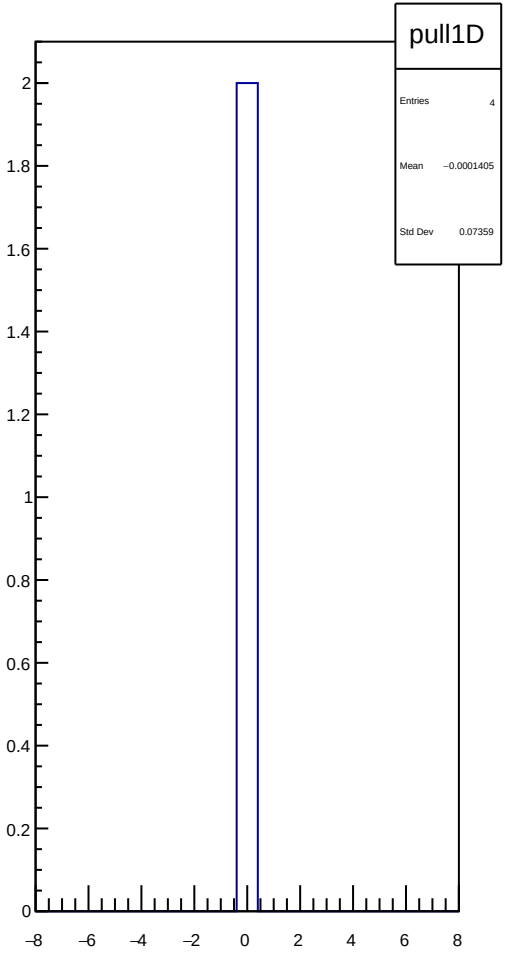

pull1D
Entries 4
Mean −0.00346
Std Dev 0.08473
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

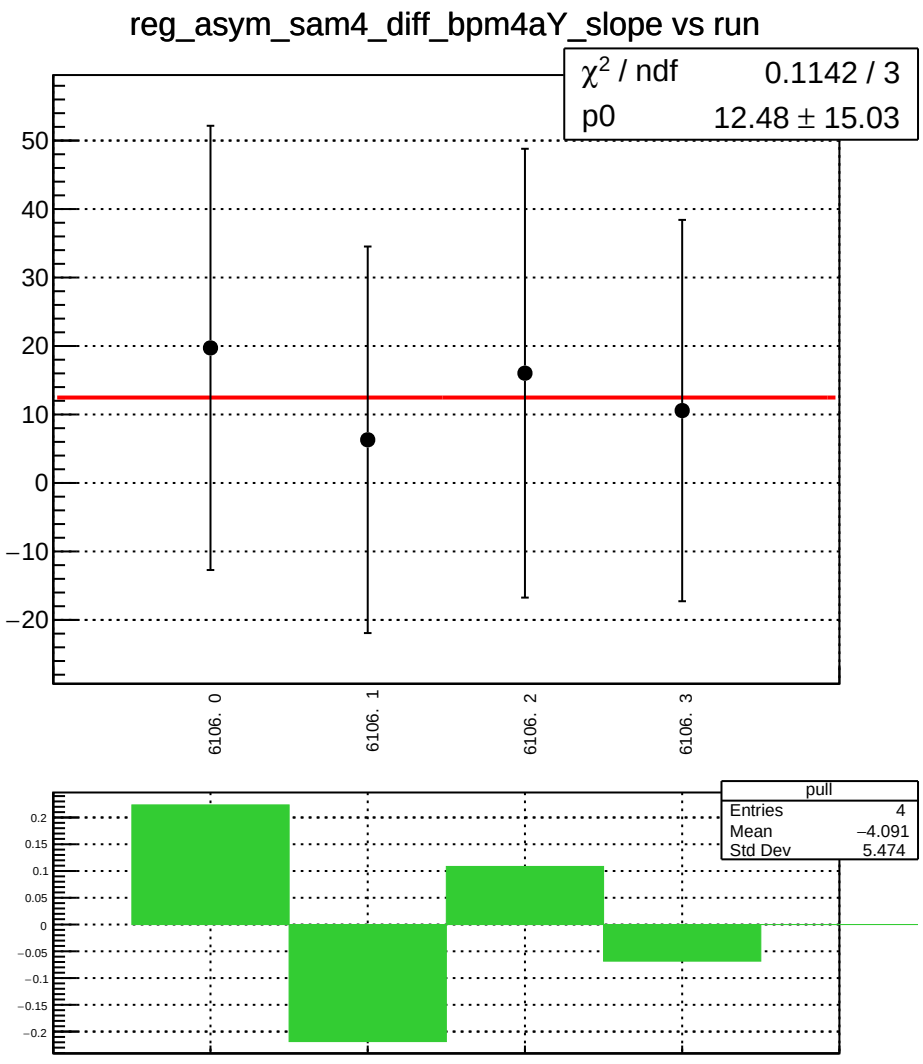

reg_asym_sam3_diff_bpm12X_slope vs run
χ² / ndf 0.002927 / 3
p0 −0.6043 ± 0.6929
1
0.5
0
−0.5
−1
−1.5
−2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −8.799
Std Dev 10.92
0.03
0.02
0.01
0
−0.01
−0.02
−0.03

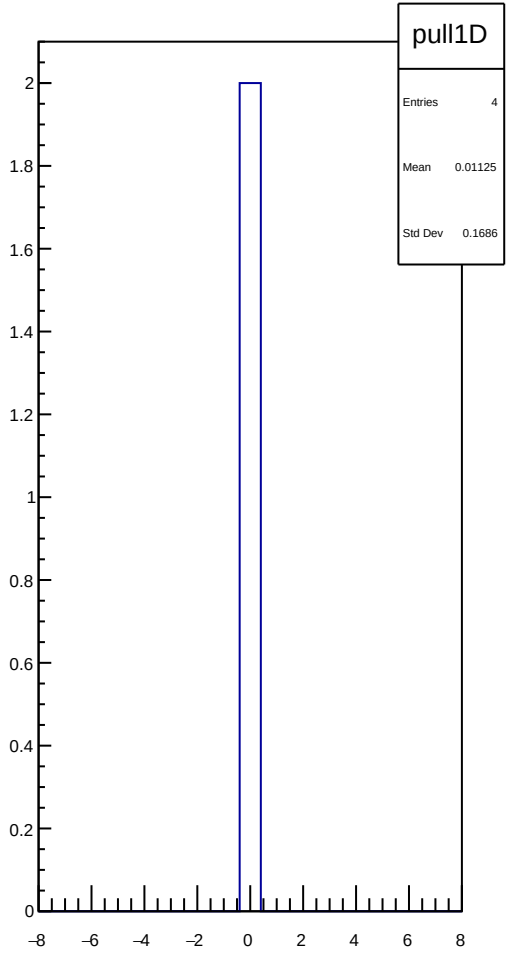

pull1D
Entries 4
Mean 0.001342
Std Dev 0.02702
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

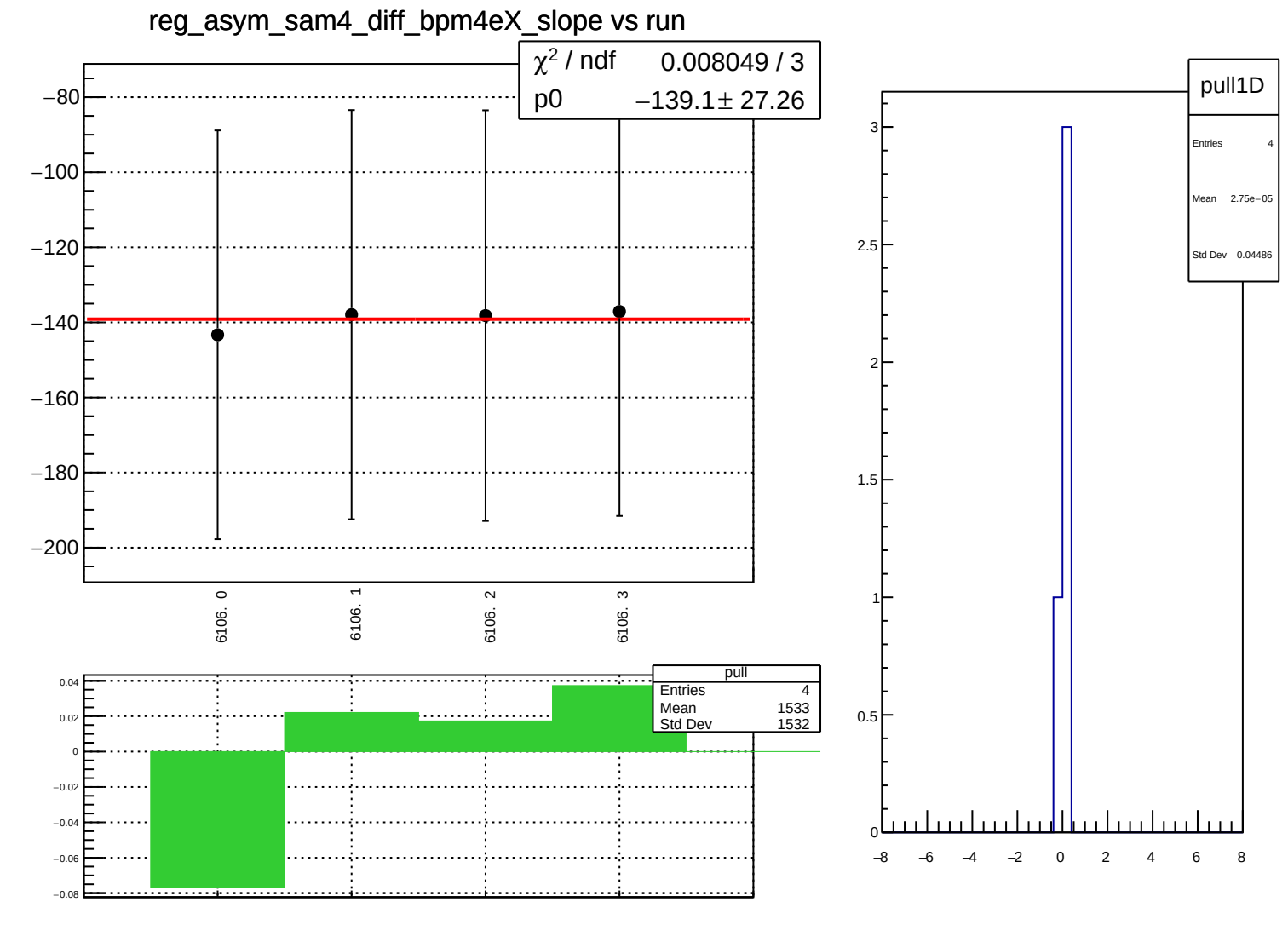

reg_asym_sam4_diff_bpm4aX_slope vs run
χ² / ndf 0.02166 / 3
p0 −77.85 ± 23.44
−20
−40
−60
−80
−100
−120
6106. 0
6106. 1
6106. 2
6106. 3

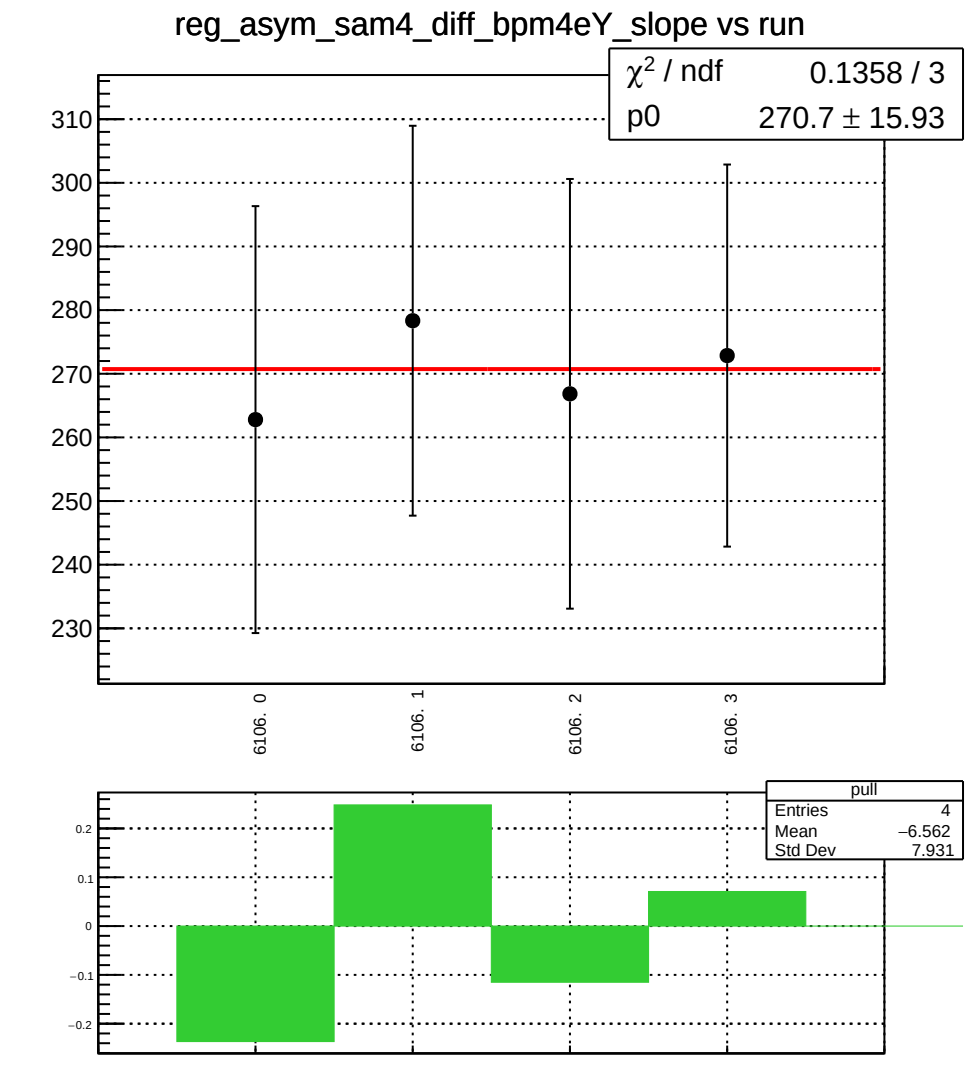

pull
Entries 4
Mean 406.8
Std Dev 405
0.12
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06

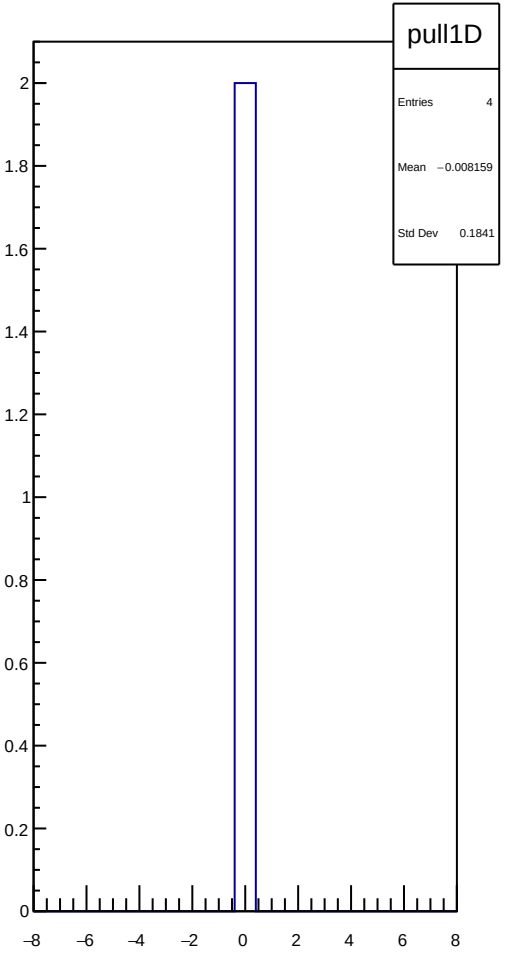

pull1D
Entries 4
Mean −0.0001405
Std Dev 0.07359
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

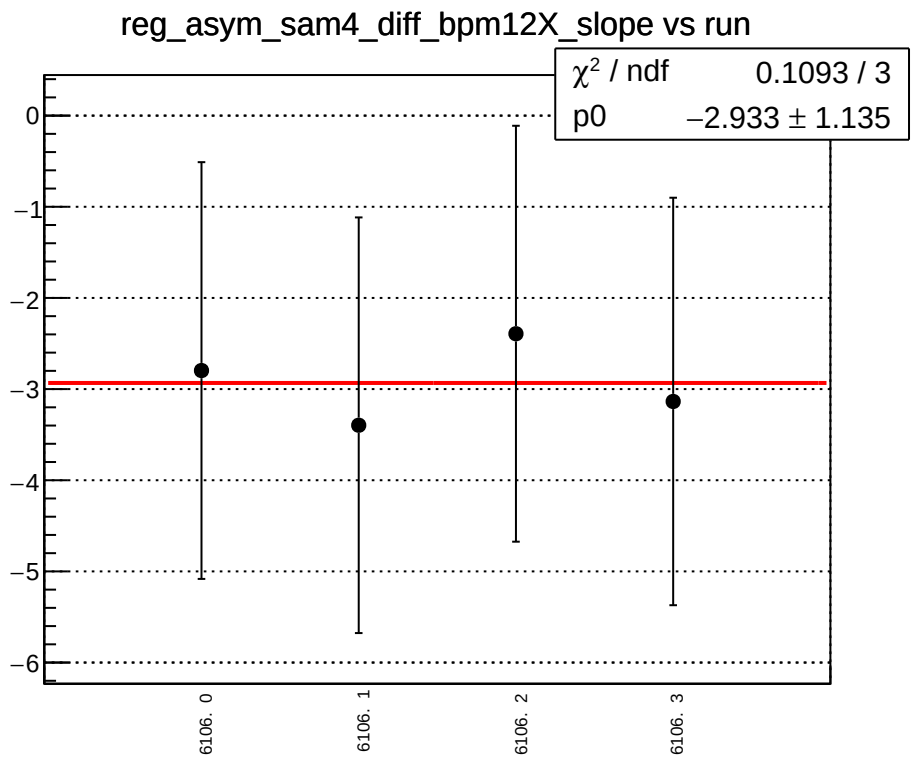

reg_asym_sam4_diff_bpm4aY_slope vs run
χ² / ndf 0.1142 / 3
p0 12.48 ± 15.03
50
40
30
20
10
0
−10
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.091
Std Dev 5.474
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

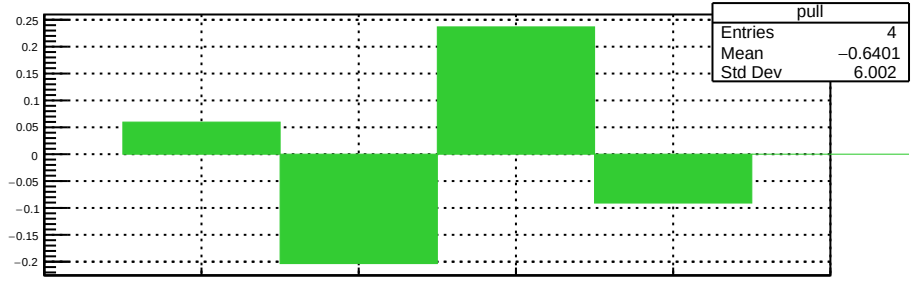

pull1D
Entries 4
Mean 0.01125
Std Dev 0.1686
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

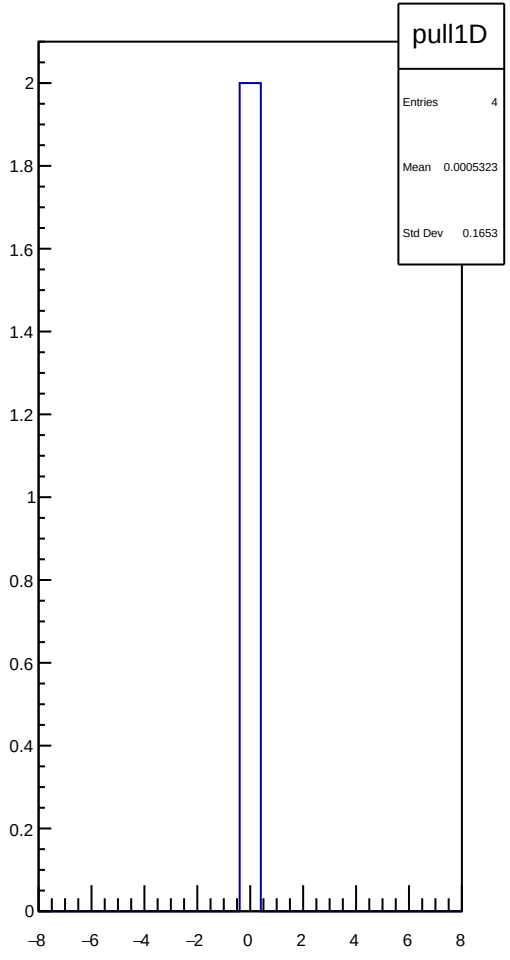

reg_asym_sam4_diff_bpm4eX_slope vs run
χ² / ndf 0.008049 / 3
p0 −139.1± 27.26
−80
−100
−120
−140
−160
−180
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 1533
Std Dev 1532
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull1D
Entries 4
Mean 2.75e−05
Std Dev 0.04486
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

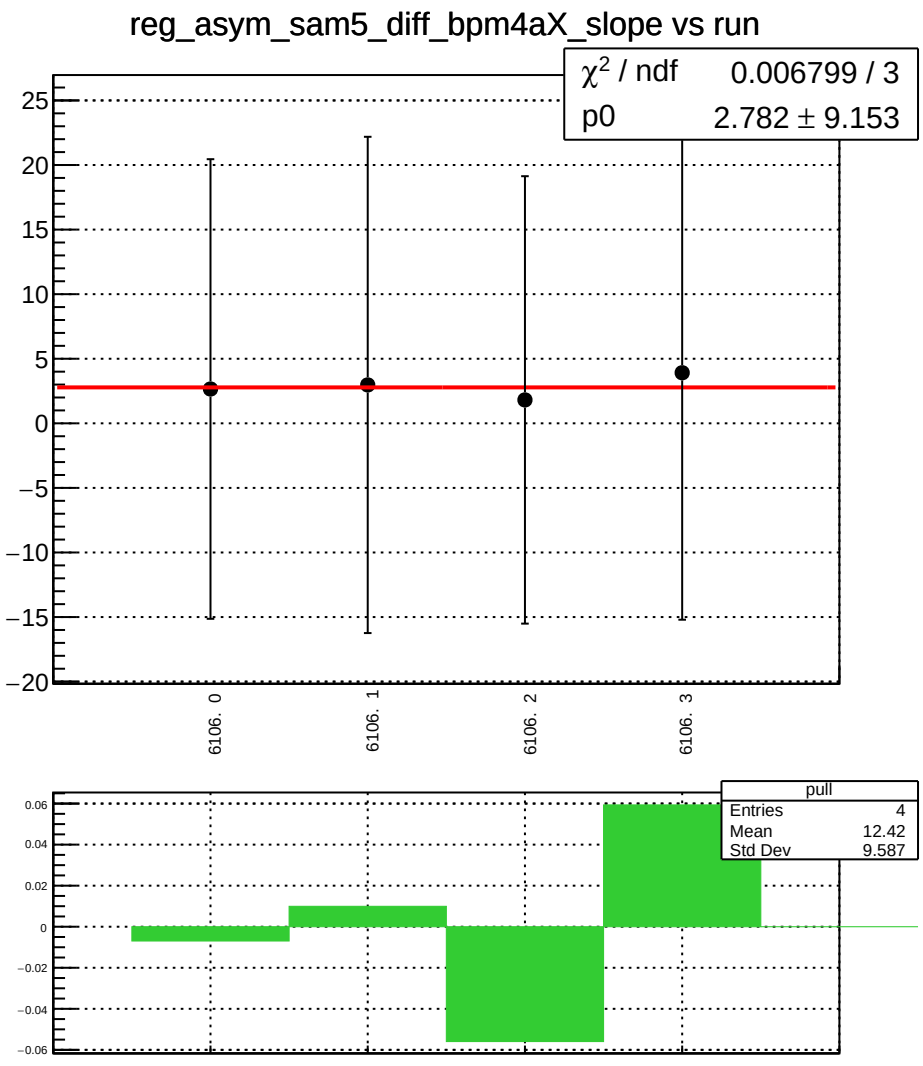

reg_asym_sam4_diff_bpm4eY_slope vs run
χ² / ndf 0.1358 / 3
p0 270.7 ± 15.93
310
300
290
280
270
260
250
240
230
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.562
Std Dev 7.931
0.2
0.1
0
−0.1
−0.2

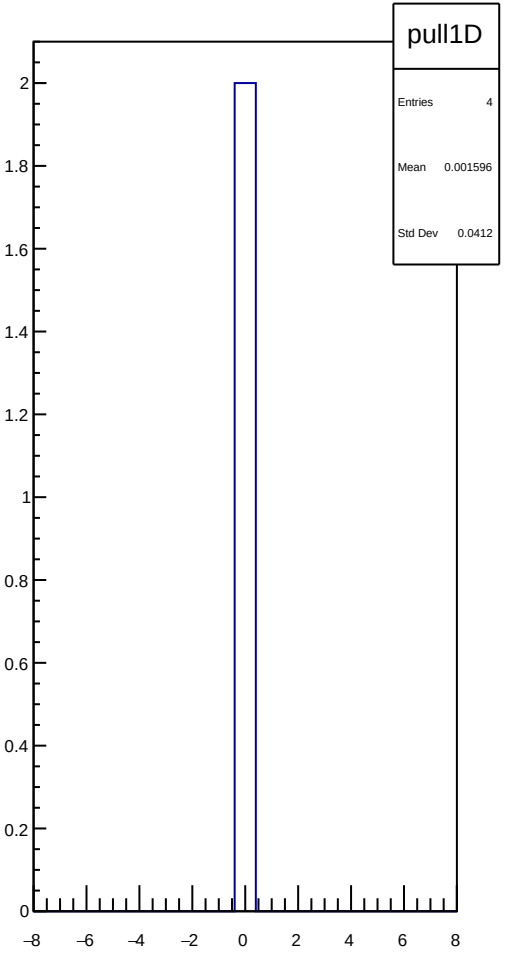

pull1D
Entries 4
Mean −0.008159
Std Dev 0.1841
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

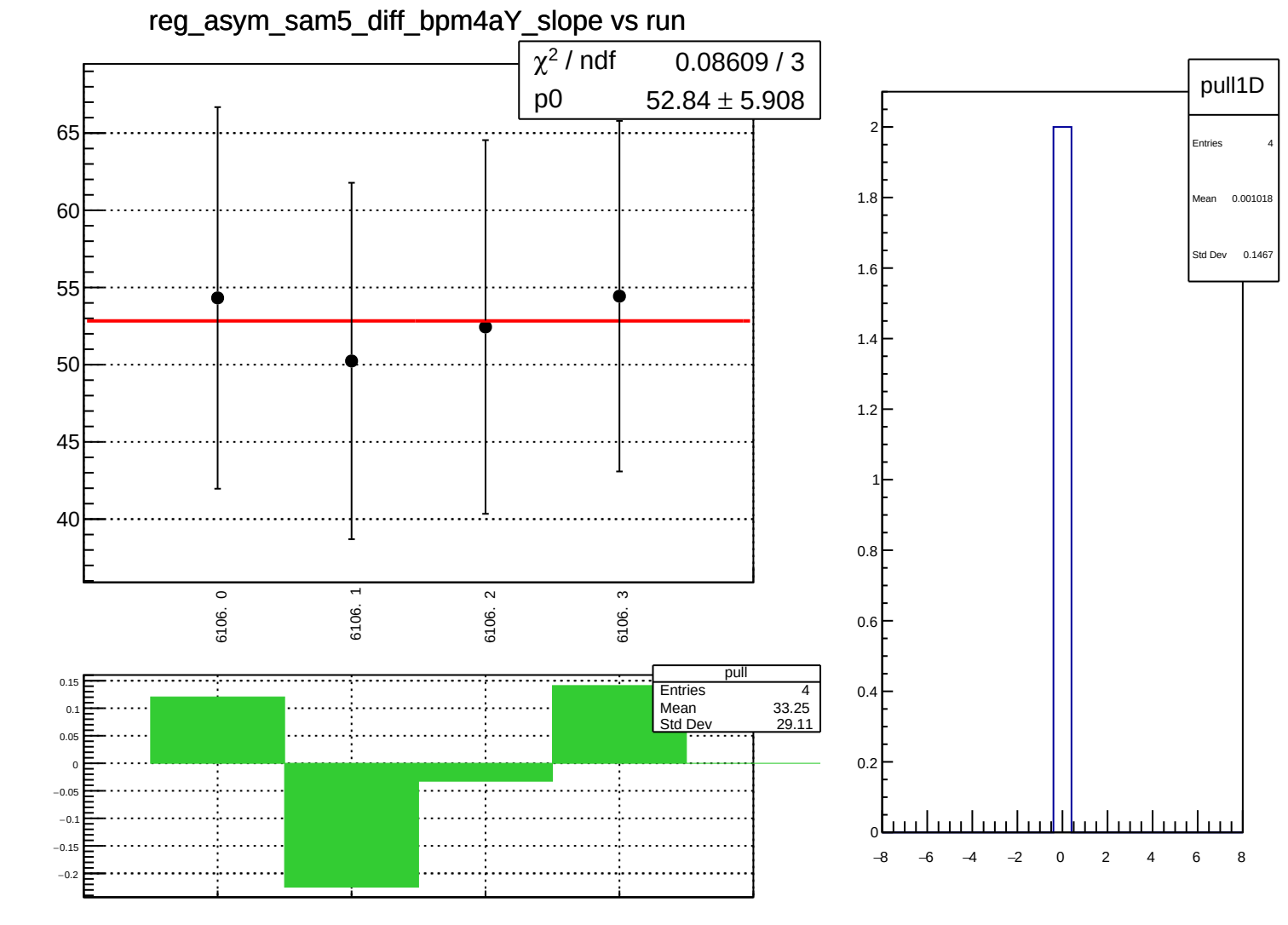

reg_asym_sam4_diff_bpm12X_slope vs run
χ² / ndf 0.1093 / 3
p0 −2.933 ± 1.135
0
−1
−2
−3
−4
−5
−6
6106. 0
6106. 1
6106. 2
6106. 3

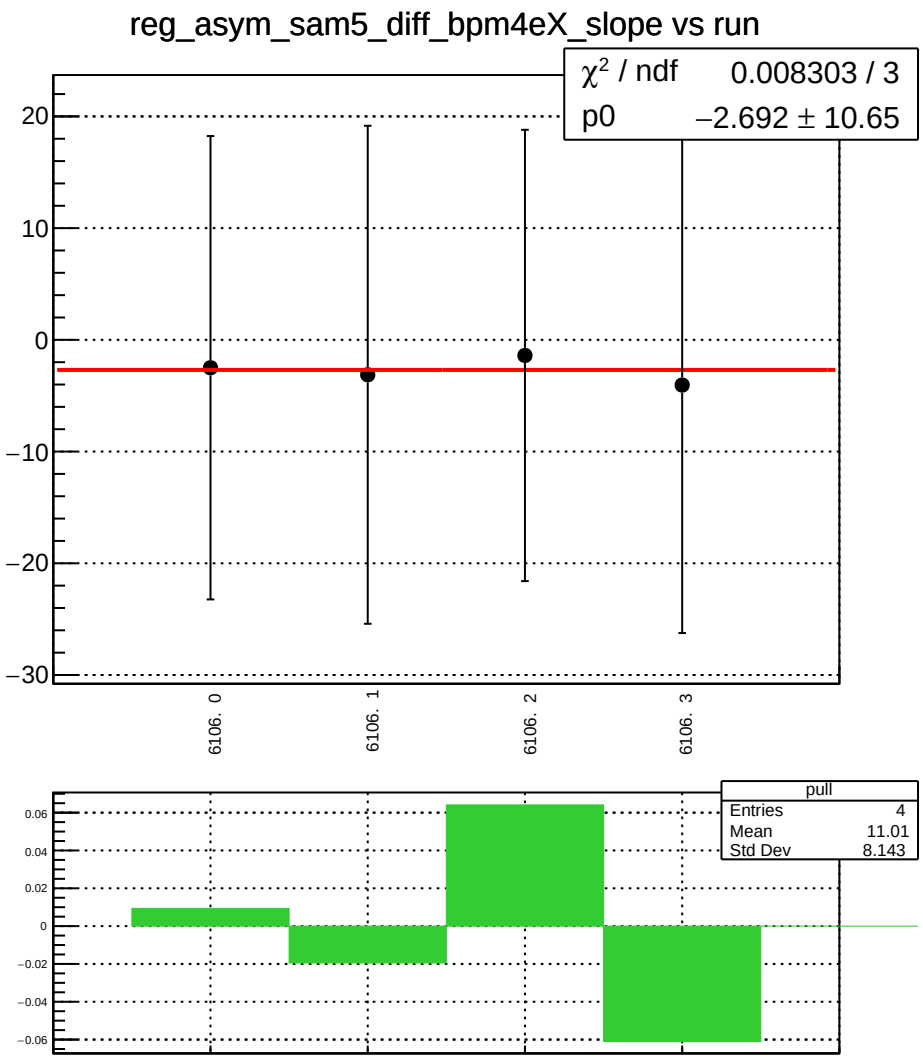

pull
Entries 4
Mean −0.6401
Std Dev 6.002
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

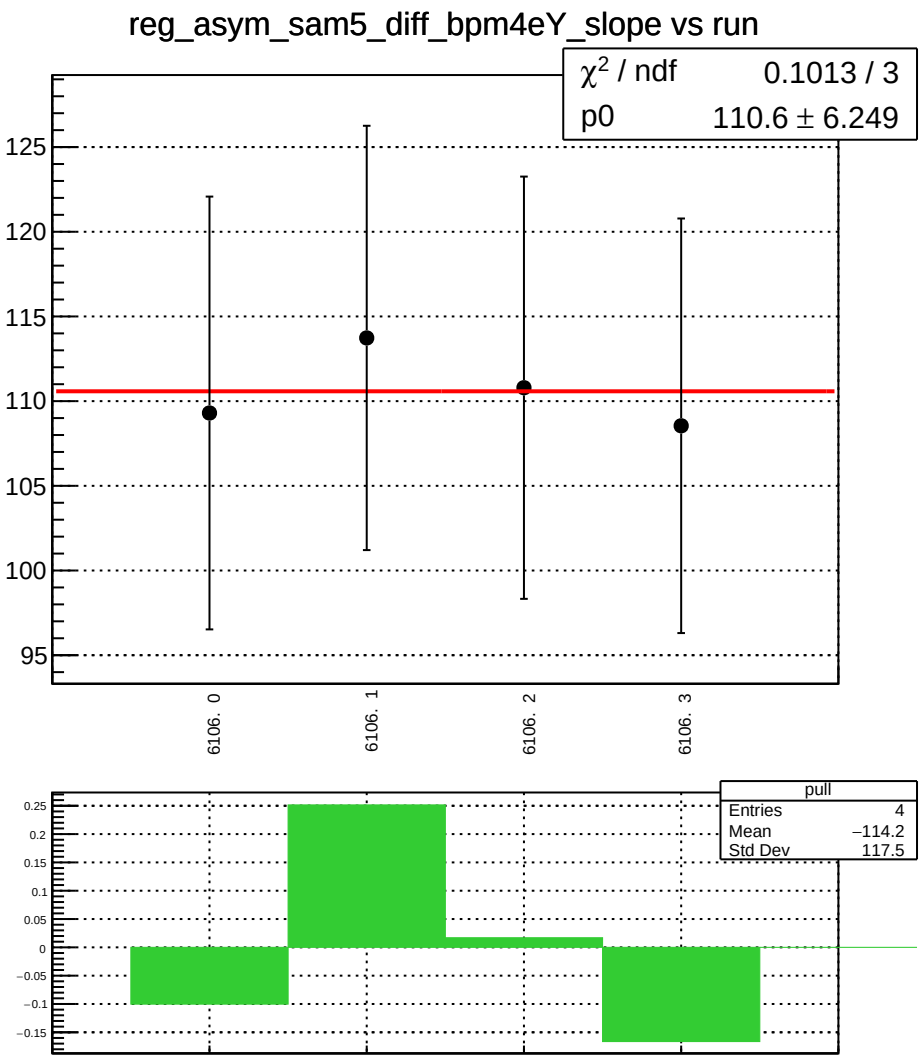

pull1D
Entries 4
Mean 0.0005323
Std Dev 0.1653
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

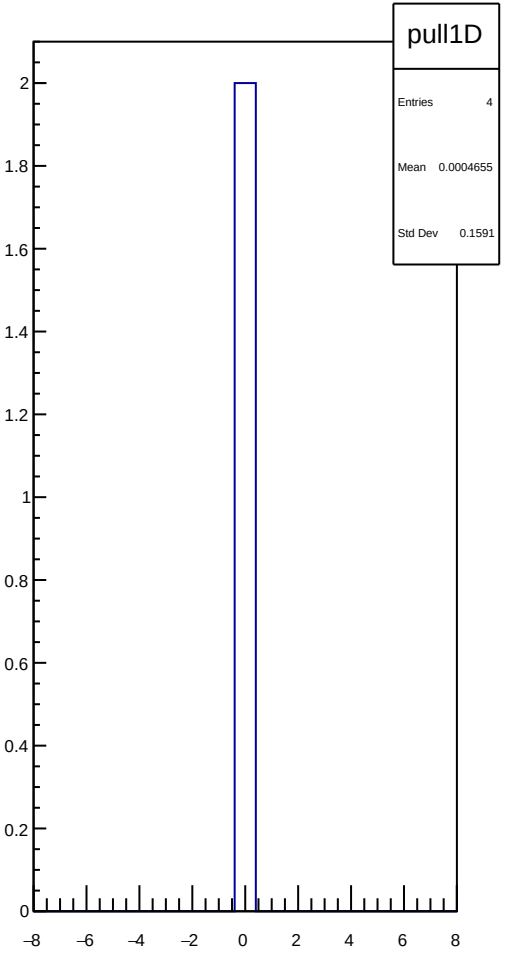

reg_asym_sam5_diff_bpm4aX_slope vs run
χ² / ndf 0.006799 / 3
p0 2.782 ± 9.153
25
20
15
10
5
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.42
Std Dev 9.587
0.06
0.04
0.02
0
−0.02
−0.04
−0.06

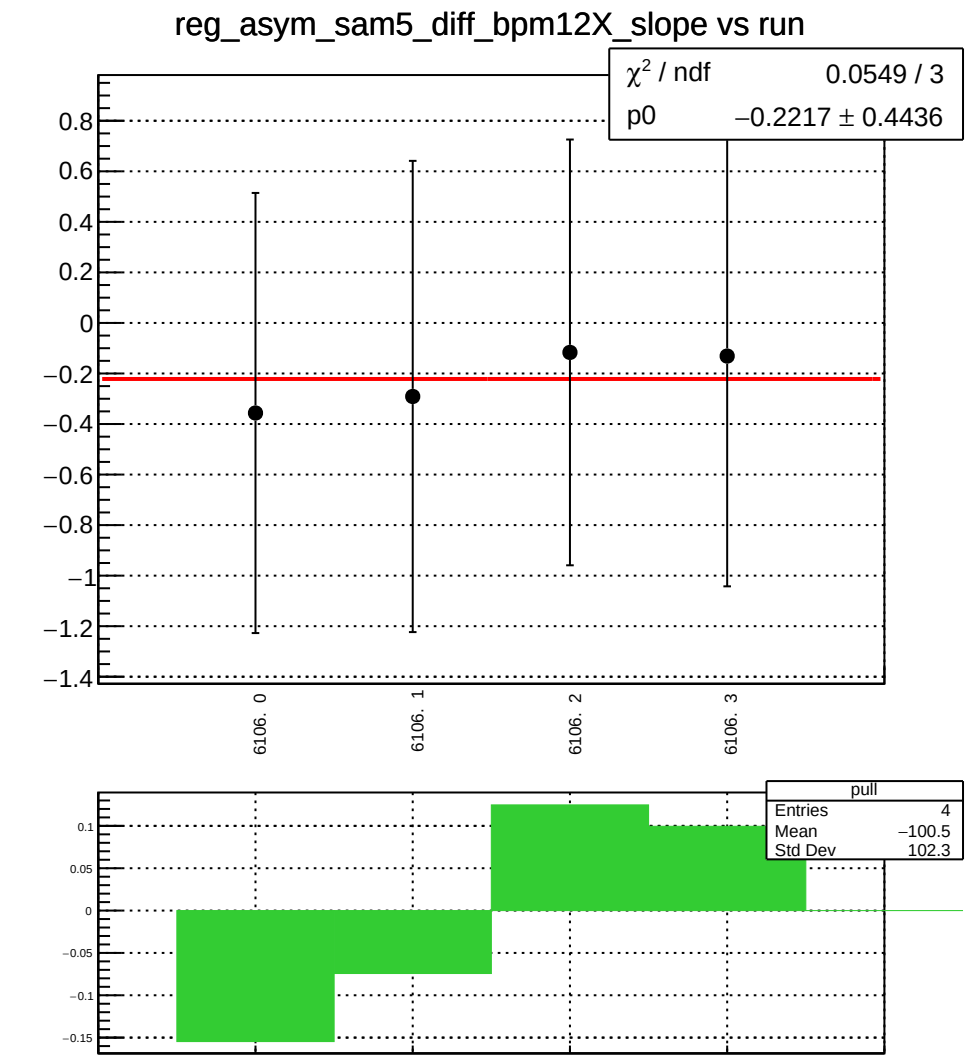

pull1D
Entries 4
Mean 0.001596
Std Dev 0.0412
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

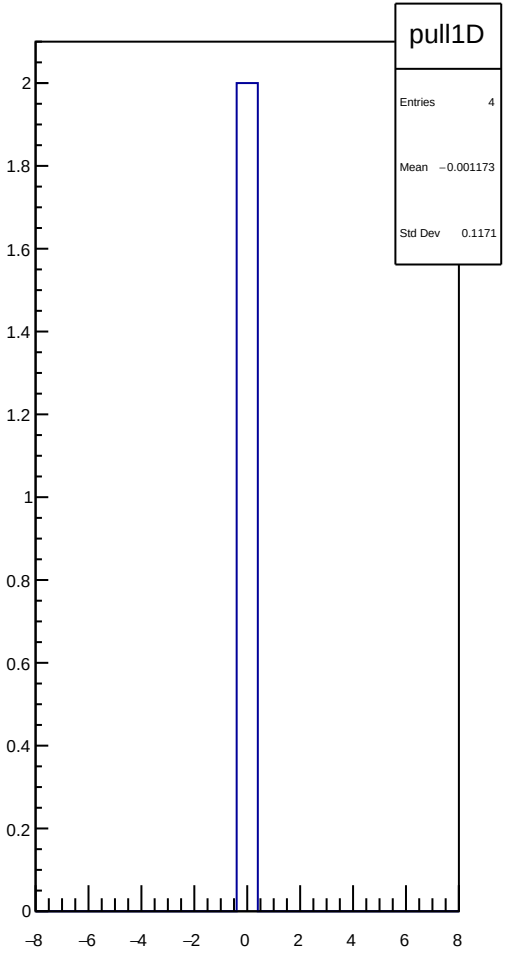

reg_asym_sam5_diff_bpm4aY_slope vs run
χ² / ndf 0.08609 / 3
p0 52.84 ± 5.908
65
60
55
50
45
40
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 33.25
Std Dev 29.11
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
pull1D
Entries 4
Mean 0.001018
Std Dev 0.1467
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

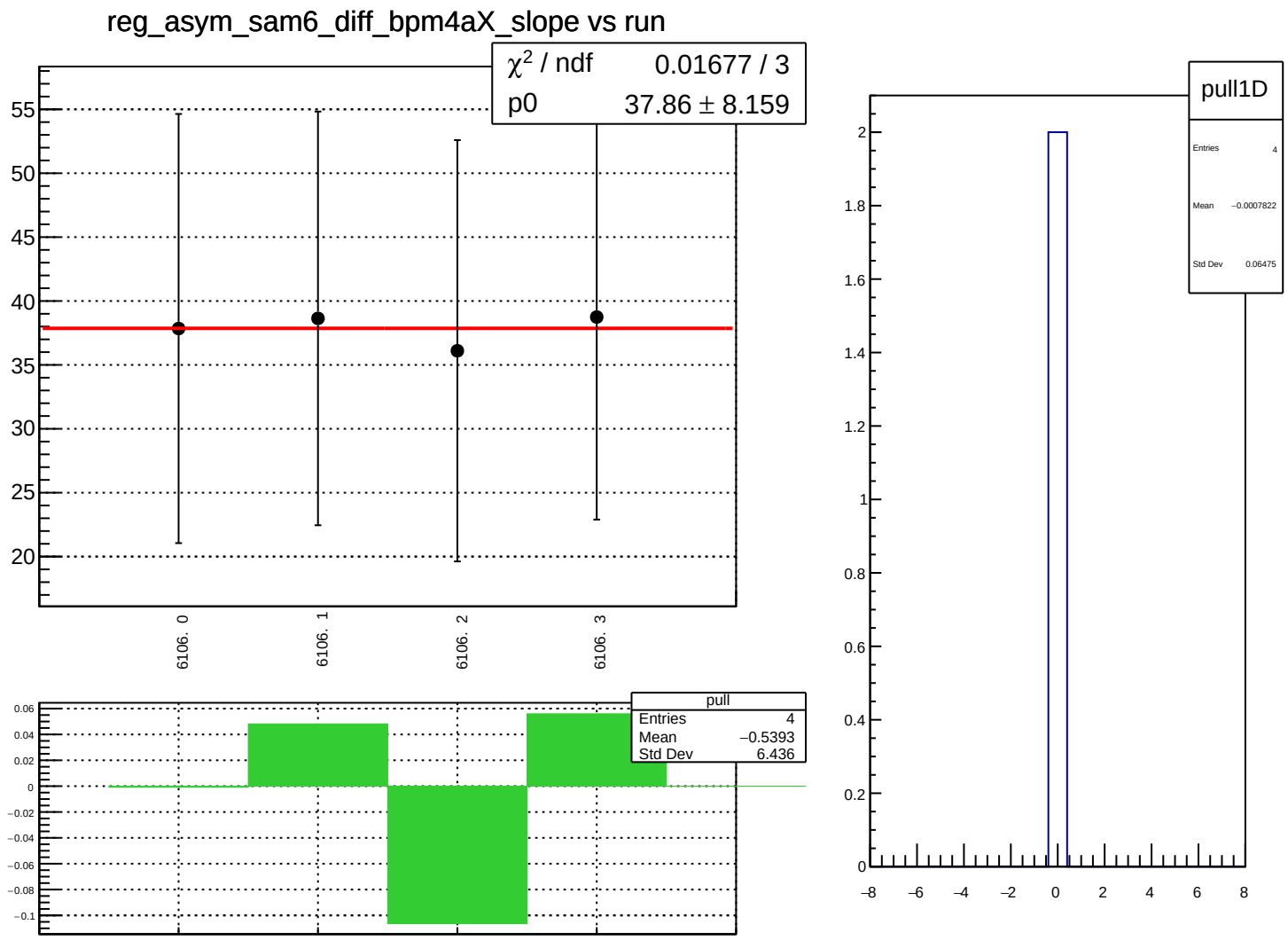

reg_asym_sam5_diff_bpm4eX_slope vs run
χ² / ndf 0.008303 / 3
p0 −2.692 ± 10.65
20
10
0
−10
−20
−30
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 11.01
Std Dev 8.143
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
pull1D
Entries 4
Mean −0.001772
Std Dev 0.04553
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

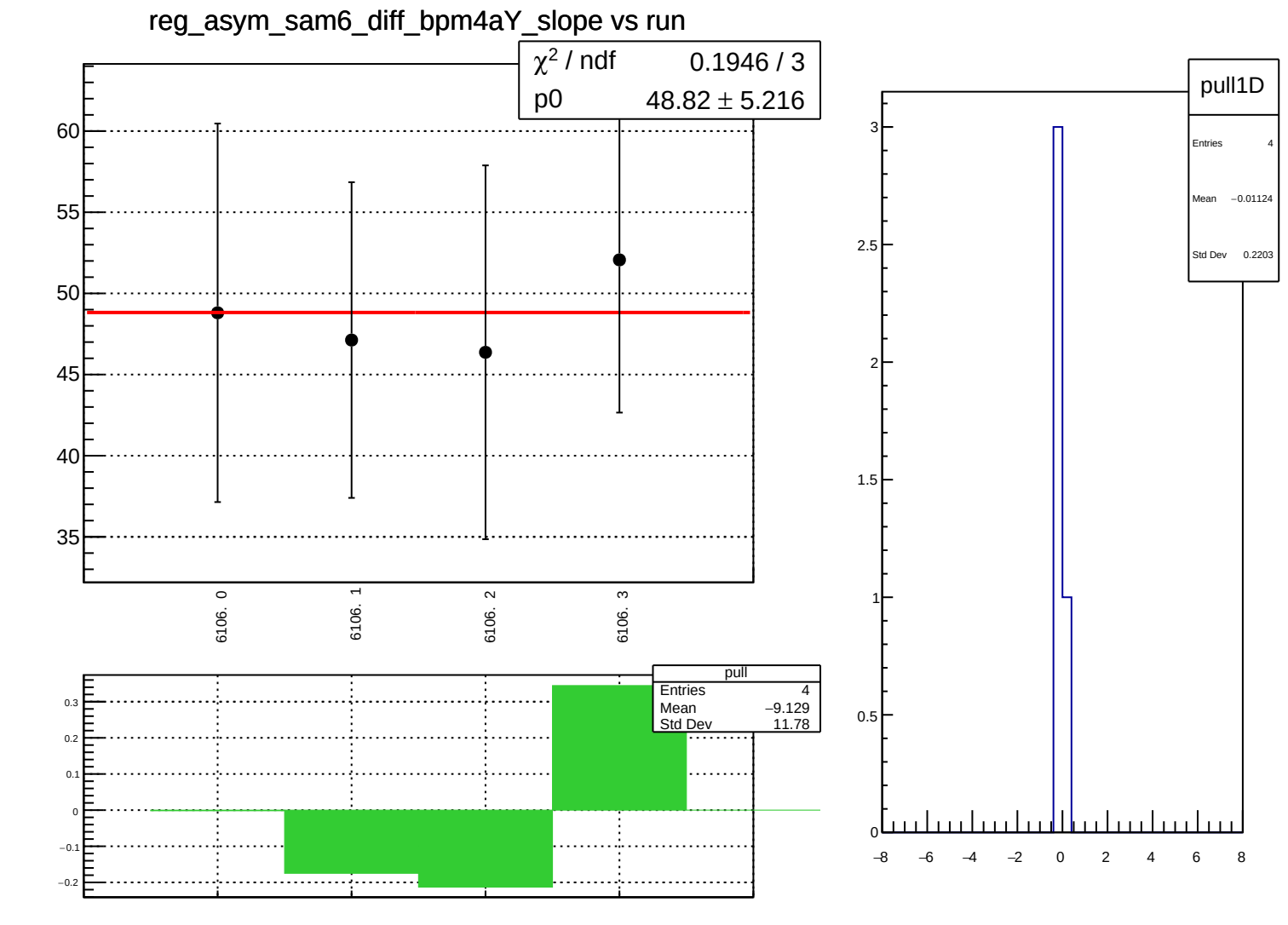

reg_asym_sam5_diff_bpm4eY_slope vs run
χ² / ndf 0.1013 / 3
p0 110.6 ± 6.249
125
120
115
110
105
100
95
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −114.2
Std Dev 117.5
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

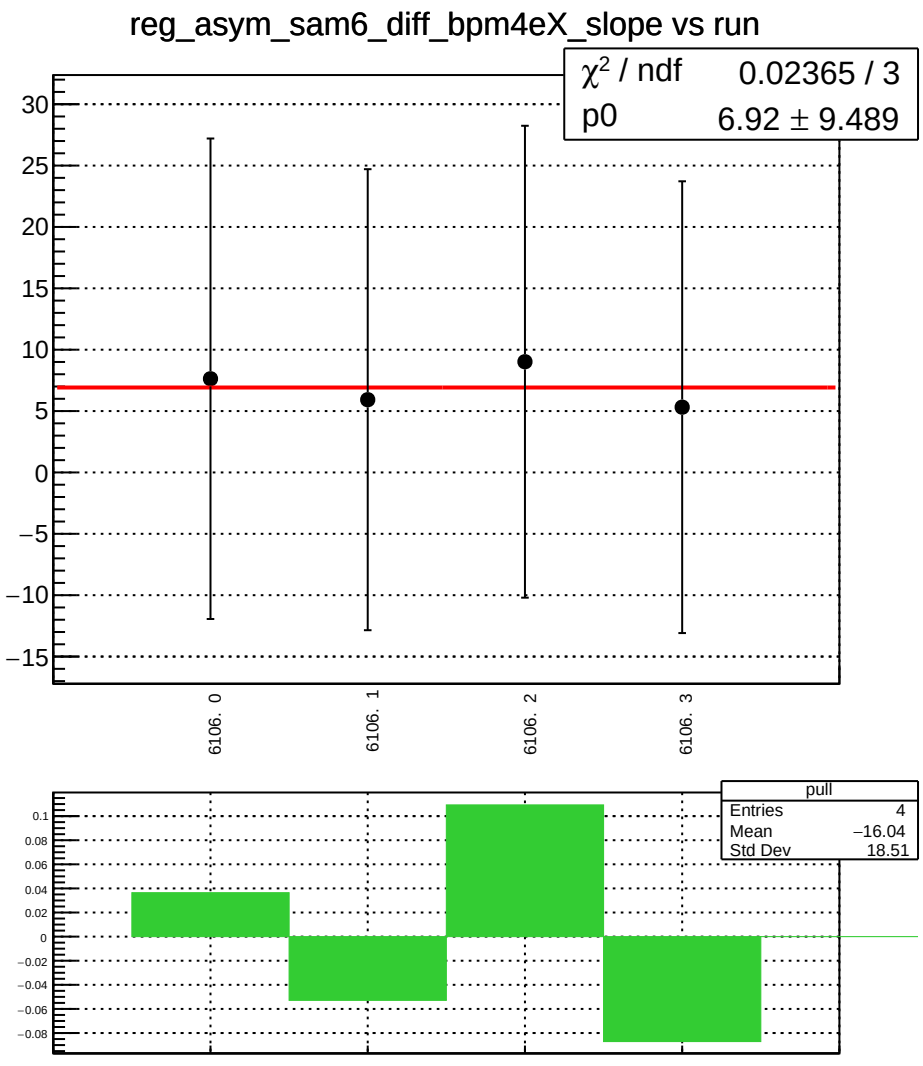

pull1D
Entries 4
Mean 0.0004655
Std Dev 0.1591
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

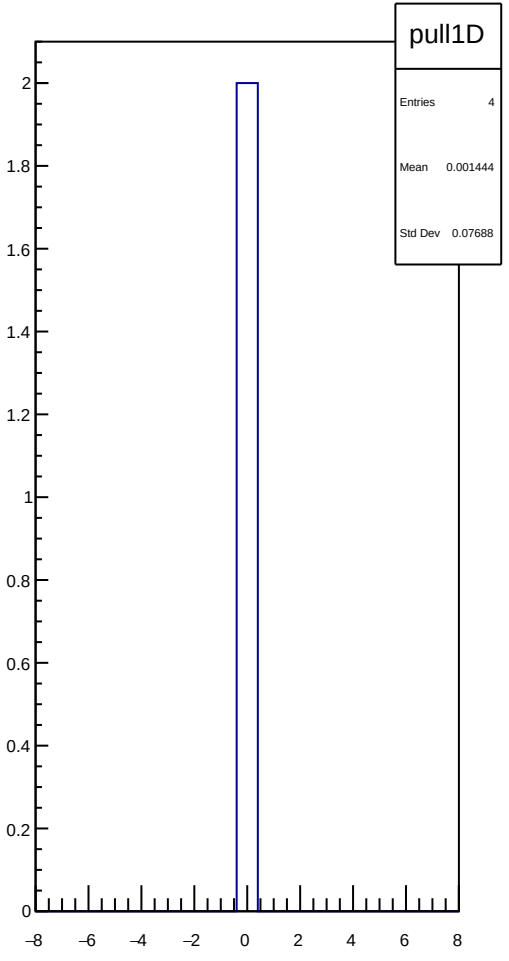

reg_asym_sam5_diff_bpm12X_slope vs run
χ² / ndf 0.0549 / 3
p0 −0.2217 ± 0.4436
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −100.5
Std Dev 102.3
0.1
0.05
0
−0.05
−0.1
−0.15

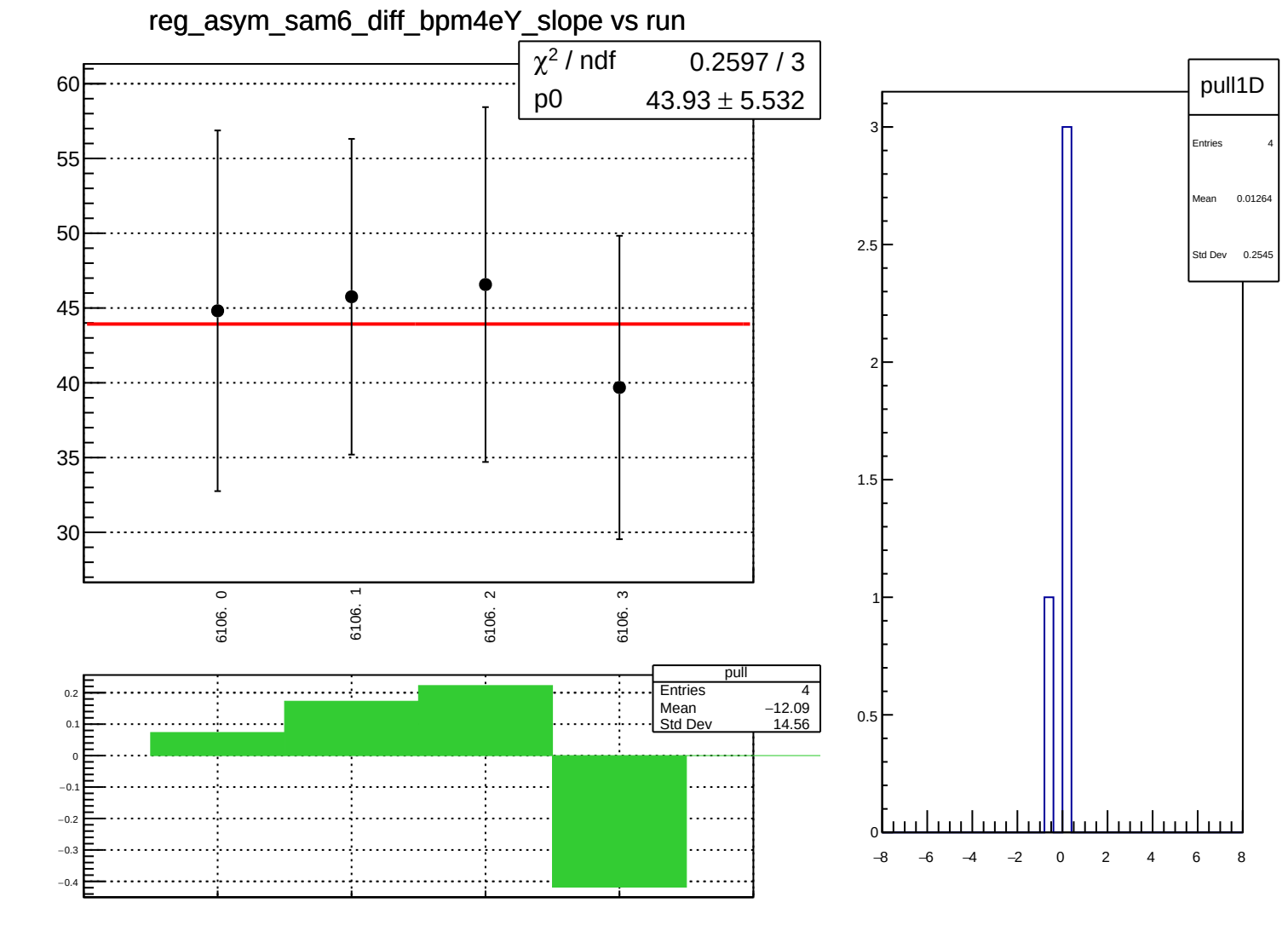

pull1D
Entries 4
Mean −0.001173
Std Dev 0.1171
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

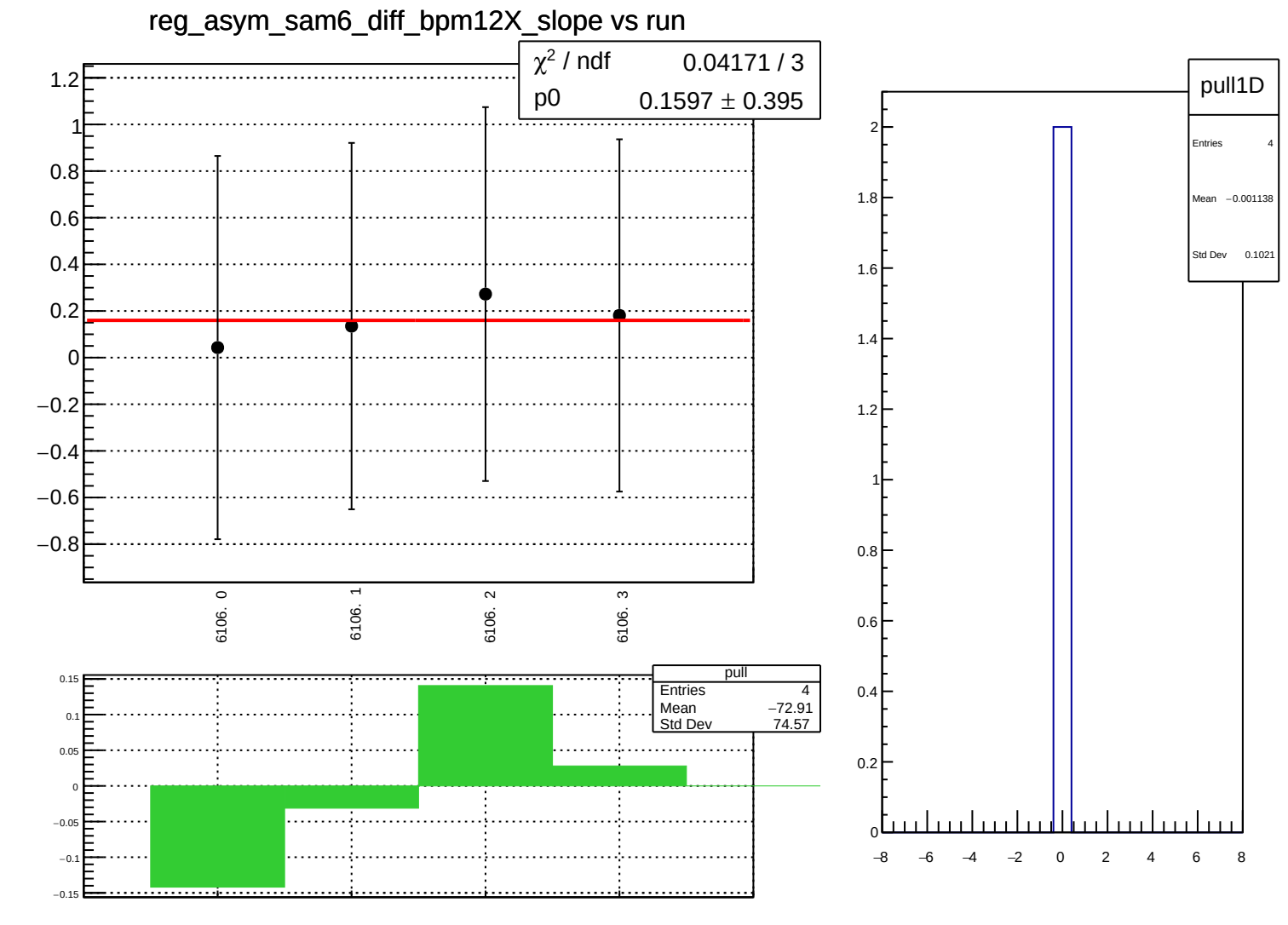

reg_asym_sam6_diff_bpm4aX_slope vs run
χ² / ndf 0.01677 / 3
p0 37.86 ± 8.159
55
50
45
40
35
30
25
20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −0.5393
Std Dev 6.436
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
pull1D
Entries 4
Mean −0.0007822
Std Dev 0.06475
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

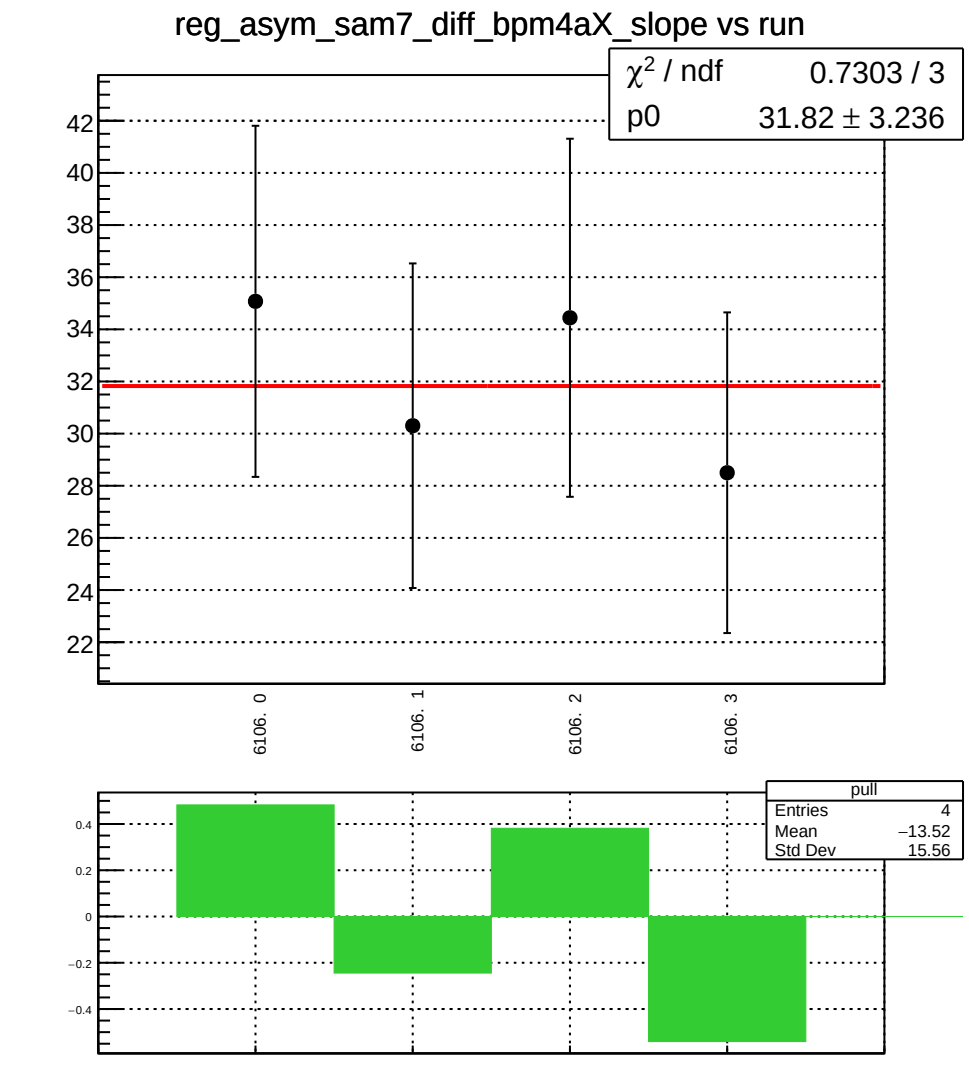

reg_asym_sam6_diff_bpm4aY_slope vs run
χ² / ndf 0.1946 / 3
p0 48.82 ± 5.216
60
55
50
45
40
35
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.129
Std Dev 11.78
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean −0.01124
Std Dev 0.2203
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

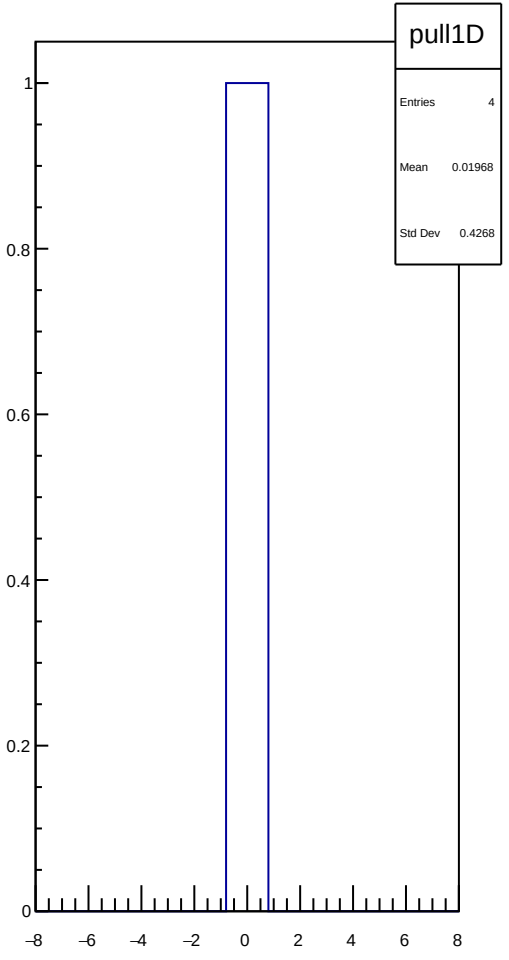

reg_asym_sam6_diff_bpm4eX_slope vs run
χ² / ndf 0.02365 / 3
p0 6.92 ± 9.489
30
25
20
15
10
5
0
−5
−10
−15
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −16.04
Std Dev 18.51
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08

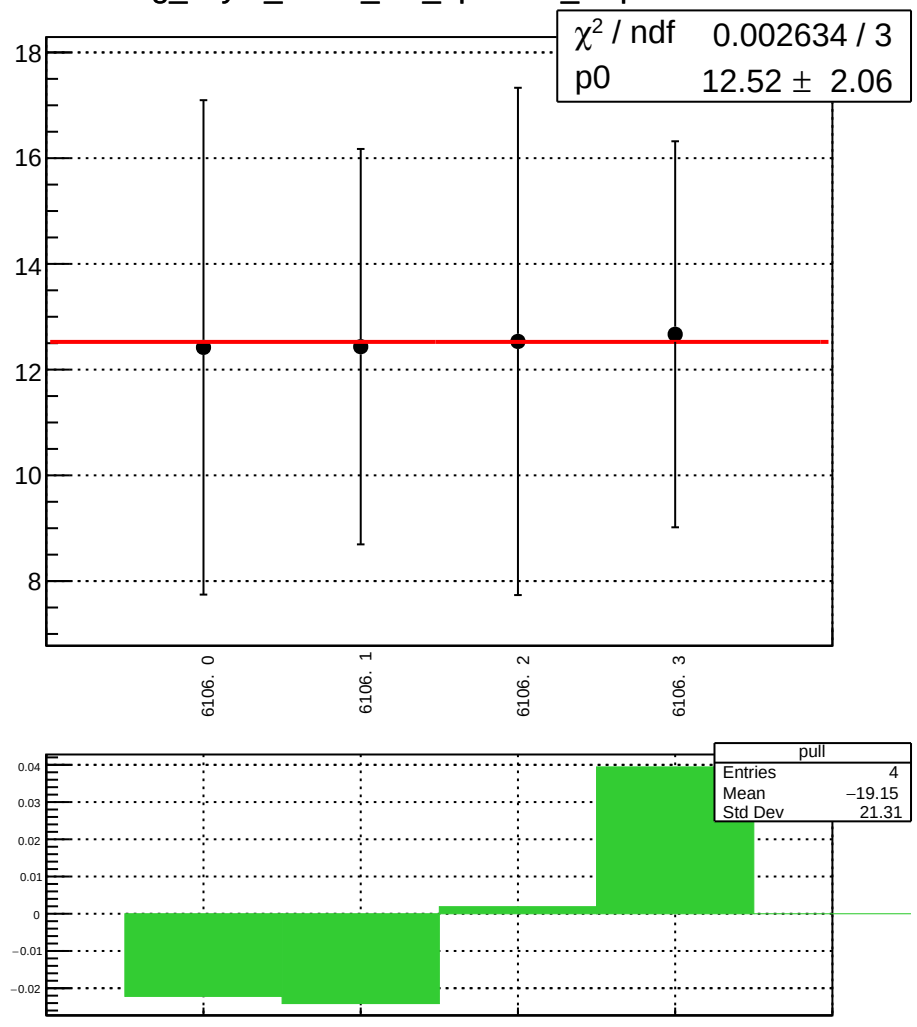

pull1D
Entries 4
Mean 0.001444
Std Dev 0.07688
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

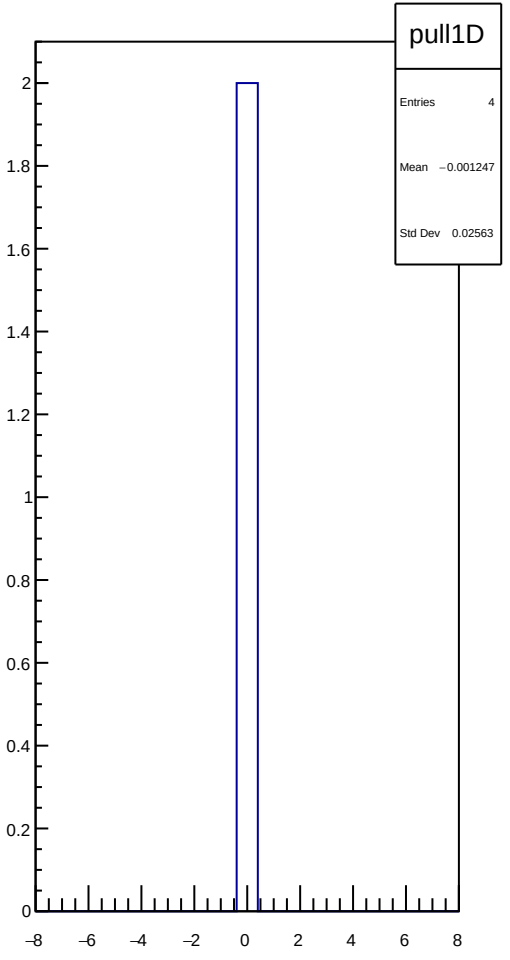

reg_asym_sam6_diff_bpm4eY_slope vs run
χ² / ndf 0.2597 / 3
p0 43.93 ± 5.532
60
55
50
45
40
35
30
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −12.09
Std Dev 14.56
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
pull1D
Entries 4
Mean 0.01264
Std Dev 0.2545
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

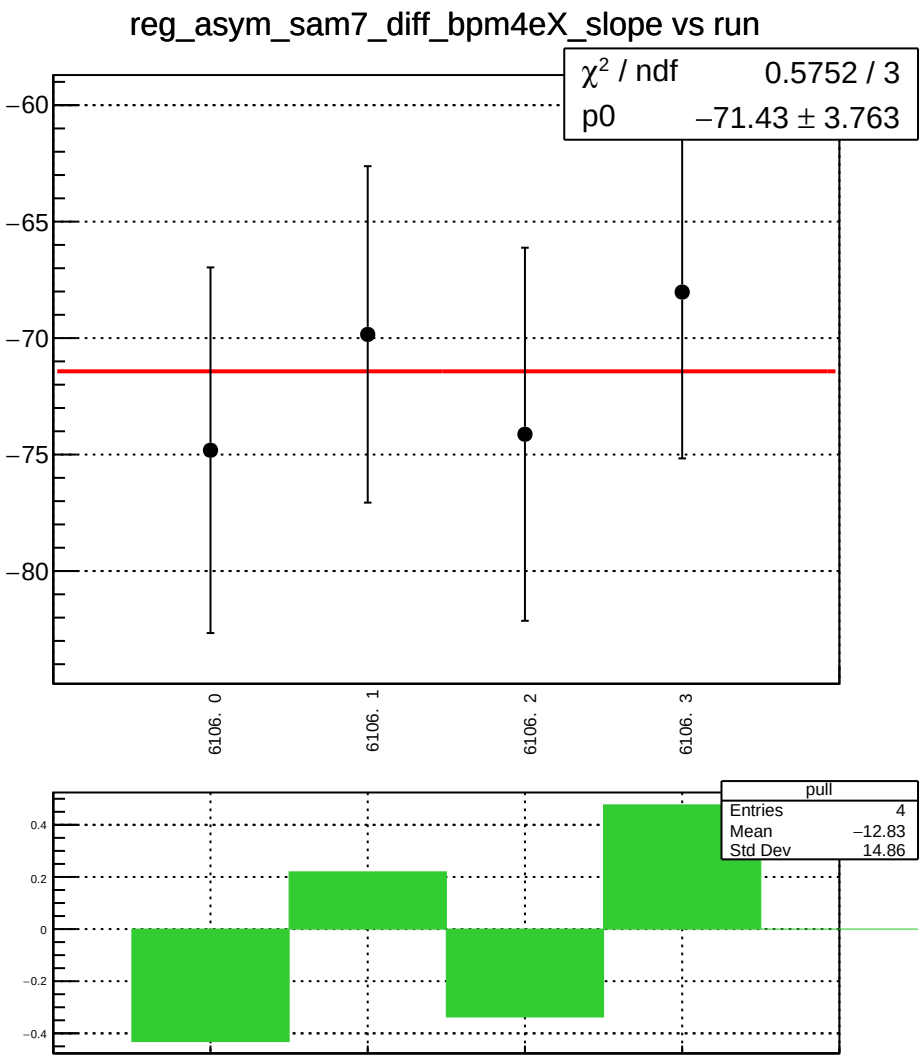

reg_asym_sam6_diff_bpm12X_slope vs run
χ² / ndf 0.04171 / 3
p0 0.1597 ± 0.395
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −72.91
Std Dev 74.57
pull1D
Entries 4
Mean −0.001138
Std Dev 0.1021

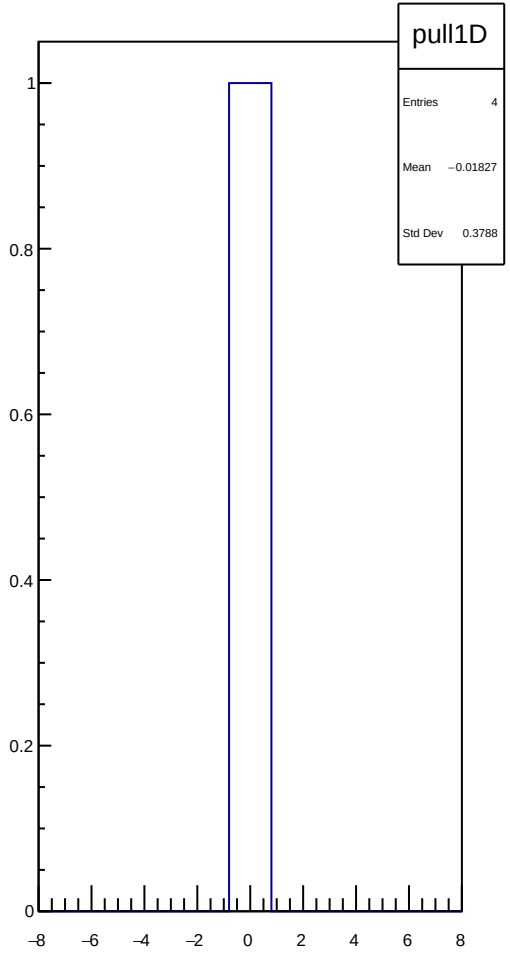

reg_asym_sam7_diff_bpm4aX_slope vs run
χ² / ndf 0.7303 / 3
p0 31.82 ± 3.236
42
40
38
36
34
32
30
28
26
24
22
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −13.52
Std Dev 15.56
0.4
0.2
0
−0.2
−0.4

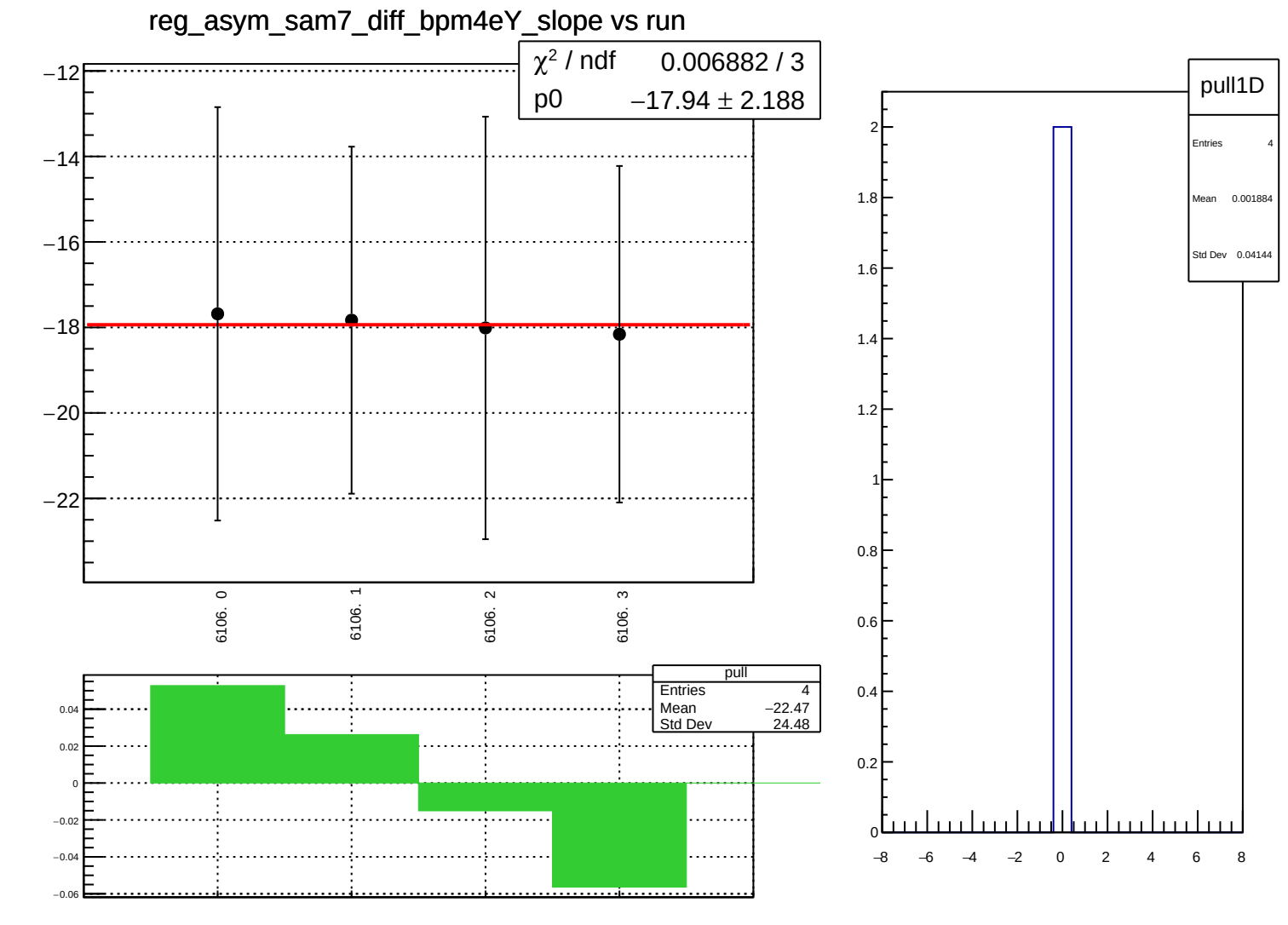

pull1D
Entries 4
Mean 0.01968
Std Dev 0.4268
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

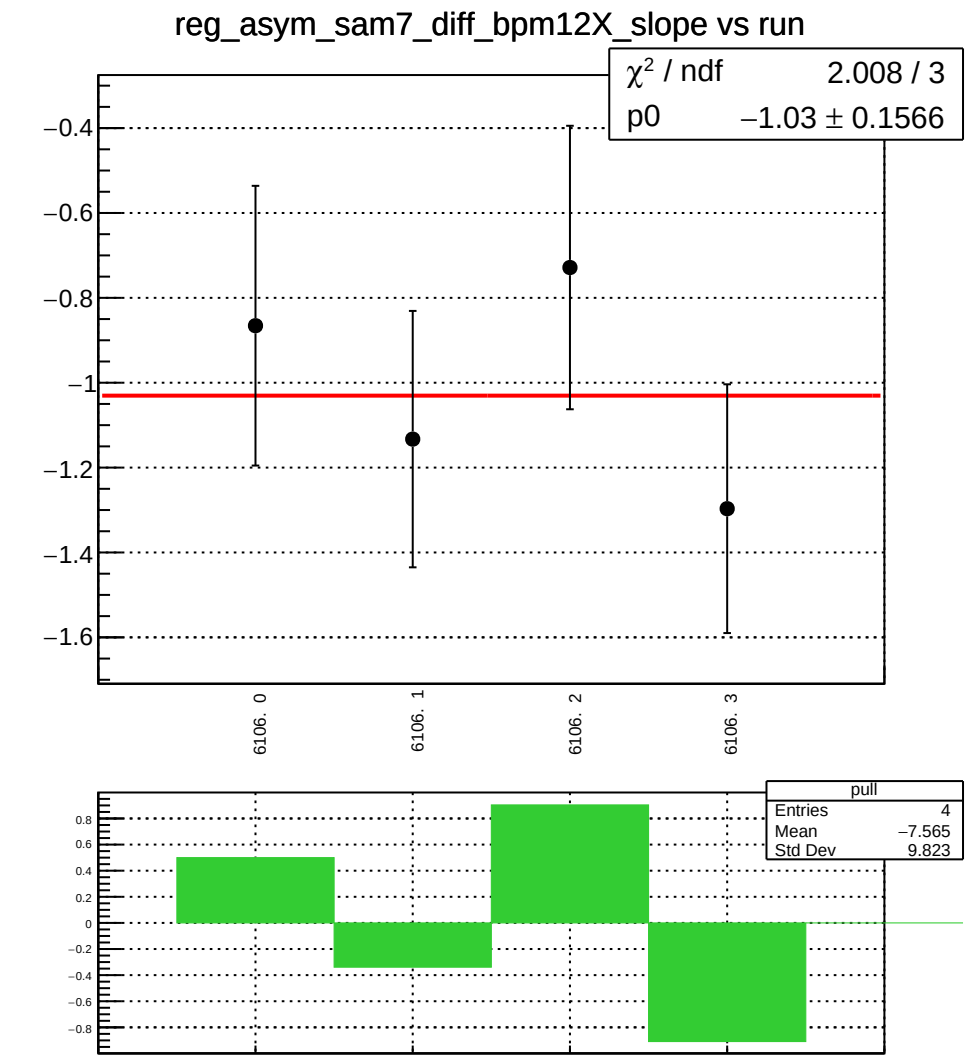

reg_asym_sam7_diff_bpm4aY_slope vs run
χ² / ndf 0.002634 / 3
p0 12.52 ± 2.06
18
16
14
12
10
8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −19.15
Std Dev 21.31
0.04
0.03
0.02
0.01
0
−0.01
−0.02

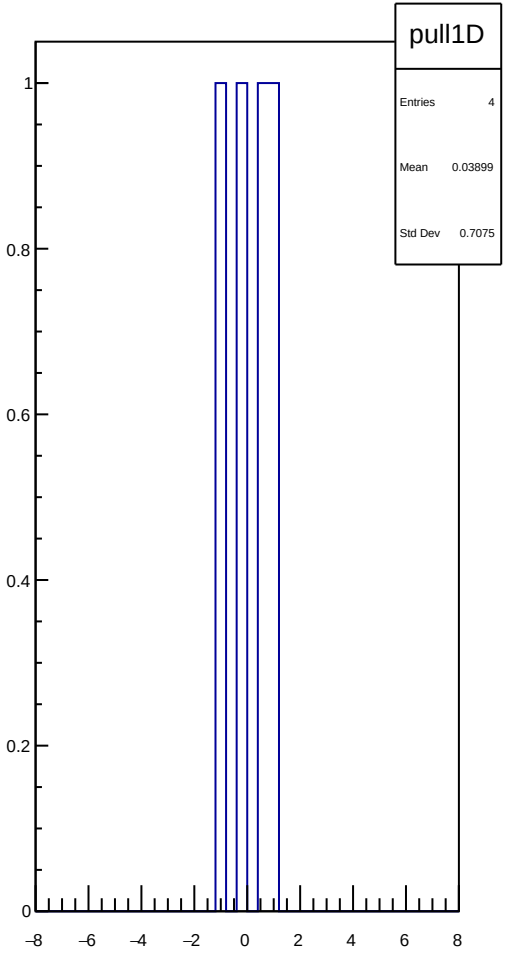

pull1D
Entries 4
Mean −0.001247
Std Dev 0.02563
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

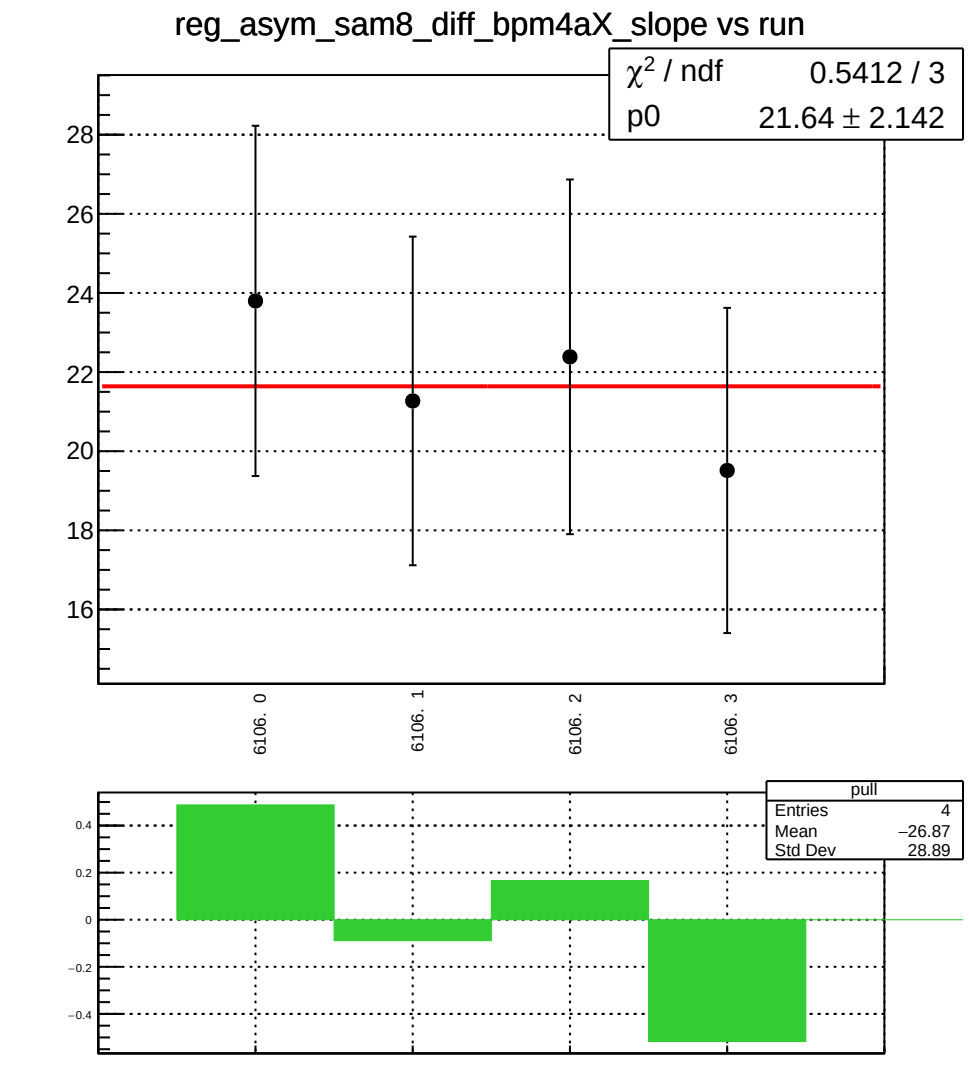

reg_asym_sam7_diff_bpm4eX_slope vs run
χ² / ndf 0.5752 / 3
p0 −71.43 ± 3.763
−60
−65
−70
−75
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −12.83
Std Dev 14.86
0.4
0.2
0
−0.2
−0.4

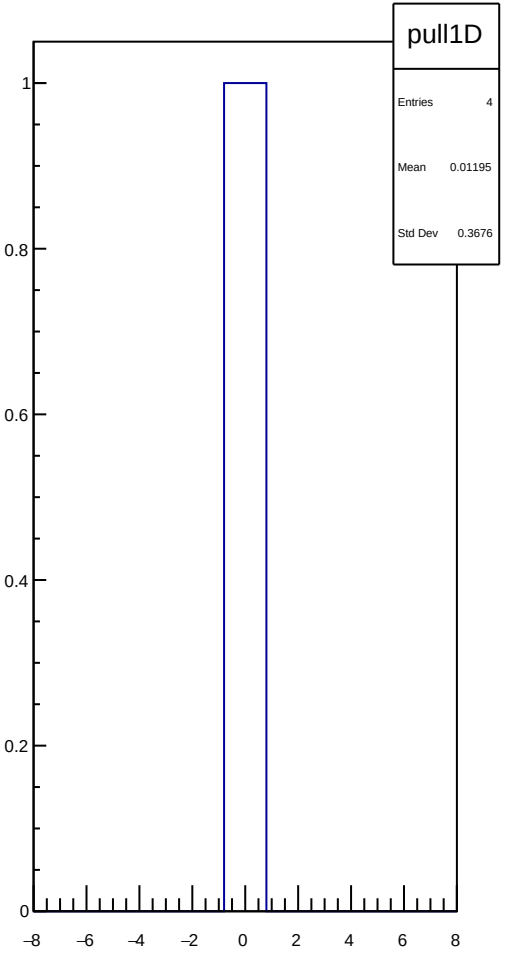

pull1D
Entries 4
Mean −0.01827
Std Dev 0.3788
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_sam7_diff_bpm4eY_slope vs run
χ² / ndf 0.006882 / 3
p0 −17.94 ± 2.188
−12
−14
−16
−18
−20
−22
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −22.47
Std Dev 24.48
0.04
0.02
0
−0.02
−0.04
−0.06
pull1D
Entries 4
Mean 0.001884
Std Dev 0.04144
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_sam7_diff_bpm12X_slope vs run
χ² / ndf 2.008 / 3
p0 −1.03 ± 0.1566
−0.4
−0.6
−0.8
−1
−1.2
−1.4
−1.6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −7.565
Std Dev 9.823
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8


pull1D
Entries 4
Mean 0.03899
Std Dev 0.7075
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8


reg_asym_sam8_diff_bpm4aX_slope vs run
χ² / ndf 0.5412 / 3
p0 21.64 ± 2.142
28
26
24
22
20
18
16
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −26.87
Std Dev 28.89
0.4
0.2
0
−0.2
−0.4


pull1D
Entries 4
Mean 0.01195
Std Dev 0.3676
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
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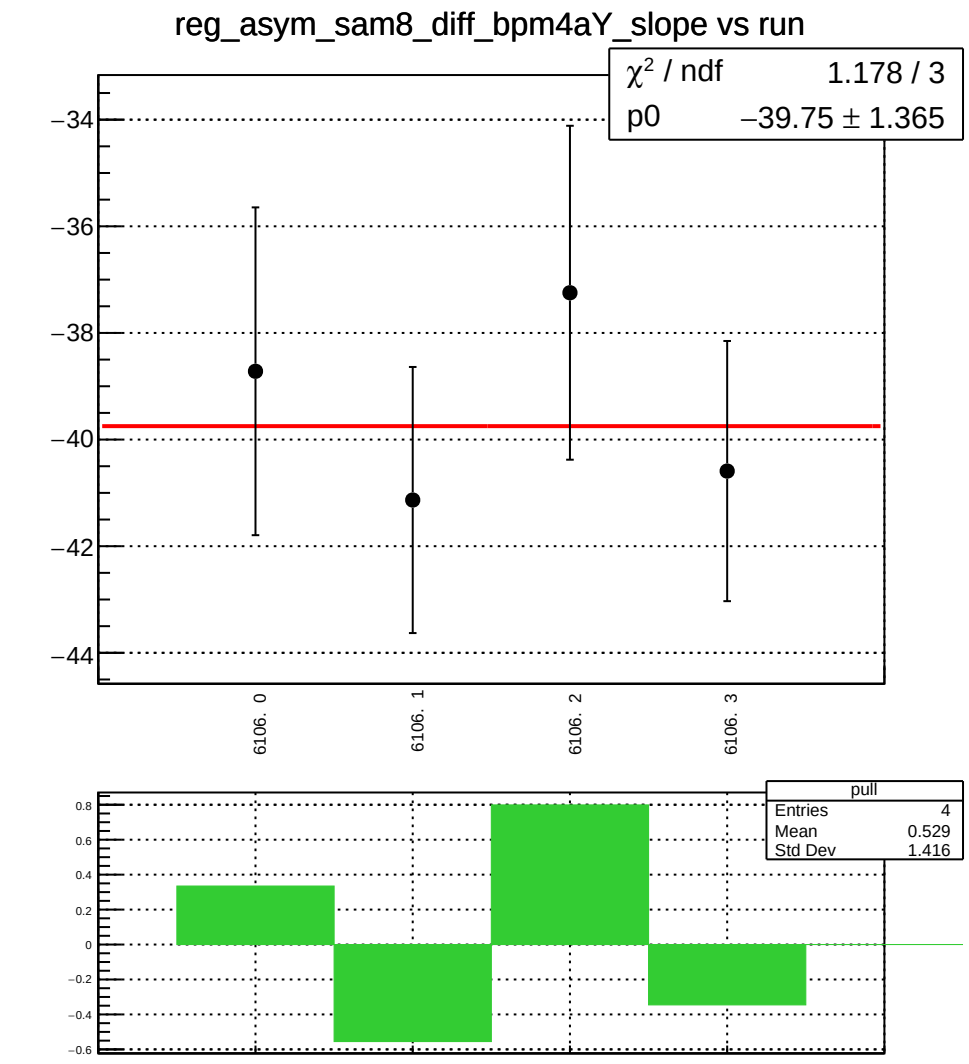
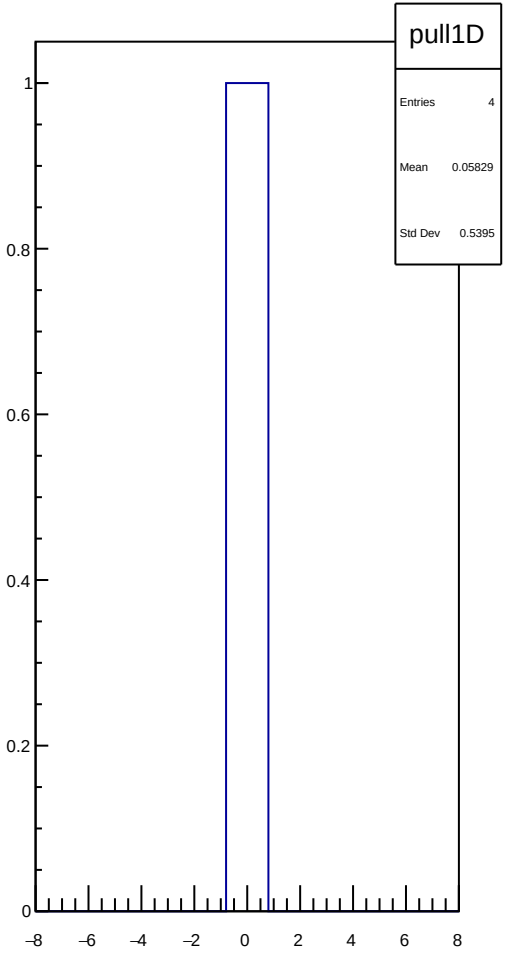
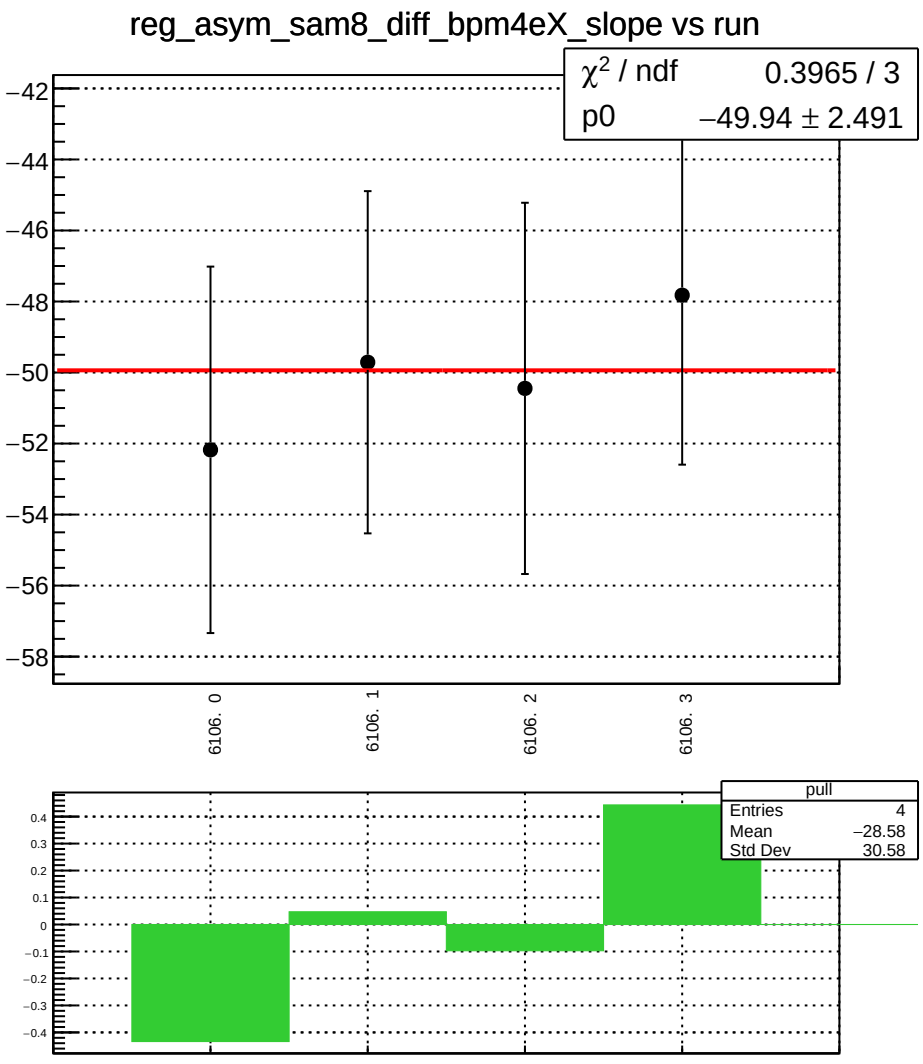
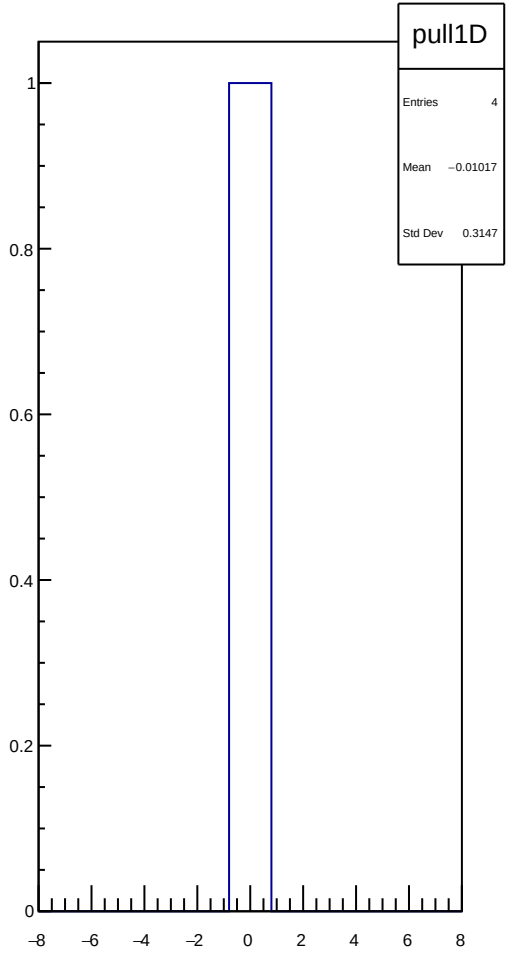
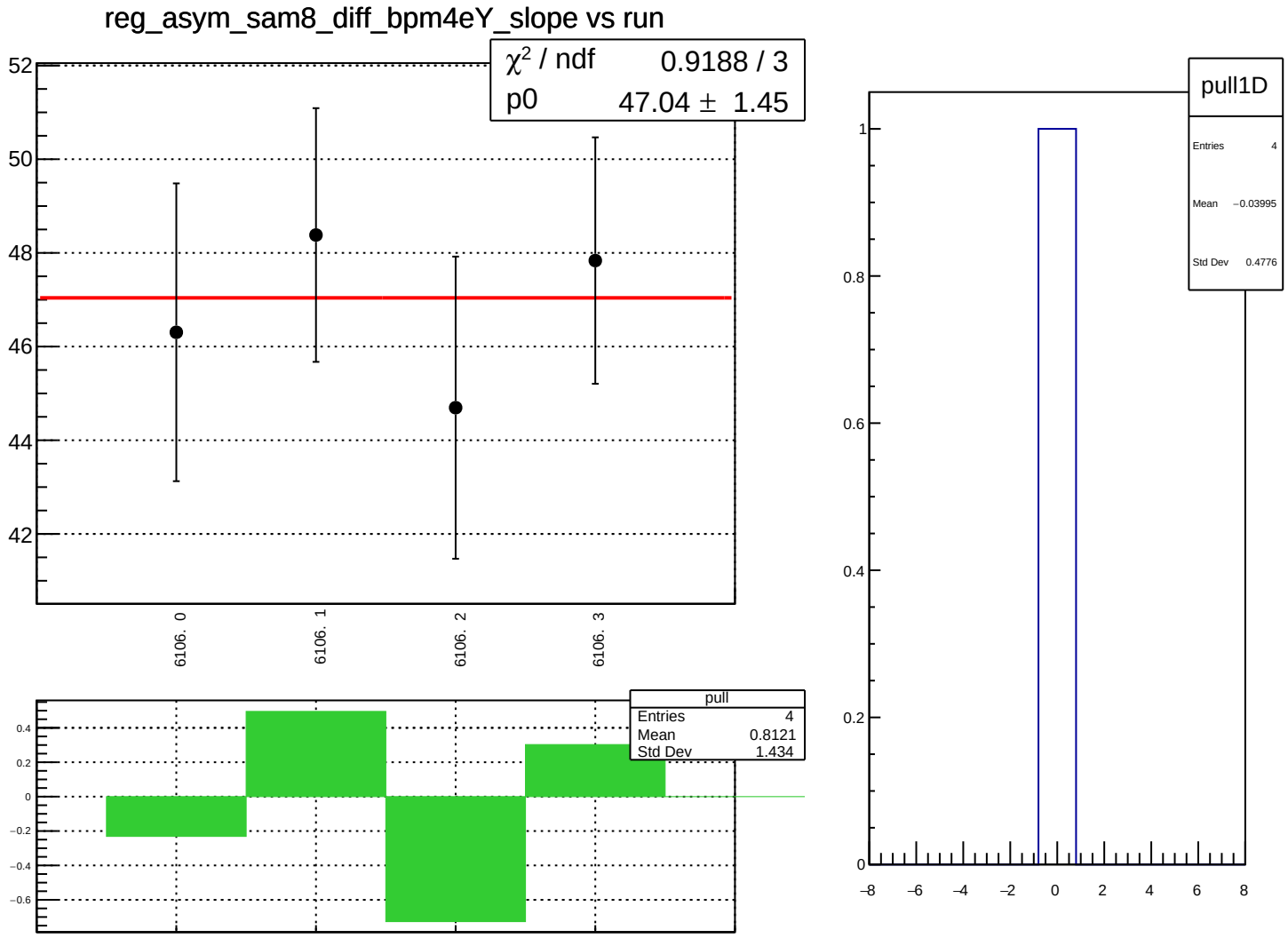
0
2
4
6
8

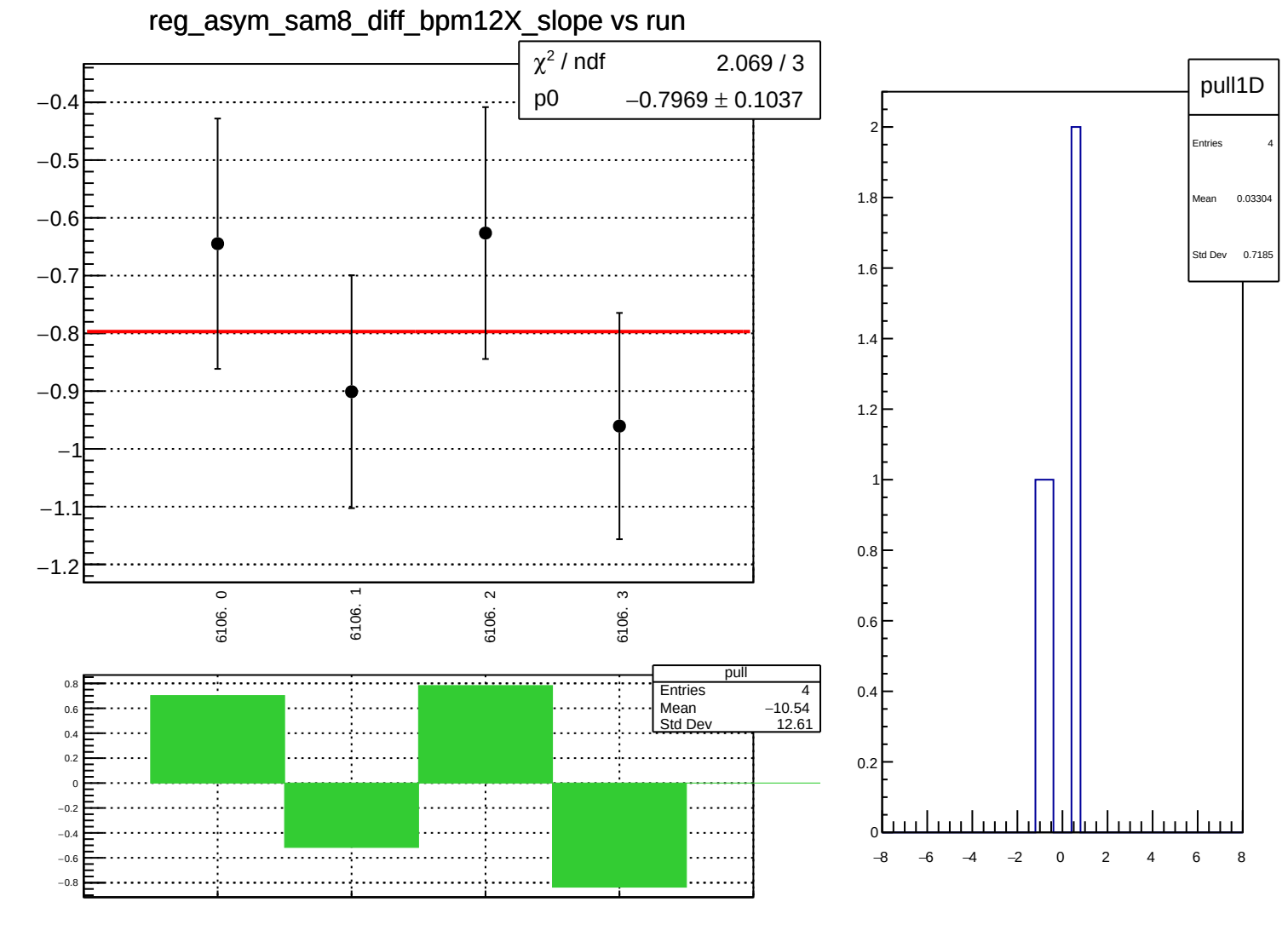

reg_asym_sam8_diff_bpm4aY_slope vs run
χ² / ndf 1.178 / 3
p0 −39.75 ± 1.365
−34
−36
−38
−40
−42
−44
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.529
Std Dev 1.416
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

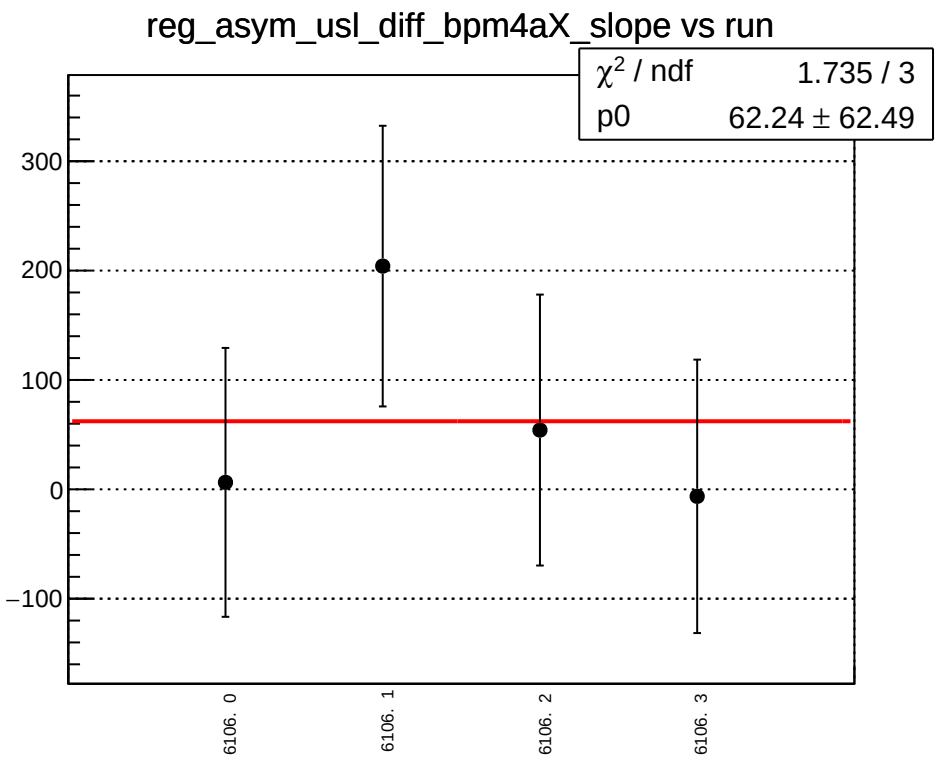

pull1D
Entries 4
Mean 0.05829
Std Dev 0.5395
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

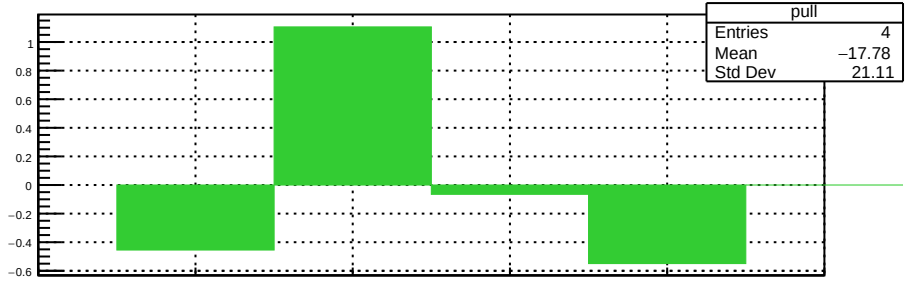

reg_asym_sam8_diff_bpm4eX_slope vs run
χ² / ndf 0.3965 / 3
p0 −49.94 ± 2.491
−42
−44
−46
−48
−50
−52
−54
−56
−58
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −28.58
Std Dev 30.58
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

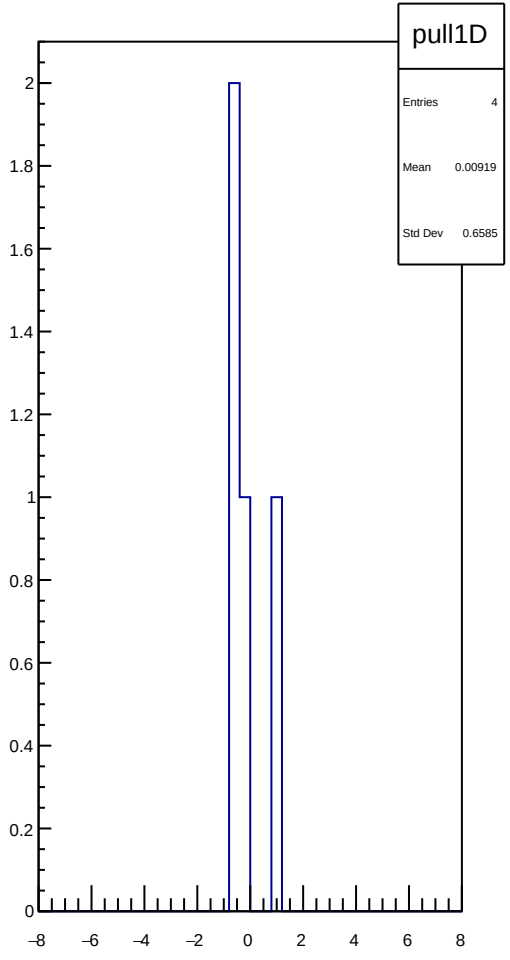

pull1D
Entries 4
Mean −0.01017
Std Dev 0.3147
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

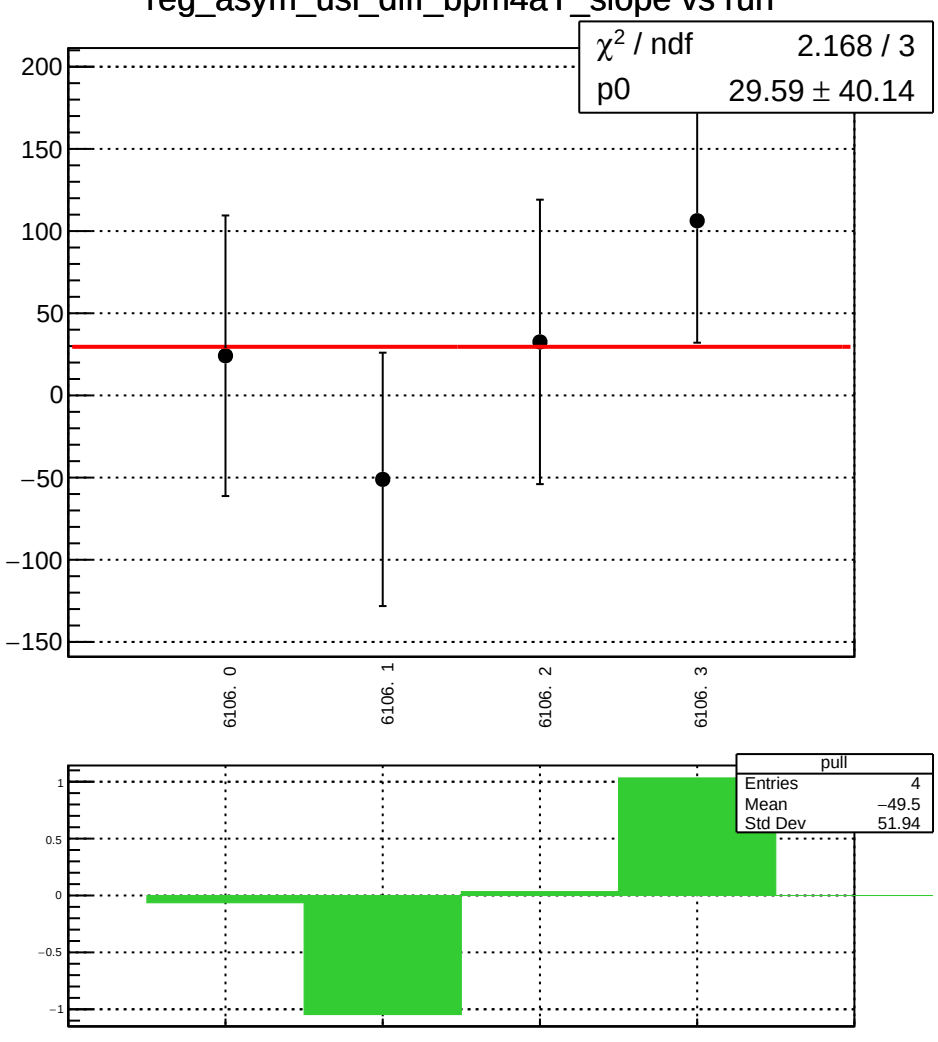

reg_asym_sam8_diff_bpm4eY_slope vs run
χ² / ndf 0.9188 / 3
p0 47.04 ± 1.45
52
50
48
46
44
42
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.8121
Std Dev 1.434
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean −0.03995
Std Dev 0.4776
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

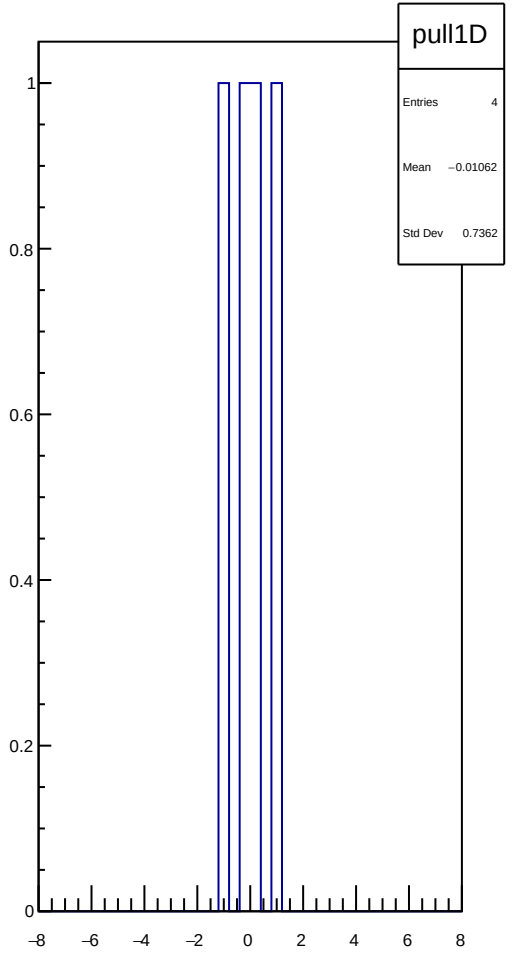

reg_asym_sam8_diff_bpm12X_slope vs run
χ² / ndf 2.069 / 3
p0 −0.7969 ± 0.1037
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
−1
−1.1
−1.2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −10.54
Std Dev 12.61
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean 0.03304
Std Dev 0.7185
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

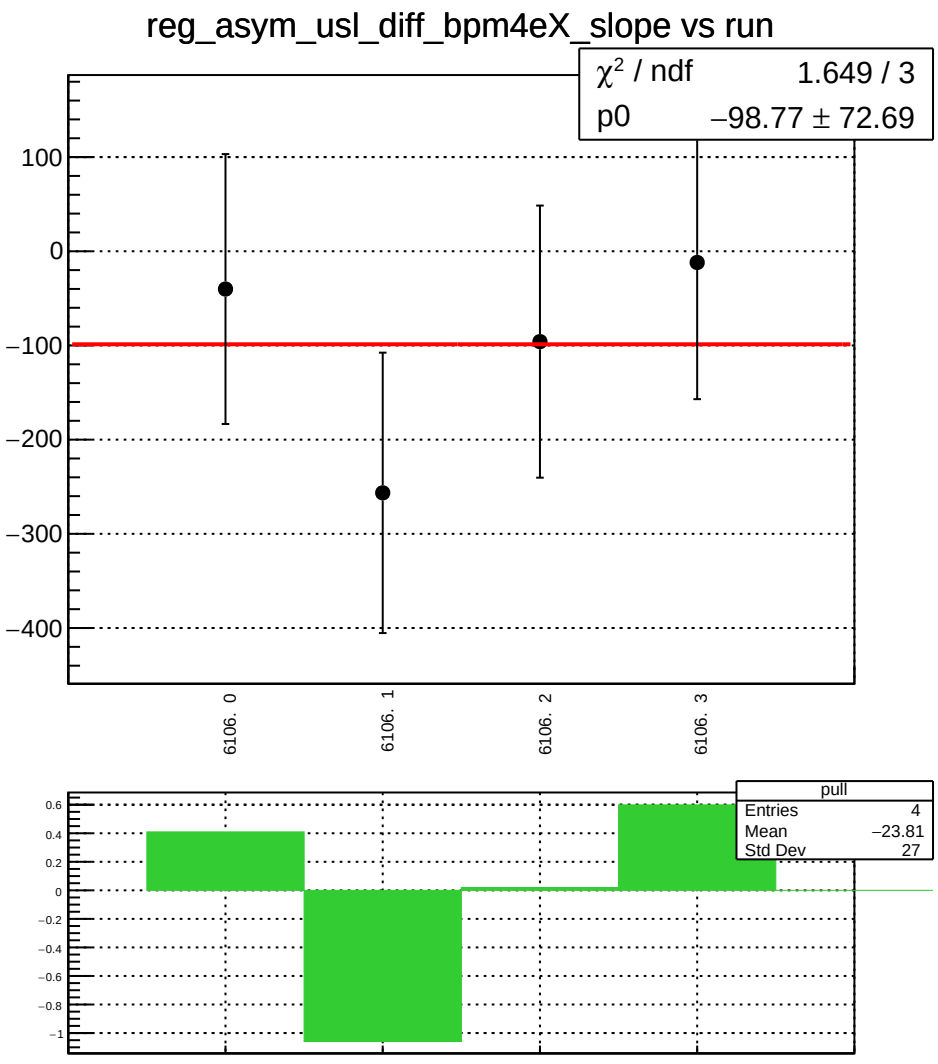

reg_asym_usl_diff_bpm4aX_slope vs run
χ² / ndf 1.735 / 3
p0 62.24 ± 62.49
300
200
100
0
−100
6106. 0
6106. 1
6106. 2
6106. 3

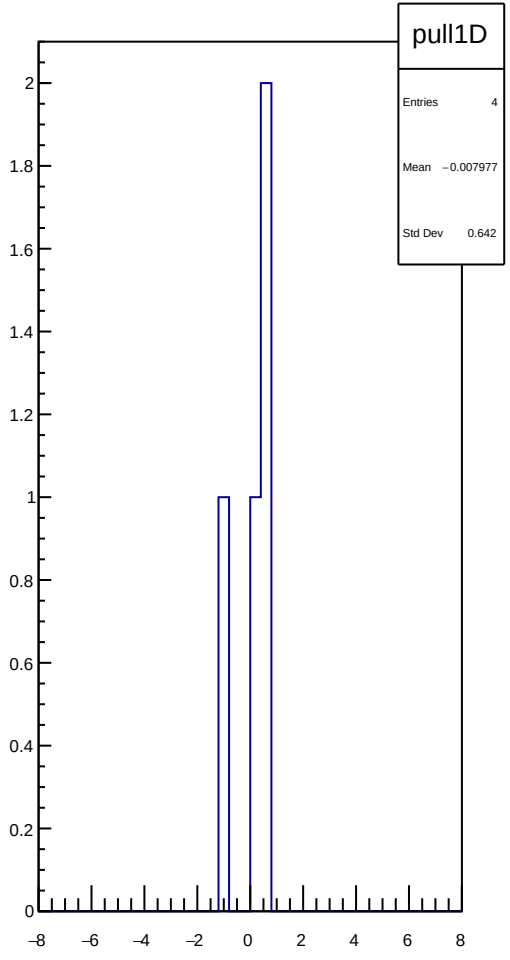

pull
Entries 4
Mean −17.78
Std Dev 21.11
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

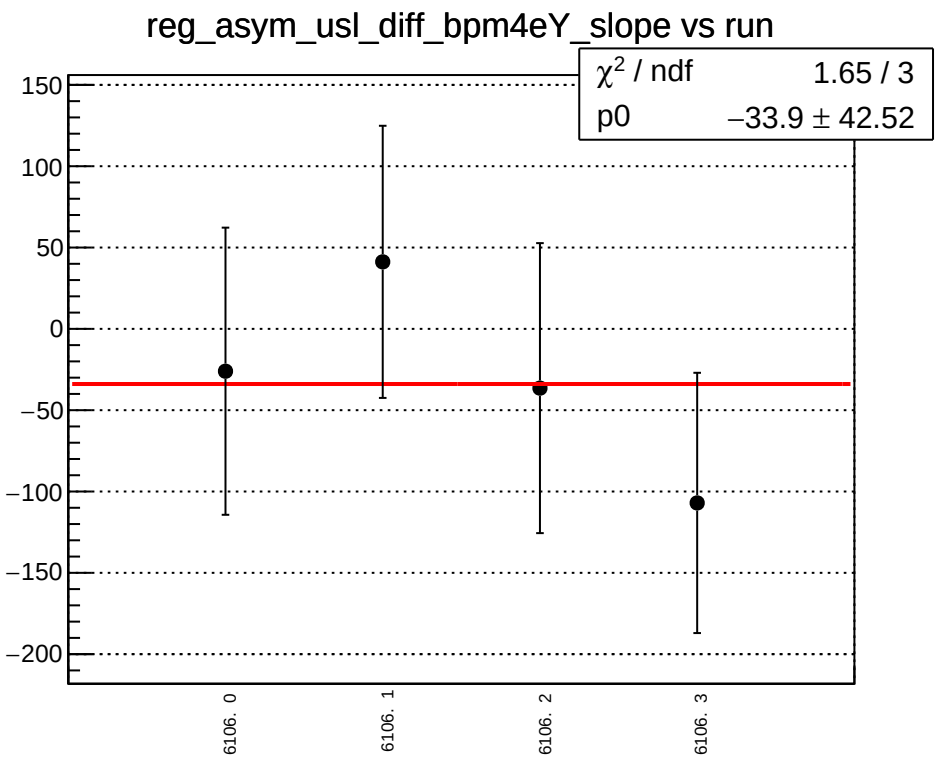

pull1D
Entries 4
Mean 0.00919
Std Dev 0.6585
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

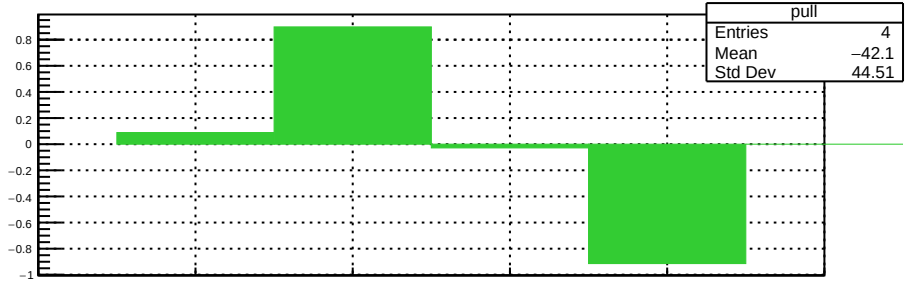

reg_asym_usl_diff_bpm4aY_slope vs run
χ² / ndf 2.168 / 3
p0 29.59 ± 40.14
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −49.5
Std Dev 51.94
1
0.5
0
−0.5
−1

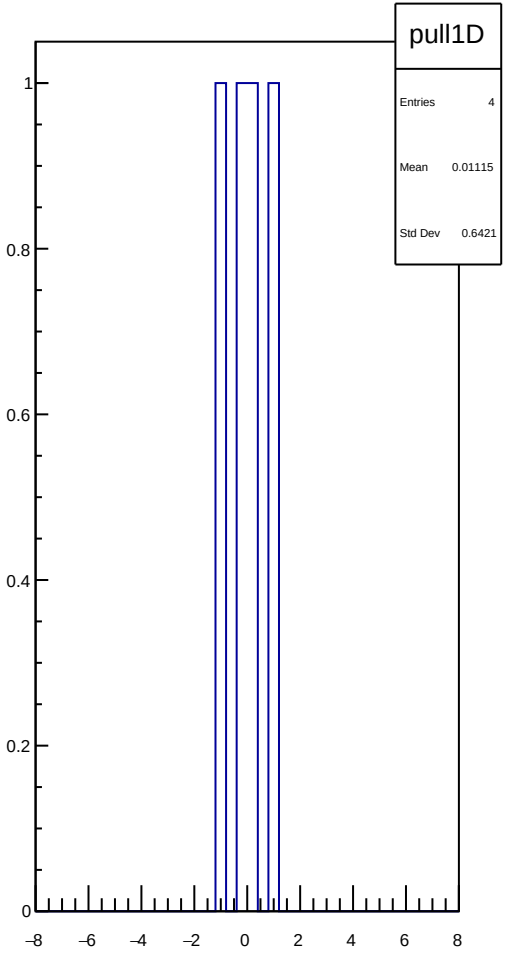

pull1D
Entries 4
Mean −0.01062
Std Dev 0.7362
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

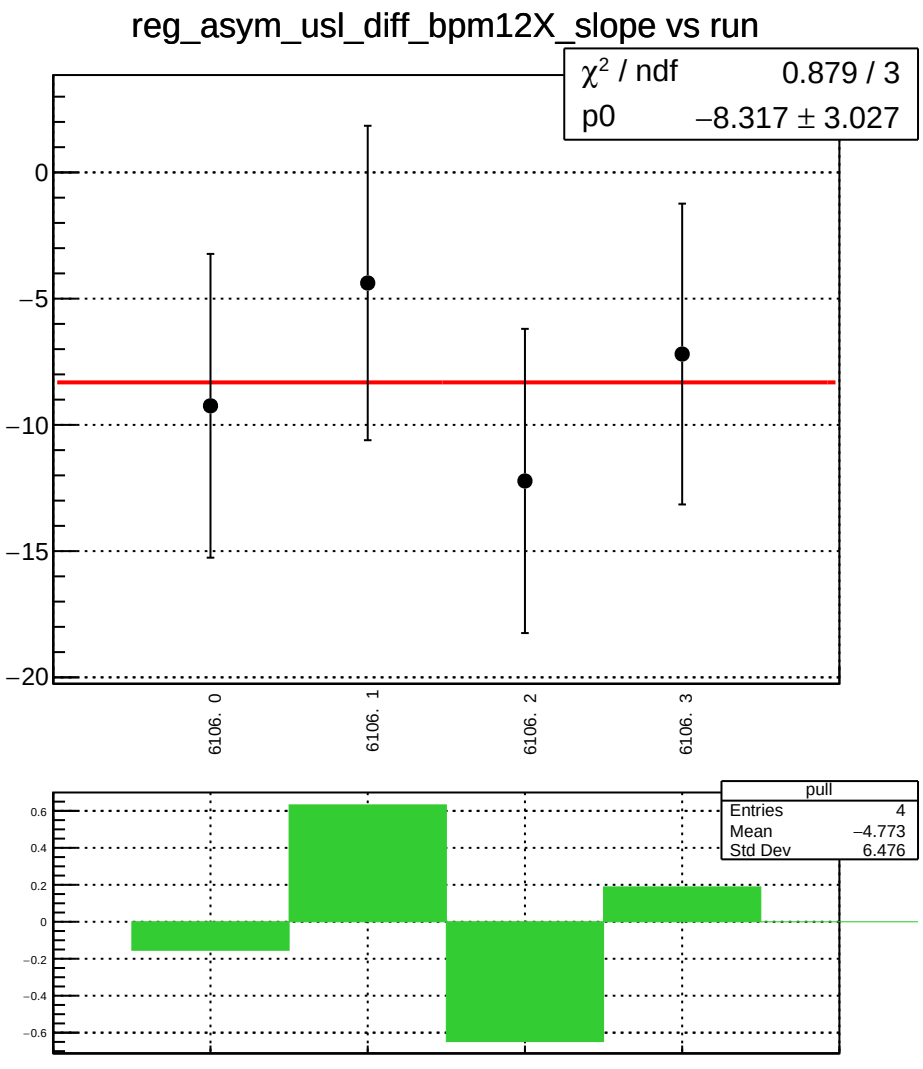

reg_asym_usl_diff_bpm4eX_slope vs run
χ² / ndf 1.649 / 3
p0 −98.77 ± 72.69
100
0
−100
−200
−300
−400
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −23.81
Std Dev 27
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

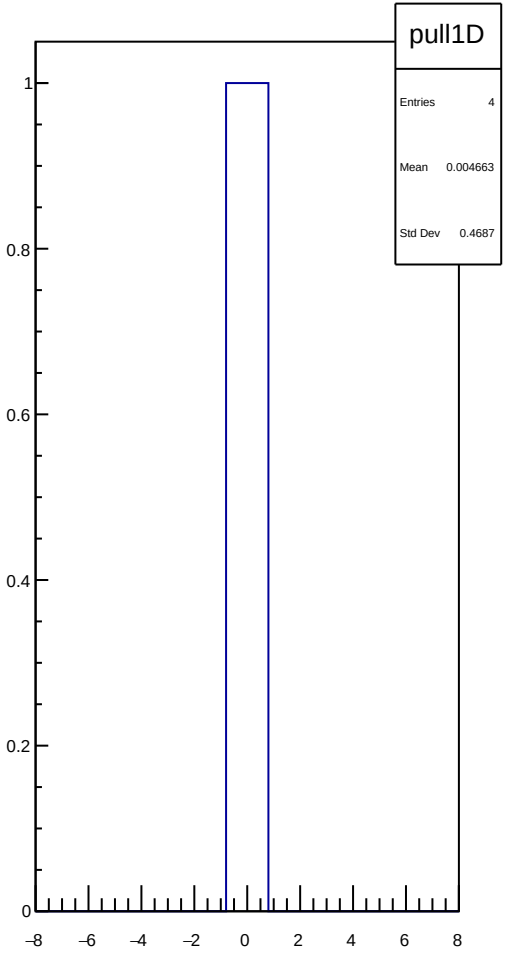

pull1D
Entries 4
Mean −0.007977
Std Dev 0.642
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

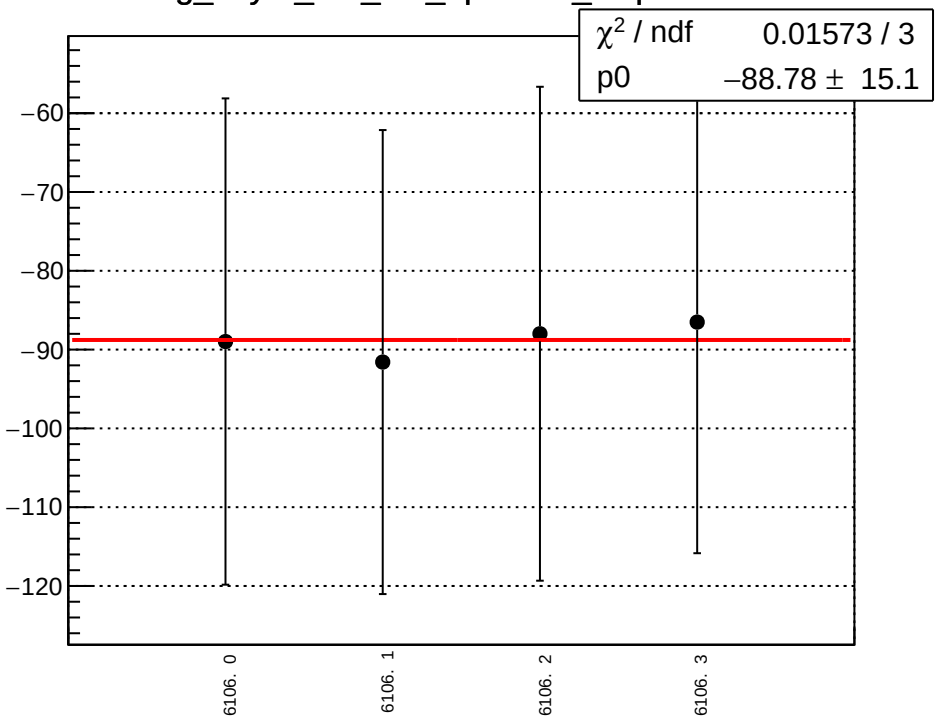

reg_asym_usl_diff_bpm4eY_slope vs run
χ² / ndf 1.65 / 3
p0 −33.9 ± 42.52
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3

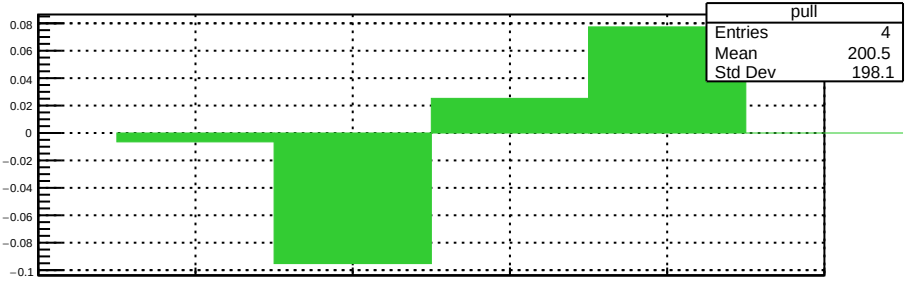

pull
Entries 4
Mean −42.1
Std Dev 44.51
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

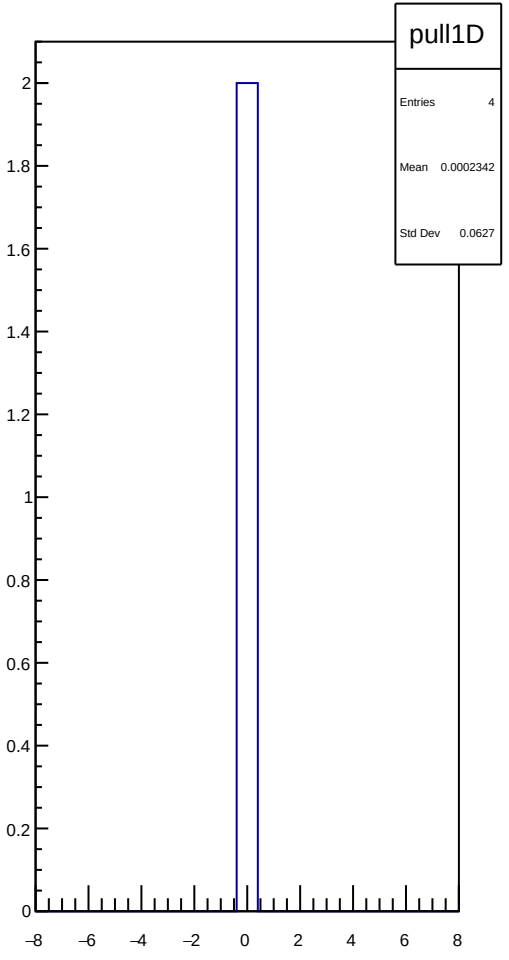

pull1D
Entries 4
Mean 0.01115
Std Dev 0.6421
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

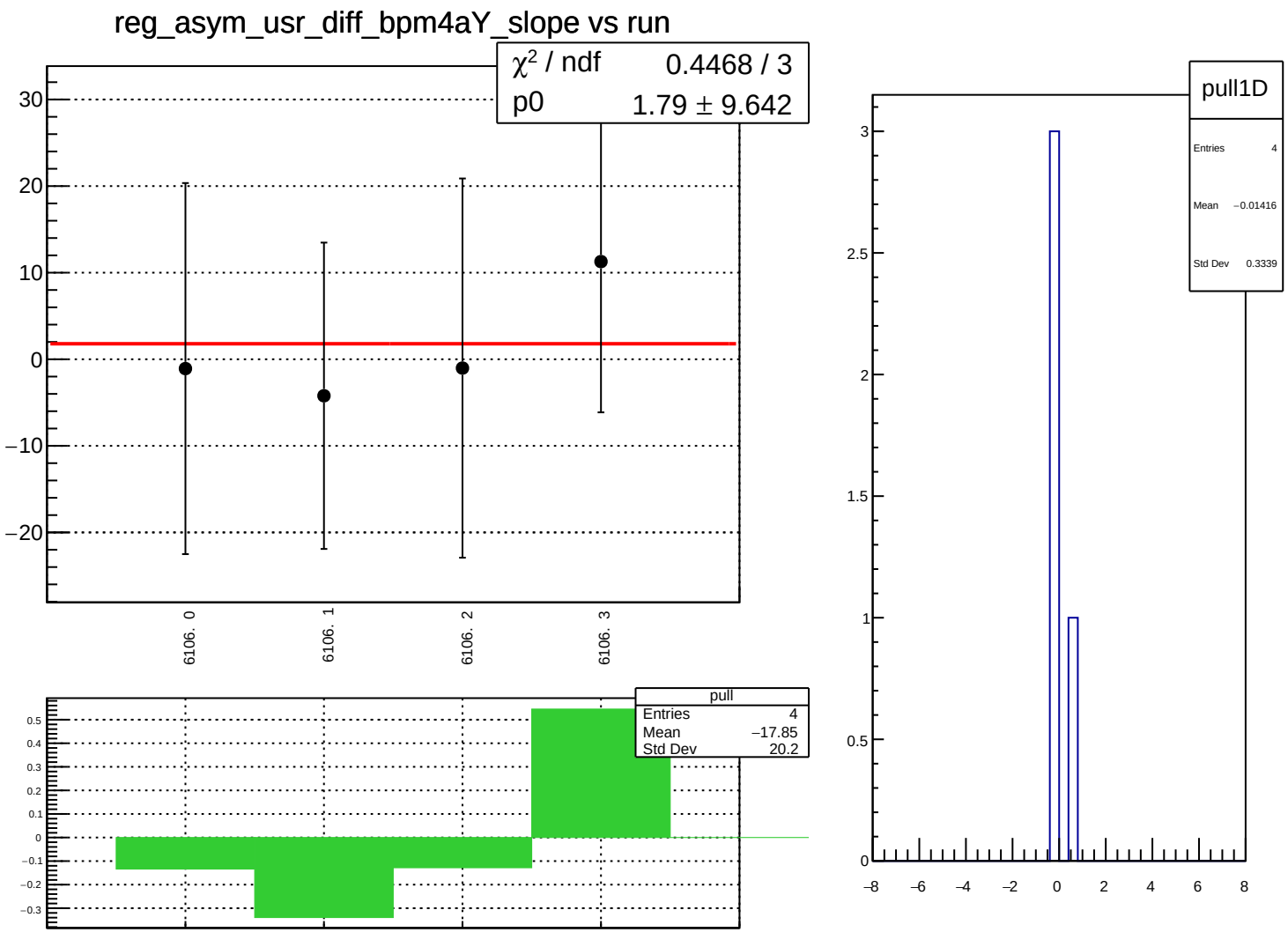

reg_asym_usl_diff_bpm12X_slope vs run
χ² / ndf 0.879 / 3
p0 −8.317 ± 3.027
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.773
Std Dev 6.476
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

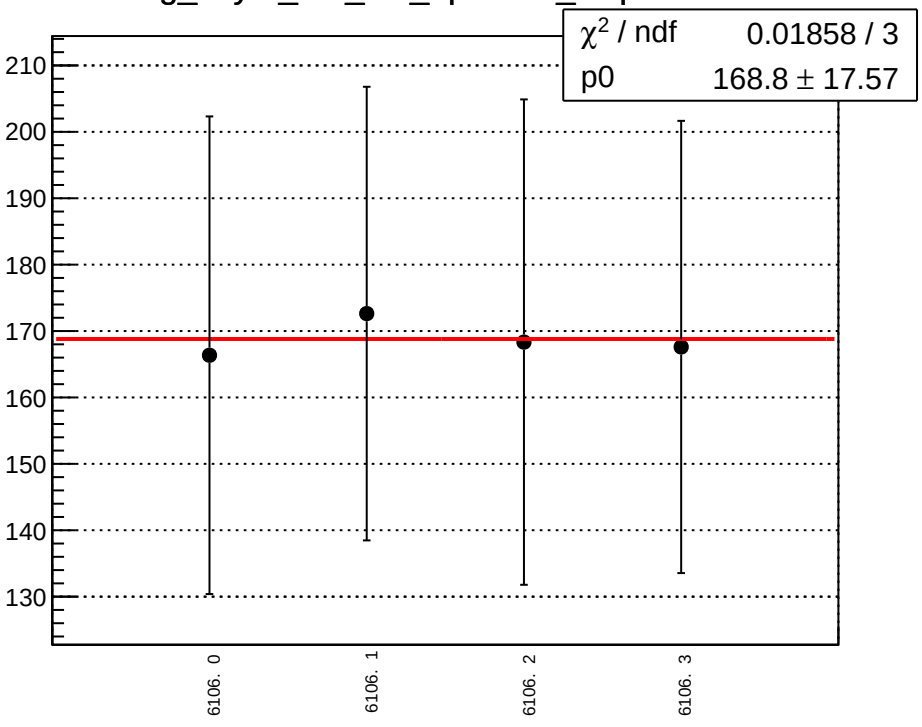

pull1D
Entries 4
Mean 0.004663
Std Dev 0.4687
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

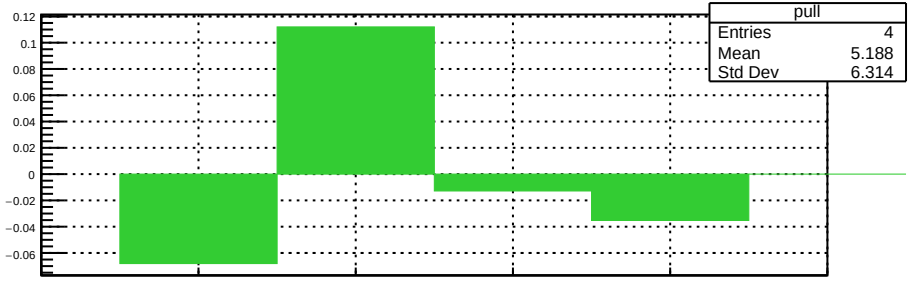

reg_asym_usr_diff_bpm4aX_slope vs run
χ² / ndf 0.01573 / 3
p0 −88.78 ± 15.1
−60
−70
−80
−90
−100
−110
−120
6106. 0
6106. 1
6106. 2
6106. 3

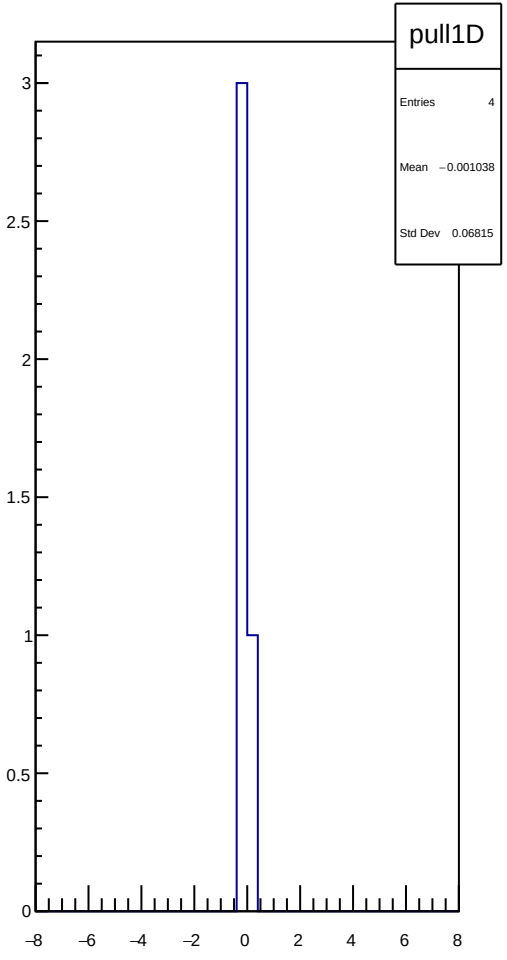

pull
Entries 4
Mean 200.5
Std Dev 198.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1

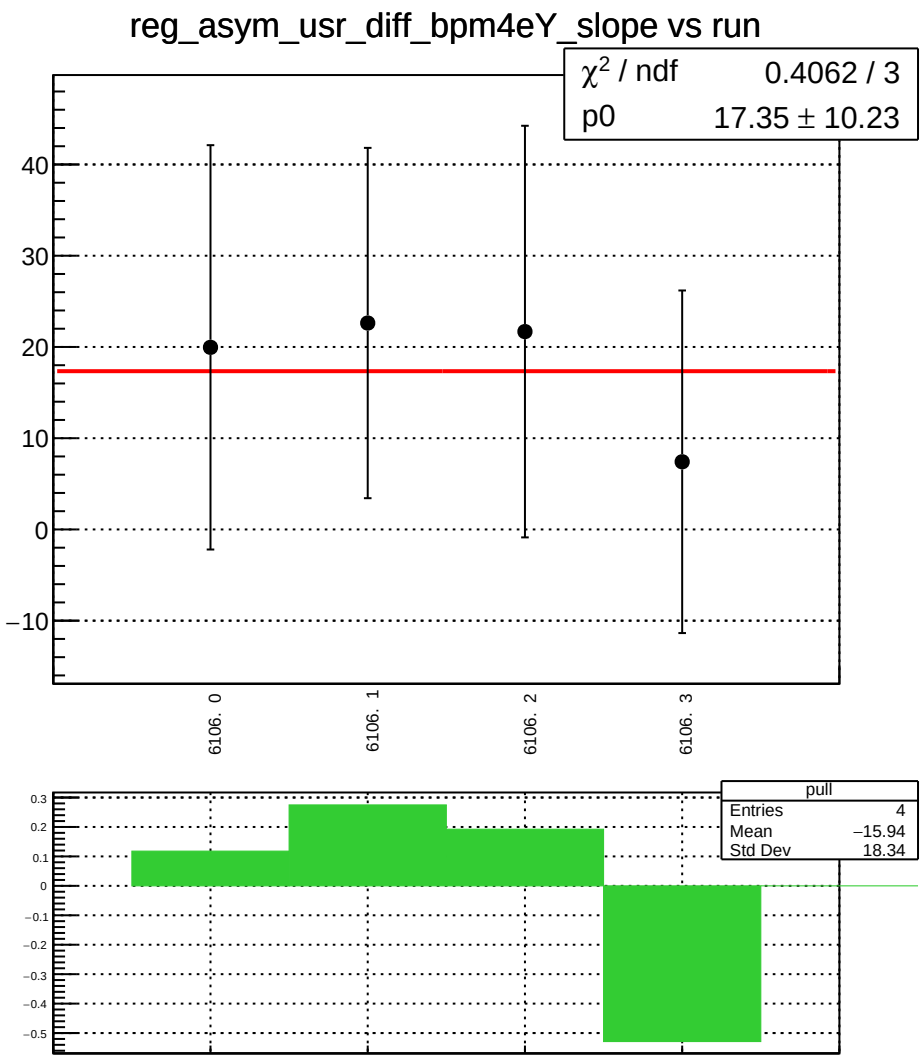

pull1D
Entries 4
Mean 0.0002342
Std Dev 0.0627
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

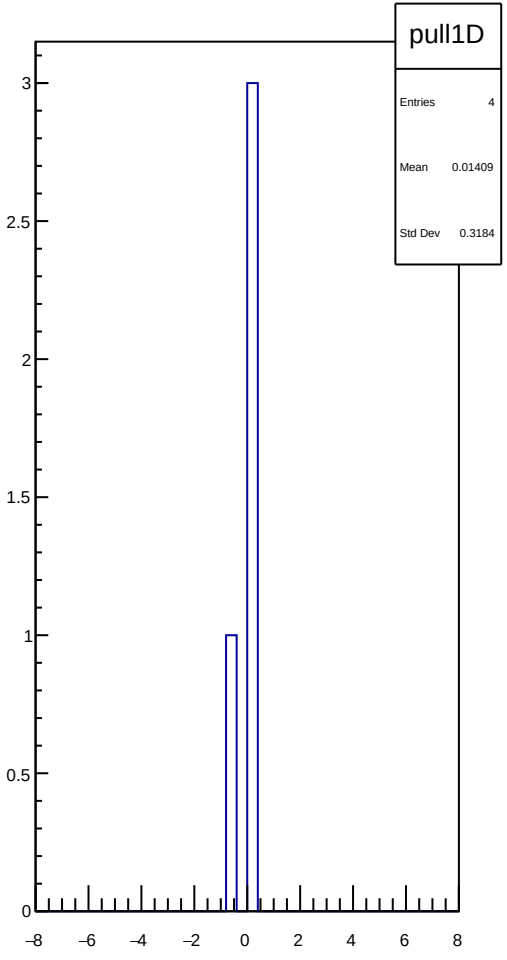

reg_asym_usr_diff_bpm4aY_slope vs run
χ² / ndf 0.4468 / 3
p0 1.79 ± 9.642
30
20
10
0
−10
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.85
Std Dev 20.2
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean −0.01416
Std Dev 0.3339
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

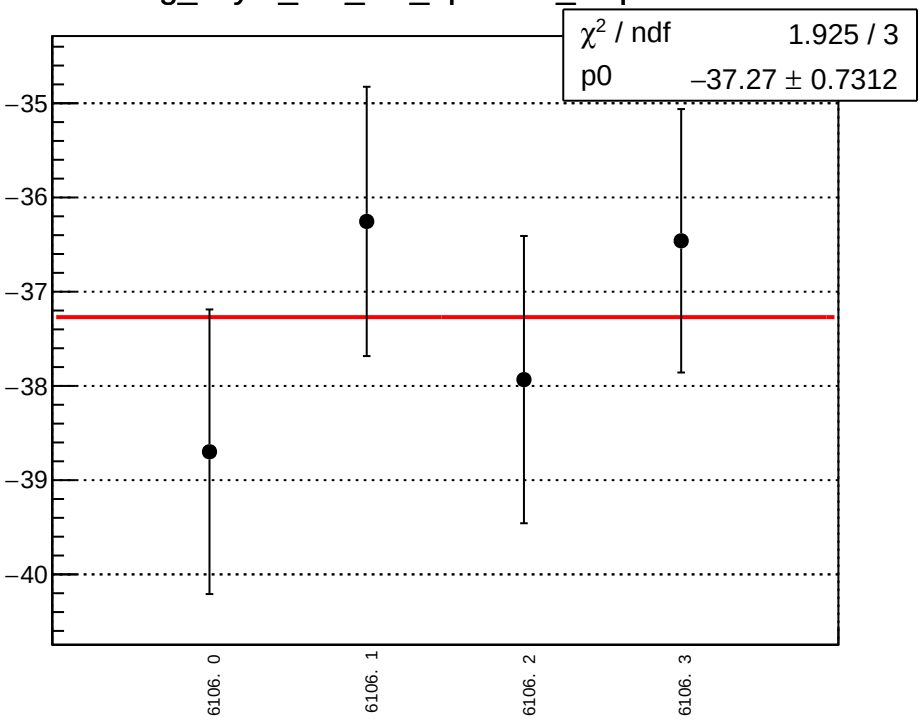

reg_asym_usr_diff_bpm4eX_slope vs run
χ² / ndf 0.01858 / 3
p0 168.8 ± 17.57
210
200
190
180
170
160
150
140
130
6106. 0
6106. 1
6106. 2
6106. 3

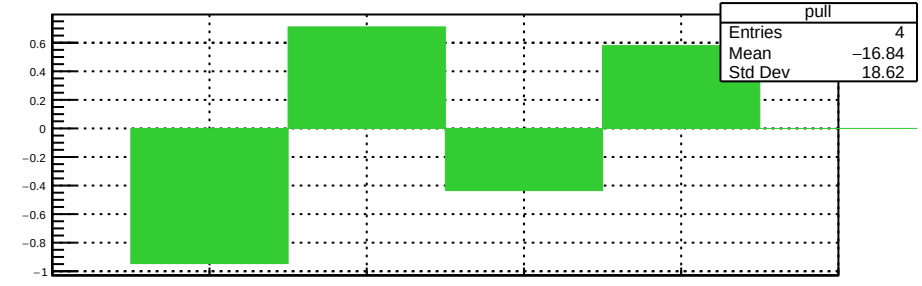

pull
Entries 4
Mean 5.188
Std Dev 6.314
0.12
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06

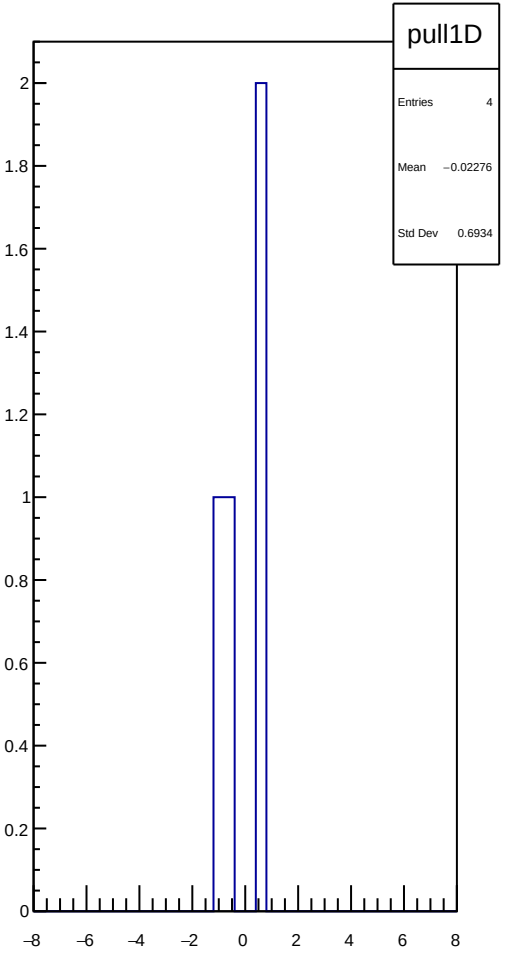

pull1D
Entries 4
Mean −0.001038
Std Dev 0.06815
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

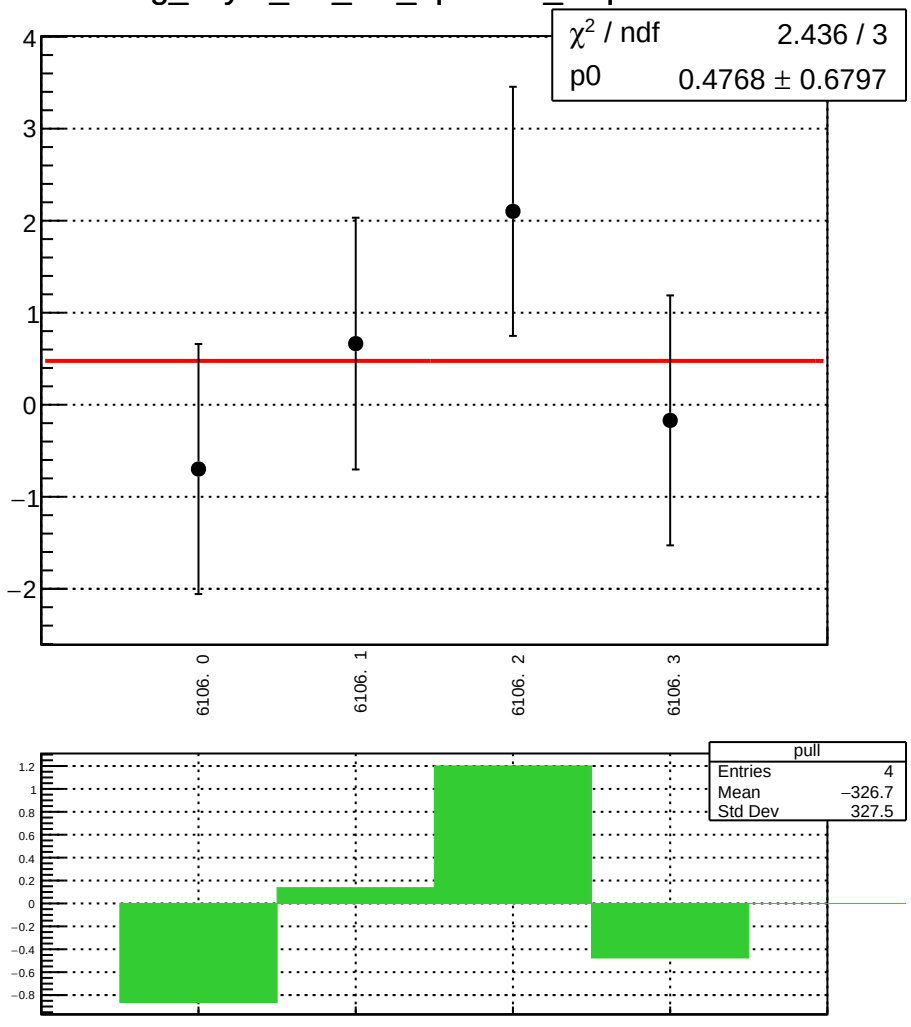

reg_asym_usr_diff_bpm4eY_slope vs run
χ² / ndf 0.4062 / 3
p0 17.35 ± 10.23
40
30
20
10
0
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −15.94
Std Dev 18.34
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

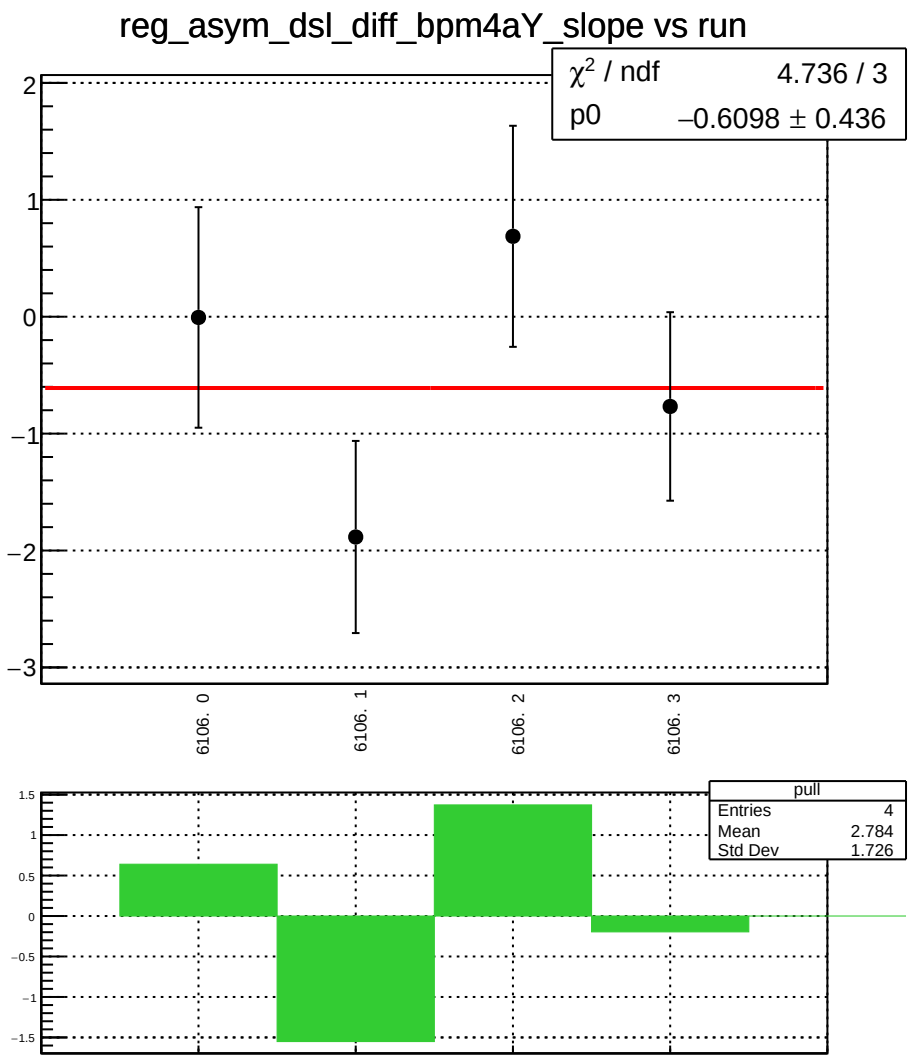

pull1D
Entries 4
Mean 0.01409
Std Dev 0.3184
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

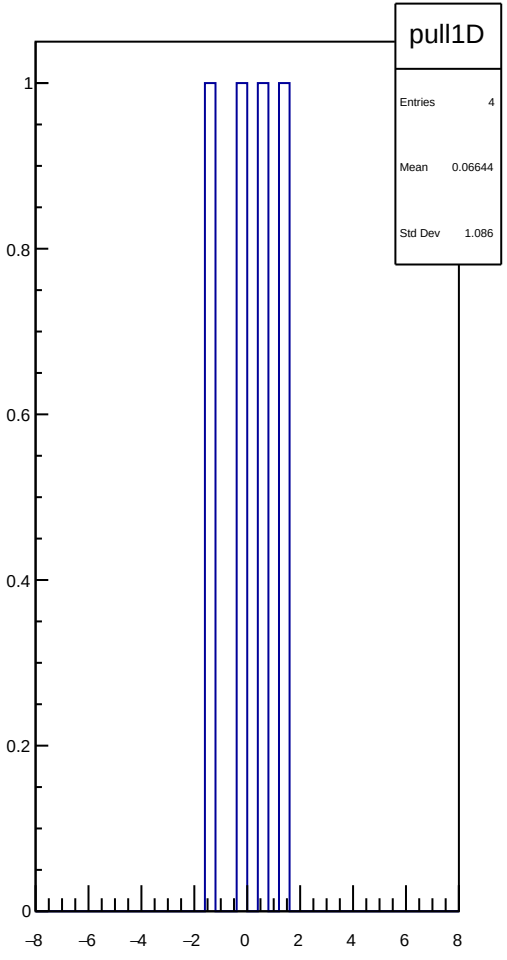

reg_asym_usr_diff_bpm12X_slope vs run
χ² / ndf 1.925 / 3
p0 −37.27 ± 0.7312
−35
−36
−37
−38
−39
−40
6106. 0
6106. 1
6106. 2
6106. 3

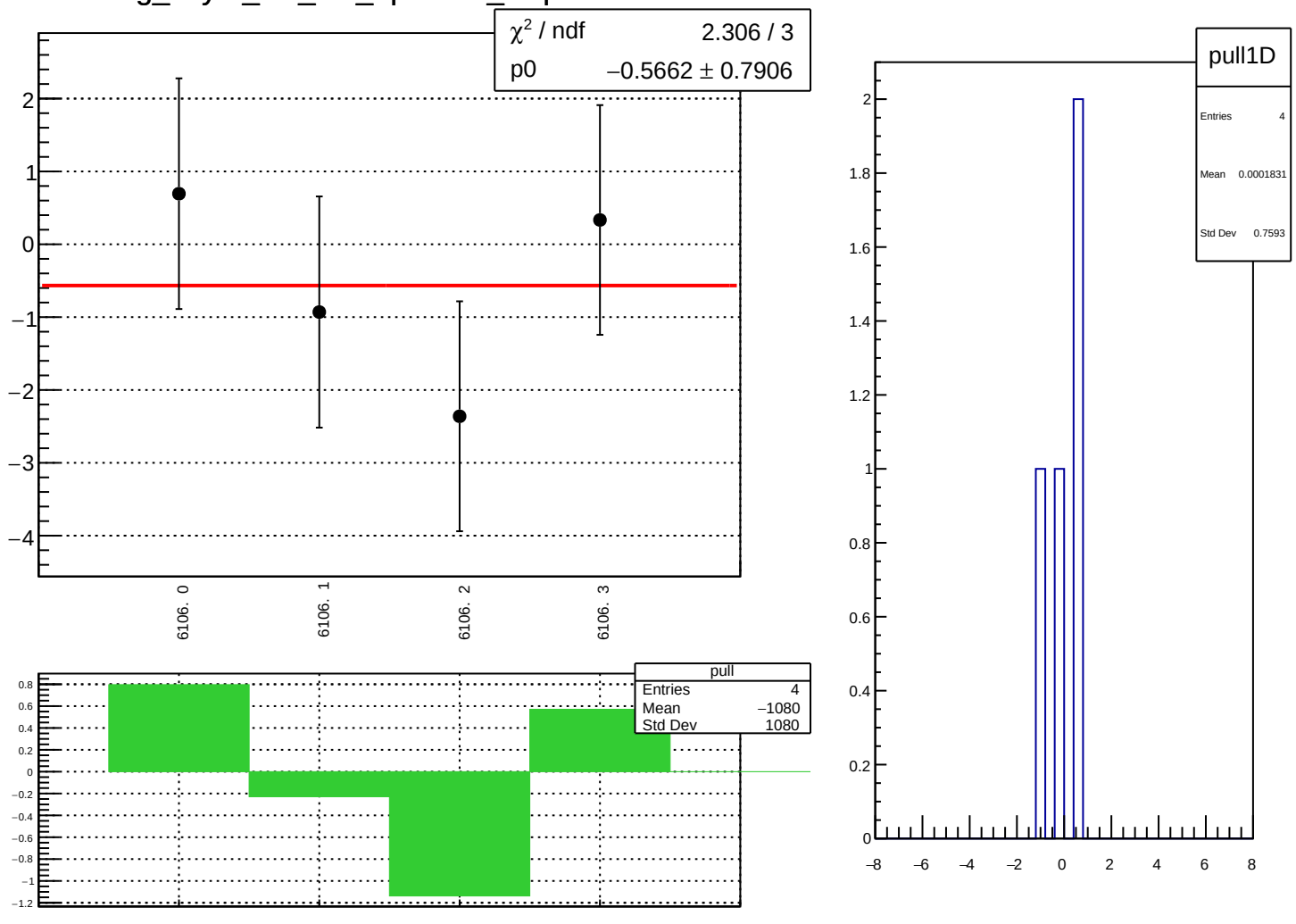

pull
Entries 4
Mean −16.84
Std Dev 18.62
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

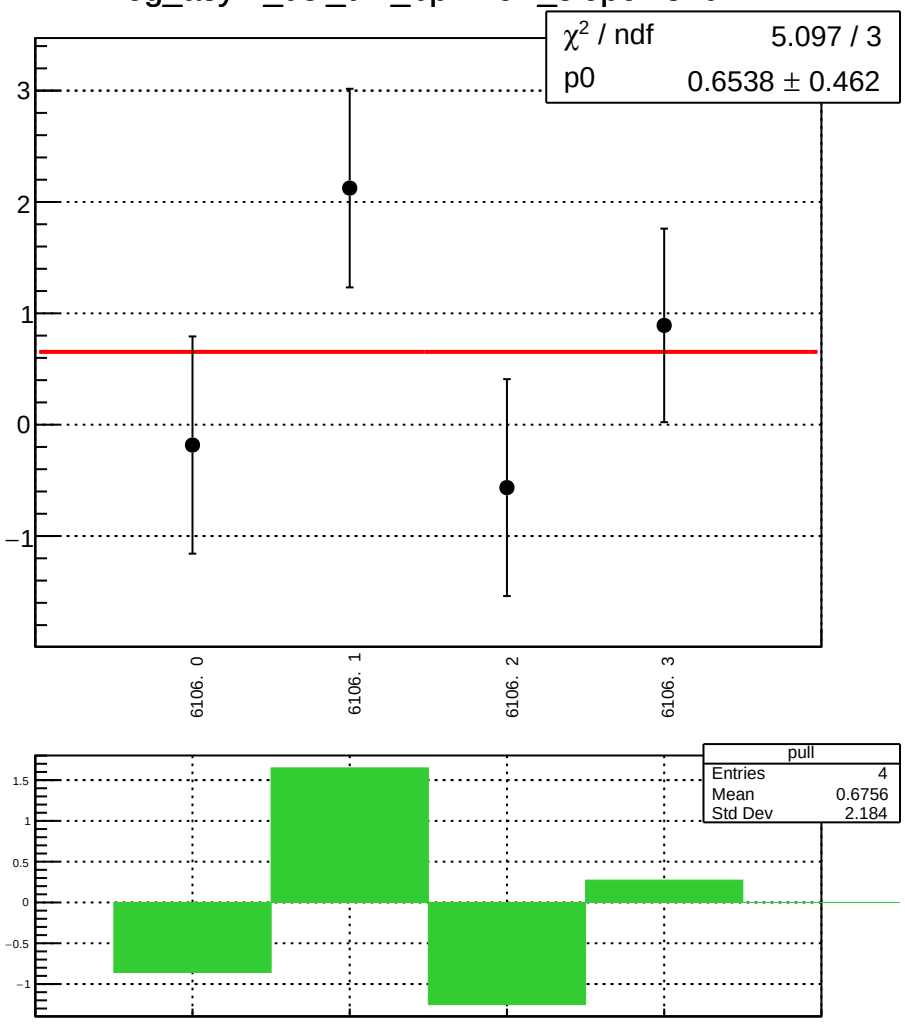

pull1D
Entries 4
Mean −0.02276
Std Dev 0.6934
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

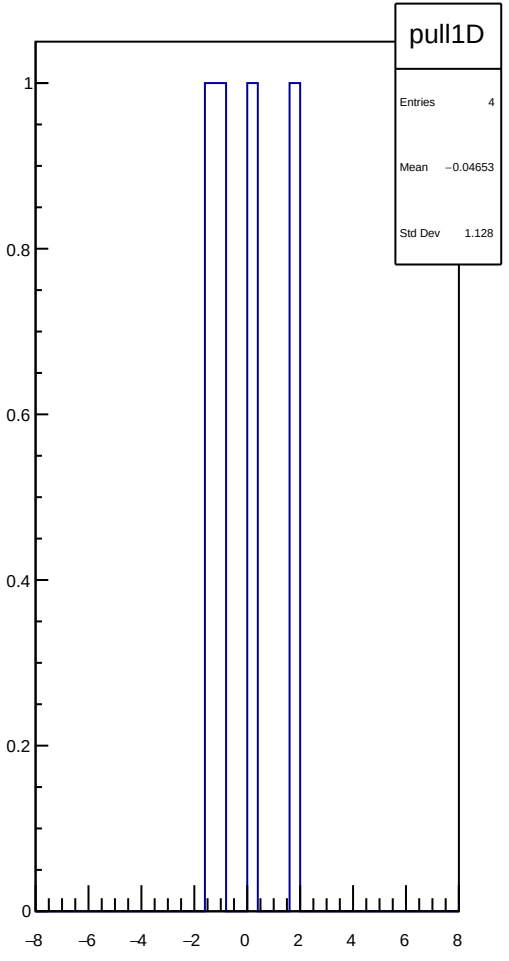

reg_asym_dsl_diff_bpm4aX_slope vs run
χ² / ndf 2.436 / 3
p0 0.4768 ± 0.6797
4
3
2
1
0
−1
−2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −326.7
Std Dev 327.5
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean −0.0008484
Std Dev 0.7804
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

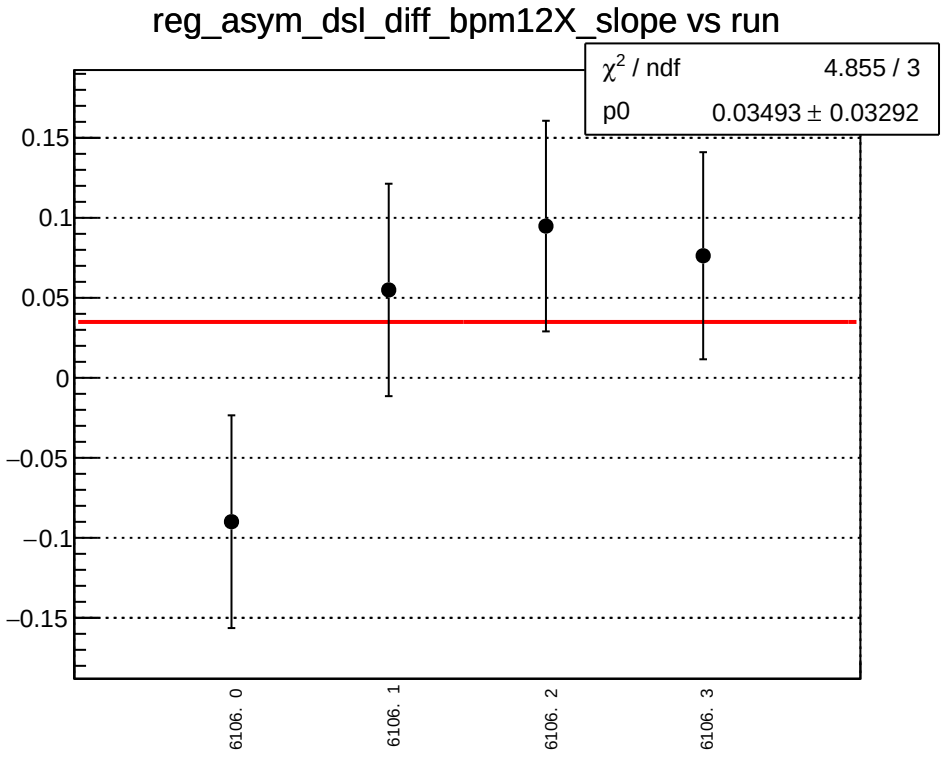

reg_asym_dsl_diff_bpm4aY_slope vs run
χ² / ndf 4.736 / 3
p0 −0.6098 ± 0.436
2
1
0
−1
−2
−3
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2.784
Std Dev 1.726
1.5
1
0.5
0
−0.5
−1
−1.5

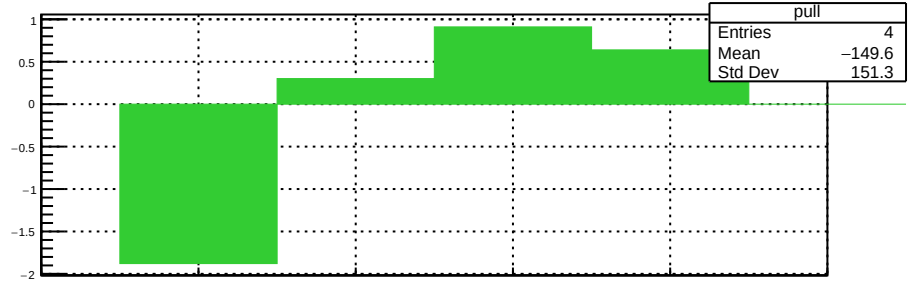

pull1D
Entries 4
Mean 0.06644
Std Dev 1.086
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

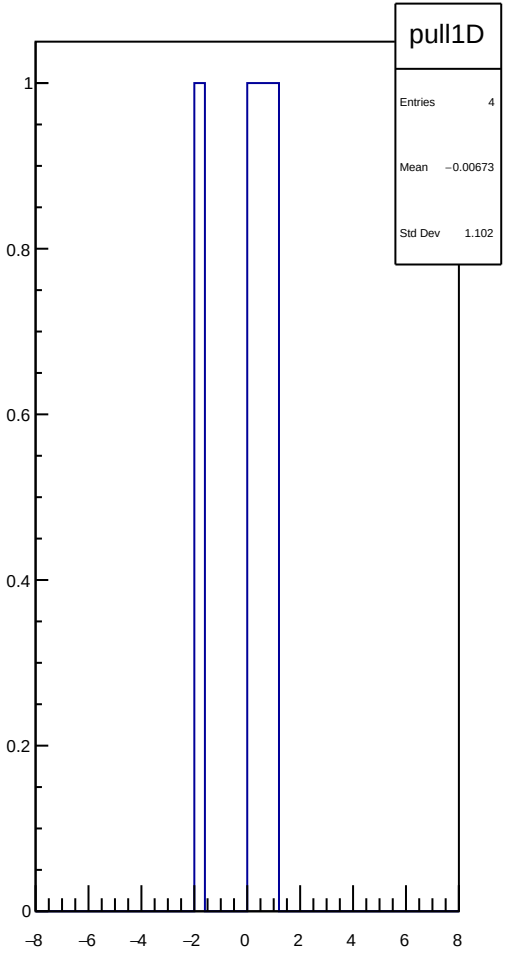

reg_asym_dsl_diff_bpm4eX_slope vs run
χ² / ndf 2.306 / 3
p0 −0.5662 ± 0.7906
2
1
0
−1
−2
−3
−4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1080
Std Dev 1080
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull1D
Entries 4
Mean 0.0001831
Std Dev 0.7593
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

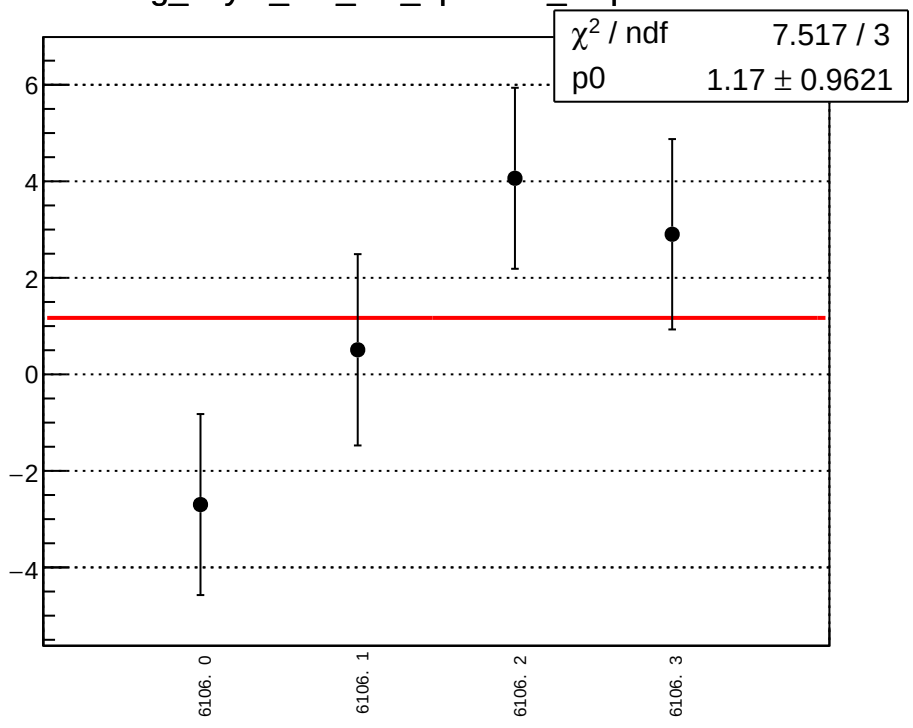

reg_asym_dsl_diff_bpm4eY_slope vs run
χ² / ndf 5.097 / 3
p0 0.6538 ± 0.462
3
2
1
0
−1
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.6756
Std Dev 2.184
1.5
1
0.5
0
−0.5
−1

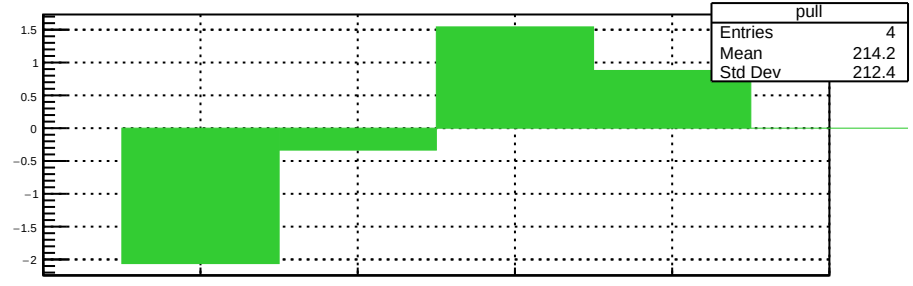

pull1D
Entries 4
Mean −0.04653
Std Dev 1.128
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

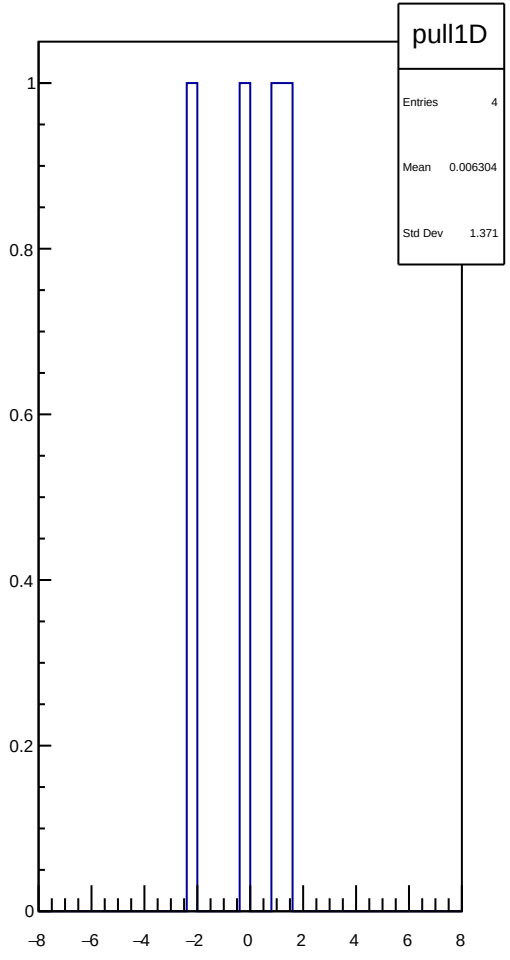

reg_asym_dsl_diff_bpm12X_slope vs run
χ² / ndf 4.855 / 3
p0 0.03493 ± 0.03292
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
6106. 0
6106. 1
6106. 2
6106. 3

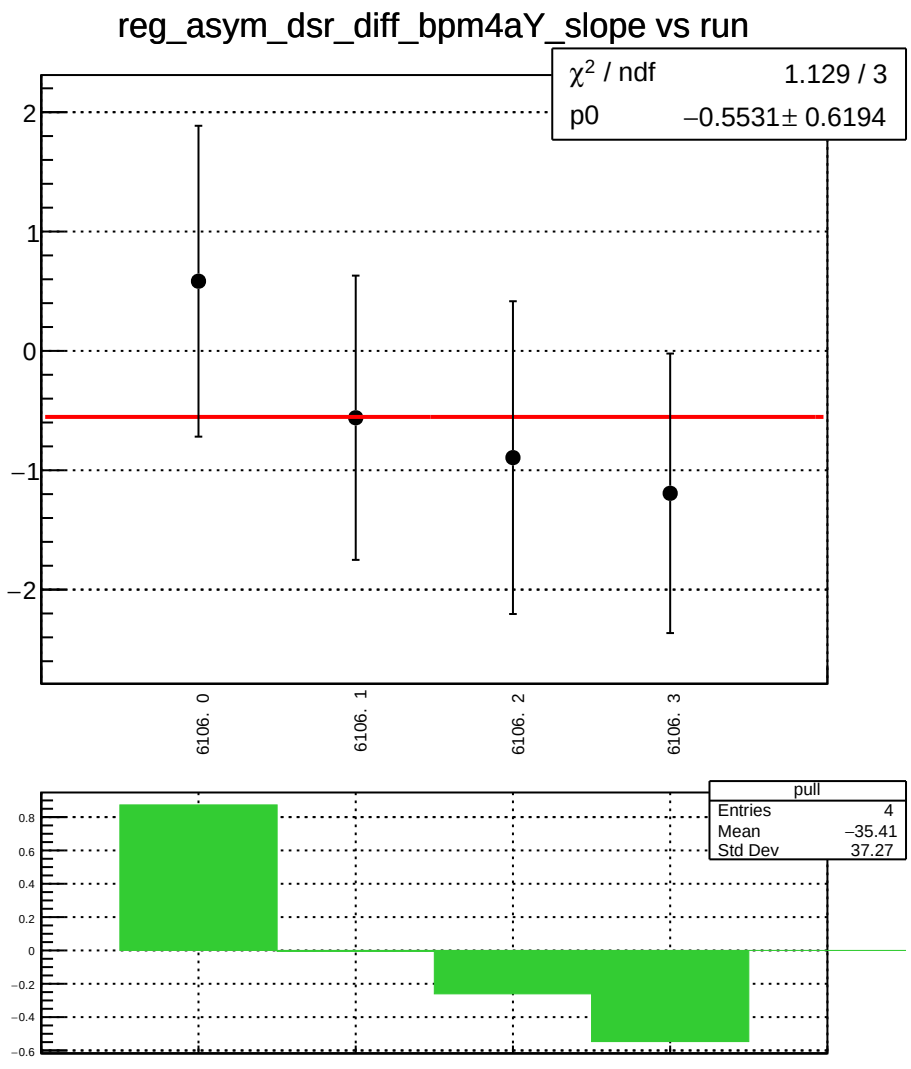

pull
Entries 4
Mean −149.6
Std Dev 151.3
1
0.5
0
−0.5
−1
−1.5
−2

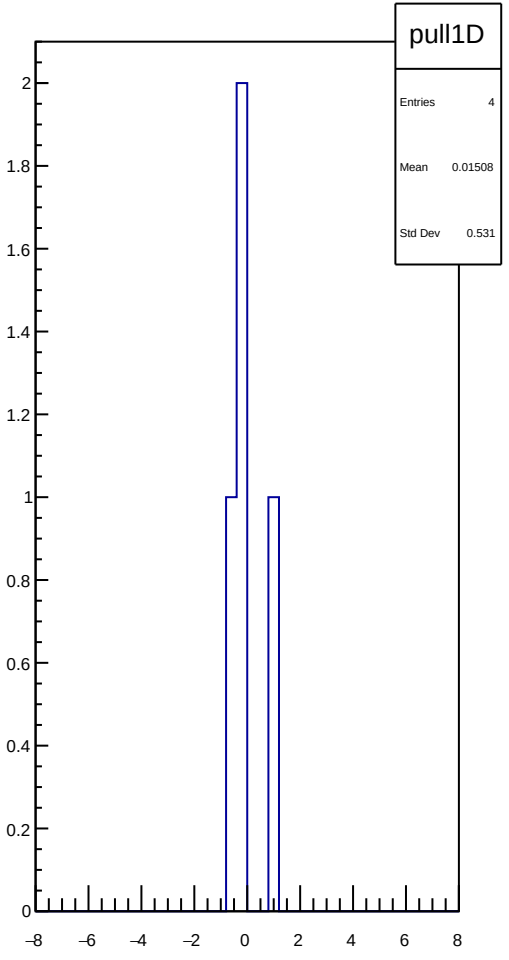

pull1D
Entries 4
Mean −0.00673
Std Dev 1.102
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

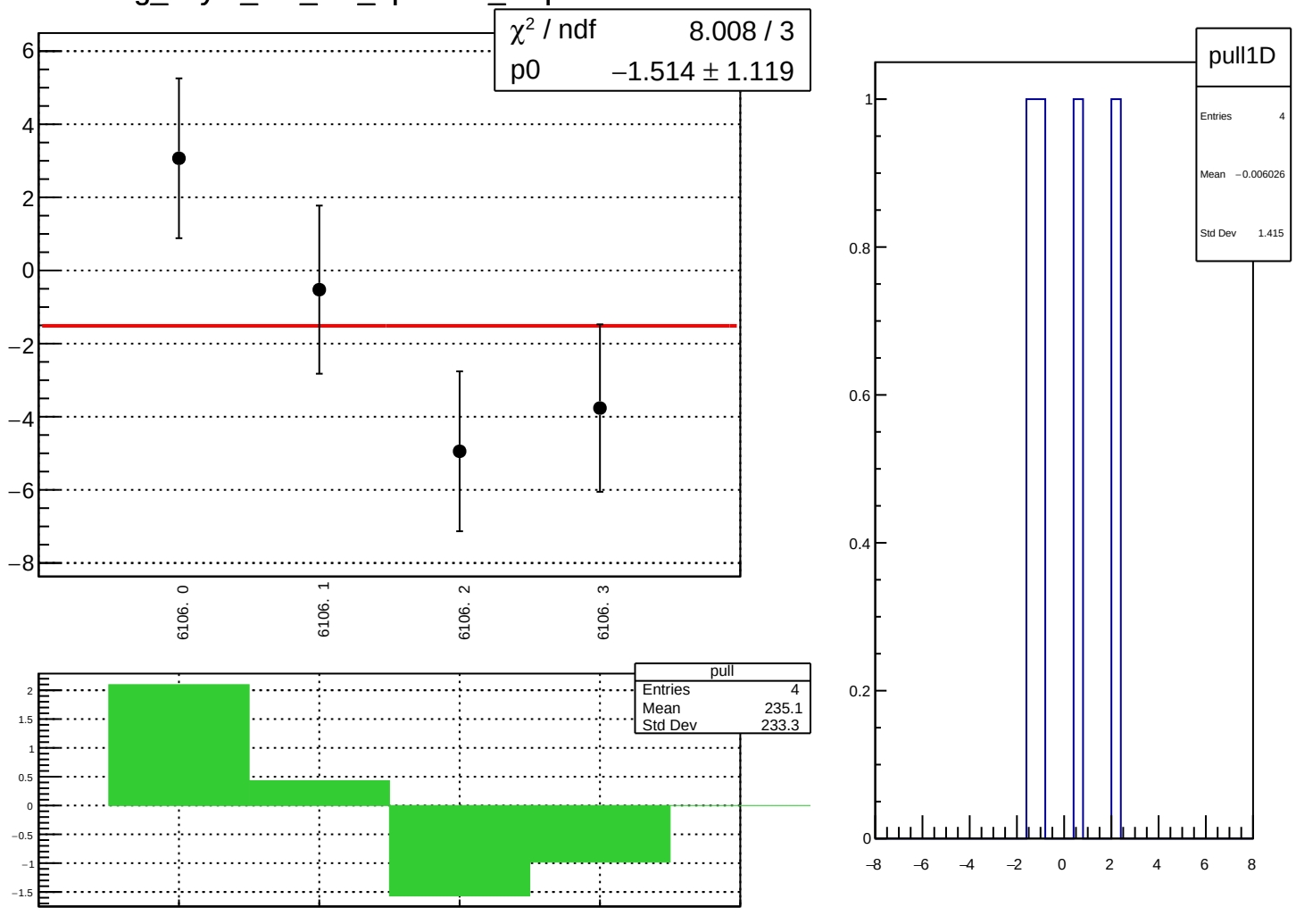

reg_asym_dsr_diff_bpm4aX_slope vs run
χ² / ndf 7.517 / 3
p0 1.17 ± 0.9621
6
4
2
0
−2
−4
6106. 0
6106. 1
6106. 2
6106. 3

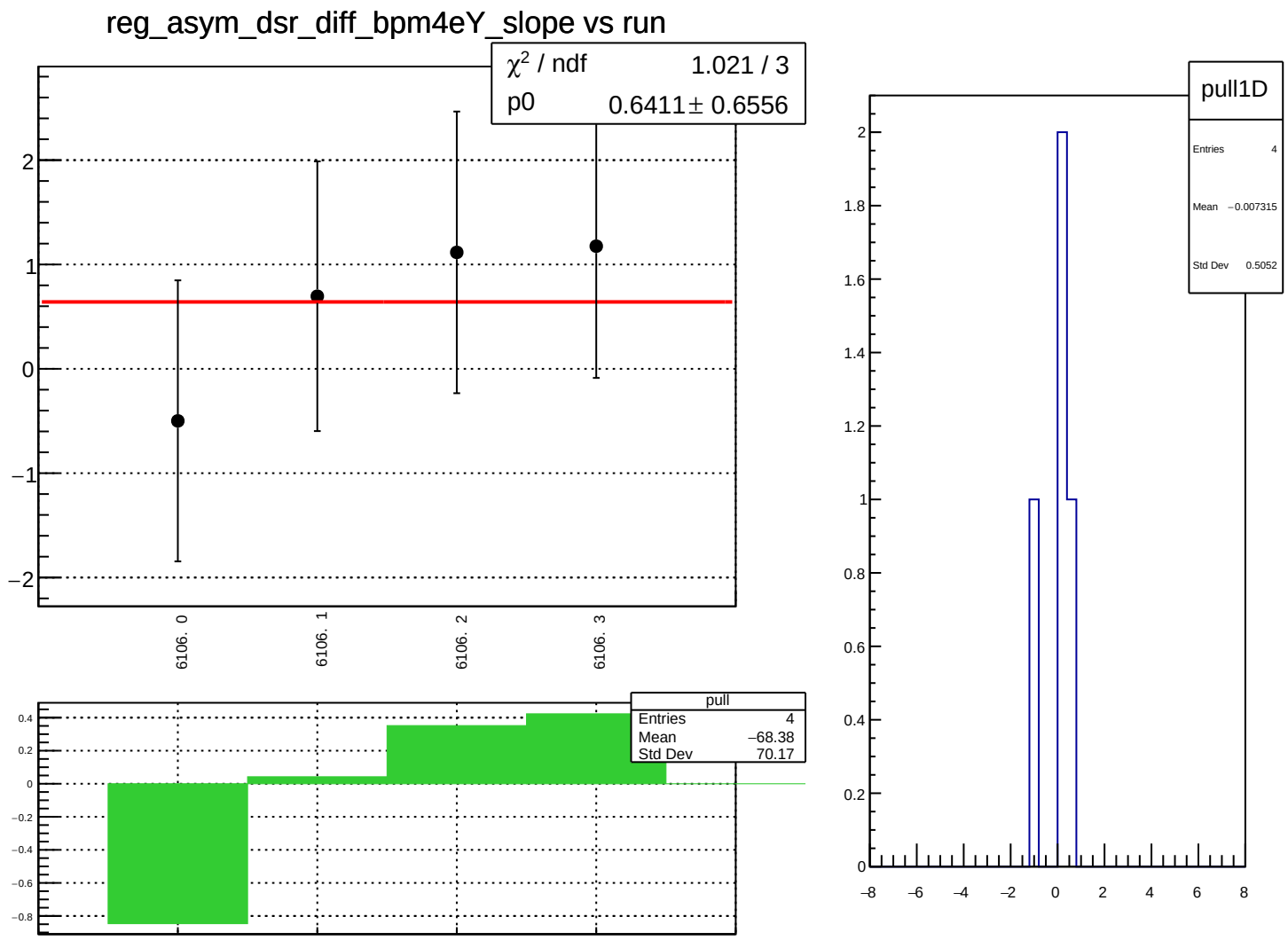

pull
Entries 4
Mean 214.2
Std Dev 212.4
1.5
1
0.5
0
−0.5
−1
−1.5
−2

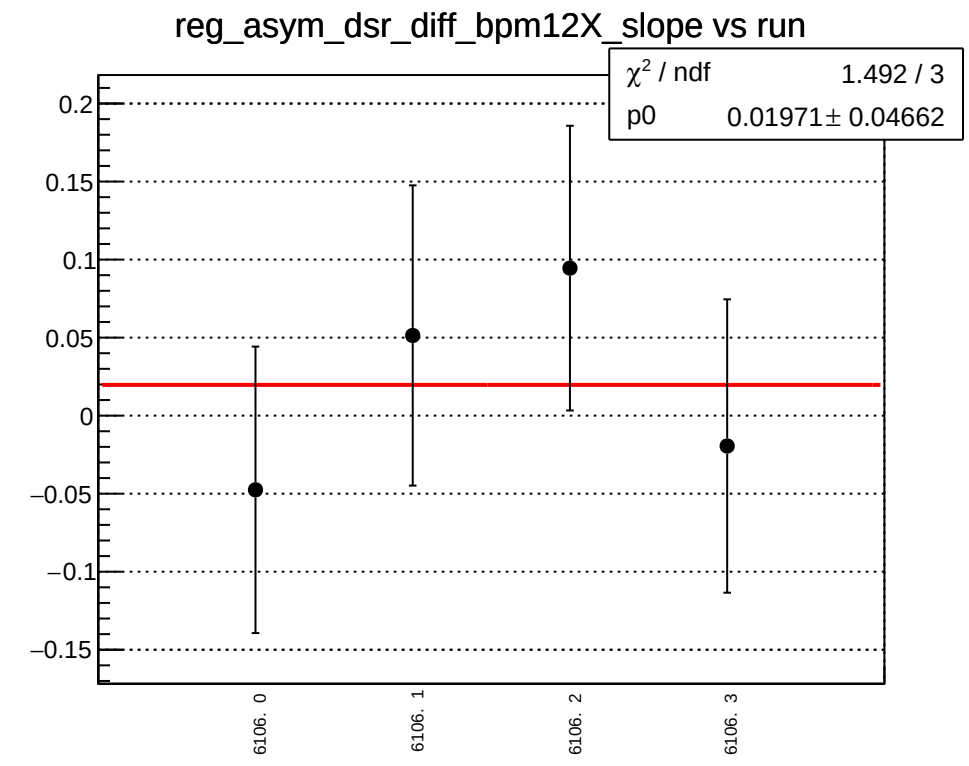

pull1D
Entries 4
Mean 0.006304
Std Dev 1.371
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

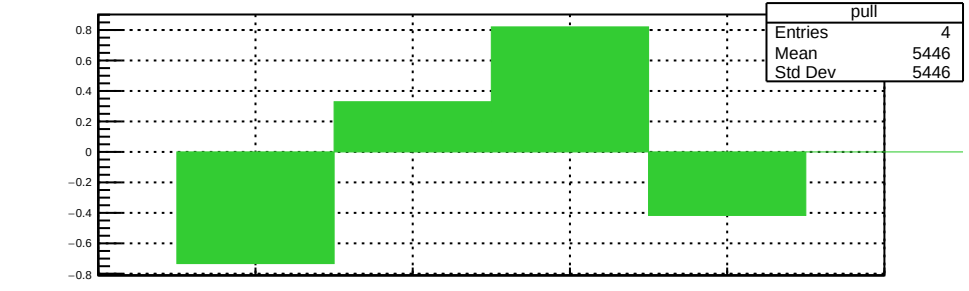

reg_asym_dsr_diff_bpm4aY_slope vs run
χ² / ndf 1.129 / 3
p0 −0.5531± 0.6194
2
1
0
−1
−2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −35.41
Std Dev 37.27
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

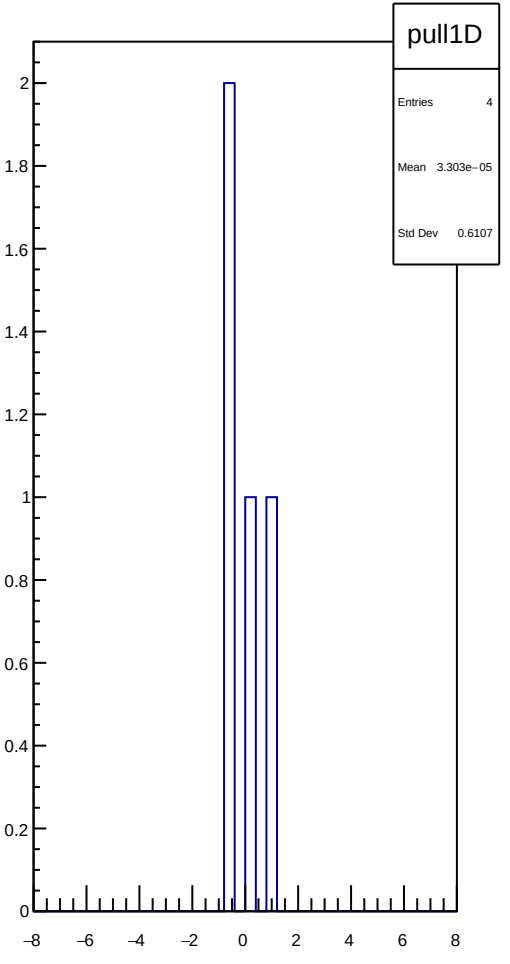

pull1D
Entries 4
Mean 0.01508
Std Dev 0.531
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

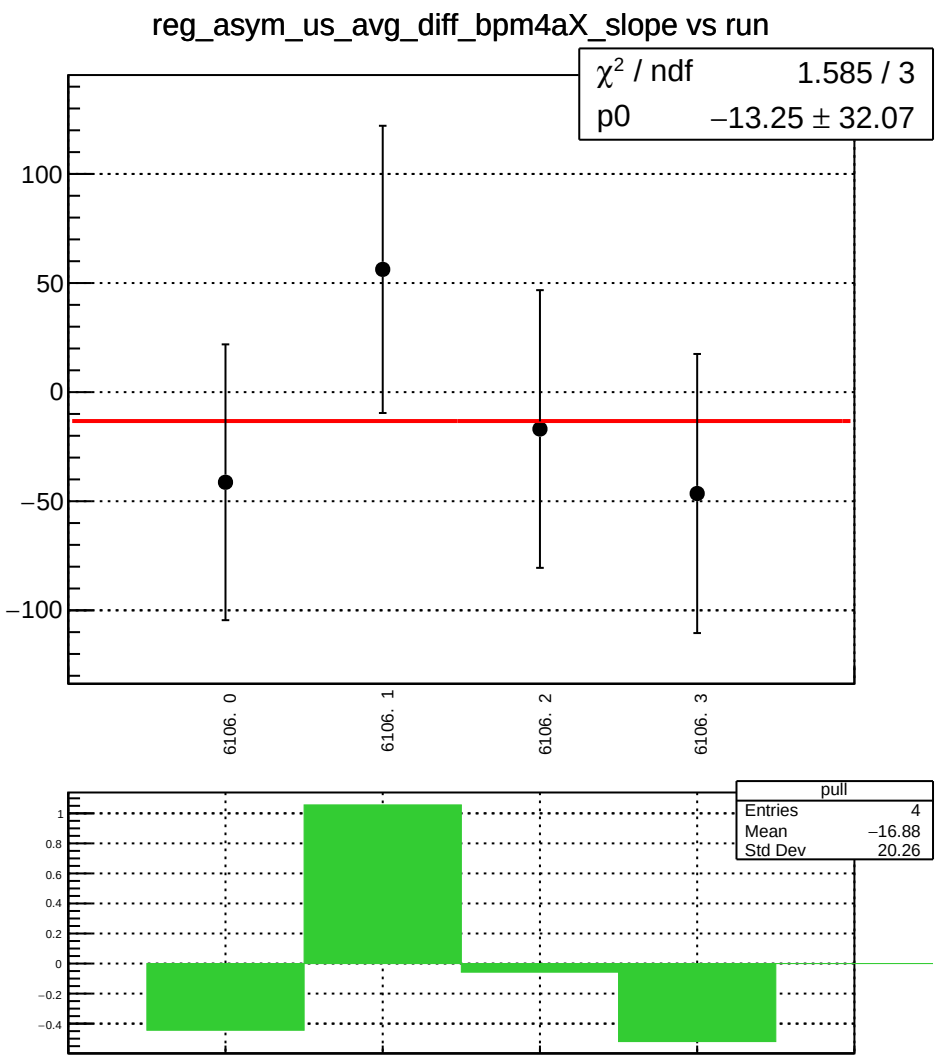

reg_asym_dsr_diff_bpm4eX_slope vs run
χ² / ndf 8.008 / 3
p0 −1.514 ± 1.119
6
4
2
0
−2
−4
−6
−8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 235.1
Std Dev 233.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 4
Mean −0.006026
Std Dev 1.415
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

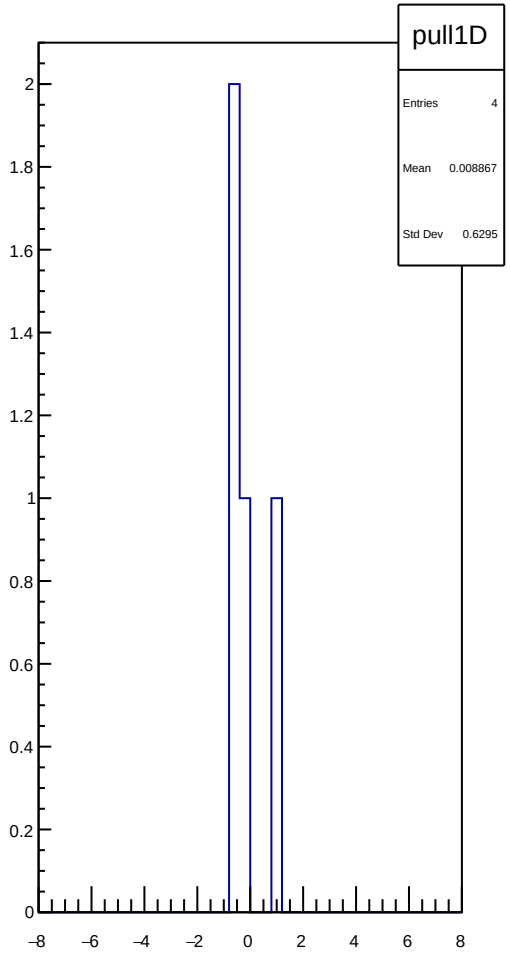

reg_asym_dsr_diff_bpm4eY_slope vs run
χ² / ndf 1.021 / 3
p0 0.6411 ± 0.6556
2
1
0
−1
−2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −68.38
Std Dev 70.17
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean −0.007315
Std Dev 0.5052
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

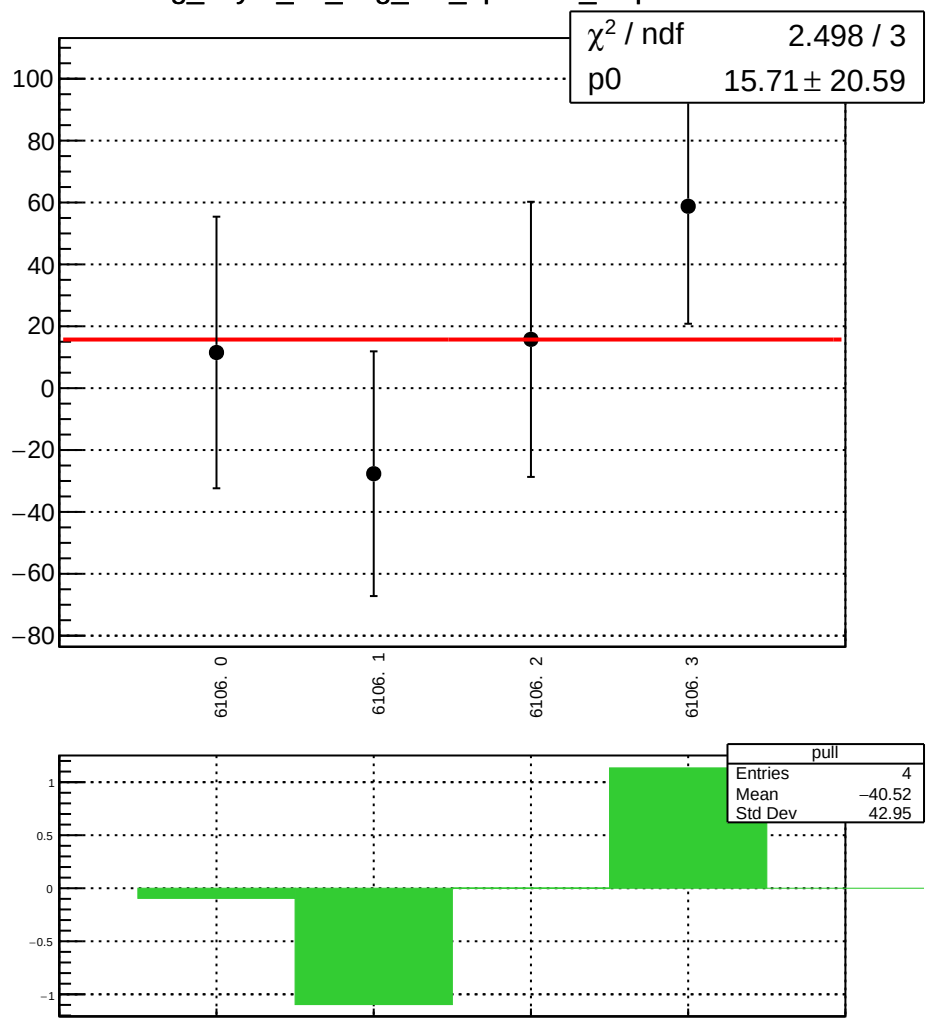

reg_asym_dsr_diff_bpm12X_slope vs run
χ² / ndf 1.492 / 3
p0 0.01971 ± 0.04662
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
6106. 0
6106. 1
6106. 2
6106. 3

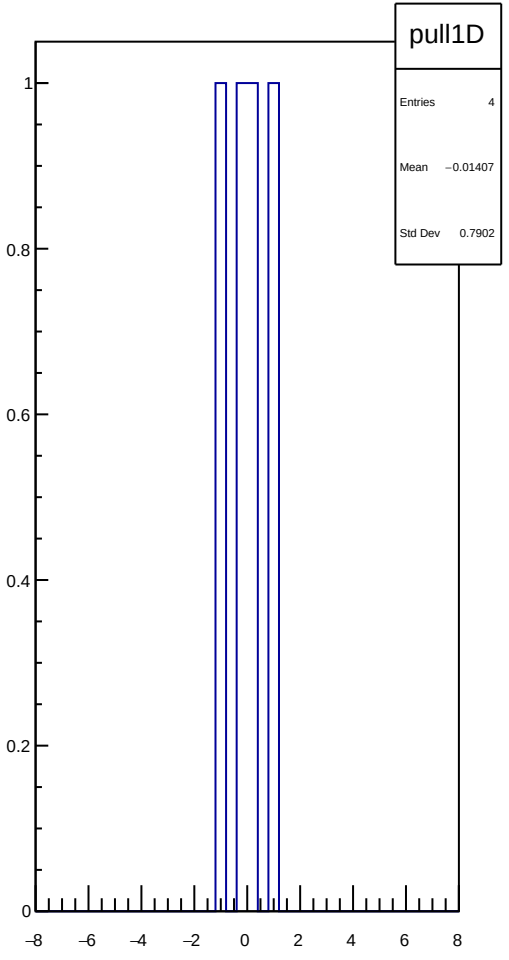

pull
Entries 4
Mean 5446
Std Dev 5446
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

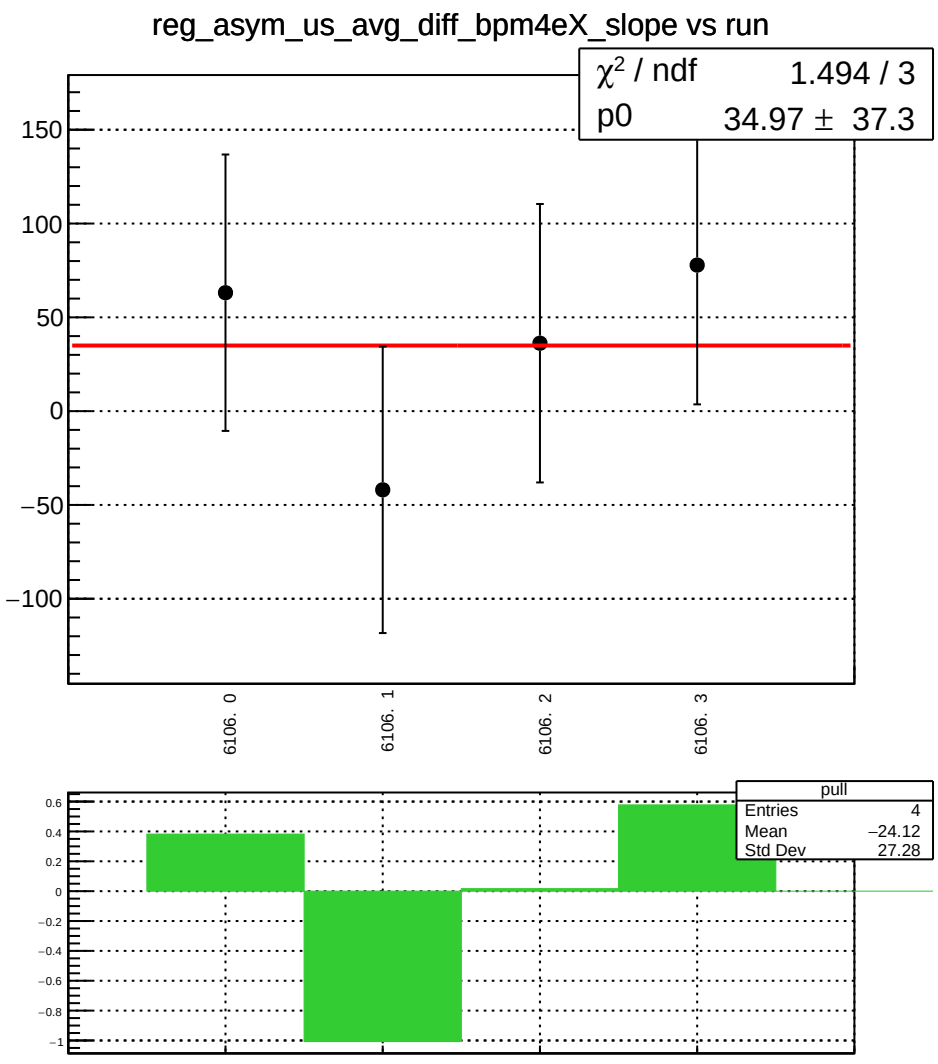

pull1D
Entries 4
Mean 3.303e−05
Std Dev 0.6107
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

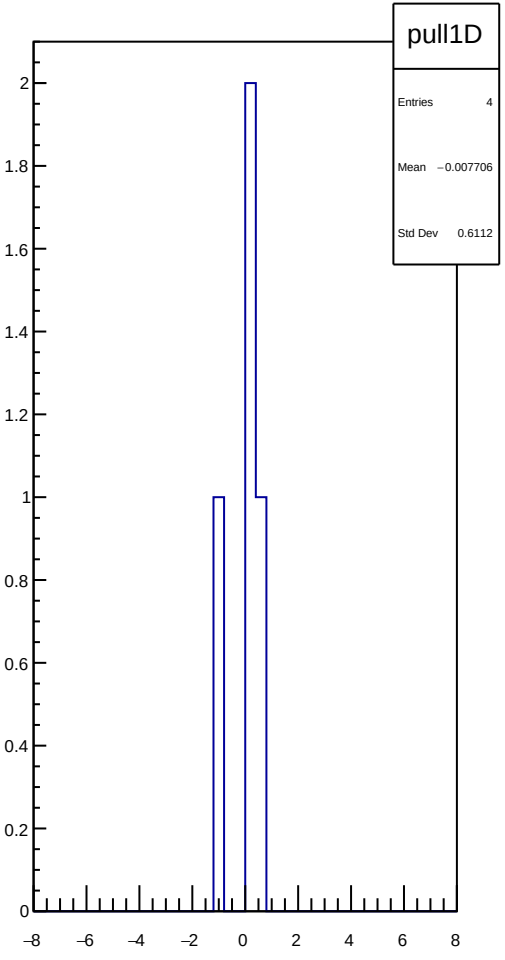

reg_asym_us_avg_diff_bpm4aX_slope vs run
χ² / ndf 1.585 / 3
p0 −13.25 ± 32.07
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −16.88
Std Dev 20.26
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4

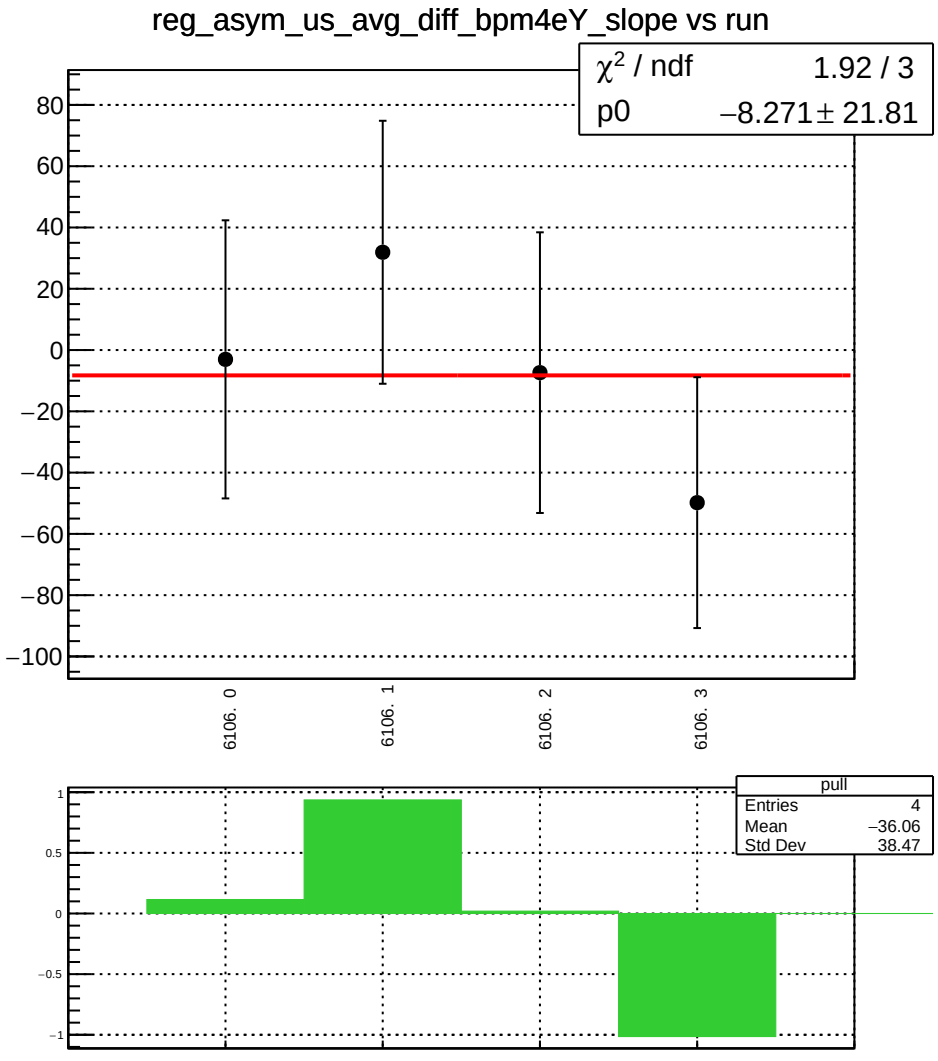

pull1D
Entries 4
Mean 0.008867
Std Dev 0.6295
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

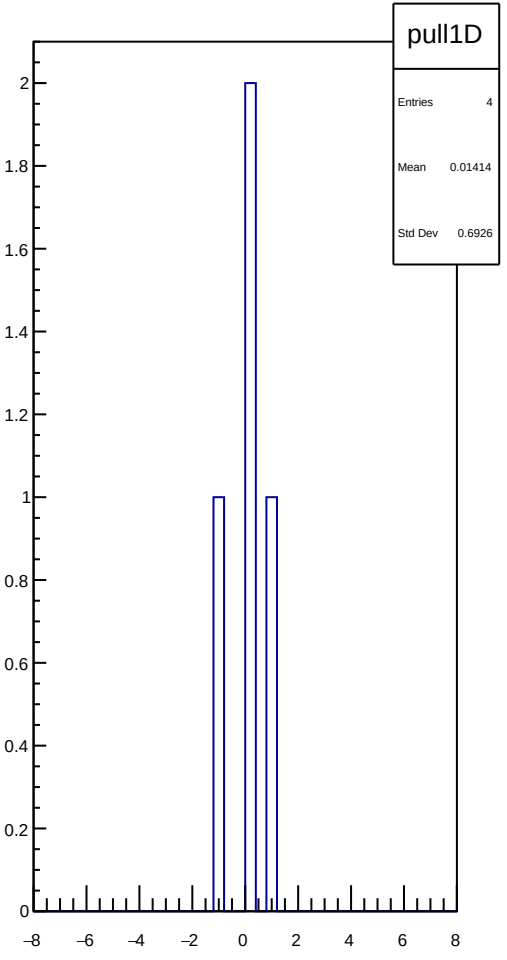

reg_asym_us_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.498 / 3
p0 15.71 ± 20.59
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −40.52
Std Dev 42.95
1
0.5
0
−0.5
−1

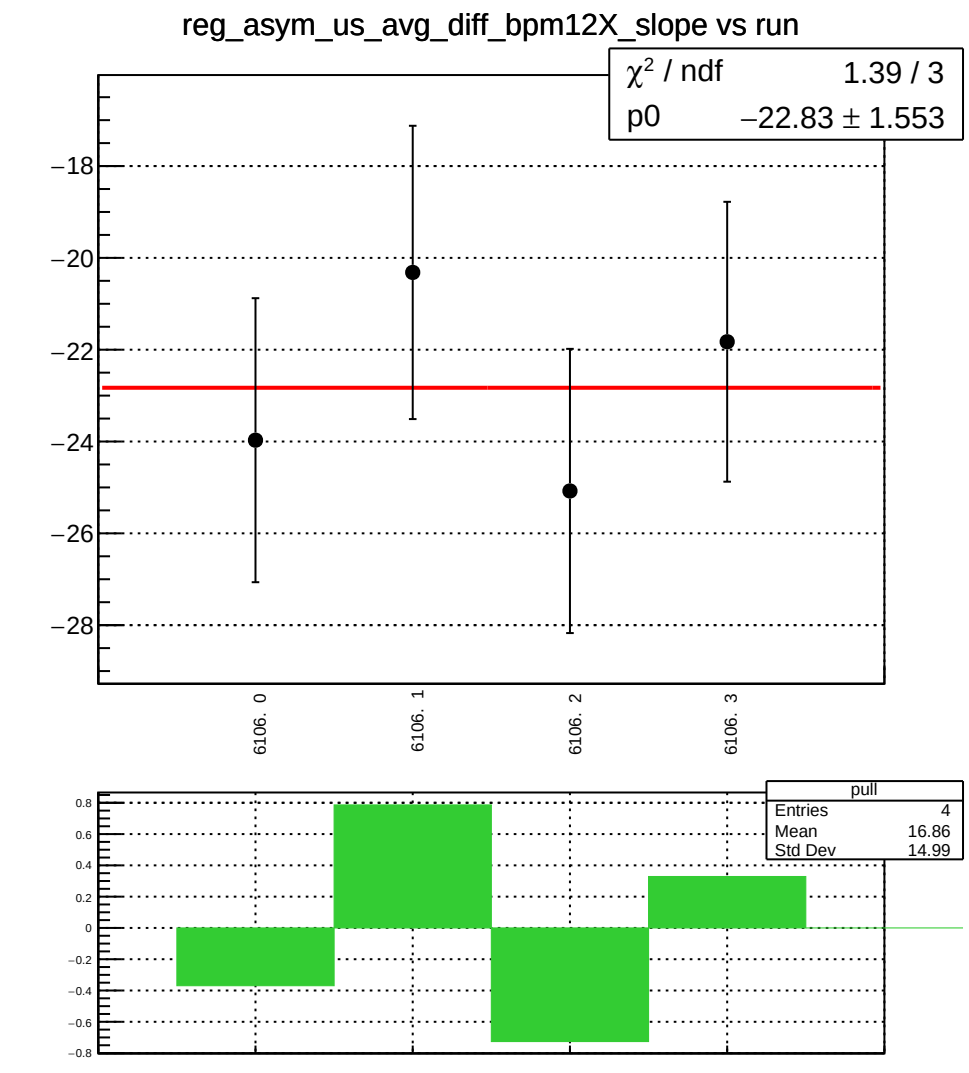

pull1D
Entries 4
Mean −0.01407
Std Dev 0.7902
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

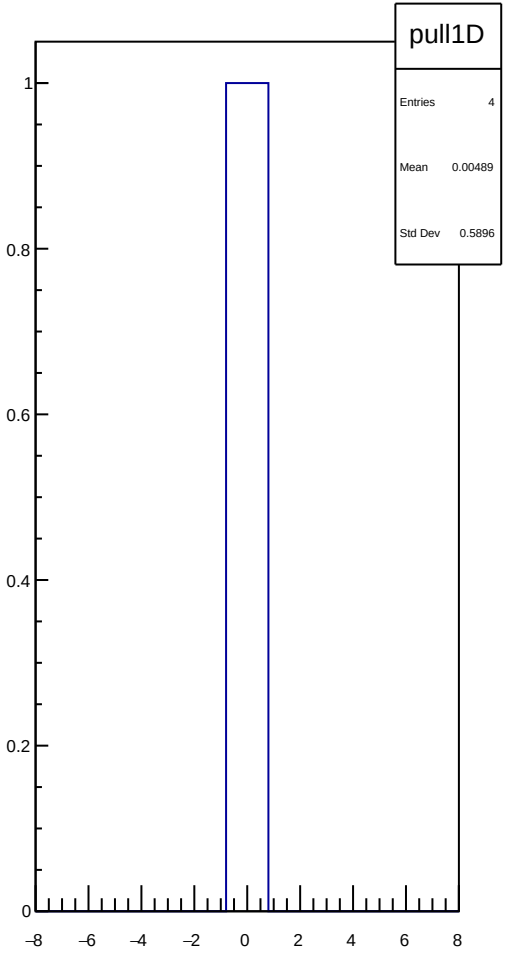

reg_asym_us_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.494 / 3
p0 34.97 ± 37.3
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −24.12
Std Dev 27.28
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

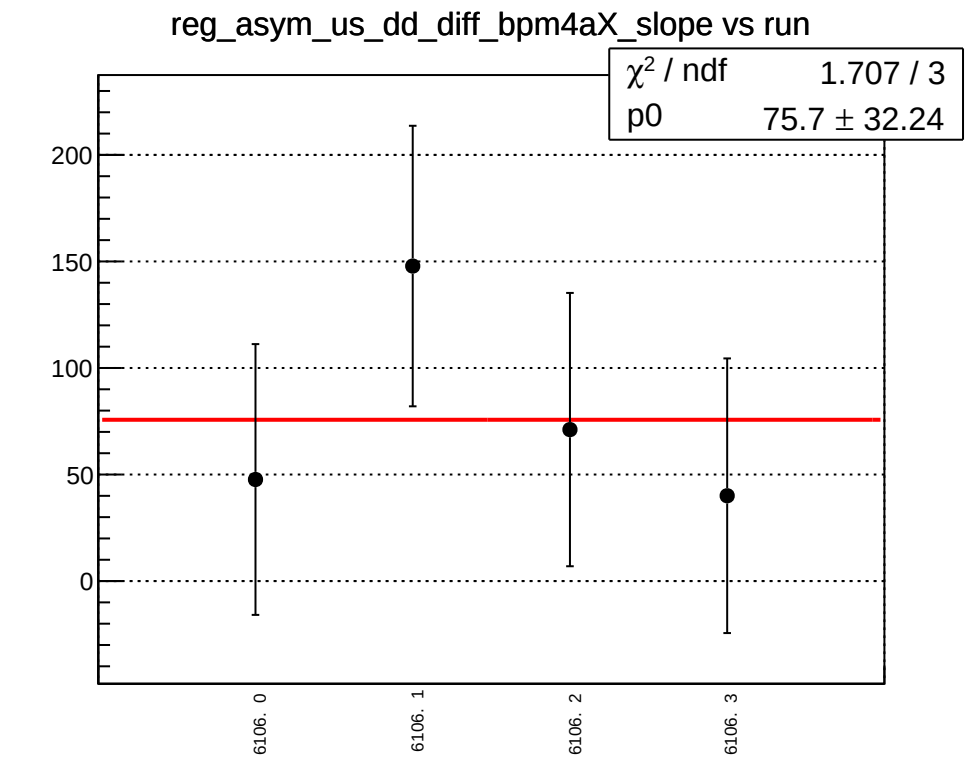

pull1D
Entries 4
Mean −0.007706
Std Dev 0.6112
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

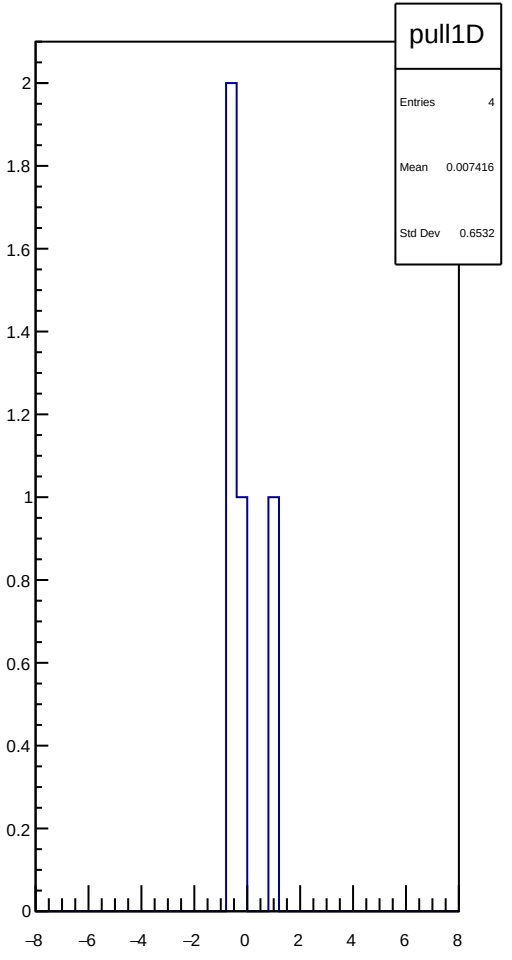

reg_asym_us_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.92 / 3
p0 −8.271 ± 21.81
80
60
40
20
0
−20
−40
−60
−80
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −36.06
Std Dev 38.47
1
0.5
0
−0.5
−1

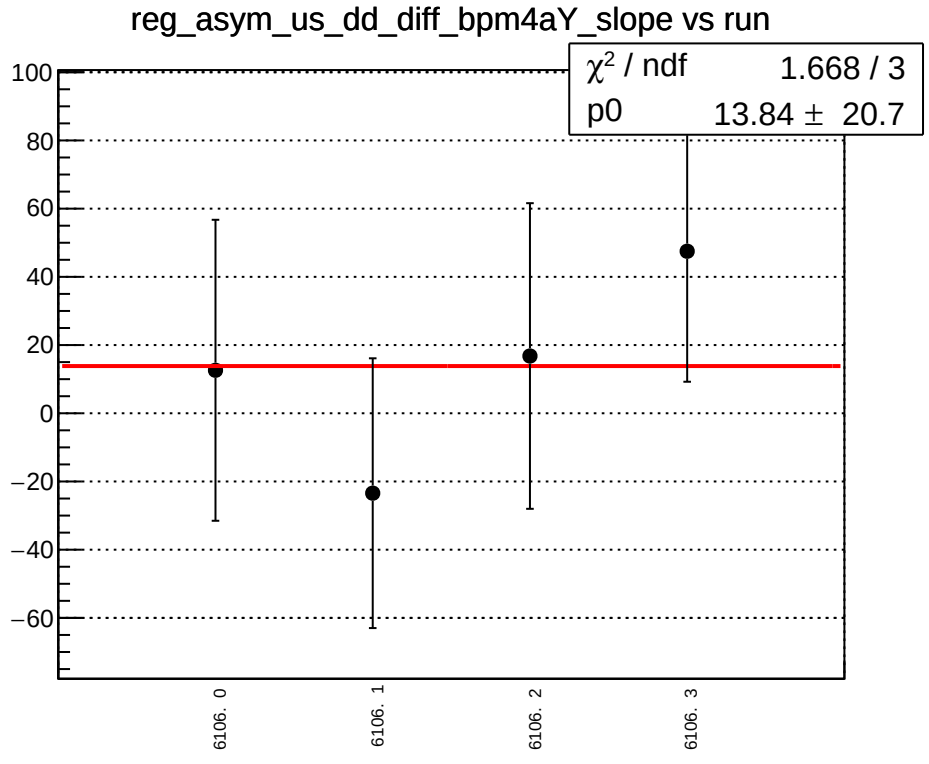

pull1D
Entries 4
Mean 0.01414
Std Dev 0.6926
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

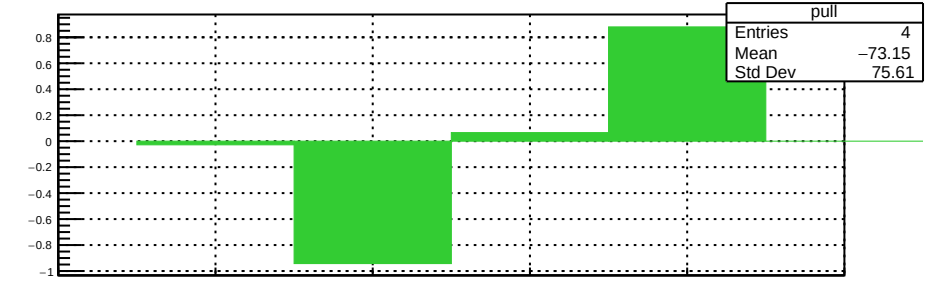

reg_asym_us_avg_diff_bpm12X_slope vs run
χ² / ndf 1.39 / 3
p0 −22.83 ± 1.553
−18
−20
−22
−24
−26
−28
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 16.86
Std Dev 14.99
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

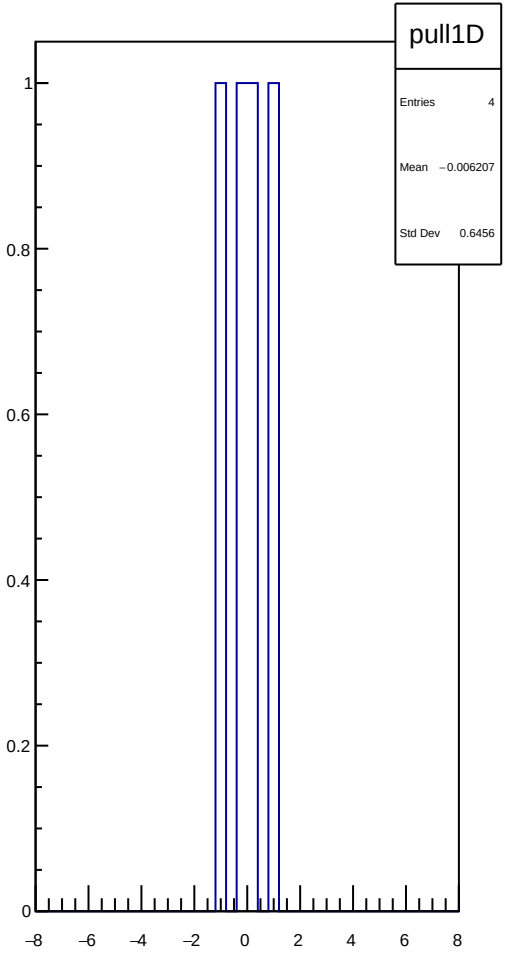

pull1D
Entries 4
Mean 0.00489
Std Dev 0.5896
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

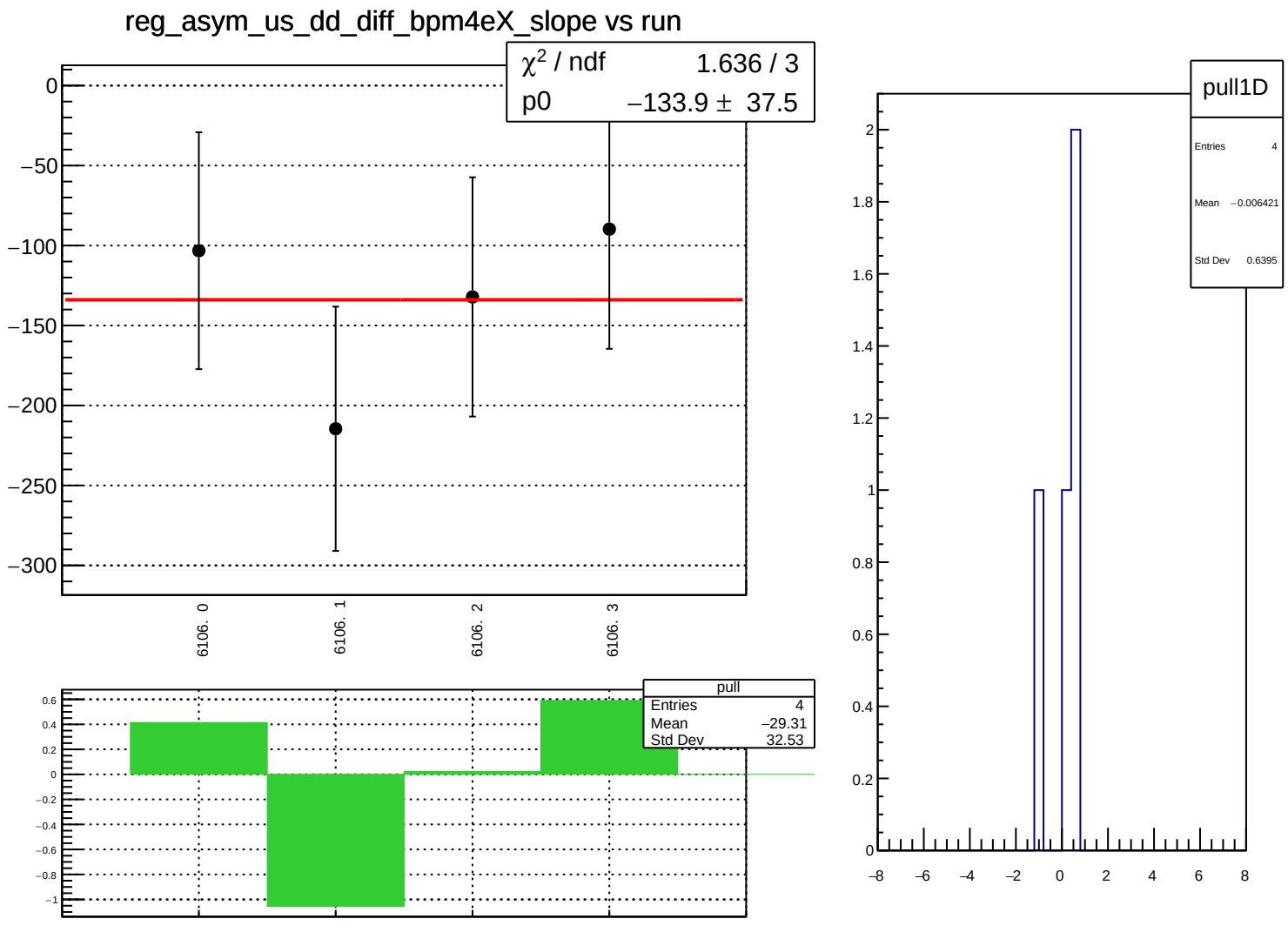

reg_asym_us_dd_diff_bpm4aX_slope vs run
χ² / ndf 1.707 / 3
p0 75.7 ± 32.24
200
150
100
50
0
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −23.35
Std Dev 26.64
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

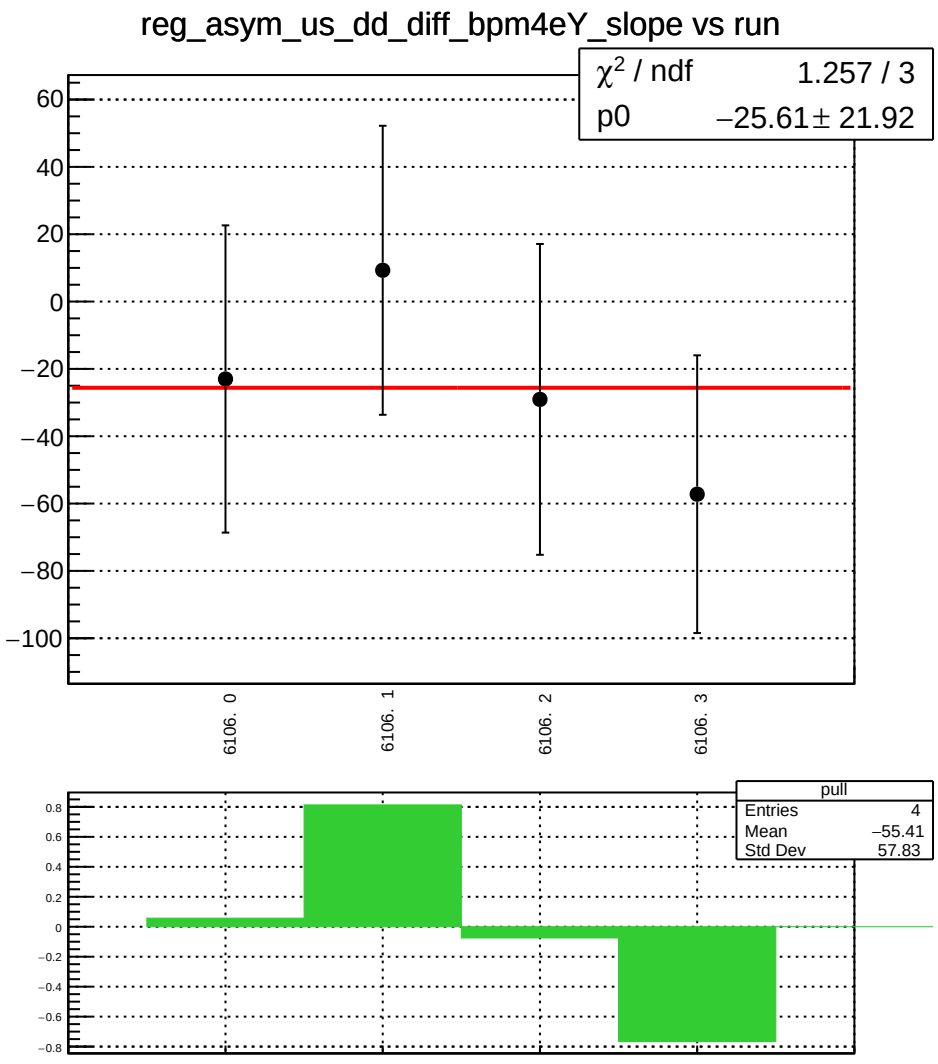

pull1D
Entries 4
Mean 0.007416
Std Dev 0.6532
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

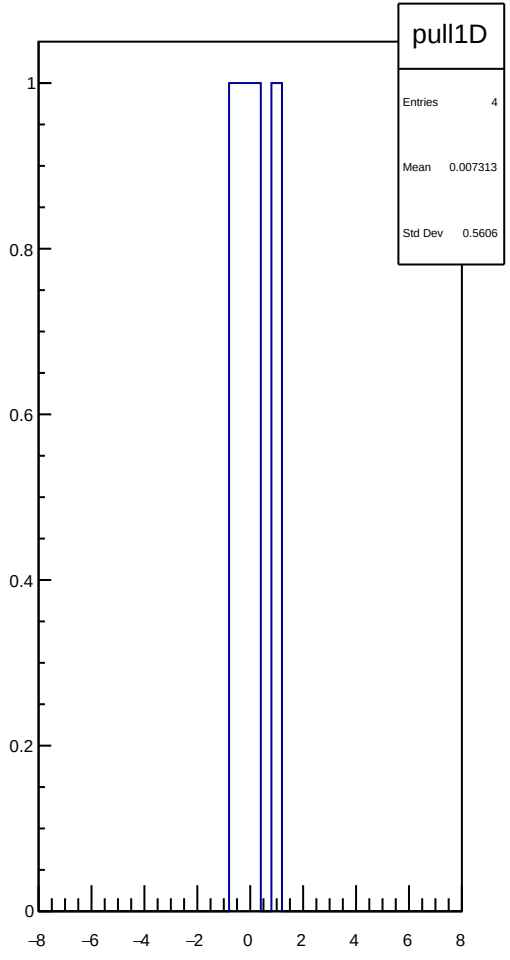

reg_asym_us_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.668 / 3
p0 13.84 ± 20.7
100
80
60
40
20
0
−20
−40
−60
6106. 0
6106. 1
6106. 2
6106. 3

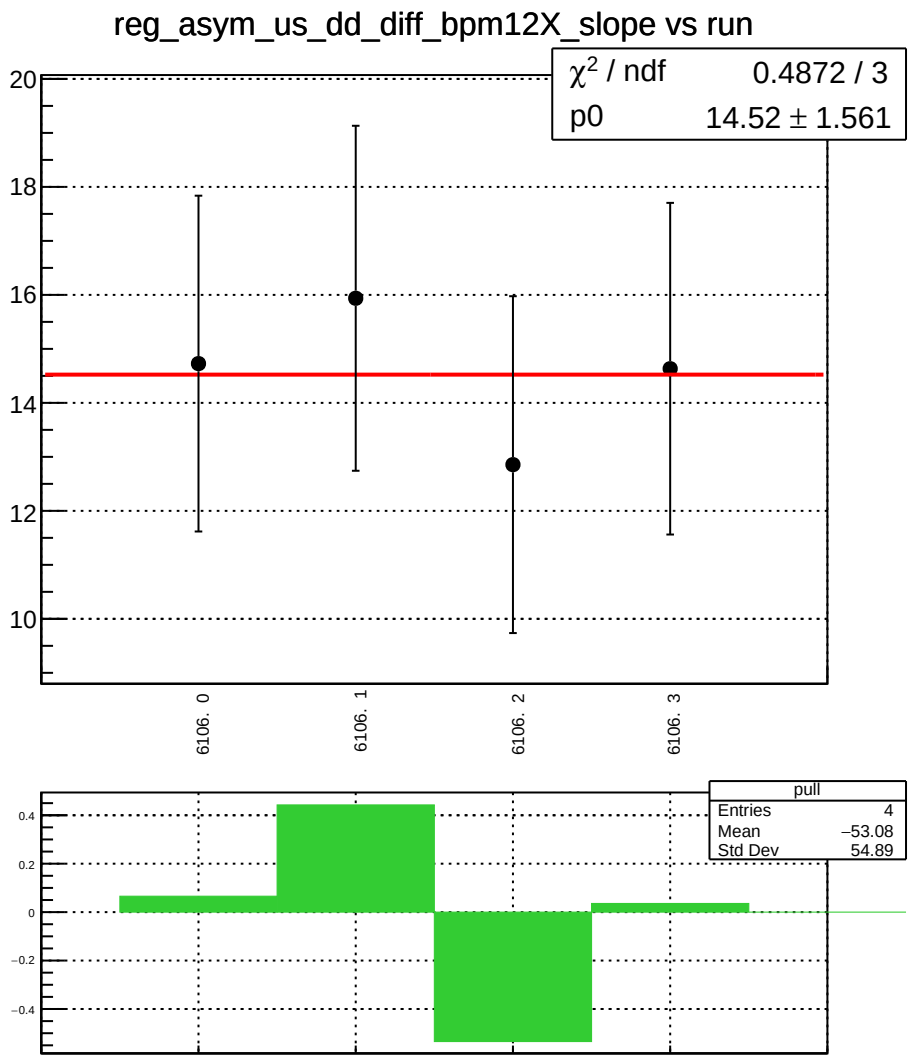

pull
Entries 4
Mean −73.15
Std Dev 75.61
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

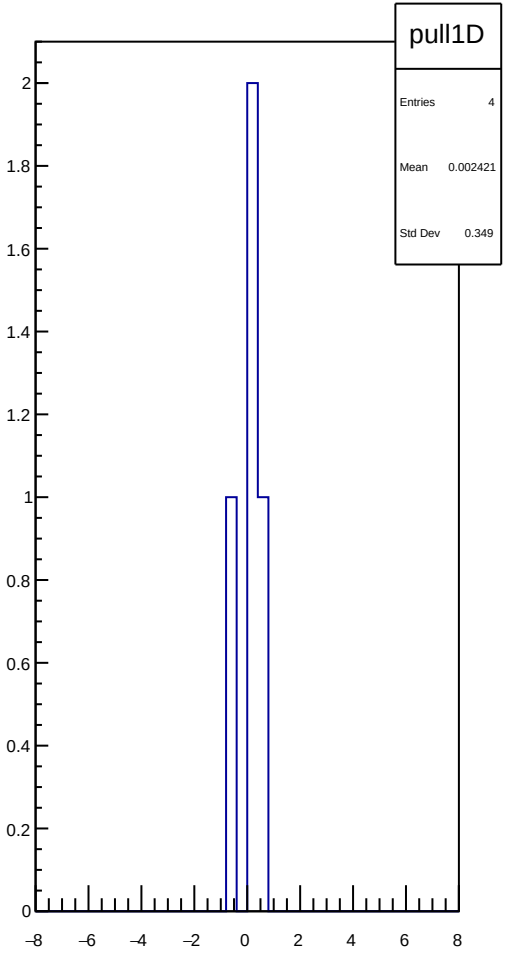

pull1D
Entries 4
Mean −0.006207
Std Dev 0.6456
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

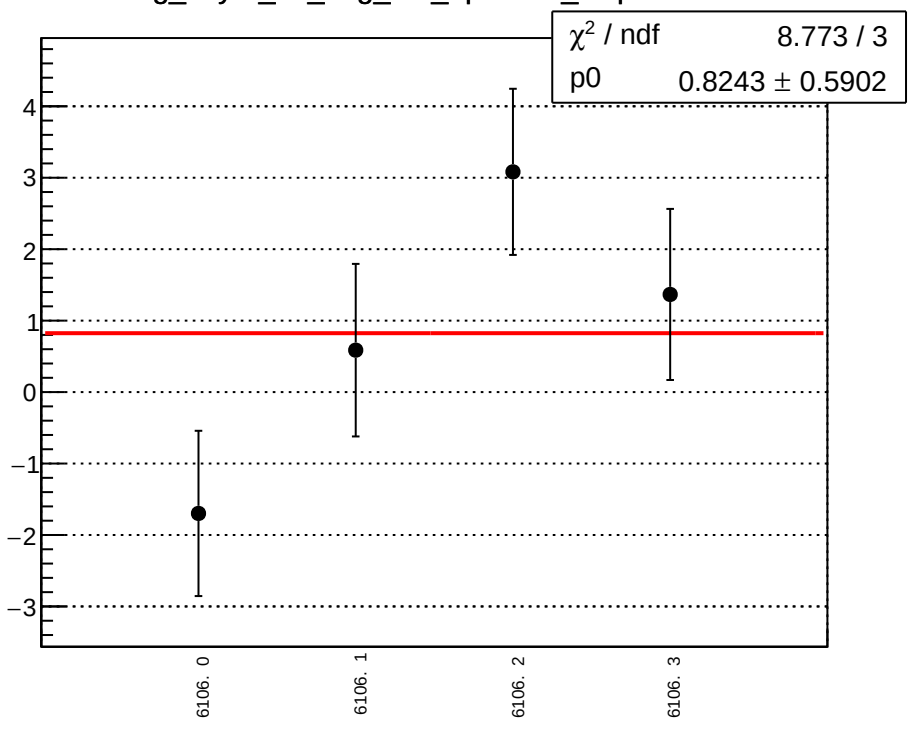

reg_asym_us_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.636 / 3
p0 −133.9 ± 37.5
0
−50
−100
−150
−200
−250
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −29.31
Std Dev 32.53
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 4
Mean −0.006421
Std Dev 0.6395
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

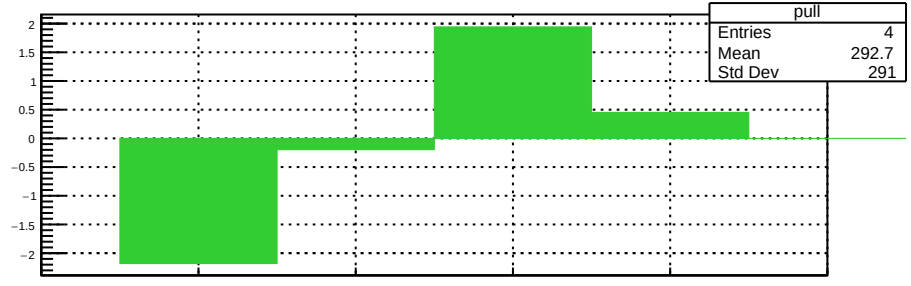

reg_asym_us_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.257 / 3
p0 −25.61 ± 21.92
60
40
20
0
−20
−40
−60
−80
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −55.41
Std Dev 57.83
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

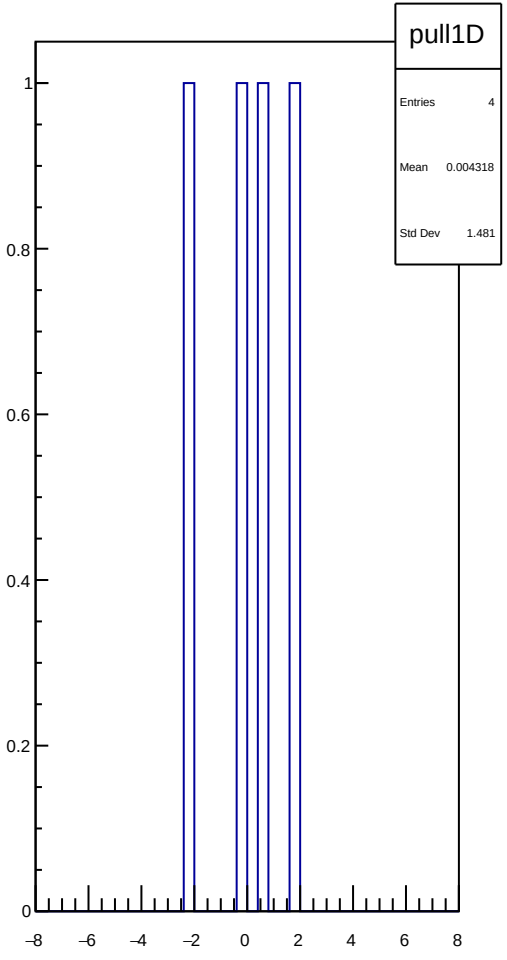

pull1D
Entries 4
Mean 0.007313
Std Dev 0.5606
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

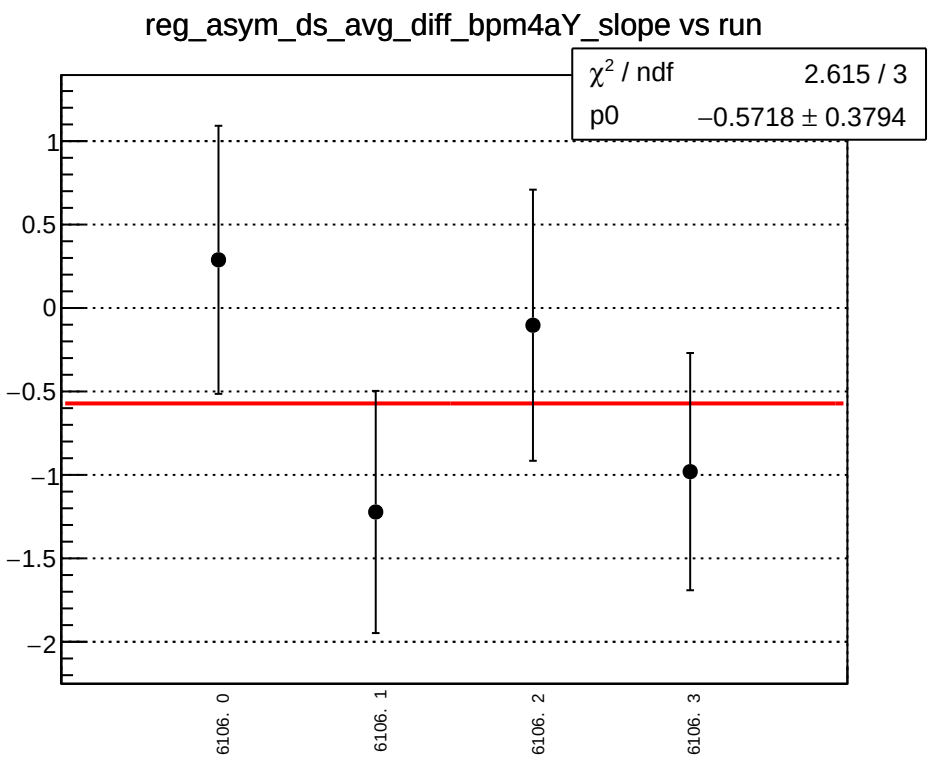

reg_asym_us_dd_diff_bpm12X_slope vs run
χ² / ndf 0.4872 / 3
p0 14.52 ± 1.561
20
18
16
14
12
10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −53.08
Std Dev 54.89
0.4
0.2
0
−0.2
−0.4

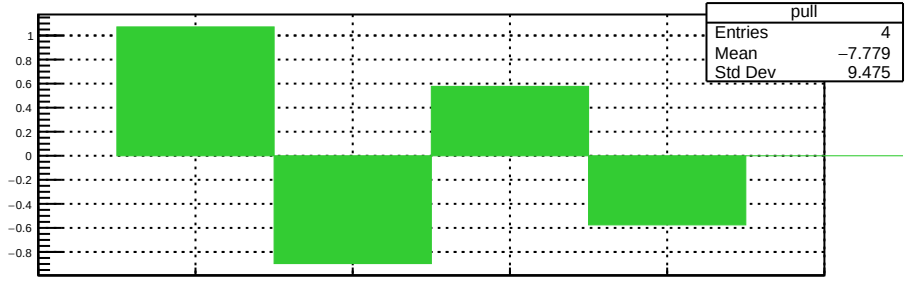

pull1D
Entries 4
Mean 0.002421
Std Dev 0.349
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

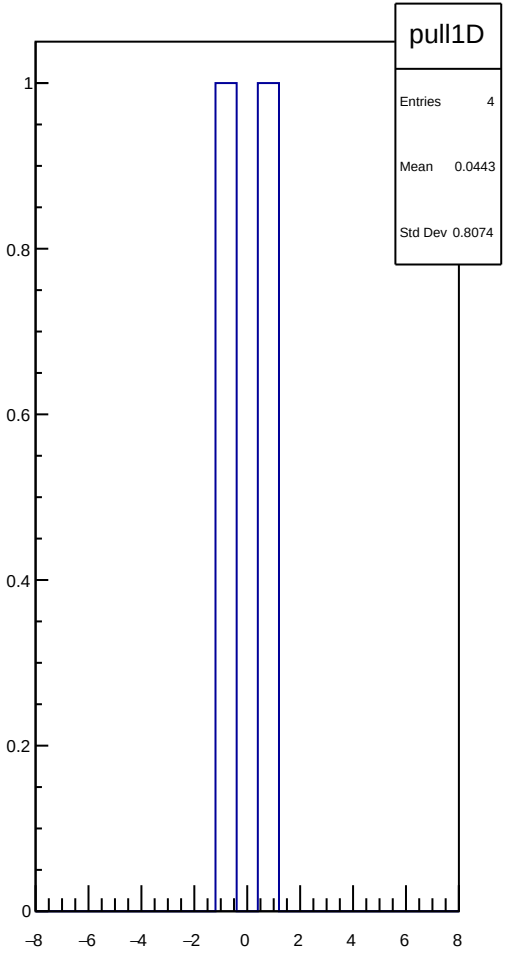

reg_asym_ds_avg_diff_bpm4aX_slope vs run
χ² / ndf 8.773 / 3
p0 0.8243 ± 0.5902
6106. 0
6106. 1
6106. 2
6106. 3

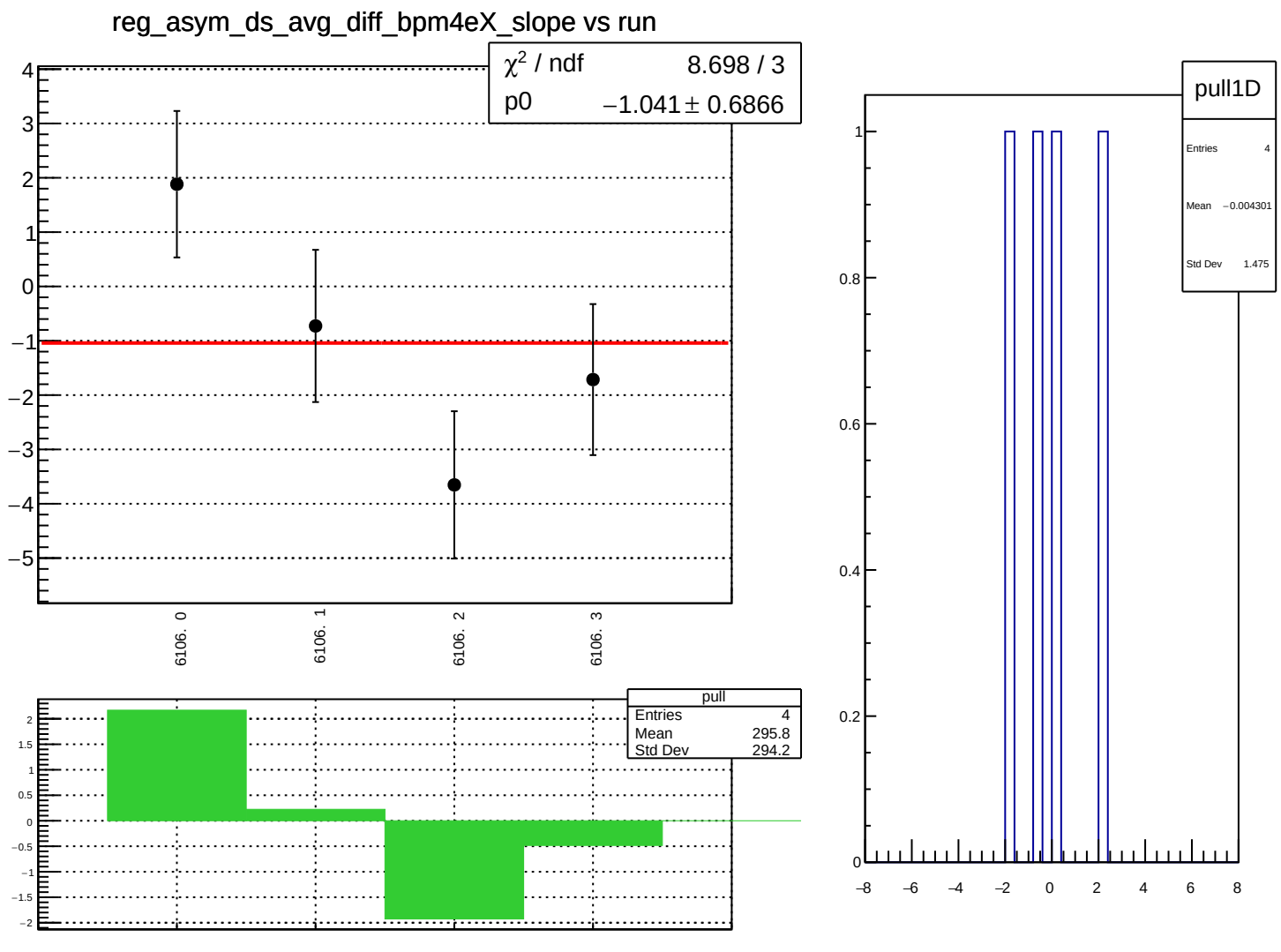

pull
Entries 4
Mean 292.7
Std Dev 291

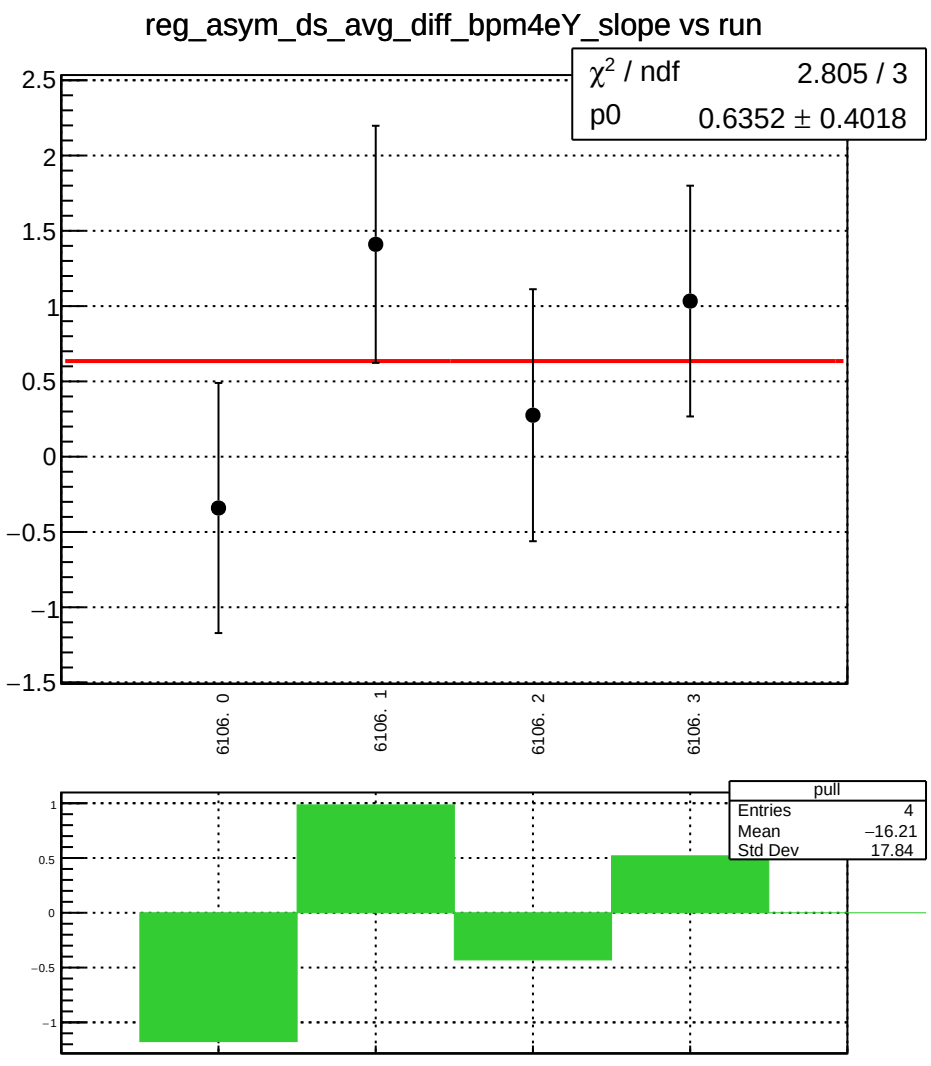

pull1D
Entries 4
Mean 0.004318
Std Dev 1.481

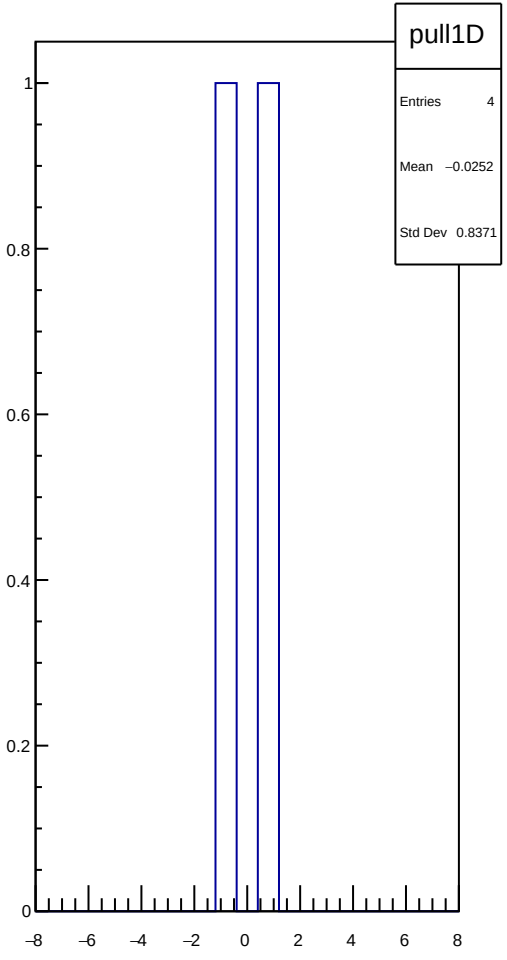

reg_asym_ds_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.615 / 3
p0 −0.5718 ± 0.3794
1
0.5
0
−0.5
−1
−1.5
−2
6106. 0
6106. 1
6106. 2
6106. 3

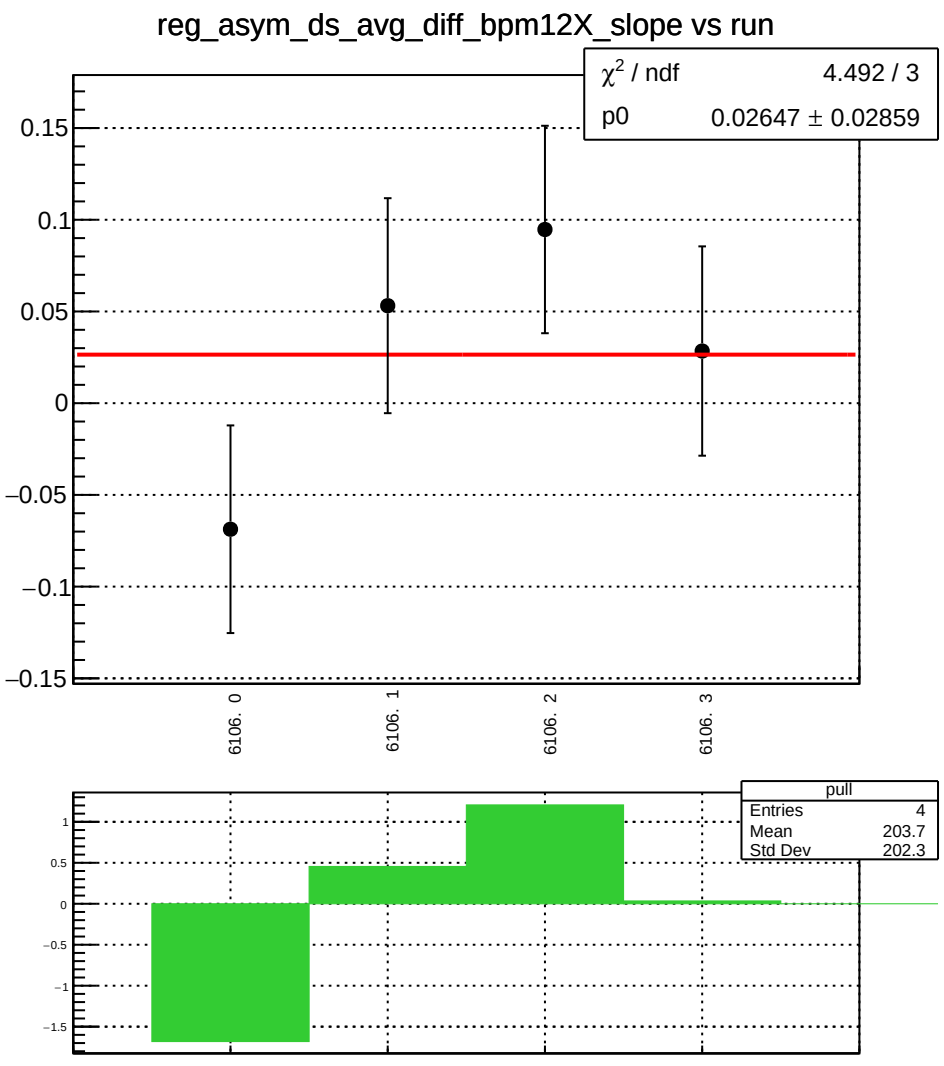

pull
Entries 4
Mean −7.779
Std Dev 9.475
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

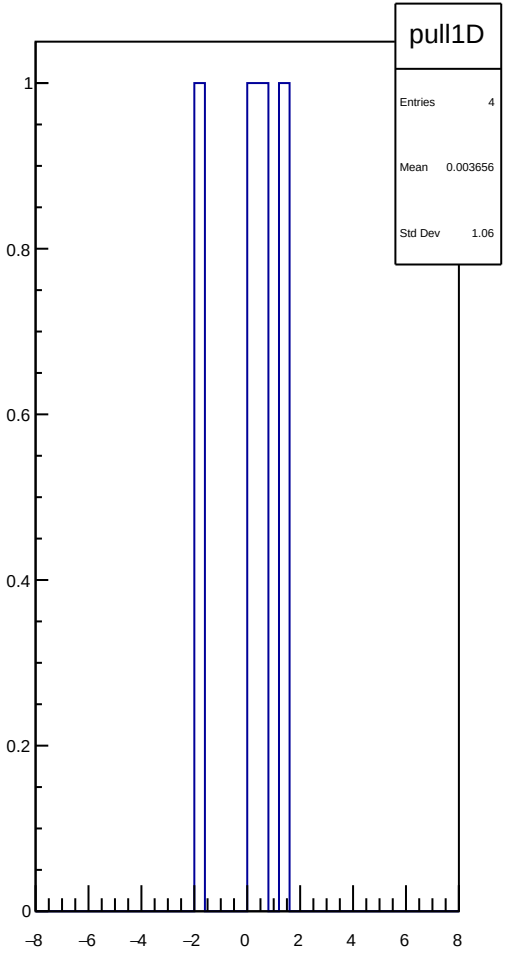

pull1D
Entries 4
Mean 0.0443
Std Dev 0.8074
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

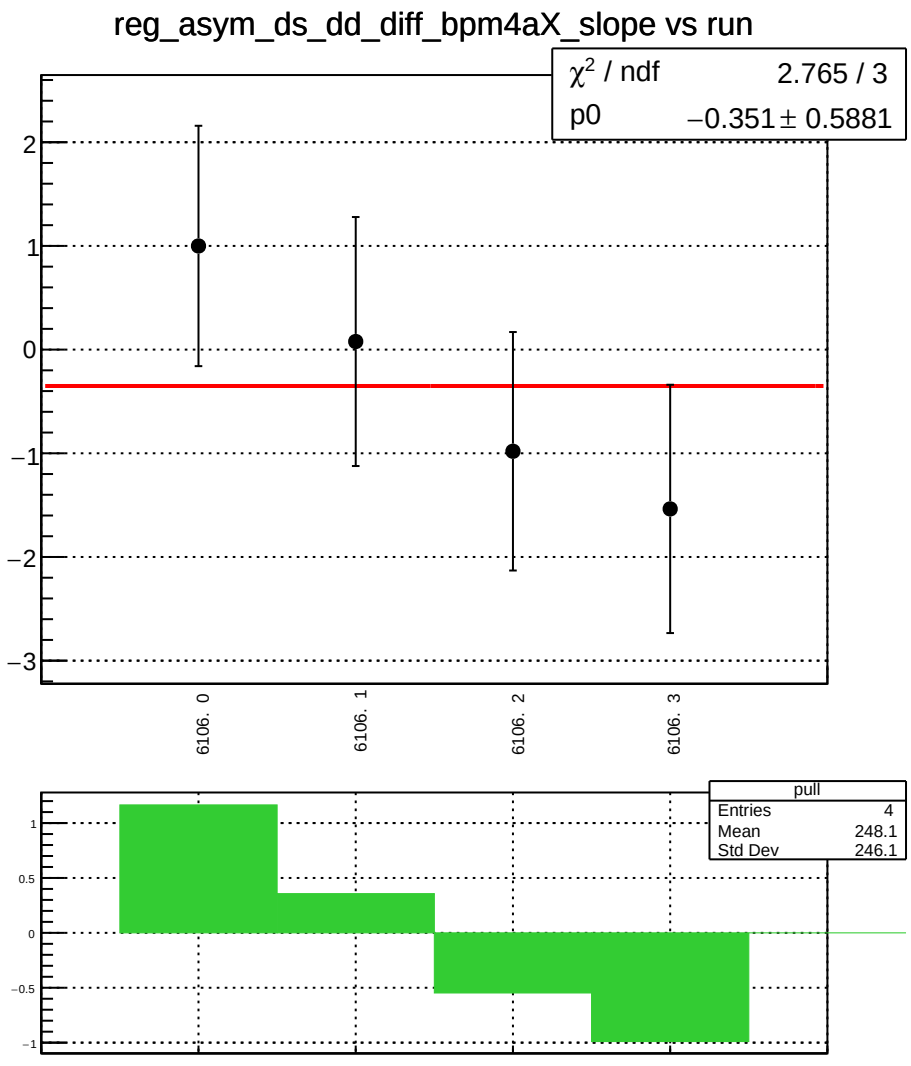

reg_asym_ds_avg_diff_bpm4eX_slope vs run
χ² / ndf 8.698 / 3
p0 −1.041 ± 0.6866
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 295.8
Std Dev 294.2
pull1D
Entries 4
Mean −0.004301
Std Dev 1.475

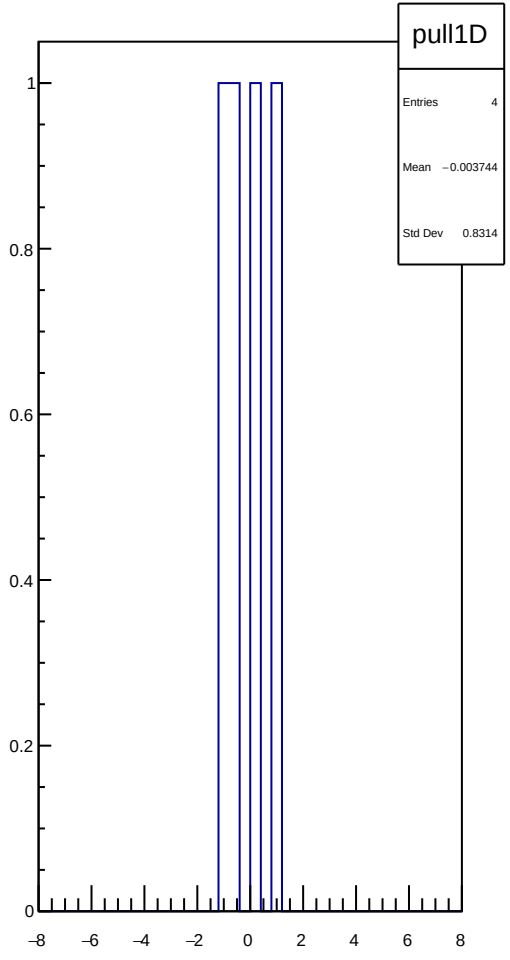

reg_asym_ds_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.805 / 3
p0 0.6352 ± 0.4018
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −16.21
Std Dev 17.84
1
0.5
0
−0.5
−1

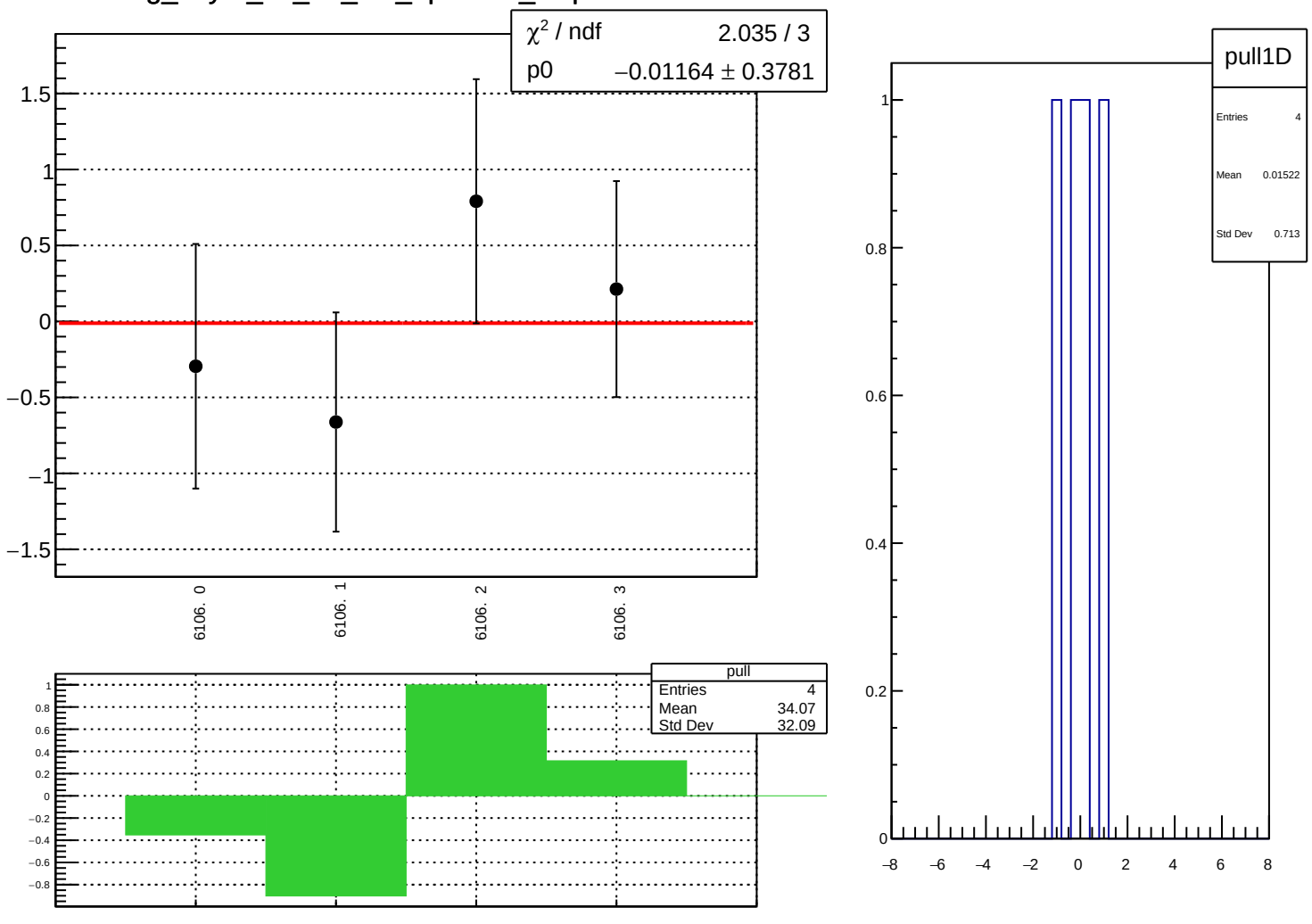

pull1D
Entries 4
Mean −0.0252
Std Dev 0.8371
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

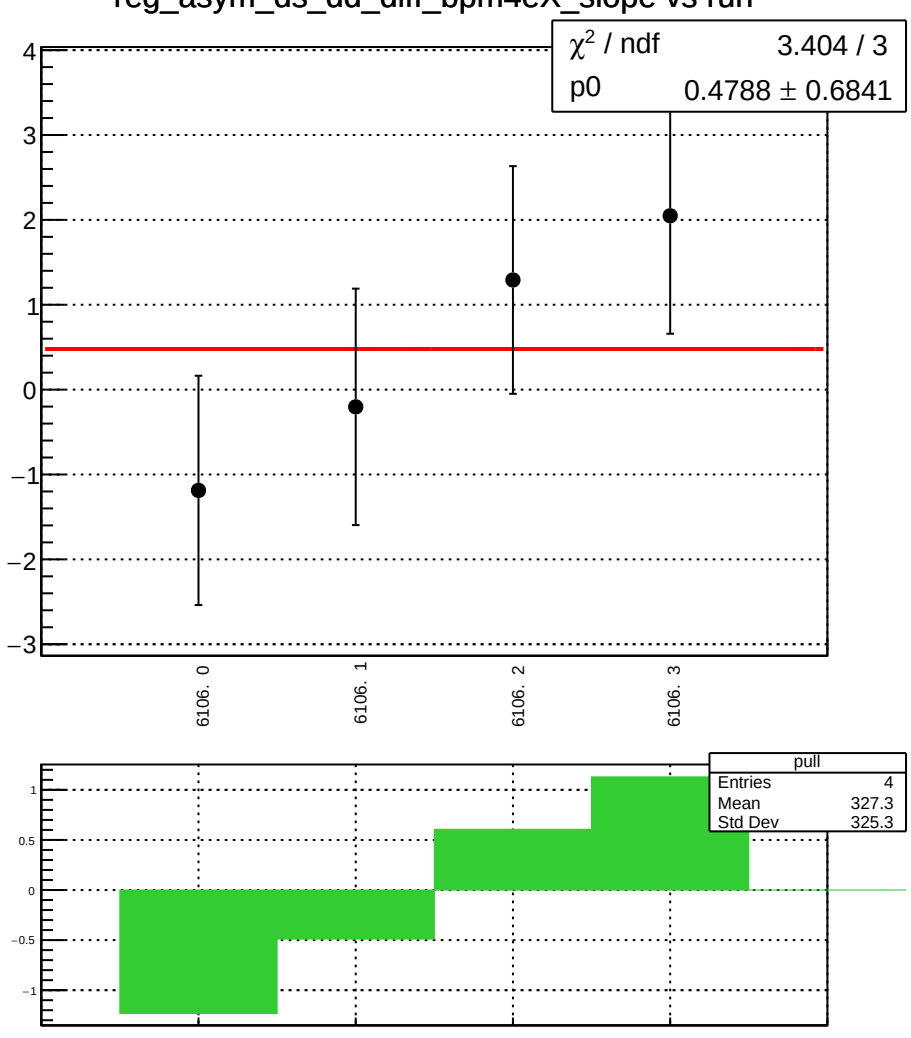

reg_asym_ds_avg_diff_bpm12X_slope vs run
χ² / ndf 4.492 / 3
p0 0.02647 ± 0.02859
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 203.7
Std Dev 202.3
1
0.5
0
−0.5
−1
−1.5

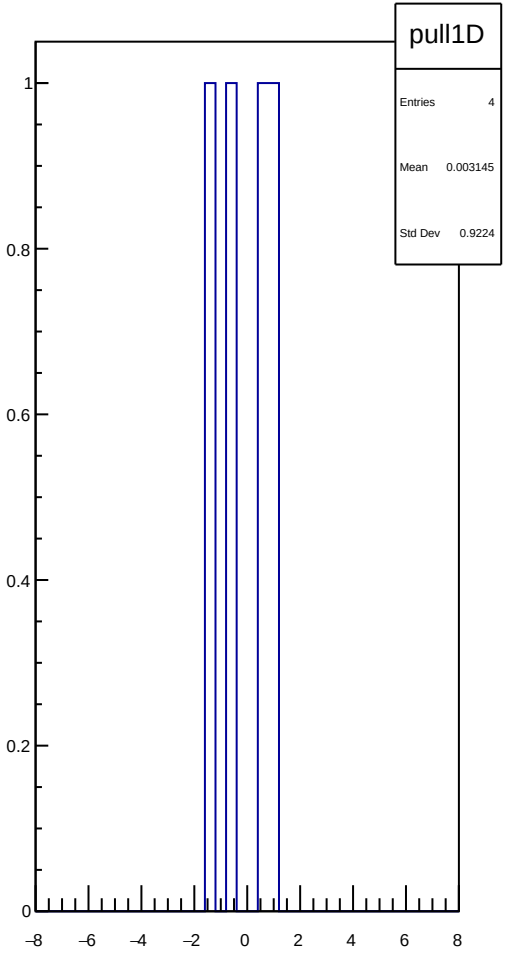

pull1D
Entries 4
Mean 0.003656
Std Dev 1.06
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

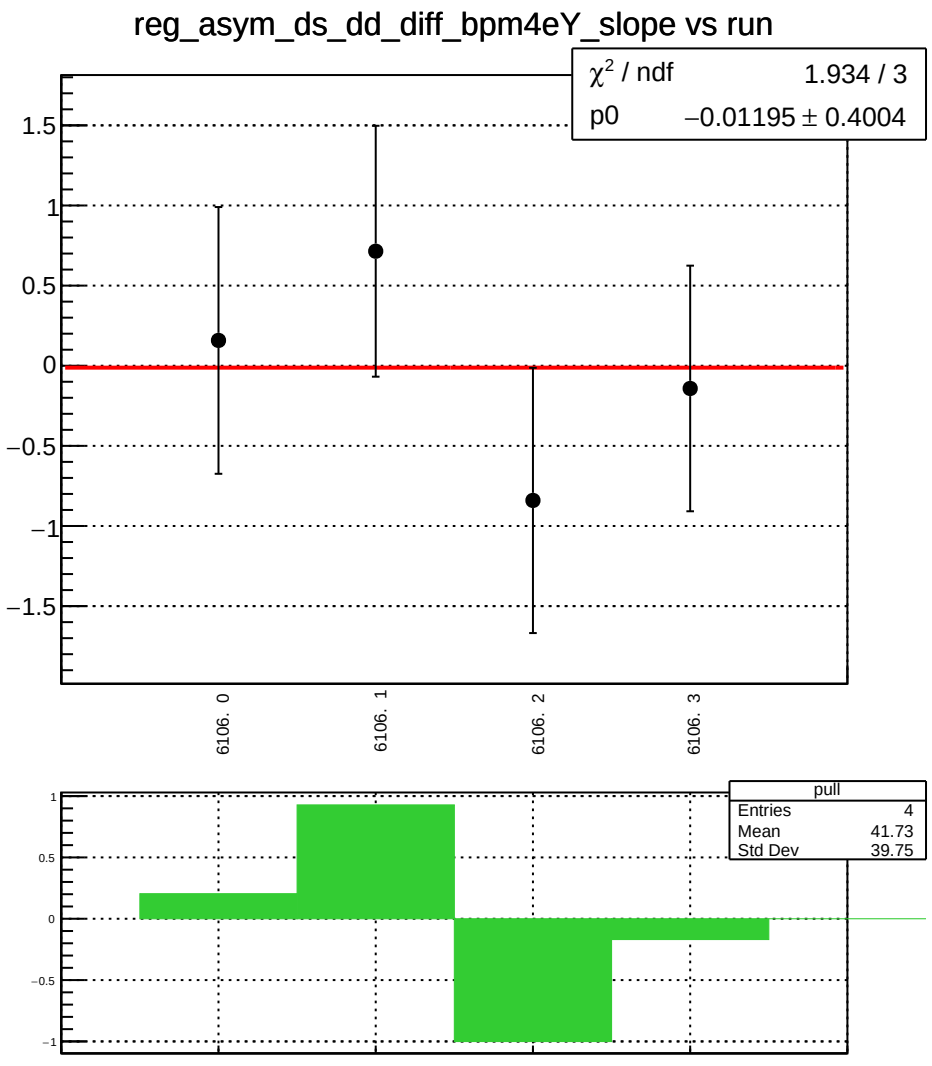

reg_asym_ds_dd_diff_bpm4aX_slope vs run
χ² / ndf 2.765 / 3
p0 −0.351 ± 0.5881
2
1
0
−1
−2
−3
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 248.1
Std Dev 246.1
1
0.5
0
−0.5
−1

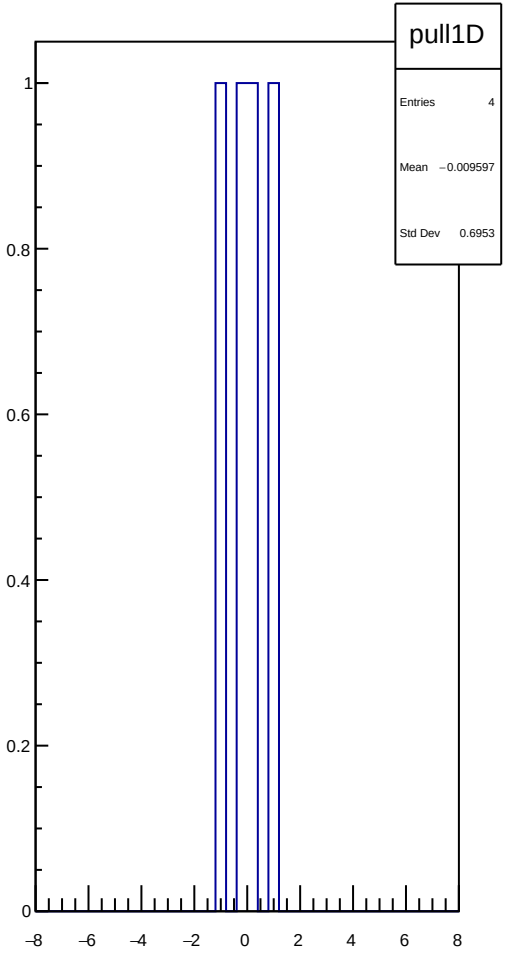

pull1D
Entries 4
Mean −0.003744
Std Dev 0.8314
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

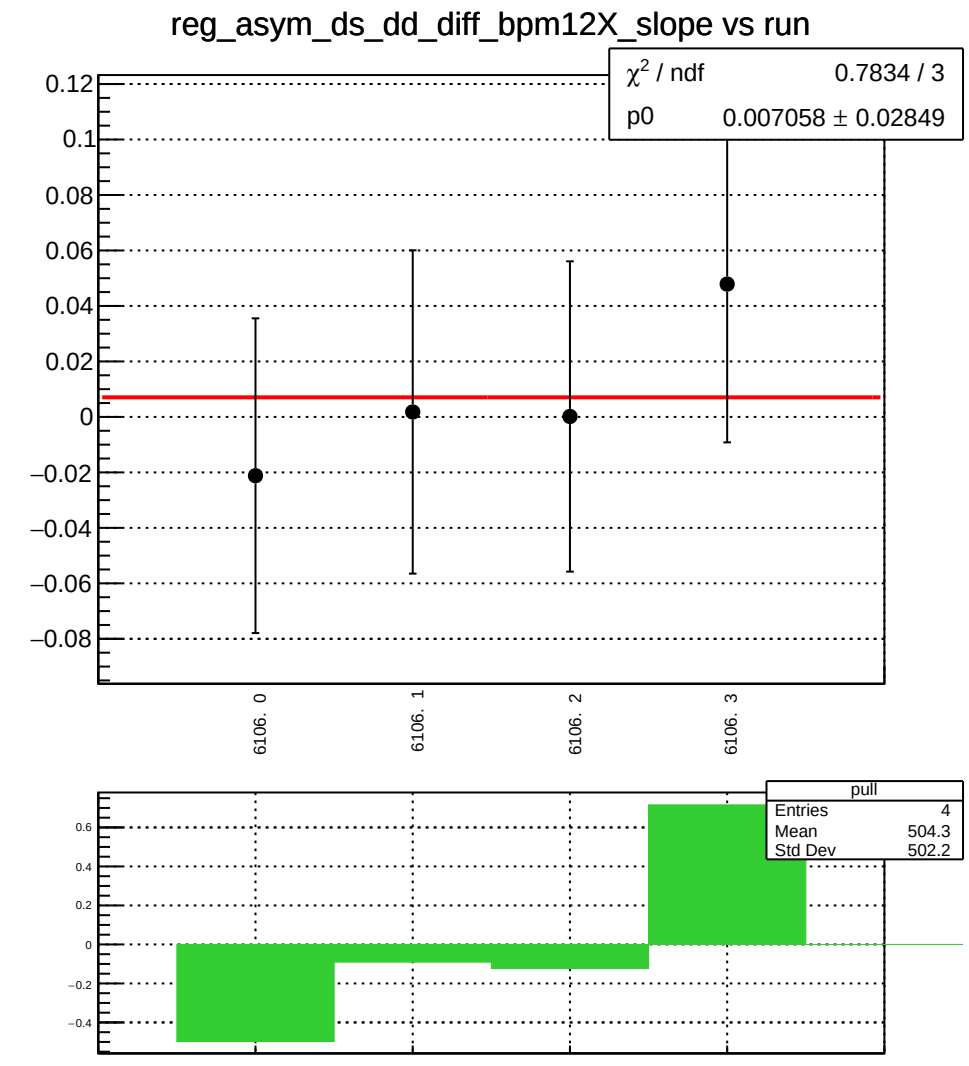

reg_asym_ds_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.035 / 3
p0 −0.01164 ± 0.3781
1.5
1
0.5
0
−0.5
−1
−1.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 34.07
Std Dev 32.09
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean 0.01522
Std Dev 0.713
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

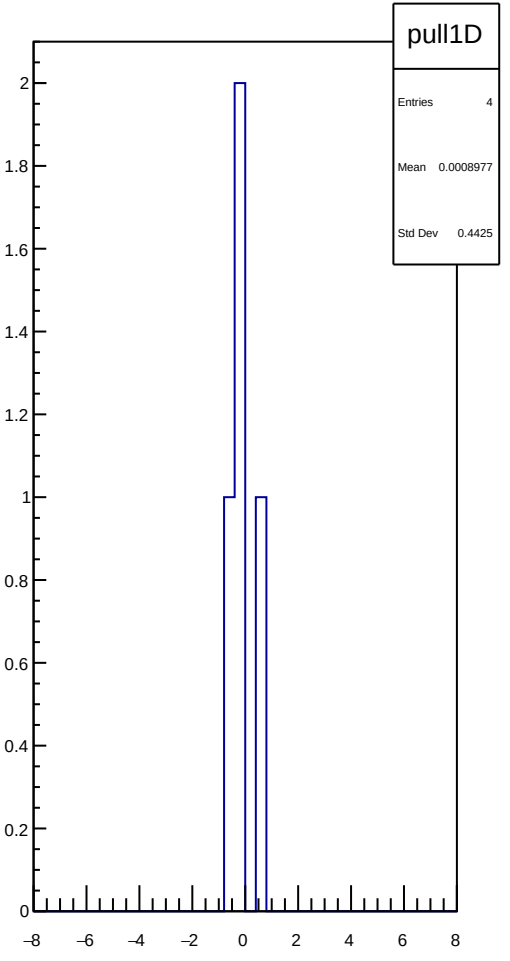

reg_asym_ds_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.404 / 3
p0 0.4788 ± 0.6841
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 327.3
Std Dev 325.3

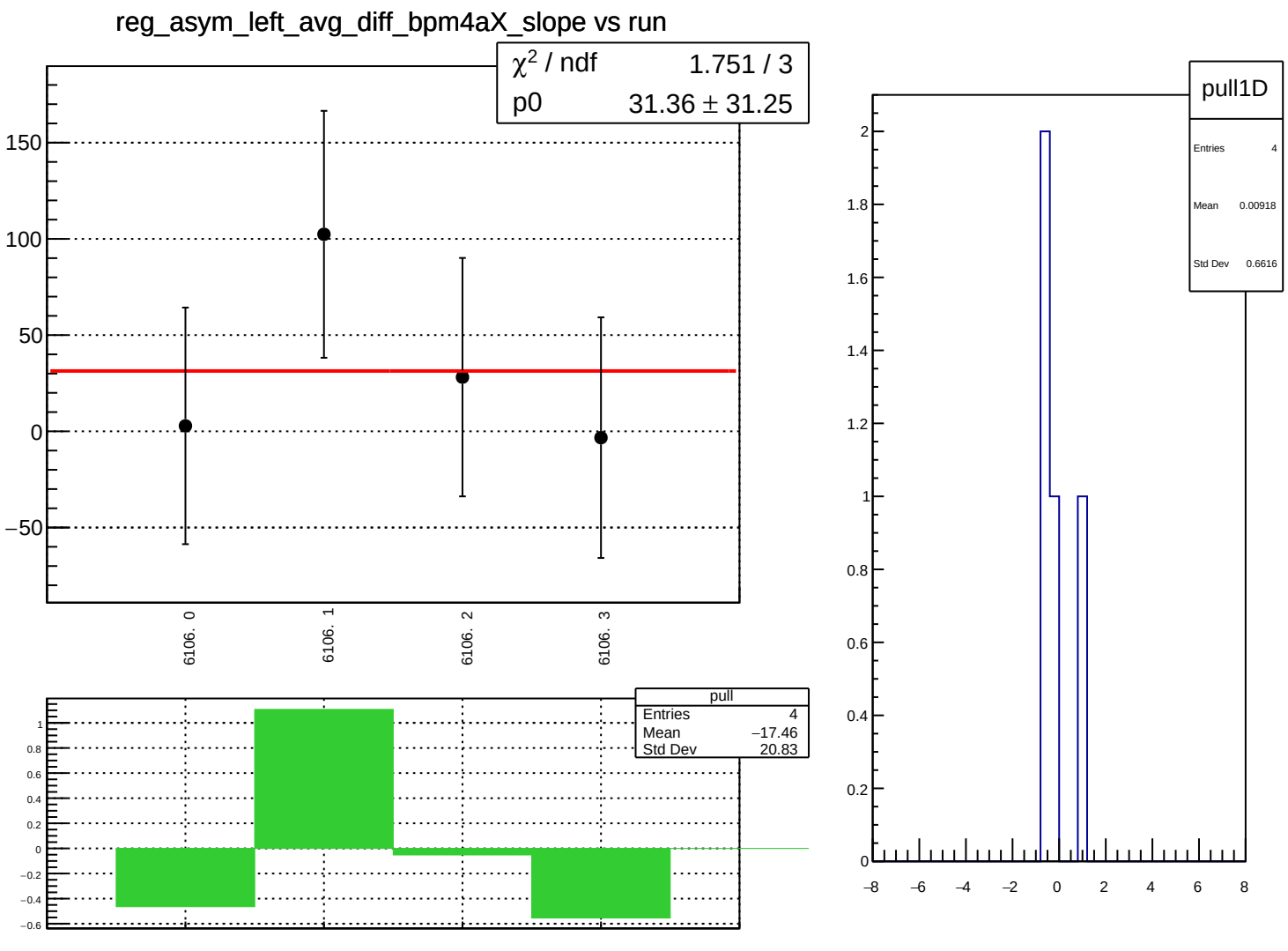

pull1D
Entries 4
Mean 0.003145
Std Dev 0.9224

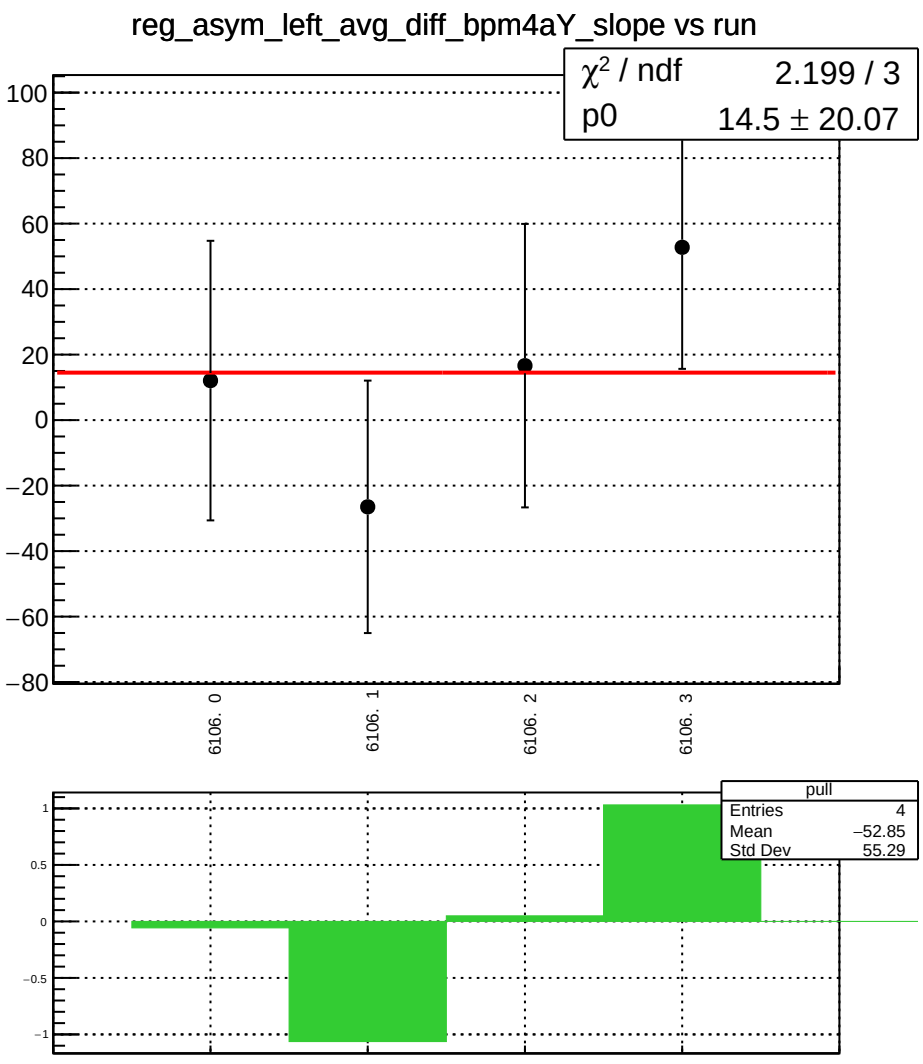

reg_asym_ds_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.934 / 3
p0 −0.01195 ± 0.4004
1.5
1
0.5
0
−0.5
−1
−1.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 41.73
Std Dev 39.75
1
0.5
0
−0.5
−1

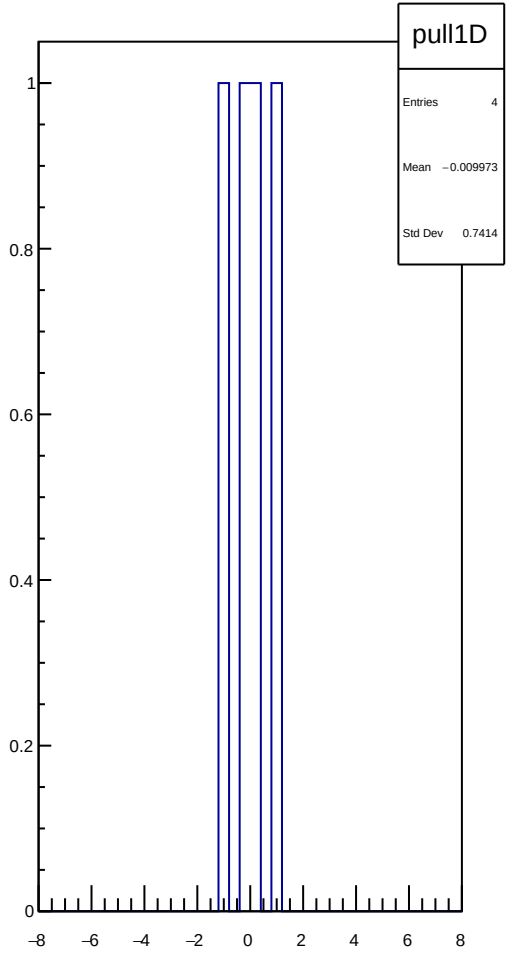

pull1D
Entries 4
Mean −0.009597
Std Dev 0.6953
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

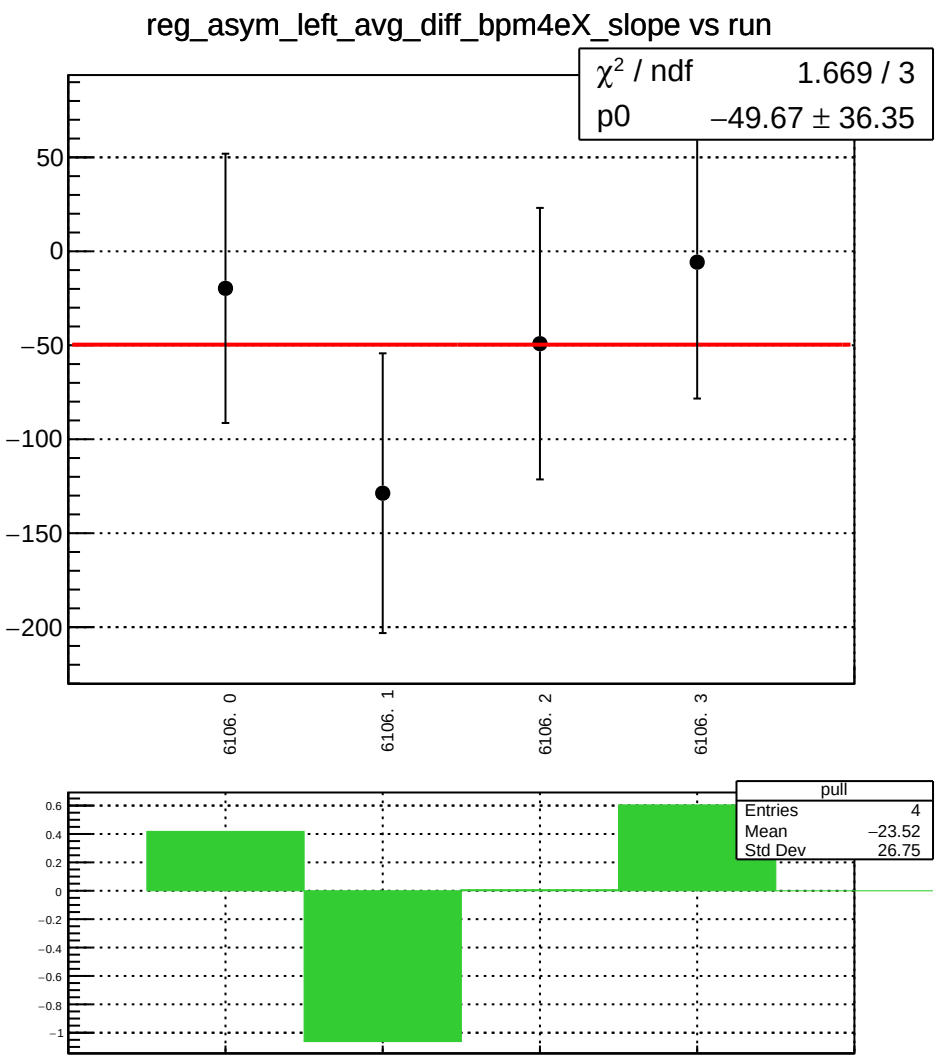

reg_asym_ds_dd_diff_bpm12X_slope vs run
χ² / ndf 0.7834 / 3
p0 0.007058 ± 0.02849
0.12
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 504.3
Std Dev 502.2
0.6
0.4
0.2
0
−0.2
−0.4

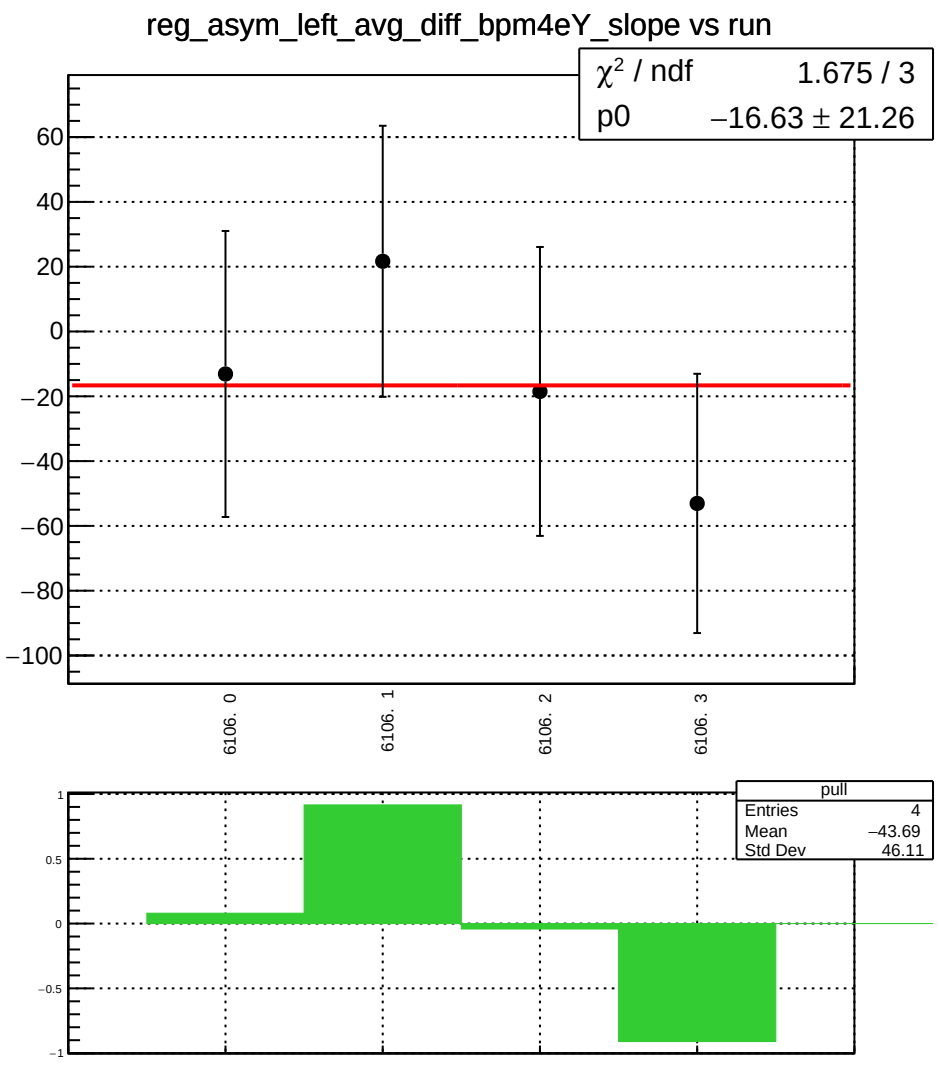

pull1D
Entries 4
Mean 0.0008977
Std Dev 0.4425
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

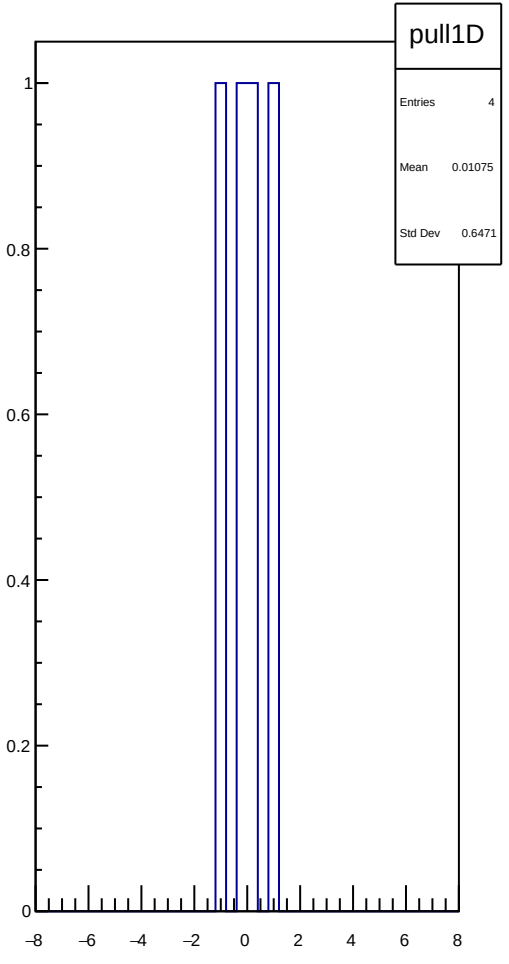

reg_asym_left_avg_diff_bpm4aX_slope vs run
χ² / ndf 1.751 / 3
p0 31.36 ± 31.25
150
100
50
0
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.46
Std Dev 20.83
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean 0.00918
Std Dev 0.6616
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

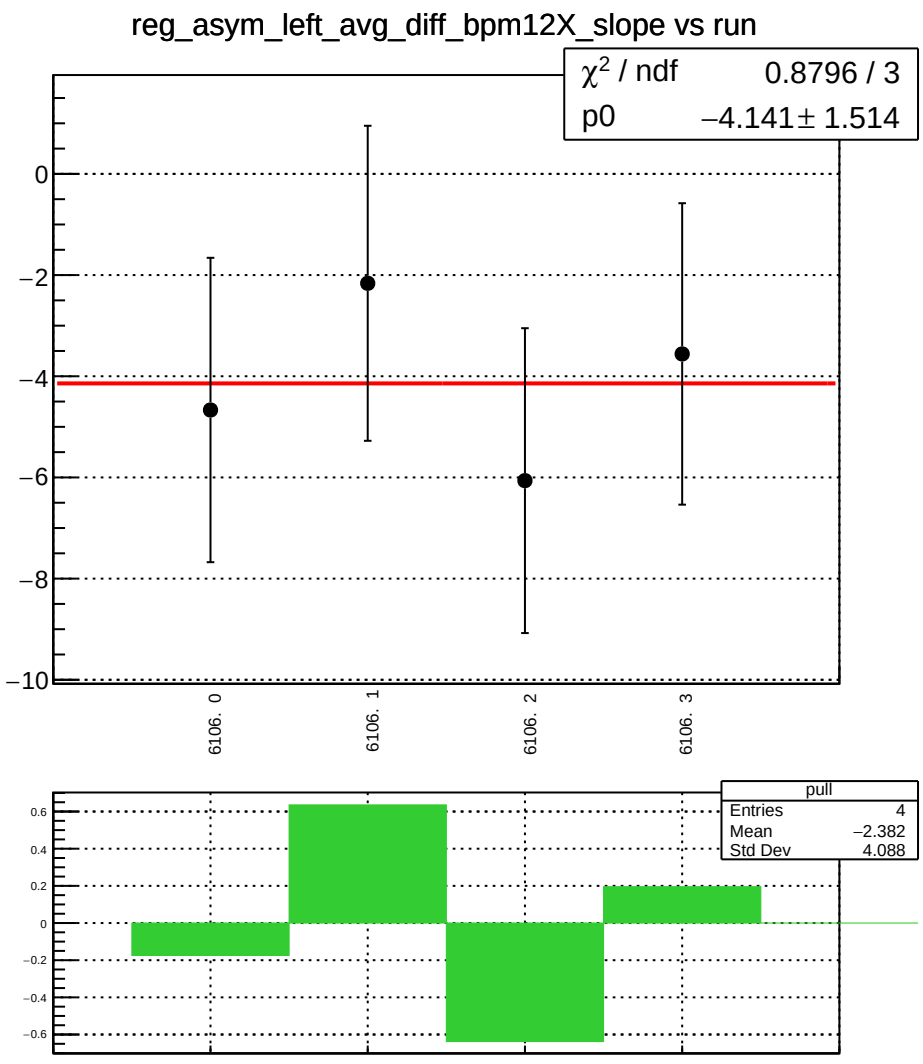

reg_asym_left_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.199 / 3
p0 14.5 ± 20.07
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −52.85
Std Dev 55.29
1
0.5
0
−0.5
−1

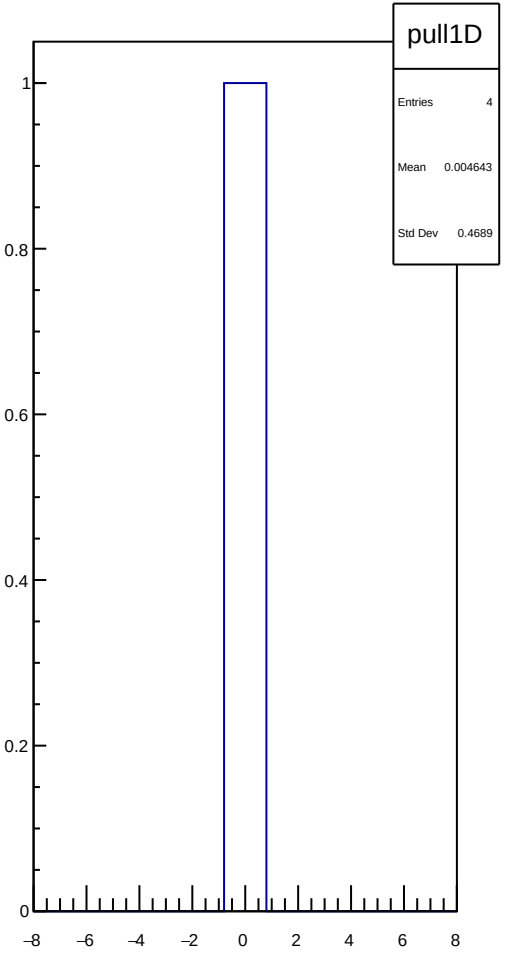

pull1D
Entries 4
Mean −0.009973
Std Dev 0.7414
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

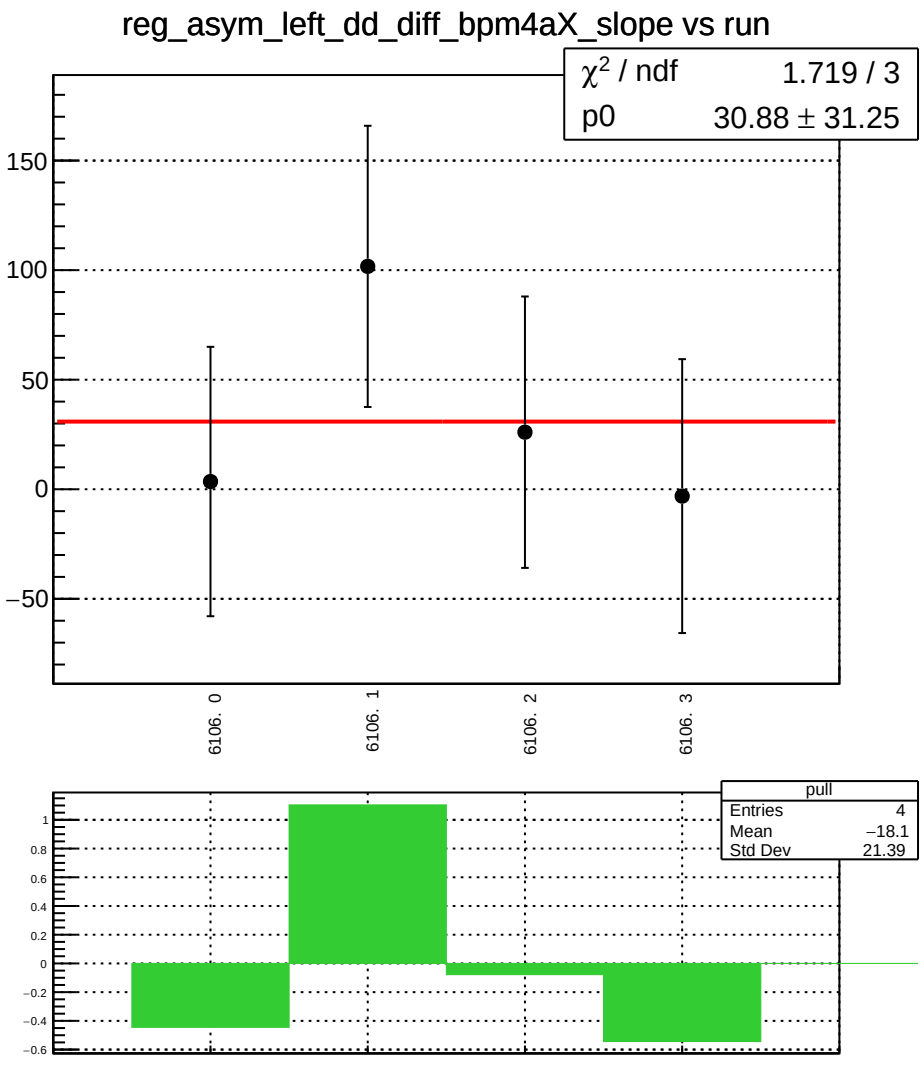

reg_asym_left_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.669 / 3
p0 −49.67 ± 36.35
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −23.52
Std Dev 26.75
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
pull1D
Entries 4
Mean −0.007977
Std Dev 0.6458
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

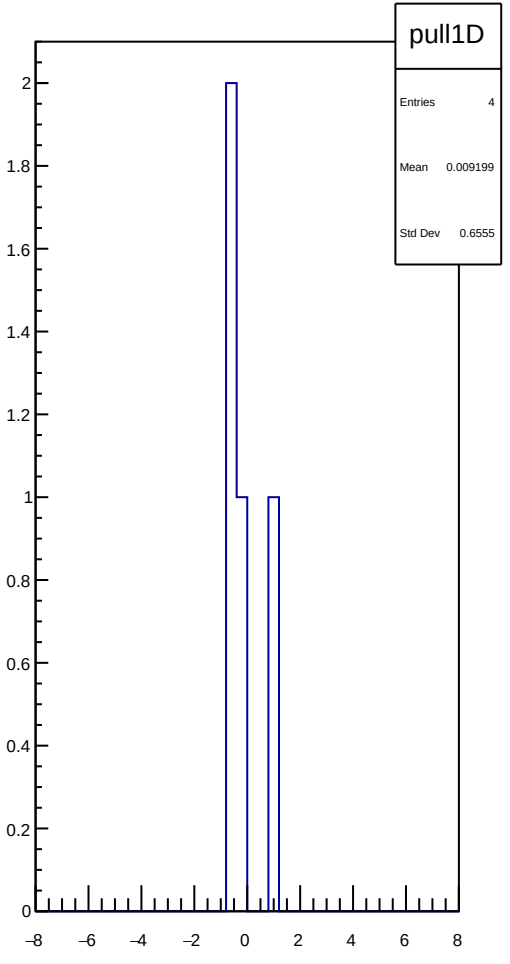

reg_asym_left_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.675 / 3
p0 −16.63 ± 21.26
60
40
20
0
−20
−40
−60
−80
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −43.69
Std Dev 46.11
1
0.5
0
−0.5
−1

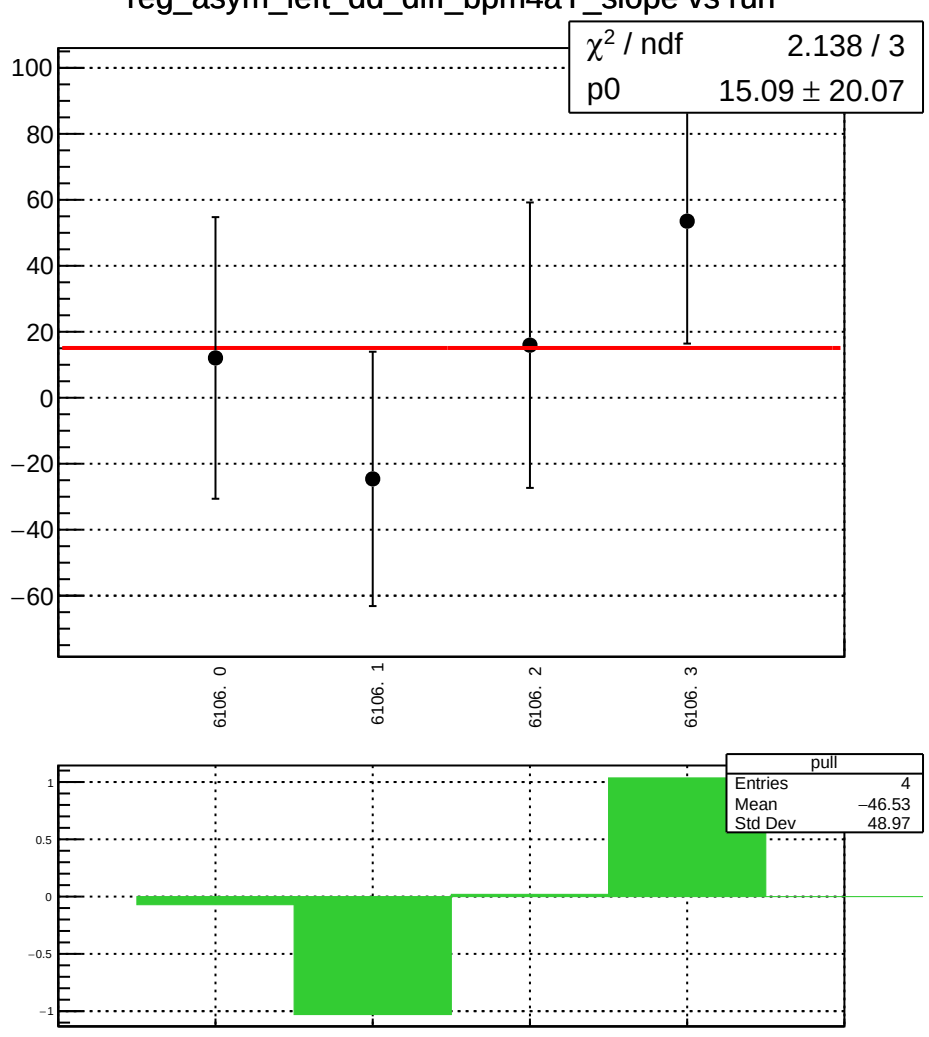

pull1D
Entries 4
Mean 0.01075
Std Dev 0.6471
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

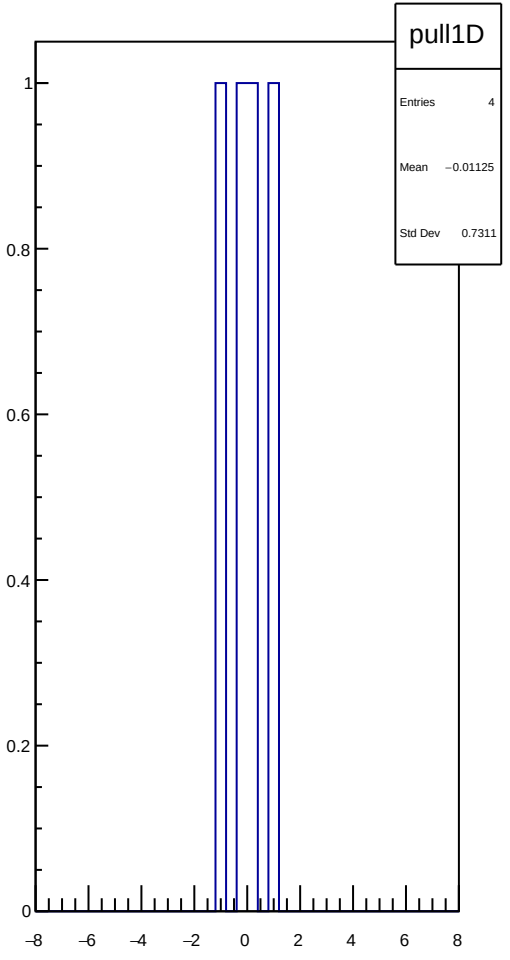

reg_asym_left_avg_diff_bpm12X_slope vs run
χ² / ndf 0.8796 / 3
p0 −4.141 ± 1.514
0
−2
−4
−6
−8
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.382
Std Dev 4.088
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

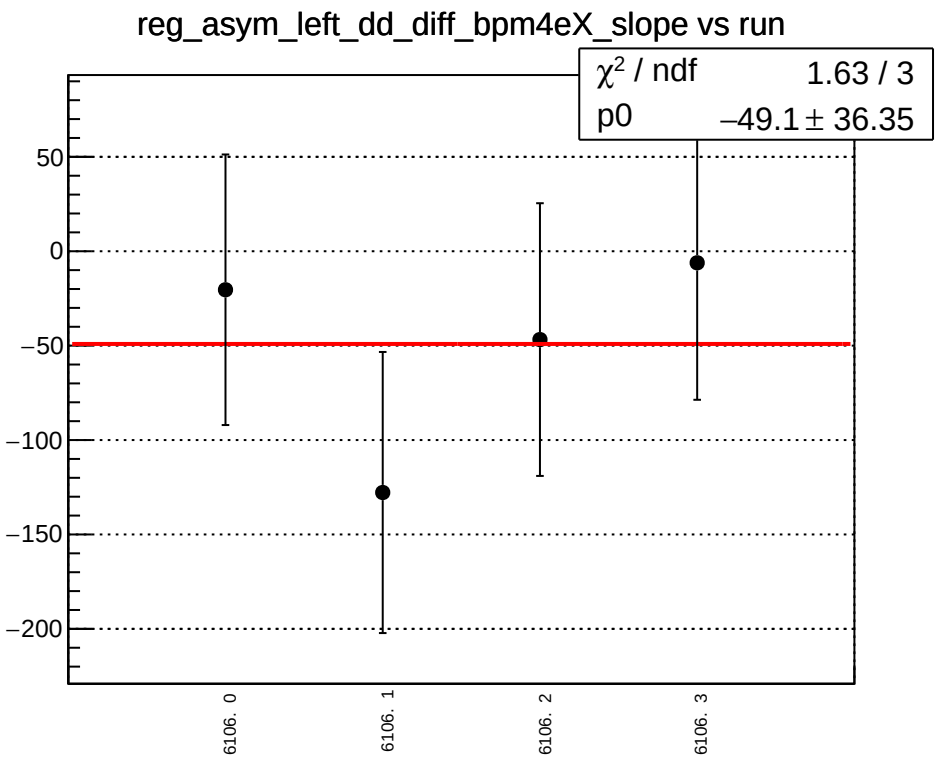

pull1D
Entries 4
Mean 0.004643
Std Dev 0.4689
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

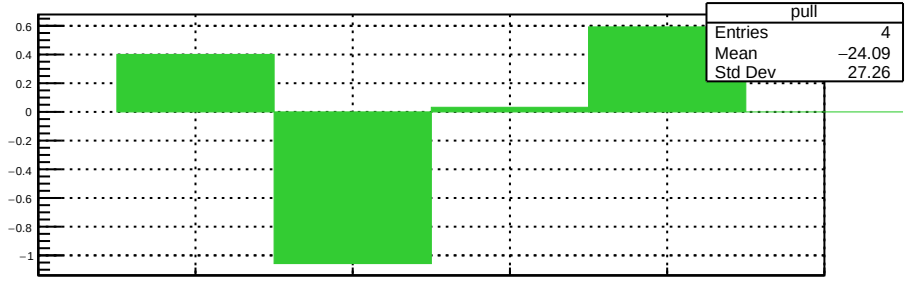

reg_asym_left_dd_diff_bpm4aX_slope vs run
χ² / ndf 1.719 / 3
p0 30.88 ± 31.25
150
100
50
0
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −18.1
Std Dev 21.39
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

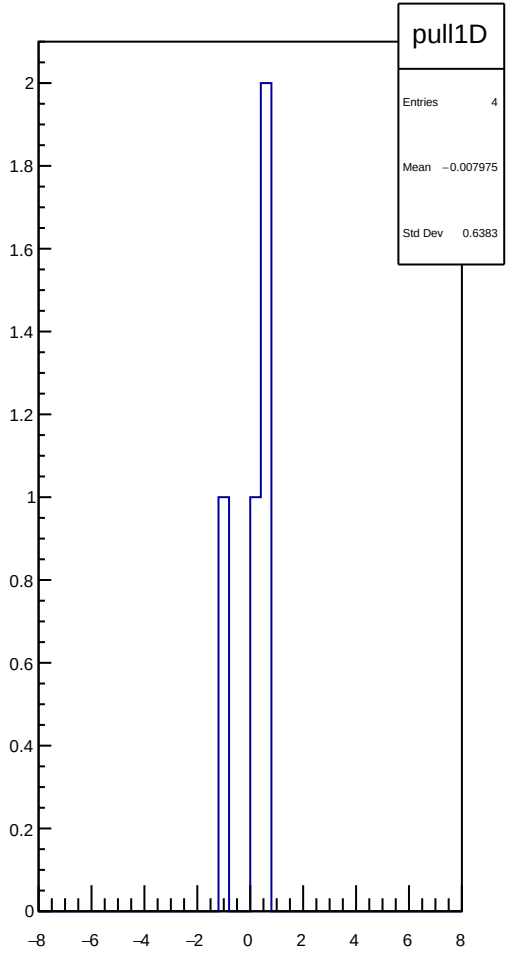

pull1D
Entries 4
Mean 0.009199
Std Dev 0.6555
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

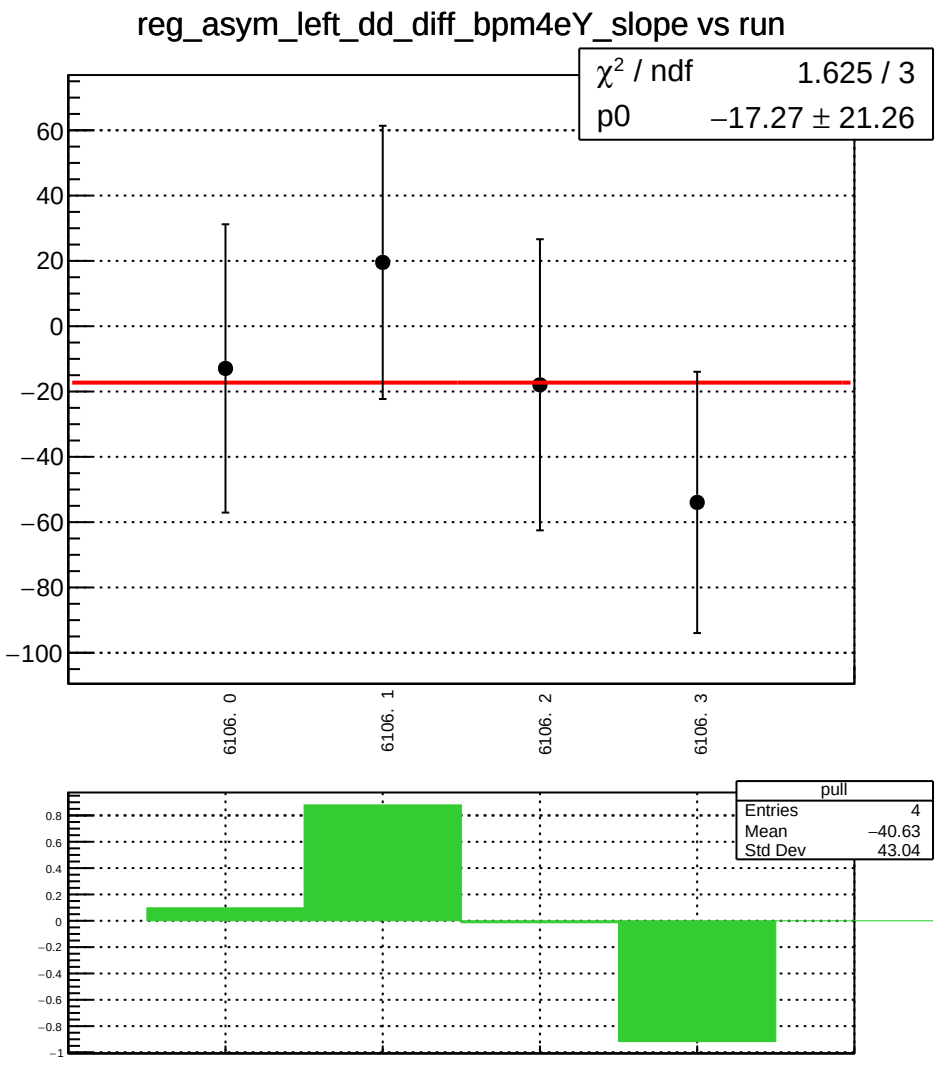

reg_asym_left_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.138 / 3
p0 15.09 ± 20.07
100
80
60
40
20
0
−20
−40
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −46.53
Std Dev 48.97
1
0.5
0
−0.5
−1

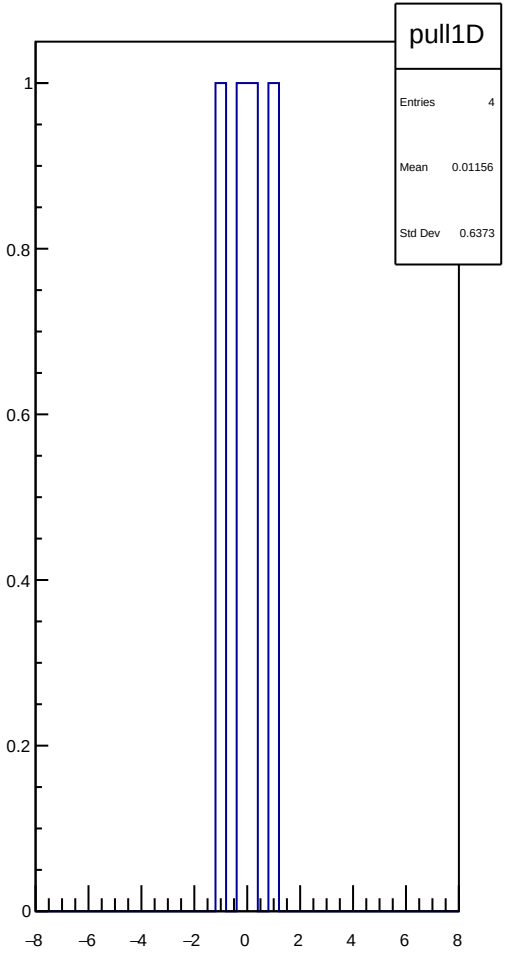

pull1D
Entries 4
Mean −0.01125
Std Dev 0.7311
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

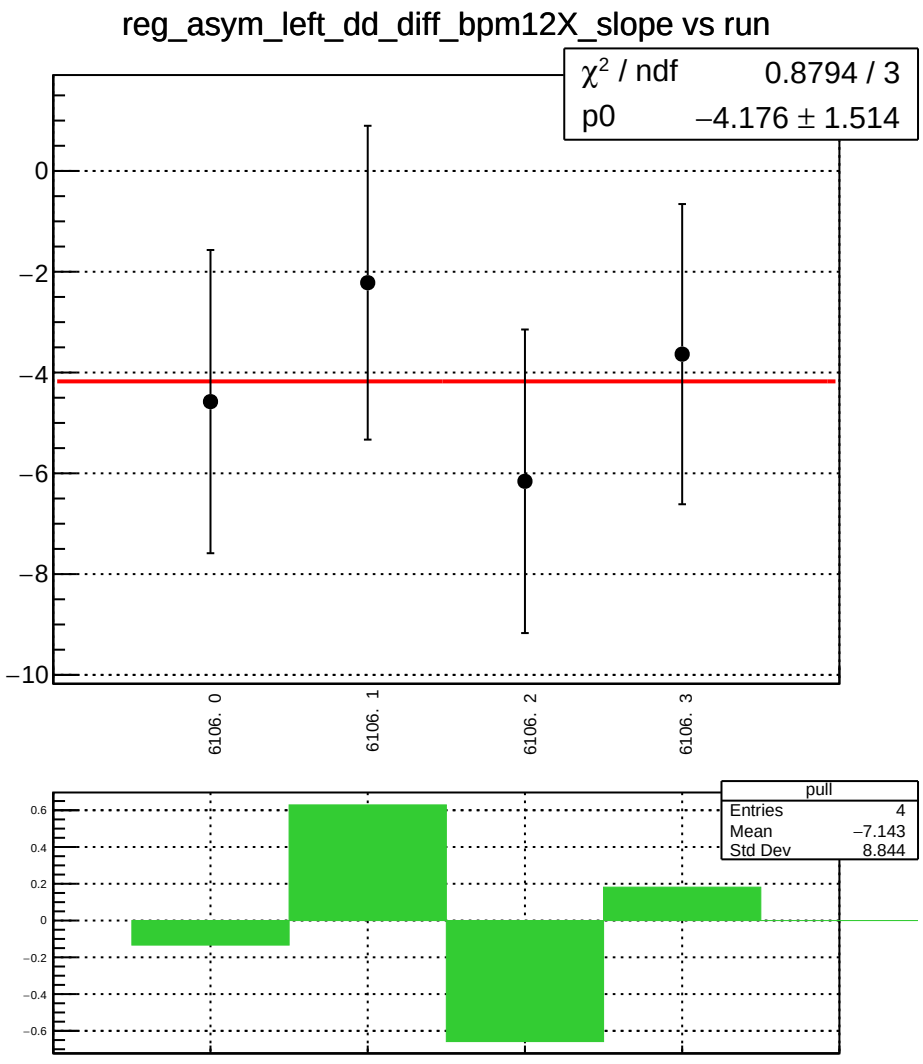

reg_asym_left_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.63 / 3
p0 −49.1 ± 36.35
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3

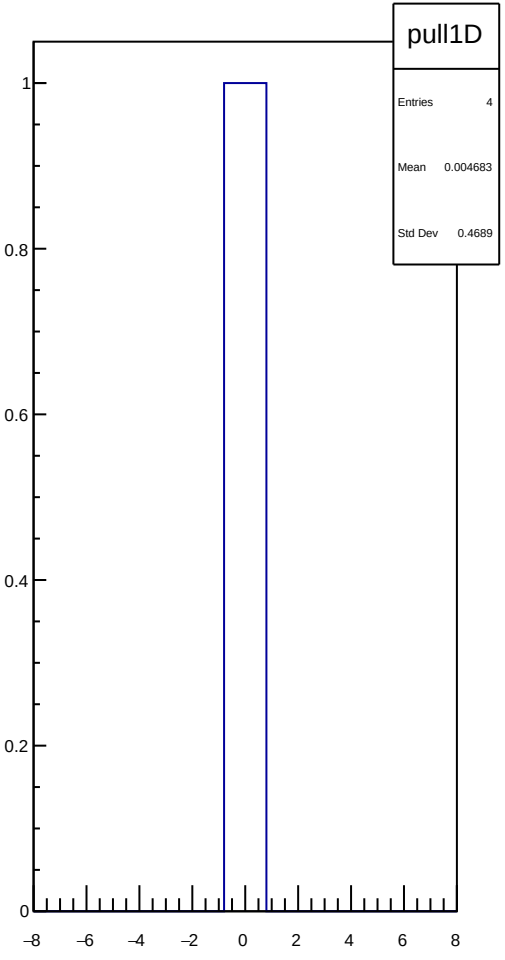

pull
Entries 4
Mean −24.09
Std Dev 27.26
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

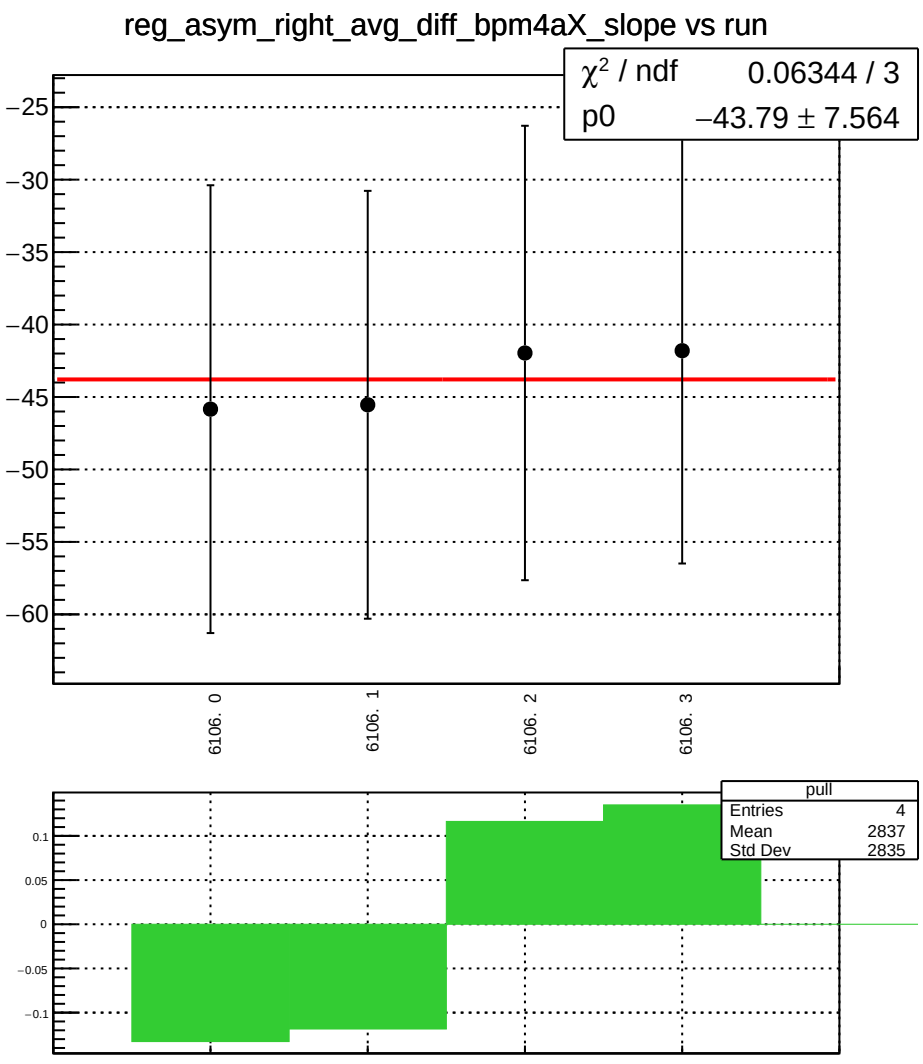

pull1D
Entries 4
Mean −0.007975
Std Dev 0.6383
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

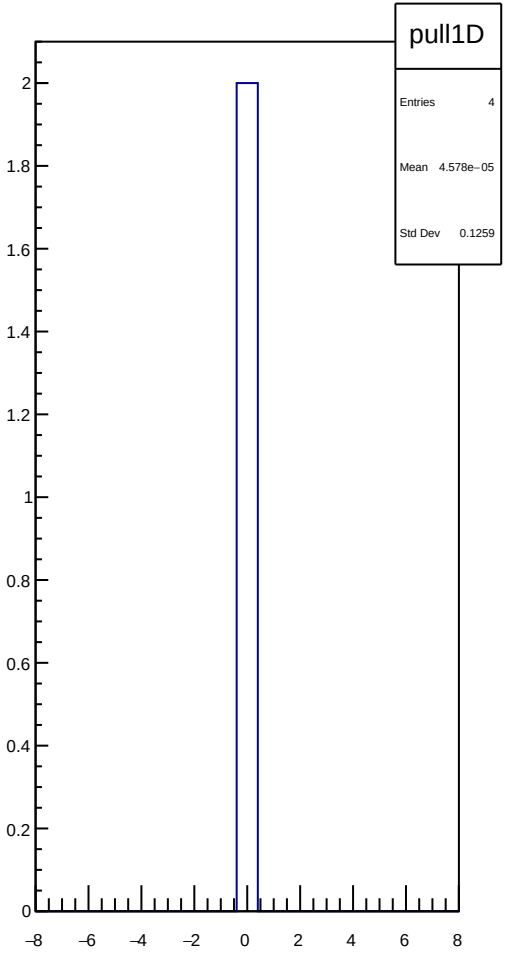

reg_asym_left_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.625 / 3
p0 −17.27 ± 21.26
60
40
20
0
−20
−40
−60
−80
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −40.63
Std Dev 43.04
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

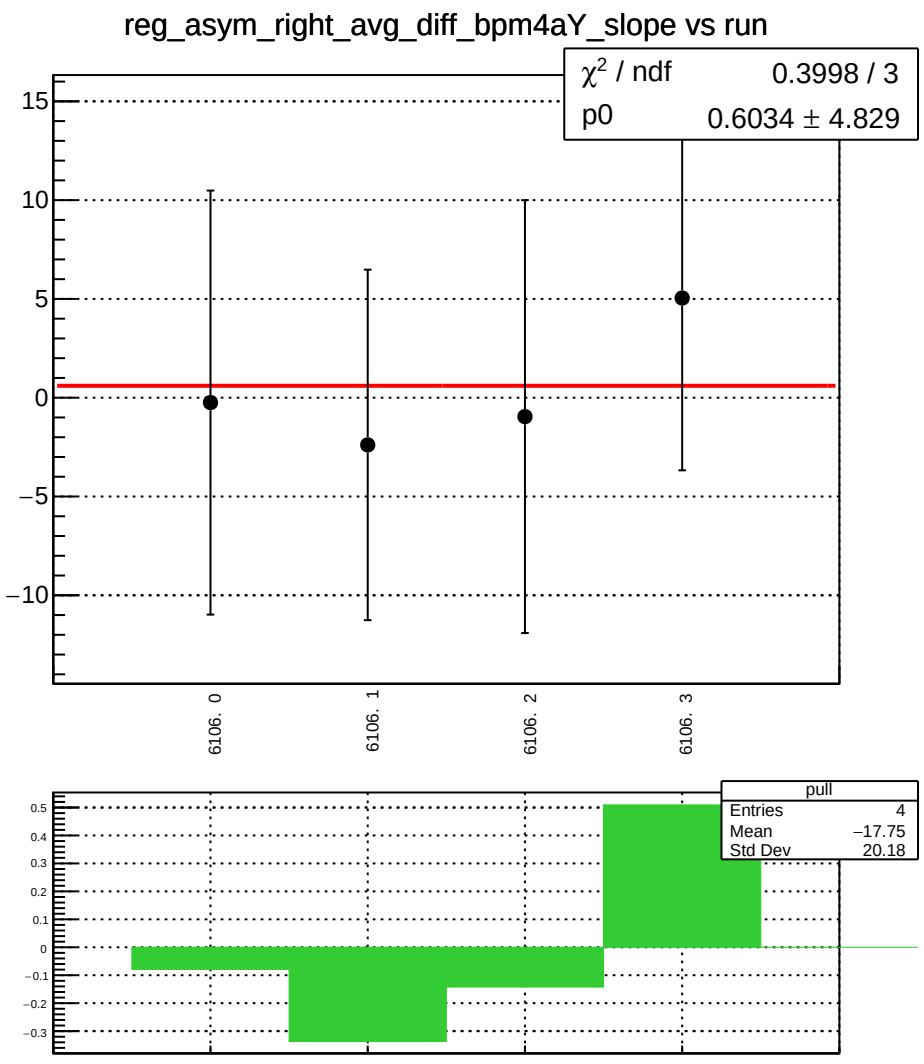

pull1D
Entries 4
Mean 0.01156
Std Dev 0.6373
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

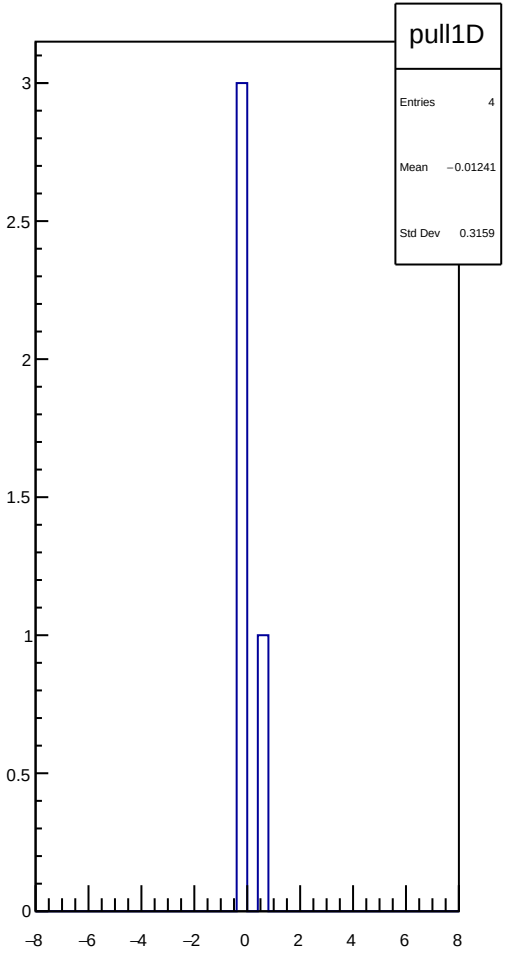

reg_asym_left_dd_diff_bpm12X_slope vs run
χ² / ndf 0.8794 / 3
p0 −4.176 ± 1.514
0
−2
−4
−6
−8
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −7.143
Std Dev 8.844
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

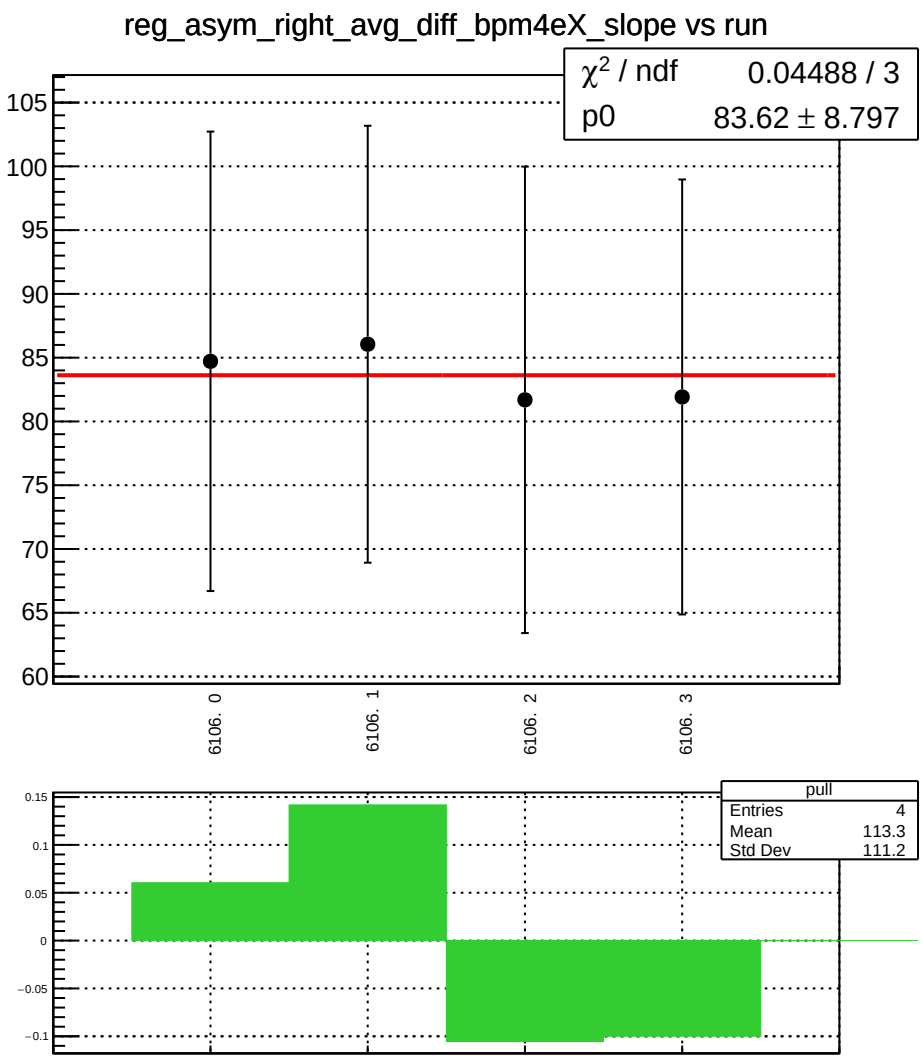

pull1D
Entries 4
Mean 0.004683
Std Dev 0.4689
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

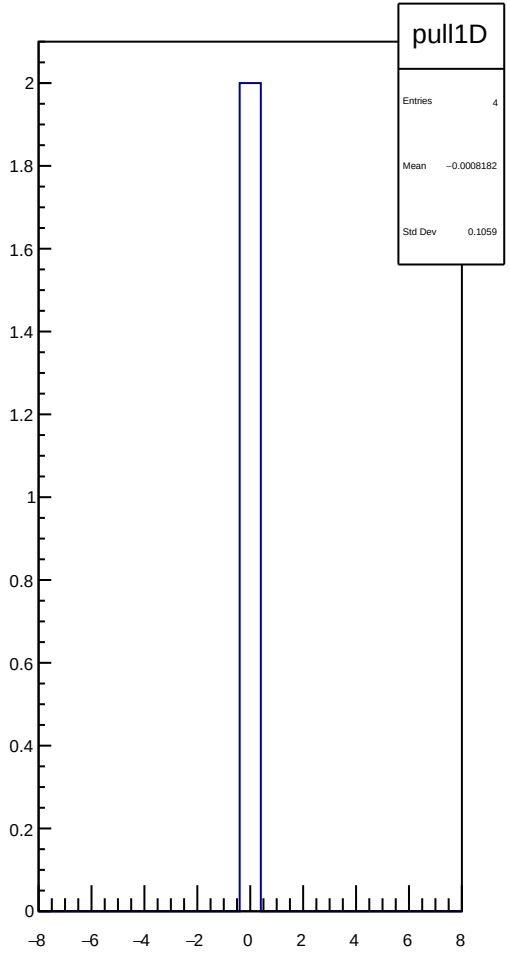

reg_asym_right_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.06344 / 3
p0 −43.79 ± 7.564
−25
−30
−35
−40
−45
−50
−55
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2837
Std Dev 2835
0.1
0.05
0
−0.05
−0.1

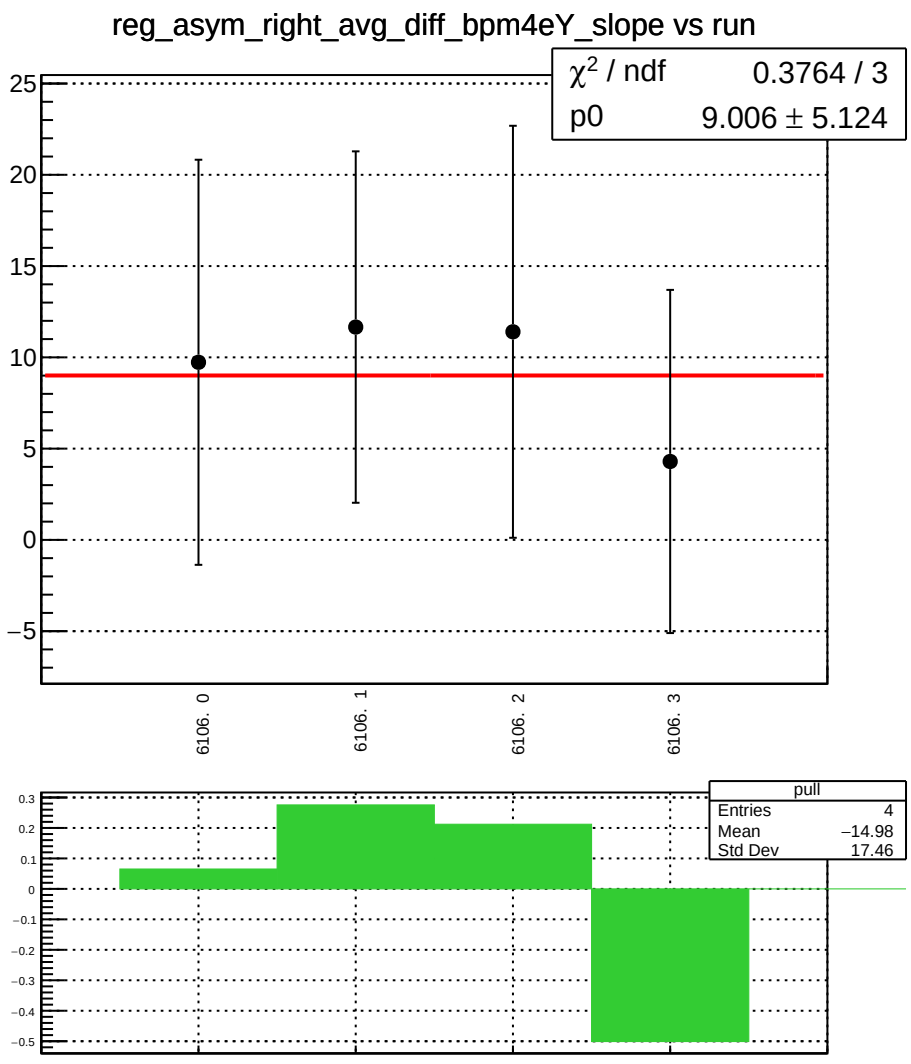

pull1D
Entries 4
Mean 4.578e−05
Std Dev 0.1259
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

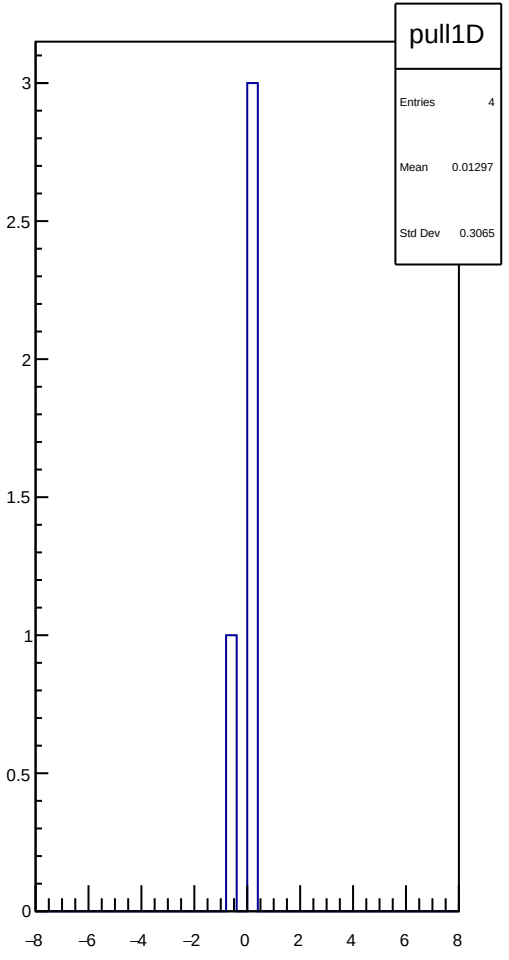

reg_asym_right_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.3998 / 3
p0 0.6034 ± 4.829
15
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.75
Std Dev 20.18
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

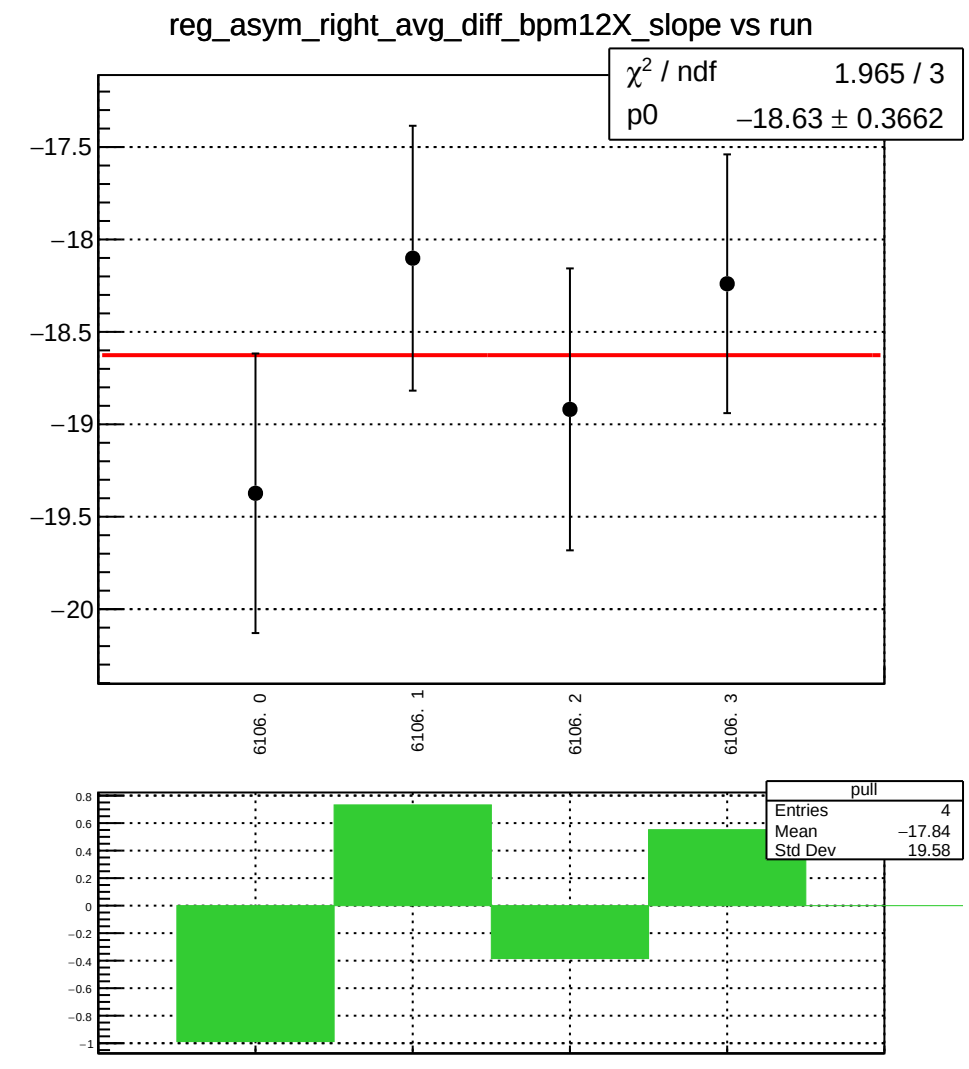

pull1D
Entries 4
Mean −0.01241
Std Dev 0.3159
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

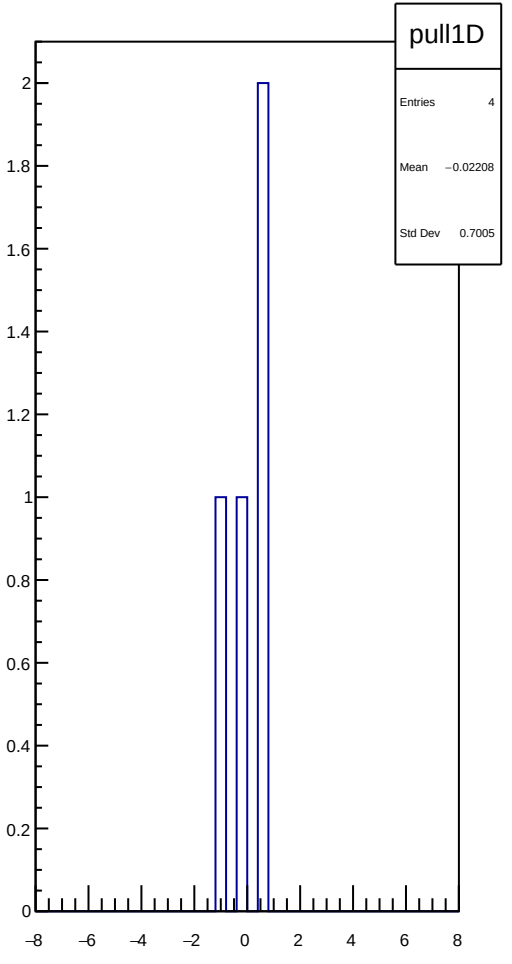

reg_asym_right_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.04488 / 3
p0 83.62 ± 8.797
105
100
95
90
85
80
75
70
65
60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 113.3
Std Dev 111.2
0.15
0.1
0.05
0
−0.05
−0.1

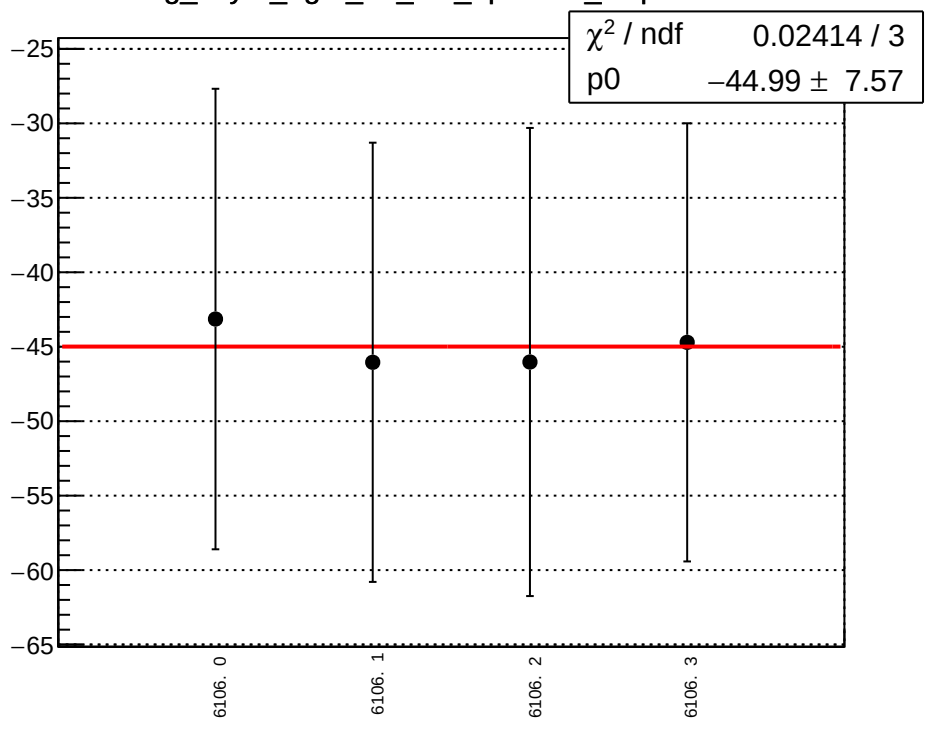

pull1D
Entries 4
Mean −0.0008182
Std Dev 0.1059
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

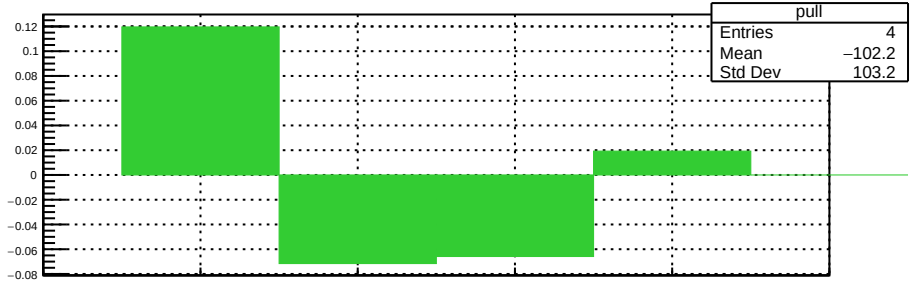

reg_asym_right_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.3764 / 3
p0 9.006 ± 5.124
25
20
15
10
5
0
−5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −14.98
Std Dev 17.46
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

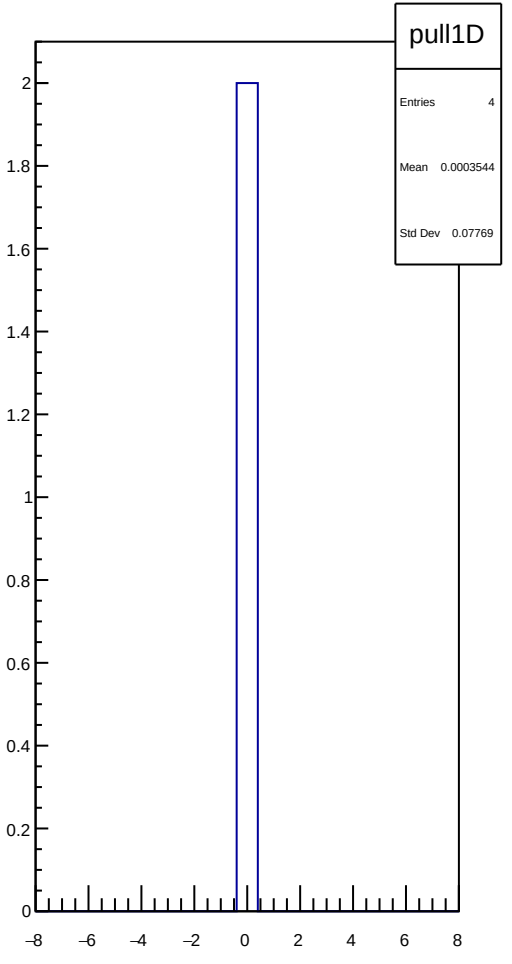

pull1D
Entries 4
Mean 0.01297
Std Dev 0.3065
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

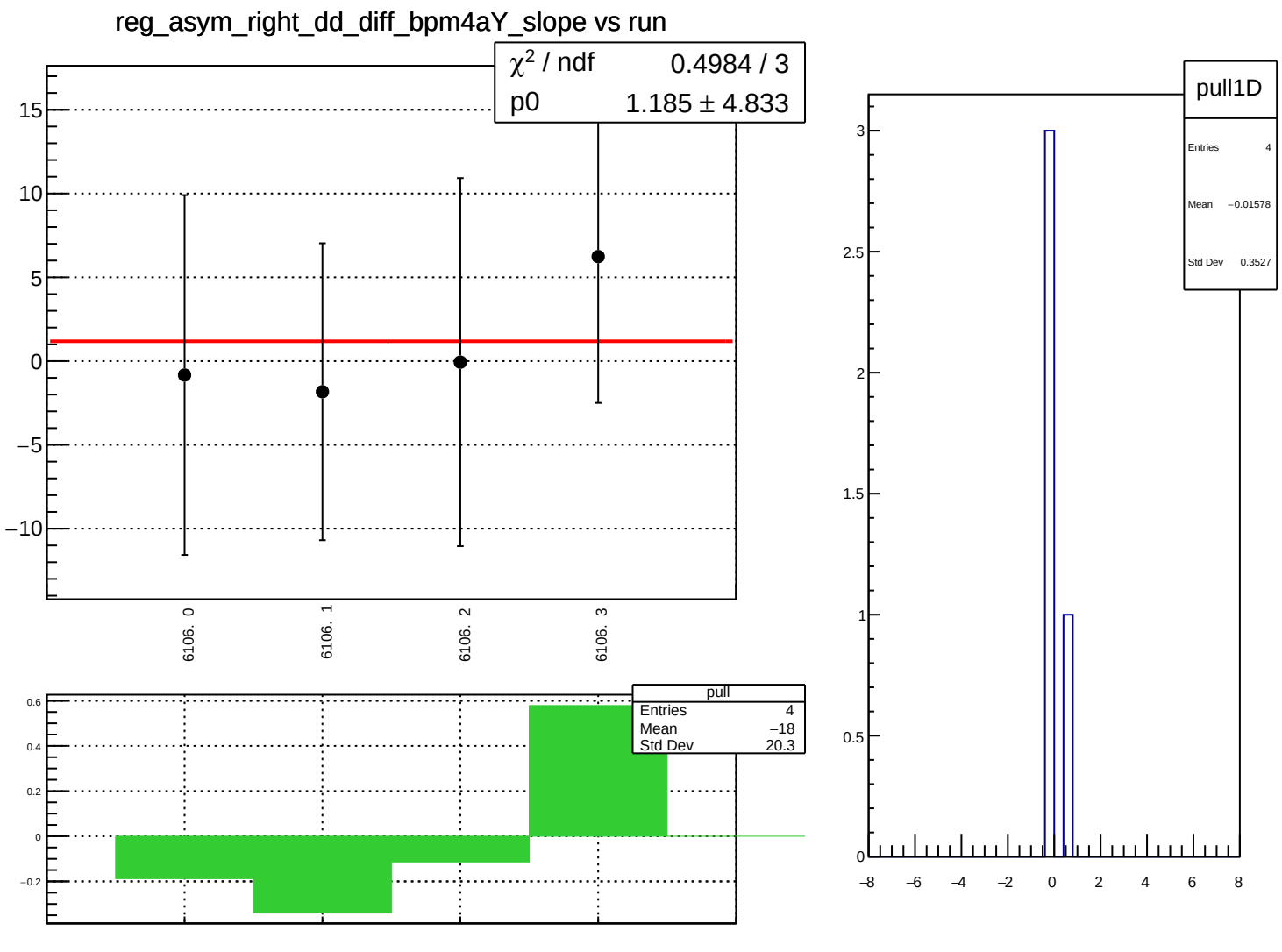

reg_asym_right_avg_diff_bpm12X_slope vs run
χ² / ndf 1.965 / 3
p0 −18.63 ± 0.3662
−17.5
−18
−18.5
−19
−19.5
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.84
Std Dev 19.58
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

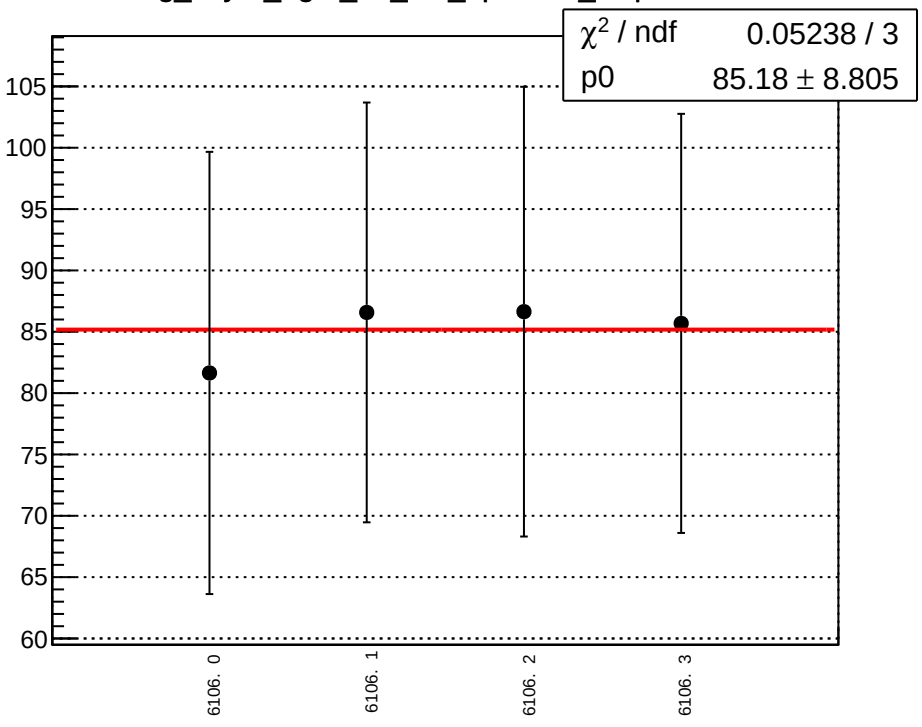

pull1D
Entries 4
Mean −0.02208
Std Dev 0.7005
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

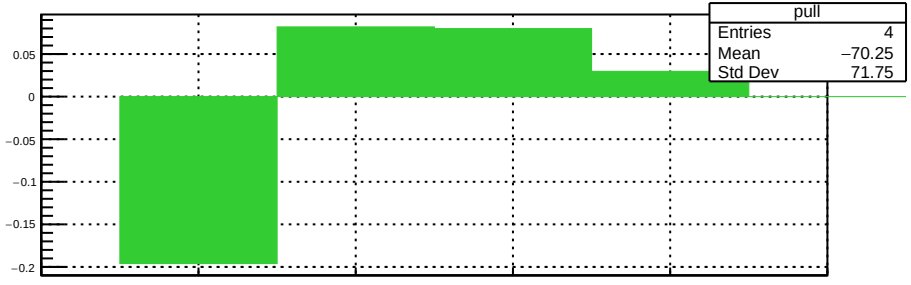

reg_asym_right_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.02414 / 3
p0 −44.99 ± 7.57
−25
−30
−35
−40
−45
−50
−55
−60
−65
6106. 0
6106. 1
6106. 2
6106. 3

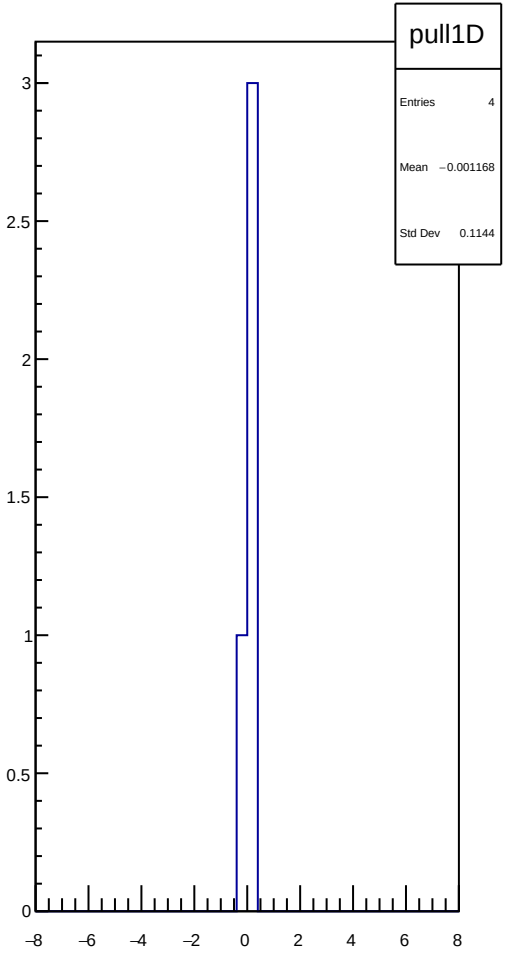

pull
Entries 4
Mean −102.2
Std Dev 103.2
0.12
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08

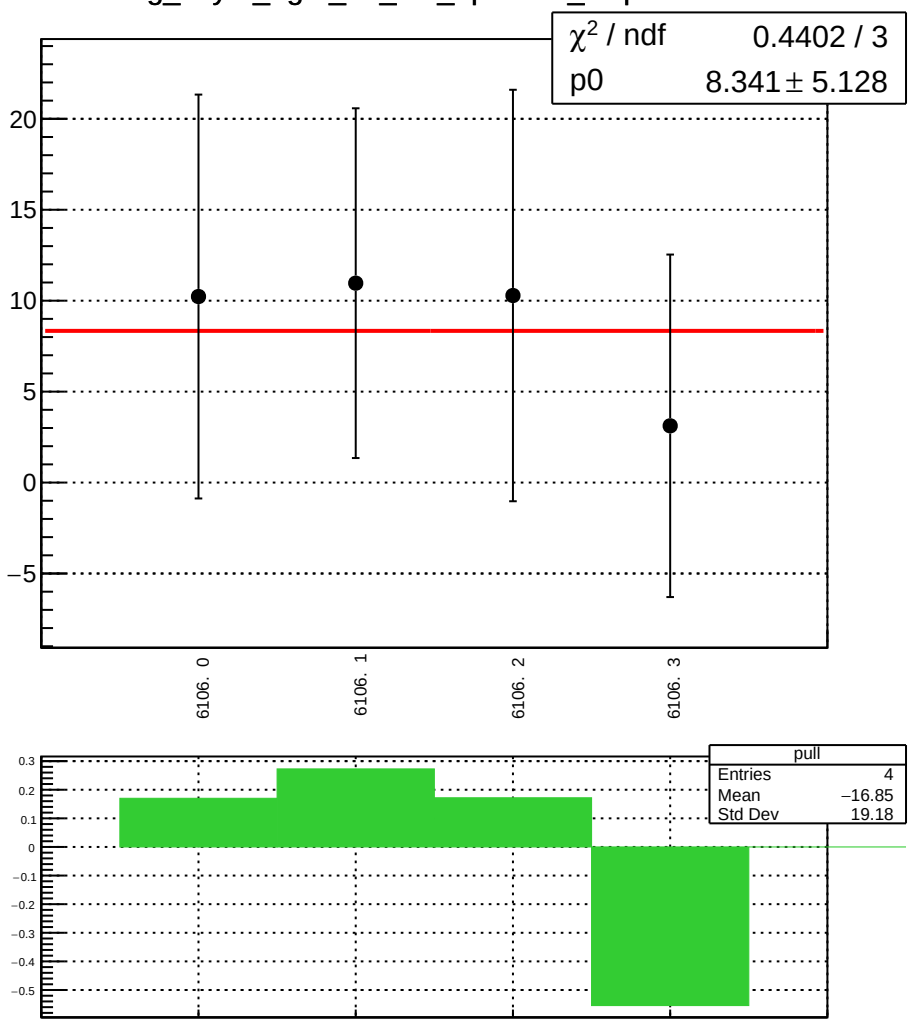

pull1D
Entries 4
Mean 0.0003544
Std Dev 0.07769
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

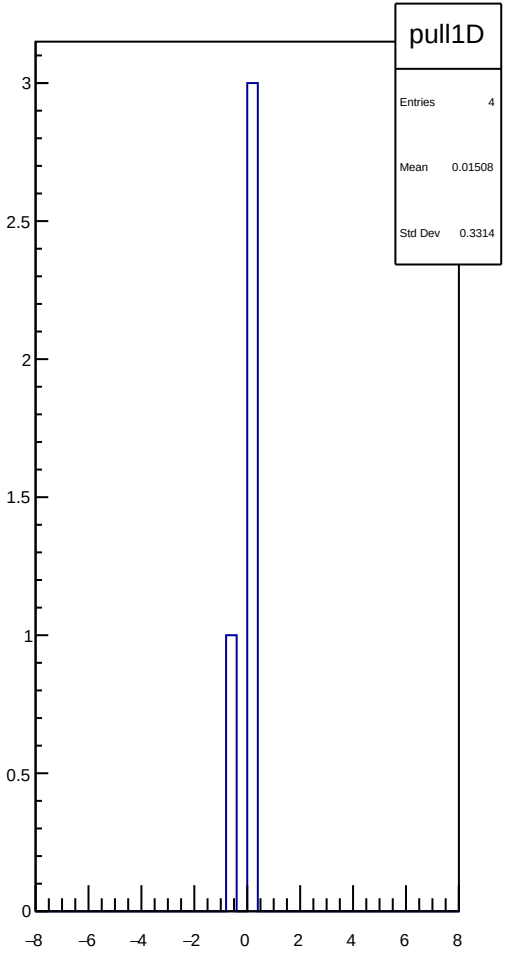

reg_asym_right_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.4984 / 3
p0 1.185 ± 4.833
15
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −18
Std Dev 20.3
0.6
0.4
0.2
0
−0.2
pull1D
Entries 4
Mean −0.01578
Std Dev 0.3527
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

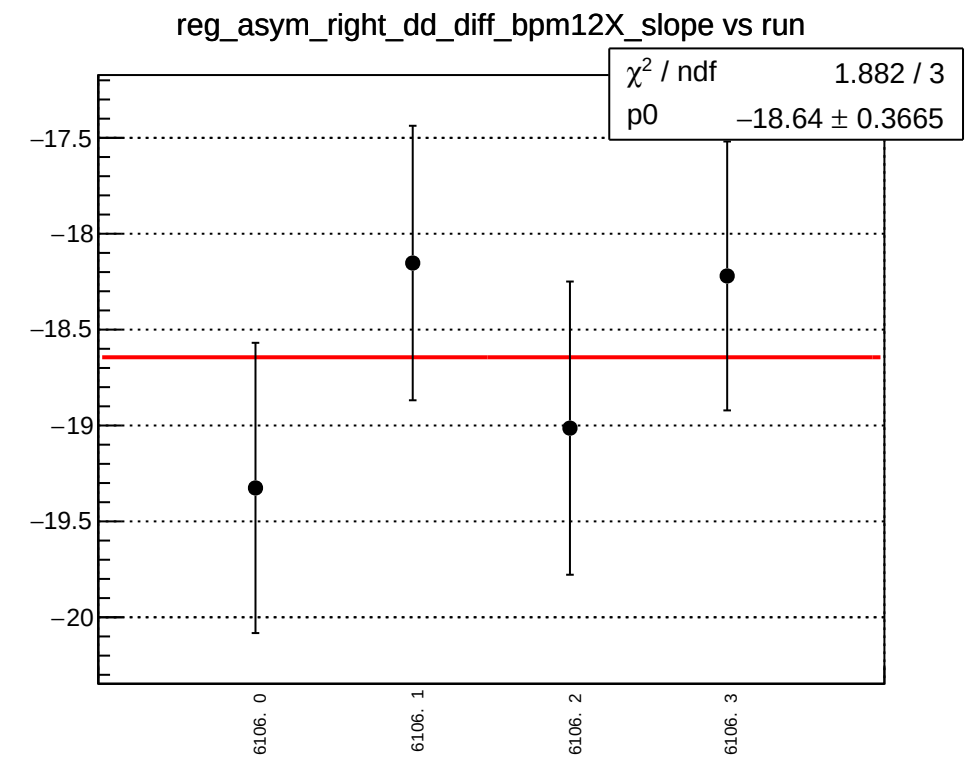

reg_asym_right_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.05238 / 3
p0 85.18 ± 8.805
105
100
95
90
85
80
75
70
65
60
6106. 0
6106. 1
6106. 2
6106. 3

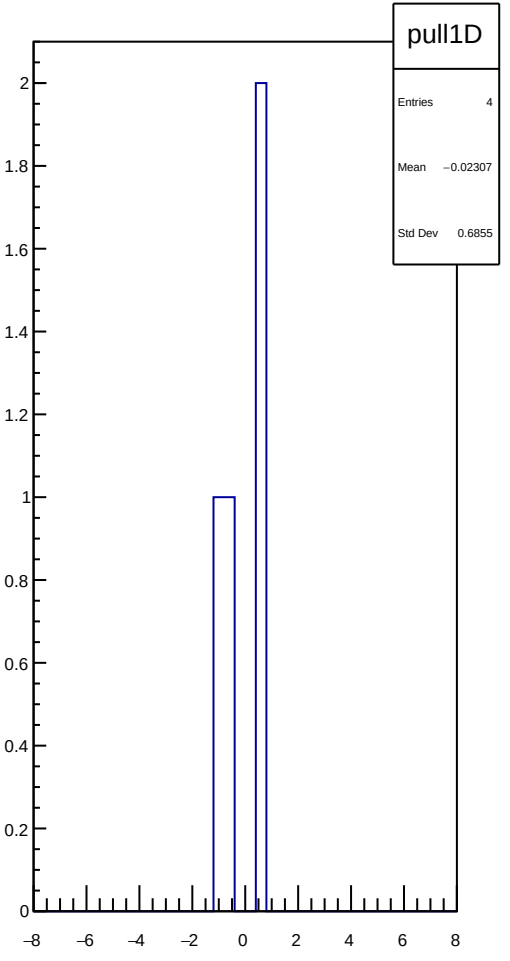

pull
Entries 4
Mean −70.25
Std Dev 71.75
0.05
0
−0.05
−0.1
−0.15
−0.2

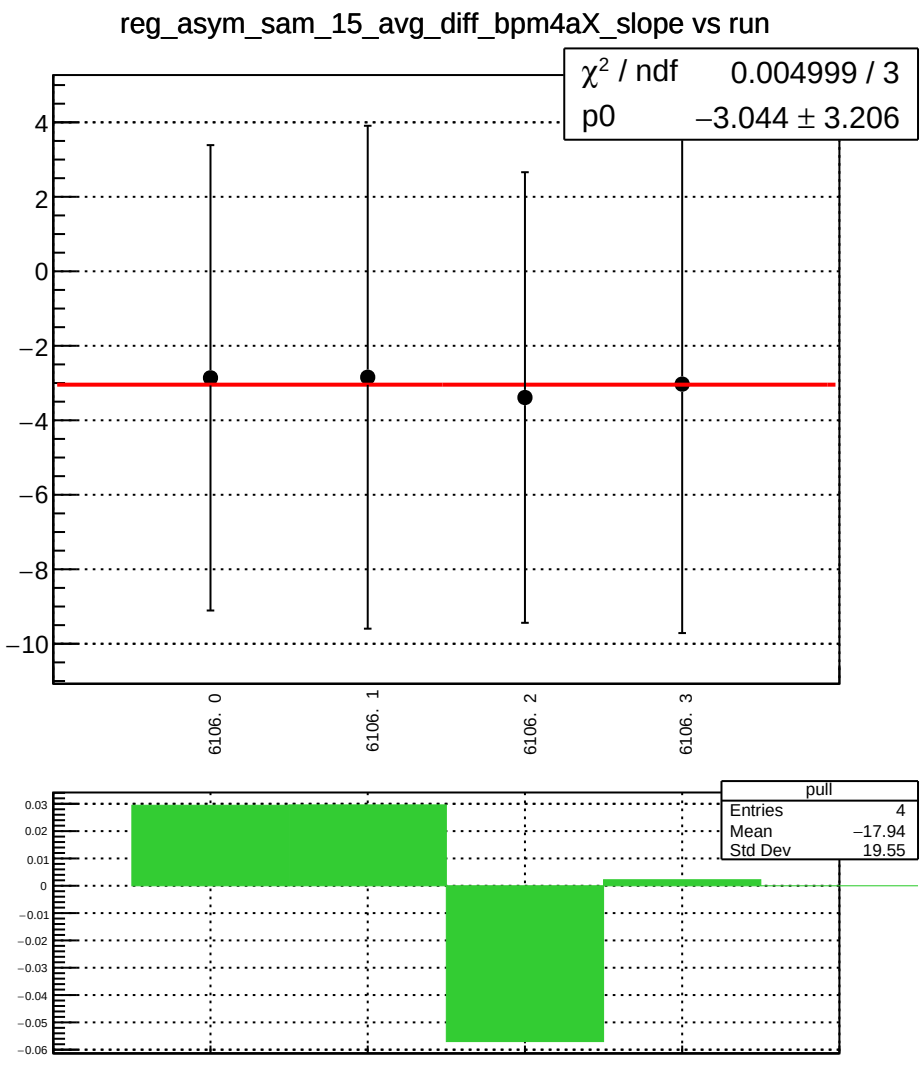

pull1D
Entries 4
Mean −0.001168
Std Dev 0.1144
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

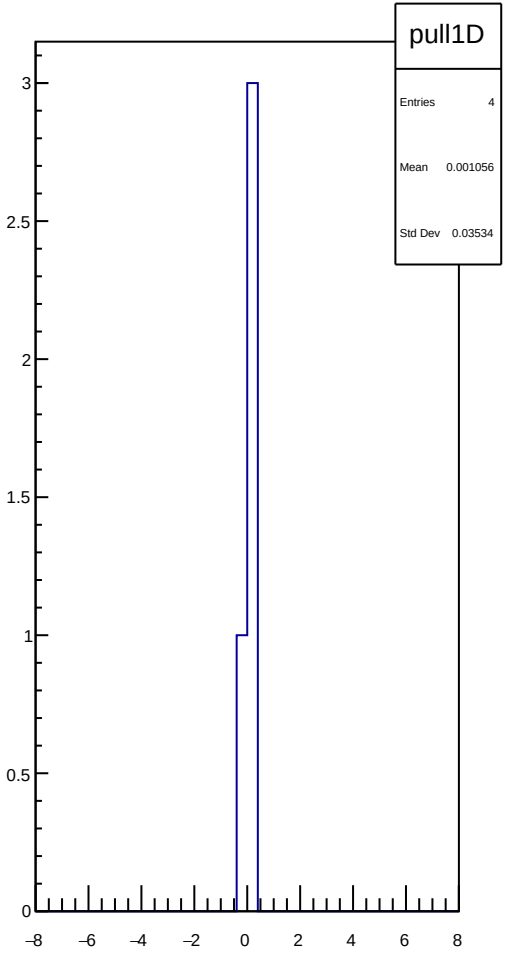

reg_asym_right_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.4402 / 3
p0 8.341 ± 5.128
20
15
10
5
0
−5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −16.85
Std Dev 19.18
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

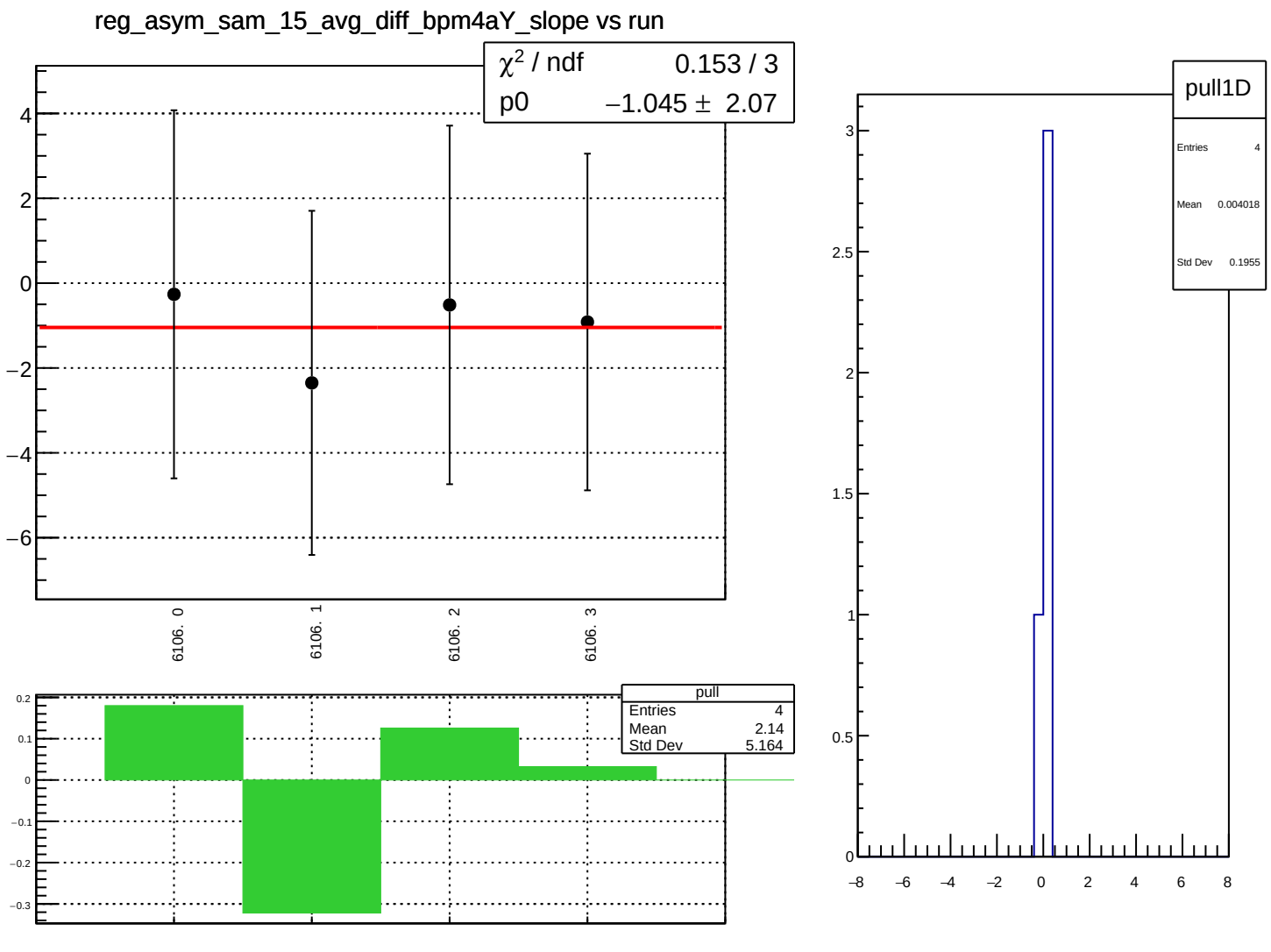

pull1D
Entries 4
Mean 0.01508
Std Dev 0.3314
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

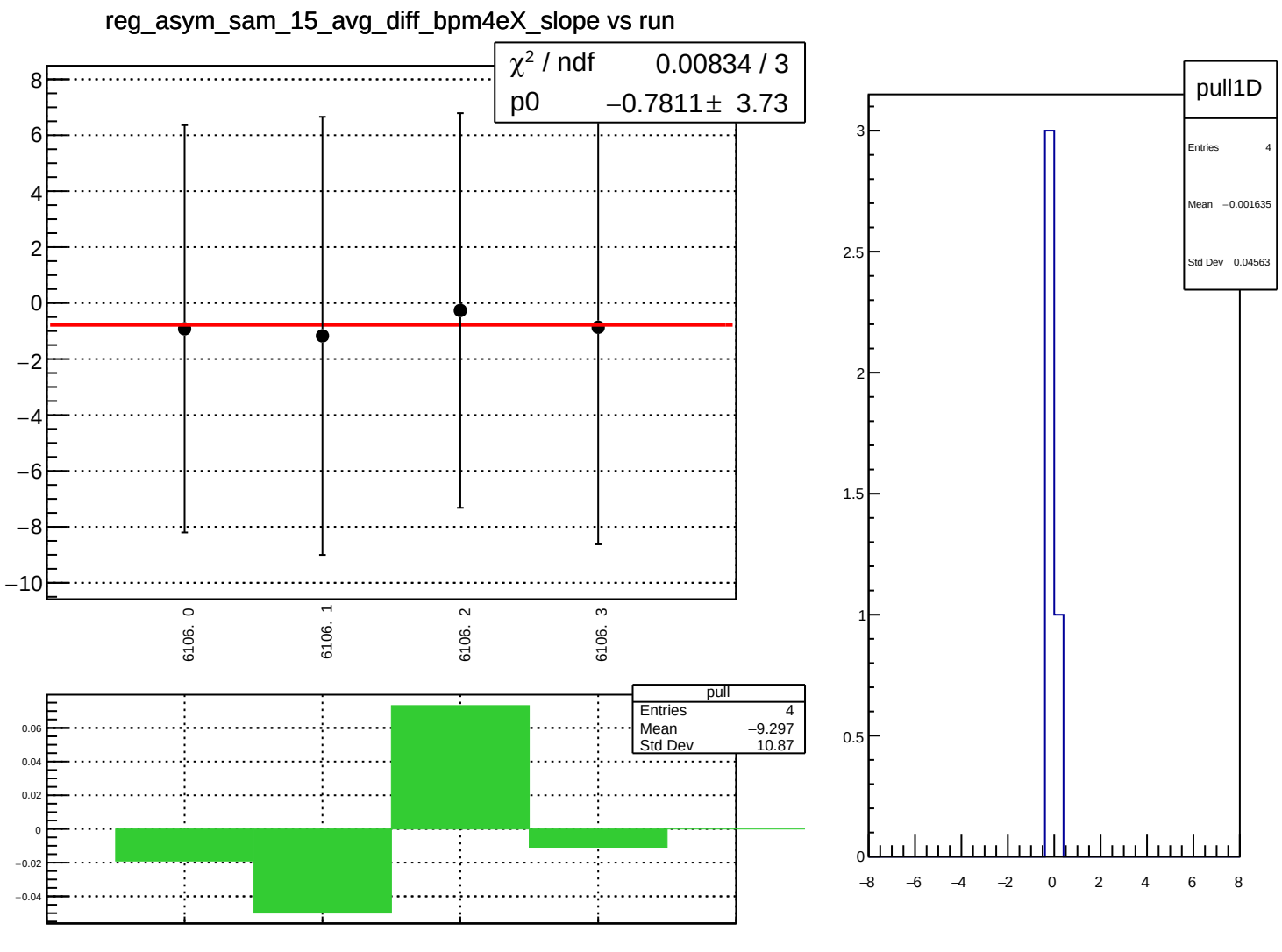

reg_asym_right_dd_diff_bpm12X_slope vs run
χ² / ndf 1.882 / 3
p0 −18.64 ± 0.3665
−17.5
−18
−18.5
−19
−19.5
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −16.13
Std Dev 17.95
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

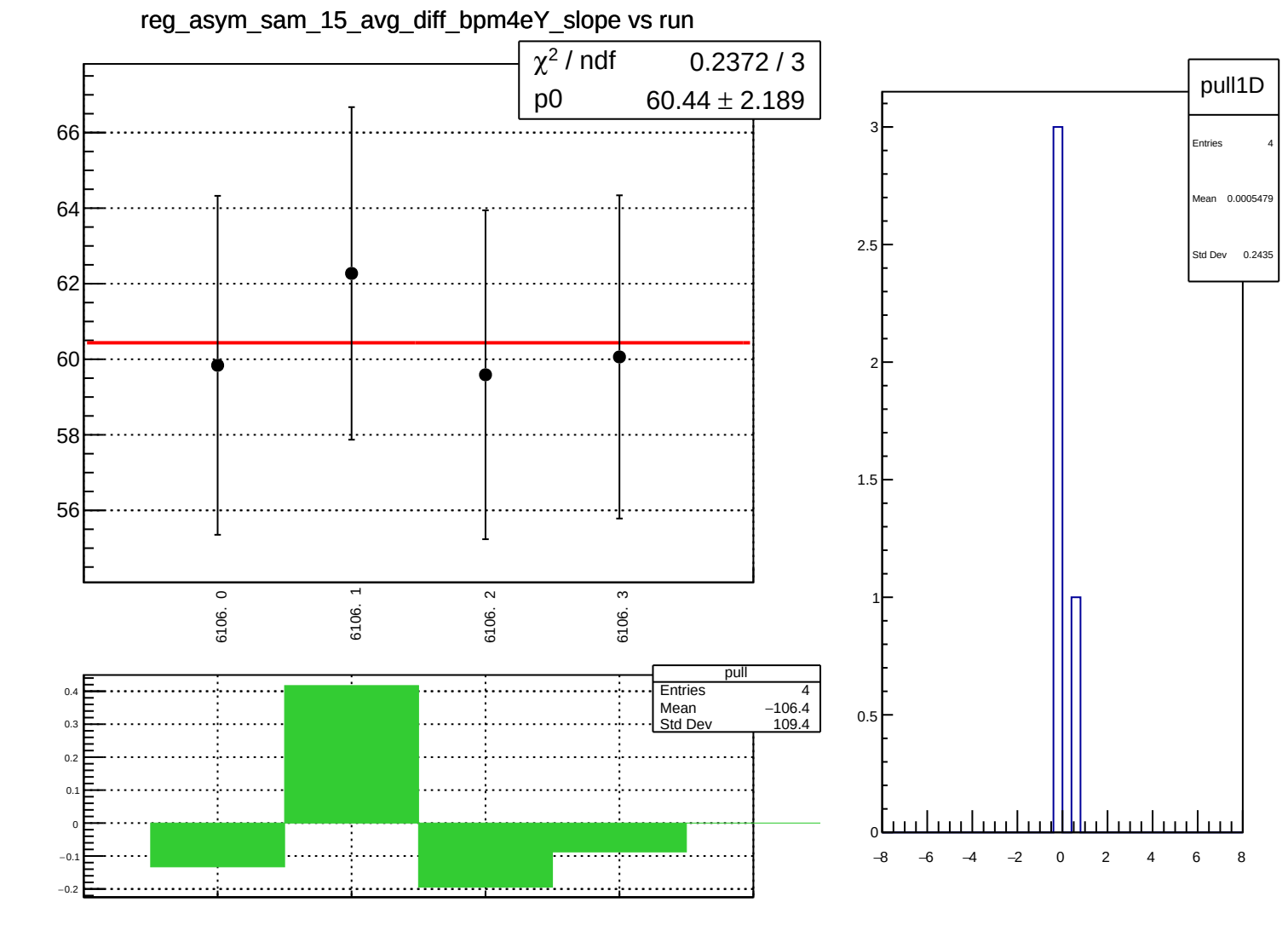

pull1D
Entries 4
Mean −0.02307
Std Dev 0.6855
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

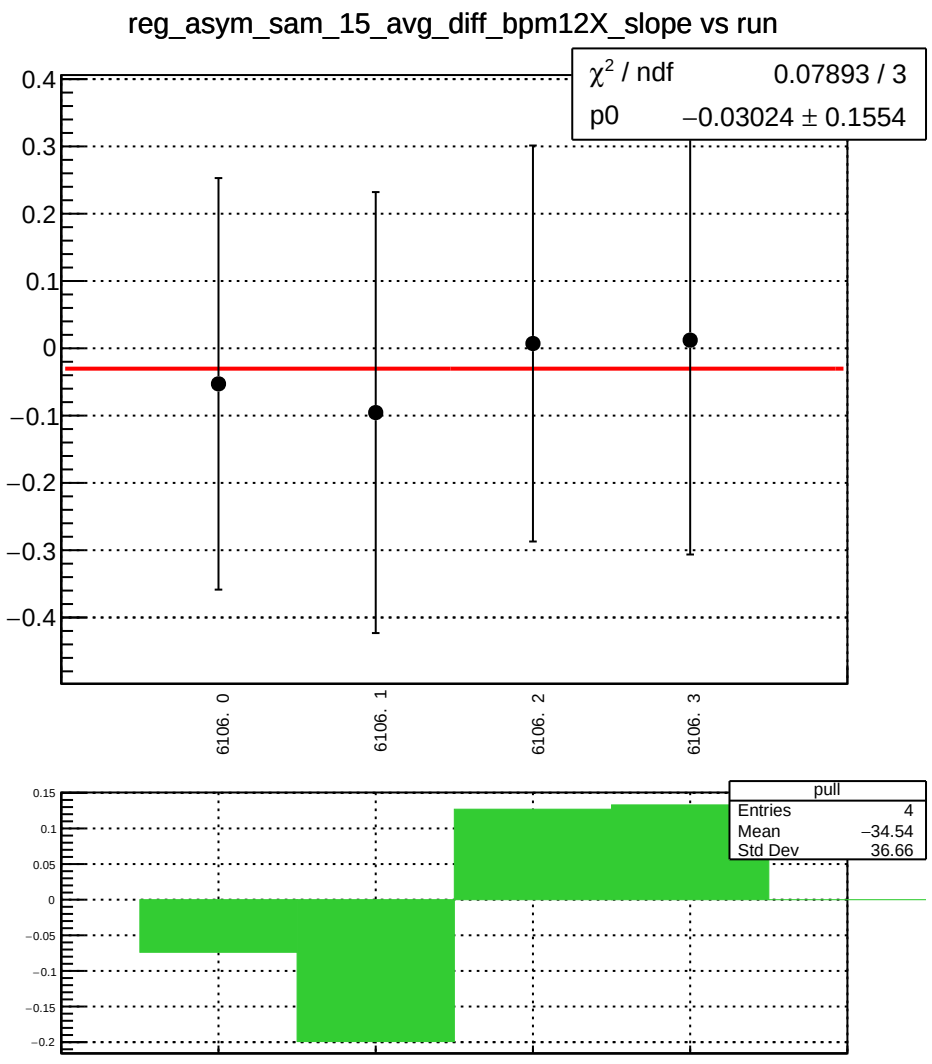

reg_asym_sam_15_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.004999 / 3
p0 −3.044 ± 3.206
4
2
0
−2
−4
−6
−8
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.94
Std Dev 19.55
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04
−0.05
−0.06

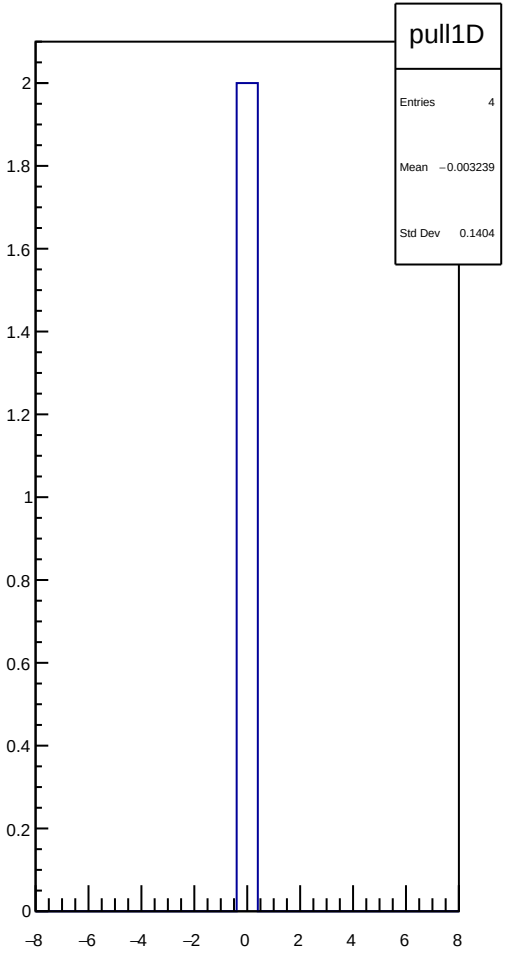

pull1D
Entries 4
Mean 0.001056
Std Dev 0.03534
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

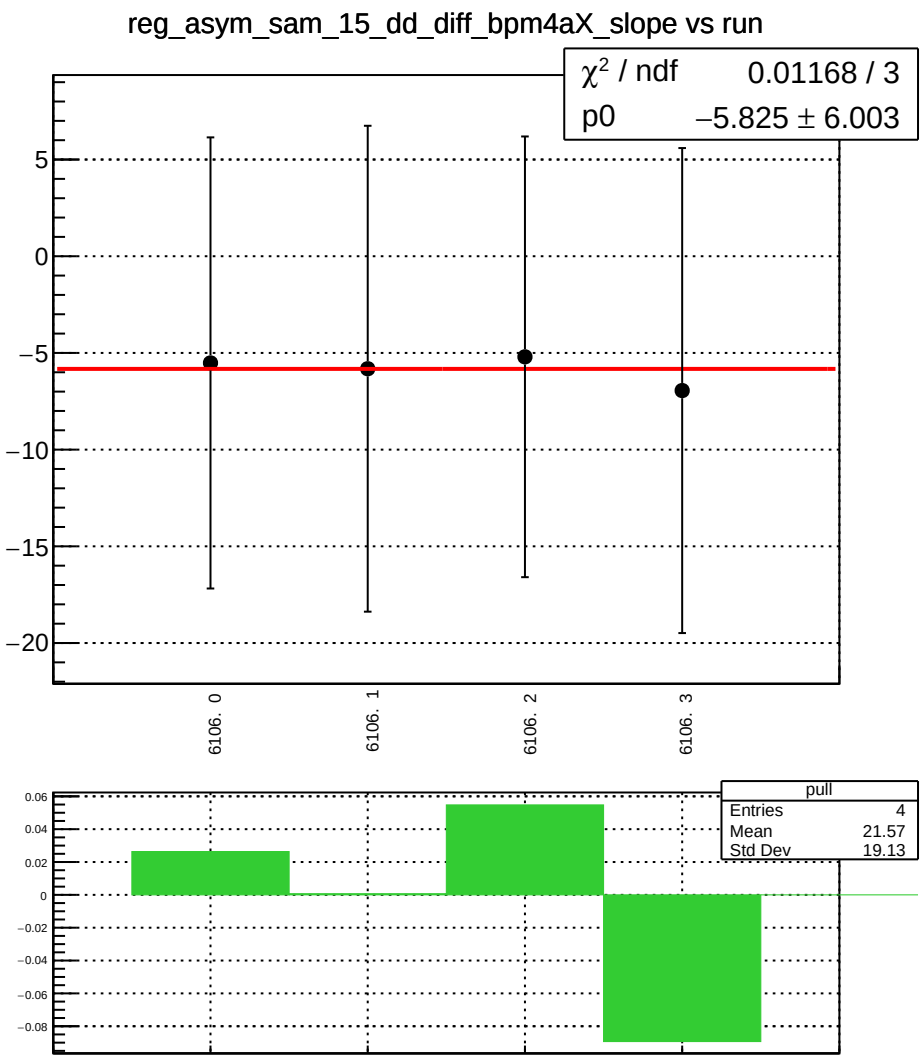

reg_asym_sam_15_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.153 / 3
p0 −1.045 ± 2.07
4
2
0
−2
−4
−6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2.14
Std Dev 5.164
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean 0.004018
Std Dev 0.1955
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

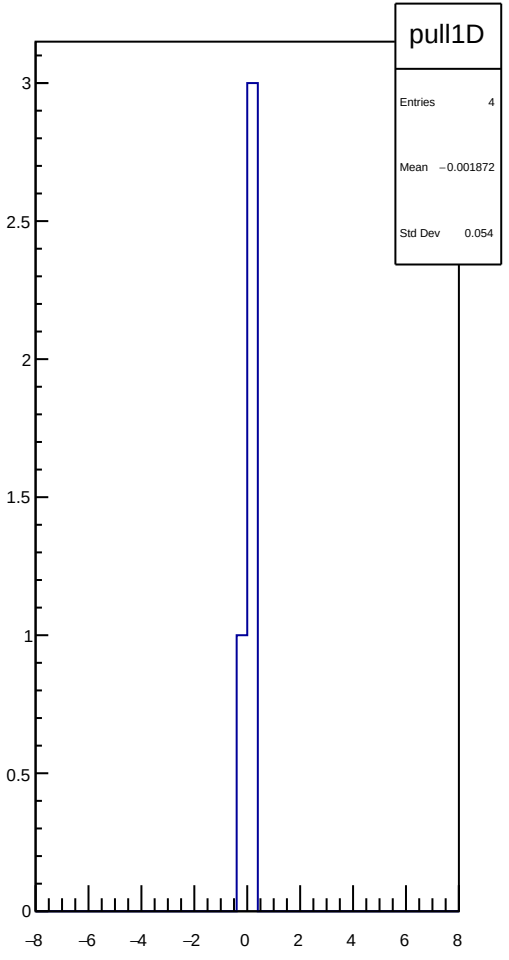

reg_asym_sam_15_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.00834 / 3
p0 −0.7811 ± 3.73
8
6
4
2
0
−2
−4
−6
−8
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.297
Std Dev 10.87
0.06
0.04
0.02
0
−0.02
−0.04
pull1D
Entries 4
Mean −0.001635
Std Dev 0.04563
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

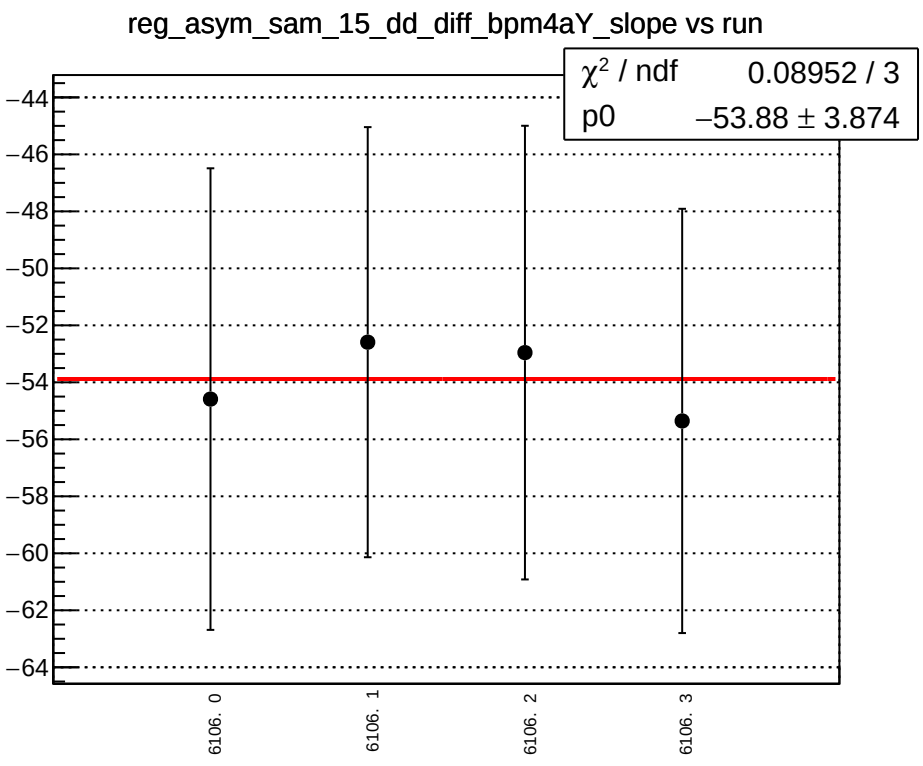

reg_asym_sam_15_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.2372 / 3
p0 60.44 ± 2.189
66
64
62
60
58
56
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −106.4
Std Dev 109.4
0.4
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean 0.0005479
Std Dev 0.2435
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

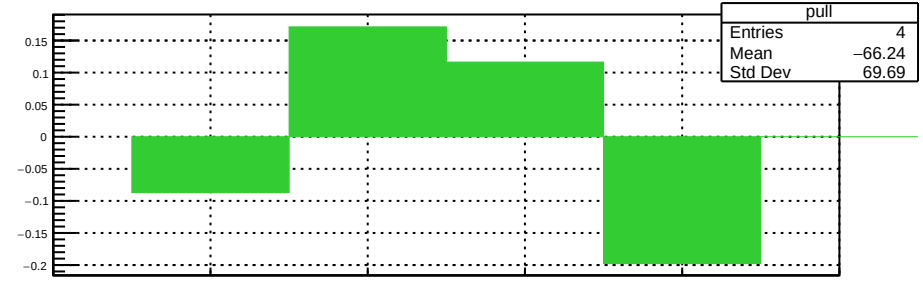

reg_asym_sam_15_avg_diff_bpm12X_slope vs run
χ² / ndf 0.07893 / 3
p0 −0.03024 ± 0.1554
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −34.54
Std Dev 36.66
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

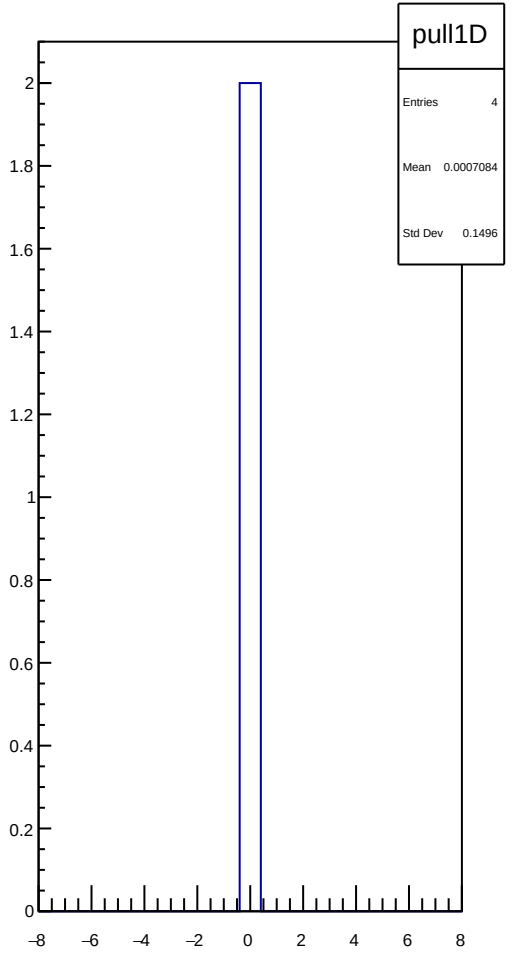

pull1D
Entries 4
Mean −0.003239
Std Dev 0.1404
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

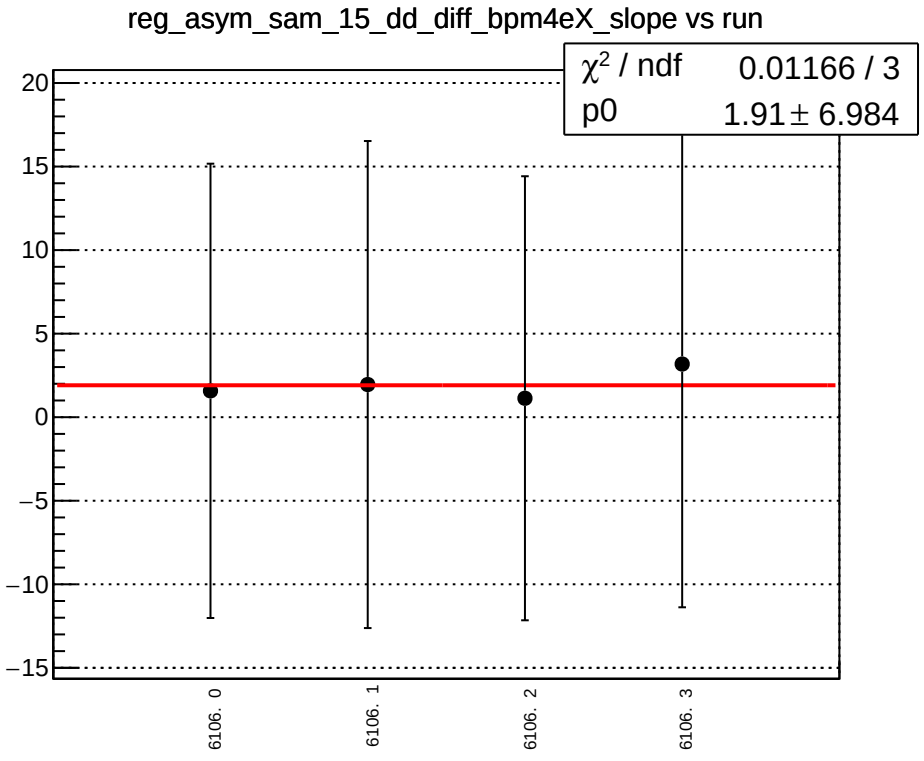

reg_asym_sam_15_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.01168 / 3
p0 −5.825 ± 6.003
5
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 21.57
Std Dev 19.13
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08

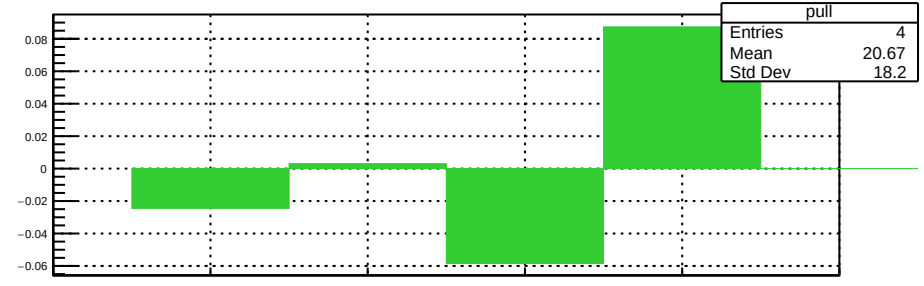

pull1D
Entries 4
Mean −0.001872
Std Dev 0.054
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

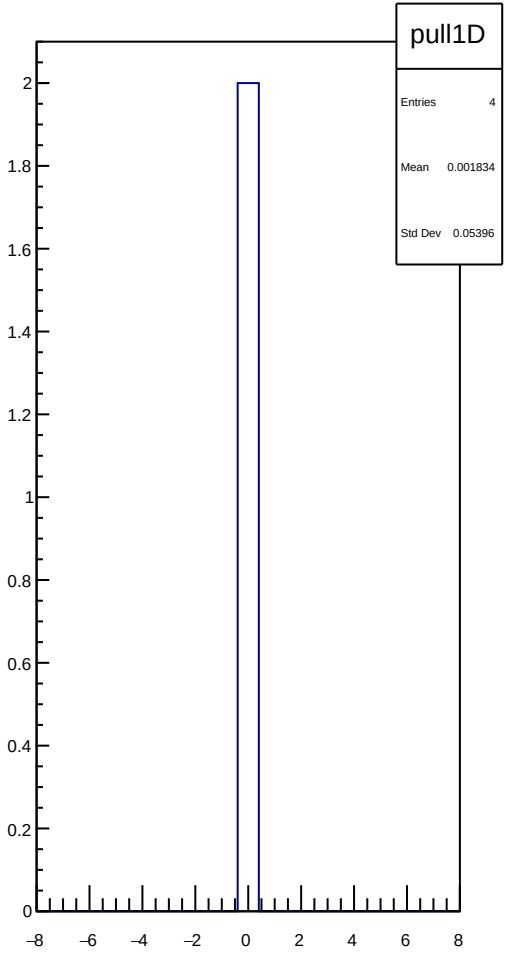

reg_asym_sam_15_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.08952 / 3
p0 −53.88 ± 3.874
−44
−46
−48
−50
−52
−54
−56
−58
−60
−62
−64
6106. 0
6106. 1
6106. 2
6106. 3

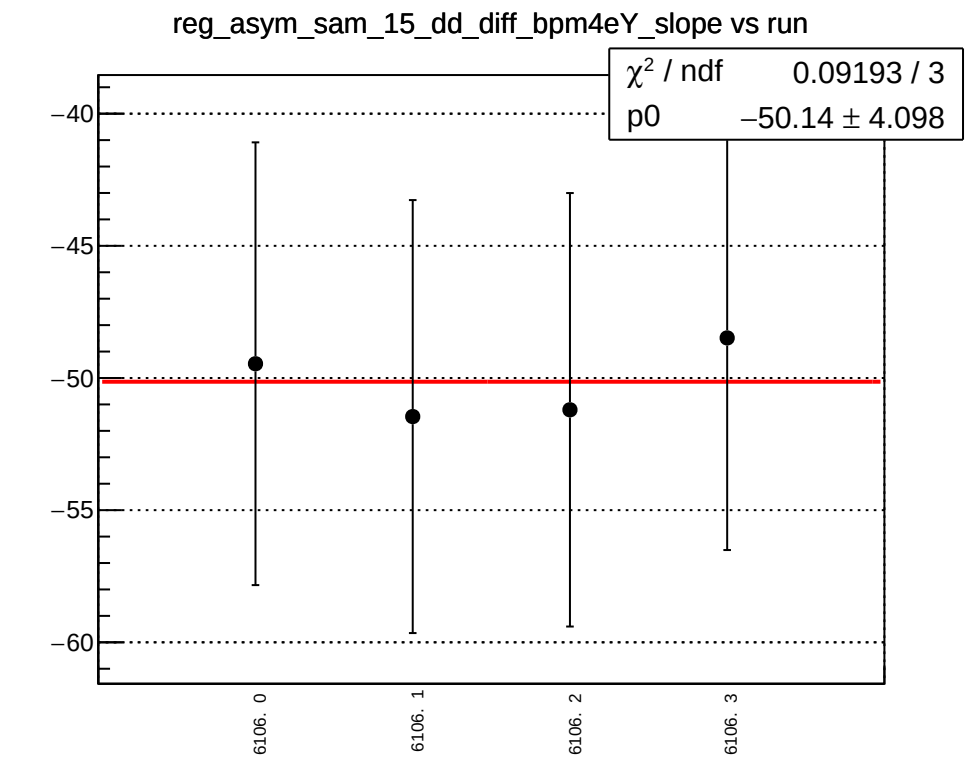

pull
Entries 4
Mean −66.24
Std Dev 69.69
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

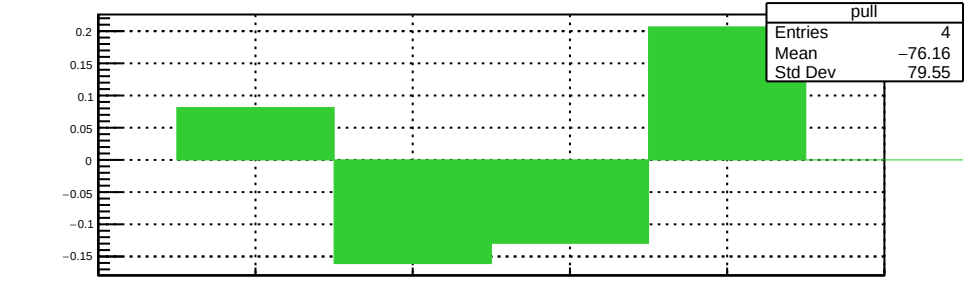

pull1D
Entries 4
Mean 0.0007084
Std Dev 0.1496
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

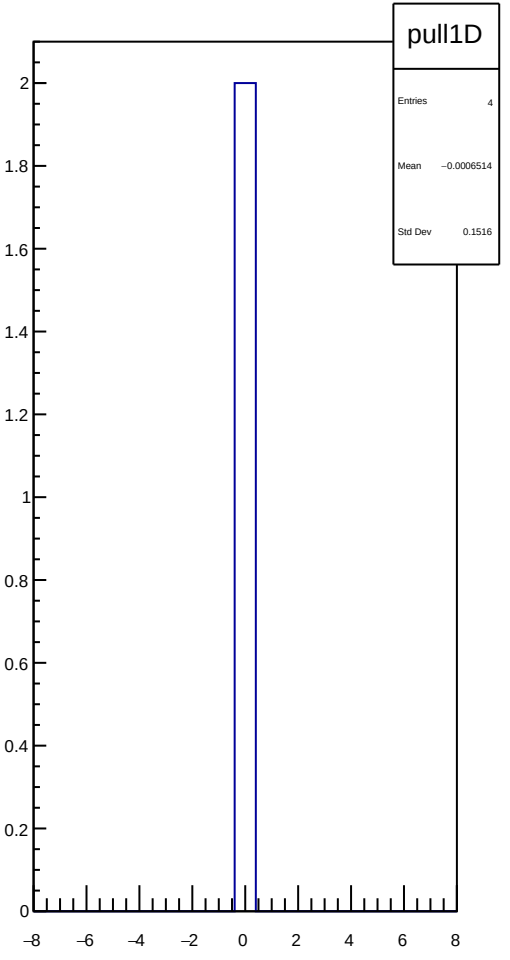

reg_asym_sam_15_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.01166 / 3
p0 1.91 ± 6.984
20
15
10
5
0
−5
−10
−15
6106. 0
6106. 1
6106. 2
6106. 3

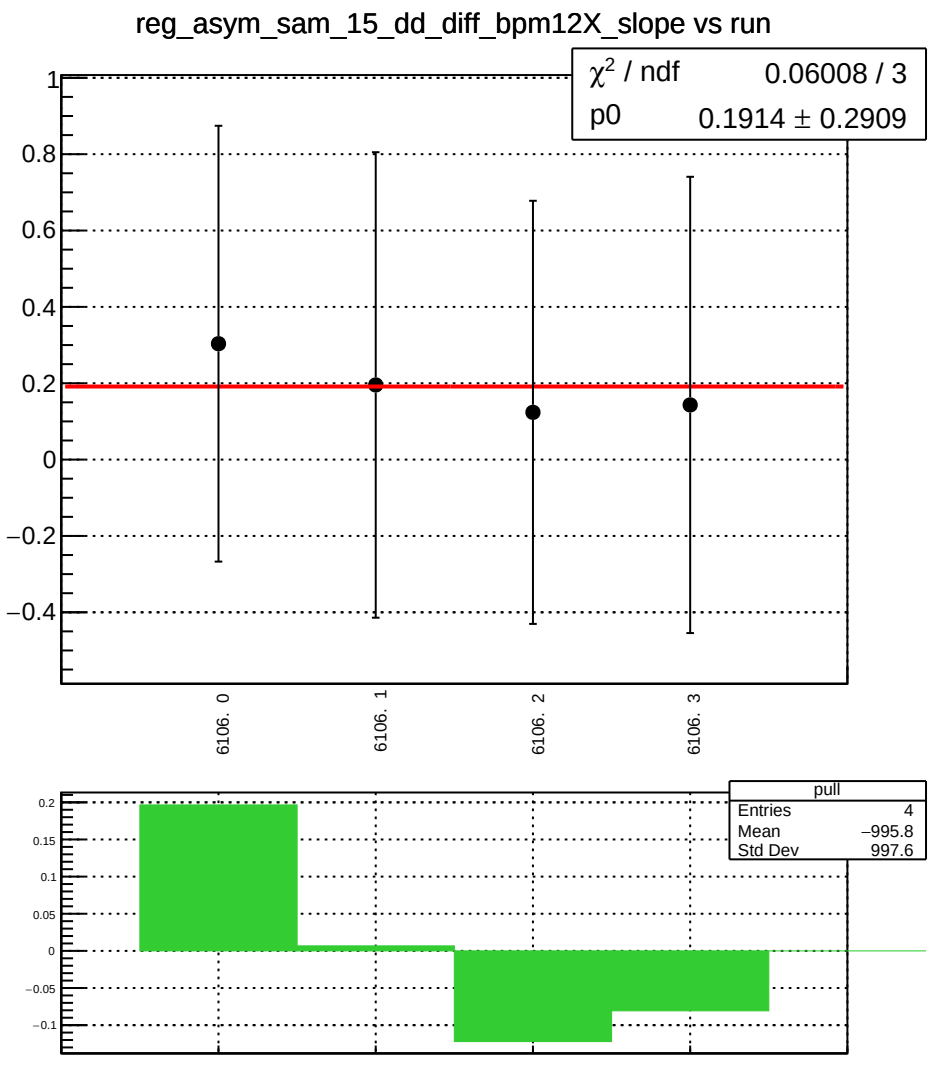

pull
Entries 4
Mean 20.67
Std Dev 18.2
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06

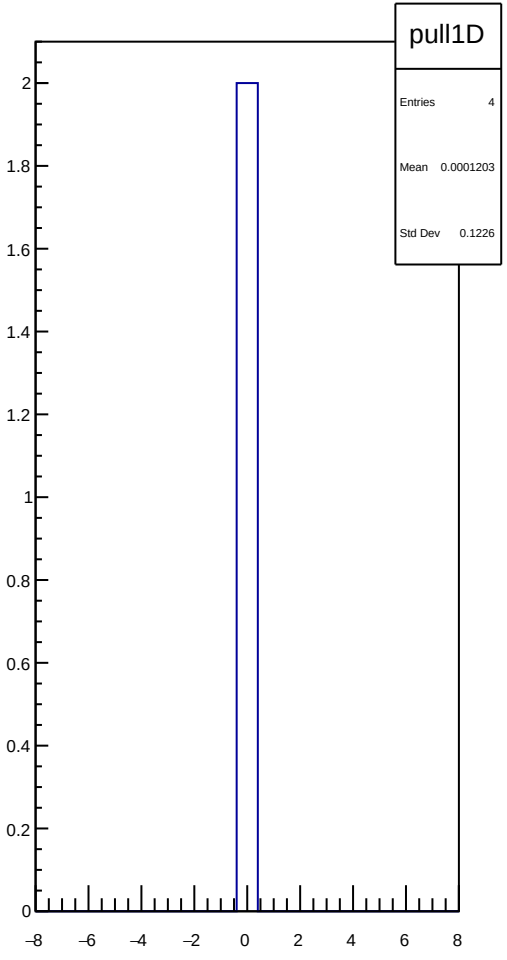

pull1D
Entries 4
Mean 0.001834
Std Dev 0.05396
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

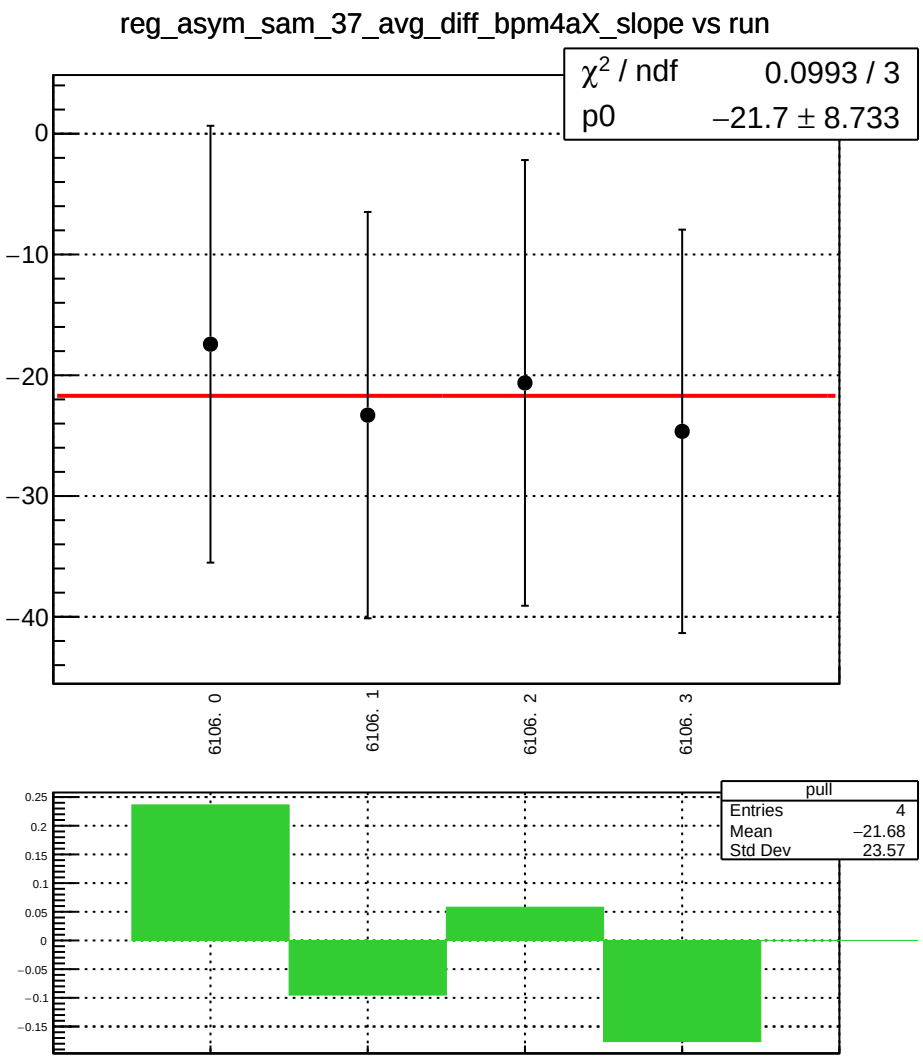

reg_asym_sam_15_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.09193 / 3
p0 −50.14 ± 4.098
−40
−45
−50
−55
−60
6106. 0
6106. 1
6106. 2
6106. 3

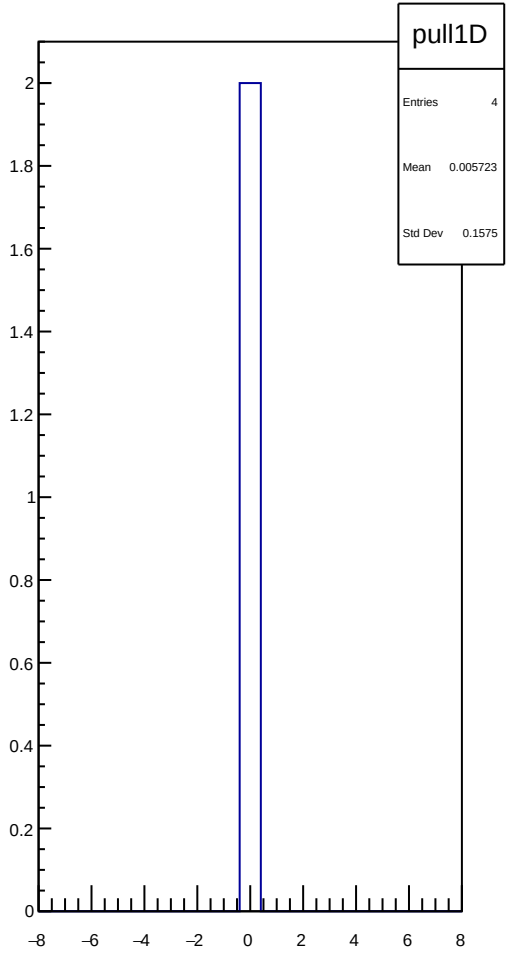

pull
Entries 4
Mean −76.16
Std Dev 79.55
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

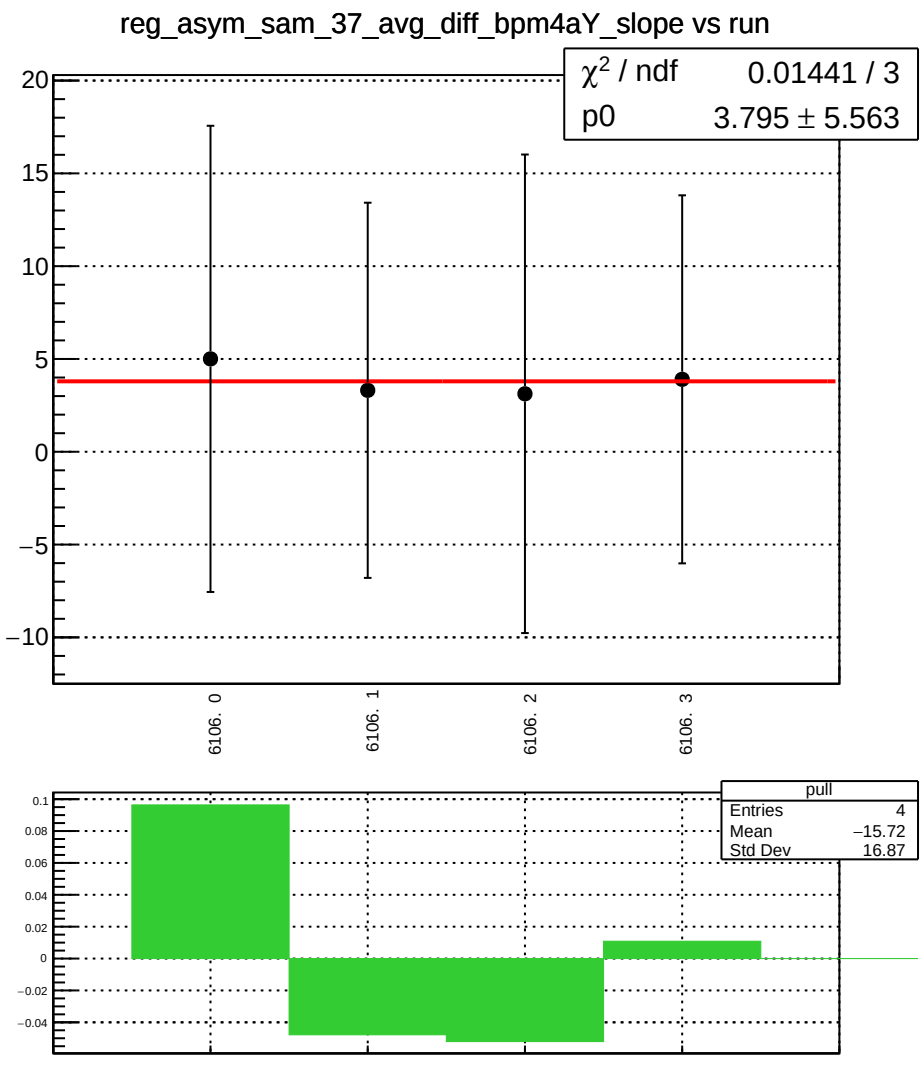

pull1D
Entries 4
Mean −0.0006514
Std Dev 0.1516
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

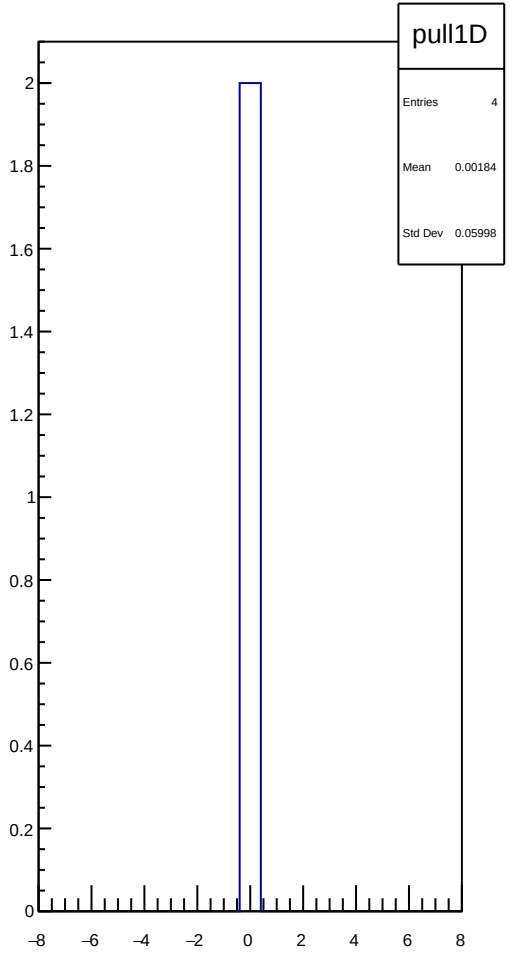

reg_asym_sam_15_dd_diff_bpm12X_slope vs run
χ² / ndf 0.06008 / 3
p0 0.1914 ± 0.2909
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −995.8
Std Dev 997.6
0.2
0.15
0.1
0.05
0
−0.05
−0.1

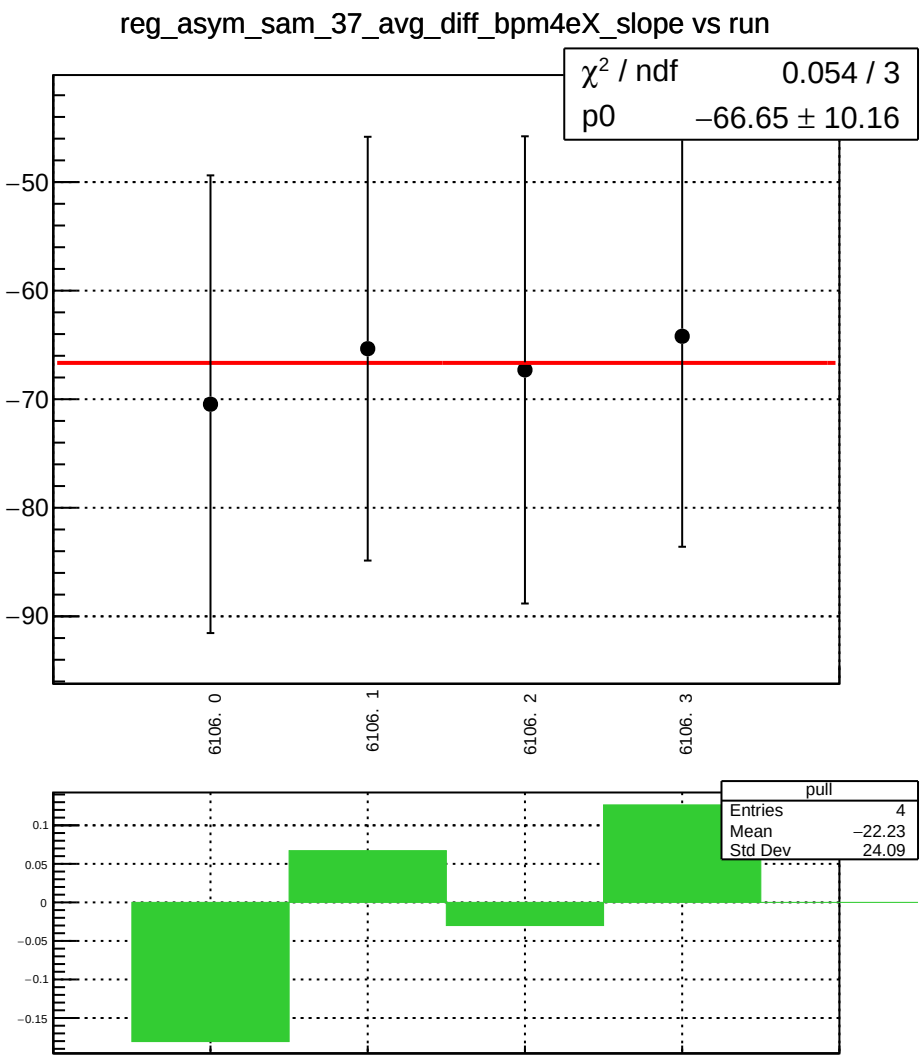

pull1D
Entries 4
Mean 0.0001203
Std Dev 0.1226
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

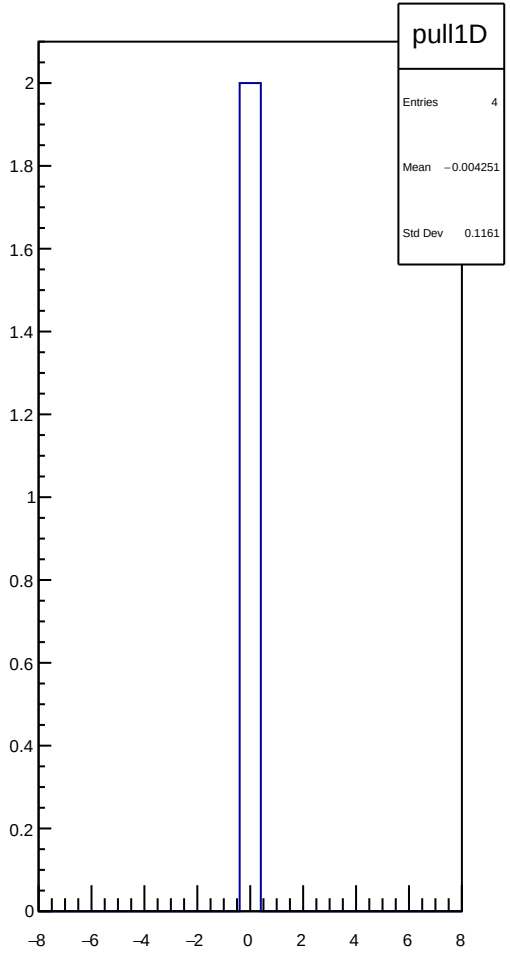

reg_asym_sam_37_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.0993 / 3
p0 −21.7 ± 8.733
0
−10
−20
−30
−40
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −21.68
Std Dev 23.57
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

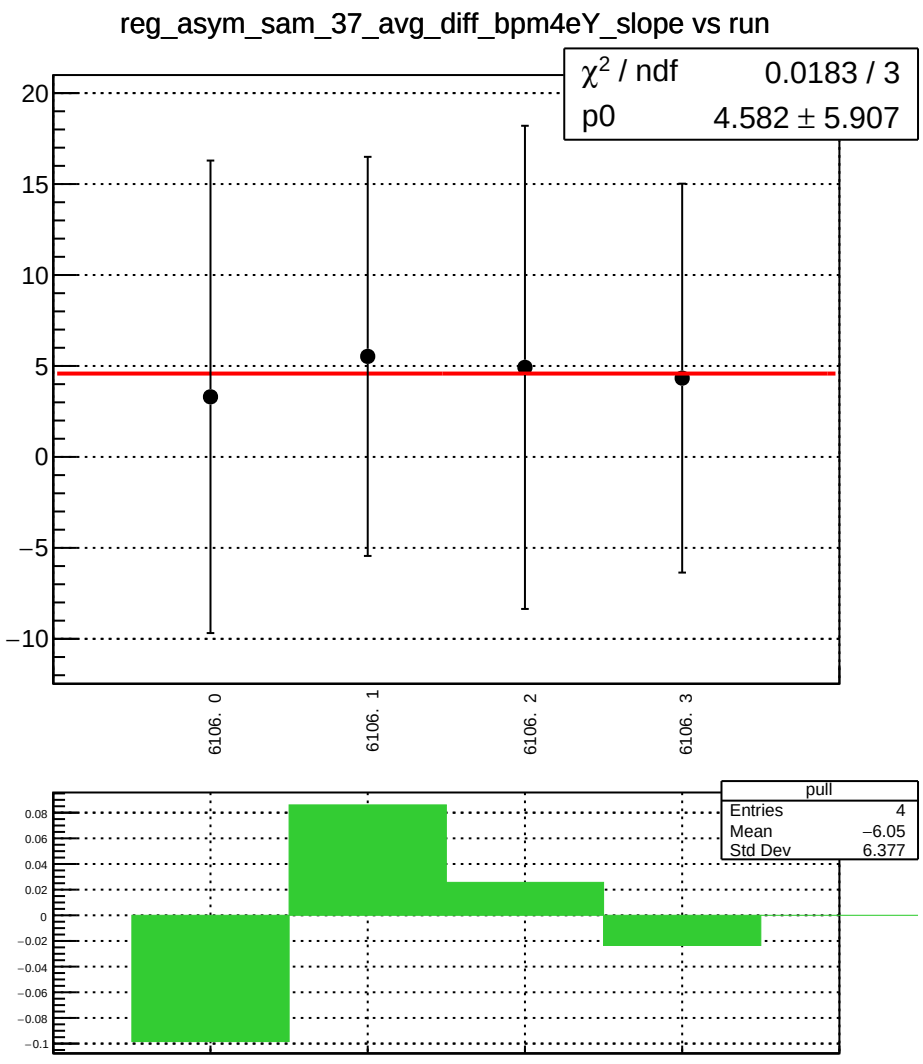

pull1D
Entries 4
Mean 0.005723
Std Dev 0.1575
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

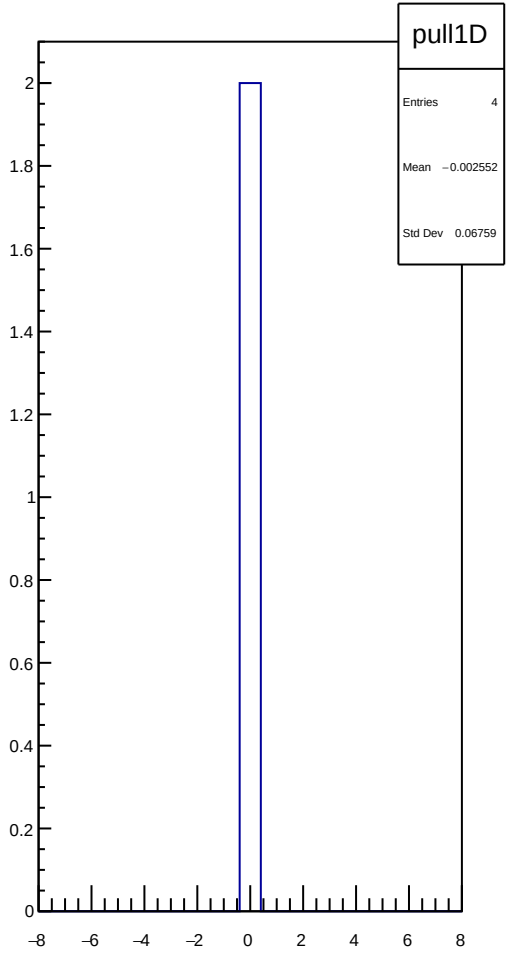

reg_asym_sam_37_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.01441 / 3
p0 3.795 ± 5.563
20
15
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −15.72
Std Dev 16.87
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04

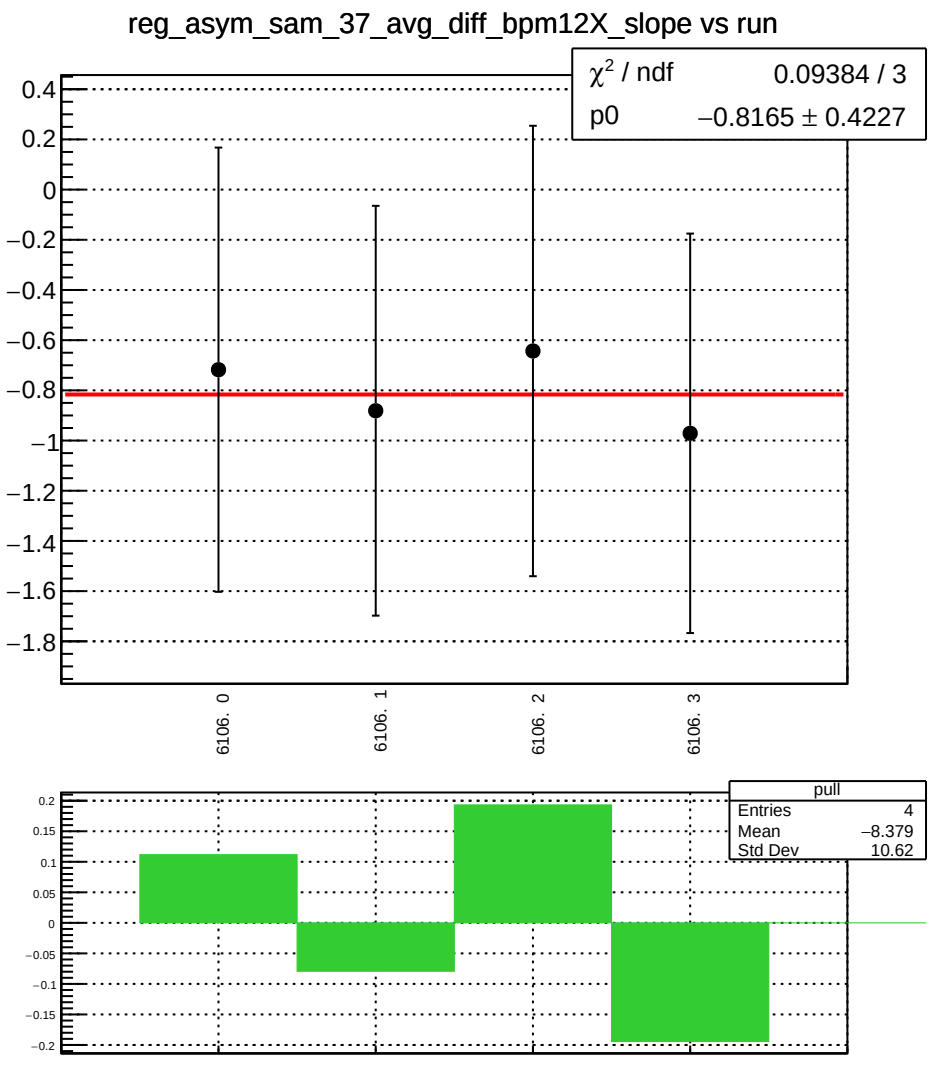

pull1D
Entries 4
Mean 0.00184
Std Dev 0.05998
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

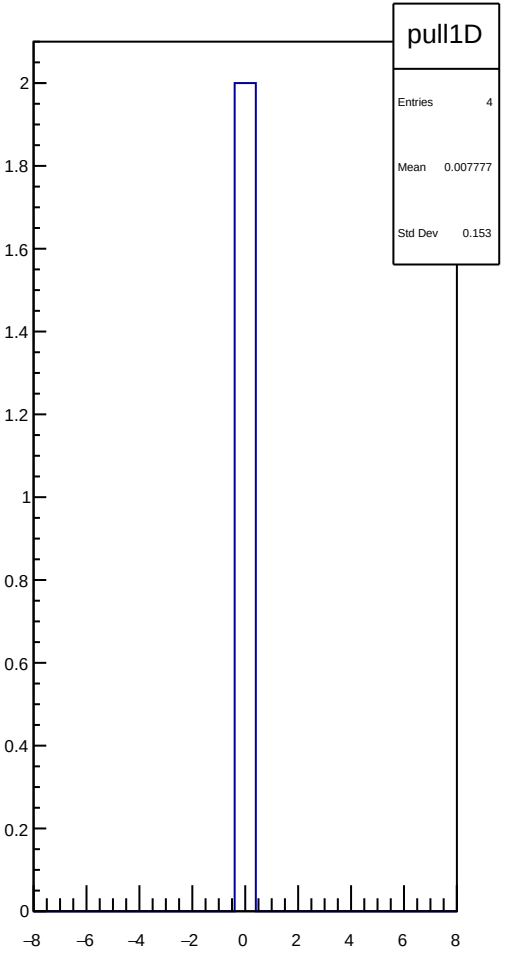

reg_asym_sam_37_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.054 / 3
p0 −66.65 ± 10.16
−50
−60
−70
−80
−90
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −22.23
Std Dev 24.09
0.1
0.05
0
−0.05
−0.1
−0.15

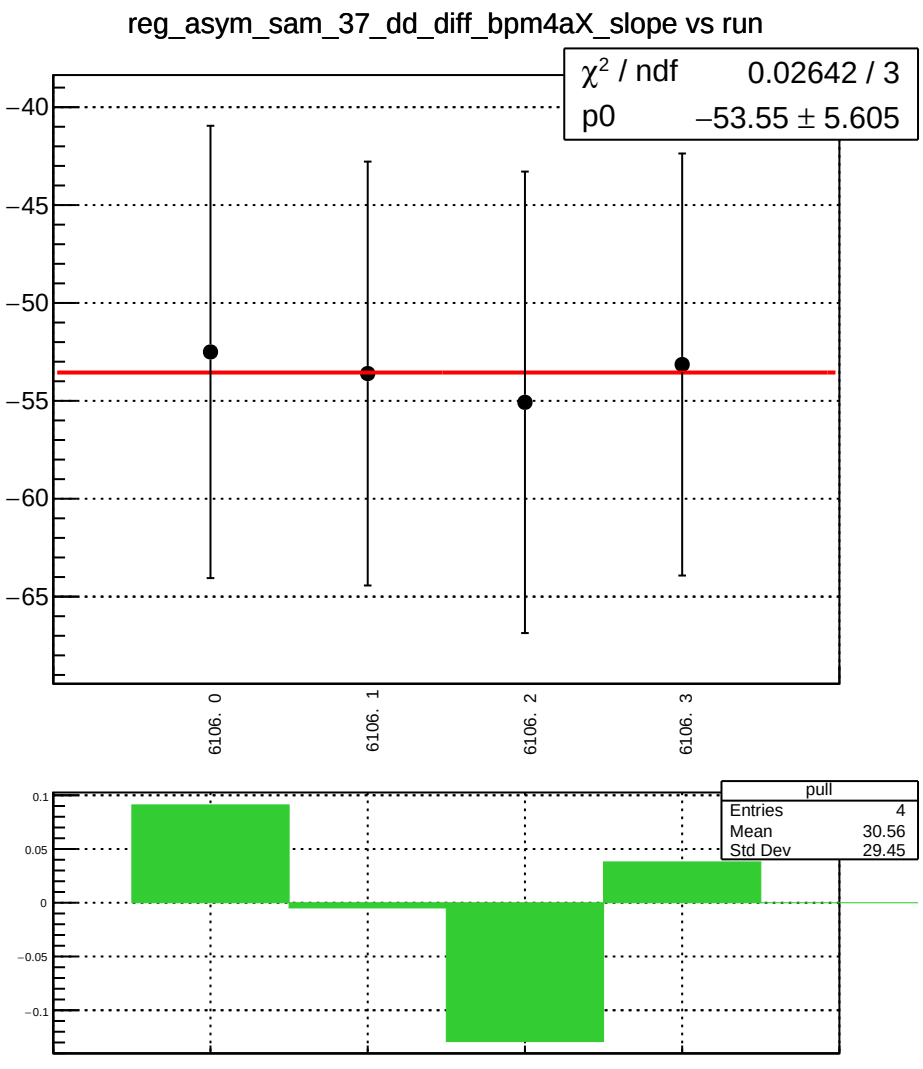

pull1D
Entries 4
Mean −0.004251
Std Dev 0.1161
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

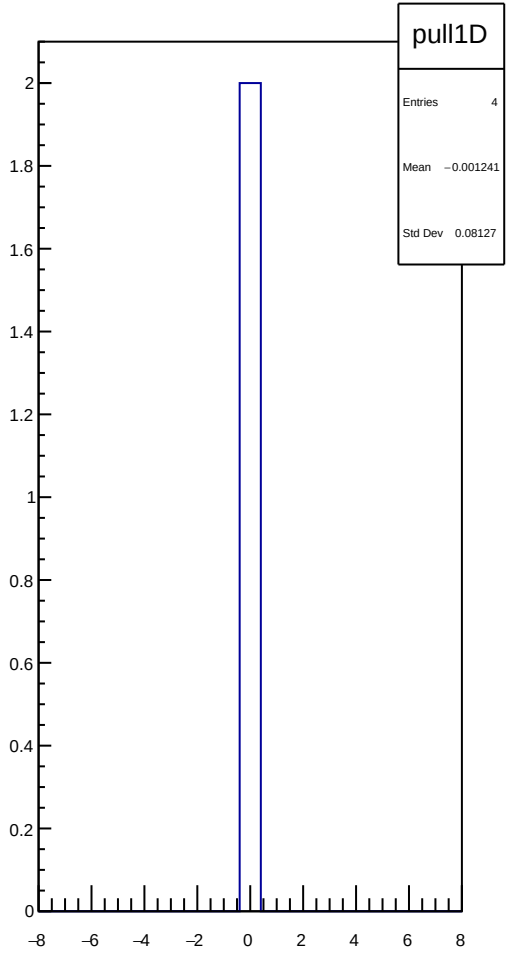

reg_asym_sam_37_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.0183 / 3
p0 4.582 ± 5.907
20
15
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.05
Std Dev 6.377
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1

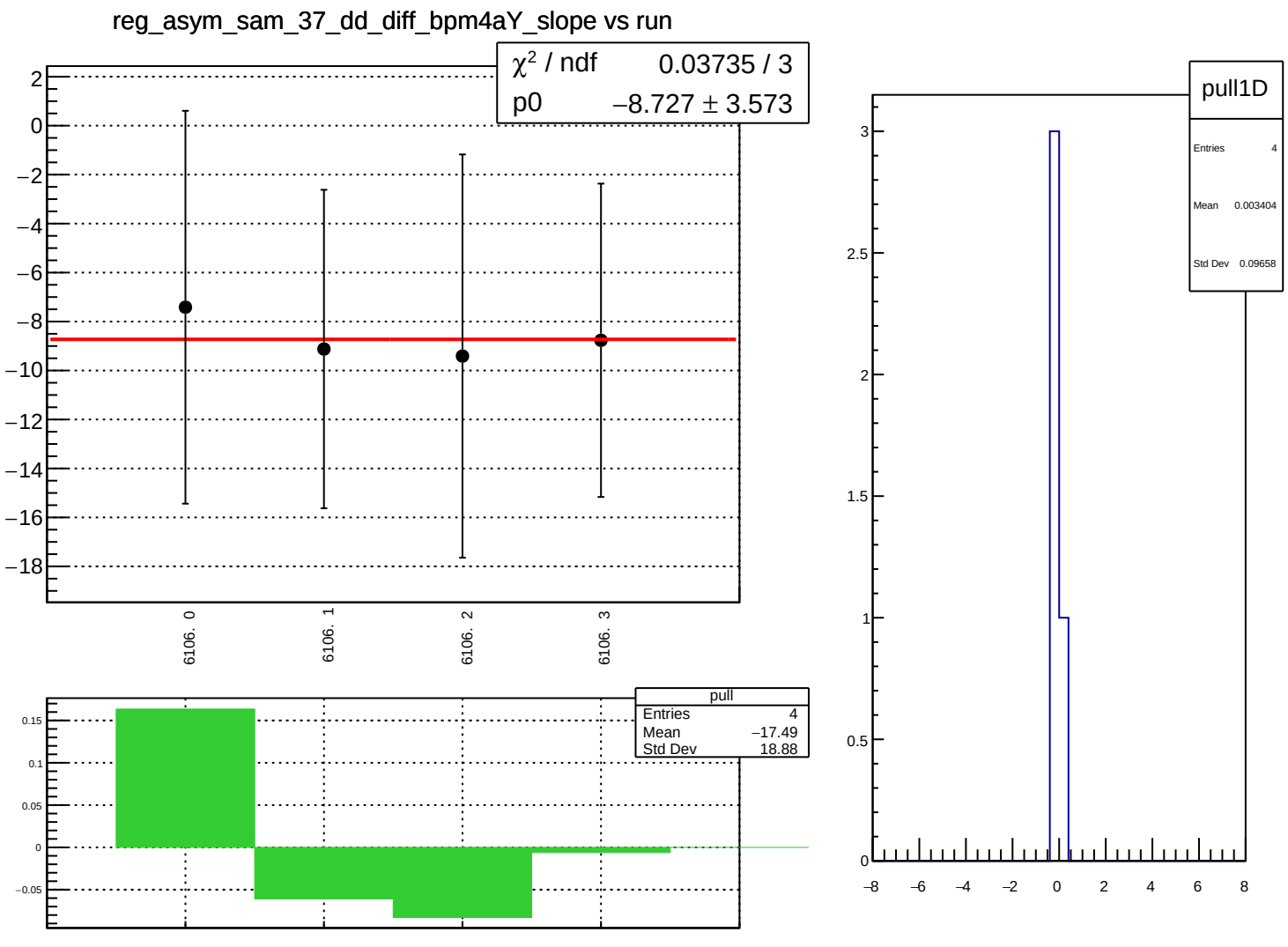

pull1D
Entries 4
Mean −0.002552
Std Dev 0.06759
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

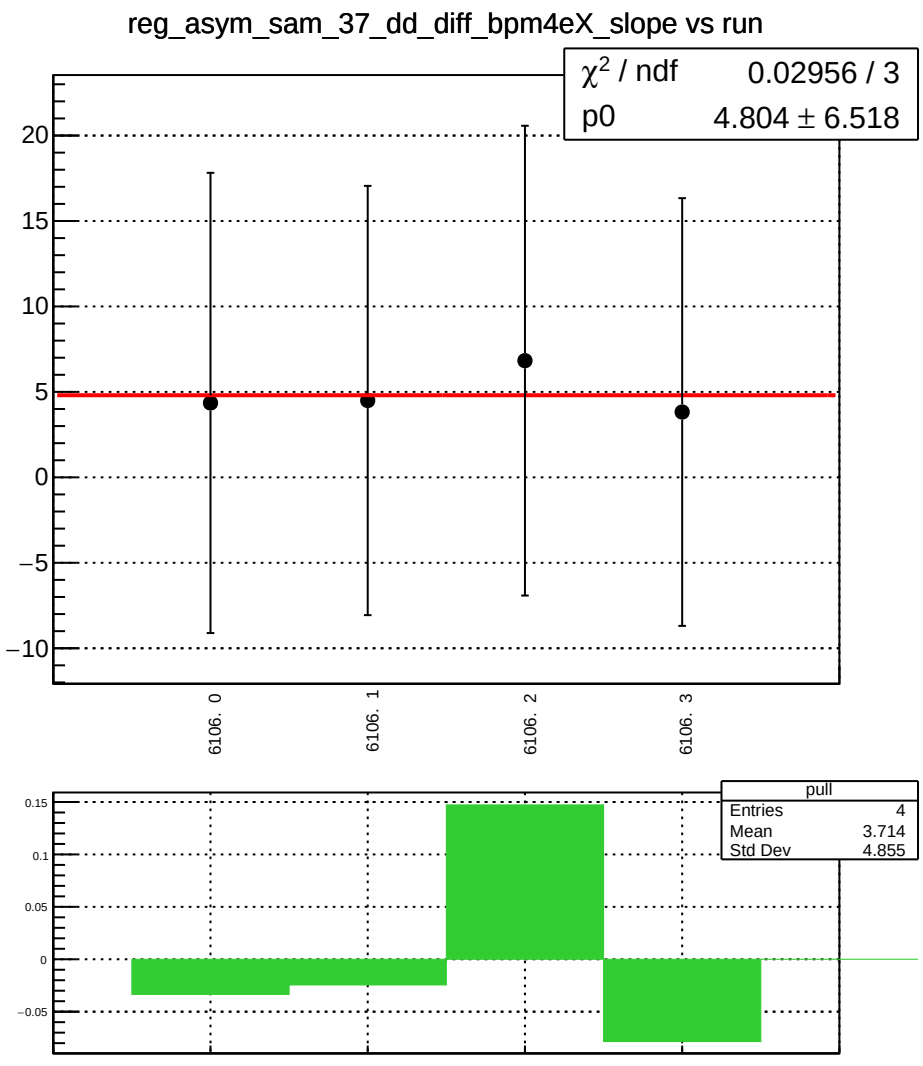

reg_asym_sam_37_avg_diff_bpm12X_slope vs run
χ² / ndf 0.09384 / 3
p0 −0.8165 ± 0.4227
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4
−1.6
−1.8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −8.379
Std Dev 10.62
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

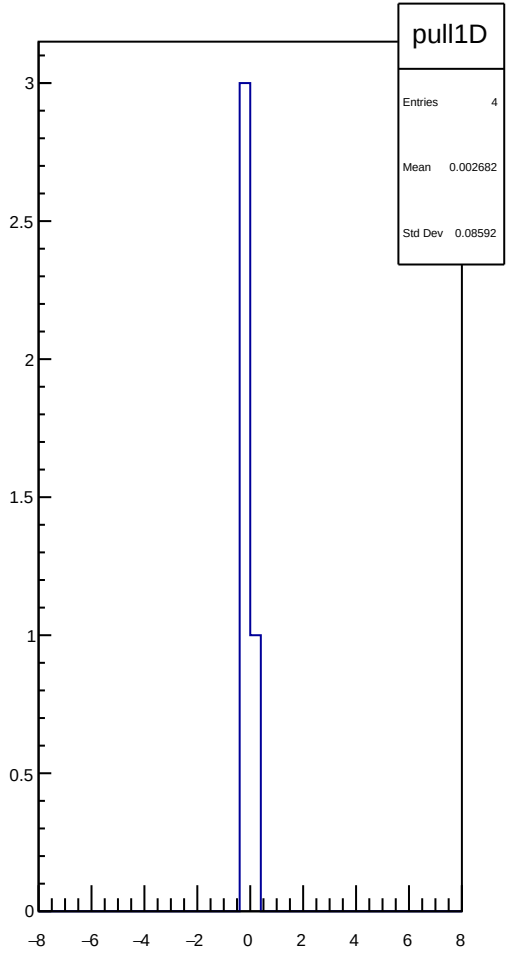

pull1D
Entries 4
Mean 0.007777
Std Dev 0.153
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

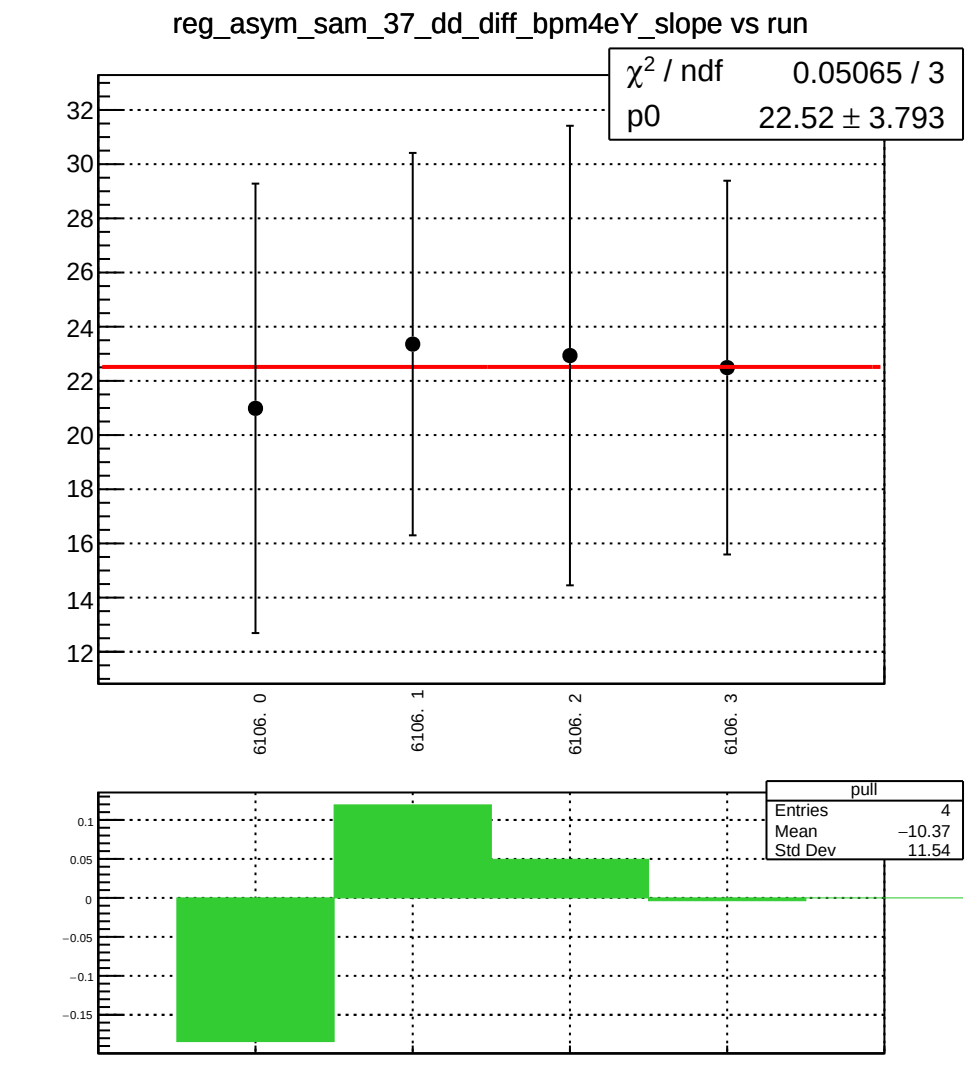

reg_asym_sam_37_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.02642 / 3
p0 −53.55 ± 5.605
−40
−45
−50
−55
−60
−65
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 30.56
Std Dev 29.45
0.1
0.05
0
−0.05
−0.1

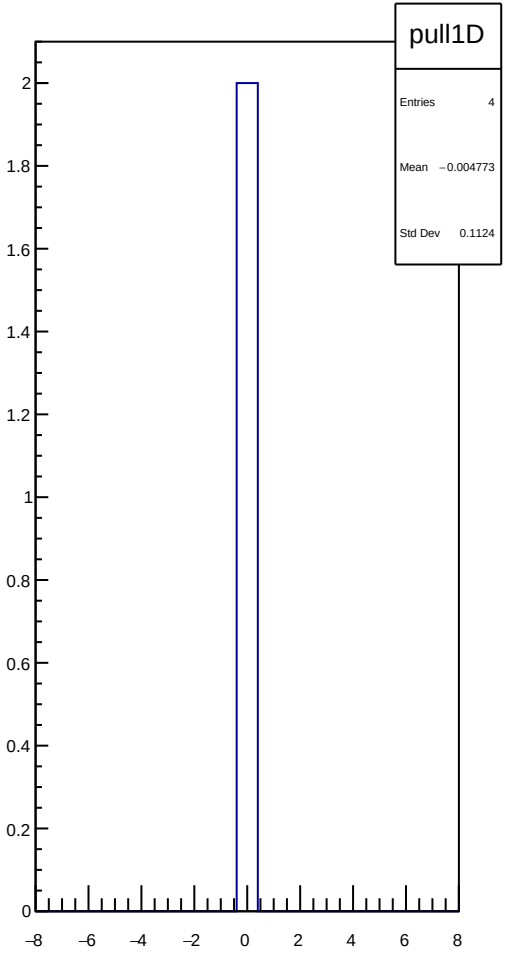

pull1D
Entries 4
Mean −0.001241
Std Dev 0.08127
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

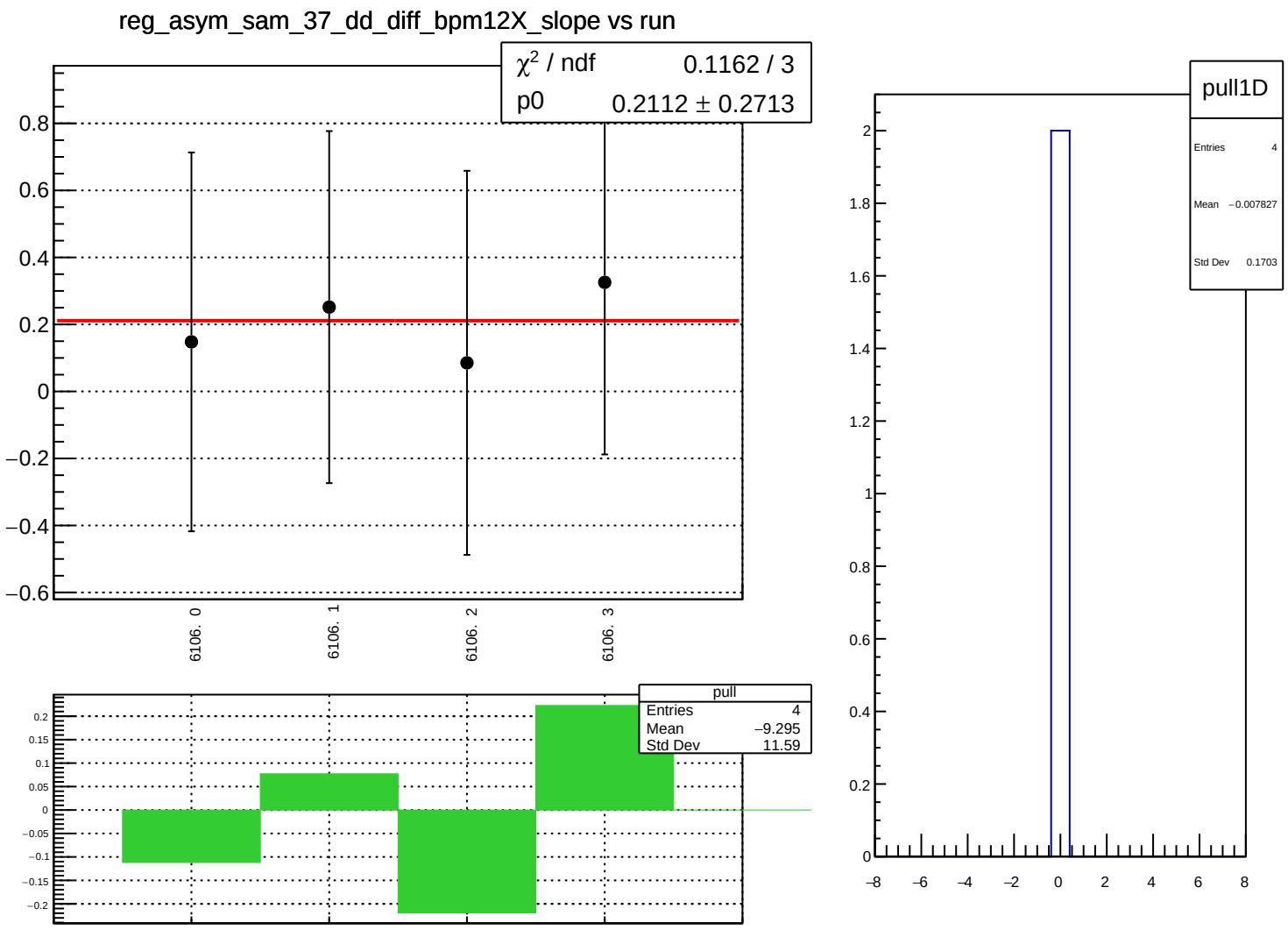

reg_asym_sam_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.03735 / 3
p0 −8.727 ± 3.573
2
0
−2
−4
−6
−8
−10
−12
−14
−16
−18
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.49
Std Dev 18.88
0.15
0.1
0.05
0
−0.05
pull1D
Entries 4
Mean 0.003404
Std Dev 0.09658
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

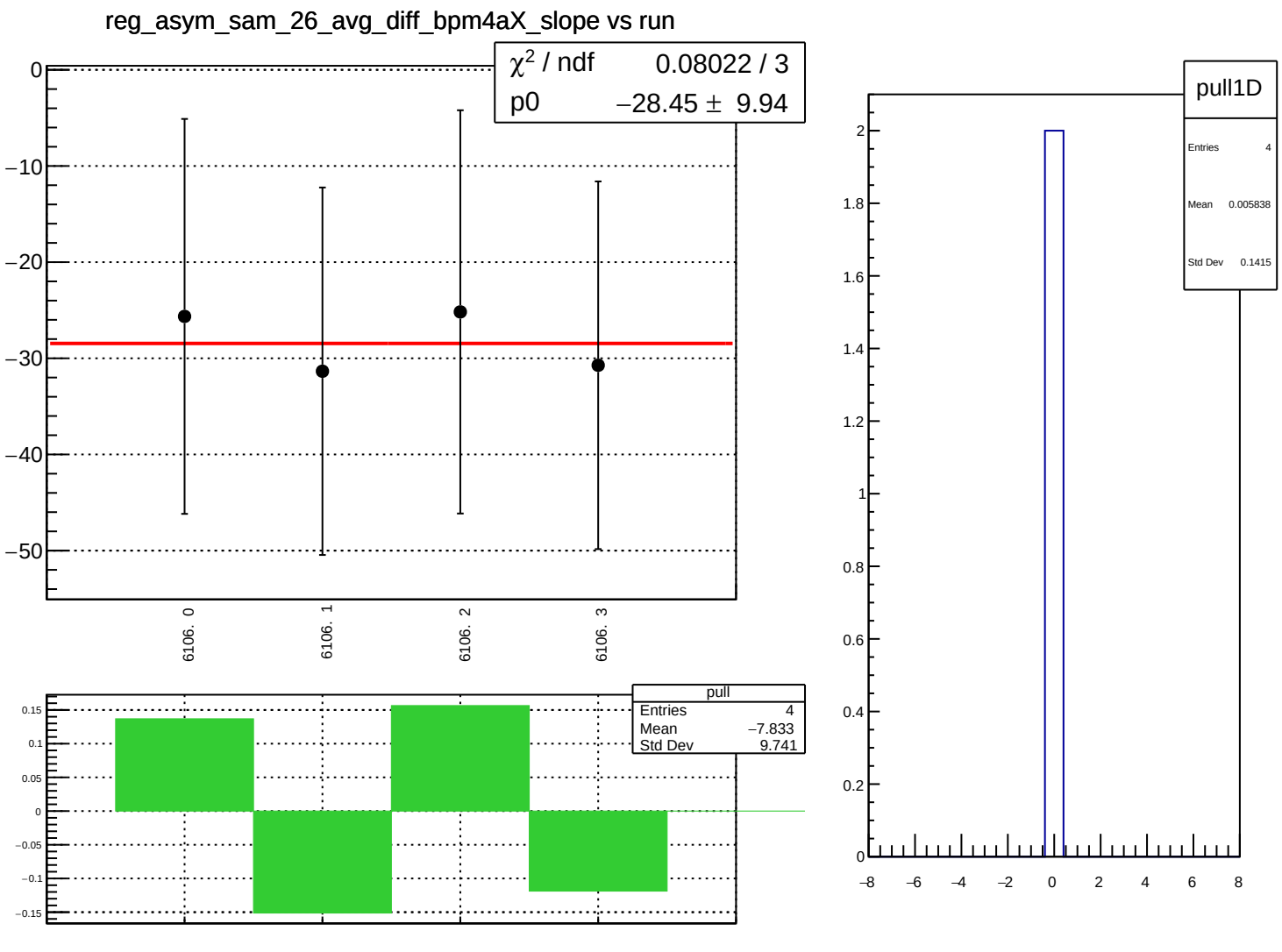

reg_asym_sam_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.02956 / 3
p0 4.804 ± 6.518
20
15
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 3.714
Std Dev 4.855
0.15
0.1
0.05
0
−0.05

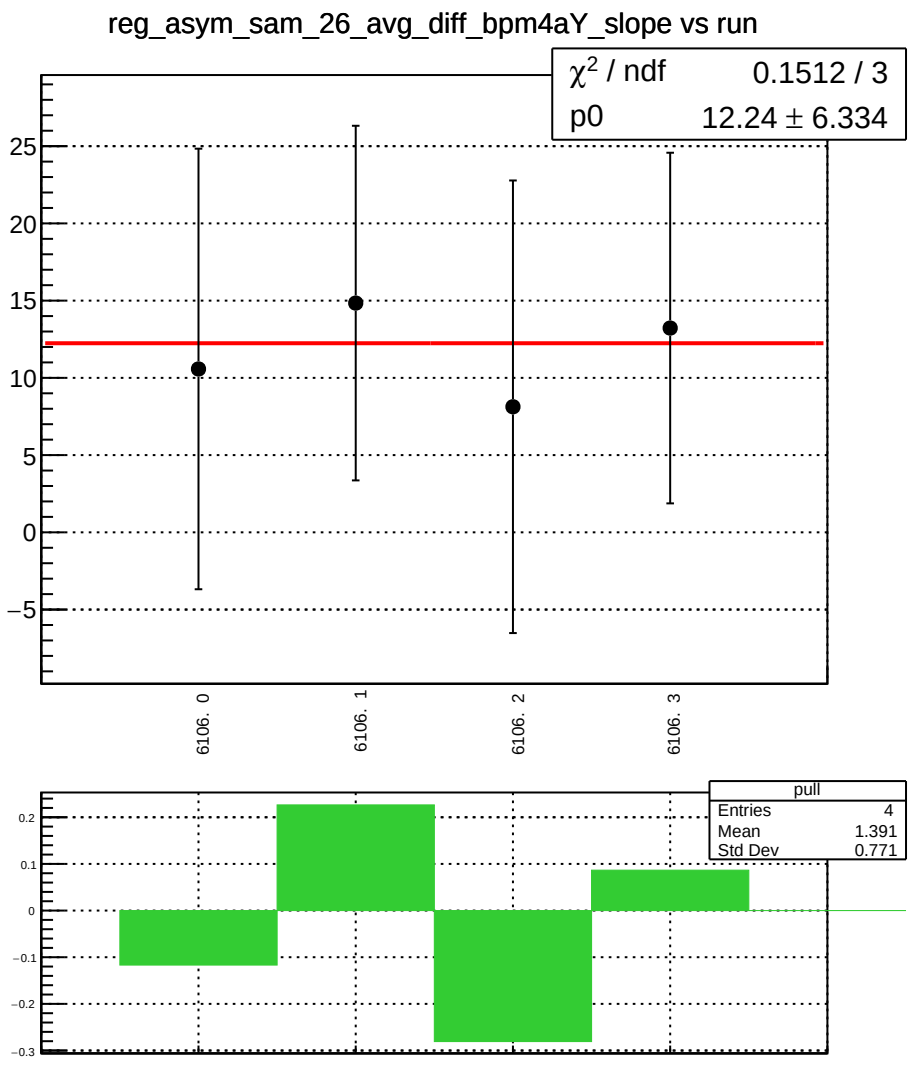

pull1D
Entries 4
Mean 0.002682
Std Dev 0.08592
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

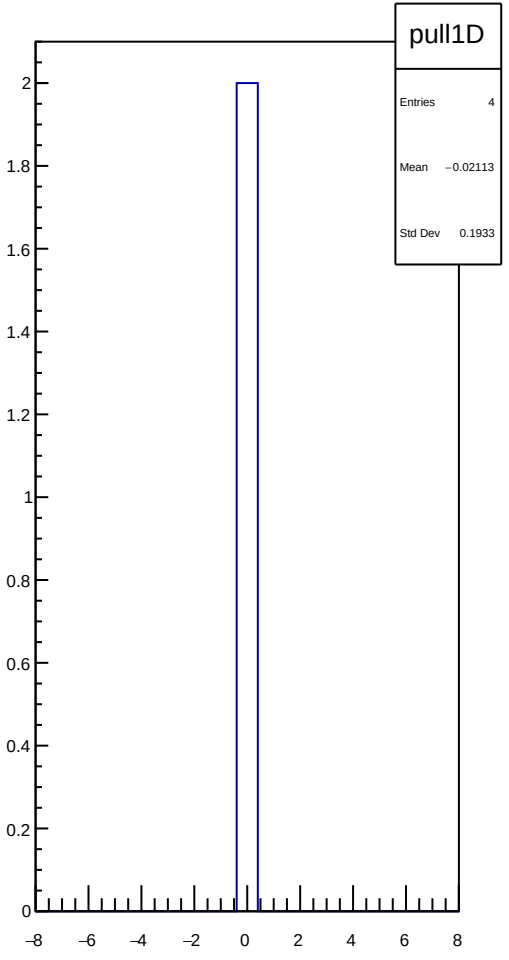

reg_asym_sam_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.05065 / 3
p0 22.52 ± 3.793
32
30
28
26
24
22
20
18
16
14
12
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −10.37
Std Dev 11.54
0.1
0.05
0
−0.05
−0.1
−0.15

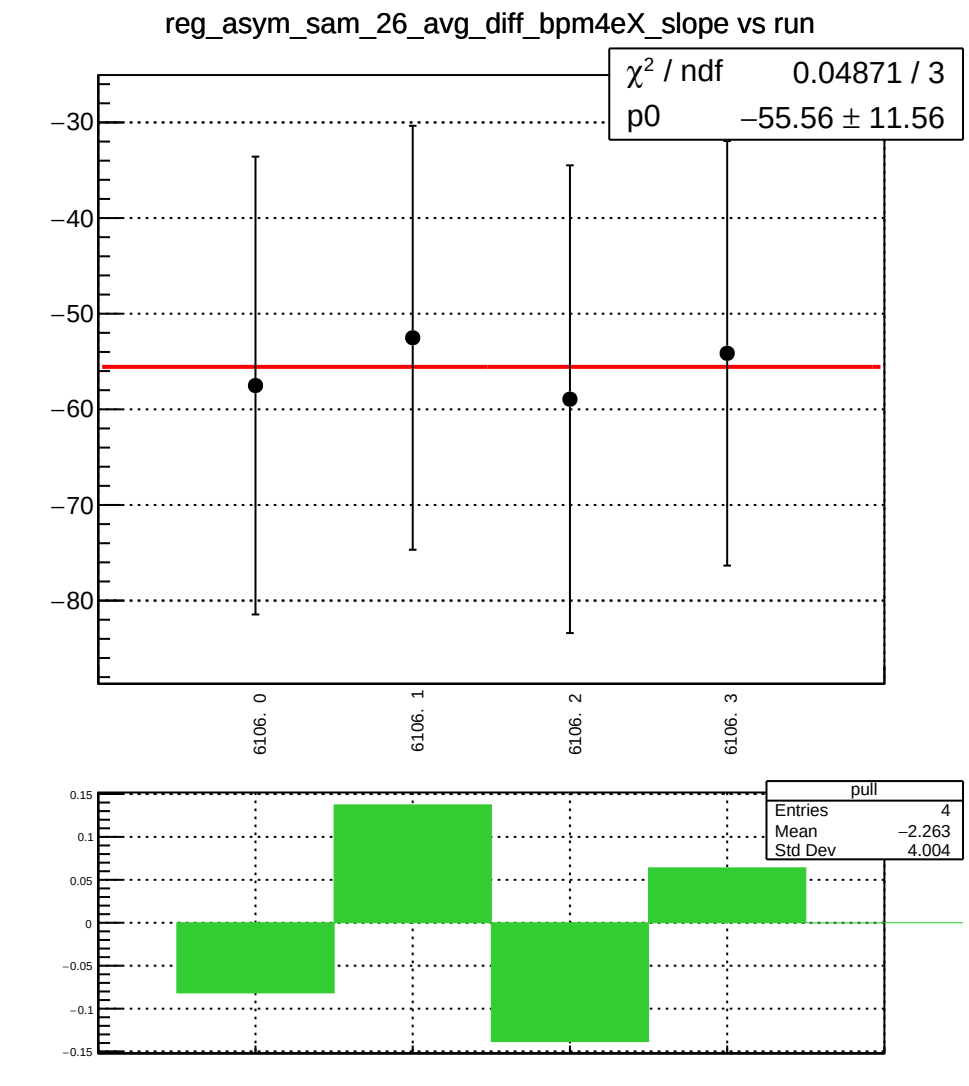

pull1D
Entries 4
Mean −0.004773
Std Dev 0.1124
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

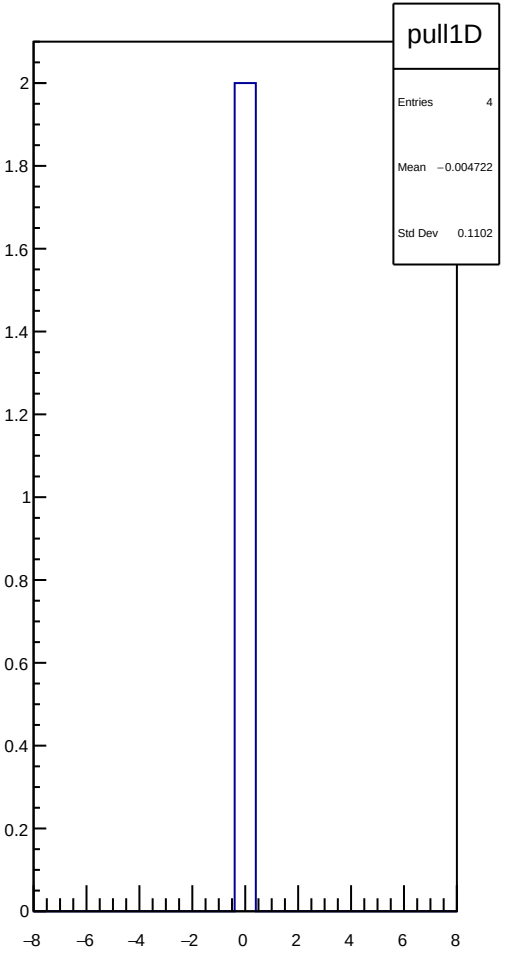

reg_asym_sam_37_dd_diff_bpm12X_slope vs run
χ² / ndf 0.1162 / 3
p0 0.2112 ± 0.2713
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.295
Std Dev 11.59
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
pull1D
Entries 4
Mean −0.007827
Std Dev 0.1703
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

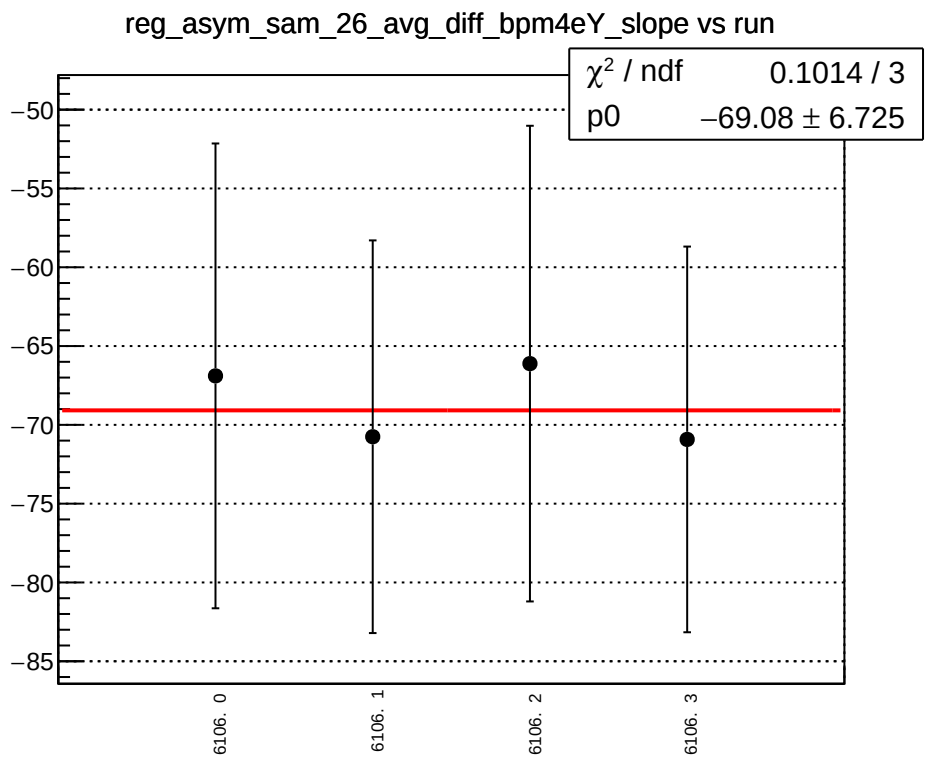

reg_asym_sam_26_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.08022 / 3
p0 −28.45 ± 9.94
0
−10
−20
−30
−40
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −7.833
Std Dev 9.741
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean 0.005838
Std Dev 0.1415
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

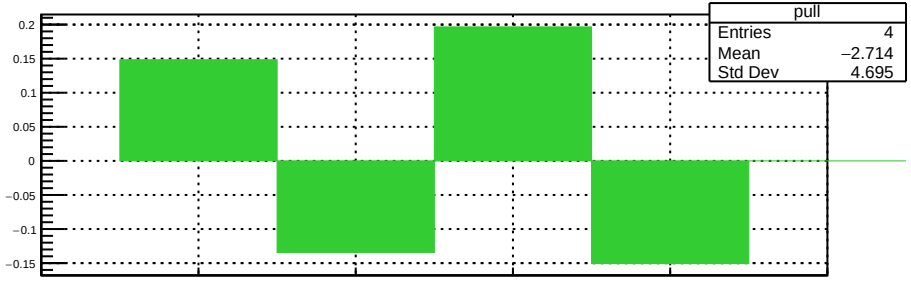

reg_asym_sam_26_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.1512 / 3
p0 12.24 ± 6.334
25
20
15
10
5
0
−5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 1.391
Std Dev 0.771
0.2
0.1
0
−0.1
−0.2
−0.3

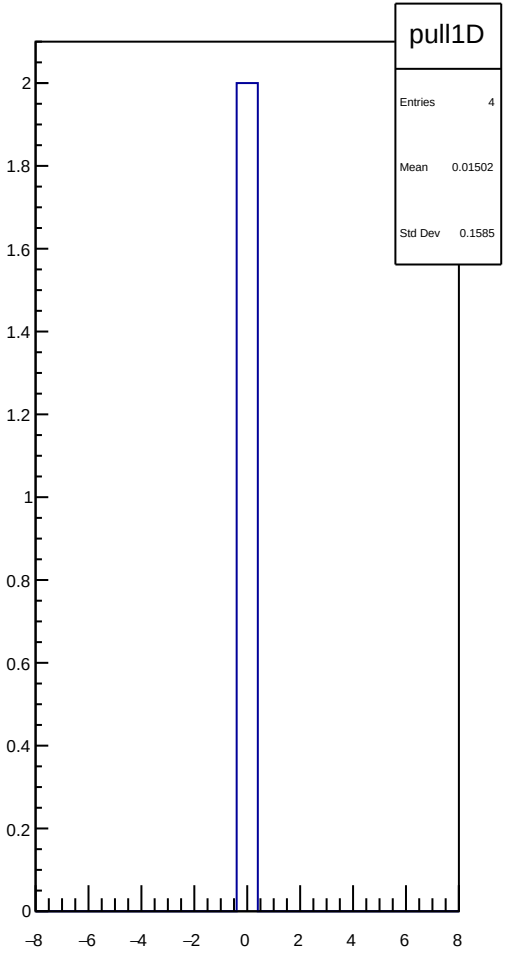

pull1D
Entries 4
Mean −0.02113
Std Dev 0.1933
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

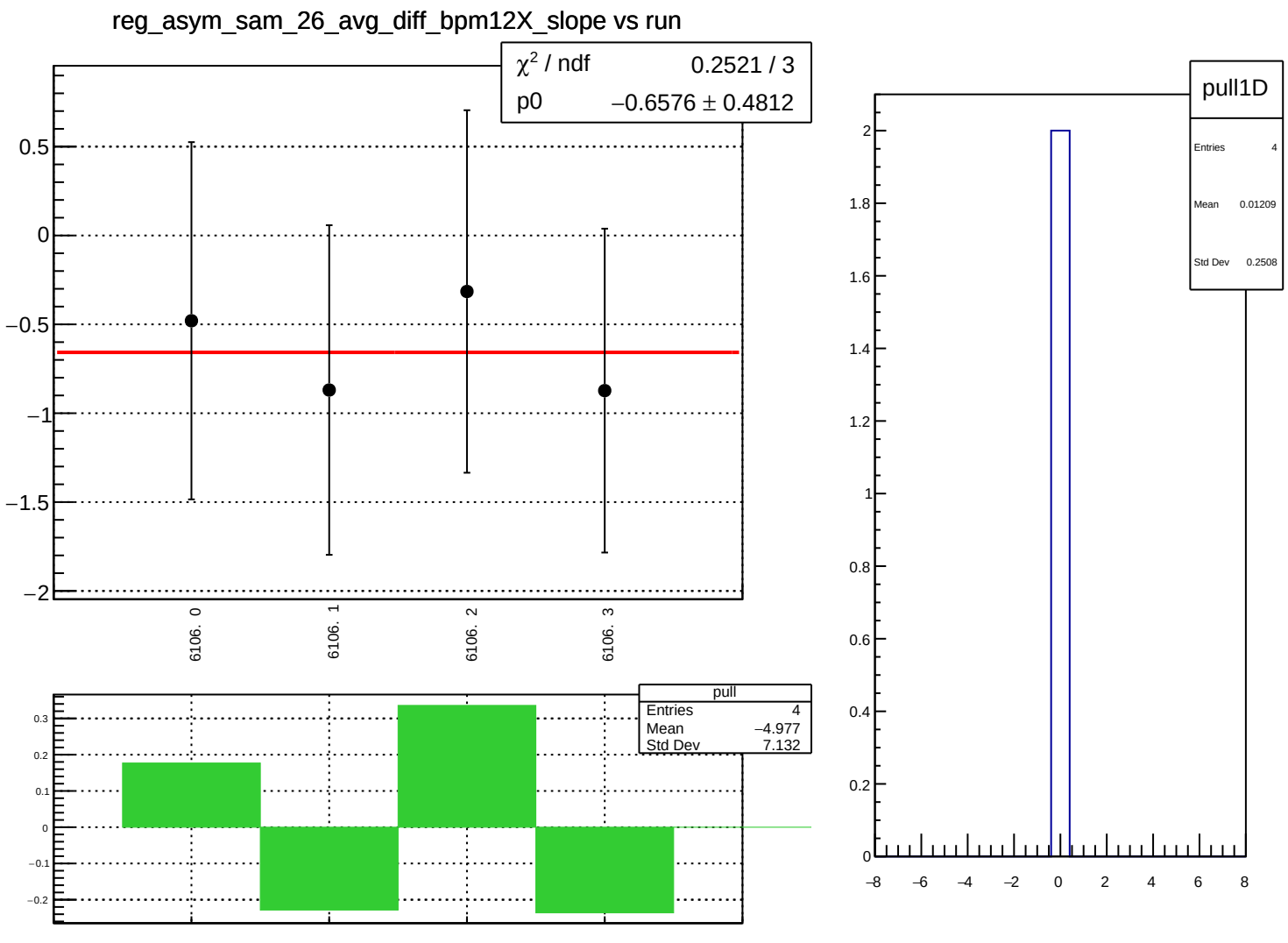

reg_asym_sam_26_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.04871 / 3
p0 −55.56 ± 11.56
−30
−40
−50
−60
−70
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.263
Std Dev 4.004
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

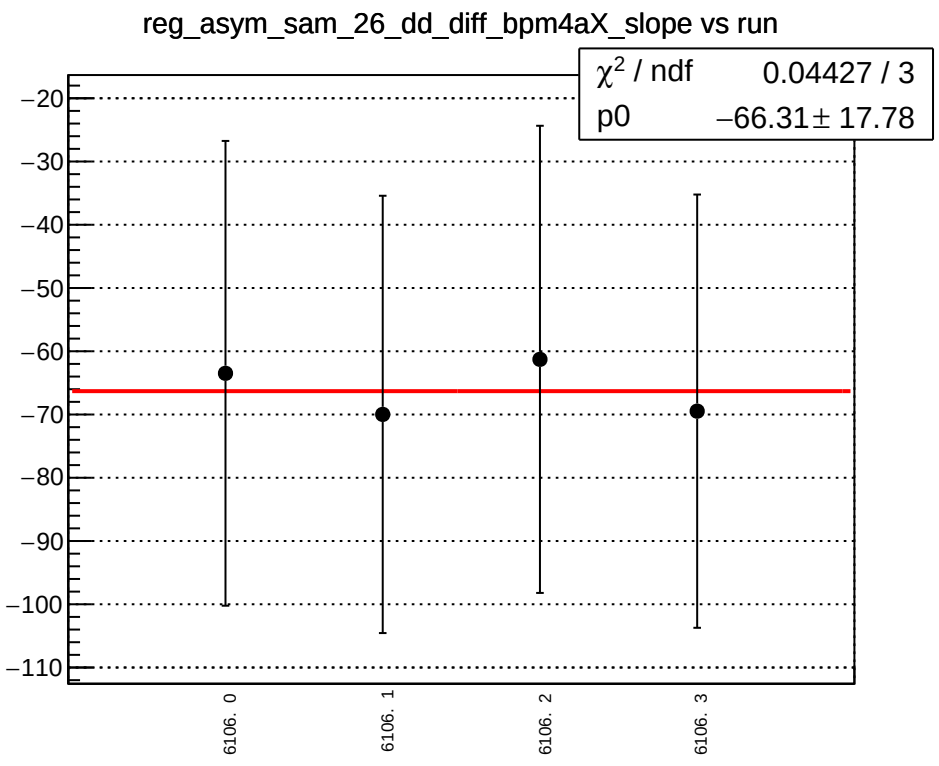

pull1D
Entries 4
Mean −0.004722
Std Dev 0.1102
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

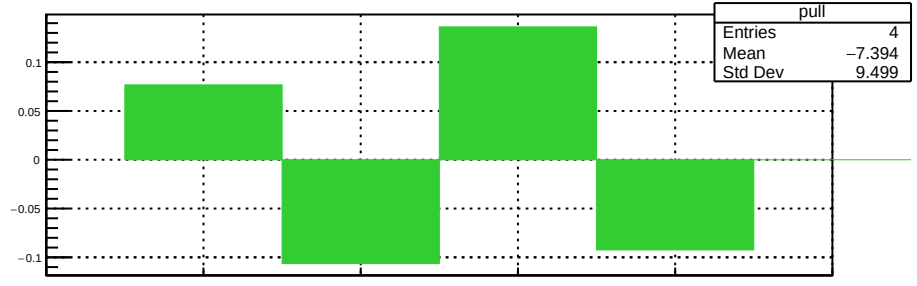

reg_asym_sam_26_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.1014 / 3
p0 −69.08 ± 6.725
−50
−55
−60
−65
−70
−75
−80
−85
6106. 0
6106. 1
6106. 2
6106. 3

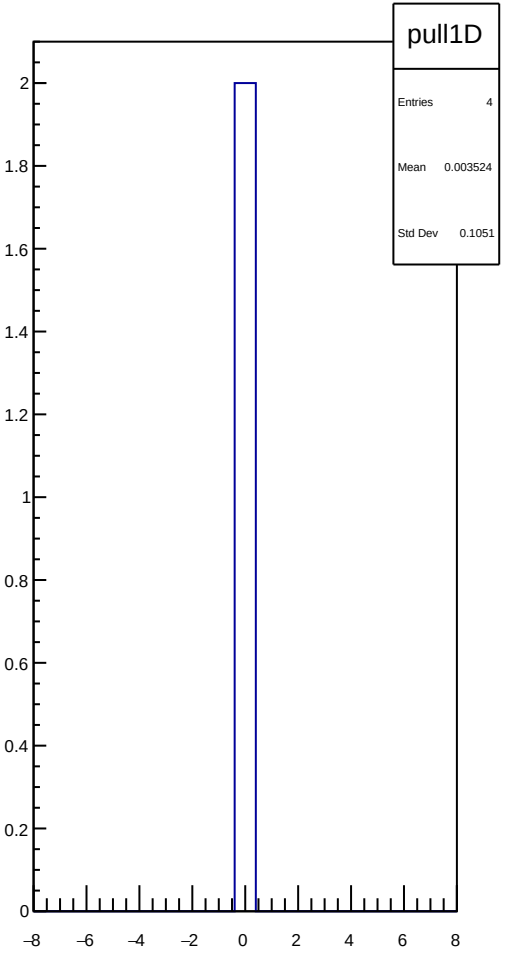

pull
Entries 4
Mean −2.714
Std Dev 4.695
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

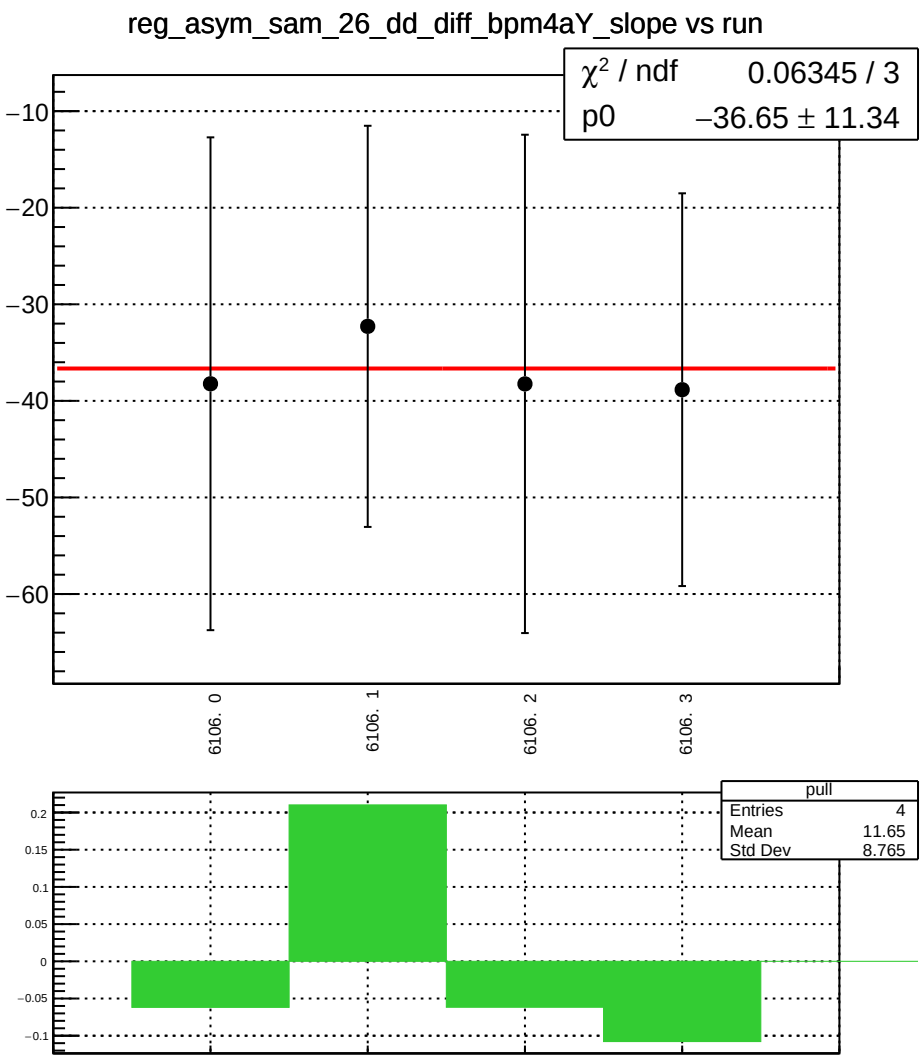

pull1D
Entries 4
Mean 0.01502
Std Dev 0.1585
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

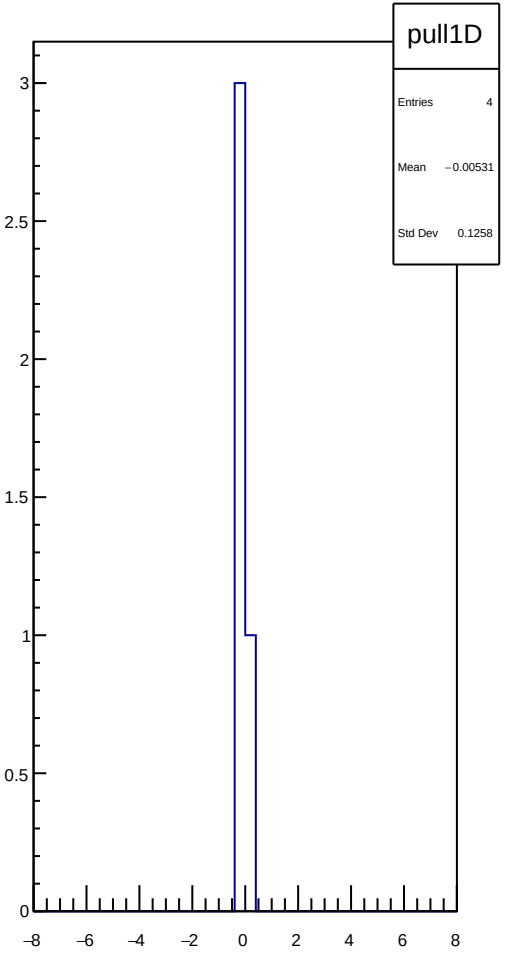

reg_asym_sam_26_avg_diff_bpm12X_slope vs run
χ² / ndf 0.2521 / 3
p0 −0.6576 ± 0.4812
0.5
0
−0.5
−1
−1.5
−2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.977
Std Dev 7.132
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean 0.01209
Std Dev 0.2508
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

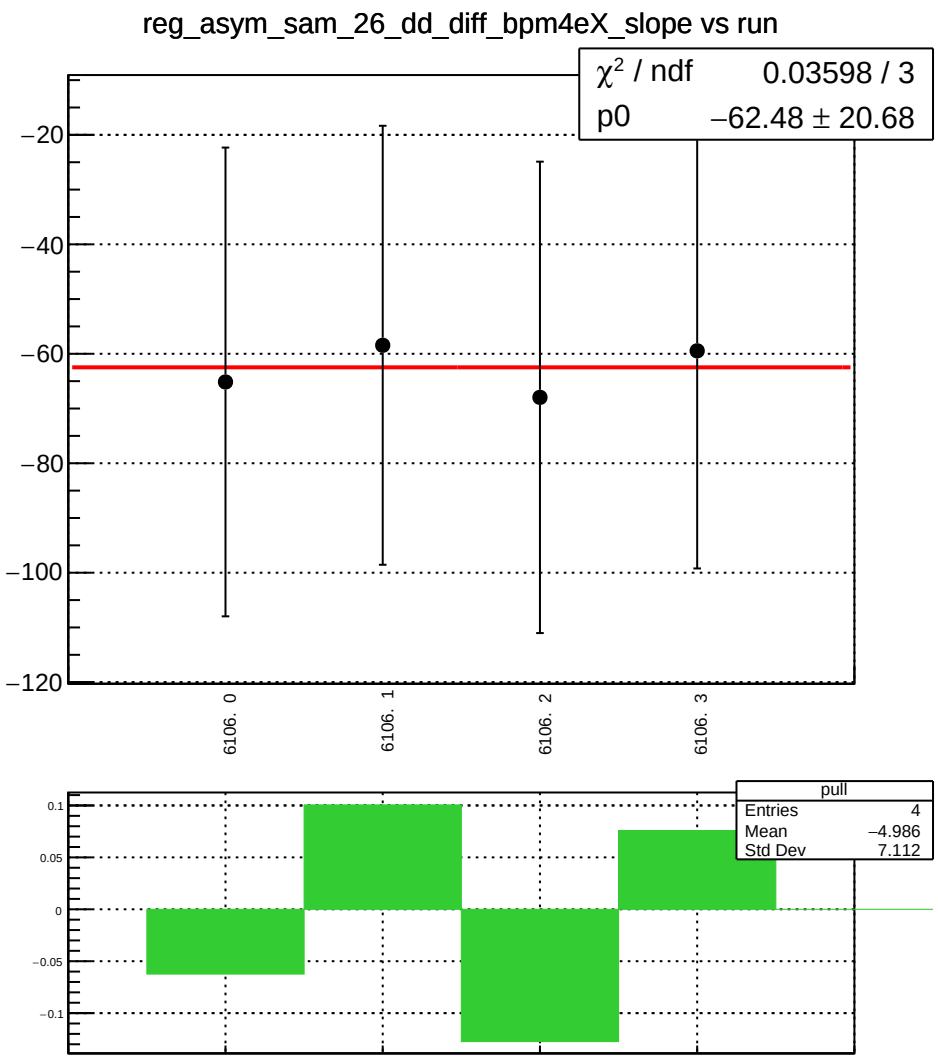

reg_asym_sam_26_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.04427 / 3
p0 −66.31 ± 17.78
−20
−30
−40
−50
−60
−70
−80
−90
−100
−110
6106. 0
6106. 1
6106. 2
6106. 3

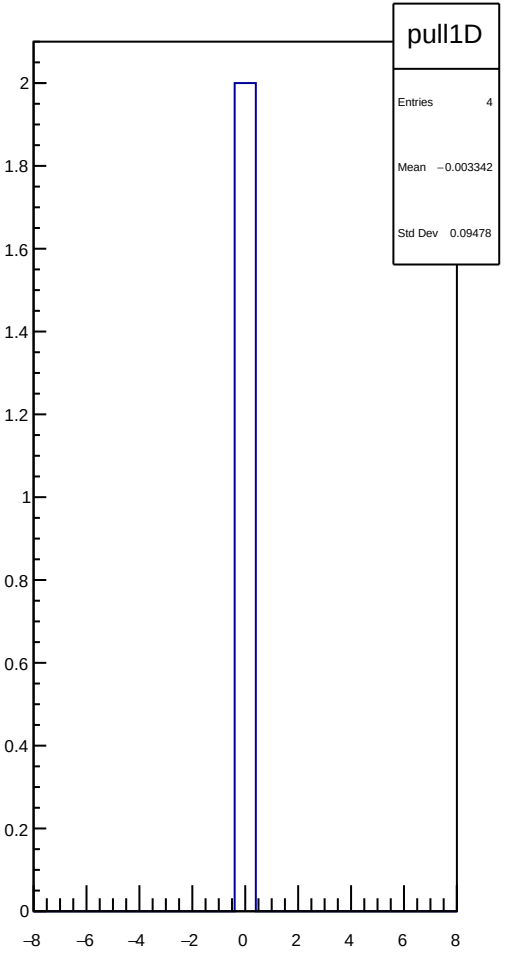

pull
Entries 4
Mean −7.394
Std Dev 9.499
0.1
0.05
0
−0.05
−0.1

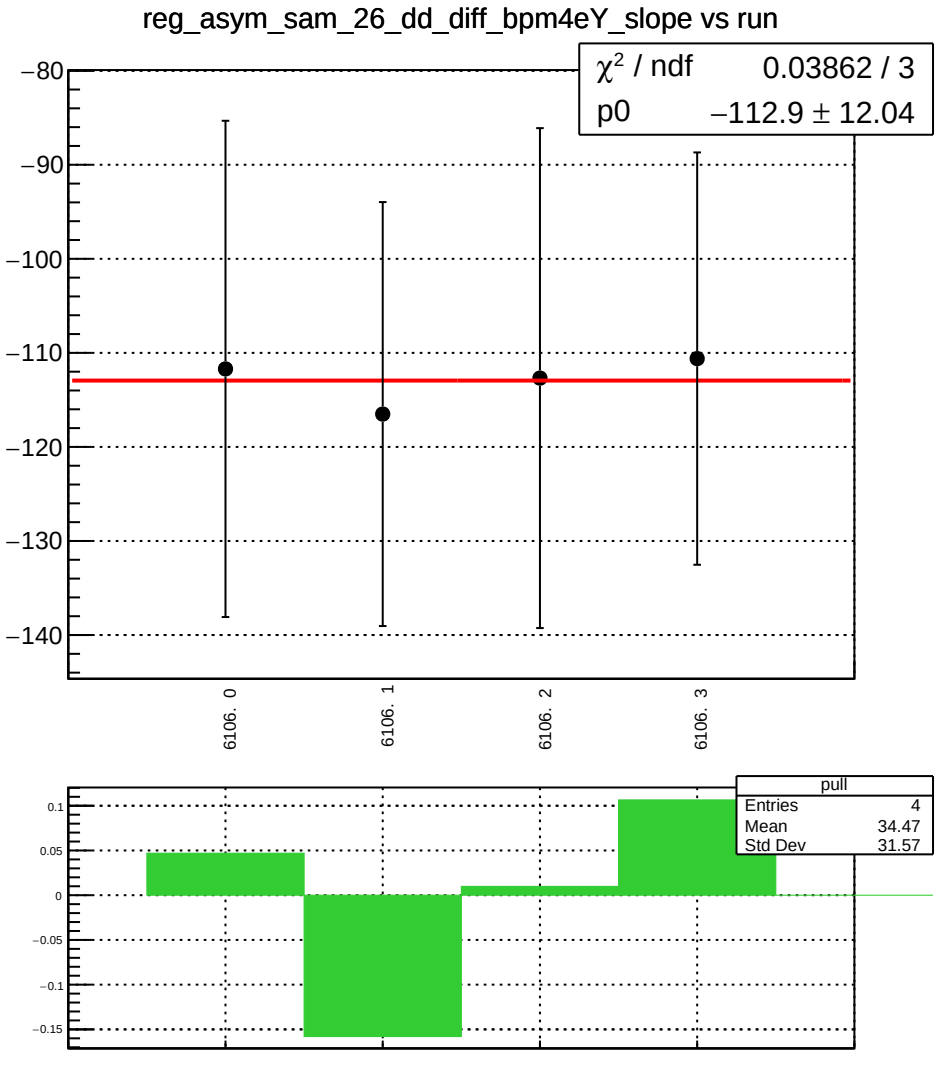

pull1D
Entries 4
Mean 0.003524
Std Dev 0.1051
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

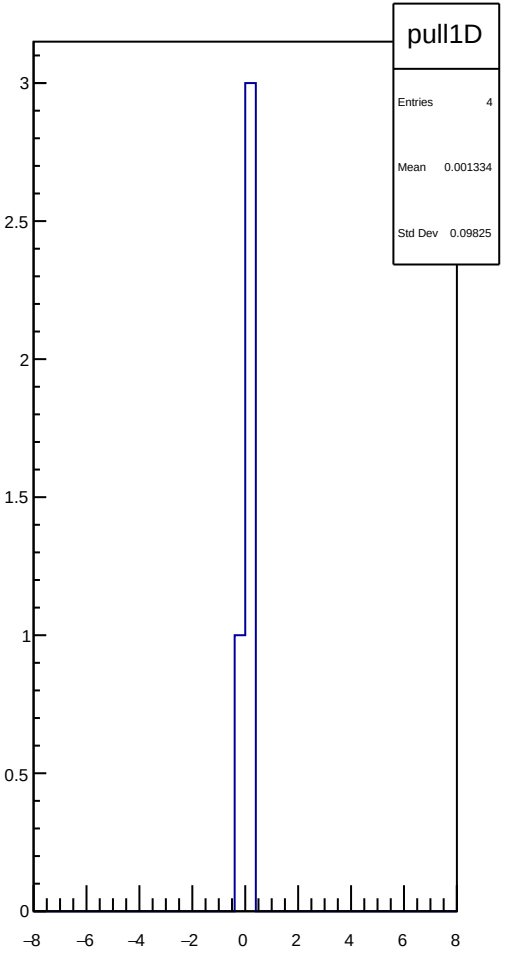

reg_asym_sam_26_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.06345 / 3
p0 −36.65 ± 11.34
−10
−20
−30
−40
−50
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 11.65
Std Dev 8.765
0.2
0.15
0.1
0.05
0
−0.05
−0.1

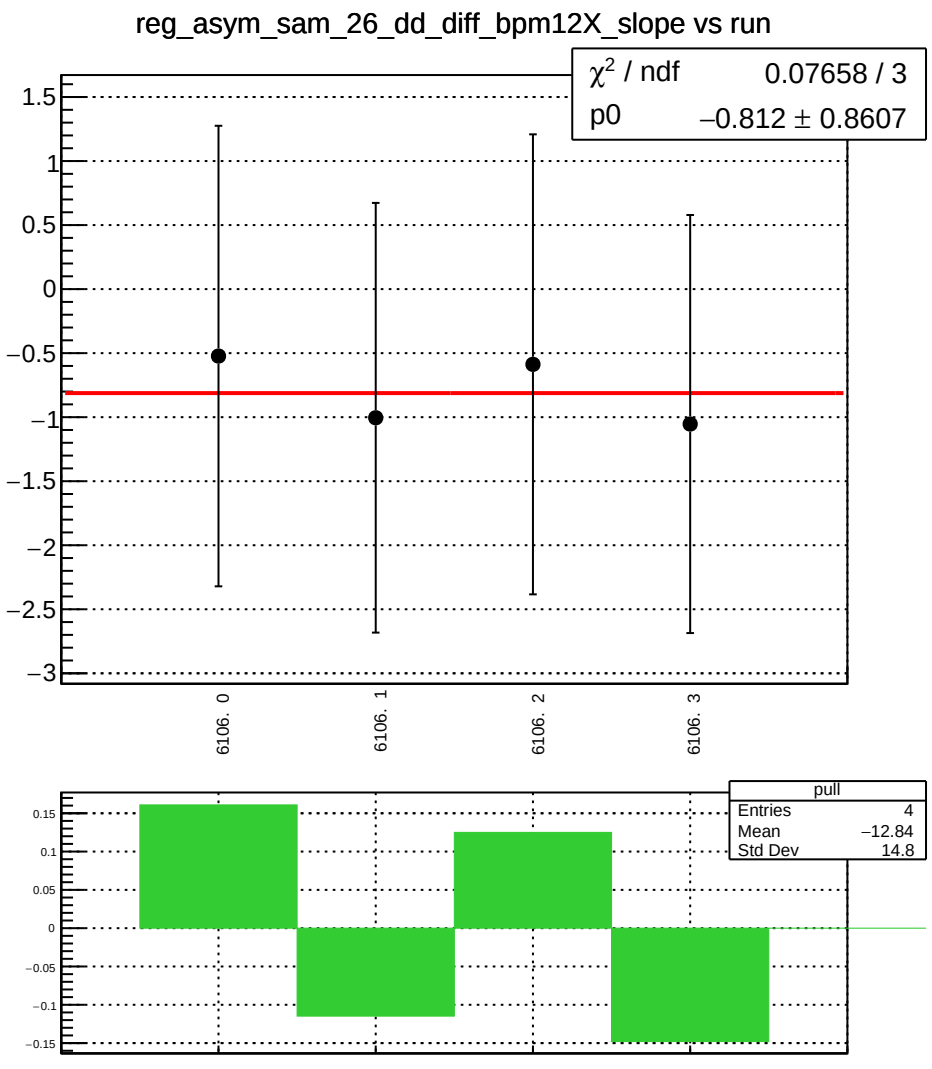

pull1D
Entries 4
Mean −0.00531
Std Dev 0.1258
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

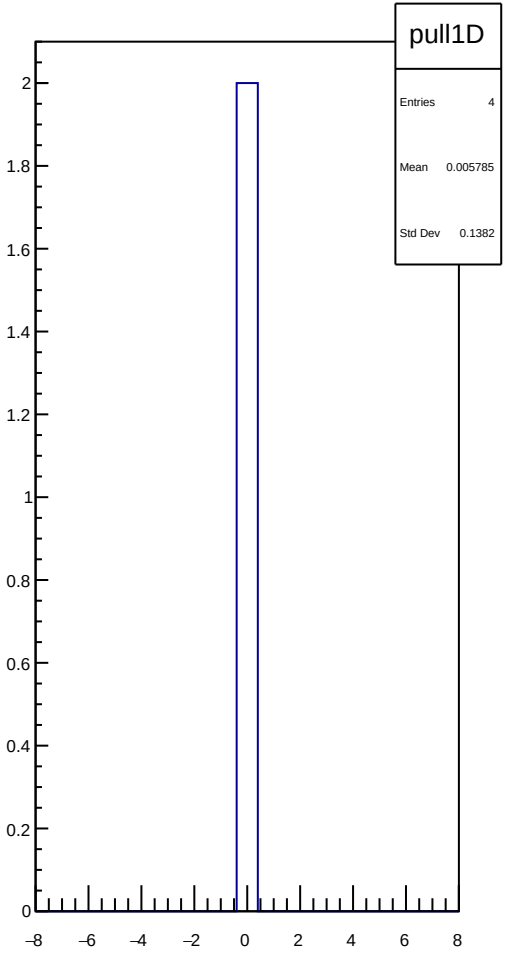

reg_asym_sam_26_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.03598 / 3
p0 −62.48 ± 20.68
−20
−40
−60
−80
−100
−120
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.986
Std Dev 7.112
0.1
0.05
0
−0.05
−0.1

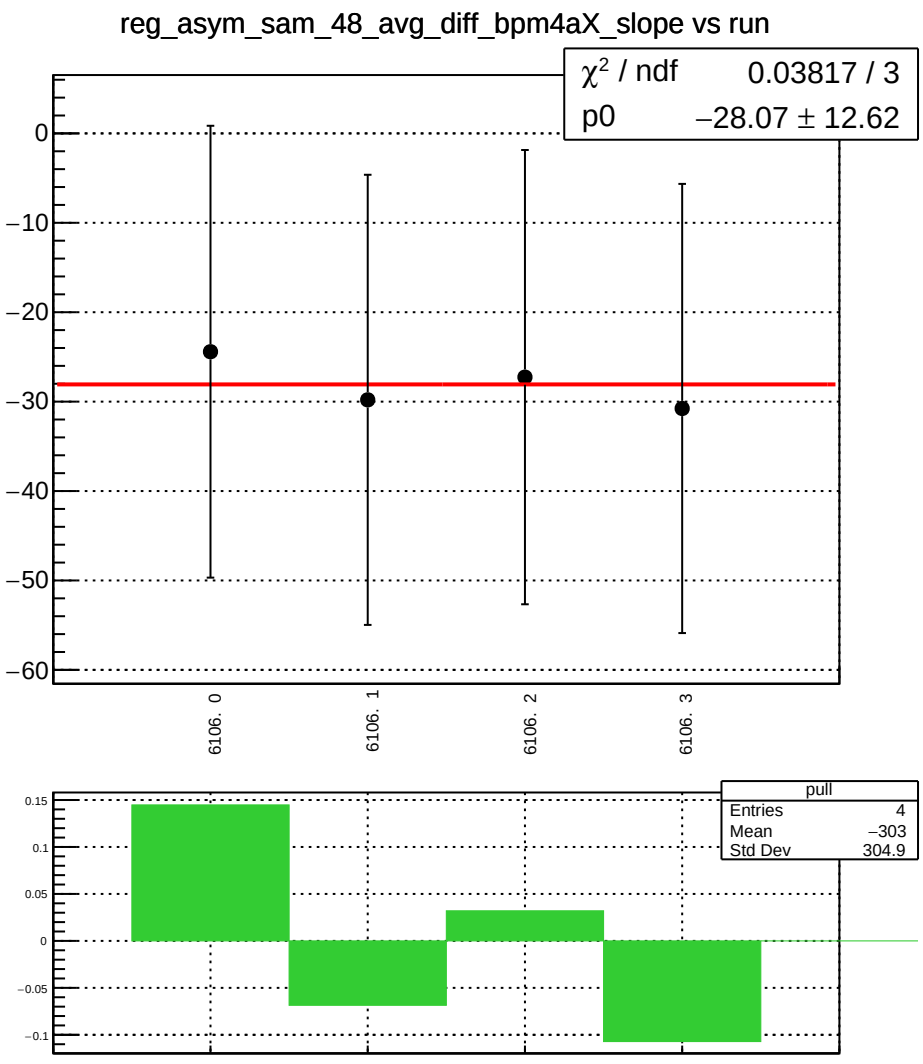

pull1D
Entries 4
Mean −0.003342
Std Dev 0.09478
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

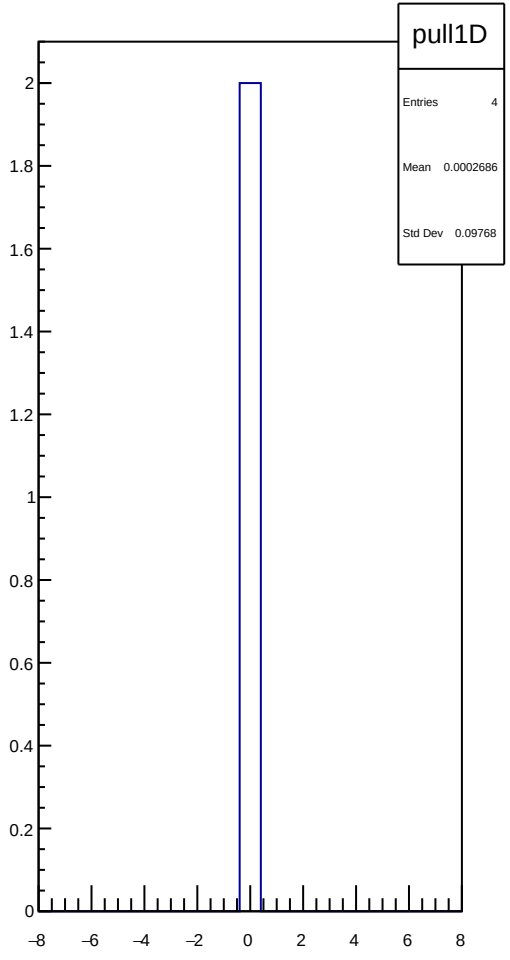

reg_asym_sam_26_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.03862 / 3
p0 −112.9 ± 12.04
−80
−90
−100
−110
−120
−130
−140
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 34.47
Std Dev 31.57
0.1
0.05
0
−0.05
−0.1
−0.15

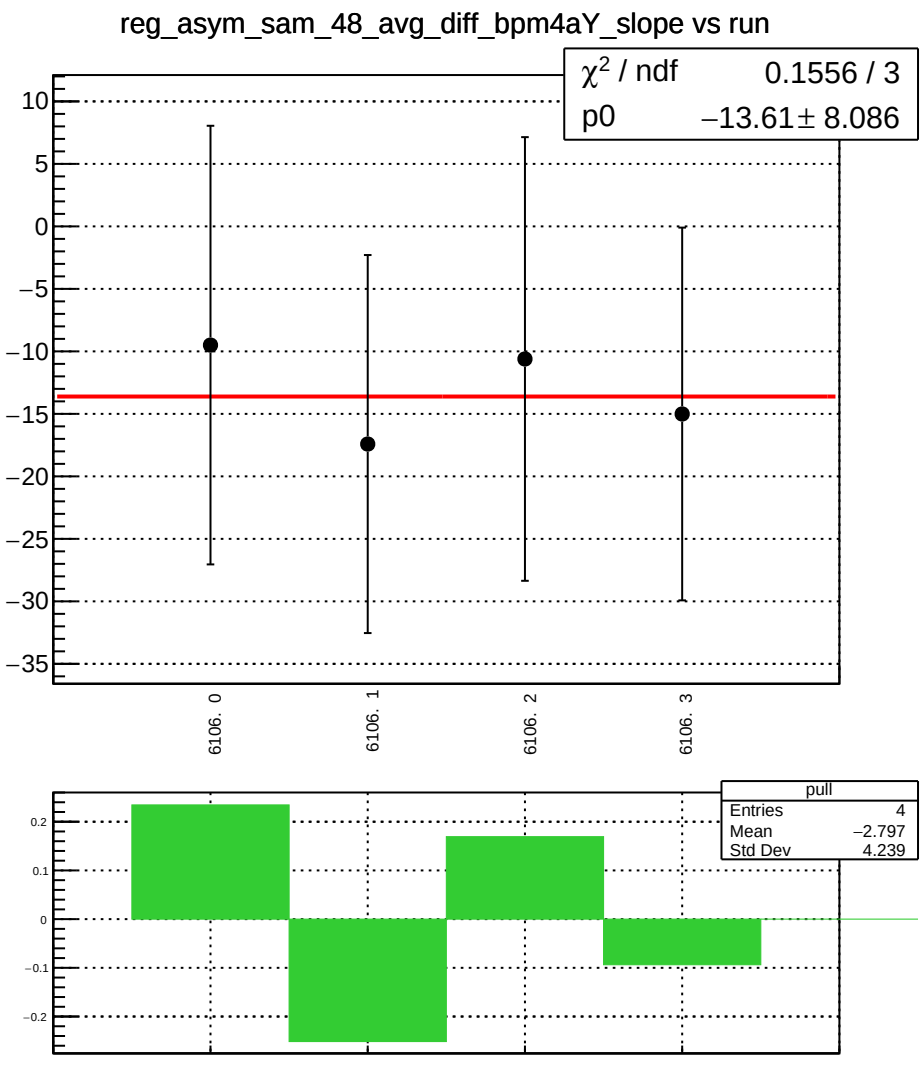

pull1D
Entries 4
Mean 0.001334
Std Dev 0.09825
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

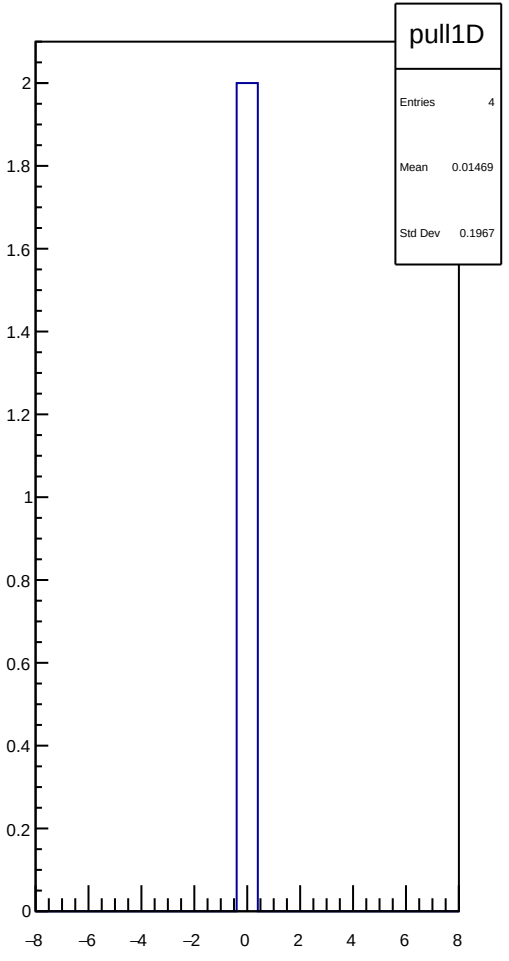

reg_asym_sam_26_dd_diff_bpm12X_slope vs run
χ² / ndf 0.07658 / 3
p0 −0.812 ± 0.8607
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −12.84
Std Dev 14.8
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

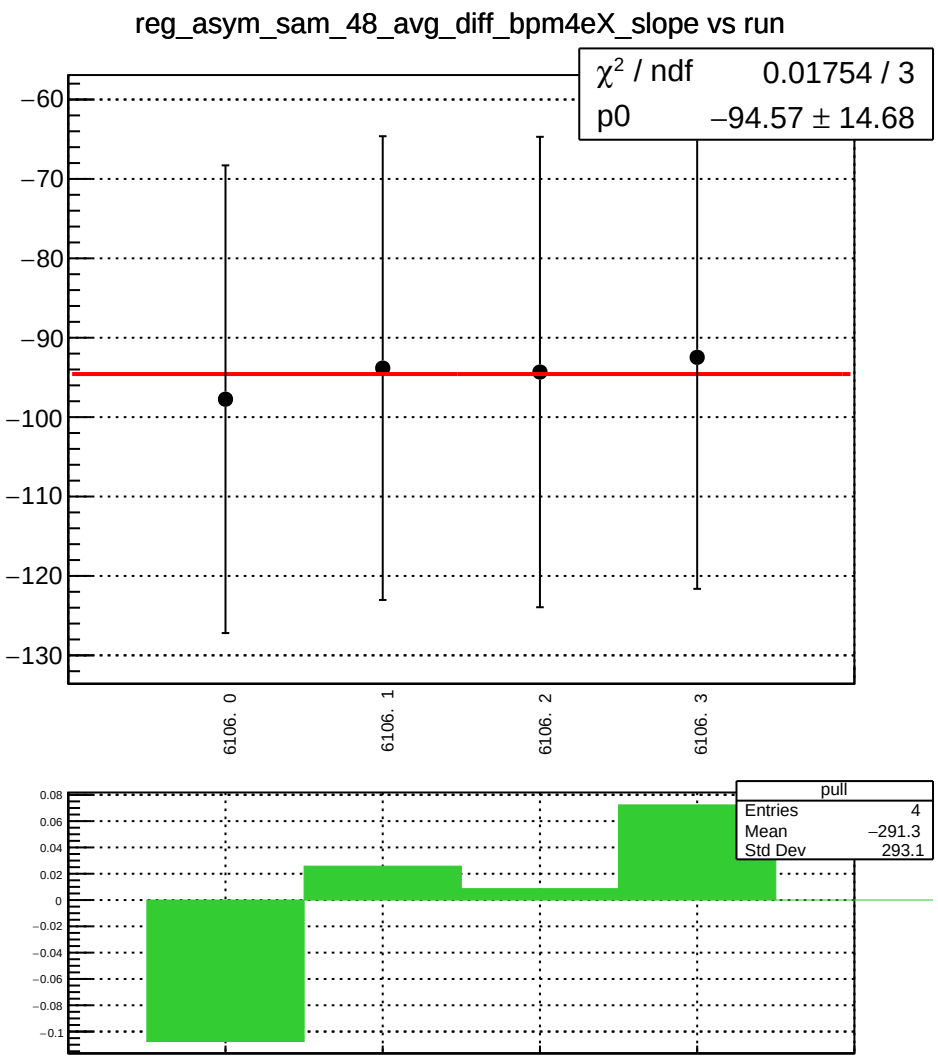

pull1D
Entries 4
Mean 0.005785
Std Dev 0.1382
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

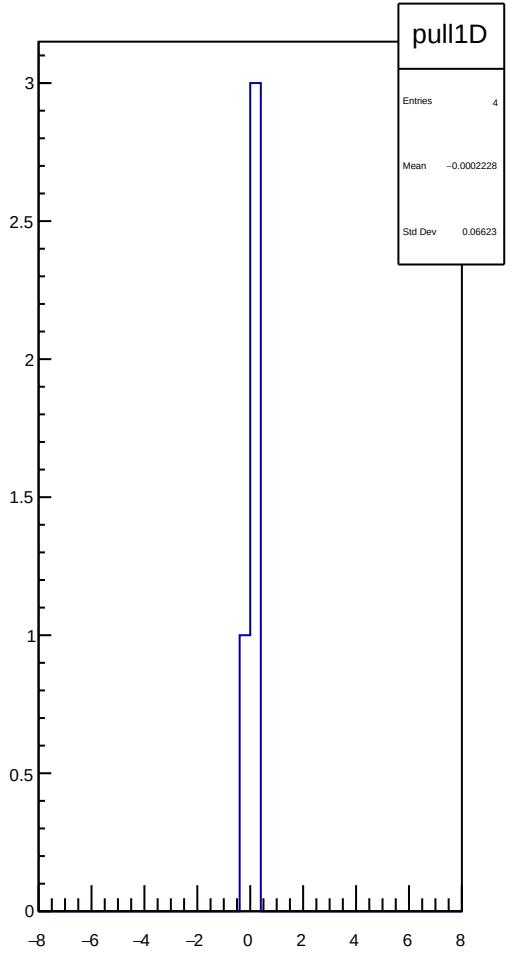

reg_asym_sam_48_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.03817 / 3
p0 −28.07 ± 12.62
0
−10
−20
−30
−40
−50
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −303
Std Dev 304.9
0.15
0.1
0.05
0
−0.05
−0.1

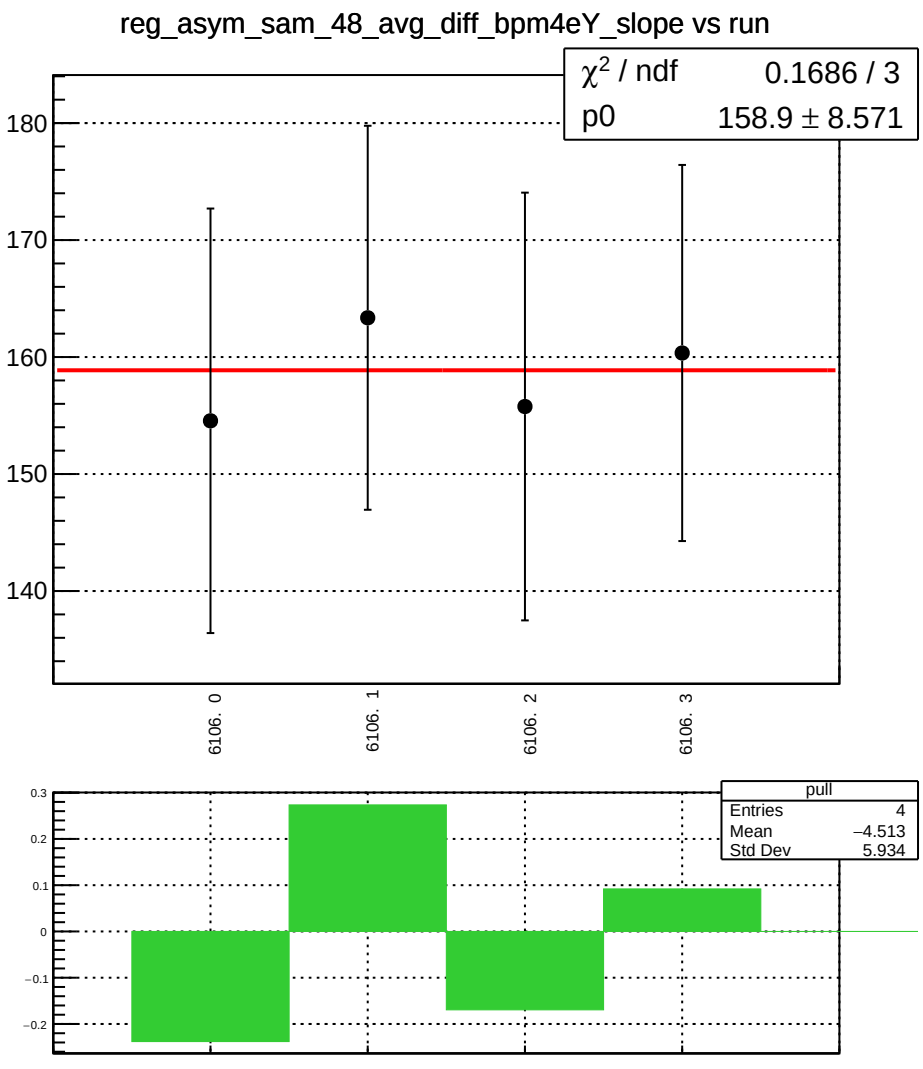

pull1D
Entries 4
Mean 0.0002686
Std Dev 0.09768
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

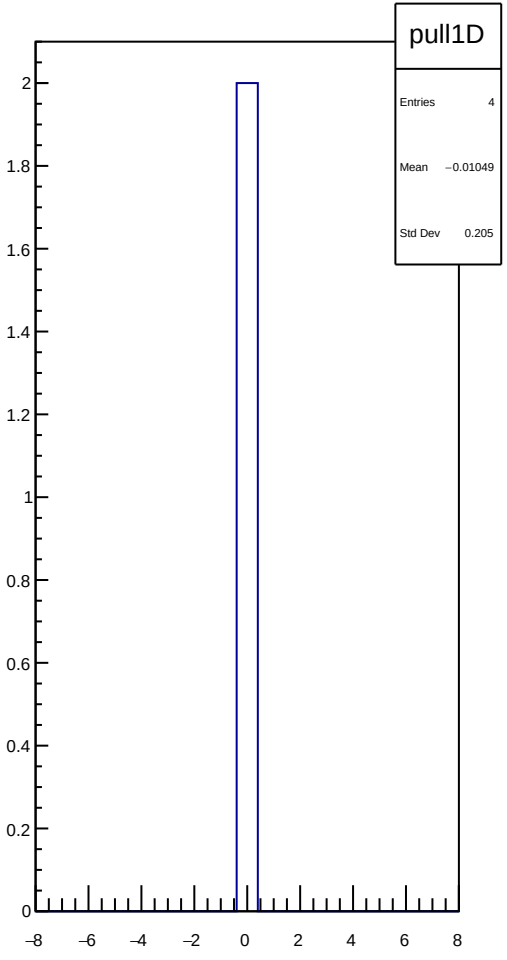

reg_asym_sam_48_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.1556 / 3
p0 −13.61 ± 8.086
10
5
0
−5
−10
−15
−20
−25
−30
−35
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.797
Std Dev 4.239
0.2
0.1
0
−0.1
−0.2

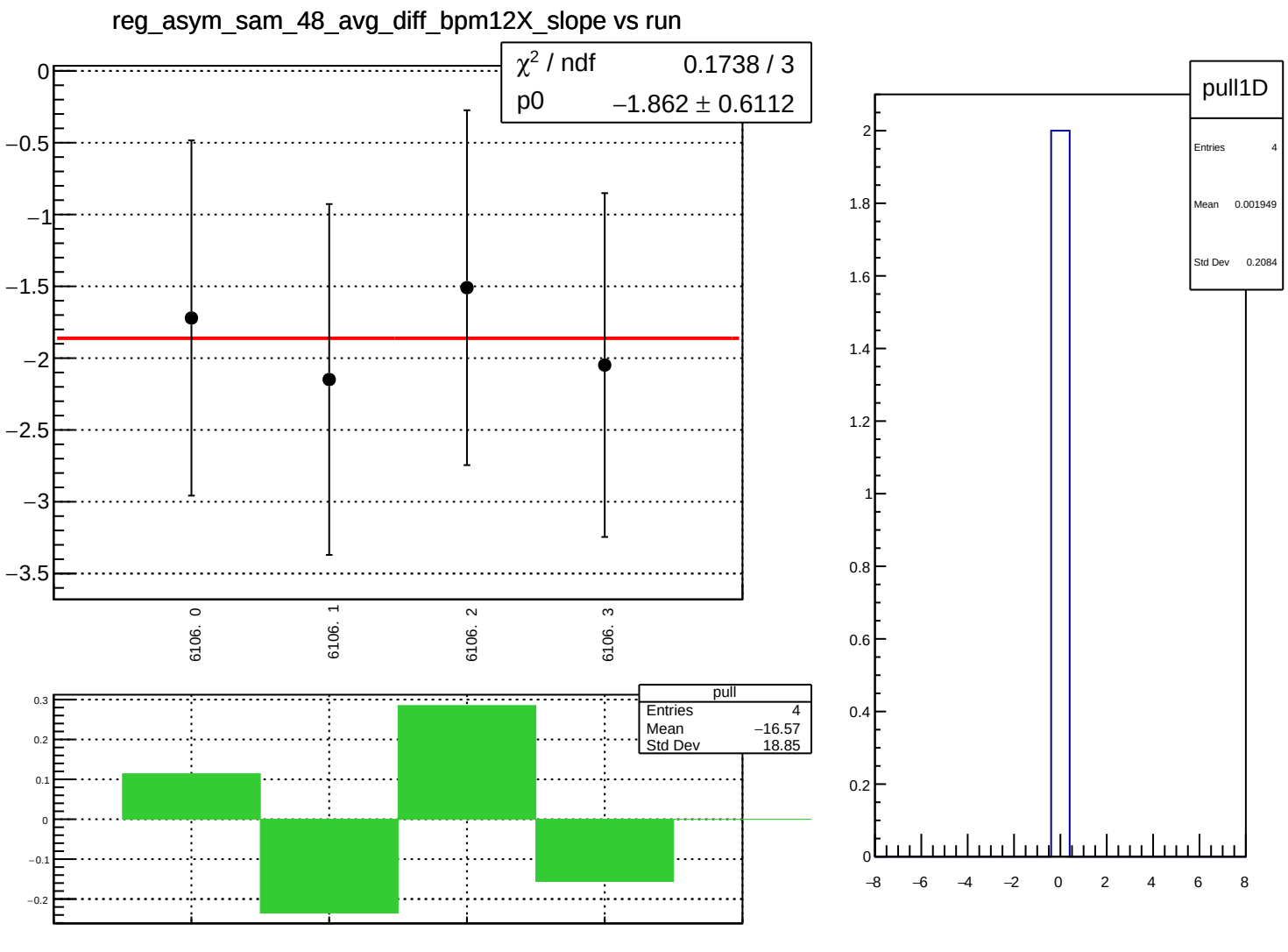

pull1D
Entries 4
Mean 0.01469
Std Dev 0.1967
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

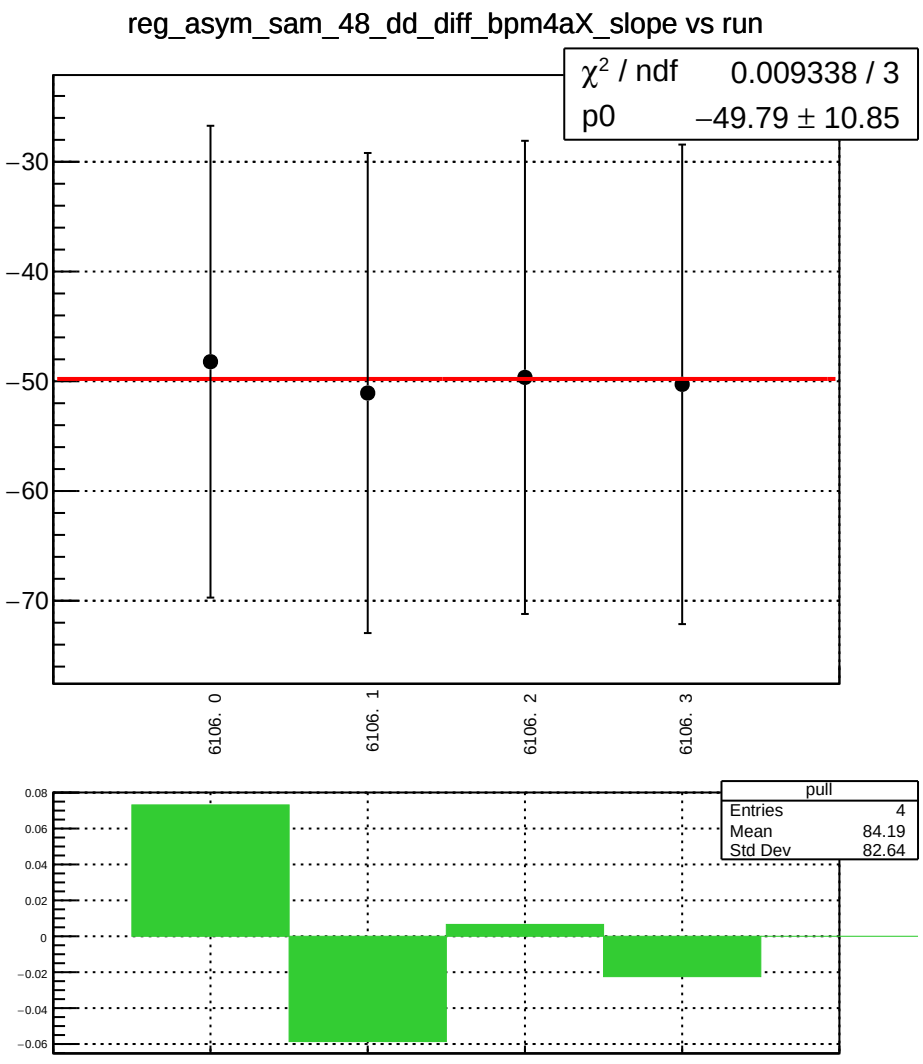

reg_asym_sam_48_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.01754 / 3
p0 −94.57 ± 14.68
−60
−70
−80
−90
−100
−110
−120
−130
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −291.3
Std Dev 293.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1

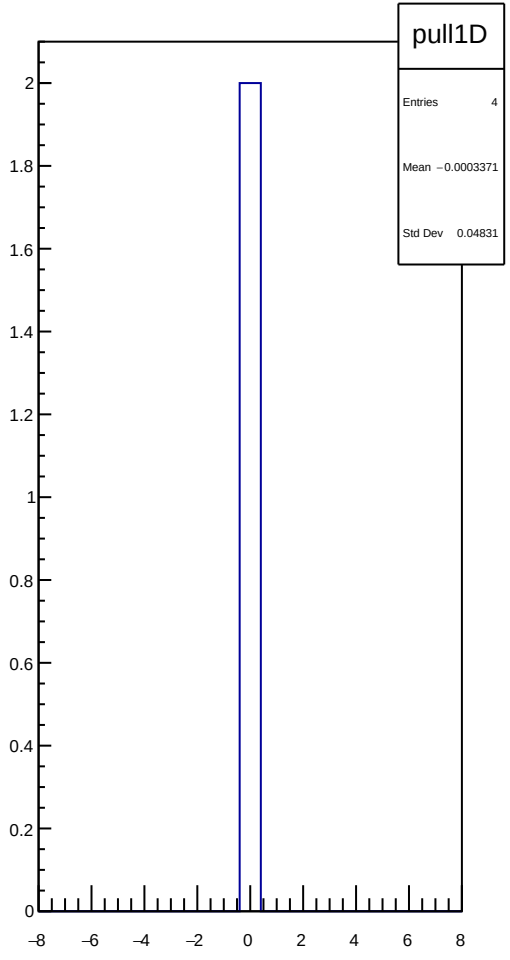

pull1D
Entries 4
Mean −0.0002228
Std Dev 0.06623
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

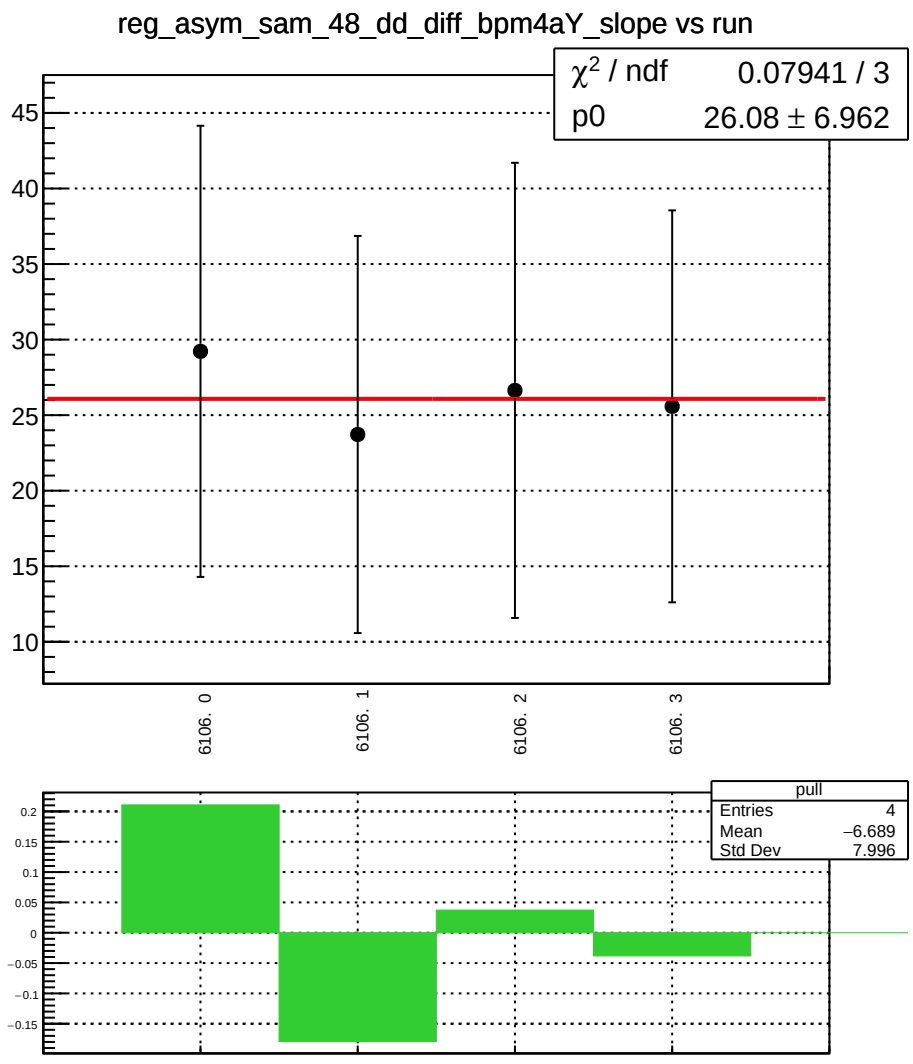

reg_asym_sam_48_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.1686 / 3
p0 158.9 ± 8.571
180
170
160
150
140
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.513
Std Dev 5.934
0.3
0.2
0.1
0
−0.1
−0.2

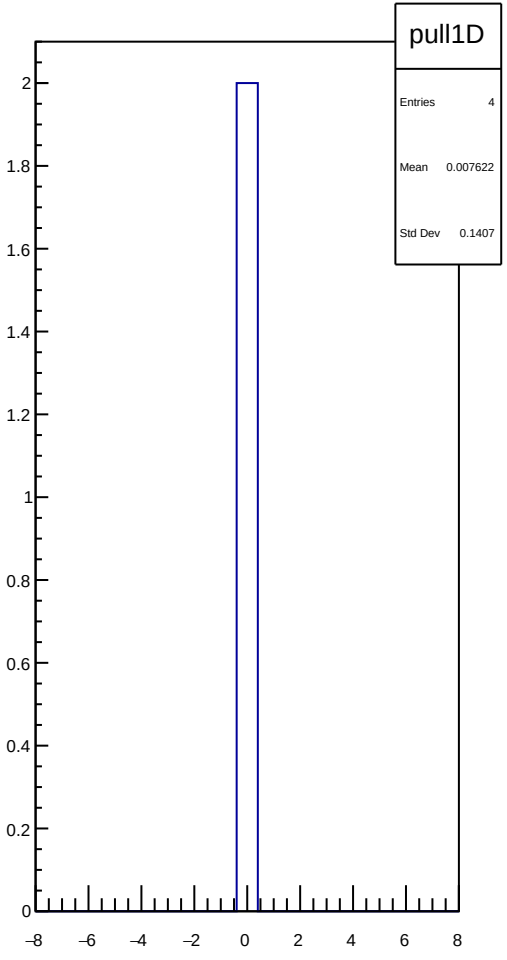

pull1D
Entries 4
Mean −0.01049
Std Dev 0.205
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

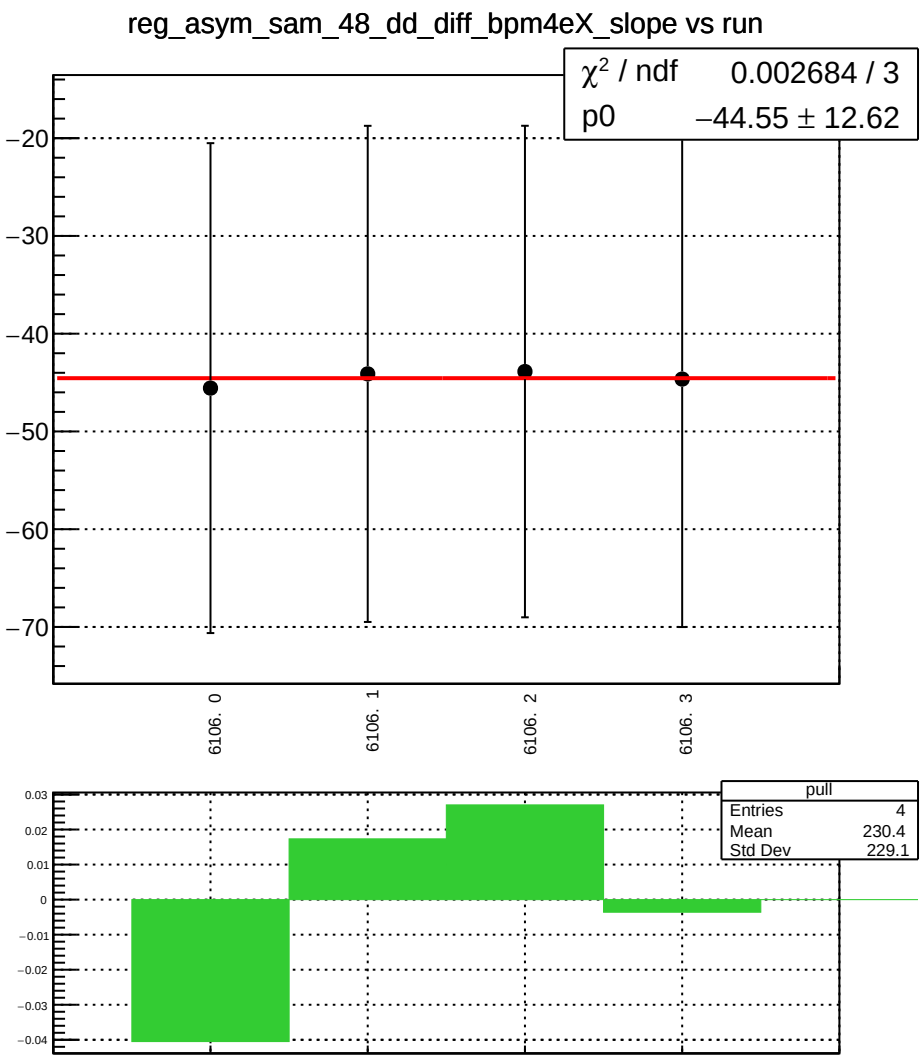

reg_asym_sam_48_avg_diff_bpm12X_slope vs run
χ² / ndf 0.1738 / 3
p0 −1.862 ± 0.6112
0
−0.5
−1
−1.5
−2
−2.5
−3
−3.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −16.57
Std Dev 18.85
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean 0.001949
Std Dev 0.2084
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

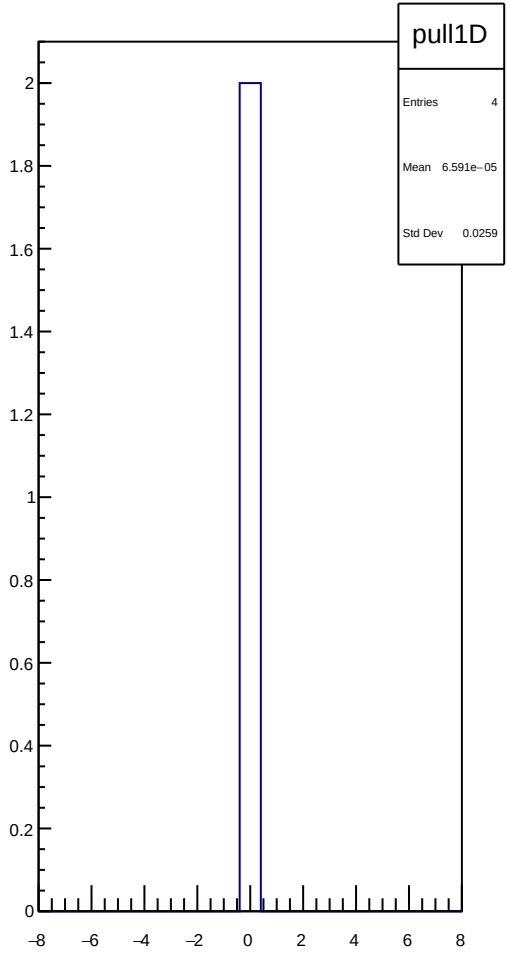

reg_asym_sam_48_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.009338 / 3
p0 −49.79 ± 10.85
−30
−40
−50
−60
−70
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 84.19
Std Dev 82.64
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06

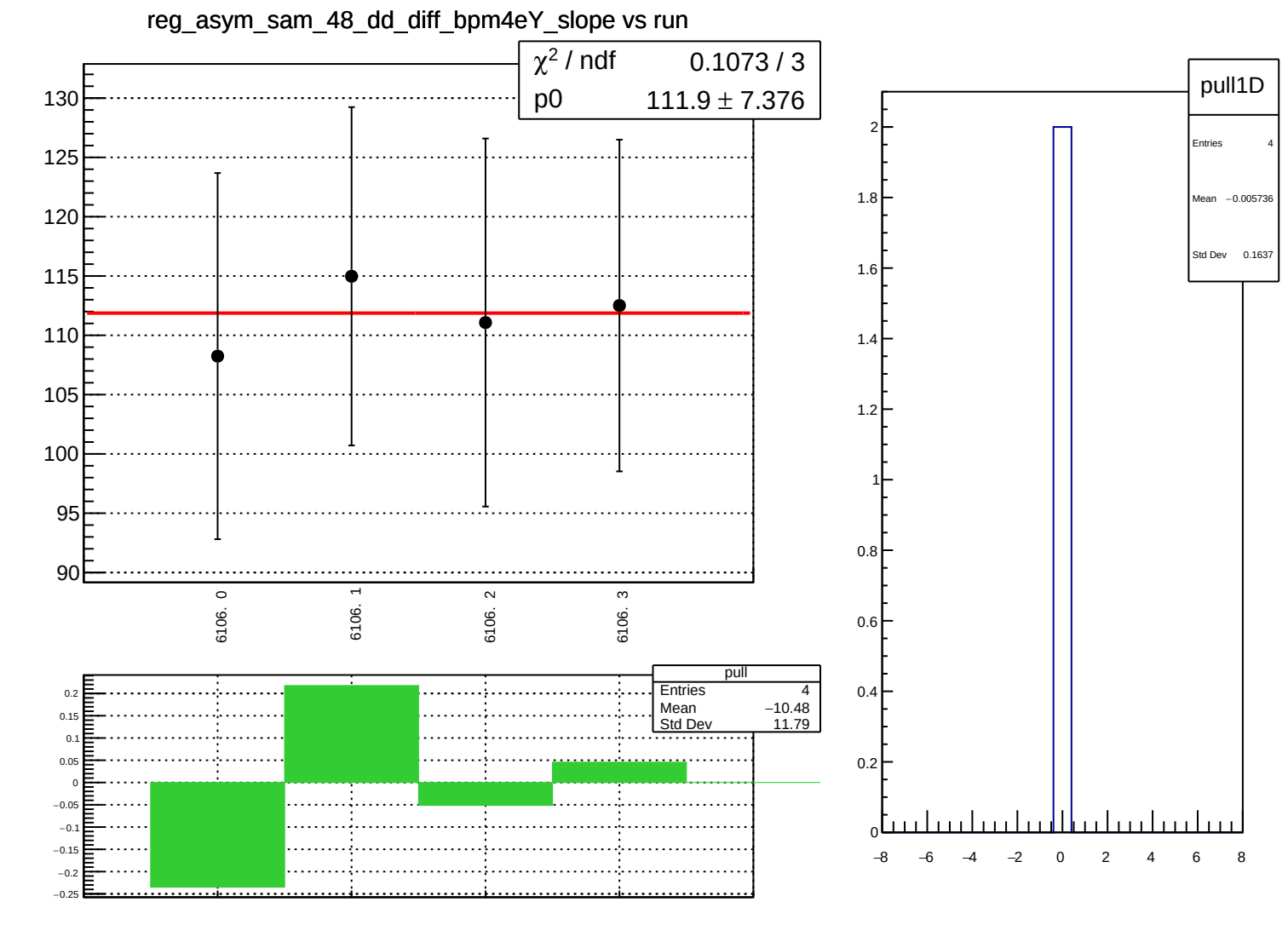

pull1D
Entries 4
Mean −0.0003371
Std Dev 0.04831
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

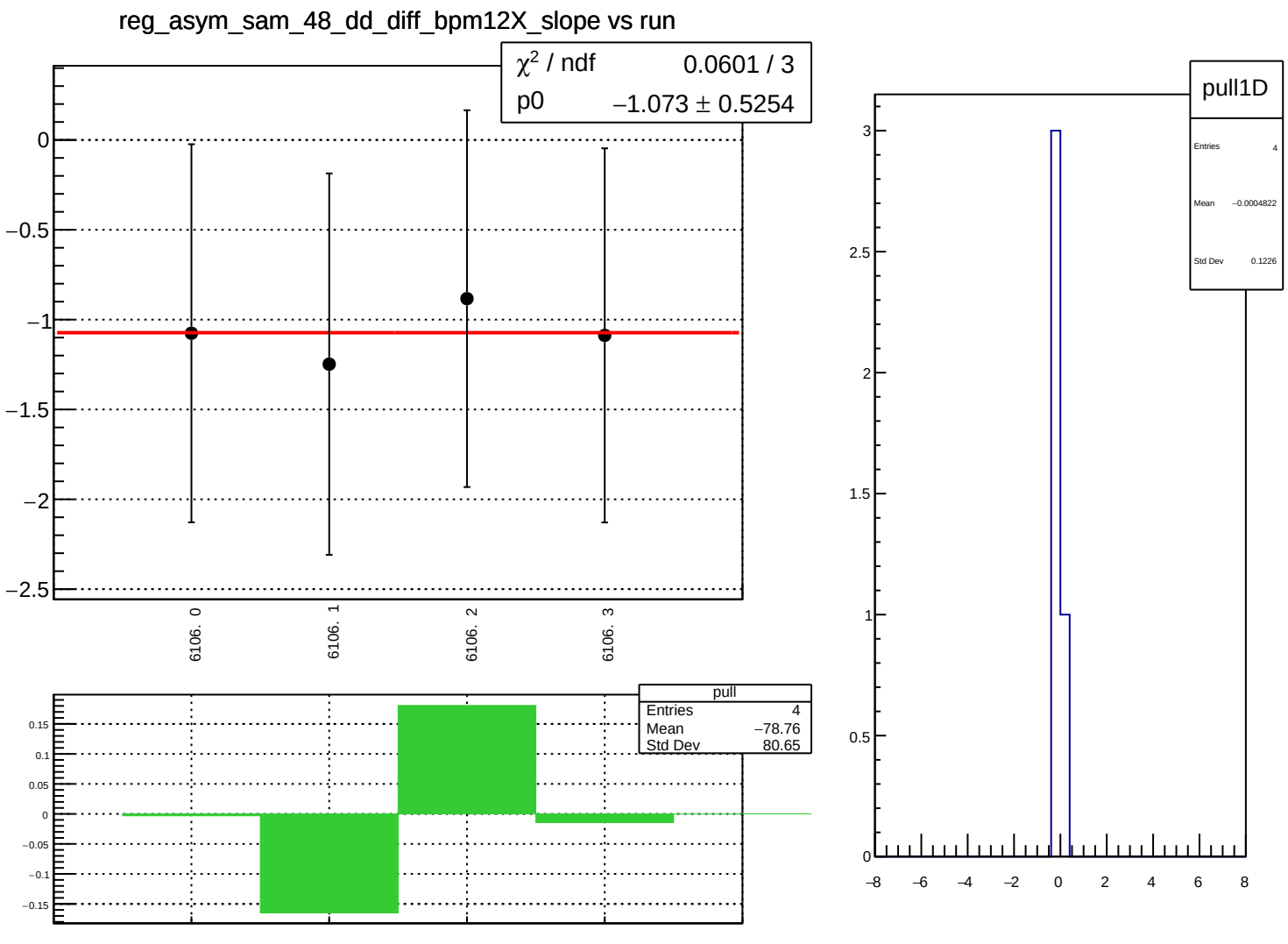

reg_asym_sam_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.07941 / 3
p0 26.08 ± 6.962
45
40
35
30
25
20
15
10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.689
Std Dev 7.996
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

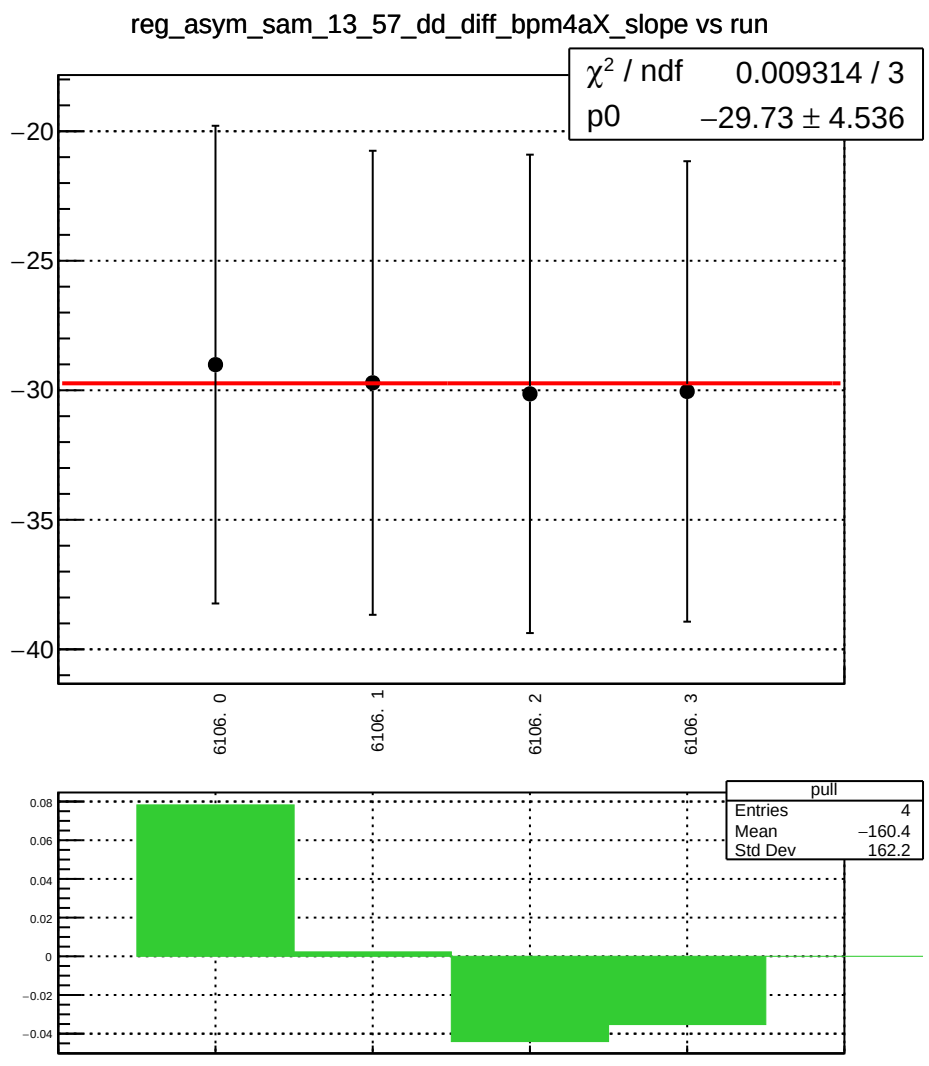

pull1D
Entries 4
Mean 0.007622
Std Dev 0.1407
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

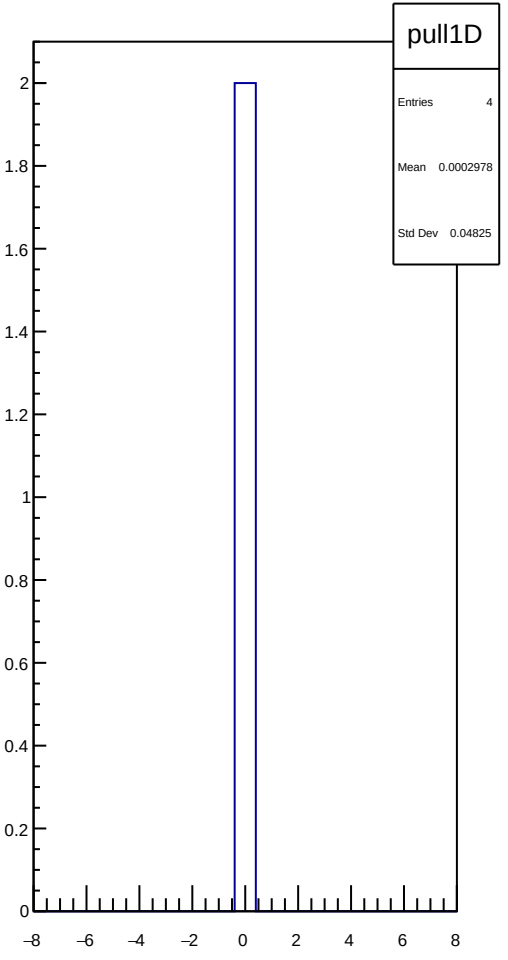

reg_asym_sam_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.002684 / 3
p0 −44.55 ± 12.62
−20
−30
−40
−50
−60
−70
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 230.4
Std Dev 229.1
0.03
0.02
0.01
0
−0.01
−0.02
−0.03
−0.04

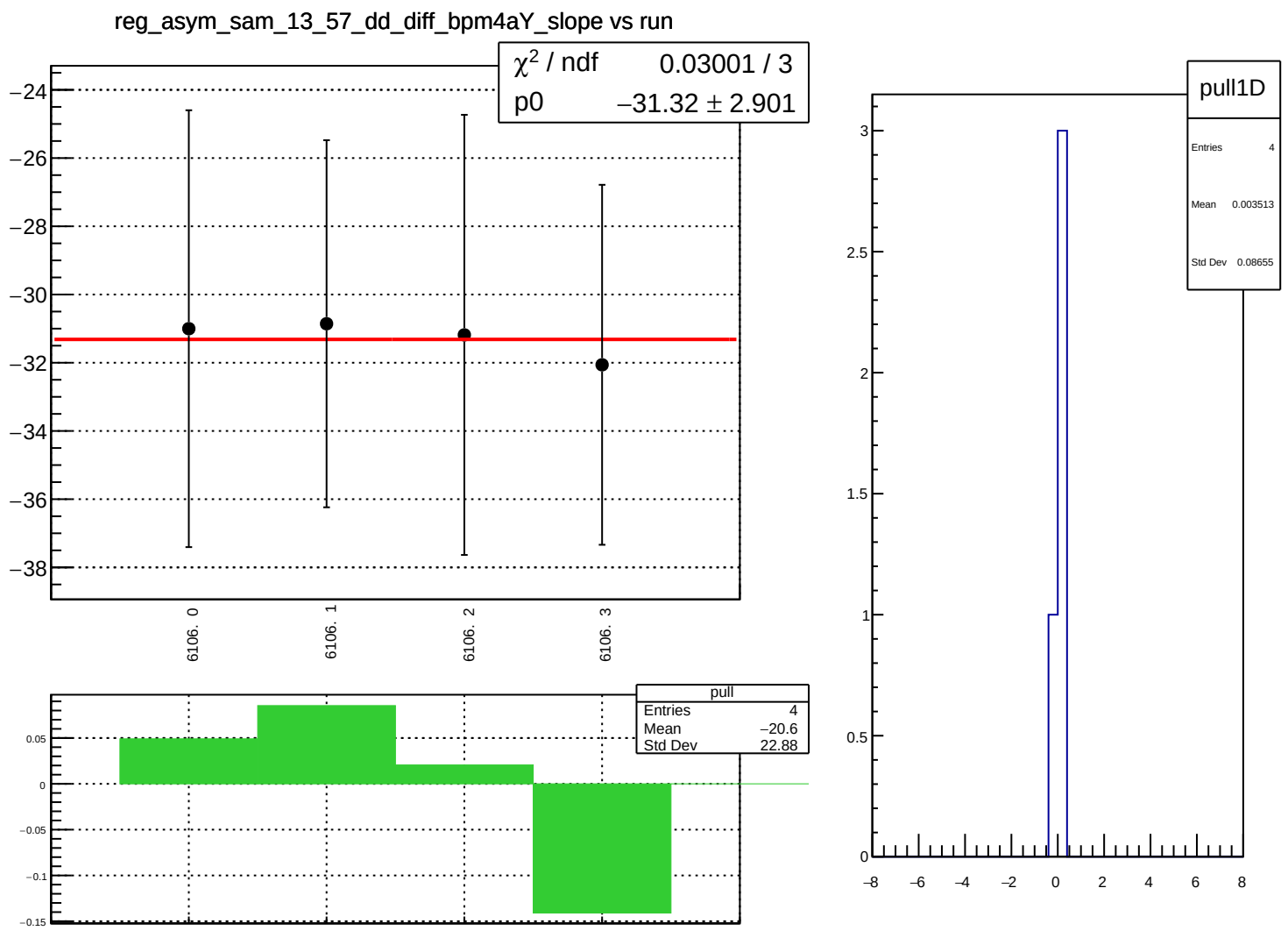

pull1D
Entries 4
Mean 6.591e−05
Std Dev 0.0259
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

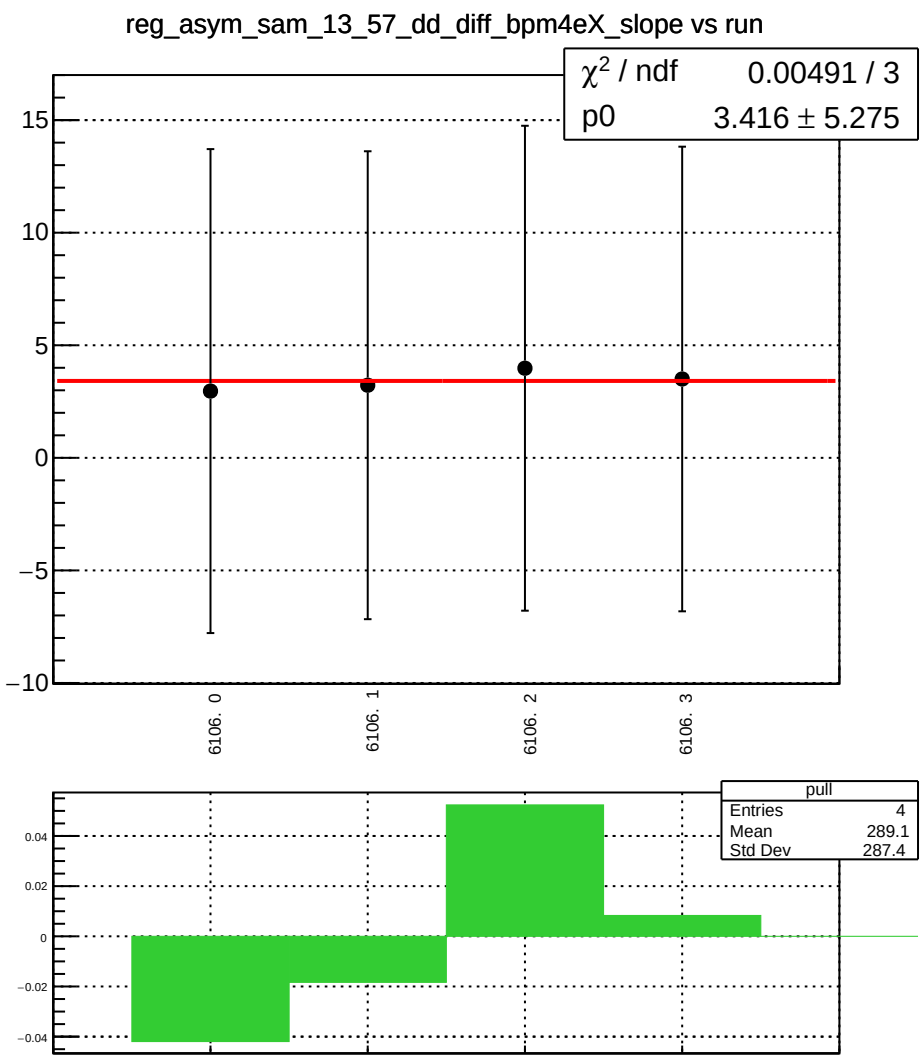

reg_asym_sam_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.1073 / 3
p0 111.9 ± 7.376
130
125
120
115
110
105
100
95
90
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −10.48
Std Dev 11.79
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
−0.25
pull1D
Entries 4
Mean −0.005736
Std Dev 0.1637
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

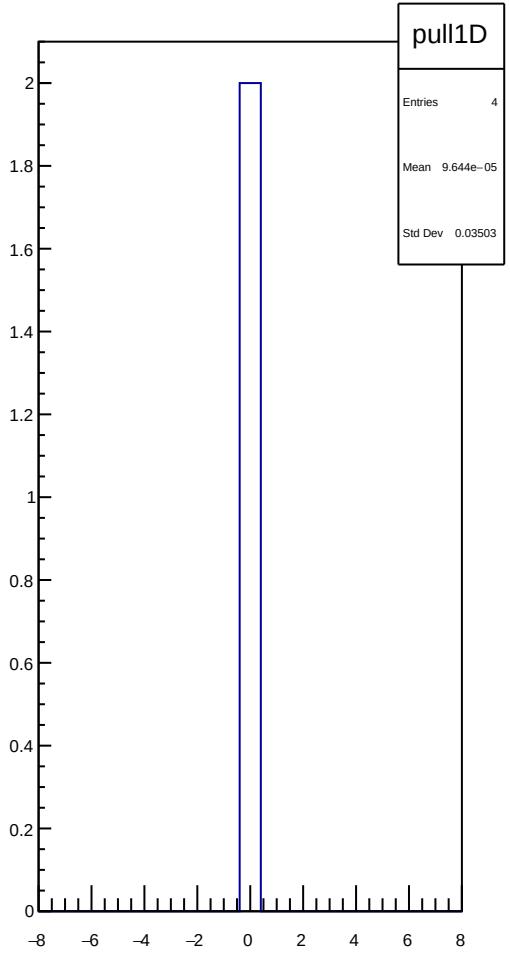

reg_asym_sam_48_dd_diff_bpm12X_slope vs run
χ² / ndf 0.0601 / 3
p0 −1.073 ± 0.5254
0
−0.5
−1
−1.5
−2
−2.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −78.76
Std Dev 80.65
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean −0.0004822
Std Dev 0.1226
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

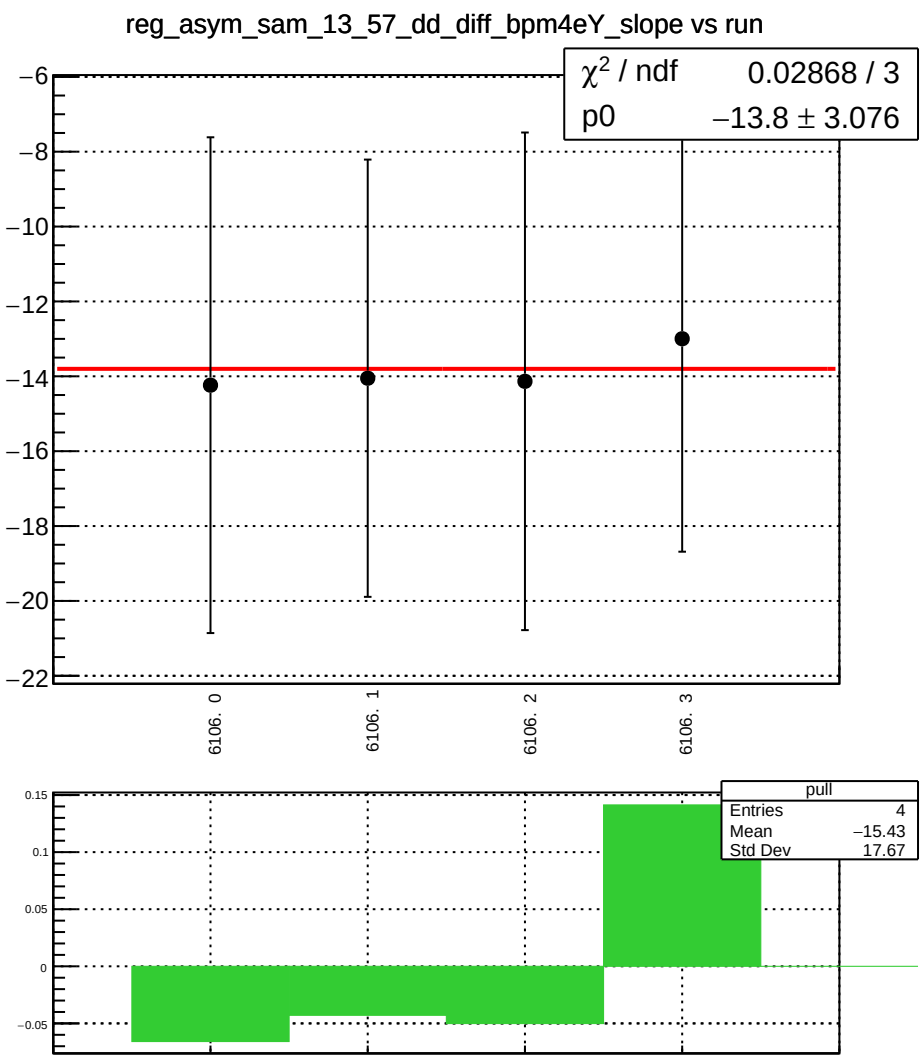

reg_asym_sam_13_57_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.009314 / 3
p0 −29.73 ± 4.536
−20
−25
−30
−35
−40
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −160.4
Std Dev 162.2
0.08
0.06
0.04
0.02
0
−0.02
−0.04

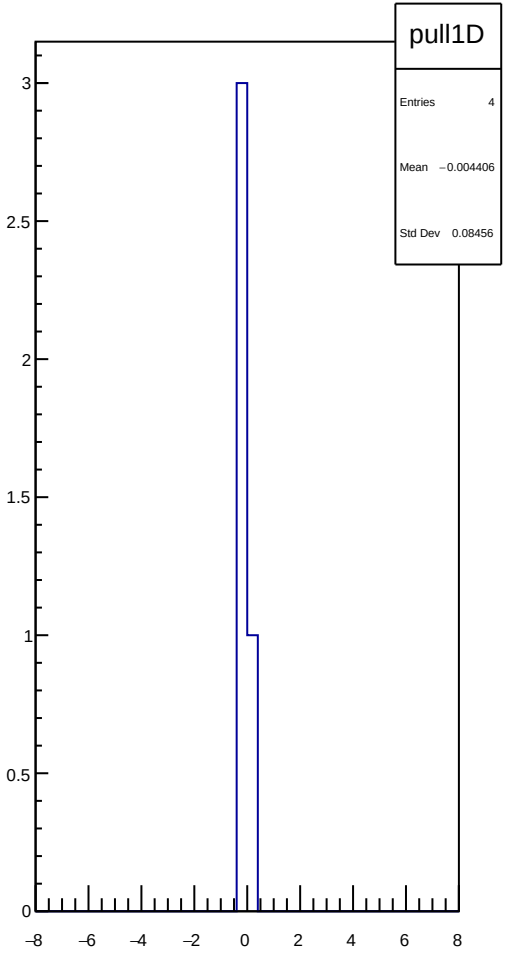

pull1D
Entries 4
Mean 0.0002978
Std Dev 0.04825
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

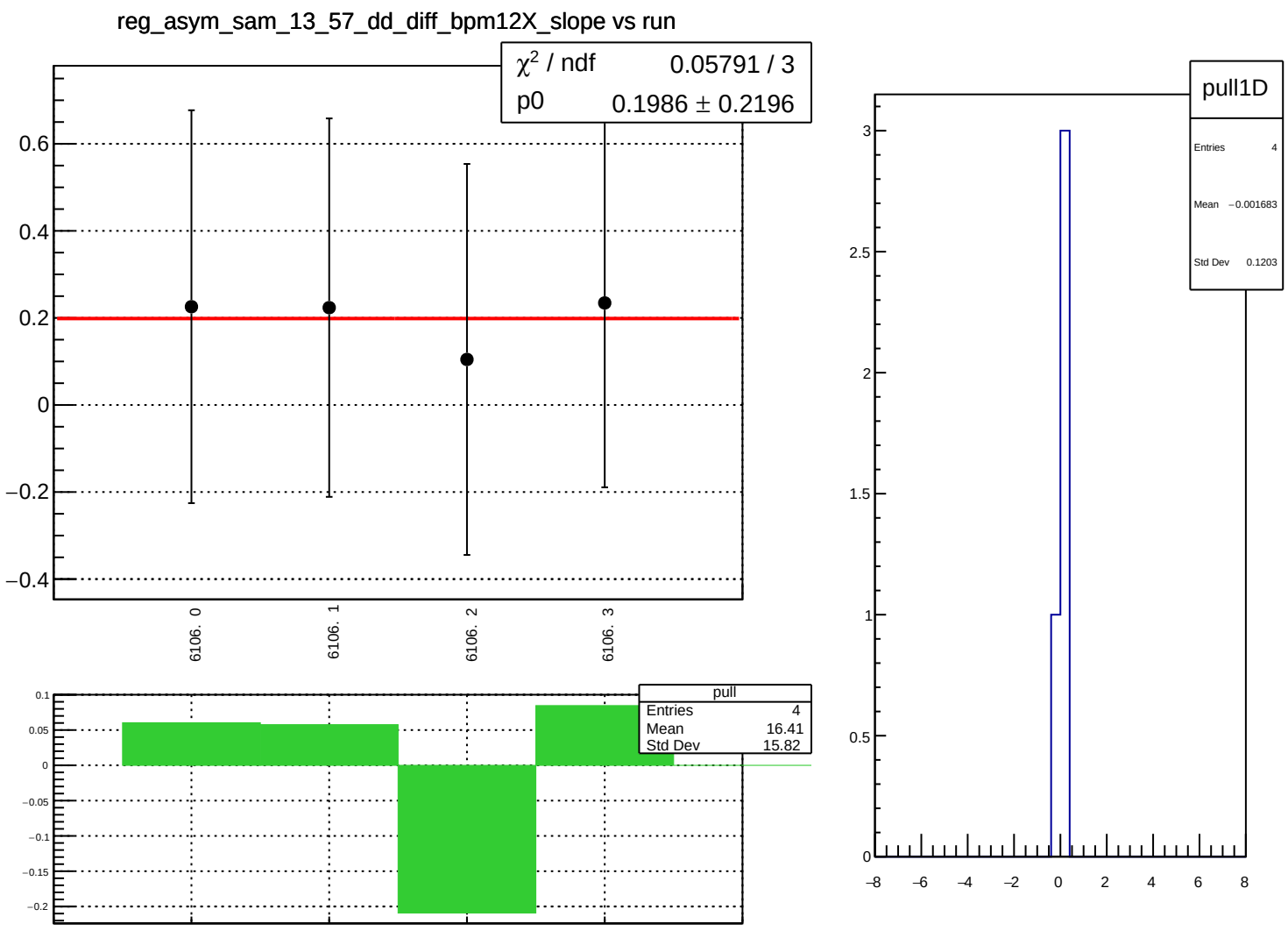

reg_asym_sam_13_57_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.03001 / 3
p0 −31.32 ± 2.901
−24
−26
−28
−30
−32
−34
−36
−38
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −20.6
Std Dev 22.88
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean 0.003513
Std Dev 0.08655
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

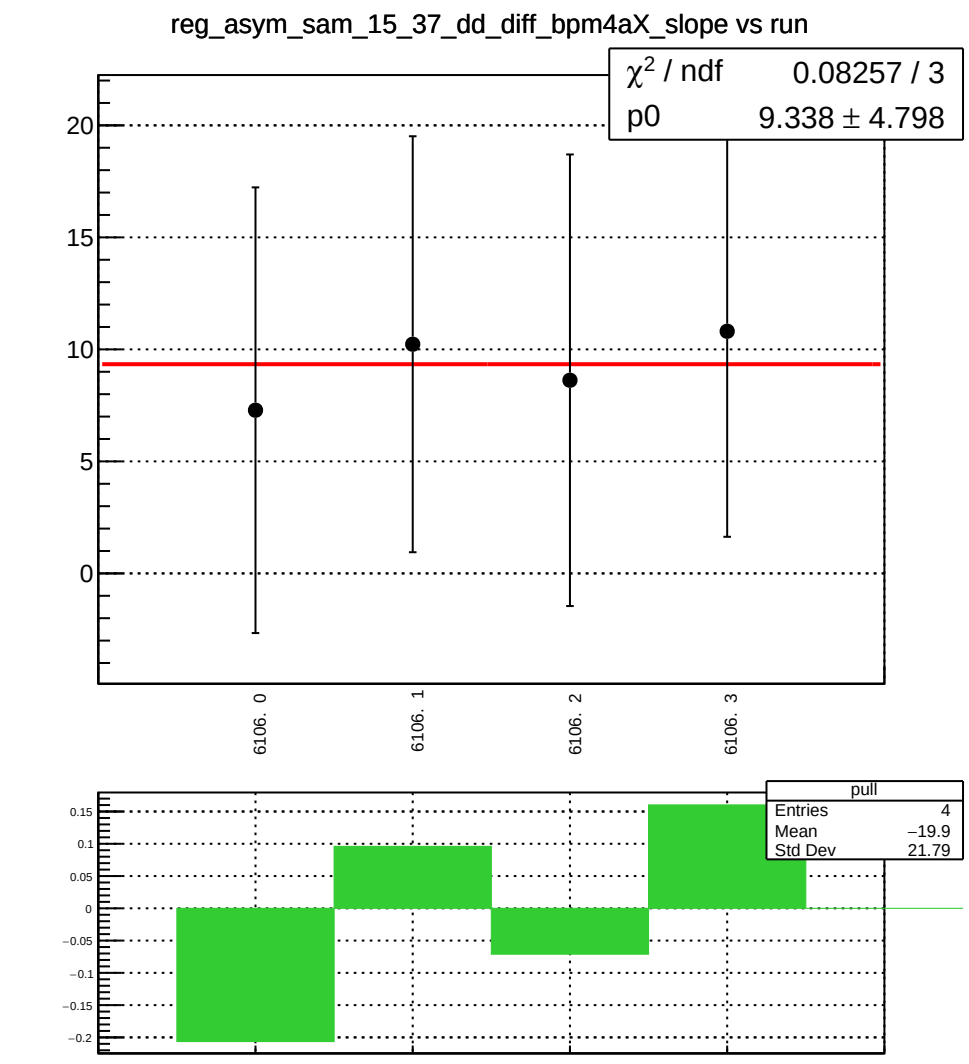

reg_asym_sam_13_57_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.00491 / 3
p0 3.416 ± 5.275
15
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 289.1
Std Dev 287.4
0.04
0.02
0
−0.02
−0.04

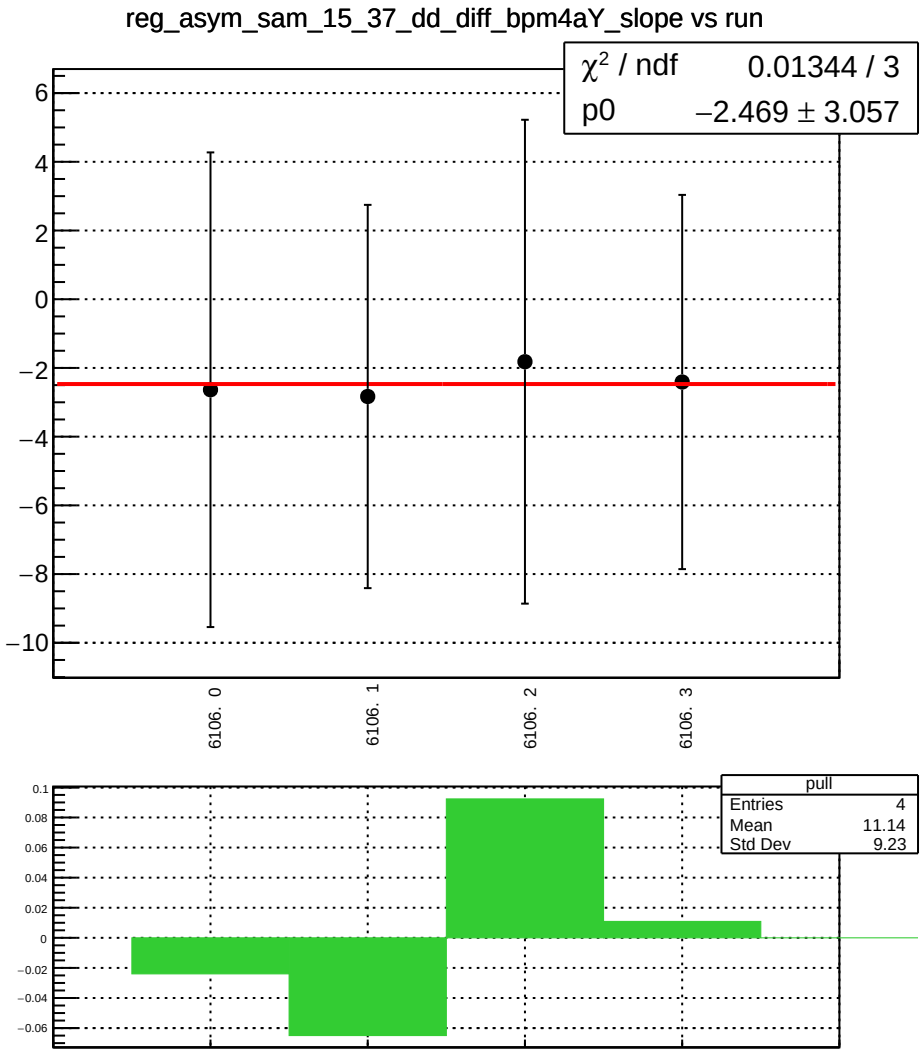

pull1D
Entries 4
Mean 9.644e−05
Std Dev 0.03503
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

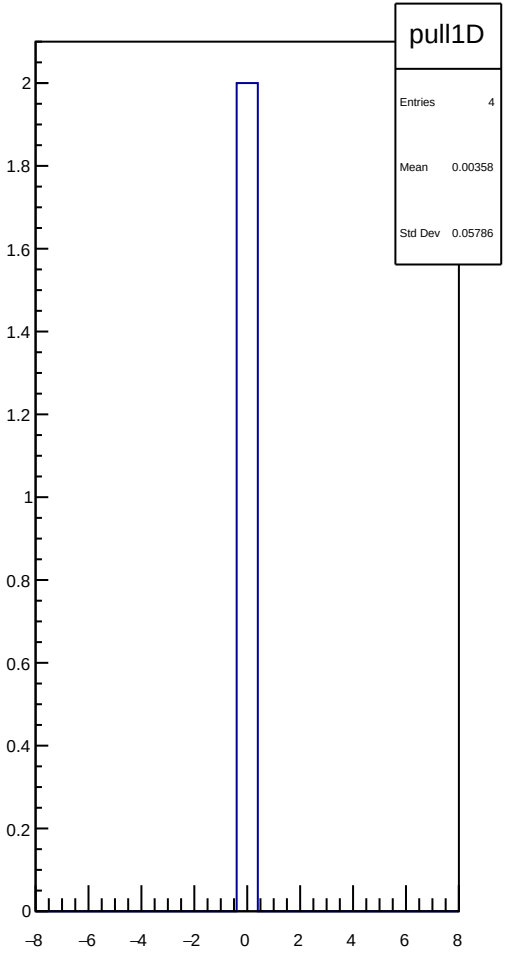

reg_asym_sam_13_57_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.02868 / 3
p0 −13.8 ± 3.076
−6
−8
−10
−12
−14
−16
−18
−20
−22
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −15.43
Std Dev 17.67
0.15
0.1
0.05
0
−0.05

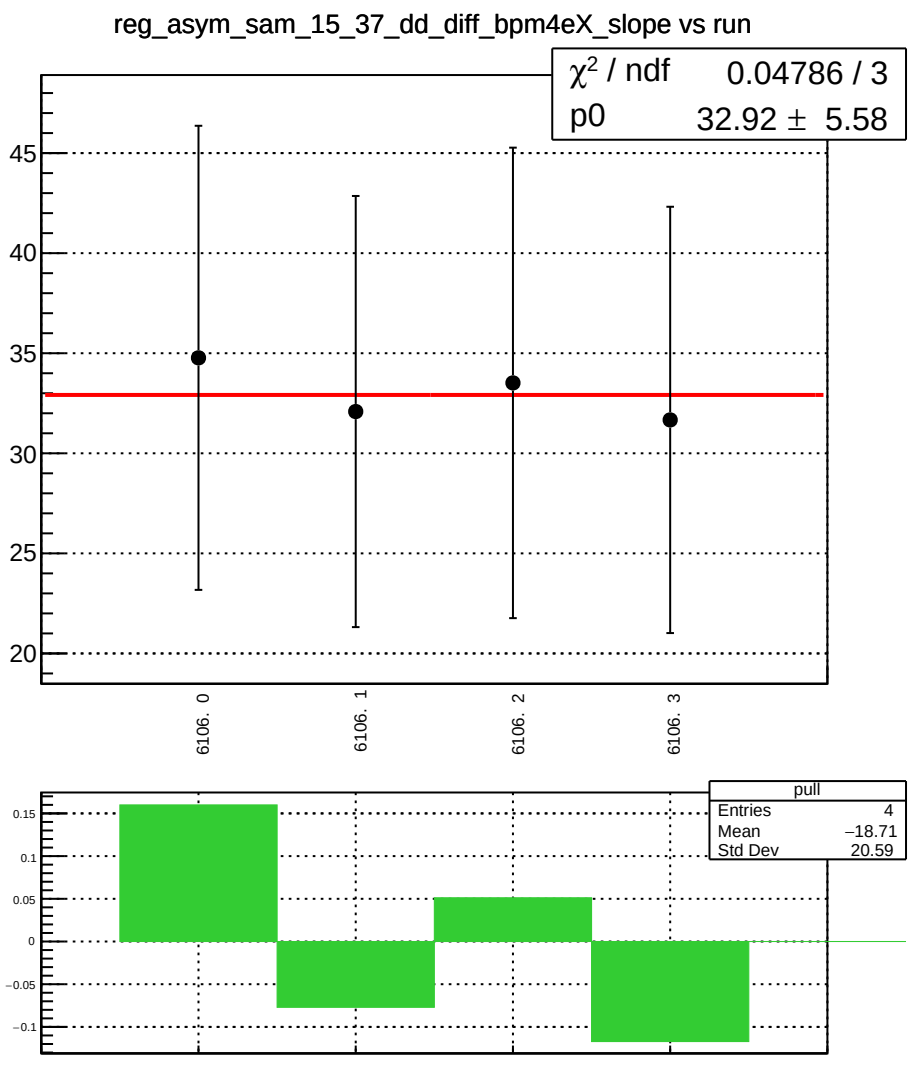

pull1D
Entries 4
Mean −0.004406
Std Dev 0.08456
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

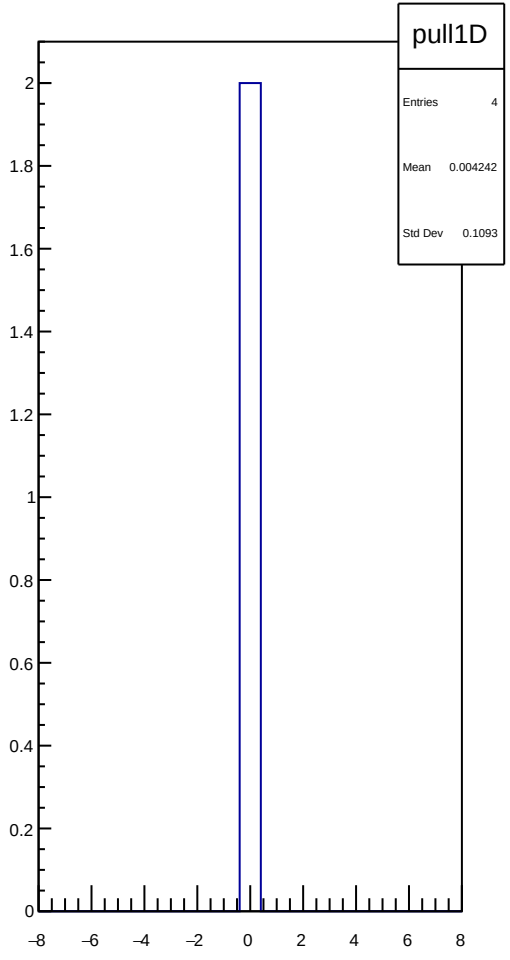

reg_asym_sam_13_57_dd_diff_bpm12X_slope vs run
χ² / ndf 0.05791 / 3
p0 0.1986 ± 0.2196
0.6
0.4
0.2
0
−0.2
−0.4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 16.41
Std Dev 15.82
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
pull1D
Entries 4
Mean −0.001683
Std Dev 0.1203
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

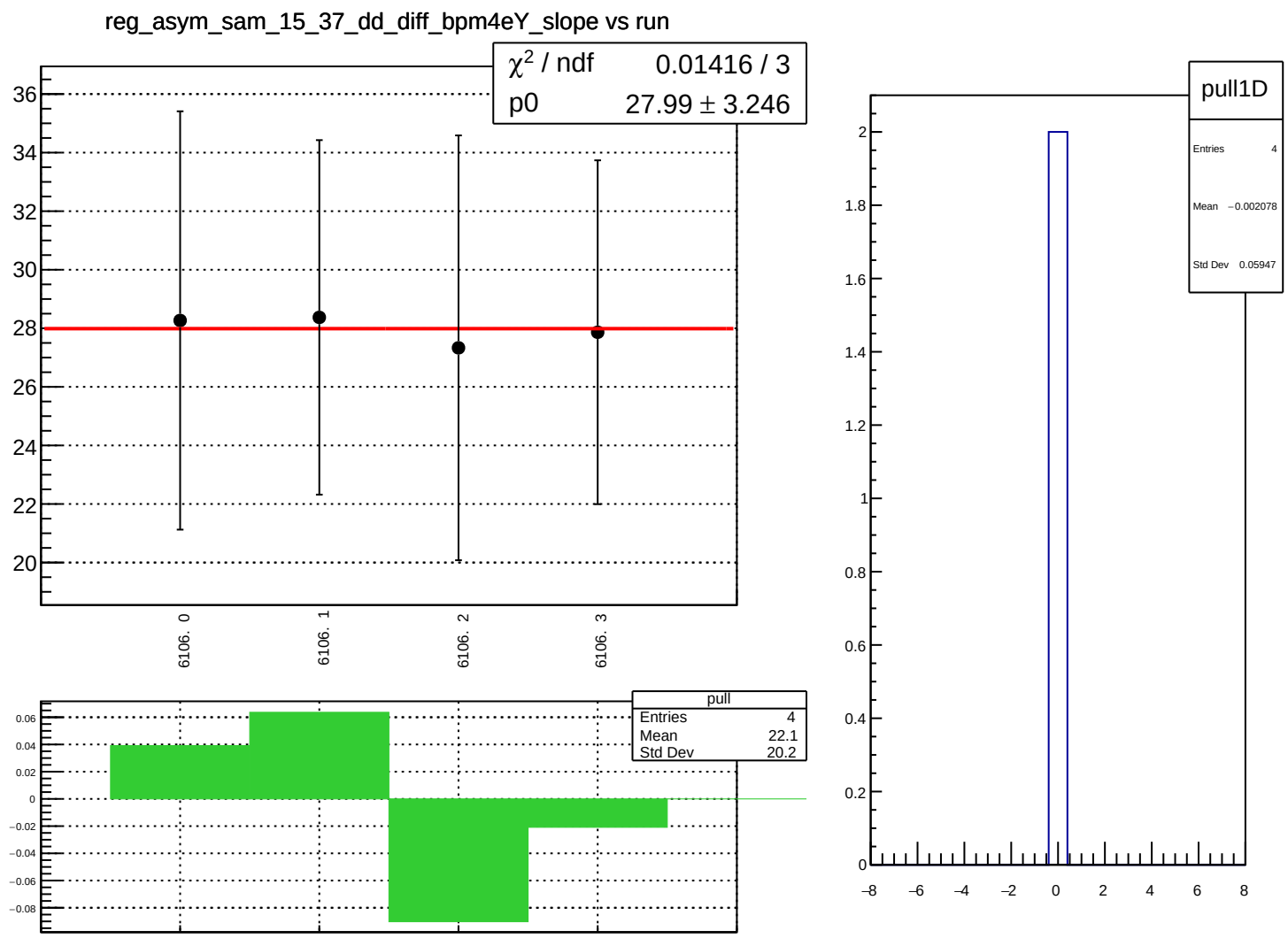

reg_asym_sam_15_37_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.08257 / 3
p0 9.338 ± 4.798
20
15
10
5
0
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −19.9
Std Dev 21.79
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
pull1D
Entries 4
Mean −0.005325
Std Dev 0.1436
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

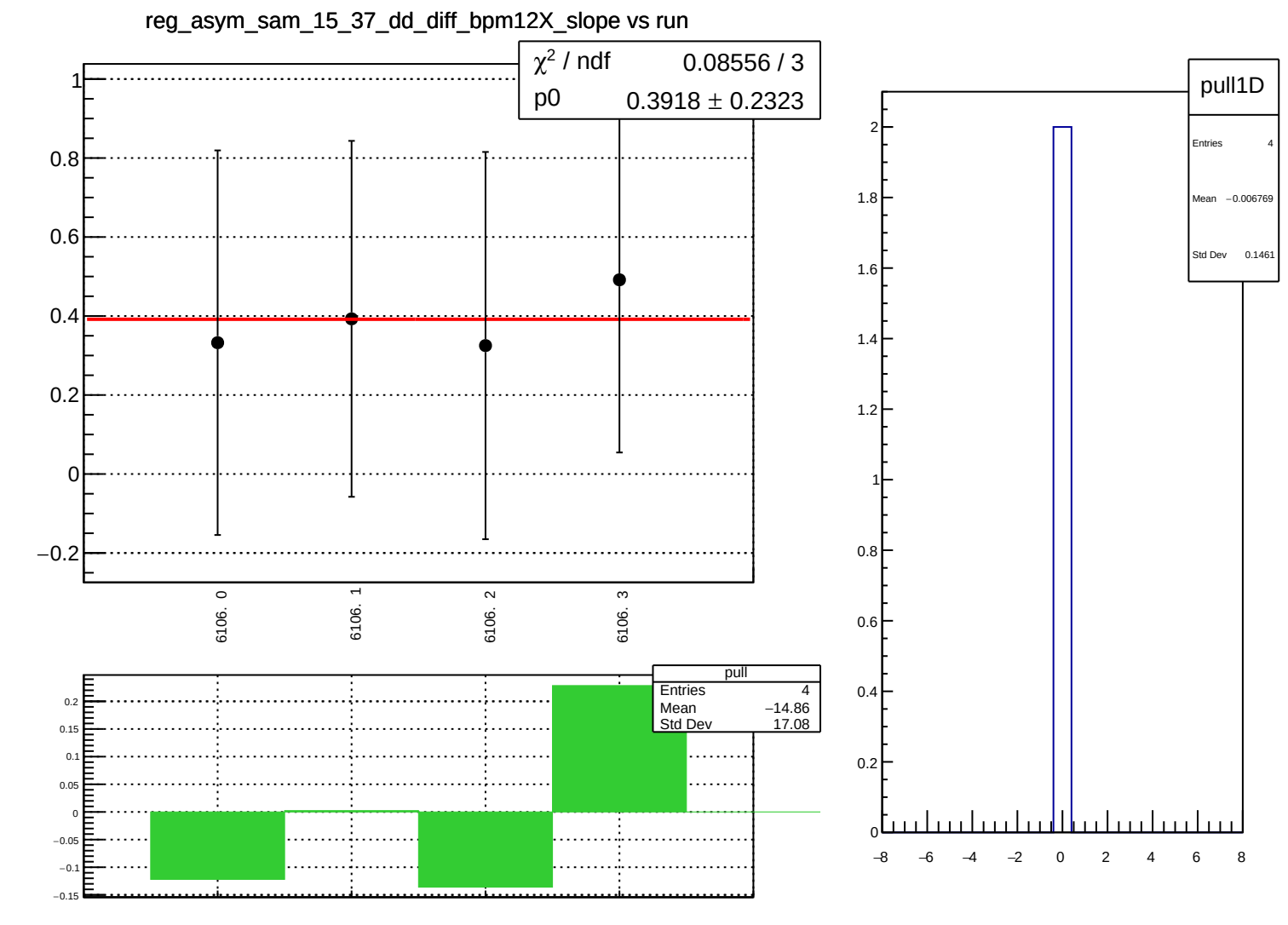

reg_asym_sam_15_37_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.01344 / 3
p0 −2.469 ± 3.057
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 11.14
Std Dev 9.23

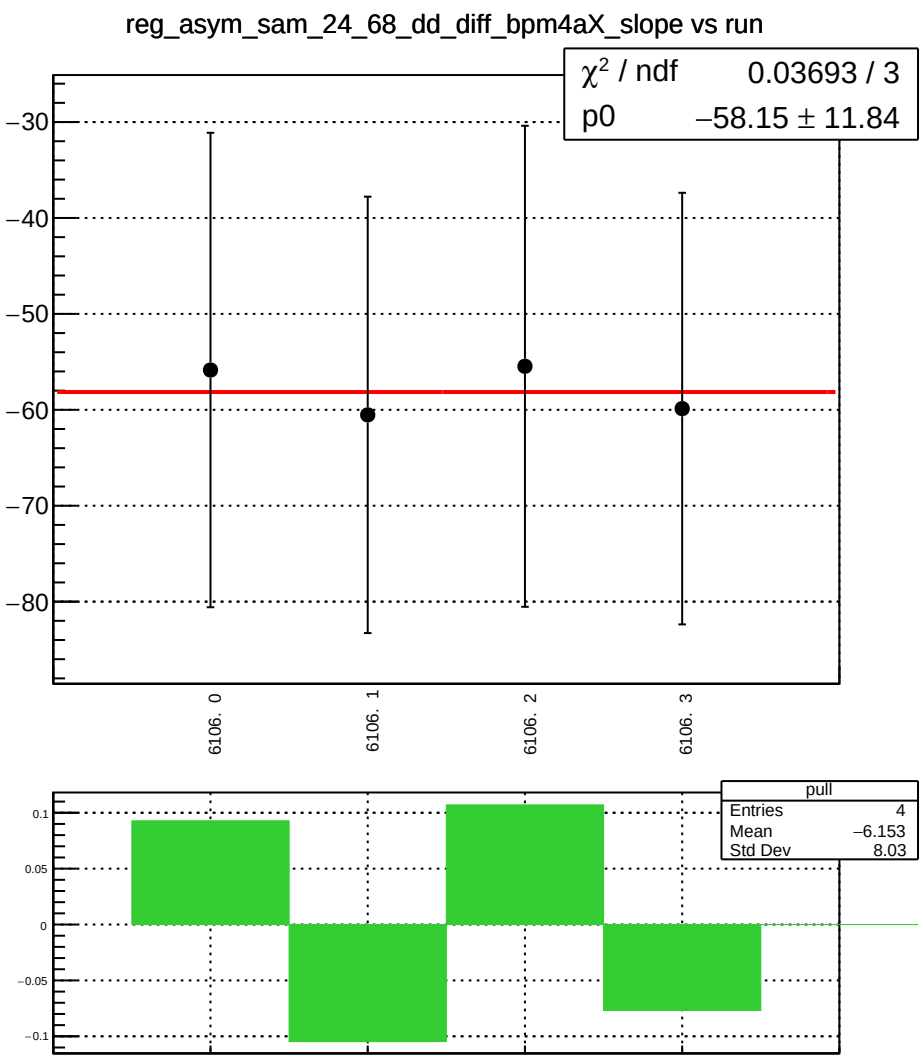

pull1D
Entries 4
Mean 0.00358
Std Dev 0.05786

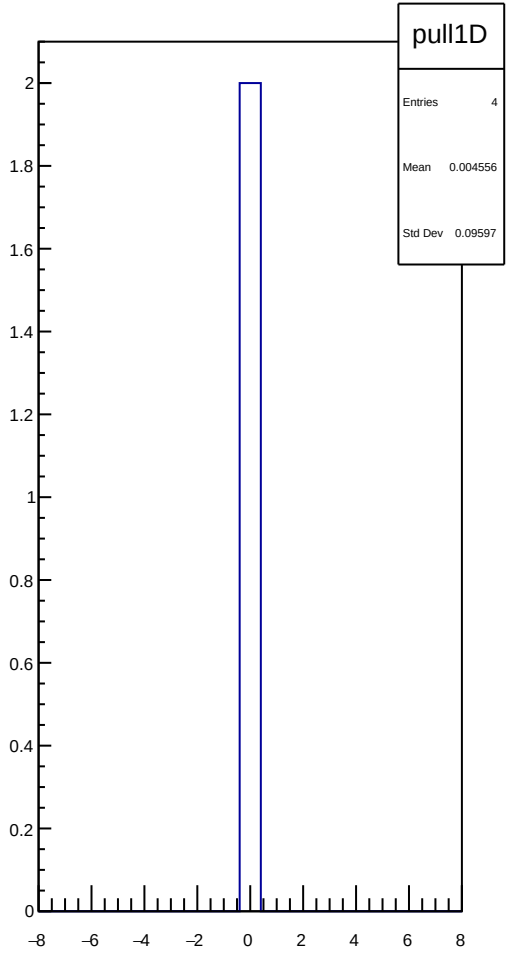

reg_asym_sam_15_37_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.04786 / 3
p0 32.92 ± 5.58
45
40
35
30
25
20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −18.71
Std Dev 20.59
0.15
0.1
0.05
0
−0.05
−0.1

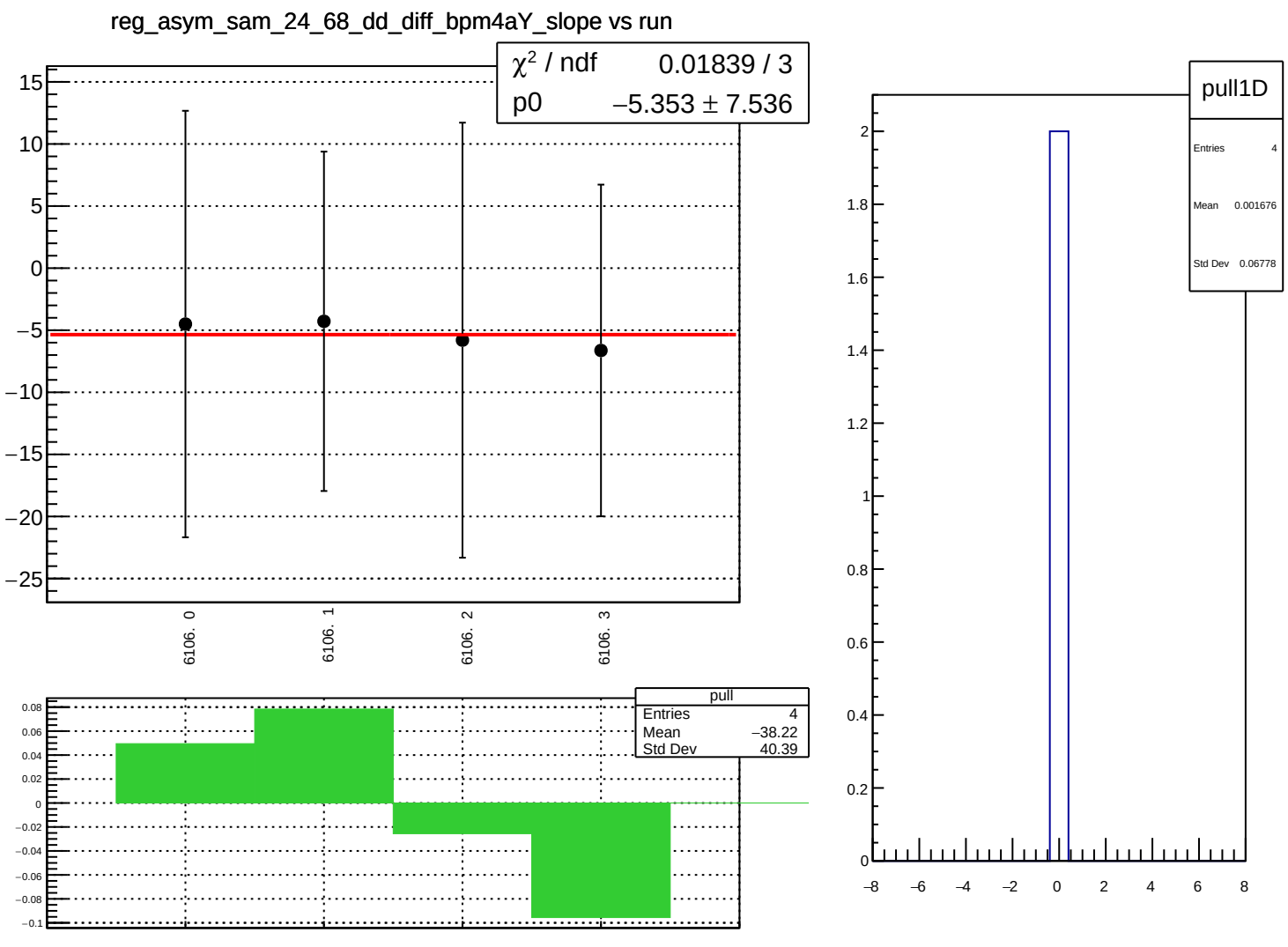

pull1D
Entries 4
Mean 0.004242
Std Dev 0.1093
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

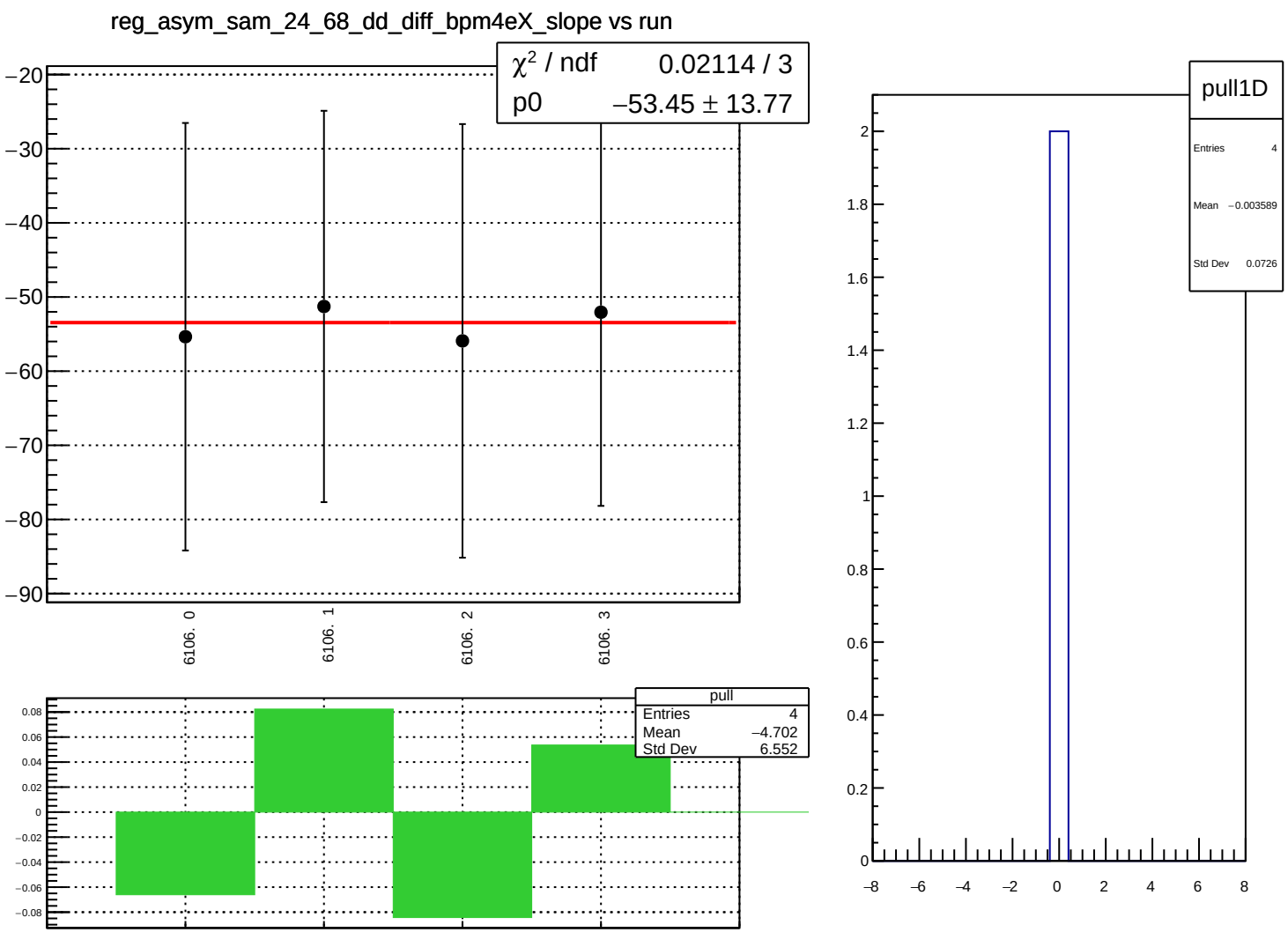

reg_asym_sam_15_37_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.01416 / 3
p0 27.99 ± 3.246
36
34
32
30
28
26
24
22
20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 22.1
Std Dev 20.2
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull1D
Entries 4
Mean −0.002078
Std Dev 0.05947
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

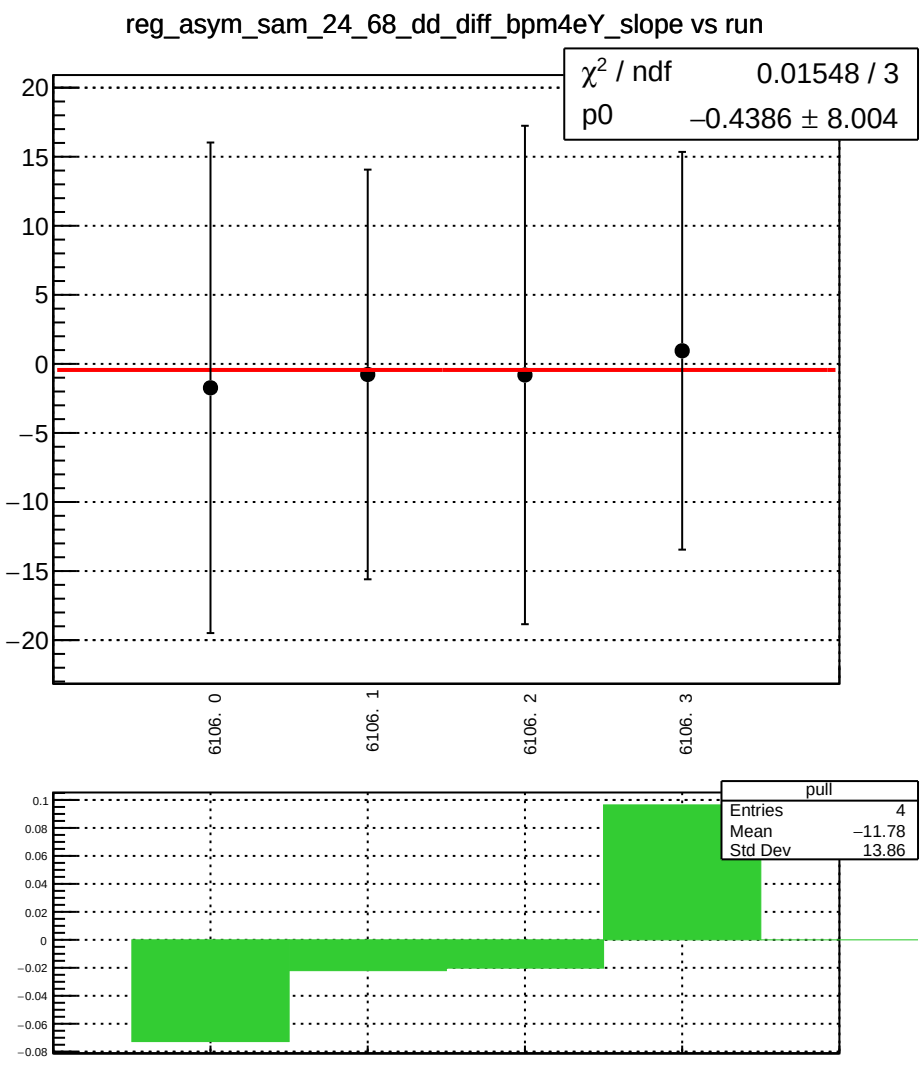

reg_asym_sam_15_37_dd_diff_bpm12X_slope vs run
χ² / ndf 0.08556 / 3
p0 0.3918 ± 0.2323
1
0.8
0.6
0.4
0.2
0
−0.2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −14.86
Std Dev 17.08
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean −0.006769
Std Dev 0.1461
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

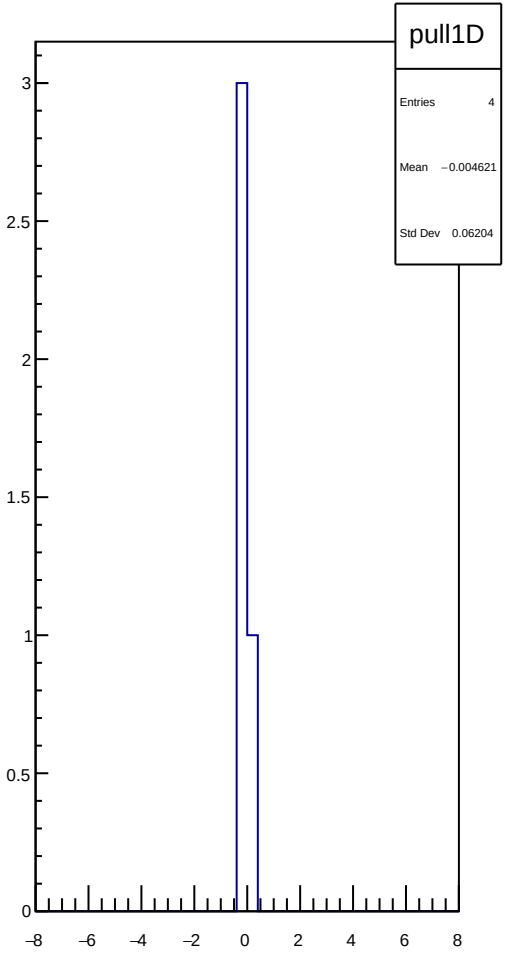

reg_asym_sam_24_68_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.03693 / 3
p0 −58.15 ± 11.84
−30
−40
−50
−60
−70
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.153
Std Dev 8.03
0.1
0.05
0
−0.05
−0.1

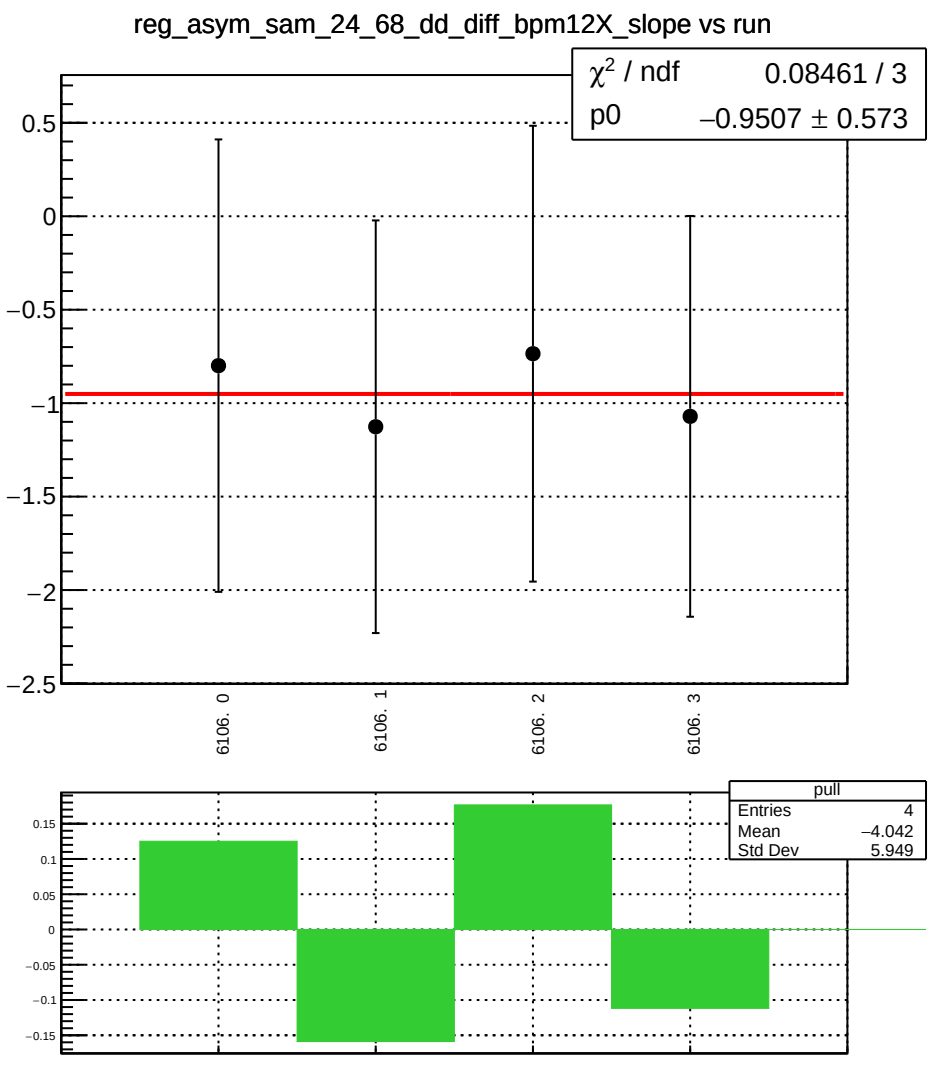

pull1D
Entries 4
Mean 0.004556
Std Dev 0.09597
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

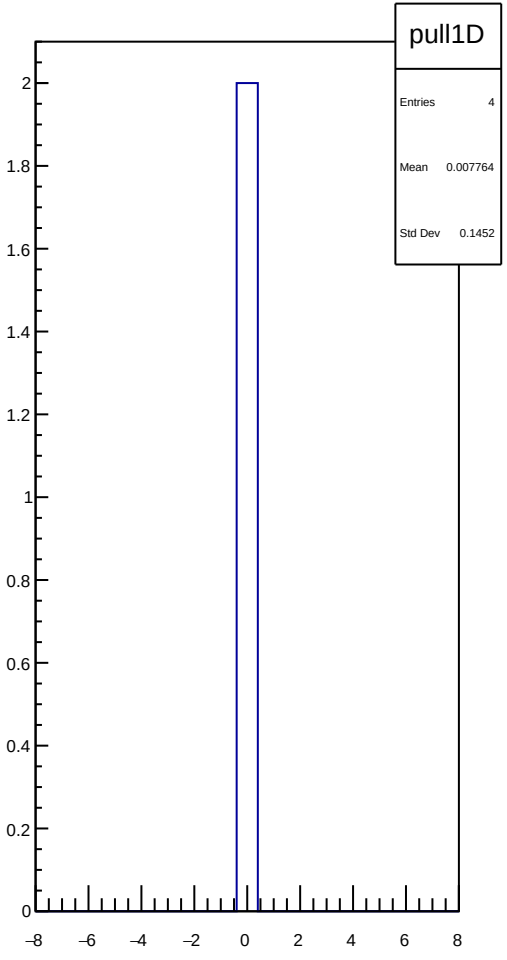

reg_asym_sam_24_68_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.01839 / 3
p0 −5.353 ± 7.536
15
10
5
0
−5
−10
−15
−20
−25
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −38.22
Std Dev 40.39
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1
pull1D
Entries 4
Mean 0.001676
Std Dev 0.06778
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

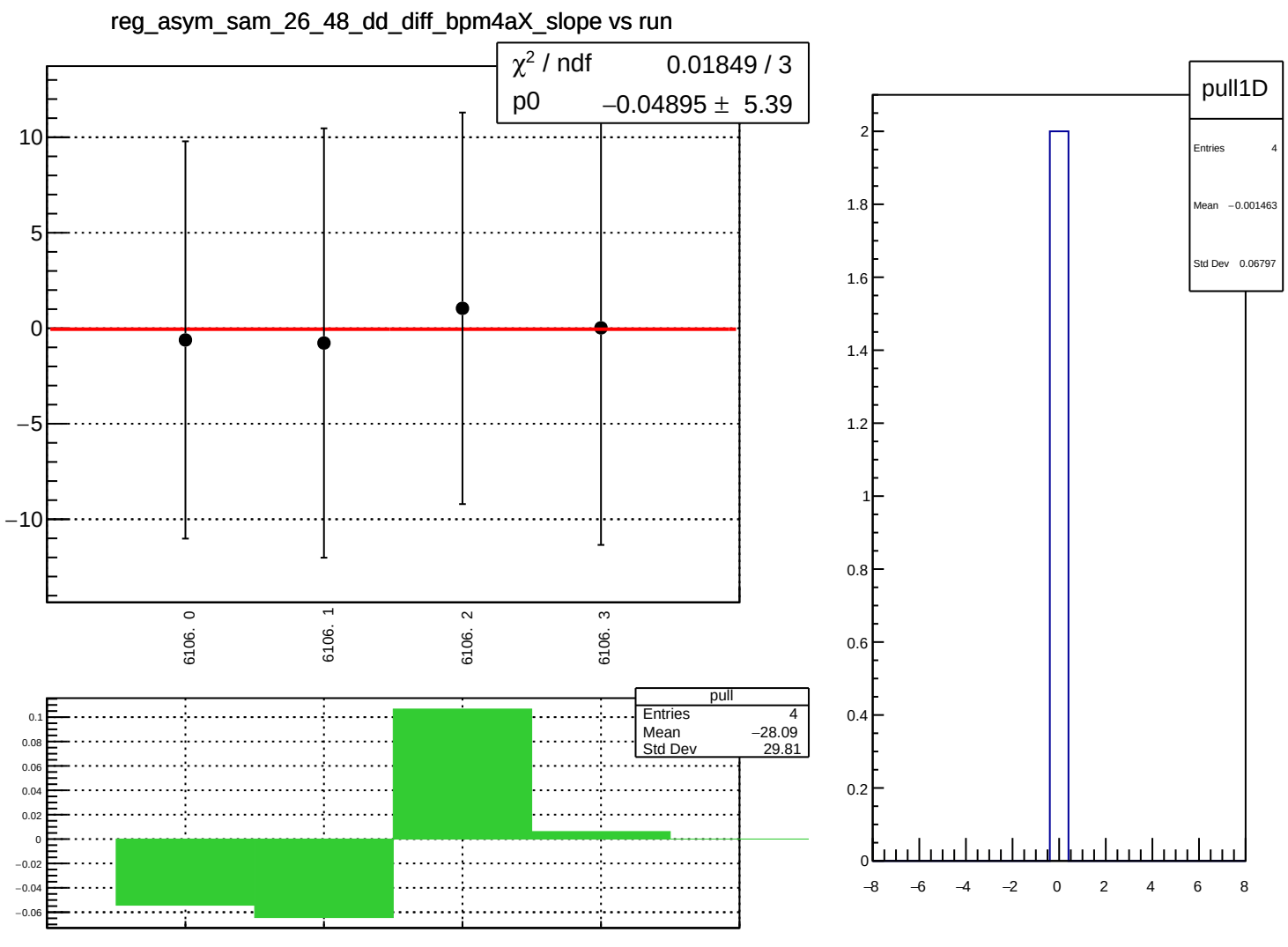

reg_asym_sam_24_68_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.02114 / 3
p0 −53.45 ± 13.77
−20
−30
−40
−50
−60
−70
−80
−90
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.702
Std Dev 6.552
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull1D
Entries 4
Mean −0.003589
Std Dev 0.0726
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

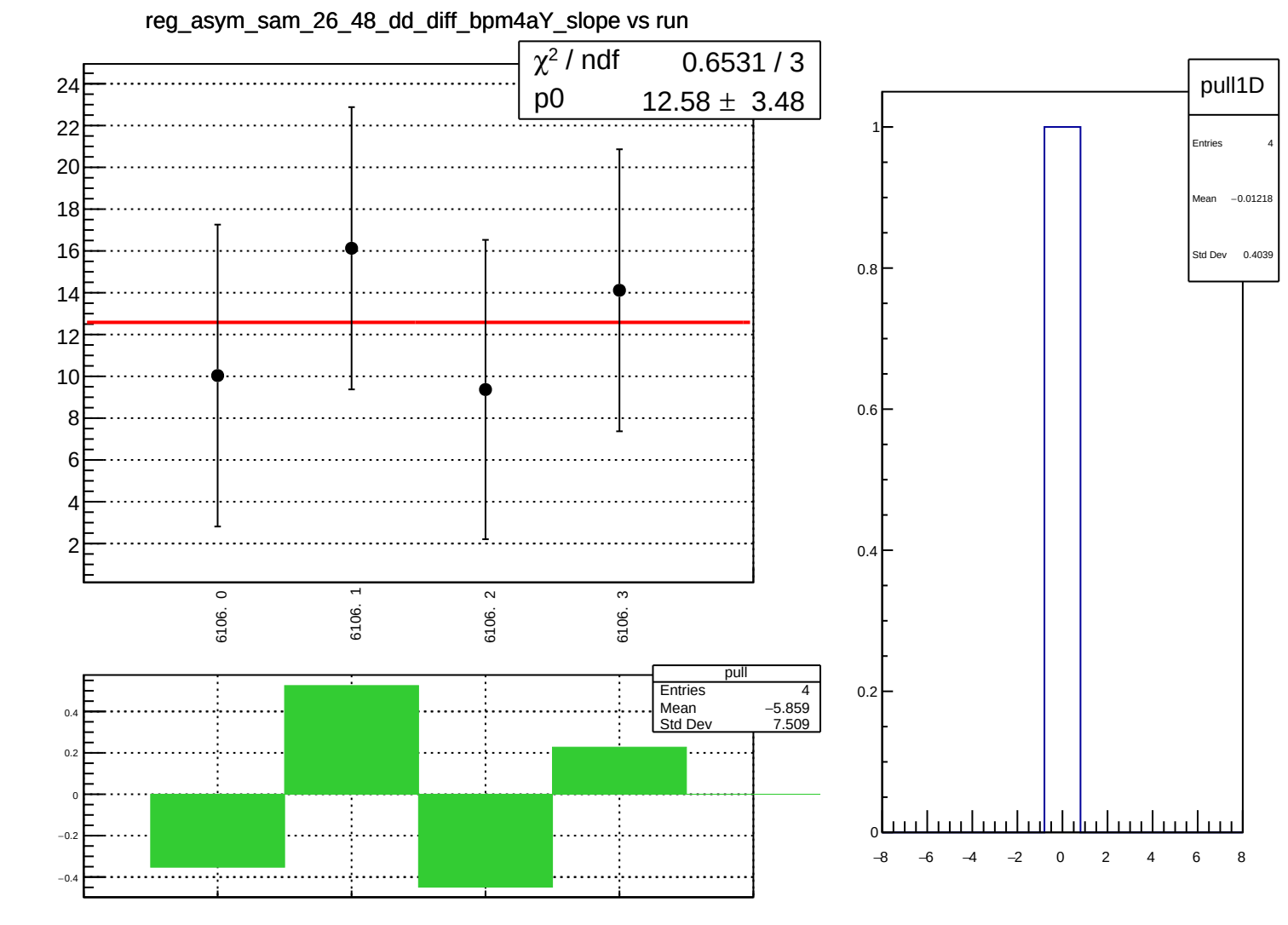

reg_asym_sam_24_68_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.01548 / 3
p0 −0.4386 ± 8.004
20
15
10
5
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −11.78
Std Dev 13.86
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08

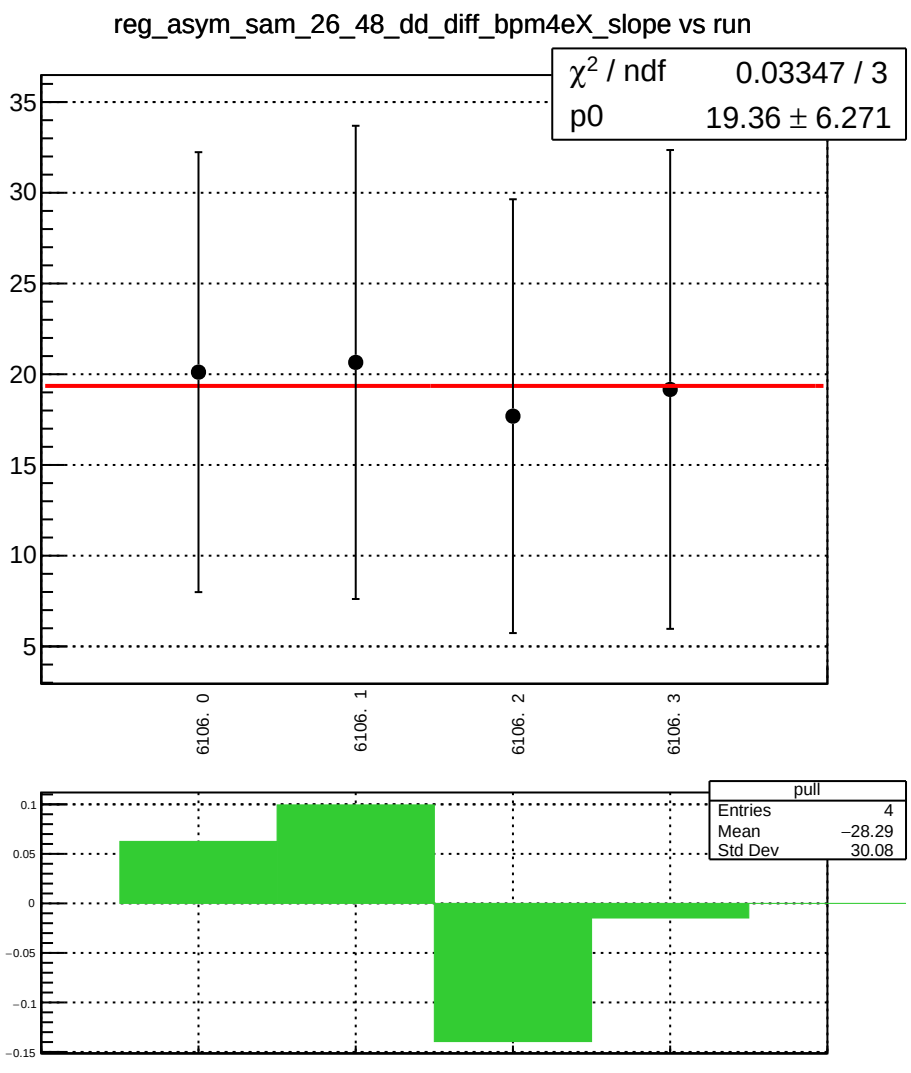

pull1D
Entries 4
Mean −0.004621
Std Dev 0.06204
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

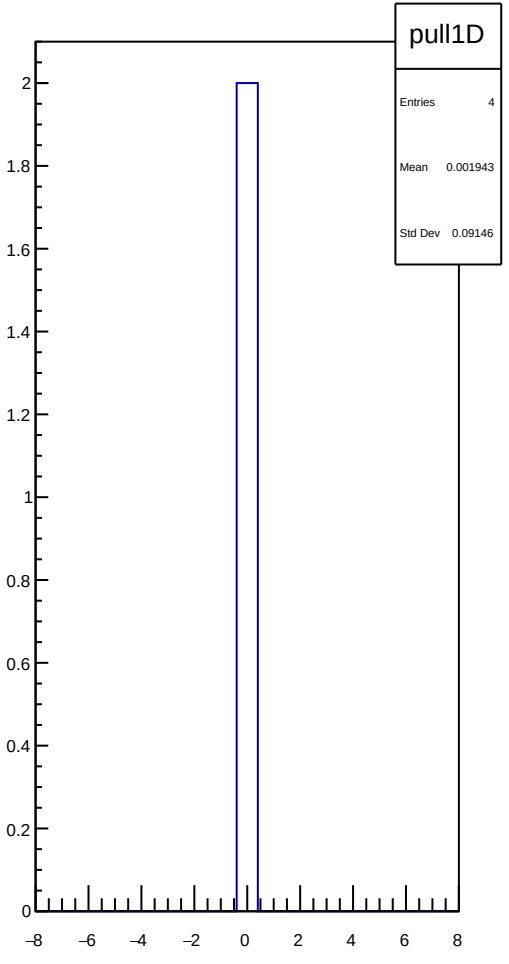

reg_asym_sam_24_68_dd_diff_bpm12X_slope vs run
χ² / ndf 0.08461 / 3
p0 −0.9507 ± 0.573
0.5
0
−0.5
−1
−1.5
−2
−2.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.042
Std Dev 5.949
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

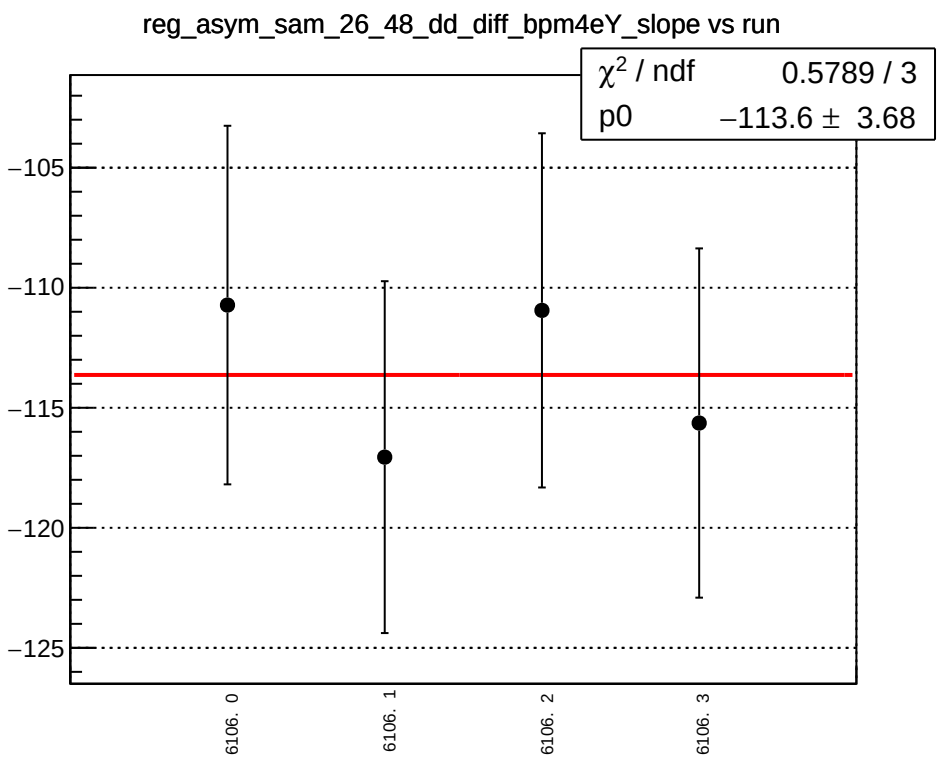

pull1D
Entries 4
Mean 0.007764
Std Dev 0.1452
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

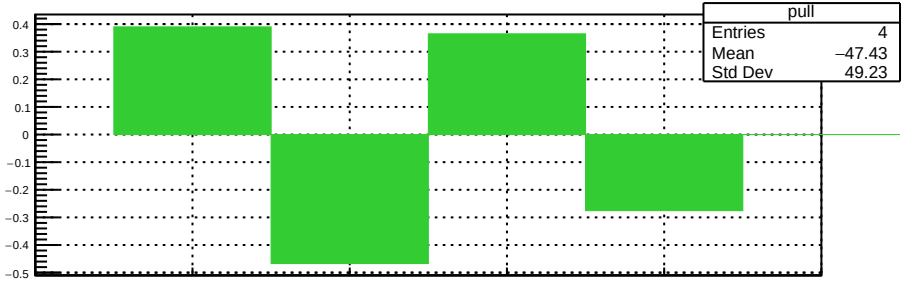

reg_asym_sam_26_48_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.01849 / 3
p0 −0.04895 ± 5.39
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −28.09
Std Dev 29.81
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
pull1D
Entries 4
Mean −0.001463
Std Dev 0.06797
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

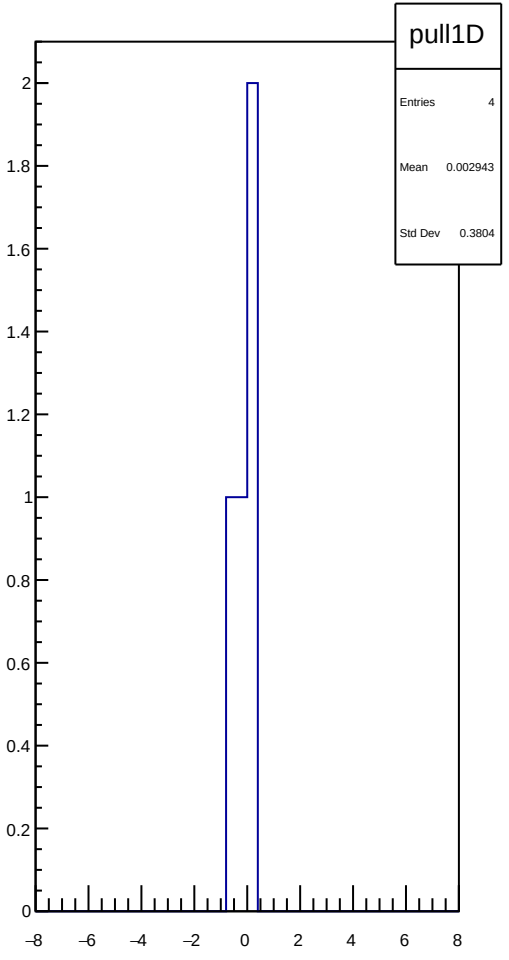

reg_asym_sam_26_48_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.6531 / 3
p0 12.58 ± 3.48
24
22
20
18
16
14
12
10
8
6
4
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.859
Std Dev 7.509
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 4
Mean −0.01218
Std Dev 0.4039
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

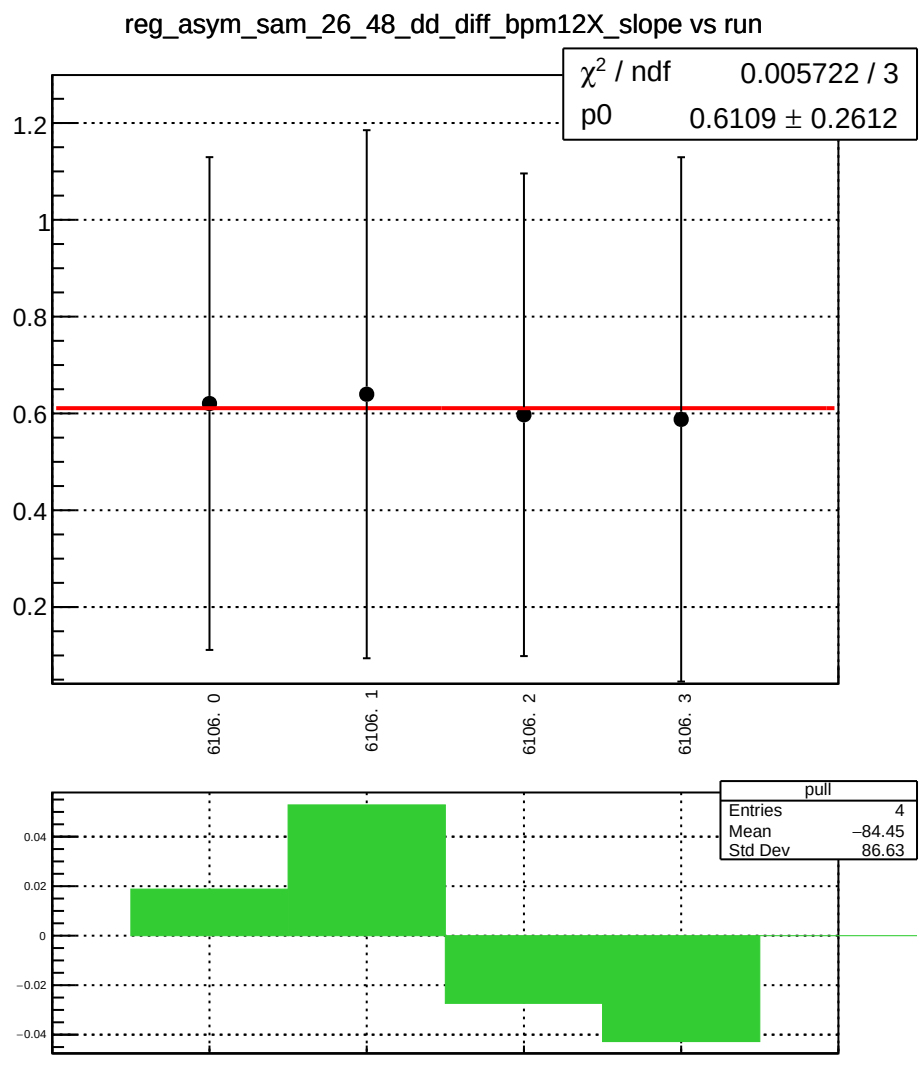

reg_asym_sam_26_48_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.03347 / 3
p0 19.36 ± 6.271
35
30
25
20
15
10
5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −28.29
Std Dev 30.08
0.1
0.05
0
−0.05
−0.1
−0.15

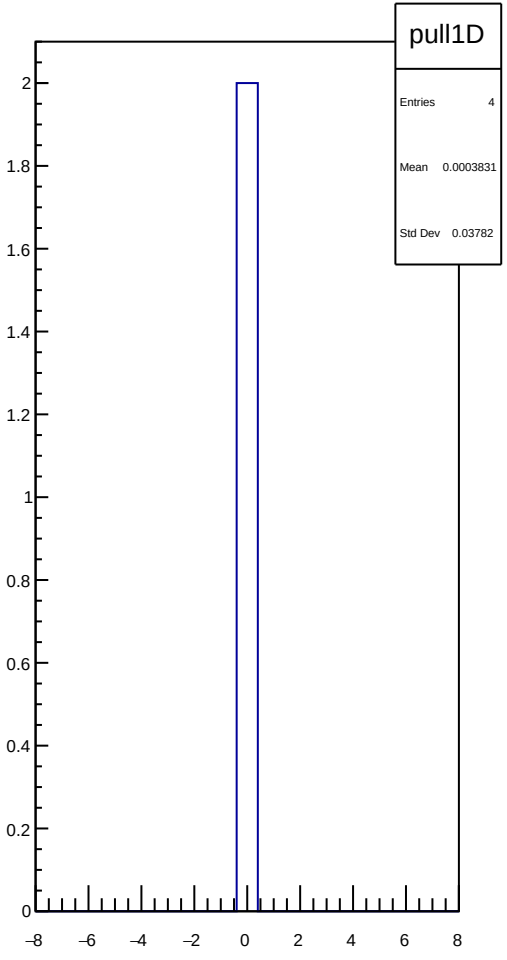

pull1D
Entries 4
Mean 0.001943
Std Dev 0.09146
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

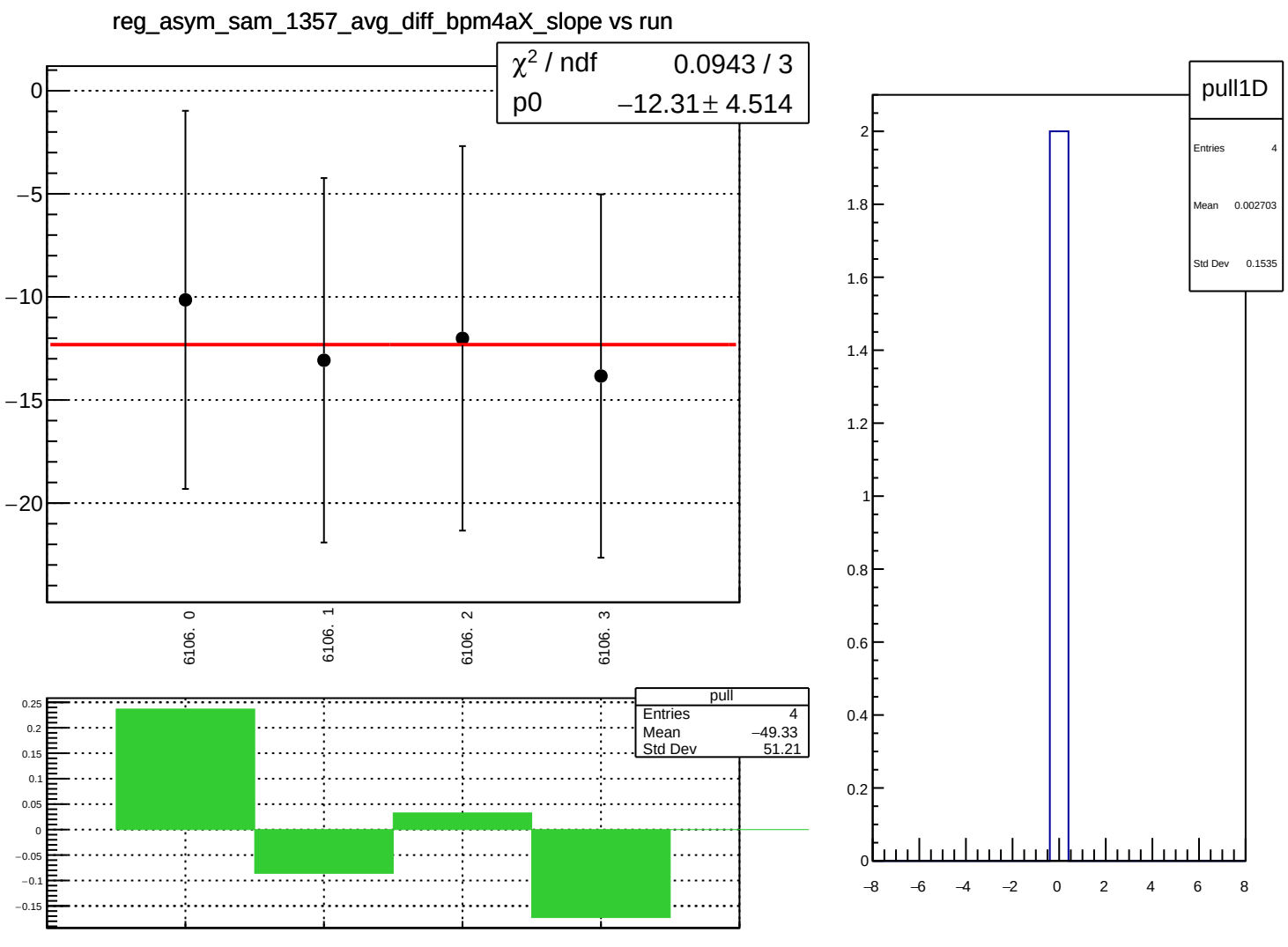

reg_asym_sam_26_48_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.5789 / 3
p0 −113.6 ± 3.68
−105
−110
−115
−120
−125
6106. 0
6106. 1
6106. 2
6106. 3

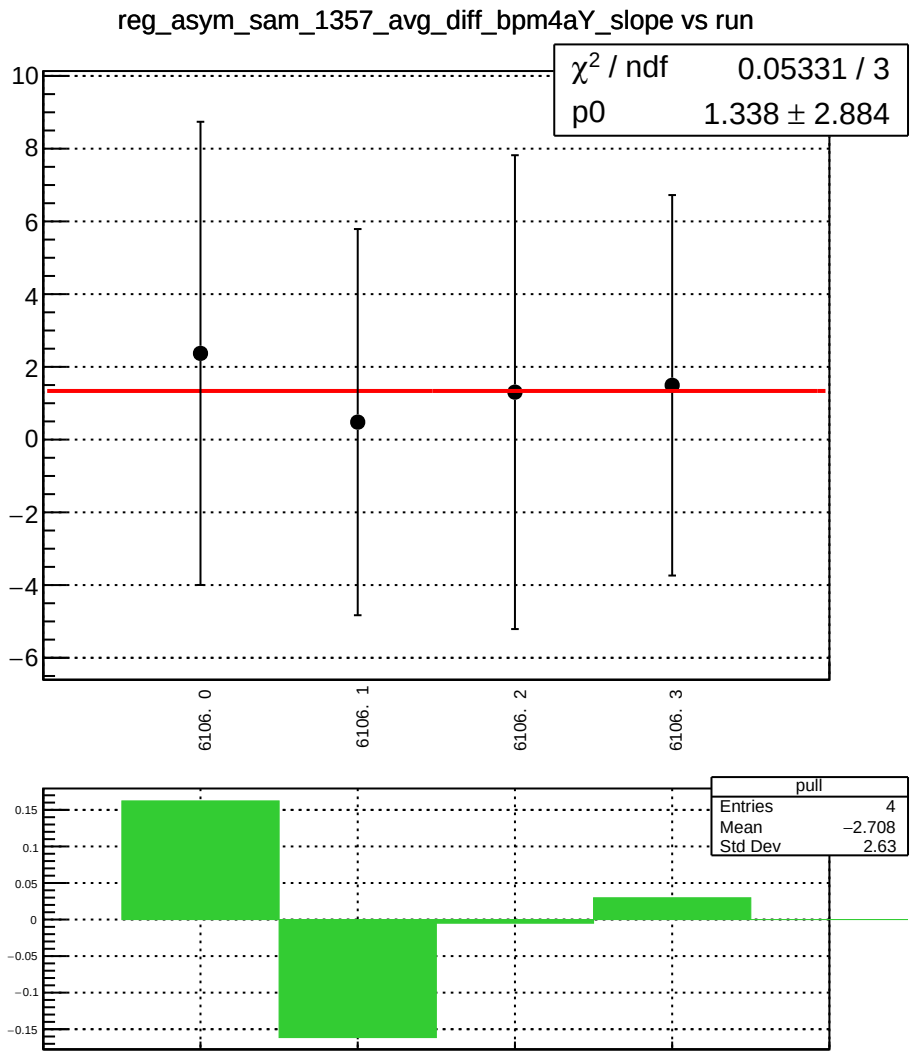

pull
Entries 4
Mean −47.43
Std Dev 49.23
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

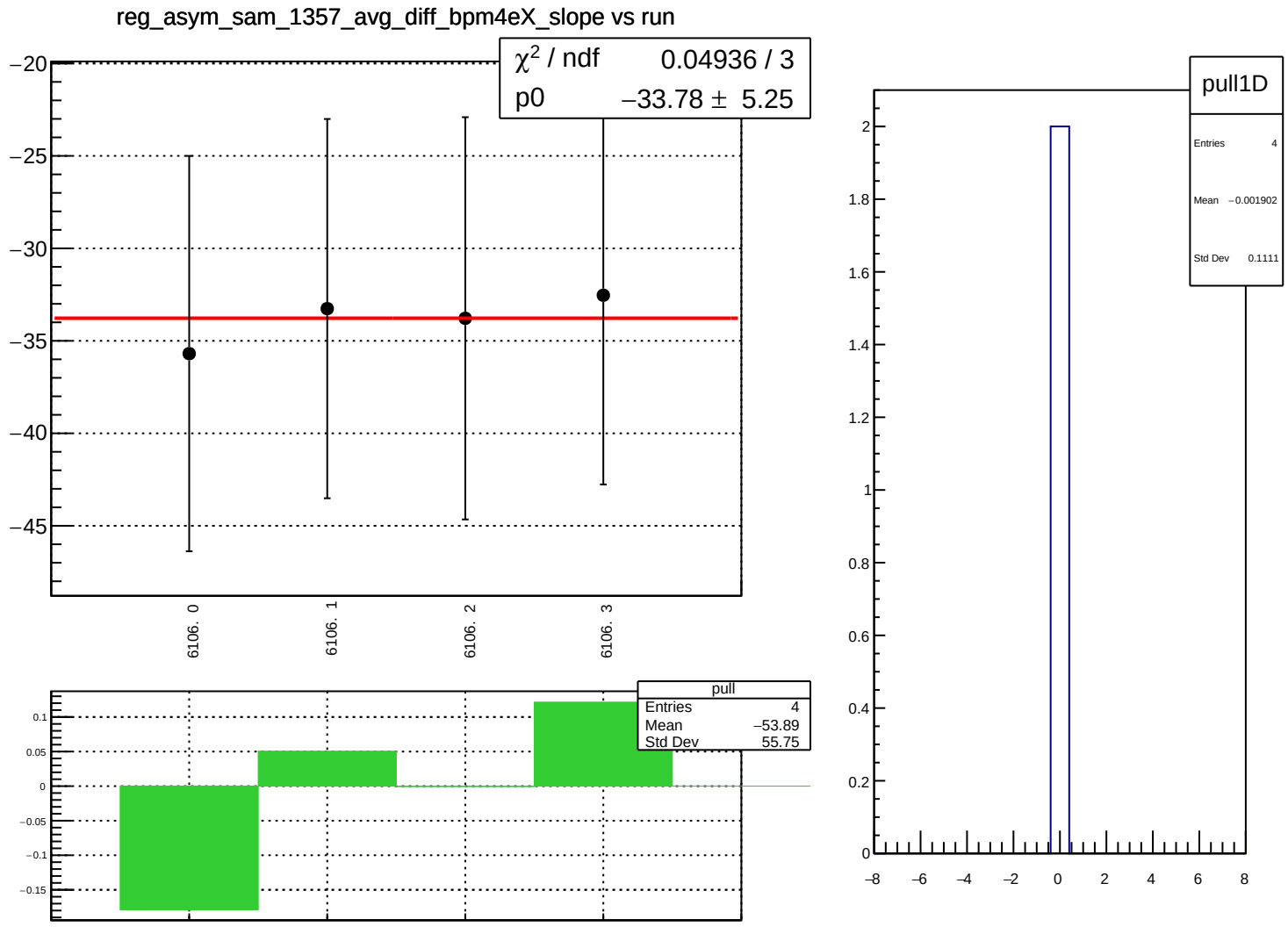

pull1D
Entries 4
Mean 0.002943
Std Dev 0.3804
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

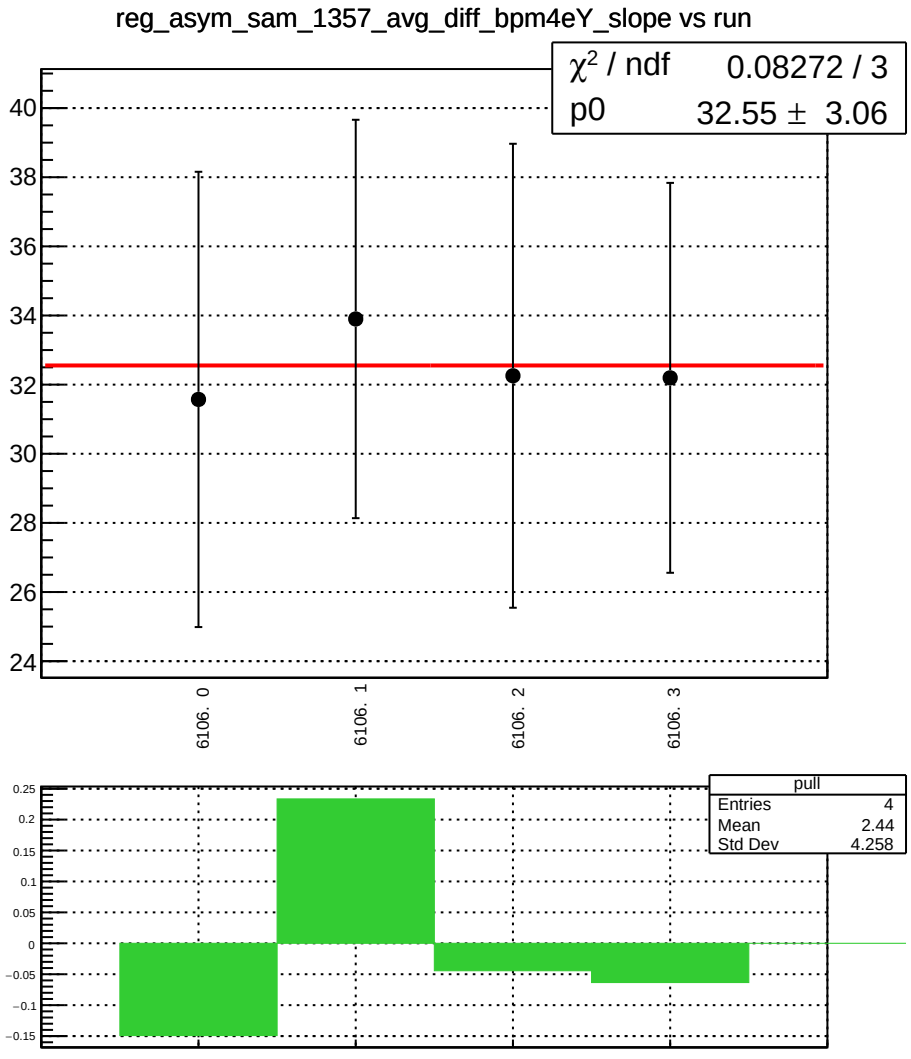

reg_asym_sam_26_48_dd_diff_bpm12X_slope vs run
χ² / ndf 0.005722 / 3
p0 0.6109 ± 0.2612
1.2
1
0.8
0.6
0.4
0.2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −84.45
Std Dev 86.63
0.04
0.02
0
−0.02
−0.04

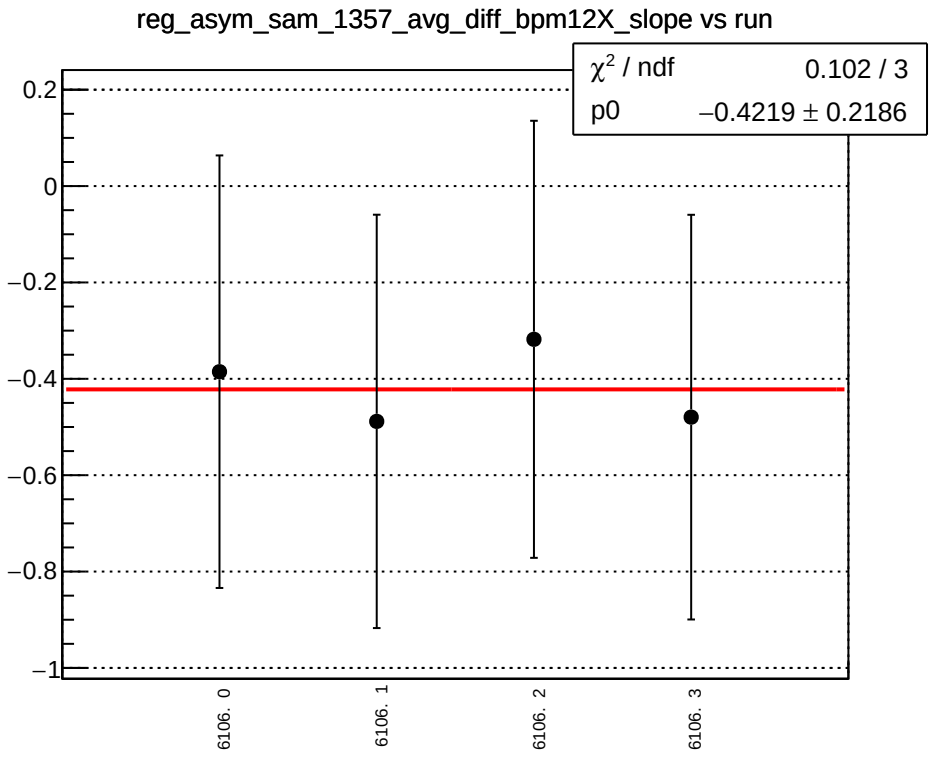

pull1D
Entries 4
Mean 0.0003831
Std Dev 0.03782
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

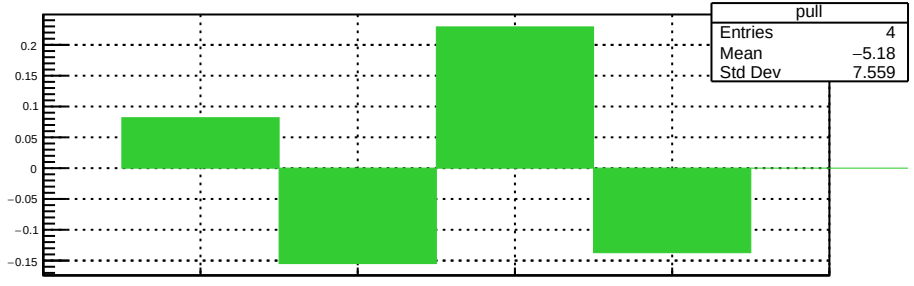

reg_asym_sam_1357_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.0943 / 3
p0 −12.31 ± 4.514
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −49.33
Std Dev 51.21
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean 0.002703
Std Dev 0.1535
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

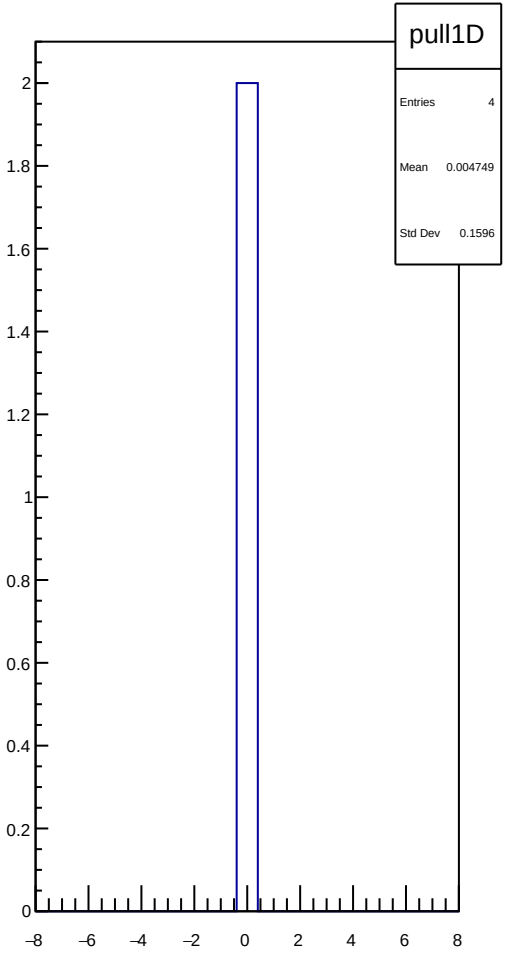

reg_asym_sam_1357_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.05331 / 3
p0 1.338 ± 2.884
10
8
6
4
2
0
−2
−4
−6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −2.708
Std Dev 2.63
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean 0.006403
Std Dev 0.1153
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

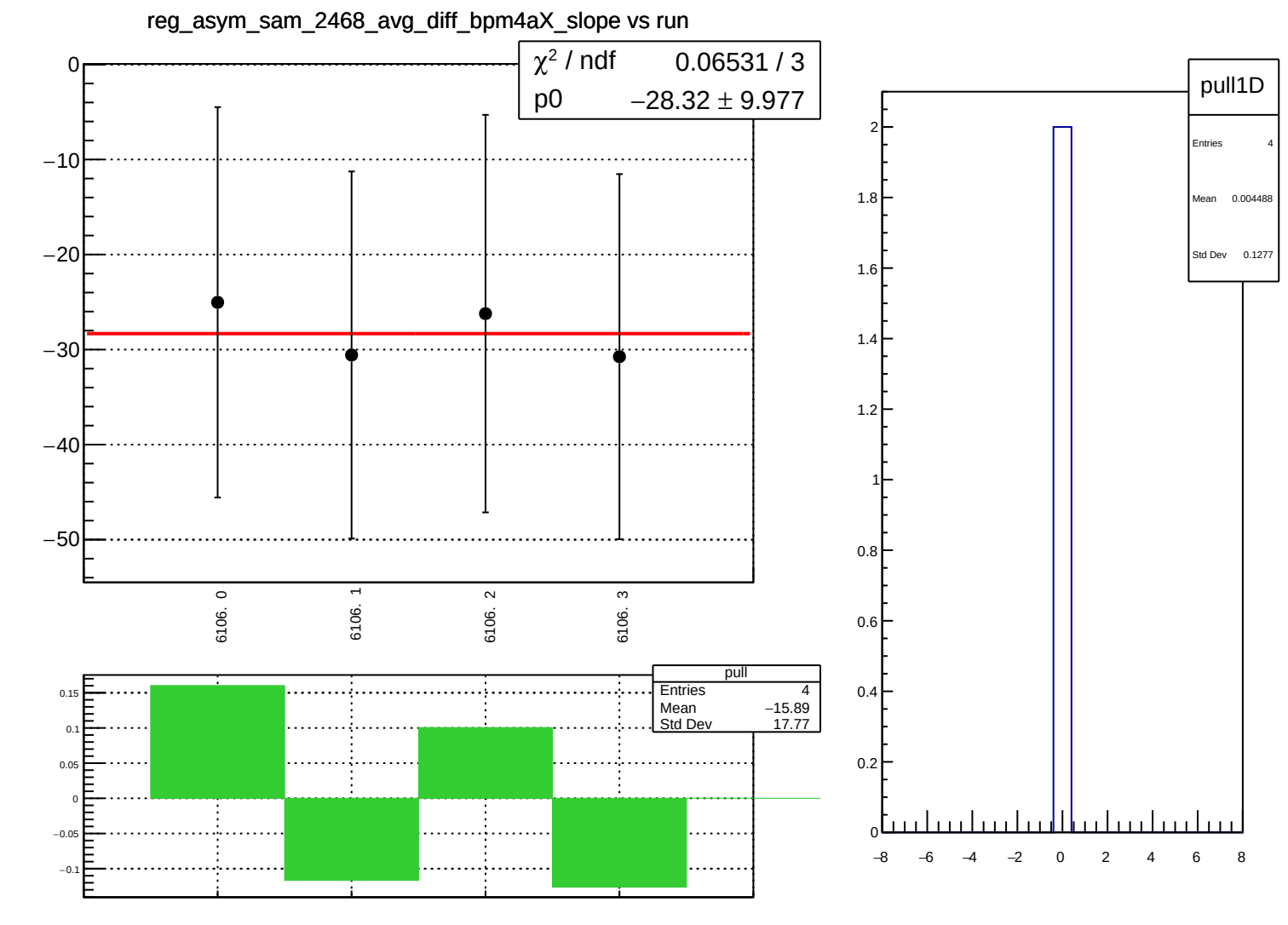

reg_asym_sam_1357_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.04936 / 3
p0 −33.78 ± 5.25
−20
−25
−30
−35
−40
−45
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −53.89
Std Dev 55.75
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean −0.001902
Std Dev 0.1111
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

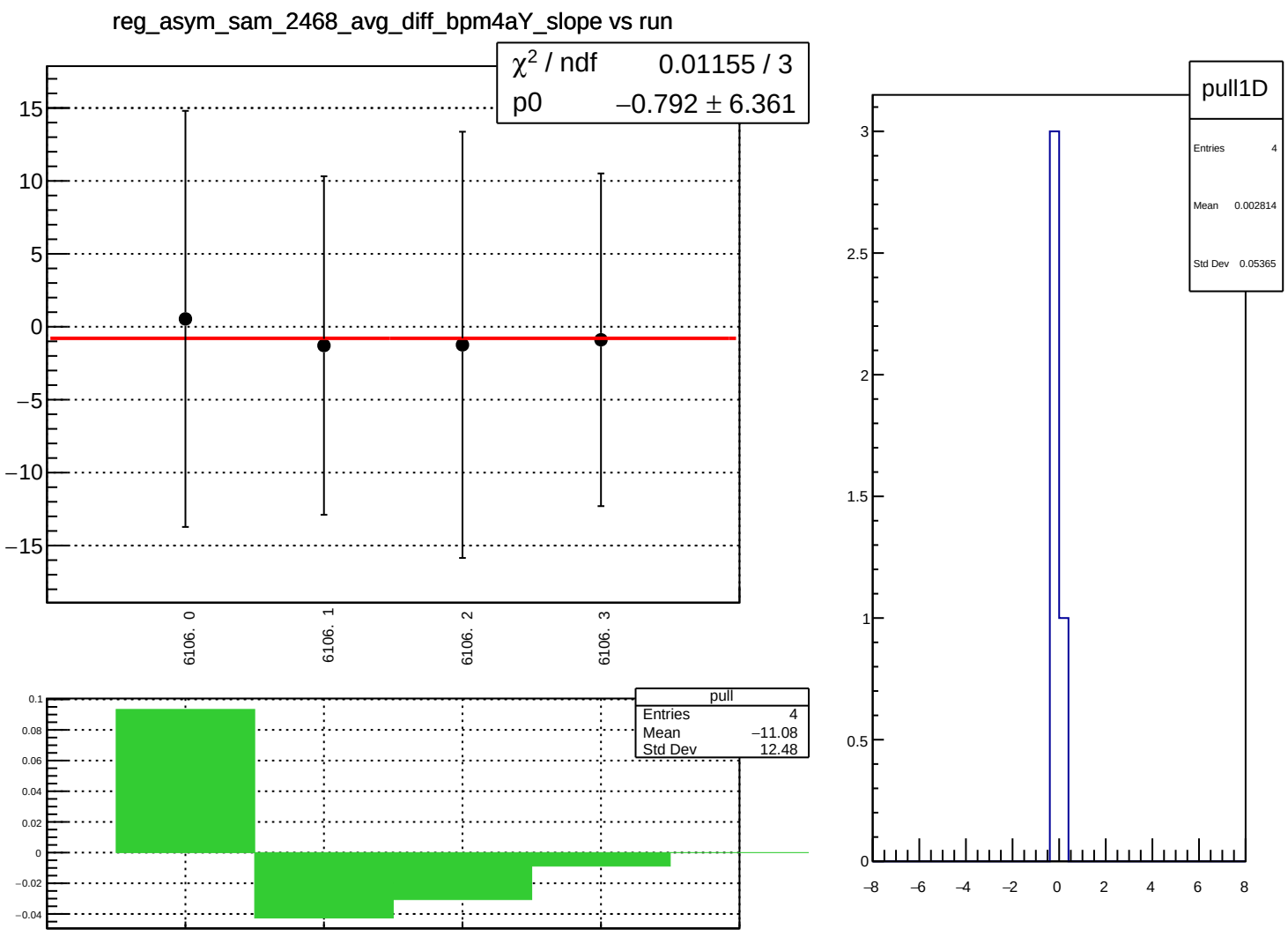

reg_asym_sam_1357_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.08272 / 3
p0 32.55 ± 3.06
40
38
36
34
32
30
28
26
24
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2.44
Std Dev 4.258
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean −0.005882
Std Dev 0.1437
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

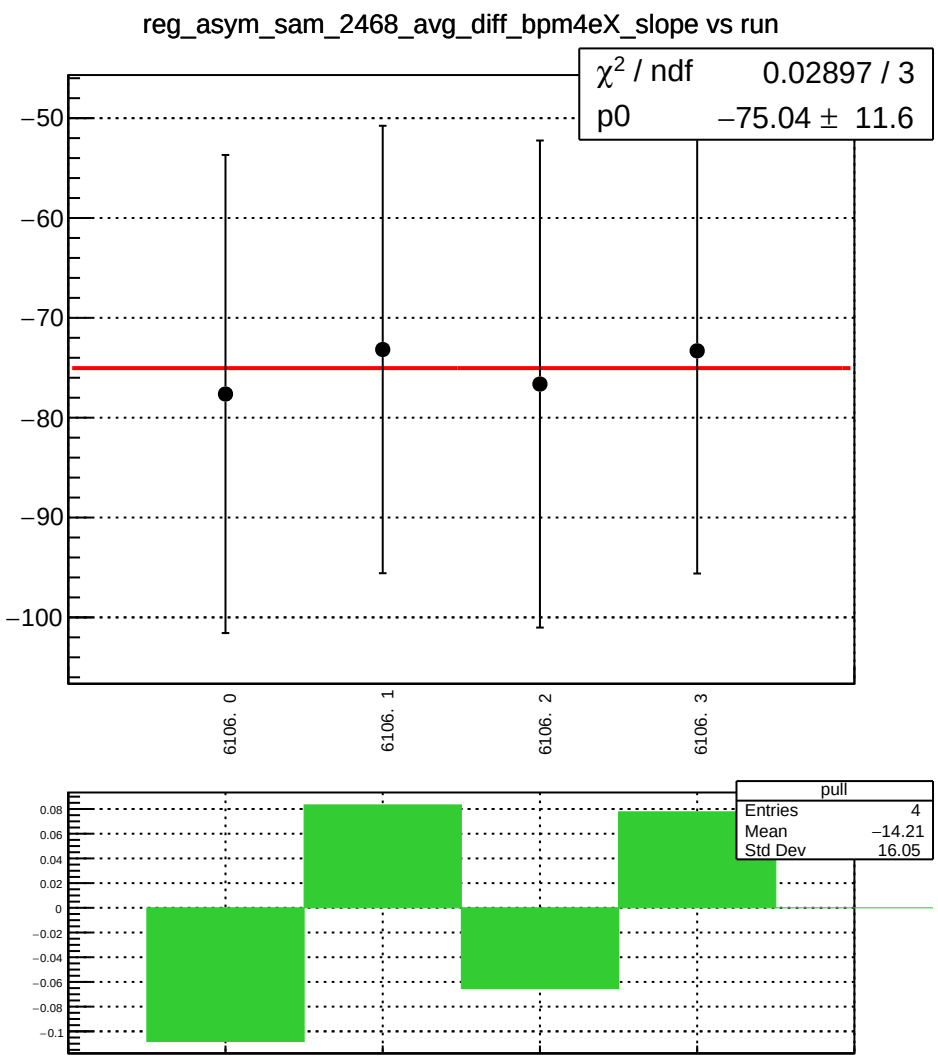

reg_asym_sam_1357_avg_diff_bpm12X_slope vs run
χ² / ndf 0.102 / 3
p0 −0.4219 ± 0.2186
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
6106. 0
6106. 1
6106. 2
6106. 3

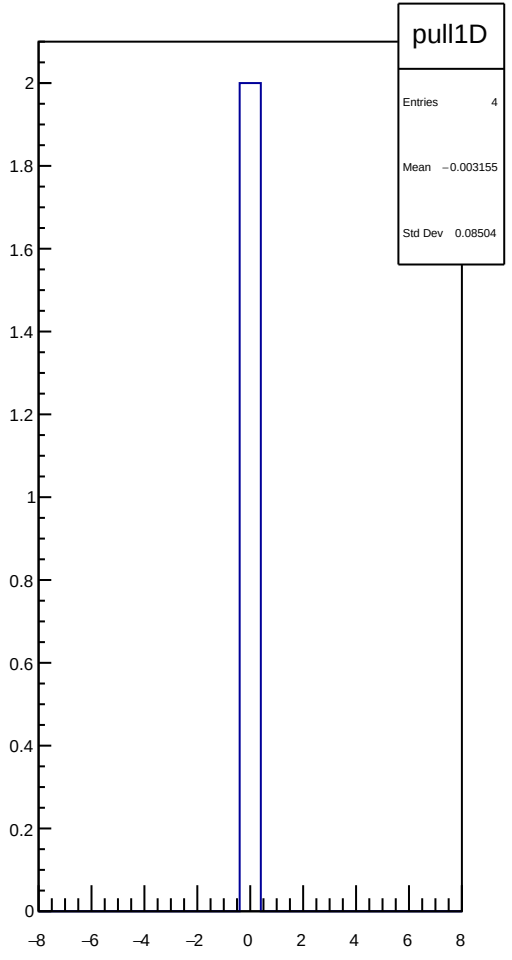

pull
Entries 4
Mean −5.18
Std Dev 7.559
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

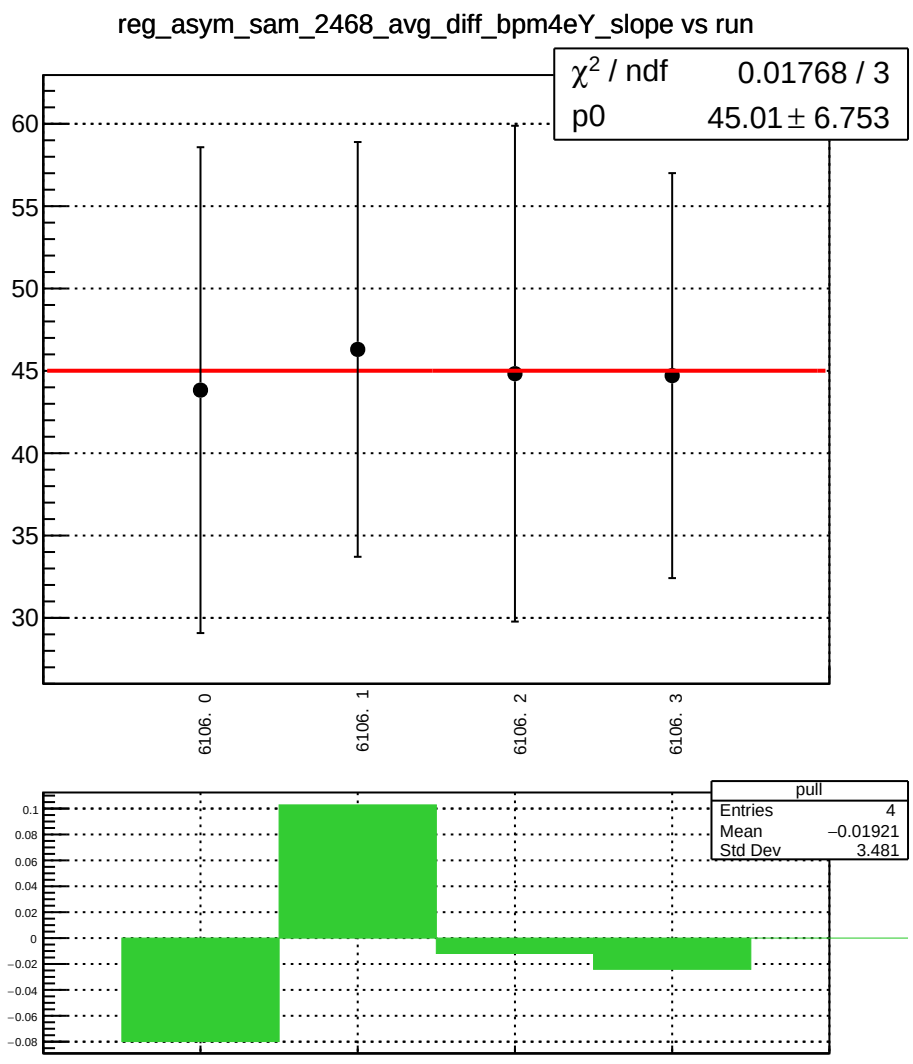

pull1D
Entries 4
Mean 0.004749
Std Dev 0.1596
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

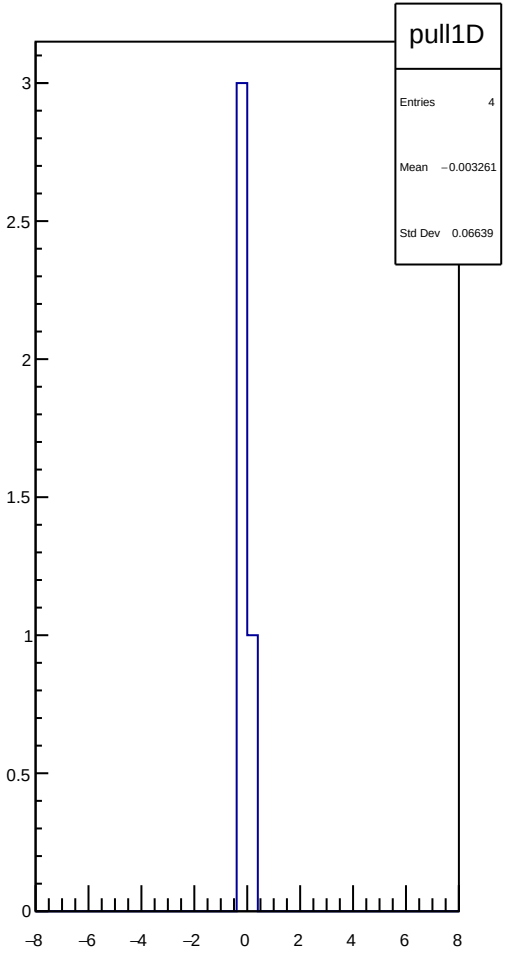

reg_asym_sam_2468_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.06531 / 3
p0 −28.32 ± 9.977
0
−10
−20
−30
−40
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −15.89
Std Dev 17.77
0.15
0.1
0.05
0
−0.05
−0.1
pull1D
Entries 4
Mean 0.004488
Std Dev 0.1277
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

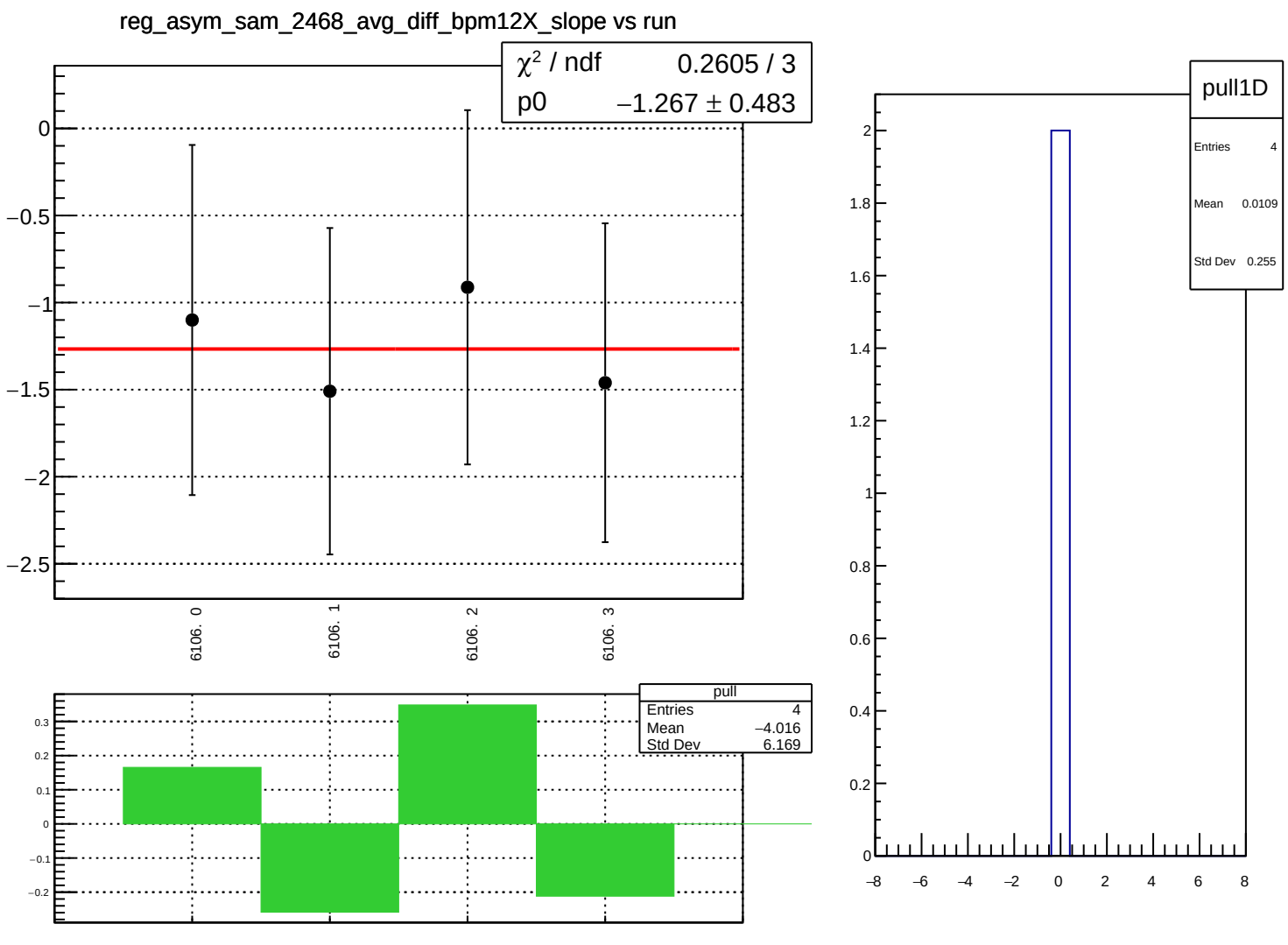

reg_asym_sam_2468_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.01155 / 3
p0 −0.792 ± 6.361
15
10
5
0
−5
−10
−15
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −11.08
Std Dev 12.48
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
pull1D
Entries 4
Mean 0.002814
Std Dev 0.05365
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

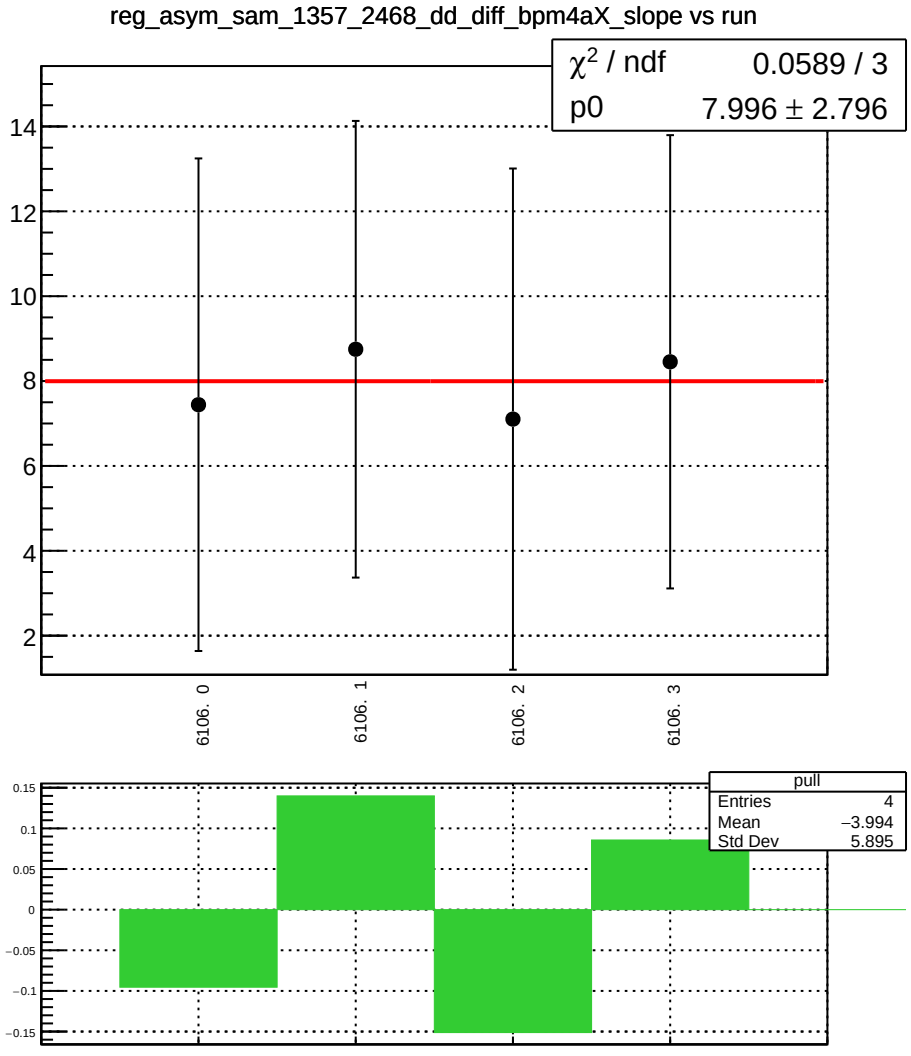

reg_asym_sam_2468_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.02897 / 3
p0 −75.04 ± 11.6
−50
−60
−70
−80
−90
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −14.21
Std Dev 16.05
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
−0.1

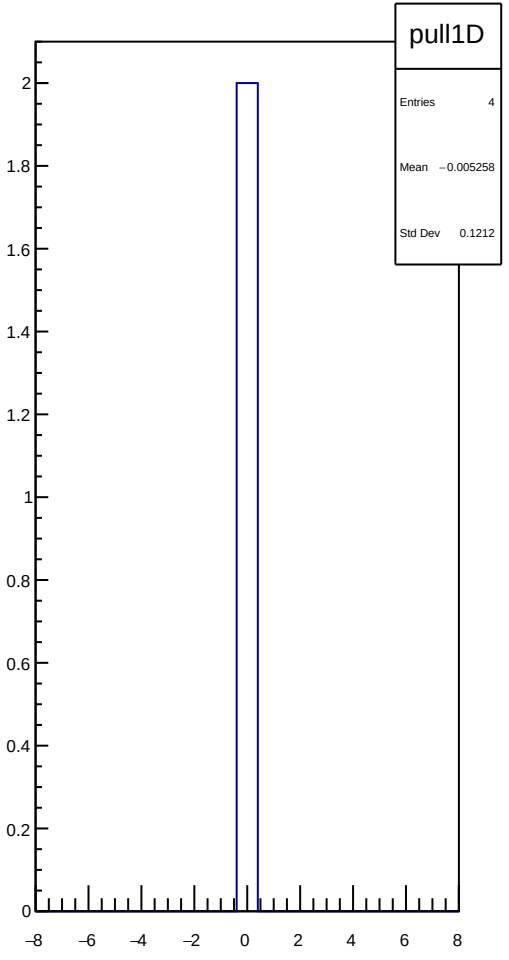

pull1D
Entries 4
Mean −0.003155
Std Dev 0.08504
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

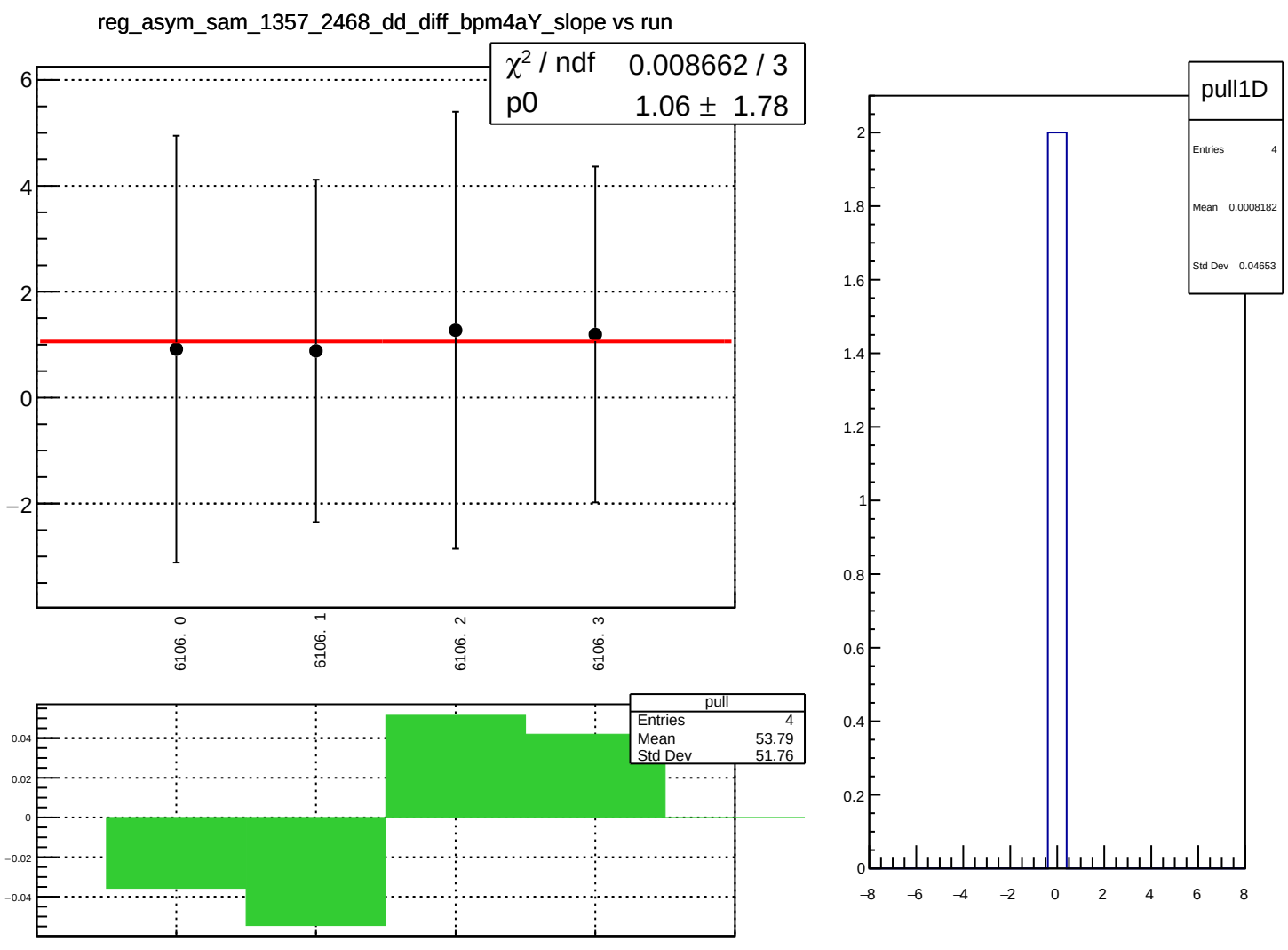

reg_asym_sam_2468_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.01768 / 3
p0 45.01 ± 6.753
60
55
50
45
40
35
30
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −0.01921
Std Dev 3.481
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08

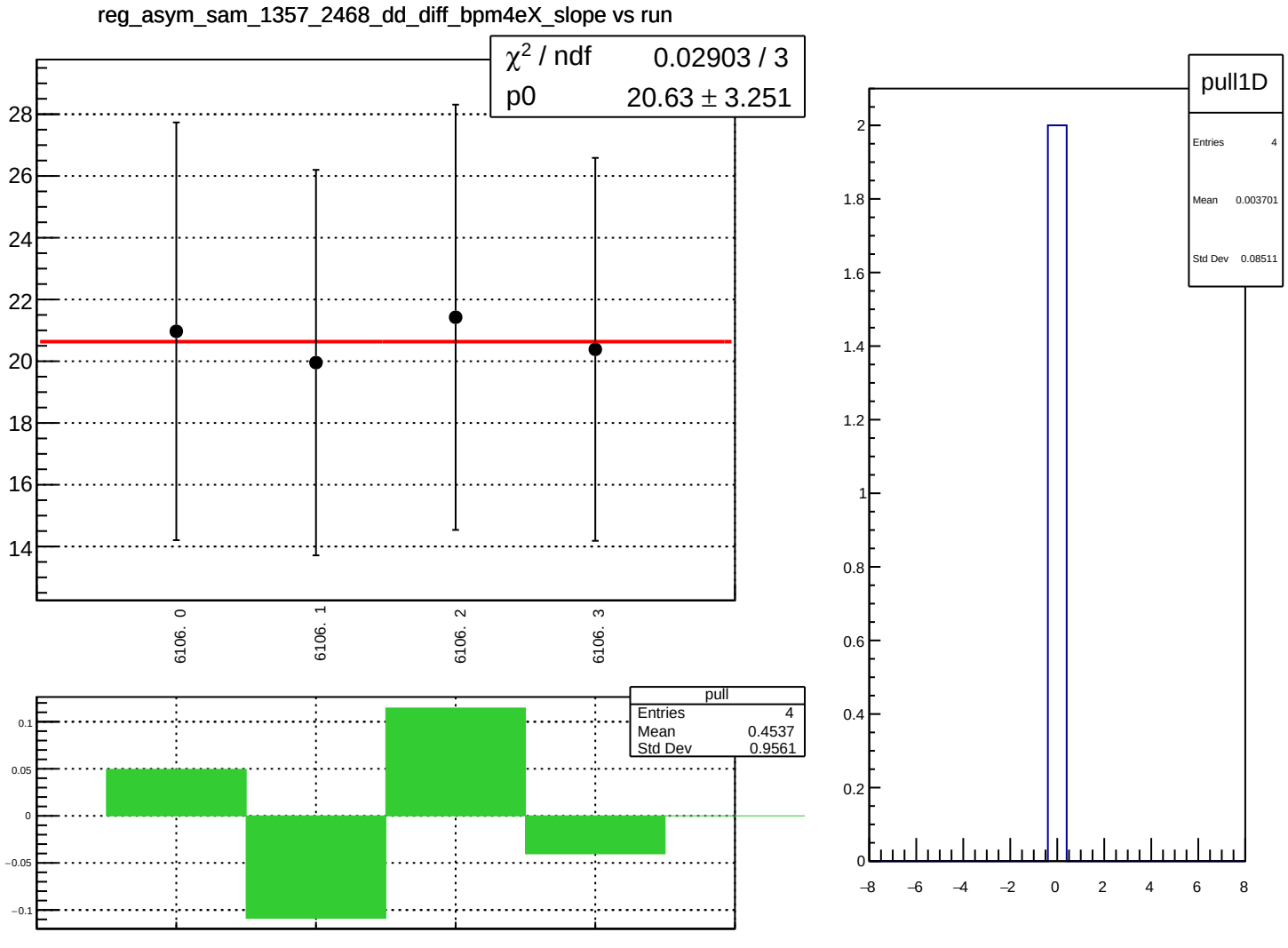

pull1D
Entries 4
Mean −0.003261
Std Dev 0.06639
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

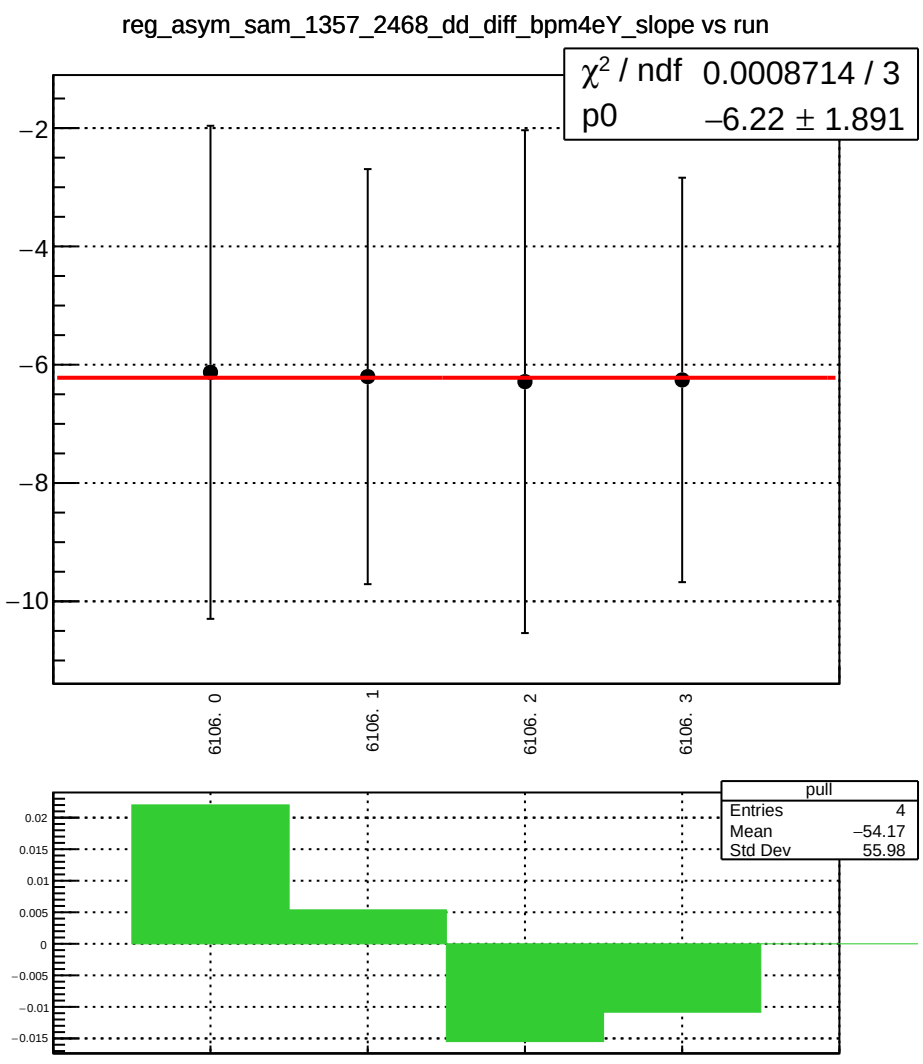

reg_asym_sam_2468_avg_diff_bpm12X_slope vs run
χ² / ndf 0.2605 / 3
p0 −1.267 ± 0.483
0
−0.5
−1
−1.5
−2
−2.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.016
Std Dev 6.169
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean 0.0109
Std Dev 0.255
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

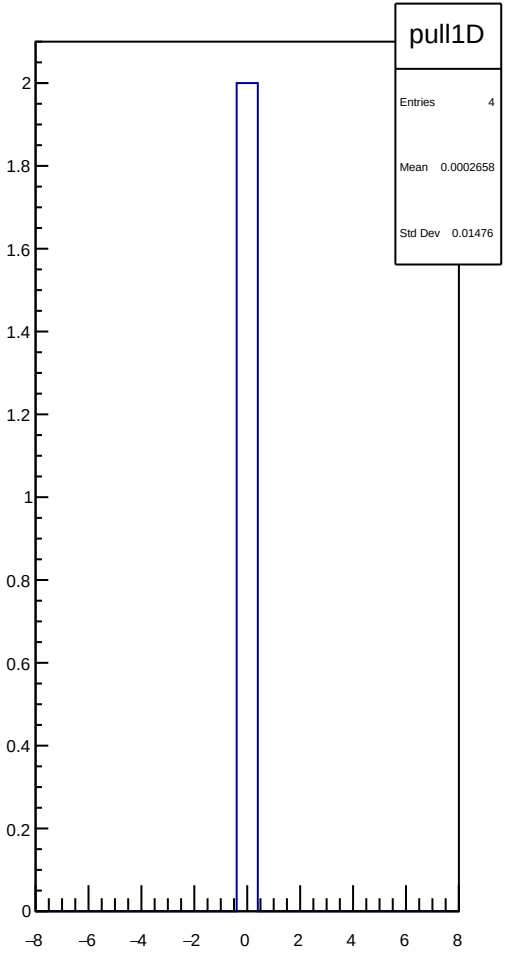

reg_asym_sam_1357_2468_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.0589 / 3
p0 7.996 ± 2.796
14
12
10
8
6
4
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.994
Std Dev 5.895
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

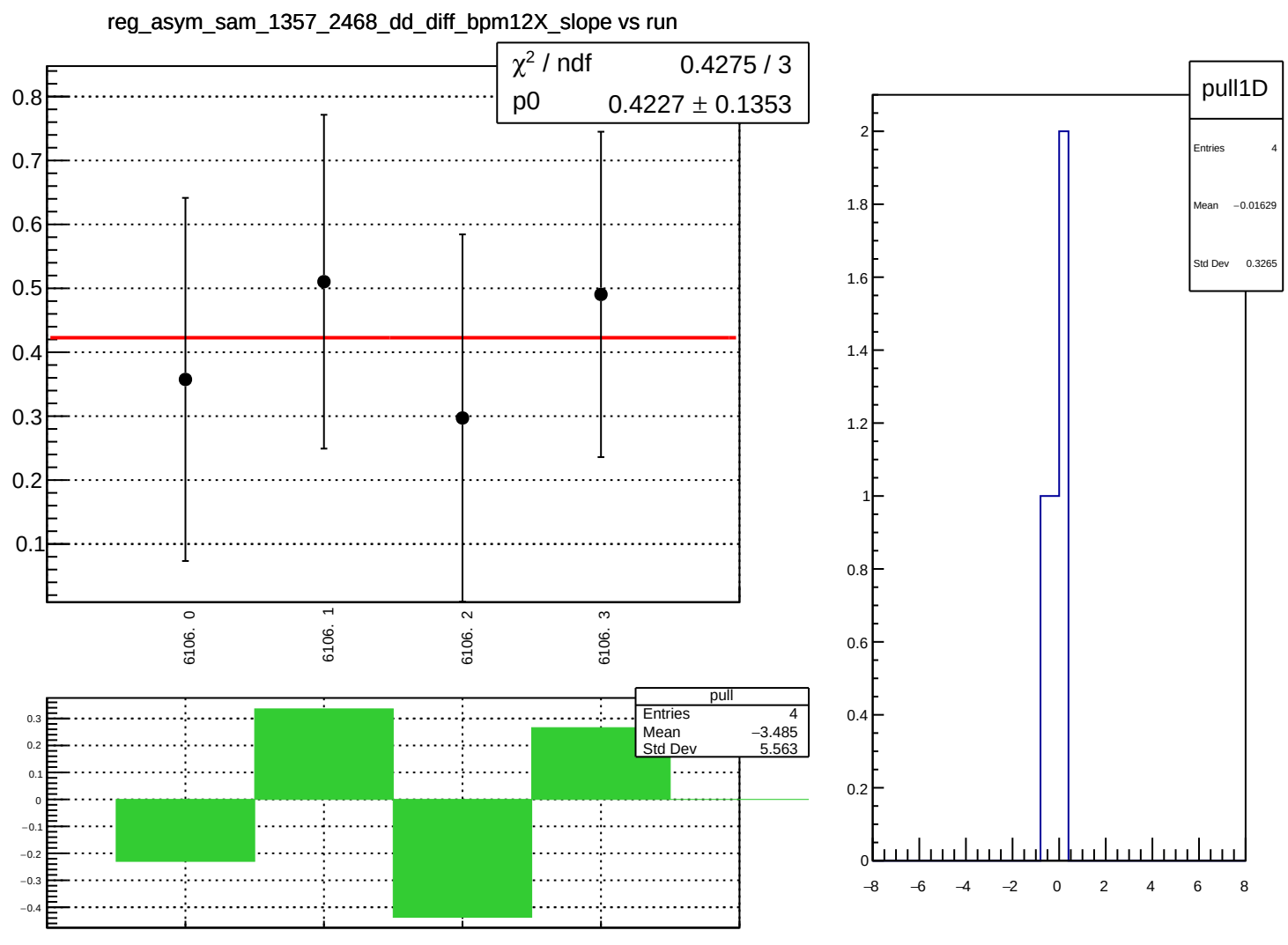

pull1D
Entries 4
Mean −0.005258
Std Dev 0.1212
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

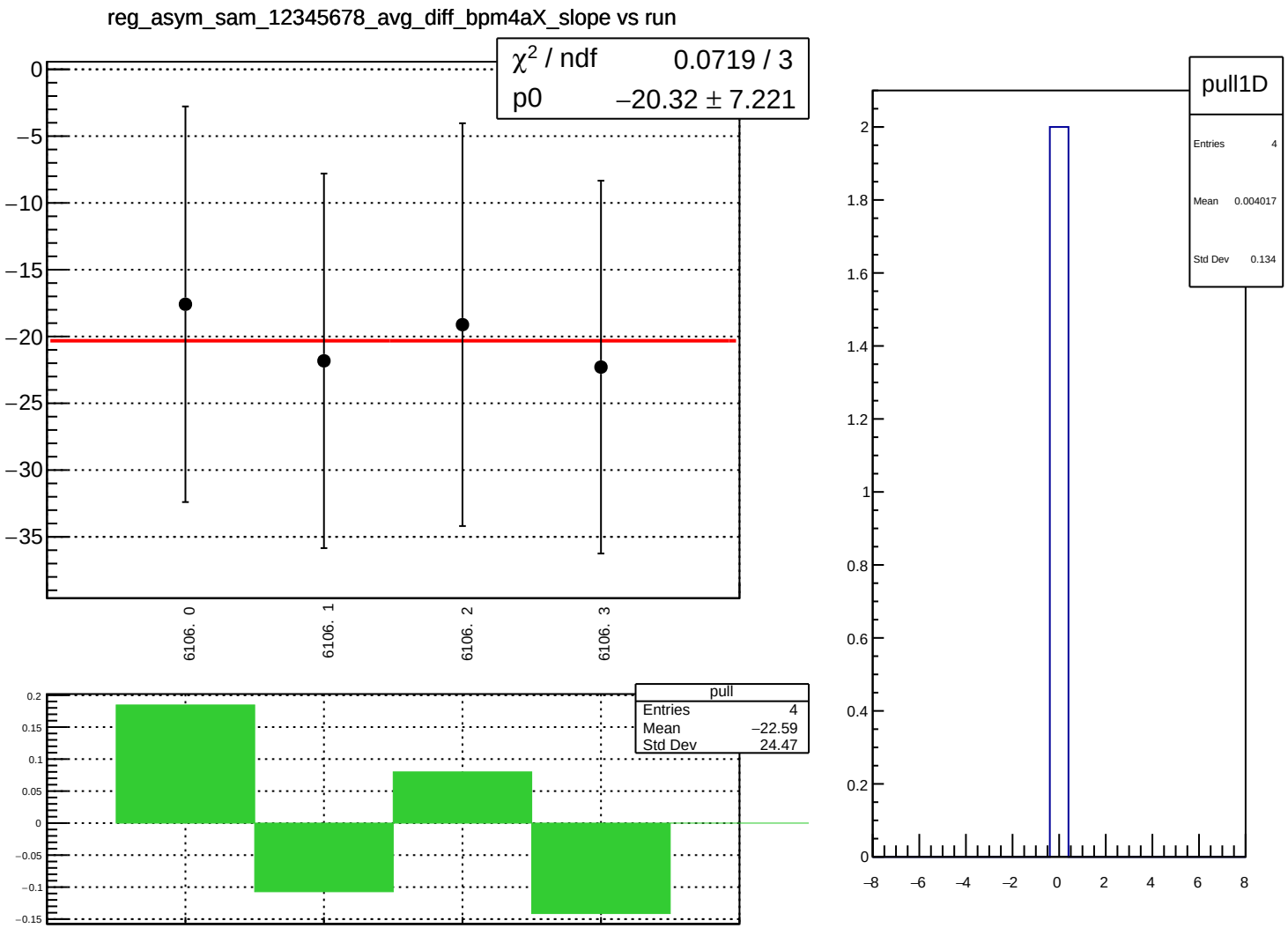

reg_asym_sam_1357_2468_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.008662 / 3
p0 1.06 ± 1.78
6
4
2
0
−2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 53.79
Std Dev 51.76
0.04
0.02
0
−0.02
−0.04
pull1D
Entries 4
Mean 0.0008182
Std Dev 0.04653
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

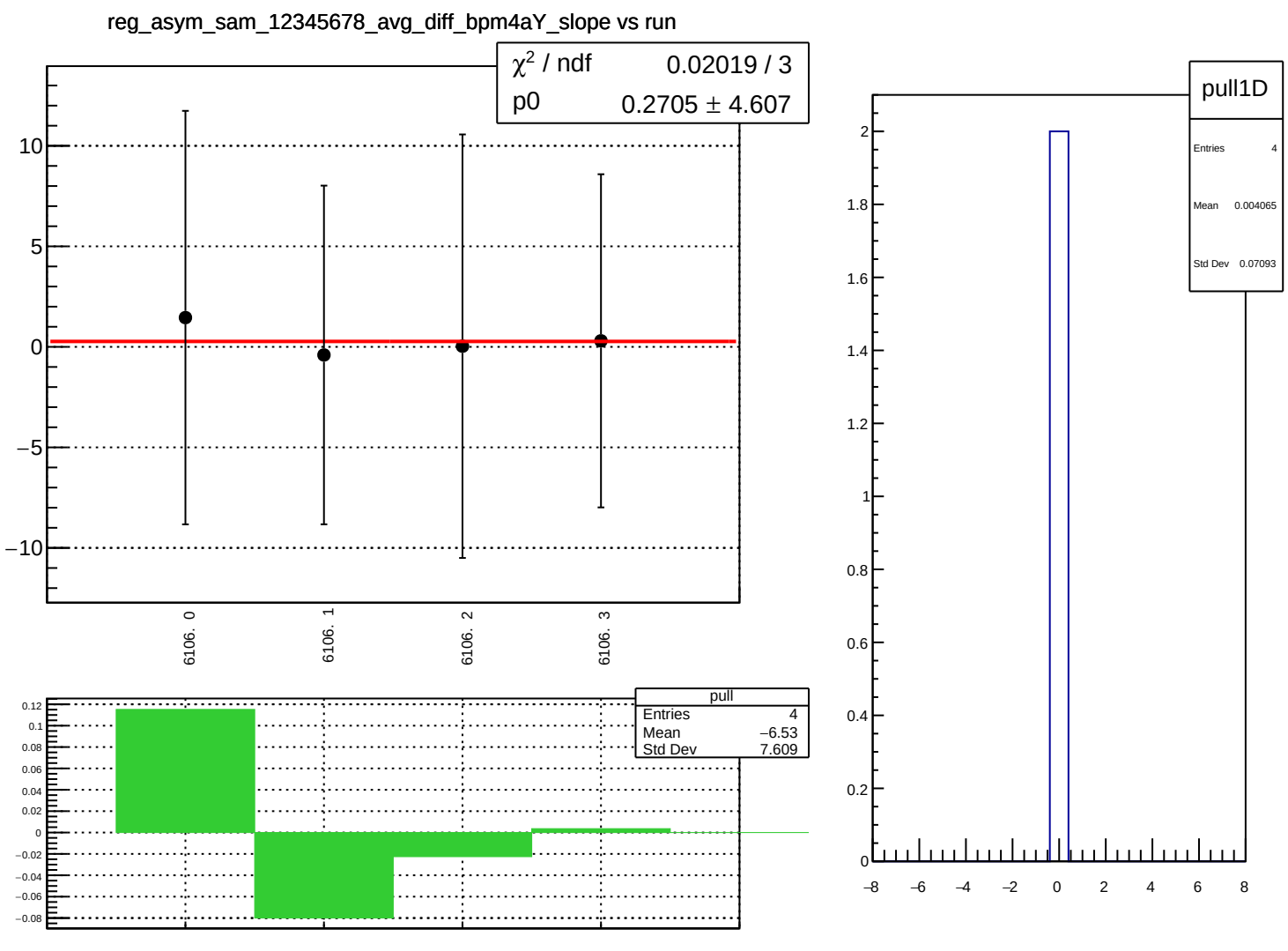

reg_asym_sam_1357_2468_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.02903 / 3
p0 20.63 ± 3.251
28
26
24
22
20
18
16
14
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0.4537
Std Dev 0.9561
0.1
0.05
0
−0.05
−0.1
pull1D
Entries 4
Mean 0.003701
Std Dev 0.08511
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

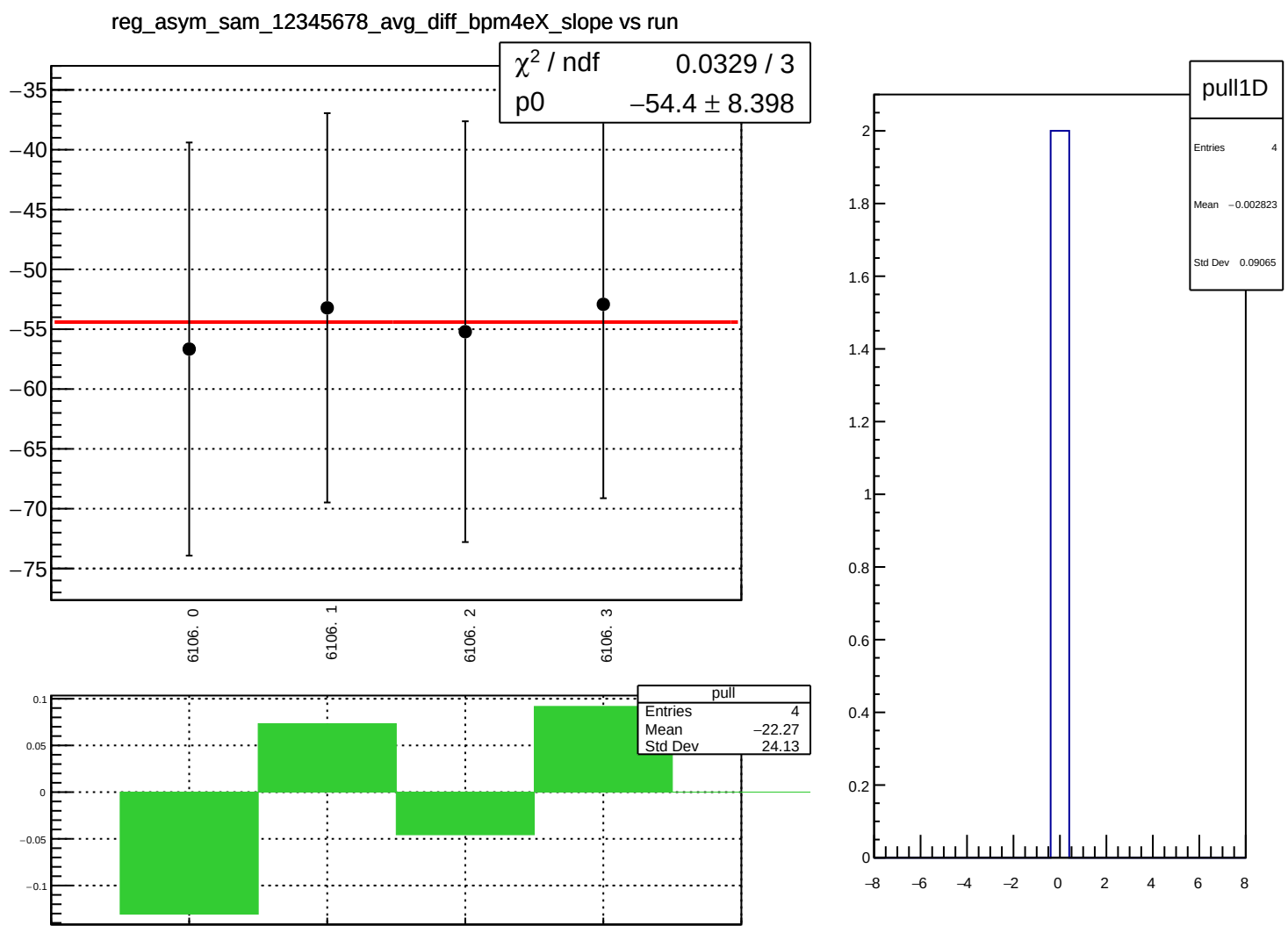

reg_asym_sam_1357_2468_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.0008714 / 3
p0 −6.22 ± 1.891
−2
−4
−6
−8
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −54.17
Std Dev 55.98
0.02
0.015
0.01
0.005
0
−0.005
−0.01
−0.015

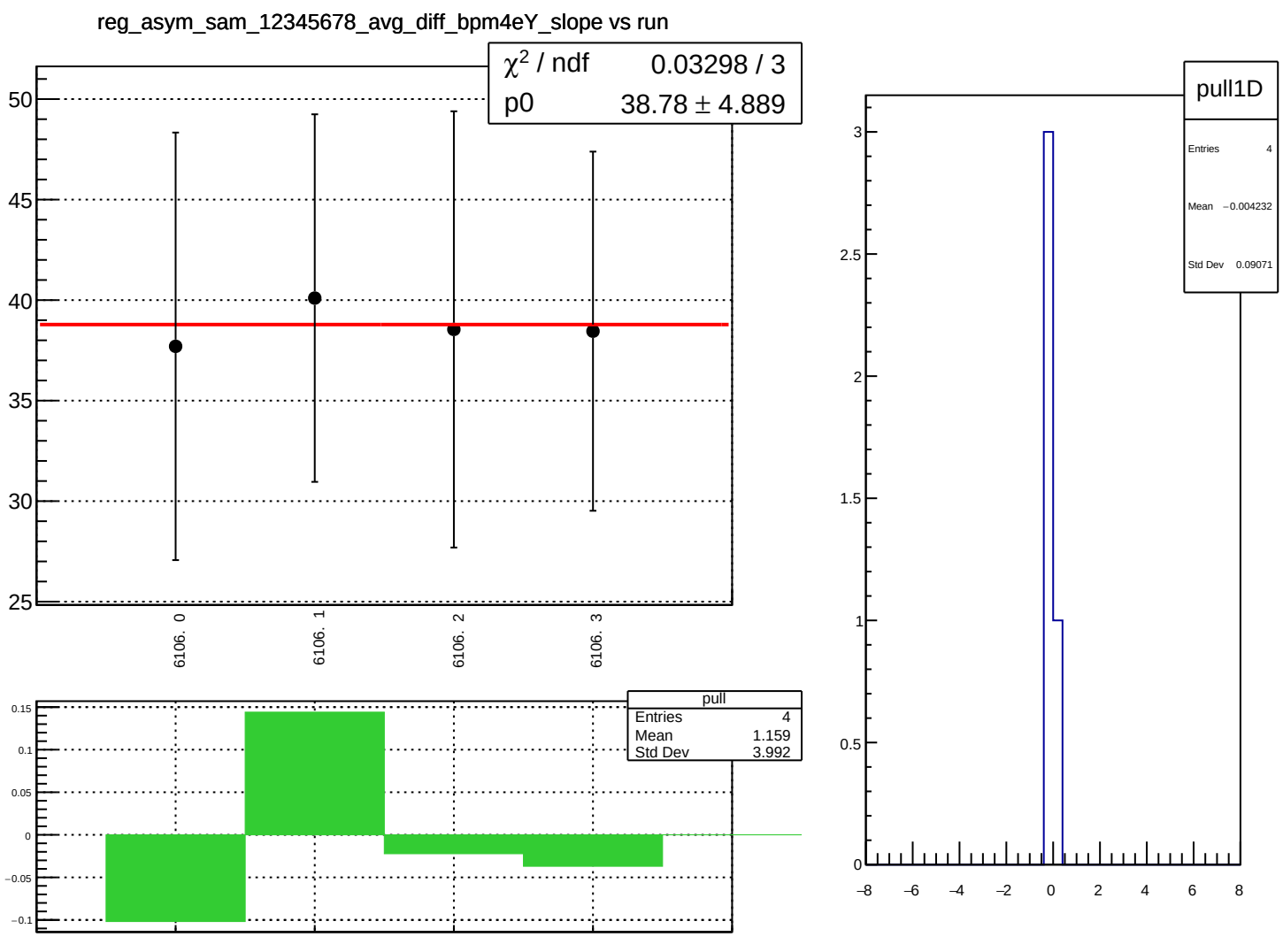

pull1D
Entries 4
Mean 0.0002658
Std Dev 0.01476
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

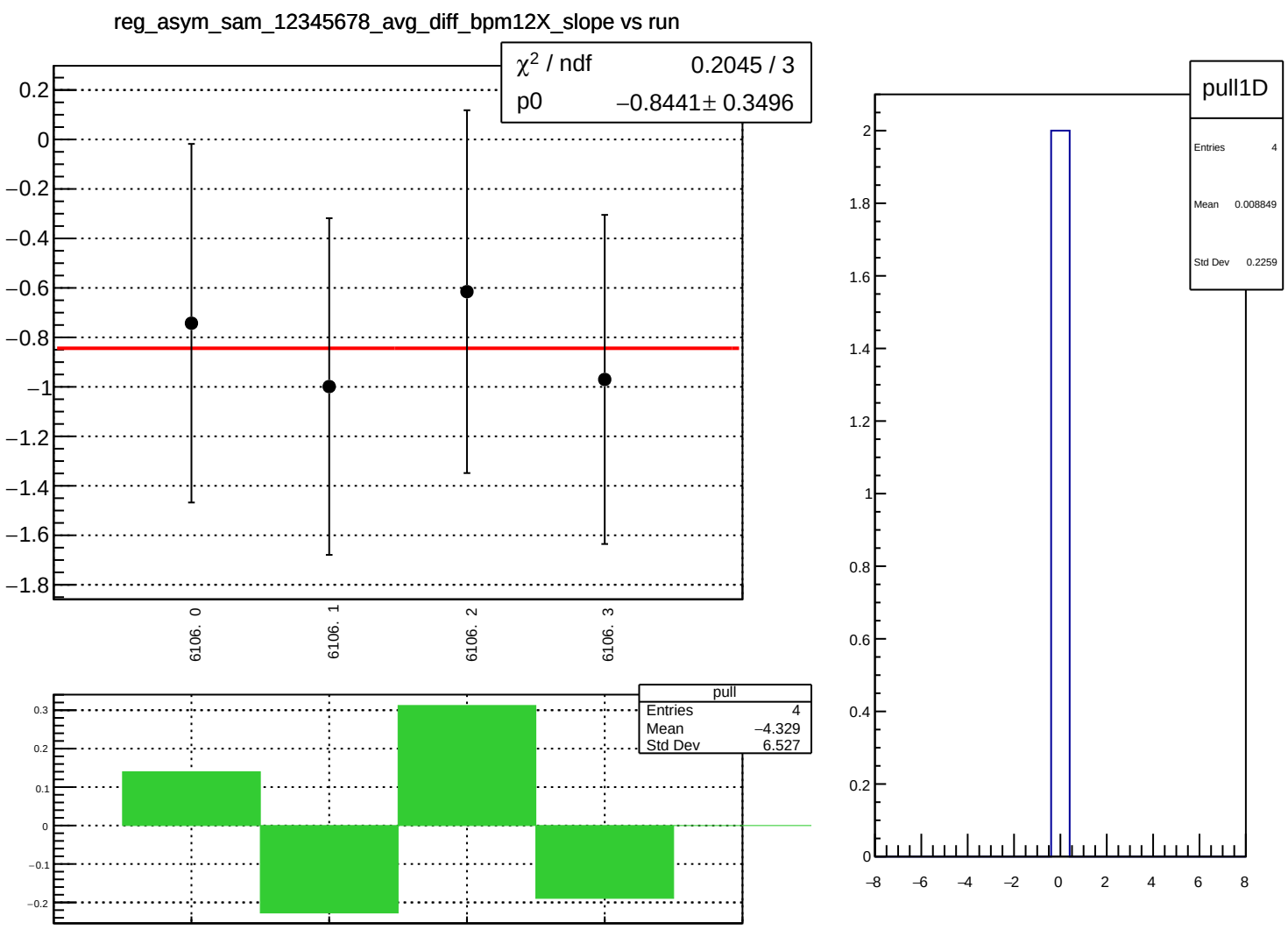

reg_asym_sam_1357_2468_dd_diff_bpm12X_slope vs run
χ² / ndf 0.4275 / 3
p0 0.4227 ± 0.1353
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.485
Std Dev 5.563
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
pull1D
Entries 4
Mean −0.01629
Std Dev 0.3265
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

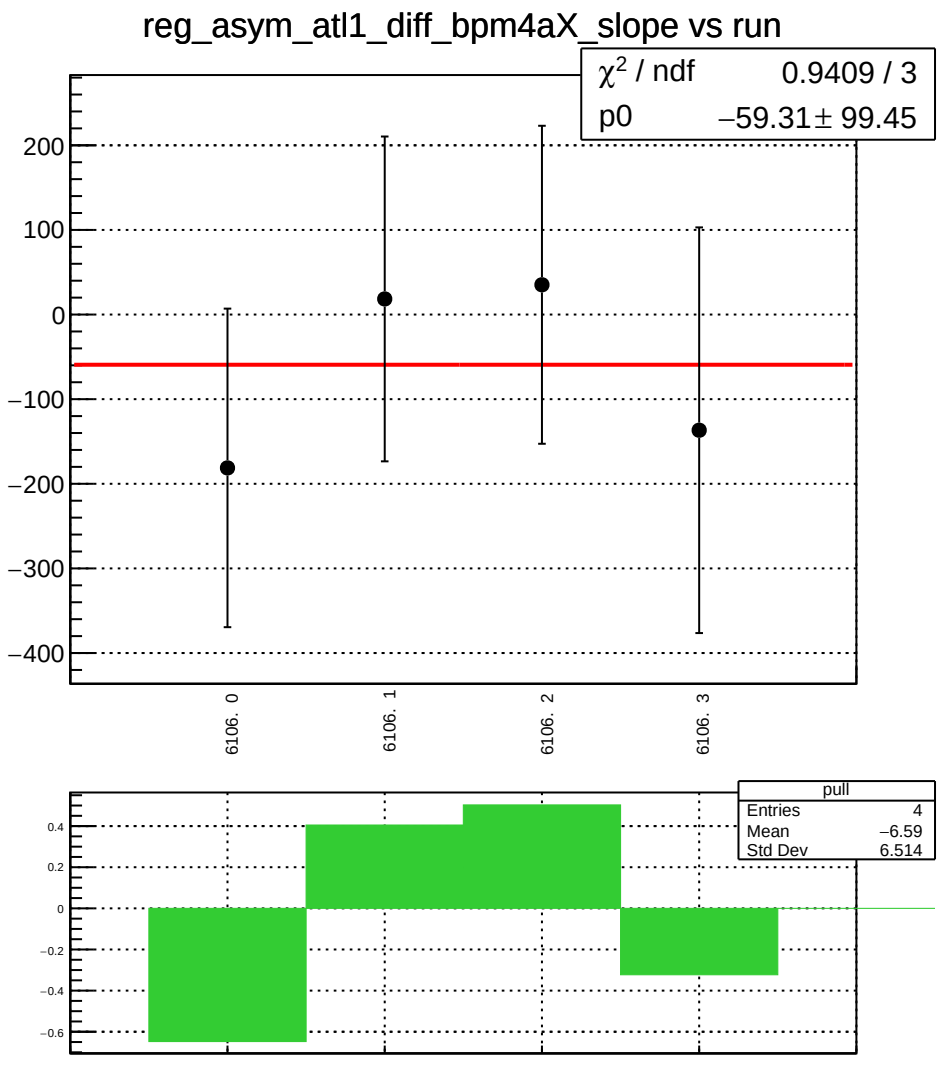

reg_asym_sam_12345678_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.0719 / 3
p0 −20.32 ± 7.221
0
−5
−10
−15
−20
−25
−30
−35
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −22.59
Std Dev 24.47
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
pull1D
Entries 4
Mean 0.004017
Std Dev 0.134
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

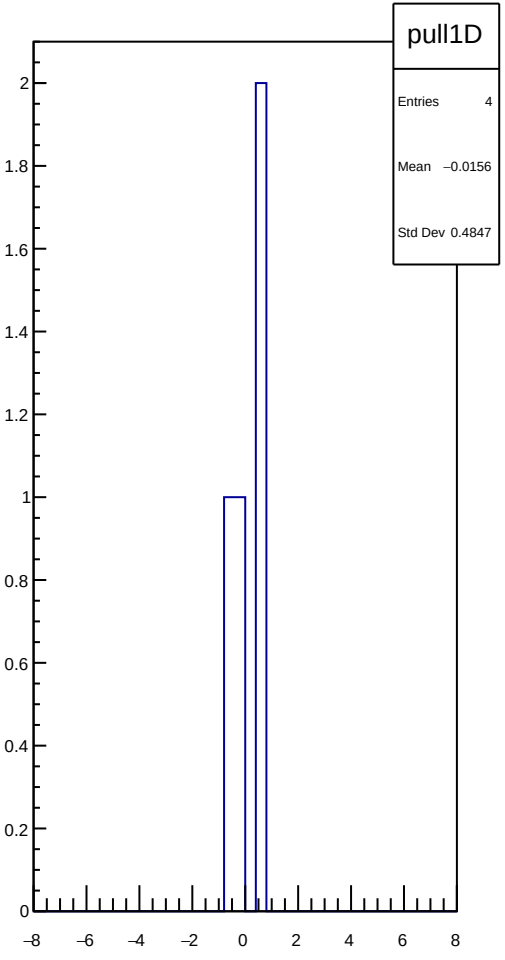

reg_asym_sam_12345678_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.02019 / 3
p0 0.2705 ± 4.607
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.53
Std Dev 7.609
0.12
0.1
0.08
0.06
0.04
0.02
0
−0.02
−0.04
−0.06
−0.08
pull1D
Entries 4
Mean 0.004065
Std Dev 0.07093
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

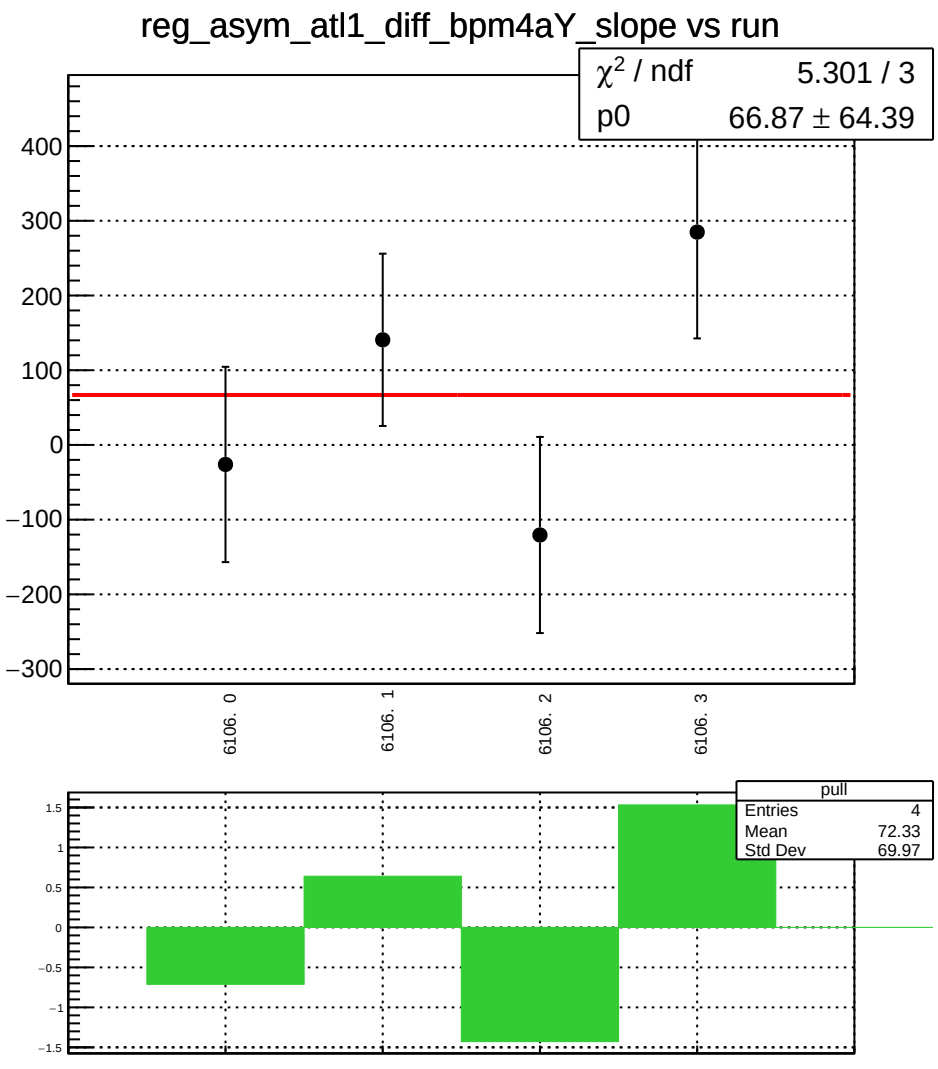

reg_asym_sam_12345678_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.0329 / 3
p0 −54.4 ± 8.398
−35
−40
−45
−50
−55
−60
−65
−70
−75
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −22.27
Std Dev 24.13
0.1
0.05
0
−0.05
−0.1
pull1D
Entries 4
Mean −0.002823
Std Dev 0.09065
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

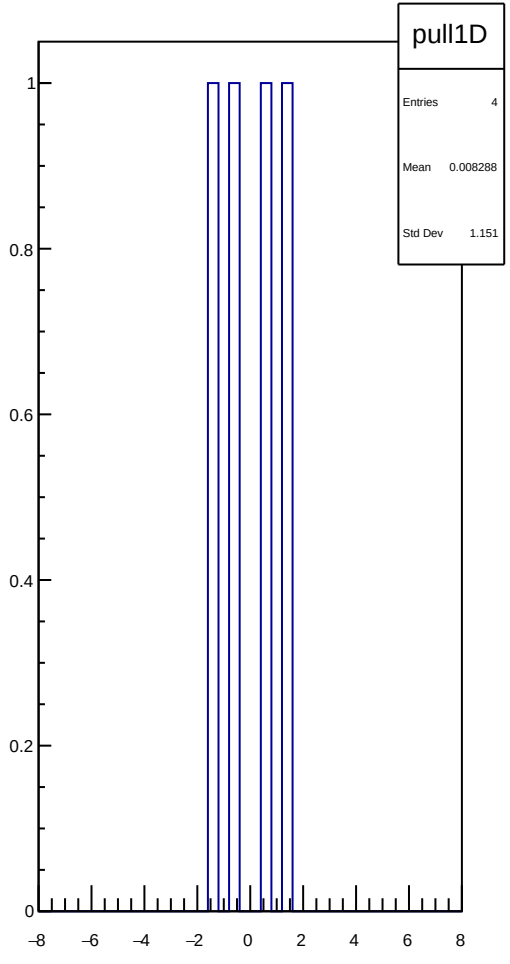

reg_asym_sam_12345678_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.03298 / 3
p0 38.78 ± 4.889
50
45
40
35
30
25
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 1.159
Std Dev 3.992
0.15
0.1
0.05
0
−0.05
−0.1
pull1D
Entries 4
Mean −0.004232
Std Dev 0.09071
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

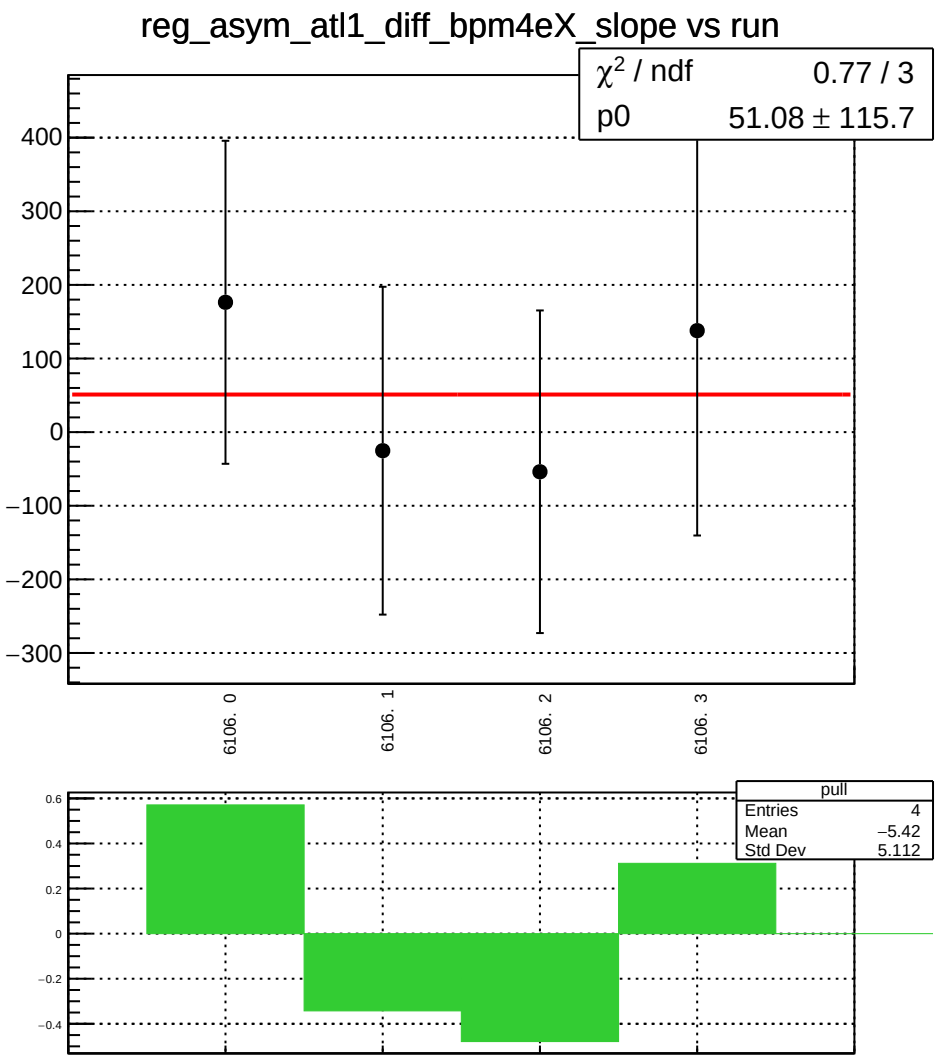

reg_asym_sam_12345678_avg_diff_bpm12X_slope vs run
χ² / ndf 0.2045 / 3
p0 −0.8441± 0.3496
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
−1.4
−1.6
−1.8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.329
Std Dev 6.527
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean 0.008849
Std Dev 0.2259
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

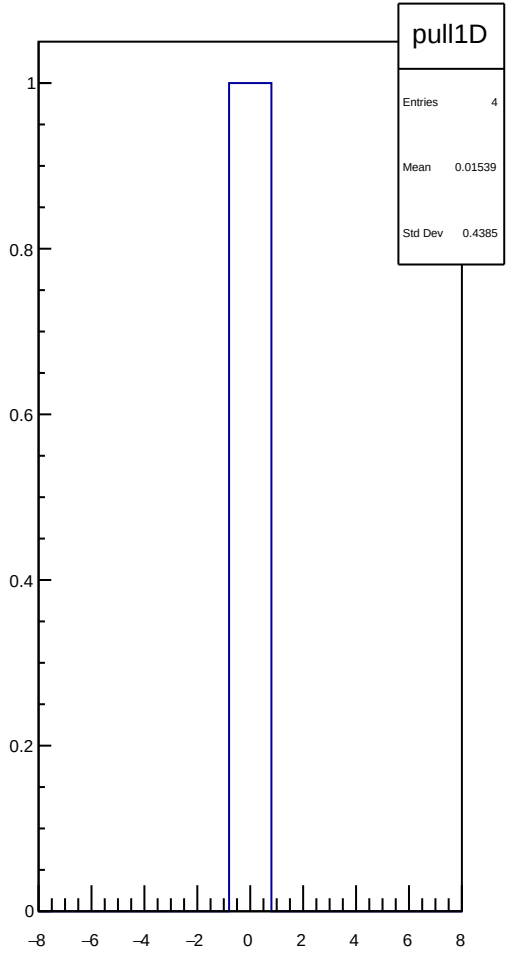

reg_asym_atl1_diff_bpm4aX_slope vs run
χ² / ndf 0.9409 / 3
p0 −59.31 ± 99.45
200
100
0
−100
−200
−300
−400
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −6.59
Std Dev 6.514
0.4
0.2
0
−0.2
−0.4
−0.6

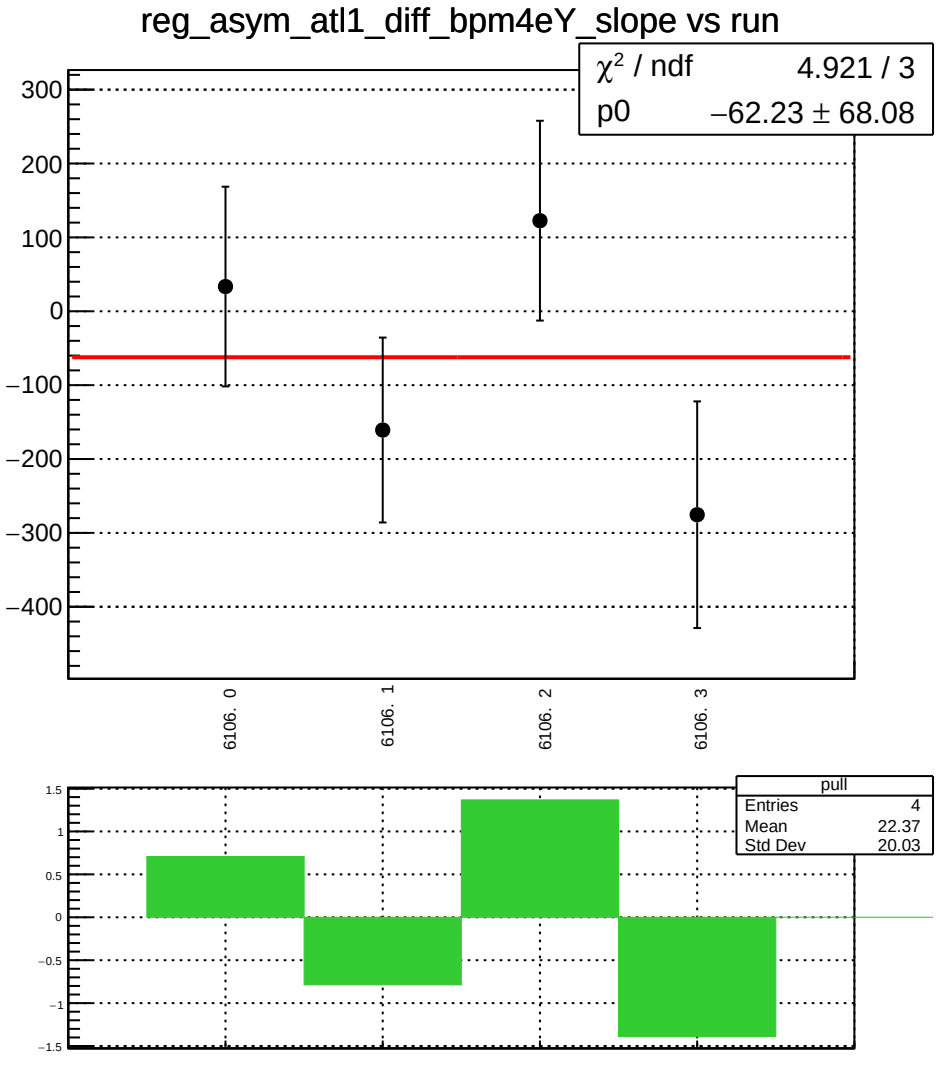

pull1D
Entries 4
Mean −0.0156
Std Dev 0.4847
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

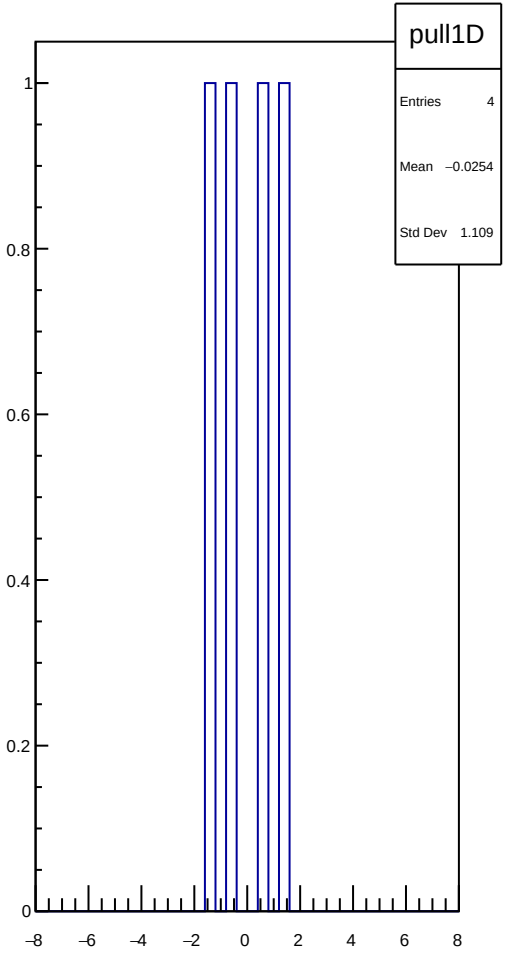

reg_asym_atl1_diff_bpm4aY_slope vs run
χ² / ndf 5.301 / 3
p0 66.87 ± 64.39
400
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 72.33
Std Dev 69.97
1.5
1
0.5
0
−0.5
−1
−1.5

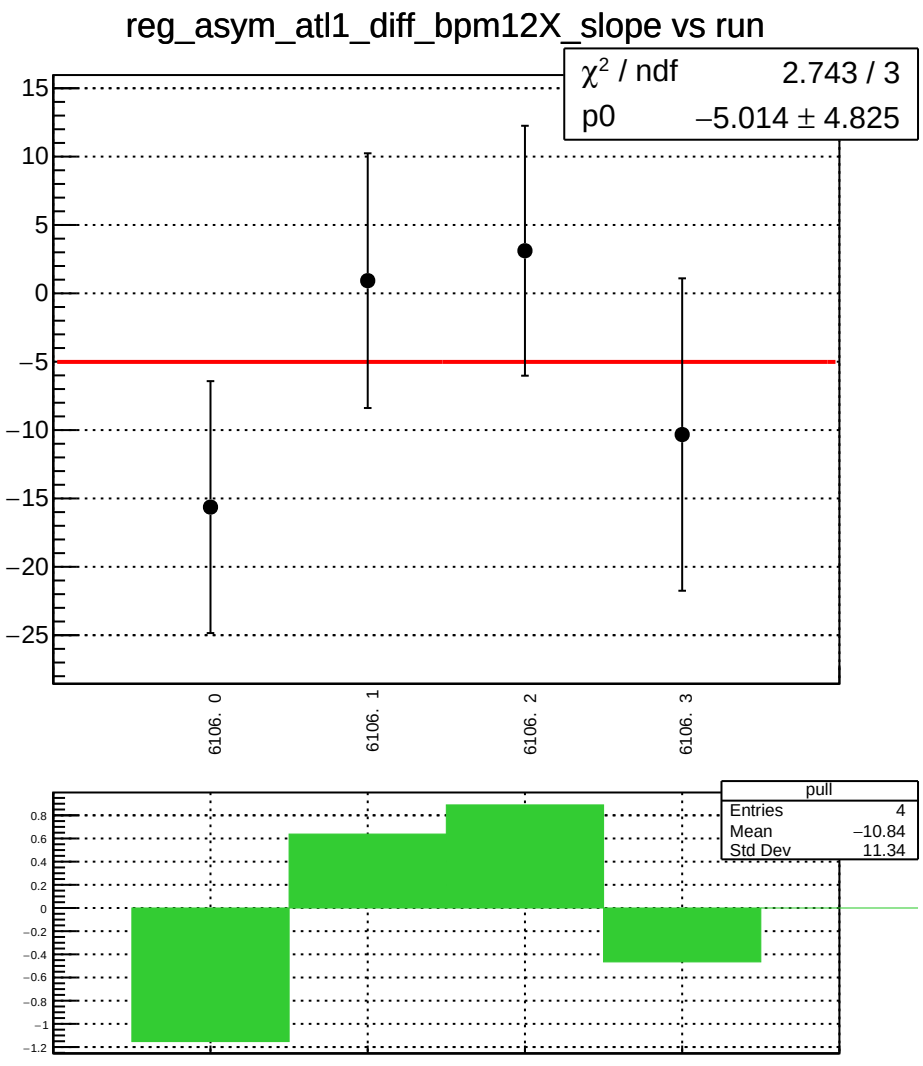

pull1D
Entries 4
Mean 0.008288
Std Dev 1.151
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

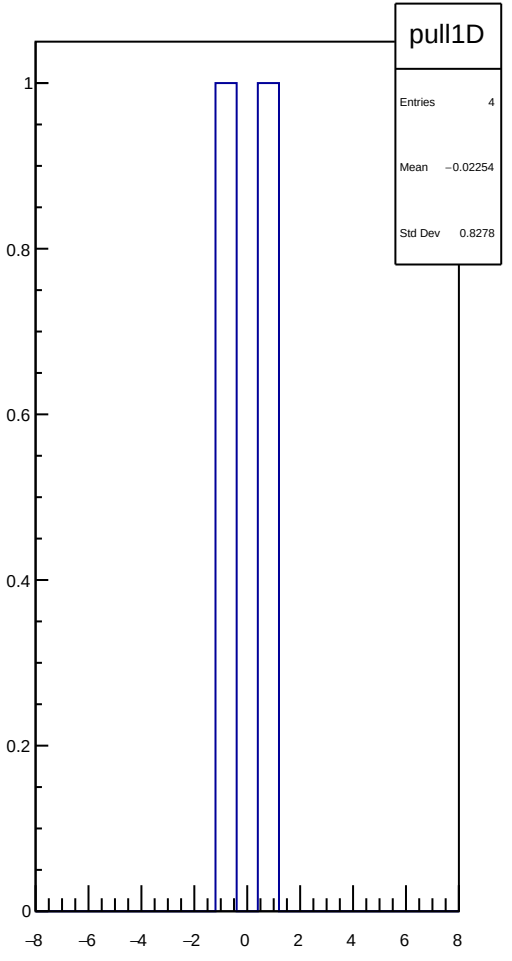

reg_asym_atl1_diff_bpm4eX_slope vs run
χ² / ndf 0.77 / 3
p0 51.08 ± 115.7
400
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.42
Std Dev 5.112
0.6
0.4
0.2
0
−0.2
−0.4

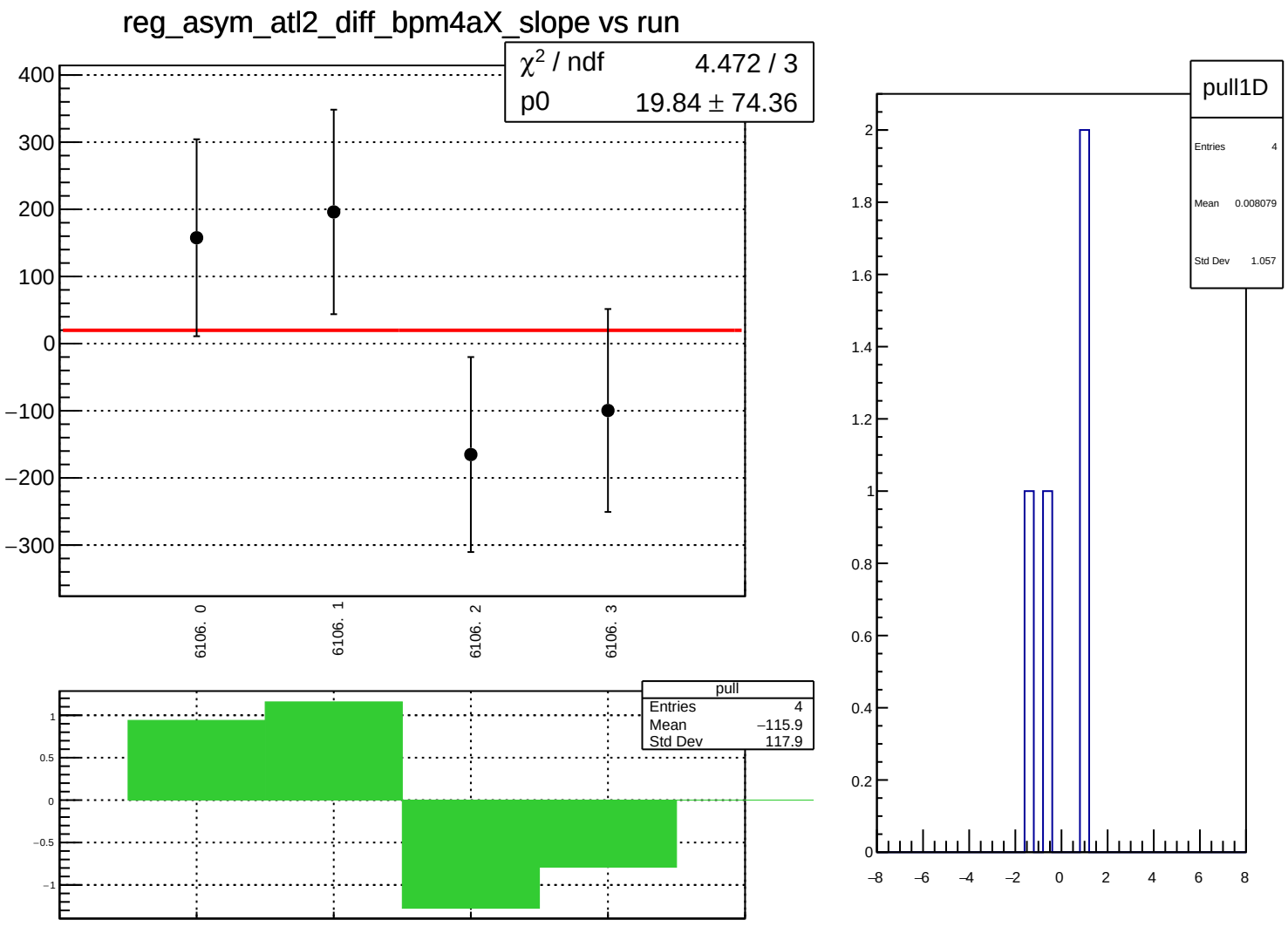

pull1D
Entries 4
Mean 0.01539
Std Dev 0.4385
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

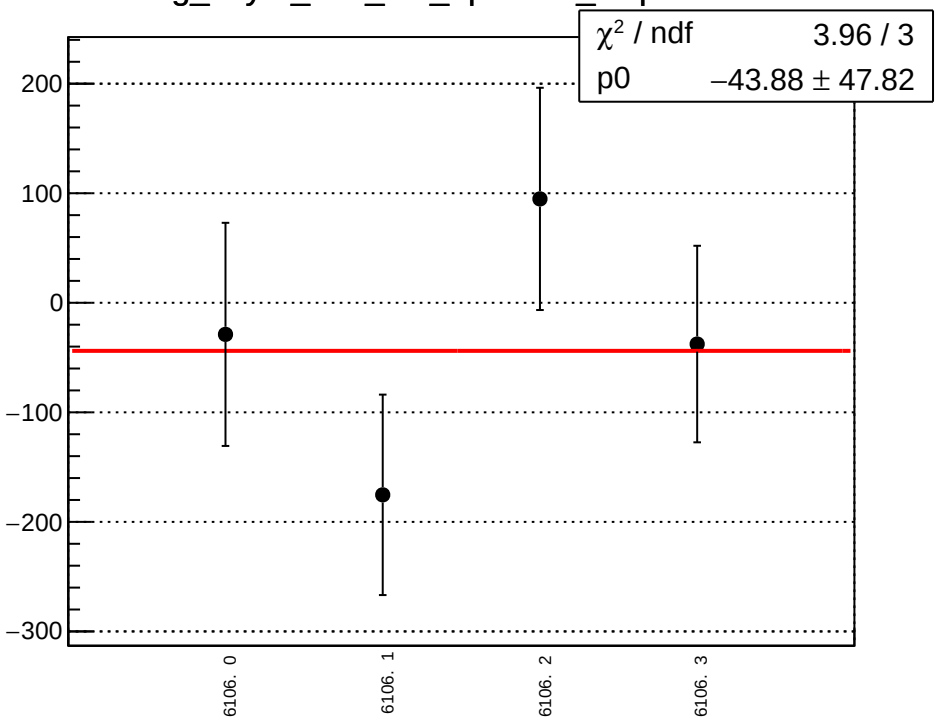

reg_asym_atl1_diff_bpm4eY_slope vs run
χ² / ndf 4.921 / 3
p0 −62.23 ± 68.08
300
200
100
0
−100
−200
−300
−400
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 22.37
Std Dev 20.03
1.5
1
0.5
0
−0.5
−1
−1.5

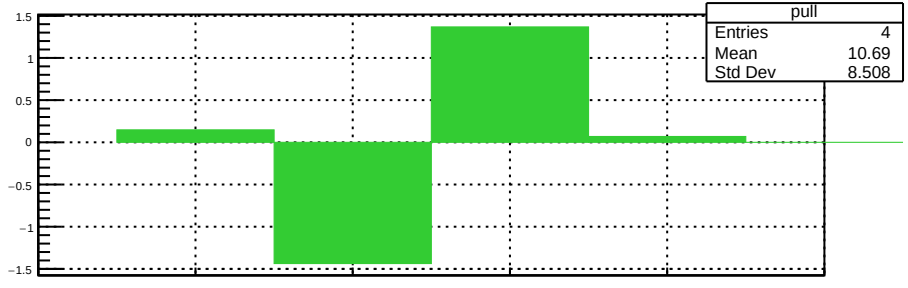

pull1D
Entries 4
Mean −0.0254
Std Dev 1.109
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

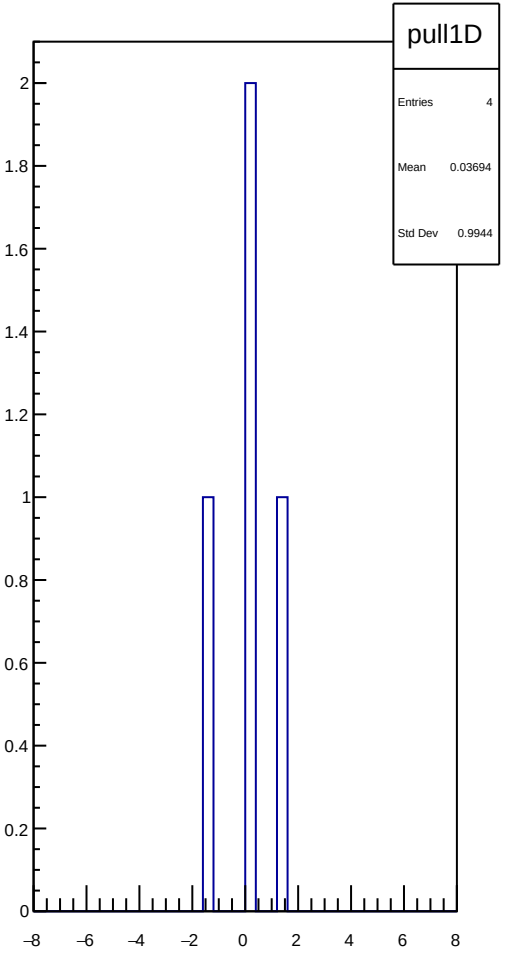

reg_asym_atl1_diff_bpm12X_slope vs run
χ² / ndf 2.743 / 3
p0 −5.014 ± 4.825
15
10
5
0
−5
−10
−15
−20
−25
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −10.84
Std Dev 11.34
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

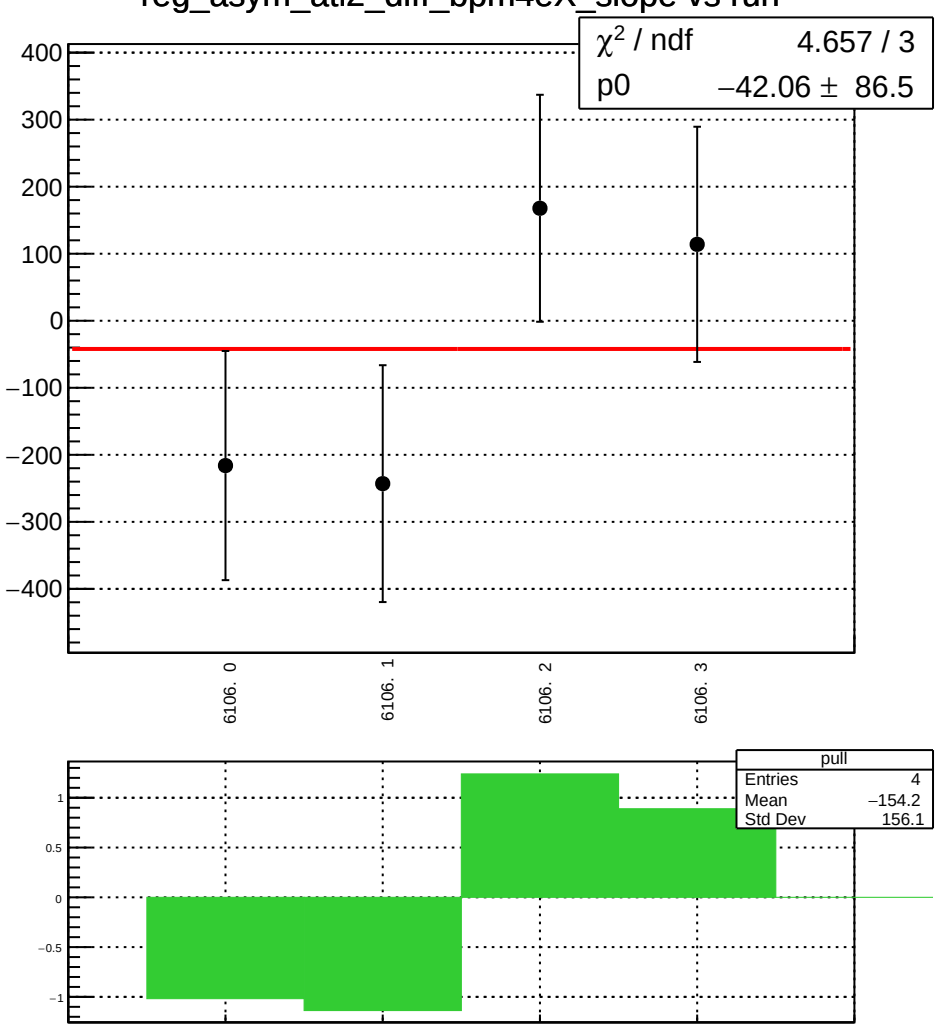

pull1D
Entries 4
Mean −0.02254
Std Dev 0.8278
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

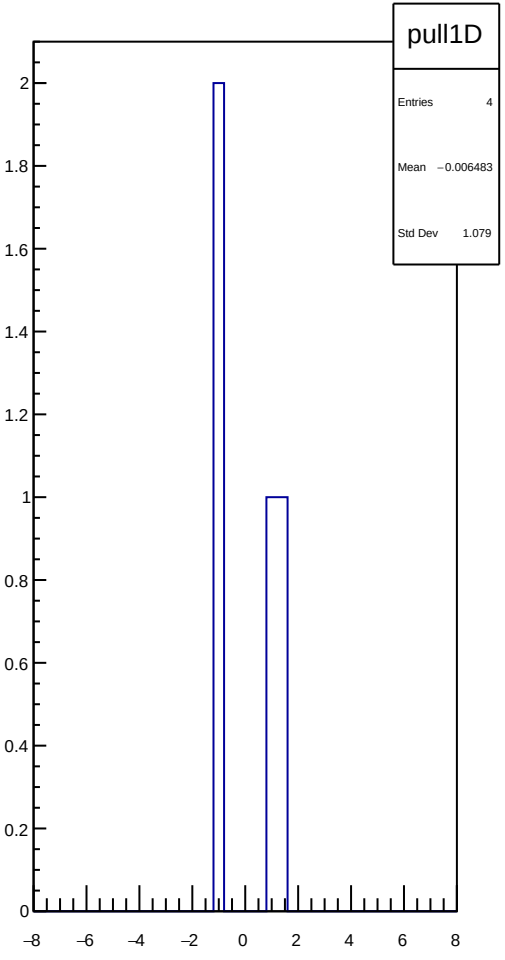

reg_asym_atl2_diff_bpm4aX_slope vs run
χ² / ndf 4.472 / 3
p0 19.84 ± 74.36
400
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −115.9
Std Dev 117.9
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean 0.008079
Std Dev 1.057
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

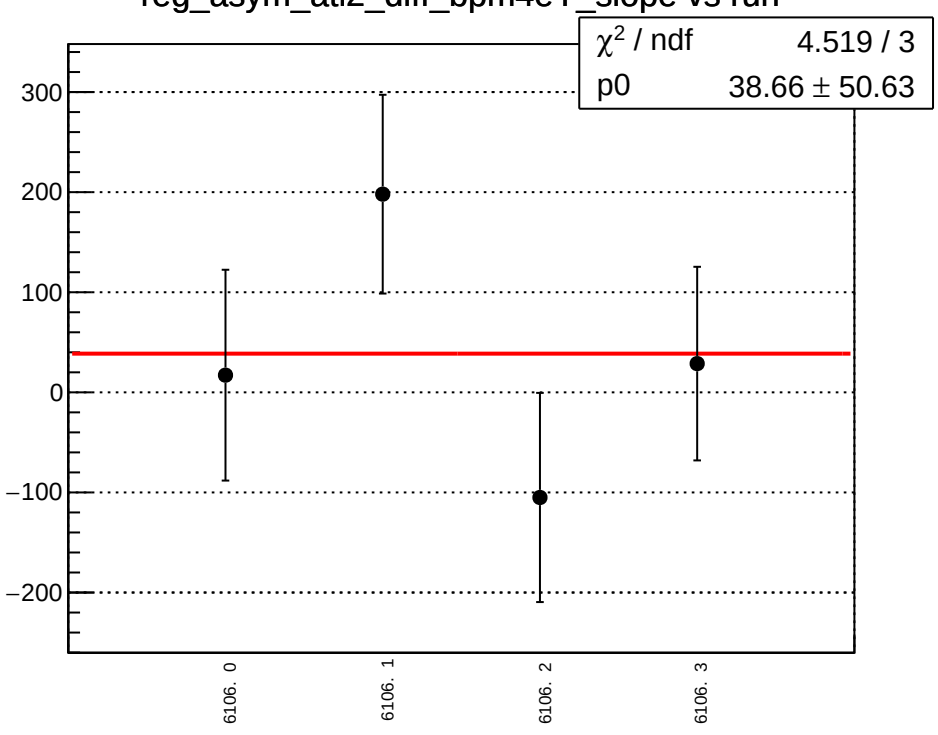

reg_asym_atl2_diff_bpm4aY_slope vs run
χ² / ndf 3.96 / 3
p0 −43.88 ± 47.82
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3

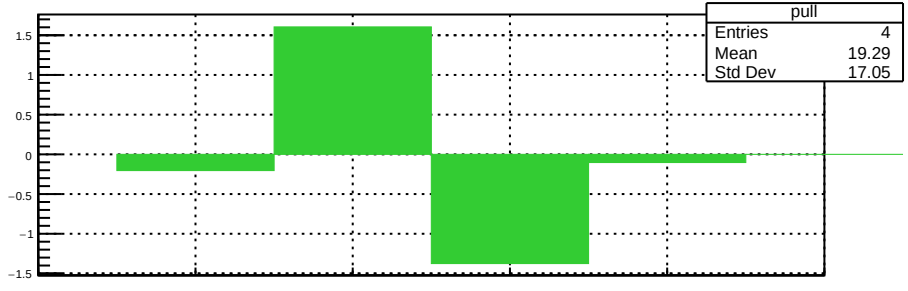

pull
Entries 4
Mean 10.69
Std Dev 8.508
1.5
1
0.5
0
−0.5
−1
−1.5

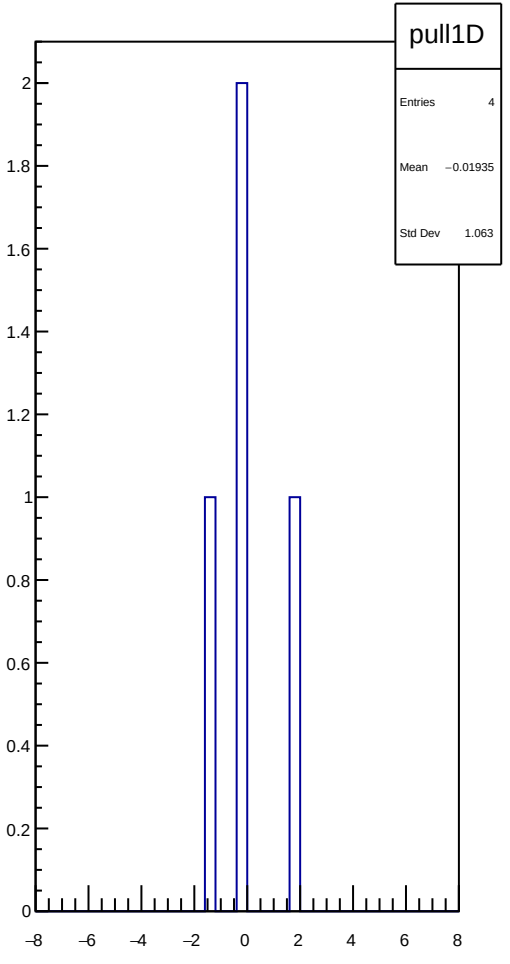

pull1D
Entries 4
Mean 0.03694
Std Dev 0.9944
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

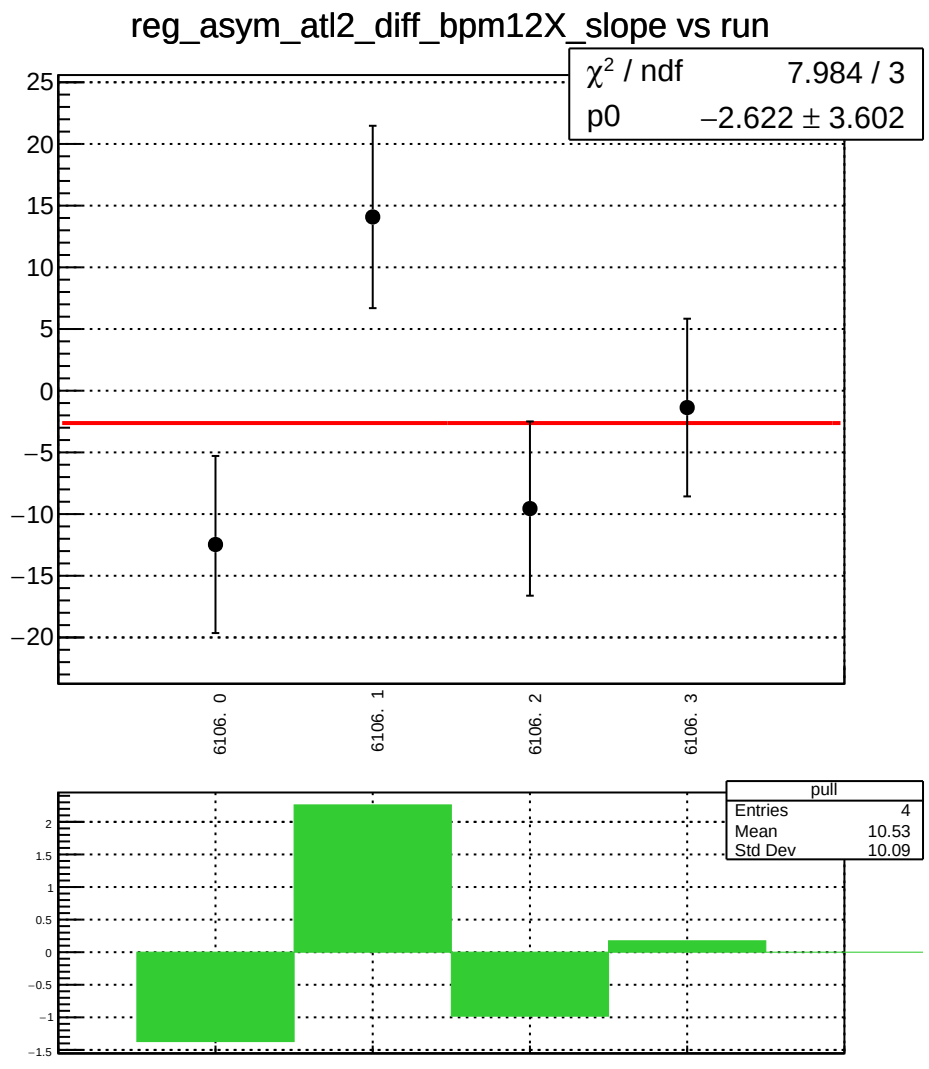

reg_asym_atl2_diff_bpm4eX_slope vs run
χ² / ndf 4.657 / 3
p0 −42.06 ± 86.5
400
300
200
100
0
−100
−200
−300
−400
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −154.2
Std Dev 156.1
1
0.5
0
−0.5
−1

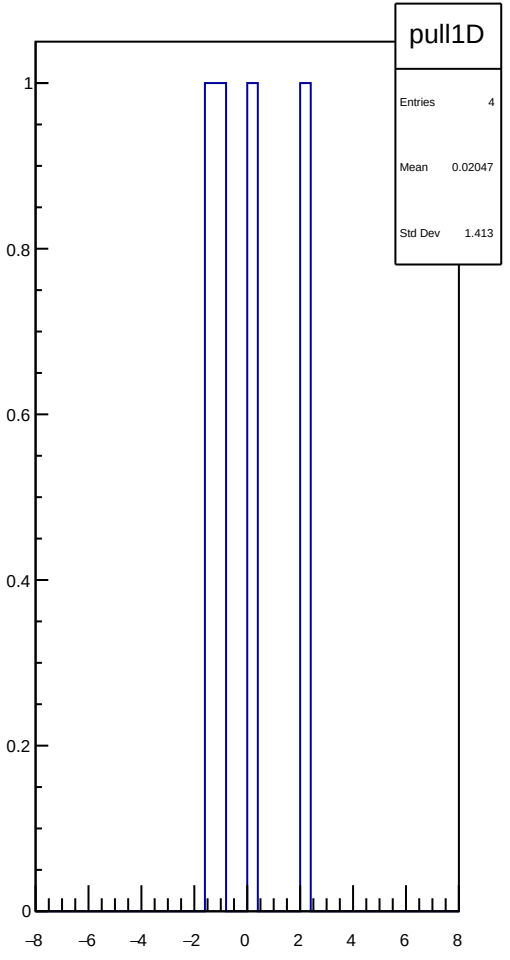

pull1D
Entries 4
Mean −0.006483
Std Dev 1.079
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

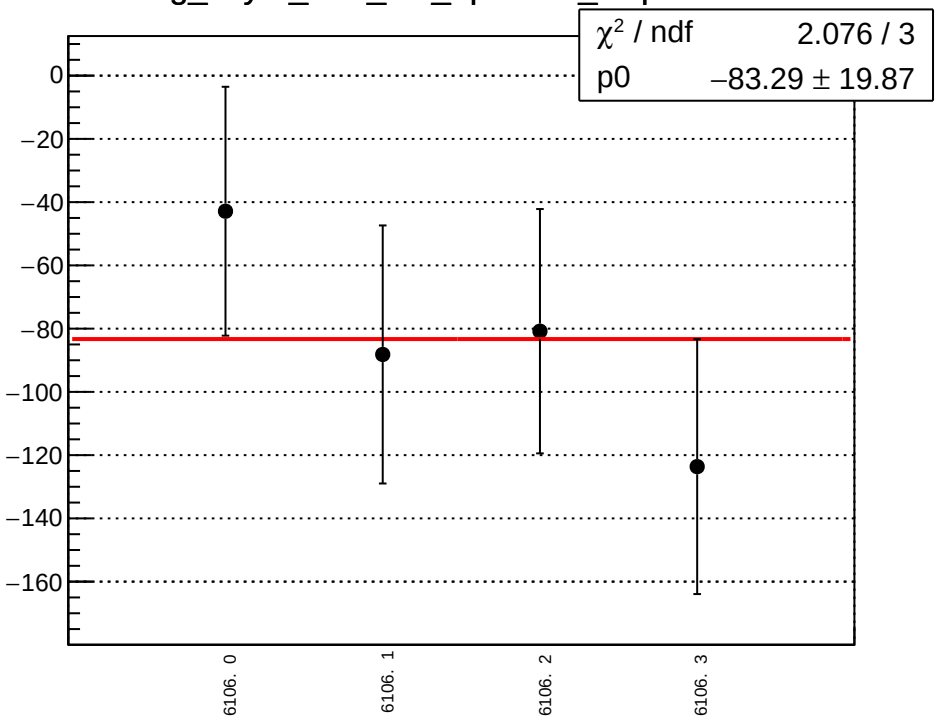

reg_asym_atl2_diff_bpm4eY_slope vs run
χ² / ndf 4.519 / 3
p0 38.66 ± 50.63
300
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3

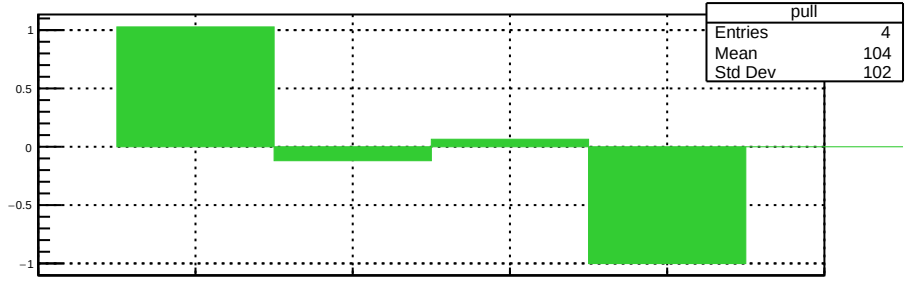

pull
Entries 4
Mean 19.29
Std Dev 17.05
1.5
1
0.5
0
−0.5
−1
−1.5

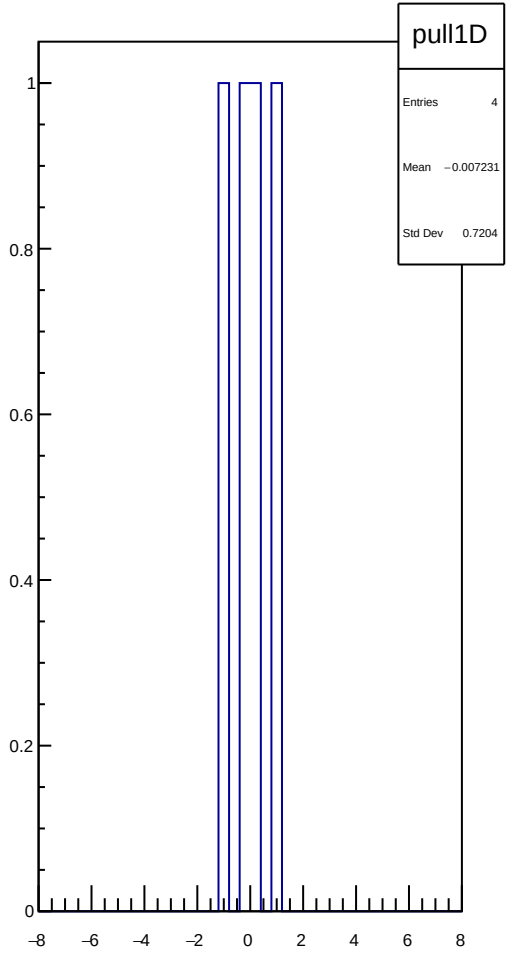

pull1D
Entries 4
Mean −0.01935
Std Dev 1.063
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

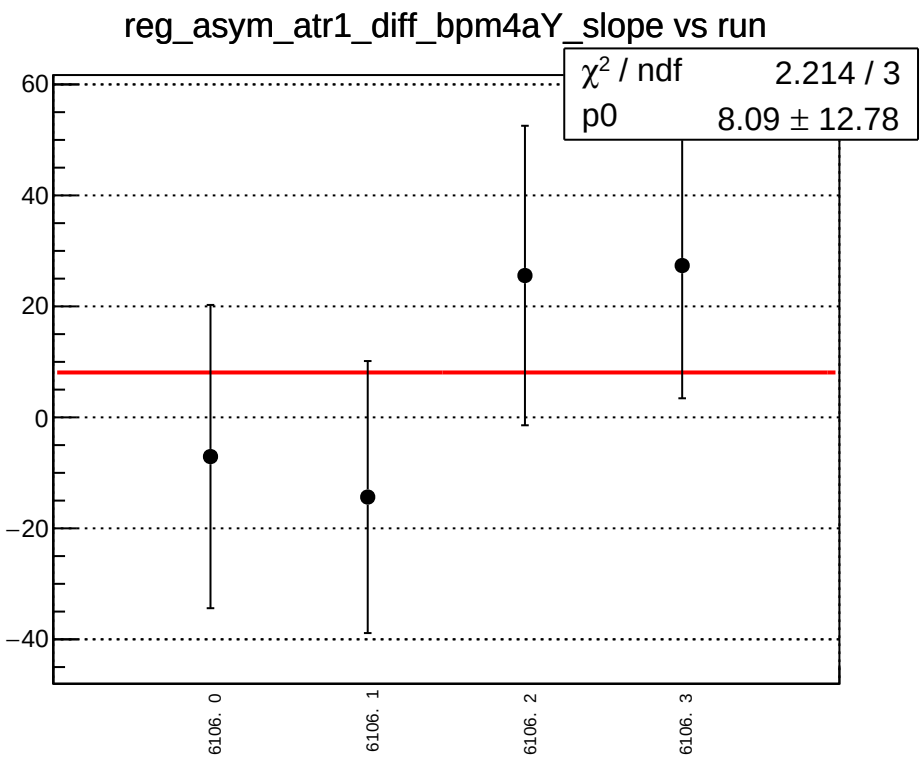

reg_asym_atl2_diff_bpm12X_slope vs run
χ² / ndf 7.984 / 3
p0 −2.622 ± 3.602
25
20
15
10
5
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 10.53
Std Dev 10.09
2
1.5
1
0.5
0
−0.5
−1
−1.5

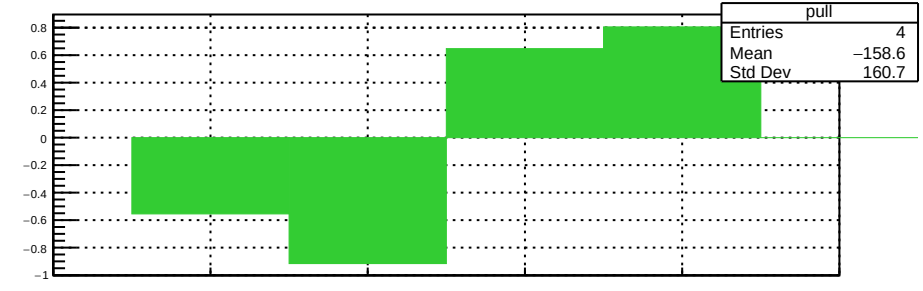

pull1D
Entries 4
Mean 0.02047
Std Dev 1.413
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

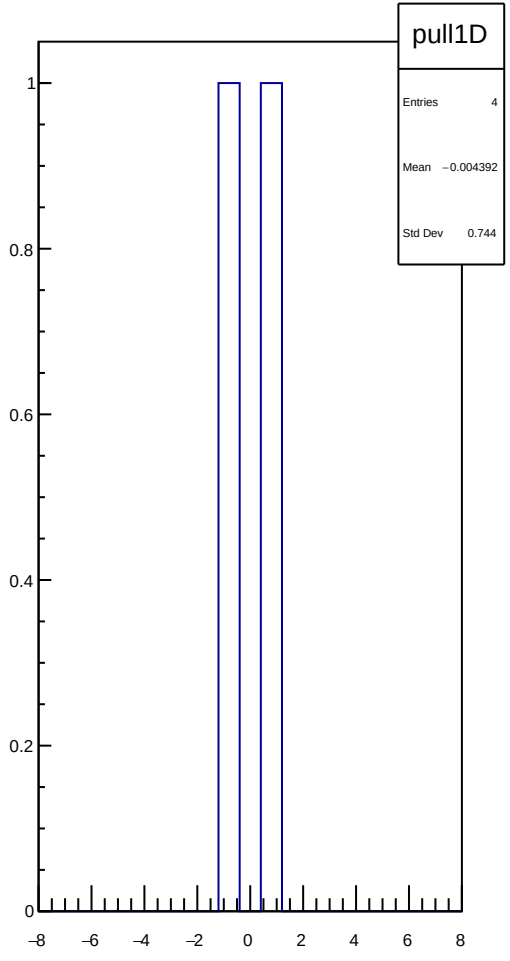

reg_asym_atr1_diff_bpm4aX_slope vs run
χ² / ndf 2.076 / 3
p0 −83.29 ± 19.87
0
−20
−40
−60
−80
−100
−120
−140
−160
6106. 0
6106. 1
6106. 2
6106. 3

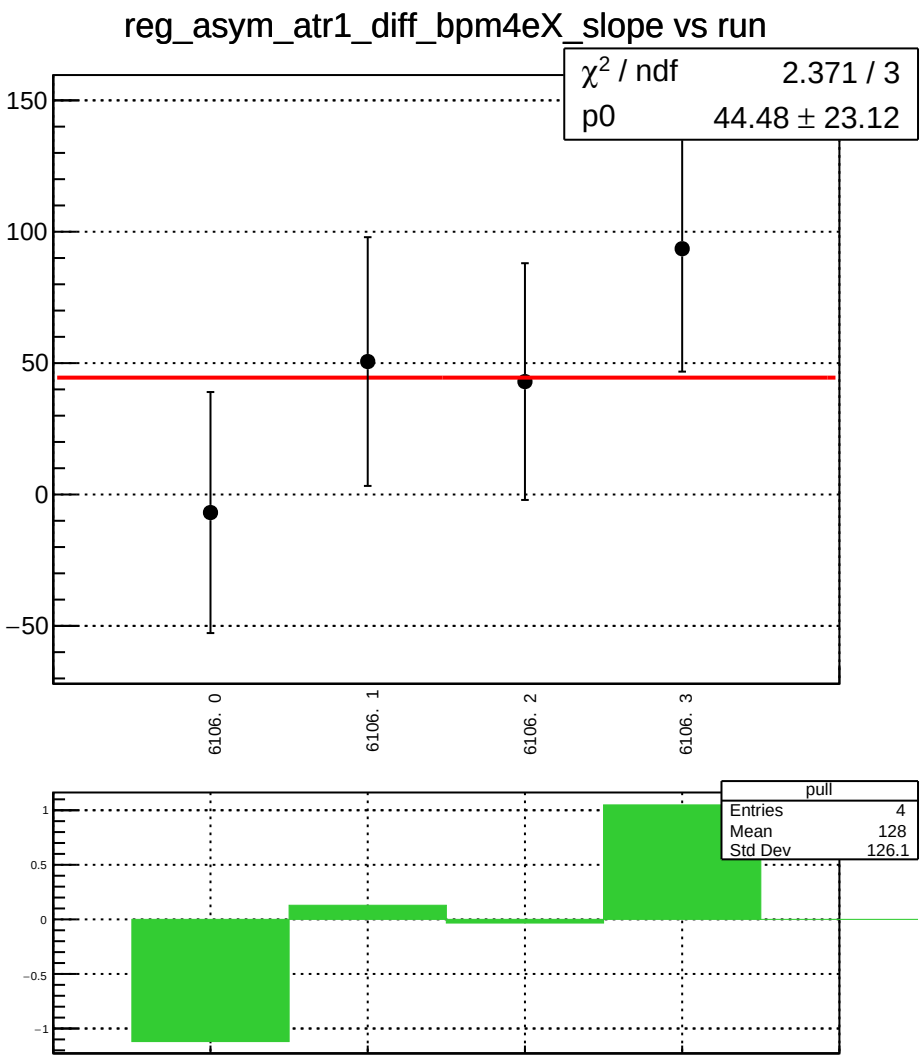

pull
Entries 4
Mean 104
Std Dev 102
1
0.5
0
−0.5
−1

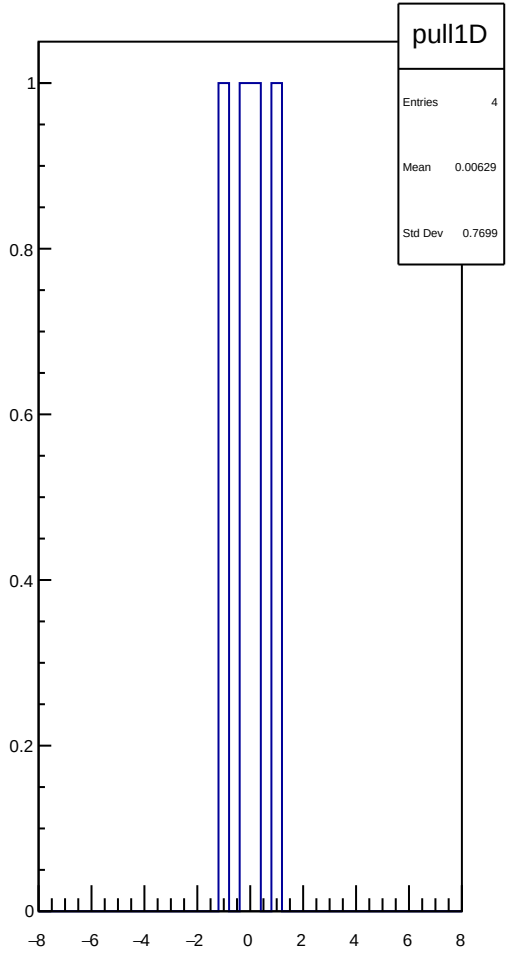

pull1D
Entries 4
Mean −0.007231
Std Dev 0.7204
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

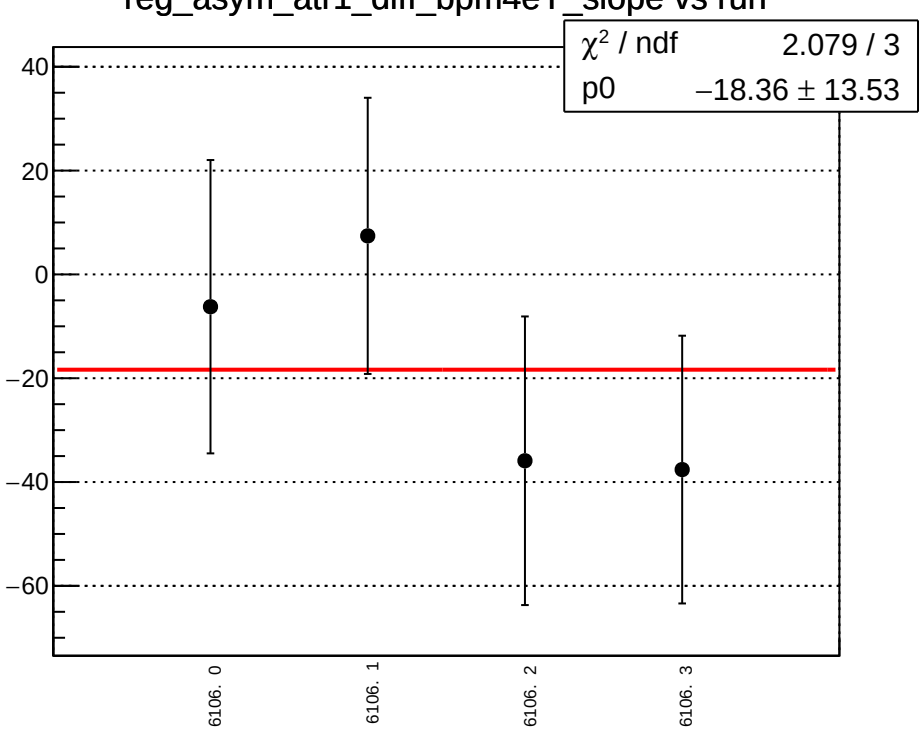

reg_asym_atr1_diff_bpm4aY_slope vs run
χ² / ndf 2.214 / 3
p0 8.09 ± 12.78
60
40
20
0
−20
−40
6106. 0
6106. 1
6106. 2
6106. 3

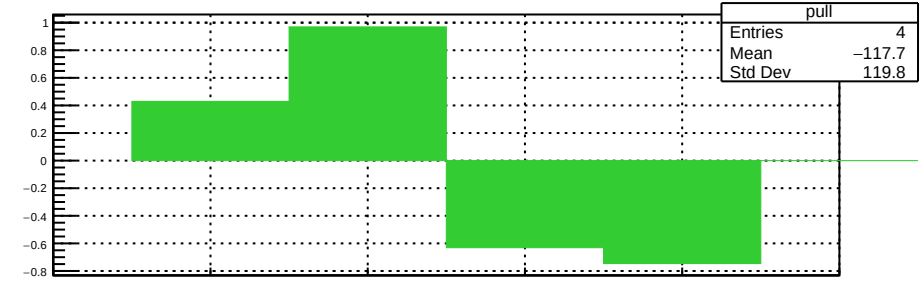

pull
Entries 4
Mean −158.6
Std Dev 160.7
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

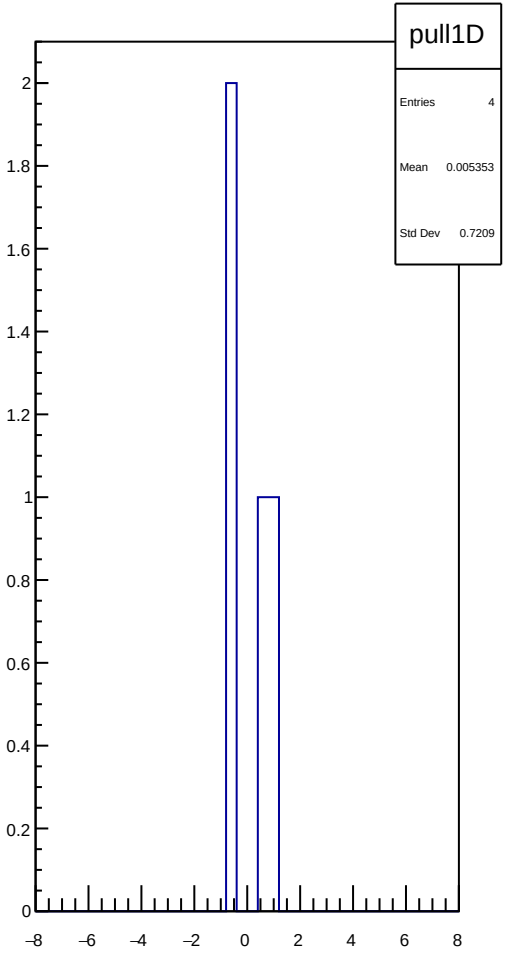

pull1D
Entries 4
Mean −0.004392
Std Dev 0.744
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

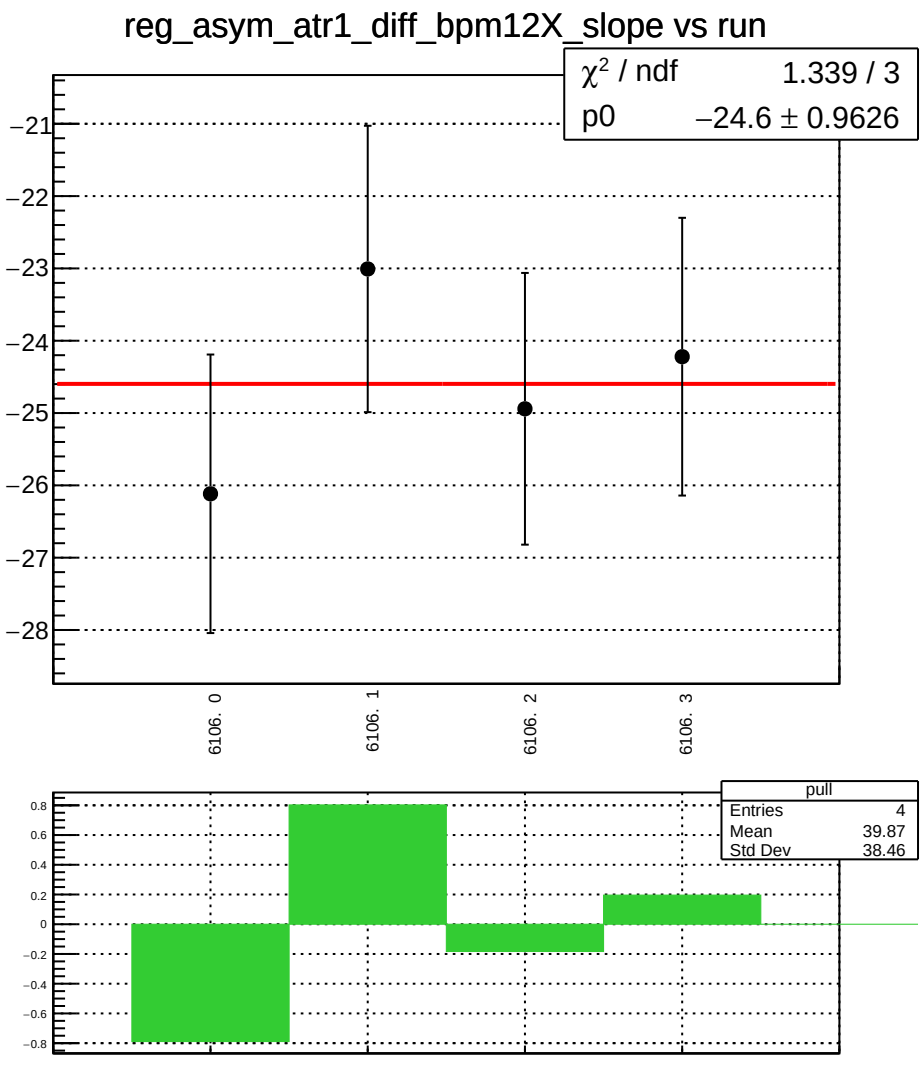

reg_asym_atr1_diff_bpm4eX_slope vs run
χ² / ndf 2.371 / 3
p0 44.48 ± 23.12
150
100
50
0
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 128
Std Dev 126.1
1
0.5
0
−0.5
−1

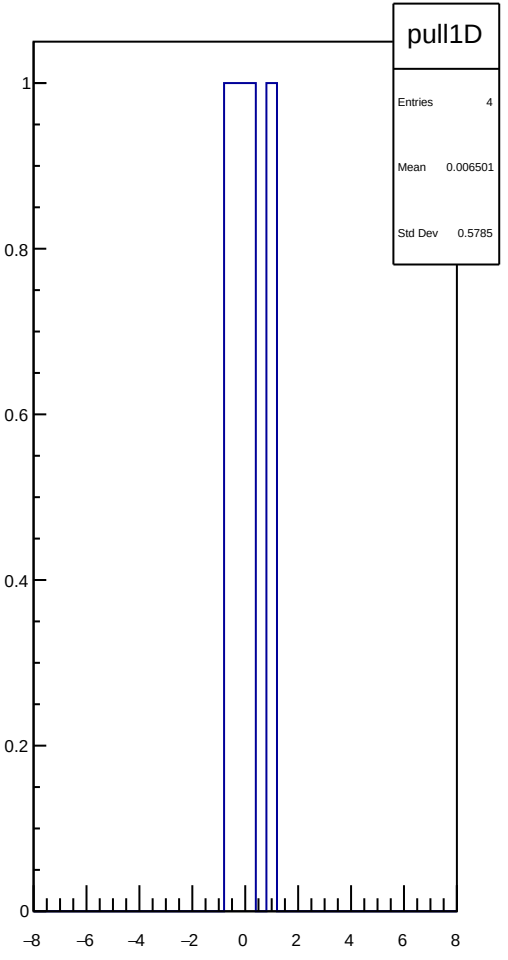

pull1D
Entries 4
Mean 0.00629
Std Dev 0.7699
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

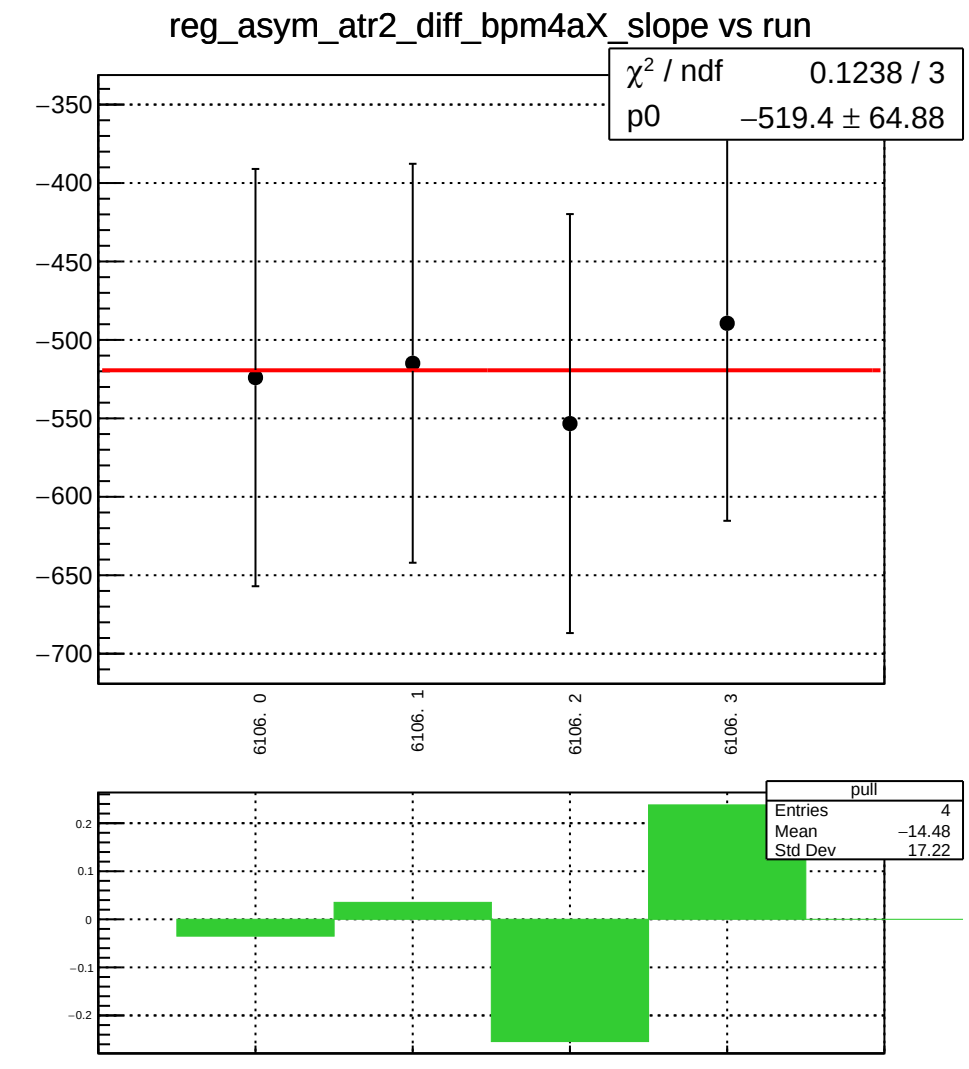

reg_asym_atr1_diff_bpm4eY_slope vs run
χ² / ndf 2.079 / 3
p0 −18.36 ± 13.53
40
20
0
−20
−40
−60
6106. 0
6106. 1
6106. 2
6106. 3

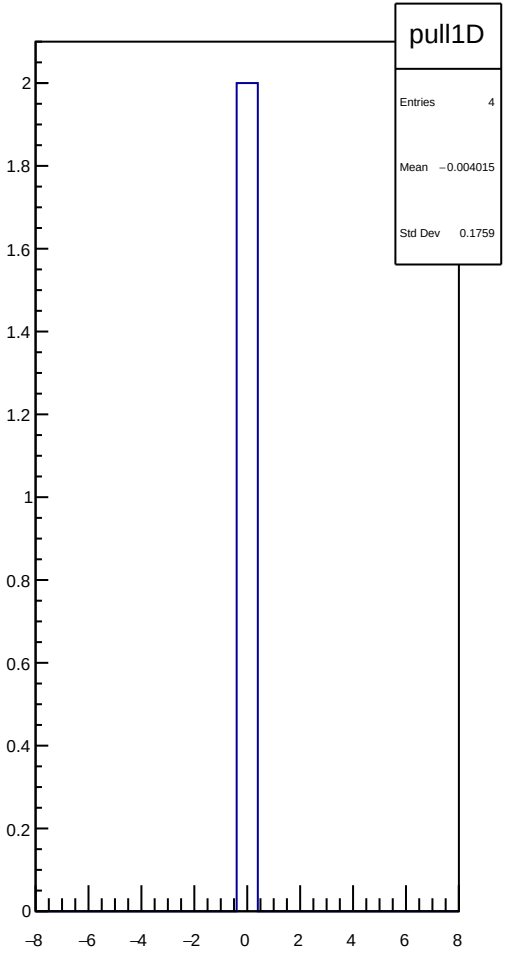

pull
Entries 4
Mean −117.7
Std Dev 119.8
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

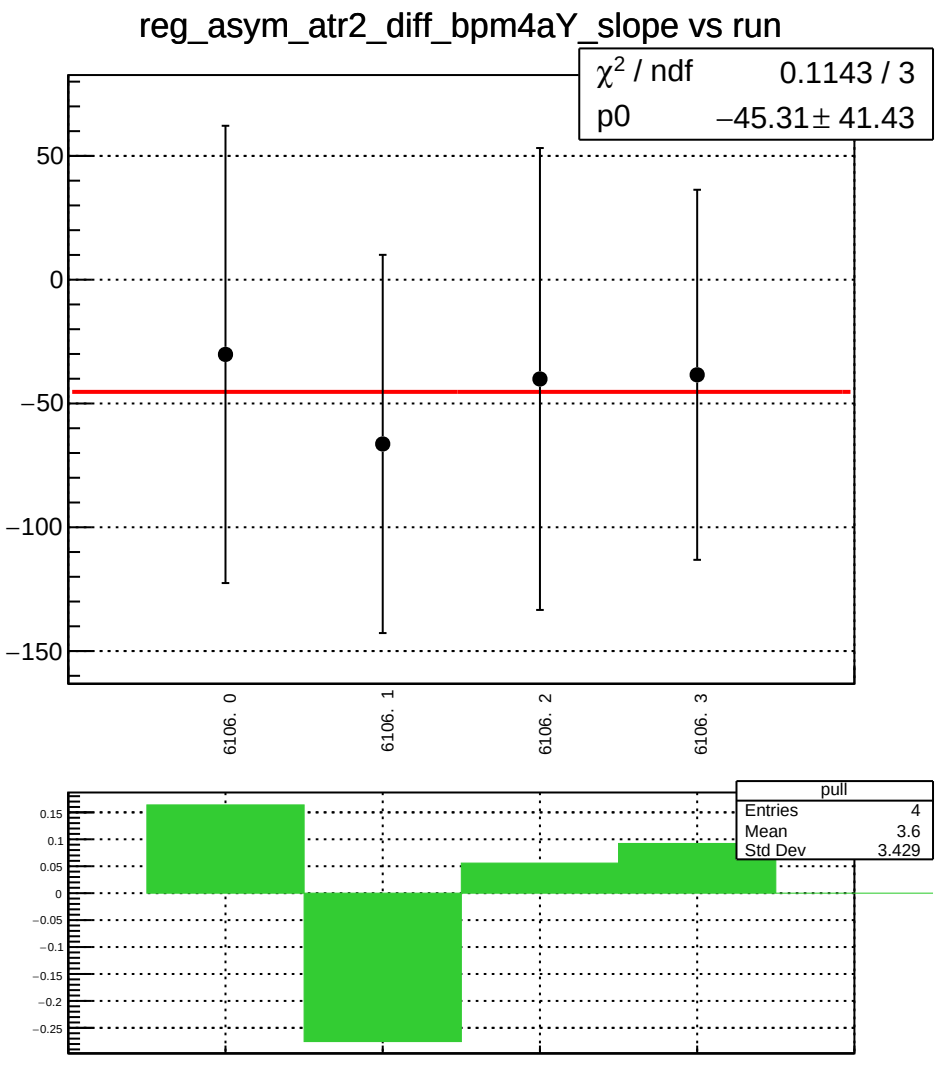

pull1D
Entries 4
Mean 0.005353
Std Dev 0.7209
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

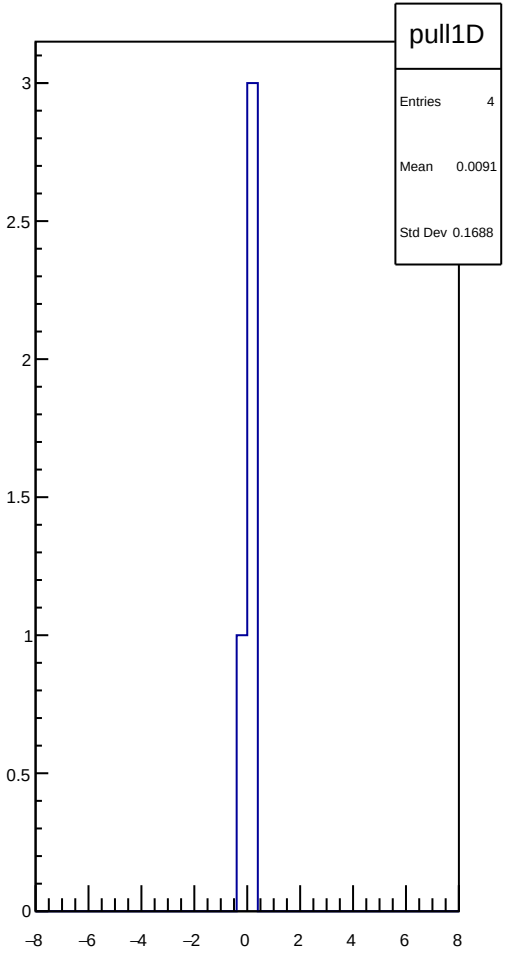

reg_asym_atr1_diff_bpm12X_slope vs run
χ² / ndf 1.339 / 3
p0 −24.6 ± 0.9626
−21
−22
−23
−24
−25
−26
−27
−28
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 39.87
Std Dev 38.46
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

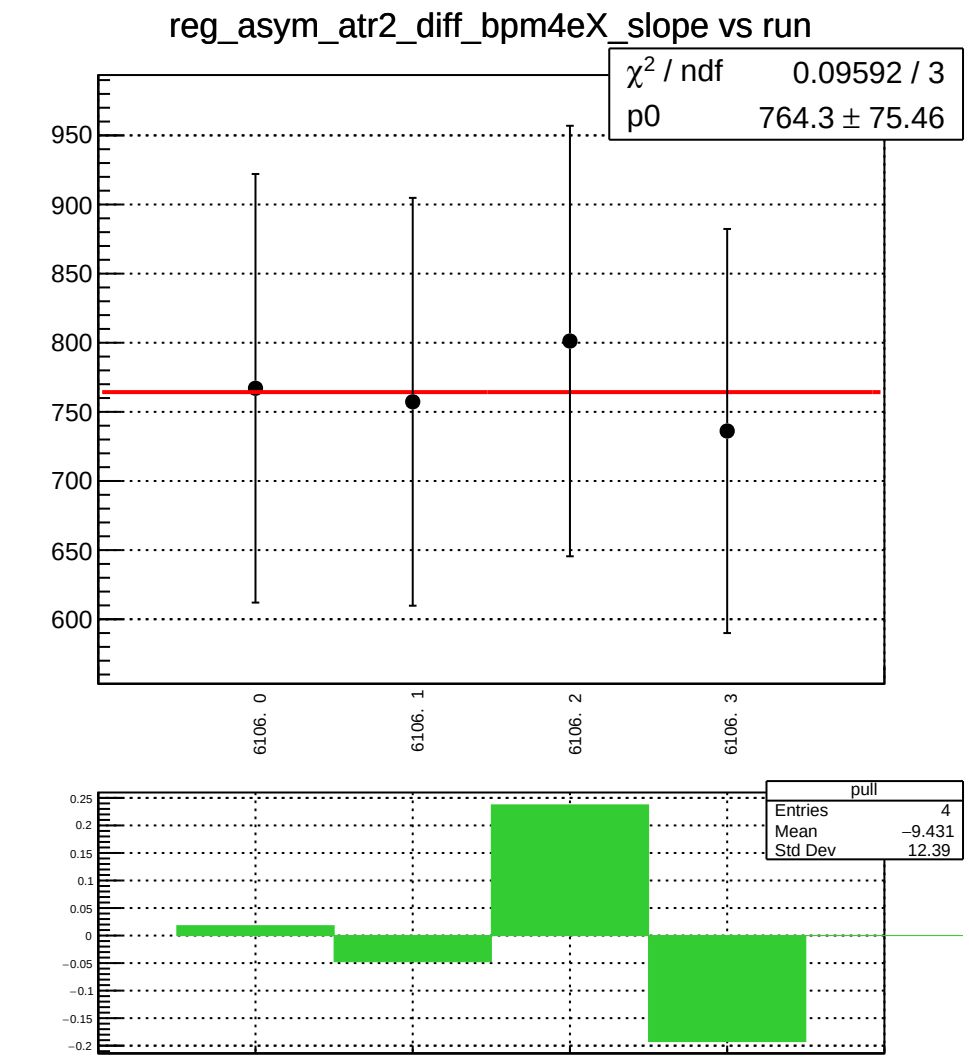

pull1D
Entries 4
Mean 0.006501
Std Dev 0.5785
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

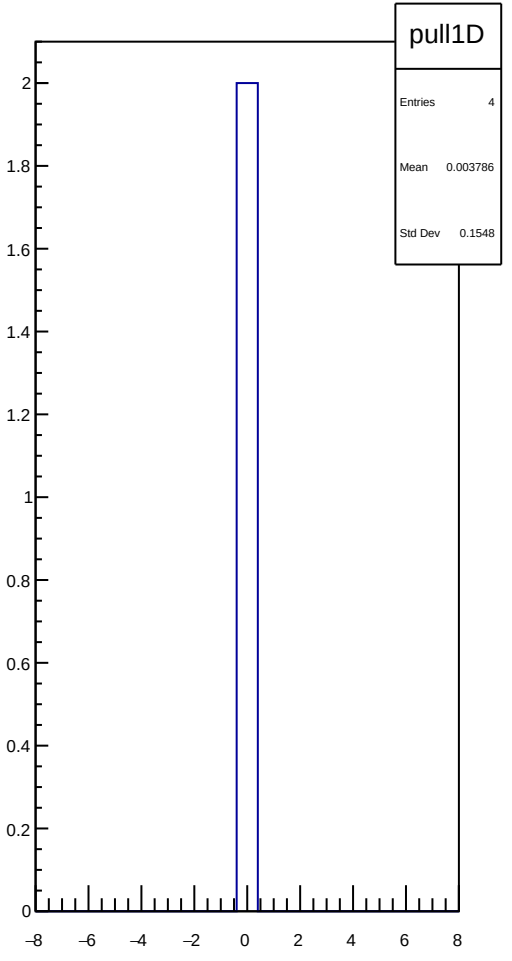

reg_asym_atr2_diff_bpm4aX_slope vs run
χ² / ndf 0.1238 / 3
p0 −519.4 ± 64.88
−350
−400
−450
−500
−550
−600
−650
−700
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −14.48
Std Dev 17.22
0.2
0.1
0
−0.1
−0.2

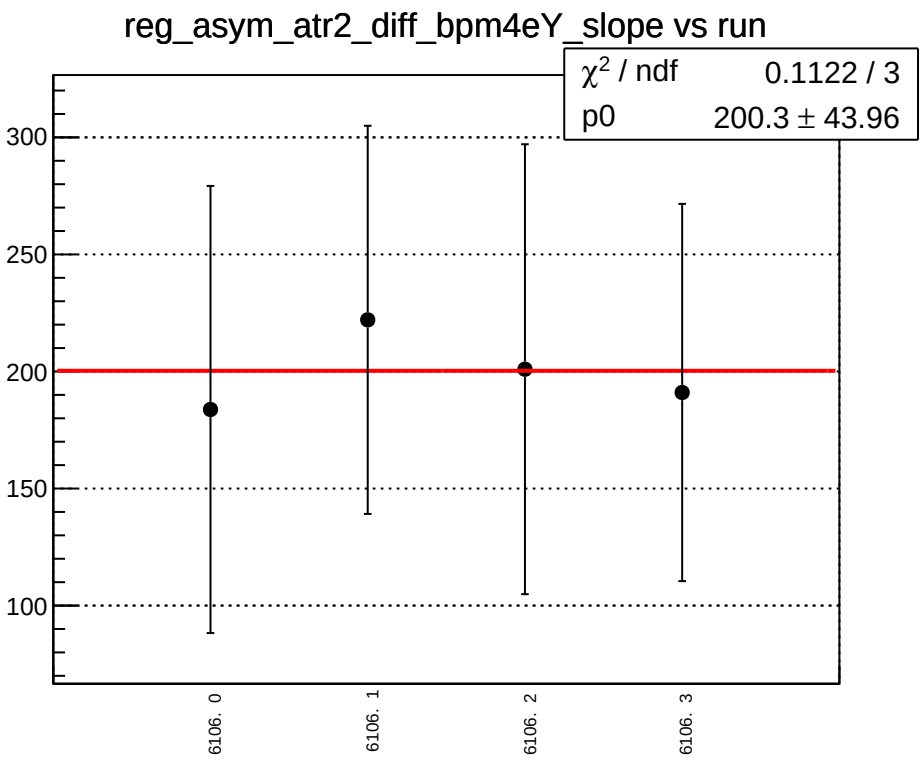

pull1D
Entries 4
Mean −0.004015
Std Dev 0.1759
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

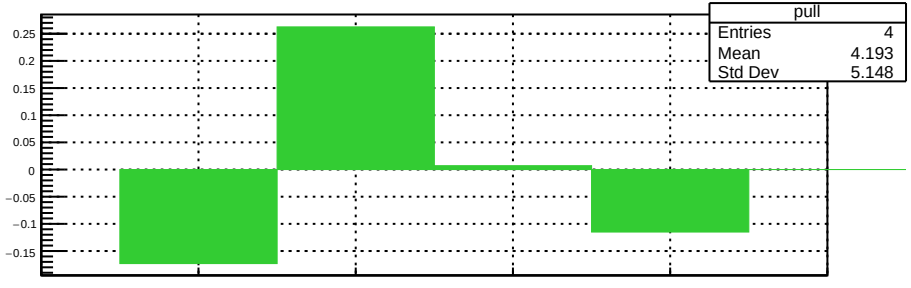

reg_asym_atr2_diff_bpm4aY_slope vs run
χ² / ndf 0.1143 / 3
p0 −45.31 ± 41.43
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 3.6
Std Dev 3.429
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
−0.25

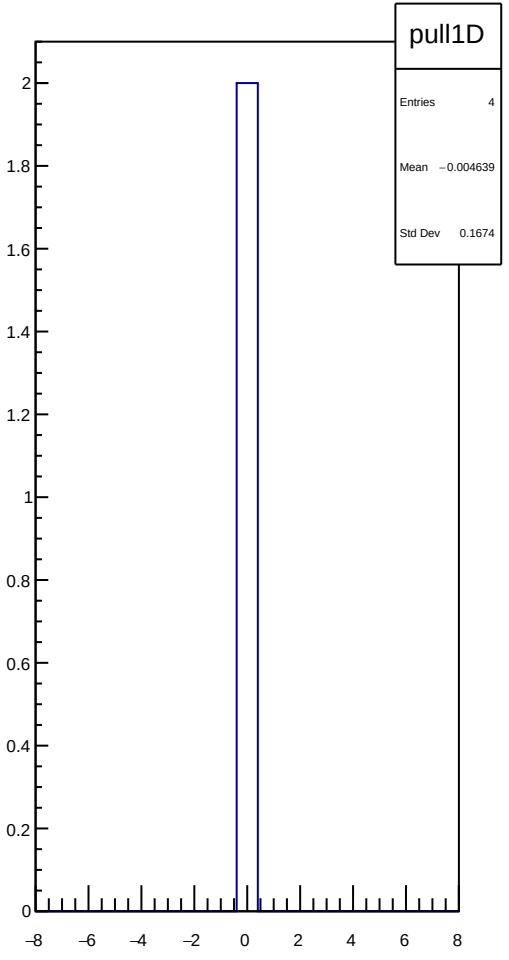

pull1D
Entries 4
Mean 0.0091
Std Dev 0.1688
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

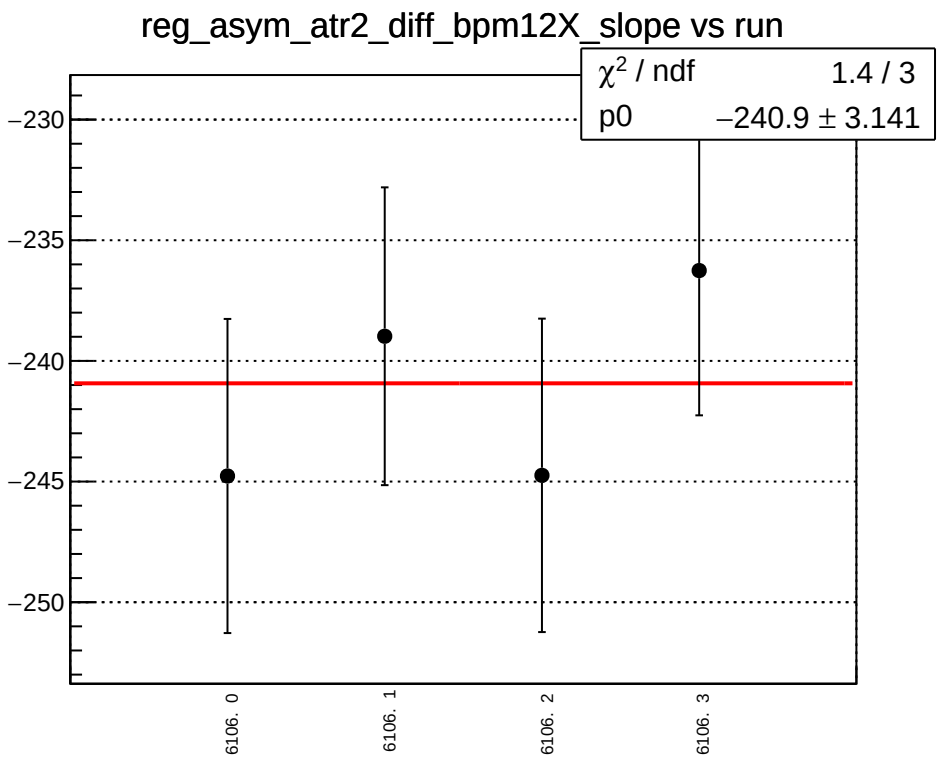

reg_asym_atr2_diff_bpm4eX_slope vs run
χ² / ndf 0.09592 / 3
p0 764.3 ± 75.46
950
900
850
800
750
700
650
600
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −9.431
Std Dev 12.39
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

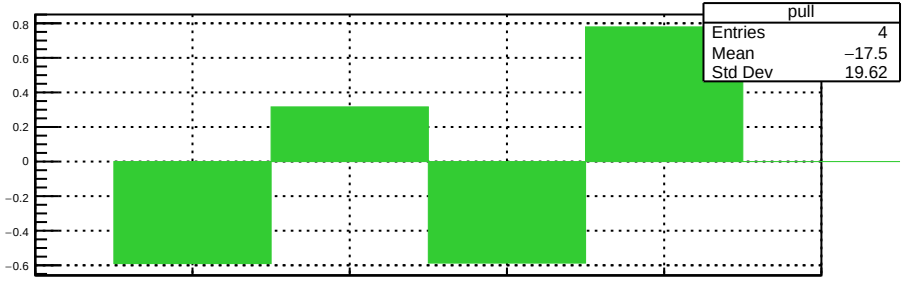

pull1D
Entries 4
Mean 0.003786
Std Dev 0.1548
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

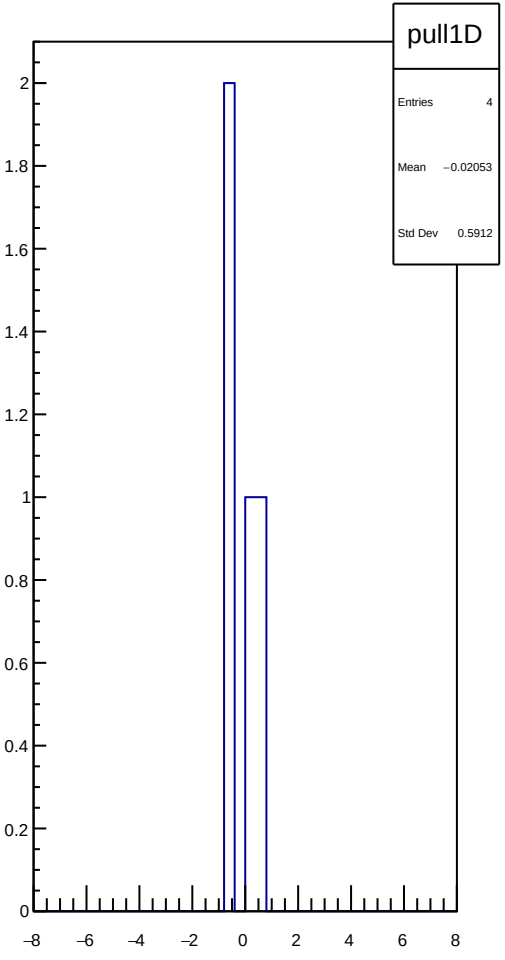

reg_asym_atr2_diff_bpm4eY_slope vs run
χ² / ndf 0.1122 / 3
p0 200.3 ± 43.96
300
250
200
150
100
6106. 0
6106. 1
6106. 2
6106. 3

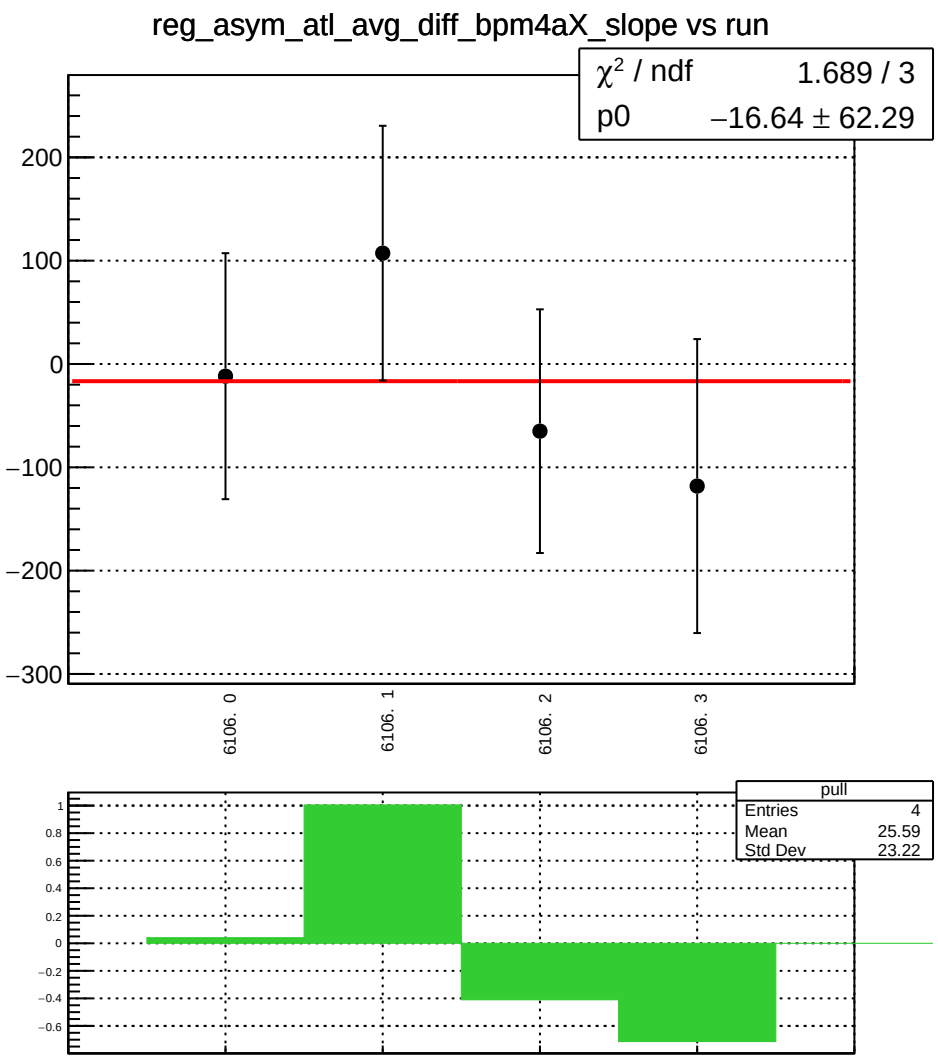

pull
Entries 4
Mean 4.193
Std Dev 5.148
0.25
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15

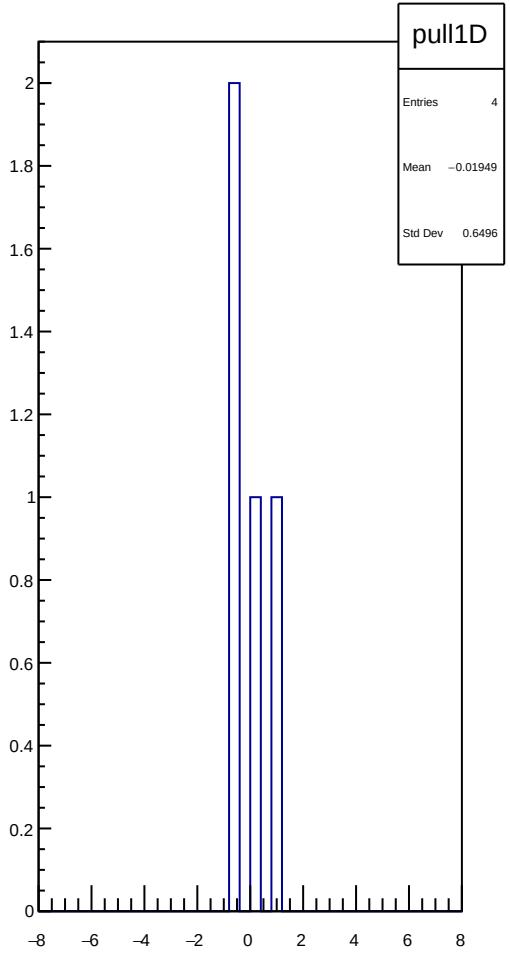

pull1D
Entries 4
Mean −0.004639
Std Dev 0.1674
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

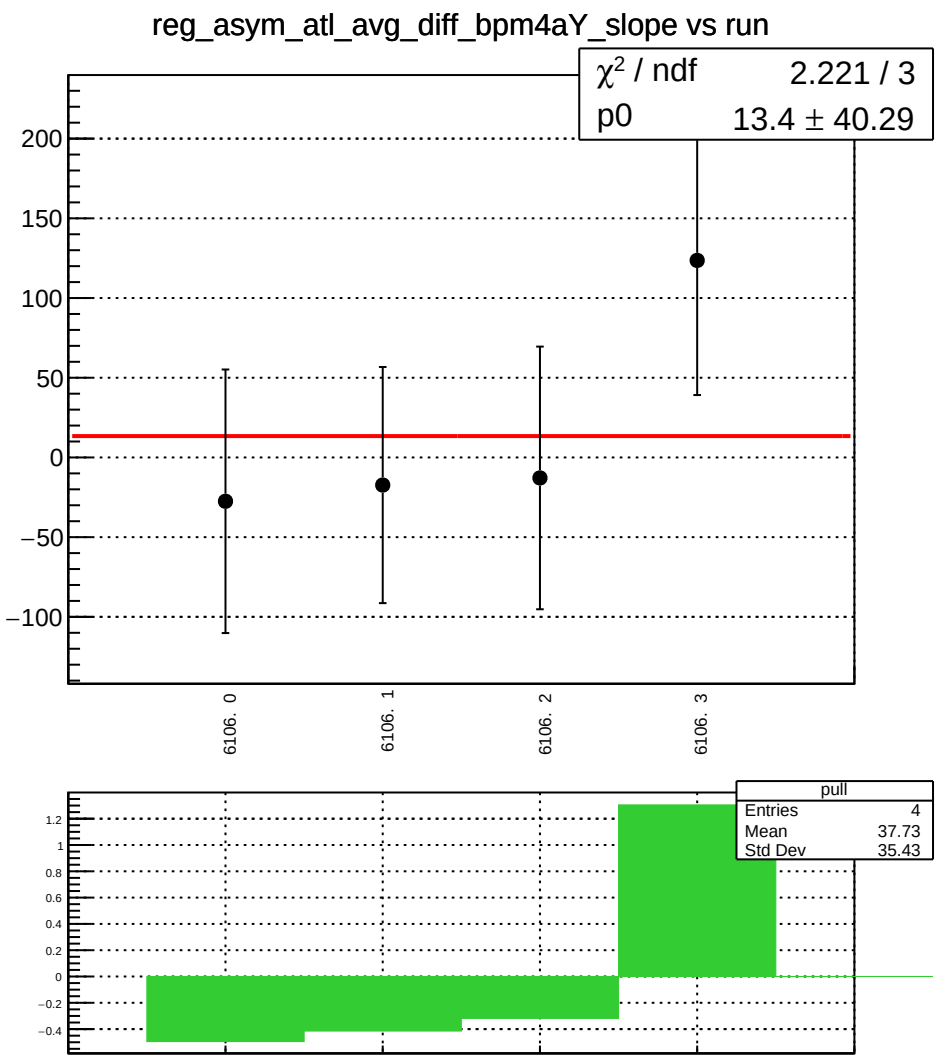

reg_asym_atr2_diff_bpm12X_slope vs run
χ² / ndf 1.4 / 3
p0 −240.9 ± 3.141
−230
−235
−240
−245
−250
6106. 0
6106. 1
6106. 2
6106. 3

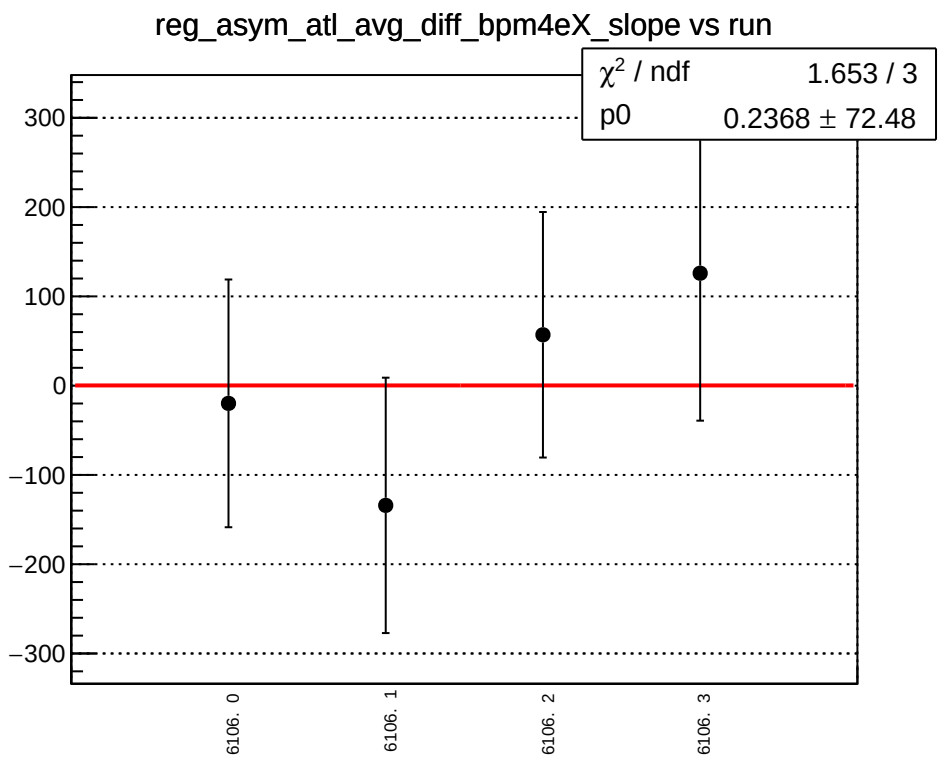

pull
Entries 4
Mean −17.5
Std Dev 19.62
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

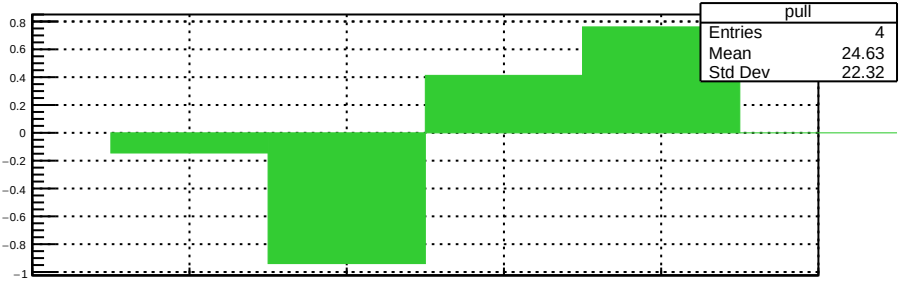

pull1D
Entries 4
Mean −0.02053
Std Dev 0.5912
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

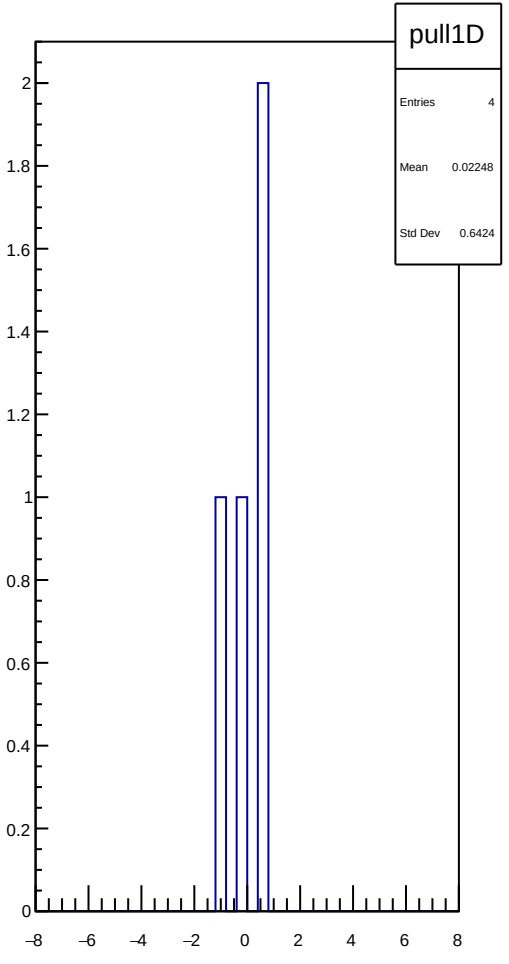

reg_asym_atl_avg_diff_bpm4aX_slope vs run
χ² / ndf 1.689 / 3
p0 −16.64 ± 62.29
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 25.59
Std Dev 23.22
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

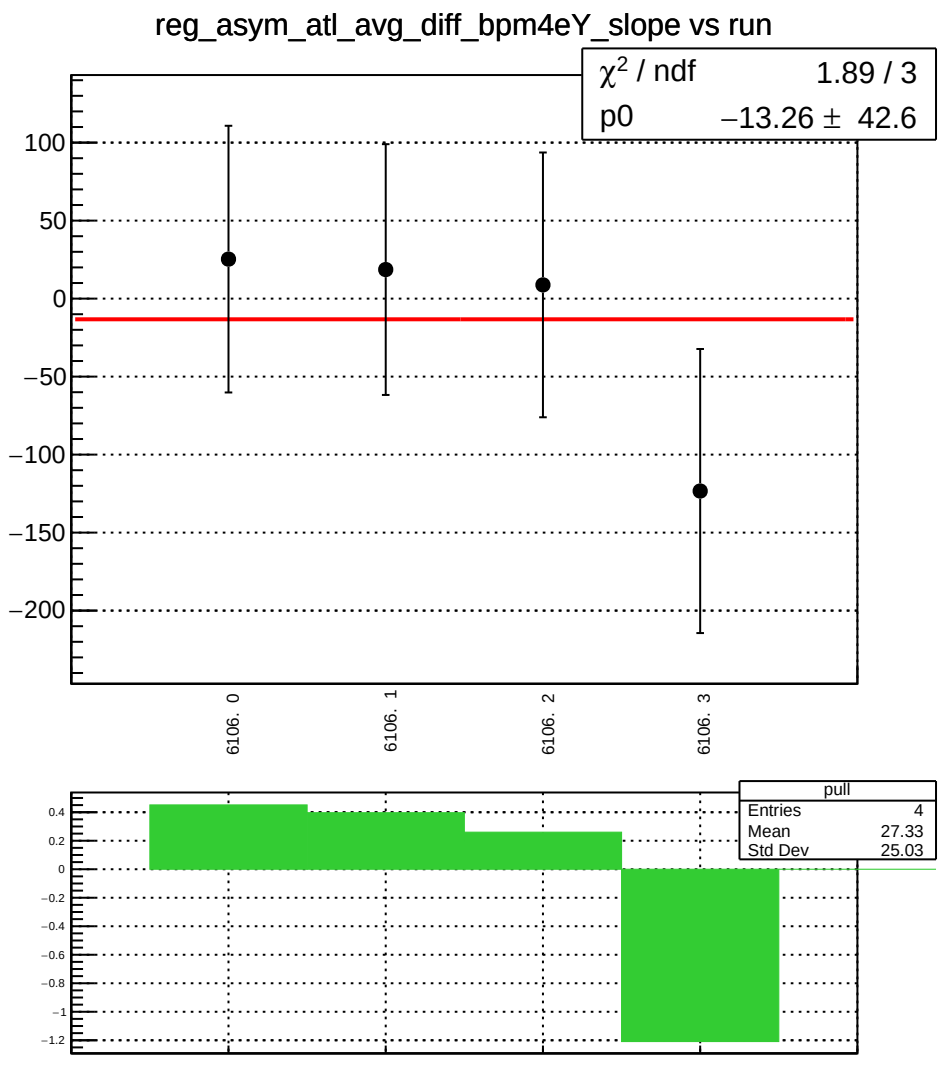

pull1D
Entries 4
Mean −0.01949
Std Dev 0.6496
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

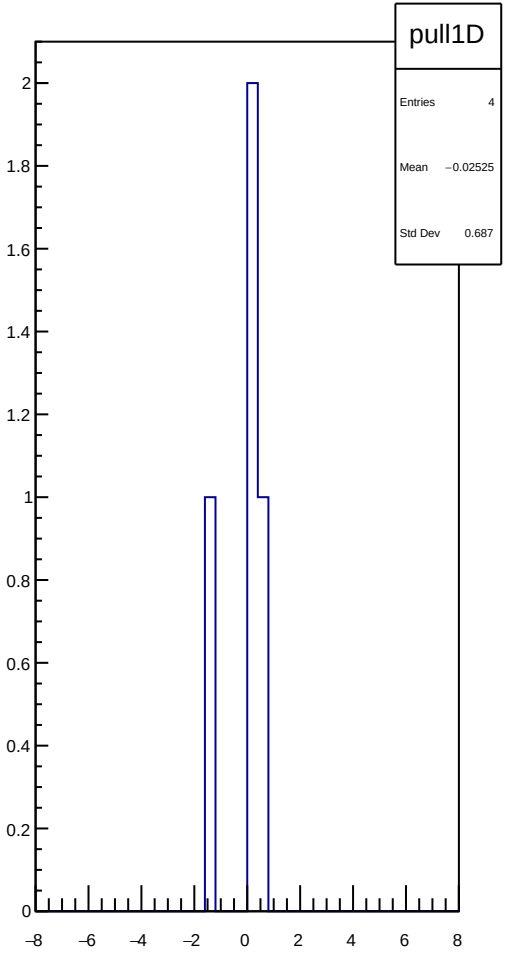

reg_asym_atl_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.221 / 3
p0 13.4 ± 40.29
200
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 37.73
Std Dev 35.43
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 4
Mean 0.01922
Std Dev 0.7449
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

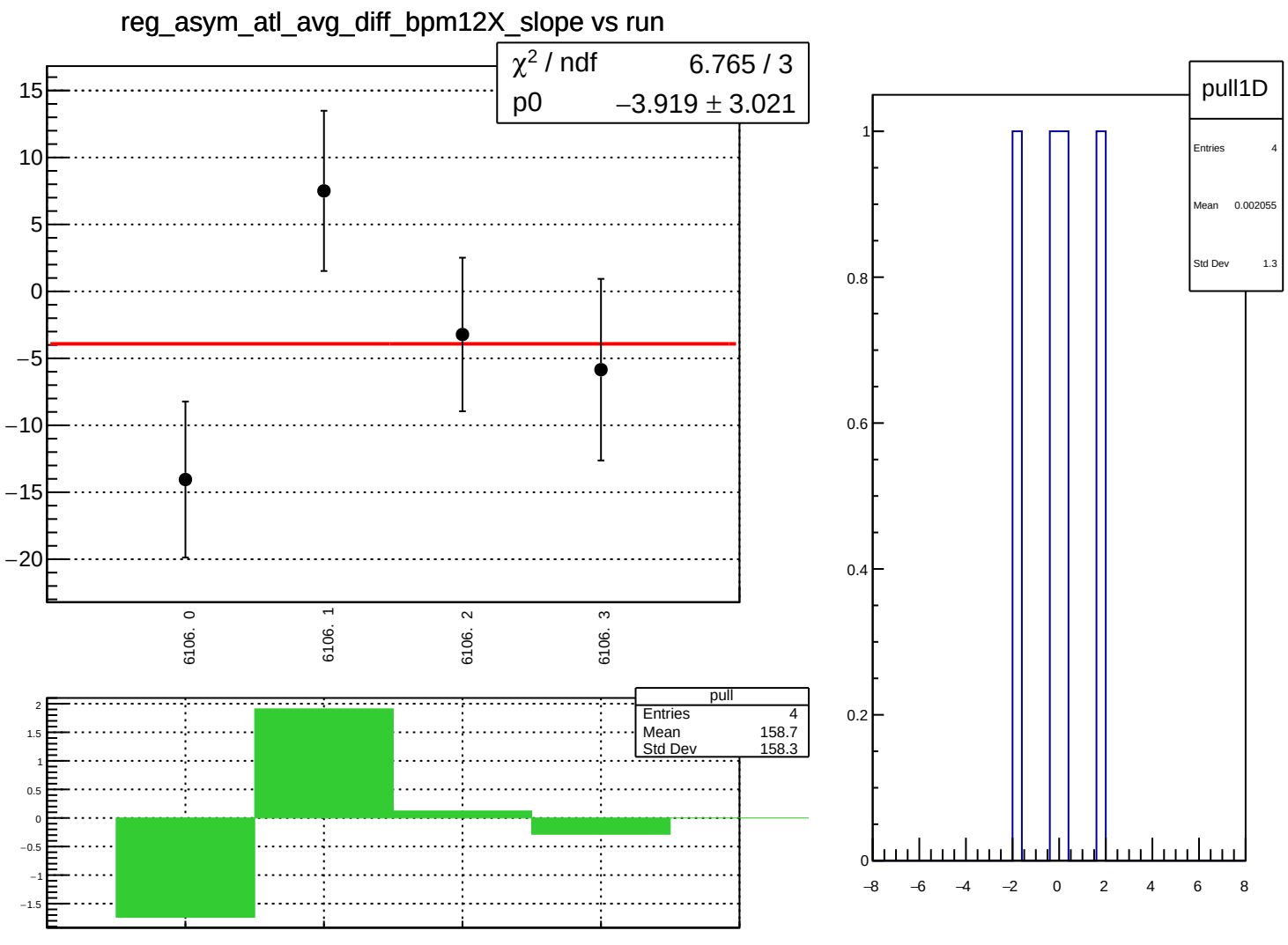

reg_asym_atl_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.653 / 3
p0 0.2368 ± 72.48
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3

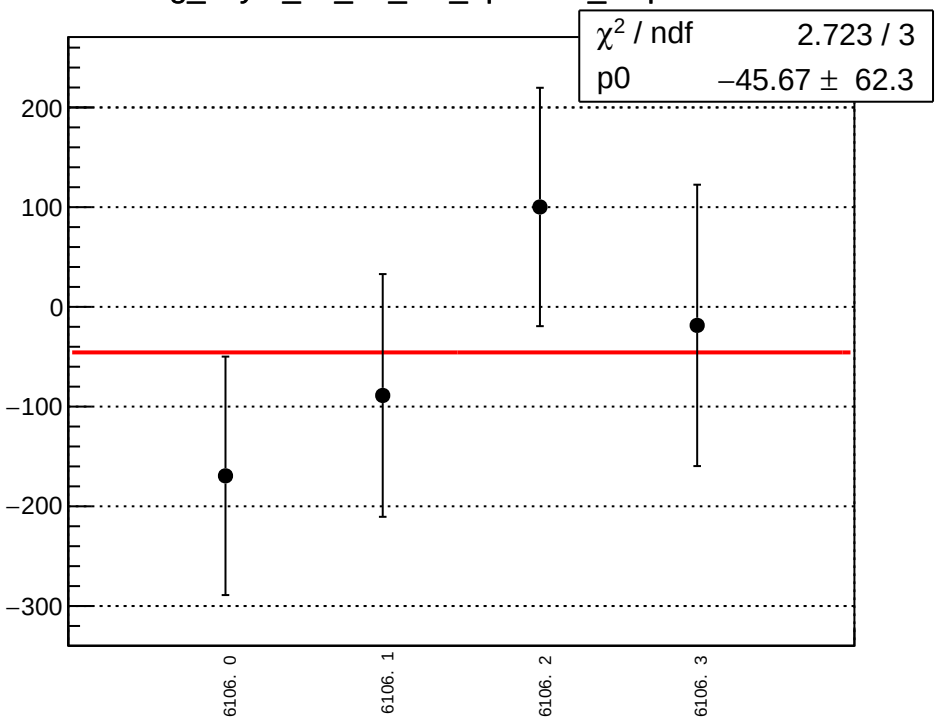

pull
Entries 4
Mean 24.63
Std Dev 22.32
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

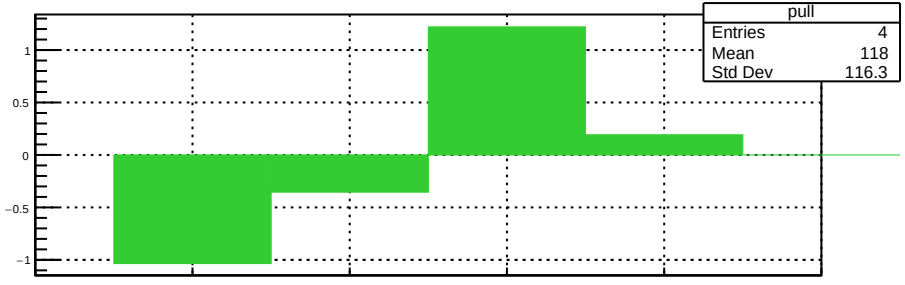

pull1D
Entries 4
Mean 0.02248
Std Dev 0.6424
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

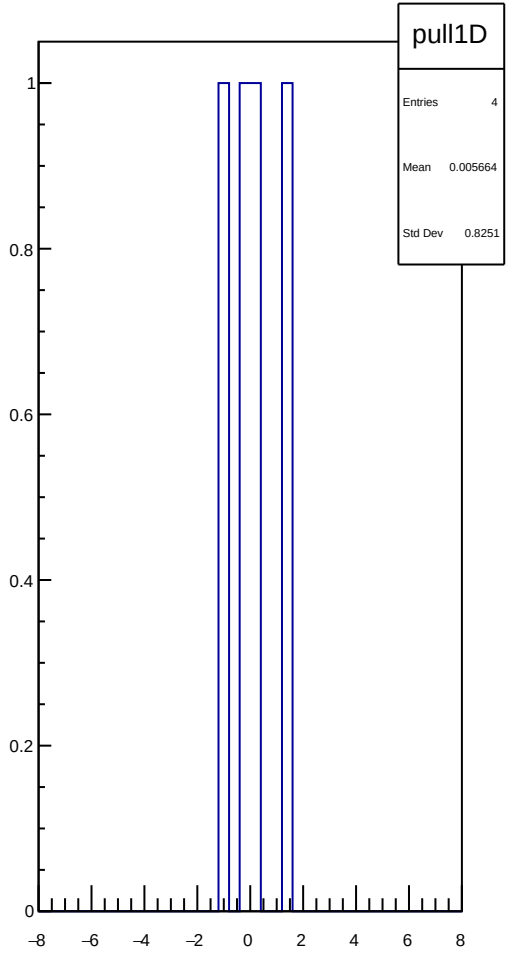

reg_asym_atl_avg_diff_bpm4eY_slope vs run
χ² / ndf 1.89 / 3
p0 −13.26 ± 42.6
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 27.33
Std Dev 25.03
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

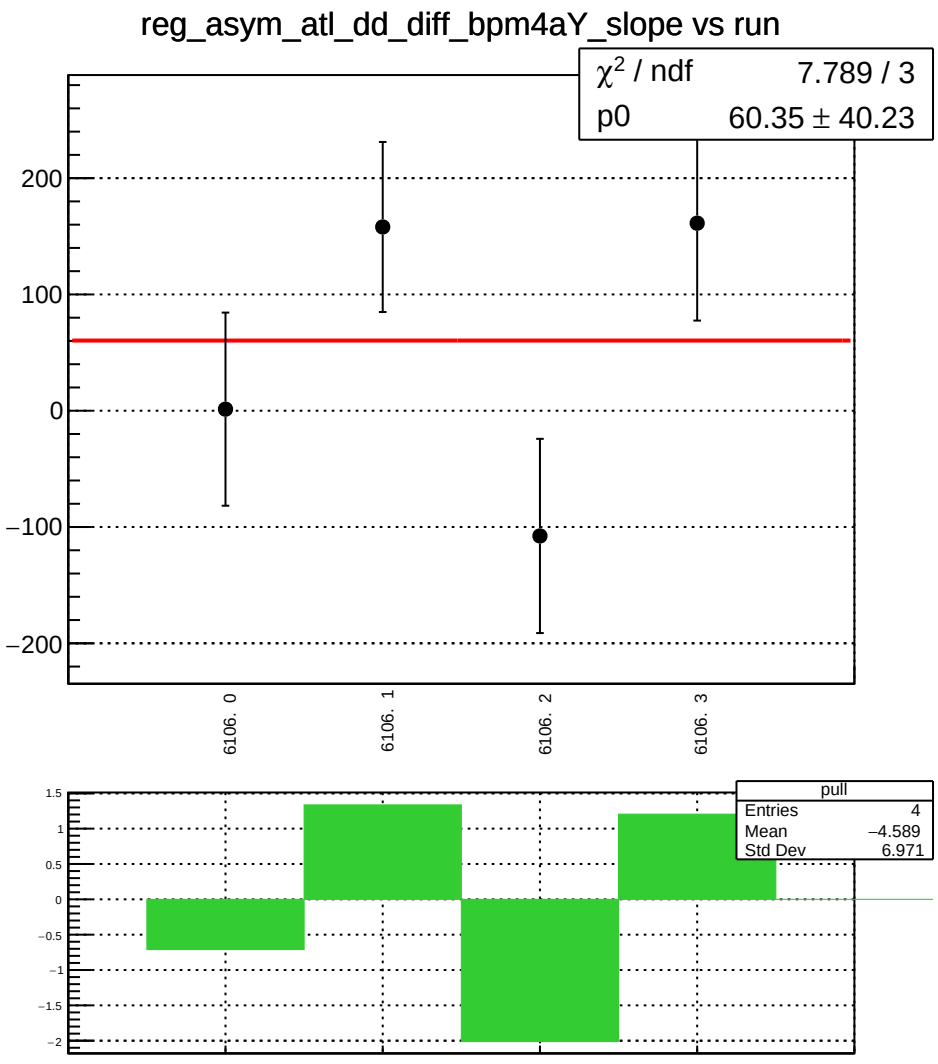

pull1D
Entries 4
Mean −0.02525
Std Dev 0.687
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

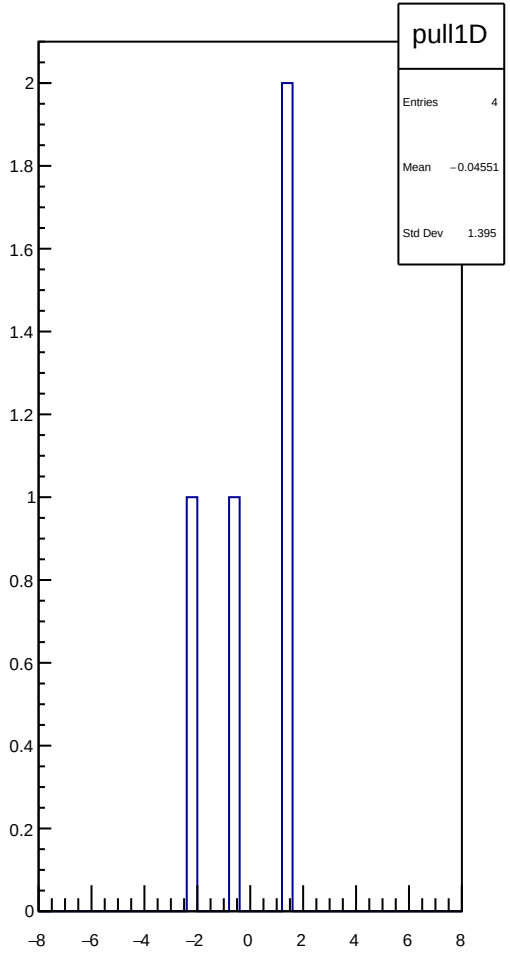

reg_asym_atl_avg_diff_bpm12X_slope vs run
χ² / ndf 6.765 / 3
p0 −3.919 ± 3.021
15
10
5
0
−5
−10
−15
−20
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 158.7
Std Dev 158.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 4
Mean 0.002055
Std Dev 1.3
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

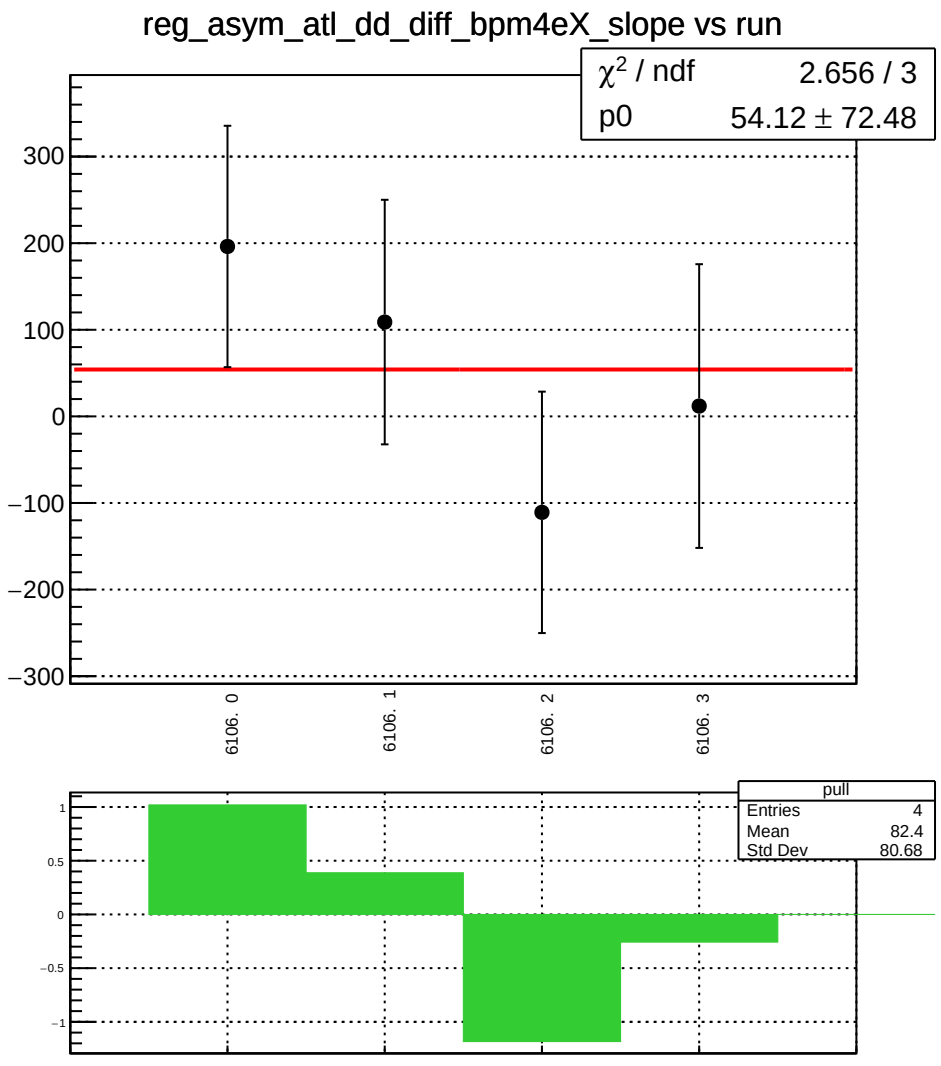

reg_asym_atl_dd_diff_bpm4aX_slope vs run
χ² / ndf 2.723 / 3
p0 −45.67 ± 62.3
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3

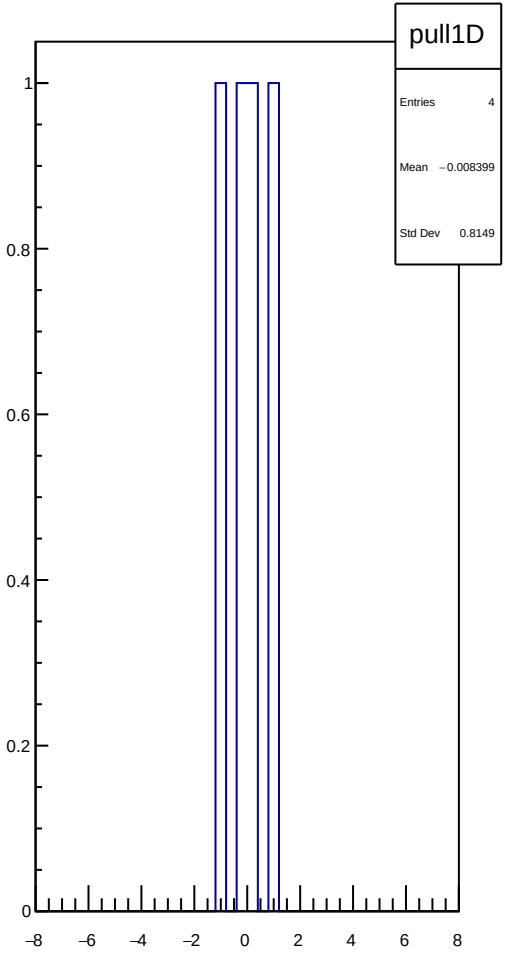

pull
Entries 4
Mean 118
Std Dev 116.3
1
0.5
0
−0.5
−1

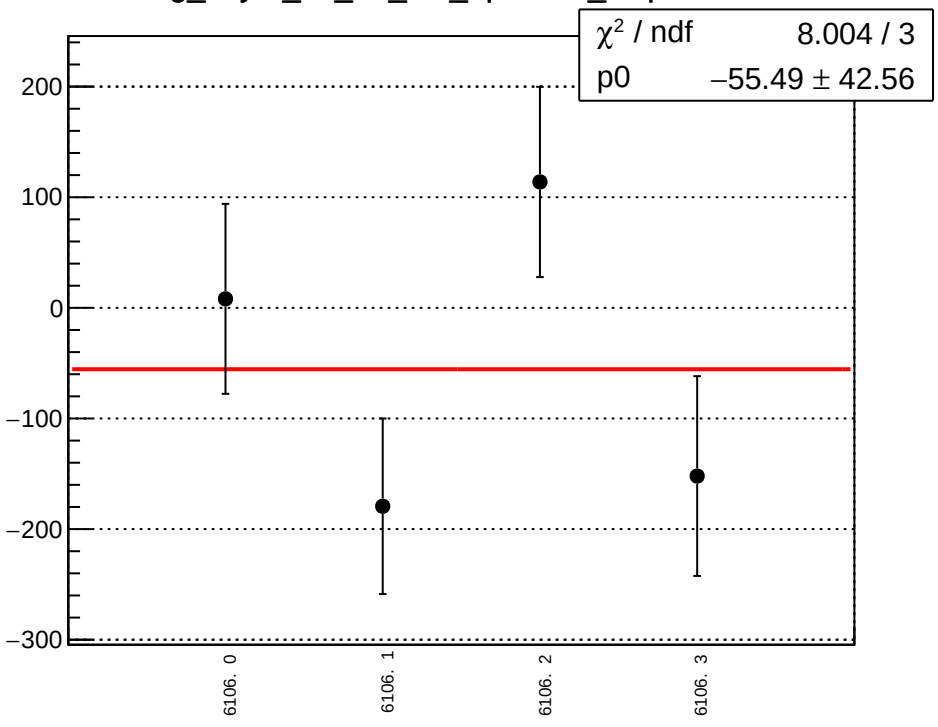

pull1D
Entries 4
Mean 0.005664
Std Dev 0.8251
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

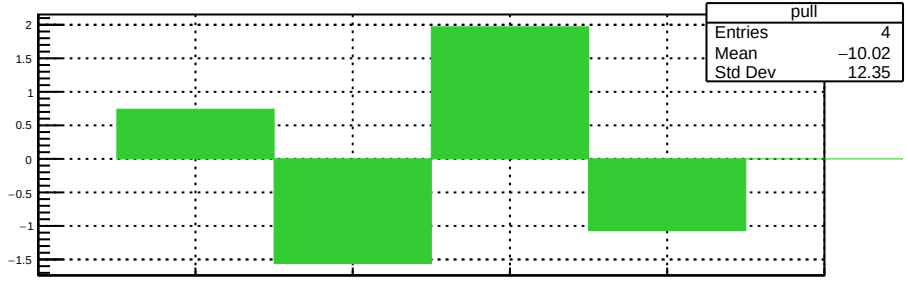

reg_asym_atl_dd_diff_bpm4aY_slope vs run
χ² / ndf 7.789 / 3
p0 60.35 ± 40.23
200
100
0
−100
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.589
Std Dev 6.971
1.5
1
0.5
0
−0.5
−1
−1.5
−2

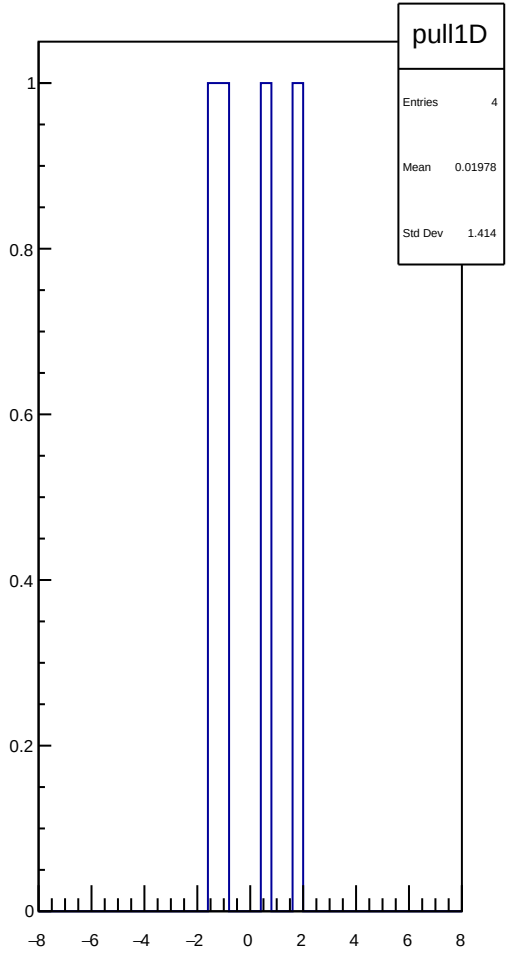

pull1D
Entries 4
Mean −0.04551
Std Dev 1.395
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

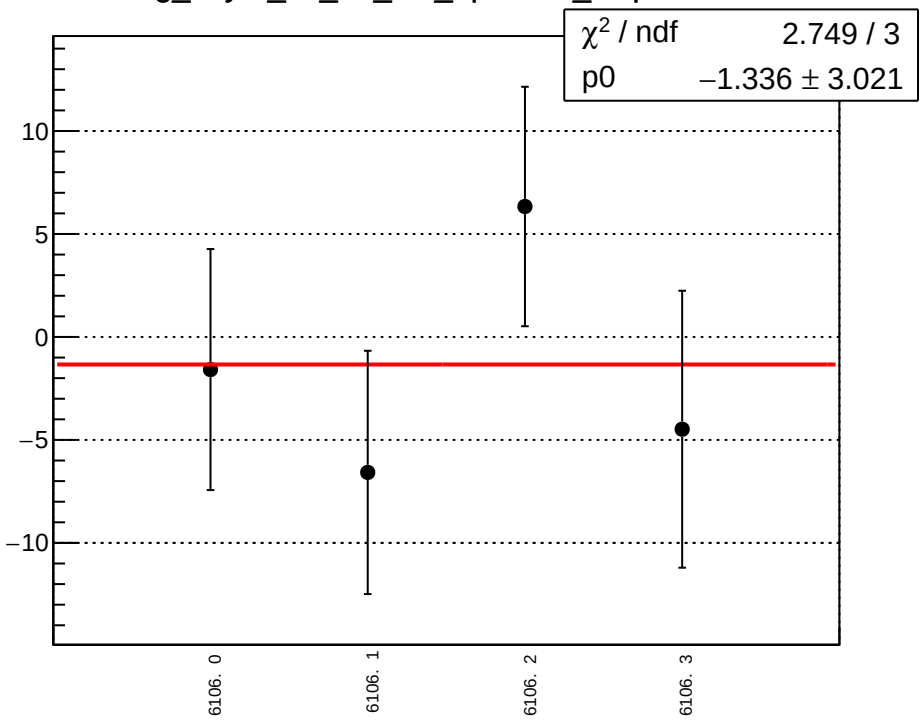

reg_asym_atl_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.656 / 3
p0 54.12 ± 72.48
300
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 82.4
Std Dev 80.68
1
0.5
0
−0.5
−1

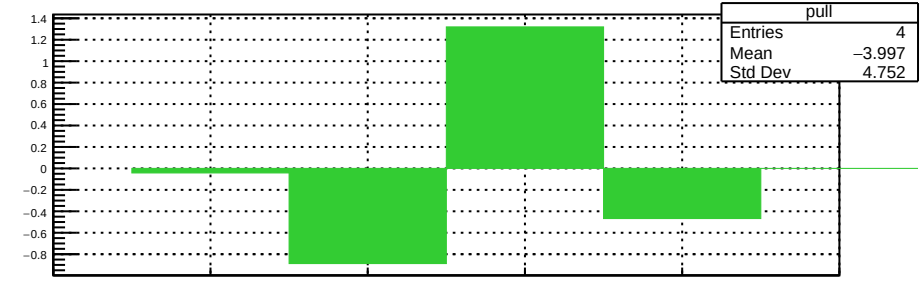

pull1D
Entries 4
Mean −0.008399
Std Dev 0.8149
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

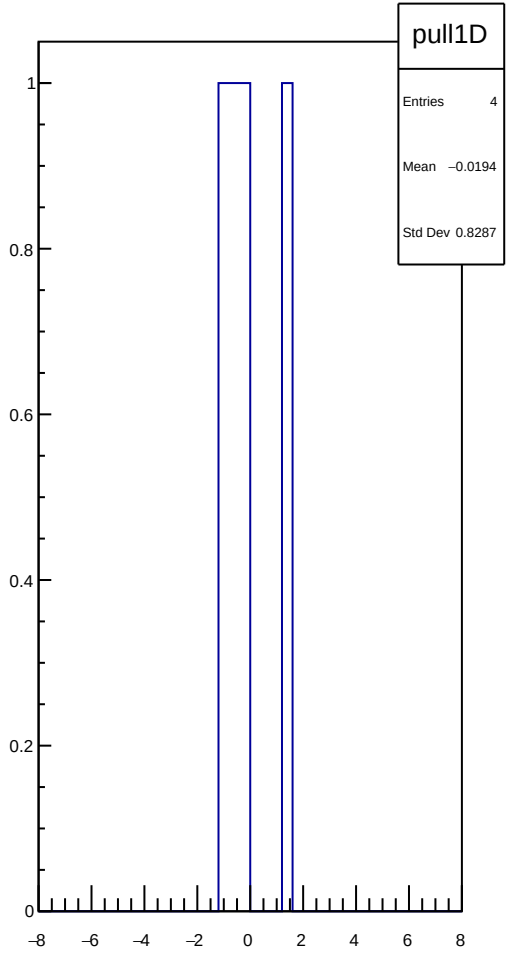

reg_asym_atl_dd_diff_bpm4eY_slope vs run
χ² / ndf 8.004 / 3
p0 −55.49 ± 42.56
200
100
0
−100
−200
−300
6106. 0
6106. 1
6106. 2
6106. 3

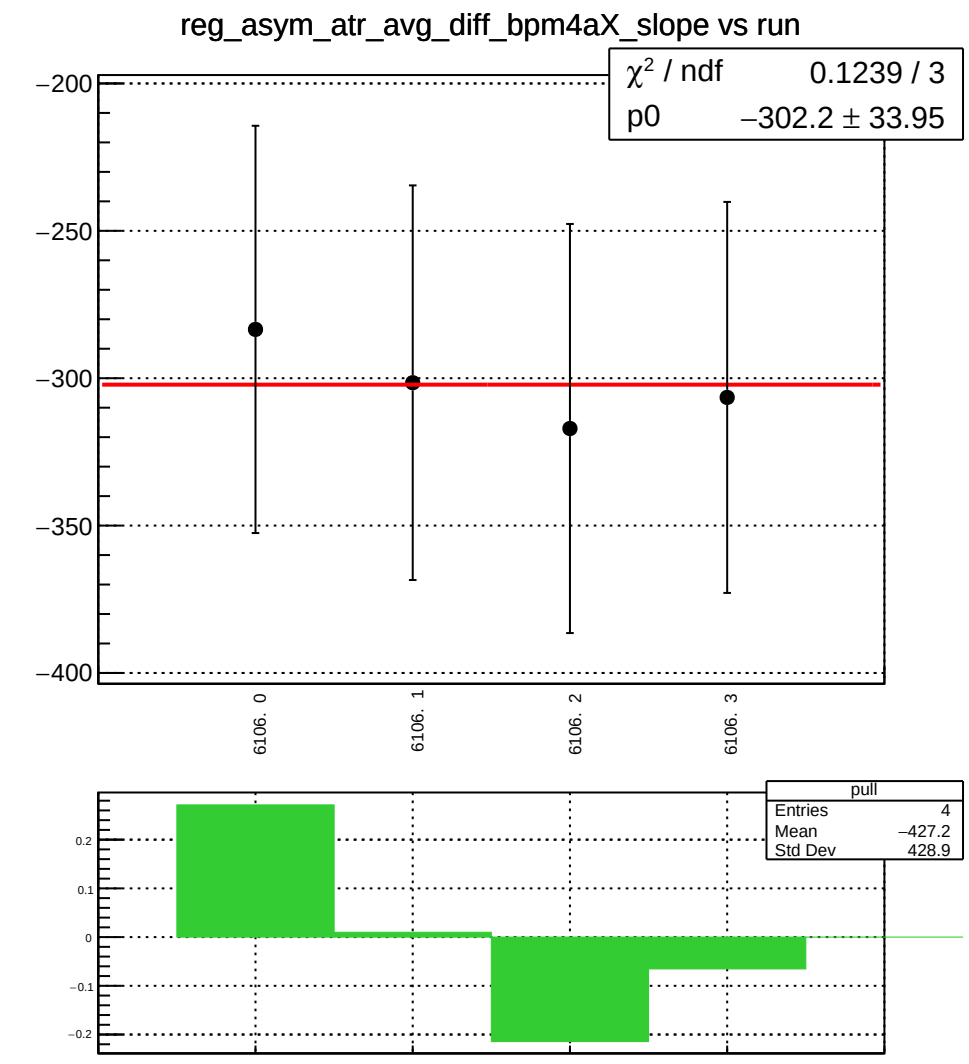

pull
Entries 4
Mean −10.02
Std Dev 12.35
2
1.5
1
0.5
0
−0.5
−1
−1.5

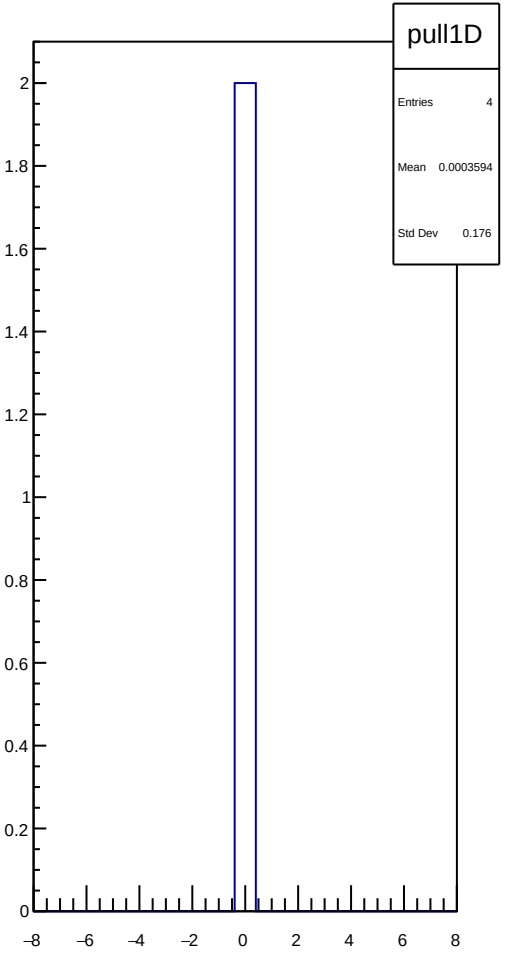

pull1D
Entries 4
Mean 0.01978
Std Dev 1.414
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

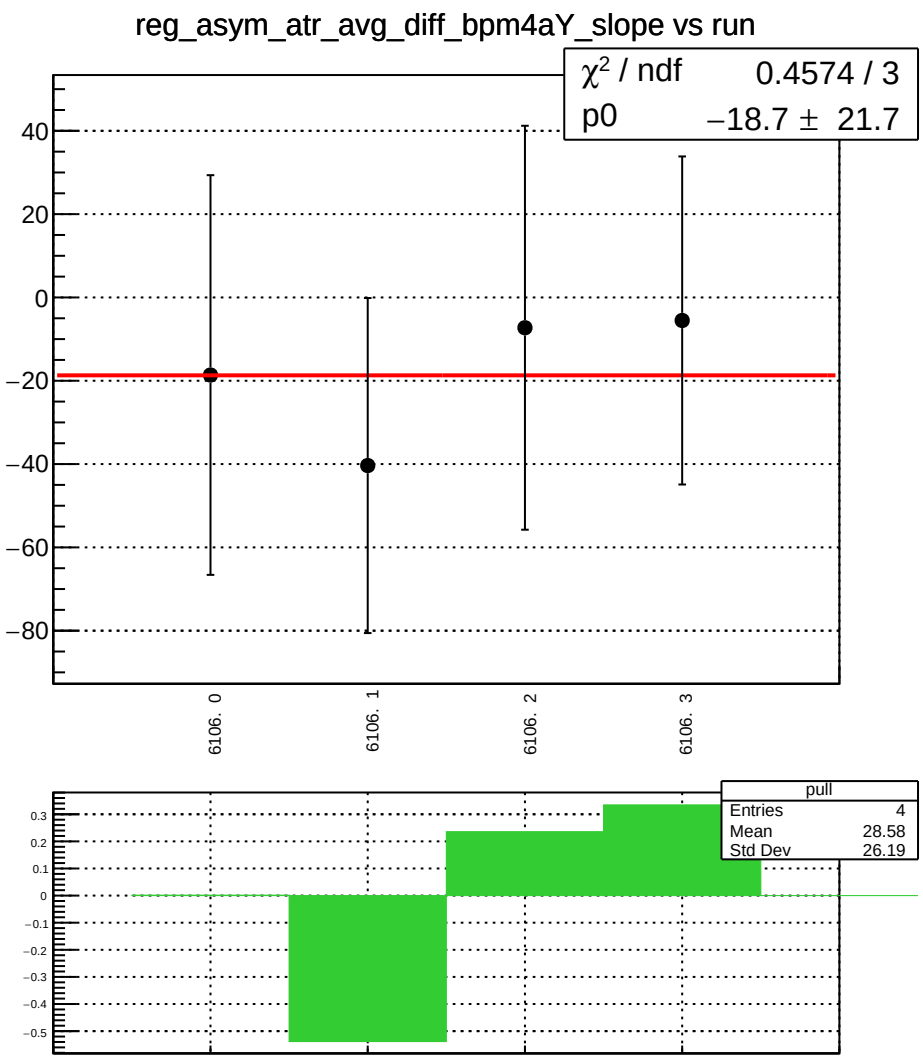

reg_asym_atl_dd_diff_bpm12X_slope vs run
χ² / ndf 2.749 / 3
p0 −1.336 ± 3.021
10
5
0
−5
−10
6106. 0
6106. 1
6106. 2
6106. 3

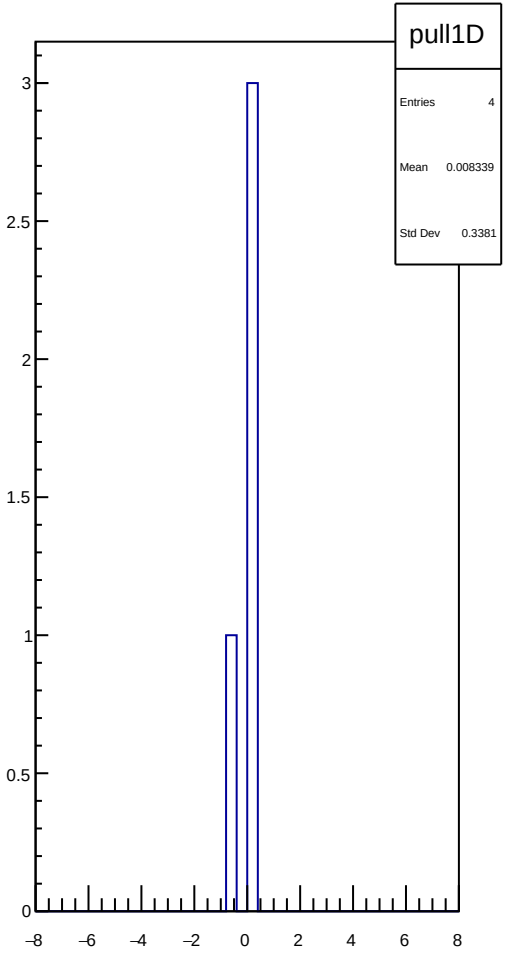

pull
Entries 4
Mean −3.997
Std Dev 4.752
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

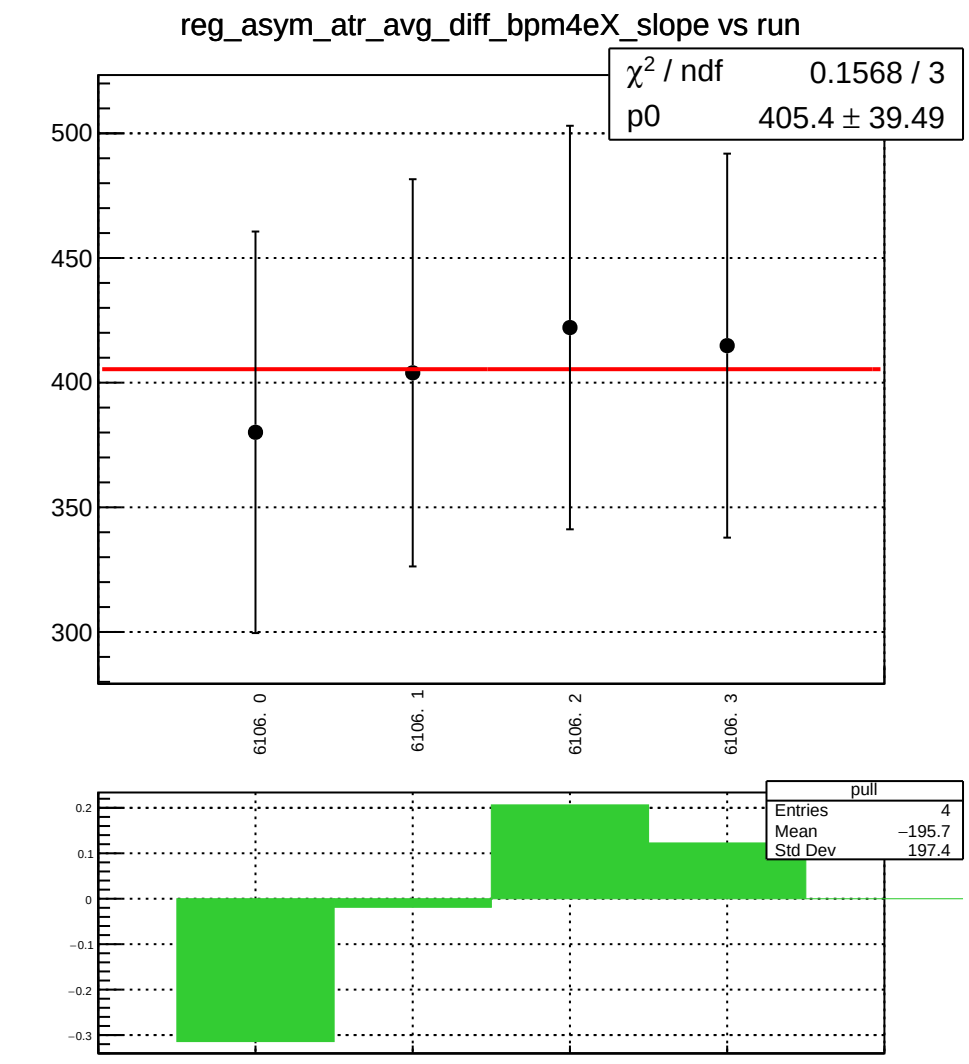

pull1D
Entries 4
Mean −0.0194
Std Dev 0.8287
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

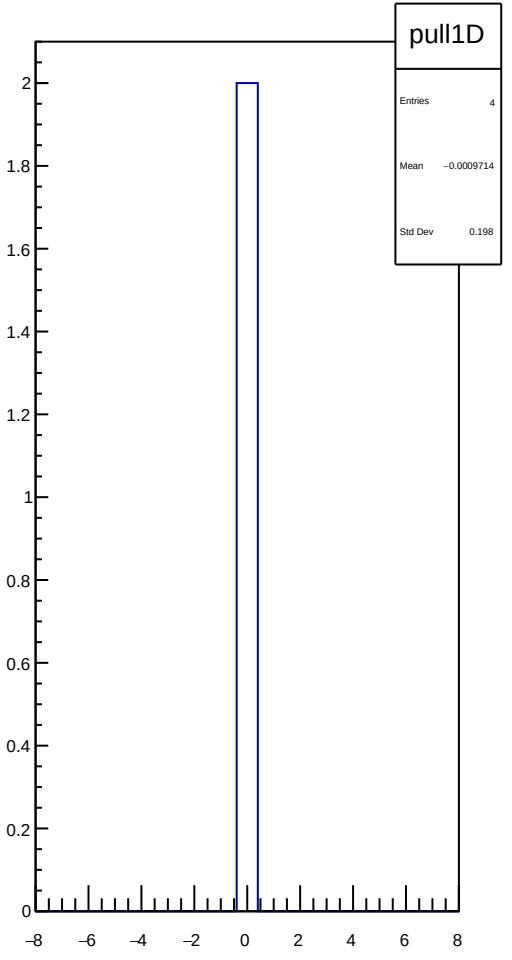

reg_asym_atr_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.1239 / 3
p0 −302.2 ± 33.95
−200
−250
−300
−350
−400
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −427.2
Std Dev 428.9
0.2
0.1
0
−0.1
−0.2

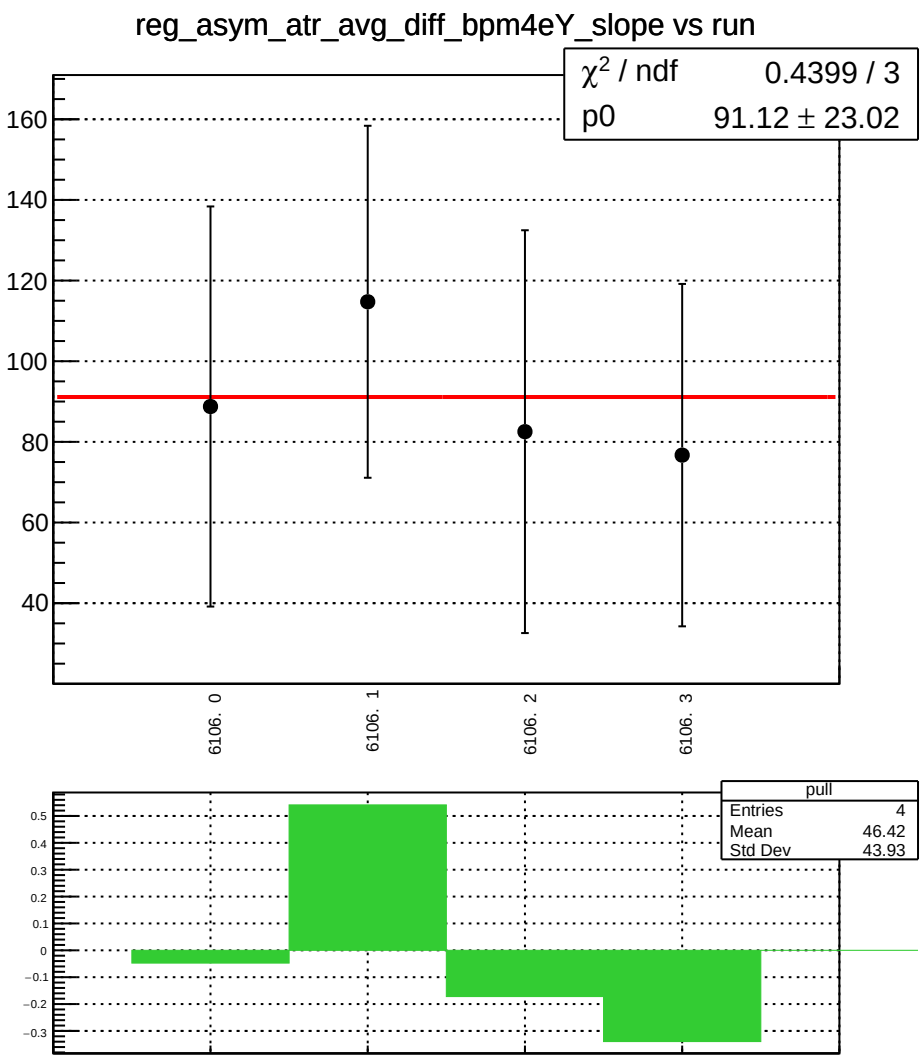

pull1D
Entries 4
Mean 0.0003594
Std Dev 0.176
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

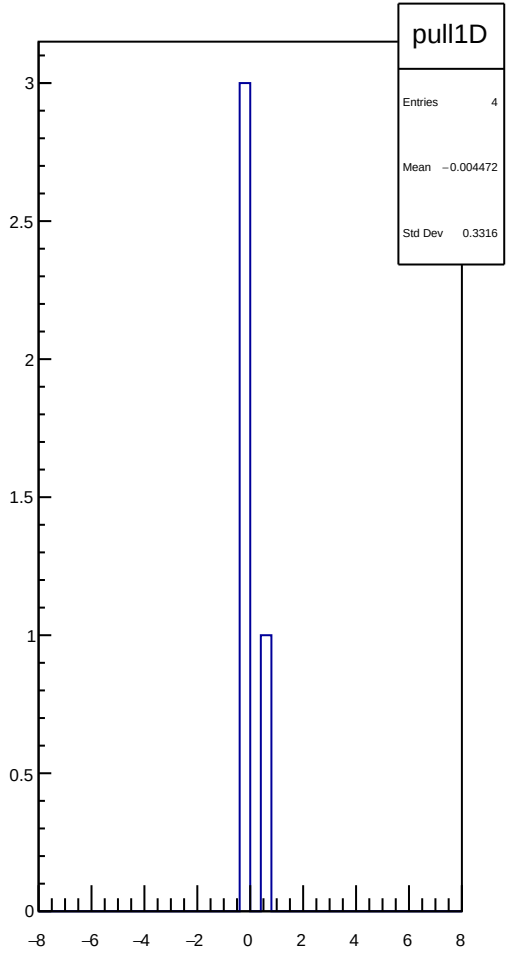

reg_asym_atr_avg_diff_bpm4aY_slope vs run
χ² / ndf 0.4574 / 3
p0 −18.7 ± 21.7
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 28.58
Std Dev 26.19
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

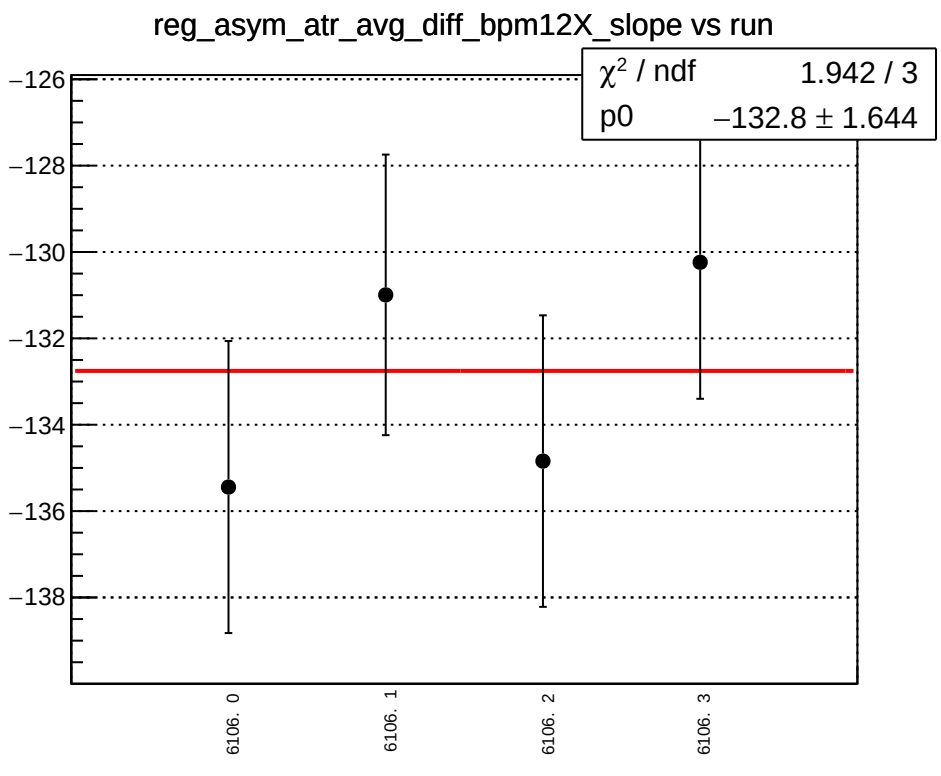

pull1D
Entries 4
Mean 0.008339
Std Dev 0.3381
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

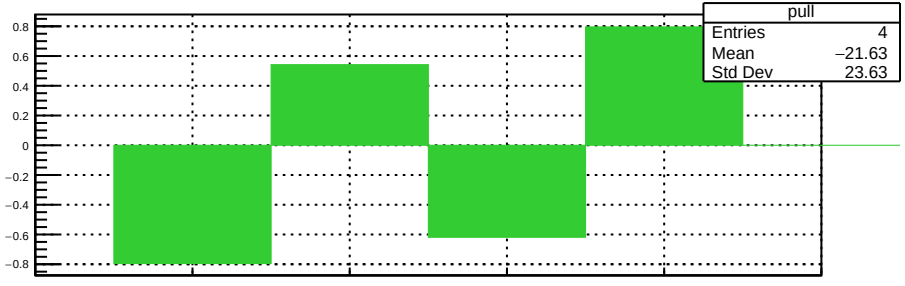

reg_asym_atr_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.1568 / 3
p0 405.4 ± 39.49
500
450
400
350
300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −195.7
Std Dev 197.4
0.2
0.1
0
−0.1
−0.2
−0.3

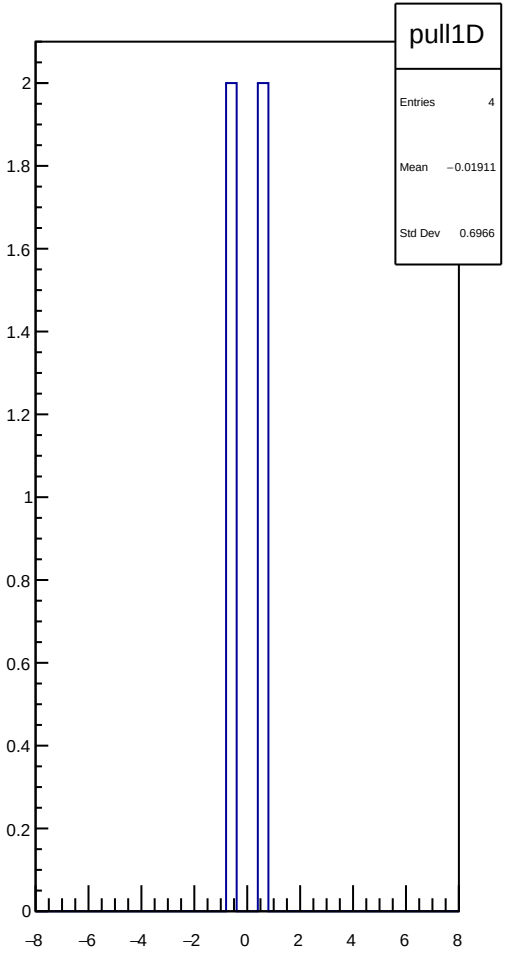

pull1D
Entries 4
Mean −0.0009714
Std Dev 0.198
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

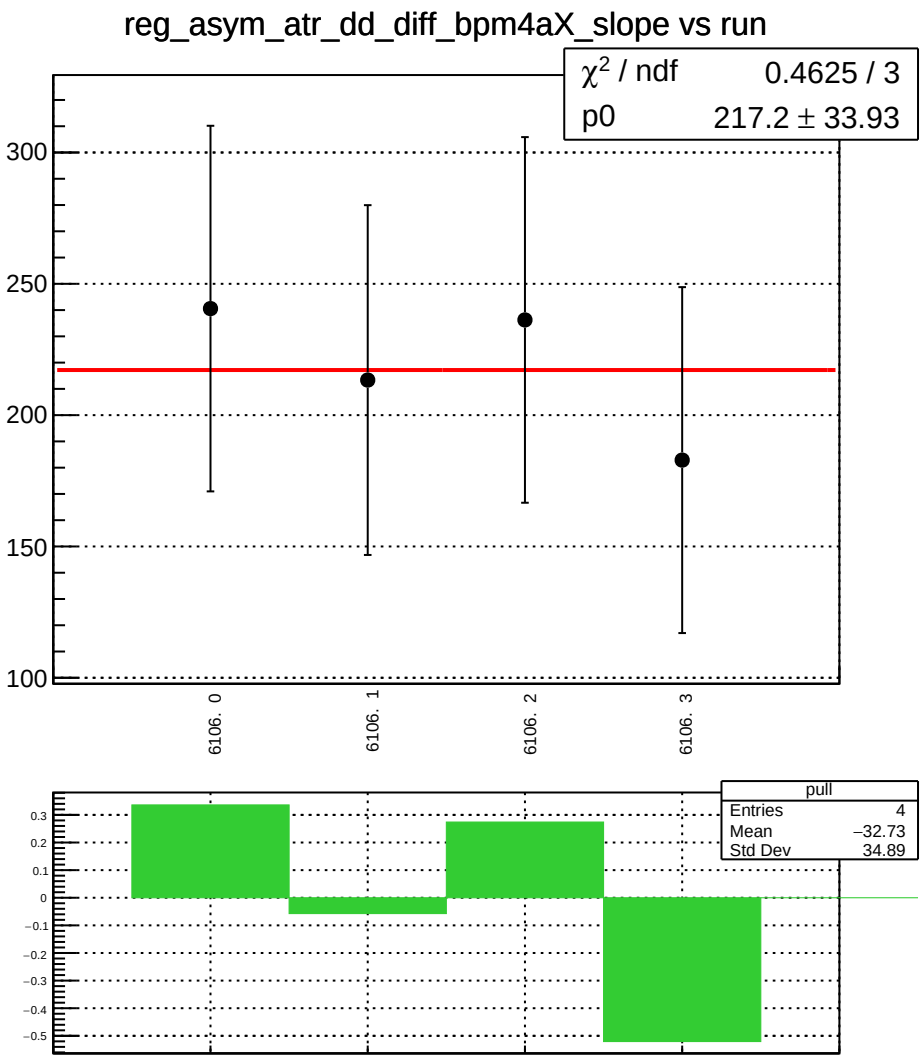

reg_asym_atr_avg_diff_bpm4eY_slope vs run
χ² / ndf 0.4399 / 3
p0 91.12 ± 23.02
160
140
120
100
80
60
40
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 46.42
Std Dev 43.93
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

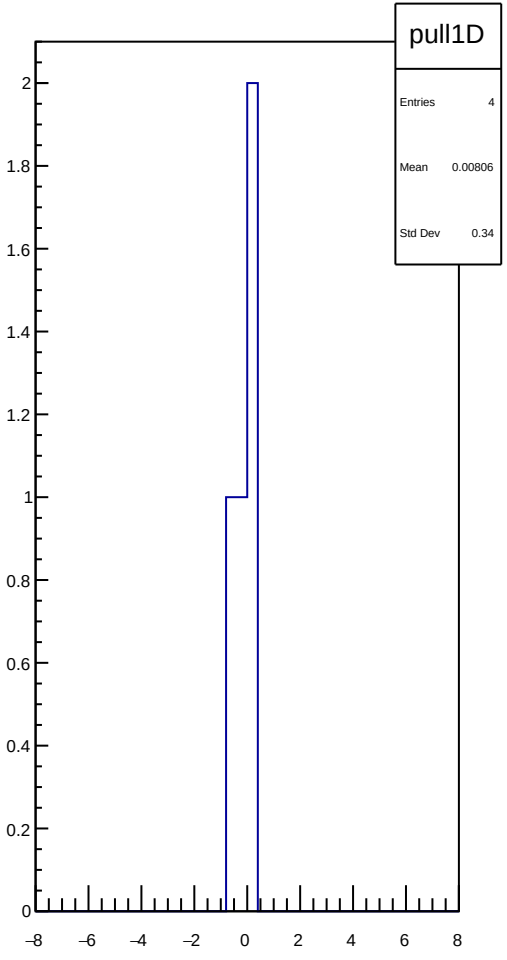

pull1D
Entries 4
Mean −0.004472
Std Dev 0.3316
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

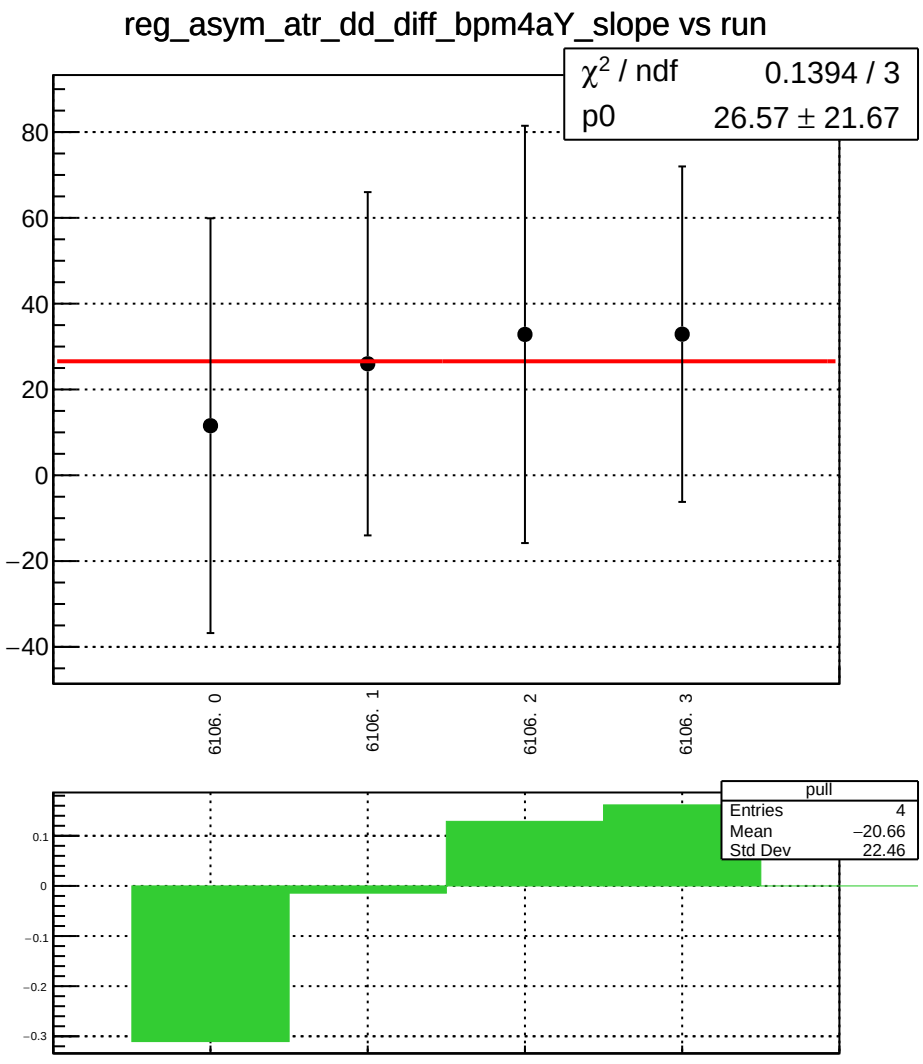

reg_asym_atr_avg_diff_bpm12X_slope vs run
χ² / ndf 1.942 / 3
p0 −132.8 ± 1.644
−126
−128
−130
−132
−134
−136
−138
6106. 0
6106. 1
6106. 2
6106. 3

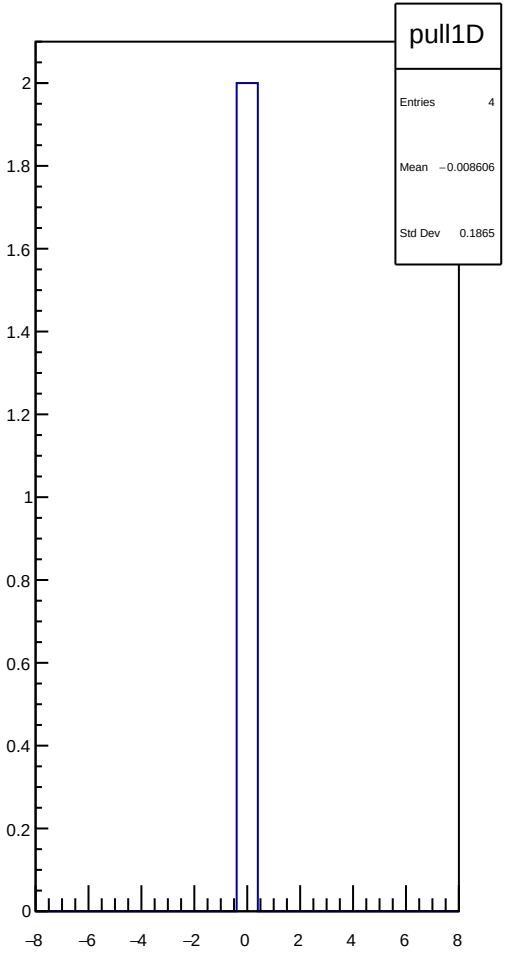

pull
Entries 4
Mean −21.63
Std Dev 23.63
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

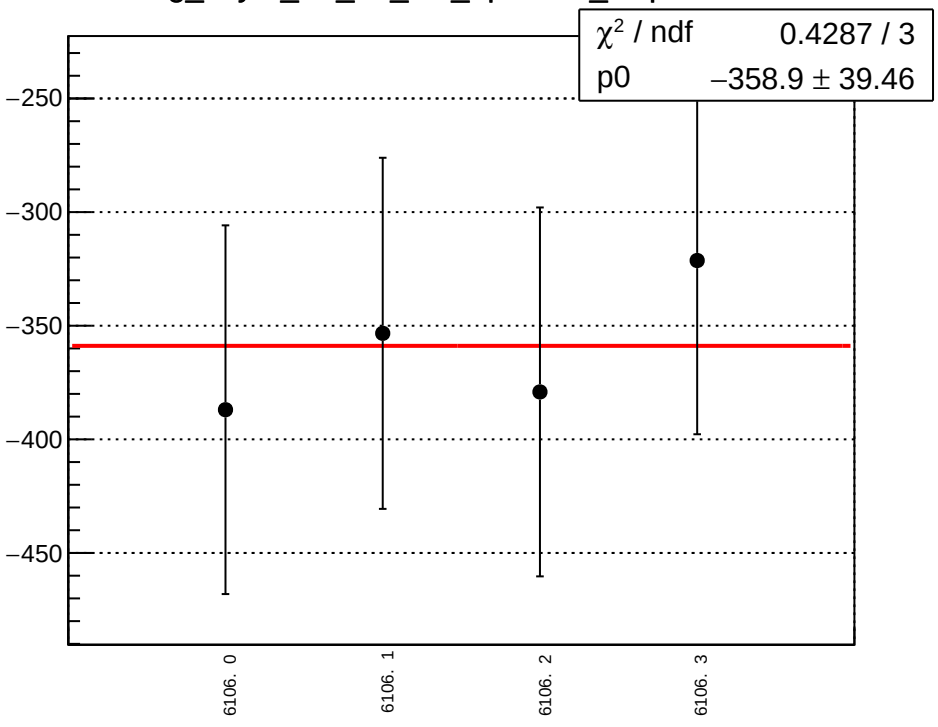

pull1D
Entries 4
Mean −0.01911
Std Dev 0.6966
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

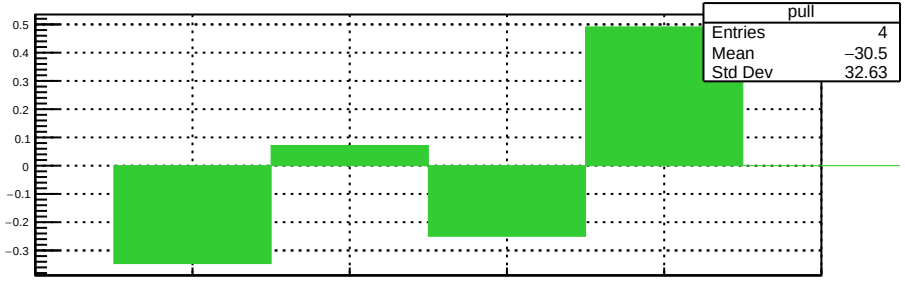

reg_asym_atr_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.4625 / 3
p0 217.2 ± 33.93
300
250
200
150
100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −32.73
Std Dev 34.89
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5

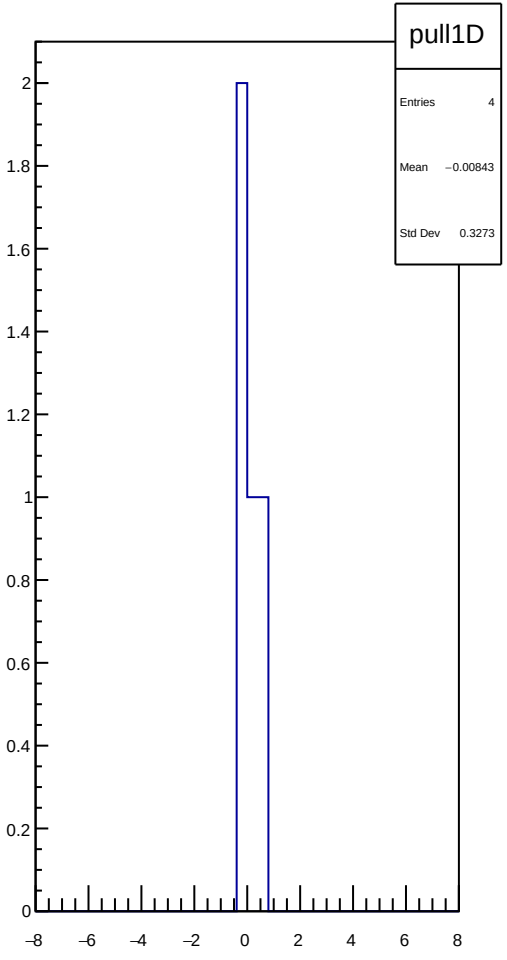

pull1D
Entries 4
Mean 0.00806
Std Dev 0.34
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

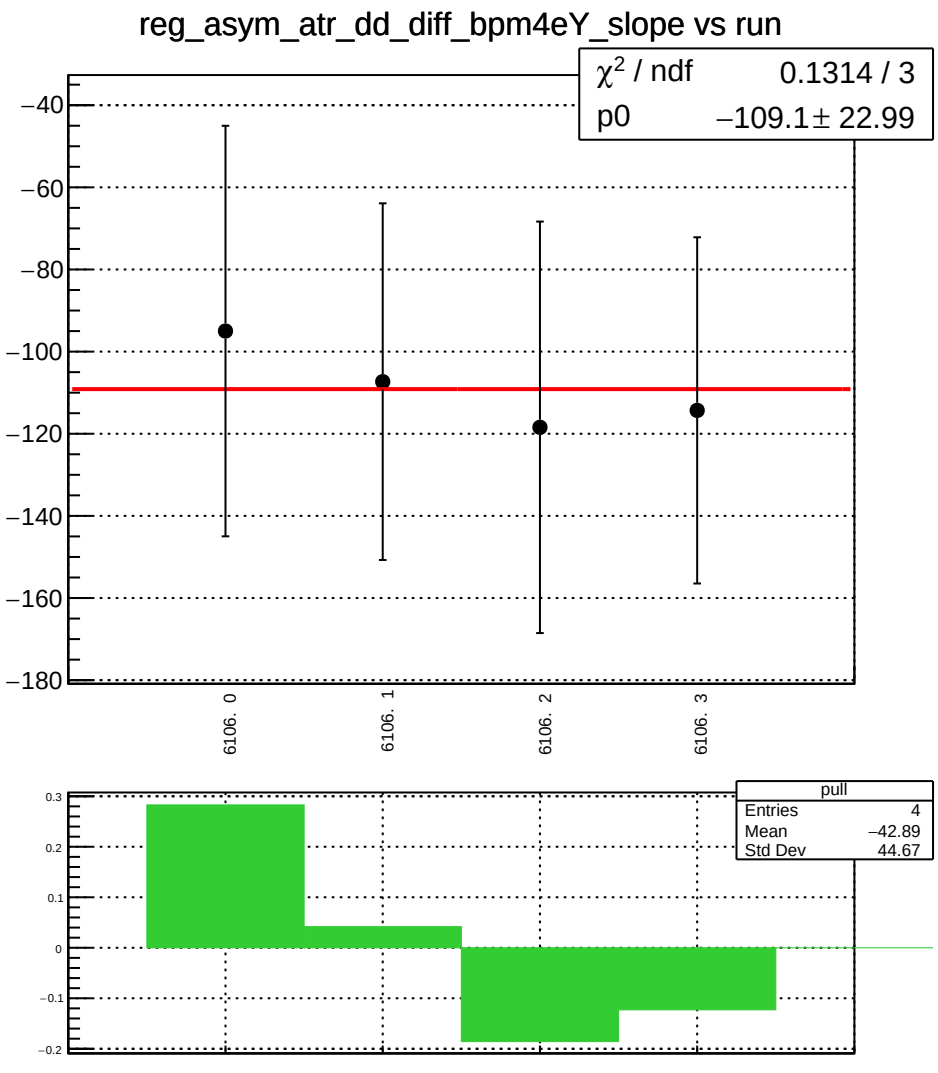

reg_asym_atr_dd_diff_bpm4aY_slope vs run
χ² / ndf 0.1394 / 3
p0 26.57 ± 21.67
80
60
40
20
0
−20
−40
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −20.66
Std Dev 22.46
0.1
0
−0.1
−0.2
−0.3

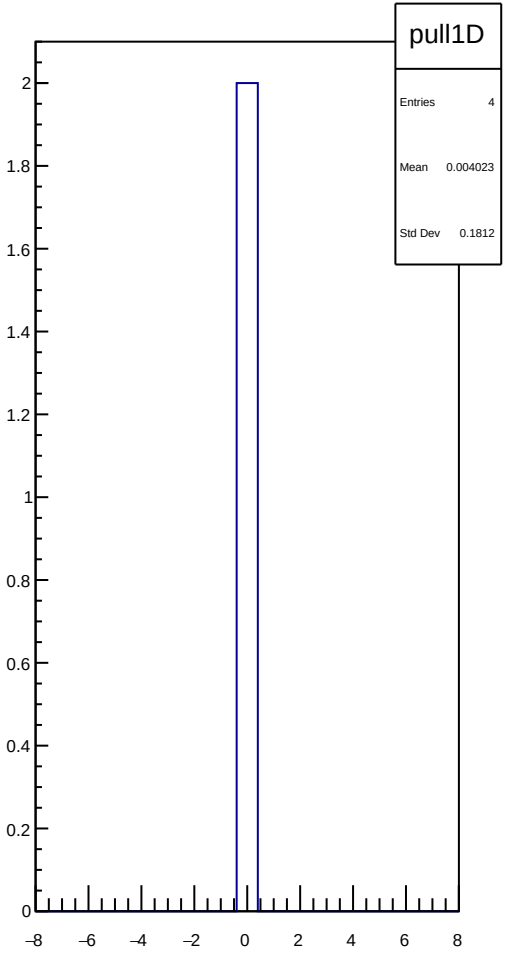

pull1D
Entries 4
Mean −0.008606
Std Dev 0.1865
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

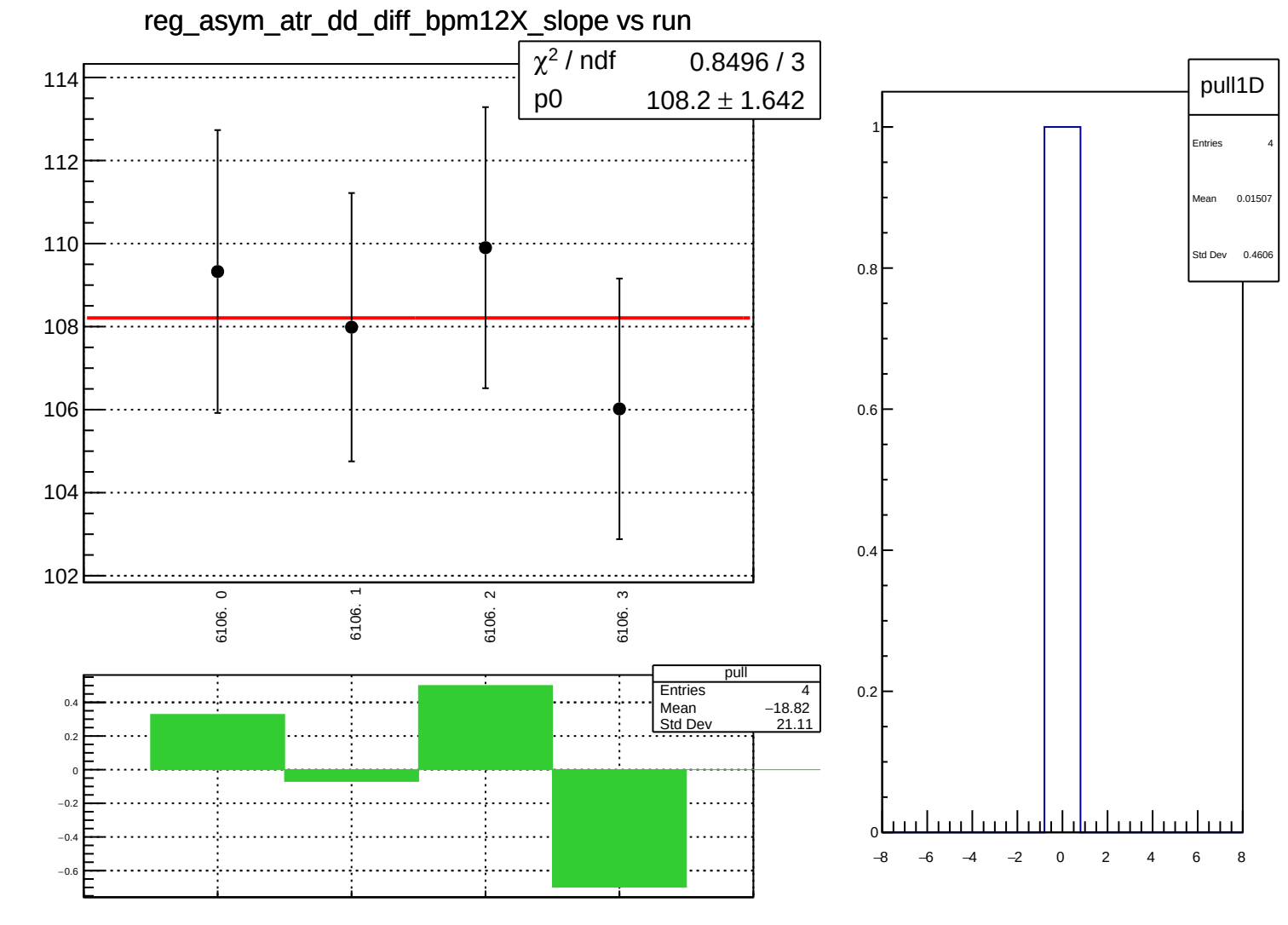

reg_asym_atr_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.4287 / 3
p0 −358.9 ± 39.46
−250
−300
−350
−400
−450
6106. 0
6106. 1
6106. 2
6106. 3

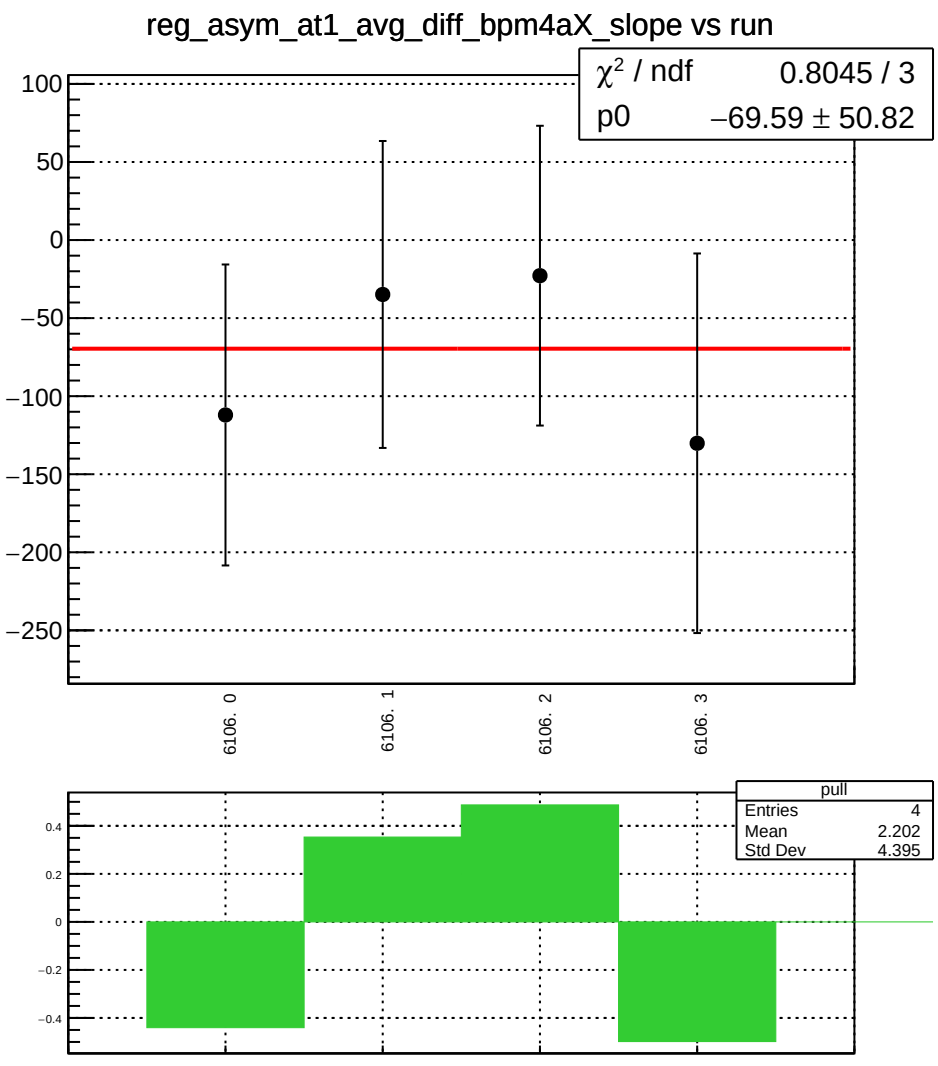

pull
Entries 4
Mean −30.5
Std Dev 32.63
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3

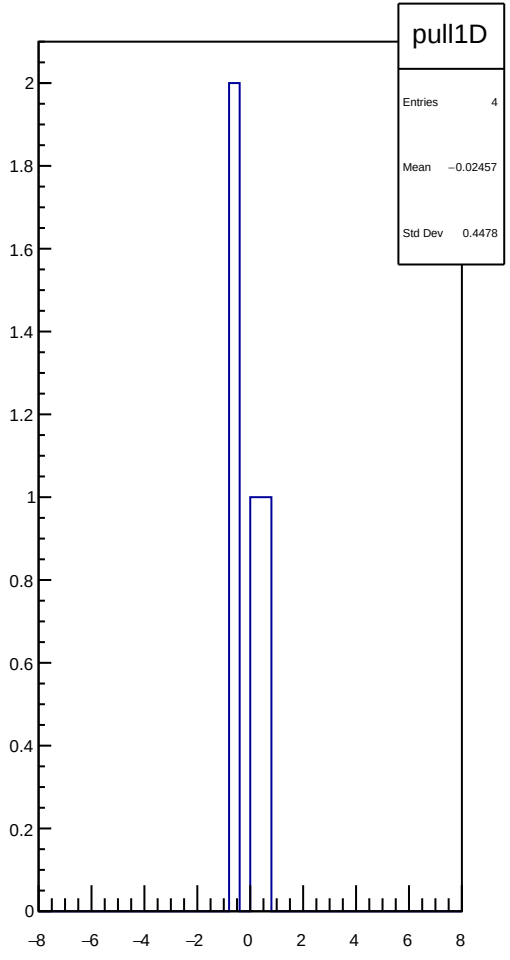

pull1D
Entries 4
Mean −0.00843
Std Dev 0.3273
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

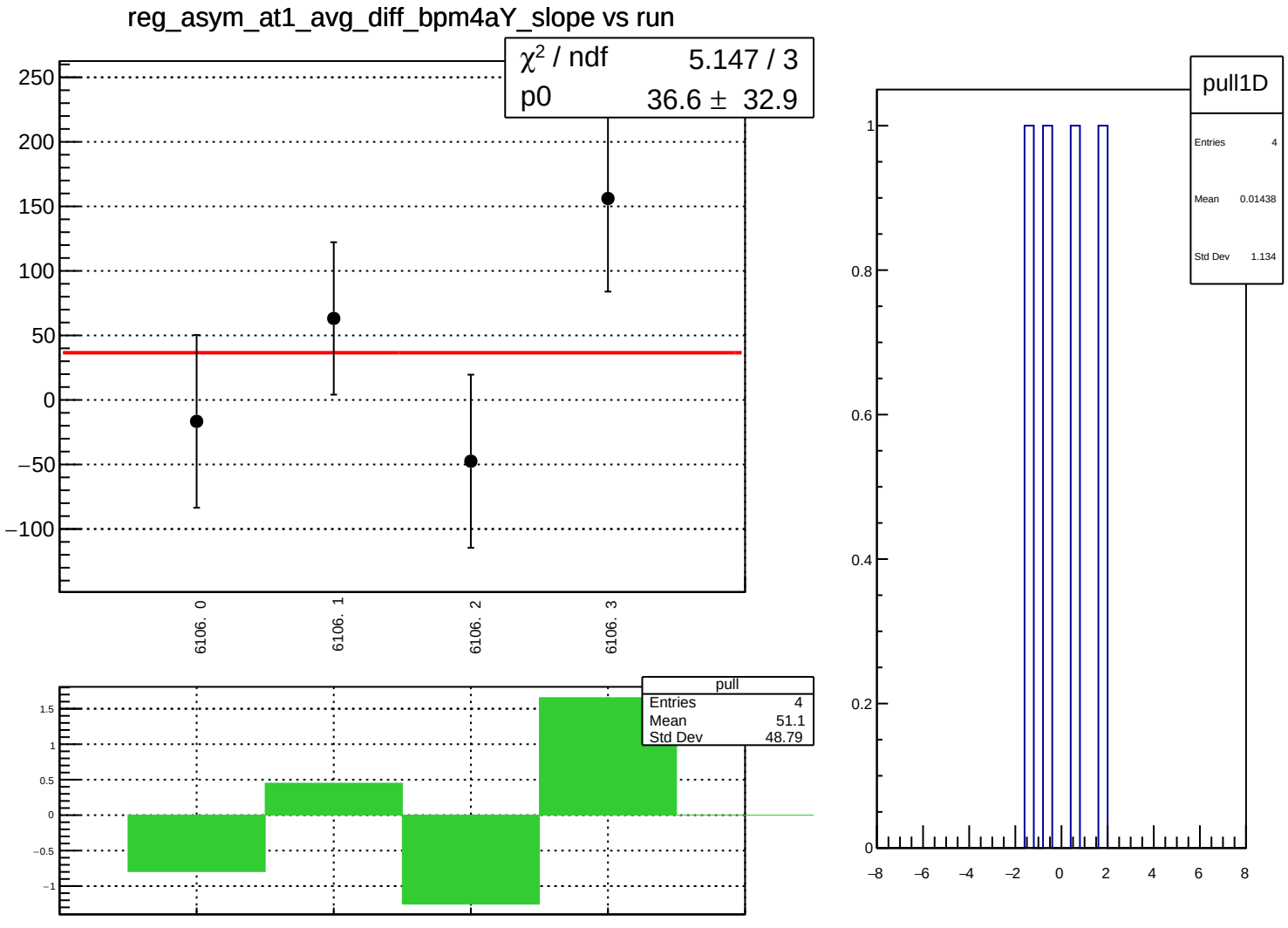

reg_asym_atr_dd_diff_bpm4eY_slope vs run
χ² / ndf 0.1314 / 3
p0 −109.1± 22.99
−40
−60
−80
−100
−120
−140
−160
−180
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −42.89
Std Dev 44.67
0.3
0.2
0.1
0
−0.1
−0.2

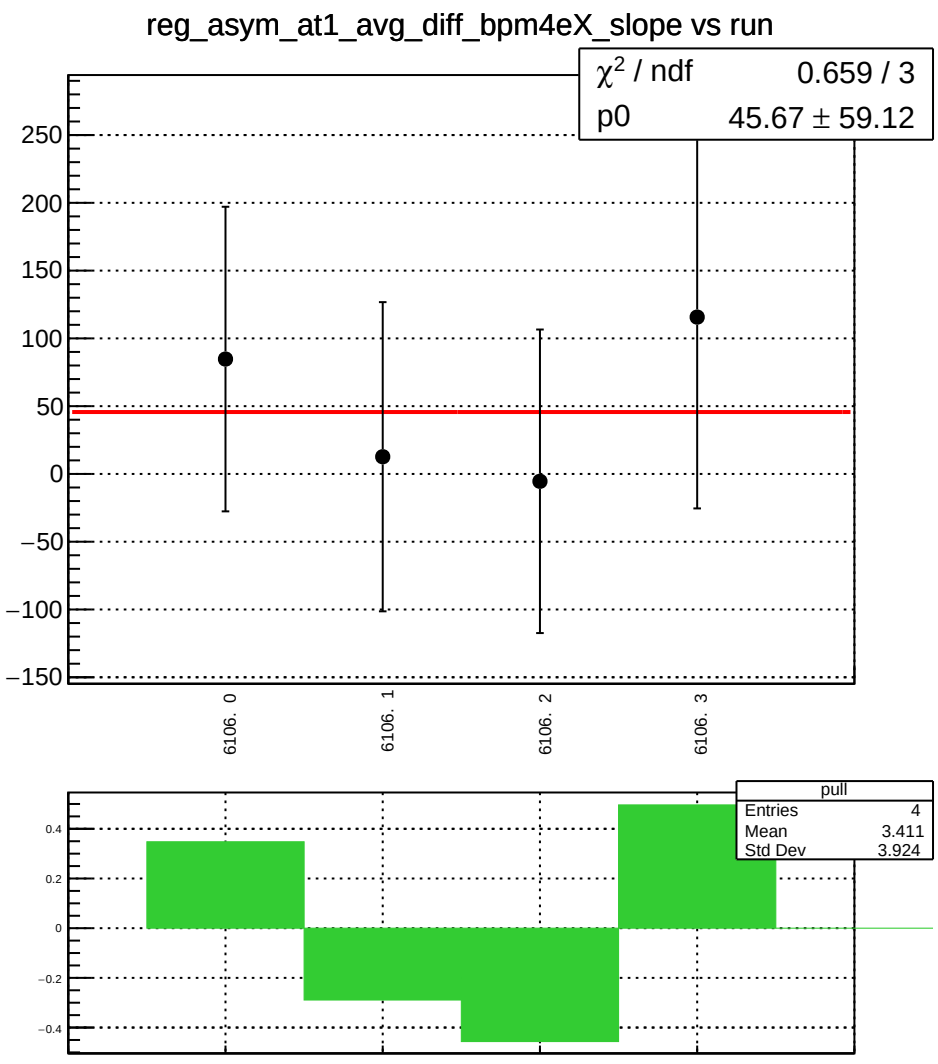

pull1D
Entries 4
Mean 0.004023
Std Dev 0.1812
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

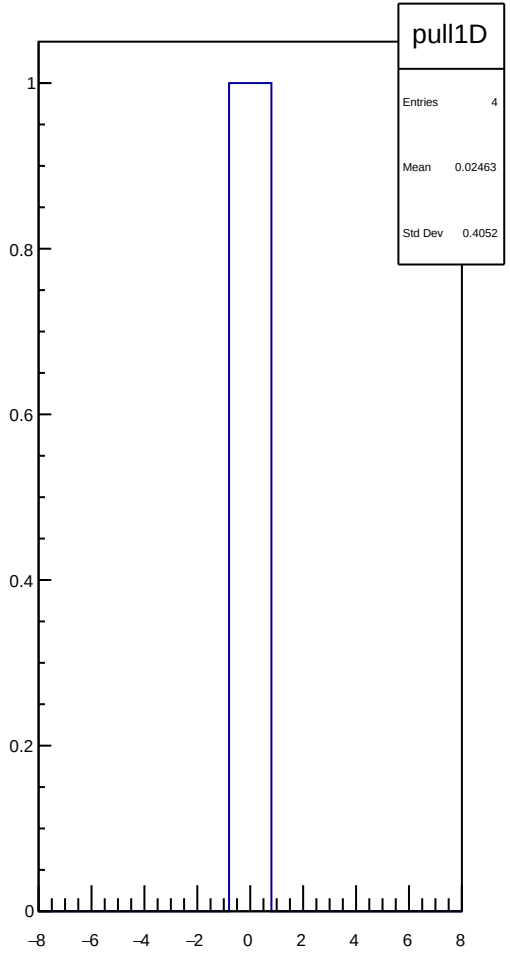

reg_asym_atr_dd_diff_bpm12X_slope vs run
χ^2 / ndf 0.8496 / 3
p0 108.2 ± 1.642
114
112
110
108
106
104
102
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −18.82
Std Dev 21.11
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean 0.01507
Std Dev 0.4606
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

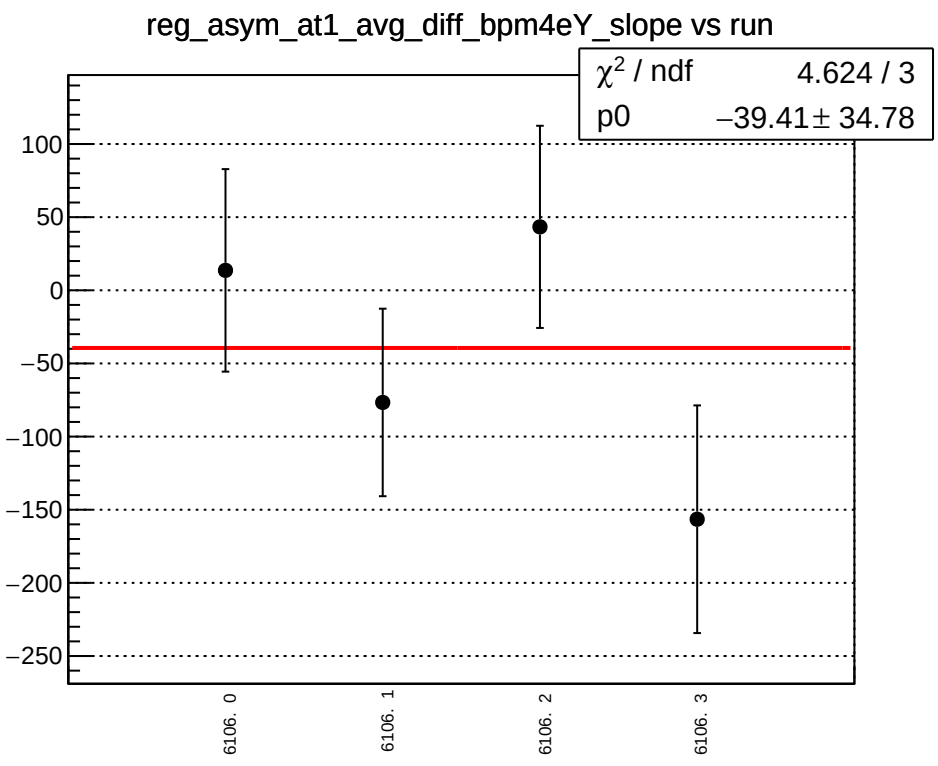

reg_asym_at1_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.8045 / 3
p0 −69.59 ± 50.82
100
50
0
−50
−100
−150
−200
−250
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2.202
Std Dev 4.395
0.4
0.2
0
−0.2
−0.4

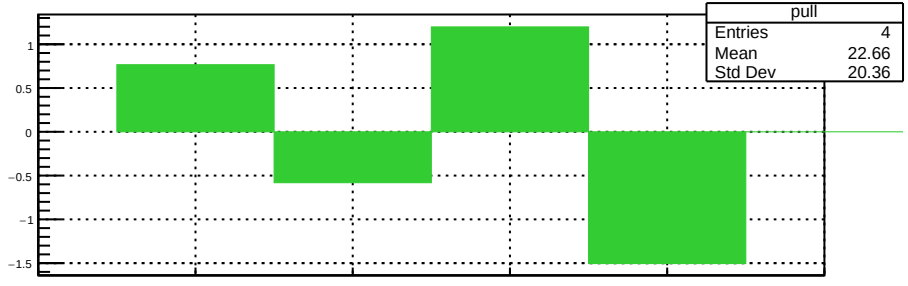

pull1D
Entries 4
Mean −0.02457
Std Dev 0.4478
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

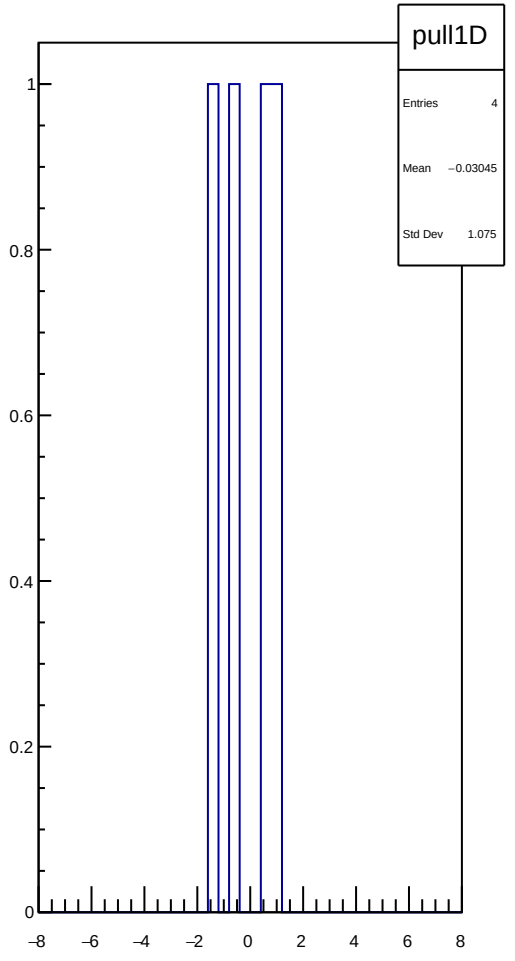

reg_asym_at1_avg_diff_bpm4aY_slope vs run
χ² / ndf 5.147 / 3
p0 36.6 ± 32.9
250
200
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 51.1
Std Dev 48.79
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean 0.01438
Std Dev 1.134
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

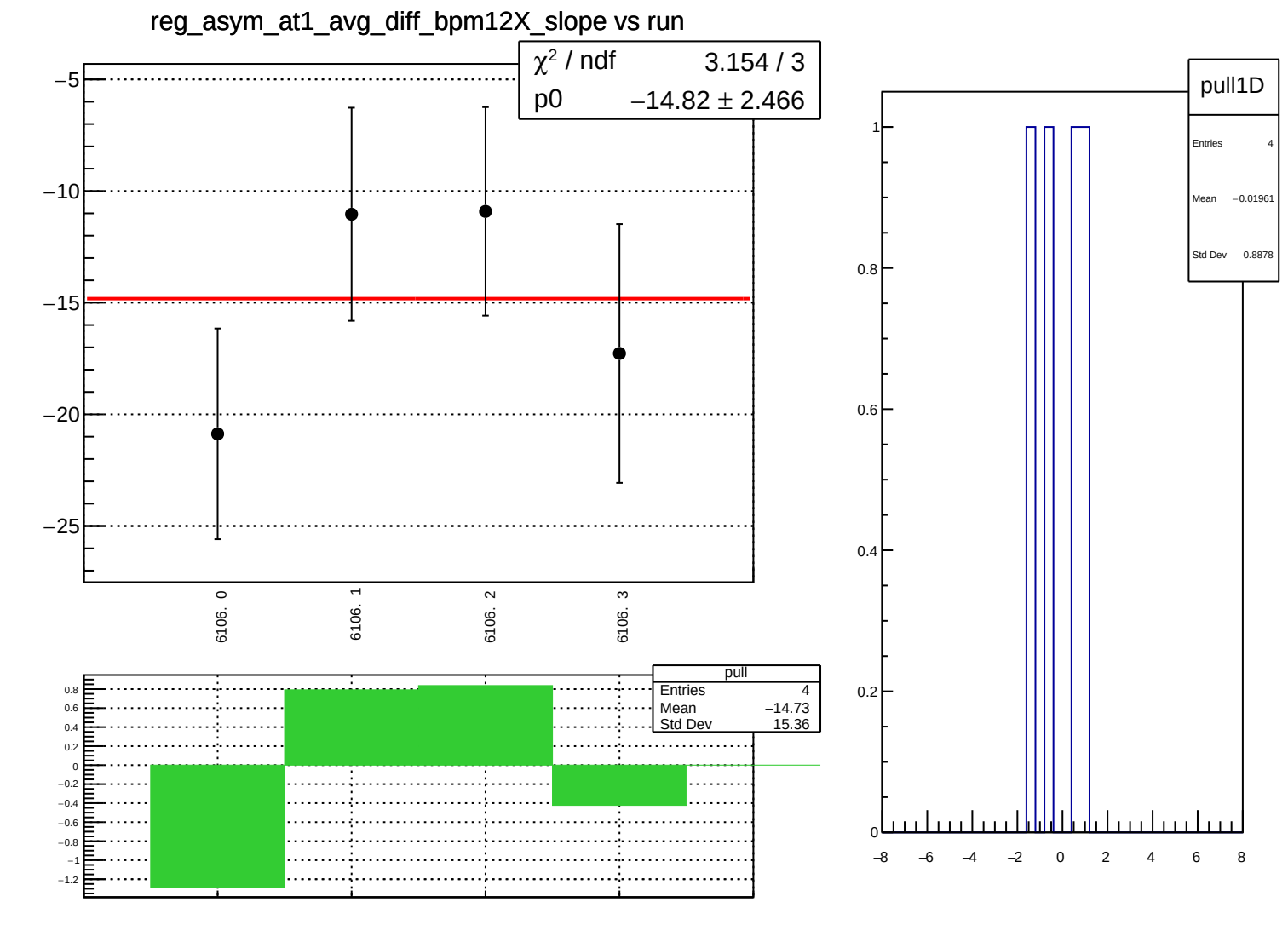

reg_asym_at1_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.659 / 3
p0 45.67 ± 59.12
250
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 3.411
Std Dev 3.924
0.4
0.2
0
−0.2
−0.4

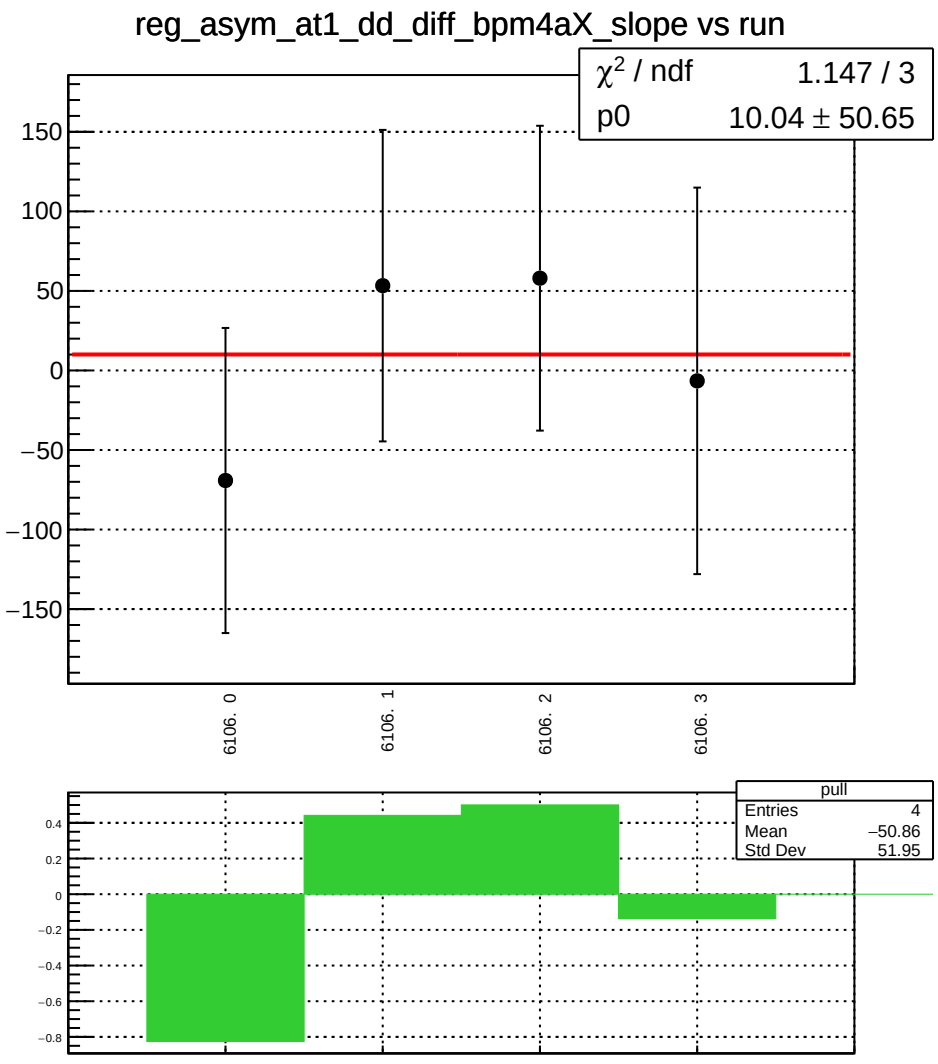

pull1D
Entries 4
Mean 0.02463
Std Dev 0.4052
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

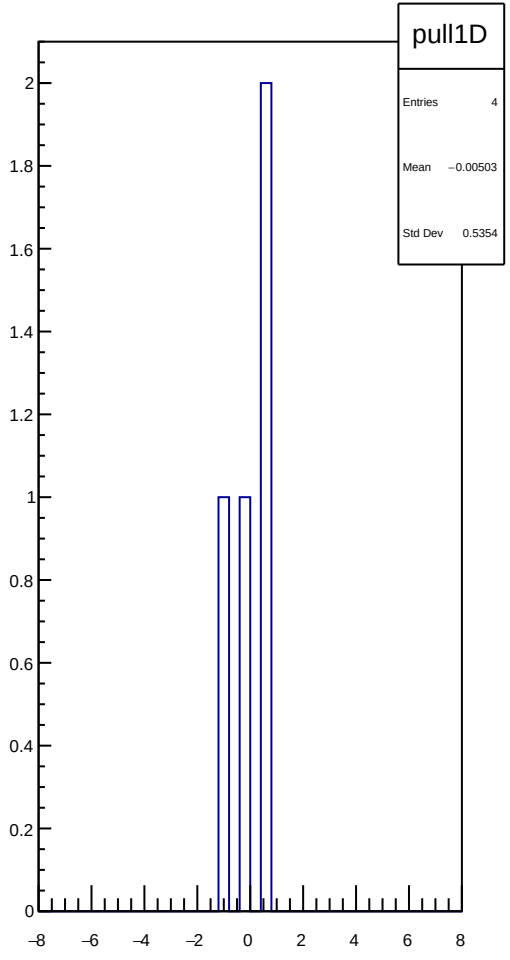

reg_asym_at1_avg_diff_bpm4eY_slope vs run
χ² / ndf 4.624 / 3
p0 −39.41 ± 34.78
100
50
0
−50
−100
−150
−200
−250
6106. 0
6106. 1
6106. 2
6106. 3

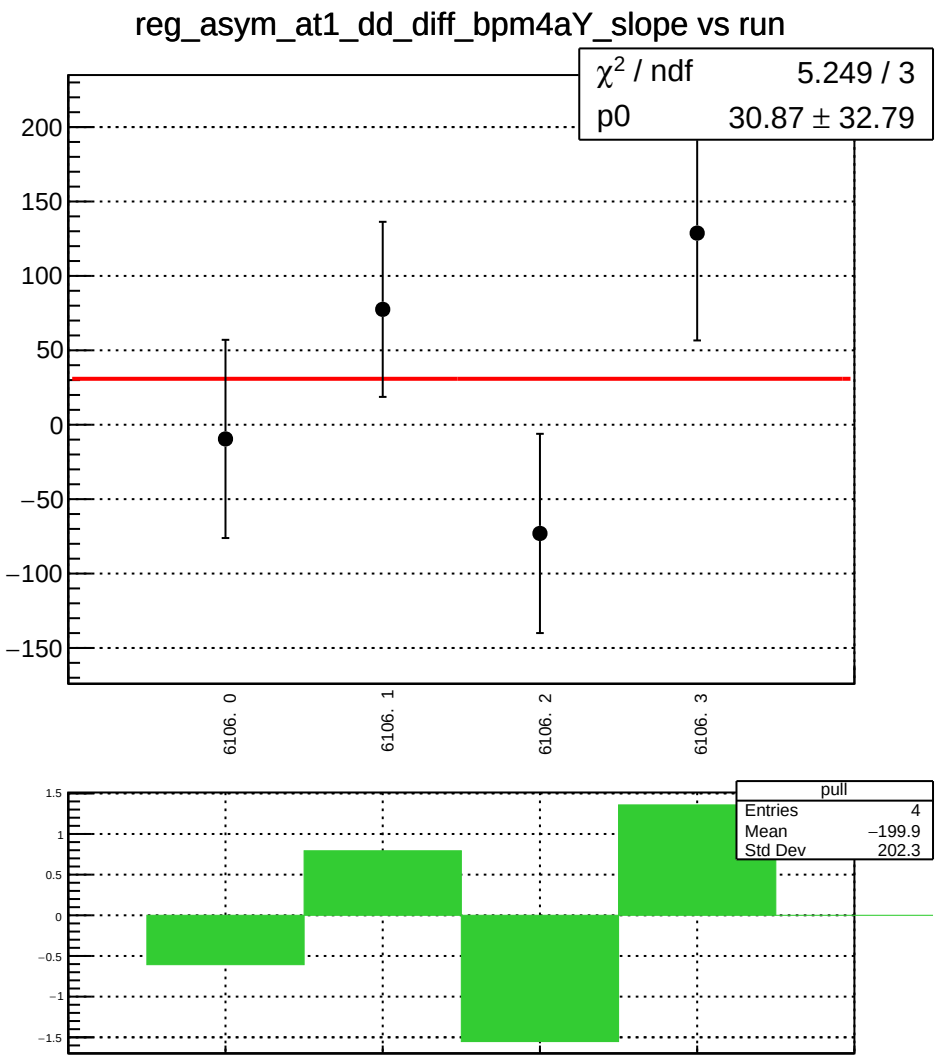

pull
Entries 4
Mean 22.66
Std Dev 20.36
1
0.5
0
−0.5
−1
−1.5

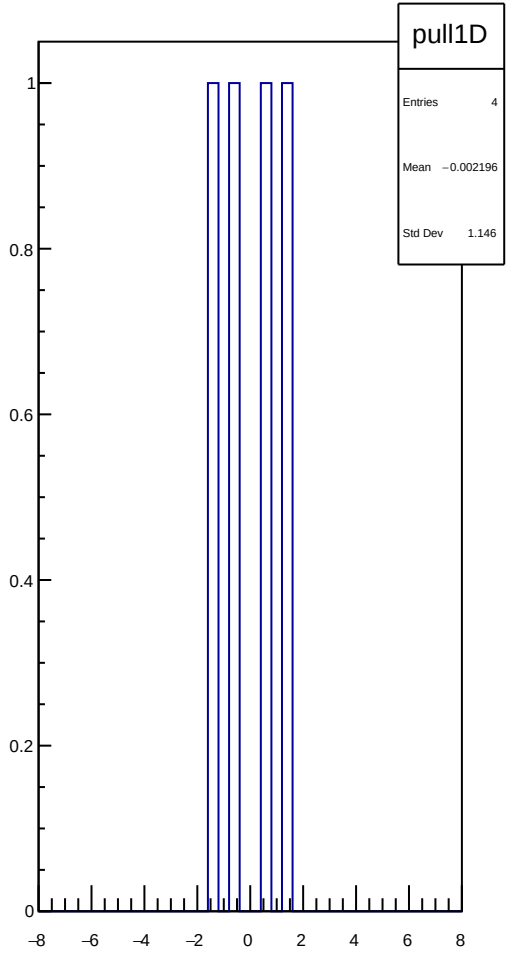

pull1D
Entries 4
Mean −0.03045
Std Dev 1.075
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

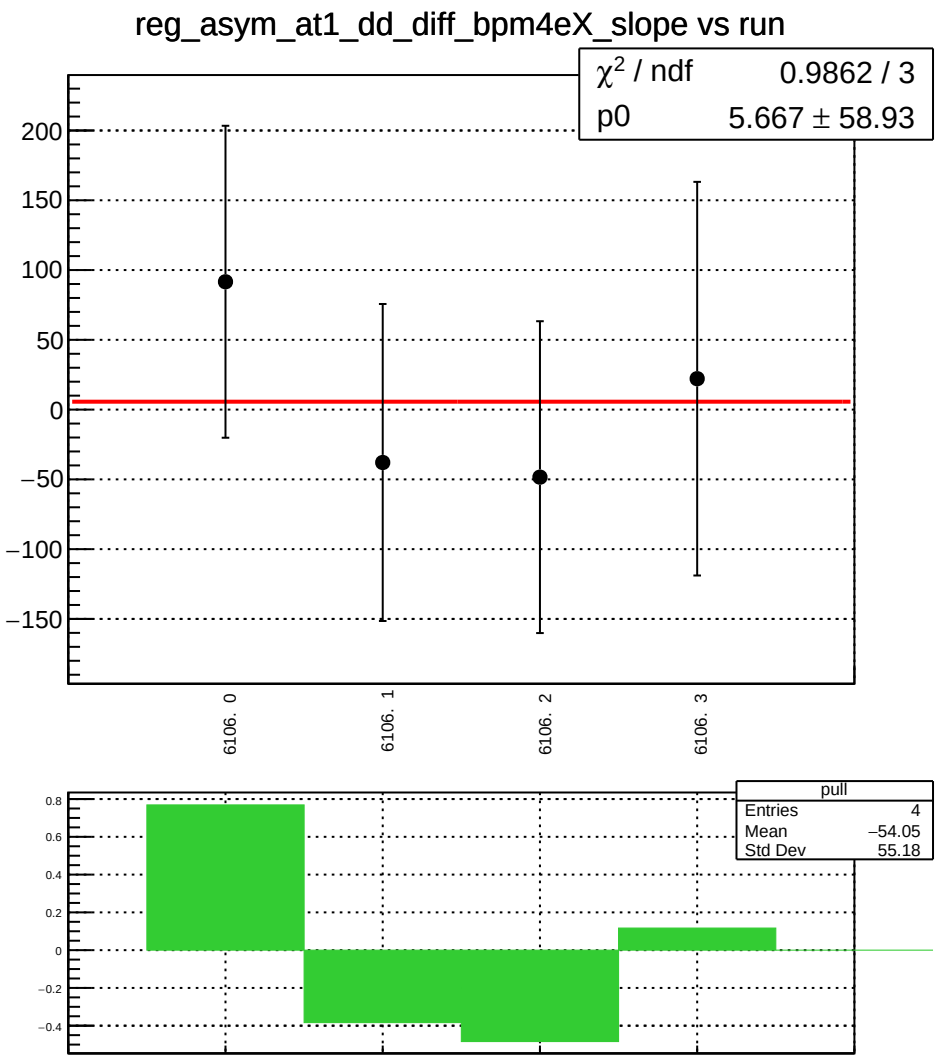

reg_asym_at1_avg_diff_bpm12X_slope vs run
χ² / ndf 3.154 / 3
p0 −14.82 ± 2.466
−5
−10
−15
−20
−25
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −14.73
Std Dev 15.36
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull1D
Entries 4
Mean −0.01961
Std Dev 0.8878
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

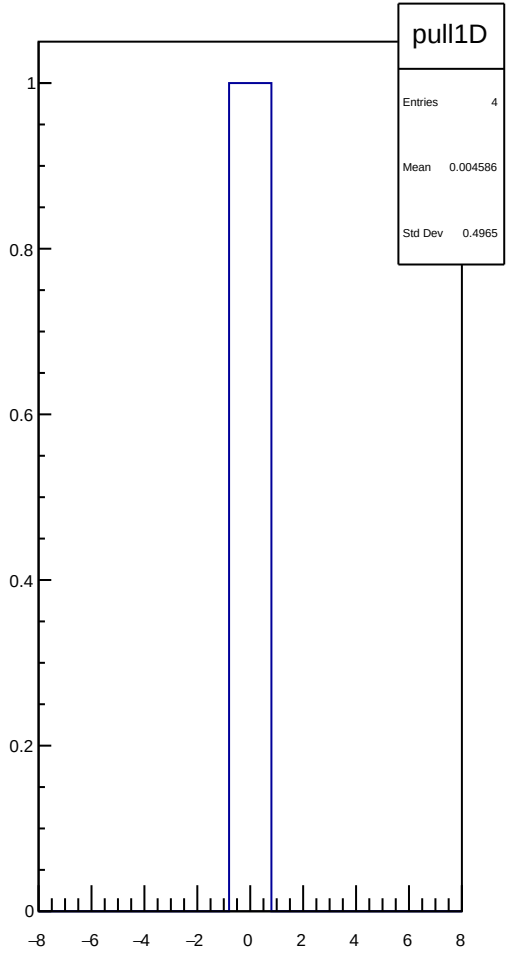

reg_asym_at1_dd_diff_bpm4aX_slope vs run
χ² / ndf 1.147 / 3
p0 10.04 ± 50.65
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −50.86
Std Dev 51.95
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

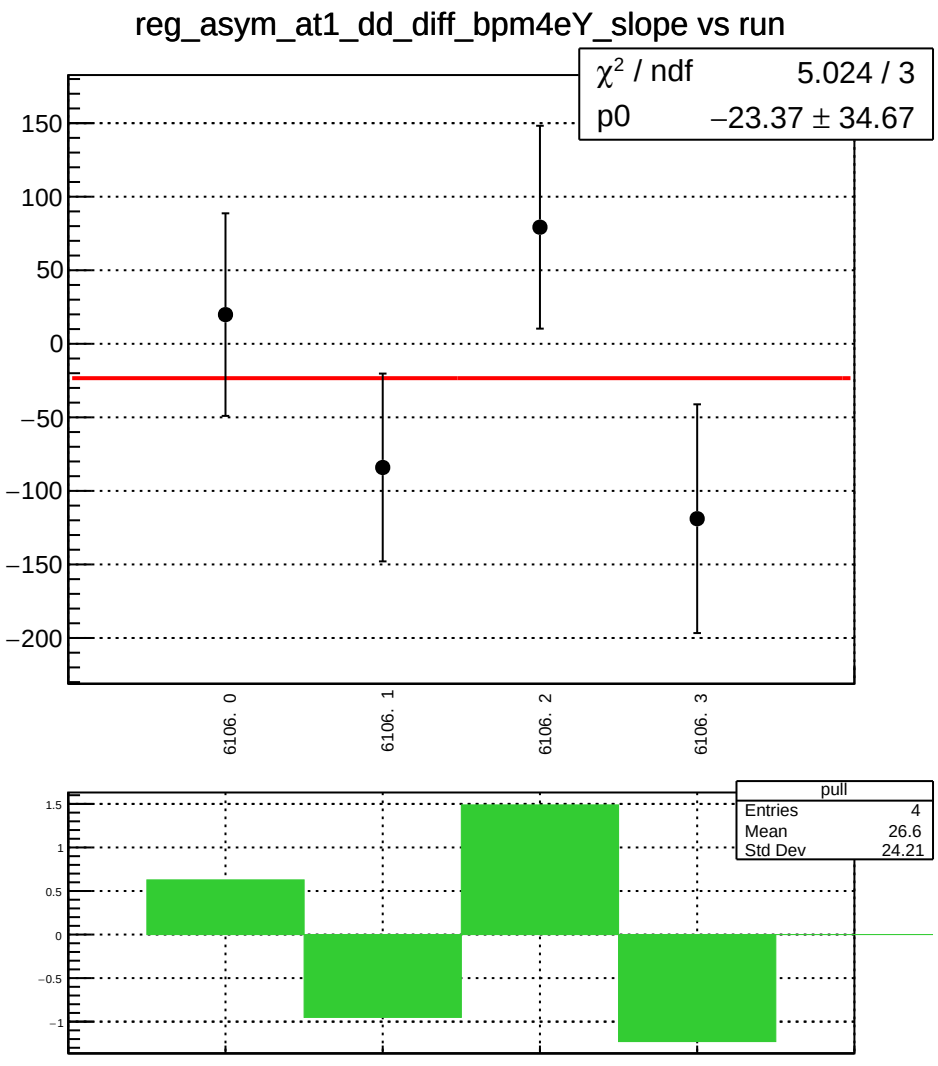

pull1D
Entries 4
Mean −0.00503
Std Dev 0.5354
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

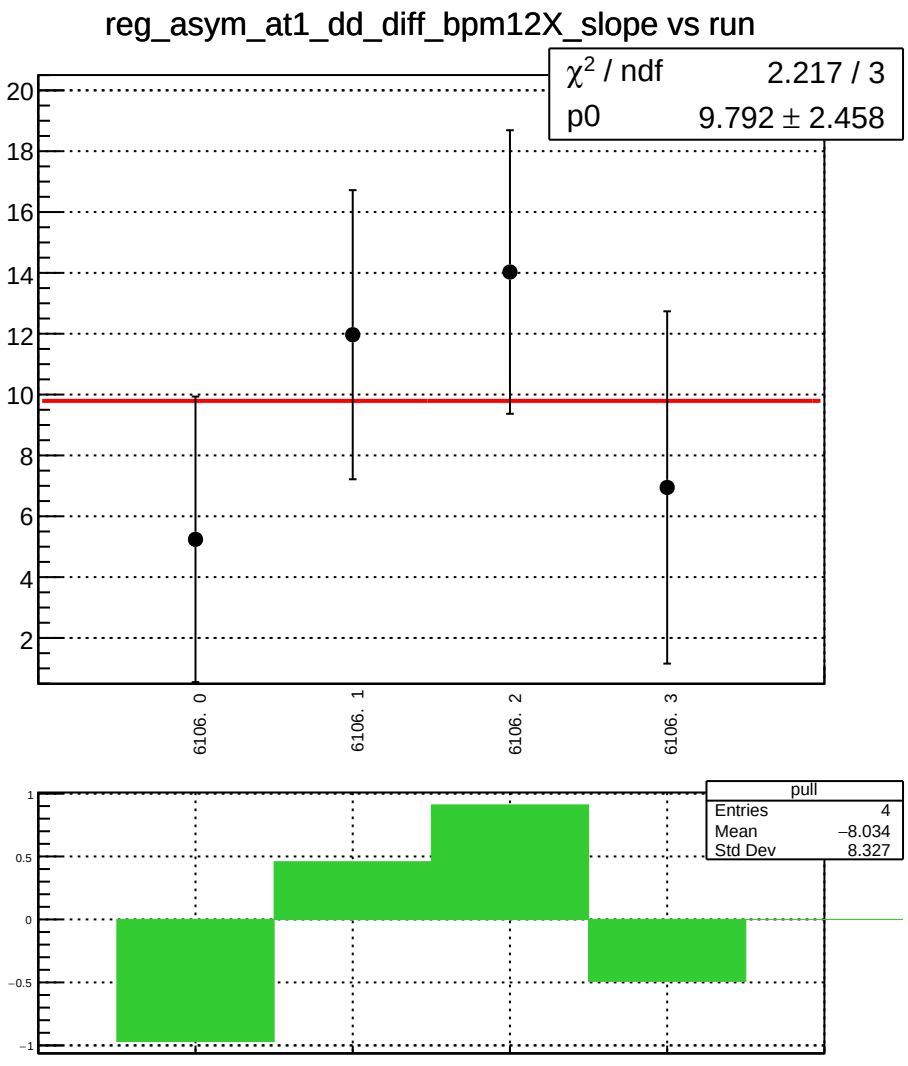

reg_asym_at1_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.249 / 3
p0 30.87 ± 32.79
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −199.9
Std Dev 202.3
1.5
1
0.5
0
−0.5
−1
−1.5

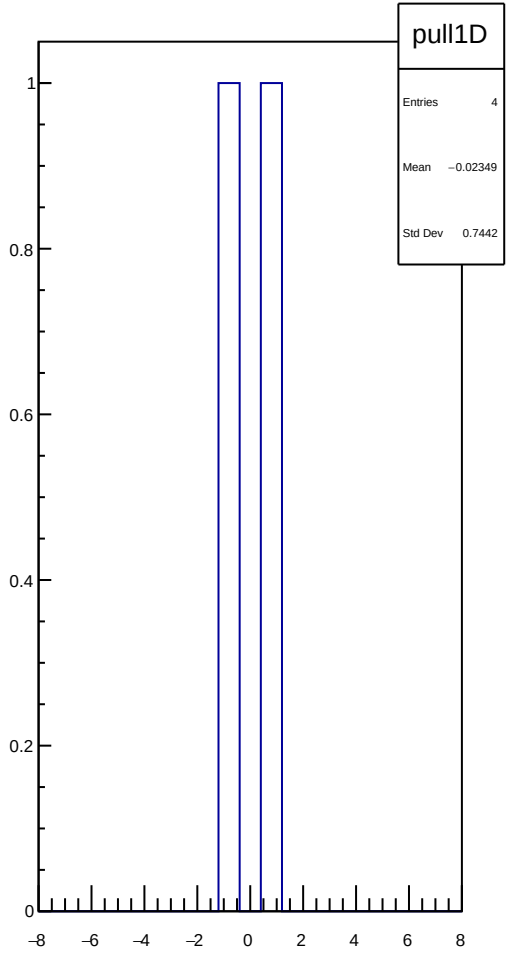

pull1D
Entries 4
Mean −0.002196
Std Dev 1.146
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

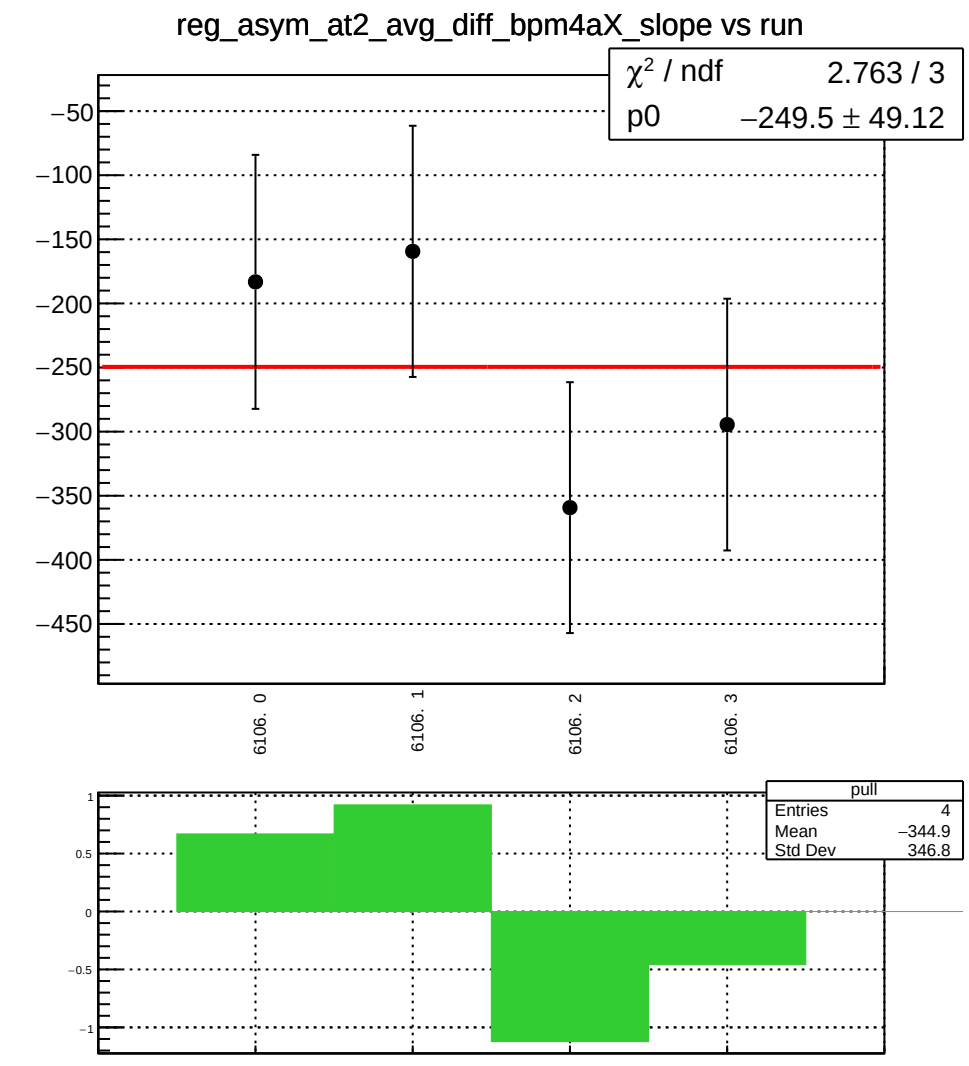

reg_asym_at1_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.9862 / 3
p0 5.667 ± 58.93
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −54.05
Std Dev 55.18
0.8
0.6
0.4
0.2
0
−0.2
−0.4

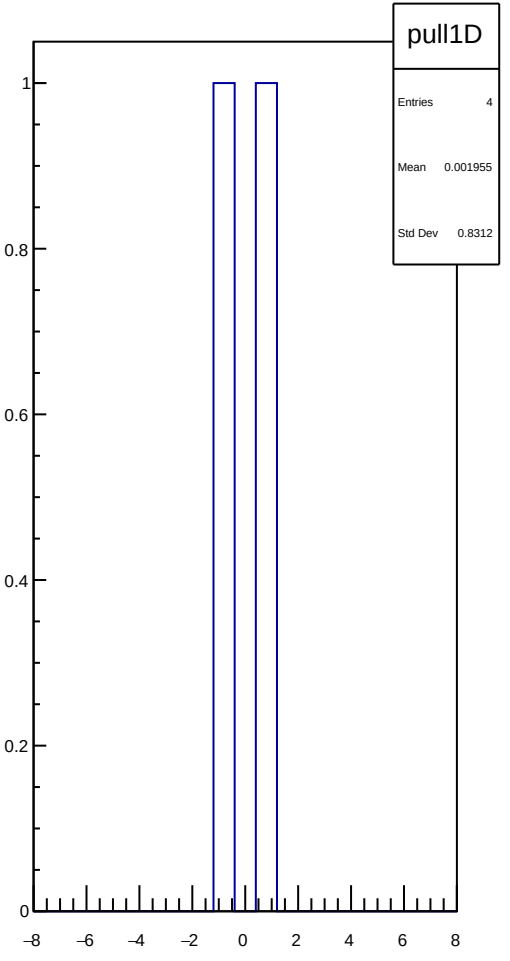

pull1D
Entries 4
Mean 0.004586
Std Dev 0.4965
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

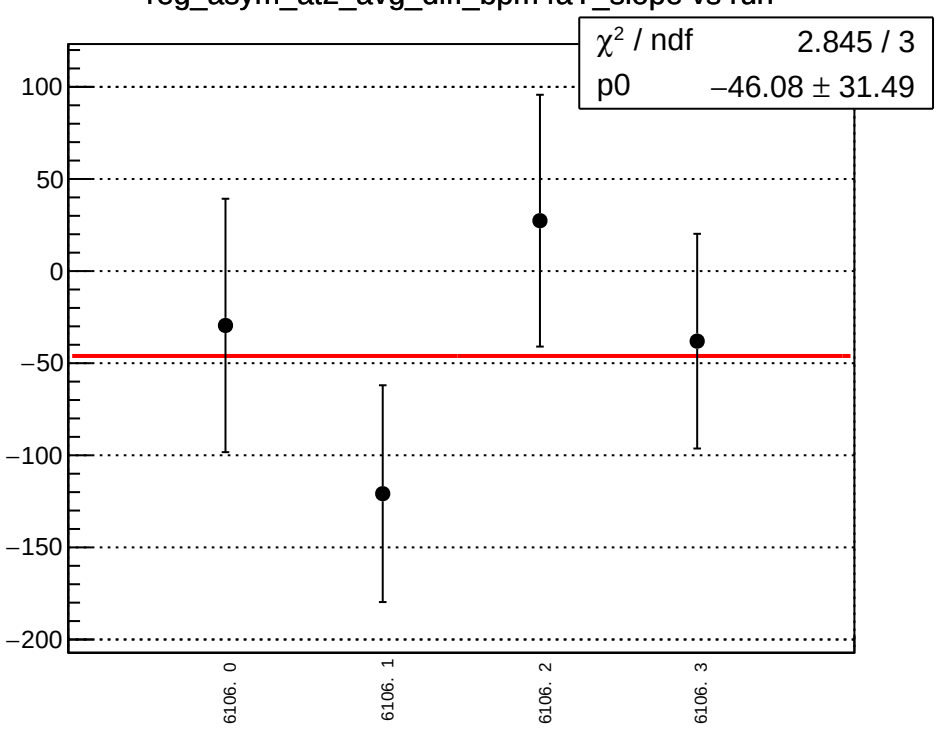

reg_asym_at1_dd_diff_bpm4eY_slope vs run
χ² / ndf 5.024 / 3
p0 −23.37 ± 34.67
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 26.6
Std Dev 24.21
1.5
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.0159
Std Dev 1.121
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

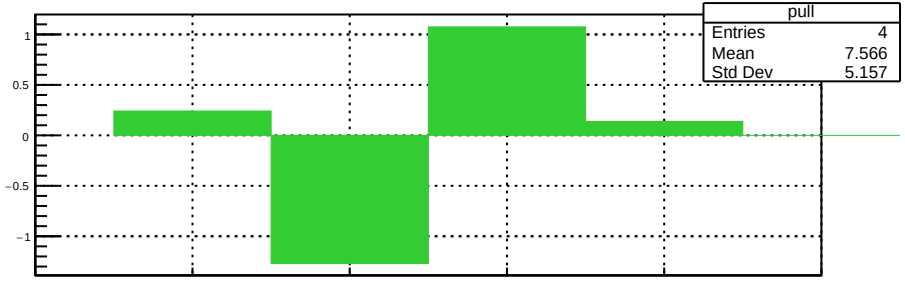

reg_asym_at1_dd_diff_bpm12X_slope vs run
χ² / ndf 2.217 / 3
p0 9.792 ± 2.458
20
18
16
14
12
10
8
6
4
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −8.034
Std Dev 8.327
1
0.5
0
−0.5
−1

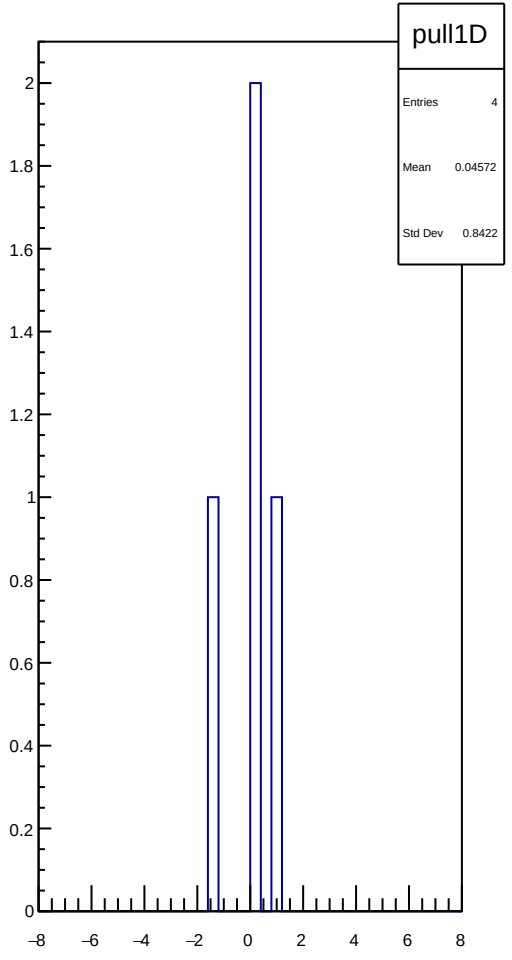

pull1D
Entries 4
Mean −0.02349
Std Dev 0.7442
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

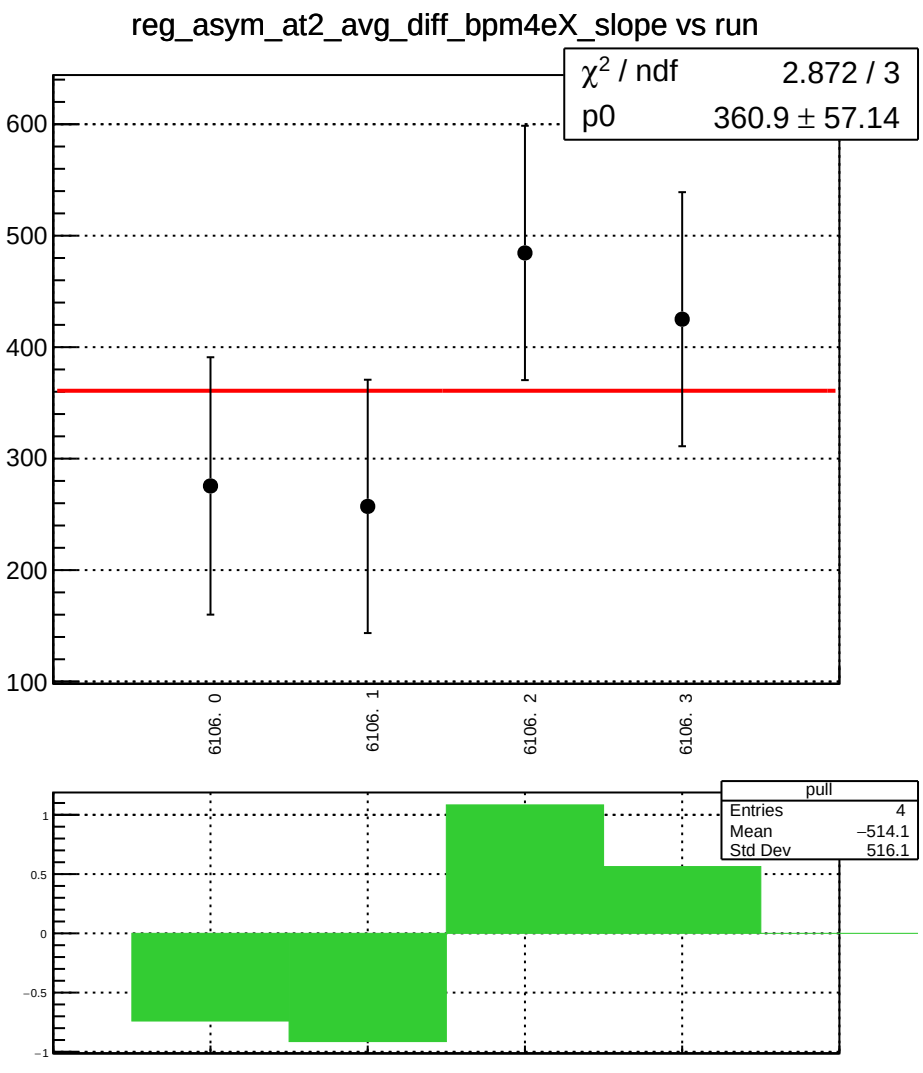

reg_asym_at2_avg_diff_bpm4aX_slope vs run
χ² / ndf 2.763 / 3
p0 −249.5 ± 49.12
−50
−100
−150
−200
−250
−300
−350
−400
−450
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −344.9
Std Dev 346.8
1
0.5
0
−0.5
−1

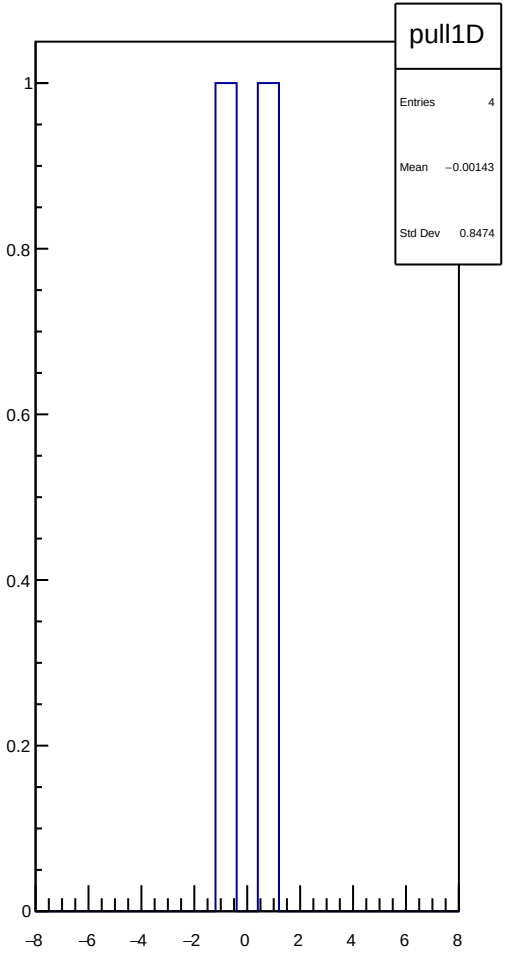

pull1D
Entries 4
Mean 0.001955
Std Dev 0.8312
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

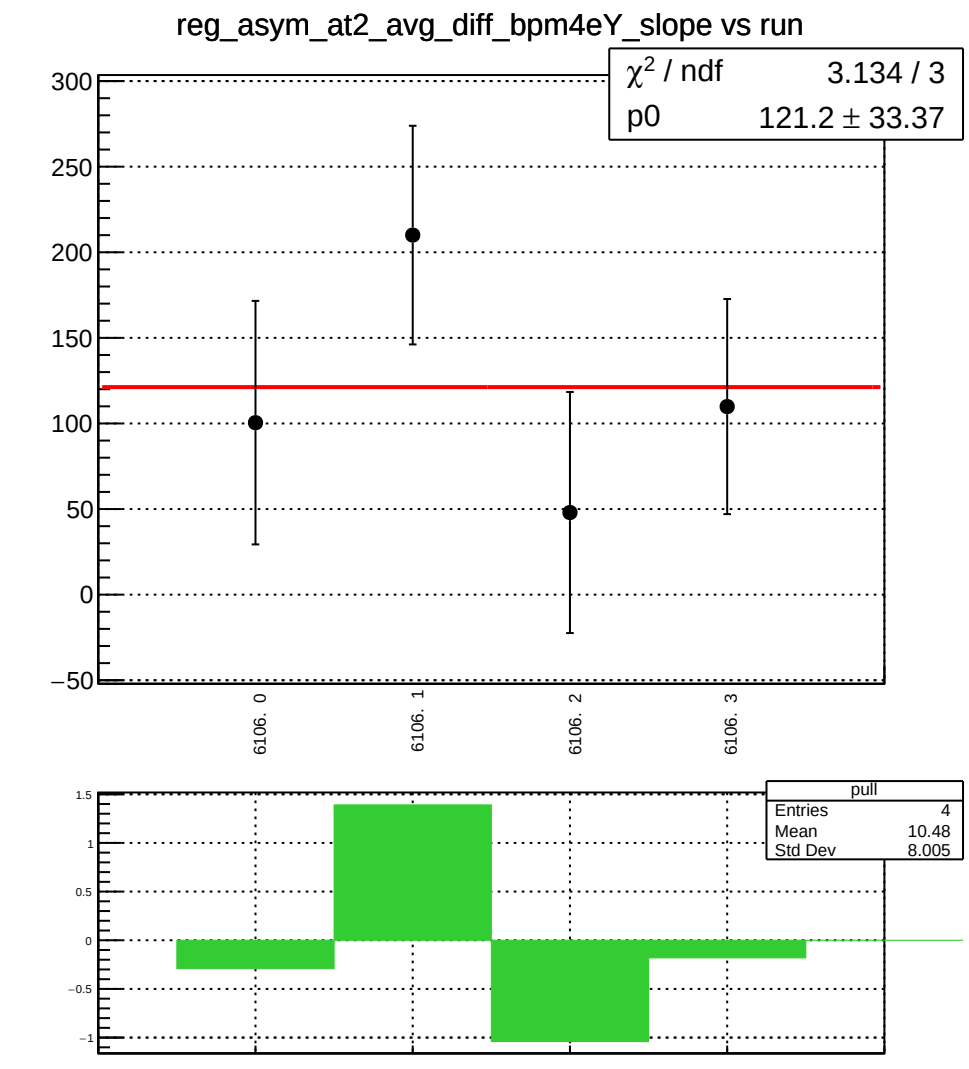

reg_asym_at2_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.845 / 3
p0 −46.08 ± 31.49
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3

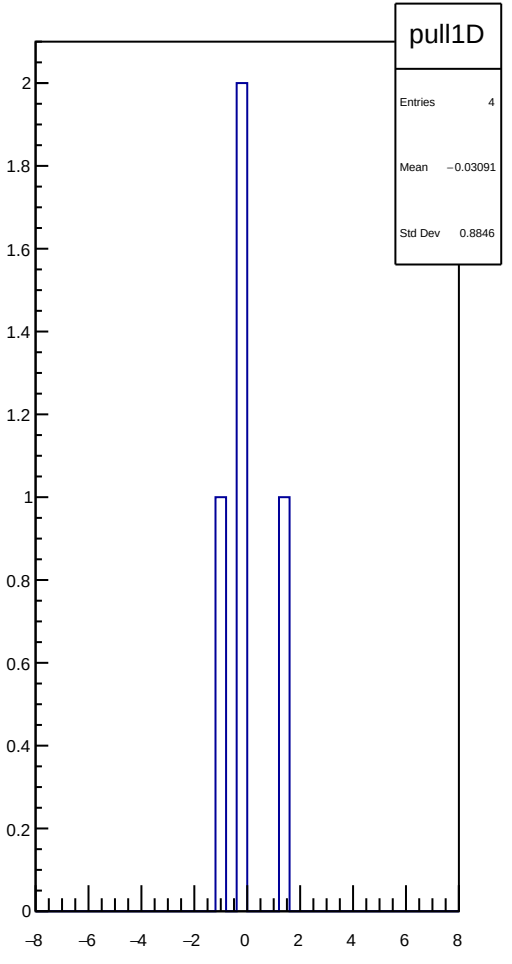

pull
Entries 4
Mean 7.566
Std Dev 5.157
1
0.5
0
−0.5
−1

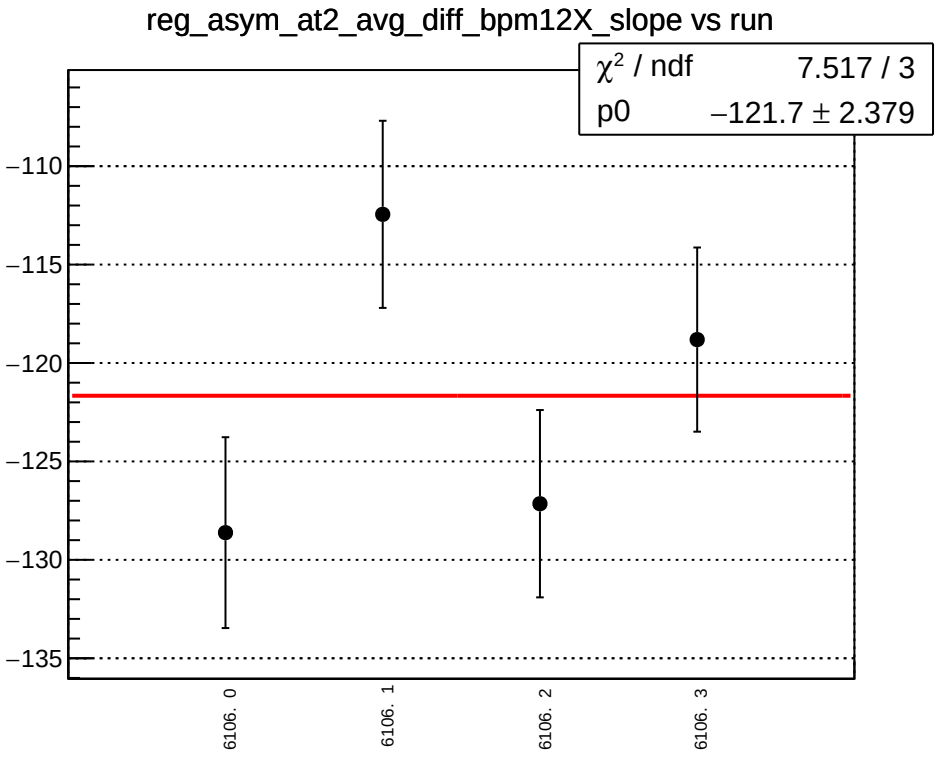

pull1D
Entries 4
Mean 0.04572
Std Dev 0.8422
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

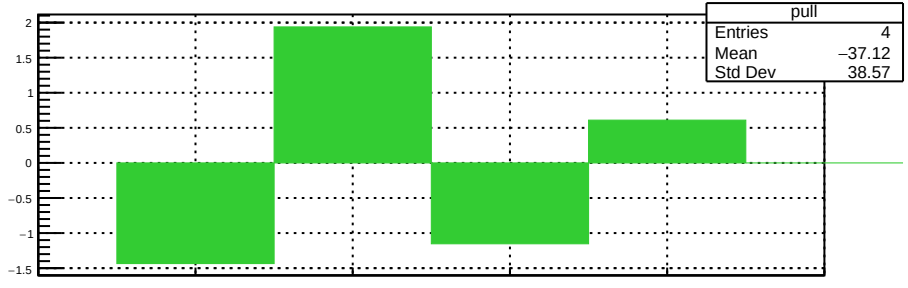

reg_asym_at2_avg_diff_bpm4eX_slope vs run
χ² / ndf 2.872 / 3
p0 360.9 ± 57.14
600
500
400
300
200
100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −514.1
Std Dev 516.1
1
0.5
0
−0.5
−1

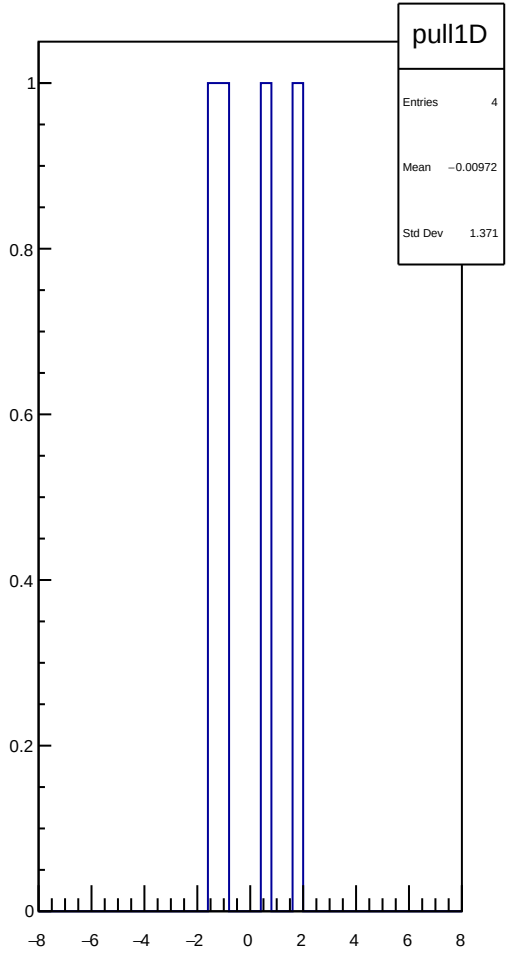

pull1D
Entries 4
Mean −0.00143
Std Dev 0.8474
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

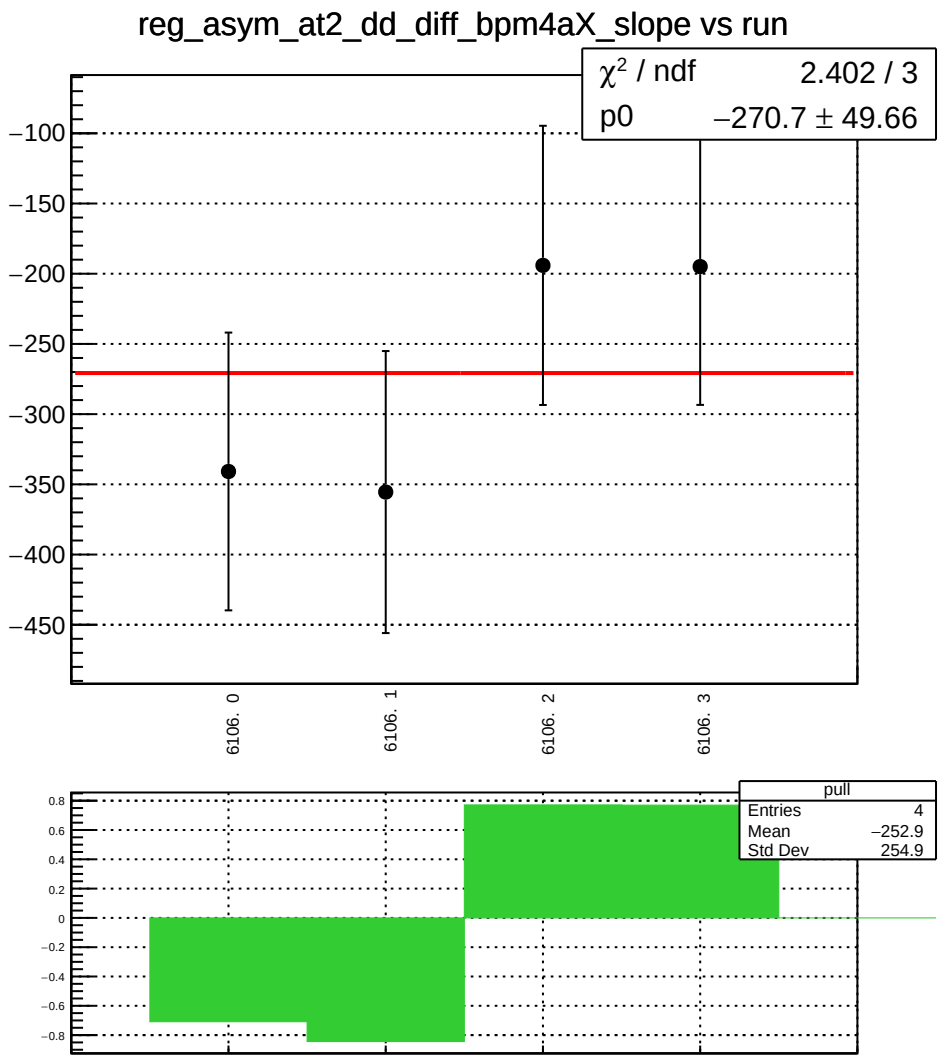

reg_asym_at2_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.134 / 3
p0 121.2 ± 33.37
300
250
200
150
100
50
0
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 10.48
Std Dev 8.005
1.5
1
0.5
0
−0.5
−1

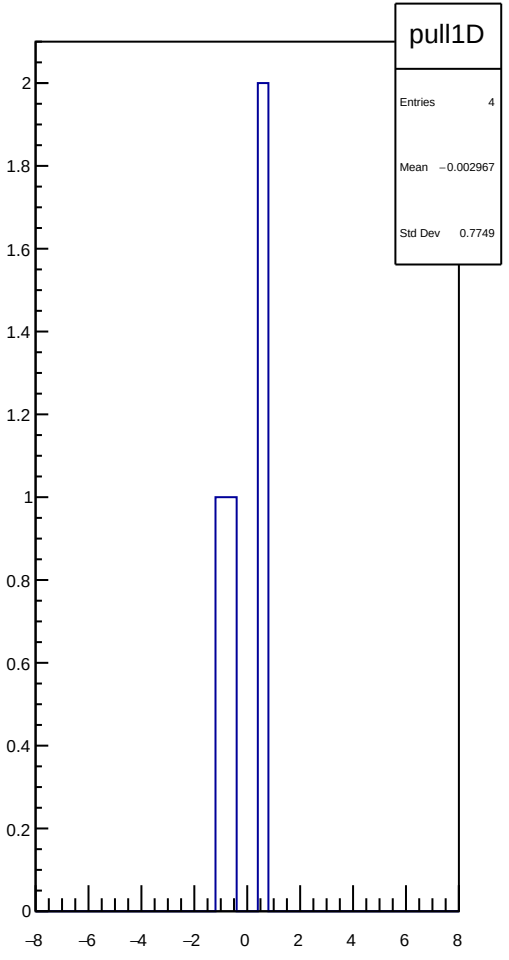

pull1D
Entries 4
Mean −0.03091
Std Dev 0.8846
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

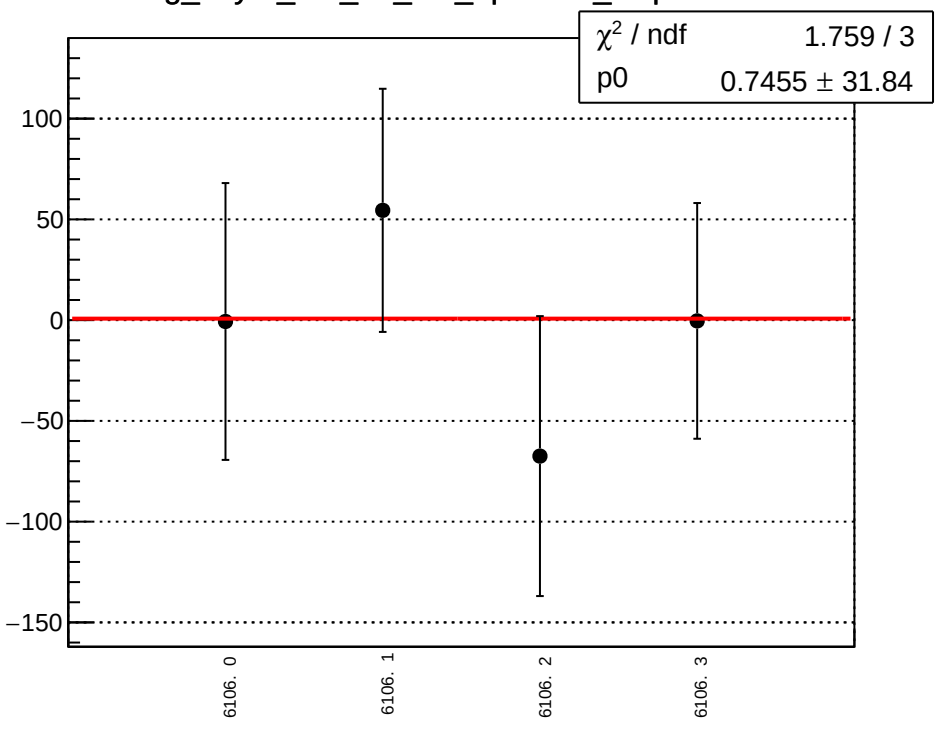

reg_asym_at2_avg_diff_bpm12X_slope vs run
χ² / ndf 7.517 / 3
p0 −121.7 ± 2.379
−110
−115
−120
−125
−130
−135
6106. 0
6106. 1
6106. 2
6106. 3

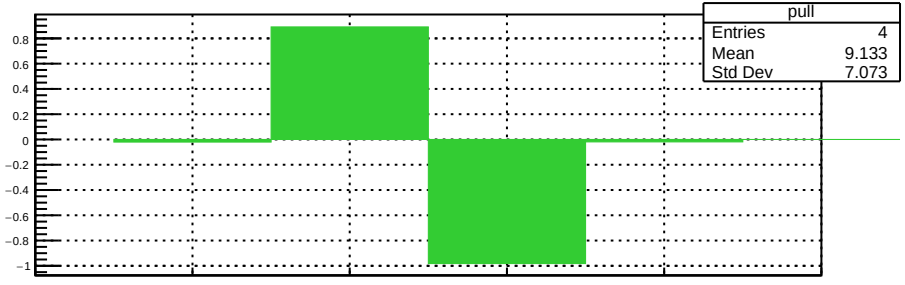

pull
Entries 4
Mean −37.12
Std Dev 38.57
2
1.5
1
0.5
0
−0.5
−1
−1.5

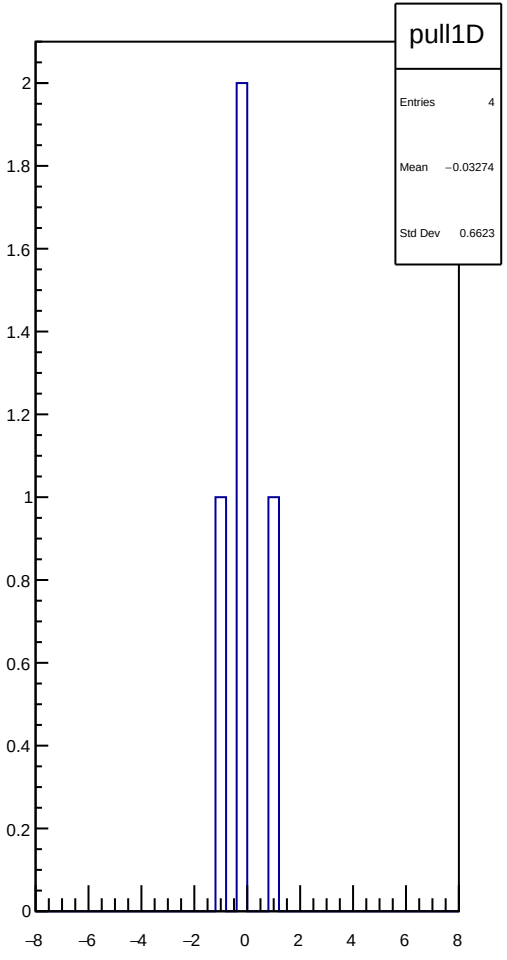

pull1D
Entries 4
Mean −0.00972
Std Dev 1.371
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

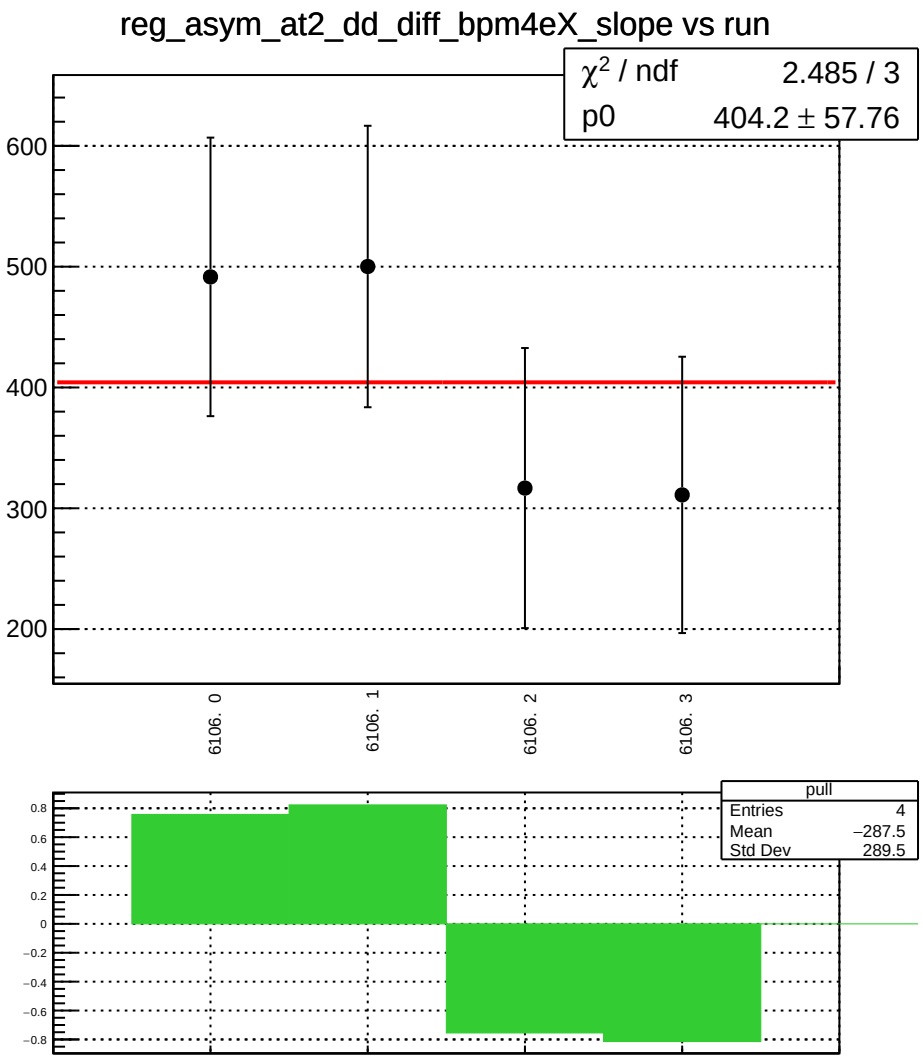

reg_asym_at2_dd_diff_bpm4aX_slope vs run
χ² / ndf 2.402 / 3
p0 −270.7 ± 49.66
−100
−150
−200
−250
−300
−350
−400
−450
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −252.9
Std Dev 254.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

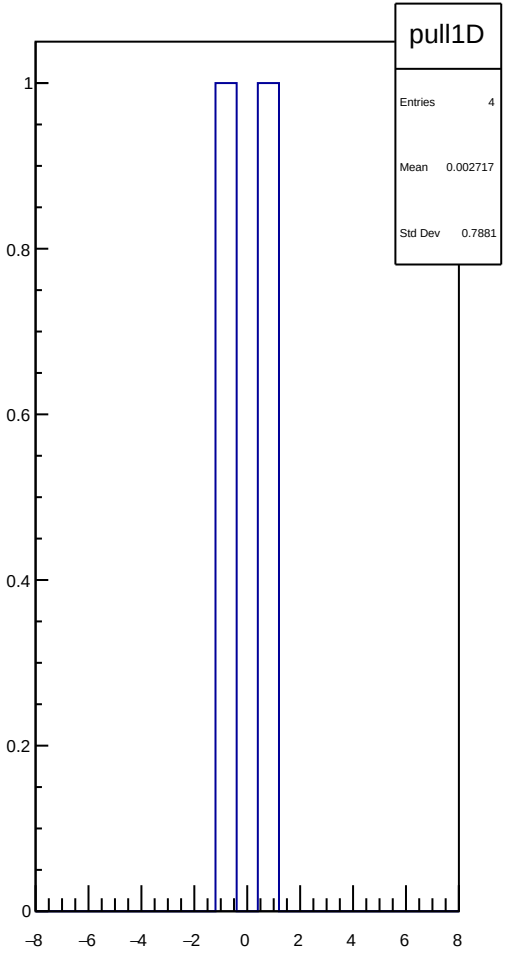

pull1D
Entries 4
Mean −0.002967
Std Dev 0.7749
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

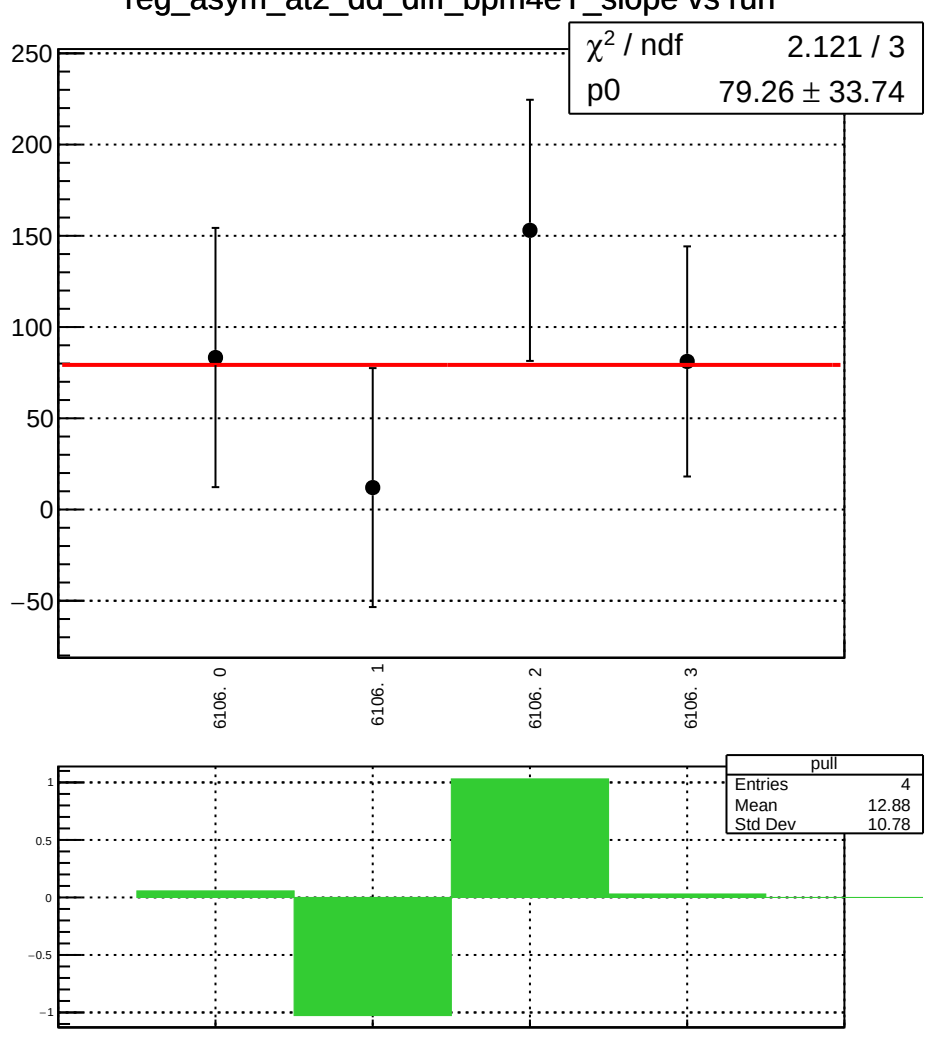

reg_asym_at2_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.759 / 3
p0 0.7455 ± 31.84
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3

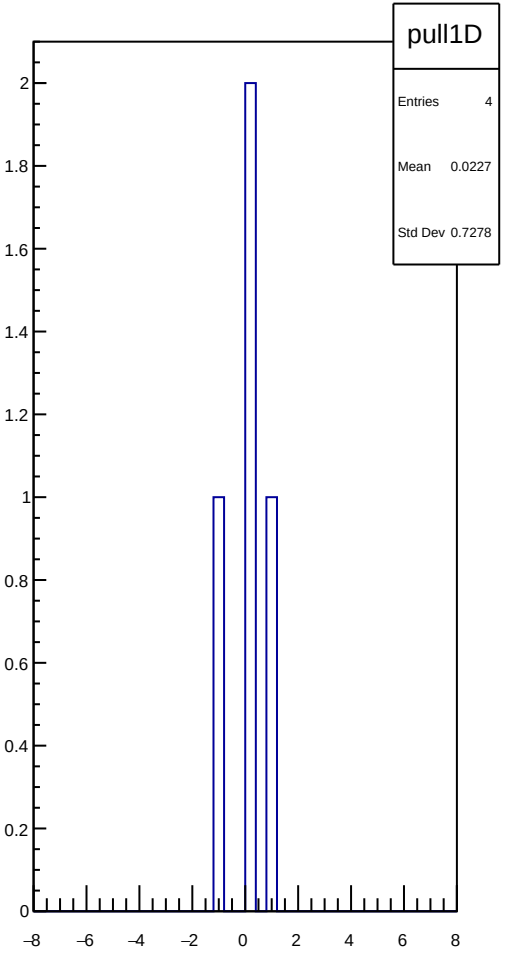

pull
Entries 4
Mean 9.133
Std Dev 7.073
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

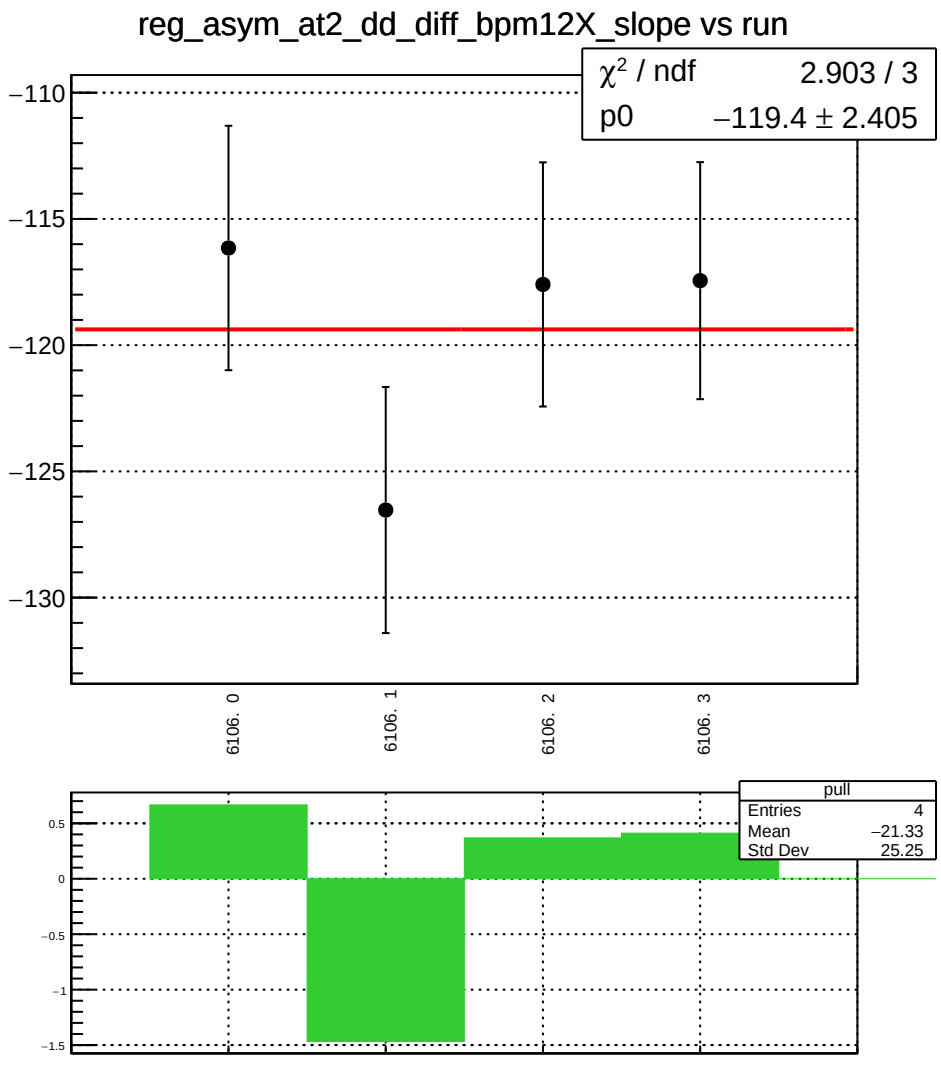

pull1D
Entries 4
Mean −0.03274
Std Dev 0.6623
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

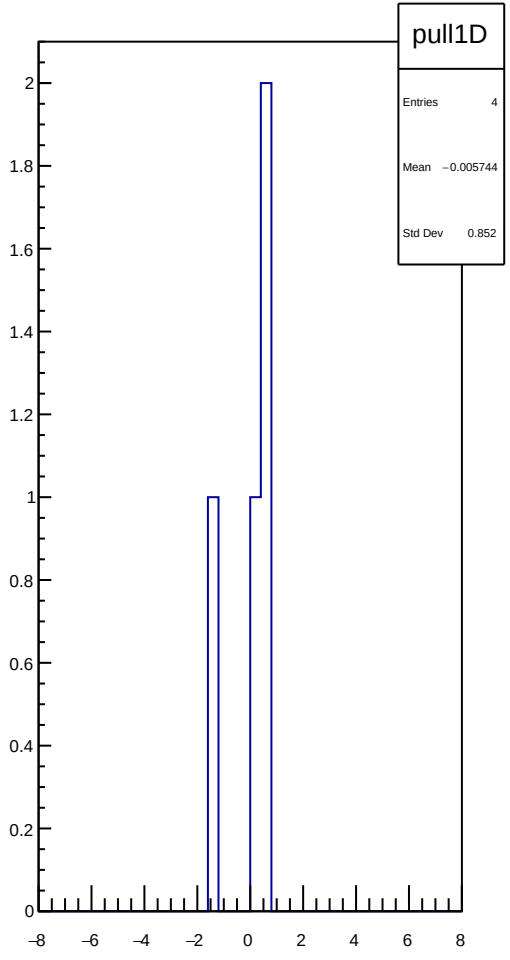

reg_asym_at2_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.485 / 3
p0 404.2 ± 57.76
600
500
400
300
200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −287.5
Std Dev 289.5
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

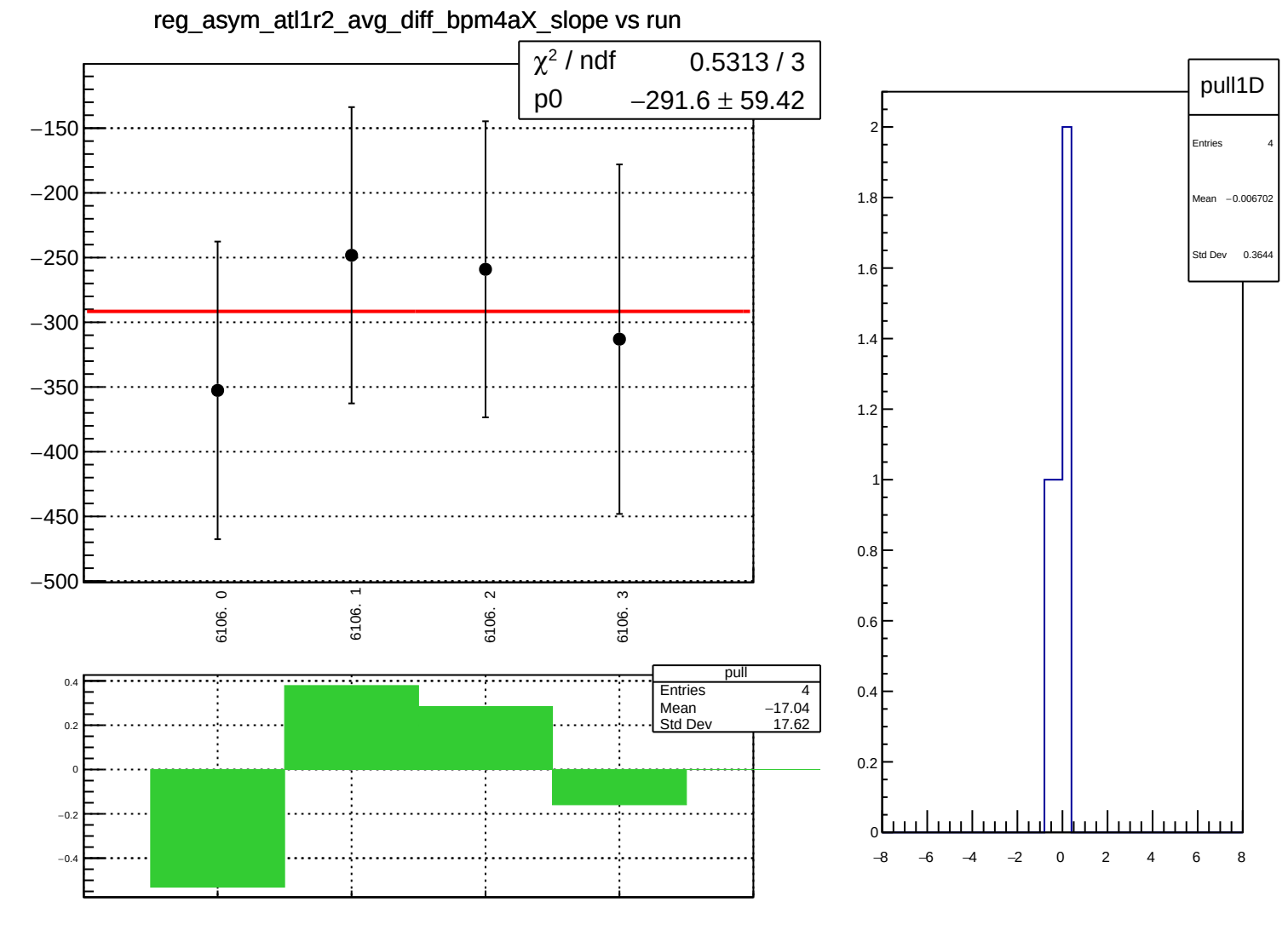

pull1D
Entries 4
Mean 0.002717
Std Dev 0.7881
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

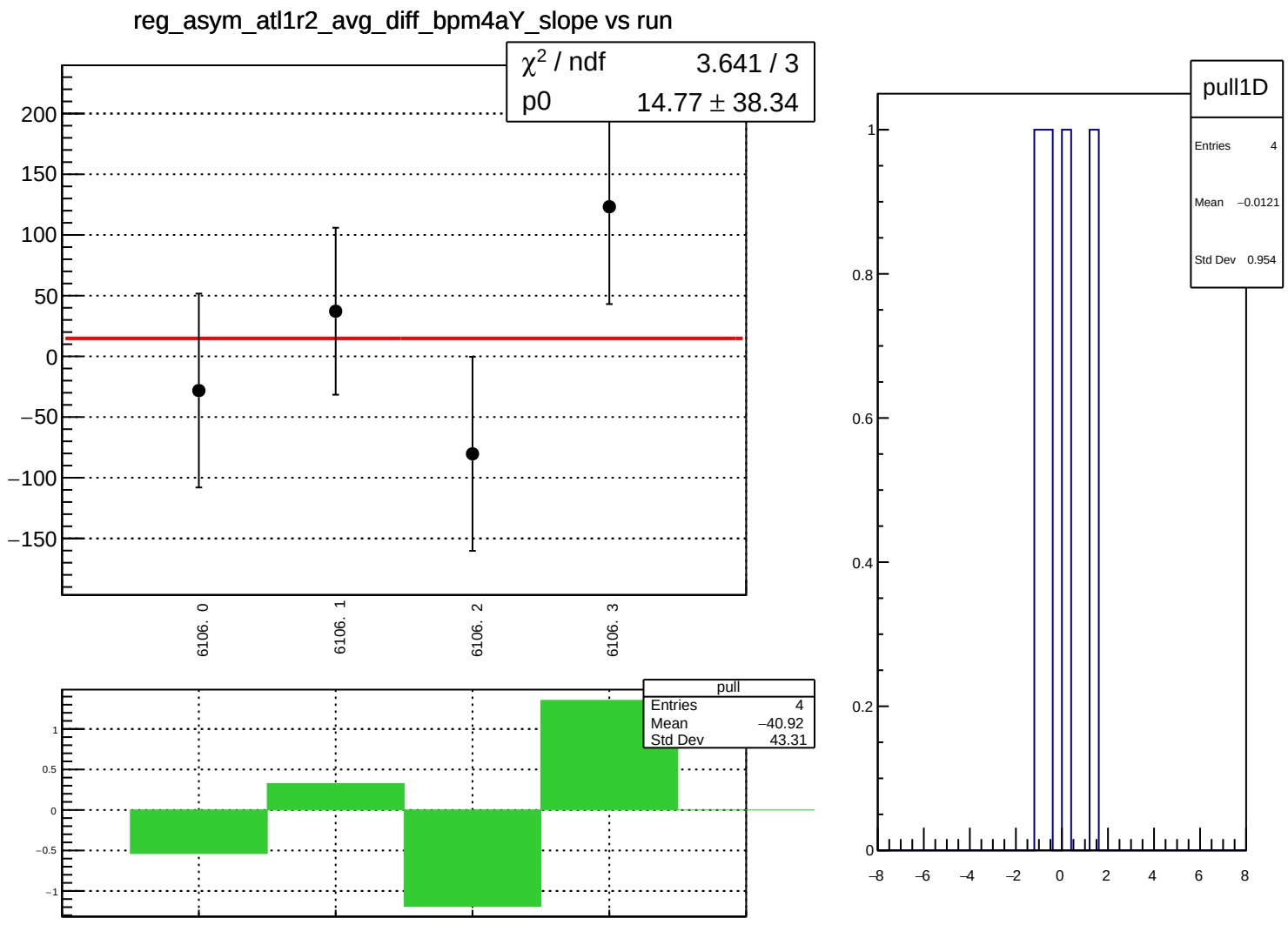

reg_asym_at2_dd_diff_bpm4eY_slope vs run
χ² / ndf 2.121 / 3
p0 79.26 ± 33.74
250
200
150
100
50
0
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 12.88
Std Dev 10.78
1
0.5
0
−0.5
−1

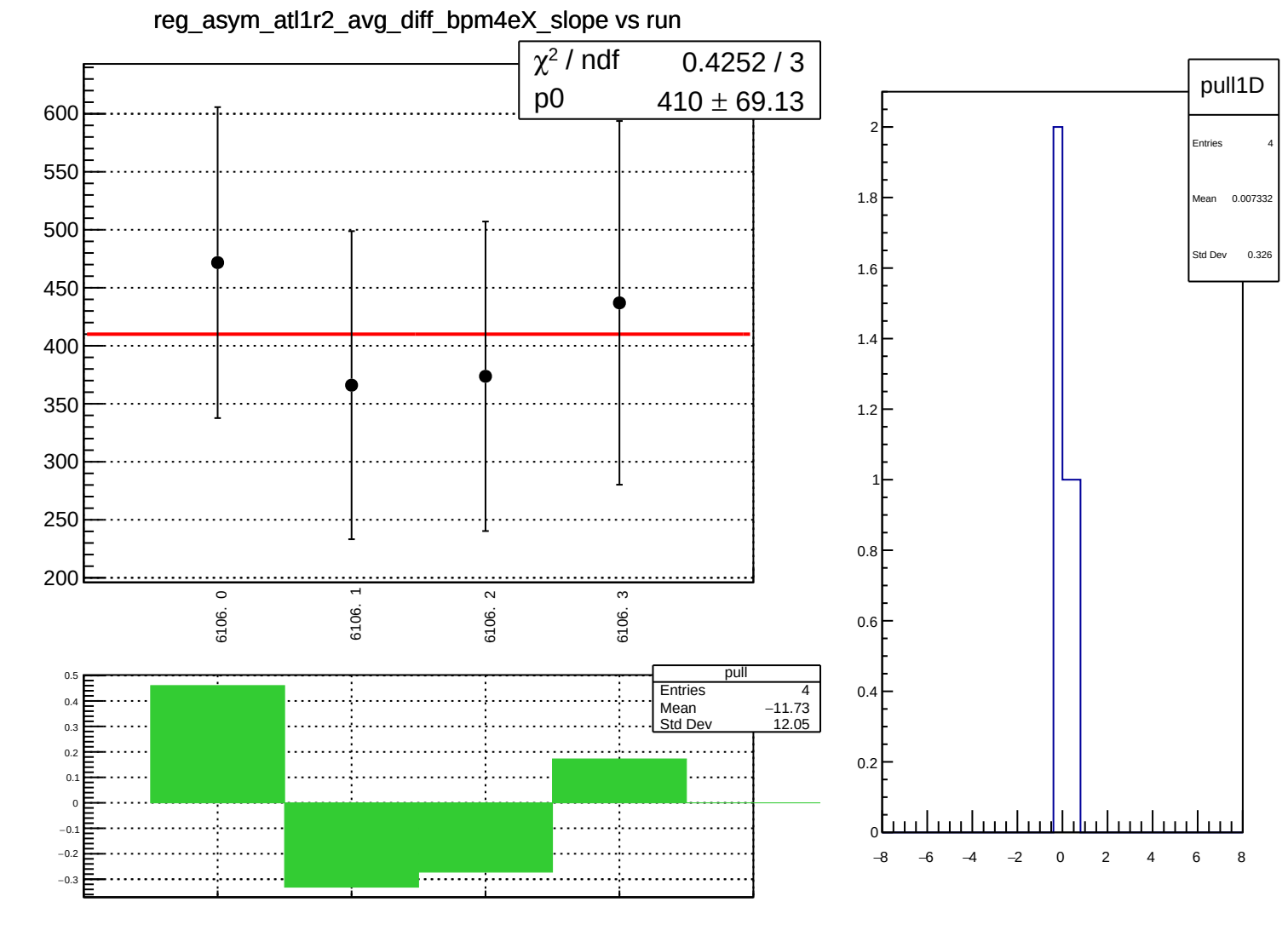

pull1D
Entries 4
Mean 0.0227
Std Dev 0.7278
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

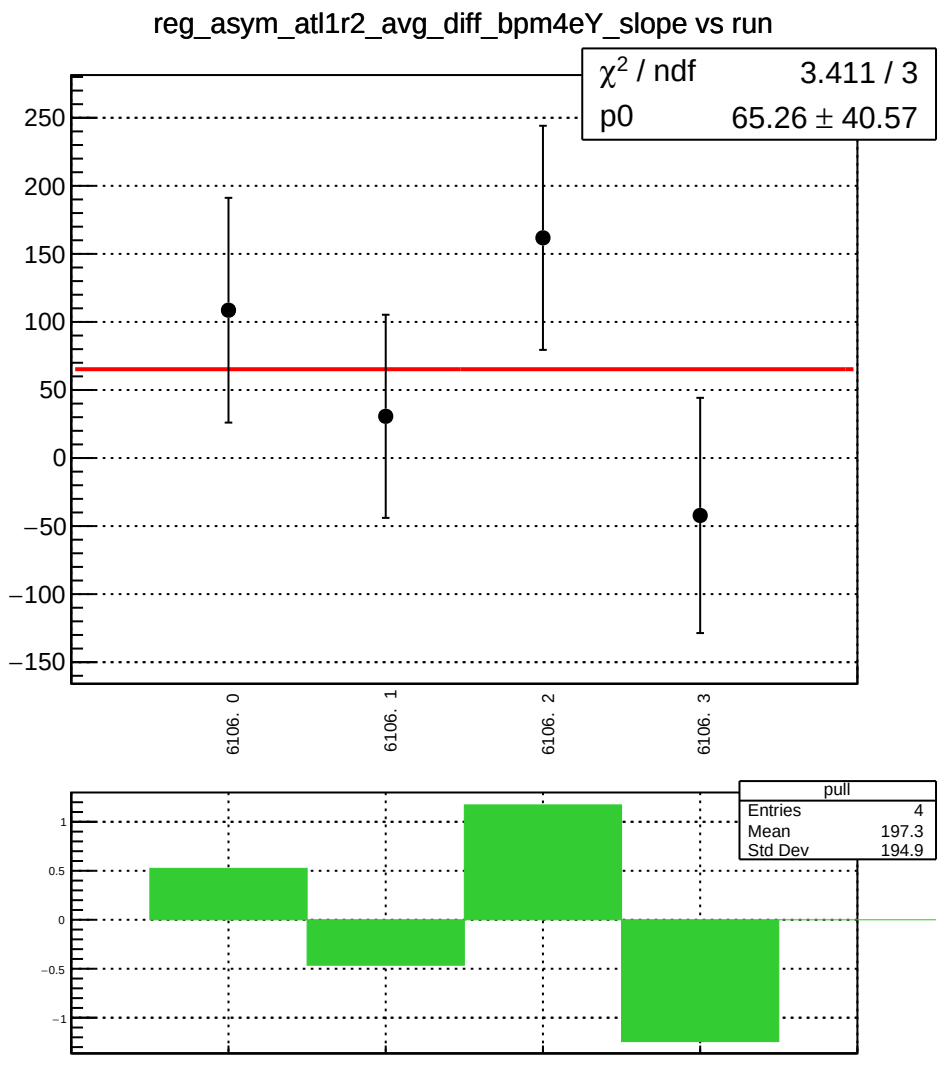

reg_asym_at2_dd_diff_bpm12X_slope vs run
χ² / ndf 2.903 / 3
p0 −119.4 ± 2.405
−110
−115
−120
−125
−130
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −21.33
Std Dev 25.25
0.5
0
−0.5
−1
−1.5

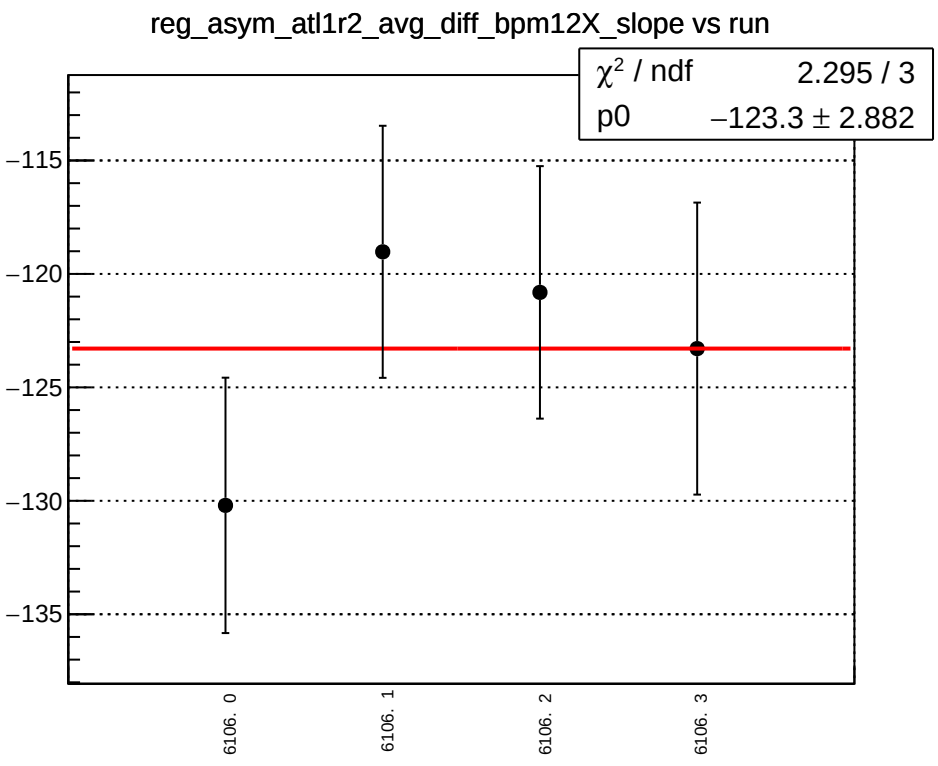

pull1D
Entries 4
Mean −0.005744
Std Dev 0.852
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

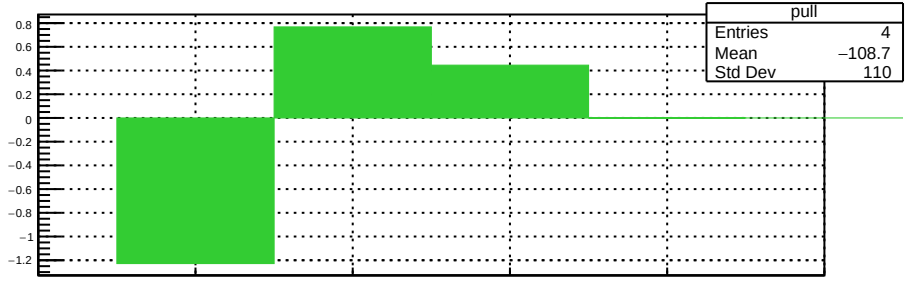

reg_asym_atl1r2_avg_diff_bpm4aX_slope vs run
χ² / ndf 0.5313 / 3
p0 −291.6 ± 59.42
−150
−200
−250
−300
−350
−400
−450
−500
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.04
Std Dev 17.62
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 4
Mean −0.006702
Std Dev 0.3644
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

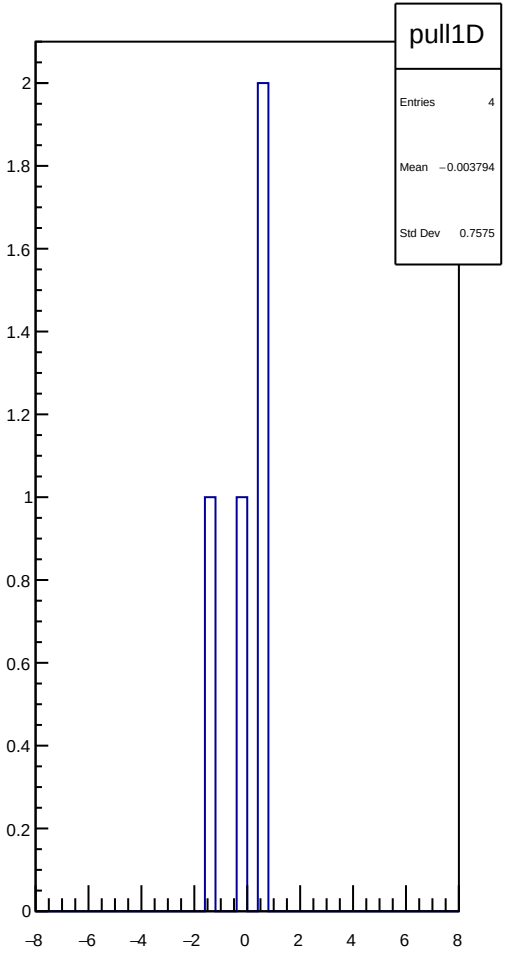

reg_asym_atl1r2_avg_diff_bpm4aY_slope vs run
χ² / ndf 3.641 / 3
p0 14.77 ± 38.34
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −40.92
Std Dev 43.31
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.0121
Std Dev 0.954
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

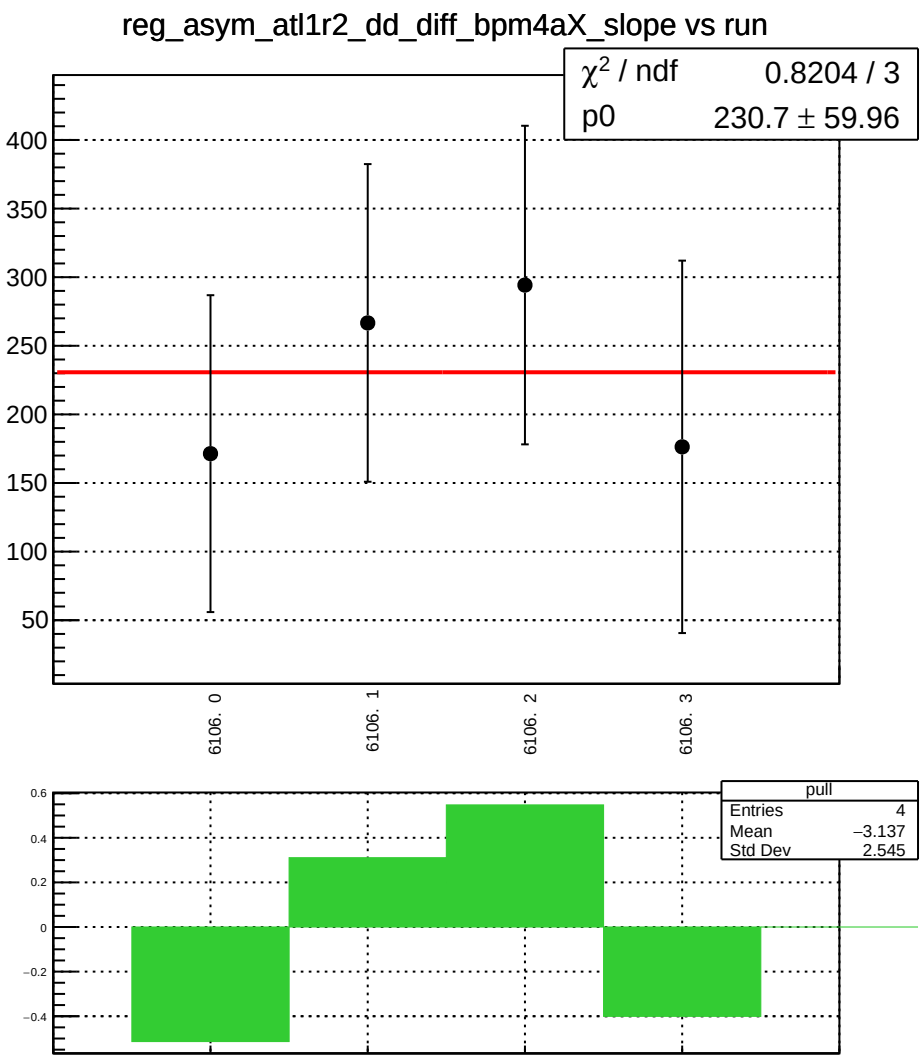

reg_asym_atl1r2_avg_diff_bpm4eX_slope vs run
χ² / ndf 0.4252 / 3
p0 410 ± 69.13
600
550
500
450
400
350
300
250
200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −11.73
Std Dev 12.05
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
pull1D
Entries 4
Mean 0.007332
Std Dev 0.326
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

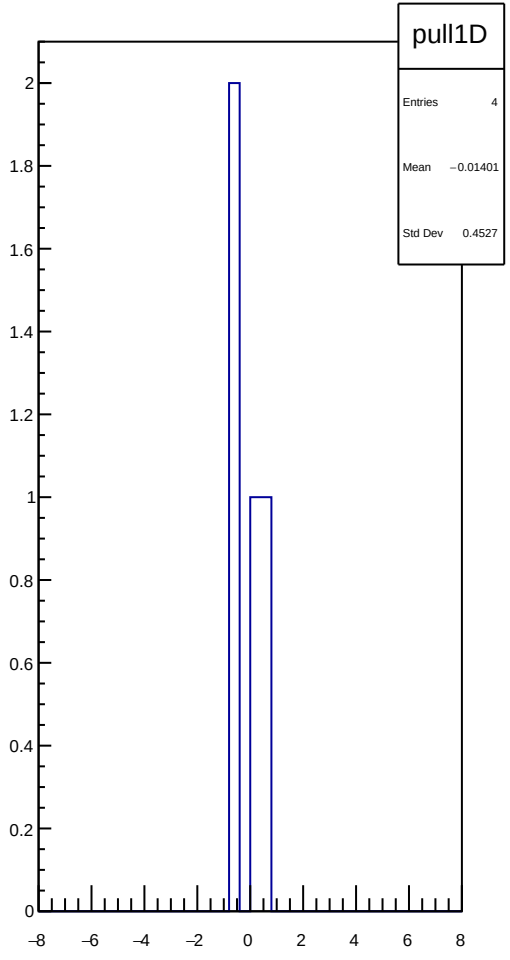

reg_asym_atl1r2_avg_diff_bpm4eY_slope vs run
χ² / ndf 3.411 / 3
p0 65.26 ± 40.57
250
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 197.3
Std Dev 194.9
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.002348
Std Dev 0.9235
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

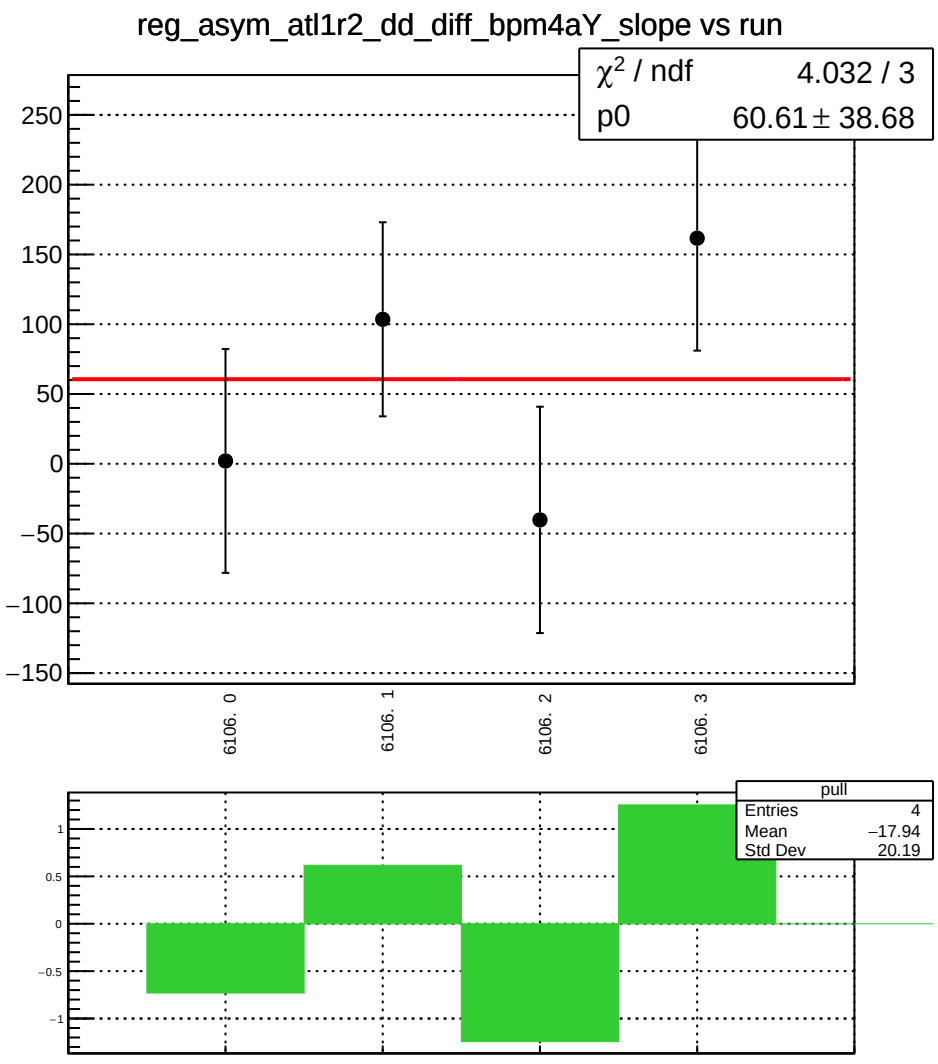

reg_asym_atl1r2_avg_diff_bpm12X_slope vs run
χ² / ndf 2.295 / 3
p0 −123.3 ± 2.882
−115
−120
−125
−130
−135
6106. 0
6106. 1
6106. 2
6106. 3

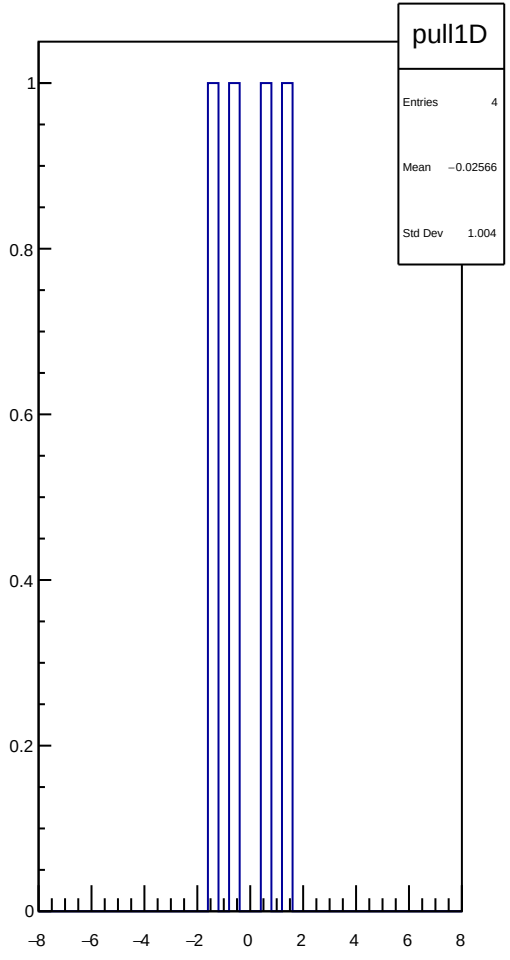

pull
Entries 4
Mean −108.7
Std Dev 110
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

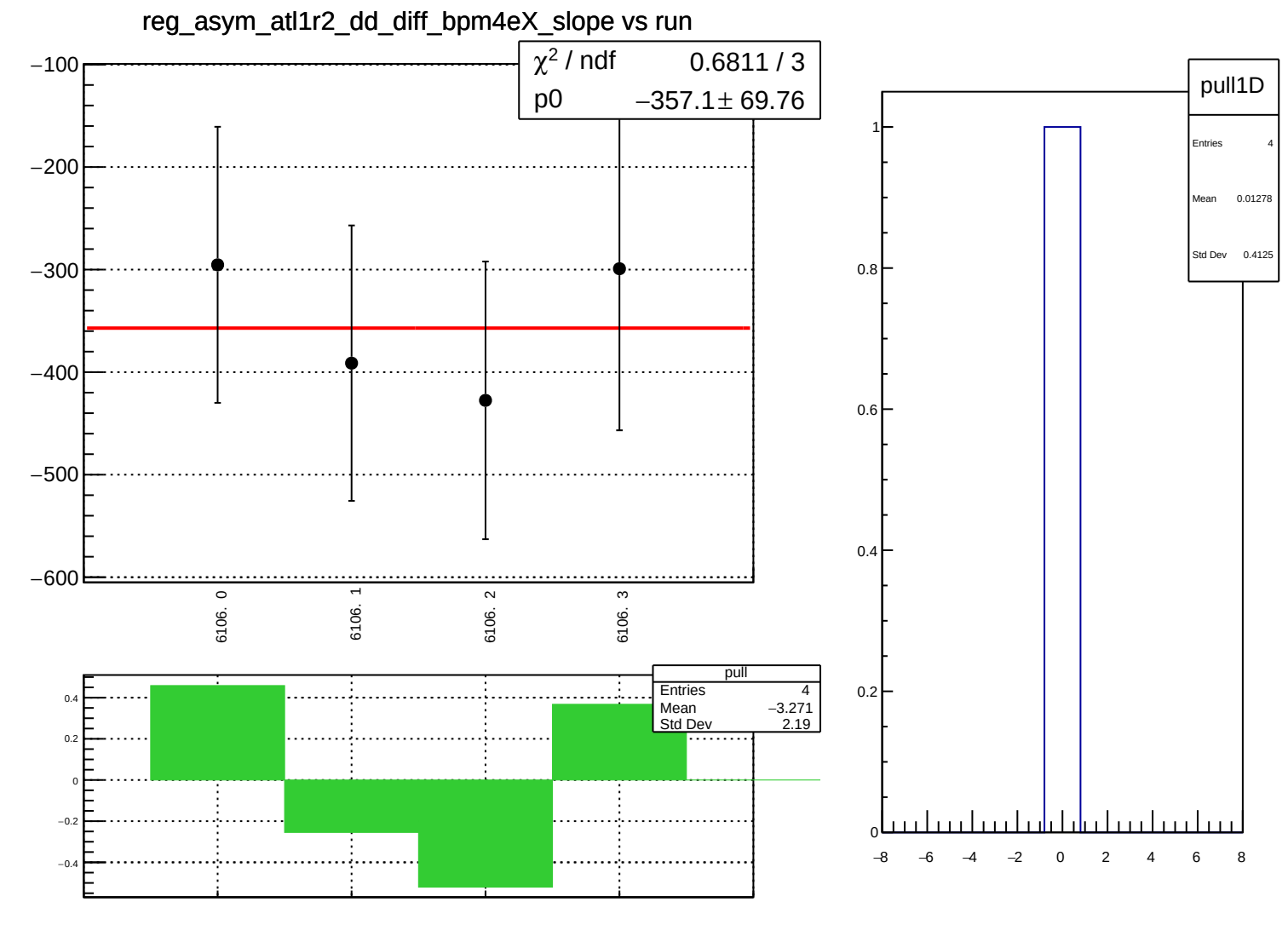

pull1D
Entries 4
Mean −0.003794
Std Dev 0.7575
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

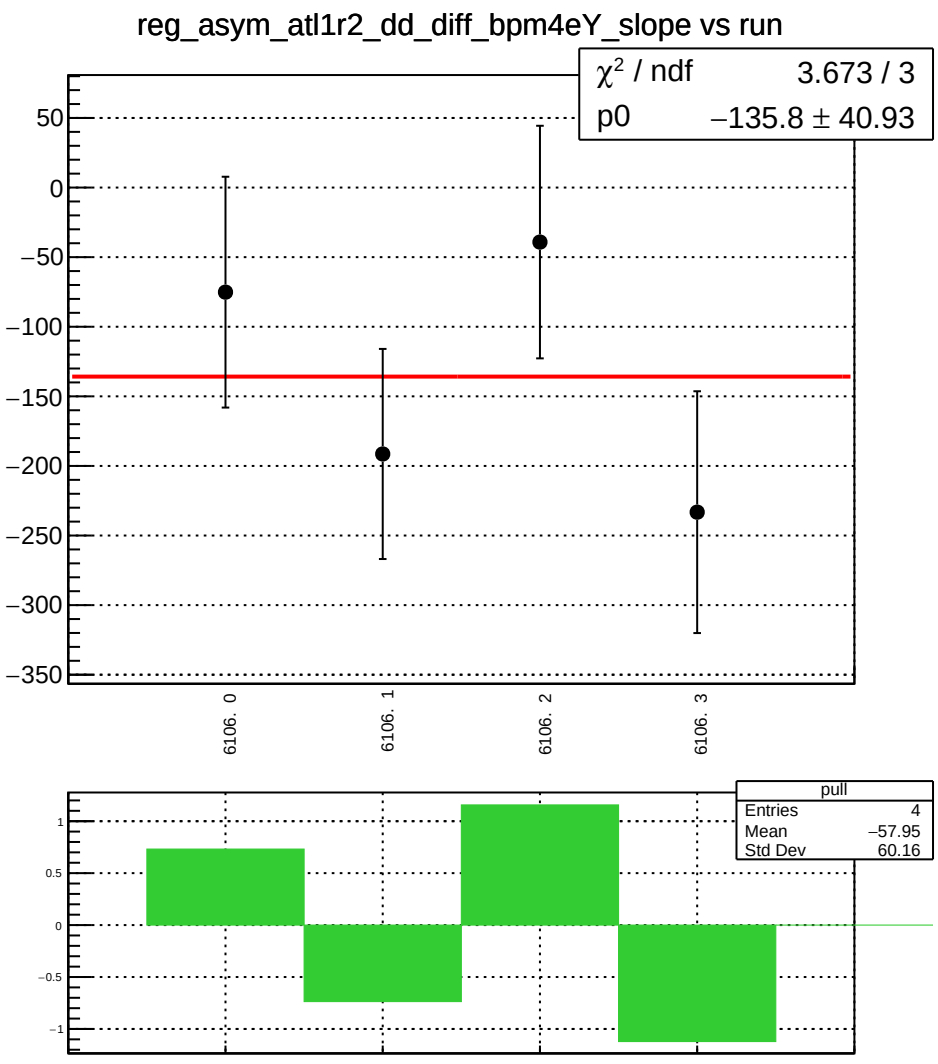

reg_asym_atl1r2_dd_diff_bpm4aX_slope vs run
χ² / ndf 0.8204 / 3
p0 230.7 ± 59.96
400
350
300
250
200
150
100
50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.137
Std Dev 2.545
0.6
0.4
0.2
0
−0.2
−0.4

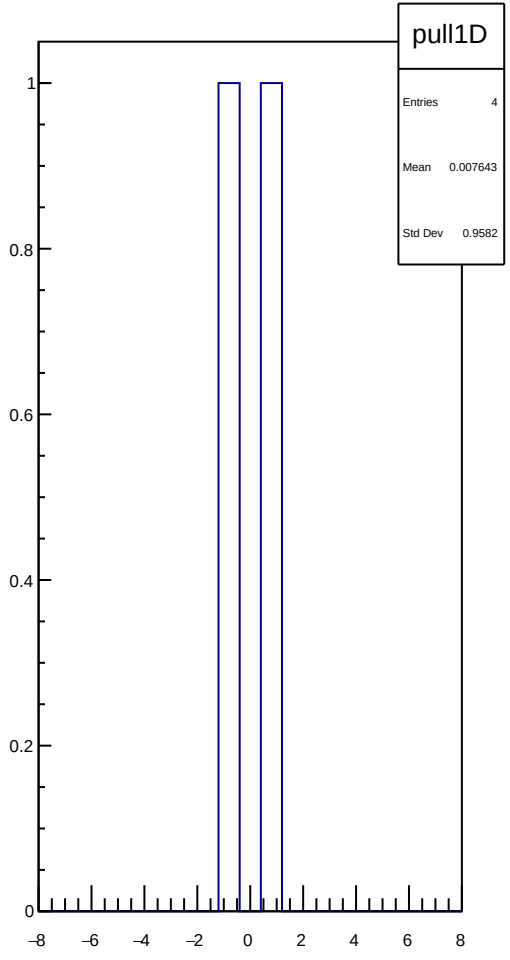

pull1D
Entries 4
Mean −0.01401
Std Dev 0.4527
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

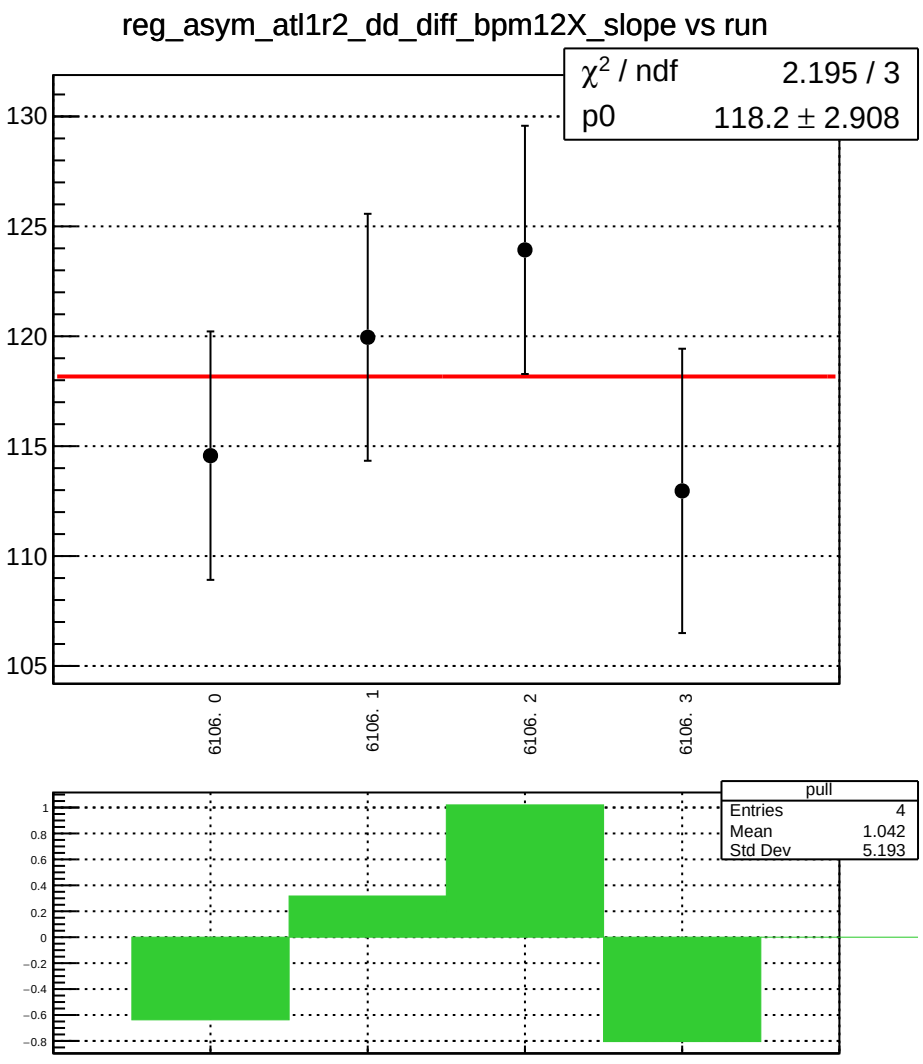

reg_asym_atl1r2_dd_diff_bpm4aY_slope vs run
χ² / ndf 4.032 / 3
p0 60.61 ± 38.68
250
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −17.94
Std Dev 20.19
1
0.5
0
−0.5
−1

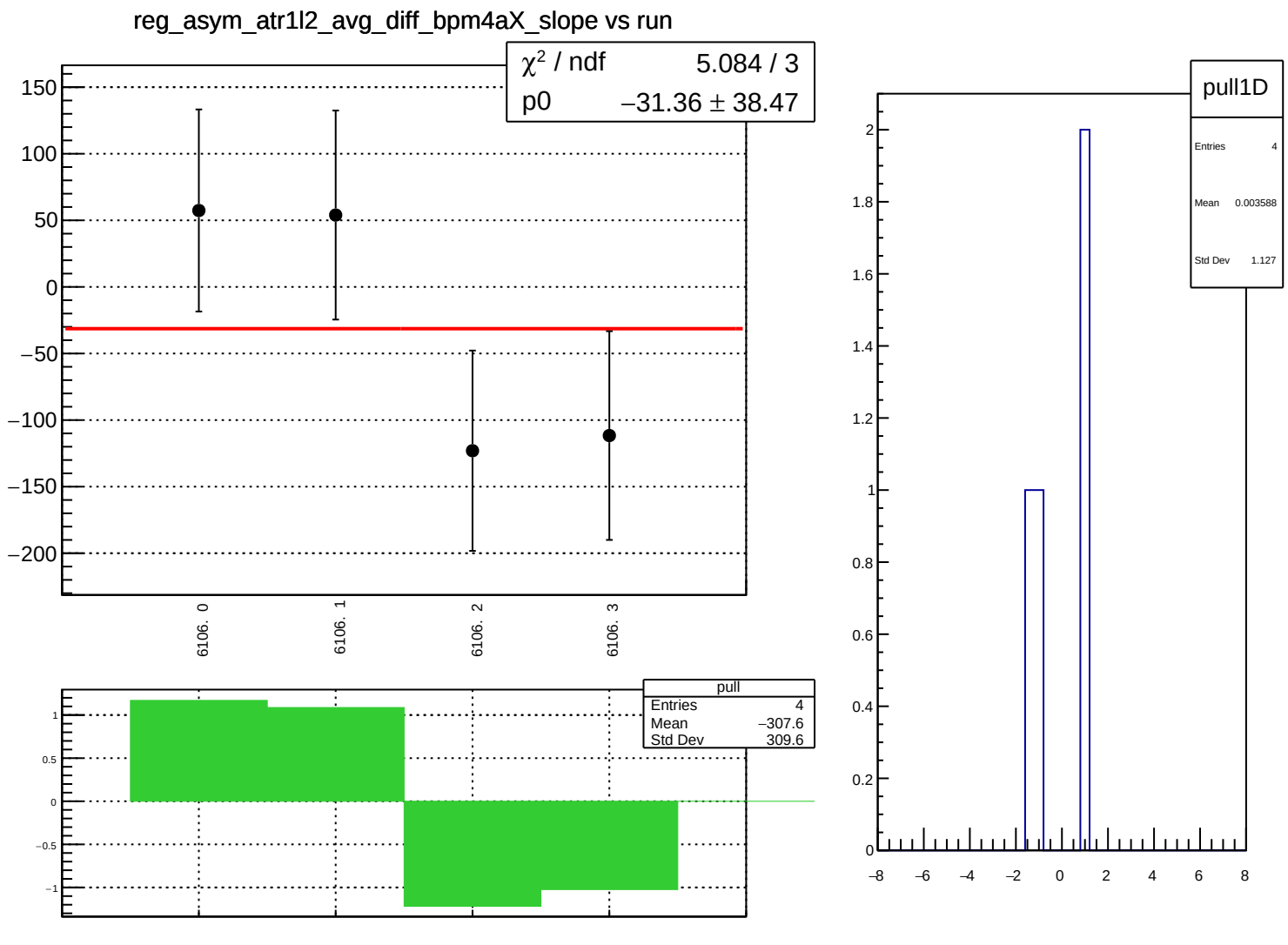

pull1D
Entries 4
Mean −0.02566
Std Dev 1.004
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

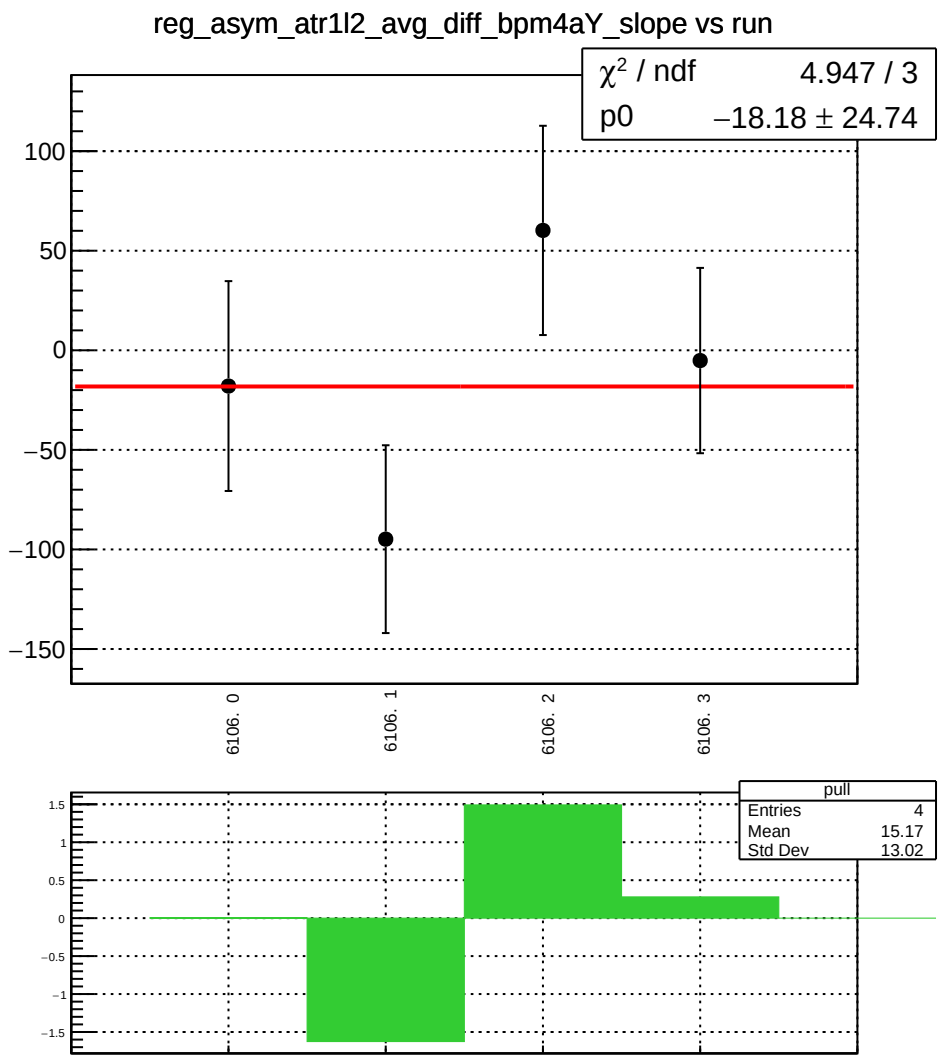

reg_asym_atl1r2_dd_diff_bpm4eX_slope vs run
χ² / ndf 0.6811 / 3
p0 −357.1± 69.76
−100
−200
−300
−400
−500
−600
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −3.271
Std Dev 2.19
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 4
Mean 0.01278
Std Dev 0.4125
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

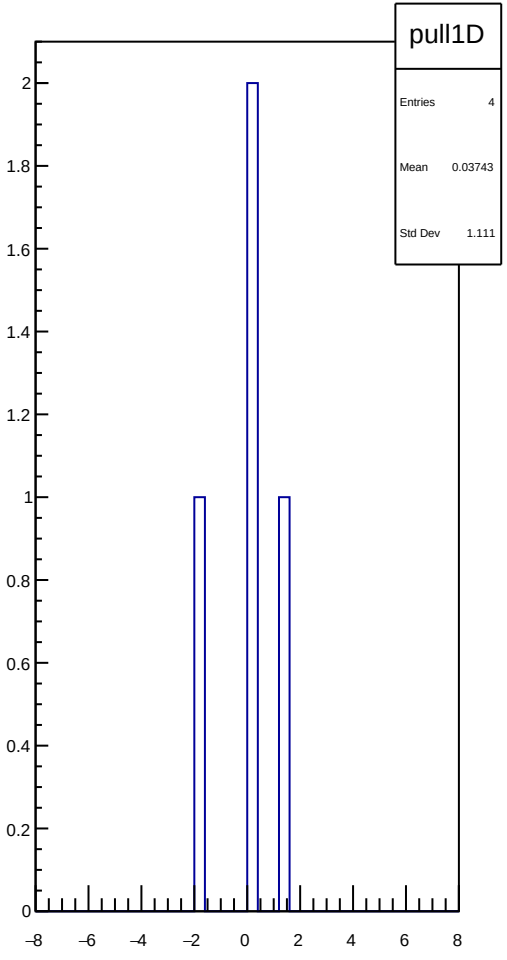

reg_asym_atl1r2_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.673 / 3
p0 −135.8 ± 40.93
50
0
−50
−100
−150
−200
−250
−300
−350
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −57.95
Std Dev 60.16
1
0.5
0
−0.5
−1

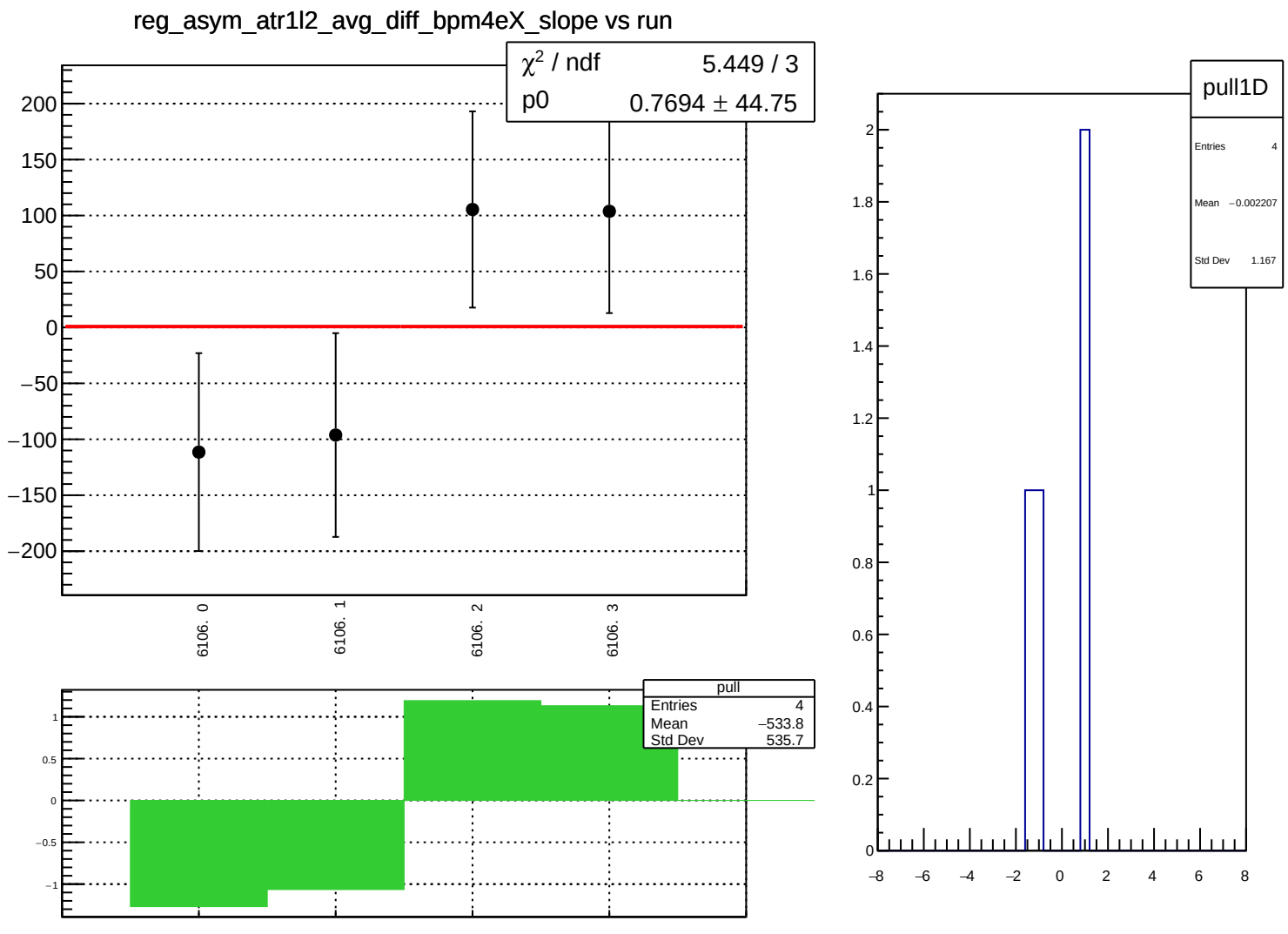

pull1D
Entries 4
Mean 0.007643
Std Dev 0.9582
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

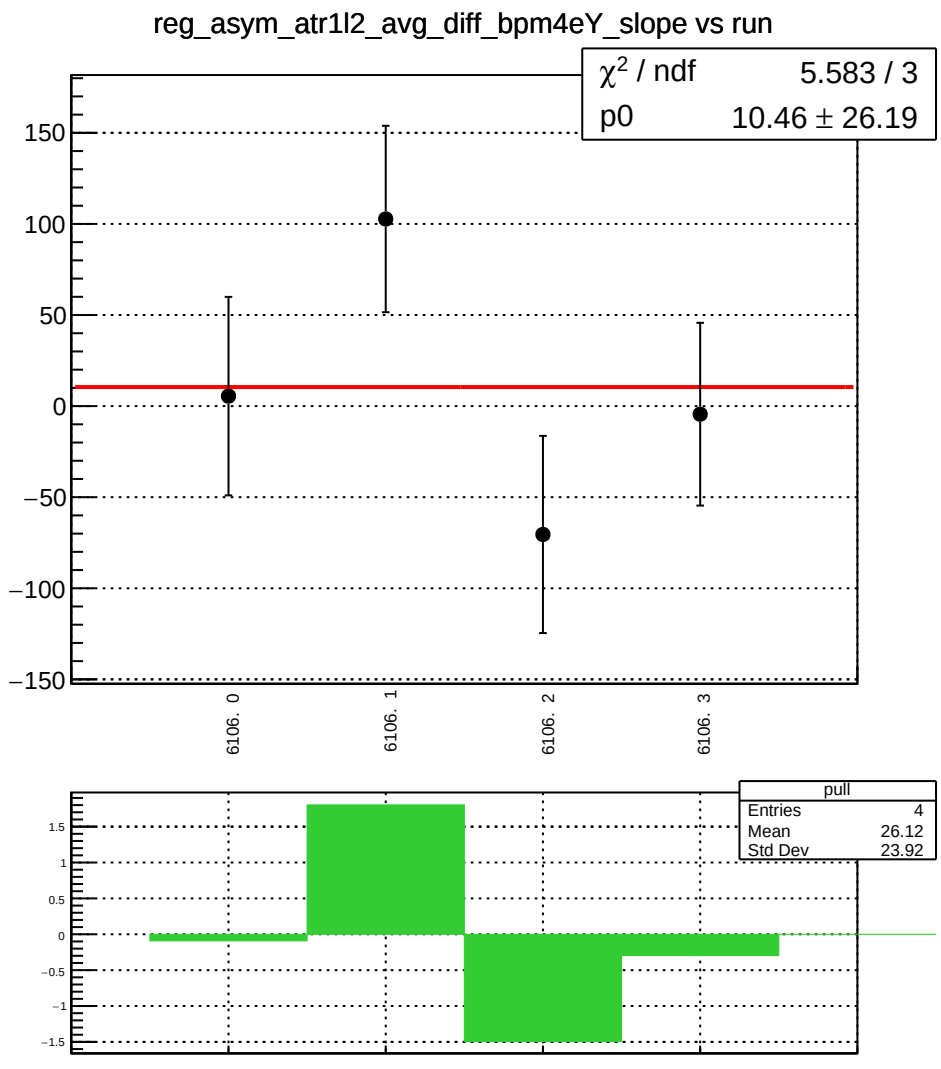

reg_asym_atl1r2_dd_diff_bpm12X_slope vs run
χ² / ndf 2.195 / 3
p0 118.2 ± 2.908
130
125
120
115
110
105
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 1.042
Std Dev 5.193
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean −0.02609
Std Dev 0.7403
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

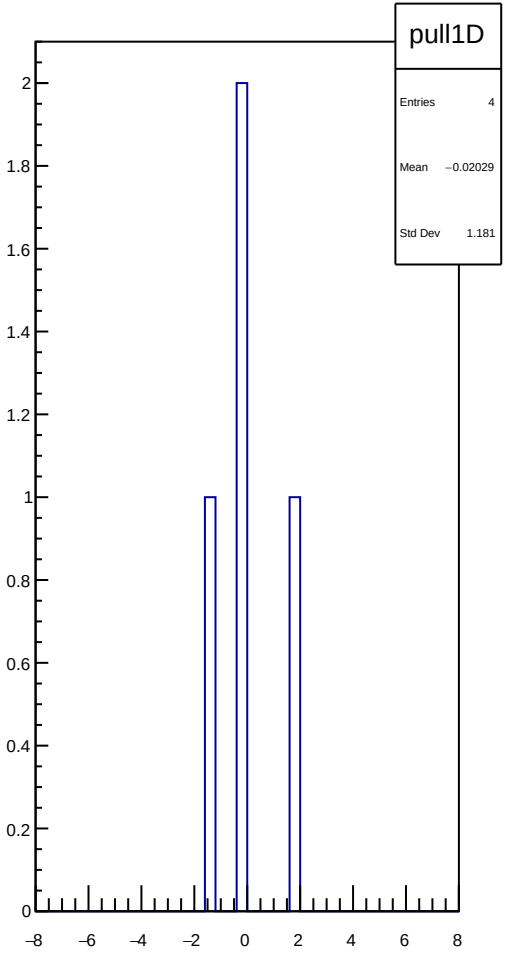

reg_asym_atr1l2_avg_diff_bpm4aX_slope vs run
χ² / ndf 5.084 / 3
p0 −31.36 ± 38.47
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −307.6
Std Dev 309.6
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean 0.003588
Std Dev 1.127
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

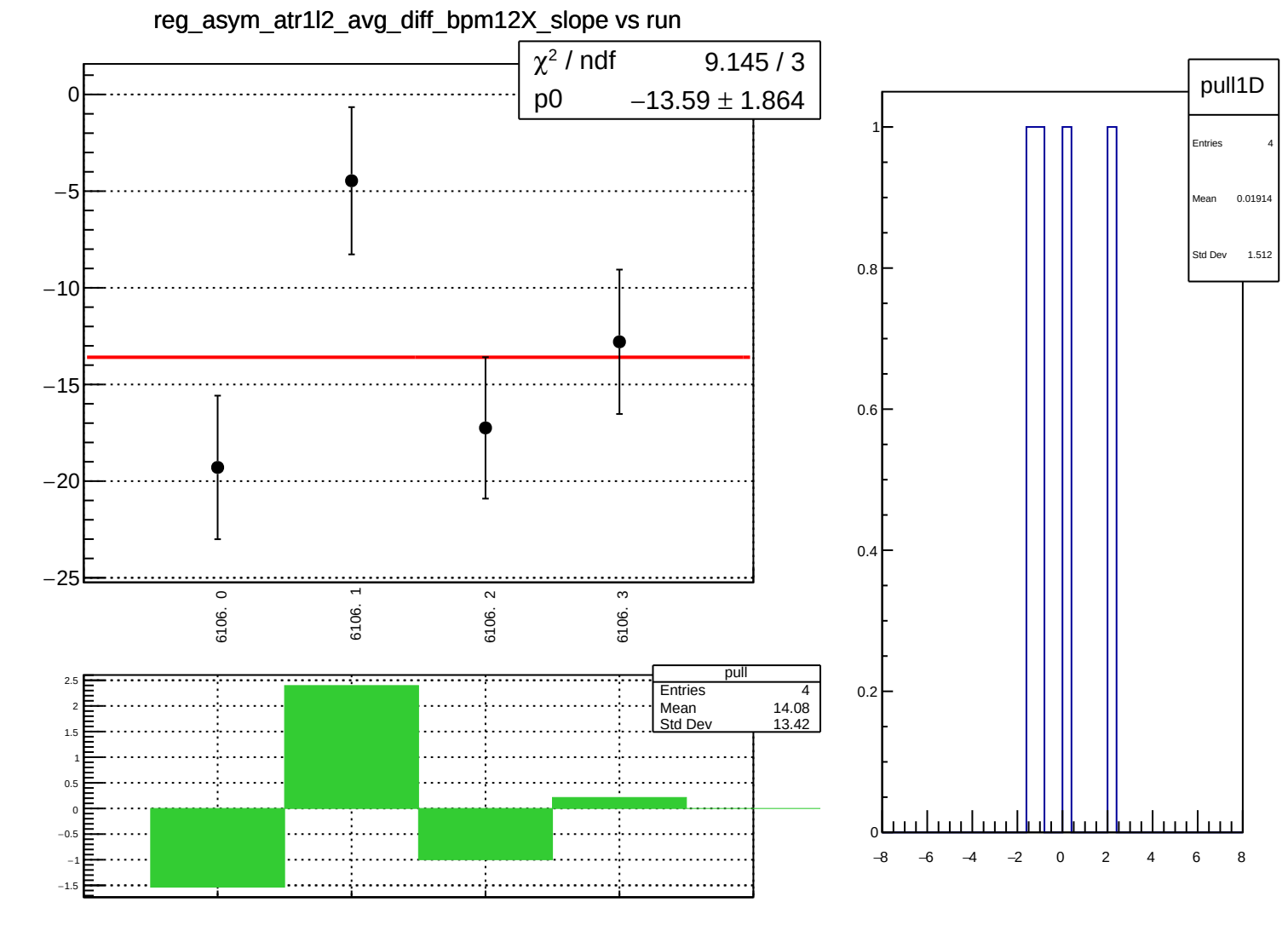

reg_asym_atr1l2_avg_diff_bpm4aY_slope vs run
χ² / ndf 4.947 / 3
p0 −18.18 ± 24.74
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 15.17
Std Dev 13.02
1.5
1
0.5
0
−0.5
−1
−1.5

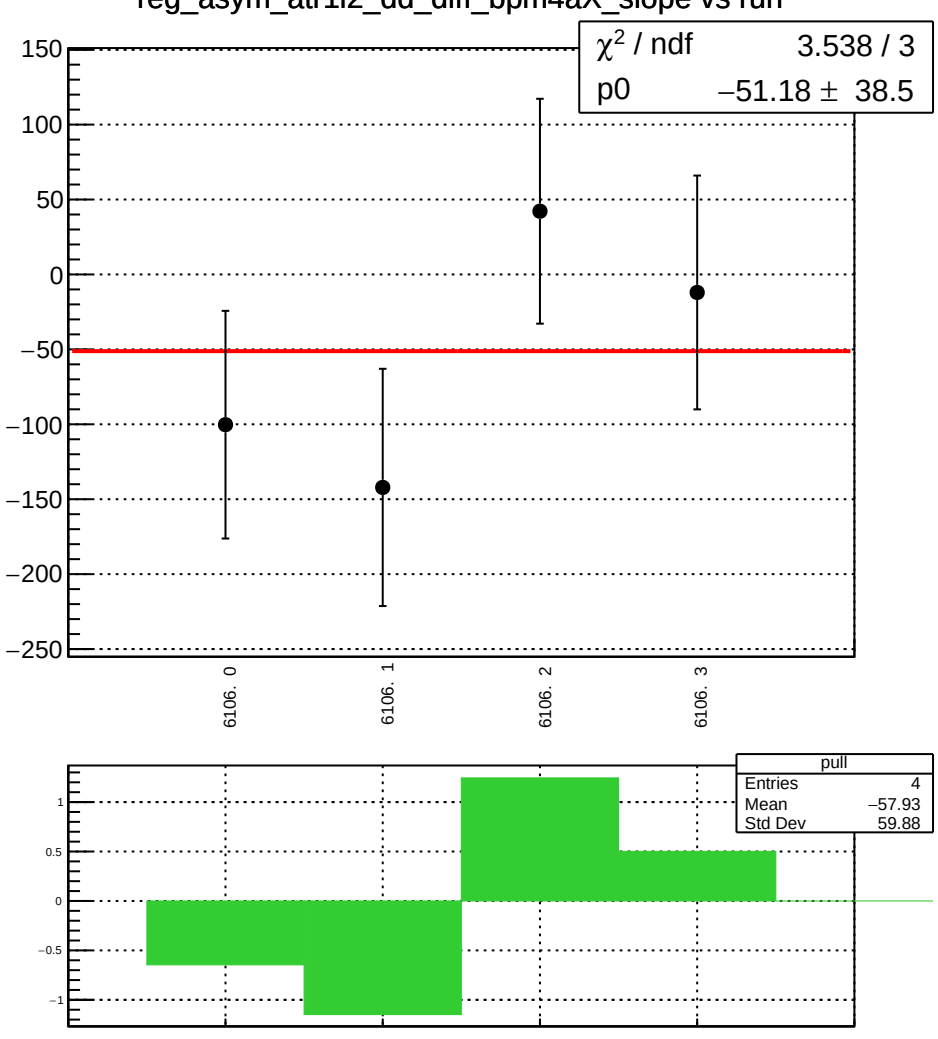

pull1D
Entries 4
Mean 0.03743
Std Dev 1.111
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

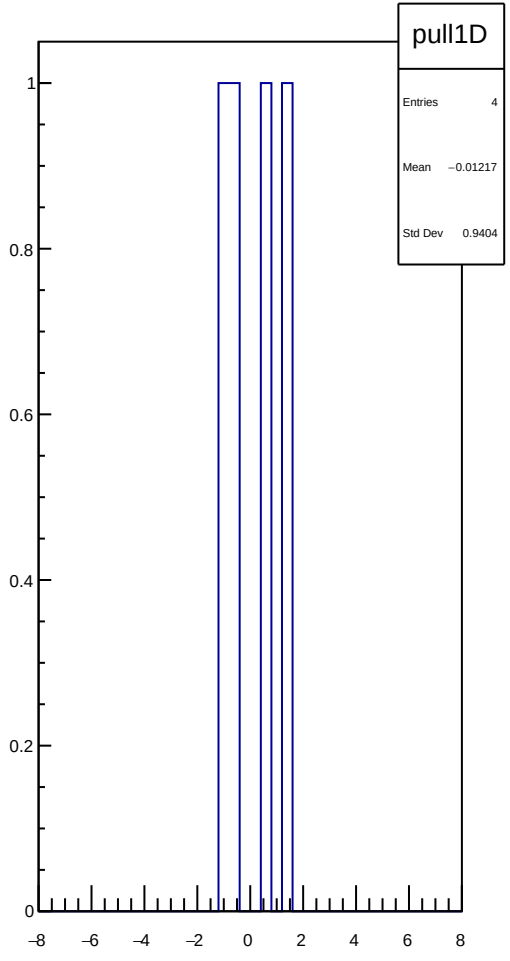

reg_asym_atr1l2_avg_diff_bpm4eX_slope vs run
χ² / ndf 5.449 / 3
p0 0.7694 ± 44.75
200
150
100
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −533.8
Std Dev 535.7
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.002207
Std Dev 1.167
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

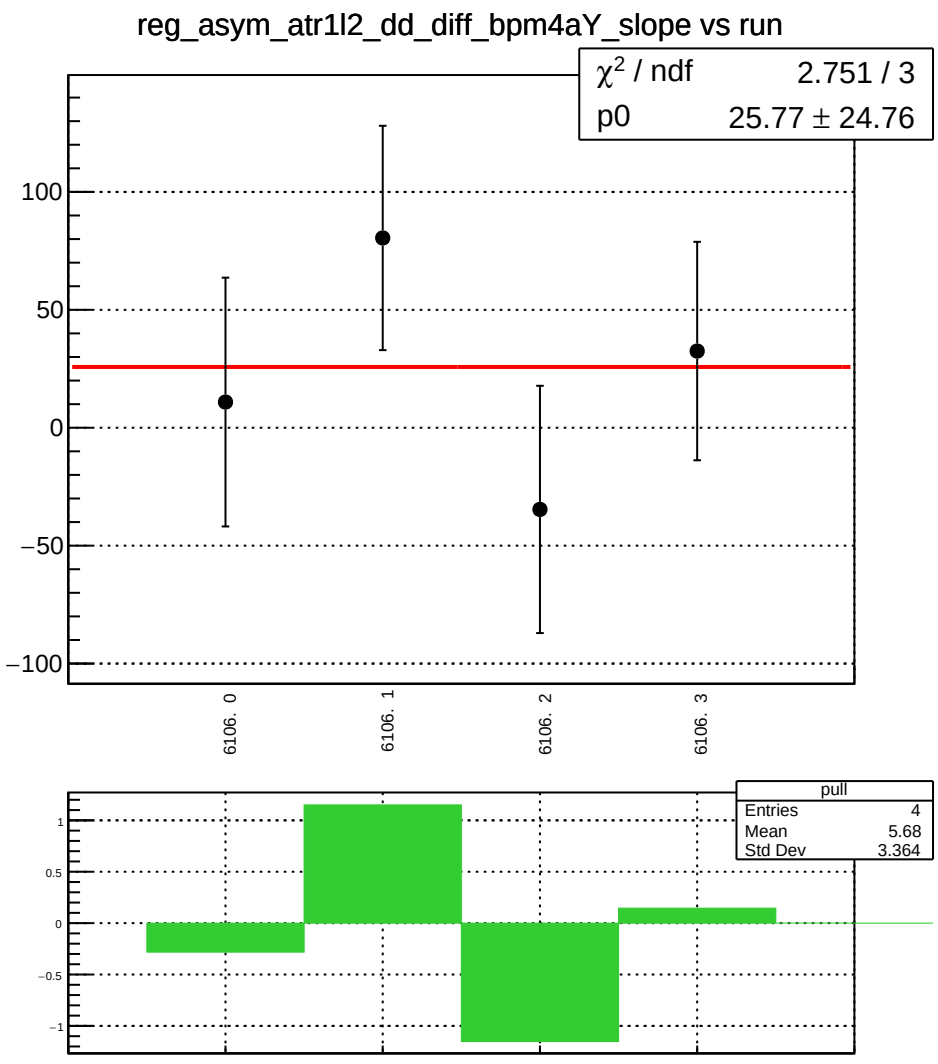

reg_asym_atr1l2_avg_diff_bpm4eY_slope vs run
χ² / ndf 5.583 / 3
p0 10.46 ± 26.19
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 26.12
Std Dev 23.92
1.5
1
0.5
0
−0.5
−1
−1.5

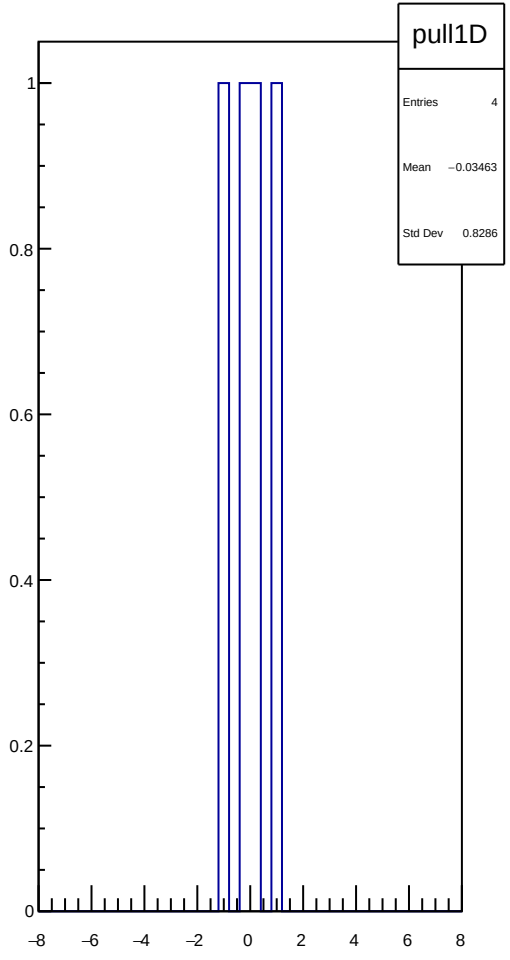

pull1D
Entries 4
Mean −0.02029
Std Dev 1.181
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

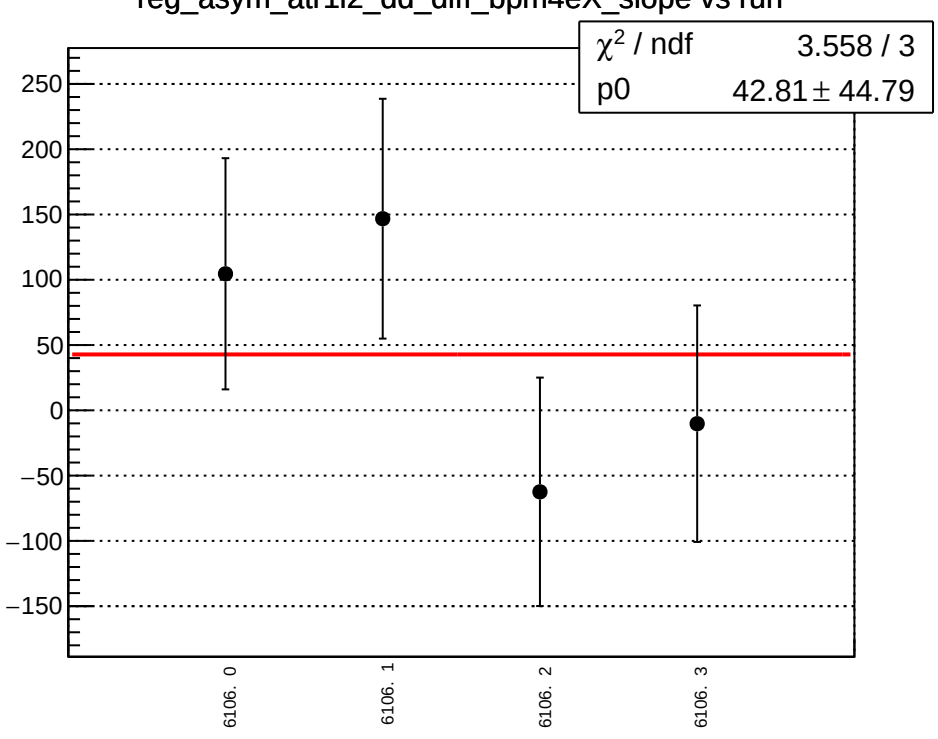

reg_asym_atr1l2_avg_diff_bpm12X_slope vs run
χ² / ndf 9.145 / 3
p0 −13.59 ± 1.864
0
−5
−10
−15
−20
−25
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 14.08
Std Dev 13.42
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 4
Mean 0.01914
Std Dev 1.512
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

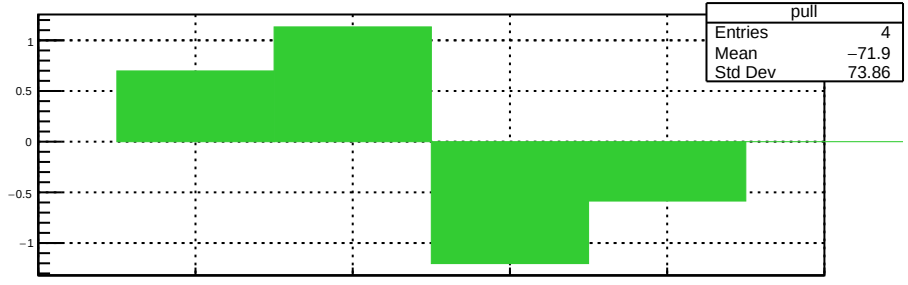

reg_asym_atr1l2_dd_diff_bpm4aX_slope vs run
χ² / ndf 3.538 / 3
p0 −51.18 ± 38.5
150
100
50
0
−50
−100
−150
−200
−250
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −57.93
Std Dev 59.88
1
0.5
0
−0.5
−1

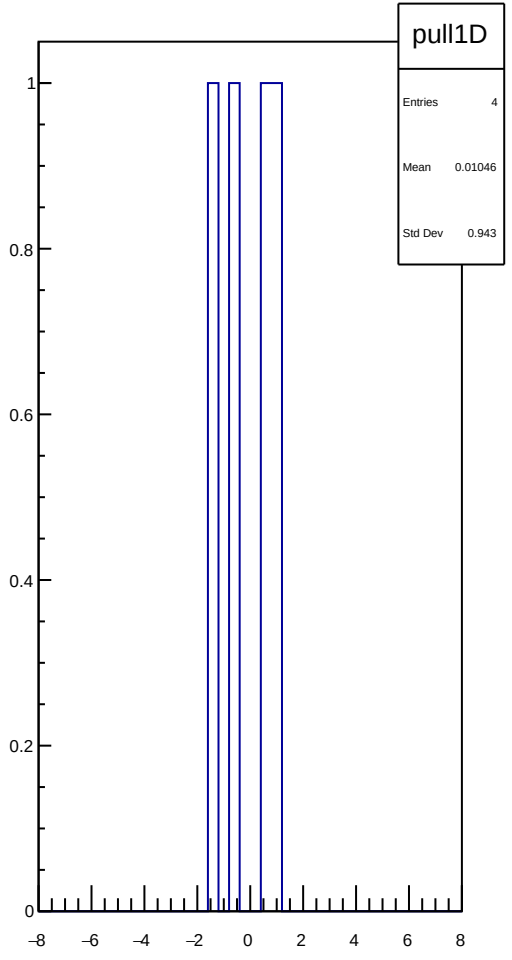

pull1D
Entries 4
Mean −0.01217
Std Dev 0.9404
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

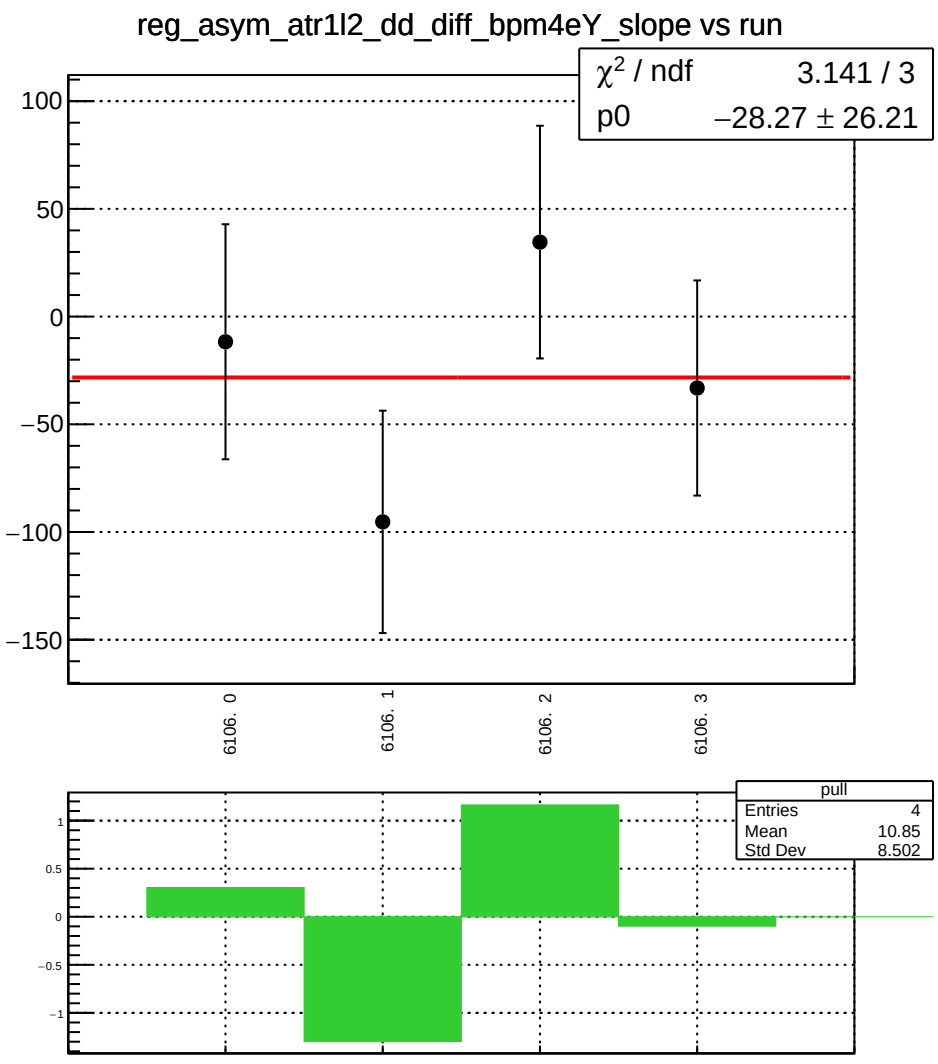

reg_asym_atr1l2_dd_diff_bpm4aY_slope vs run
χ² / ndf 2.751 / 3
p0 25.77 ± 24.76
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 5.68
Std Dev 3.364
1
0.5
0
−0.5
−1

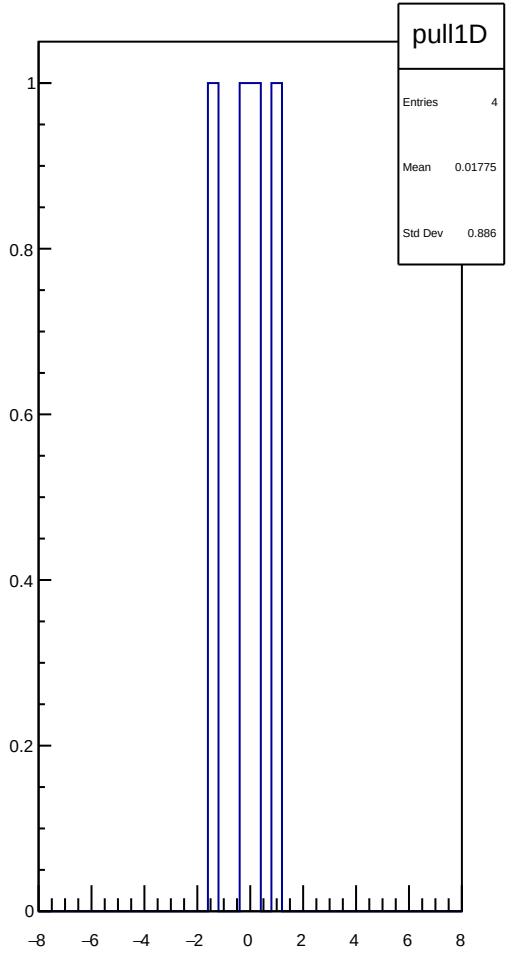

pull1D
Entries 4
Mean −0.03463
Std Dev 0.8286
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

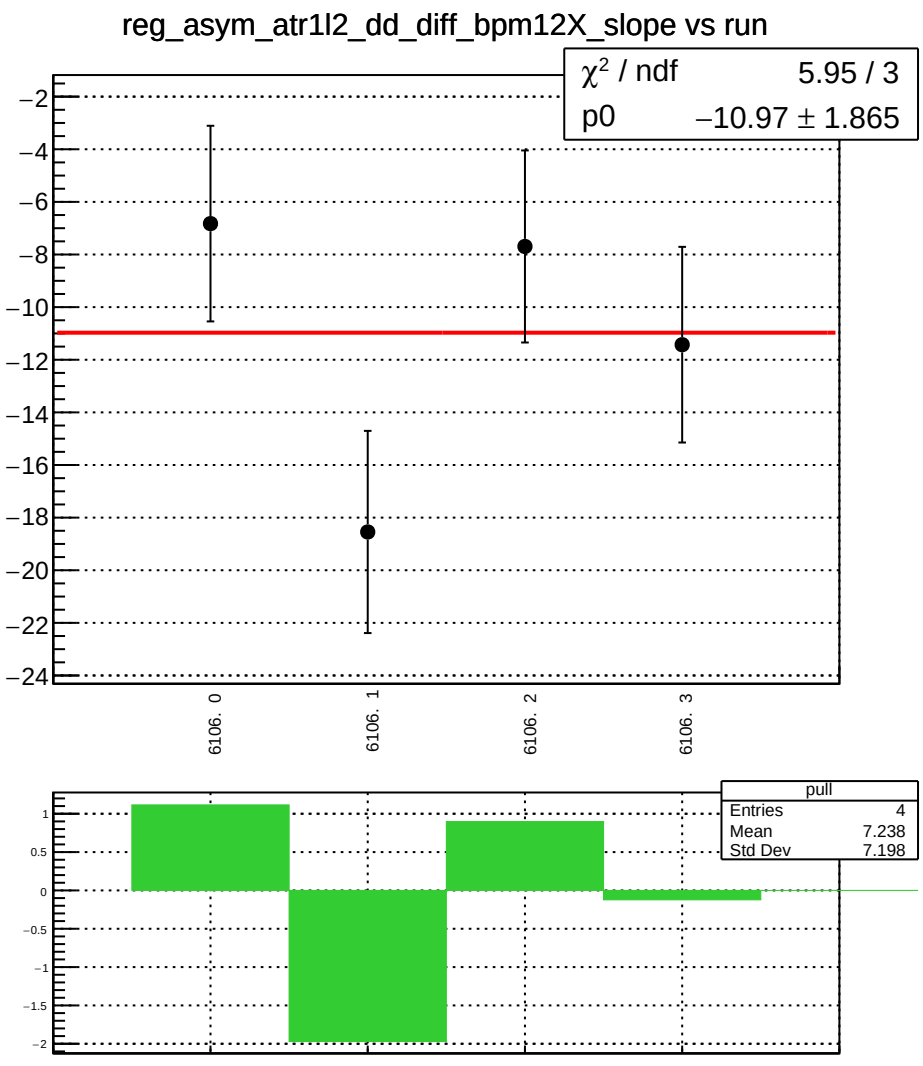

reg_asym_atr1l2_dd_diff_bpm4eX_slope vs run
χ² / ndf 3.558 / 3
p0 42.81 ± 44.79
250
200
150
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3

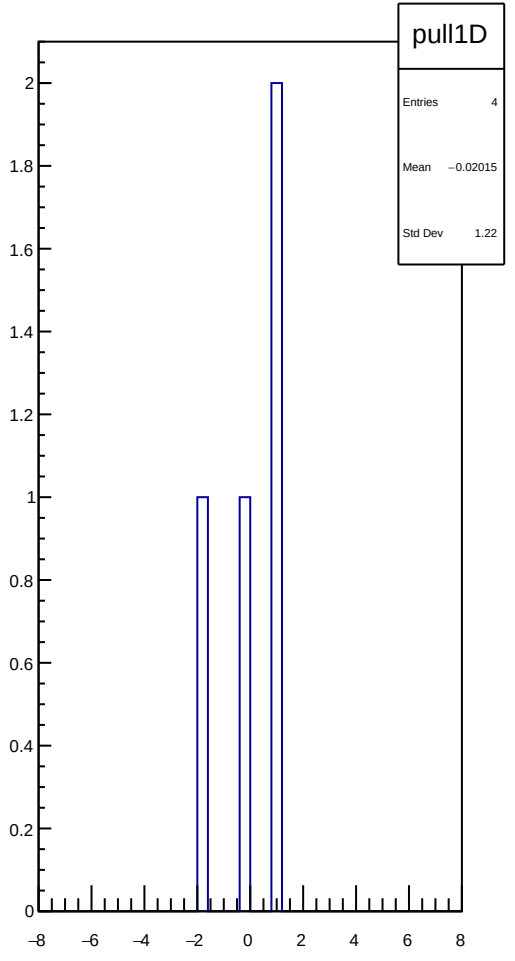

pull
Entries 4
Mean −71.9
Std Dev 73.86
1
0.5
0
−0.5
−1

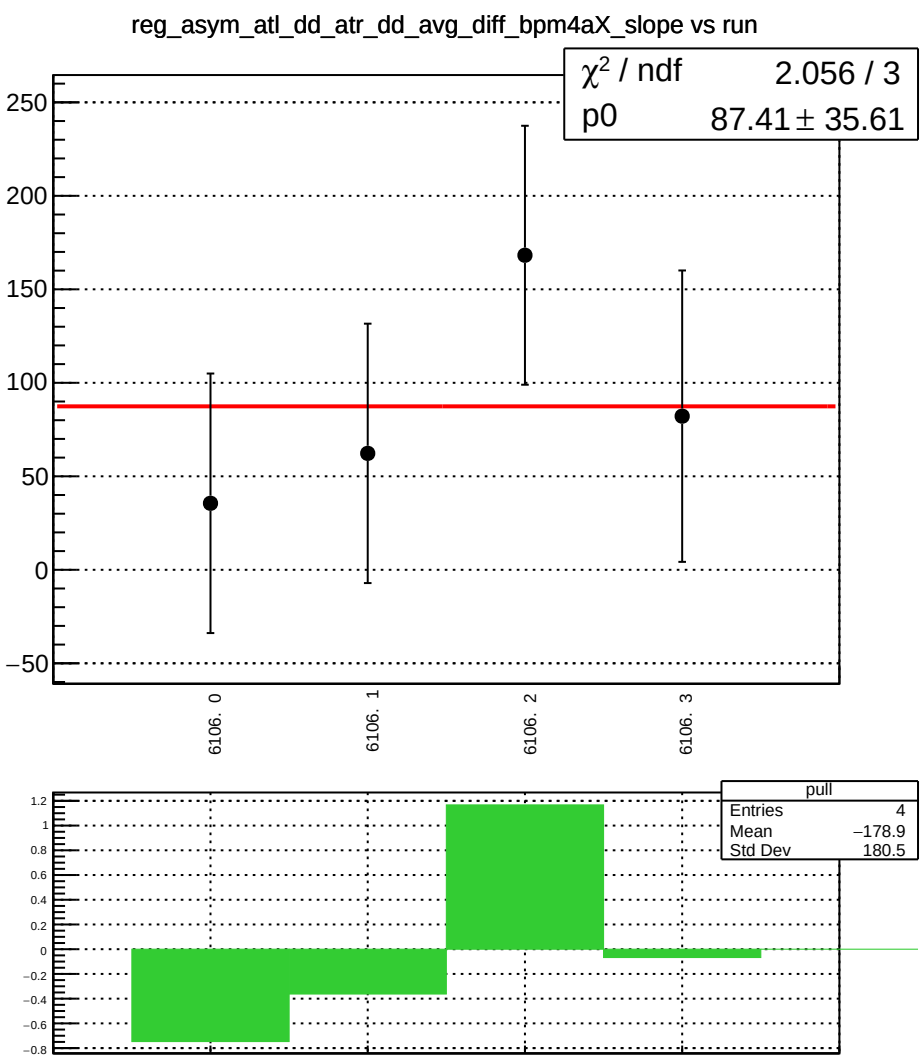

pull1D
Entries 4
Mean 0.01046
Std Dev 0.943
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

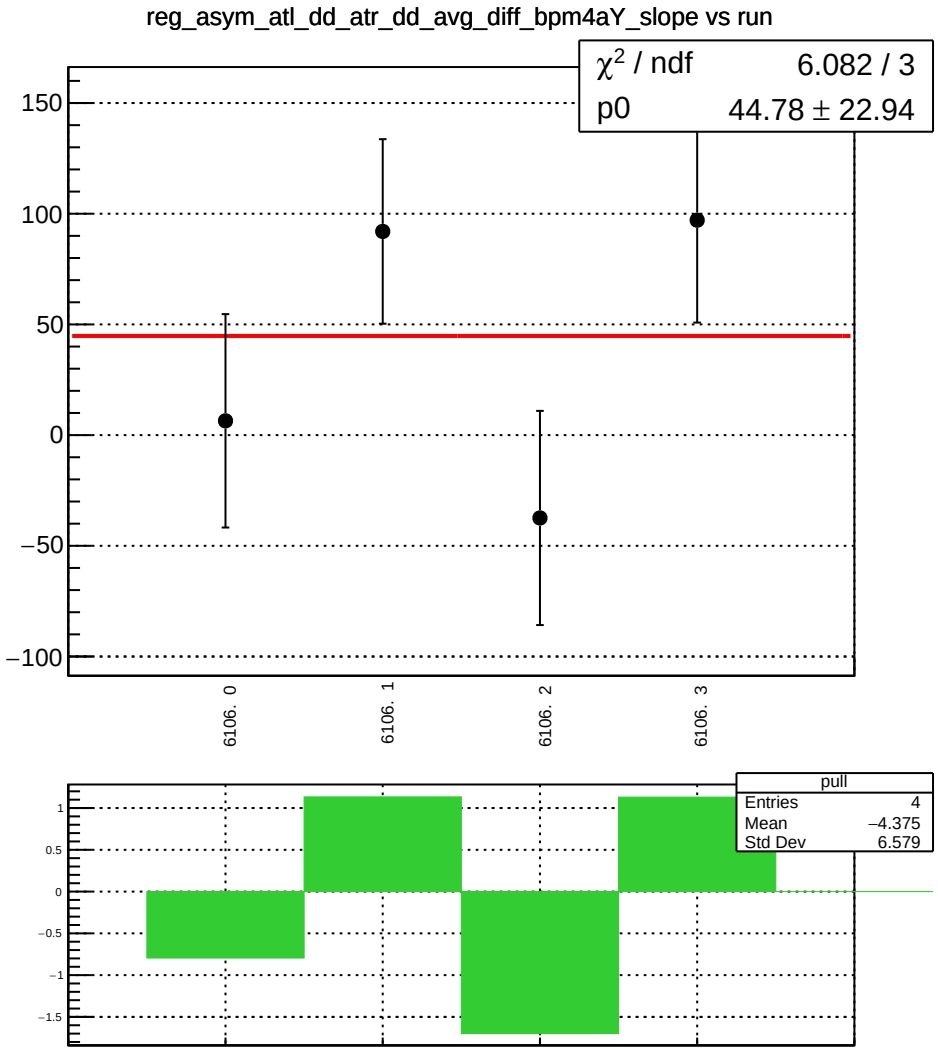

reg_asym_atr1l2_dd_diff_bpm4eY_slope vs run
χ² / ndf 3.141 / 3
p0 −28.27 ± 26.21
100
50
0
−50
−100
−150
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 10.85
Std Dev 8.502
1
0.5
0
−0.5
−1

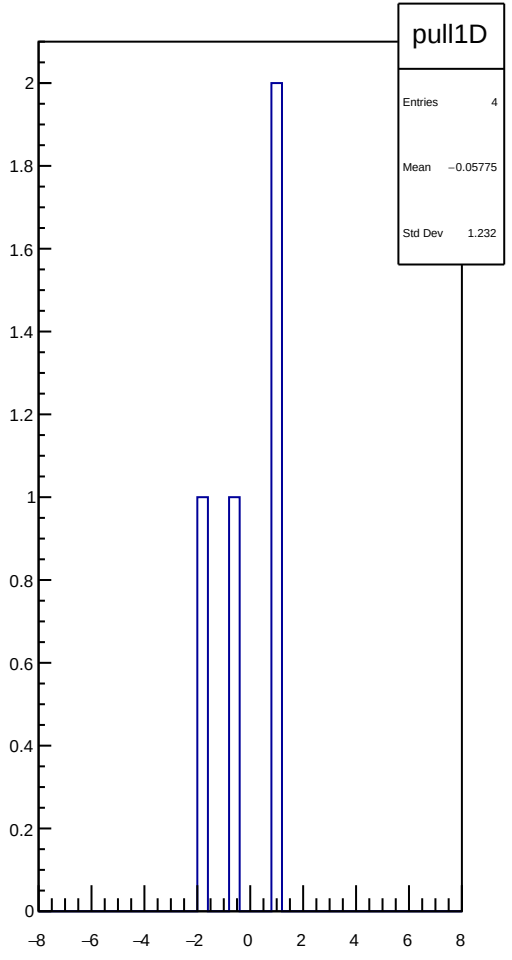

pull1D
Entries 4
Mean 0.01775
Std Dev 0.886
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

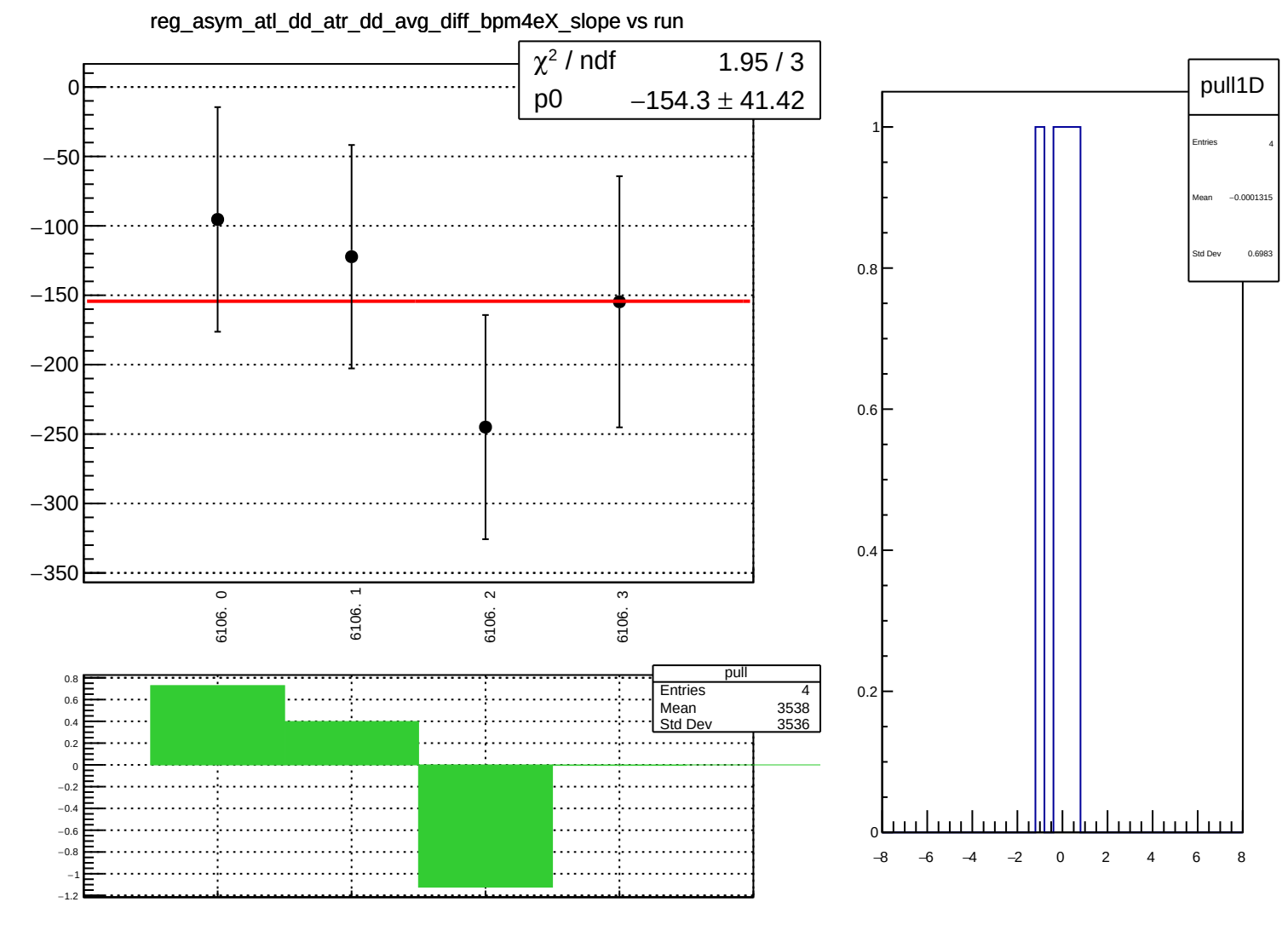

reg_asym_atr1l2_dd_diff_bpm12X_slope vs run
χ² / ndf 5.95 / 3
p0 −10.97 ± 1.865
−2
−4
−6
−8
−10
−12
−14
−16
−18
−20
−22
−24
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 7.238
Std Dev 7.198
1
0.5
0
−0.5
−1
−1.5
−2

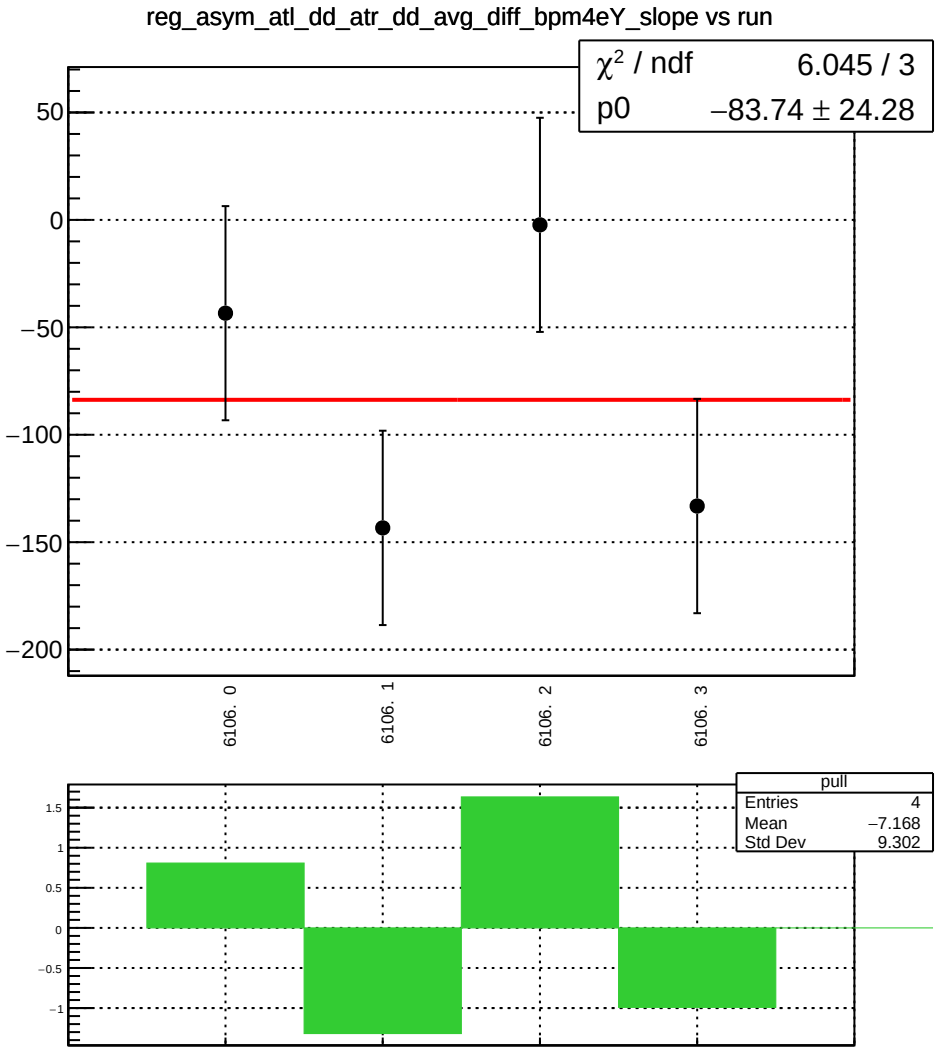

pull1D
Entries 4
Mean −0.02015
Std Dev 1.22
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

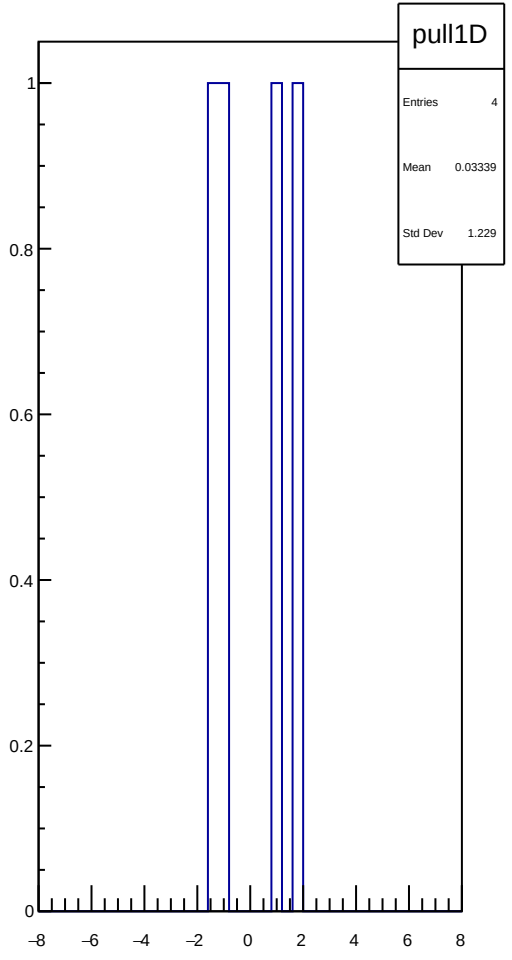

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aX_slope vs run
χ² / ndf 2.056 / 3
p0 87.41 ± 35.61
250
200
150
100
50
0
−50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −178.9
Std Dev 180.5
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean −0.002465
Std Dev 0.717
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

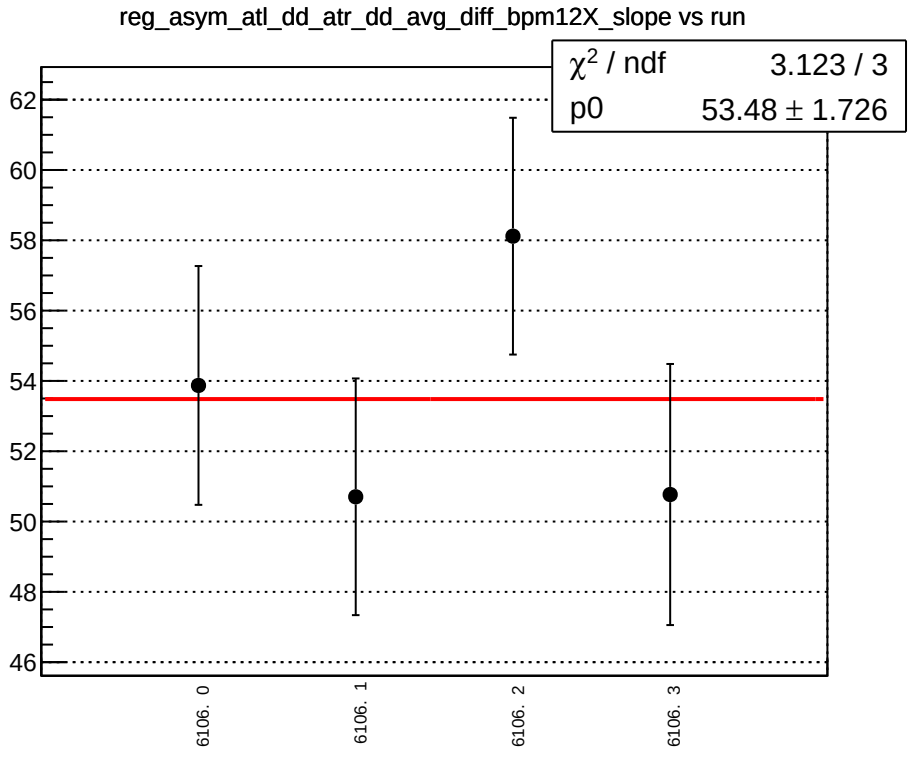

reg_asym_atl_dd_atr_dd_avg_diff_bpm4aY_slope vs run
χ² / ndf 6.082 / 3
p0 44.78 ± 22.94
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −4.375
Std Dev 6.579
1
0.5
0
−0.5
−1
−1.5

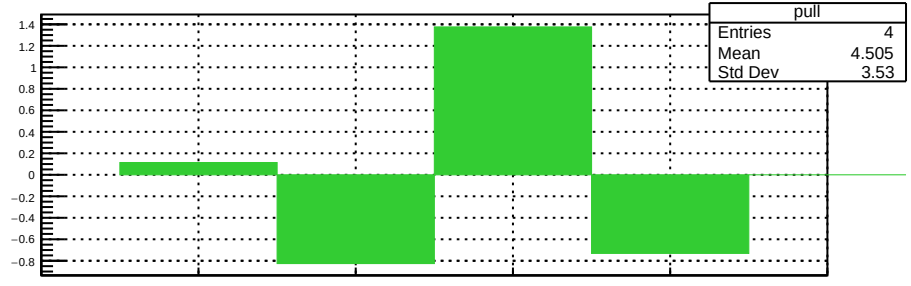

pull1D
Entries 4
Mean −0.05775
Std Dev 1.232
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

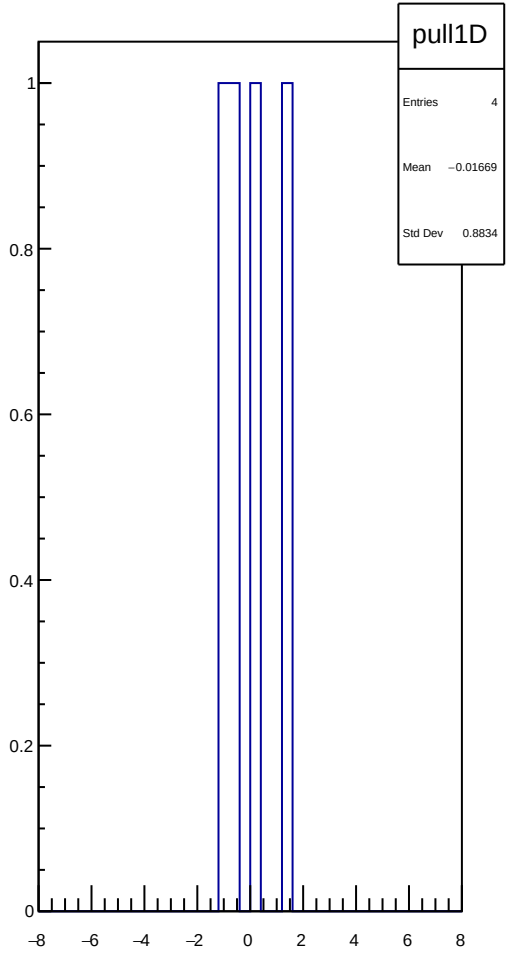

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.95 / 3
p0 −154.3 ± 41.42
0
−50
−100
−150
−200
−250
−300
−350
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 3538
Std Dev 3536
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull1D
Entries 4
Mean −0.0001315
Std Dev 0.6983
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

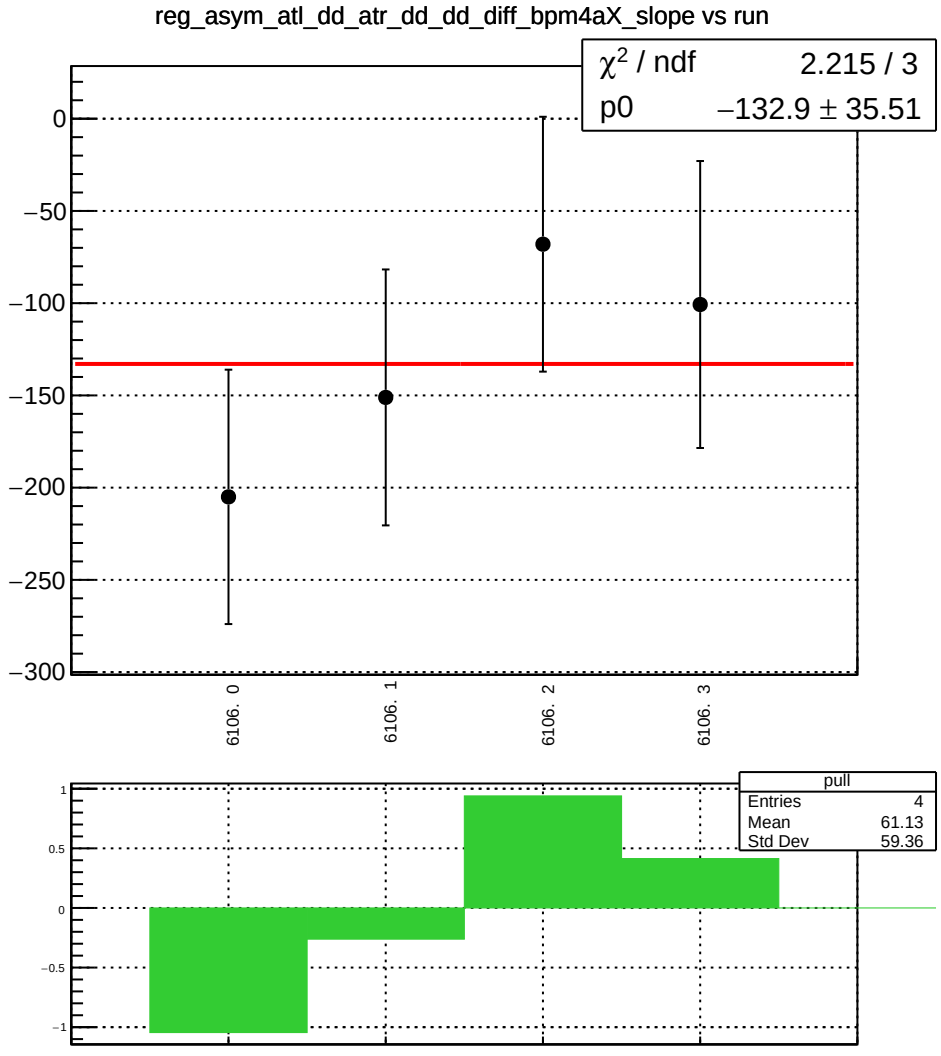

reg_asym_atl_dd_atr_dd_avg_diff_bpm4eY_slope vs run
χ² / ndf 6.045 / 3
p0 −83.74 ± 24.28
50
0
−50
−100
−150
−200
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −7.168
Std Dev 9.302
1.5
1
0.5
0
−0.5
−1

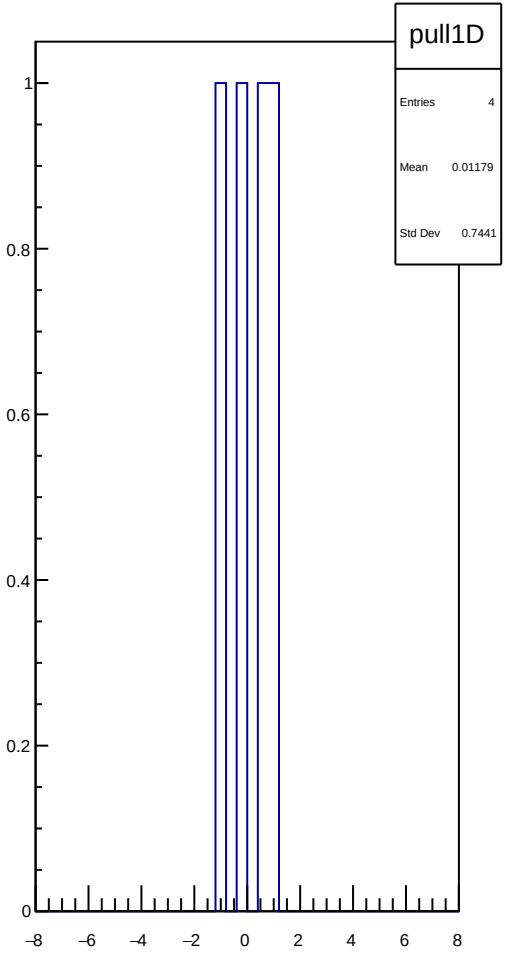

pull1D
Entries 4
Mean 0.03339
Std Dev 1.229
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

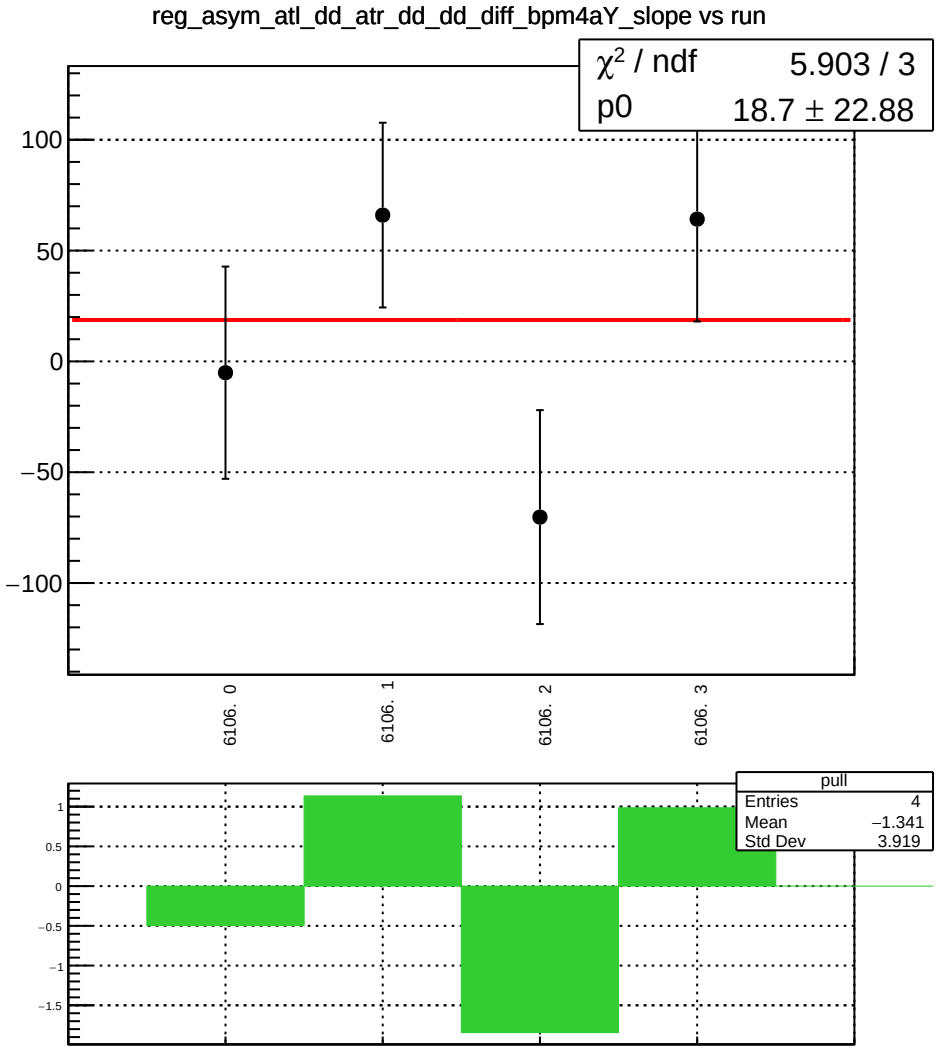

reg_asym_atl_dd_atr_dd_avg_diff_bpm12X_slope vs run
χ² / ndf 3.123 / 3
p0 53.48 ± 1.726
62
60
58
56
54
52
50
48
46
6106. 0
6106. 1
6106. 2
6106. 3

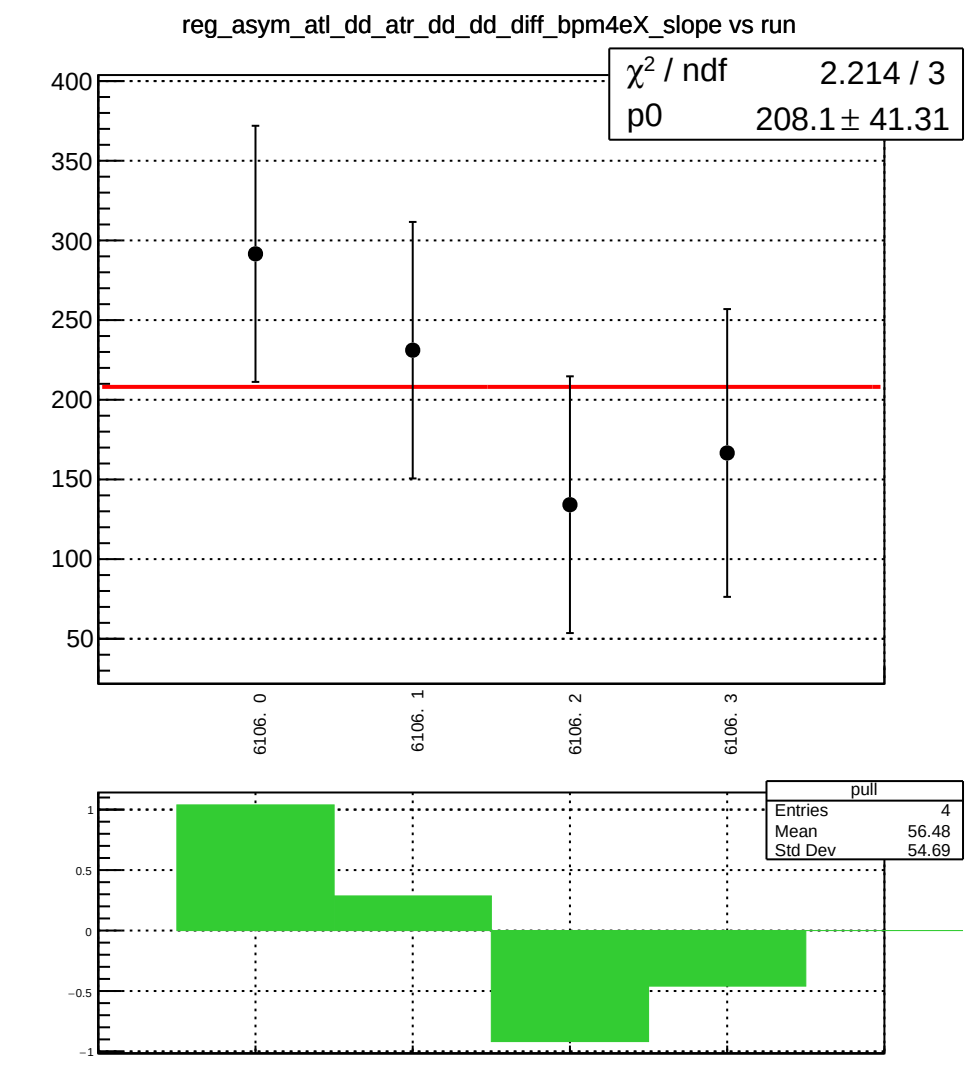

pull
Entries 4
Mean 4.505
Std Dev 3.53
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

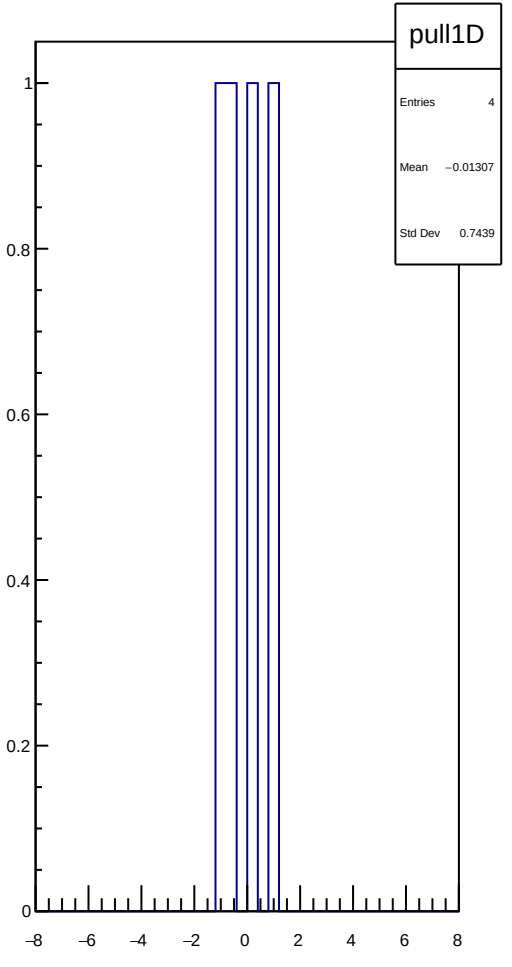

pull1D
Entries 4
Mean −0.01669
Std Dev 0.8834
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

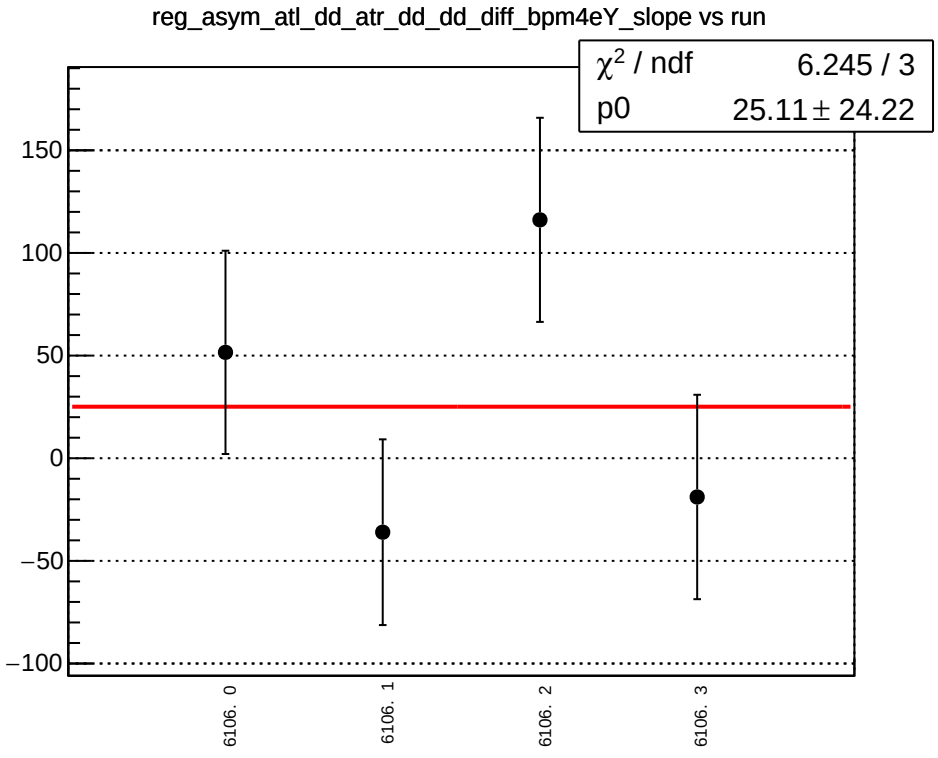

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aX_slope vs run
χ² / ndf 2.215 / 3
p0 −132.9 ± 35.51
0
−50
−100
−150
−200
−250
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 61.13
Std Dev 59.36
1
0.5
0
−0.5
−1

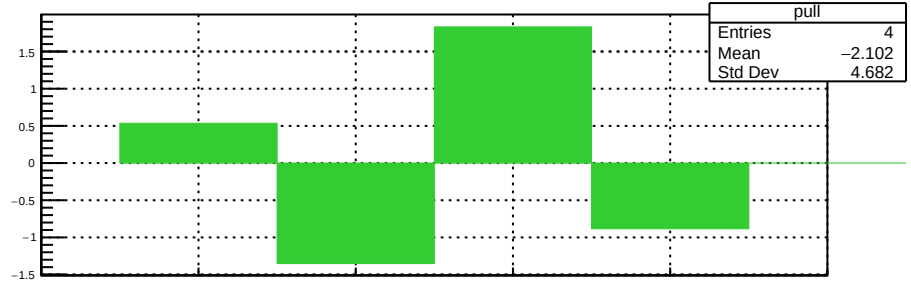

pull1D
Entries 4
Mean 0.01179
Std Dev 0.7441
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

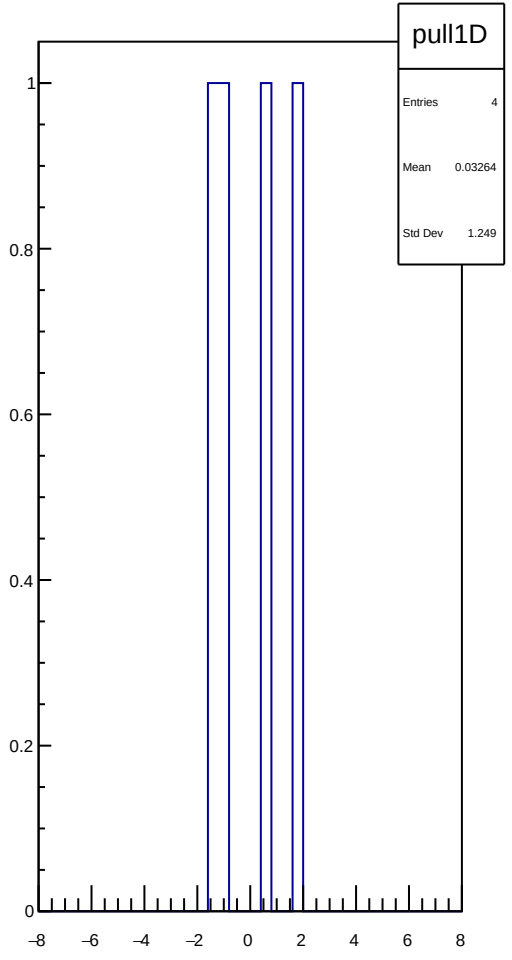

reg_asym_atl_dd_atr_dd_dd_diff_bpm4aY_slope vs run
χ² / ndf 5.903 / 3
p0 18.7 ± 22.88
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.341
Std Dev 3.919
1
0.5
0
−0.5
−1
−1.5
pull1D
Entries 4
Mean −0.05495
Std Dev 1.214
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

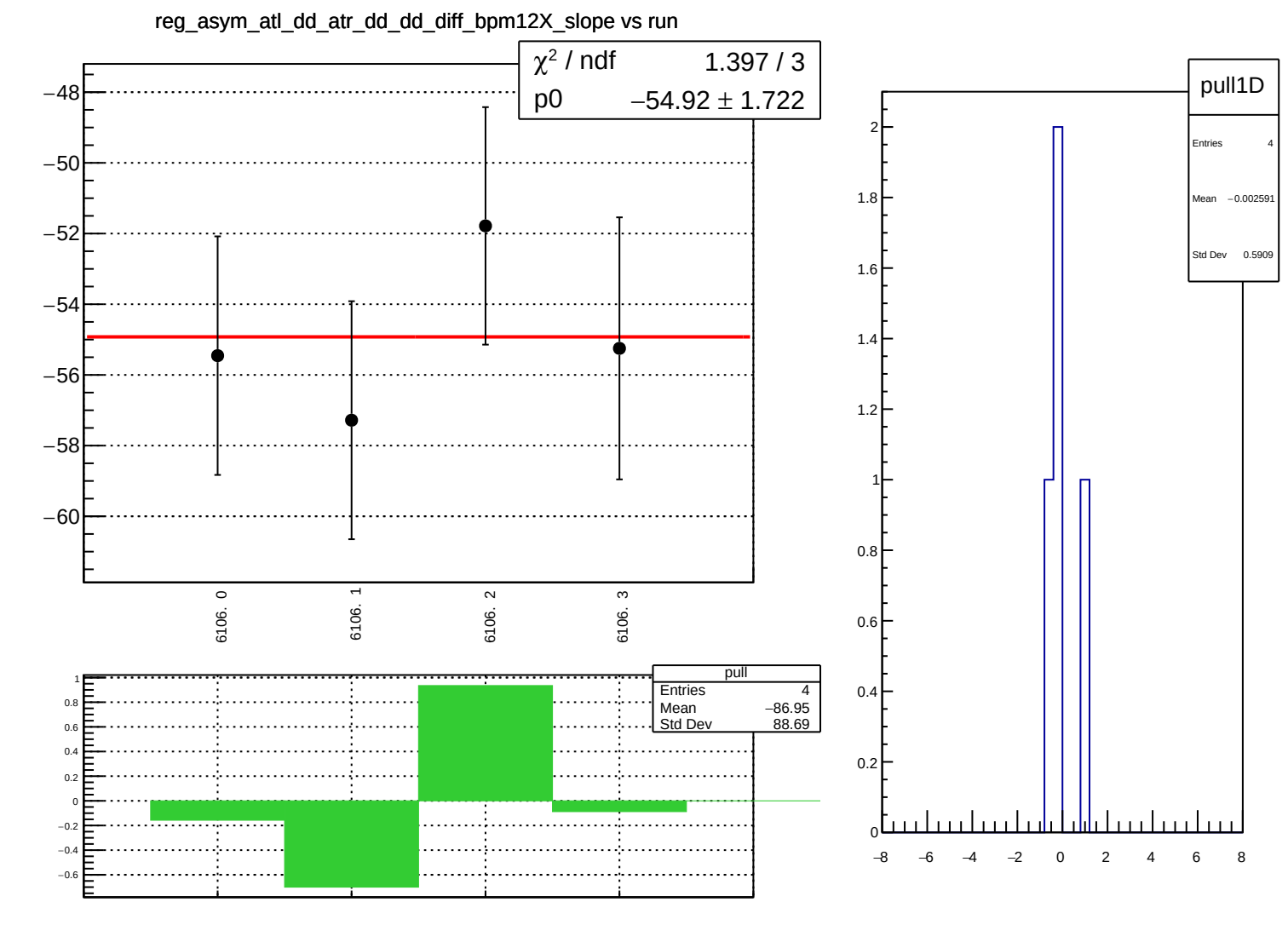

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eX_slope vs run
χ² / ndf 2.214 / 3
p0 208.1 ± 41.31
400
350
300
250
200
150
100
50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 56.48
Std Dev 54.69
1
0.5
0
−0.5
−1

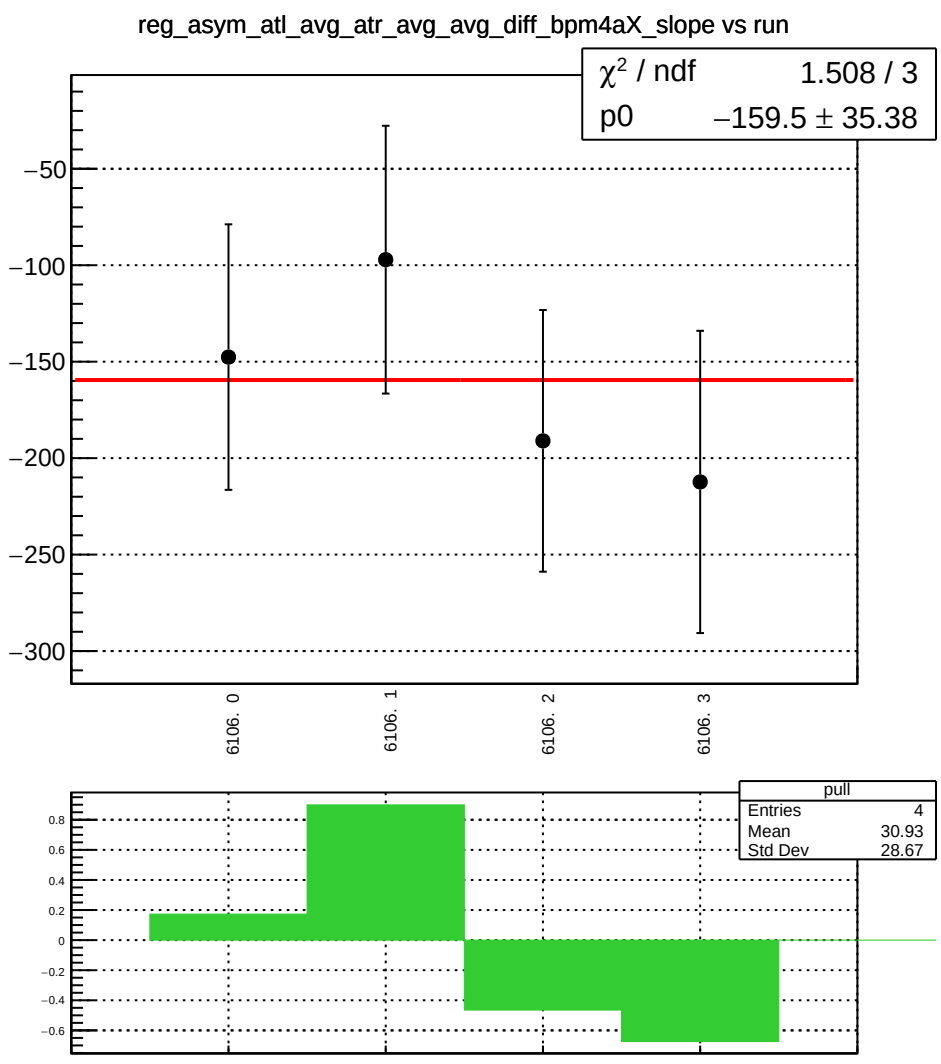

pull1D
Entries 4
Mean −0.01307
Std Dev 0.7439
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

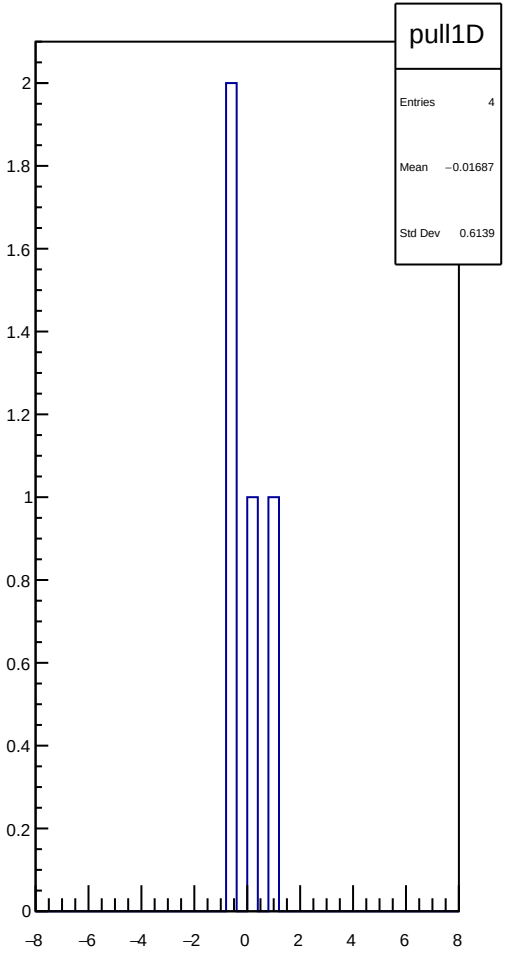

reg_asym_atl_dd_atr_dd_dd_diff_bpm4eY_slope vs run
χ² / ndf 6.245 / 3
p0 25.11 ± 24.22
150
100
50
0
−50
−100
6106. 0
6106. 1
6106. 2
6106. 3

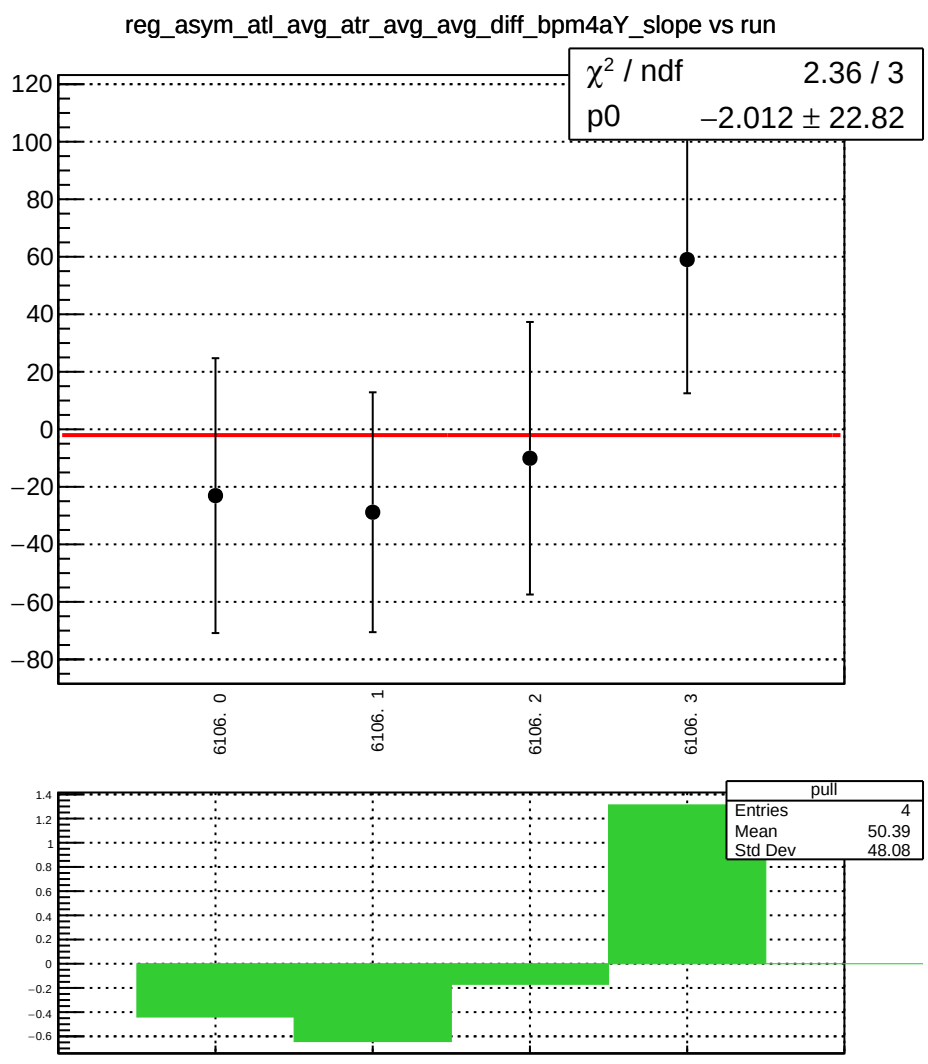

pull
Entries 4
Mean −2.102
Std Dev 4.682
1.5
1
0.5
0
−0.5
−1
−1.5

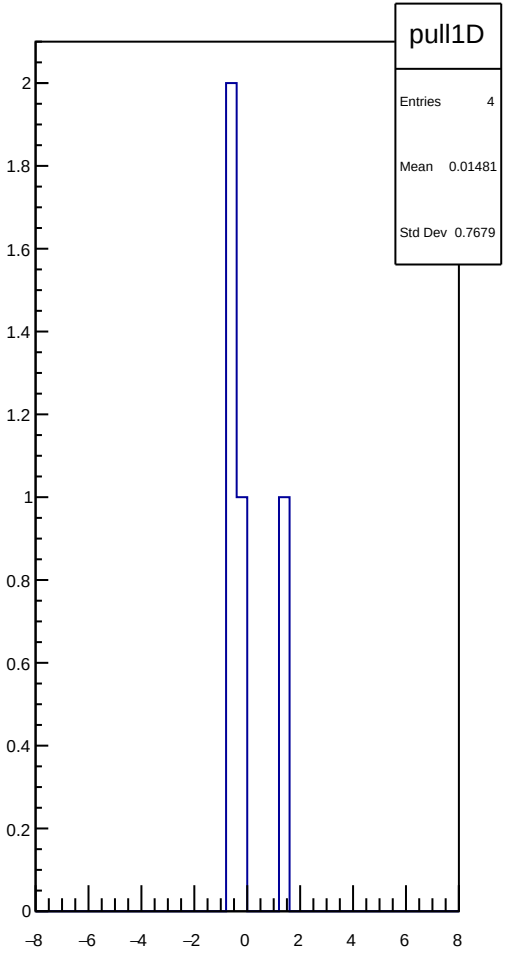

pull1D
Entries 4
Mean 0.03264
Std Dev 1.249
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

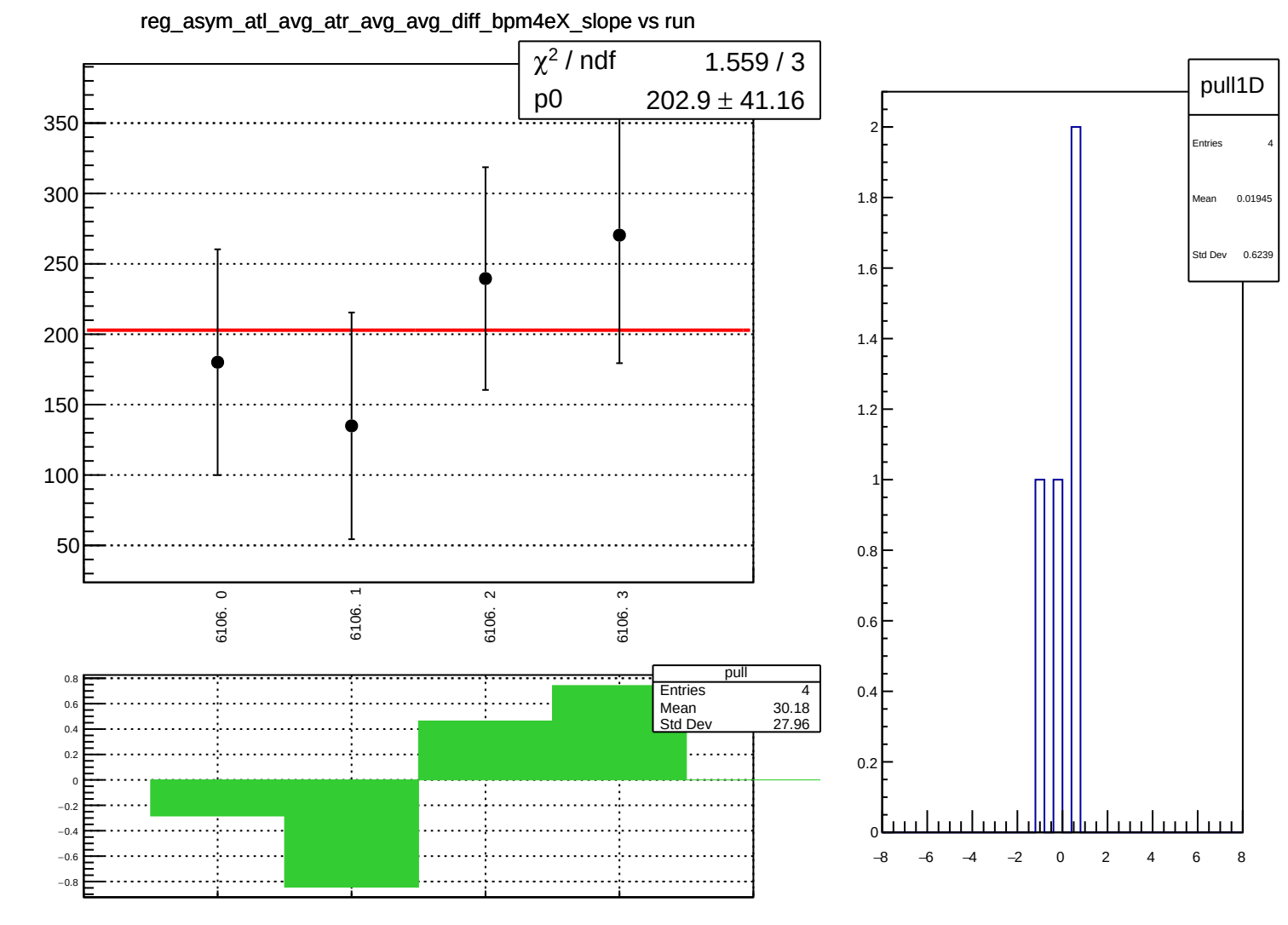

reg_asym_atl_dd_atr_dd_dd_diff_bpm12X_slope vs run
χ² / ndf 1.397 / 3
p0 −54.92 ± 1.722
−48
−50
−52
−54
−56
−58
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −86.95
Std Dev 88.69
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean −0.002591
Std Dev 0.5909
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

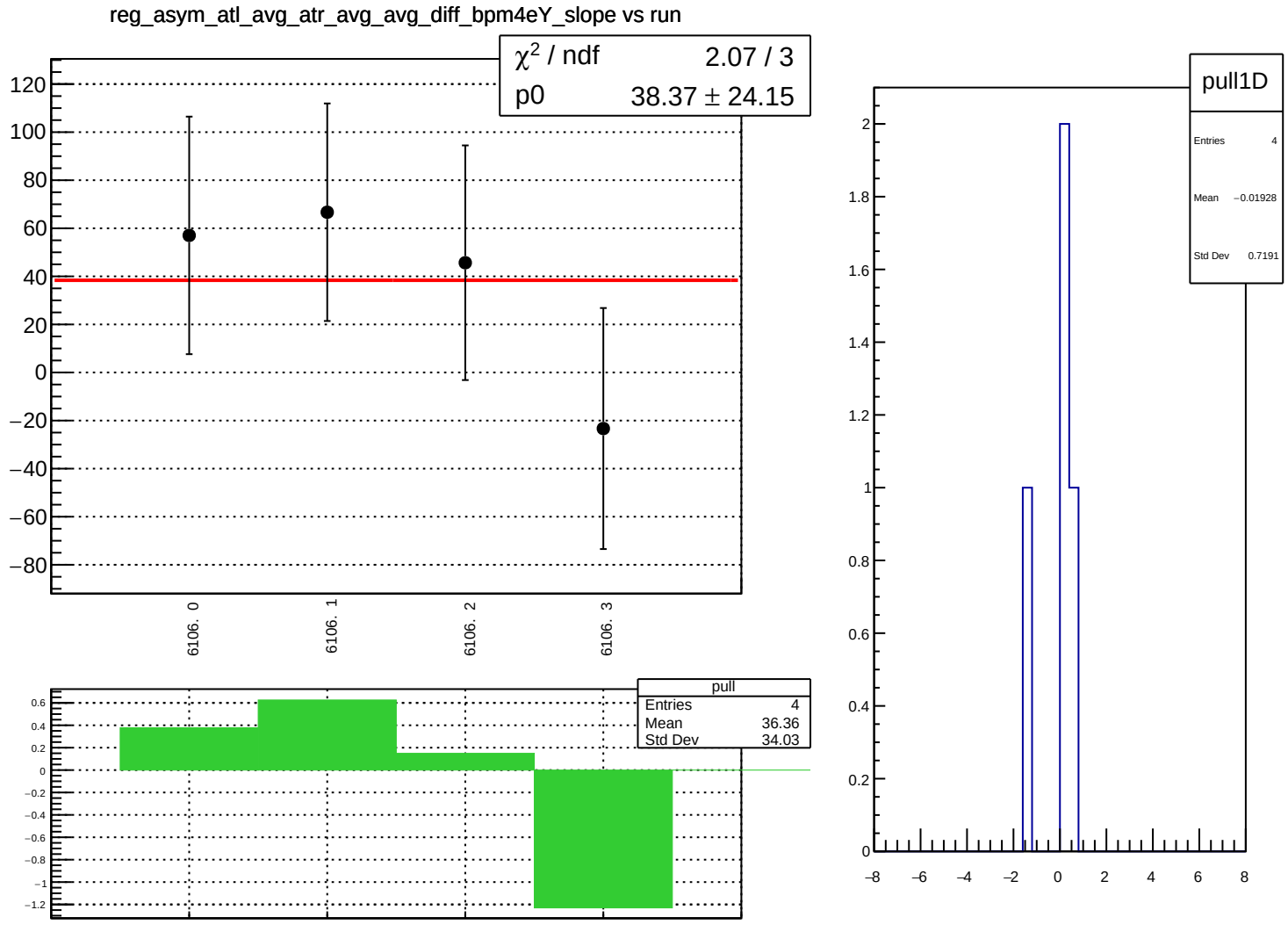

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aX_slope vs run
χ² / ndf 1.508 / 3
p0 −159.5 ± 35.38
−50
−100
−150
−200
−250
−300
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 30.93
Std Dev 28.67
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

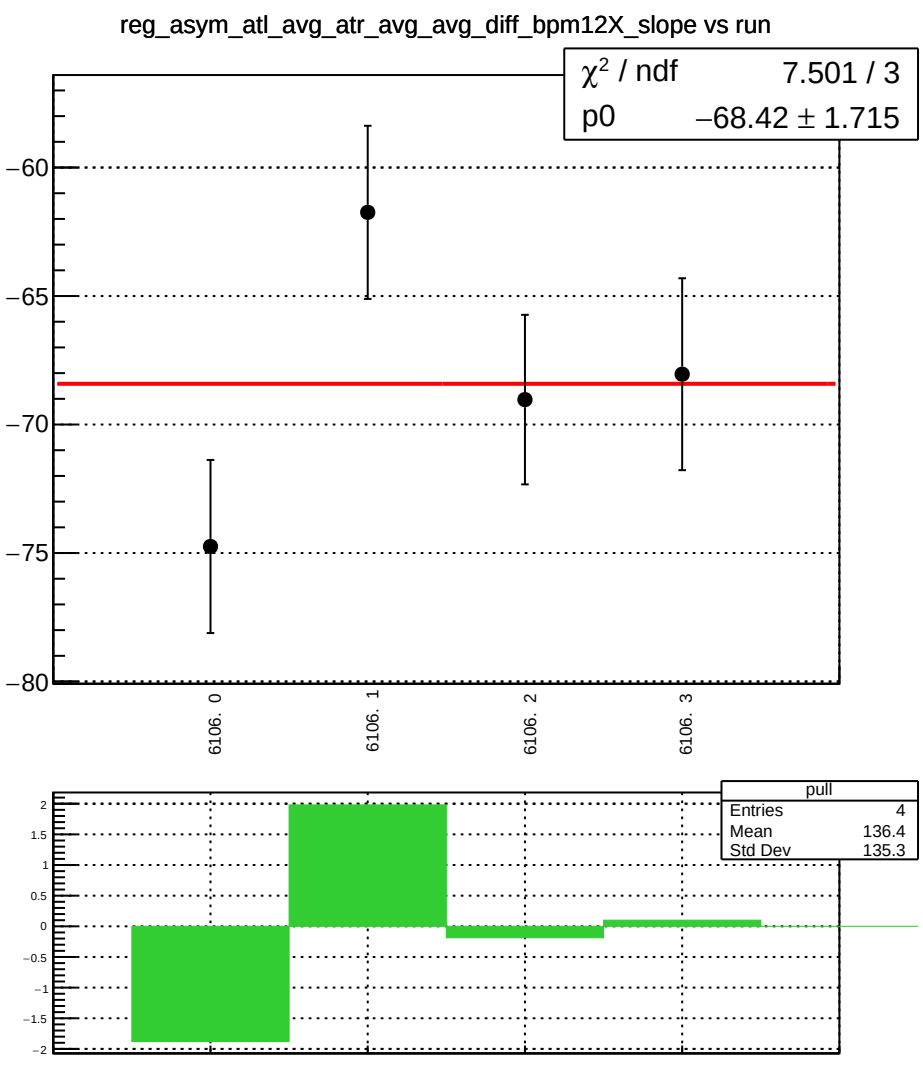

pull1D
Entries 4
Mean −0.01687
Std Dev 0.6139
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

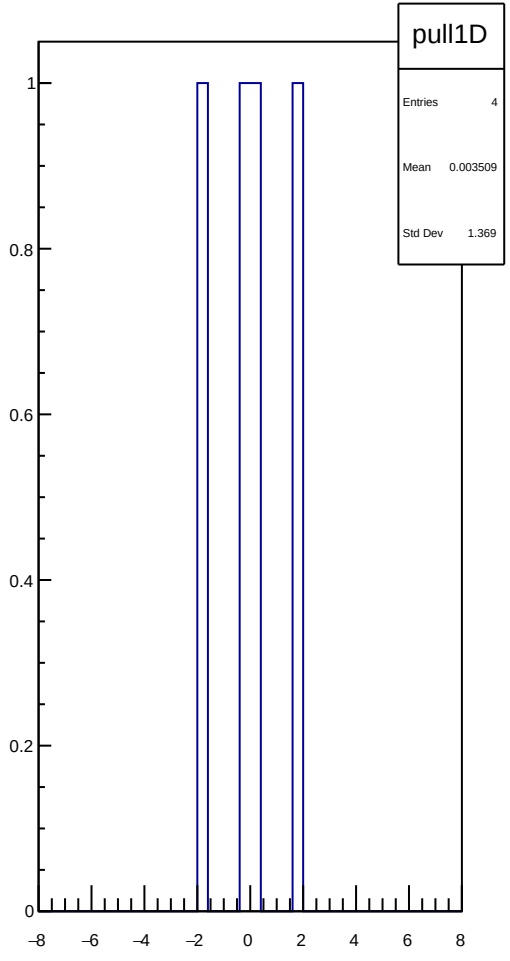

reg_asym_atl_avg_atr_avg_avg_diff_bpm4aY_slope vs run
χ² / ndf 2.36 / 3
p0 −2.012 ± 22.82
120
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 50.39
Std Dev 48.08
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6

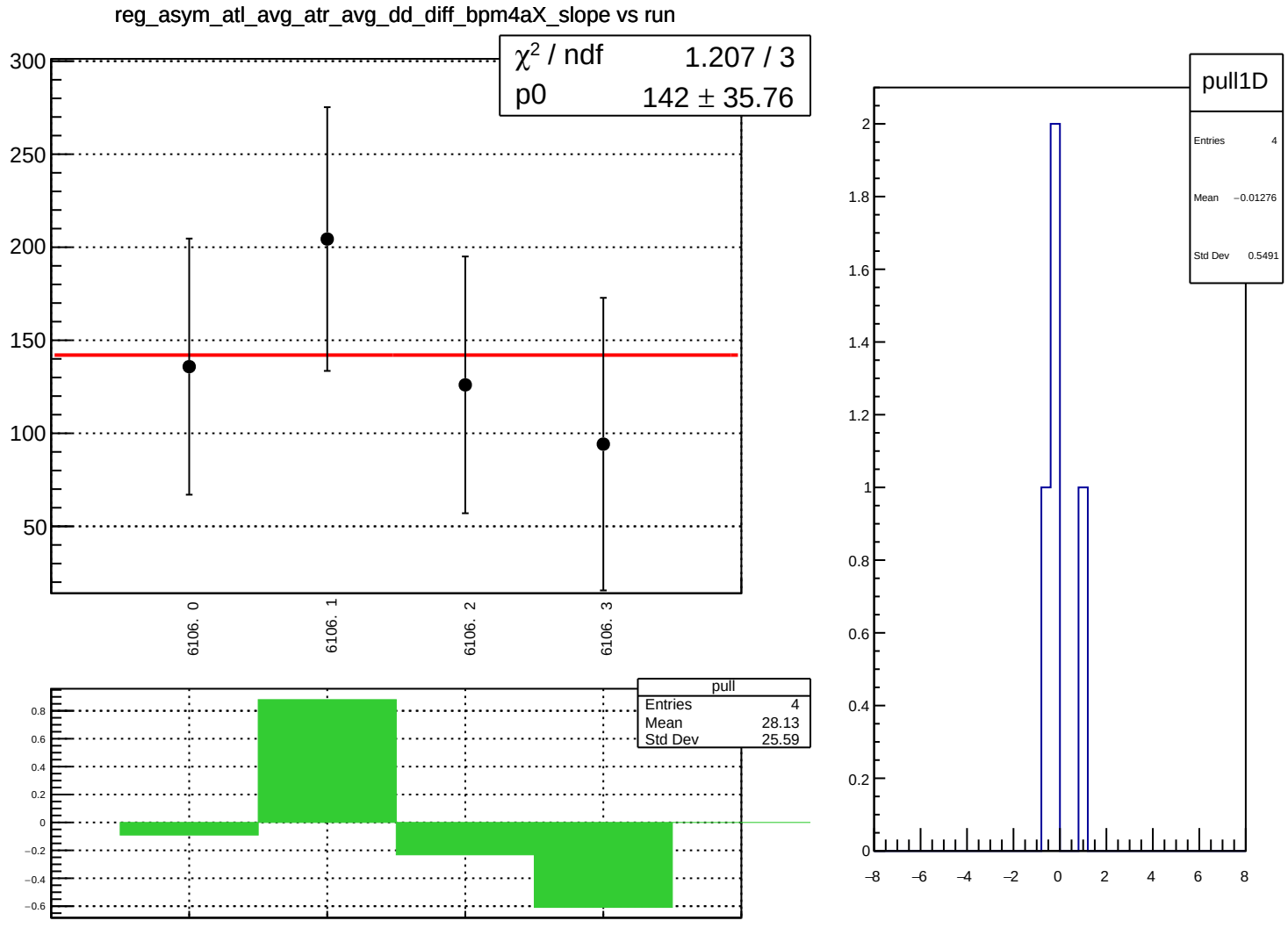

pull1D
Entries 4
Mean 0.01481
Std Dev 0.7679
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

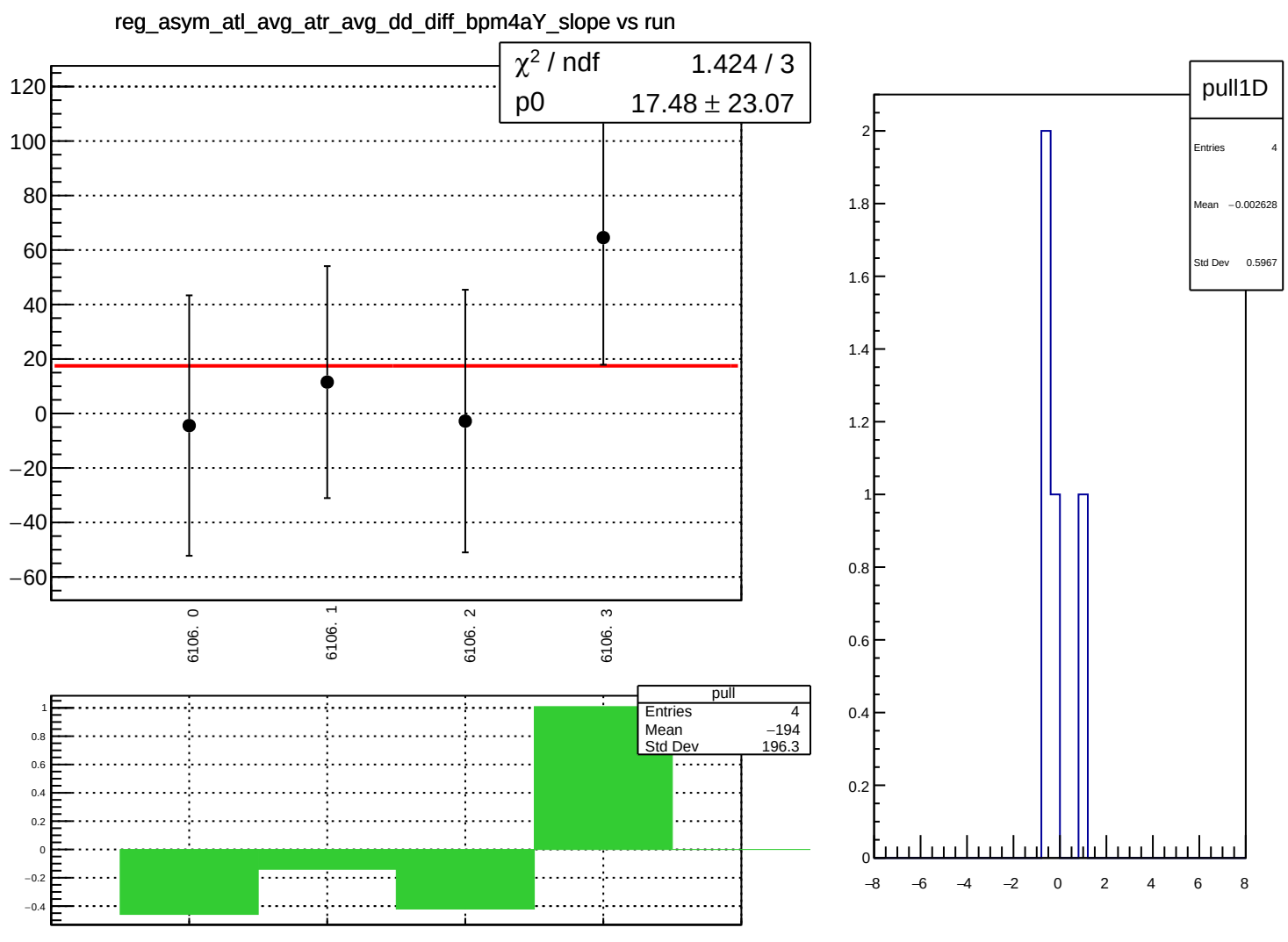

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eX_slope vs run
χ² / ndf 1.559 / 3
p0 202.9 ± 41.16
350
300
250
200
150
100
50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 30.18
Std Dev 27.96
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
pull1D
Entries 4
Mean 0.01945
Std Dev 0.6239
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

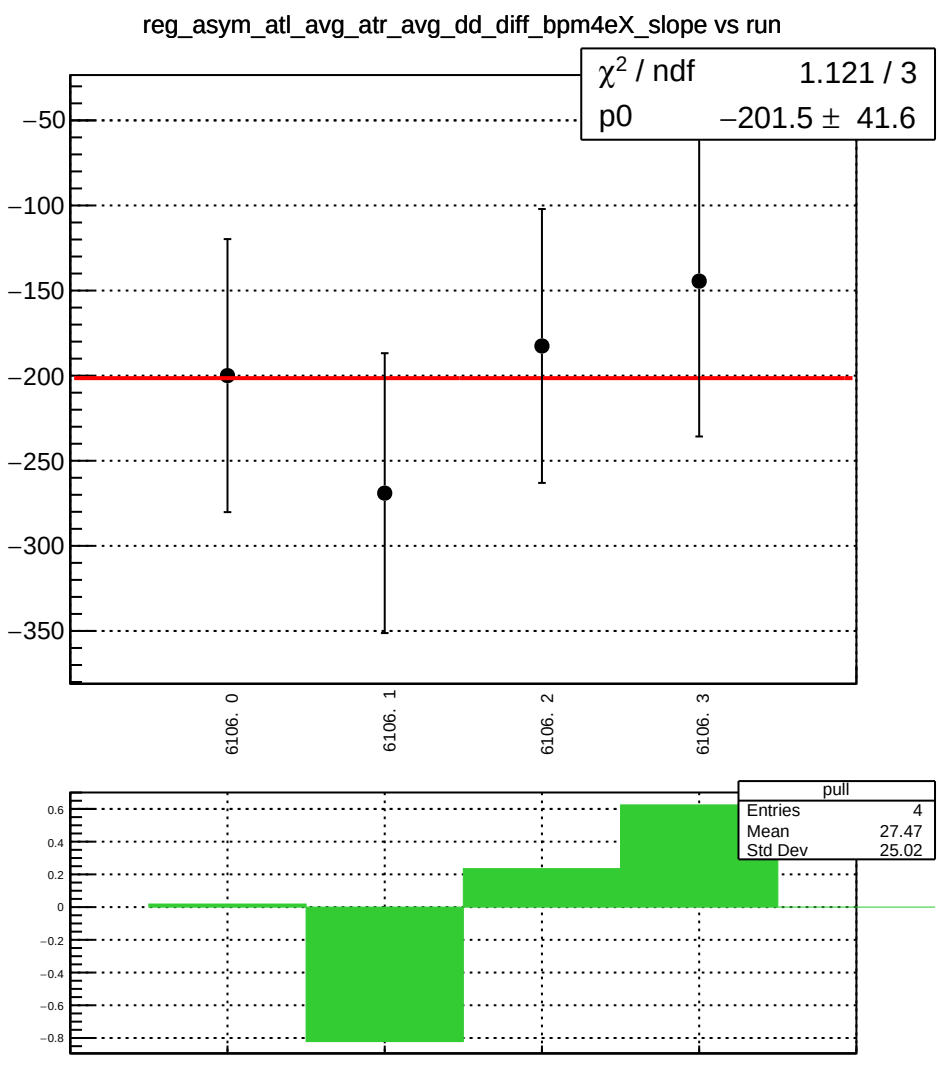

reg_asym_atl_avg_atr_avg_avg_diff_bpm4eY_slope vs run
χ² / ndf 2.07 / 3
p0 38.37 ± 24.15
120
100
80
60
40
20
0
−20
−40
−60
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 36.36
Std Dev 34.03
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull1D
Entries 4
Mean −0.01928
Std Dev 0.7191
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

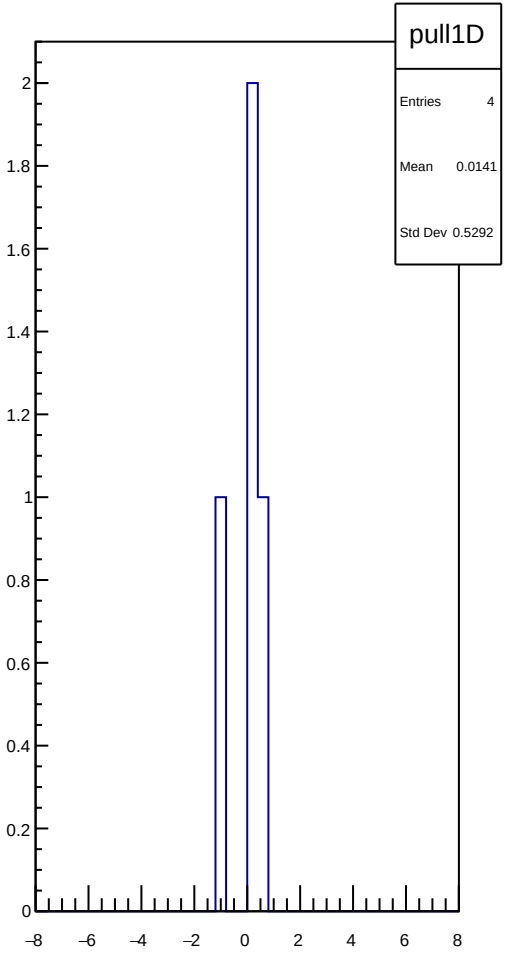

reg_asym_atl_avg_atr_avg_avg_diff_bpm12X_slope vs run
χ² / ndf 7.501 / 3
p0 −68.42 ± 1.715
−60
−65
−70
−75
−80
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 136.4
Std Dev 135.3
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2

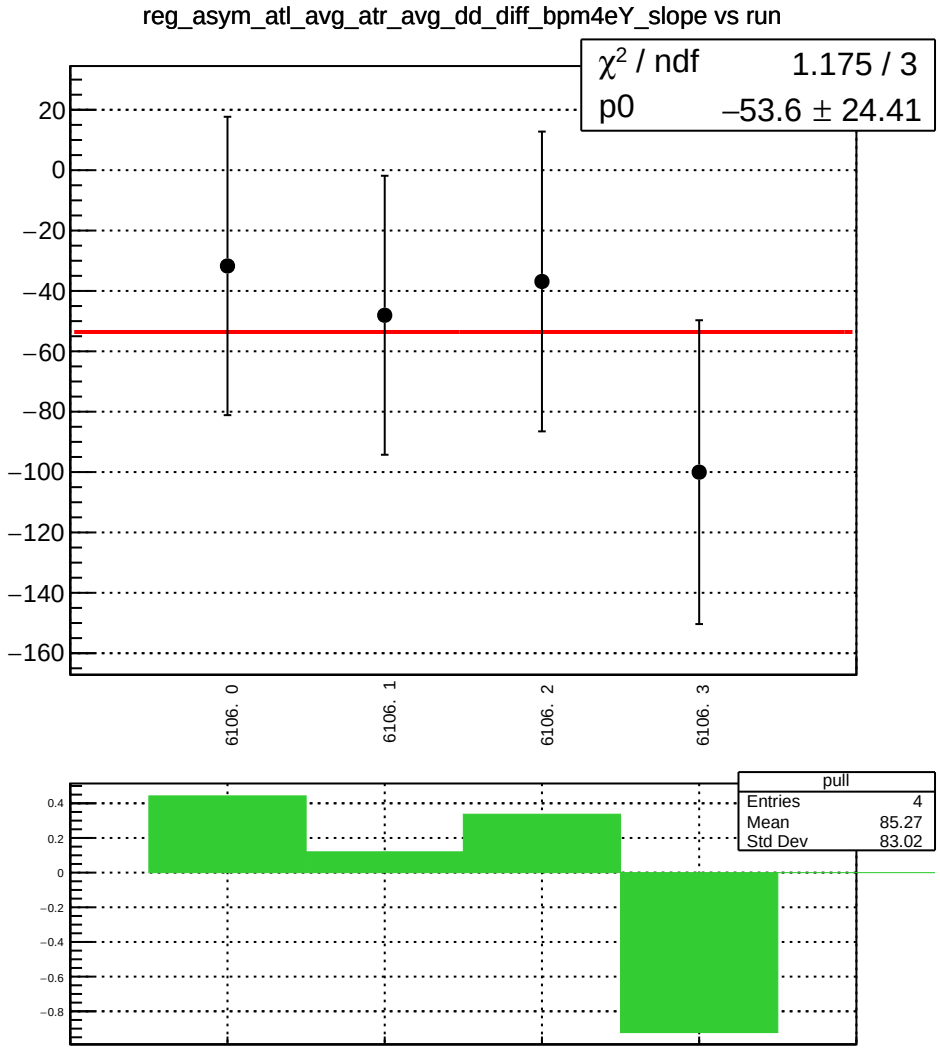

pull1D
Entries 4
Mean 0.003509
Std Dev 1.369
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

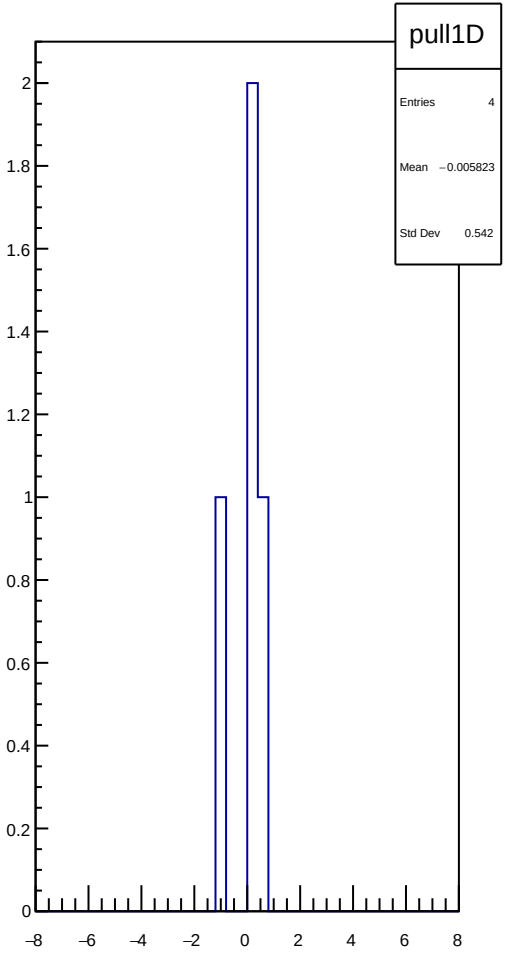

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aX_slope vs run
χ² / ndf 1.207 / 3
p0 142 ± 35.76
300
250
200
150
100
50
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 28.13
Std Dev 25.59
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean −0.01276
Std Dev 0.5491
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

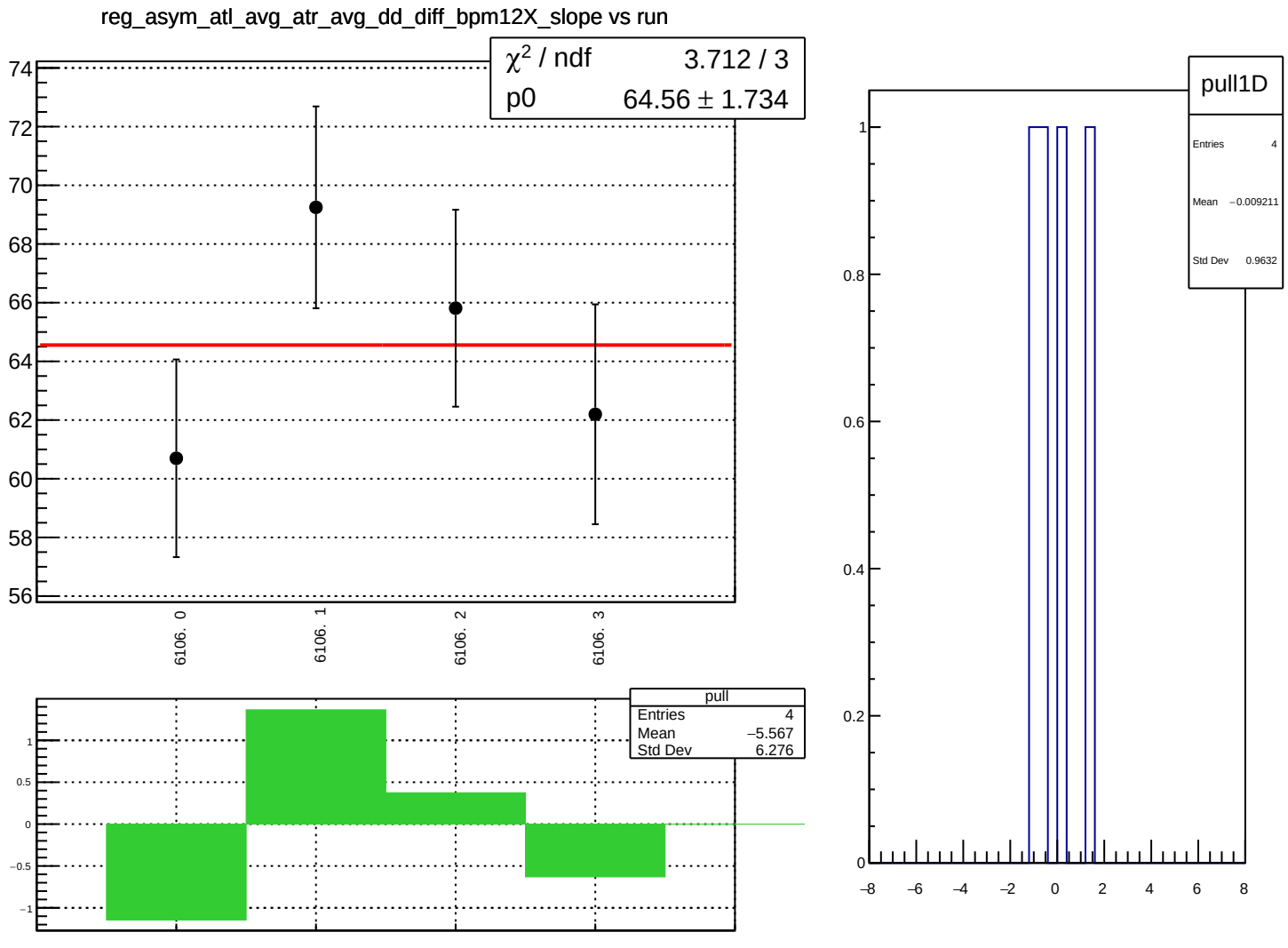

reg_asym_atl_avg_atr_avg_dd_diff_bpm4aY_slope vs run
χ² / ndf 1.424 / 3
p0 17.48 ± 23.07
120
100
80
60
40
20
0
−20
−40
−60
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −194
Std Dev 196.3
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 4
Mean −0.002628
Std Dev 0.5967
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

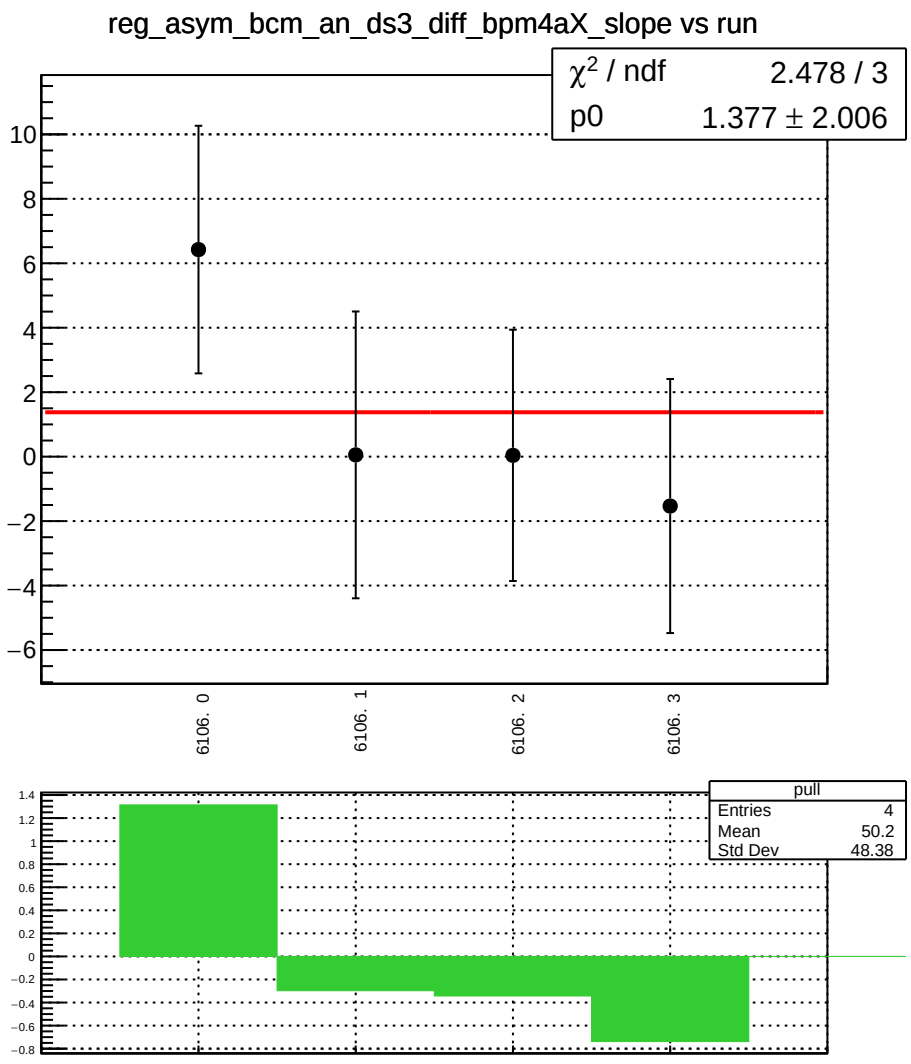

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eX_slope vs run
χ² / ndf 1.121 / 3
p0 −201.5 ± 41.6
−50
−100
−150
−200
−250
−300
−350
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 27.47
Std Dev 25.02
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

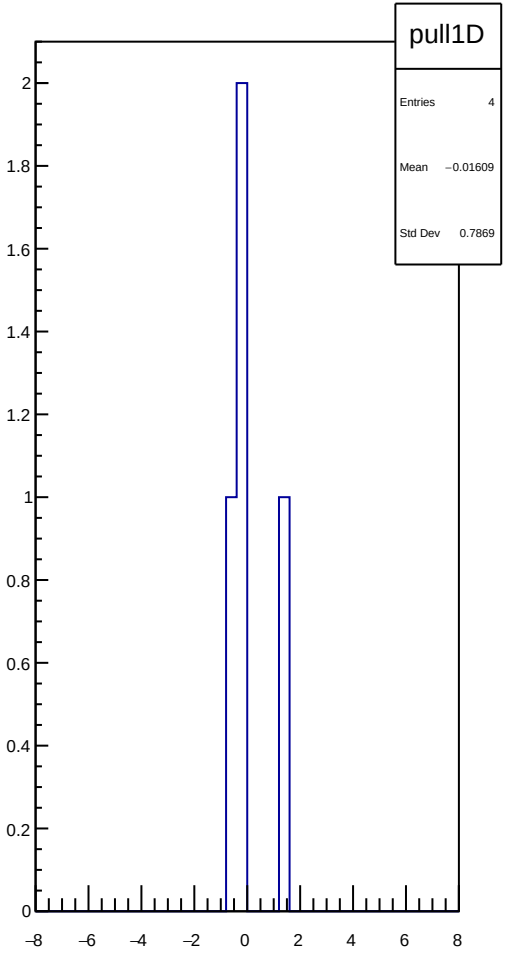

pull1D
Entries 4
Mean 0.0141
Std Dev 0.5292
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

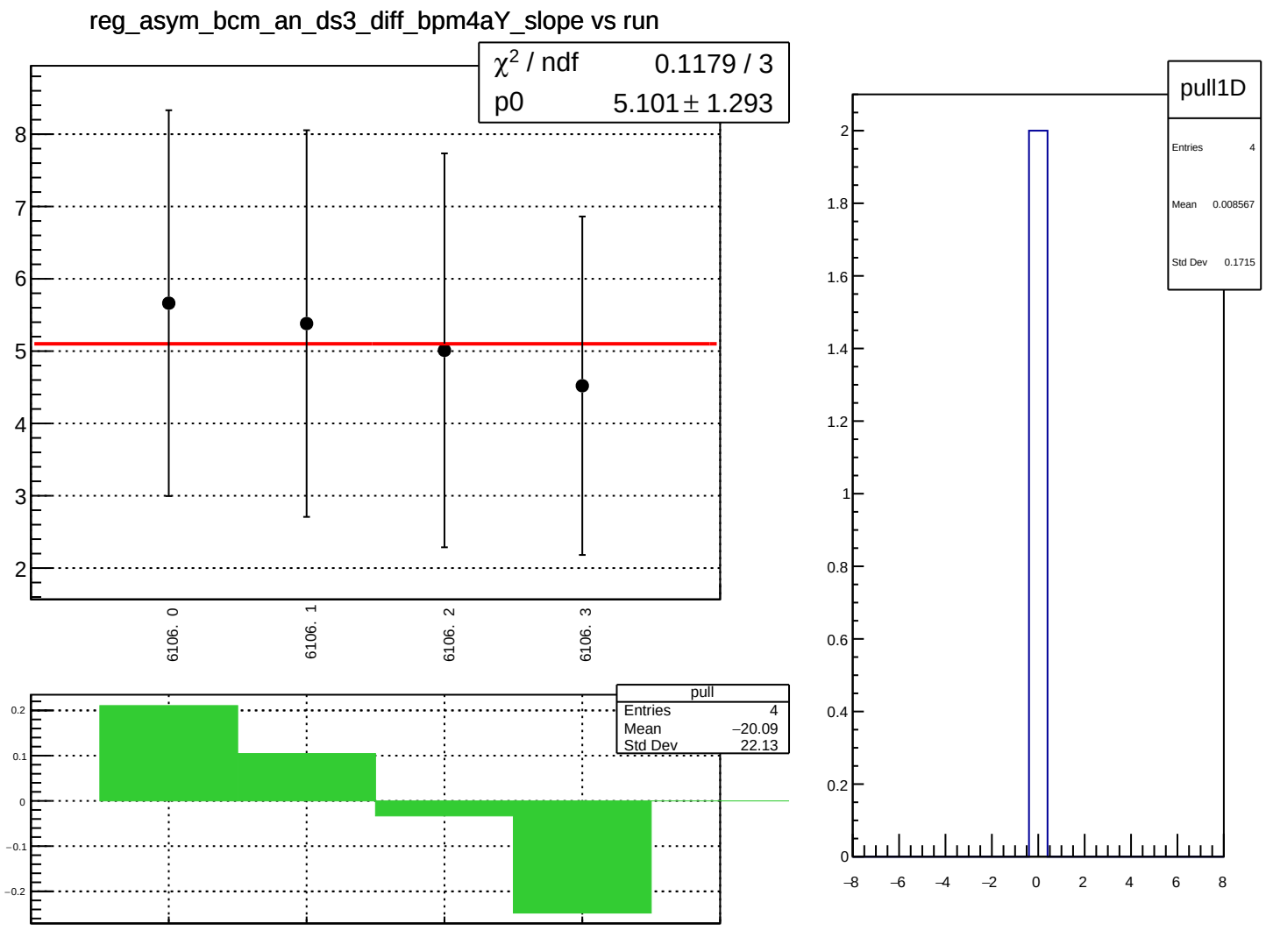

reg_asym_atl_avg_atr_avg_dd_diff_bpm4eY_slope vs run
χ² / ndf 1.175 / 3
p0 −53.6 ± 24.41
20
0
−20
−40
−60
−80
−100
−120
−140
−160
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 85.27
Std Dev 83.02
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

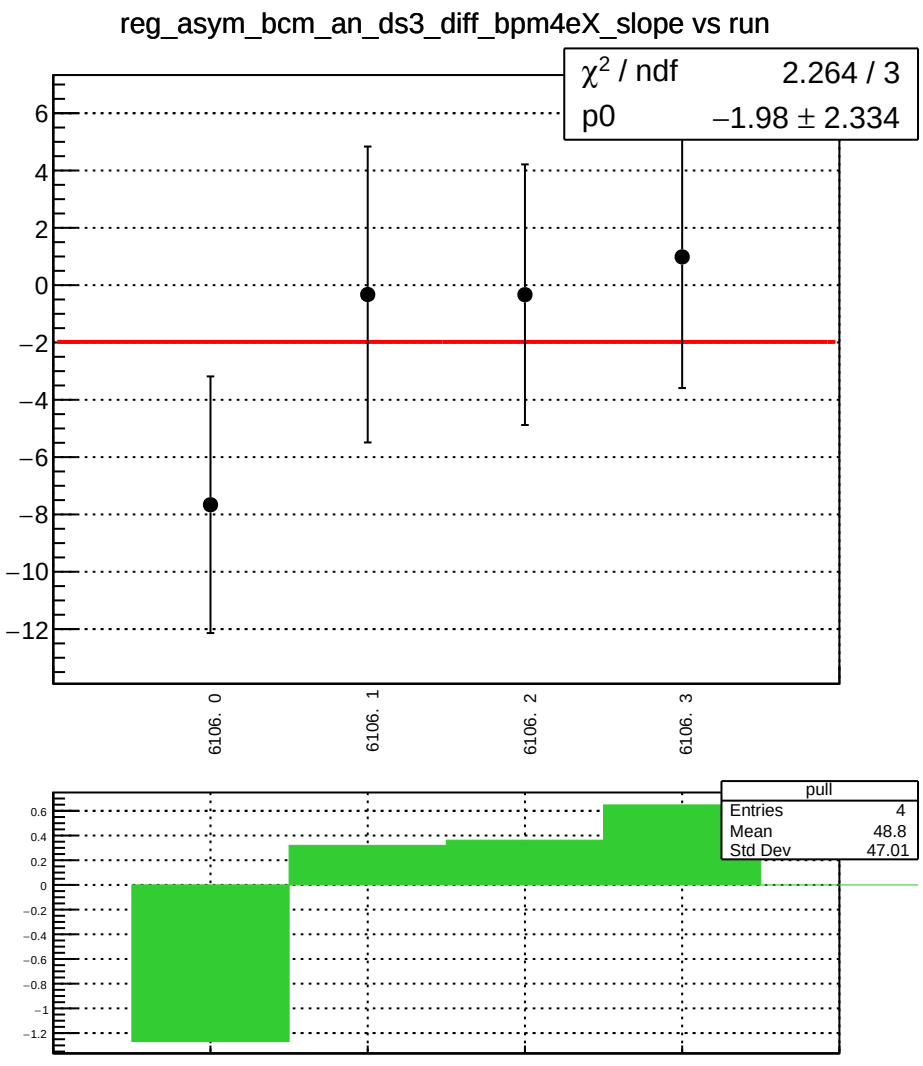

pull1D
Entries 4
Mean −0.005823
Std Dev 0.542
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

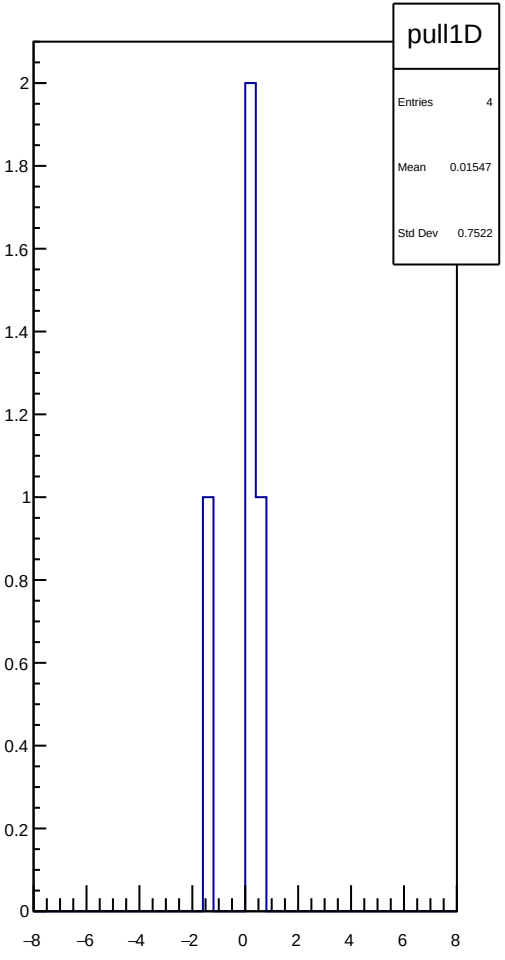

reg_asym_atl_avg_atr_avg_dd_diff_bpm12X_slope vs run
χ² / ndf 3.712 / 3
p0 64.56 ± 1.734
74
72
70
68
66
64
62
60
58
56
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −5.567
Std Dev 6.276
1
0.5
0
−0.5
−1
pull1D
Entries 4
Mean −0.009211
Std Dev 0.9632
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

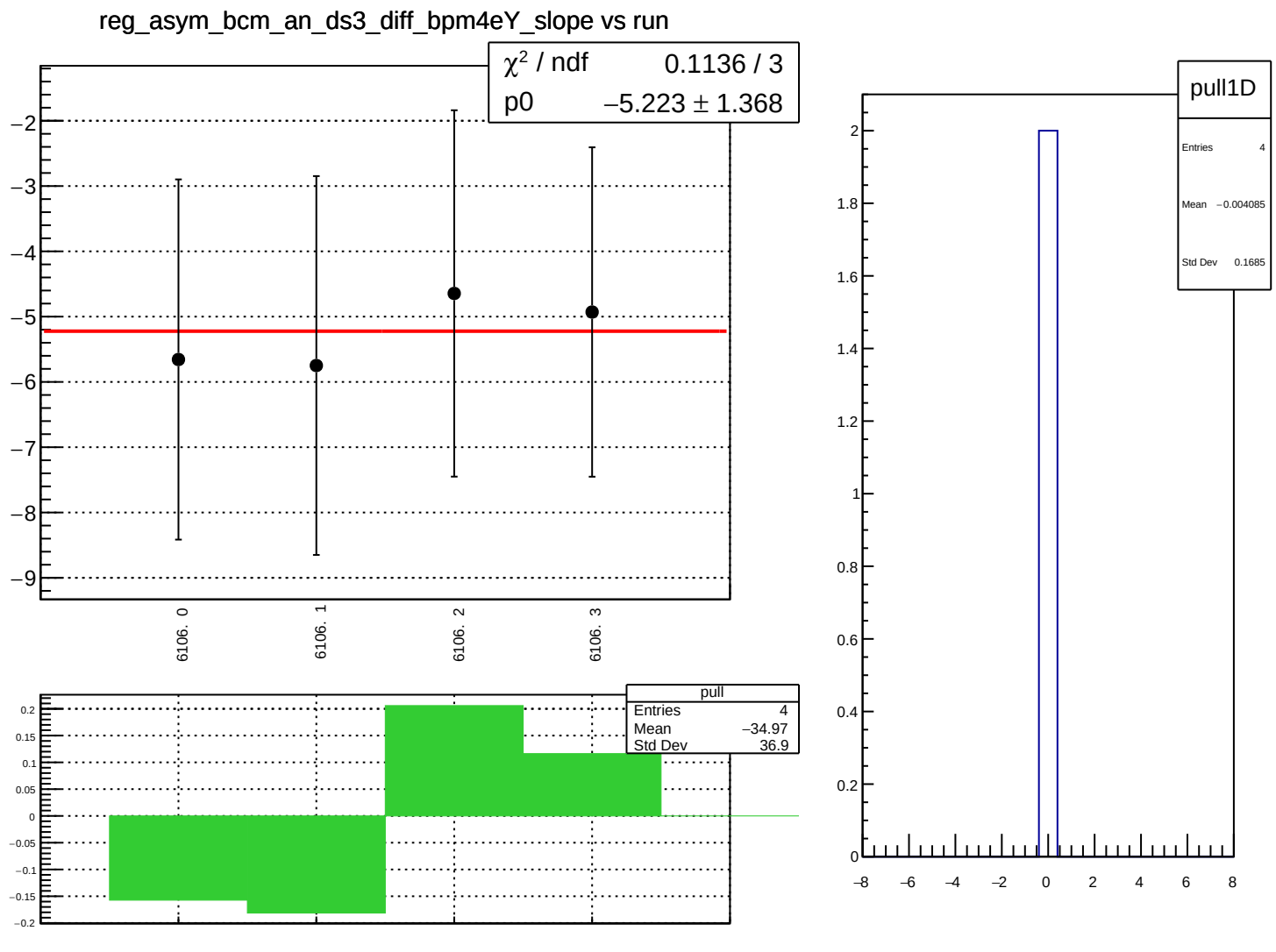

reg_asym_bcm_an_ds3_diff_bpm4aX_slope vs run
χ² / ndf 2.478 / 3
p0 1.377 ± 2.006
10
8
6
4
2
0
−2
−4
−6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 50.2
Std Dev 48.38
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

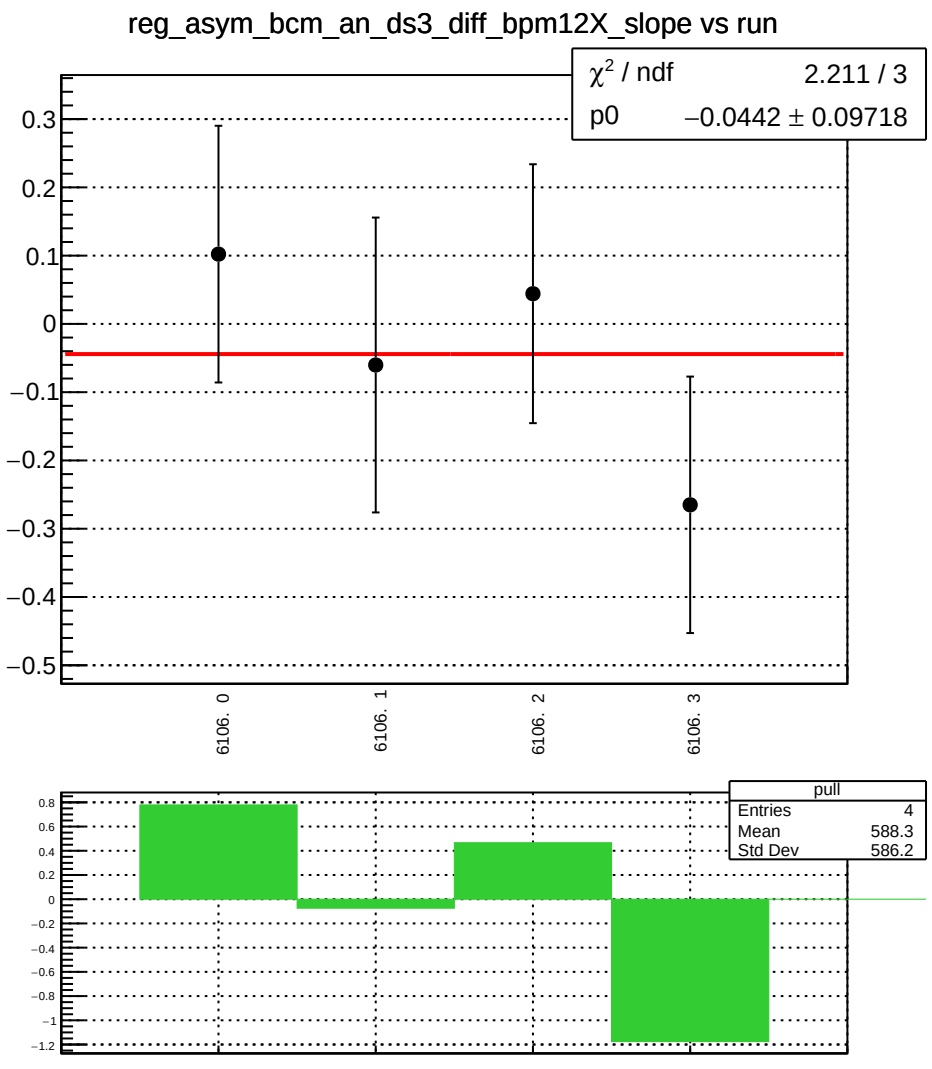

pull1D
Entries 4
Mean −0.01609
Std Dev 0.7869
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

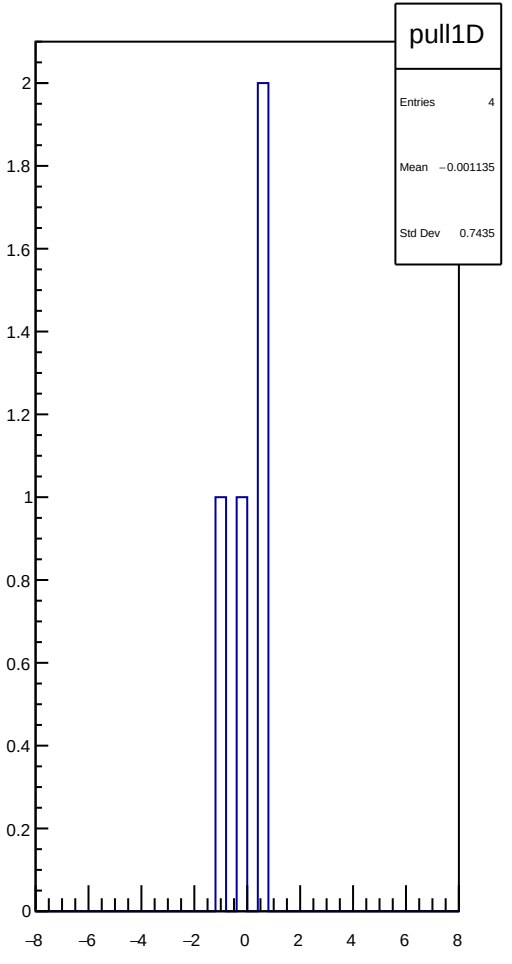

reg_asym_bcm_an_ds3_diff_bpm4aY_slope vs run
χ² / ndf 0.1179 / 3
p0 5.101 ± 1.293
8
7
6
5
4
3
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −20.09
Std Dev 22.13
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean 0.008567
Std Dev 0.1715
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

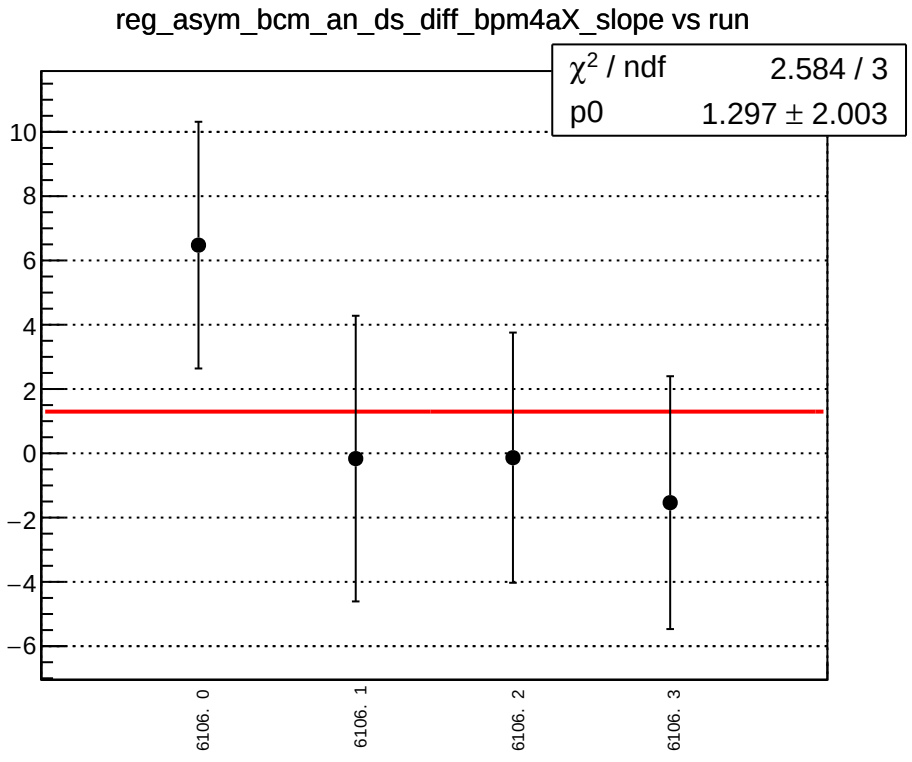

reg_asym_bcm_an_ds3_diff_bpm4eX_slope vs run
χ² / ndf 2.264 / 3
p0 −1.98 ± 2.334
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 48.8
Std Dev 47.01

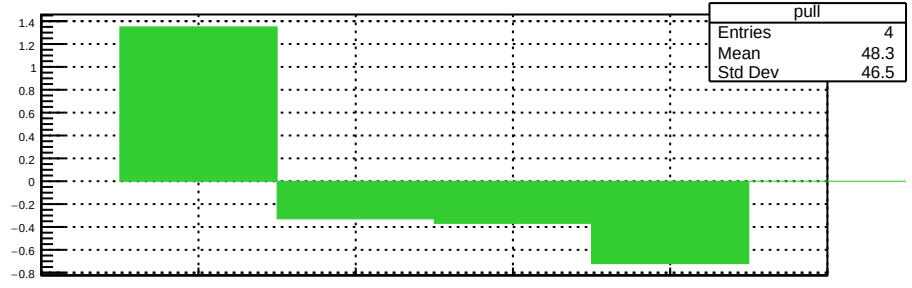

pull1D
Entries 4
Mean 0.01547
Std Dev 0.7522

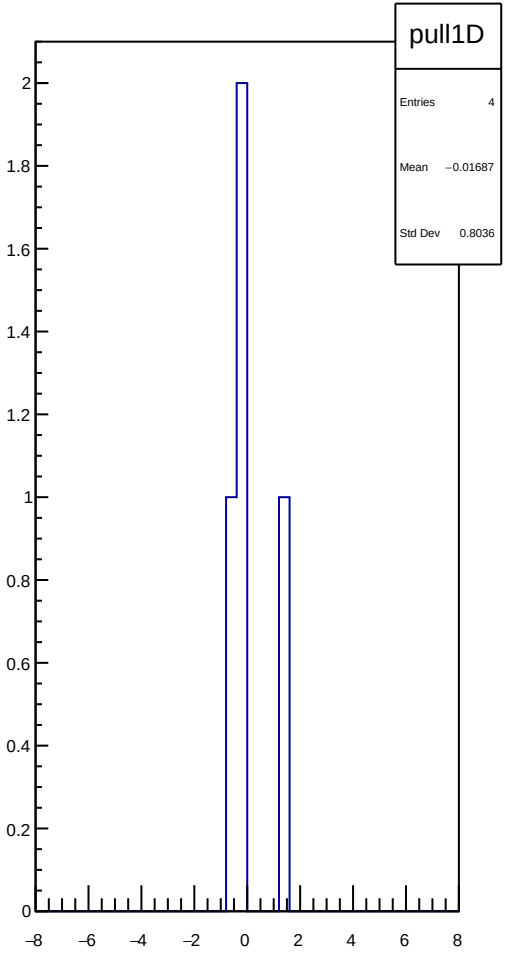

reg_asym_bcm_an_ds3_diff_bpm4eY_slope vs run
χ² / ndf 0.1136 / 3
p0 −5.223 ± 1.368
−2
−3
−4
−5
−6
−7
−8
−9
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −34.97
Std Dev 36.9
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2
pull1D
Entries 4
Mean −0.004085
Std Dev 0.1685
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

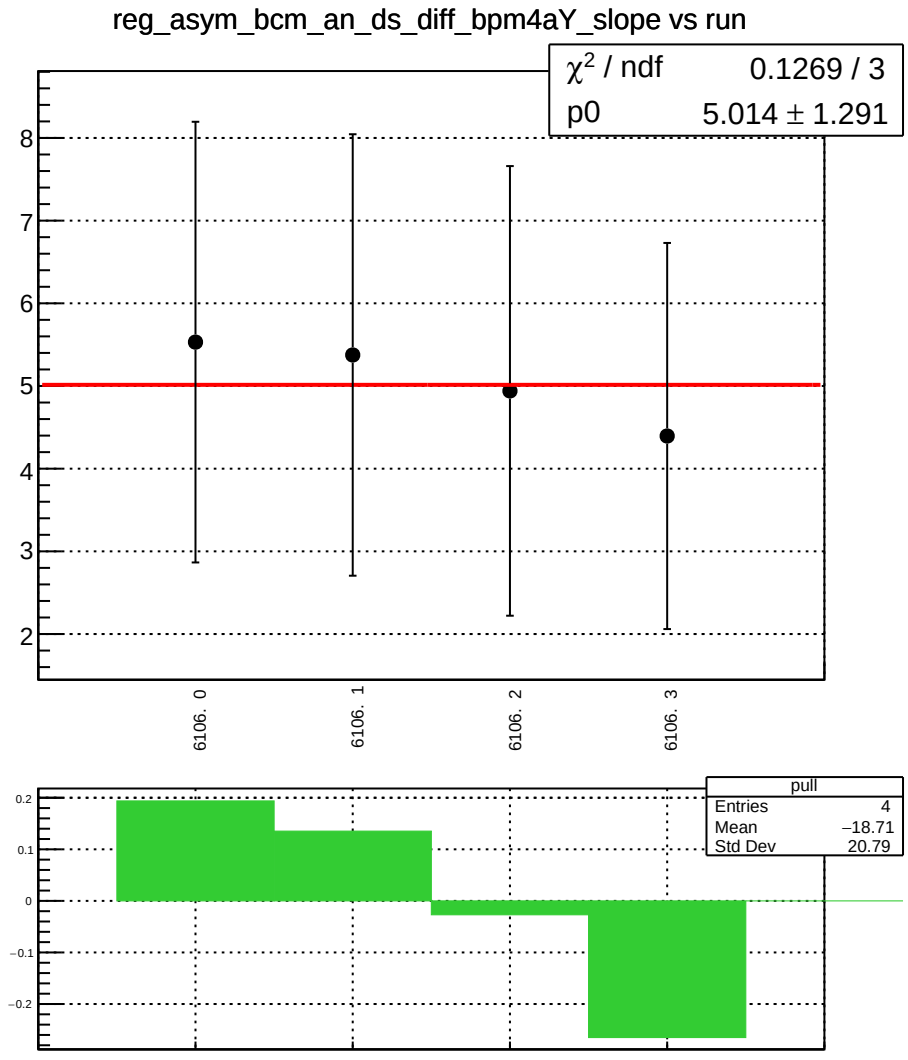

reg_asym_bcm_an_ds3_diff_bpm12X_slope vs run
χ² / ndf 2.211 / 3
p0 −0.0442 ± 0.09718
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 588.3
Std Dev 586.2
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

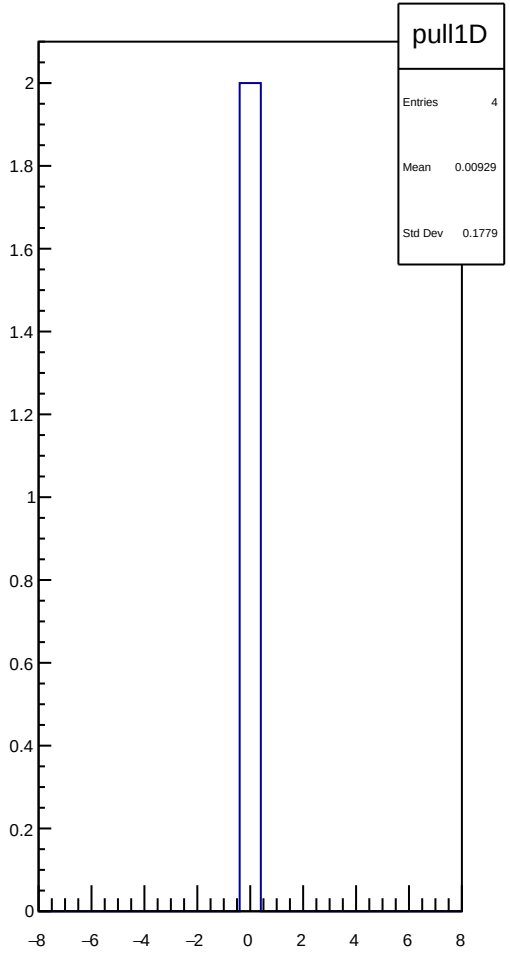

pull1D
Entries 4
Mean −0.001135
Std Dev 0.7435
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

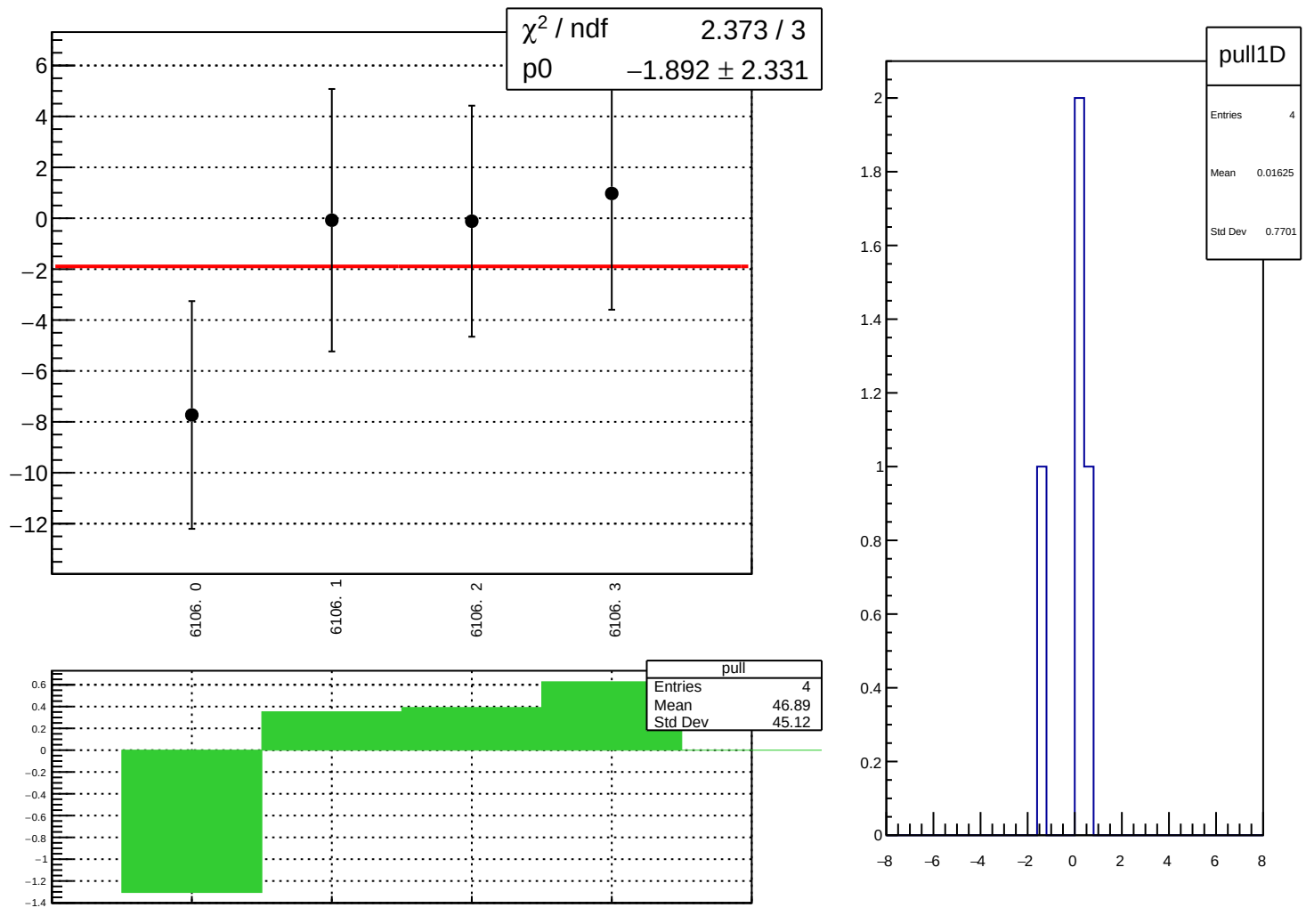

reg_asym_bcm_an_ds_diff_bpm4aX_slope vs run
χ² / ndf 2.584 / 3
p0 1.297 ± 2.003
10
8
6
4
2
0
−2
−4
−6
6106. 0
6106. 1
6106. 2
6106. 3

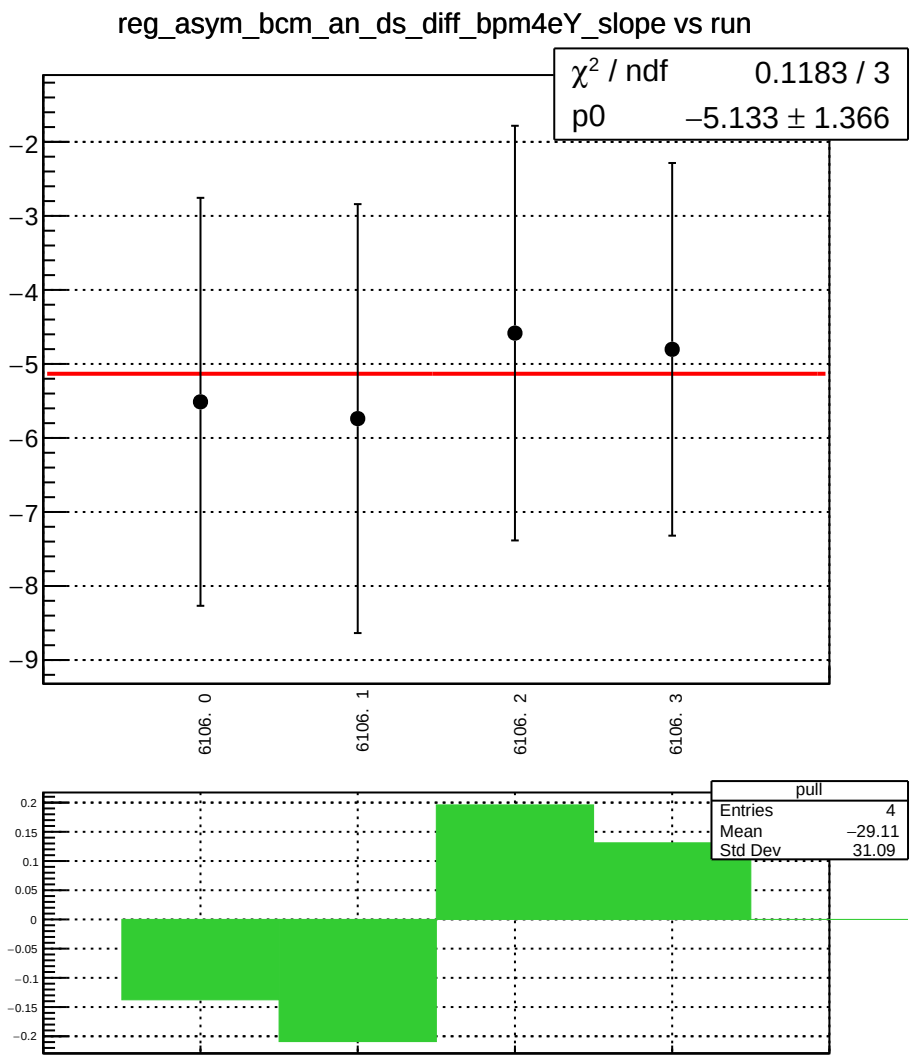

pull
Entries 4
Mean 48.3
Std Dev 46.5
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8

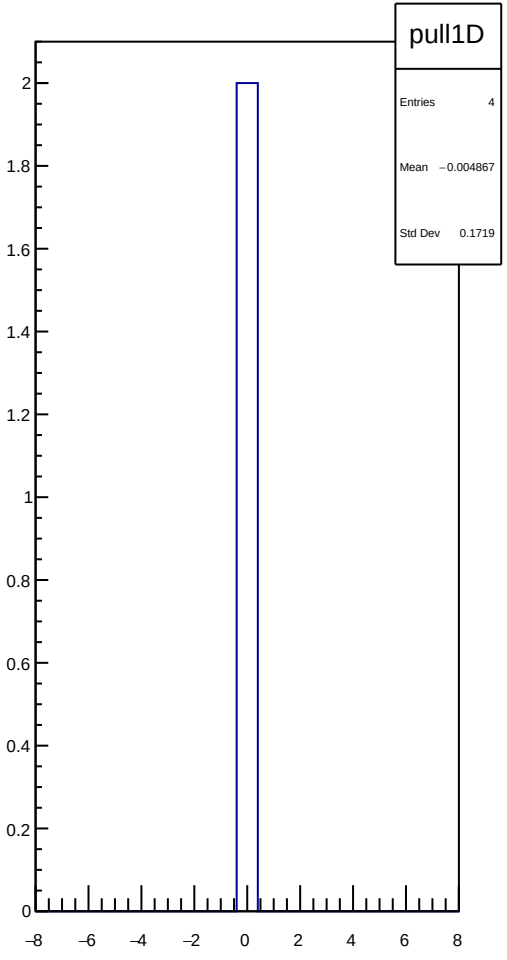

pull1D
Entries 4
Mean −0.01687
Std Dev 0.8036
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

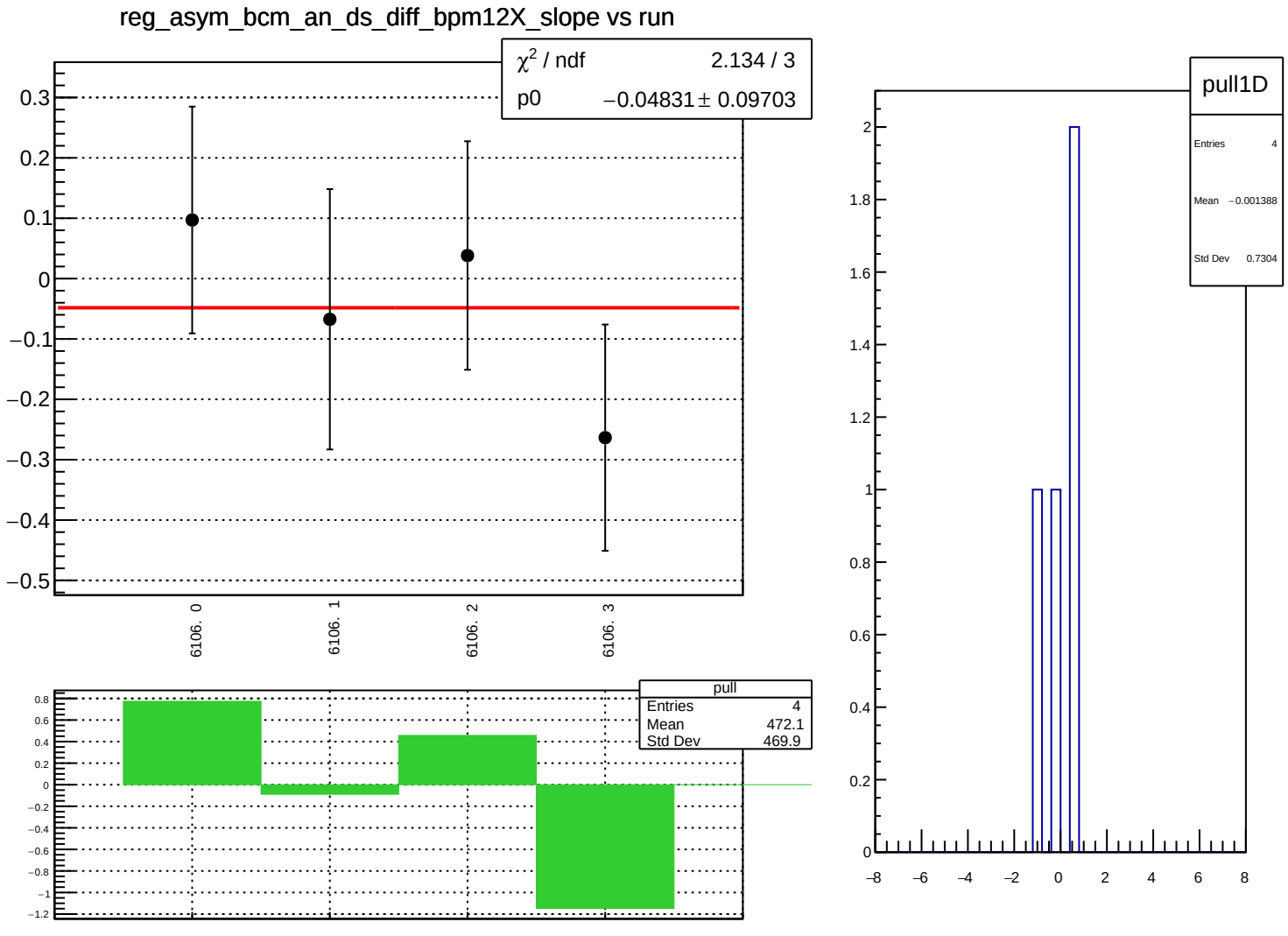

reg_asym_bcm_an_ds_diff_bpm4aY_slope vs run
χ² / ndf 0.1269 / 3
p0 5.014 ± 1.291
8
7
6
5
4
3
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −18.71
Std Dev 20.79
0.2
0.1
0
−0.1
−0.2

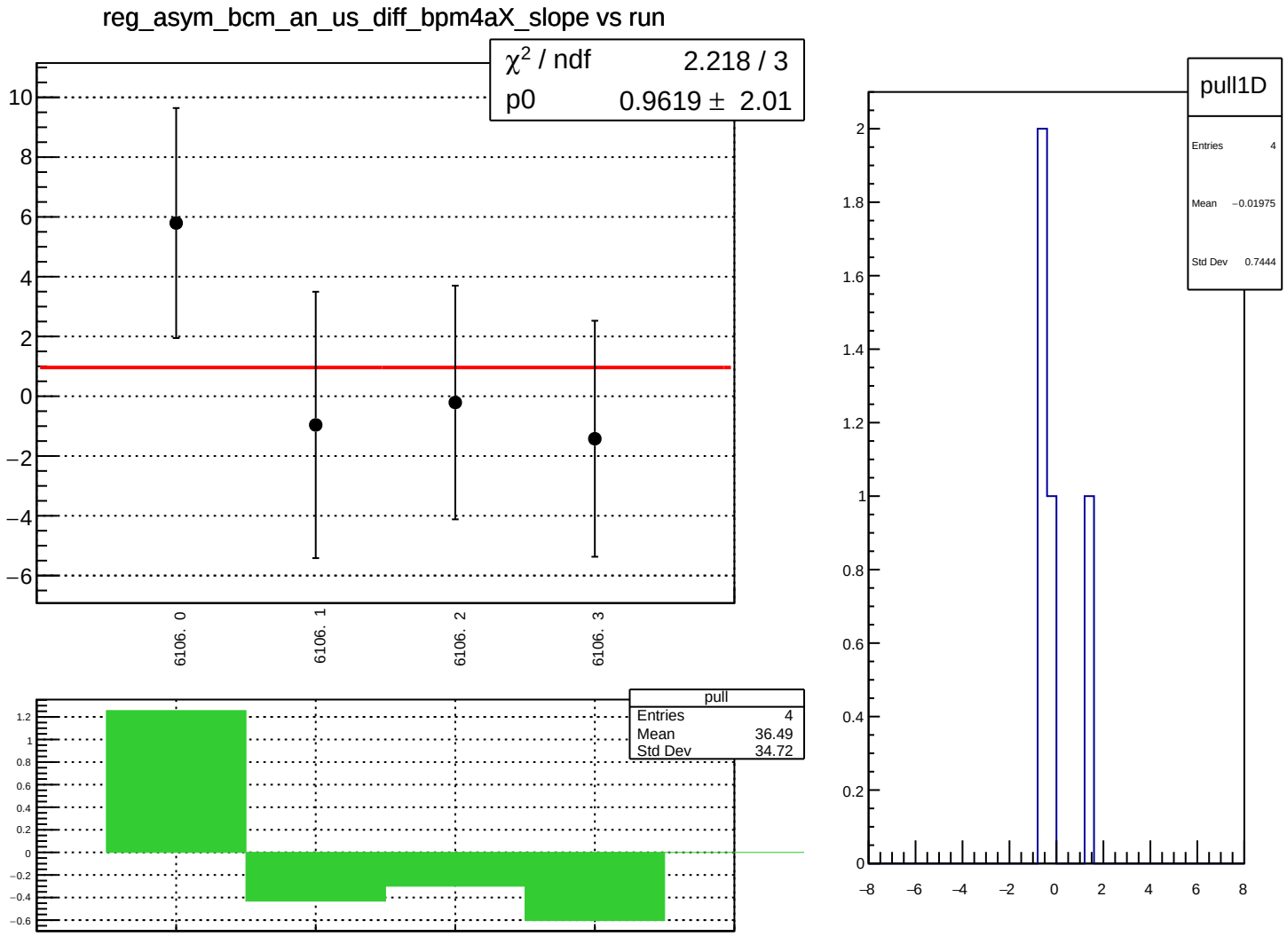

pull1D
Entries 4
Mean 0.00929
Std Dev 0.1779
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

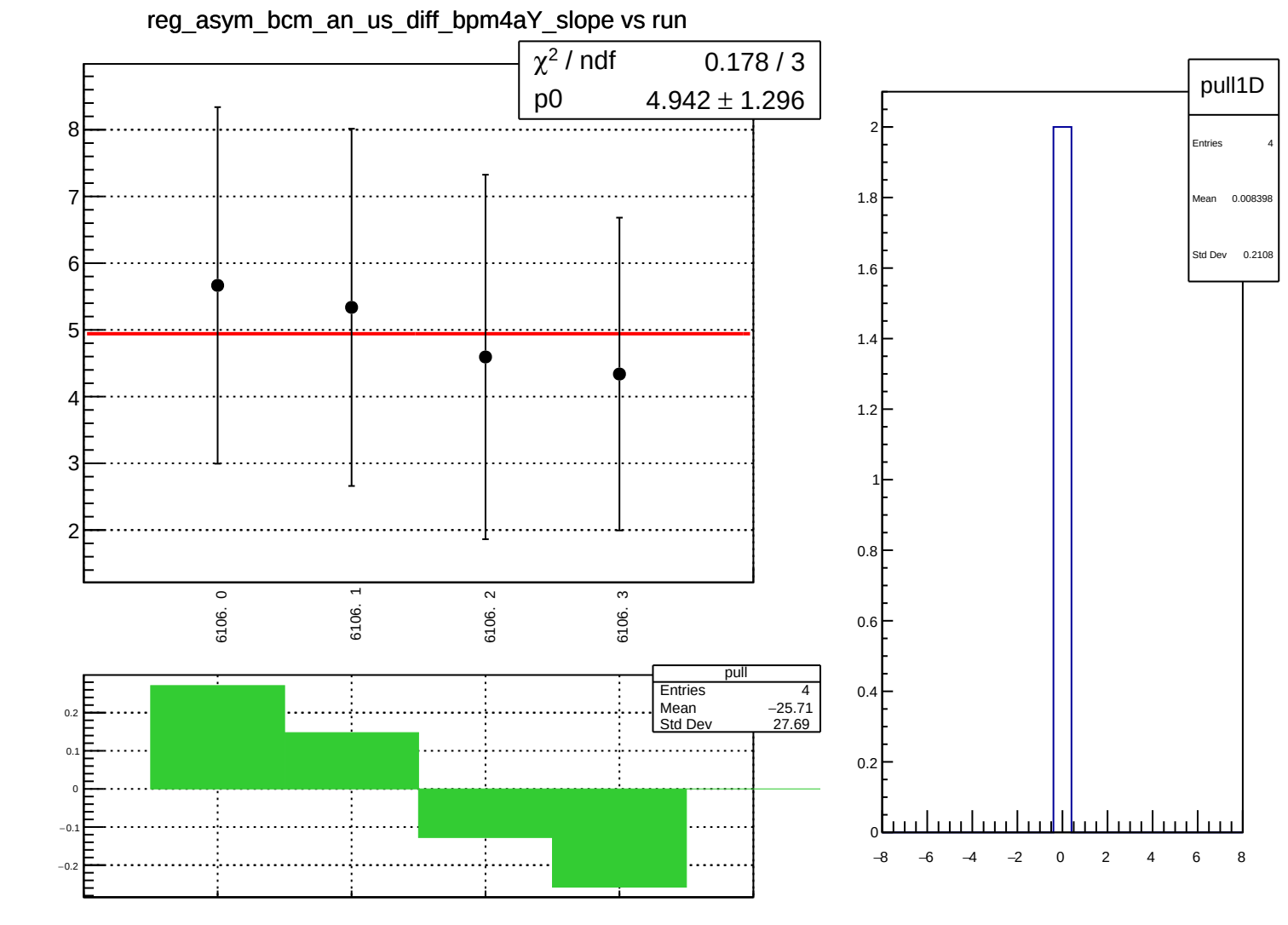

reg_asym_bcm_an_ds_diff_bpm4eX_slope vs run
χ² / ndf 2.373 / 3
p0 −1.892 ± 2.331
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 46.89
Std Dev 45.12
pull1D
Entries 4
Mean 0.01625
Std Dev 0.7701

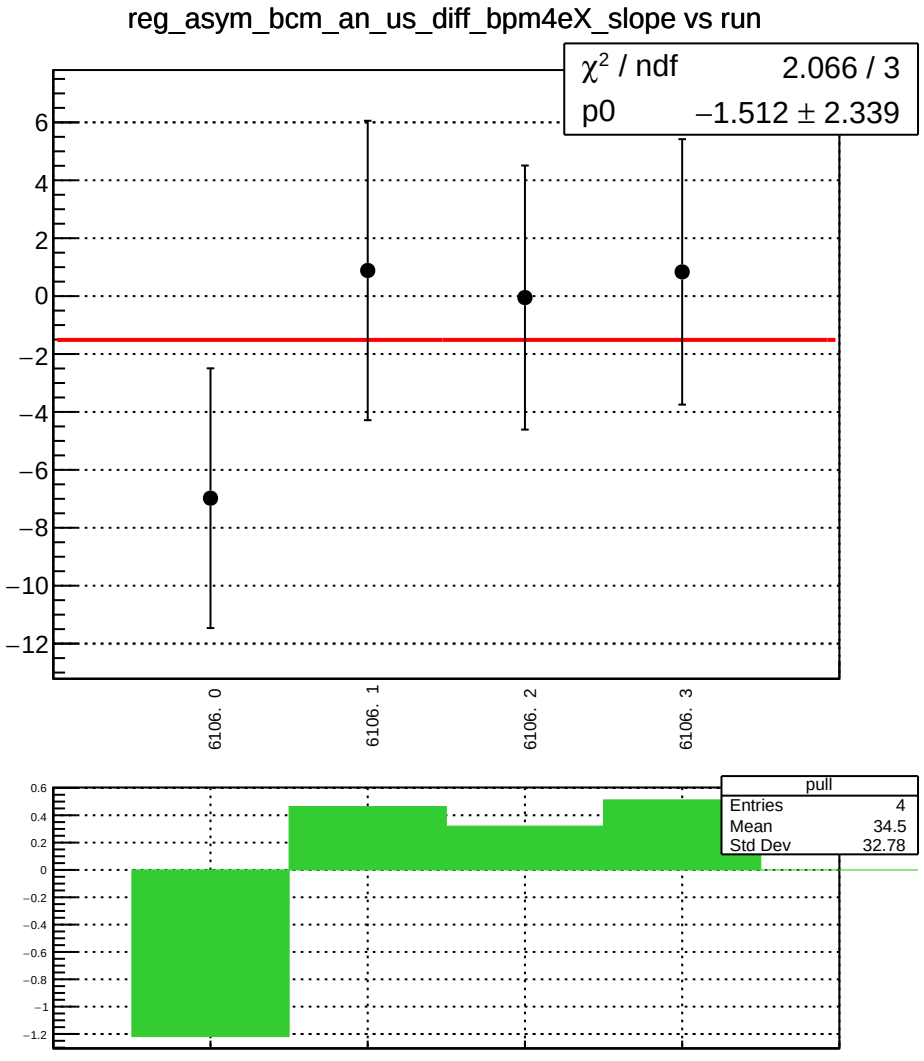

reg_asym_bcm_an_ds_diff_bpm4eY_slope vs run
χ² / ndf 0.1183 / 3
p0 −5.133 ± 1.366
−2
−3
−4
−5
−6
−7
−8
−9
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −29.11
Std Dev 31.09
0.2
0.15
0.1
0.05
0
−0.05
−0.1
−0.15
−0.2

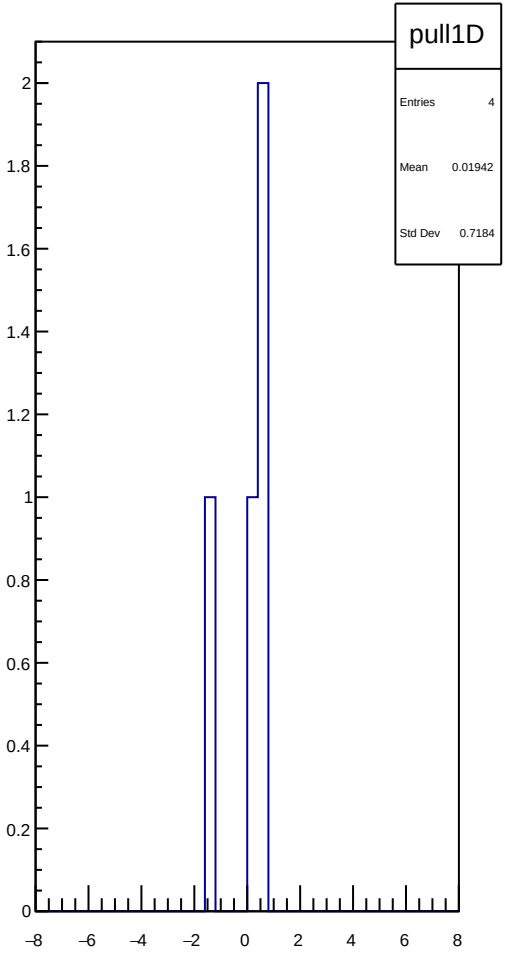

pull1D
Entries 4
Mean −0.004867
Std Dev 0.1719
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

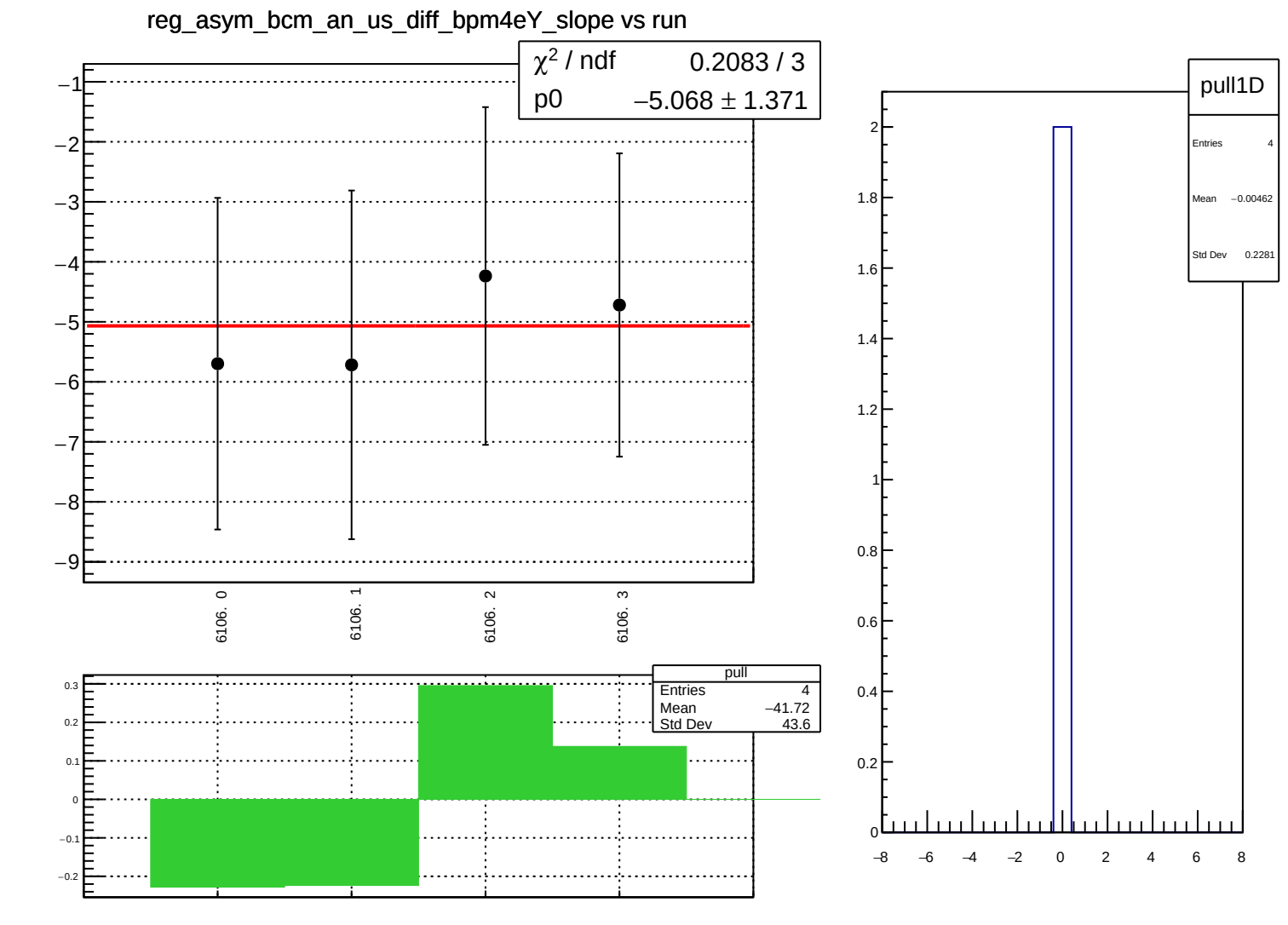

reg_asym_bcm_an_ds_diff_bpm12X_slope vs run
χ² / ndf 2.134 / 3
p0 −0.04831 ± 0.09703
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 472.1
Std Dev 469.9
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
pull1D
Entries 4
Mean −0.001388
Std Dev 0.7304
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

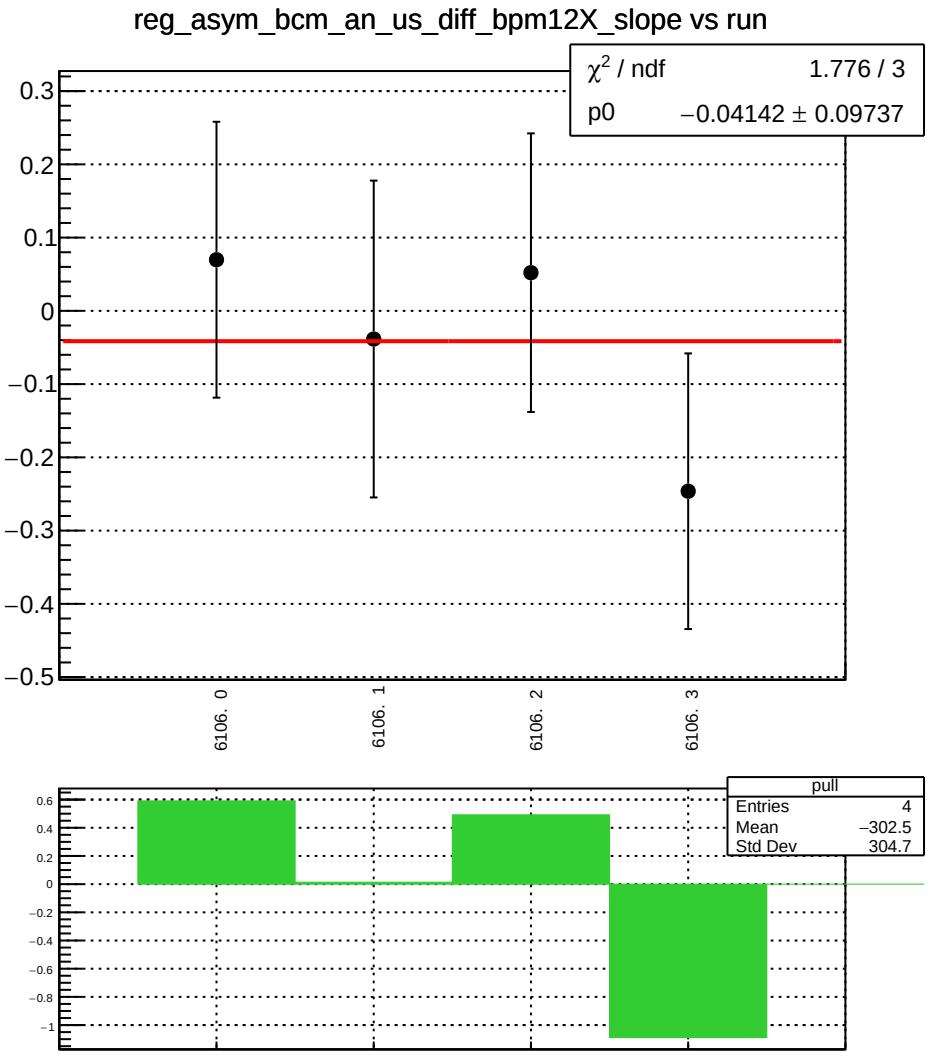

reg_asym_bcm_an_us_diff_bpm4aX_slope vs run
χ² / ndf 2.218 / 3
p0 0.9619 ± 2.01
10
8
6
4
2
0
−2
−4
−6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 36.49
Std Dev 34.72
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean −0.01975
Std Dev 0.7444
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

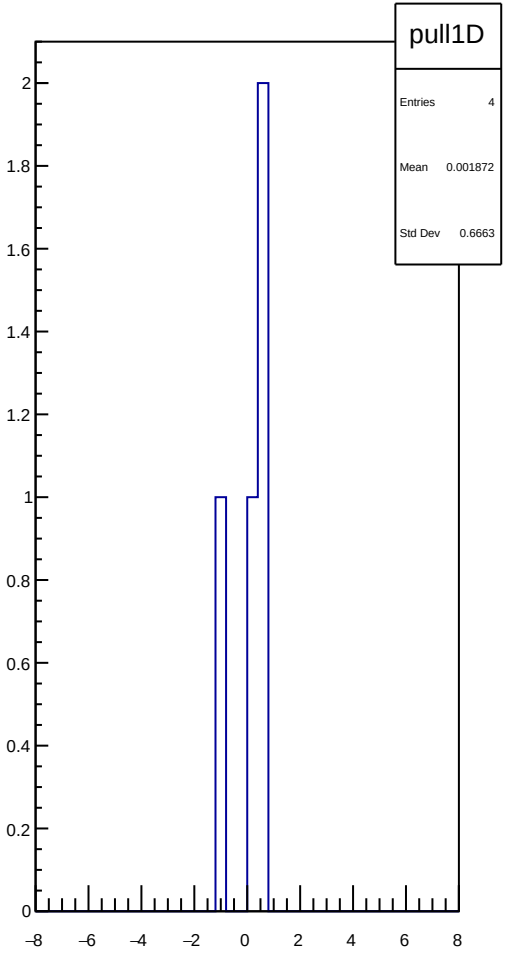

reg_asym_bcm_an_us_diff_bpm4aY_slope vs run
χ² / ndf 0.178 / 3
p0 4.942 ± 1.296
8
7
6
5
4
3
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −25.71
Std Dev 27.69
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean 0.008398
Std Dev 0.2108
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

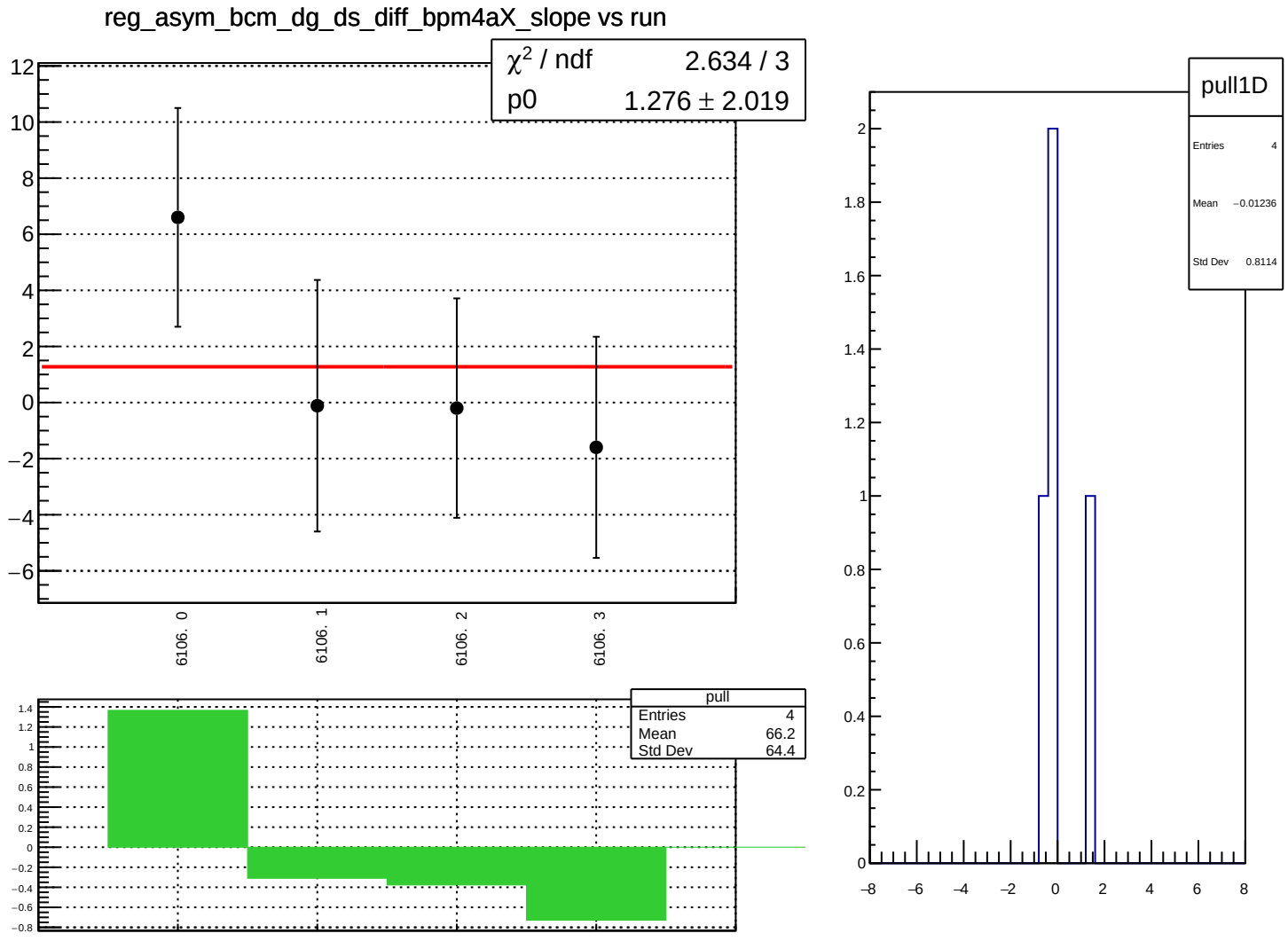

reg_asym_bcm_an_us_diff_bpm4eX_slope vs run
χ² / ndf 2.066 / 3
p0 −1.512 ± 2.339
6
4
2
0
−2
−4
−6
−8
−10
−12
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 34.5
Std Dev 32.78
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2

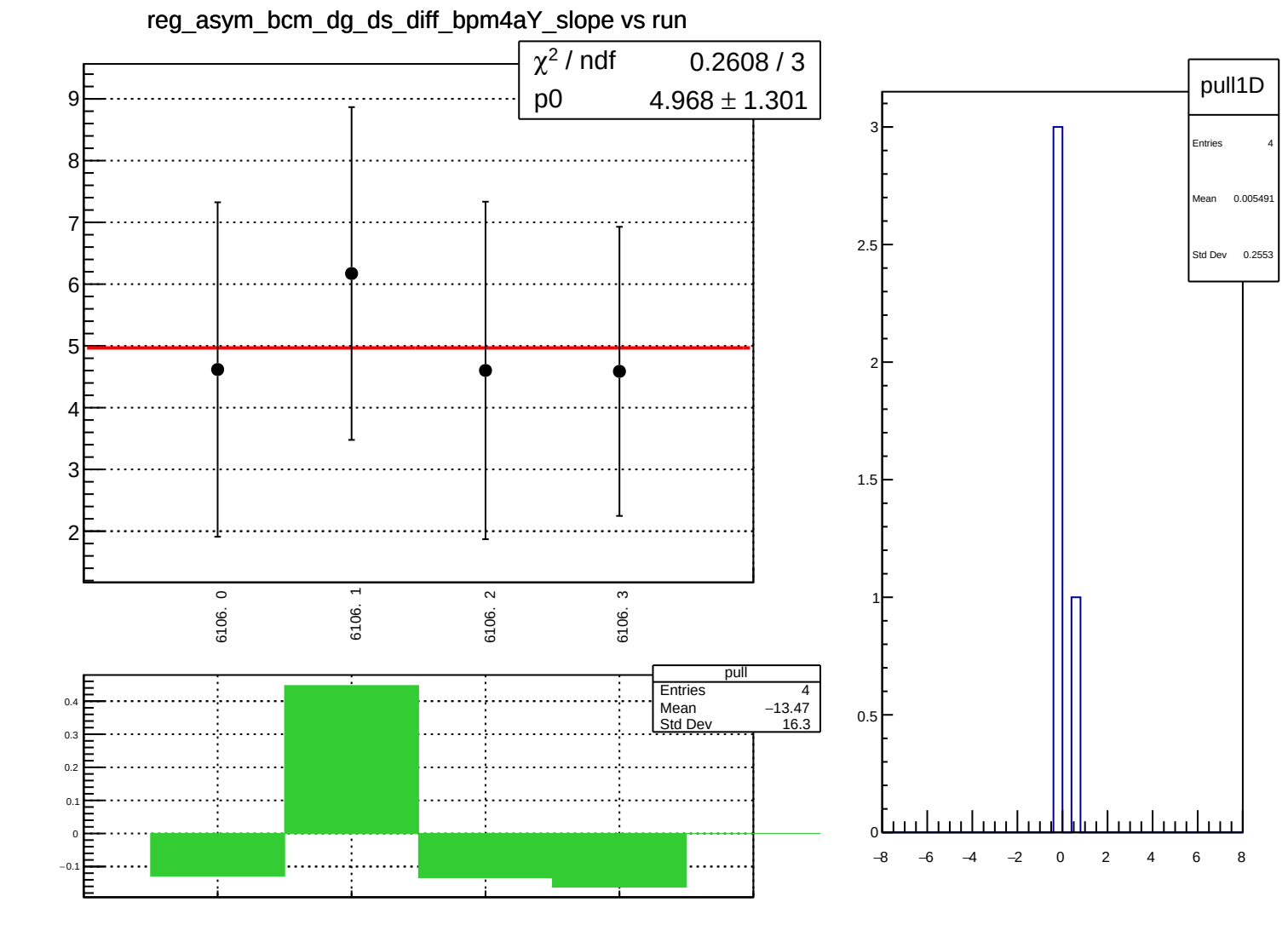

pull1D
Entries 4
Mean 0.01942
Std Dev 0.7184
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

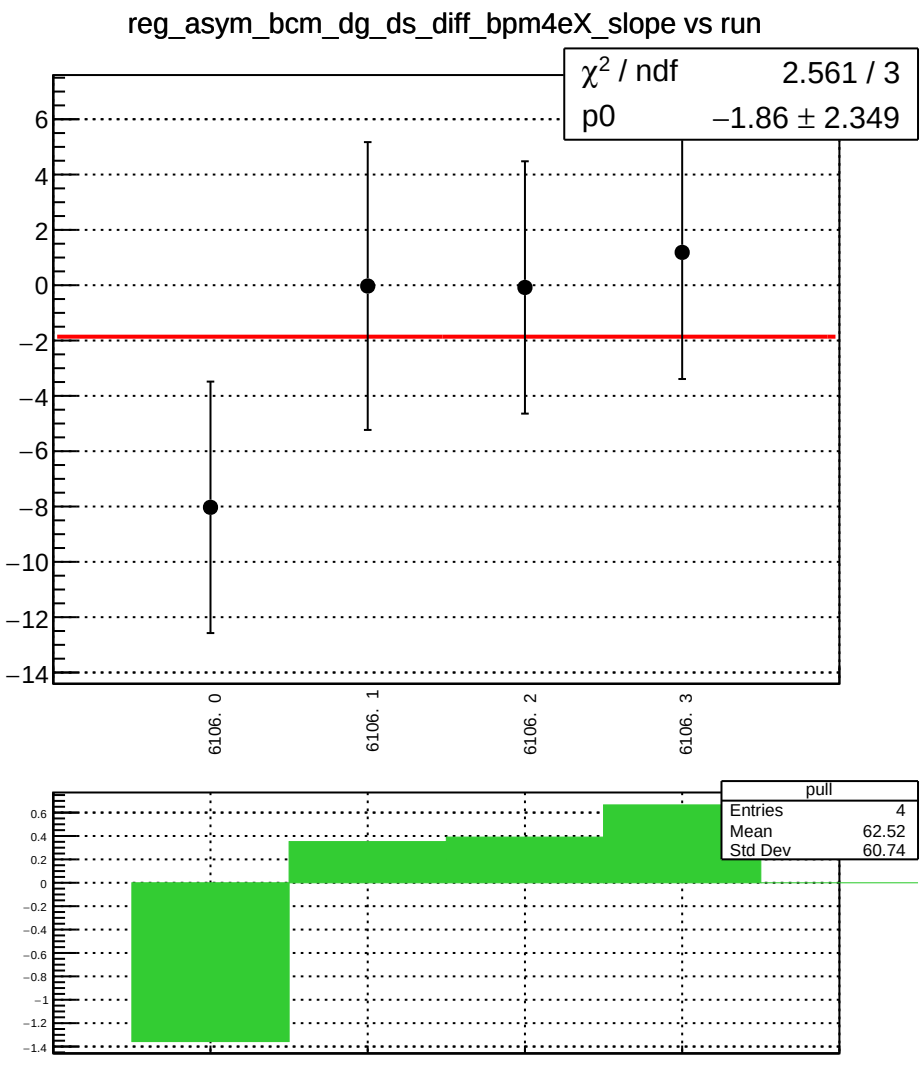

reg_asym_bcm_an_us_diff_bpm4eY_slope vs run
χ² / ndf 0.2083 / 3
p0 −5.068 ± 1.371
−1
−2
−3
−4
−5
−6
−7
−8
−9
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −41.72
Std Dev 43.6
0.3
0.2
0.1
0
−0.1
−0.2
pull1D
Entries 4
Mean −0.00462
Std Dev 0.2281
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

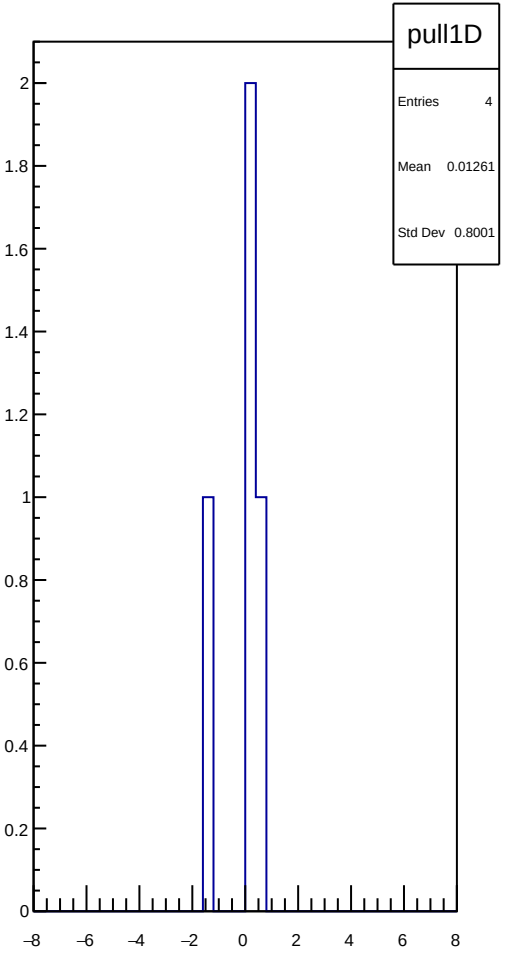

reg_asym_bcm_an_us_diff_bpm12X_slope vs run
χ² / ndf 1.776 / 3
p0 −0.04142 ± 0.09737
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −302.5
Std Dev 304.7
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1

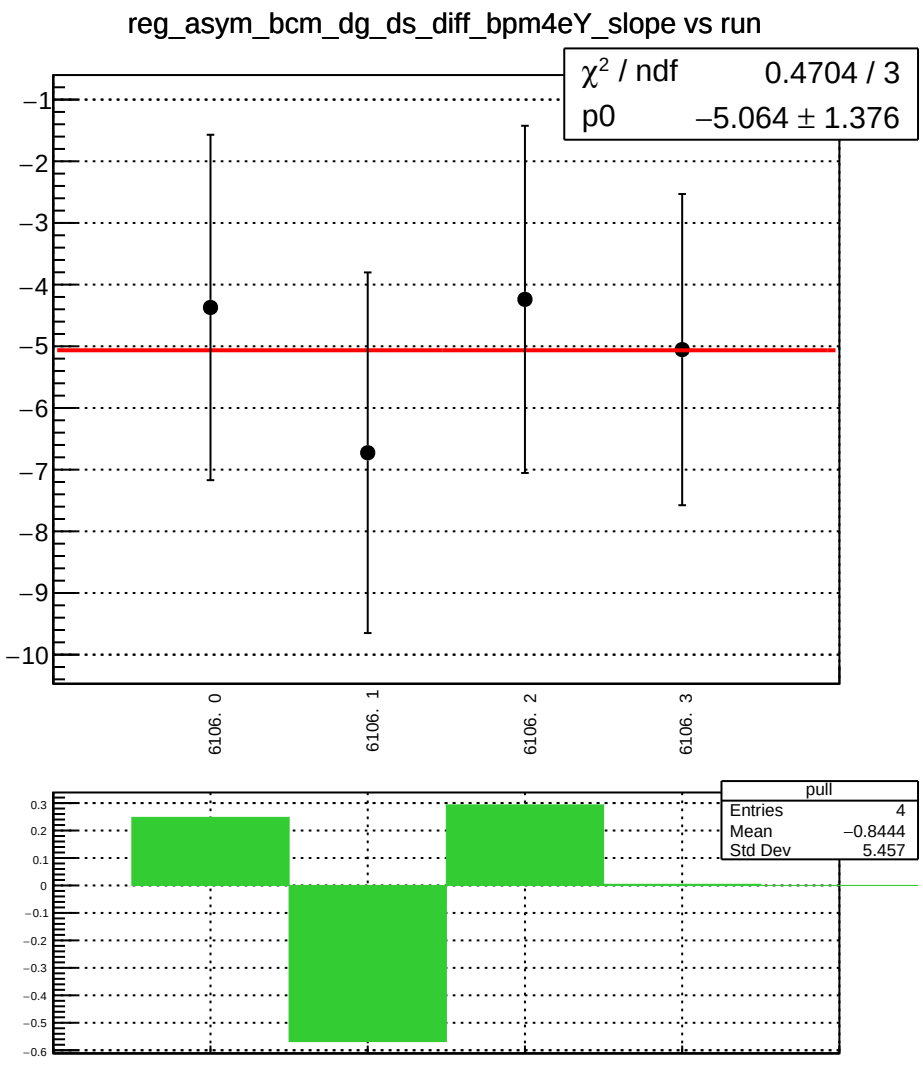

pull1D
Entries 4
Mean 0.001872
Std Dev 0.6663
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

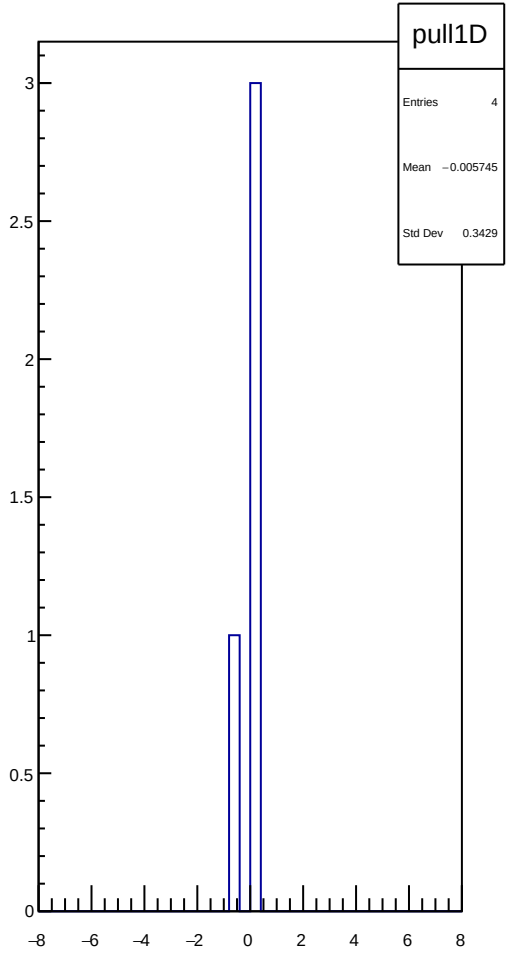

reg_asym_bcm_dg_ds_diff_bpm4aX_slope vs run
χ² / ndf 2.634 / 3
p0 1.276 ± 2.019
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 66.2
Std Dev 64.4
pull1D
Entries 4
Mean −0.01236
Std Dev 0.8114

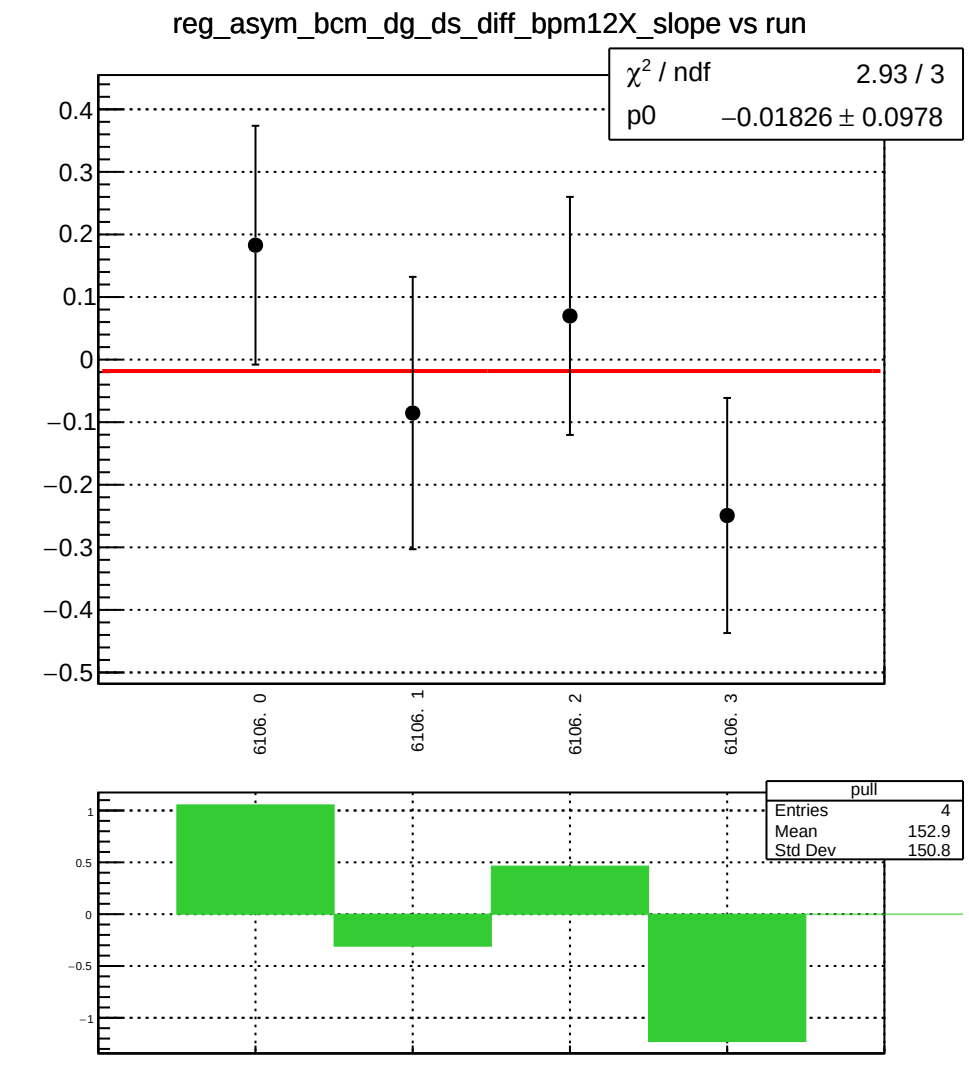

reg_asym_bcm_dg_ds_diff_bpm4aY_slope vs run
χ² / ndf 0.2608 / 3
p0 4.968 ± 1.301
9
8
7
6
5
4
3
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −13.47
Std Dev 16.3
0.4
0.3
0.2
0.1
0
−0.1
pull1D
Entries 4
Mean 0.005491
Std Dev 0.2553
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

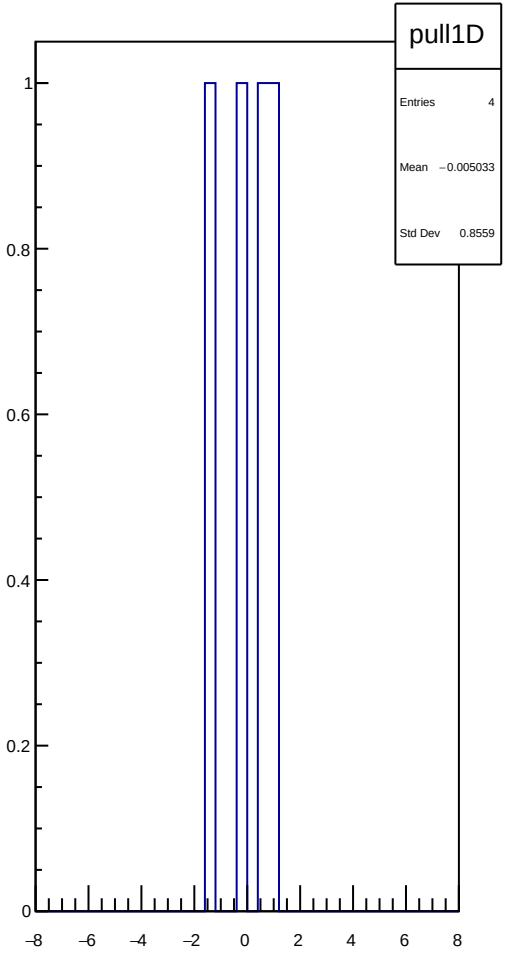

reg_asym_bcm_dg_ds_diff_bpm4eX_slope vs run
χ² / ndf 2.561 / 3
p0 −1.86 ± 2.349
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 62.52
Std Dev 60.74

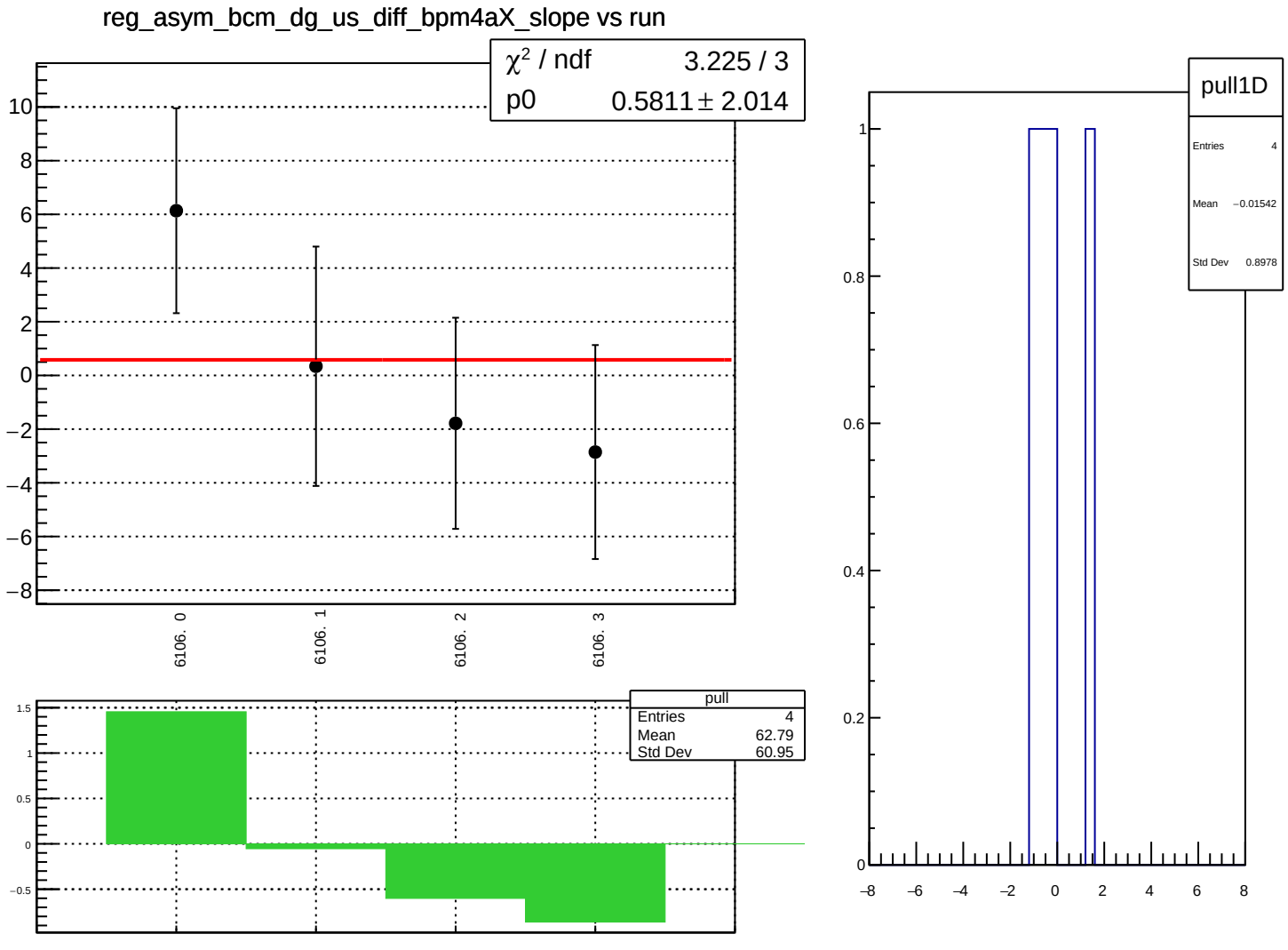

pull1D
Entries 4
Mean 0.01261
Std Dev 0.8001

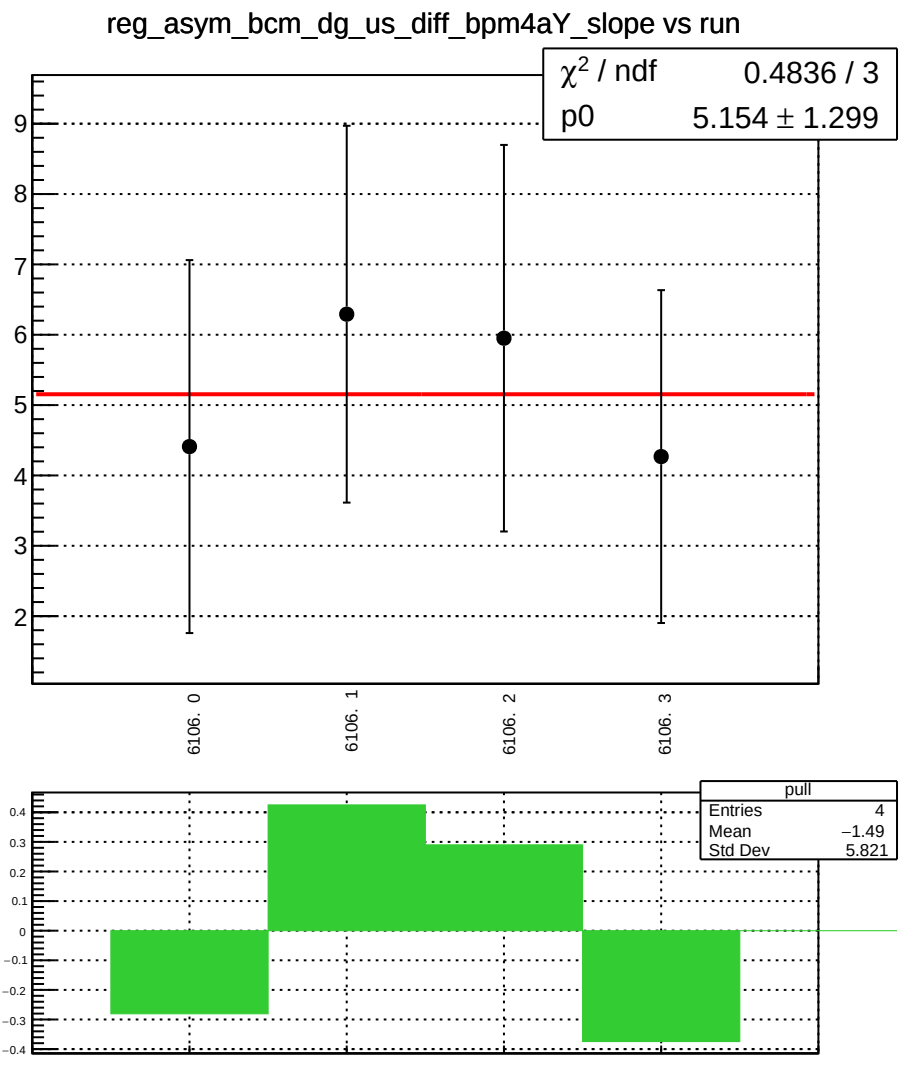

reg_asym_bcm_dg_ds_diff_bpm4eY_slope vs run
χ² / ndf 0.4704 / 3
p0 −5.064 ± 1.376
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −0.8444
Std Dev 5.457

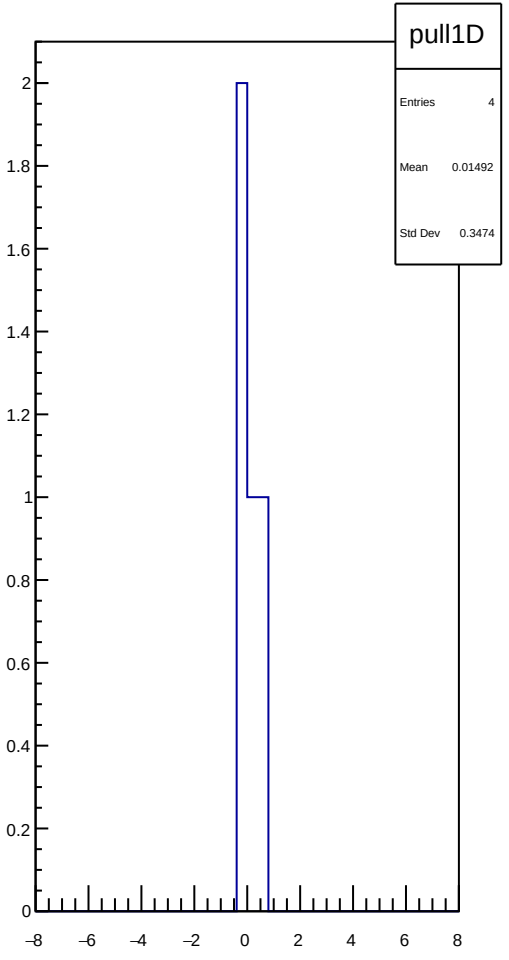

pull1D
Entries 4
Mean −0.005745
Std Dev 0.3429

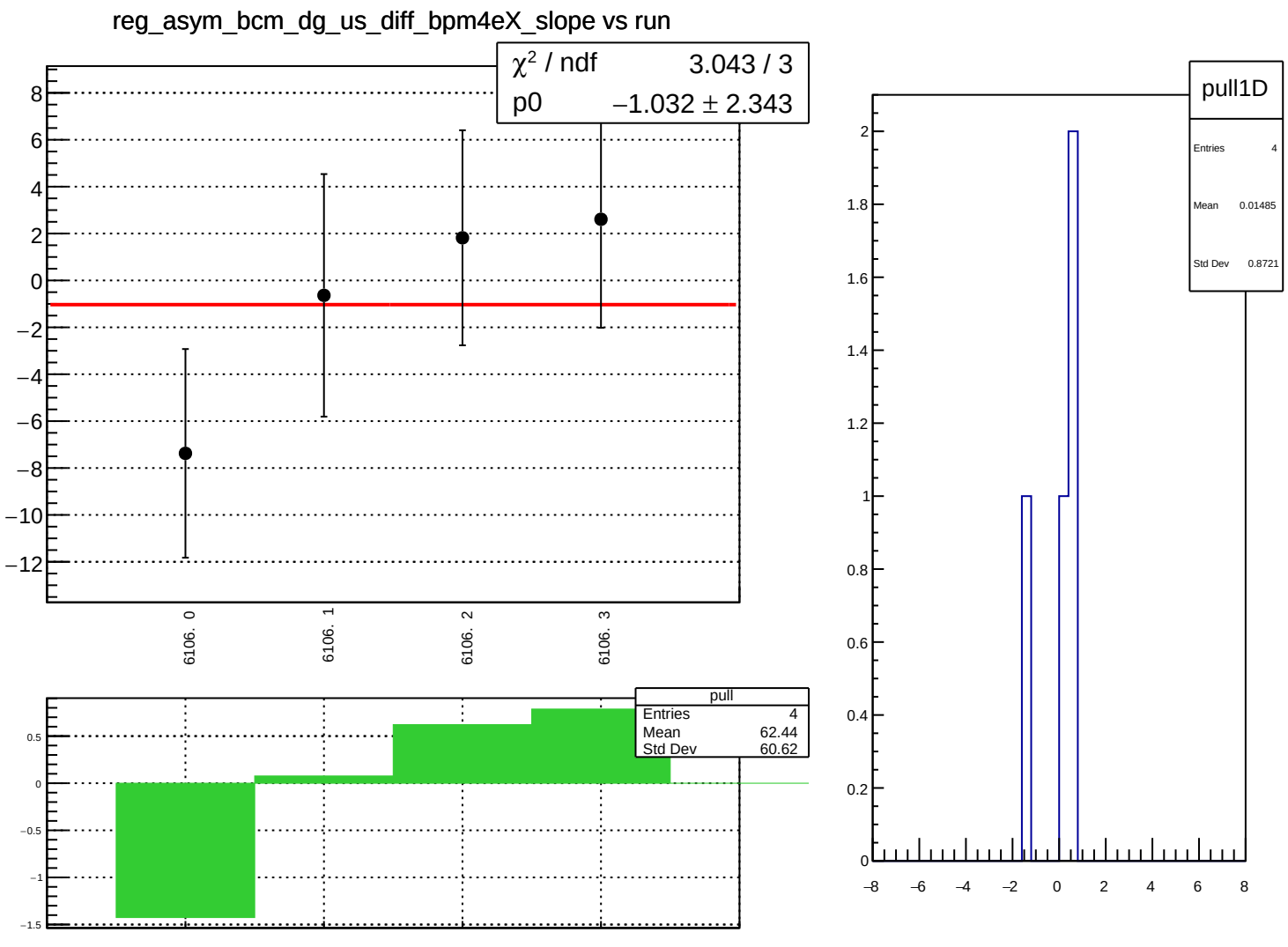

reg_asym_bcm_dg_ds_diff_bpm12X_slope vs run
χ² / ndf 2.93 / 3
p0 −0.01826 ± 0.0978
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
−0.5
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 152.9
Std Dev 150.8
1
0.5
0
−0.5
−1

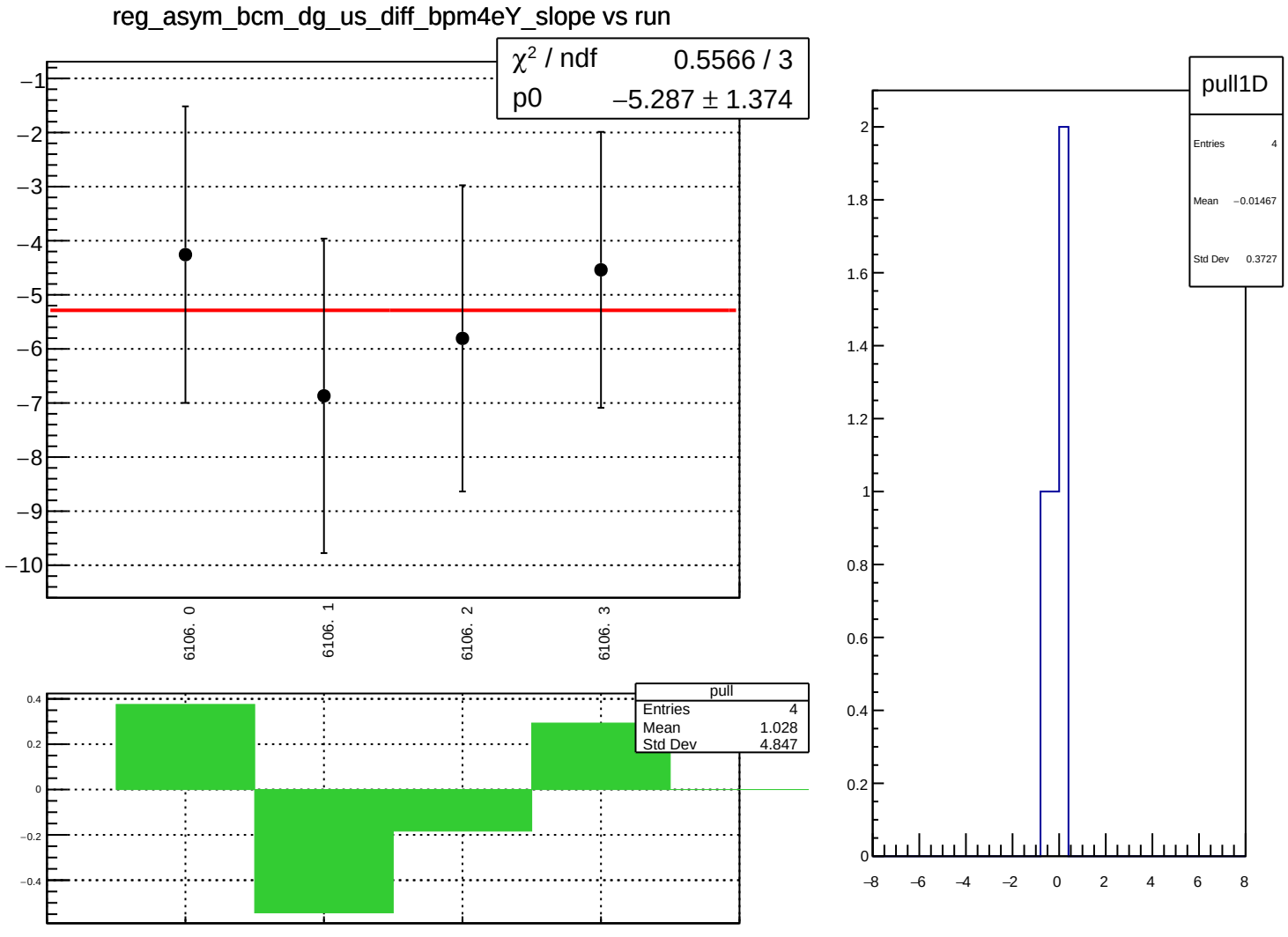

pull1D
Entries 4
Mean −0.005033
Std Dev 0.8559
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

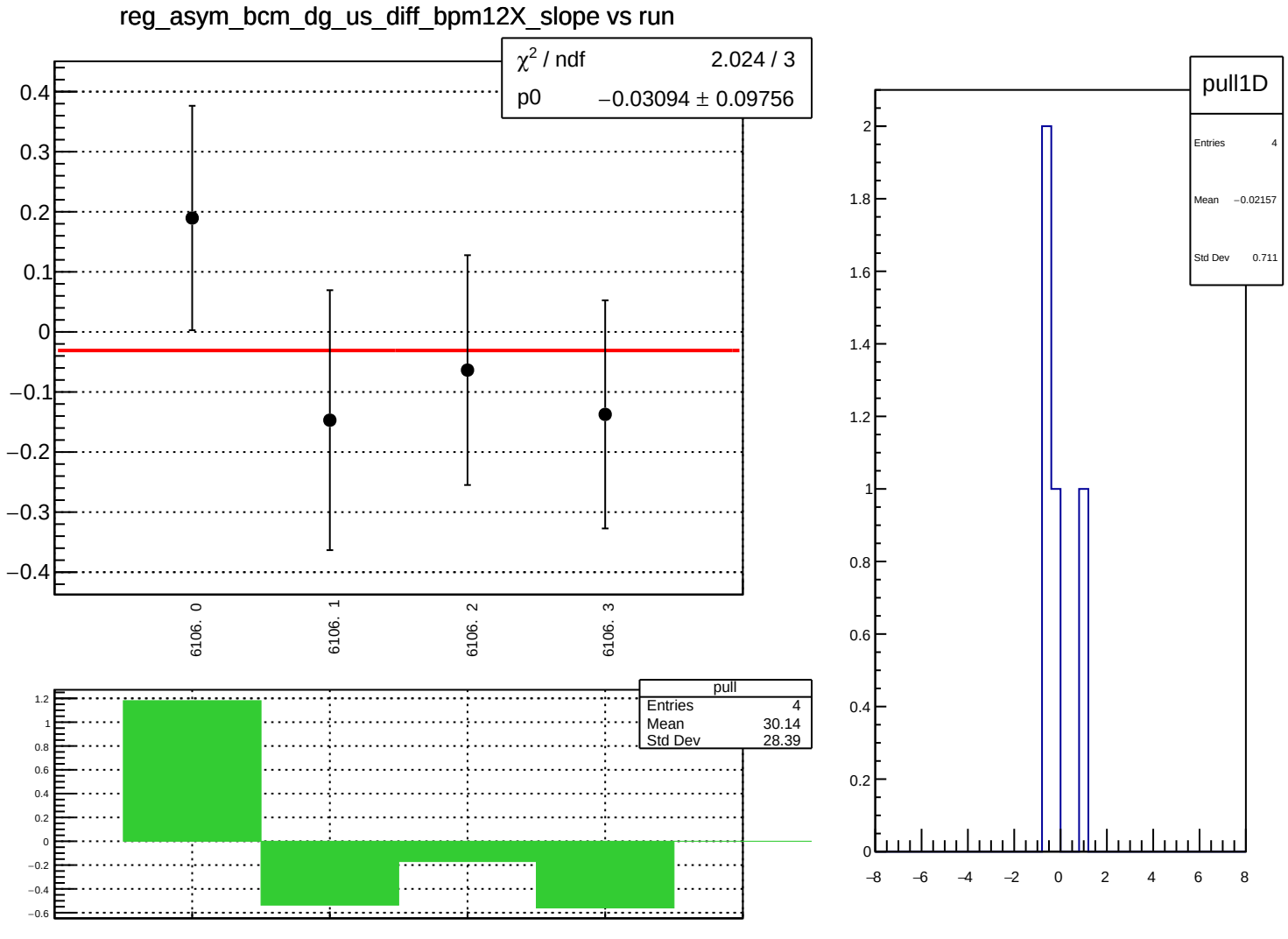

reg_asym_bcm_dg_us_diff_bpm4aX_slope vs run
χ² / ndf 3.225 / 3
p0 0.5811 ± 2.014
10
8
6
4
2
0
−2
−4
−6
−8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 62.79
Std Dev 60.95
1.5
1
0.5
0
−0.5
pull1D
Entries 4
Mean −0.01542
Std Dev 0.8978
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

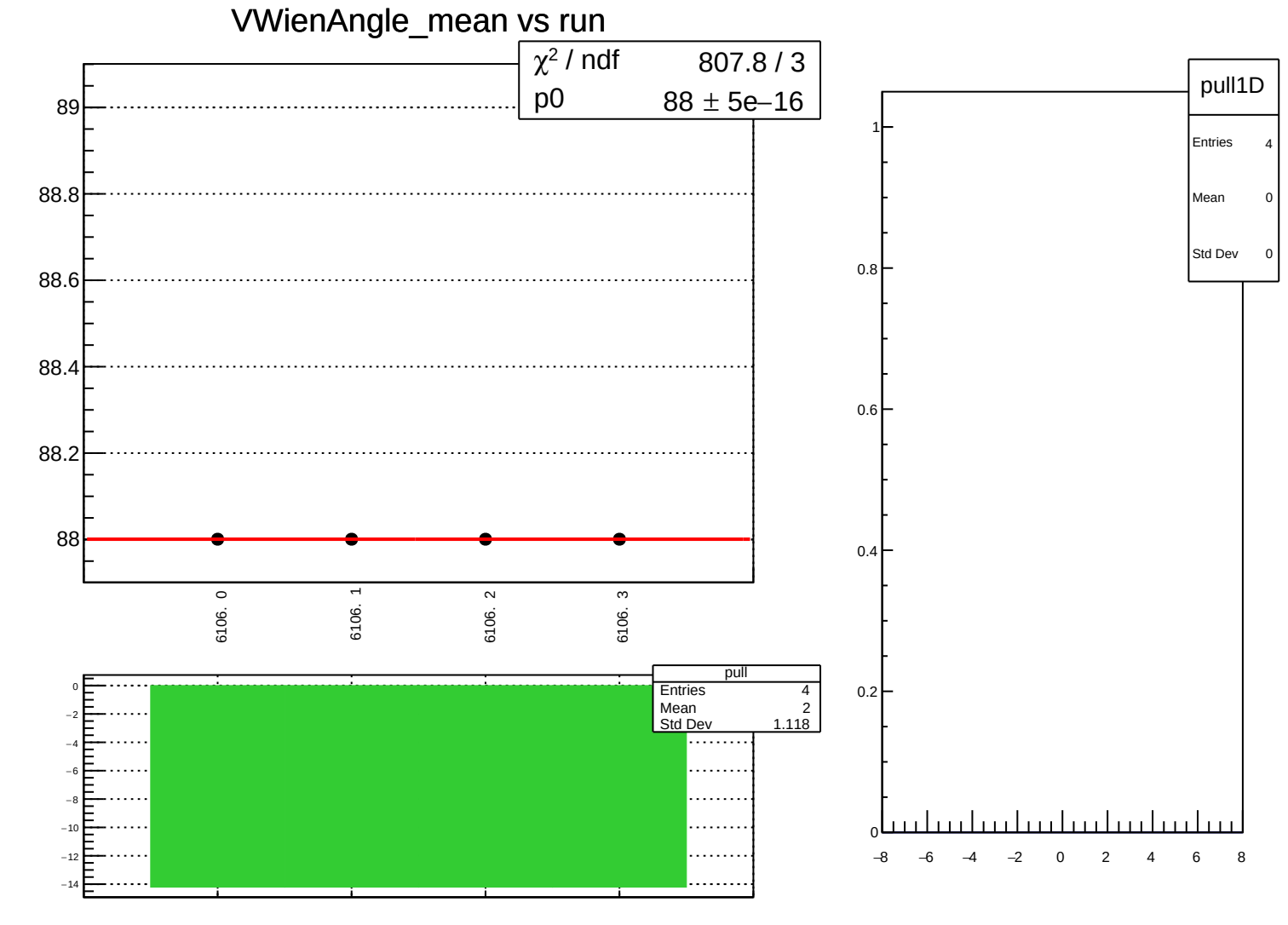

reg_asym_bcm_dg_us_diff_bpm4aY_slope vs run
χ² / ndf 0.4836 / 3
p0 5.154 ± 1.299
9
8
7
6
5
4
3
2
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean −1.49
Std Dev 5.821
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4

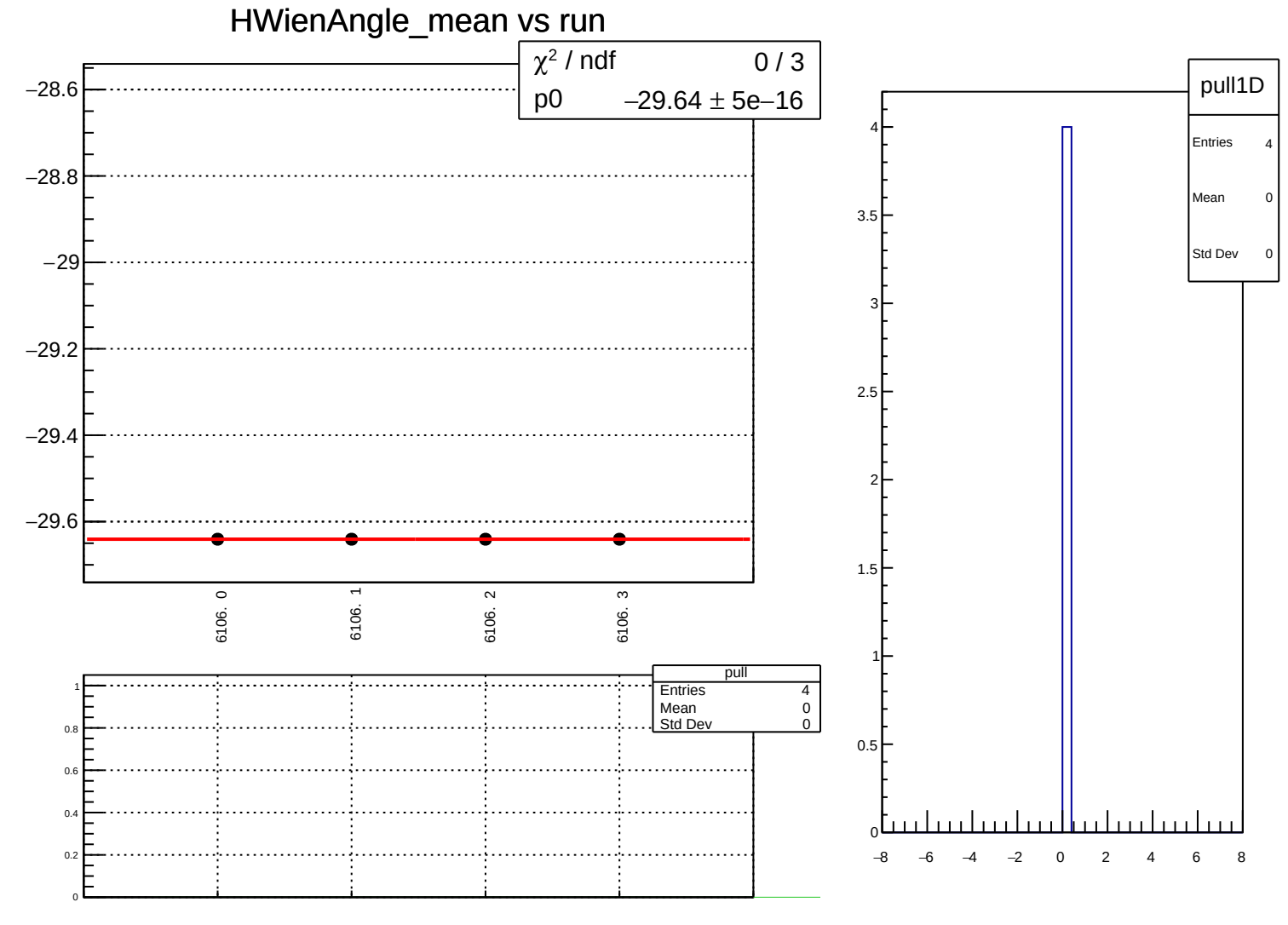

pull1D
Entries 4
Mean 0.01492
Std Dev 0.3474
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

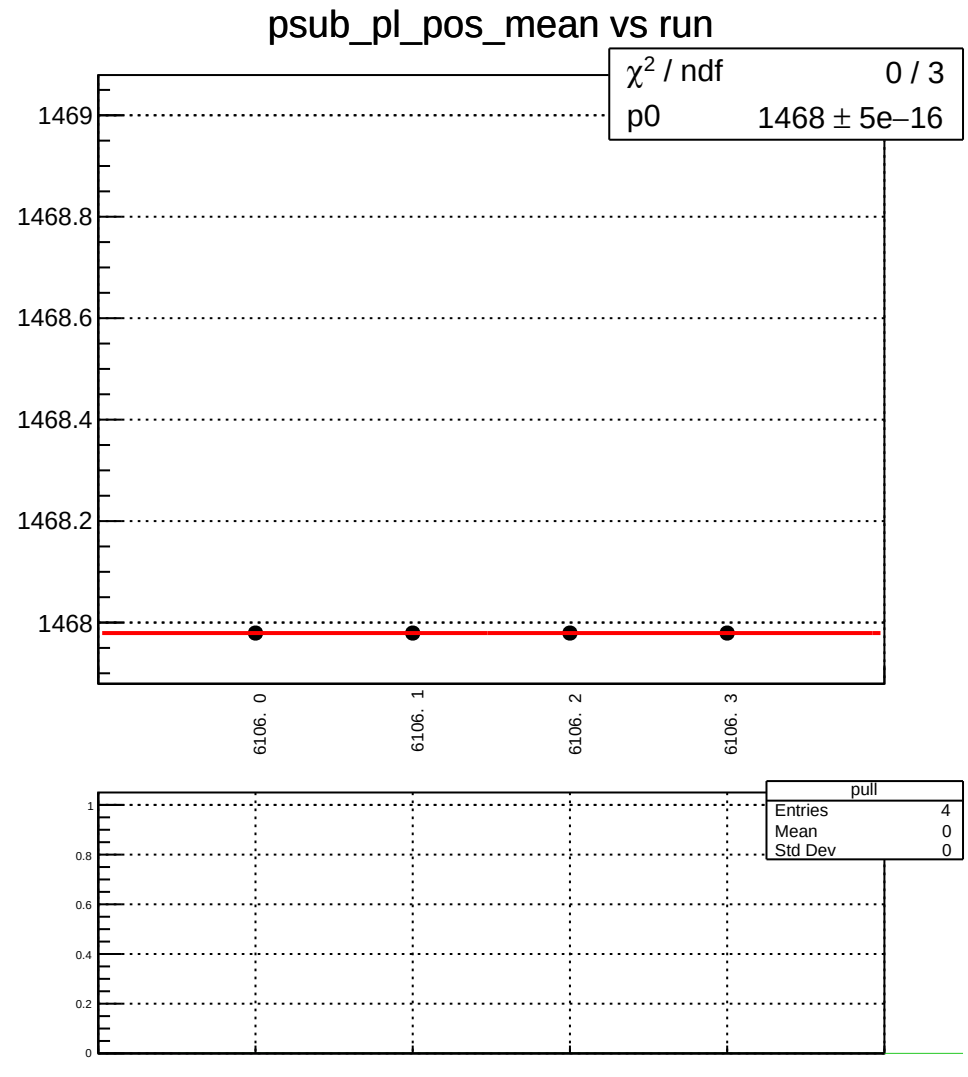

reg_asym_bcm_dg_us_diff_bpm4eX_slope vs run
χ² / ndf 3.043 / 3
p0 −1.032 ± 2.343
8
6
4
2
0
−2
−4
−6
−8
−10
−12
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 62.44
Std Dev 60.62
0.5
0
−0.5
−1
−1.5
pull1D
Entries 4
Mean 0.01485
Std Dev 0.8721
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

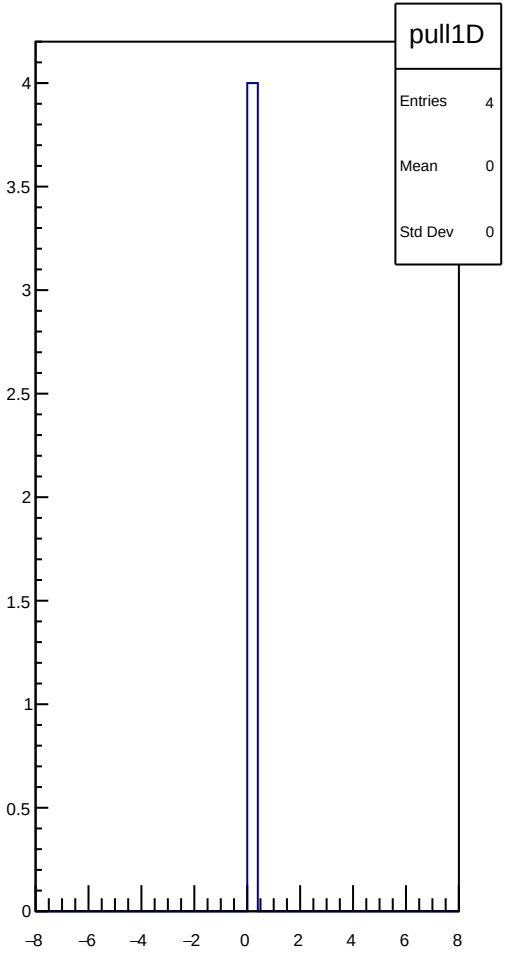

reg_asym_bcm_dg_us_diff_bpm4eY_slope vs run
χ² / ndf 0.5566 / 3
p0 −5.287 ± 1.374
−1
−2
−3
−4
−5
−6
−7
−8
−9
−10
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 1.028
Std Dev 4.847
0.4
0.2
0
−0.2
−0.4
pull1D
Entries 4
Mean −0.01467
Std Dev 0.3727
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

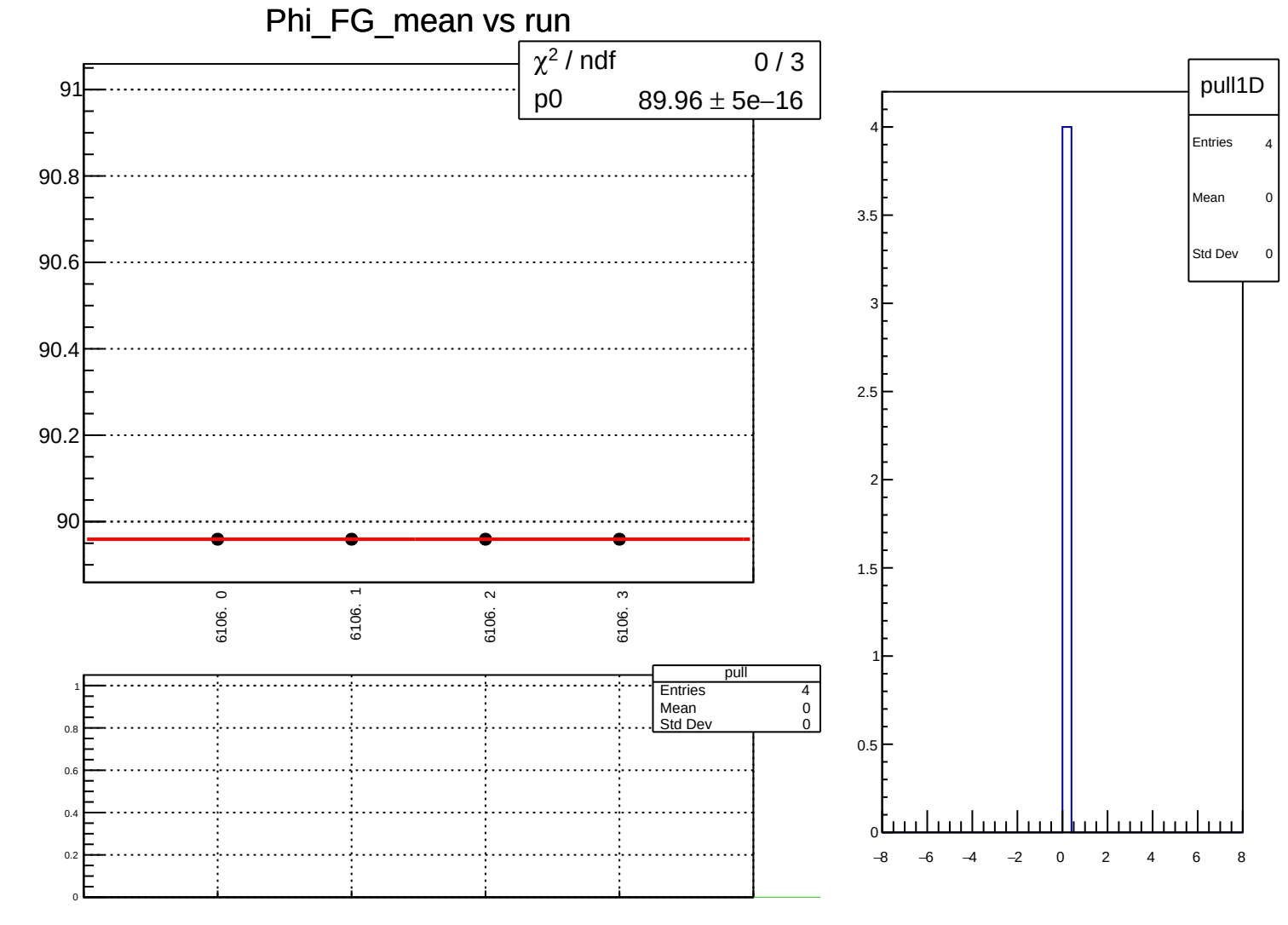

reg_asym_bcm_dg_us_diff_bpm12X_slope vs run
χ² / ndf 2.024 / 3
p0 −0.03094 ± 0.09756
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−0.3
−0.4
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 30.14
Std Dev 28.39
1.2
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
pull1D
Entries 4
Mean −0.02157
Std Dev 0.711
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

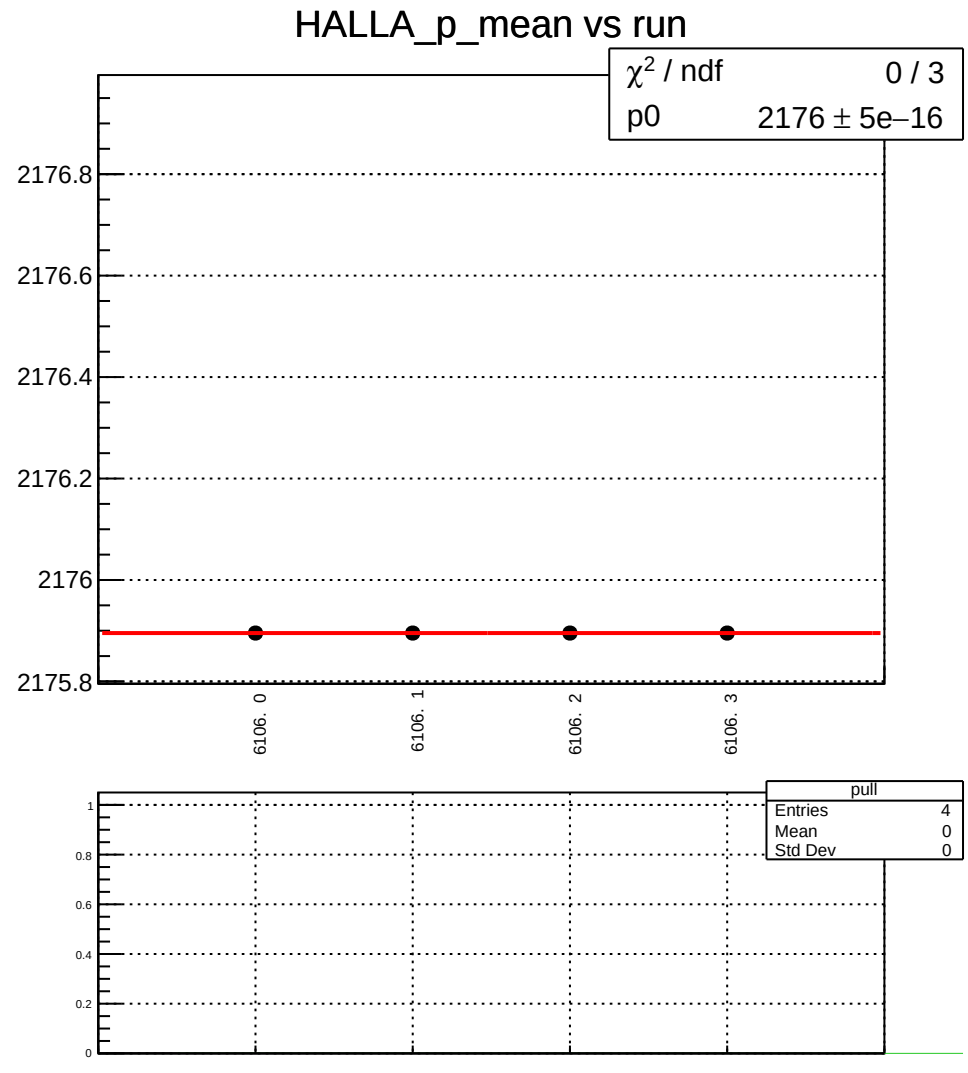

VWienAngle_mean vs run
χ² / ndf 807.8 / 3
p0 88 ± 5e−16
89
88.8
88.6
88.4
88.2
88
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2
Std Dev 1.118
0
−2
−4
−6
−8
−10
−12
−14
pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

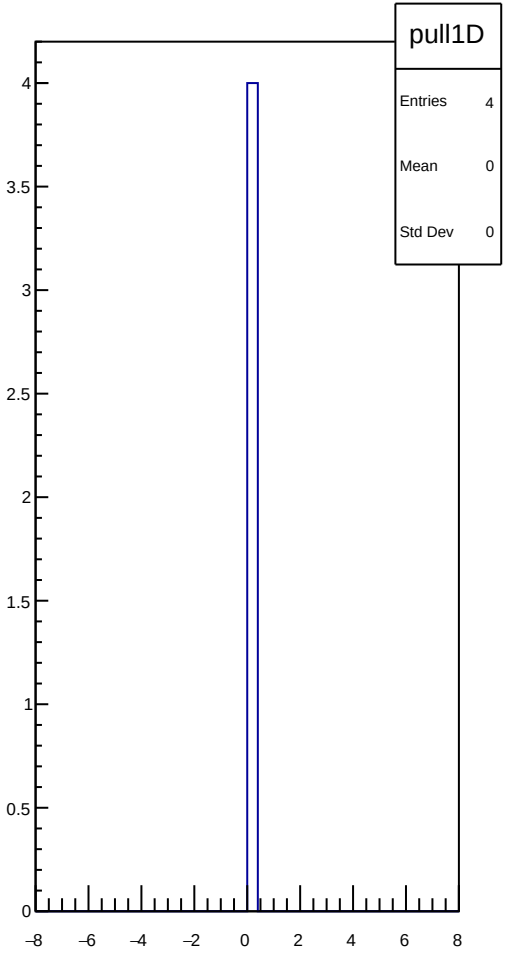

HWienAngle_mean vs run
χ² / ndf 0 / 3
p0 −29.64 ± 5e−16
−28.6
−28.8
−29
−29.2
−29.4
−29.6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

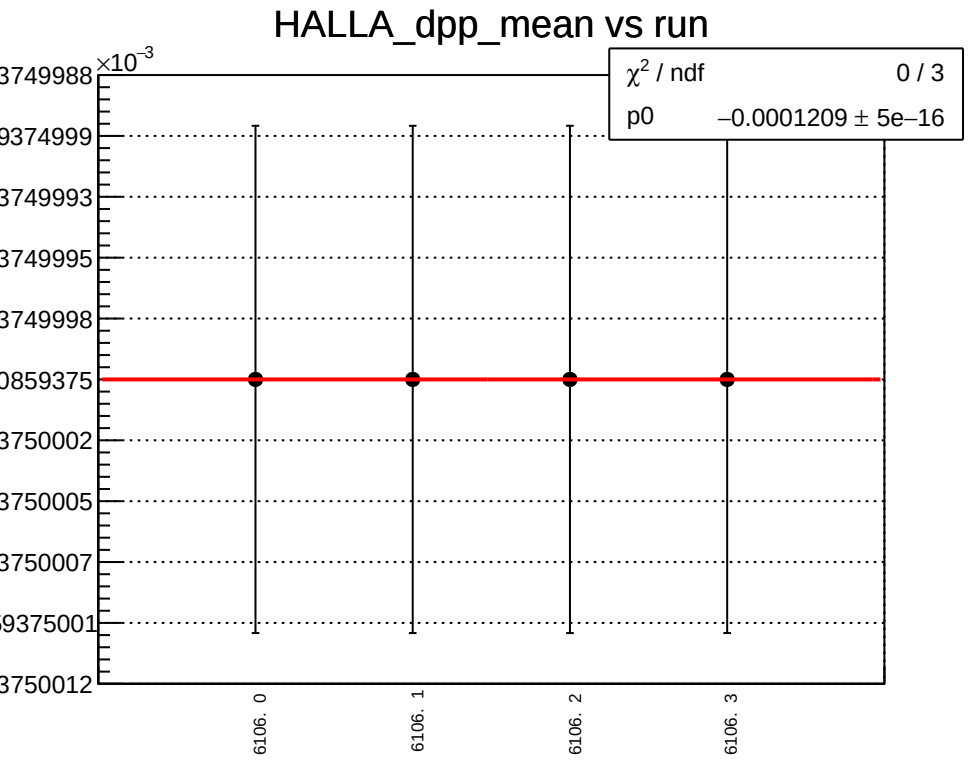

psub_pl_pos_mean vs run
χ² / ndf 0 / 3
p0 1468 ± 5e−16
1469
1468.8
1468.6
1468.4
1468.2
1468
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

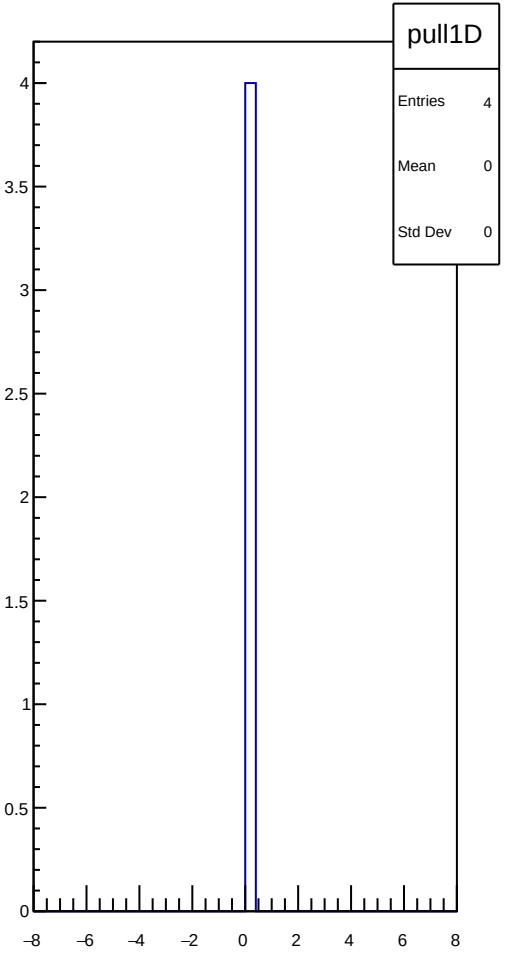

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

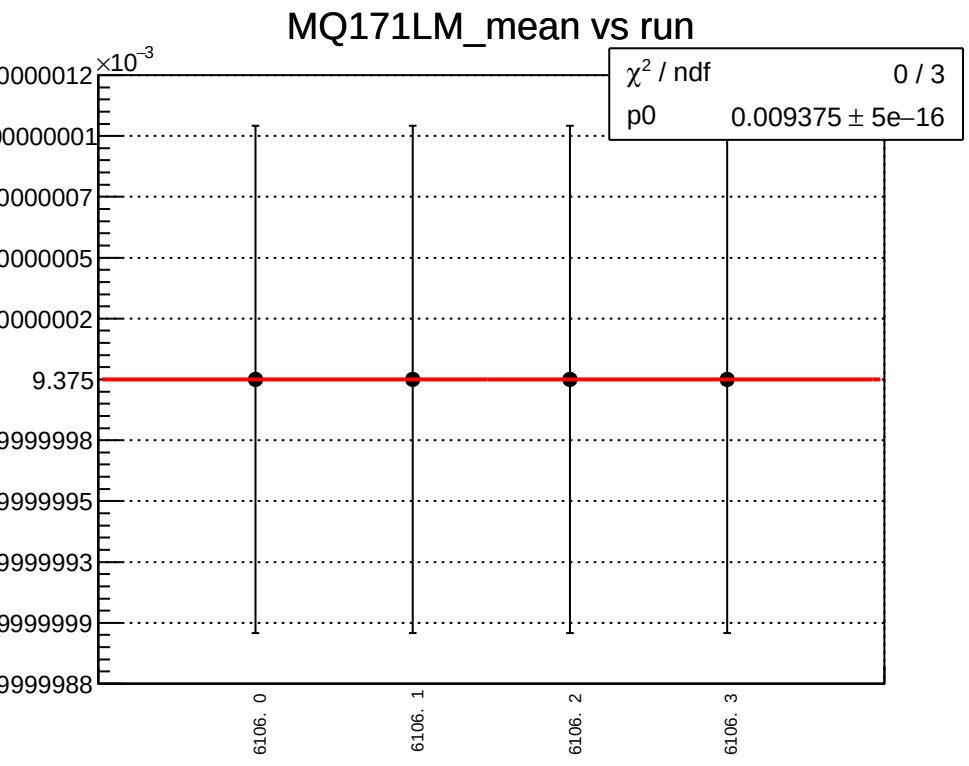

Phi_FG_mean vs run
χ² / ndf 0 / 3
p0 89.96 ± 5e−16
91
90.8
90.6
90.4
90.2
90
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

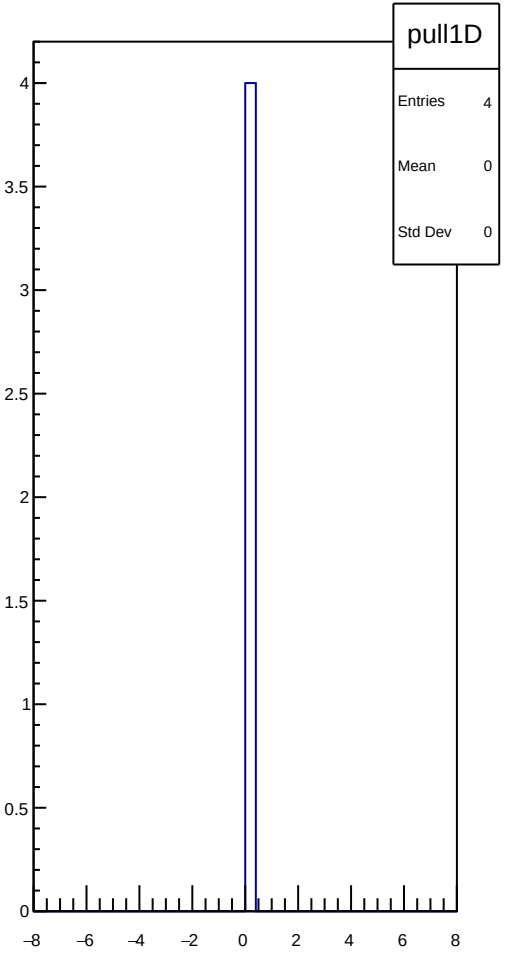

HALLA_p_mean vs run
χ² / ndf 0 / 3
p0 2176 ± 5e−16
2176.8
2176.6
2176.4
2176.2
2176
2175.8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

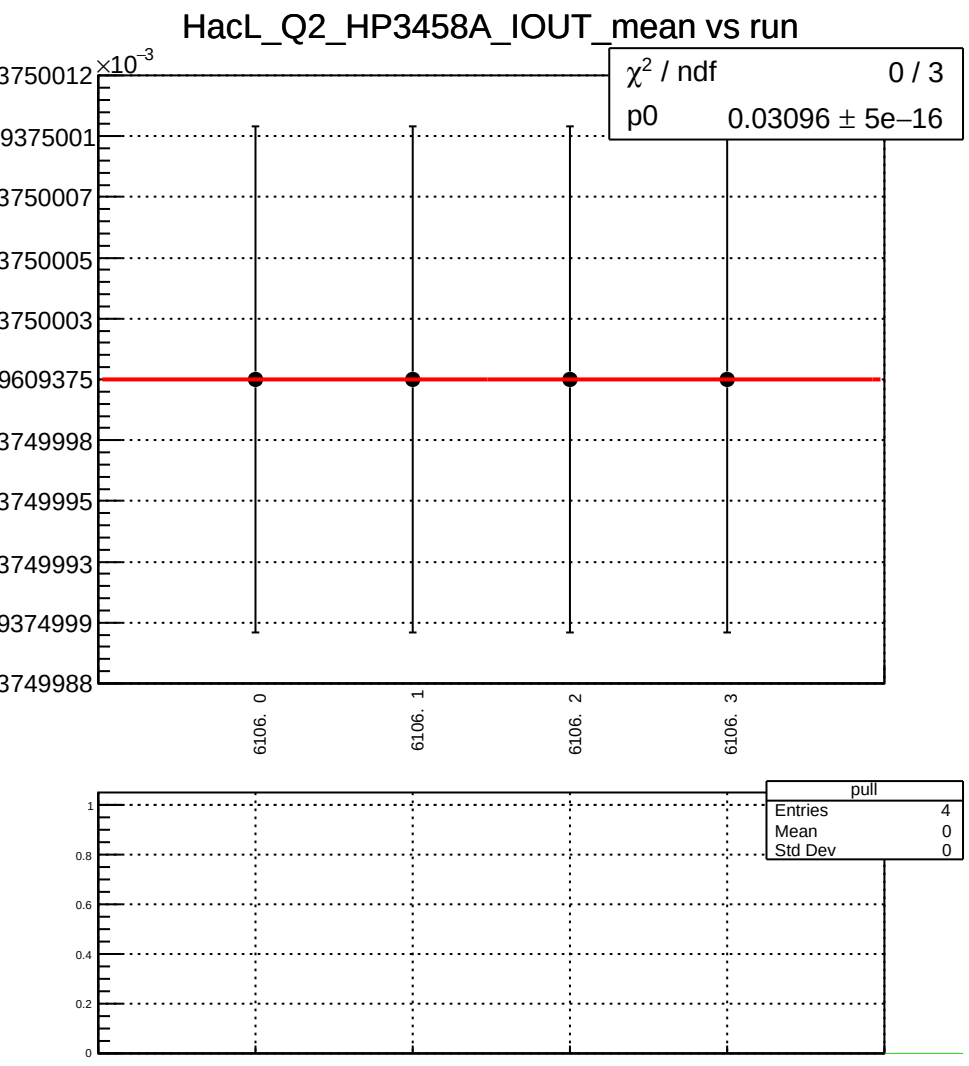

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

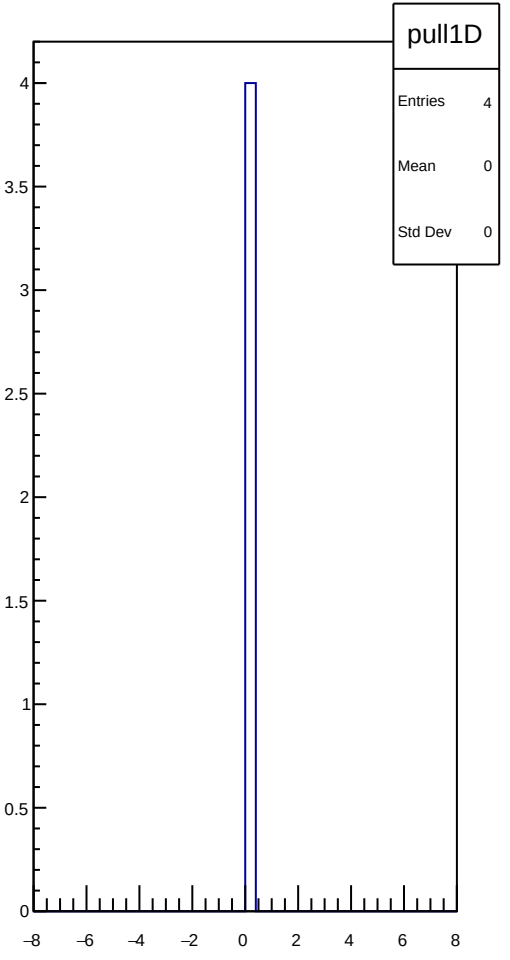

HALLA_dpp_mean vs run
×10⁻³
χ² / ndf 0 / 3
p0 –0.0001209 ± 5e–16
3749988
9374999
3749993
3749995
3749998
0859375
3750002
3750005
3750007
9375001
3750012
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

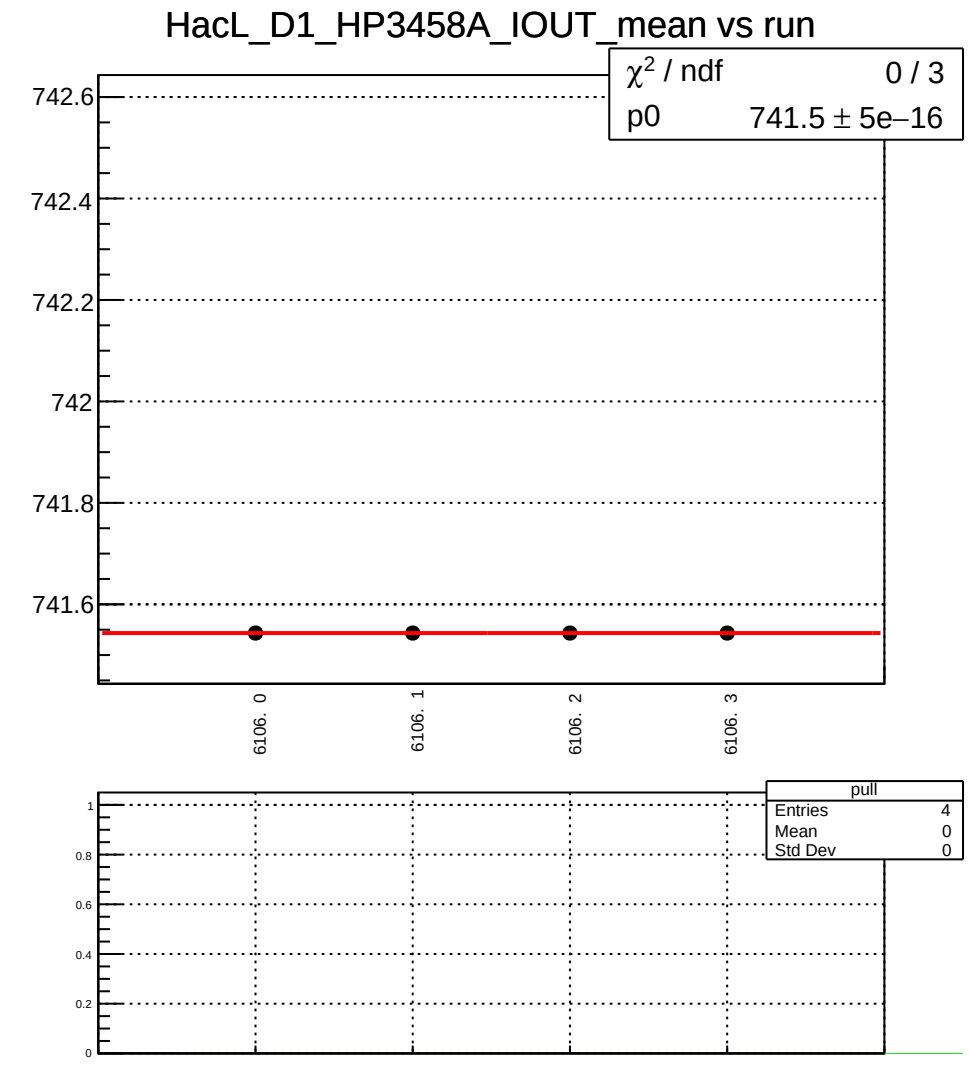

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
–8
–6
–4
–2
0
2
4
6
8

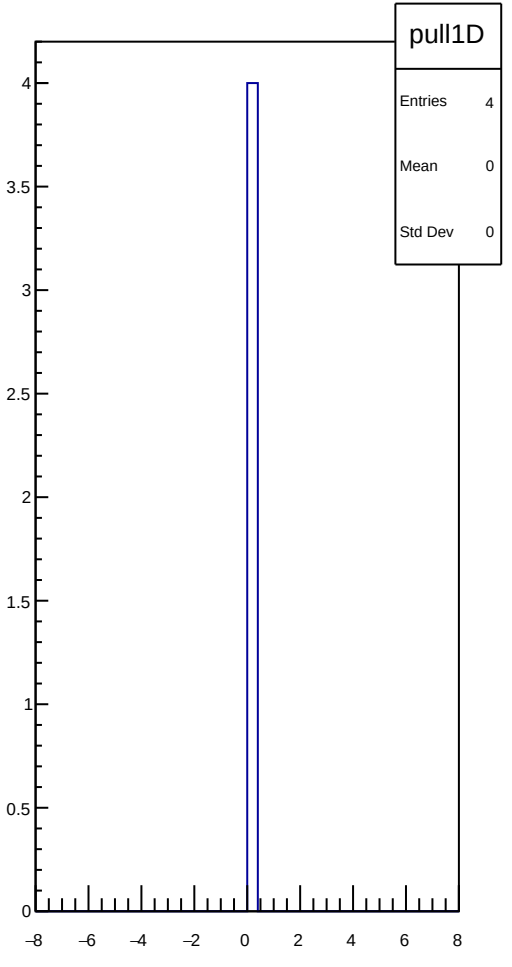

MQ171LM_mean vs run
×10⁻³
χ² / ndf 0 / 3
p0 0.009375 ± 5e−16
0000012
0000001
0000007
0000005
0000002
9.375
9999998
9999995
9999993
9999999
9999988
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

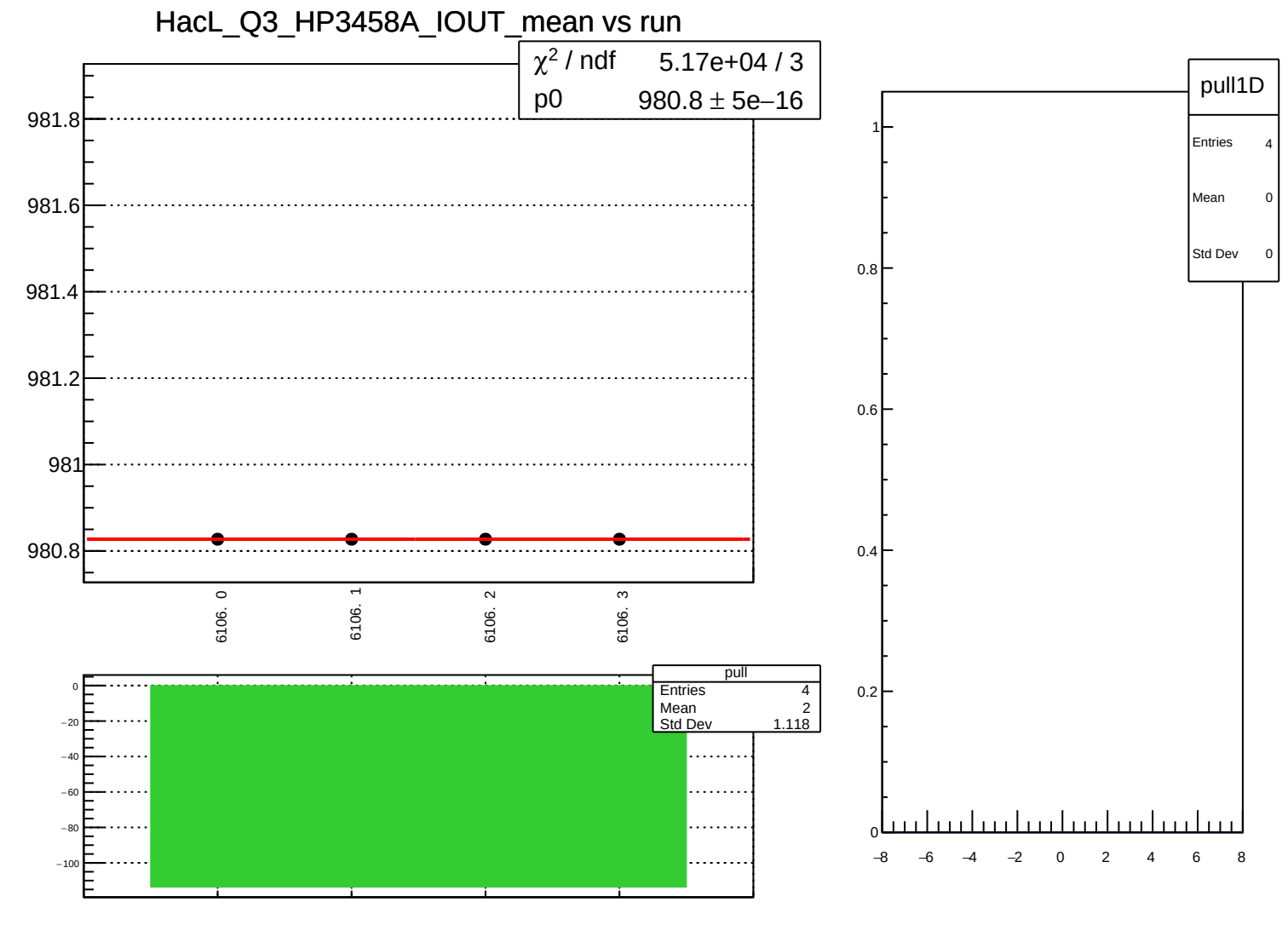

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

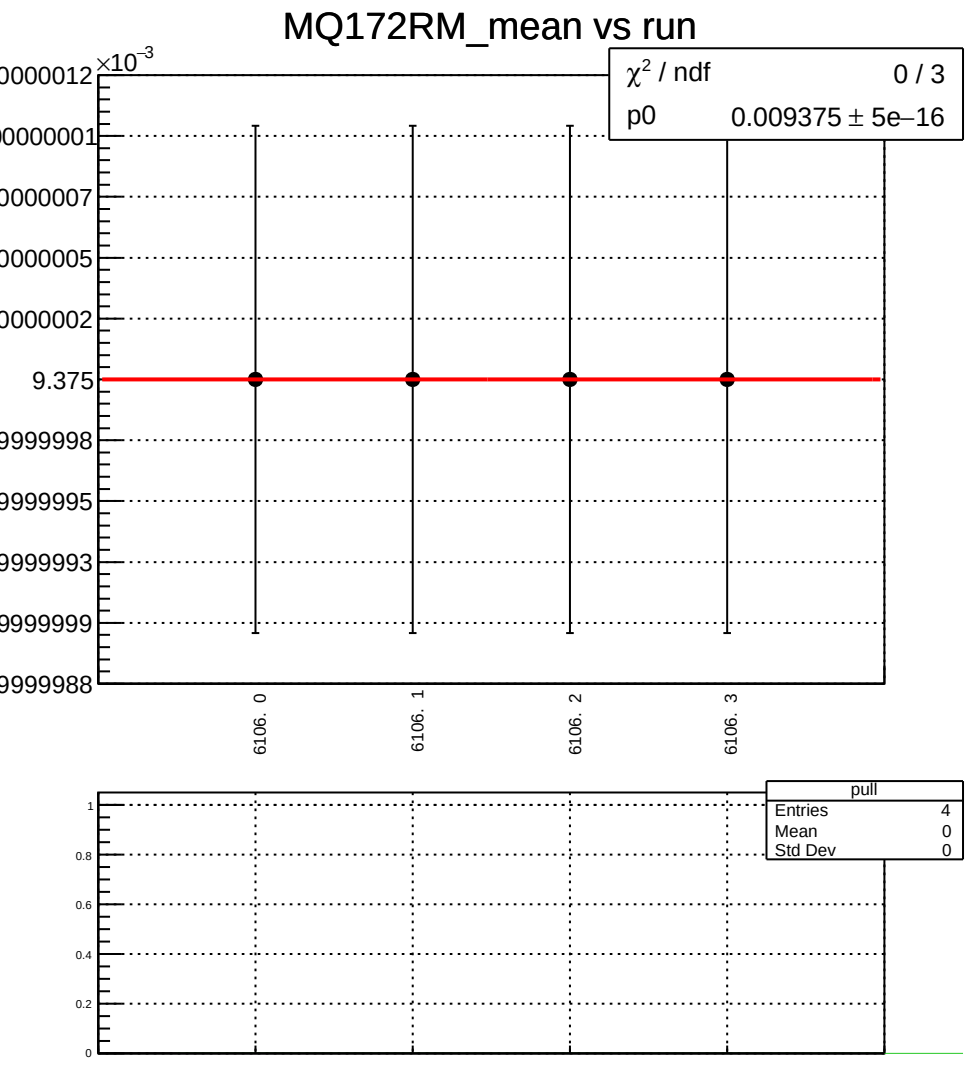

HacL_Q2_HP3458A_IOUT_mean vs run
×10⁻³
3750012
9375001
3750007
3750005
3750003
9609375
3749998
3749995
3749993
9374999
3749988
χ² / ndf 0 / 3
p0 0.03096 ± 5e−16
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

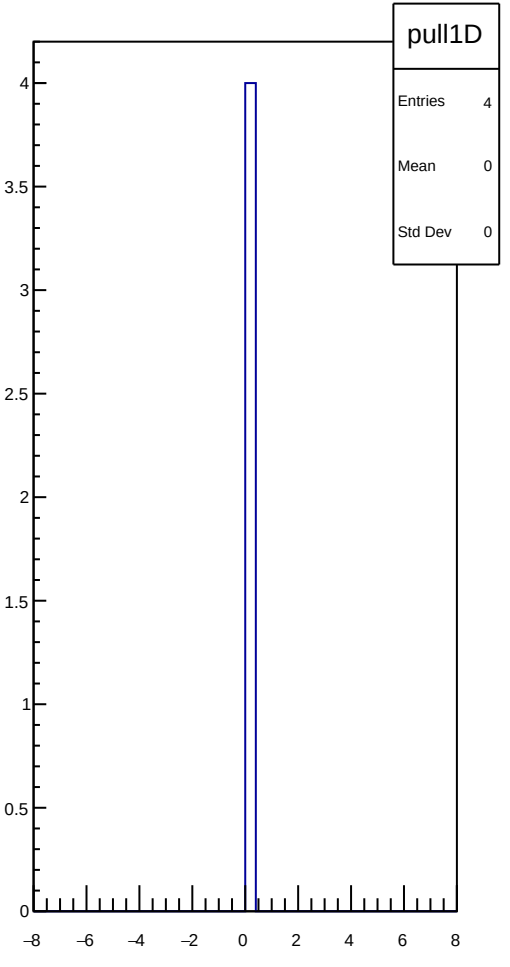

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

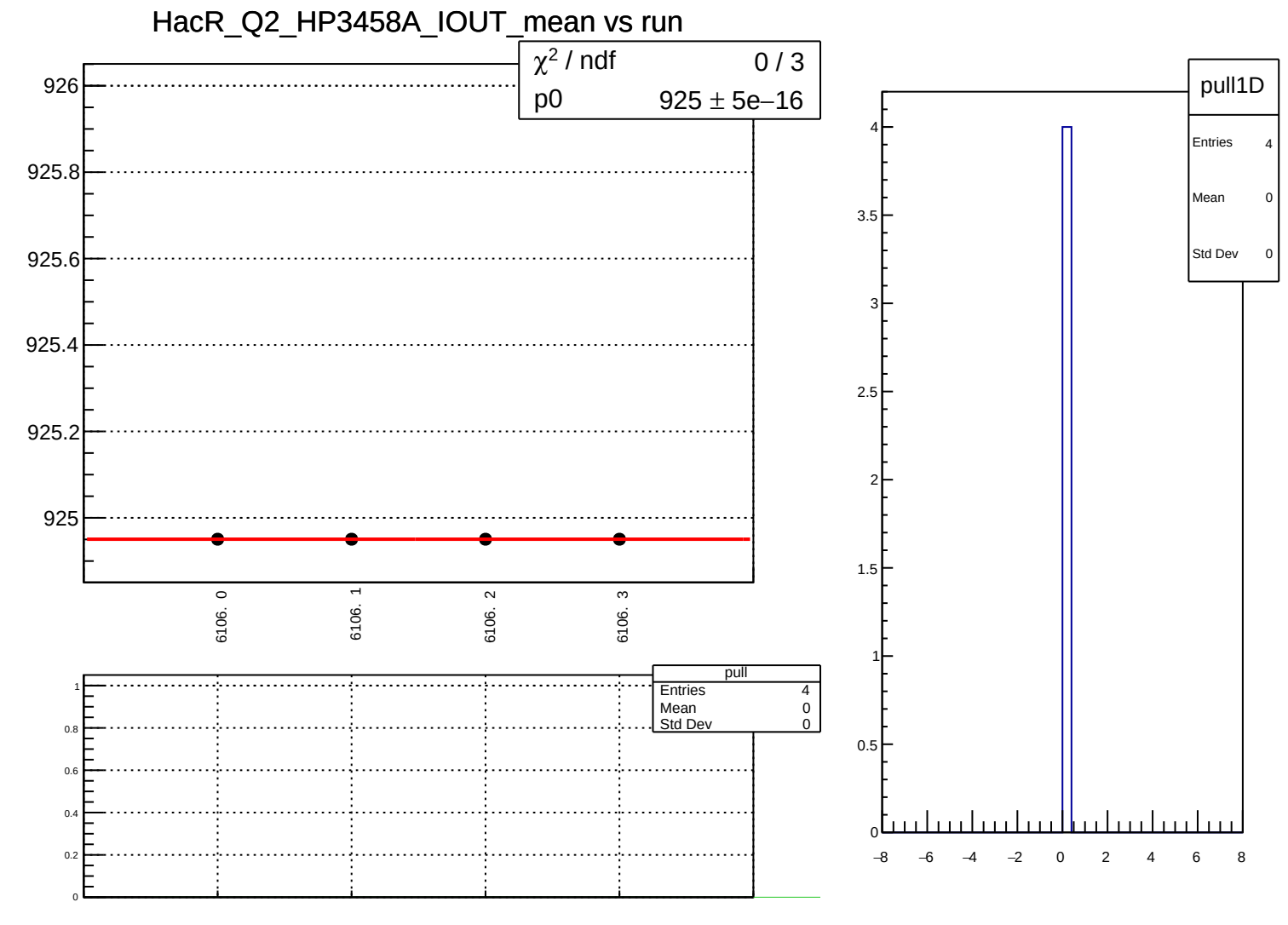

HacL_D1_HP3458A_IOUT_mean vs run
χ² / ndf 0 / 3
p0 741.5 ± 5e−16
742.6
742.4
742.2
742
741.8
741.6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

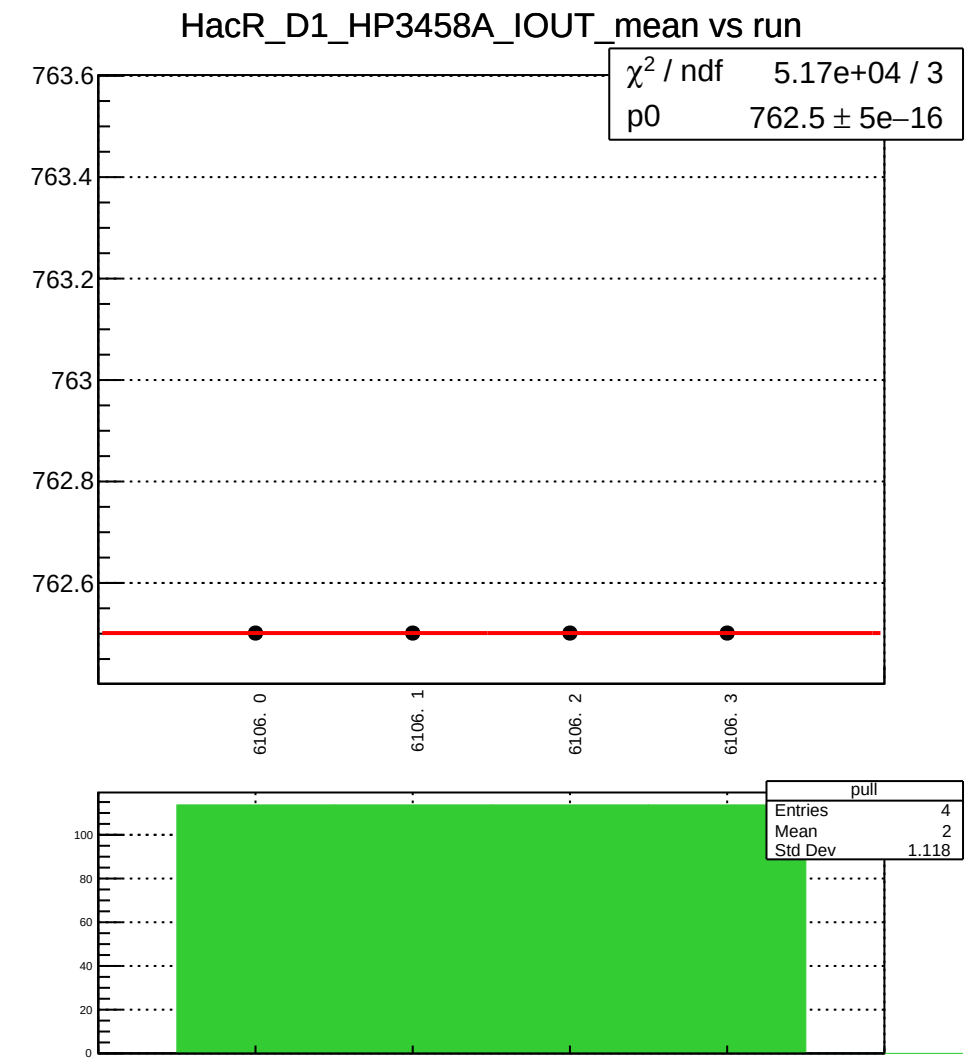

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

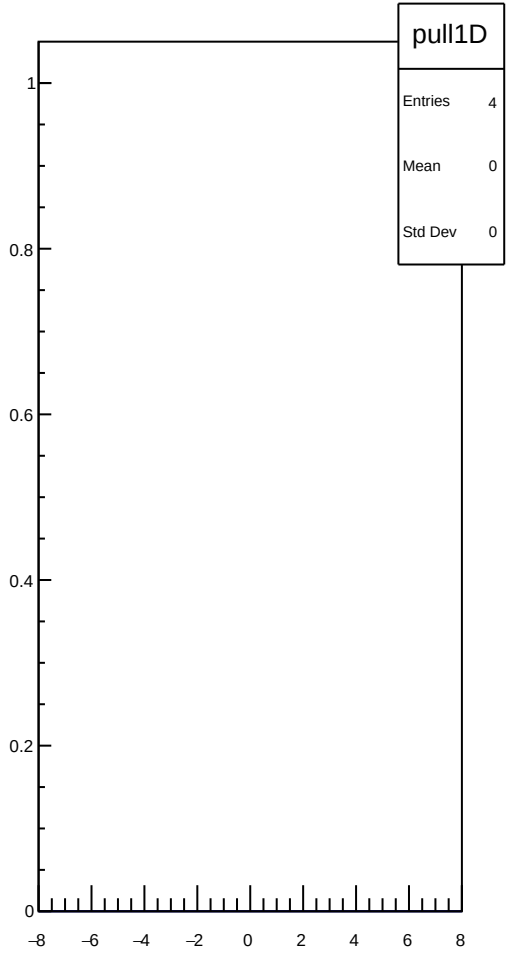

HacL_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 5.17e+04 / 3
p0 980.8 ± 5e−16
981.8
981.6
981.4
981.2
981
980.8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2
Std Dev 1.118
0
−20
−40
−60
−80
−100
pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

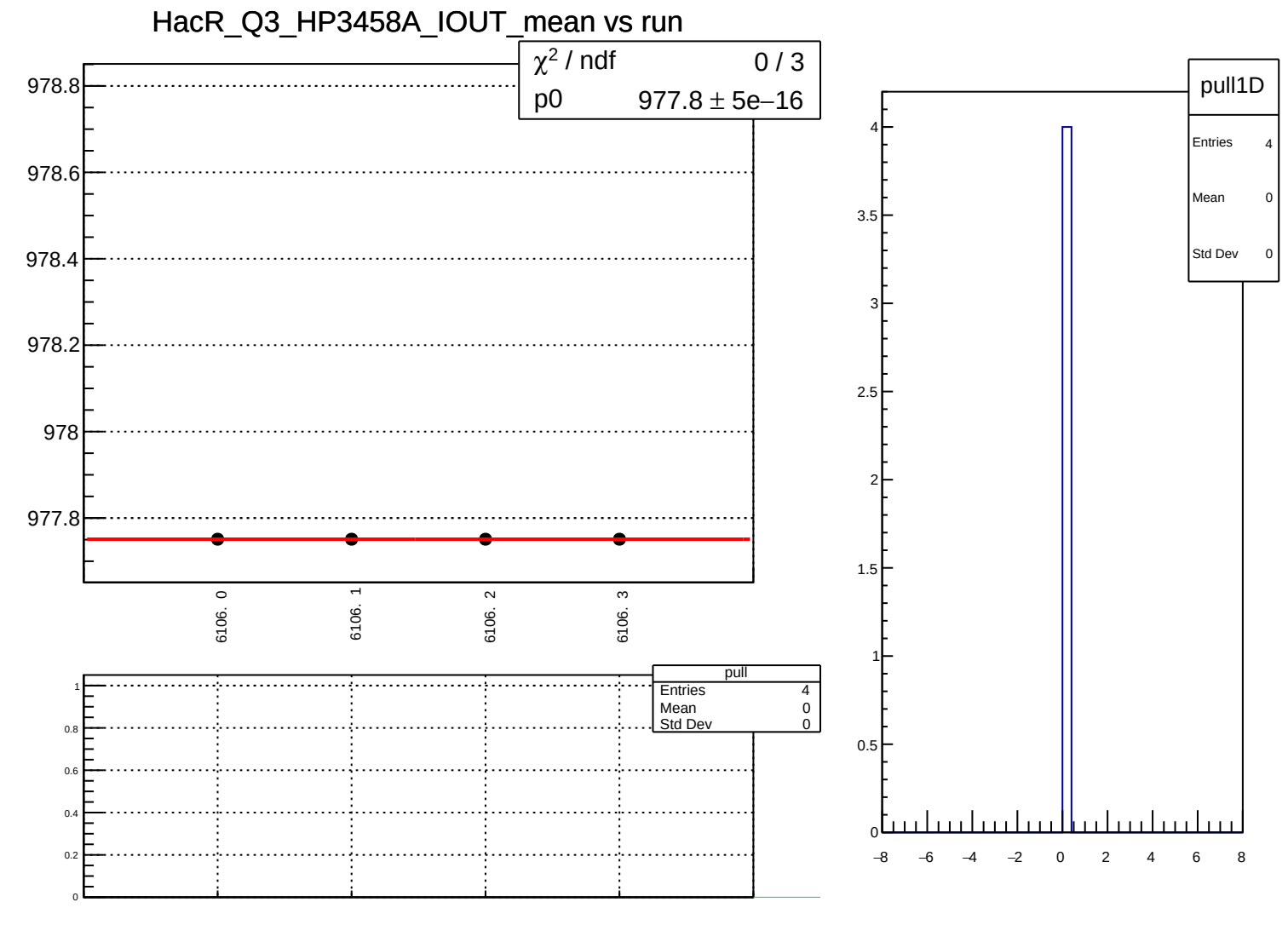

MQ172RM_mean vs run
×10⁻³
χ² / ndf 0 / 3
p0 0.009375 ± 5e−16
0000012
0000001
0000007
0000005
0000002
9.375
9999998
9999995
9999993
9999999
9999988
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

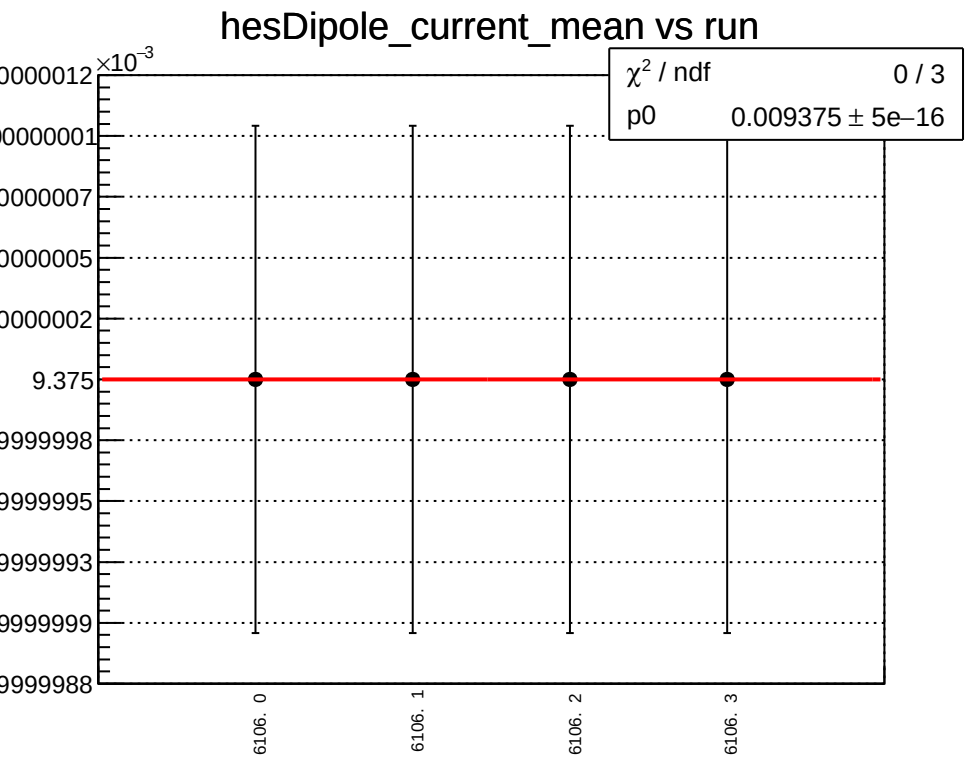

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

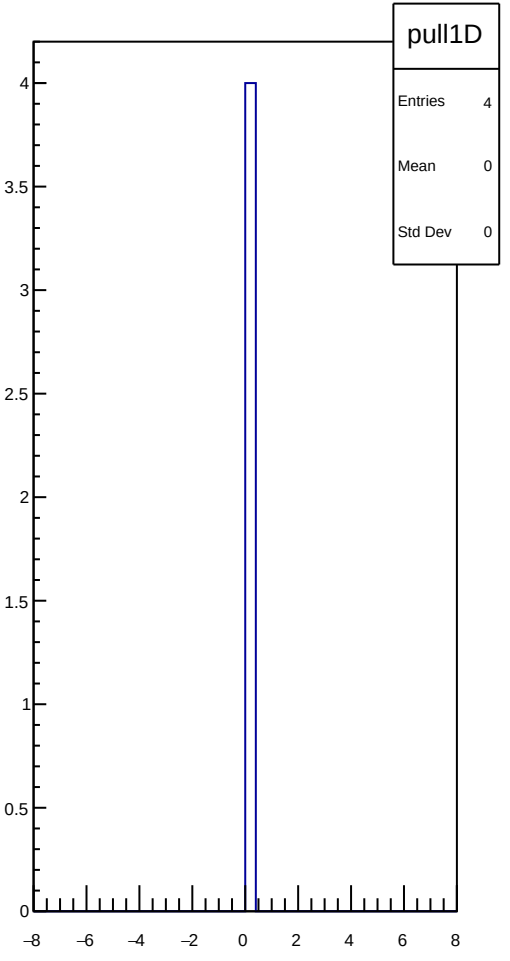

HacR_Q2_HP3458A_IOUT_mean vs run
χ² / ndf 0 / 3
p0 925 ± 5e−16
926
925.8
925.6
925.4
925.2
925
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

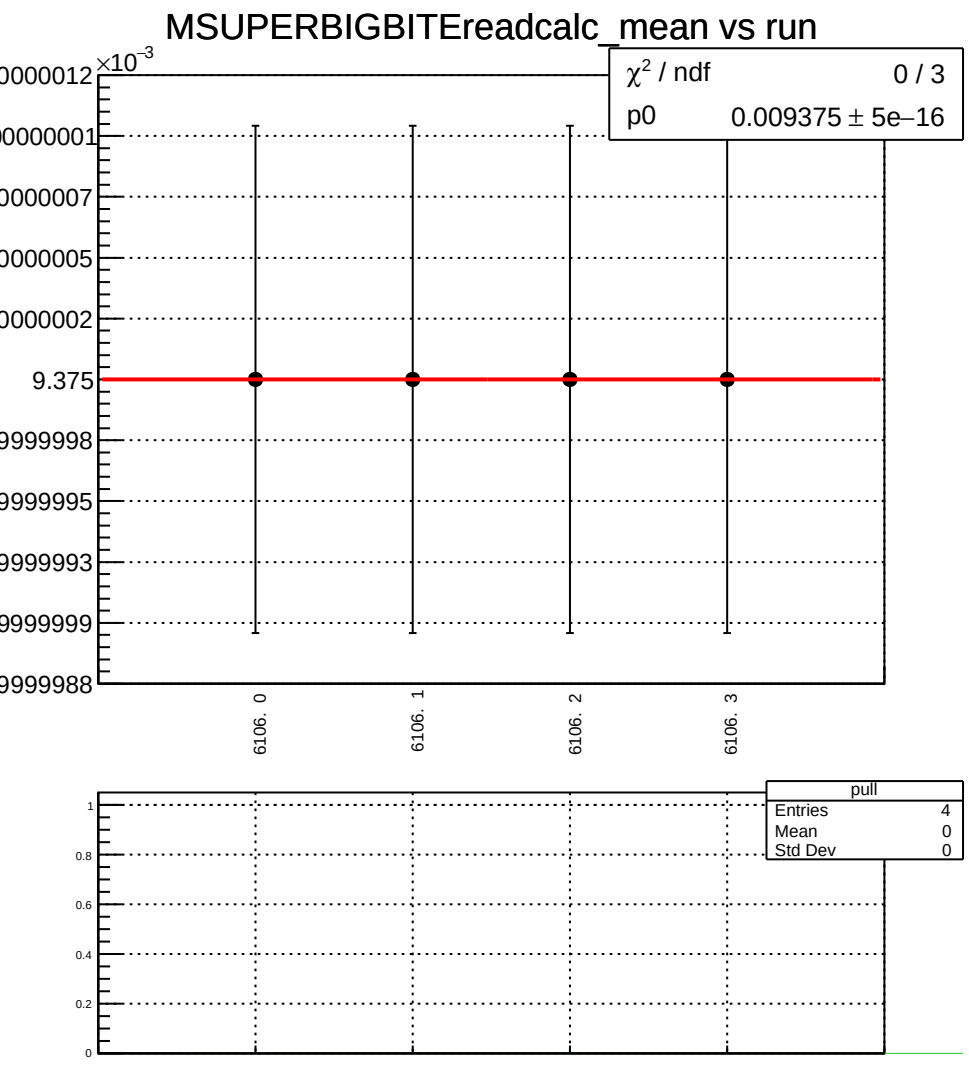

HacR_D1_HP3458A_IOUT_mean vs run
χ² / ndf 5.17e+04 / 3
p0 762.5 ± 5e−16
763.6
763.4
763.2
763
762.8
762.6
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2
Std Dev 1.118
100
80
60
40
20
0

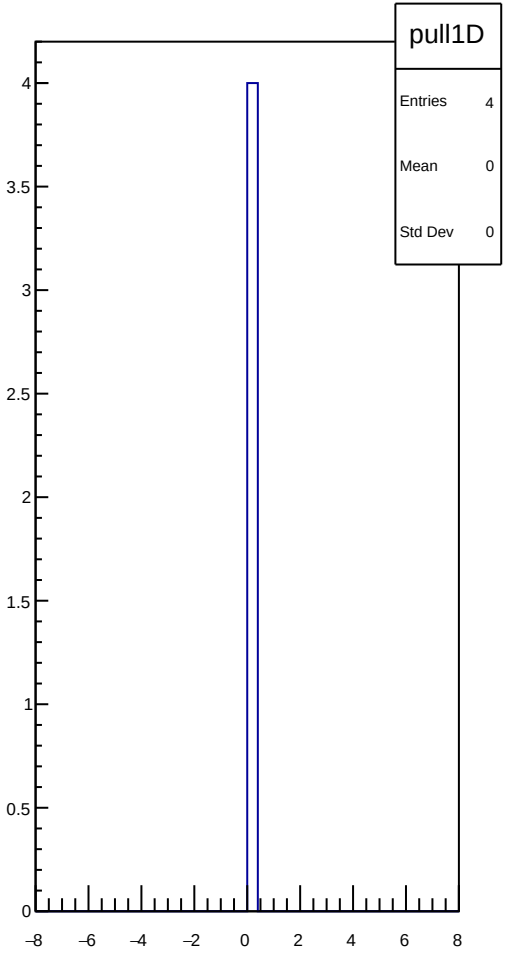

pull1D
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

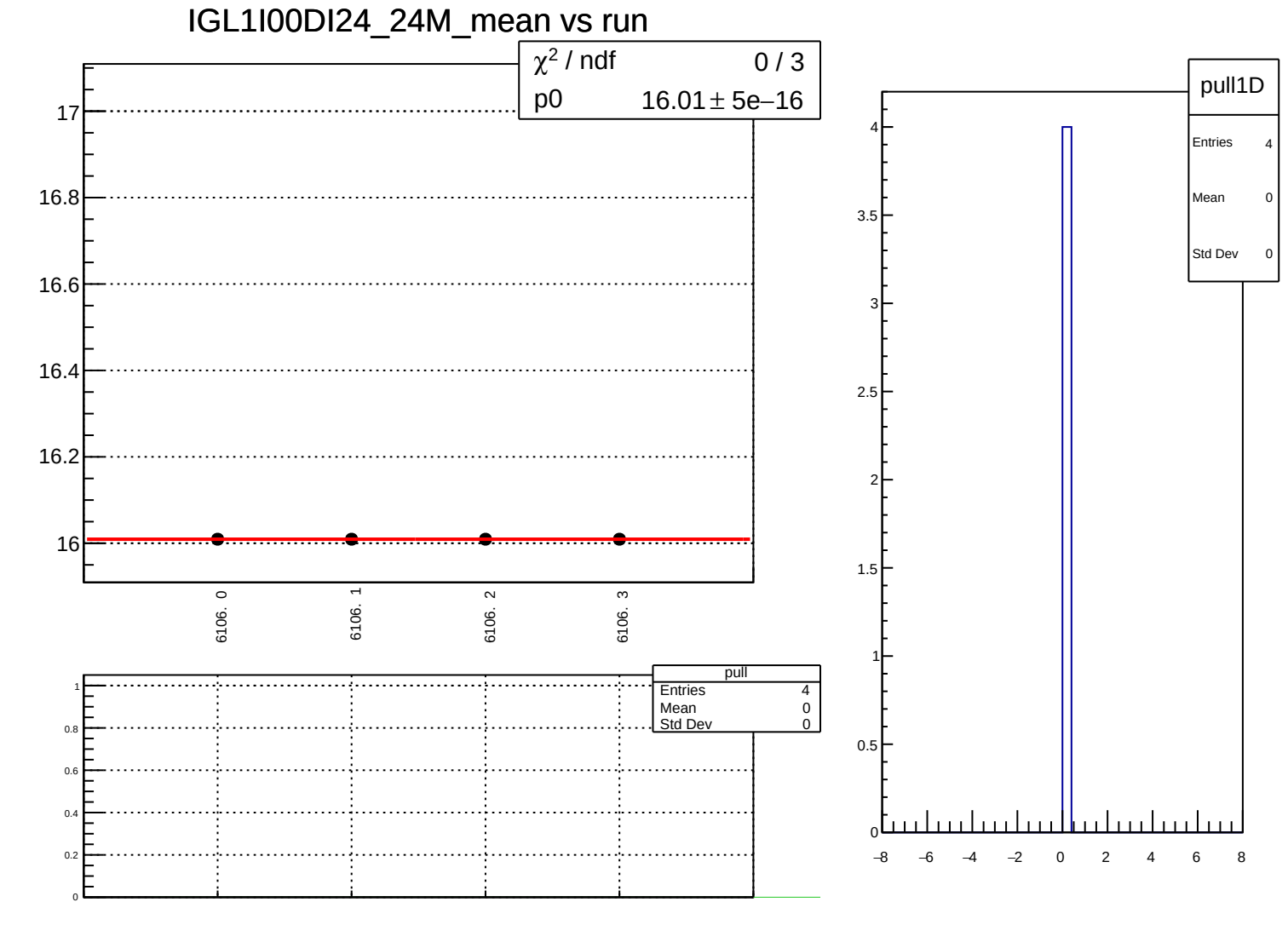

HacR_Q3_HP3458A_IOUT_mean vs run
χ² / ndf 0 / 3
p0 977.8 ± 5e−16
978.8
978.6
978.4
978.2
978
977.8
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
pull1D
Entries 4
Mean 0
Std Dev 0

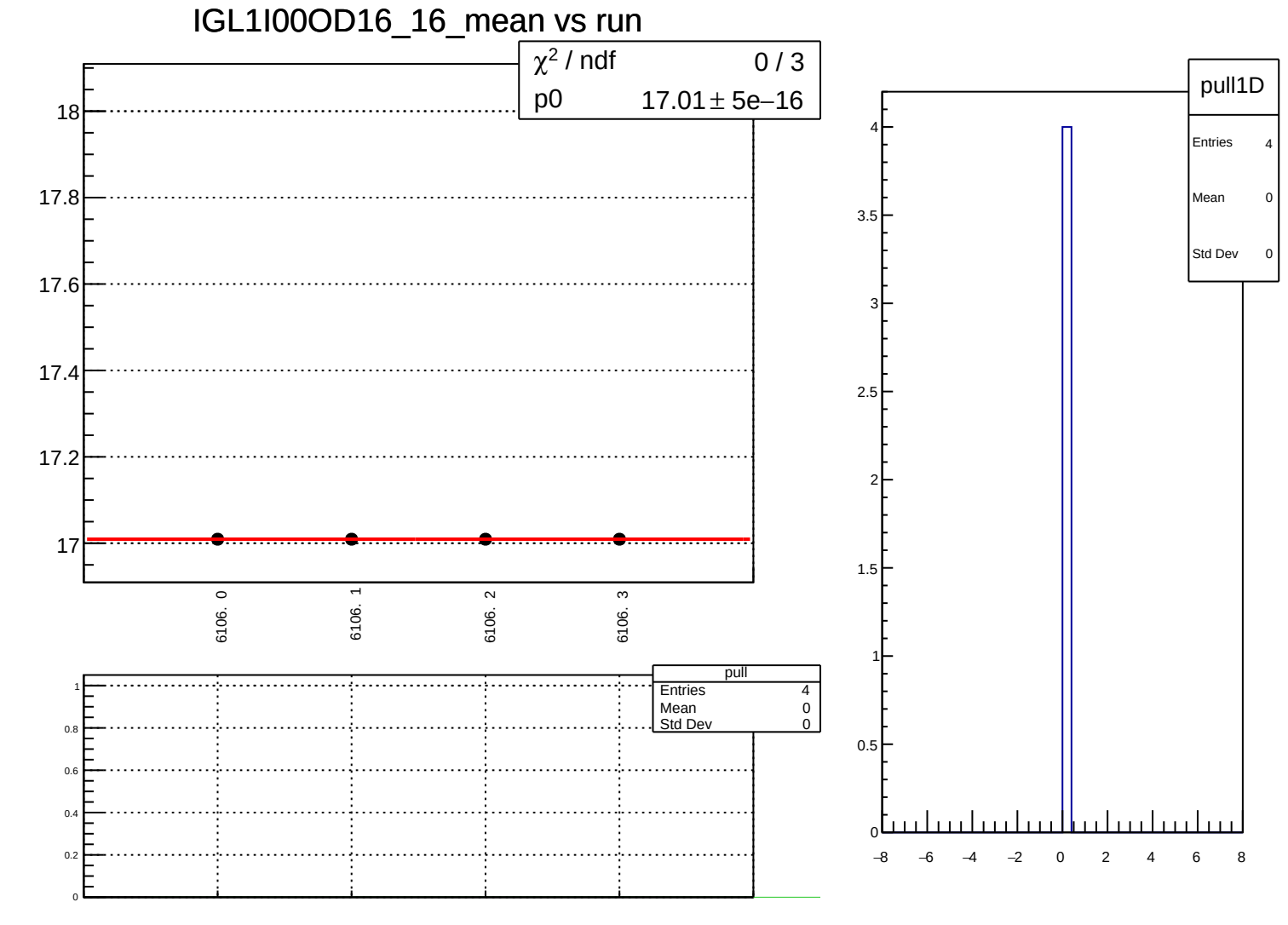

hesDipole_current_mean vs run
×10⁻³
χ² / ndf 0 / 3
p0 0.009375 ± 5e–16
0000012
0000001
0000007
0000005
0000002
9.375
9999998
9999995
9999993
9999999
9999988
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0

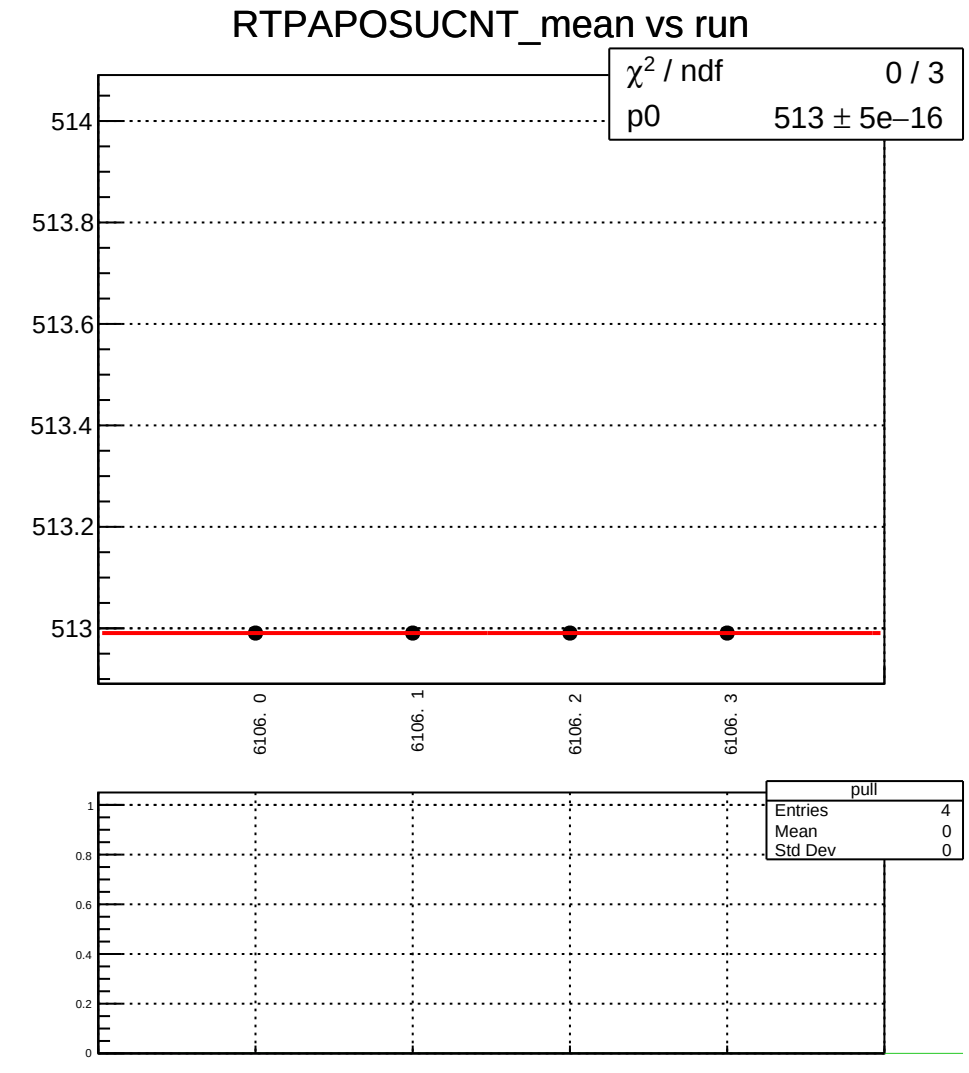

pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
–8
–6
–4
–2
0
2
4
6
8

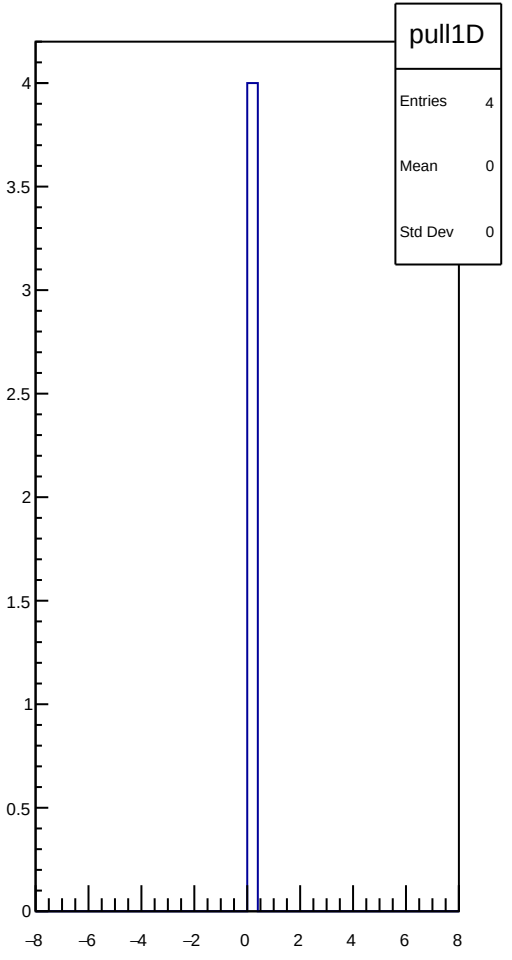

MSUPERBIGBITEreadcalc_mean vs run
×10⁻³
χ² / ndf 0 / 3
p0 0.009375 ± 5e–16
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0

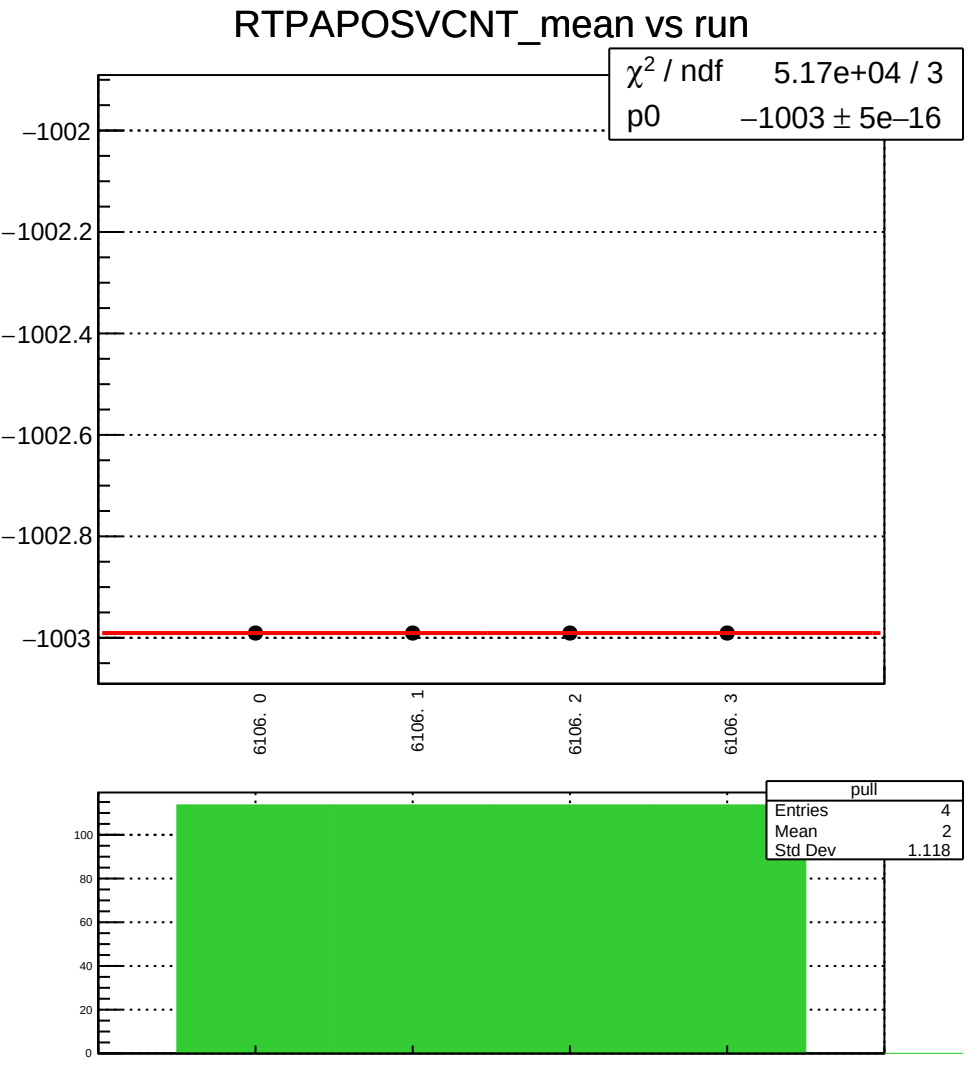

pull1D
Entries 4
Mean 0
Std Dev 0

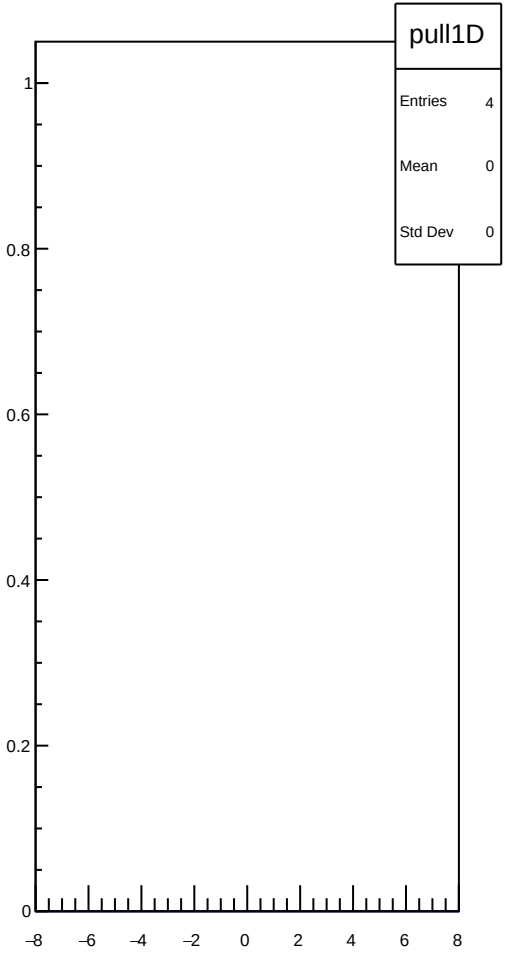

IGL1I00DI24_24M_mean vs run
χ² / ndf 0 / 3
p0 16.01 ± 5e−16
17
16.8
16.6
16.4
16.2
16
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8


IGL1I00OD16_16_mean vs run
χ² / ndf 0 / 3
p0 17.01 ± 5e−16
18
17.8
17.6
17.4
17.2
17
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0
pull1D
Entries 4
Mean 0
Std Dev 0
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8


RTPAPOSUCNT_mean vs run
χ² / ndf 0 / 3
p0 513 ± 5e−16
514
513.8
513.6
513.4
513.2
513
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 0
Std Dev 0
1
0.8
0.6
0.4
0.2
0


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


RTPAPOSVCNT_mean vs run
χ² / ndf 5.17e+04 / 3
p0 −1003 ± 5e−16
−1002
−1002.2
−1002.4
−1002.6
−1002.8
−1003
6106. 0
6106. 1
6106. 2
6106. 3
pull
Entries 4
Mean 2
Std Dev 1.118
100
80
60
40
20
0


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