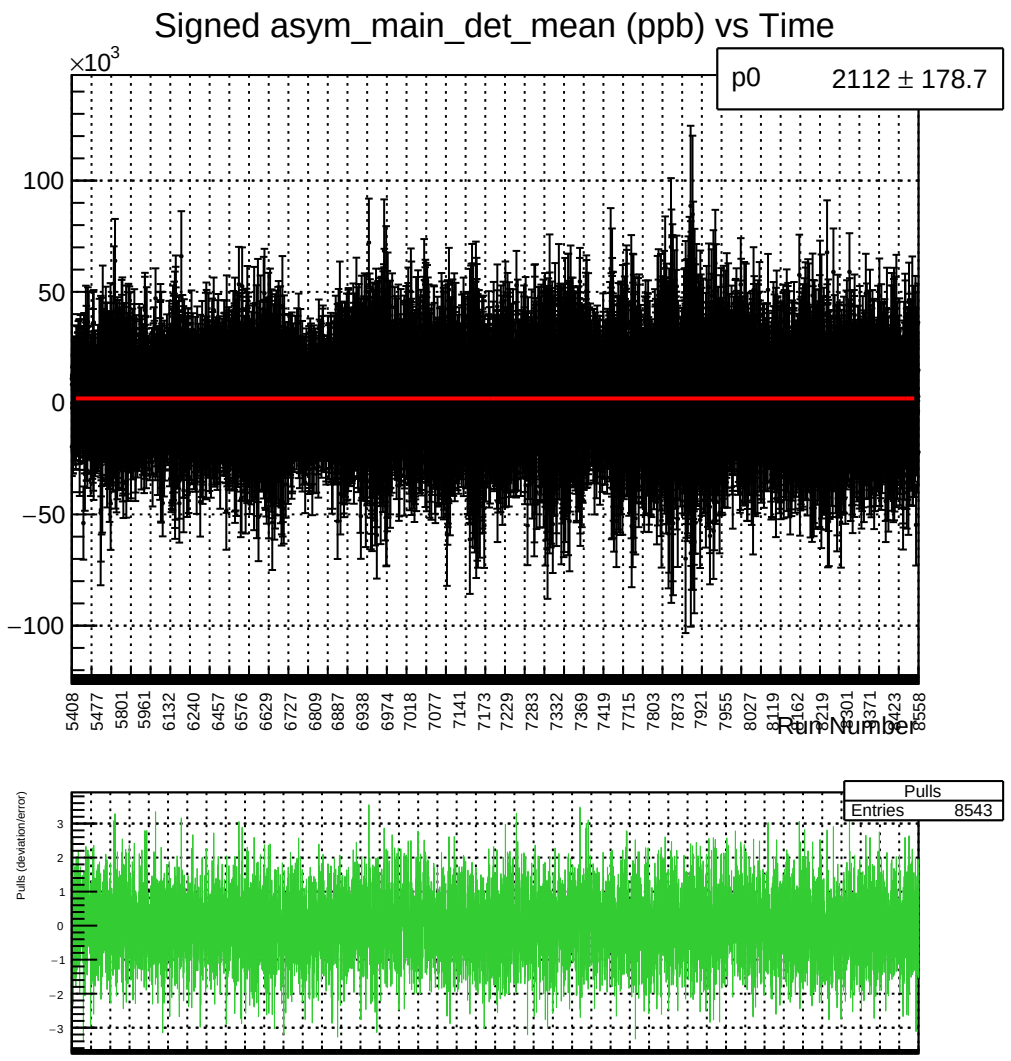
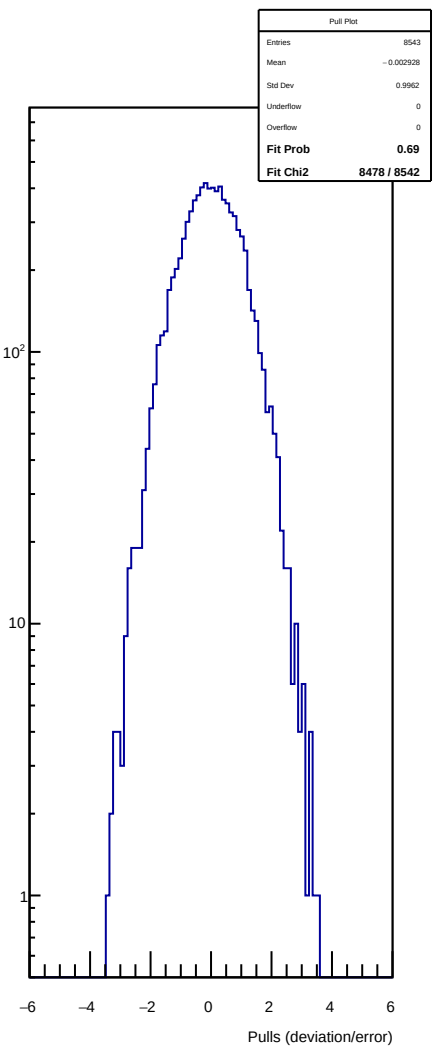
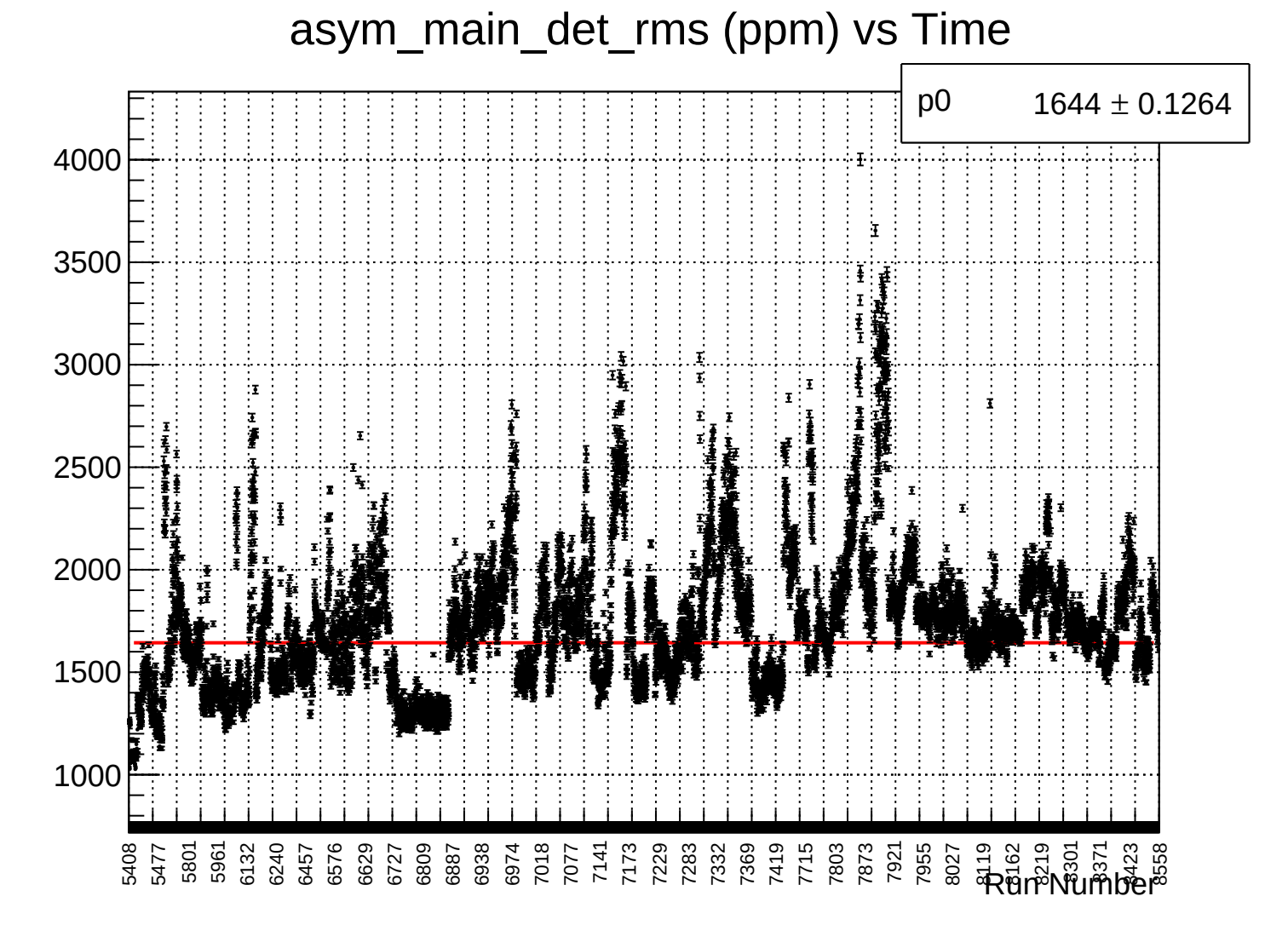
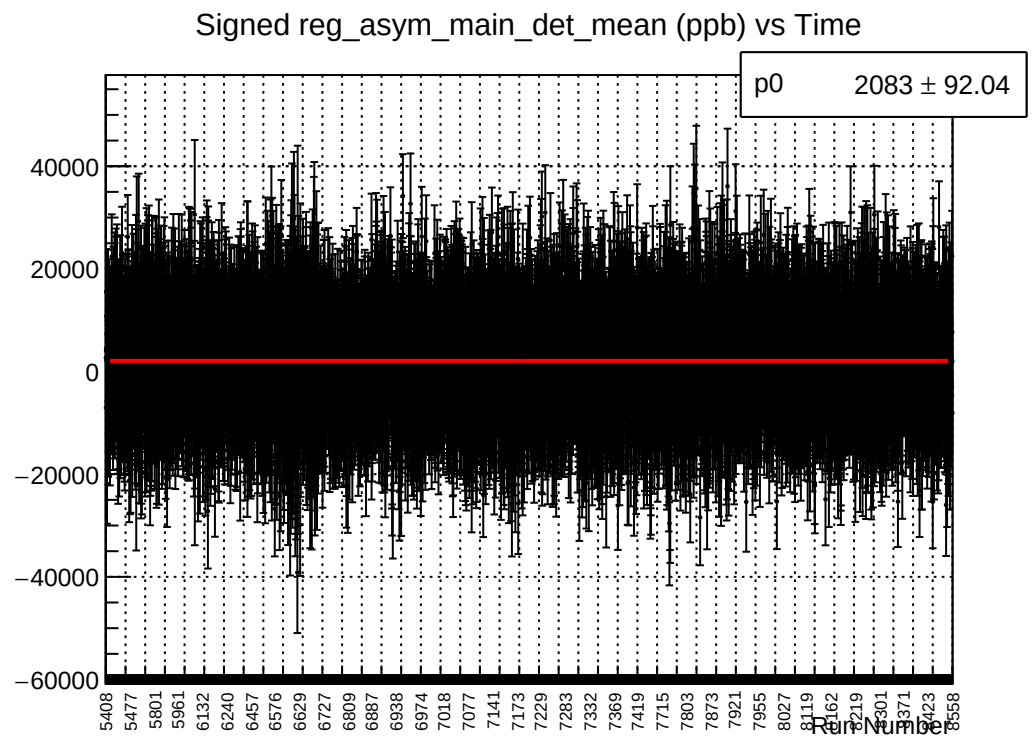
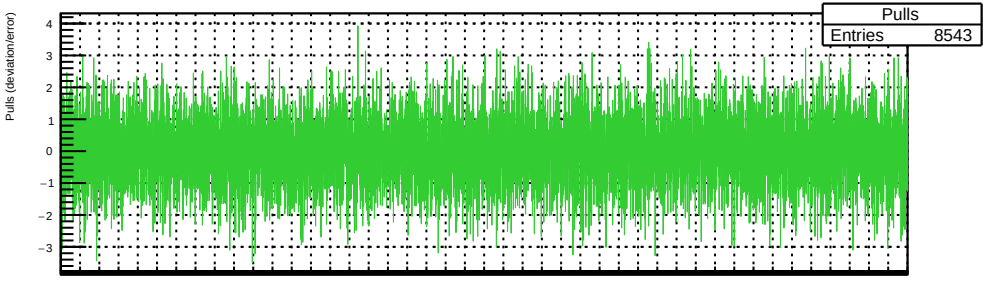
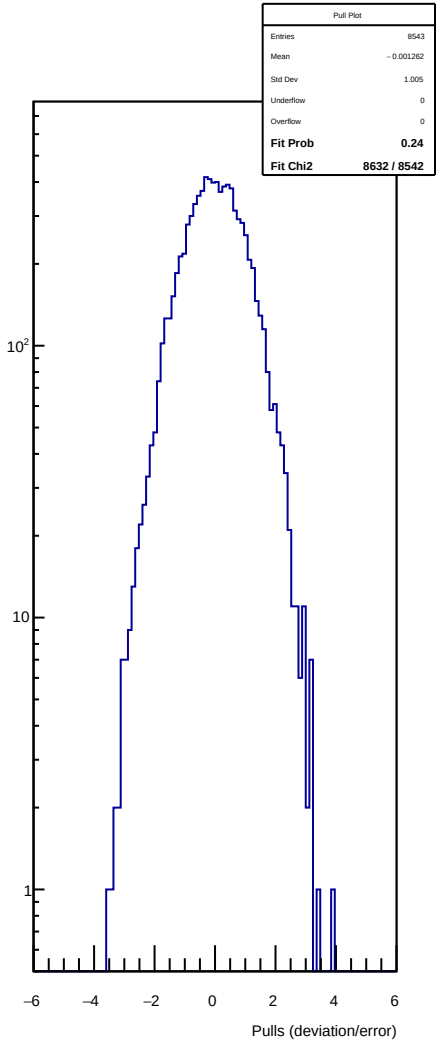

Signed asym_main_det_mean (ppb) vs Time
p0 2112 ± 178.7
×10^3
100
50
0
−50
−100
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number
Pulls
Entries 8543
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

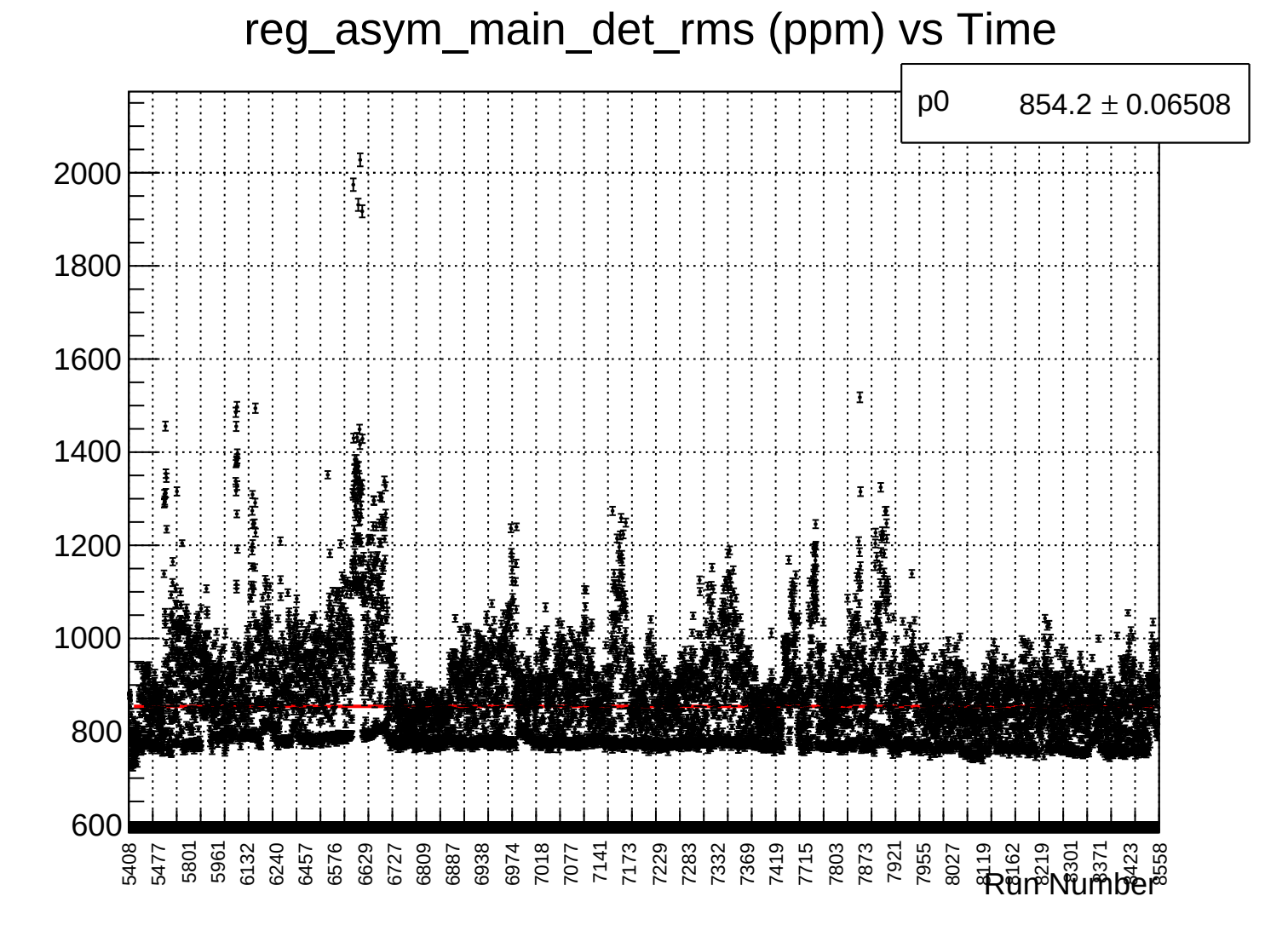

Pull Plot
Entries 8543
Mean −0.002928
Std Dev 0.9962
Underflow 0
Overflow 0
Fit Prob 0.69
Fit Chi2 8478 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

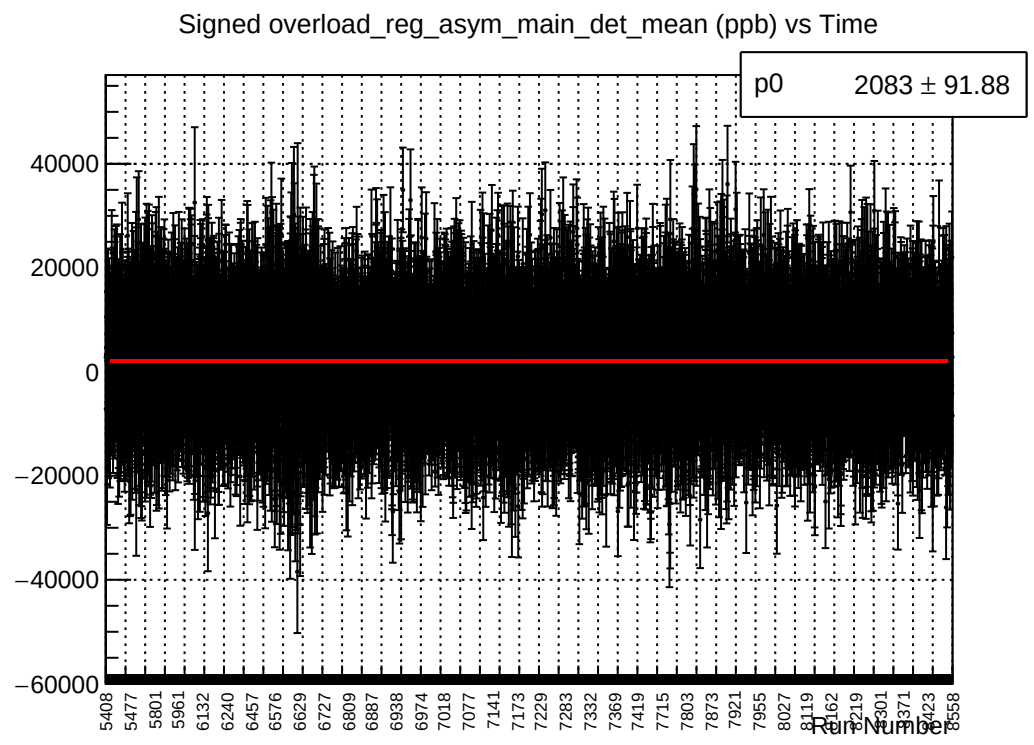

asym_main_det_rms (ppm) vs Time
p0
1644 ± 0.1264
4000
3500
3000
2500
2000
1500
1000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

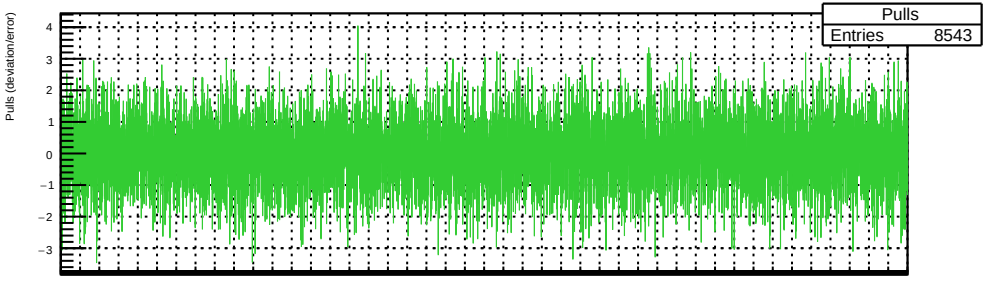

Signed reg_asym_main_det_mean (ppb) vs Time
p0 2083 ± 92.04
40000
20000
0
−20000
−40000
−60000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

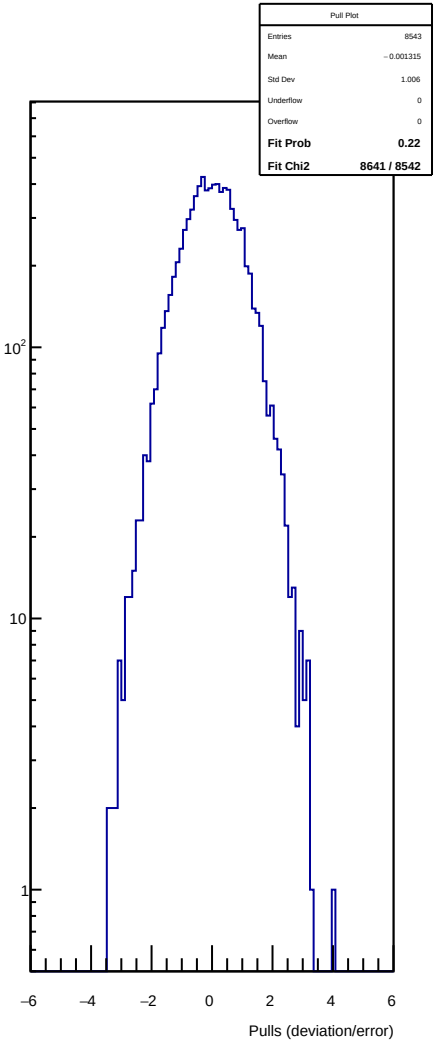

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

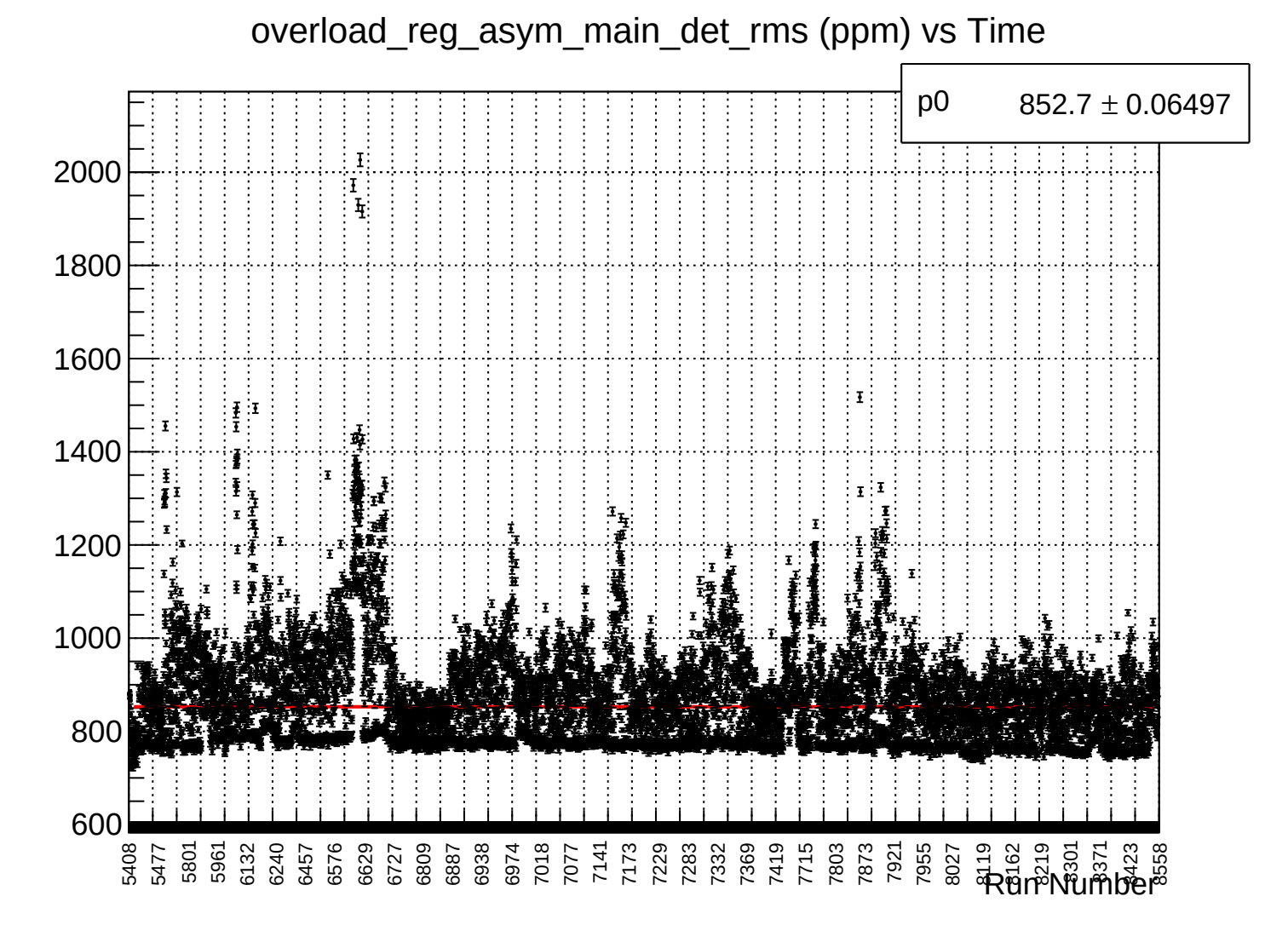

Pull Plot
Entries 8543
Mean −0.001262
Std Dev 1.005
Underflow 0
Overflow 0
Fit Prob 0.24
Fit Chi2 8632 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

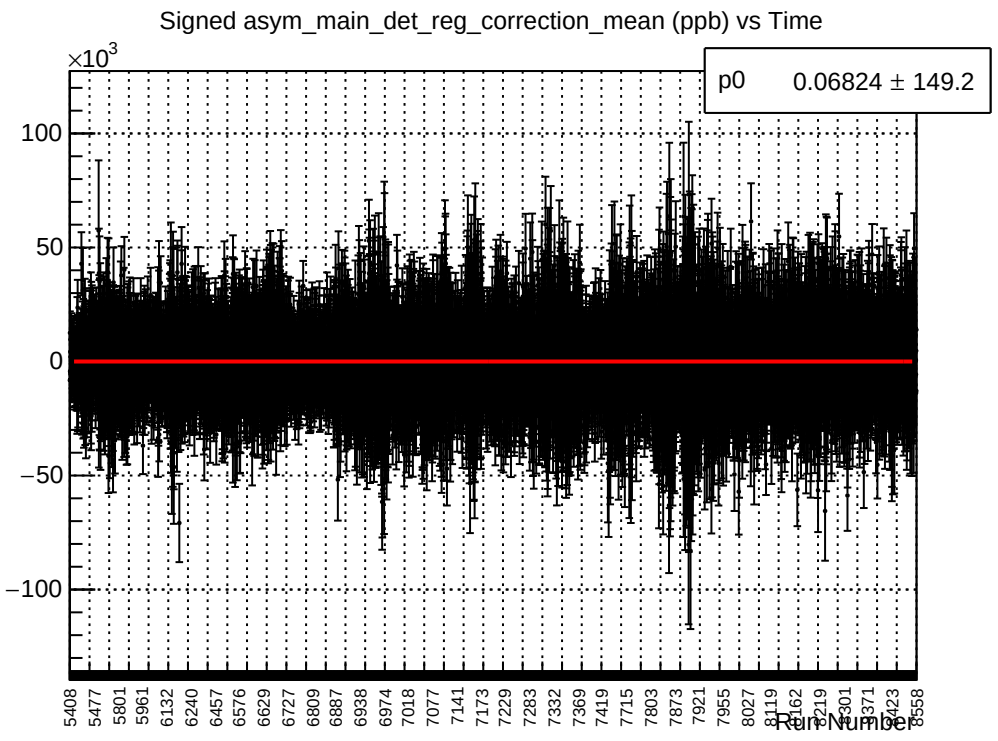

reg_asym_main_det_rms (ppm) vs Time
p0
854.2 ± 0.06508
2000
1800
1600
1400
1200
1000
800
600
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

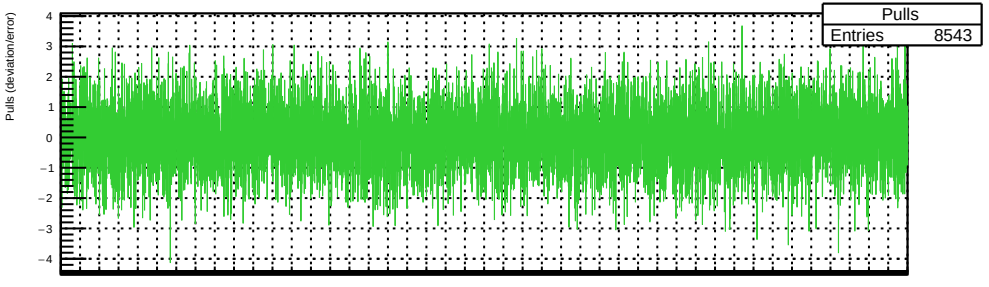

Signed overload_reg_asym_main_det_mean (ppb) vs Time
p0 2083 ± 91.88
40000
20000
0
−20000
−40000
−60000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

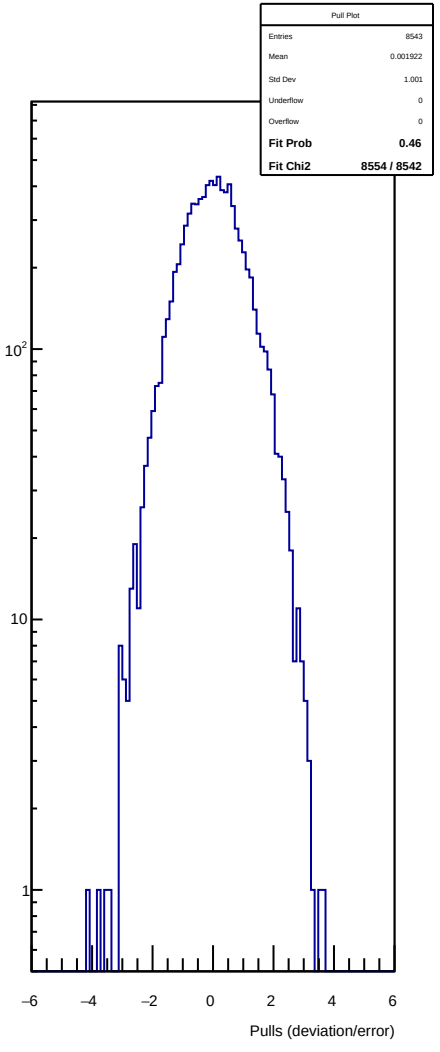

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

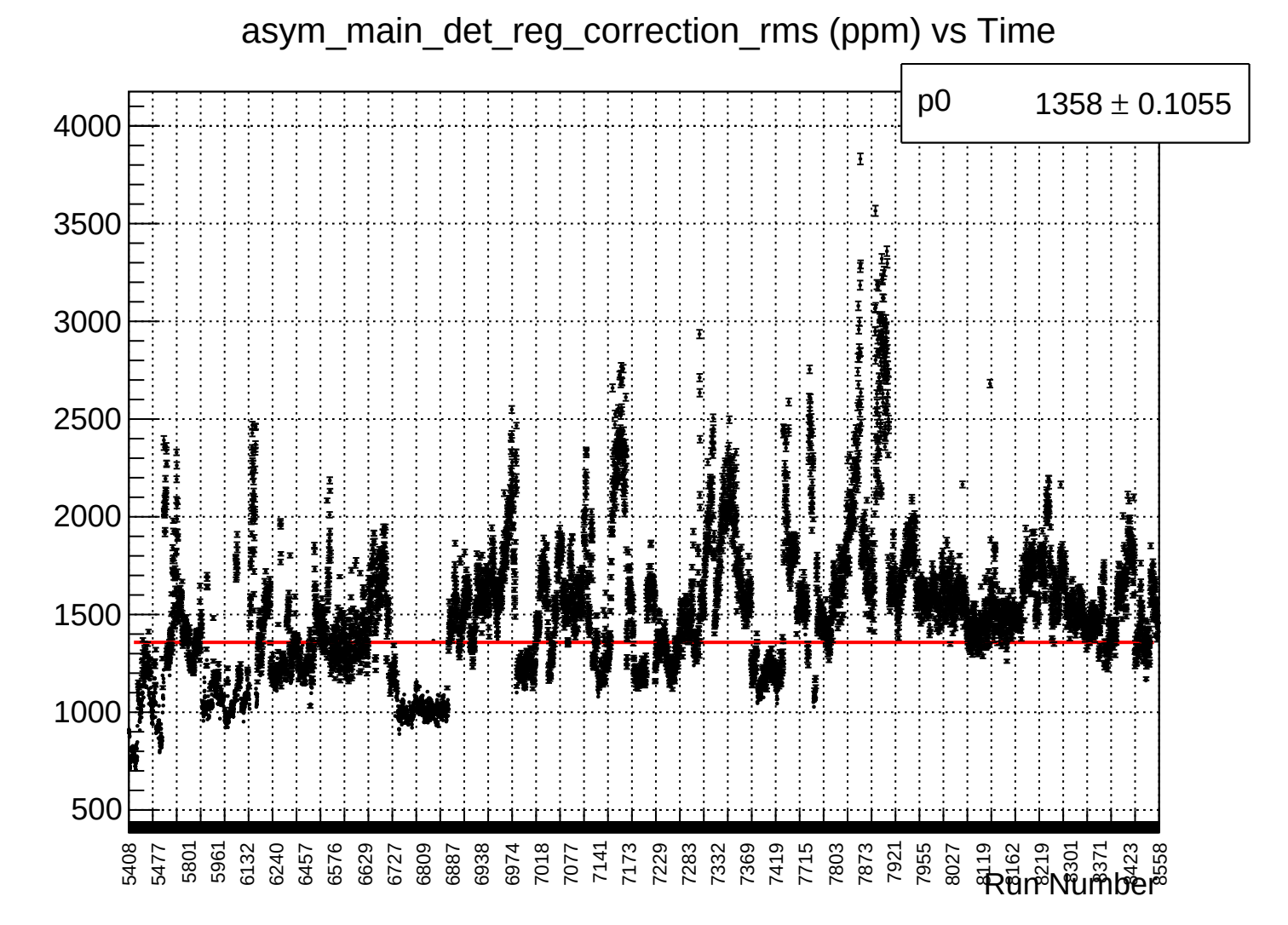

Pull Plot
Entries 8543
Mean −0.001315
Std Dev 1.006
Underflow 0
Overflow 0
Fit Prob 0.22
Fit Chi2 8641 / 8542
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

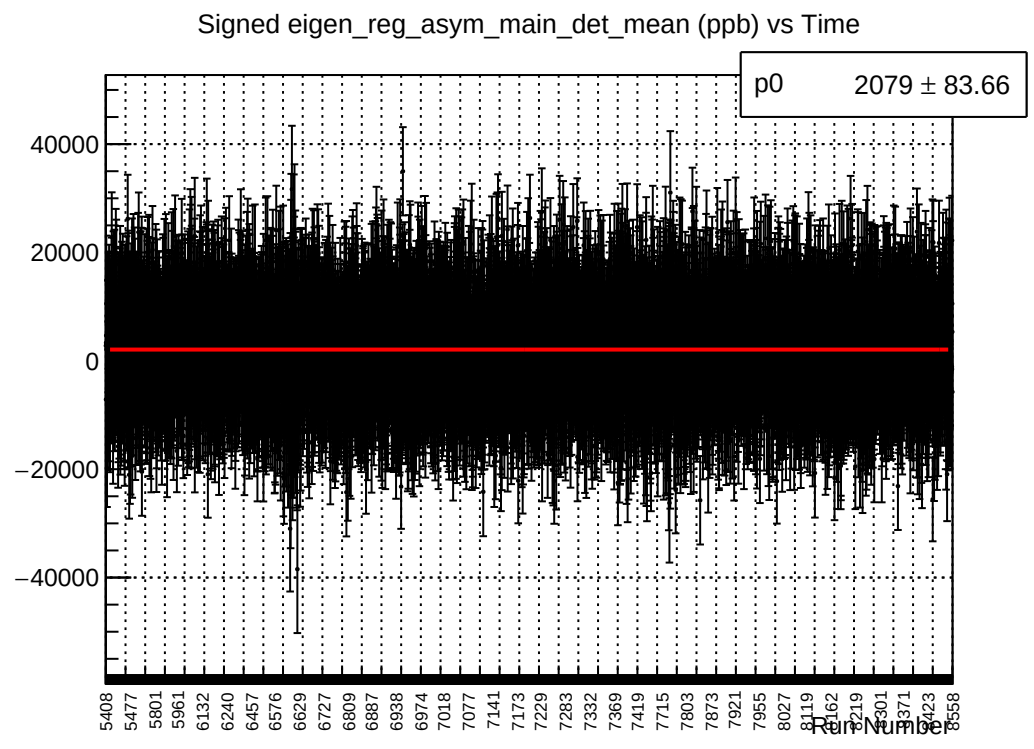

overload_reg_asym_main_det_rms (ppm) vs Time
p0 852.7 ± 0.06497
2000
1800
1600
1400
1200
1000
800
600
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

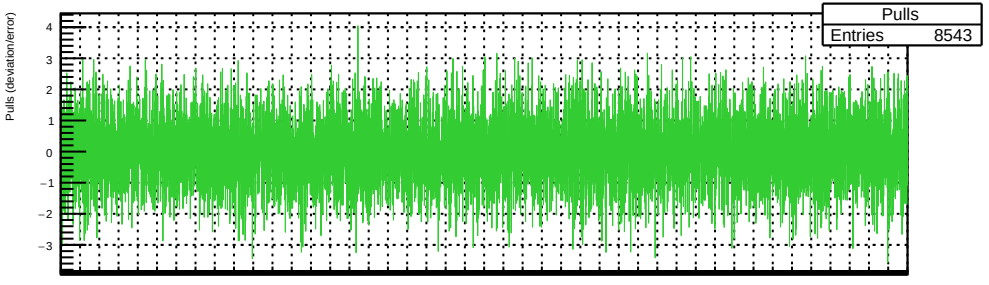

Signed asym_main_det_reg_correction_mean (ppb) vs Time
×10^3
p0 0.06824 ± 149.2
100
50
0
−50
−100
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

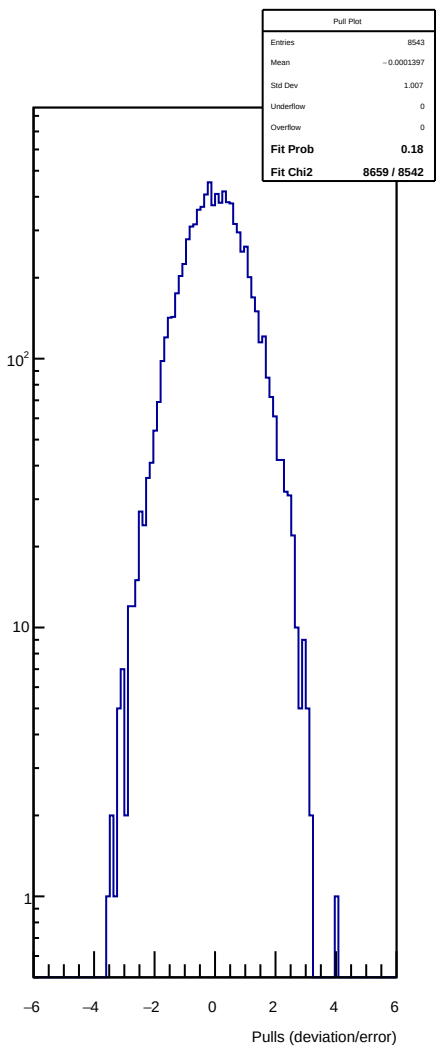

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

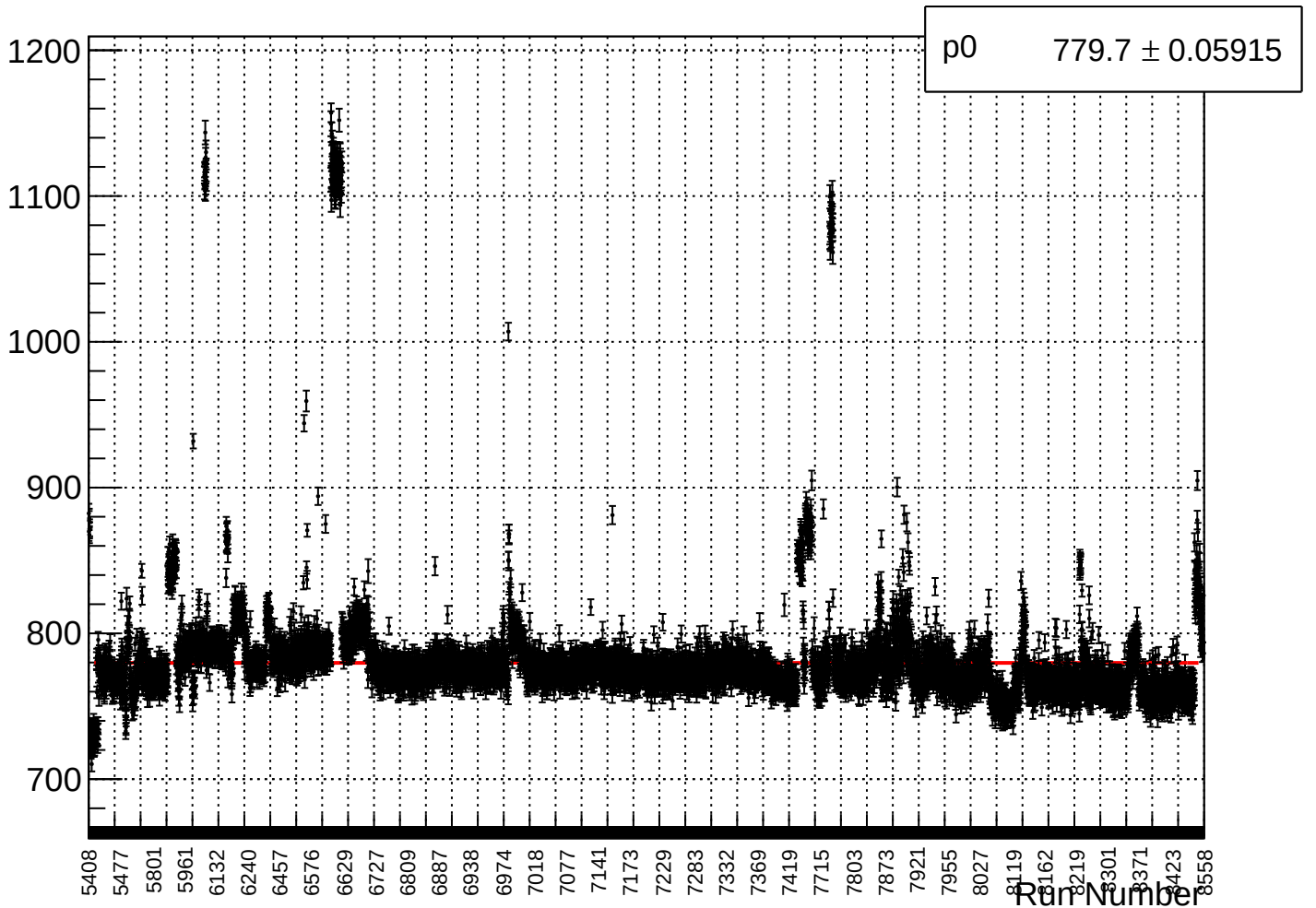

Pull Plot
Entries 8543
Mean 0.001922
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.46
Fit Chi2 8554 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

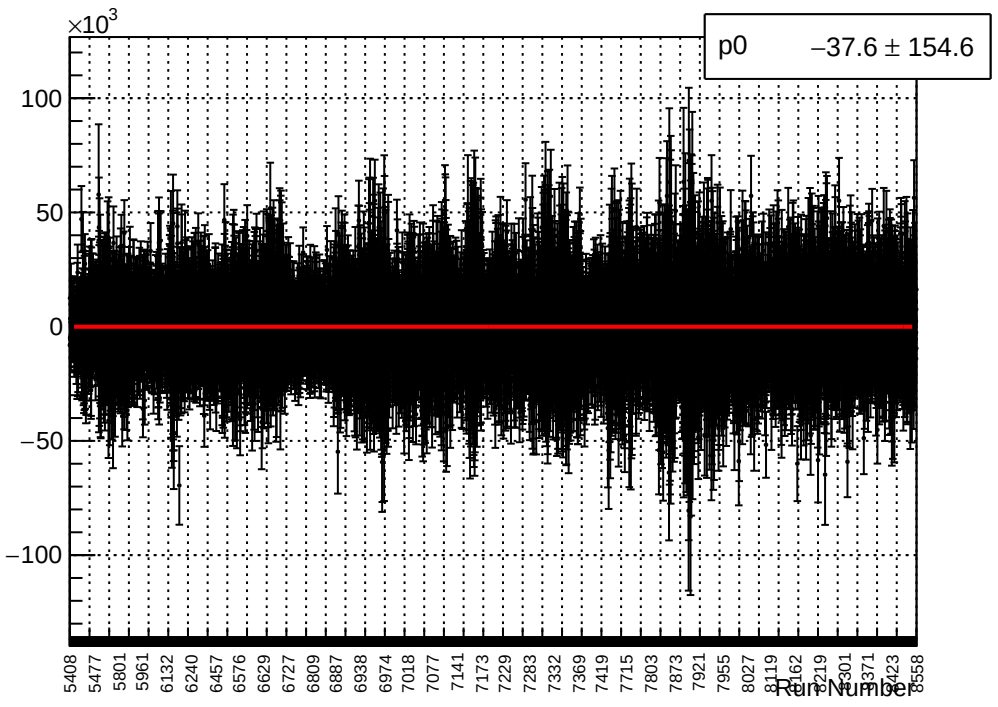

asym_main_det_reg_correction_rms (ppm) vs Time
p0 1358 ± 0.1055
4000
3500
3000
2500
2000
1500
1000
500
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

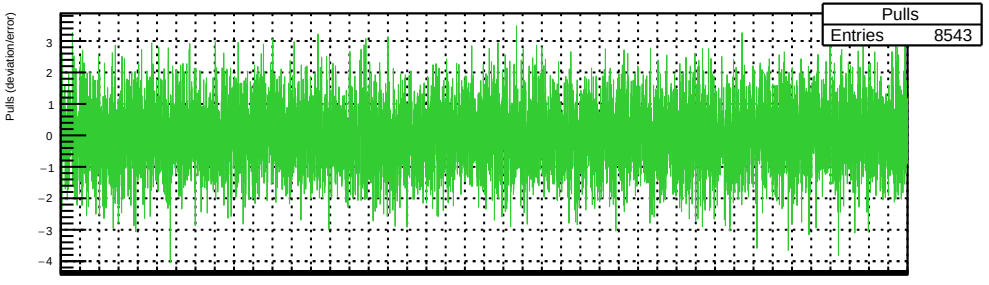

Signed eigen_reg_asym_main_det_mean (ppb) vs Time
p0 2079 ± 83.66
40000
20000
0
−20000
−40000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

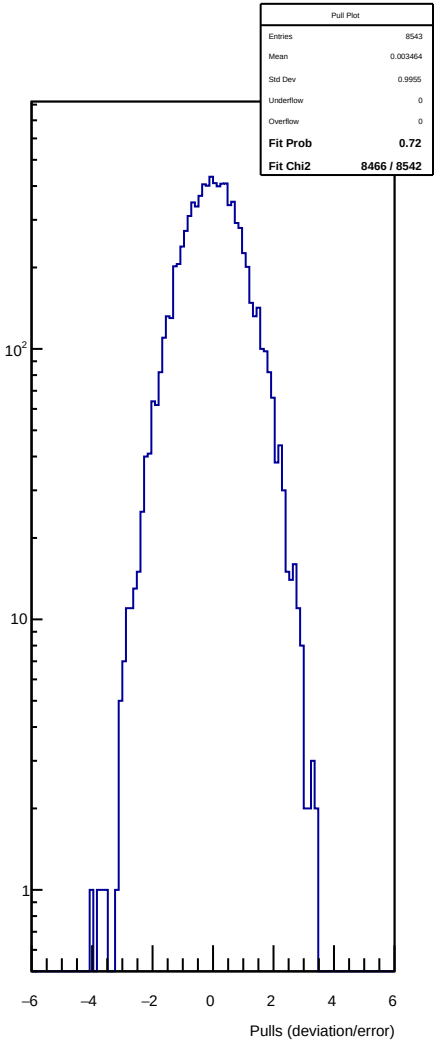

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

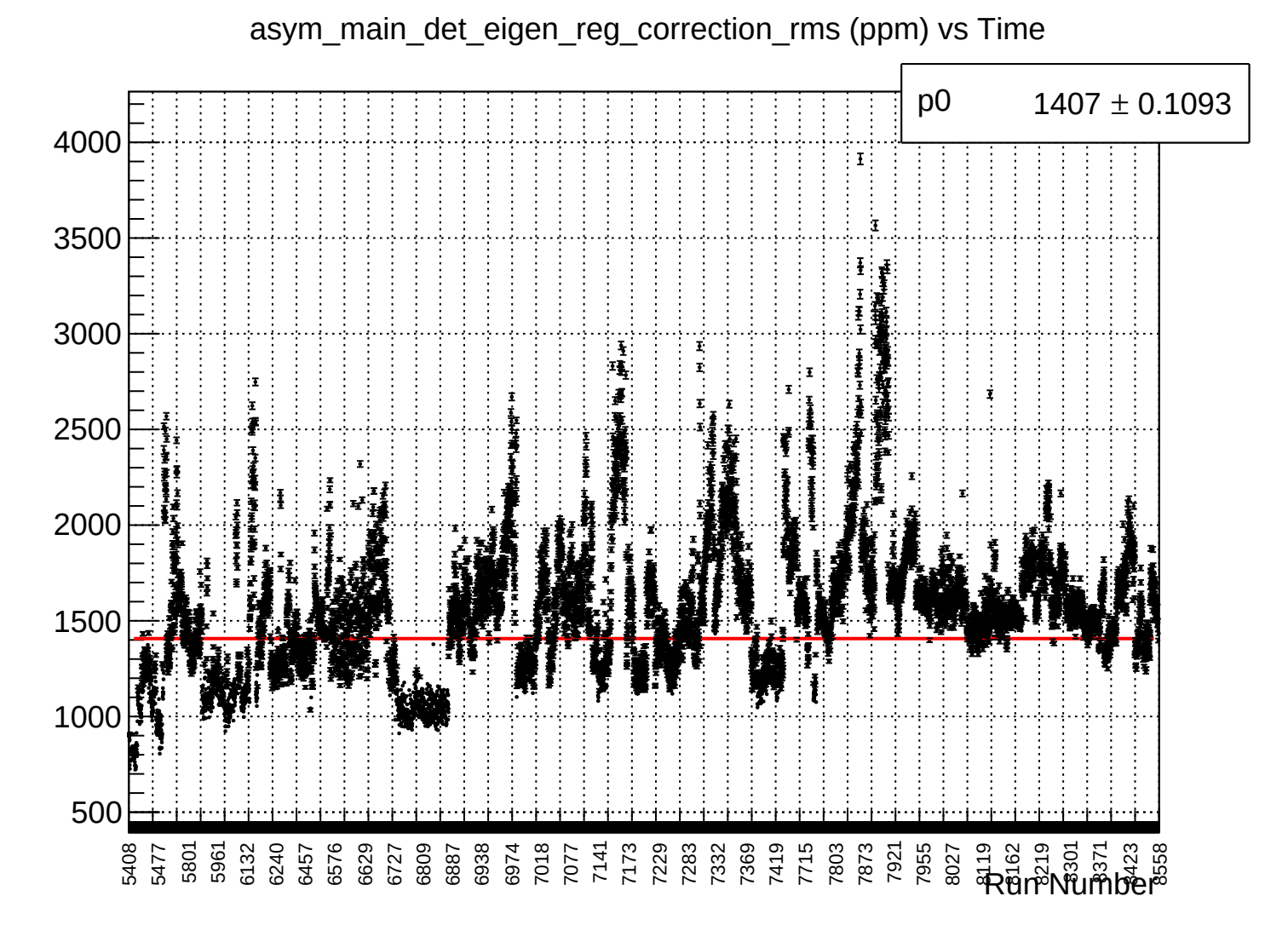

Pull Plot
Entries 8543
Mean −0.0001397
Std Dev 1.007
Underflow 0
Overflow 0
Fit Prob 0.18
Fit Chi2 8659 / 8542
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

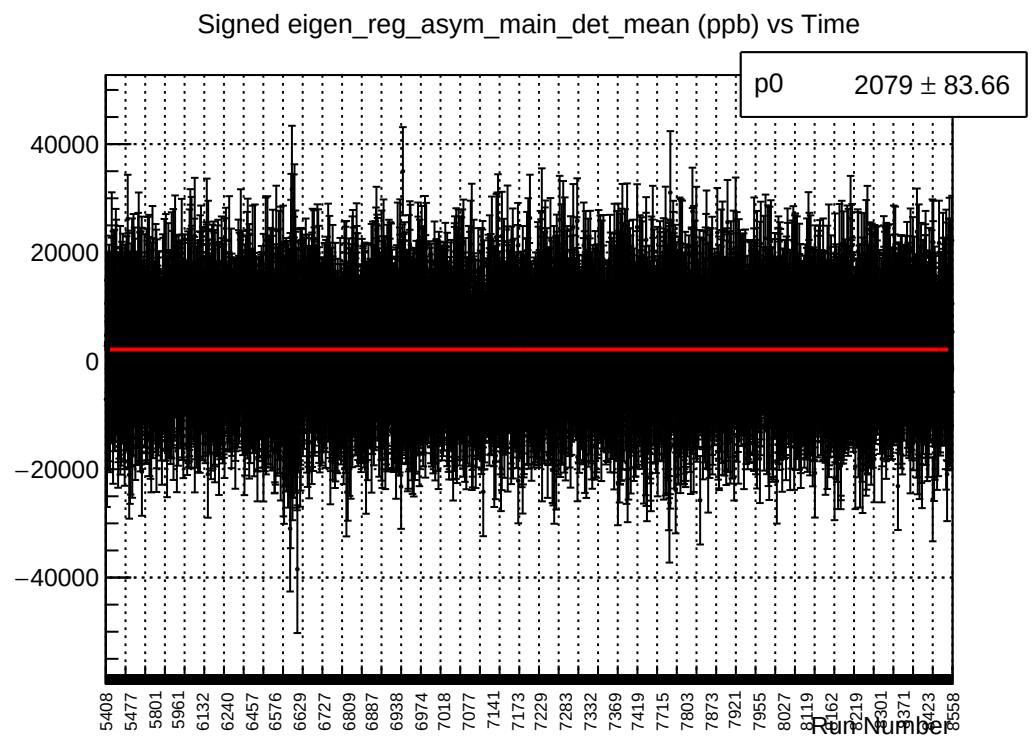

eigen_reg_asym_main_det_rms (ppm) vs Time
p0 779.7 ± 0.05915
1200
1100
1000
900
800
700
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

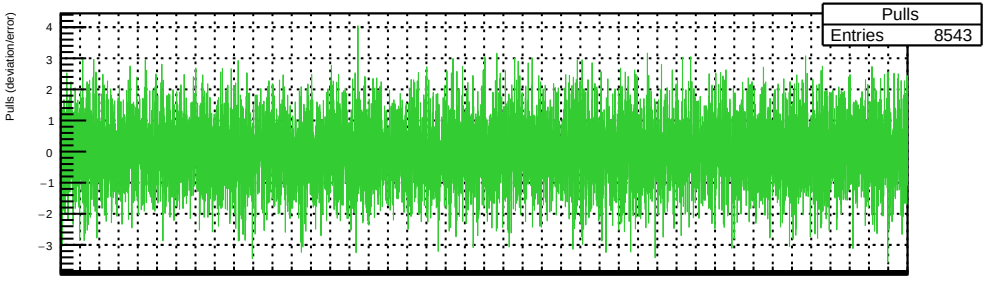

Signed asym_main_det_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 −37.6 ± 154.6
100
50
0
−50
−100
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

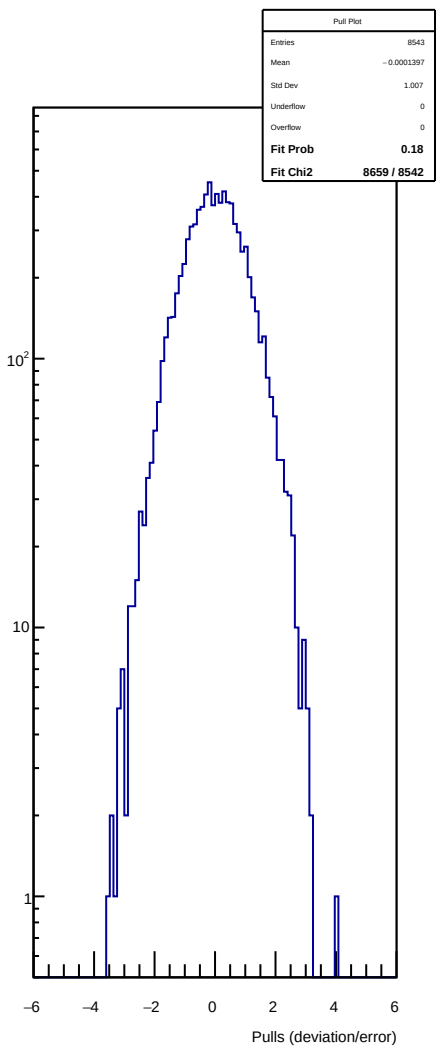

Pulls
Entries 8543
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

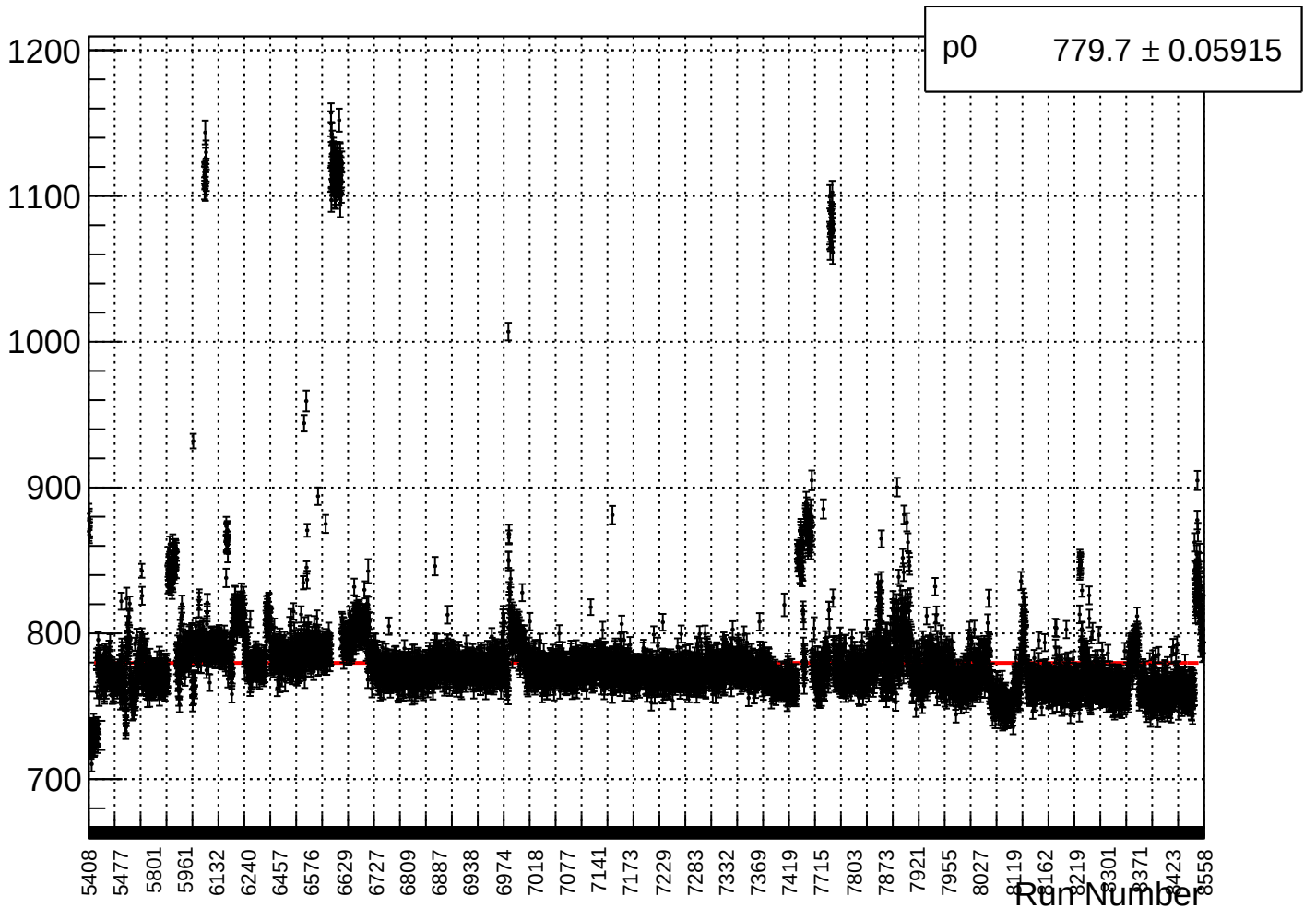

Pull Plot
Entries 8543
Mean 0.003464
Std Dev 0.9955
Underflow 0
Overflow 0
Fit Prob 0.72
Fit Chi2 8466 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

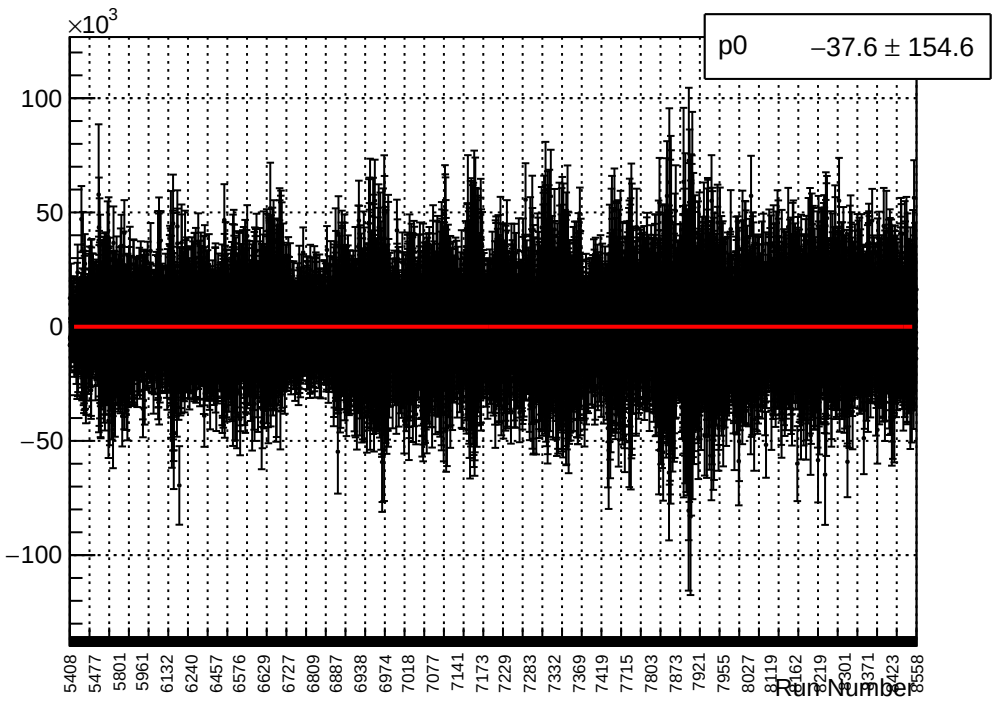

asym_main_det_eigen_reg_correction_rms (ppm) vs Time
p0 1407 ± 0.1093
4000
3500
3000
2500
2000
1500
1000
500
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

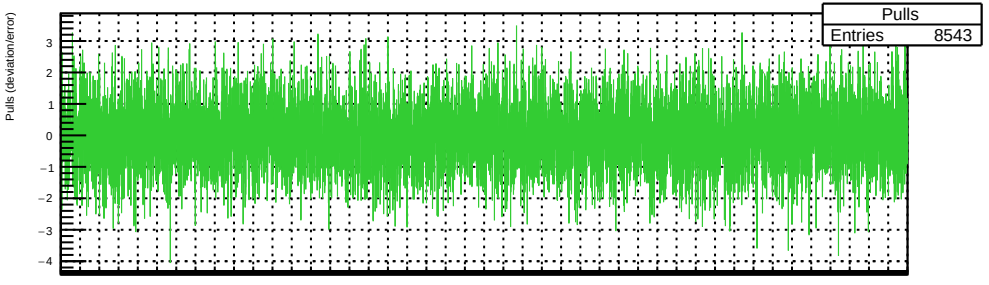

Signed eigen_reg_asym_main_det_mean (ppb) vs Time
p0 2079 ± 83.66
40000
20000
0
−20000
−40000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

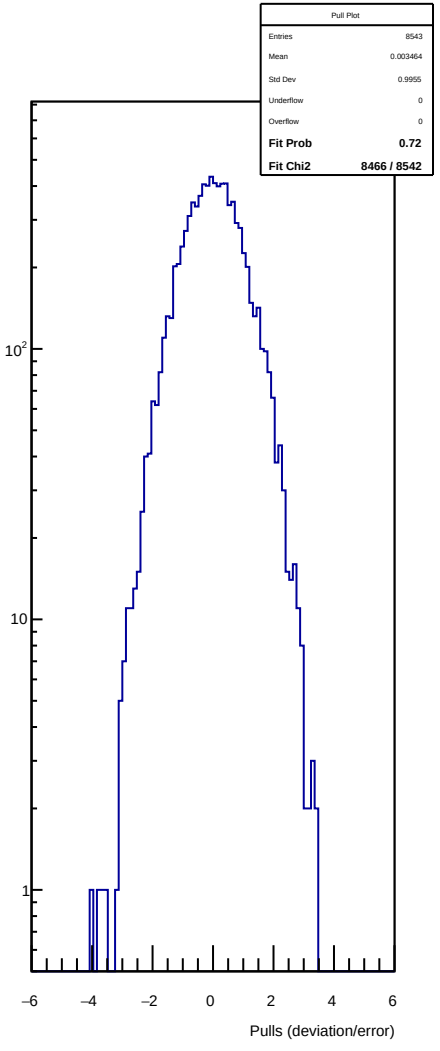

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

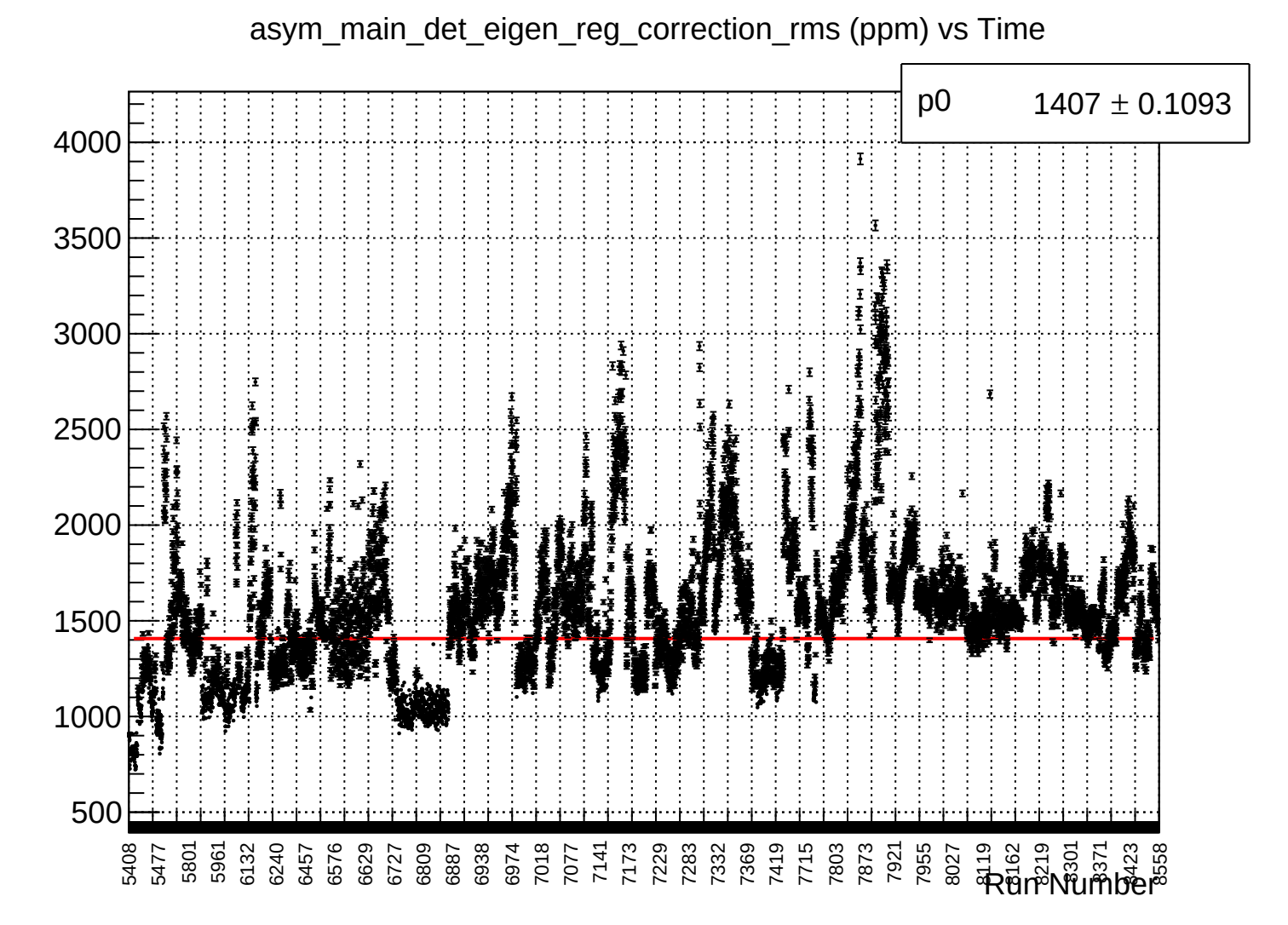

Pull Plot
Entries 8543
Mean −0.0001397
Std Dev 1.007
Underflow 0
Overflow 0
Fit Prob 0.18
Fit Chi2 8659 / 8542
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

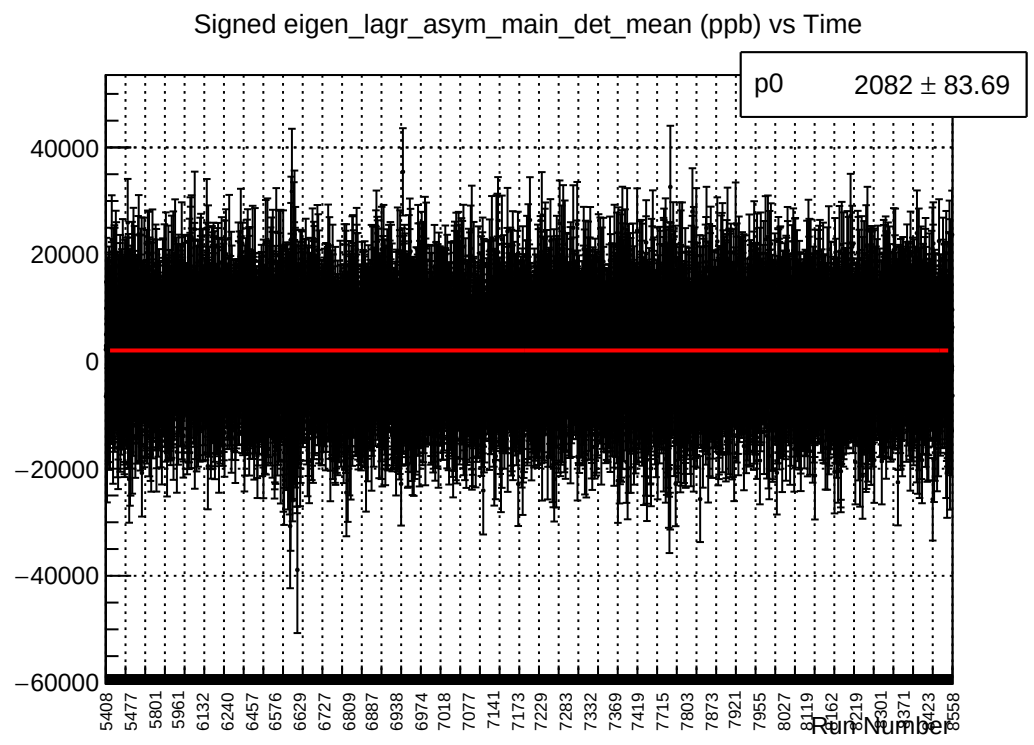

eigen_reg_asym_main_det_rms (ppm) vs Time
p0 779.7 ± 0.05915
1200
1100
1000
900
800
700
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

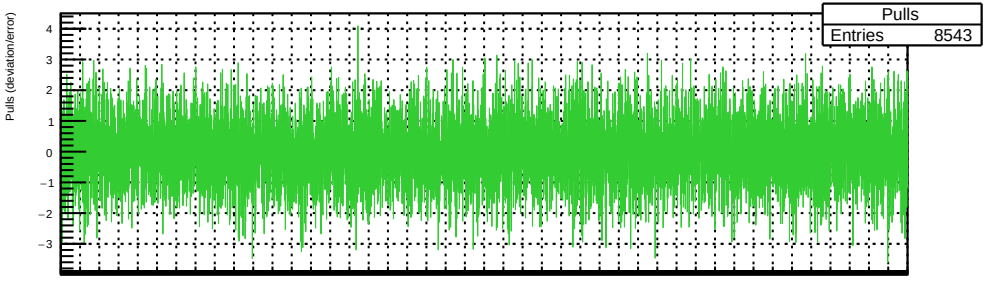

Signed asym_main_det_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 −37.6 ± 154.6
100
50
0
−50
−100
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

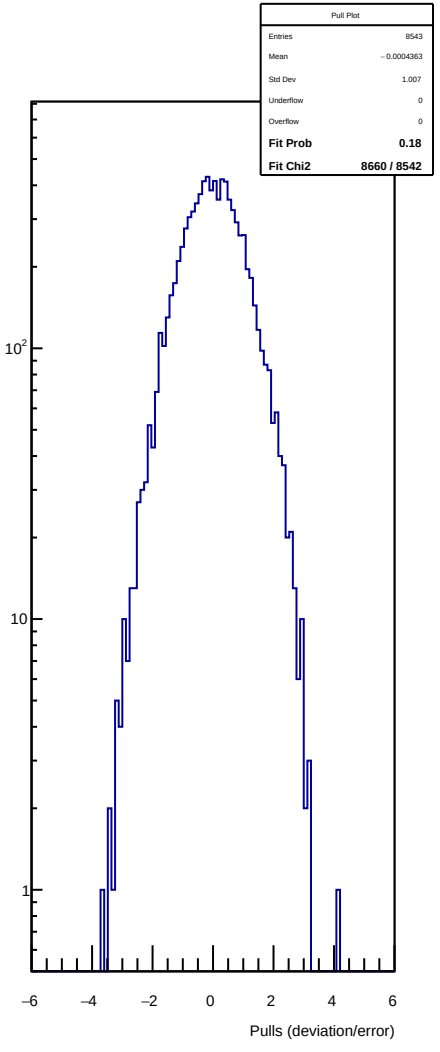

Pulls
Entries 8543
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

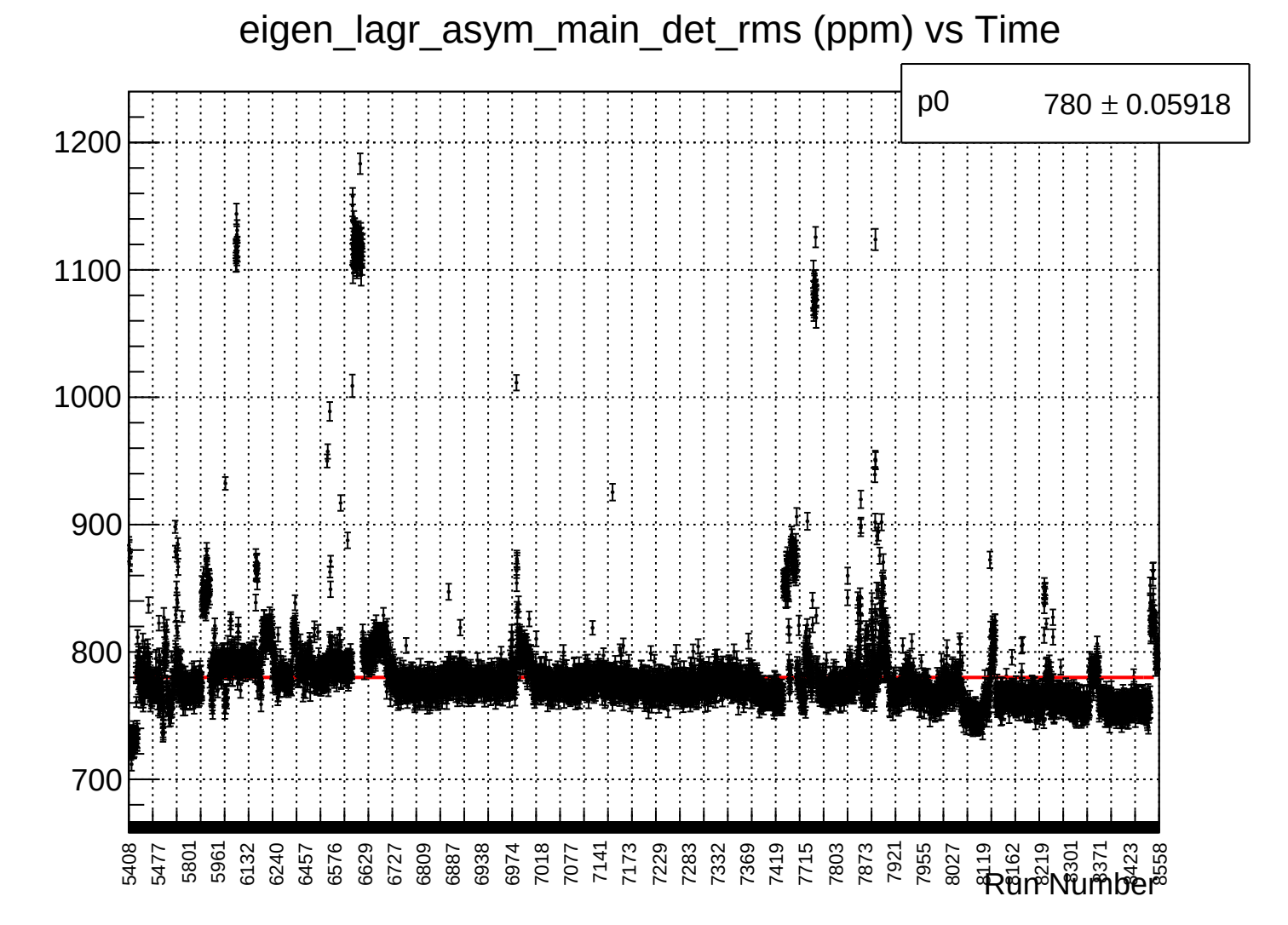

Pull Plot
Entries 8543
Mean 0.003464
Std Dev 0.9955
Underflow 0
Overflow 0
Fit Prob 0.72
Fit Chi2 8466 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

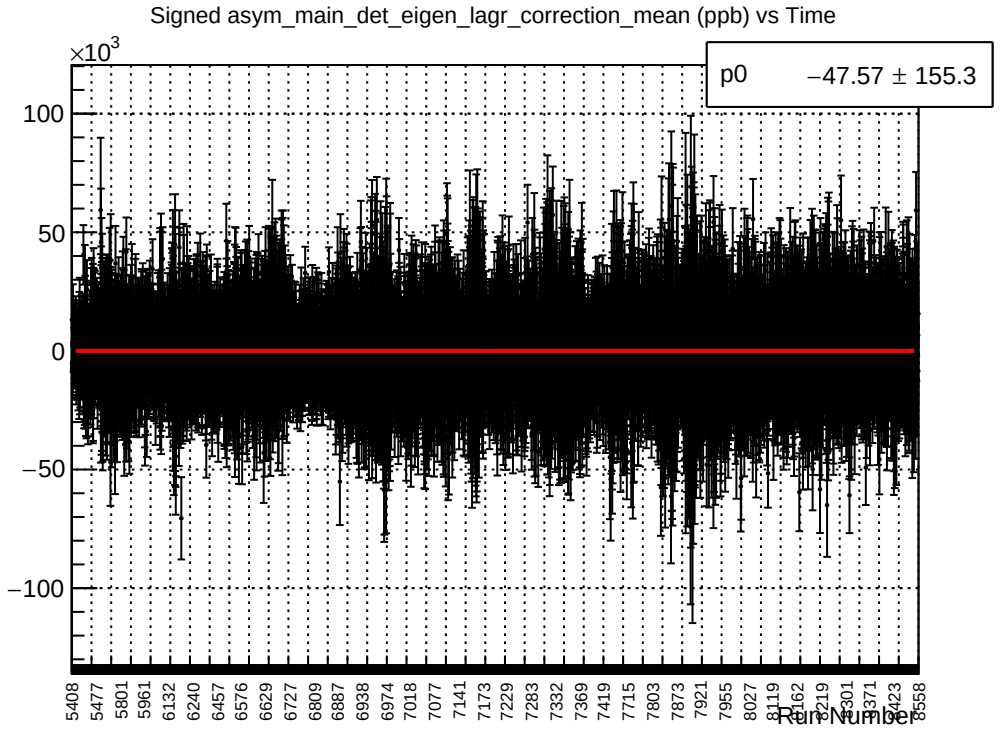

asym_main_det_eigen_reg_correction_rms (ppm) vs Time
p0 1407 ± 0.1093
4000
3500
3000
2500
2000
1500
1000
500
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

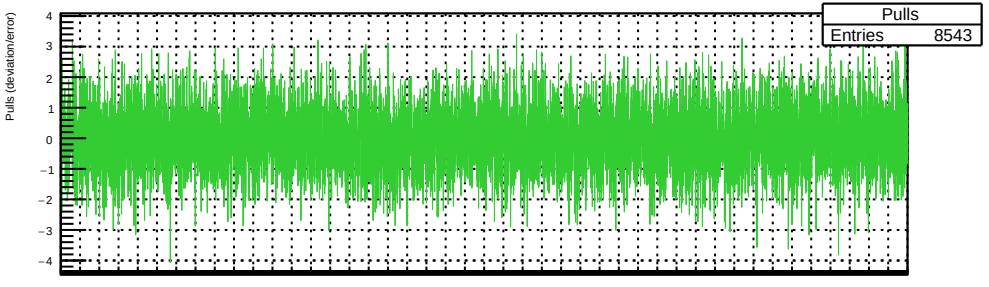

Signed eigen_lagr_asym_main_det_mean (ppb) vs Time
p0 2082 ± 83.69
40000
20000
0
−20000
−40000
−60000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

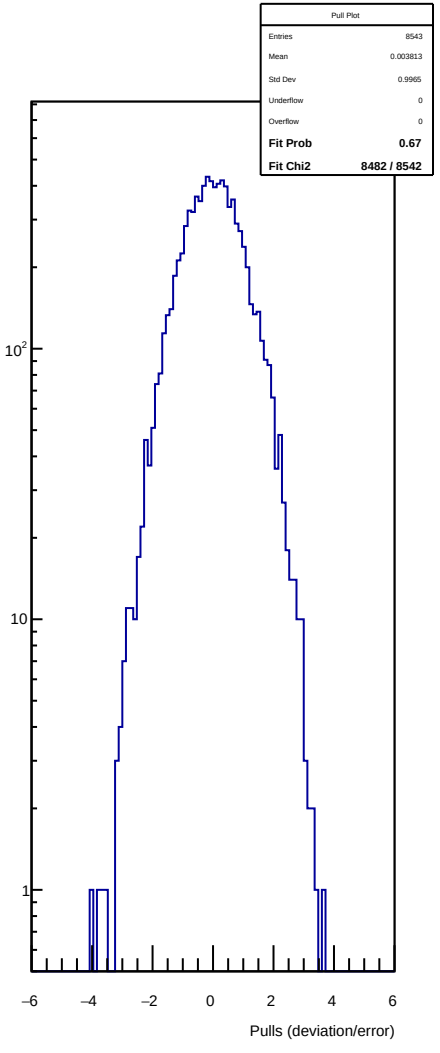

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

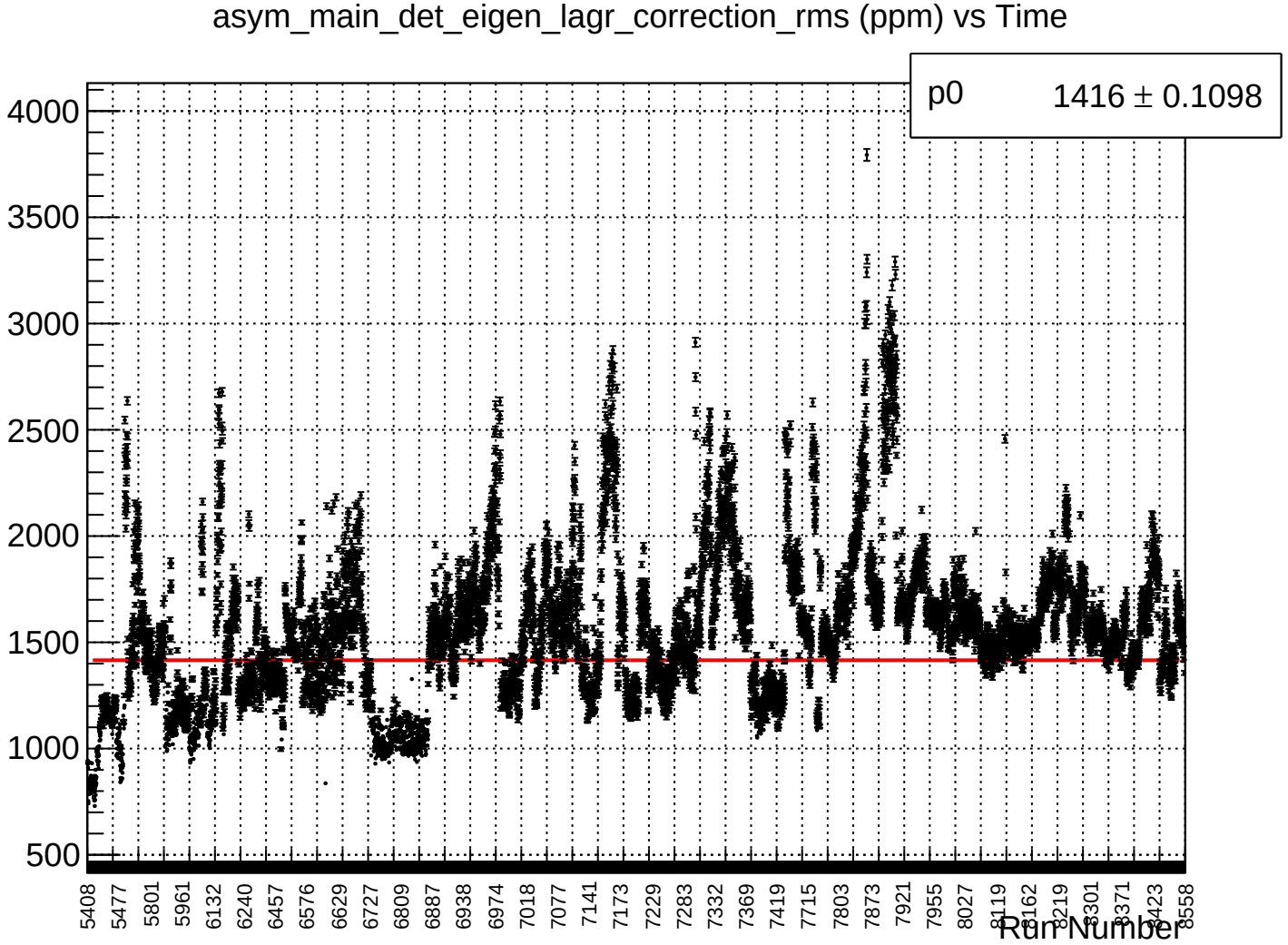

Pull Plot
Entries 8543
Mean −0.0004363
Std Dev 1.007
Underflow 0
Overflow 0
Fit Prob 0.18
Fit Chi2 8660 / 8542
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

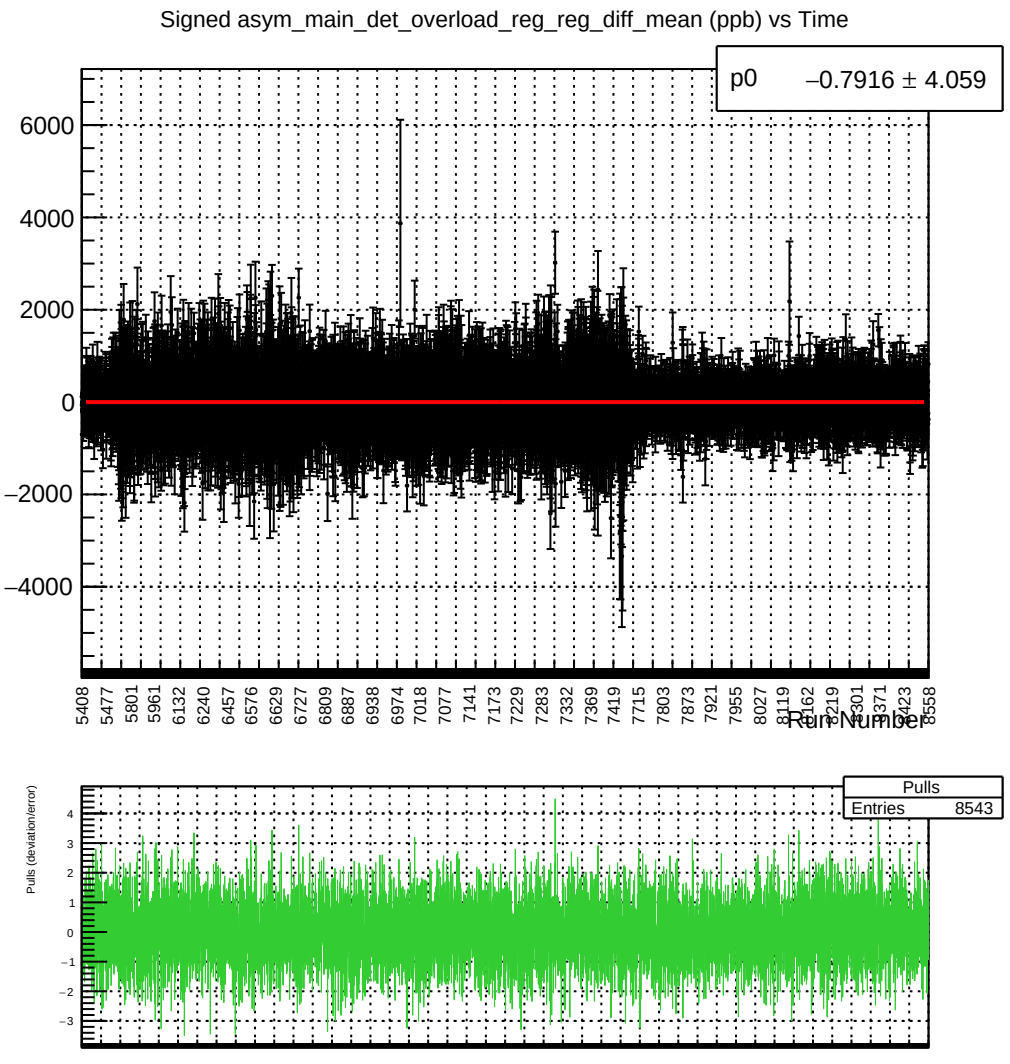

eigen_lagr_asym_main_det_rms (ppm) vs Time
p0
780 ± 0.05918
1200
1100
1000
900
800
700
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

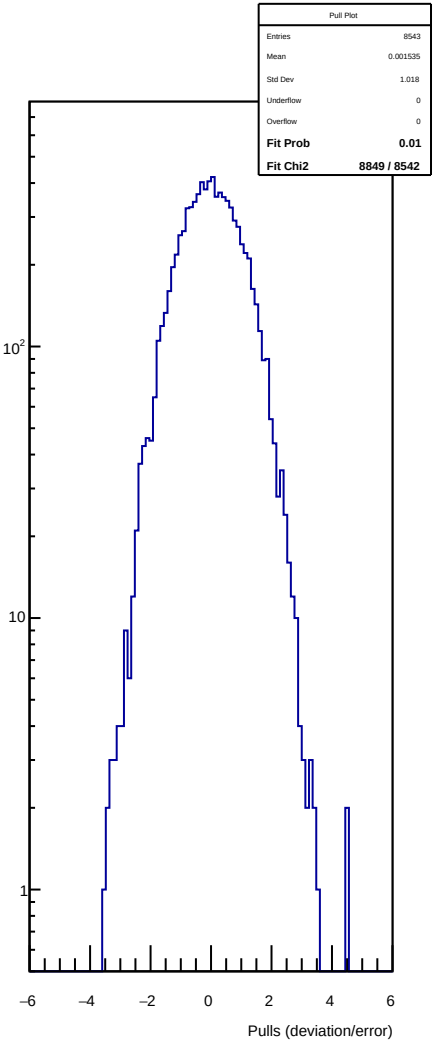

Signed asym_main_det_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 −47.57 ± 155.3
100
50
0
−50
−100
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

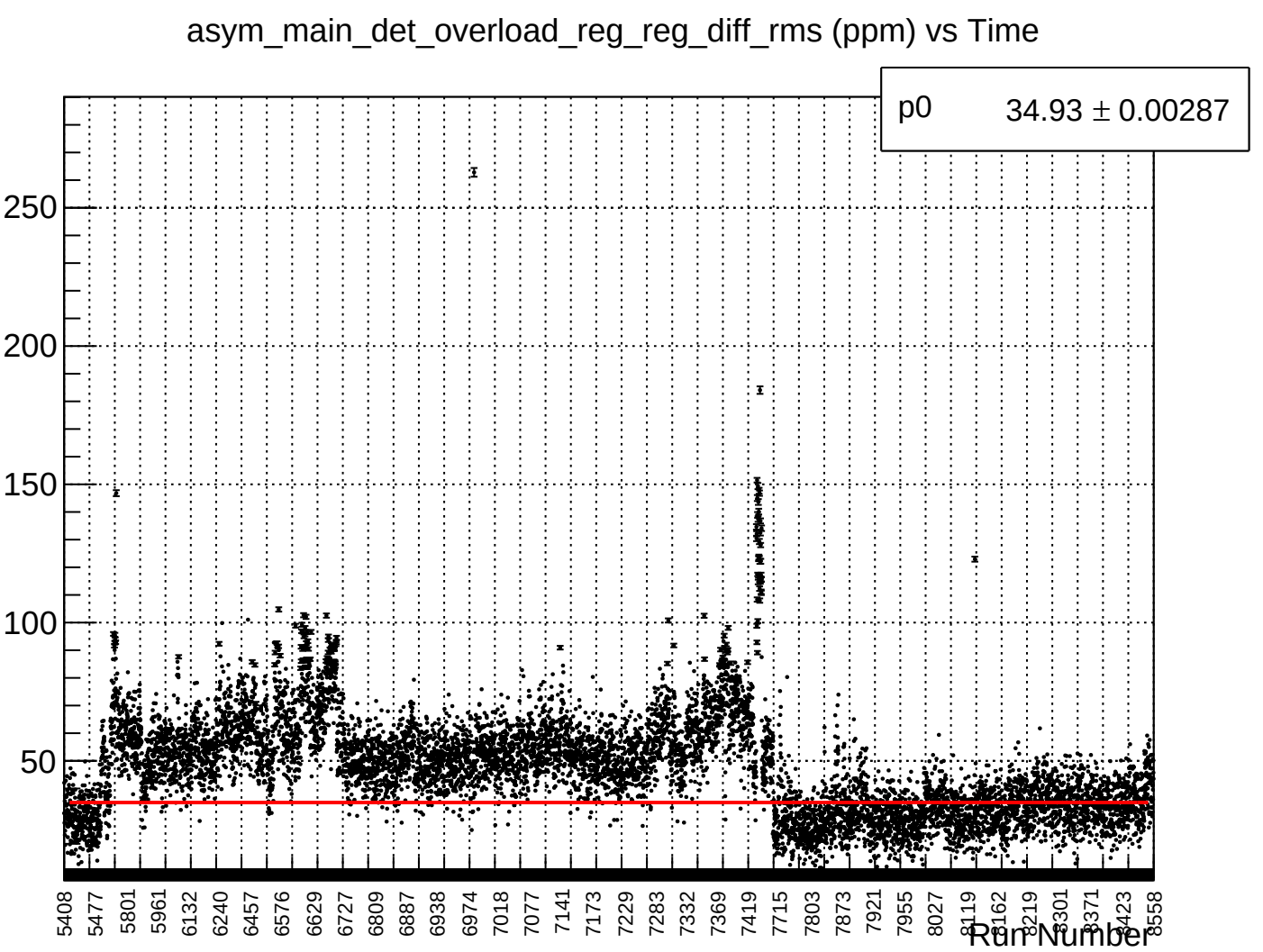

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

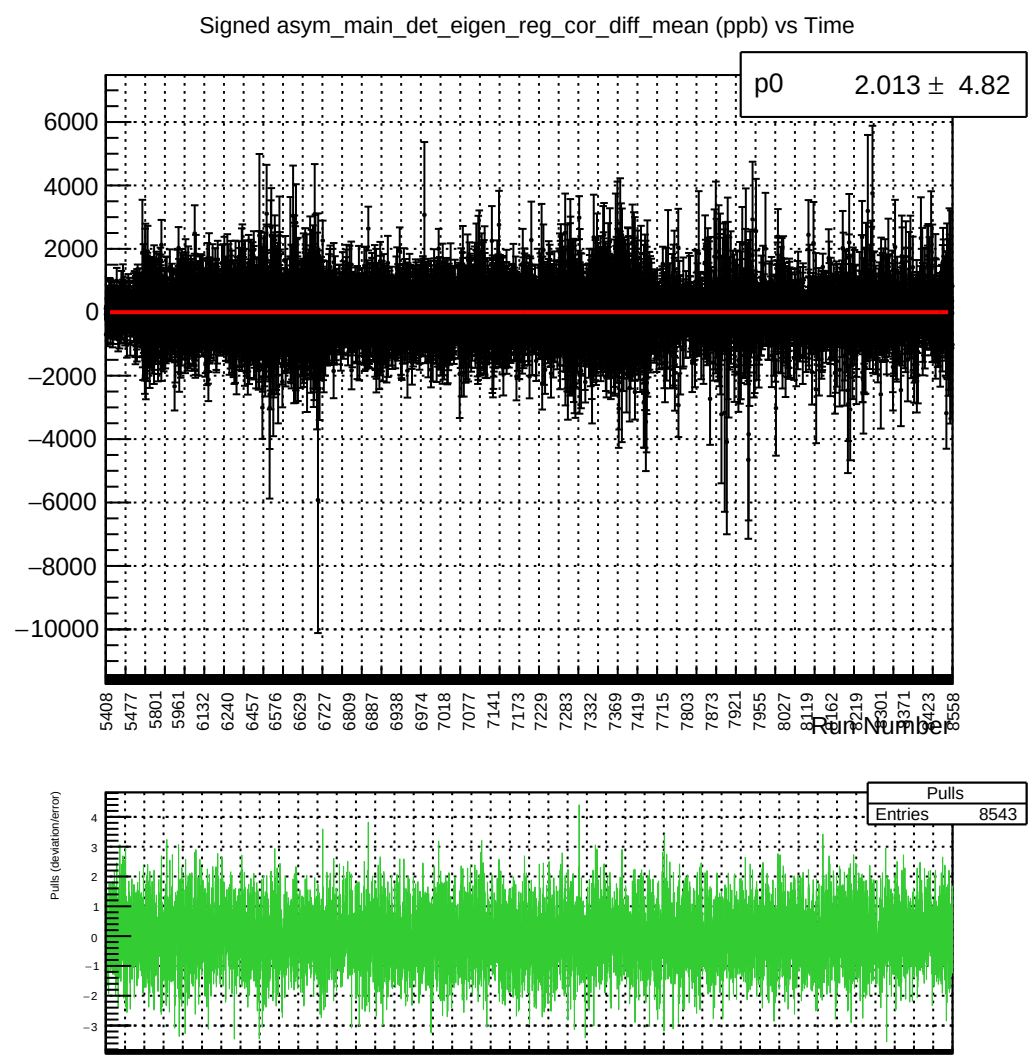

Pull Plot
Entries 8543
Mean 0.003813
Std Dev 0.9965
Underflow 0
Overflow 0
Fit Prob 0.67
Fit Chi2 8482 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

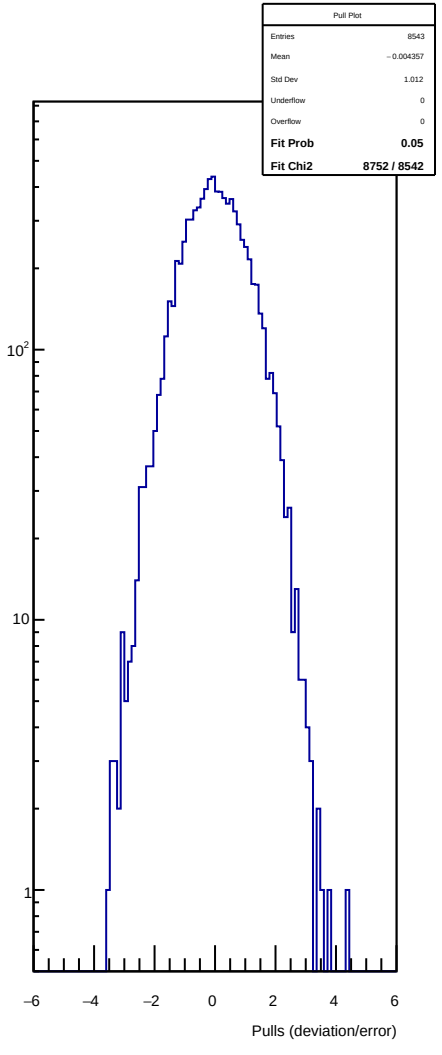

asym_main_det_eigen_lagr_correction_rms (ppm) vs Time
p0 1416 ± 0.1098
4000
3500
3000
2500
2000
1500
1000
500
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

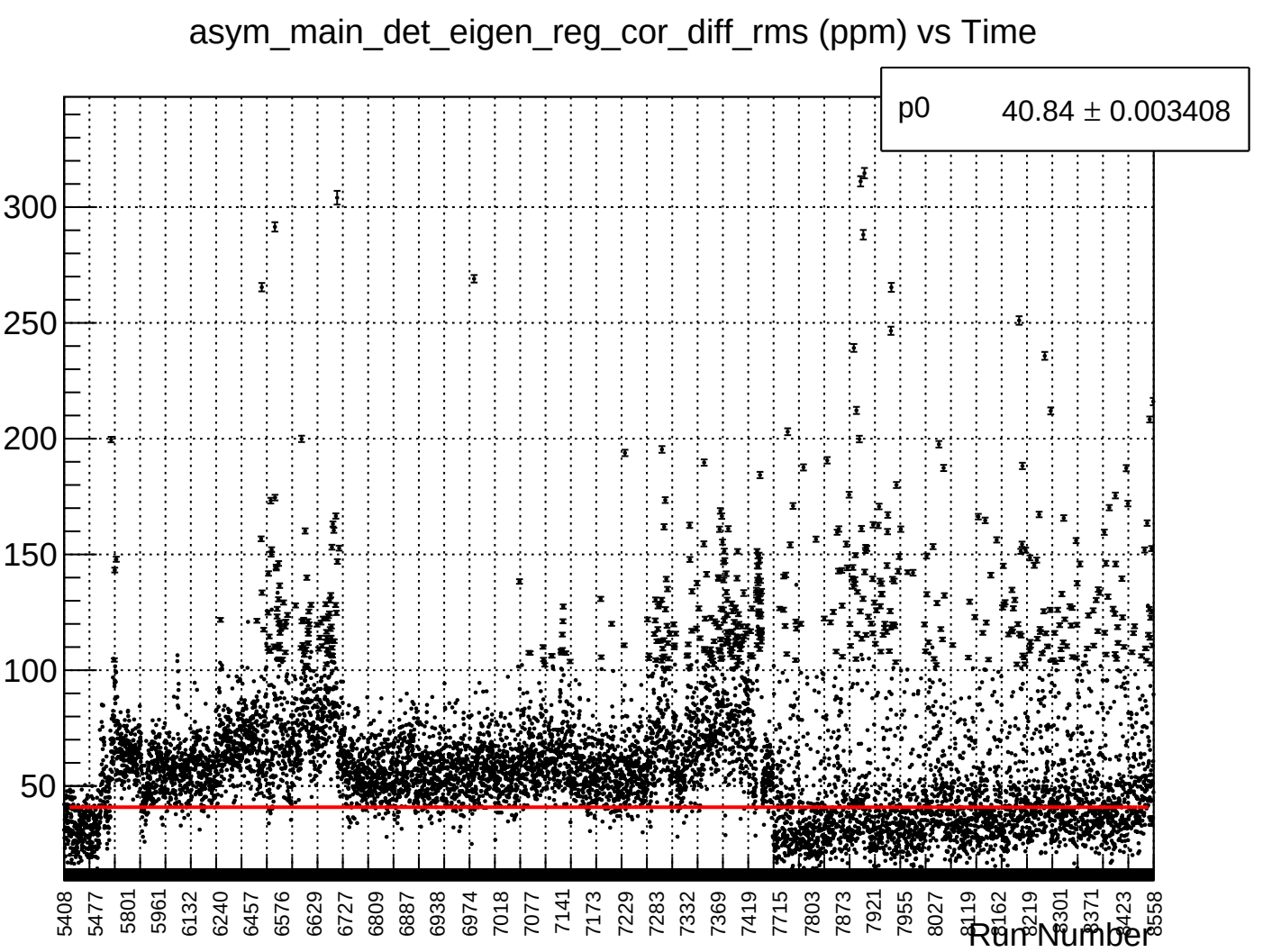

Signed asym_main_det_overload_reg_reg_diff_mean (ppb) vs Time
p0 −0.7916 ± 4.059
6000
4000
2000
0
−2000
−4000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number
Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

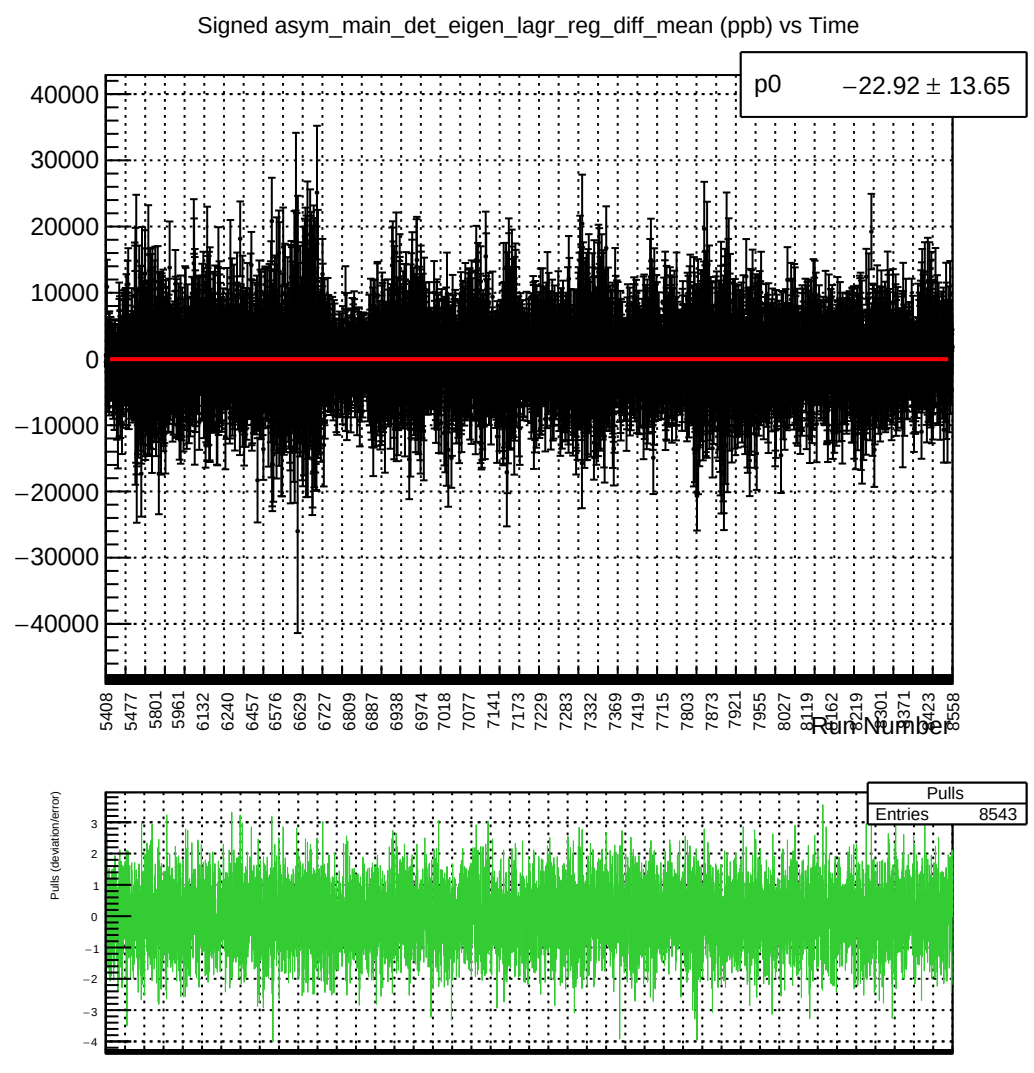

Pull Plot
Entries 8543
Mean 0.001535
Std Dev 1.018
Underflow 0
Overflow 0
Fit Prob 0.01
Fit Chi2 8849 / 8542
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

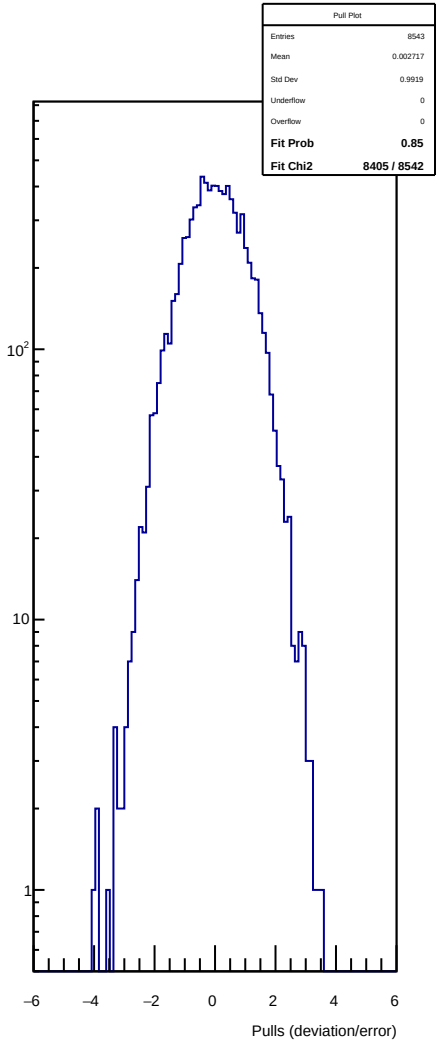

asym_main_det_overload_reg_reg_diff_rms (ppm) vs Time
p0 34.93 ± 0.00287
250
200
150
100
50
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

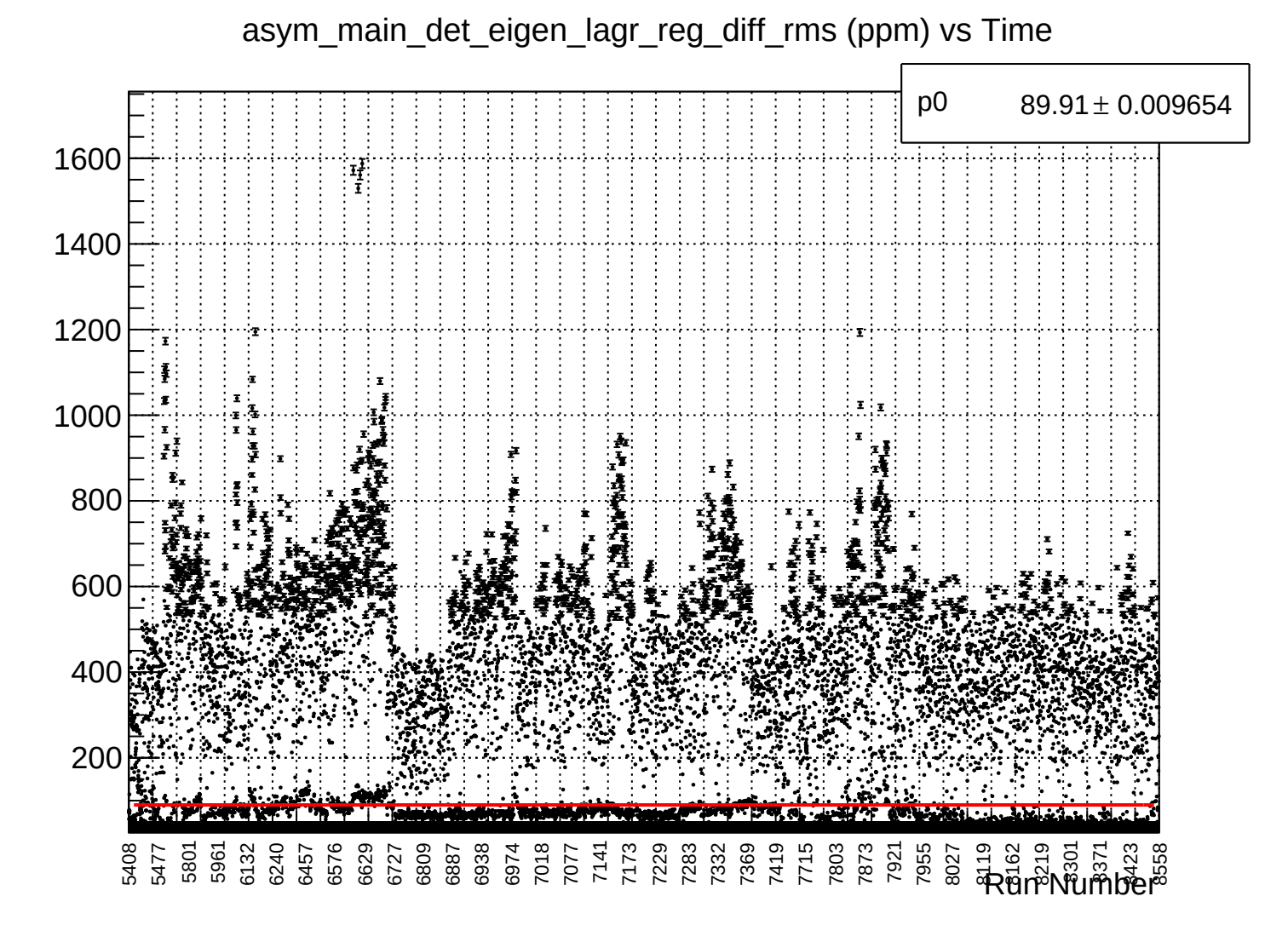

Signed asym_main_det_eigen_reg_cor_diff_mean (ppb) vs Time
p0 2.013 ± 4.82
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number
Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

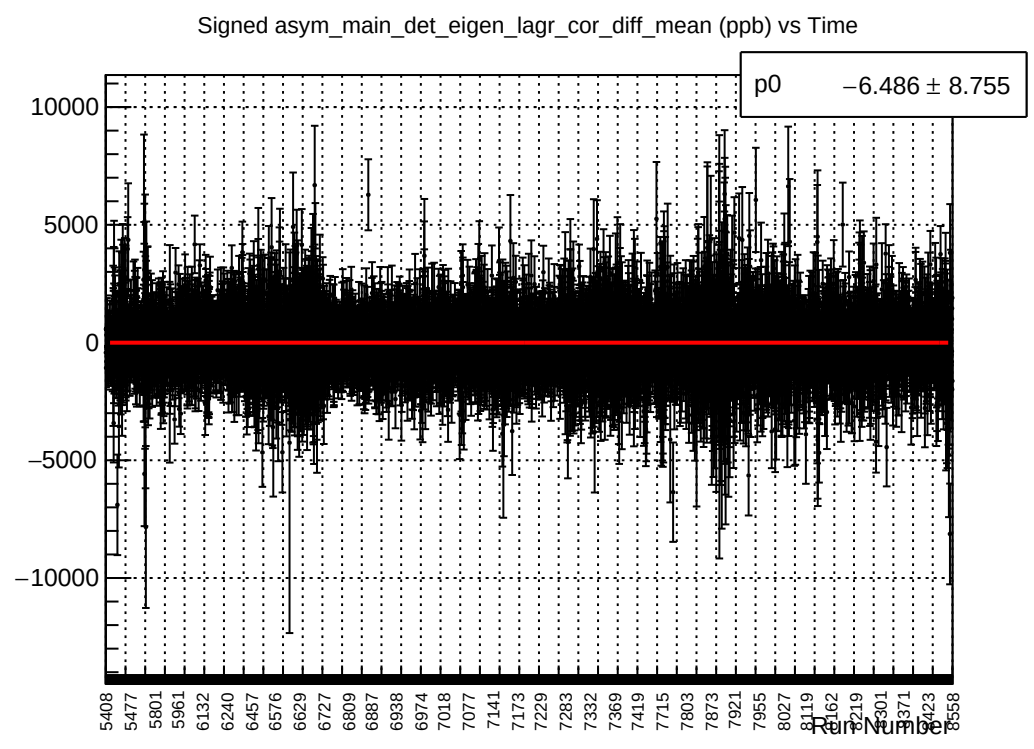

Pull Plot
Entries 8543
Mean −0.004357
Std Dev 1.012
Underflow 0
Overflow 0
Fit Prob 0.05
Fit Chi2 8752 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

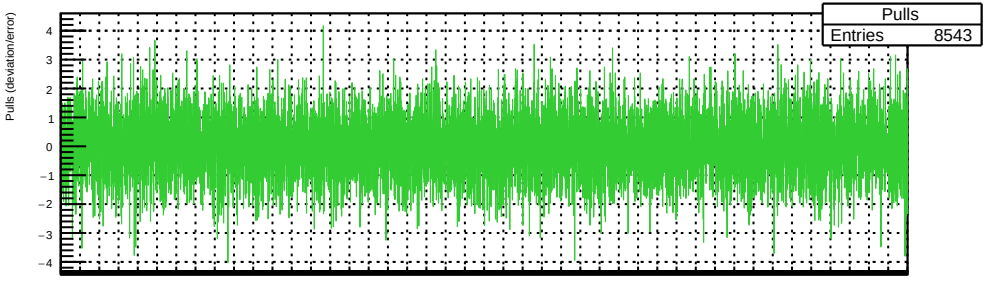

asym_main_det_eigen_reg_cor_diff_rms (ppm) vs Time
p0 40.84 ± 0.003408
300
250
200
150
100
50
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

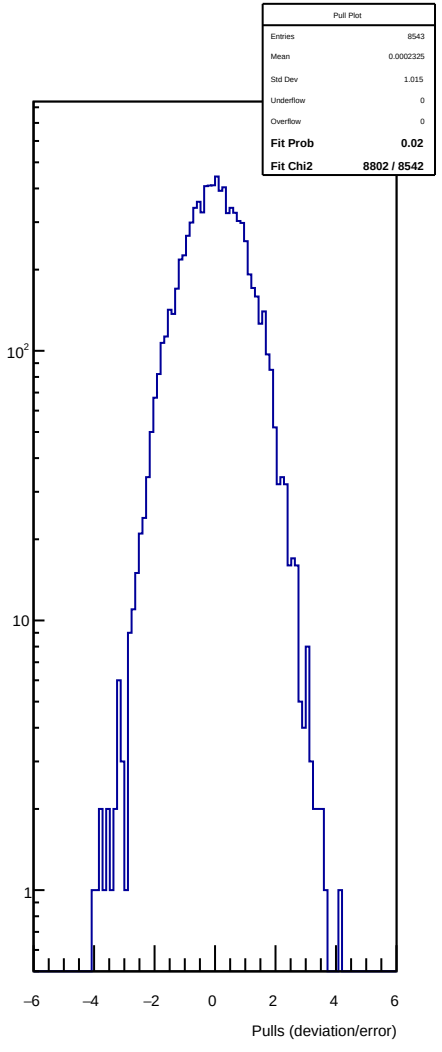

Signed asym_main_det_eigen_lagr_reg_diff_mean (ppb) vs Time
p0 −22.92 ± 13.65
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number
Pulls
Entries 8543
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

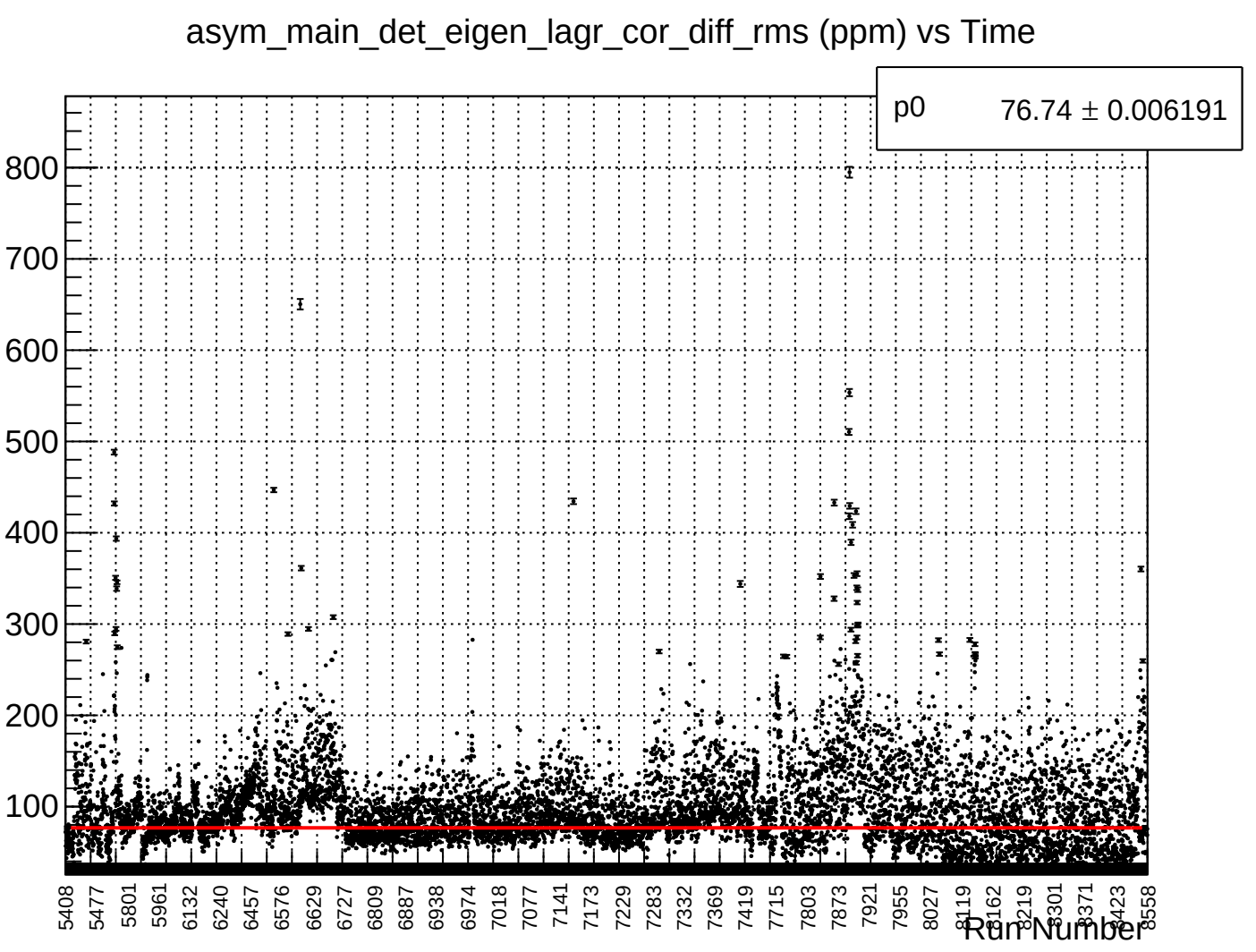

Pull Plot
Entries 8543
Mean 0.002717
Std Dev 0.9919
Underflow 0
Overflow 0
Fit Prob 0.85
Fit Chi2 8405 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

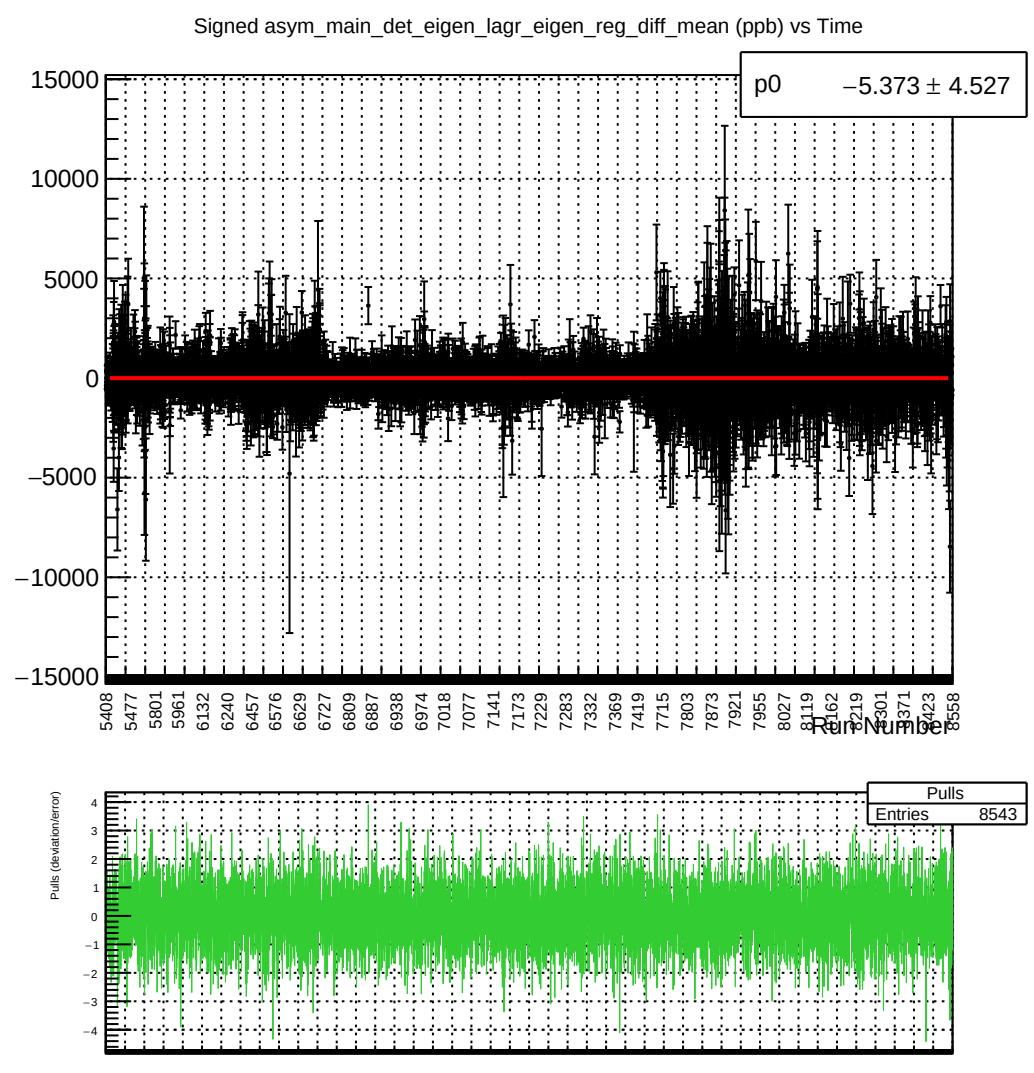

asym_main_det_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 89.91 ± 0.009654
1600
1400
1200
1000
800
600
400
200
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

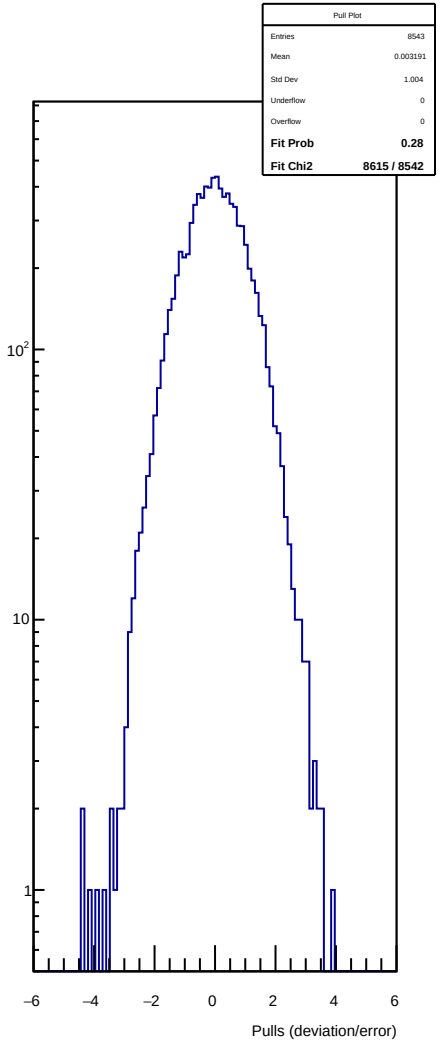

Signed asym_main_det_eigen_lagr_cor_diff_mean (ppb) vs Time
p0 −6.486 ± 8.755
10000
5000
0
−5000
−10000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

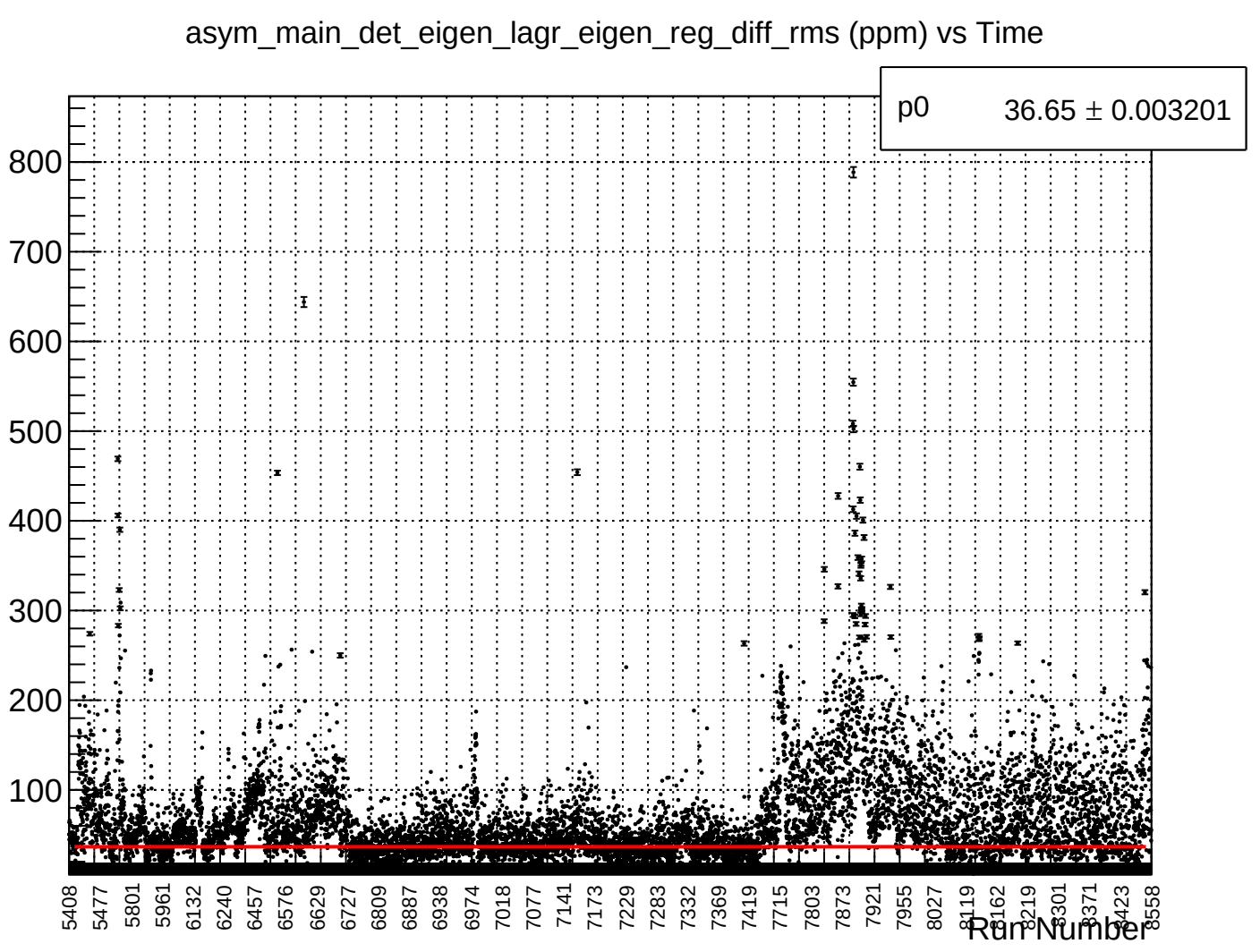

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

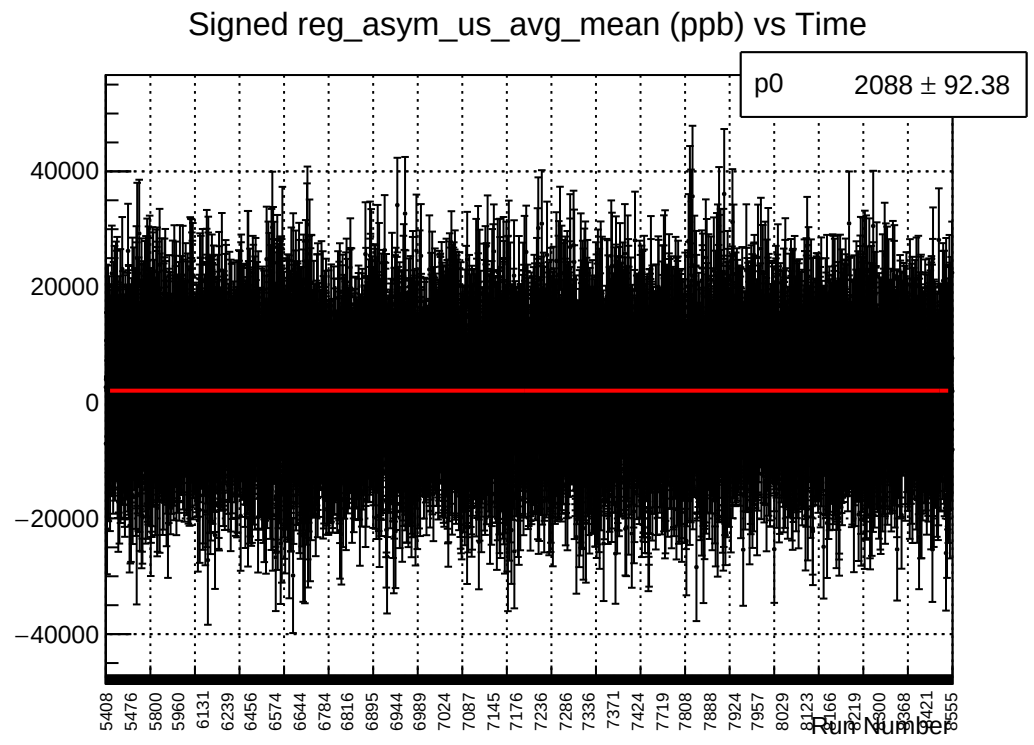

Pull Plot
Entries 8543
Mean 0.0002325
Std Dev 1.015
Underflow 0
Overflow 0
Fit Prob 0.02
Fit Chi2 8802 / 8542
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

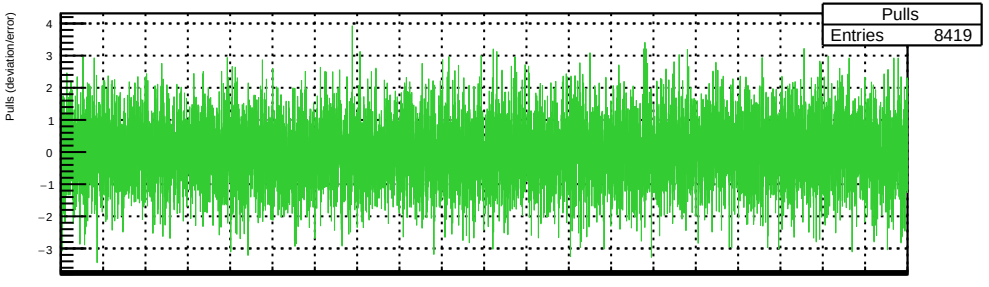

asym_main_det_eigen_lagr_cor_diff_rms (ppm) vs Time
p0
76.74 ± 0.006191
800
700
600
500
400
300
200
100
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

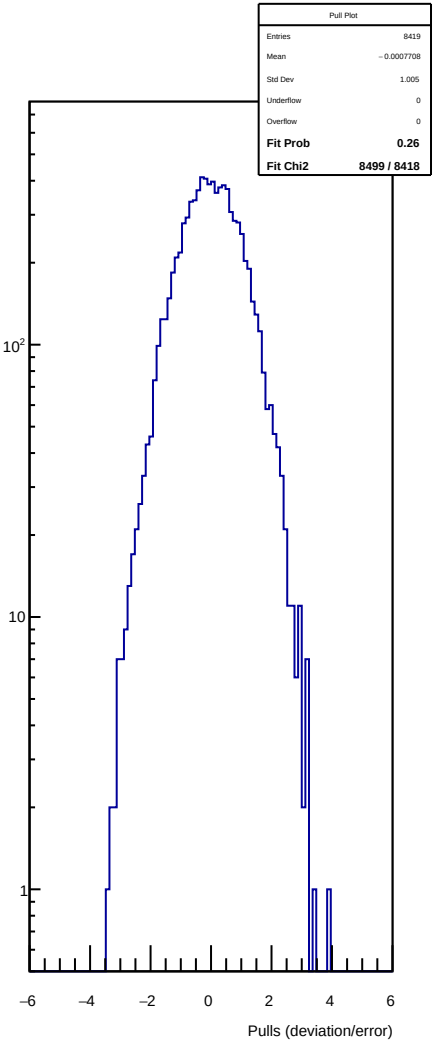

Signed asym_main_det_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
p0 −5.373 ± 4.527
15000
10000
5000
0
−5000
−10000
−15000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number
Pulls
Entries 8543
Pulls (deviation/error)
4 3 2 1 0 −1 −2 −3 −4

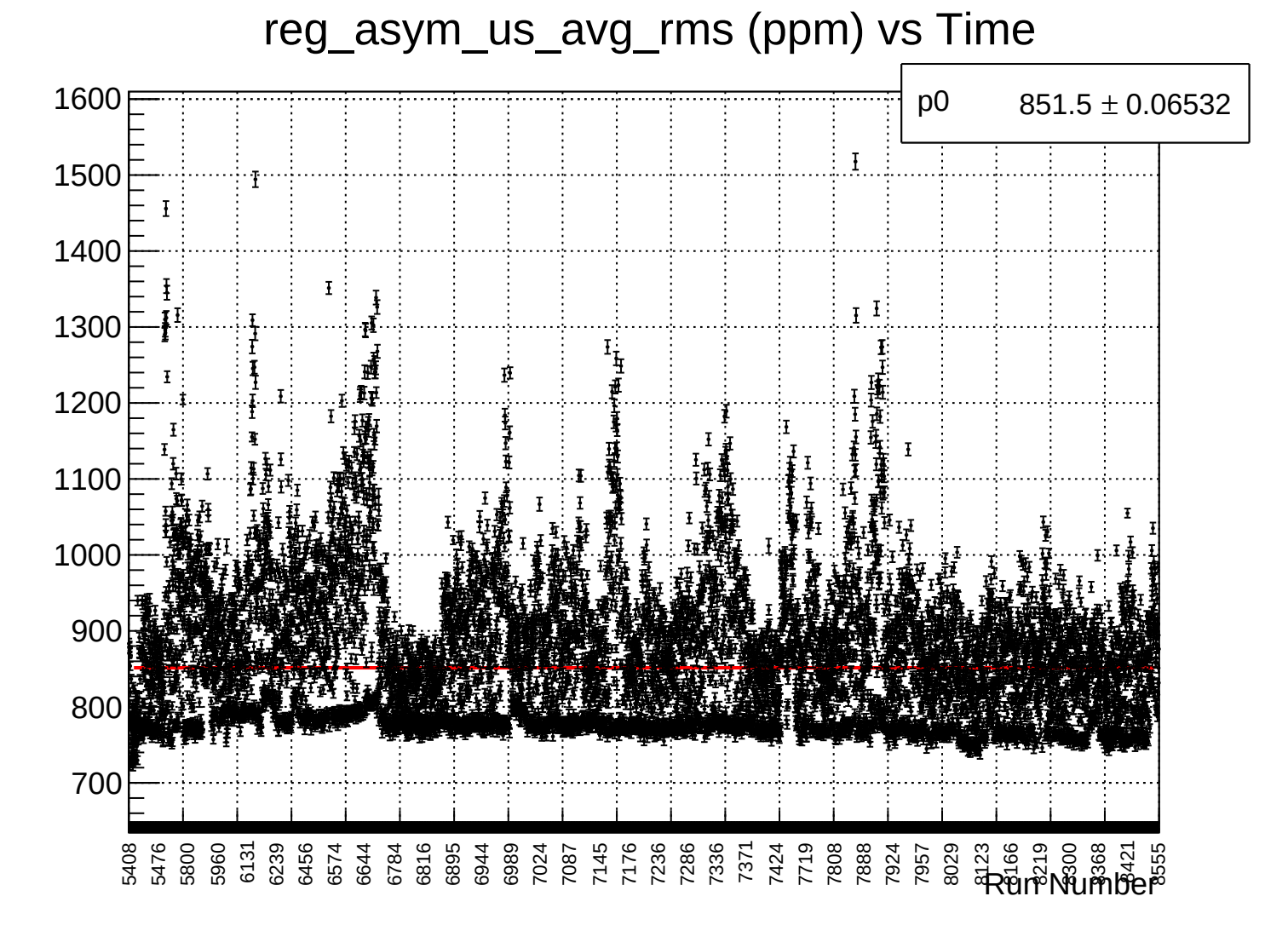

Pull Plot
Entries 8543
Mean 0.003191
Std Dev 1.004
Underflow 0
Overflow 0
Fit Prob 0.28
Fit Chi2 8615 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

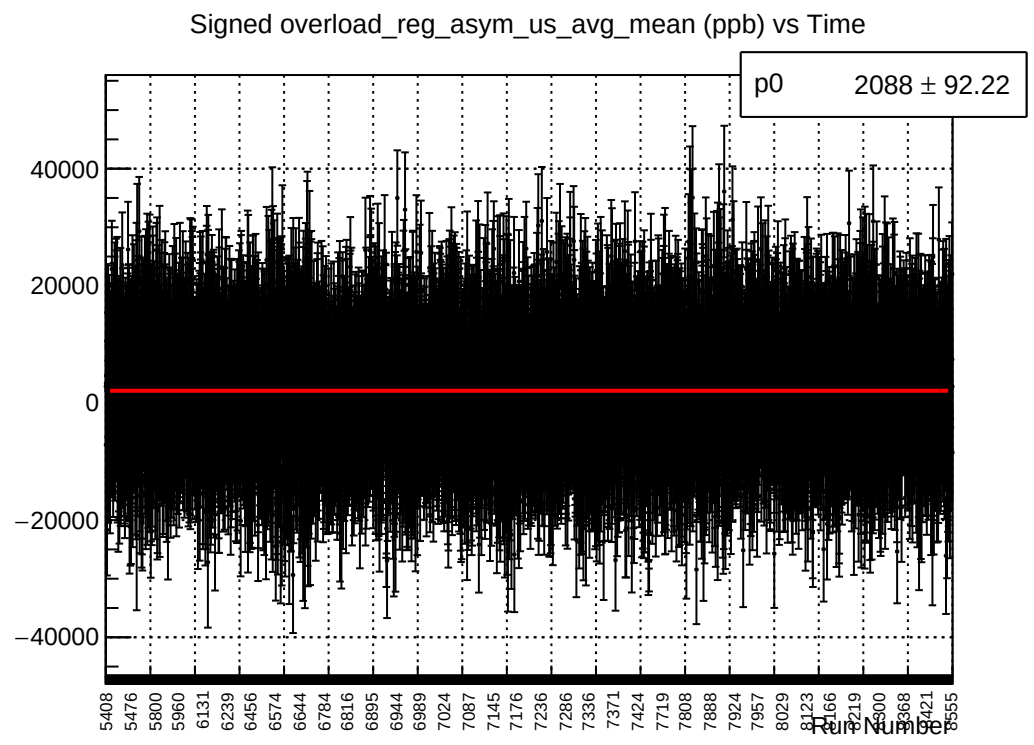

asym_main_det_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 36.65 ± 0.003201
800
700
600
500
400
300
200
100
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

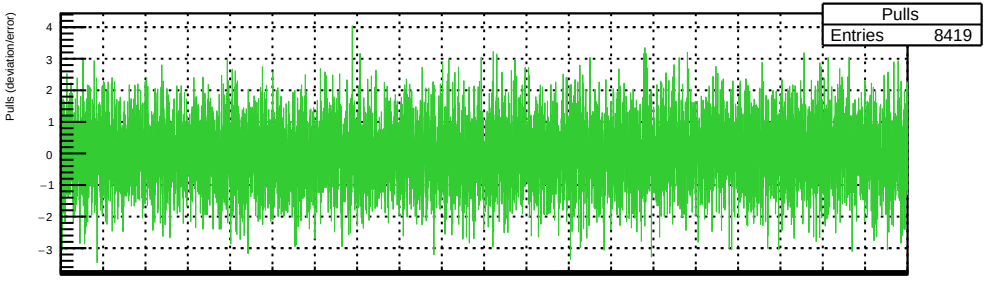

Signed reg_asym_us_avg_mean (ppb) vs Time
p0 2088 ± 92.38
40000
20000
0
−20000
−40000
5408 5476 5800 5960 6131 6239 6456 6574 6644 6784 6816 6895 6944 6989 7024 7087 7145 7176 7236 7286 7336 7371 7424 7719 7808 7888 7924 7957 8029 8123 8166 8219 8300 8368 8421 8555
Run Number

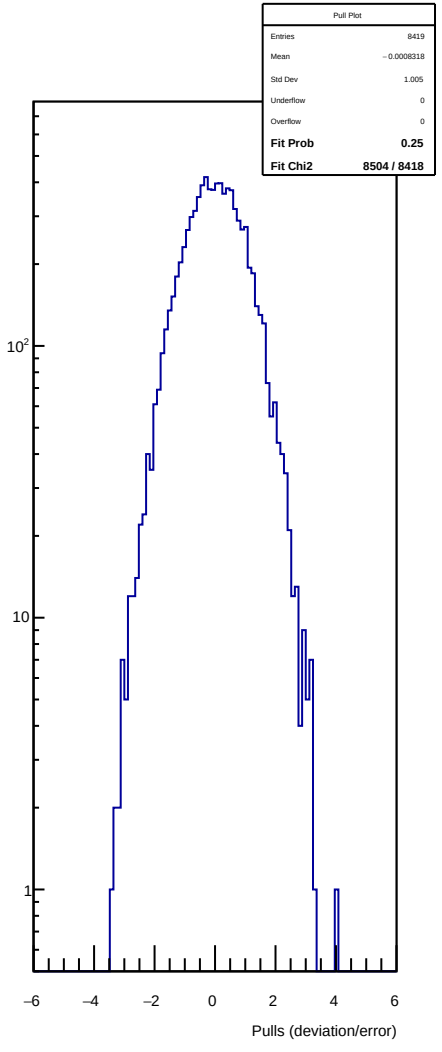

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

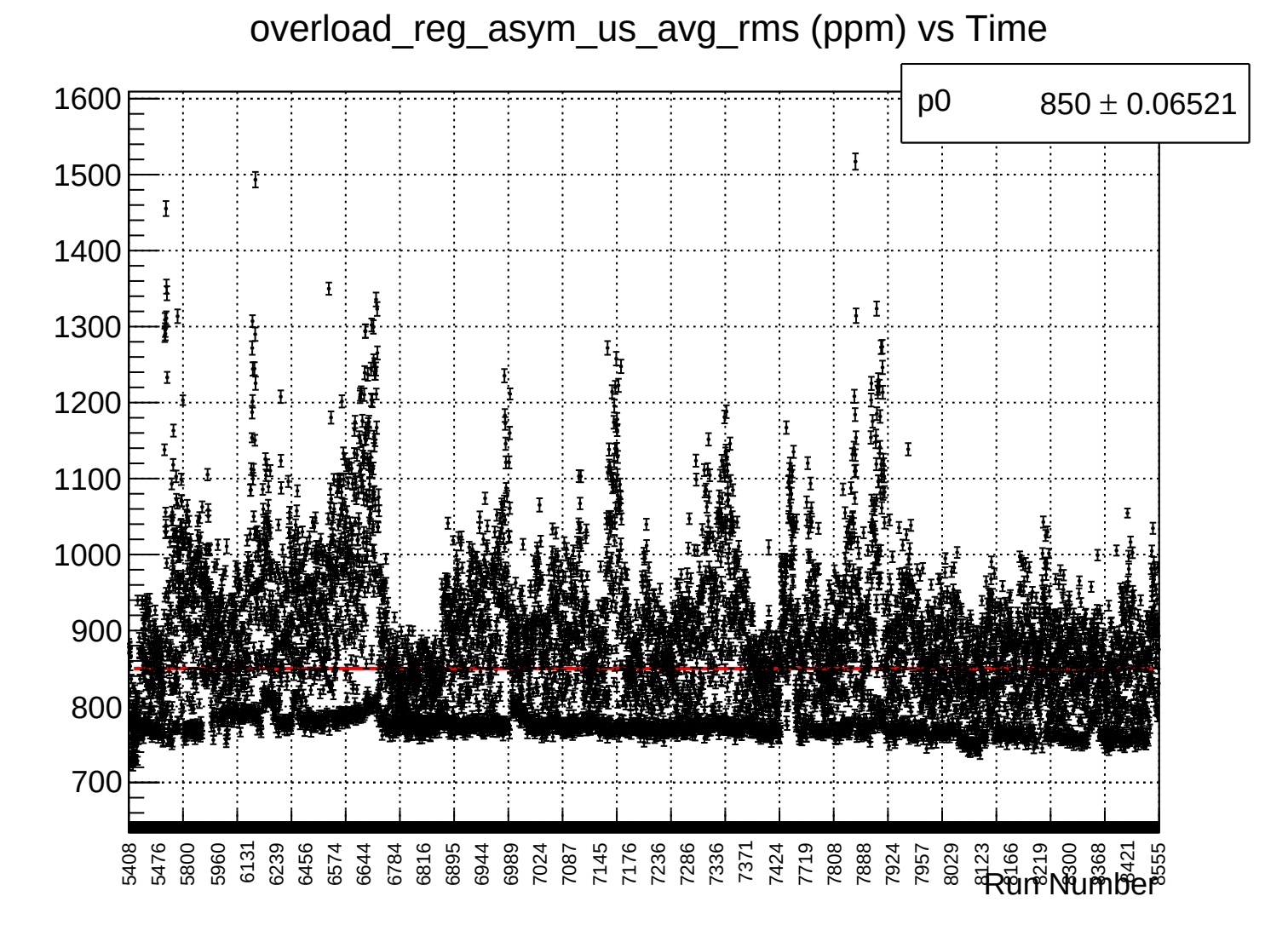

Pull Plot
Entries 8419
Mean −0.0007708
Std Dev 1.005
Underflow 0
Overflow 0
Fit Prob 0.26
Fit Chi2 8499 / 8418
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

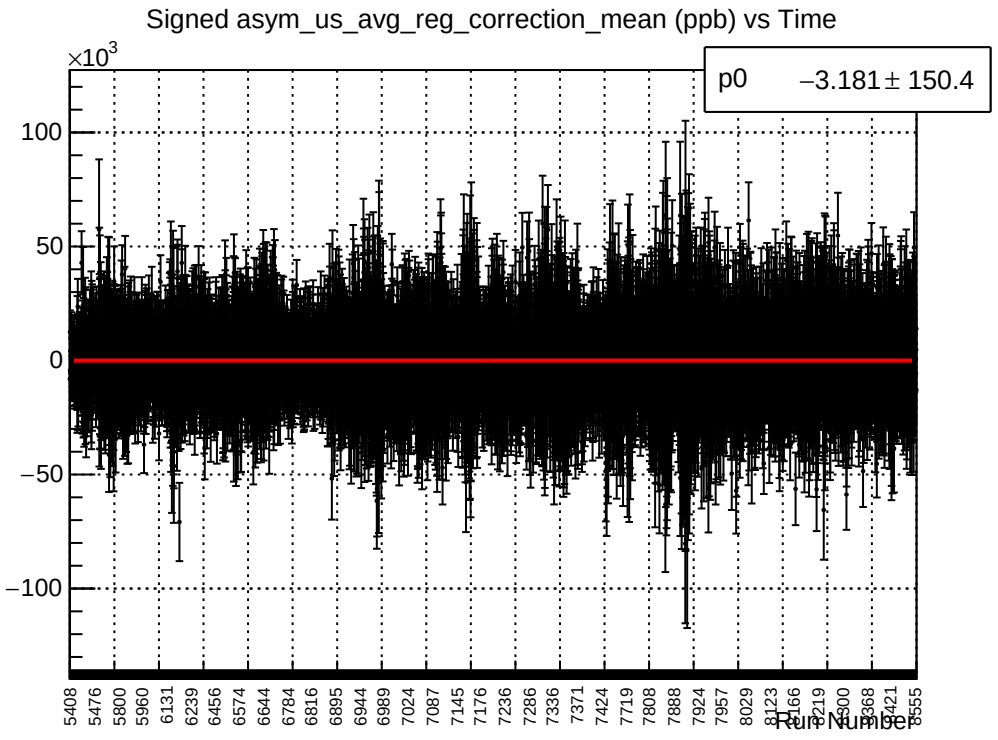

reg_asym_us_avg_rms (ppm) vs Time
p0
851.5 ± 0.06532
1600
1500
1400
1300
1200
1100
1000
900
800
700
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

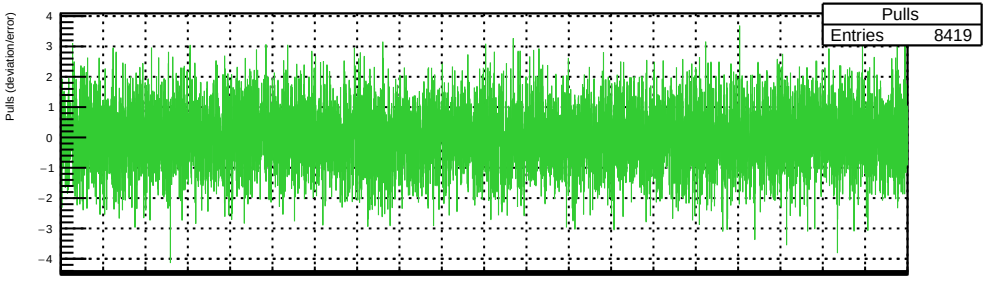

Signed overload_reg_asym_us_avg_mean (ppb) vs Time
p0 2088 ± 92.22
40000
20000
0
−20000
−40000
5408 5476 5800 5960 6131 6239 6456 6574 6644 6784 6816 6895 6944 6989 7024 7087 7145 7176 7236 7286 7336 7371 7424 7719 7808 7888 7924 7957 8029 8123 8166 8219 8300 8368 8421 8555
Run Number

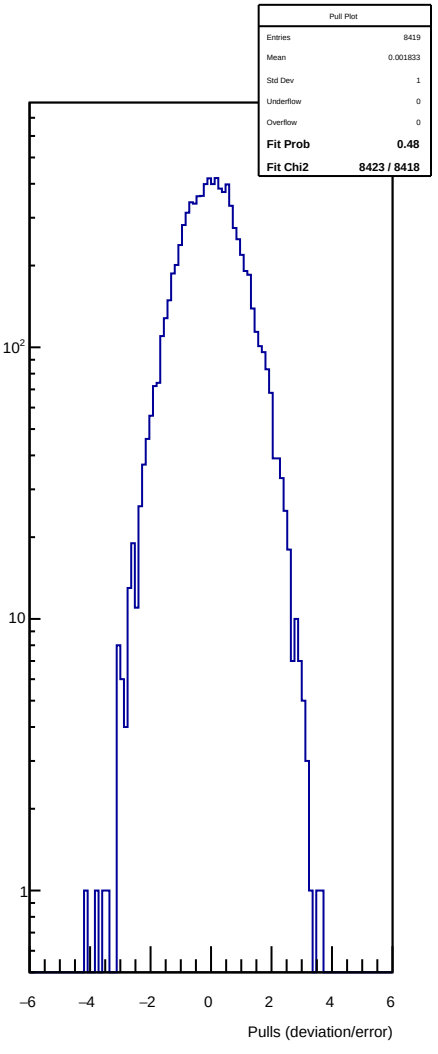

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

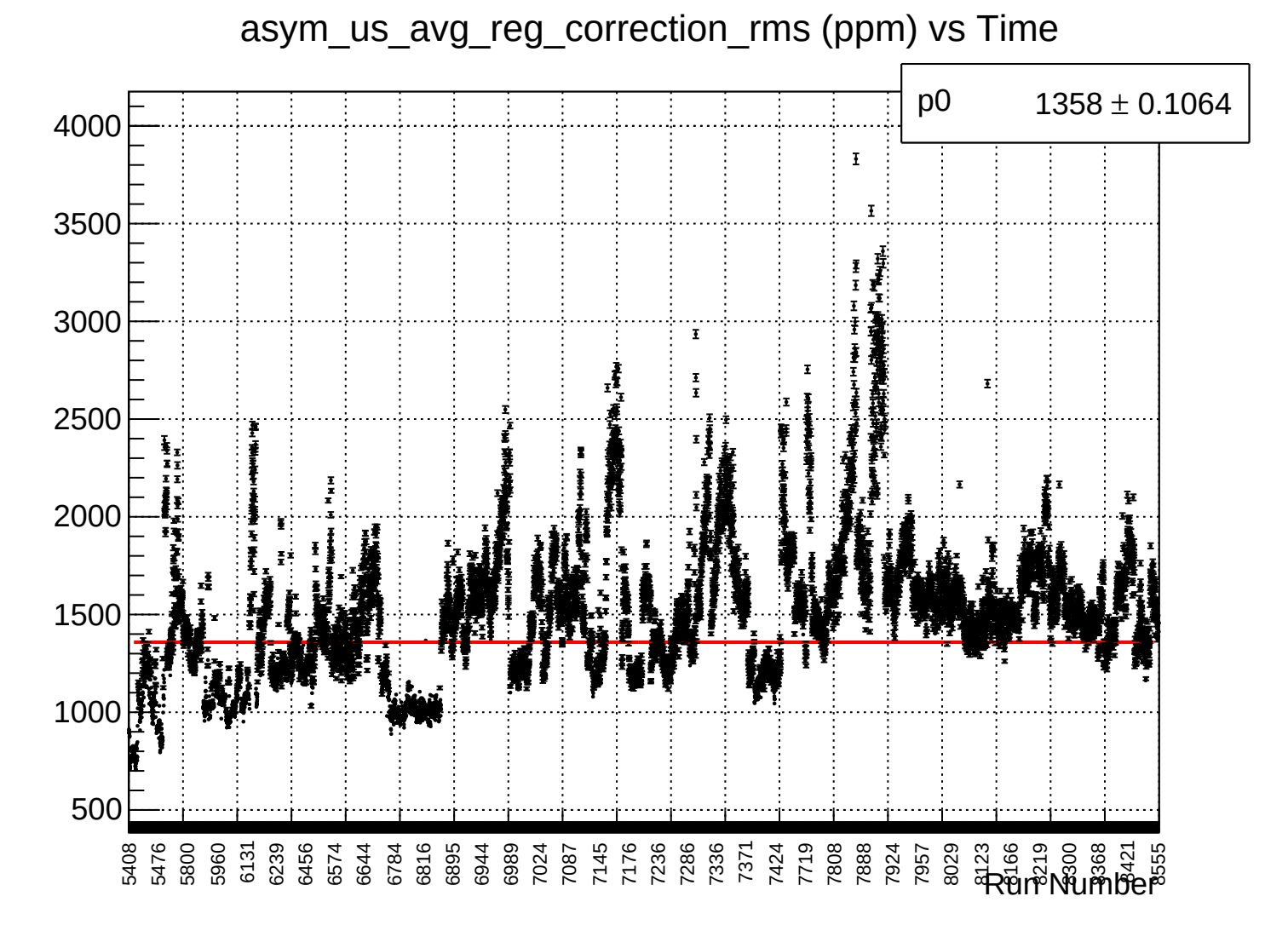

Pull Plot
Entries 8419
Mean −0.0008318
Std Dev 1.005
Underflow 0
Overflow 0
Fit Prob 0.25
Fit Chi2 8504 / 8418
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

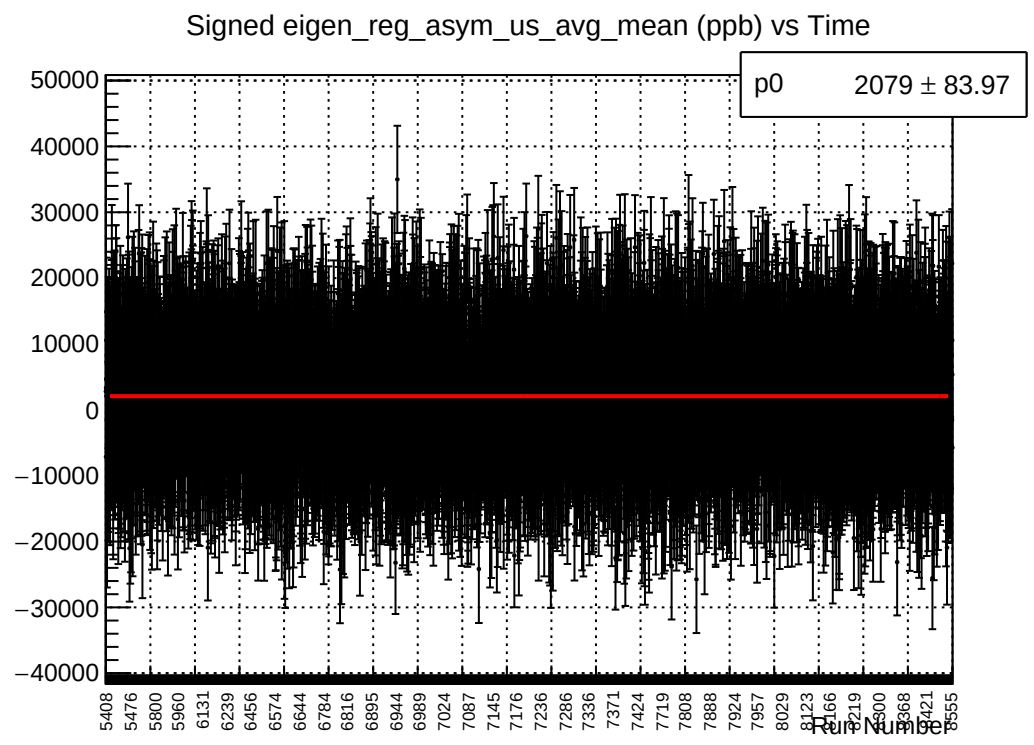

overload_reg_asym_us_avg_rms (ppm) vs Time
p0 850 ± 0.06521
1600
1500
1400
1300
1200
1100
1000
900
800
700
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

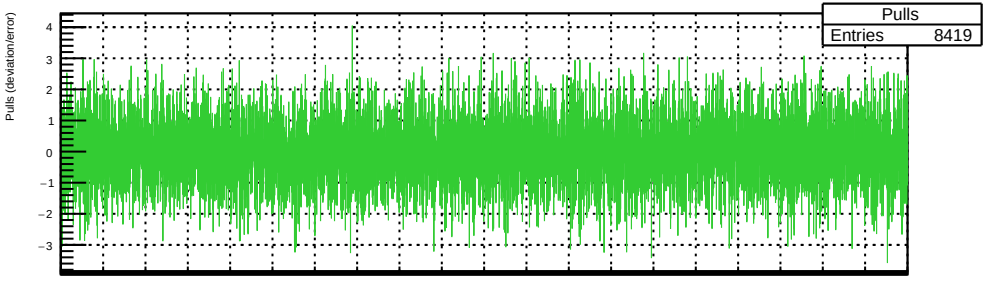

Signed asym_us_avg_reg_correction_mean (ppb) vs Time
×10^3
p0 −3.181 ± 150.4
100
50
0
−50
−100
5408 5476 5800 5960 6131 6239 6456 6574 6644 6784 6816 6895 6944 6989 7024 7087 7145 7176 7236 7286 7336 7371 7424 7719 7808 7888 7924 7957 8029 8123 8166 8219 8300 8368 8421 8555
Run Number

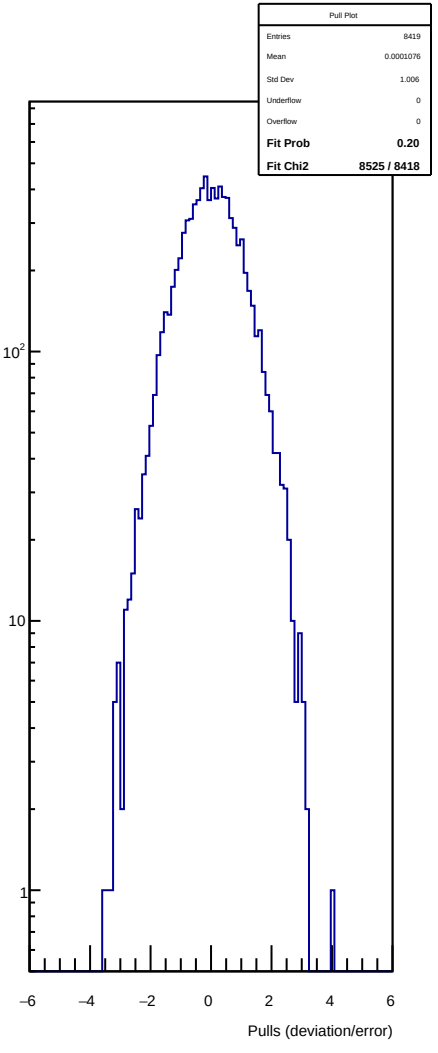

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

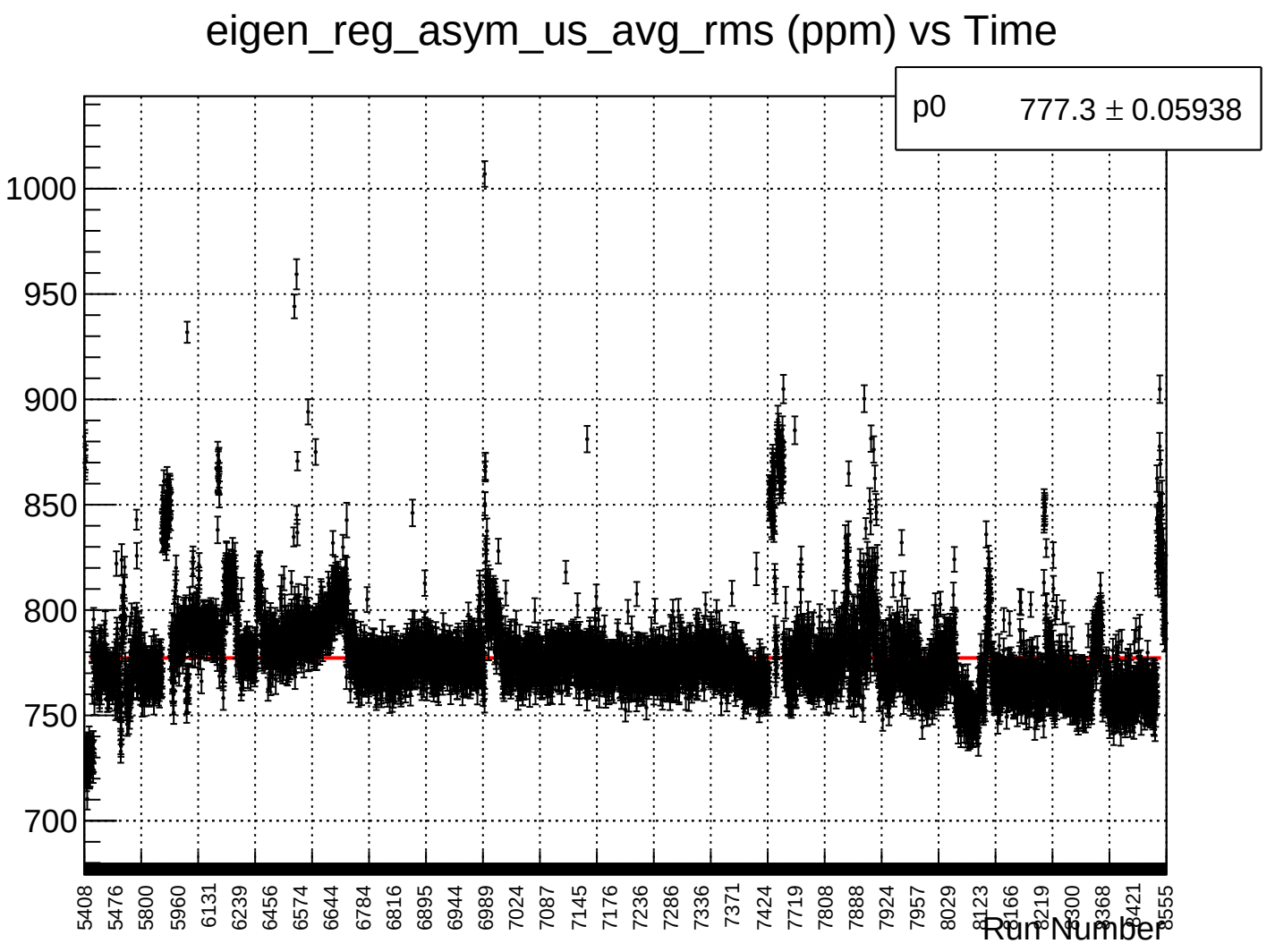

Pull Plot
Entries 8419
Mean 0.001833
Std Dev 1
Underflow 0
Overflow 0
Fit Prob 0.48
Fit Chi2 8423 / 8418
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

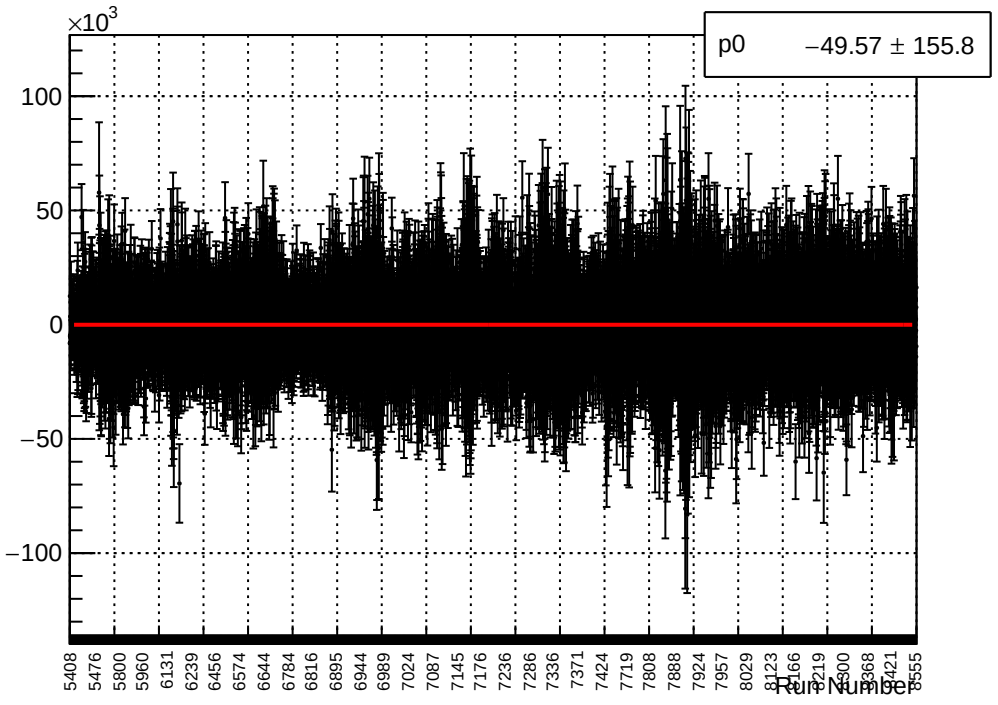

asym_us_avg_reg_correction_rms (ppm) vs Time
p0
1358 ± 0.1064
4000
3500
3000
2500
2000
1500
1000
500
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

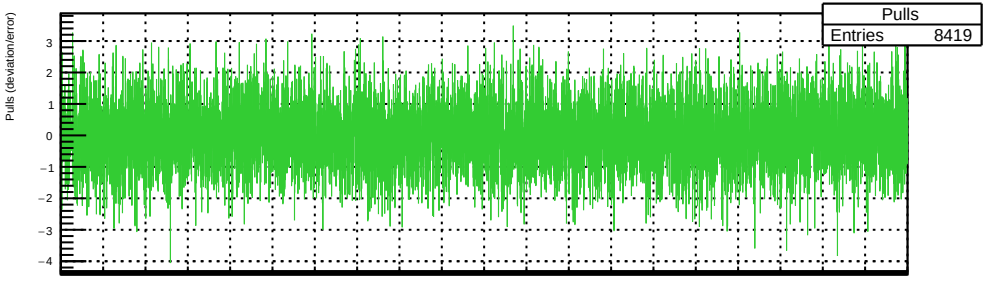

Signed eigen_reg_asym_us_avg_mean (ppb) vs Time
p0 2079 ± 83.97
50000
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

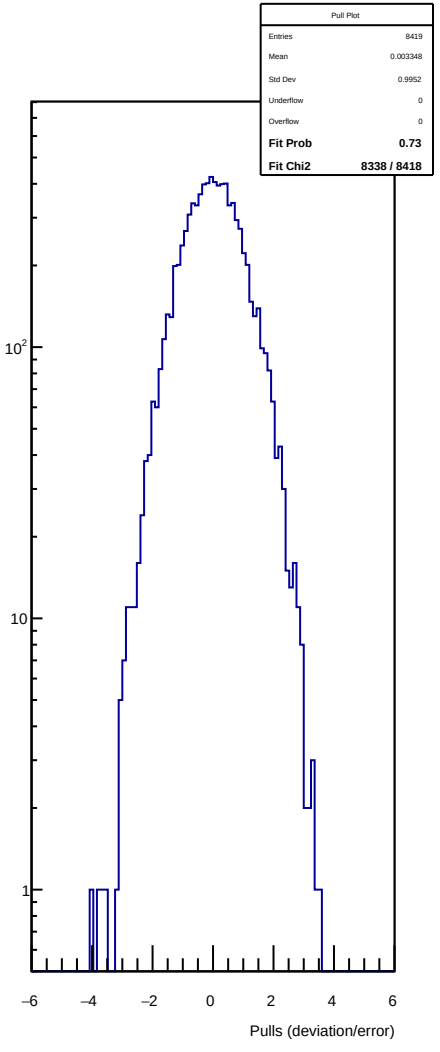

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

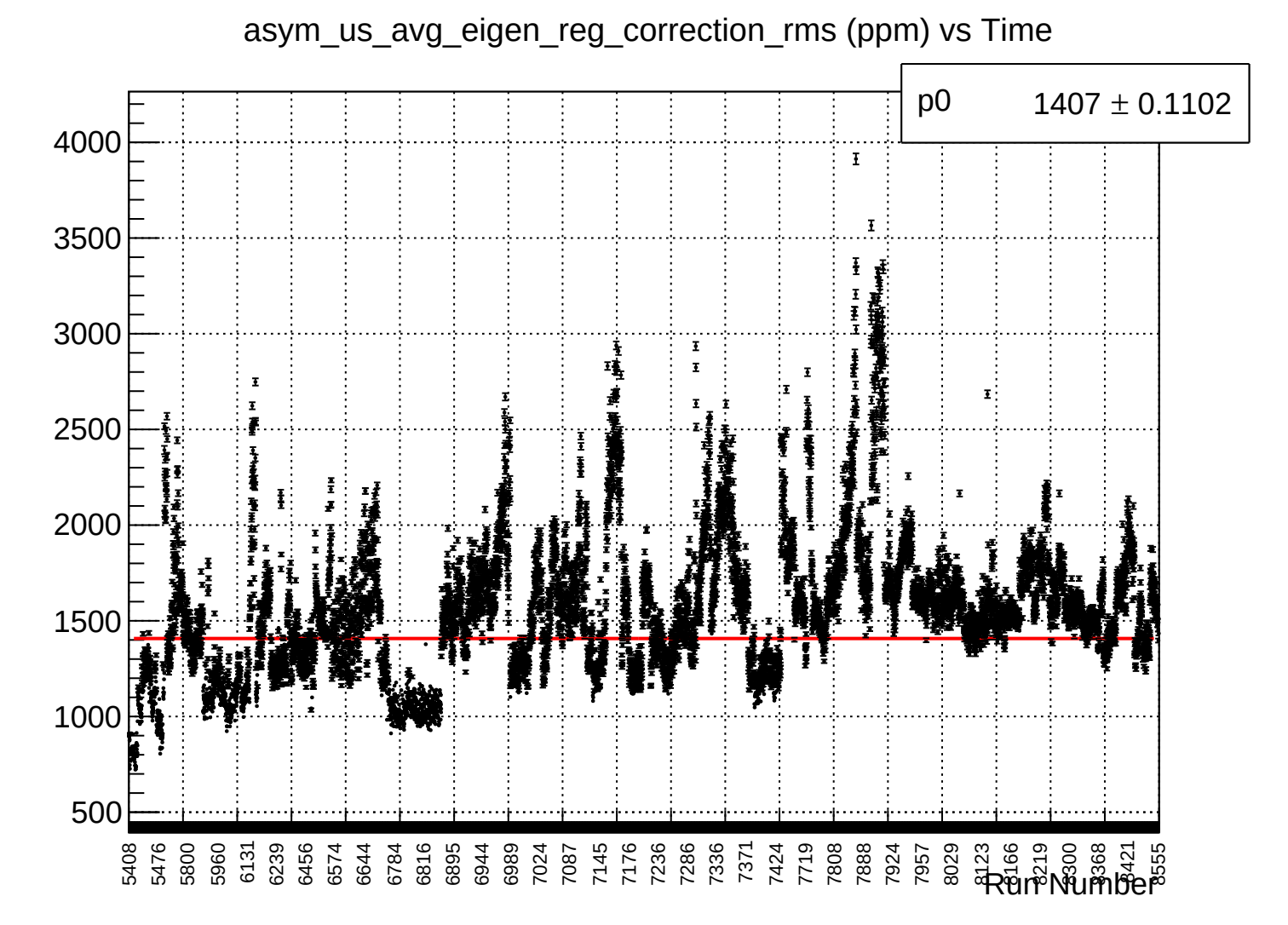

Pull Plot
Entries 8419
Mean 0.0001076
Std Dev 1.006
Underflow 0
Overflow 0
Fit Prob 0.20
Fit Chi2 8525 / 8418
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

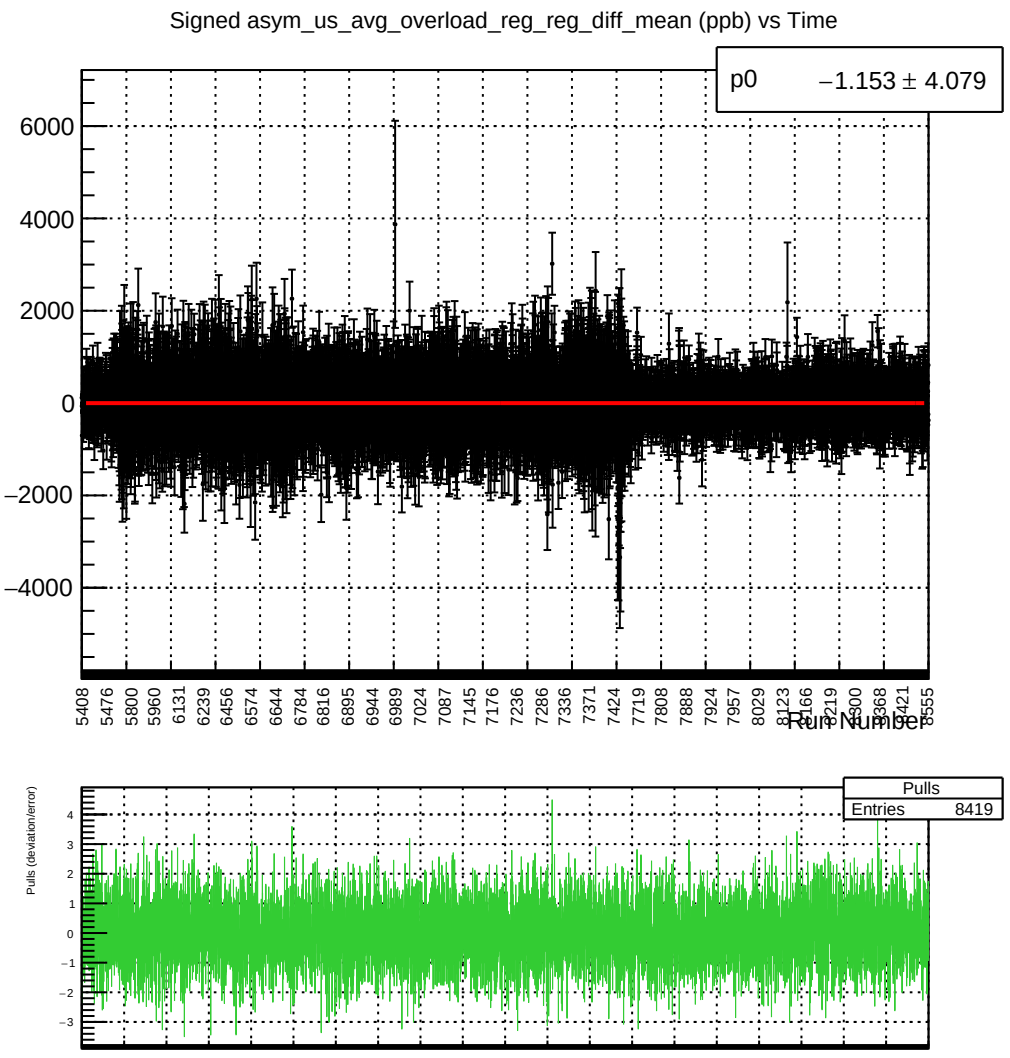

eigen_reg_asym_us_avg_rms (ppm) vs Time
p0 777.3 ± 0.05938
1000
950
900
850
800
750
700
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

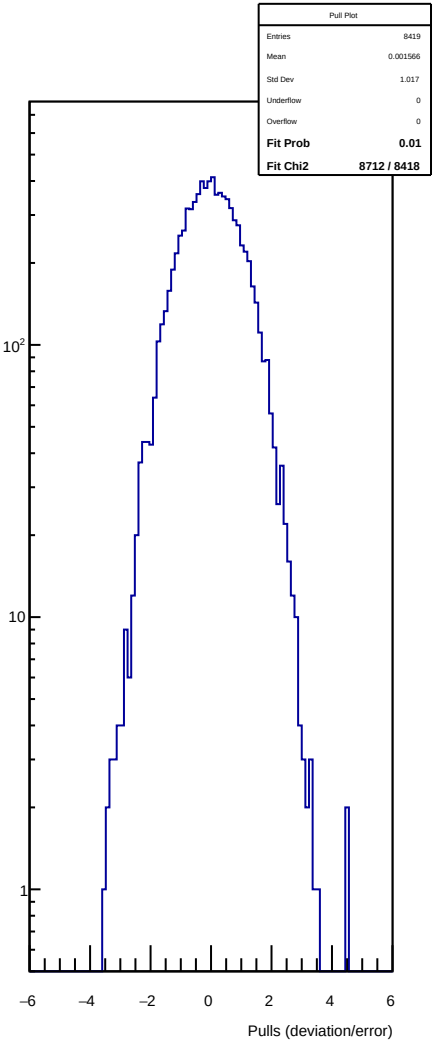

Signed asym_us_avg_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 −49.57 ± 155.8
100
50
0
−50
−100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

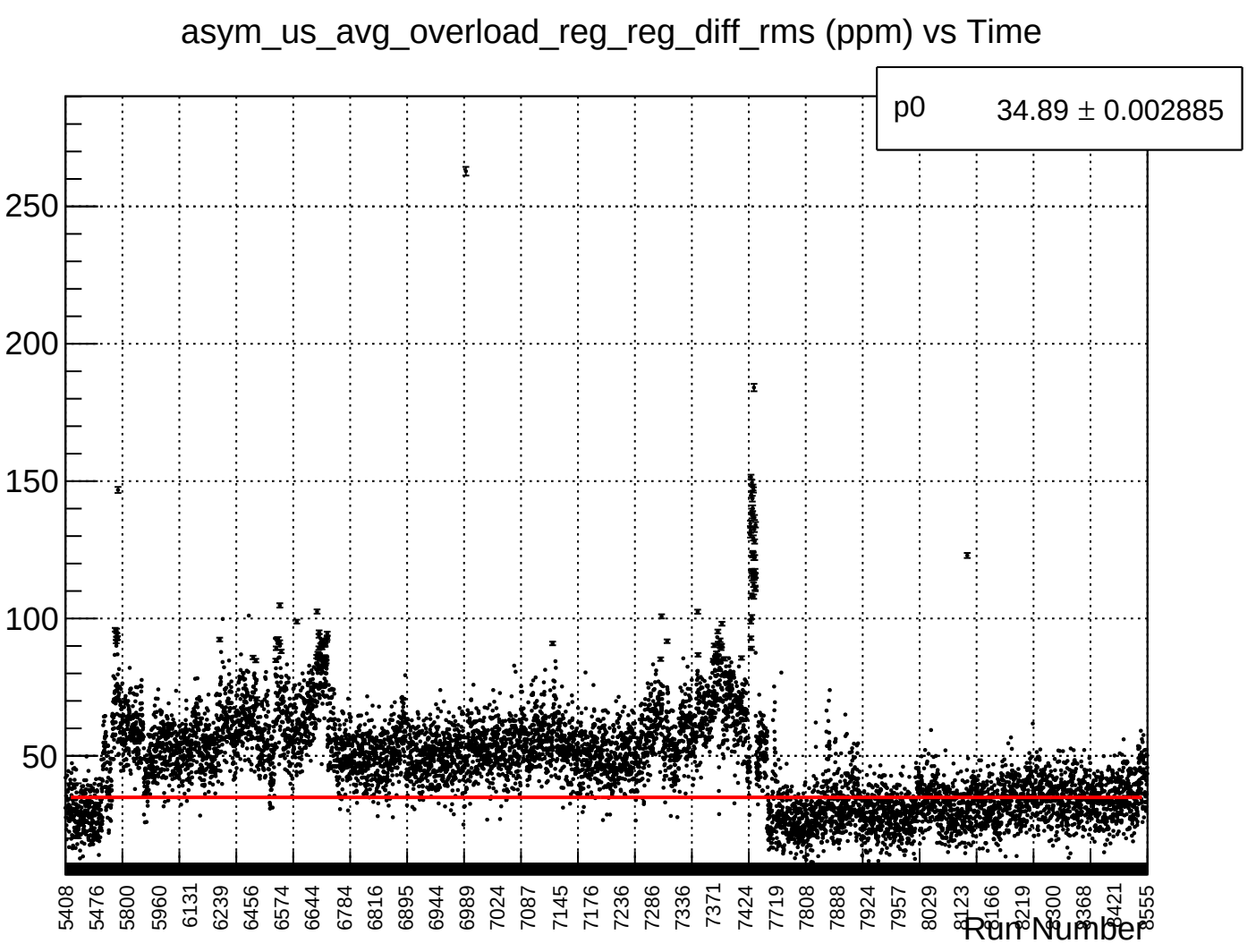

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

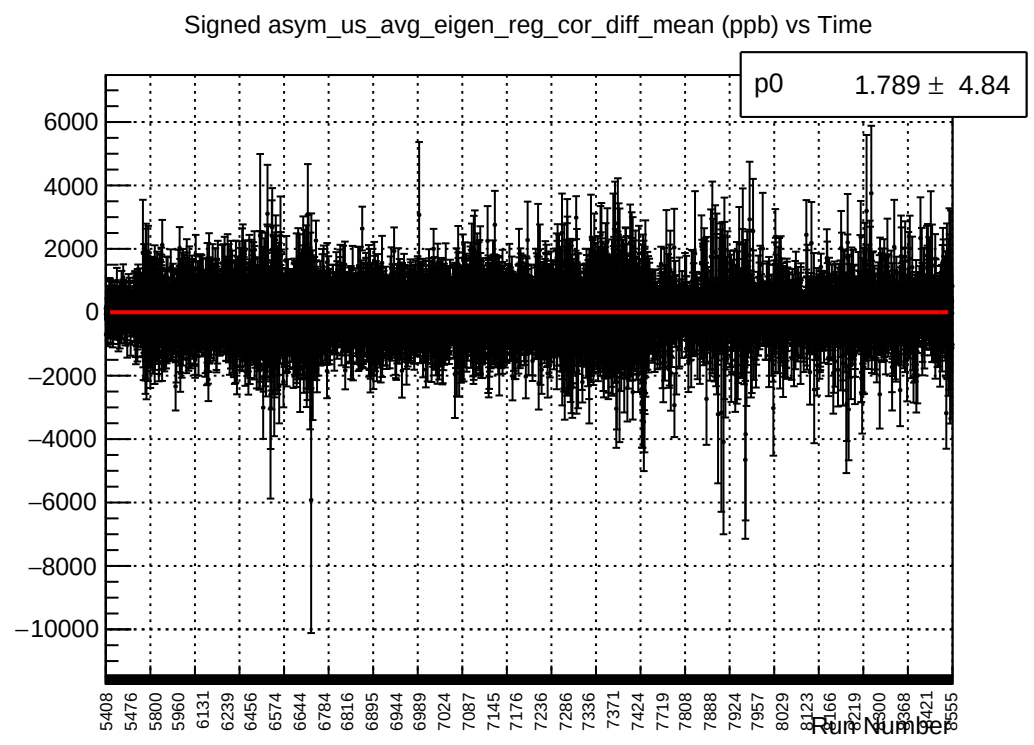

Pull Plot
Entries 8419
Mean 0.003348
Std Dev 0.9952
Underflow 0
Overflow 0
Fit Prob 0.73
Fit Chi2 8338 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

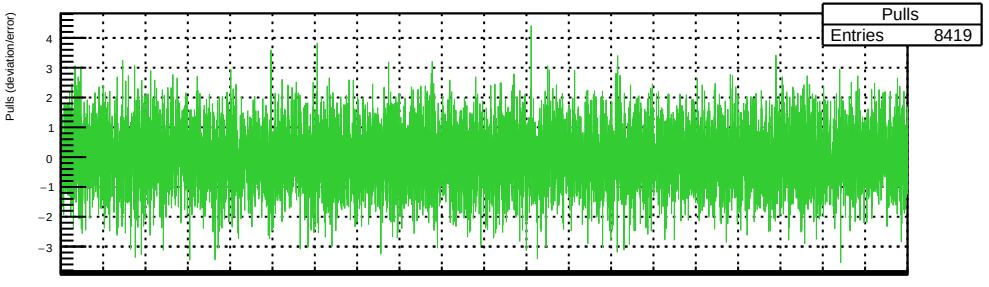

asym_us_avg_eigen_reg_correction_rms (ppm) vs Time
p0 1407 ± 0.1102
4000
3500
3000
2500
2000
1500
1000
500
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

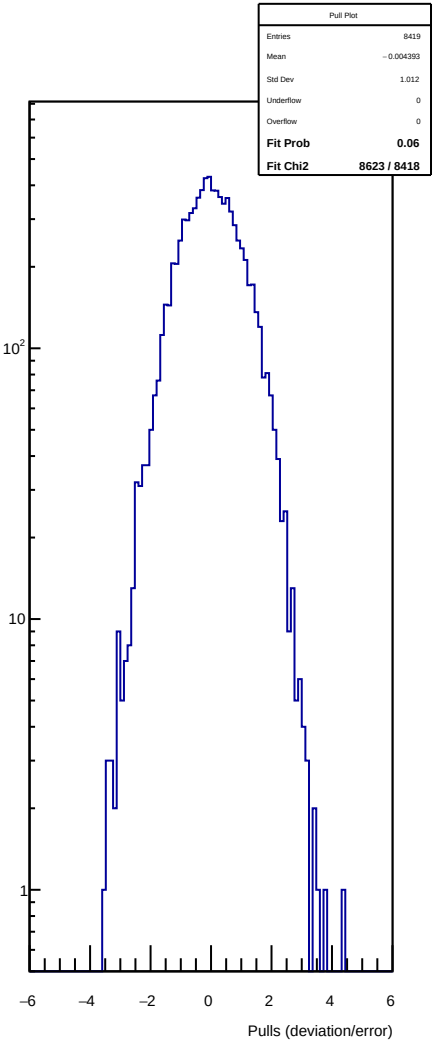

Signed asym_us_avg_overload_reg_reg_diff_mean (ppb) vs Time
p0 −1.153 ± 4.079
6000
4000
2000
0
−2000
−4000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number
Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

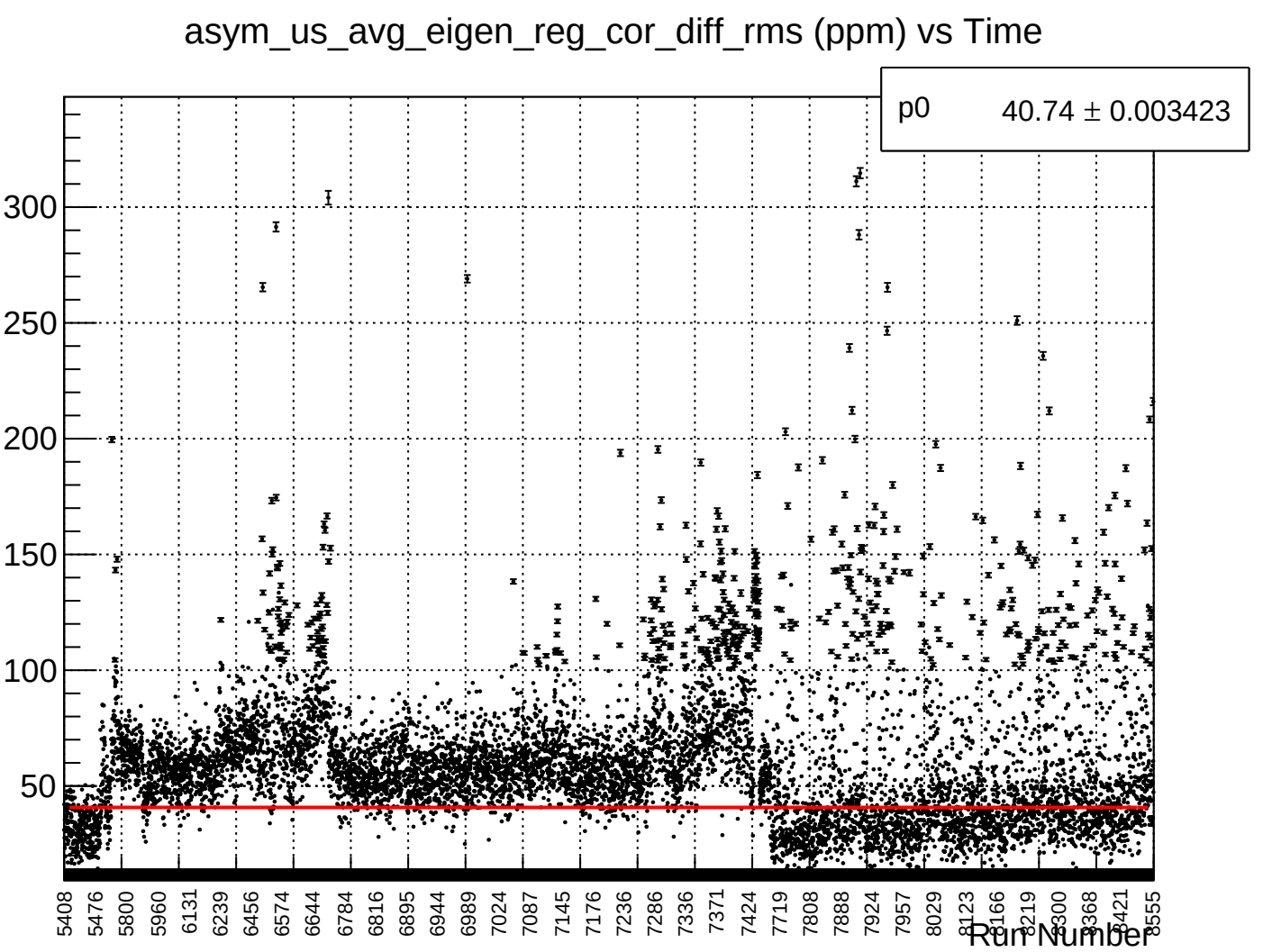

Pull Plot
Entries 8419
Mean 0.001566
Std Dev 1.017
Underflow 0
Overflow 0
Fit Prob 0.01
Fit Chi2 8712 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

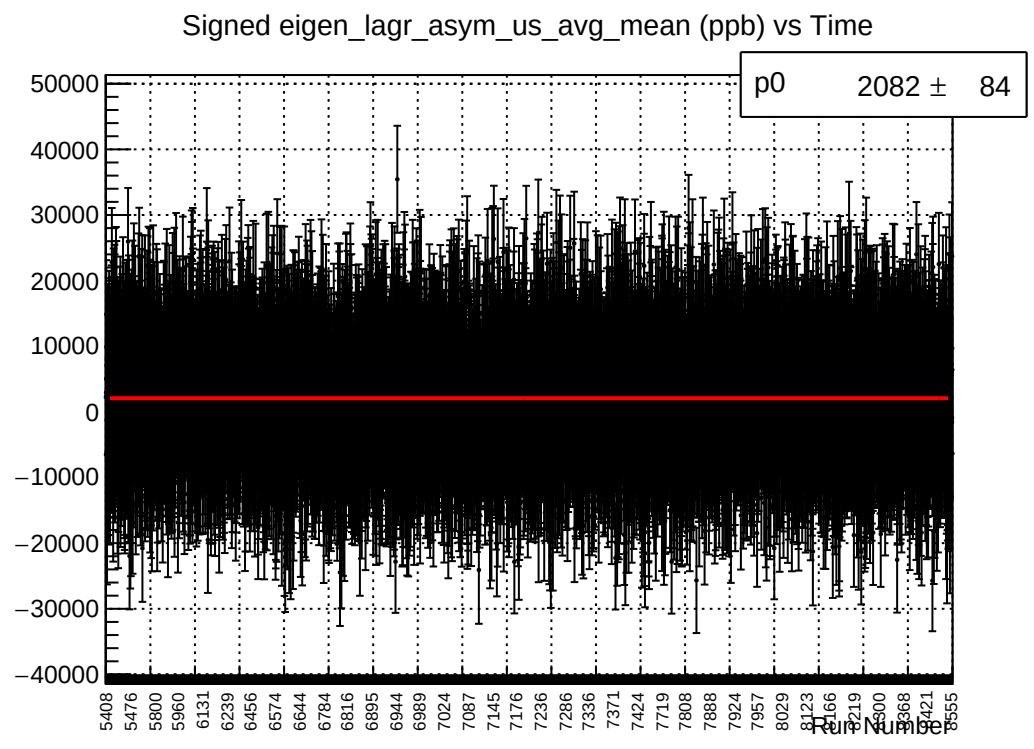

asym_us_avg_overload_reg_reg_diff_rms (ppm) vs Time
p0 34.89 ± 0.002885
250
200
150
100
50
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

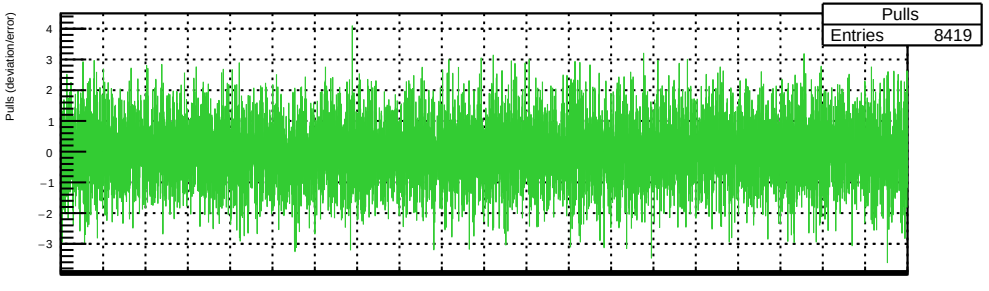

Signed asym_us_avg_eigen_reg_cor_diff_mean (ppb) vs Time
p0 1.789 ± 4.84
6000
4000
2000
0
−2000
−4000
−6000
−8000
−10000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

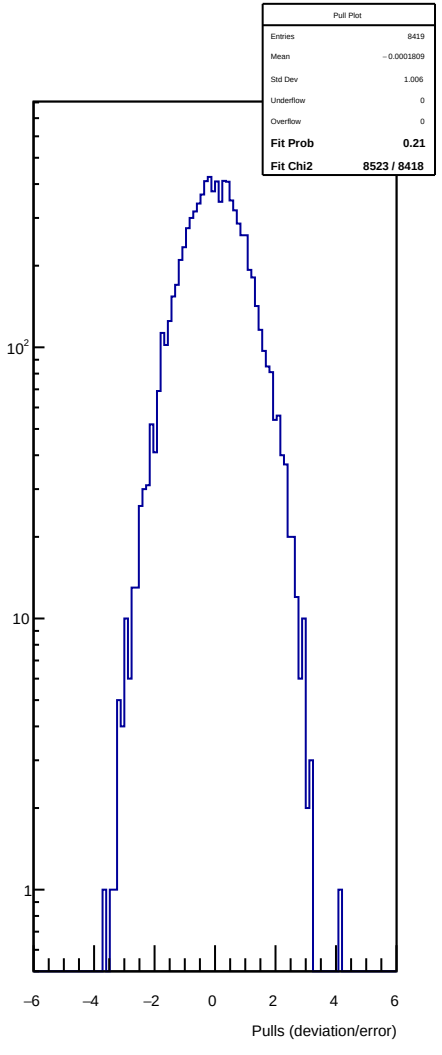

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

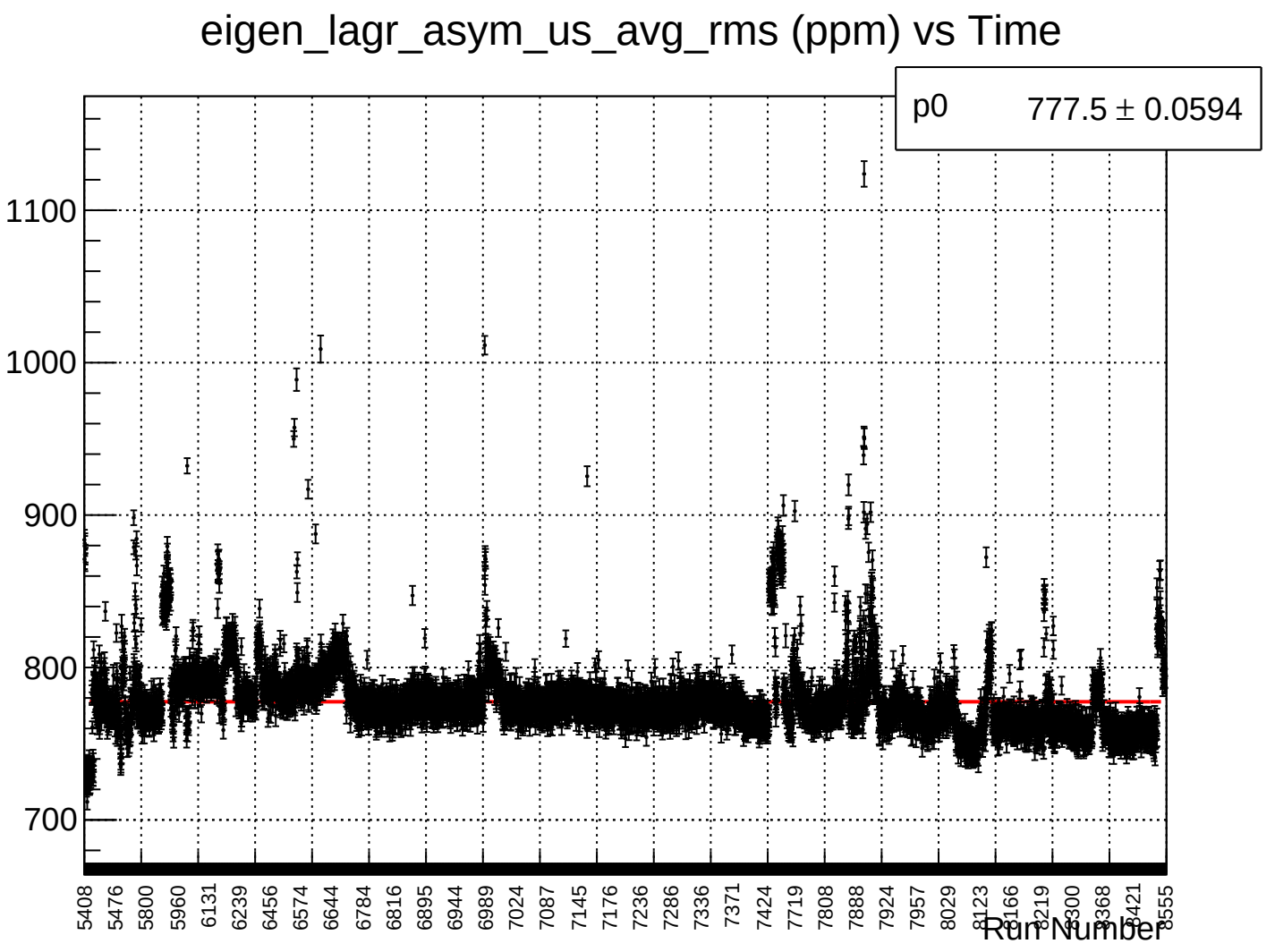

Pull Plot
Entries 8419
Mean −0.004393
Std Dev 1.012
Underflow 0
Overflow 0
Fit Prob 0.06
Fit Chi2 8623 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

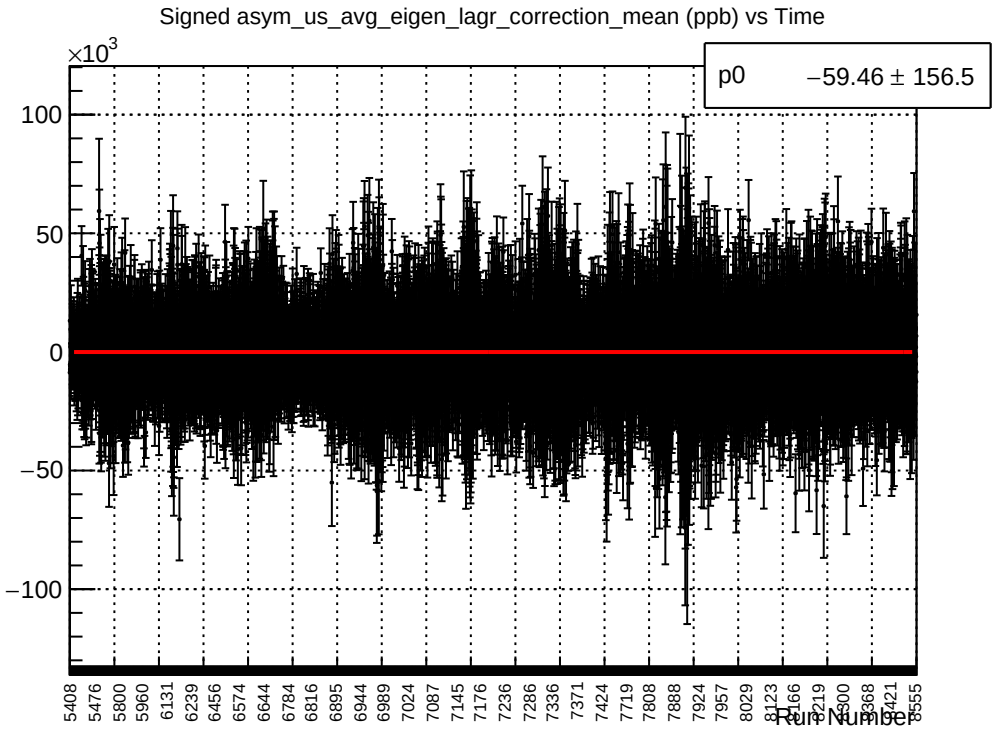

asym_us_avg_eigen_reg_cor_diff_rms (ppm) vs Time
p0 40.74 ± 0.003423
300
250
200
150
100
50
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

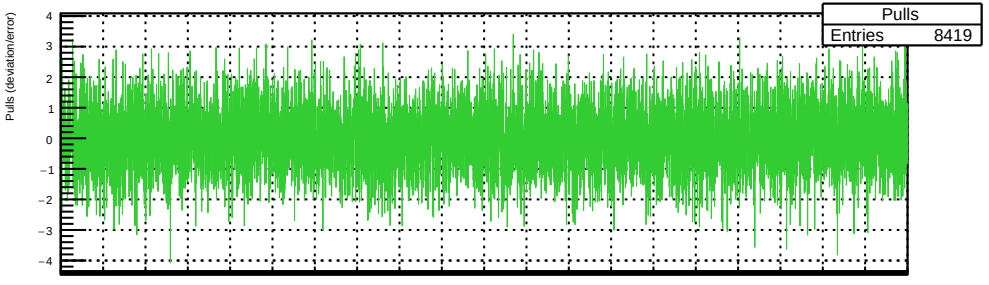

Signed eigen_lagr_asym_us_avg_mean (ppb) vs Time
p0 2082 ± 84
50000
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

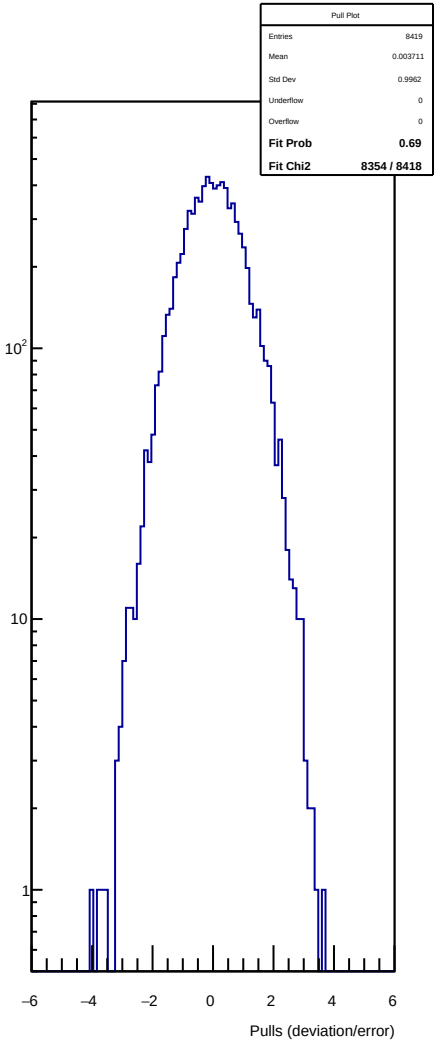

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

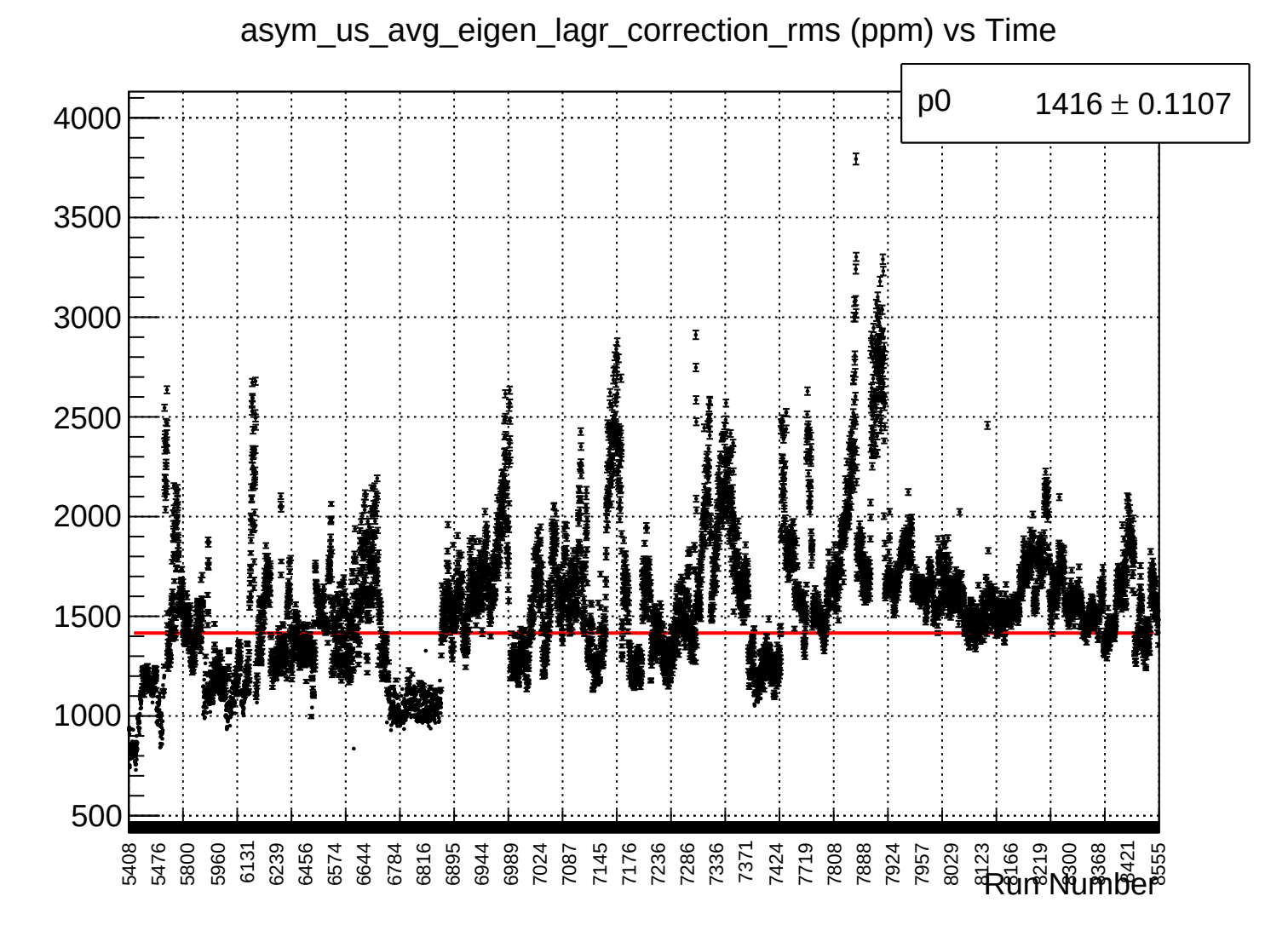

Pull Plot
Entries 8419
Mean −0.0001809
Std Dev 1.006
Underflow 0
Overflow 0
Fit Prob 0.21
Fit Chi2 8523 / 8418
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

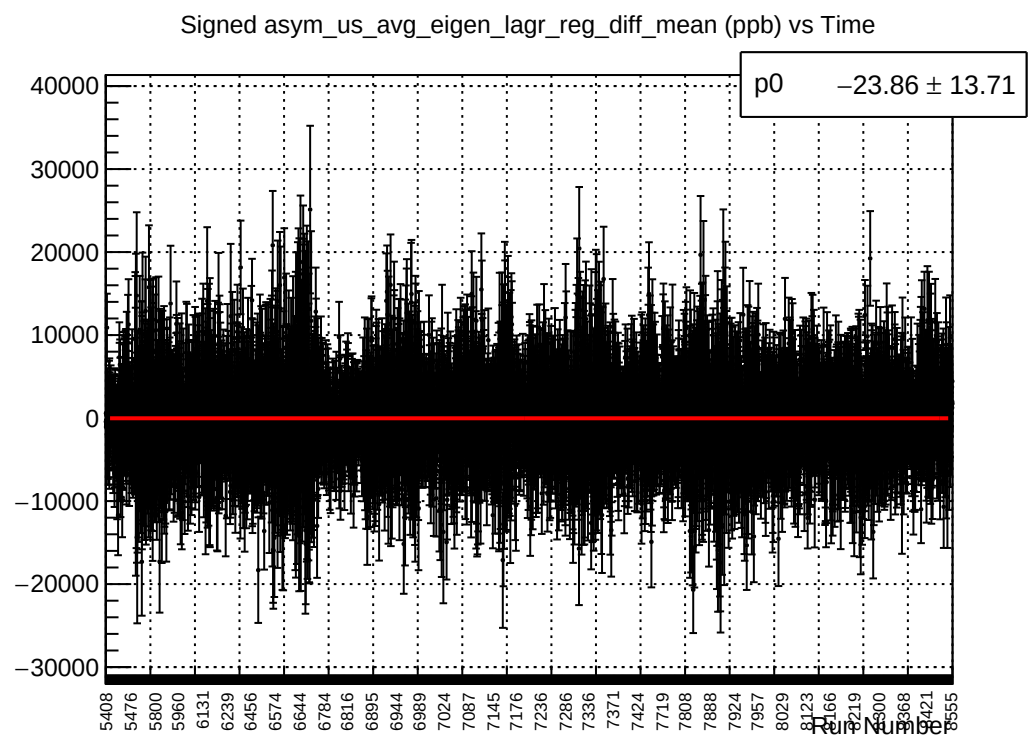

eigen_lagr_asym_us_avg_rms (ppm) vs Time
p0 777.5 ± 0.0594
1100
1000
900
800
700
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

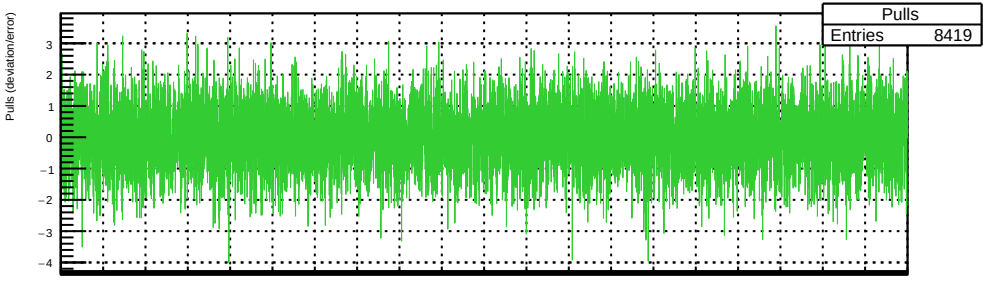

Signed asym_us_avg_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 −59.46 ± 156.5
100
50
0
−50
−100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

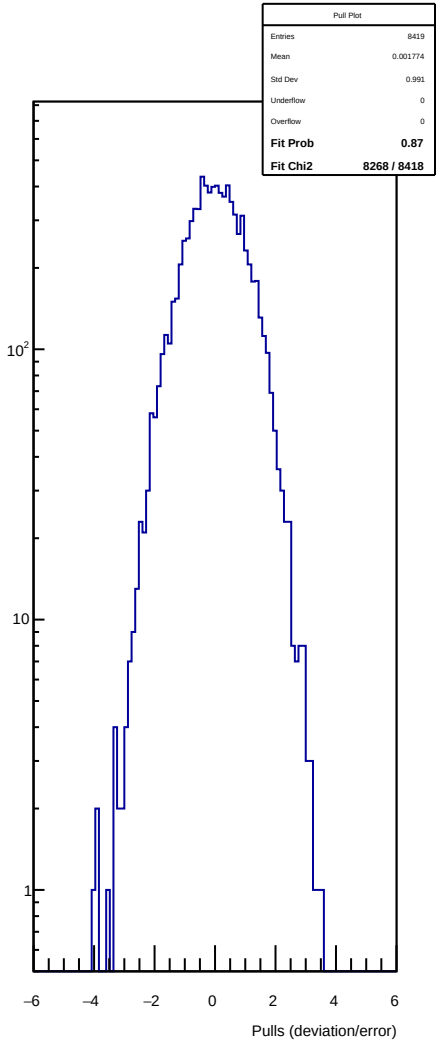

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

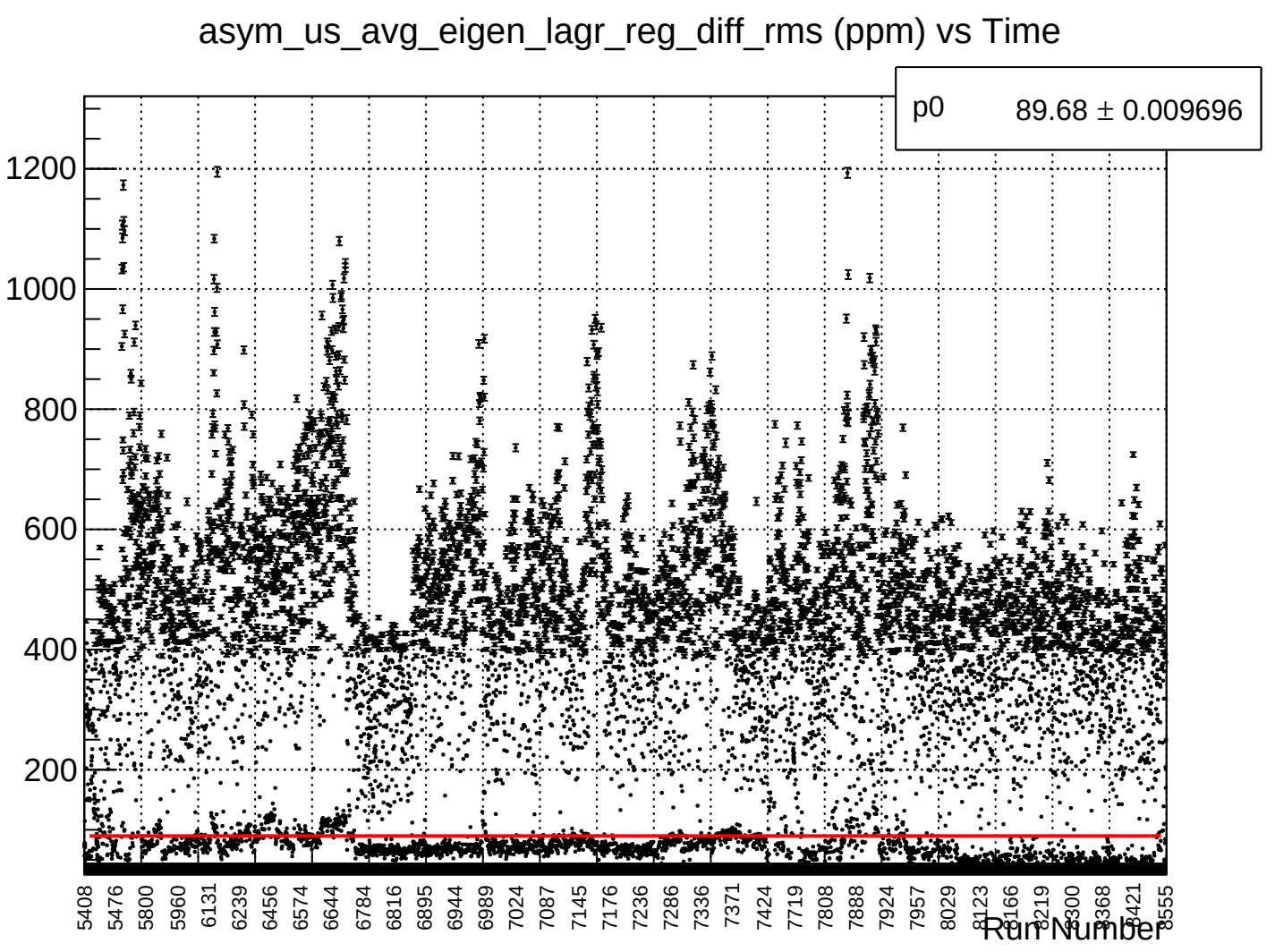

Pull Plot
Entries 8419
Mean 0.003711
Std Dev 0.9962
Underflow 0
Overflow 0
Fit Prob 0.69
Fit Chi2 8354 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

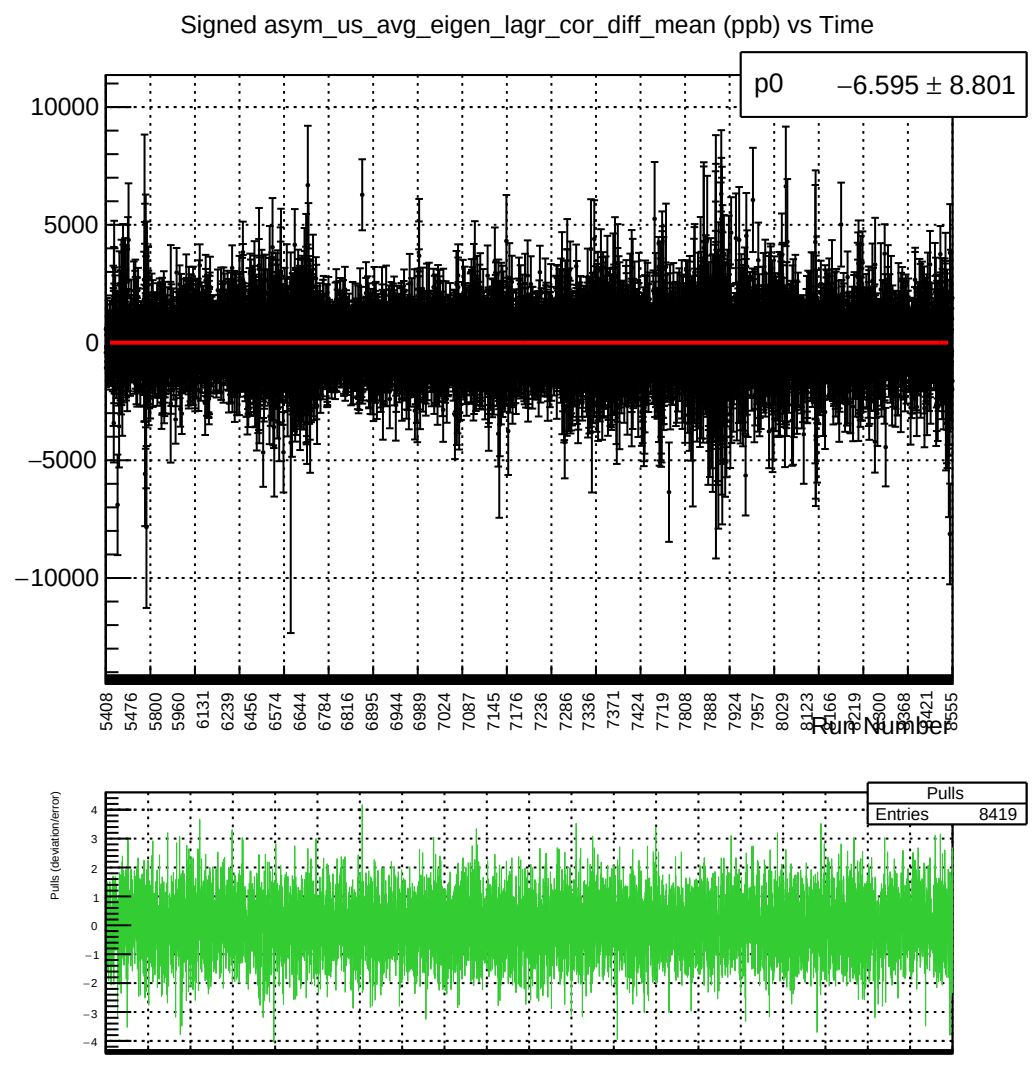

asym_us_avg_eigen_lagr_correction_rms (ppm) vs Time
p0
1416 ± 0.1107
4000
3500
3000
2500
2000
1500
1000
500
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

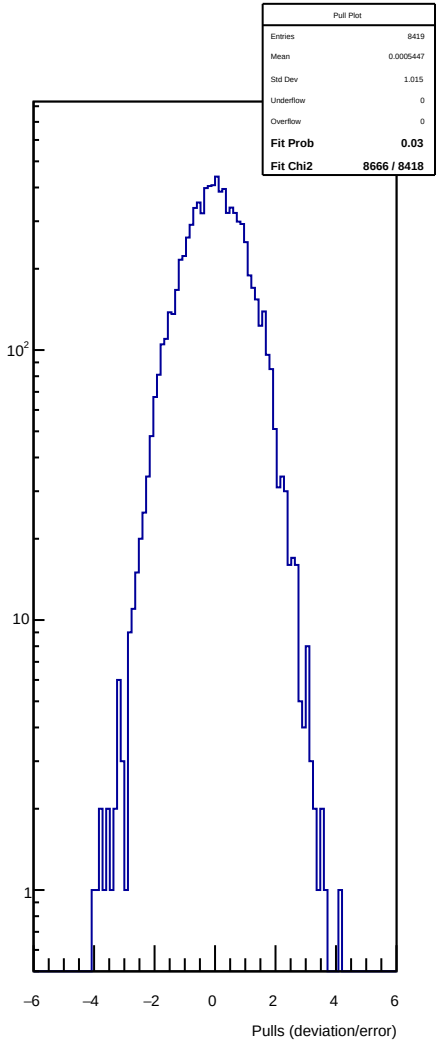

Signed asym_us_avg_eigen_lagr_reg_diff_mean (ppb) vs Time
p0 −23.86 ± 13.71
40000
30000
20000
10000
0
−10000
−20000
−30000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

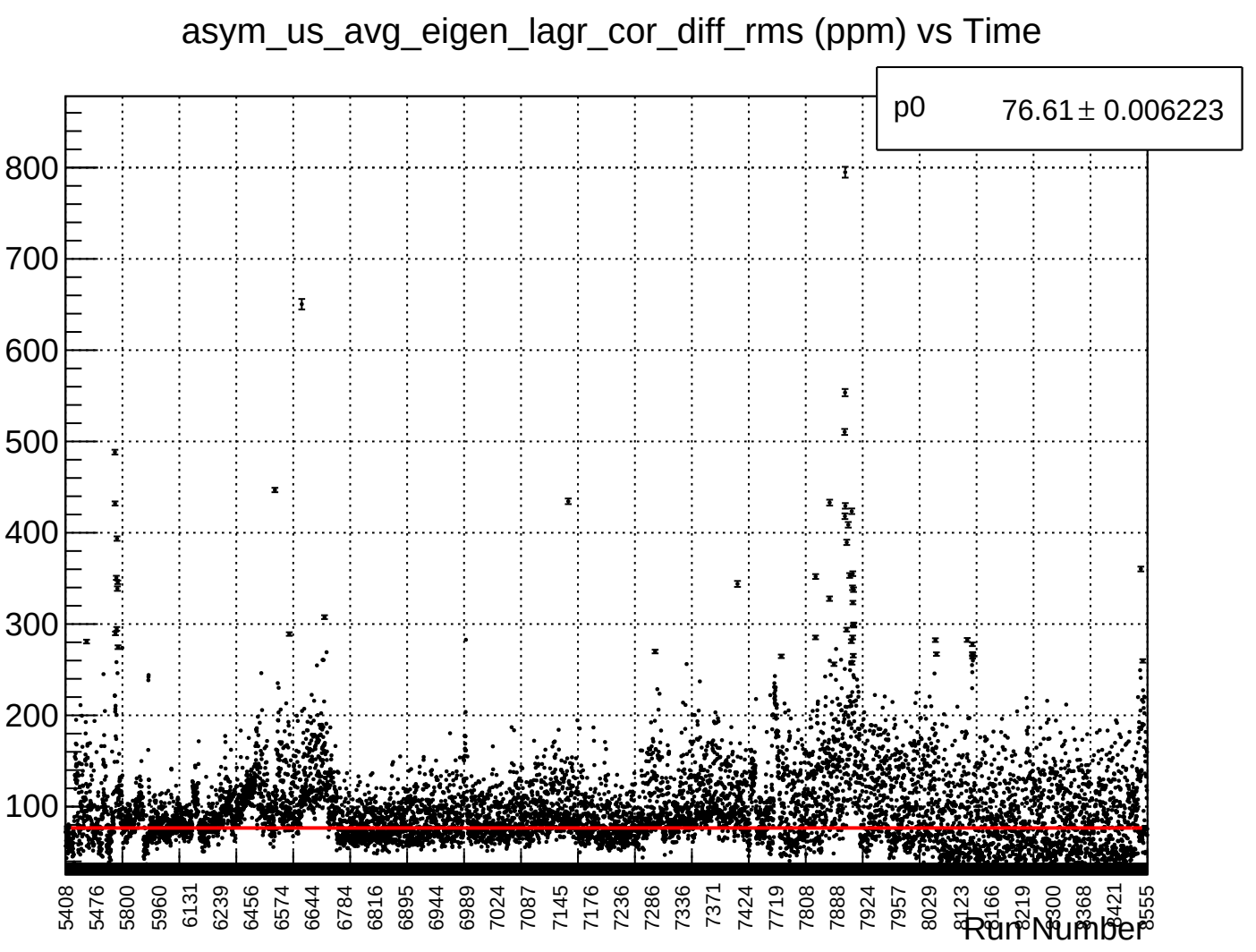

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

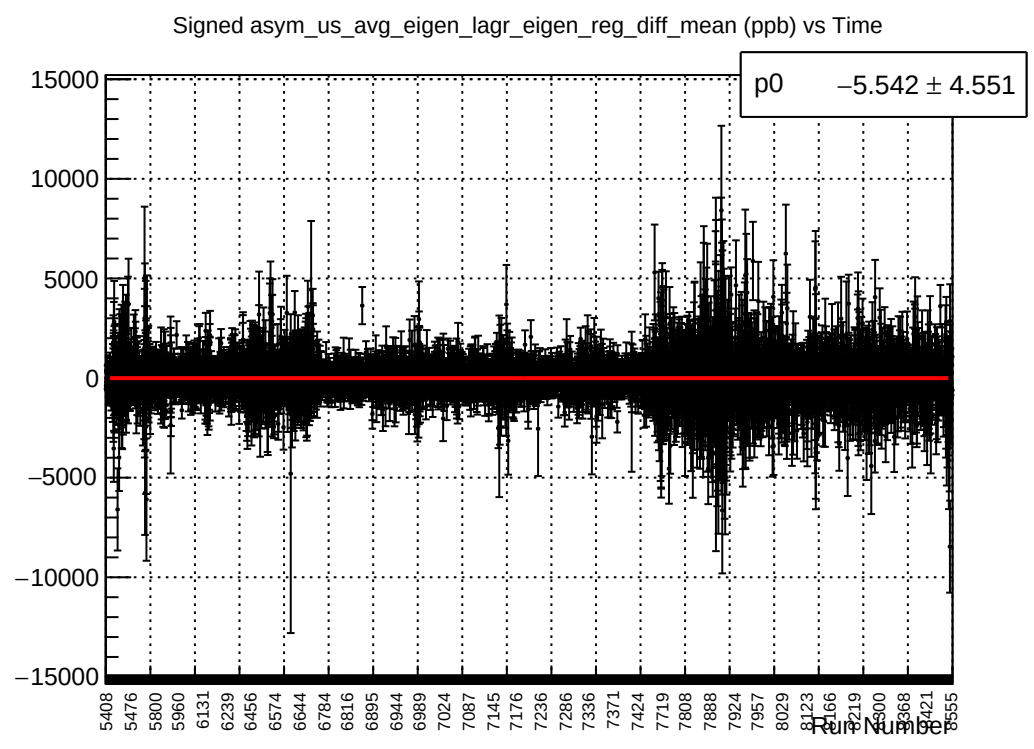

Pull Plot
Entries 8419
Mean 0.001774
Std Dev 0.991
Underflow 0
Overflow 0
Fit Prob 0.87
Fit Chi2 8268 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

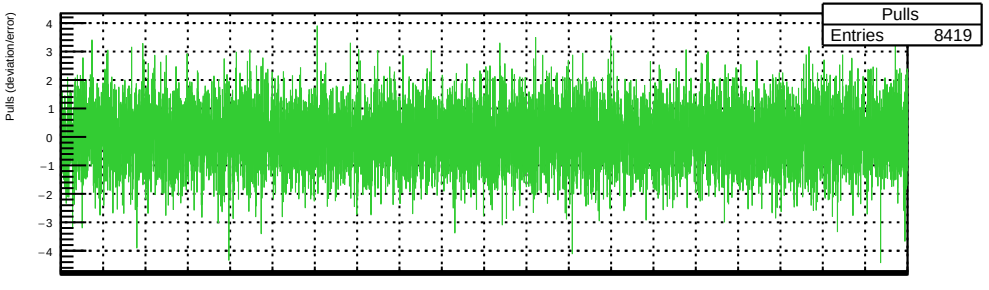

asym_us_avg_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 89.68 ± 0.009696
1200
1000
800
600
400
200
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

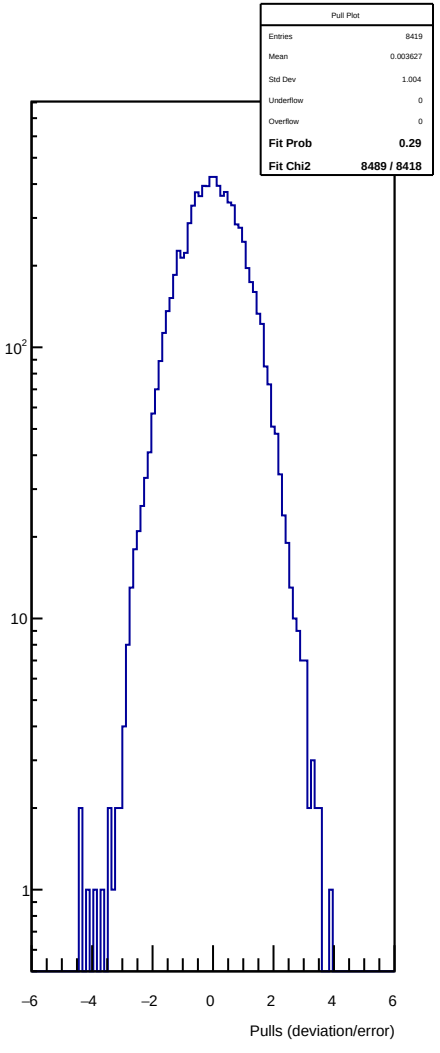

Signed asym_us_avg_eigen_lagr_cor_diff_mean (ppb) vs Time
p0 −6.595 ± 8.801
10000
5000
0
−5000
−10000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number
Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

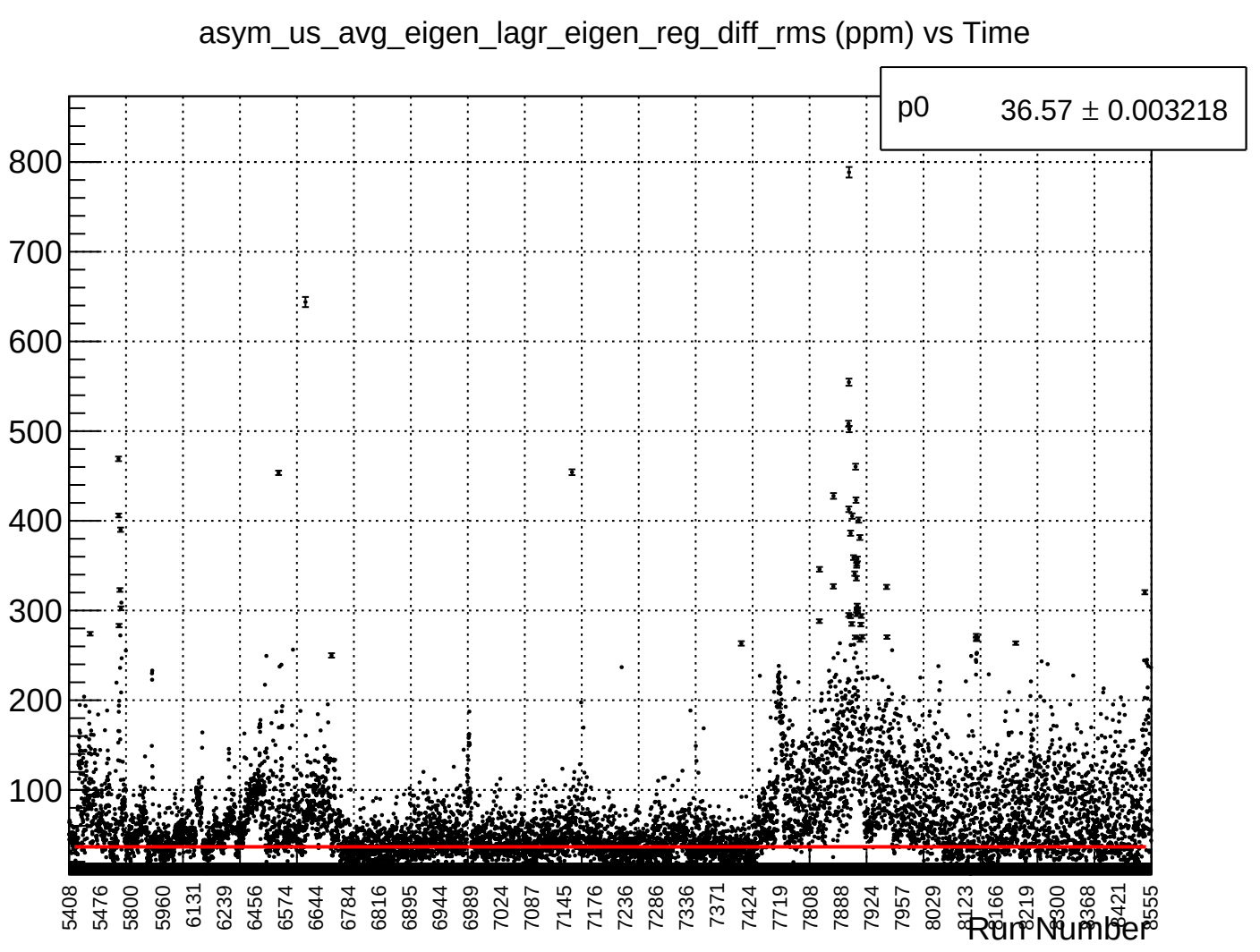

Pull Plot
Entries 8419
Mean 0.0005447
Std Dev 1.015
Underflow 0
Overflow 0
Fit Prob 0.03
Fit Chi2 8666 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

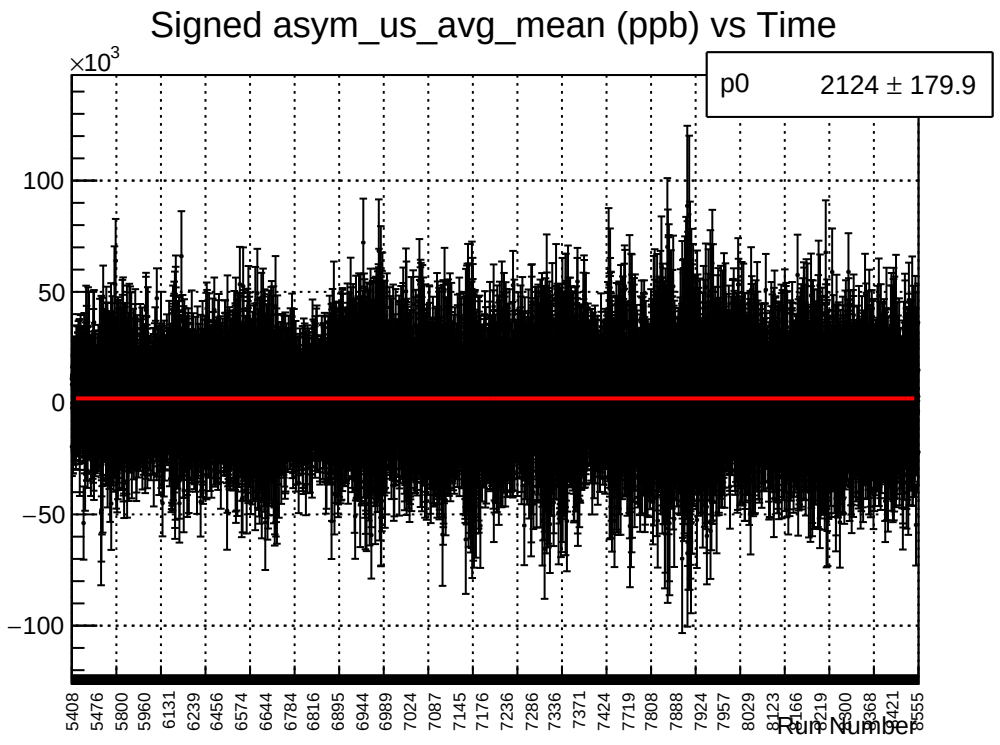

asym_us_avg_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 76.61 ± 0.006223
800
700
600
500
400
300
200
100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

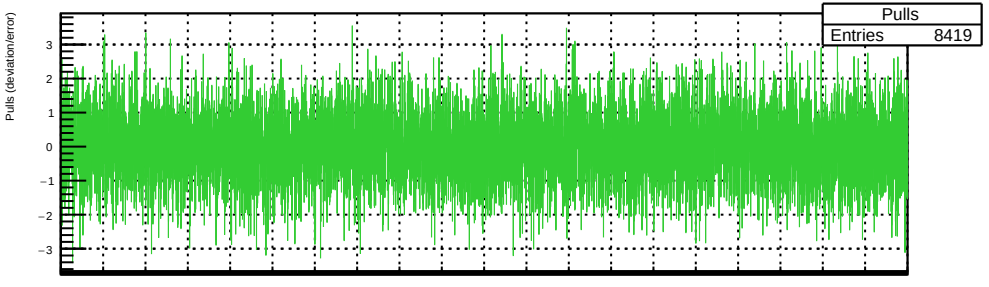

Signed asym_us_avg_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
p0 −5.542 ± 4.551
15000
10000
5000
0
−5000
−10000
−15000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

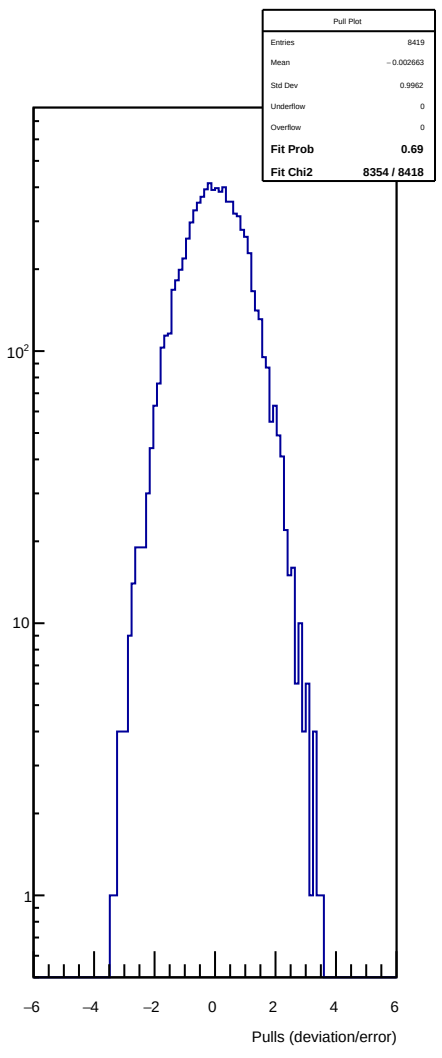

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

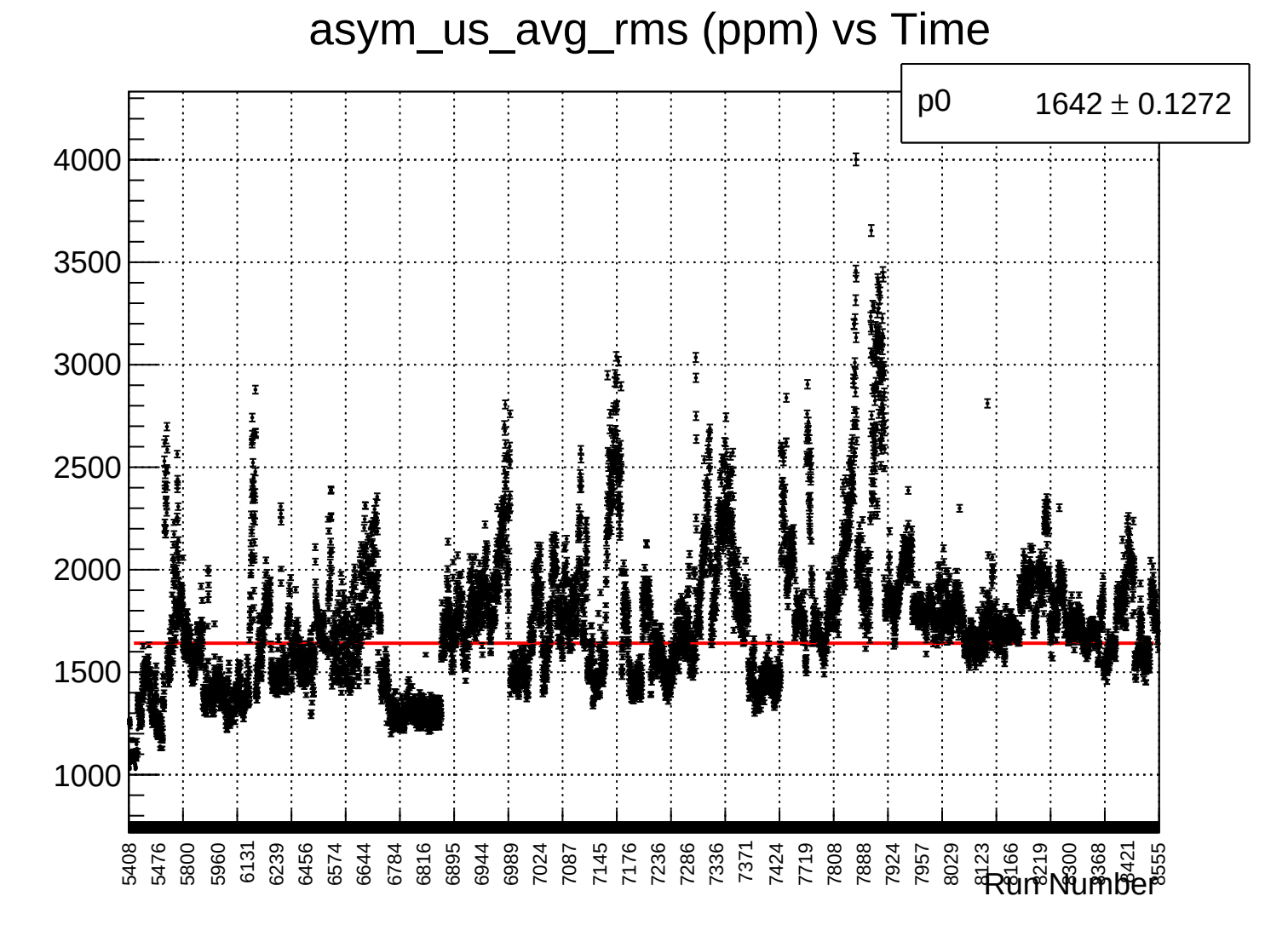

Pull Plot
Entries 8419
Mean 0.003627
Std Dev 1.004
Underflow 0
Overflow 0
Fit Prob 0.29
Fit Chi2 8489 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

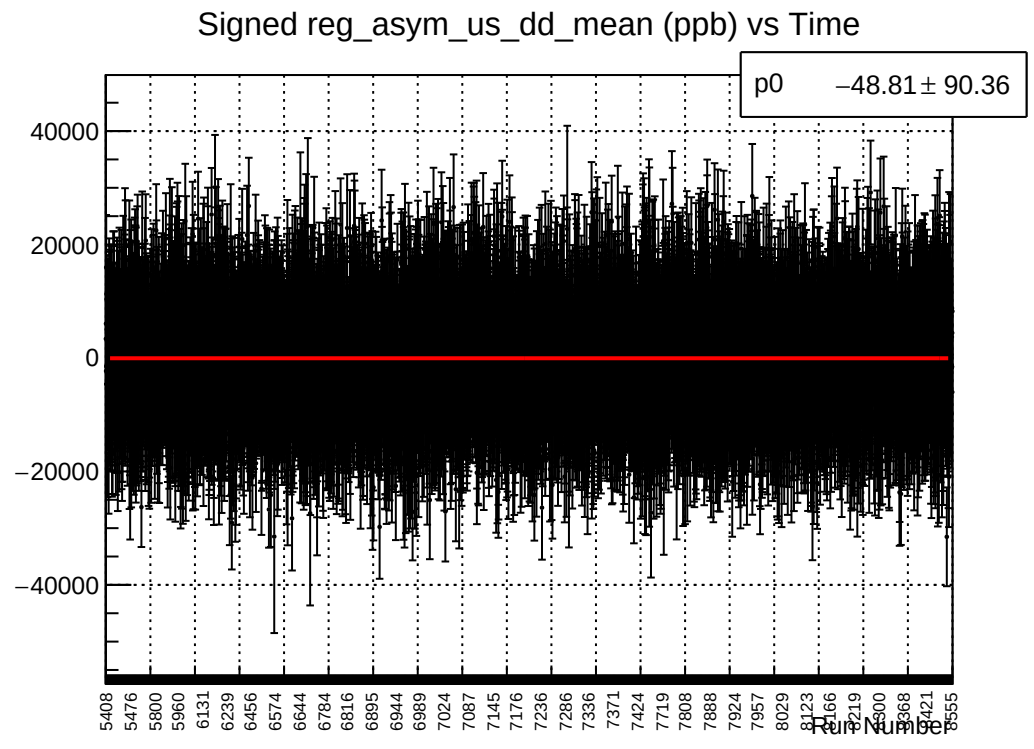

asym_us_avg_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 36.57 ± 0.003218
800
700
600
500
400
300
200
100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

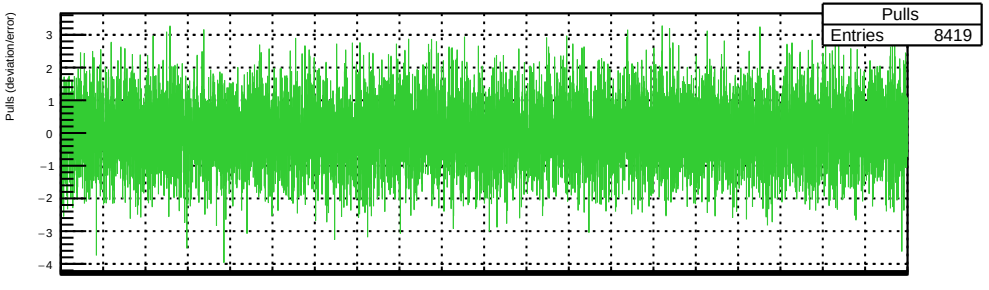

Signed asym_us_avg_mean (ppb) vs Time
×10^3
p0 2124 ± 179.9
100
50
0
−50
−100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

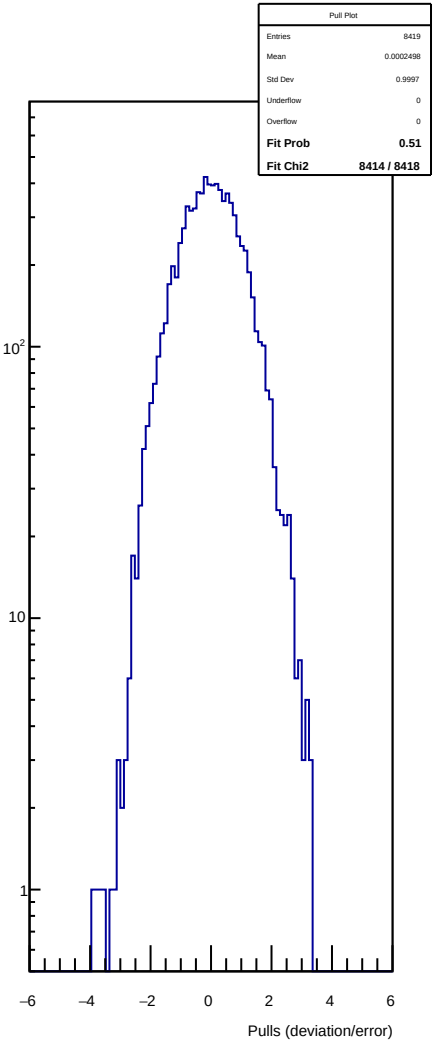

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

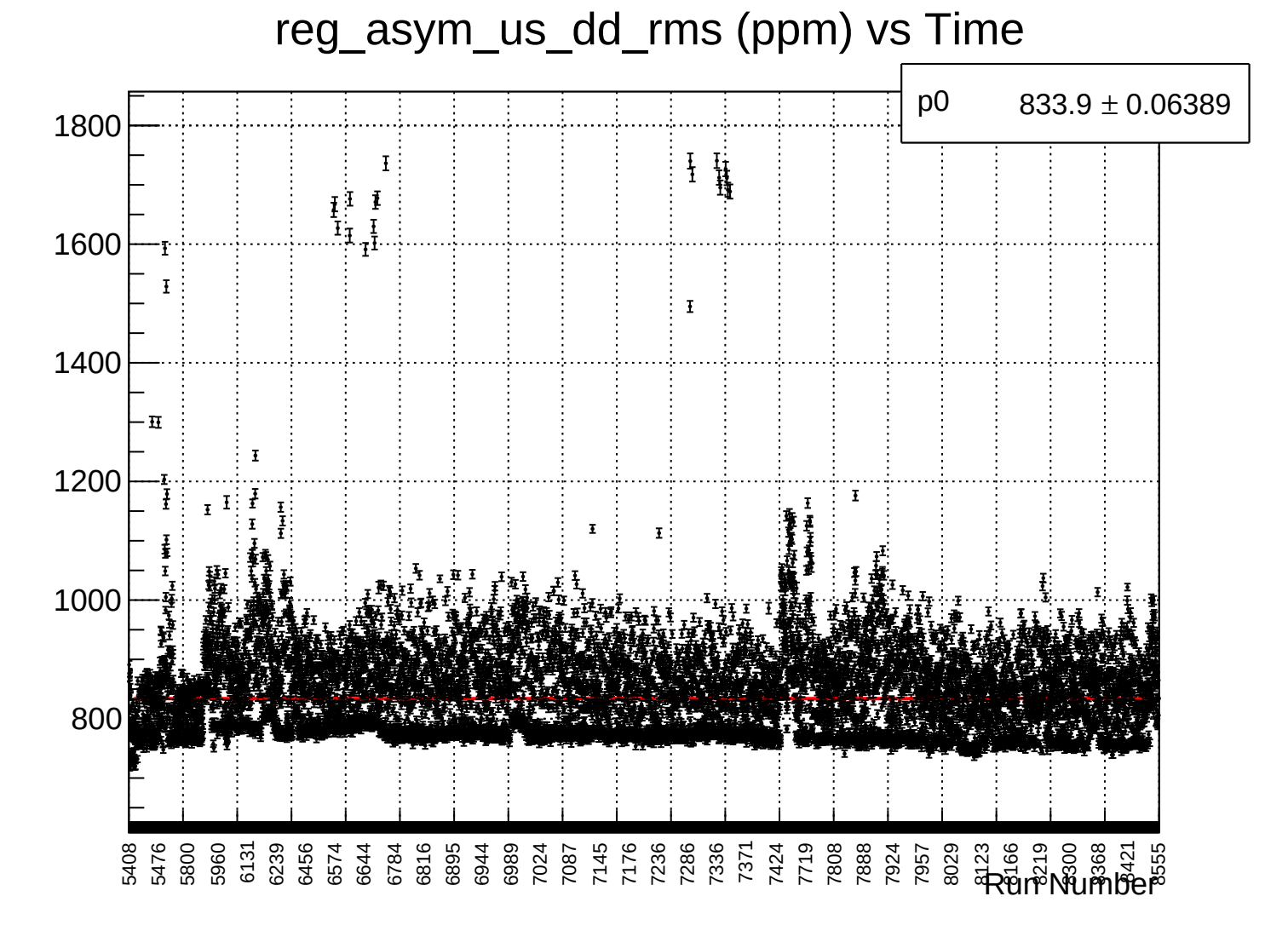

Pull Plot
Entries 8419
Mean −0.002663
Std Dev 0.9962
Underflow 0
Overflow 0
Fit Prob 0.69
Fit Chi2 8354 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

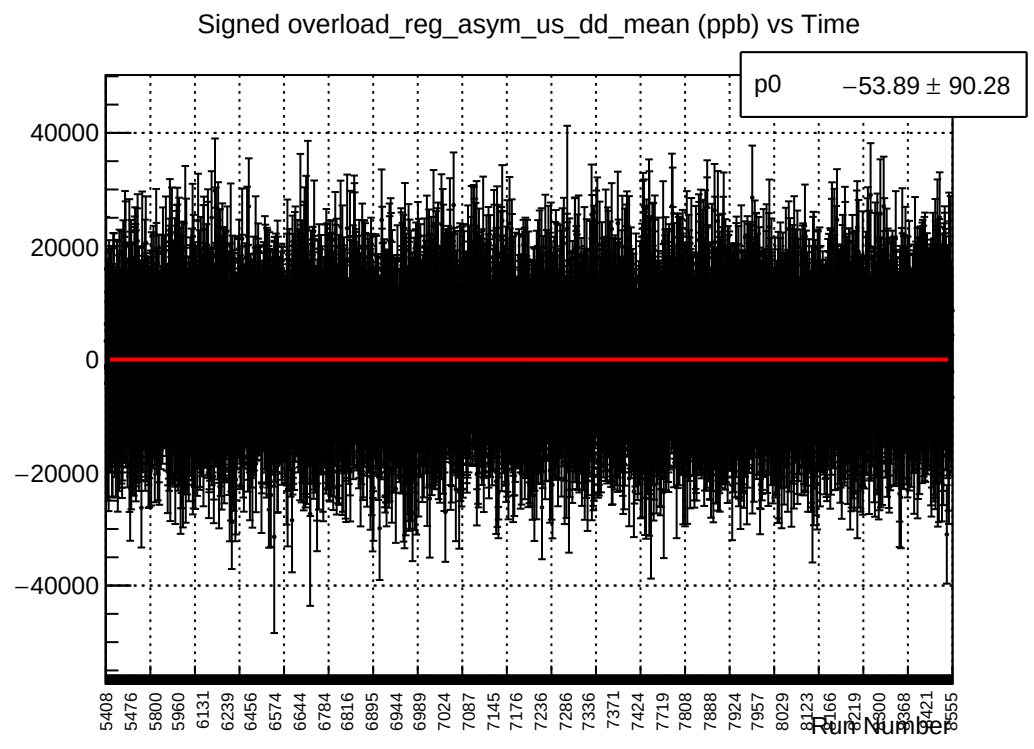

asym_us_avg_rms (ppm) vs Time
p0
1642 ± 0.1272
4000
3500
3000
2500
2000
1500
1000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

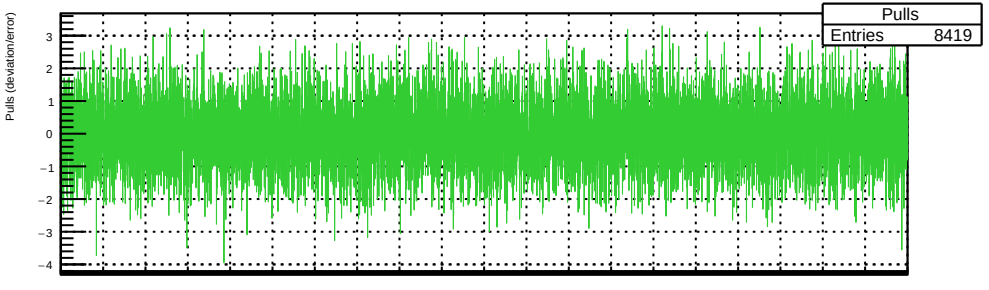

Signed reg_asym_us_dd_mean (ppb) vs Time
p0 −48.81 ± 90.36
40000
20000
0
−20000
−40000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

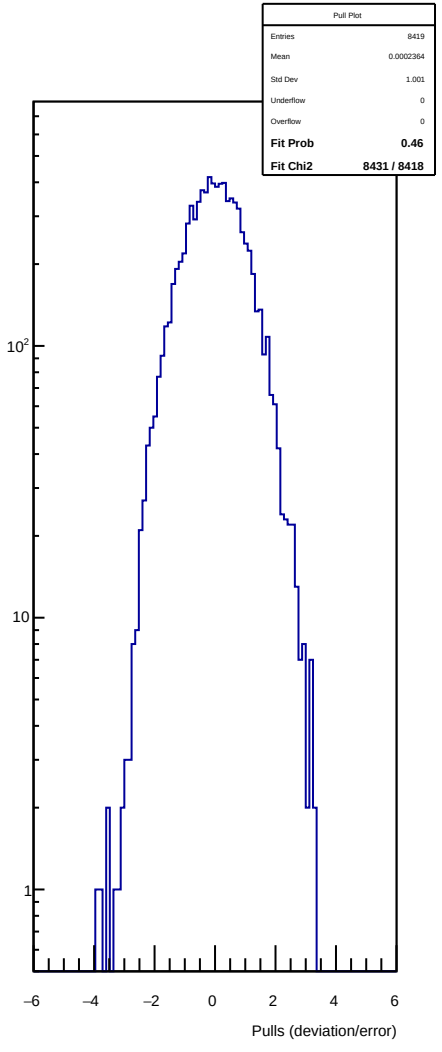

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

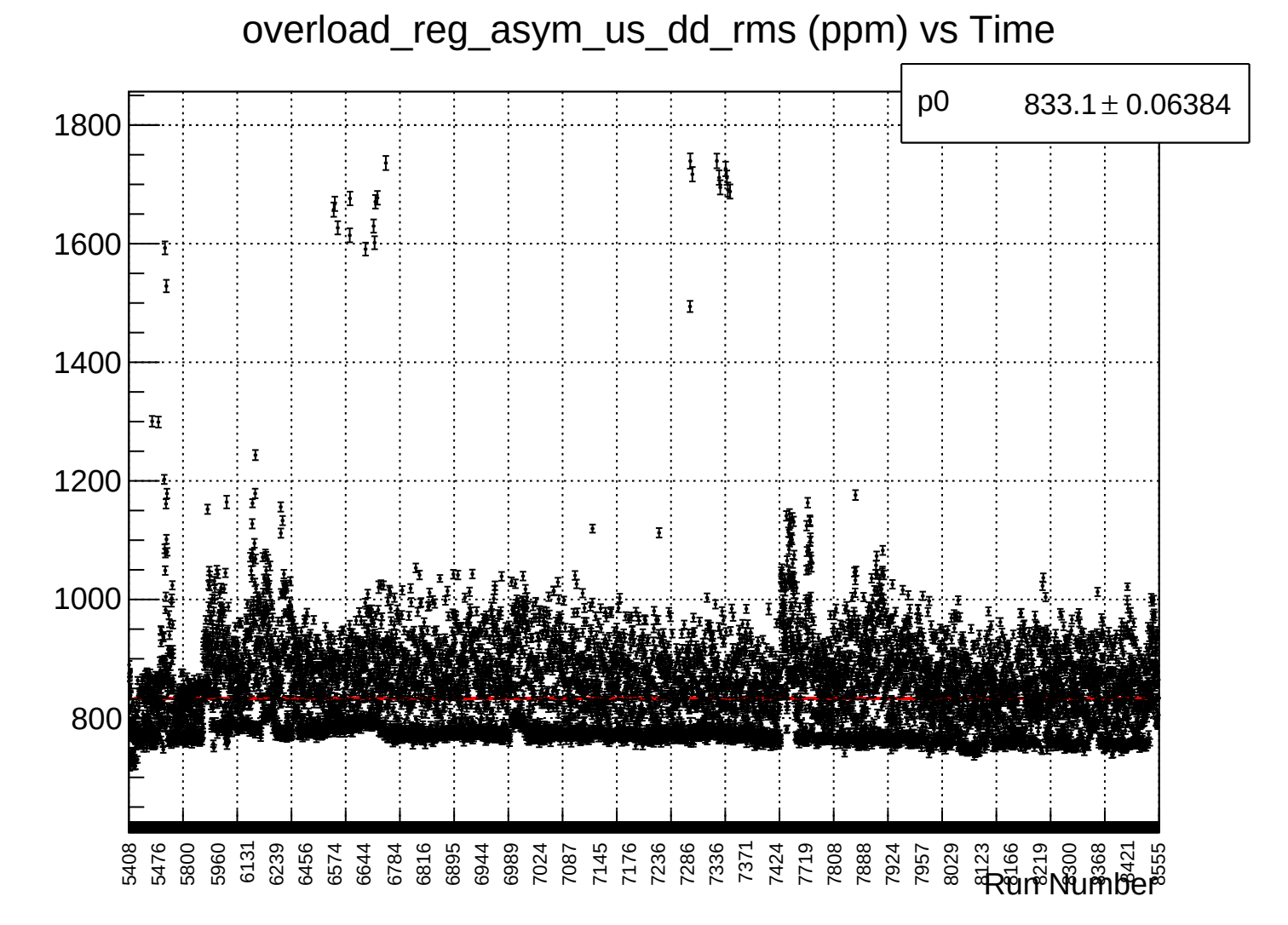

Pull Plot
Entries 8419
Mean 0.0002498
Std Dev 0.9997
Underflow 0
Overflow 0
Fit Prob 0.51
Fit Chi2 8414 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

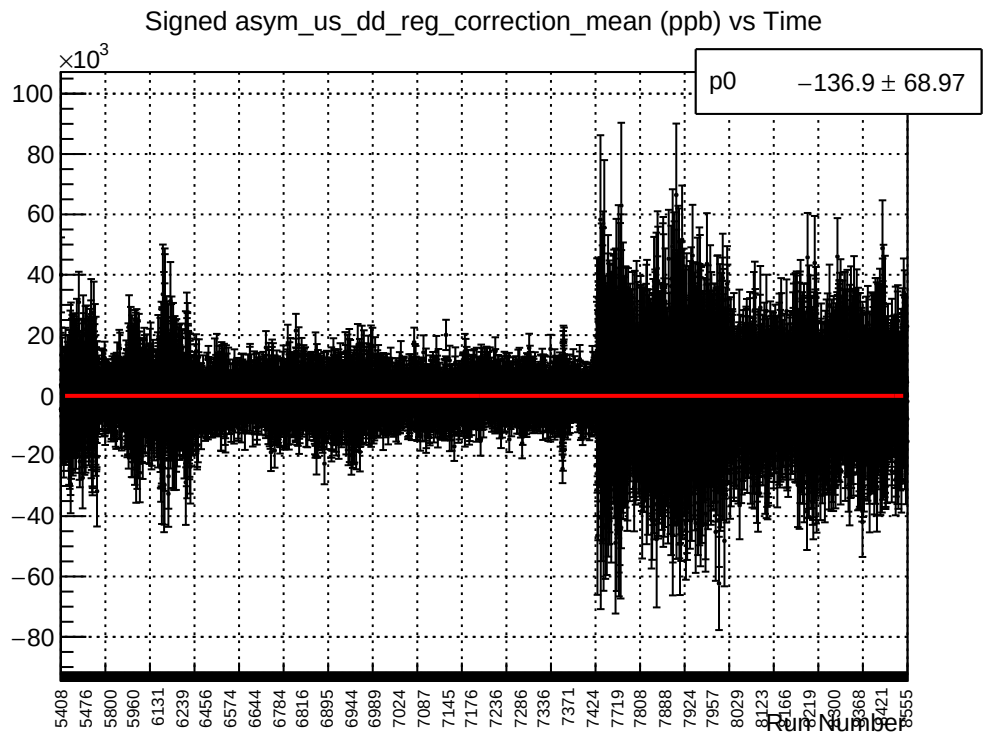

reg_asym_us_dd_rms (ppm) vs Time
p0 833.9 ± 0.06389
1800
1600
1400
1200
1000
800
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

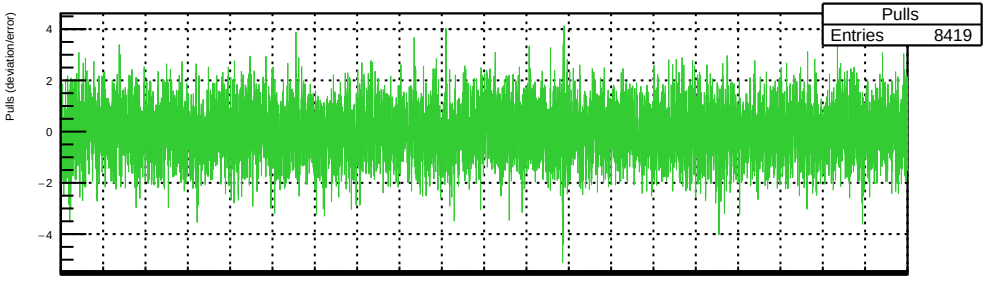

Signed overload_reg_asym_us_dd_mean (ppb) vs Time
p0 −53.89 ± 90.28
40000
20000
0
−20000
−40000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

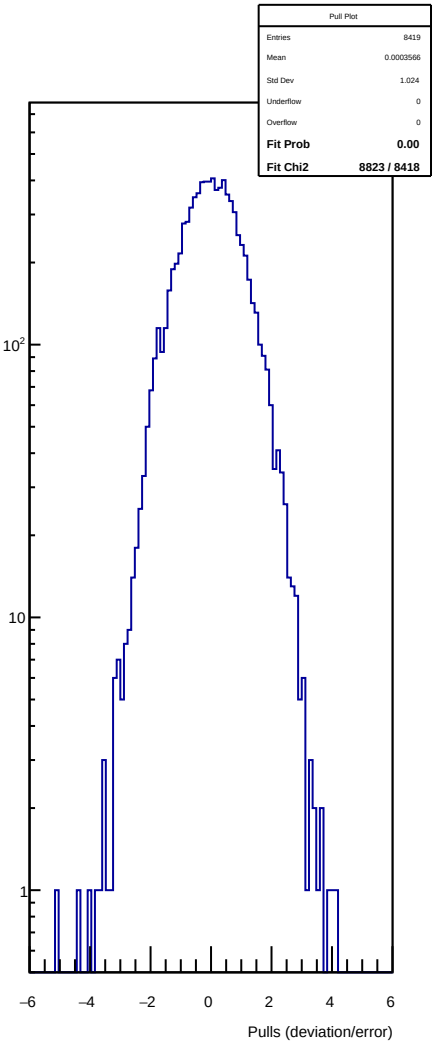

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

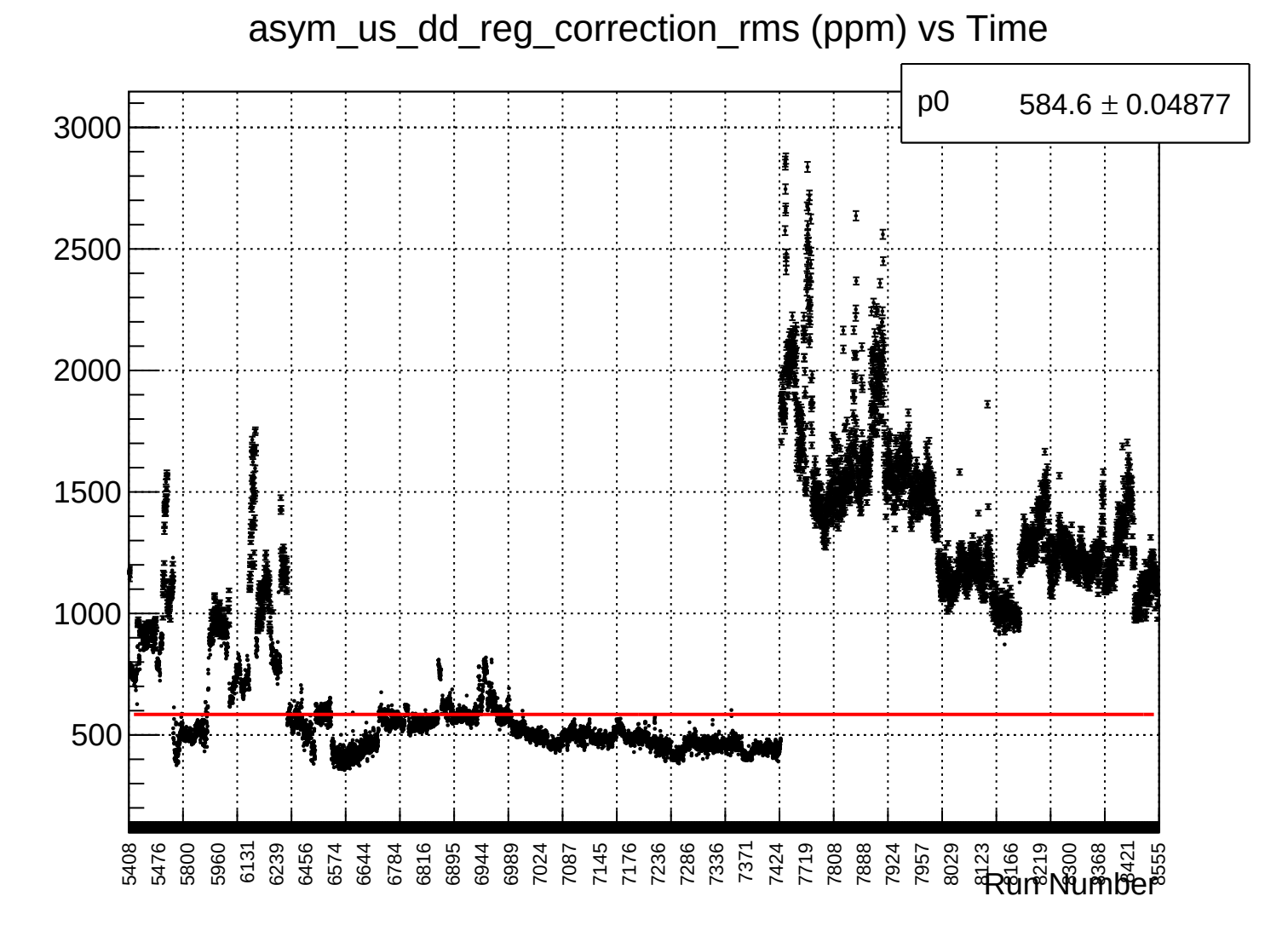

Pull Plot
Entries 8419
Mean 0.0002364
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.46
Fit Chi2 8431 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

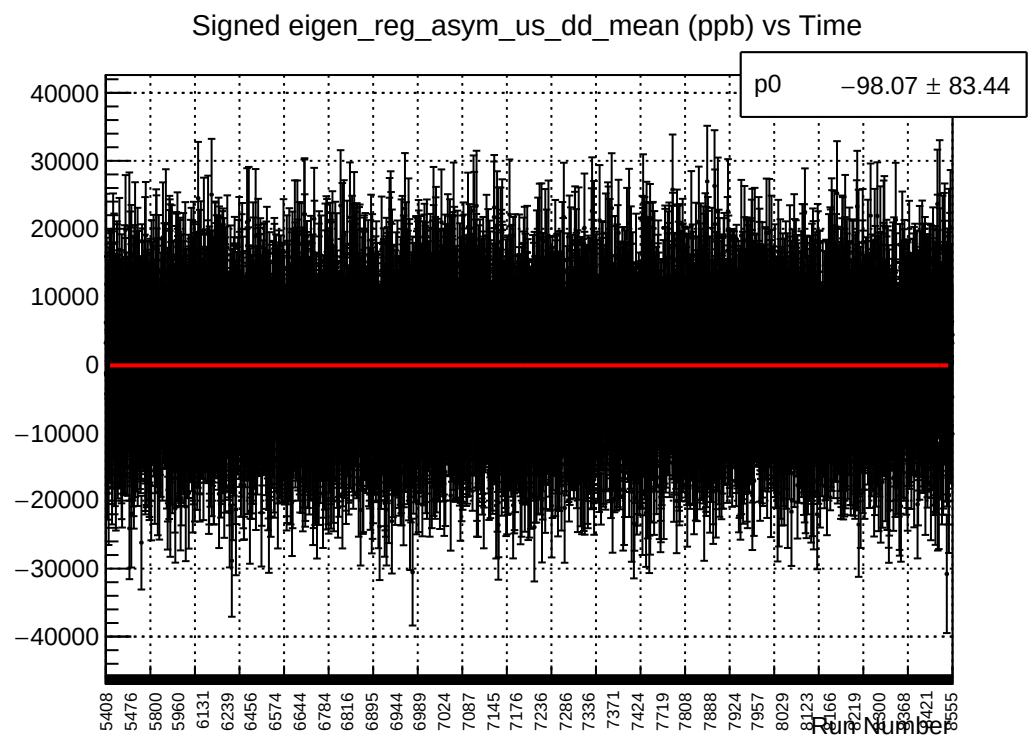

overload_reg_asym_us_dd_rms (ppm) vs Time
p0 833.1 ± 0.06384
1800
1600
1400
1200
1000
800
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

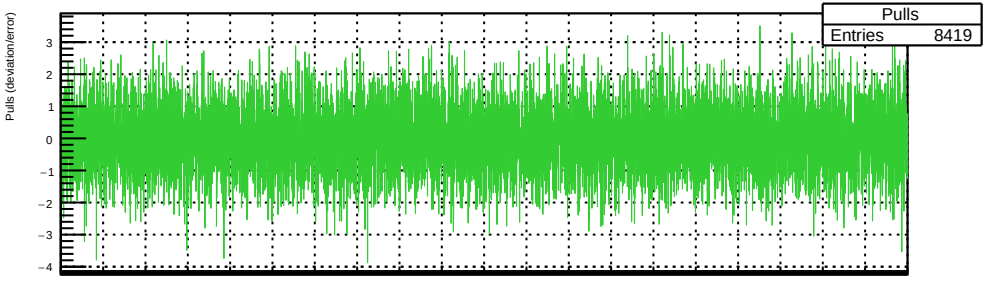

Signed asym_us_dd_reg_correction_mean (ppb) vs Time
×10^3
p0 −136.9 ± 68.97
100
80
60
40
20
0
−20
−40
−60
−80
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

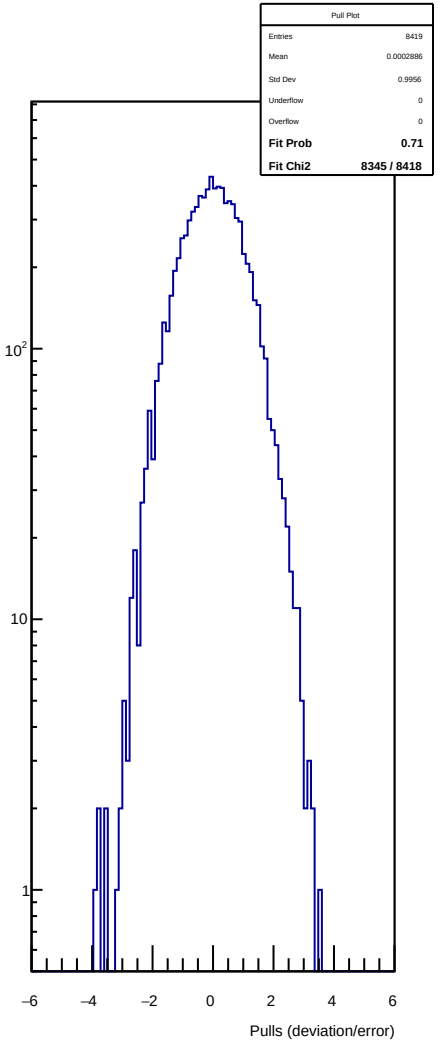

Pulls
Entries 8419
Pulls (deviation/error)
4
2
0
−2
−4

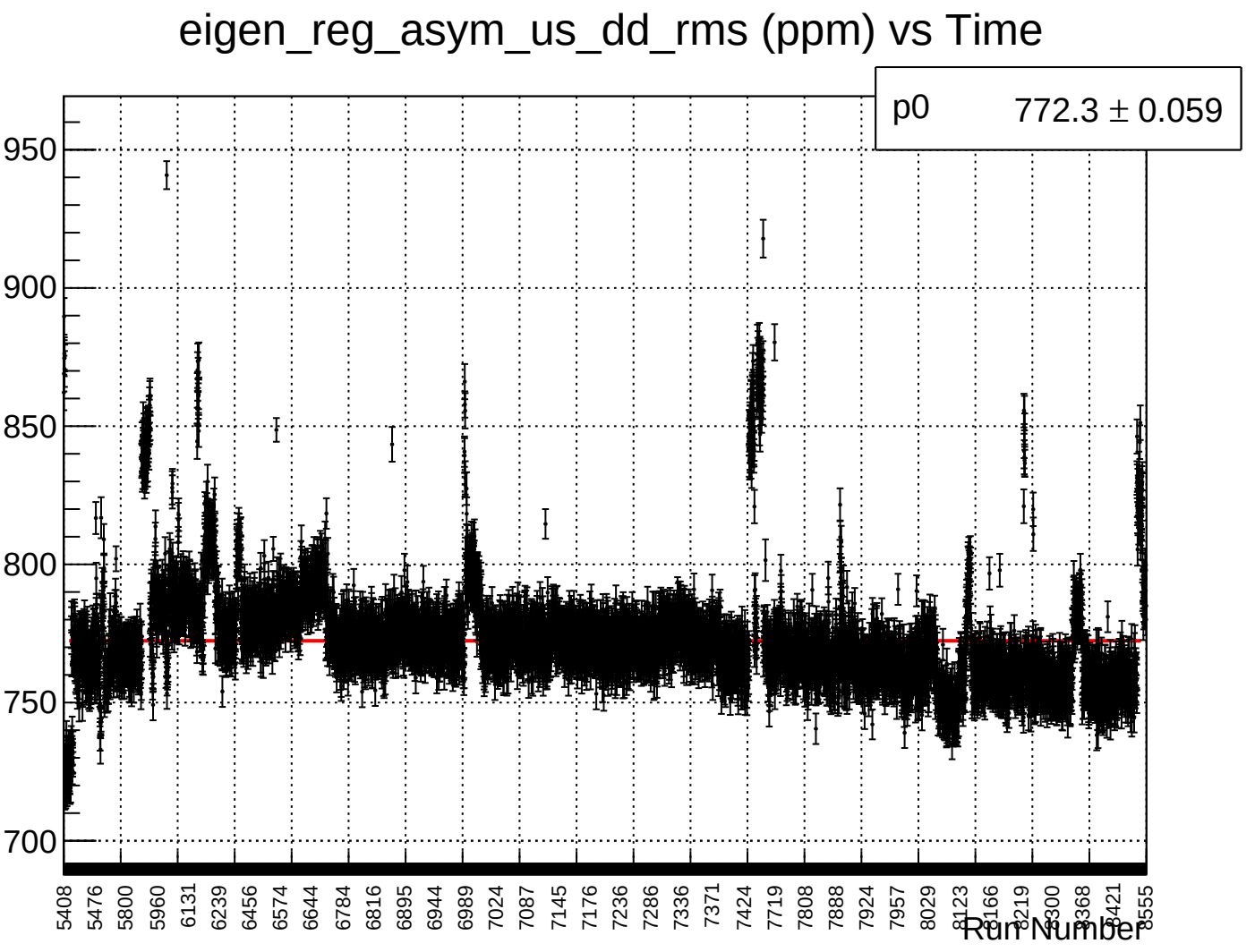

Pull Plot
Entries 8419
Mean 0.0003566
Std Dev 1.024
Underflow 0
Overflow 0
Fit Prob 0.00
Fit Chi2 8823 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

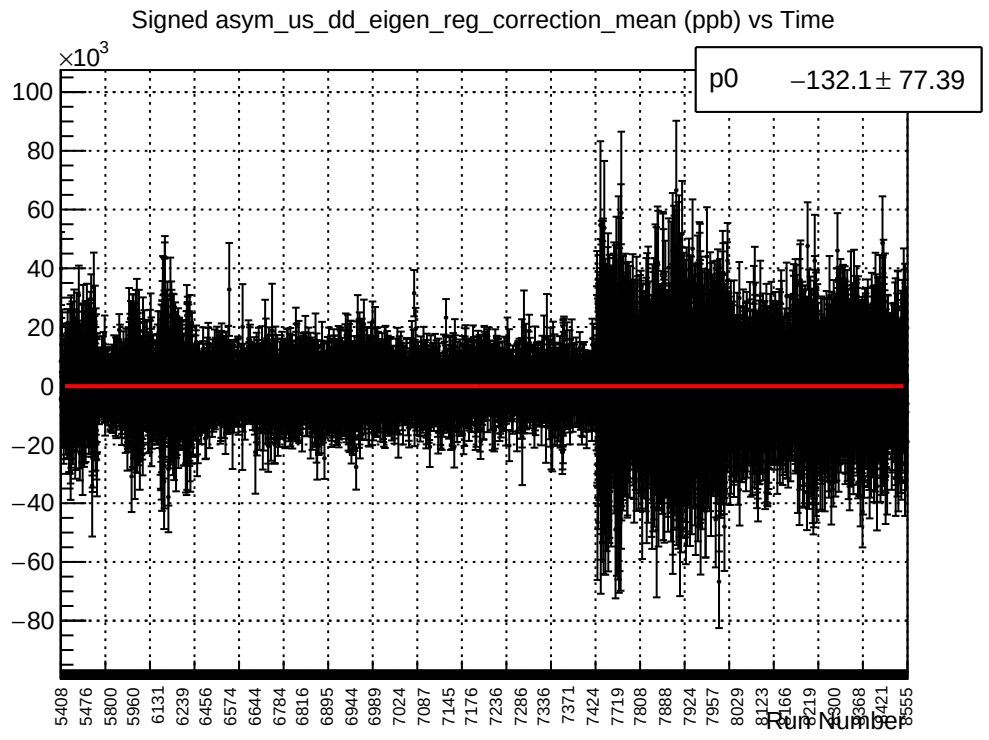

asym_us_dd_reg_correction_rms (ppm) vs Time
p0 584.6 ± 0.04877
3000
2500
2000
1500
1000
500
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

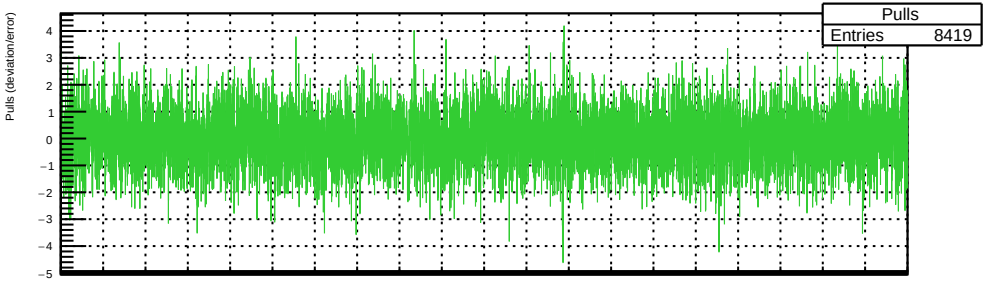

Signed eigen_reg_asym_us_dd_mean (ppb) vs Time
p0 −98.07 ± 83.44
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

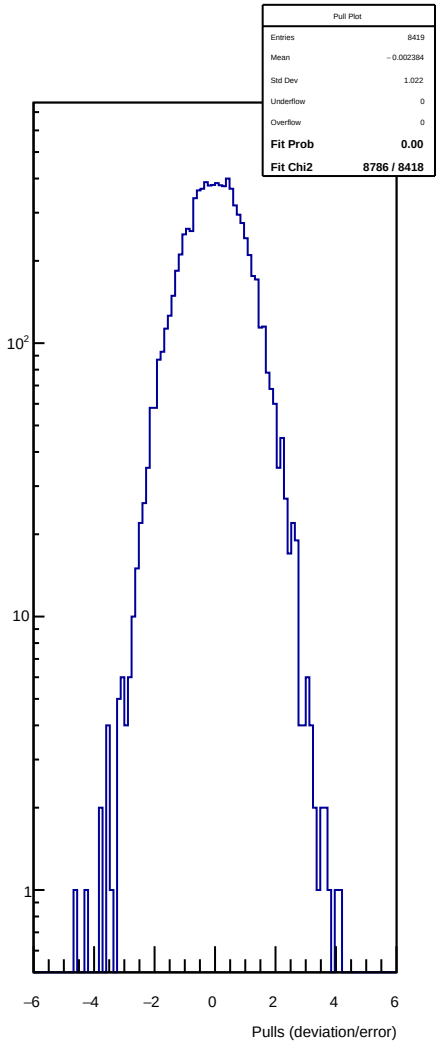

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

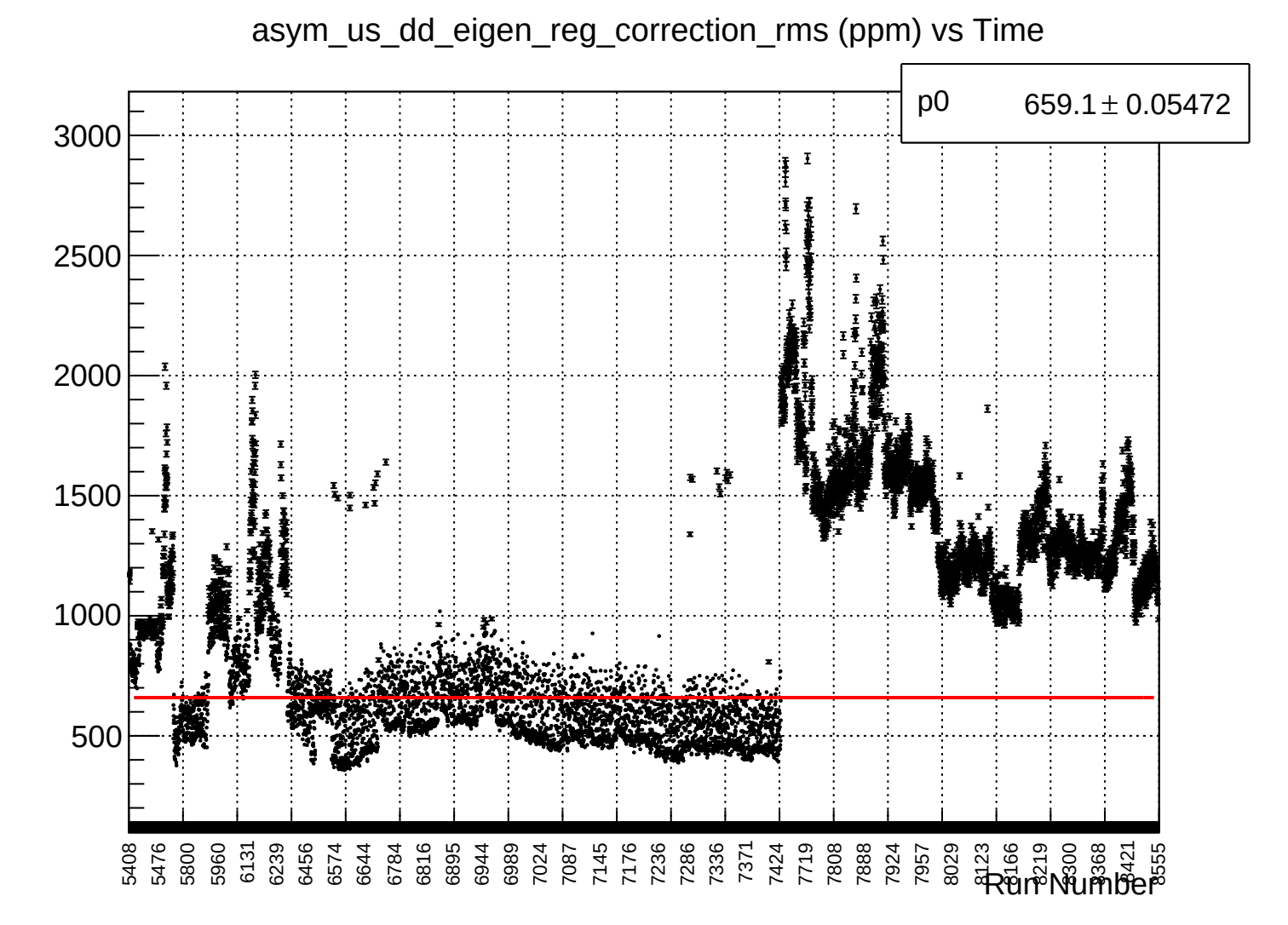

Pull Plot
Entries 8419
Mean 0.0002886
Std Dev 0.9956
Underflow 0
Overflow 0
Fit Prob 0.71
Fit Chi2 8345 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

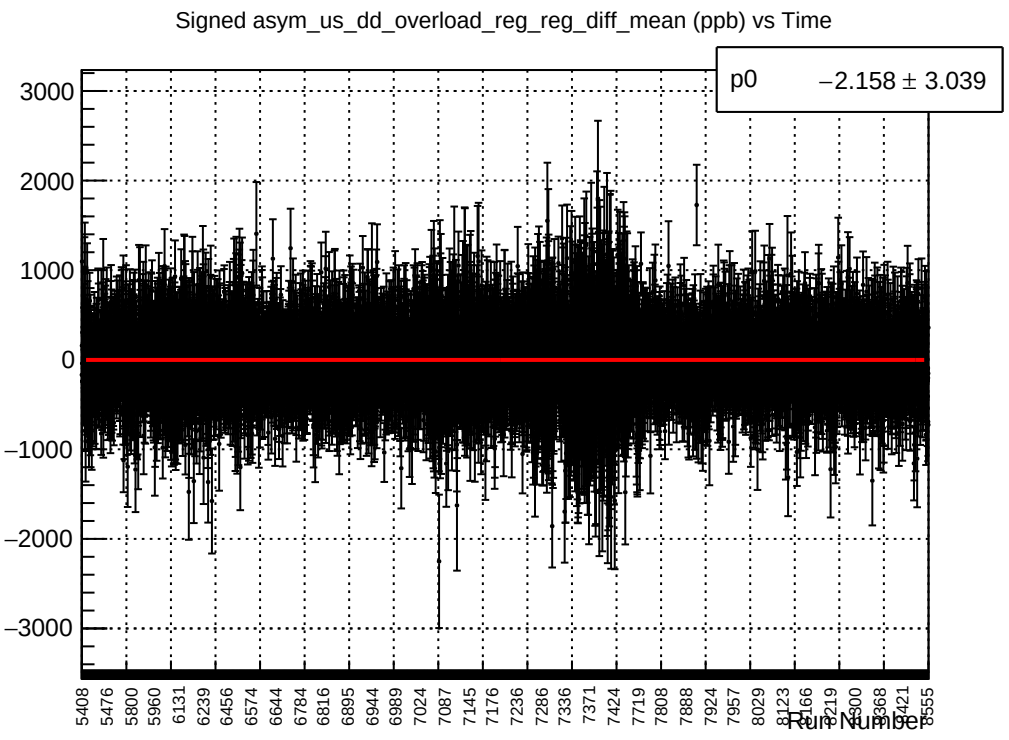

eigen_reg_asym_us_dd_rms (ppm) vs Time
p0
772.3 ± 0.059
950
900
850
800
750
700
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

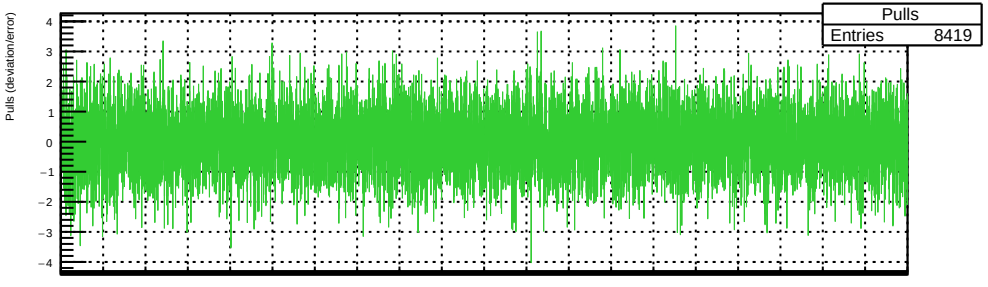

Signed asym_us_dd_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 −132.1 ± 77.39
100
80
60
40
20
0
−20
−40
−60
−80
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

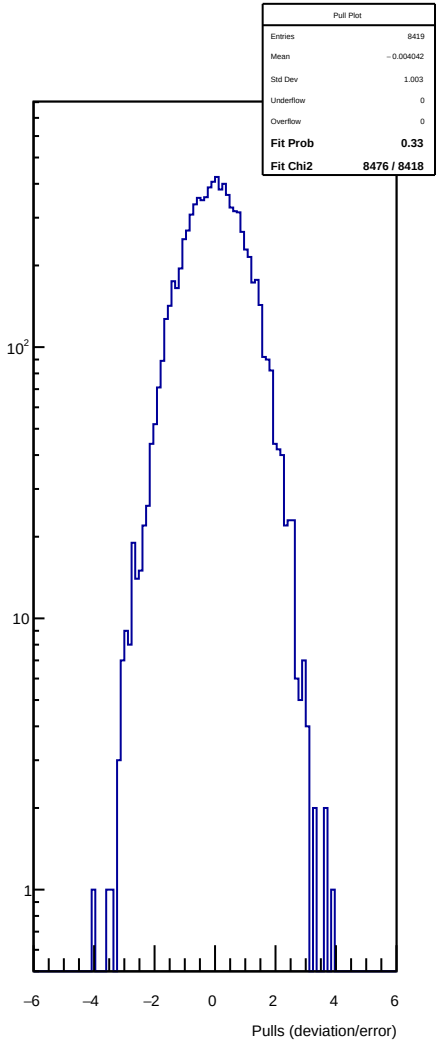

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4
−5

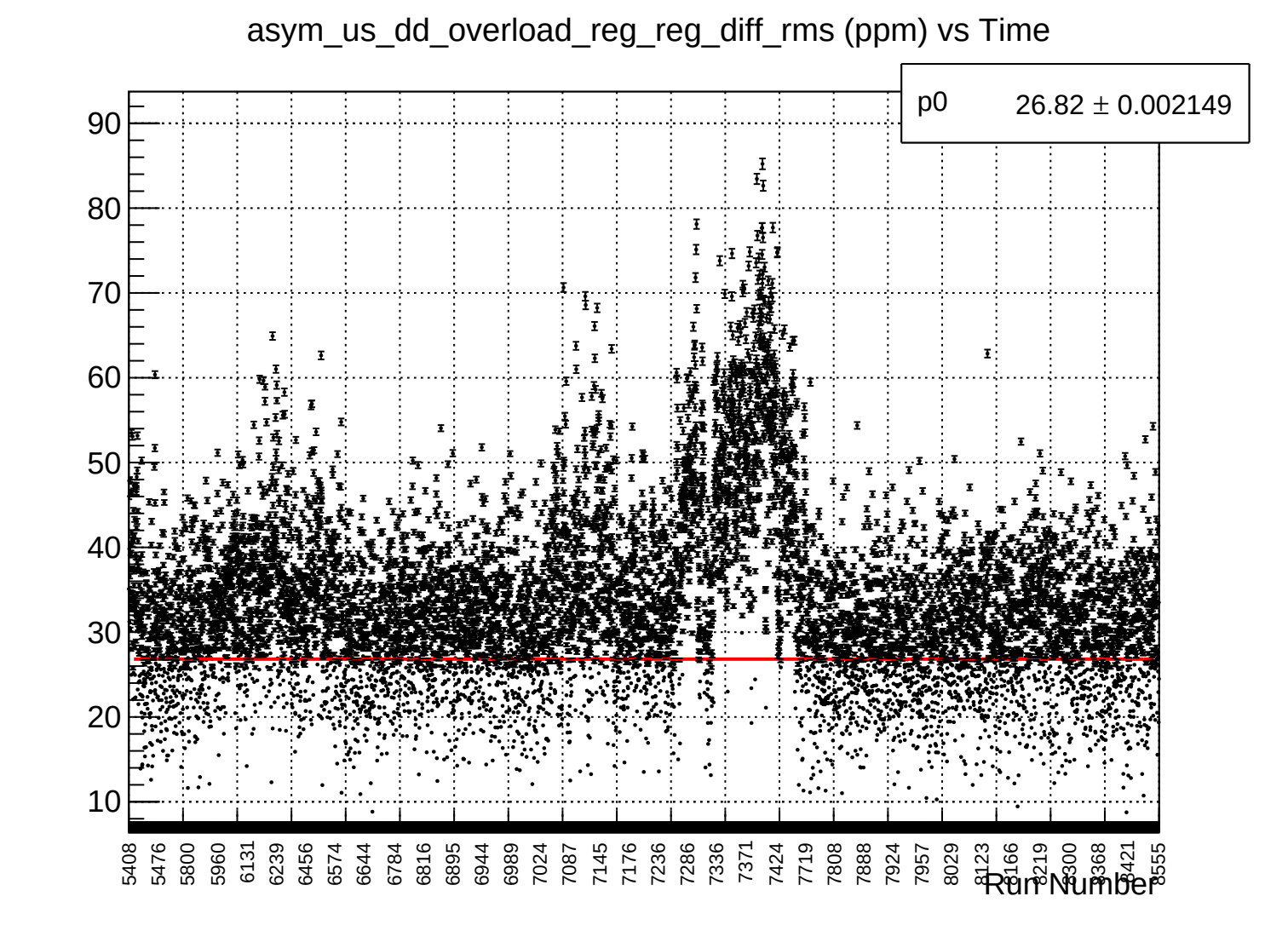

Pull Plot
Entries 8419
Mean −0.002384
Std Dev 1.022
Underflow 0
Overflow 0
Fit Prob 0.00
Fit Chi2 8786 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

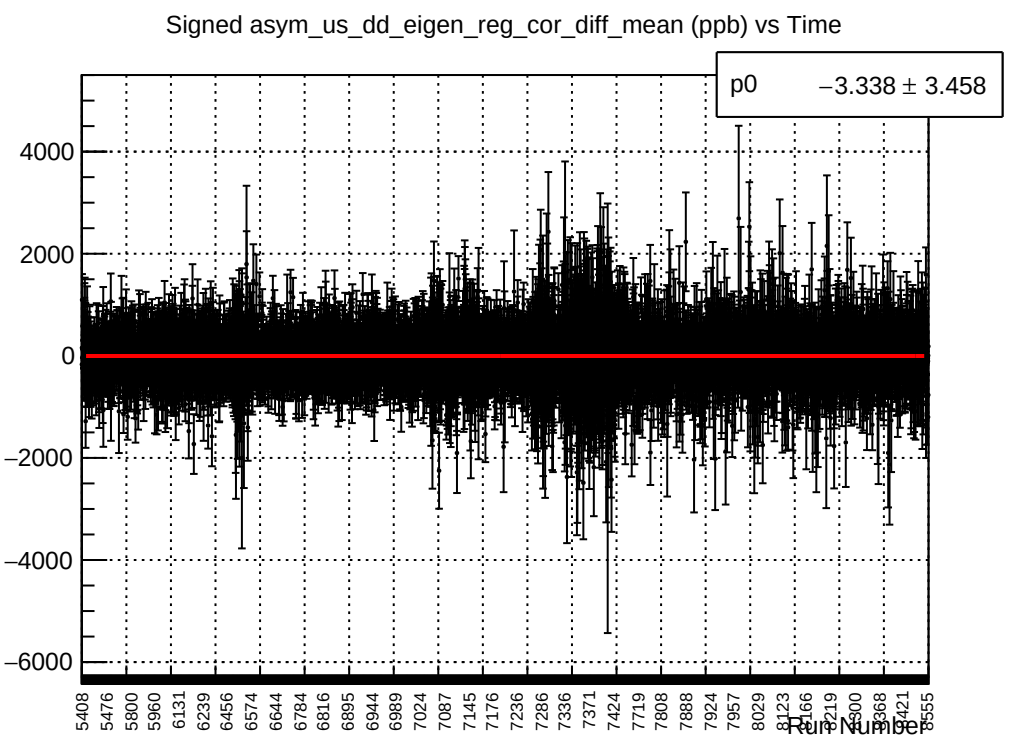

asym_us_dd_eigen_reg_correction_rms (ppm) vs Time
p0 659.1 ± 0.05472
3000
2500
2000
1500
1000
500
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

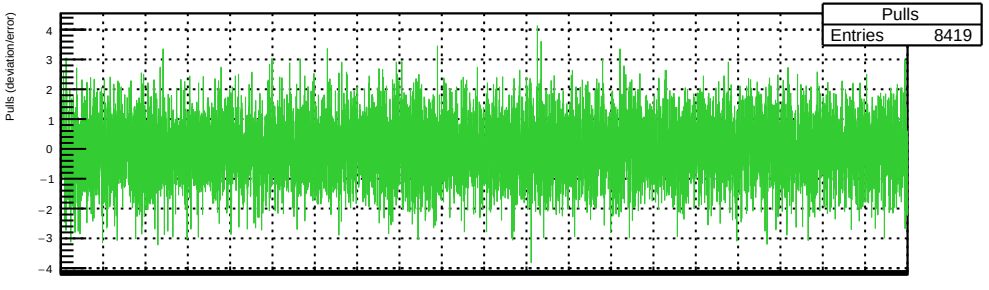

Signed asym_us_dd_overload_reg_reg_diff_mean (ppb) vs Time
p0 −2.158 ± 3.039
3000
2000
1000
0
−1000
−2000
−3000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

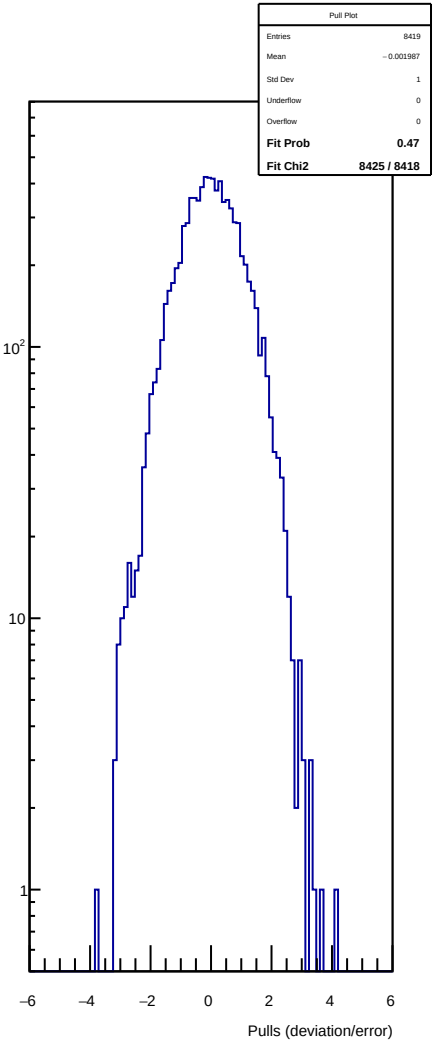

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

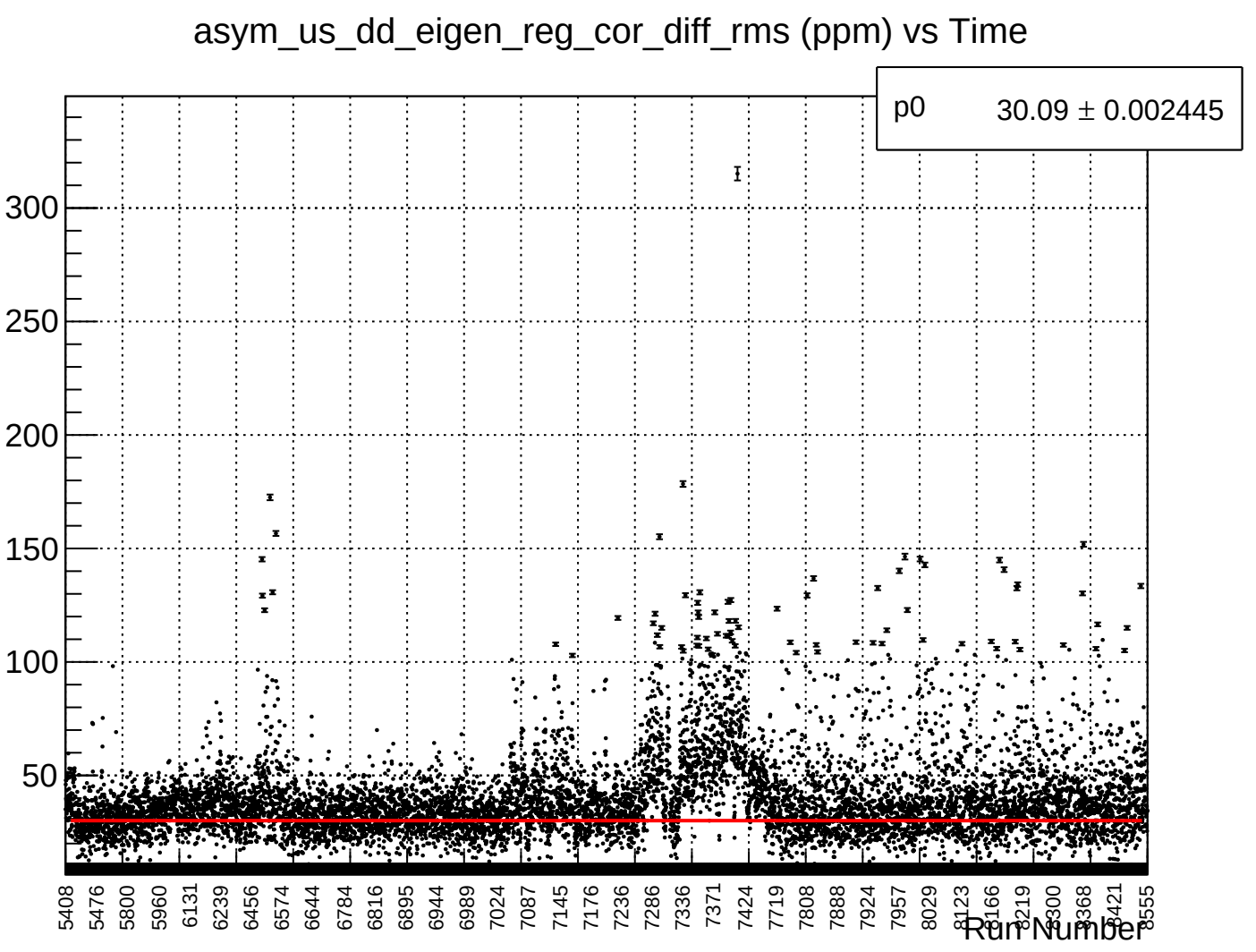

Pull Plot
Entries 8419
Mean −0.004042
Std Dev 1.003
Underflow 0
Overflow 0
Fit Prob 0.33
Fit Chi2 8476 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

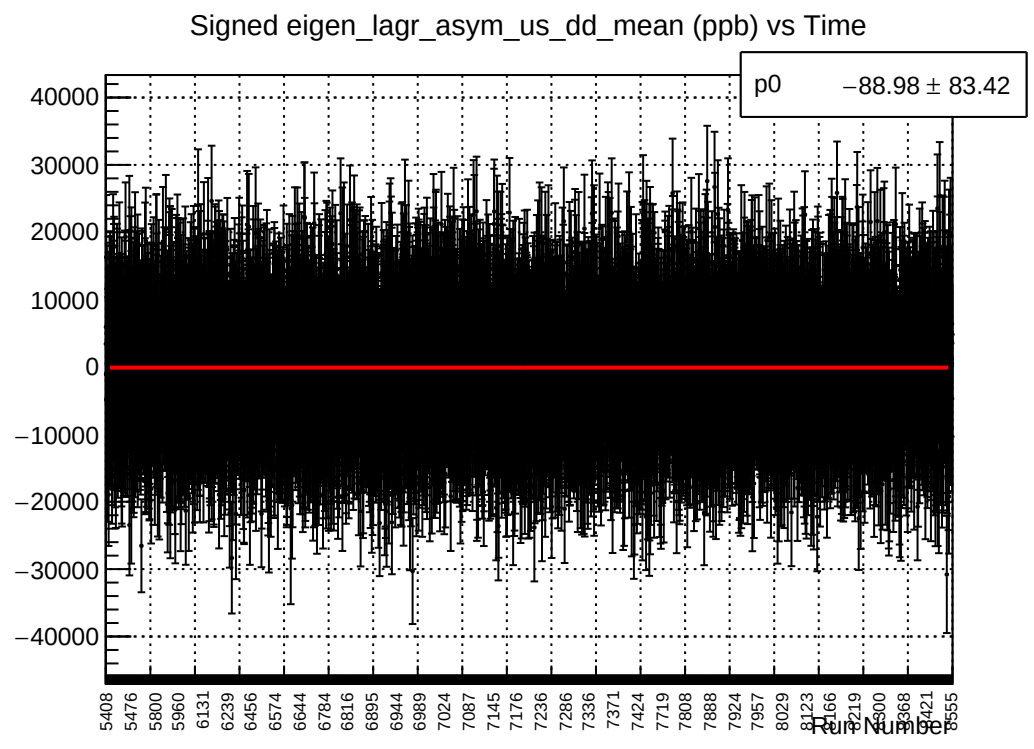

asym_us_dd_overload_reg_reg_diff_rms (ppm) vs Time
p0 26.82 ± 0.002149
90
80
70
60
50
40
30
20
10
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

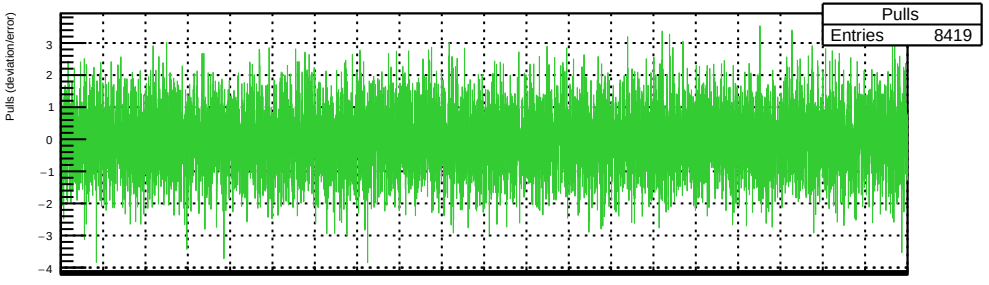

Signed asym_us_dd_eigen_reg_cor_diff_mean (ppb) vs Time
p0 −3.338 ± 3.458
4000
2000
0
−2000
−4000
−6000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

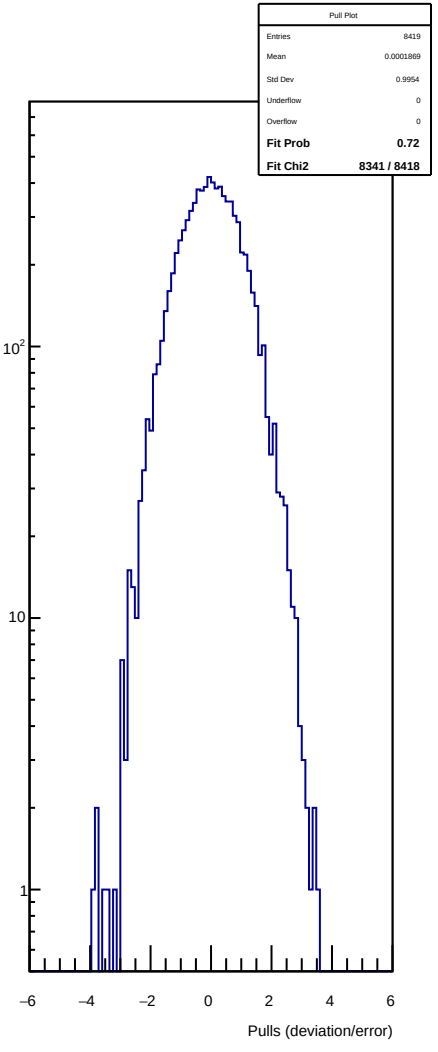

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

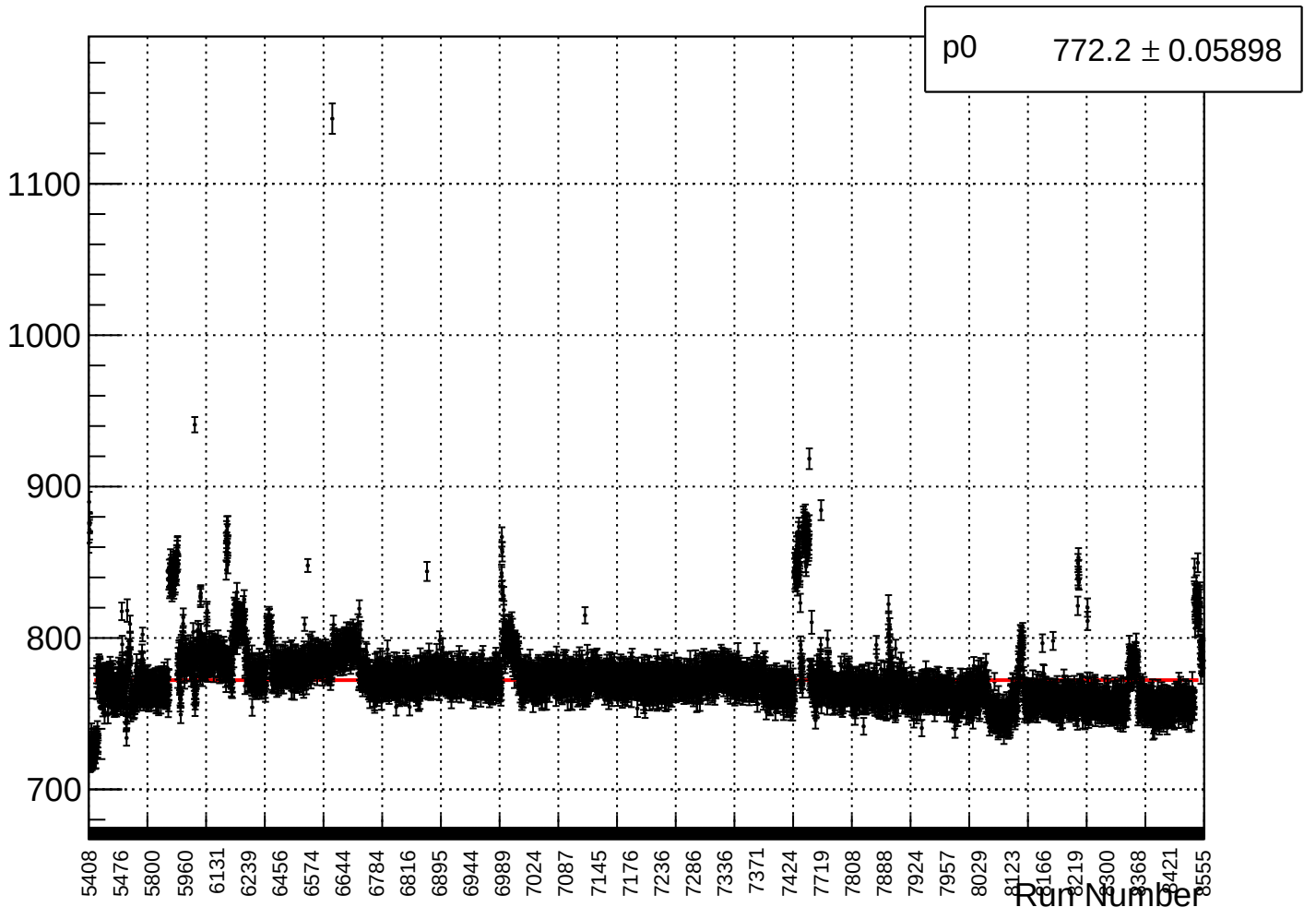

Pull Plot
Entries 8419
Mean −0.001987
Std Dev 1
Underflow 0
Overflow 0
Fit Prob 0.47
Fit Chi2 8425 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

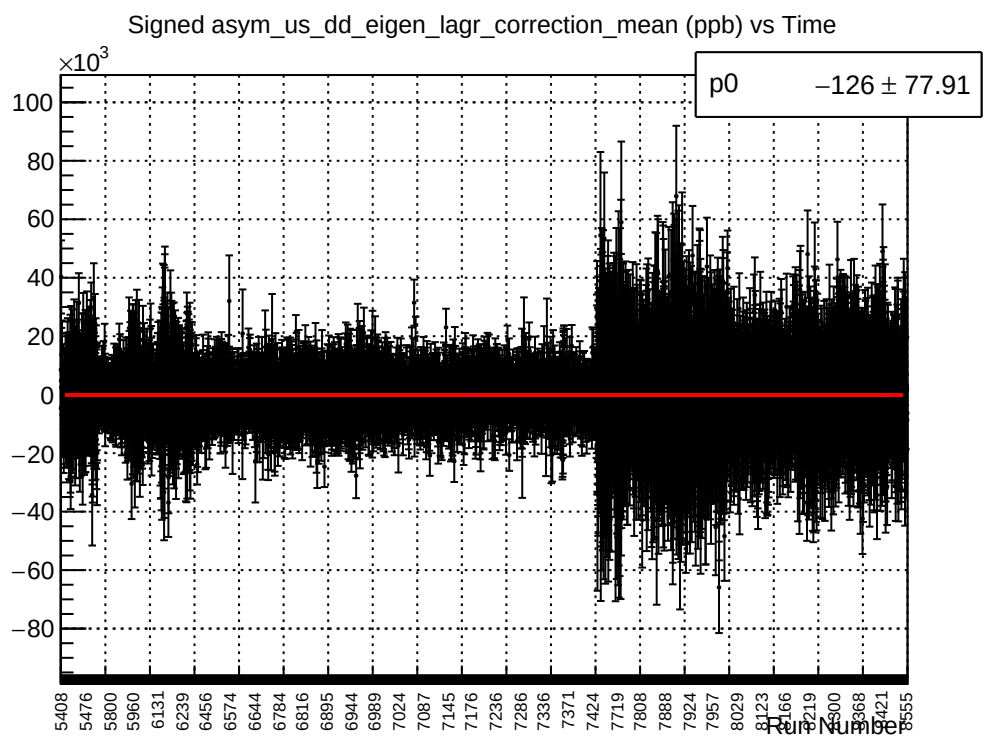

asym_us_dd_eigen_reg_cor_diff_rms (ppm) vs Time
p0
30.09 ± 0.002445
300
250
200
150
100
50
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

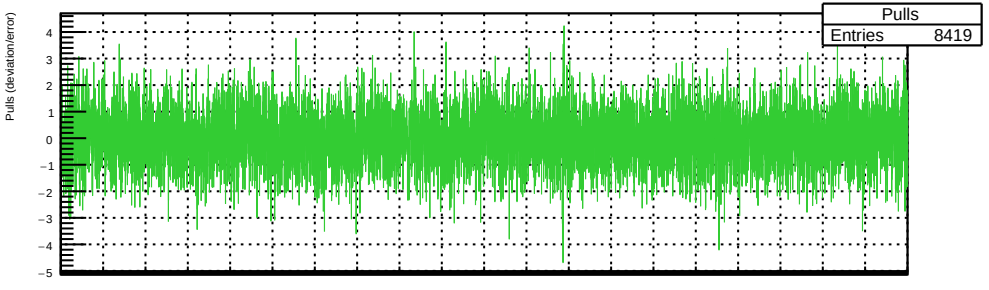

Signed eigen_lagr_asym_us_dd_mean (ppb) vs Time
p0 −88.98 ± 83.42
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

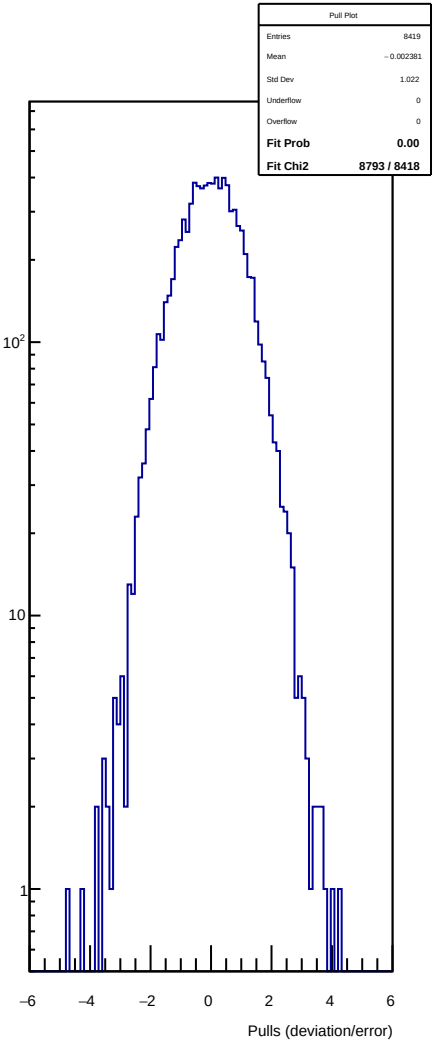

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

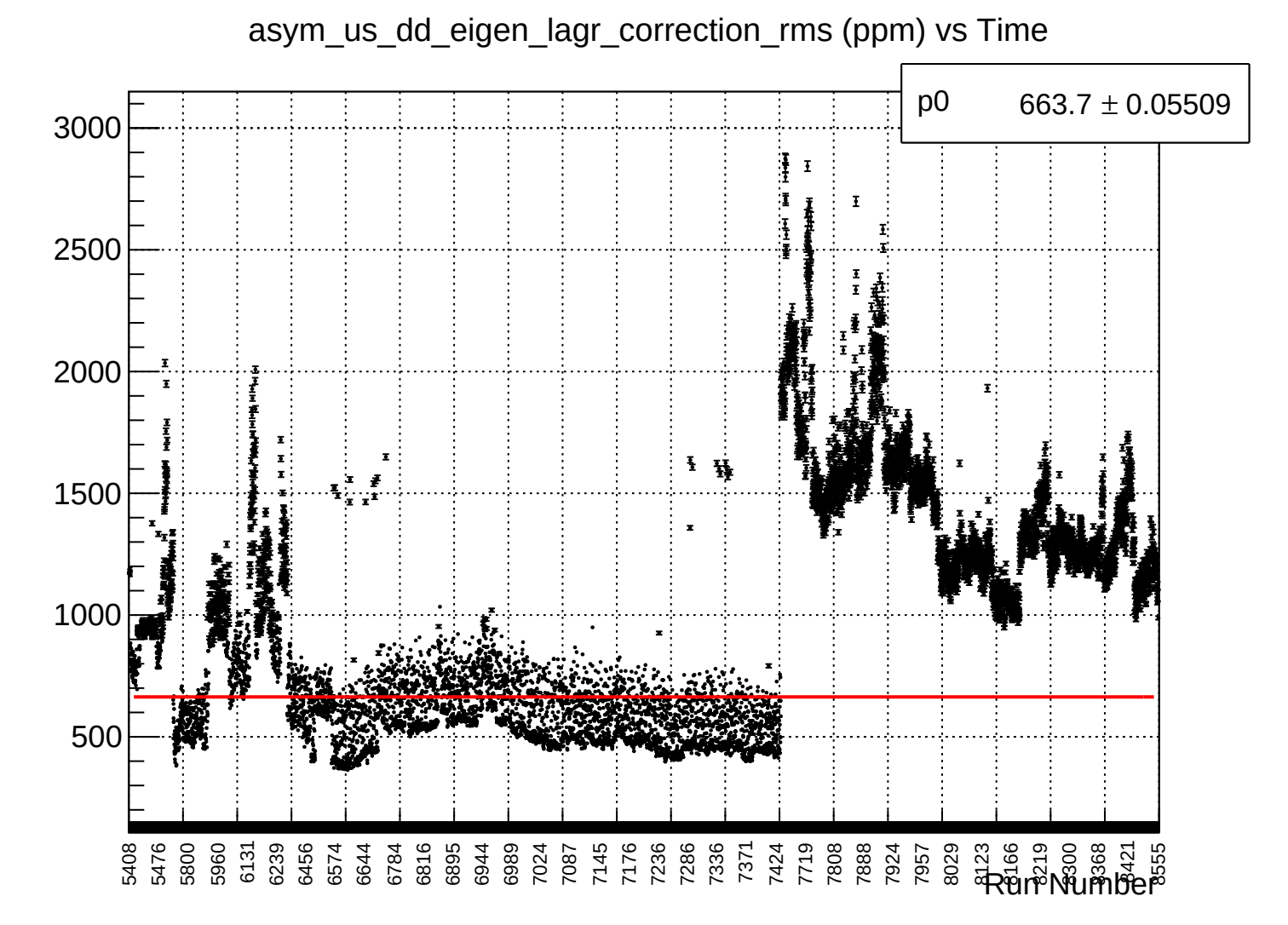

Pull Plot
Entries 8419
Mean 0.0001869
Std Dev 0.9954
Underflow 0
Overflow 0
Fit Prob 0.72
Fit Chi2 8341 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

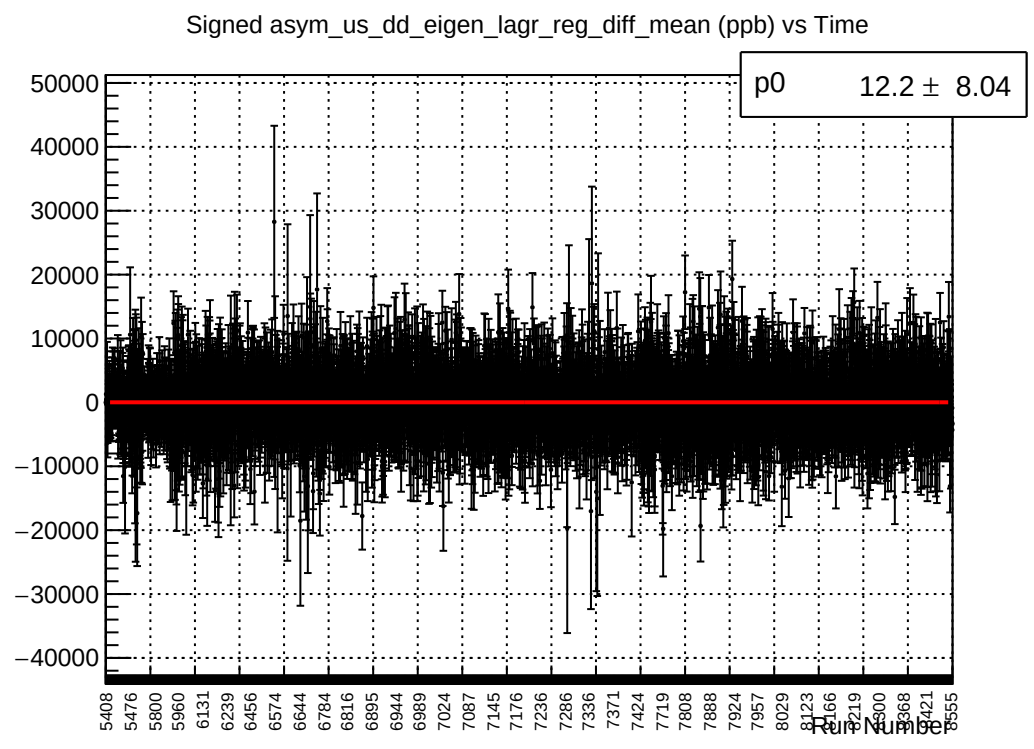

eigen_lagr_asym_us_dd_rms (ppm) vs Time
p0 772.2 ± 0.05898
1100
1000
900
800
700
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

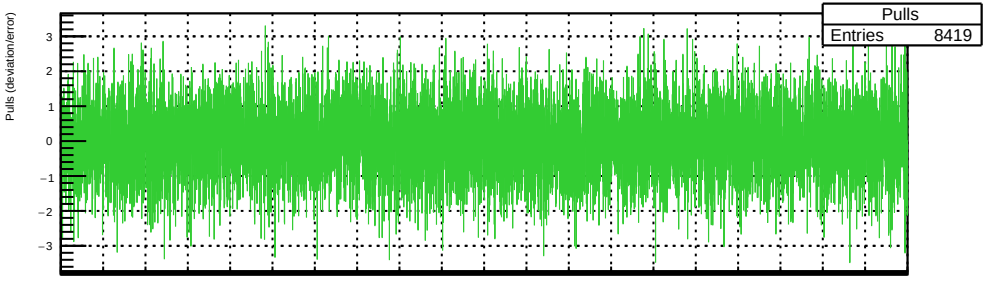

Signed asym_us_dd_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 −126 ± 77.91
100
80
60
40
20
0
−20
−40
−60
−80
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

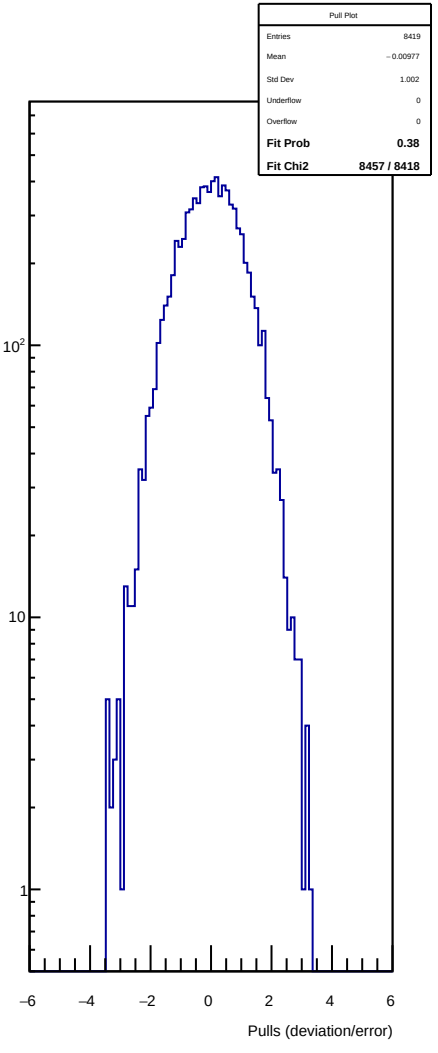

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4
−5

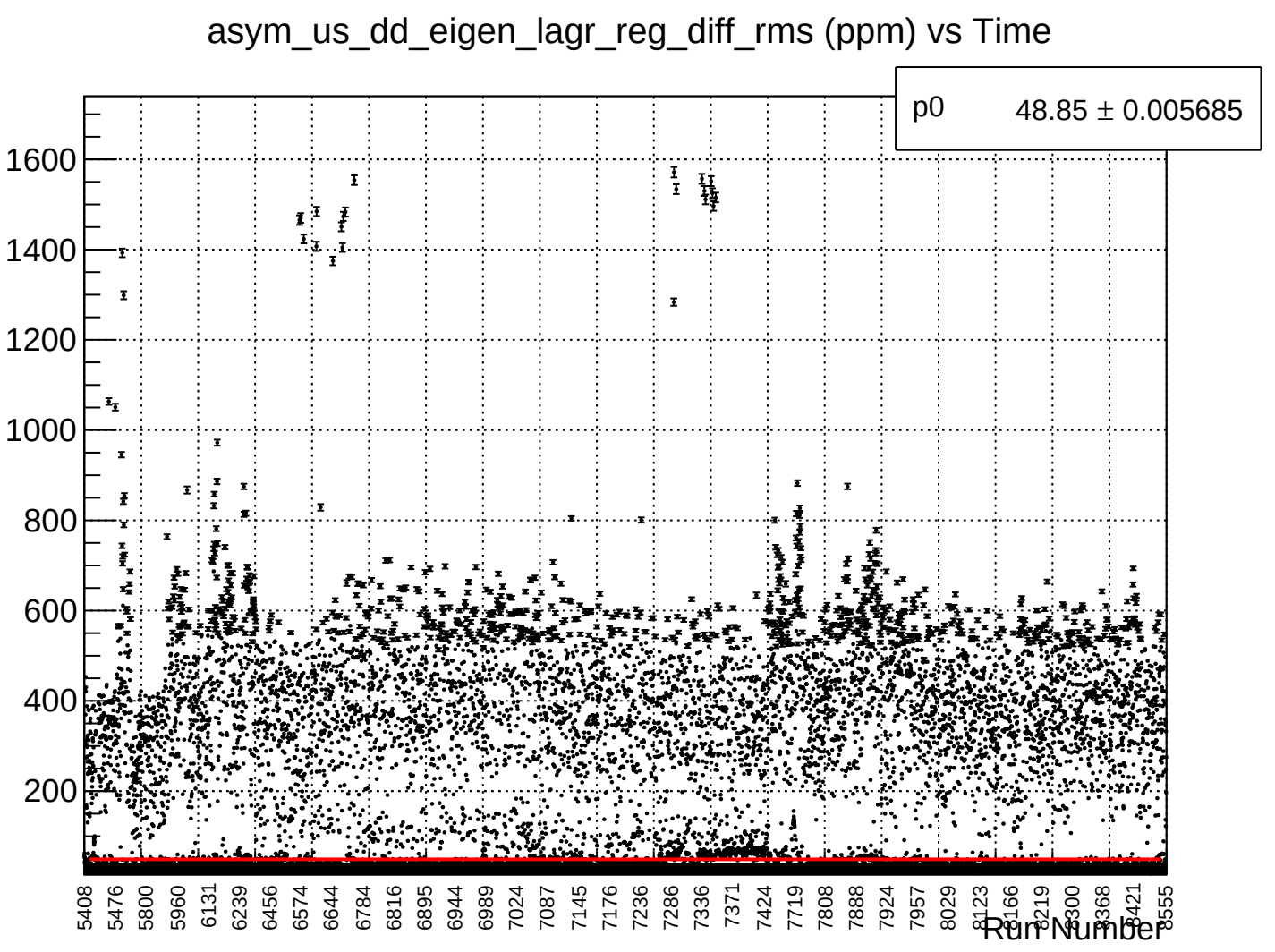

Pull Plot
Entries 8419
Mean −0.002381
Std Dev 1.022
Underflow 0
Overflow 0
Fit Prob 0.00
Fit Chi2 8793 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

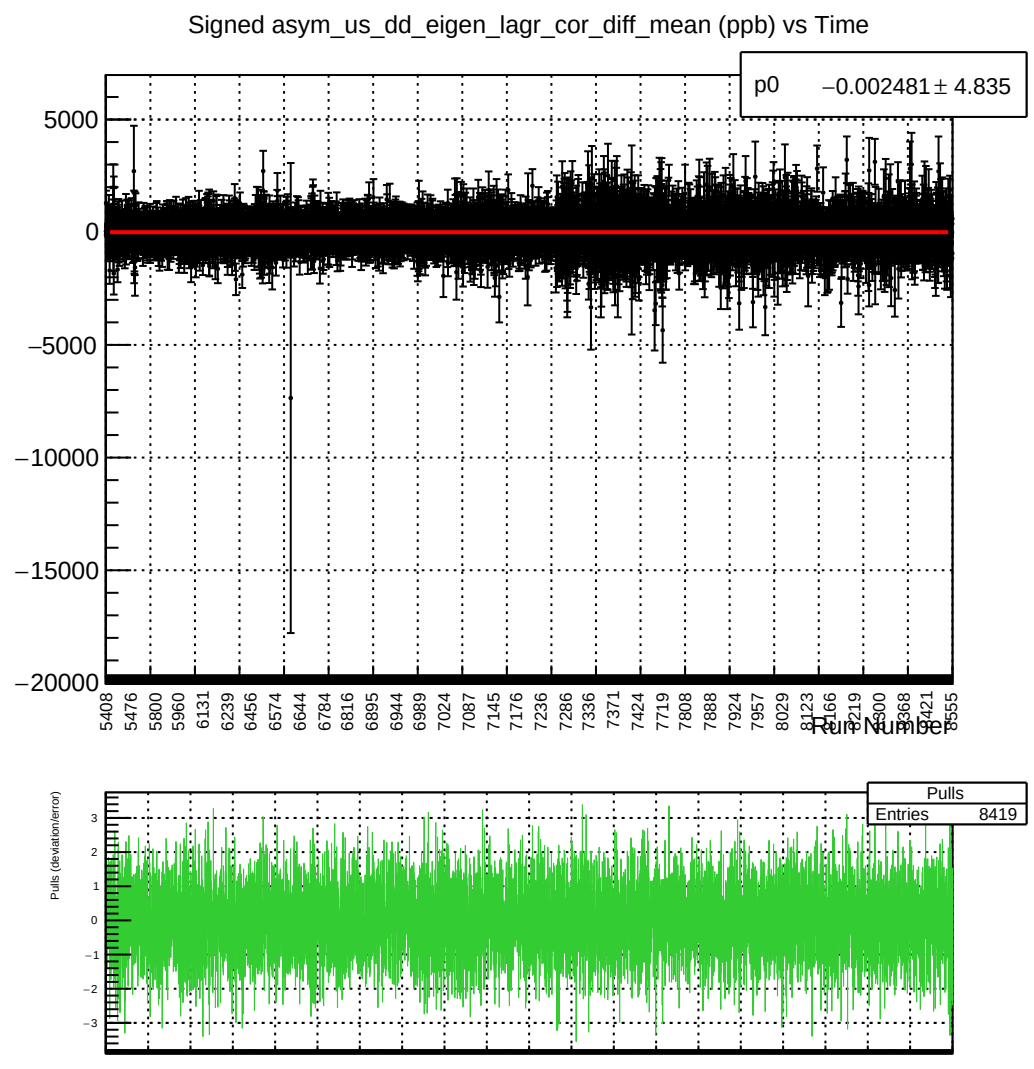

asym_us_dd_eigen_lagr_correction_rms (ppm) vs Time
p0 663.7 ± 0.05509
3000
2500
2000
1500
1000
500
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

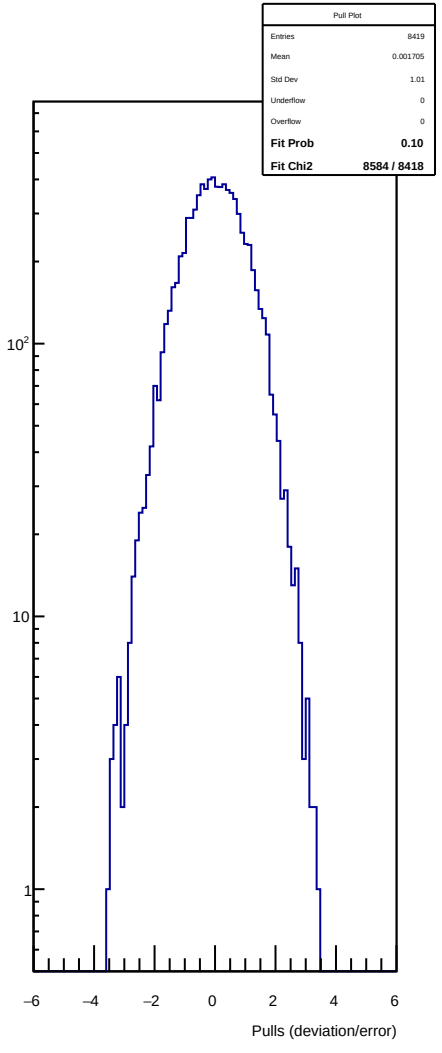

Signed asym_us_dd_eigen_lagr_reg_diff_mean (ppb) vs Time
p0 12.2 ± 8.04
50000
40000
30000
20000
10000
0
−10000
−20000
−30000
−40000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

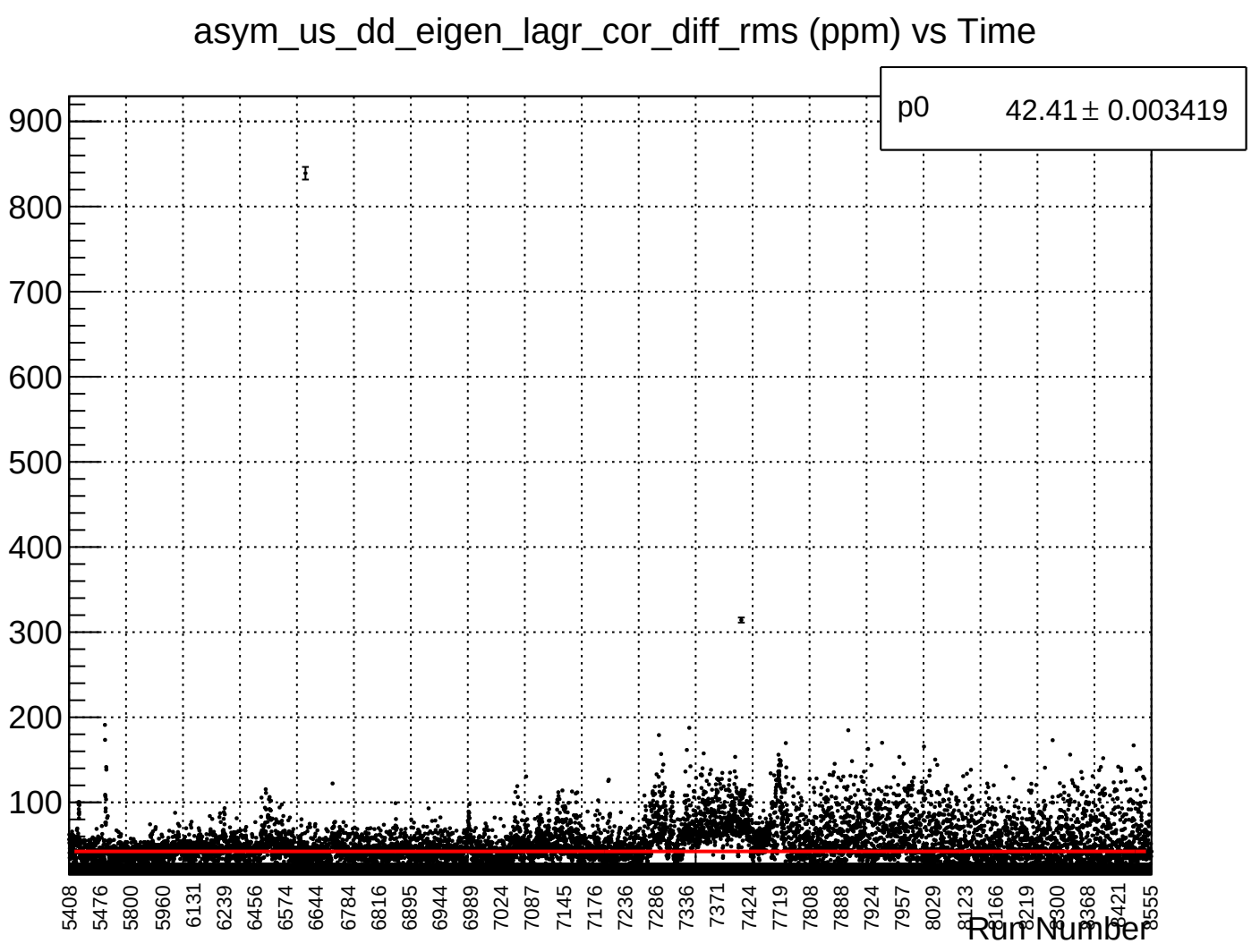

Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

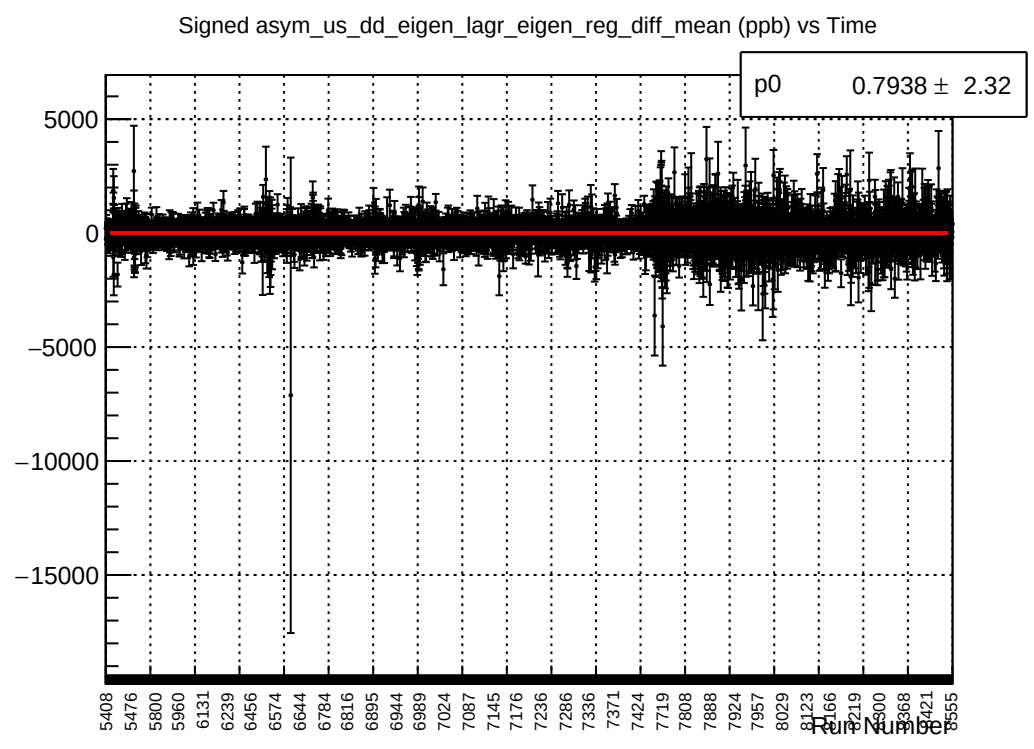

Pull Plot
Entries 8419
Mean −0.00977
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.38
Fit Chi2 8457 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

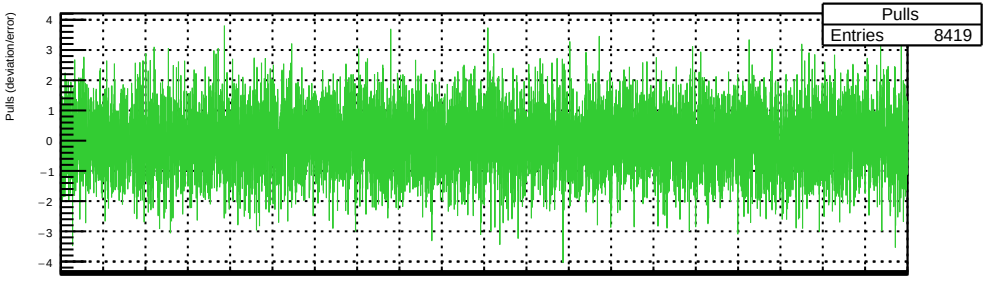

asym_us_dd_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 48.85 ± 0.005685
1600
1400
1200
1000
800
600
400
200
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

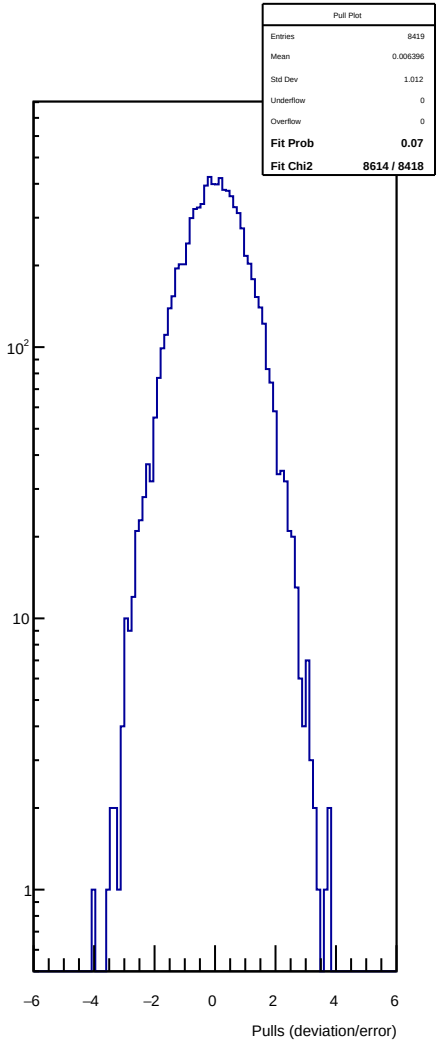

Signed asym_us_dd_eigen_lagr_cor_diff_mean (ppb) vs Time
p0 −0.002481 ± 4.835
5000
0
−5000
−10000
−15000
−20000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number
Pulls
Entries 8419
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

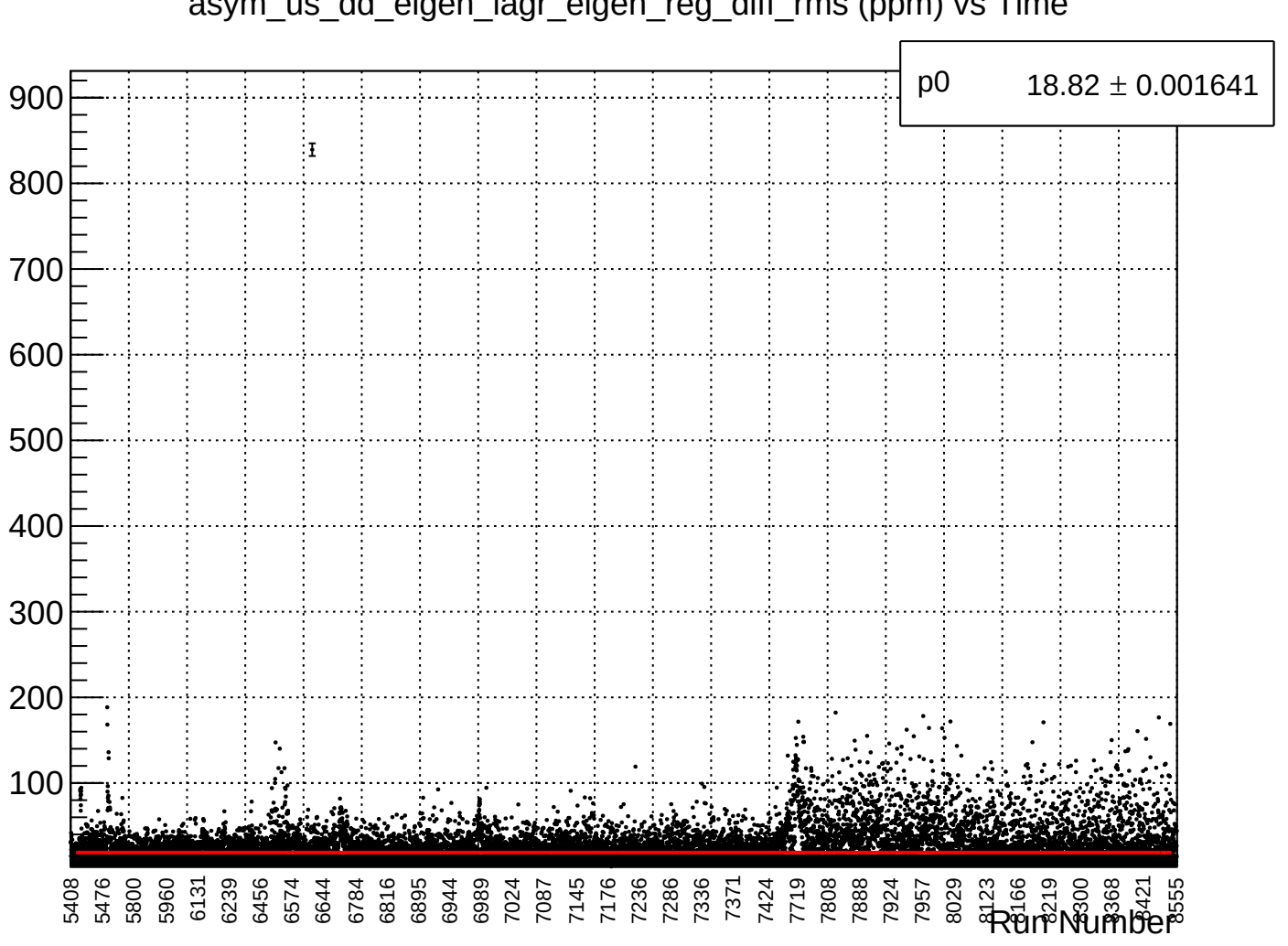

Pull Plot
Entries 8419
Mean 0.001705
Std Dev 1.01
Underflow 0
Overflow 0
Fit Prob 0.10
Fit Chi2 8584 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

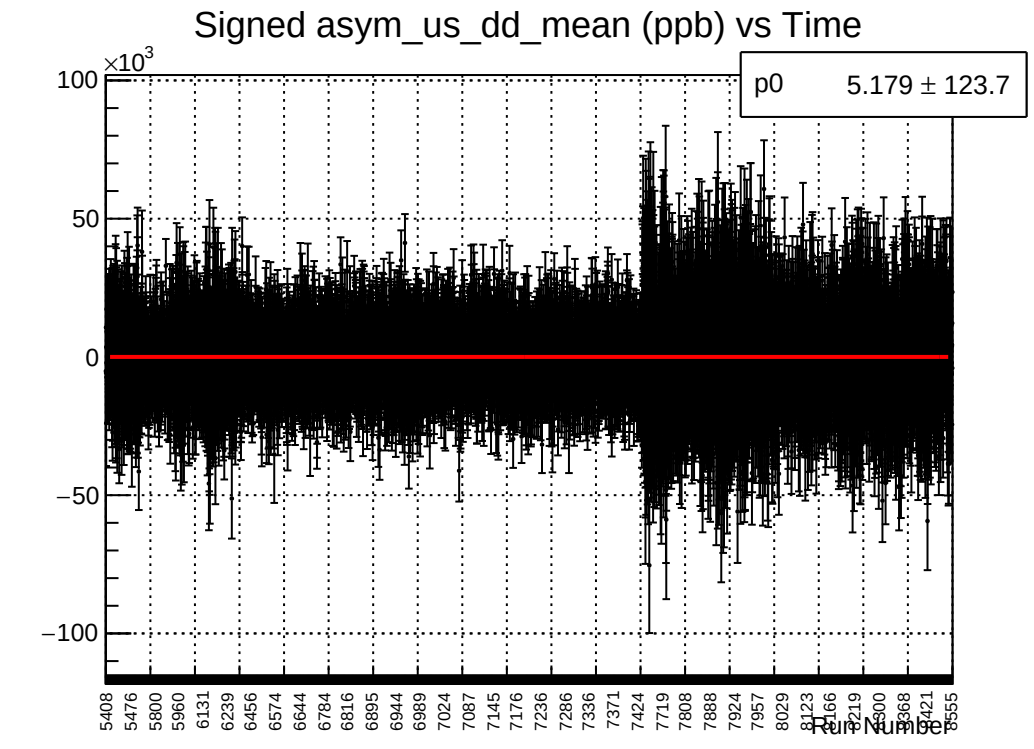

asym_us_dd_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 42.41 ± 0.003419
900
800
700
600
500
400
300
200
100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

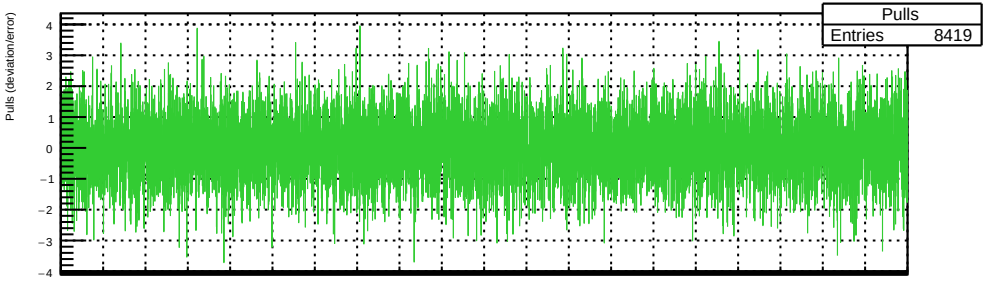

Signed asym_us_dd_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
p0 0.7938 ± 2.32
5000
0
−5000
−10000
−15000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

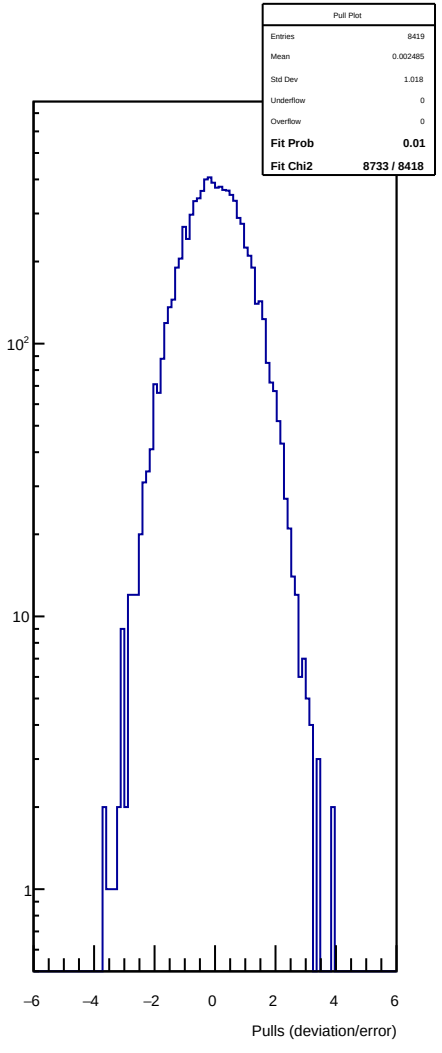

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

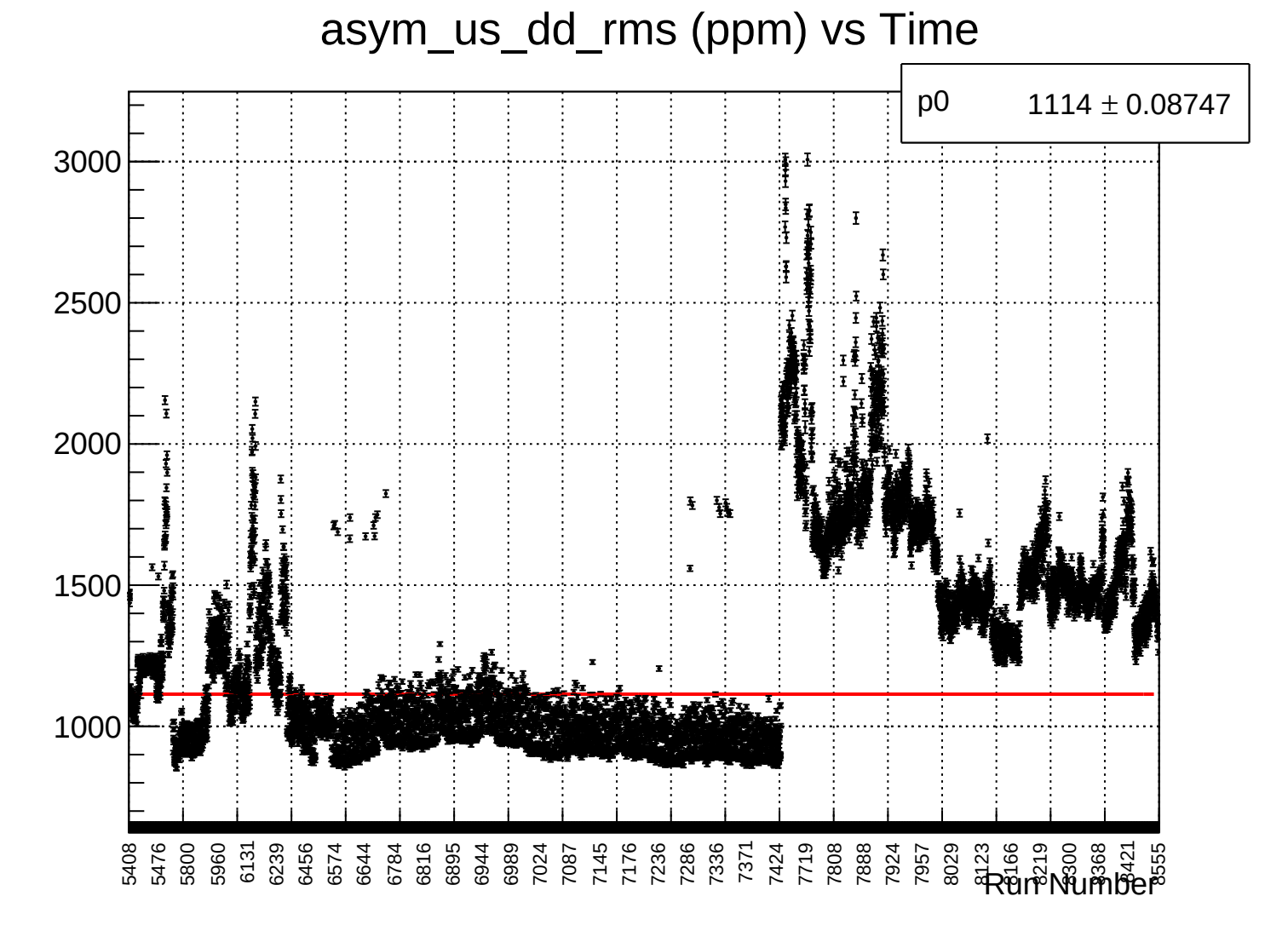

Pull Plot
Entries 8419
Mean 0.006396
Std Dev 1.012
Underflow 0
Overflow 0
Fit Prob 0.07
Fit Chi2 8614 / 8418
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

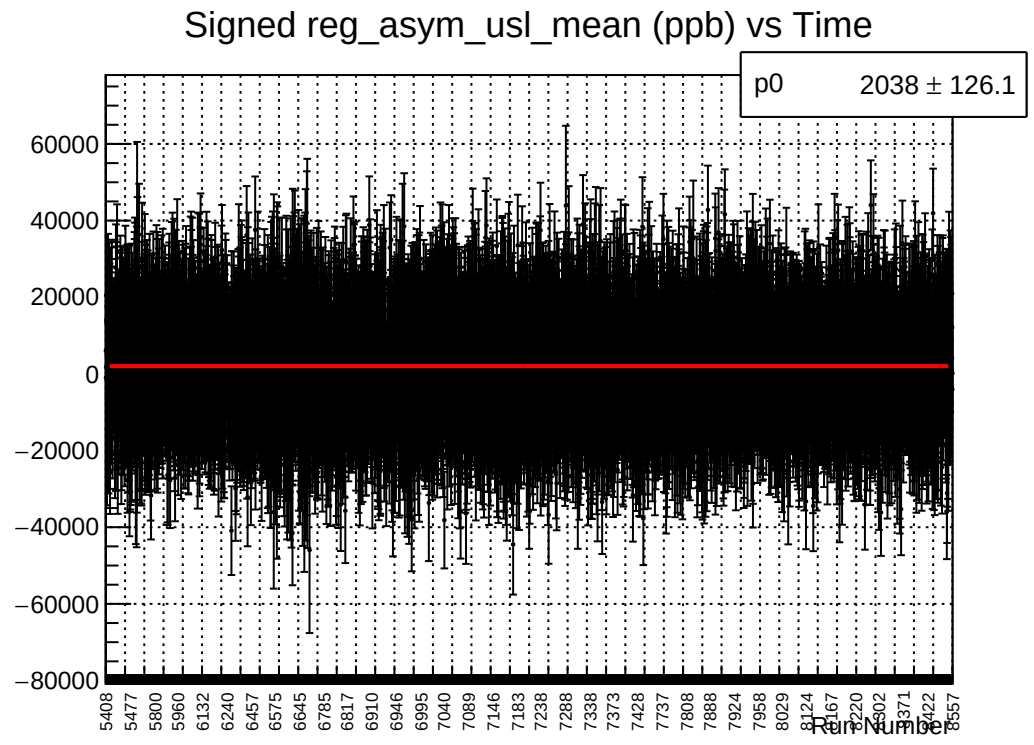

asym_us_dd_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 18.82 ± 0.001641
900
800
700
600
500
400
300
200
100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

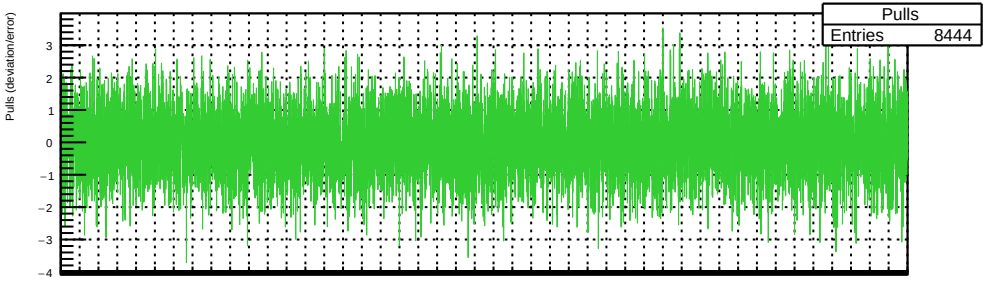

Signed asym_us_dd_mean (ppb) vs Time
p0 5.179 ± 123.7
×10^3
100
50
0
−50
−100
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

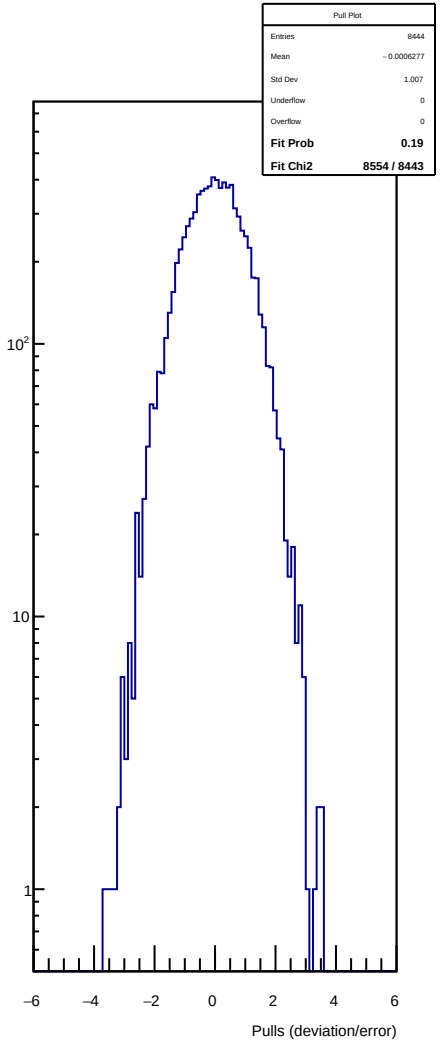

Pulls
Entries 8419
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

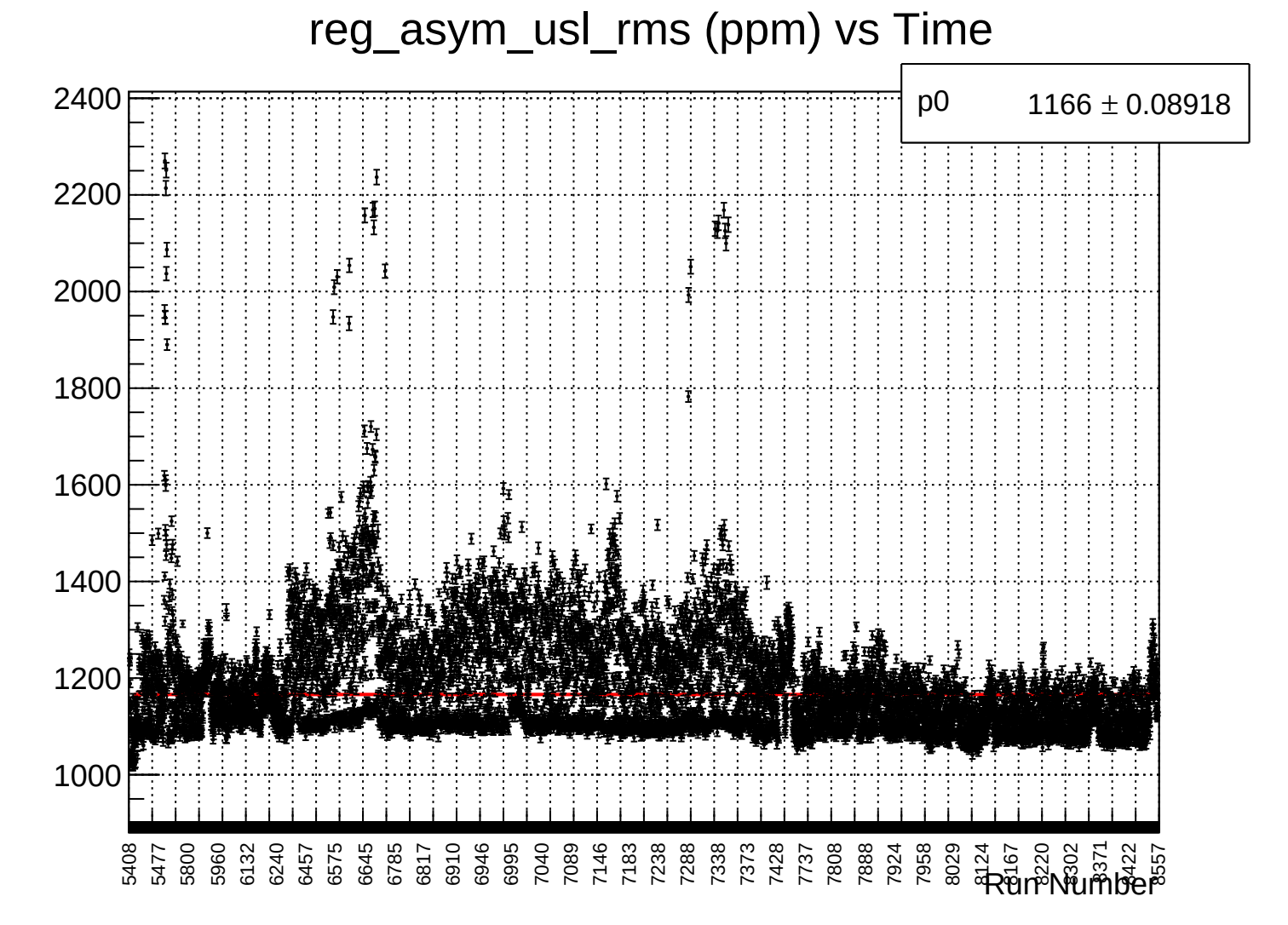

Pull Plot
Entries 8419
Mean 0.002485
Std Dev 1.018
Underflow 0
Overflow 0
Fit Prob 0.01
Fit Chi2 8733 / 8418
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

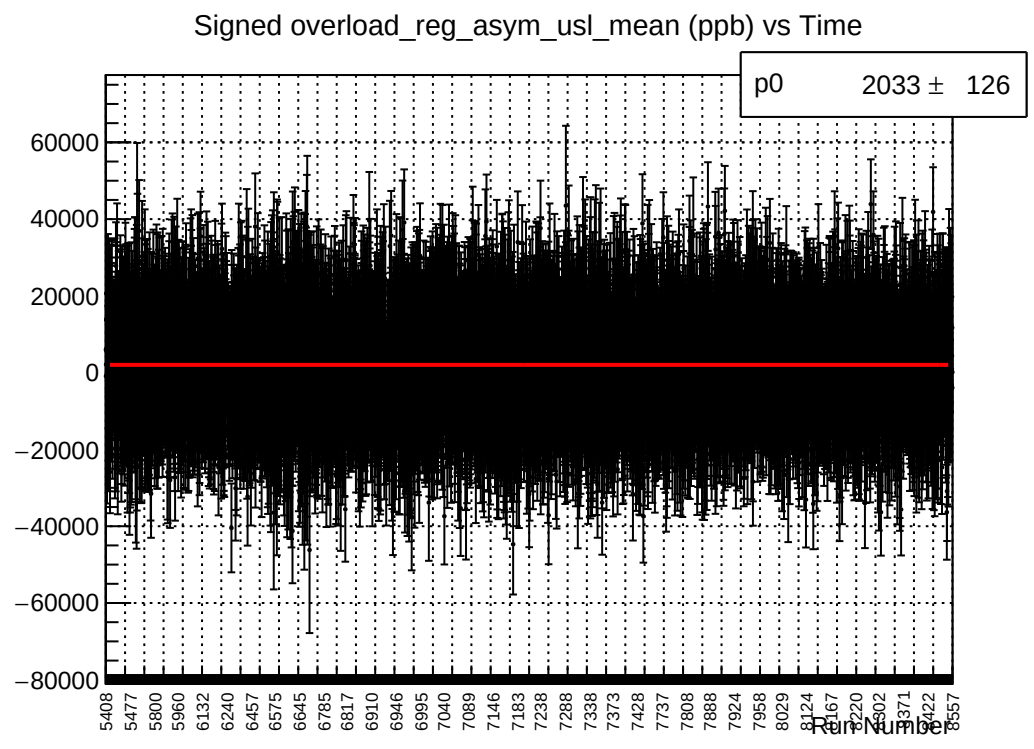

asym_us_dd_rms (ppm) vs Time
p0
1114 ± 0.08747
3000
2500
2000
1500
1000
5408
5476
5800
5960
6131
6239
6456
6574
6644
6784
6816
6895
6944
6989
7024
7087
7145
7176
7236
7286
7336
7371
7424
7719
7808
7888
7924
7957
8029
8123
8166
8219
8300
8368
8421
8555
Run Number

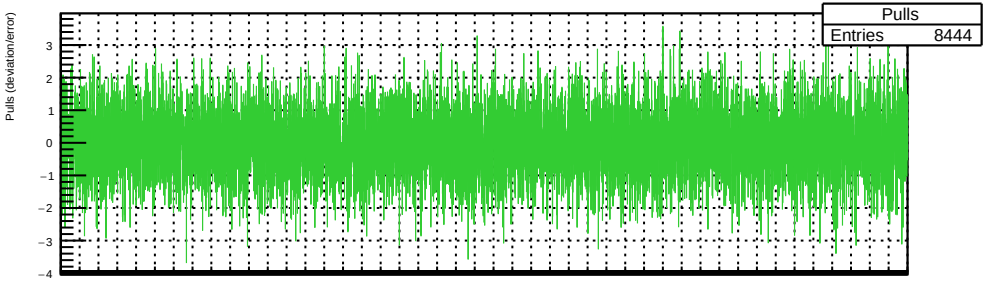

Signed reg_asym_usl_mean (ppb) vs Time
p0 2038 ± 126.1
60000
40000
20000
0
−20000
−40000
−60000
−80000
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

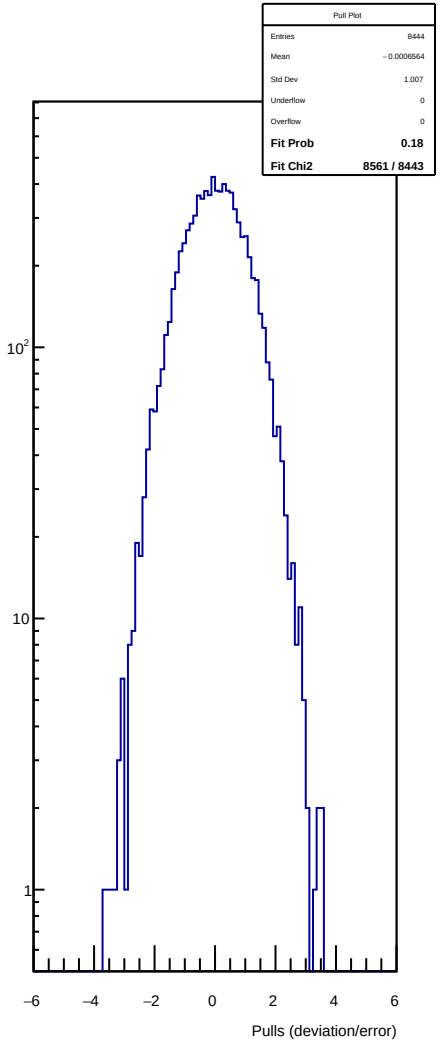

Pulls
Entries 8444
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

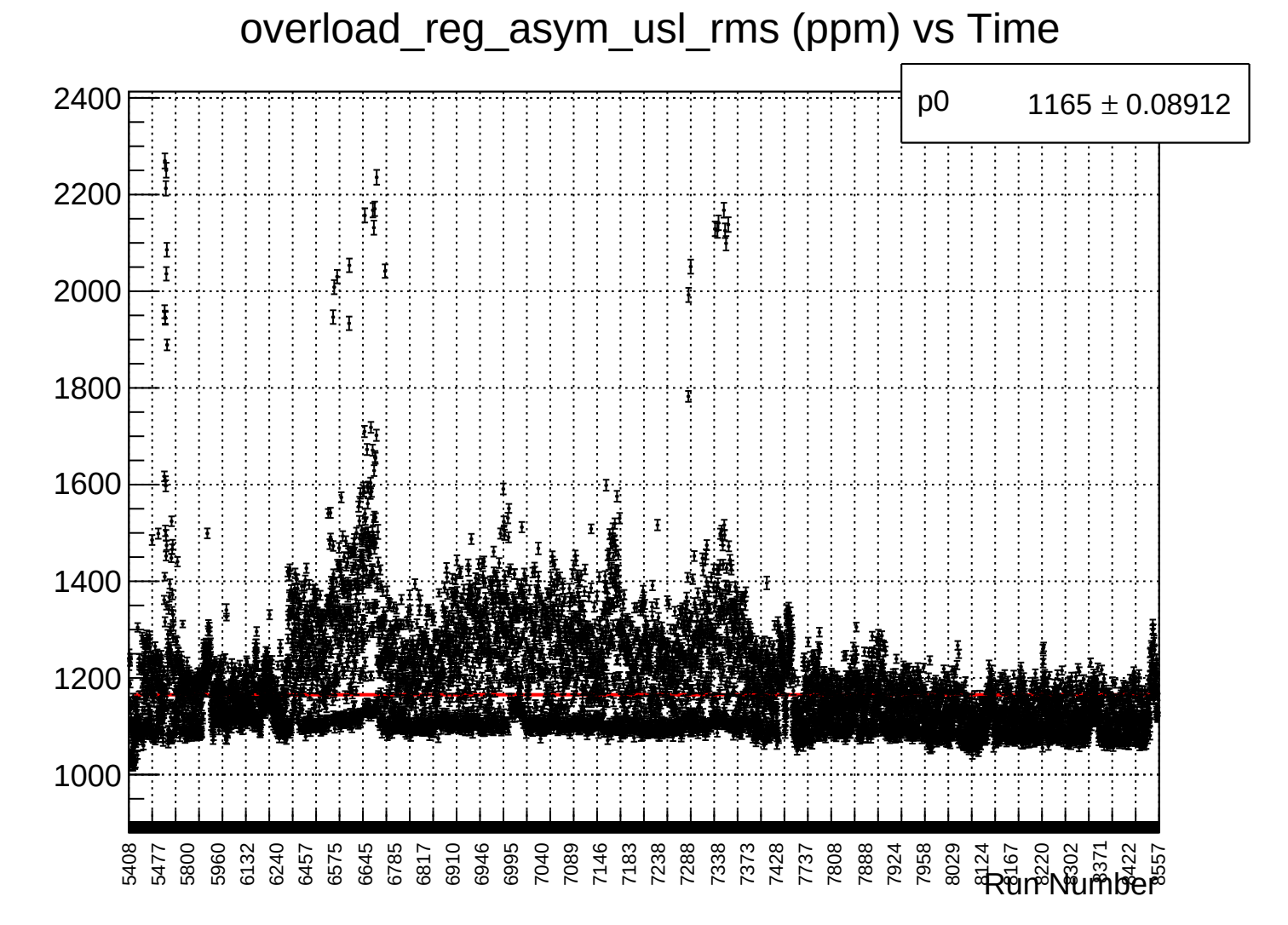

Pull Plot
Entries 8444
Mean −0.0006277
Std Dev 1.007
Underflow 0
Overflow 0
Fit Prob 0.19
Fit Chi2 8554 / 8443
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

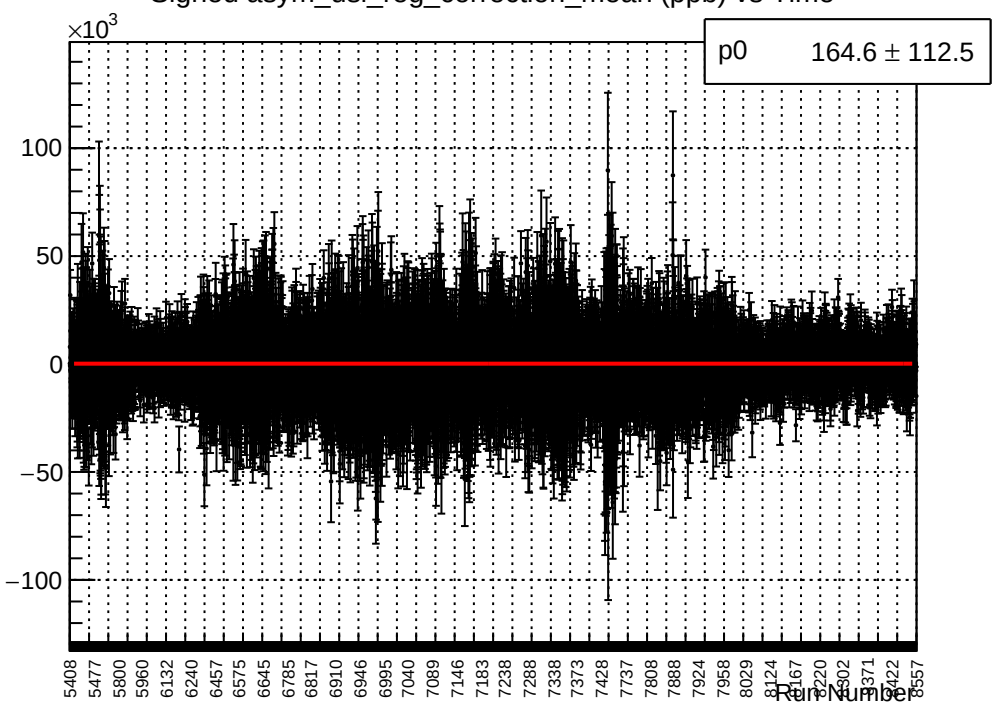

reg_asym_usl_rms (ppm) vs Time
p0
1166 ± 0.08918
2400
2200
2000
1800
1600
1400
1200
1000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

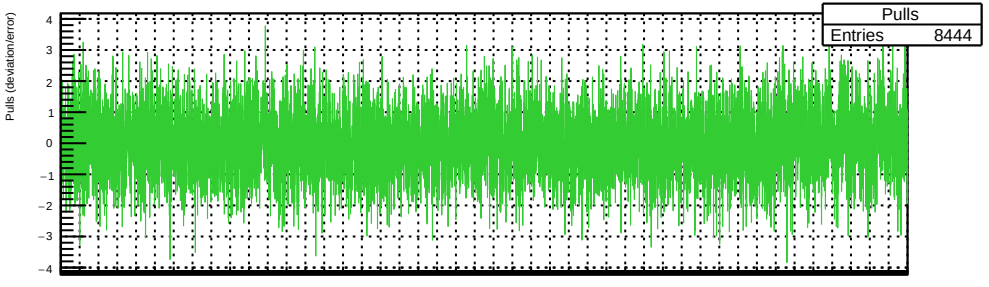

Signed overload_reg_asym_usl_mean (ppb) vs Time
p0 2033 ± 126
60000
40000
20000
0
−20000
−40000
−60000
−80000
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

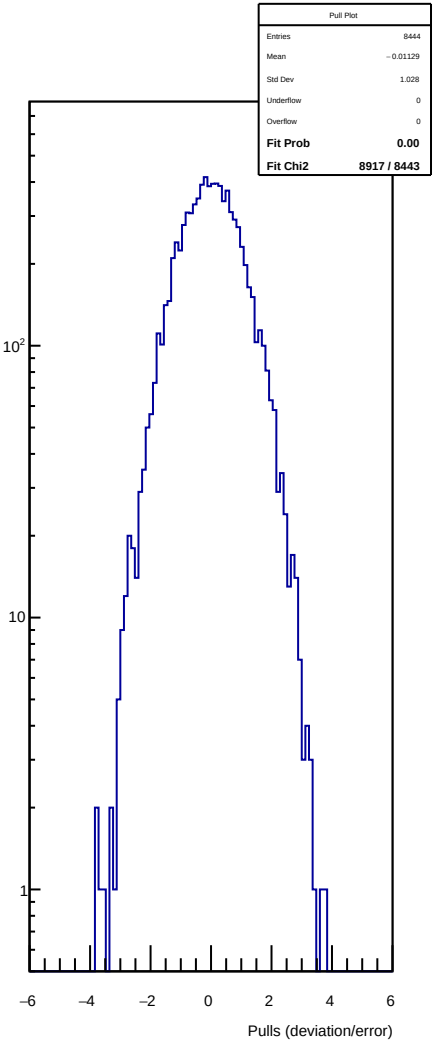

Pulls
Entries 8444
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

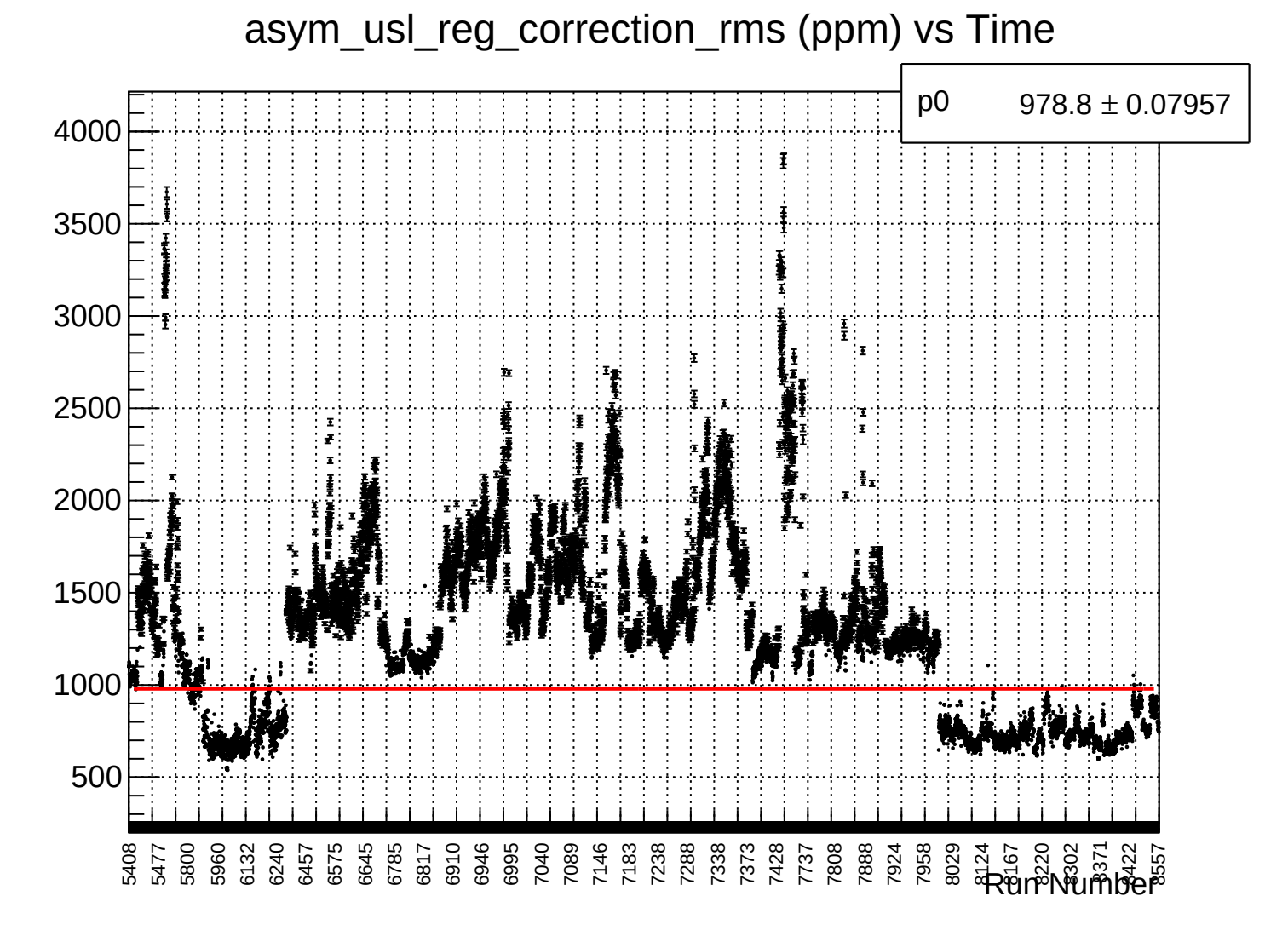

Pull Plot
Entries 8444
Mean −0.0006564
Std Dev 1.007
Underflow 0
Overflow 0
Fit Prob 0.18
Fit Chi2 8561 / 8443
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

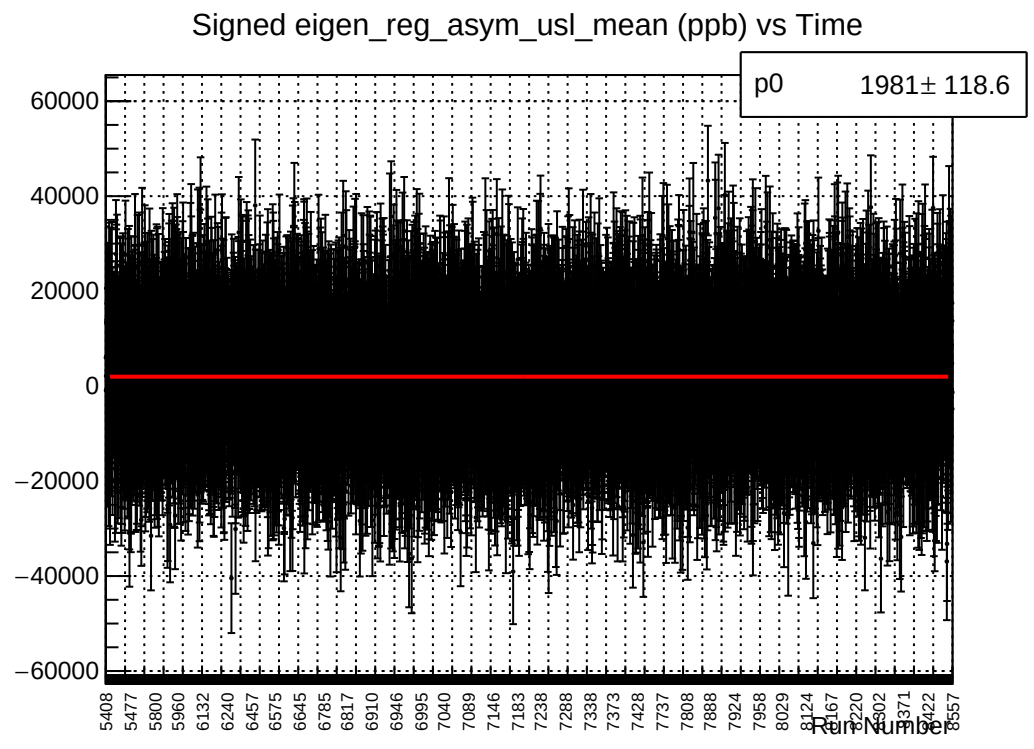

overload_reg_asym_usl_rms (ppm) vs Time
p0 1165 ± 0.08912
2400
2200
2000
1800
1600
1400
1200
1000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

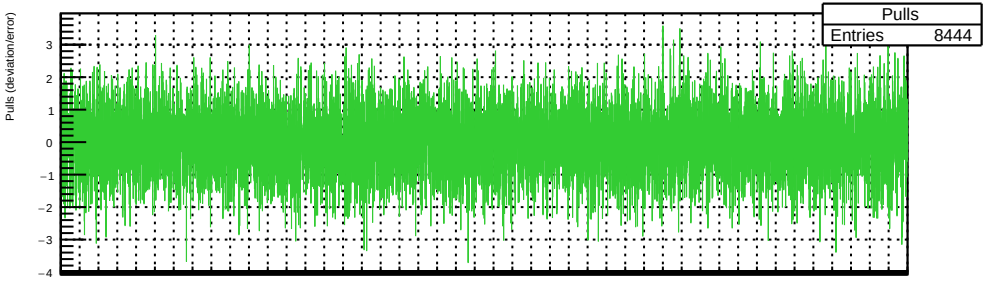

Signed asym_usl_reg_correction_mean (ppb) vs Time
p0 164.6 ± 112.5
×10^3
100
50
0
−50
−100
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

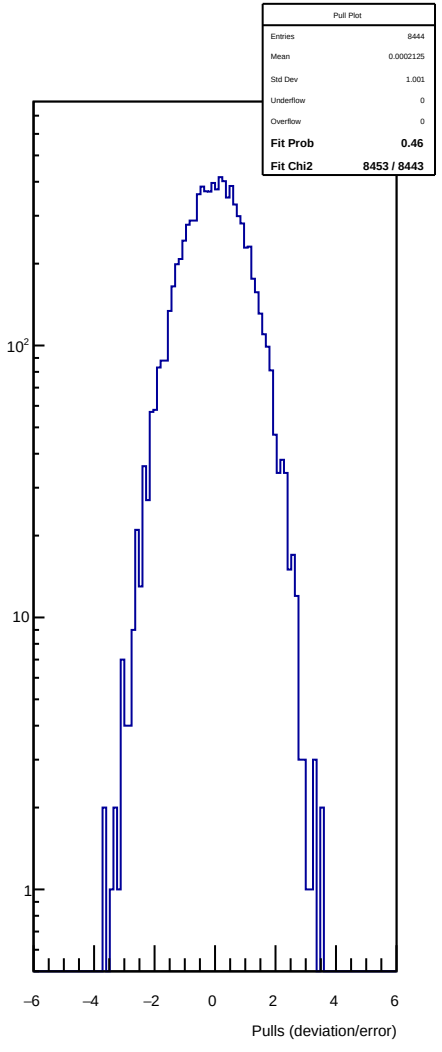

Pulls
Entries 8444
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

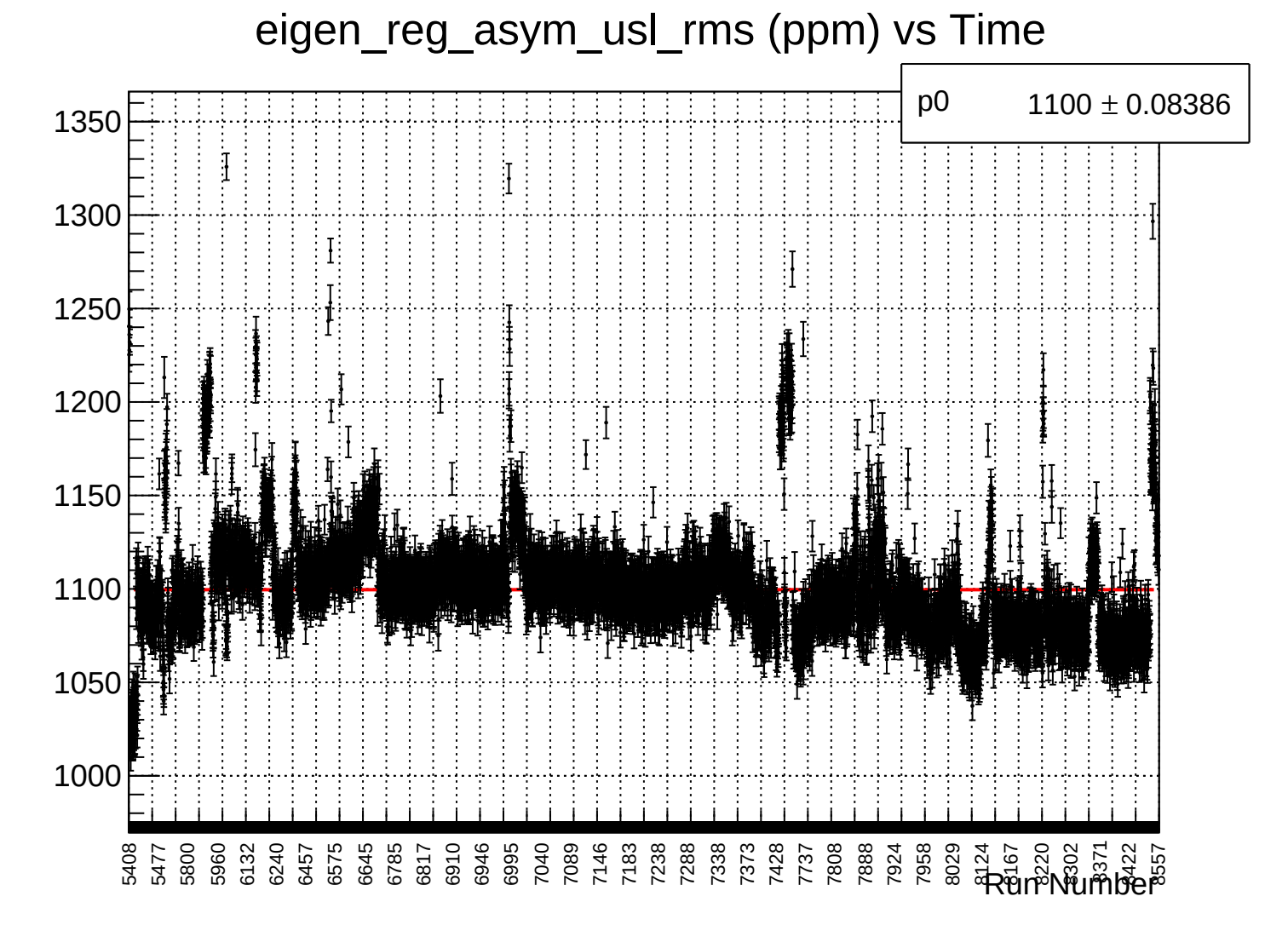

Pull Plot
Entries 8444
Mean −0.01129
Std Dev 1.028
Underflow 0
Overflow 0
Fit Prob 0.00
Fit Chi2 8917 / 8443
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

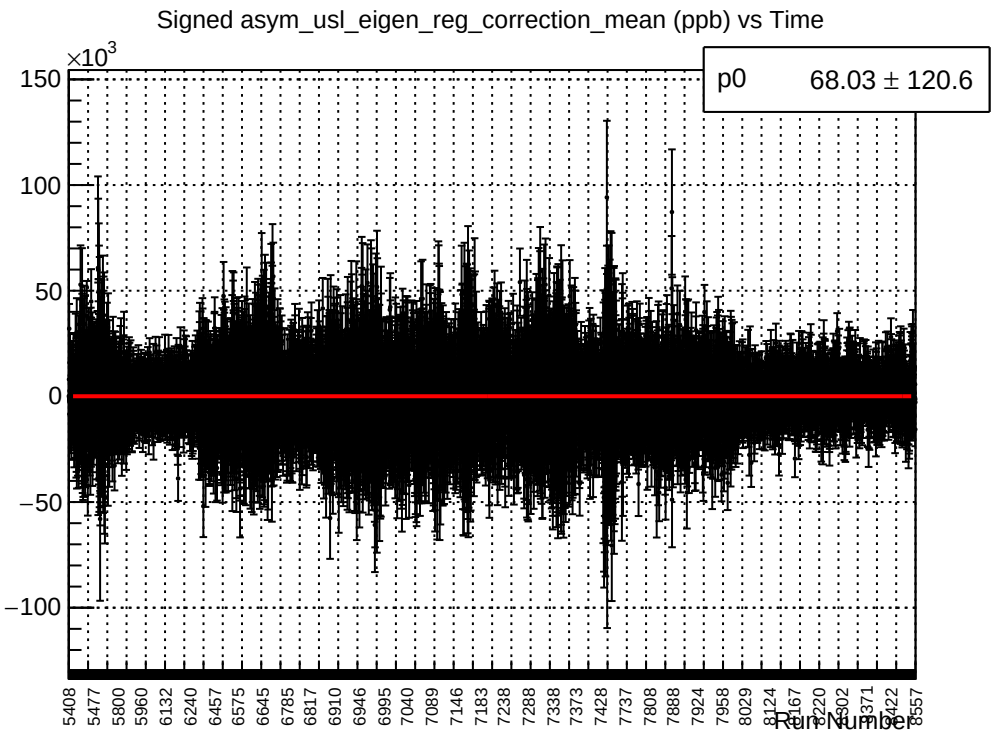

asym_usl_reg_correction_rms (ppm) vs Time
p0 978.8 ± 0.07957
4000
3500
3000
2500
2000
1500
1000
500
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

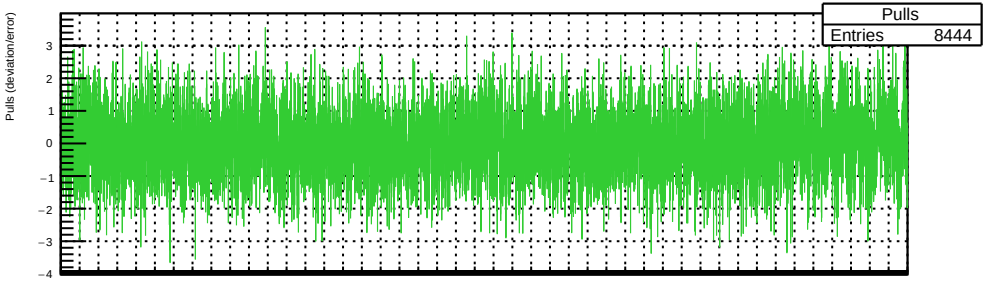

Signed eigen_reg_asym_usl_mean (ppb) vs Time
p0 1981± 118.6
60000
40000
20000
0
−20000
−40000
−60000
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

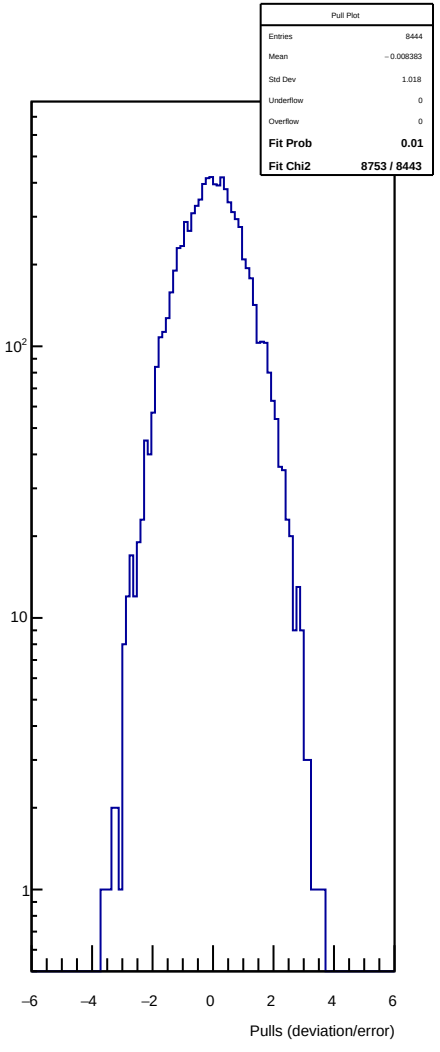

Pulls
Entries 8444
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

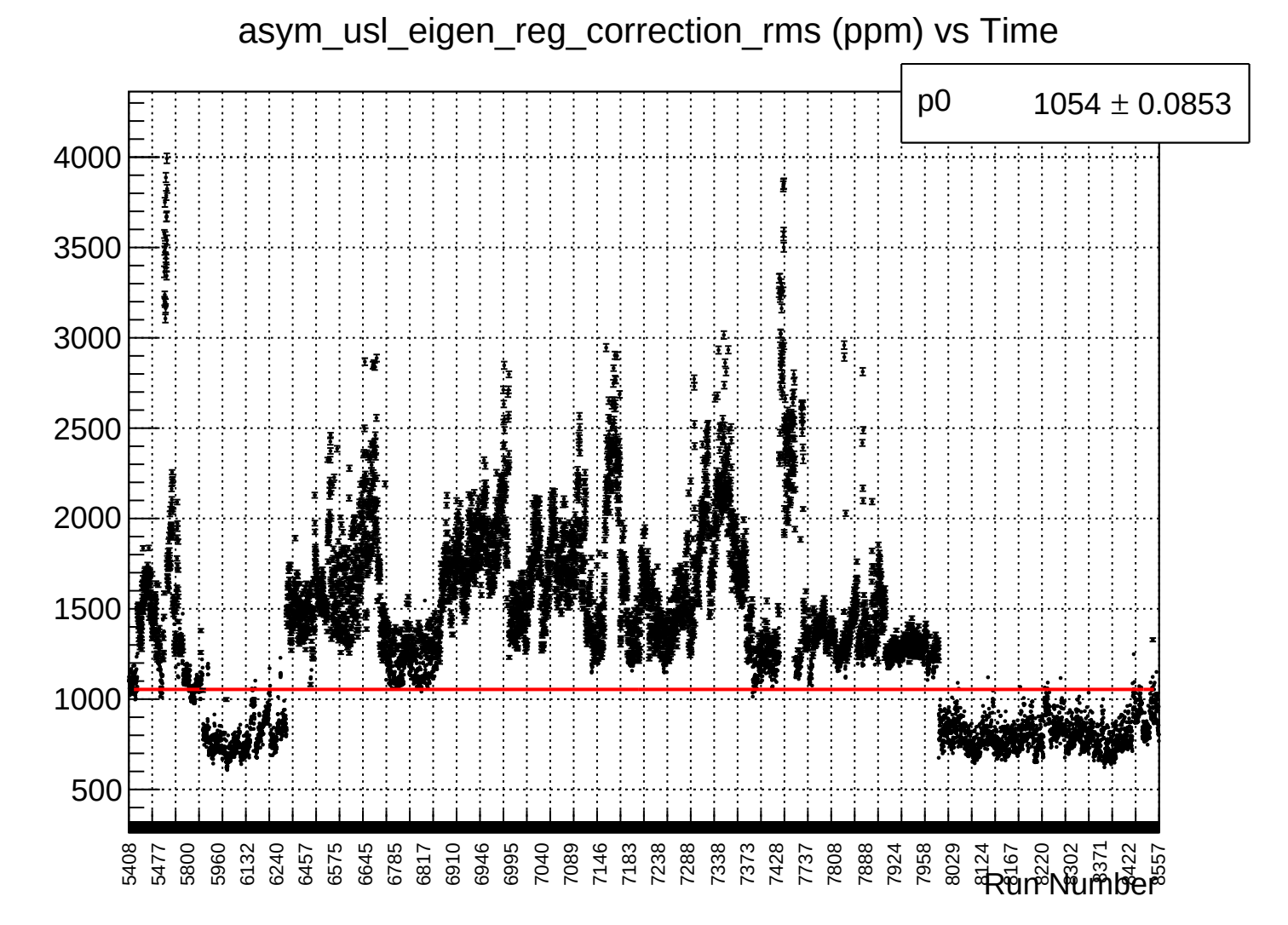

Pull Plot
Entries 8444
Mean 0.0002125
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.46
Fit Chi2 8453 / 8443
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

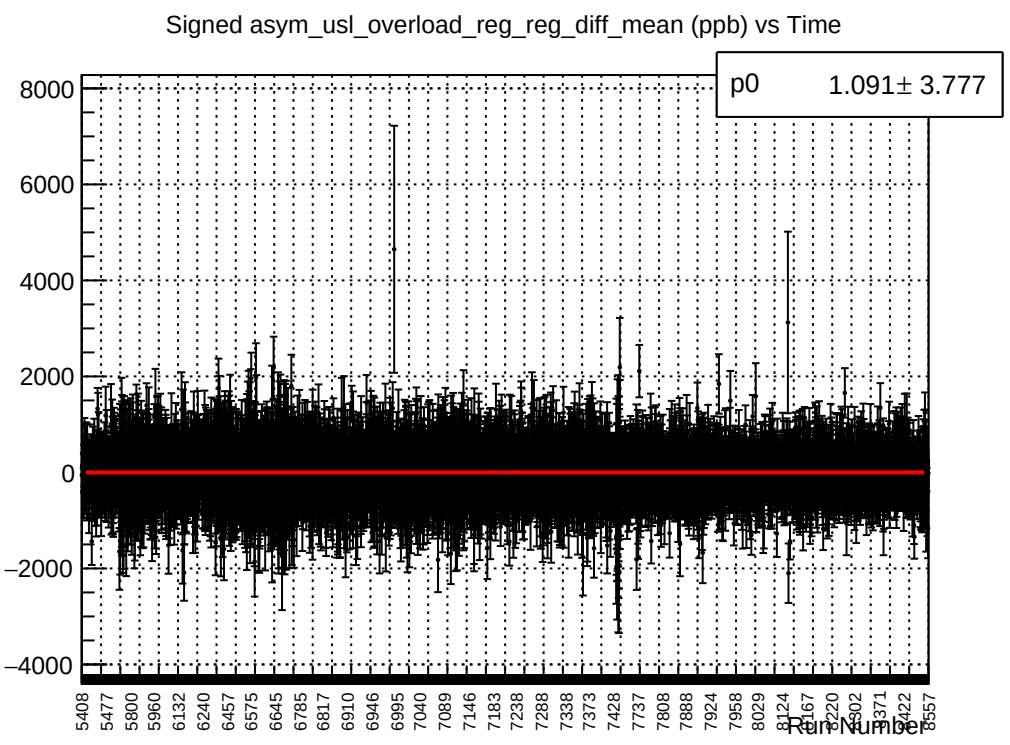

eigen_reg_asym_usl_rms (ppm) vs Time
p0
1100 ± 0.08386
1350
1300
1250
1200
1150
1100
1050
1000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

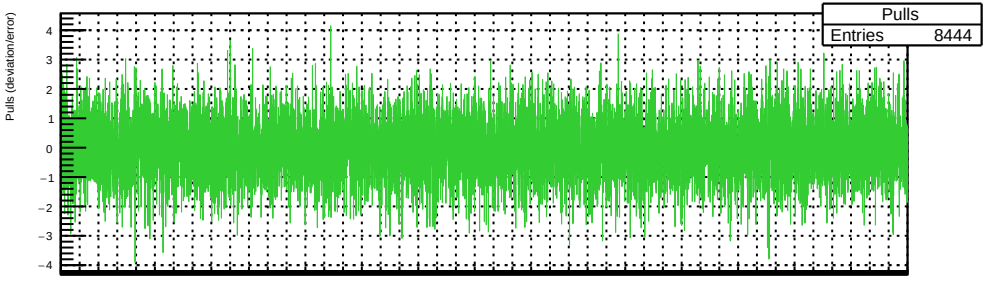

Signed asym_usl_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 68.03 ± 120.6
150
100
50
0
−50
−100
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

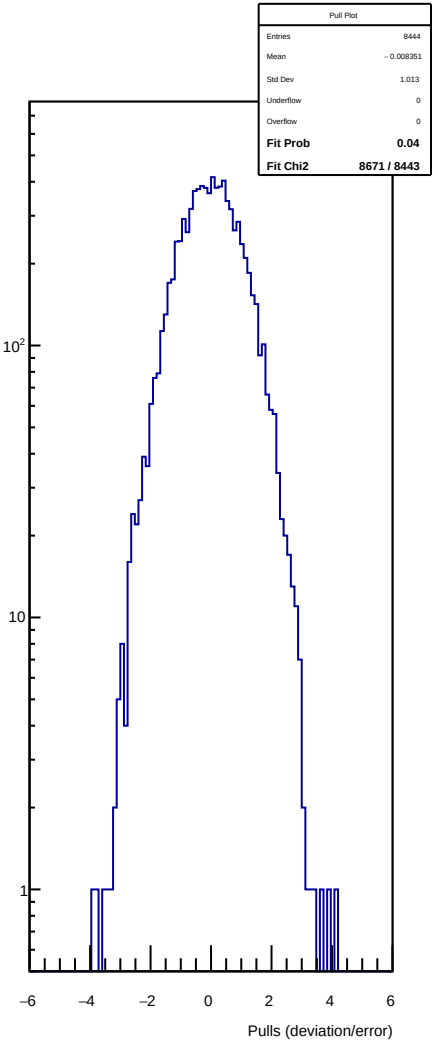

Pulls
Entries 8444
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

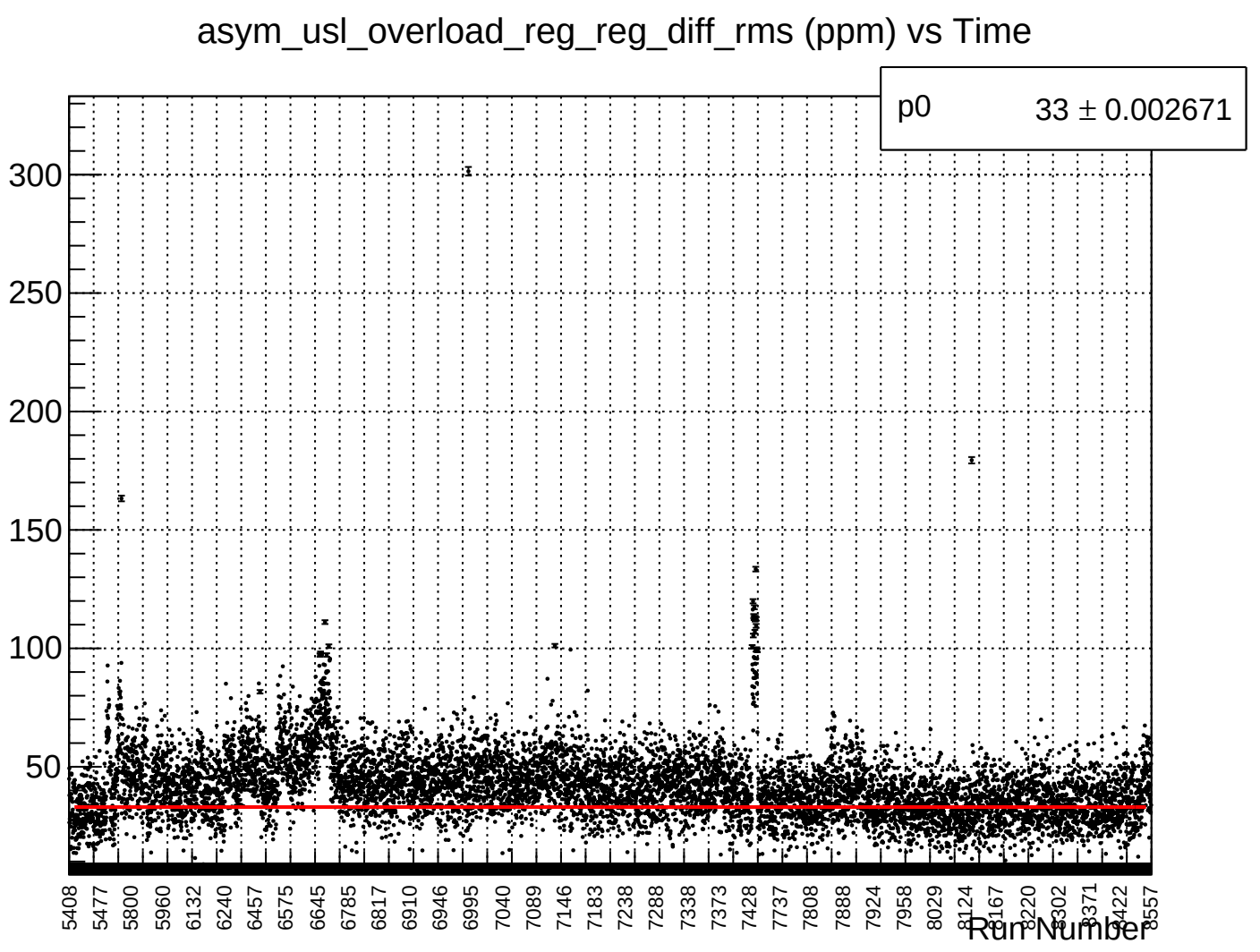

Pull Plot
Entries 8444
Mean −0.008383
Std Dev 1.018
Underflow 0
Overflow 0
Fit Prob 0.01
Fit Chi2 8753 / 8443
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

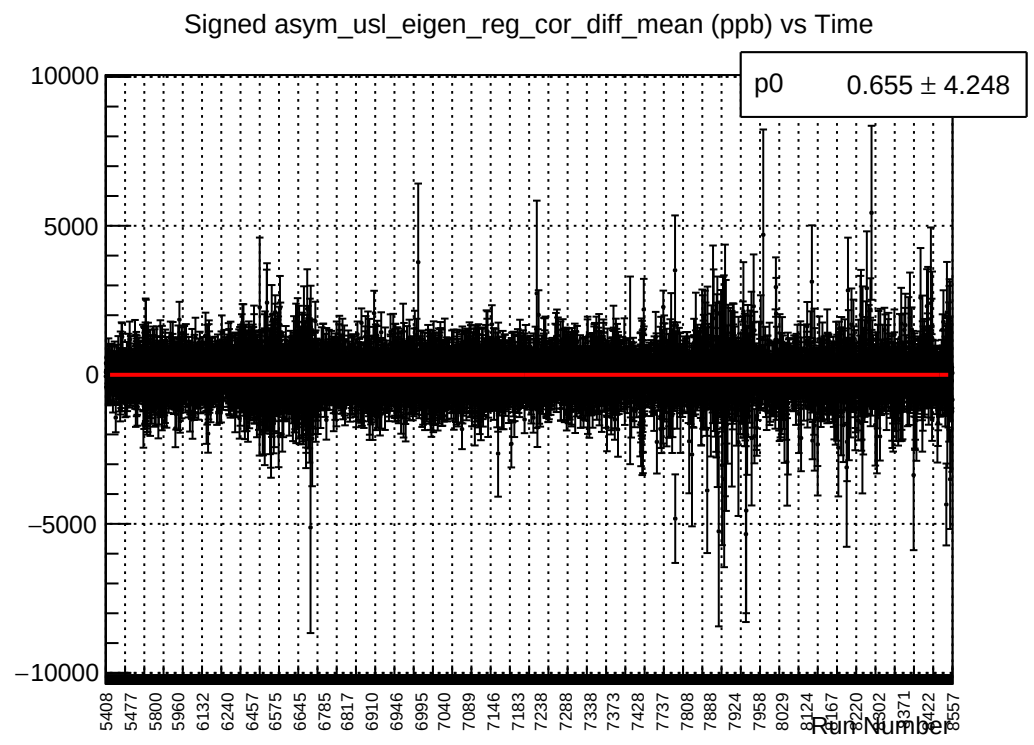

asym_usl_eigen_reg_correction_rms (ppm) vs Time
p0 1054 ± 0.0853
4000
3500
3000
2500
2000
1500
1000
500
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

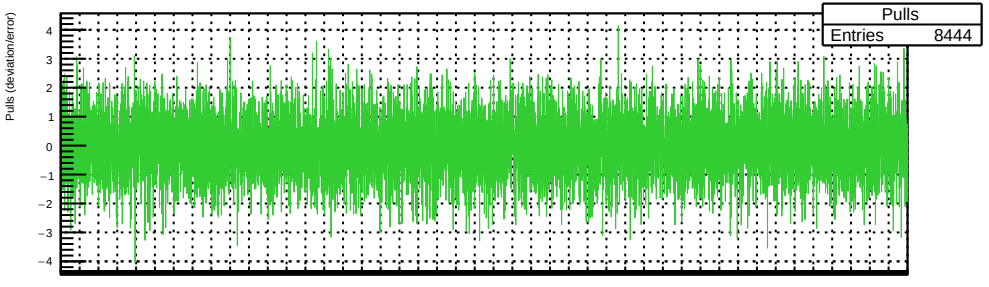

Signed asym_usl_overload_reg_reg_diff_mean (ppb) vs Time
p0 1.091± 3.777
8000
6000
4000
2000
0
−2000
−4000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

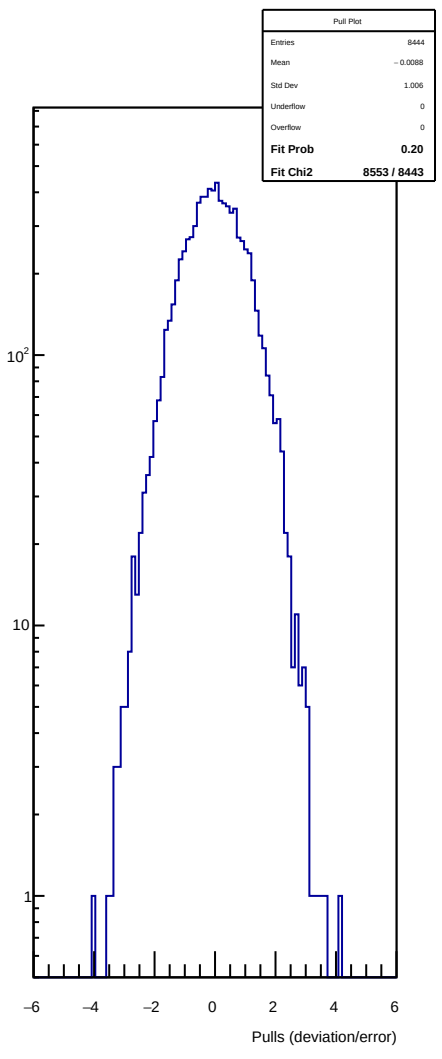

Pulls
Entries 8444
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

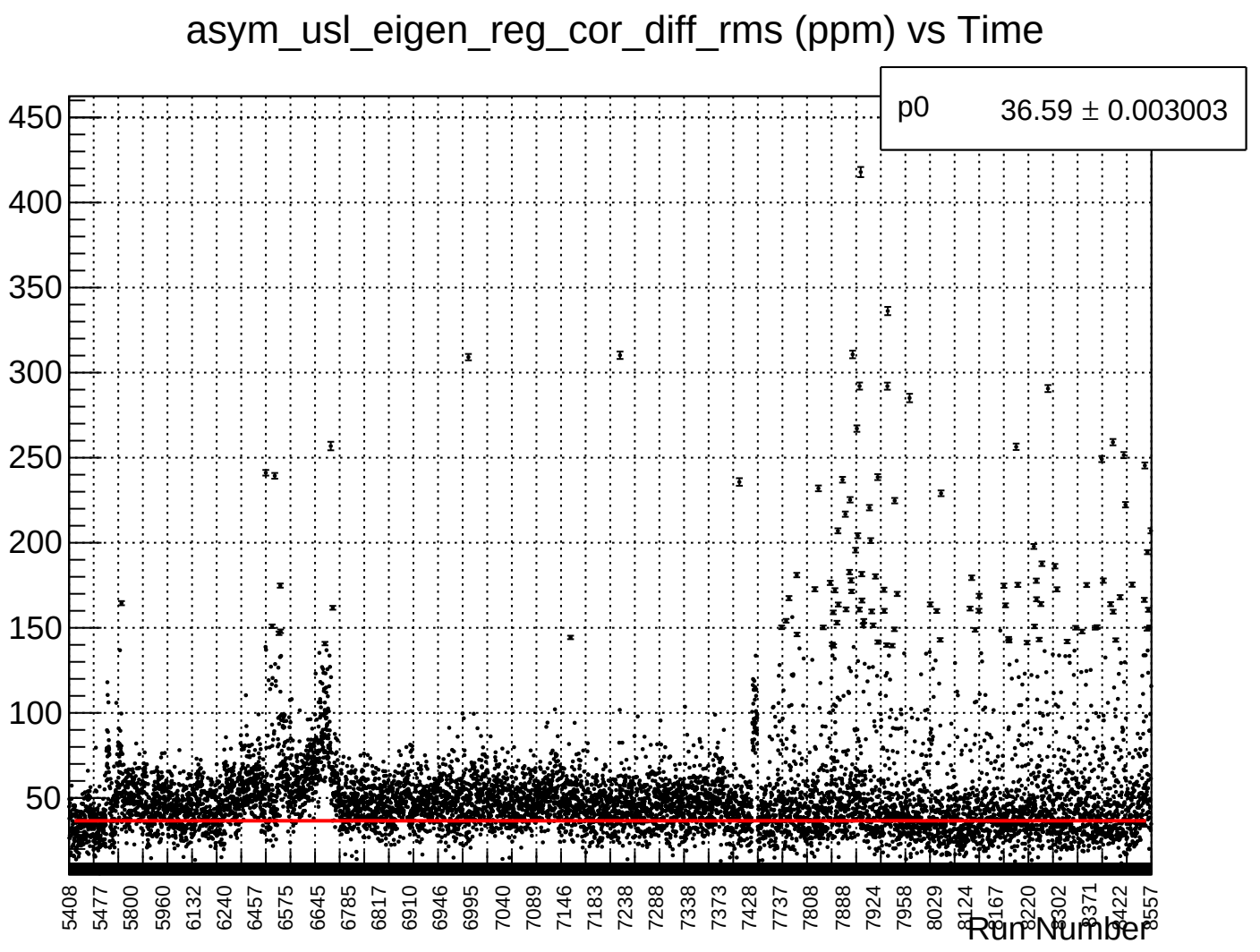

Pull Plot
Entries 8444
Mean −0.008351
Std Dev 1.013
Underflow 0
Overflow 0
Fit Prob 0.04
Fit Chi2 8671 / 8443
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

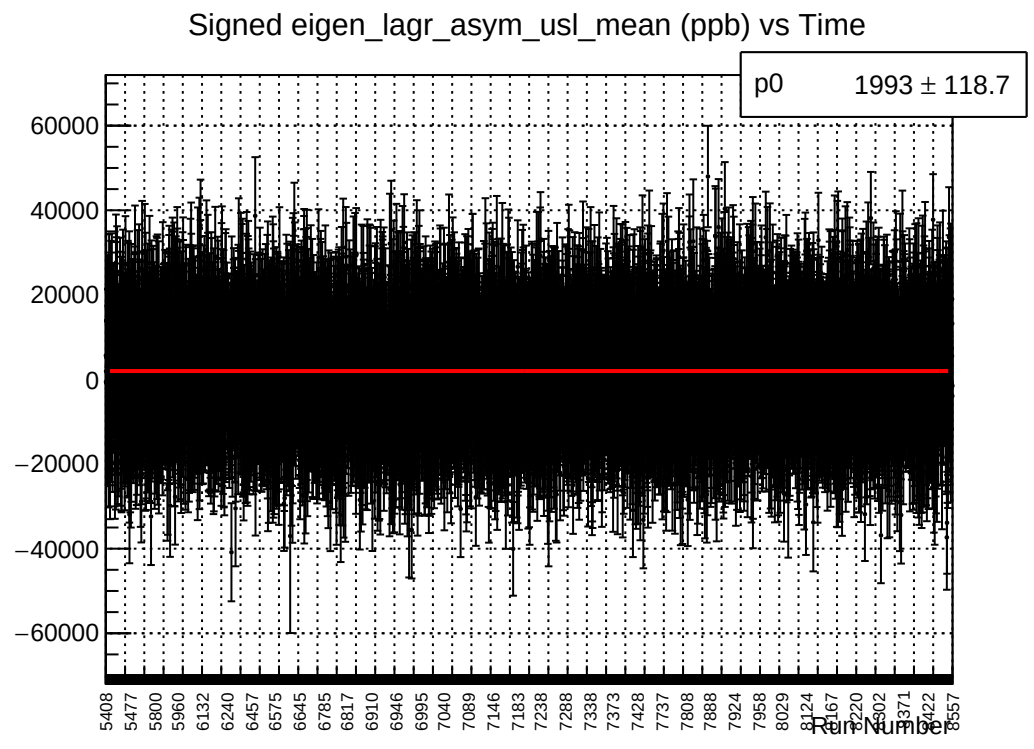

asym_usl_overload_reg_reg_diff_rms (ppm) vs Time
p0
33 ± 0.002671
300
250
200
150
100
50
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

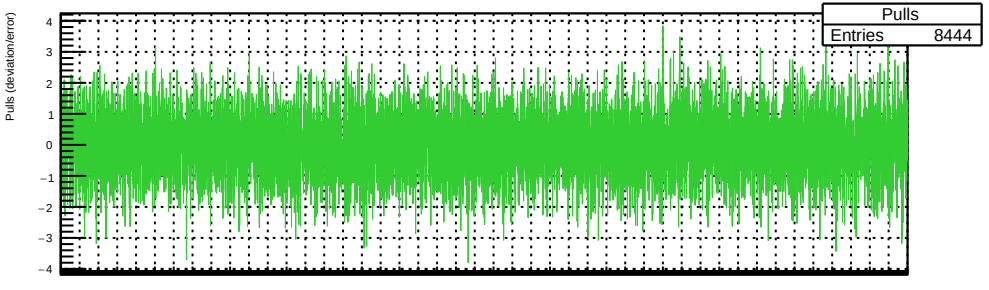

Signed asym_usl_eigen_reg_cor_diff_mean (ppb) vs Time
p0 0.655 ± 4.248
10000
5000
0
−5000
−10000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8902
8371
8422
8557
Run Number

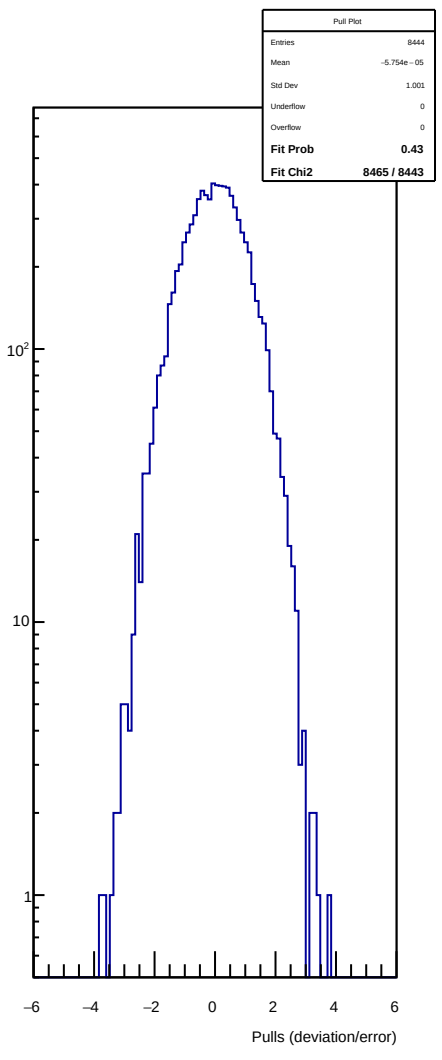

Pulls
Entries 8444
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

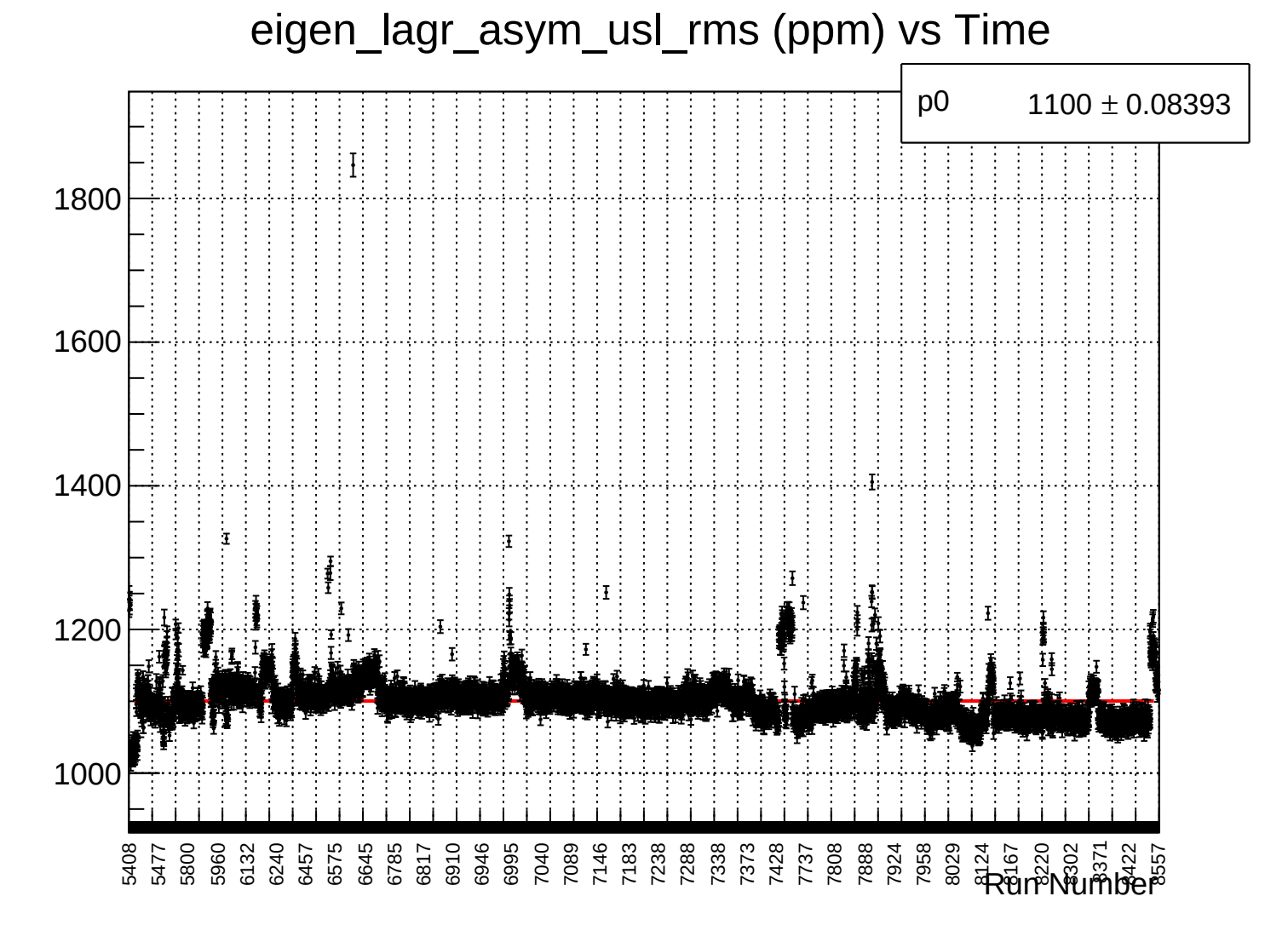

Pull Plot
Entries 8444
Mean −0.0088
Std Dev 1.006
Underflow 0
Overflow 0
Fit Prob 0.20
Fit Chi2 8553 / 8443
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

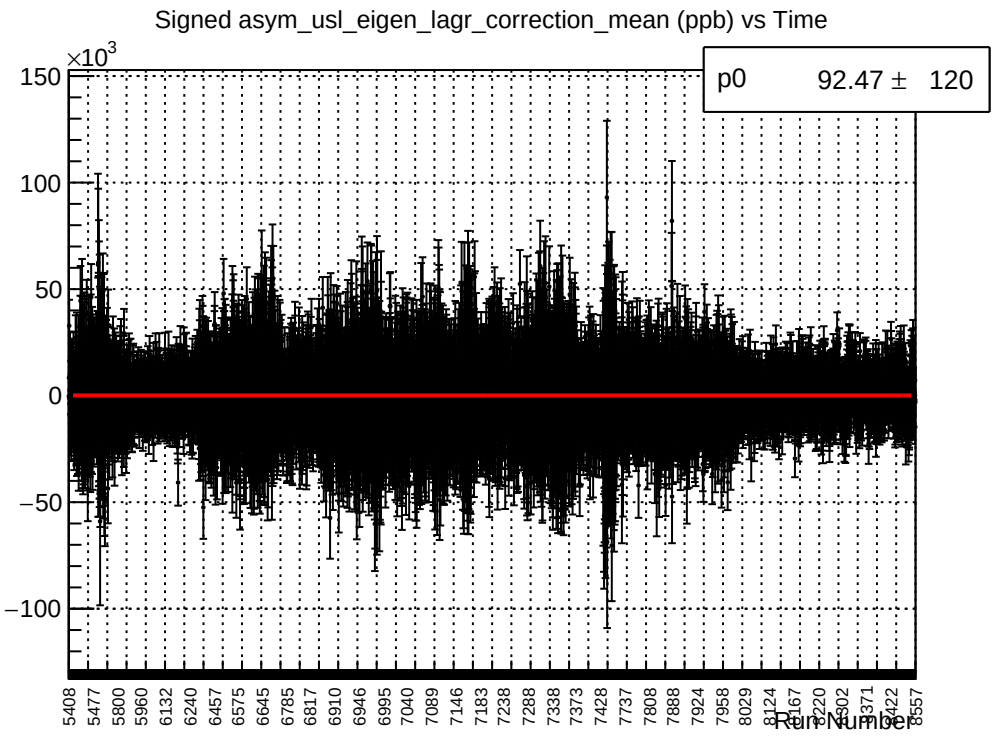

asym_usl_eigen_reg_cor_diff_rms (ppm) vs Time
p0 36.59 ± 0.003003
450
400
350
300
250
200
150
100
50
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

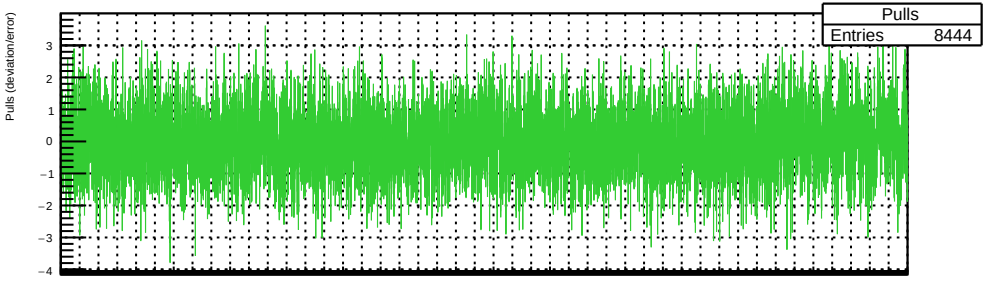

Signed eigen_lagr_asym_usl_mean (ppb) vs Time
p0 1993 ± 118.7
60000
40000
20000
0
−20000
−40000
−60000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8902
9371
9422
9557
Run Number

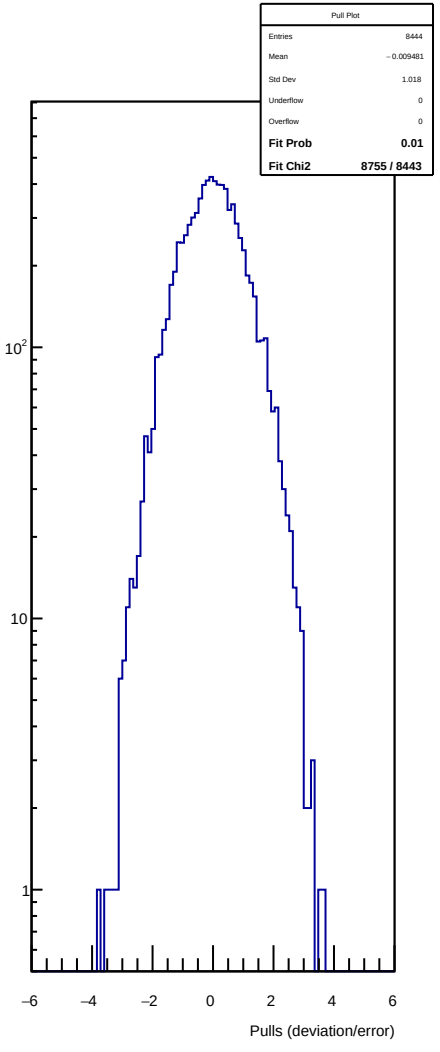

Pulls
Entries 8444
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

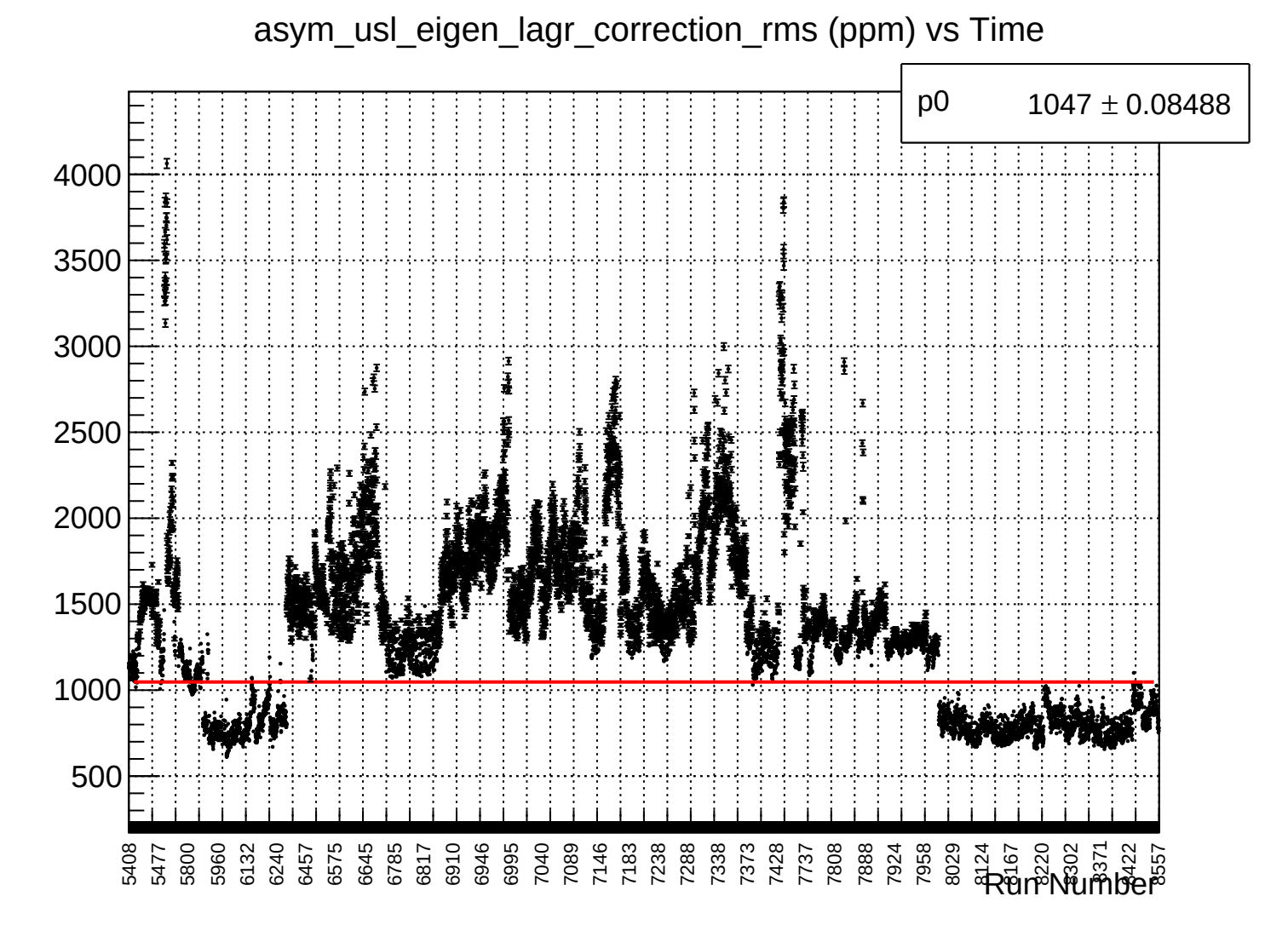

Pull Plot
Entries 8444
Mean −5.754e−05
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.43
Fit Chi2 8465 / 8443
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

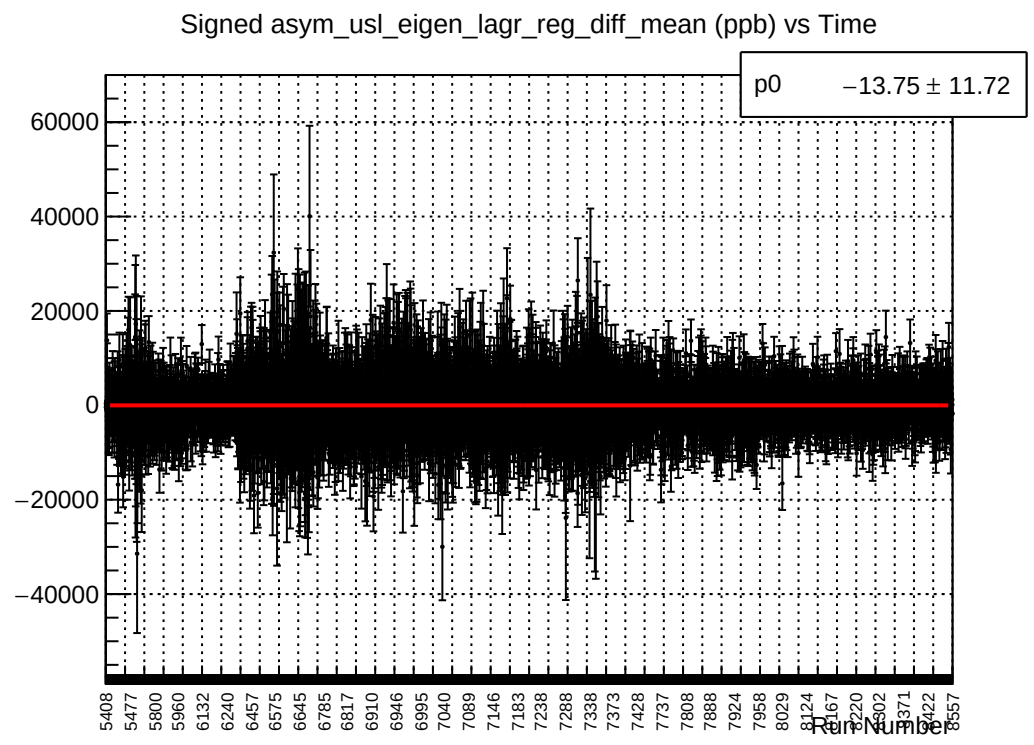

eigen_lagr_asym_usl_rms (ppm) vs Time
p0
1100 ± 0.08393
1800
1600
1400
1200
1000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

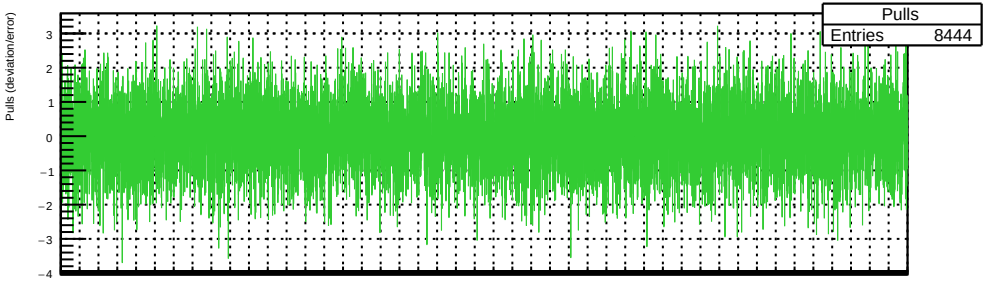

Signed asym_usl_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 92.47 ± 120
150
100
50
0
−50
−100
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

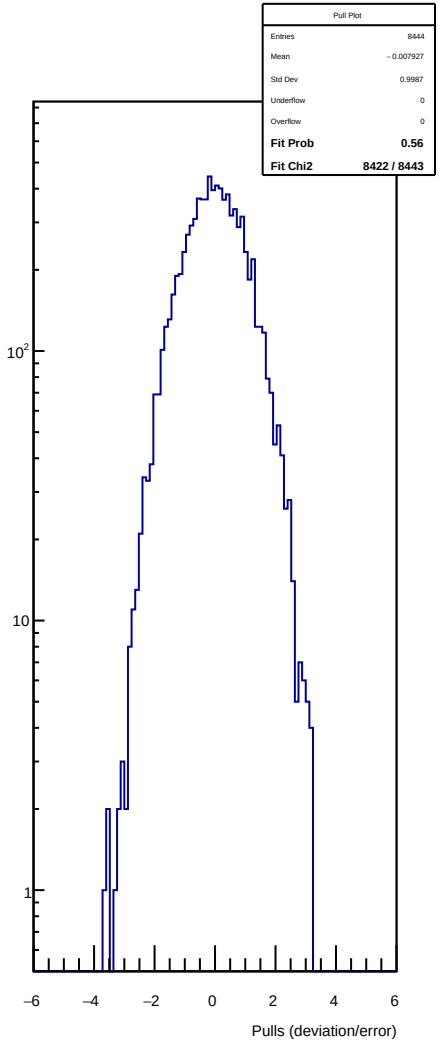

Pulls
Entries 8444
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

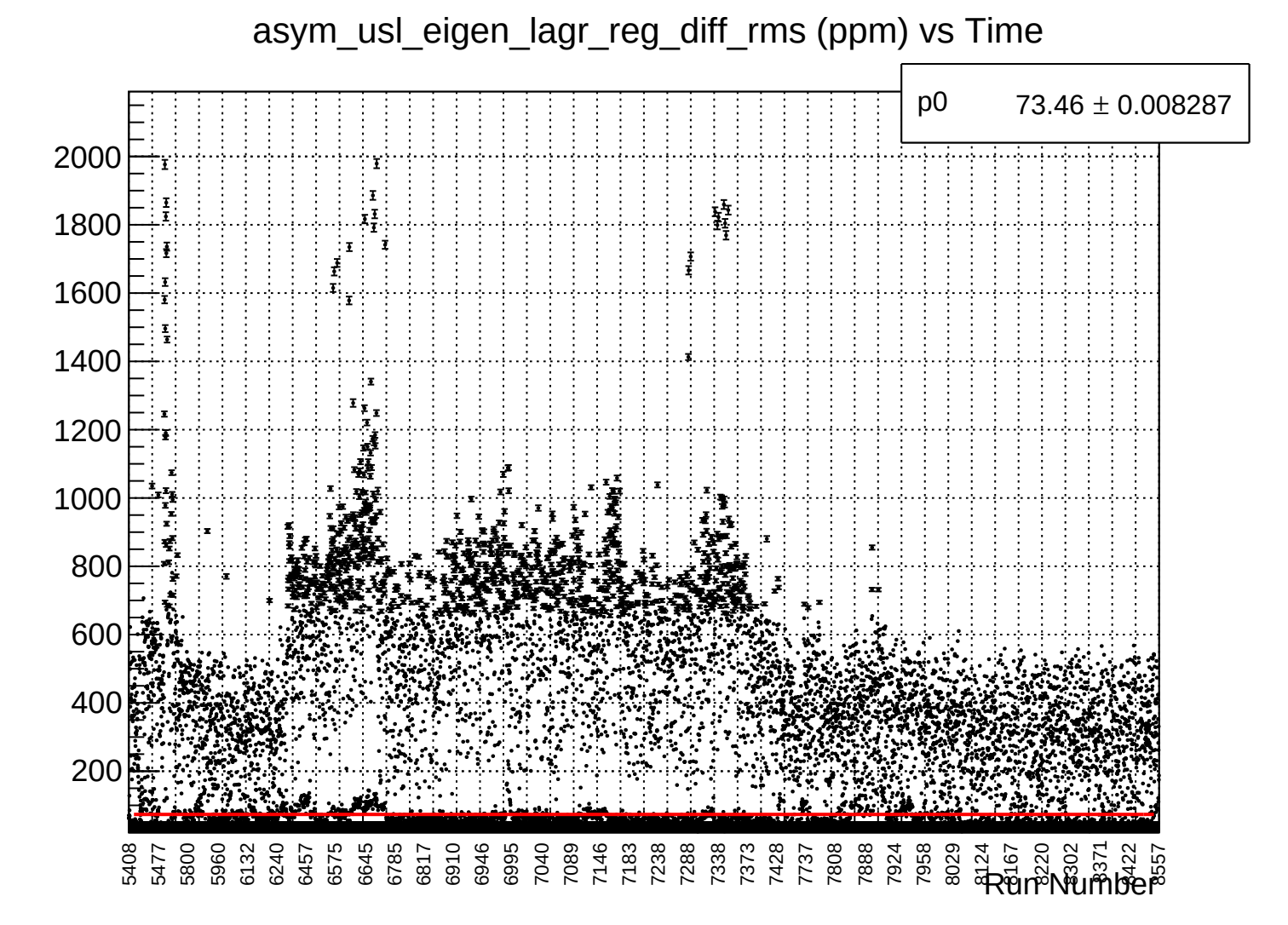

Pull Plot
Entries 8444
Mean −0.009481
Std Dev 1.018
Underflow 0
Overflow 0
Fit Prob 0.01
Fit Chi2 8755 / 8443
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

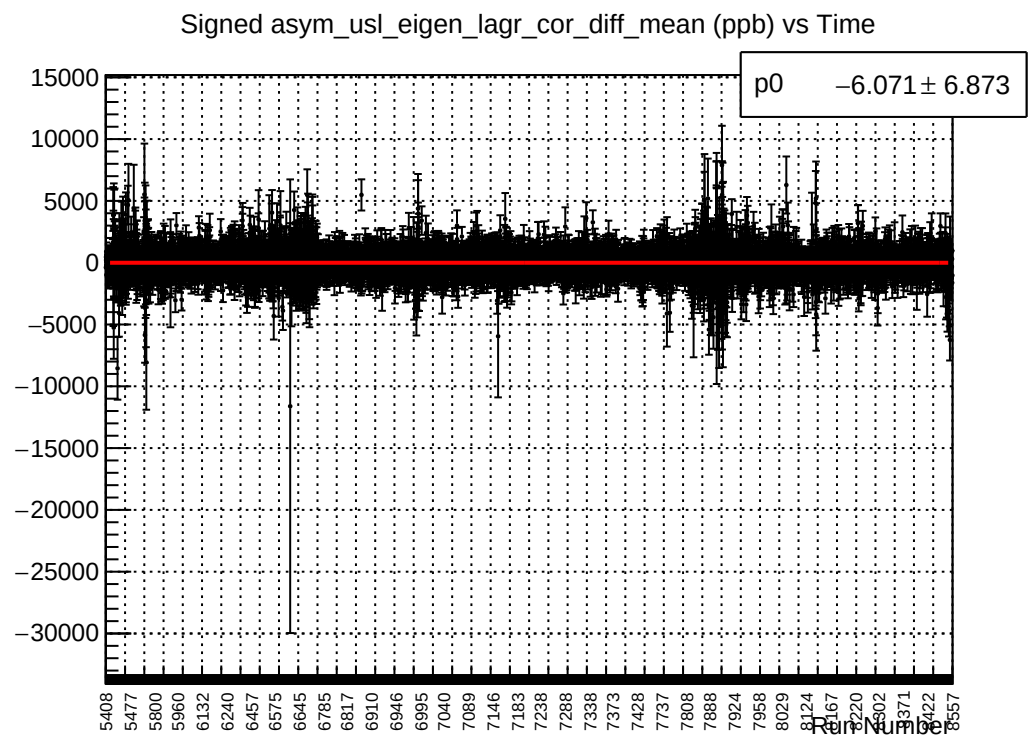

asym_usl_eigen_lagr_correction_rms (ppm) vs Time
p0 1047 ± 0.08488
4000
3500
3000
2500
2000
1500
1000
500
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

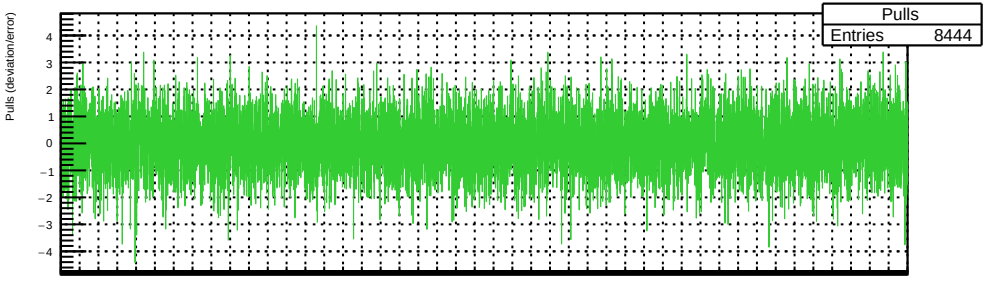

Signed asym_usl_eigen_lagr_reg_diff_mean (ppb) vs Time
p0 −13.75 ± 11.72
60000
40000
20000
0
−20000
−40000
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

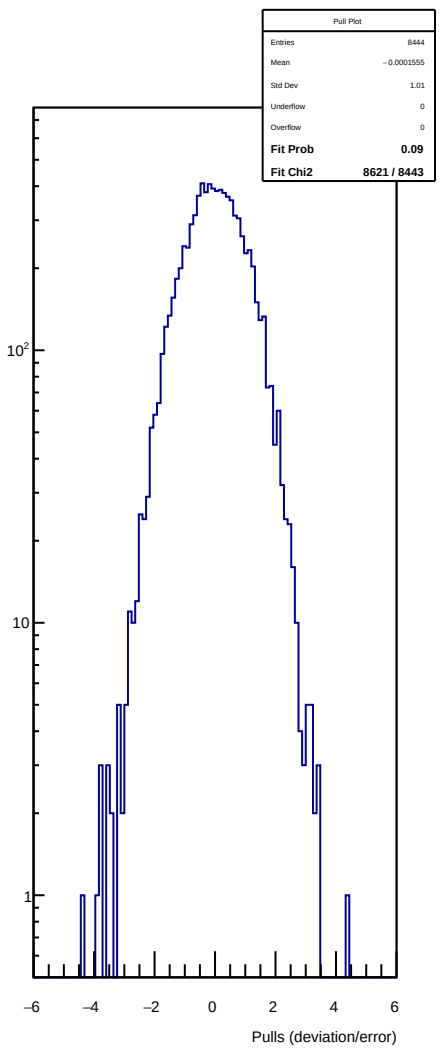

Pulls
Entries 8444
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

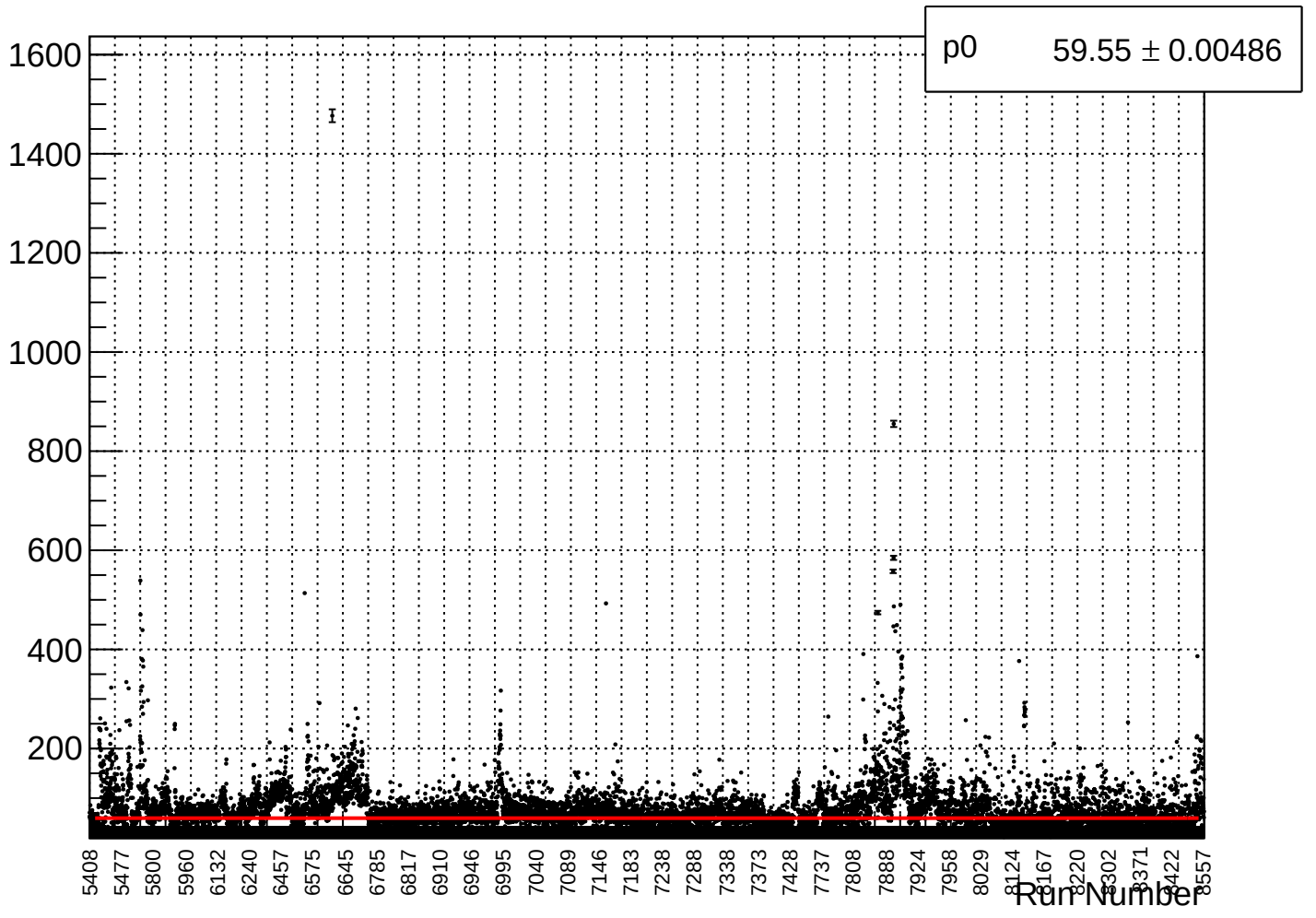

Pull Plot
Entries 8444
Mean −0.007927
Std Dev 0.9987
Underflow 0
Overflow 0
Fit Prob 0.56
Fit Chi2 8422 / 8443
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

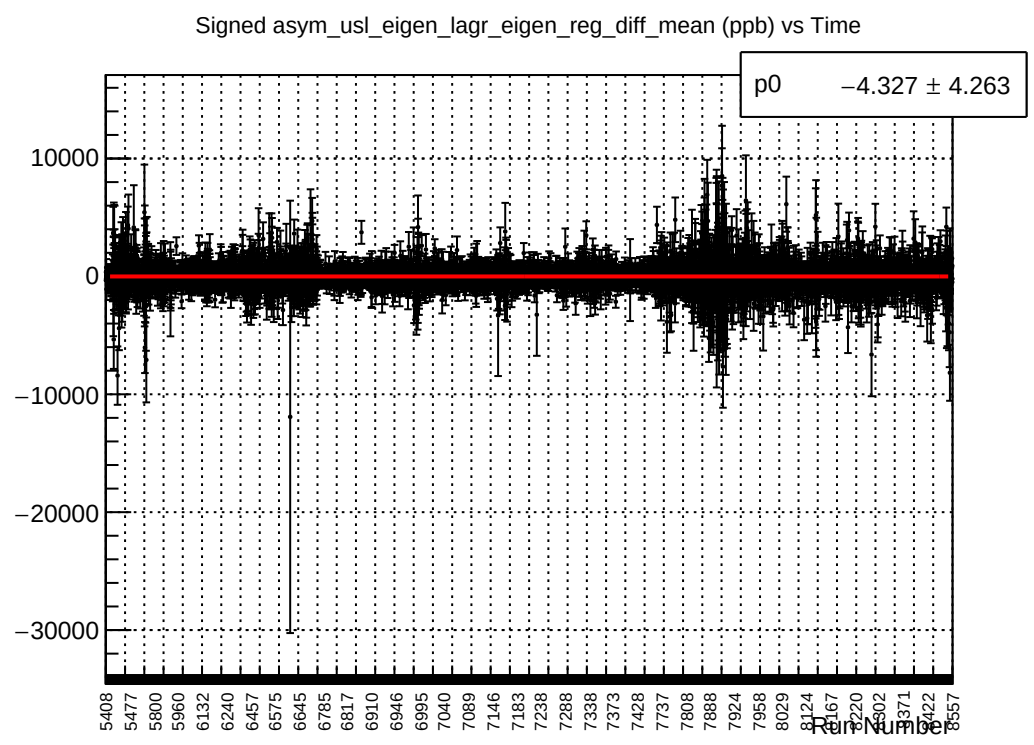

asym_usl_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 73.46 ± 0.008287
2000
1800
1600
1400
1200
1000
800
600
400
200
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

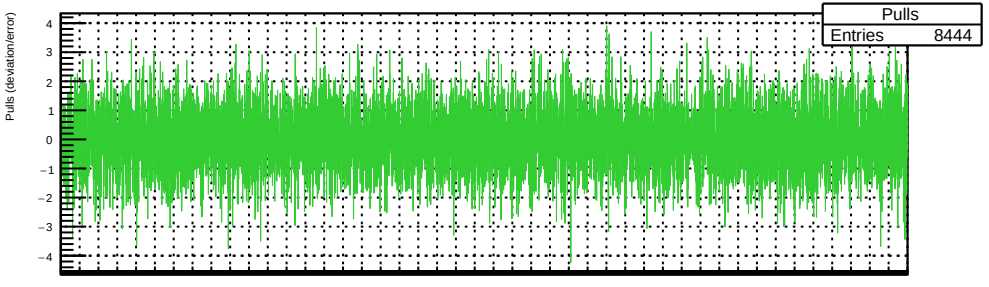

Signed asym_usl_eigen_lagr_cor_diff_mean (ppb) vs Time
p0 −6.071 ± 6.873
15000
10000
5000
0
−5000
−10000
−15000
−20000
−25000
−30000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

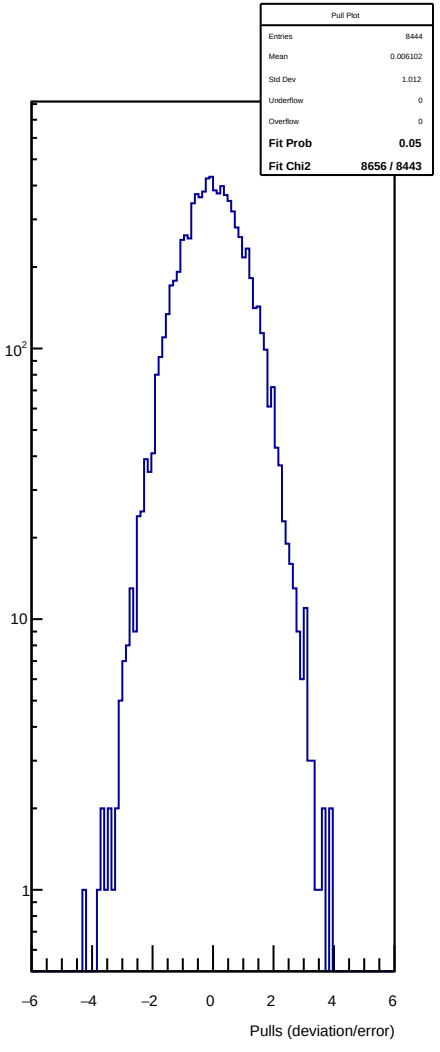

Pulls
Entries 8444
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

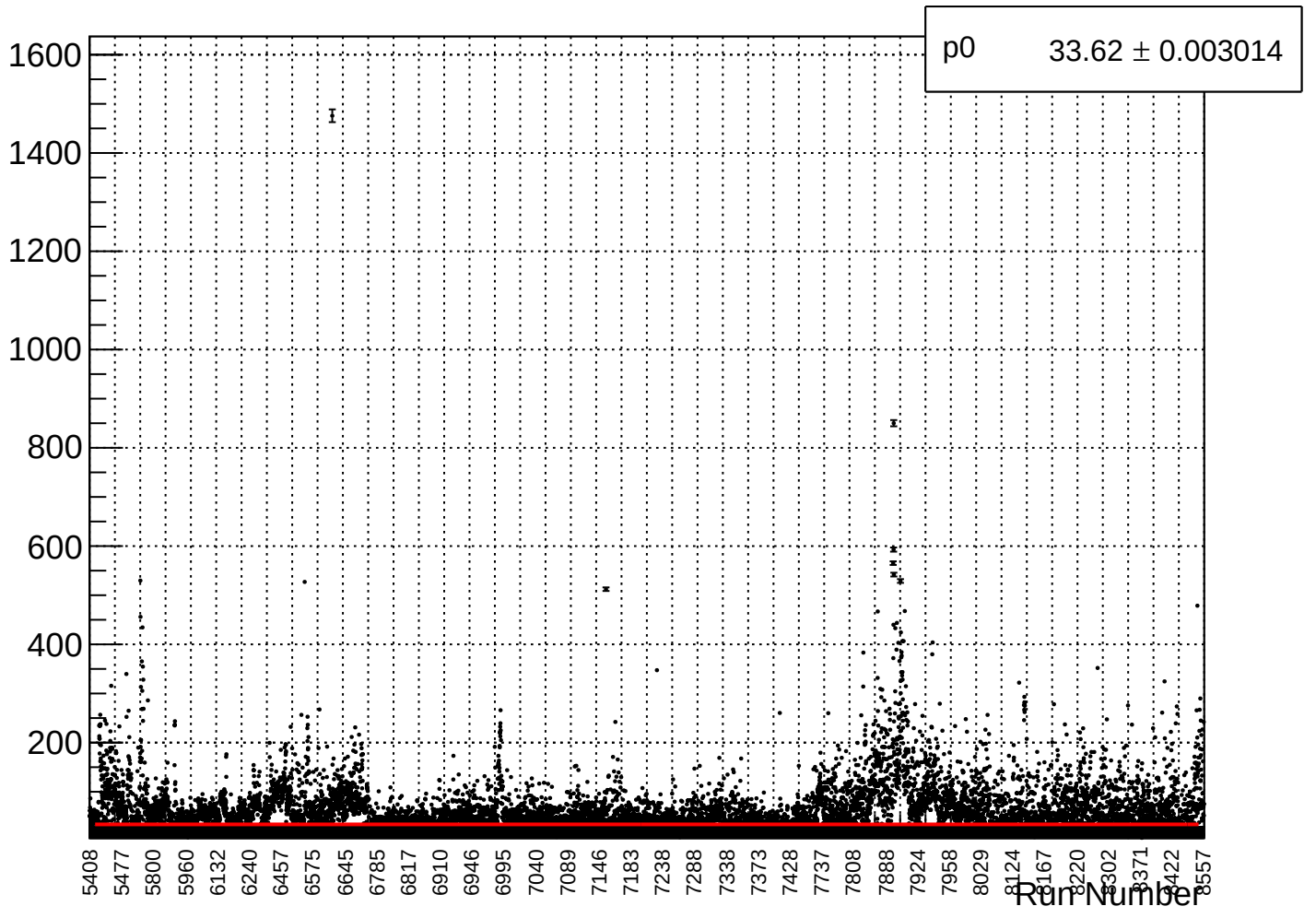

Pull Plot
Entries 8444
Mean −0.0001555
Std Dev 1.01
Underflow 0
Overflow 0
Fit Prob 0.09
Fit Chi2 8621 / 8443
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

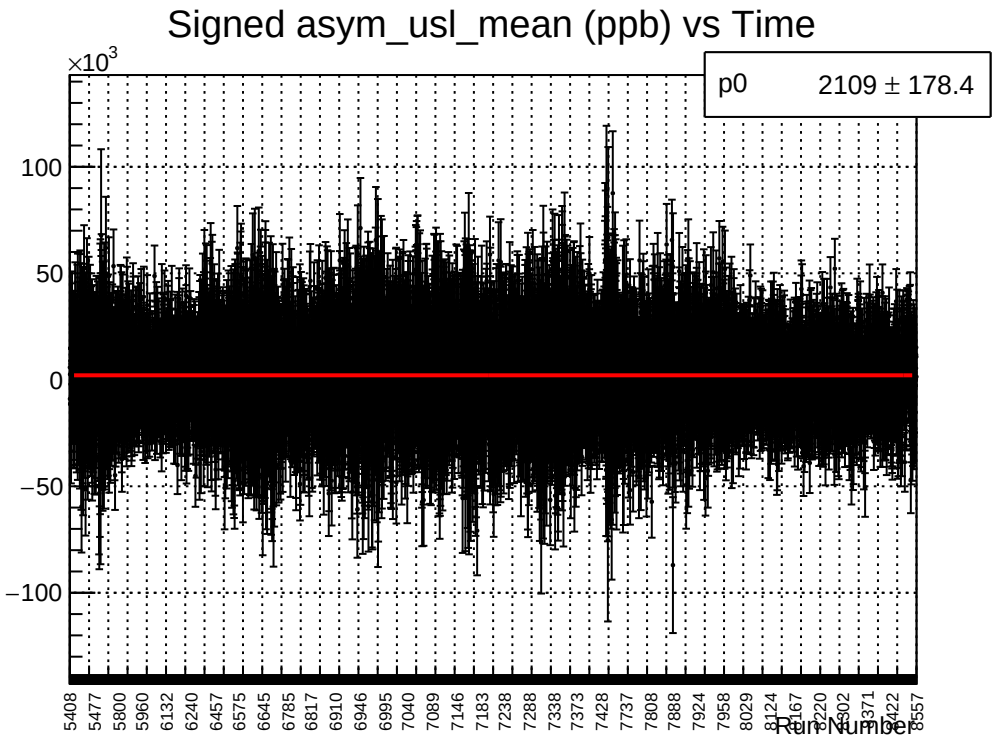

asym_usl_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 59.55 ± 0.00486
1600
1400
1200
1000
800
600
400
200
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

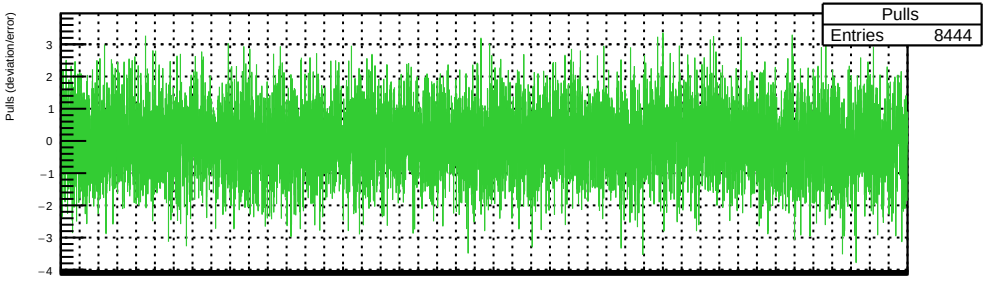

Signed asym_usl_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
p0 −4.327 ± 4.263
10000
0
−10000
−20000
−30000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

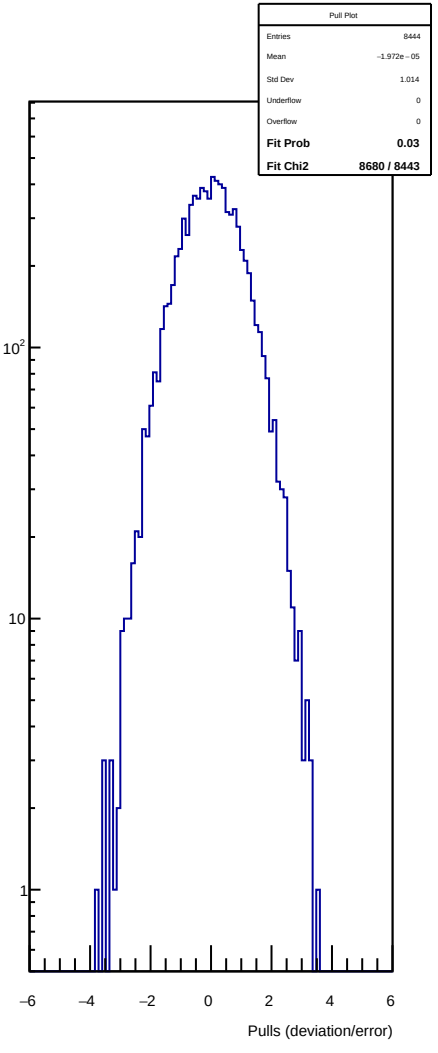

Pulls
Entries 8444
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

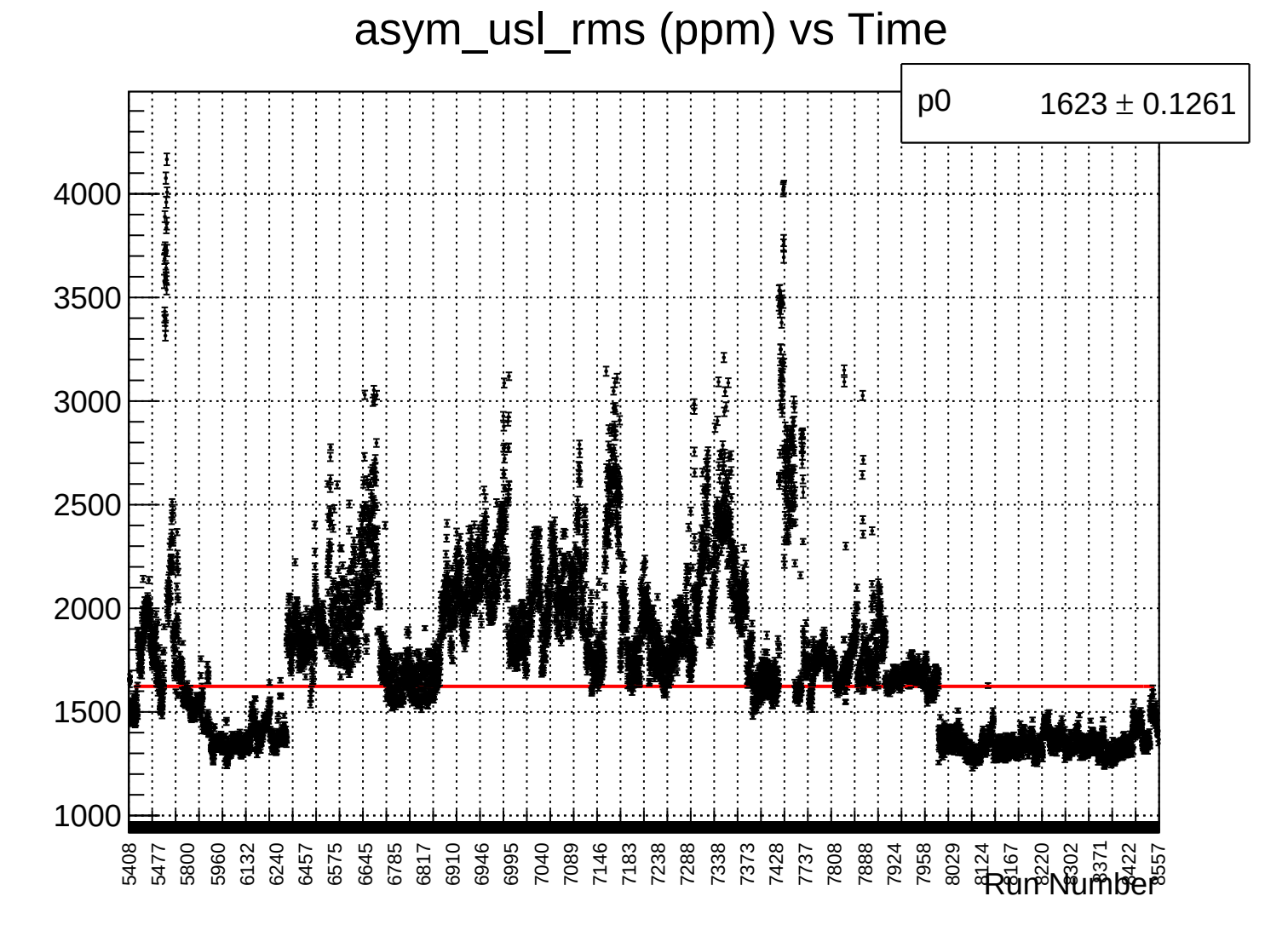

Pull Plot
Entries 8444
Mean 0.006102
Std Dev 1.012
Underflow 0
Overflow 0
Fit Prob 0.05
Fit Chi2 8656 / 8443
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

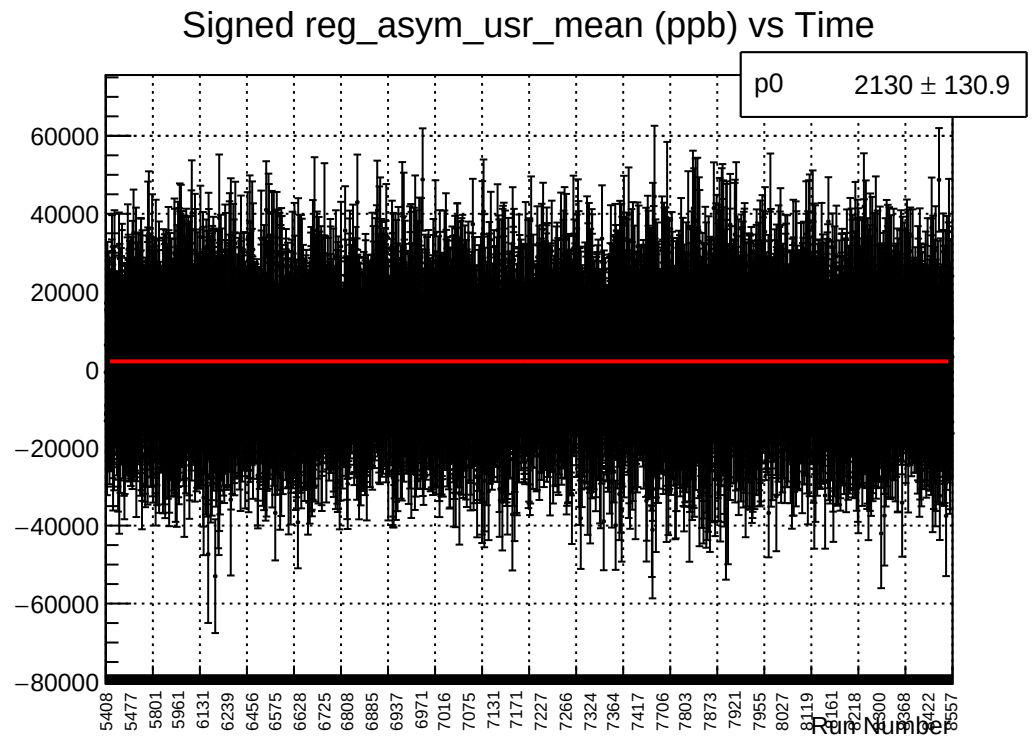

asym_usl_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 33.62 ± 0.003014
1600
1400
1200
1000
800
600
400
200
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

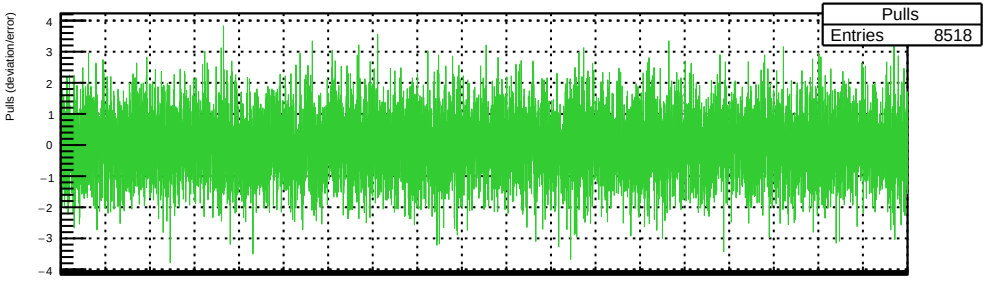

Signed asym_usl_mean (ppb) vs Time
×10^3
p0 2109 ± 178.4
100
50
0
−50
−100
5408 5477 5800 5960 6132 6240 6457 6575 6645 6785 6817 6910 6946 6995 7040 7089 7146 7183 7238 7288 7338 7373 7428 7737 7808 7888 7924 7958 8029 8124 8167 8220 8302 8371 8422 8557
Run Number

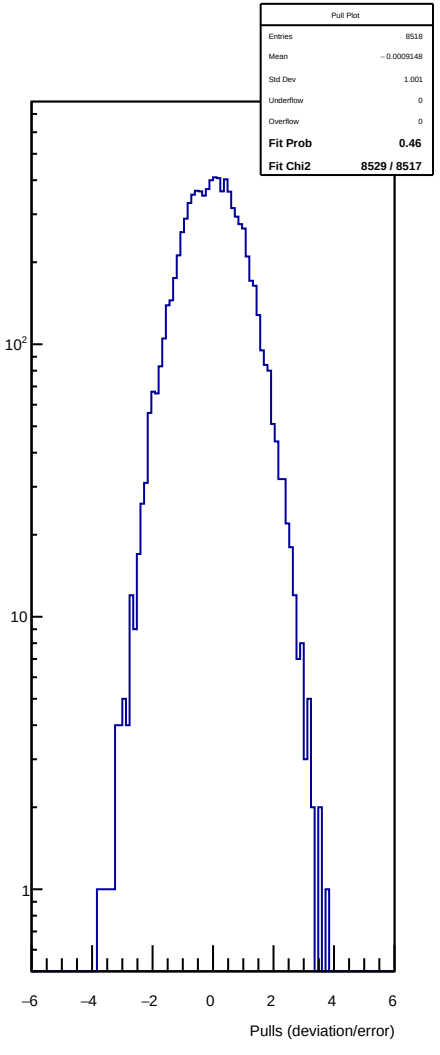

Pulls
Entries 8444
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

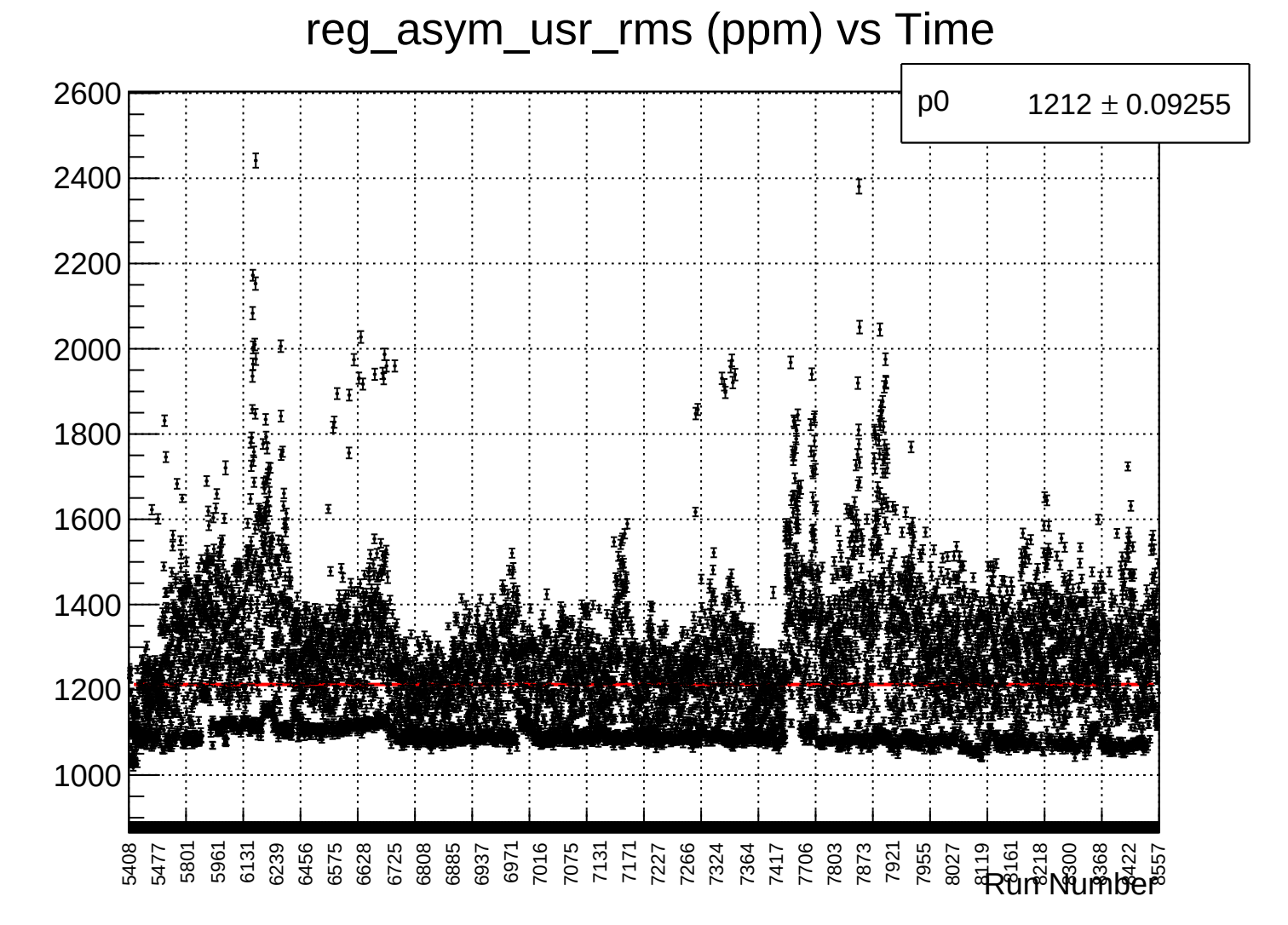

Pull Plot
Entries 8444
Mean −1.972e−05
Std Dev 1.014
Underflow 0
Overflow 0
Fit Prob 0.03
Fit Chi2 8680 / 8443
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

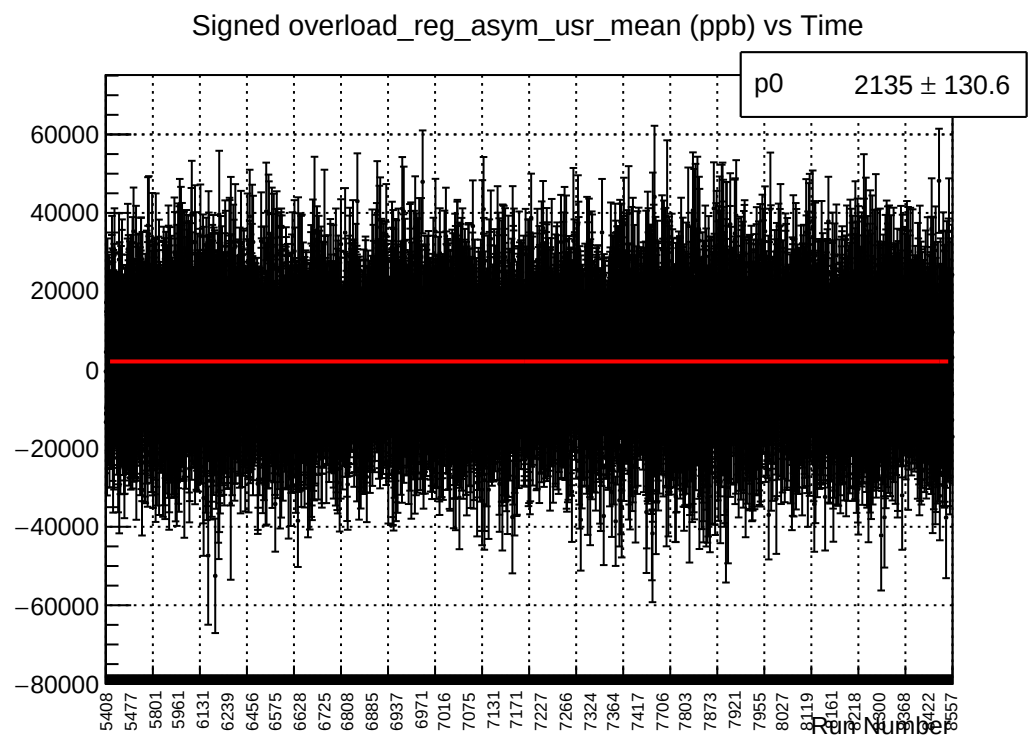

asym_usl_rms (ppm) vs Time
p0
1623 ± 0.1261
4000
3500
3000
2500
2000
1500
1000
5408
5477
5800
5960
6132
6240
6457
6575
6645
6785
6817
6910
6946
6995
7040
7089
7146
7183
7238
7288
7338
7373
7428
7737
7808
7888
7924
7958
8029
8124
8167
8220
8302
8371
8422
8557
Run Number

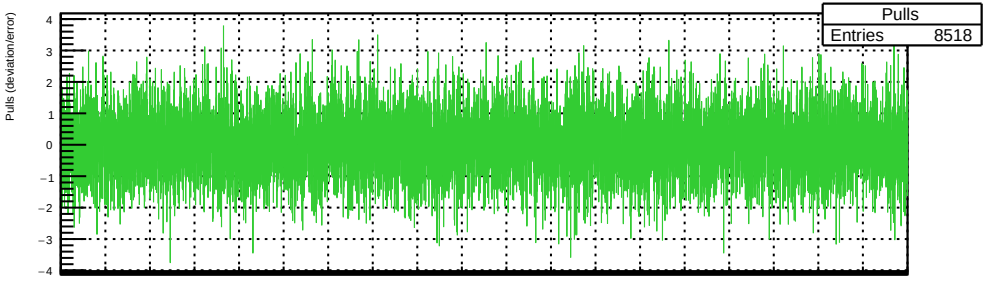

Signed reg_asym_usr_mean (ppb) vs Time
p0 2130 ± 130.9
60000
40000
20000
0
−20000
−40000
−60000
−80000
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number

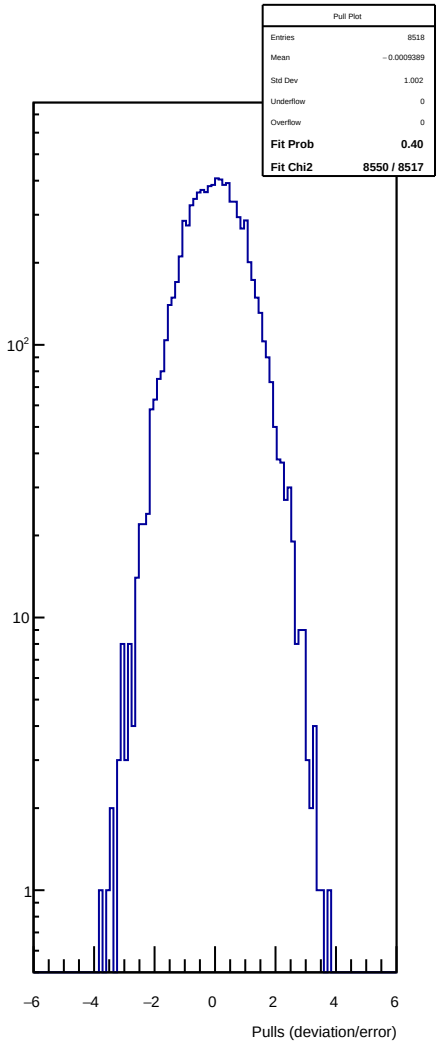

Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

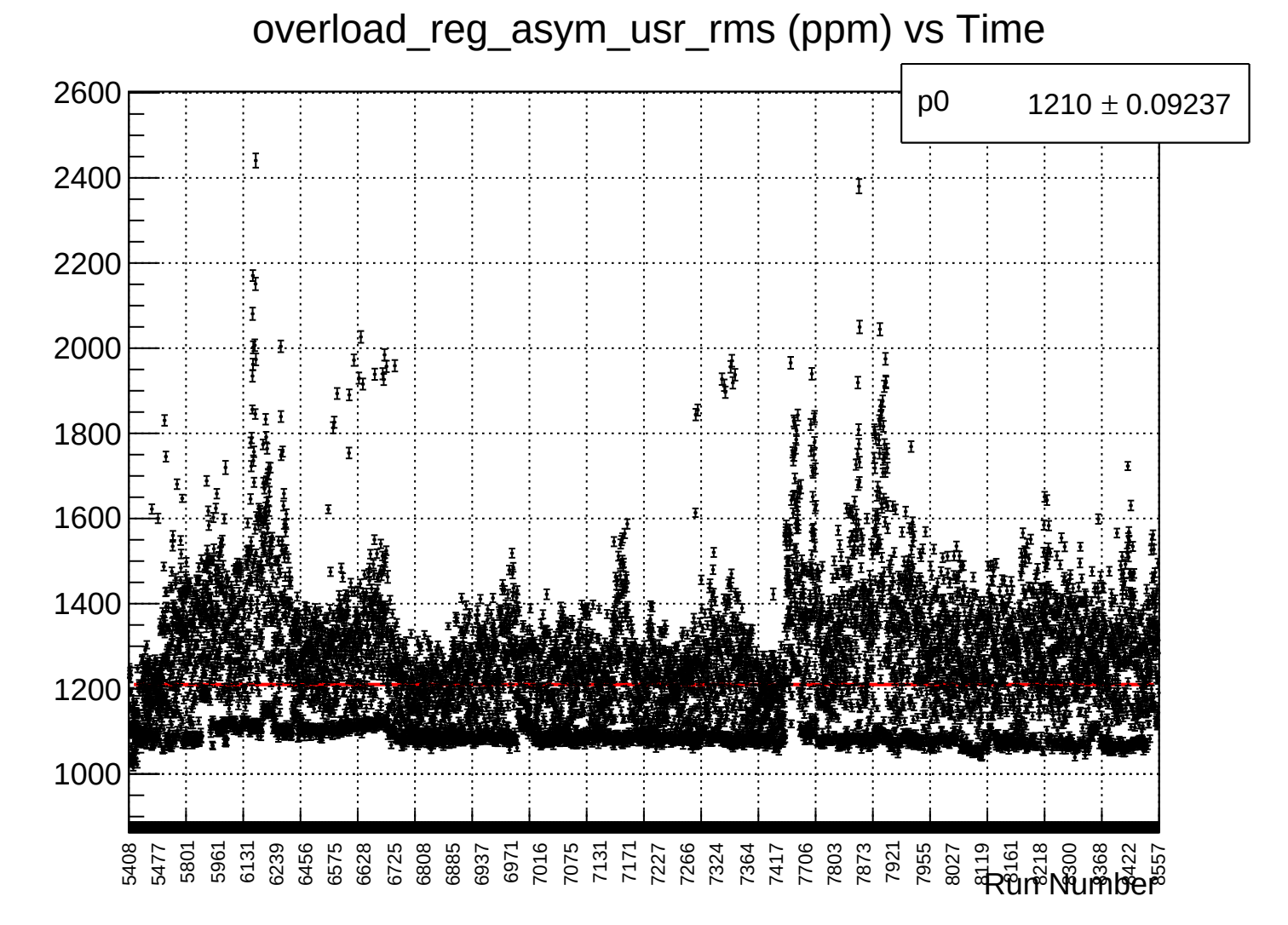

Pull Plot
Entries 8518
Mean −0.0009148
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.46
Fit Chi2 8529 / 8517
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

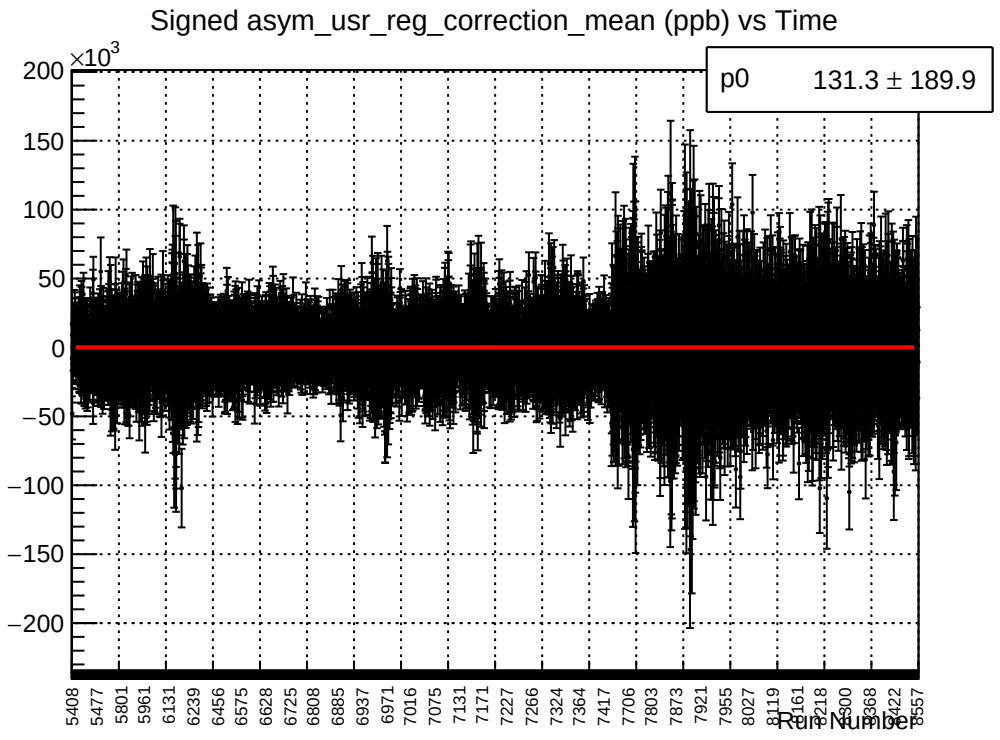

reg_asym_usr_rms (ppm) vs Time
p0
1212 ± 0.09255
2600
2400
2200
2000
1800
1600
1400
1200
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

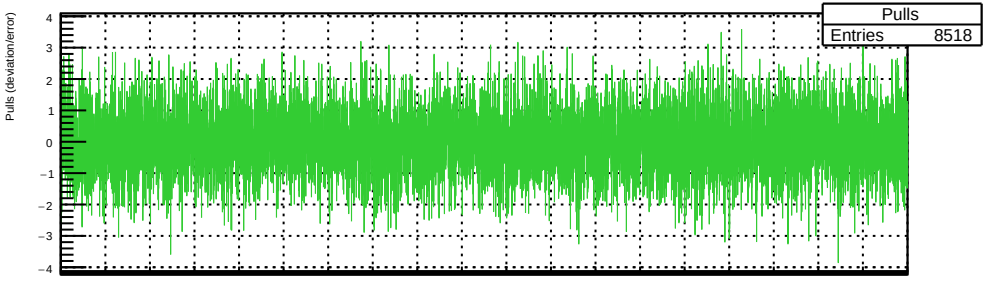

Signed overload_reg_asym_usr_mean (ppb) vs Time
p0 2135 ± 130.6
60000
40000
20000
0
−20000
−40000
−60000
−80000
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number

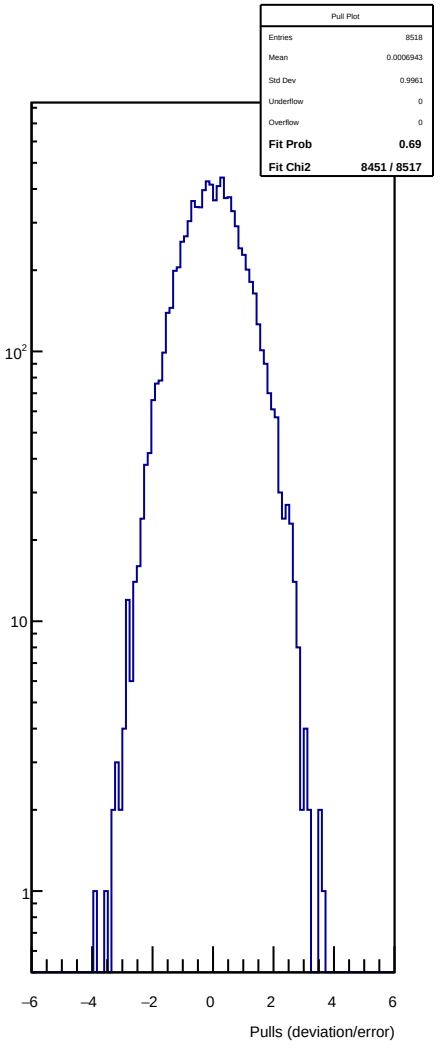

Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

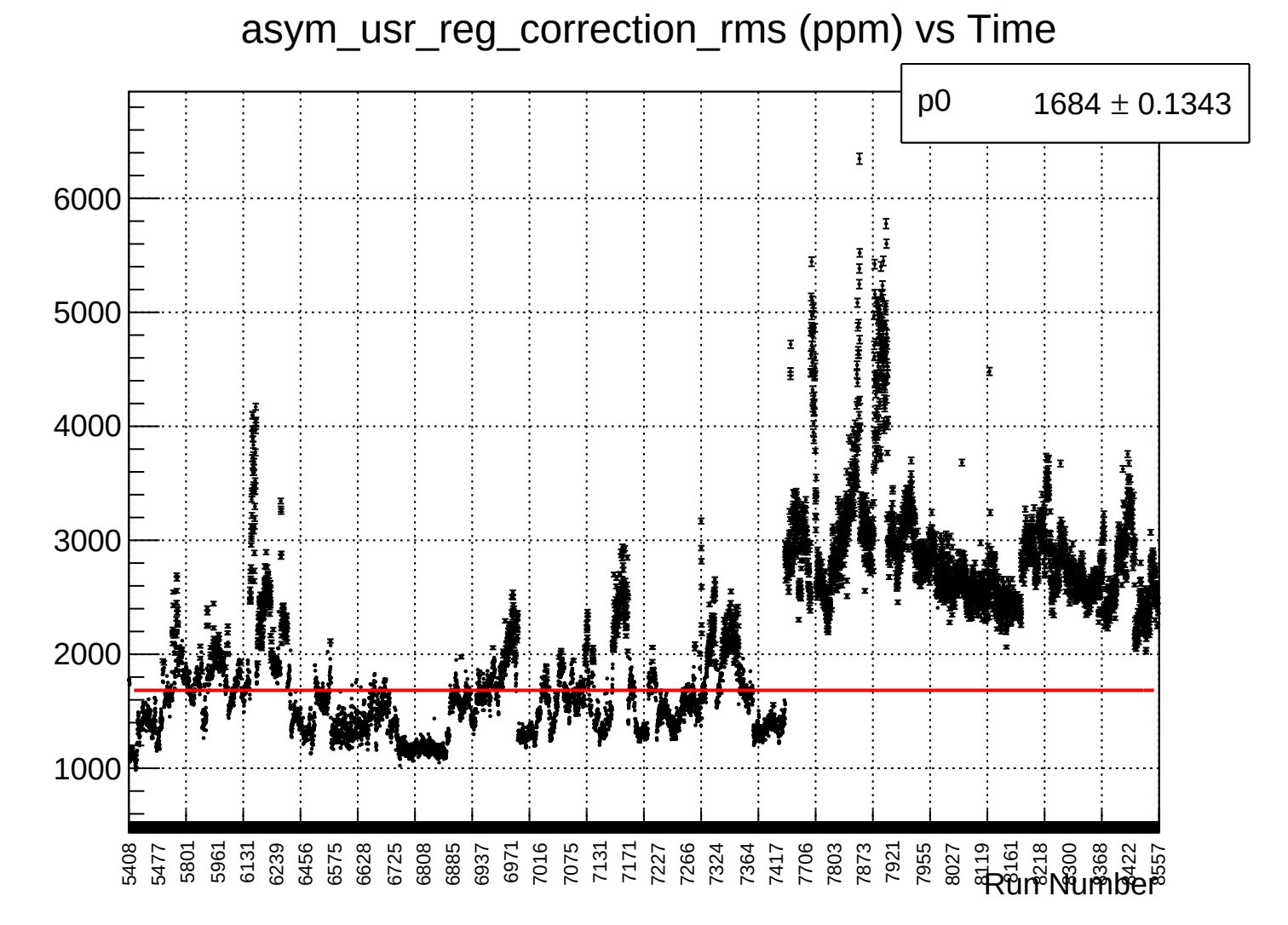

Pull Plot
Entries 8518
Mean −0.0009389
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.40
Fit Chi2 8550 / 8517
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

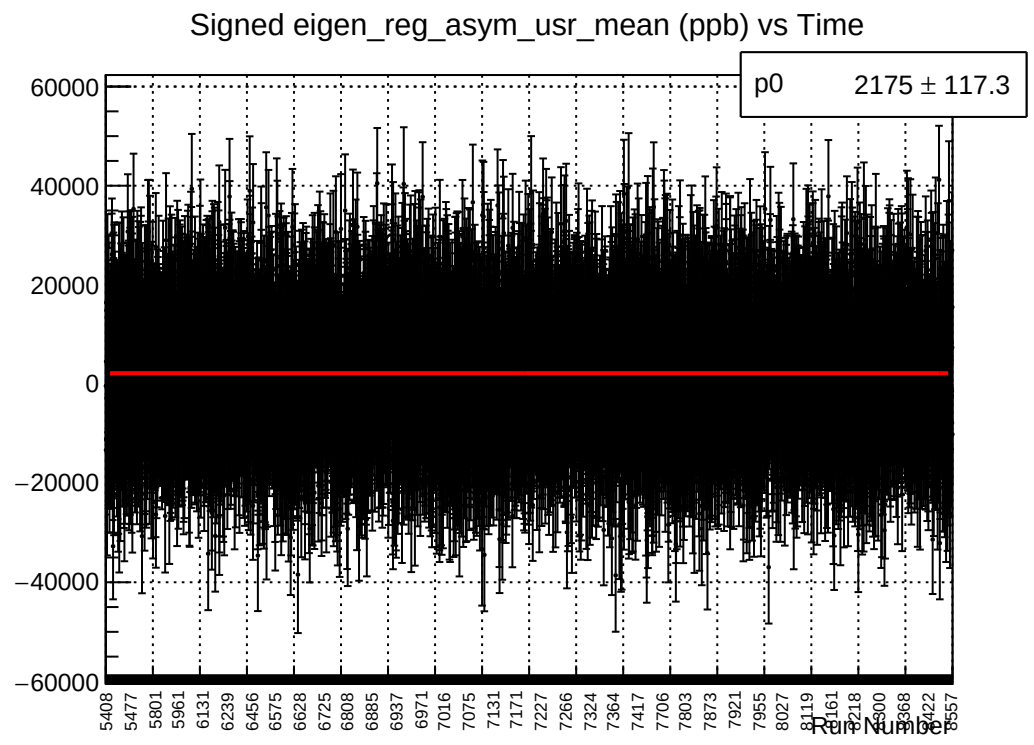

overload_reg_asym_usr_rms (ppm) vs Time
p0 1210 ± 0.09237
2600
2400
2200
2000
1800
1600
1400
1200
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

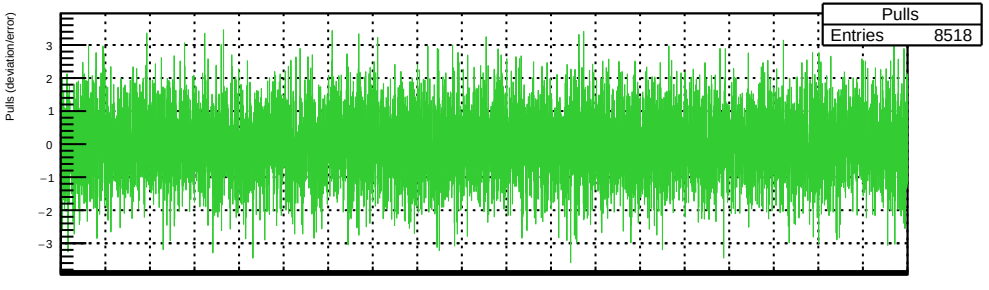

Signed asym_usr_reg_correction_mean (ppb) vs Time
p0 131.3 ± 189.9
×10^3
200
150
100
50
0
−50
−100
−150
−200
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

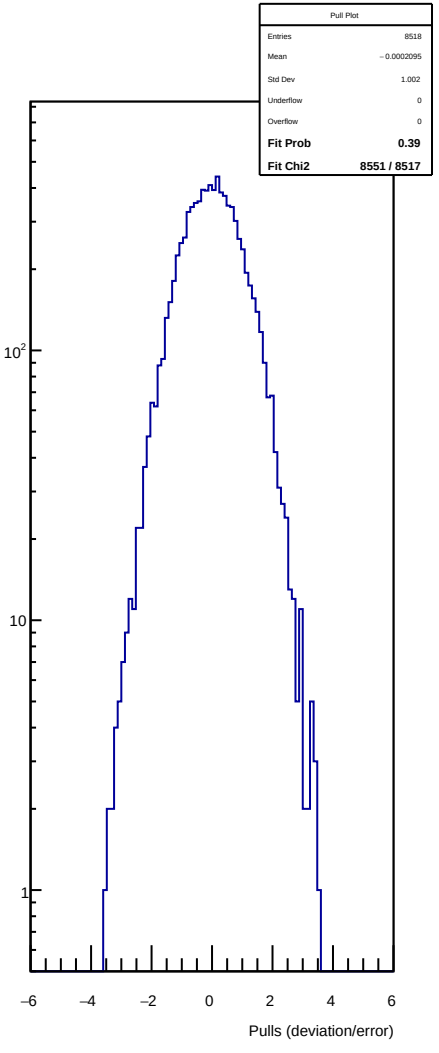

Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

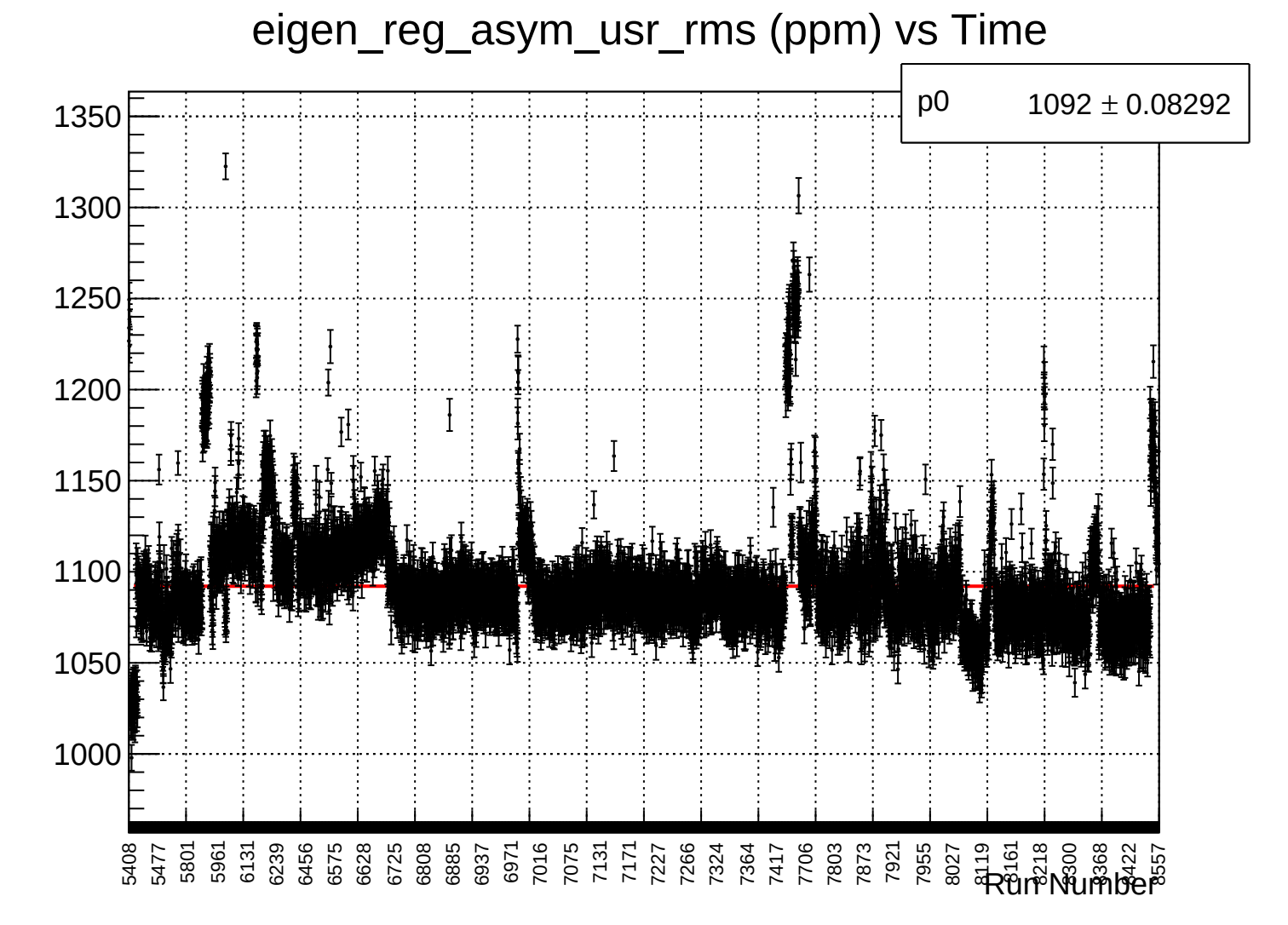

Pull Plot
Entries 8518
Mean 0.0006943
Std Dev 0.9961
Underflow 0
Overflow 0
Fit Prob 0.69
Fit Chi2 8451 / 8517
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

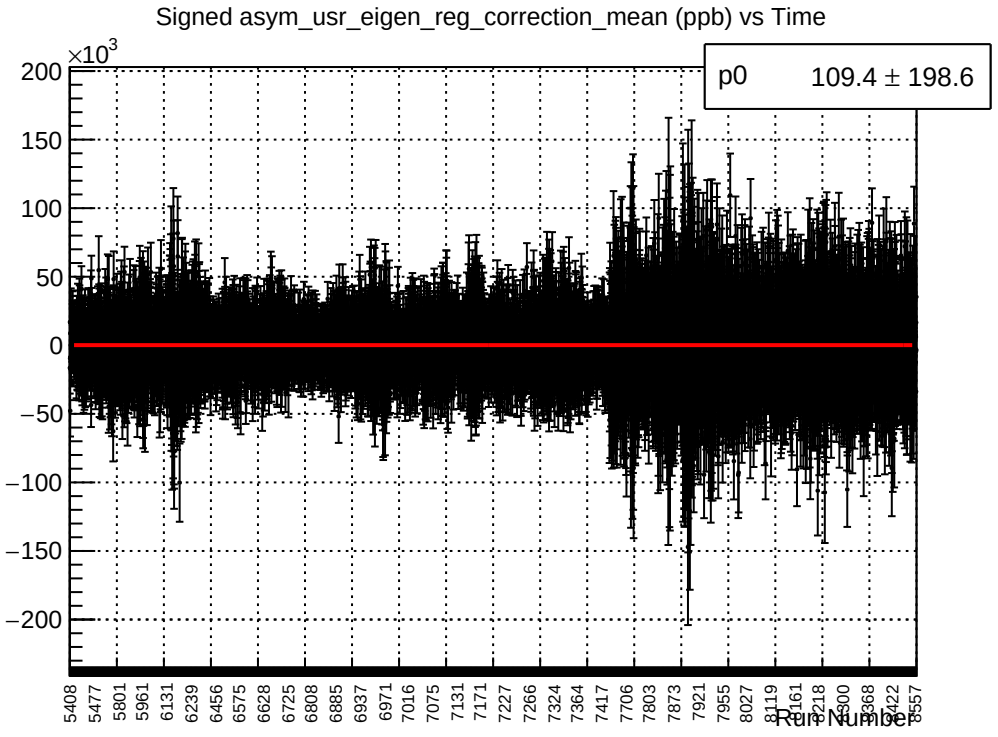

asym_usr_reg_correction_rms (ppm) vs Time
p0
1684 ± 0.1343
6000
5000
4000
3000
2000
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

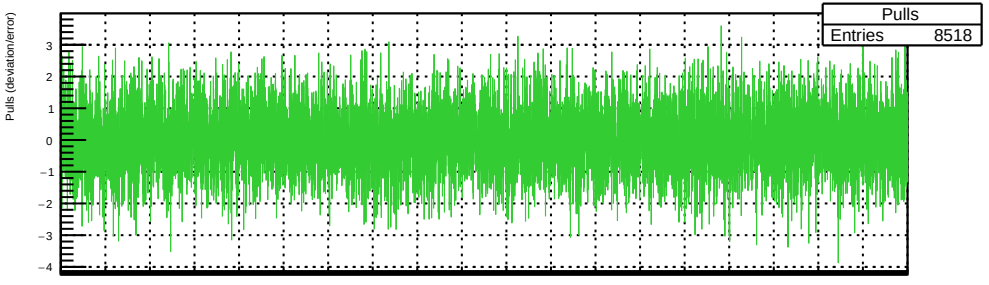

Signed eigen_reg_asym_usr_mean (ppb) vs Time
p0 2175 ± 117.3
60000
40000
20000
0
−20000
−40000
−60000
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number

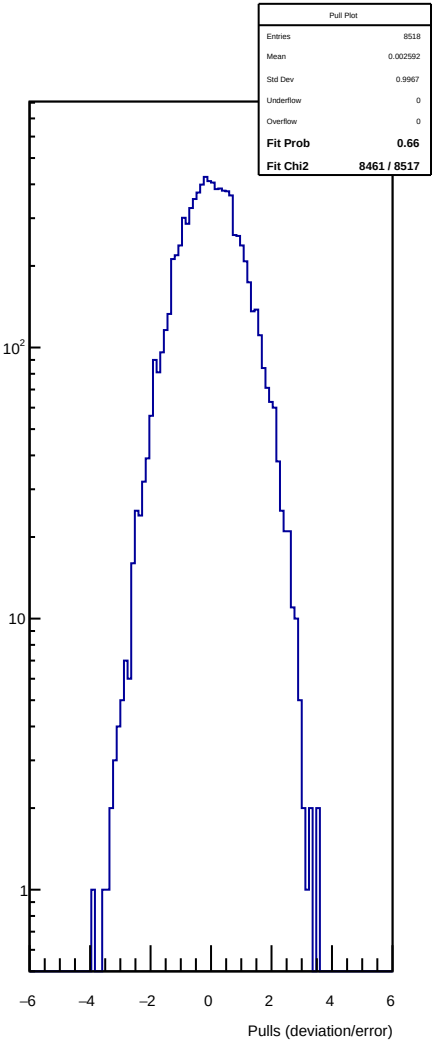

Pulls
Entries 8518
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

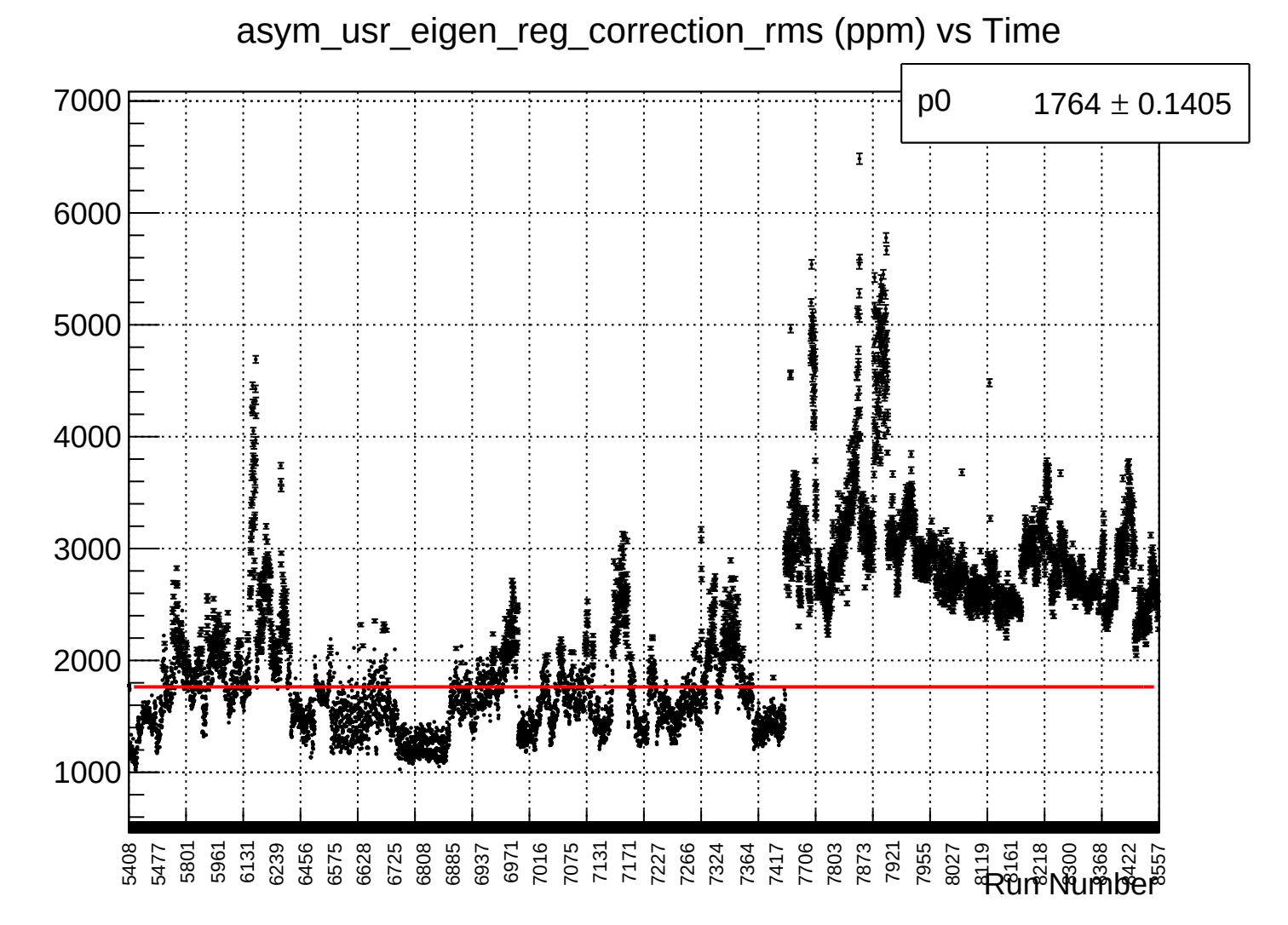

Pull Plot
Entries 8518
Mean −0.0002095
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.39
Fit Chi2 8551 / 8517
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

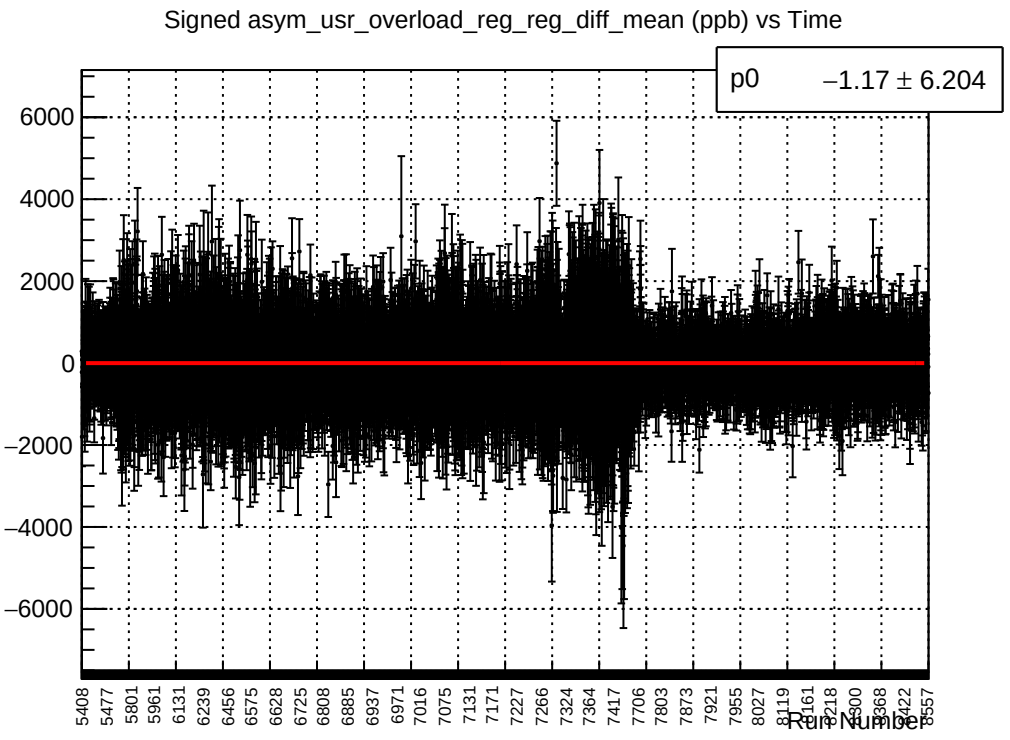

eigen_reg_asym_usr_rms (ppm) vs Time
p0
1092 ± 0.08292
1350
1300
1250
1200
1150
1100
1050
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

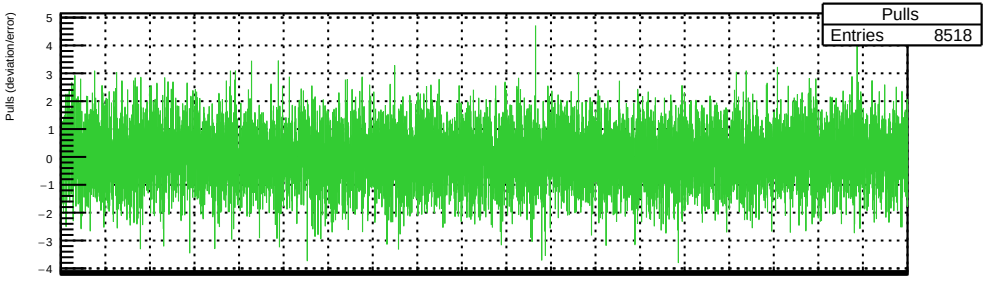

Signed asym_usr_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 109.4 ± 198.6
Run Number

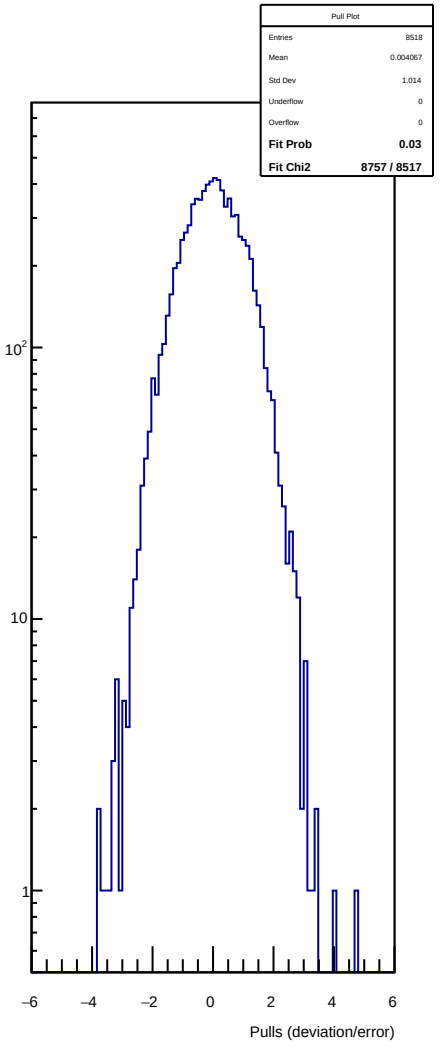

Pulls
Entries 8518
Pulls (deviation/error)

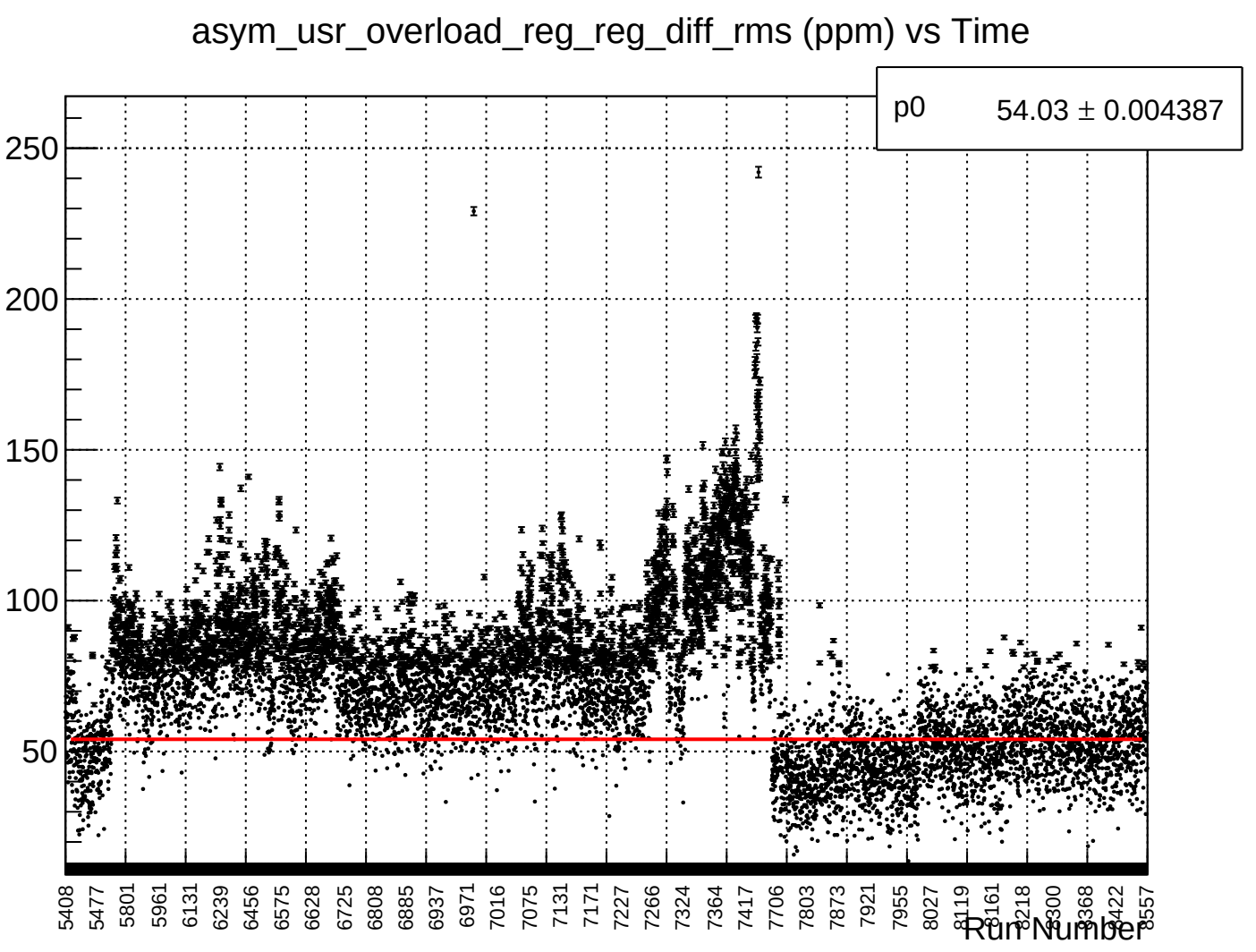

Pull Plot
Entries 8518
Mean 0.002592
Std Dev 0.9967
Underflow 0
Overflow 0
Fit Prob 0.66
Fit Chi2 8461 / 8517
Pulls (deviation/error)

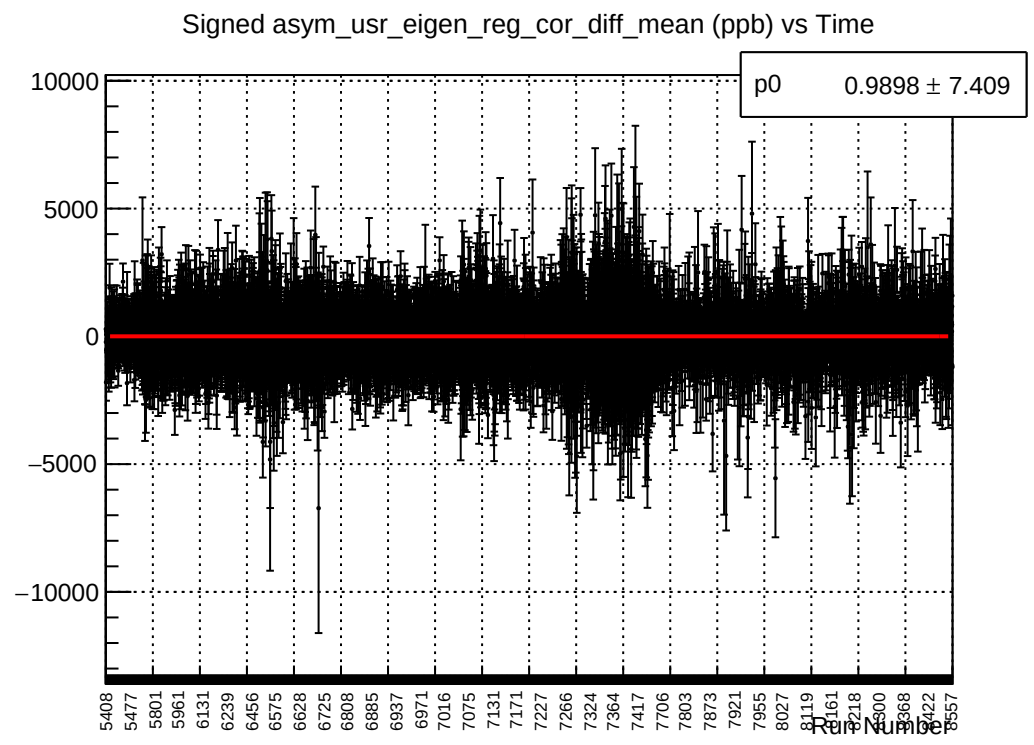

asym_usr_eigen_reg_correction_rms (ppm) vs Time
p0 1764 ± 0.1405
7000
6000
5000
4000
3000
2000
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

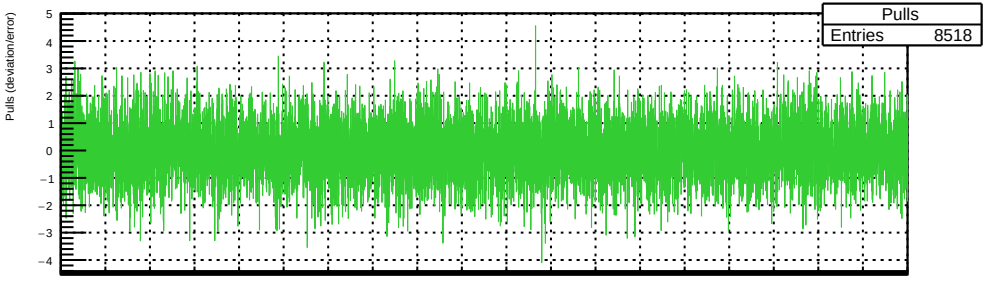

Signed asym_usr_overload_reg_reg_diff_mean (ppb) vs Time
p0 −1.17 ± 6.204
6000
4000
2000
0
−2000
−4000
−6000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

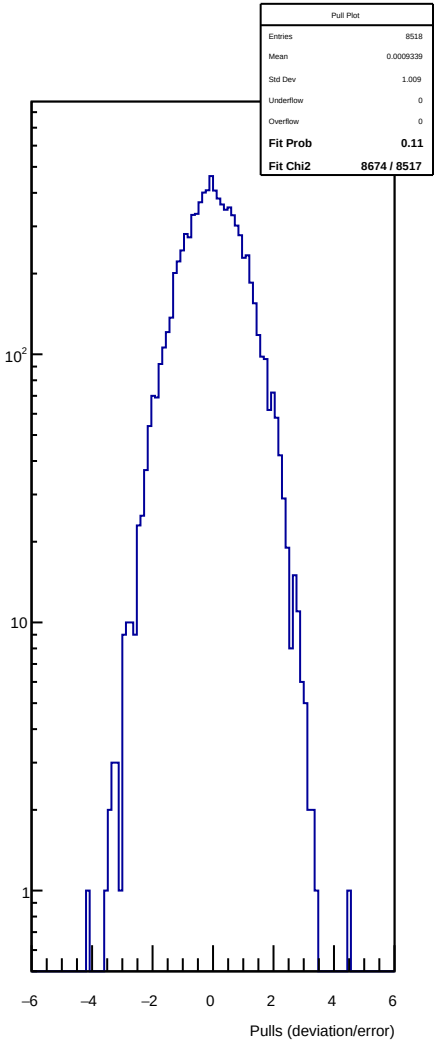

Pulls
Entries 8518
Pulls (deviation/error)
5
4
3
2
1
0
−1
−2
−3
−4

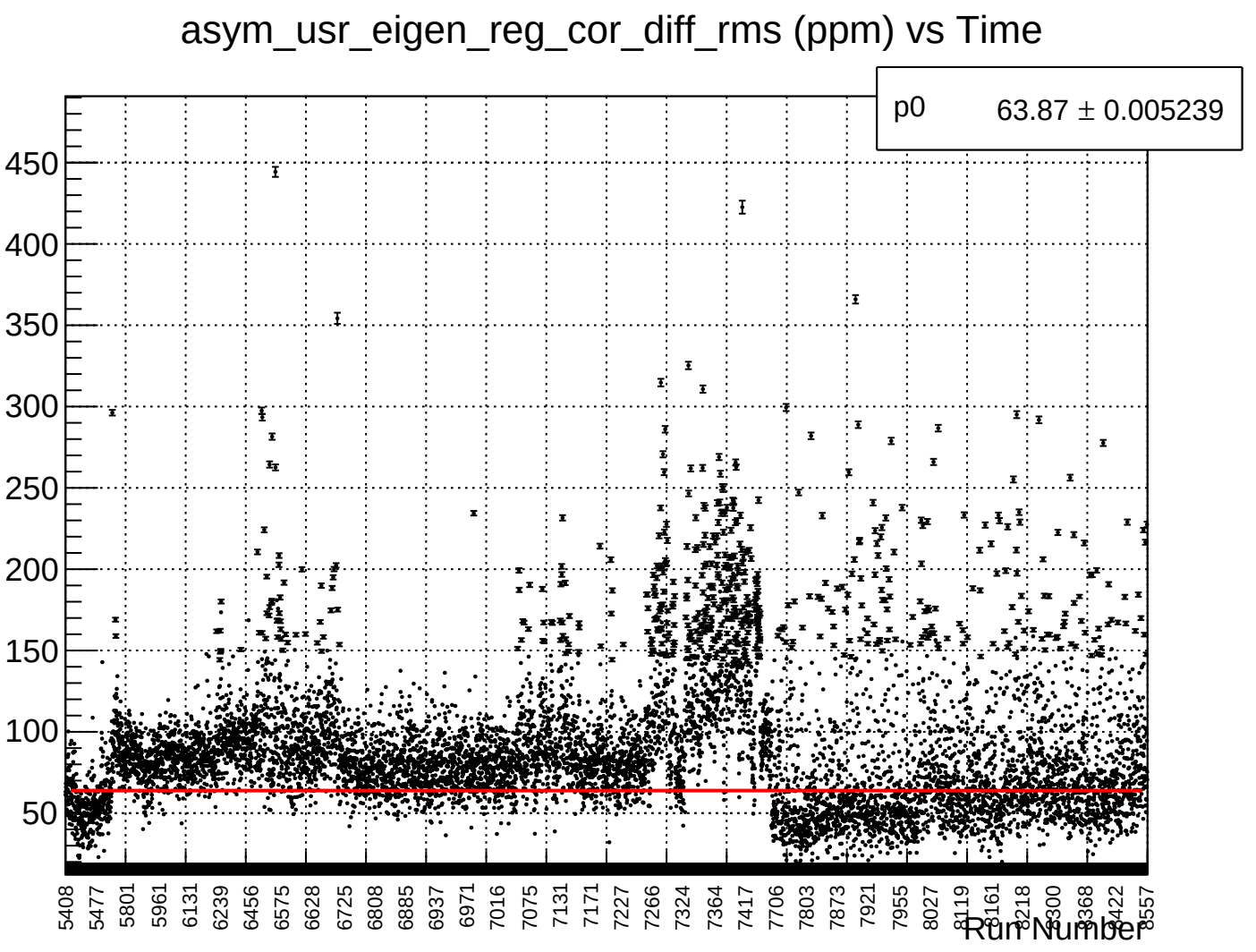

Pull Plot
Entries 8518
Mean 0.004067
Std Dev 1.014
Underflow 0
Overflow 0
Fit Prob 0.03
Fit Chi2 8757 / 8517
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

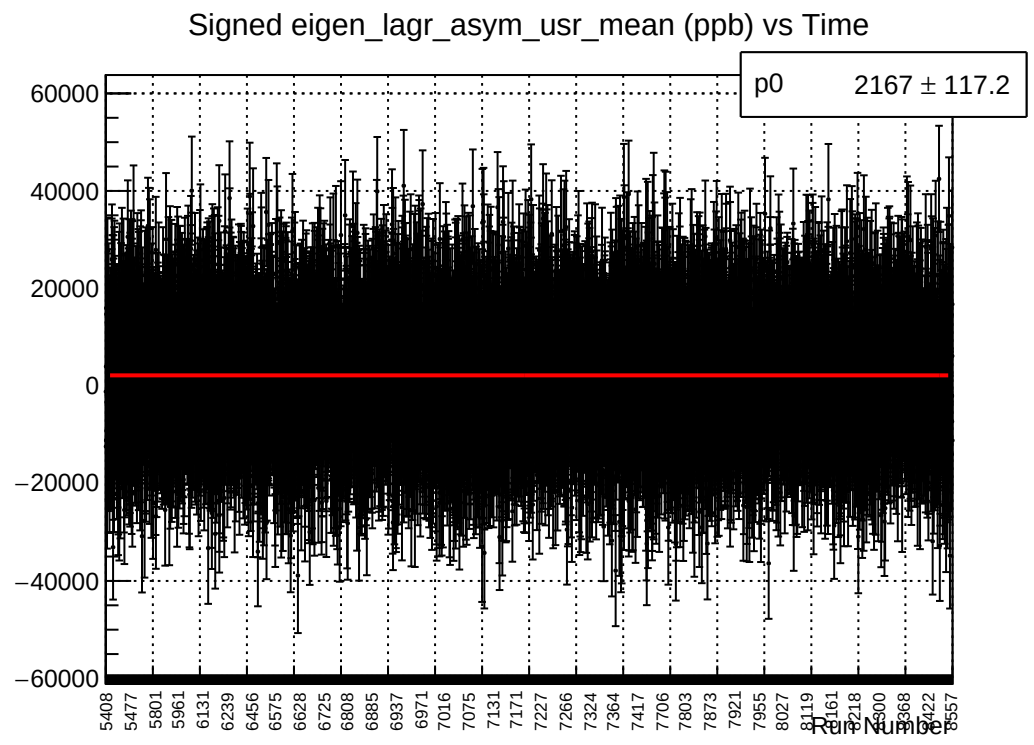

asym_usr_overload_reg_reg_diff_rms (ppm) vs Time
p0 54.03 ± 0.004387
250
200
150
100
50
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

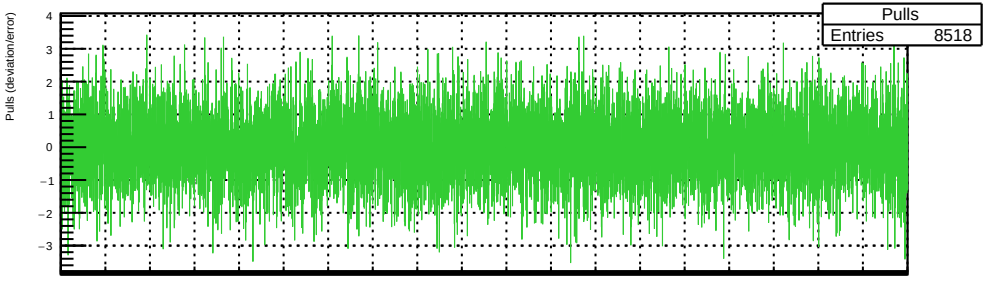

Signed asym_usr_eigen_reg_cor_diff_mean (ppb) vs Time
p0 0.9898 ± 7.409
10000
5000
0
−5000
−10000
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number

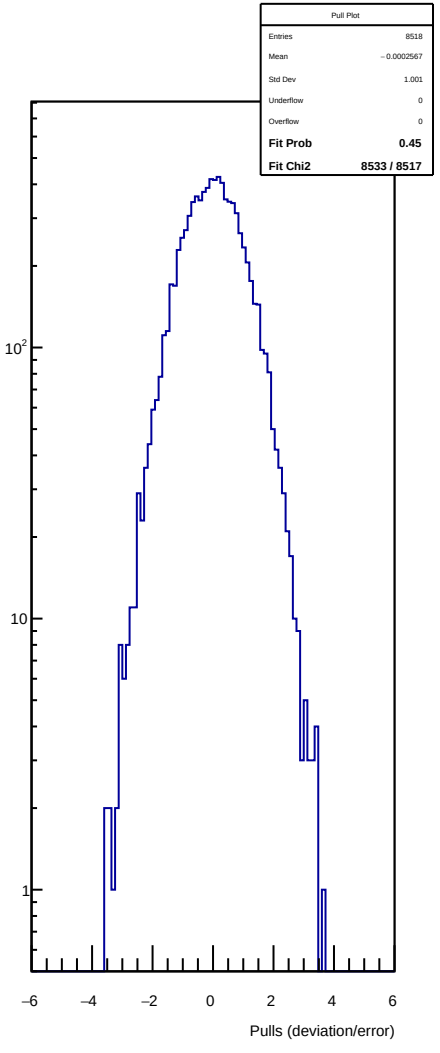

Pulls
Entries 8518
Pulls (deviation/error)
5
4
3
2
1
0
−1
−2
−3
−4

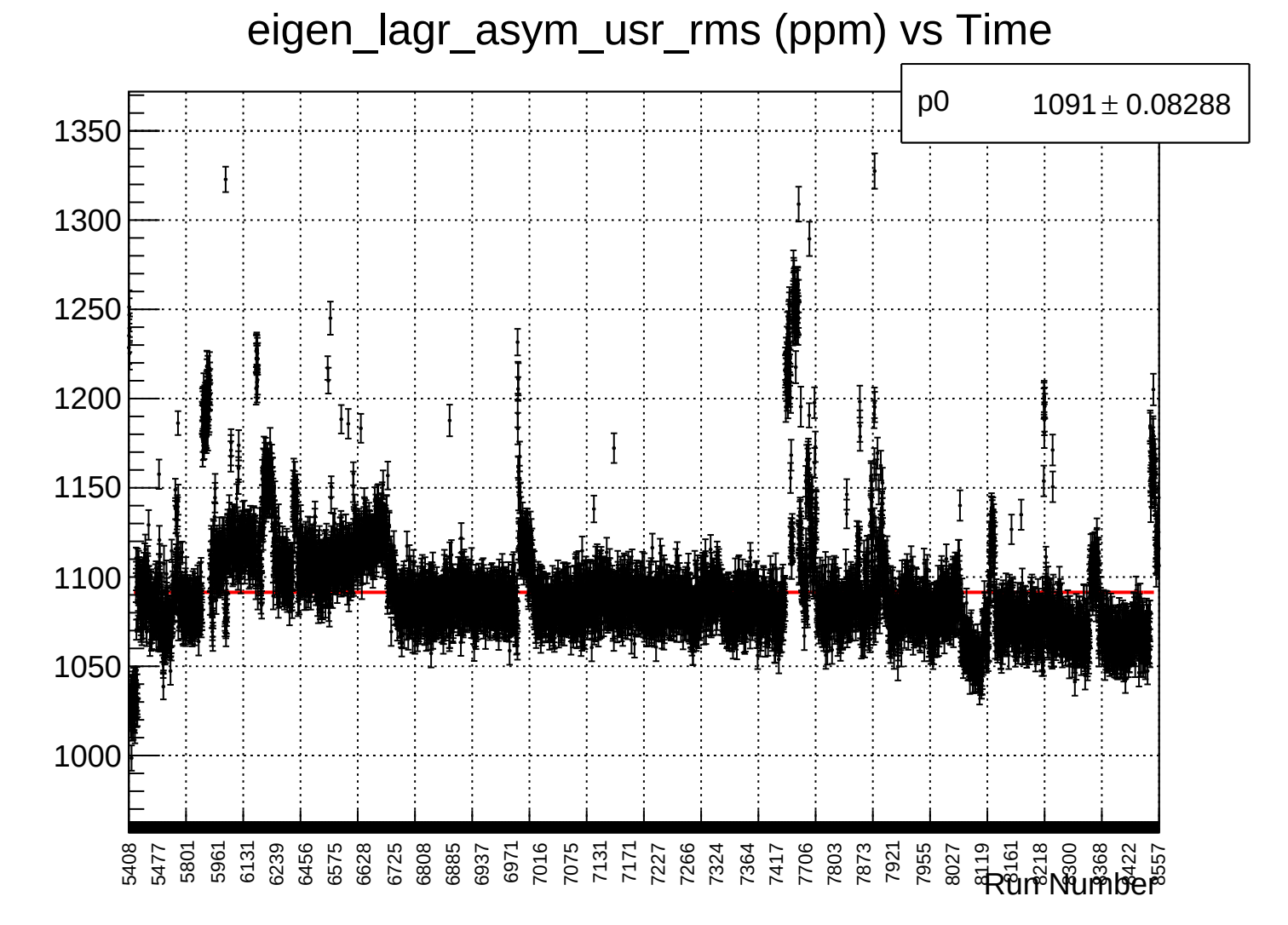

Pull Plot
Entries 8518
Mean 0.0009339
Std Dev 1.009
Underflow 0
Overflow 0
Fit Prob 0.11
Fit Chi2 8674 / 8517
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

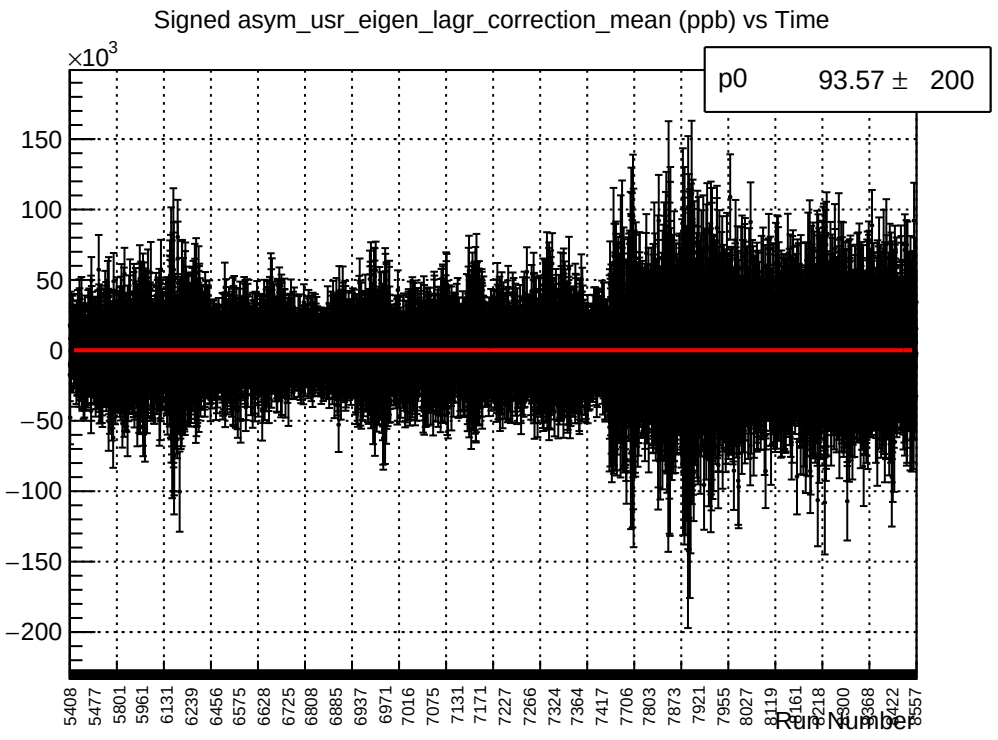

asym_usr_eigen_reg_cor_diff_rms (ppm) vs Time
p0 63.87 ± 0.005239
450
400
350
300
250
200
150
100
50
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

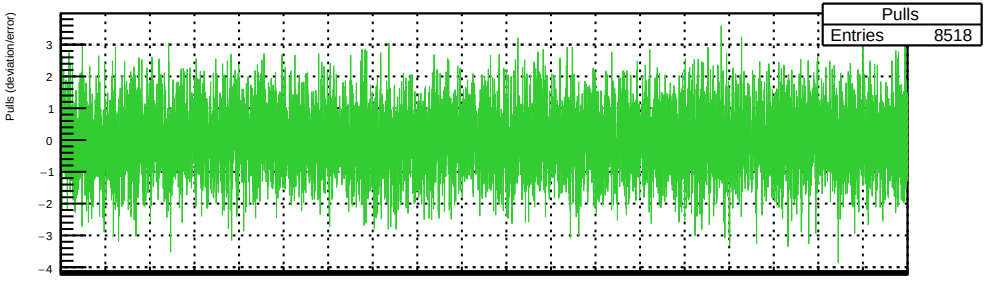

Signed eigen_lagr_asym_usr_mean (ppb) vs Time
p0 2167 ± 117.2
60000
40000
20000
0
−20000
−40000
−60000
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number

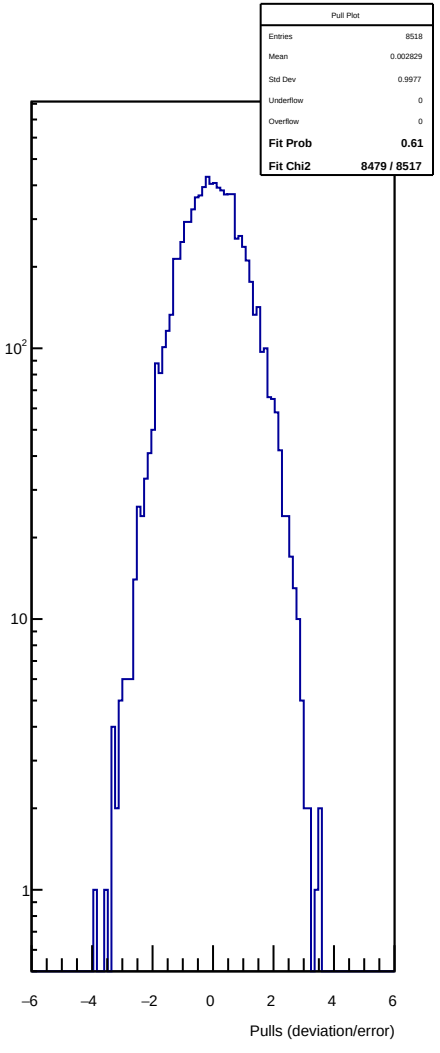

Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

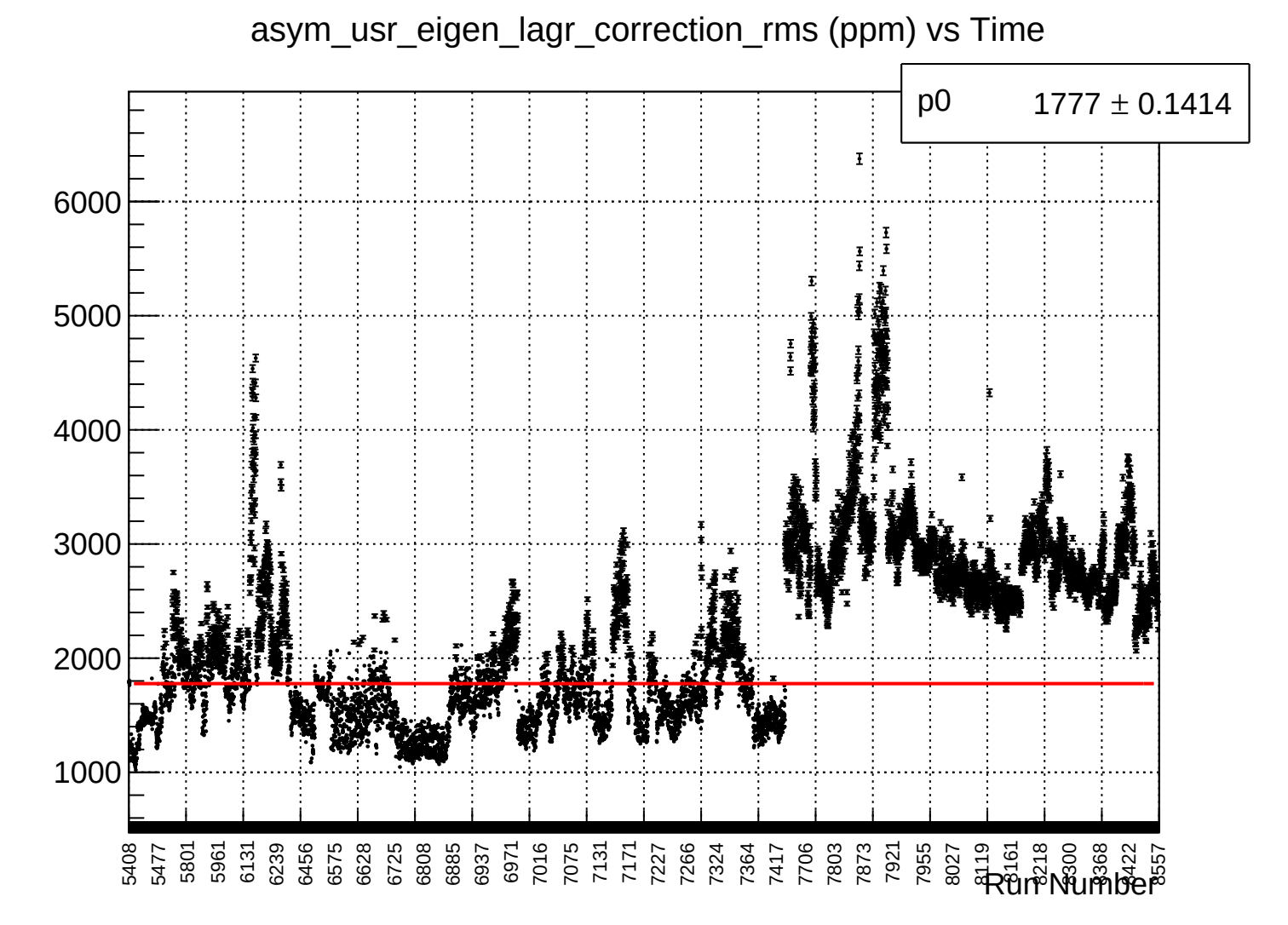

Pull Plot
Entries 8518
Mean −0.0002567
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.45
Fit Chi2 8533 / 8517
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

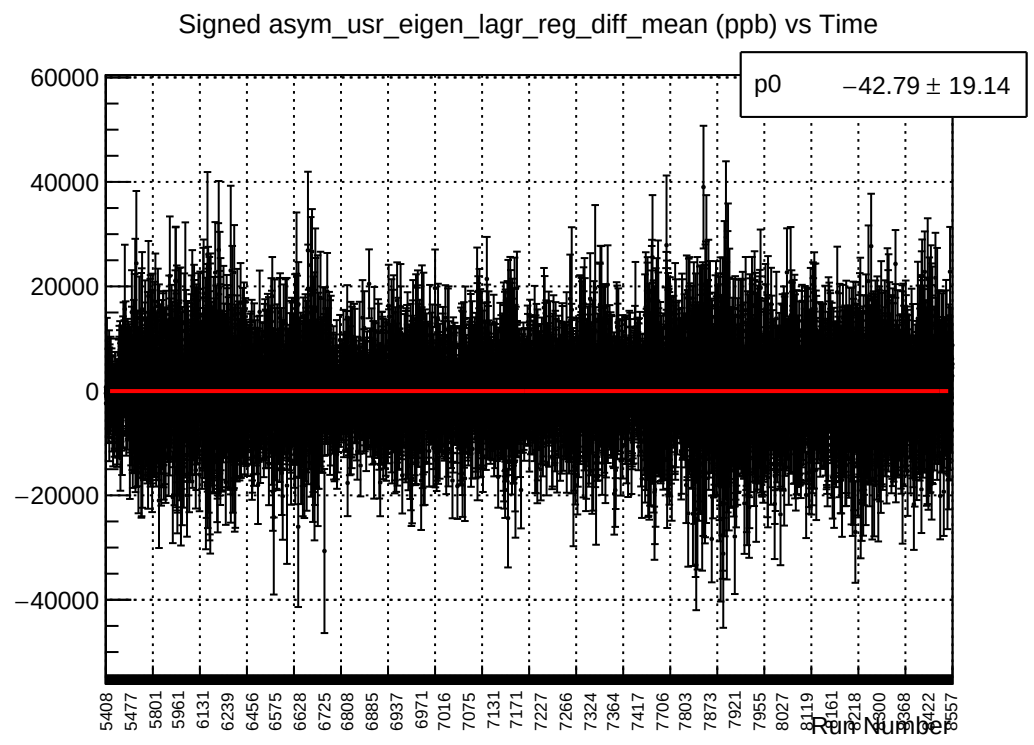

eigen_lagr_asym_usr_rms (ppm) vs Time
p0
1091 ± 0.08288
1350
1300
1250
1200
1150
1100
1050
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

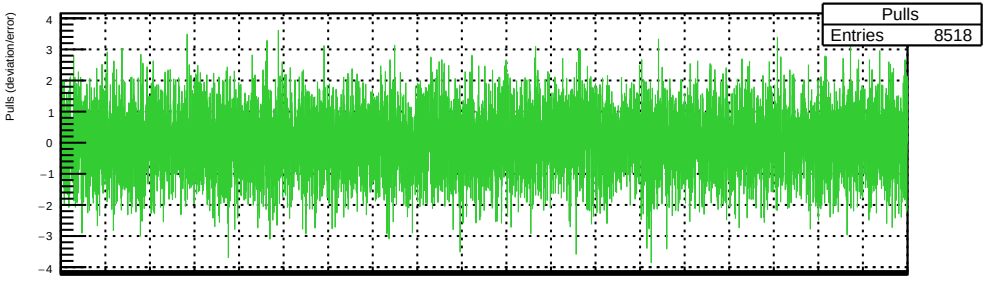

Signed asym_usr_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 93.57 ± 200
150
100
50
0
−50
−100
−150
−200
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

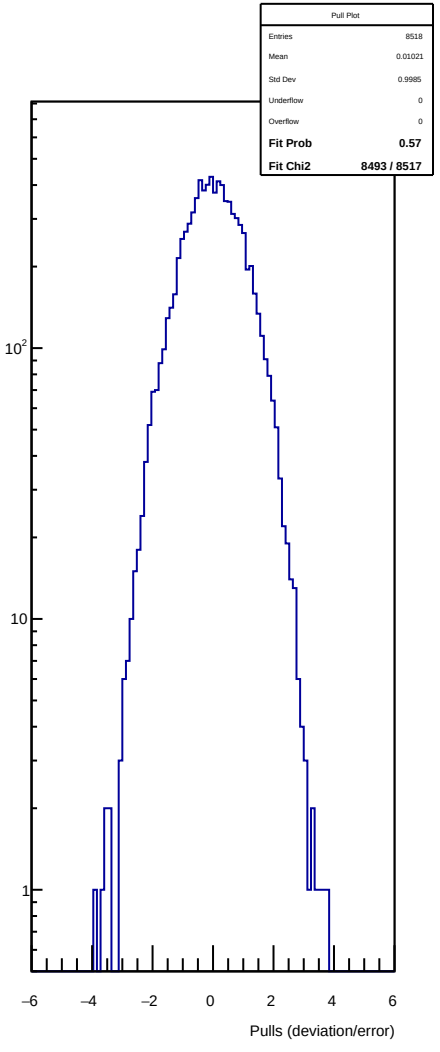

Pulls
Entries 8518
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

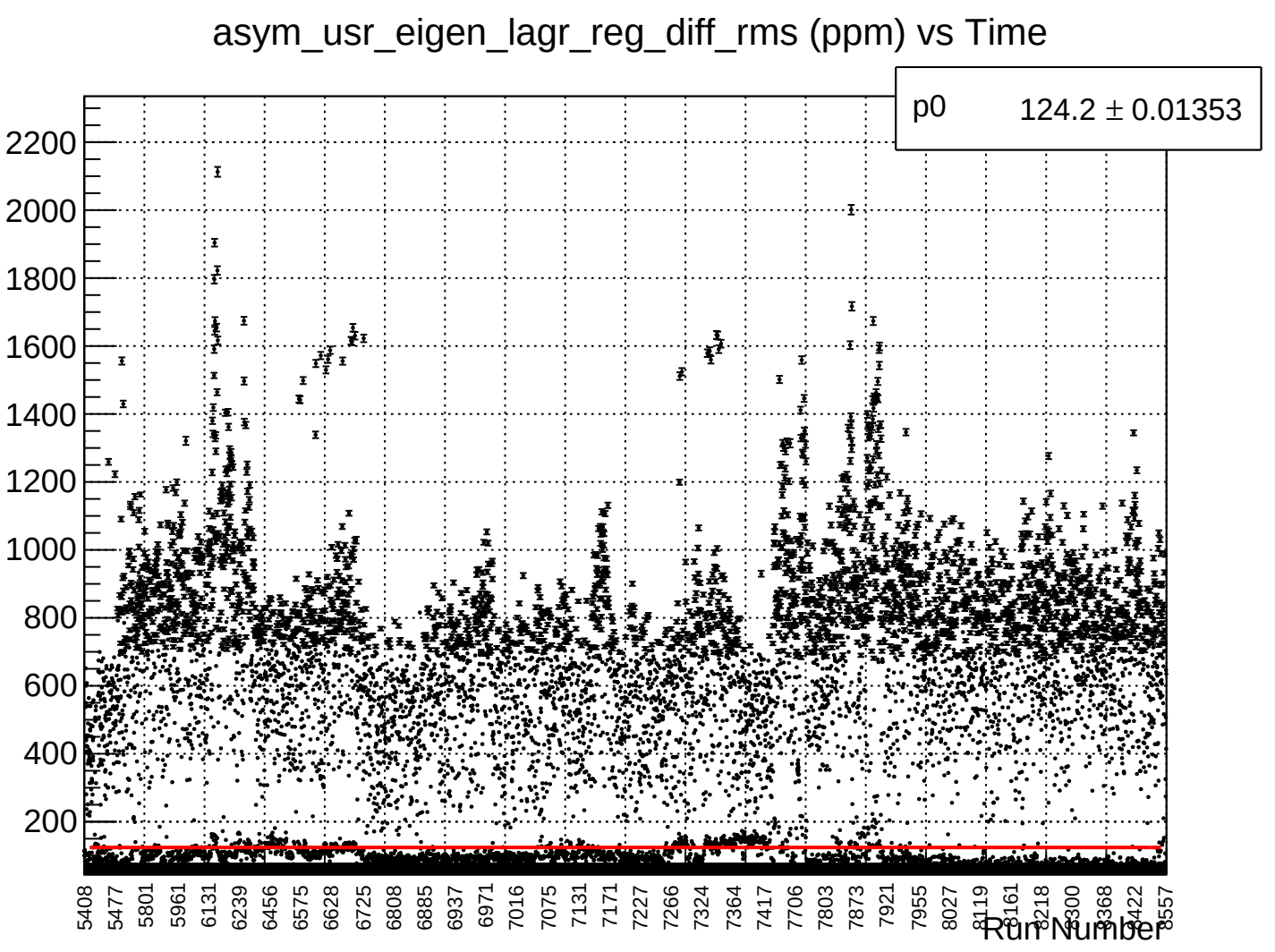

Pull Plot
Entries 8518
Mean 0.002829
Std Dev 0.9977
Underflow 0
Overflow 0
Fit Prob 0.61
Fit Chi2 8479 / 8517
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

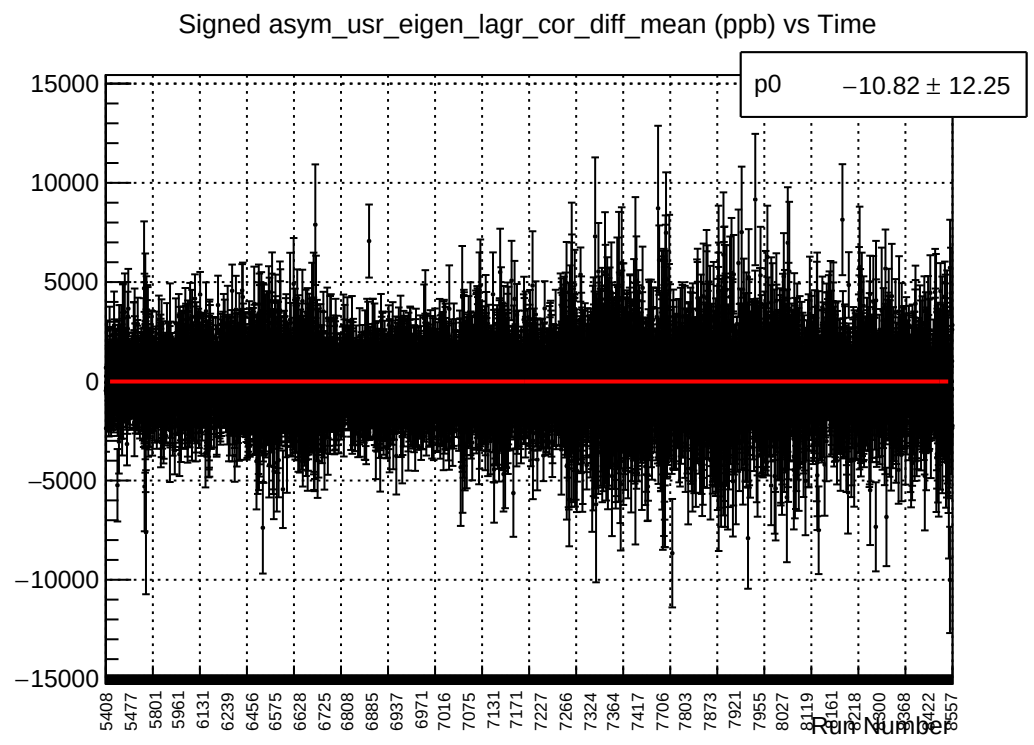

asym_usr_eigen_lagr_correction_rms (ppm) vs Time
p0
1777 ± 0.1414
6000
5000
4000
3000
2000
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

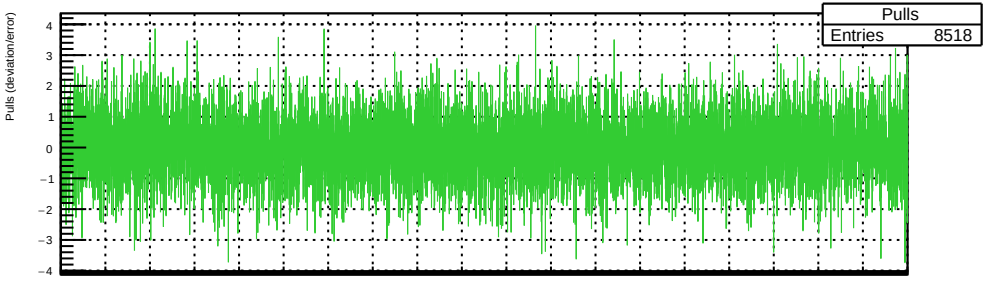

Signed asym_usr_eigen_lagr_reg_diff_mean (ppb) vs Time
p0 −42.79 ± 19.14
60000
40000
20000
0
−20000
−40000
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number

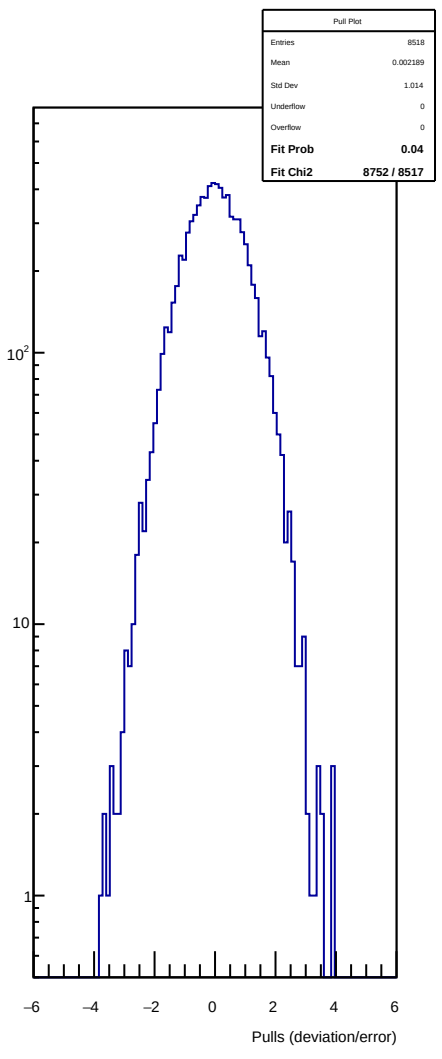

Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

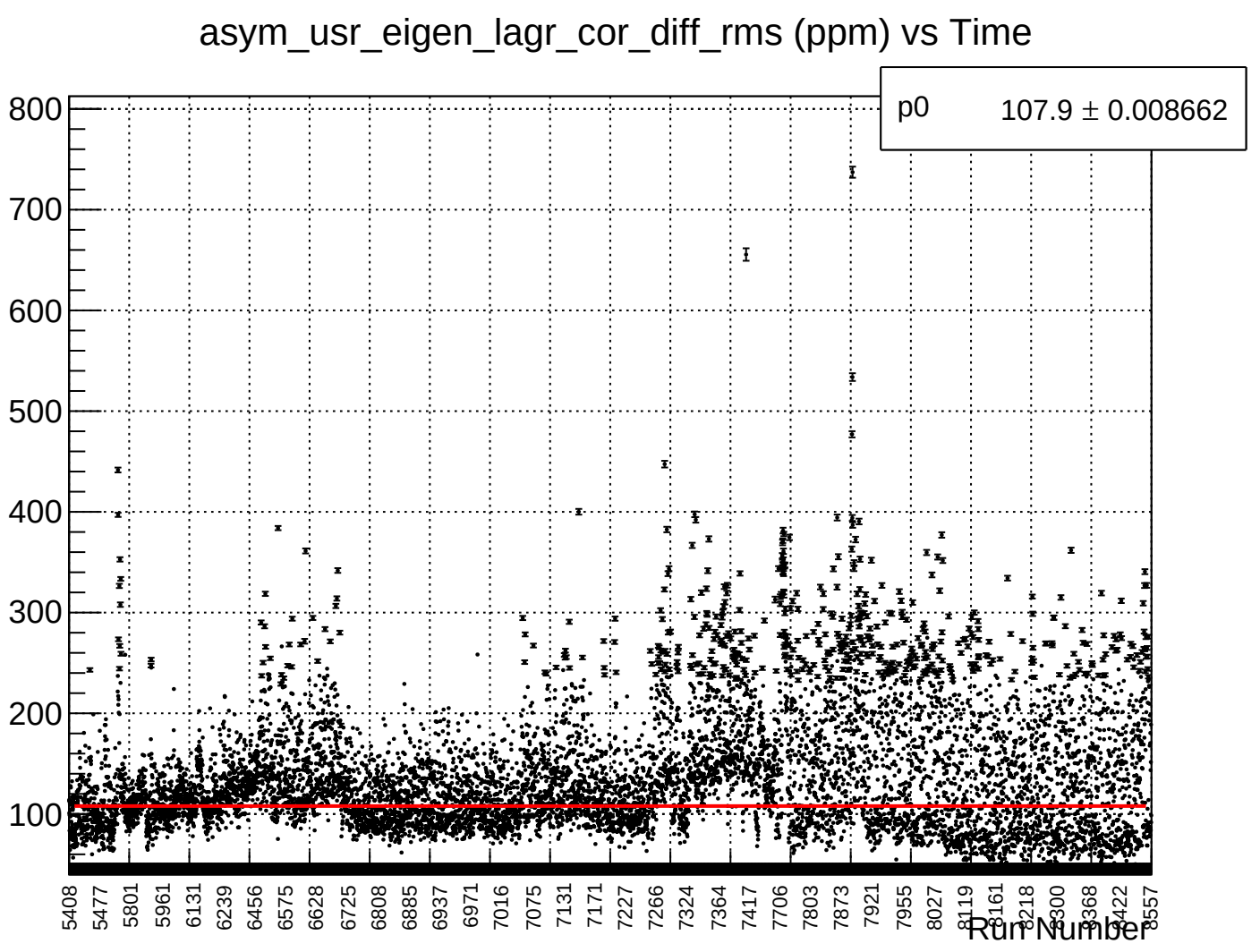

Pull Plot
Entries 8518
Mean 0.01021
Std Dev 0.9985
Underflow 0
Overflow 0
Fit Prob 0.57
Fit Chi2 8493 / 8517
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

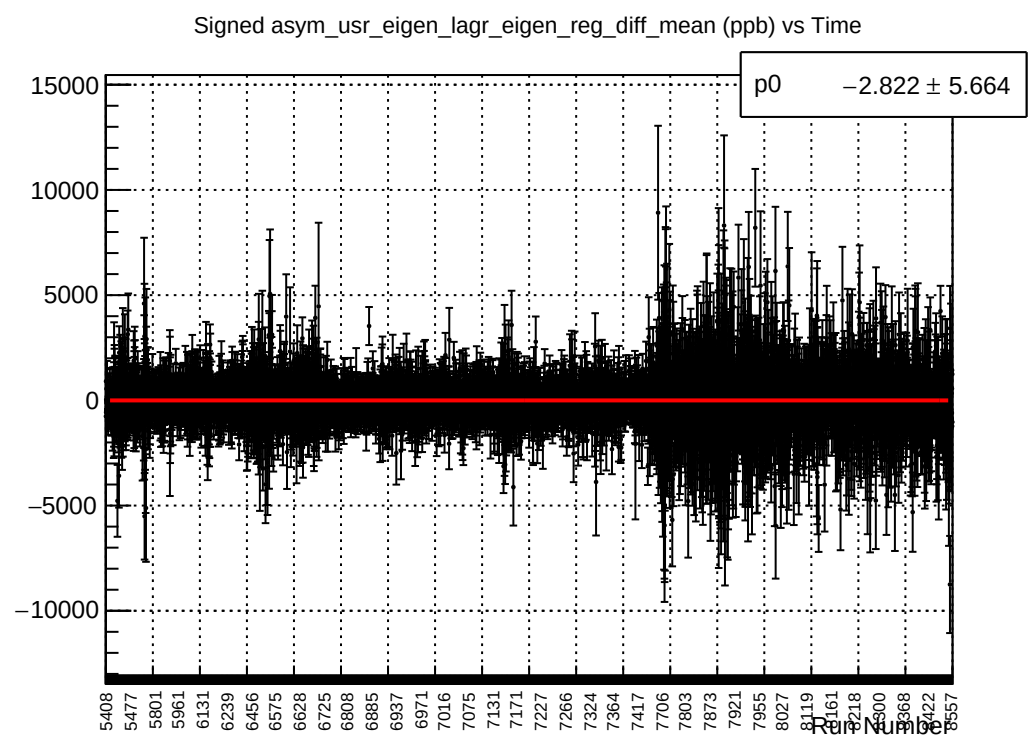

asym_usr_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 124.2 ± 0.01353
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

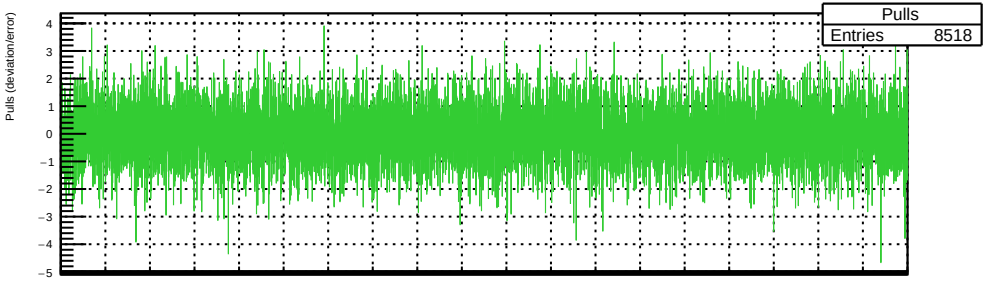

Signed asym_usr_eigen_lagr_cor_diff_mean (ppb) vs Time
p0 −10.82 ± 12.25
15000
10000
5000
0
−5000
−10000
−15000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

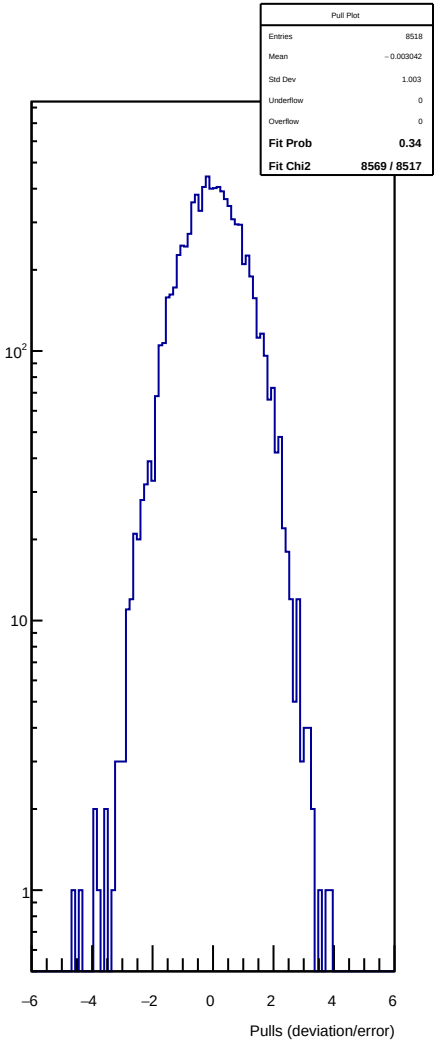

Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

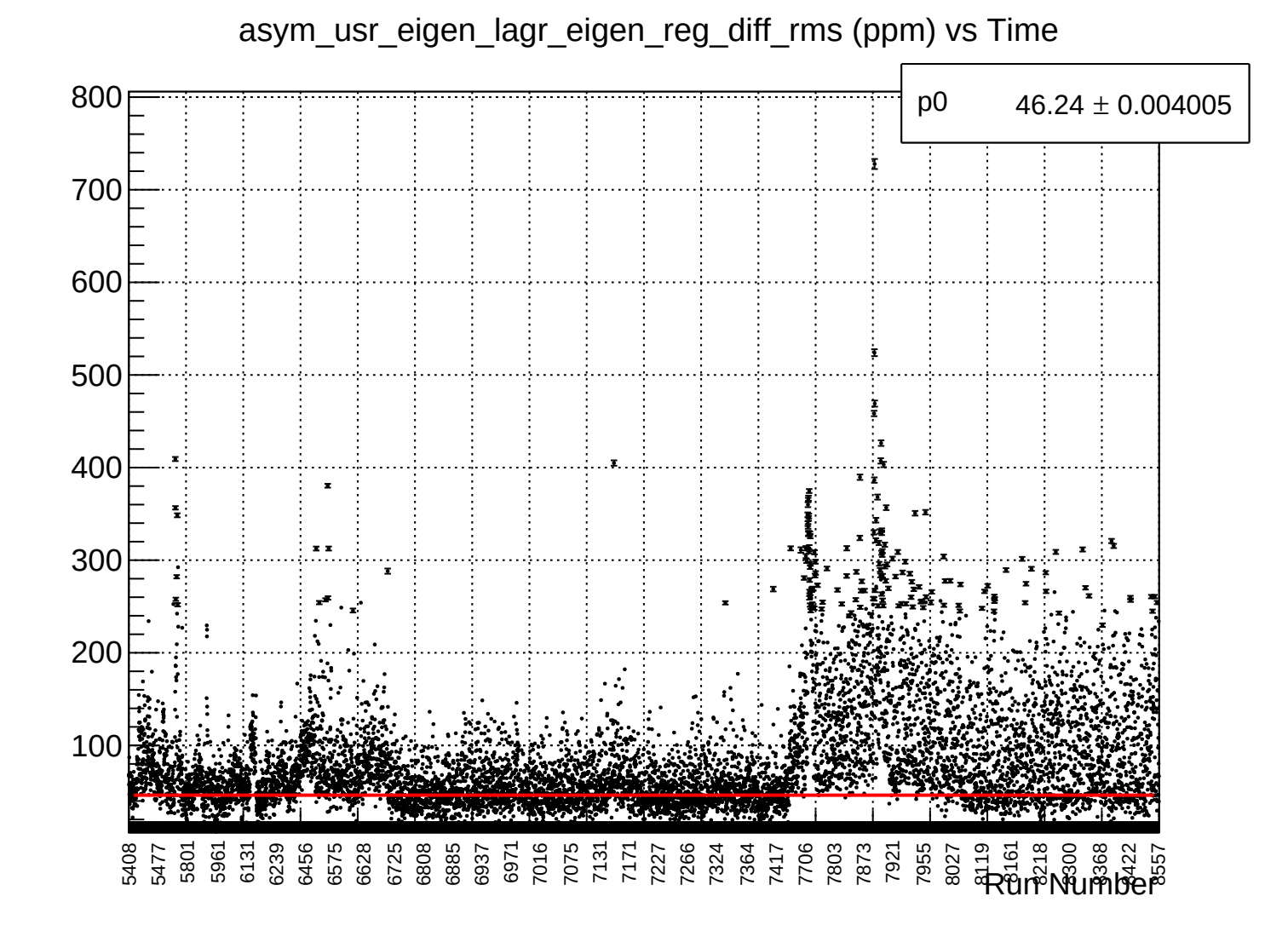

Pull Plot
Entries 8518
Mean 0.002189
Std Dev 1.014
Underflow 0
Overflow 0
Fit Prob 0.04
Fit Chi2 8752 / 8517
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

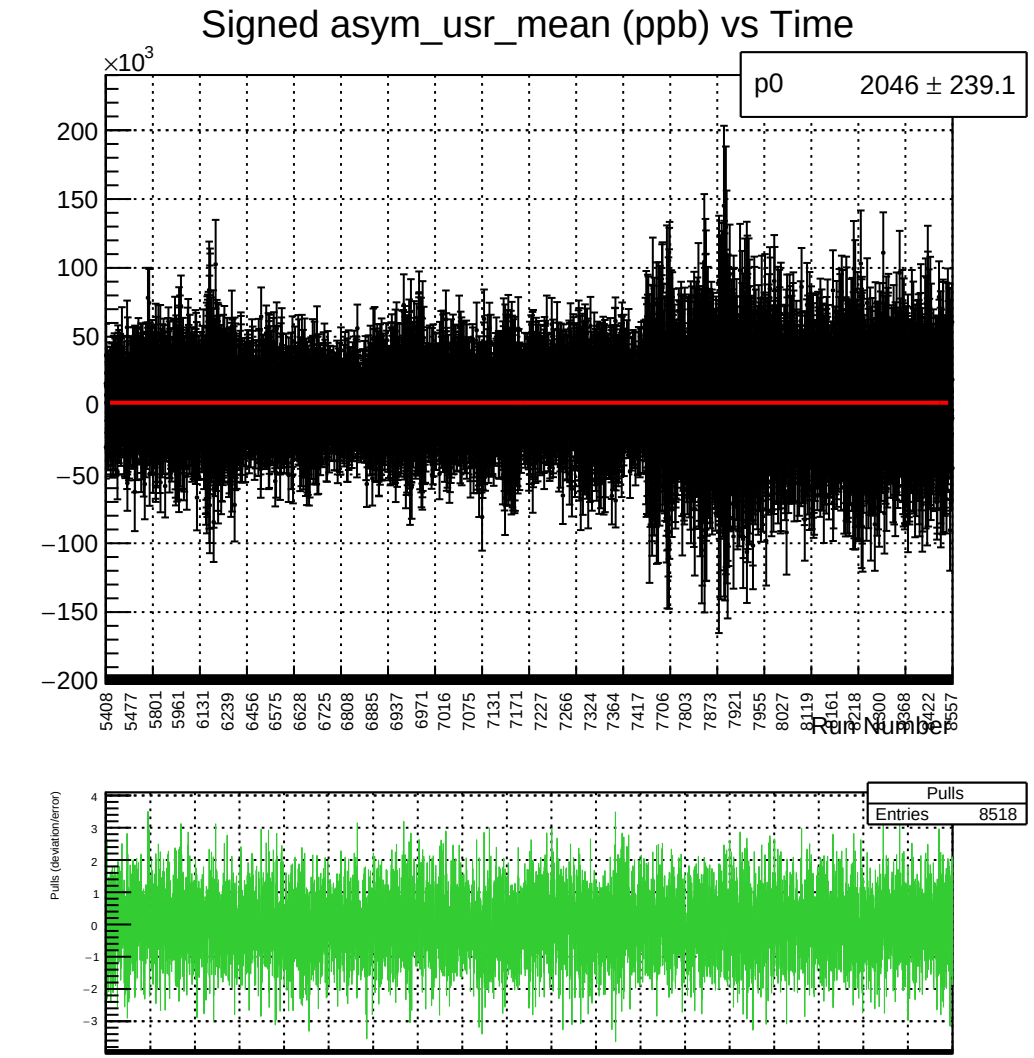

asym_usr_eigen_lagr_cor_diff_rms (ppm) vs Time
p0
107.9 ± 0.008662
800
700
600
500
400
300
200
100
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

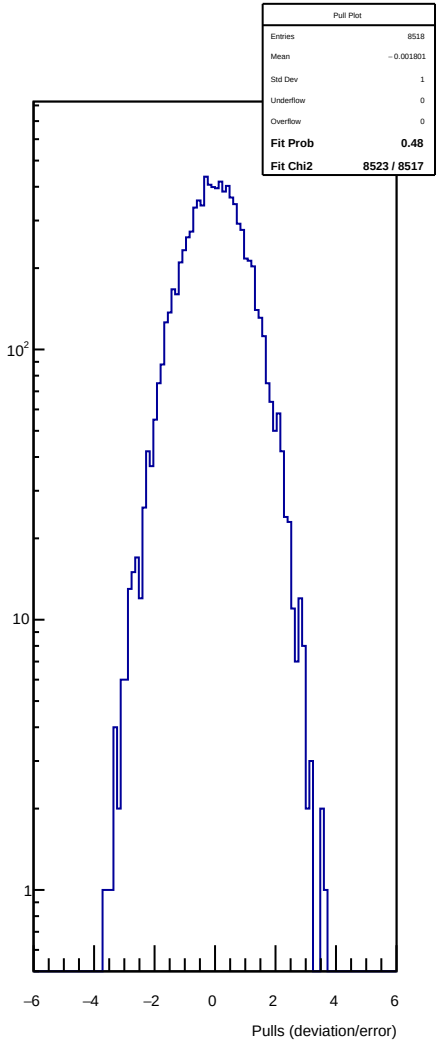

Signed asym_usr_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
p0 −2.822 ± 5.664
15000
10000
5000
0
−5000
−10000
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number

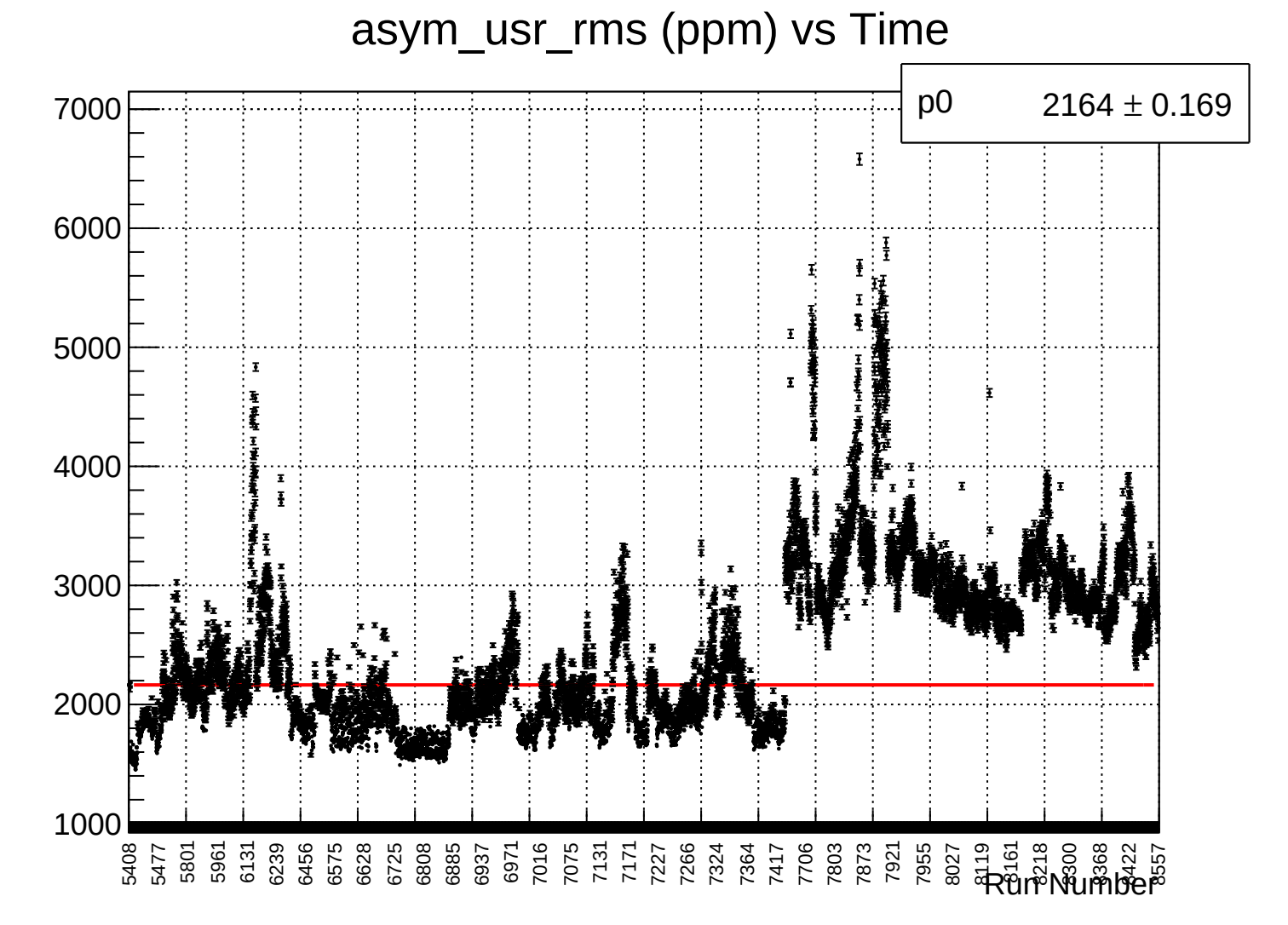

Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4
−5

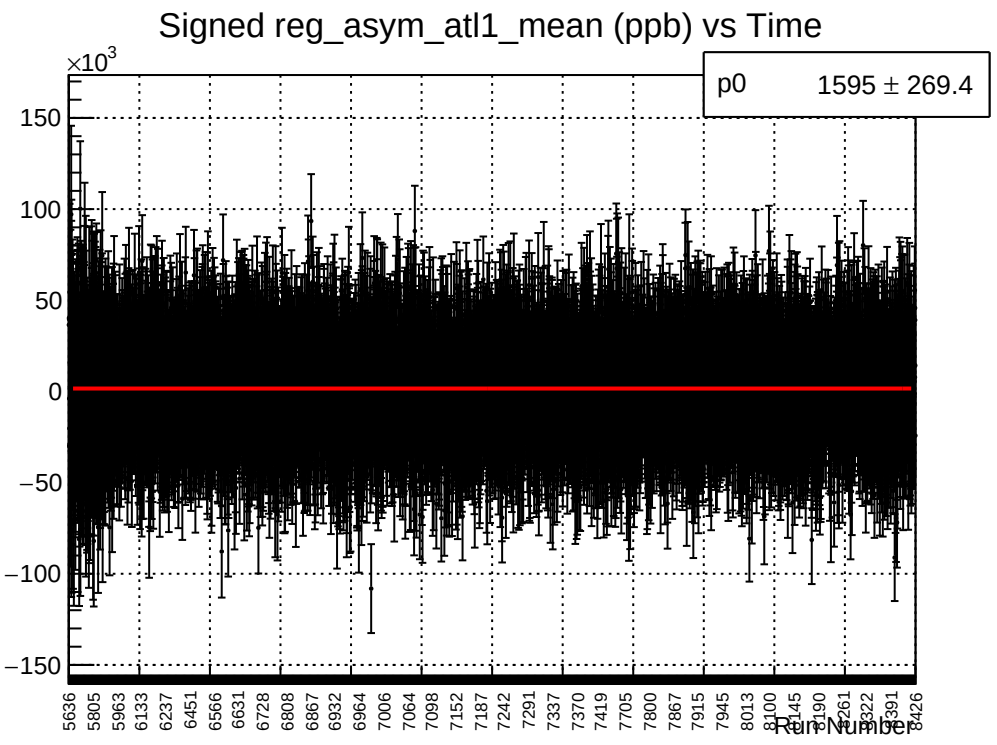

Pull Plot
Entries 8518
Mean −0.003042
Std Dev 1.003
Underflow 0
Overflow 0
Fit Prob 0.34
Fit Chi2 8569 / 8517
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

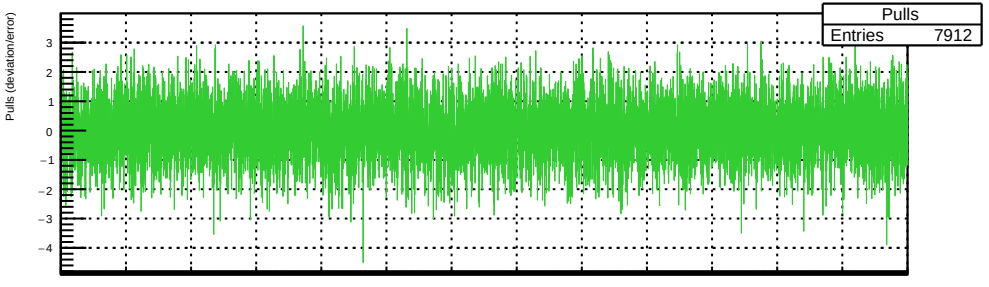

asym_usr_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 46.24 ± 0.004005
800
700
600
500
400
300
200
100
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

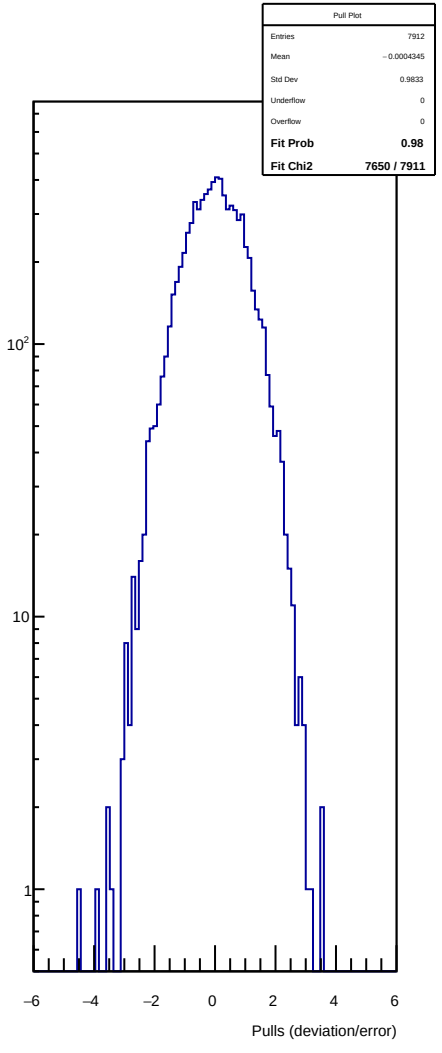

Signed asym_usr_mean (ppb) vs Time
×10^3
p0 2046 ± 239.1
200
150
100
50
0
−50
−100
−150
−200
5408 5477 5801 5961 6131 6239 6456 6575 6628 6725 6808 6885 6937 6971 7016 7075 7131 7171 7227 7266 7324 7364 7417 7706 7803 7873 7921 7955 8027 8119 8161 8218 8300 8368 8422 8557
Run Number
Pulls
Entries 8518
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

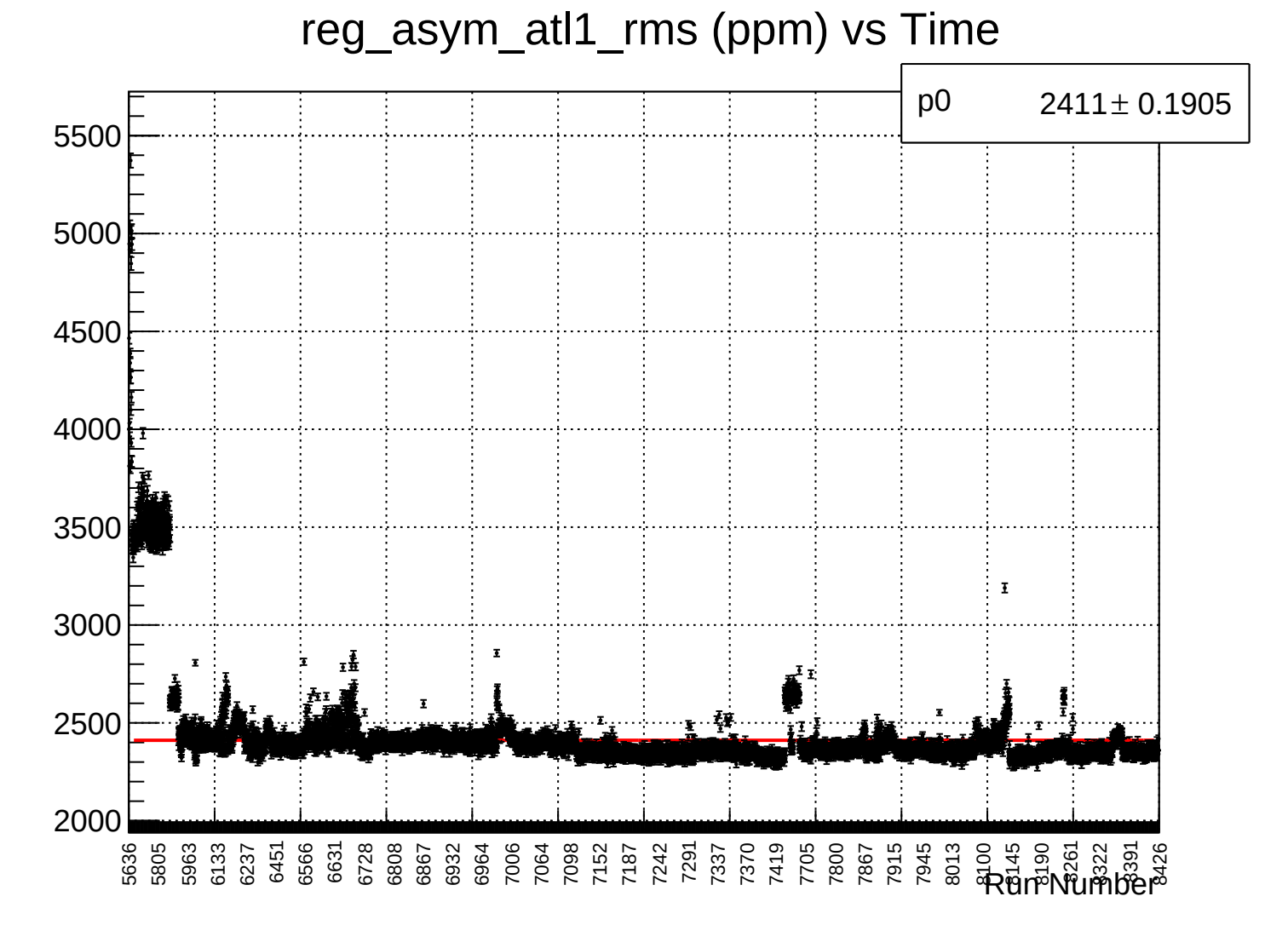

Pull Plot
Entries 8518
Mean −0.001801
Std Dev 1
Underflow 0
Overflow 0
Fit Prob 0.48
Fit Chi2 8523 / 8517
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

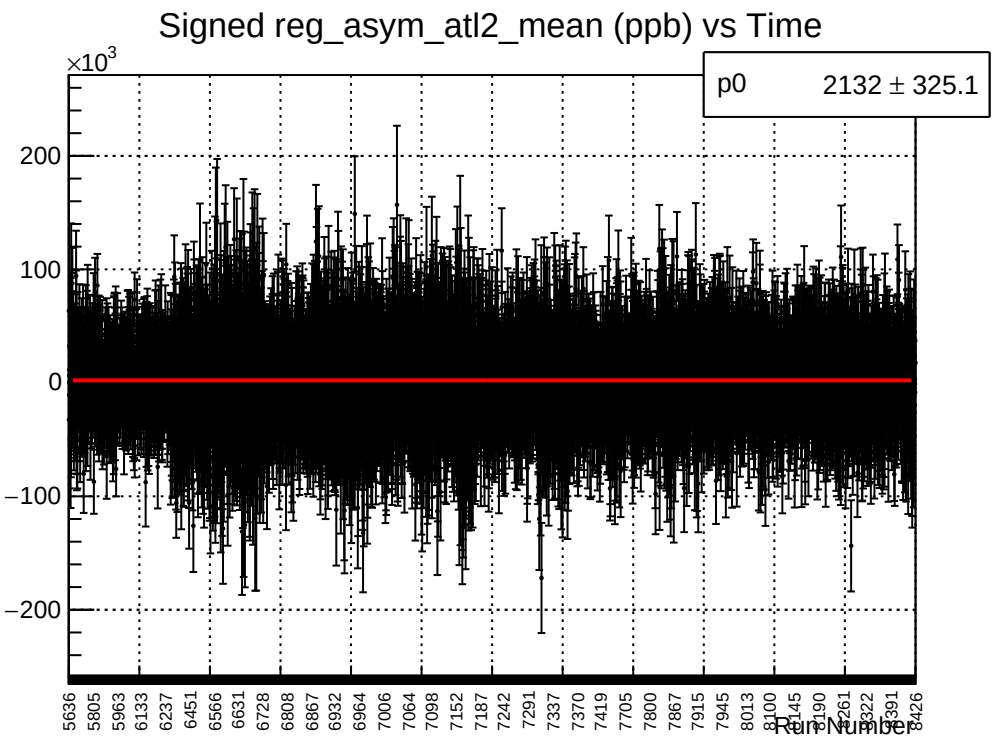

asym_usr_rms (ppm) vs Time
p0 2164 ± 0.169
7000
6000
5000
4000
3000
2000
1000
5408
5477
5801
5961
6131
6239
6456
6575
6628
6725
6808
6885
6937
6971
7016
7075
7131
7171
7227
7266
7324
7364
7417
7706
7803
7873
7921
7955
8027
8119
8161
8218
8300
8368
8422
8557
Run Number

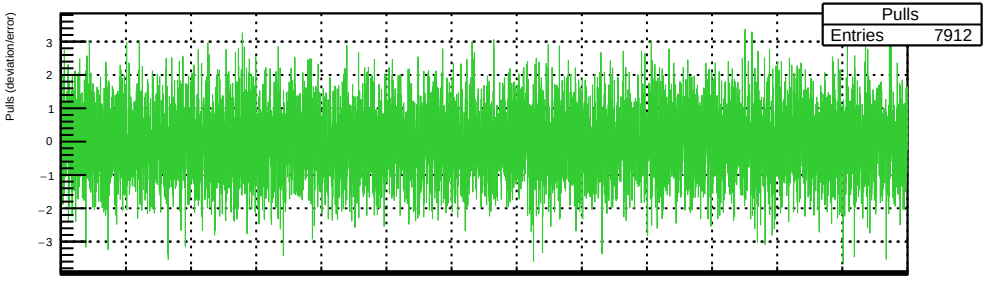

Signed reg_asym_atl1_mean (ppb) vs Time
×10^3
p0 1595 ± 269.4
150
100
50
0
−50
−100
−150
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

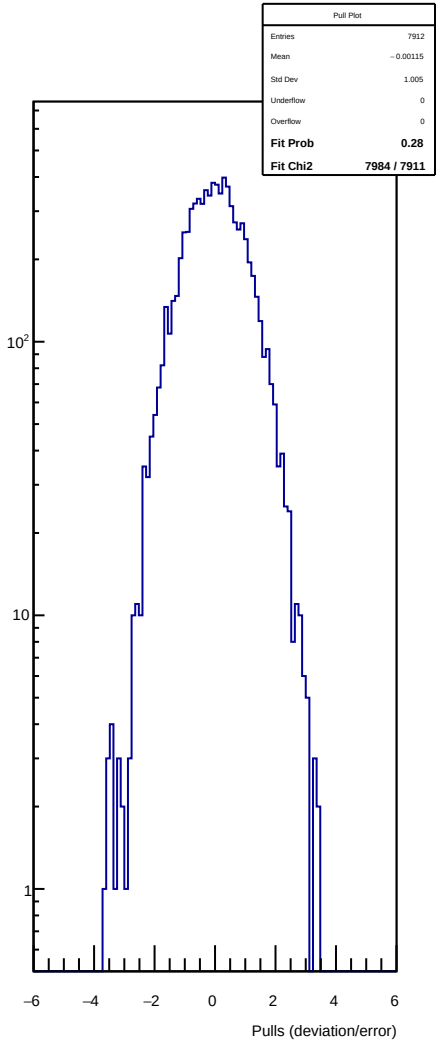

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

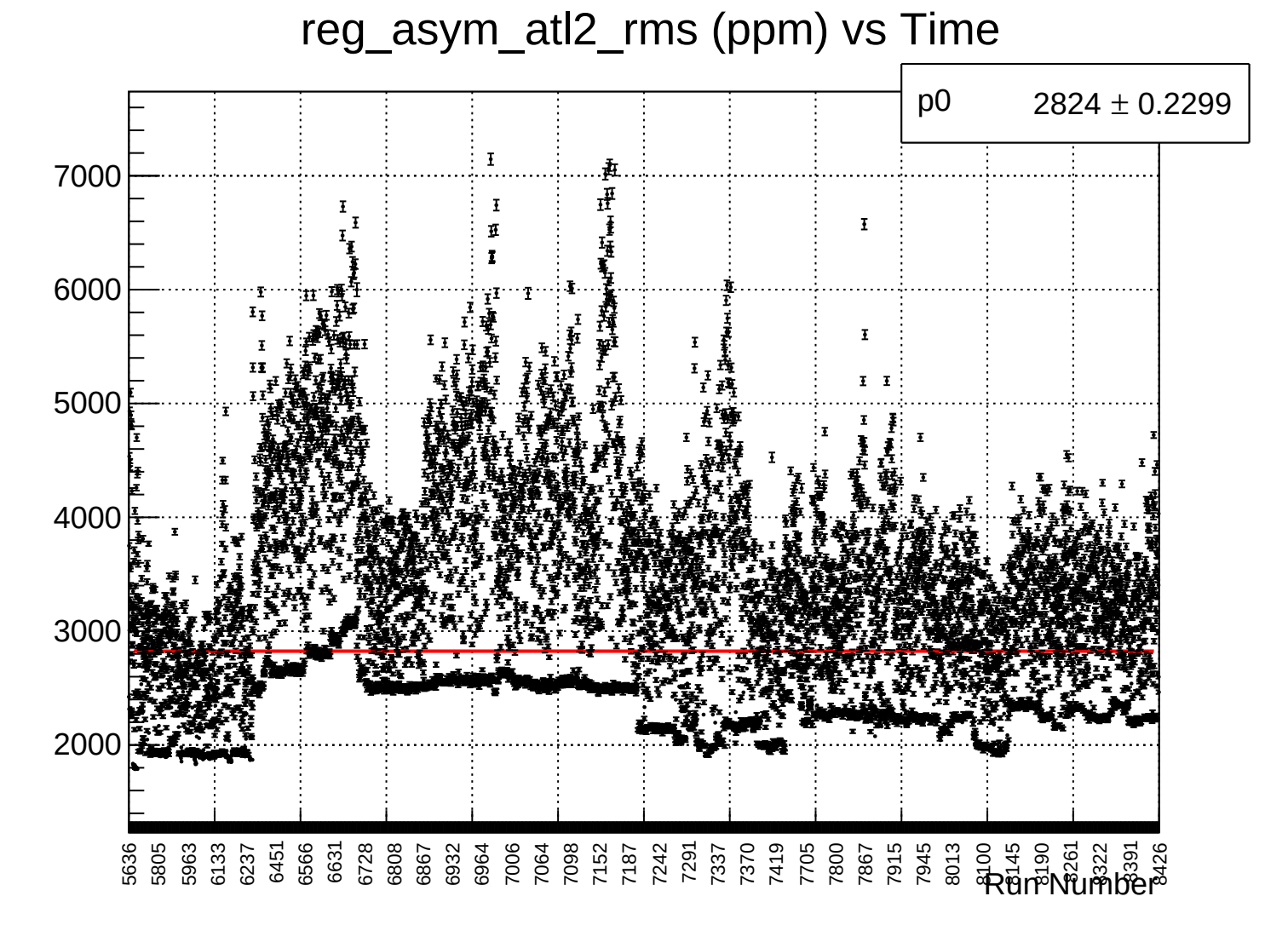

Pull Plot
Entries 7912
Mean −0.0004345
Std Dev 0.9833
Underflow 0
Overflow 0
Fit Prob 0.98
Fit Chi2 7650 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

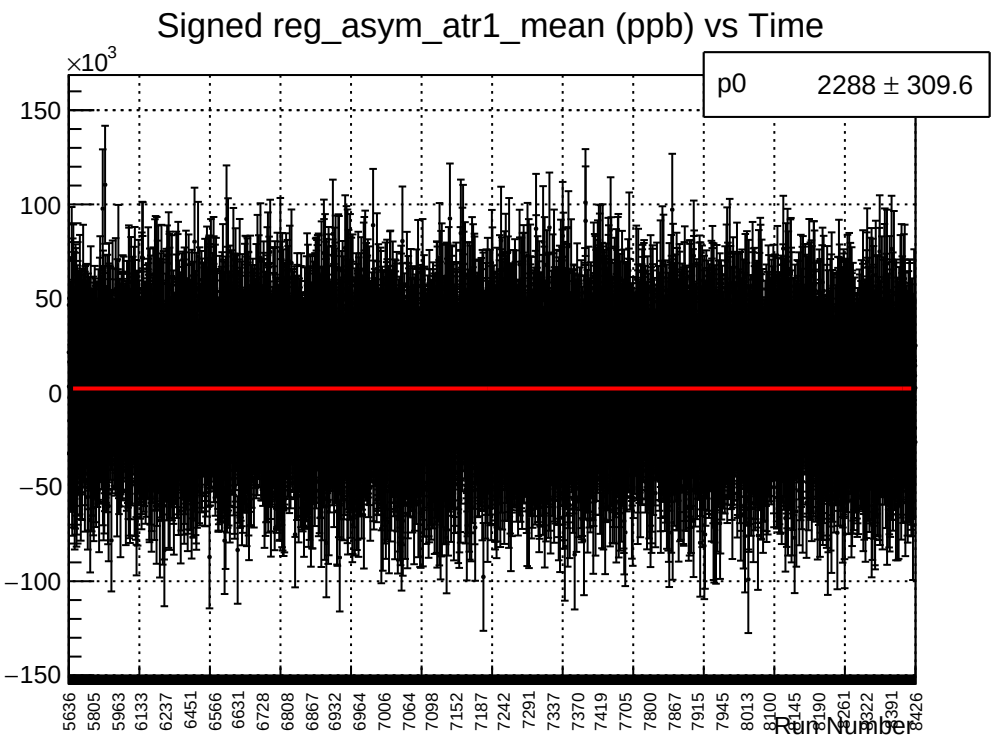

reg_asym_atl1_rms (ppm) vs Time
p0 2411 ± 0.1905
5500
5000
4500
4000
3500
3000
2500
2000
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

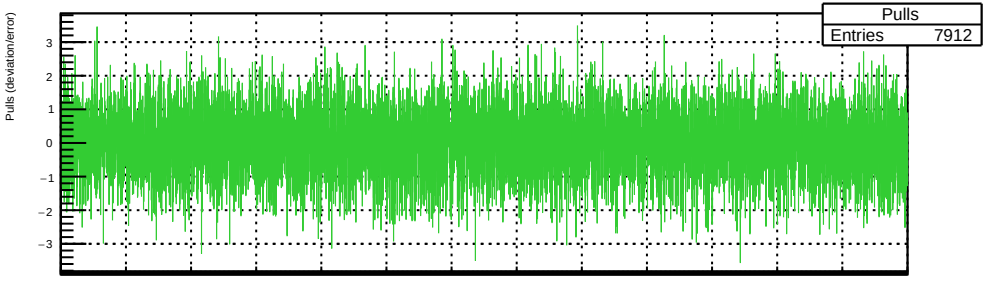

Signed reg_asym_atl2_mean (ppb) vs Time
×10^3
p0 2132 ± 325.1
200
100
0
−100
−200
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

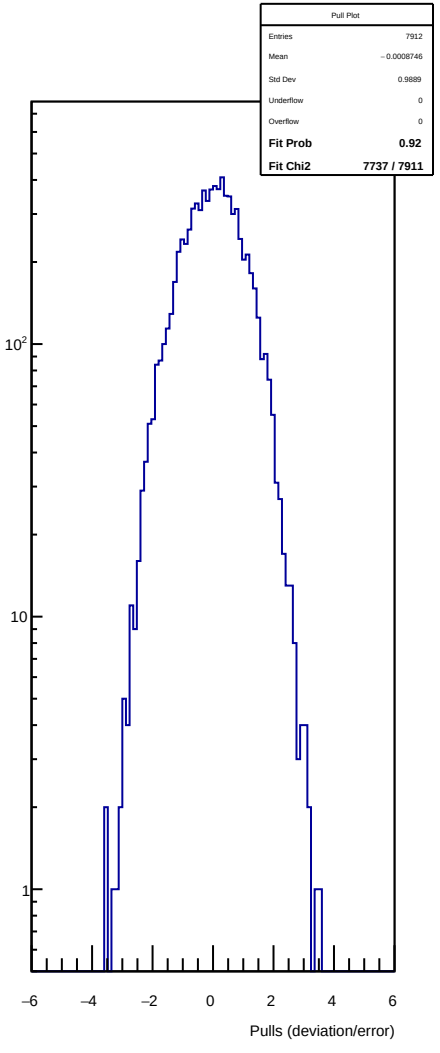

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

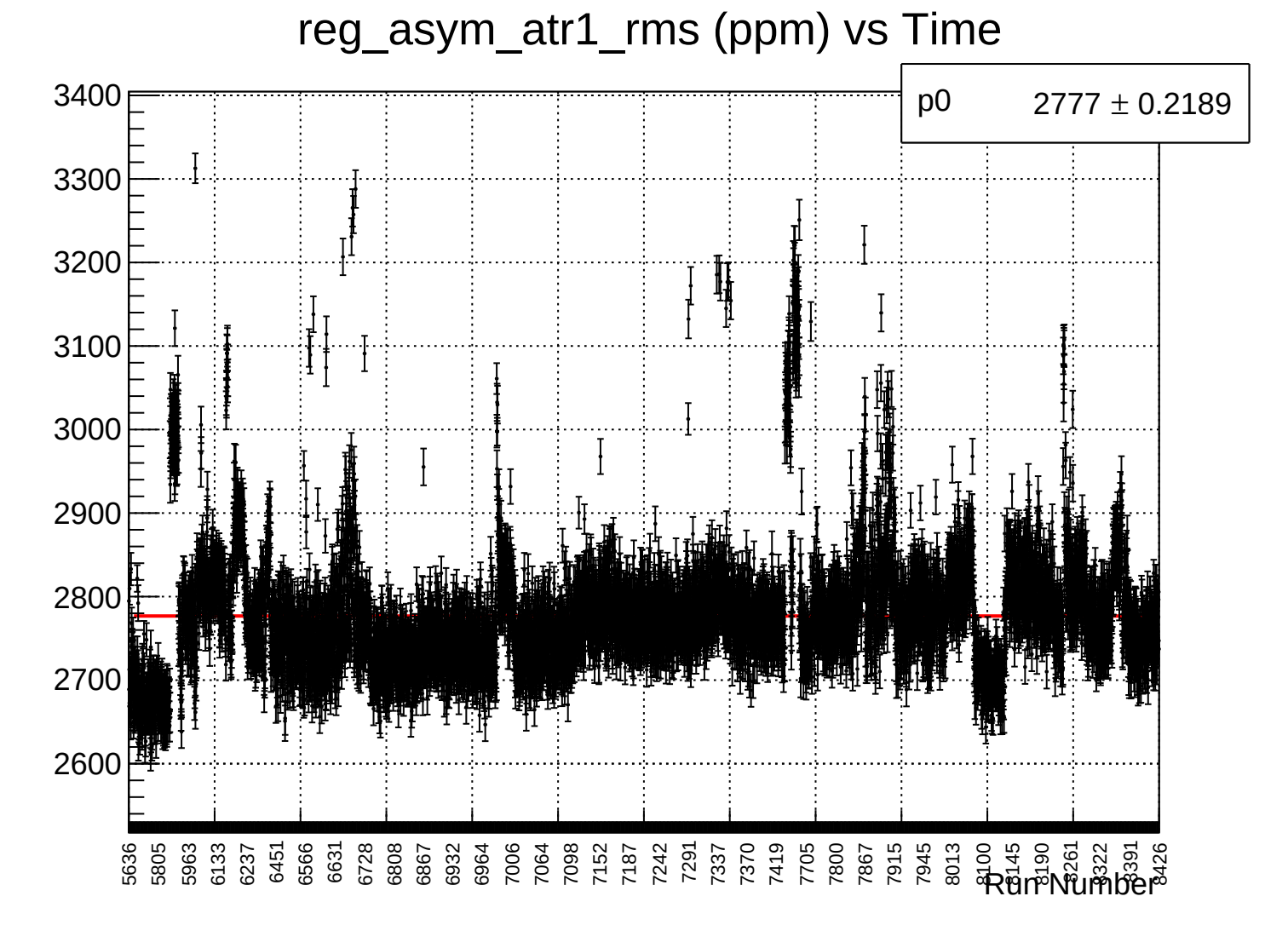

Pull Plot
Entries 7912
Mean −0.00115
Std Dev 1.005
Underflow 0
Overflow 0
Fit Prob 0.28
Fit Chi2 7984 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

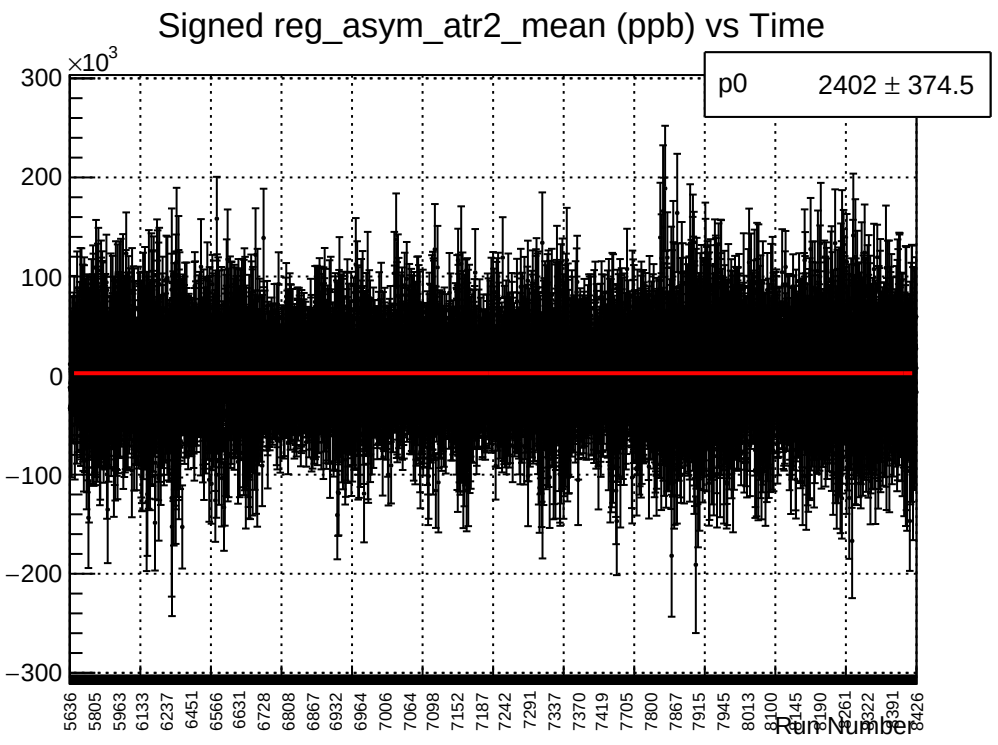

reg_asym_atl2_rms (ppm) vs Time
p0 2824 ± 0.2299
7000
6000
5000
4000
3000
2000
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

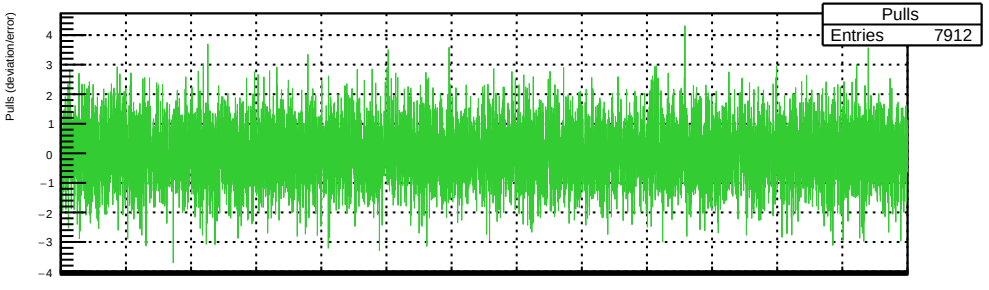

Signed reg_asym_atr1_mean (ppb) vs Time
×10^3
p0 2288 ± 309.6
150
100
50
0
−50
−100
−150
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

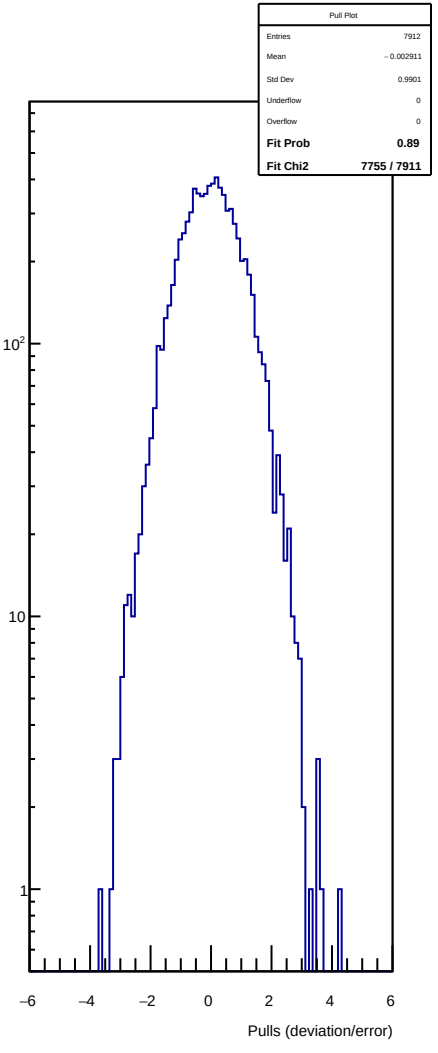

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

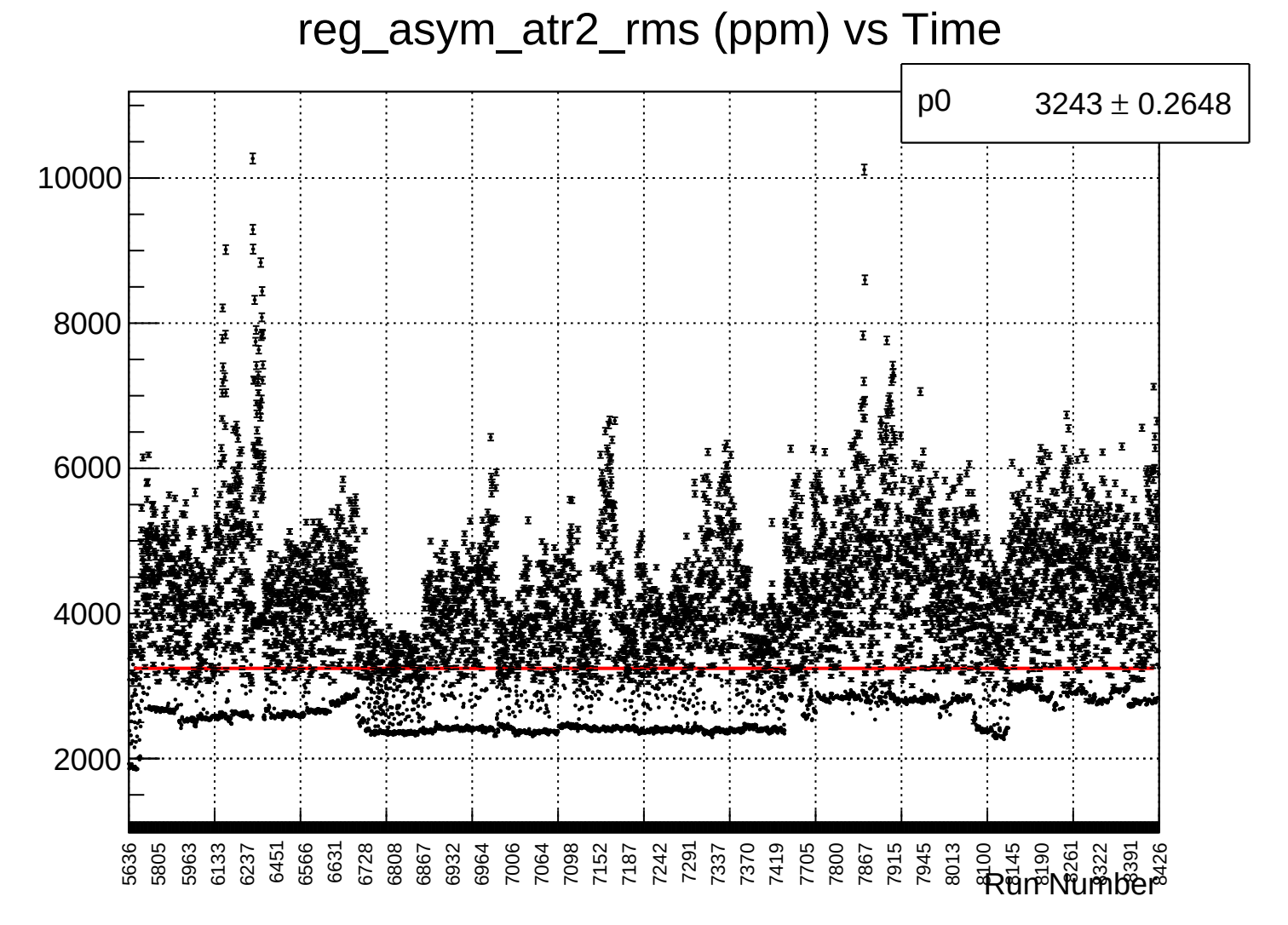

Pull Plot
Entries 7912
Mean −0.0008746
Std Dev 0.9889
Underflow 0
Overflow 0
Fit Prob 0.92
Fit Chi2 7737 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

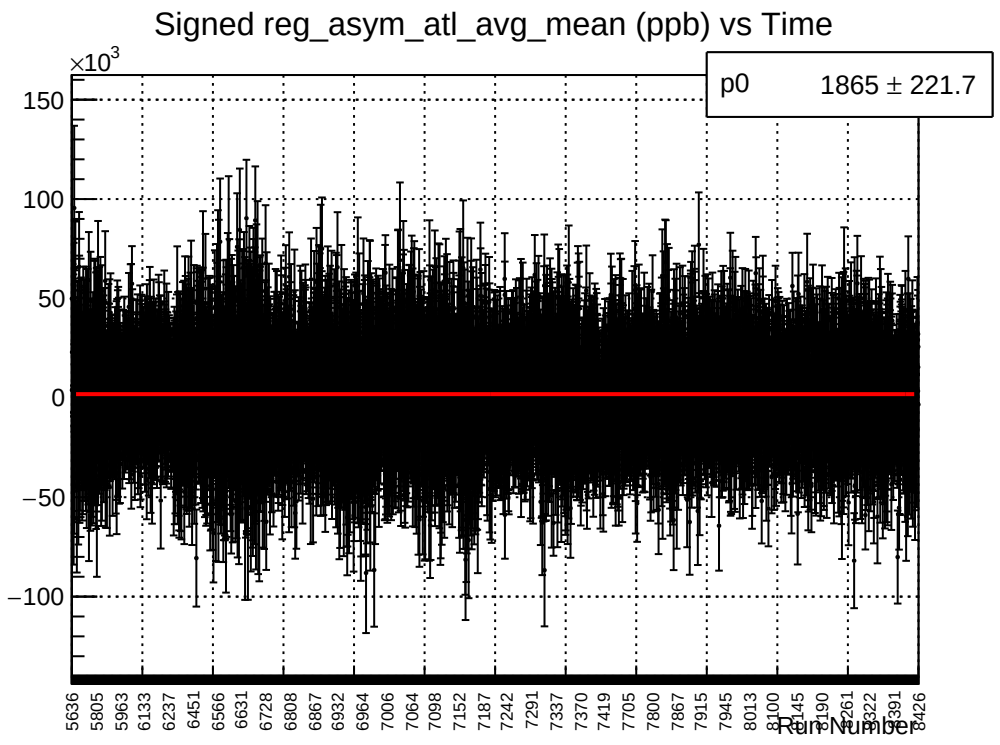

reg_asym_atr1_rms (ppm) vs Time
p0 2777 ± 0.2189
3400
3300
3200
3100
3000
2900
2800
2700
2600
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

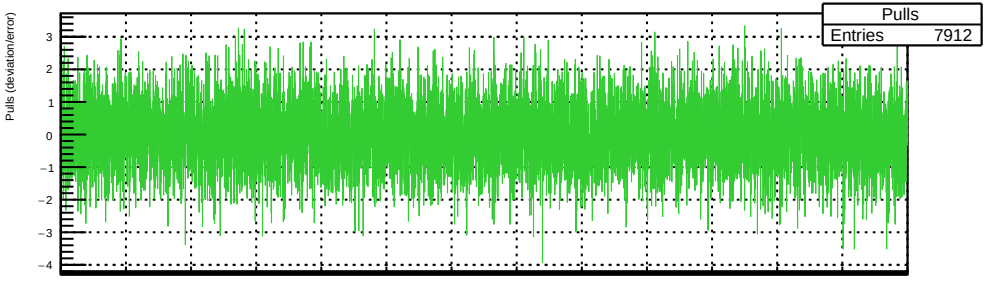

Signed reg_asym_atr2_mean (ppb) vs Time
p0 2402 ± 374.5
×10^3
300
200
100
0
−100
−200
−300
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

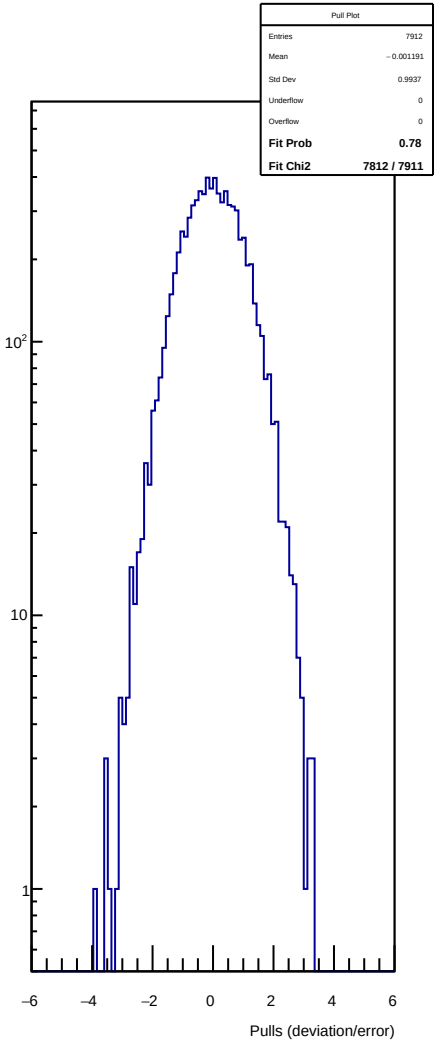

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

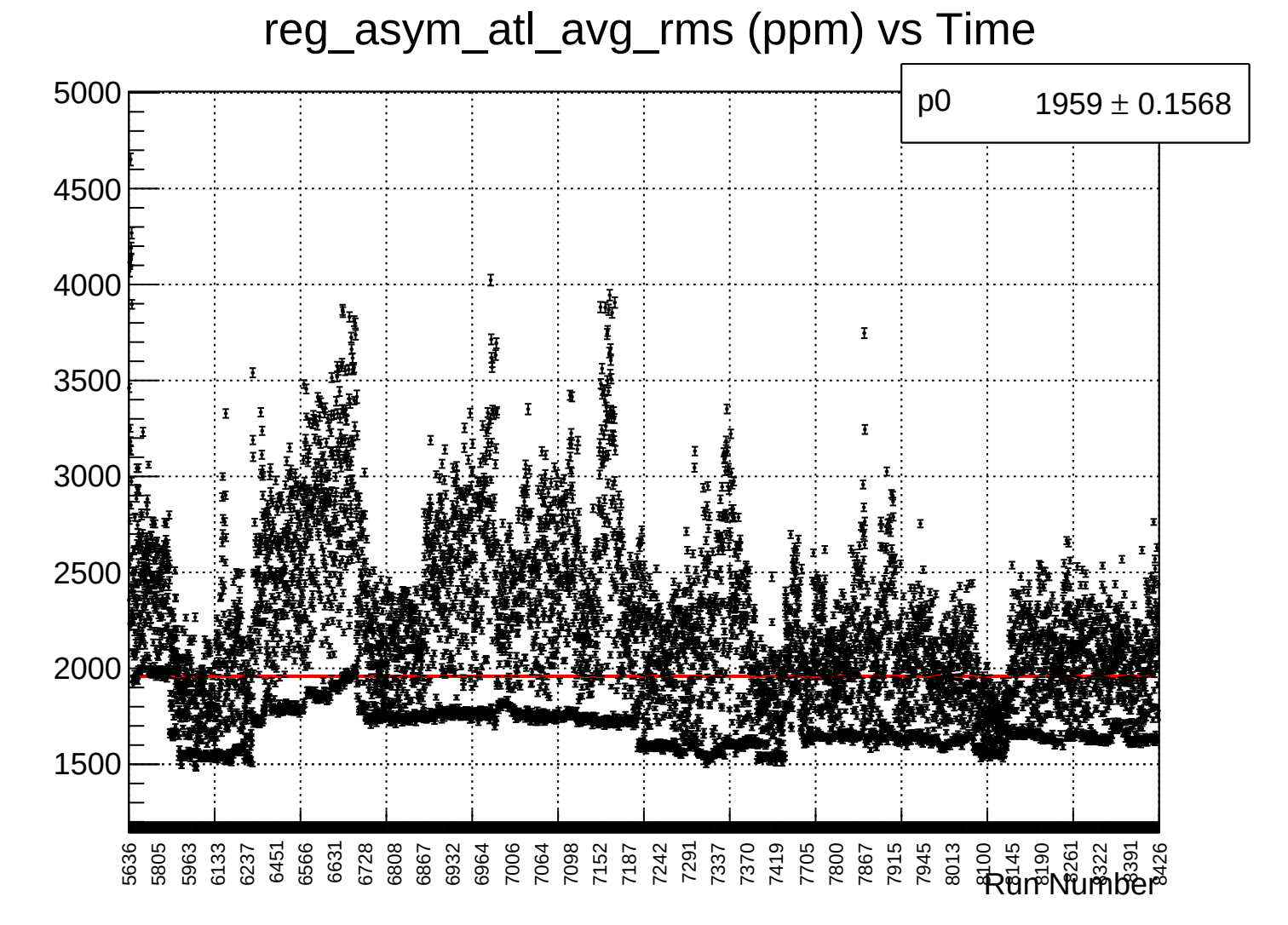

Pull Plot
Entries 7912
Mean −0.002911
Std Dev 0.9901
Underflow 0
Overflow 0
Fit Prob 0.89
Fit Chi2 7755 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

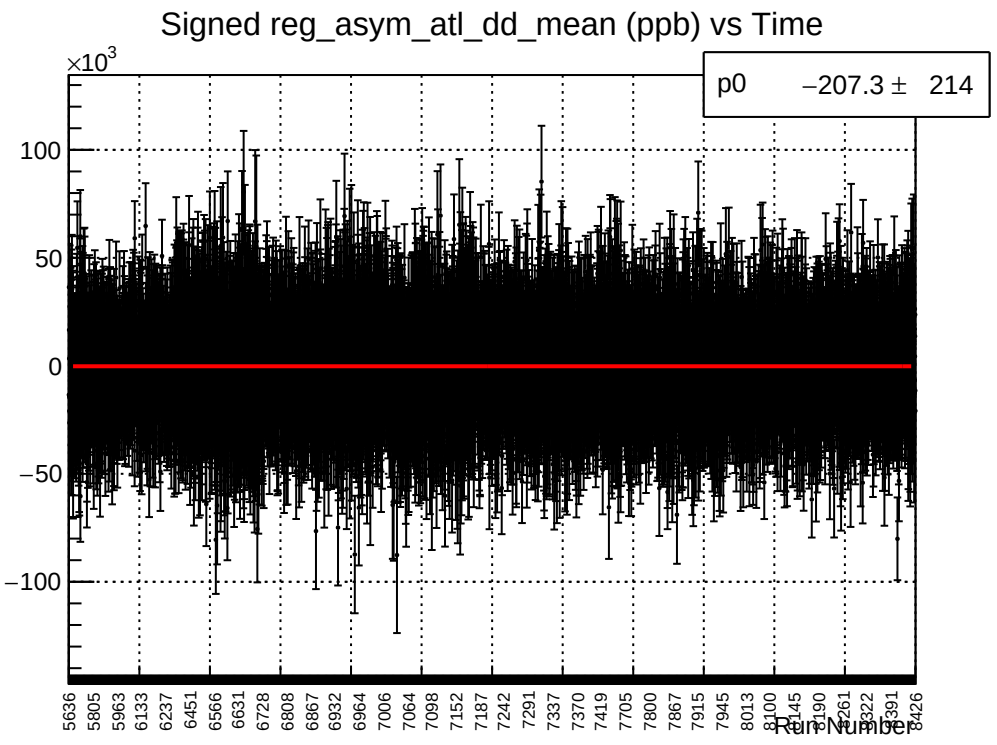

reg_asym_atr2_rms (ppm) vs Time
p0 3243 ± 0.2648
10000
8000
6000
4000
2000
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

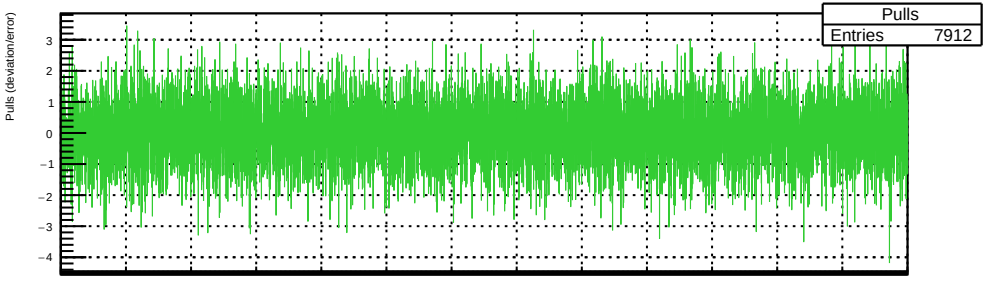

Signed reg_asym_atl_avg_mean (ppb) vs Time
×10^3
p0 1865 ± 221.7
150
100
50
0
−50
−100
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

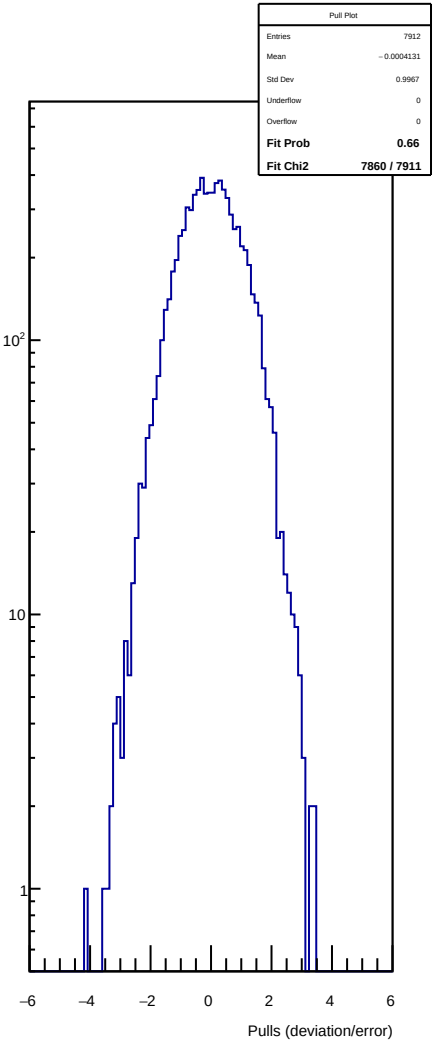

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

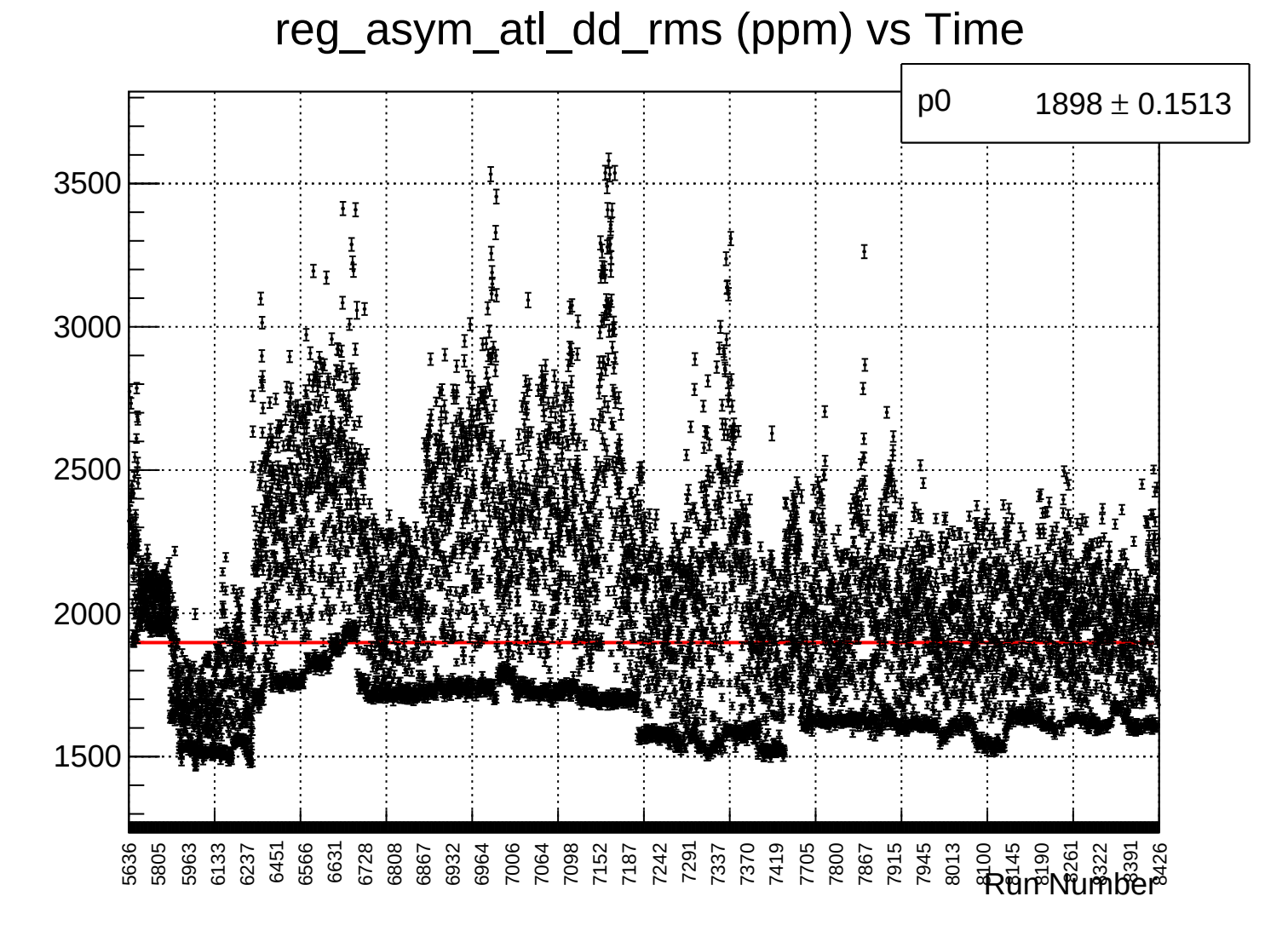

Pull Plot
Entries 7912
Mean −0.001191
Std Dev 0.9937
Underflow 0
Overflow 0
Fit Prob 0.78
Fit Chi2 7812 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

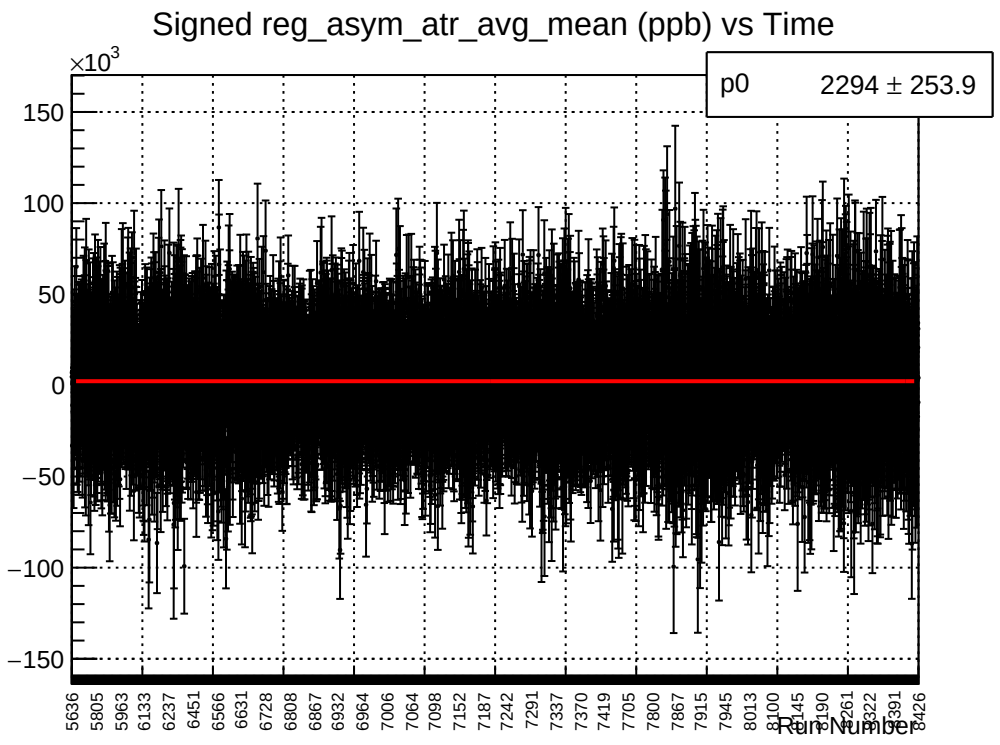

reg_asym_atl_avg_rms (ppm) vs Time
p0
1959 ± 0.1568
5000
4500
4000
3500
3000
2500
2000
1500
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

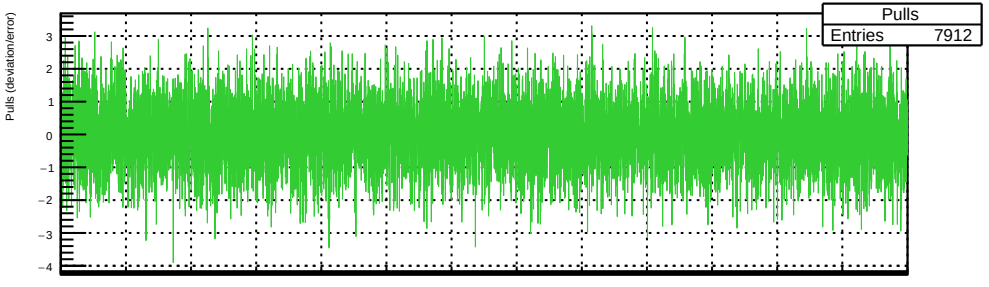

Signed reg_asym_atl_dd_mean (ppb) vs Time
×10^3
p0 −207.3 ± 214
100
50
0
−50
−100
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

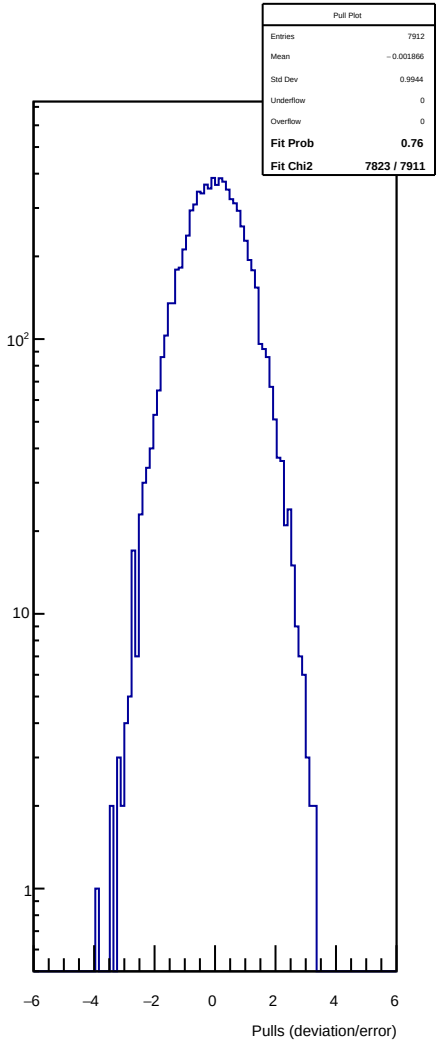

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

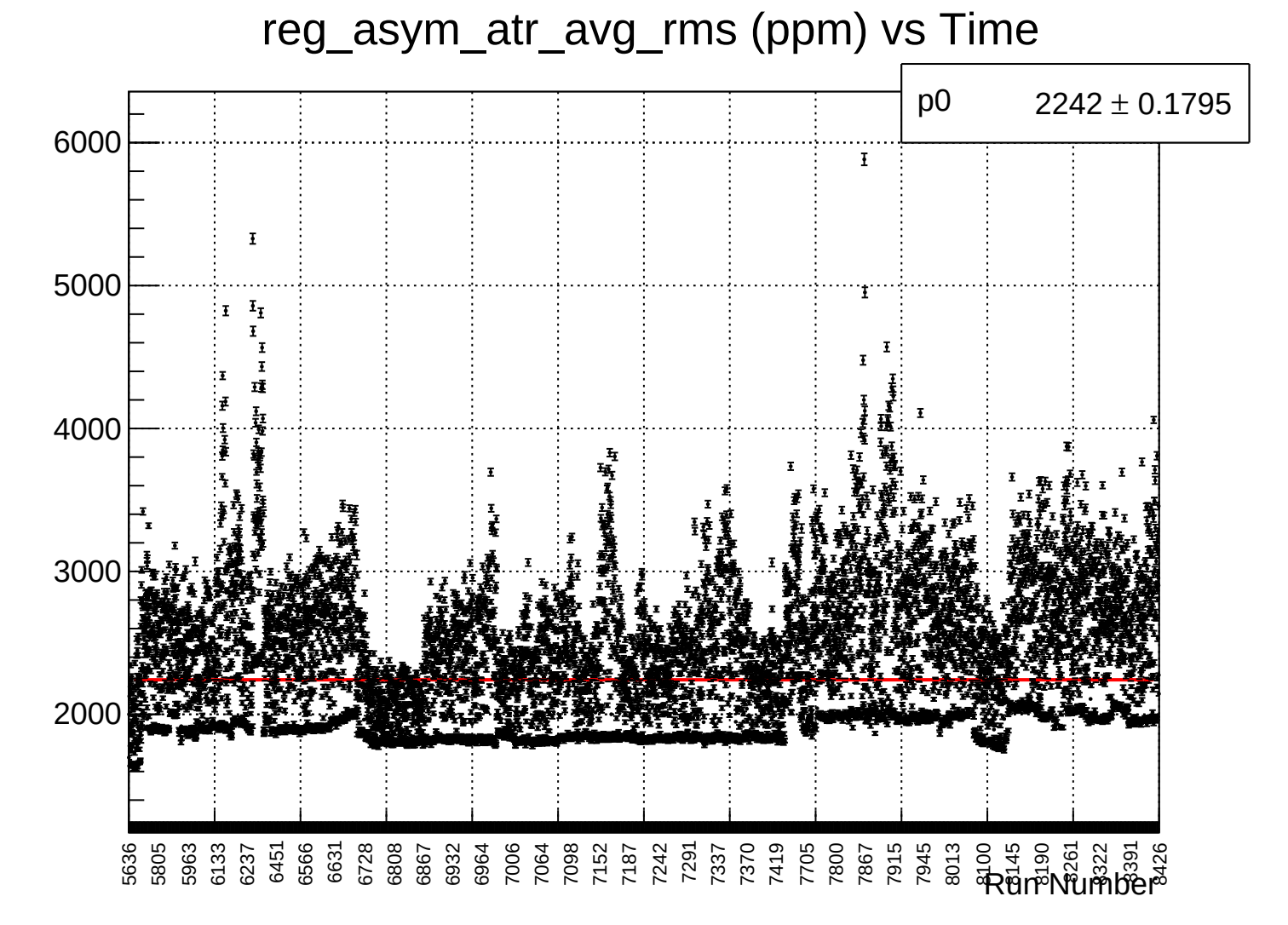

Pull Plot
Entries 7912
Mean −0.0004131
Std Dev 0.9967
Underflow 0
Overflow 0
Fit Prob 0.66
Fit Chi2 7860 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

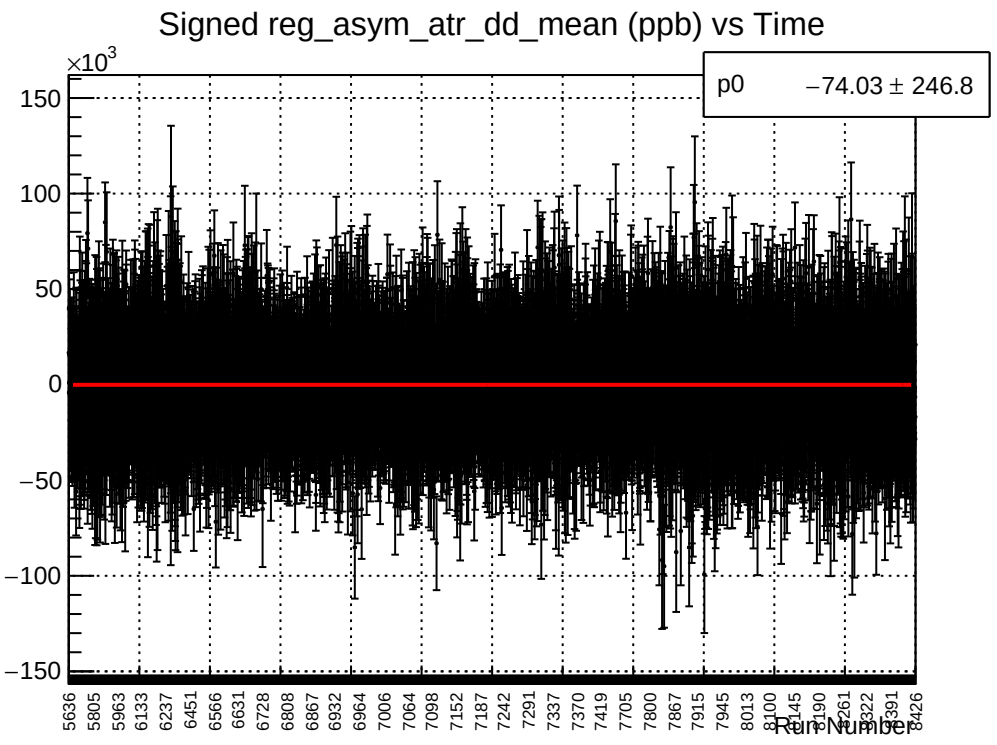

reg_asym_atl_dd_rms (ppm) vs Time
p0 1898 ± 0.1513
3500
3000
2500
2000
1500
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

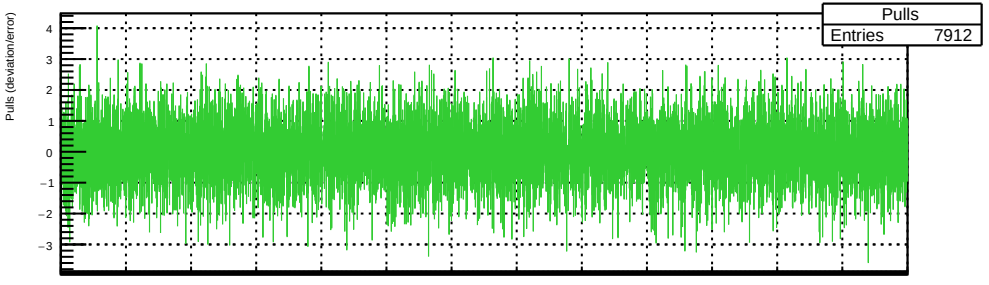

Signed reg_asym_atr_avg_mean (ppb) vs Time
×10^3
p0 2294 ± 253.9
150
100
50
0
−50
−100
−150
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

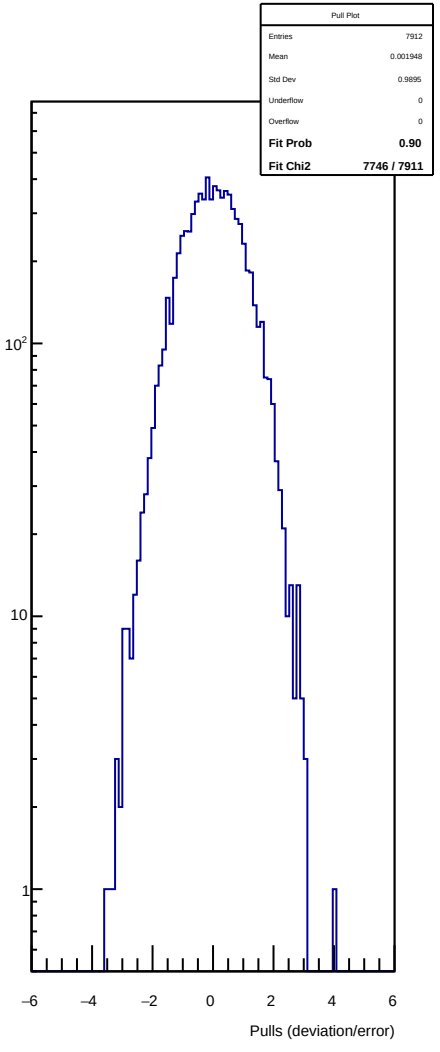

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

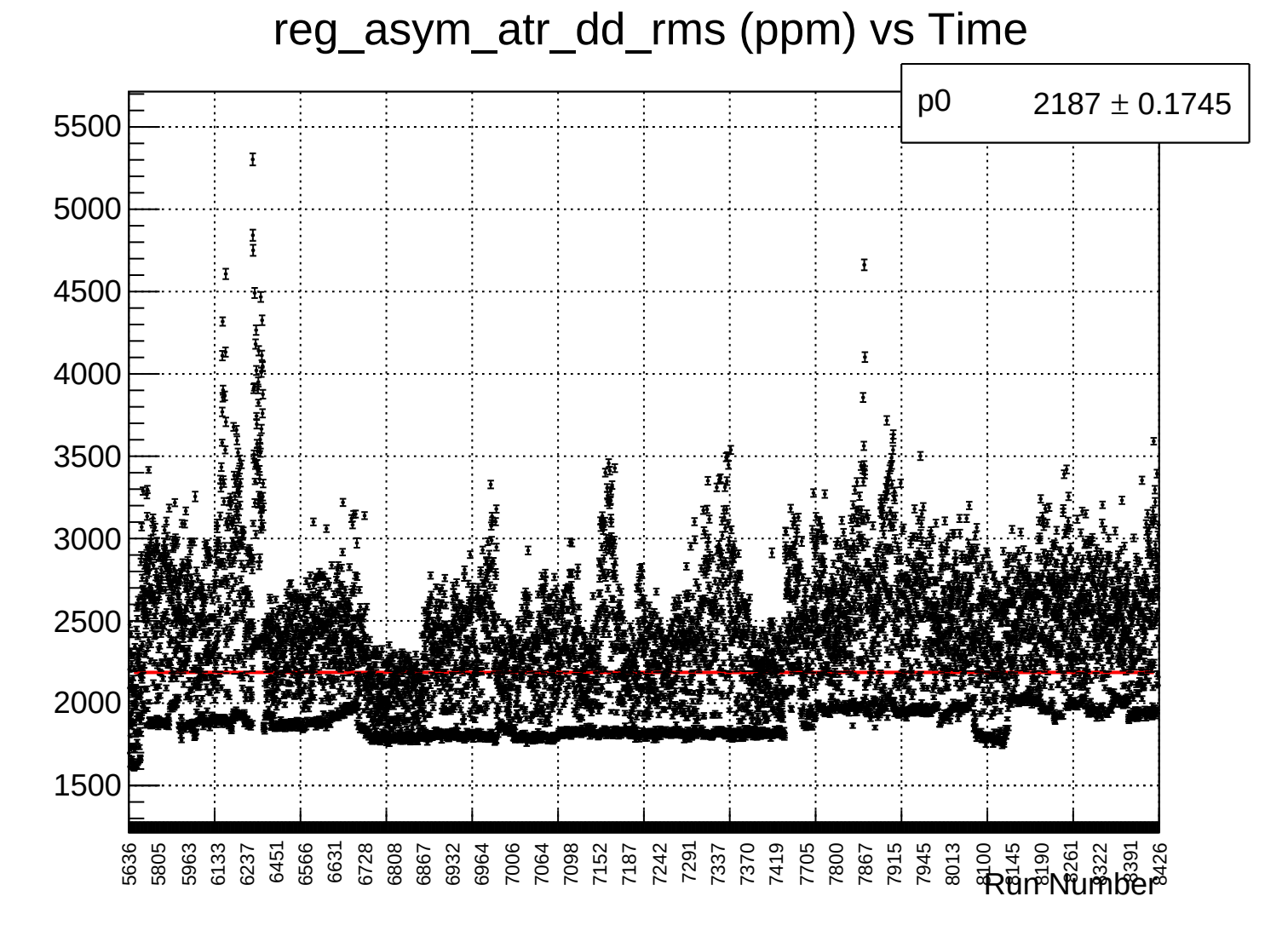

Pull Plot
Entries 7912
Mean −0.001866
Std Dev 0.9944
Underflow 0
Overflow 0
Fit Prob 0.76
Fit Chi2 7823 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

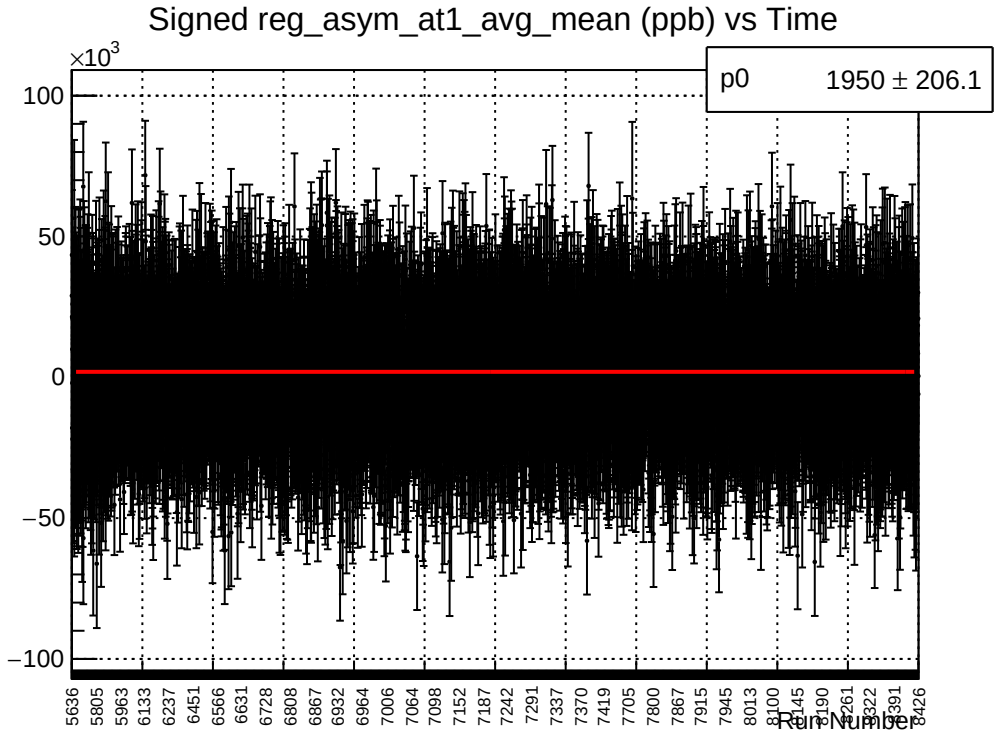

reg_asym_atr_avg_rms (ppm) vs Time
p0
2242 ± 0.1795
6000
5000
4000
3000
2000
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

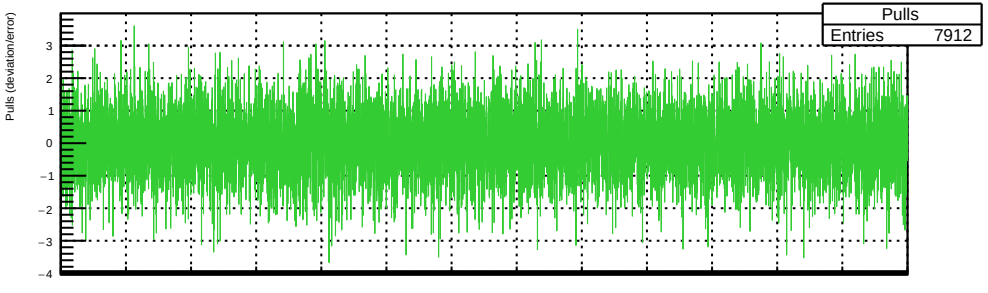

Signed reg_asym_atr_dd_mean (ppb) vs Time
×10^3
p0 −74.03 ± 246.8
150
100
50
0
−50
−100
−150
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

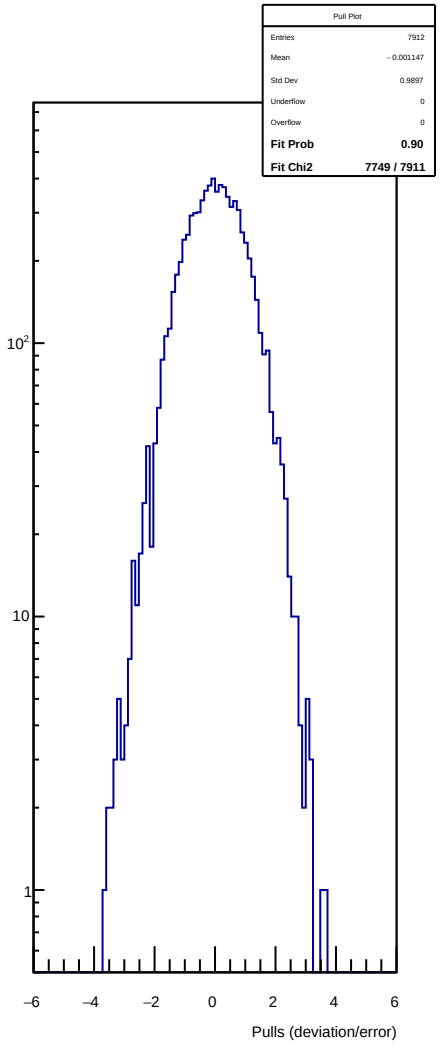

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

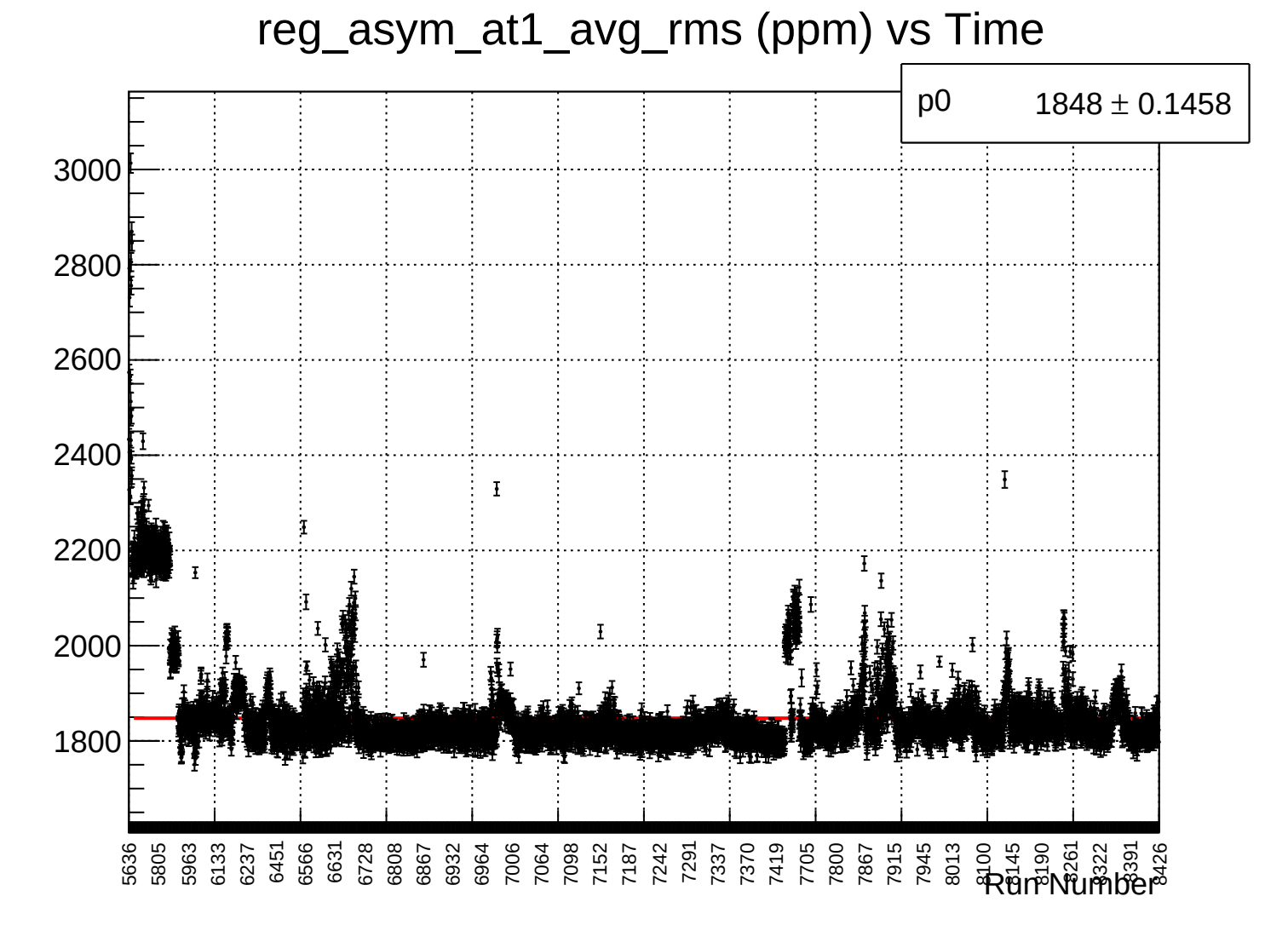

Pull Plot
Entries 7912
Mean 0.001948
Std Dev 0.9895
Underflow 0
Overflow 0
Fit Prob 0.90
Fit Chi2 7746 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

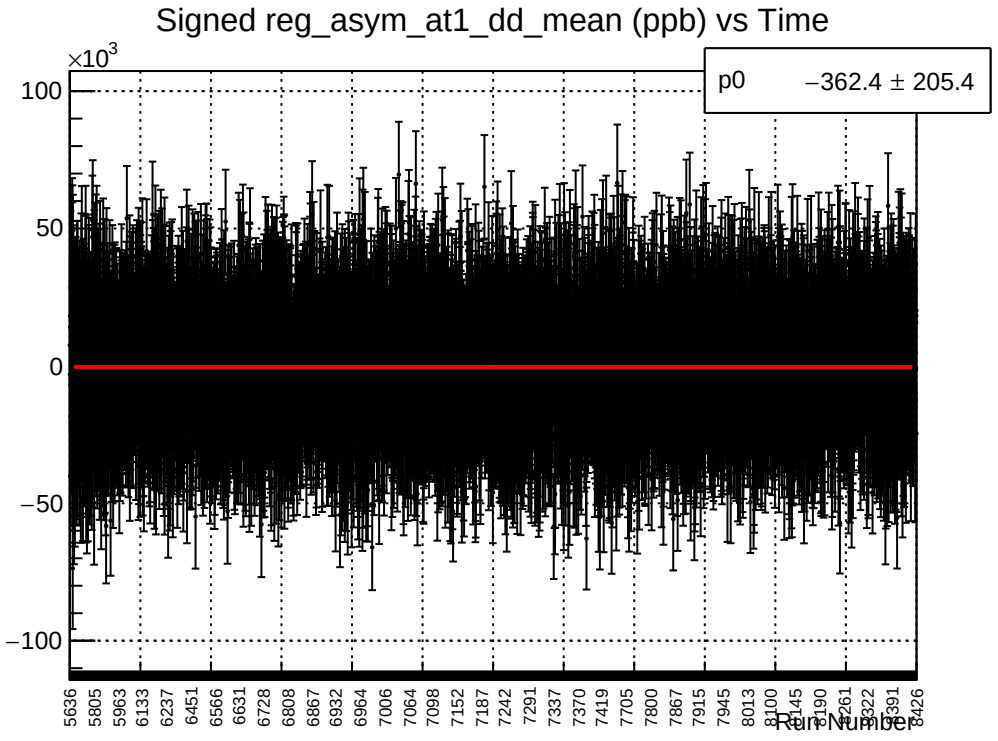

reg_asym_atr_dd_rms (ppm) vs Time
p0 2187 ± 0.1745
5500
5000
4500
4000
3500
3000
2500
2000
1500
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

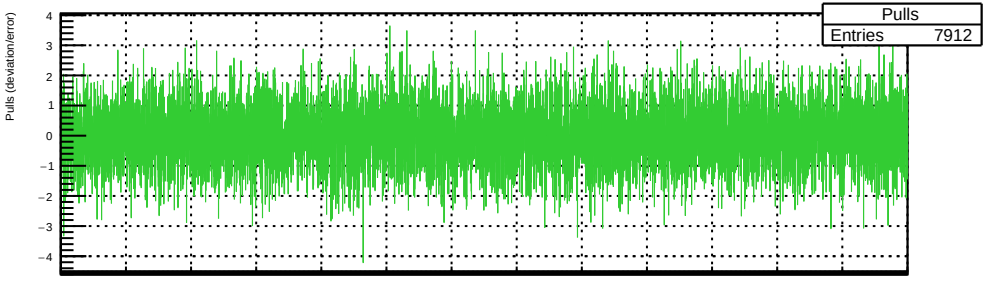

Signed reg_asym_at1_avg_mean (ppb) vs Time
×10^3
p0 1950 ± 206.1
100
50
0
−50
−100
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

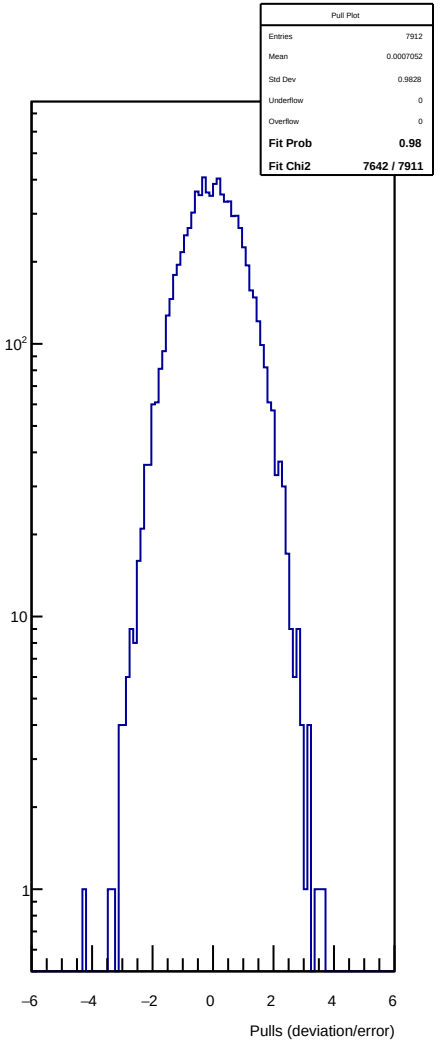

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

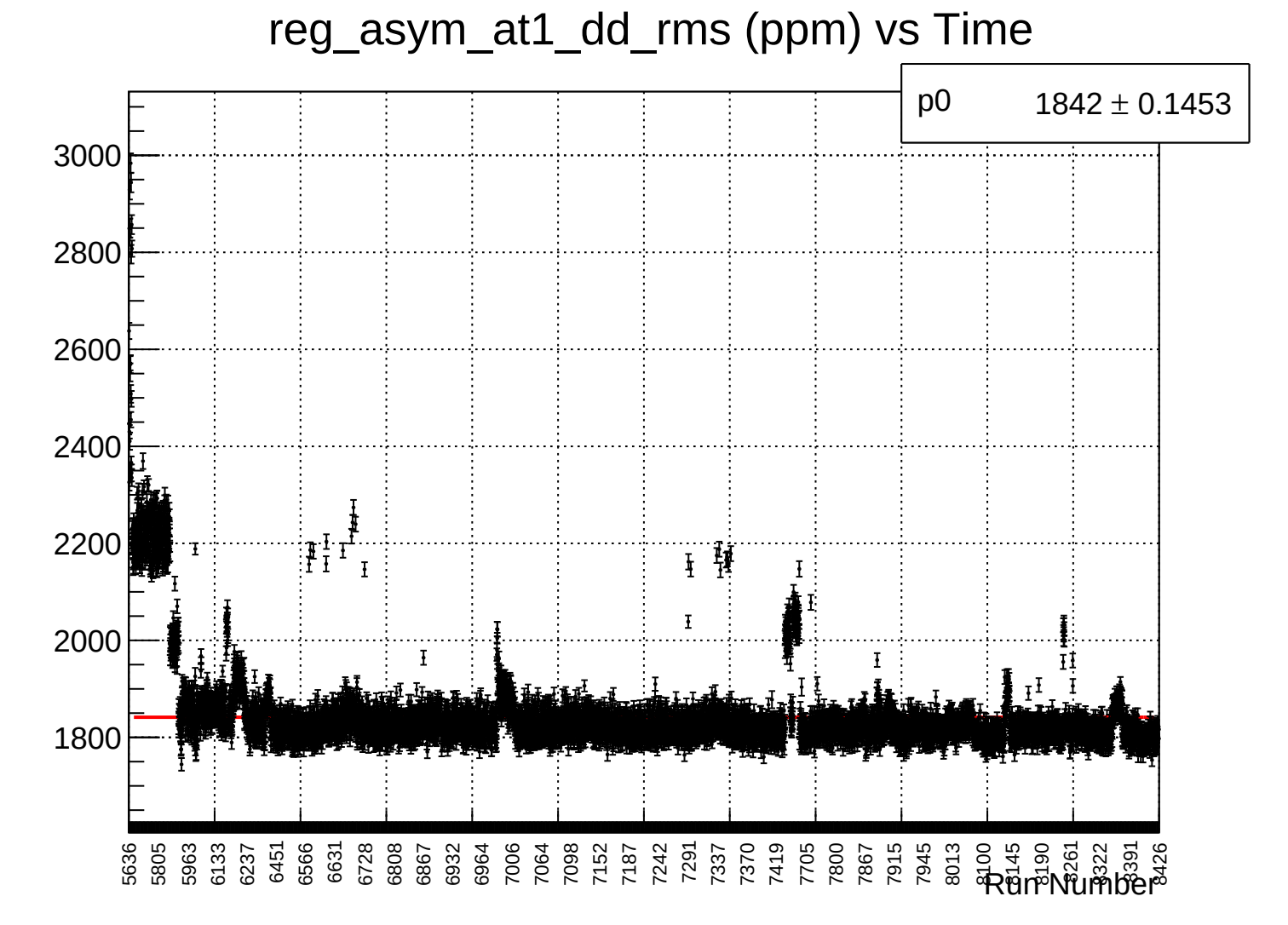

Pull Plot
Entries 7912
Mean −0.001147
Std Dev 0.9897
Underflow 0
Overflow 0
Fit Prob 0.90
Fit Chi2 7749 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

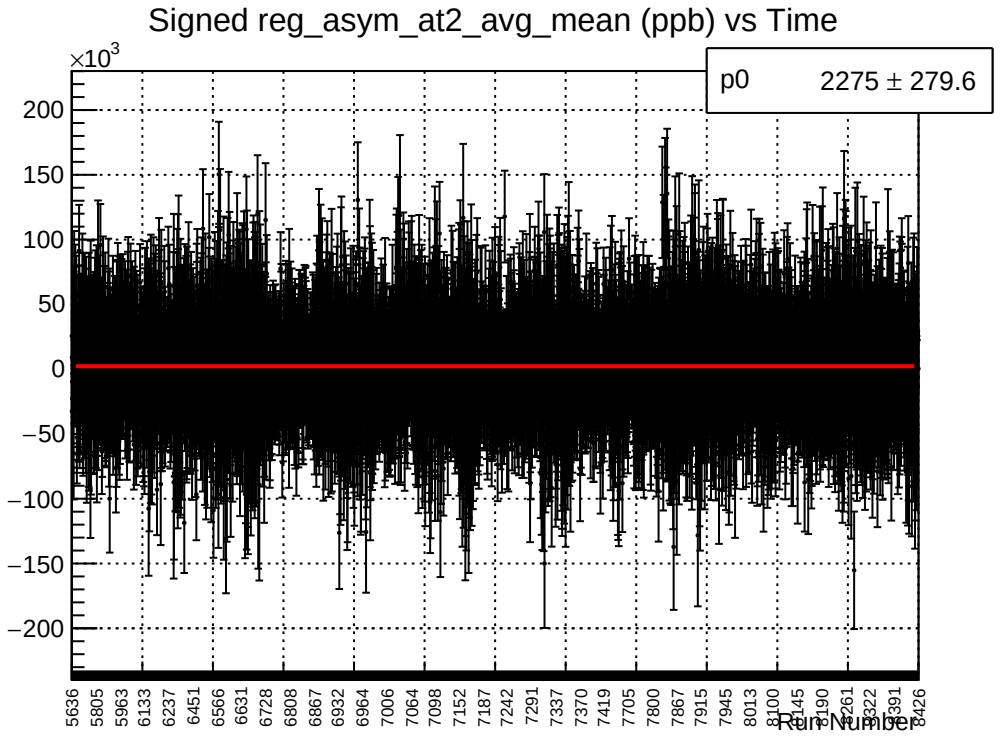

reg_asym_at1_avg_rms (ppm) vs Time
p0
1848 ± 0.1458
3000
2800
2600
2400
2200
2000
1800
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

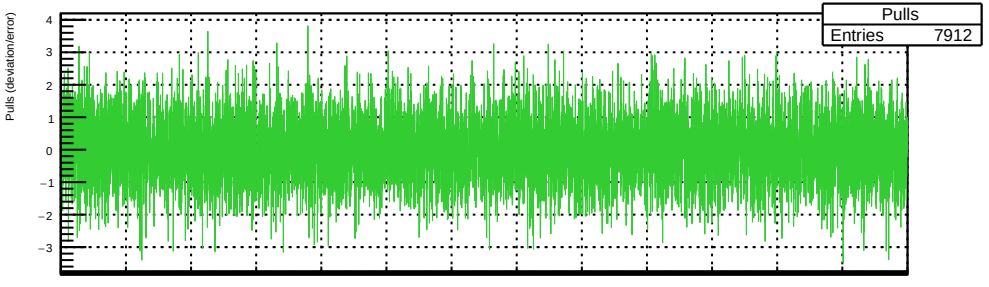

Signed reg_asym_at1_dd_mean (ppb) vs Time
×10^3
p0 −362.4 ± 205.4
100
50
0
−50
−100
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

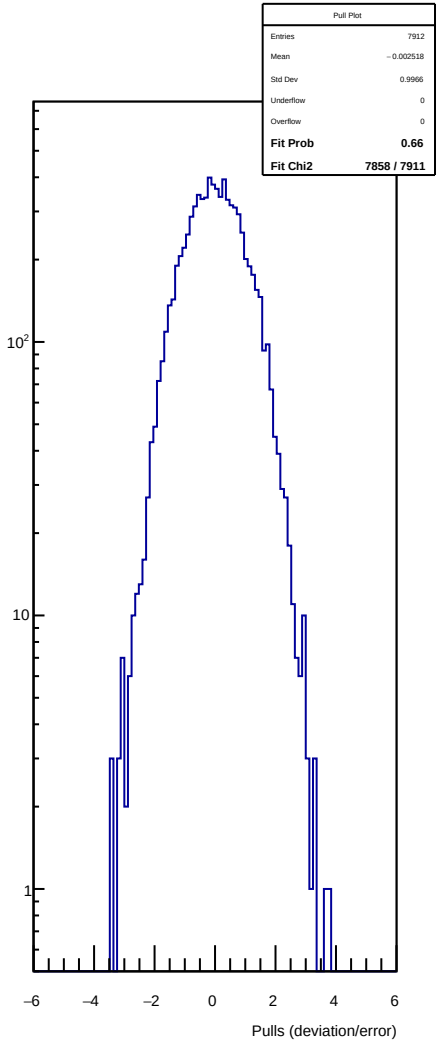

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

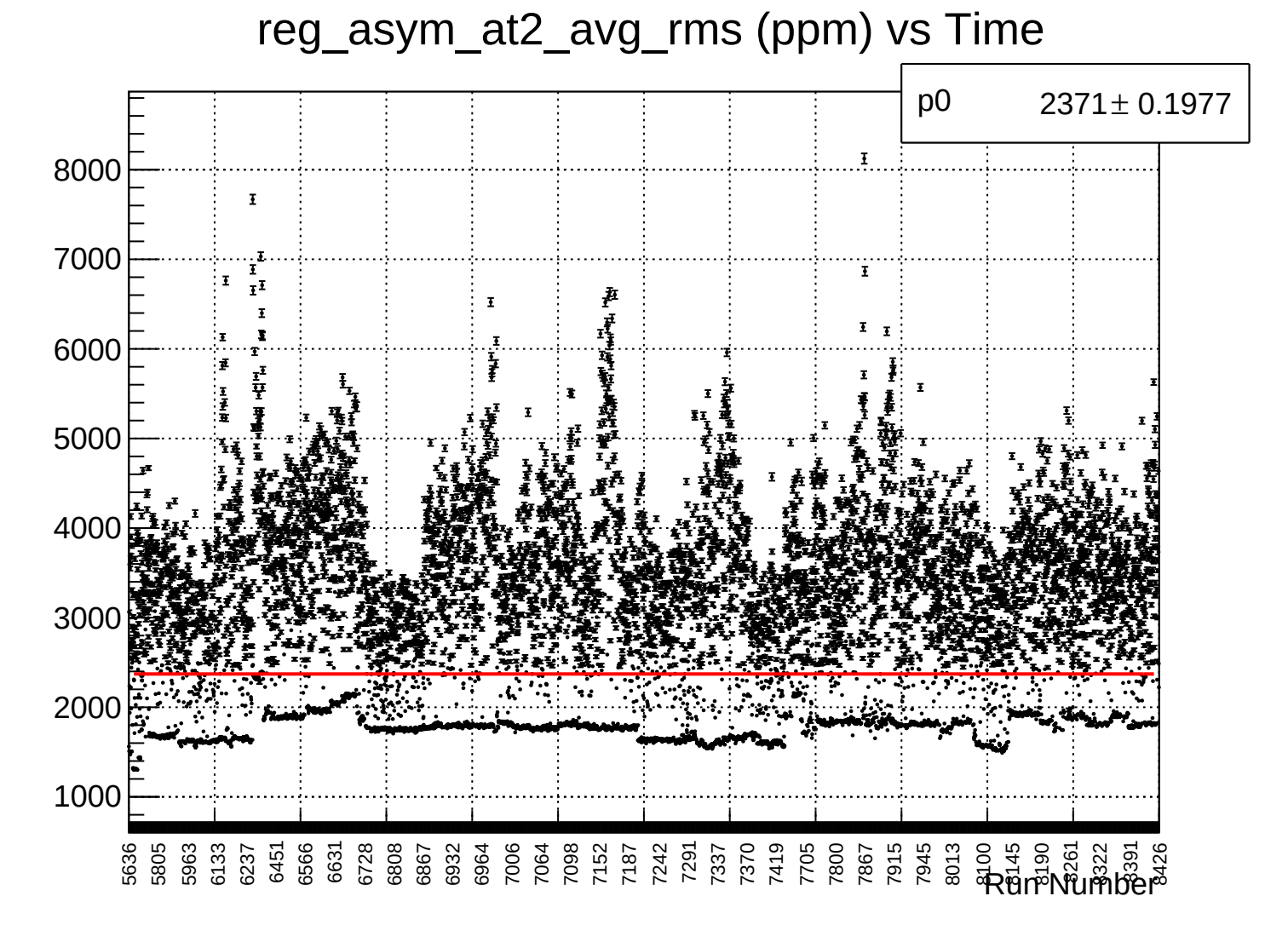

Pull Plot
Entries 7912
Mean 0.0007052
Std Dev 0.9828
Underflow 0
Overflow 0
Fit Prob 0.98
Fit Chi2 7642 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

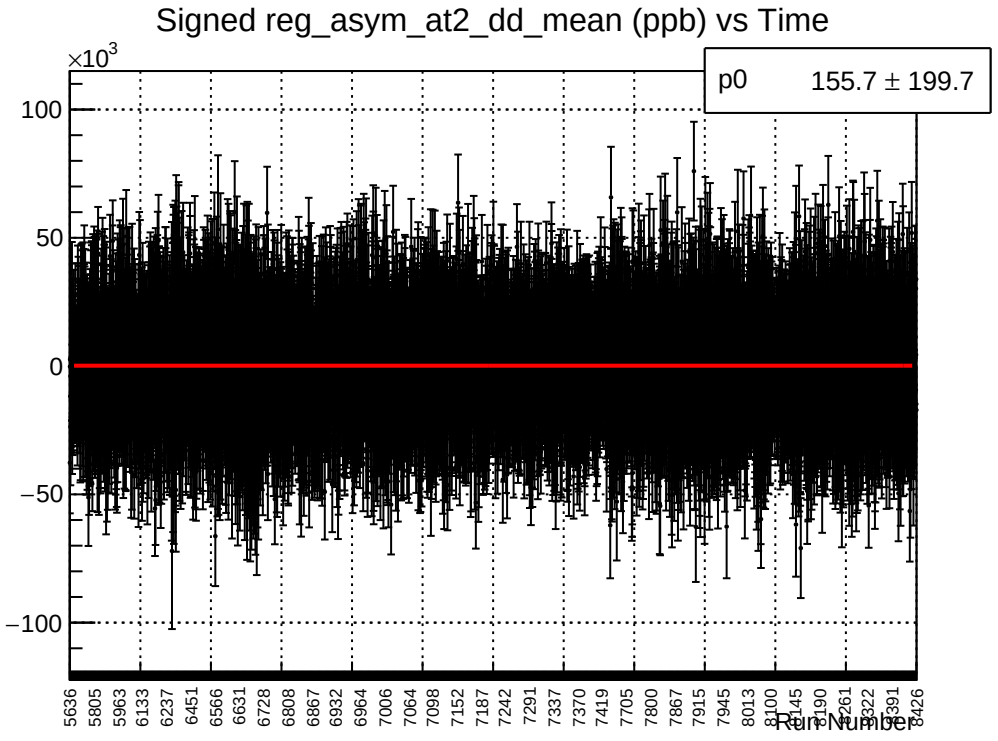

reg_asym_at1_dd_rms (ppm) vs Time
p0
1842 ± 0.1453
3000
2800
2600
2400
2200
2000
1800
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

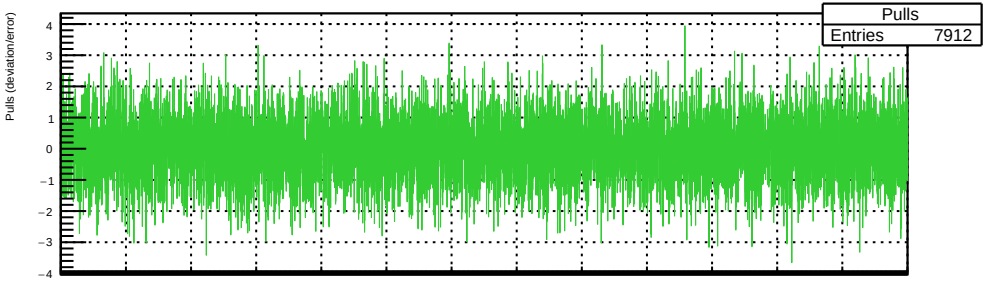

Signed reg_asym_at2_avg_mean (ppb) vs Time
×10^3
p0 2275 ± 279.6
200
150
100
50
0
−50
−100
−150
−200
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

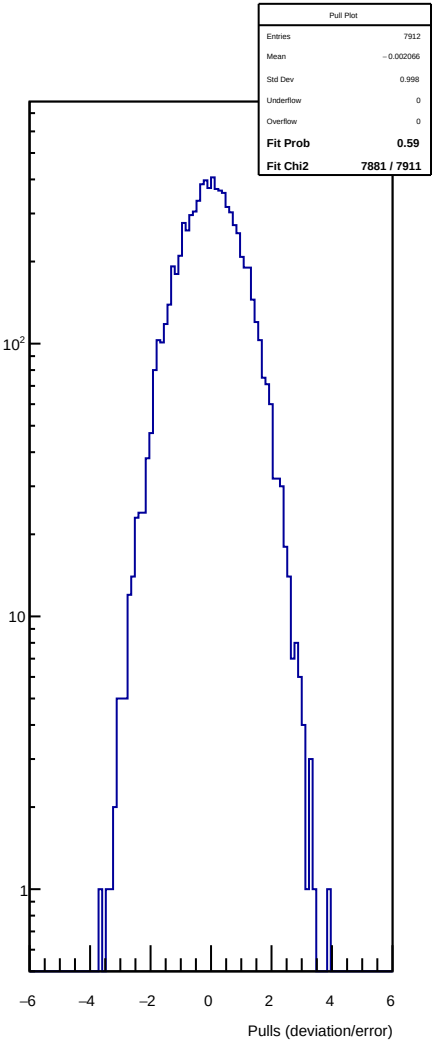

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

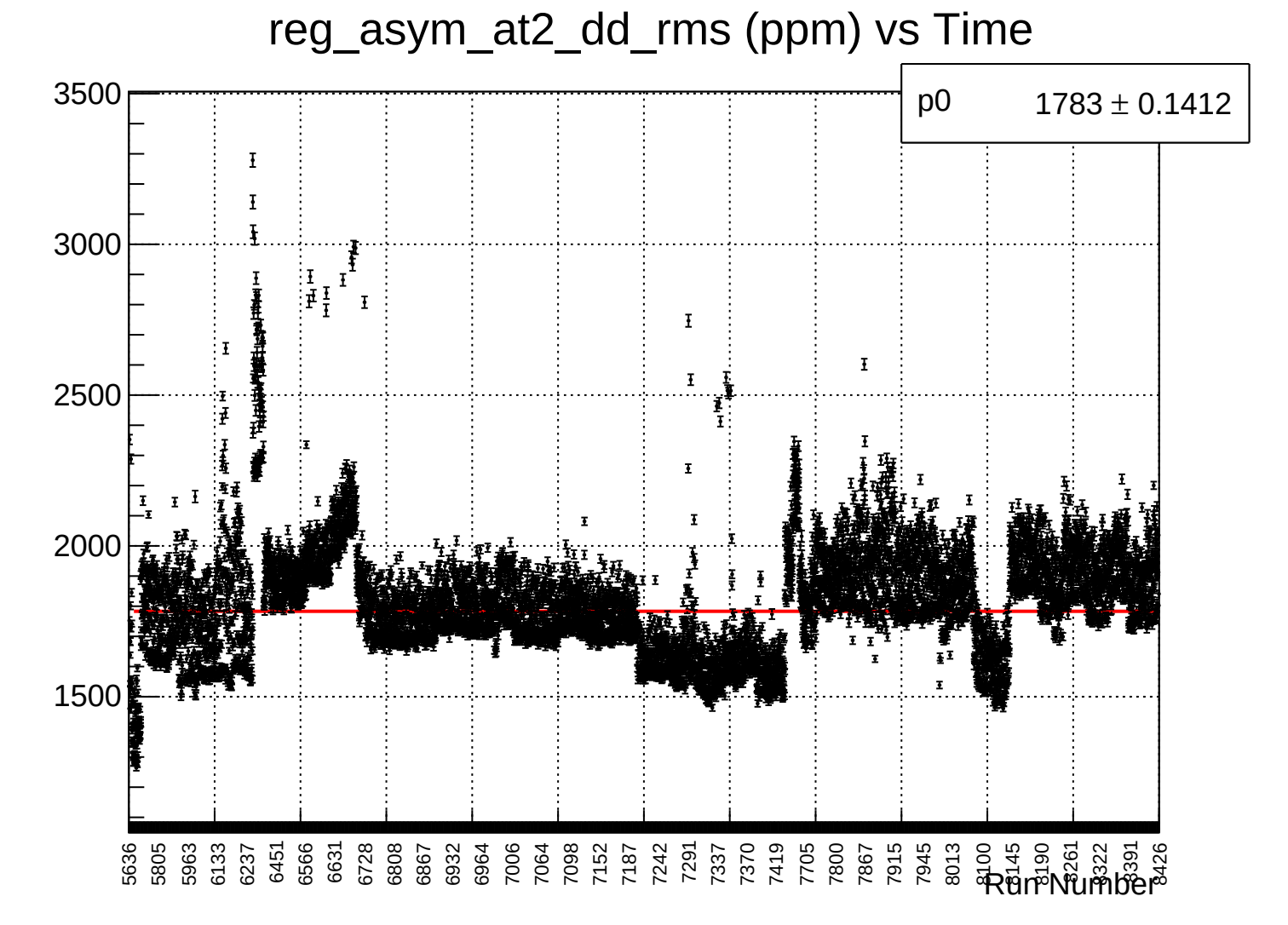

Pull Plot
Entries 7912
Mean −0.002518
Std Dev 0.9966
Underflow 0
Overflow 0
Fit Prob 0.66
Fit Chi2 7858 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

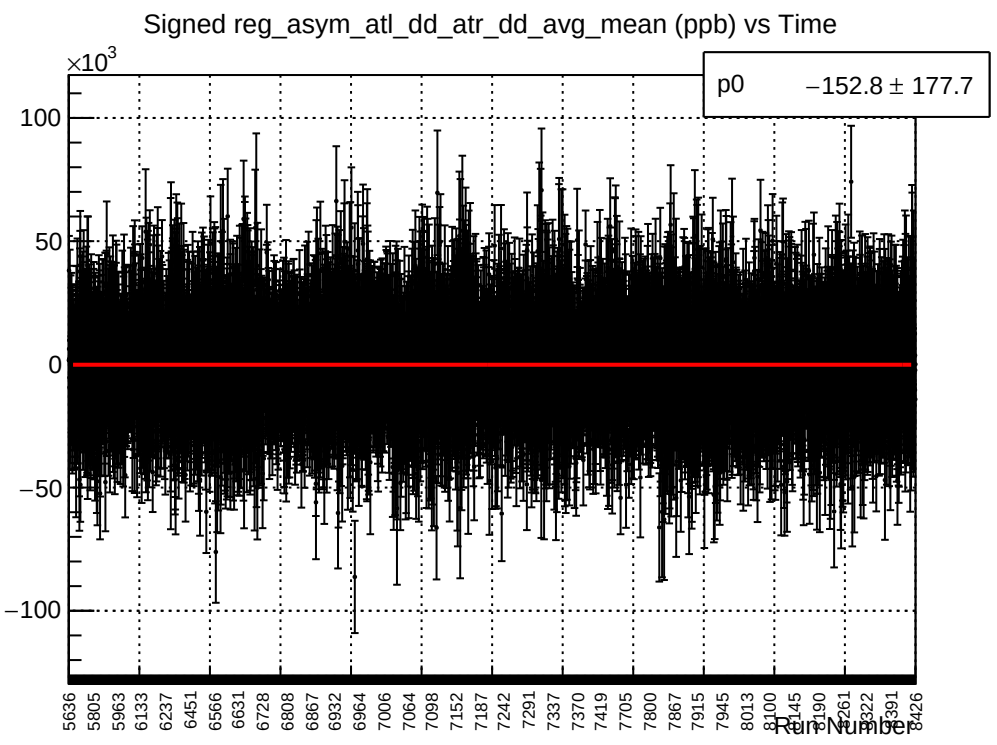

reg_asym_at2_avg_rms (ppm) vs Time
p0 2371 ± 0.1977
8000
7000
6000
5000
4000
3000
2000
1000
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

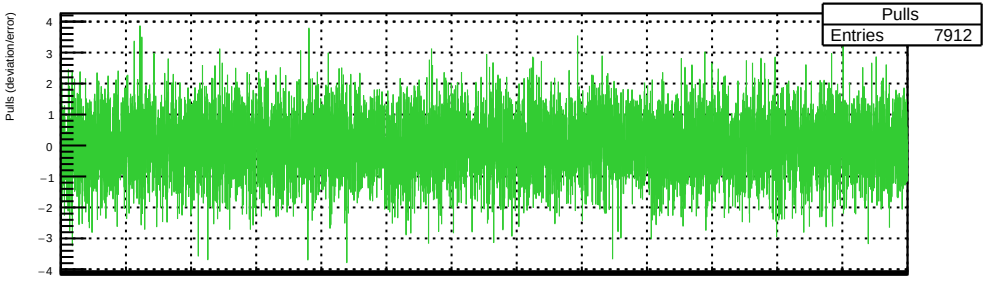

Signed reg_asym_at2_dd_mean (ppb) vs Time
×10^3
p0 155.7 ± 199.7
100
50
0
−50
−100
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

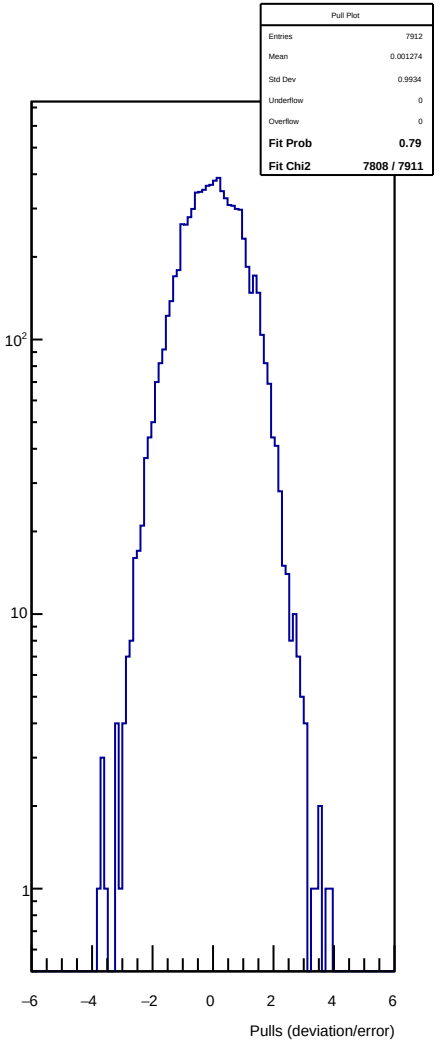

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

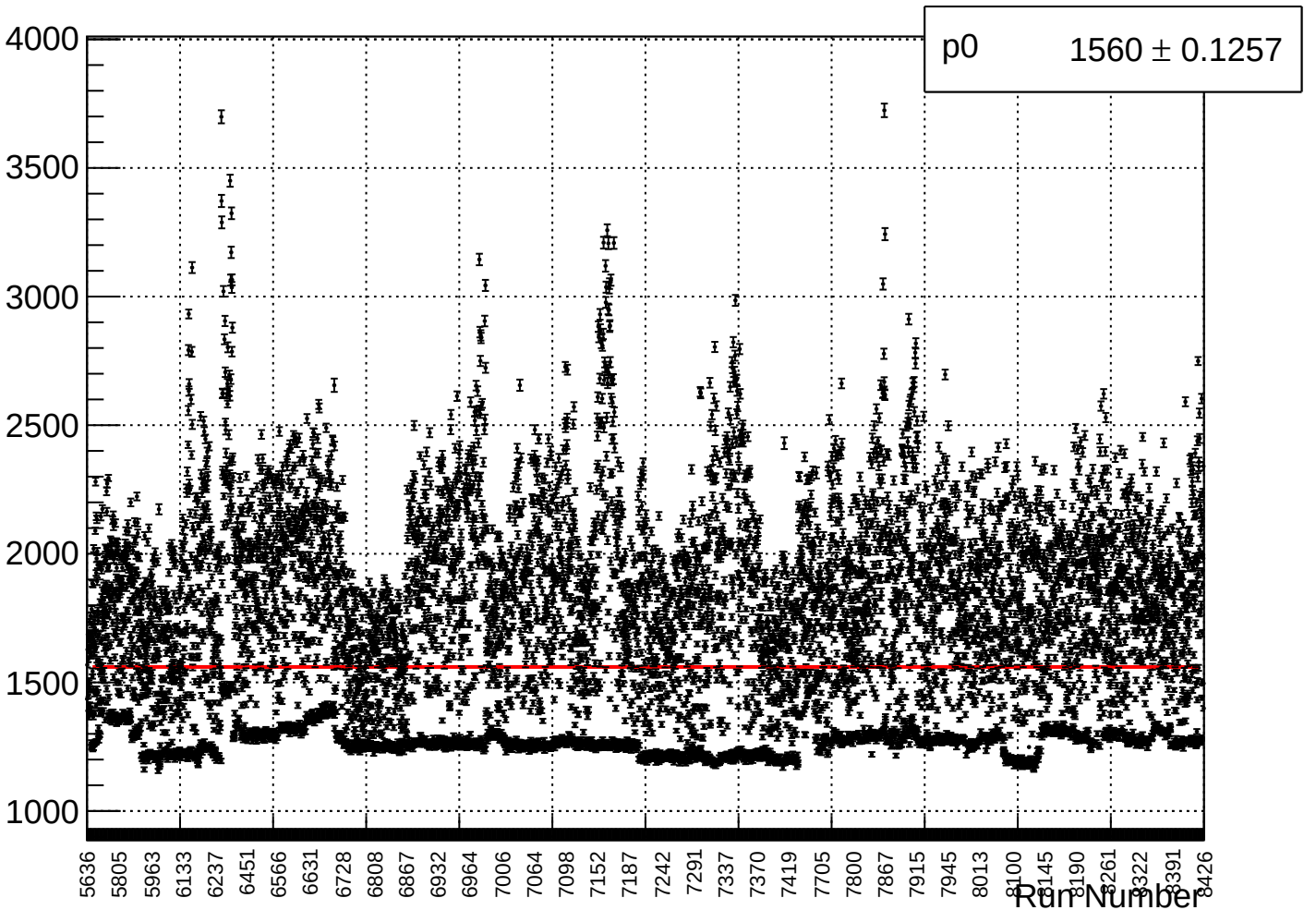

Pull Plot
Entries 7912
Mean −0.002066
Std Dev 0.998
Underflow 0
Overflow 0
Fit Prob 0.59
Fit Chi2 7881 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

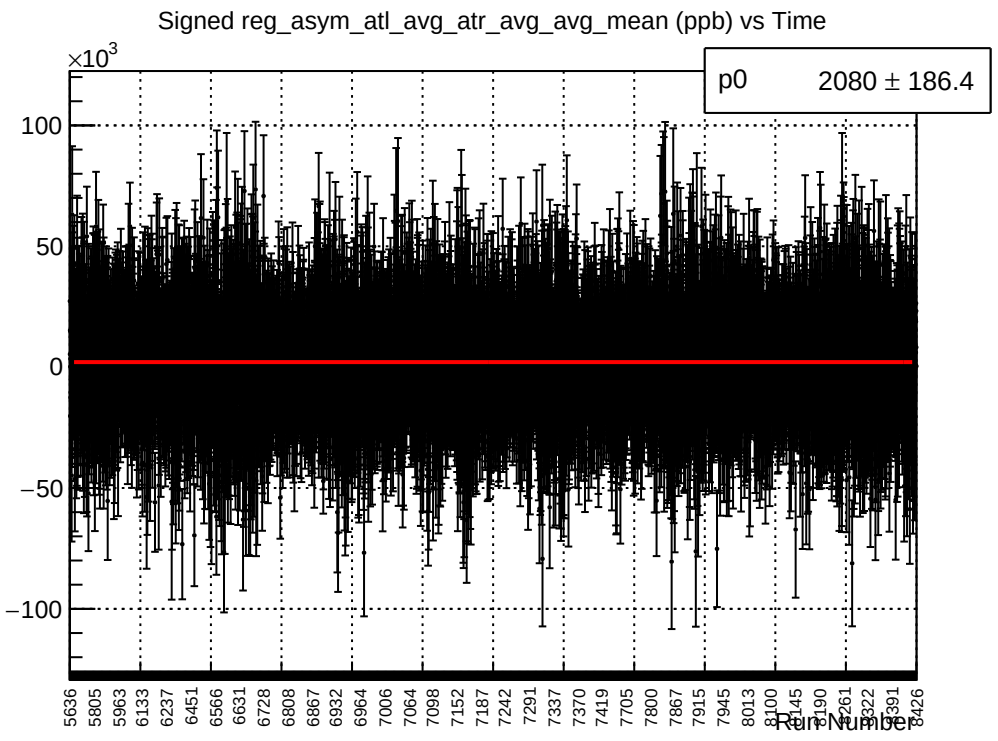

reg_asym_at2_dd_rms (ppm) vs Time
p0
1783 ± 0.1412
3500
3000
2500
2000
1500
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

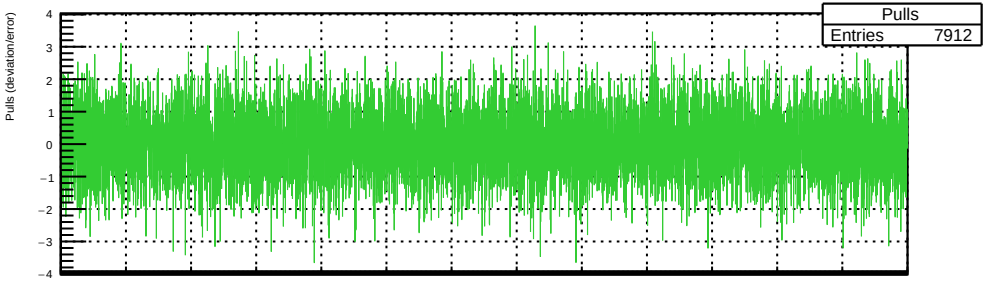

Signed reg_asym_atl_dd_atr_dd_avg_mean (ppb) vs Time
×10^3
p0 −152.8 ± 177.7
100
50
0
−50
−100
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

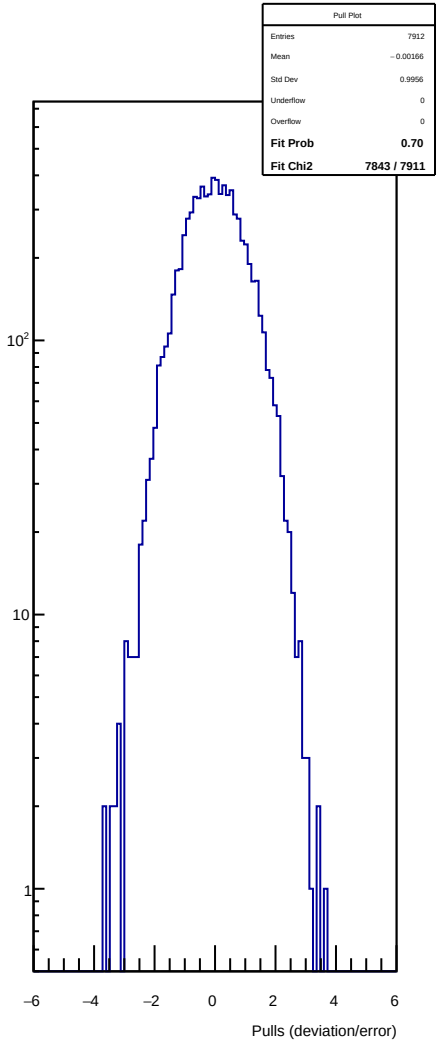

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

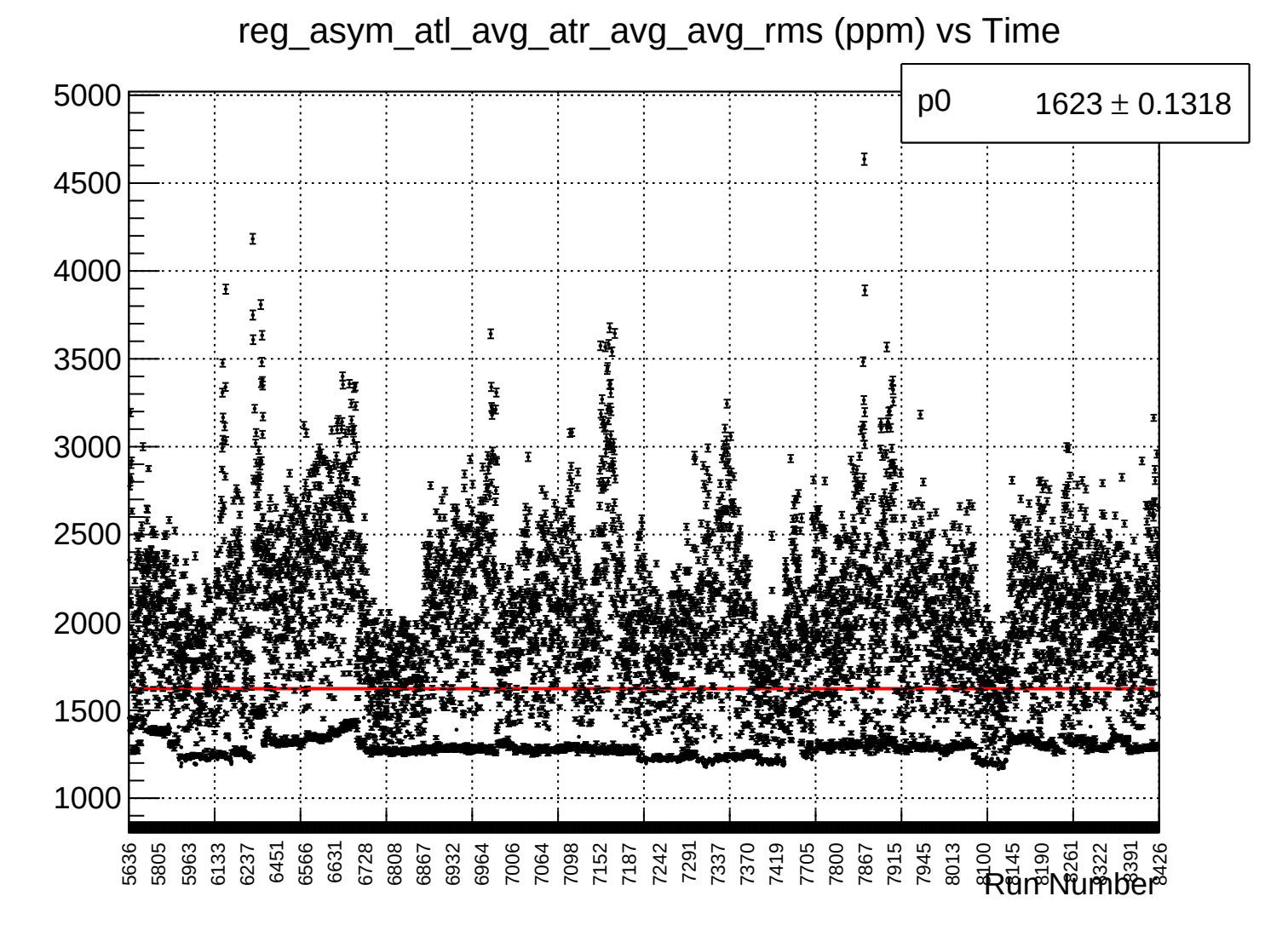

Pull Plot
Entries 7912
Mean 0.001274
Std Dev 0.9934
Underflow 0
Overflow 0
Fit Prob 0.79
Fit Chi2 7808 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

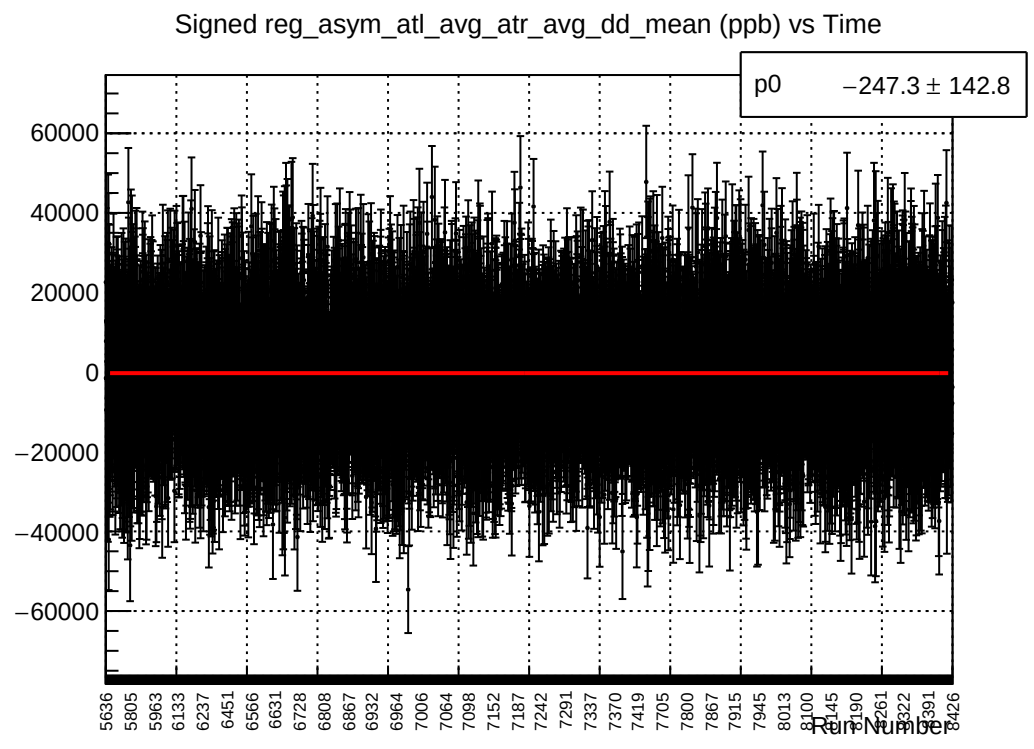

reg_asym_atl_dd_atr_dd_avg_rms (ppm) vs Time
p0
1560 ± 0.1257
4000
3500
3000
2500
2000
1500
1000
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

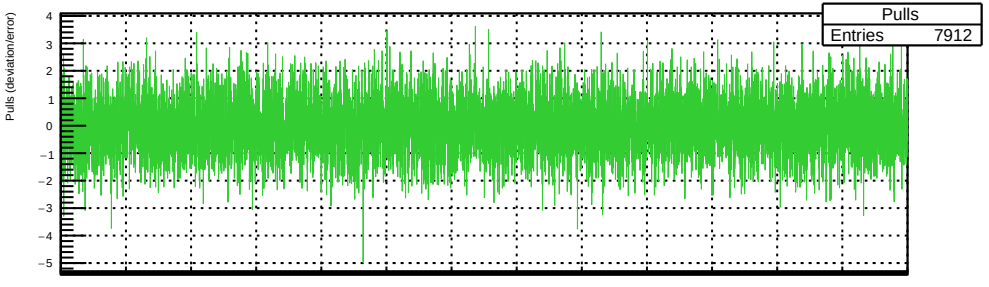

Signed reg_asym_atl_avg_atr_avg_avg_mean (ppb) vs Time
×10^3
p0 2080 ± 186.4
100
50
0
−50
−100
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

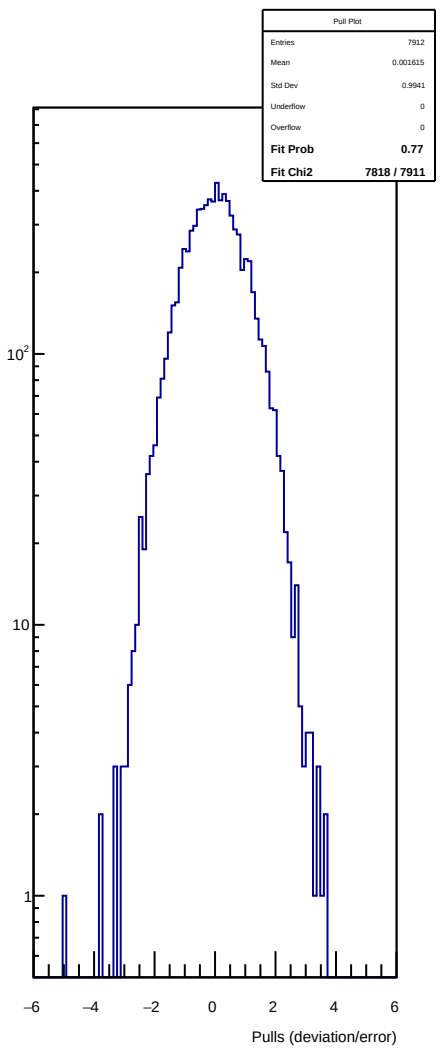

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

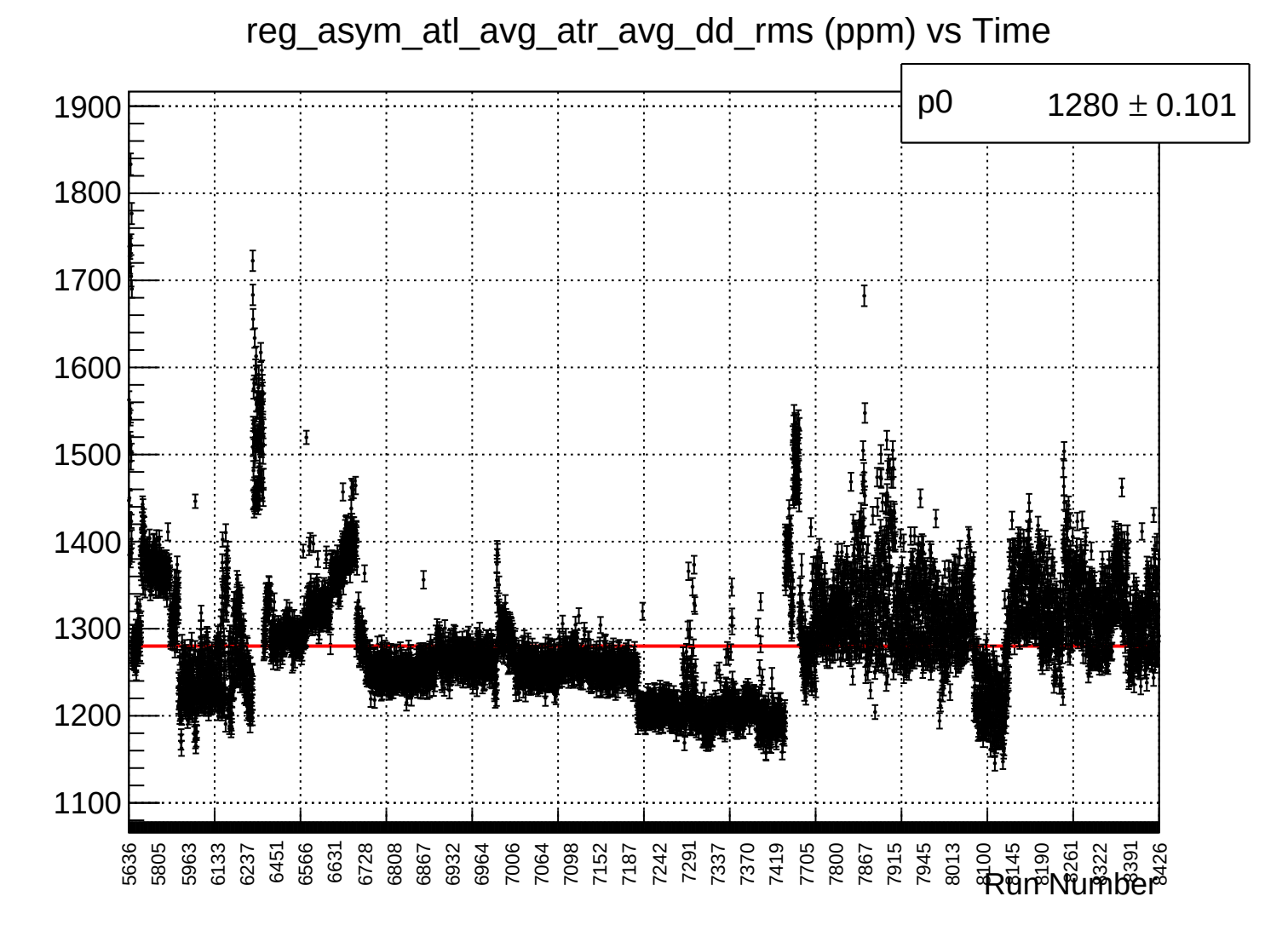

Pull Plot
Entries 7912
Mean −0.00166
Std Dev 0.9956
Underflow 0
Overflow 0
Fit Prob 0.70
Fit Chi2 7843 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

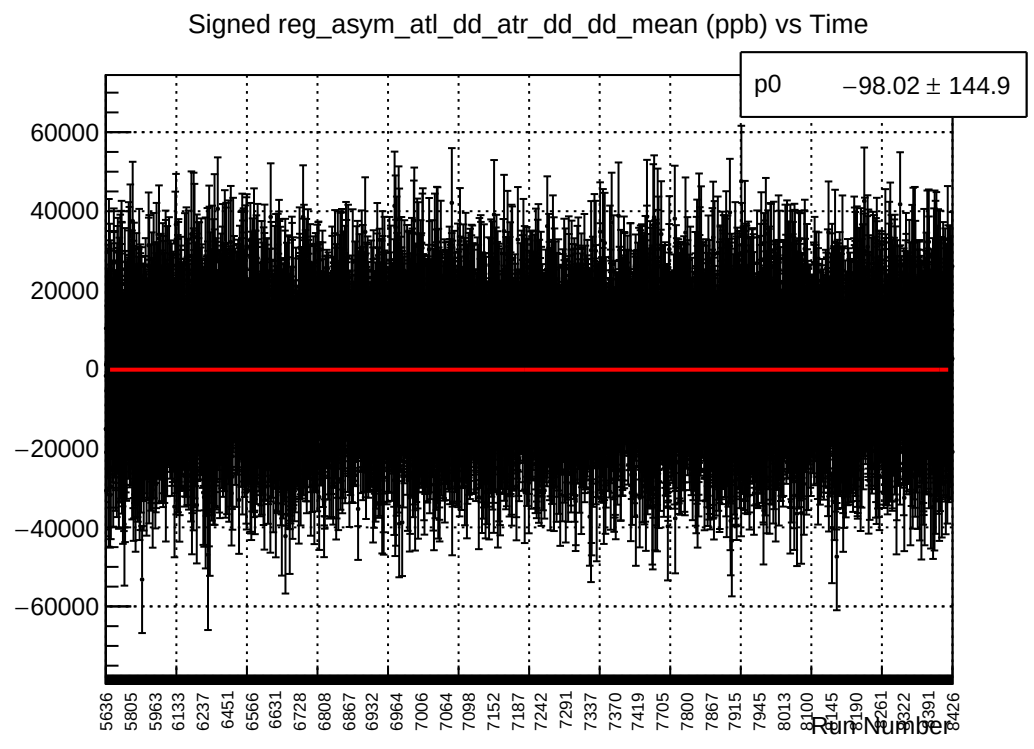

reg_asym_atl_avg_atr_avg_avg_rms (ppm) vs Time
p0 1623 ± 0.1318
5000
4500
4000
3500
3000
2500
2000
1500
1000
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

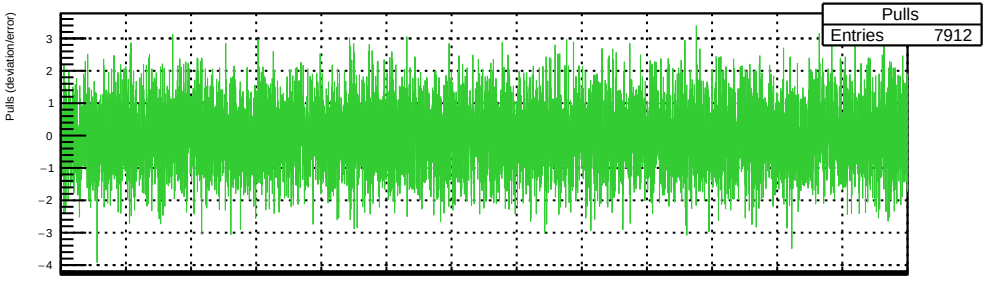

Signed reg_asym_atl_avg_atr_avg_dd_mean (ppb) vs Time
p0 −247.3 ± 142.8
60000
40000
20000
0
−20000
−40000
−60000
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

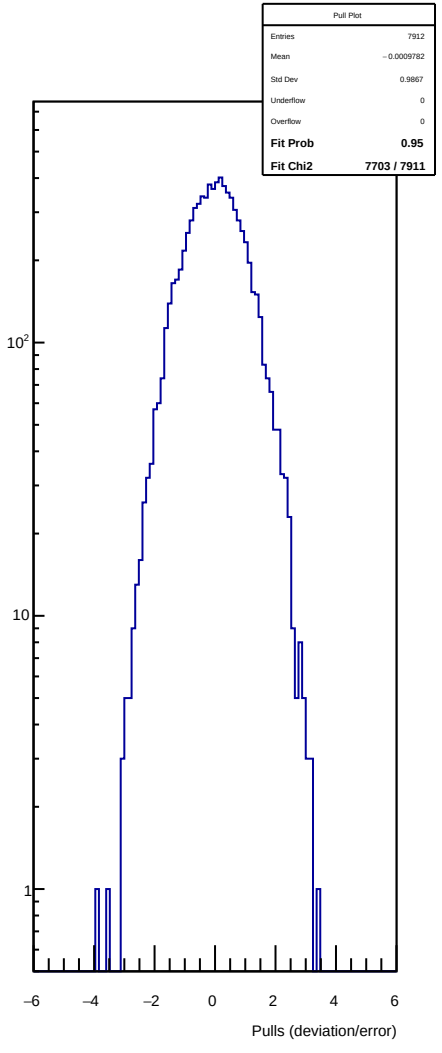

Pulls
Entries 7912
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4
−5

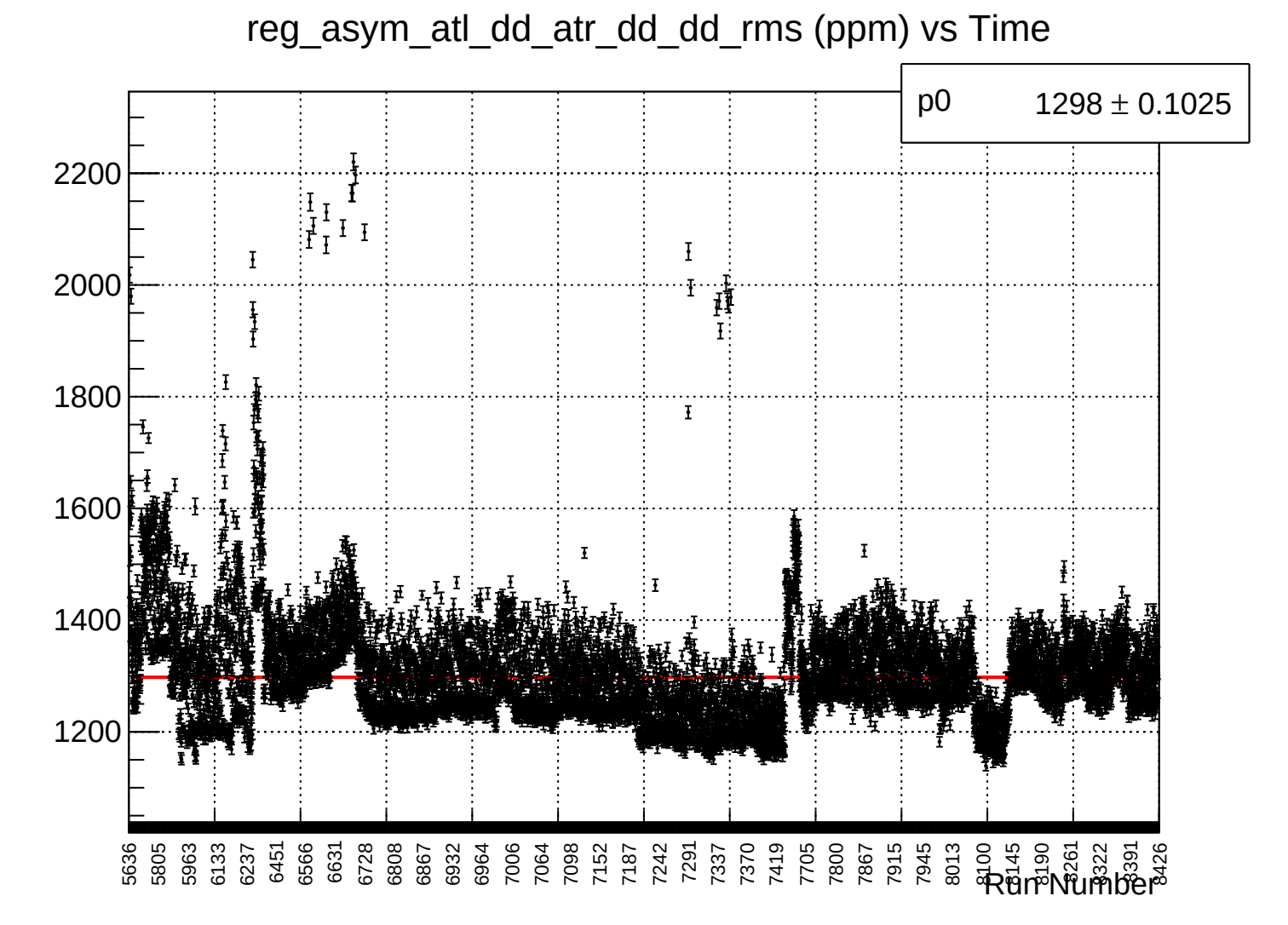

Pull Plot
Entries 7912
Mean 0.001615
Std Dev 0.9941
Underflow 0
Overflow 0
Fit Prob 0.77
Fit Chi2 7818 / 7911
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

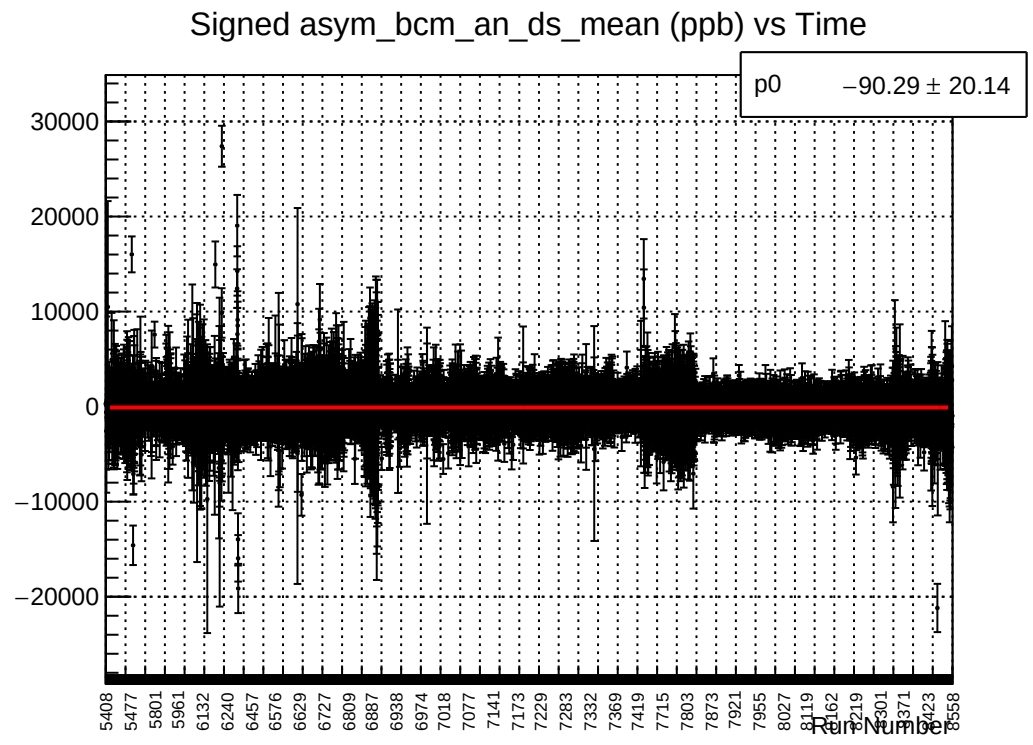

reg_asym_atl_avg_atr_avg_dd_rms (ppm) vs Time
p0 1280 ± 0.101
1900
1800
1700
1600
1500
1400
1300
1200
1100
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

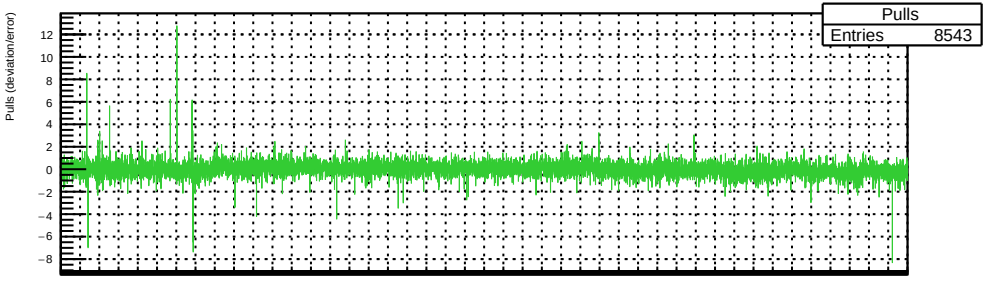

Signed reg_asym_atl_dd_atr_dd_dd_mean (ppb) vs Time
p0 −98.02 ± 144.9
60000
40000
20000
0
−20000
−40000
−60000
5636 5805 5963 6133 6237 6451 6566 6631 6728 6808 6867 6932 6964 7006 7064 7098 7152 7187 7242 7291 7337 7370 7419 7705 7800 7867 7915 7945 8013 8100 8145 8190 8261 8322 8391 8426
Run Number

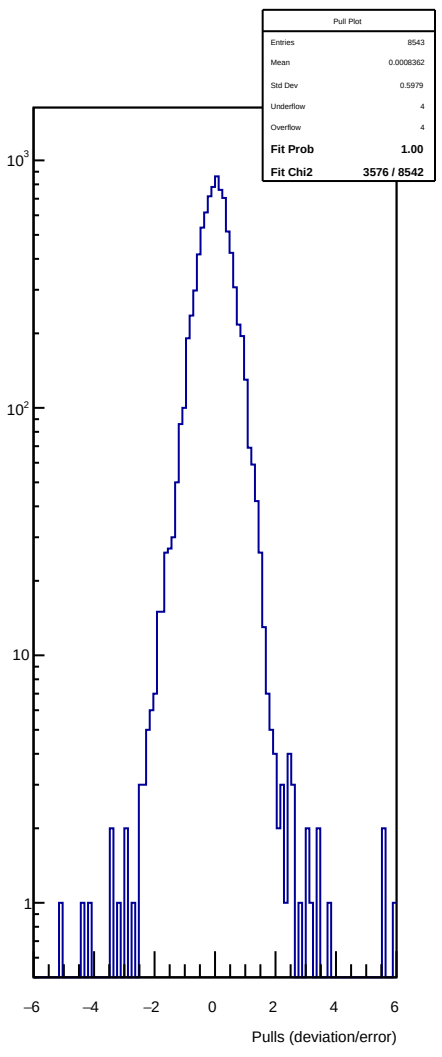

Pulls
Entries 7912
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

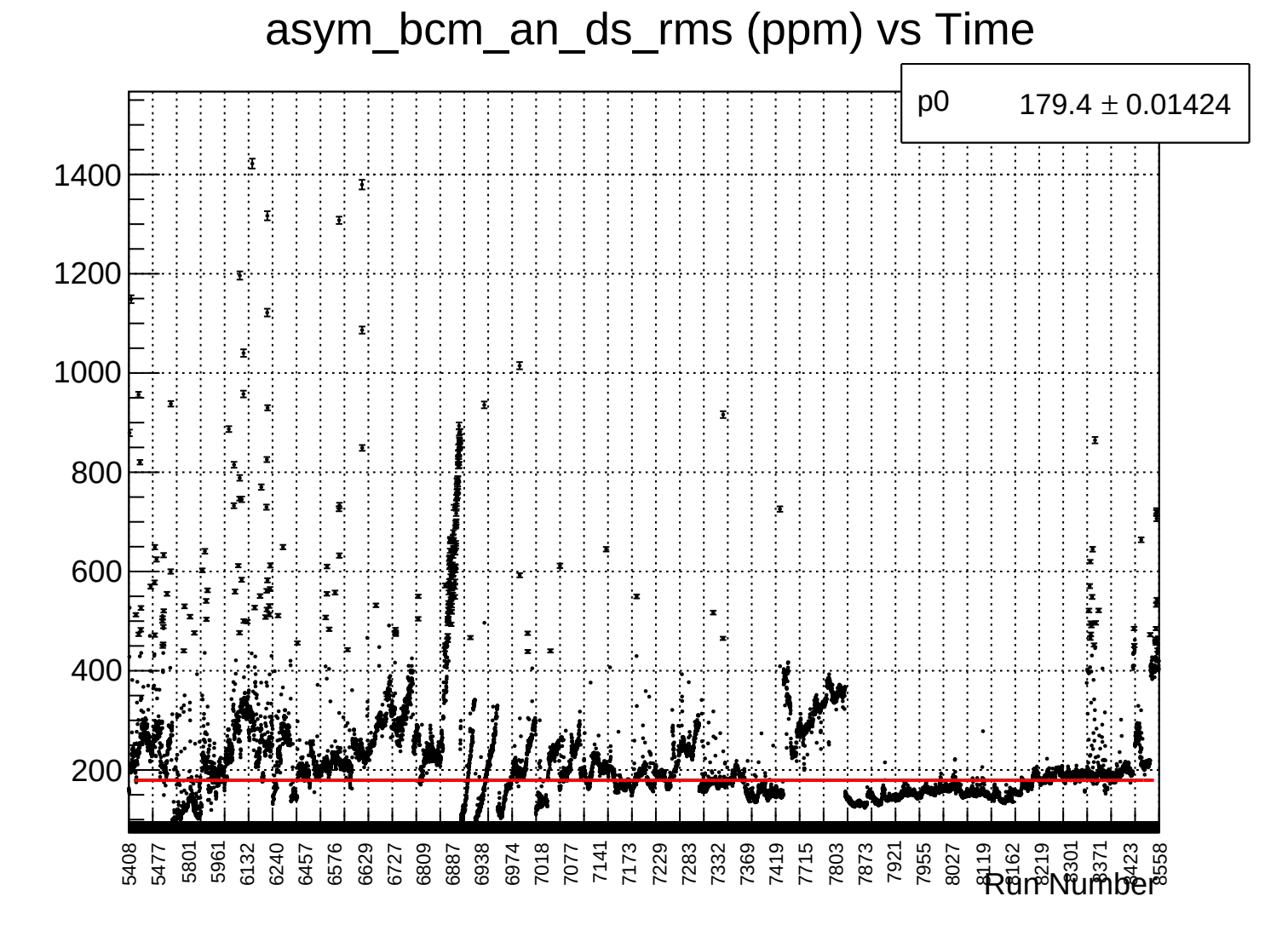

Pull Plot
Entries 7912
Mean −0.0009782
Std Dev 0.9867
Underflow 0
Overflow 0
Fit Prob 0.95
Fit Chi2 7703 / 7911
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

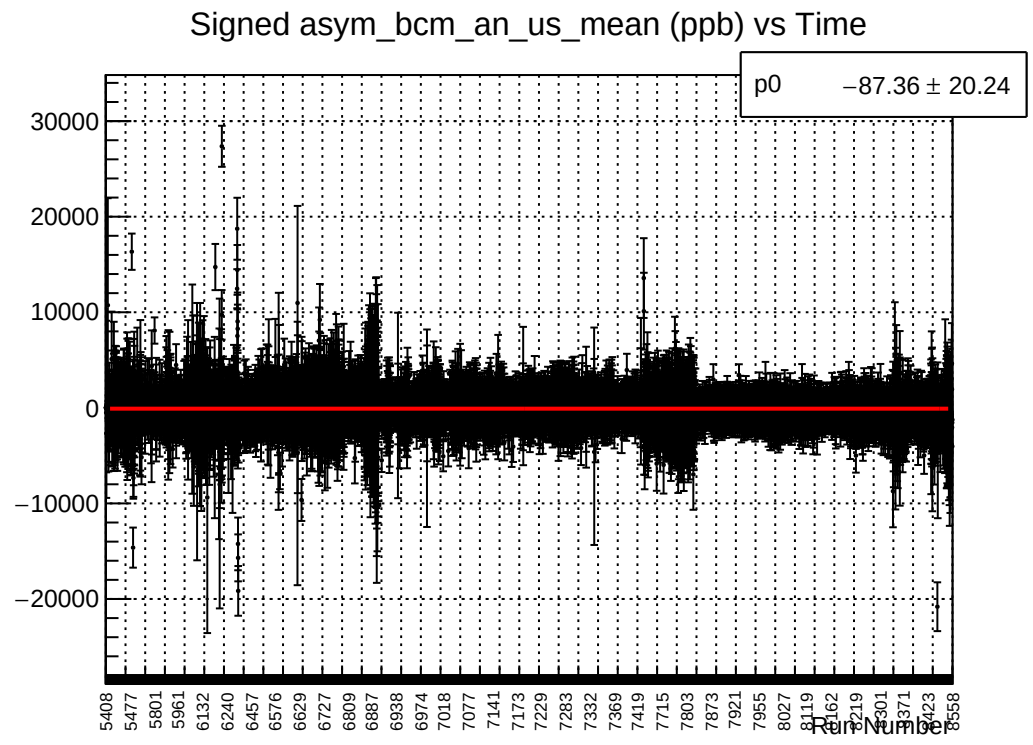

reg_asym_atl_dd_atr_dd_dd_rms (ppm) vs Time
p0 1298 ± 0.1025
2200
2000
1800
1600
1400
1200
5636
5805
5963
6133
6237
6451
6566
6631
6728
6808
6867
6932
6964
7006
7064
7098
7152
7187
7242
7291
7337
7370
7419
7705
7800
7867
7915
7945
8013
8100
8145
8190
8261
8322
8391
8426
Run Number

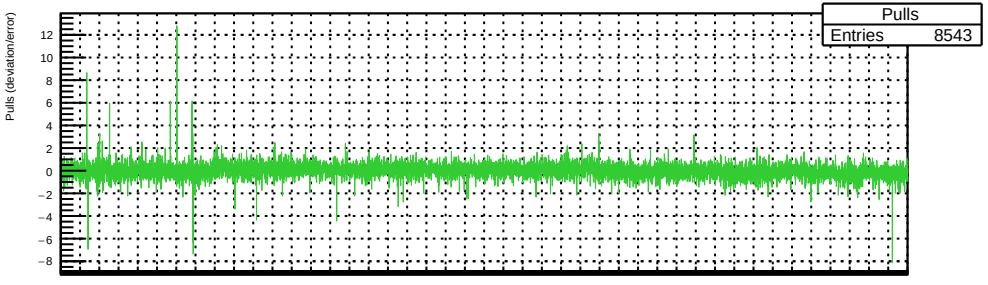

Signed asym_bcm_an_ds_mean (ppb) vs Time
p0 −90.29 ± 20.14
30000
20000
10000
0
−10000
−20000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

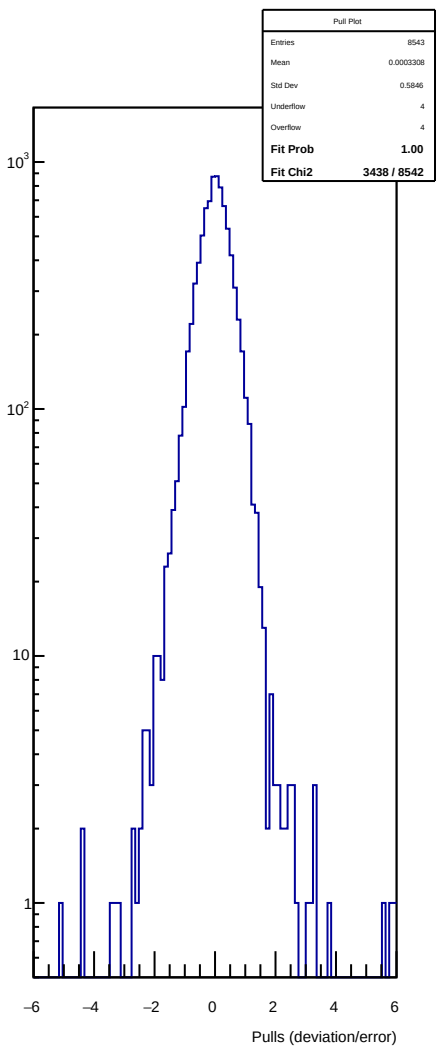

Pulls
Entries 8543
Pulls (deviation/error)
12
10
8
6
4
2
0
−2
−4
−6
−8

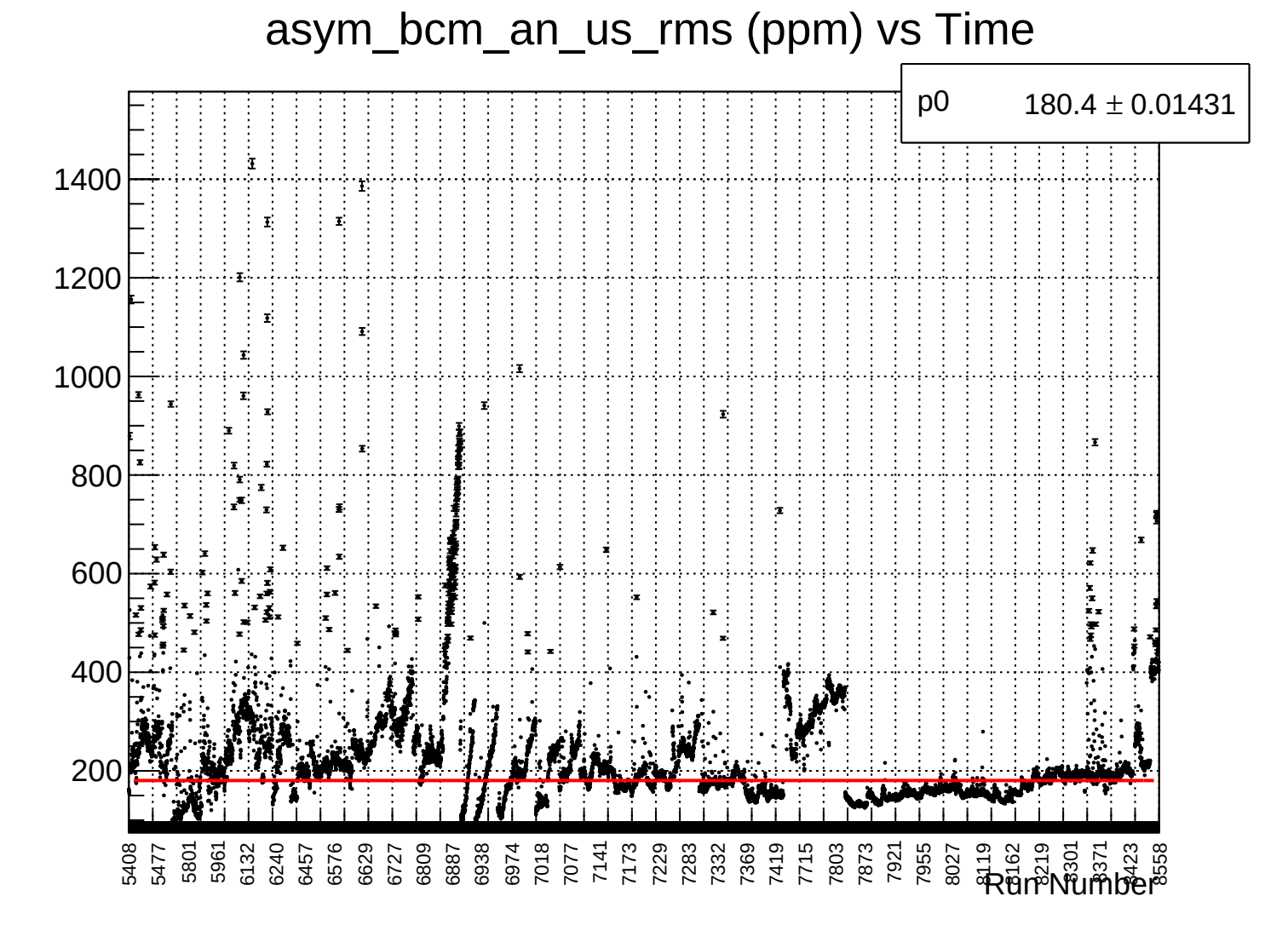

Pull Plot
Entries 8543
Mean 0.0008362
Std Dev 0.5979
Underflow 4
Overflow 4
Fit Prob 1.00
Fit Chi2 3576 / 8542
10^3
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

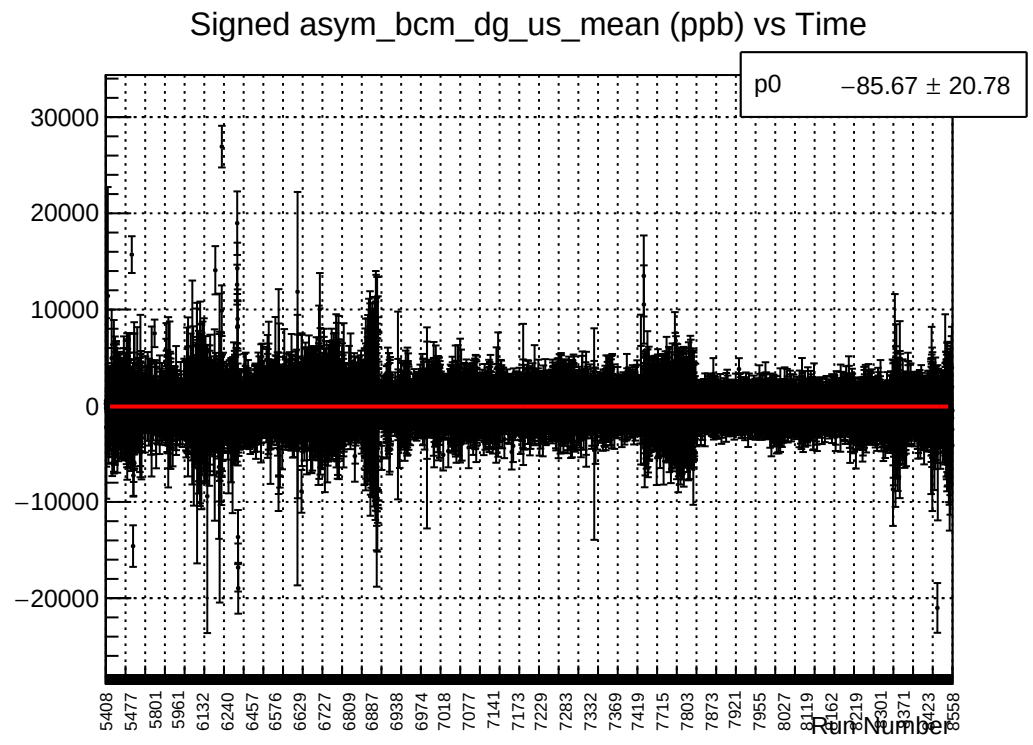

asym_bcm_an_ds_rms (ppm) vs Time
p0 179.4 ± 0.01424
1400
1200
1000
800
600
400
200
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

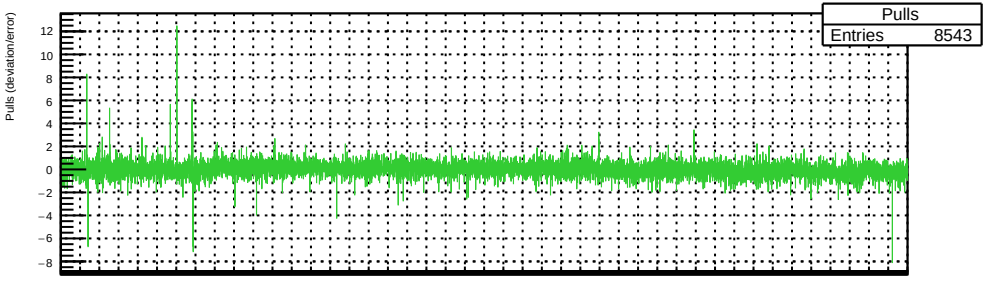

Signed asym_bcm_an_us_mean (ppb) vs Time
p0 −87.36 ± 20.24
30000
20000
10000
0
−10000
−20000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

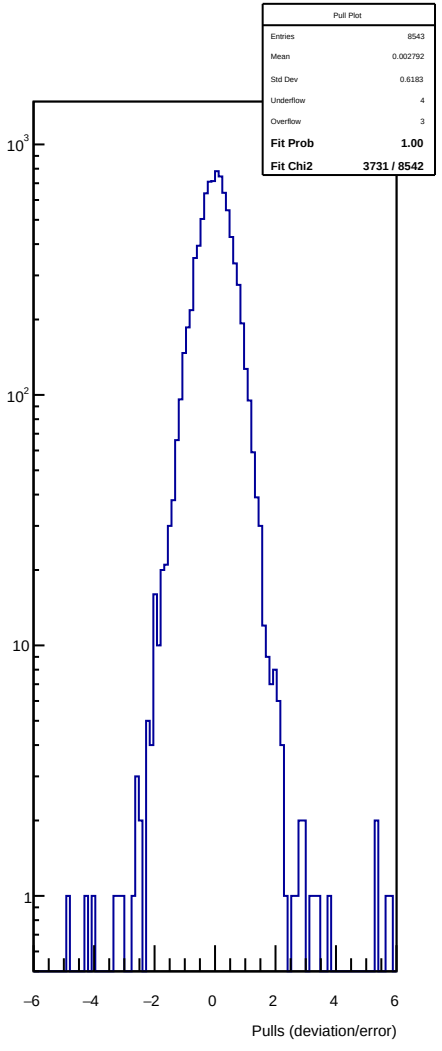

Pulls
Entries 8543
Pulls (deviation/error)
12
10
8
6
4
2
0
−2
−4
−6
−8

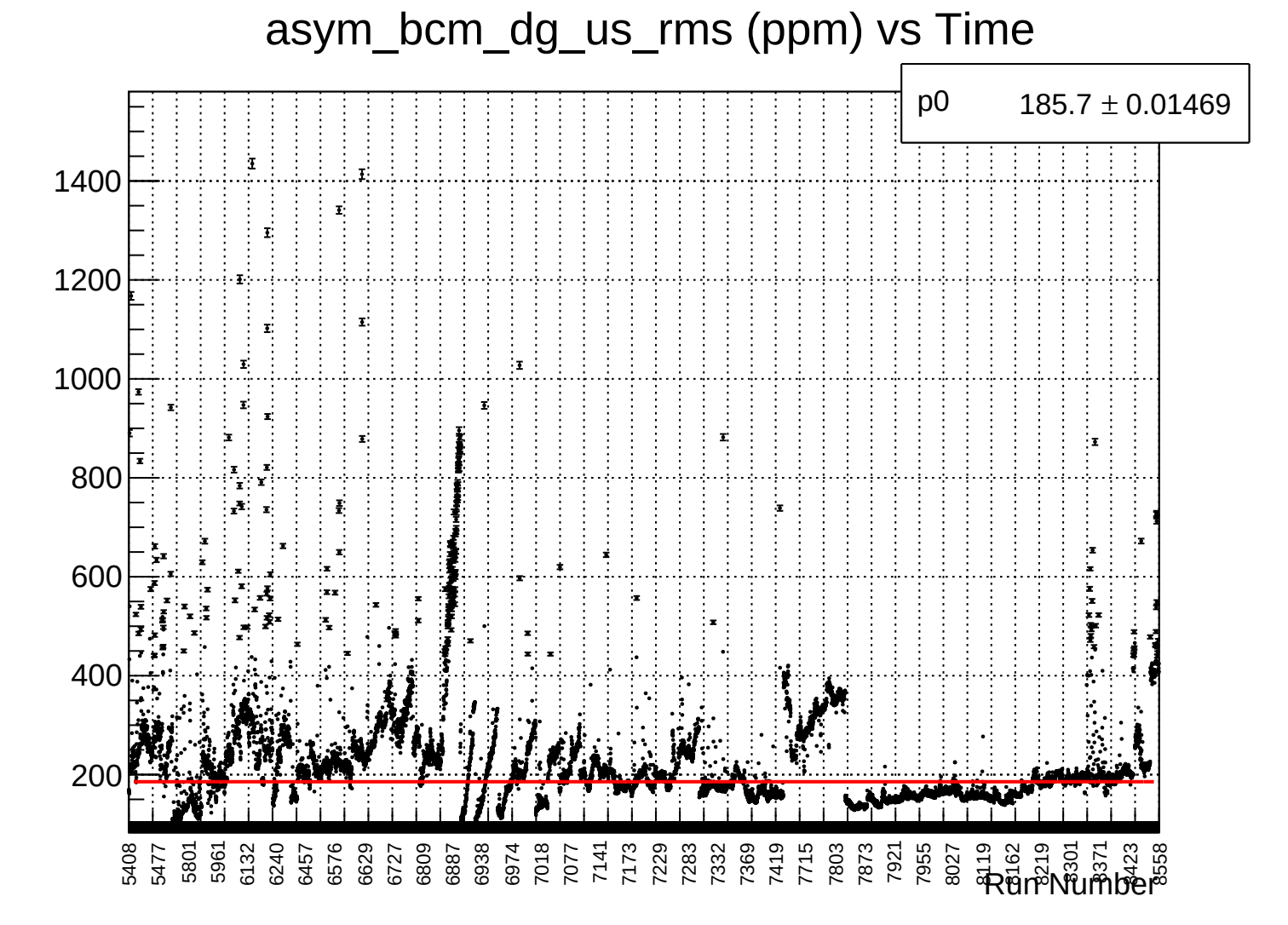

Pull Plot
Entries 8543
Mean 0.0003308
Std Dev 0.5846
Underflow 4
Overflow 4
Fit Prob 1.00
Fit Chi2 3438 / 8542
10^3
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

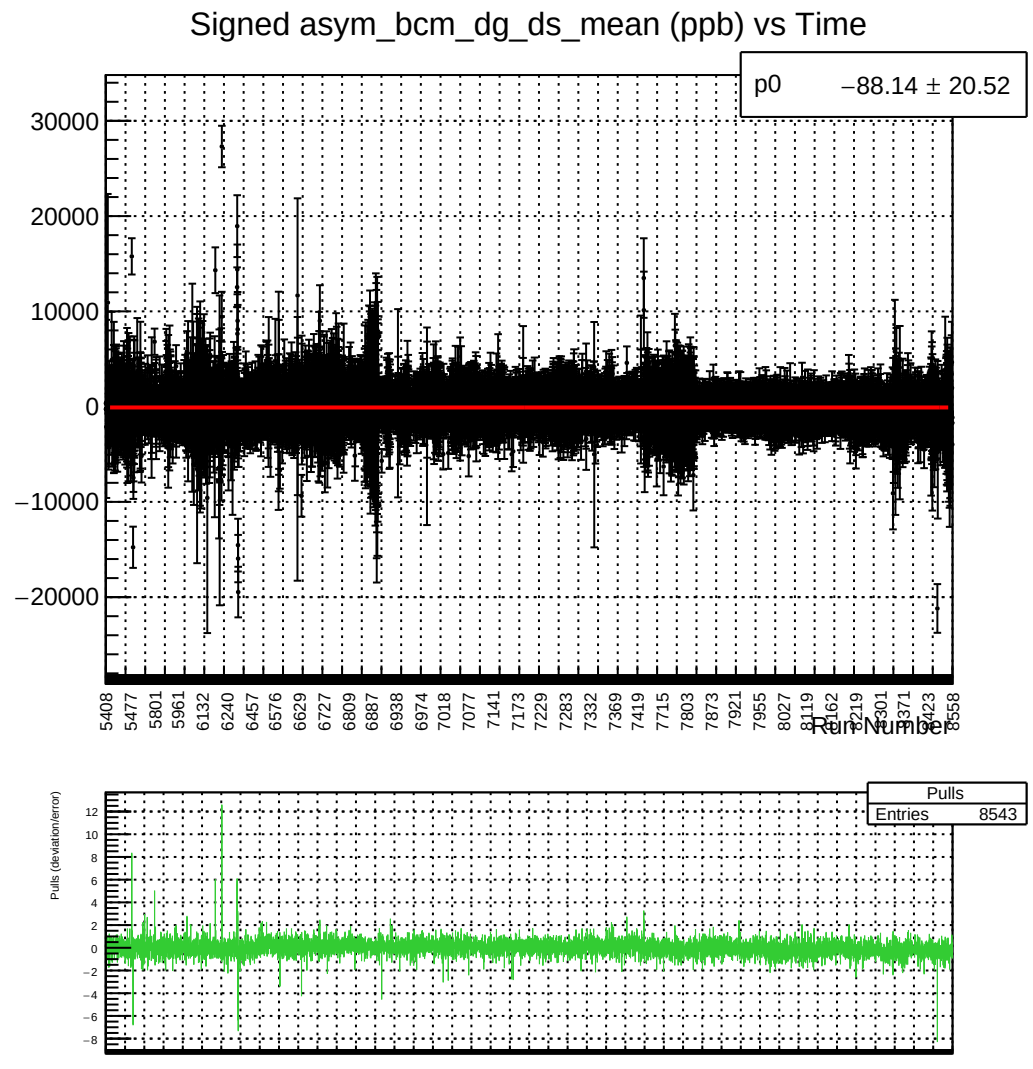

asym_bcm_an_us_rms (ppm) vs Time
p0
180.4 ± 0.01431
1400
1200
1000
800
600
400
200
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

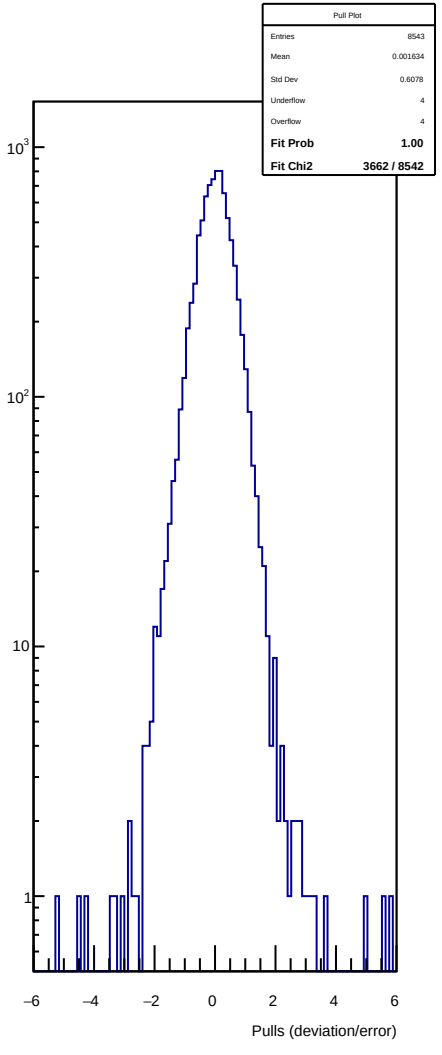

Signed asym_bcm_dg_us_mean (ppb) vs Time
p0 −85.67 ± 20.78
30000
20000
10000
0
−10000
−20000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

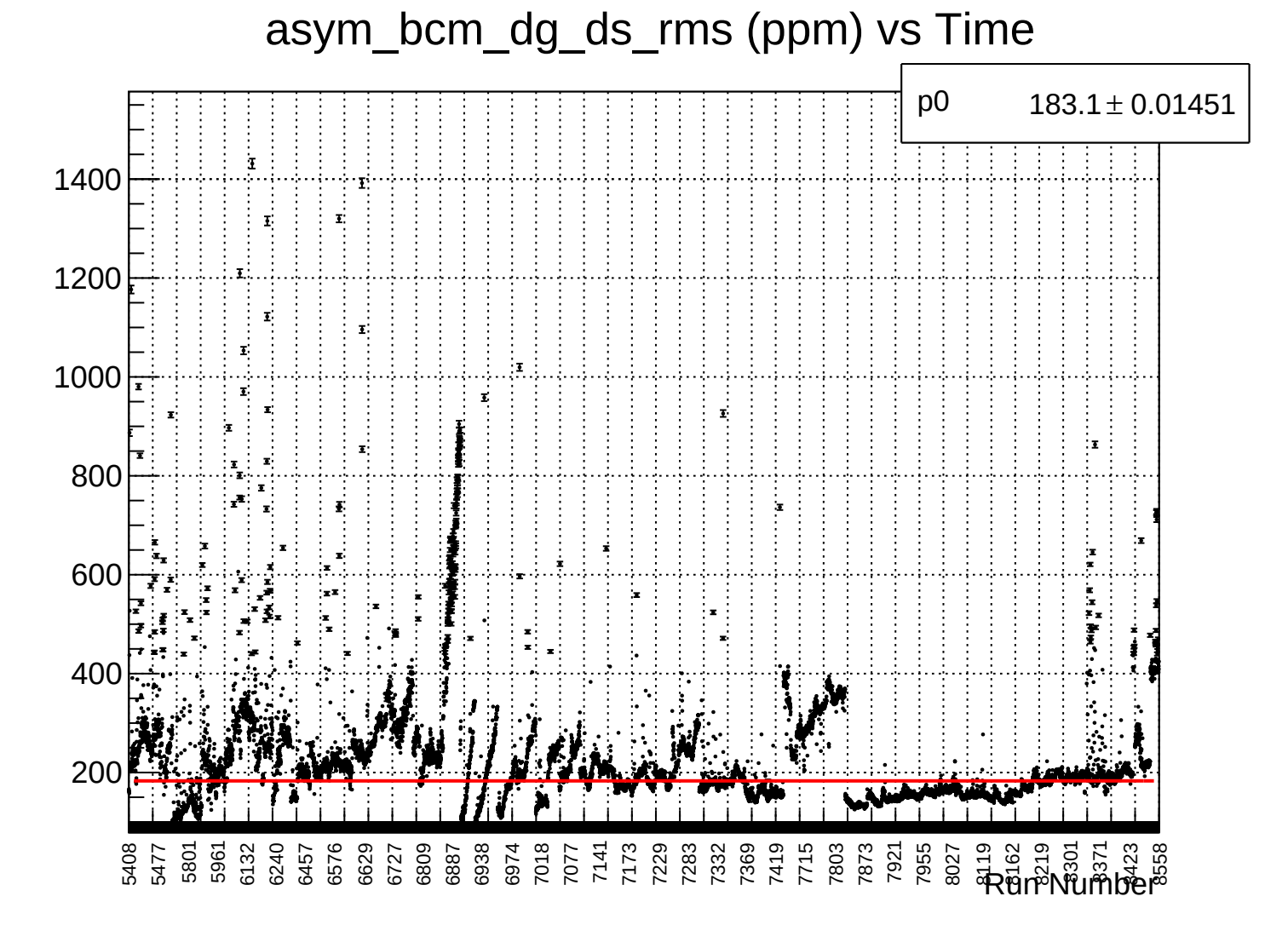

Pulls
Entries 8543
Pulls (deviation/error)
12
10
8
6
4
2
0
−2
−4
−6
−8

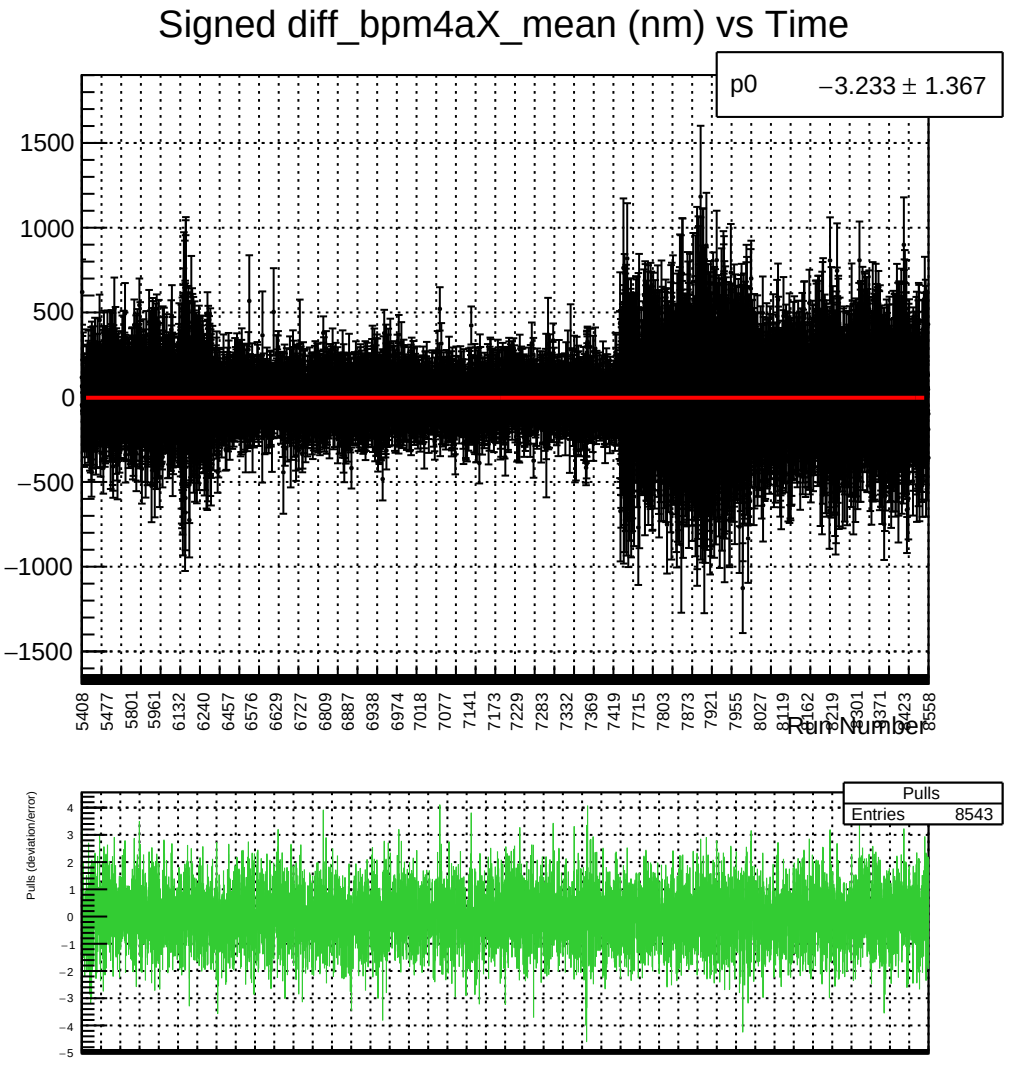

Pull Plot
Entries 8543
Mean 0.002792
Std Dev 0.6183
Underflow 4
Overflow 3
Fit Prob 1.00
Fit Chi2 3731 / 8542
10³
10²
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

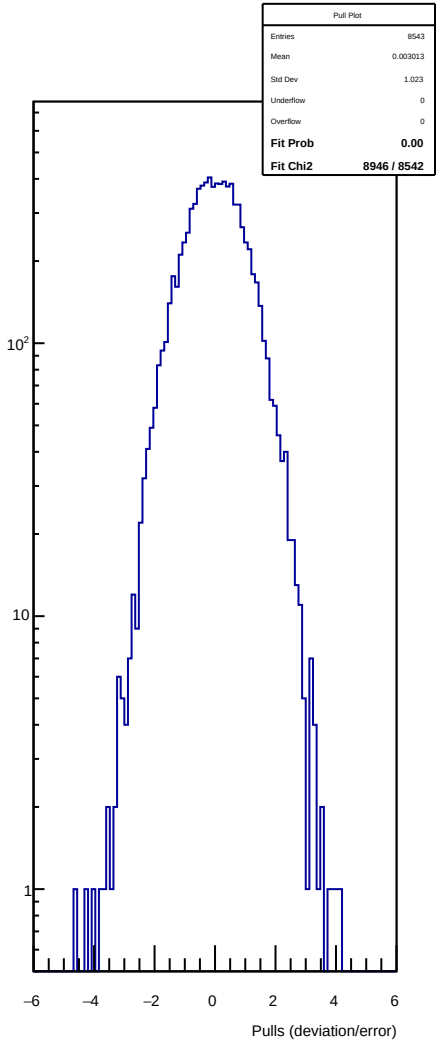

asym_bcm_dg_us_rms (ppm) vs Time
p0
185.7 ± 0.01469
1400
1200
1000
800
600
400
200
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

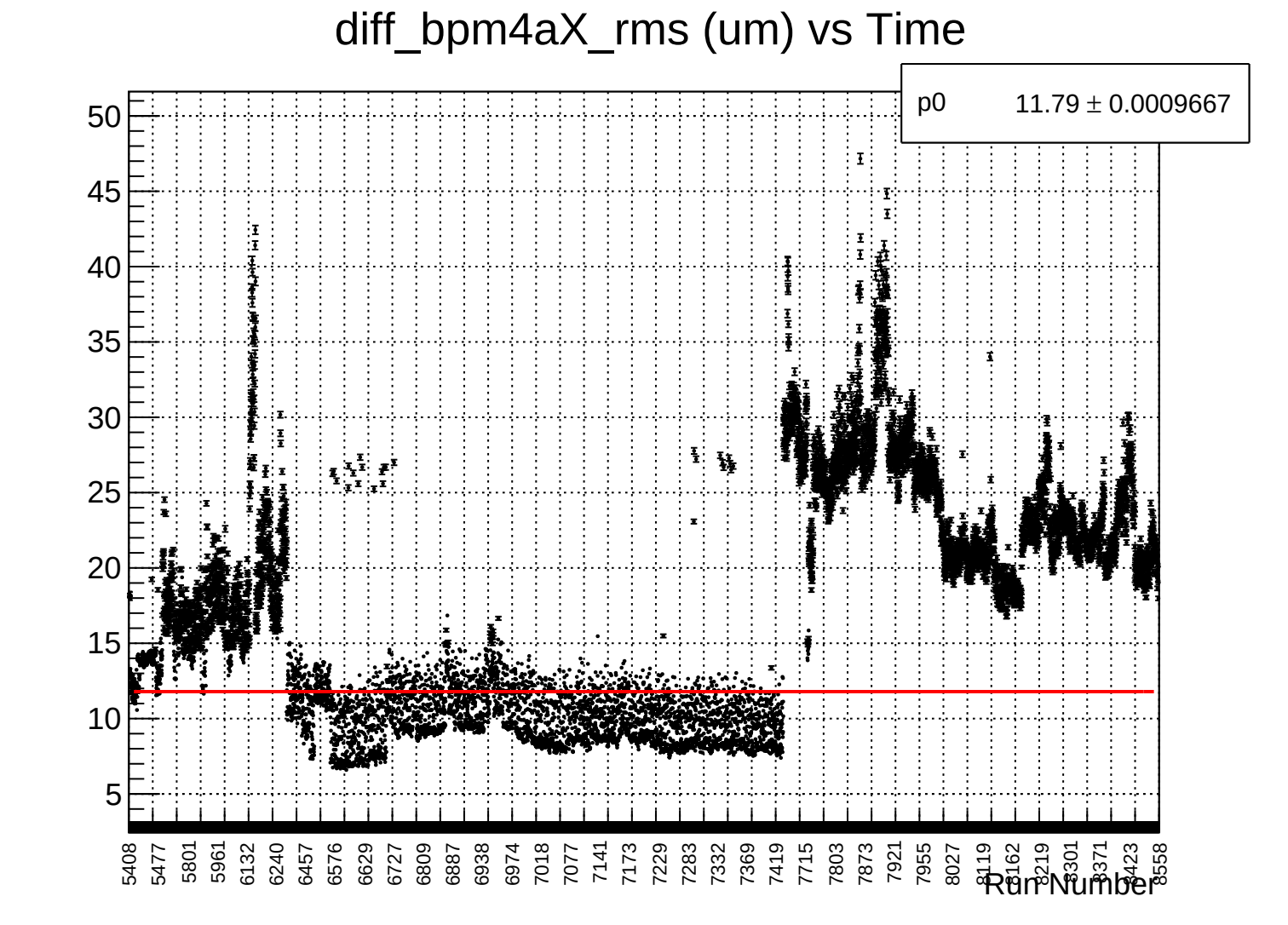

Signed asym_bcm_dg_ds_mean (ppb) vs Time
p0 −88.14 ± 20.52
30000
20000
10000
0
−10000
−20000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number
Pulls
Entries 8543
Pulls (deviation/error)
12
10
8
6
4
2
0
−2
−4
−6
−8

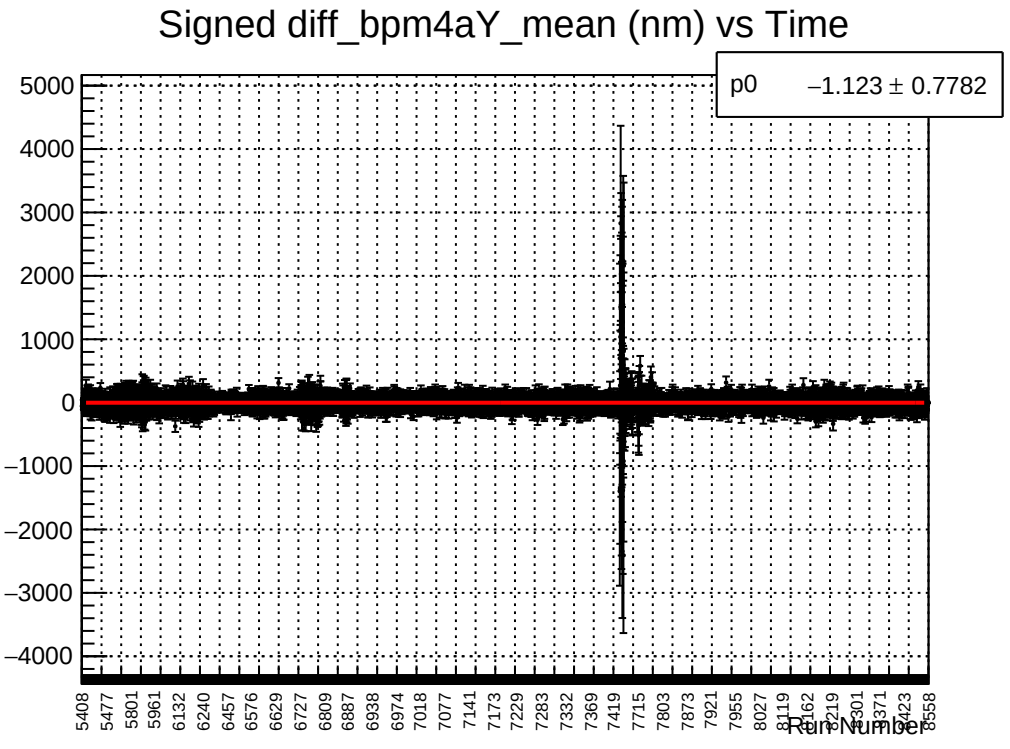

Pull Plot
Entries 8543
Mean 0.001634
Std Dev 0.6078
Underflow 4
Overflow 4
Fit Prob 1.00
Fit Chi2 3662 / 8542
10^3
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

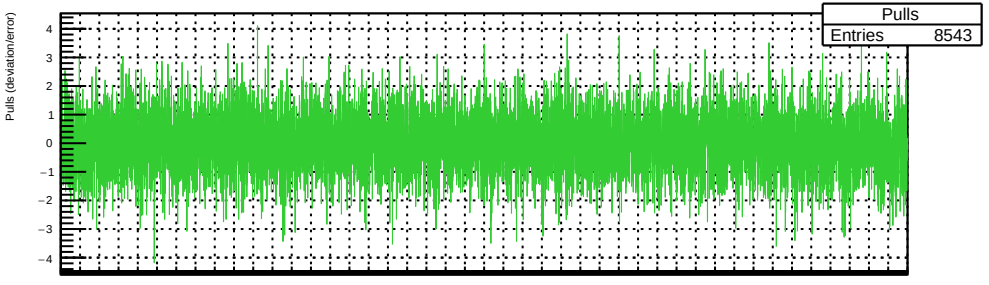

asym_bcm_dg_ds_rms (ppm) vs Time
p0
183.1 ± 0.01451
1400
1200
1000
800
600
400
200
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

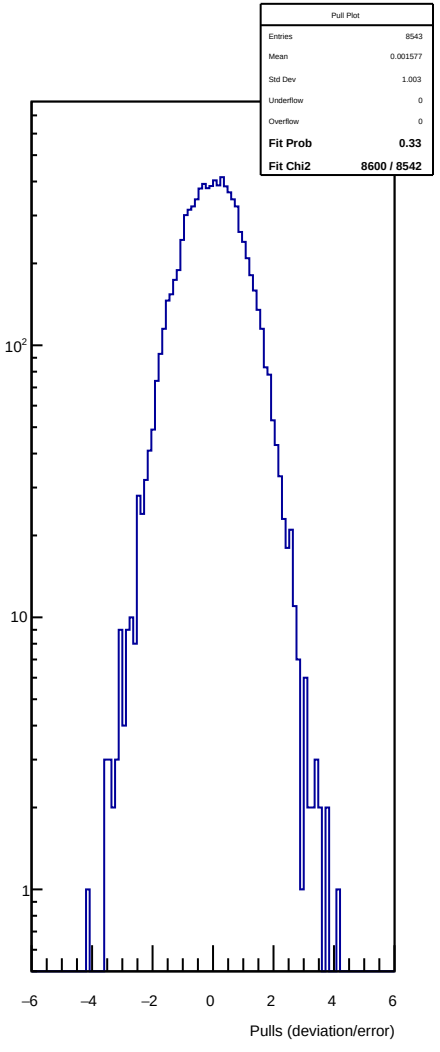

Signed diff_bpm4aX_mean (nm) vs Time
p0 −3.233 ± 1.367
1500
1000
500
0
−500
−1000
−1500
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number
Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4
−5

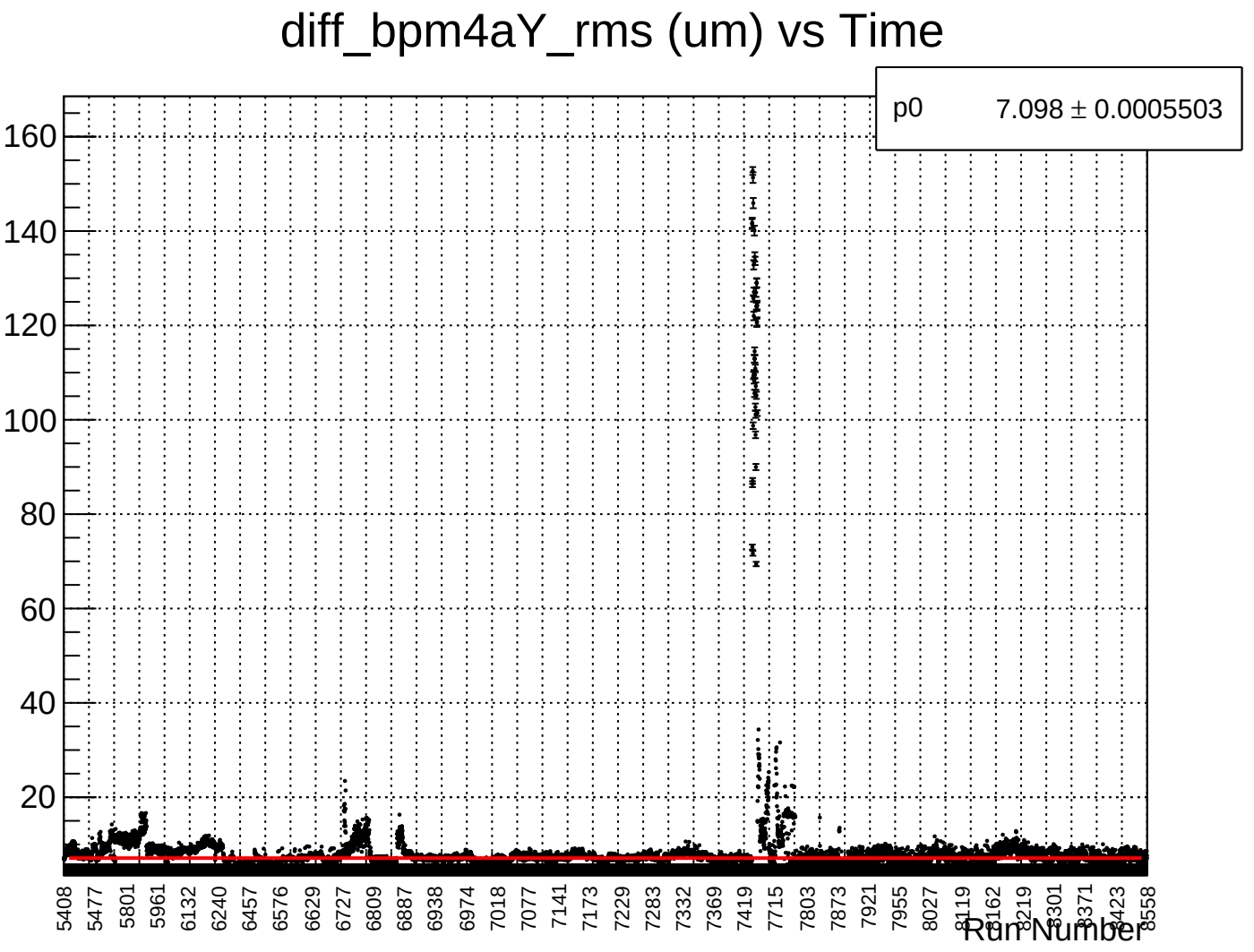

Pull Plot
Entries 8543
Mean 0.003013
Std Dev 1.023
Underflow 0
Overflow 0
Fit Prob 0.00
Fit Chi2 8946 / 8542
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

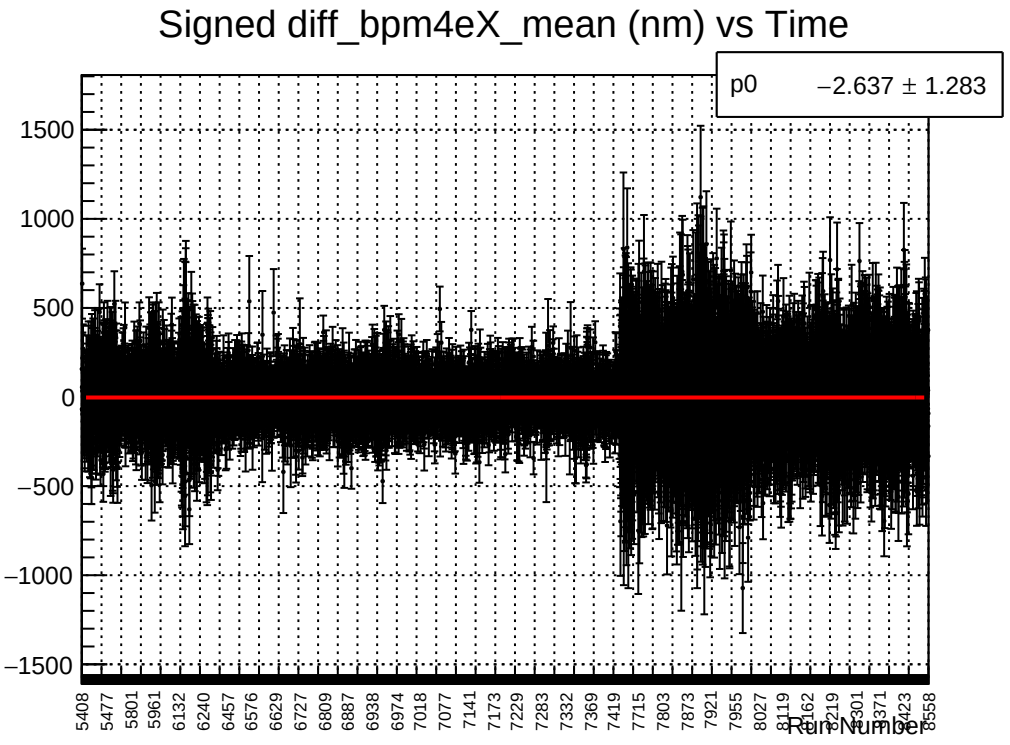

diff_bpm4aX_rms (um) vs Time
p0 11.79 ± 0.0009667
50
45
40
35
30
25
20
15
10
5
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

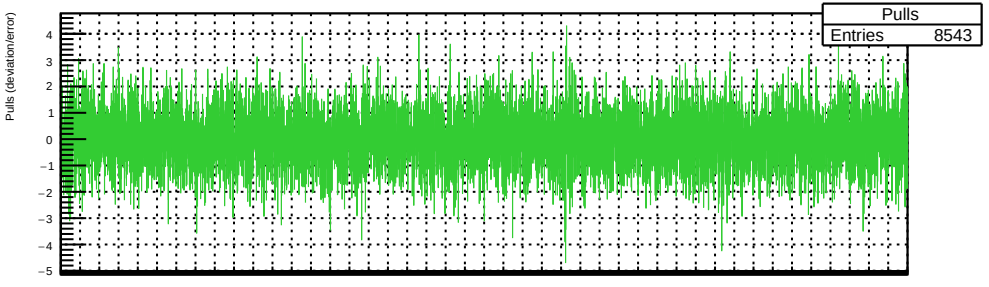

Signed diff_bpm4aY_mean (nm) vs Time
p0 −1.123 ± 0.7782
5000
4000
3000
2000
1000
0
−1000
−2000
−3000
−4000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

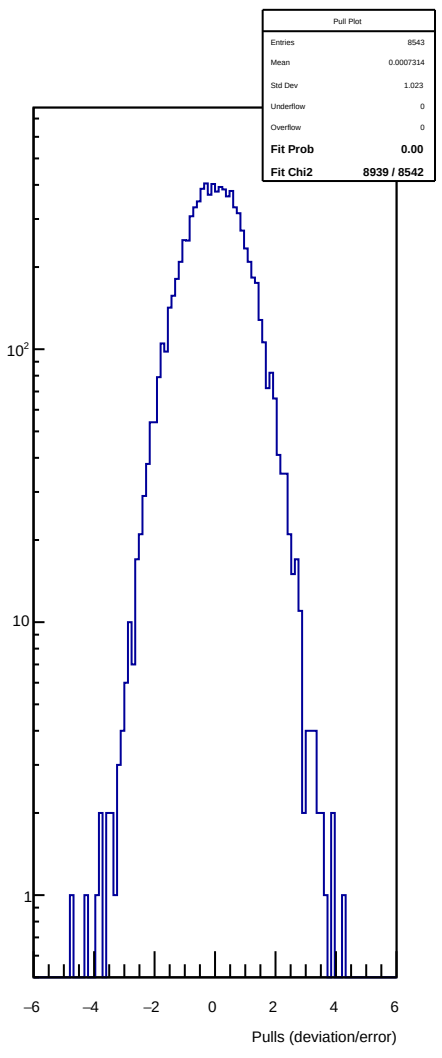

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

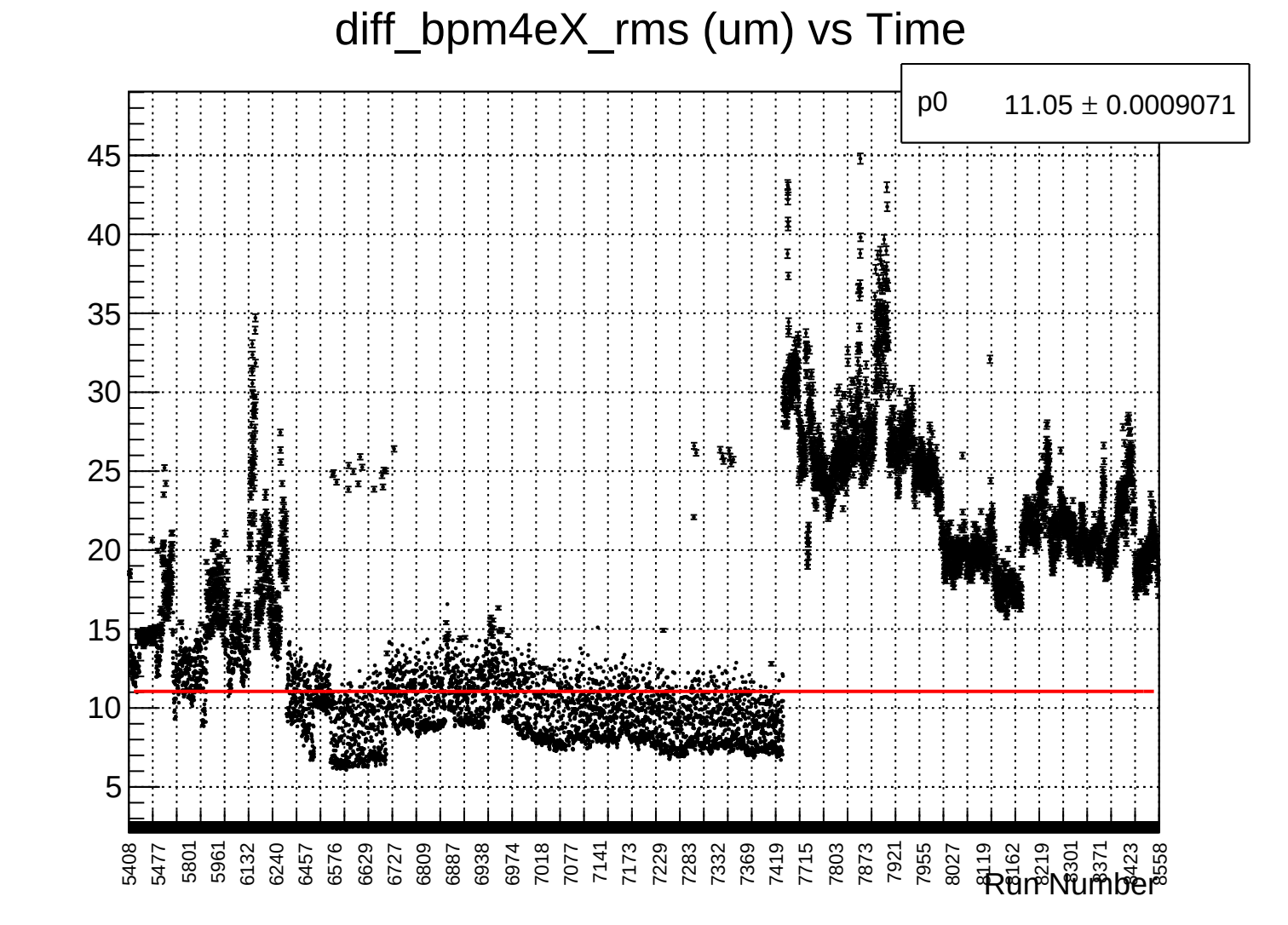

Pull Plot
Entries 8543
Mean 0.001577
Std Dev 1.003
Underflow 0
Overflow 0
Fit Prob 0.33
Fit Chi2 8600 / 8542
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

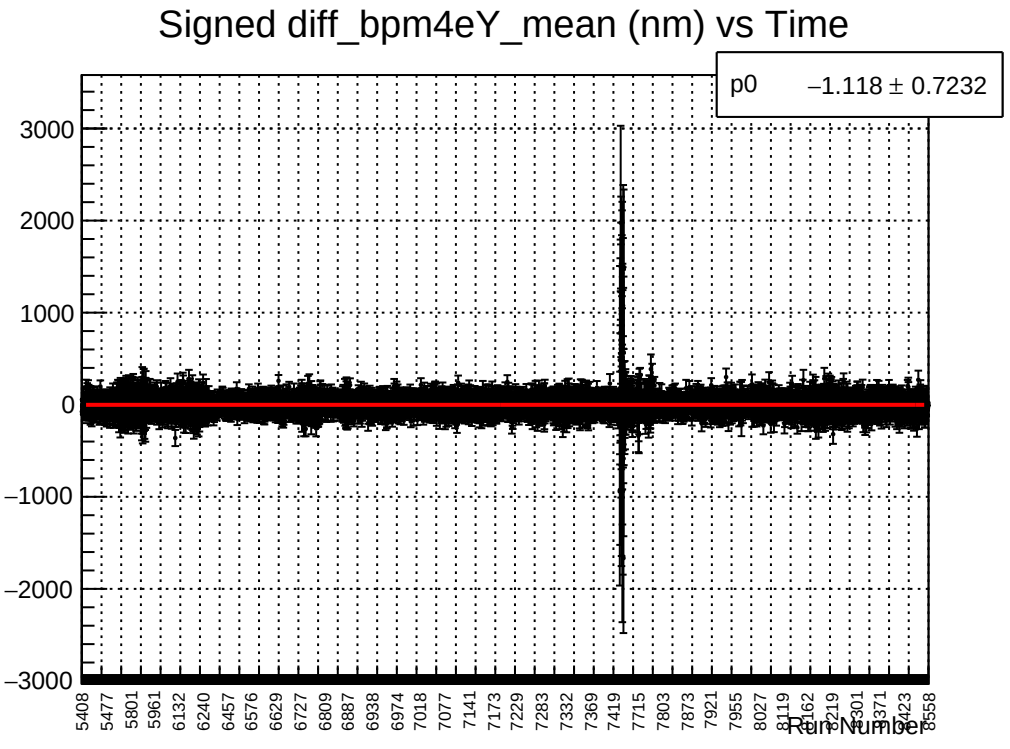

diff_bpm4aY_rms (um) vs Time
p0 7.098 ± 0.0005503
160
140
120
100
80
60
40
20
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

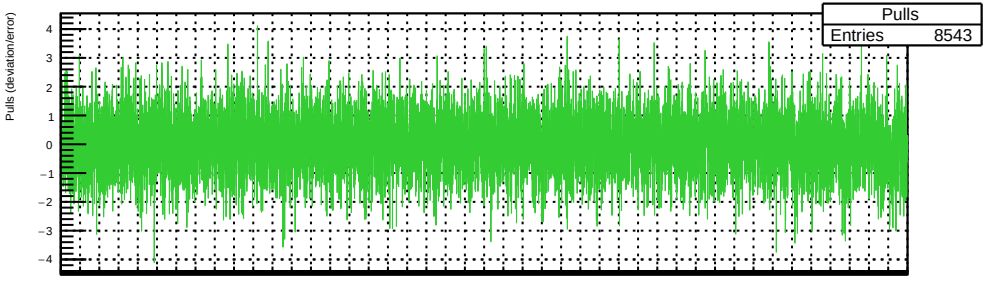

Signed diff_bpm4eX_mean (nm) vs Time
p0 −2.637 ± 1.283
1500
1000
500
0
−500
−1000
−1500
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

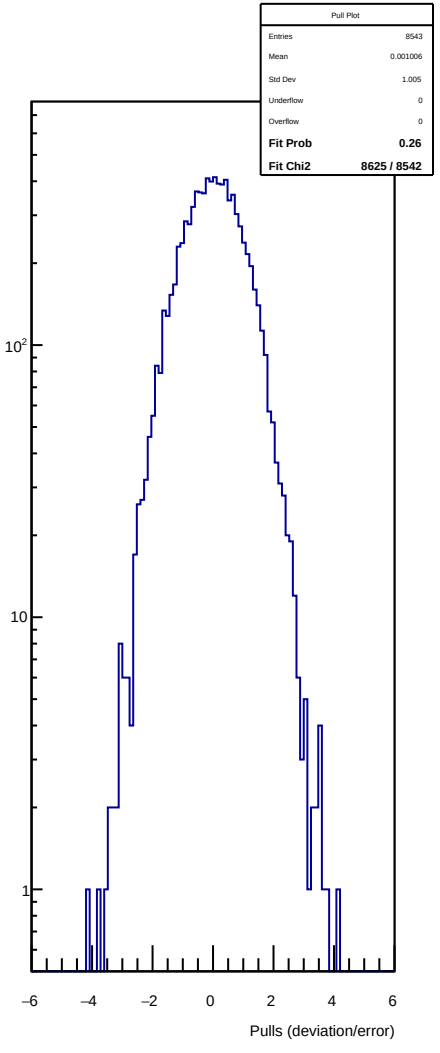

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4
−5

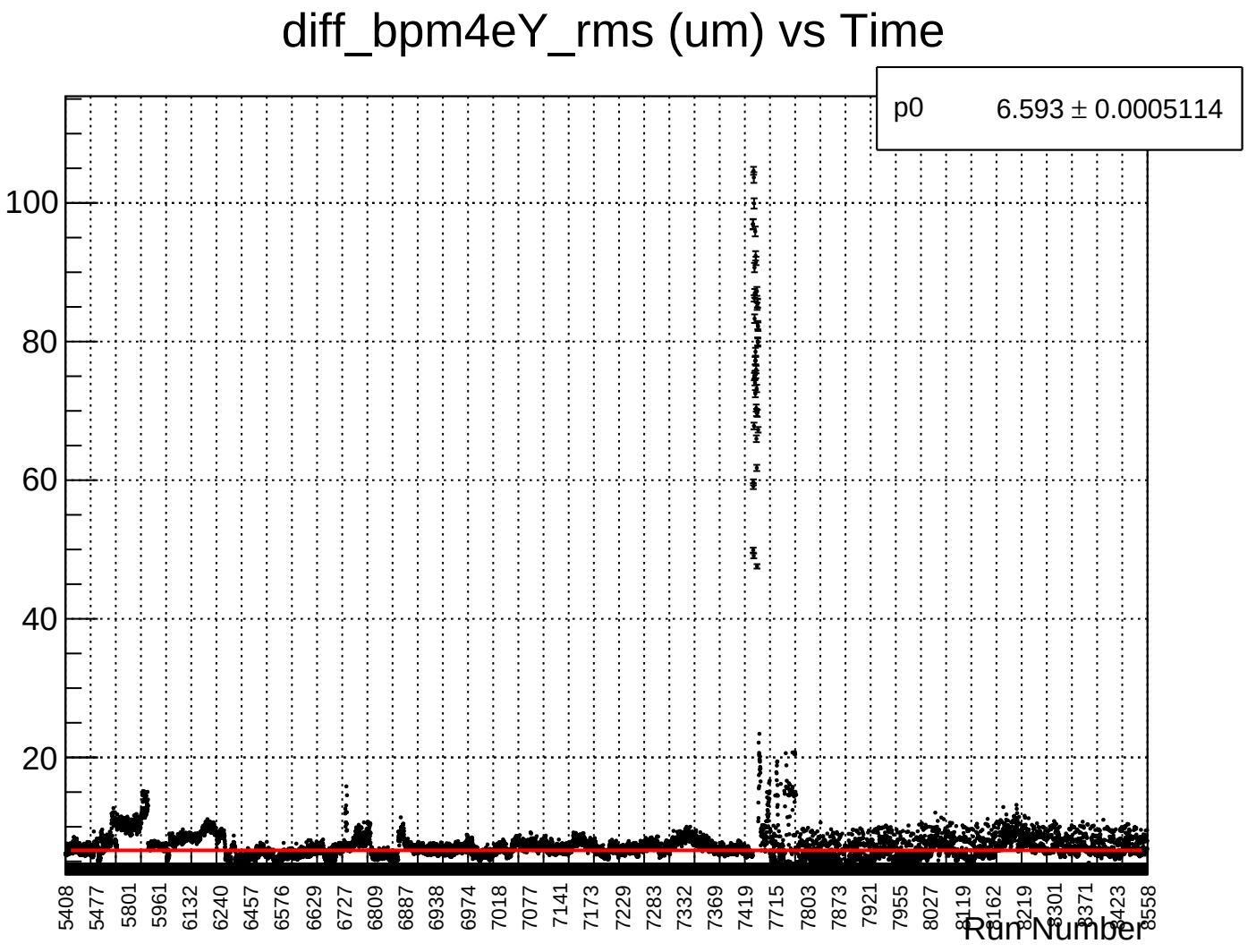

Pull Plot
Entries 8543
Mean 0.0007314
Std Dev 1.023
Underflow 0
Overflow 0
Fit Prob 0.00
Fit Chi2 8939 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

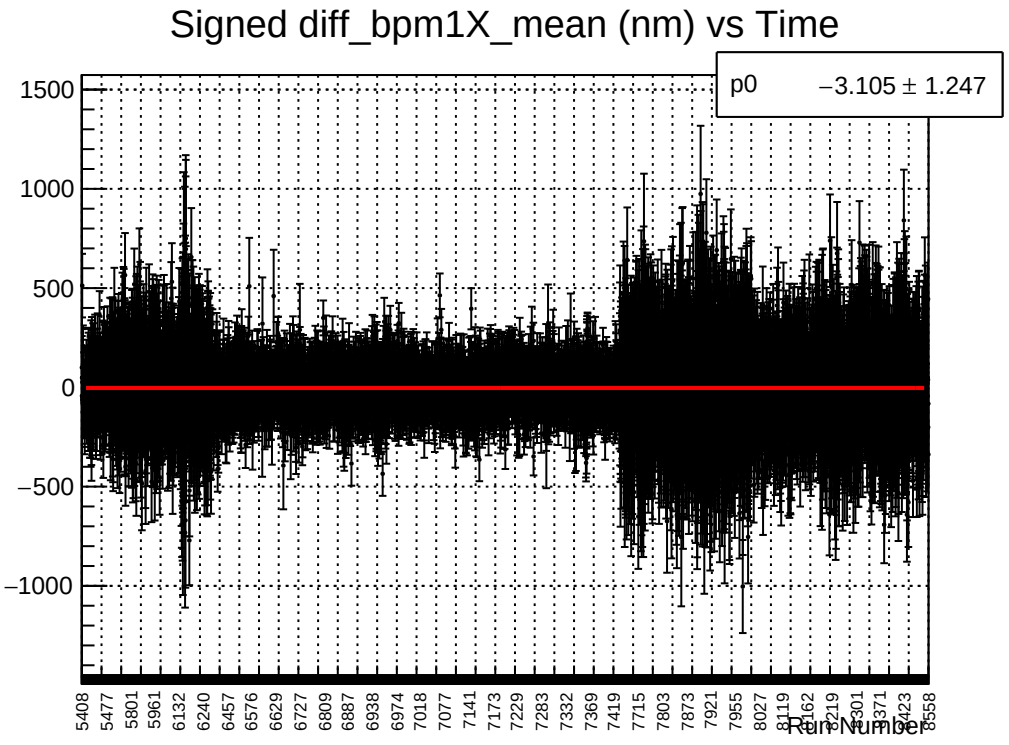

diff_bpm4eX_rms (um) vs Time
p0 11.05 ± 0.0009071
45
40
35
30
25
20
15
10
5
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

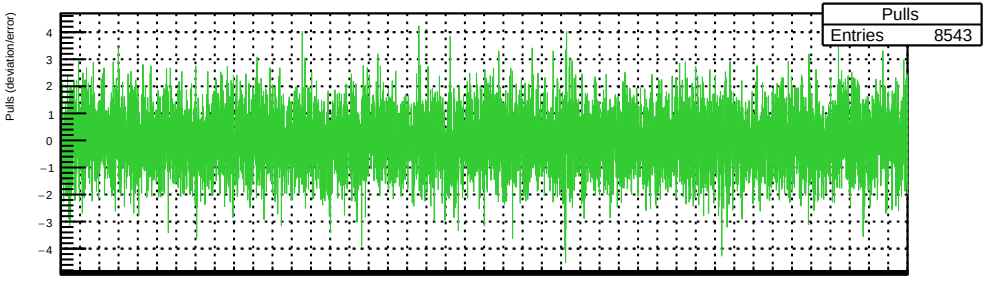

Signed diff_bpm4eY_mean (nm) vs Time
p0 −1.118 ± 0.7232
3000
2000
1000
0
−1000
−2000
−3000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

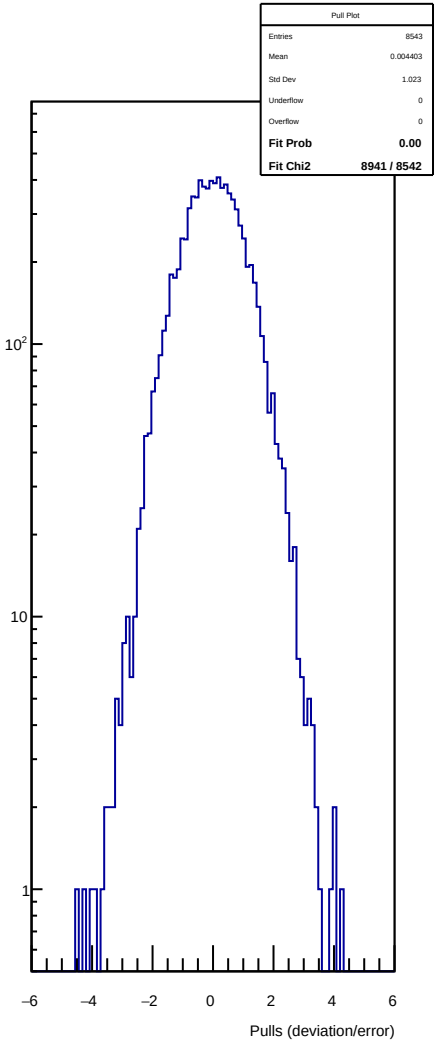

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

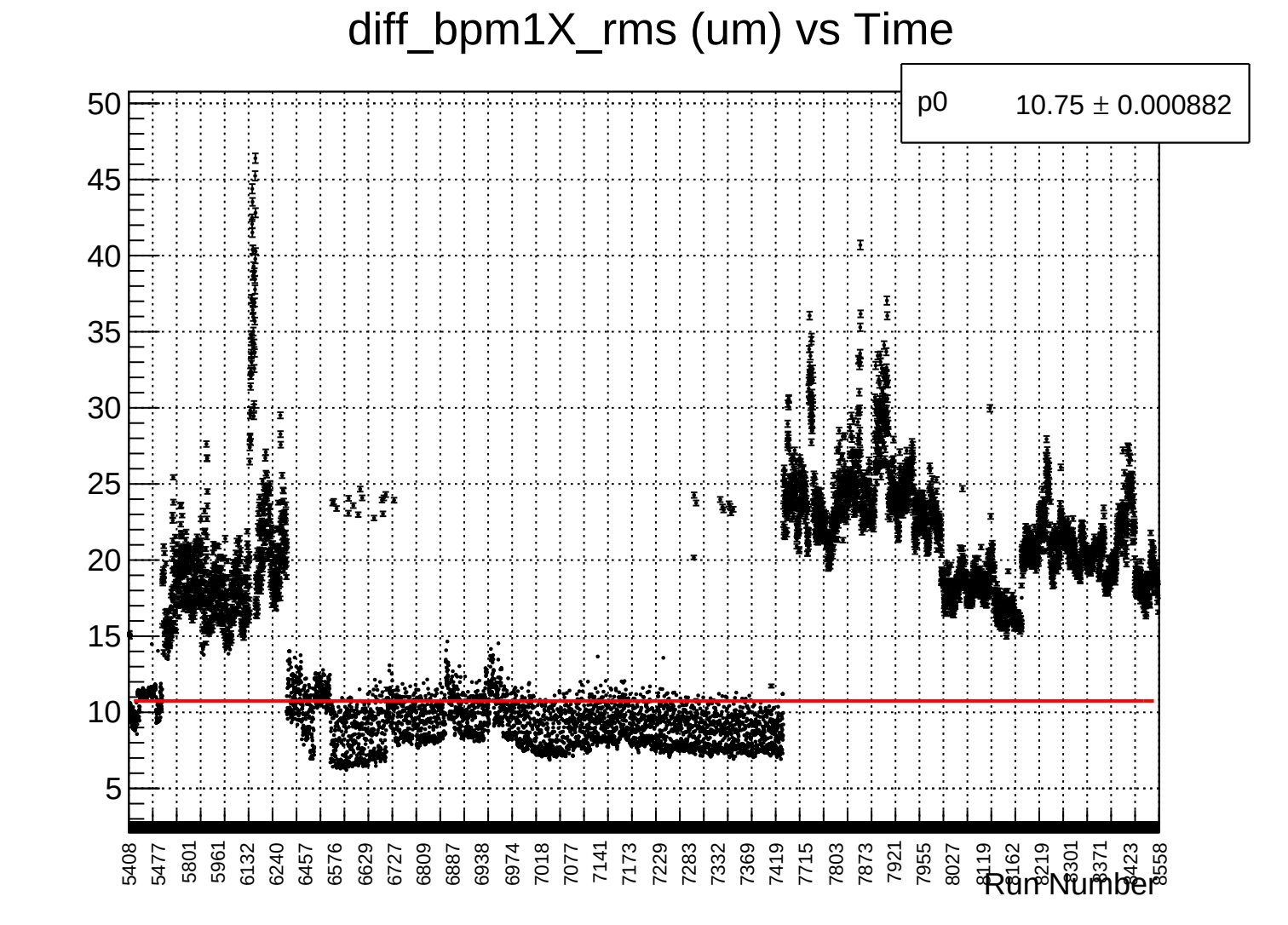

Pull Plot
Entries 8543
Mean 0.001006
Std Dev 1.005
Underflow 0
Overflow 0
Fit Prob 0.26
Fit Chi2 8625 / 8542
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

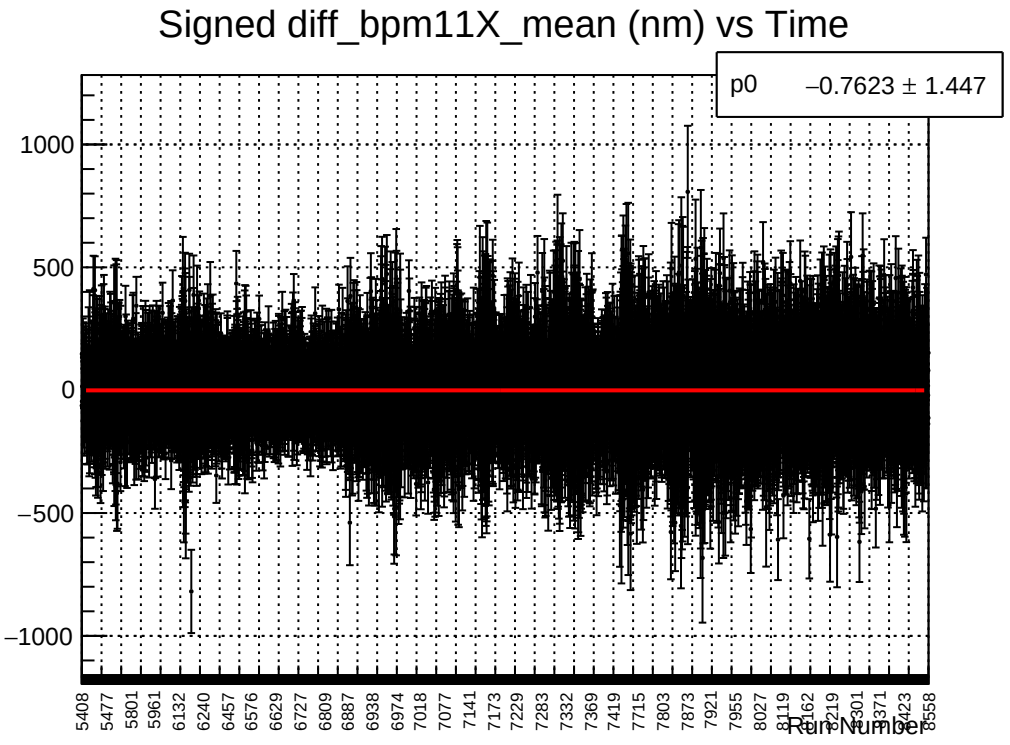

diff_bpm4eY_rms (um) vs Time
p0 6.593 ± 0.0005114
100
80
60
40
20
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

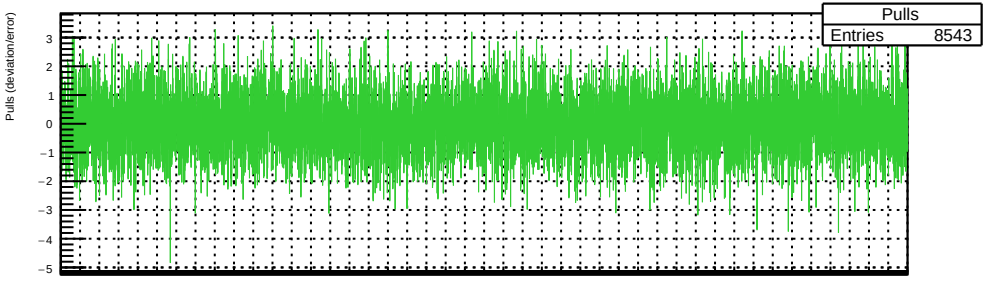

Signed diff_bpm1X_mean (nm) vs Time
p0 −3.105 ± 1.247
1500
1000
500
0
−500
−1000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

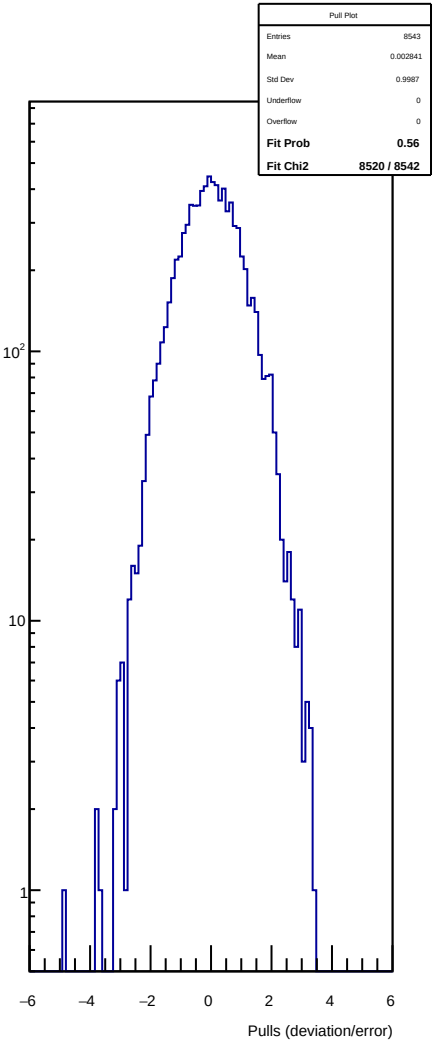

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

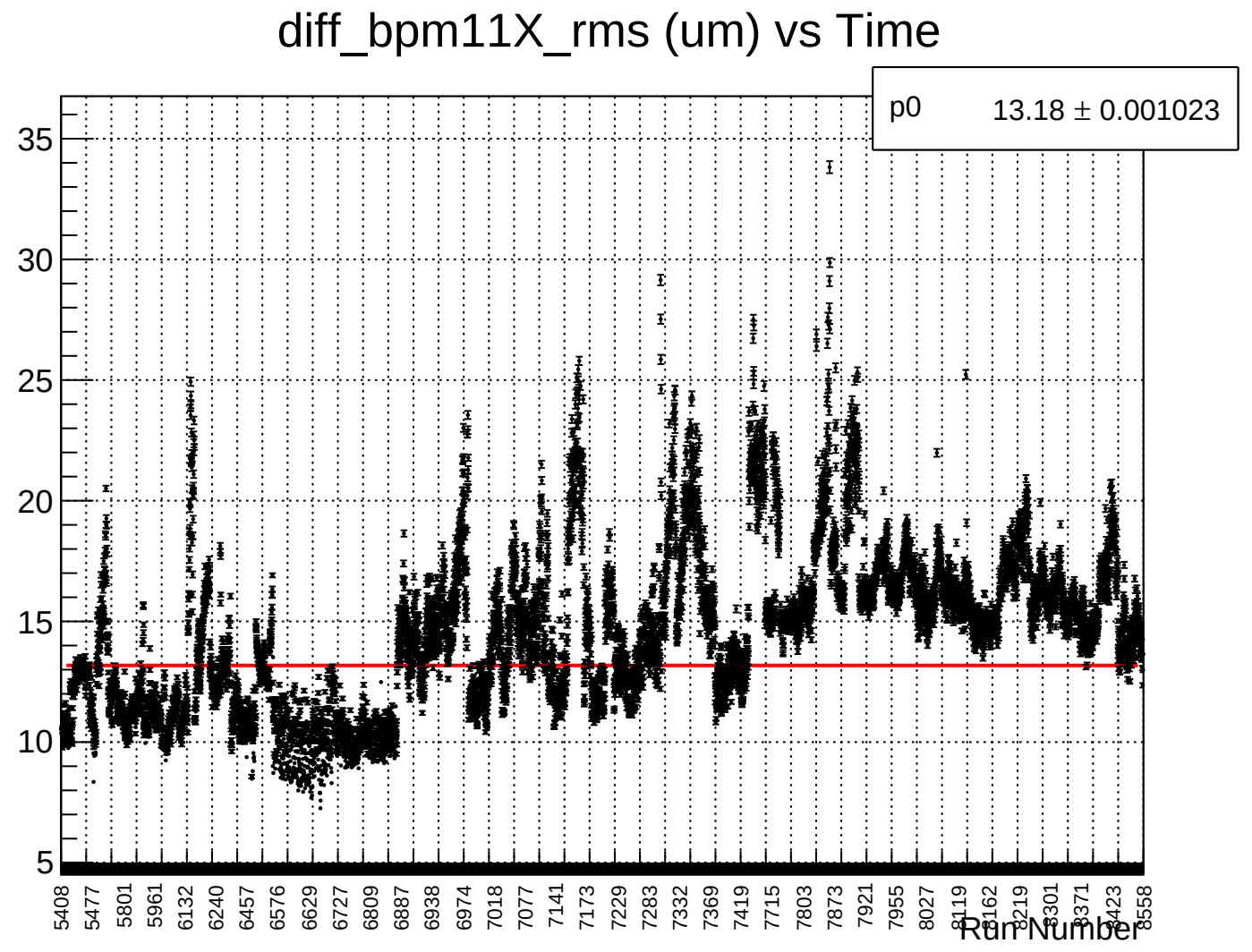

Pull Plot
Entries 8543
Mean 0.004403
Std Dev 1.023
Underflow 0
Overflow 0
Fit Prob 0.00
Fit Chi2 8941 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

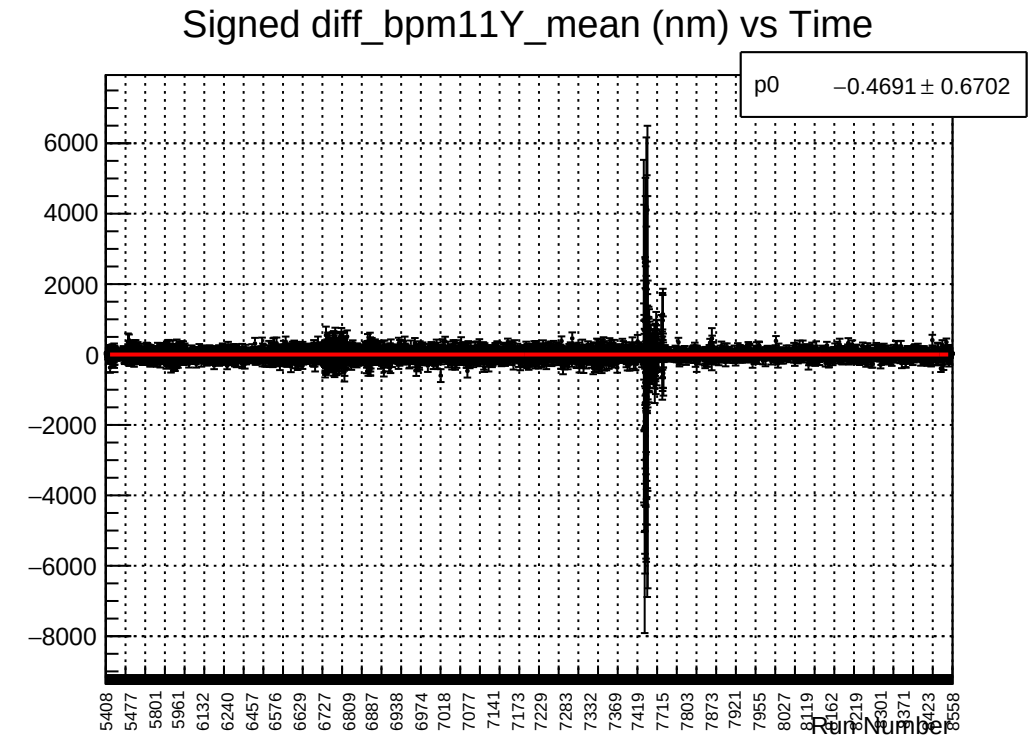

diff_bpm1X_rms (um) vs Time
p0 10.75 ± 0.000882
50
45
40
35
30
25
20
15
10
5
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

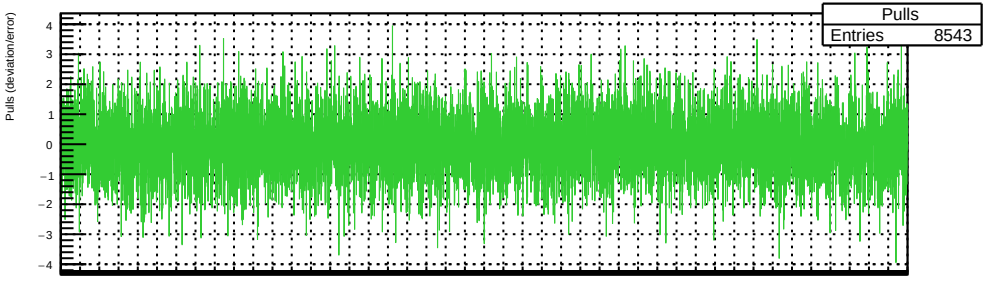

Signed diff_bpm11X_mean (nm) vs Time
p0 −0.7623 ± 1.447
1000
500
0
−500
−1000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

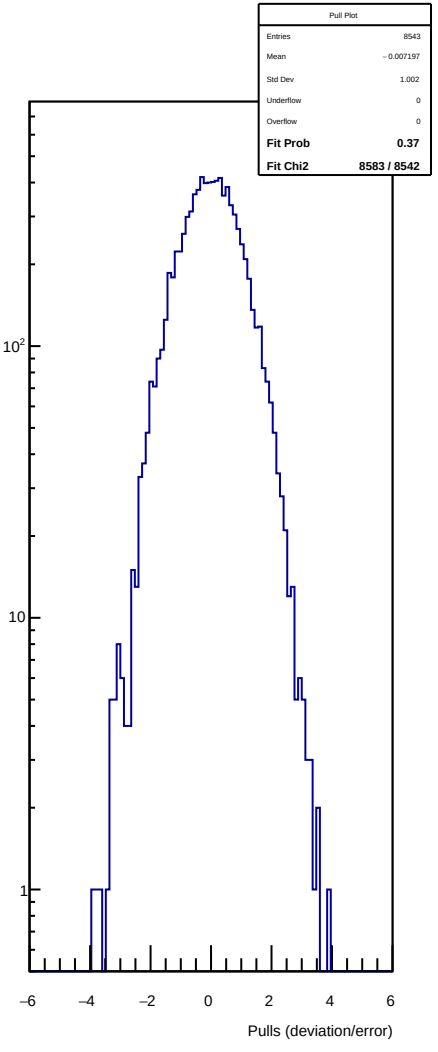

Pulls
Entries 8543
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4
−5

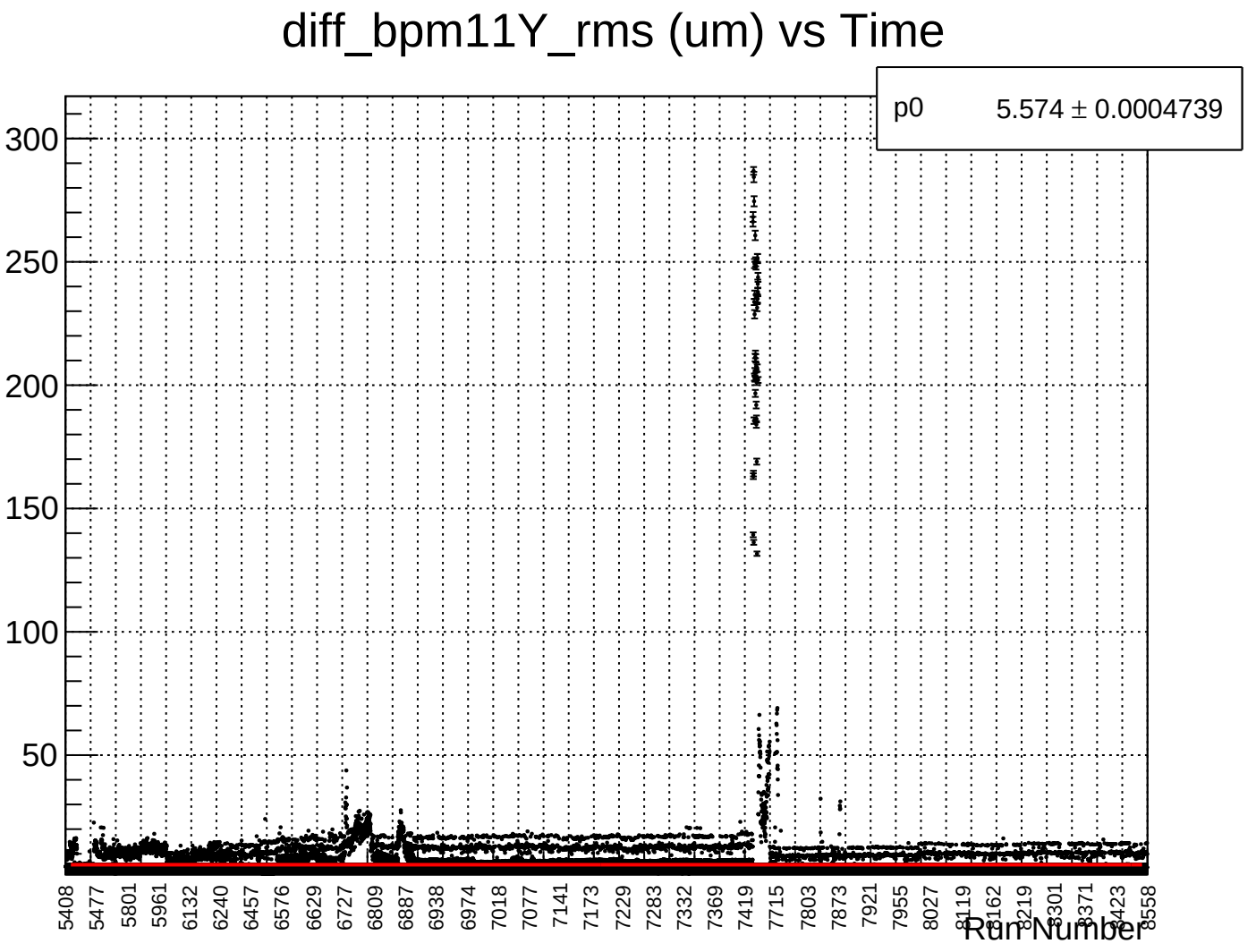

Pull Plot
Entries 8543
Mean 0.002841
Std Dev 0.9987
Underflow 0
Overflow 0
Fit Prob 0.56
Fit Chi2 8520 / 8542
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

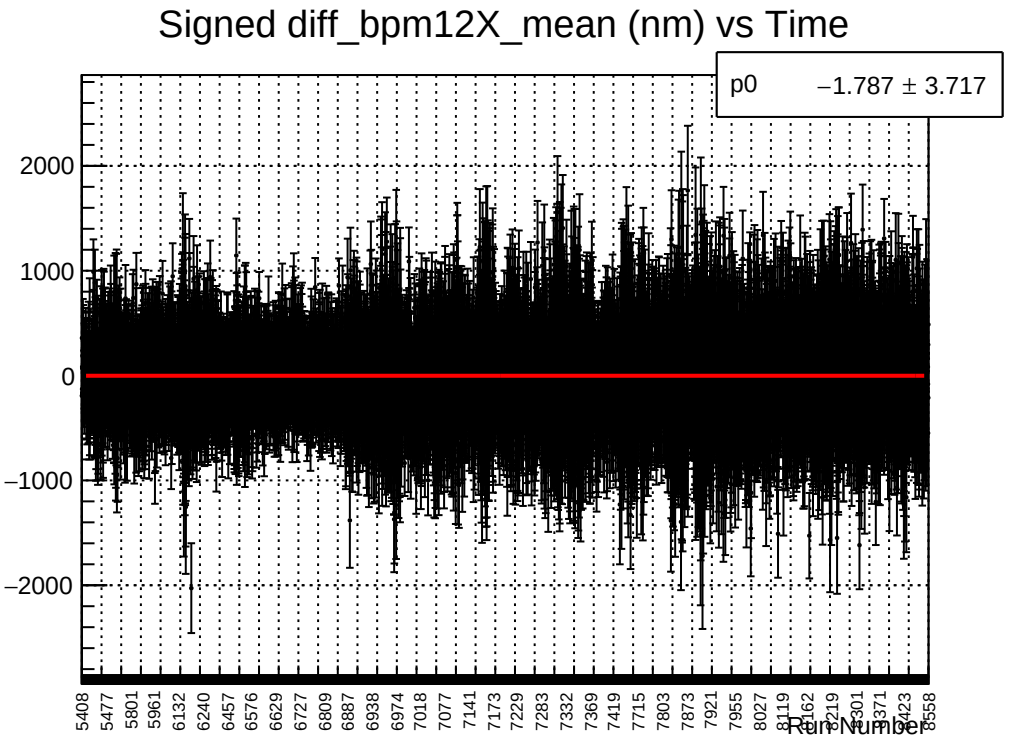

diff_bpm11X_rms (um) vs Time
p0
13.18 ± 0.001023
35
30
25
20
15
10
5
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

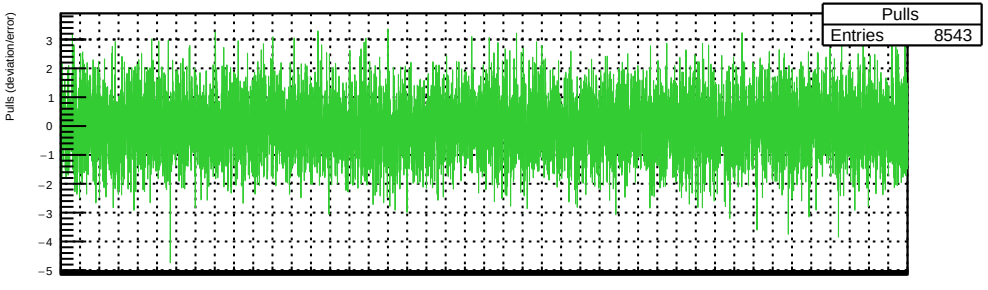

Signed diff_bpm11Y_mean (nm) vs Time
p0 −0.4691 ± 0.6702
6000
4000
2000
0
−2000
−4000
−6000
−8000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

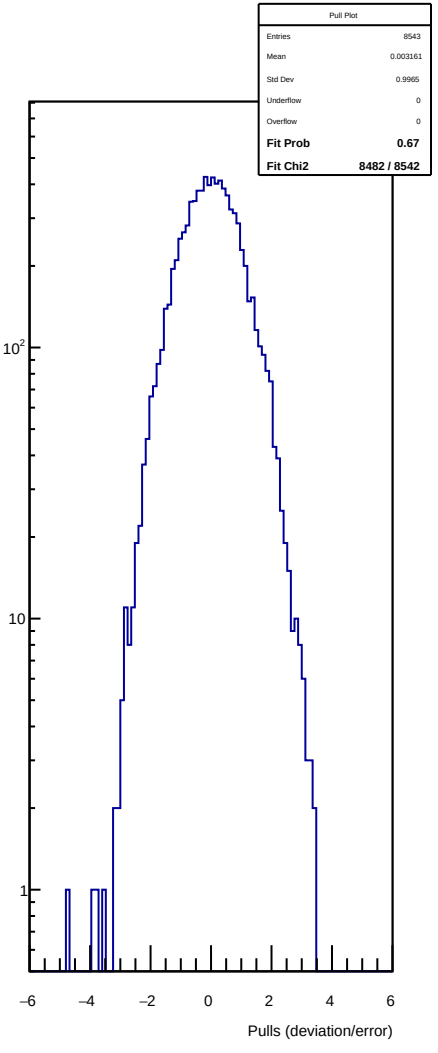

Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

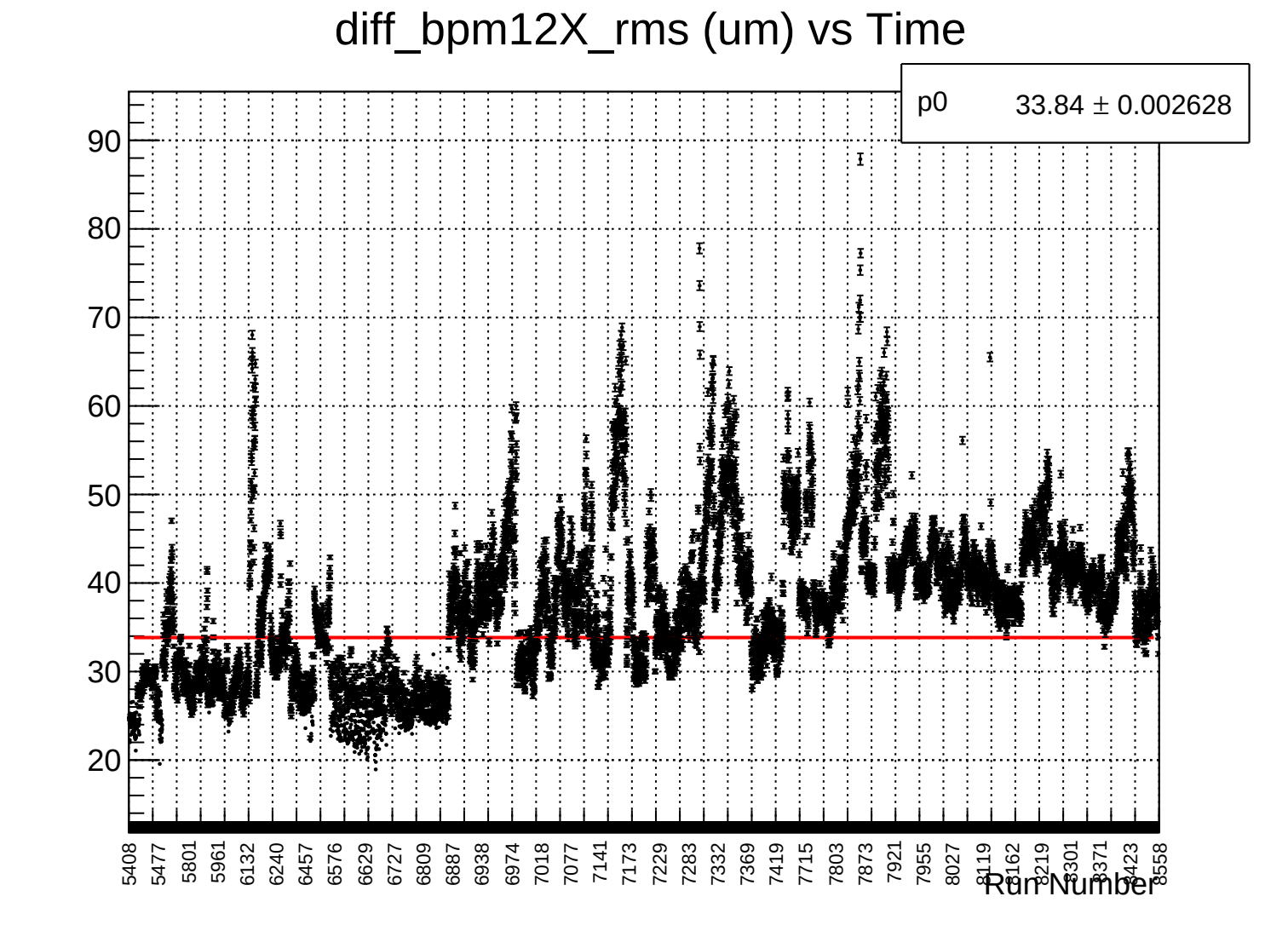

Pull Plot
Entries 8543
Mean −0.007197
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.37
Fit Chi2 8583 / 8542
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

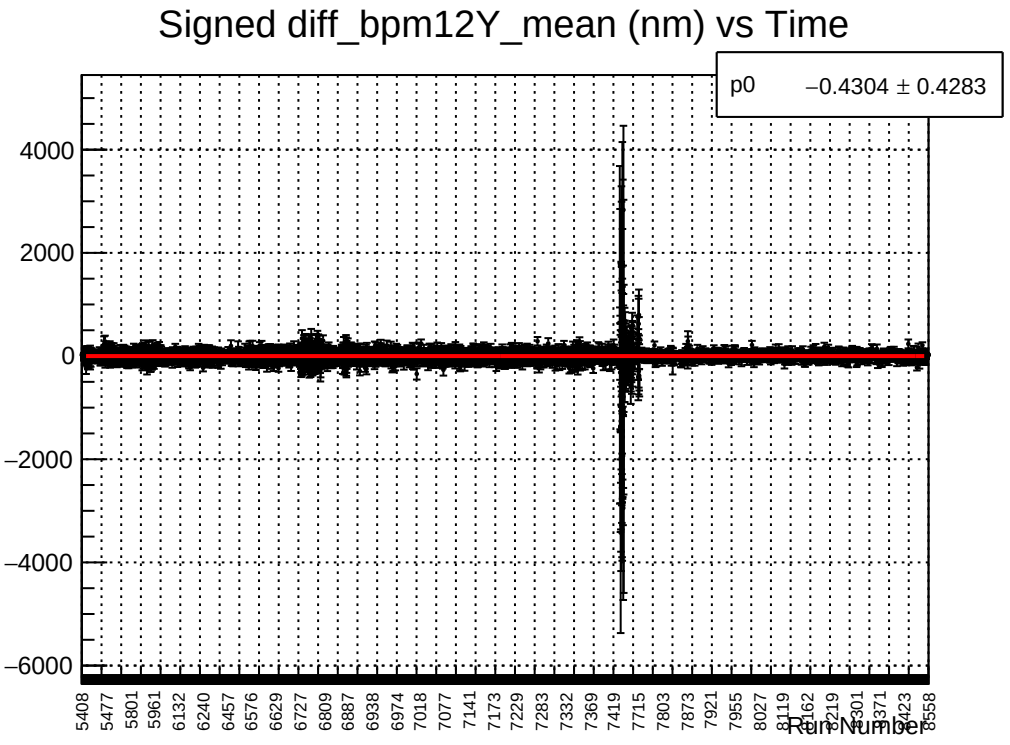

diff_bpm11Y_rms (um) vs Time
p0 5.574 ± 0.0004739
300
250
200
150
100
50
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number

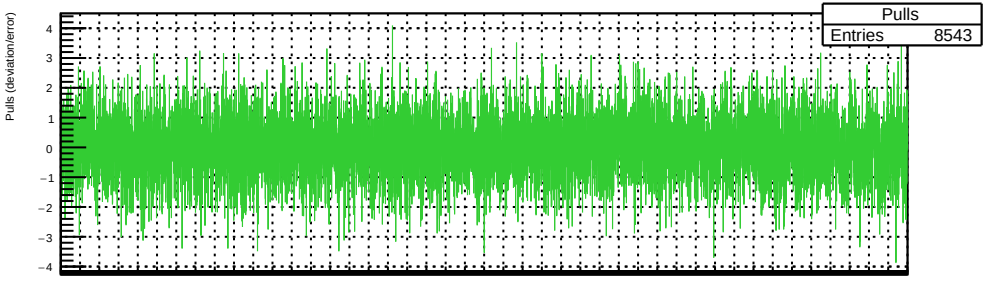

Signed diff_bpm12X_mean (nm) vs Time
p0 −1.787 ± 3.717
2000
1000
0
−1000
−2000
5408 5477 5801 5961 6132 6240 6457 6576 6629 6727 6809 6887 6938 6974 7018 7077 7141 7173 7229 7283 7332 7369 7419 7715 7803 7873 7921 7955 8027 8119 8162 8219 8301 8371 8423 8558
Run Number

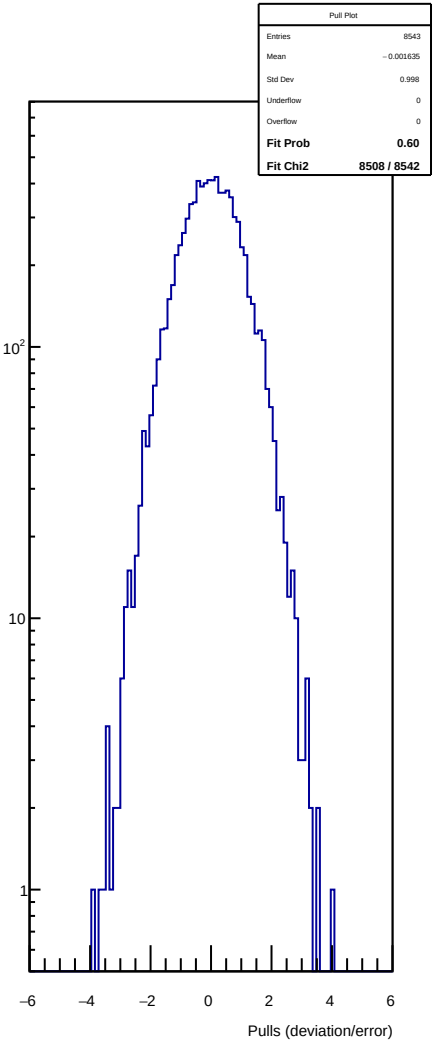

Pulls
Entries 8543
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4
−5

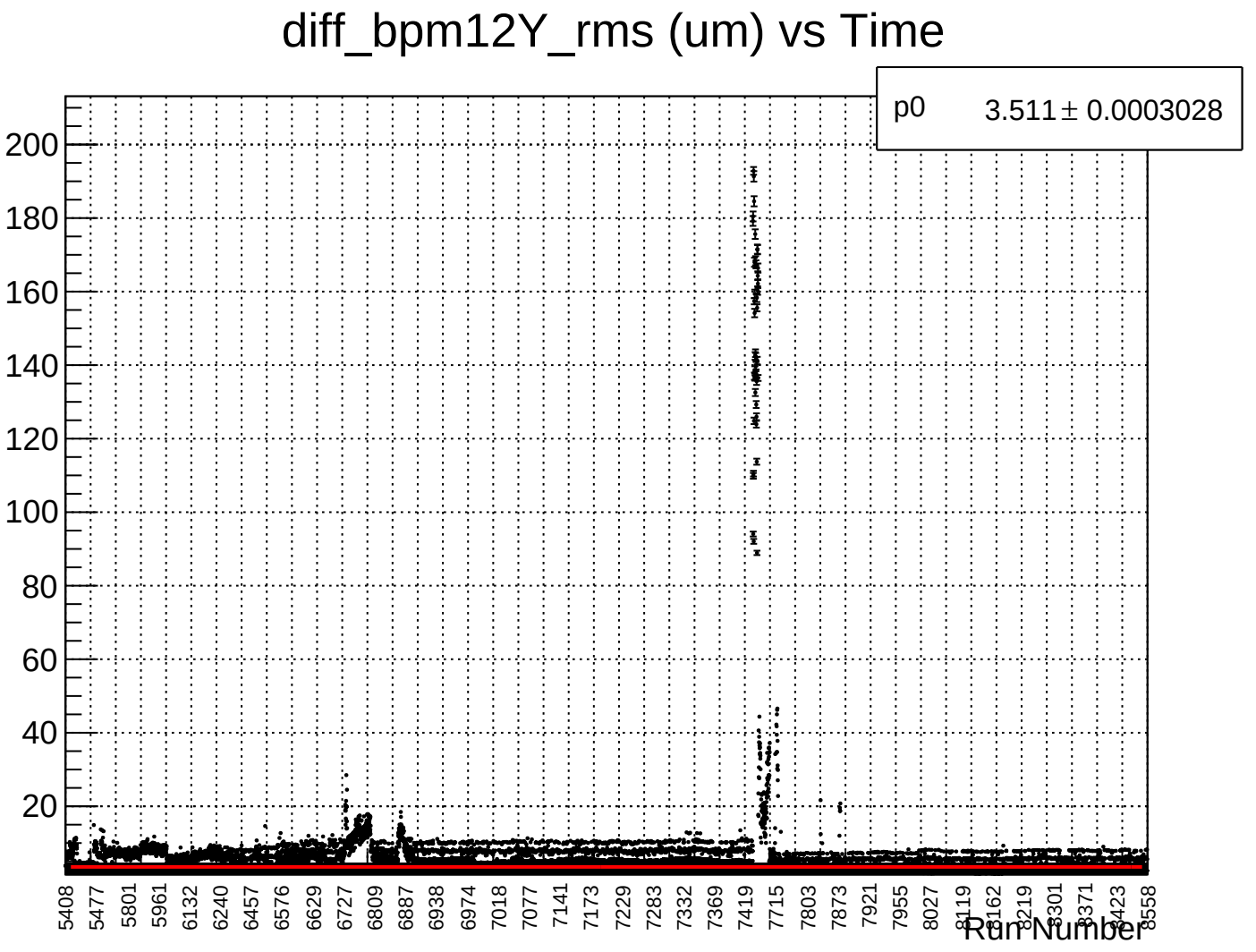

Pull Plot
Entries 8543
Mean 0.003161
Std Dev 0.9965
Underflow 0
Overflow 0
Fit Prob 0.67
Fit Chi2 8482 / 8542
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)


diff_bpm12X_rms (um) vs Time
p0 33.84 ± 0.002628
90
80
70
60
50
40
30
20
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number


Signed diff_bpm12Y_mean (nm) vs Time
p0 −0.4304 ± 0.4283
4000
2000
0
−2000
−4000
−6000
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number


Pulls
Entries 8543
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4


Pull Plot
Entries 8543
Mean −0.001635
Std Dev 0.998
Underflow 0
Overflow 0
Fit Prob 0.60
Fit Chi2 8508 / 8542
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)


diff_bpm12Y_rms (um) vs Time
p0 3.511 ± 0.0003028
200
180
160
140
120
100
80
60
40
20
5408
5477
5801
5961
6132
6240
6457
6576
6629
6727
6809
6887
6938
6974
7018
7077
7141
7173
7229
7283
7332
7369
7419
7715
7803
7873
7921
7955
8027
8119
8162
8219
8301
8371
8423
8558
Run Number