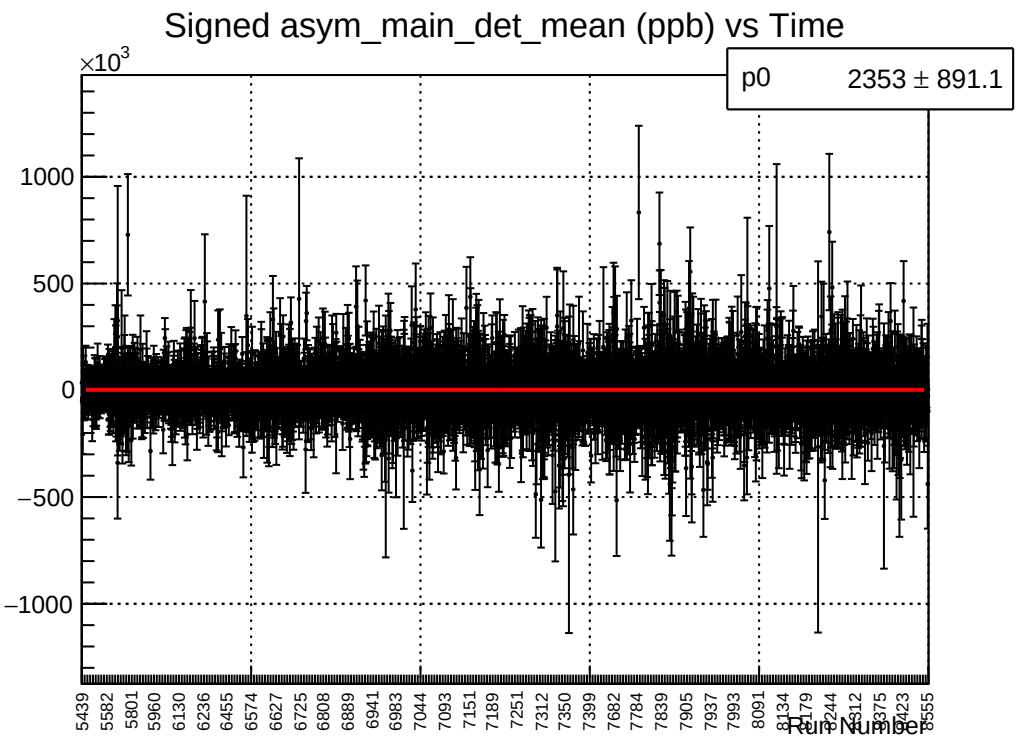
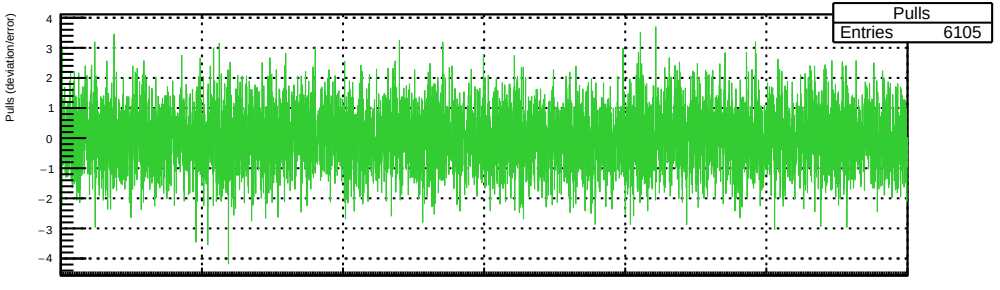
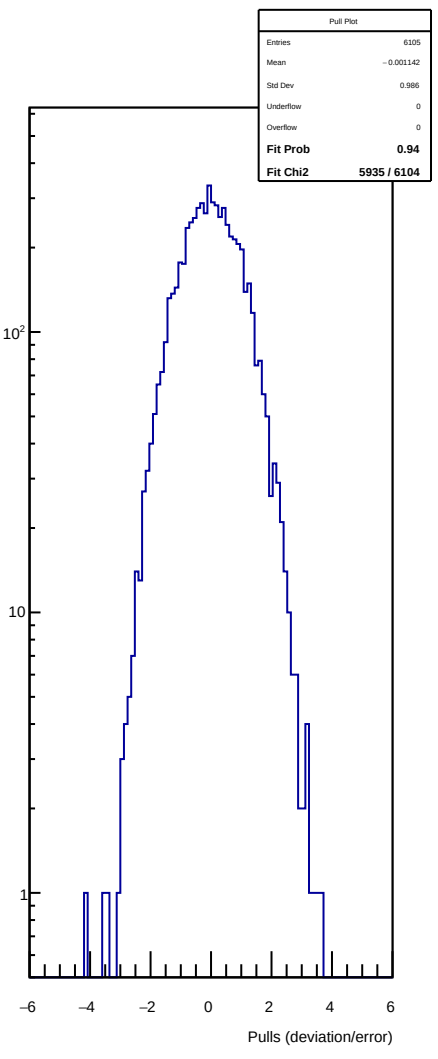
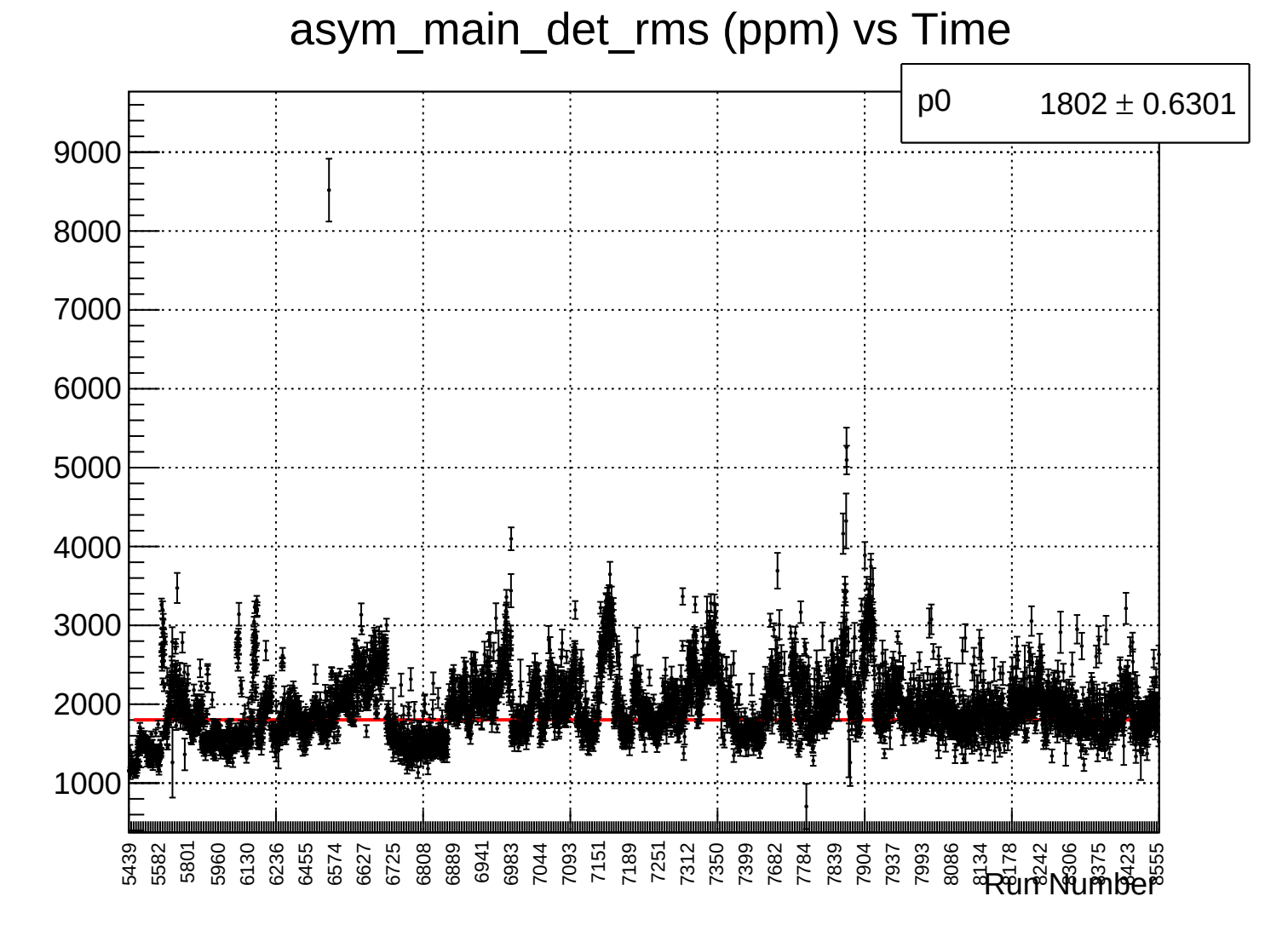
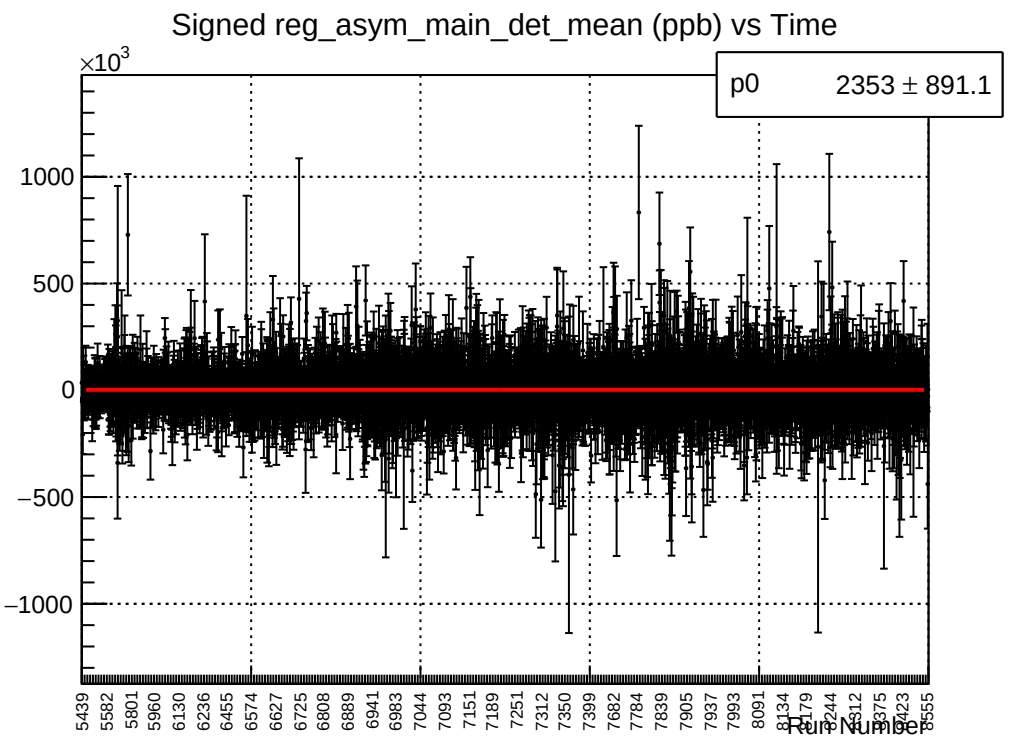
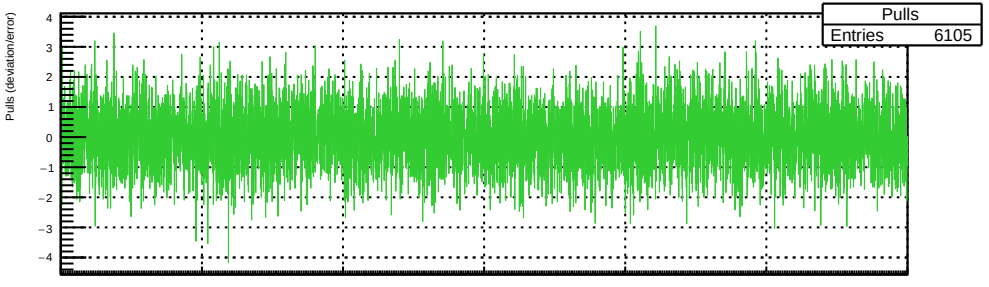

Signed asym_main_det_mean (ppb) vs Time
×10^3
p0 2353 ± 891.1
1000
500
0
−500
−1000
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7905 7937 7993 8091 8134 8179 8244 8312 8375 8423 8555
Run Number

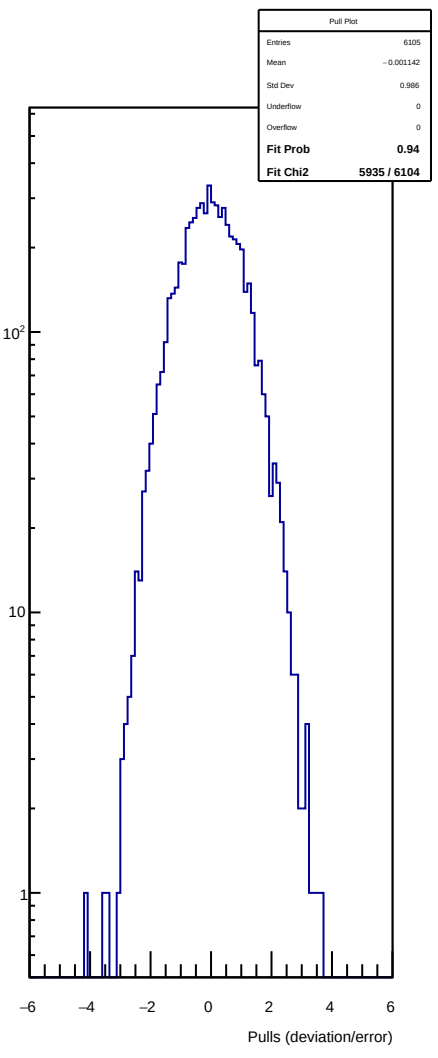

Pulls
Entries 6105
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

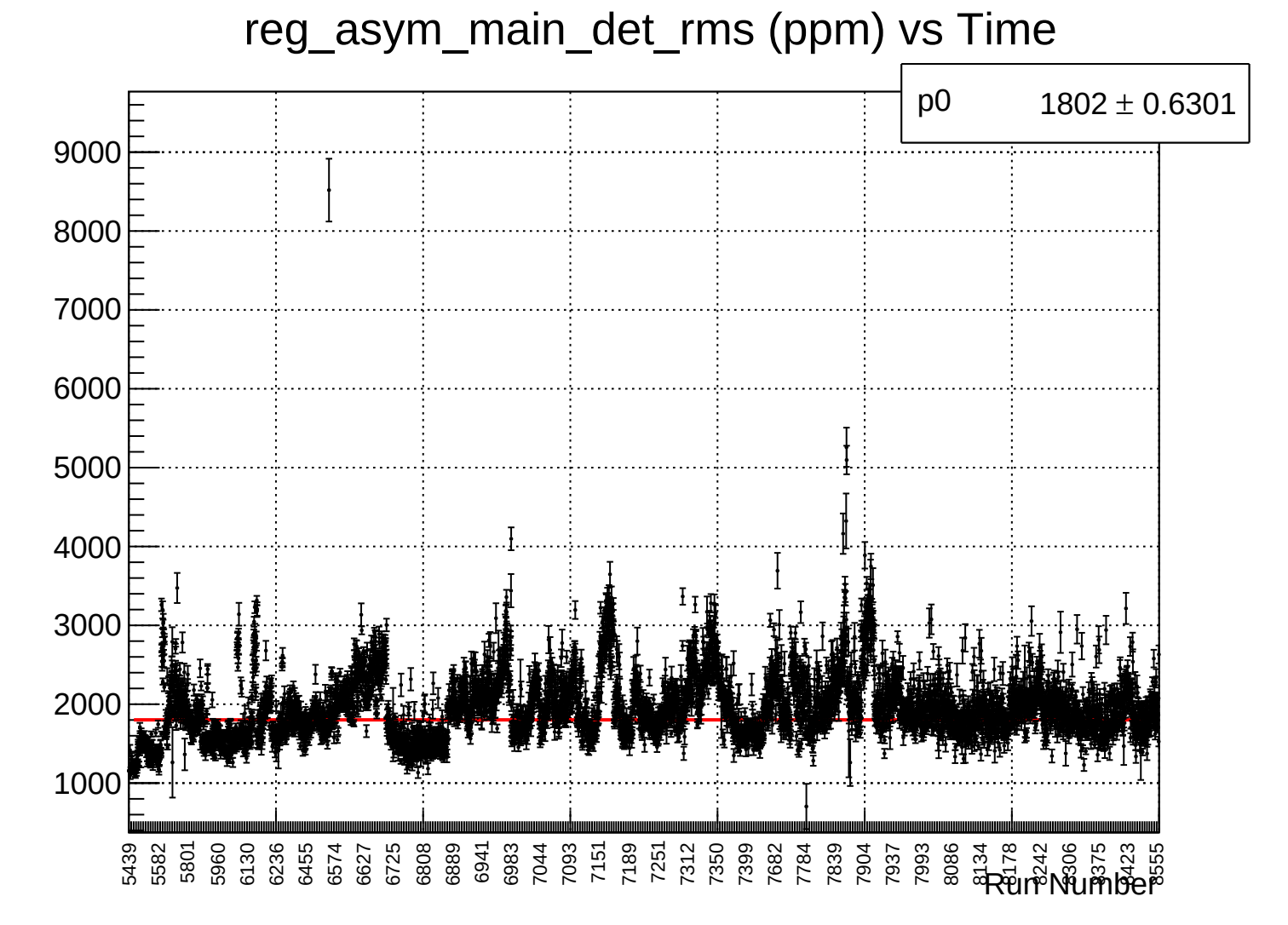

Pull Plot
Entries 6105
Mean −0.001142
Std Dev 0.986
Underflow 0
Overflow 0
Fit Prob 0.94
Fit Chi2 5935 / 6104
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

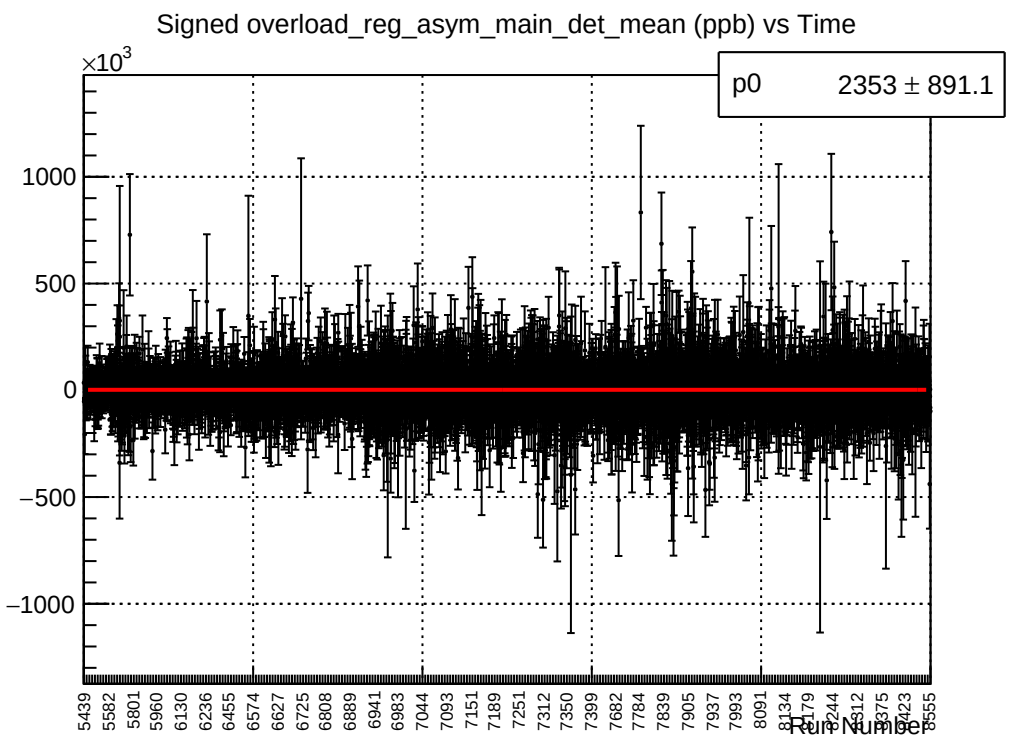

asym_main_det_rms (ppm) vs Time
p0
1802 ± 0.6301
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

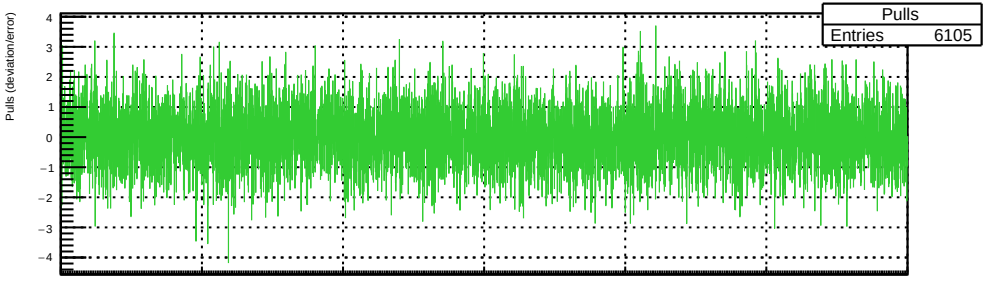

Signed reg_asym_main_det_mean (ppb) vs Time
×10^3
p0 2353 ± 891.1
1000
500
0
−500
−1000
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7905 7937 7993 8091 8134 8179 8244 8312 8375 8423 8555
Run Number

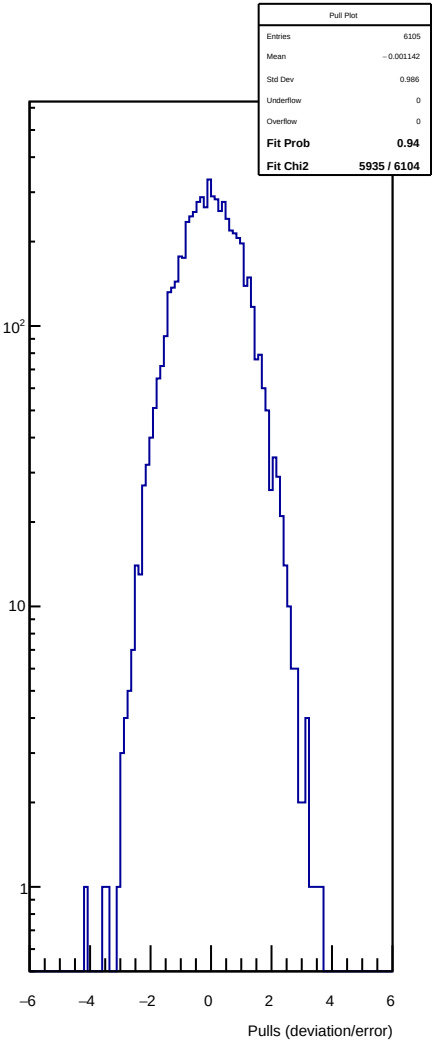

Pulls
Entries 6105
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

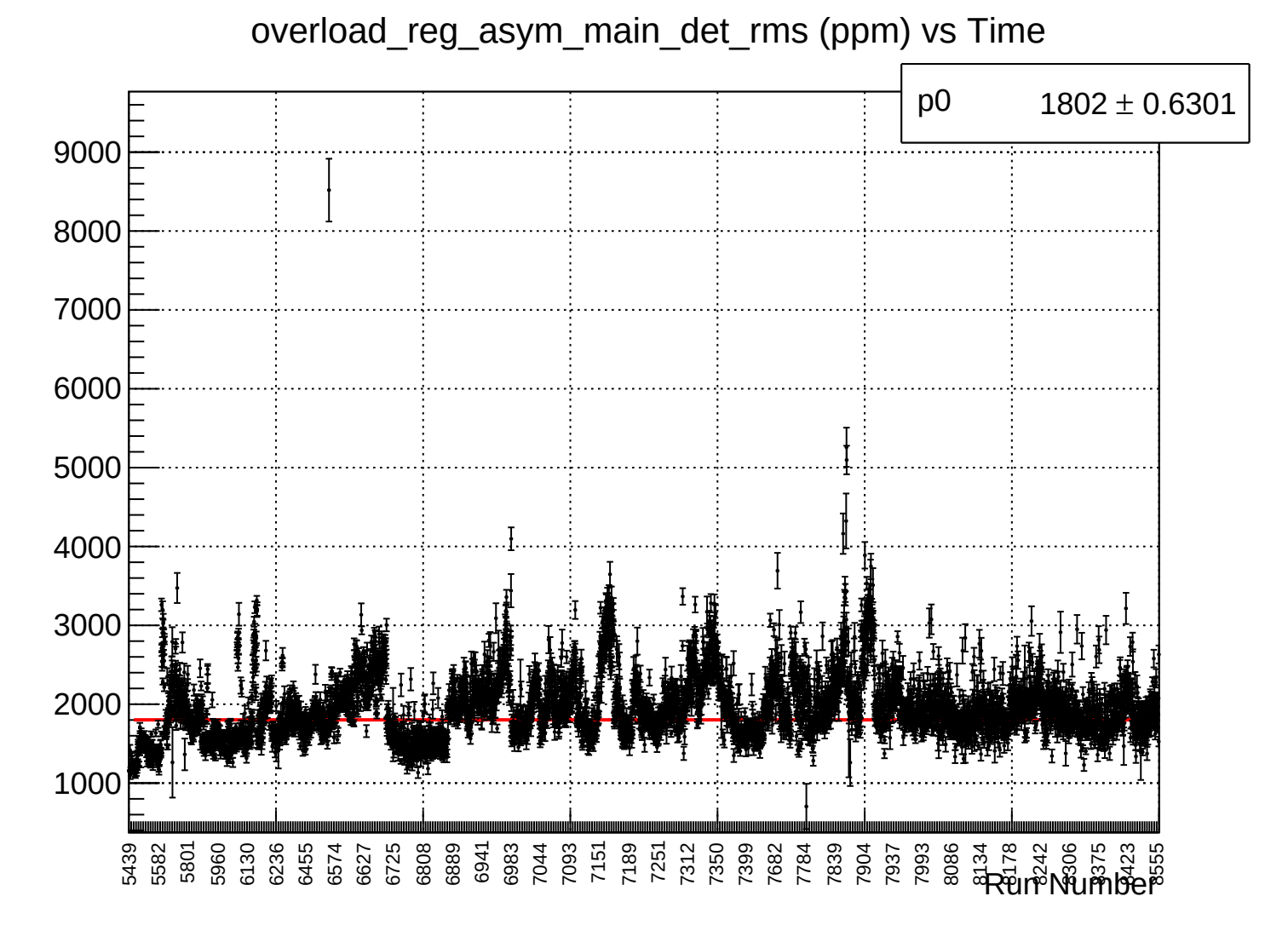

Pull Plot
Entries 6105
Mean −0.001142
Std Dev 0.986
Underflow 0
Overflow 0
Fit Prob 0.94
Fit Chi2 5935 / 6104
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

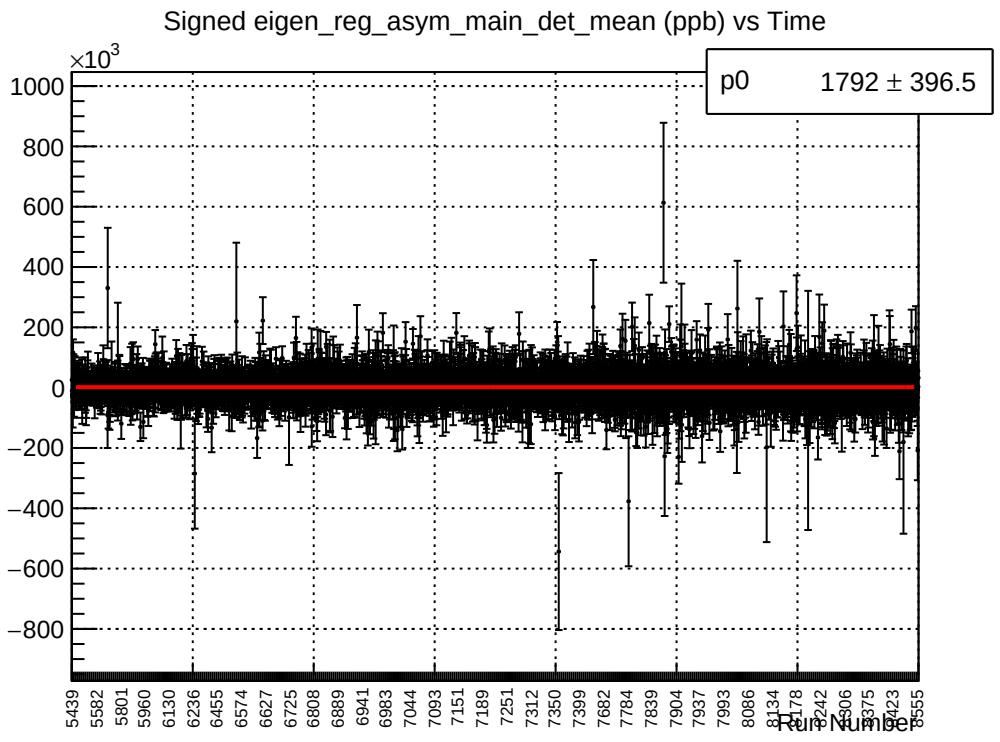

reg_asym_main_det_rms (ppm) vs Time
p0
1802 ± 0.6301
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

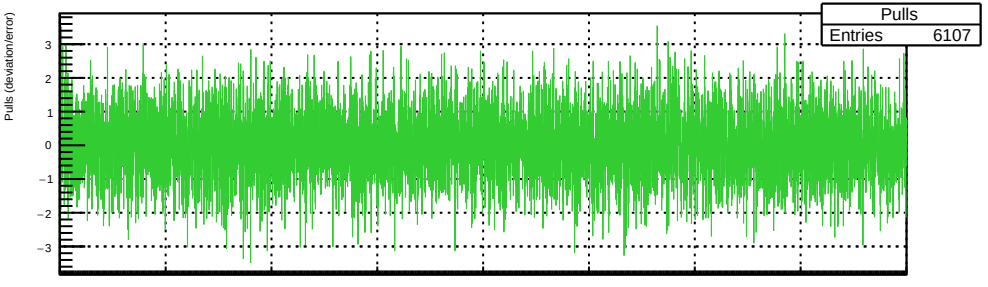

Signed overload_reg_asym_main_det_mean (ppb) vs Time
×10^3
p0 2353 ± 891.1
1000
500
0
−500
−1000
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7905 7937 7993 8091 8134 8179 8244 8312 8375 8423 8555
Run Number

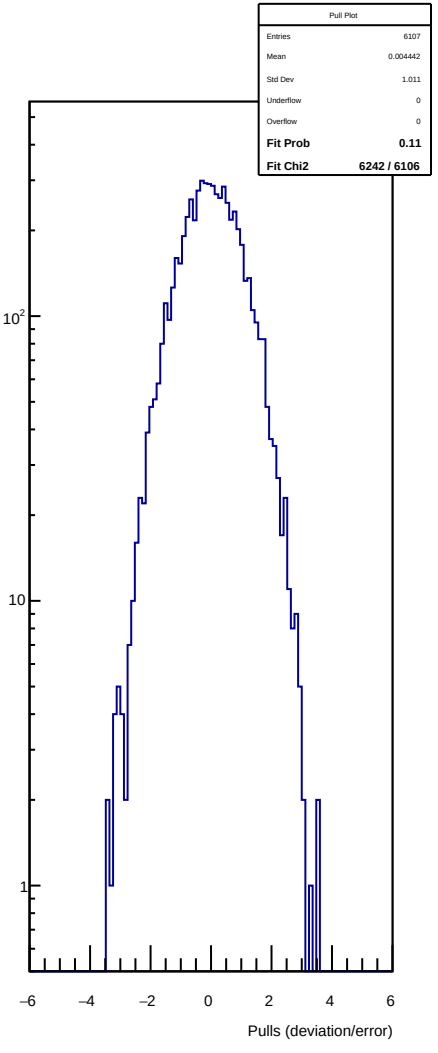

Pulls
Entries 6105
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

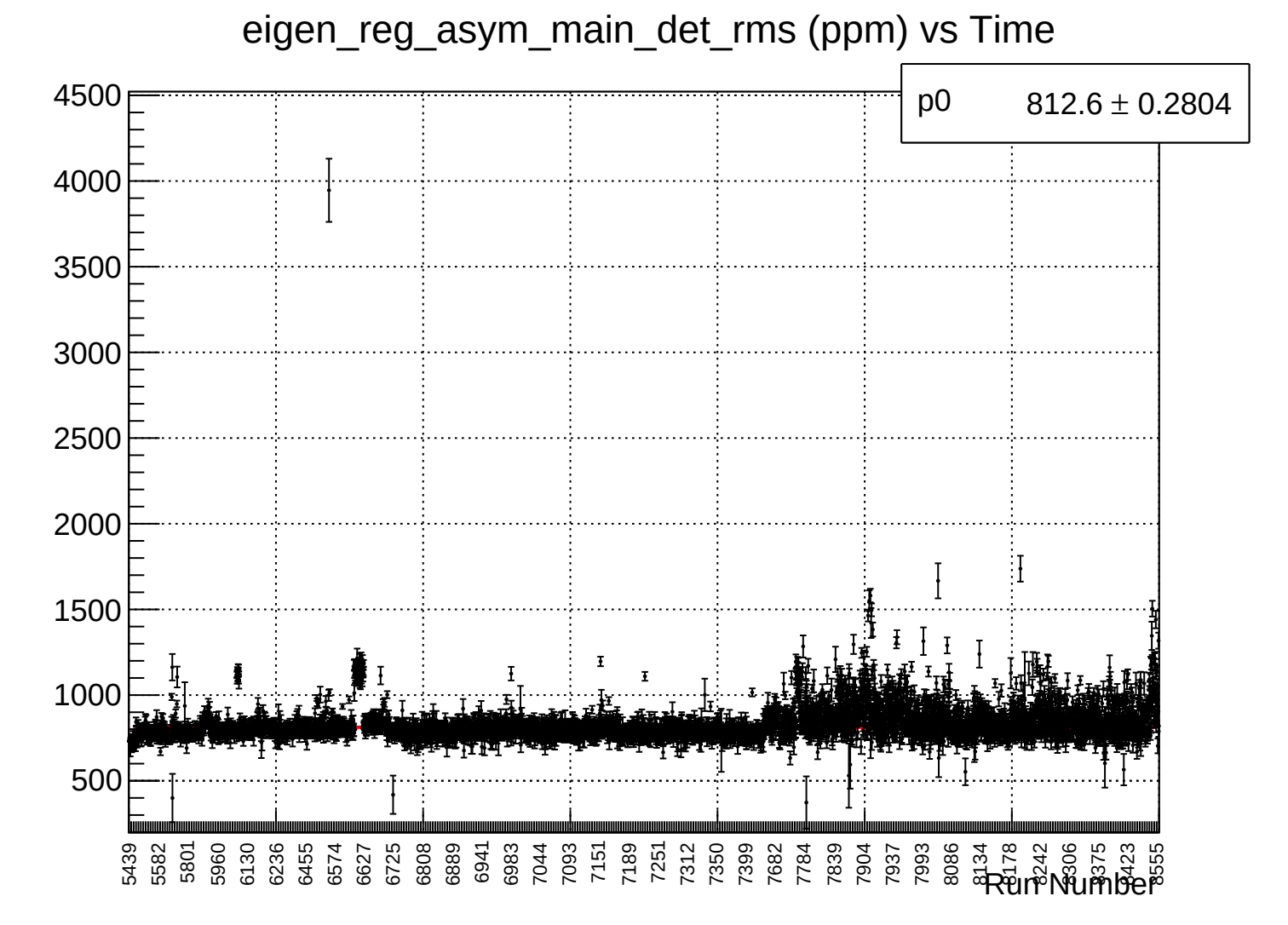

Pull Plot
Entries 6105
Mean −0.001142
Std Dev 0.986
Underflow 0
Overflow 0
Fit Prob 0.94
Fit Chi2 5935 / 6104
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

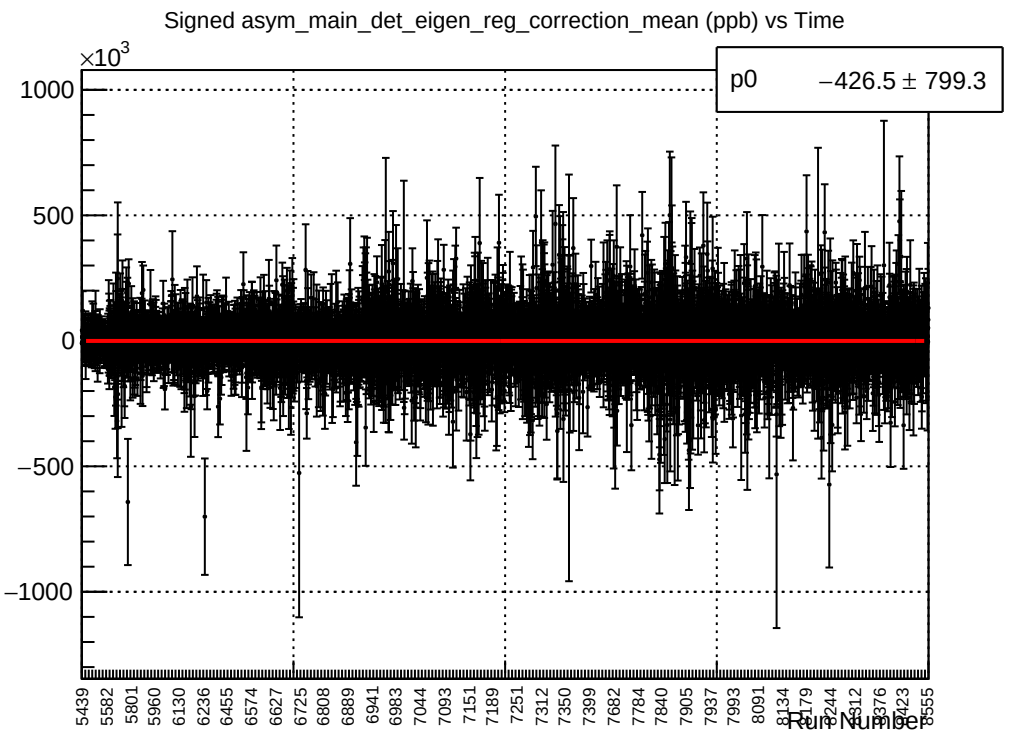

overload_reg_asym_main_det_rms (ppm) vs Time
p0
1802 ± 0.6301
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

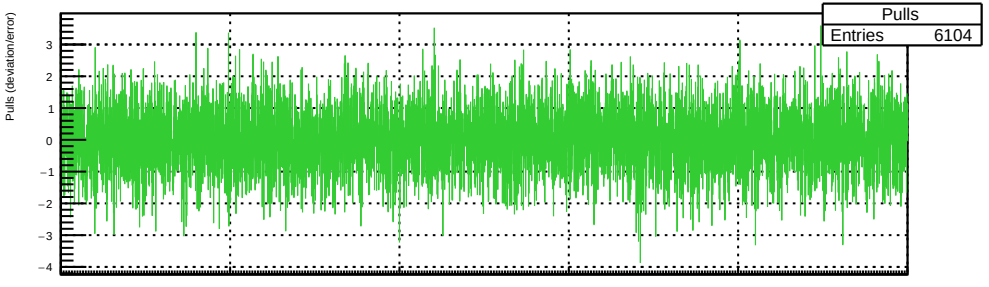

Signed eigen_reg_asym_main_det_mean (ppb) vs Time
×10^3
p0 1792 ± 396.5
Run Number

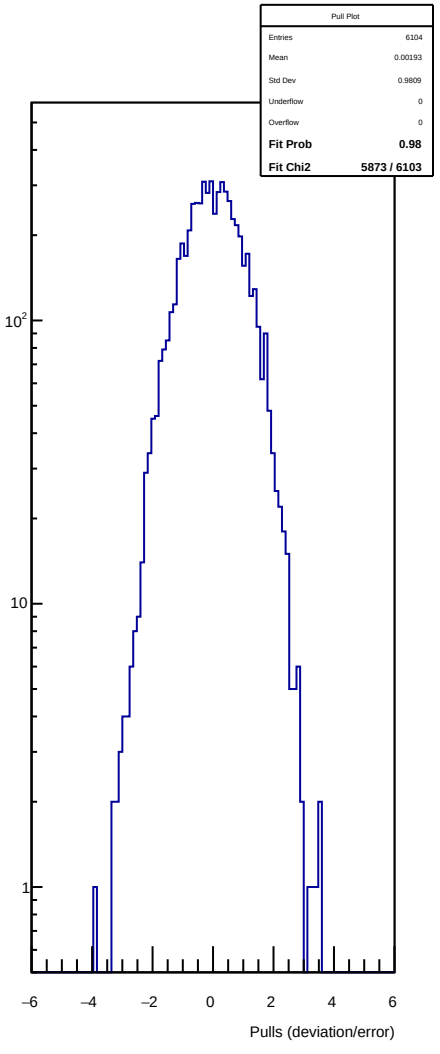

Pulls
Entries 6107
Pulls (deviation/error)

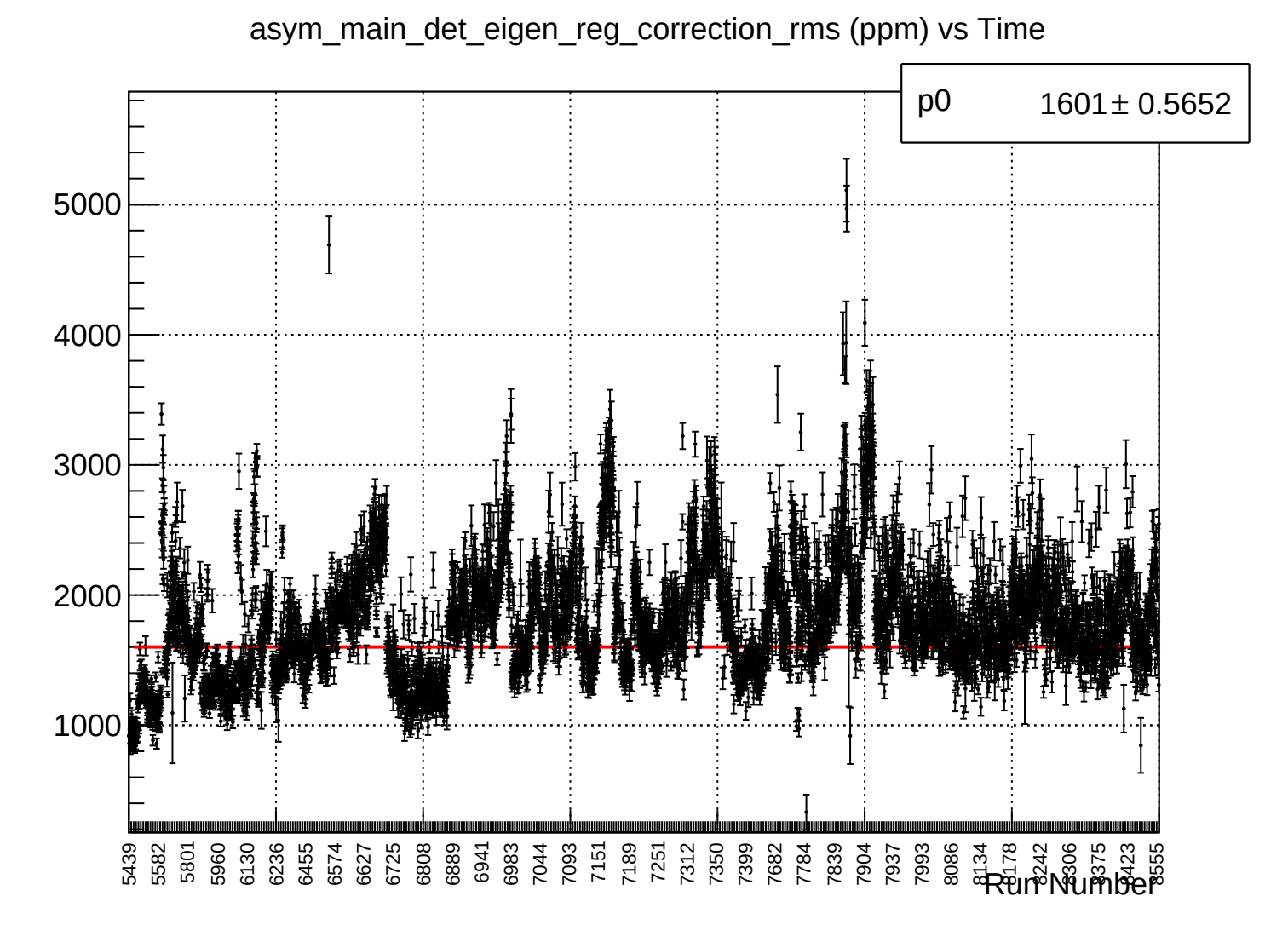

Pull Plot
Entries 6107
Mean 0.004442
Std Dev 1.011
Underflow 0
Overflow 0
Fit Prob 0.11
Fit Chi2 6242 / 6106
Pulls (deviation/error)

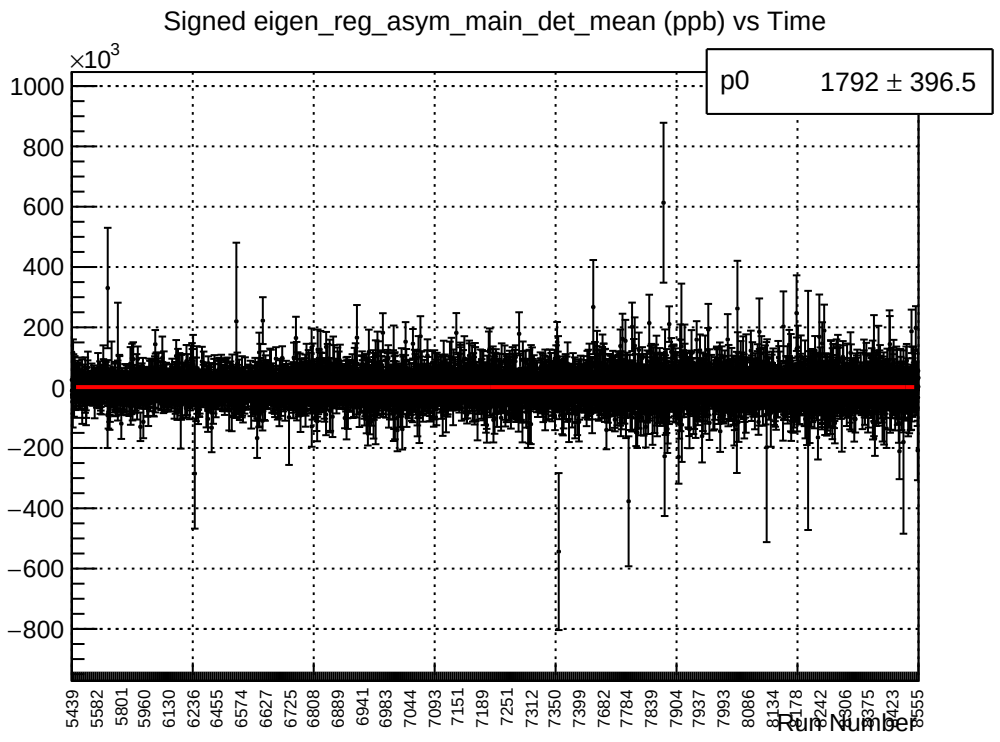

eigen_reg_asym_main_det_rms (ppm) vs Time
p0 812.6 ± 0.2804
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

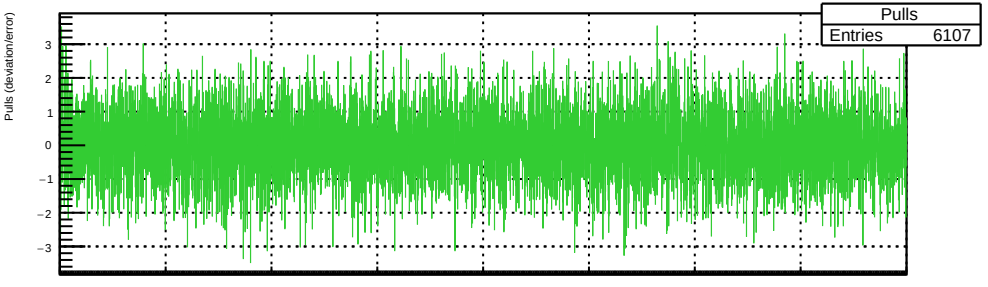

Signed asym_main_det_eigen_reg_correction_mean (ppb) vs Time
×10^3
1000
500
0
−500
−1000
p0 −426.5 ± 799.3
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7840 7905 7937 7993 8091 8134 8179 8244 8312 8376 8423 8555
Run Number

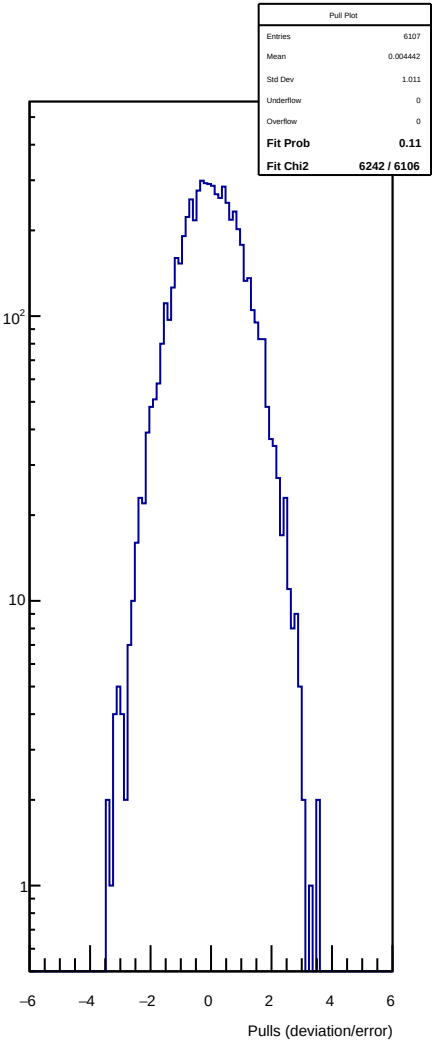

Pulls
Entries 6104
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

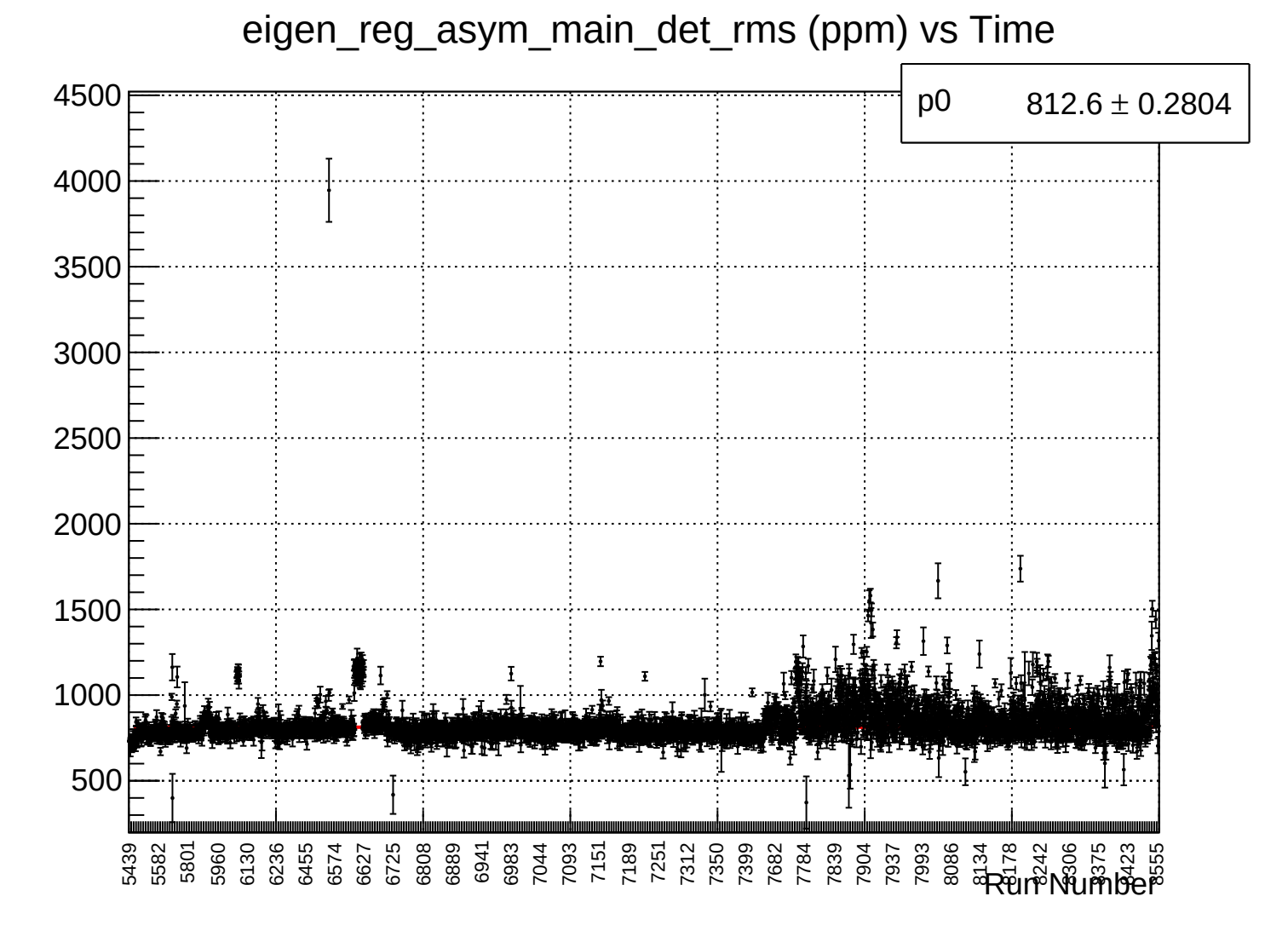

Pull Plot
Entries 6104
Mean 0.00193
Std Dev 0.9809
Underflow 0
Overflow 0
Fit Prob 0.98
Fit Chi2 5873 / 6103
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

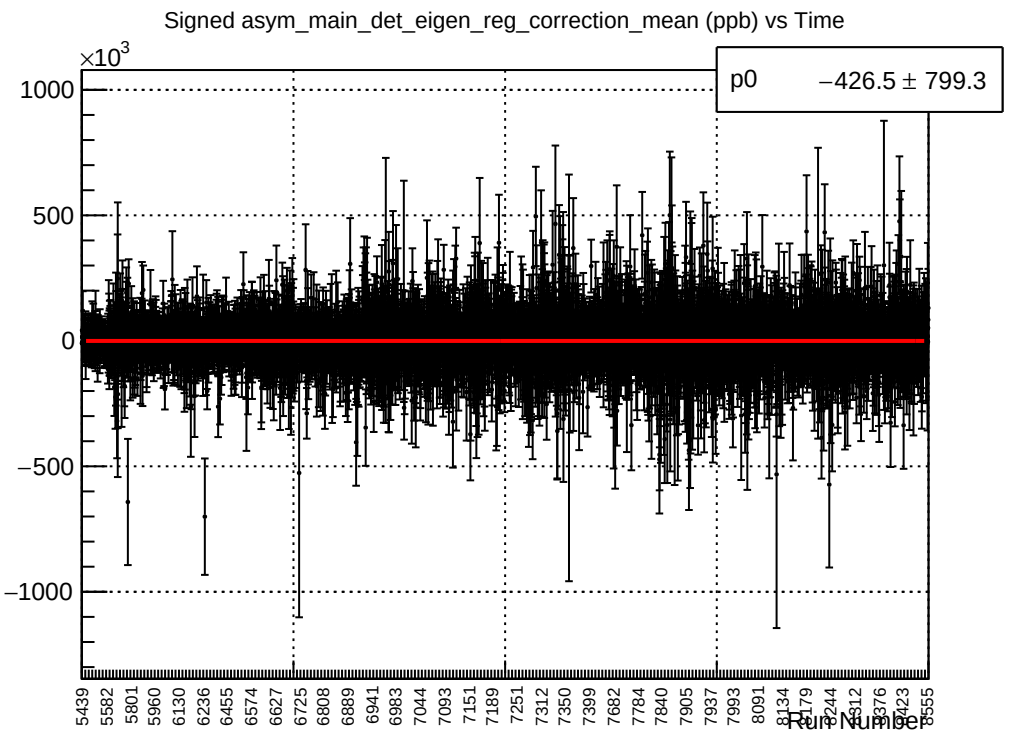

asym_main_det_eigen_reg_correction_rms (ppm) vs Time
p0 1601 ± 0.5652
5000
4000
3000
2000
1000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

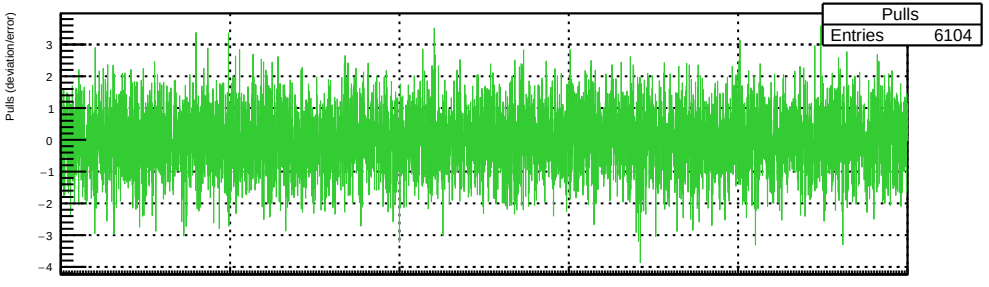

Signed eigen_reg_asym_main_det_mean (ppb) vs Time
×10^3
p0 1792 ± 396.5
Run Number

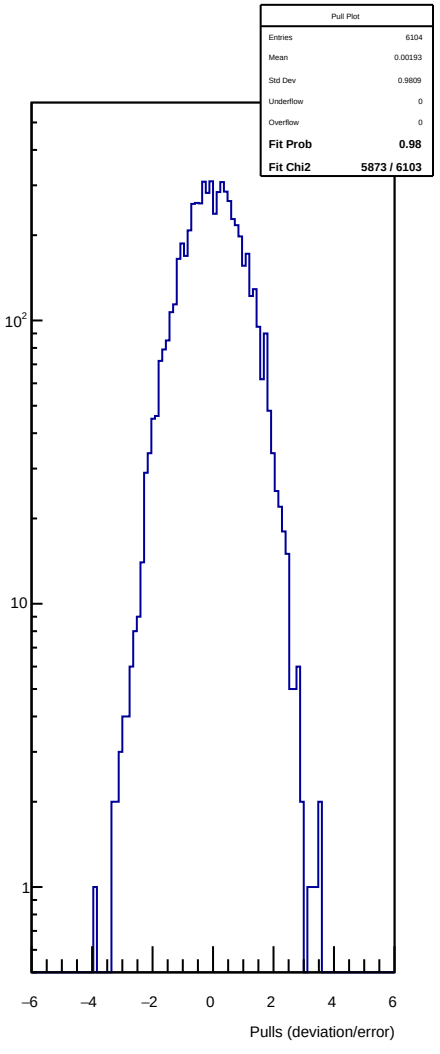

Pulls
Entries 6107
Pulls (deviation/error)

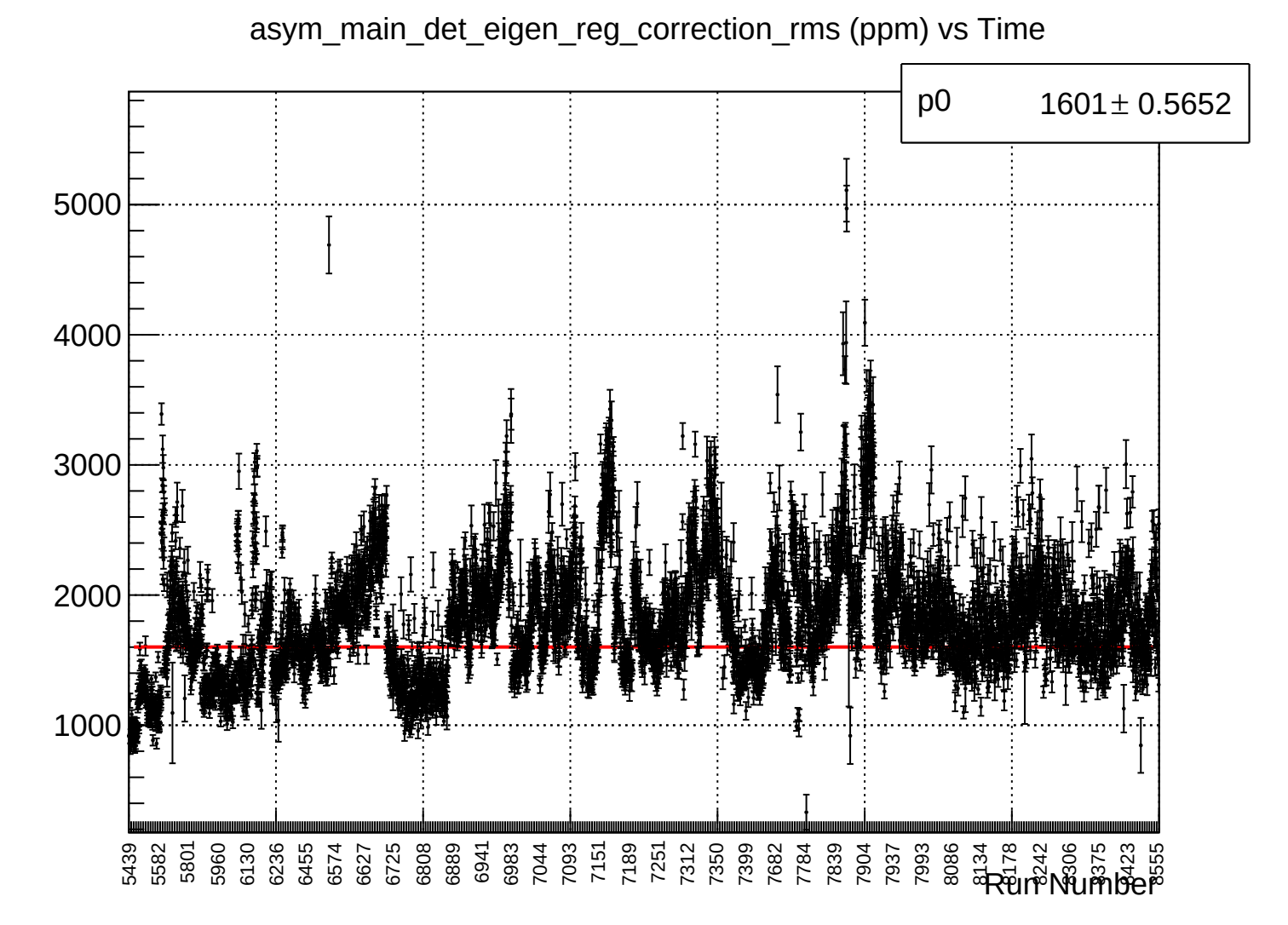

Pull Plot
Entries 6107
Mean 0.004442
Std Dev 1.011
Underflow 0
Overflow 0
Fit Prob 0.11
Fit Chi2 6242 / 6106
Pulls (deviation/error)

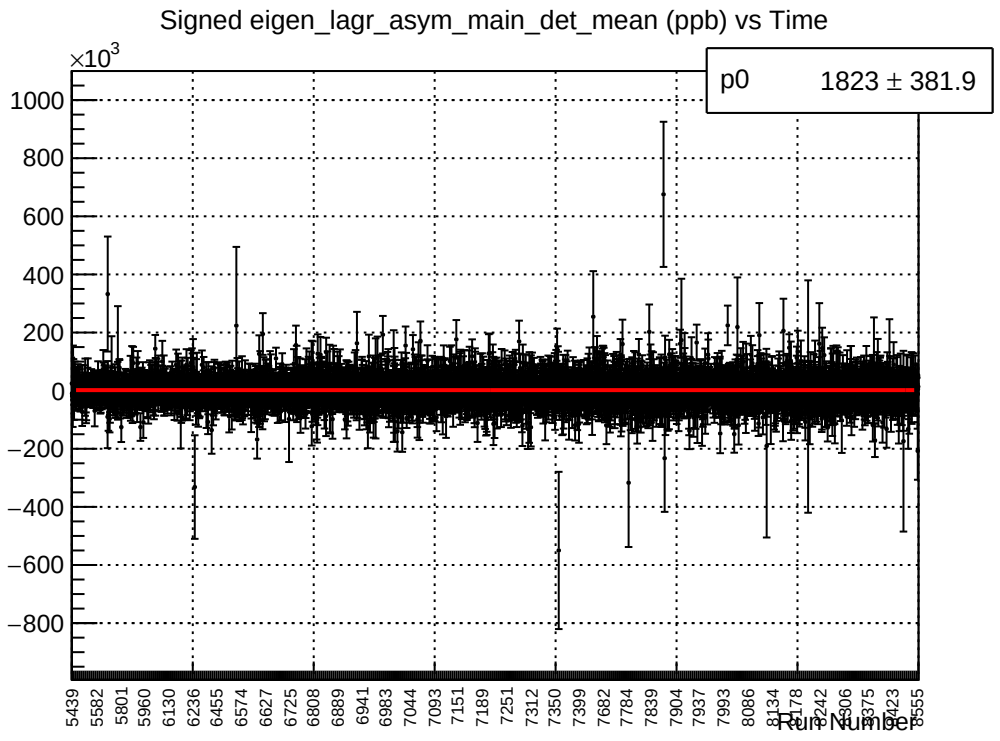

eigen_reg_asym_main_det_rms (ppm) vs Time
p0 812.6 ± 0.2804
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

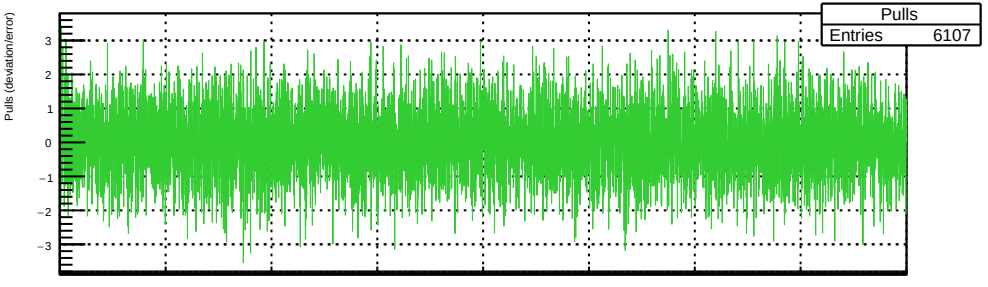

Signed asym_main_det_eigen_reg_correction_mean (ppb) vs Time
×10^3
1000
500
0
−500
−1000
p0 −426.5 ± 799.3
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7840 7905 7937 7993 8091 8134 8179 8244 8312 8376 8423 8555
Run Number

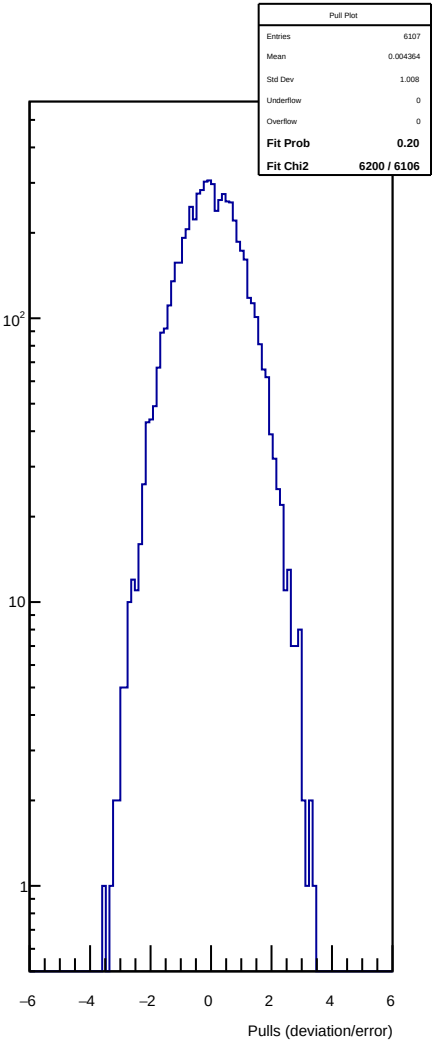

Pulls
Entries 6104
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

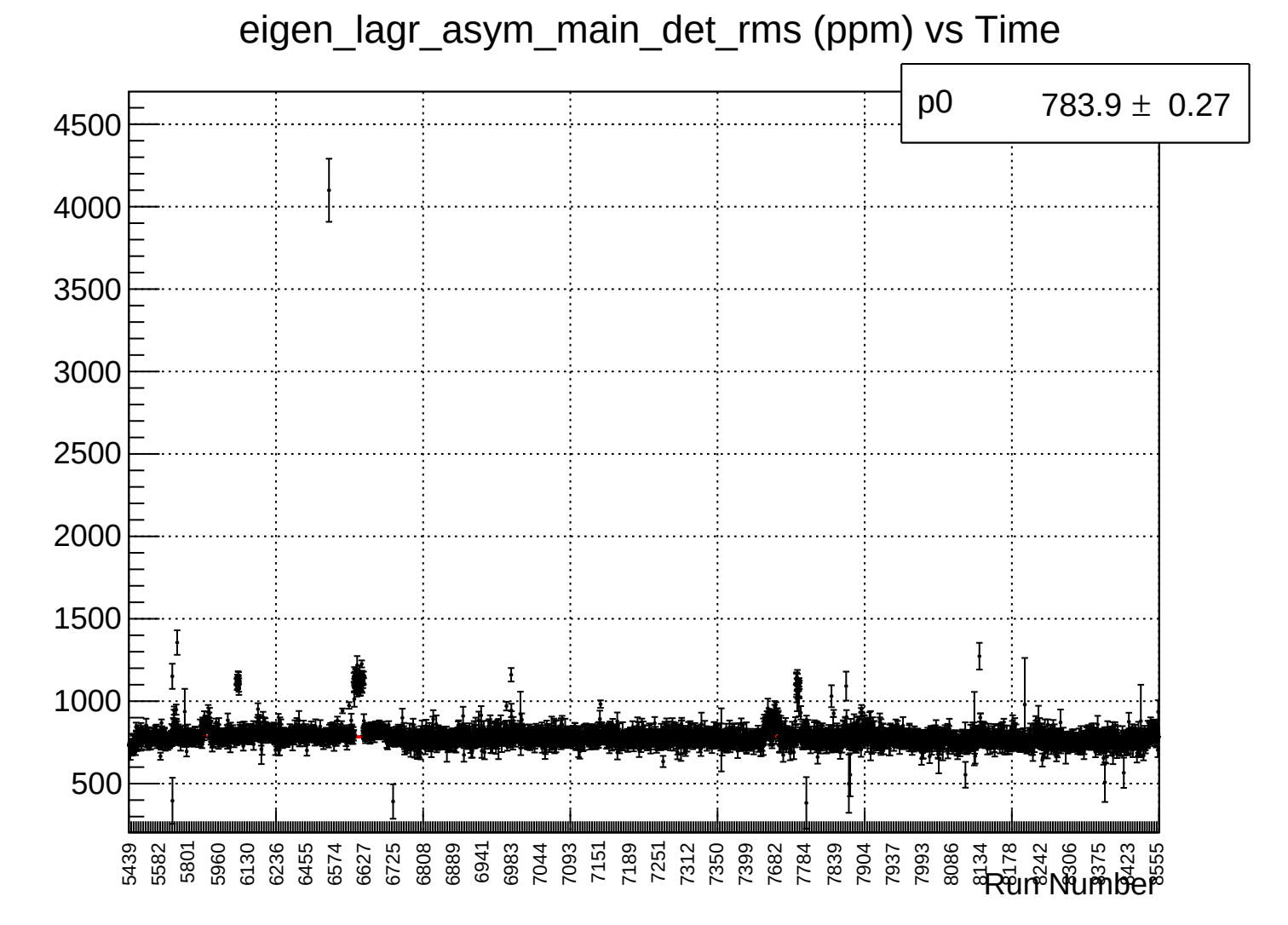

Pull Plot
Entries 6104
Mean 0.00193
Std Dev 0.9809
Underflow 0
Overflow 0
Fit Prob 0.98
Fit Chi2 5873 / 6103
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

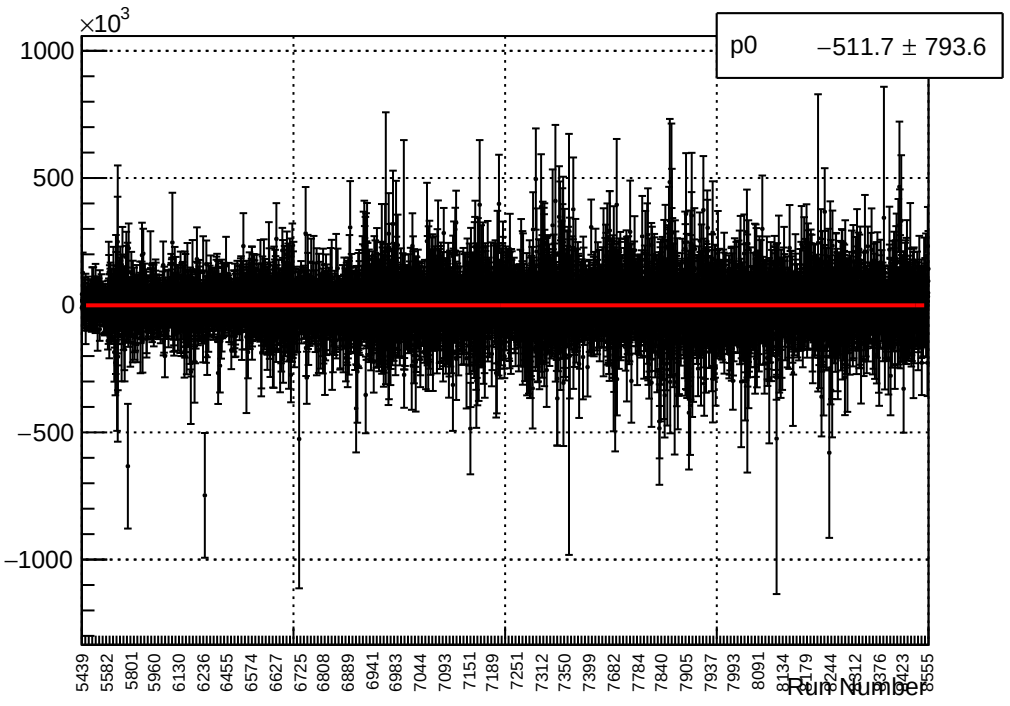

asym_main_det_eigen_reg_correction_rms (ppm) vs Time
p0 1601 ± 0.5652
5000
4000
3000
2000
1000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

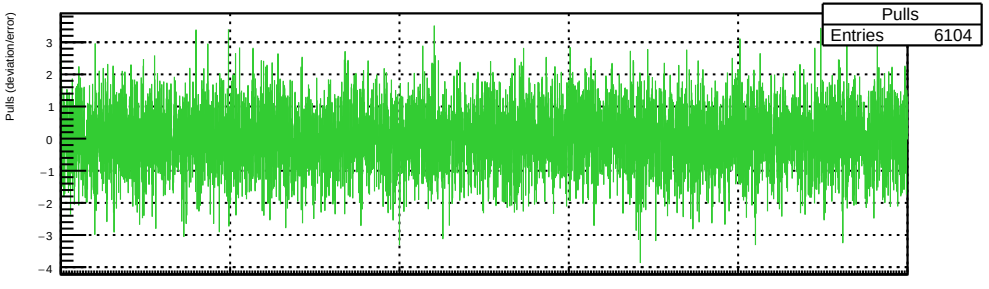

Signed eigen_lagr_asym_main_det_mean (ppb) vs Time
×10^3
p0 1823 ± 381.9
Run Number

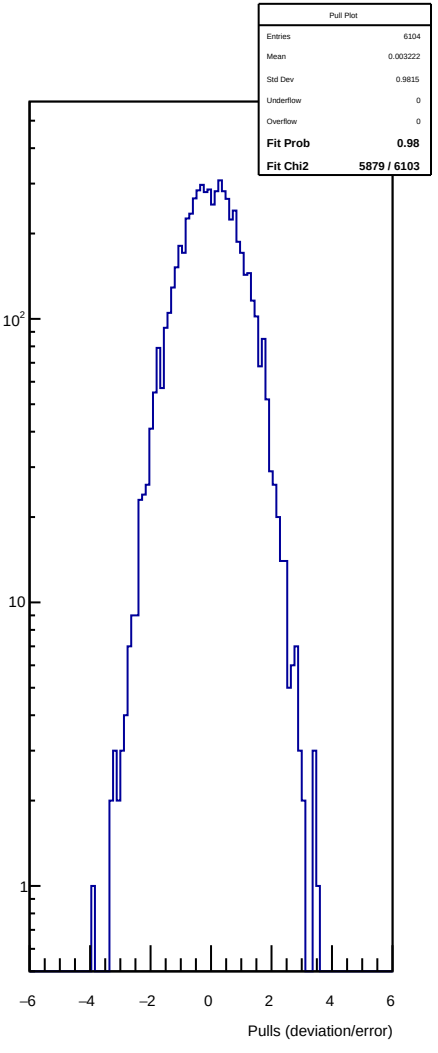

Pulls
Entries 6107
Pulls (deviation/error)

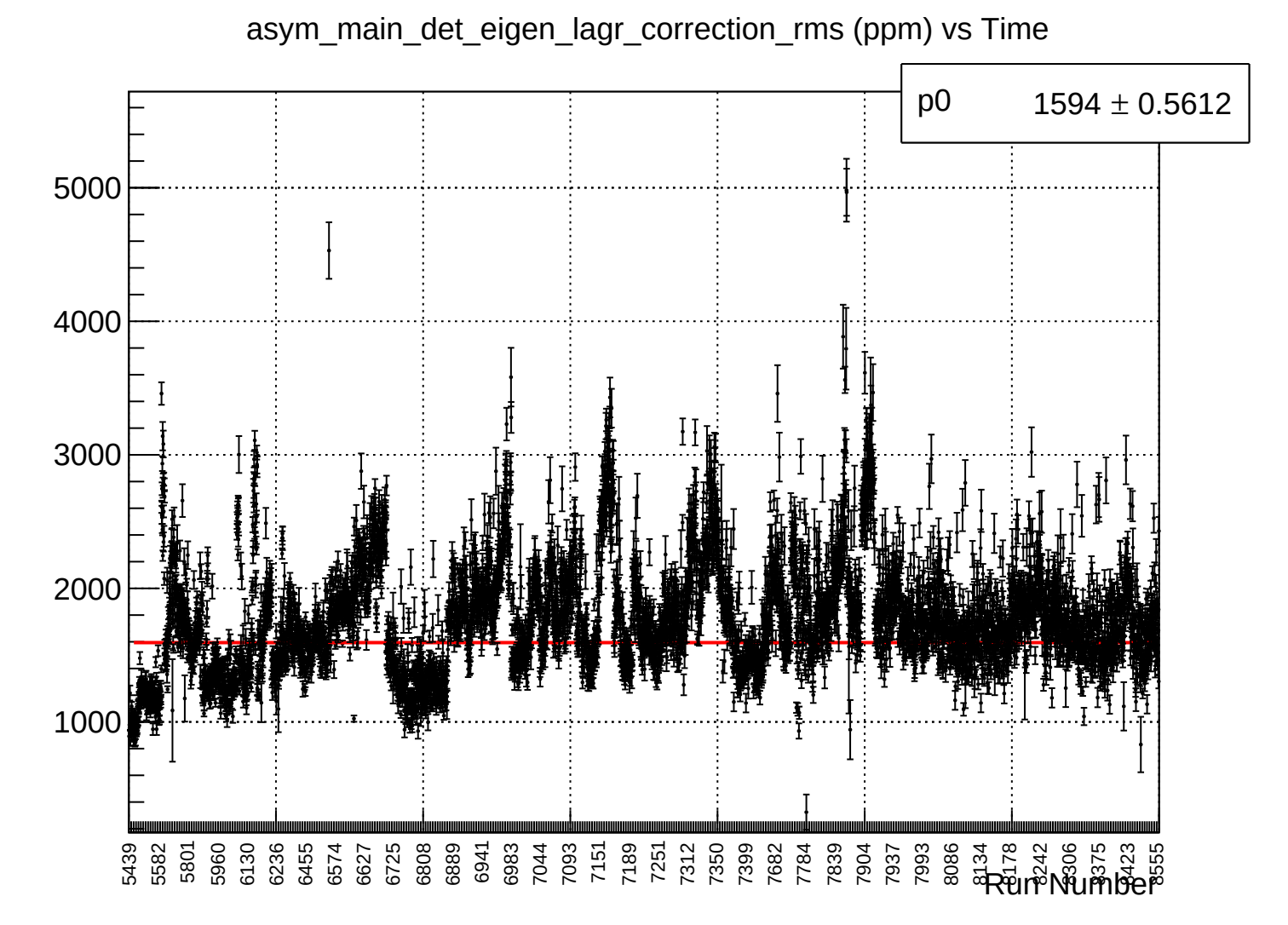

Pull Plot
Entries 6107
Mean 0.004364
Std Dev 1.008
Underflow 0
Overflow 0
Fit Prob 0.20
Fit Chi2 6200 / 6106
Pulls (deviation/error)

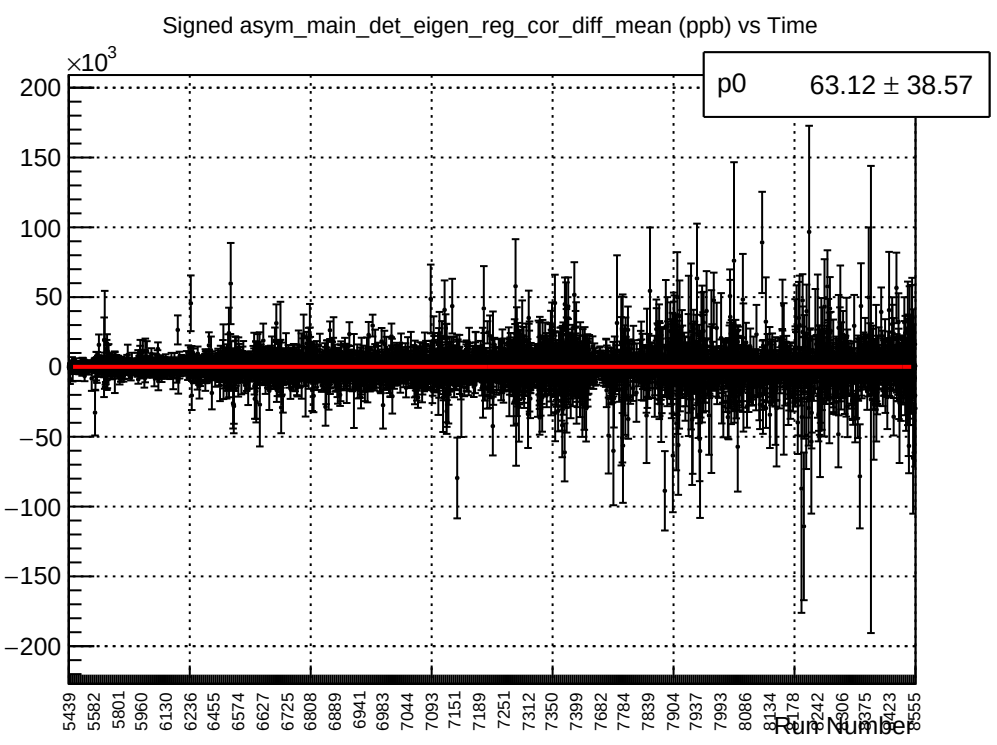

eigen_lagr_asym_main_det_rms (ppm) vs Time
p0 783.9 ± 0.27
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

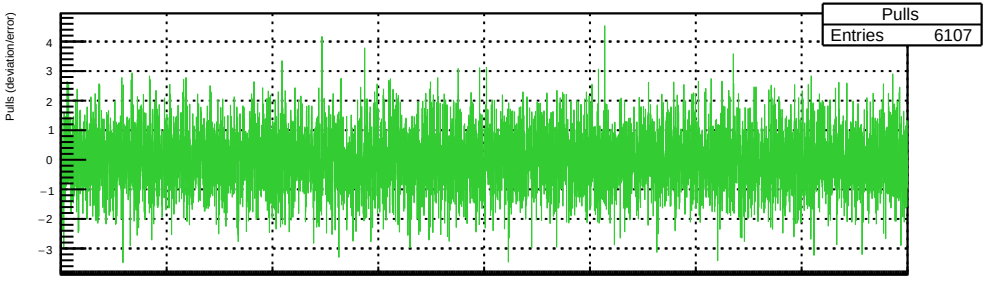

Signed asym_main_det_eigen_lagr_correction_mean (ppb) vs Time
×10^3
1000
500
0
−500
−1000
p0 −511.7 ± 793.6
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7840 7905 7937 7993 8091 8134 8179 8244 8312 8376 8423 8555
Run Number

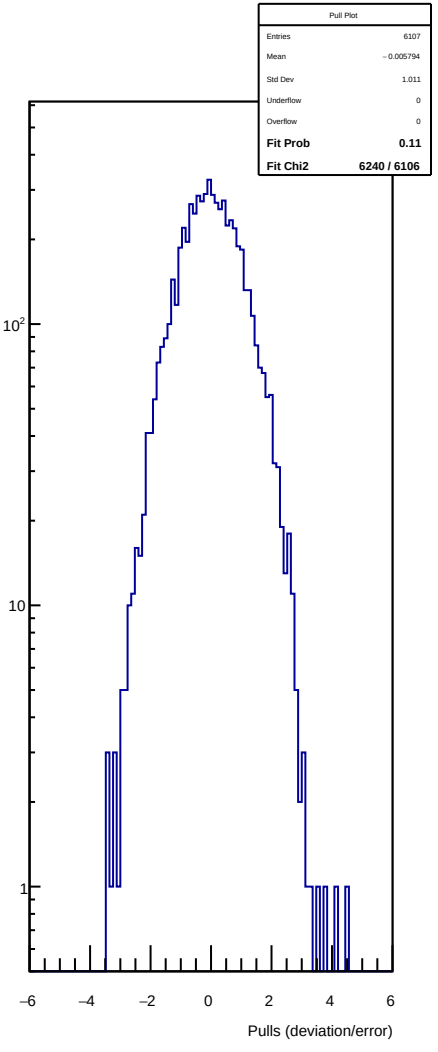

Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4
Pulls
Entries 6104

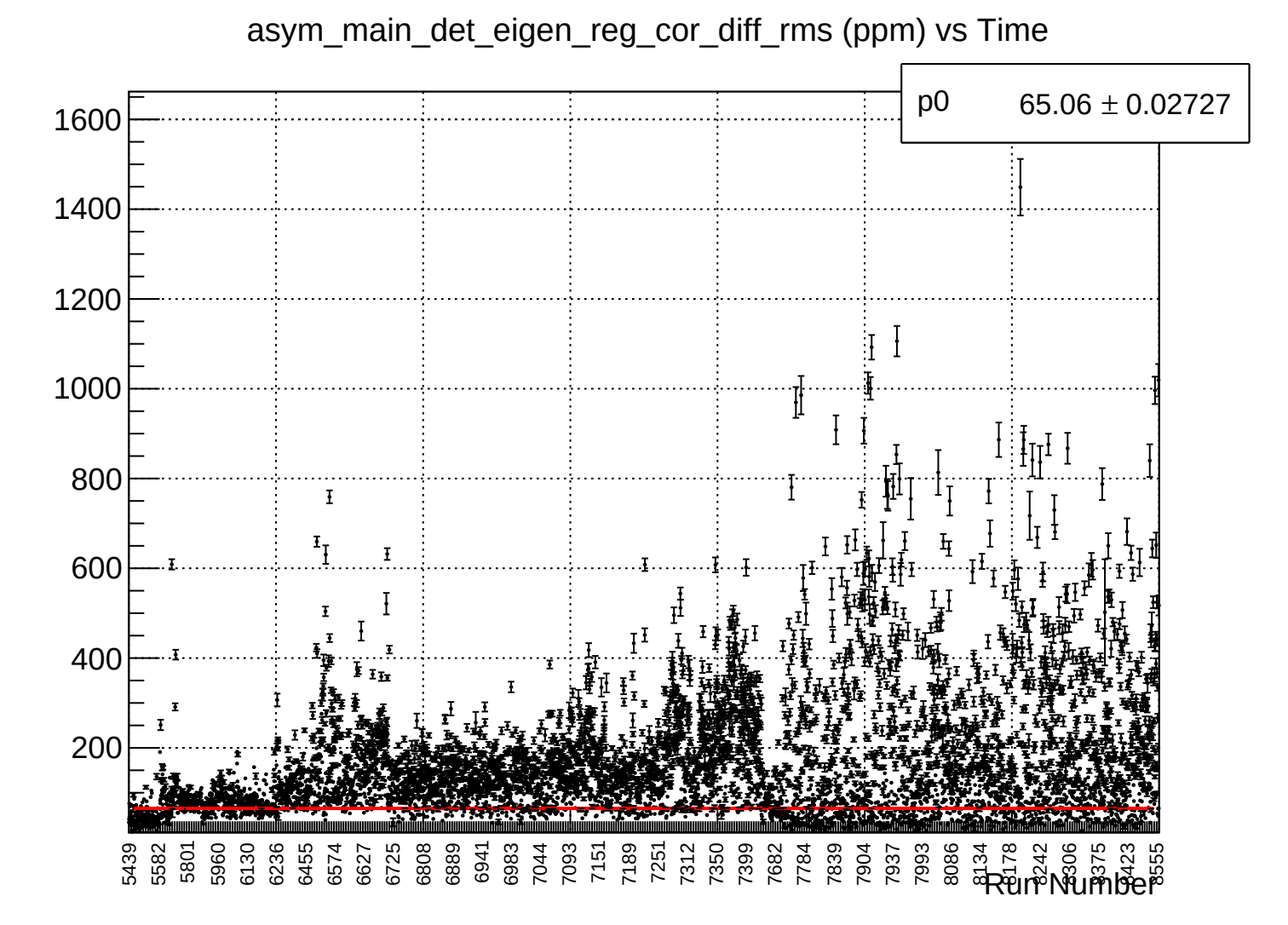

Pull Plot
Entries 6104
Mean 0.003222
Std Dev 0.9815
Underflow 0
Overflow 0
Fit Prob 0.98
Fit Chi2 5879 / 6103
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

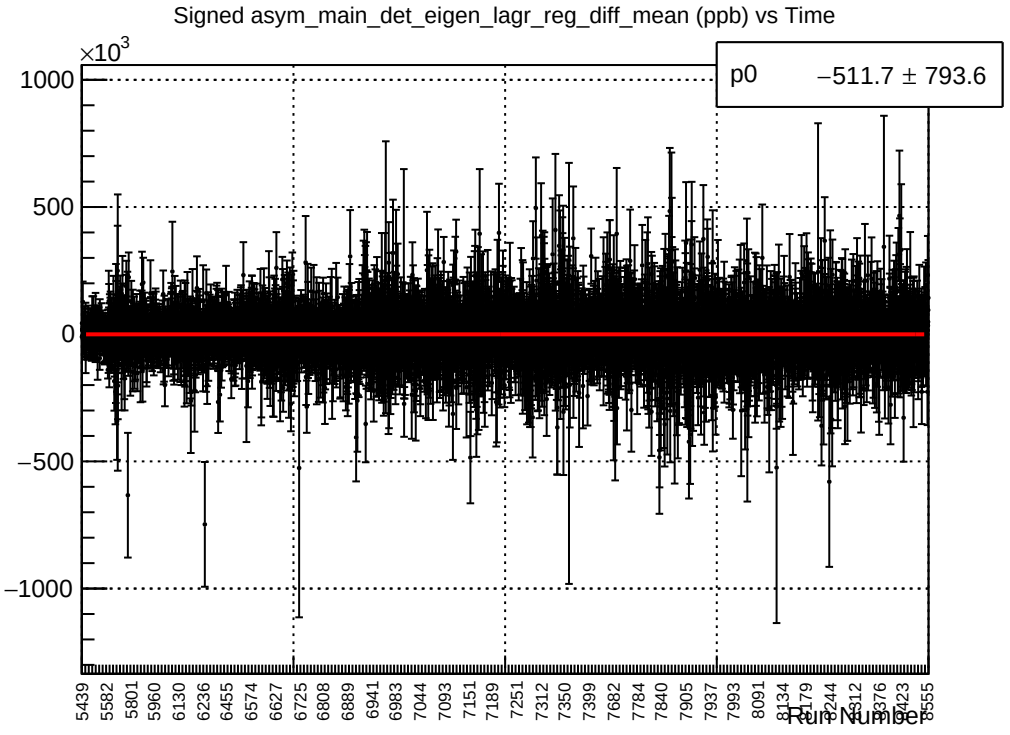

asym_main_det_eigen_lagr_correction_rms (ppm) vs Time
p0
1594 ± 0.5612
5000
4000
3000
2000
1000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

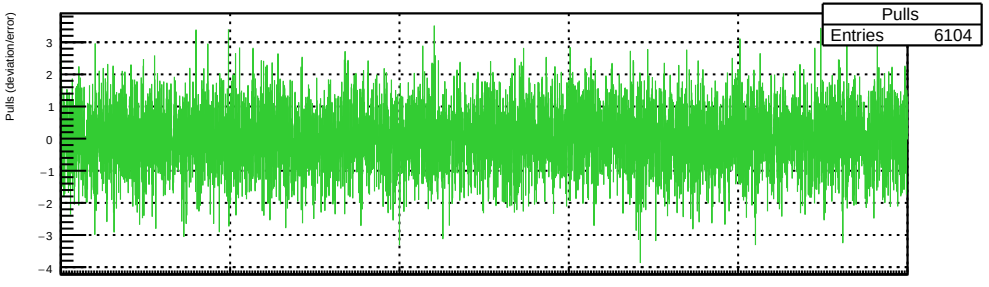

Signed asym_main_det_eigen_reg_cor_diff_mean (ppb) vs Time
×10^3
p0 63.12 ± 38.57
Run Number

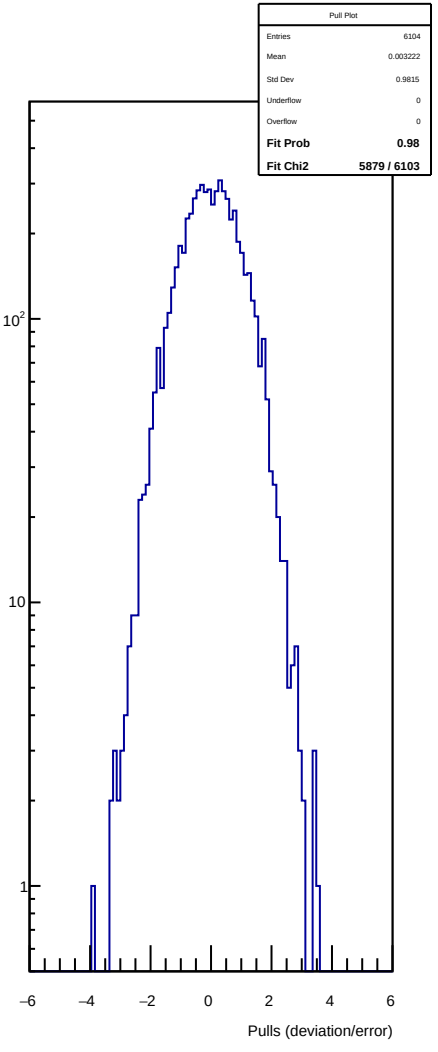

Pulls
Entries 6107
Pulls (deviation/error)

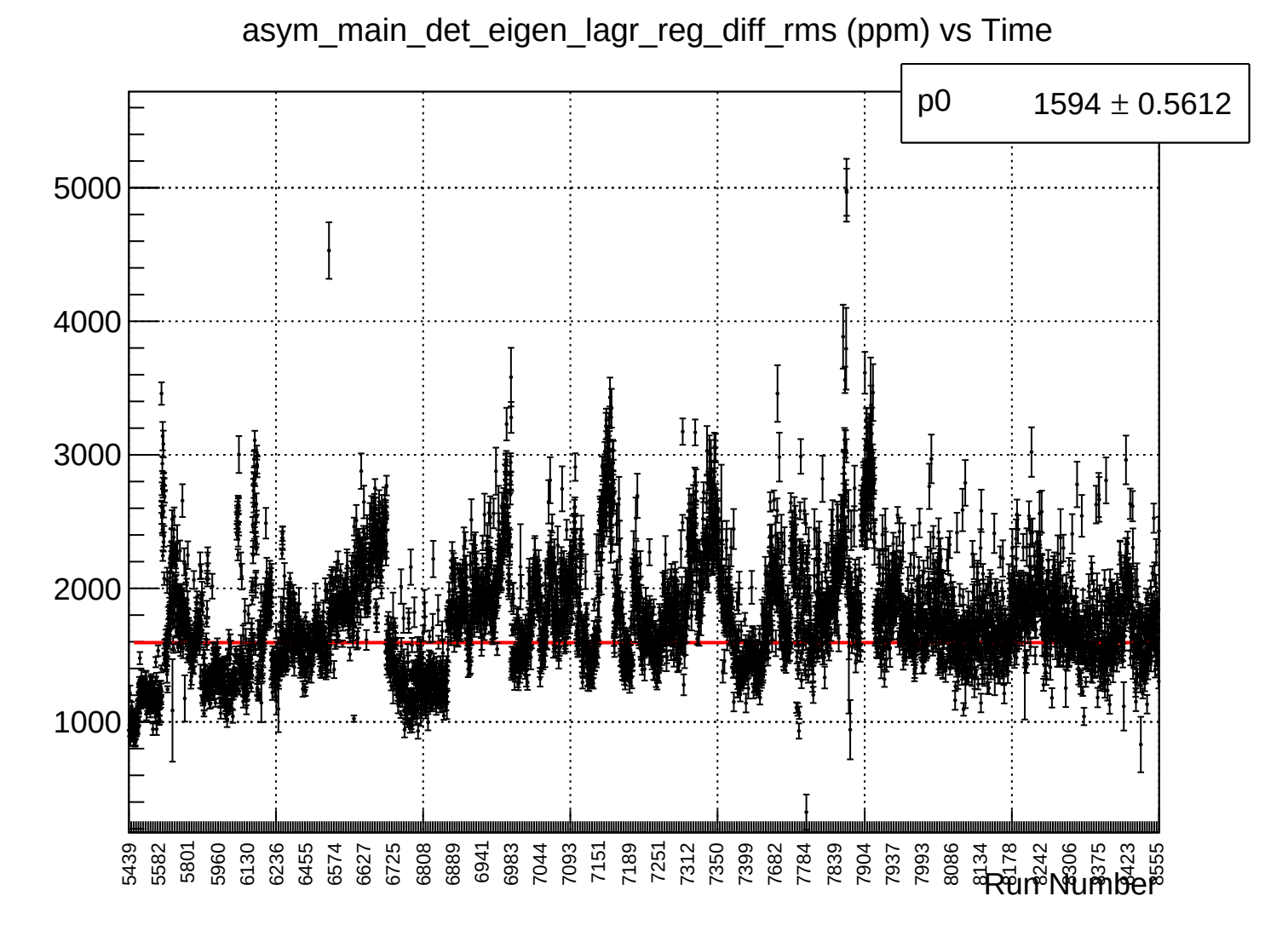

Pull Plot
Entries 6107
Mean −0.005794
Std Dev 1.011
Underflow 0
Overflow 0
Fit Prob 0.11
Fit Chi2 6240 / 6106
Pulls (deviation/error)

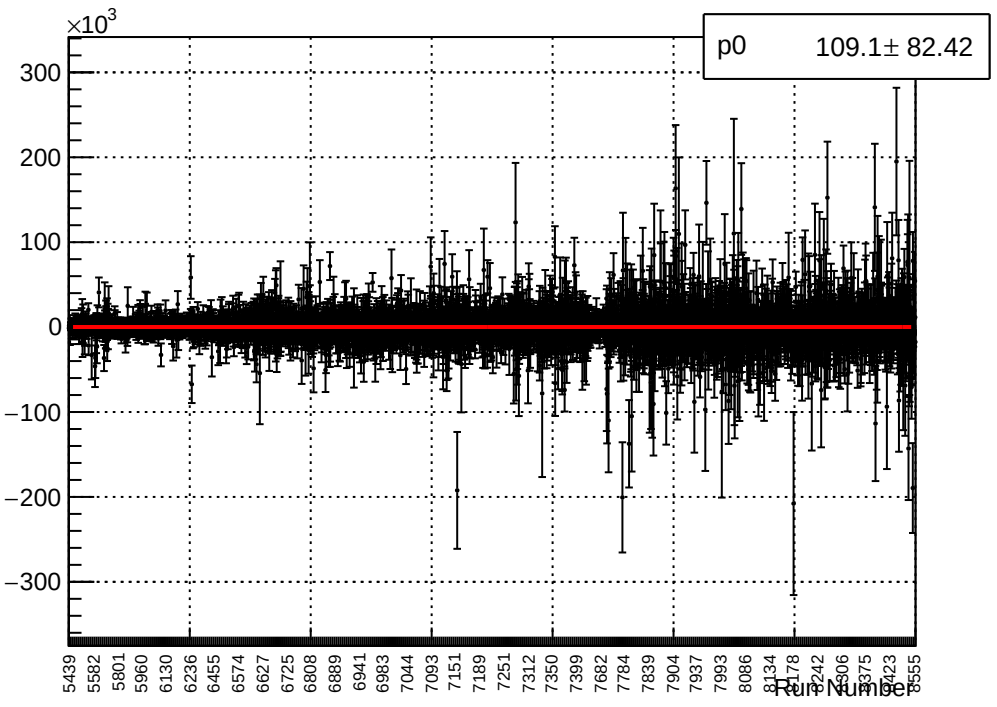

asym_main_det_eigen_reg_cor_diff_rms (ppm) vs Time
p0 65.06 ± 0.02727
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

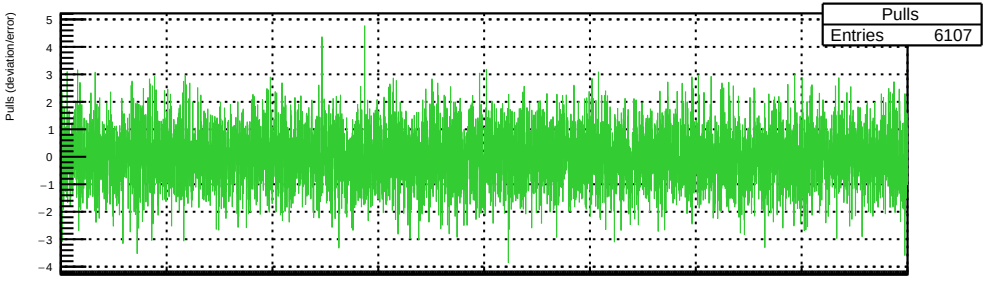

Signed asym_main_det_eigen_lagr_reg_diff_mean (ppb) vs Time
×10^3
1000
500
0
−500
−1000
p0 −511.7 ± 793.6
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7840 7905 7937 7993 8091 8134 8179 8244 8312 8376 8423 8555
Run Number

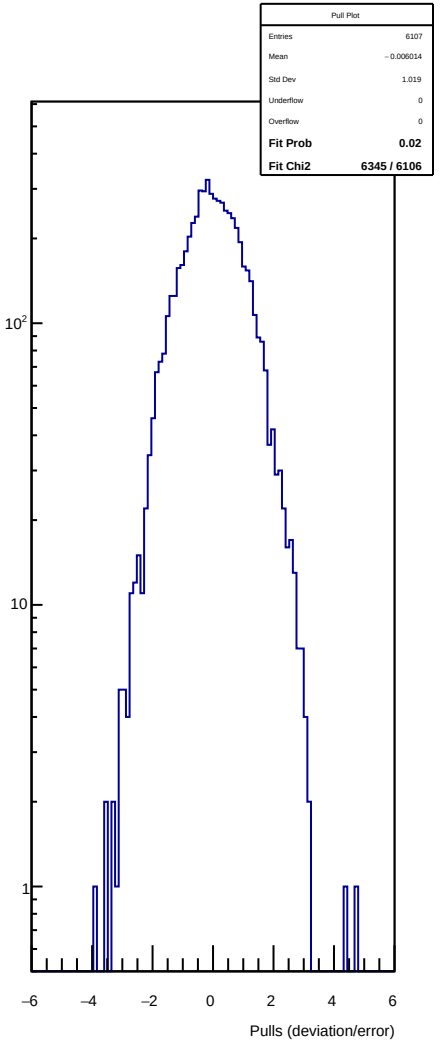

Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4
Pulls
Entries 6104

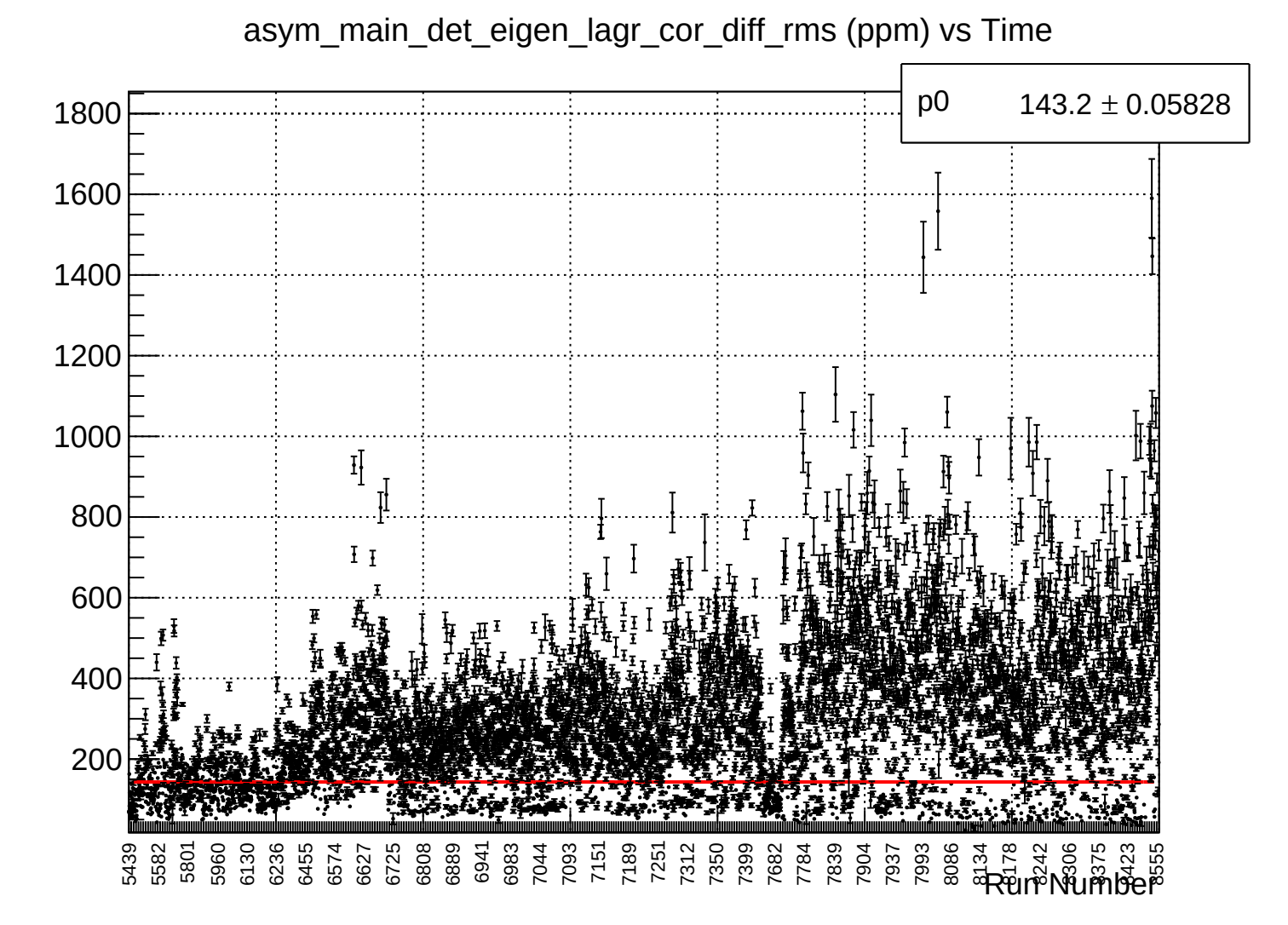

Pull Plot
Entries 6104
Mean 0.003222
Std Dev 0.9815
Underflow 0
Overflow 0
Fit Prob 0.98
Fit Chi2 5879 / 6103
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

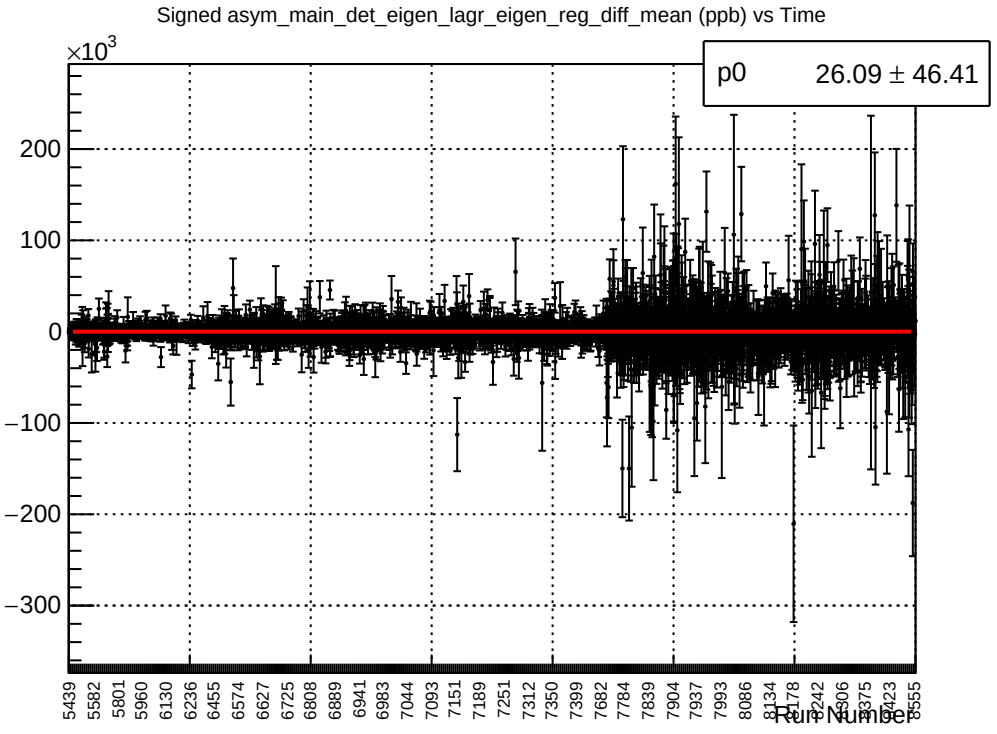

asym_main_det_eigen_lagr_reg_diff_rms (ppm) vs Time
p0
1594 ± 0.5612
5000
4000
3000
2000
1000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

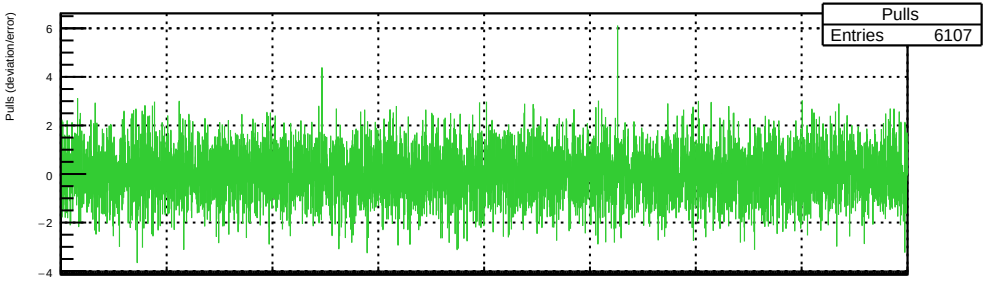

Signed asym_main_det_eigen_lagr_cor_diff_mean (ppb) vs Time
×10^3
p0 109.1± 82.42
300
200
100
0
−100
−200
−300
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7904 7937 7993 8086 8134 8178 8242 8306 8375 8423 8555
Run Number

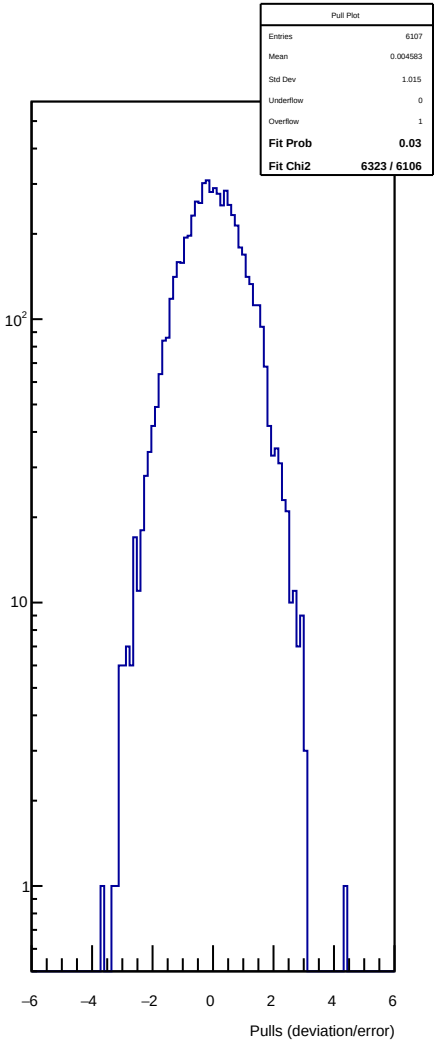

Pulls
Entries 6107
Pulls (deviation/error)
5
4
3
2
1
0
−1
−2
−3
−4

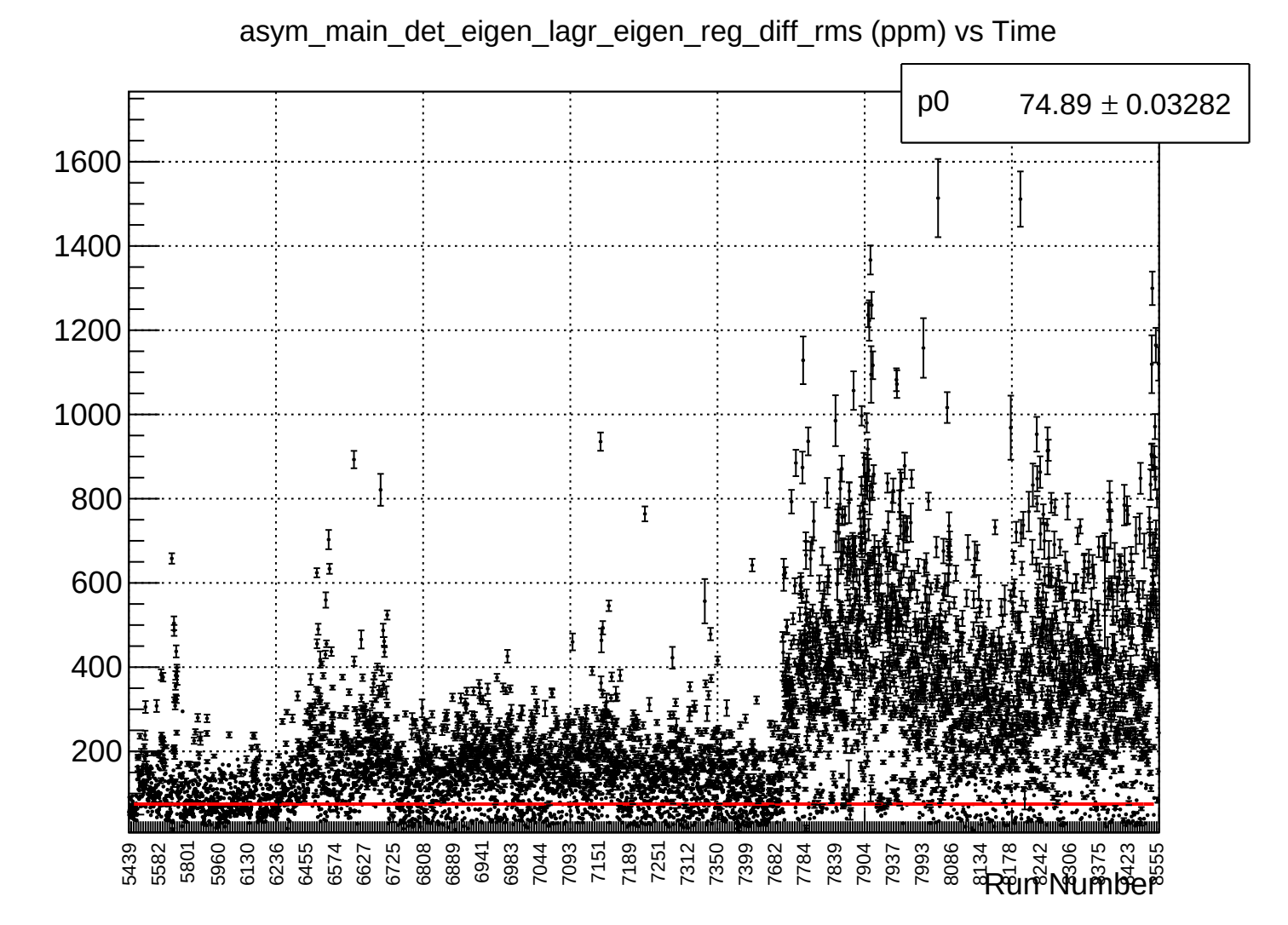

Pull Plot
Entries 6107
Mean −0.006014
Std Dev 1.019
Underflow 0
Overflow 0
Fit Prob 0.02
Fit Chi2 6345 / 6106
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

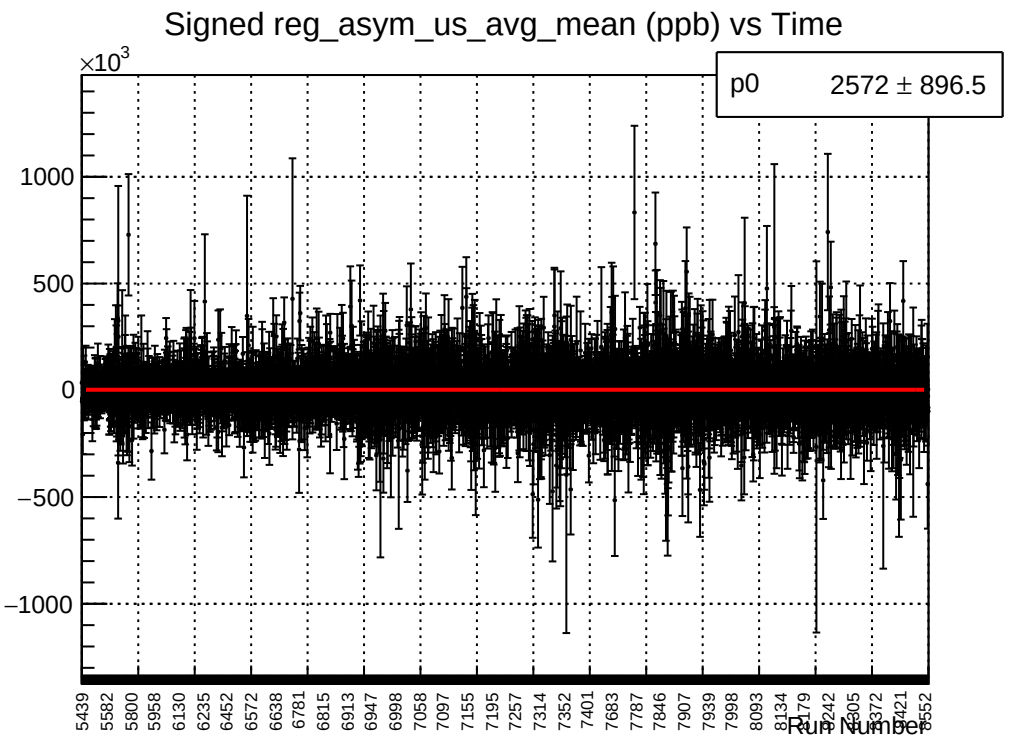

asym_main_det_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 143.2 ± 0.05828
1800
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

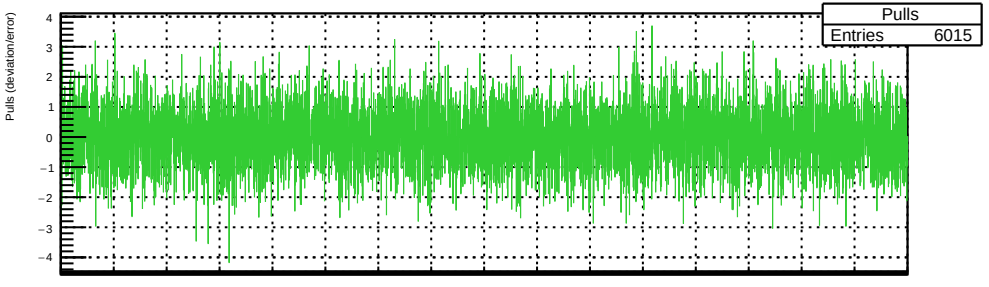

Signed asym_main_det_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
×10^3
p0 26.09 ± 46.41
200
100
0
−100
−200
−300
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7904 7937 7993 8086 8134 8178 8242 8306 8375 8423 8555
Run Number

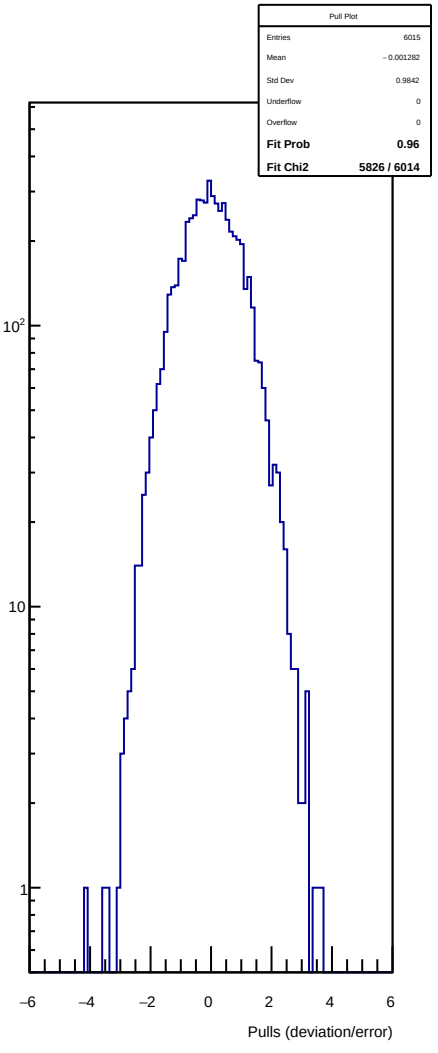

Pulls
Entries 6107
Pulls (deviation/error)
6
4
2
0
−2
−4

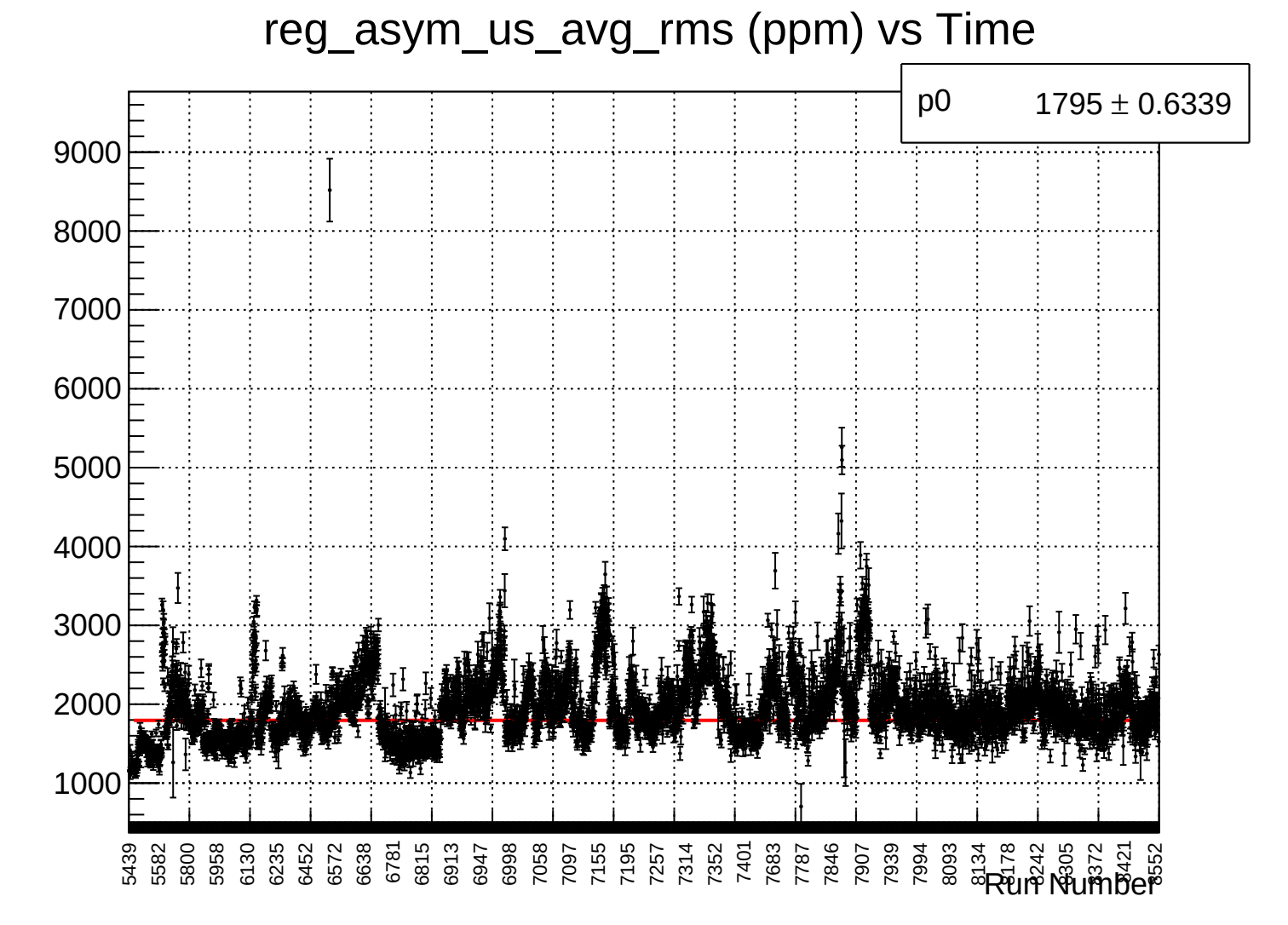

Pull Plot
Entries 6107
Mean 0.004583
Std Dev 1.015
Underflow 0
Overflow 1
Fit Prob 0.03
Fit Chi2 6323 / 6106
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

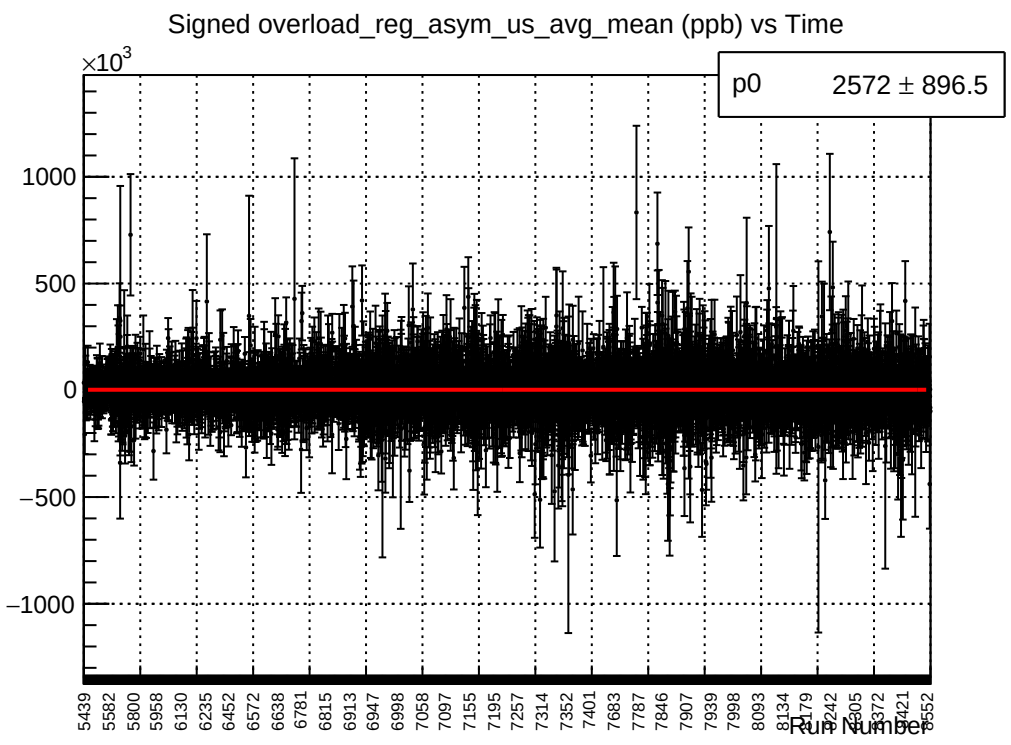

asym_main_det_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 74.89 ± 0.03282
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

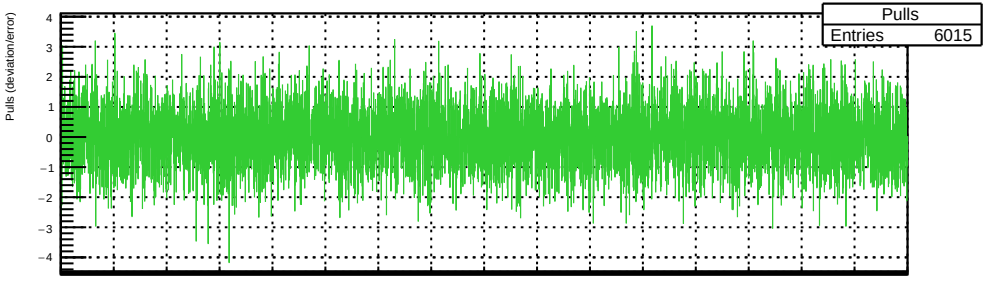

Signed reg_asym_us_avg_mean (ppb) vs Time
×10^3
p0 2572 ± 896.5
1000
500
0
−500
−1000
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7998 8093 8134 8179 8242 8305 8372 8421 8552
Run Number

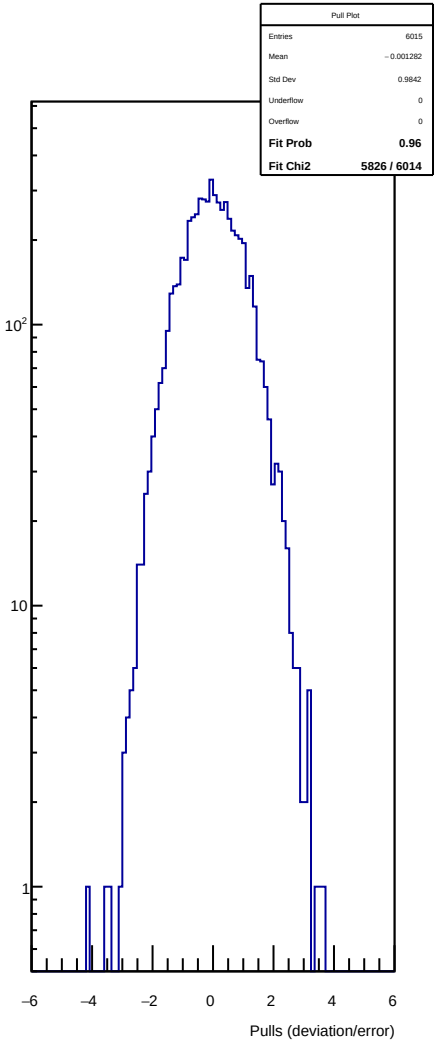

Pulls
Entries 6015
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

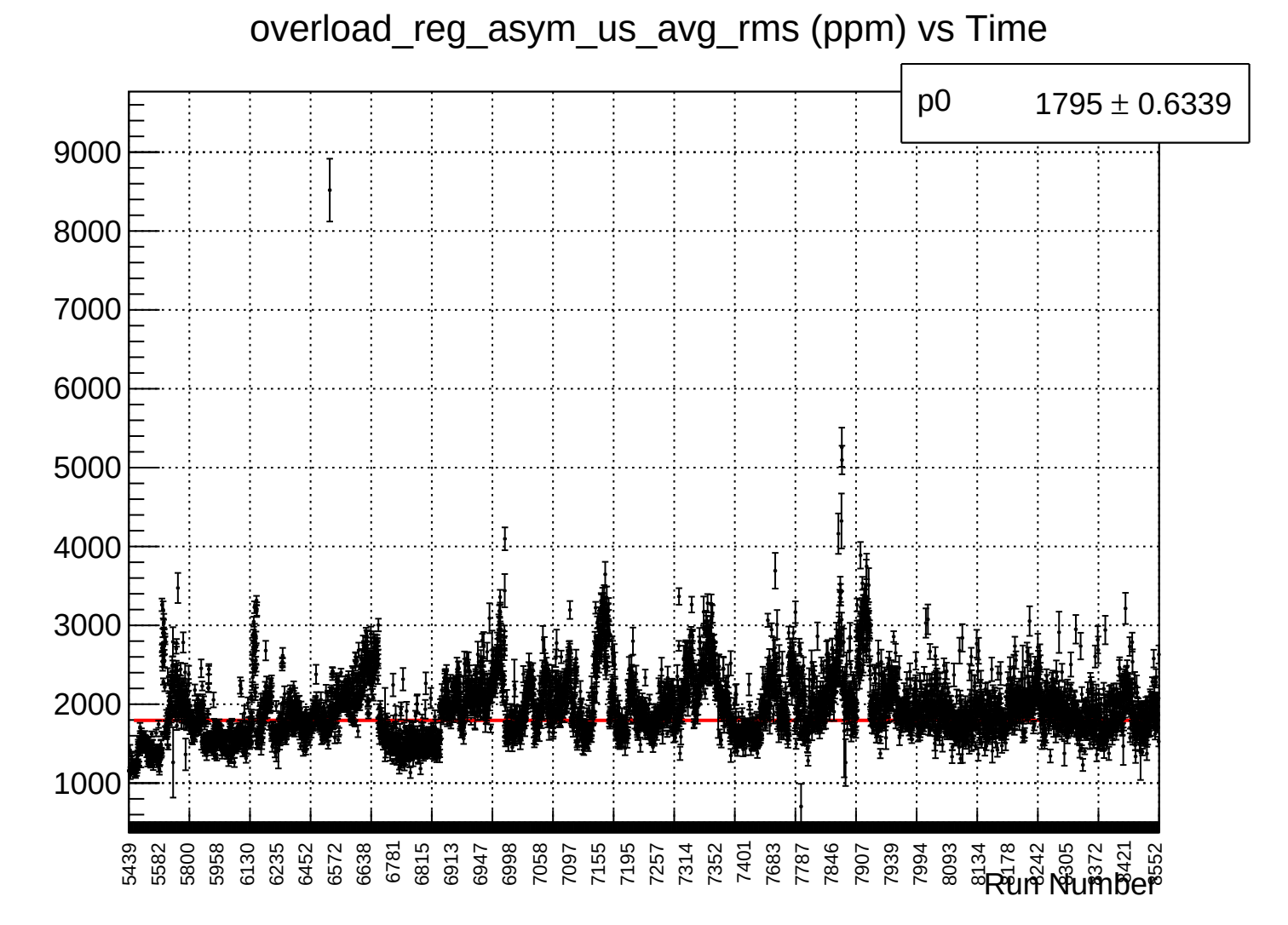

Pull Plot
Entries 6015
Mean −0.001282
Std Dev 0.9842
Underflow 0
Overflow 0
Fit Prob 0.96
Fit Chi2 5826 / 6014
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

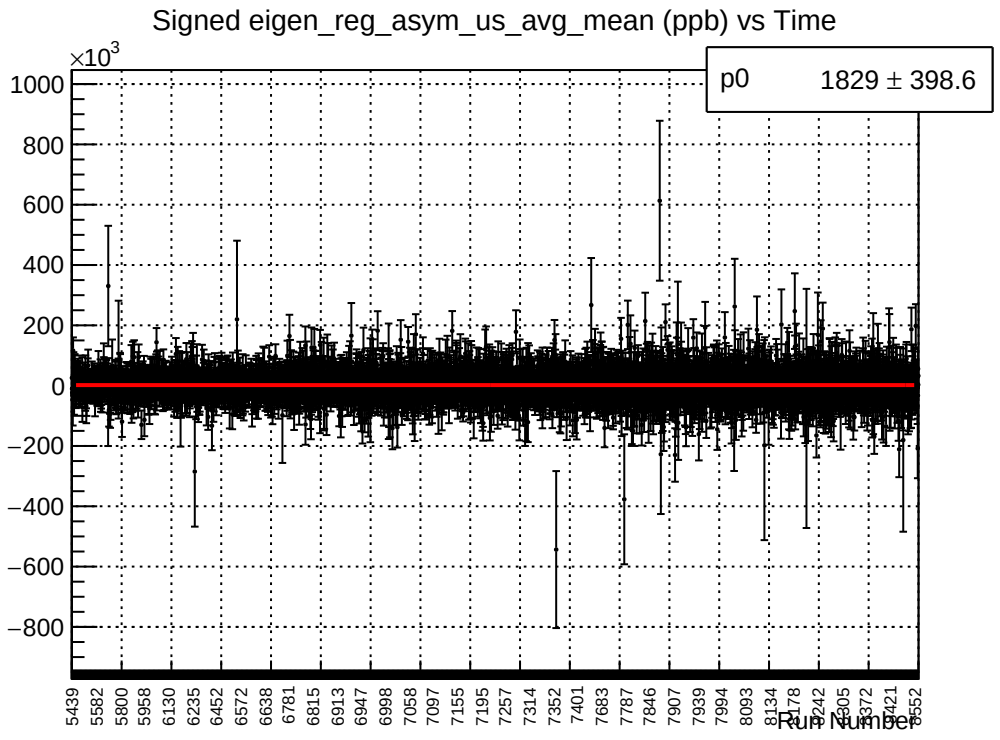

reg_asym_us_avg_rms (ppm) vs Time
p0
1795 ± 0.6339
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

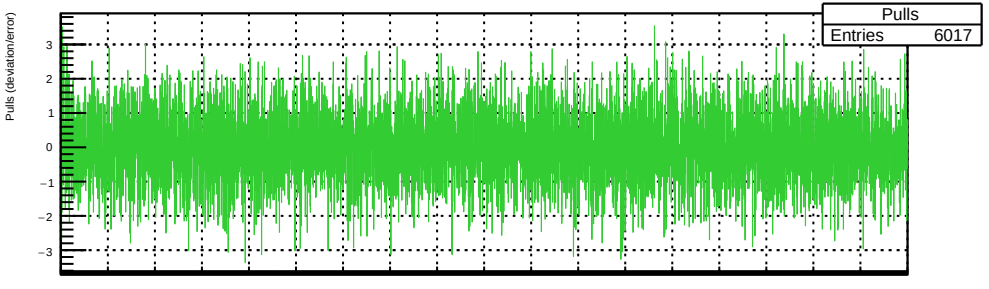

Signed overload_reg_asym_us_avg_mean (ppb) vs Time
×10^3
p0 2572 ± 896.5
1000
500
0
−500
−1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7998
8093
8134
8179
8242
8305
8372
8421
8552
Run Number

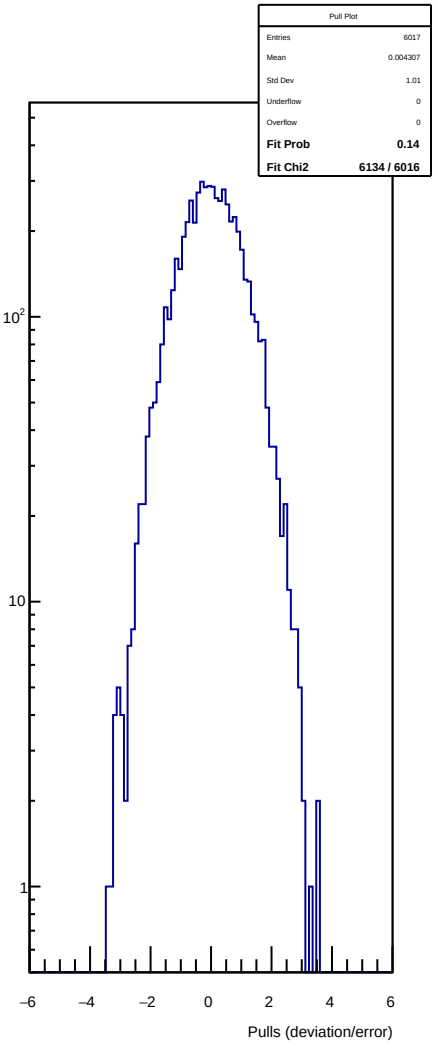

Pulls
Entries 6015
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

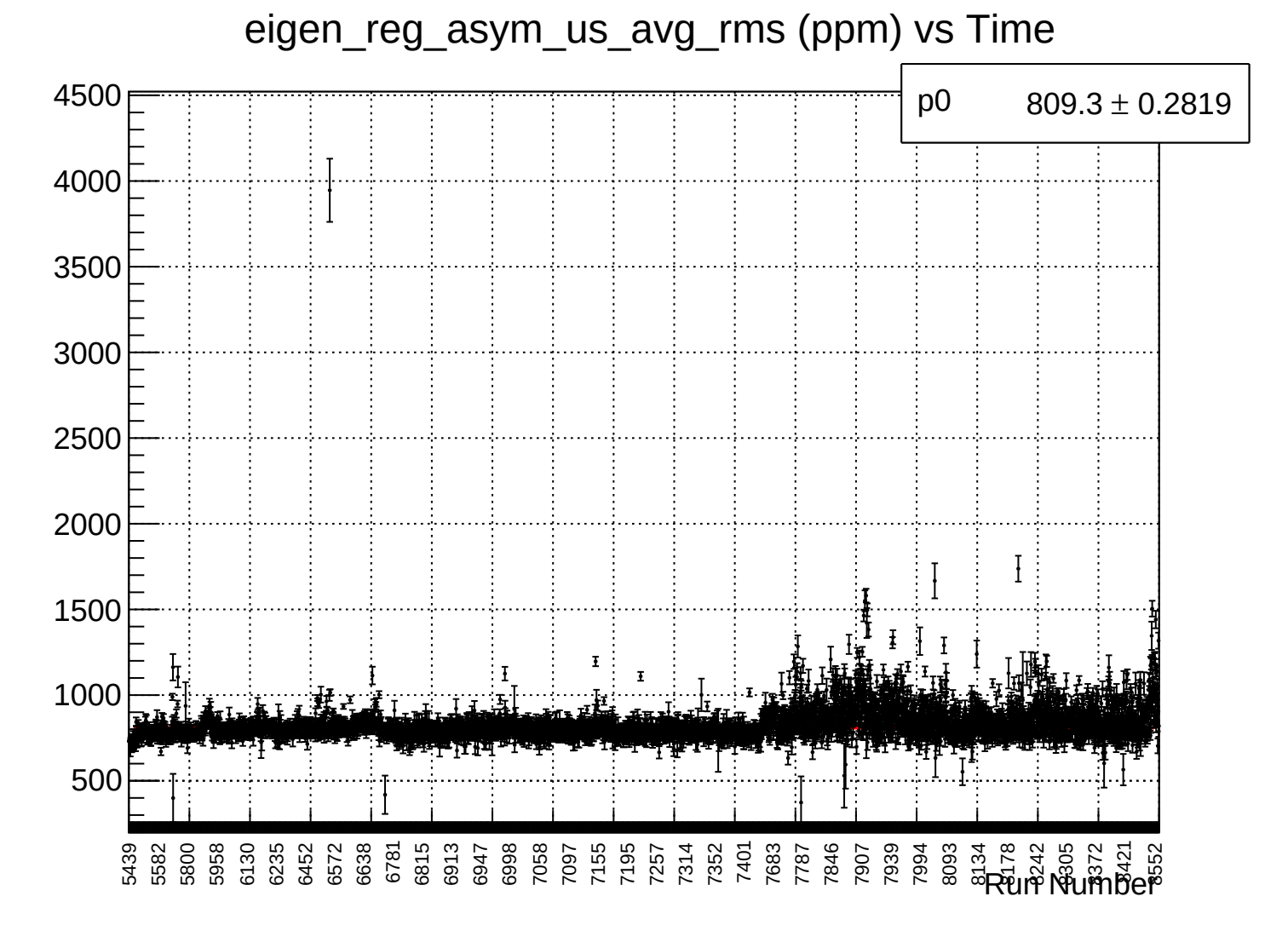

Pull Plot
Entries 6015
Mean −0.001282
Std Dev 0.9842
Underflow 0
Overflow 0
Fit Prob 0.96
Fit Chi2 5826 / 6014
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

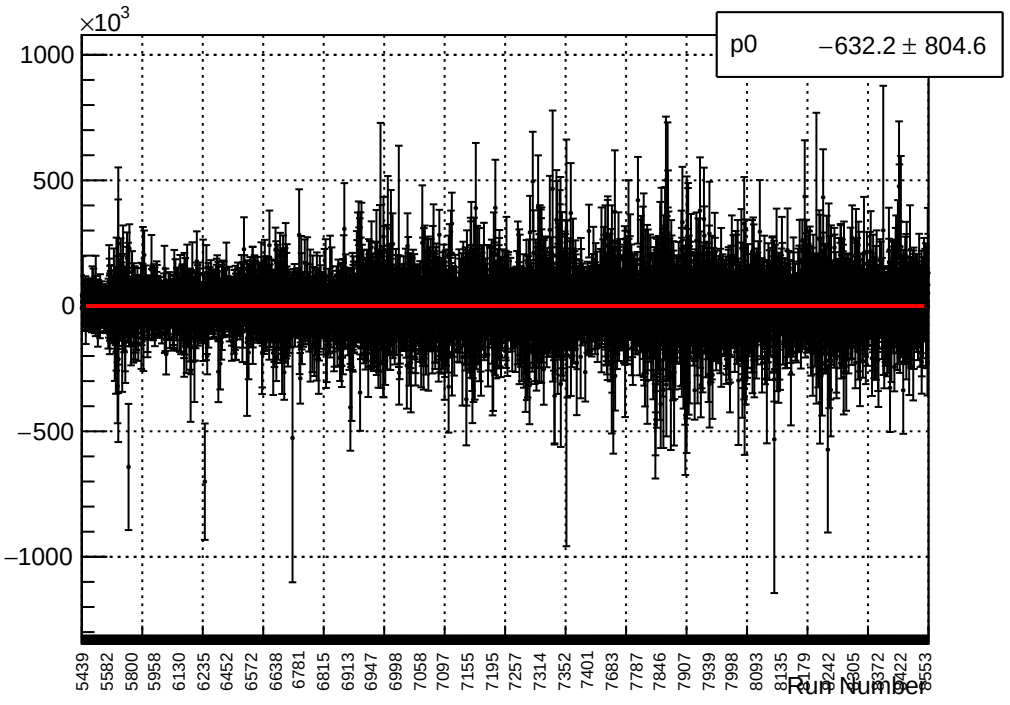

overload_reg_asym_us_avg_rms (ppm) vs Time
p0 1795 ± 0.6339
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

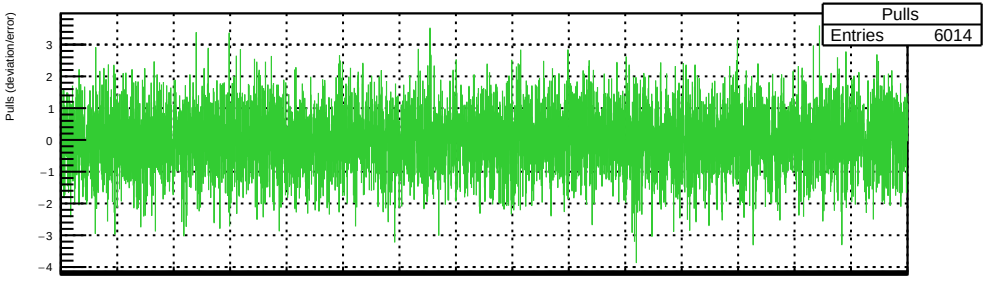

Signed eigen_reg_asym_us_avg_mean (ppb) vs Time
×10^3
p0 1829 ± 398.6
1000
800
600
400
200
0
−200
−400
−600
−800
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

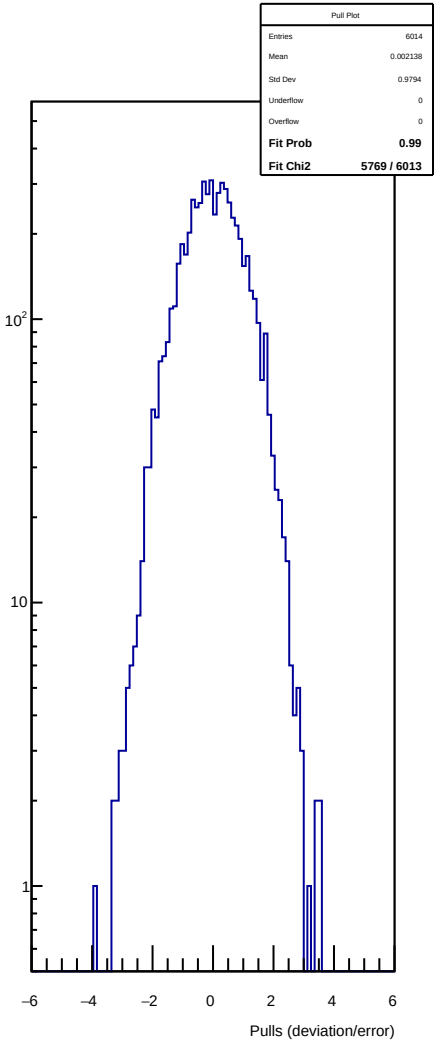

Pulls
Entries 6017
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

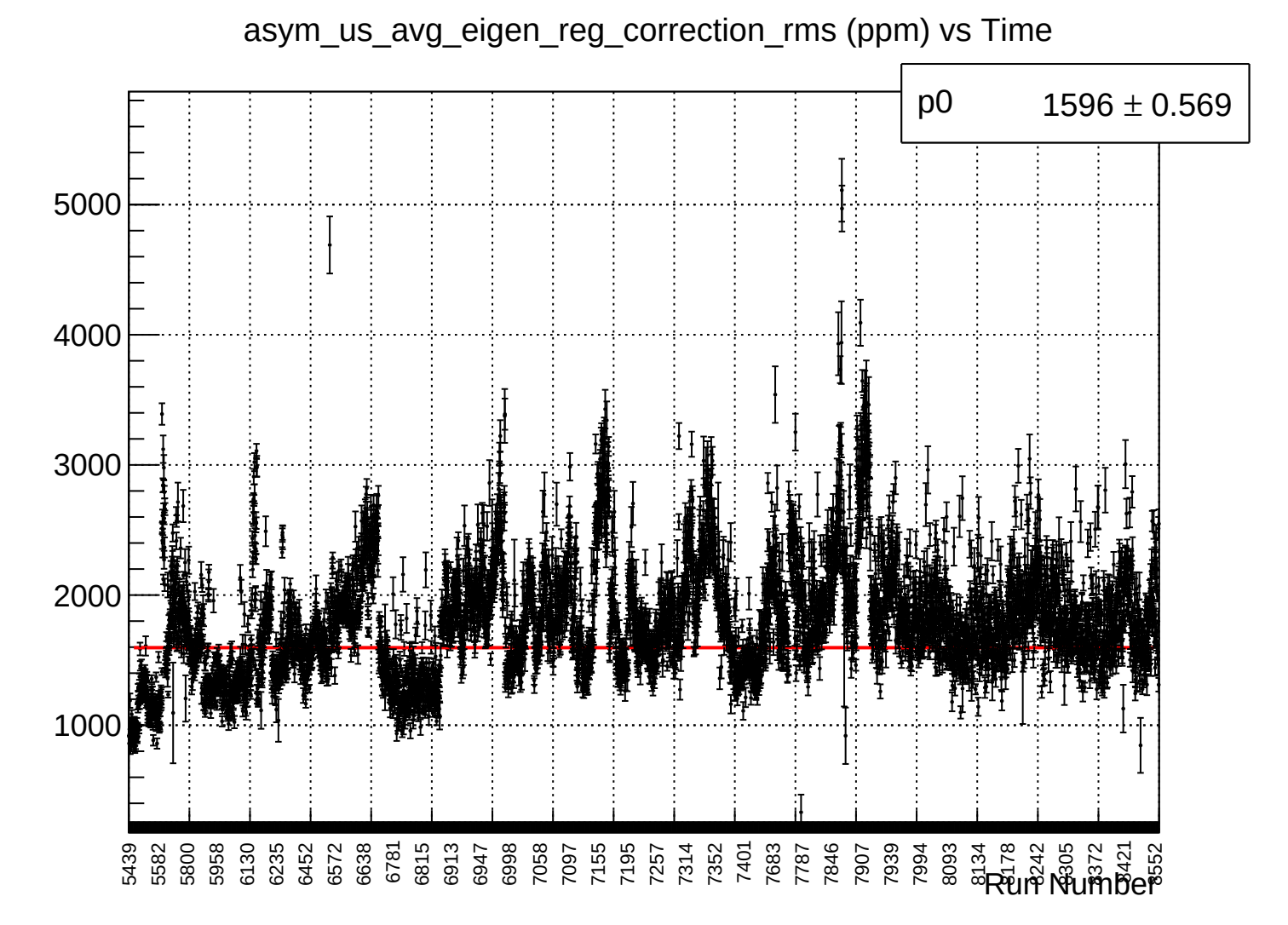

Pull Plot
Entries 6017
Mean 0.004307
Std Dev 1.01
Underflow 0
Overflow 0
Fit Prob 0.14
Fit Chi2 6134 / 6016
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

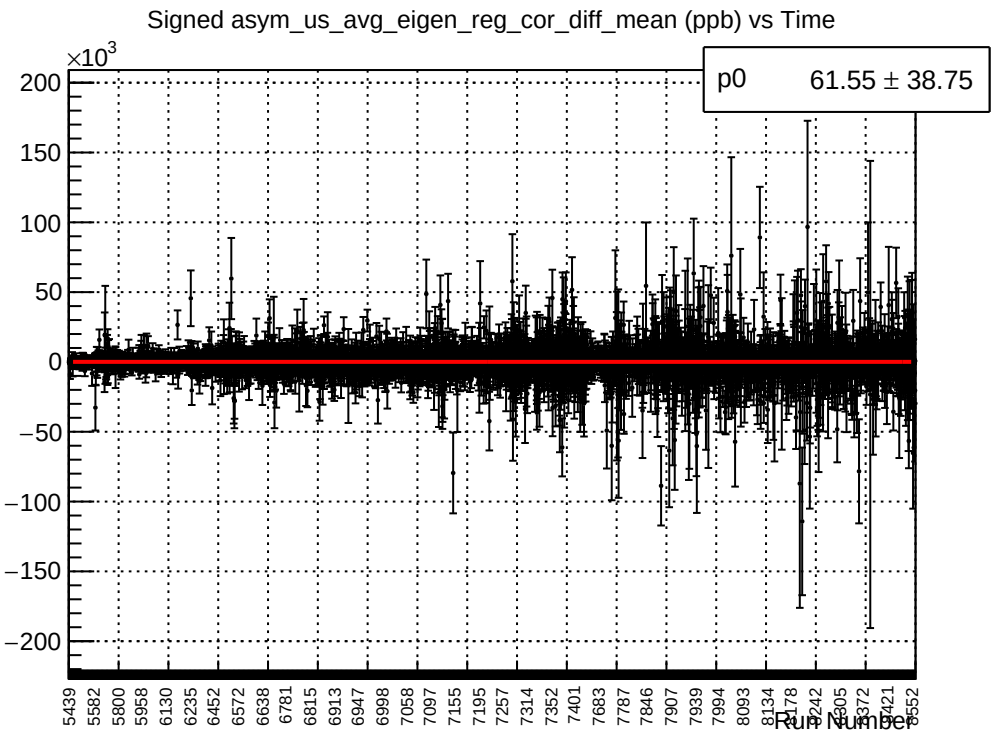

eigen_reg_asym_us_avg_rms (ppm) vs Time
p0
809.3 ± 0.2819
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

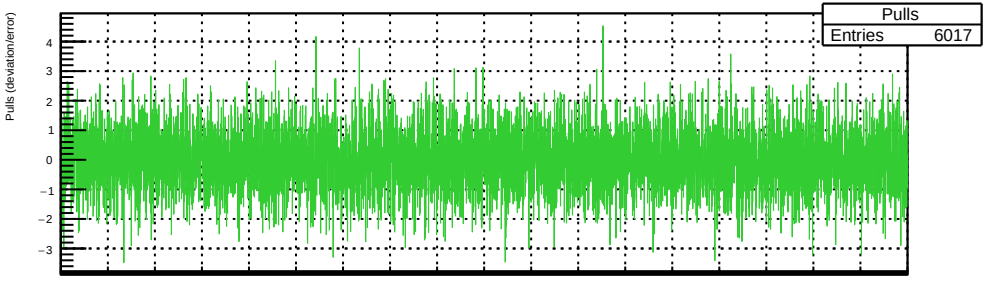

Signed asym_us_avg_eigen_reg_correction_mean (ppb) vs Time
×10^3
1000
500
0
−500
−1000
p0 −632.2 ± 804.6
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7998
8093
8135
8179
8242
8305
8372
8422
8553
Run Number

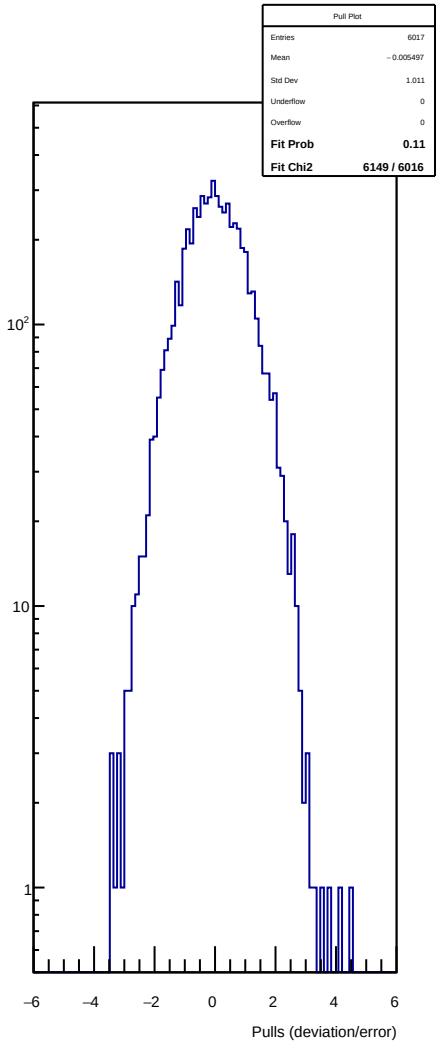

Pulls
Entries 6014
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

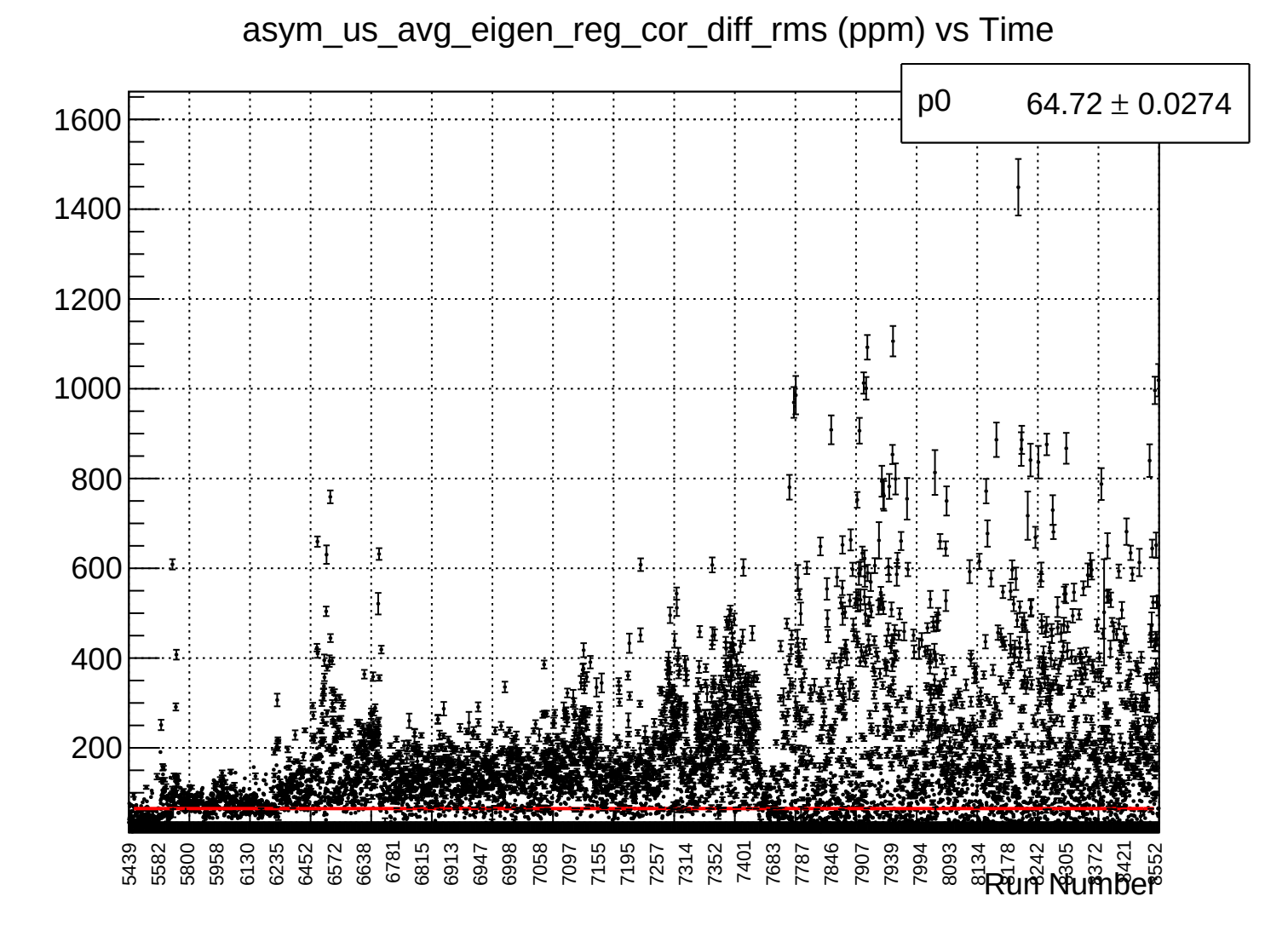

Pull Plot
Entries 6014
Mean 0.002138
Std Dev 0.9794
Underflow 0
Overflow 0
Fit Prob 0.99
Fit Chi2 5769 / 6013
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

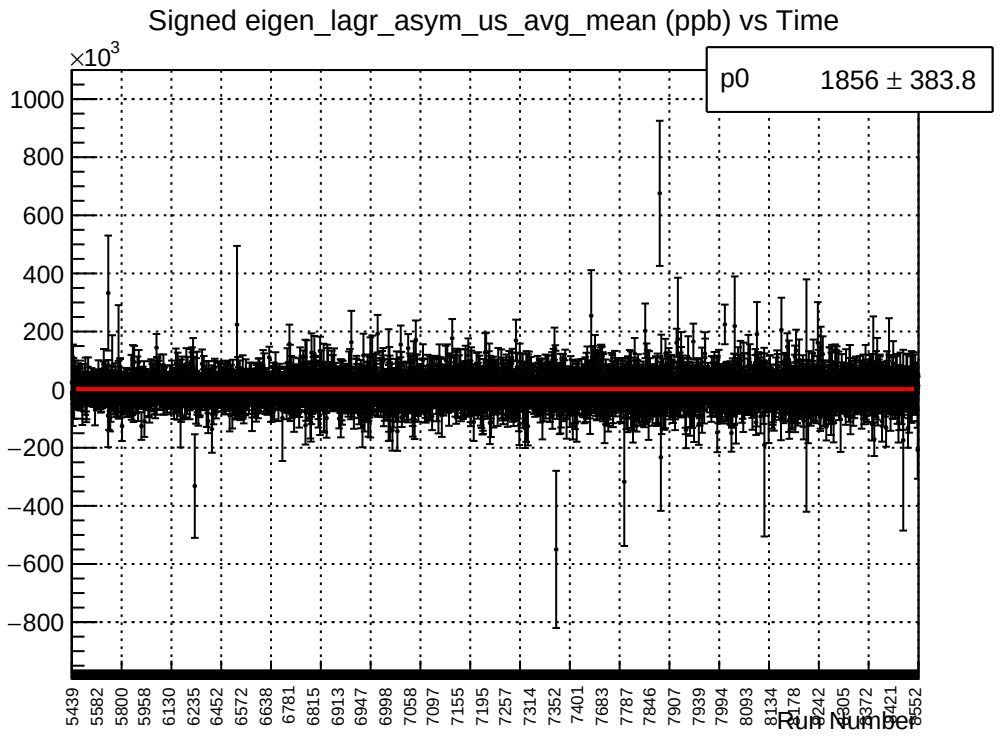

asym_us_avg_eigen_reg_correction_rms (ppm) vs Time
p0 1596 ± 0.569
5000
4000
3000
2000
1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

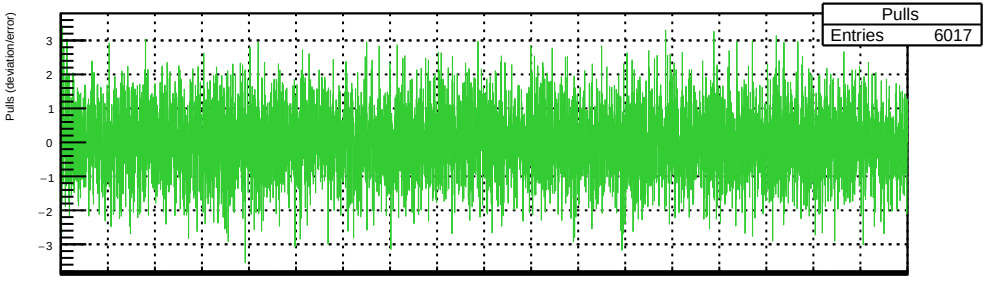

Signed asym_us_avg_eigen_reg_cor_diff_mean (ppb) vs Time
×10^3
p0 61.55 ± 38.75
200
150
100
50
0
−50
−100
−150
−200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

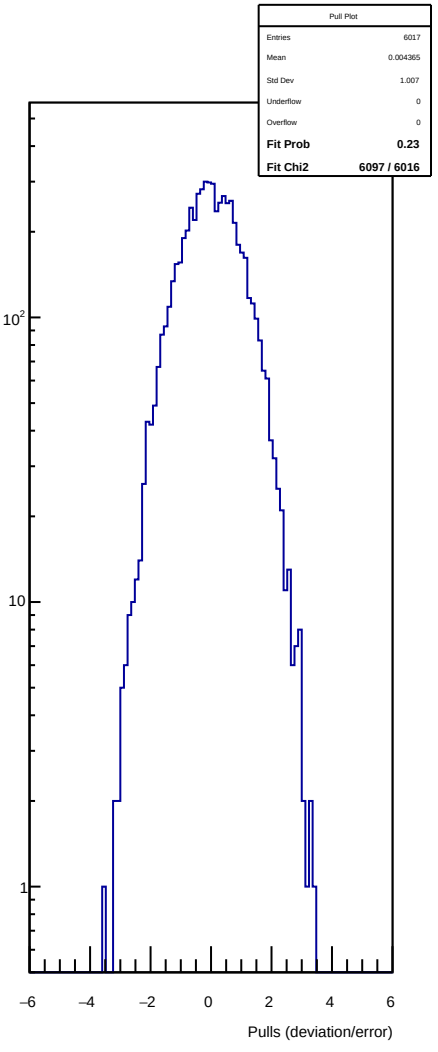

Pulls
Entries 6017
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

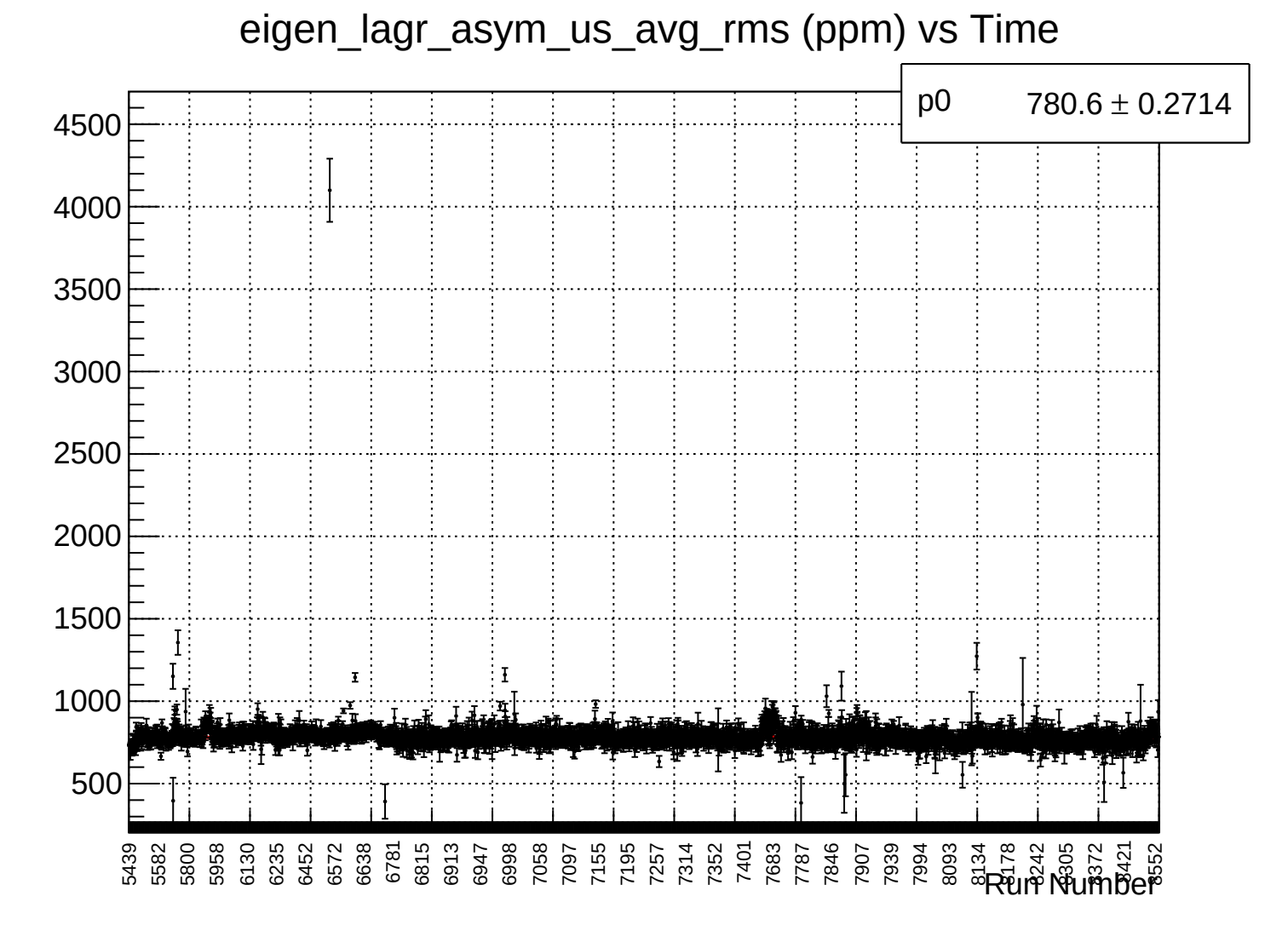

Pull Plot
Entries 6017
Mean −0.005497
Std Dev 1.011
Underflow 0
Overflow 0
Fit Prob 0.11
Fit Chi2 6149 / 6016
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

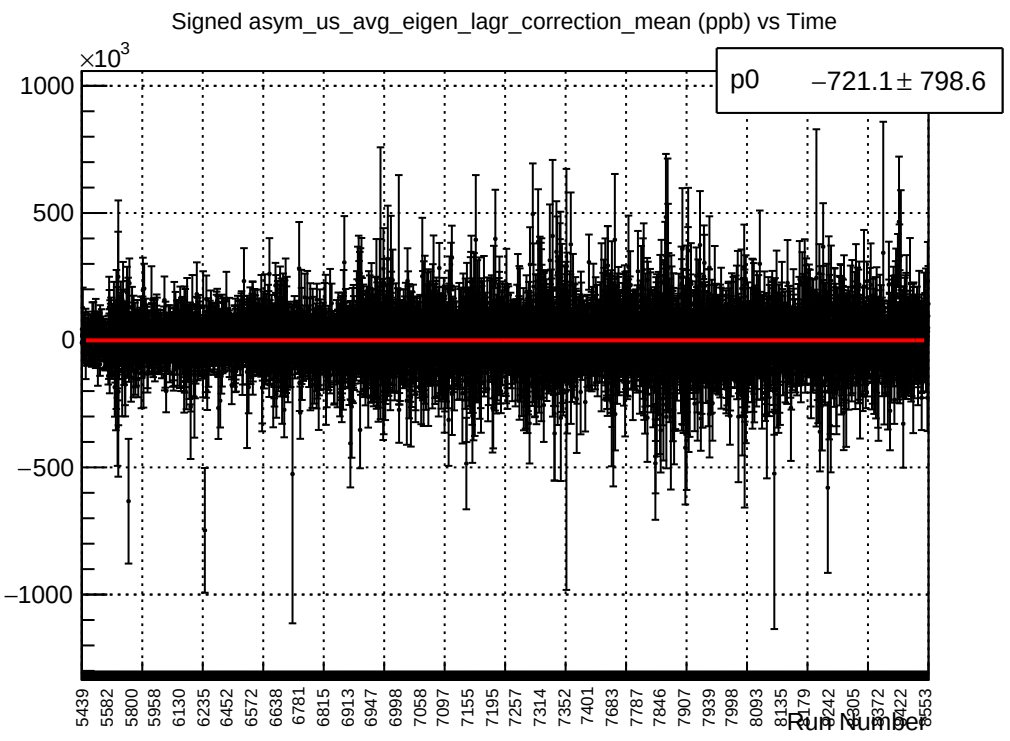

asym_us_avg_eigen_reg_cor_diff_rms (ppm) vs Time
p0 64.72 ± 0.0274
1600
1400
1200
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

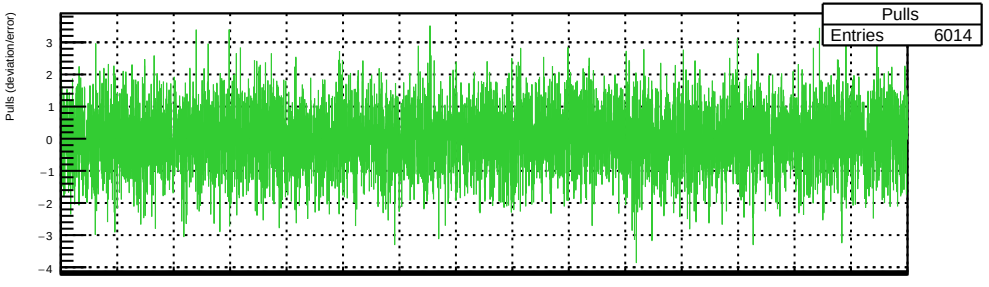

Signed eigen_lagr_asym_us_avg_mean (ppb) vs Time
×10^3
p0 1856 ± 383.8
1000
800
600
400
200
0
−200
−400
−600
−800
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

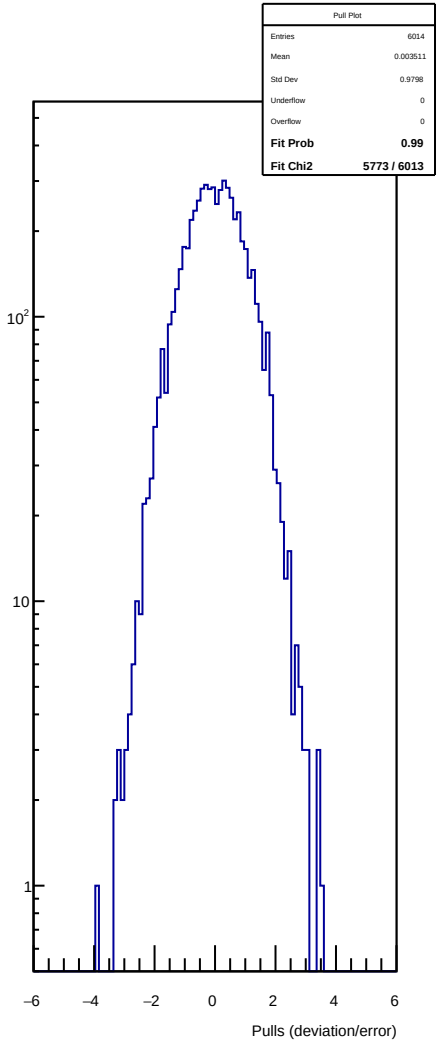

Pulls
Entries 6017
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

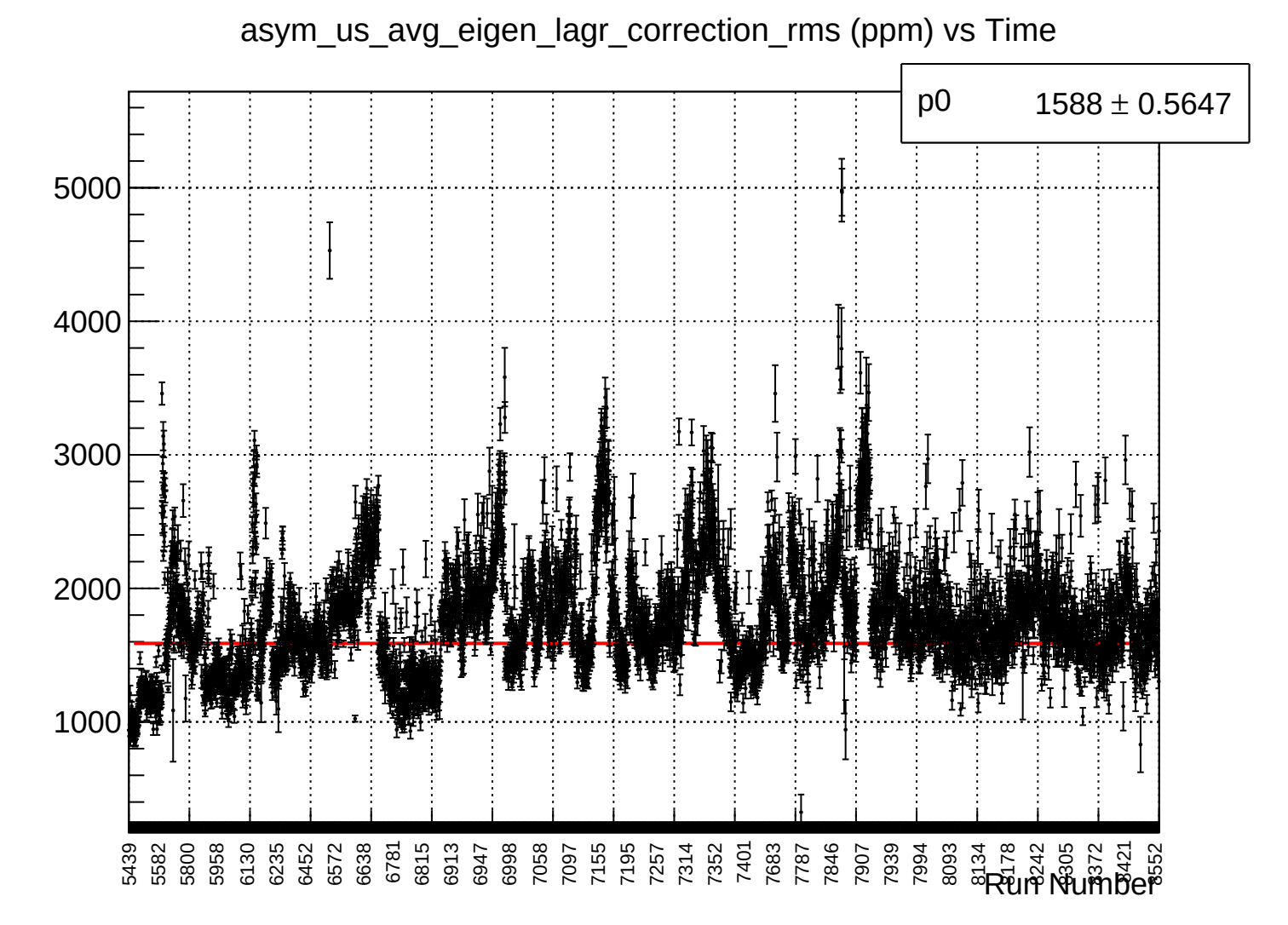

Pull Plot
Entries 6017
Mean 0.004365
Std Dev 1.007
Underflow 0
Overflow 0
Fit Prob 0.23
Fit Chi2 6097 / 6016
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

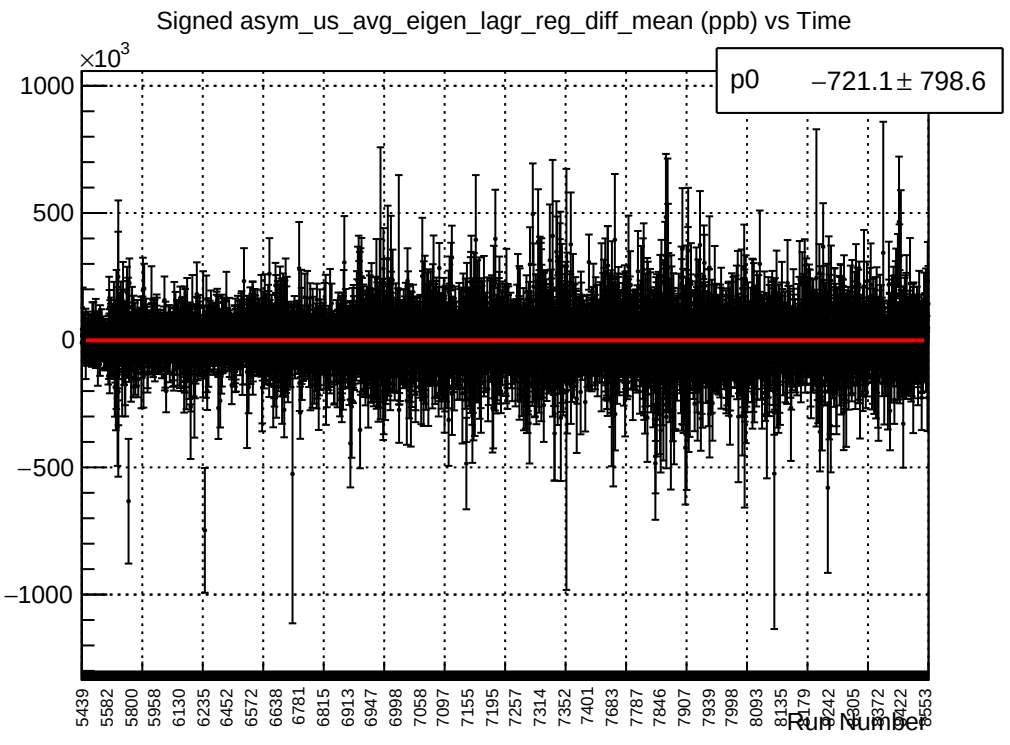

eigen_lagr_asym_us_avg_rms (ppm) vs Time
p0 780.6 ± 0.2714
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

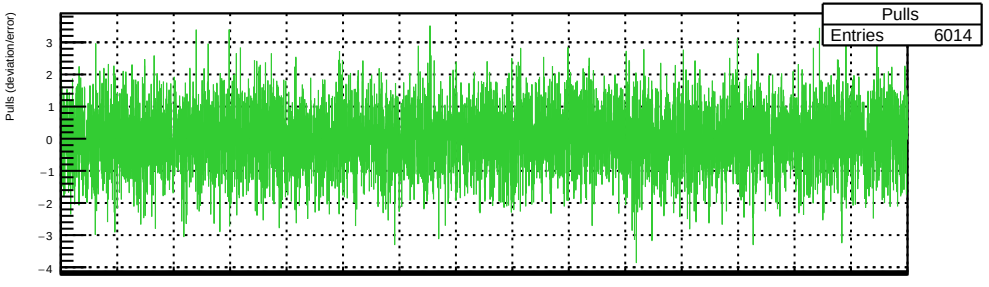

Signed asym_us_avg_eigen_lagr_correction_mean (ppb) vs Time
×10^3
1000
500
0
−500
−1000
p0 −721.1 ± 798.6
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7998 8093 8135 8179 8242 8305 8372 8422 8553
Run Number

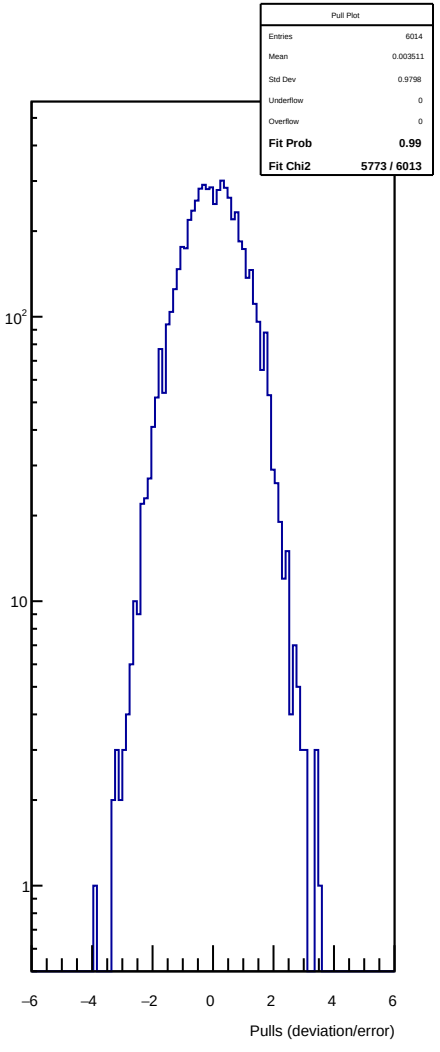

Pulls
Entries 6014
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

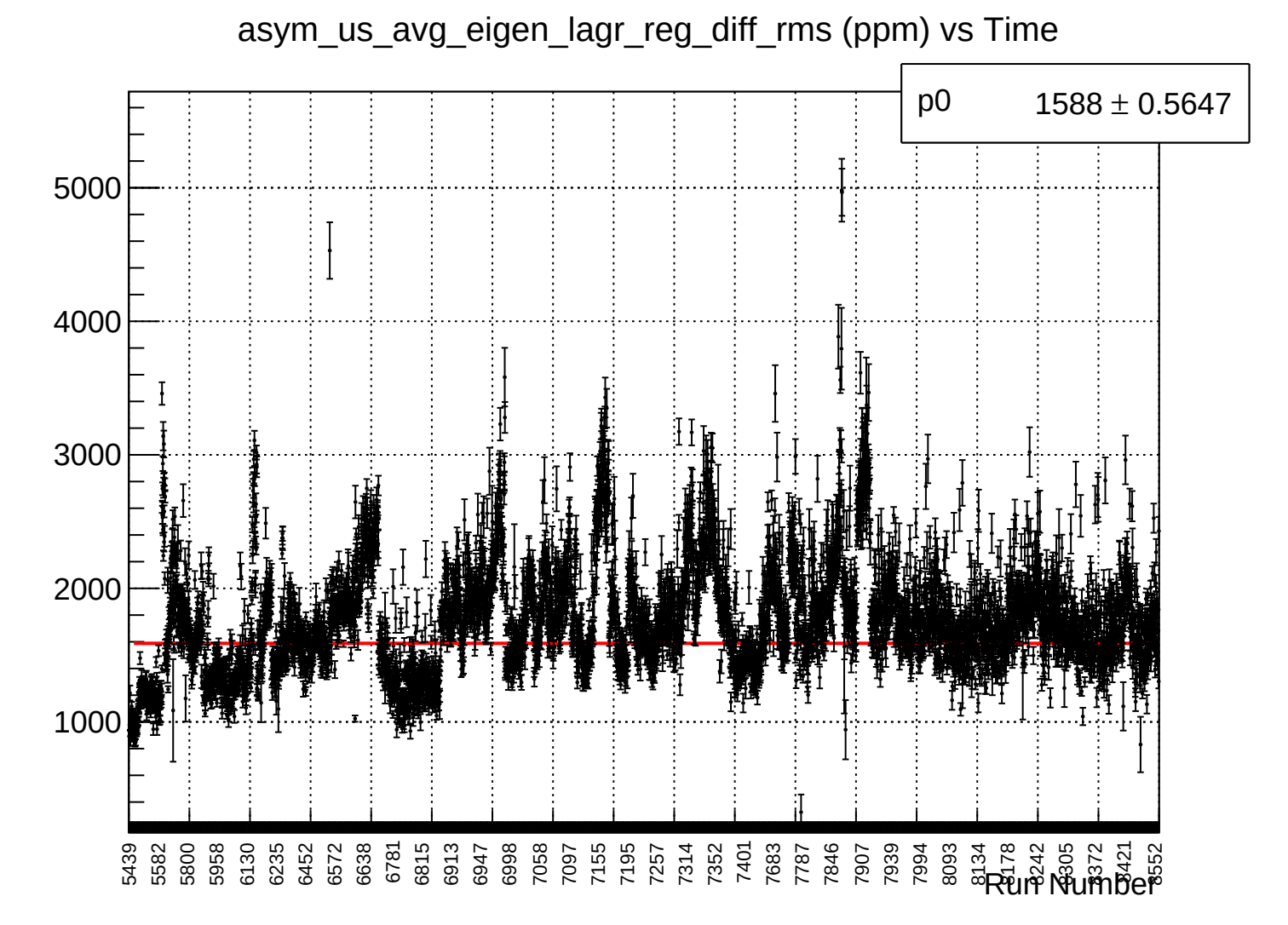

Pull Plot
Entries 6014
Mean 0.003511
Std Dev 0.9798
Underflow 0
Overflow 0
Fit Prob 0.99
Fit Chi2 5773 / 6013
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

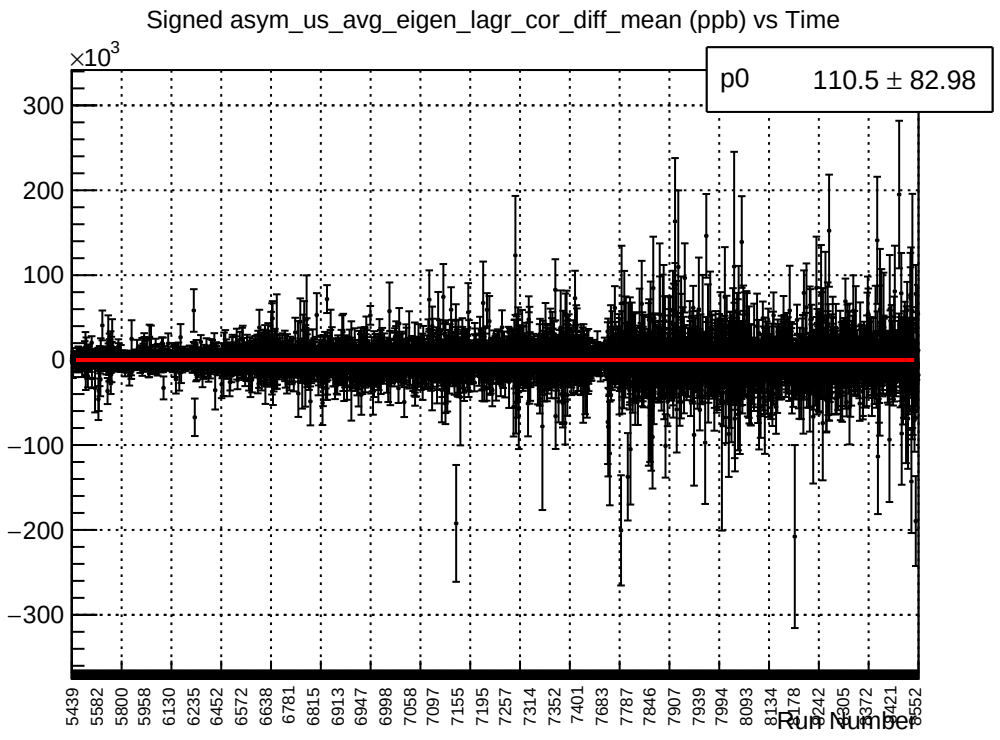

asym_us_avg_eigen_lagr_correction_rms (ppm) vs Time
p0
1588 ± 0.5647
5000
4000
3000
2000
1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

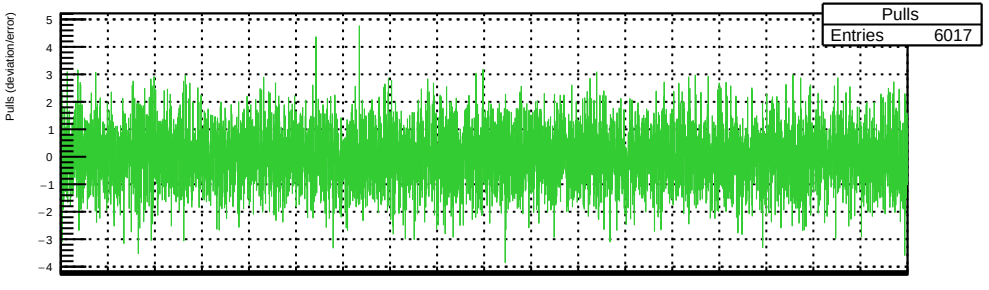

Signed asym_us_avg_eigen_lagr_reg_diff_mean (ppb) vs Time
×10^3
p0 −721.1 ± 798.6
1000
500
0
−500
−1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7998
8093
8135
8179
8242
8305
8372
8422
8553
Run Number

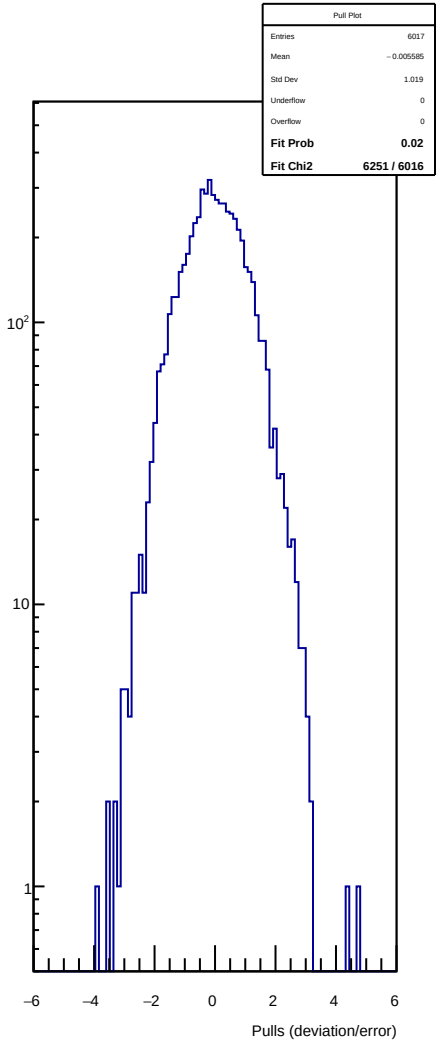

Pulls
Entries 6014
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

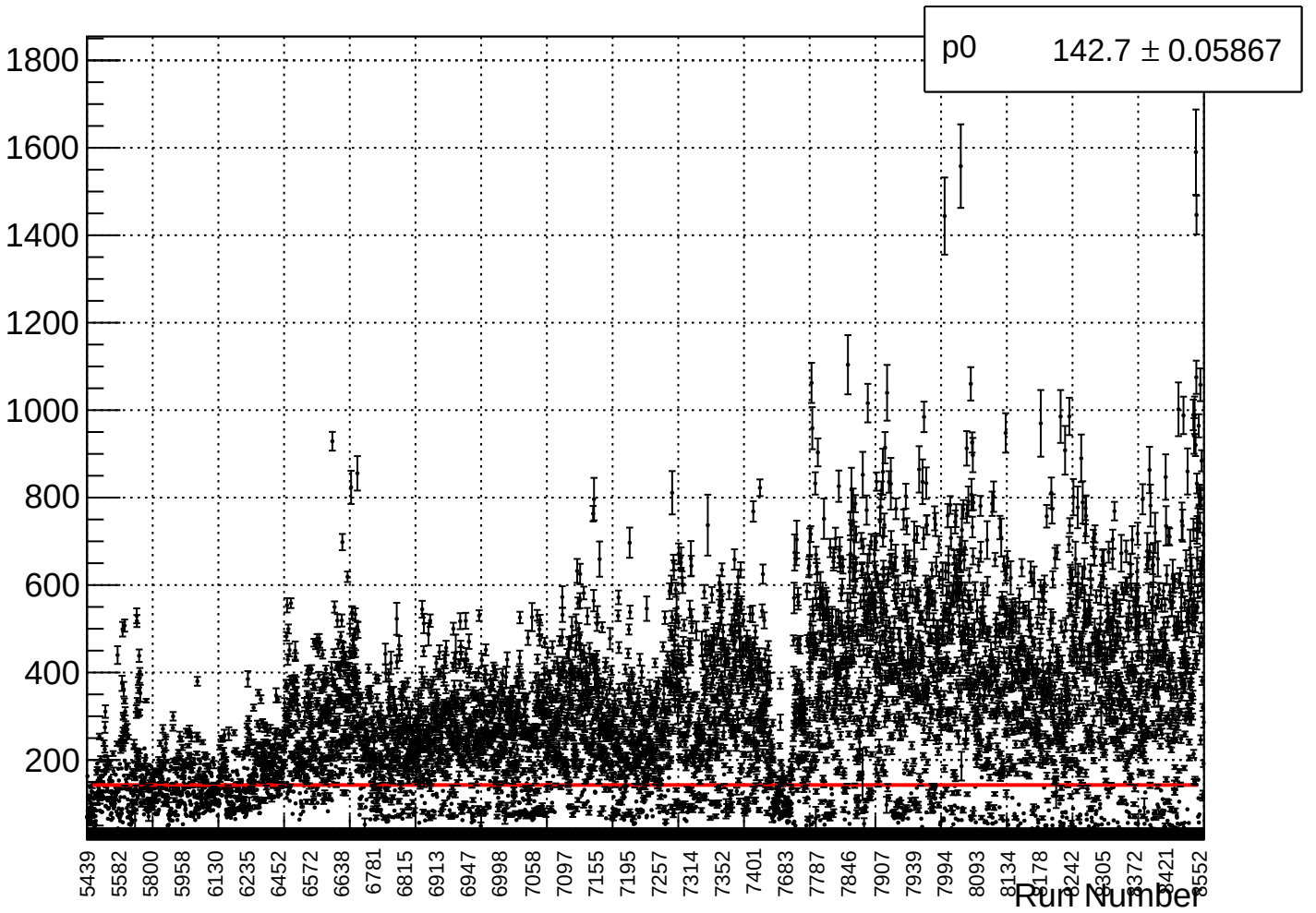

Pull Plot
Entries 6014
Mean 0.003511
Std Dev 0.9798
Underflow 0
Overflow 0
Fit Prob 0.99
Fit Chi2 5773 / 6013
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

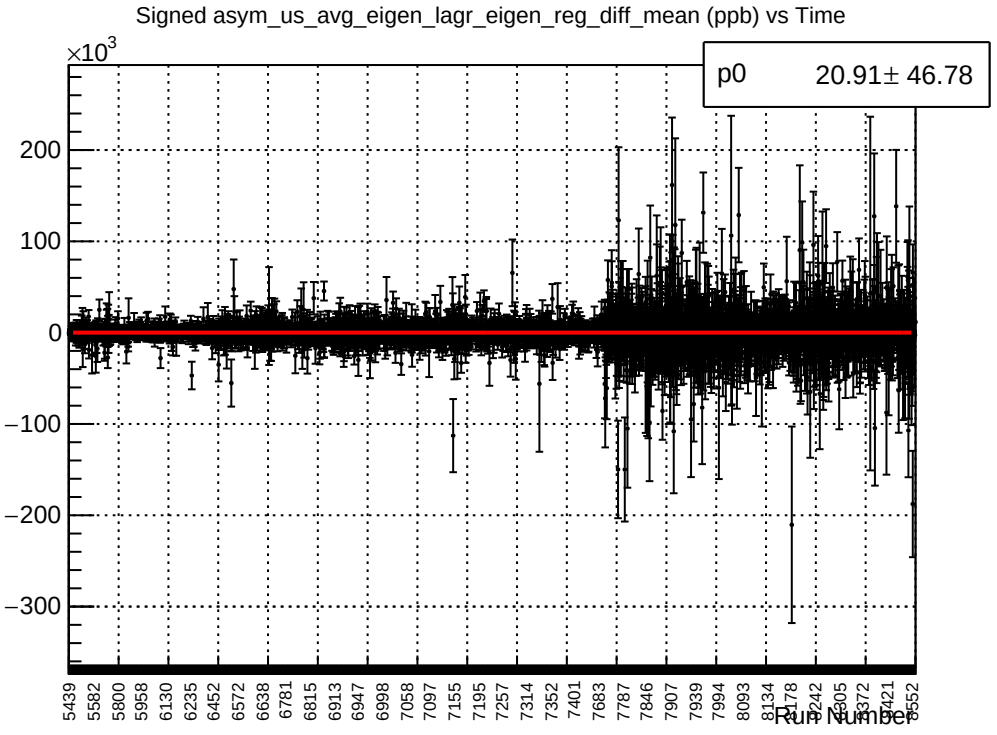

asym_us_avg_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 1588 ± 0.5647
5000
4000
3000
2000
1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

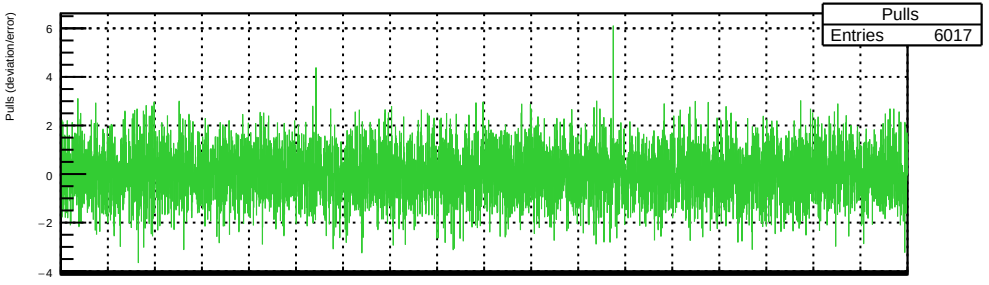

Signed asym_us_avg_eigen_lagr_cor_diff_mean (ppb) vs Time
×10^3
p0 110.5 ± 82.98
300
200
100
0
−100
−200
−300
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7994 8093 8134 8178 8242 8305 8372 8421 8552
Run Number

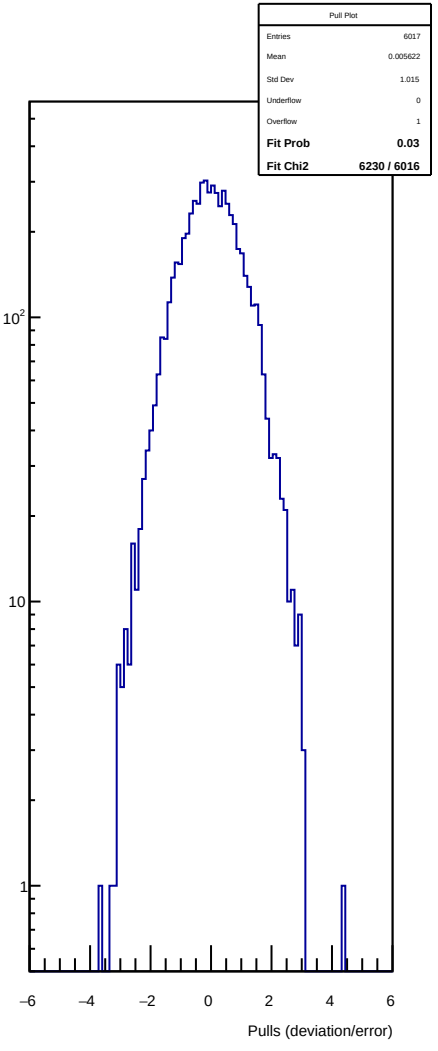

Pulls
Entries 6017
Pulls (deviation/error)
5
4
3
2
1
0
−1
−2
−3
−4

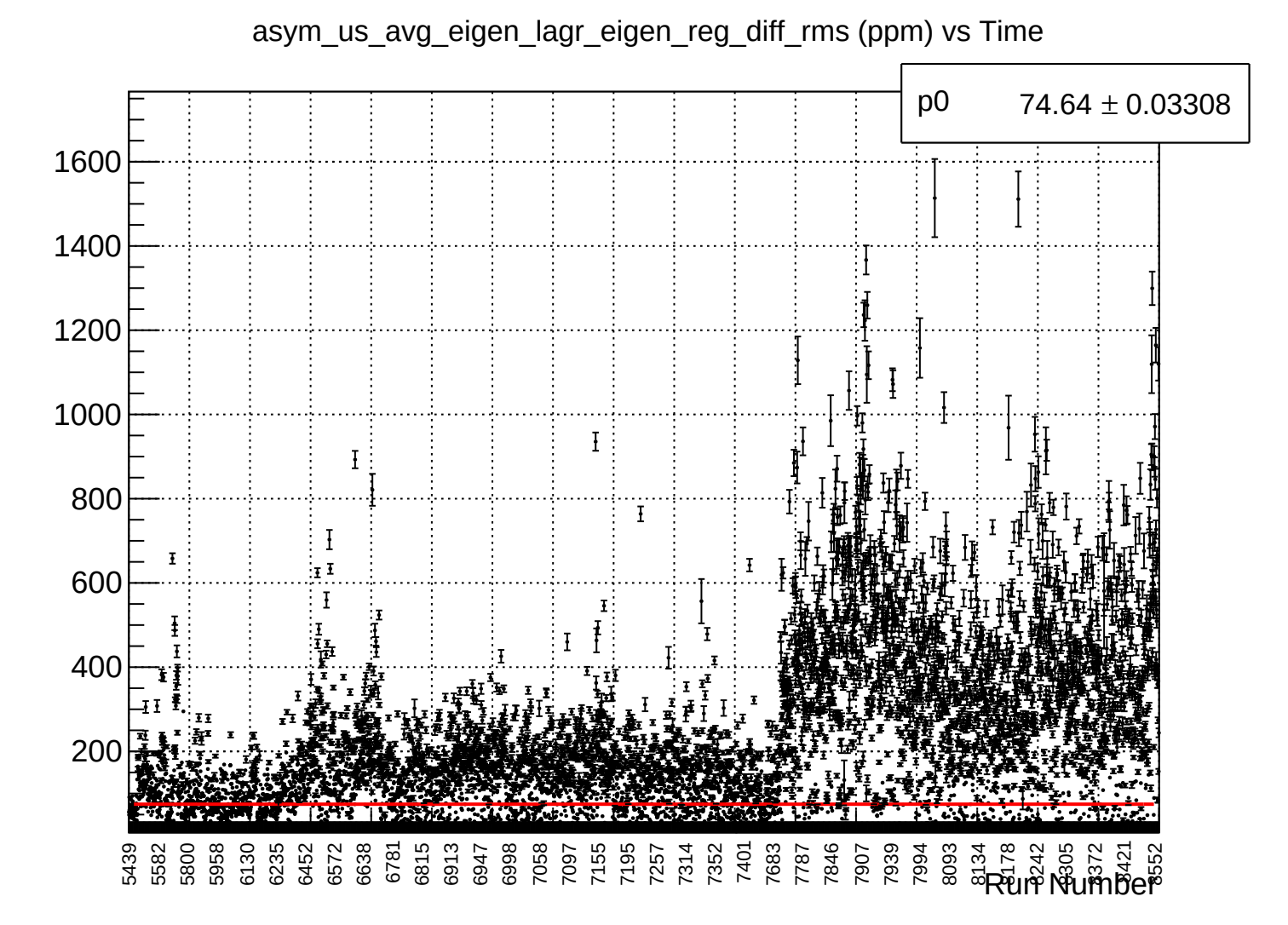

Pull Plot
Entries 6017
Mean −0.005585
Std Dev 1.019
Underflow 0
Overflow 0
Fit Prob 0.02
Fit Chi2 6251 / 6016
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

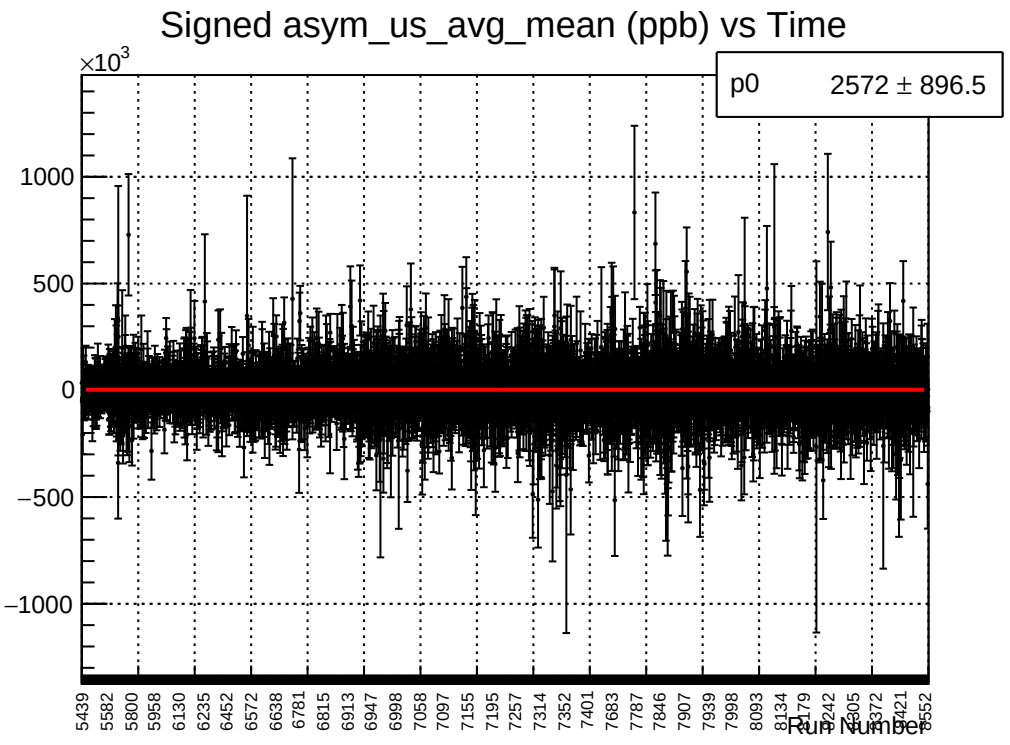

asym_us_avg_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 142.7 ± 0.05867
1800
1600
1400
1200
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

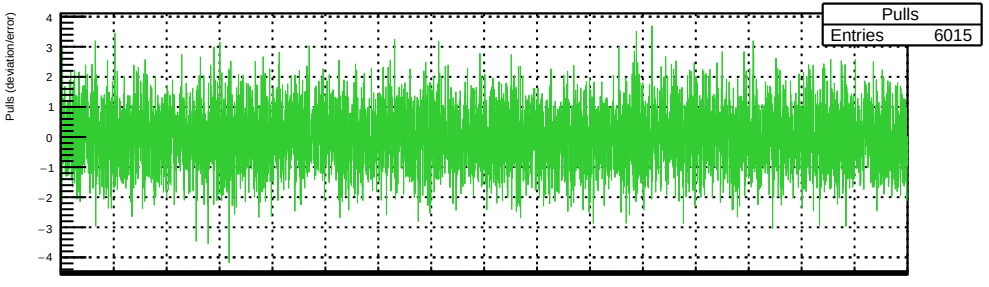

Signed asym_us_avg_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
×10^3
p0 20.91± 46.78
200
100
0
−100
−200
−300
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7994 8093 8134 8178 8242 8305 8372 8421 8552
Run Number

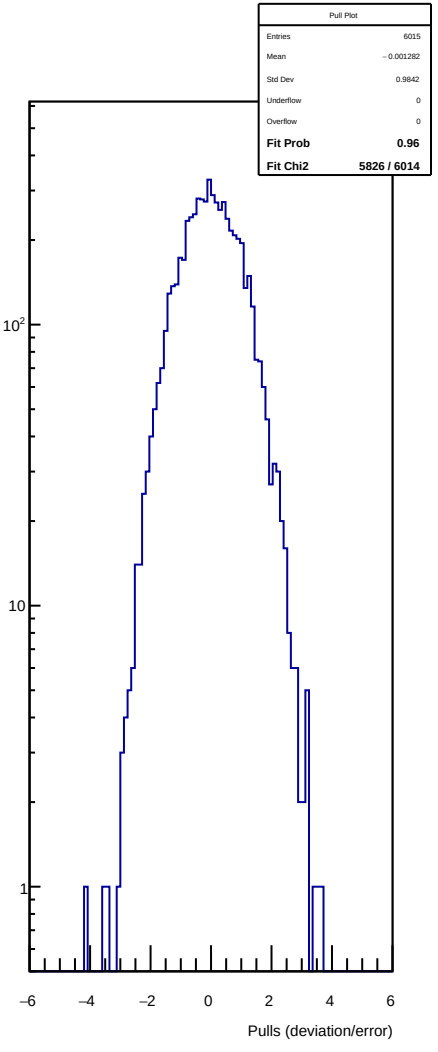

Pulls
Entries 6017
Pulls (deviation/error)
6
4
2
0
−2
−4

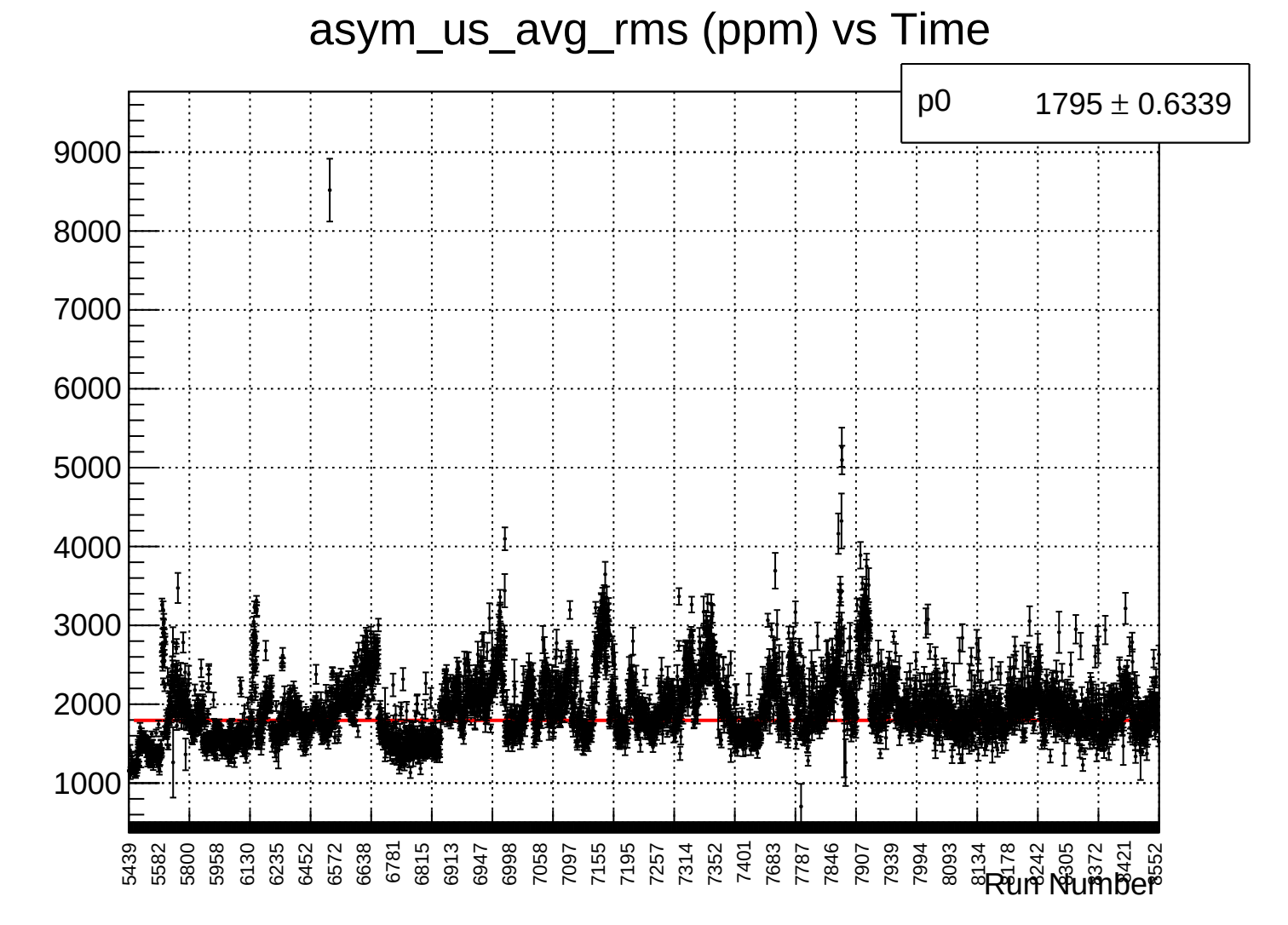

Pull Plot
Entries 6017
Mean 0.005622
Std Dev 1.015
Underflow 0
Overflow 1
Fit Prob 0.03
Fit Chi2 6230 / 6016
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

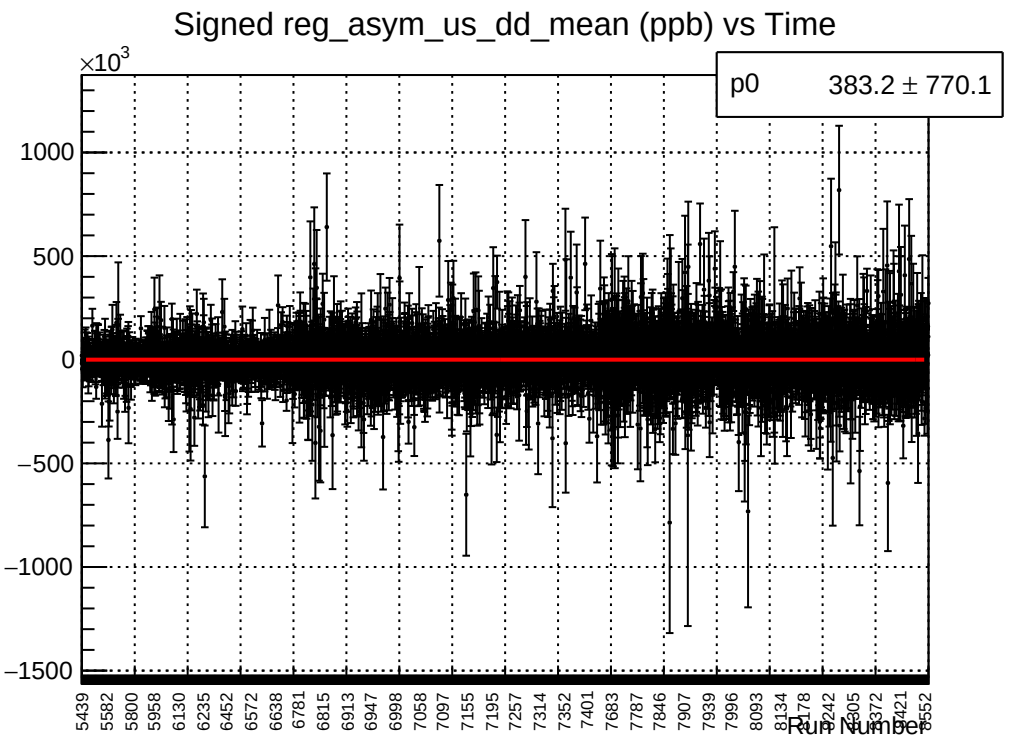

asym_us_avg_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 74.64 ± 0.03308
1600
1400
1200
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

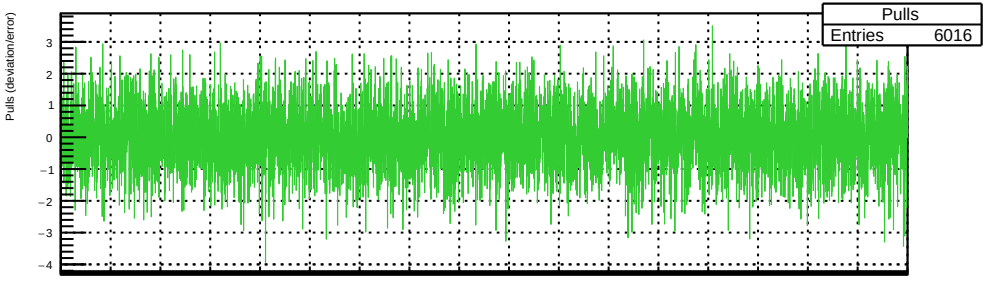

Signed asym_us_avg_mean (ppb) vs Time
×10^3
p0 2572 ± 896.5
1000
500
0
−500
−1000
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7998 8093 8134 8179 8242 8305 8372 8421 8552
Run Number

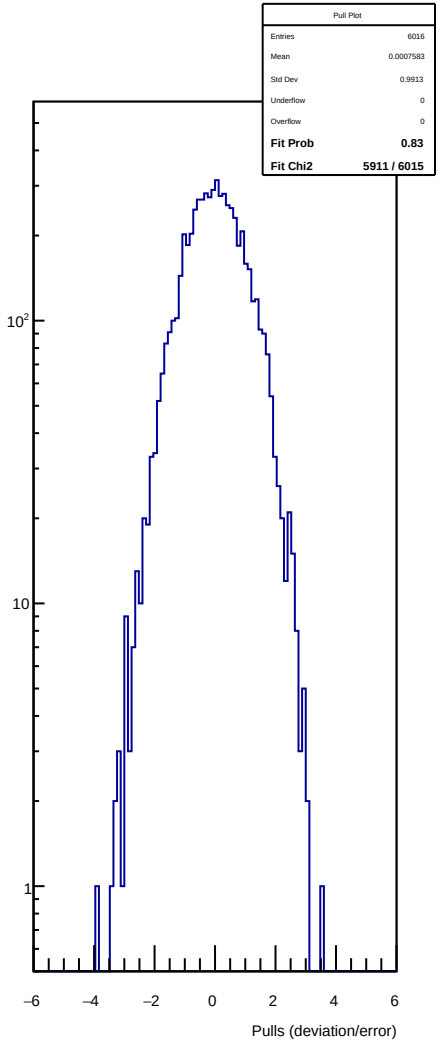

Pulls
Entries 6015
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

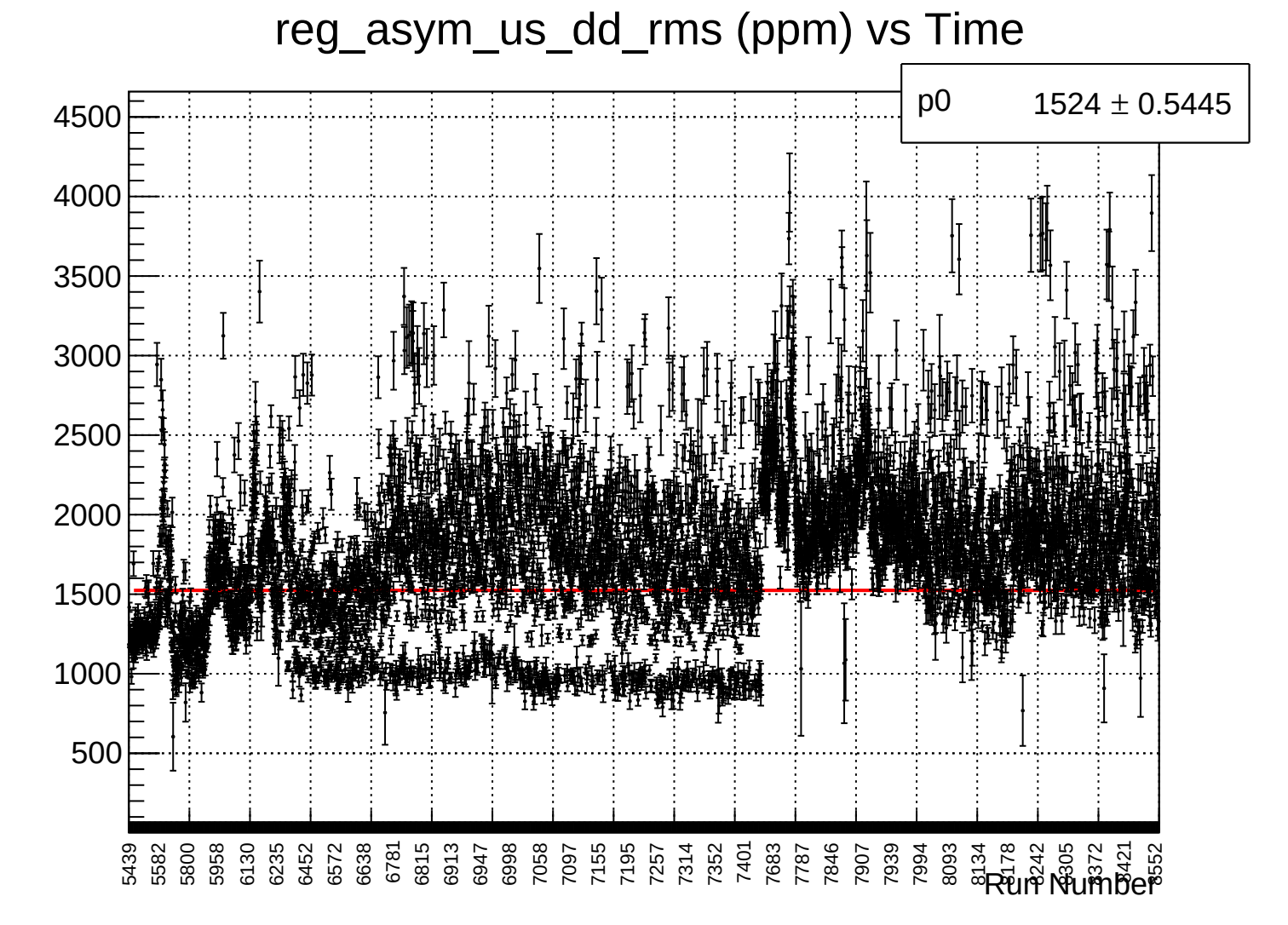

Pull Plot
Entries 6015
Mean −0.001282
Std Dev 0.9842
Underflow 0
Overflow 0
Fit Prob 0.96
Fit Chi2 5826 / 6014
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

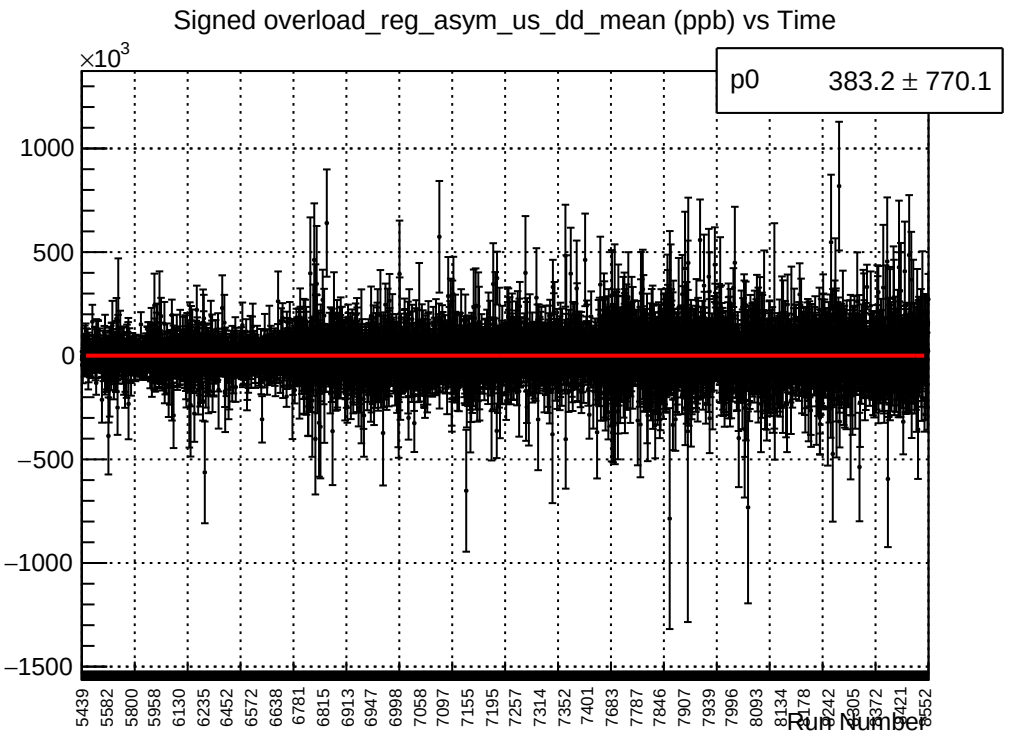

asym_us_avg_rms (ppm) vs Time
p0
1795 ± 0.6339
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

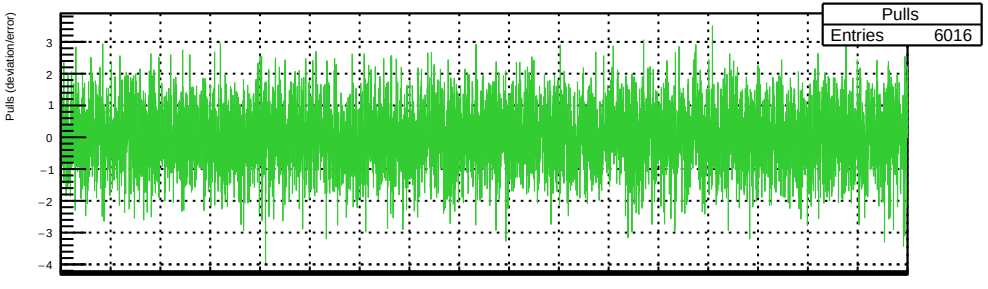

Signed reg_asym_us_dd_mean (ppb) vs Time
×10^3
p0 383.2 ± 770.1
1000
500
0
−500
−1000
−1500
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7996 8093 8134 8178 8242 8305 8372 8421 8552
Run Number

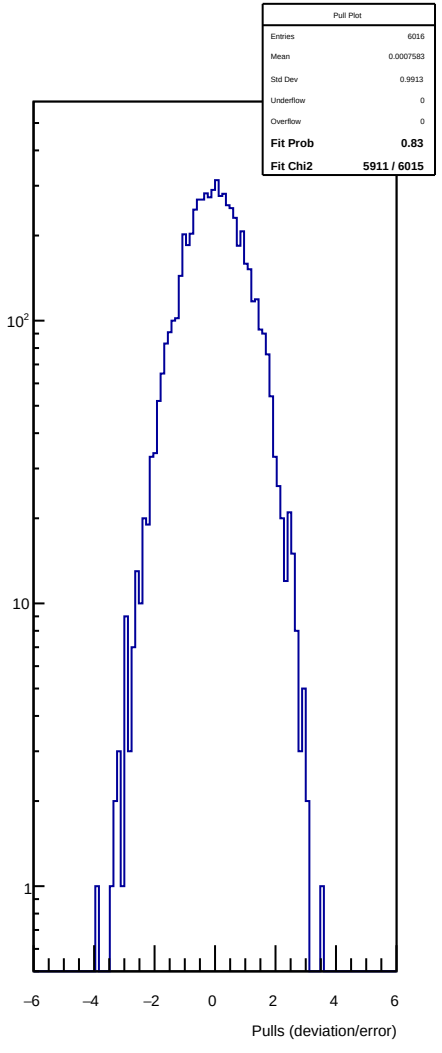

Pulls
Entries 6016
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

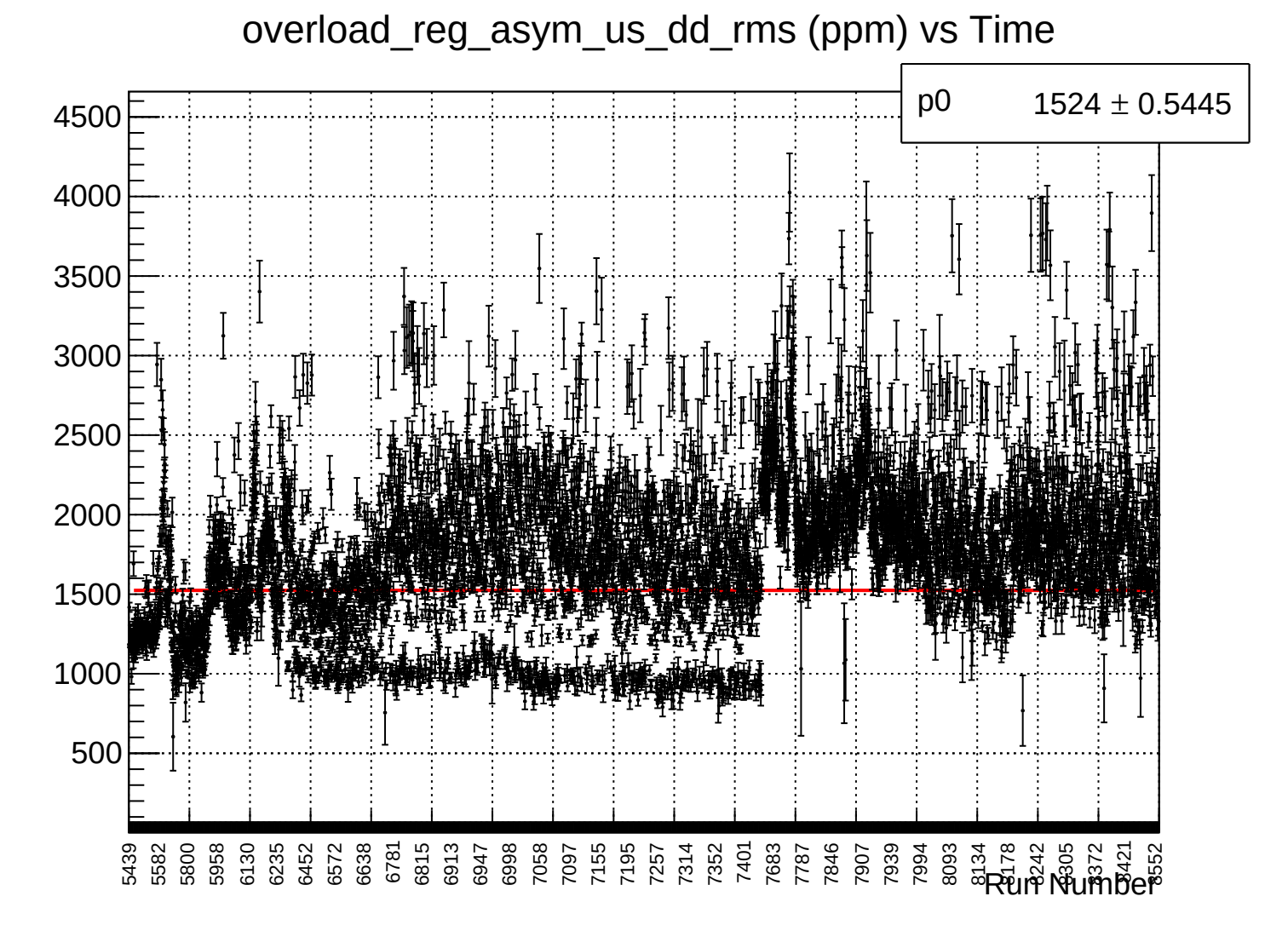

Pull Plot
Entries 6016
Mean 0.0007583
Std Dev 0.9913
Underflow 0
Overflow 0
Fit Prob 0.83
Fit Chi2 5911 / 6015
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

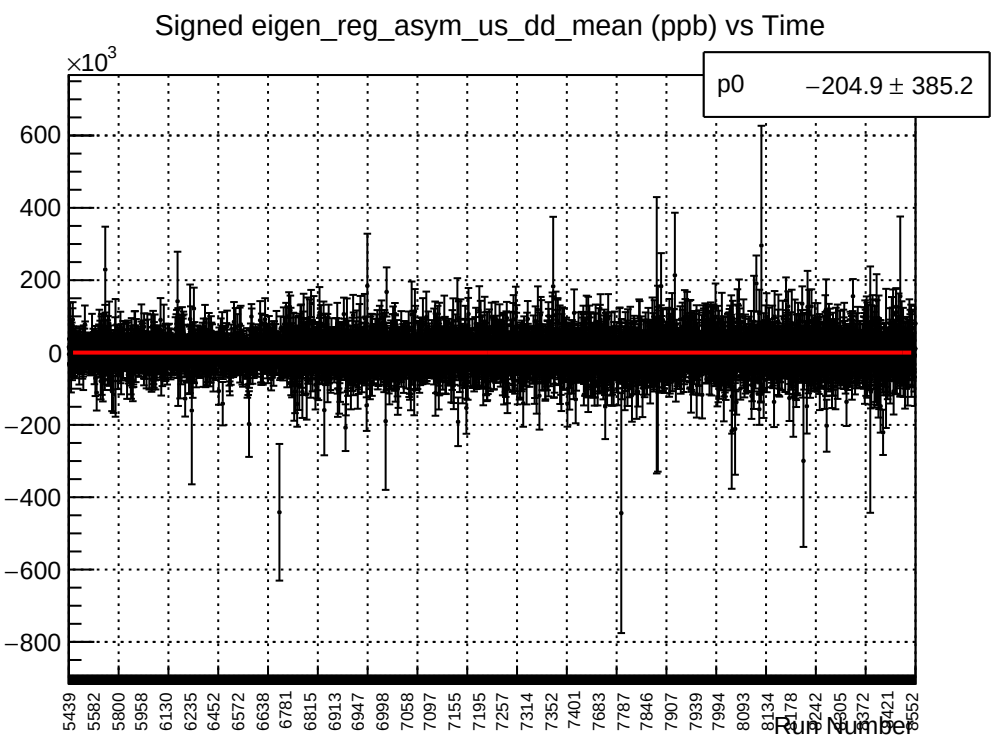

reg_asym_us_dd_rms (ppm) vs Time
p0
1524 ± 0.5445
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

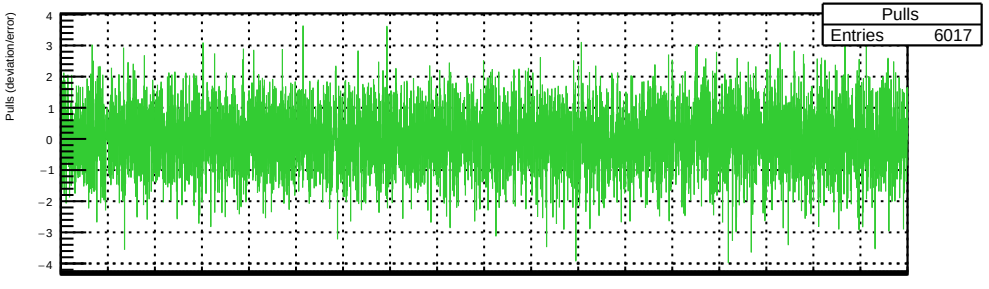

Signed overload_reg_asym_us_dd_mean (ppb) vs Time
×10^3
p0 383.2 ± 770.1
1000
500
0
−500
−1000
−1500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7996
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

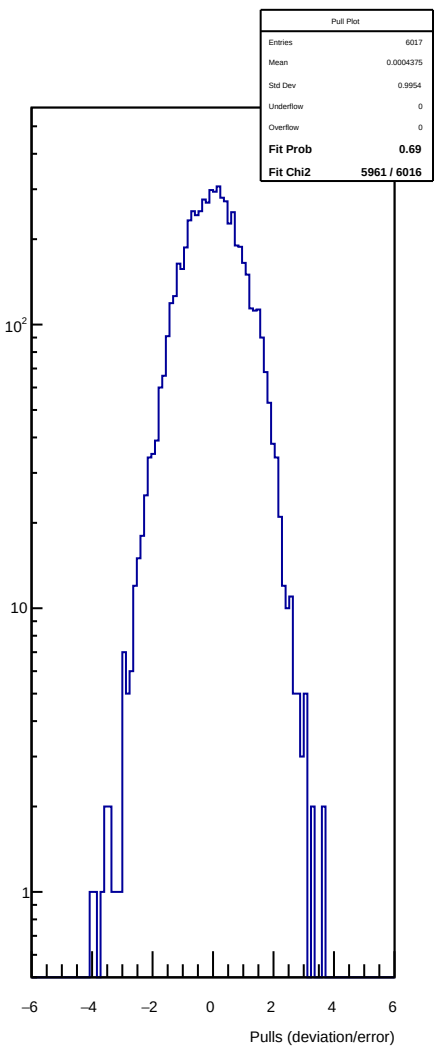

Pulls
Entries 6016
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

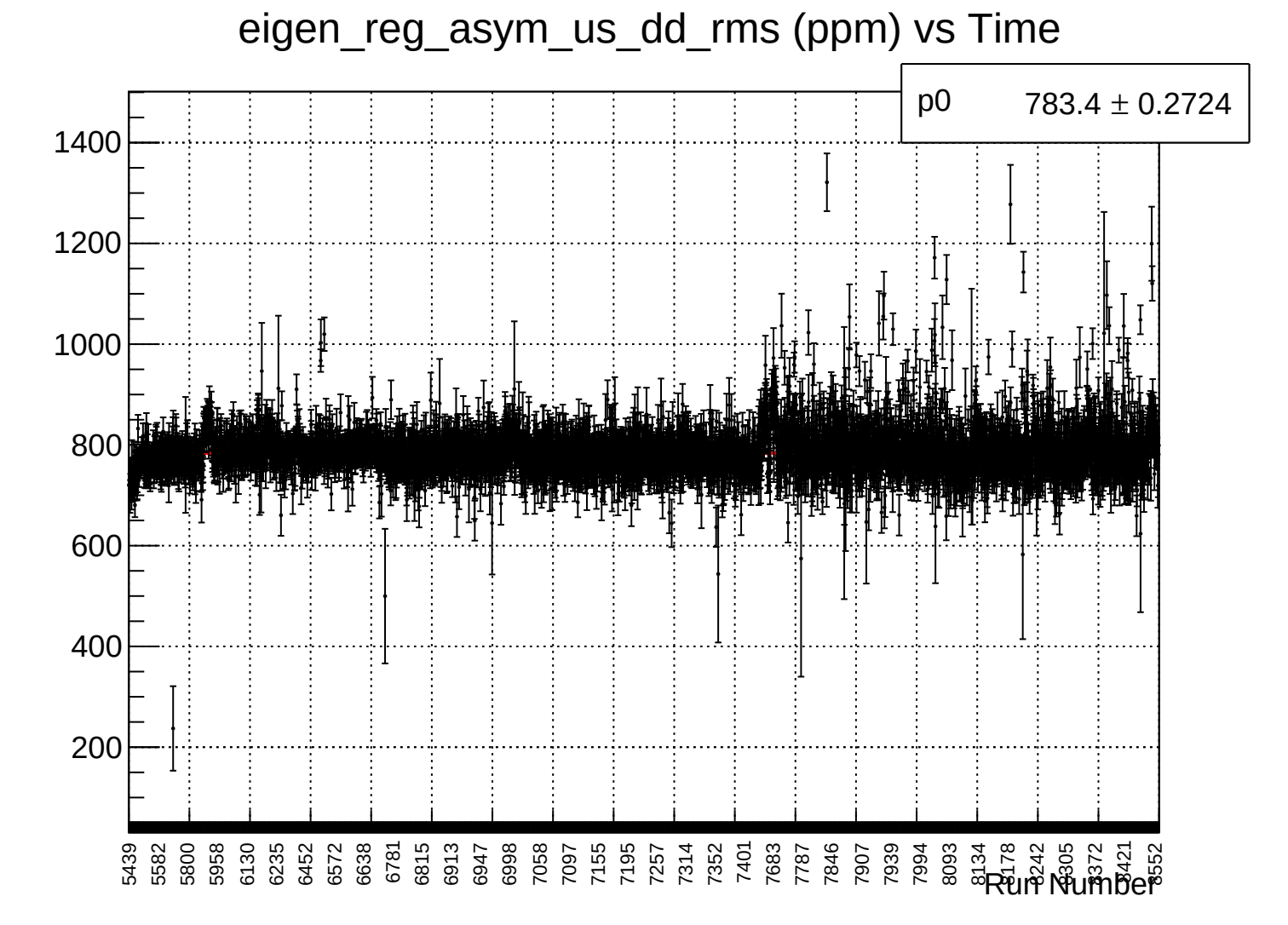

Pull Plot
Entries 6016
Mean 0.0007583
Std Dev 0.9913
Underflow 0
Overflow 0
Fit Prob 0.83
Fit Chi2 5911 / 6015
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

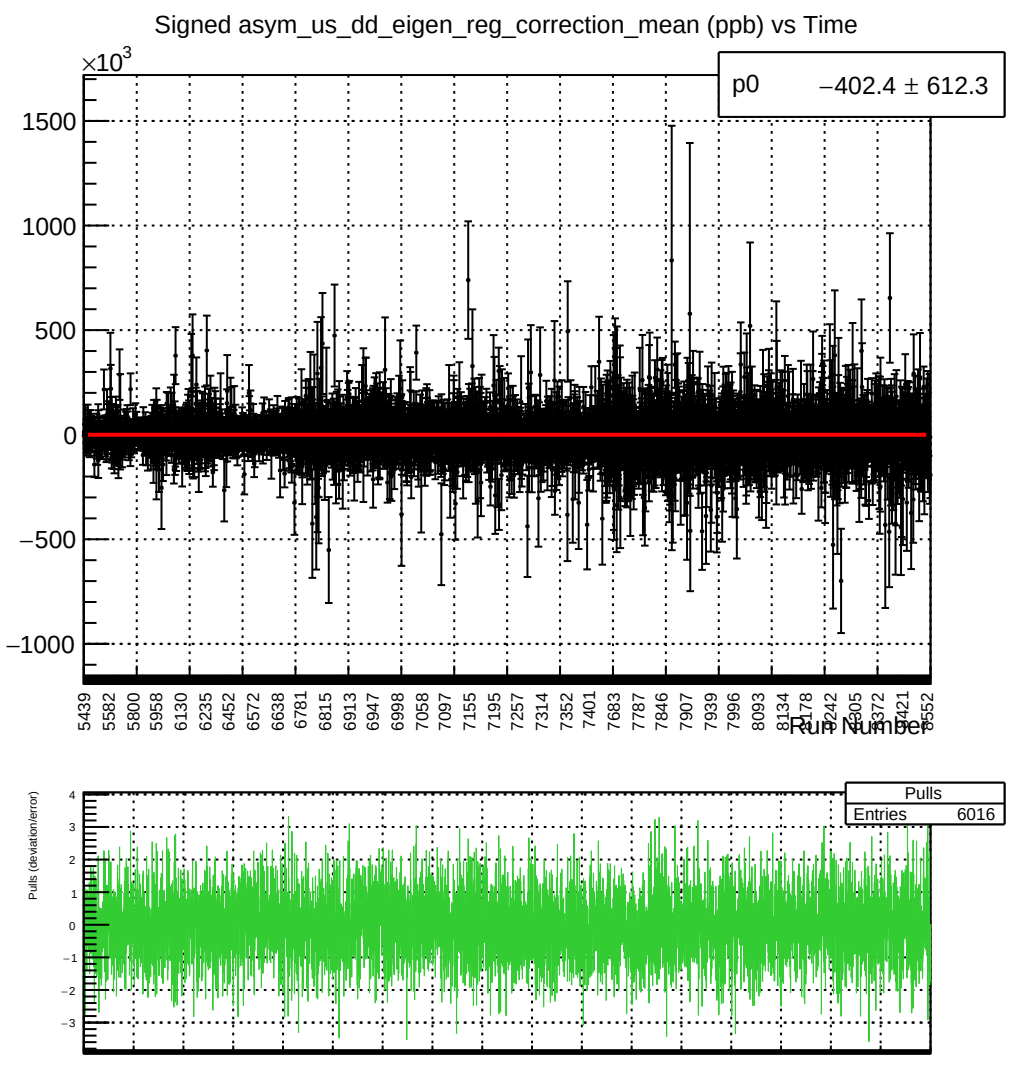

overload_reg_asym_us_dd_rms (ppm) vs Time
p0 1524 ± 0.5445
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

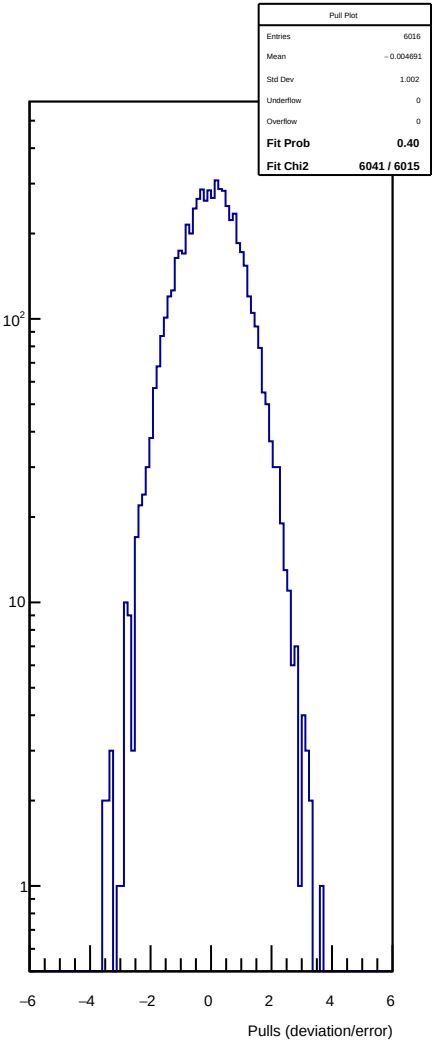

Signed eigen_reg_asym_us_dd_mean (ppb) vs Time
×10^3
p0 −204.9 ± 385.2
600
400
200
0
−200
−400
−600
−800
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

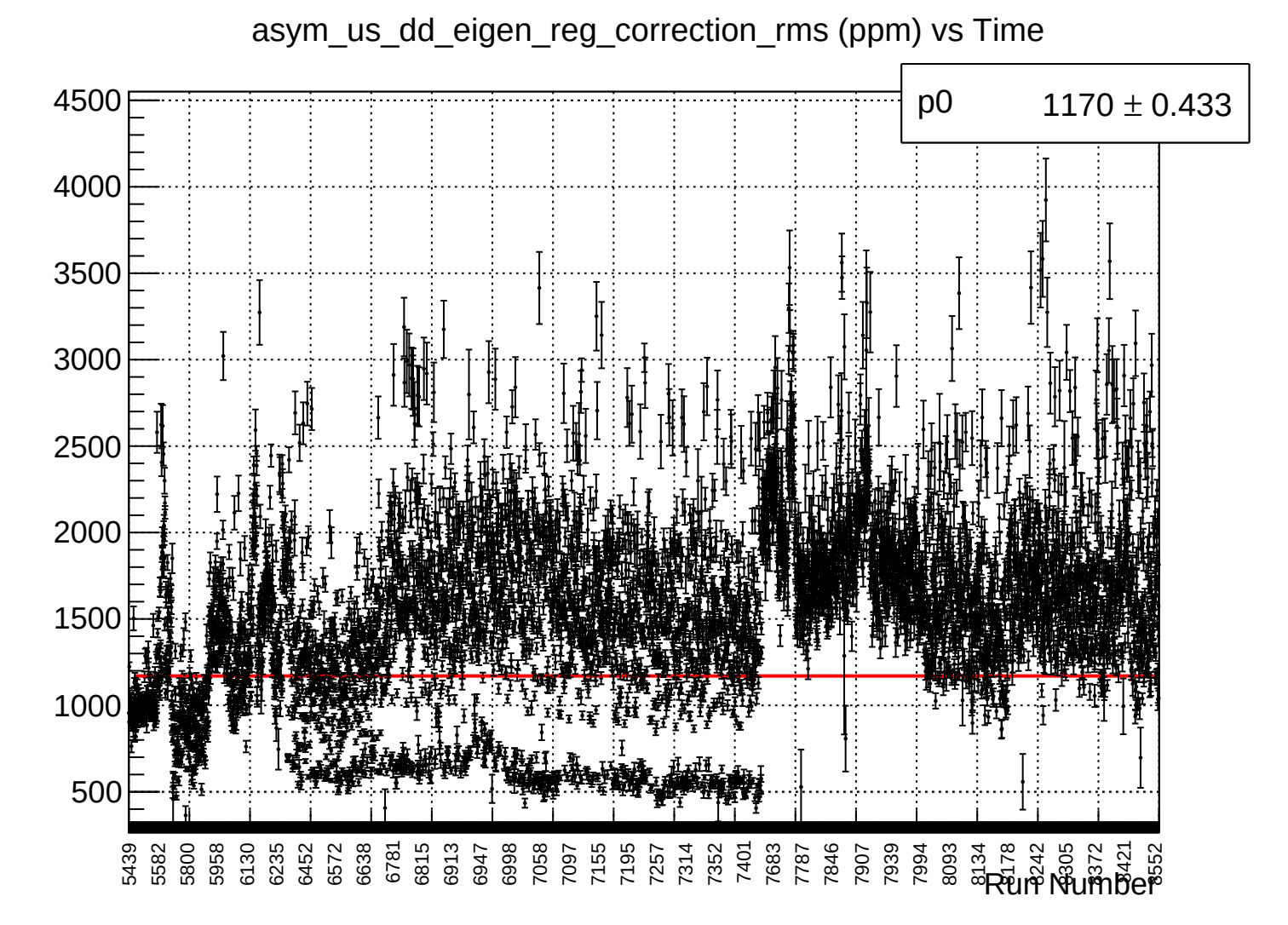

Pulls
Entries 6017
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

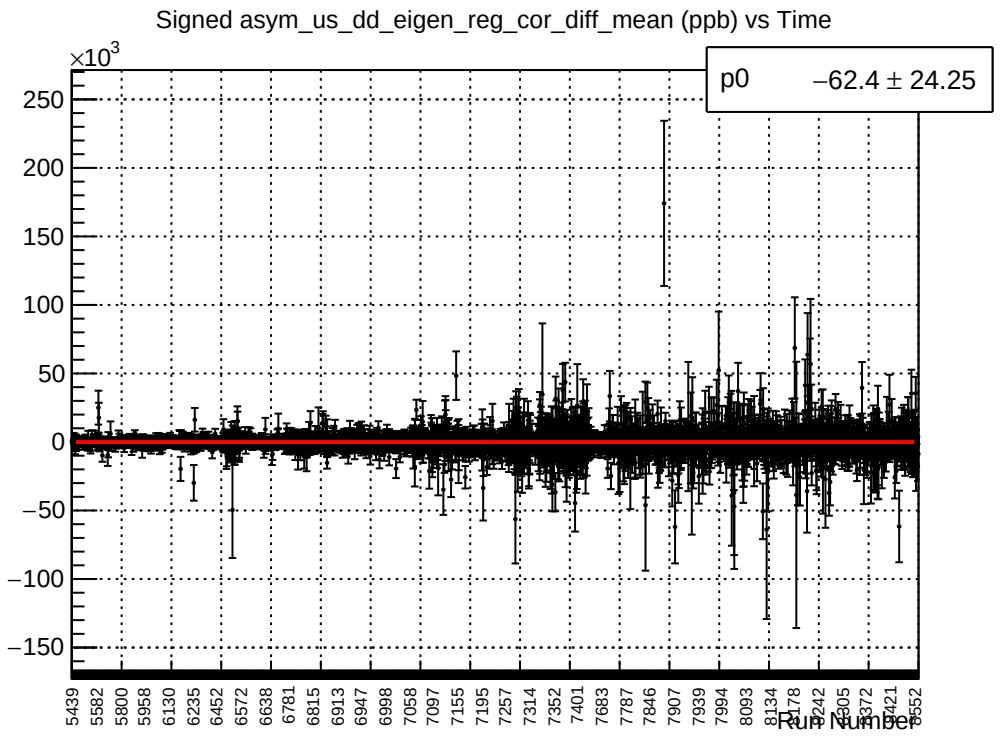

Pull Plot
Entries 6017
Mean 0.0004375
Std Dev 0.9954
Underflow 0
Overflow 0
Fit Prob 0.69
Fit Chi2 5961 / 6016
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

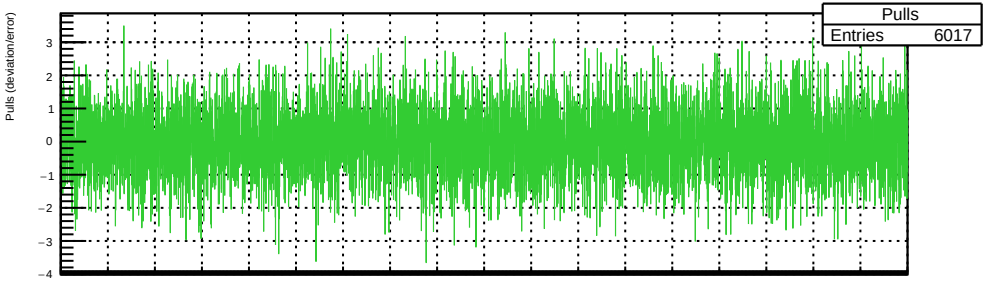

eigen_reg_asym_us_dd_rms (ppm) vs Time
p0 783.4 ± 0.2724
1400
1200
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

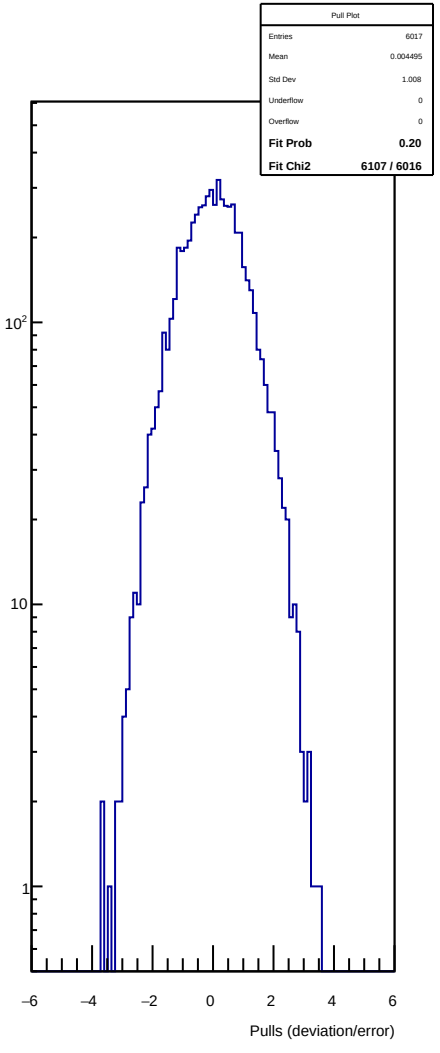

Signed asym_us_dd_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 −402.4 ± 612.3
1500
1000
500
0
−500
−1000
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7996 8093 8134 8178 8242 8305 8372 8421 8552
Run Number
Pulls
Entries 6016
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

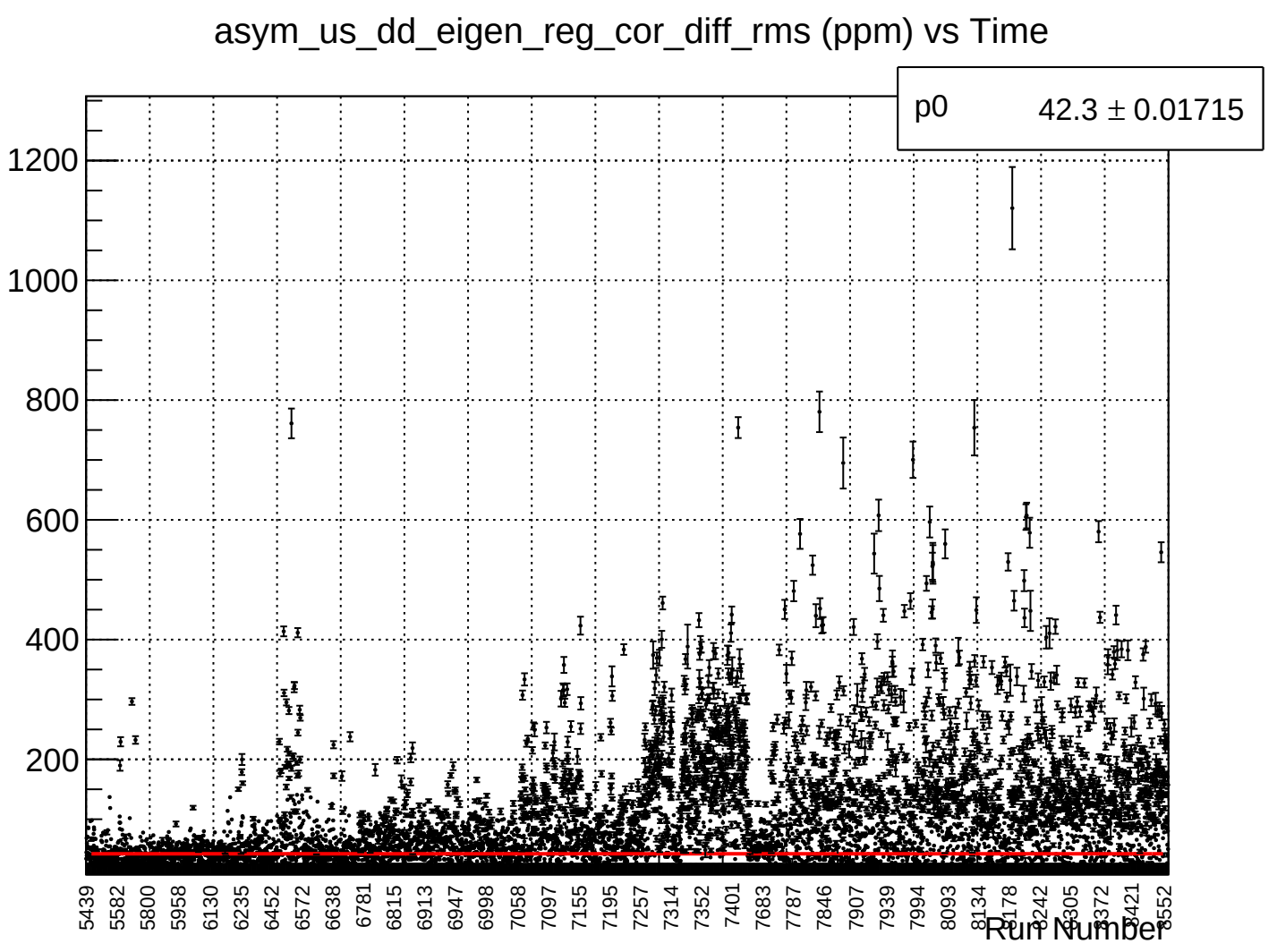

Pull Plot
Entries 6016
Mean −0.004691
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.40
Fit Chi2 6041 / 6015
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

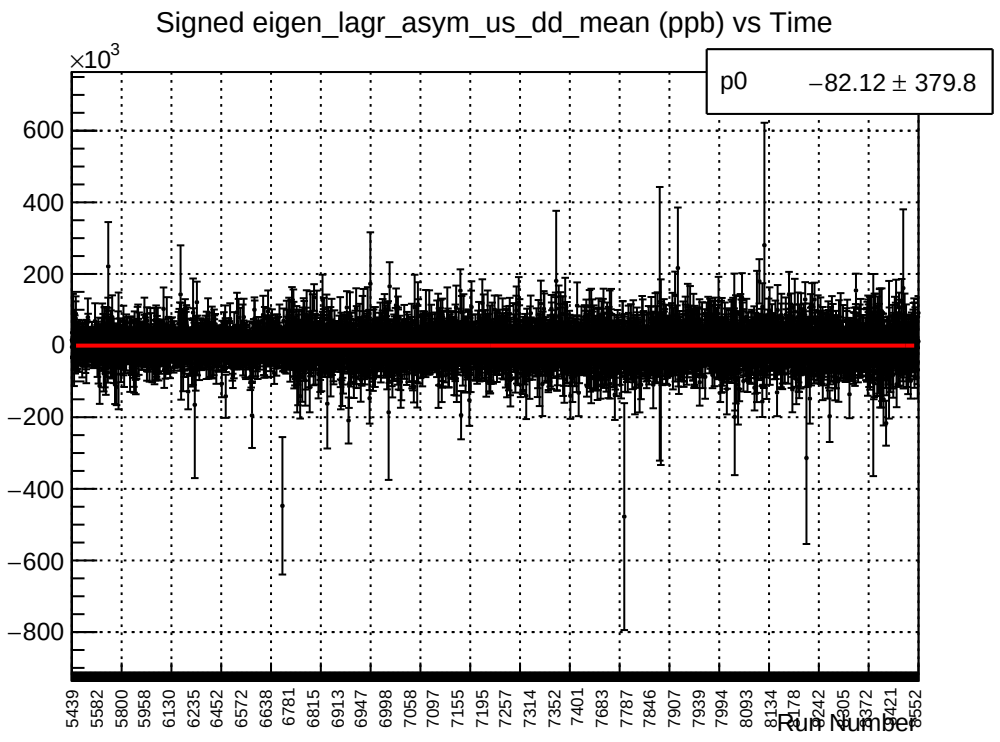

asym_us_dd_eigen_reg_correction_rms (ppm) vs Time
p0
1170 ± 0.433
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

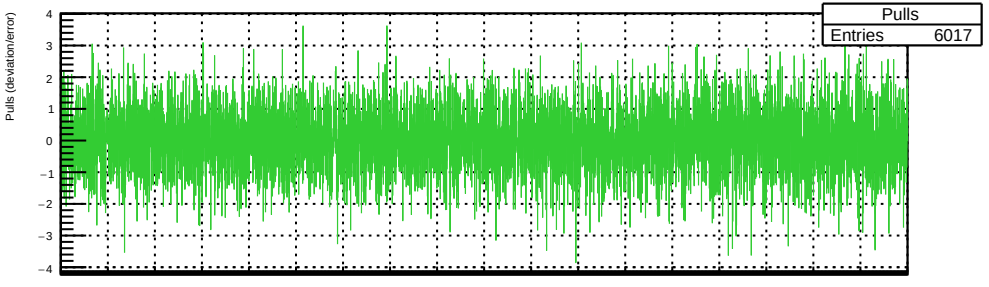

Signed asym_us_dd_eigen_reg_cor_diff_mean (ppb) vs Time
×10^3
p0 −62.4 ± 24.25
250
200
150
100
50
0
−50
−100
−150
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

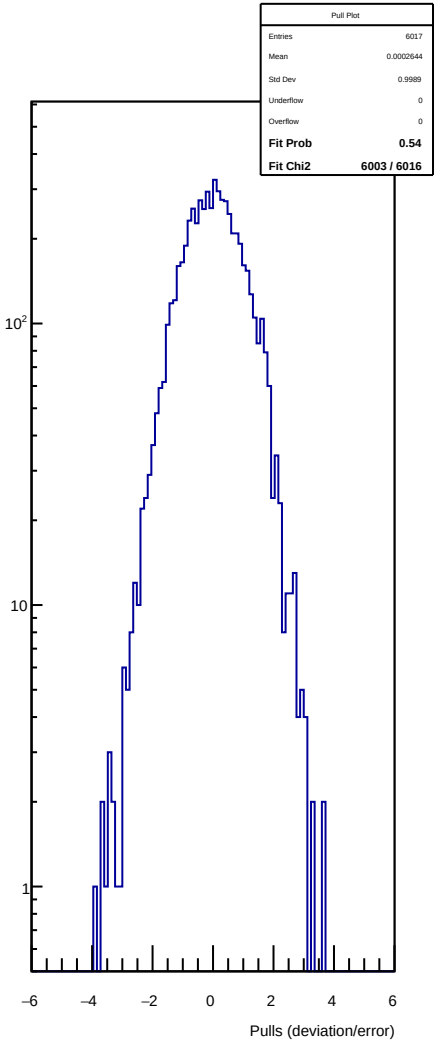

Pulls
Entries 6017
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

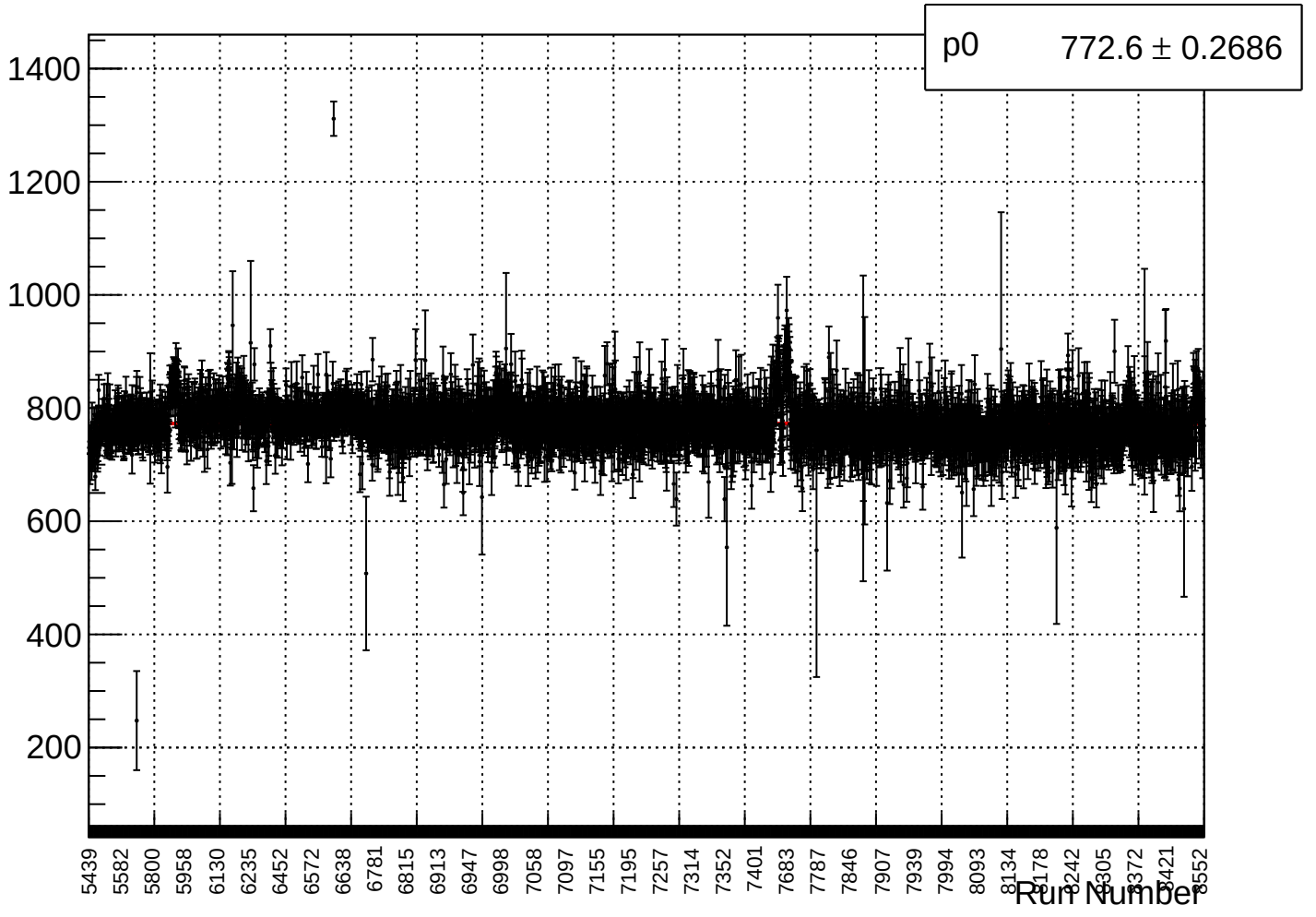

Pull Plot
Entries 6017
Mean 0.004495
Std Dev 1.008
Underflow 0
Overflow 0
Fit Prob 0.20
Fit Chi2 6107 / 6016
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

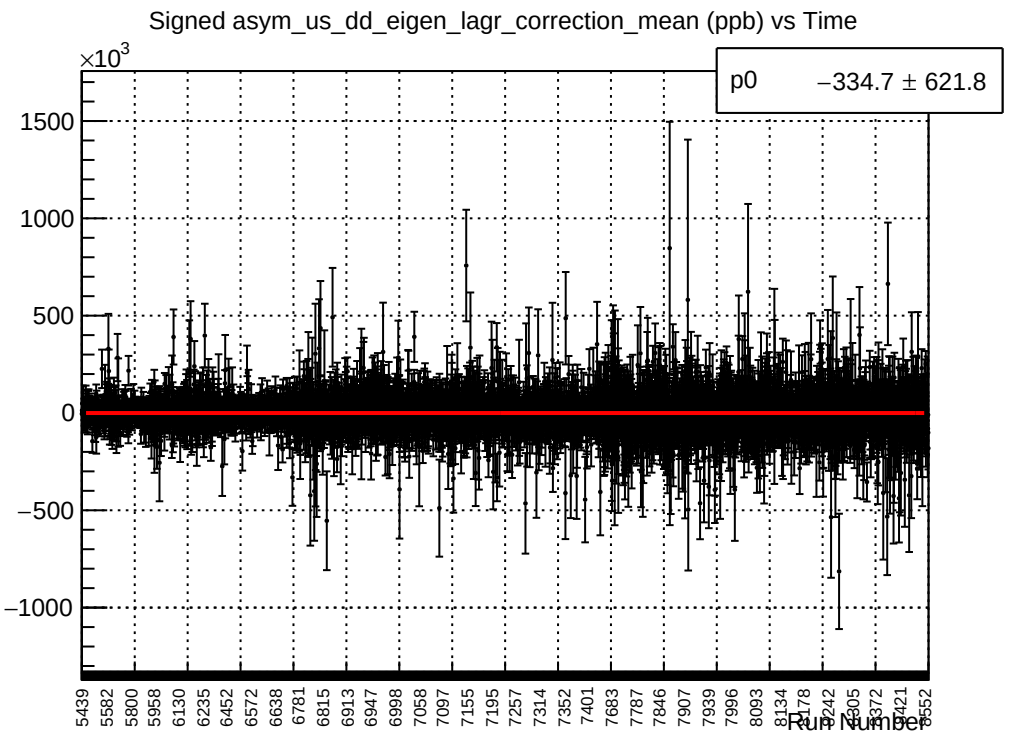

asym_us_dd_eigen_reg_cor_diff_rms (ppm) vs Time
p0
42.3 ± 0.01715
1200
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

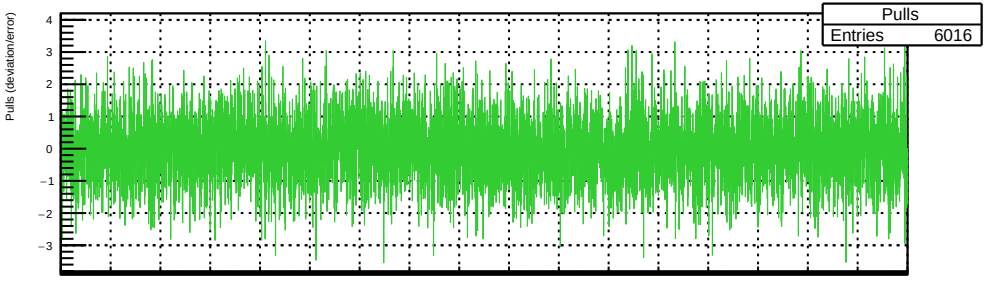

Signed eigen_lagr_asym_us_dd_mean (ppb) vs Time
×10^3
p0 −82.12 ± 379.8
600
400
200
0
−200
−400
−600
−800
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7994 8093 8134 8178 8242 8305 8372 8421 8552
Run Number

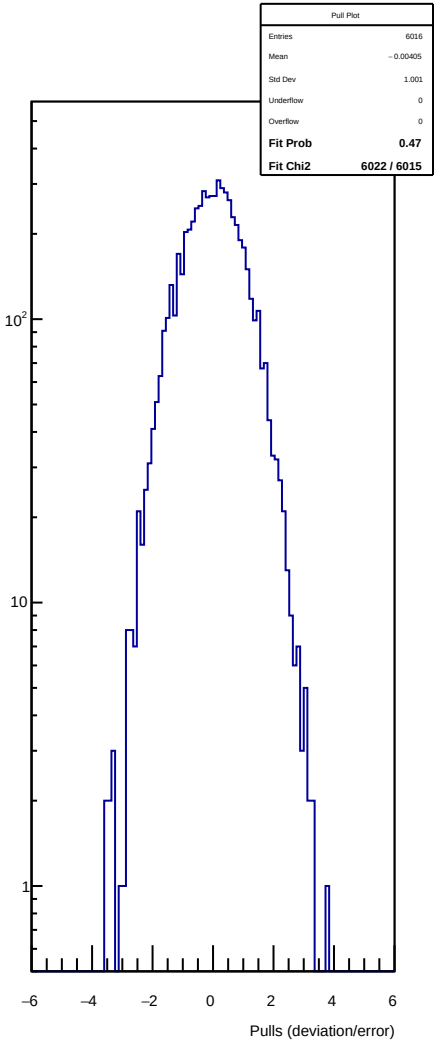

Pulls
Entries 6017
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

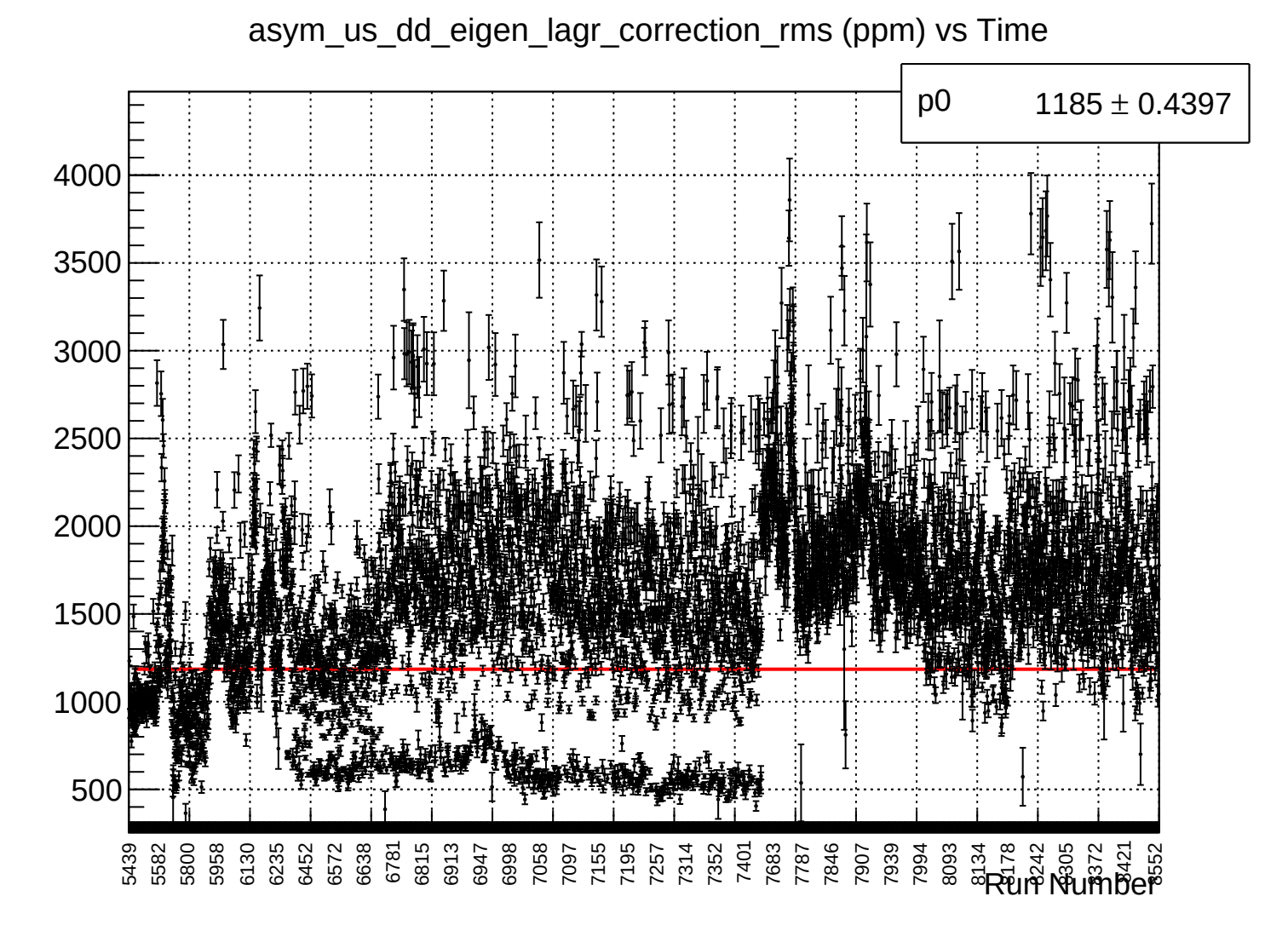

Pull Plot
Entries 6017
Mean 0.0002644
Std Dev 0.9989
Underflow 0
Overflow 0
Fit Prob 0.54
Fit Chi2 6003 / 6016
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

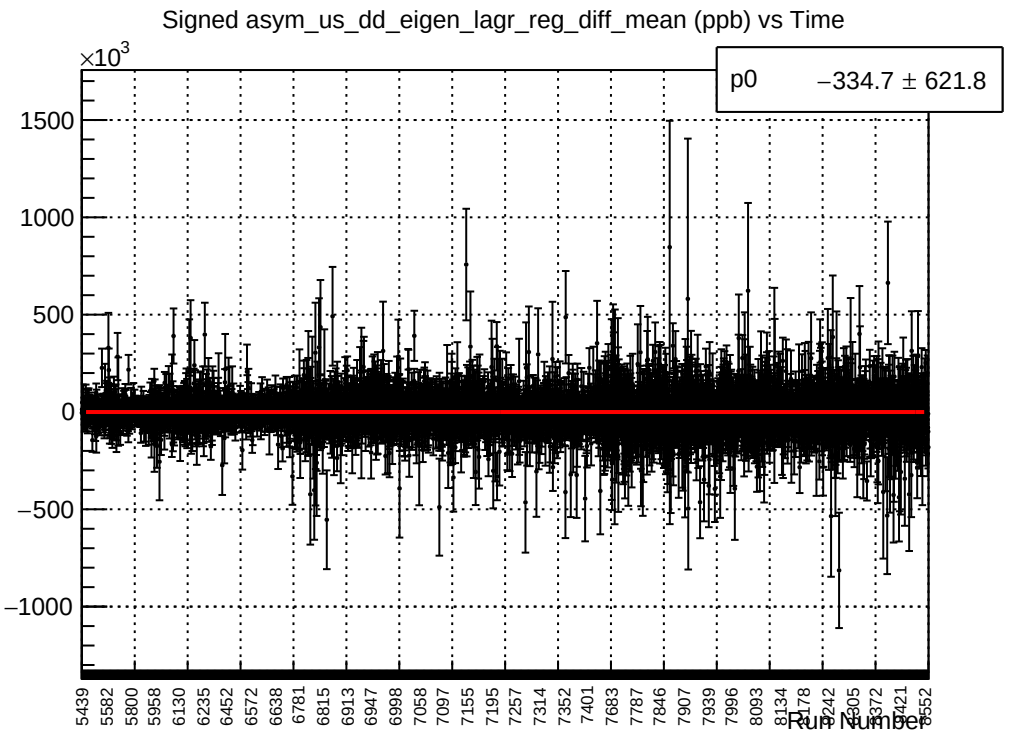

eigen_lagr_asym_us_dd_rms (ppm) vs Time
p0 772.6 ± 0.2686
1400
1200
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

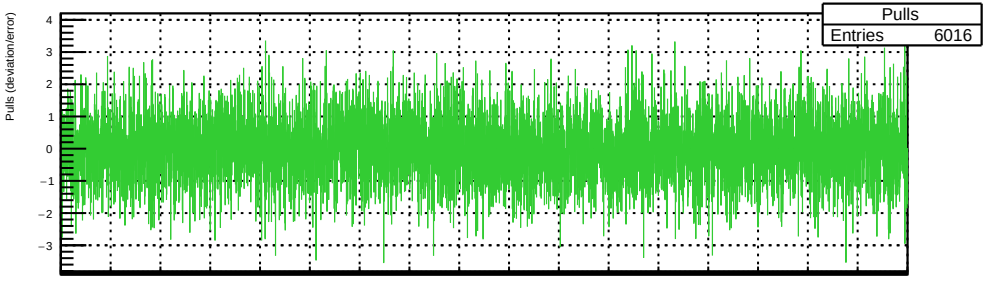

Signed asym_us_dd_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 −334.7 ± 621.8
1500
1000
500
0
−500
−1000
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7996
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

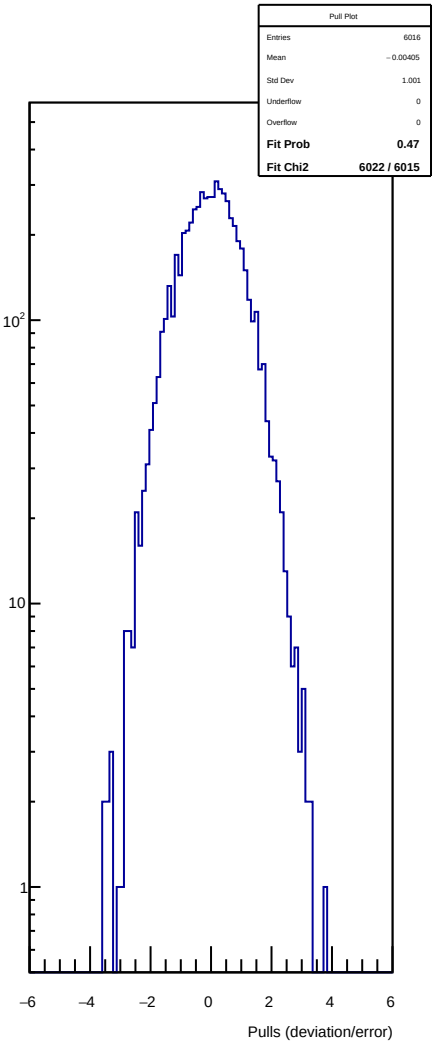

Pulls
Entries 6016
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

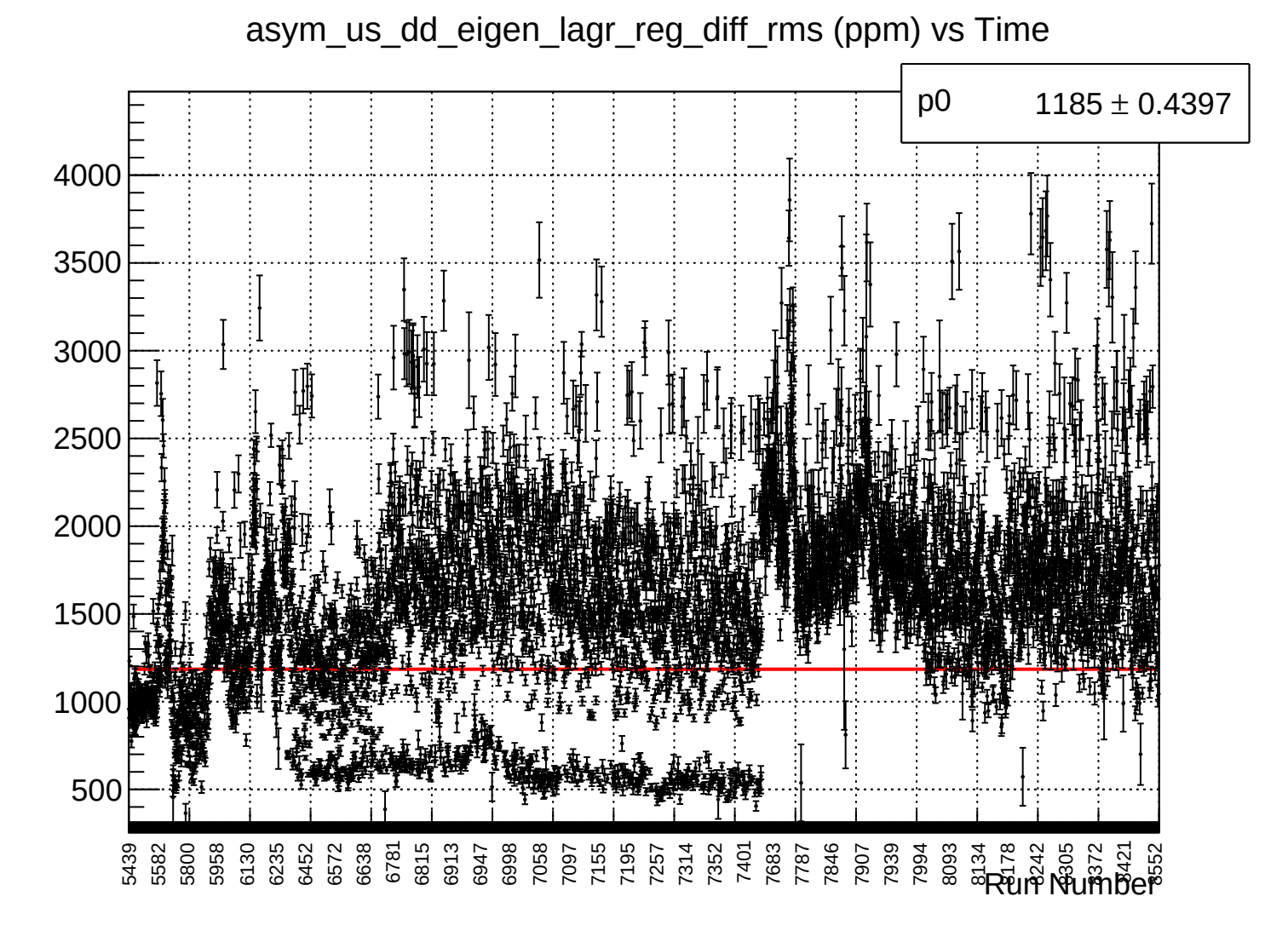

Pull Plot
Entries 6016
Mean −0.00405
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.47
Fit Chi2 6022 / 6015
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

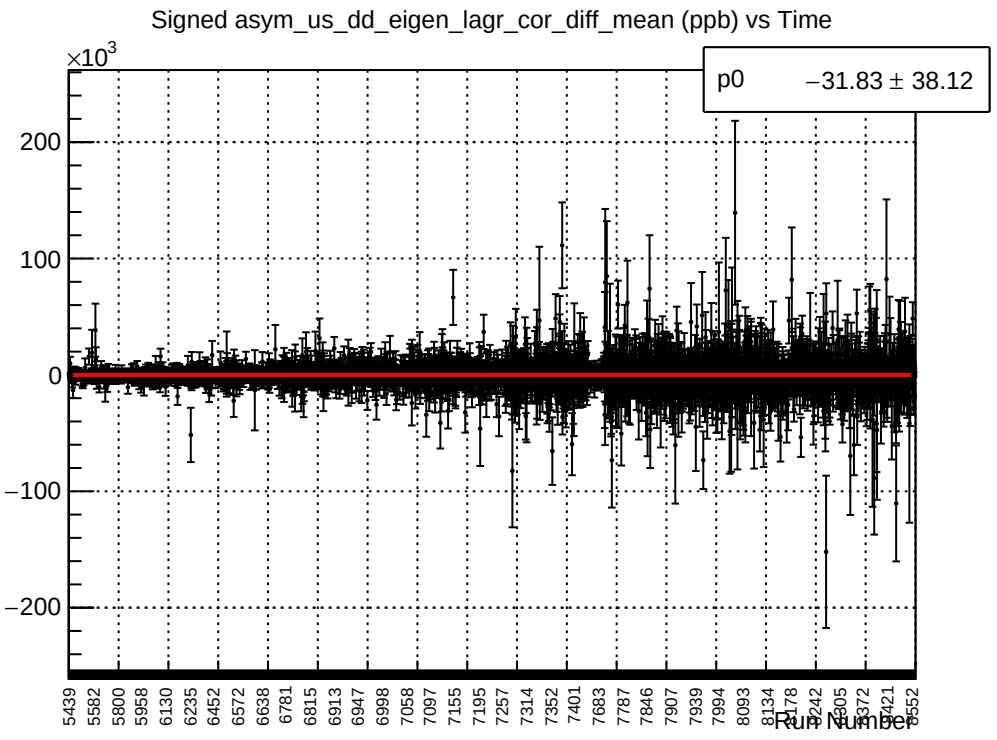

asym_us_dd_eigen_lagr_correction_rms (ppm) vs Time
p0
1185 ± 0.4397
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

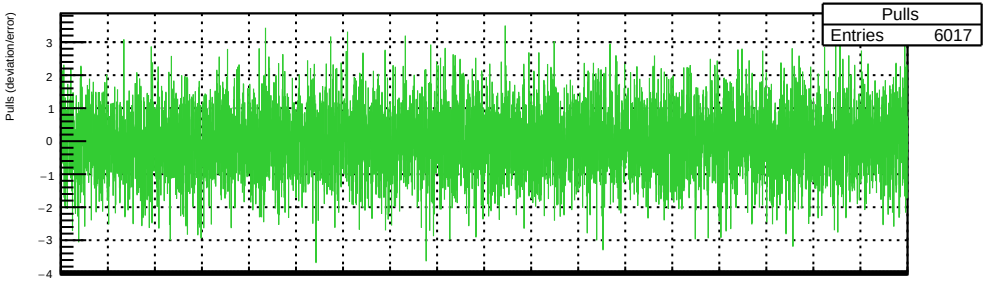

Signed asym_us_dd_eigen_lagr_reg_diff_mean (ppb) vs Time
×10^3
p0 −334.7 ± 621.8
1500
1000
500
0
−500
−1000
5439 5582 5800 5958 6130 6235 6452 6572 6638 6781 6815 6913 6947 6998 7058 7097 7155 7195 7257 7314 7352 7401 7683 7787 7846 7907 7939 7996 8093 8134 8178 8242 8305 8372 8421 8552
Run Number

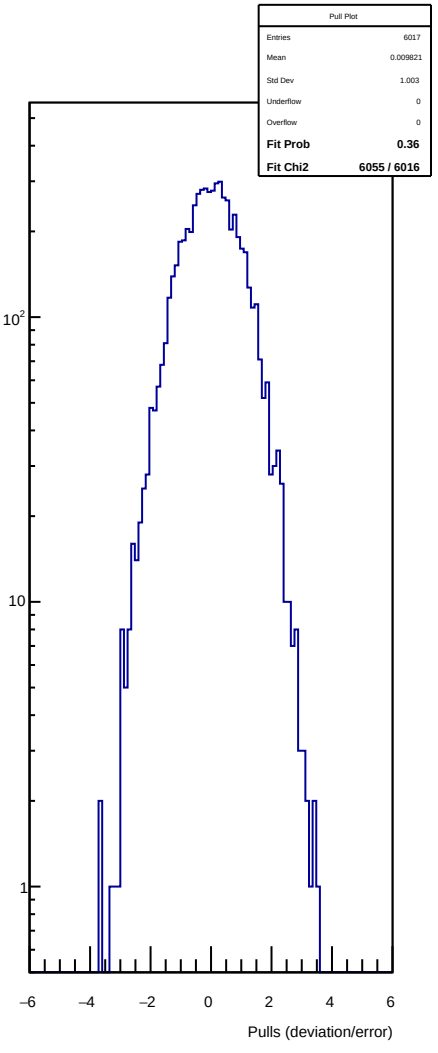

Pulls
Entries 6016
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

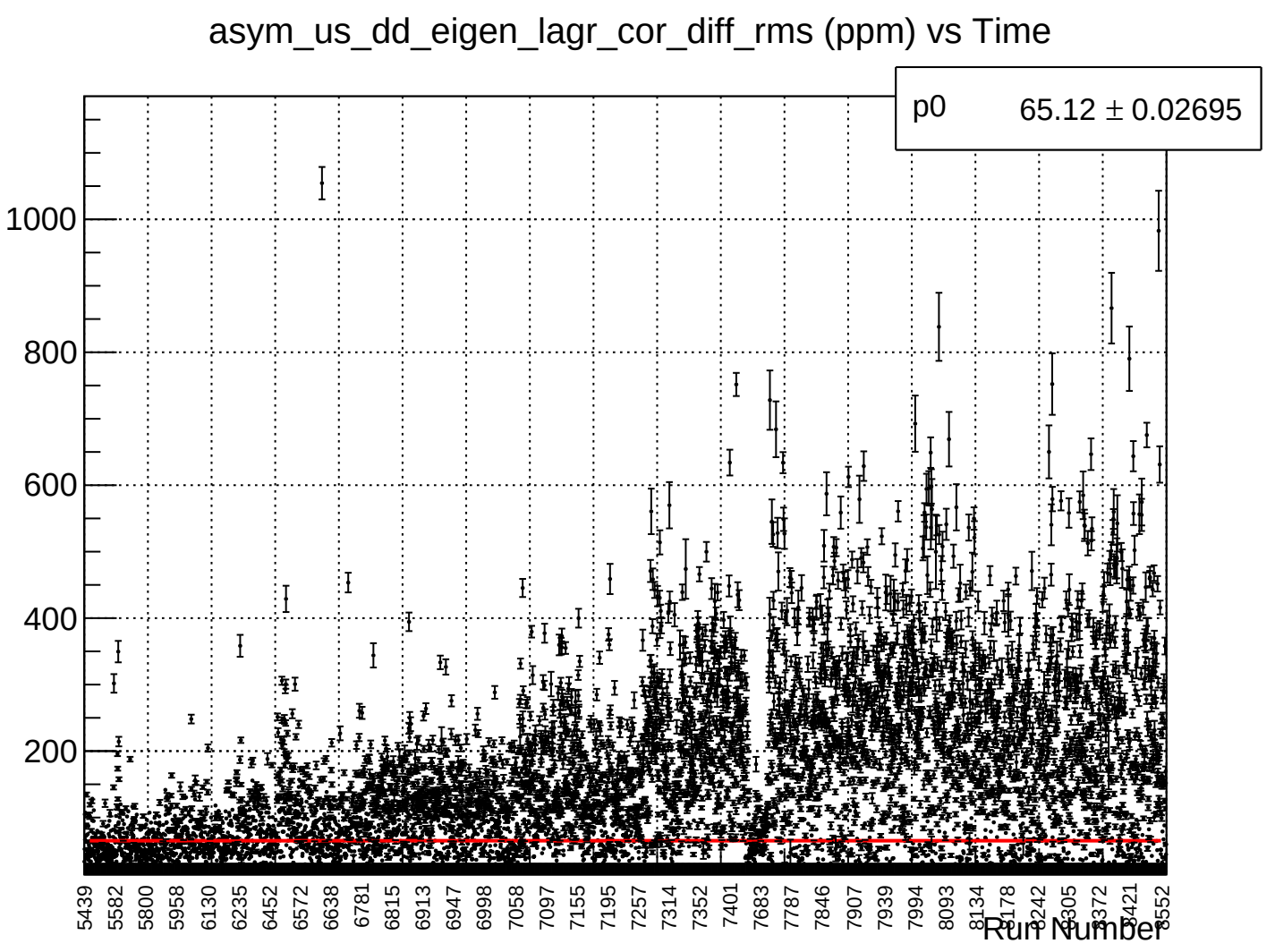

Pull Plot
Entries 6016
Mean −0.00405
Std Dev 1.001
Underflow 0
Overflow 0
Fit Prob 0.47
Fit Chi2 6022 / 6015
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

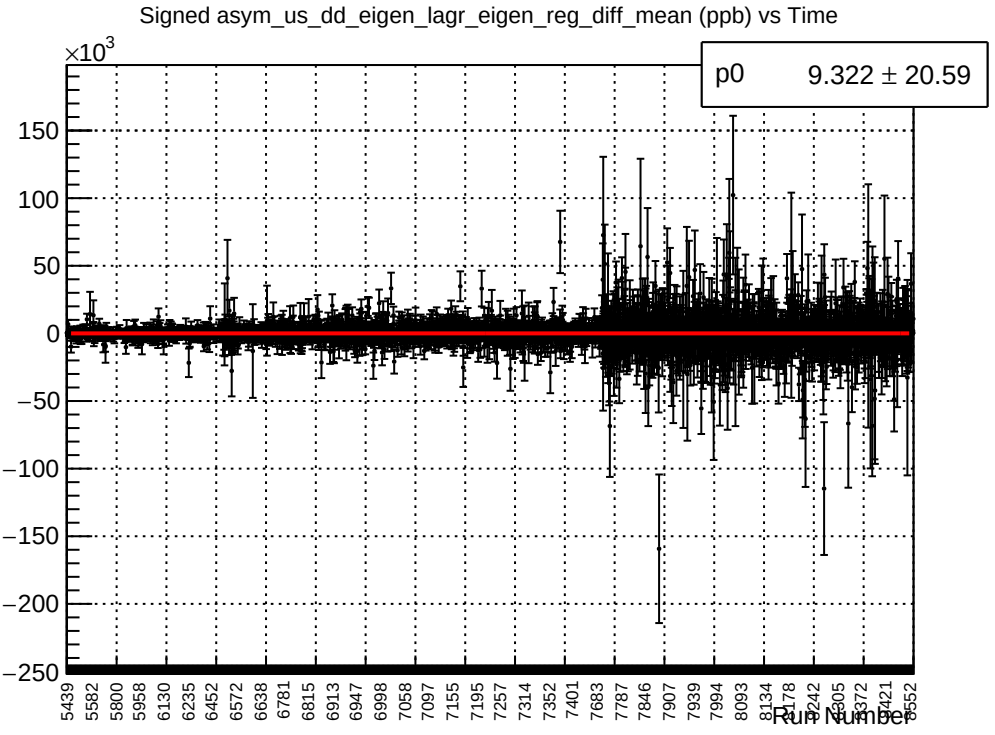

asym_us_dd_eigen_lagr_reg_diff_rms (ppm) vs Time
p0
1185 ± 0.4397
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

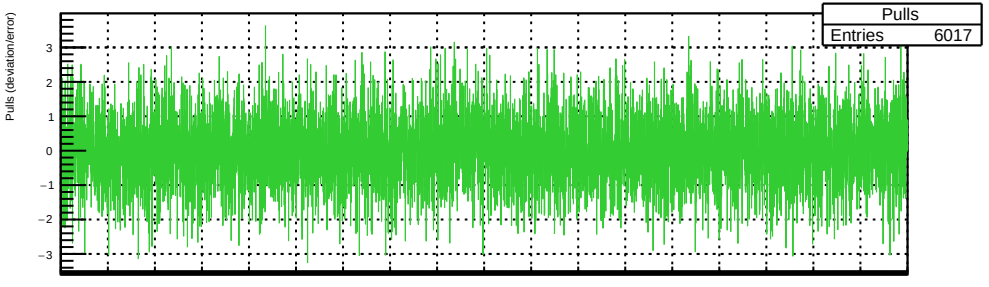

Signed asym_us_dd_eigen_lagr_cor_diff_mean (ppb) vs Time
×10^3
p0 −31.83 ± 38.12
200
100
0
−100
−200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

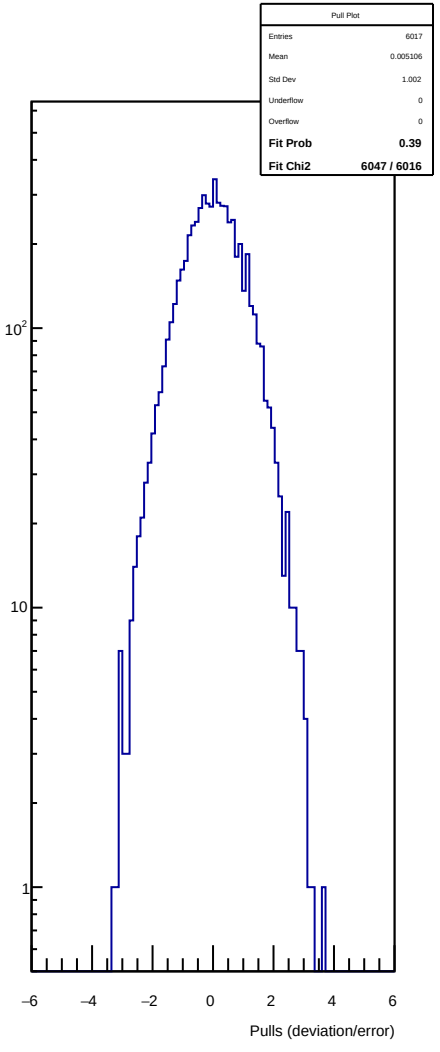

Pulls
Entries 6017
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

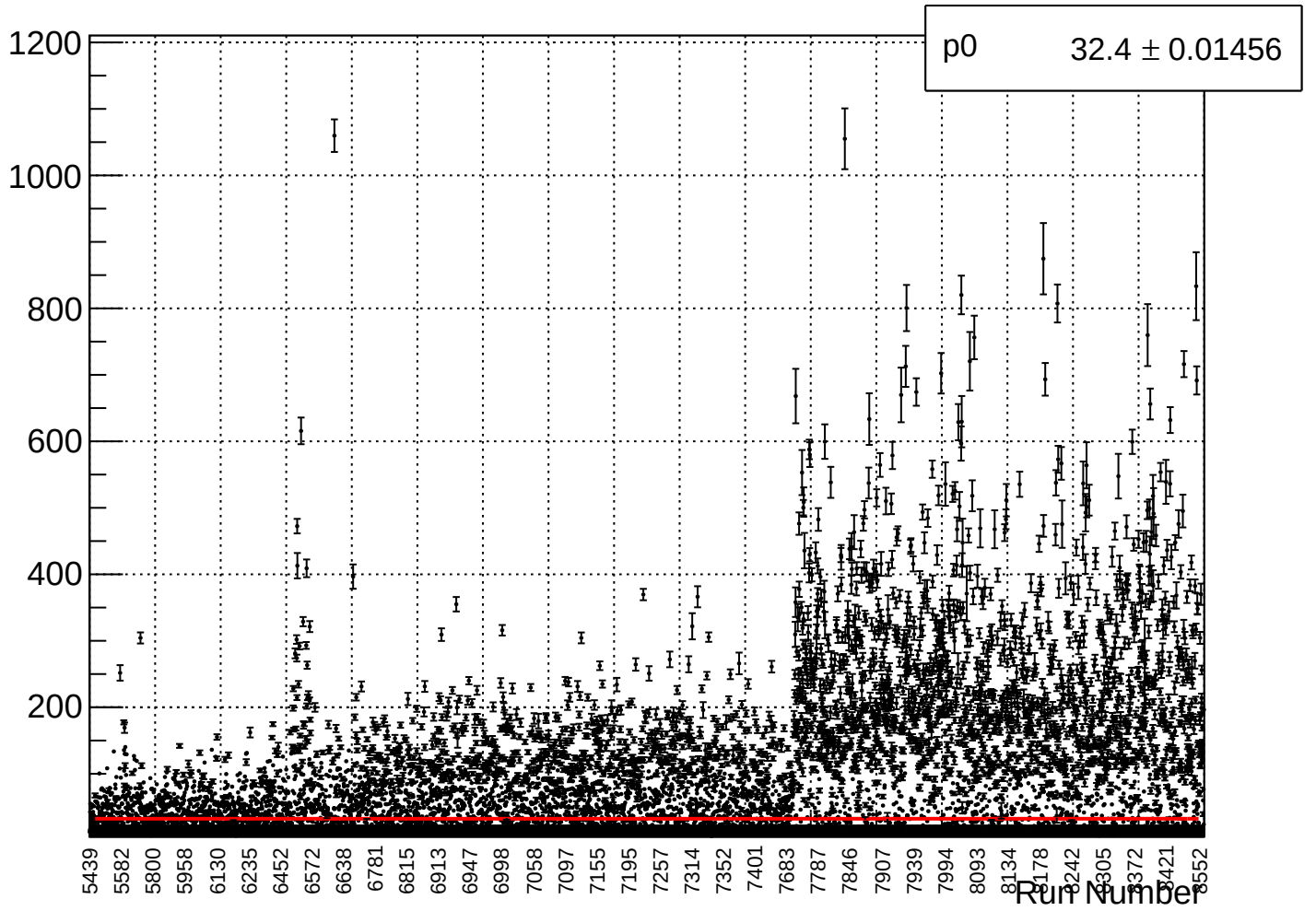

Pull Plot
Entries 6017
Mean 0.009821
Std Dev 1.003
Underflow 0
Overflow 0
Fit Prob 0.36
Fit Chi2 6055 / 6016
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

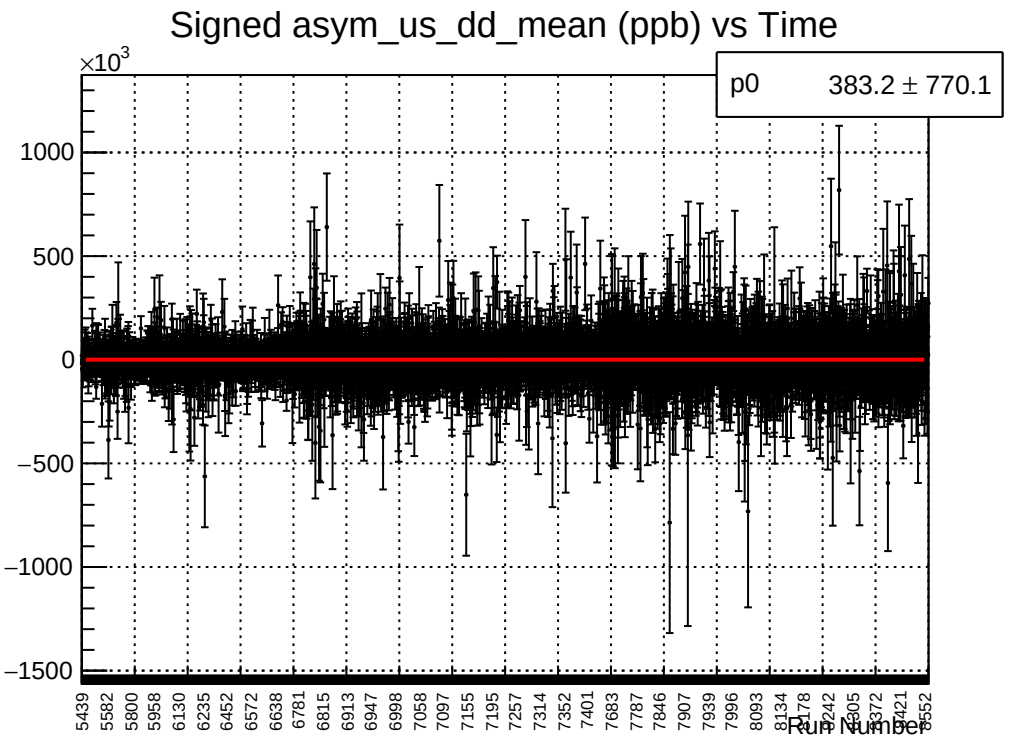

asym_us_dd_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 65.12 ± 0.02695
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

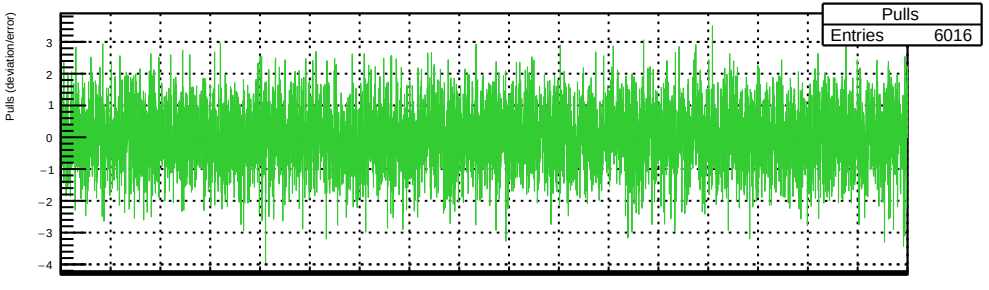

Signed asym_us_dd_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
×10^3
p0 9.322 ± 20.59
150
100
50
0
−50
−100
−150
−200
−250
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

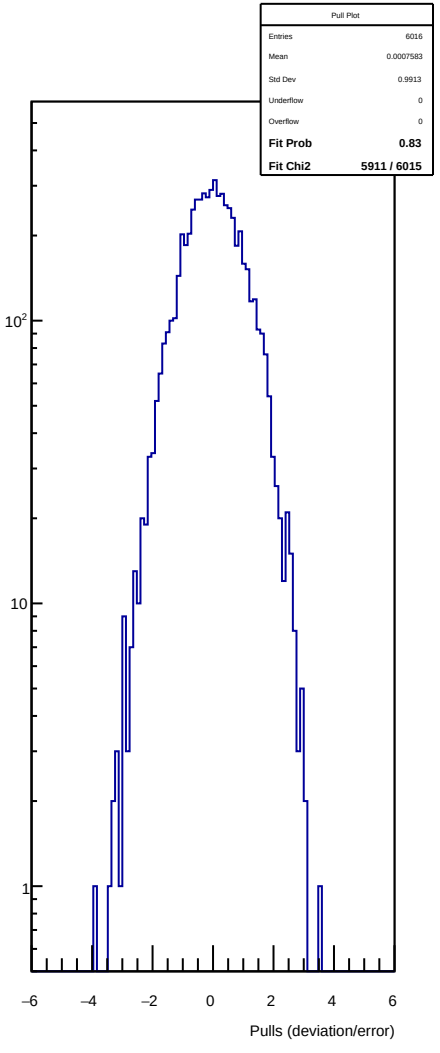

Pulls
Entries 6017
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

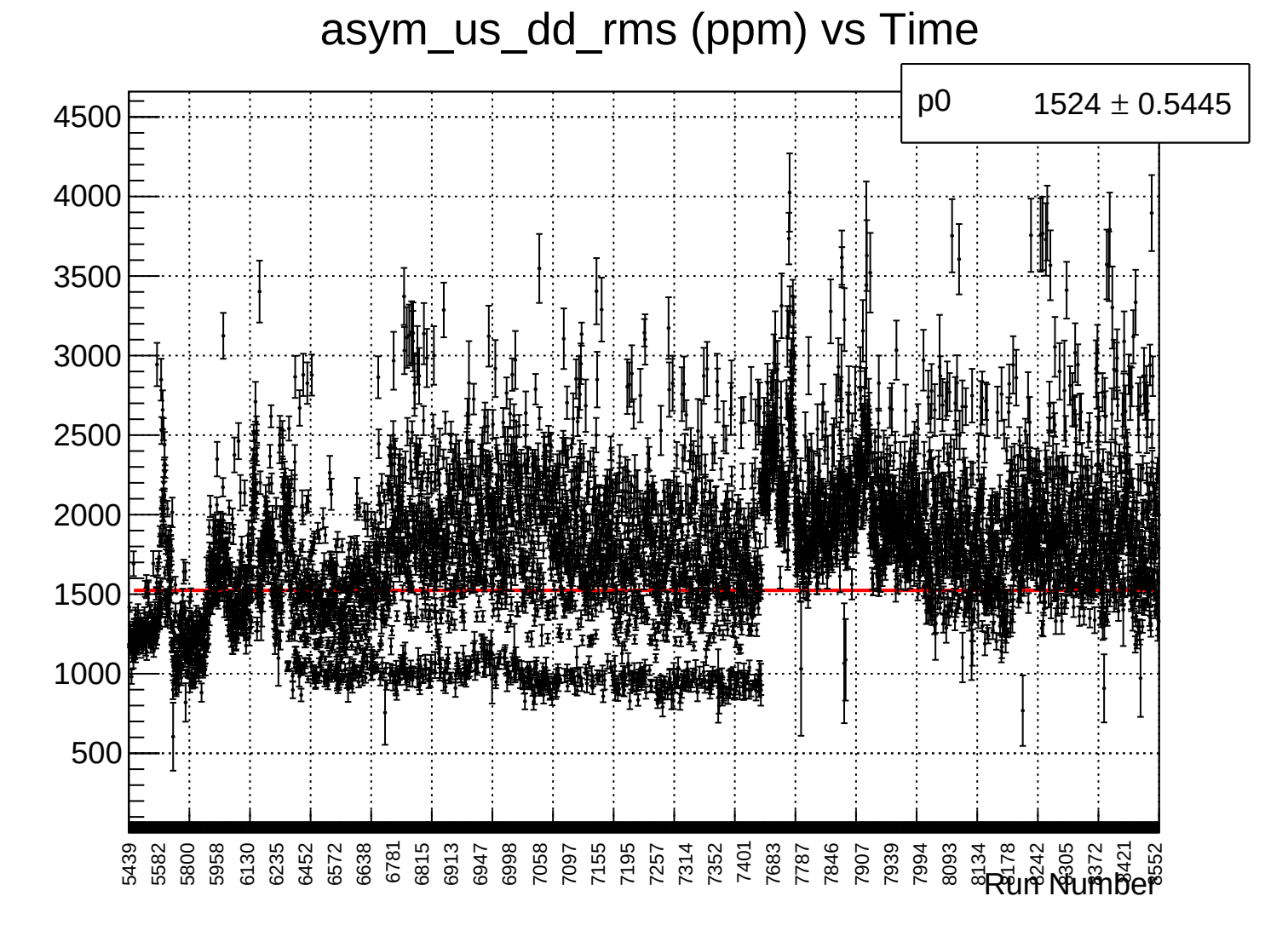

Pull Plot
Entries 6017
Mean 0.005106
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.39
Fit Chi2 6047 / 6016
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

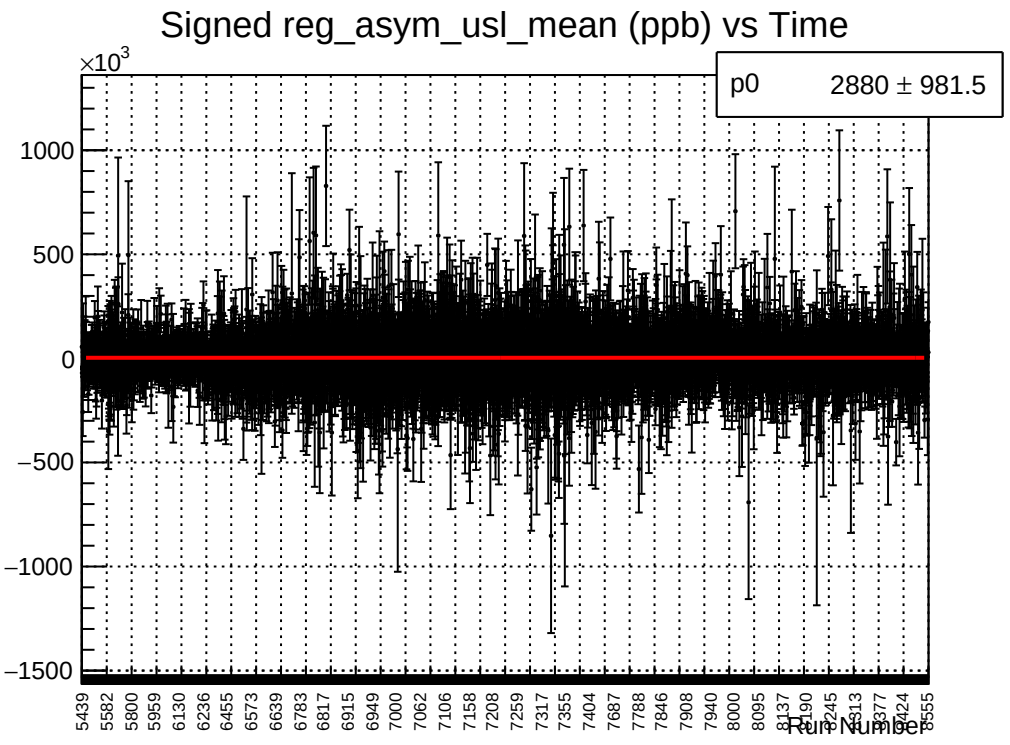

asym_us_dd_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 32.4 ± 0.01456
1200
1000
800
600
400
200
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

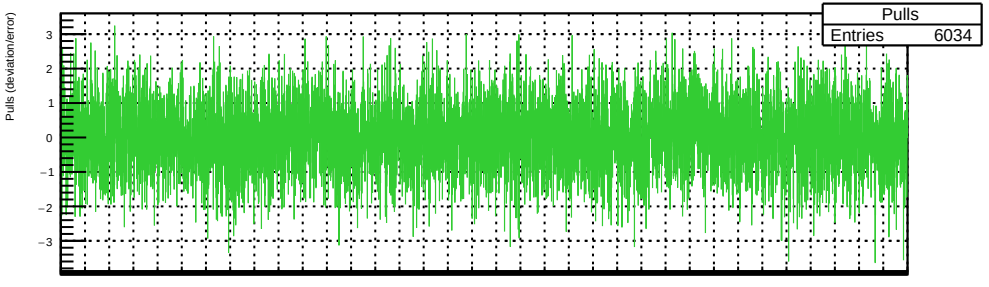

Signed asym_us_dd_mean (ppb) vs Time
×10^3
p0 383.2 ± 770.1
1000
500
0
−500
−1000
−1500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7996
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

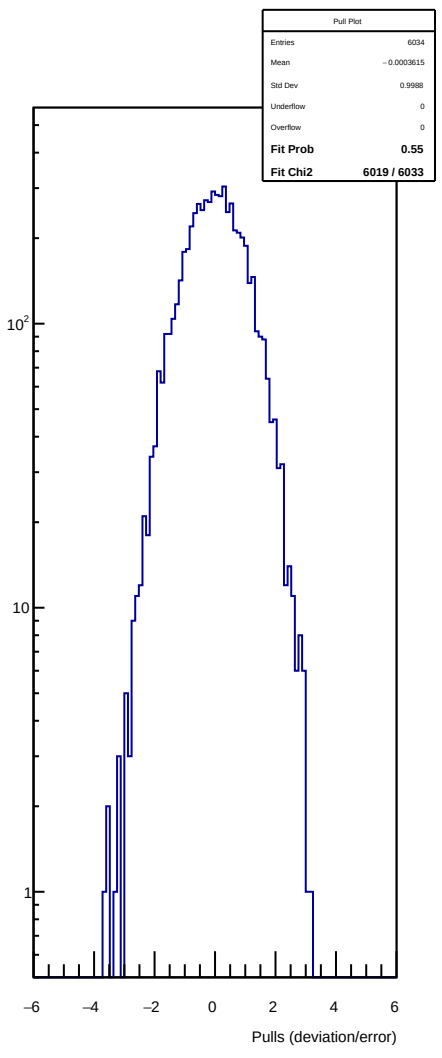

Pulls
Entries 6016
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

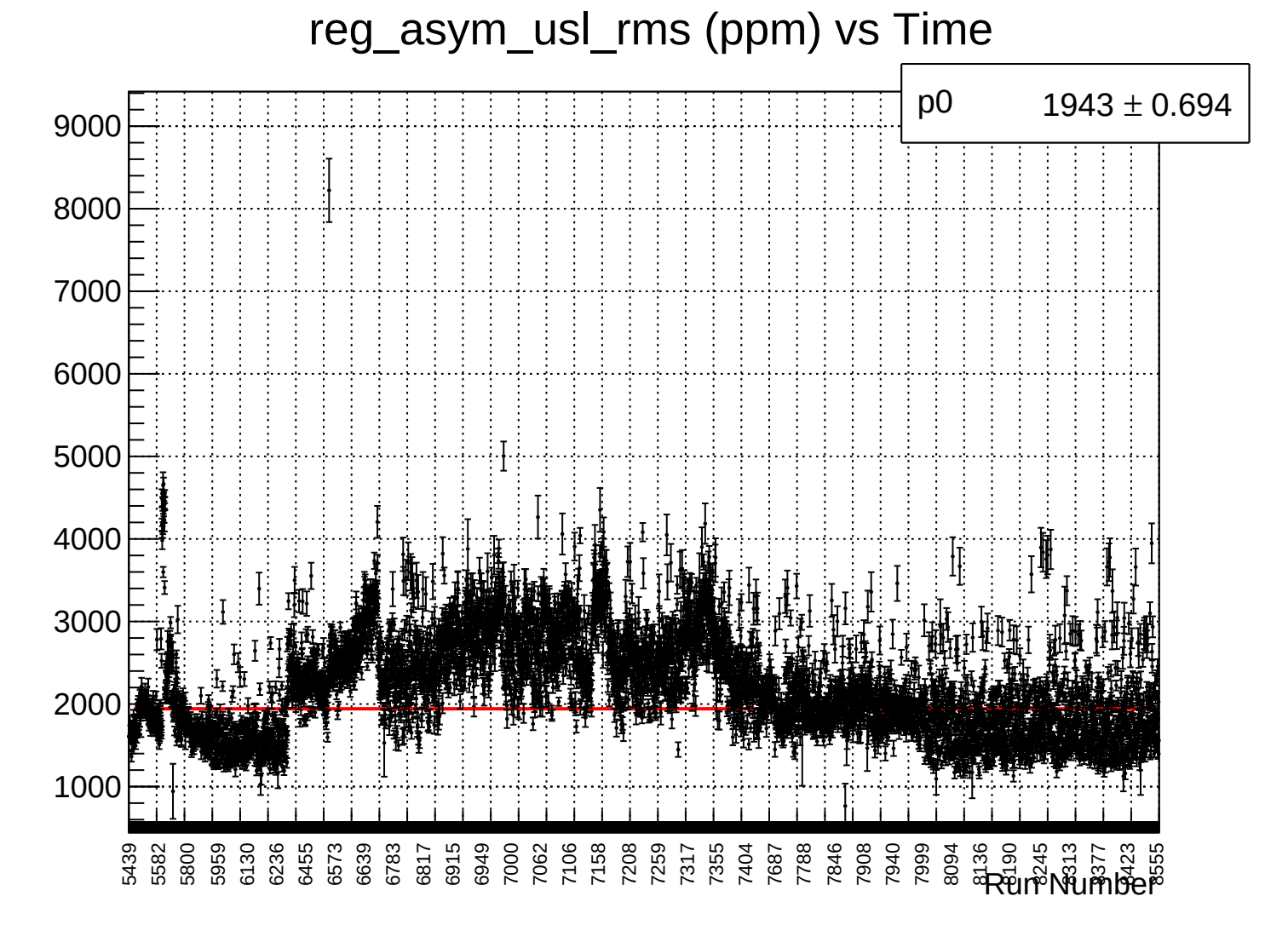

Pull Plot
Entries 6016
Mean 0.0007583
Std Dev 0.9913
Underflow 0
Overflow 0
Fit Prob 0.83
Fit Chi2 5911 / 6015
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

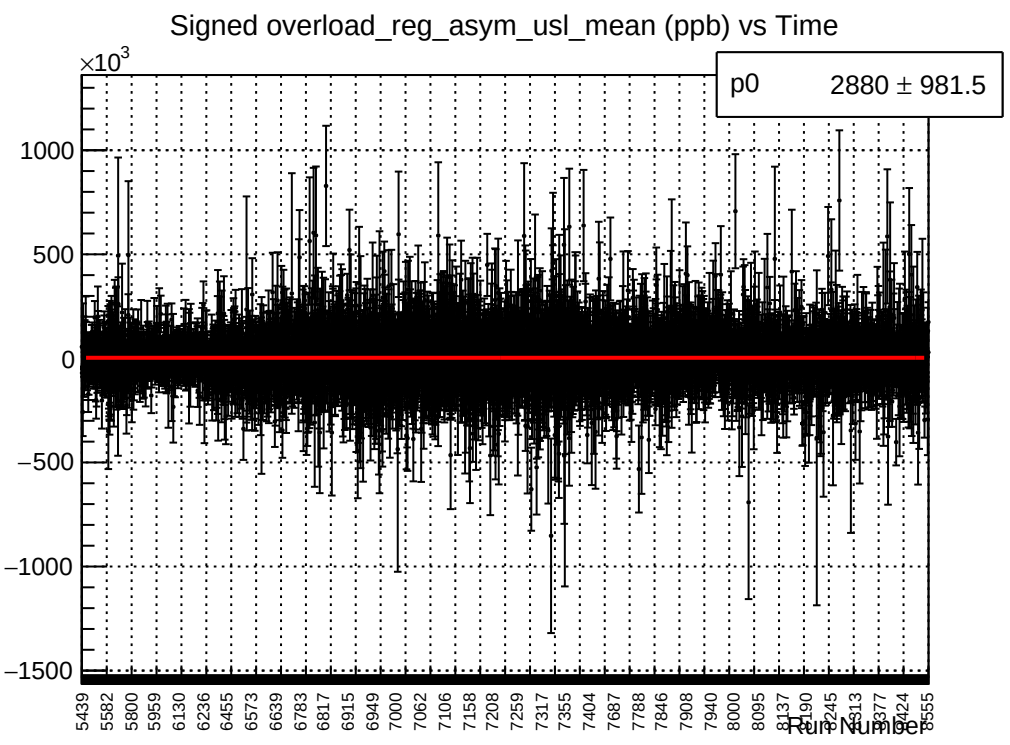

asym_us_dd_rms (ppm) vs Time
p0
1524 ± 0.5445
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5958
6130
6235
6452
6572
6638
6781
6815
6913
6947
6998
7058
7097
7155
7195
7257
7314
7352
7401
7683
7787
7846
7907
7939
7994
8093
8134
8178
8242
8305
8372
8421
8552
Run Number

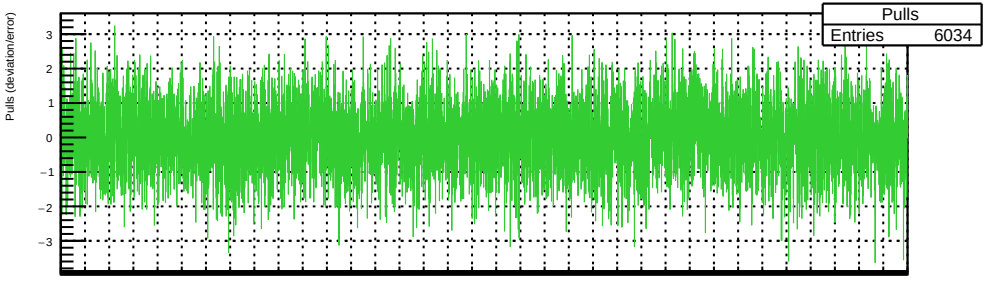

Signed reg_asym_usl_mean (ppb) vs Time
×10^3
p0 2880 ± 981.5
1000
500
0
−500
−1000
−1500
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
8000
8095
8137
8190
8245
8313
8377
8424
8555
Run Number

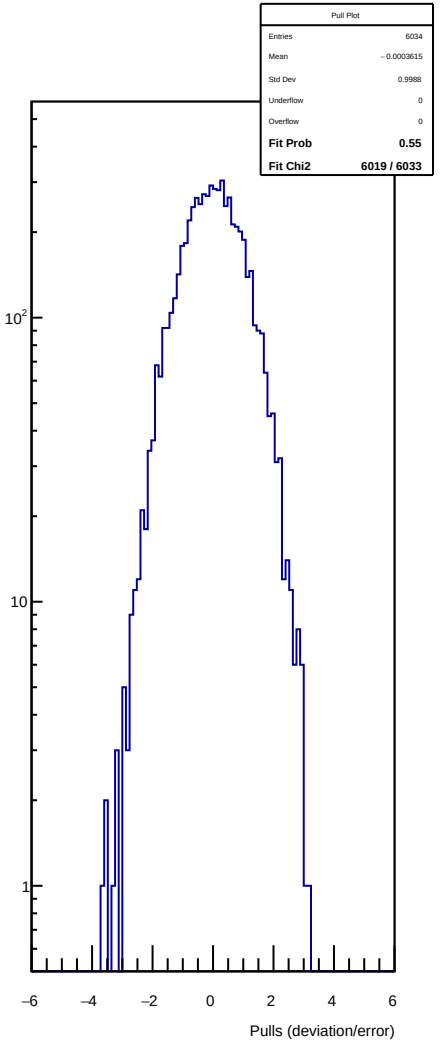

Pulls
Entries 6034
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

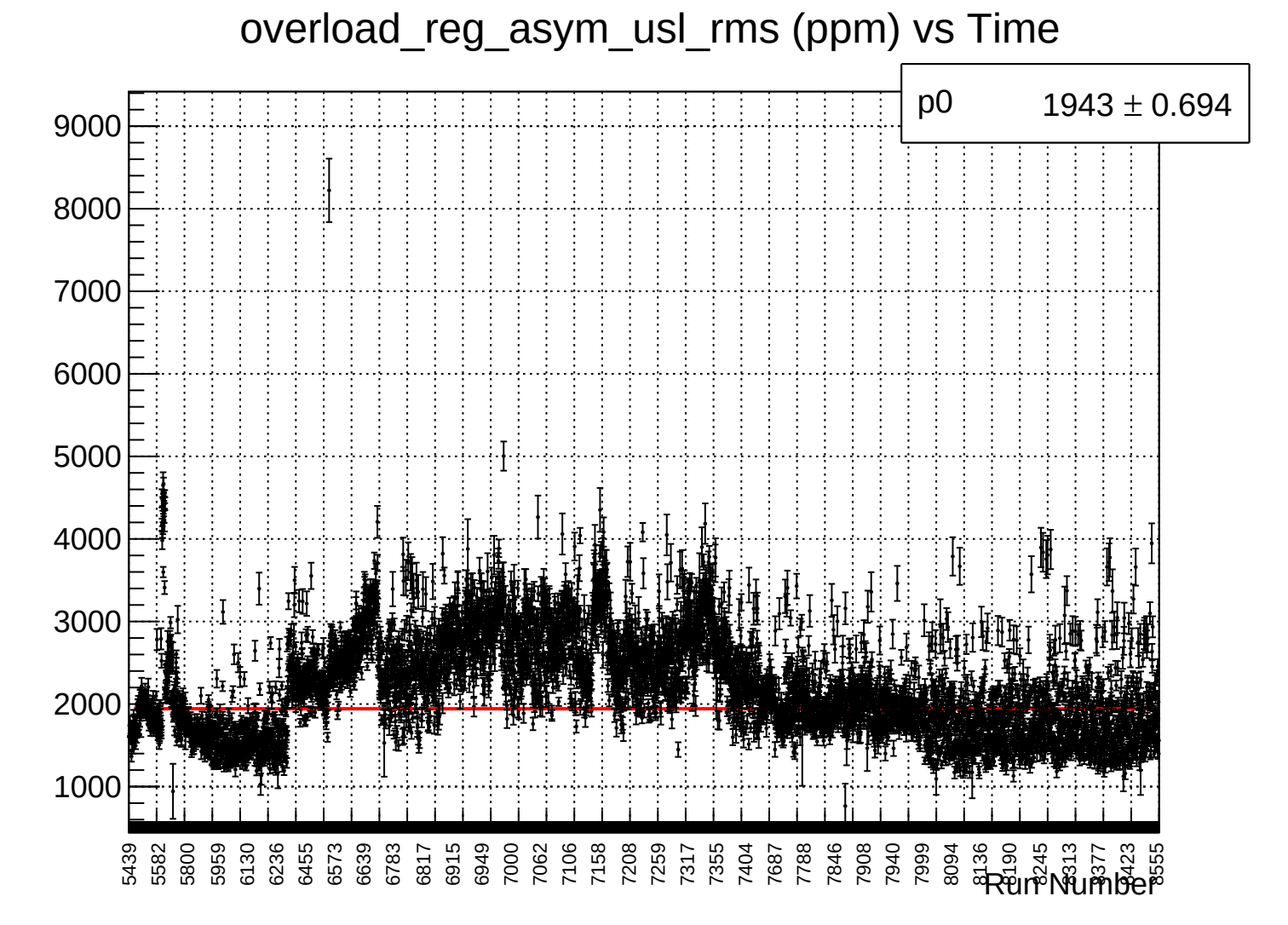

Pull Plot
Entries 6034
Mean −0.0003615
Std Dev 0.9988
Underflow 0
Overflow 0
Fit Prob 0.55
Fit Chi2 6019 / 6033
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

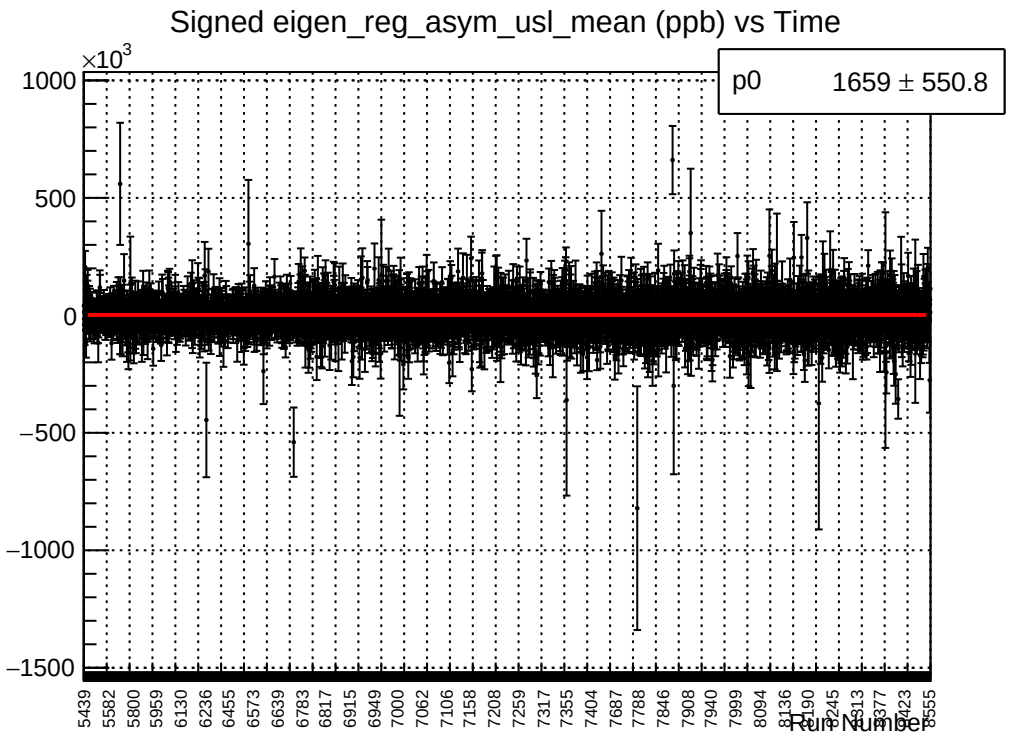

reg_asym_usl_rms (ppm) vs Time
p0 1943 ± 0.694
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

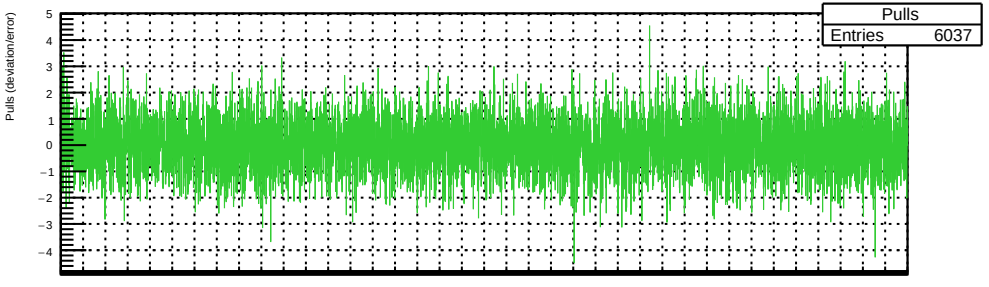

Signed overload_reg_asym_usl_mean (ppb) vs Time
×10^3
p0 2880 ± 981.5
1000
500
0
−500
−1000
−1500
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
8000
8095
8137
8190
8245
8313
8377
8424
8555
Run Number

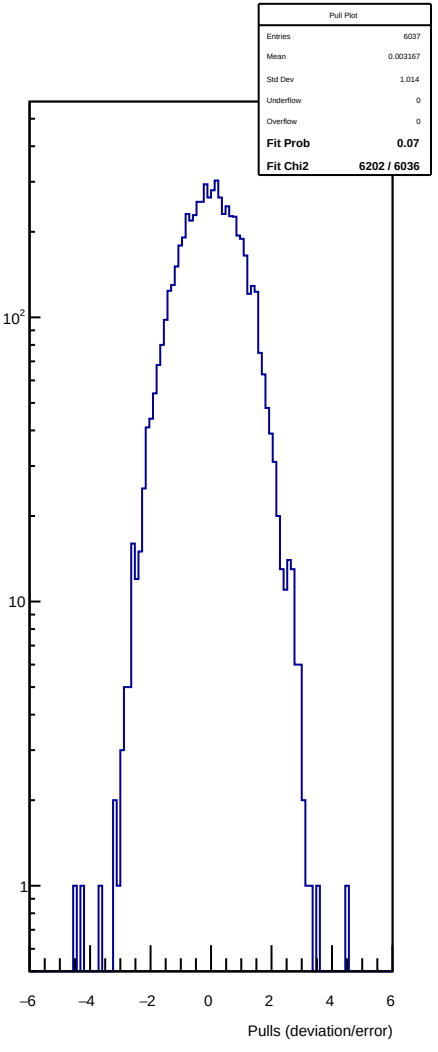

Pulls
Entries 6034
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

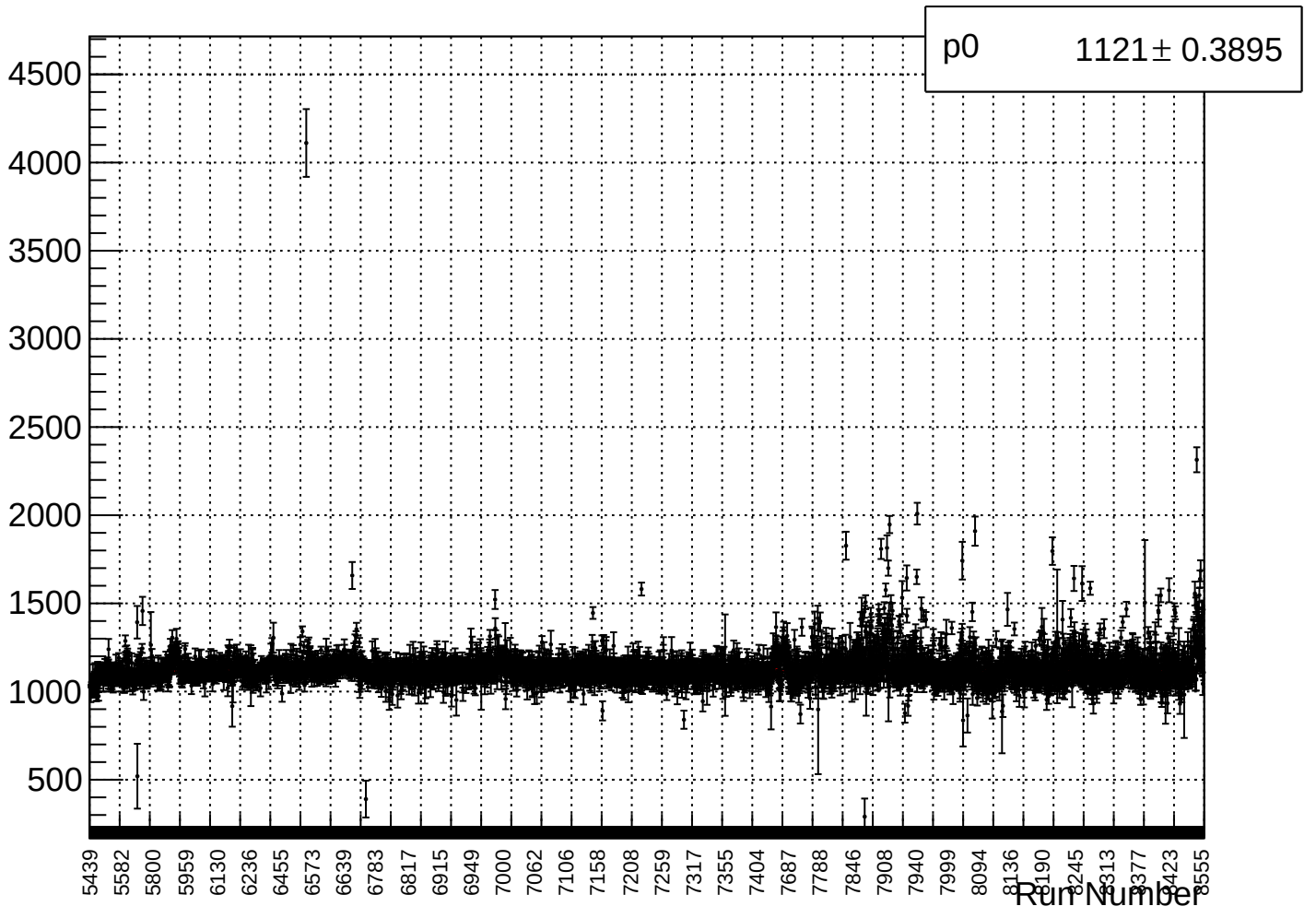

Pull Plot
Entries 6034
Mean −0.0003615
Std Dev 0.9988
Underflow 0
Overflow 0
Fit Prob 0.55
Fit Chi2 6019 / 6033
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

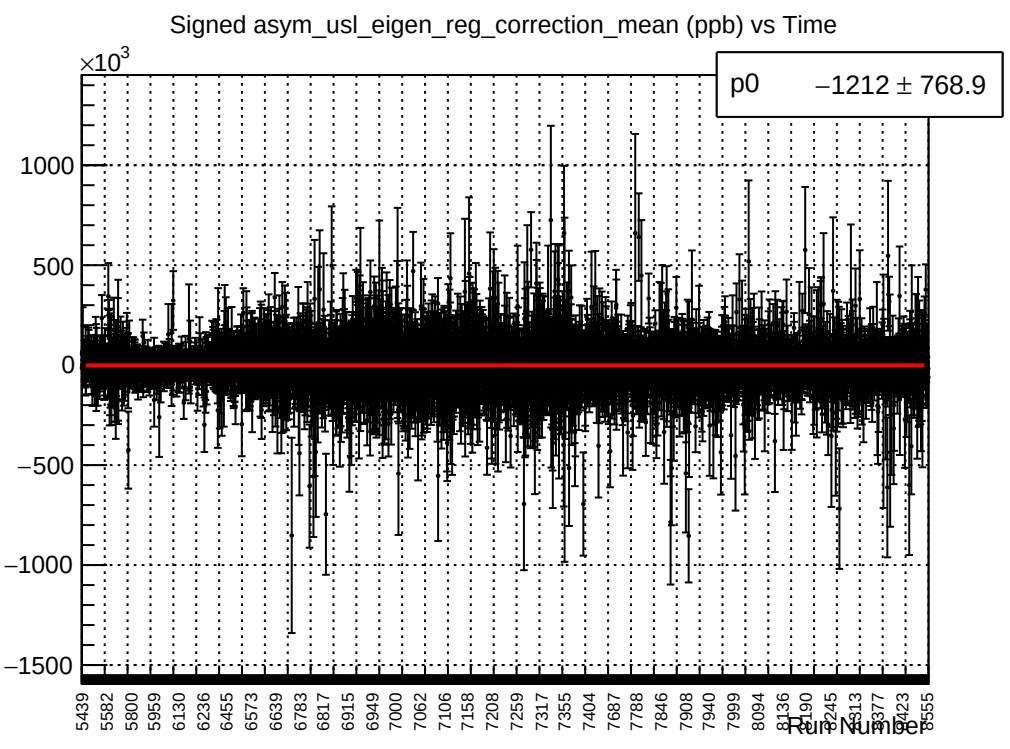

overload_reg_asym_usl_rms (ppm) vs Time
p0 1943 ± 0.694
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

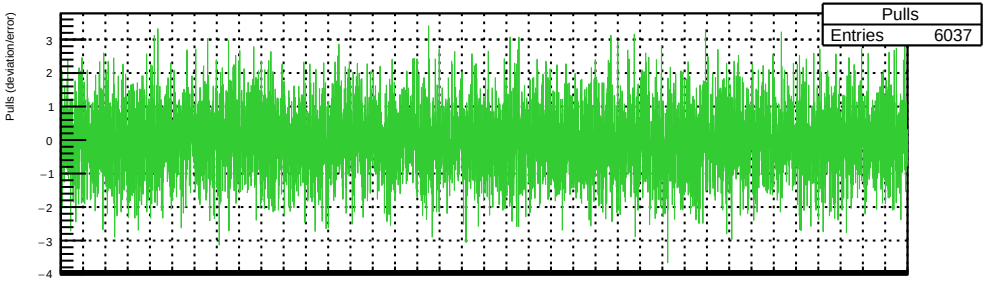

Signed eigen_reg_asym_usl_mean (ppb) vs Time
×10^3
p0 1659 ± 550.8
1000
500
0
−500
−1000
−1500
5439 5582 5800 5959 6130 6236 6455 6573 6639 6783 6817 6915 6949 7000 7062 7106 7158 7208 7259 7317 7355 7404 7687 7788 7846 7908 7940 7999 8094 8136 8190 8245 8313 8377 8423 8555
Run Number

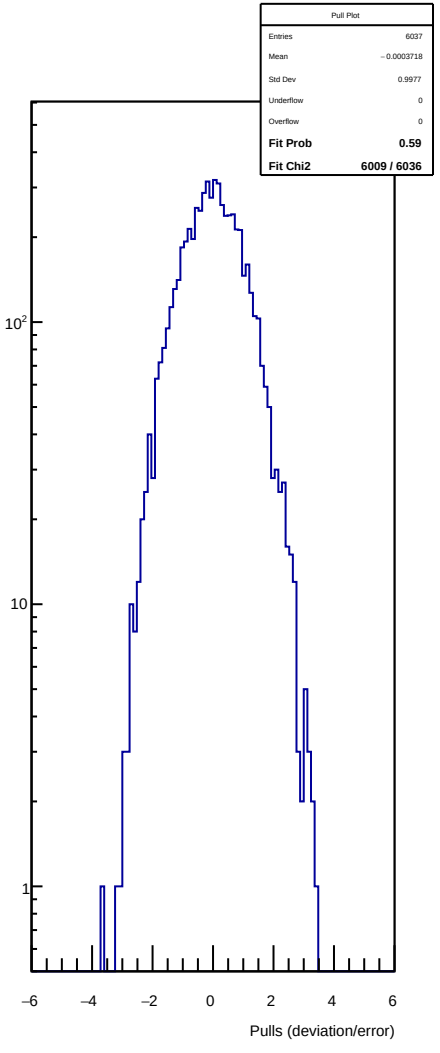

Pulls
Entries 6037
Pulls (deviation/error)
5
4
3
2
1
0
−1
−2
−3
−4

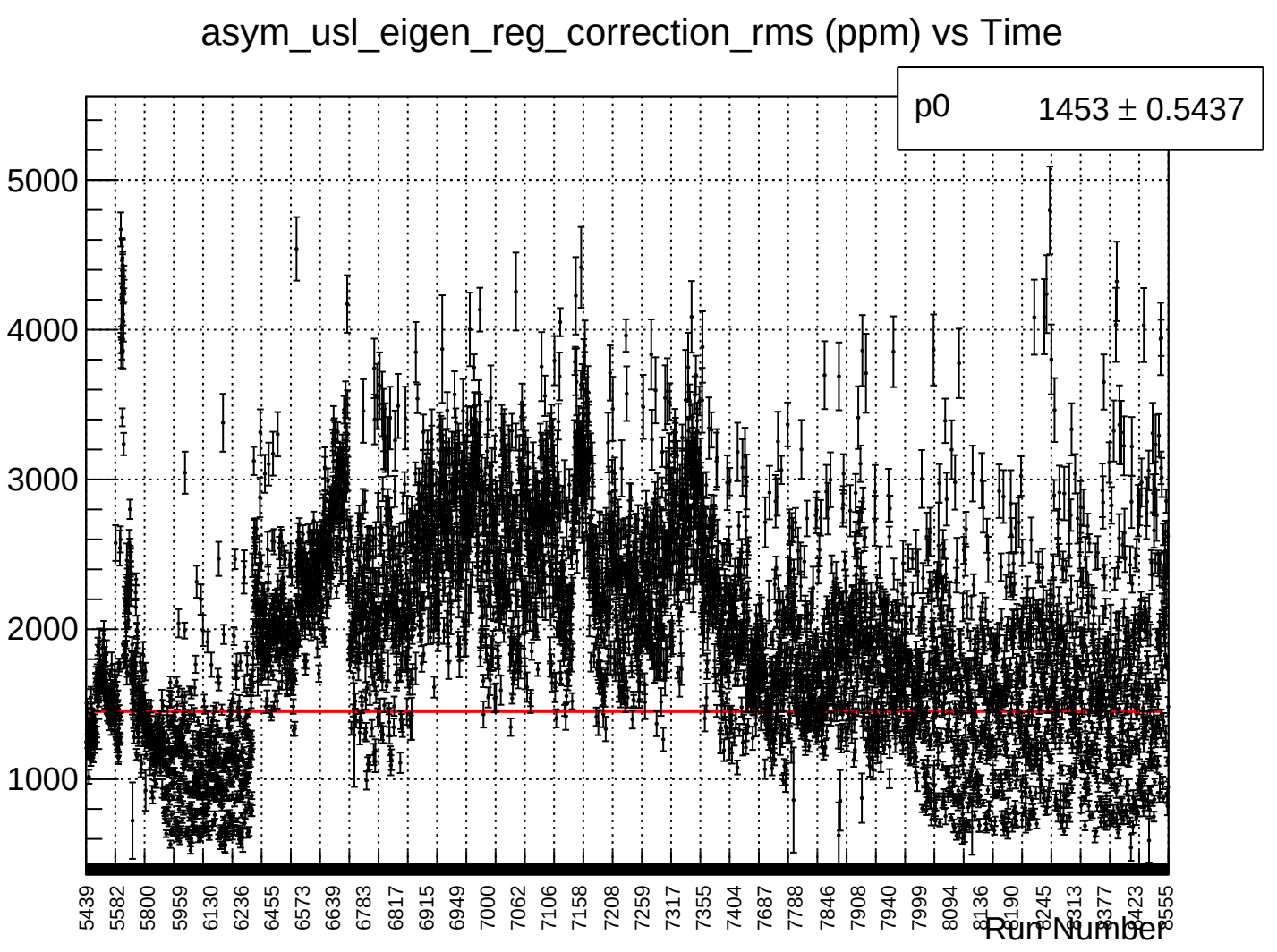

Pull Plot
Entries 6037
Mean 0.003167
Std Dev 1.014
Underflow 0
Overflow 0
Fit Prob 0.07
Fit Chi2 6202 / 6036
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

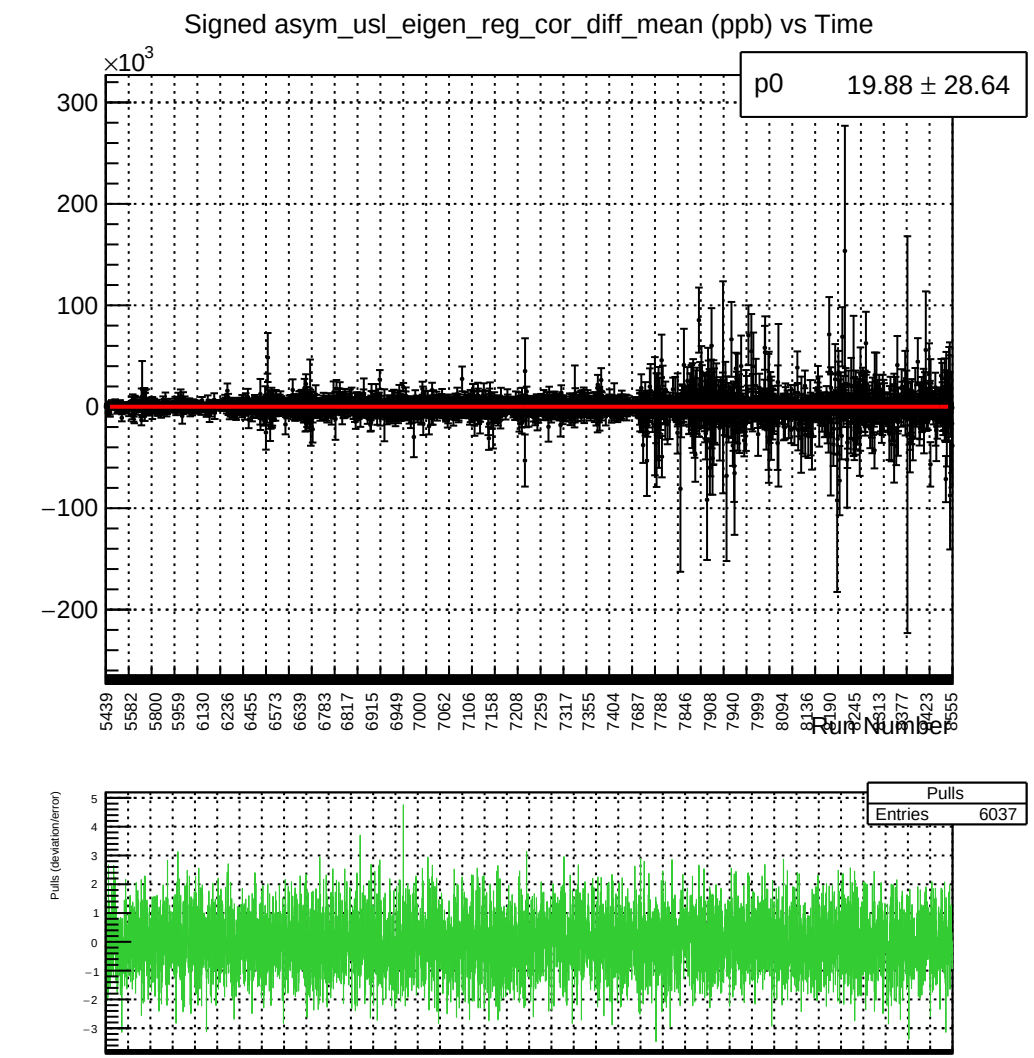

eigen_reg_asym_usl_rms (ppm) vs Time
p0 1121 ± 0.3895
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

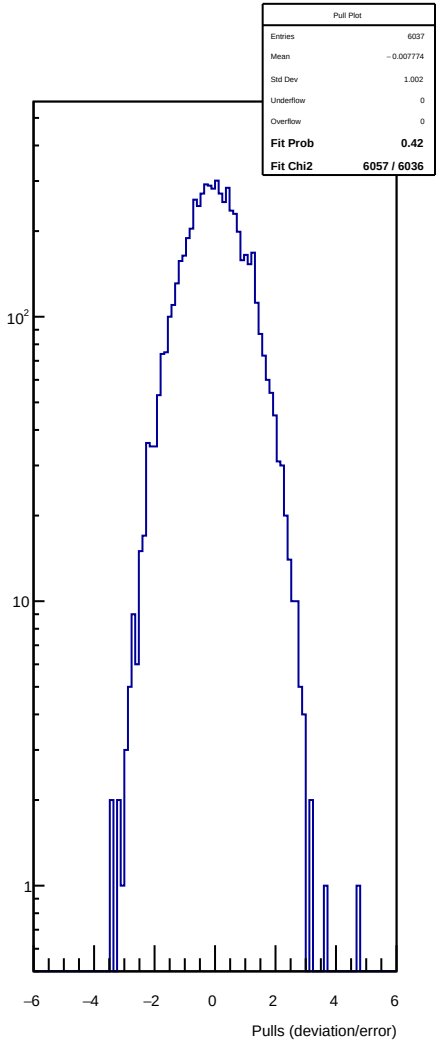

Signed asym_usl_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 −1212 ± 768.9
1000
500
0
−500
−1000
−1500
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

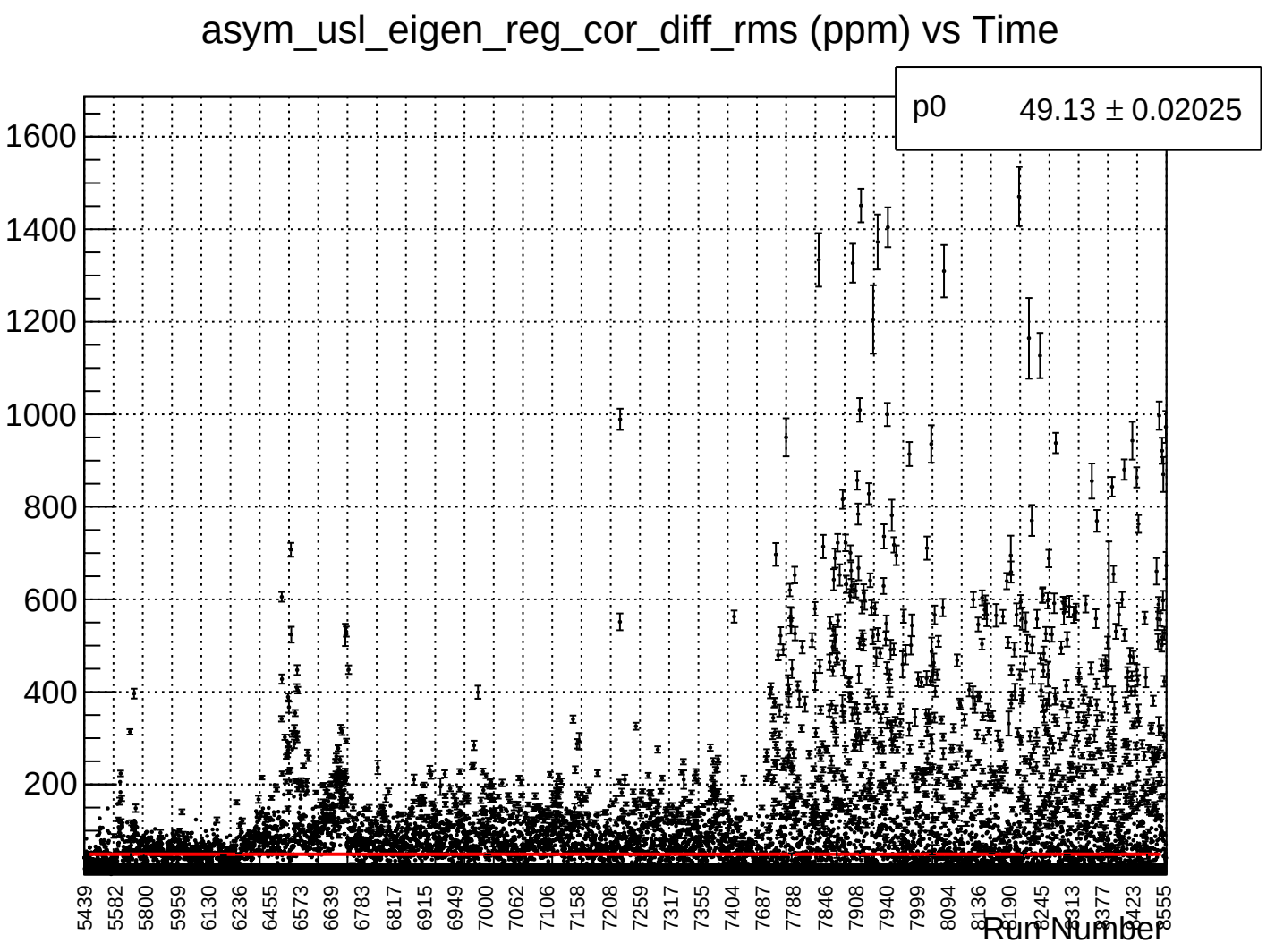

Pulls
Entries 6037
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

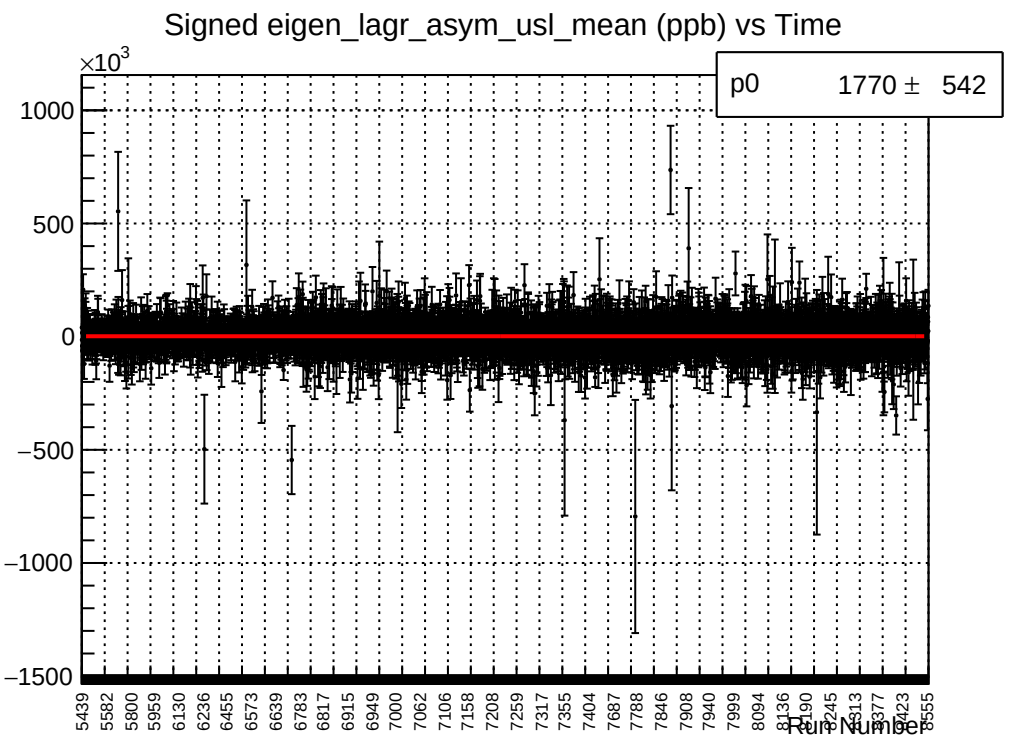

Pull Plot
Entries 6037
Mean −0.0003718
Std Dev 0.9977
Underflow 0
Overflow 0
Fit Prob 0.59
Fit Chi2 6009 / 6036
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

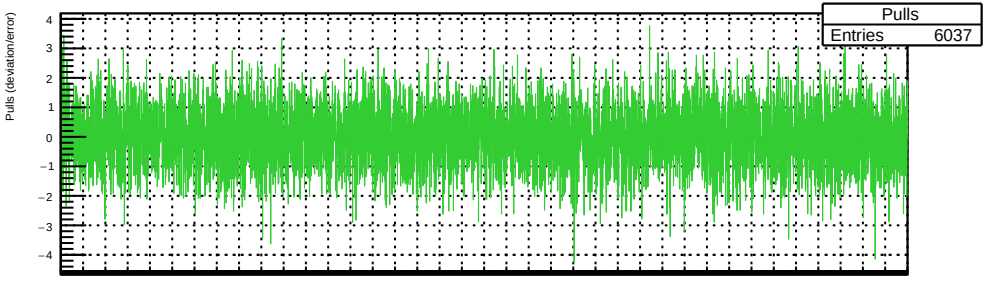

asym_usl_eigen_reg_correction_rms (ppm) vs Time
p0 1453 ± 0.5437
5000
4000
3000
2000
1000
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

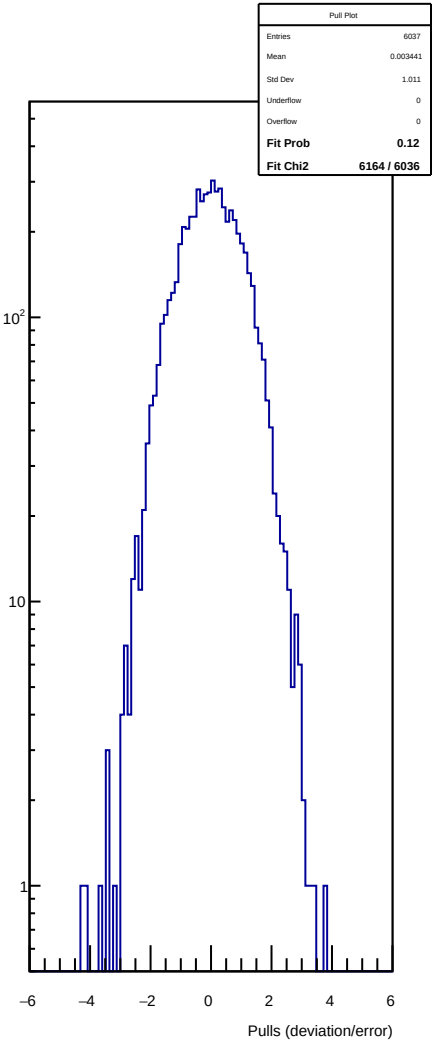

Signed asym_usl_eigen_reg_cor_diff_mean (ppb) vs Time
×10^3
p0 19.88 ± 28.64
300
200
100
0
−100
−200
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number
Pulls
Entries 6037
Pulls (deviation/error)
5
4
3
2
1
0
−1
−2
−3

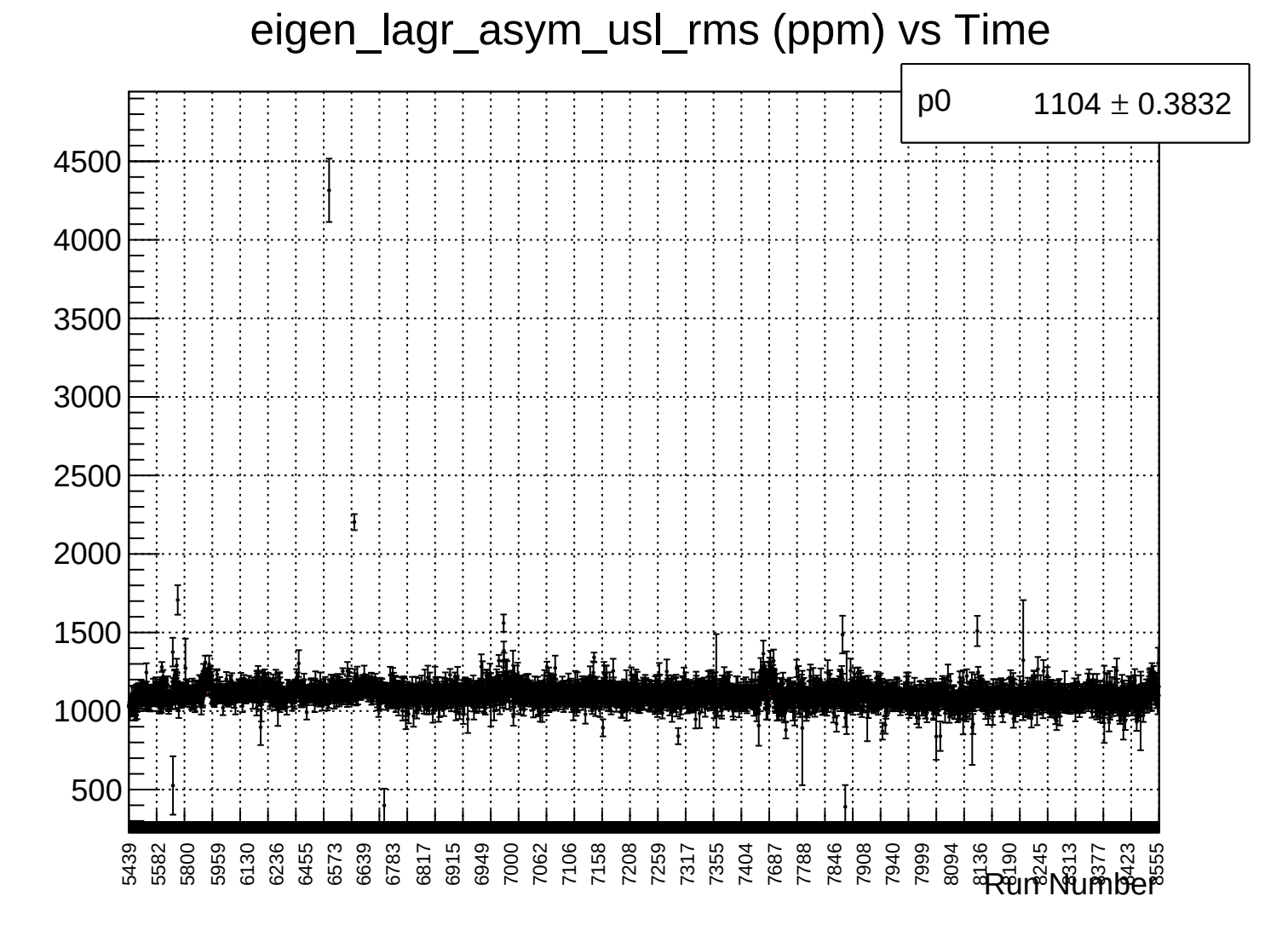

Pull Plot
Entries 6037
Mean −0.007774
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.42
Fit Chi2 6057 / 6036
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

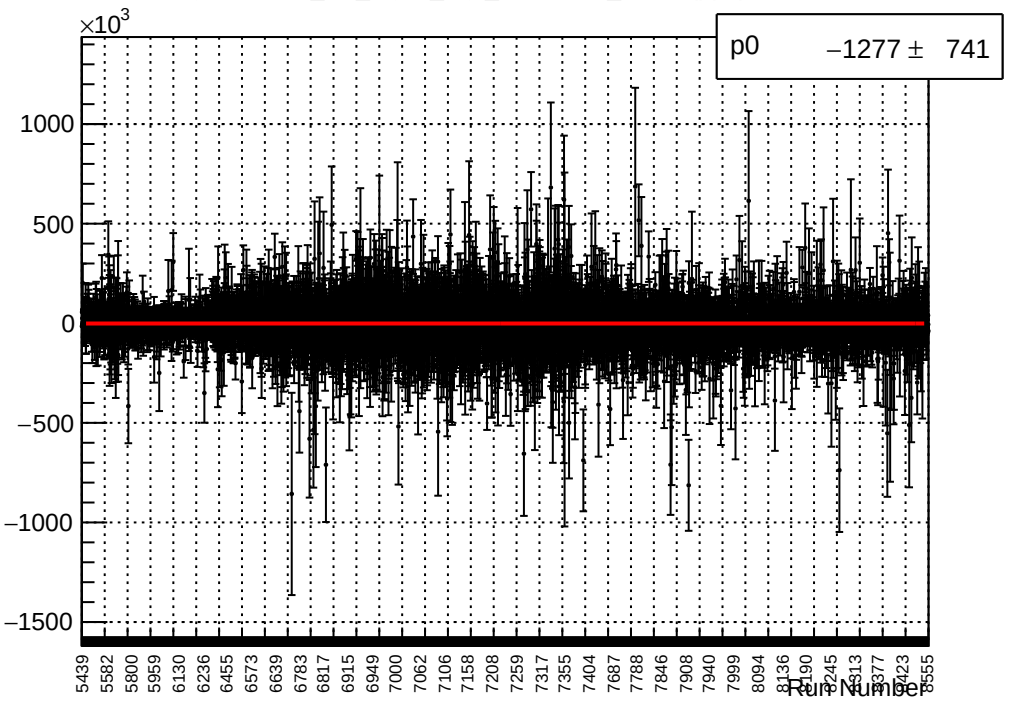

asym_usl_eigen_reg_cor_diff_rms (ppm) vs Time
p0 49.13 ± 0.02025
1600
1400
1200
1000
800
600
400
200
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

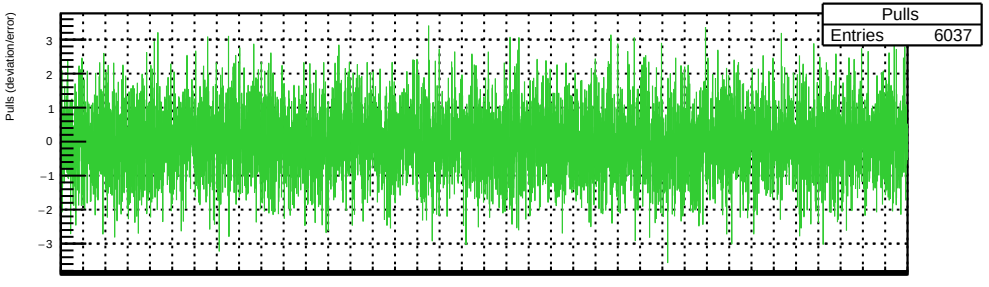

Signed eigen_lagr_asym_usl_mean (ppb) vs Time
×10^3
p0 1770 ± 542
1000
500
0
−500
−1000
−1500
5439 5582 5800 5959 6130 6236 6455 6573 6639 6783 6817 6915 6949 7000 7062 7106 7158 7208 7259 7317 7355 7404 7687 7788 7846 7908 7940 7999 8094 8136 8190 8245 8313 8377 8423 8555
Run Number

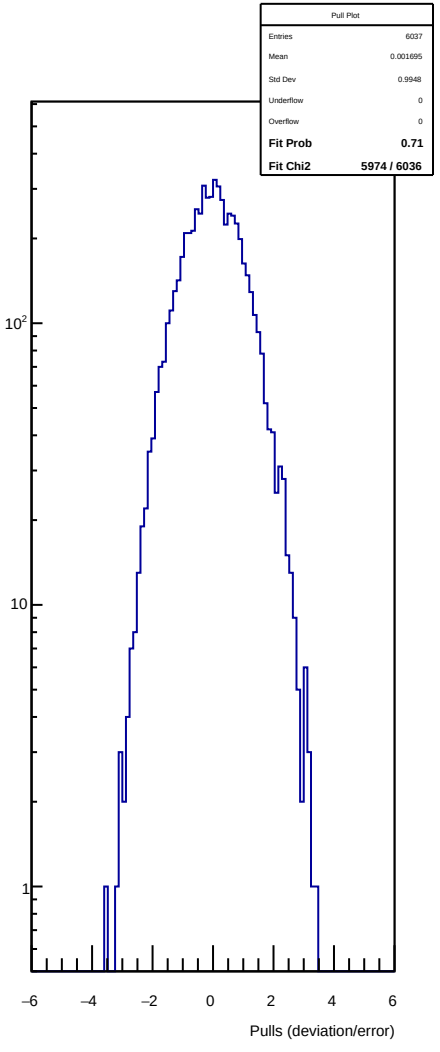

Pulls
Entries 6037
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

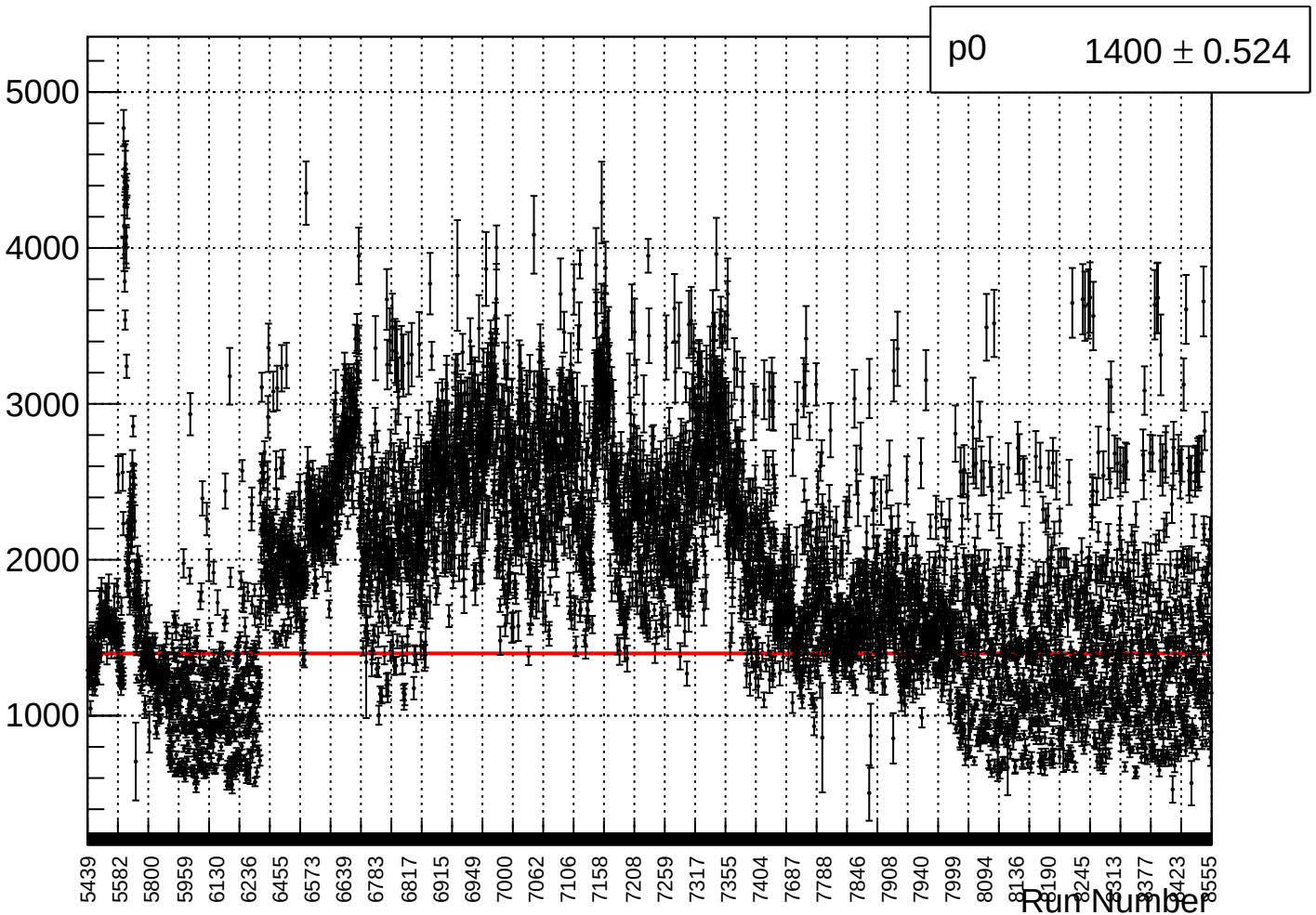

Pull Plot
Entries 6037
Mean 0.003441
Std Dev 1.011
Underflow 0
Overflow 0
Fit Prob 0.12
Fit Chi2 6164 / 6036
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

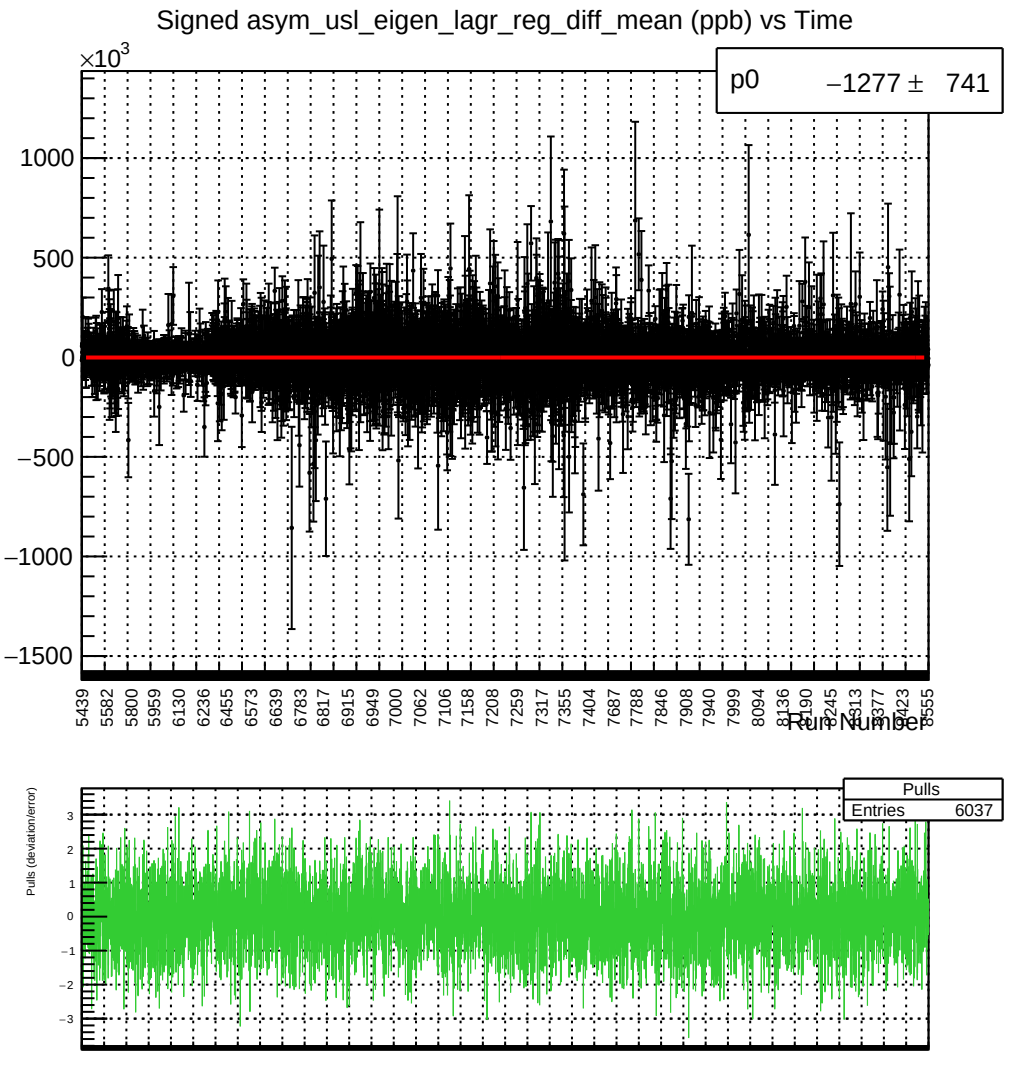

eigen_lagr_asym_usl_rms (ppm) vs Time
p0
1104 ± 0.3832
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

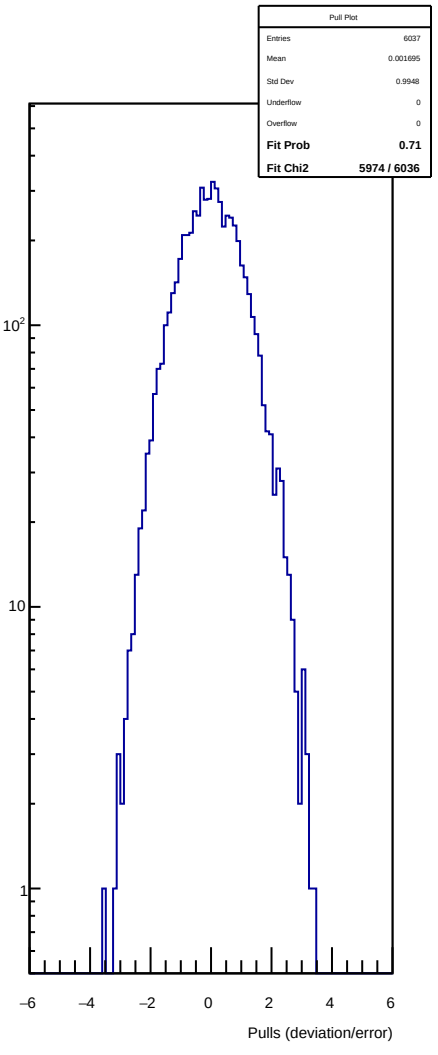

Signed asym_usl_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 −1277 ± 741
1000
500
0
−500
−1000
−1500
5439 5582 5800 5959 6130 6236 6455 6573 6639 6783 6817 6915 6949 7000 7062 7106 7158 7208 7259 7317 7355 7404 7687 7788 7846 7908 7940 7999 8094 8136 8190 8245 8313 8377 8423 8555
Run Number

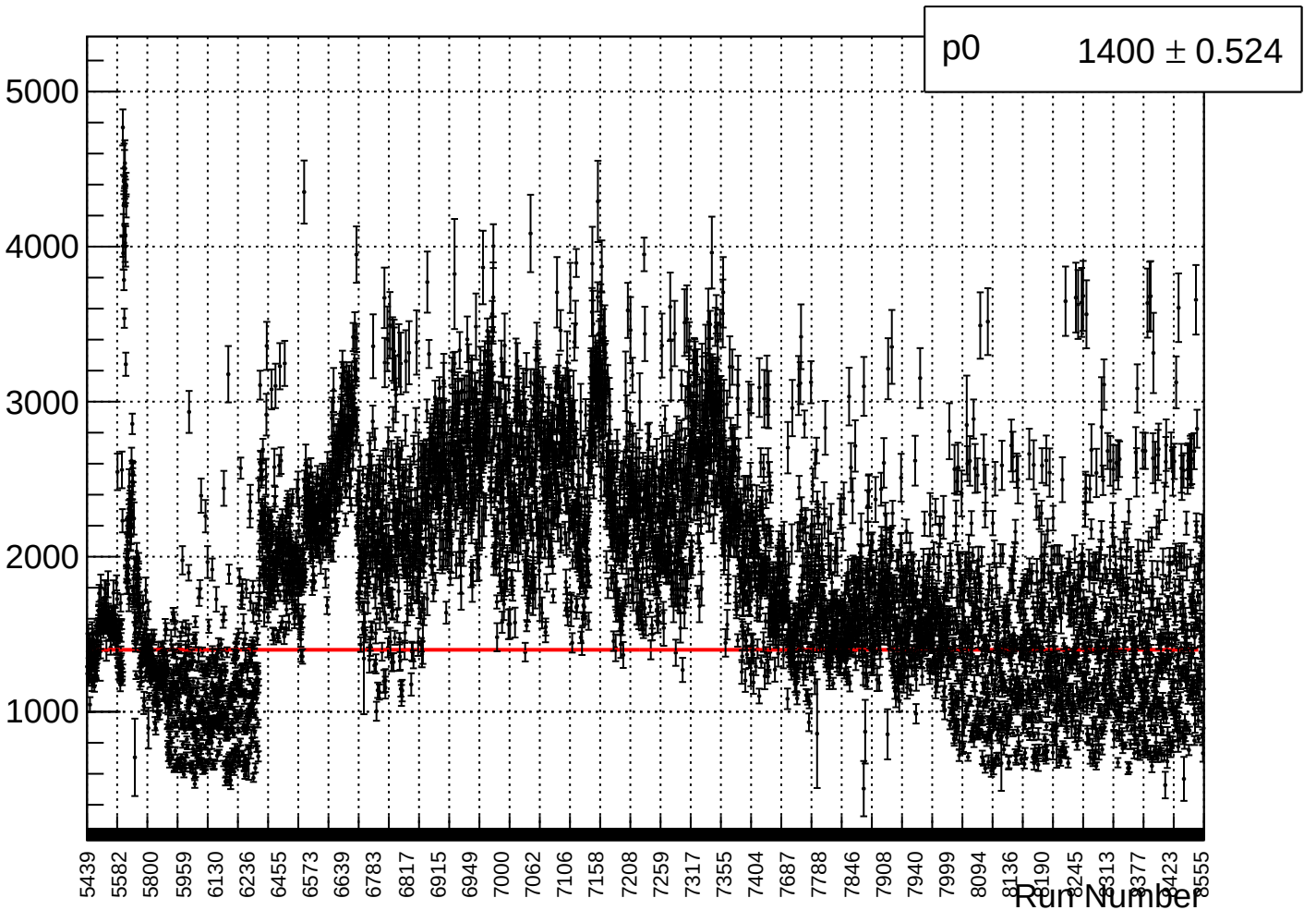

Pulls
Entries 6037
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

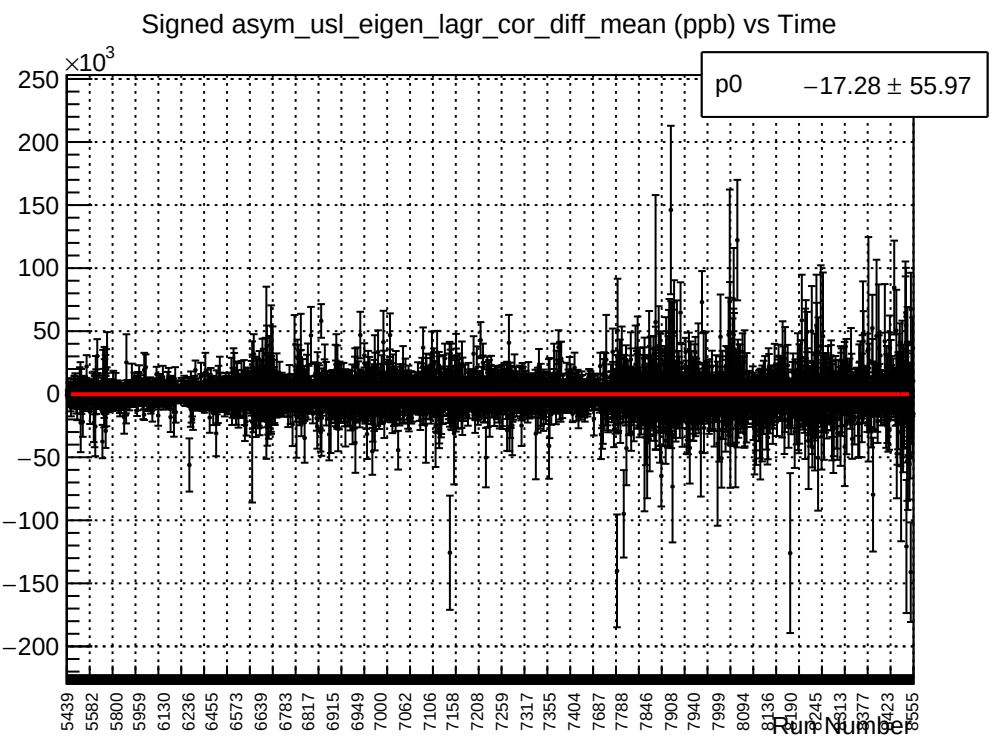

Pull Plot
Entries 6037
Mean 0.001695
Std Dev 0.9948
Underflow 0
Overflow 0
Fit Prob 0.71
Fit Chi2 5974 / 6036
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

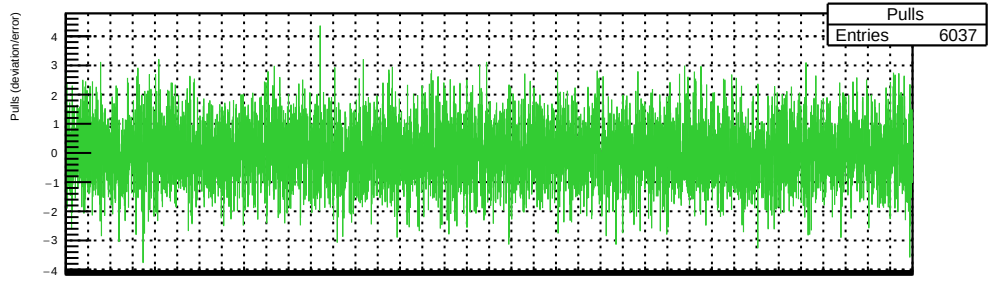

asym_usl_eigen_lagr_correction_rms (ppm) vs Time
p0 1400 ± 0.524
5000
4000
3000
2000
1000
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

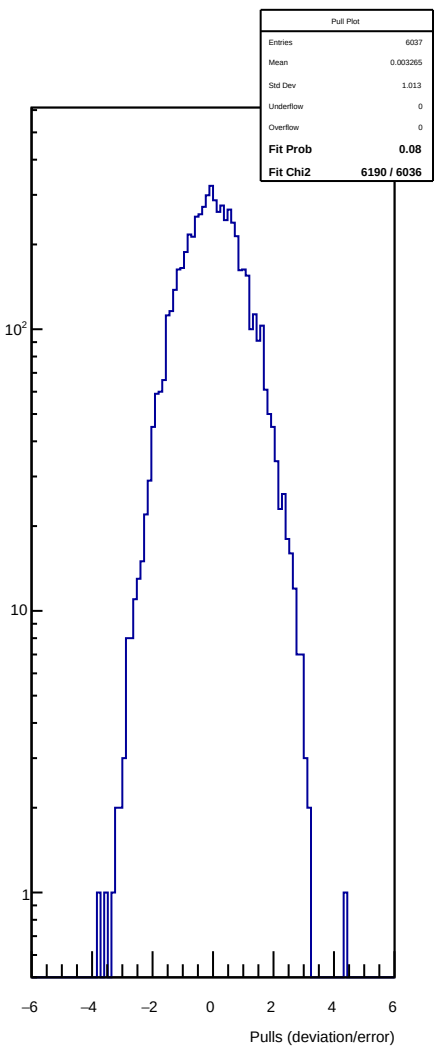

Signed asym_usl_eigen_lagr_reg_diff_mean (ppb) vs Time
×10^3
p0 −1277 ± 741
1000
500
0
−500
−1000
−1500
5439 5582 5800 5959 6130 6236 6455 6573 6639 6783 6817 6915 6949 7000 7062 7106 7158 7208 7259 7317 7355 7404 7687 7788 7846 7908 7940 7999 8094 8136 8190 8245 8313 8377 8423 8555
Run Number
Pulls
Entries 6037
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

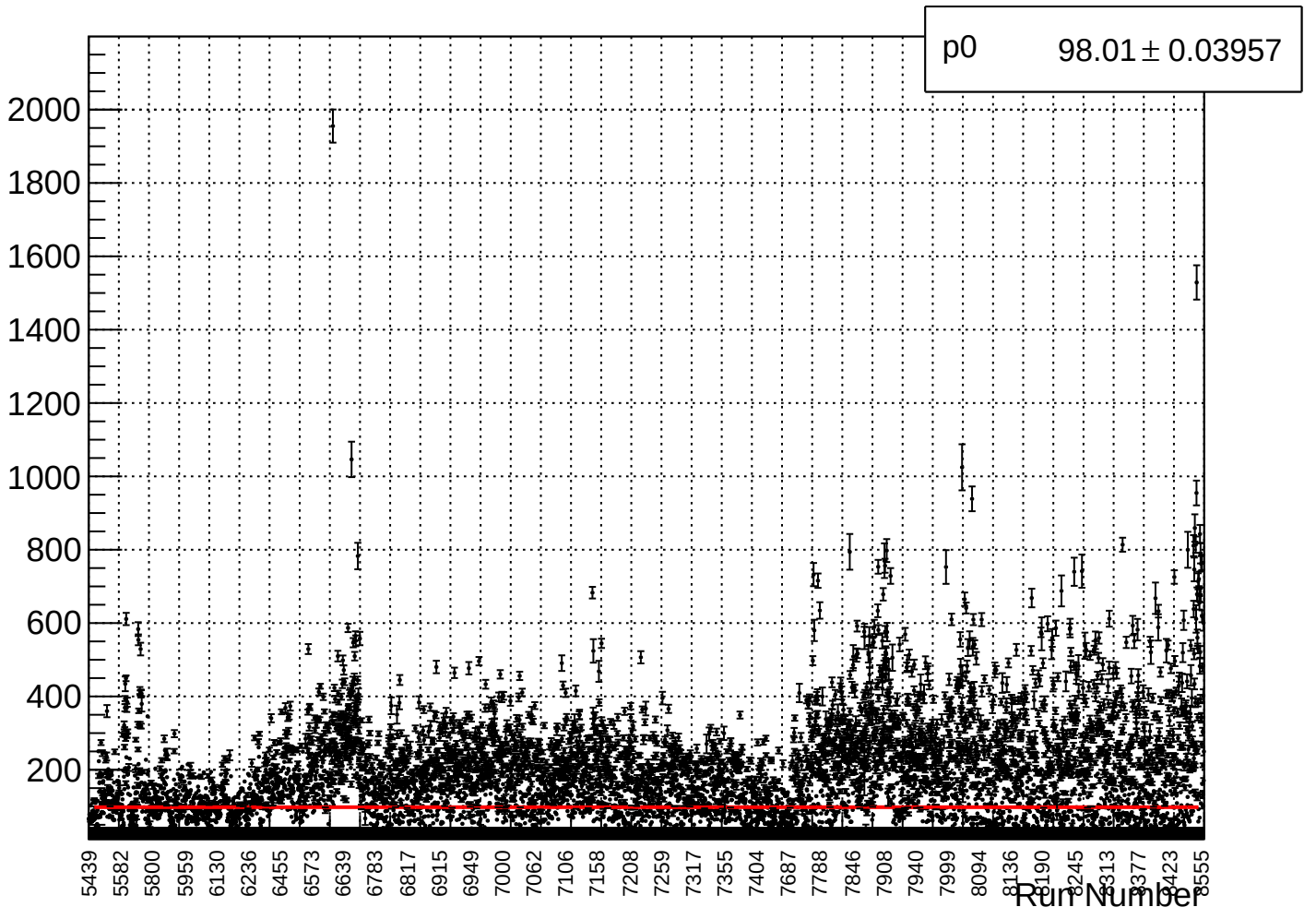

Pull Plot
Entries 6037
Mean 0.001695
Std Dev 0.9948
Underflow 0
Overflow 0
Fit Prob 0.71
Fit Chi2 5974 / 6036
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

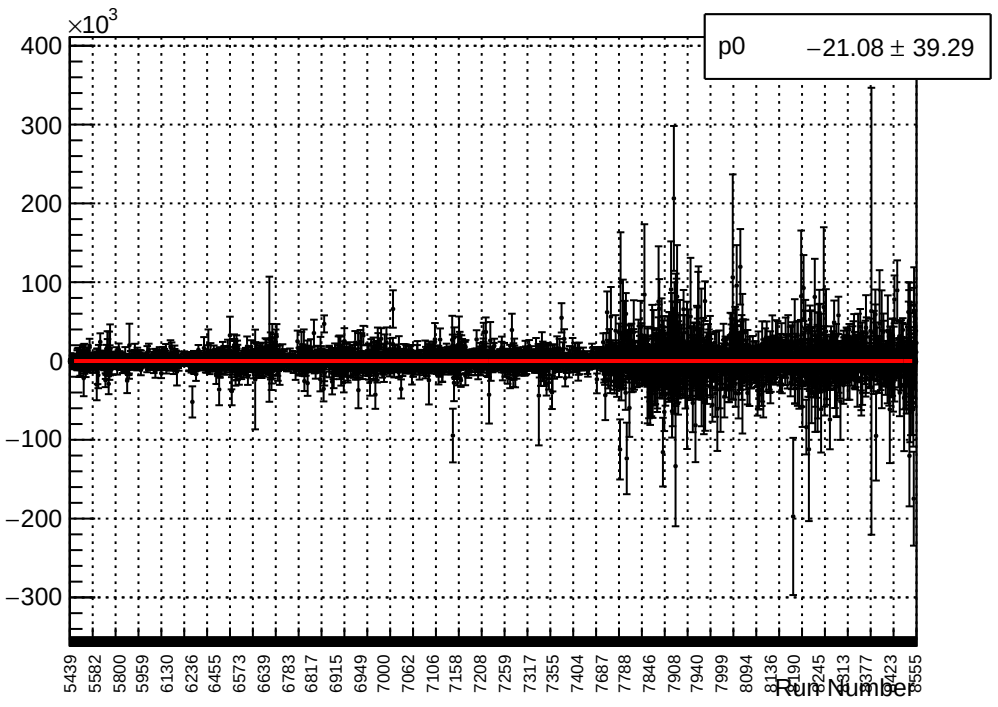

asym_usl_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 1400 ± 0.524
5000
4000
3000
2000
1000
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

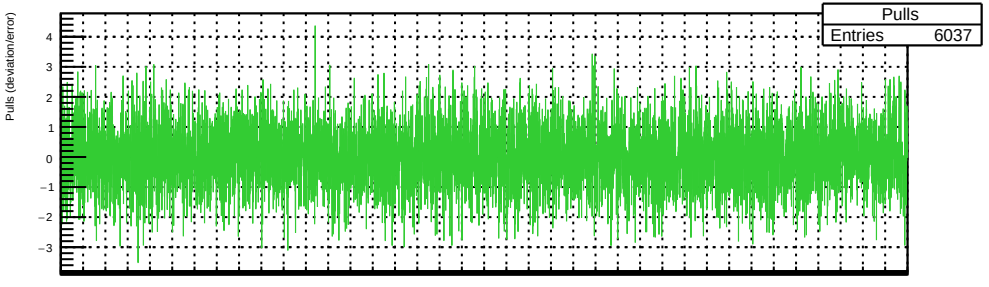

Signed asym_usl_eigen_lagr_cor_diff_mean (ppb) vs Time
×10^3
p0 −17.28 ± 55.97
Run Number

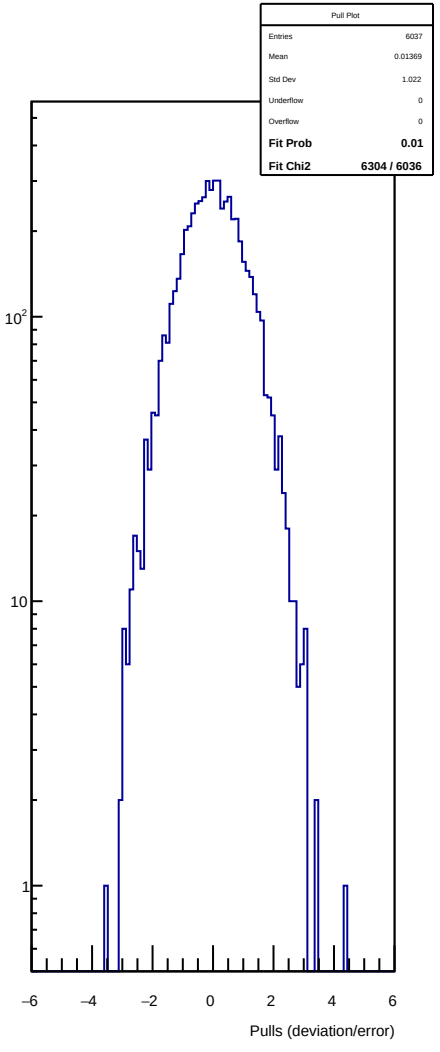

Pulls
Entries 6037
Pulls (deviation/error)

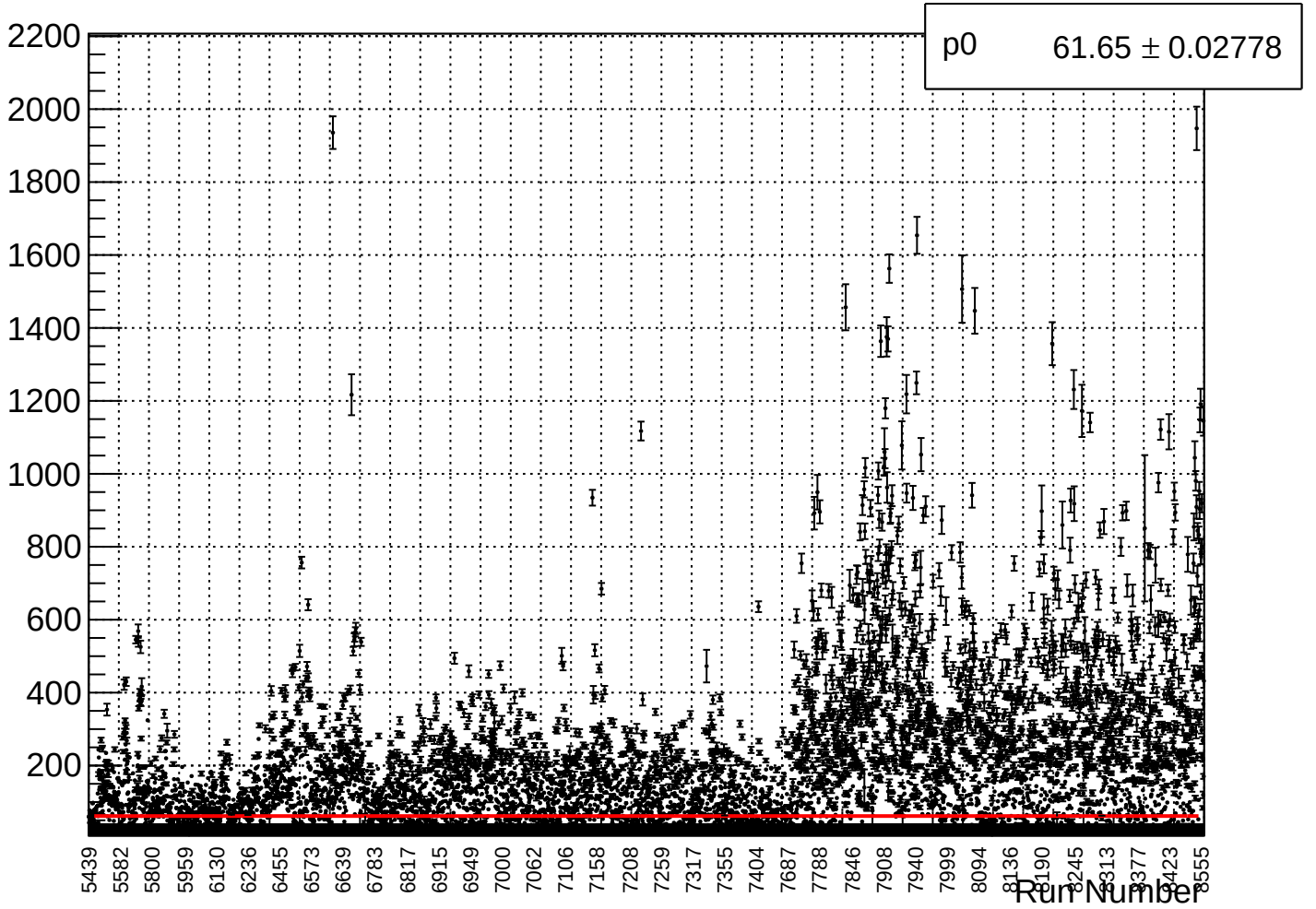

Pull Plot
Entries 6037
Mean 0.003265
Std Dev 1.013
Underflow 0
Overflow 0
Fit Prob 0.08
Fit Chi2 6190 / 6036
Pulls (deviation/error)

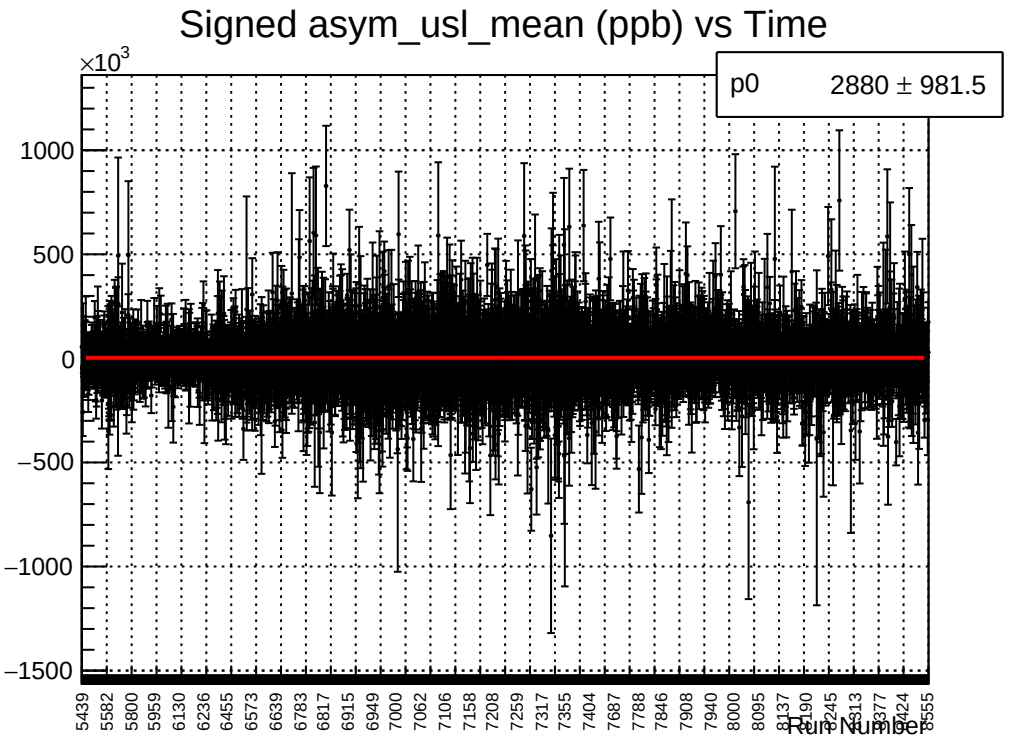

asym_usl_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 98.01 ± 0.03957
2000
1800
1600
1400
1200
1000
800
600
400
200
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

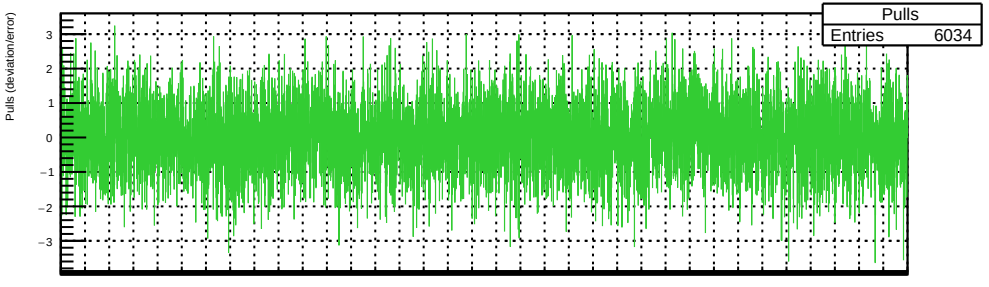

Signed asym_usl_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
×10^3
400
300
200
100
0
−100
−200
−300
p0 −21.08 ± 39.29
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

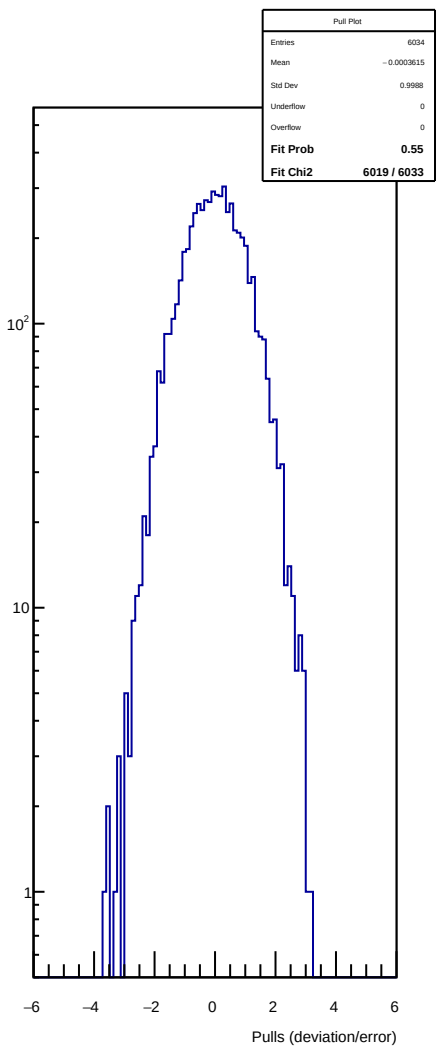

Pulls
Entries 6037
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

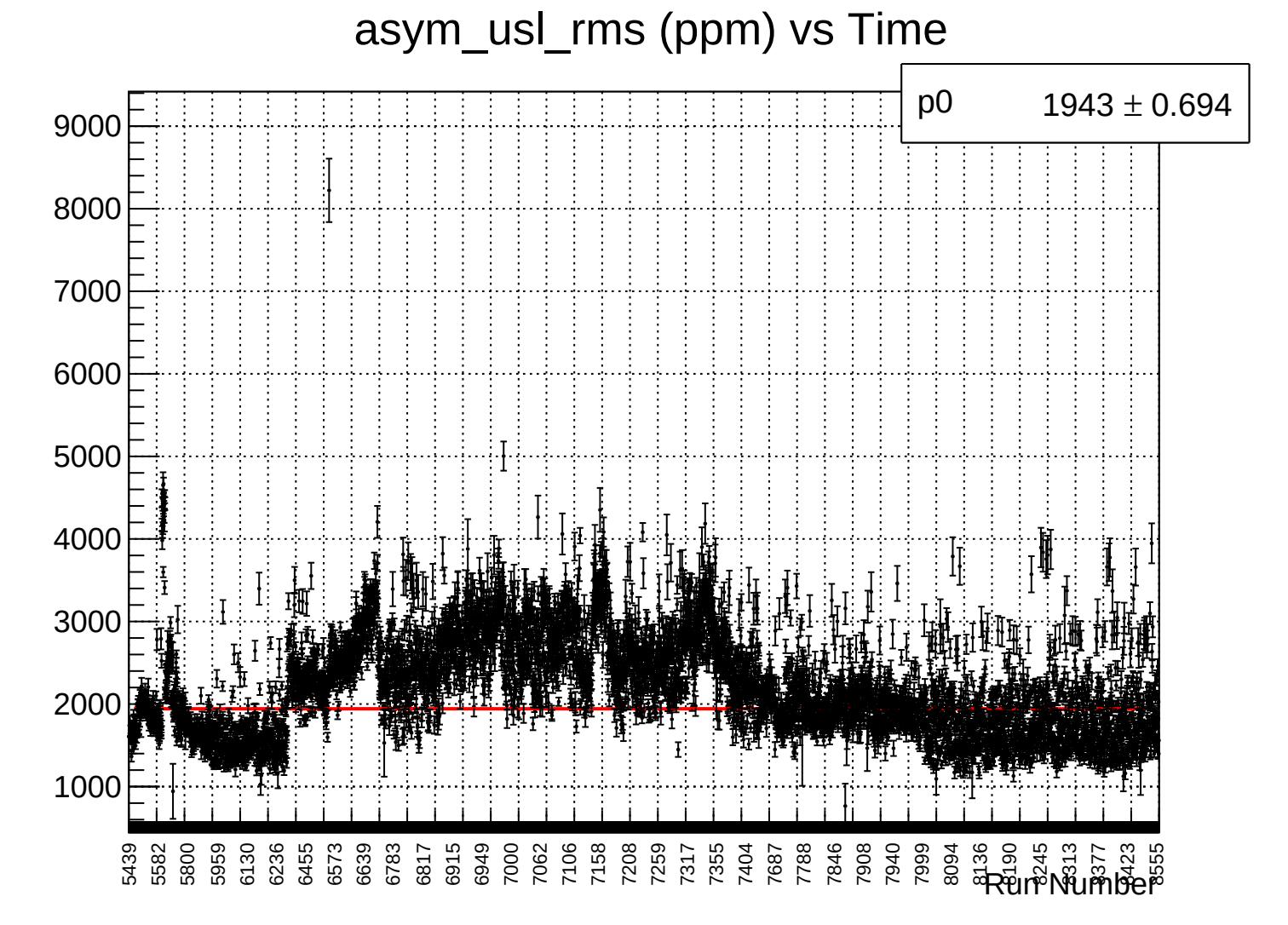

Pull Plot
Entries 6037
Mean 0.01369
Std Dev 1.022
Underflow 0
Overflow 0
Fit Prob 0.01
Fit Chi2 6304 / 6036
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

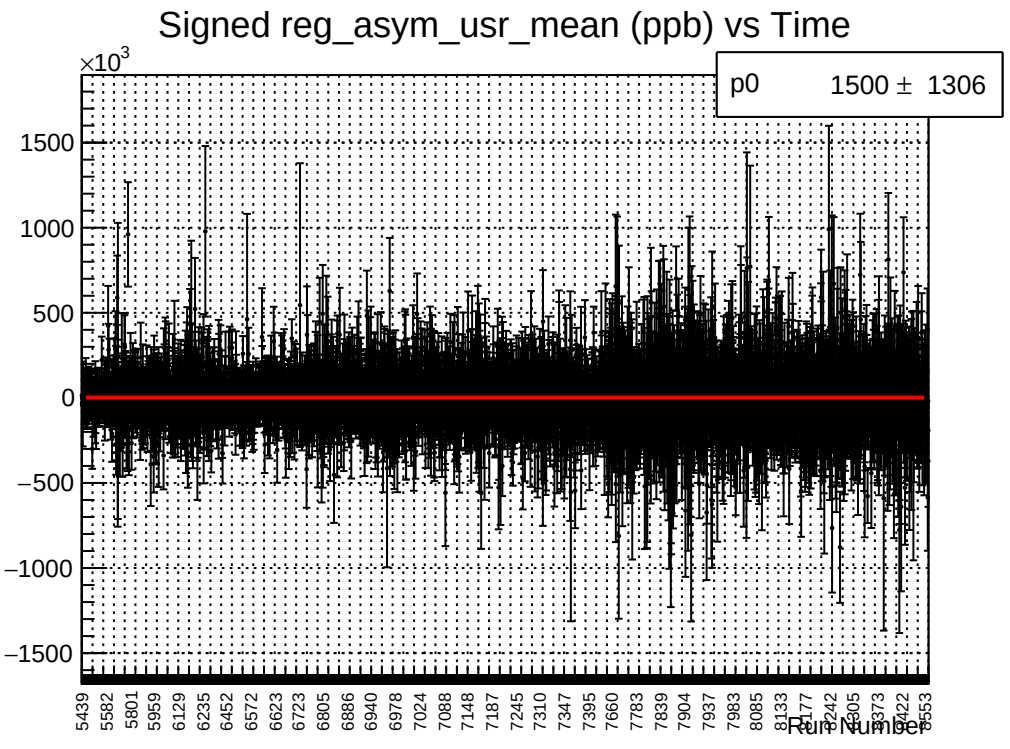

asym_usl_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 61.65 ± 0.02778
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

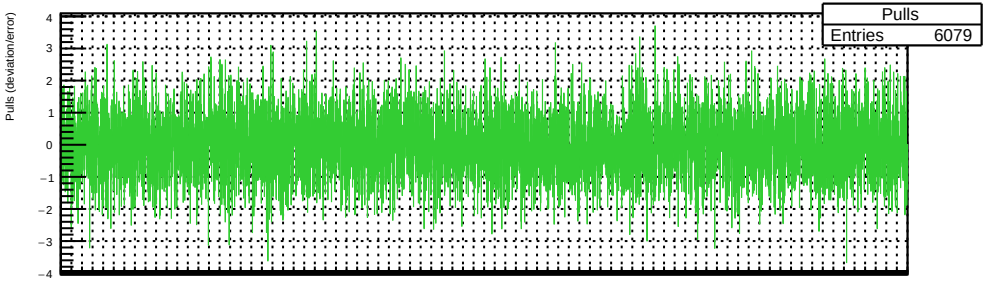

Signed asym_usl_mean (ppb) vs Time
×10^3
p0 2880 ± 981.5
1000
500
0
−500
−1000
−1500
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
8000
8095
8137
8190
8245
8313
8377
8424
8555
Run Number

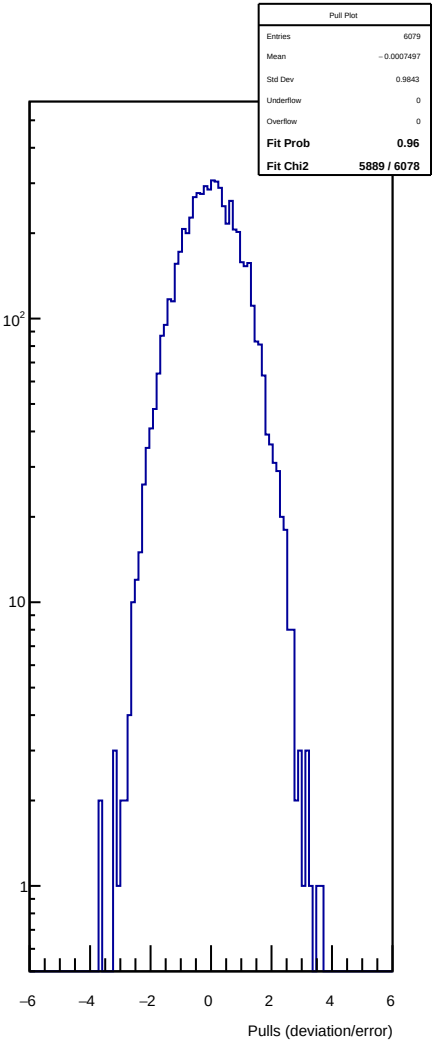

Pulls
Entries 6034
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

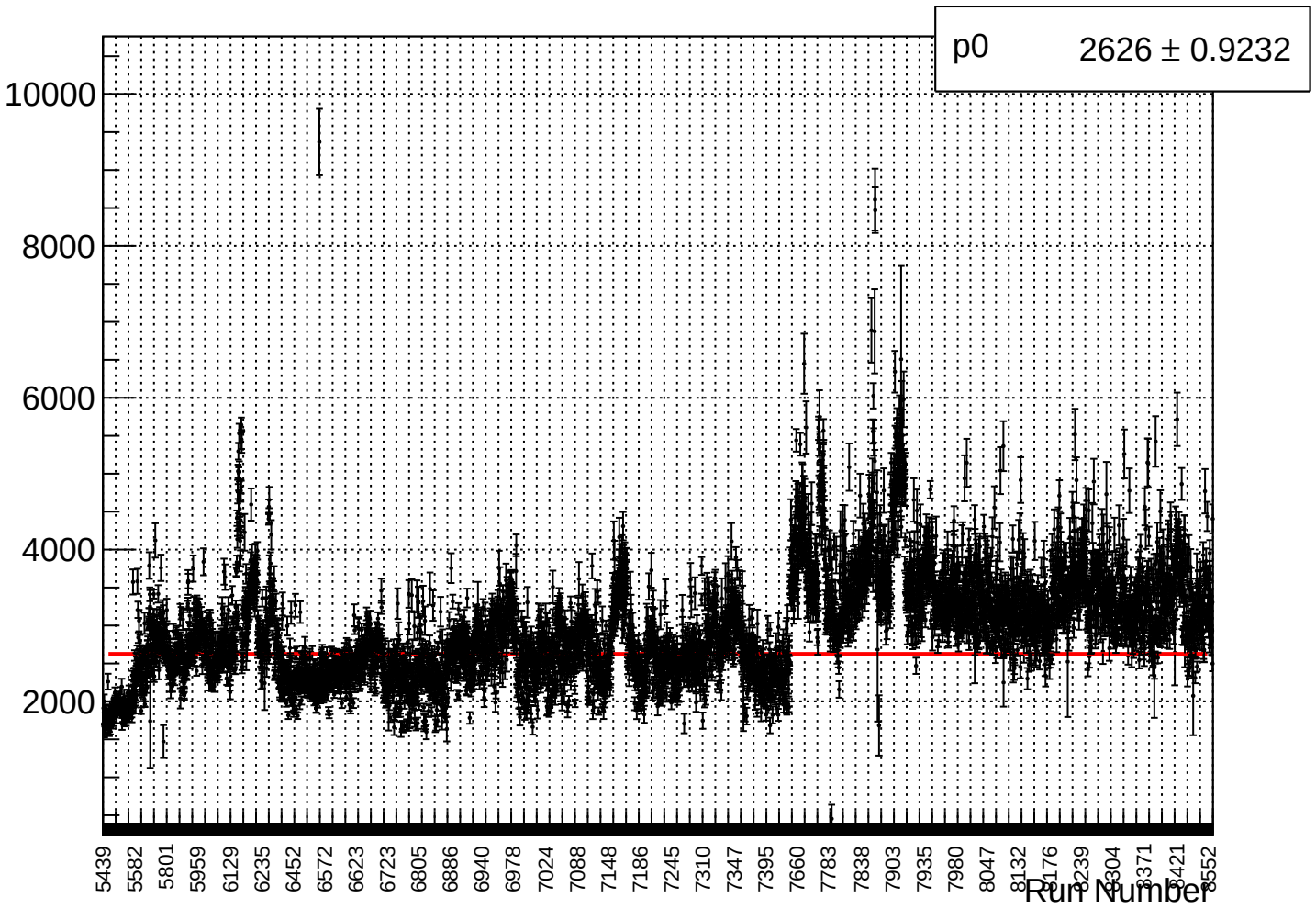

Pull Plot
Entries 6034
Mean −0.0003615
Std Dev 0.9988
Underflow 0
Overflow 0
Fit Prob 0.55
Fit Chi2 6019 / 6033
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

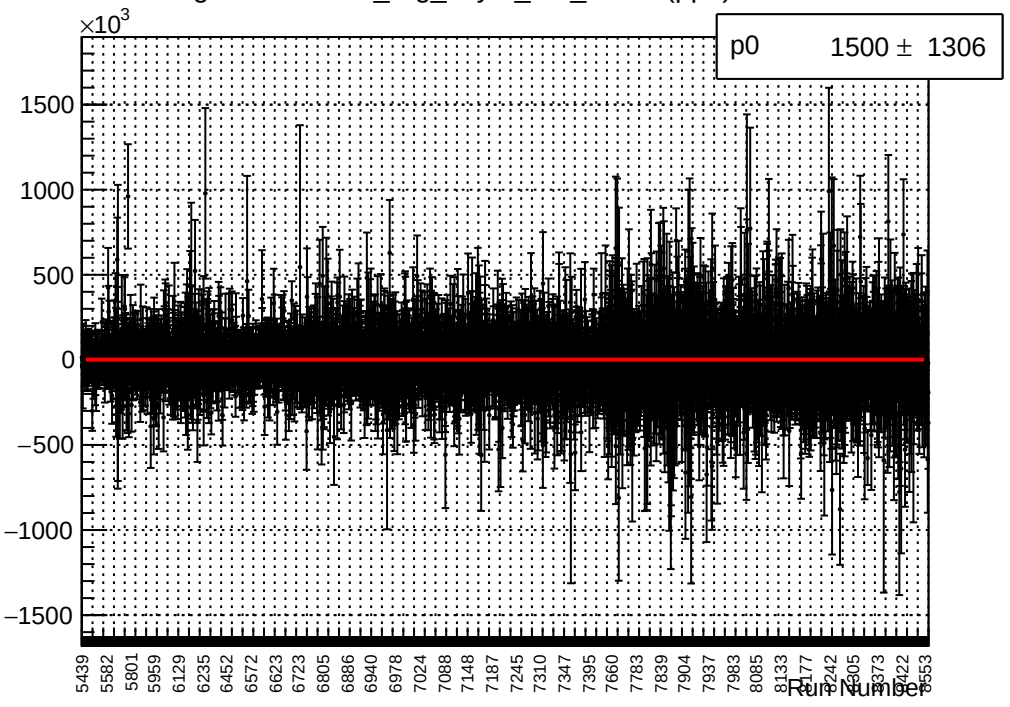

asym_usl_rms (ppm) vs Time
p0 1943 ± 0.694
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5800
5959
6130
6236
6455
6573
6639
6783
6817
6915
6949
7000
7062
7106
7158
7208
7259
7317
7355
7404
7687
7788
7846
7908
7940
7999
8094
8136
8190
8245
8313
8377
8423
8555
Run Number

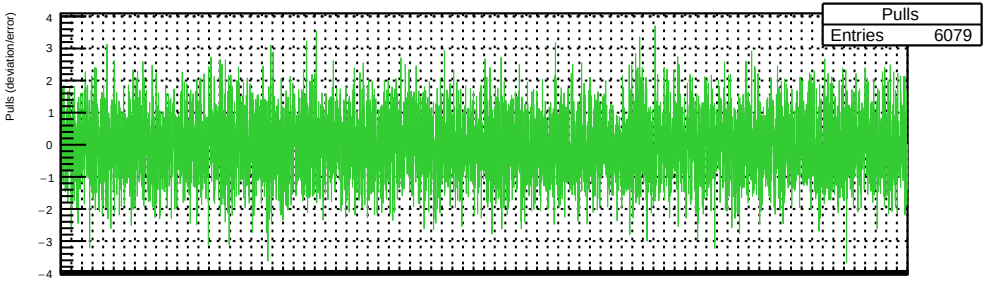

Signed reg_asym_usr_mean (ppb) vs Time
×10^3
p0 1500 ± 1306
1500
1000
500
0
−500
−1000
−1500
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7187
7245
7310
7347
7395
7660
7783
7839
7904
7937
7983
8085
8133
8177
8242
8305
8373
8422
8553
Run Number

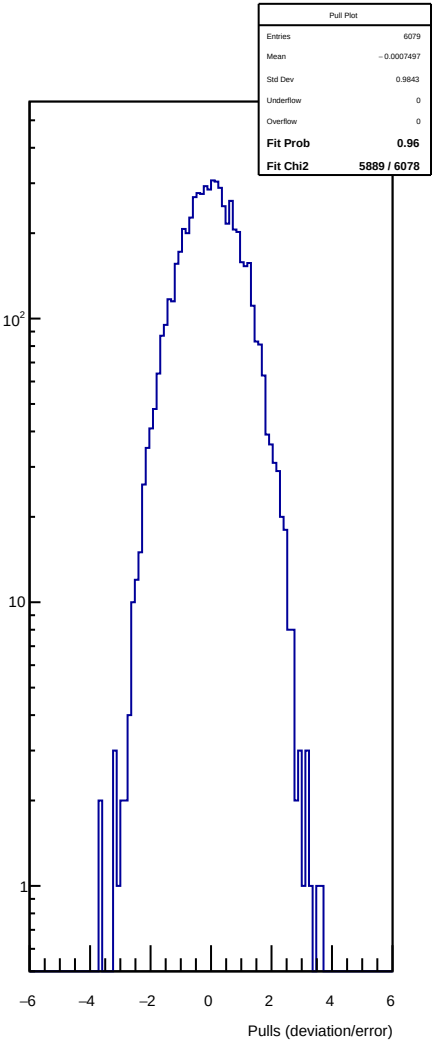

Pulls
Entries 6079
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

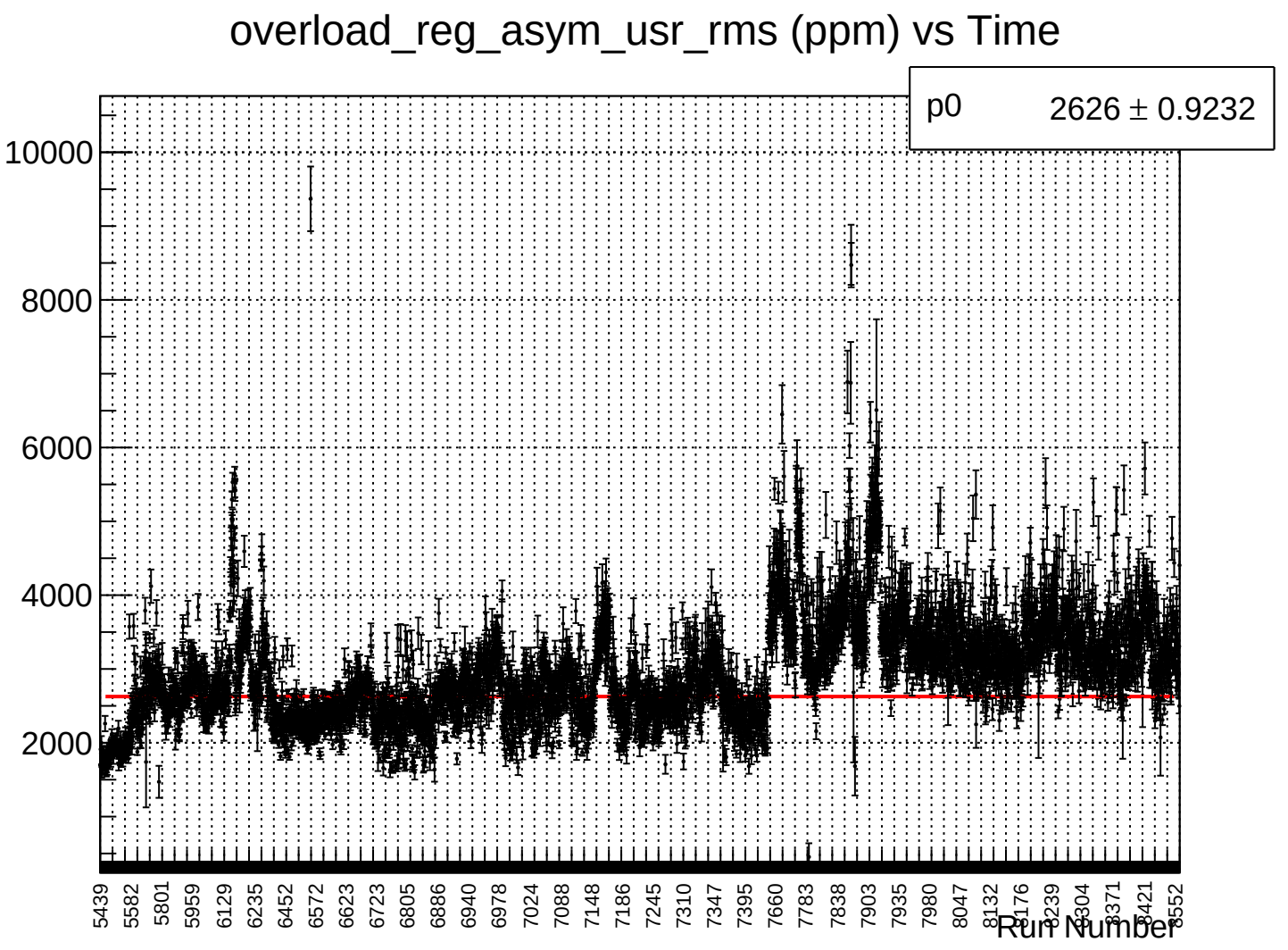

Pull Plot
Entries 6079
Mean −0.0007497
Std Dev 0.9843
Underflow 0
Overflow 0
Fit Prob 0.96
Fit Chi2 5889 / 6078
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

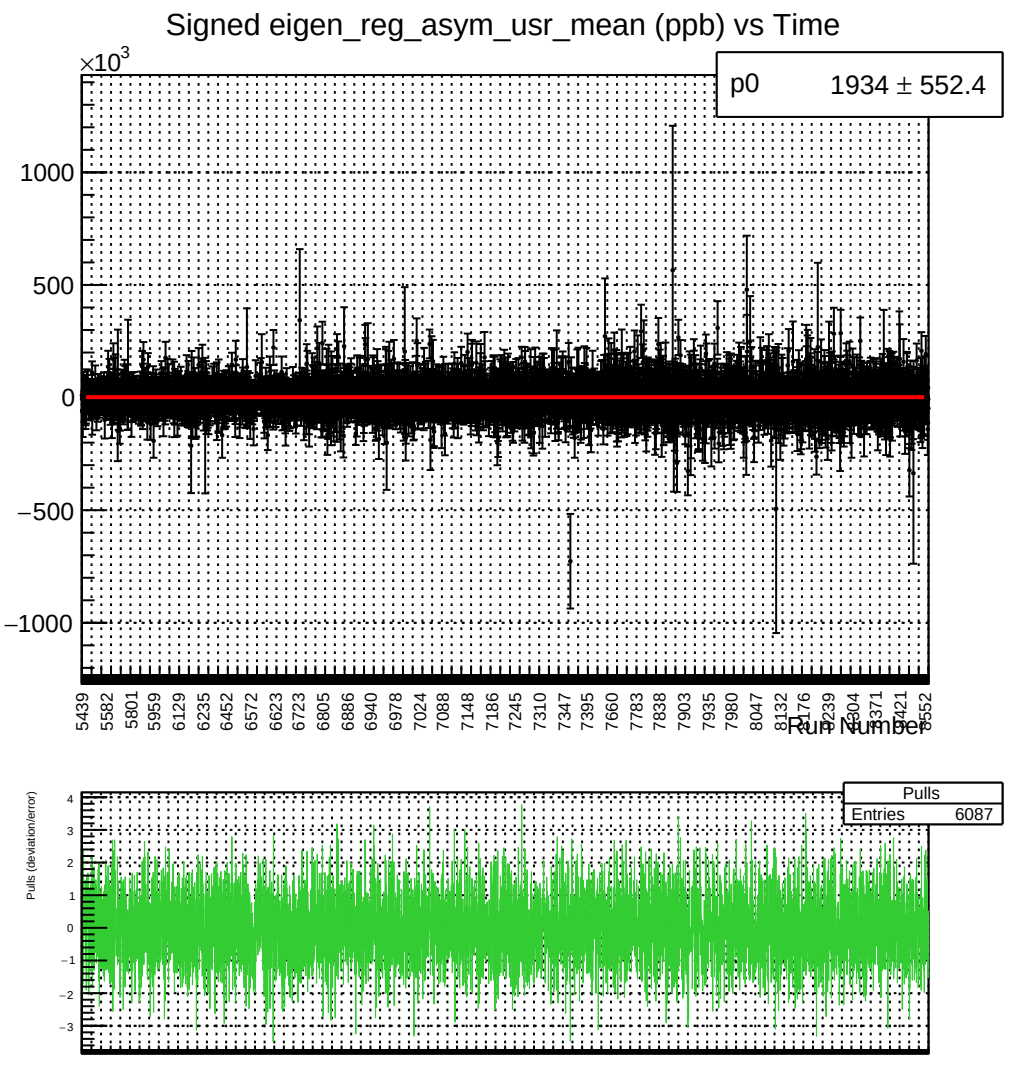

reg_asym_usr_rms (ppm) vs Time
p0 2626 ± 0.9232
10000
8000
6000
4000
2000
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

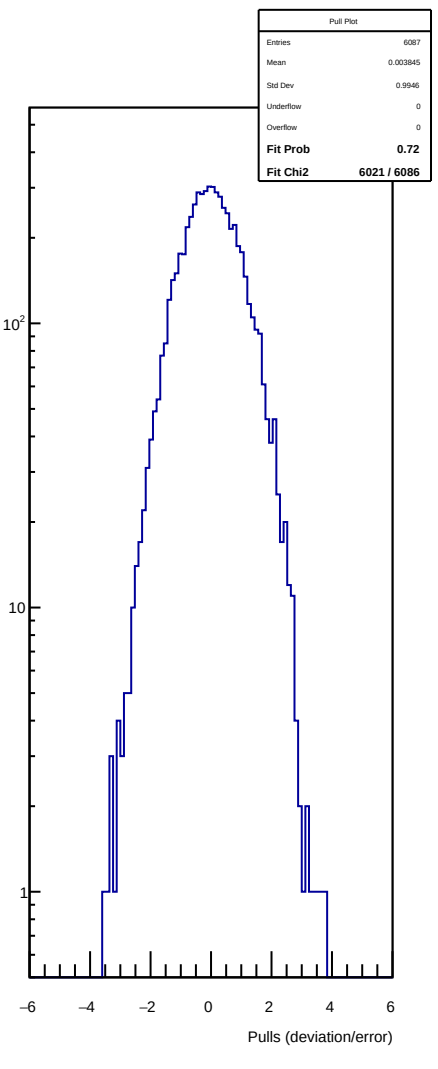

Signed overload_reg_asym_usr_mean (ppb) vs Time
×10^3
p0 1500 ± 1306
1500
1000
500
0
−500
−1000
−1500
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6805 6886 6940 6978 7024 7088 7148 7187 7245 7310 7347 7395 7660 7783 7839 7904 7937 7983 8085 8133 8177 8242 8305 8373 8422 8553
Run Number

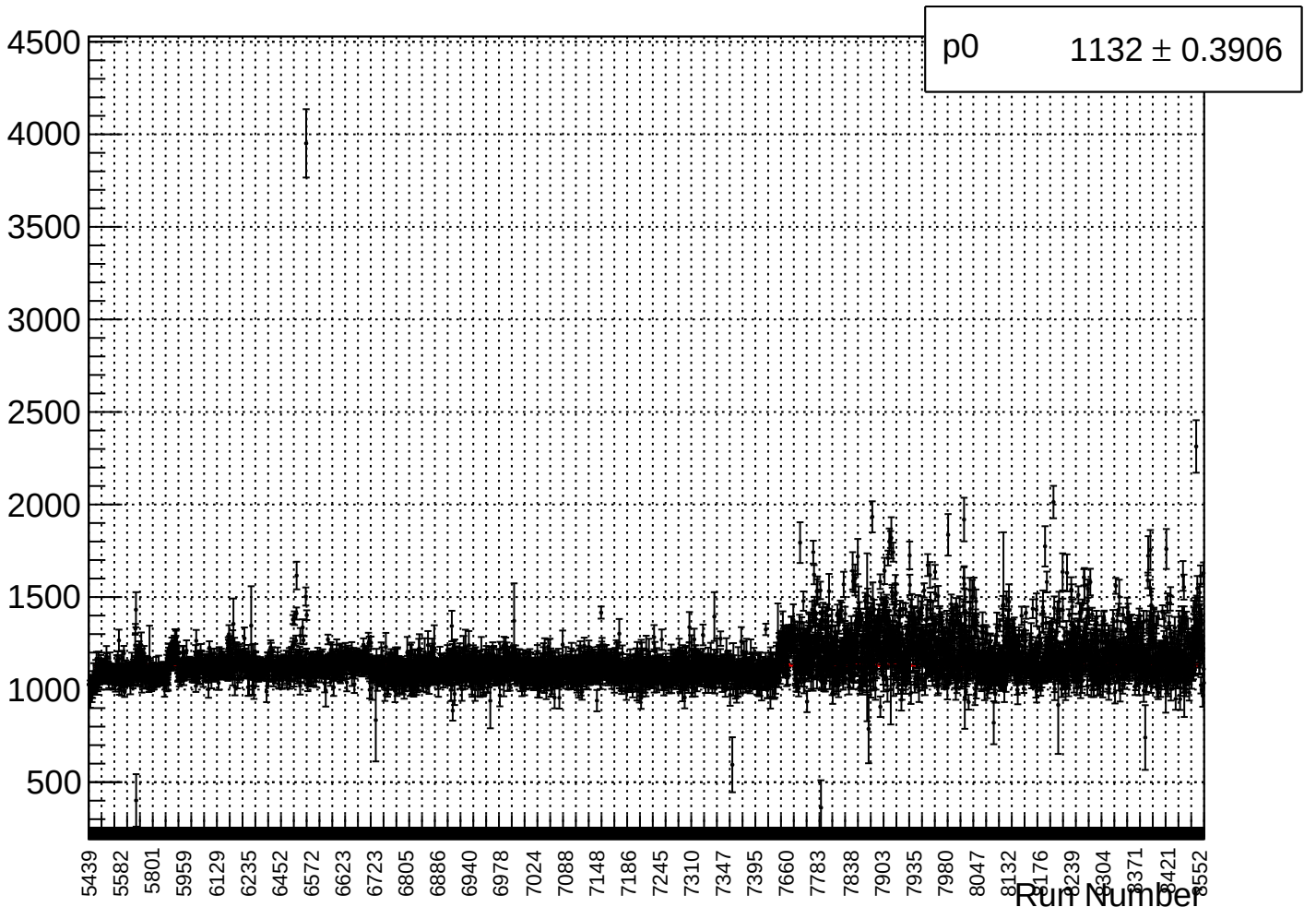

Pulls
Entries 6079
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

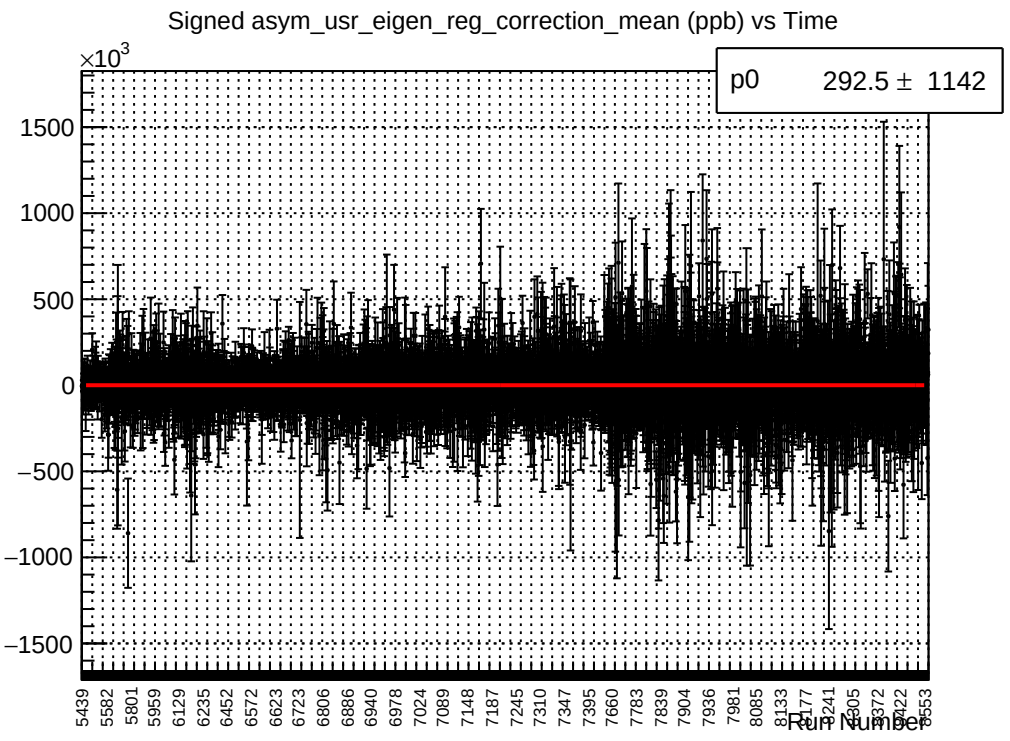

Pull Plot
Entries 6079
Mean −0.0007497
Std Dev 0.9843
Underflow 0
Overflow 0
Fit Prob 0.96
Fit Chi2 5889 / 6078
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

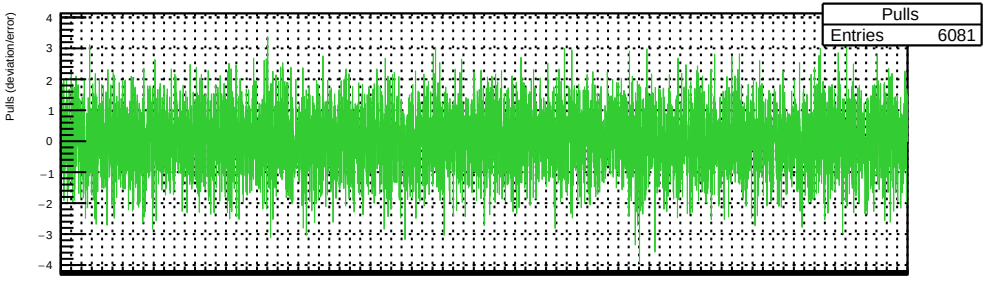

overload_reg_asym_usr_rms (ppm) vs Time
p0 2626 ± 0.9232
10000
8000
6000
4000
2000
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

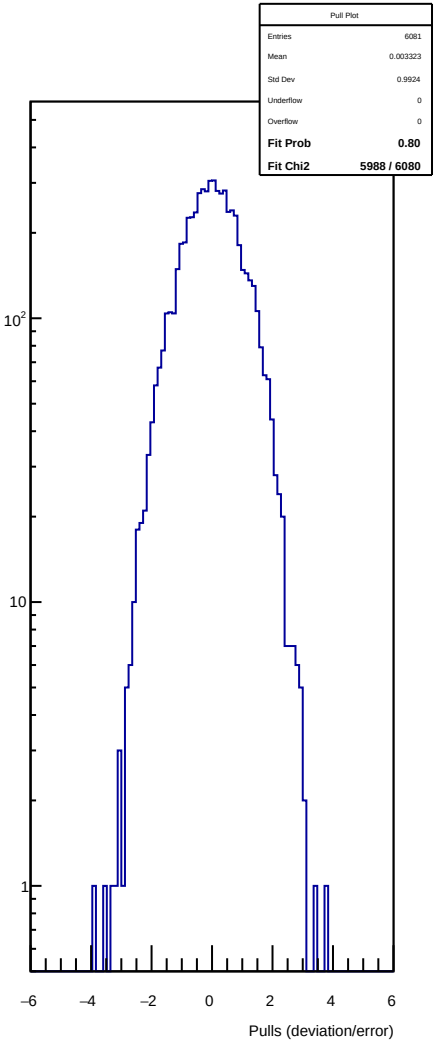

Signed eigen_reg_asym_usr_mean (ppb) vs Time
×10^3
p0 1934 ± 552.4
1000
500
0
−500
−1000
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6805 6886 6940 6978 7024 7088 7148 7186 7245 7310 7347 7395 7660 7783 7838 7903 7935 7980 8047 8132 8176 8239 8304 8371 8421 8552
Run Number
Pulls
Entries 6087
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

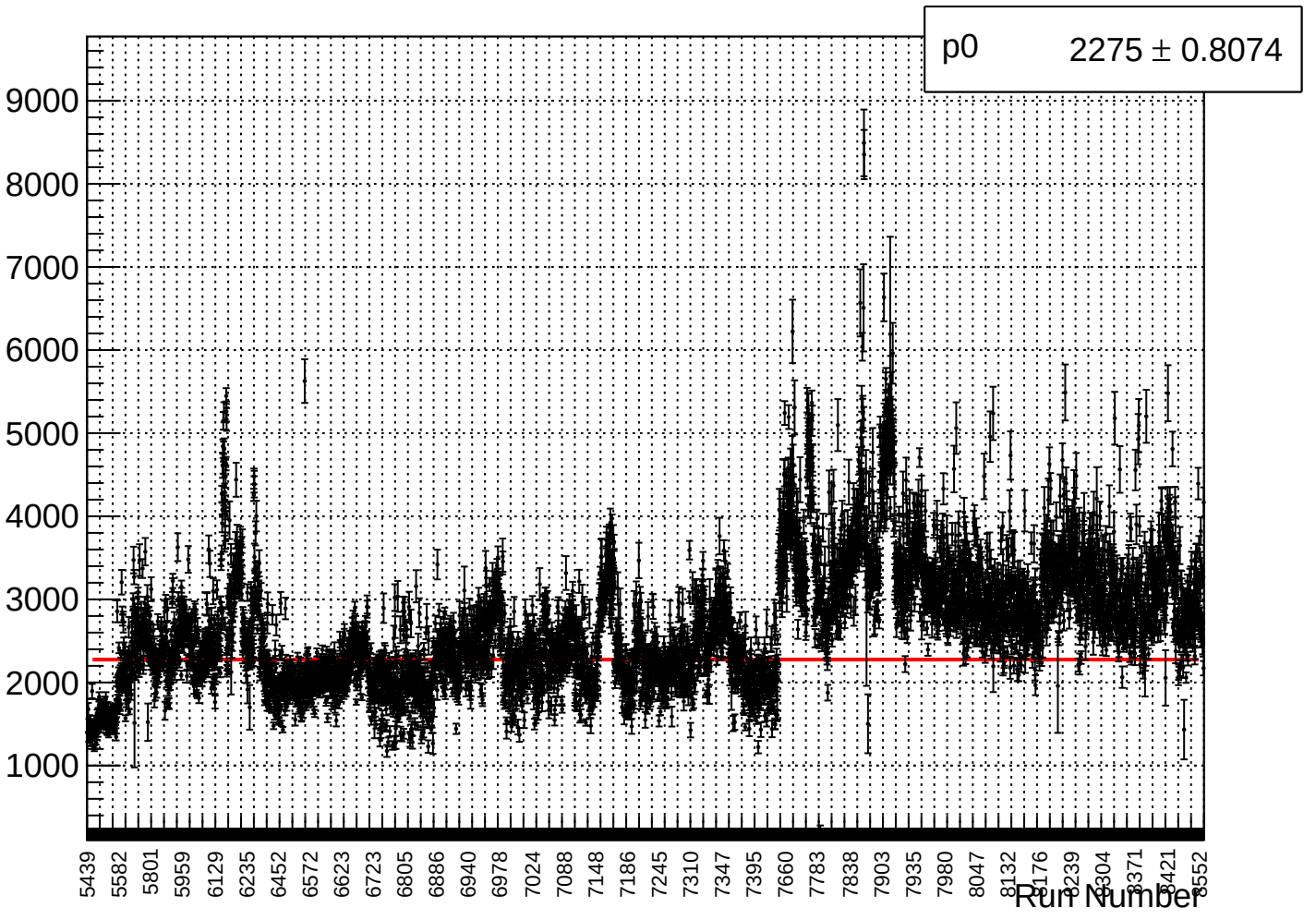

Pull Plot
Entries 6087
Mean 0.003845
Std Dev 0.9946
Underflow 0
Overflow 0
Fit Prob 0.72
Fit Chi2 6021 / 6086
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

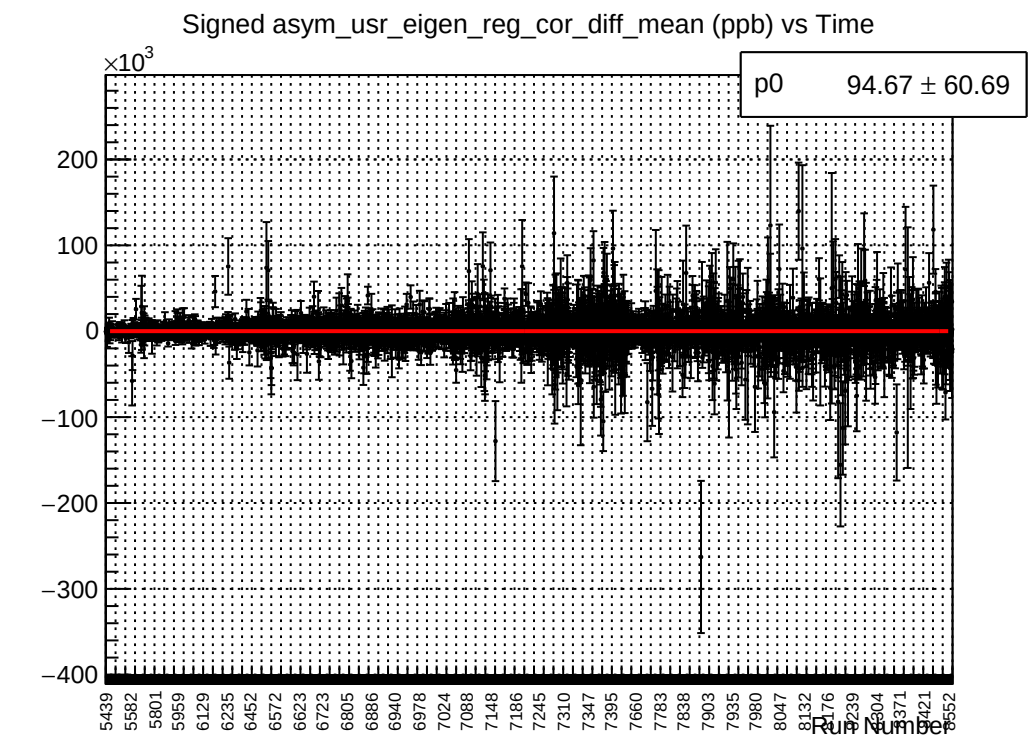

eigen_reg_asym_usr_rms (ppm) vs Time
p0
1132 ± 0.3906
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

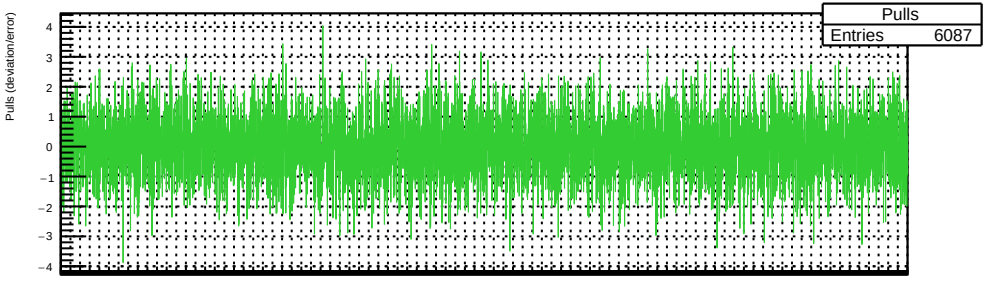

Signed asym_usr_eigen_reg_correction_mean (ppb) vs Time
×10^3
p0 292.5 ± 1142
1500
1000
500
0
−500
−1000
−1500
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6806 6886 6940 6978 7024 7089 7148 7187 7245 7310 7347 7395 7660 7783 7839 7904 7936 7981 8085 8133 8177 8241 8305 8372 8422 8553
Run Number

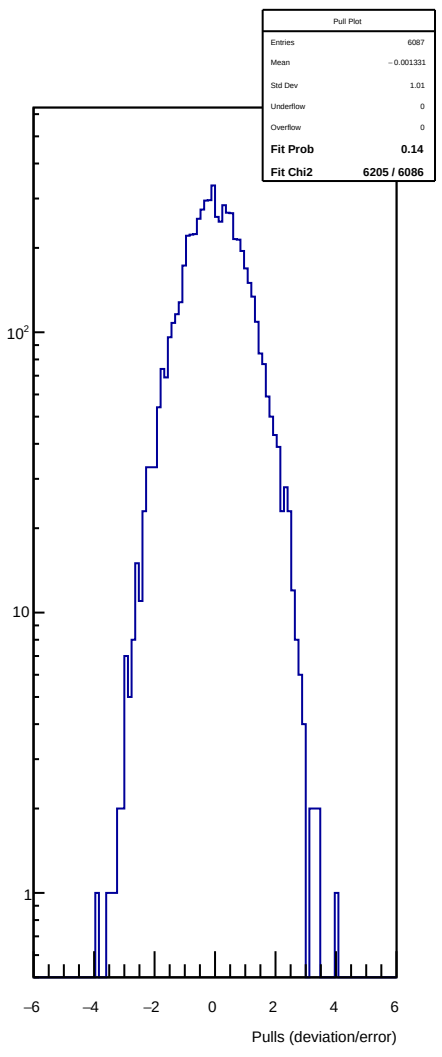

Pulls
Entries 6081
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

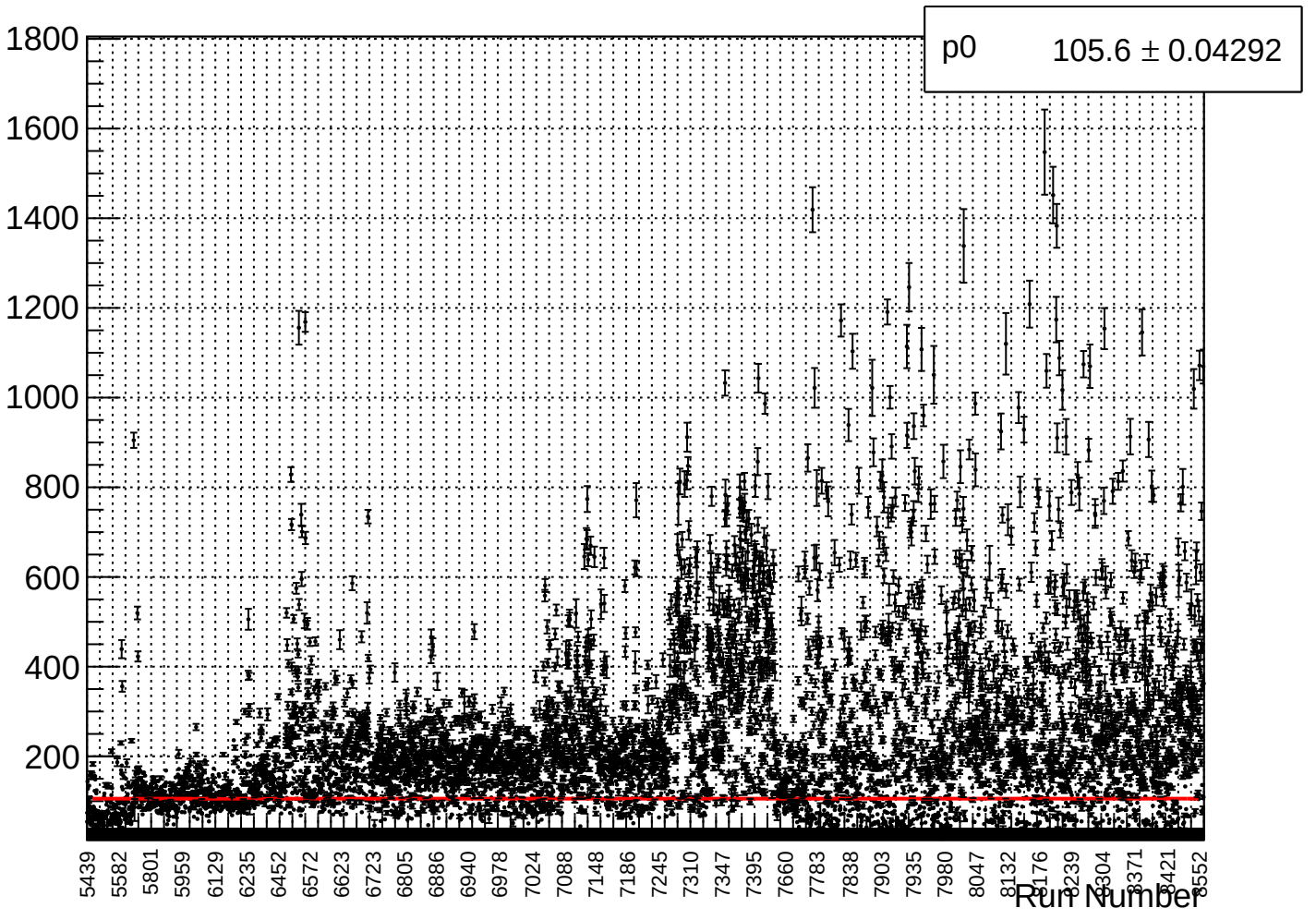

Pull Plot
Entries 6081
Mean 0.003323
Std Dev 0.9924
Underflow 0
Overflow 0
Fit Prob 0.80
Fit Chi2 5988 / 6080
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

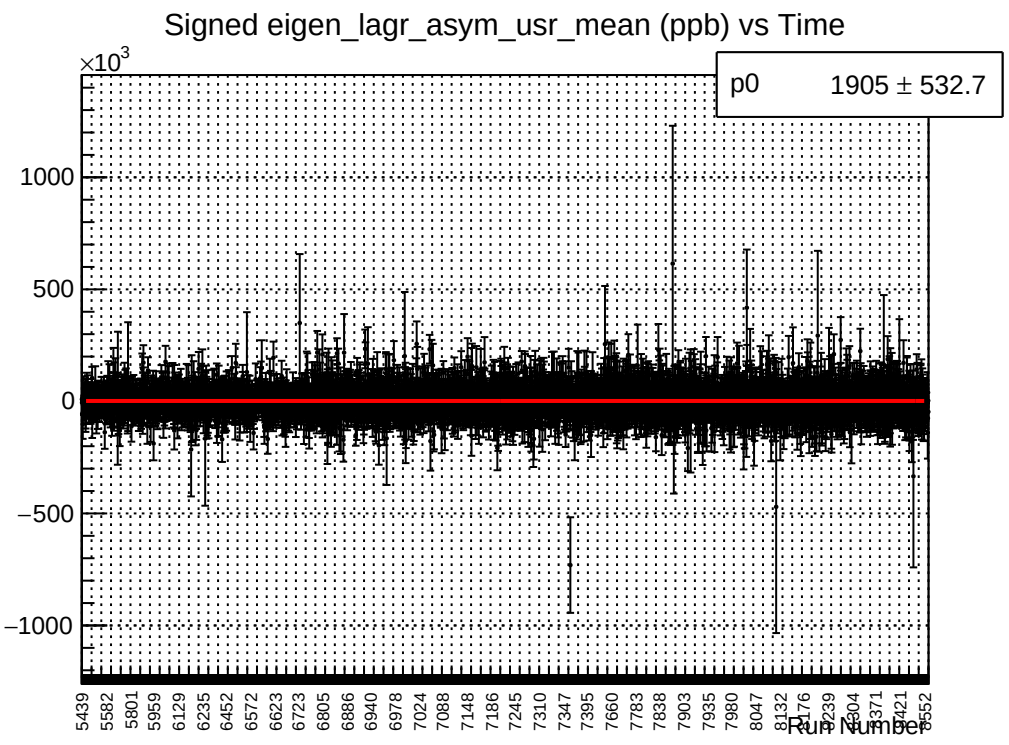

asym_usr_eigen_reg_correction_rms (ppm) vs Time
p0 2275 ± 0.8074
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

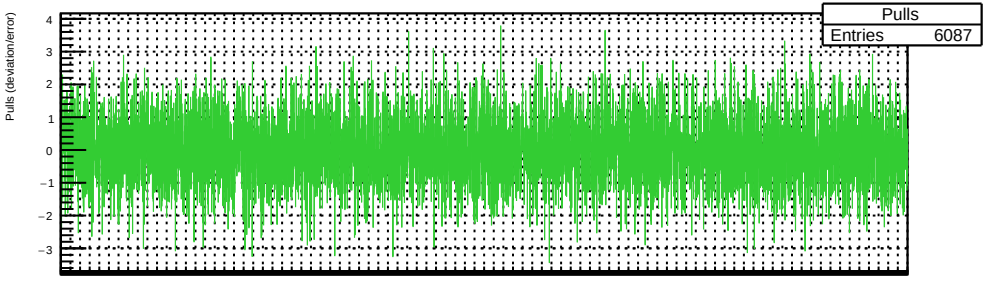

Signed asym_usr_eigen_reg_cor_diff_mean (ppb) vs Time
×10^3
p0 94.67 ± 60.69
200
100
0
−100
−200
−300
−400
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6805 6886 6940 6978 7024 7088 7148 7186 7245 7310 7347 7395 7660 7783 7838 7903 7935 7980 8047 8132 8176 8239 8304 8371 8421 8552
Run Number

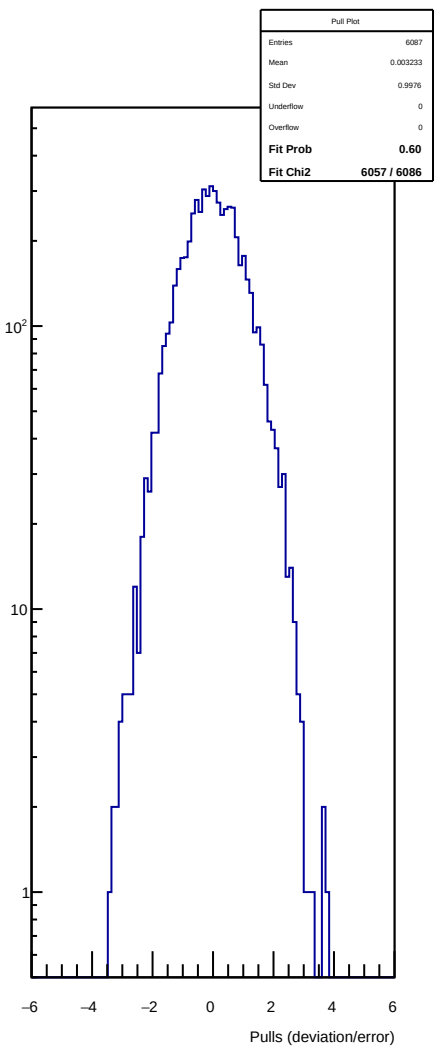

Pulls
Entries 6087
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

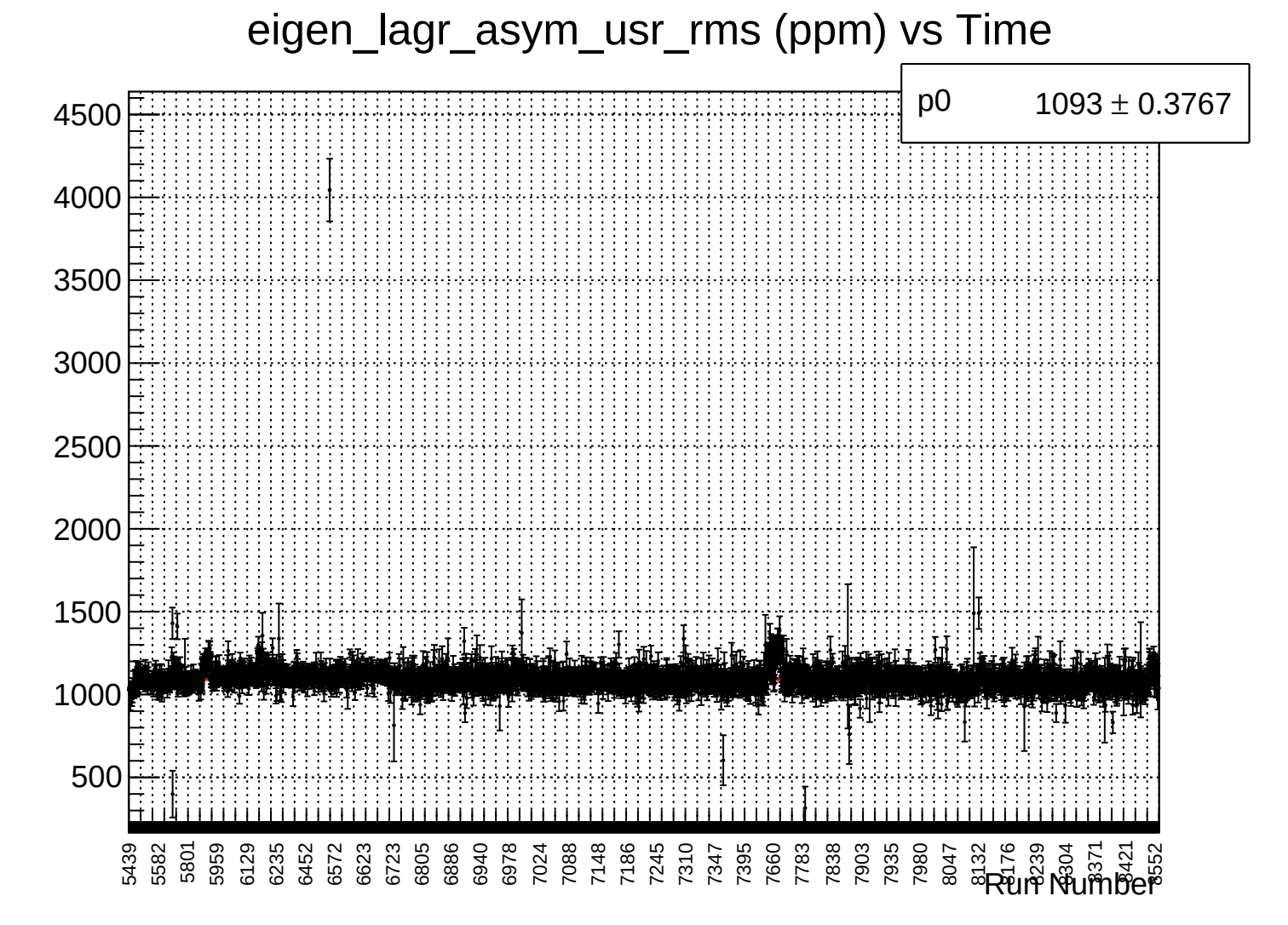

Pull Plot
Entries 6087
Mean −0.001331
Std Dev 1.01
Underflow 0
Overflow 0
Fit Prob 0.14
Fit Chi2 6205 / 6086
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

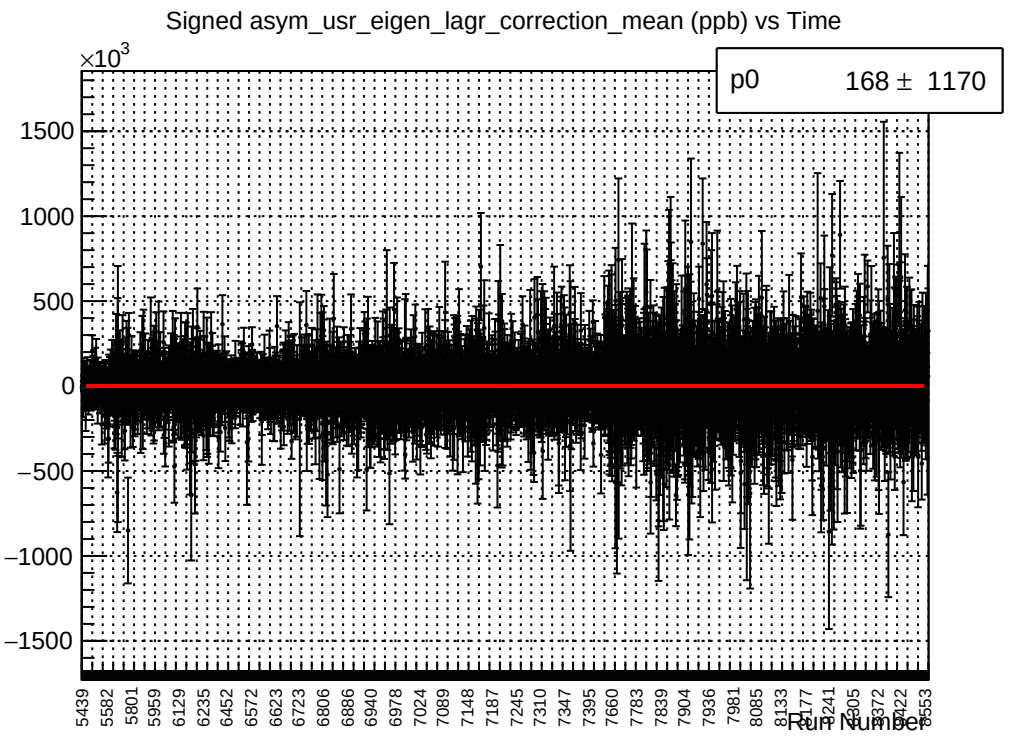

asym_usr_eigen_reg_cor_diff_rms (ppm) vs Time
p0 105.6 ± 0.04292
1800
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

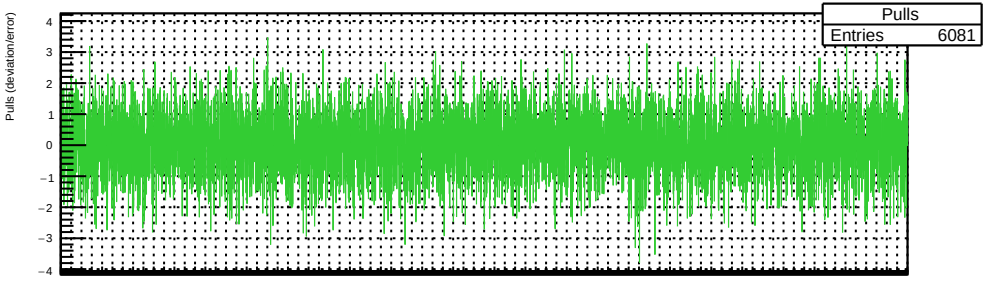

Signed eigen_lagr_asym_usr_mean (ppb) vs Time
×10^3
p0 1905 ± 532.7
1000
500
0
−500
−1000
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6805 6886 6940 6978 7024 7088 7148 7186 7245 7310 7347 7395 7660 7783 7838 7903 7935 7980 8047 8132 8176 8239 8304 8371 8421 8552
Run Number

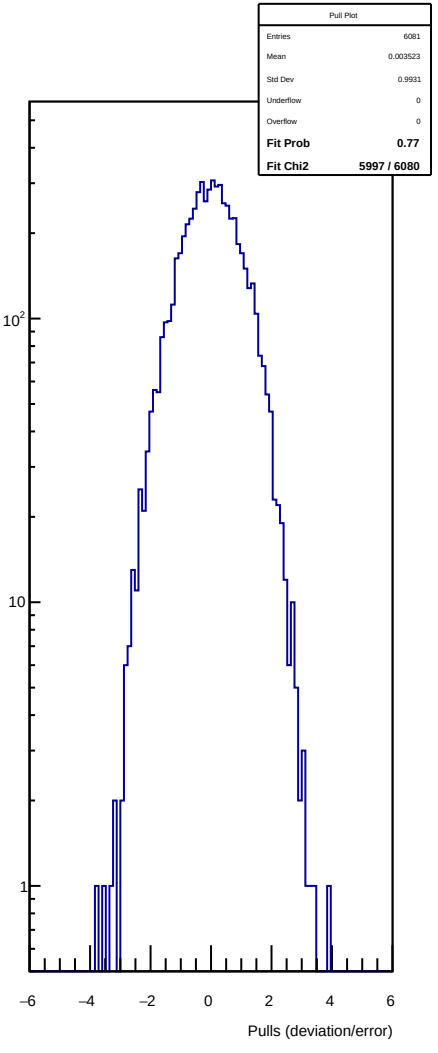

Pulls
Entries 6087
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

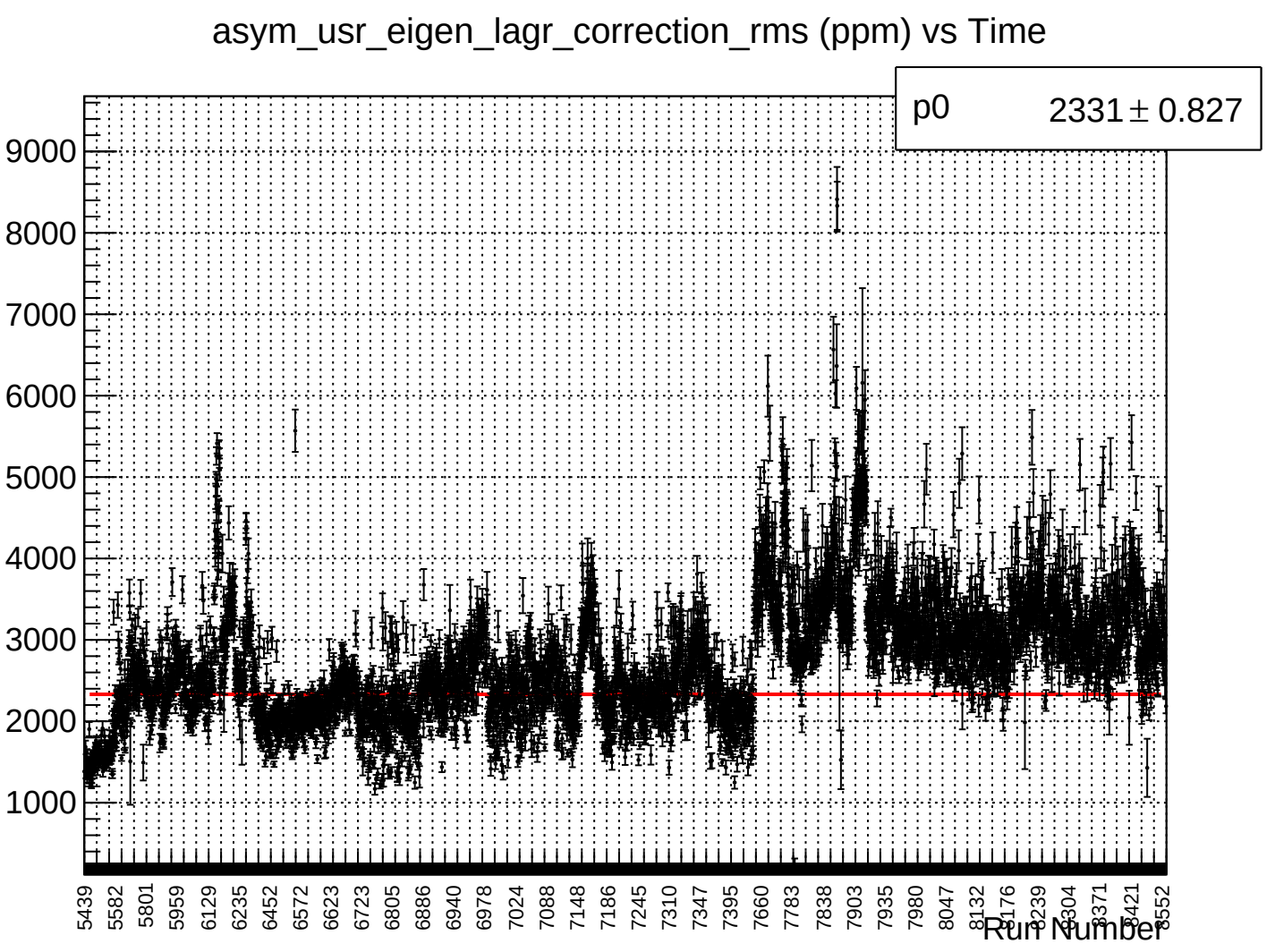

Pull Plot
Entries 6087
Mean 0.003233
Std Dev 0.9976
Underflow 0
Overflow 0
Fit Prob 0.60
Fit Chi2 6057 / 6086
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

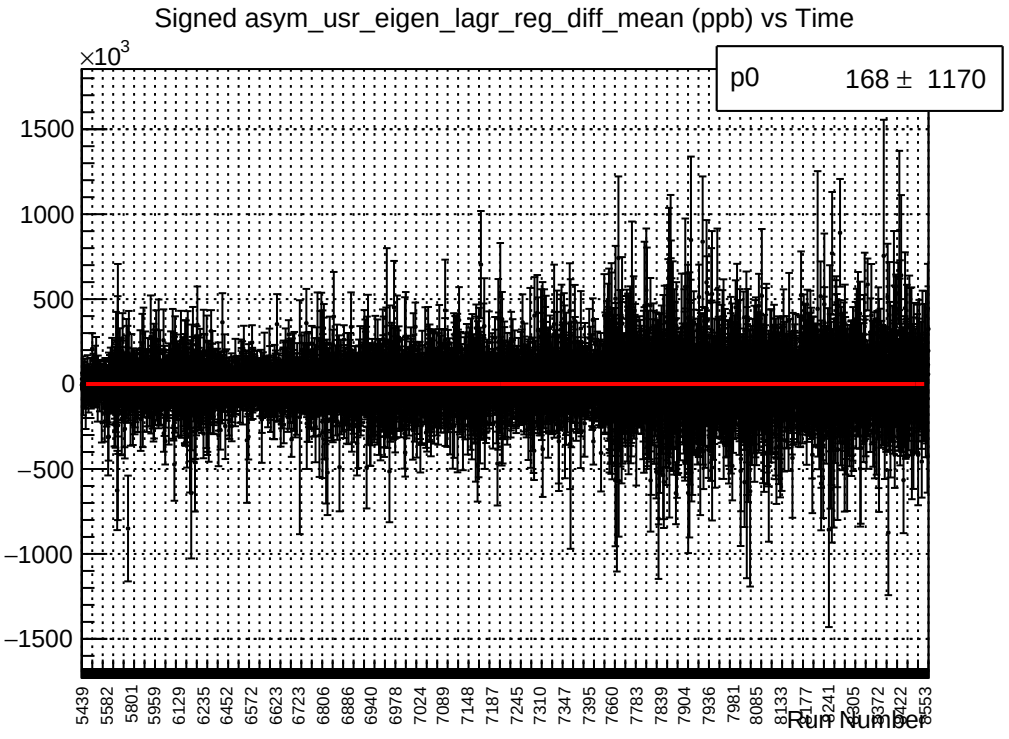

eigen_lagr_asym_usr_rms (ppm) vs Time
p0 1093 ± 0.3767
4500
4000
3500
3000
2500
2000
1500
1000
500
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

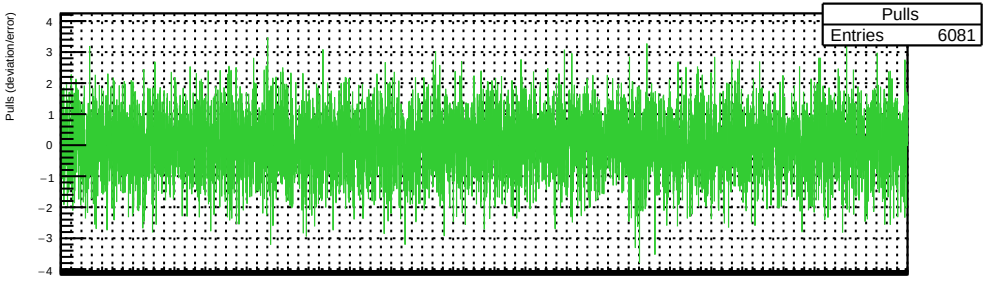

Signed asym_usr_eigen_lagr_correction_mean (ppb) vs Time
×10^3
p0 168 ± 1170
1500
1000
500
0
−500
−1000
−1500
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6806 6886 6940 6978 7024 7089 7148 7187 7245 7310 7347 7395 7660 7783 7839 7904 7936 7981 8085 8133 8177 8241 8305 8372 8422 8553
Run Number

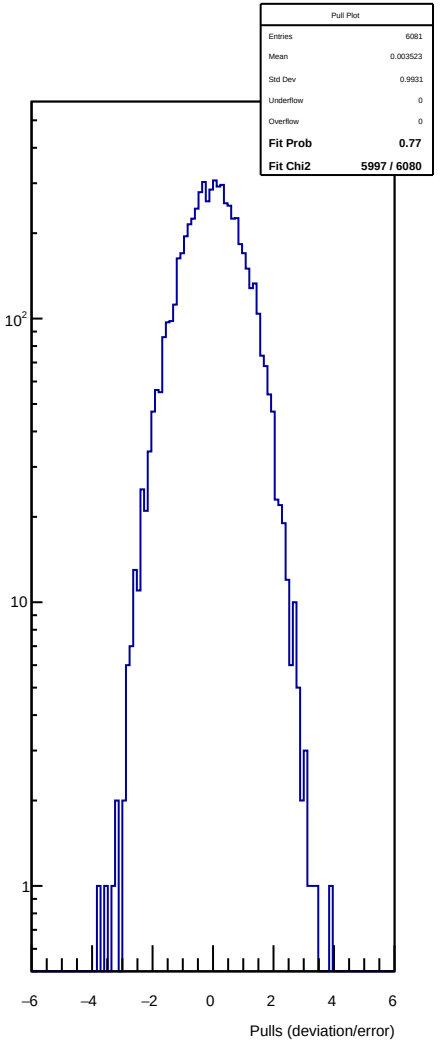

Pulls
Entries 6081
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

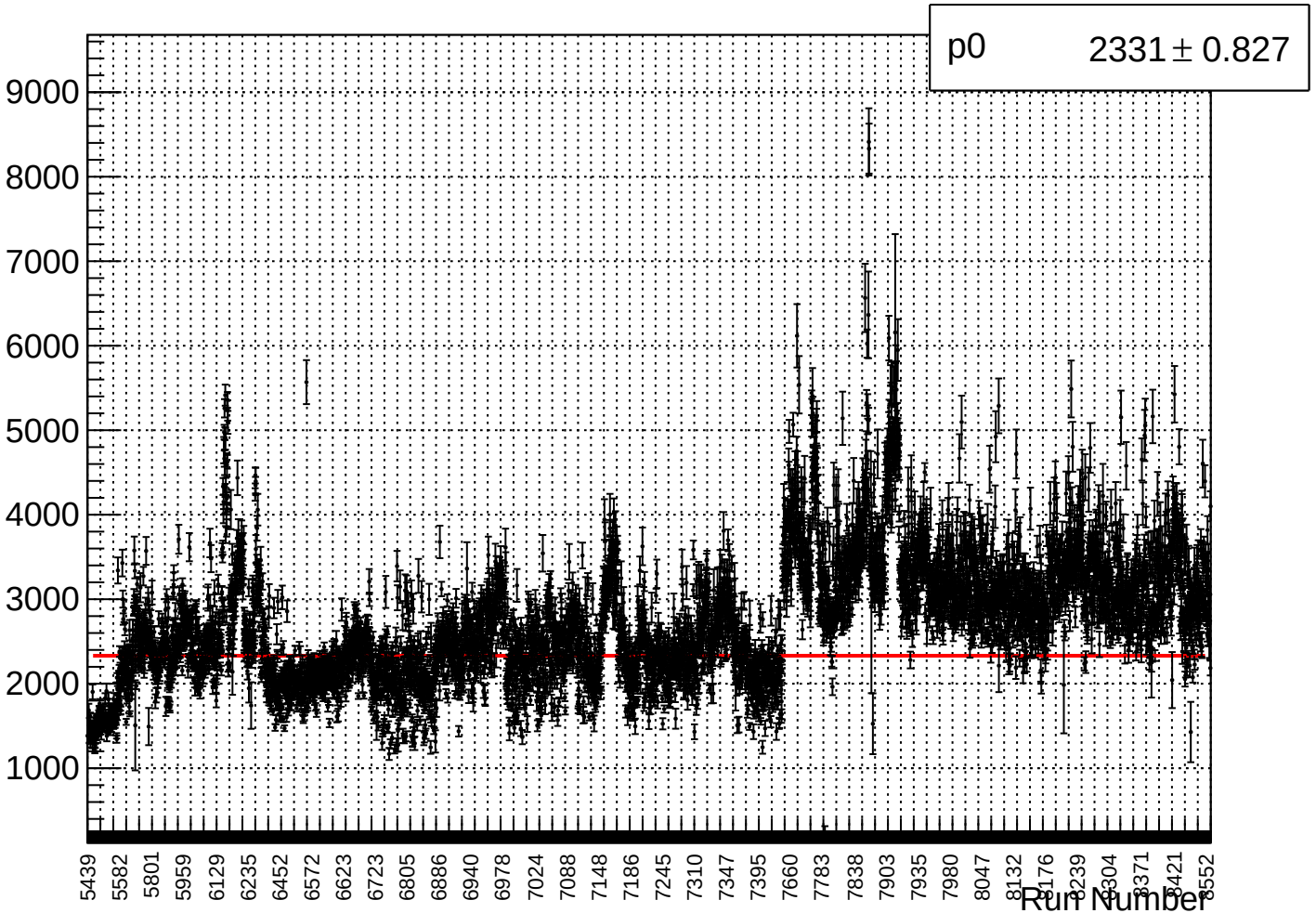

Pull Plot
Entries 6081
Mean 0.003523
Std Dev 0.9931
Underflow 0
Overflow 0
Fit Prob 0.77
Fit Chi2 5997 / 6080
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

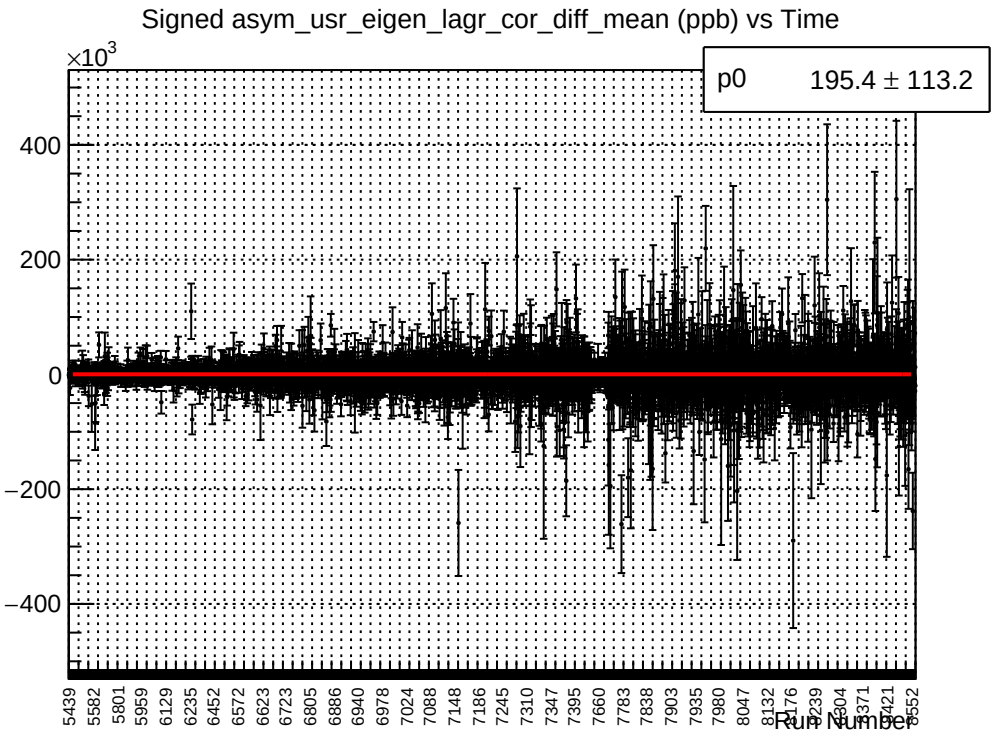

asym_usr_eigen_lagr_correction_rms (ppm) vs Time
p0 2331 ± 0.827
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

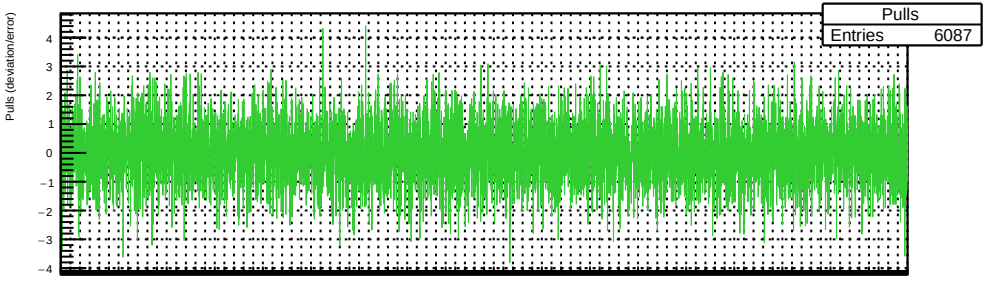

Signed asym_usr_eigen_lagr_reg_diff_mean (ppb) vs Time
p0 168 ± 1170
×10^3
1500
1000
500
0
−500
−1000
−1500
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6806 6886 6940 6978 7024 7089 7148 7187 7245 7310 7347 7395 7660 7783 7839 7904 7936 7981 8085 8133 8177 8241 8305 8372 8422 8553
Run Number

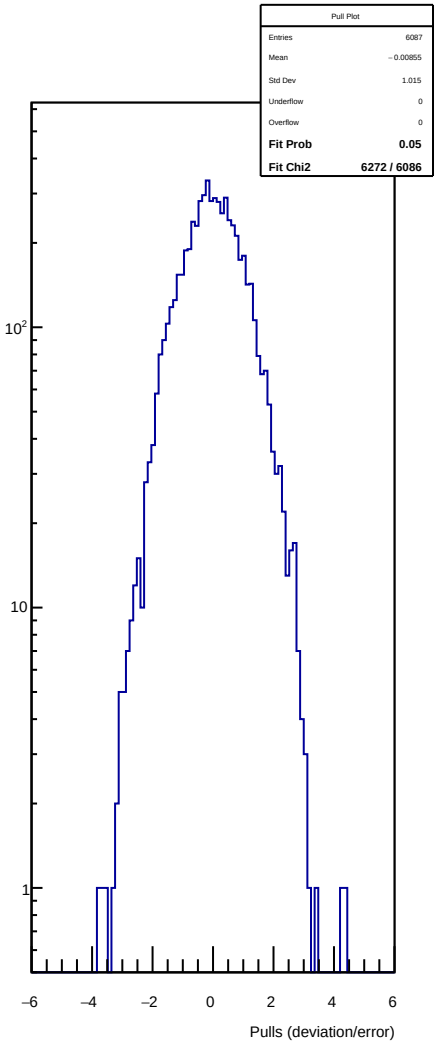

Pulls
Entries 6081
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

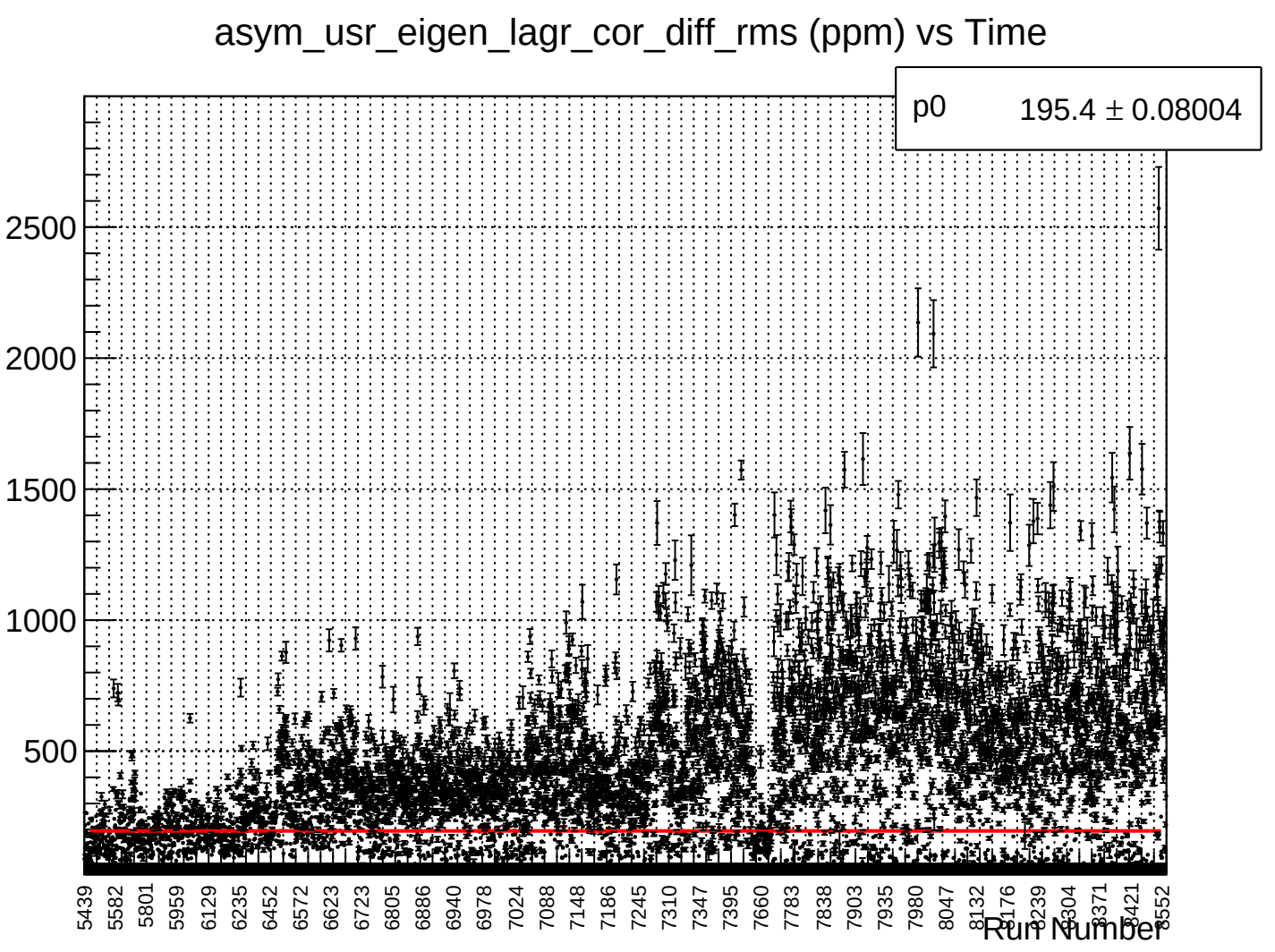

Pull Plot
Entries 6081
Mean 0.003523
Std Dev 0.9931
Underflow 0
Overflow 0
Fit Prob 0.77
Fit Chi2 5997 / 6080
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

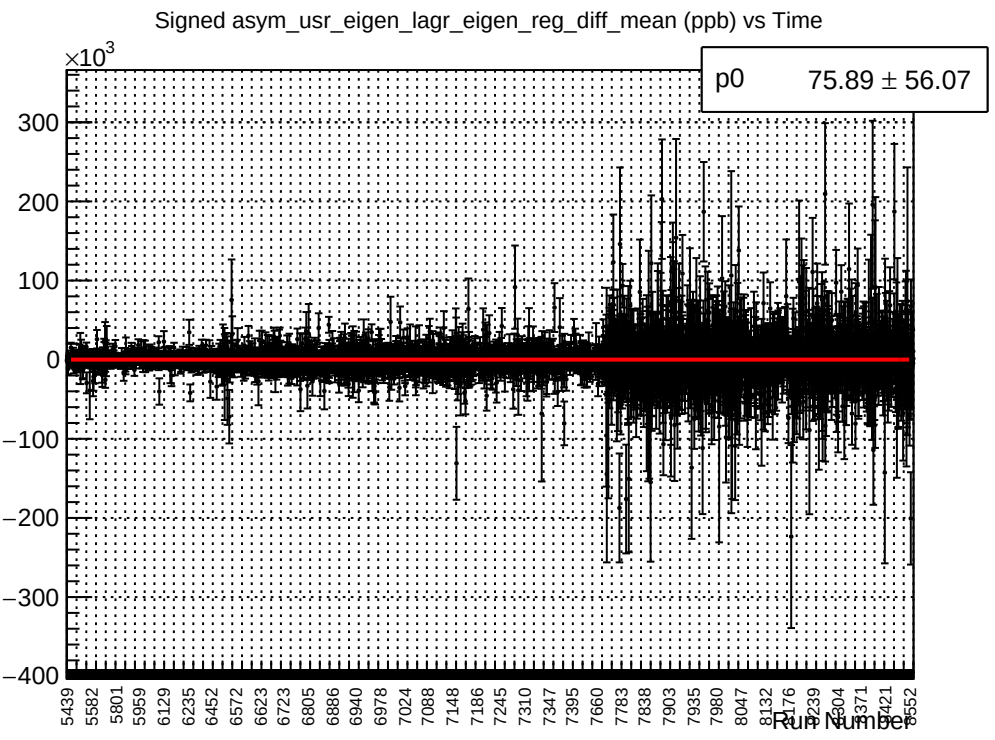

asym_usr_eigen_lagr_reg_diff_rms (ppm) vs Time
p0 2331 ± 0.827
9000
8000
7000
6000
5000
4000
3000
2000
1000
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

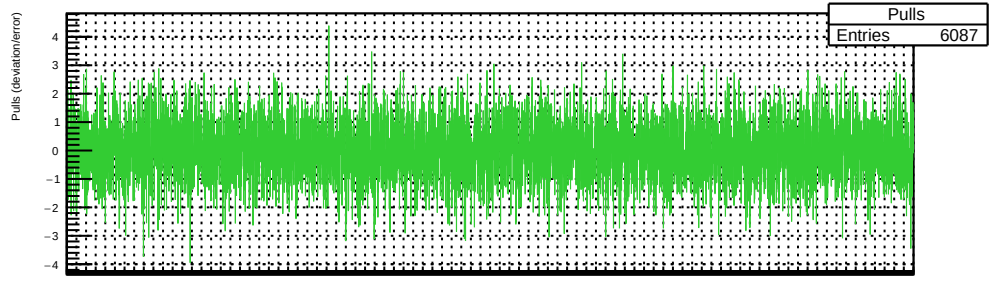

Signed asym_usr_eigen_lagr_cor_diff_mean (ppb) vs Time
×10^3
p0 195.4 ± 113.2
400
200
0
−200
−400
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6805 6886 6940 6978 7024 7088 7148 7186 7245 7310 7347 7395 7660 7783 7838 7903 7935 7980 8047 8132 8176 8239 8304 8371 8421 8552
Run Number

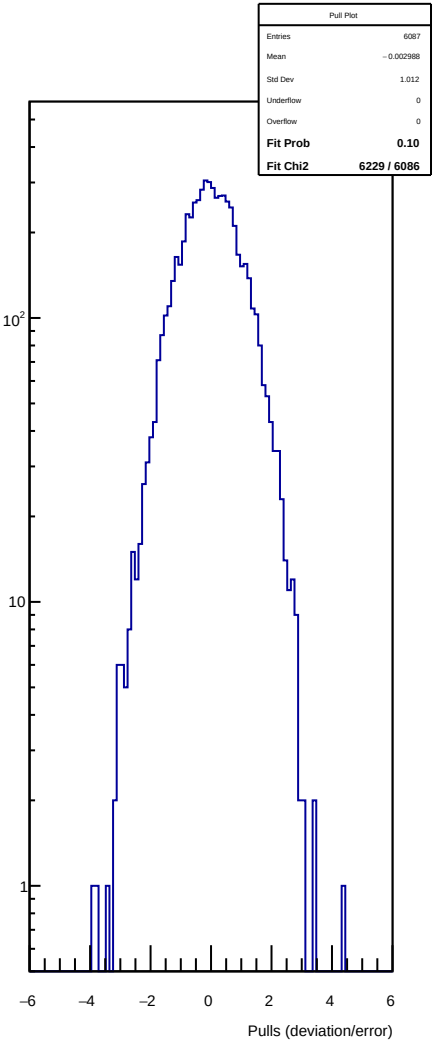

Pulls
Entries 6087
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

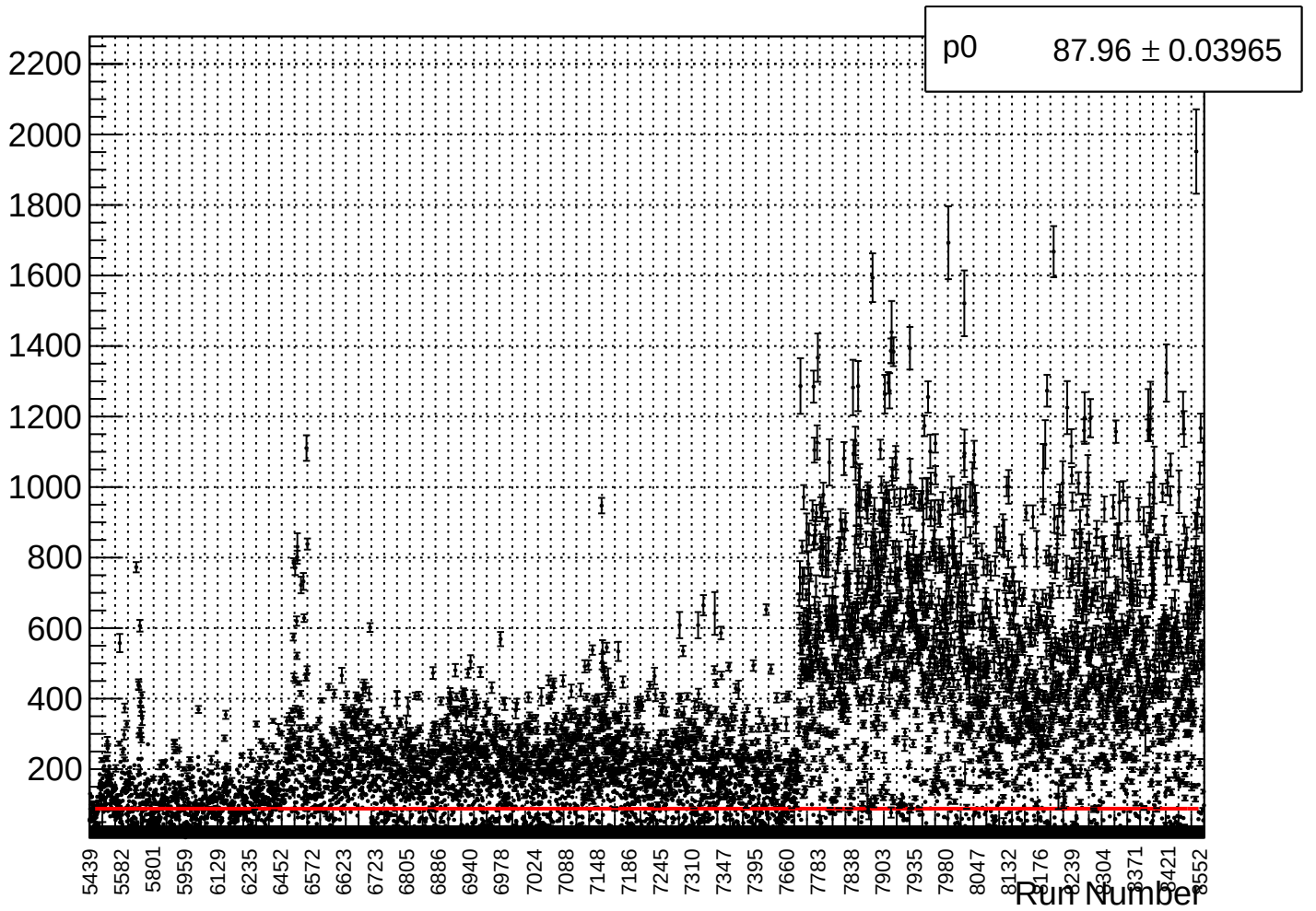

Pull Plot
Entries 6087
Mean −0.00855
Std Dev 1.015
Underflow 0
Overflow 0
Fit Prob 0.05
Fit Chi2 6272 / 6086
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

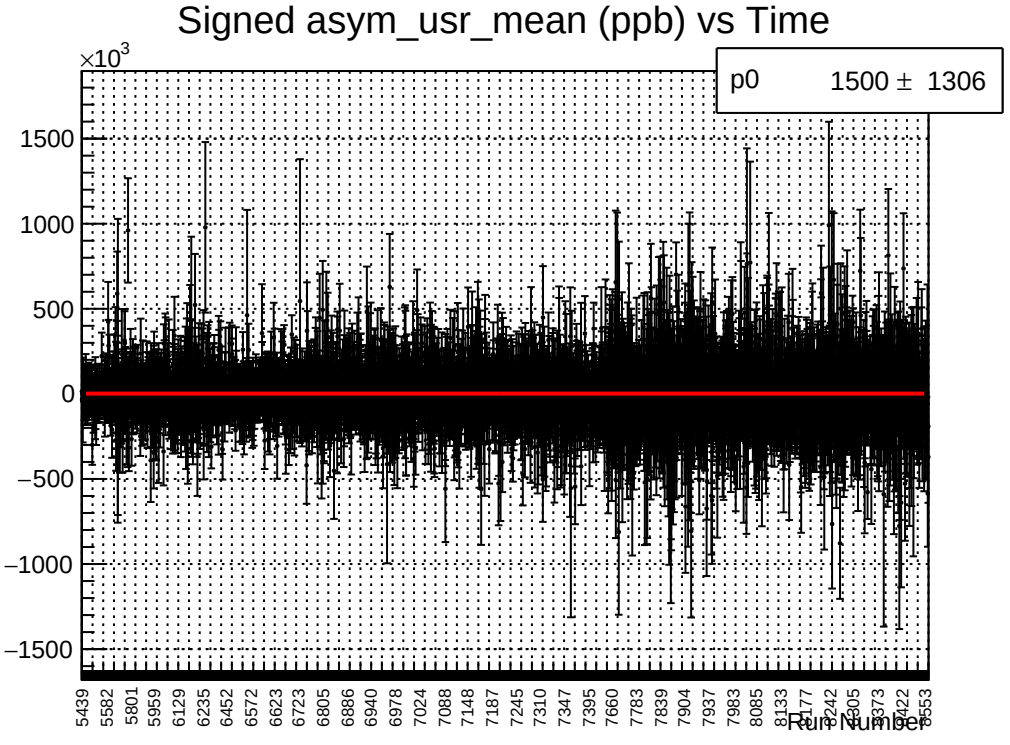

asym_usr_eigen_lagr_cor_diff_rms (ppm) vs Time
p0 195.4 ± 0.08004
2500
2000
1500
1000
500
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

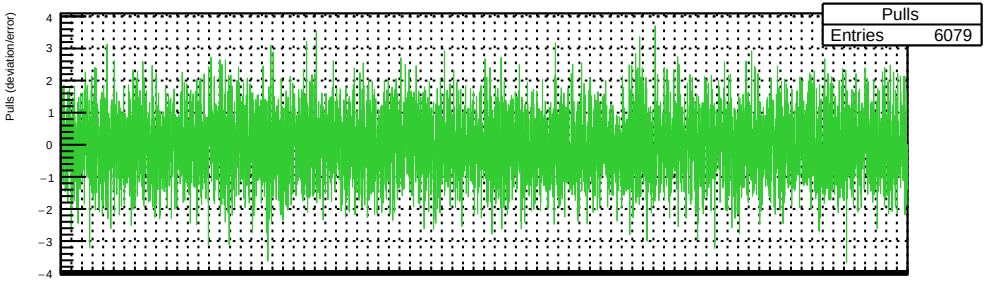

Signed asym_usr_eigen_lagr_eigen_reg_diff_mean (ppb) vs Time
×10^3
p0 75.89 ± 56.07
300
200
100
0
−100
−200
−300
−400
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6805 6886 6940 6978 7024 7088 7148 7186 7245 7310 7347 7395 7660 7783 7838 7903 7935 7980 8047 8132 8176 8239 8304 8371 8421 8552
Run Number

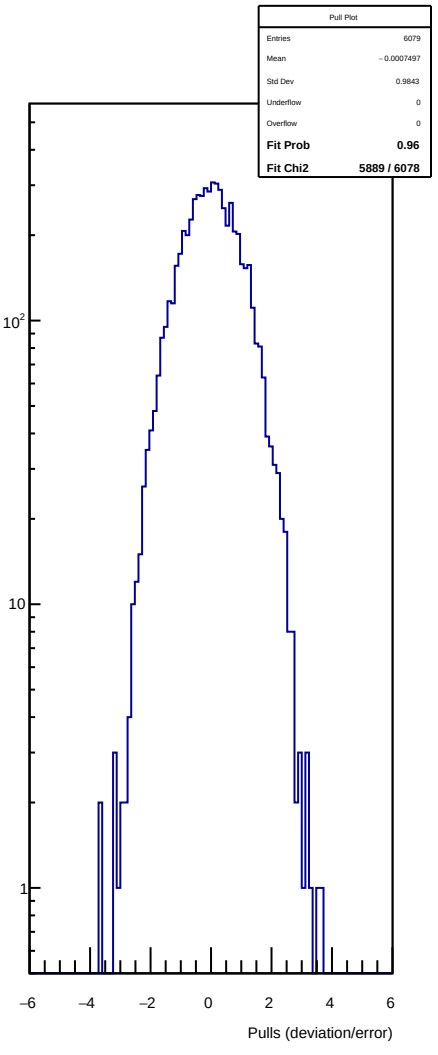

Pulls
Entries 6087
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

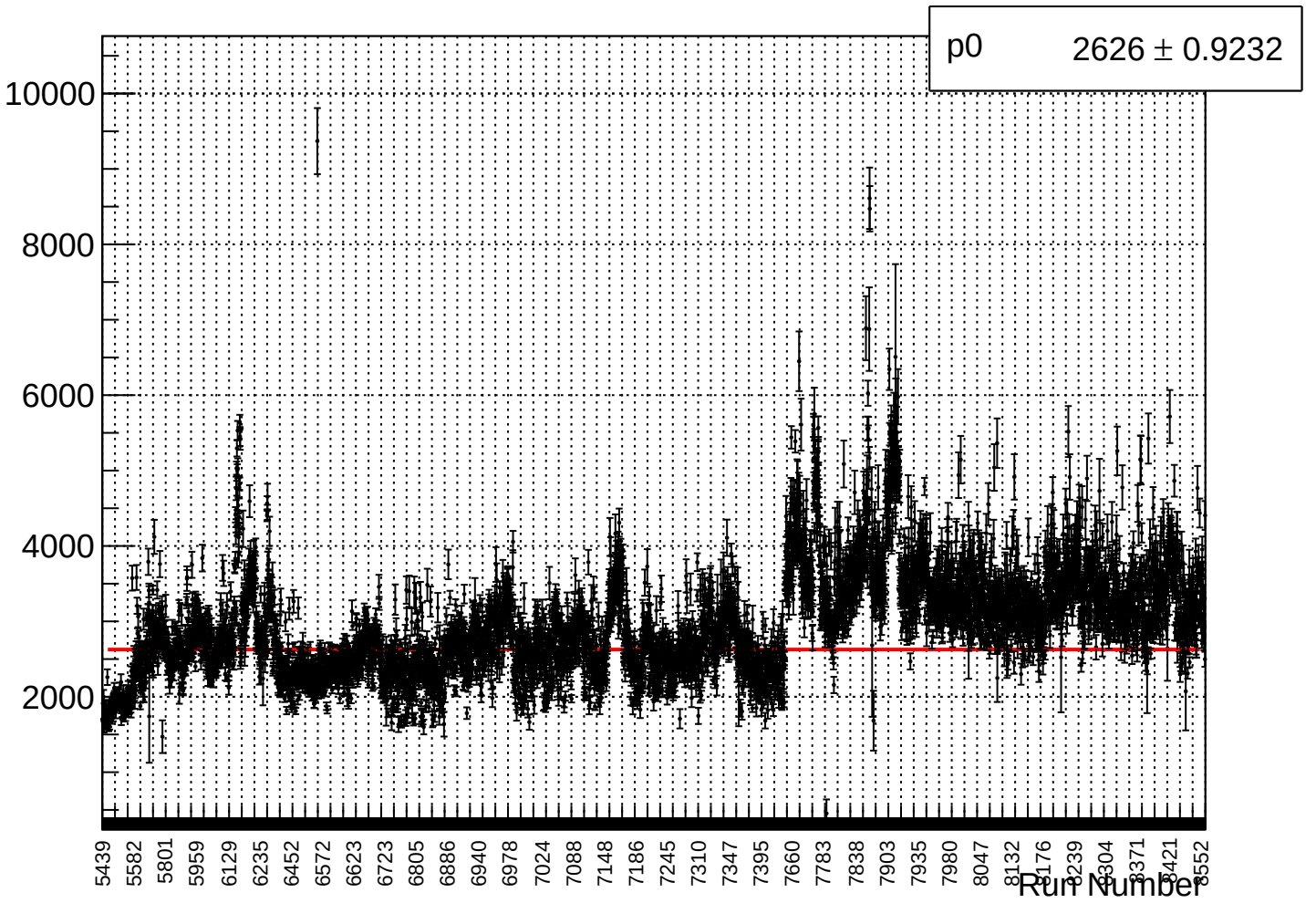

Pull Plot
Entries 6087
Mean −0.002988
Std Dev 1.012
Underflow 0
Overflow 0
Fit Prob 0.10
Fit Chi2 6229 / 6086
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

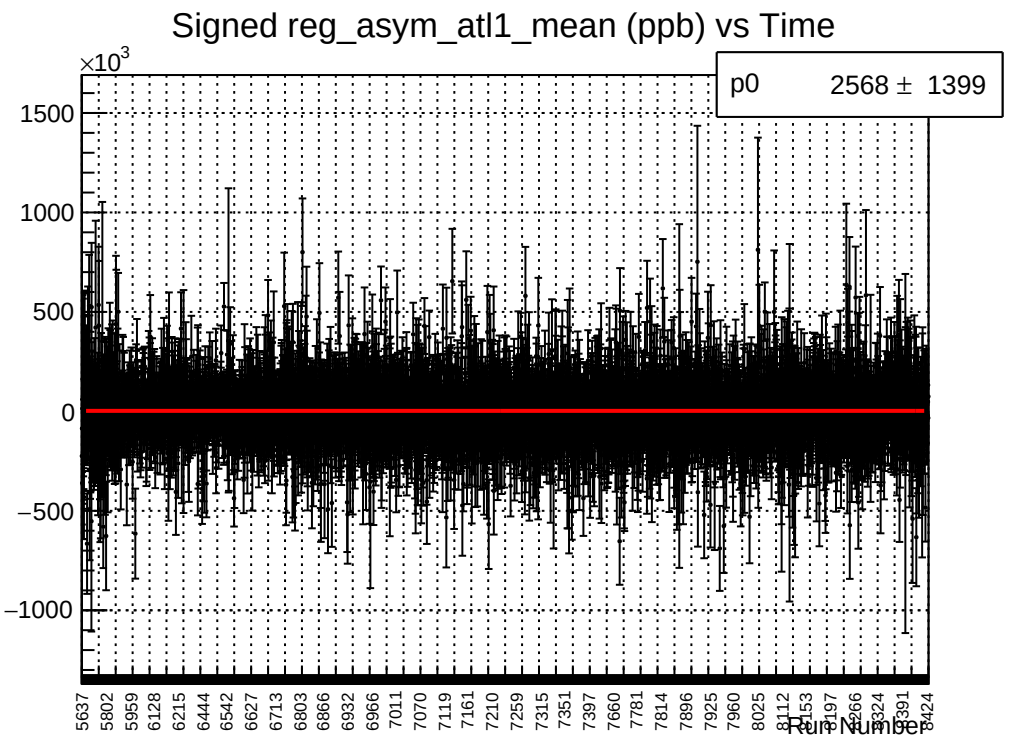

asym_usr_eigen_lagr_eigen_reg_diff_rms (ppm) vs Time
p0 87.96 ± 0.03965
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

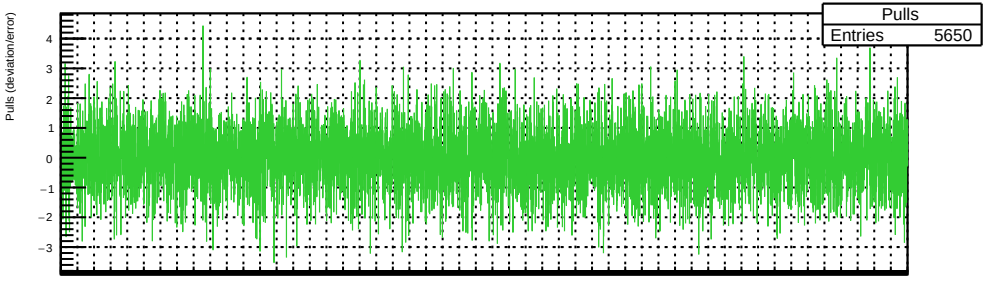

Signed asym_usr_mean (ppb) vs Time
×10^3
p0 1500 ± 1306
1500
1000
500
0
−500
−1000
−1500
5439 5582 5801 5959 6129 6235 6452 6572 6623 6723 6805 6886 6940 6978 7024 7088 7148 7187 7245 7310 7347 7395 7660 7783 7839 7904 7937 7983 8085 8133 8177 8242 8305 8373 8422 8553
Run Number

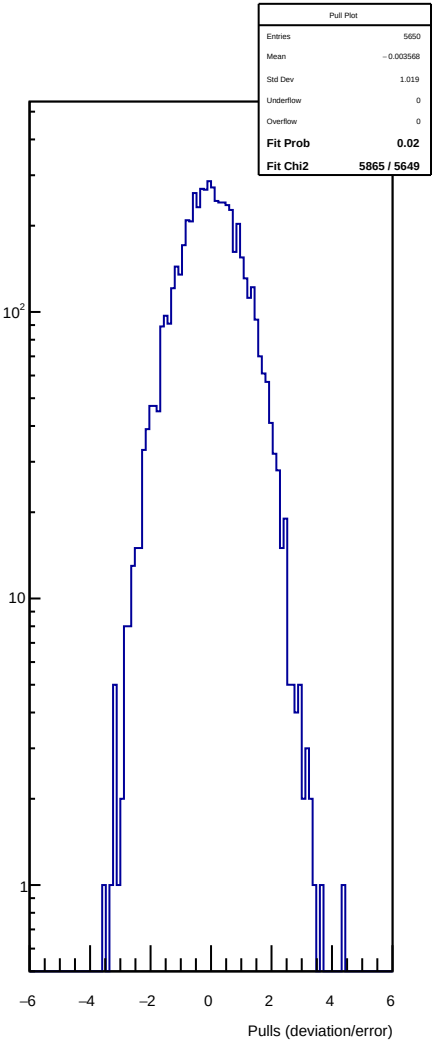

Pulls
Entries 6079
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

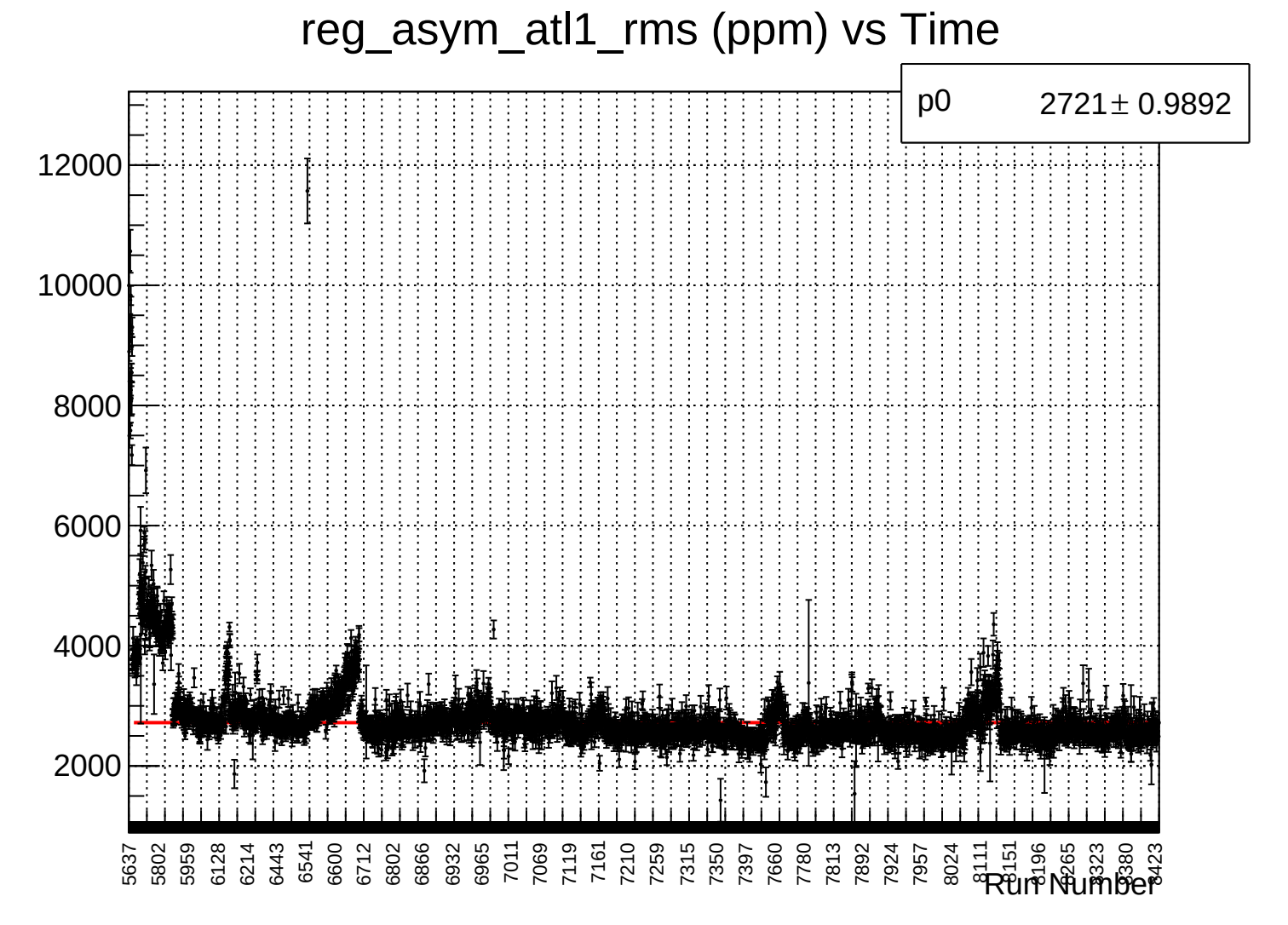

Pull Plot
Entries 6079
Mean −0.0007497
Std Dev 0.9843
Underflow 0
Overflow 0
Fit Prob 0.96
Fit Chi2 5889 / 6078
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

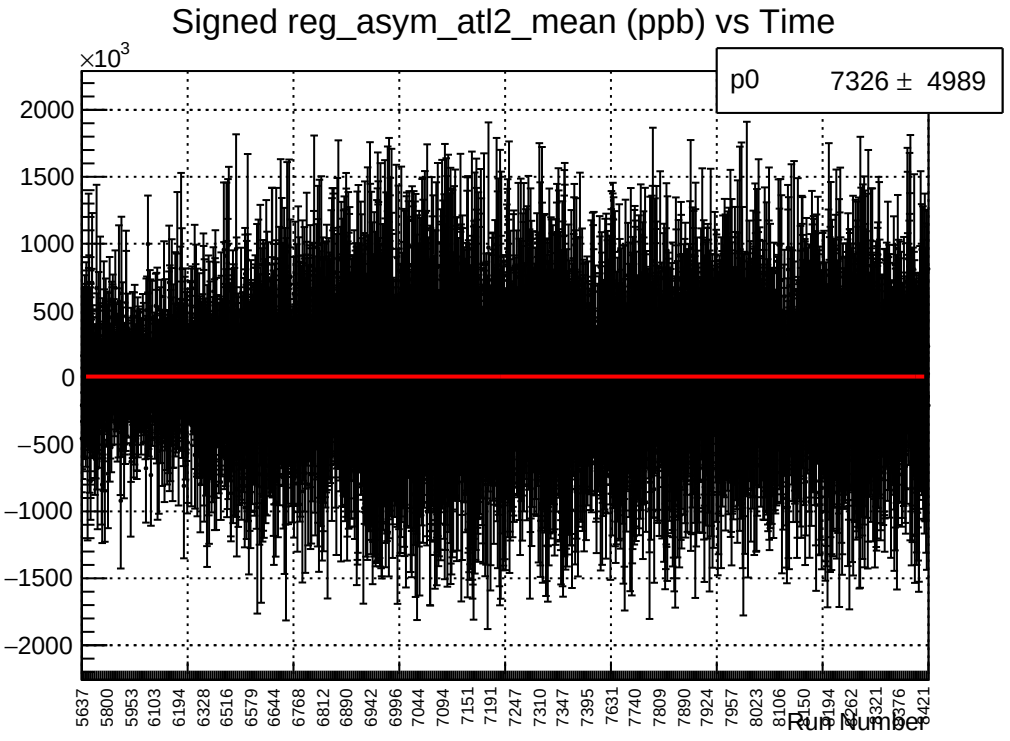

asym_usr_rms (ppm) vs Time
p0
2626 ± 0.9232
10000
8000
6000
4000
2000
5439
5582
5801
5959
6129
6235
6452
6572
6623
6723
6805
6886
6940
6978
7024
7088
7148
7186
7245
7310
7347
7395
7660
7783
7838
7903
7935
7980
8047
8132
8176
8239
8304
8371
8421
8552
Run Number

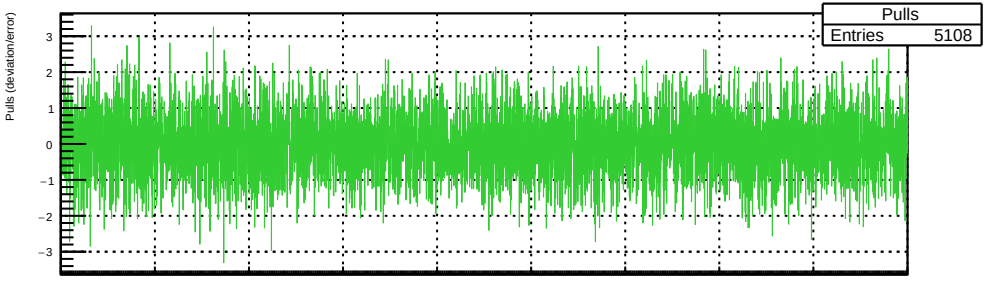

Signed reg_asym_atl1_mean (ppb) vs Time
×10^3
p0 2568 ± 1399
1500
1000
500
0
−500
−1000
5637 5802 5959 6128 6215 6444 6542 6627 6713 6803 6866 6932 6966 7011 7070 7119 7161 7210 7259 7315 7351 7397 7660 7781 7814 7896 7925 7960 8025 8112 8153 8197 8266 8324 8391 8424
Run Number

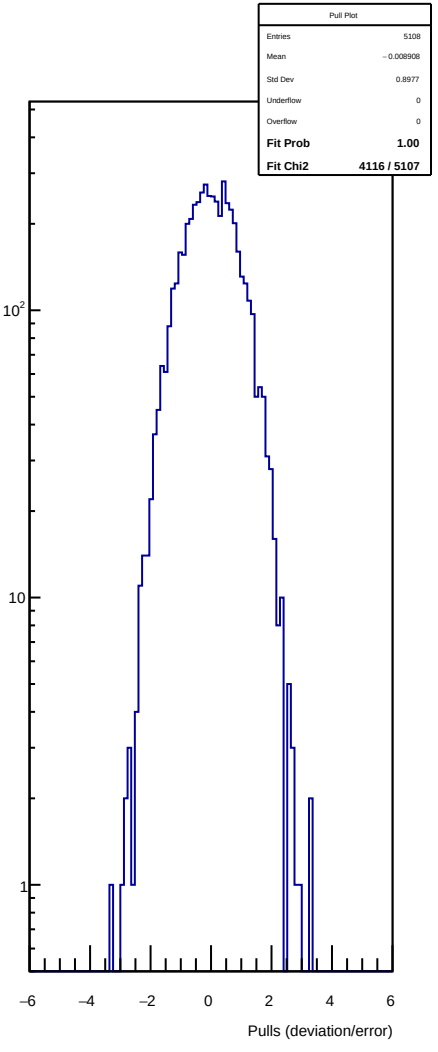

Pulls
Entries 5650
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

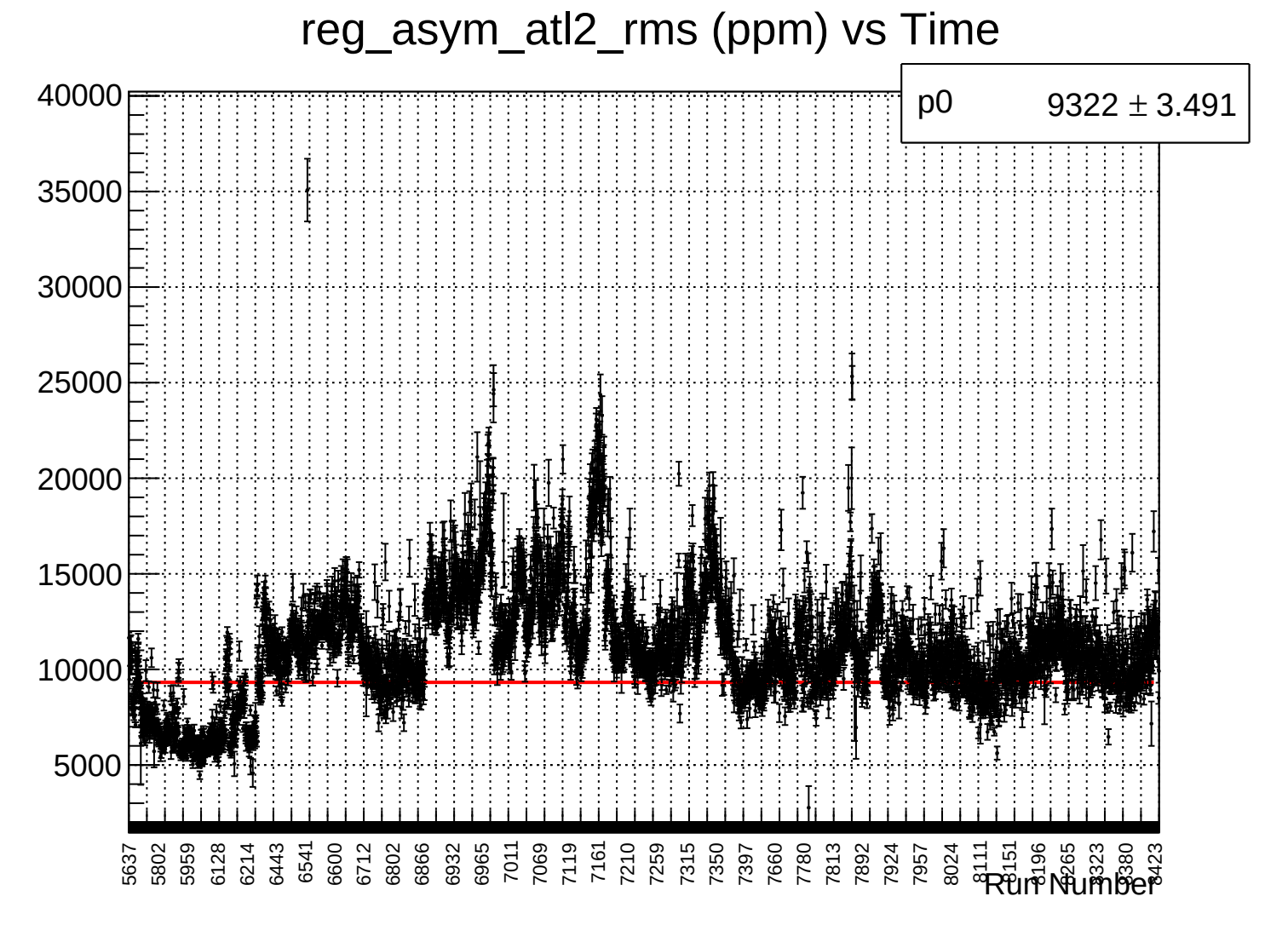

Pull Plot
Entries 5650
Mean −0.003568
Std Dev 1.019
Underflow 0
Overflow 0
Fit Prob 0.02
Fit Chi2 5865 / 5649
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

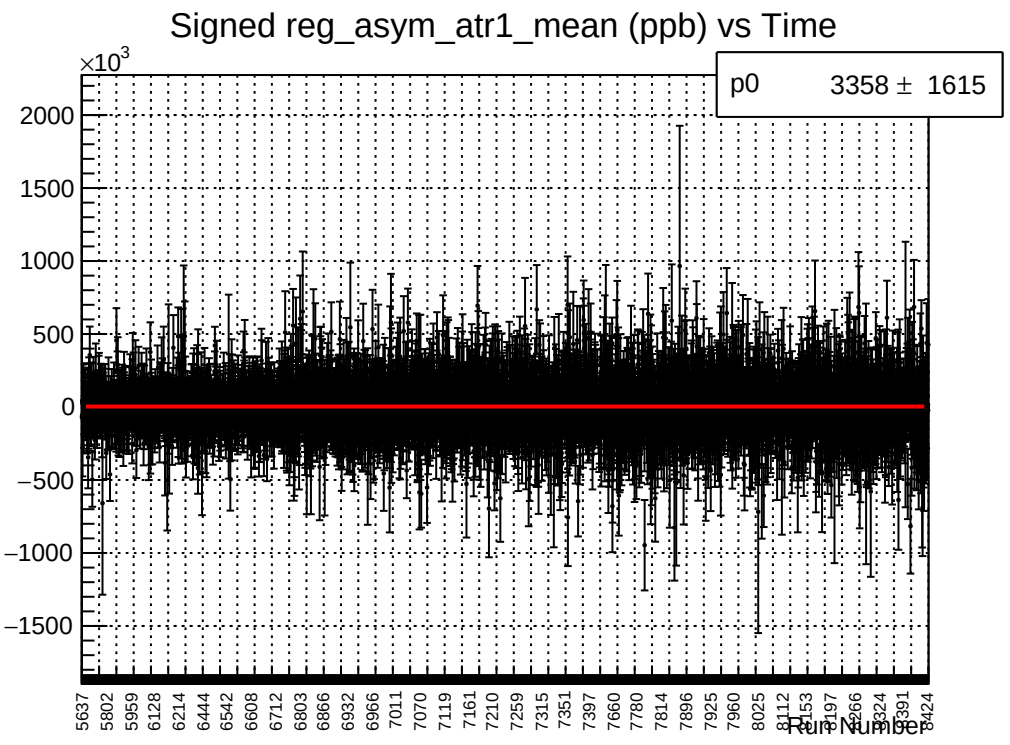

reg_asym_atl1_rms (ppm) vs Time
p0 2721 ± 0.9892
12000
10000
8000
6000
4000
2000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

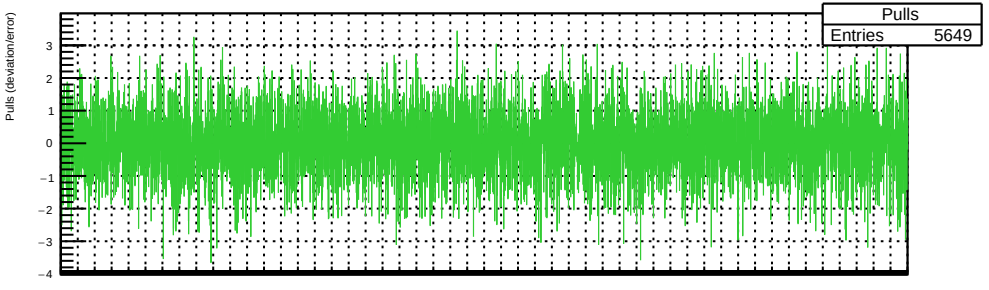

Signed reg_asym_atl2_mean (ppb) vs Time
×10^3
p0 7326 ± 4989
2000
1500
1000
500
0
−500
−1000
−1500
−2000
5637 5800 5953 6103 6194 6328 6516 6579 6644 6768 6812 6890 6942 6996 7044 7094 7151 7191 7247 7310 7347 7395 7631 7740 7809 7890 7924 7957 8023 8106 8150 8194 8262 8321 8376 8421
Run Number

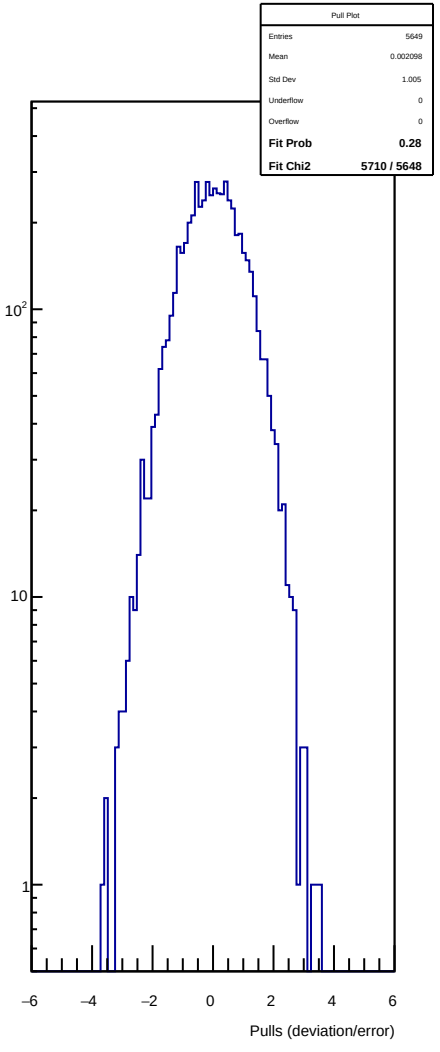

Pulls
Entries 5108
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

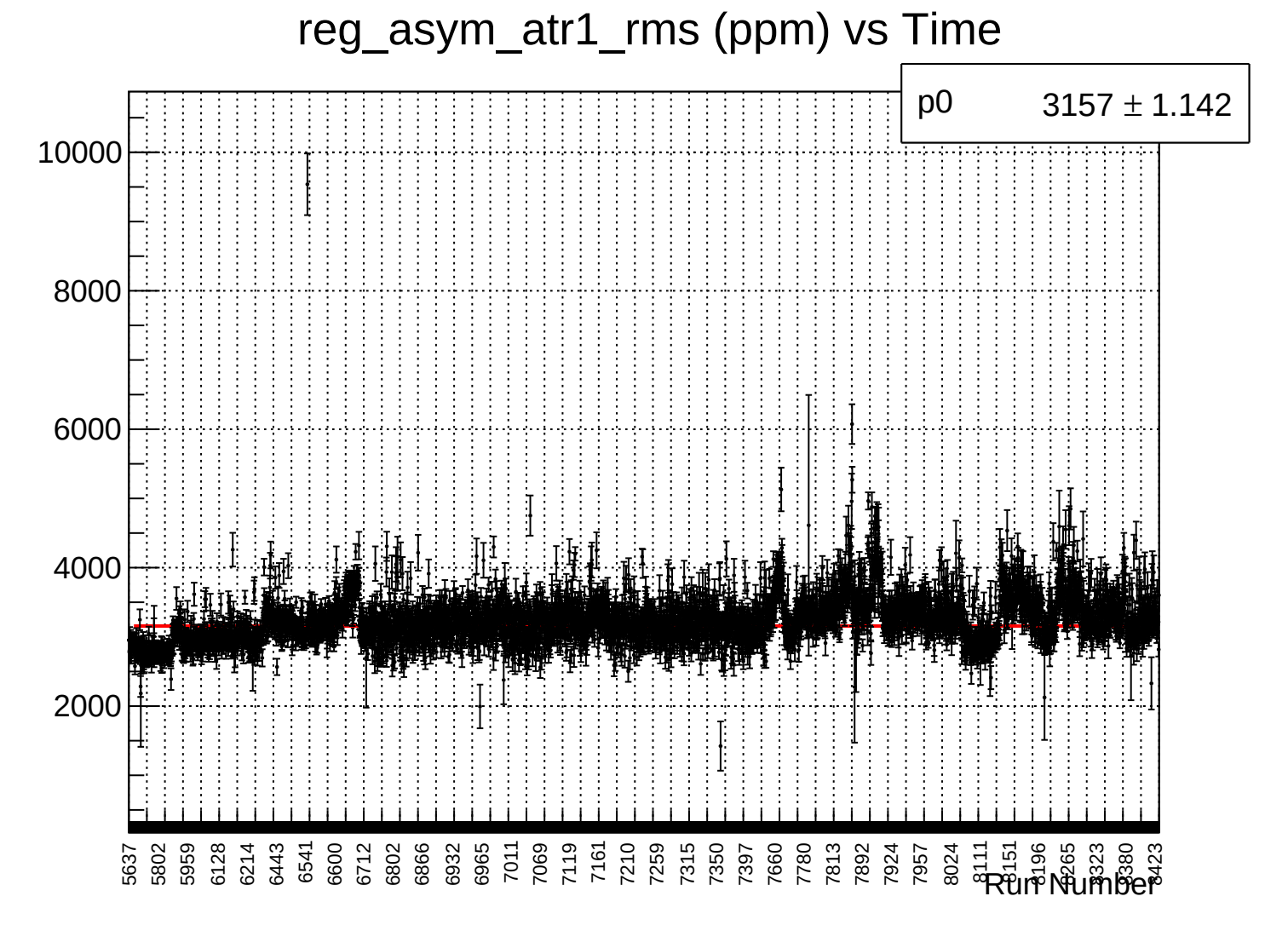

Pull Plot
Entries 5108
Mean −0.008908
Std Dev 0.8977
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 4116 / 5107
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

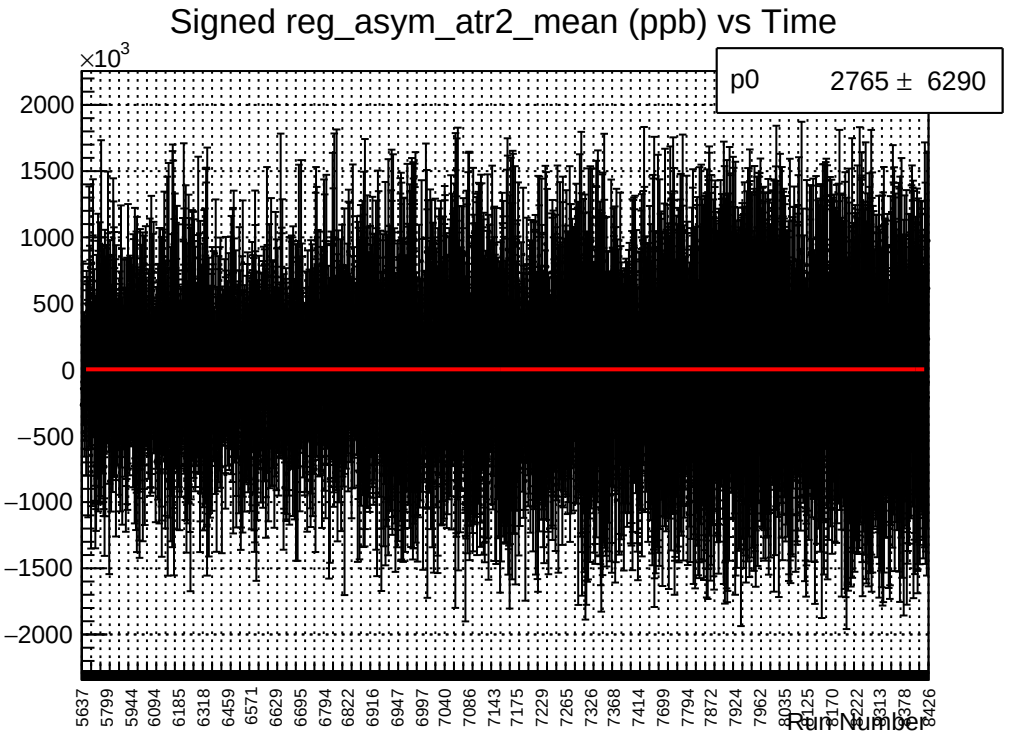

reg_asym_atl2_rms (ppm) vs Time
p0 9322 ± 3.491
40000
35000
30000
25000
20000
15000
10000
5000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

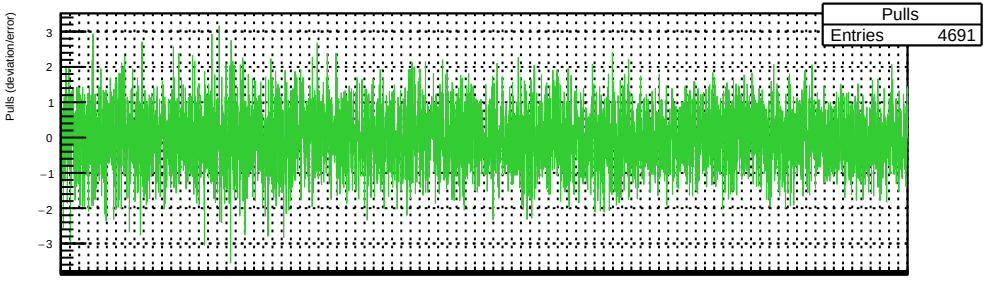

Signed reg_asym_atr1_mean (ppb) vs Time
×10^3
p0 3358 ± 1615
2000
1500
1000
500
0
−500
−1000
−1500
5637 5802 5959 6128 6214 6444 6542 6608 6712 6803 6866 6932 6966 7011 7070 7119 7161 7210 7259 7315 7351 7397 7660 7780 7814 7896 7925 7960 8025 8112 8153 8197 8266 8324 8391 8424
Run Number

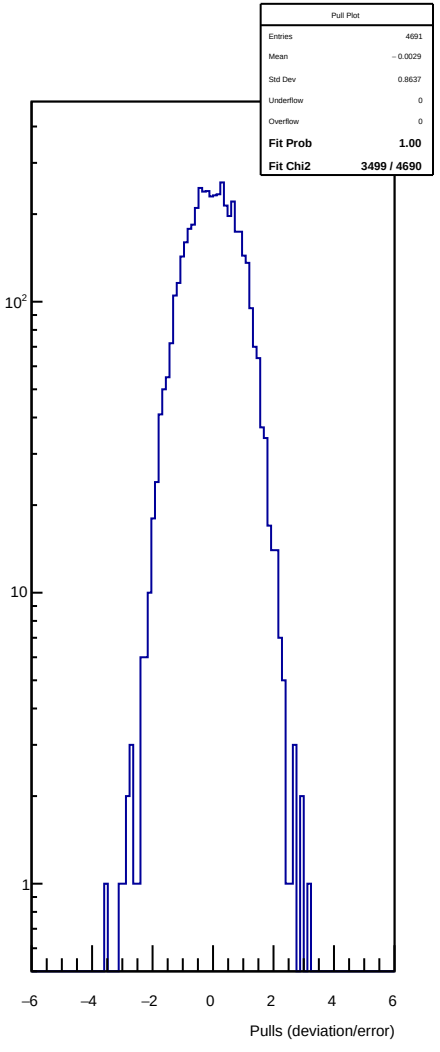

Pulls
Entries 5649
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

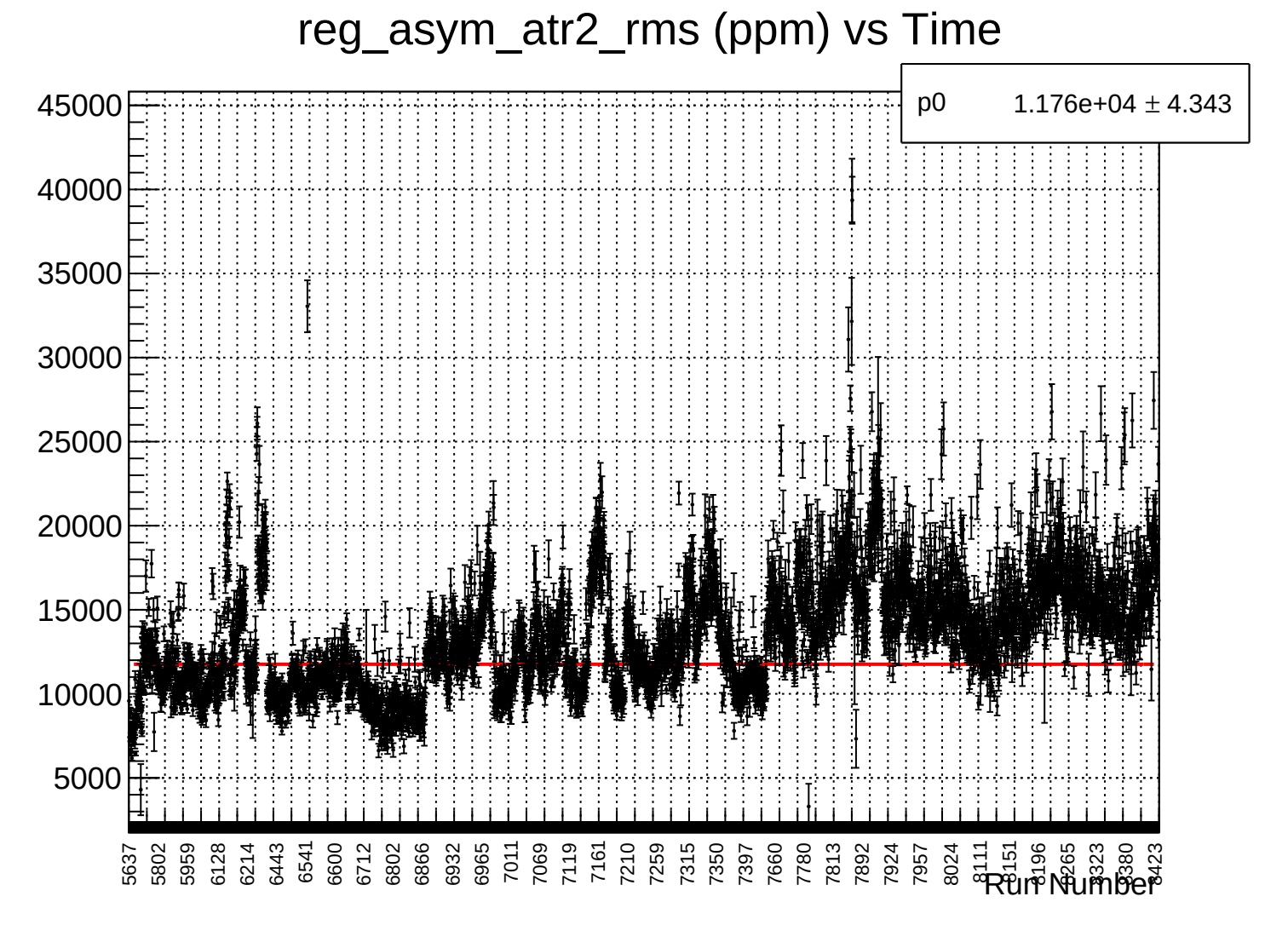

Pull Plot
Entries 5649
Mean 0.002098
Std Dev 1.005
Underflow 0
Overflow 0
Fit Prob 0.28
Fit Chi2 5710 / 5648
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

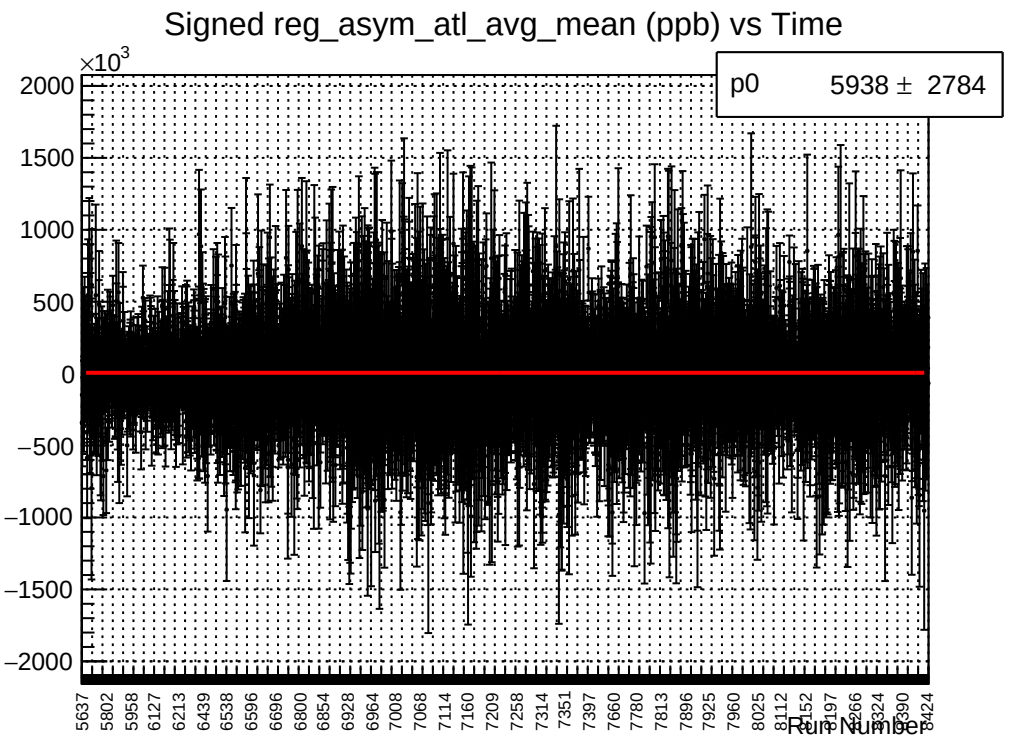

reg_asym_atr1_rms (ppm) vs Time
p0 3157 ± 1.142
10000
8000
6000
4000
2000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

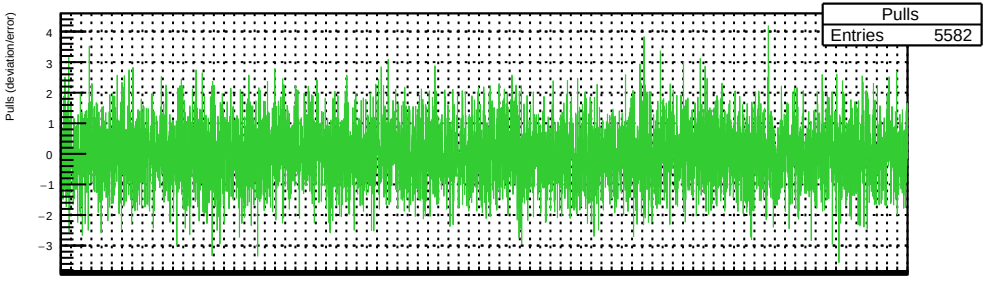

Signed reg_asym_atr2_mean (ppb) vs Time
×10^3
p0 2765 ± 6290
2000
1500
1000
500
0
−500
−1000
−1500
−2000
5637 5799 5944 6094 6185 6318 6459 6571 6629 6695 6794 6822 6916 6947 6997 7040 7086 7143 7175 7229 7265 7326 7368 7414 7699 7794 7872 7924 7962 8035 8125 8170 8222 8313 8378 8426
Run Number

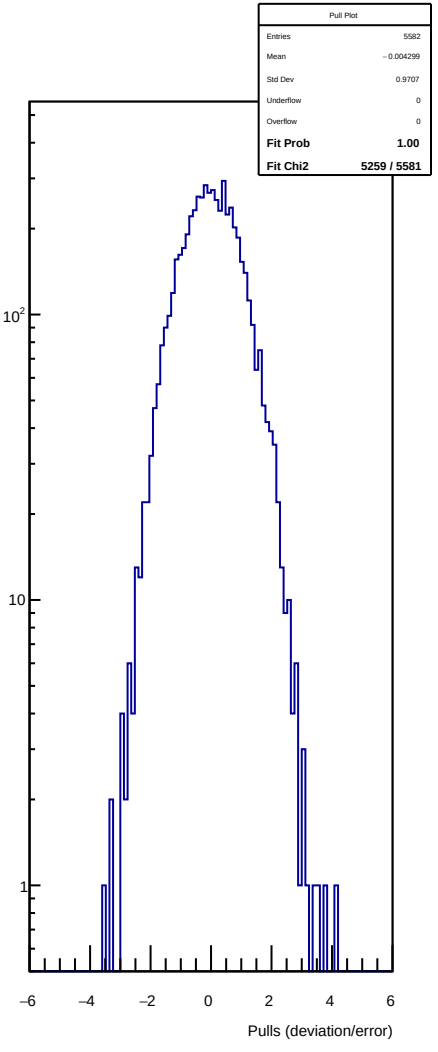

Pulls
Entries 4691
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

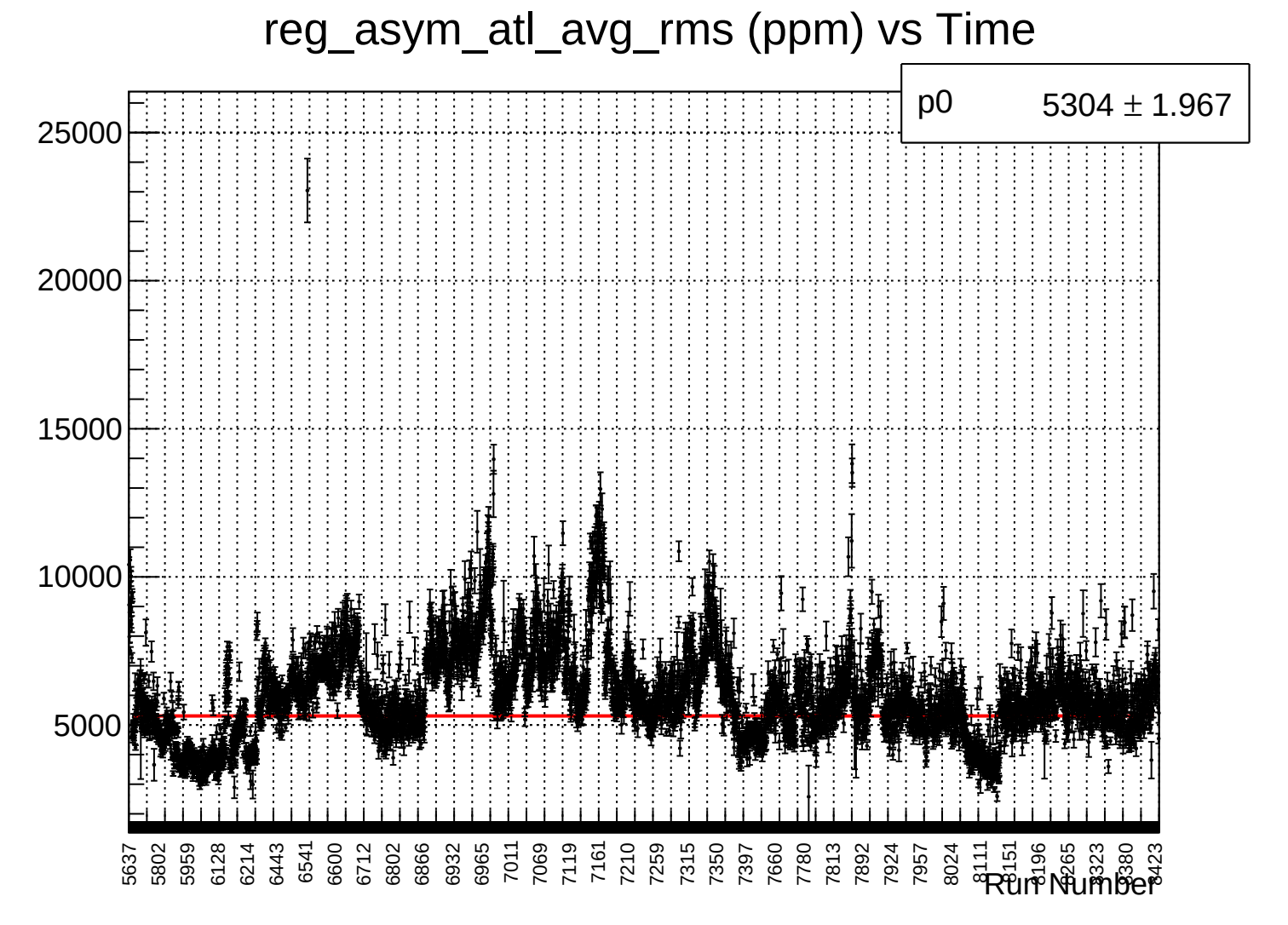

Pull Plot
Entries 4691
Mean −0.0029
Std Dev 0.8637
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 3499 / 4690
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

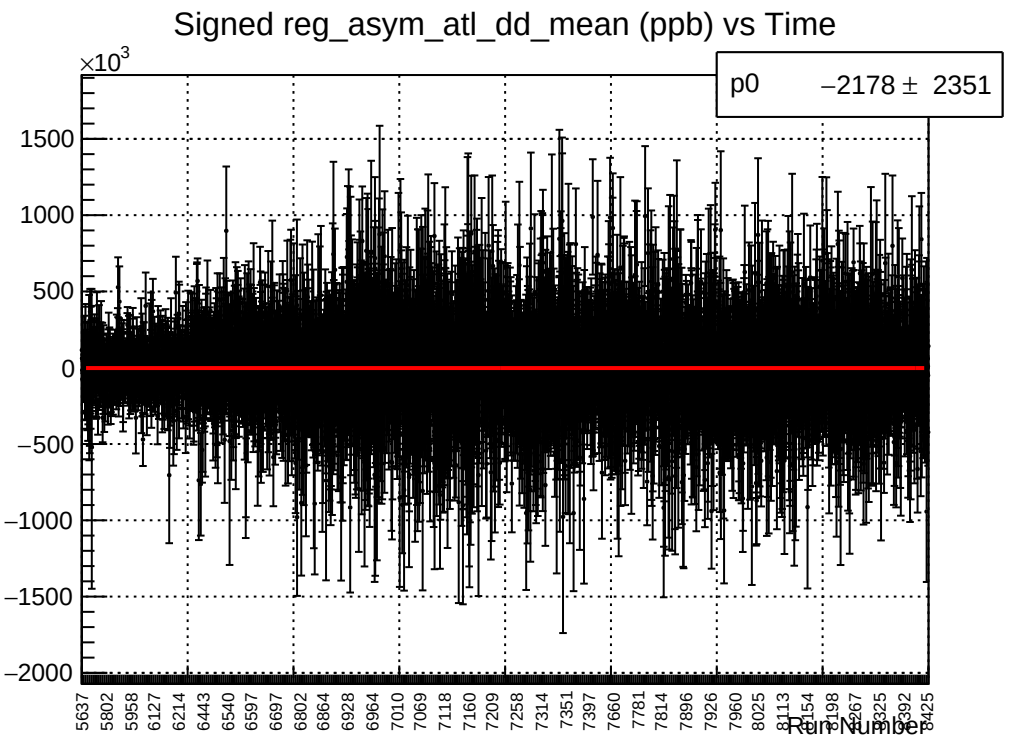

reg_asym_atr2_rms (ppm) vs Time
p0 1.176e+04 ± 4.343
45000
40000
35000
30000
25000
20000
15000
10000
5000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

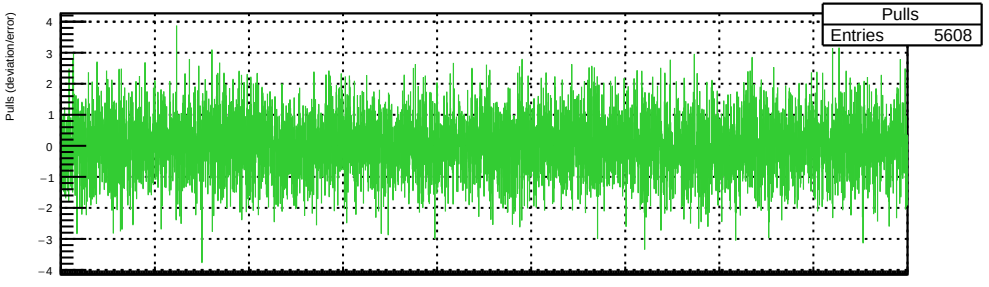

Signed reg_asym_atl_avg_mean (ppb) vs Time
×10^3
p0 5938 ± 2784
2000
1500
1000
500
0
−500
−1000
−1500
−2000
5637
5802
5958
6127
6213
6439
6538
6596
6696
6800
6854
6928
6964
7008
7068
7114
7160
7209
7258
7314
7351
7397
7660
7780
7813
7896
7925
7960
8025
8112
8152
8197
8266
8324
8390
8424
Run Number

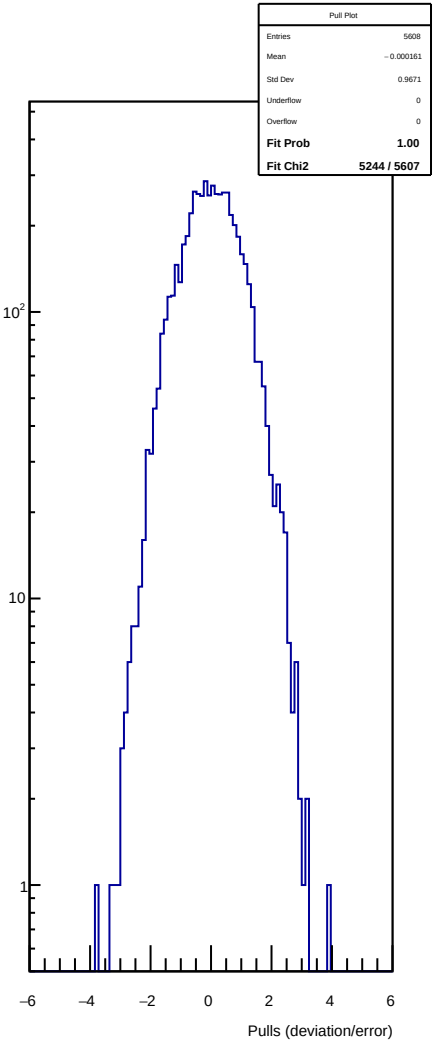

Pulls
Entries 5582
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

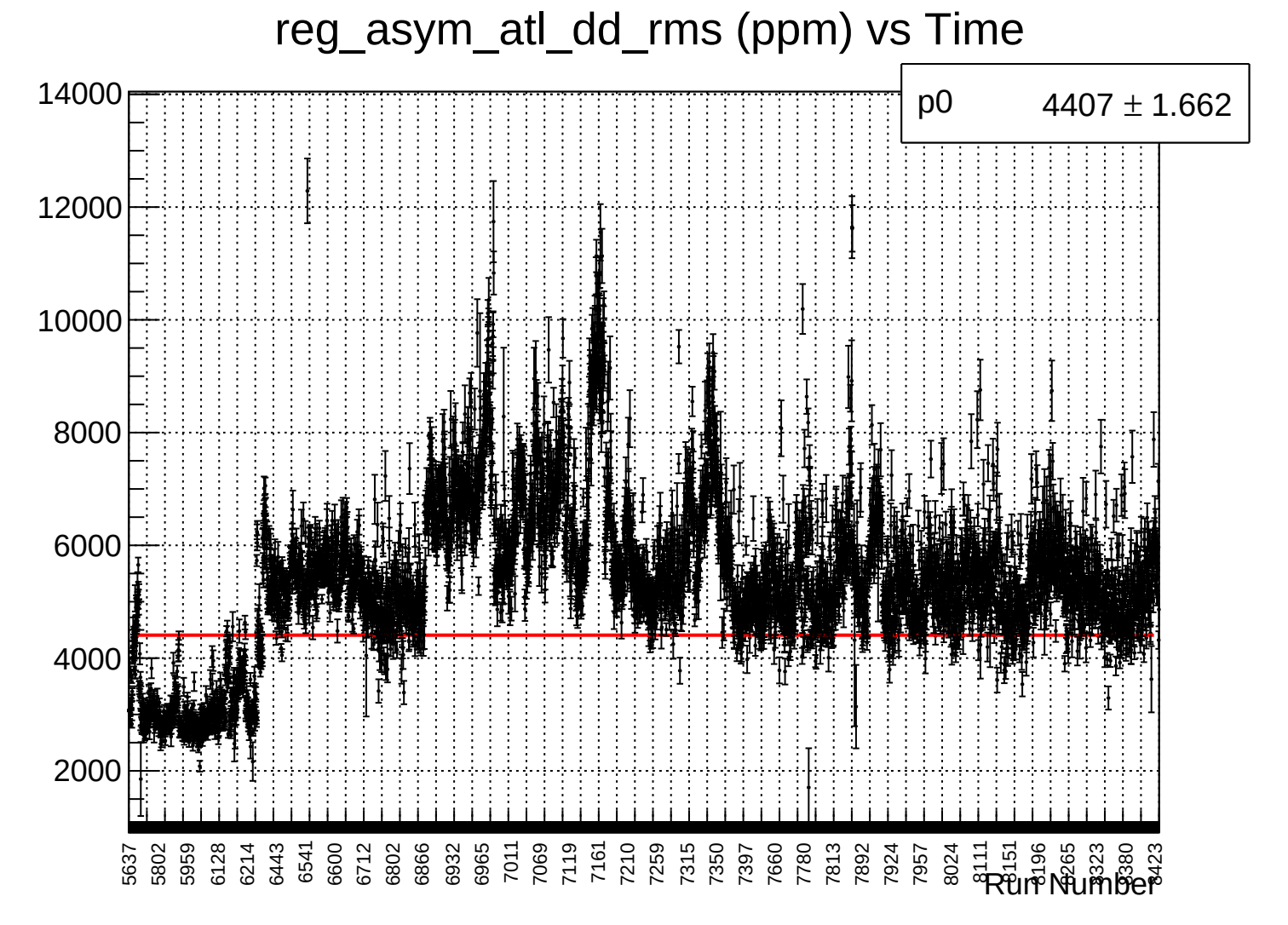

Pull Plot
Entries 5582
Mean −0.004299
Std Dev 0.9707
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 5259 / 5581
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

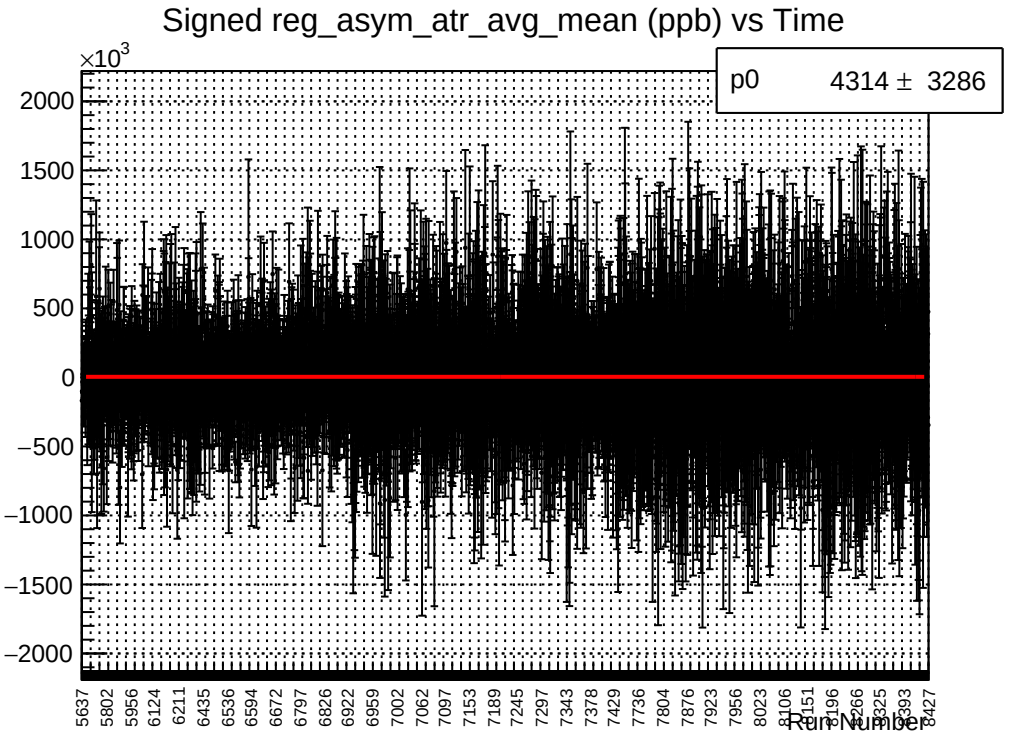

reg_asym_atl_avg_rms (ppm) vs Time
p0 5304 ± 1.967
25000
20000
15000
10000
5000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

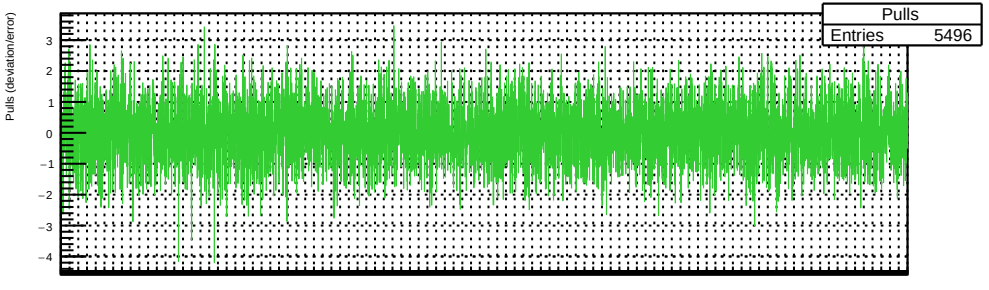

Signed reg_asym_atl_dd_mean (ppb) vs Time
×10^3
p0 −2178 ± 2351
1500
1000
500
0
−500
−1000
−1500
−2000
5637 5802 5958 6127 6214 6443 6540 6597 6697 6802 6864 6928 6964 7010 7069 7118 7160 7209 7258 7314 7351 7397 7660 7781 7814 7896 7926 7960 8025 8113 8154 8198 8267 8325 8392 8425
Run Number

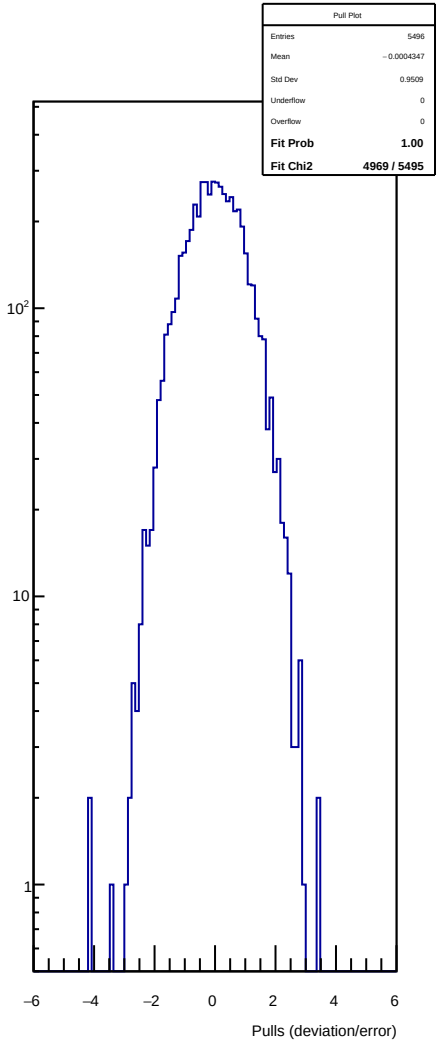

Pulls
Entries 5608
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

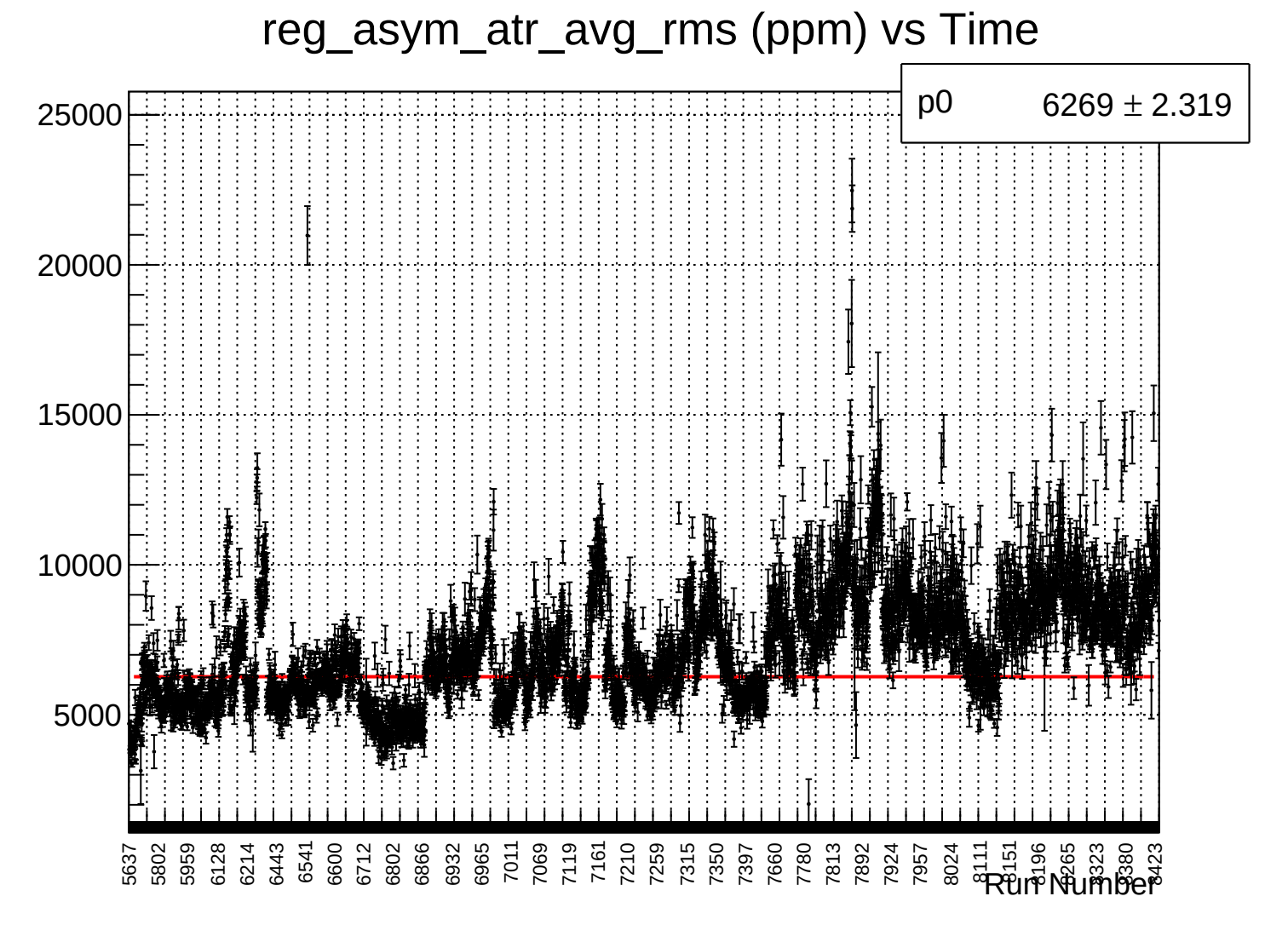

Pull Plot
Entries 5608
Mean −0.000161
Std Dev 0.9671
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 5244 / 5607
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

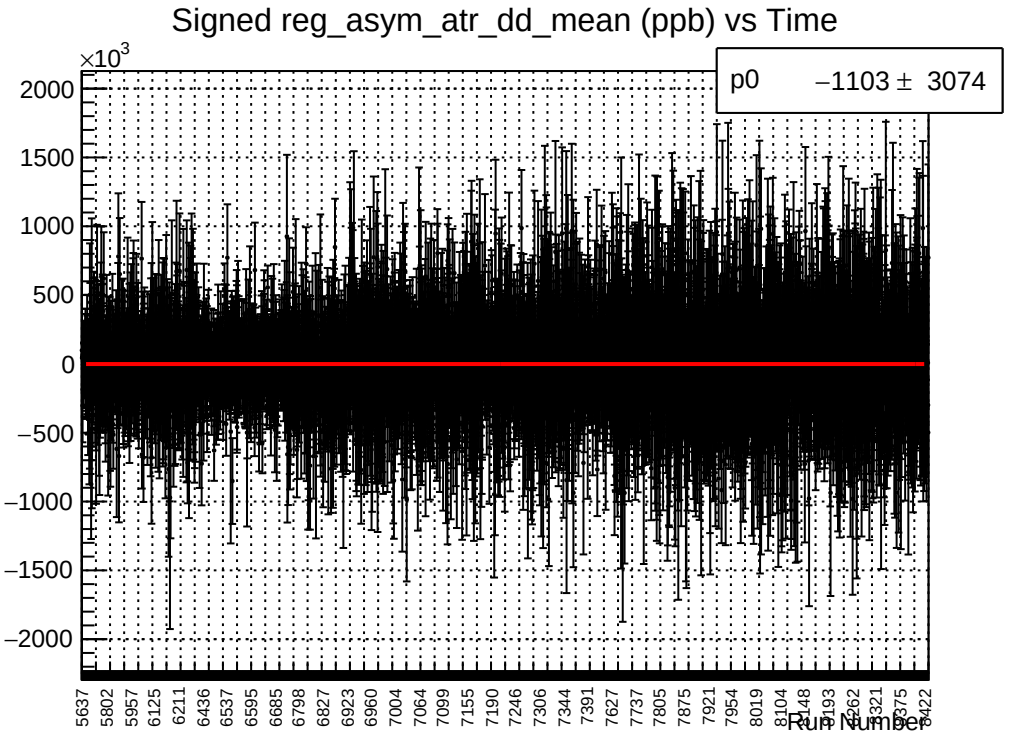

reg_asym_atl_dd_rms (ppm) vs Time
p0 4407 ± 1.662
14000
12000
10000
8000
6000
4000
2000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

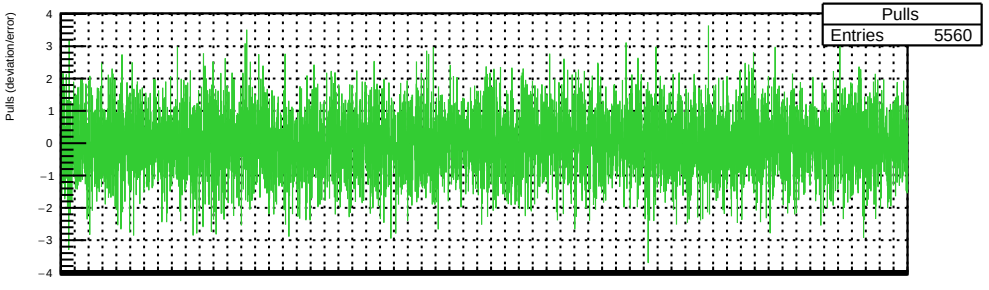

Signed reg_asym_atr_avg_mean (ppb) vs Time
×10^3
2000
1500
1000
500
0
−500
−1000
−1500
−2000
p0 4314 ± 3286
5637 5802 5956 6124 6211 6435 6536 6594 6672 6797 6826 6922 6959 7002 7062 7097 7153 7189 7245 7297 7343 7378 7429 7736 7804 7876 7923 7956 8023 8106 8151 8196 8266 8325 8393 8427
Run Number

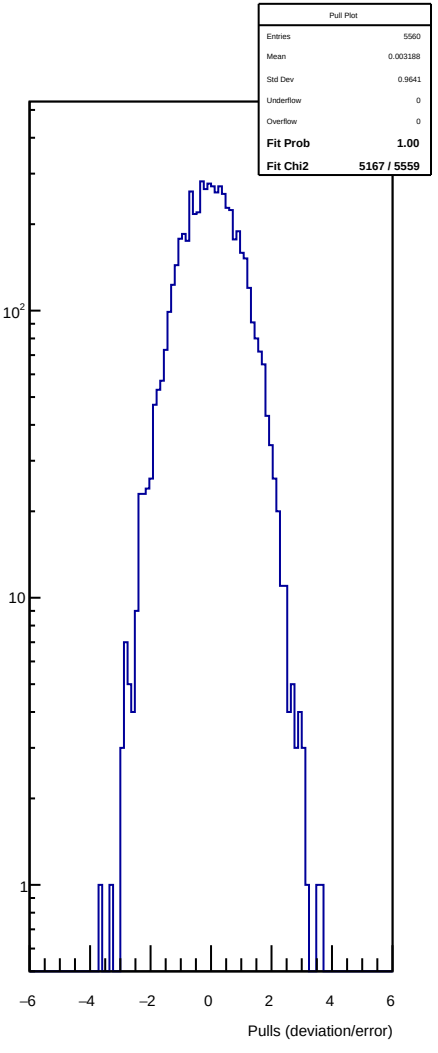

Pulls
Entries 5496
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

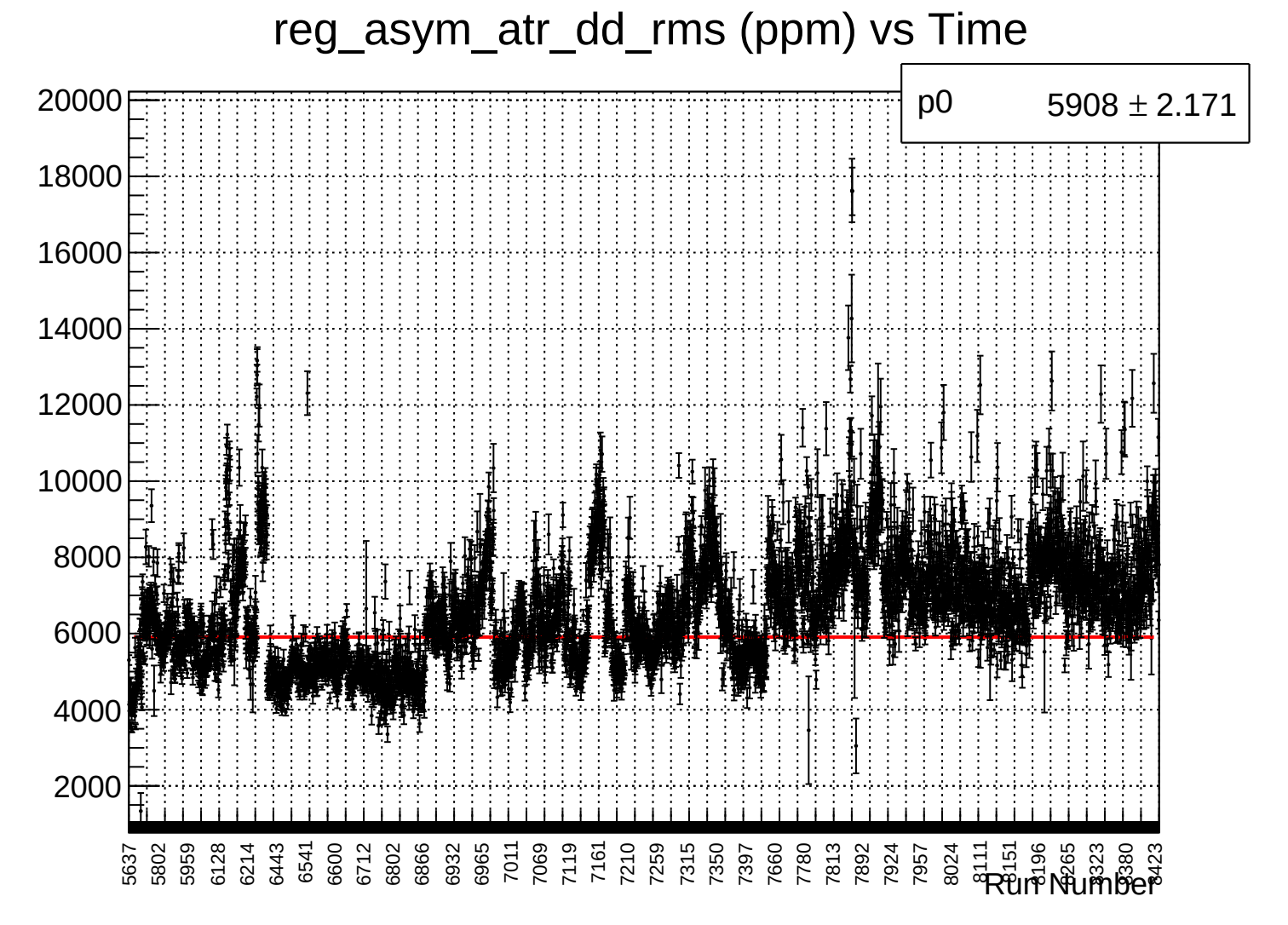

Pull Plot
Entries 5496
Mean −0.0004347
Std Dev 0.9509
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 4969 / 5495
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

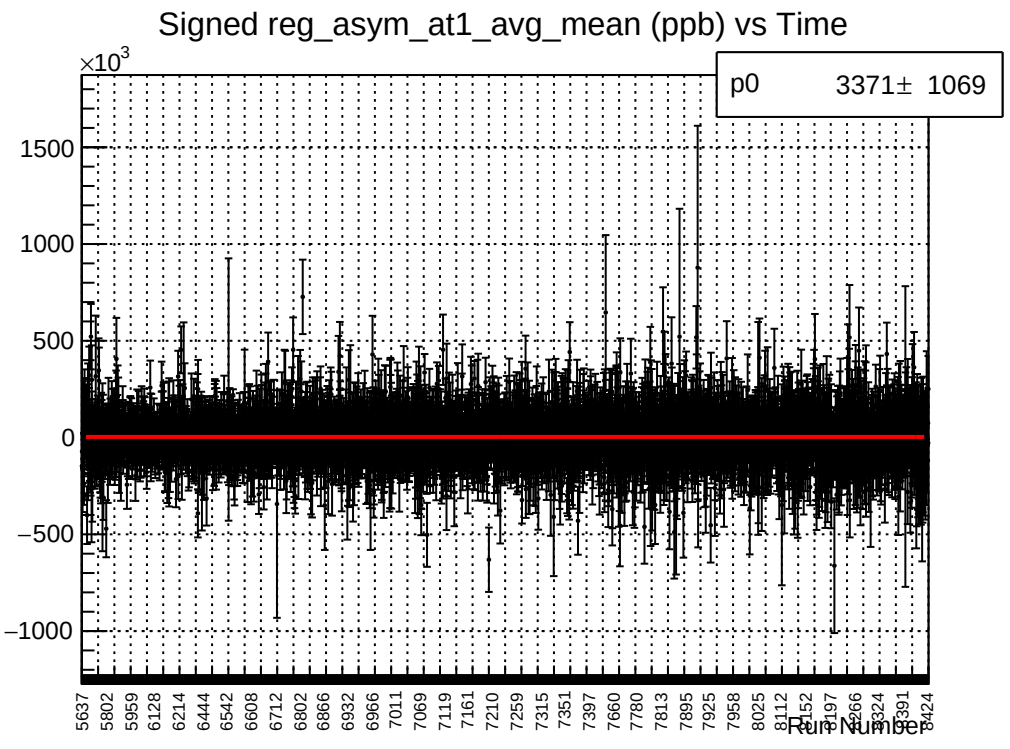

reg_asym_atr_avg_rms (ppm) vs Time
p0 6269 ± 2.319
25000
20000
15000
10000
5000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

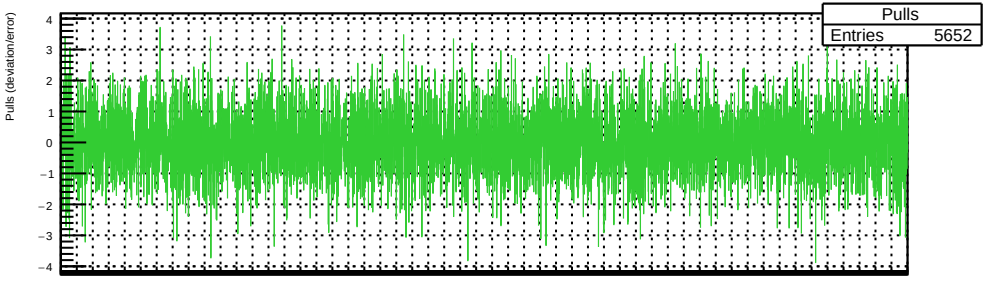

Signed reg_asym_atr_dd_mean (ppb) vs Time
×10^3
p0 −1103 ± 3074
2000
1500
1000
500
0
−500
−1000
−1500
−2000
5637 5802 5957 6125 6211 6436 6537 6595 6685 6798 6827 6923 6960 7004 7064 7099 7155 7190 7246 7306 7344 7391 7627 7737 7805 7875 7921 7954 8019 8104 8148 8193 8262 8321 8375 8422
Run Number

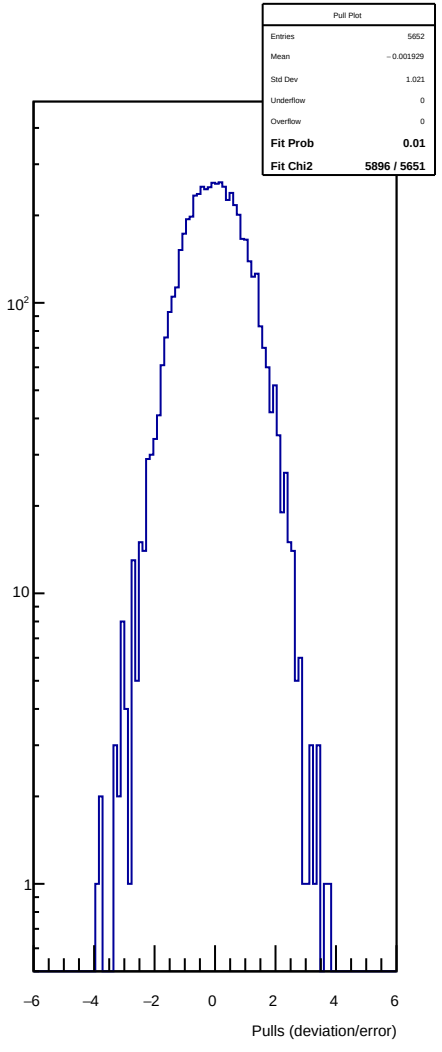

Pulls
Entries 5560
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

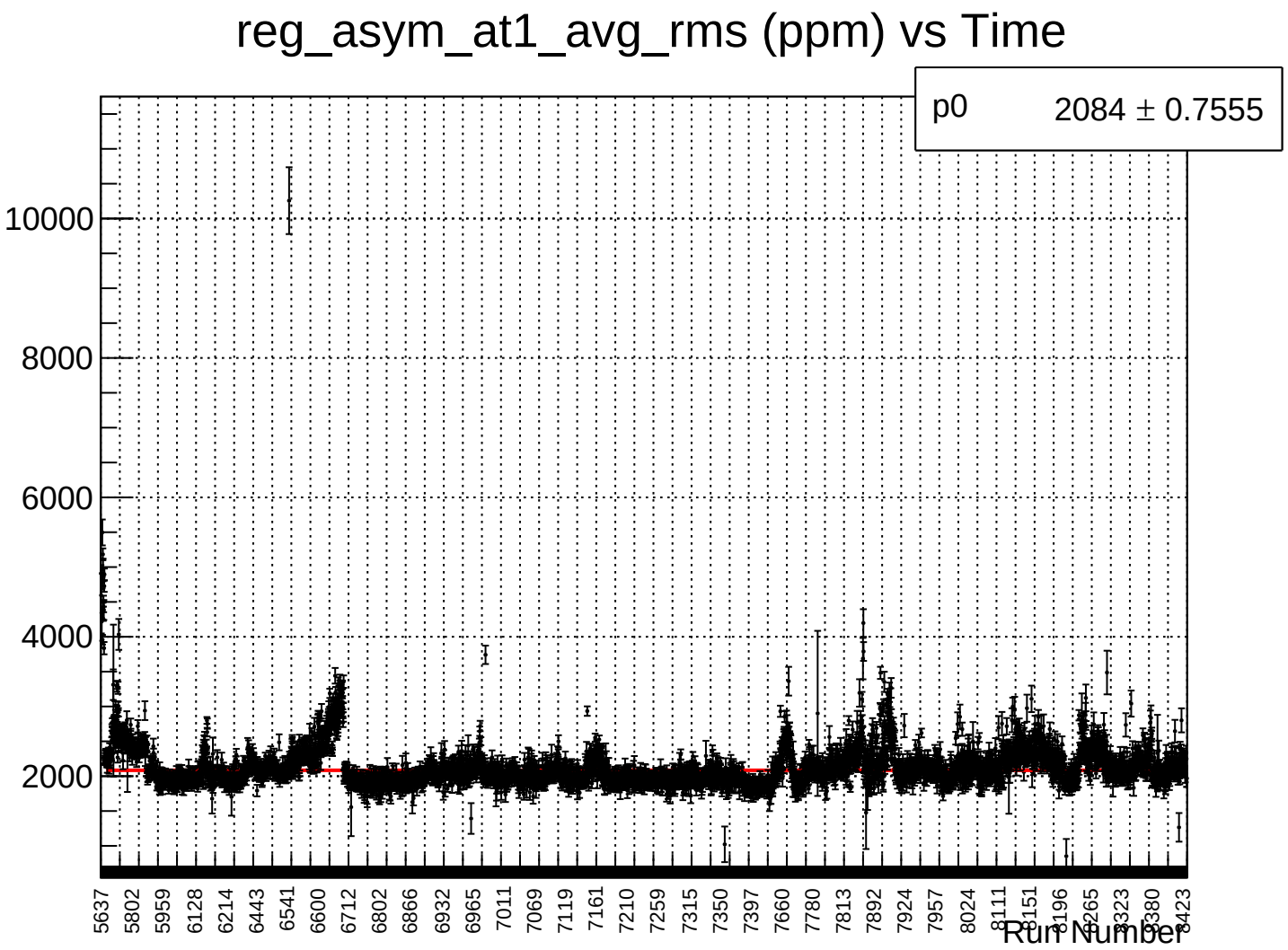

Pull Plot
Entries 5560
Mean 0.003188
Std Dev 0.9641
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 5167 / 5559
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

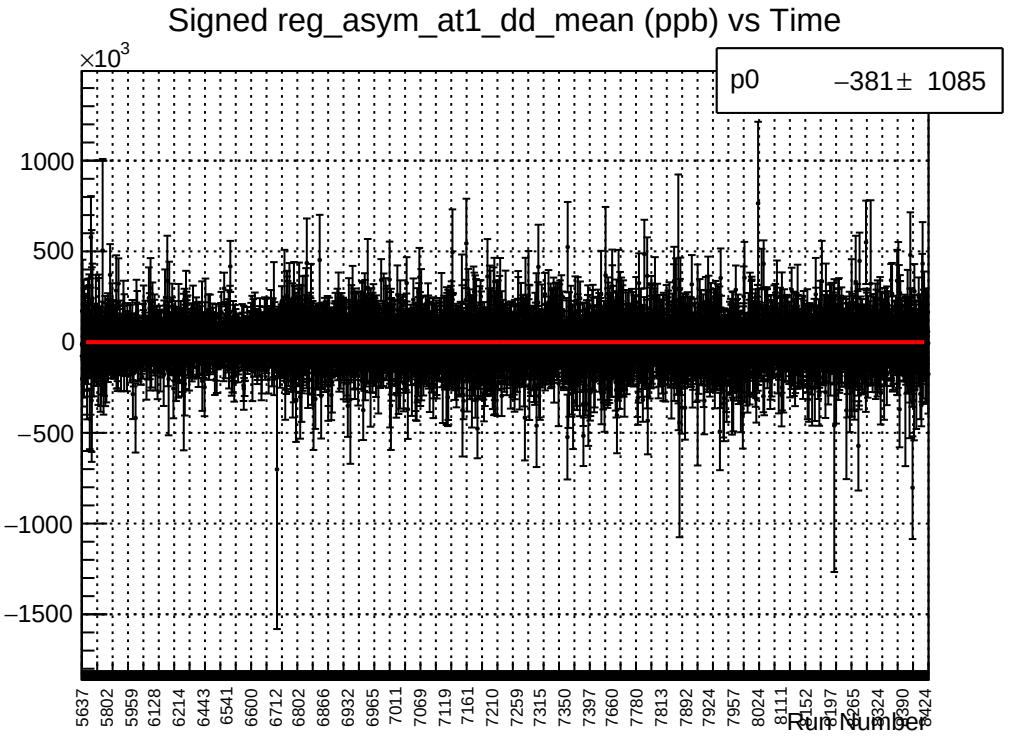

reg_asym_atr_dd_rms (ppm) vs Time
p0 5908 ± 2.171
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

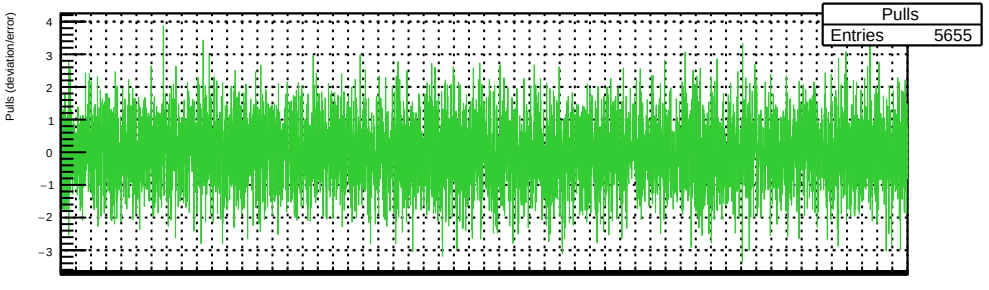

Signed reg_asym_at1_avg_mean (ppb) vs Time
×10^3
p0 3371± 1069
1500
1000
500
0
−500
−1000
5637 5802 5959 6128 6214 6444 6542 6608 6712 6802 6866 6932 6966 7011 7069 7119 7161 7210 7259 7315 7351 7397 7660 7780 7813 7895 7925 7958 8025 8112 8152 8197 8266 8324 8391 8424
Run Number

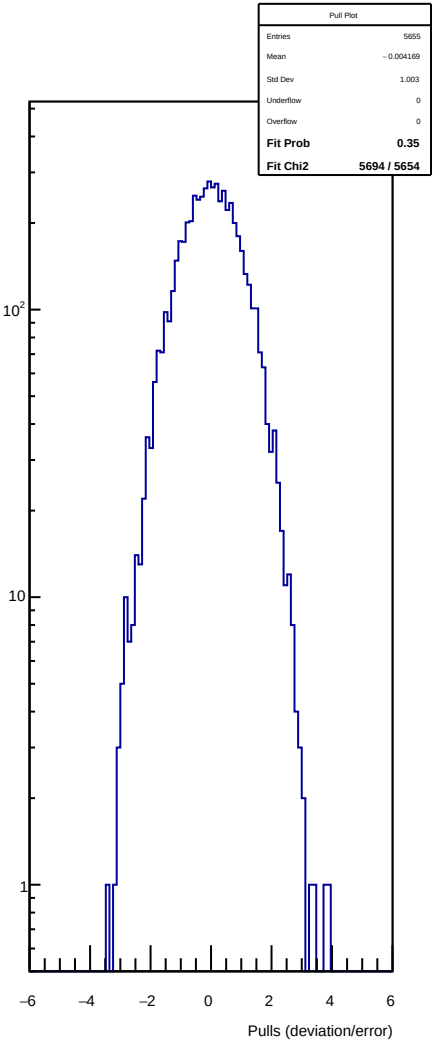

Pulls
Entries 5652
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

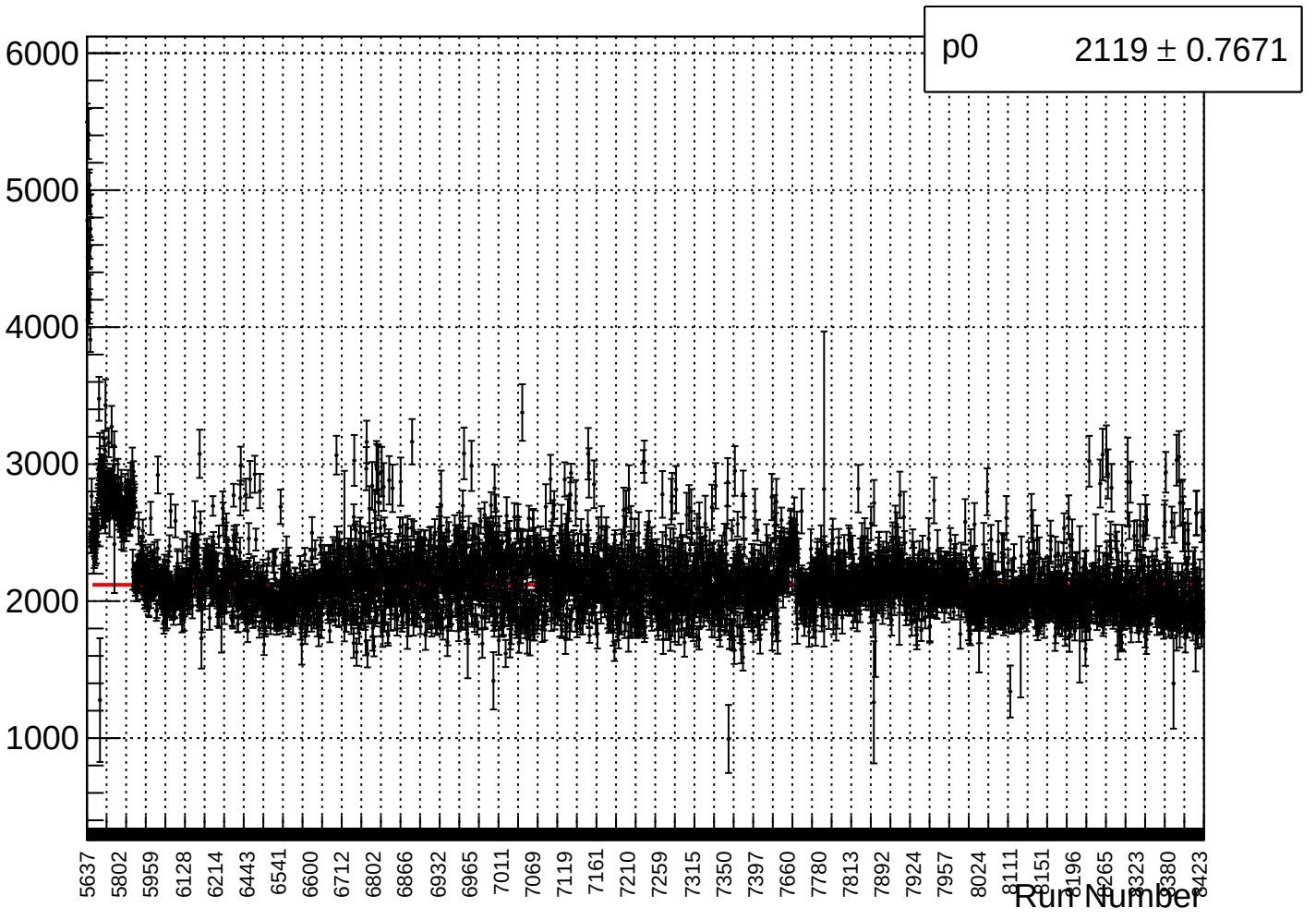

Pull Plot
Entries 5652
Mean −0.001929
Std Dev 1.021
Underflow 0
Overflow 0
Fit Prob 0.01
Fit Chi2 5896 / 5651
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

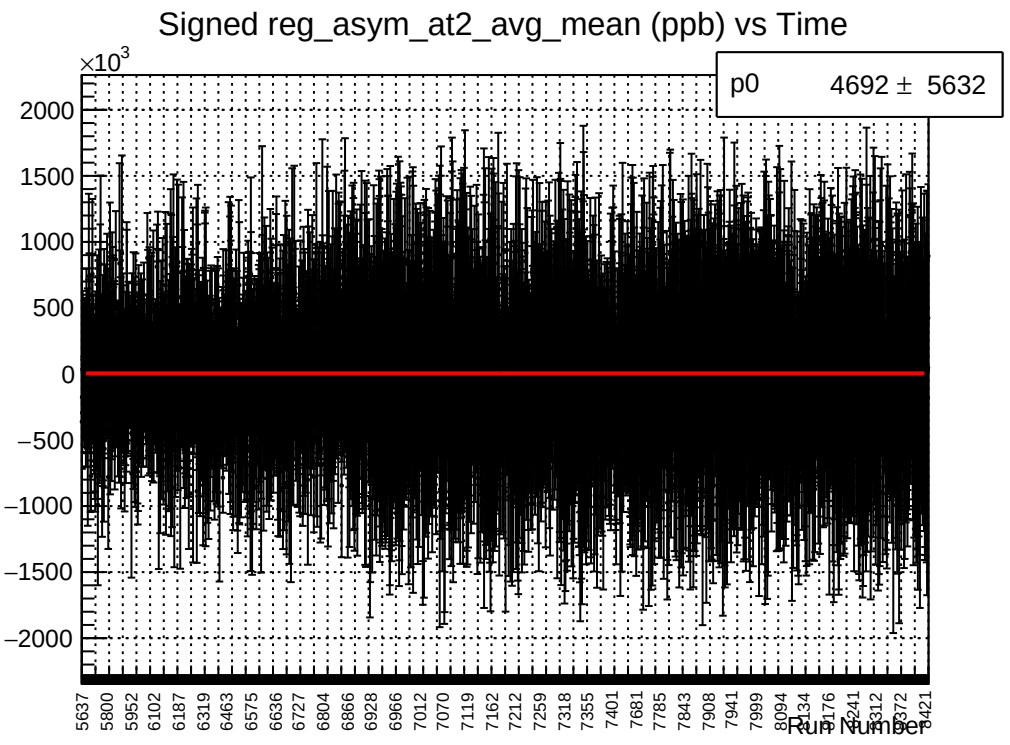

reg_asym_at1_avg_rms (ppm) vs Time
p0 2084 ± 0.7555
10000
8000
6000
4000
2000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

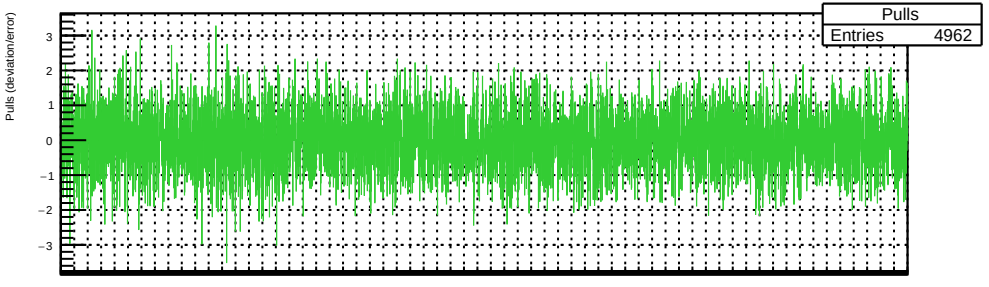

Signed reg_asym_at1_dd_mean (ppb) vs Time
×10^3
p0 −381± 1085
1000
500
0
−500
−1000
−1500
5637 5802 5959 6128 6214 6443 6541 6600 6712 6802 6866 6932 6965 7011 7069 7119 7161 7210 7259 7315 7350 7397 7660 7780 7813 7892 7924 7957 8024 8111 8152 8197 8265 8324 8390 8424
Run Number

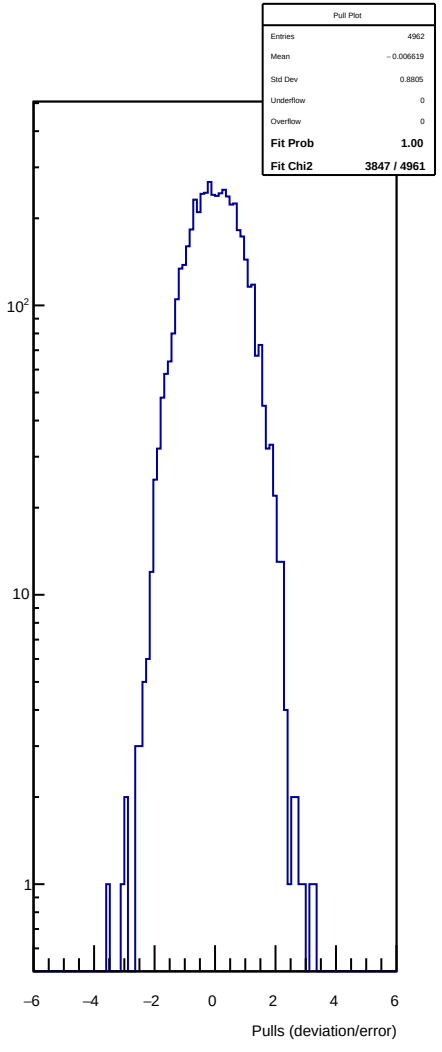

Pulls
Entries 5655
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

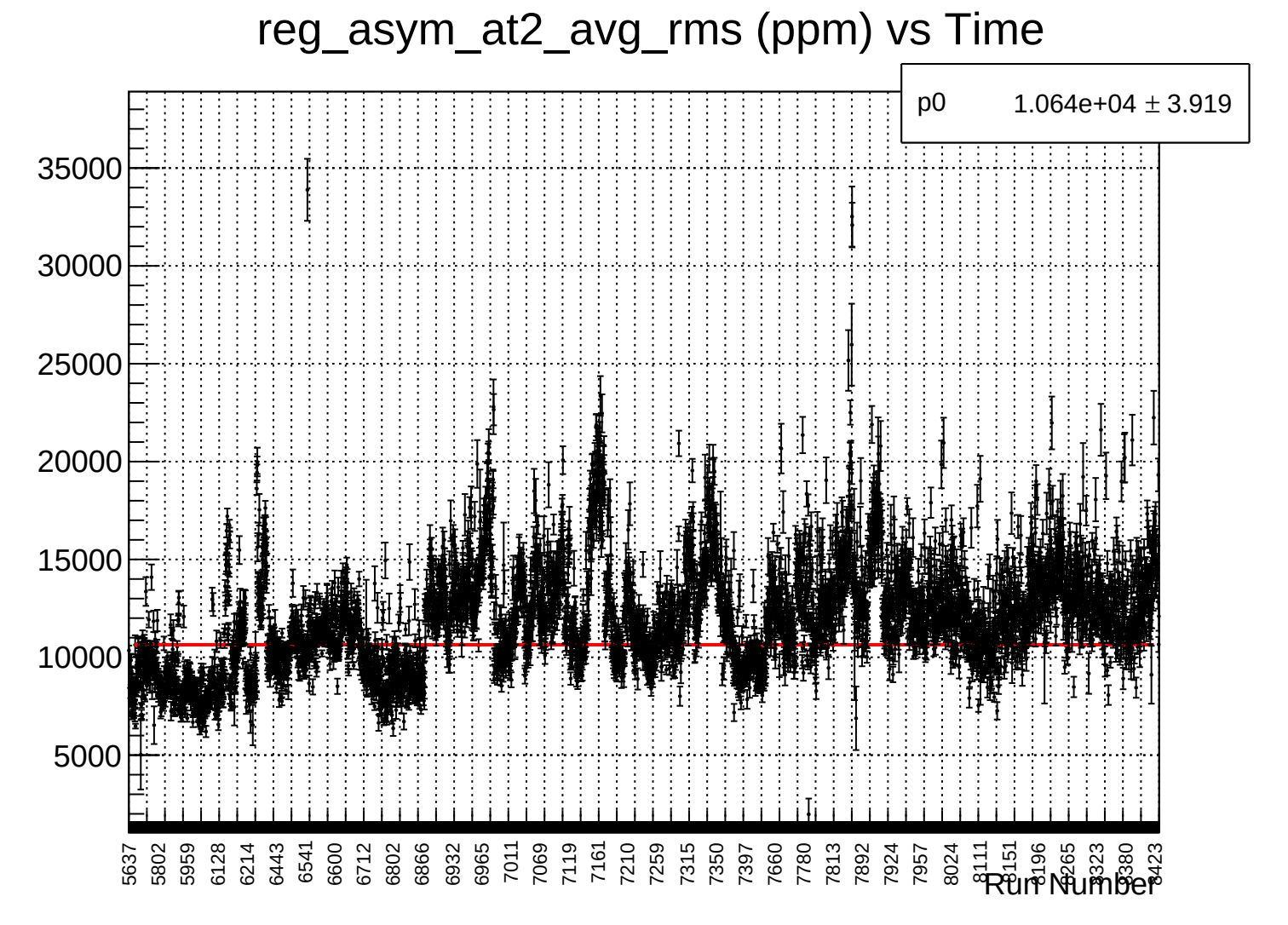

Pull Plot
Entries 5655
Mean −0.004169
Std Dev 1.003
Underflow 0
Overflow 0
Fit Prob 0.35
Fit Chi2 5694 / 5654
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

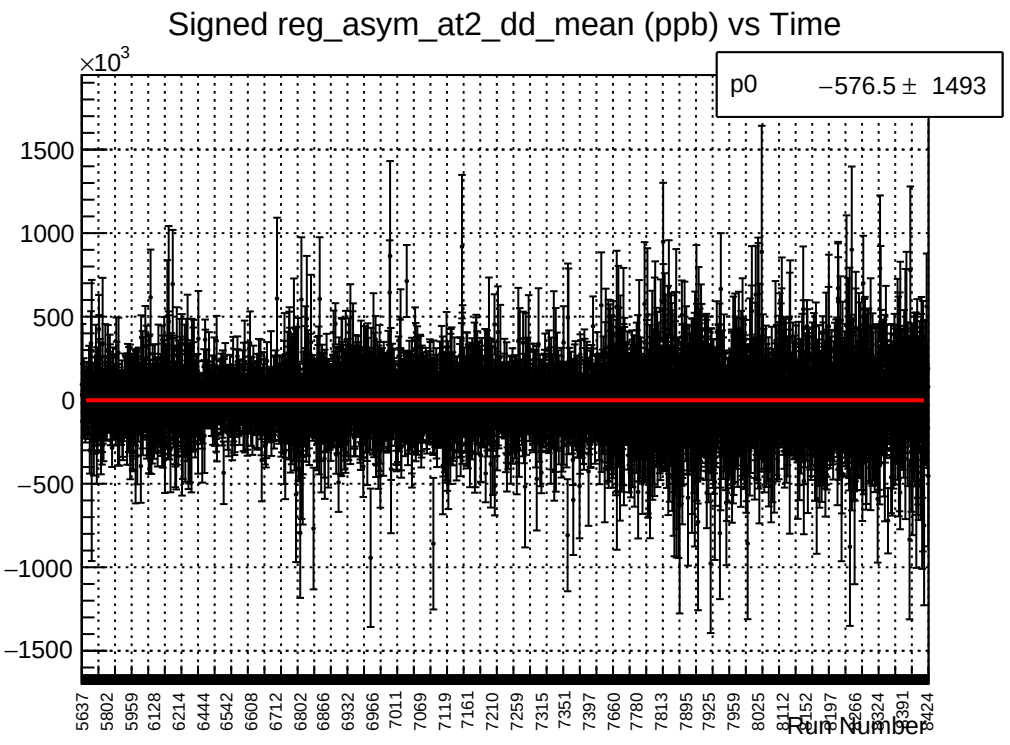

reg_asym_at1_dd_rms (ppm) vs Time
p0 2119 ± 0.7671
6000
5000
4000
3000
2000
1000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

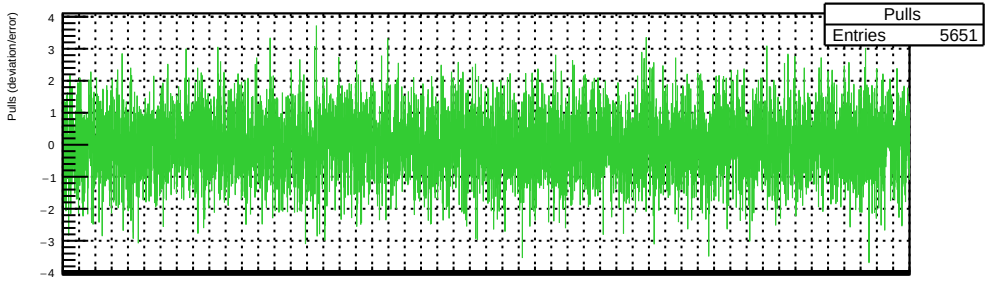

Signed reg_asym_at2_avg_mean (ppb) vs Time
×10^3
p0 4692 ± 5632
2000
1500
1000
500
0
−500
−1000
−1500
−2000
5637 5800 5952 6102 6187 6319 6463 6575 6636 6727 6804 6866 6928 6966 7012 7070 7119 7162 7212 7259 7318 7355 7401 7681 7785 7843 7908 7941 7999 8094 8134 8176 8241 8312 8372 8421
Run Number

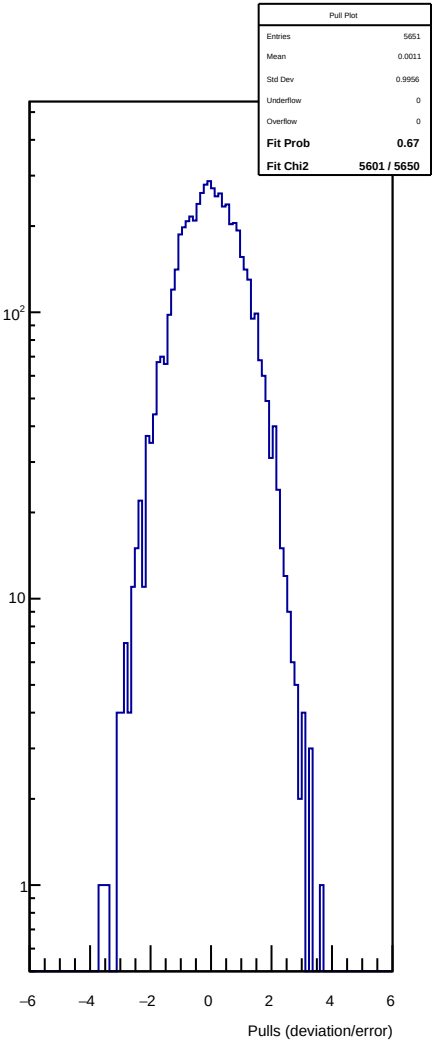

Pulls
Entries 4962
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

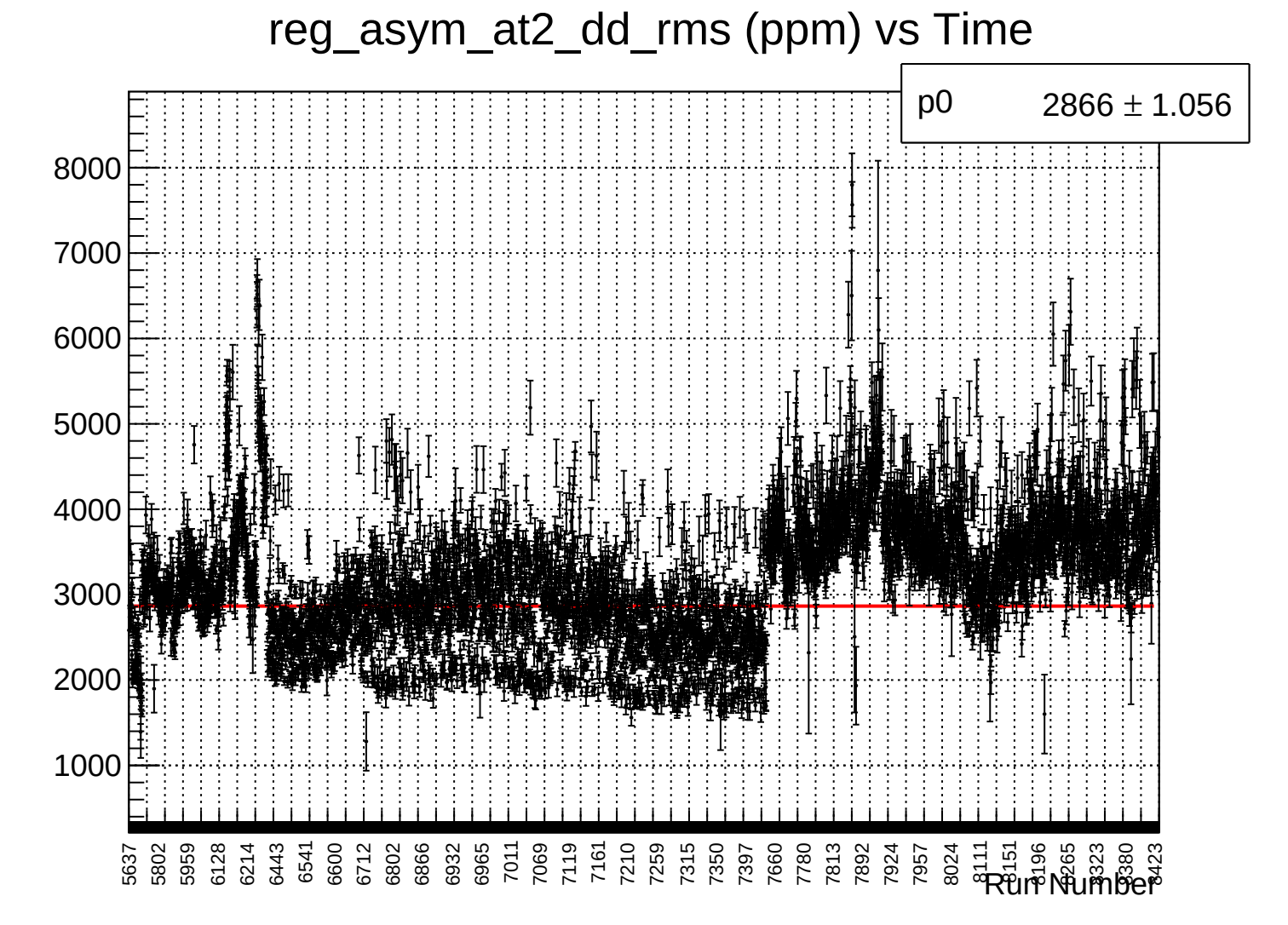

Pull Plot
Entries 4962
Mean −0.006619
Std Dev 0.8805
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 3847 / 4961
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

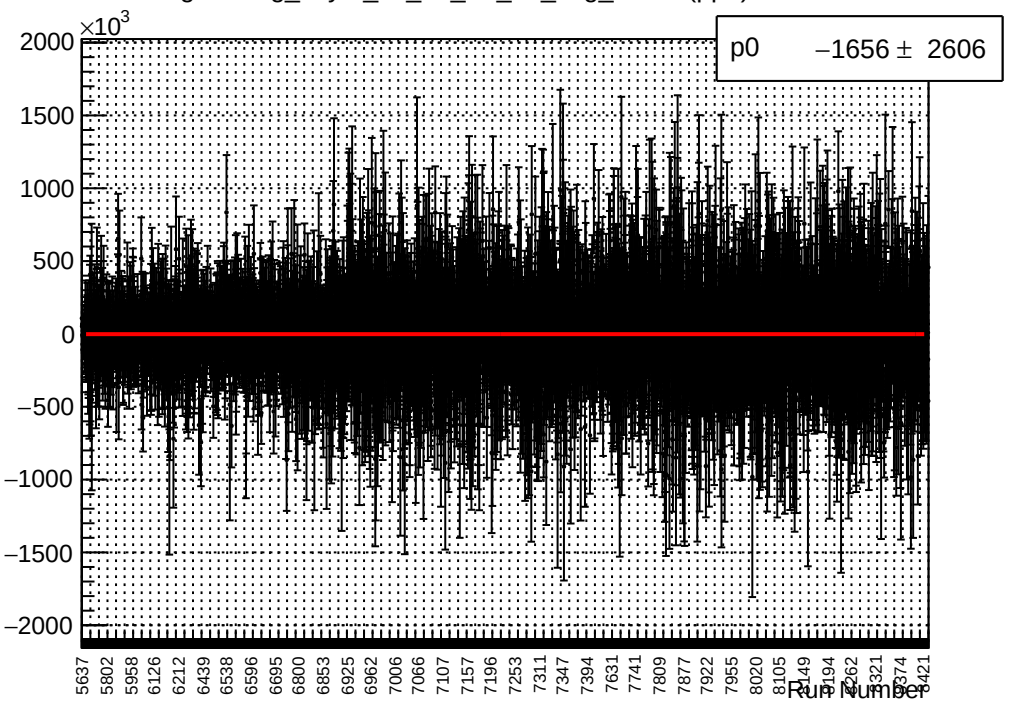

reg_asym_at2_avg_rms (ppm) vs Time
p0 1.064e+04 ± 3.919
35000
30000
25000
20000
15000
10000
5000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

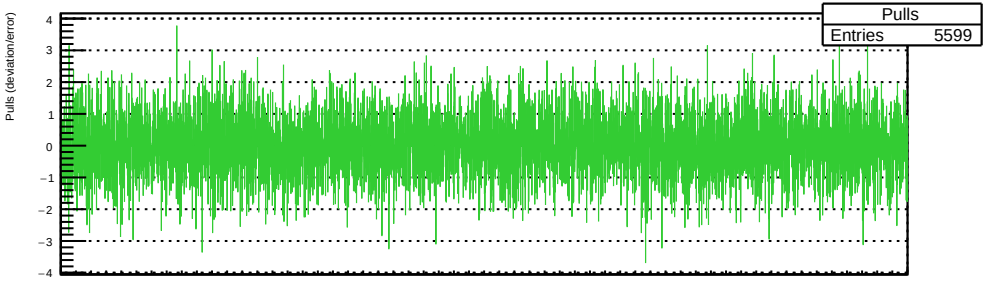

Signed reg_asym_at2_dd_mean (ppb) vs Time
×10^3
p0 −576.5 ± 1493
1500
1000
500
0
−500
−1000
−1500
5637 5802 5959 6128 6214 6444 6542 6608 6712 6802 6866 6932 6966 7011 7069 7119 7161 7210 7259 7315 7351 7397 7660 7780 7813 7895 7925 7959 8025 8112 8152 8197 8266 8324 8391 8424
Run Number

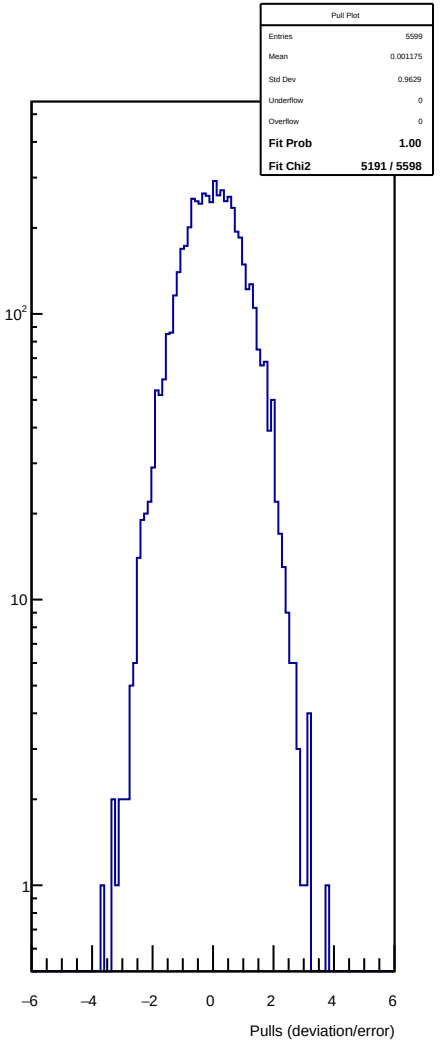

Pulls
Entries 5651
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

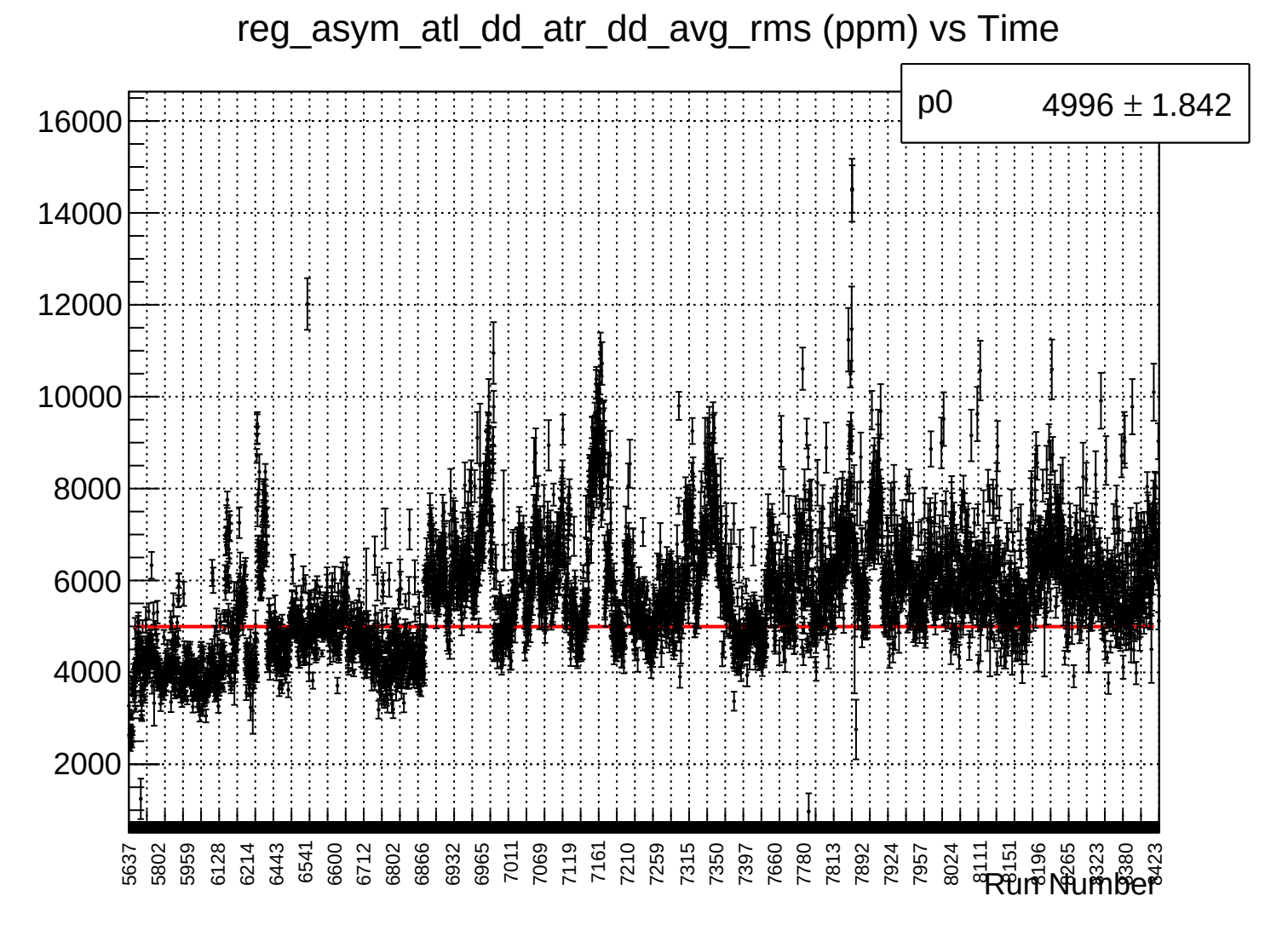

Pull Plot
Entries 5651
Mean 0.0011
Std Dev 0.9956
Underflow 0
Overflow 0
Fit Prob 0.67
Fit Chi2 5601 / 5650
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

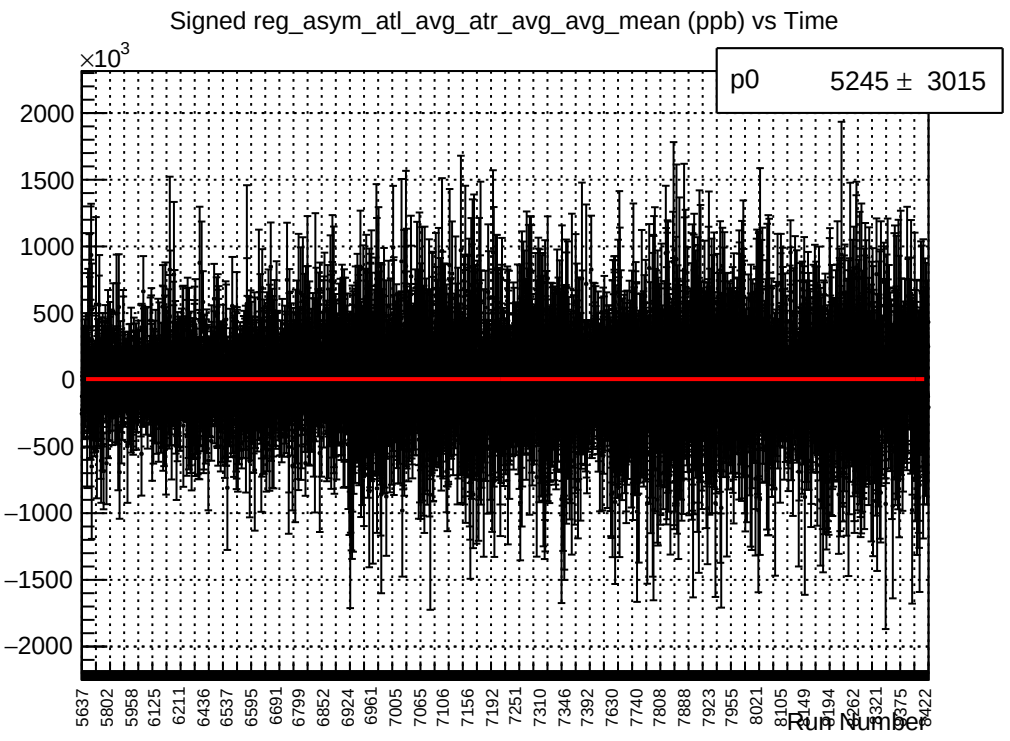

reg_asym_at2_dd_rms (ppm) vs Time
p0 2866 ± 1.056
8000
7000
6000
5000
4000
3000
2000
1000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

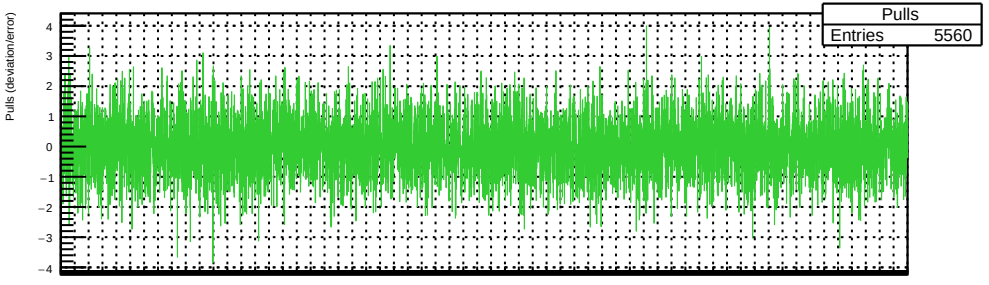

Signed reg_asym_atl_dd_atr_dd_avg_mean (ppb) vs Time
×10^3
p0 −1656 ± 2606
2000
1500
1000
500
0
−500
−1000
−1500
−2000
5637 5802 5958 6126 6212 6439 6538 6596 6695 6800 6853 6925 6962 7006 7066 7107 7157 7196 7253 7311 7347 7394 7631 7741 7809 7877 7922 7955 8020 8105 8149 8194 8262 8321 8374 8421
Run Number

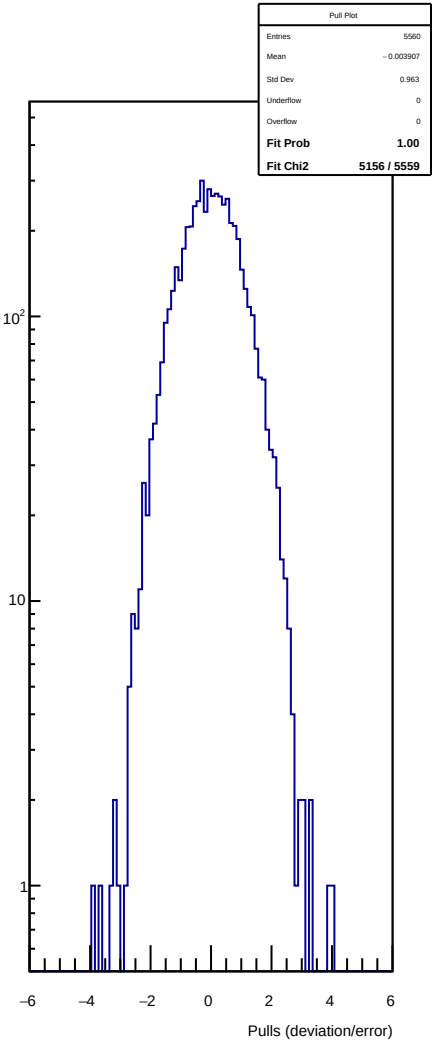

Pulls
Entries 5599
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

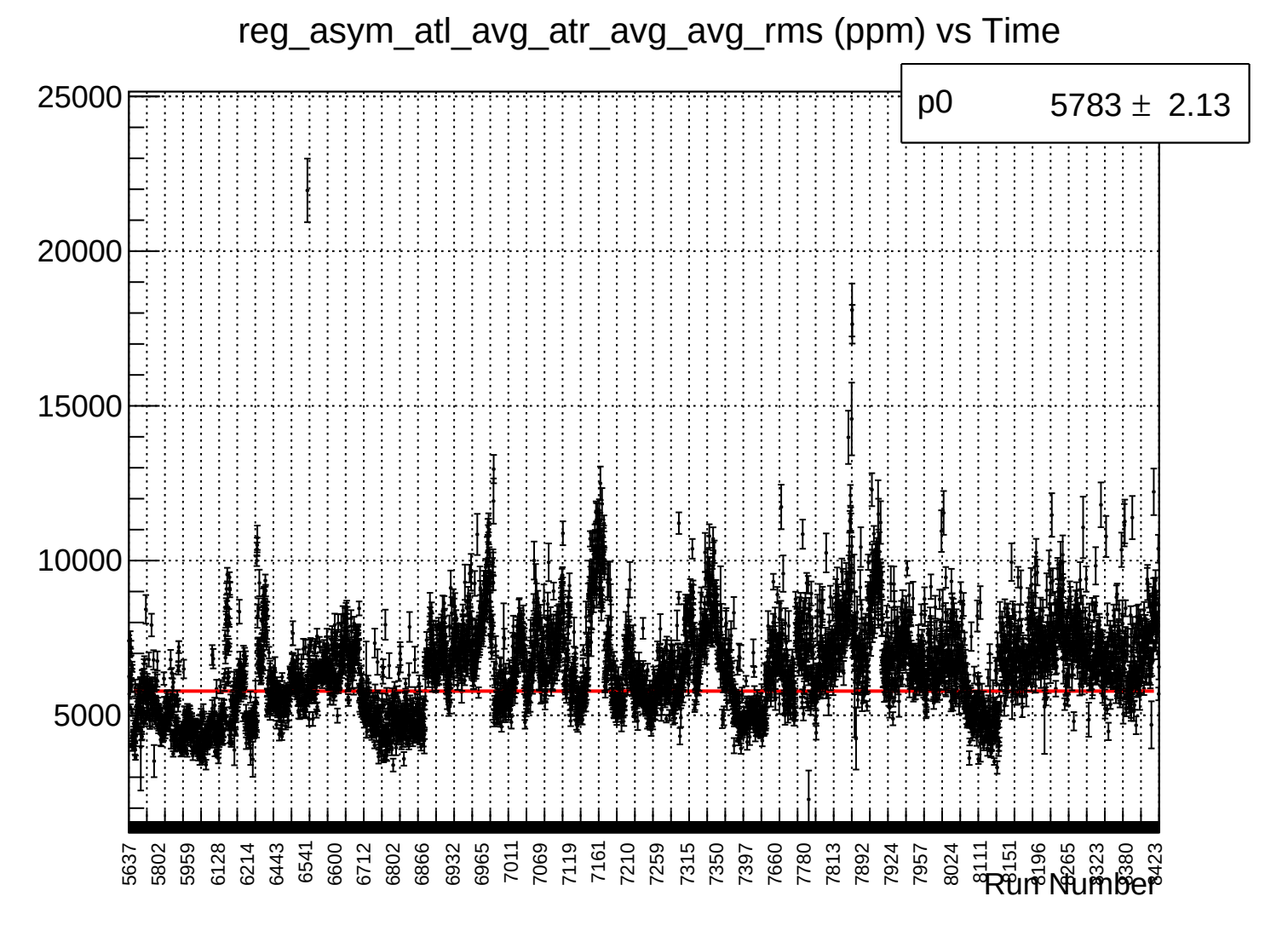

Pull Plot
Entries 5599
Mean 0.001175
Std Dev 0.9629
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 5191 / 5598
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

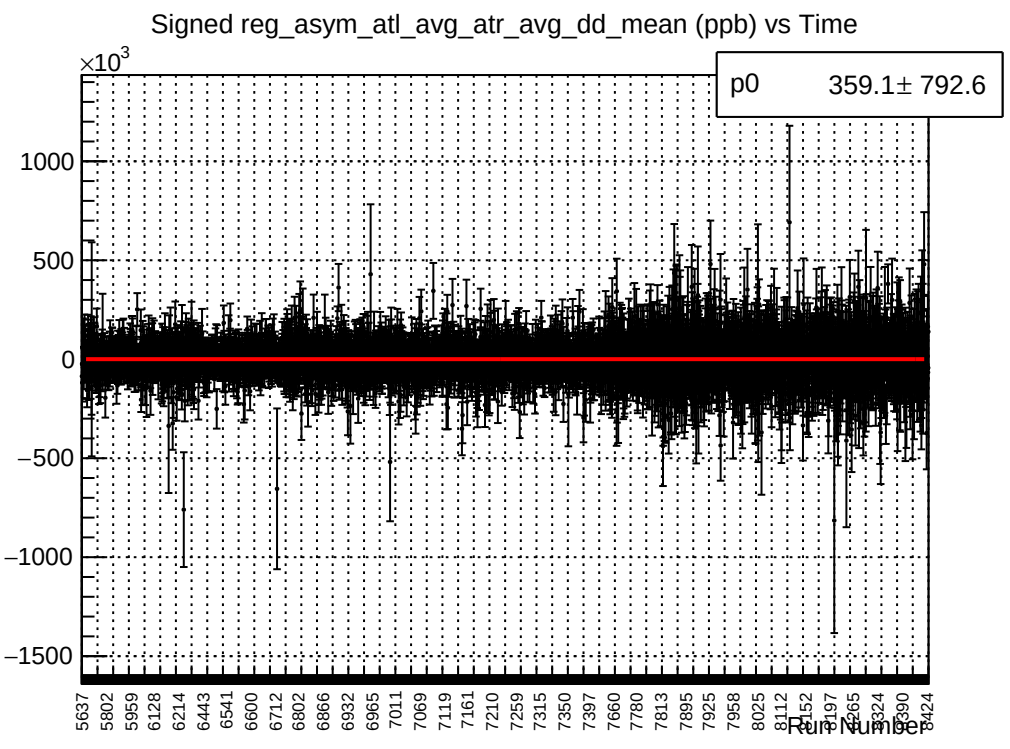

reg_asym_atl_dd_atr_dd_avg_rms (ppm) vs Time
p0 4996 ± 1.842
16000
14000
12000
10000
8000
6000
4000
2000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

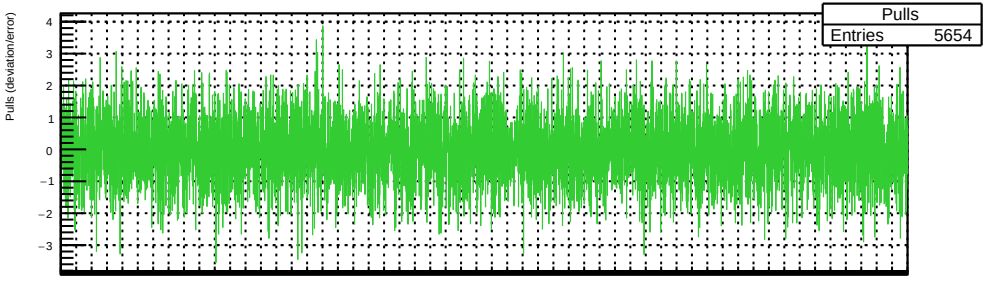

Signed reg_asym_atl_avg_atr_avg_avg_mean (ppb) vs Time
×10^3
p0 5245 ± 3015
2000
1500
1000
500
0
−500
−1000
−1500
−2000
5637 5802 5958 6125 6211 6436 6537 6595 6691 6799 6852 6924 6961 7005 7065 7106 7156 7192 7251 7310 7346 7392 7630 7740 7808 7888 7923 7955 8021 8105 8149 8194 8262 8321 8375 8422
Run Number

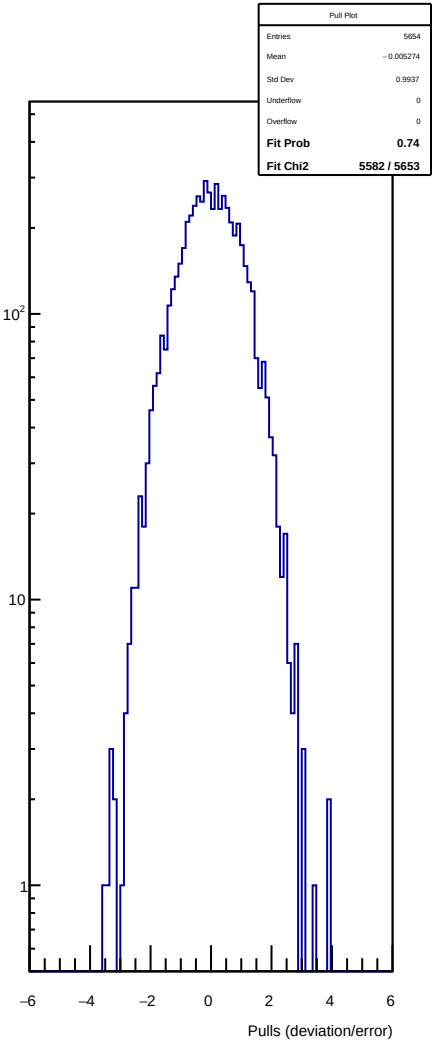

Pulls
Entries 5560
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

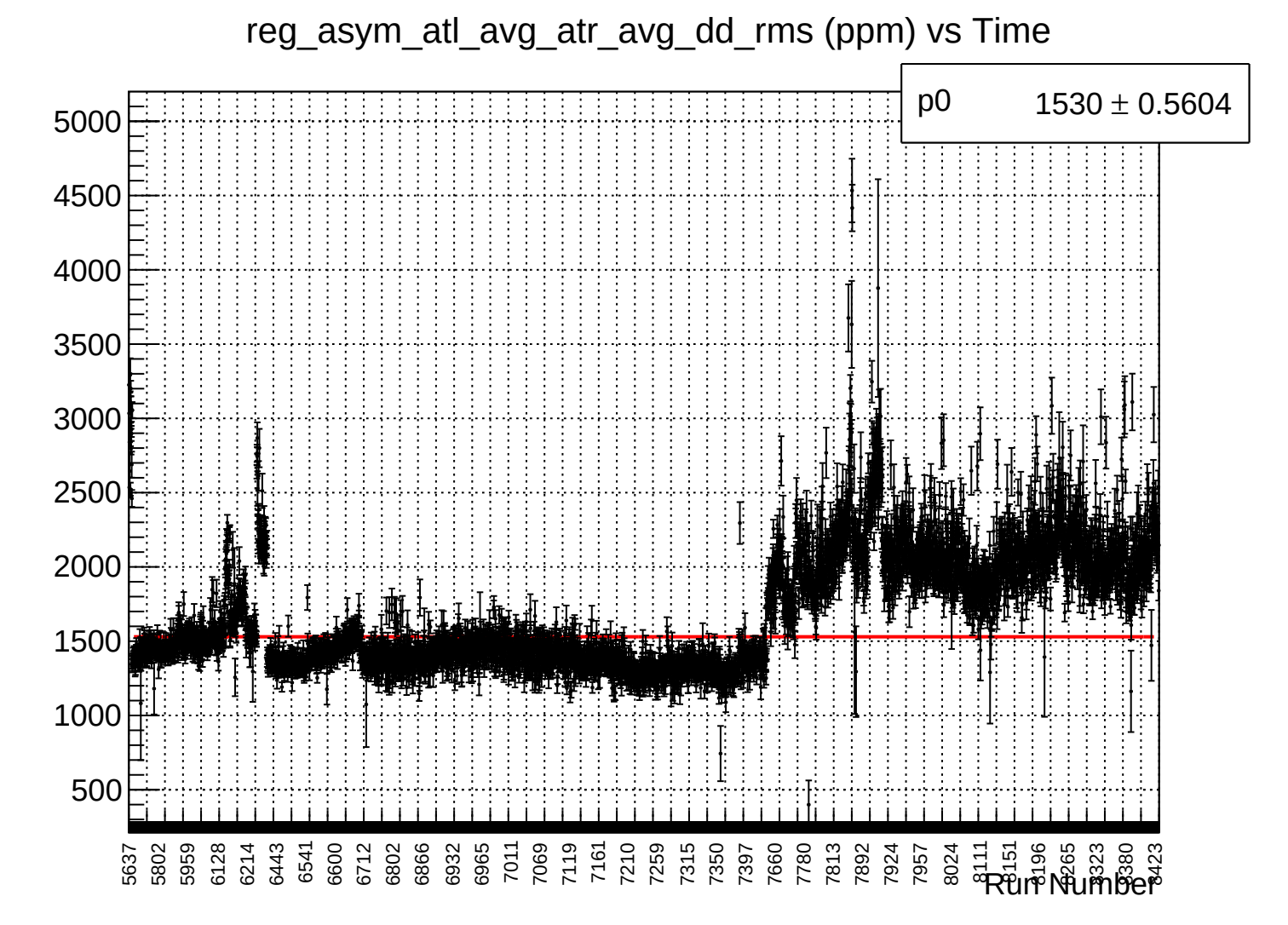

Pull Plot
Entries 5560
Mean −0.003907
Std Dev 0.963
Underflow 0
Overflow 0
Fit Prob 1.00
Fit Chi2 5156 / 5559
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

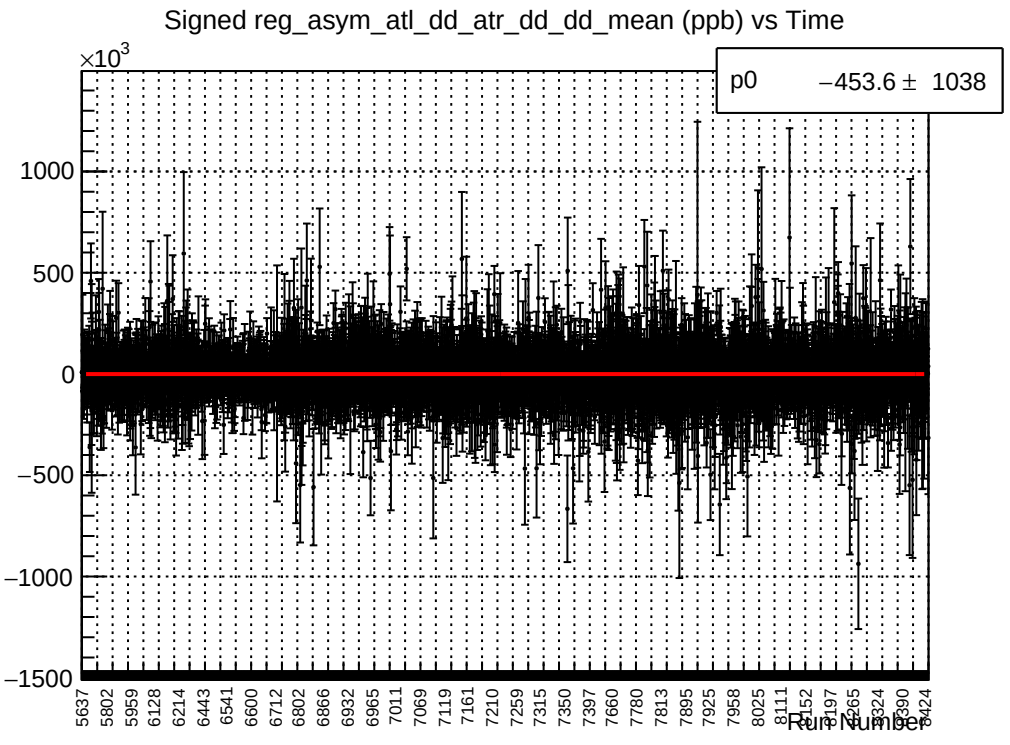

reg_asym_atl_avg_atr_avg_avg_rms (ppm) vs Time
p0 5783 ± 2.13
25000
20000
15000
10000
5000
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

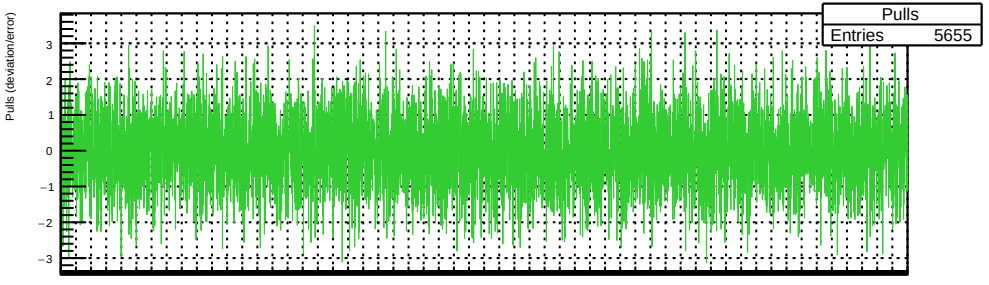

Signed reg_asym_atl_avg_atr_avg_dd_mean (ppb) vs Time
×10^3
p0 359.1± 792.6
1000
500
0
−500
−1000
−1500
5637 5802 5959 6128 6214 6443 6541 6600 6712 6802 6866 6932 6965 7011 7069 7119 7161 7210 7259 7315 7350 7397 7660 7780 7813 7895 7925 7958 8025 8112 8152 8197 8265 8324 8390 8424
Run Number

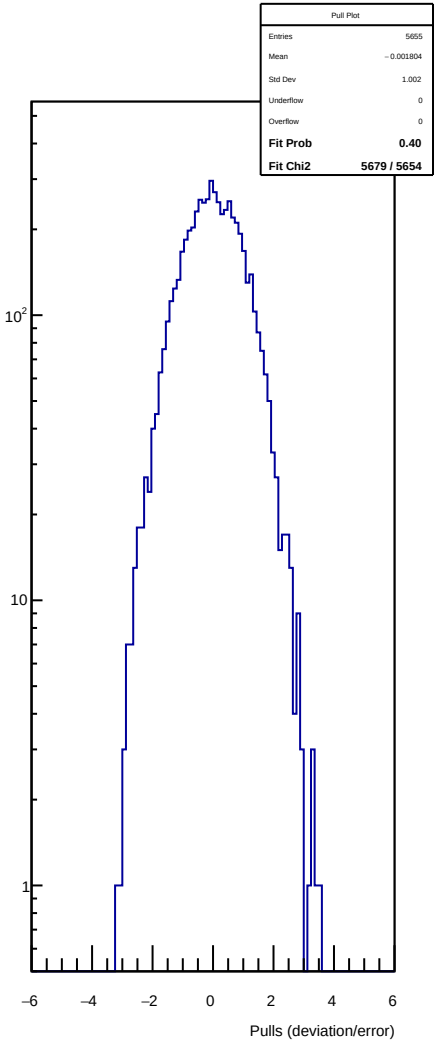

Pulls
Entries 5654
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3

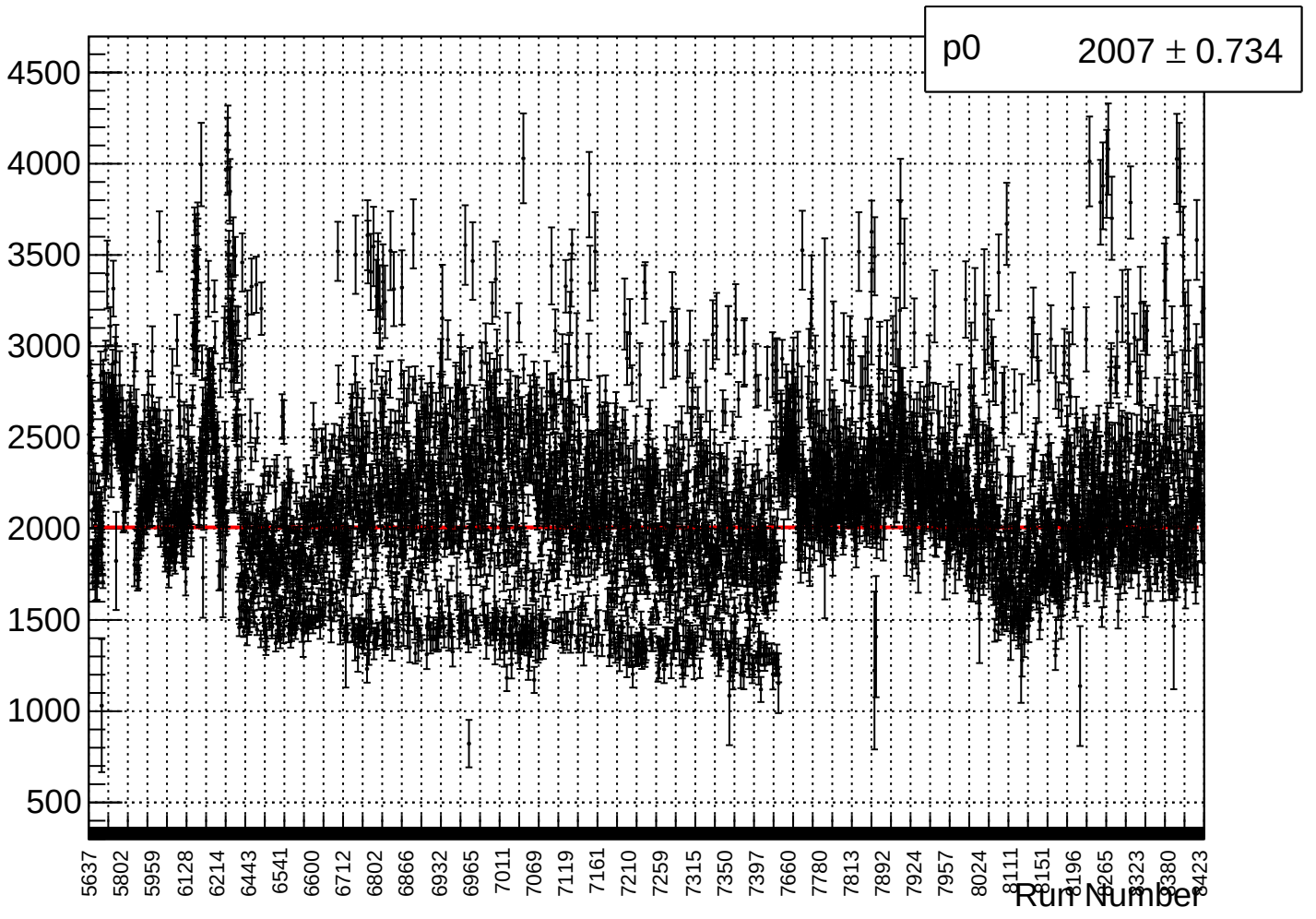

Pull Plot
Entries 5654
Mean −0.005274
Std Dev 0.9937
Underflow 0
Overflow 0
Fit Prob 0.74
Fit Chi2 5582 / 5653
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

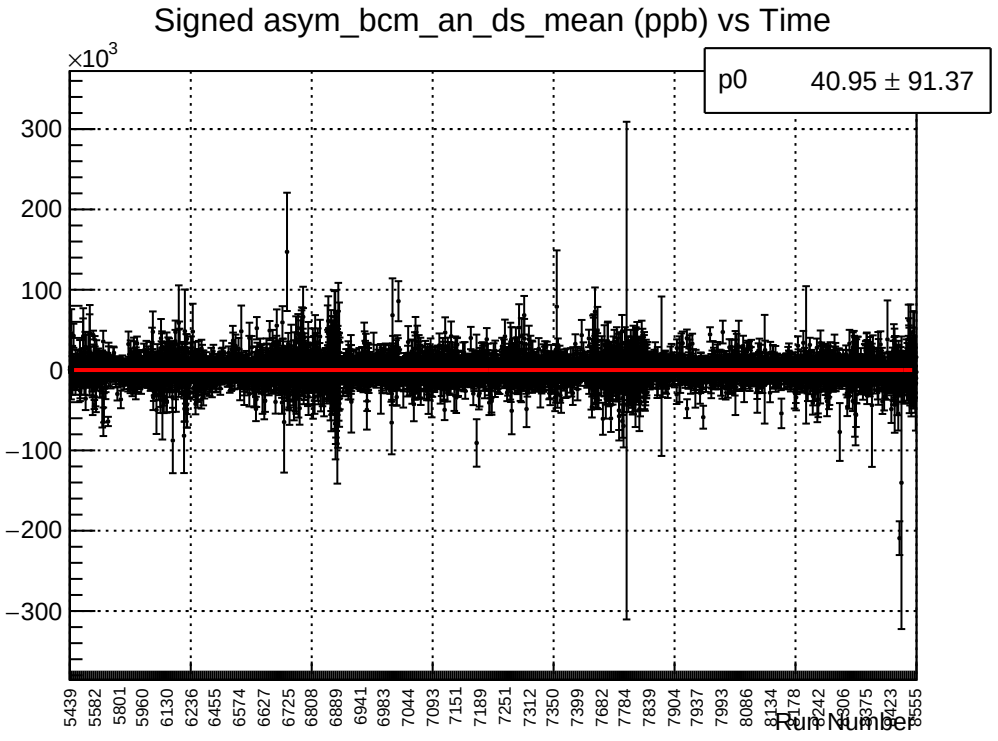

reg_asym_atl_avg_atr_avg_dd_rms (ppm) vs Time
p0 1530 ± 0.5604
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

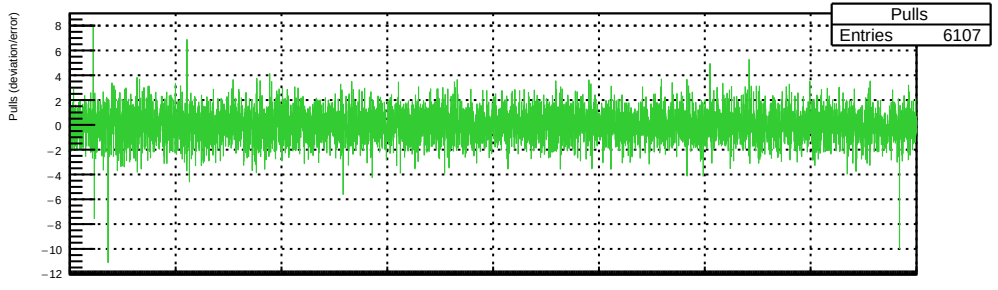

Signed reg_asym_atl_dd_atr_dd_dd_mean (ppb) vs Time
×10^3
p0 −453.6 ± 1038
1000
500
0
−500
−1000
−1500
5637 5802 5959 6128 6214 6443 6541 6600 6712 6802 6866 6932 6965 7011 7069 7119 7161 7210 7259 7315 7350 7397 7660 7780 7813 7895 7925 7958 8025 8111 8152 8197 8265 8324 8390 8424
Run Number

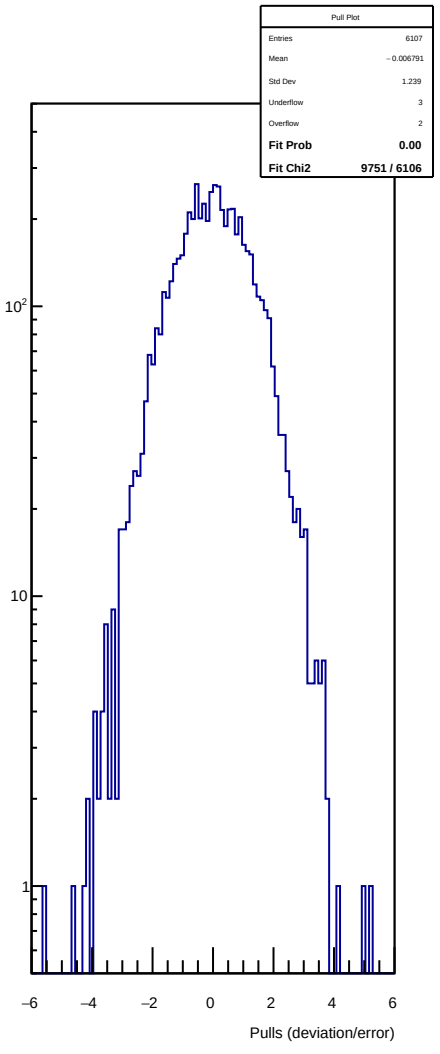

Pulls
Entries 5655
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

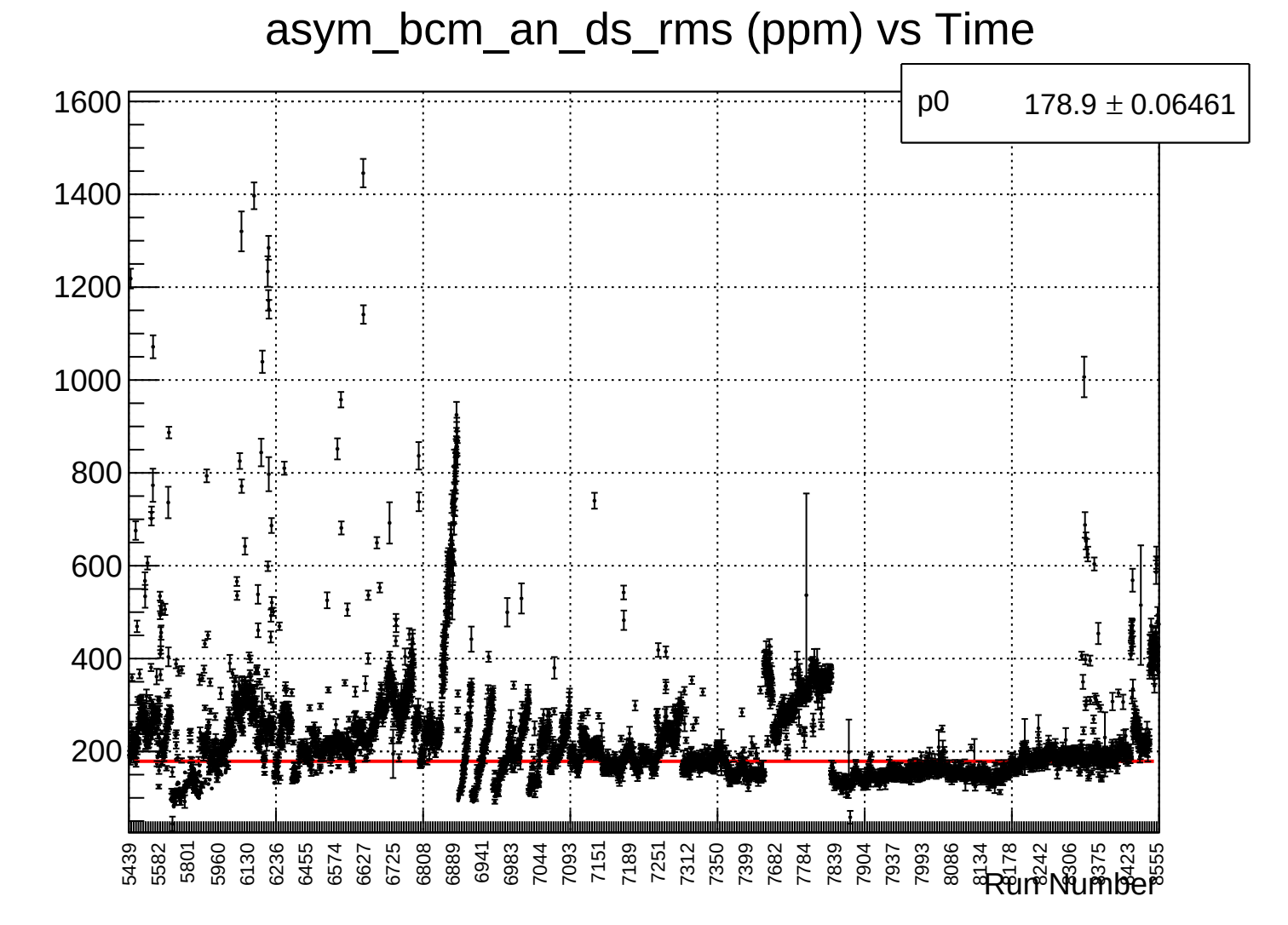

Pull Plot
Entries 5655
Mean −0.001804
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.40
Fit Chi2 5679 / 5654
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

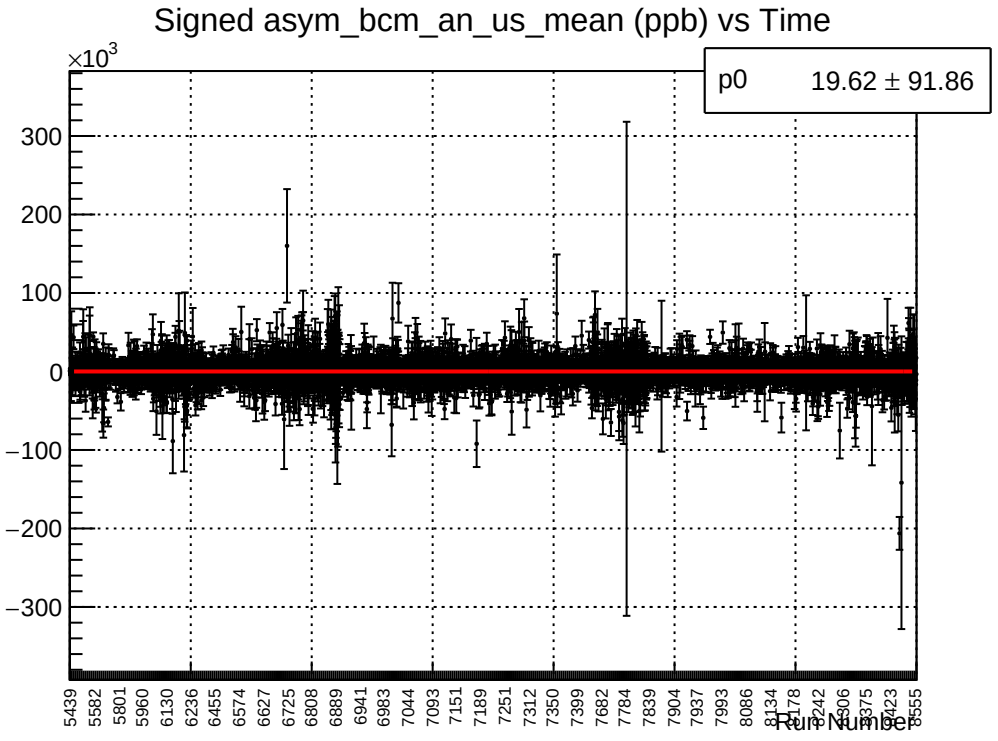

reg_asym_atl_dd_atr_dd_dd_rms (ppm) vs Time
p0 2007 ± 0.734
4500
4000
3500
3000
2500
2000
1500
1000
500
5637
5802
5959
6128
6214
6443
6541
6600
6712
6802
6866
6932
6965
7011
7069
7119
7161
7210
7259
7315
7350
7397
7660
7780
7813
7892
7924
7957
8024
8111
8151
8196
8265
8323
8380
8423
Run Number

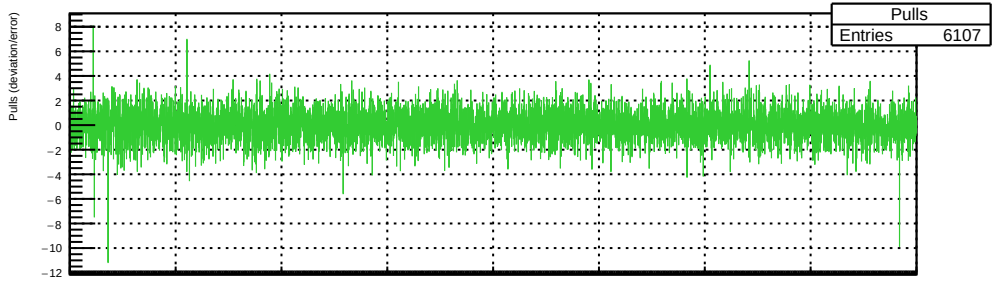

Signed asym_bcm_an_ds_mean (ppb) vs Time
×10^3
p0 40.95 ± 91.37
300
200
100
0
−100
−200
−300
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

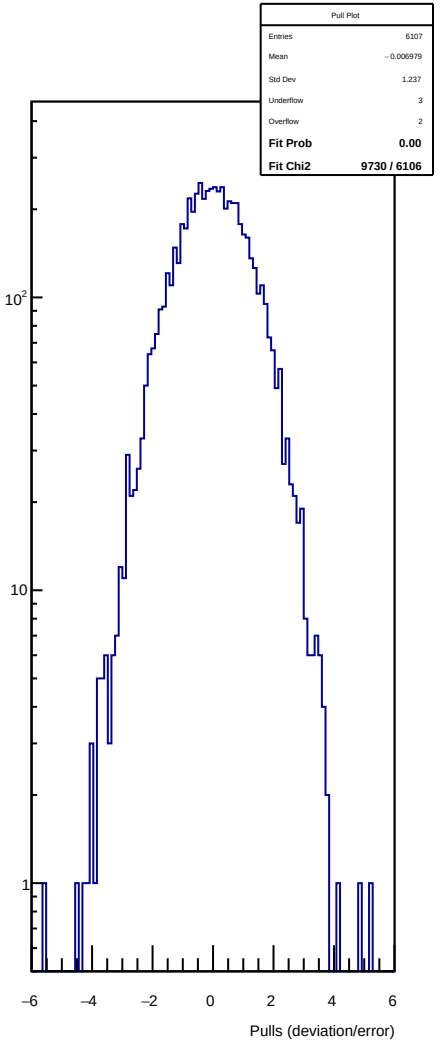

Pulls
Entries 6107
Pulls (deviation/error)
8
6
4
2
0
−2
−4
−6
−8
−10
−12

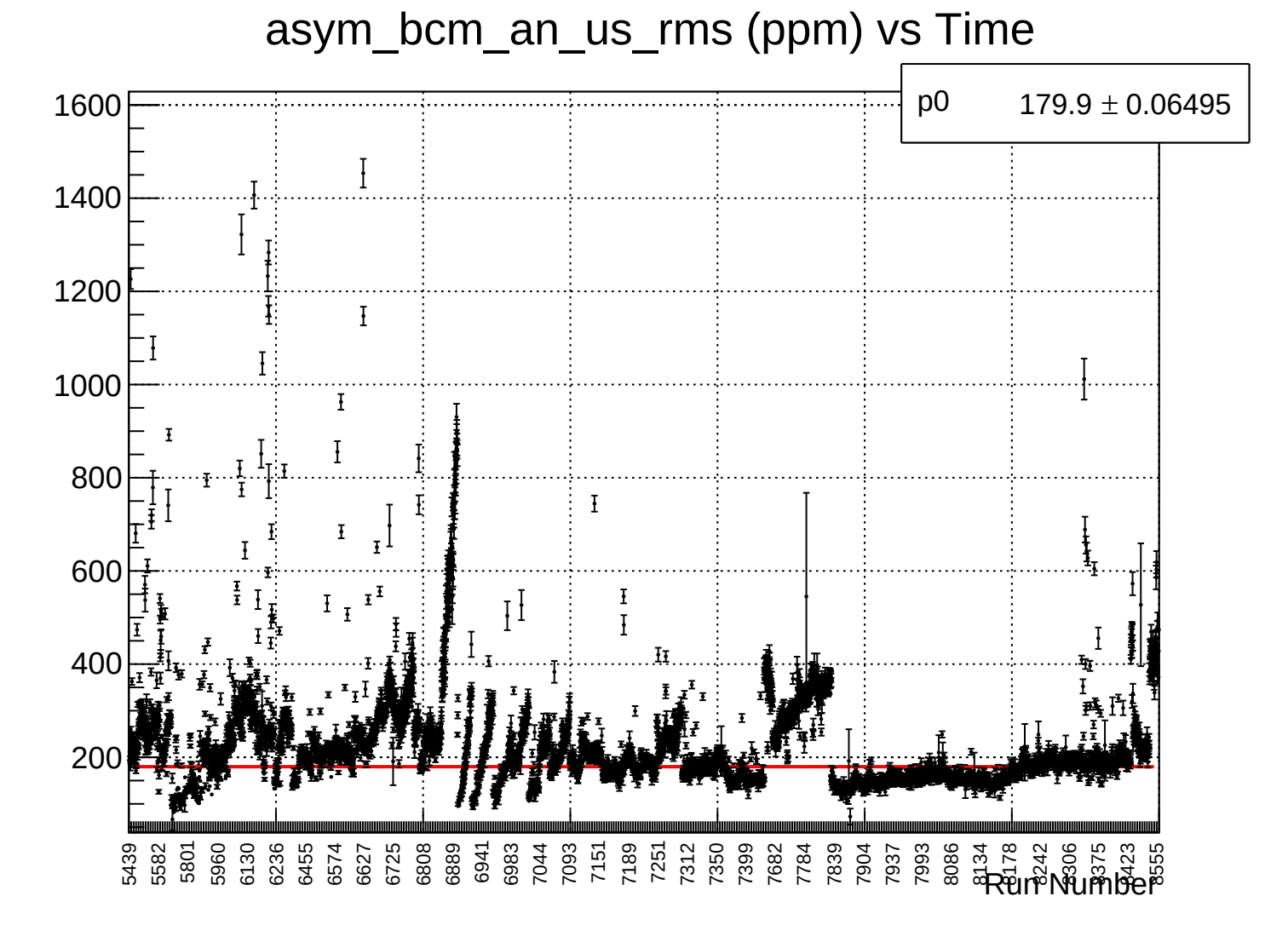

Pull Plot
Entries 6107
Mean −0.006791
Std Dev 1.239
Underflow 3
Overflow 2
Fit Prob 0.00
Fit Chi2 9751 / 6106
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

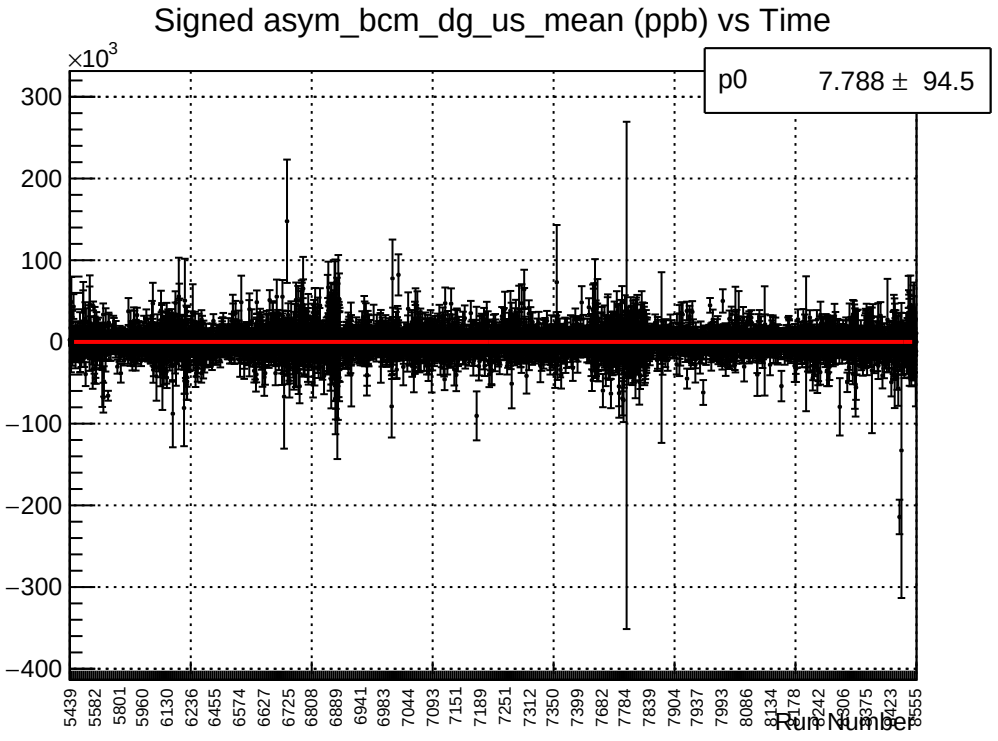

asym_bcm_an_ds_rms (ppm) vs Time
p0
178.9 ± 0.06461
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

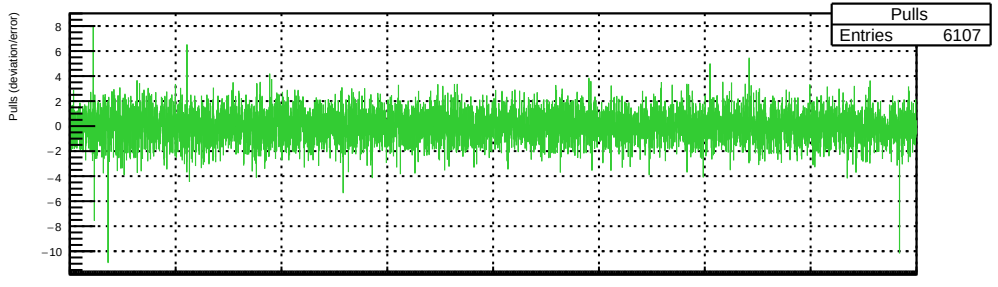

Signed asym_bcm_an_us_mean (ppb) vs Time
×10^3
p0 19.62 ± 91.86
300
200
100
0
−100
−200
−300
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7904 7937 7993 8086 8134 8178 8242 8306 8375 8423 8555
Run Number

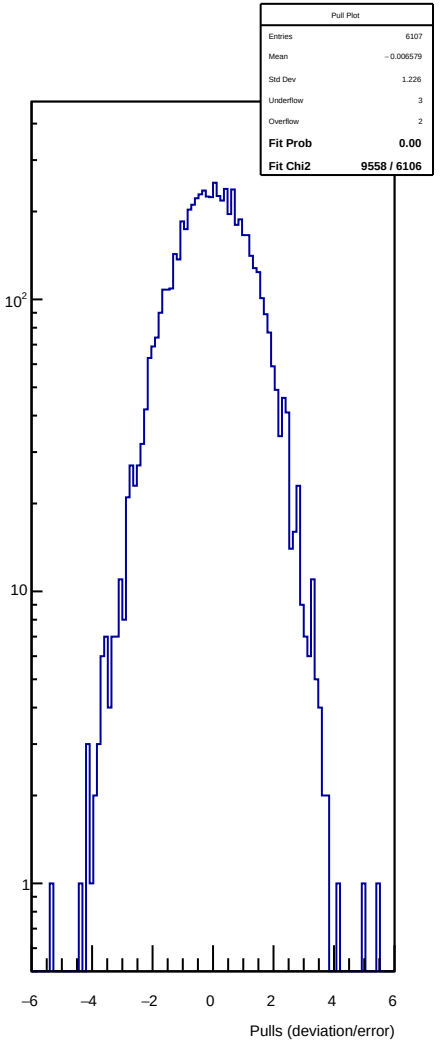

Pulls
Entries 6107
Pulls (deviation/error)
8
6
4
2
0
−2
−4
−6
−8
−10
−12

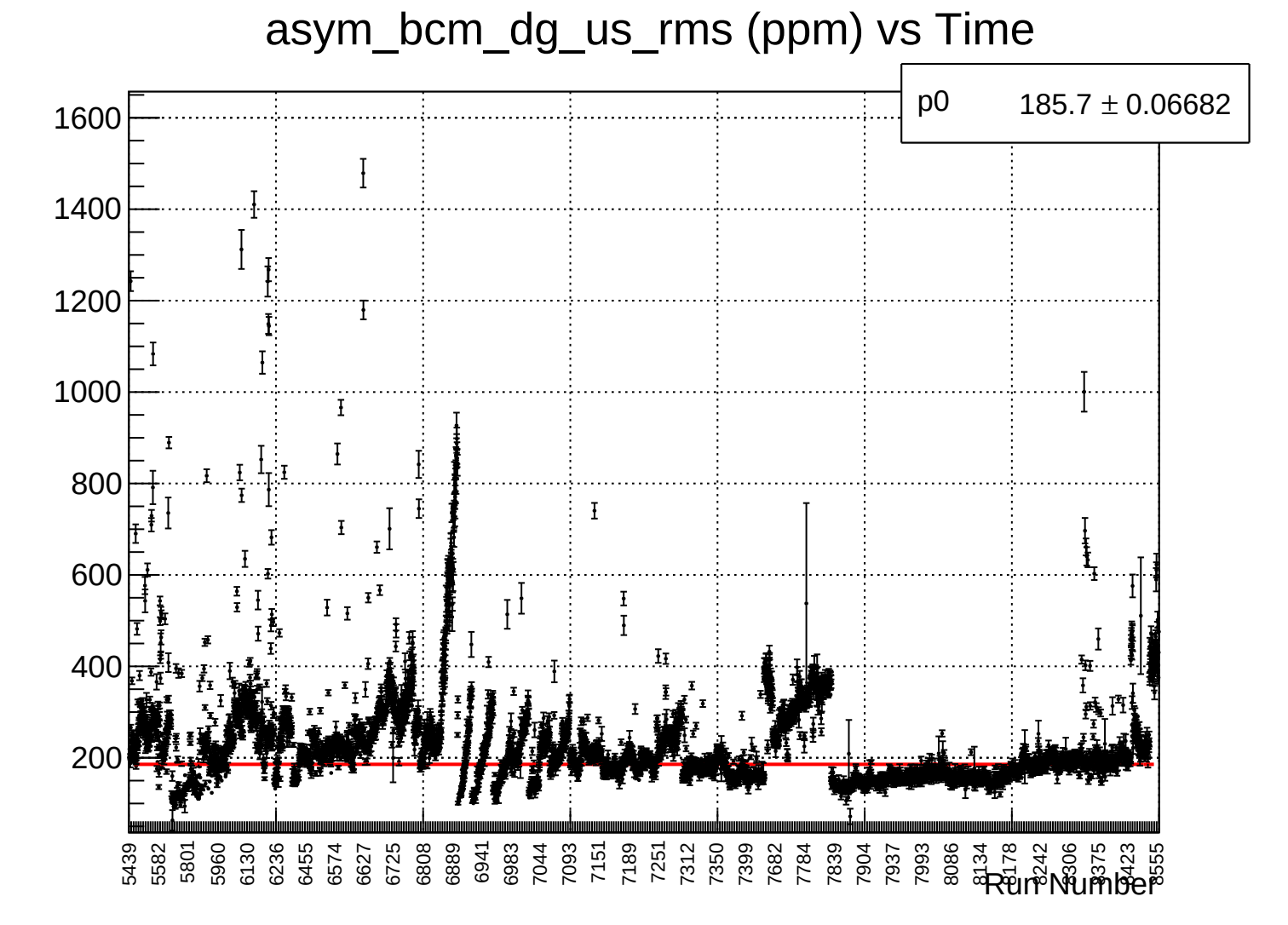

Pull Plot
Entries 6107
Mean −0.006979
Std Dev 1.237
Underflow 3
Overflow 2
Fit Prob 0.00
Fit Chi2 9730 / 6106
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

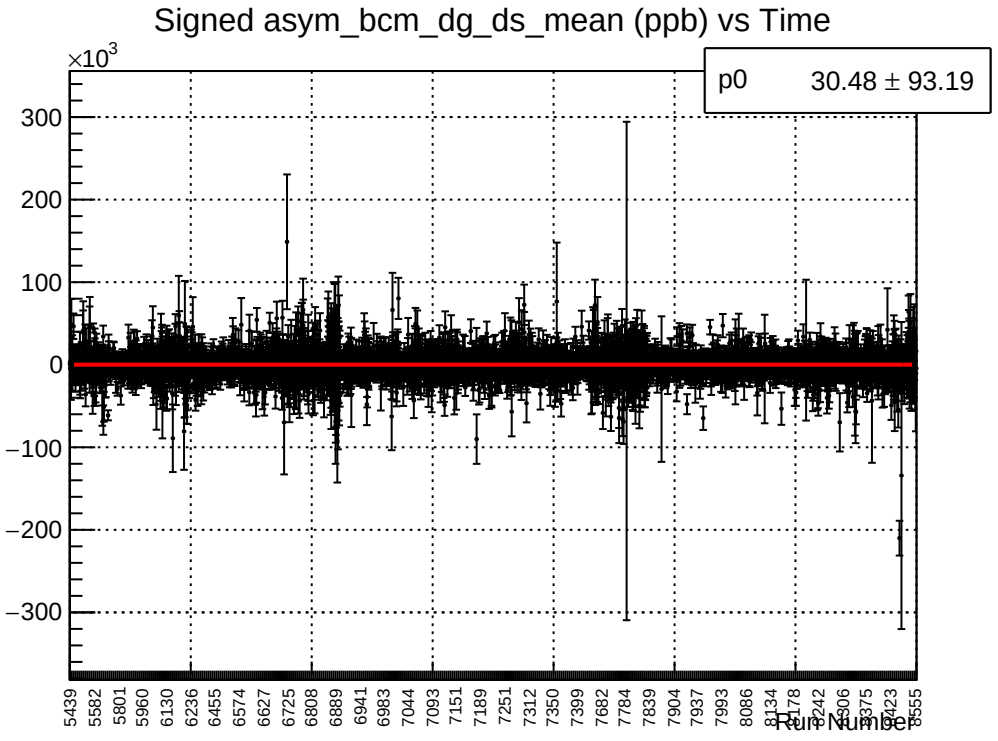

asym_bcm_an_us_rms (ppm) vs Time
p0 179.9 ± 0.06495
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

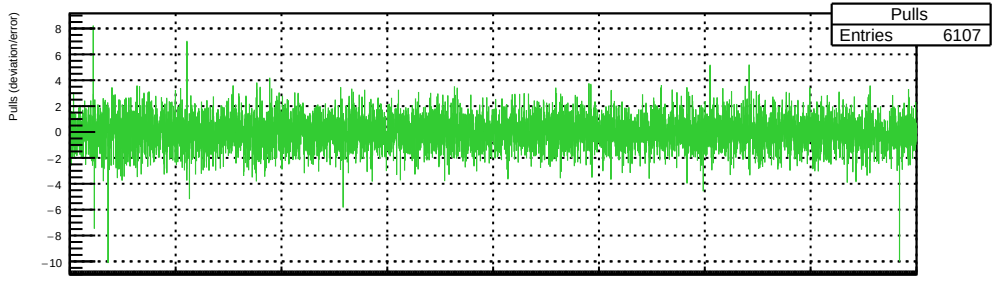

Signed asym_bcm_dg_us_mean (ppb) vs Time
×10^3
p0 7.788 ± 94.5
300
200
100
0
−100
−200
−300
−400
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7904 7937 7993 8086 8134 8178 8242 8306 8375 8423 8555
Run Number

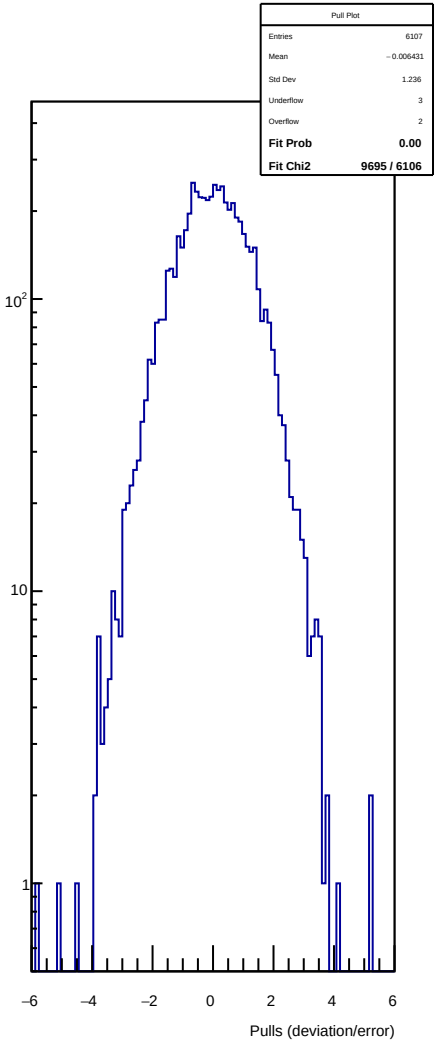

Pulls
Entries 6107
Pulls (deviation/error)
8
6
4
2
0
−2
−4
−6
−8
−10

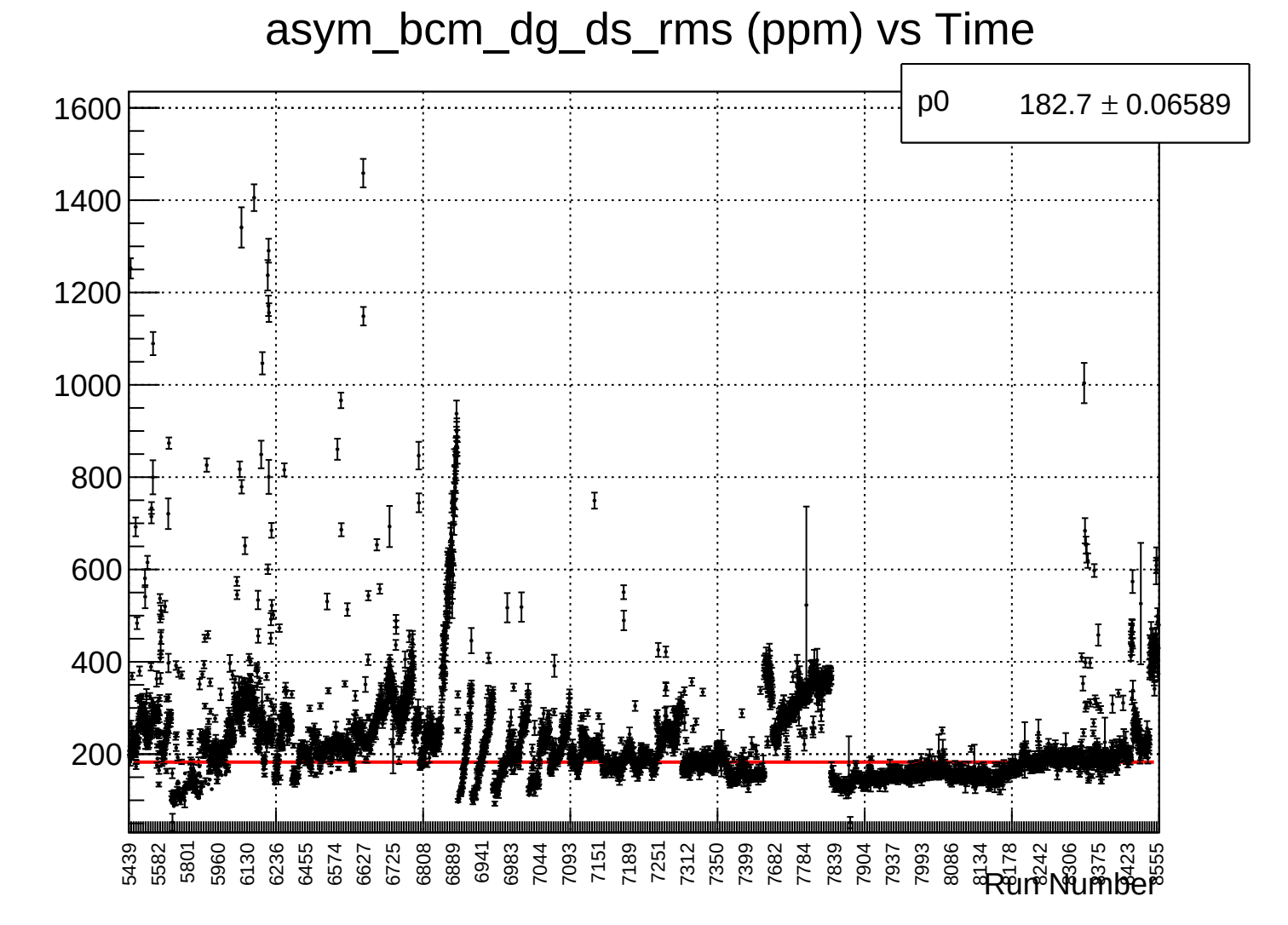

Pull Plot
Entries 6107
Mean −0.006579
Std Dev 1.226
Underflow 3
Overflow 2
Fit Prob 0.00
Fit Chi2 9558 / 6106
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

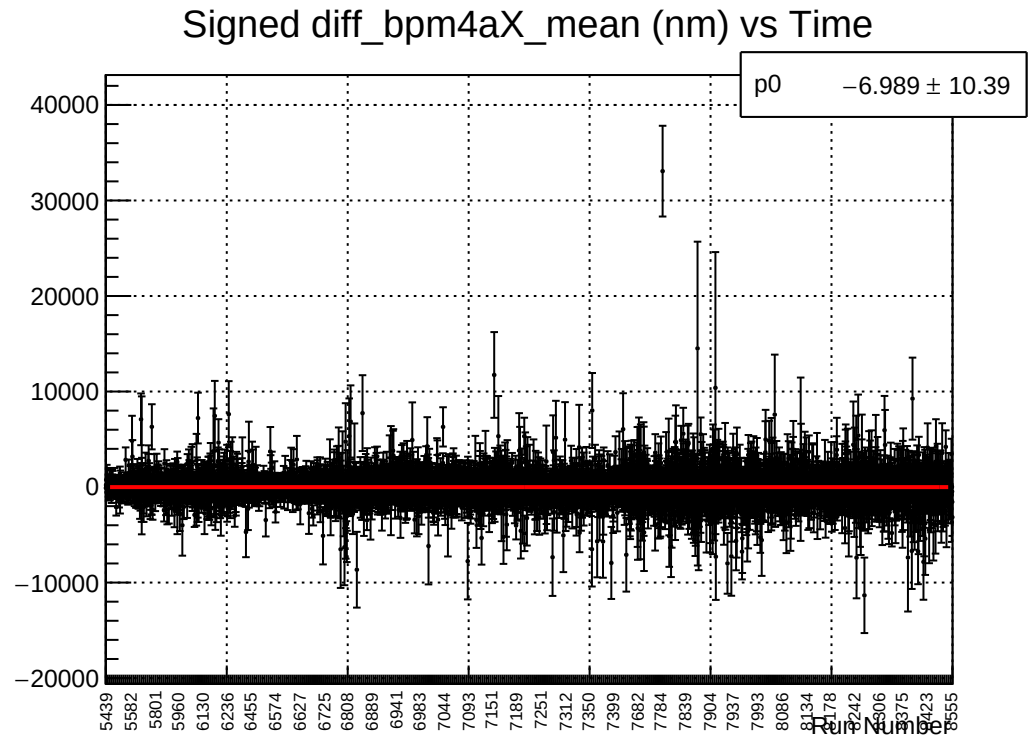

asym_bcm_dg_us_rms (ppm) vs Time
p0 185.7 ± 0.06682
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

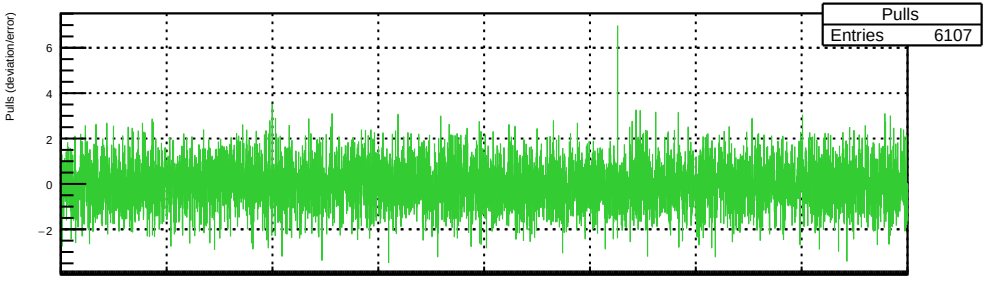

Signed asym_bcm_dg_ds_mean (ppb) vs Time
p0 30.48 ± 93.19
×10^3
300
200
100
0
−100
−200
−300
5439 5582 5801 5960 6130 6236 6455 6574 6627 6725 6808 6889 6941 6983 7044 7093 7151 7189 7251 7312 7350 7399 7682 7784 7839 7904 7937 7993 8086 8134 8178 8242 8306 8375 8423 8555
Run Number

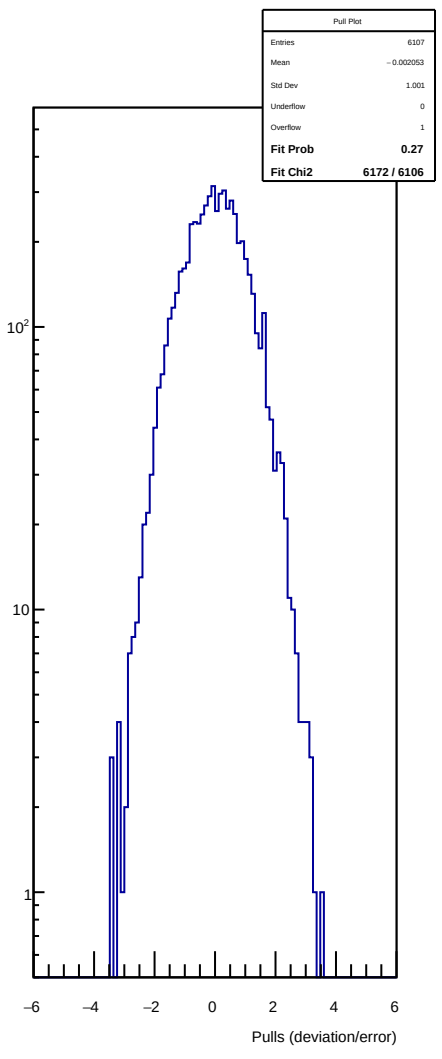

Pulls
Entries 6107
Pulls (deviation/error)
8
6
4
2
0
−2
−4
−6
−8
−10

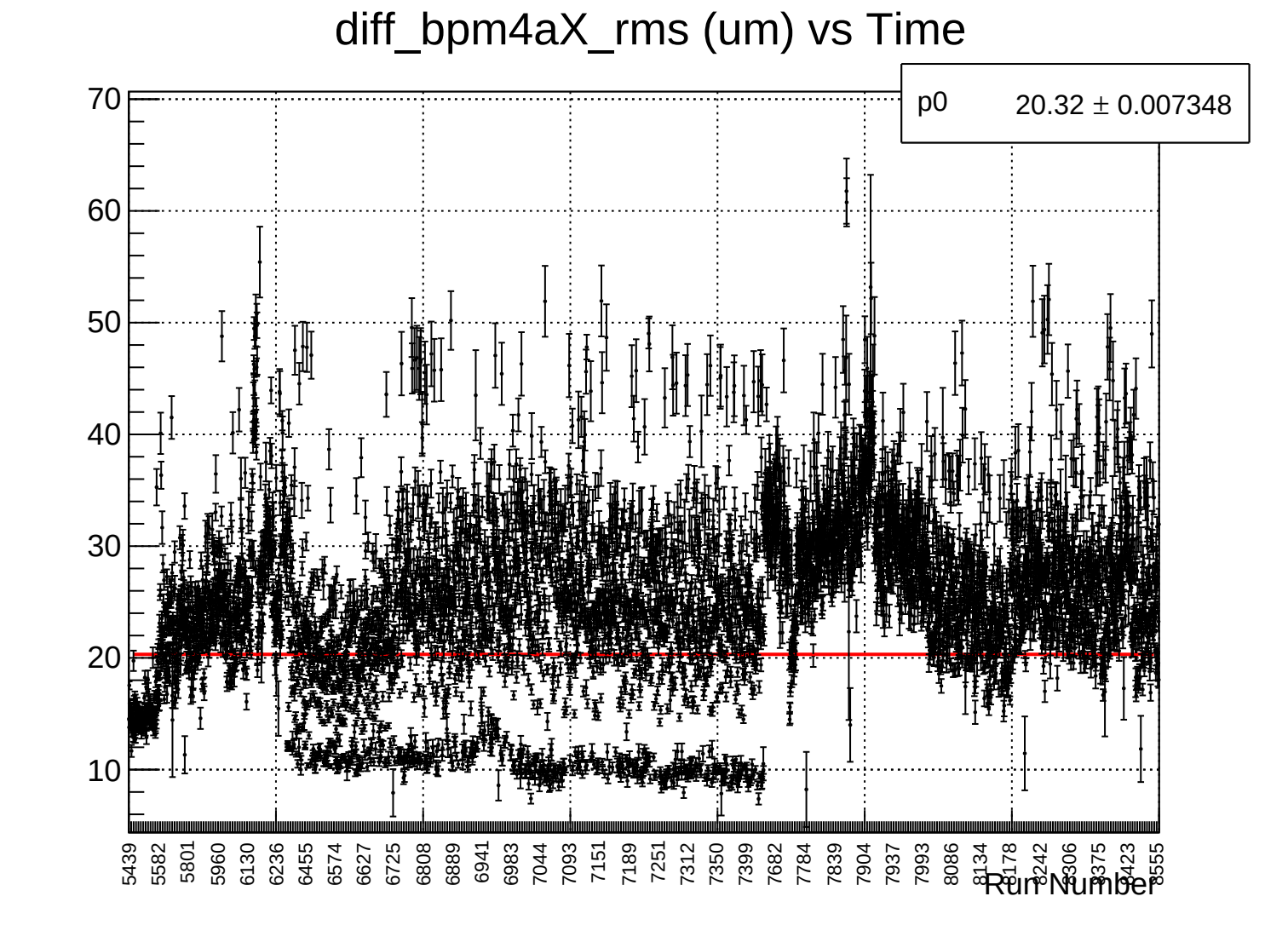

Pull Plot
Entries 6107
Mean −0.006431
Std Dev 1.236
Underflow 3
Overflow 2
Fit Prob 0.00
Fit Chi2 9695 / 6106
10^2
10
1
−6 −4 −2 0 2 4 6
Pulls (deviation/error)

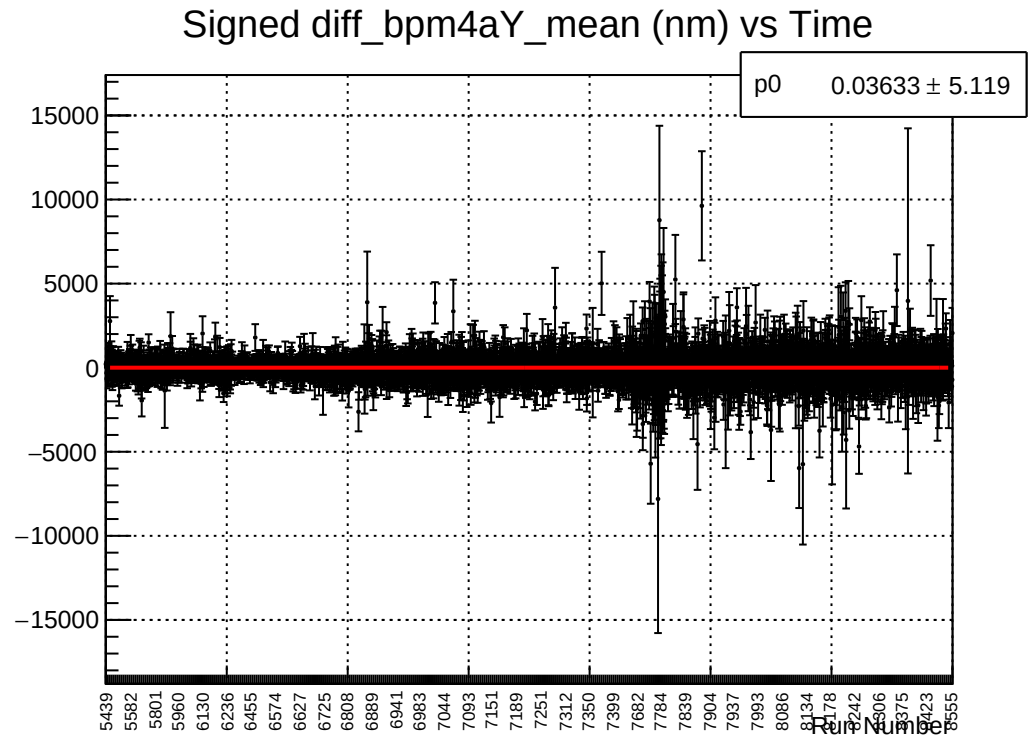

asym_bcm_dg_ds_rms (ppm) vs Time
p0 182.7 ± 0.06589
1600
1400
1200
1000
800
600
400
200
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

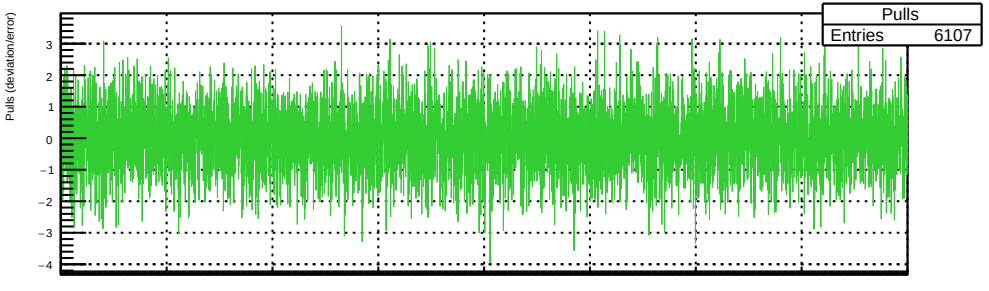

Signed diff_bpm4aX_mean (nm) vs Time
p0 −6.989 ± 10.39
40000
30000
20000
10000
0
−10000
−20000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

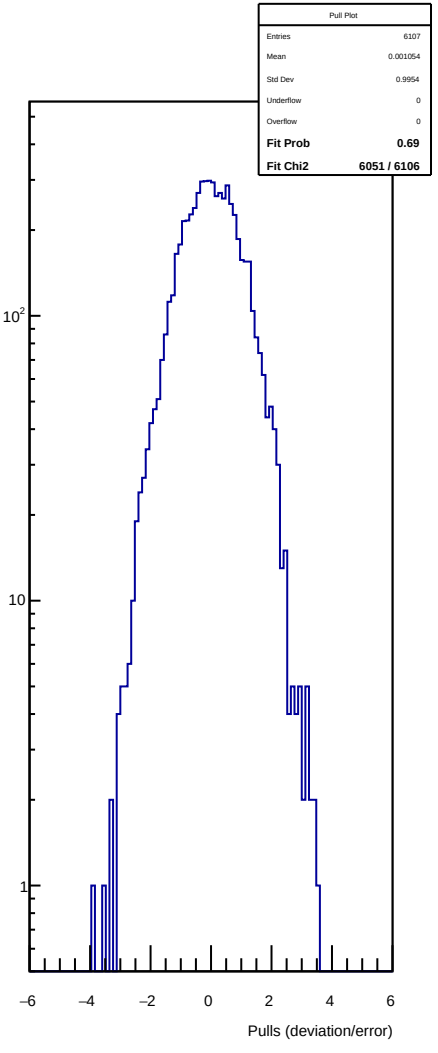

Pulls
Entries 6107
Pulls (deviation/error)
6
4
2
0
−2

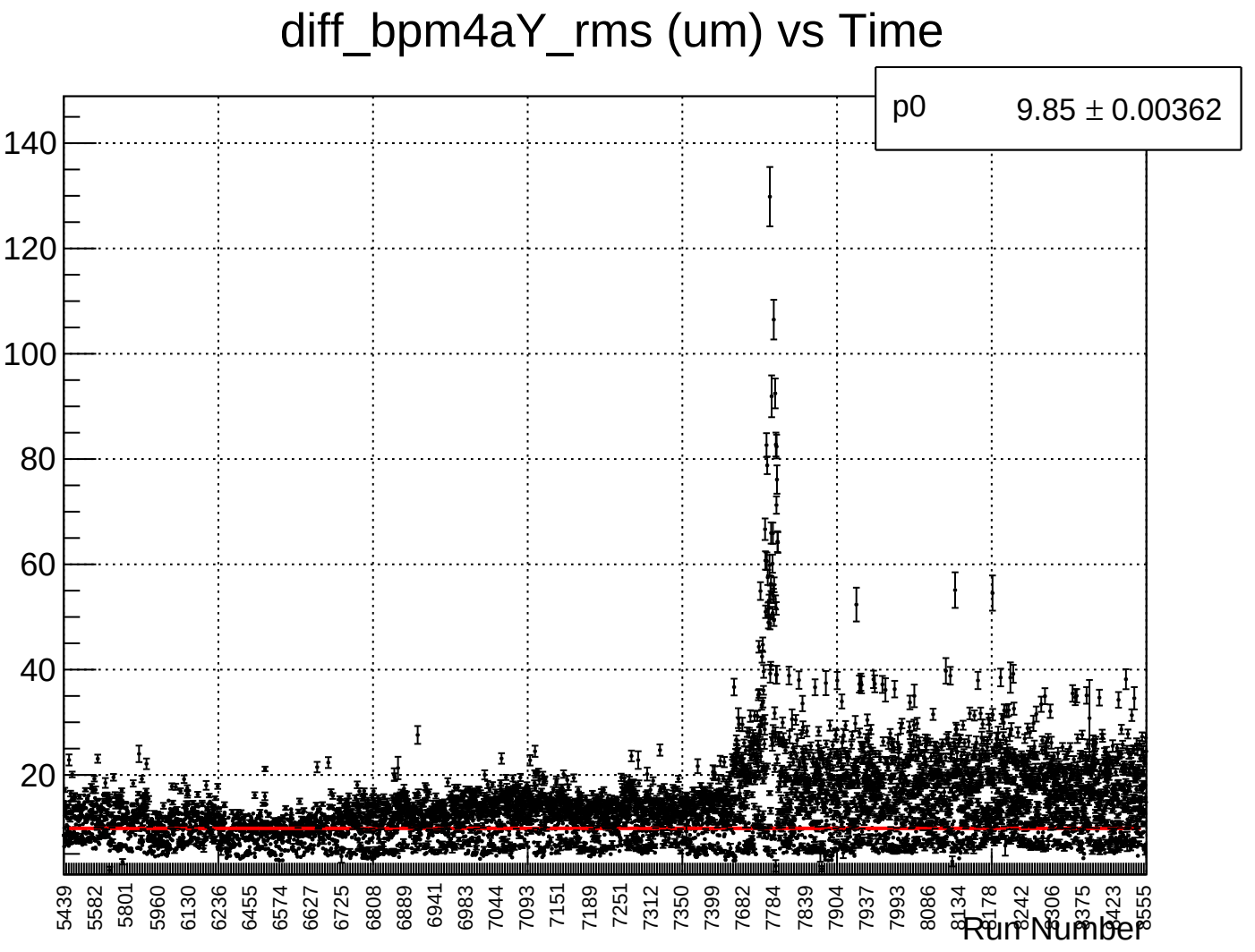

Pull Plot
Entries 6107
Mean −0.002053
Std Dev 1.001
Underflow 0
Overflow 1
Fit Prob 0.27
Fit Chi2 6172 / 6106
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

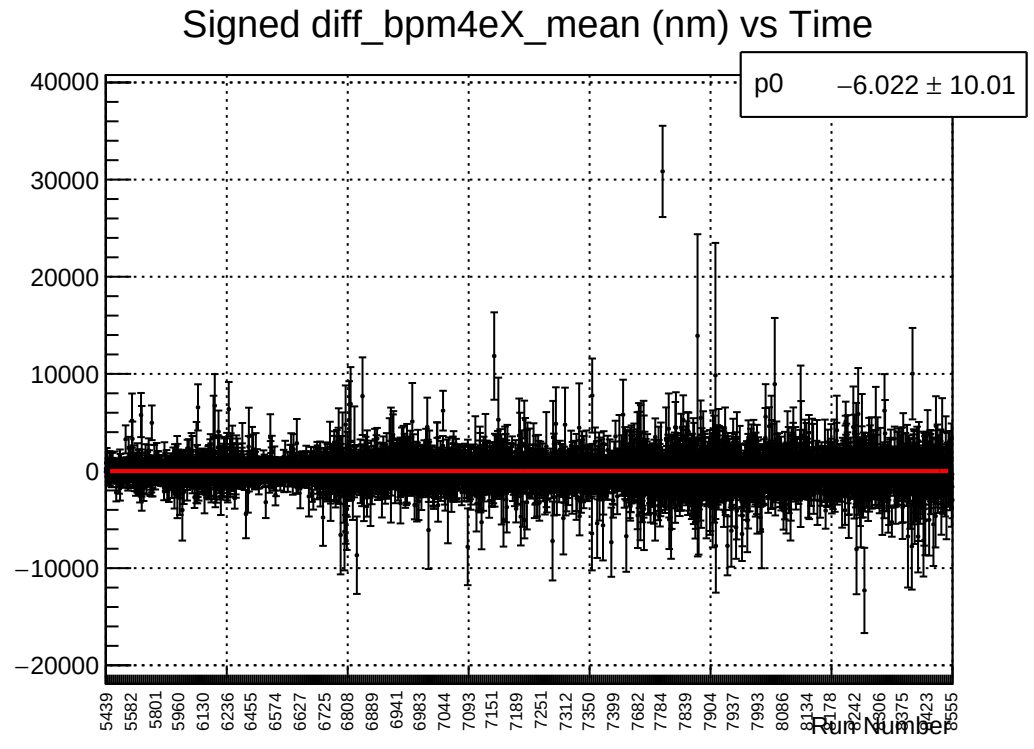

diff_bpm4aX_rms (um) vs Time
p0
20.32 ± 0.007348
70
60
50
40
30
20
10
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

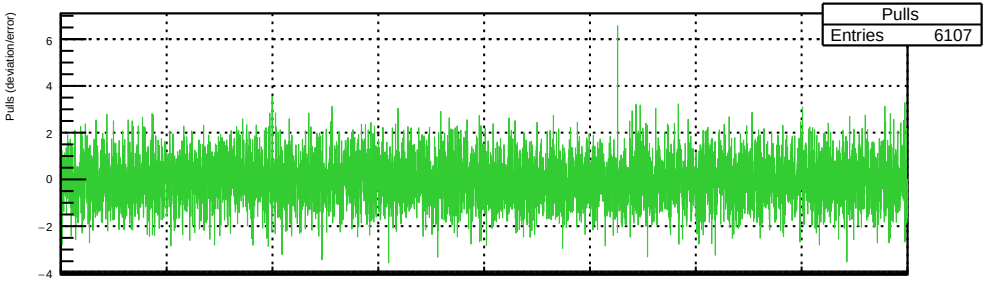

Signed diff_bpm4aY_mean (nm) vs Time
p0 0.03633 ± 5.119
15000
10000
5000
0
−5000
−10000
−15000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

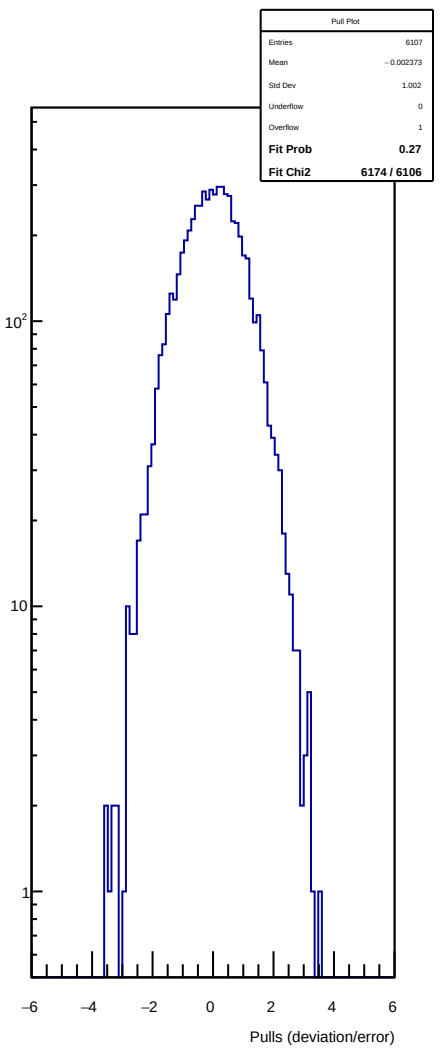

Pulls
Entries 6107
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

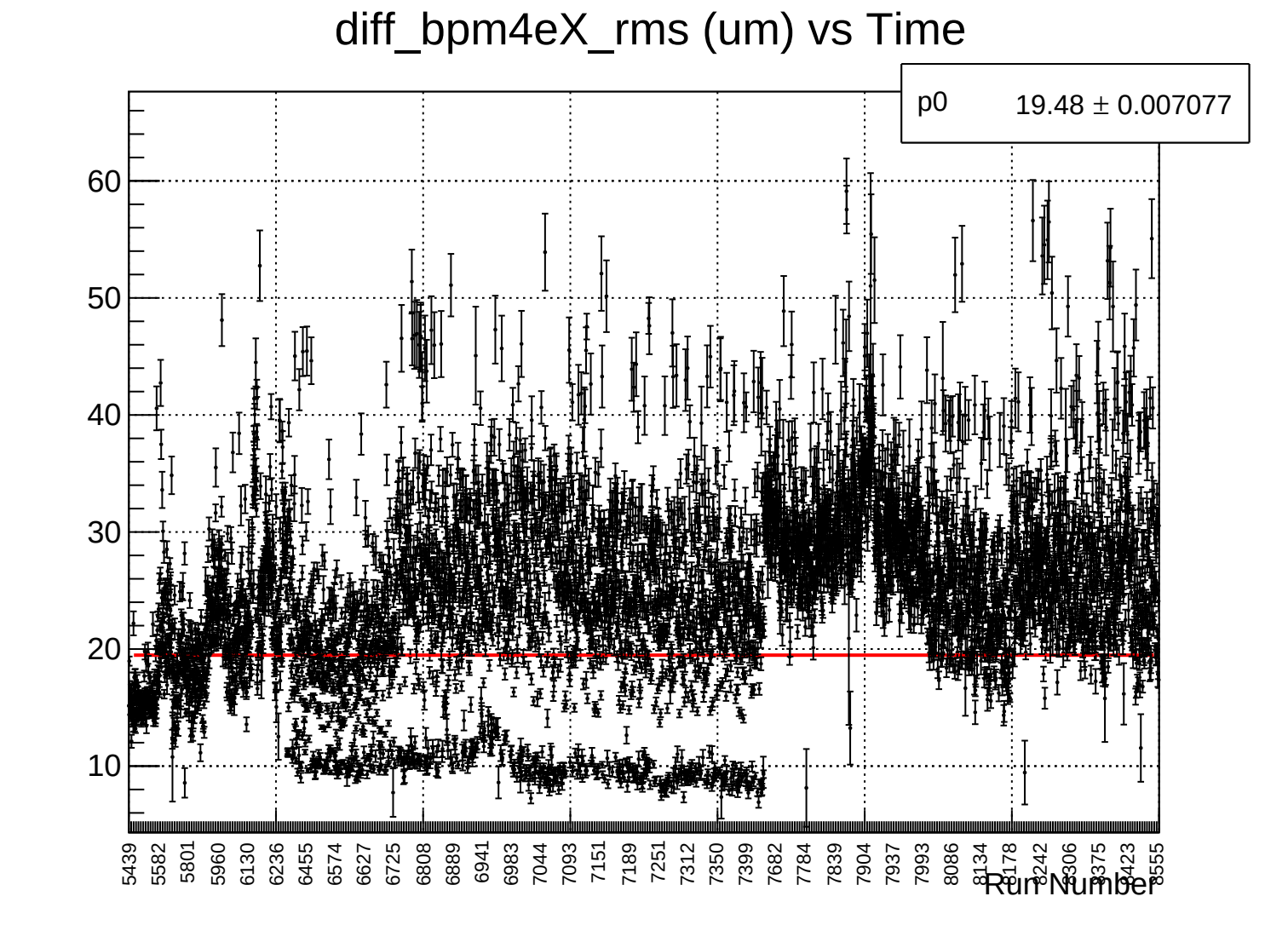

Pull Plot
Entries 6107
Mean 0.001054
Std Dev 0.9954
Underflow 0
Overflow 0
Fit Prob 0.69
Fit Chi2 6051 / 6106
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

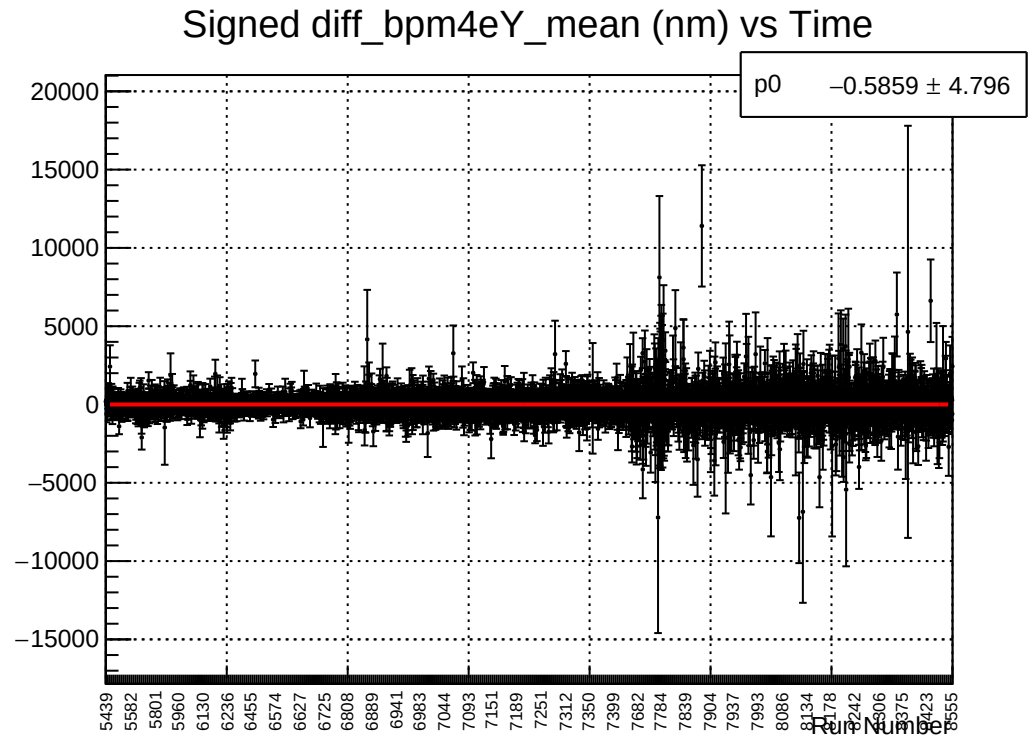

diff_bpm4aY_rms (um) vs Time
p0
9.85 ± 0.00362
140
120
100
80
60
40
20
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

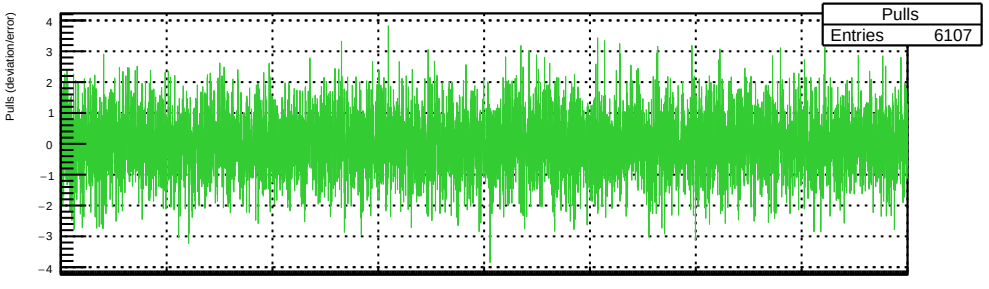

Signed diff_bpm4eX_mean (nm) vs Time
p0 −6.022 ± 10.01
40000
30000
20000
10000
0
−10000
−20000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

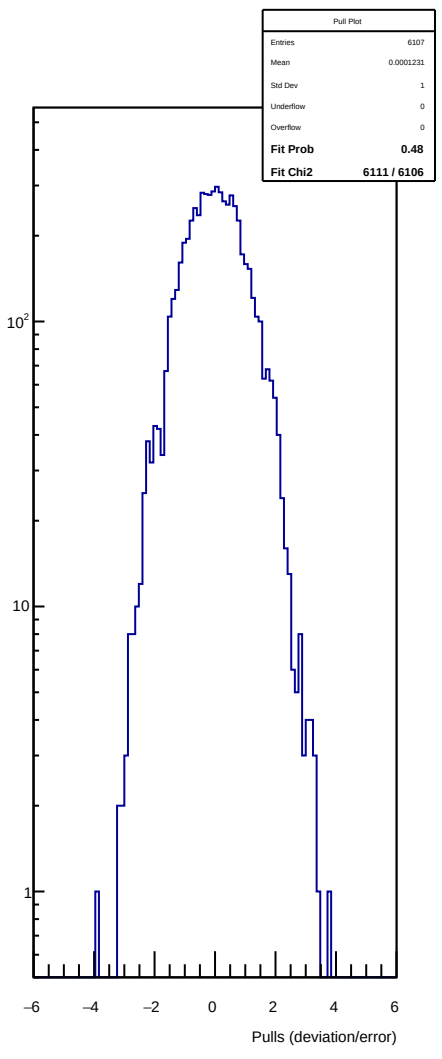

Pulls
Entries 6107
Pulls (deviation/error)
6
4
2
0
−2
−4

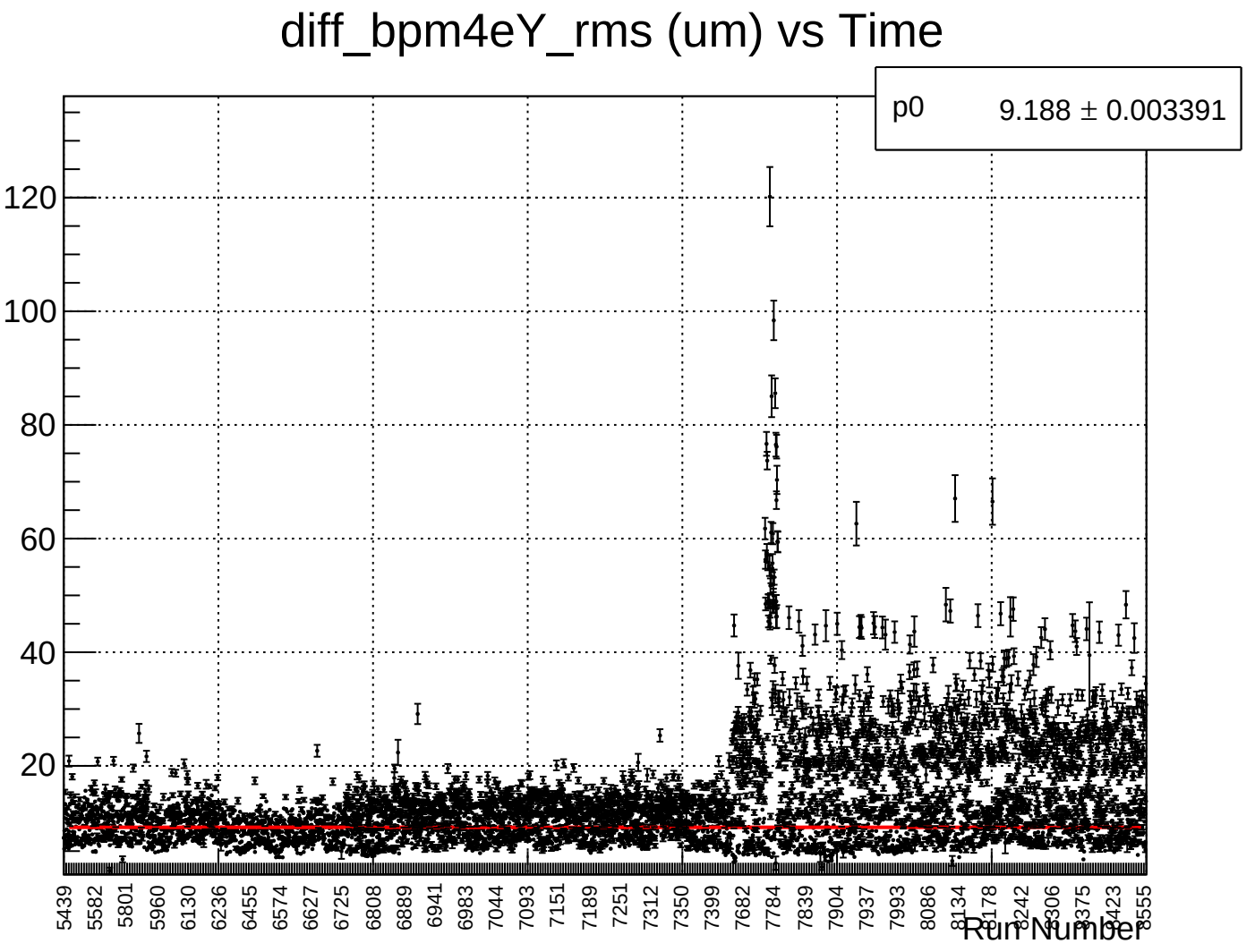

Pull Plot
Entries 6107
Mean −0.002373
Std Dev 1.002
Underflow 0
Overflow 1
Fit Prob 0.27
Fit Chi2 6174 / 6106
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

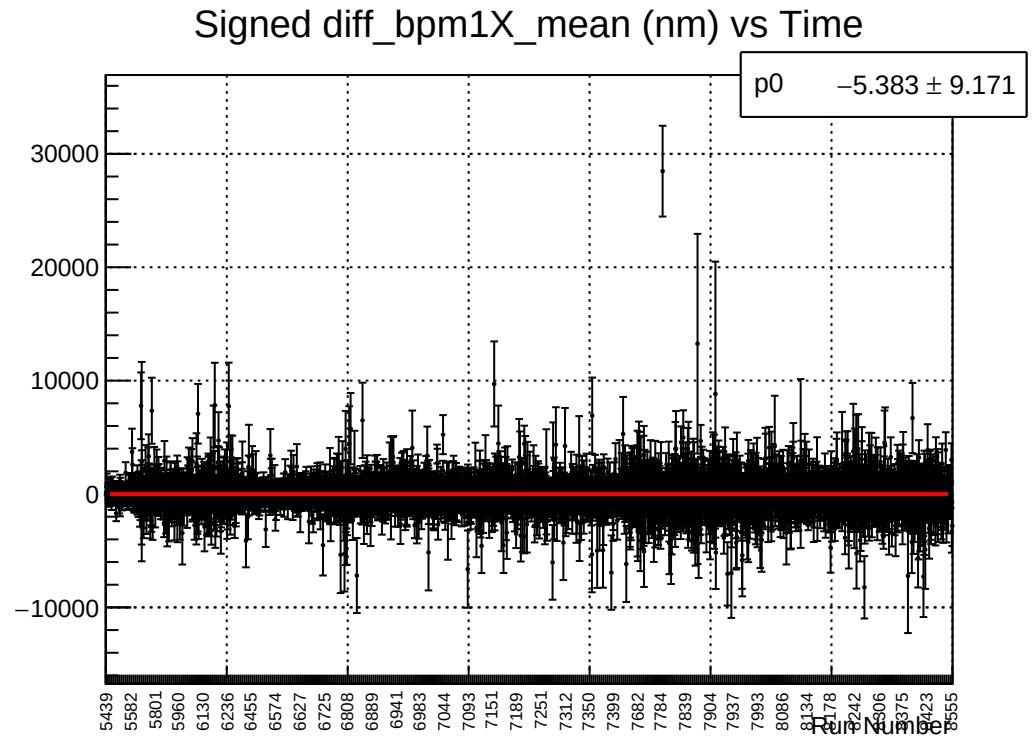

diff_bpm4eX_rms (um) vs Time
p0
19.48 ± 0.007077
60
50
40
30
20
10
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

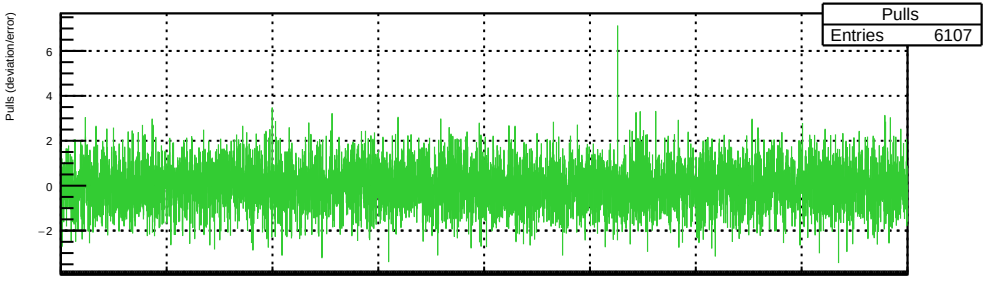

Signed diff_bpm4eY_mean (nm) vs Time
p0 −0.5859 ± 4.796
20000
15000
10000
5000
0
−5000
−10000
−15000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

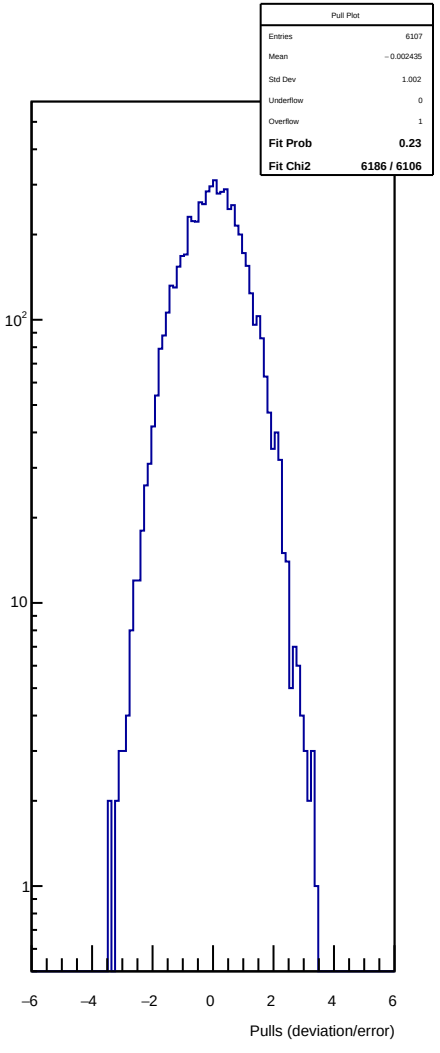

Pulls
Entries 6107
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4

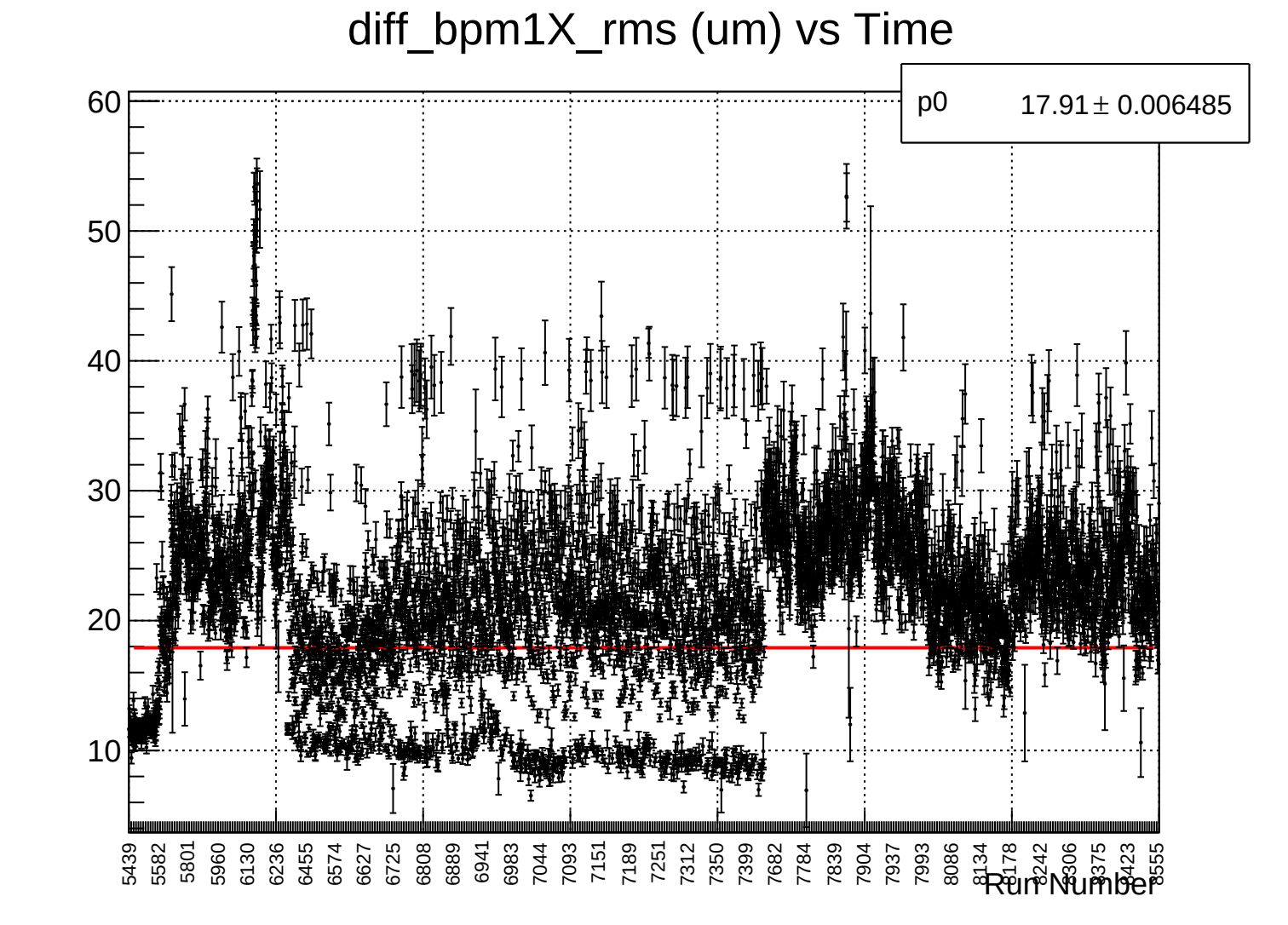

Pull Plot
Entries 6107
Mean 0.0001231
Std Dev 1
Underflow 0
Overflow 0
Fit Prob 0.48
Fit Chi2 6111 / 6106
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

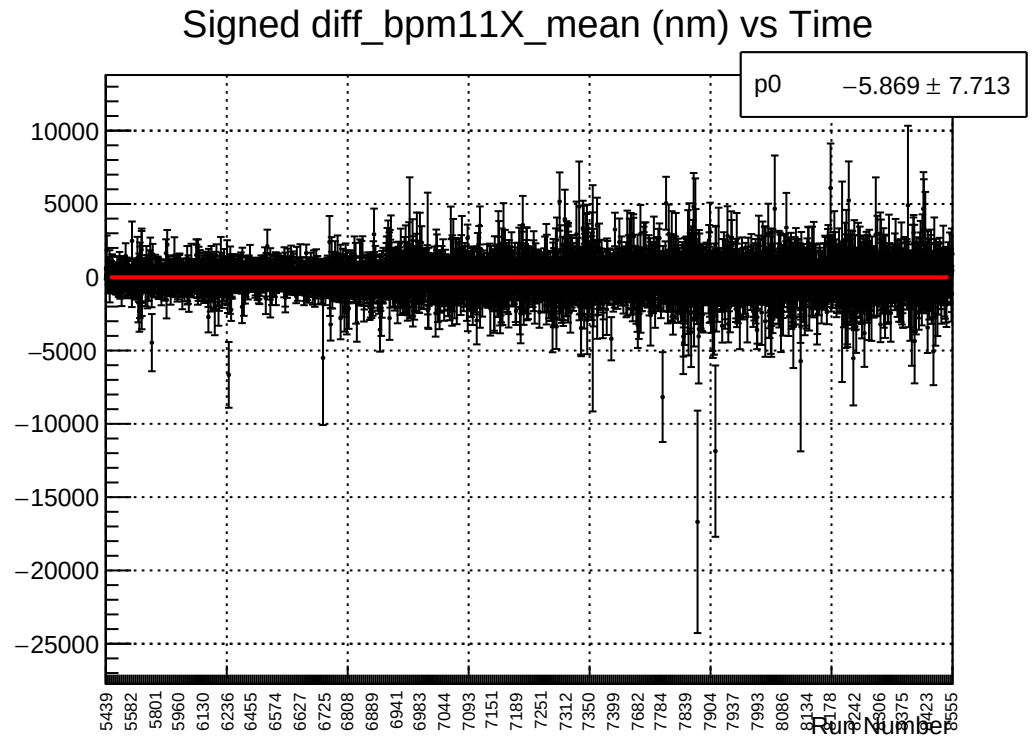

diff_bpm4eY_rms (um) vs Time
p0 9.188 ± 0.003391
120
100
80
60
40
20
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

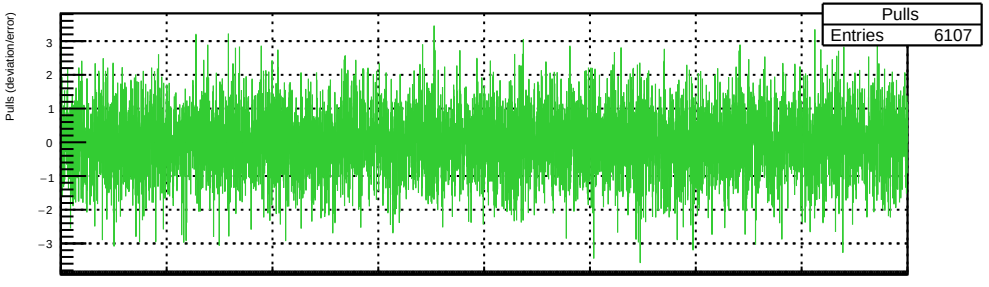

Signed diff_bpm1X_mean (nm) vs Time
p0 −5.383 ± 9.171
30000
20000
10000
0
−10000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

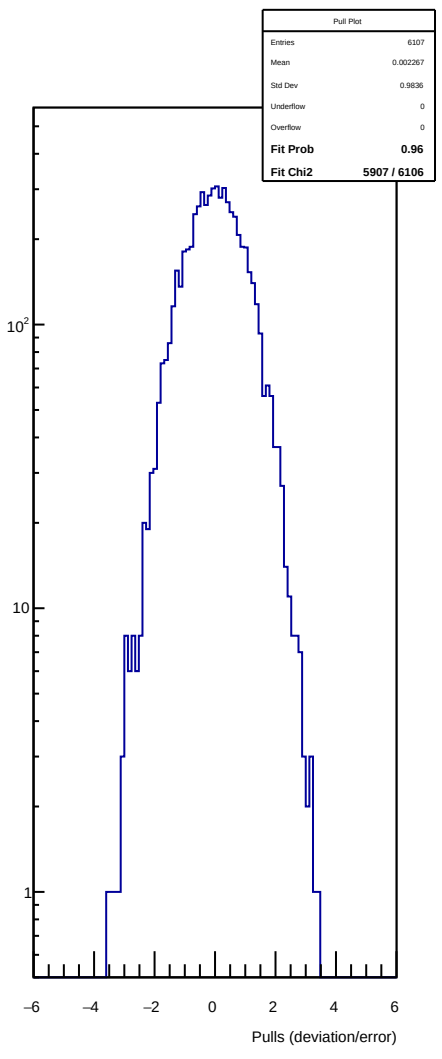

Pulls
Entries 6107
Pulls (deviation/error)
6
4
2
0
−2

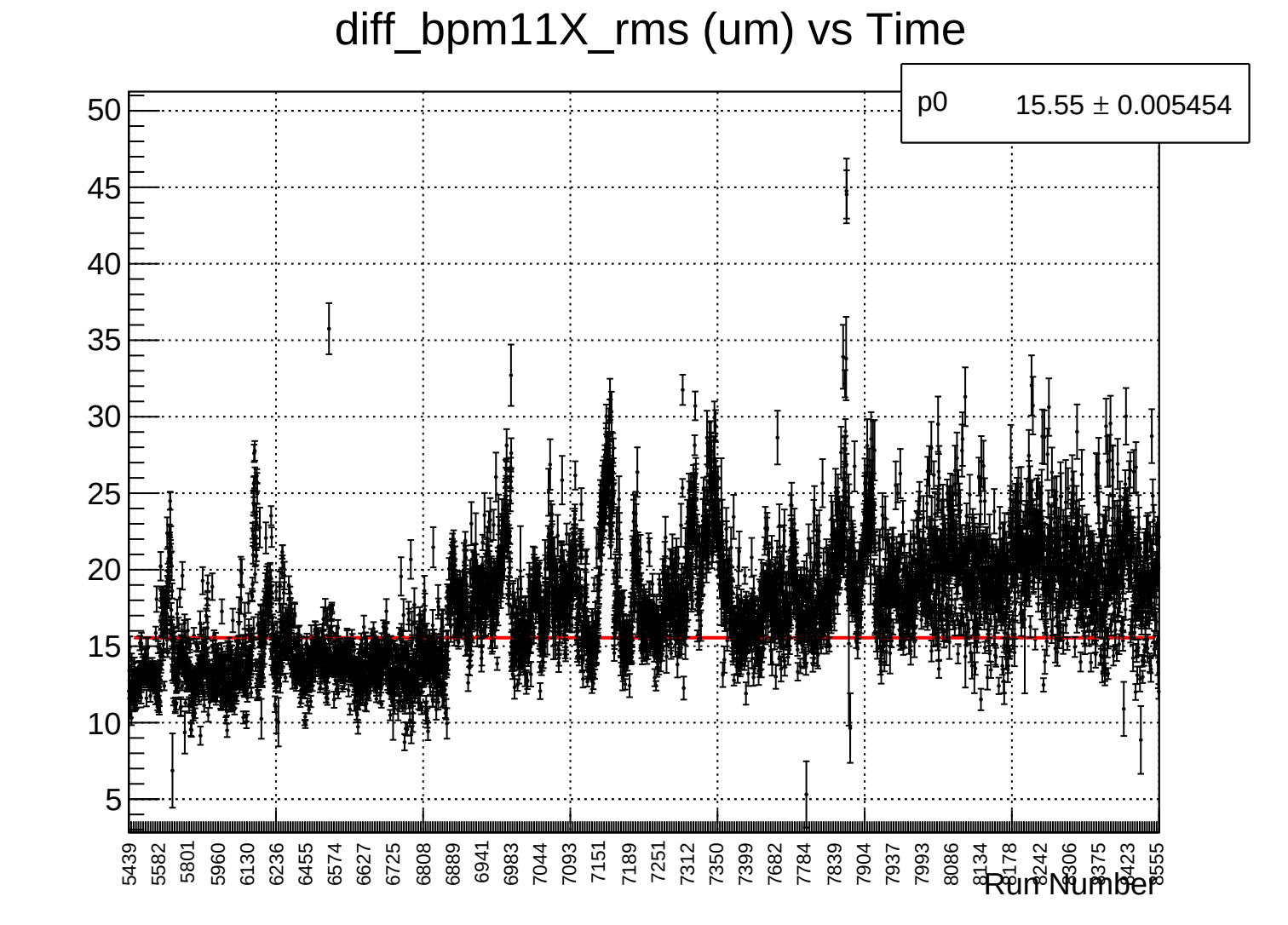

Pull Plot
Entries 6107
Mean −0.002435
Std Dev 1.002
Underflow 0
Overflow 1
Fit Prob 0.23
Fit Chi2 6186 / 6106
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

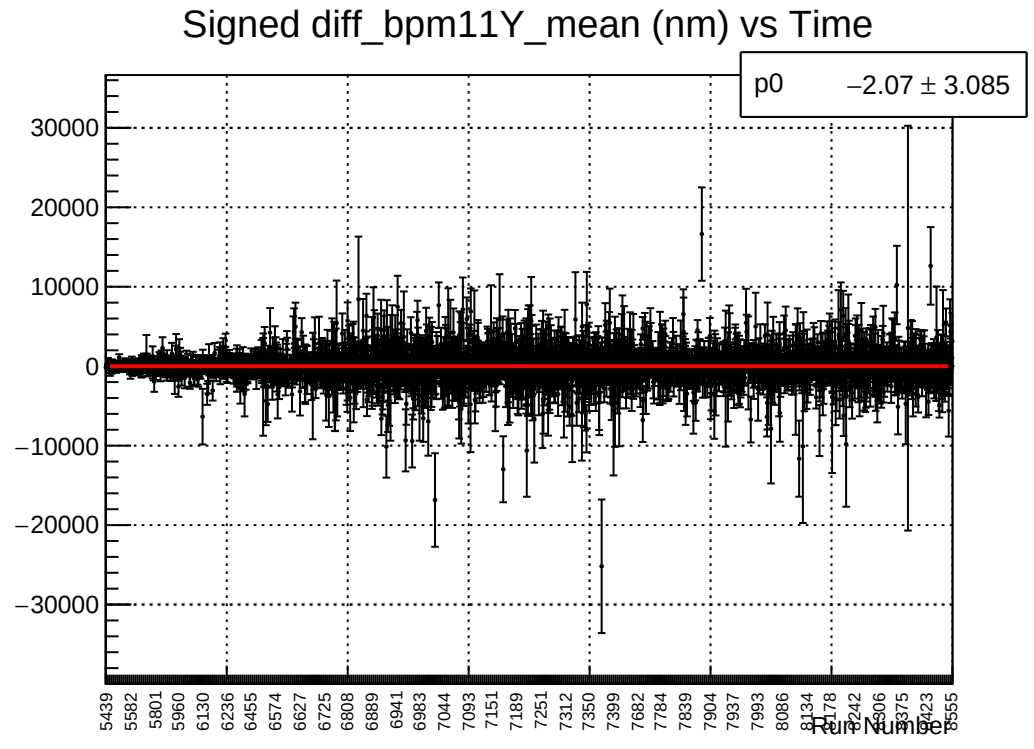

diff_bpm1X_rms (um) vs Time
p0
17.91 ± 0.006485
60
50
40
30
20
10
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

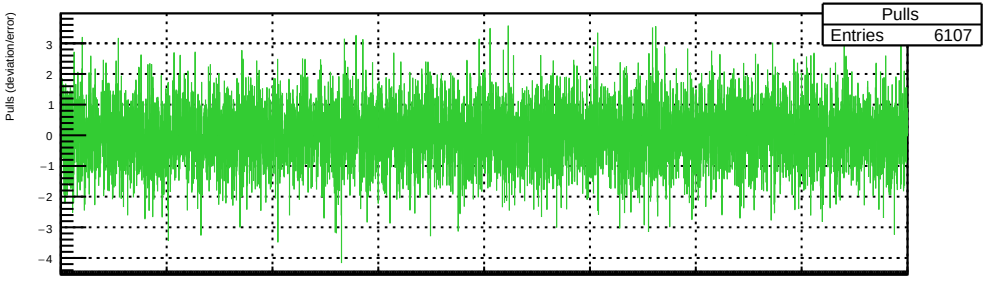

Signed diff_bpm11X_mean (nm) vs Time
p0 −5.869 ± 7.713
10000
5000
0
−5000
−10000
−15000
−20000
−25000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

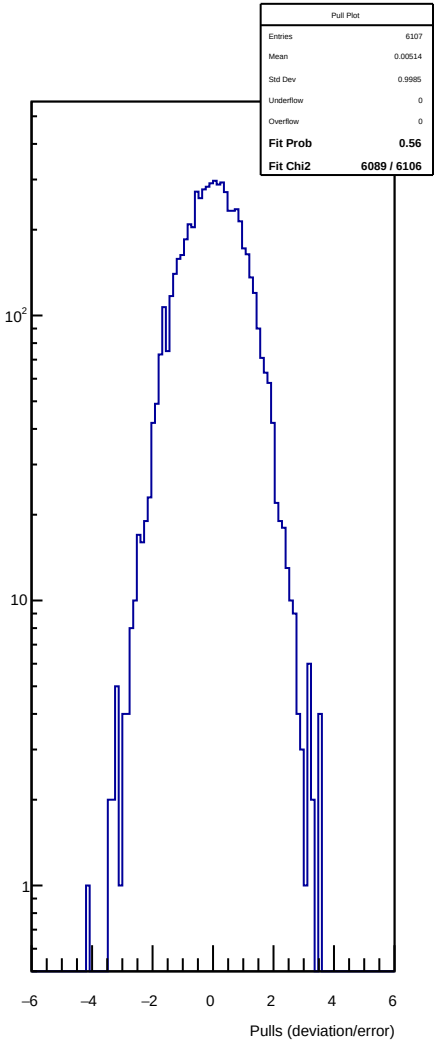

Pulls
Entries 6107
Pulls (deviation/error)
3
2
1
0
−1
−2
−3

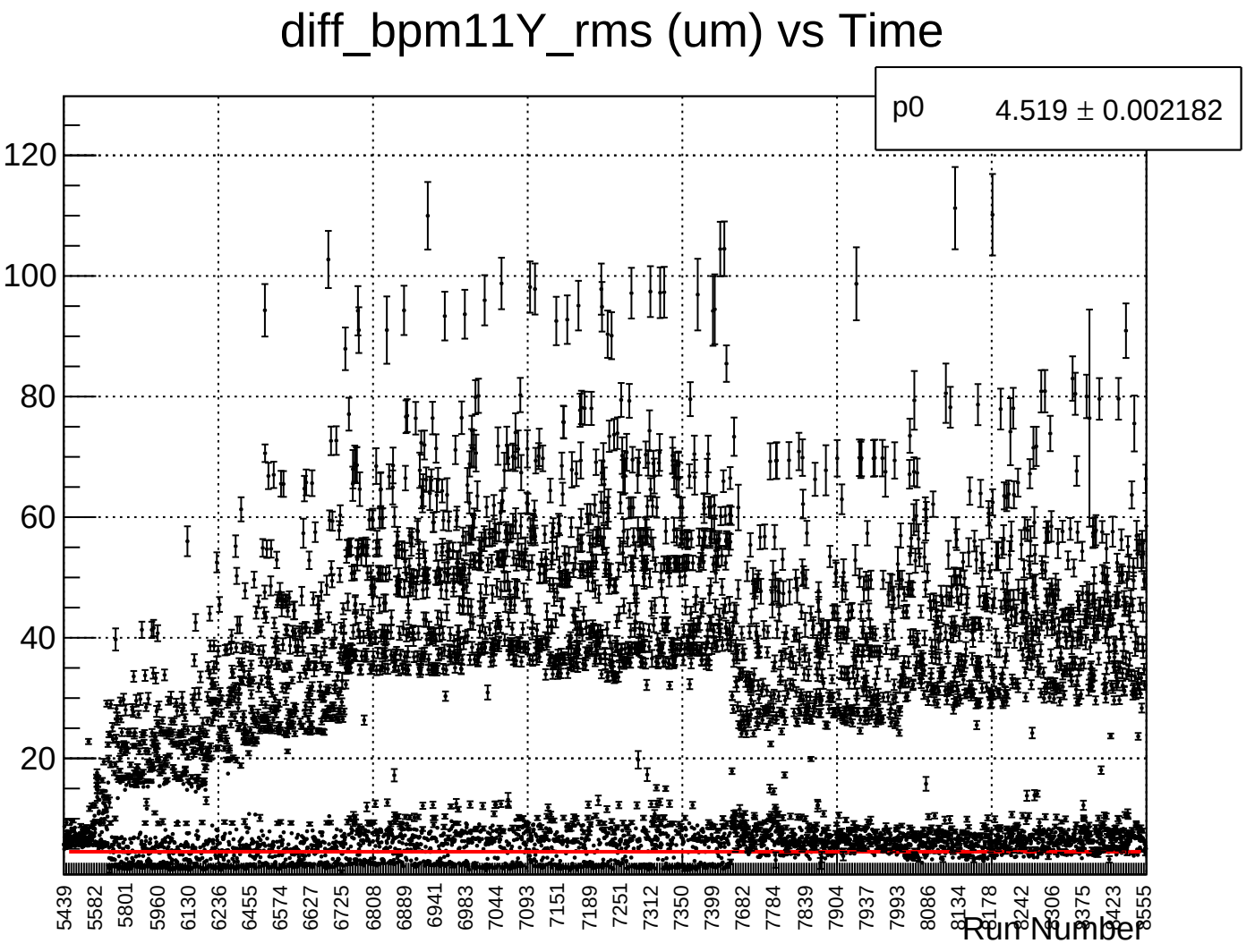

Pull Plot
Entries 6107
Mean 0.002267
Std Dev 0.9836
Underflow 0
Overflow 0
Fit Prob 0.96
Fit Chi2 5907 / 6106
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

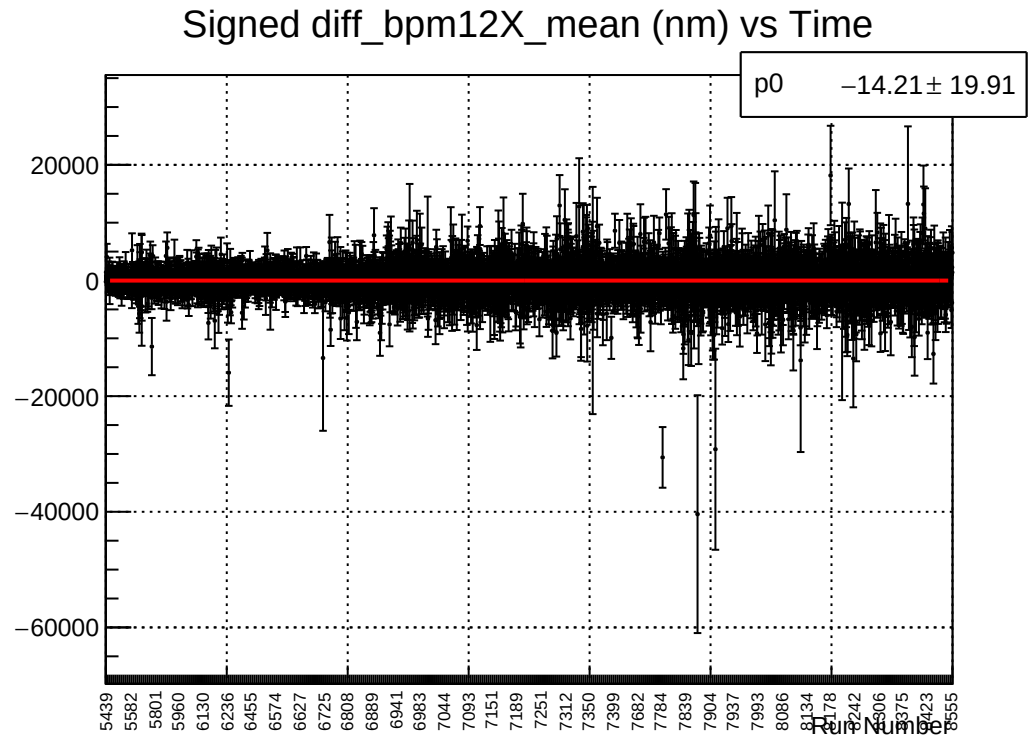

diff_bpm11X_rms (um) vs Time
p0 15.55 ± 0.005454
50
45
40
35
30
25
20
15
10
5
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

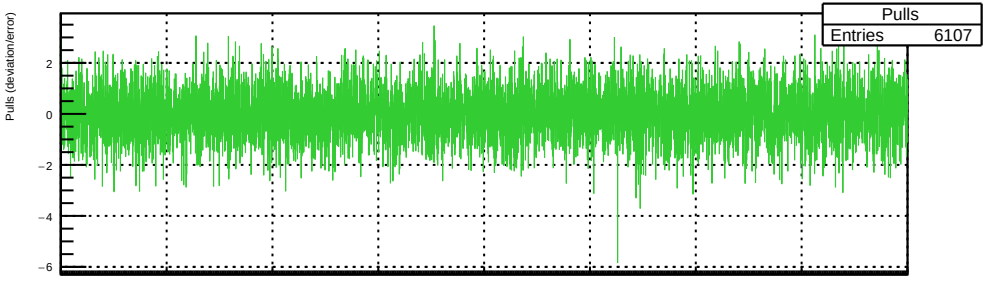

Signed diff_bpm11Y_mean (nm) vs Time
p0 −2.07 ± 3.085
30000
20000
10000
0
−10000
−20000
−30000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

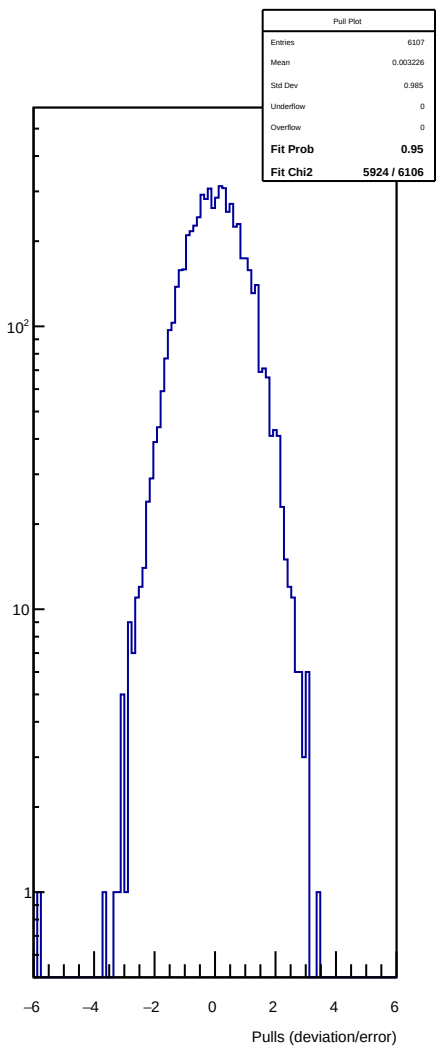

Pulls
Entries 6107
Pulls (deviation/error)
3
2
1
0
−1
−2
−3
−4

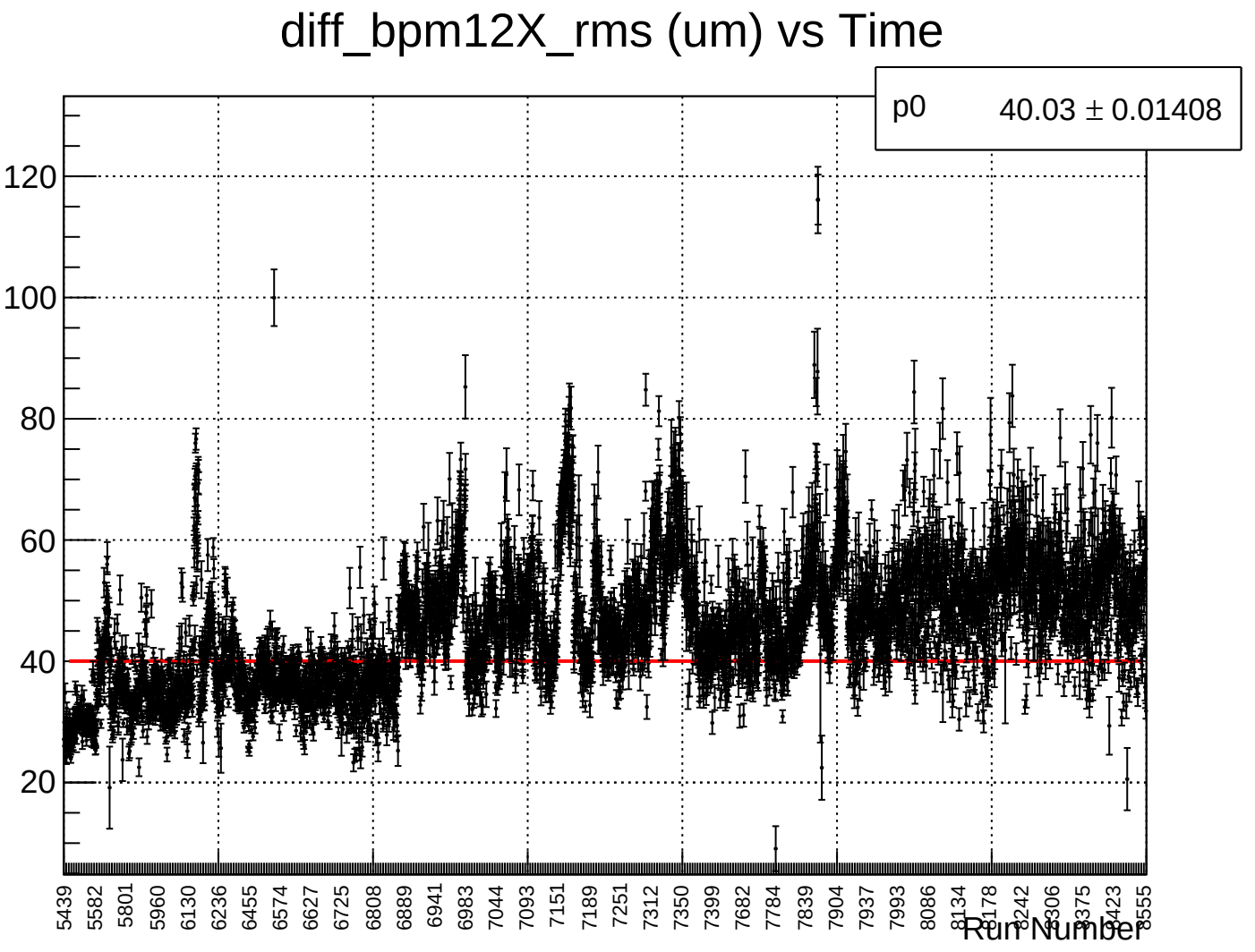

Pull Plot
Entries 6107
Mean 0.00514
Std Dev 0.9985
Underflow 0
Overflow 0
Fit Prob 0.56
Fit Chi2 6089 / 6106
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)

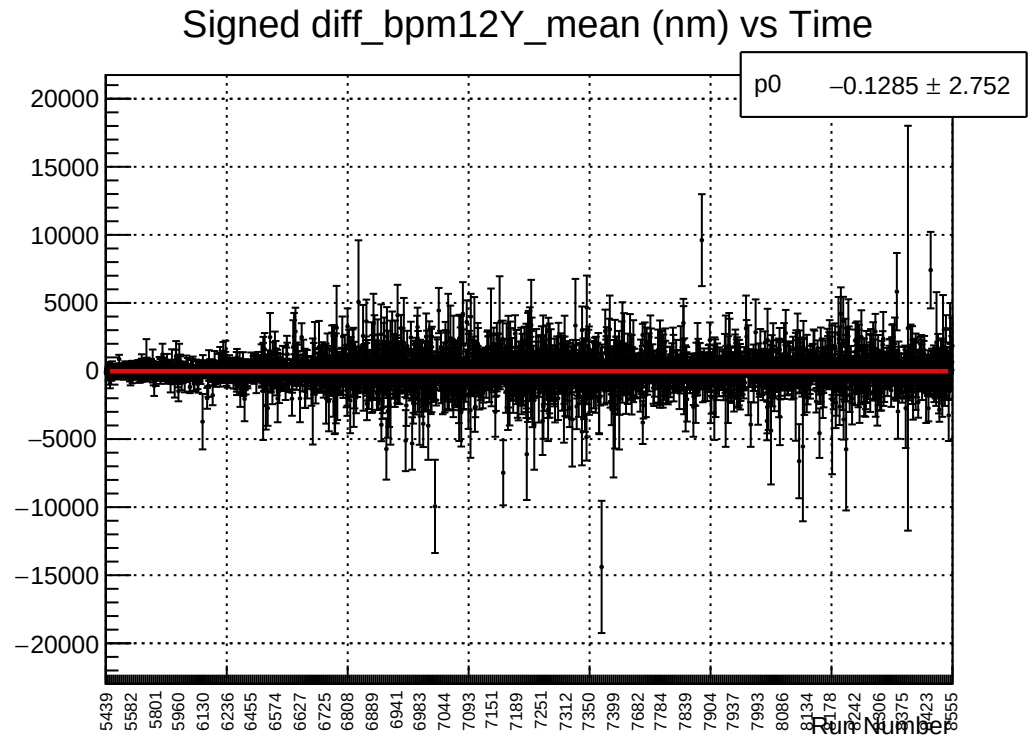

diff_bpm11Y_rms (um) vs Time
p0 4.519 ± 0.002182
120
100
80
60
40
20
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

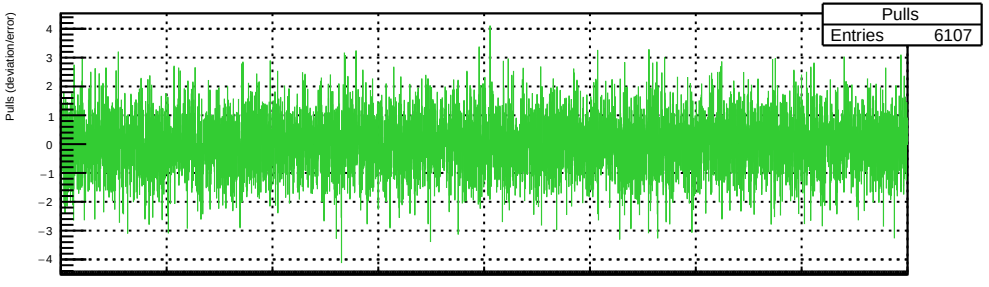

Signed diff_bpm12X_mean (nm) vs Time
p0 −14.21 ± 19.91
20000
0
−20000
−40000
−60000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number

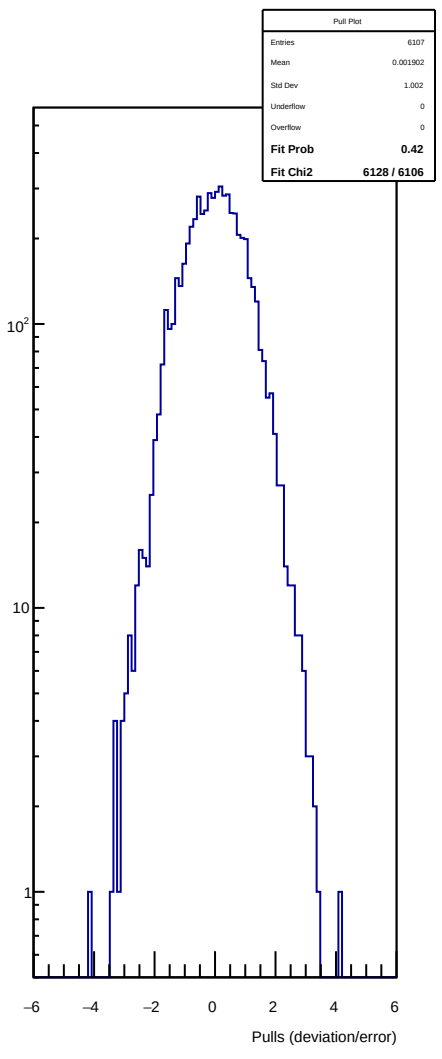

Pulls
Entries 6107
Pulls (deviation/error)
2
0
−2
−4
−6

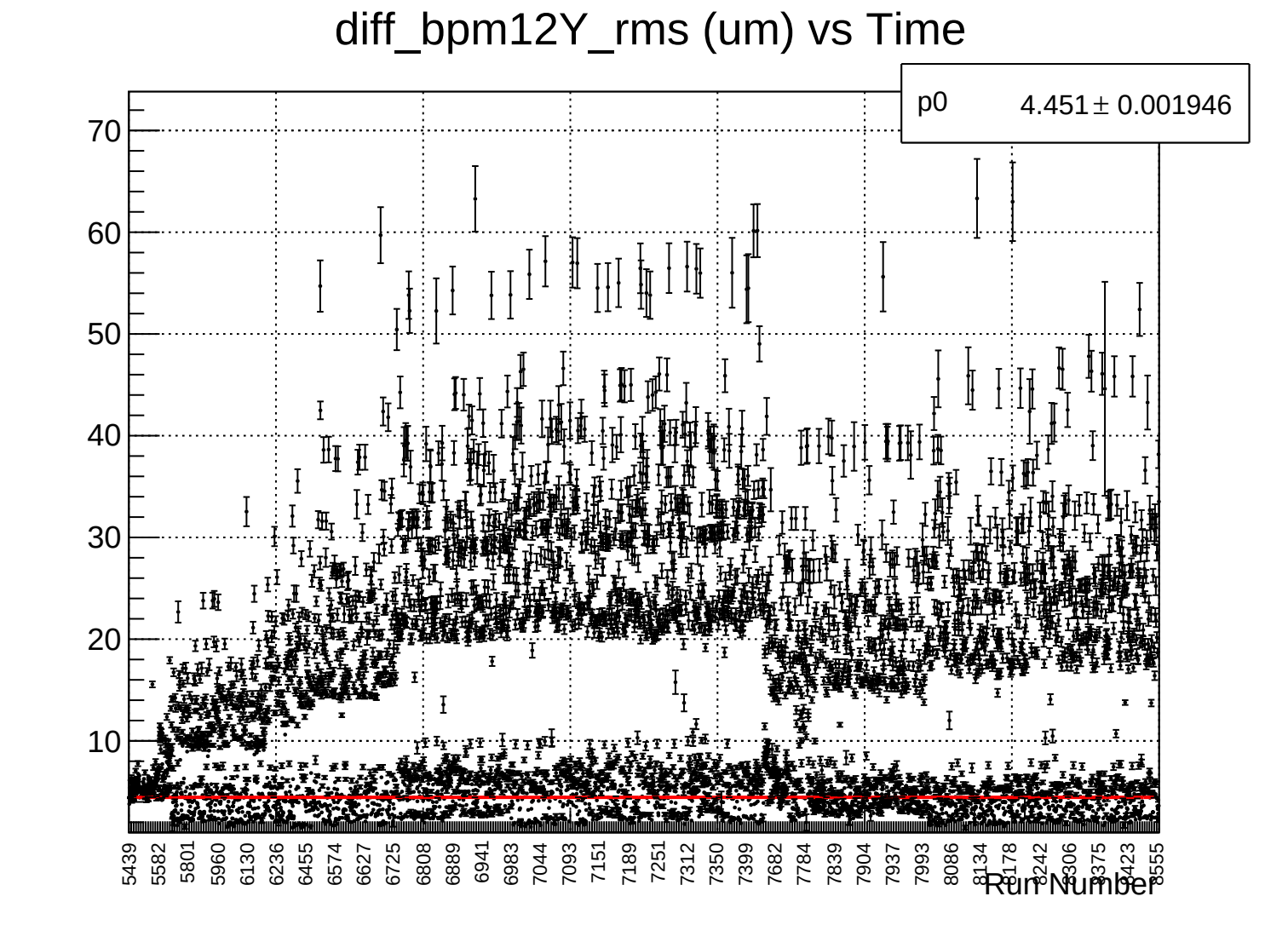

Pull Plot
Entries 6107
Mean 0.003226
Std Dev 0.985
Underflow 0
Overflow 0
Fit Prob 0.95
Fit Chi2 5924 / 6106
10²
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)


diff_bpm12X_rms (um) vs Time
p0
40.03 ± 0.01408
120
100
80
60
40
20
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number


Signed diff_bpm12Y_mean (nm) vs Time
p0 −0.1285 ± 2.752
20000
15000
10000
5000
0
−5000
−10000
−15000
−20000
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number


Pulls
Entries 6107
Pulls (deviation/error)
4
3
2
1
0
−1
−2
−3
−4


Pull Plot
Entries 6107
Mean 0.001902
Std Dev 1.002
Underflow 0
Overflow 0
Fit Prob 0.42
Fit Chi2 6128 / 6106
10^2
10
1
−6
−4
−2
0
2
4
6
Pulls (deviation/error)


diff_bpm12Y_rms (um) vs Time
p0 4.451 ± 0.001946
70
60
50
40
30
20
10
5439
5582
5801
5960
6130
6236
6455
6574
6627
6725
6808
6889
6941
6983
7044
7093
7151
7189
7251
7312
7350
7399
7682
7784
7839
7904
7937
7993
8086
8134
8178
8242
8306
8375
8423
8555
Run Number