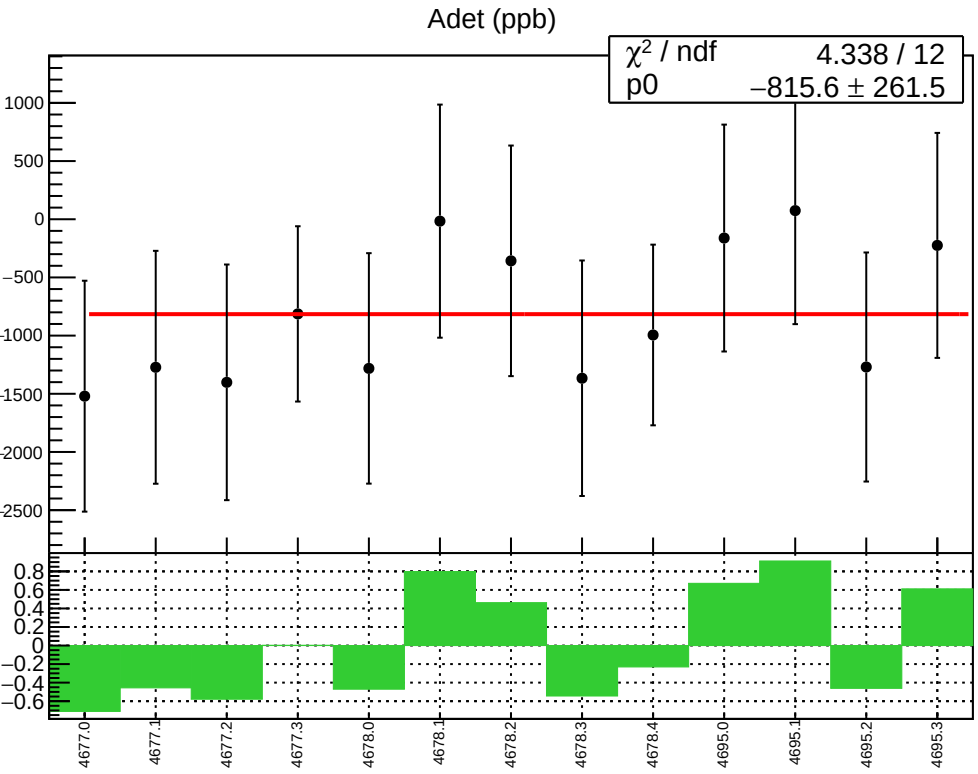
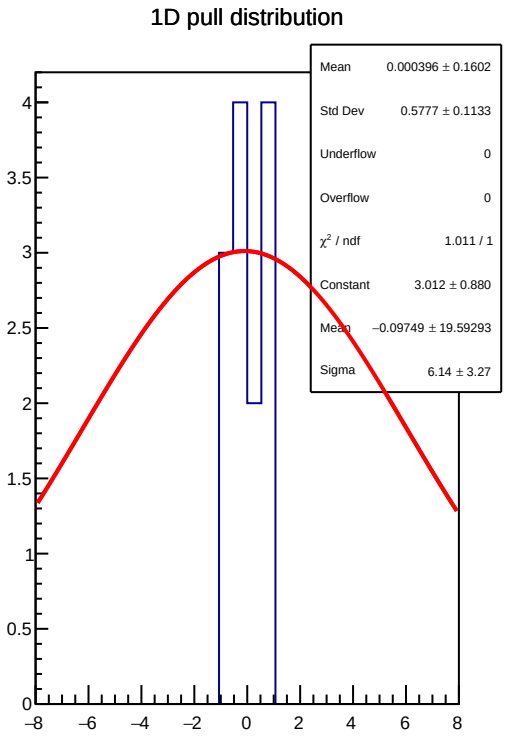
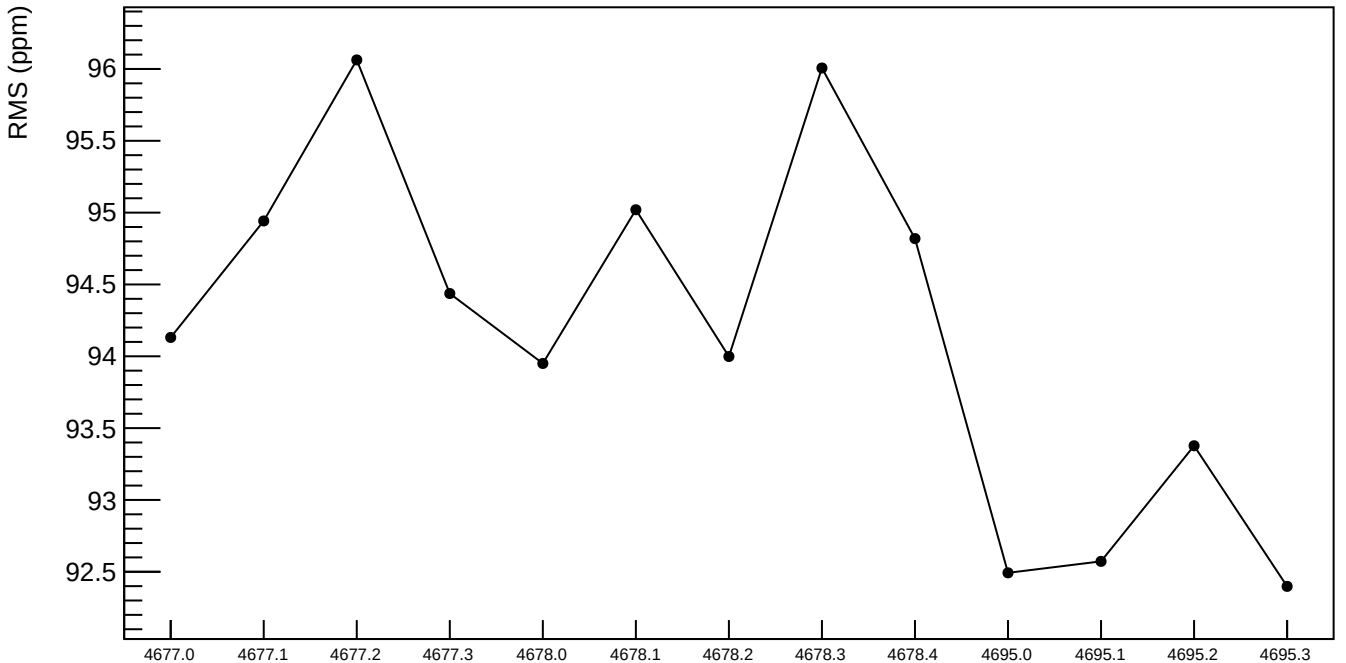
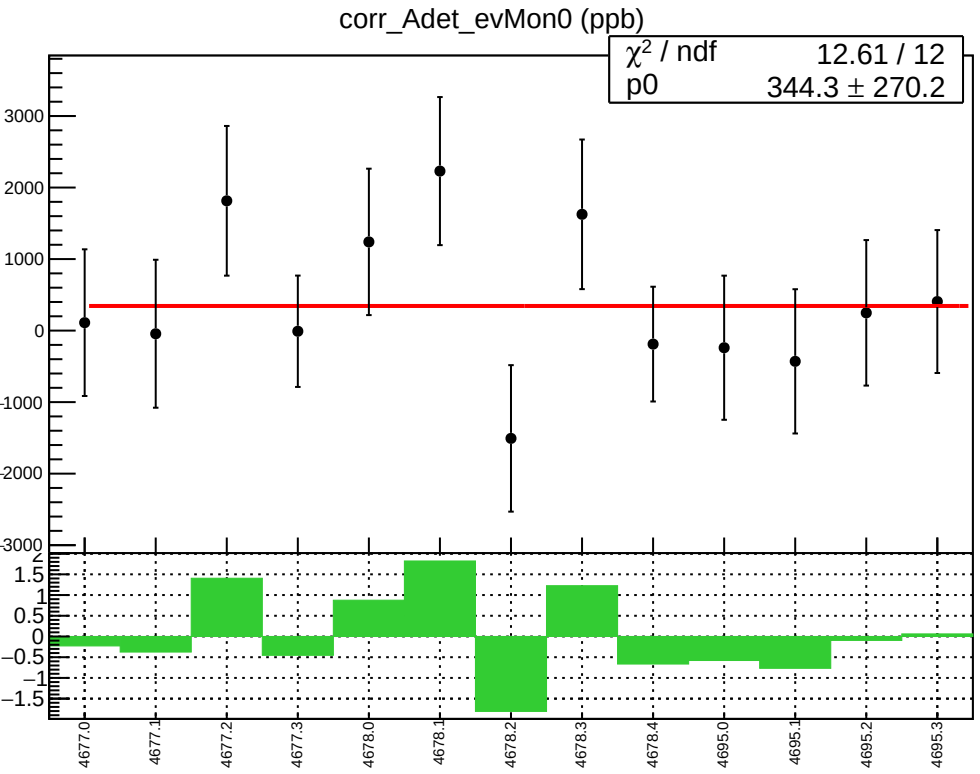
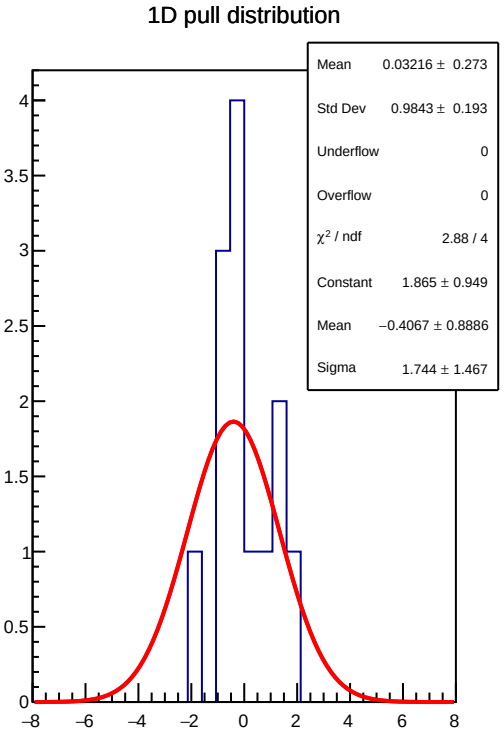

Adet (ppb)
χ² / ndf 4.338 / 12
p0 −815.6 ± 261.5
1000
500
0
−500
−1000
−1500
−2000
−2500
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

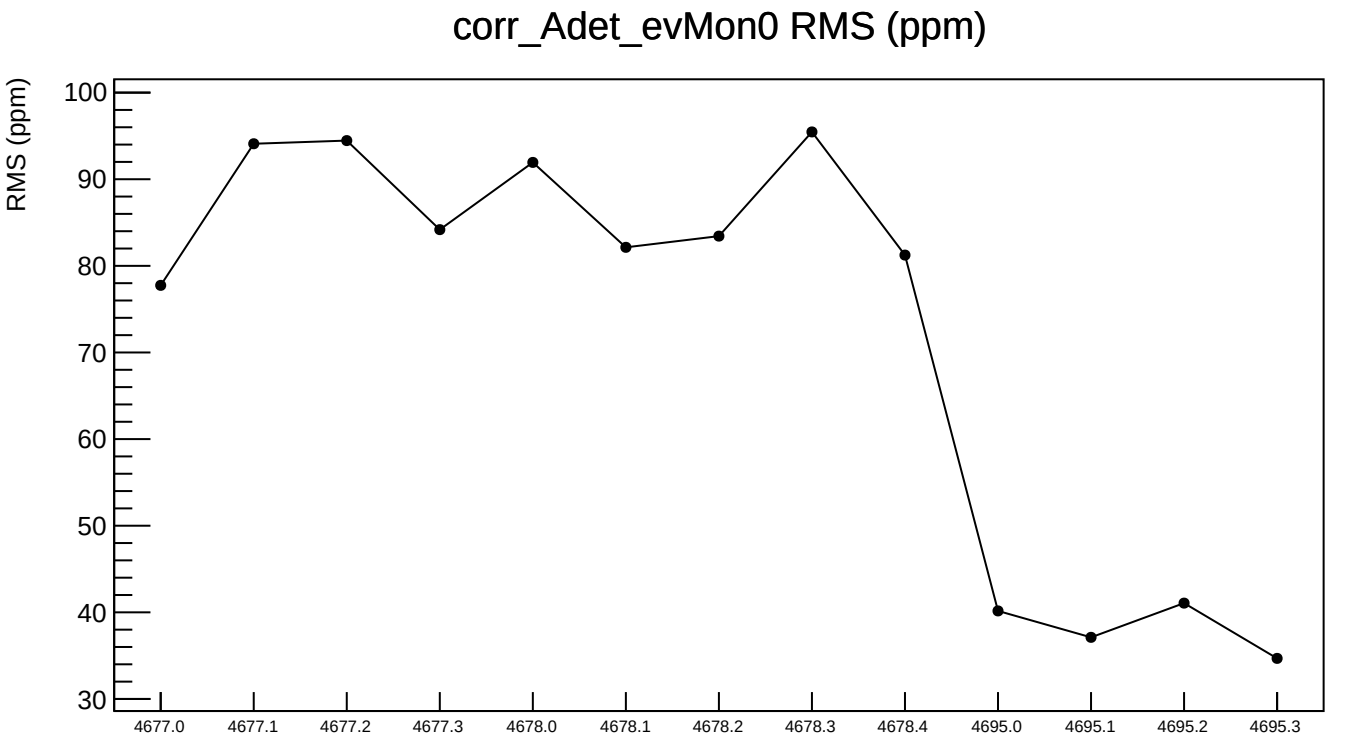

1D pull distribution
Mean 0.000396 ± 0.1602
Std Dev 0.5777 ± 0.1133
Underflow 0
Overflow 0
χ² / ndf 1.011 / 1
Constant 3.012 ± 0.880
Mean −0.09749 ± 19.59293
Sigma 6.14 ± 3.27
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

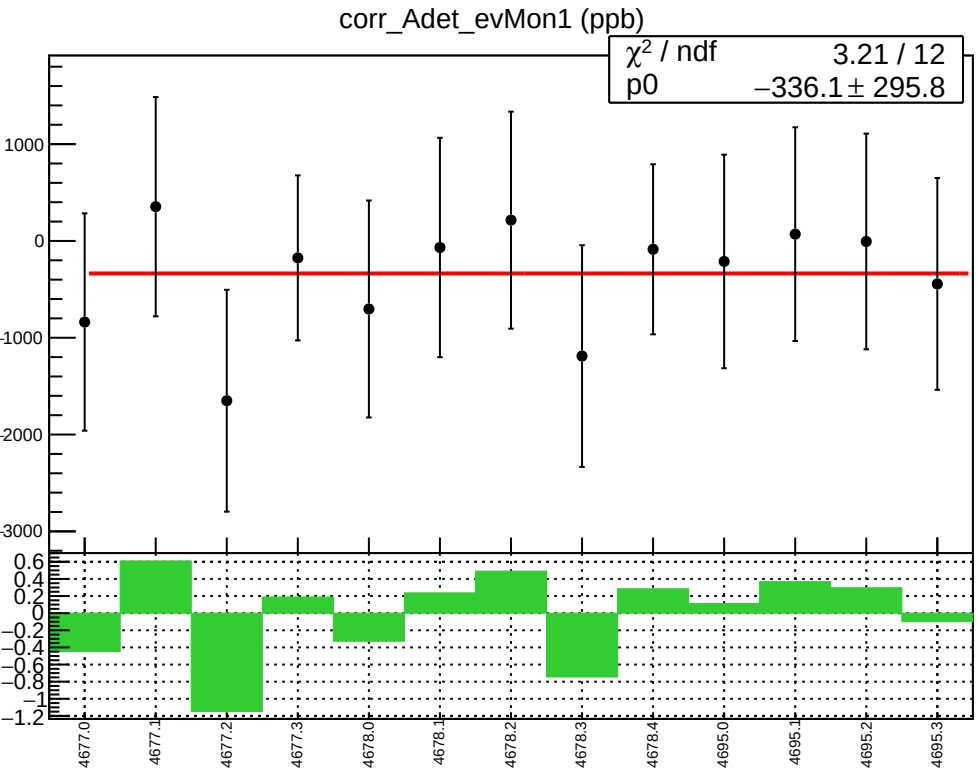
Adet RMS (ppm)

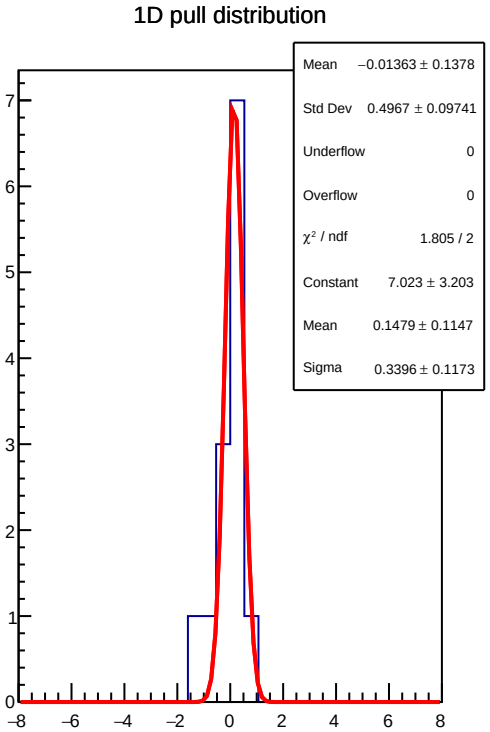

RMS (ppm)
96
95.5
95
94.5
94
93.5
93
92.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

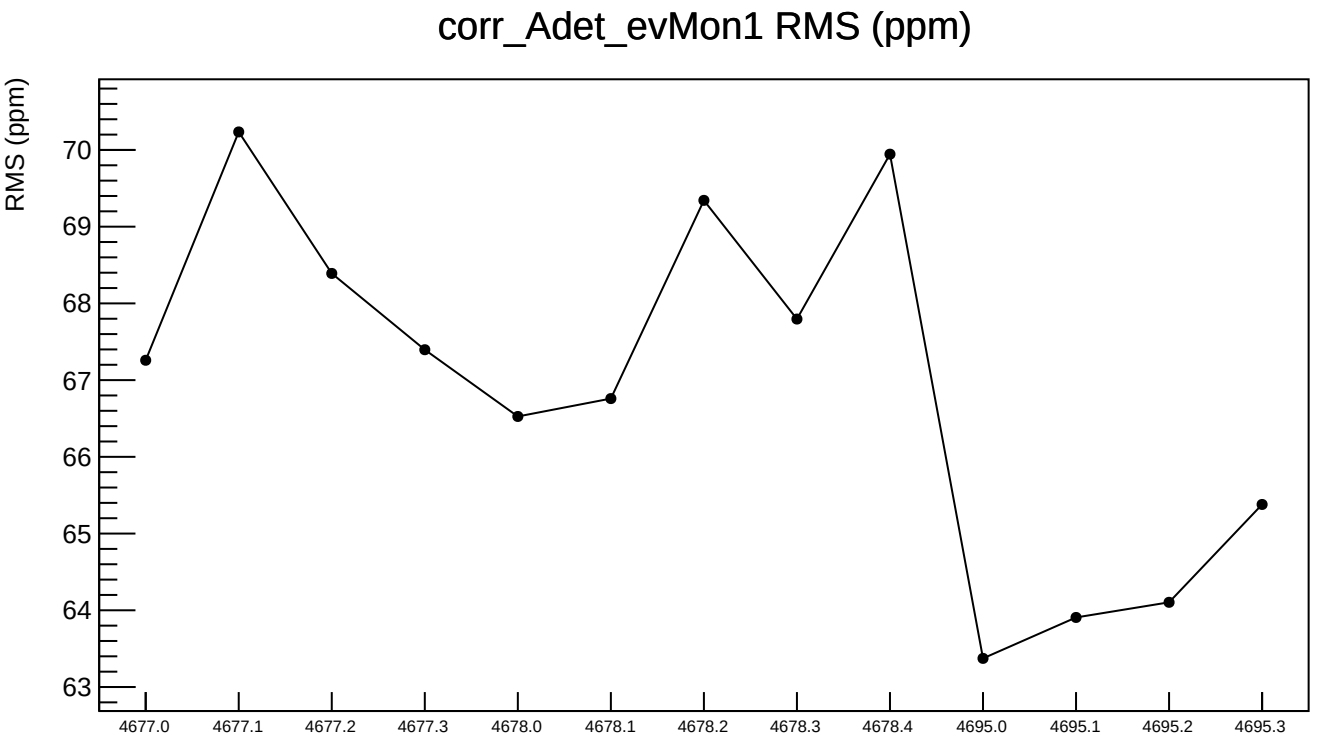

corr_Adet_evMon0 (ppb)
χ² / ndf 12.61 / 12
p0 344.3 ± 270.2
3000
2000
1000
0
-1000
-2000
-3000
2
1.5
1
0.5
0
−0.5
−1
−1.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

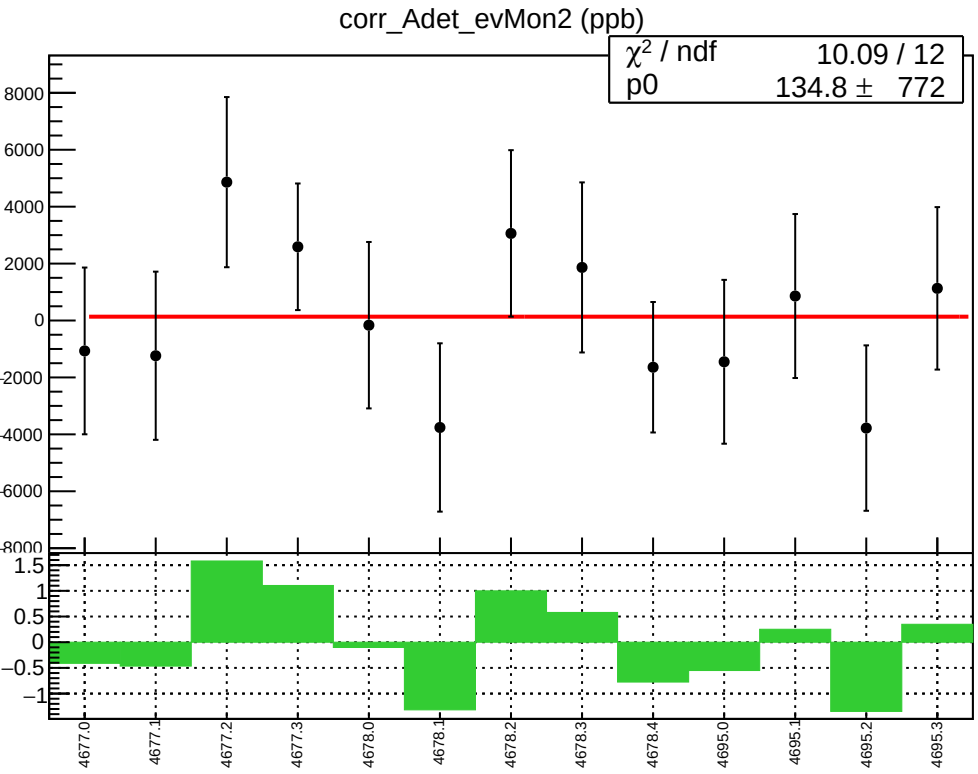

1D pull distribution
Mean 0.03216 ± 0.273
Std Dev 0.9843 ± 0.193
Underflow 0
Overflow 0
χ² / ndf 2.88 / 4
Constant 1.865 ± 0.949
Mean −0.4067 ± 0.8886
Sigma 1.744 ± 1.467
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

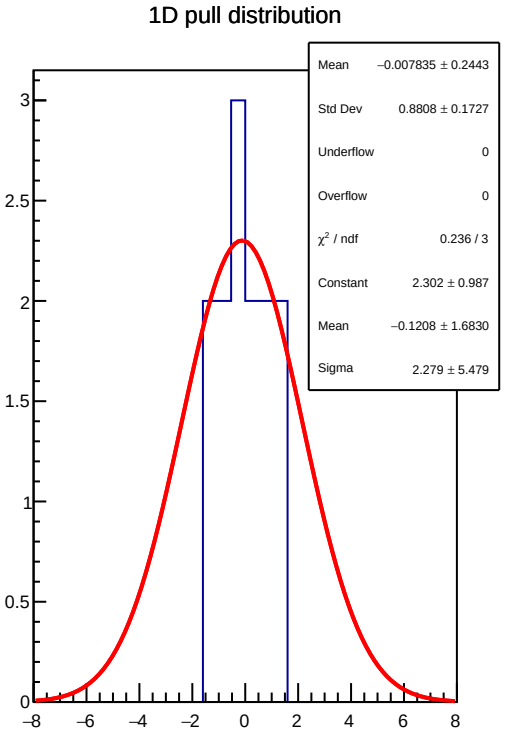

corr_Adet_evMon0 RMS (ppm)
RMS (ppm)
100
90
80
70
60
50
40
30
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


corr_Adet_evMon1 (ppb)
χ² / ndf 3.21 / 12
p0 −336.1 ± 295.8
1000
0
-1000
-2000
-3000
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

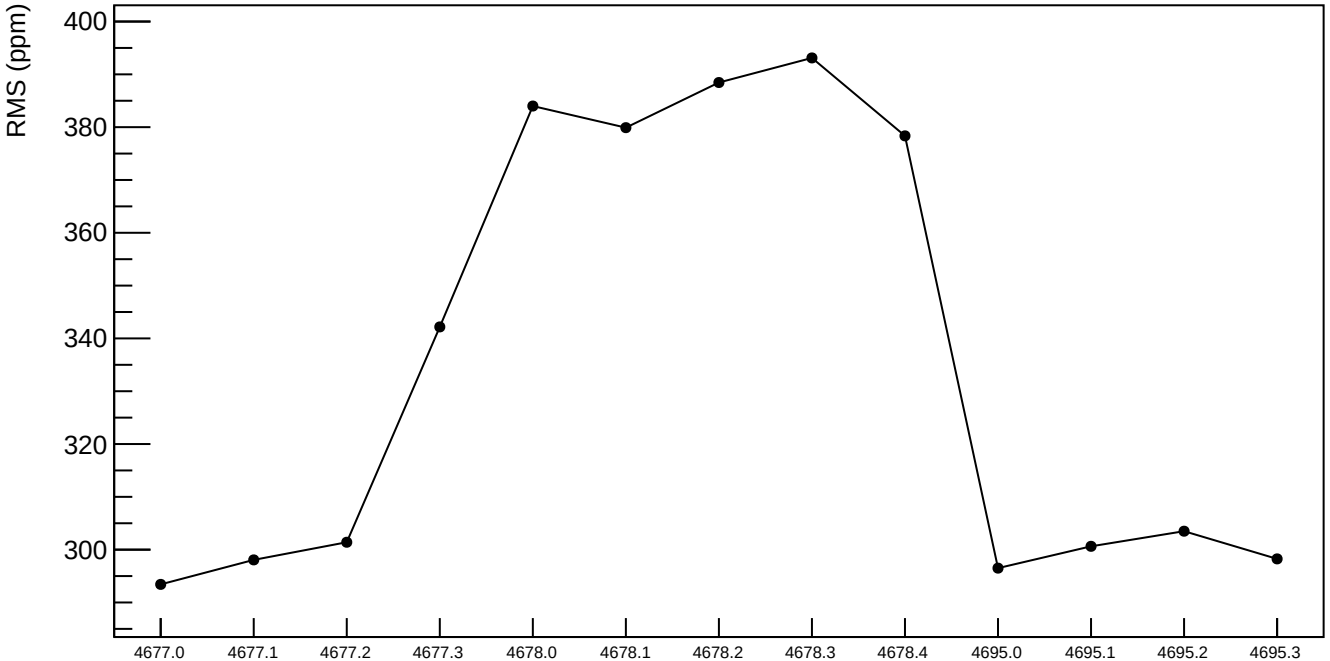

1D pull distribution
Mean −0.01363 ± 0.1378
Std Dev 0.4967 ± 0.09741
Underflow 0
Overflow 0
χ² / ndf 1.805 / 2
Constant 7.023 ± 3.203
Mean 0.1479 ± 0.1147
Sigma 0.3396 ± 0.1173
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

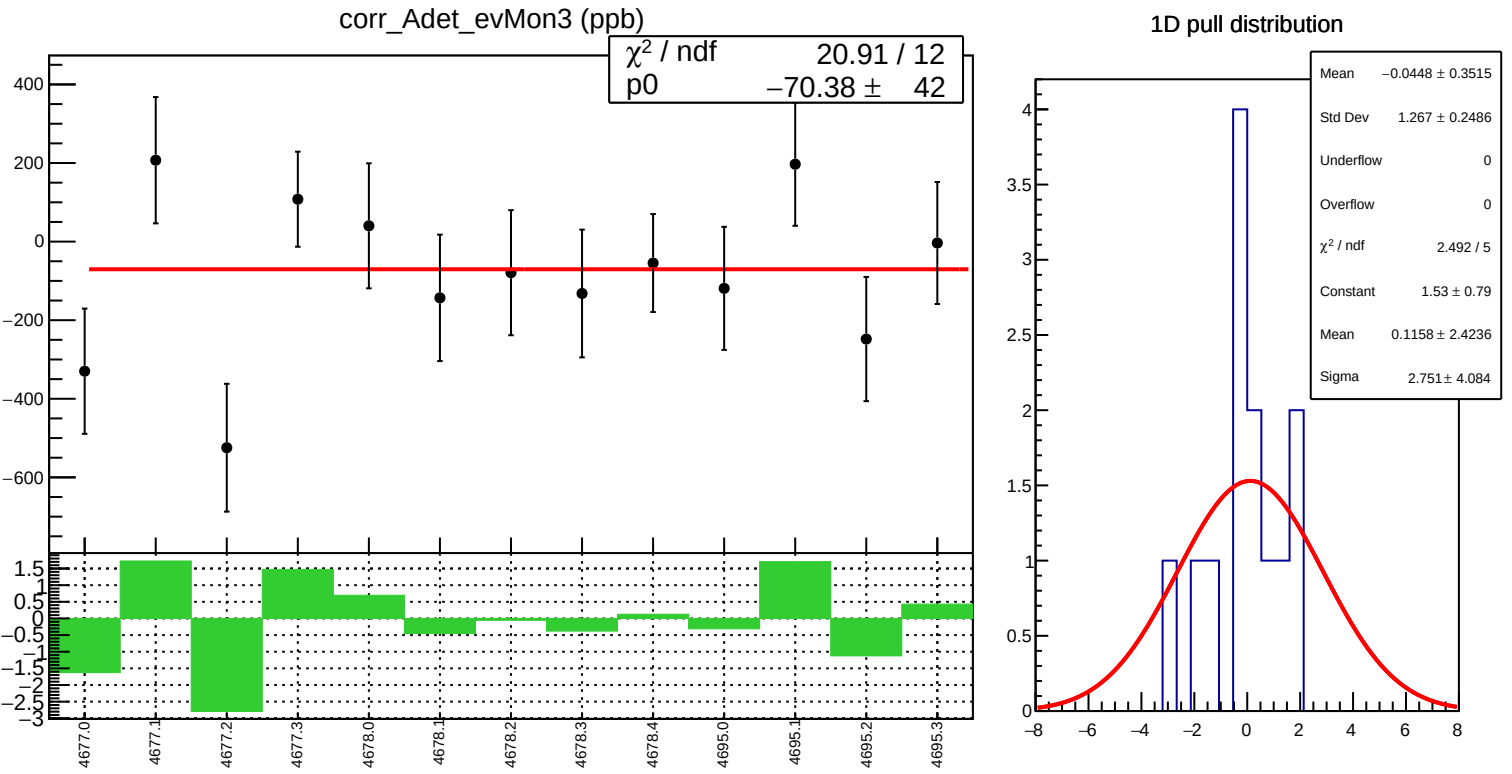

corr_Adet_evMon1 RMS (ppm)
RMS (ppm)
70
69
68
67
66
65
64
63
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

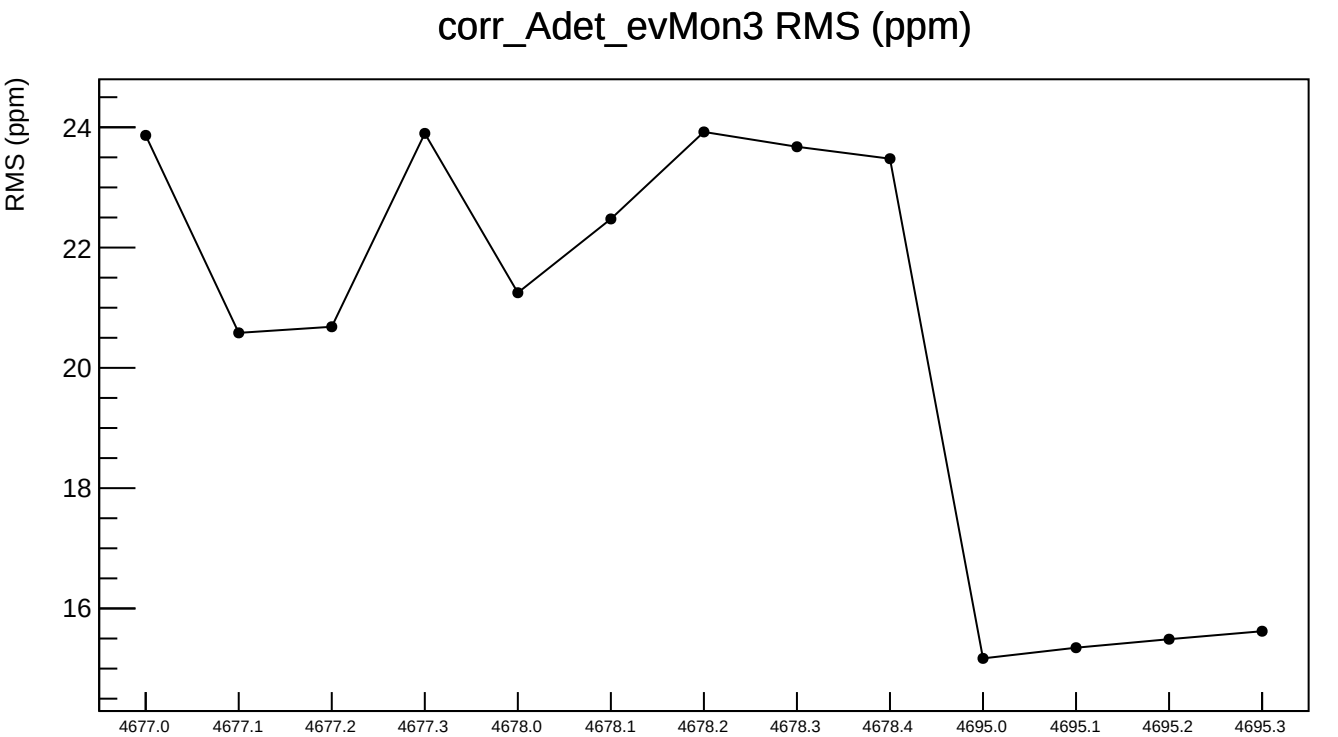

corr_Adet_evMon2 (ppb)
χ² / ndf 10.09 / 12
p0 134.8 ± 772
8000
6000
4000
2000
0
-2000
-4000
-6000
-8000
1.5
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

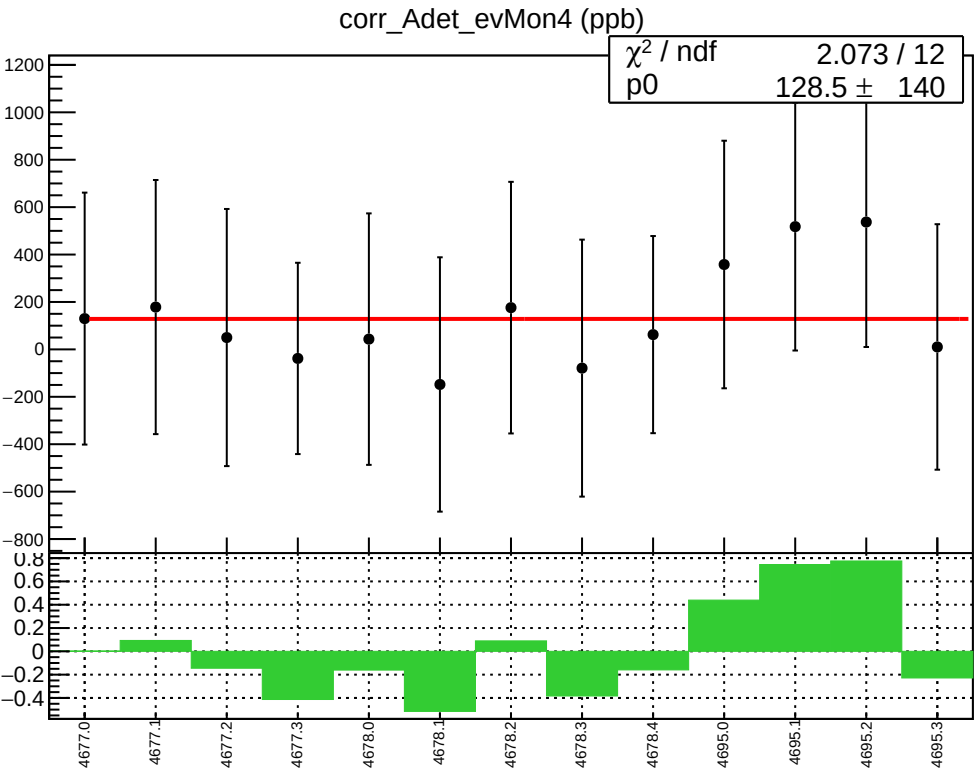

1D pull distribution
Mean −0.007835 ± 0.2443
Std Dev 0.8808 ± 0.1727
Underflow 0
Overflow 0
χ² / ndf 0.236 / 3
Constant 2.302 ± 0.987
Mean −0.1208 ± 1.6830
Sigma 2.279 ± 5.479
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

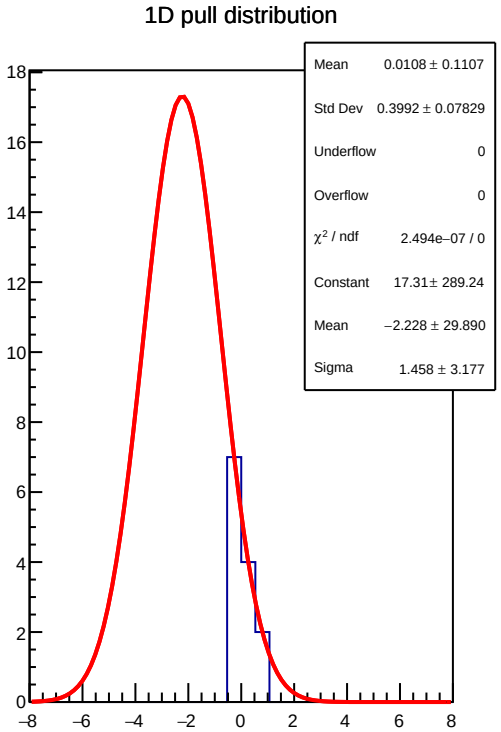
corr_Adet_evMon2 RMS (ppm)



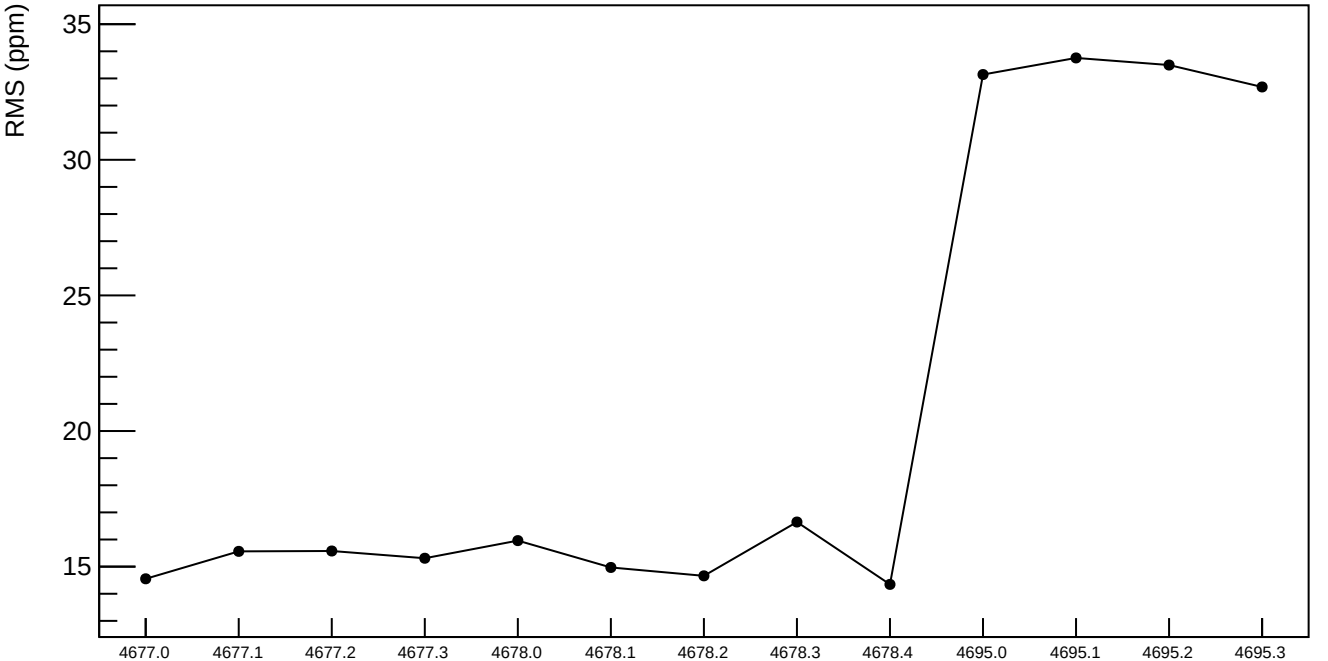

corr_Adet_evMon3 (ppb)
χ² / ndf 20.91 / 12
p0 −70.38 ± 42
400
200
0
−200
−400
−600
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.0448 ± 0.3515
Std Dev 1.267 ± 0.2486
Underflow 0
Overflow 0
χ² / ndf 2.492 / 5
Constant 1.53 ± 0.79
Mean 0.1158 ± 2.4236
Sigma 2.751 ± 4.084
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

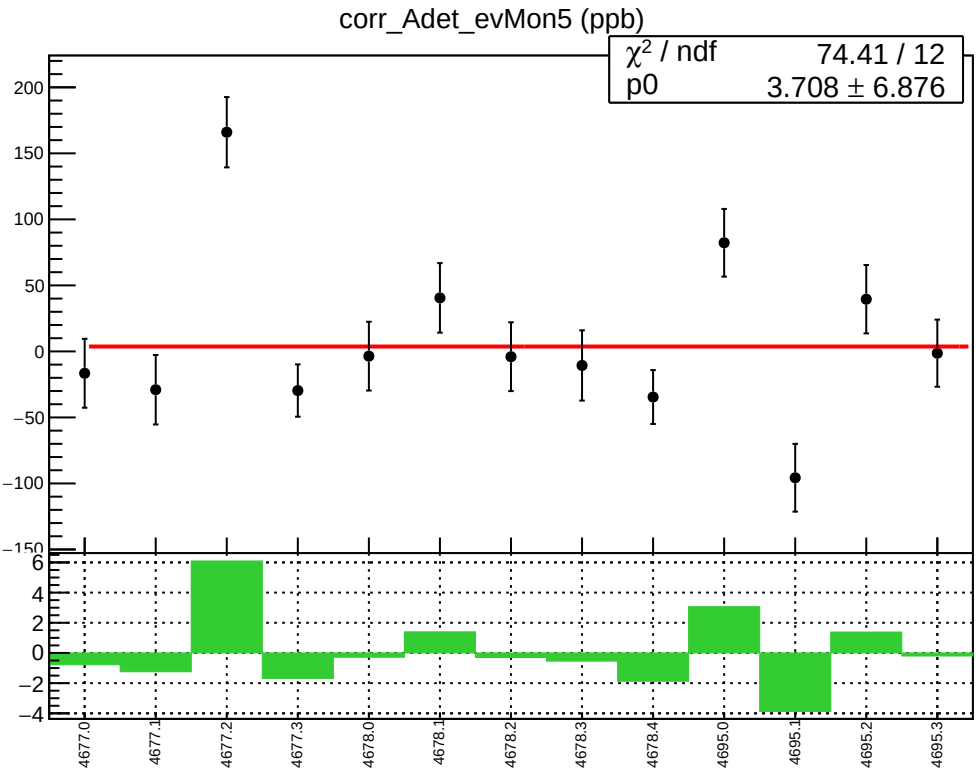

corr_Adet_evMon3 RMS (ppm)
RMS (ppm)
24
22
20
18
16
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

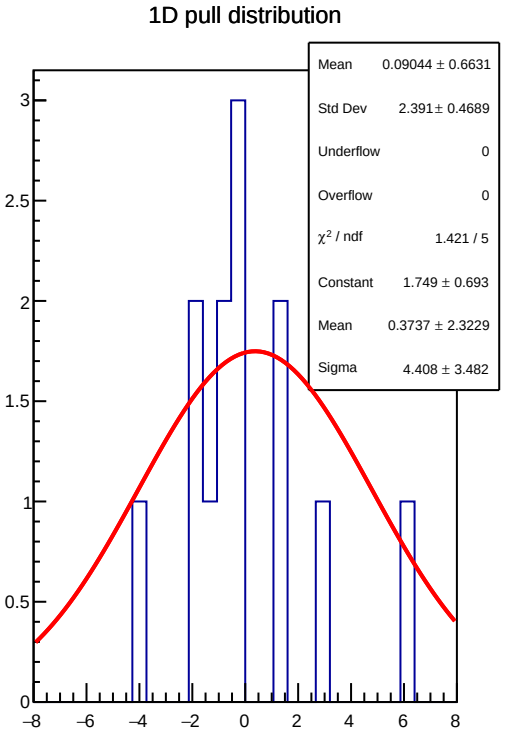

corr_Adet_evMon4 (ppb)
χ² / ndf 2.073 / 12
p0 128.5 ± 140
1200
1000
800
600
400
200
0
−200
−400
−600
−800
0.8
0.6
0.4
0.2
0
−0.2
−0.4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


1D pull distribution
Mean 0.0108 ± 0.1107
Std Dev 0.3992 ± 0.07829
Underflow 0
Overflow 0
χ² / ndf 2.494e−07 / 0
Constant 17.31± 289.24
Mean −2.228 ± 29.890
Sigma 1.458 ± 3.177
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

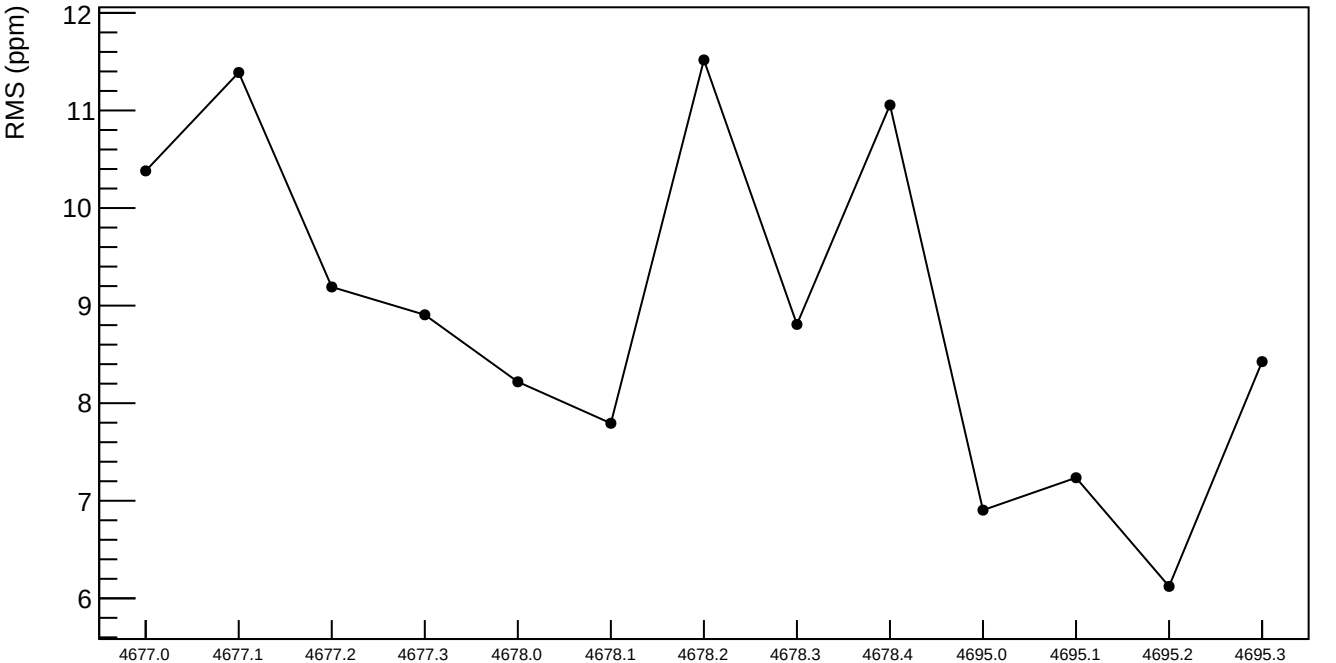
corr_Adet_evMon4 RMS (ppm)

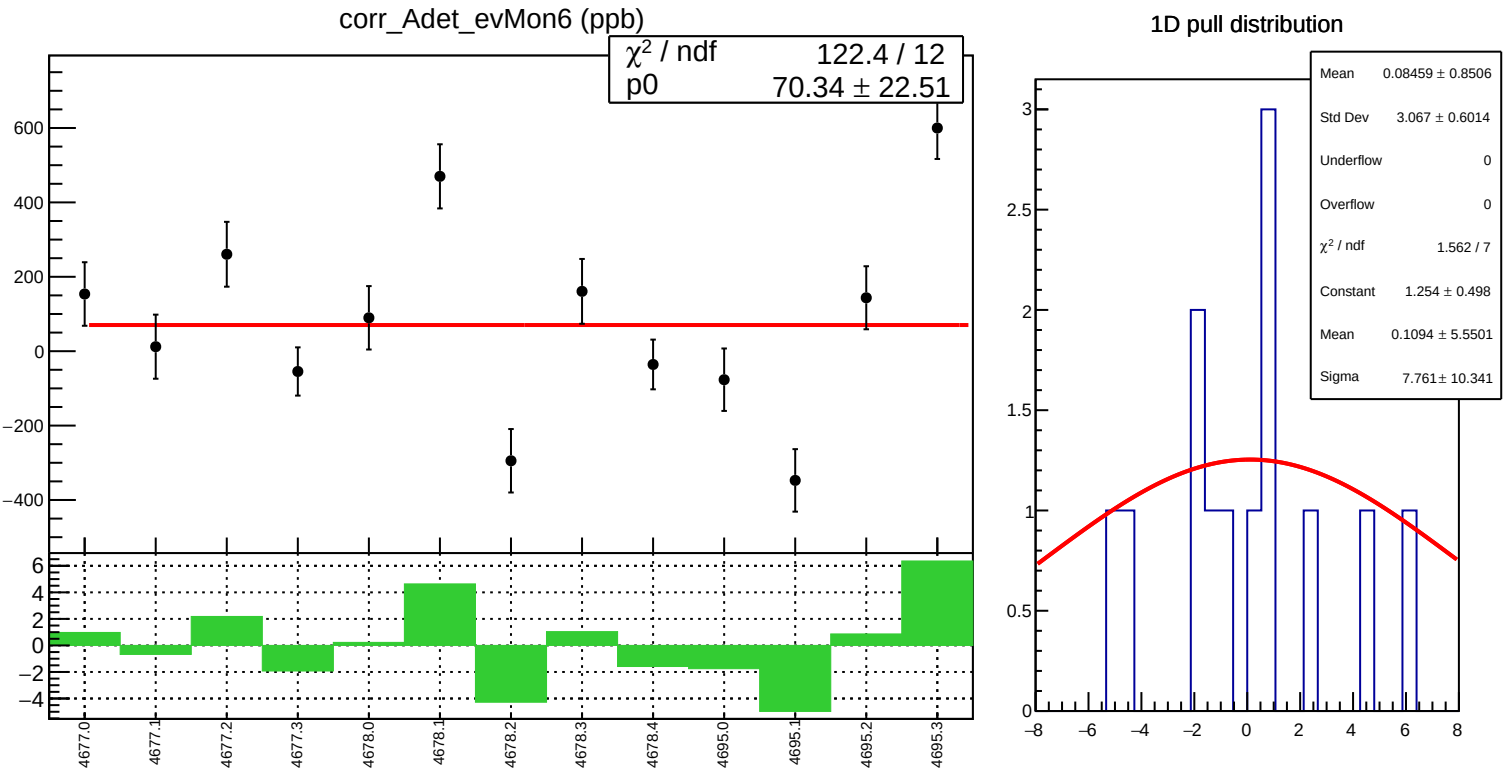


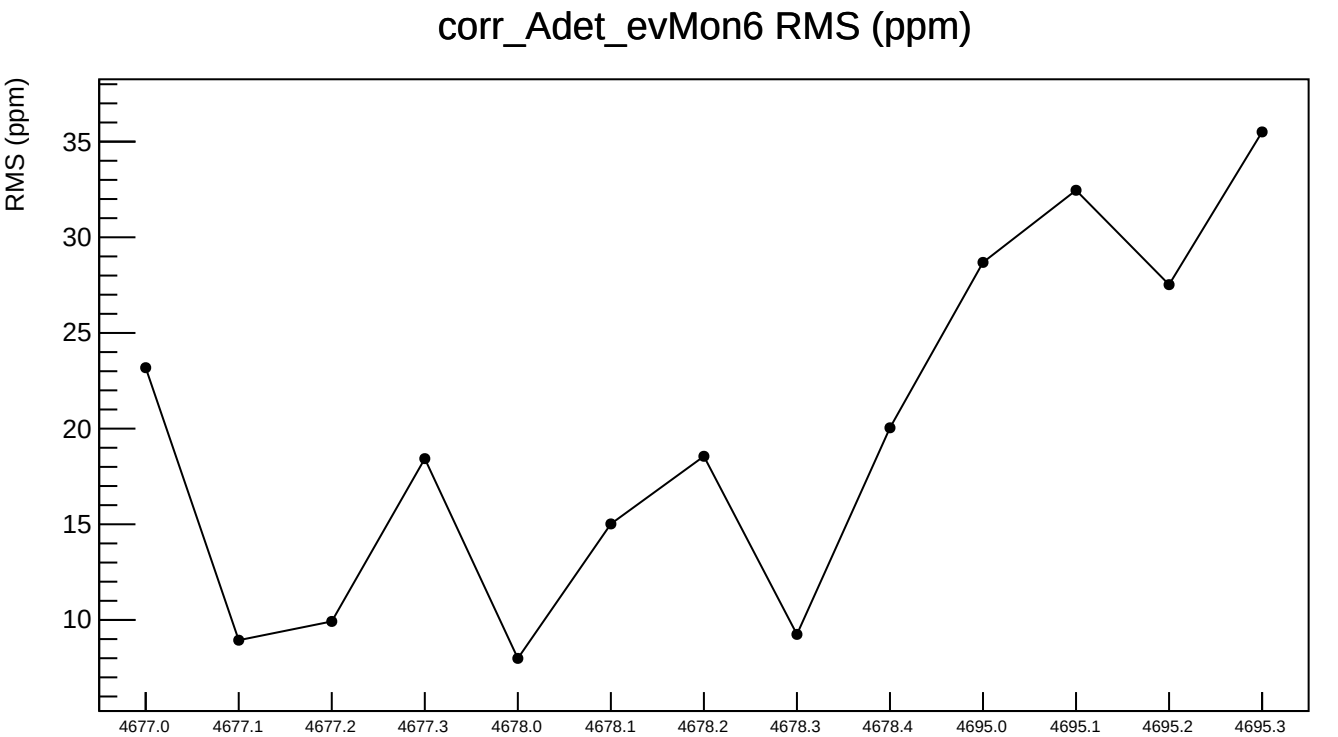

corr_Adet_evMon5 (ppb)
χ² / ndf 74.41 / 12
p0 3.708 ± 6.876
200
150
100
50
0
−50
−100
−150
6
4
2
0
−2
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

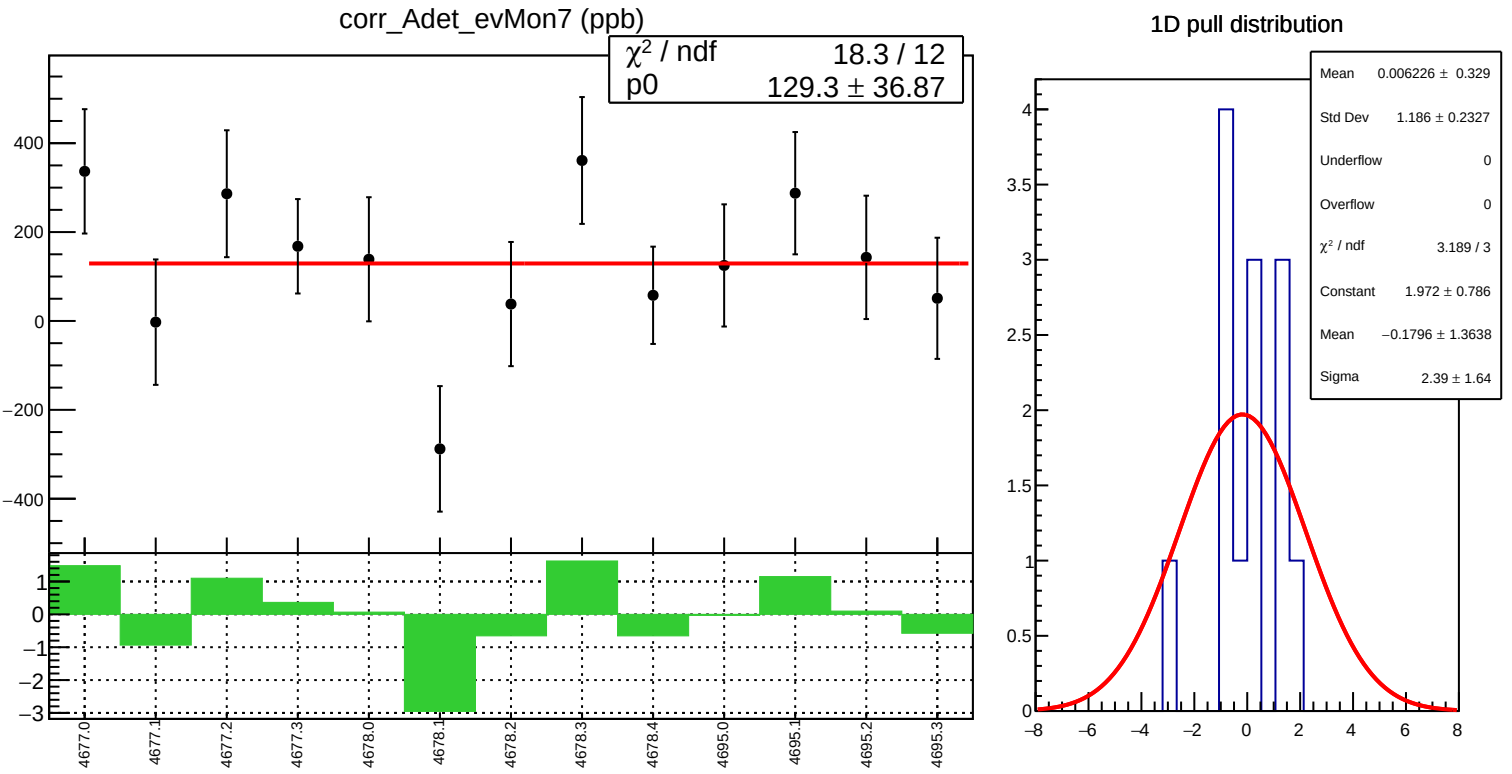

1D pull distribution
Mean 0.09044 ± 0.6631
Std Dev 2.391± 0.4689
Underflow 0
Overflow 0
χ² / ndf 1.421 / 5
Constant 1.749 ± 0.693
Mean 0.3737 ± 2.3229
Sigma 4.408 ± 3.482
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

corr_Adet_evMon5 RMS (ppm)

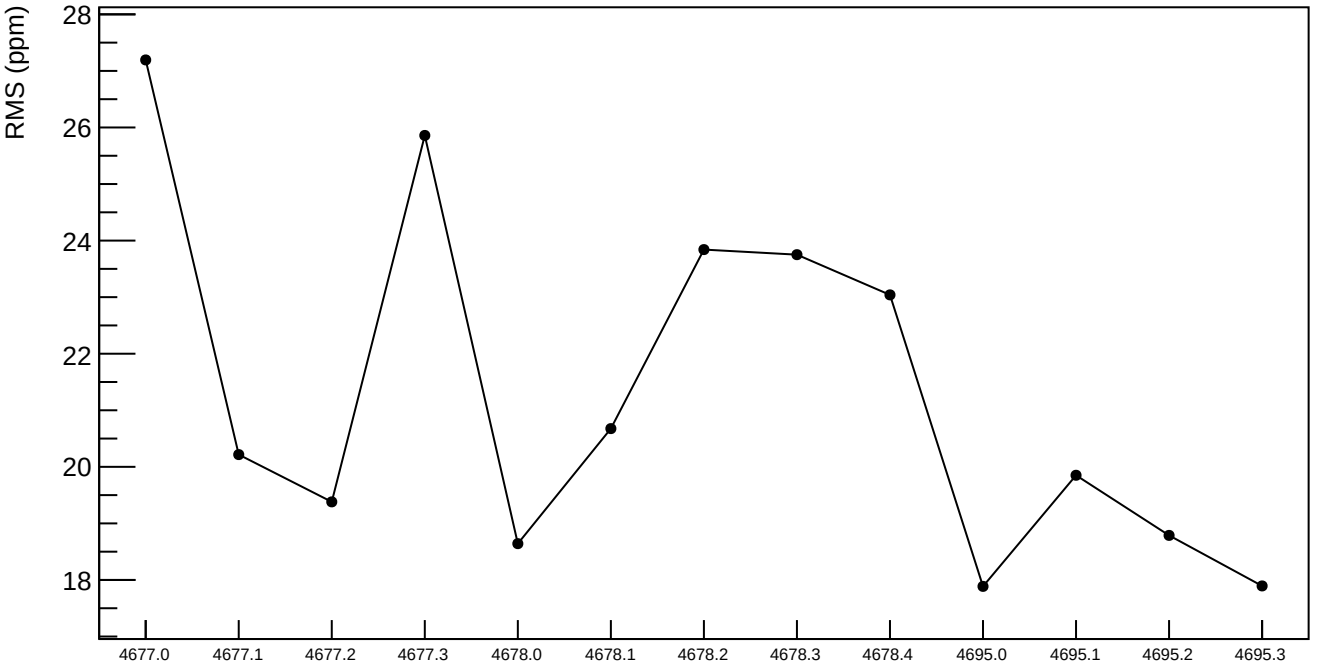


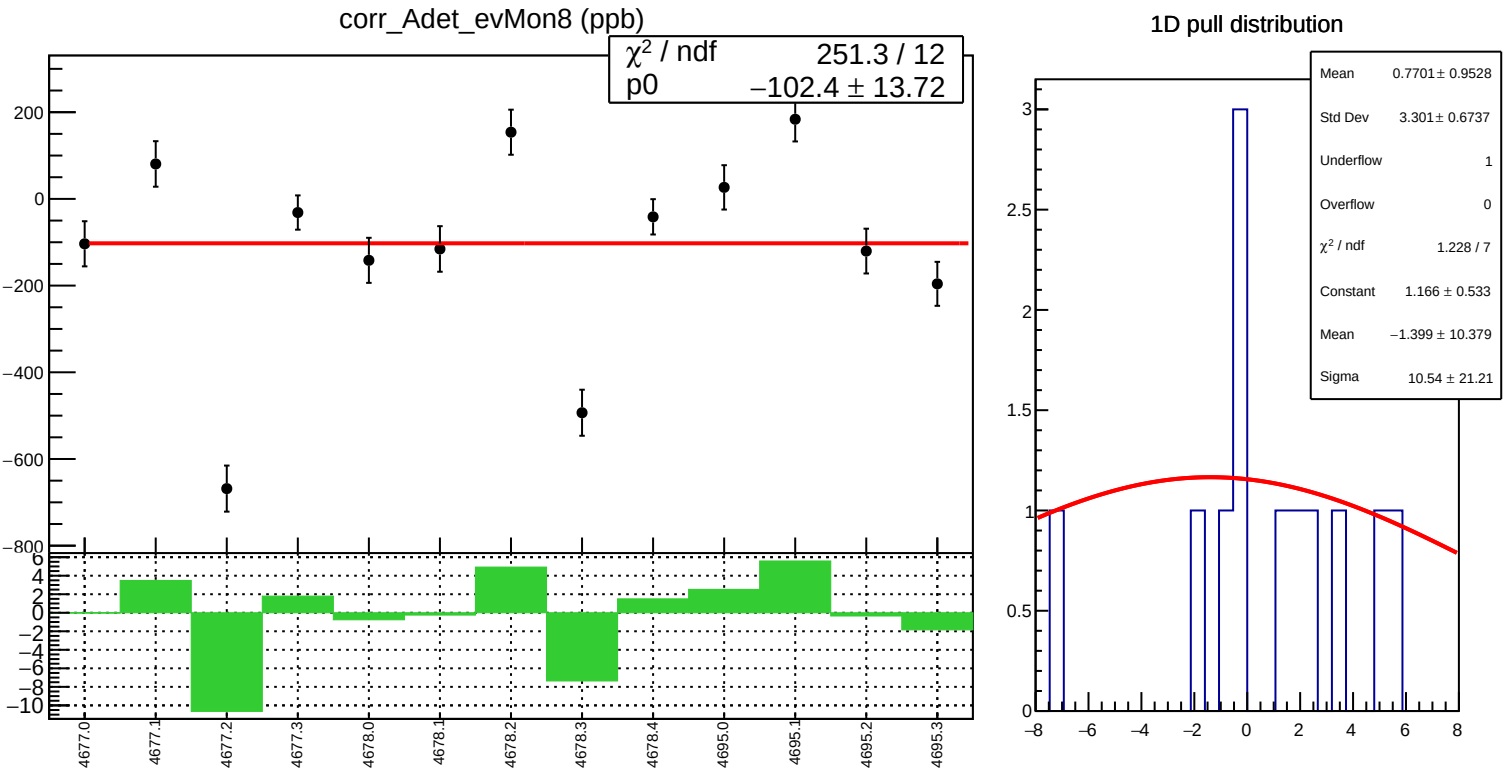

corr_Adet_evMon6 (ppb)
χ² / ndf 122.4 / 12
p0 70.34 ± 22.51
600
400
200
0
−200
−400
6
4
2
0
−2
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.08459 ± 0.8506
Std Dev 3.067 ± 0.6014
Underflow 0
Overflow 0
χ² / ndf 1.562 / 7
Constant 1.254 ± 0.498
Mean 0.1094 ± 5.5501
Sigma 7.761± 10.341
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

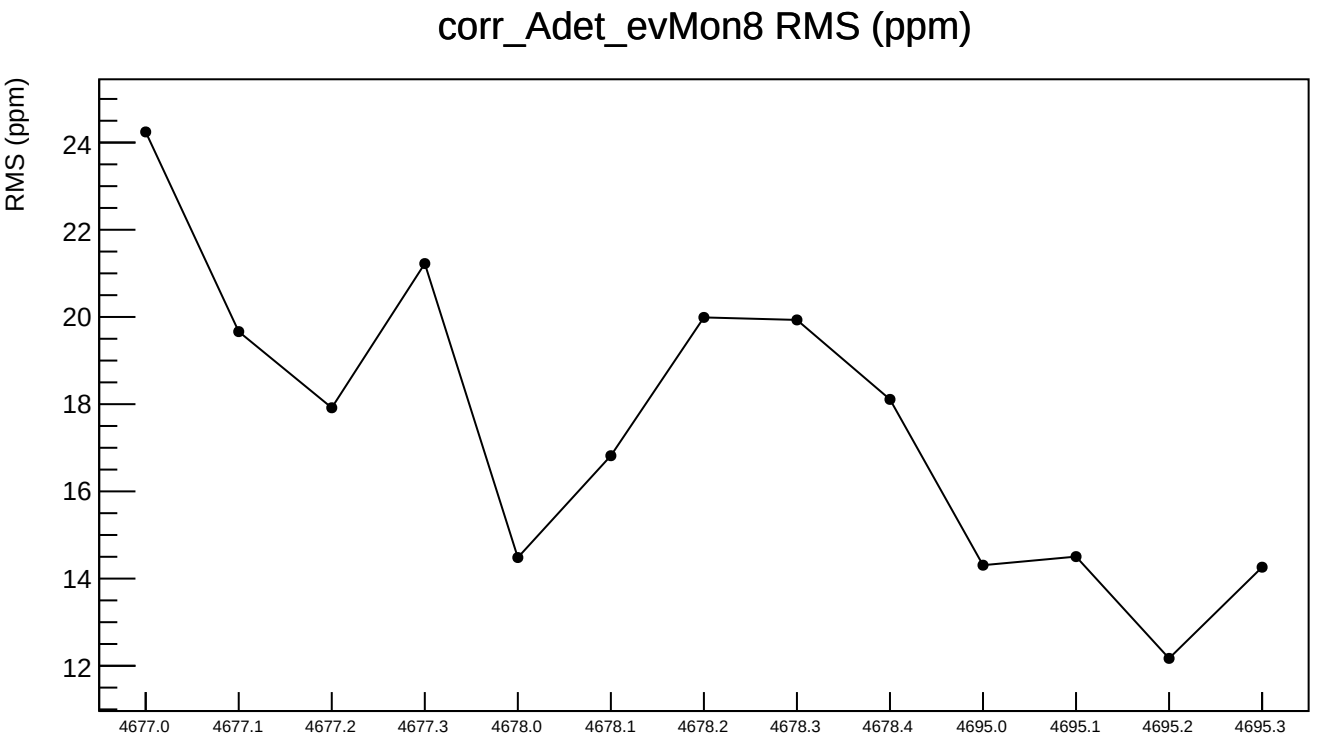

corr_Adet_evMon6 RMS (ppm)
RMS (ppm)
35
30
25
20
15
10
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

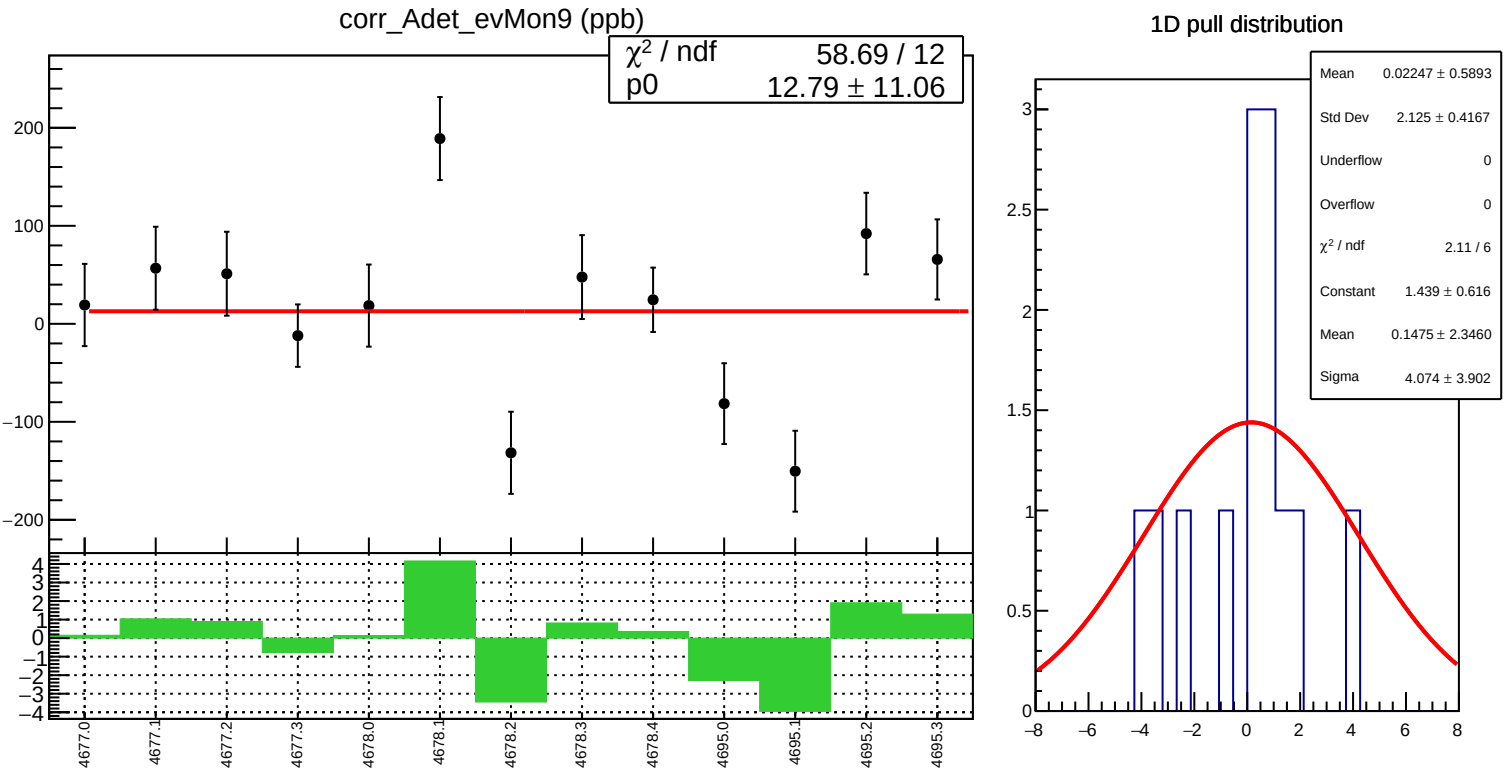

corr_Adet_evMon7 (ppb)
χ² / ndf 18.3 / 12
p0 129.3 ± 36.87
400
200
0
−200
−400
1
0
−1
−2
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.006226 ± 0.329
Std Dev 1.186 ± 0.2327
Underflow 0
Overflow 0
χ² / ndf 3.189 / 3
Constant 1.972 ± 0.786
Mean −0.1796 ± 1.3638
Sigma 2.39 ± 1.64
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

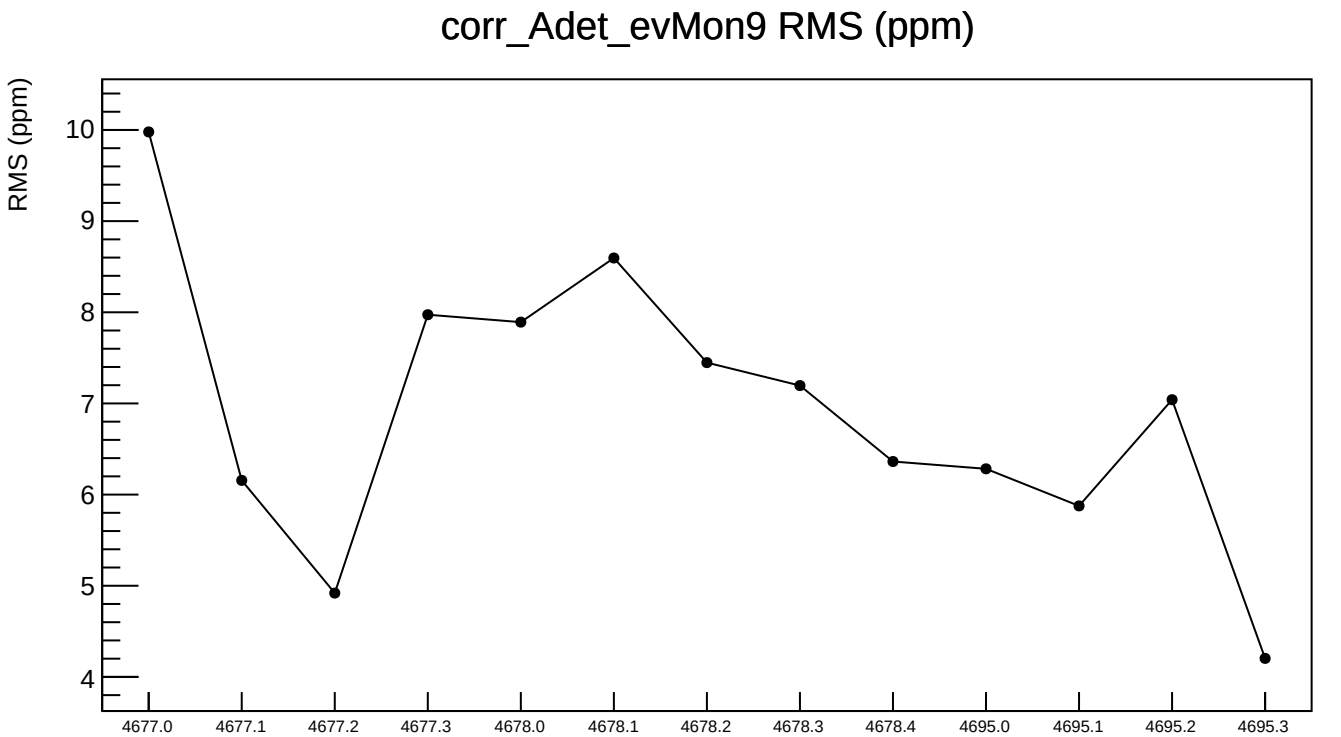
corr_Adet_evMon7 RMS (ppm)

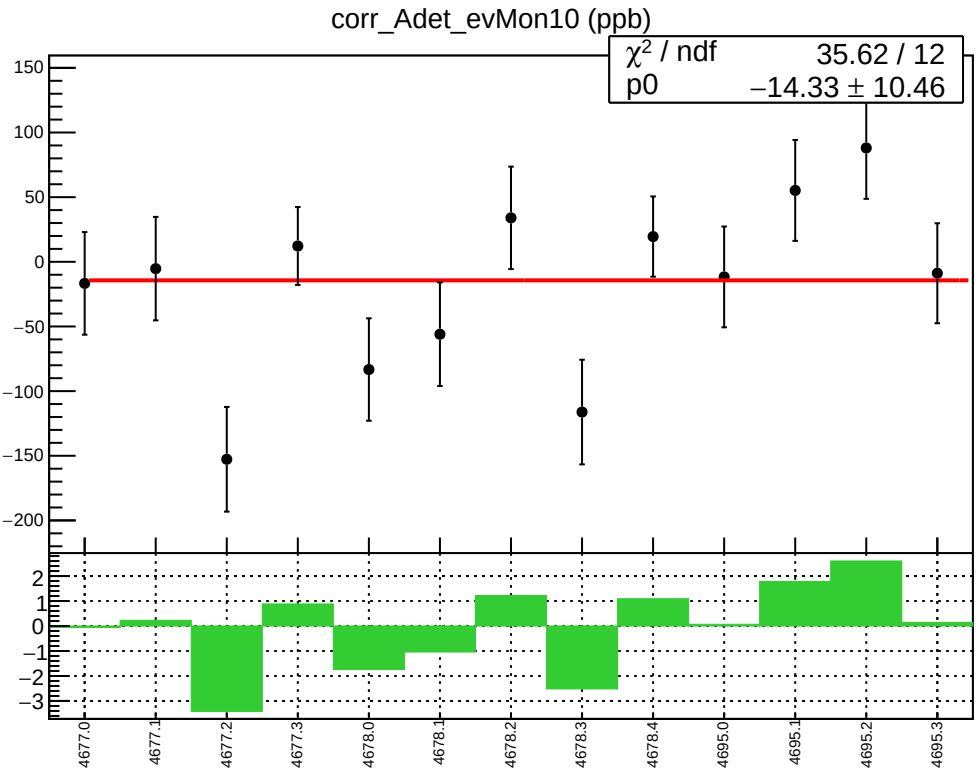


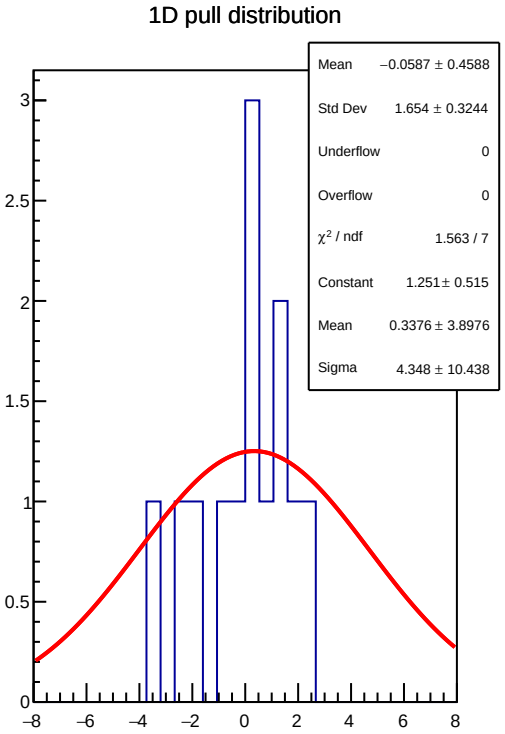

corr_Adet_evMon8 (ppb)
χ² / ndf 251.3 / 12
p0 −102.4 ± 13.72
200
0
−200
−400
−600
−800
6
4
2
0
−2
−4
−6
−8
−10
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.7701 ± 0.9528
Std Dev 3.301 ± 0.6737
Underflow 1
Overflow 0
χ² / ndf 1.228 / 7
Constant 1.166 ± 0.533
Mean −1.399 ± 10.379
Sigma 10.54 ± 21.21
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

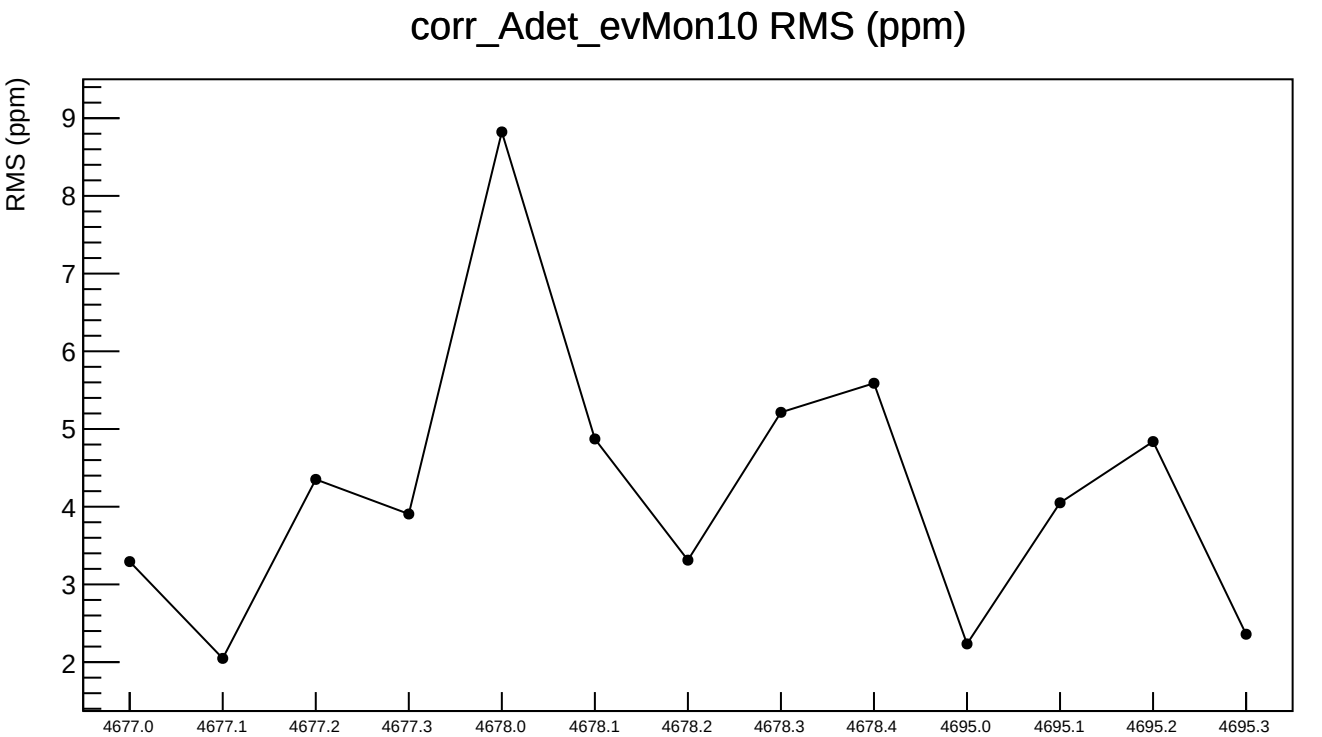

corr_Adet_evMon8 RMS (ppm)
RMS (ppm)
24
22
20
18
16
14
12
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

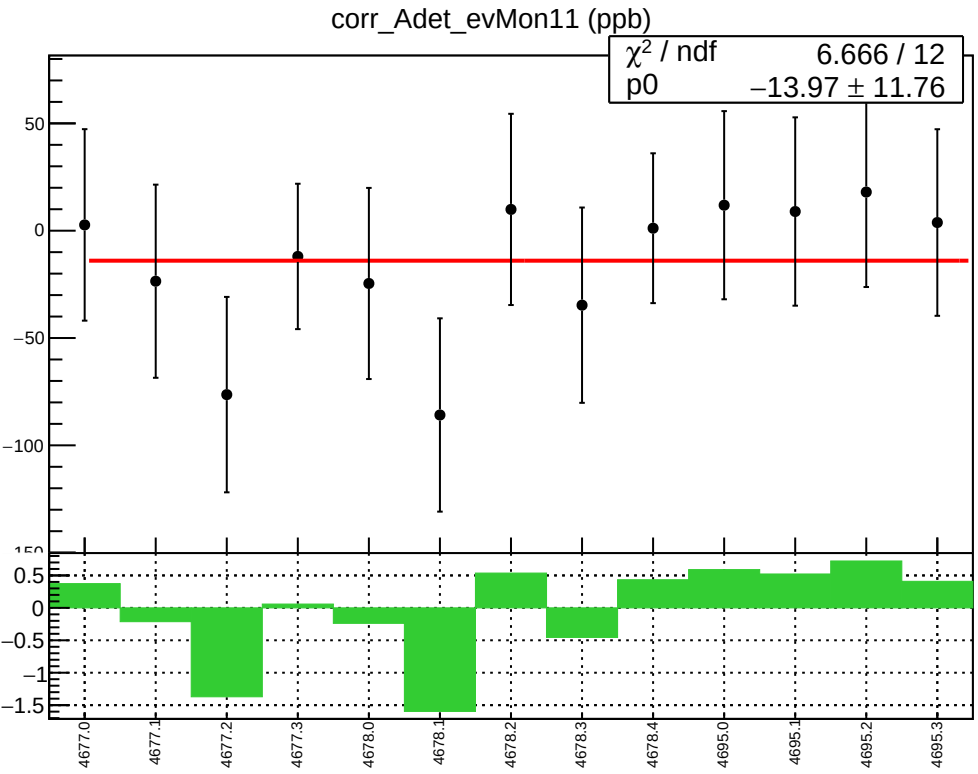

corr_Adet_evMon9 (ppb)
χ² / ndf 58.69 / 12
p0 12.79 ± 11.06
200
100
0
−100
−200
4
3
2
1
0
−1
−2
−3
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.02247 ± 0.5893
Std Dev 2.125 ± 0.4167
Underflow 0
Overflow 0
χ² / ndf 2.11 / 6
Constant 1.439 ± 0.616
Mean 0.1475 ± 2.3460
Sigma 4.074 ± 3.902
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

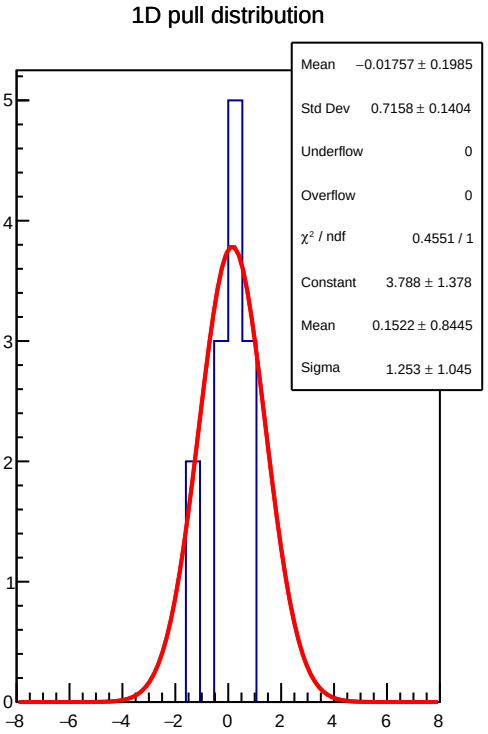

corr_Adet_evMon9 RMS (ppm)
RMS (ppm)
10
9
8
7
6
5
4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

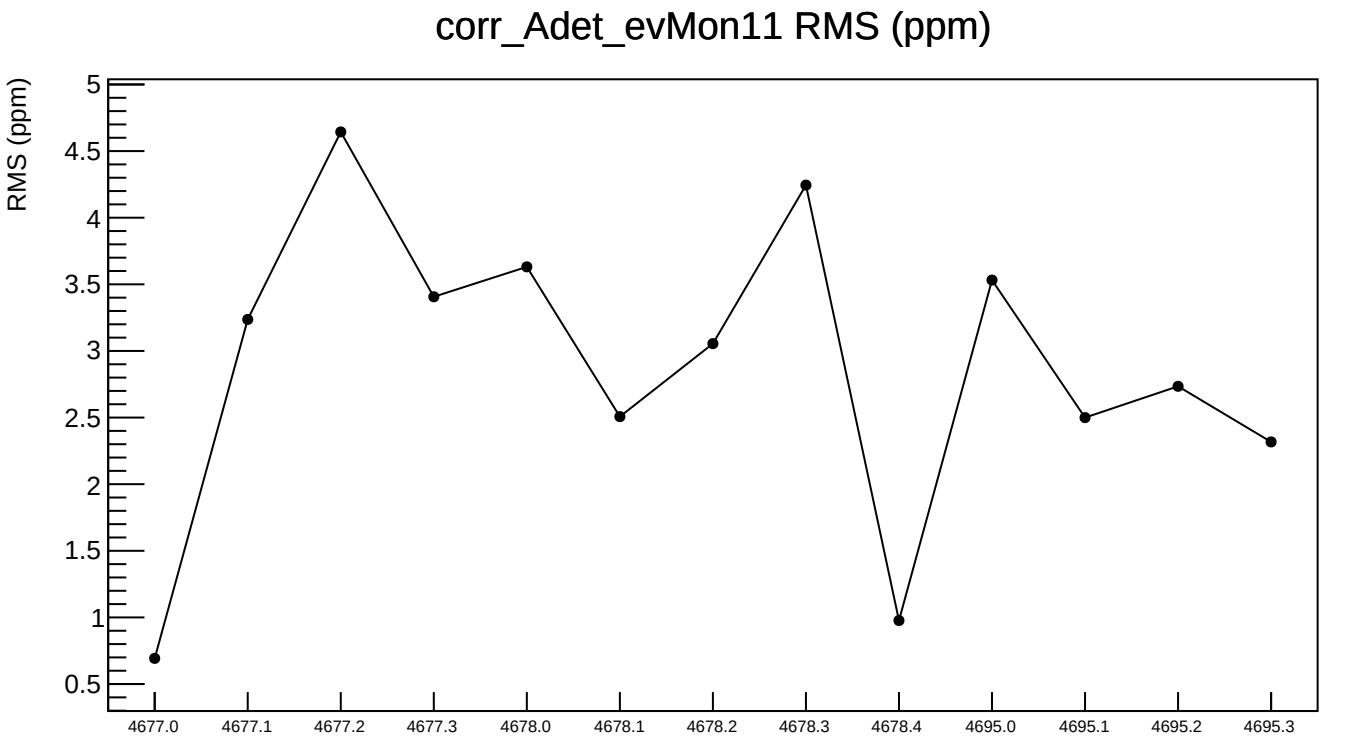

corr_Adet_evMon10 (ppb)
χ² / ndf 35.62 / 12
p0 −14.33 ± 10.46
150
100
50
0
−50
−100
−150
−200
2
1
0
−1
−2
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

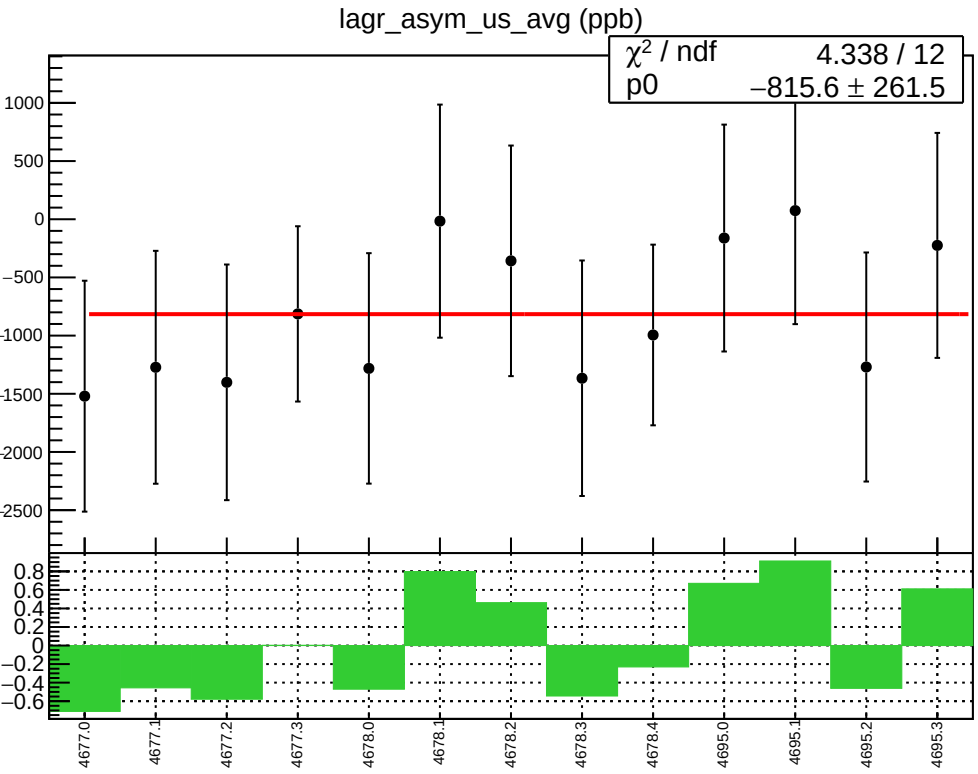

1D pull distribution
Mean −0.0587 ± 0.4588
Std Dev 1.654 ± 0.3244
Underflow 0
Overflow 0
χ² / ndf 1.563 / 7
Constant 1.251 ± 0.515
Mean 0.3376 ± 3.8976
Sigma 4.348 ± 10.438
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

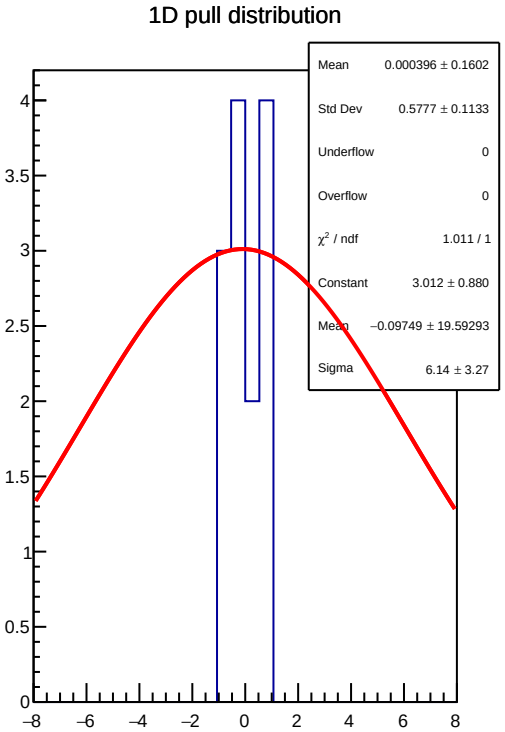

corr_Adet_evMon10 RMS (ppm)
RMS (ppm)
9
8
7
6
5
4
3
2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

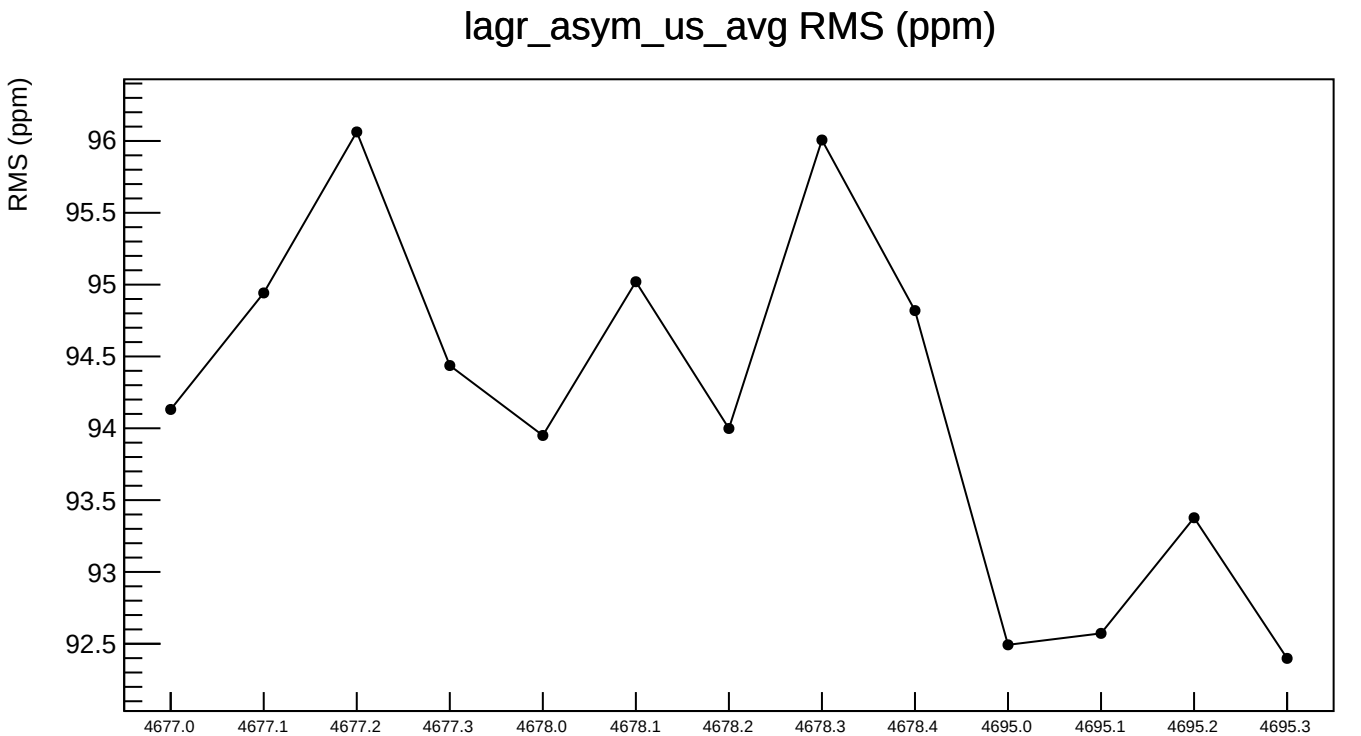

corr_Adet_evMon11 (ppb)
χ² / ndf 6.666 / 12
p0 −13.97 ± 11.76
50
0
−50
−100
0.5
0
−0.5
−1
−1.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

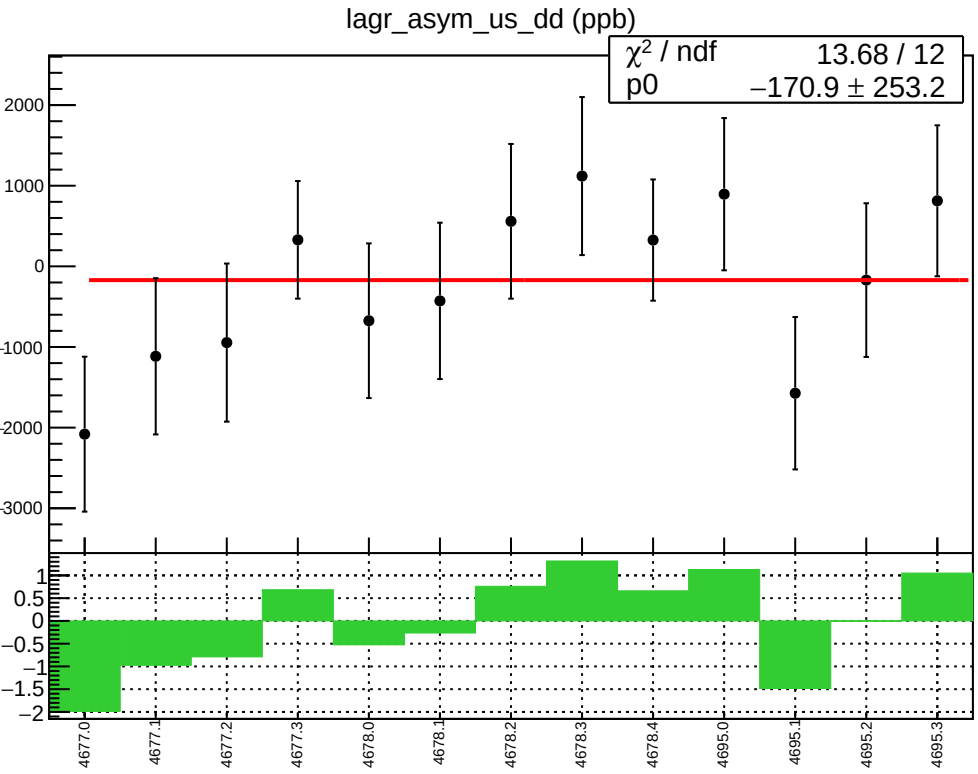

1D pull distribution
Mean −0.01757 ± 0.1985
Std Dev 0.7158 ± 0.1404
Underflow 0
Overflow 0
χ² / ndf 0.4551 / 1
Constant 3.788 ± 1.378
Mean 0.1522 ± 0.8445
Sigma 1.253 ± 1.045
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

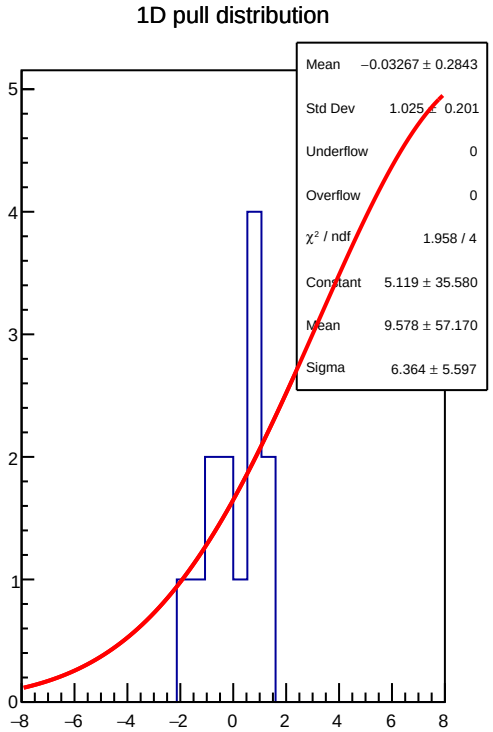

corr_Adet_evMon11 RMS (ppm)
RMS (ppm)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

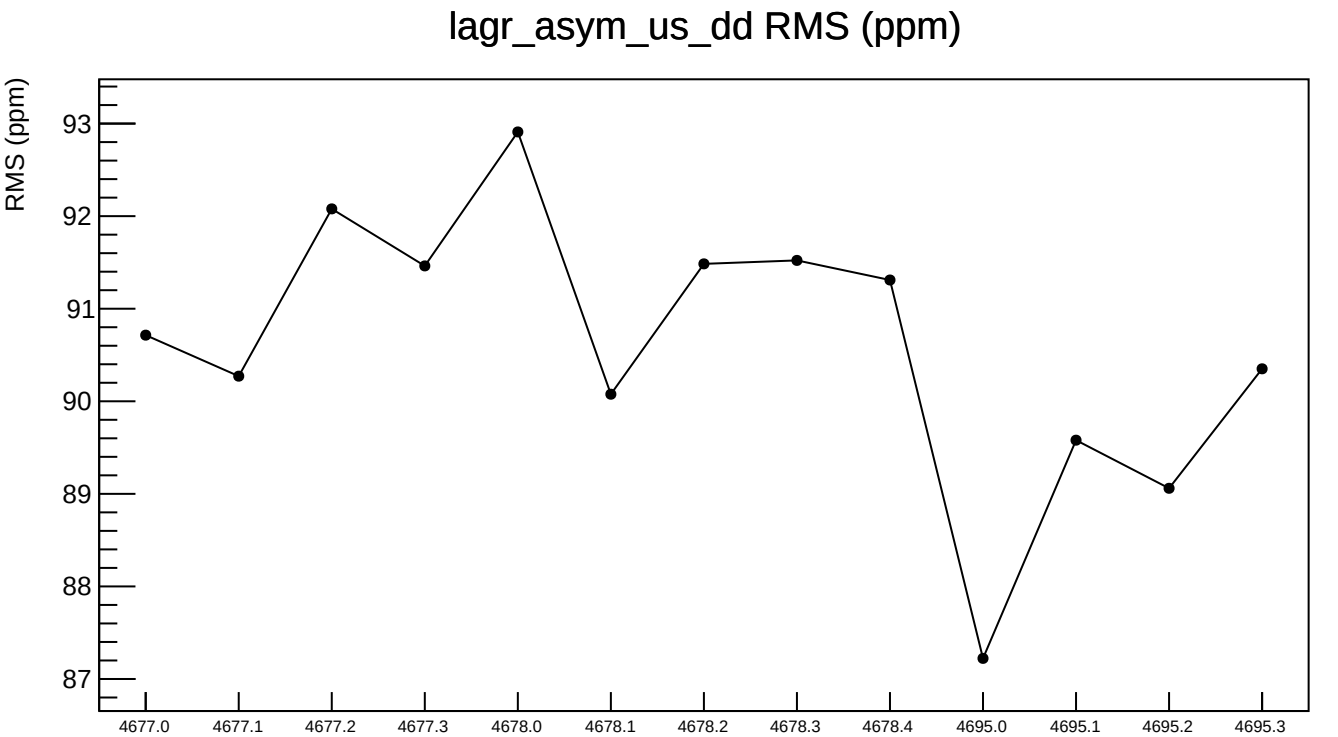

lagr_asym_us_avg (ppb)
χ² / ndf 4.338 / 12
p0 −815.6 ± 261.5
1000
500
0
−500
−1000
−1500
−2000
−2500
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

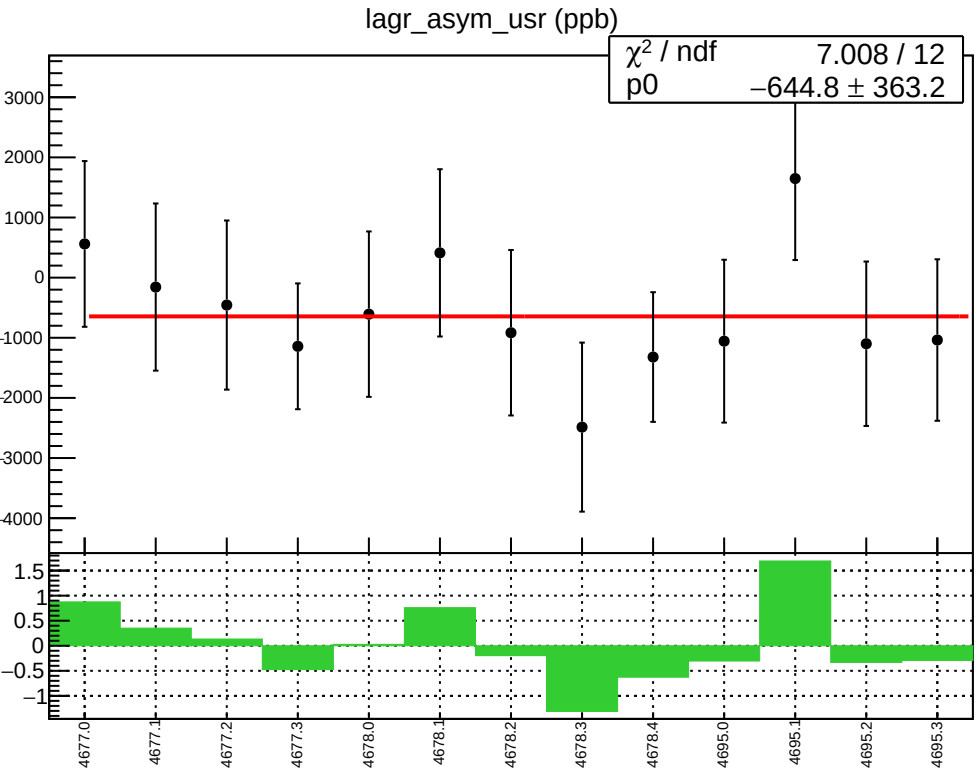

1D pull distribution
Mean 0.000396 ± 0.1602
Std Dev 0.5777 ± 0.1133
Underflow 0
Overflow 0
χ² / ndf 1.011 / 1
Constant 3.012 ± 0.880
Mean −0.09749 ± 19.59293
Sigma 6.14 ± 3.27
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

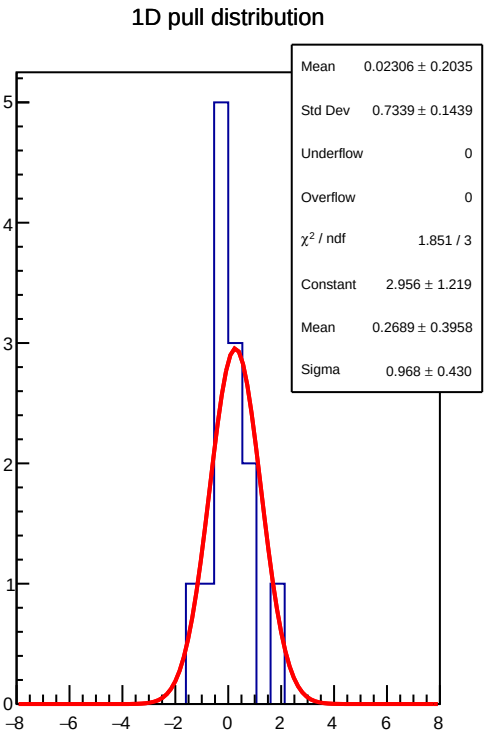

lagr_asym_us_avg RMS (ppm)
RMS (ppm)
96
95.5
95
94.5
94
93.5
93
92.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

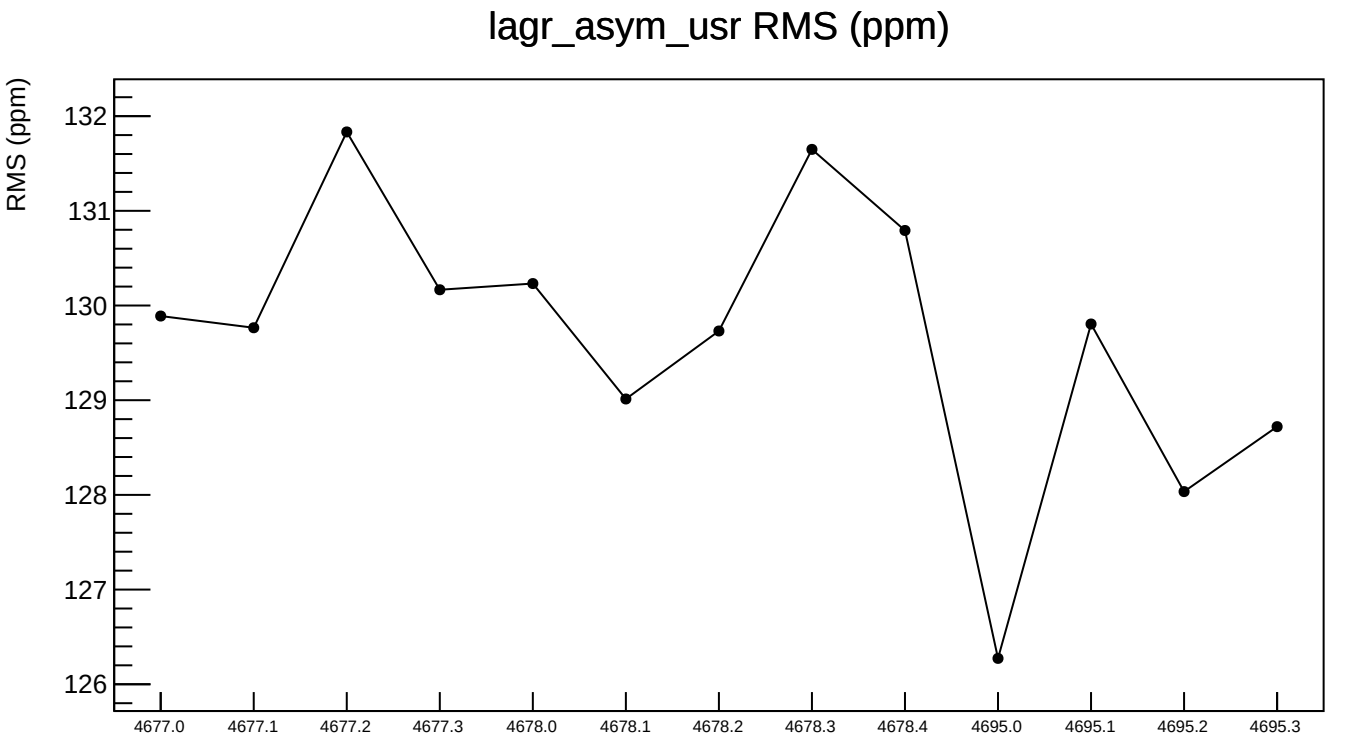

lagr_asym_us_dd (ppb)
χ² / ndf 13.68 / 12
p0 −170.9 ± 253.2
2000
1000
0
-1000
-2000
-3000
1
0.5
0
−0.5
−1
−1.5
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

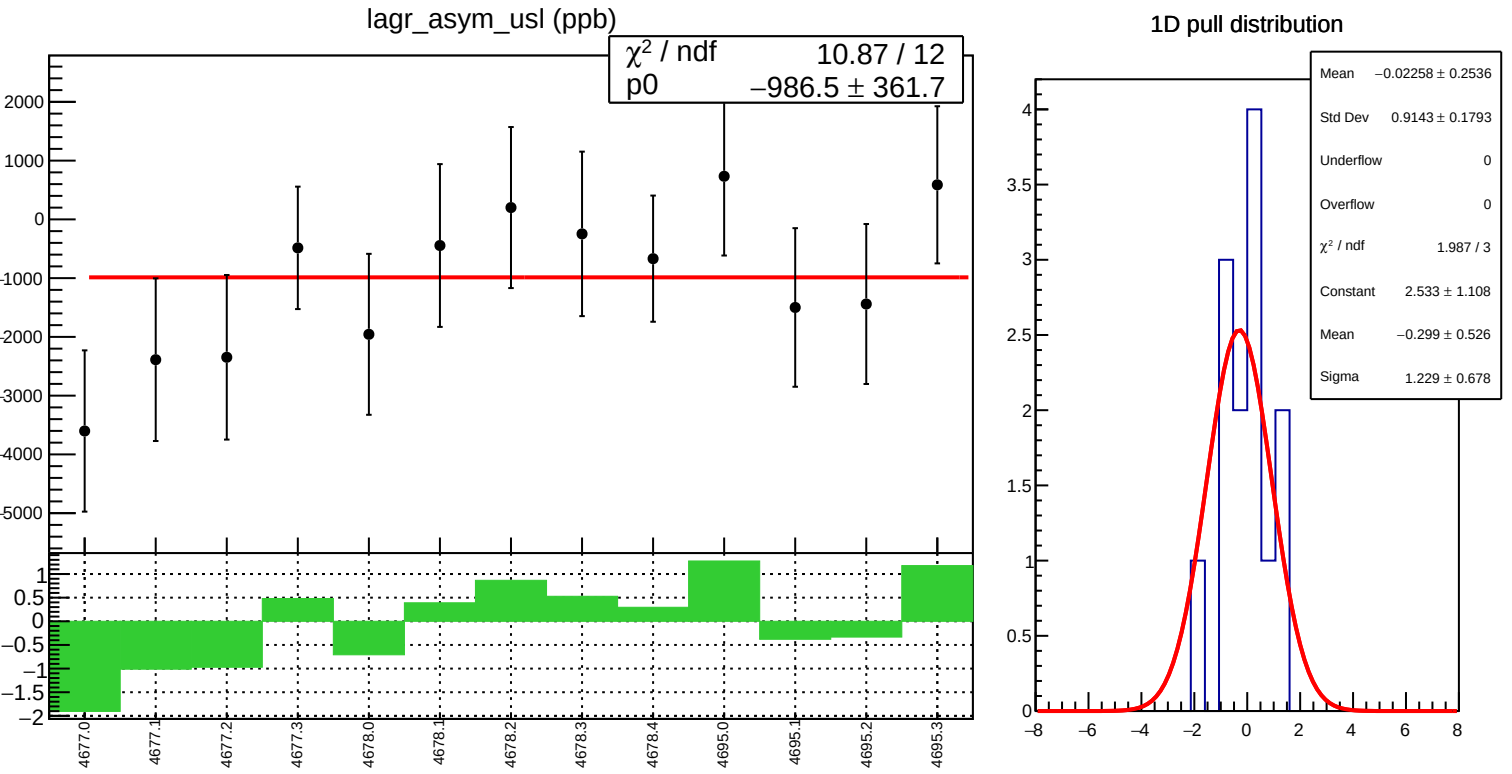

1D pull distribution
Mean −0.03267 ± 0.2843
Std Dev 1.025 ± 0.201
Underflow 0
Overflow 0
χ² / ndf 1.958 / 4
Constant 5.119 ± 35.580
Mean 9.578 ± 57.170
Sigma 6.364 ± 5.597
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

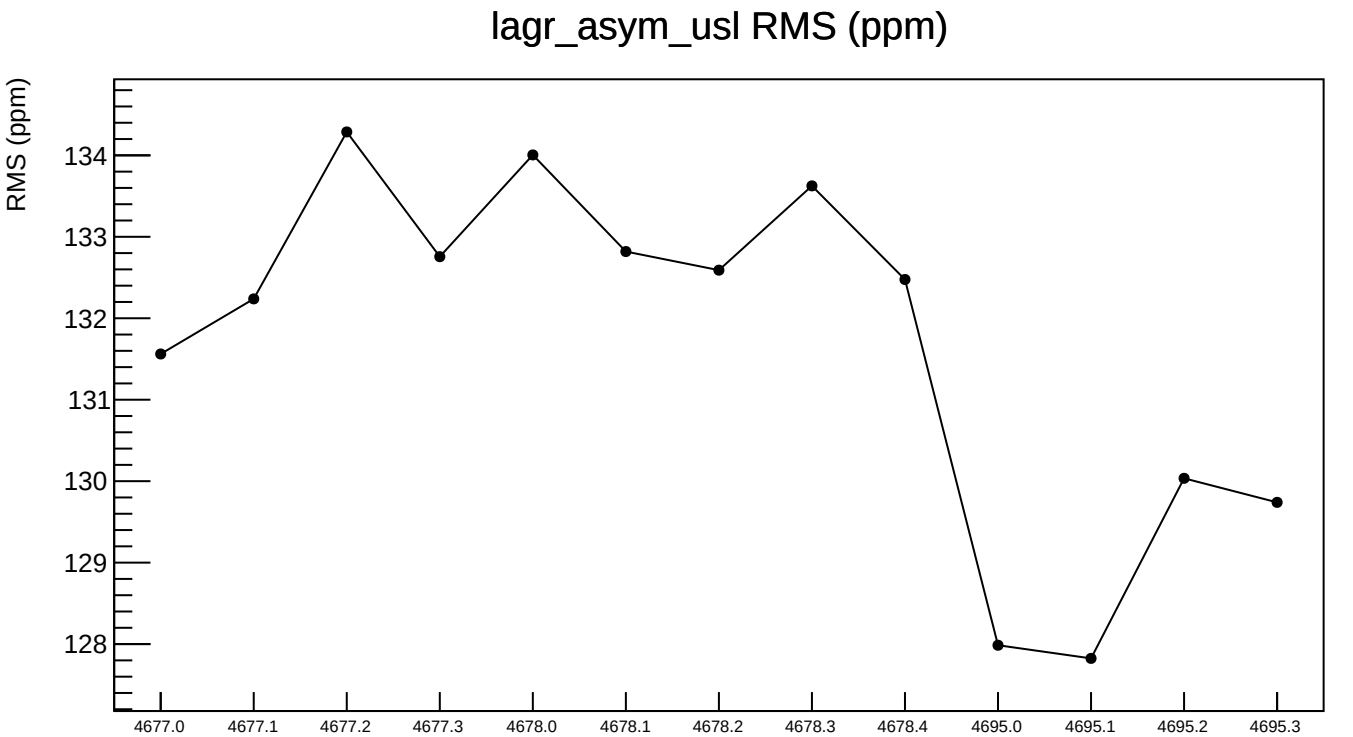

lagr_asym_us_dd RMS (ppm)
RMS (ppm)
93
92
91
90
89
88
87
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

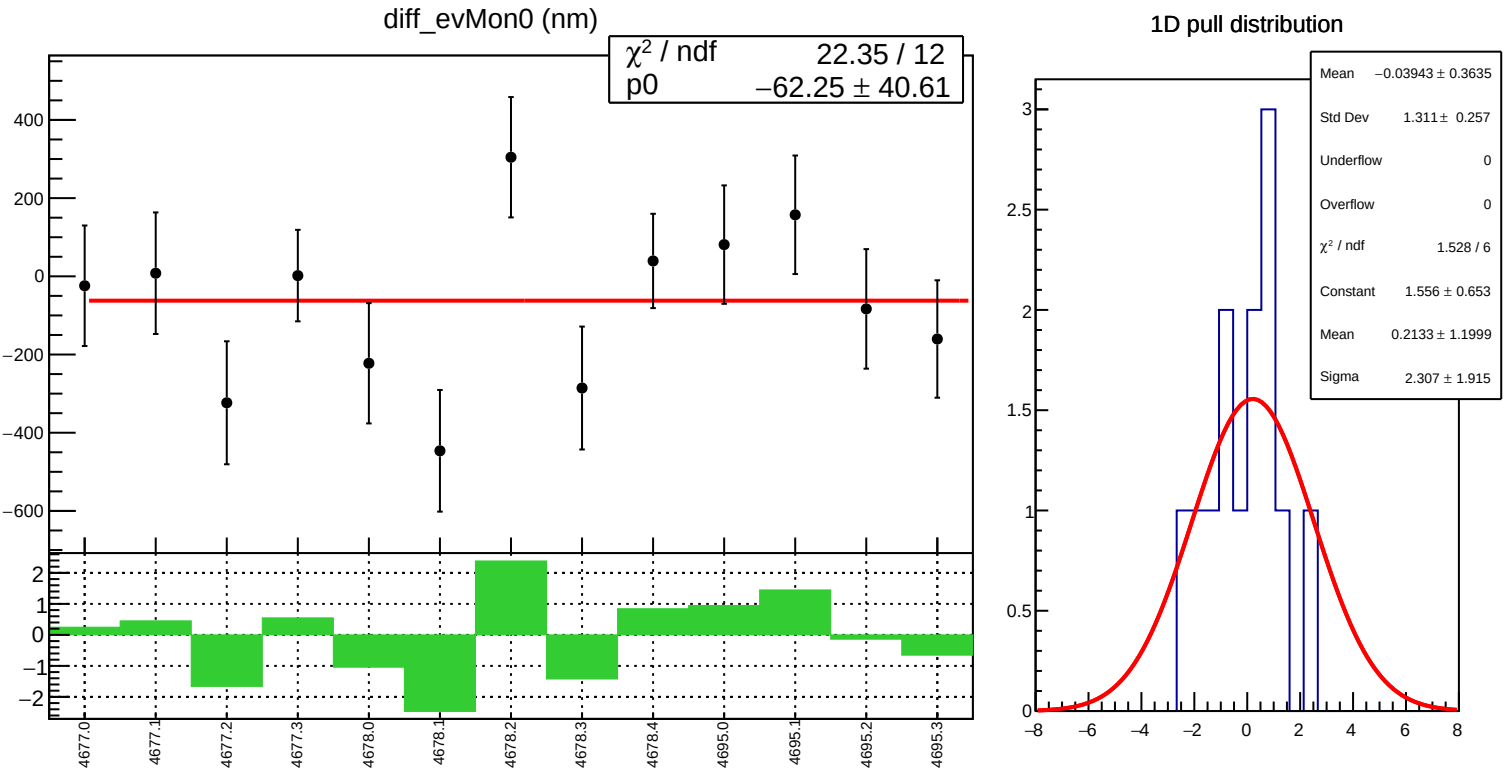

lagr_asym_usr (ppb)
χ² / ndf 7.008 / 12
p0 −644.8 ± 363.2
3000
2000
1000
0
-1000
-2000
-3000
-4000
1.5
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

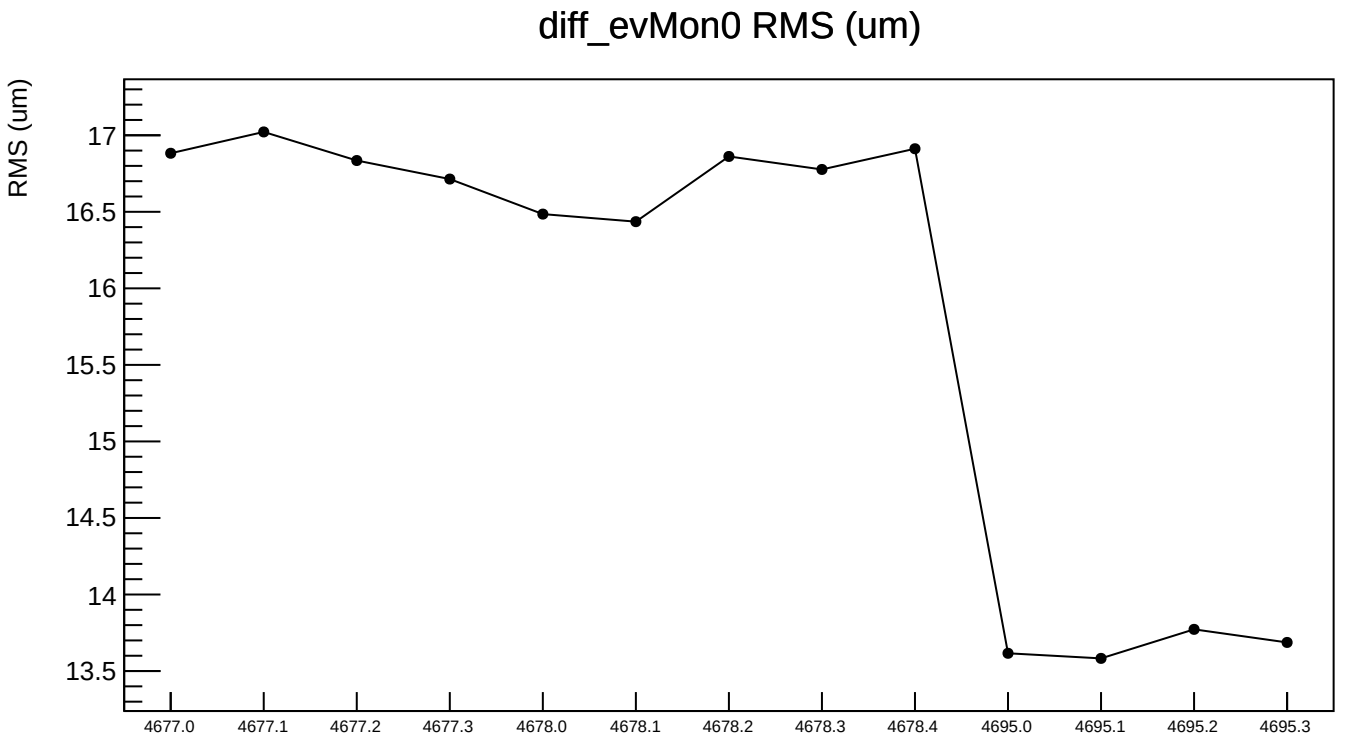

1D pull distribution
Mean 0.02306 ± 0.2035
Std Dev 0.7339 ± 0.1439
Underflow 0
Overflow 0
χ² / ndf 1.851 / 3
Constant 2.956 ± 1.219
Mean 0.2689 ± 0.3958
Sigma 0.968 ± 0.430
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

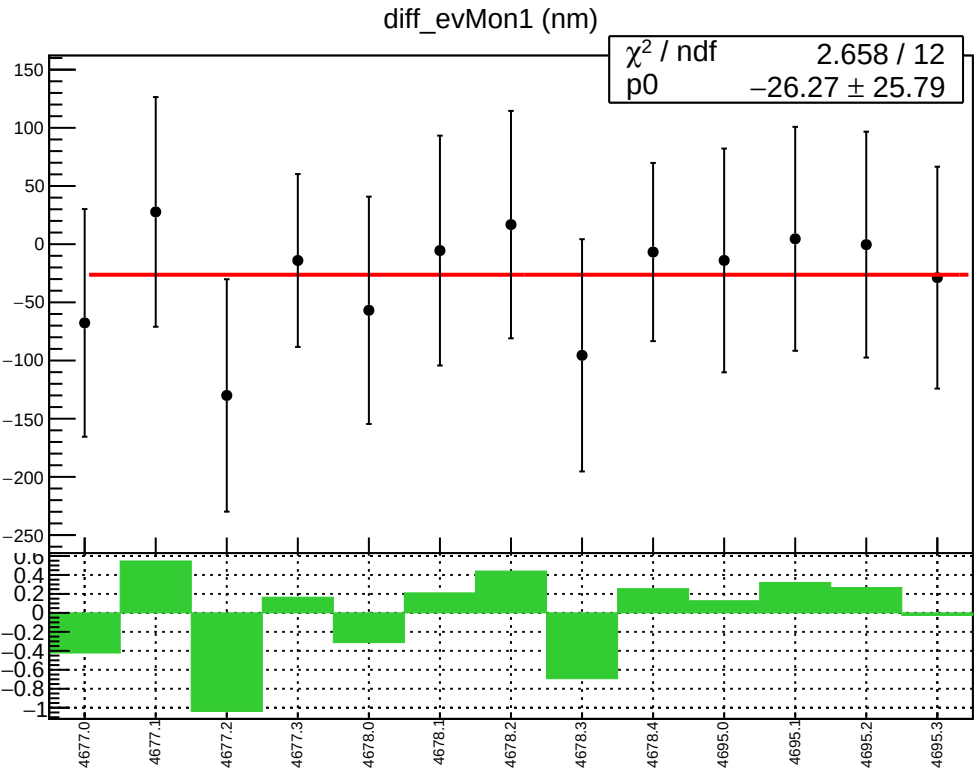

lagr_asym_usr RMS (ppm)
RMS (ppm)
132
131
130
129
128
127
126
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

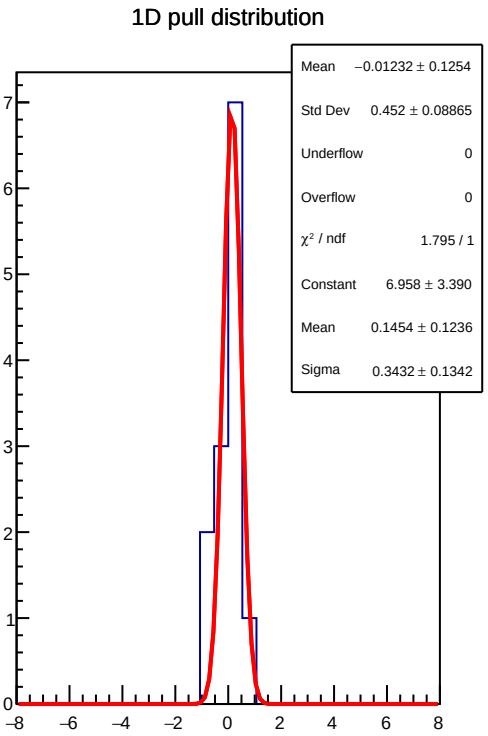

lagr_asym_usl (ppb)
χ² / ndf 10.87 / 12
p0 −986.5 ± 361.7
2000
1000
0
-1000
-2000
-3000
-4000
-5000
1
0.5
0
−0.5
−1
−1.5
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.02258 ± 0.2536
Std Dev 0.9143 ± 0.1793
Underflow 0
Overflow 0
χ² / ndf 1.987 / 3
Constant 2.533 ± 1.108
Mean −0.299 ± 0.526
Sigma 1.229 ± 0.678
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

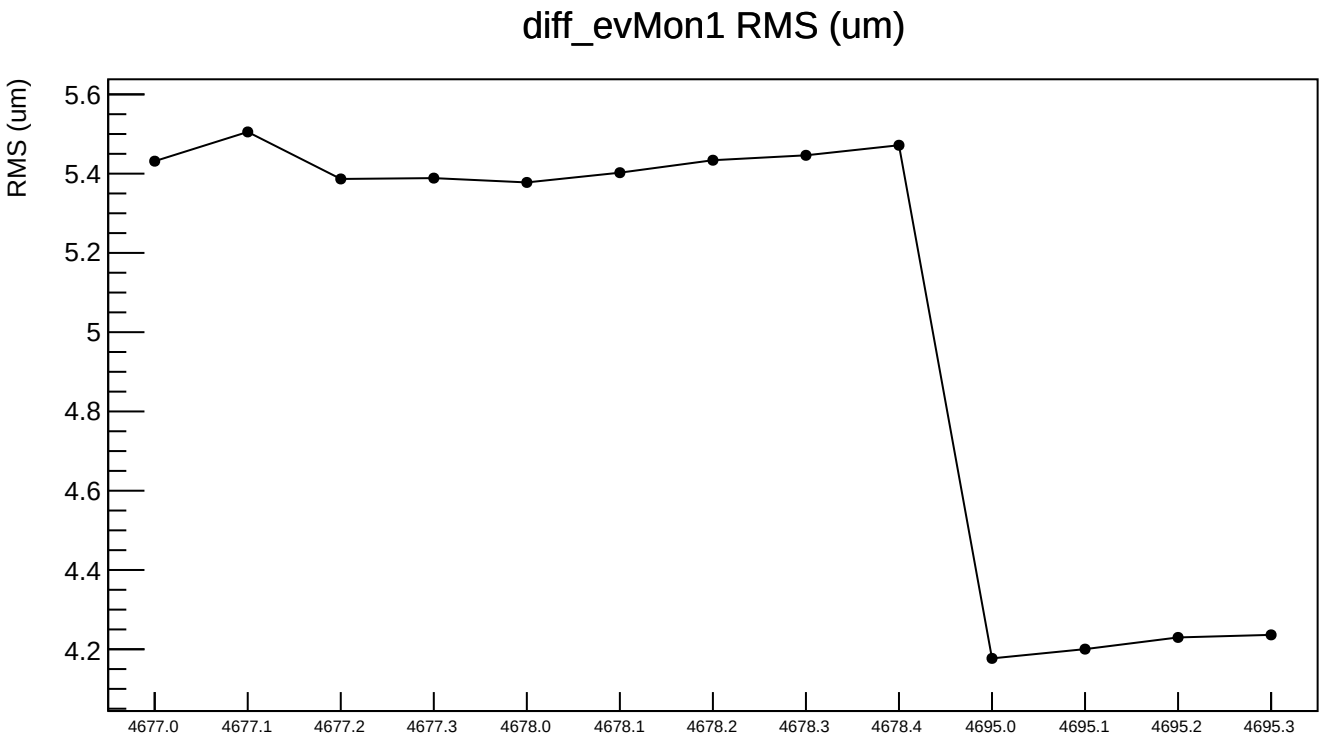

lagr_asym_usl RMS (ppm)
RMS (ppm)
134
133
132
131
130
129
128
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

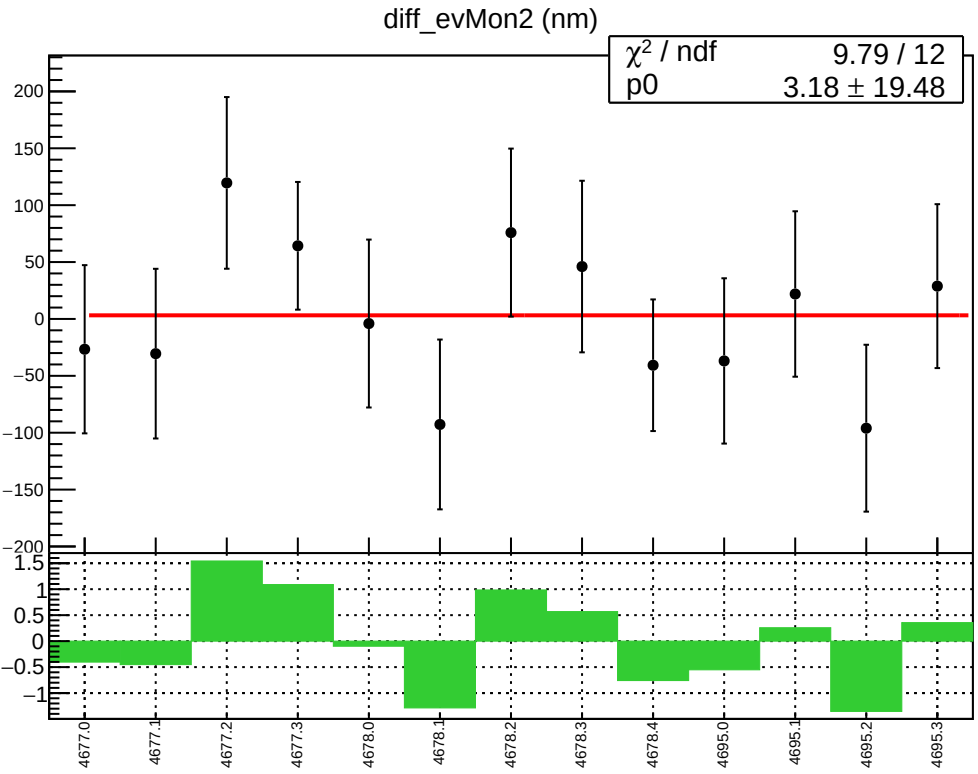

diff_evMon0 (nm)
χ² / ndf 22.35 / 12
p0 −62.25 ± 40.61
400
200
0
−200
−400
−600
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.03943 ± 0.3635
Std Dev 1.311 ± 0.257
Underflow 0
Overflow 0
χ² / ndf 1.528 / 6
Constant 1.556 ± 0.653
Mean 0.2133 ± 1.1999
Sigma 2.307 ± 1.915
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

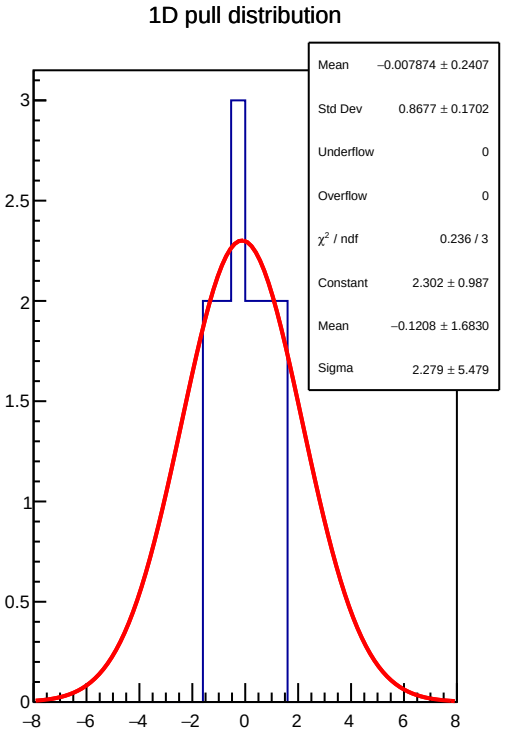

diff_evMon0 RMS (um)
RMS (um)
17
16.5
16
15.5
15
14.5
14
13.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

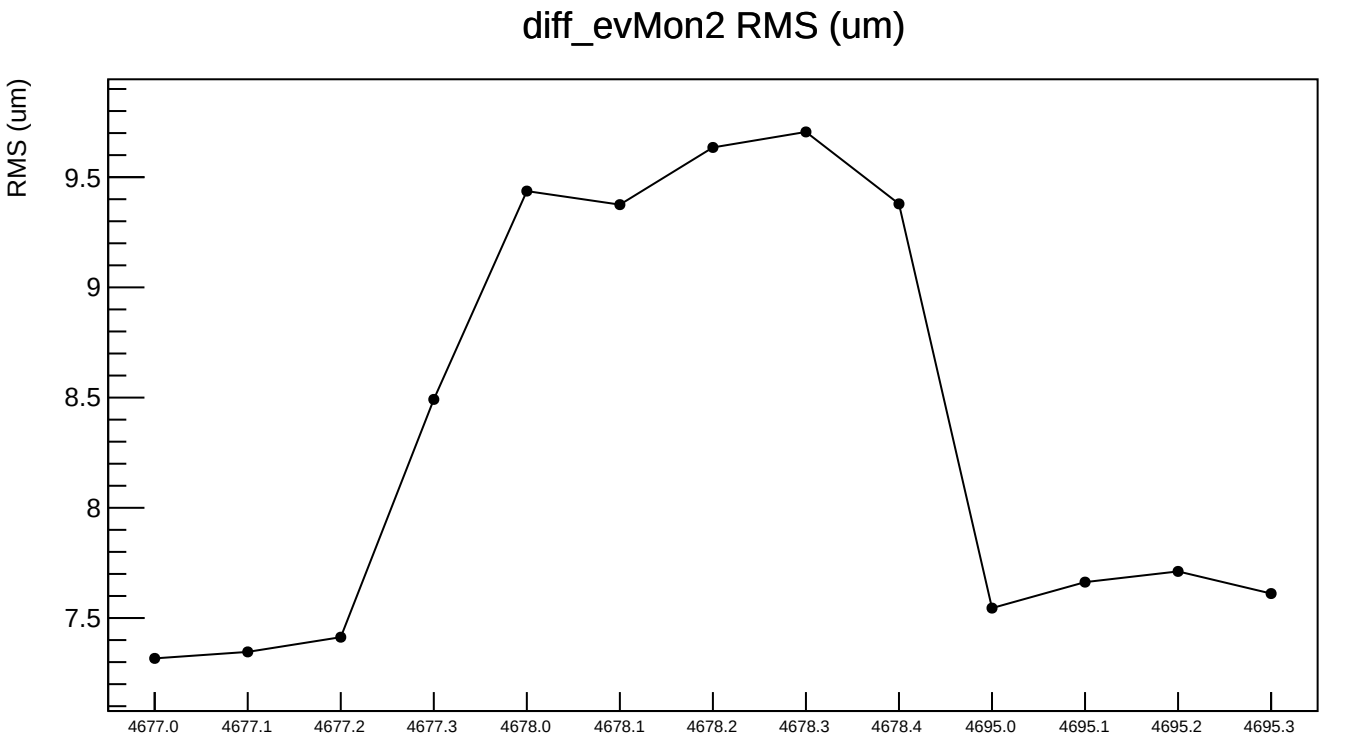

diff_evMon1 (nm)
χ² / ndf 2.658 / 12
p0 −26.27 ± 25.79
150
100
50
0
−50
−100
−150
−200
−250
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

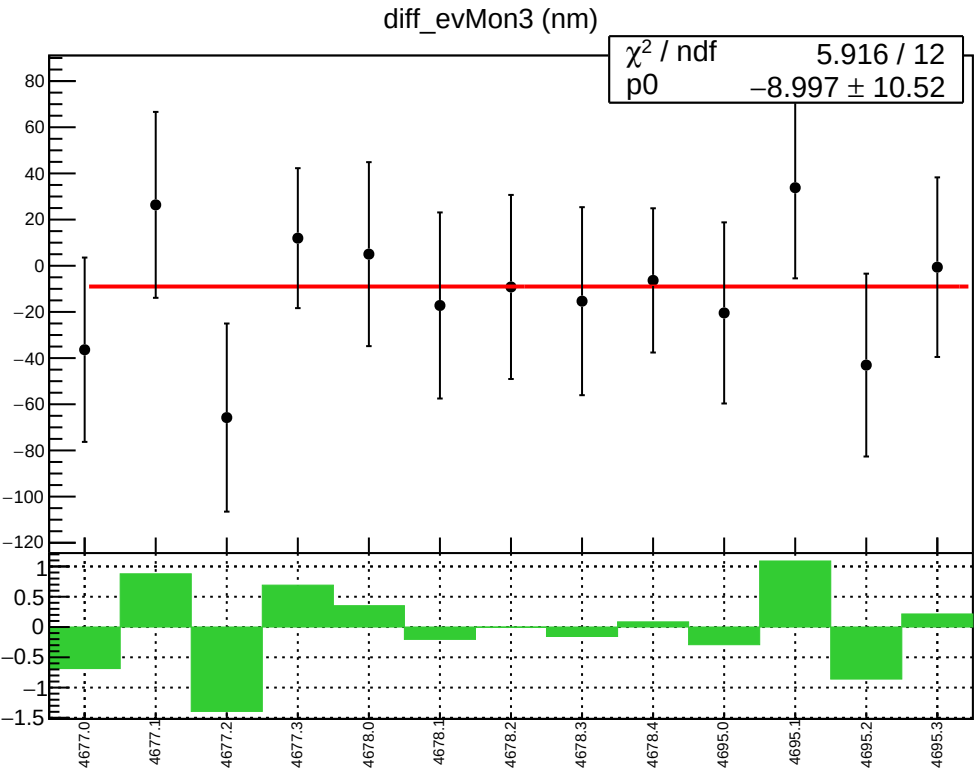

1D pull distribution
Mean −0.01232 ± 0.1254
Std Dev 0.452 ± 0.08865
Underflow 0
Overflow 0
χ² / ndf 1.795 / 1
Constant 6.958 ± 3.390
Mean 0.1454 ± 0.1236
Sigma 0.3432 ± 0.1342
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

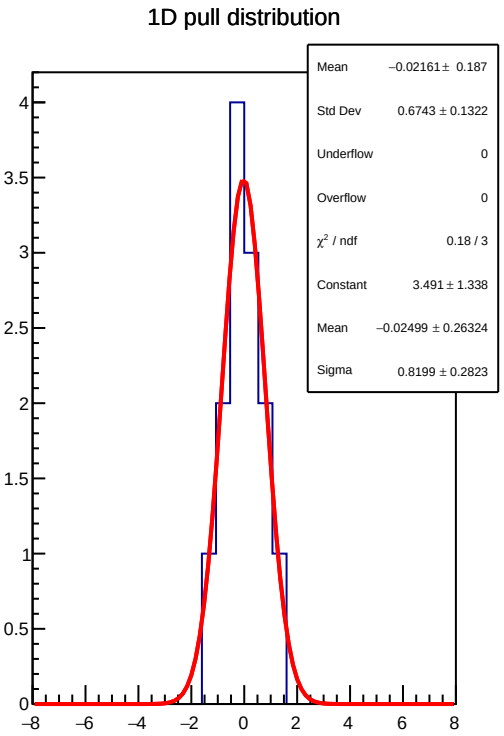

diff_evMon1 RMS (um)
RMS (um)
5.6
5.4
5.2
5
4.8
4.6
4.4
4.2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

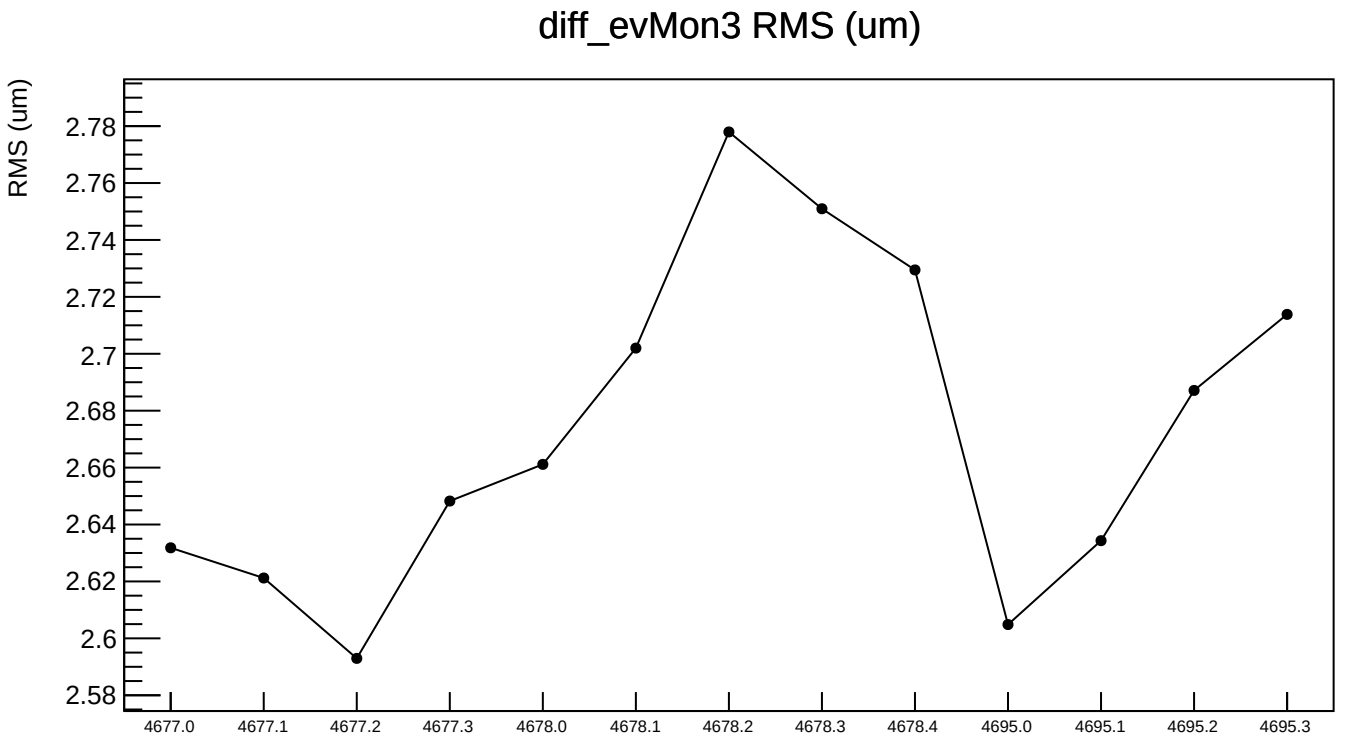

diff_evMon2 (nm)
χ² / ndf 9.79 / 12
p0 3.18 ± 19.48
200
150
100
50
0
−50
−100
−150
−200
1.5
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

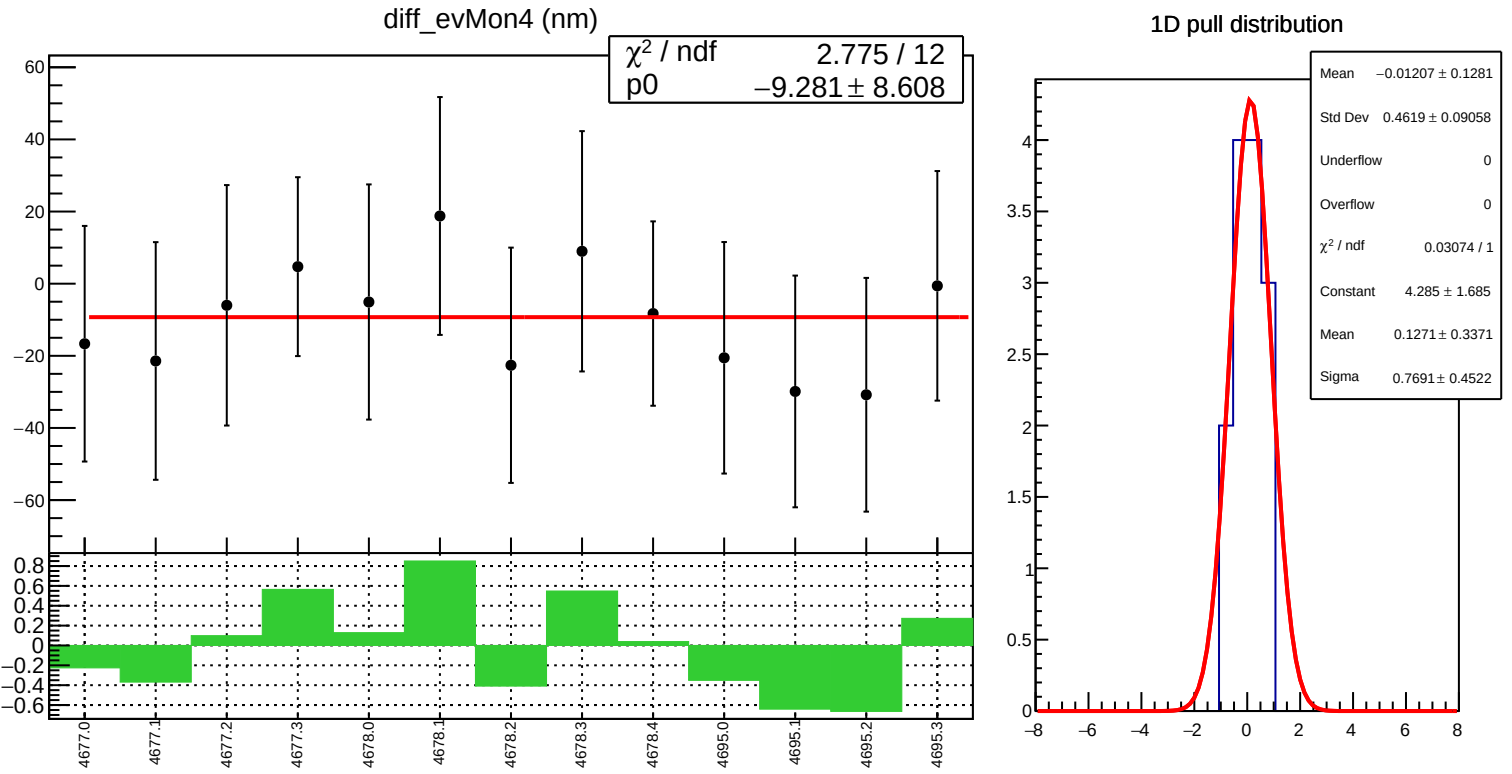

1D pull distribution
Mean −0.007874 ± 0.2407
Std Dev 0.8677 ± 0.1702
Underflow 0
Overflow 0
χ² / ndf 0.236 / 3
Constant 2.302 ± 0.987
Mean −0.1208 ± 1.6830
Sigma 2.279 ± 5.479
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8


diff_evMon2 RMS (um)
RMS (um)
9.5
9
8.5
8
7.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

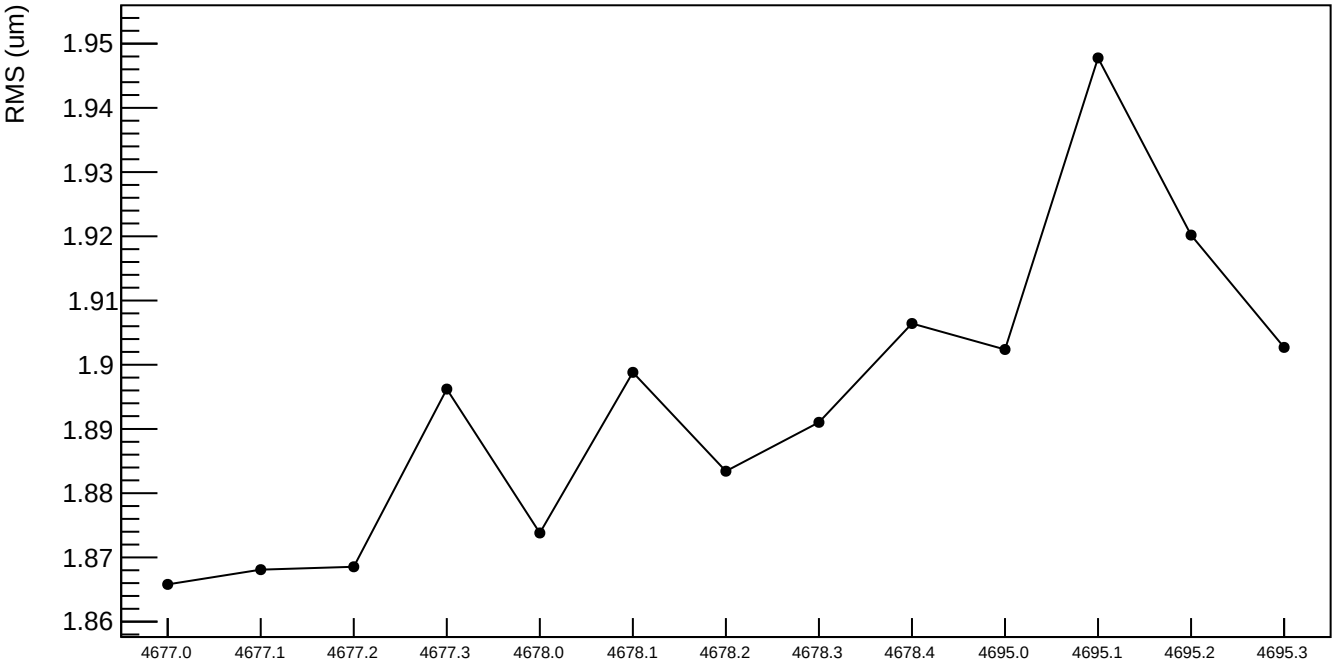

diff_evMon3 (nm)
χ² / ndf 5.916 / 12
p0 −8.997 ± 10.52
80
60
40
20
0
−20
−40
−60
−80
−100
−120
1
0.5
0
−0.5
−1
−1.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

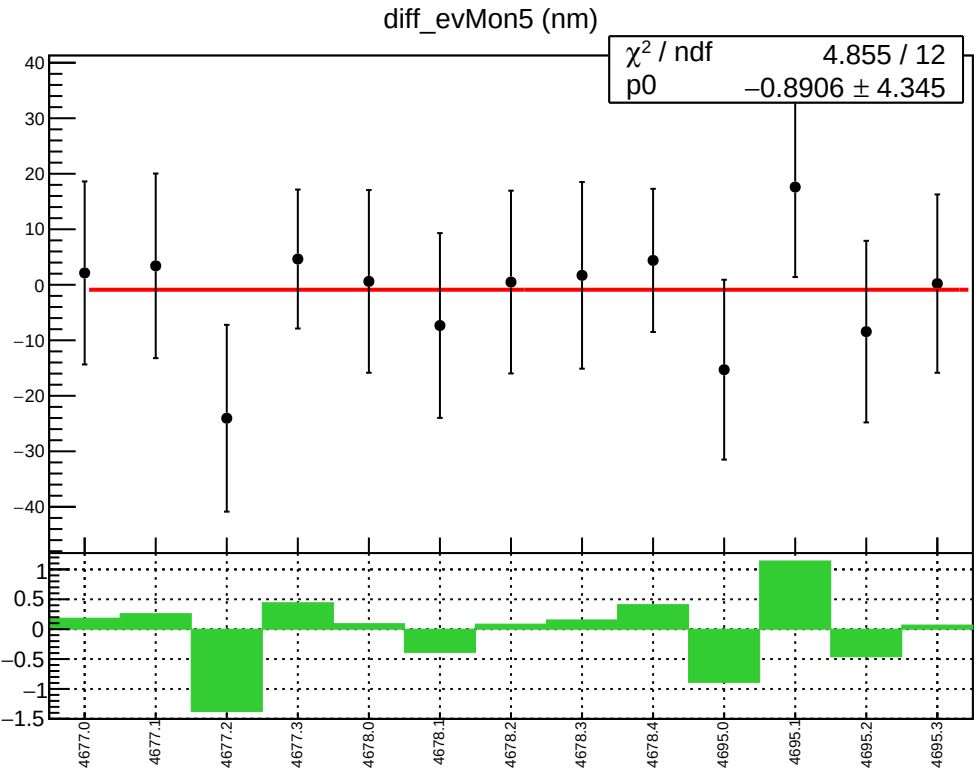

1D pull distribution
Mean −0.02161 ± 0.187
Std Dev 0.6743 ± 0.1322
Underflow 0
Overflow 0
χ² / ndf 0.18 / 3
Constant 3.491 ± 1.338
Mean −0.02499 ± 0.26324
Sigma 0.8199 ± 0.2823
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

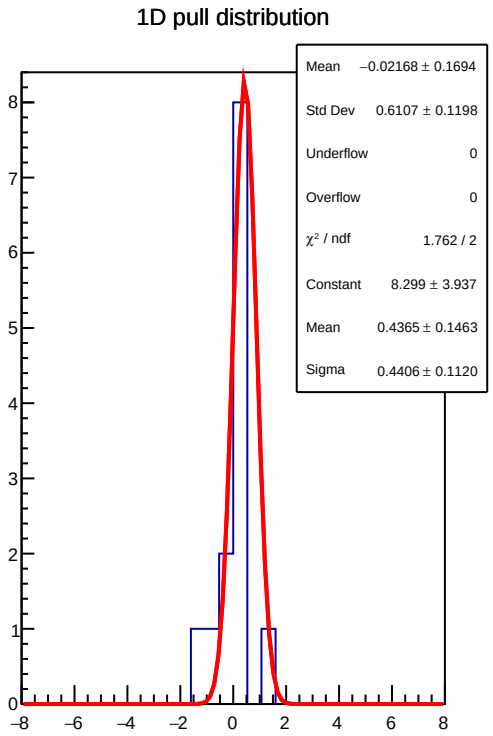

diff_evMon3 RMS (um)
RMS (um)
2.78
2.76
2.74
2.72
2.7
2.68
2.66
2.64
2.62
2.6
2.58
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

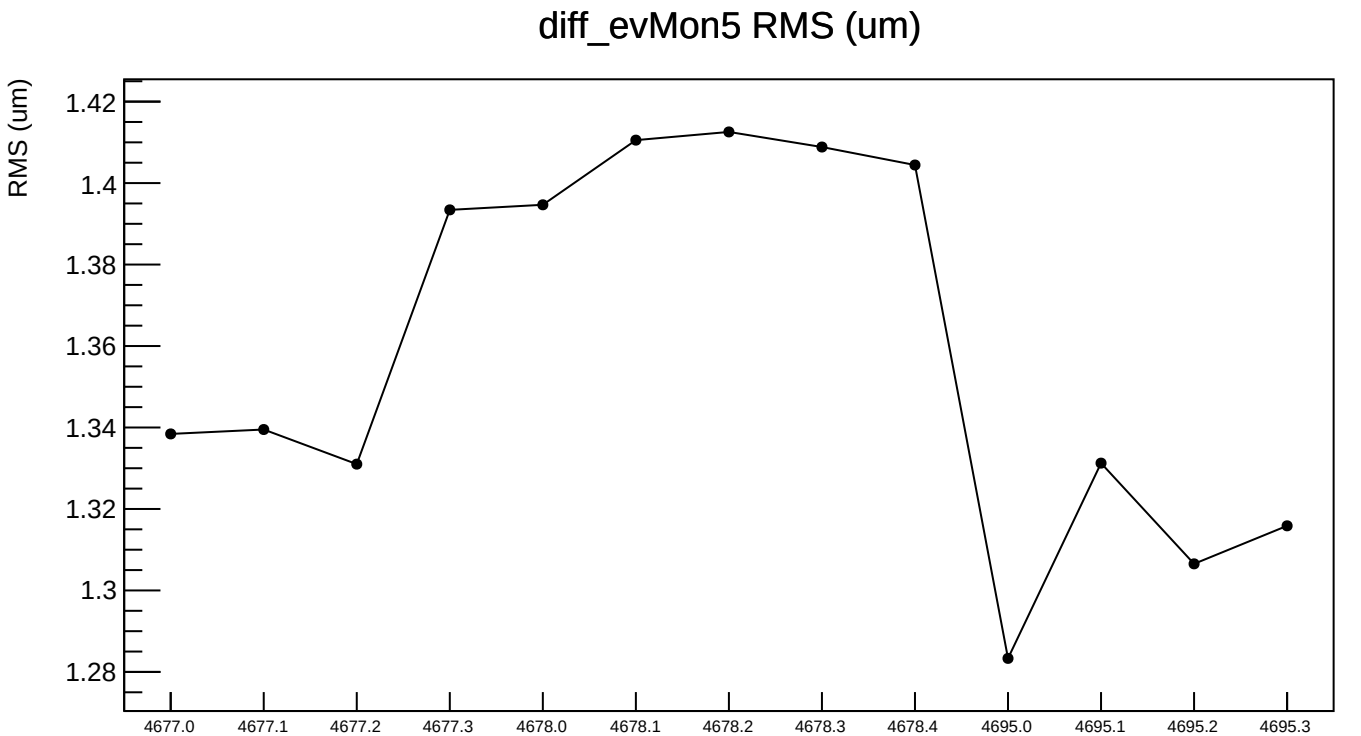

diff_evMon4 (nm)
χ² / ndf 2.775 / 12
p0 −9.281 ± 8.608
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.01207 ± 0.1281
Std Dev 0.4619 ± 0.09058
Underflow 0
Overflow 0
χ² / ndf 0.03074 / 1
Constant 4.285 ± 1.685
Mean 0.1271 ± 0.3371
Sigma 0.7691 ± 0.4522

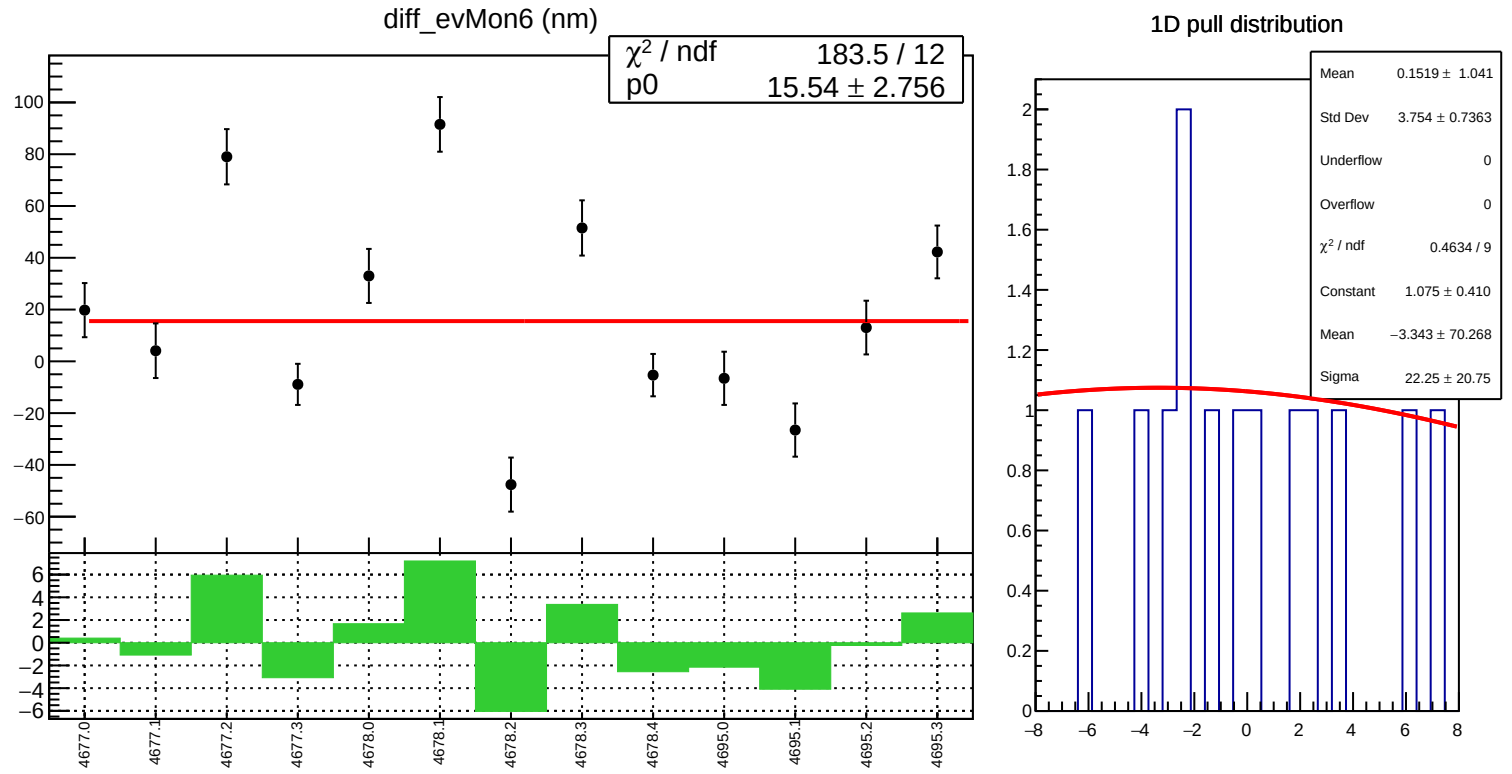
diff_evMon4 RMS (um)

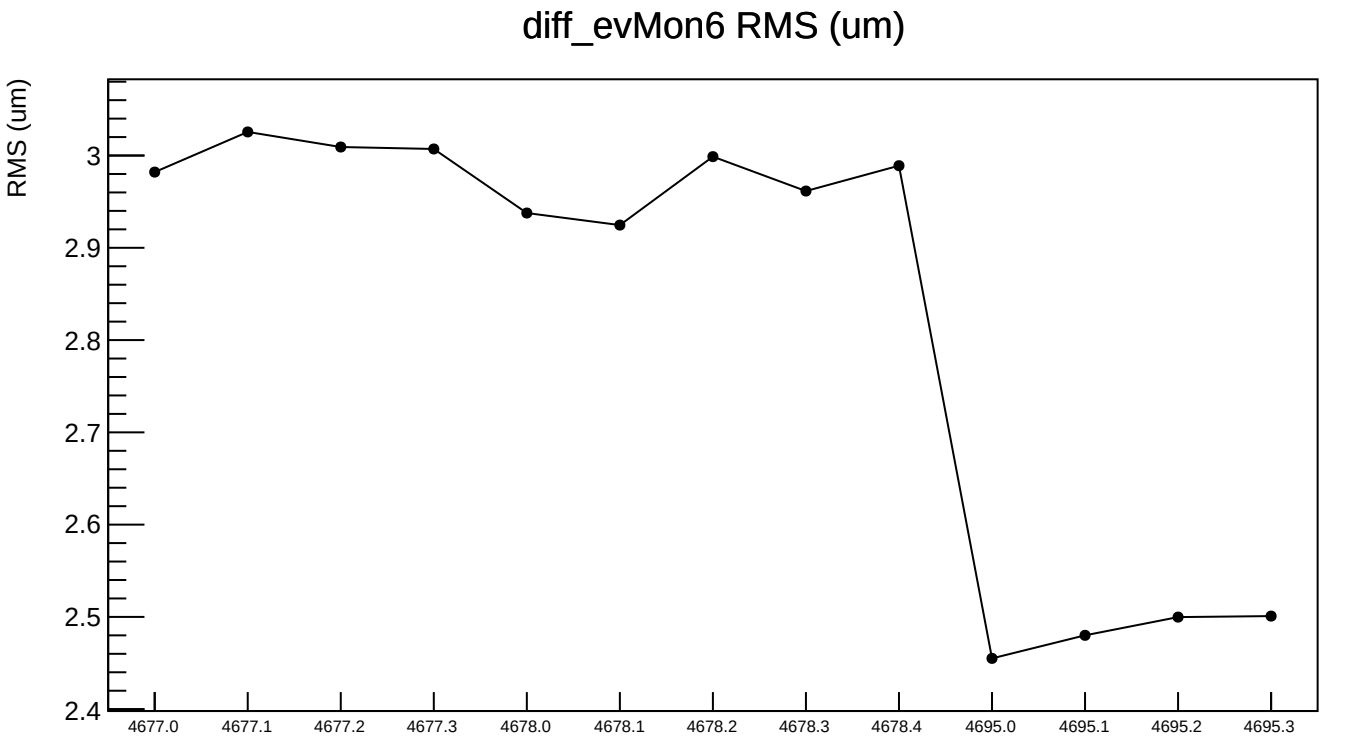


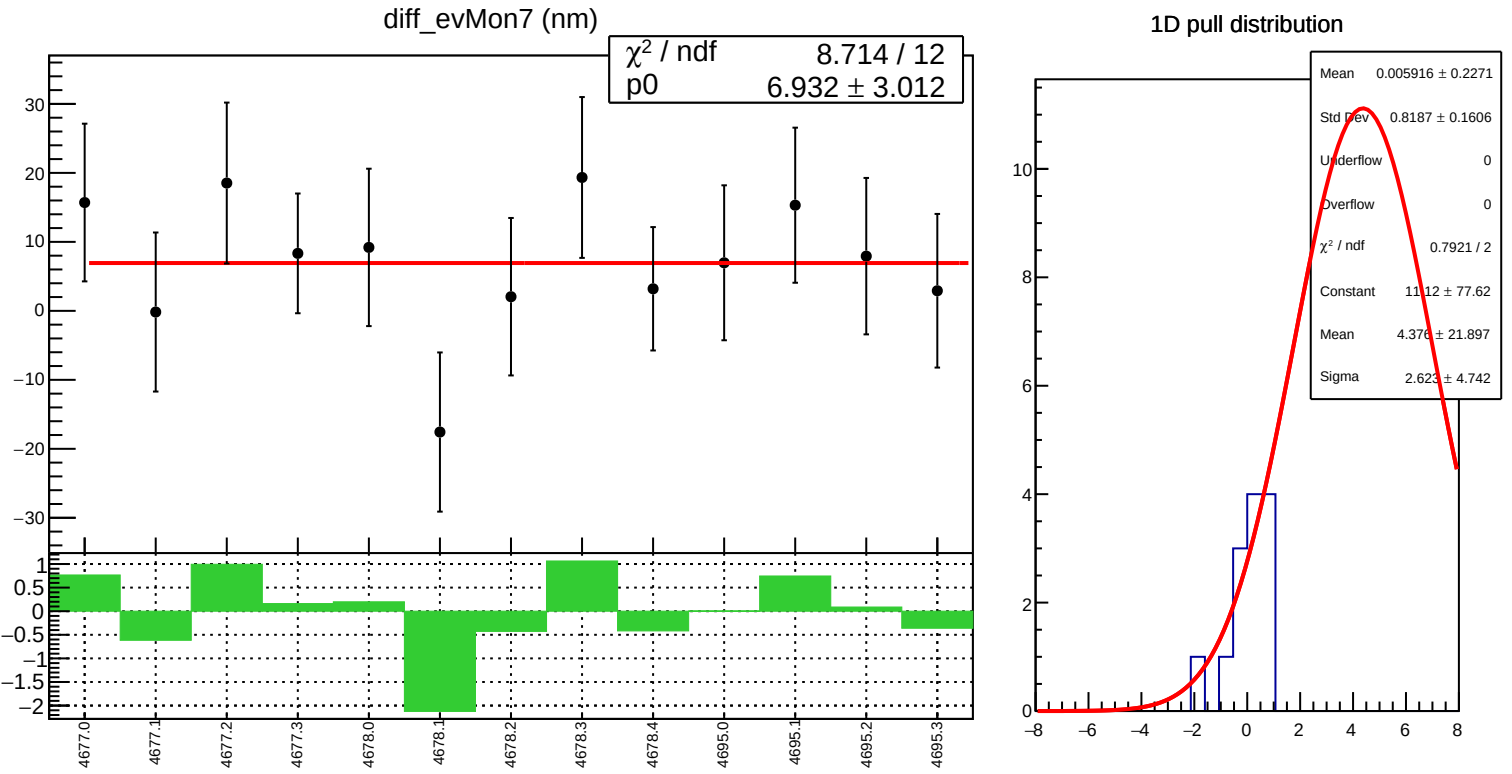

diff_evMon5 (nm)
χ² / ndf 4.855 / 12
p0 −0.8906 ± 4.345
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

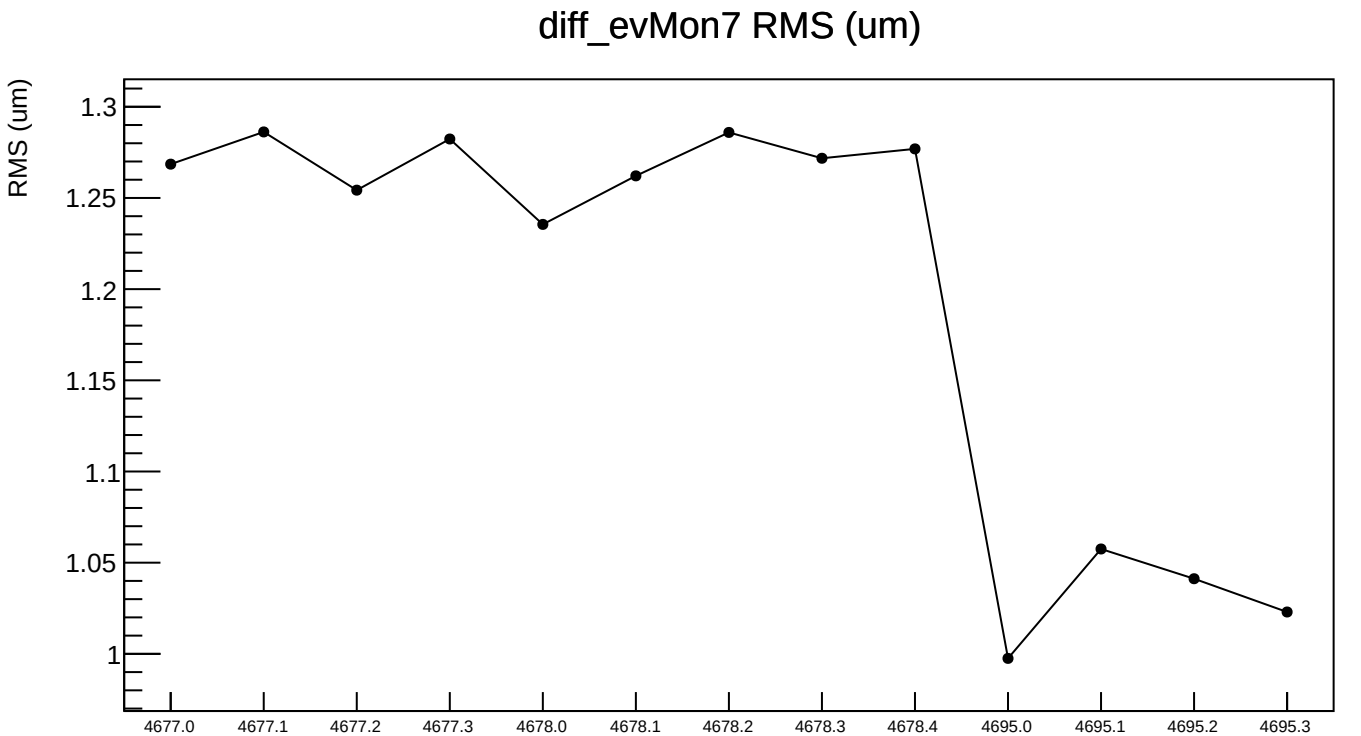

1D pull distribution
Mean −0.02168 ± 0.1694
Std Dev 0.6107 ± 0.1198
Underflow 0
Overflow 0
χ² / ndf 1.762 / 2
Constant 8.299 ± 3.937
Mean 0.4365 ± 0.1463
Sigma 0.4406 ± 0.1120

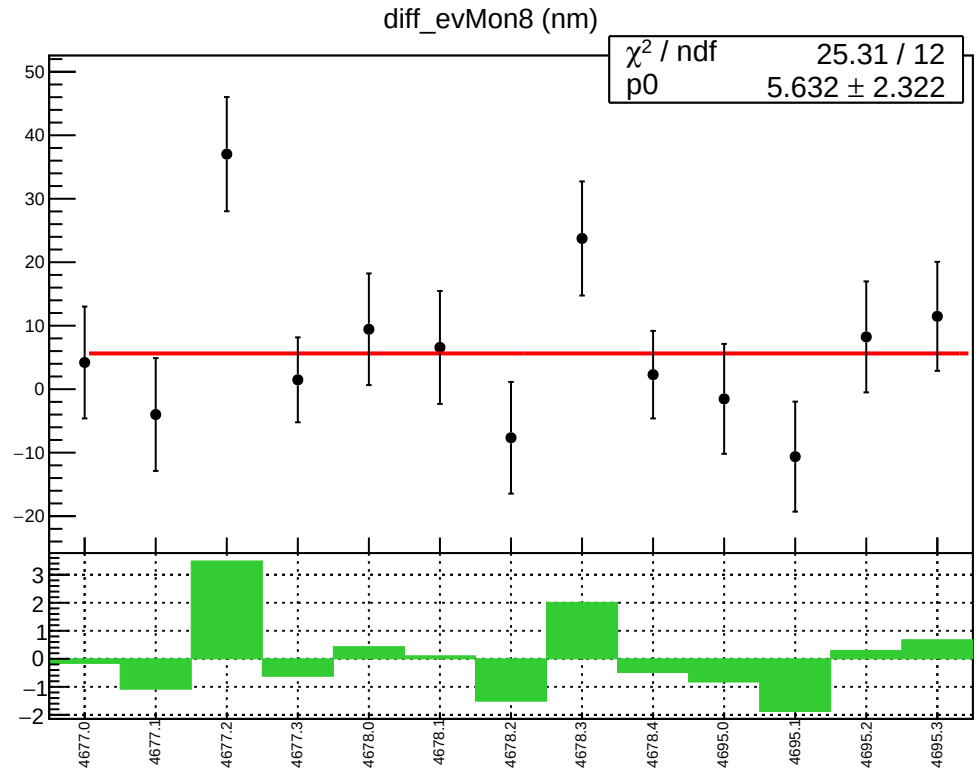

diff_evMon5 RMS (um)
RMS (um)
1.42
1.4
1.38
1.36
1.34
1.32
1.3
1.28
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

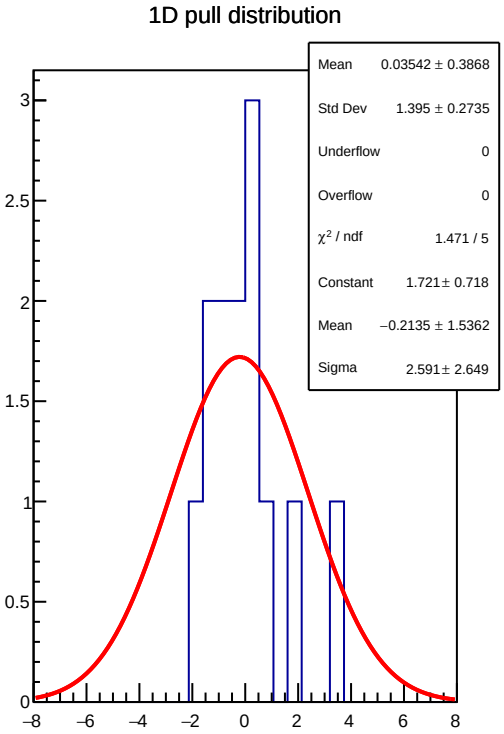

diff_evMon6 (nm)
χ² / ndf 183.5 / 12
p0 15.54 ± 2.756
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.1519 ± 1.041
Std Dev 3.754 ± 0.7363
Underflow 0
Overflow 0
χ² / ndf 0.4634 / 9
Constant 1.075 ± 0.410
Mean −3.343 ± 70.268
Sigma 22.25 ± 20.75

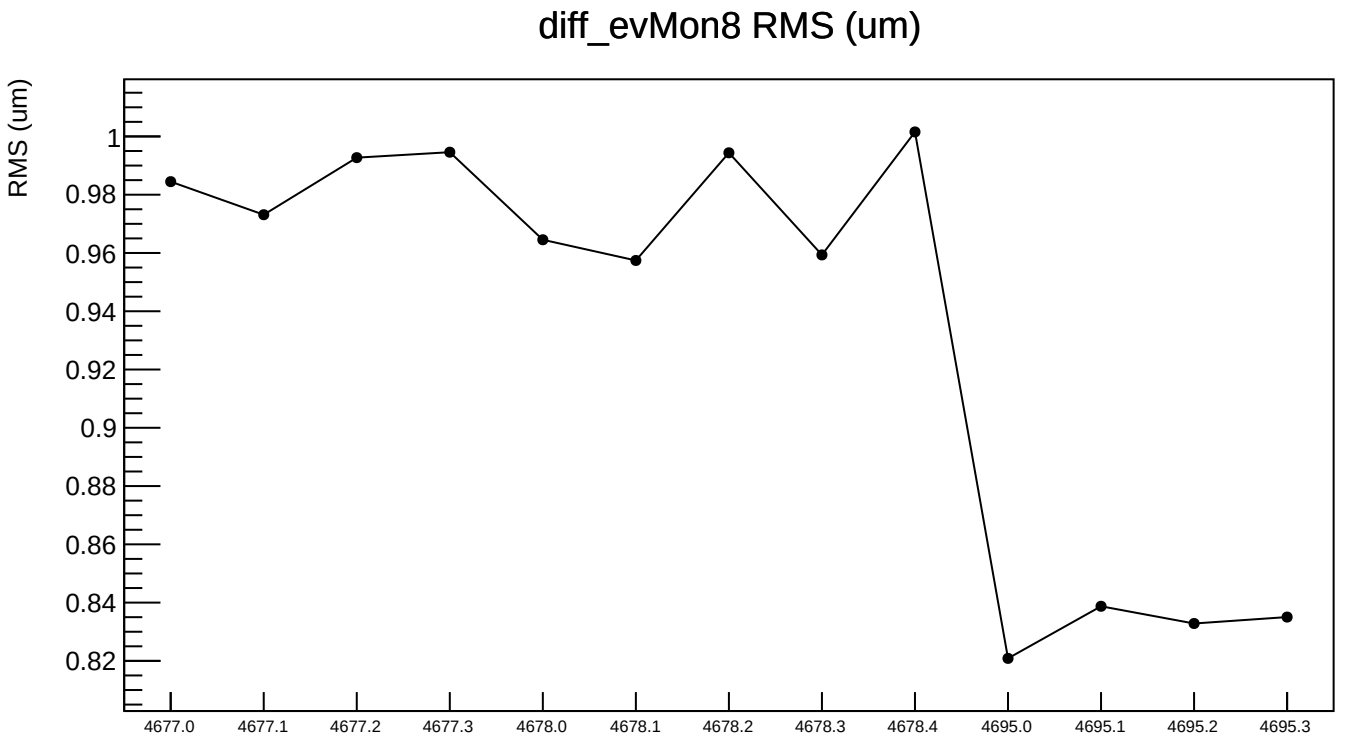

diff_evMon6 RMS (um)
RMS (um)
3
2.9
2.8
2.7
2.6
2.5
2.4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

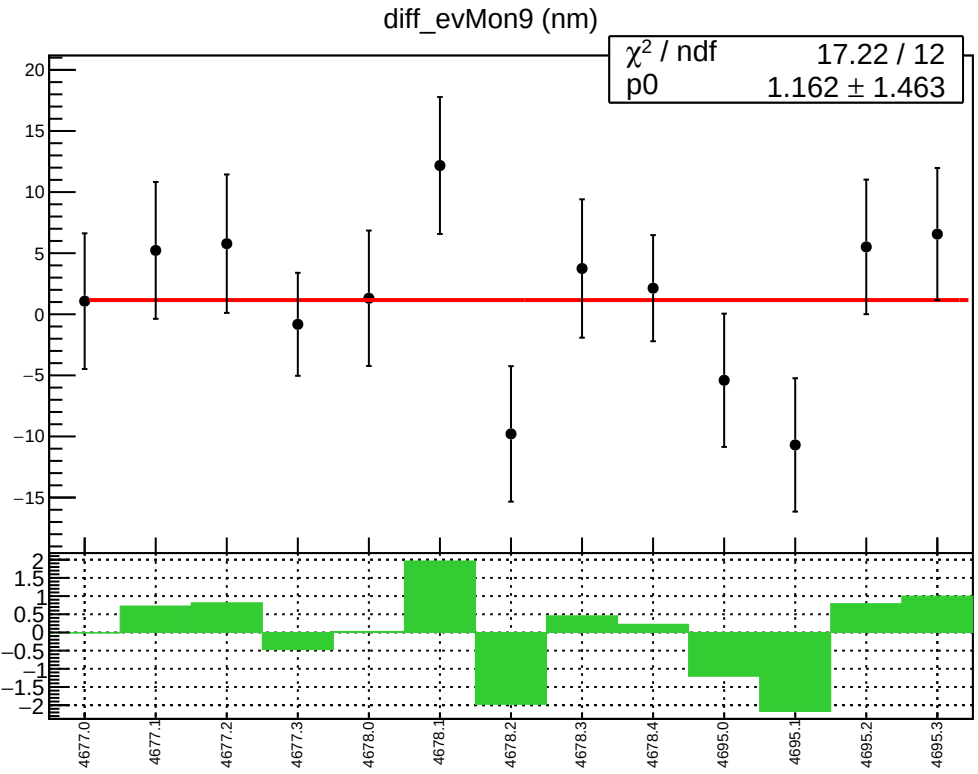

diff_evMon7 (nm)
χ² / ndf 8.714 / 12
p0 6.932 ± 3.012
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.005916 ± 0.2271
Std Dev 0.8187 ± 0.1606
Underflow 0
Overflow 0
χ² / ndf 0.7921 / 2
Constant 11.12 ± 77.62
Mean 4.376 ± 21.897
Sigma 2.623 ± 4.742

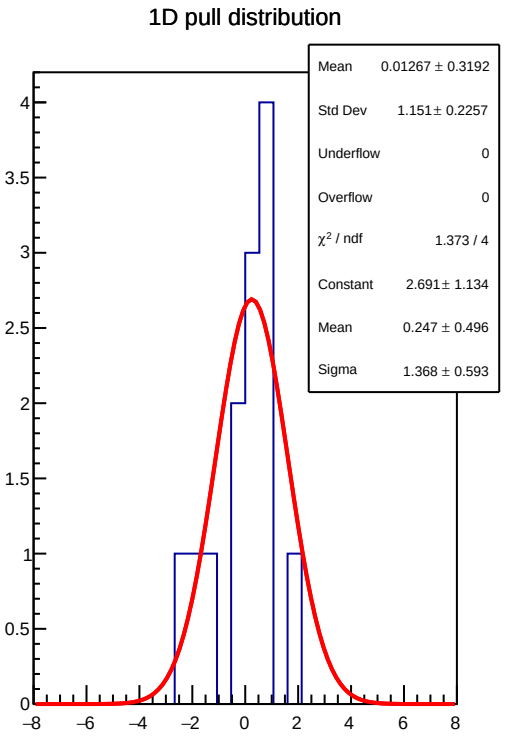

diff_evMon7 RMS (um)
RMS (um)
1.3
1.25
1.2
1.15
1.1
1.05
1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

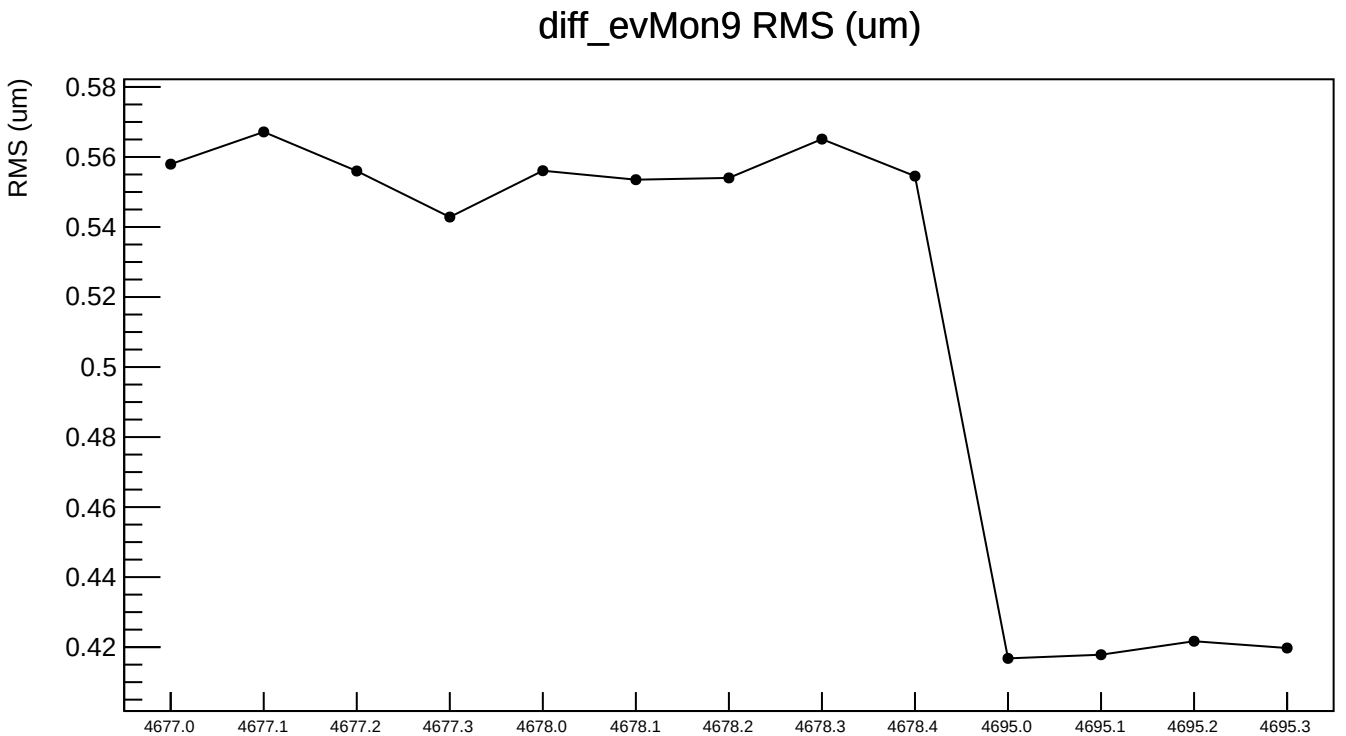

diff_evMon8 (nm)
χ² / ndf 25.31 / 12
p0 5.632 ± 2.322
50
40
30
20
10
0
−10
−20
3
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

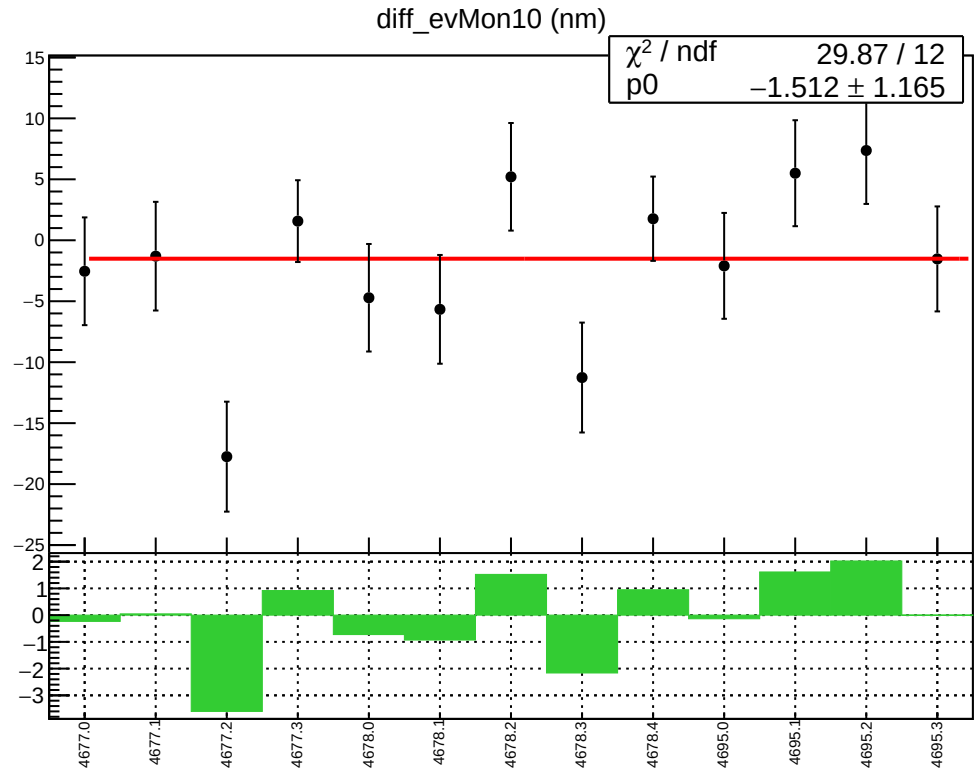

1D pull distribution
Mean 0.03542 ± 0.3868
Std Dev 1.395 ± 0.2735
Underflow 0
Overflow 0
χ² / ndf 1.471 / 5
Constant 1.721 ± 0.718
Mean −0.2135 ± 1.5362
Sigma 2.591 ± 2.649
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

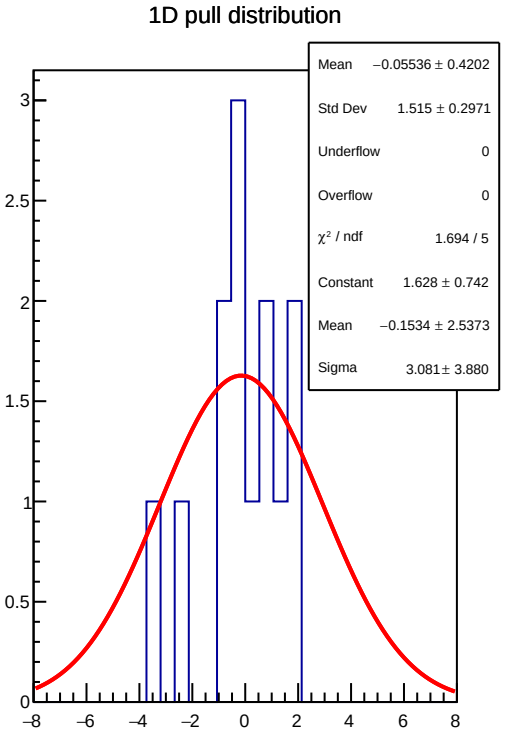

diff_evMon8 RMS (um)
RMS (um)
1
0.98
0.96
0.94
0.92
0.9
0.88
0.86
0.84
0.82
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


diff_evMon9 (nm)
χ² / ndf 17.22 / 12
p0 1.162 ± 1.463
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

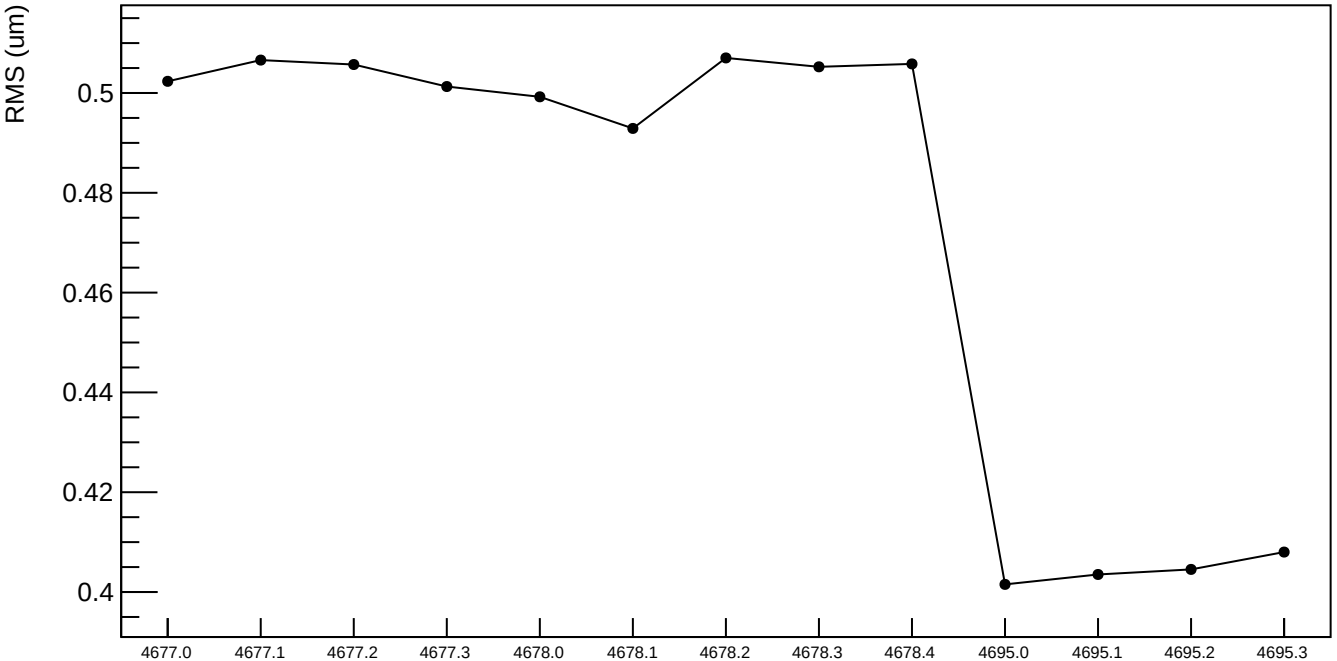

1D pull distribution
Mean 0.01267 ± 0.3192
Std Dev 1.151± 0.2257
Underflow 0
Overflow 0
χ² / ndf 1.373 / 4
Constant 2.691± 1.134
Mean 0.247 ± 0.496
Sigma 1.368 ± 0.593

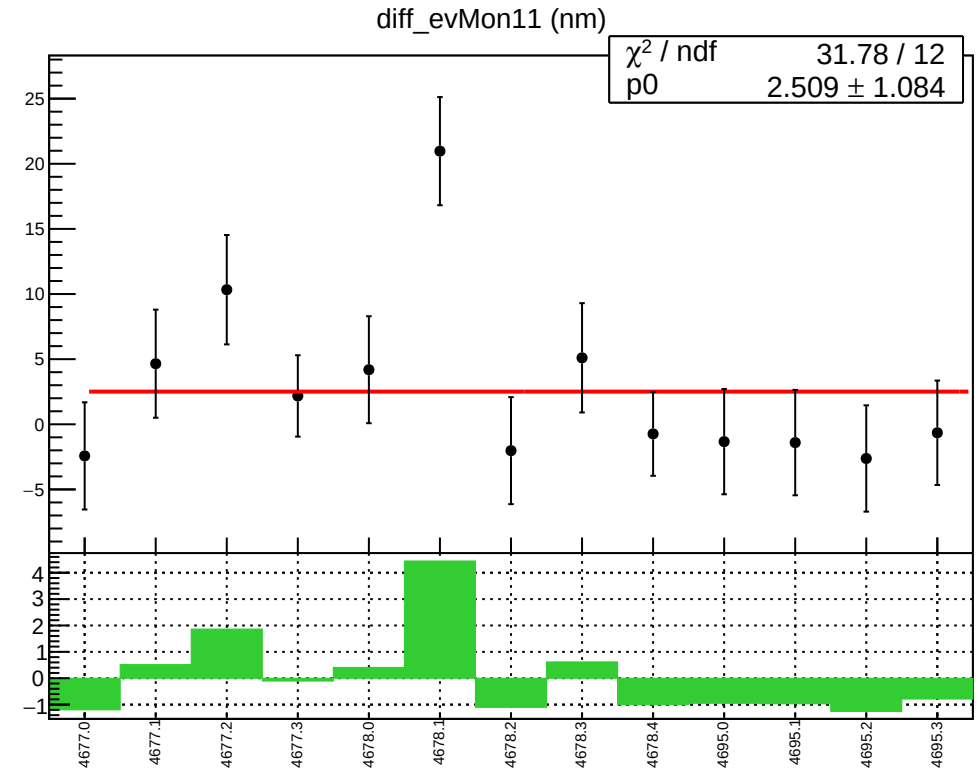

diff_evMon9 RMS (um)
RMS (um)
0.58
0.56
0.54
0.52
0.5
0.48
0.46
0.44
0.42
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

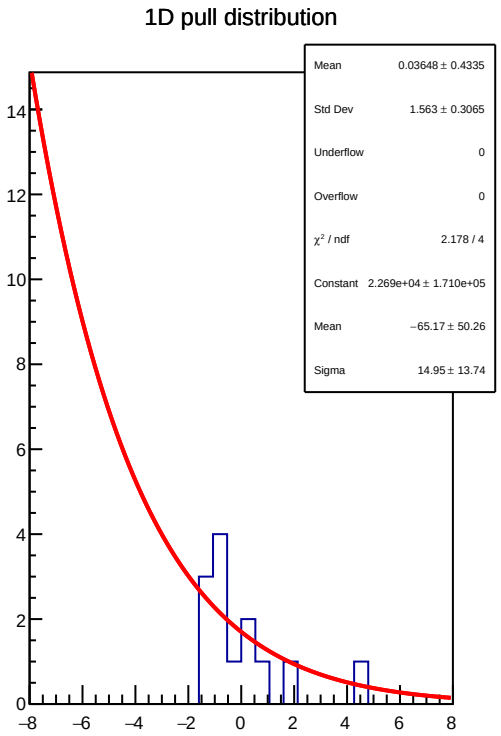

diff_evMon10 (nm)
χ² / ndf 29.87 / 12
p0 −1.512 ± 1.165
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


1D pull distribution
Mean −0.05536 ± 0.4202
Std Dev 1.515 ± 0.2971
Underflow 0
Overflow 0
χ² / ndf 1.694 / 5
Constant 1.628 ± 0.742
Mean −0.1534 ± 2.5373
Sigma 3.081± 3.880

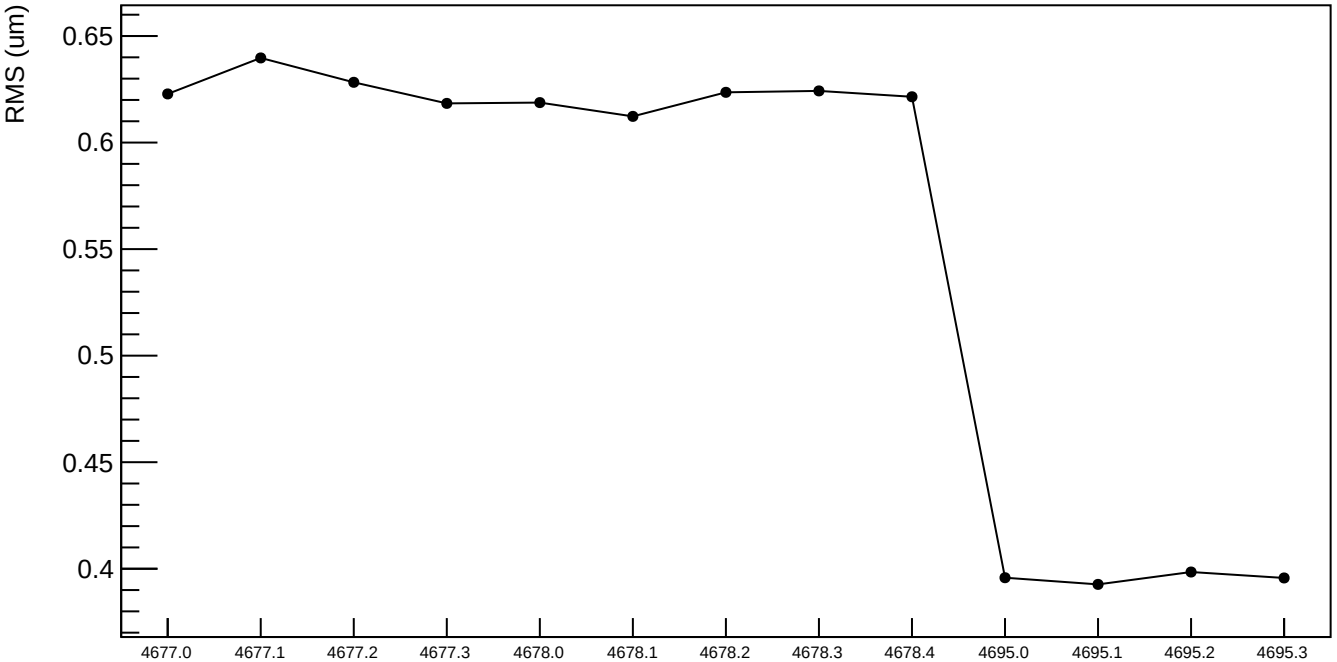
diff_evMon10 RMS (um)

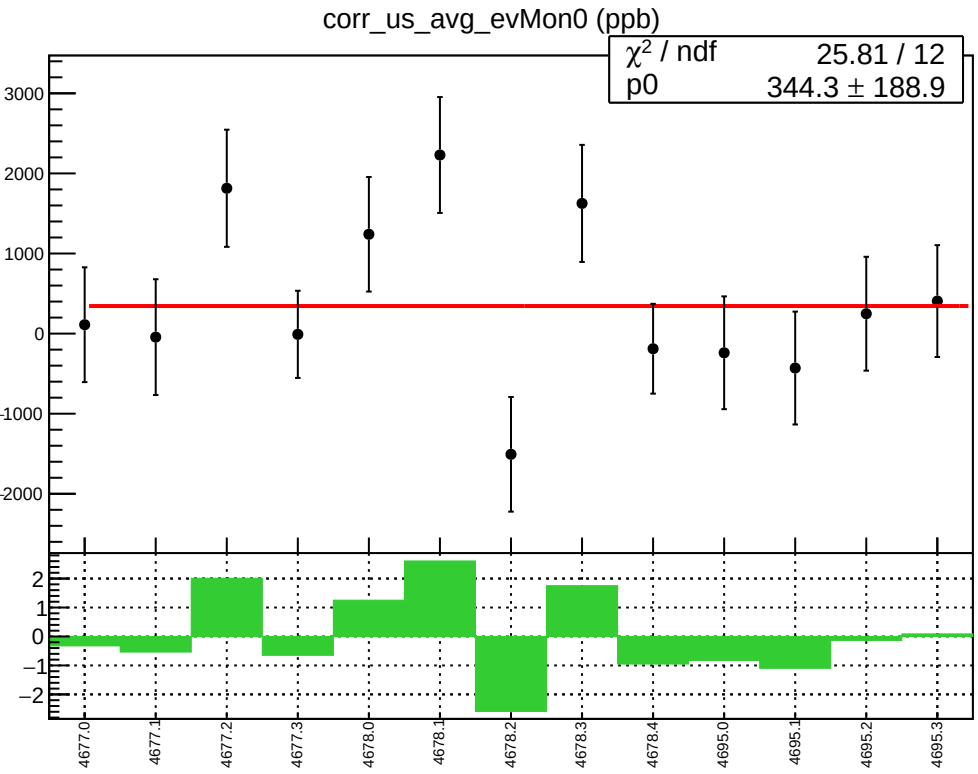


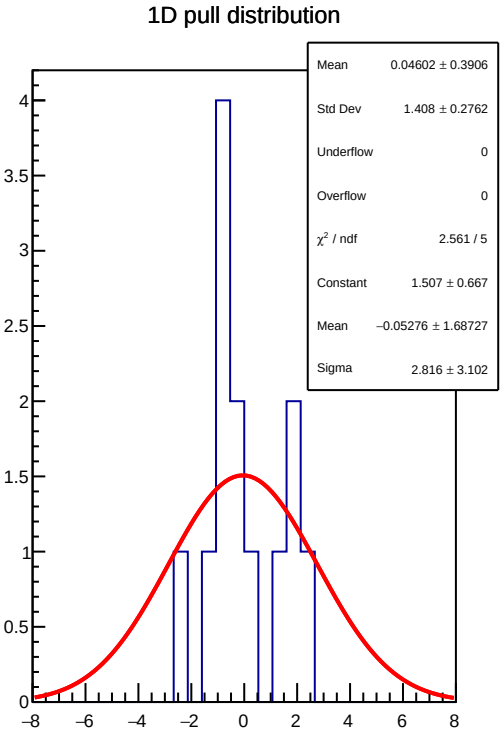

diff_evMon11 (nm)
χ² / ndf 31.78 / 12
p0 2.509 ± 1.084
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

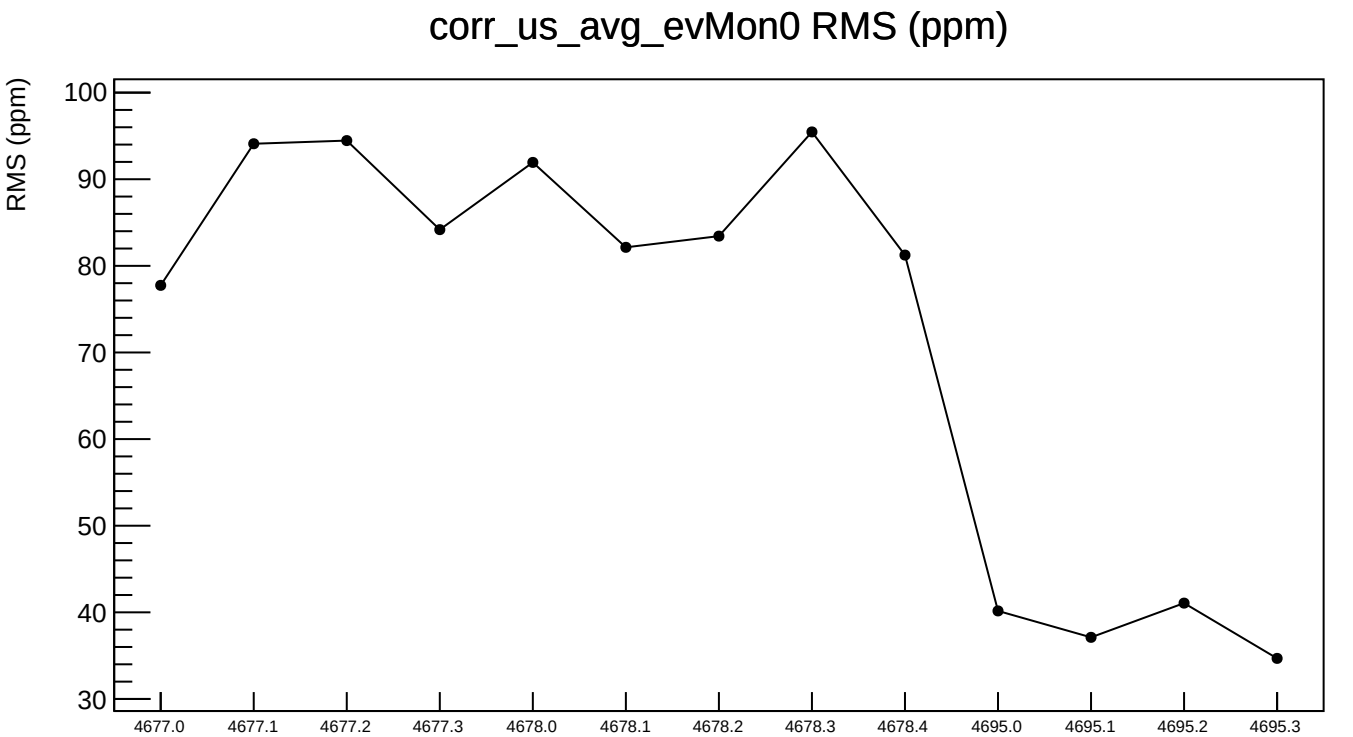

1D pull distribution
Mean 0.03648 ± 0.4335
Std Dev 1.563 ± 0.3065
Underflow 0
Overflow 0
χ² / ndf 2.178 / 4
Constant 2.269e+04 ± 1.710e+05
Mean −65.17 ± 50.26
Sigma 14.95 ± 13.74

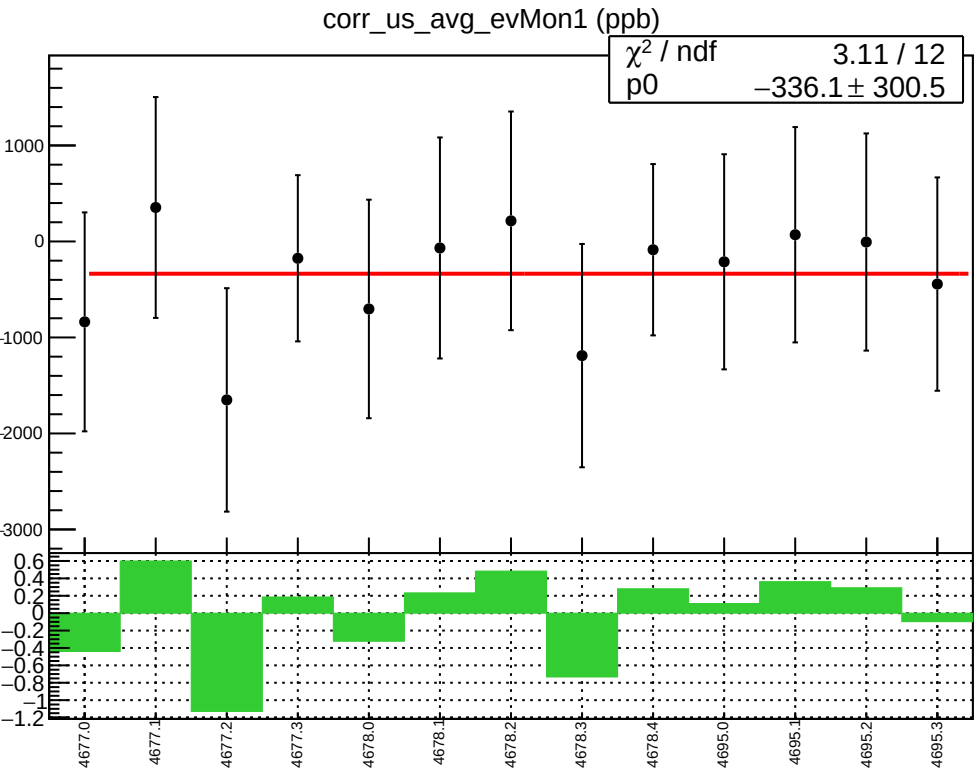
diff_evMon11 RMS (um)

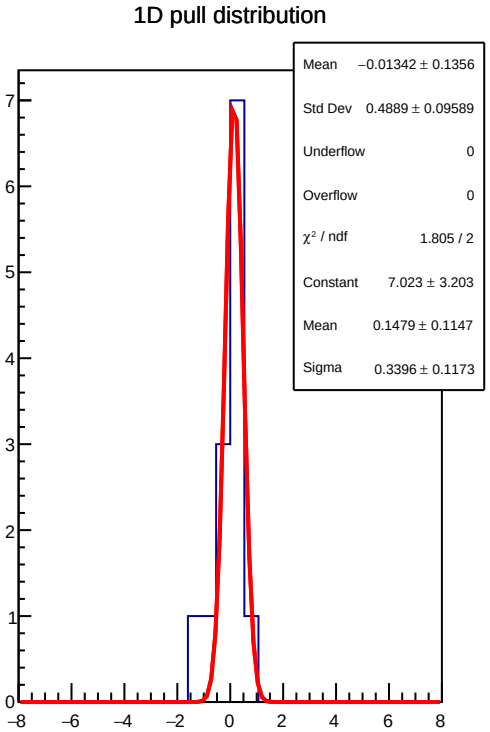


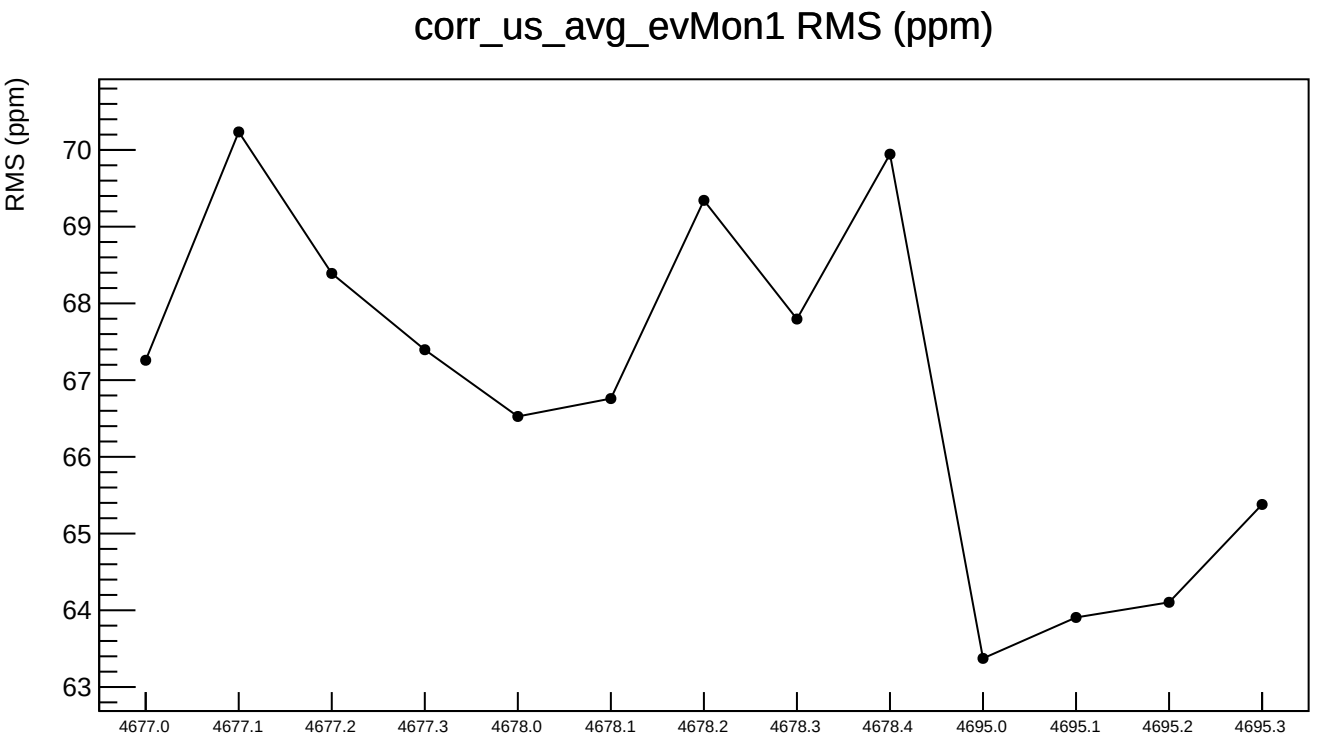

corr_us_avg_evMon0 (ppb)
χ² / ndf 25.81 / 12
p0 344.3 ± 188.9
3000
2000
1000
0
-1000
-2000
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

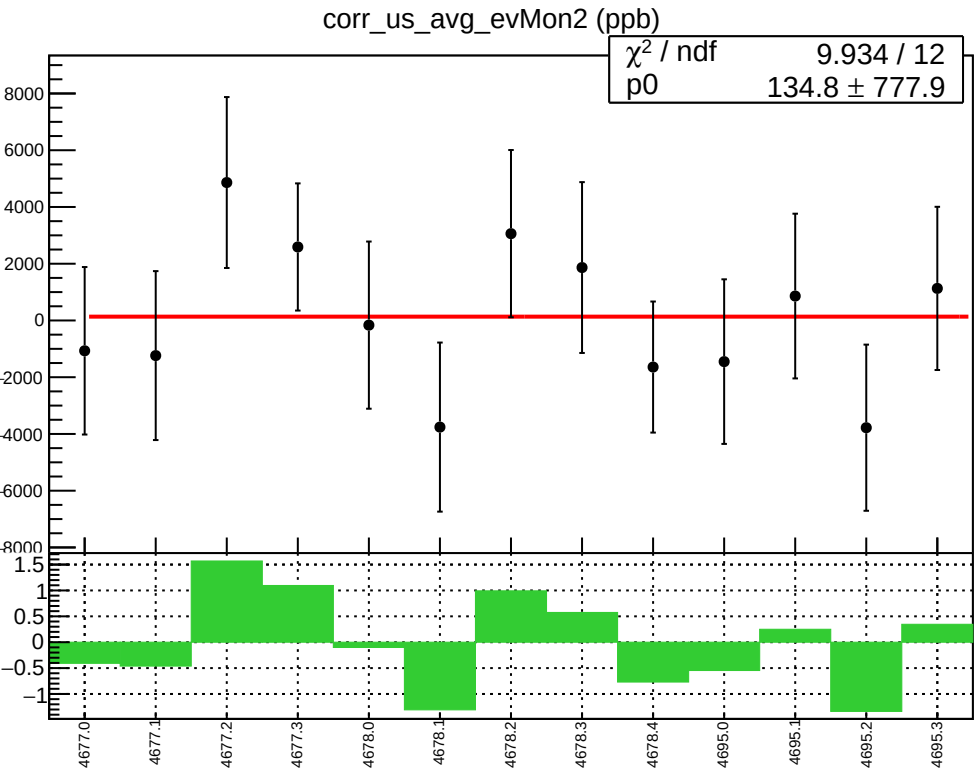

1D pull distribution
Mean 0.04602 ± 0.3906
Std Dev 1.408 ± 0.2762
Underflow 0
Overflow 0
χ² / ndf 2.561 / 5
Constant 1.507 ± 0.667
Mean −0.05276 ± 1.68727
Sigma 2.816 ± 3.102
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

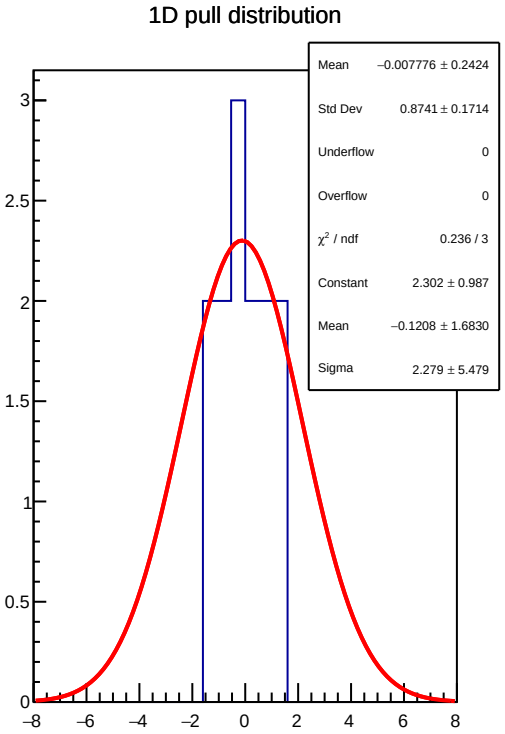

corr_us_avg_evMon0 RMS (ppm)
RMS (ppm)
100
90
80
70
60
50
40
30
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

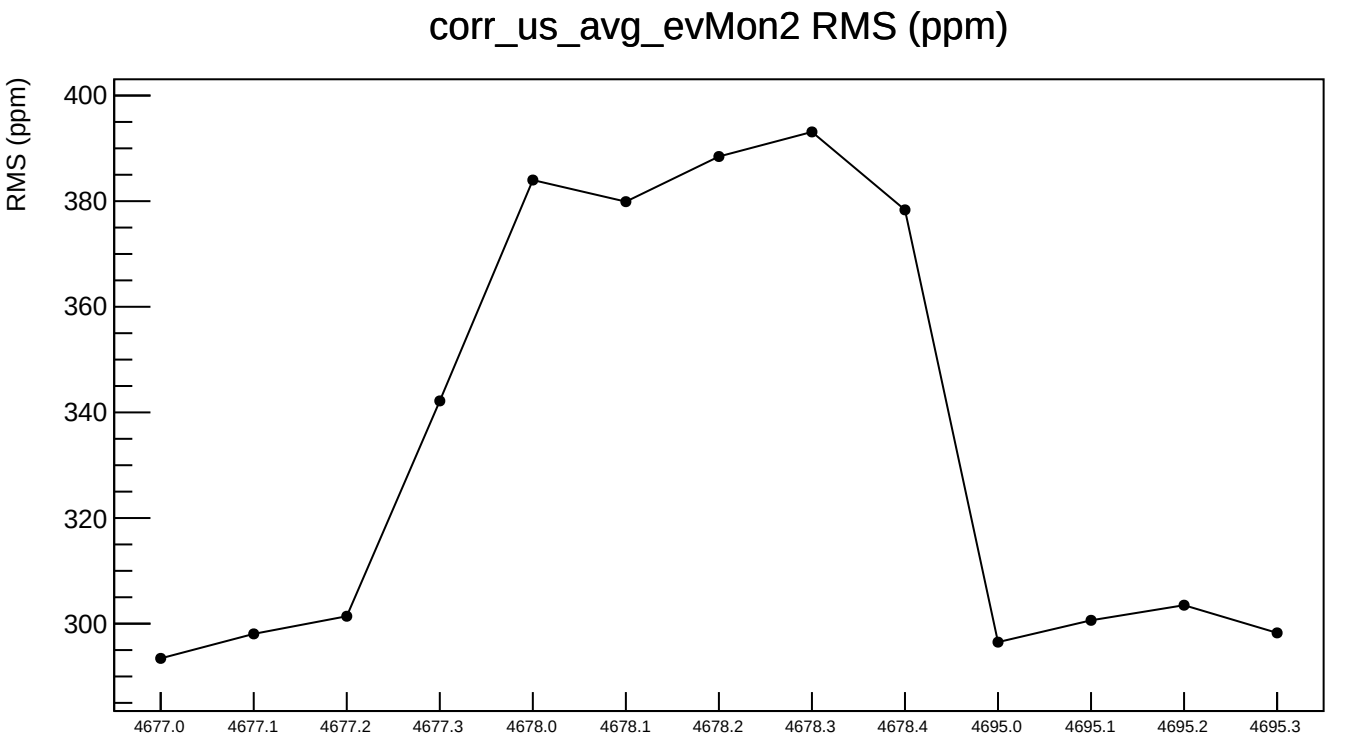

corr_us_avg_evMon1 (ppb)
χ² / ndf 3.11 / 12
p0 −336.1 ± 300.5
1000
0
-1000
-2000
-3000
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

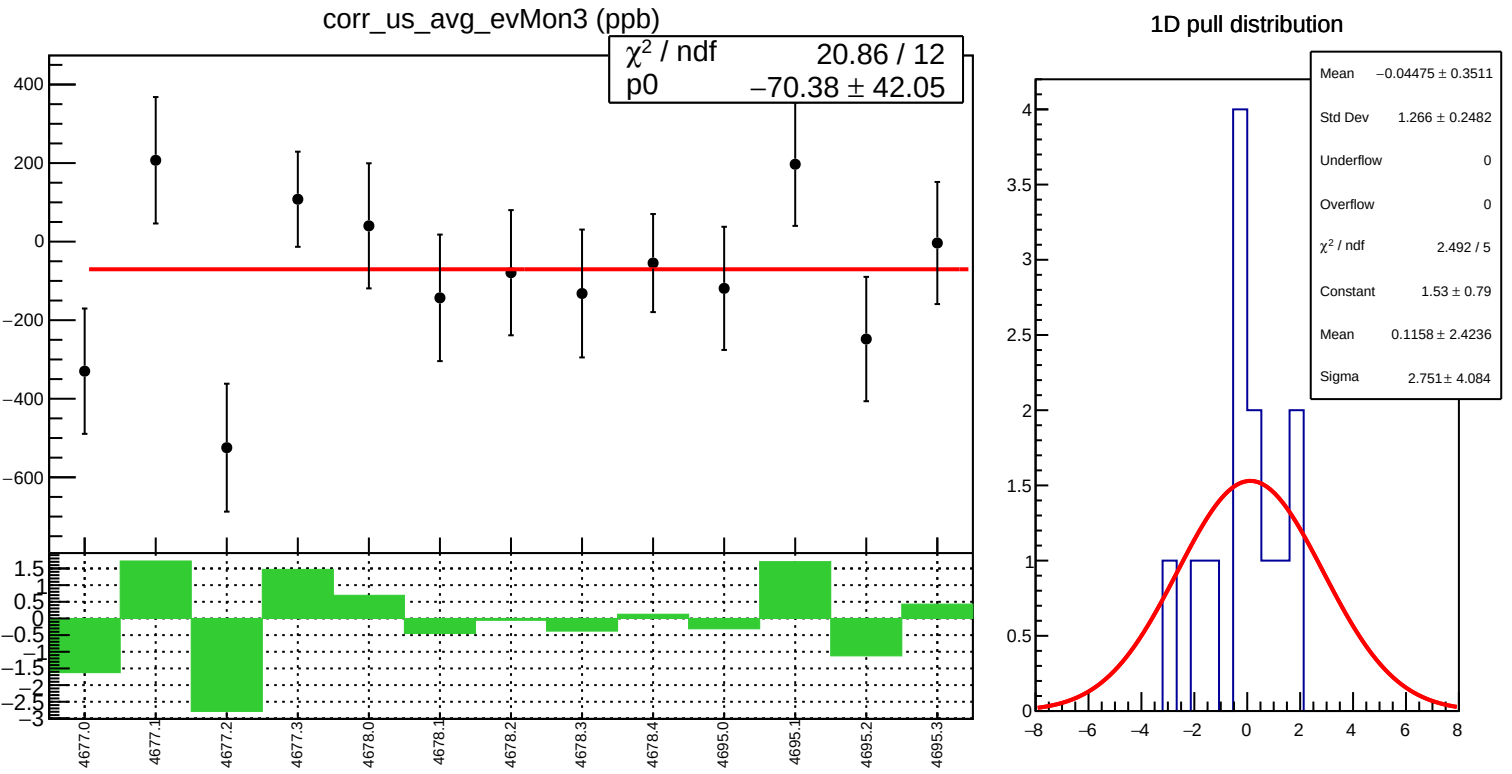

1D pull distribution
Mean −0.01342 ± 0.1356
Std Dev 0.4889 ± 0.09589
Underflow 0
Overflow 0
χ² / ndf 1.805 / 2
Constant 7.023 ± 3.203
Mean 0.1479 ± 0.1147
Sigma 0.3396 ± 0.1173
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

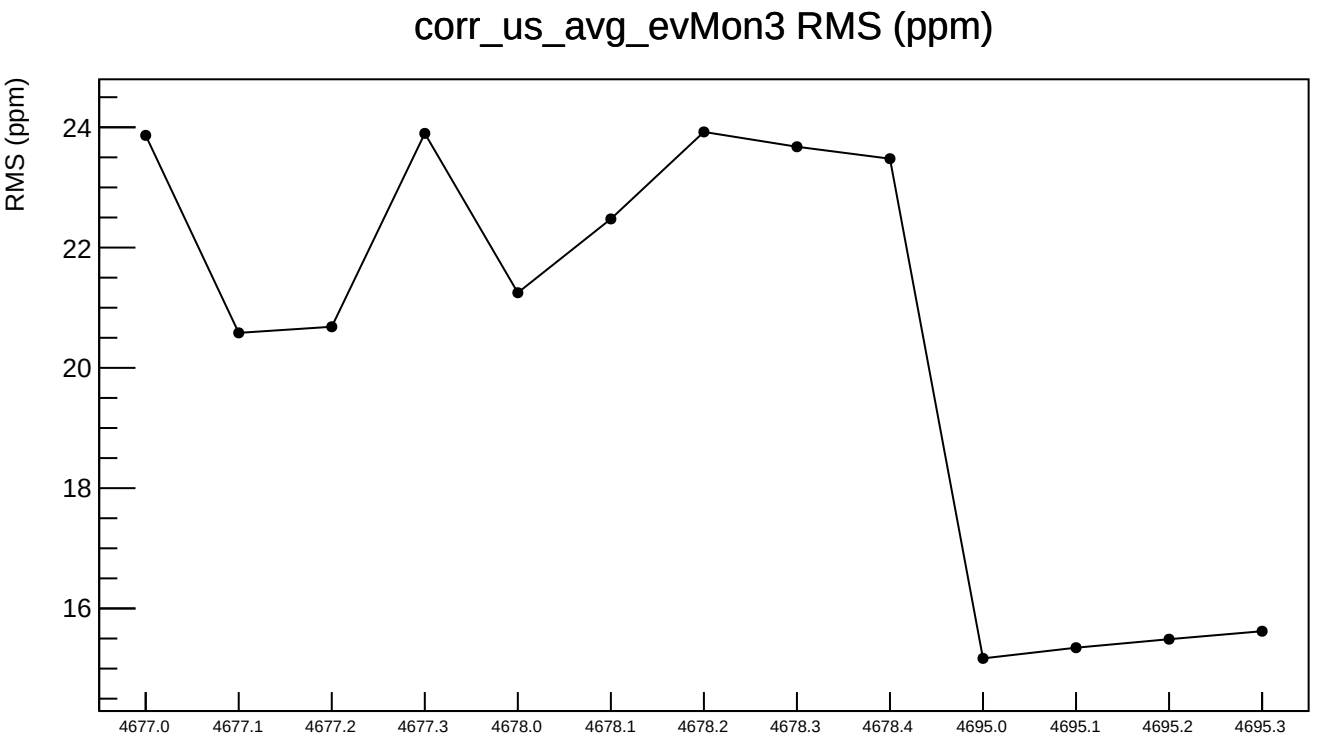

corr_us_avg_evMon1 RMS (ppm)
RMS (ppm)
70
69
68
67
66
65
64
63
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

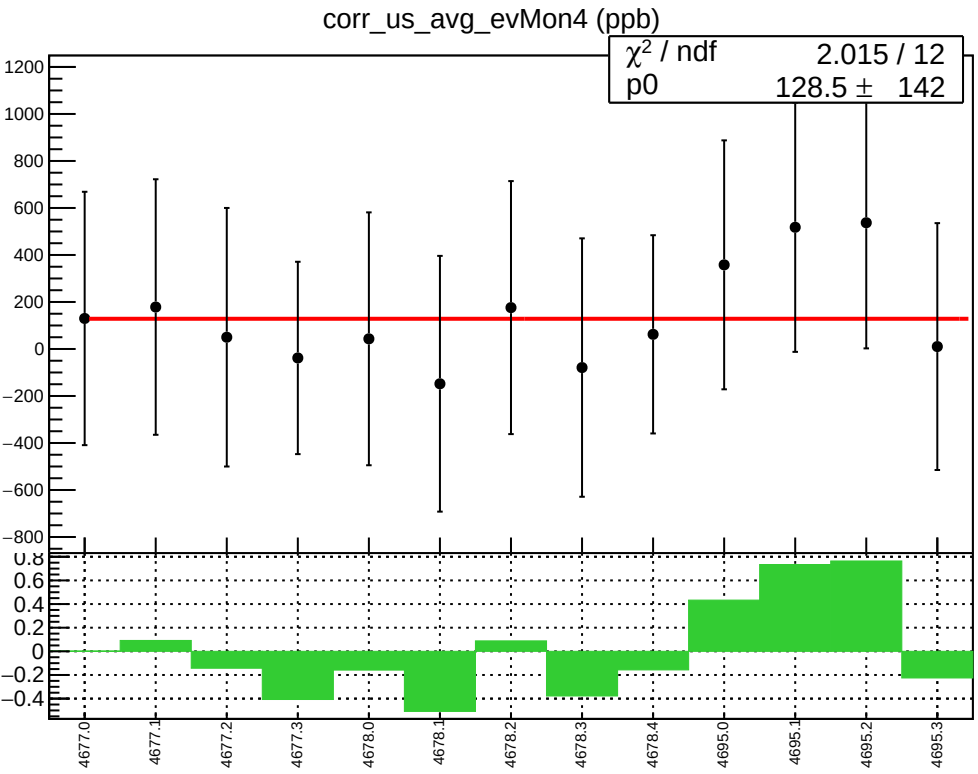

corr_us_avg_evMon2 (ppb)
χ² / ndf 9.934 / 12
p0 134.8 ± 777.9
8000
6000
4000
2000
0
-2000
-4000
-6000
-8000
1.5
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

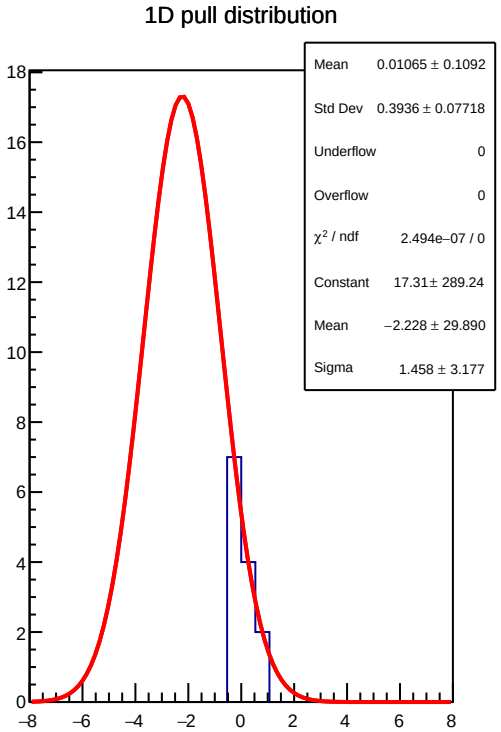

1D pull distribution
Mean −0.007776 ± 0.2424
Std Dev 0.8741 ± 0.1714
Underflow 0
Overflow 0
χ² / ndf 0.236 / 3
Constant 2.302 ± 0.987
Mean −0.1208 ± 1.6830
Sigma 2.279 ± 5.479
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_avg_evMon2 RMS (ppm)
RMS (ppm)
400
380
360
340
320
300
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

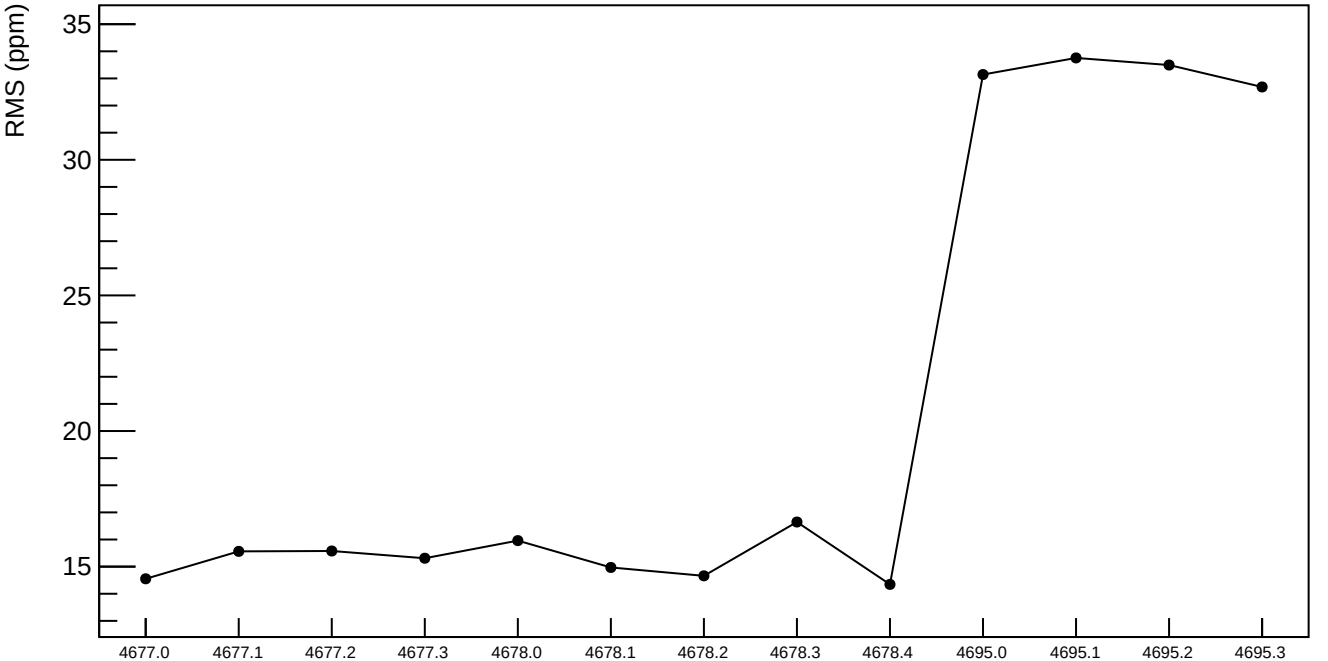

corr_us_avg_evMon3 (ppb)
χ² / ndf 20.86 / 12
p0 −70.38 ± 42.05
400
200
0
−200
−400
−600
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.04475 ± 0.3511
Std Dev 1.266 ± 0.2482
Underflow 0
Overflow 0
χ² / ndf 2.492 / 5
Constant 1.53 ± 0.79
Mean 0.1158 ± 2.4236
Sigma 2.751 ± 4.084
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

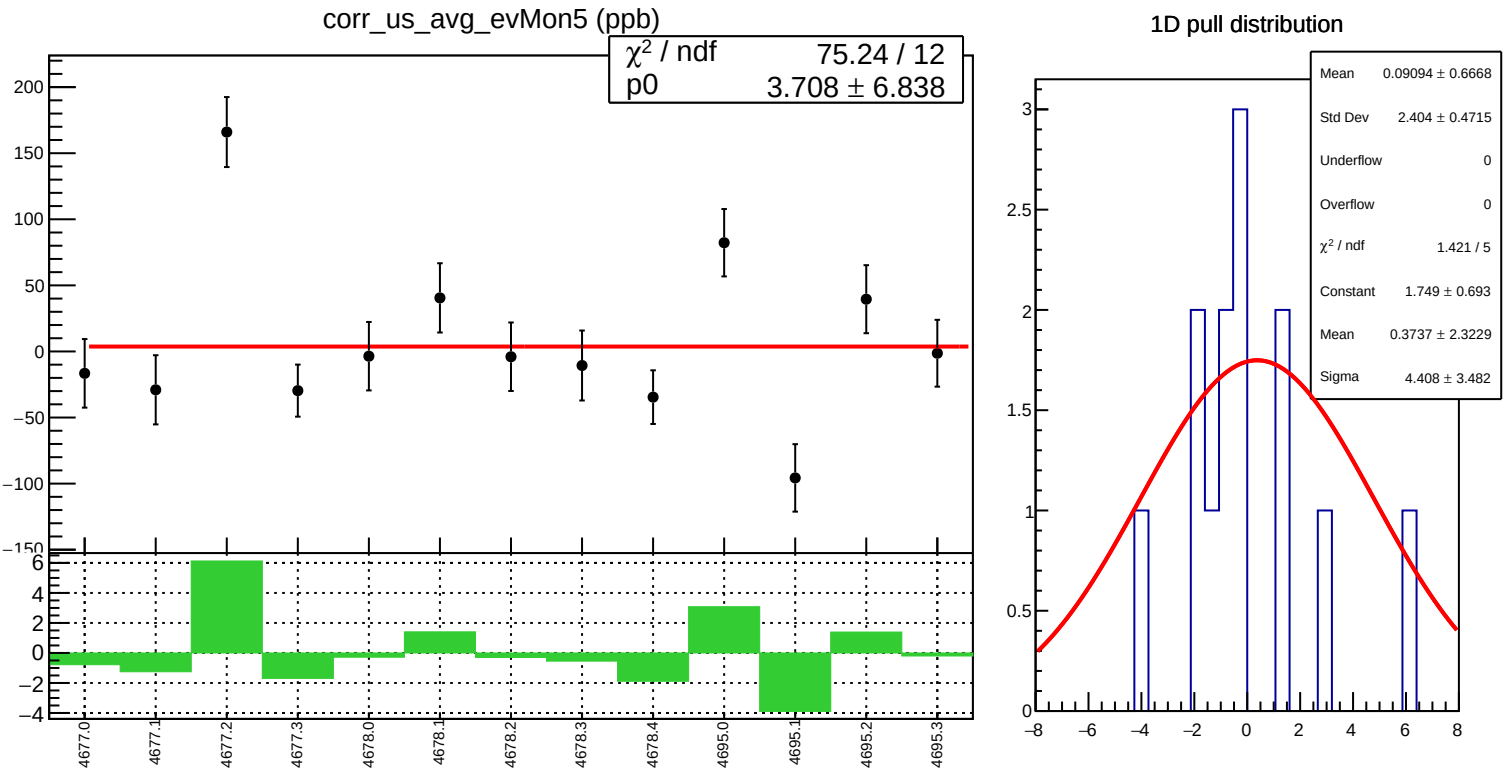

corr_us_avg_evMon3 RMS (ppm)
RMS (ppm)
24
22
20
18
16
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

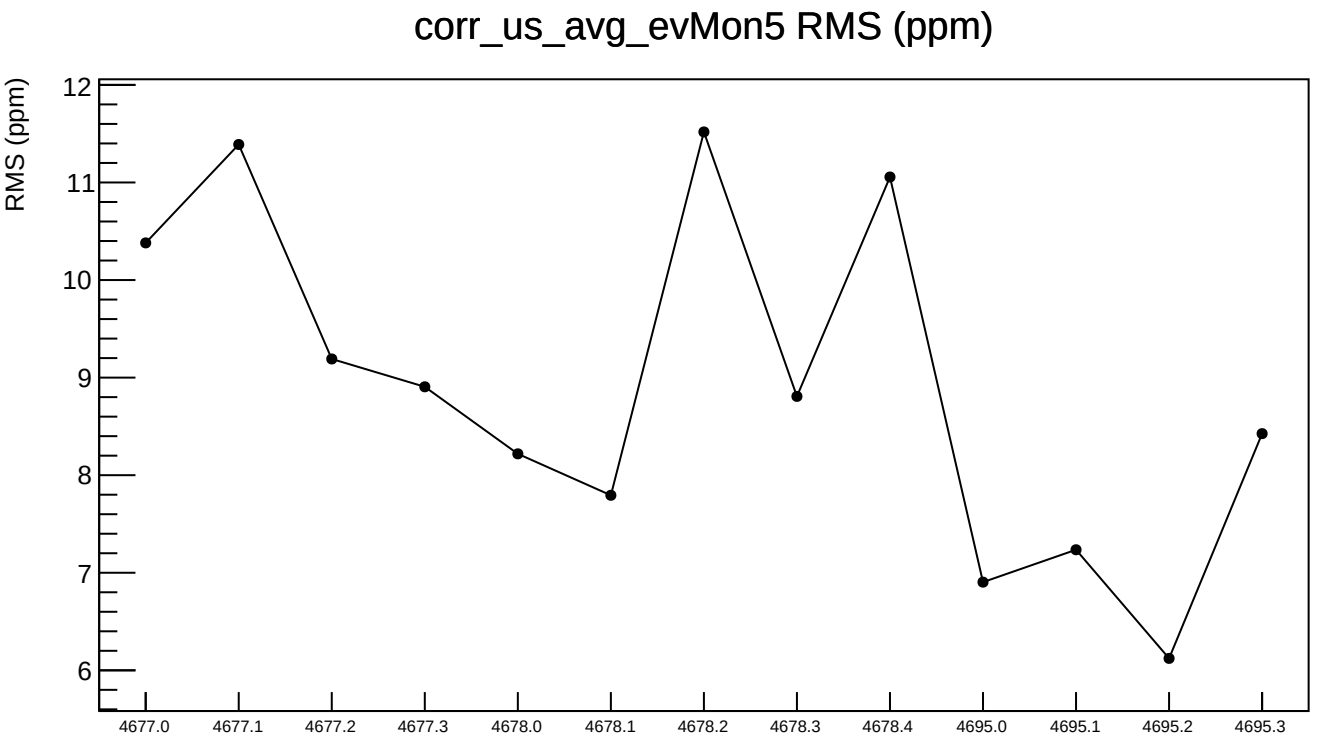

corr_us_avg_evMon4 (ppb)
χ² / ndf 2.015 / 12
p0 128.5 ± 142
1200
1000
800
600
400
200
0
−200
−400
−600
−800
0.8
0.6
0.4
0.2
0
−0.2
−0.4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

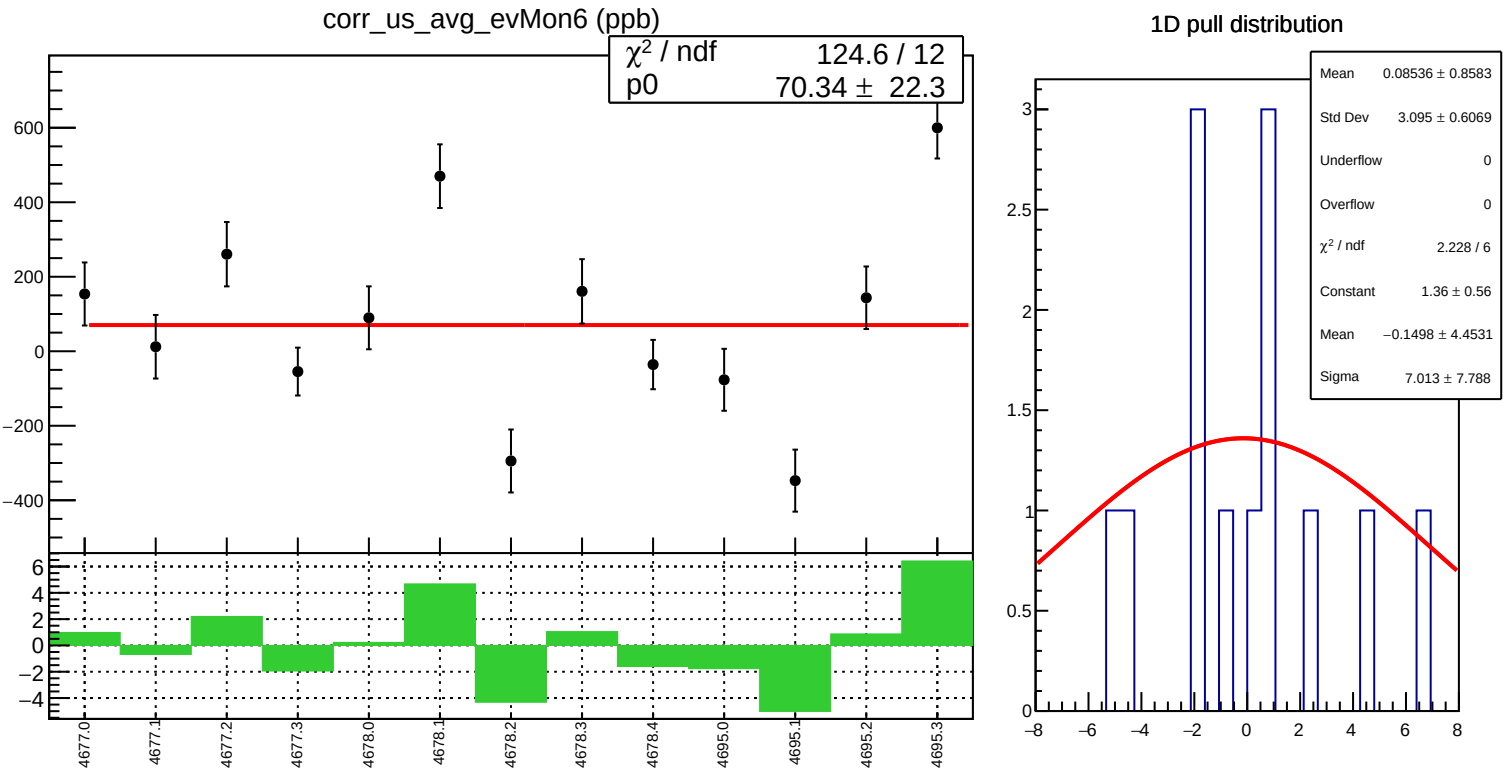

1D pull distribution
Mean 0.01065 ± 0.1092
Std Dev 0.3936 ± 0.07718
Underflow 0
Overflow 0
χ² / ndf 2.494e−07 / 0
Constant 17.31± 289.24
Mean −2.228 ± 29.890
Sigma 1.458 ± 3.177
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

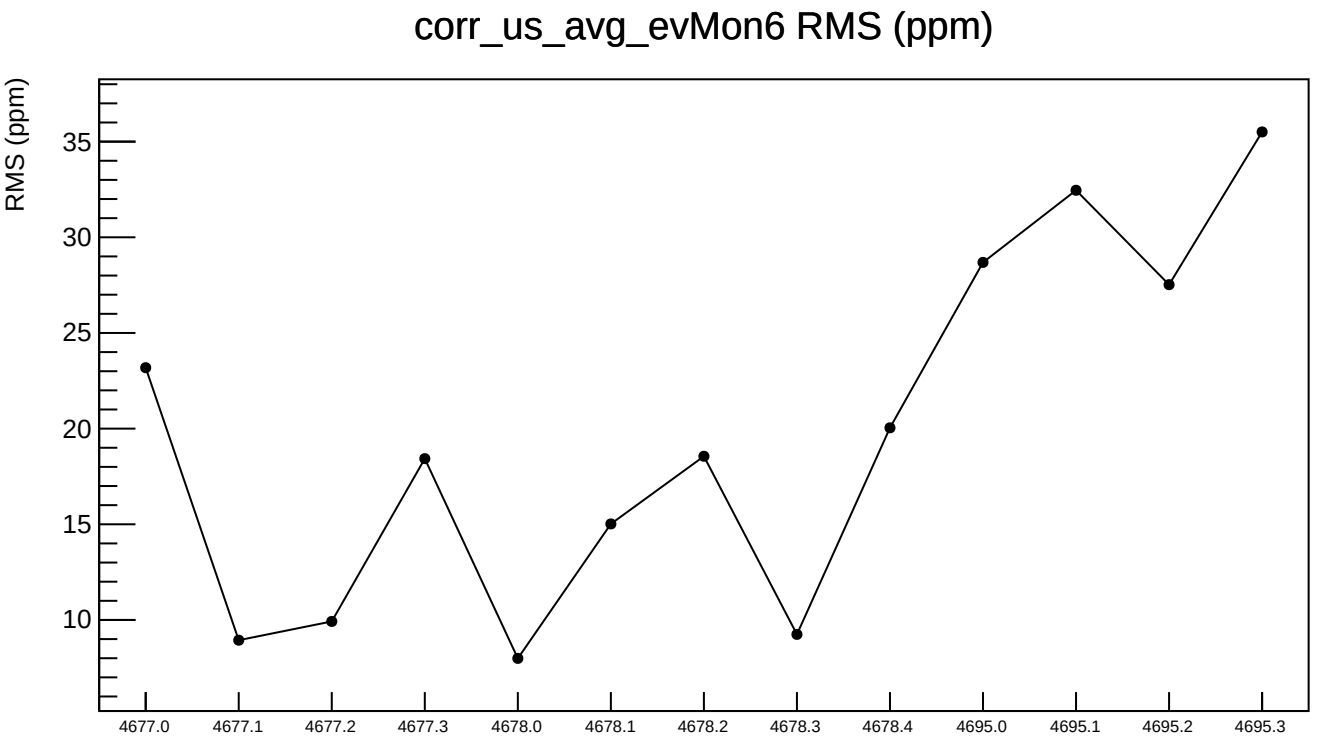
corr_us_avg_evMon4 RMS (ppm)

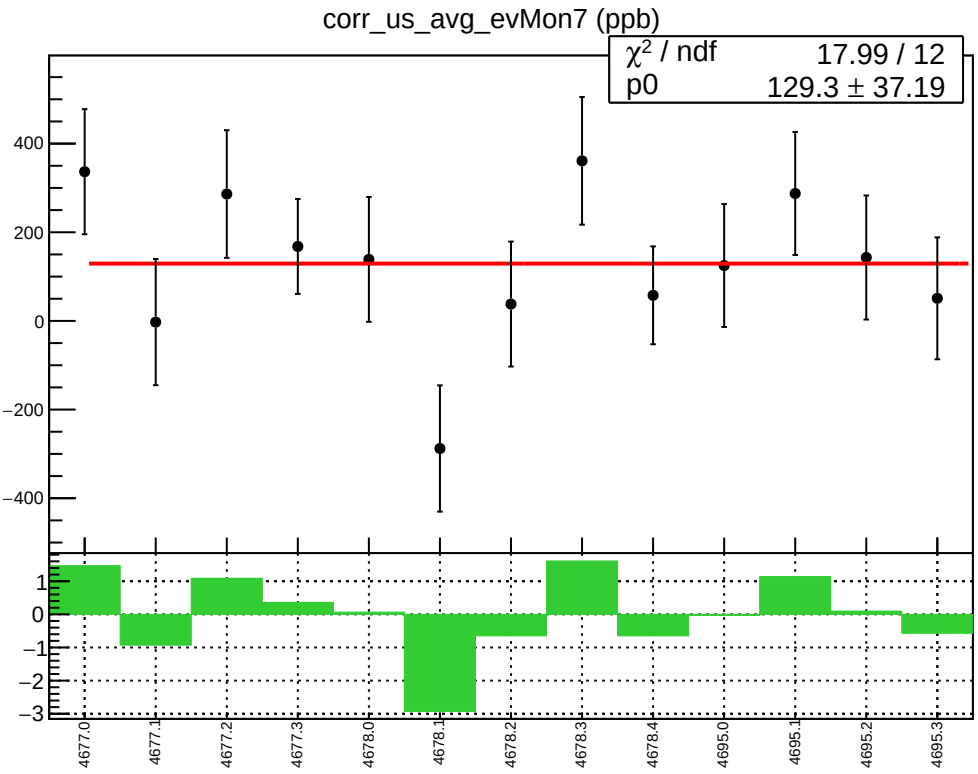


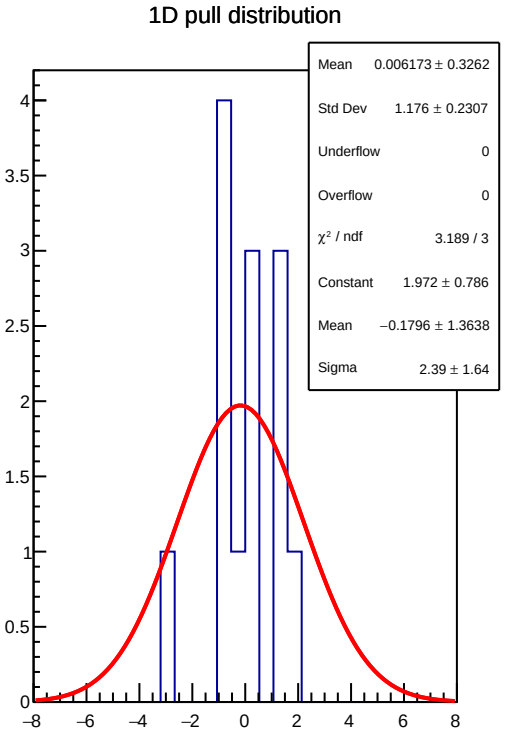

corr_us_avg_evMon5 (ppb)
χ² / ndf 75.24 / 12
p0 3.708 ± 6.838
200
150
100
50
0
−50
−100
−150
6
4
2
0
−2
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.09094 ± 0.6668
Std Dev 2.404 ± 0.4715
Underflow 0
Overflow 0
χ² / ndf 1.421 / 5
Constant 1.749 ± 0.693
Mean 0.3737 ± 2.3229
Sigma 4.408 ± 3.482
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

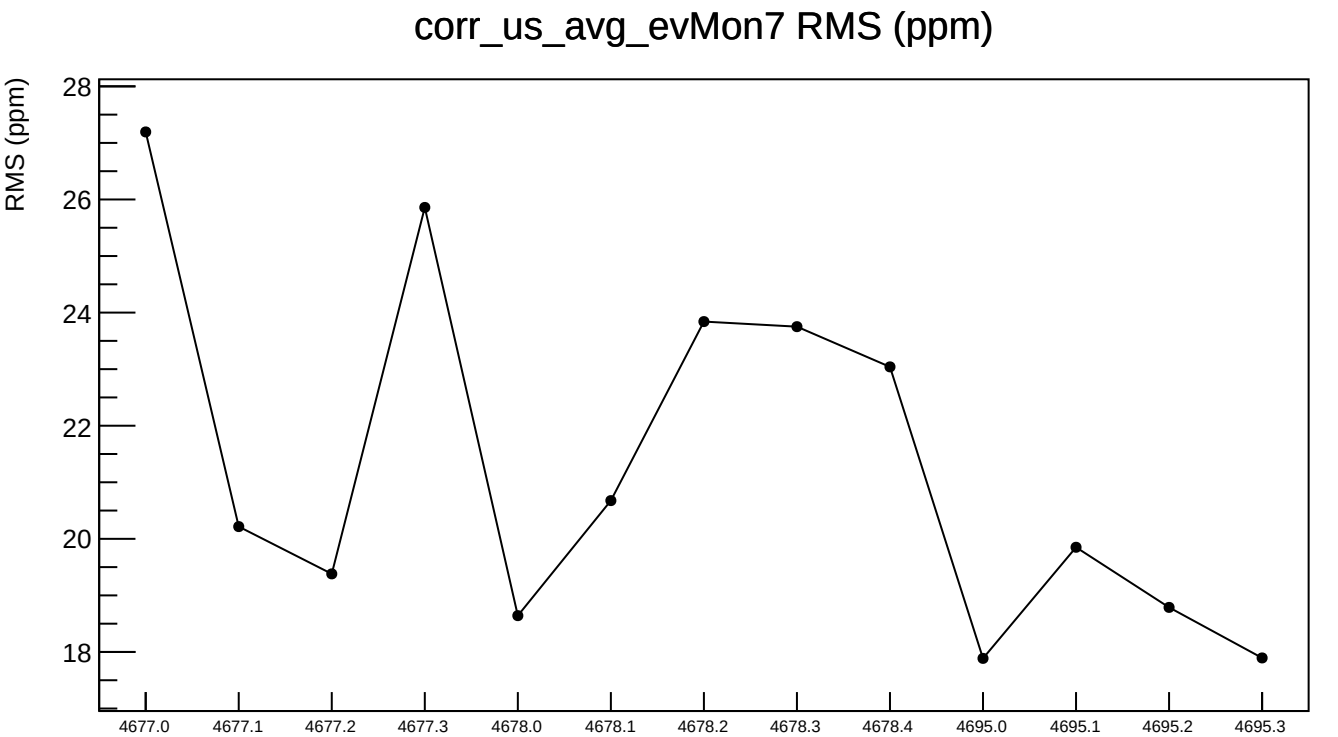

corr_us_avg_evMon5 RMS (ppm)
RMS (ppm)
12
11
10
9
8
7
6
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

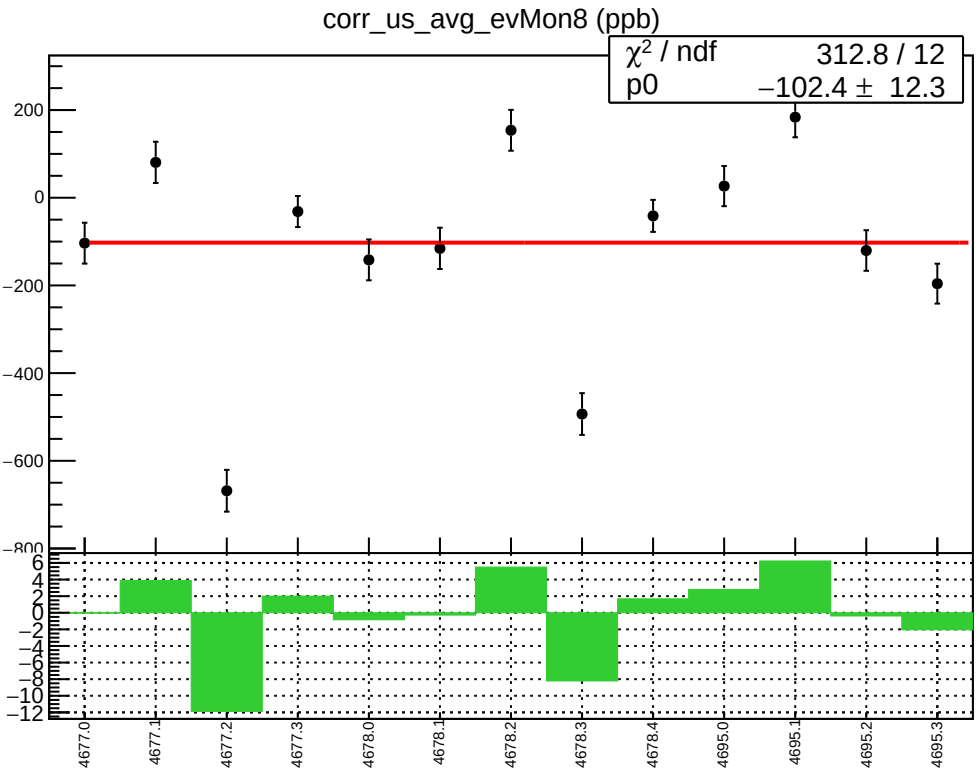

corr_us_avg_evMon6 (ppb)
χ² / ndf 124.6 / 12
p0 70.34 ± 22.3
600
400
200
0
−200
−400
6
4
2
0
−2
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.08536 ± 0.8583
Std Dev 3.095 ± 0.6069
Underflow 0
Overflow 0
χ² / ndf 2.228 / 6
Constant 1.36 ± 0.56
Mean −0.1498 ± 4.4531
Sigma 7.013 ± 7.788
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

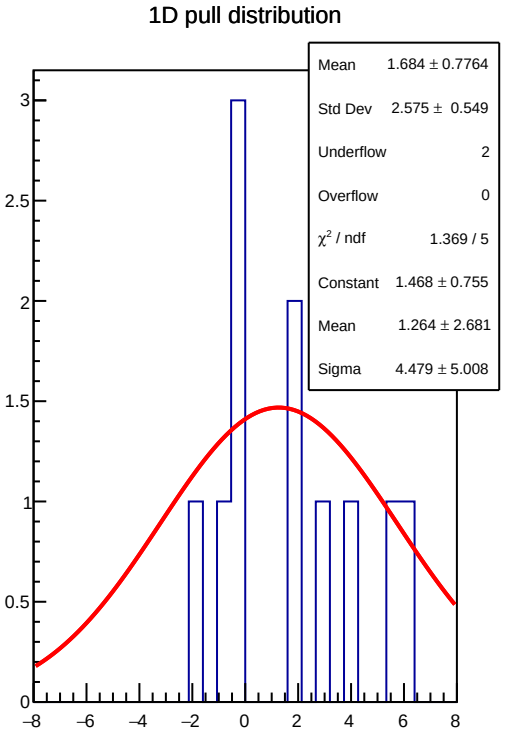

corr_us_avg_evMon6 RMS (ppm)
RMS (ppm)
35
30
25
20
15
10
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

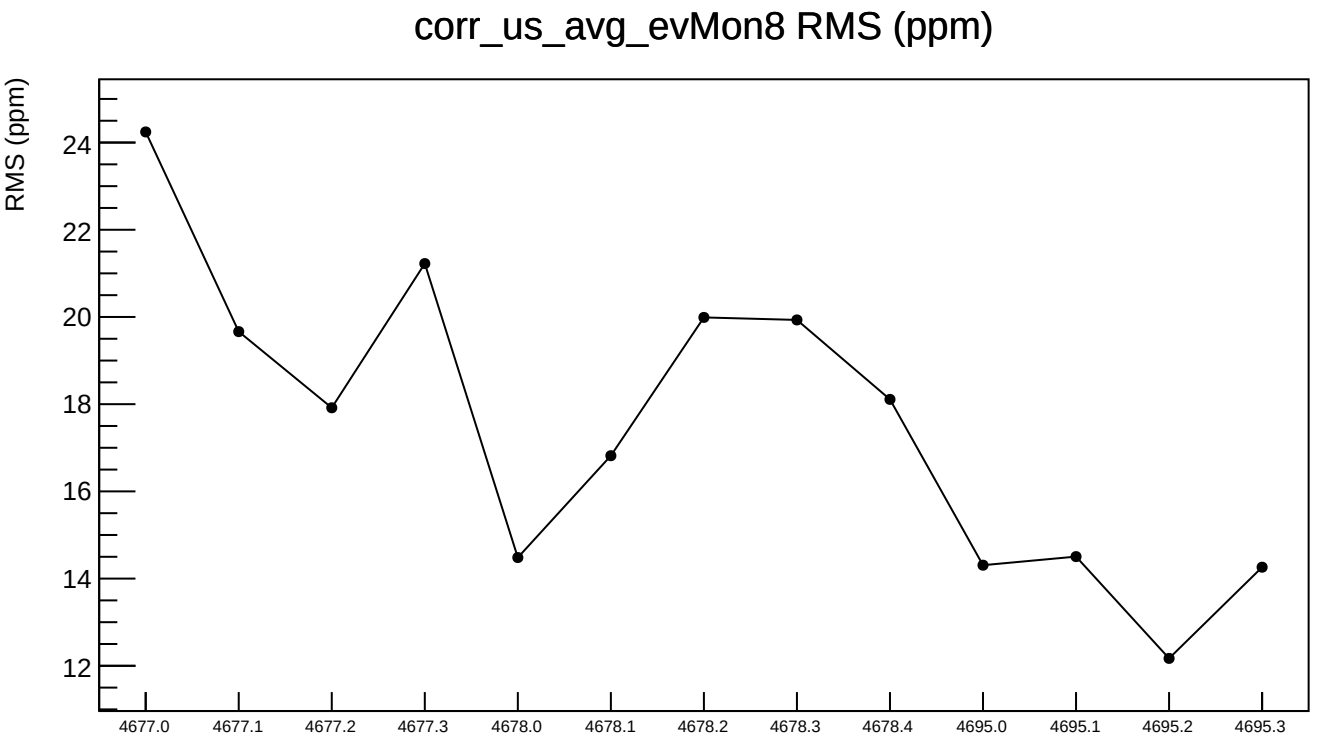

corr_us_avg_evMon7 (ppb)
χ² / ndf 17.99 / 12
p0 129.3 ± 37.19
400
200
0
−200
−400
1
0
−1
−2
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

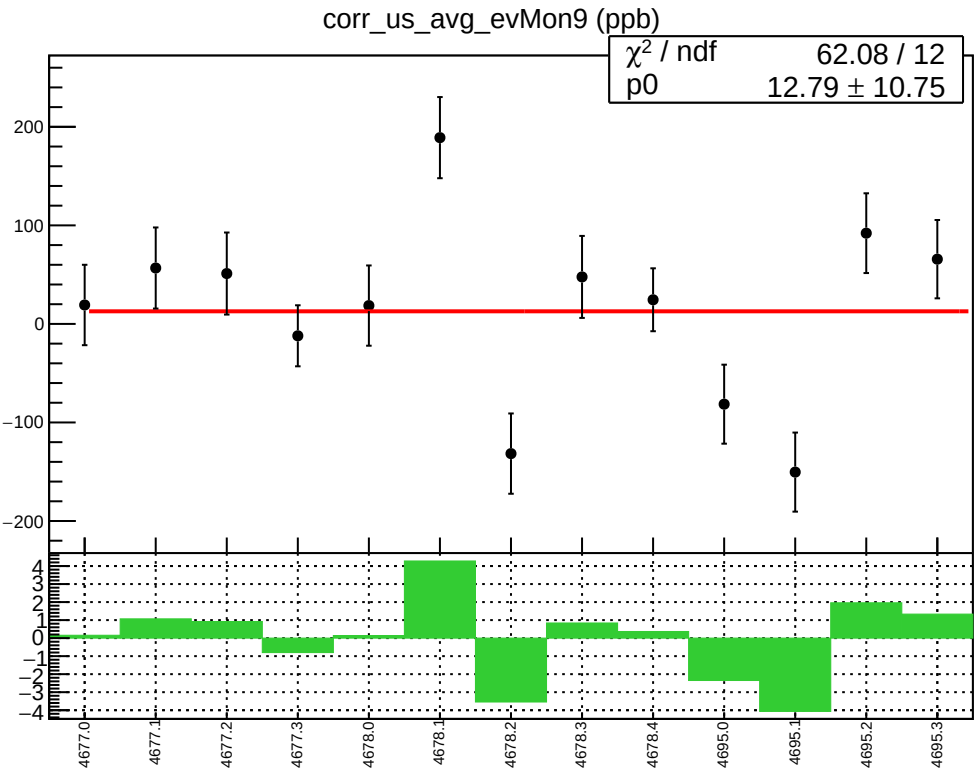

1D pull distribution
Mean 0.006173 ± 0.3262
Std Dev 1.176 ± 0.2307
Underflow 0
Overflow 0
χ² / ndf 3.189 / 3
Constant 1.972 ± 0.786
Mean −0.1796 ± 1.3638
Sigma 2.39 ± 1.64
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

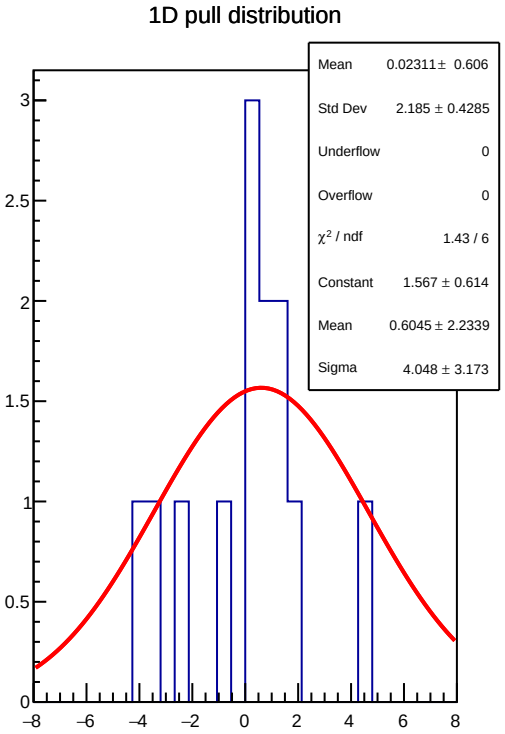

corr_us_avg_evMon7 RMS (ppm)
RMS (ppm)
28
26
24
22
20
18
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

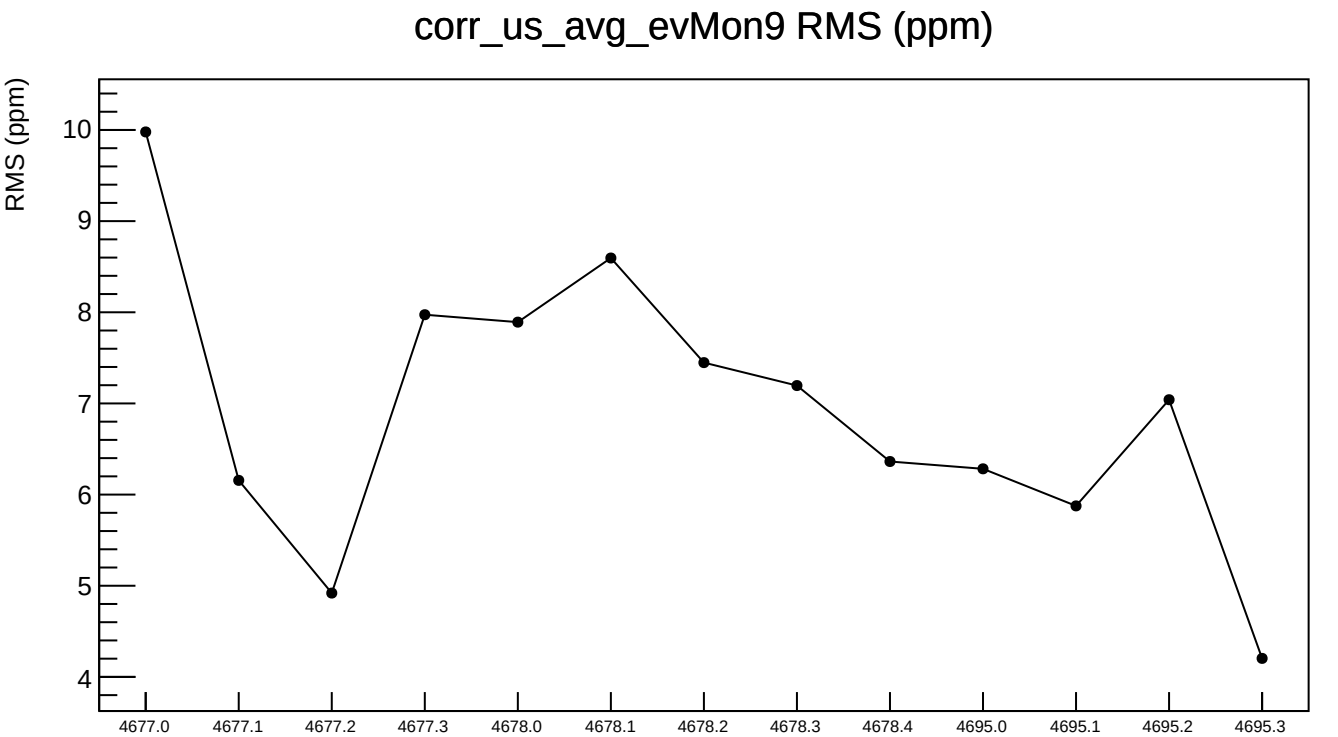

corr_us_avg_evMon8 (ppb)
χ² / ndf 312.8 / 12
p0 −102.4 ± 12.3
200
0
−200
−400
−600
−800
6
4
2
0
−2
−4
−6
−8
−10
−12
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

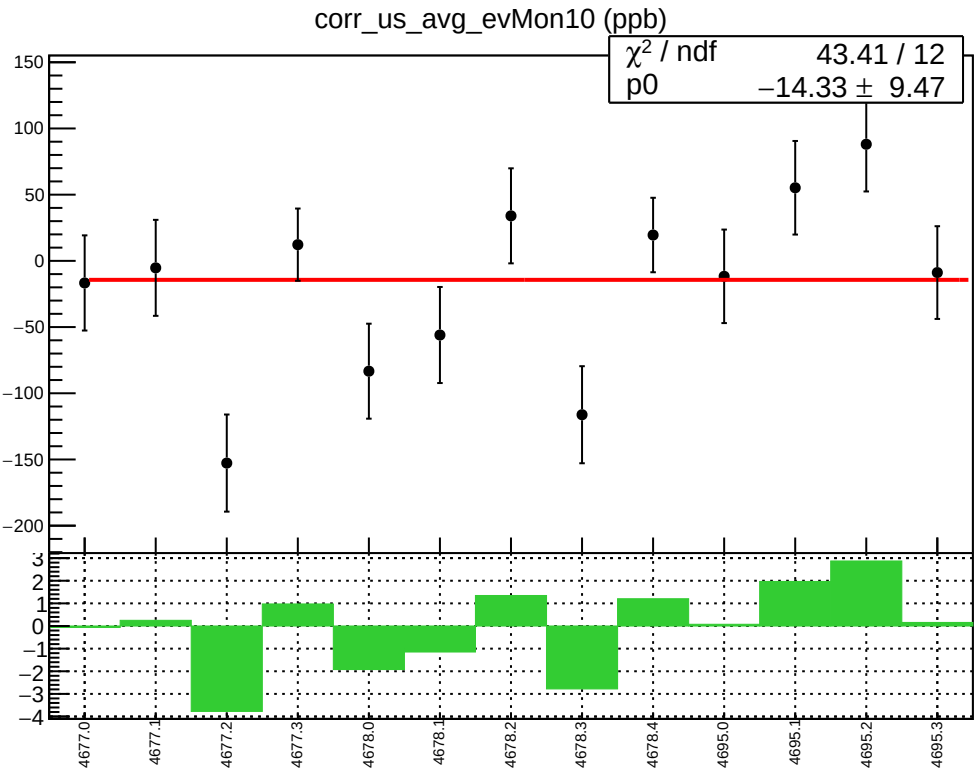

1D pull distribution
Mean 1.684 ± 0.7764
Std Dev 2.575 ± 0.549
Underflow 2
Overflow 0
χ² / ndf 1.369 / 5
Constant 1.468 ± 0.755
Mean 1.264 ± 2.681
Sigma 4.479 ± 5.008
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

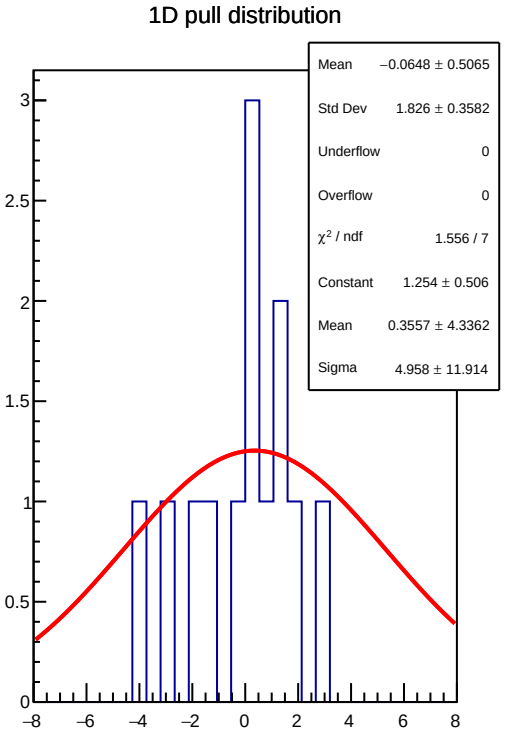

corr_us_avg_evMon8 RMS (ppm)
RMS (ppm)
24
22
20
18
16
14
12
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

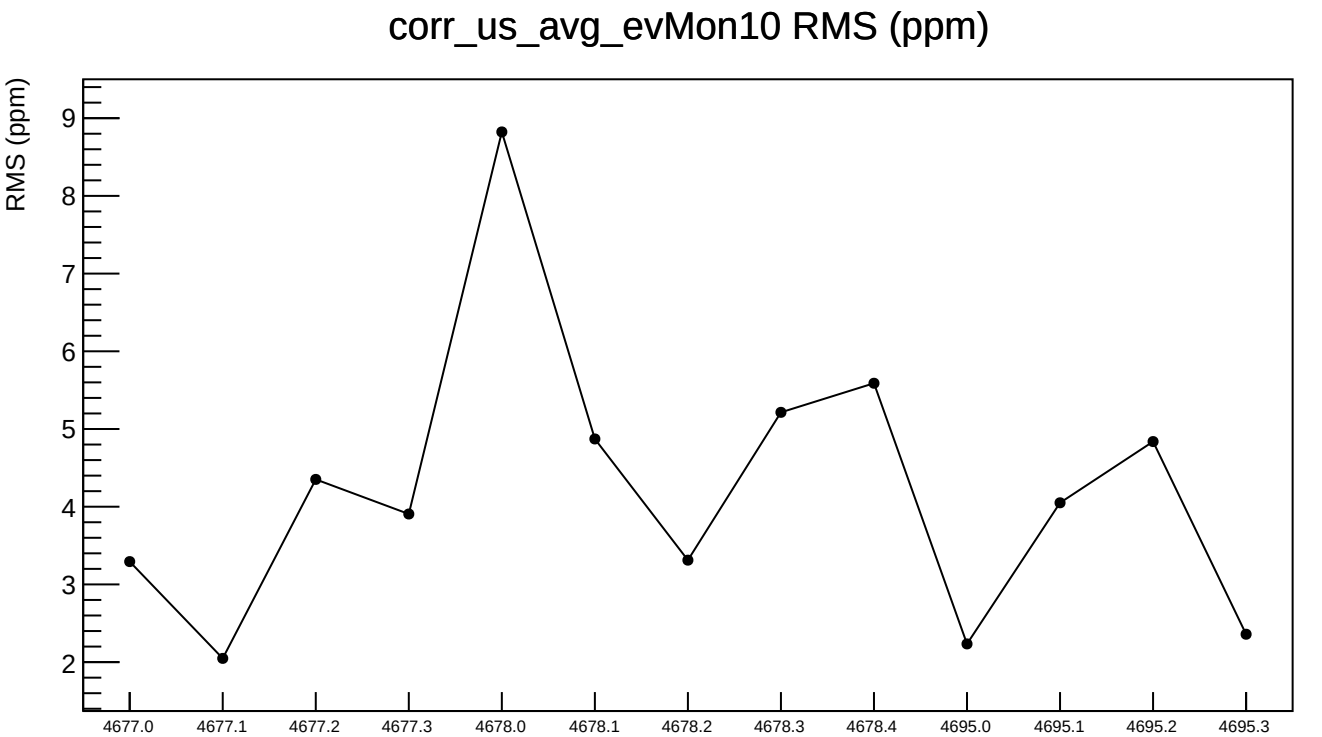

corr_us_avg_evMon9 (ppb)
χ² / ndf 62.08 / 12
p0 12.79 ± 10.75
200
100
0
−100
−200
4
3
2
1
0
−1
−2
−3
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

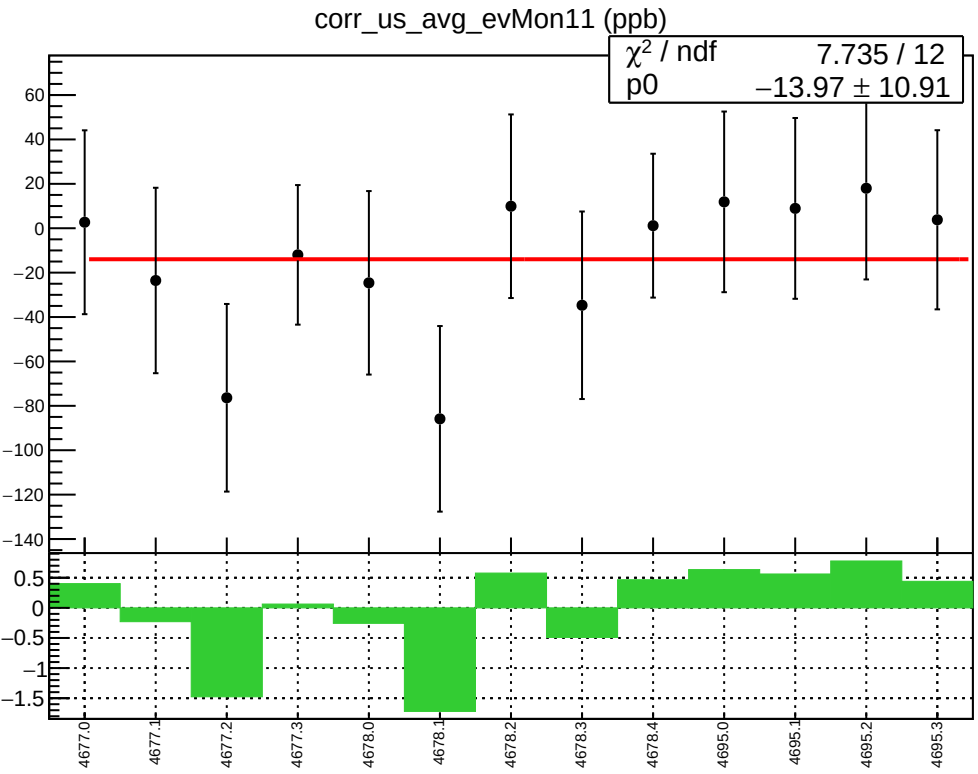

1D pull distribution
Mean 0.02311 ± 0.606
Std Dev 2.185 ± 0.4285
Underflow 0
Overflow 0
χ² / ndf 1.43 / 6
Constant 1.567 ± 0.614
Mean 0.6045 ± 2.2339
Sigma 4.048 ± 3.173
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

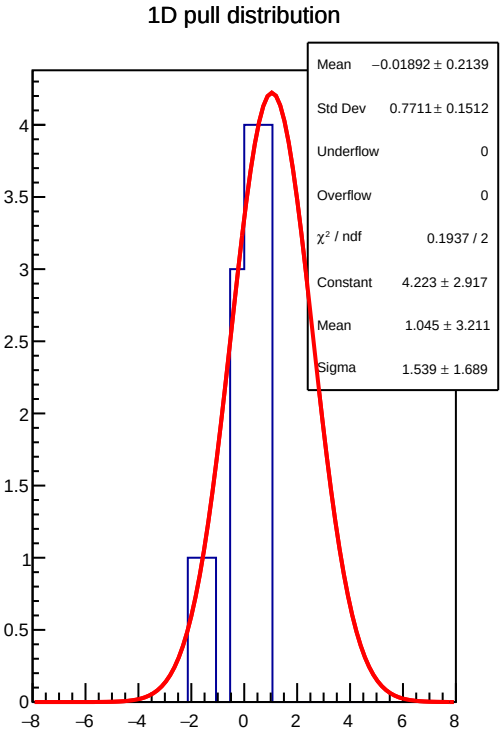

corr_us_avg_evMon9 RMS (ppm)
RMS (ppm)
10
9
8
7
6
5
4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

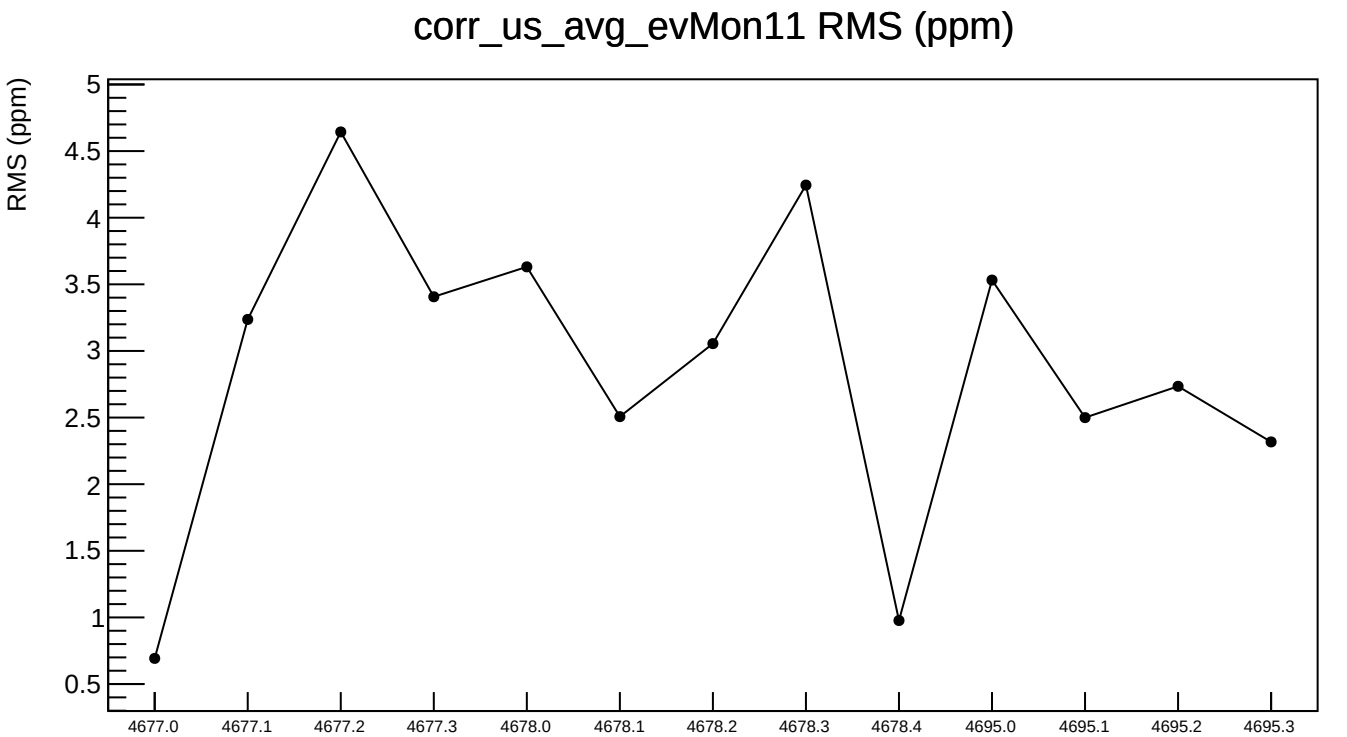

corr_us_avg_evMon10 (ppb)
χ² / ndf 43.41 / 12
p0 −14.33 ± 9.47
150
100
50
0
−50
−100
−150
−200
3
2
1
0
−1
−2
−3
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

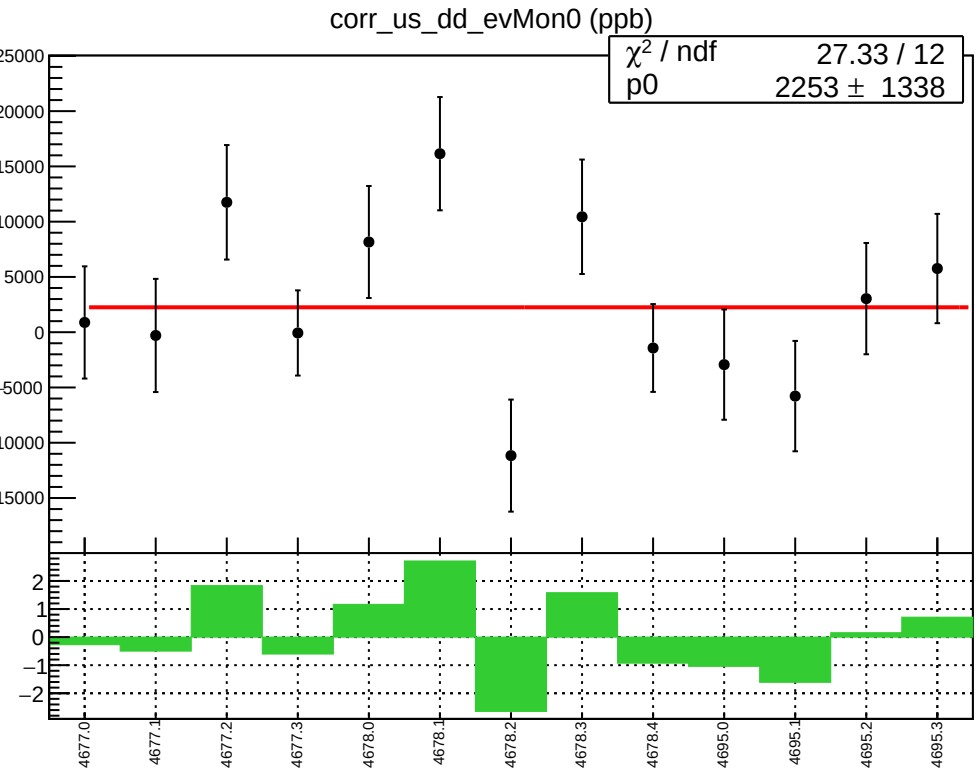

1D pull distribution
Mean −0.0648 ± 0.5065
Std Dev 1.826 ± 0.3582
Underflow 0
Overflow 0
χ² / ndf 1.556 / 7
Constant 1.254 ± 0.506
Mean 0.3557 ± 4.3362
Sigma 4.958 ± 11.914
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

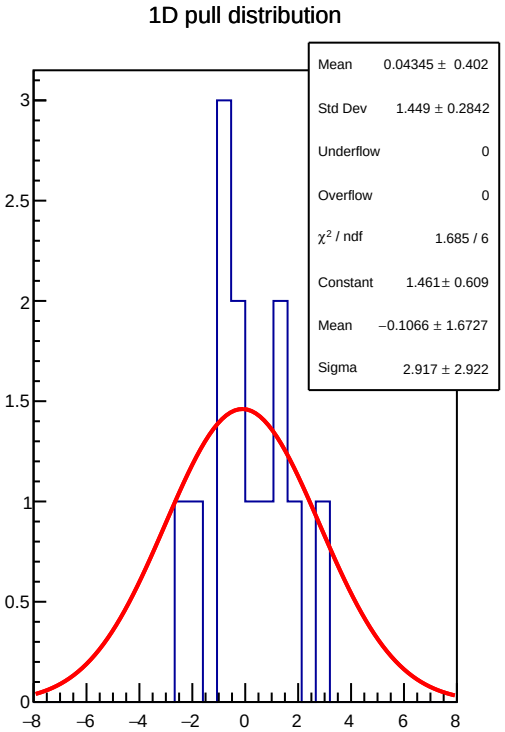

corr_us_avg_evMon10 RMS (ppm)
RMS (ppm)
9
8
7
6
5
4
3
2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

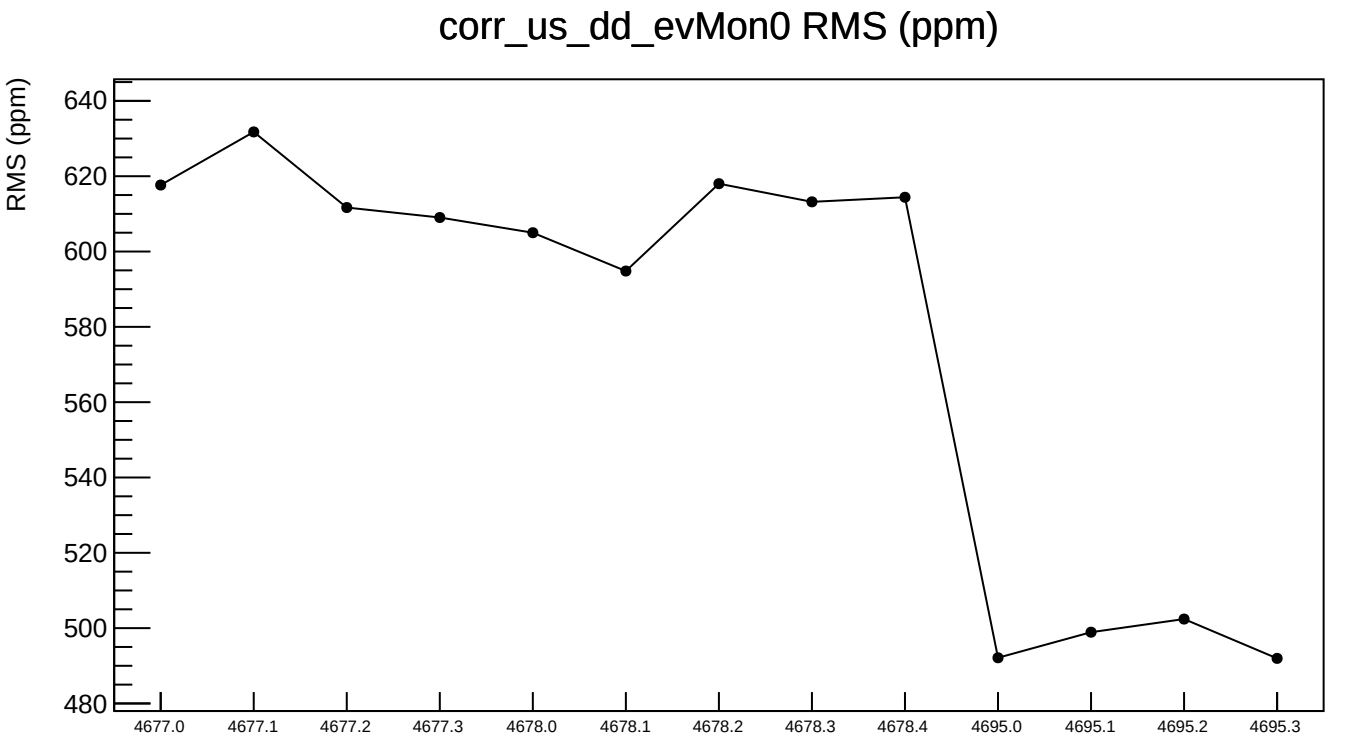

corr_us_avg_evMon11 (ppb)
χ² / ndf 7.735 / 12
p0 −13.97 ± 10.91
60
40
20
0
−20
−40
−60
−80
−100
−120
−140
0.5
0
−0.5
−1
−1.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

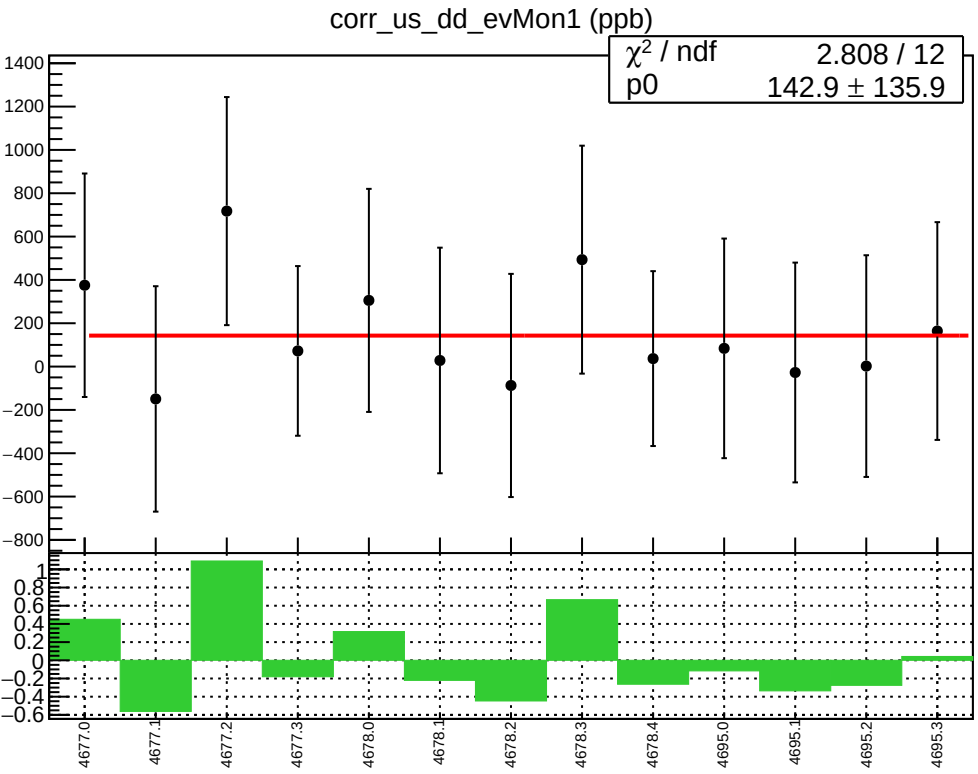

1D pull distribution
Mean −0.01892 ± 0.2139
Std Dev 0.7711 ± 0.1512
Underflow 0
Overflow 0
χ² / ndf 0.1937 / 2
Constant 4.223 ± 2.917
Mean 1.045 ± 3.211
Sigma 1.539 ± 1.689
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

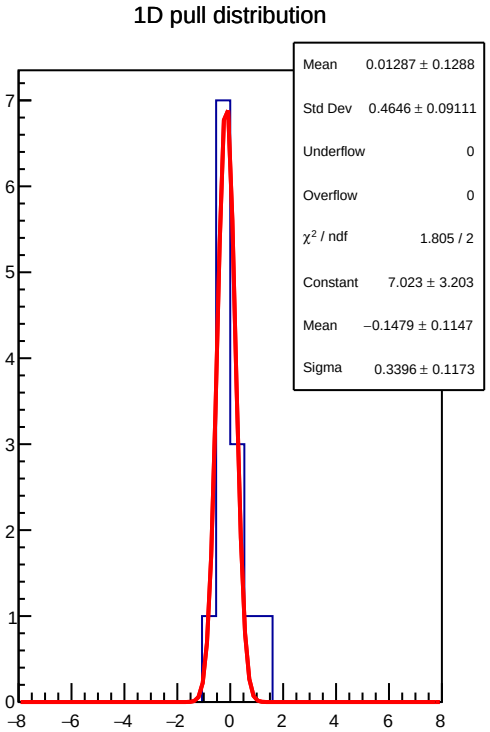

corr_us_avg_evMon11 RMS (ppm)
RMS (ppm)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

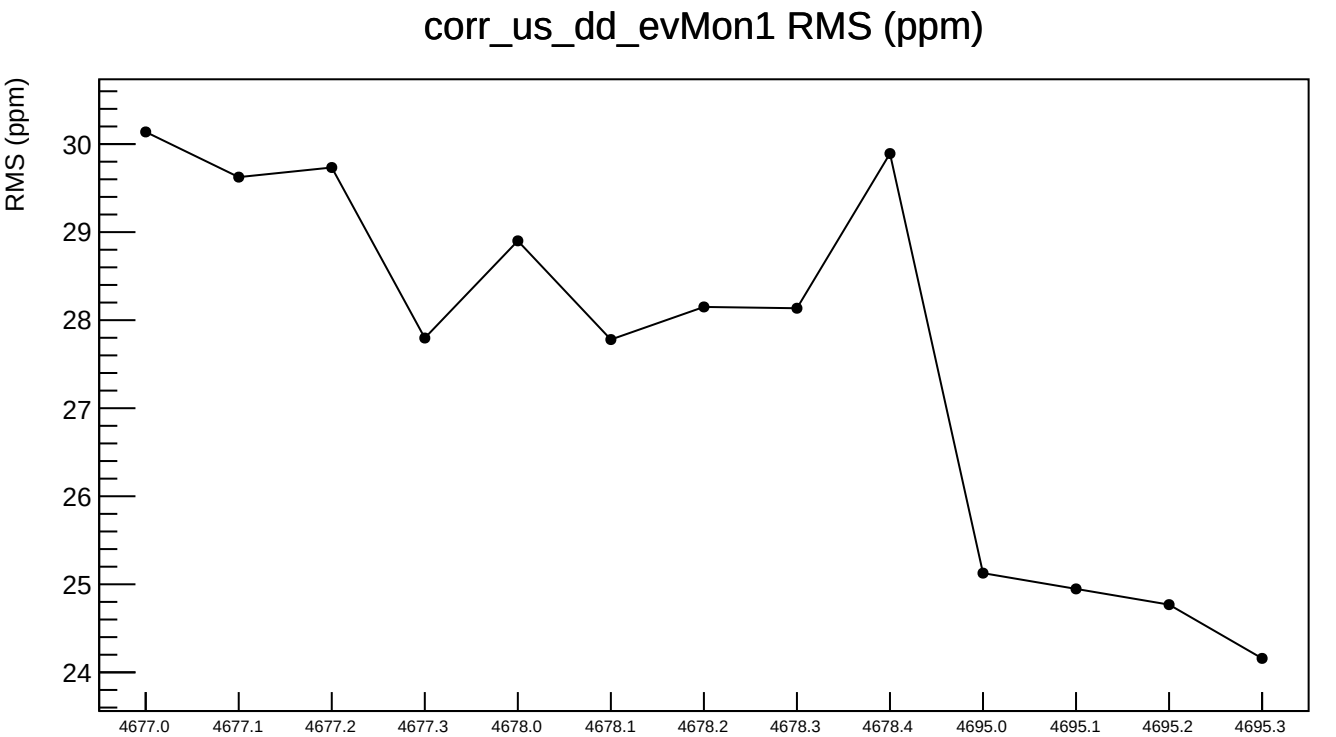

corr_us_dd_evMon0 (ppb)
χ² / ndf 27.33 / 12
p0 2253 ± 1338
25000
20000
15000
10000
5000
0
-5000
-10000
-15000
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

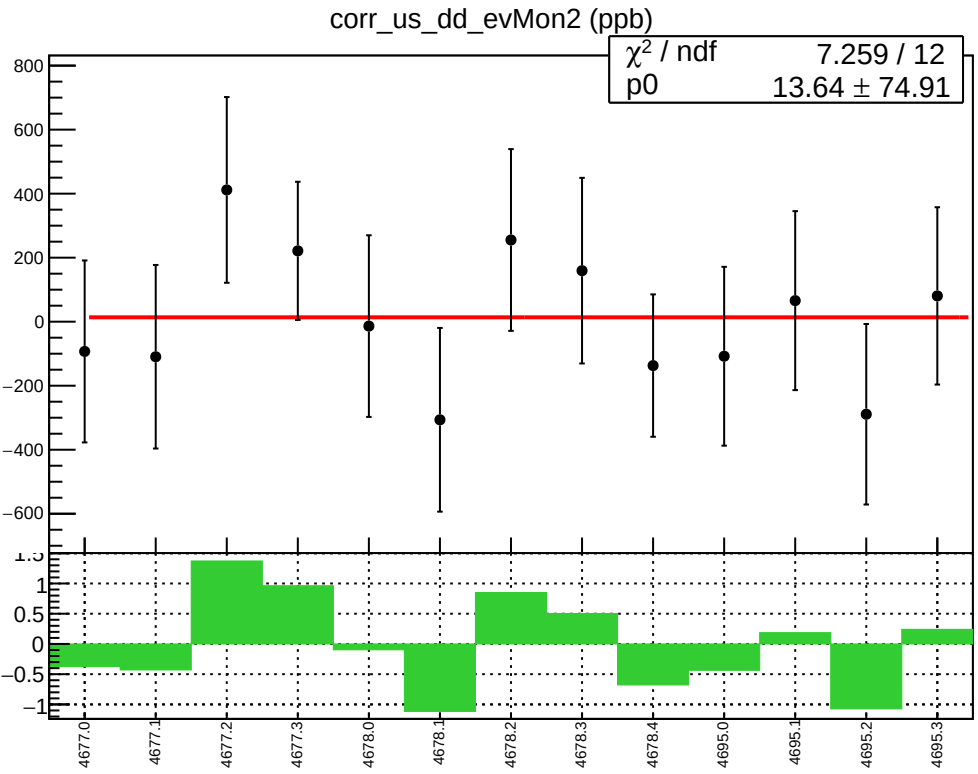

1D pull distribution
Mean 0.04345 ± 0.402
Std Dev 1.449 ± 0.2842
Underflow 0
Overflow 0
χ² / ndf 1.685 / 6
Constant 1.461 ± 0.609
Mean −0.1066 ± 1.6727
Sigma 2.917 ± 2.922
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

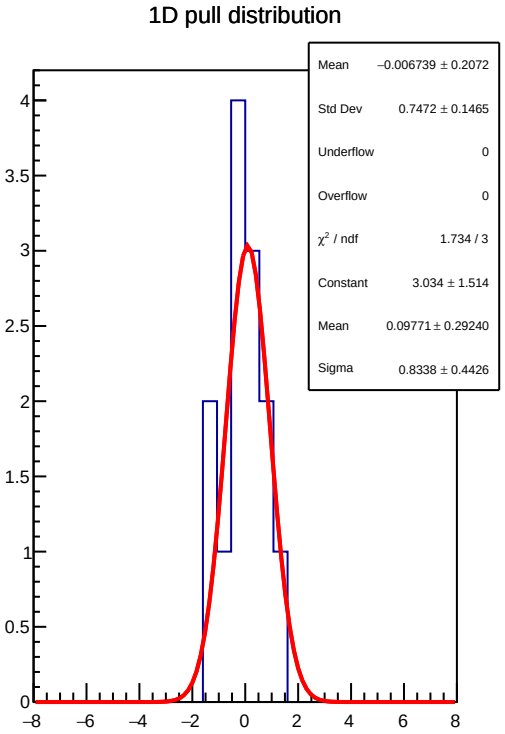

corr_us_dd_evMon0 RMS (ppm)
RMS (ppm)
640
620
600
580
560
540
520
500
480
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

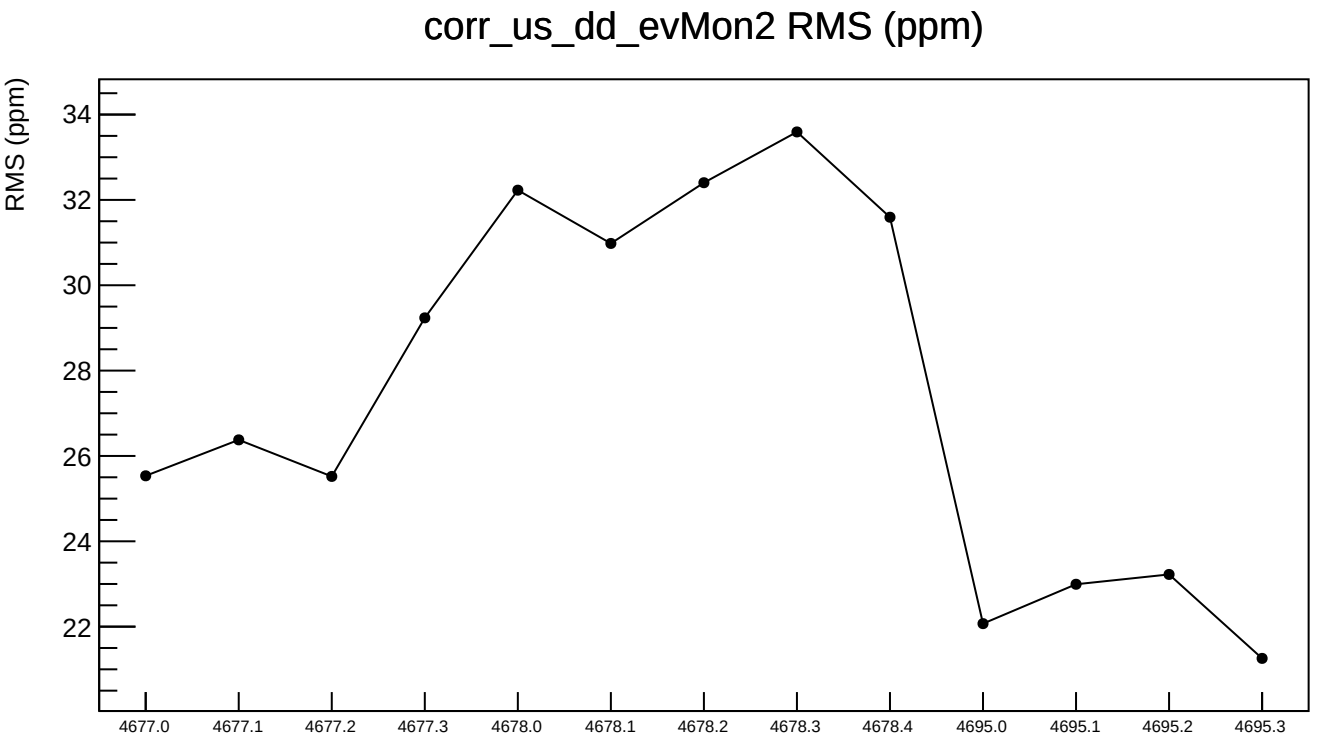

corr_us_dd_evMon1 (ppb)
χ² / ndf 2.808 / 12
p0 142.9 ± 135.9
1400
1200
1000
800
600
400
200
0
−200
−400
−600
−800
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

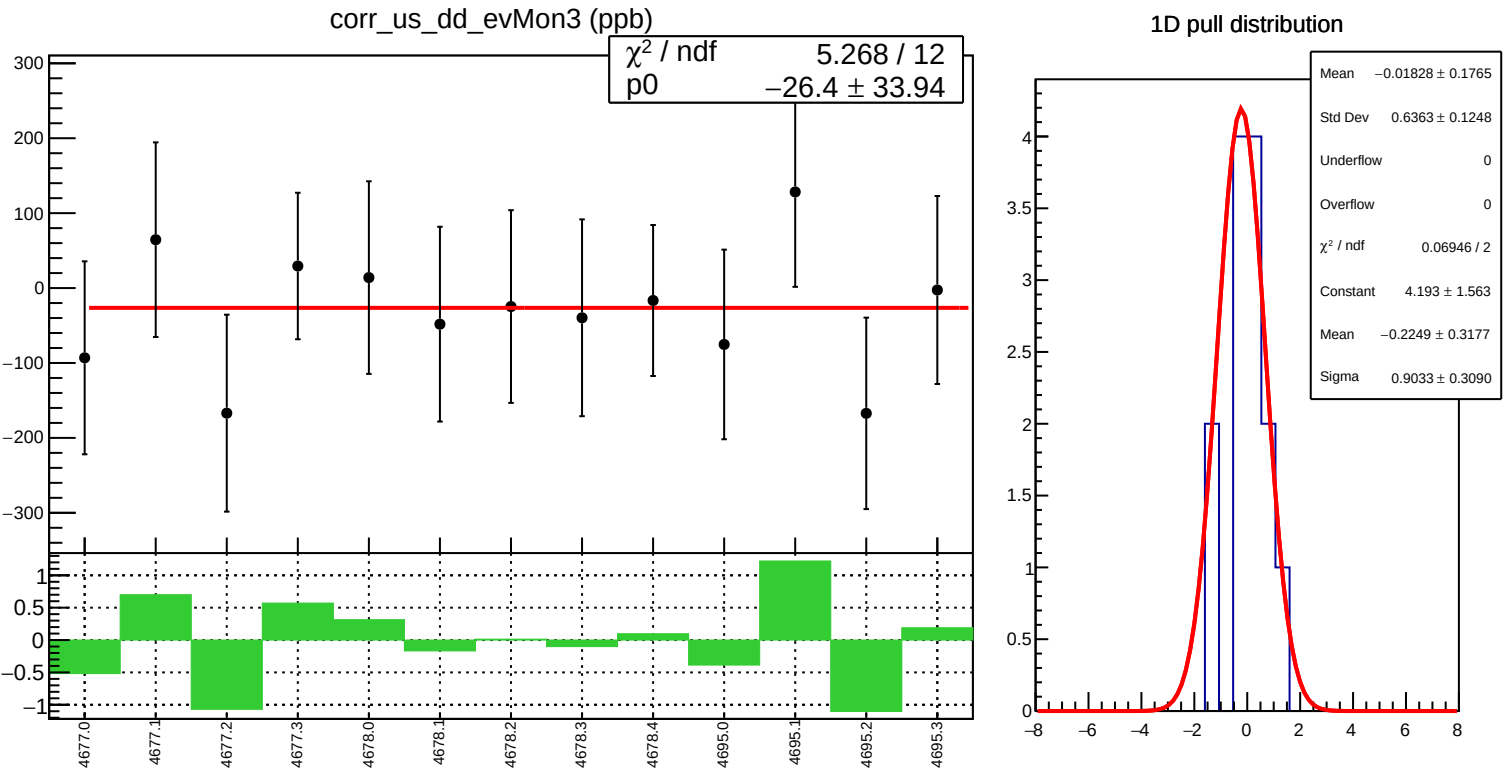

1D pull distribution
Mean 0.01287 ± 0.1288
Std Dev 0.4646 ± 0.09111
Underflow 0
Overflow 0
χ² / ndf 1.805 / 2
Constant 7.023 ± 3.203
Mean −0.1479 ± 0.1147
Sigma 0.3396 ± 0.1173
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

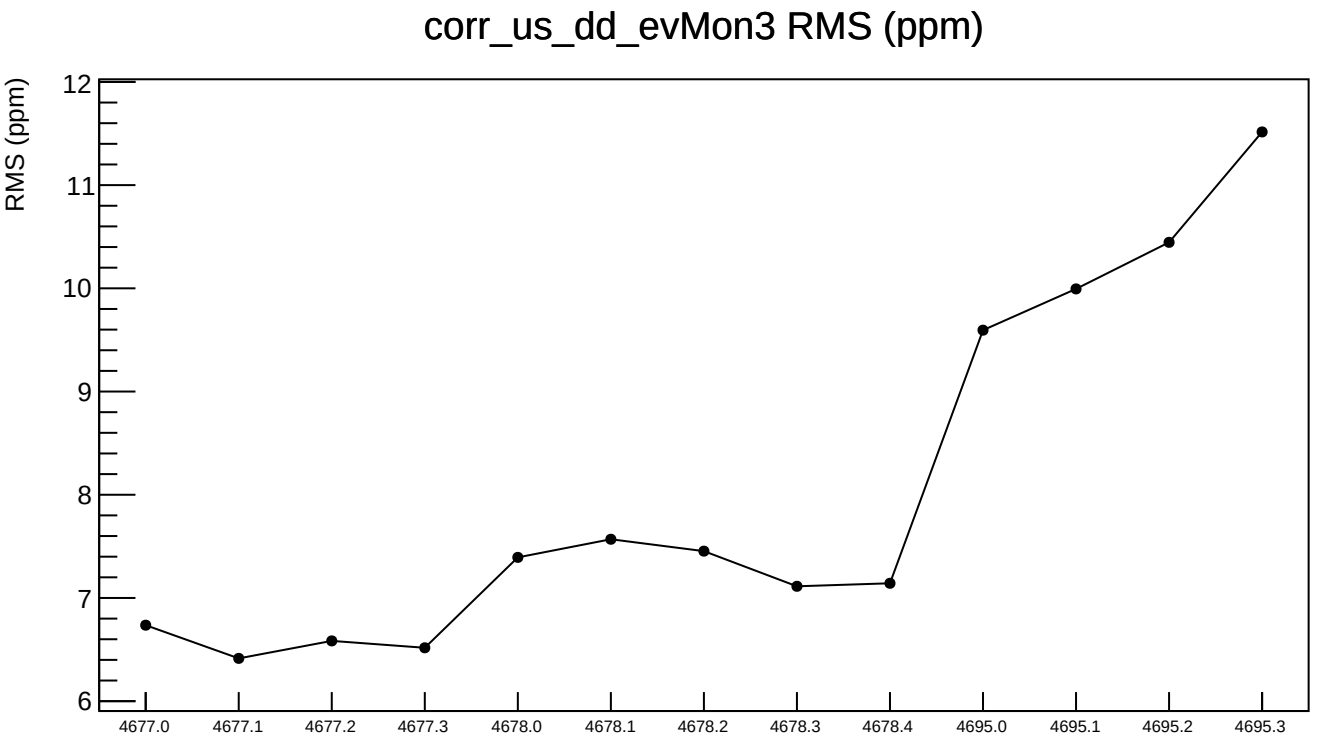

corr_us_dd_evMon1 RMS (ppm)
RMS (ppm)
30
29
28
27
26
25
24
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

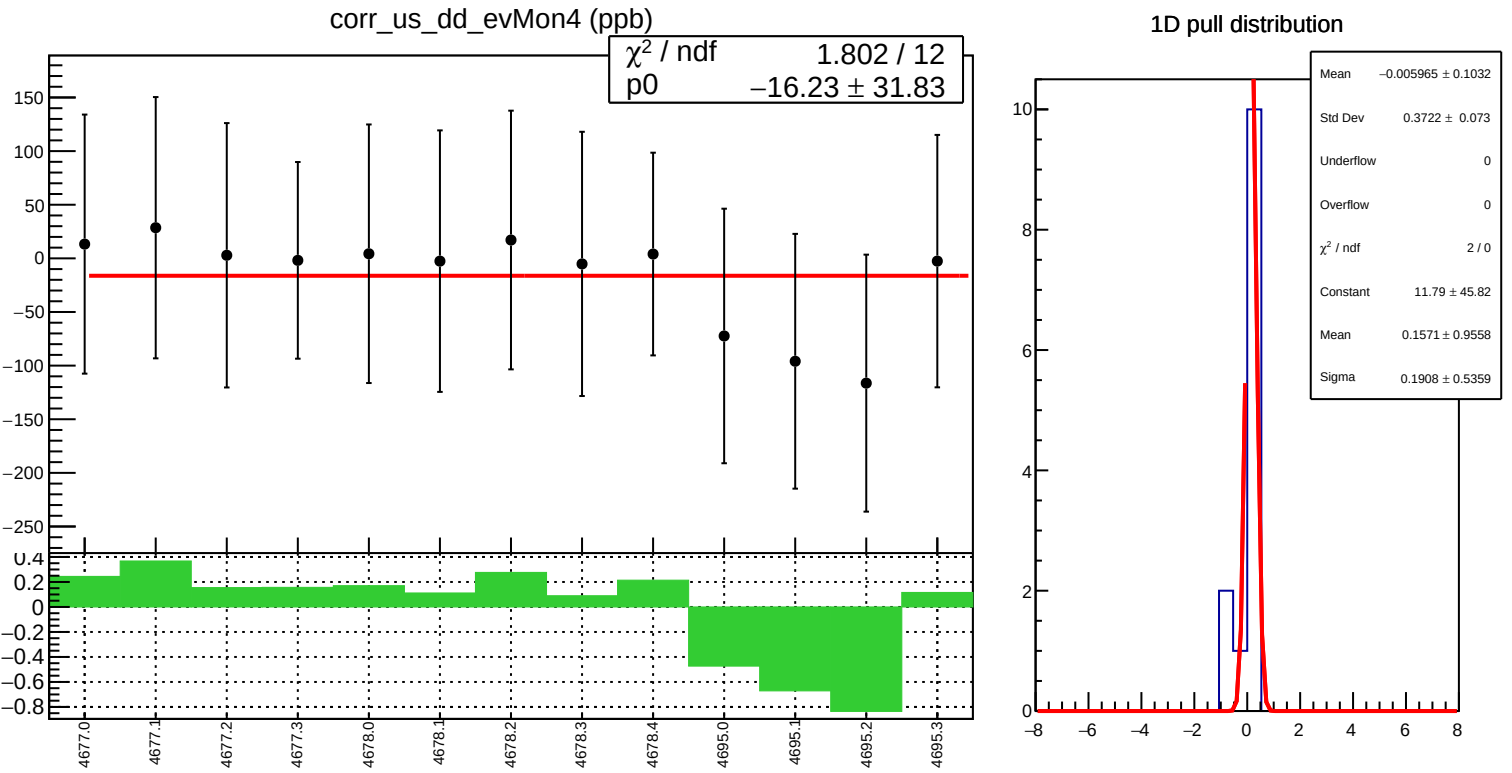

corr_us_dd_evMon2 (ppb)
χ² / ndf 7.259 / 12
p0 13.64 ± 74.91
800
600
400
200
0
−200
−400
−600
1.5
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

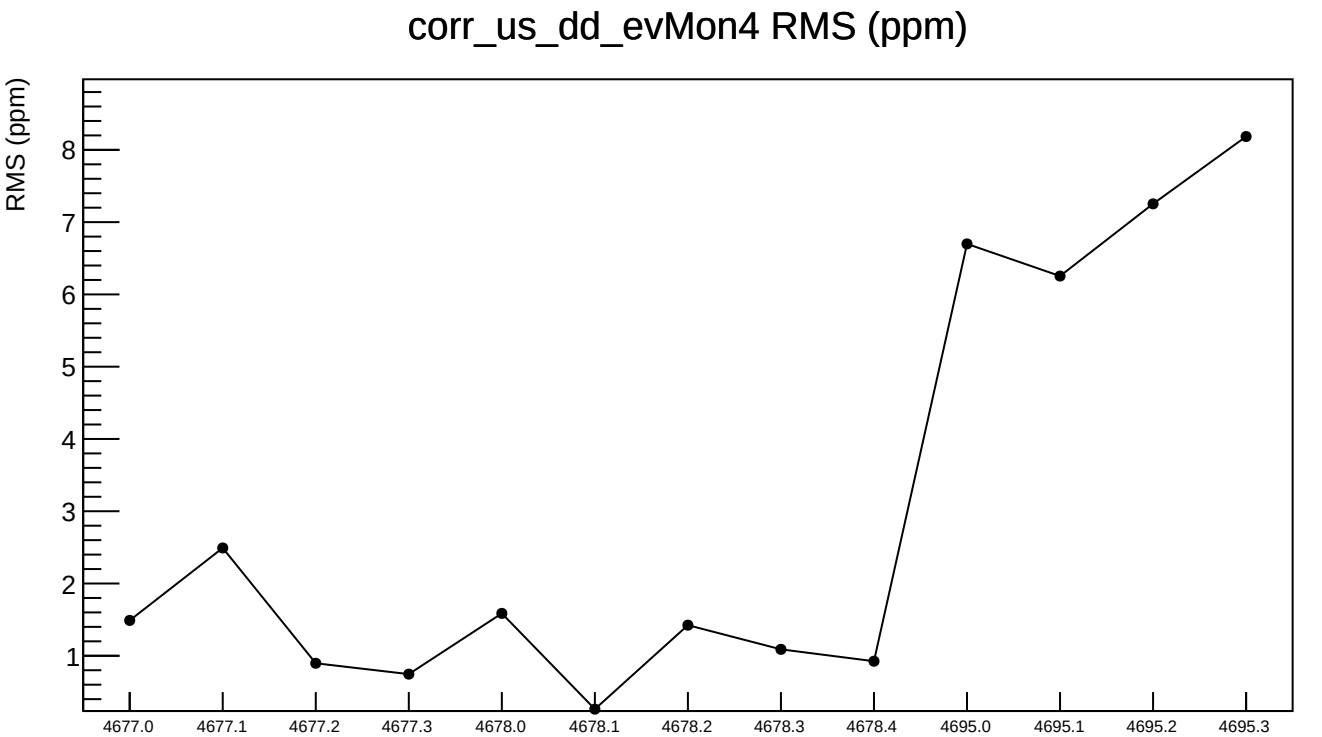

1D pull distribution
Mean −0.006739 ± 0.2072
Std Dev 0.7472 ± 0.1465
Underflow 0
Overflow 0
χ² / ndf 1.734 / 3
Constant 3.034 ± 1.514
Mean 0.09771 ± 0.29240
Sigma 0.8338 ± 0.4426
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

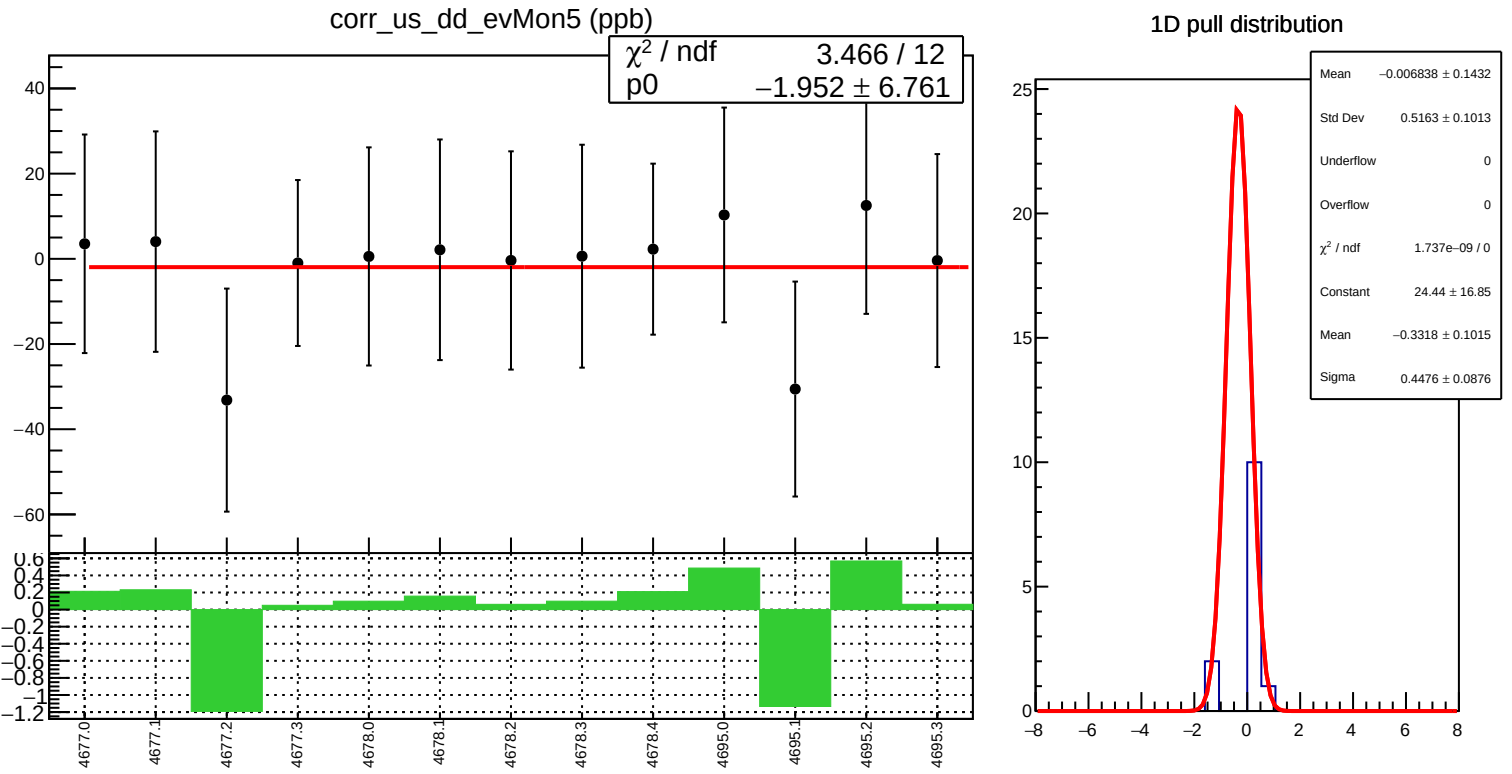

corr_us_dd_evMon2 RMS (ppm)
RMS (ppm)
34
32
30
28
26
24
22
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

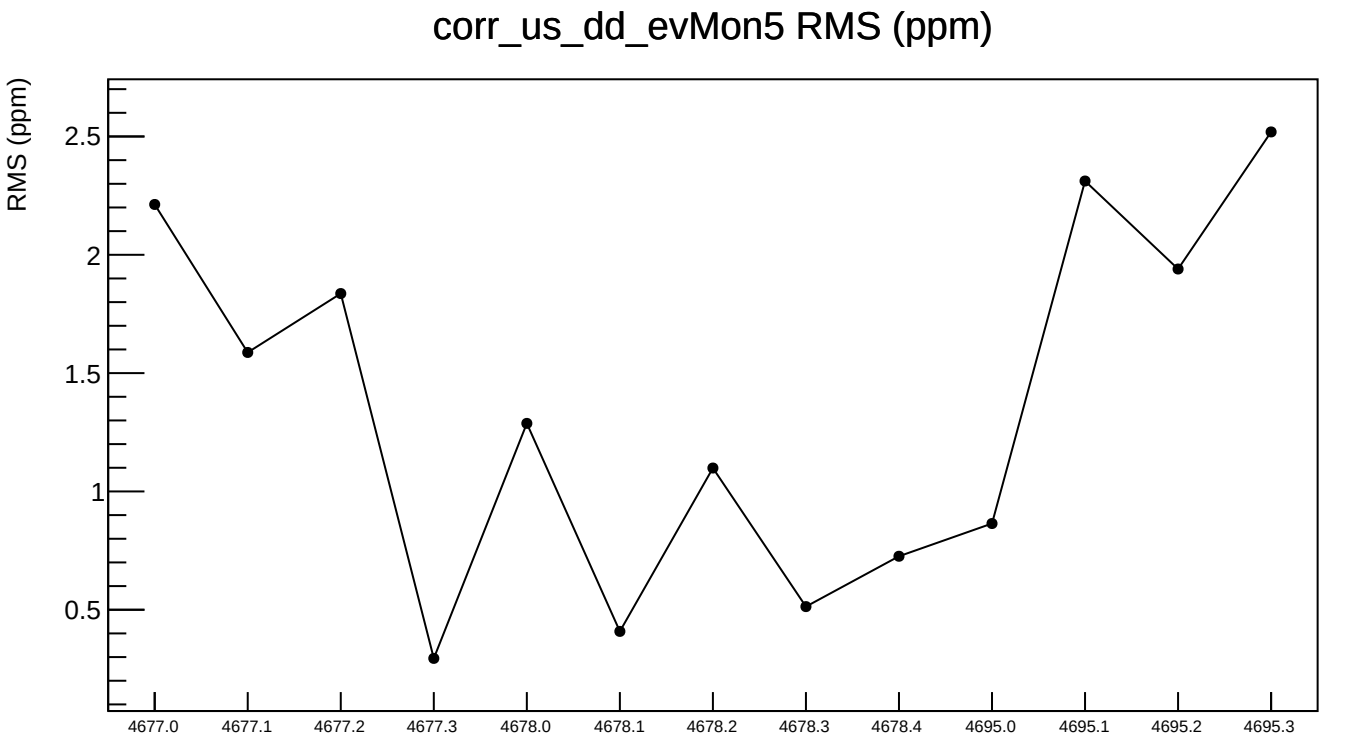

corr_us_dd_evMon3 (ppb)
χ² / ndf 5.268 / 12
p0 −26.4 ± 33.94
300
200
100
0
−100
−200
−300
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.01828 ± 0.1765
Std Dev 0.6363 ± 0.1248
Underflow 0
Overflow 0
χ² / ndf 0.06946 / 2
Constant 4.193 ± 1.563
Mean −0.2249 ± 0.3177
Sigma 0.9033 ± 0.3090
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

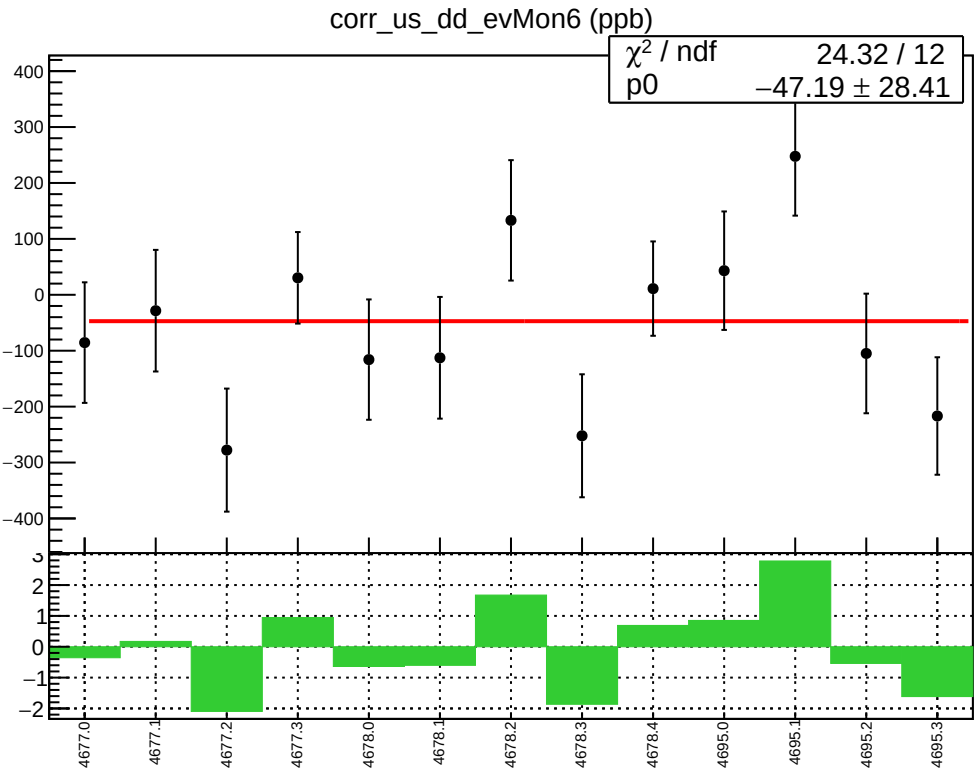

corr_us_dd_evMon3 RMS (ppm)
RMS (ppm)
12
11
10
9
8
7
6
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

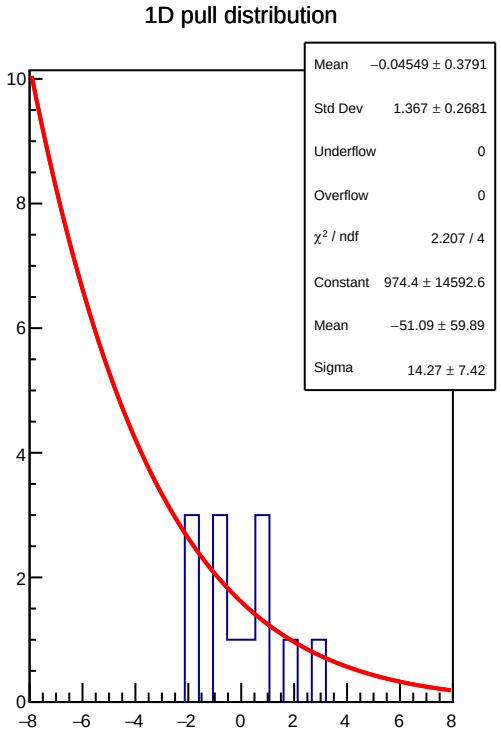

corr_us_dd_evMon4 (ppb)
χ² / ndf 1.802 / 12
p0 −16.23 ± 31.83
150
100
50
0
−50
−100
−150
−200
−250
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.005965 ± 0.1032
Std Dev 0.3722 ± 0.073
Underflow 0
Overflow 0
χ² / ndf 2 / 0
Constant 11.79 ± 45.82
Mean 0.1571 ± 0.9558
Sigma 0.1908 ± 0.5359
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

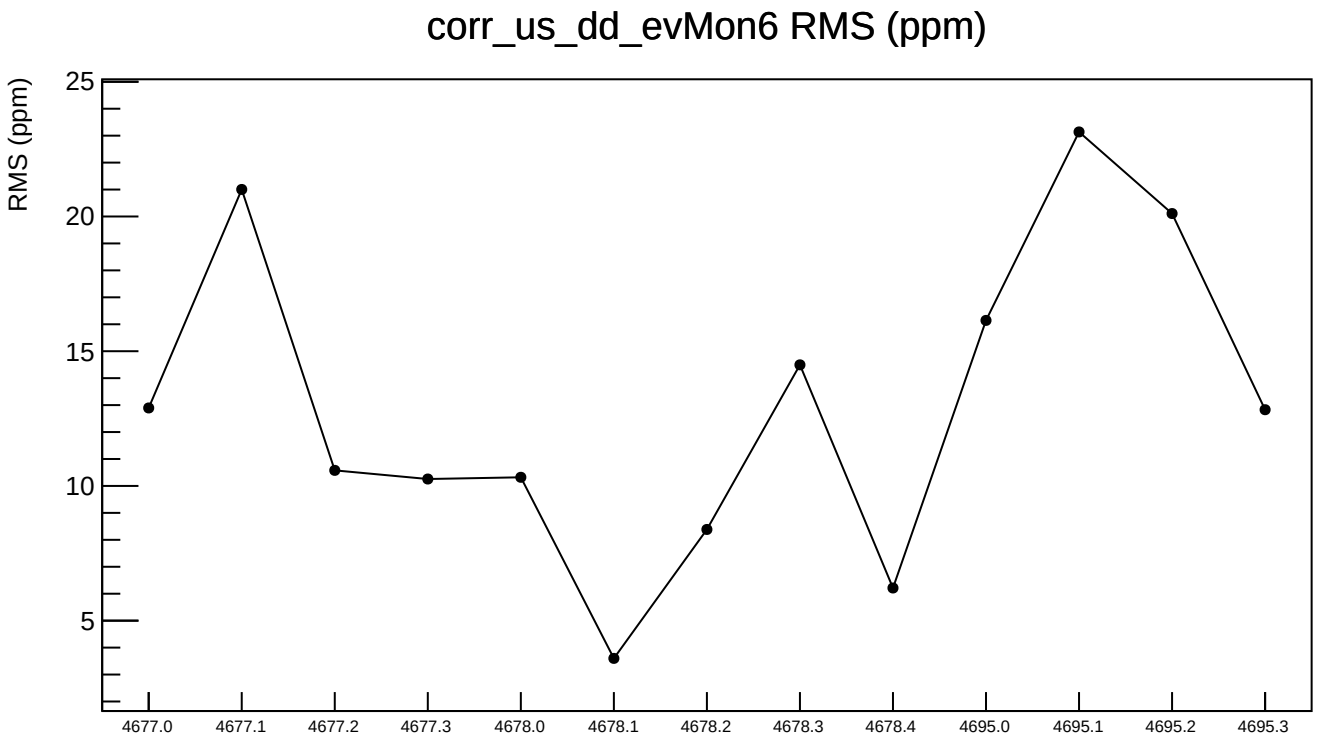

corr_us_dd_evMon4 RMS (ppm)
RMS (ppm)
1
2
3
4
5
6
7
8
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

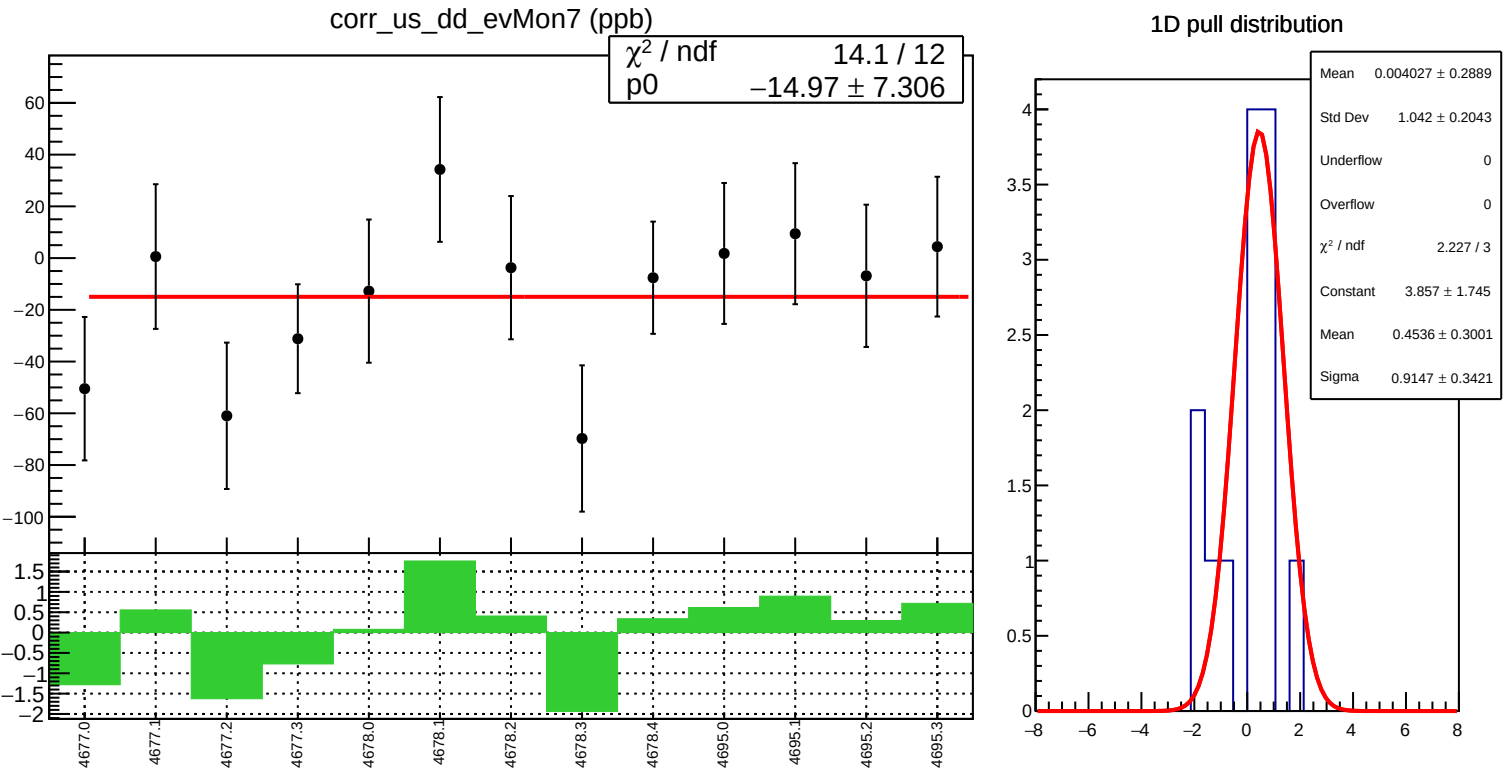

corr_us_dd_evMon5 (ppb)
χ² / ndf 3.466 / 12
p0 −1.952 ± 6.761
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.006838 ± 0.1432
Std Dev 0.5163 ± 0.1013
Underflow 0
Overflow 0
χ² / ndf 1.737e−09 / 0
Constant 24.44 ± 16.85
Mean −0.3318 ± 0.1015
Sigma 0.4476 ± 0.0876

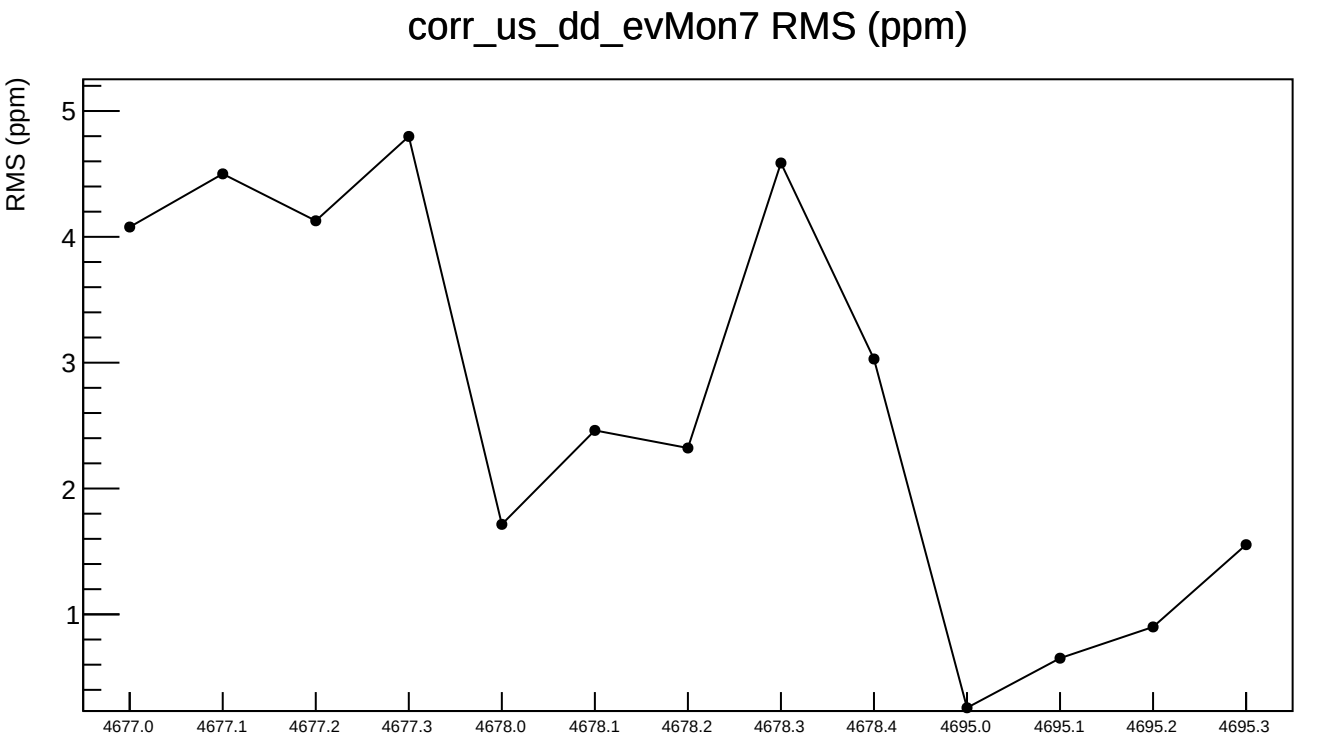

corr_us_dd_evMon5 RMS (ppm)
RMS (ppm)
2.5
2
1.5
1
0.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

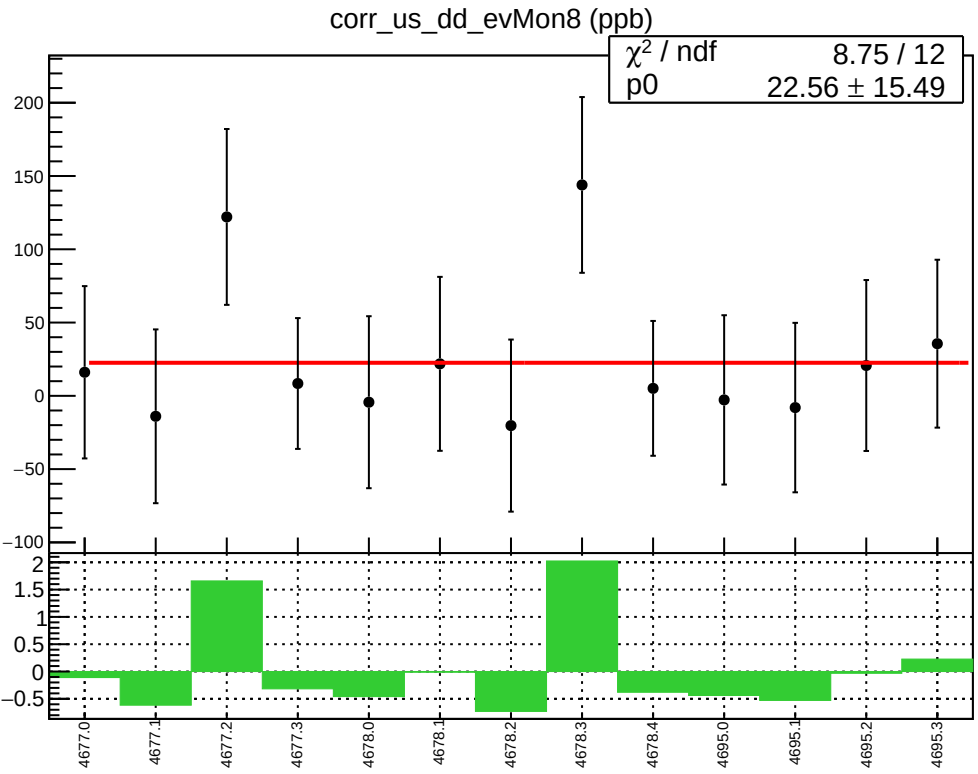

corr_us_dd_evMon6 (ppb)
χ² / ndf 24.32 / 12
p0 −47.19 ± 28.41
400
300
200
100
0
−100
−200
−300
−400
3
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

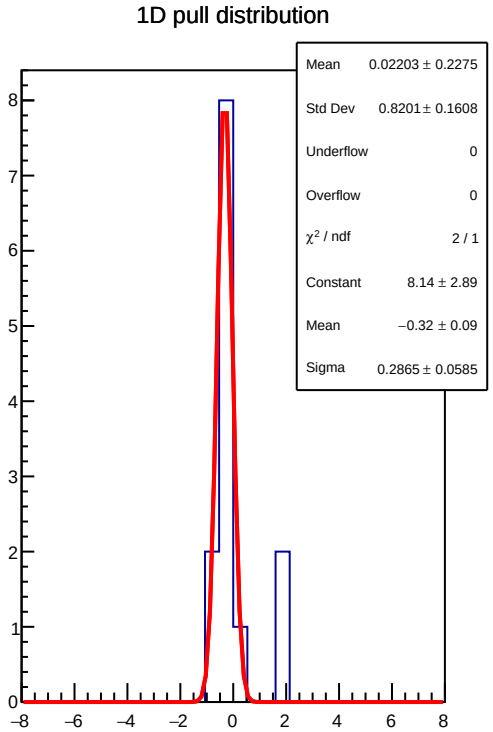

1D pull distribution
Mean −0.04549 ± 0.3791
Std Dev 1.367 ± 0.2681
Underflow 0
Overflow 0
χ² / ndf 2.207 / 4
Constant 974.4 ± 14592.6
Mean −51.09 ± 59.89
Sigma 14.27 ± 7.42
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_dd_evMon6 RMS (ppm)
RMS (ppm)
25
20
15
10
5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

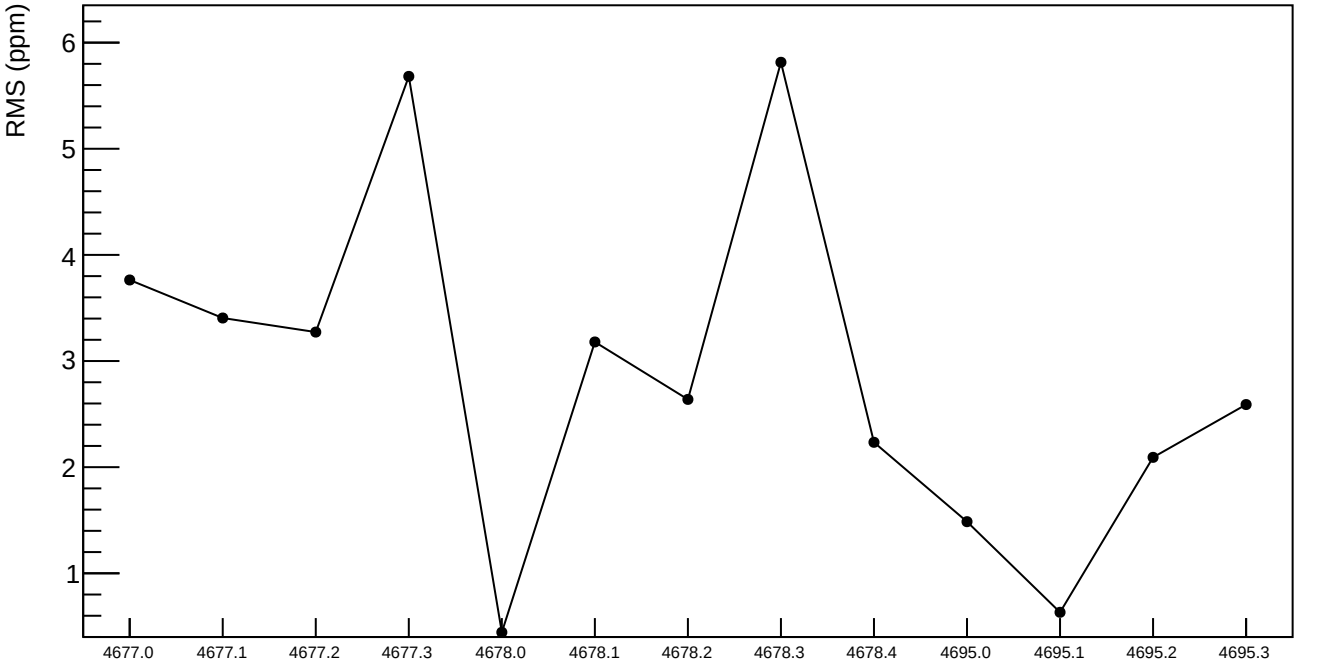

corr_us_dd_evMon7 (ppb)
χ² / ndf 14.1 / 12
p0 −14.97 ± 7.306
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.004027 ± 0.2889
Std Dev 1.042 ± 0.2043
Underflow 0
Overflow 0
χ² / ndf 2.227 / 3
Constant 3.857 ± 1.745
Mean 0.4536 ± 0.3001
Sigma 0.9147 ± 0.3421

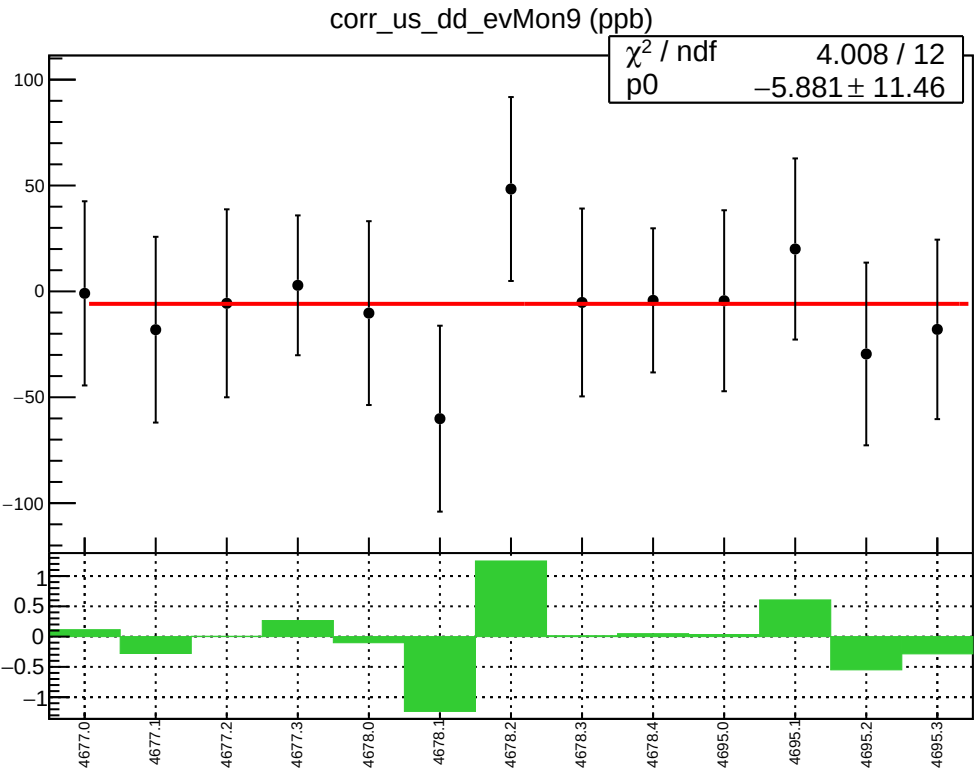

corr_us_dd_evMon7 RMS (ppm)
RMS (ppm)
5
4
3
2
1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

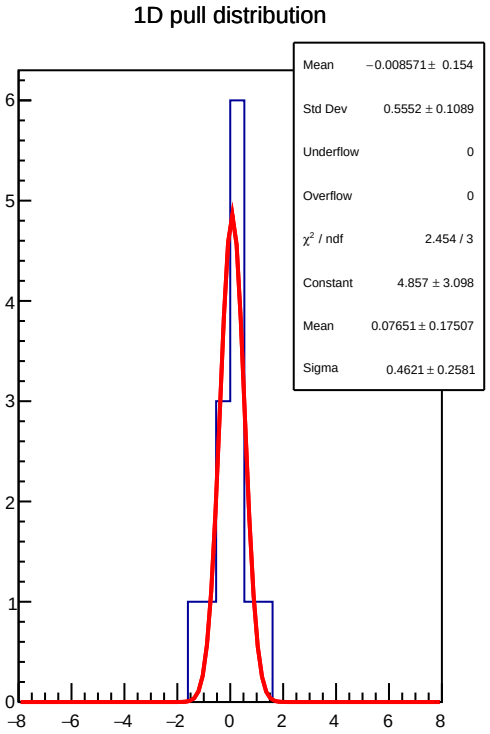

corr_us_dd_evMon8 (ppb)
χ² / ndf 8.75 / 12
p0 22.56 ± 15.49
200
150
100
50
0
−50
−100
2
1.5
1
0.5
0
−0.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

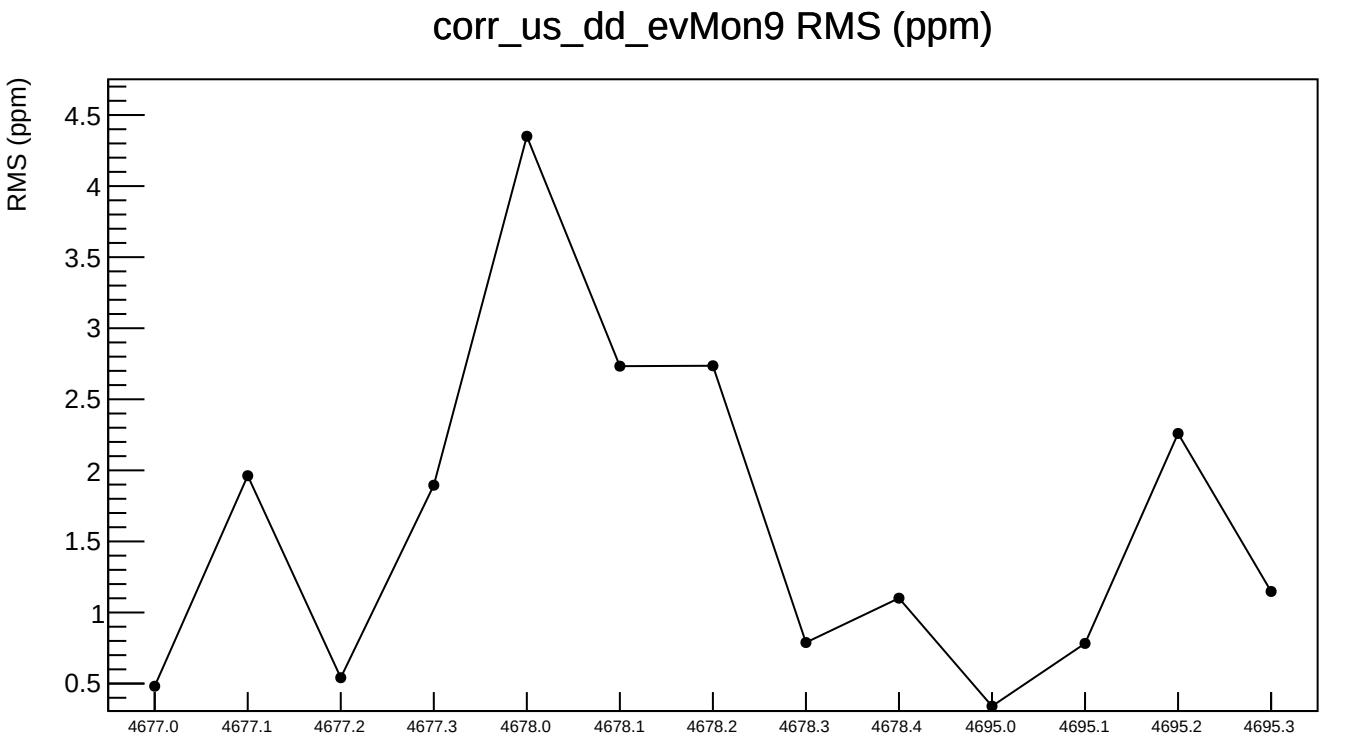

1D pull distribution
Mean 0.02203 ± 0.2275
Std Dev 0.8201 ± 0.1608
Underflow 0
Overflow 0
χ² / ndf 2 / 1
Constant 8.14 ± 2.89
Mean −0.32 ± 0.09
Sigma 0.2865 ± 0.0585
8
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

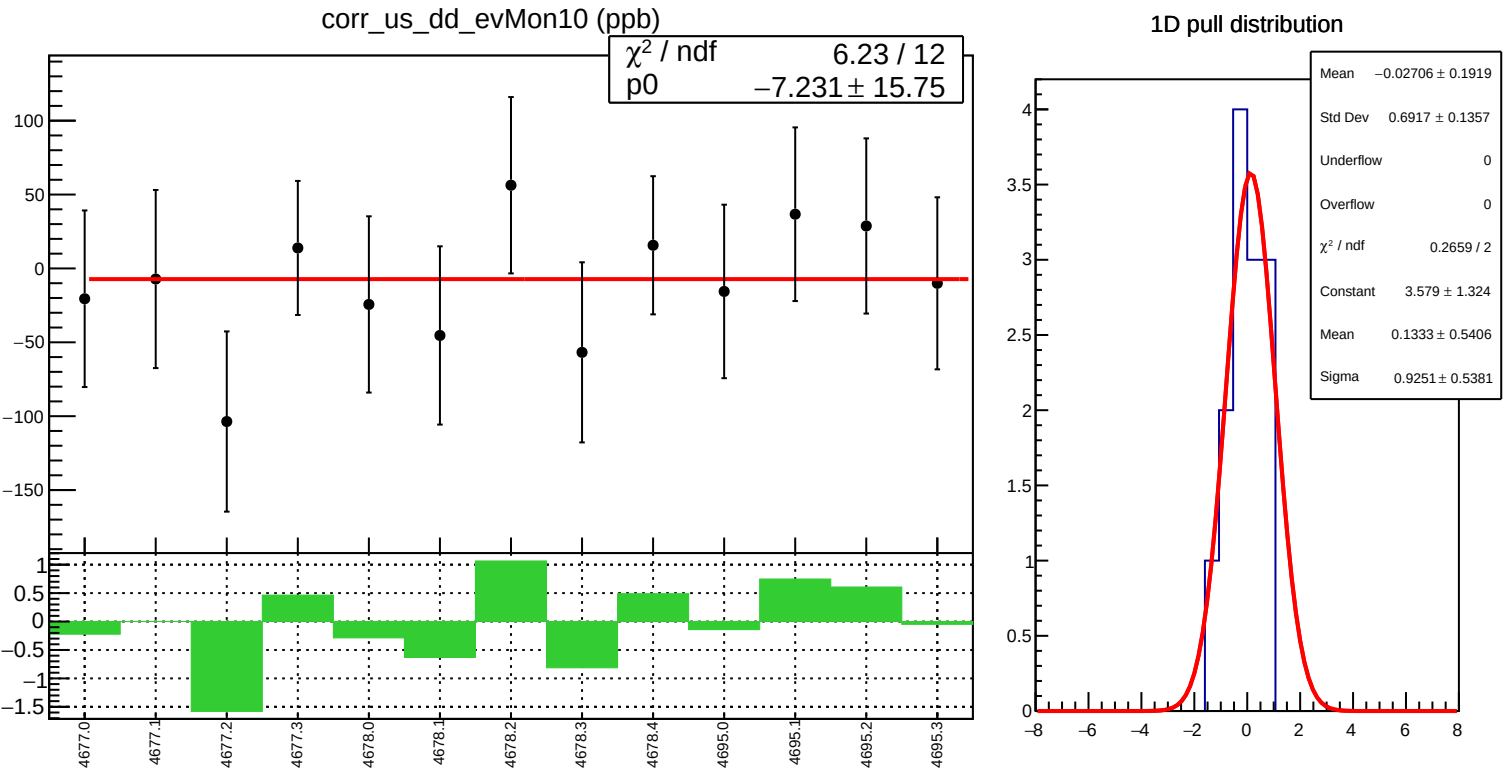
corr_us_dd_evMon8 RMS (ppm)



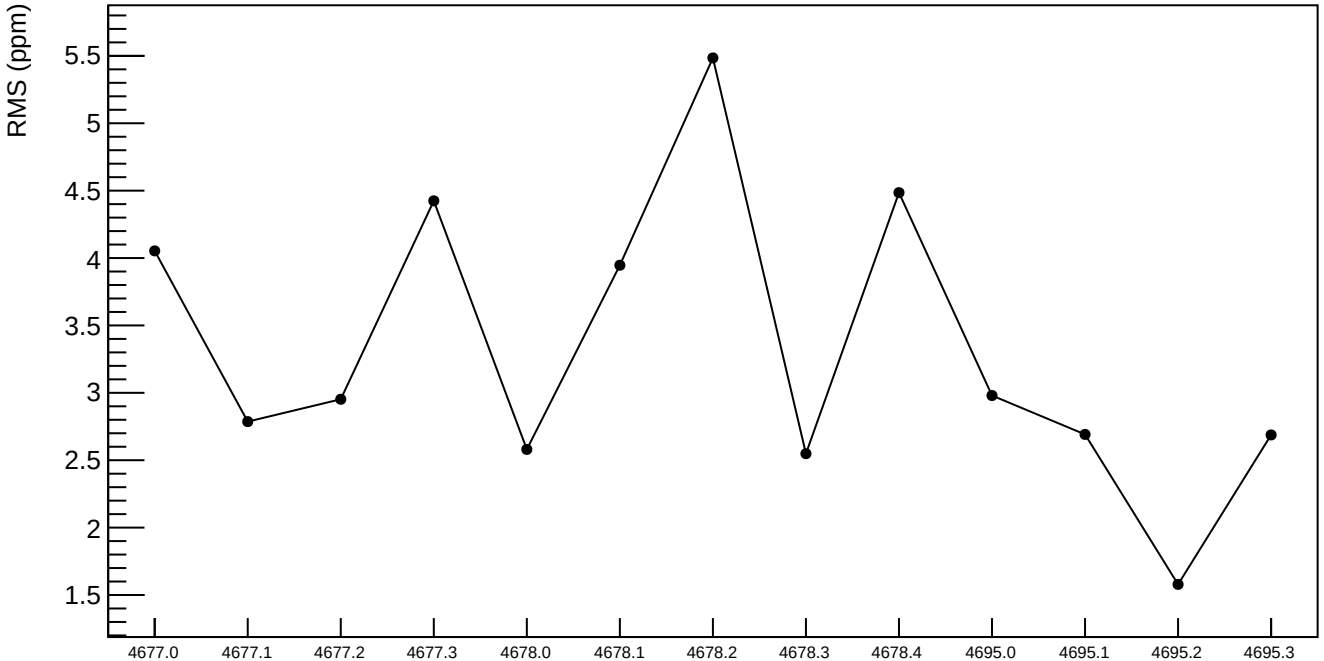

corr_us_dd_evMon9 (ppb)
χ² / ndf 4.008 / 12
p0 −5.881 ± 11.46
100
50
0
−50
−100
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

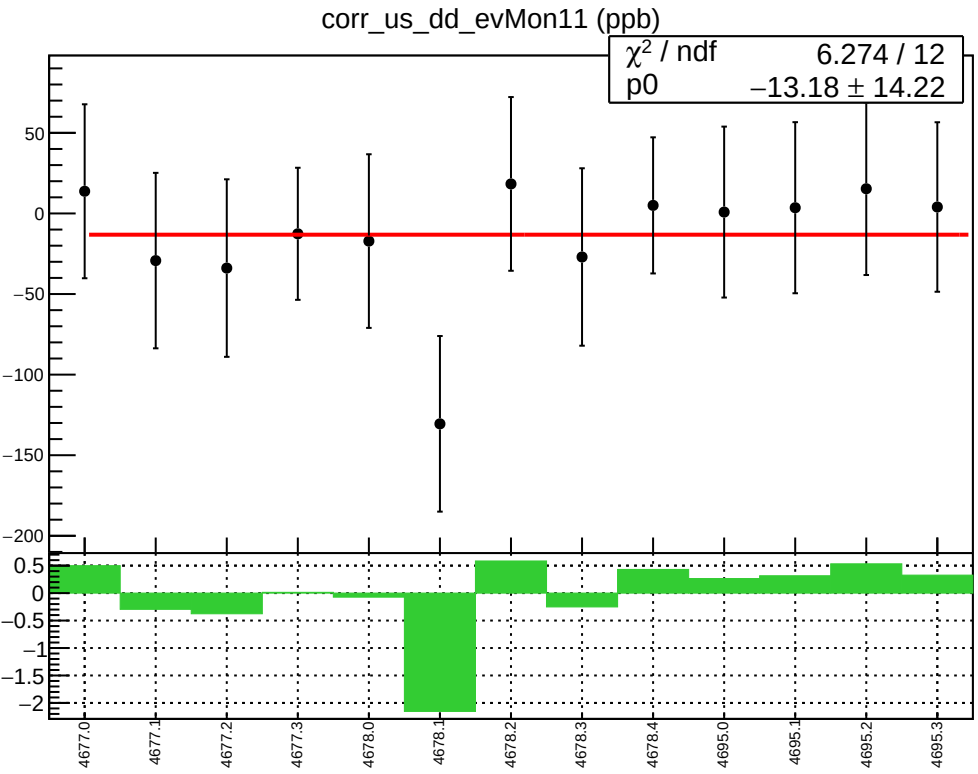

1D pull distribution
Mean −0.008571 ± 0.154
Std Dev 0.5552 ± 0.1089
Underflow 0
Overflow 0
χ² / ndf 2.454 / 3
Constant 4.857 ± 3.098
Mean 0.07651 ± 0.17507
Sigma 0.4621 ± 0.2581
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

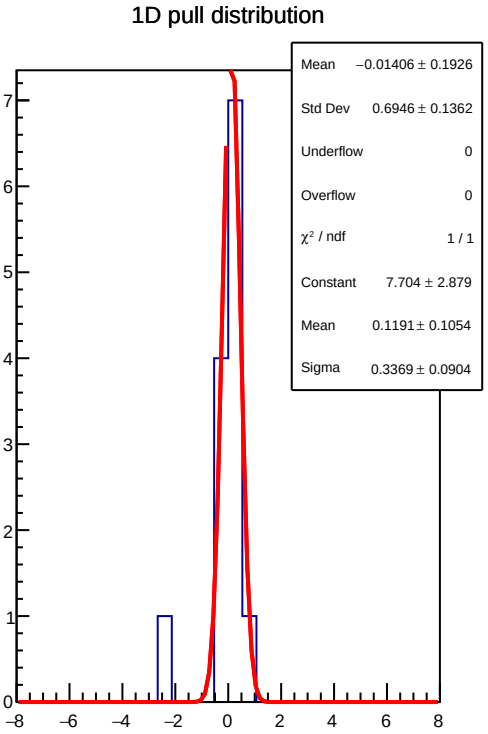

corr_us_dd_evMon9 RMS (ppm)
RMS (ppm)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

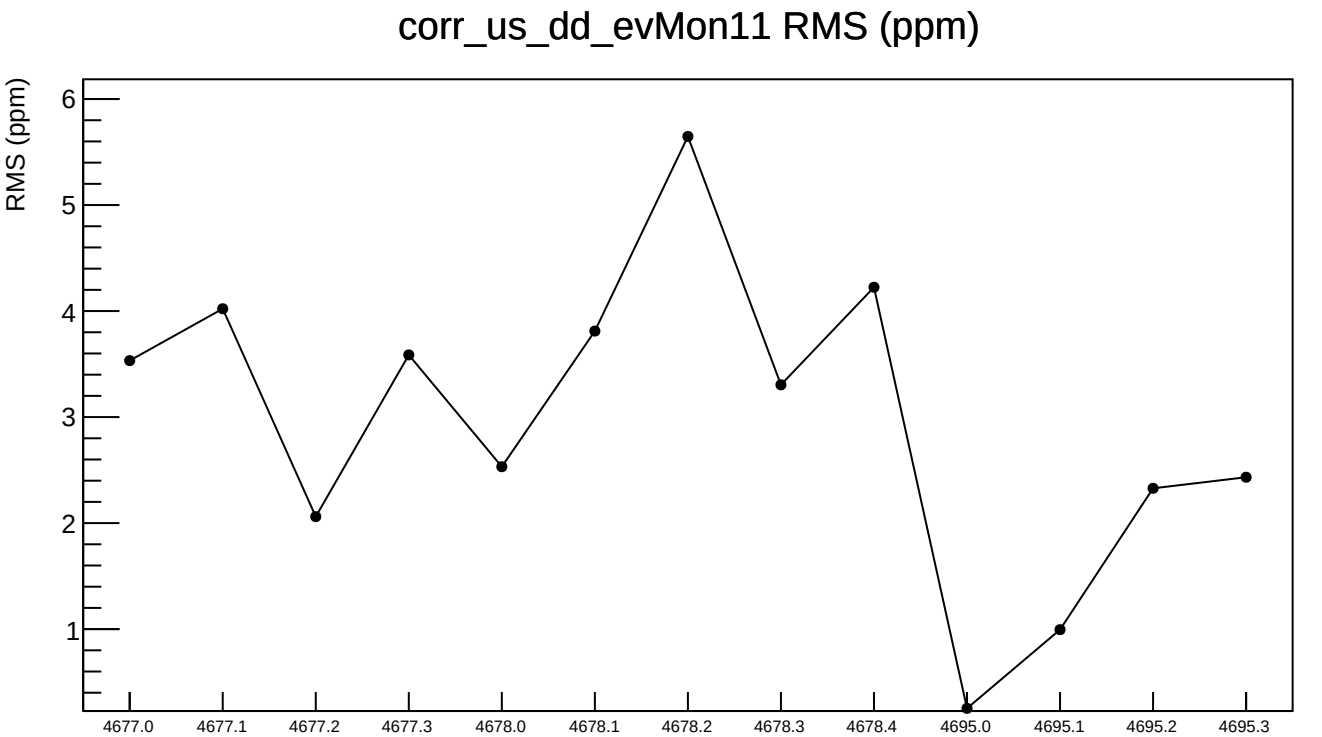

corr_us_dd_evMon10 (ppb)
χ² / ndf 6.23 / 12
p0 −7.231 ± 15.75
100
50
0
−50
−100
−150
1
0.5
0
−0.5
−1
−1.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.02706 ± 0.1919
Std Dev 0.6917 ± 0.1357
Underflow 0
Overflow 0
χ² / ndf 0.2659 / 2
Constant 3.579 ± 1.324
Mean 0.1333 ± 0.5406
Sigma 0.9251 ± 0.5381
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

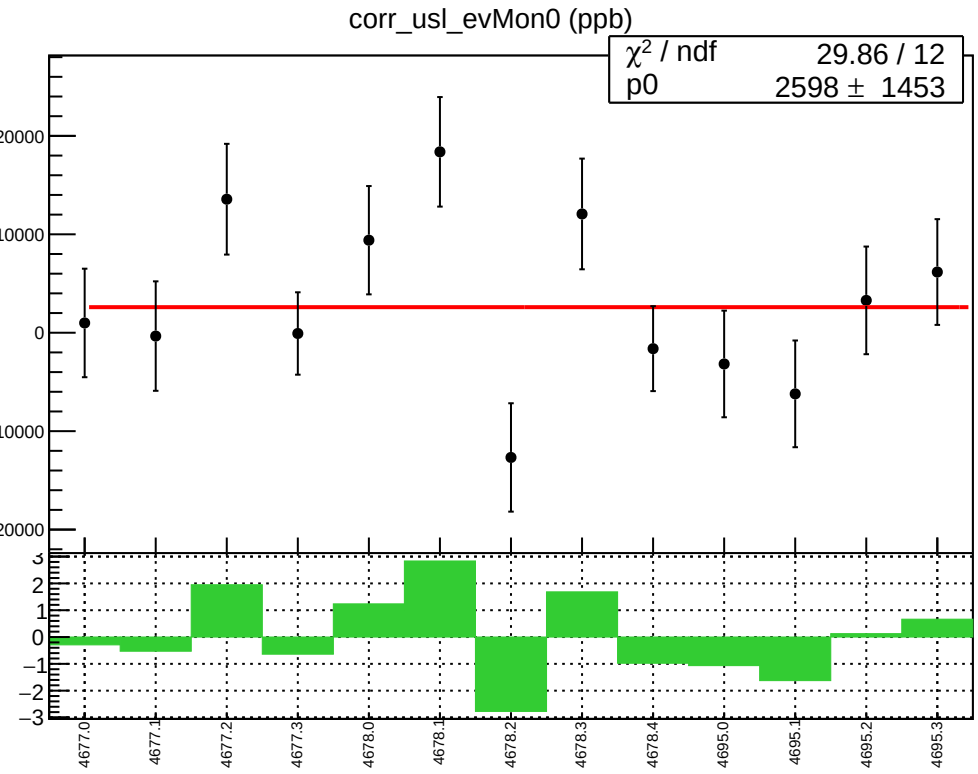
corr_us_dd_evMon10 RMS (ppm)

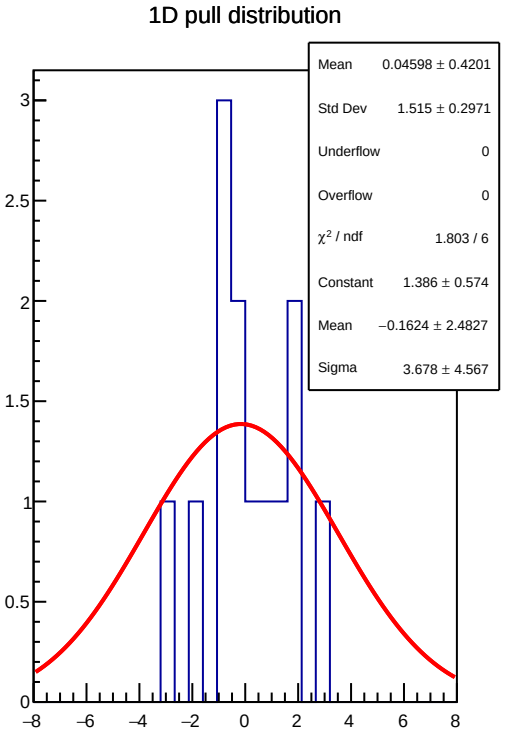


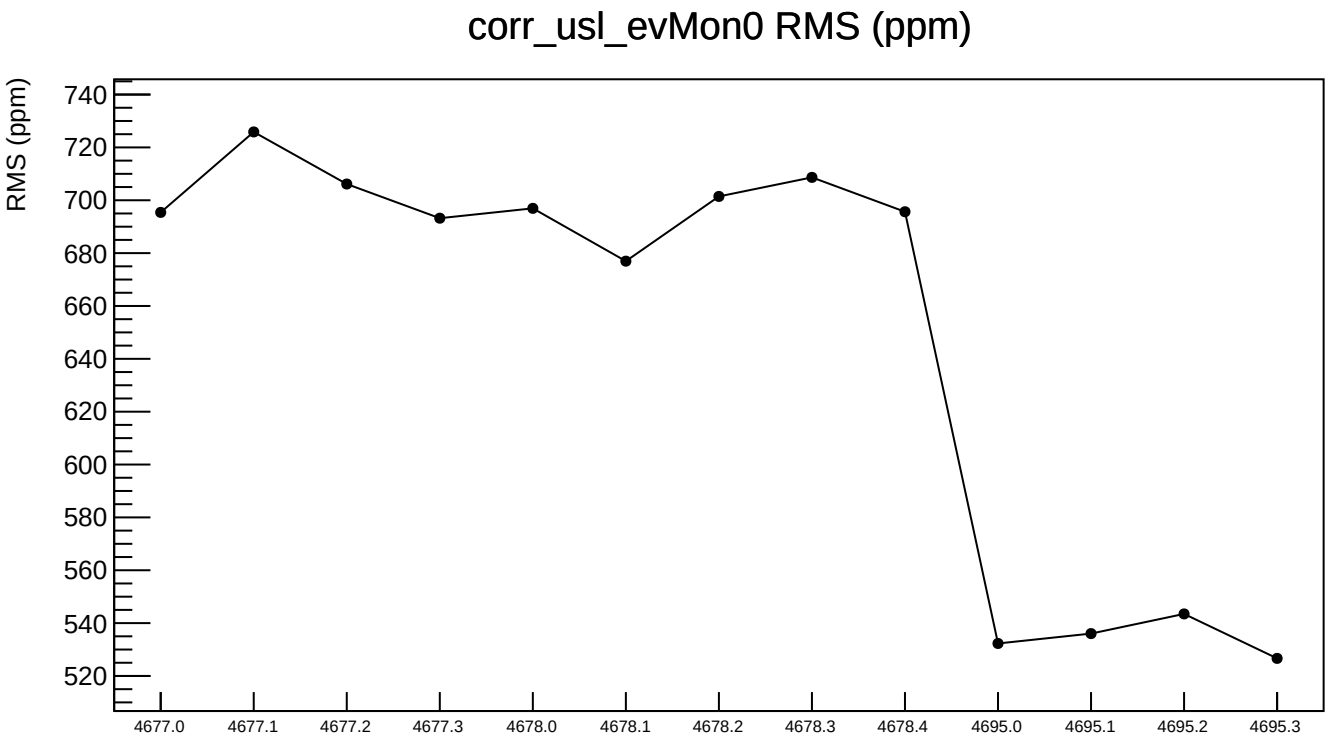

corr_us_dd_evMon11 (ppb)
χ² / ndf 6.274 / 12
p0 −13.18 ± 14.22
50
0
−50
−100
−150
−200
0.5
0
−0.5
−1
−1.5
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

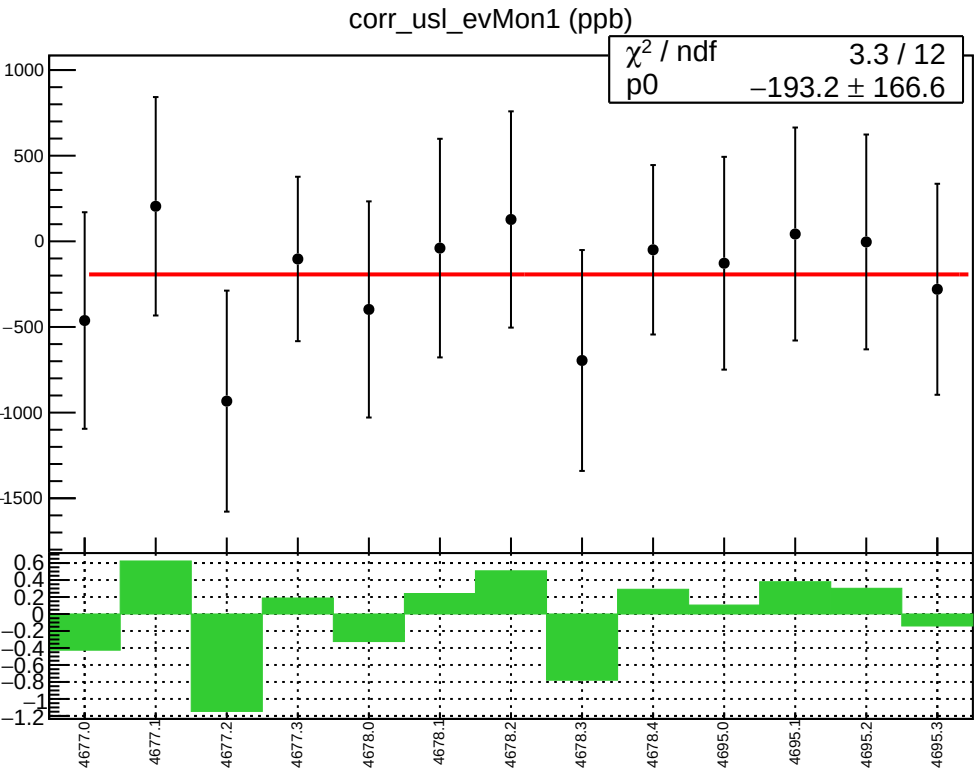

1D pull distribution
Mean −0.01406 ± 0.1926
Std Dev 0.6946 ± 0.1362
Underflow 0
Overflow 0
χ² / ndf 1 / 1
Constant 7.704 ± 2.879
Mean 0.1191 ± 0.1054
Sigma 0.3369 ± 0.0904
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

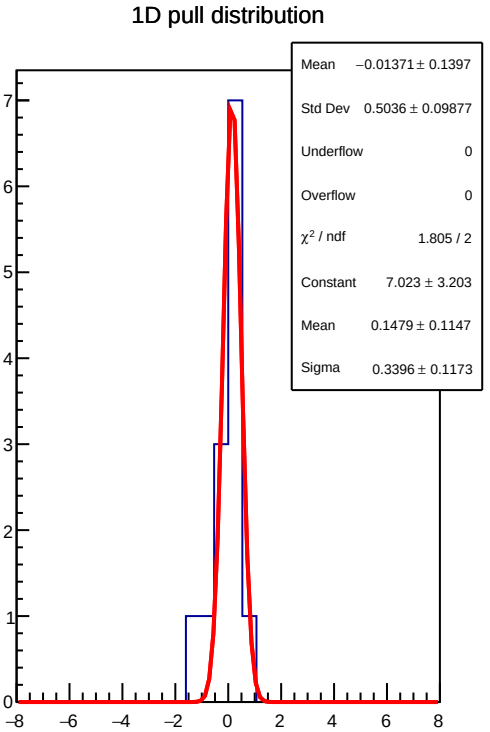

corr_us_dd_evMon11 RMS (ppm)
RMS (ppm)
6
5
4
3
2
1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


corr_usl_evMon0 (ppb)
χ² / ndf 29.86 / 12
p0 2598 ± 1453
20000
10000
0
10000
20000
3
2
1
0
−1
−2
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

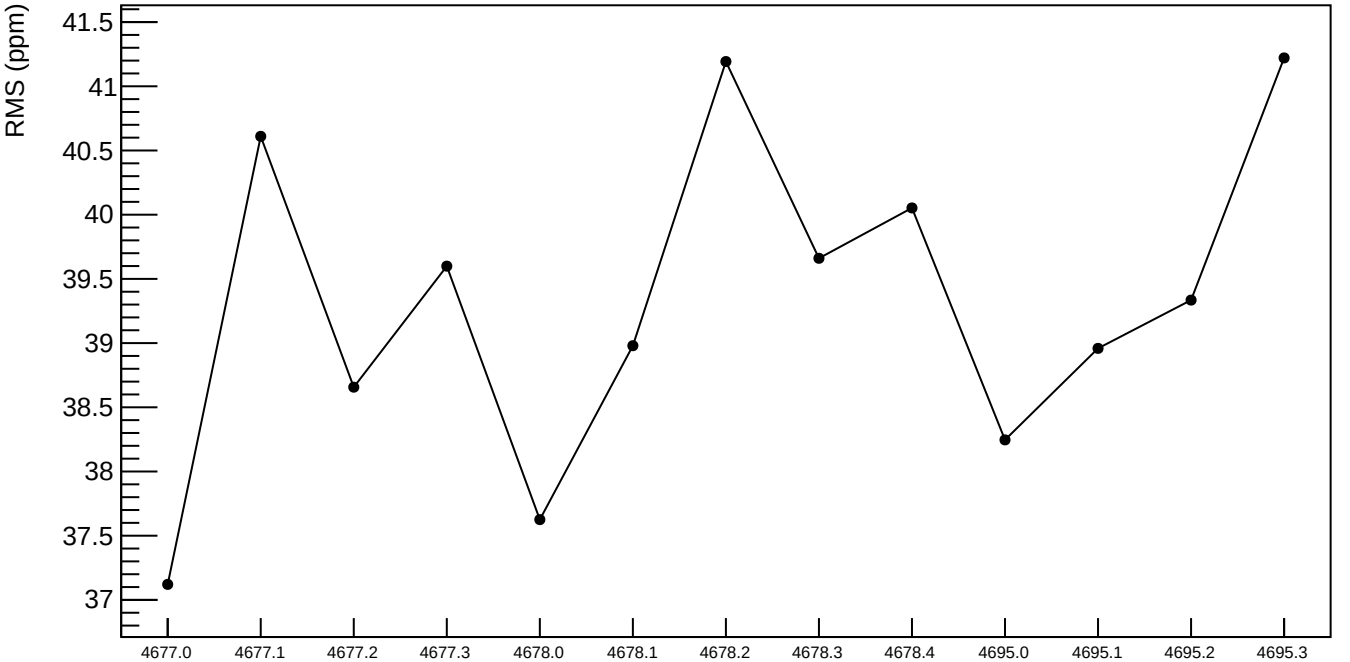

1D pull distribution
Mean 0.04598 ± 0.4201
Std Dev 1.515 ± 0.2971
Underflow 0
Overflow 0
χ² / ndf 1.803 / 6
Constant 1.386 ± 0.574
Mean −0.1624 ± 2.4827
Sigma 3.678 ± 4.567
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

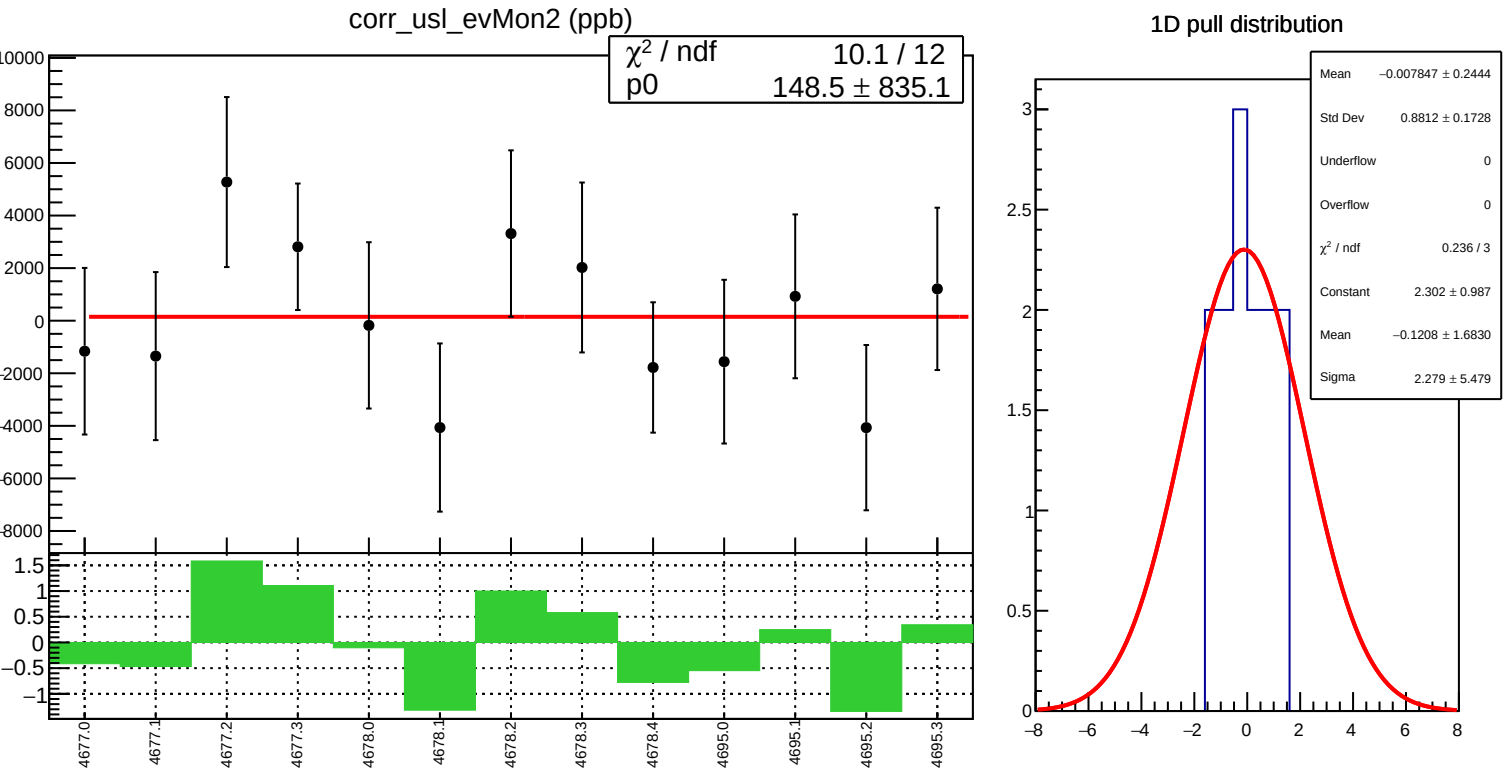

corr_usl_evMon0 RMS (ppm)
RMS (ppm)
740
720
700
680
660
640
620
600
580
560
540
520
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

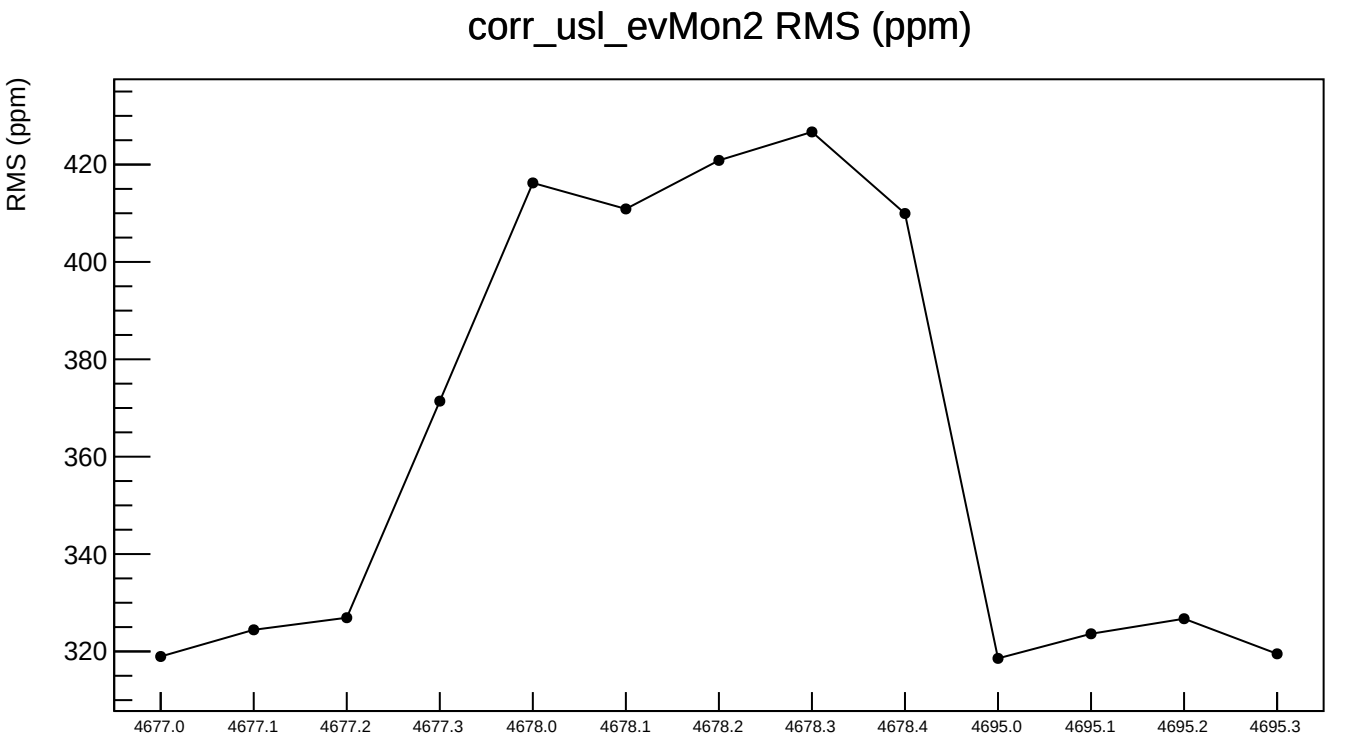

corr_usl_evMon1 (ppb)
χ² / ndf 3.3 / 12
p0 −193.2 ± 166.6
1000
500
0
−500
−1000
−1500
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

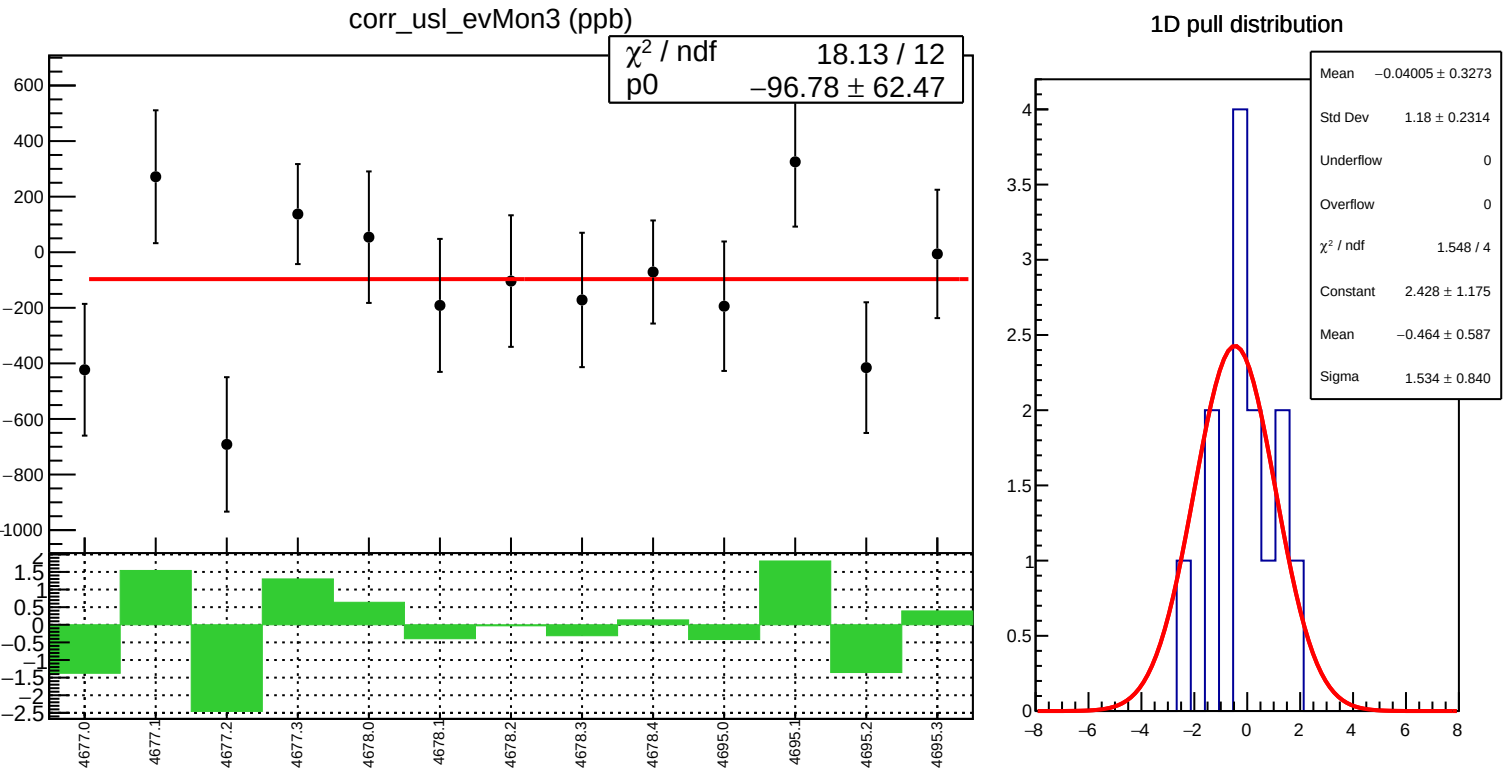

1D pull distribution
Mean −0.01371 ± 0.1397
Std Dev 0.5036 ± 0.09877
Underflow 0
Overflow 0
χ² / ndf 1.805 / 2
Constant 7.023 ± 3.203
Mean 0.1479 ± 0.1147
Sigma 0.3396 ± 0.1173
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

corr_usl_evMon1 RMS (ppm)

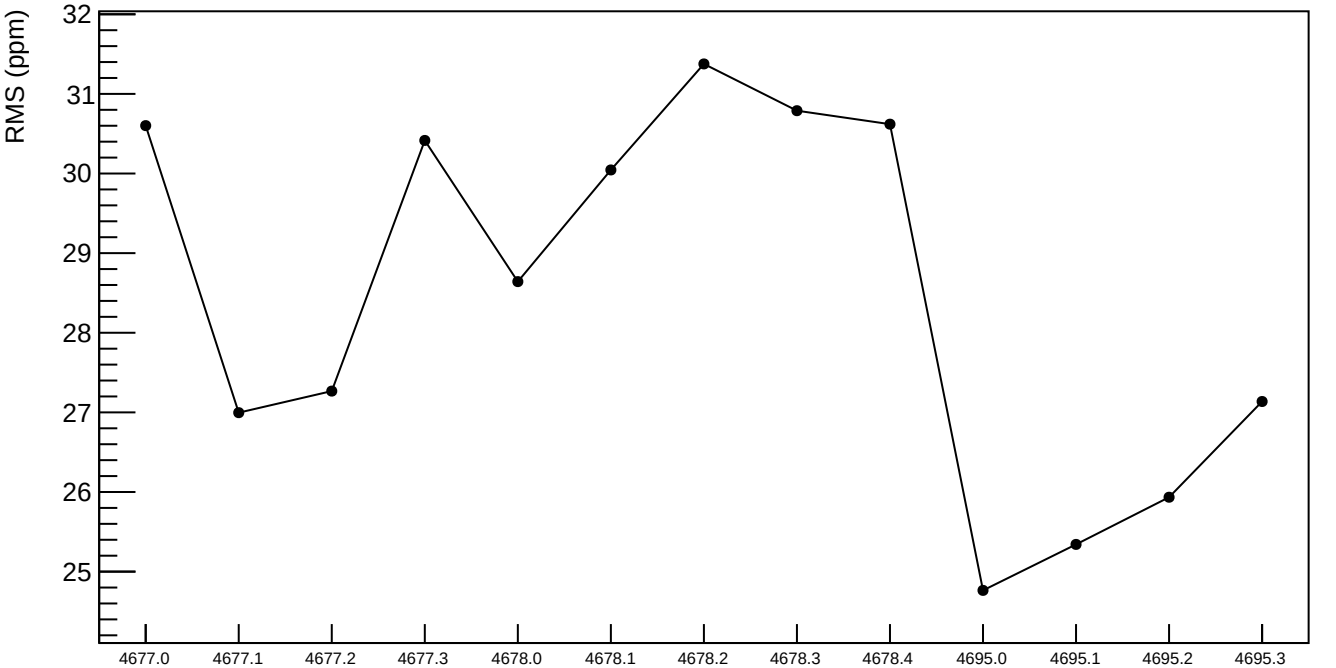


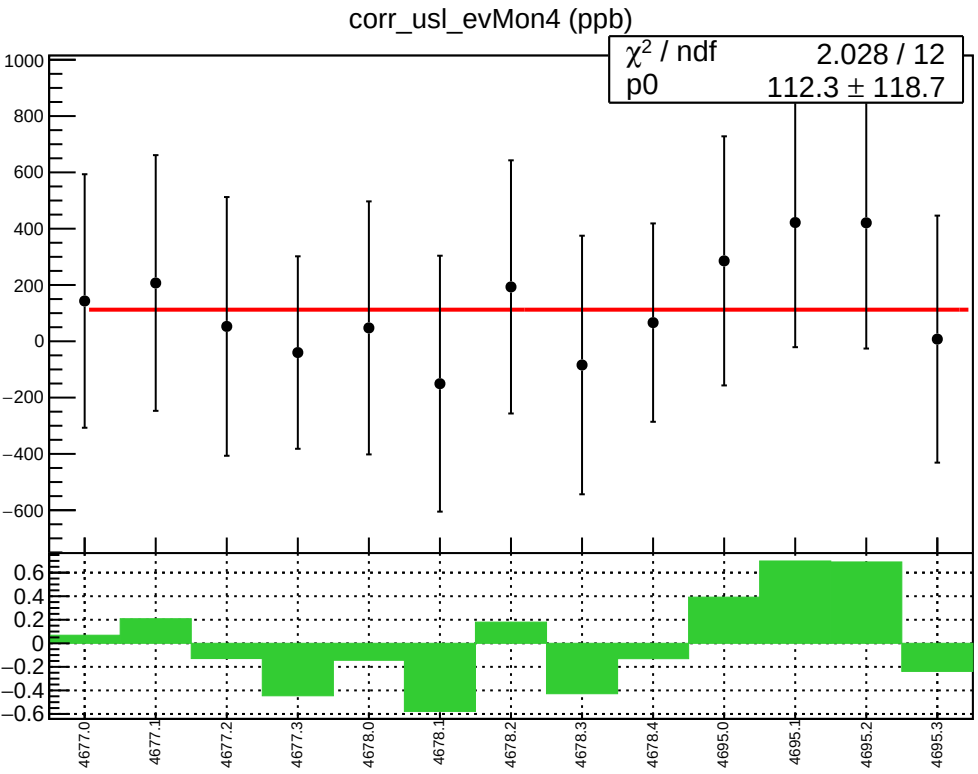

corr_usl_evMon2 (ppb)
χ² / ndf 10.1 / 12
p0 148.5 ± 835.1
10000
8000
6000
4000
2000
0
-2000
-4000
-6000
-8000
1.5
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.007847 ± 0.2444
Std Dev 0.8812 ± 0.1728
Underflow 0
Overflow 0
χ² / ndf 0.236 / 3
Constant 2.302 ± 0.987
Mean −0.1208 ± 1.6830
Sigma 2.279 ± 5.479
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

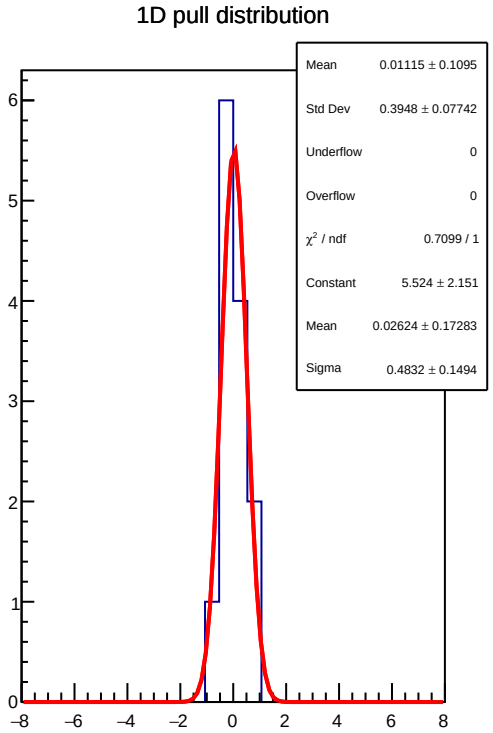

corr_usl_evMon2 RMS (ppm)
RMS (ppm)
420
400
380
360
340
320
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

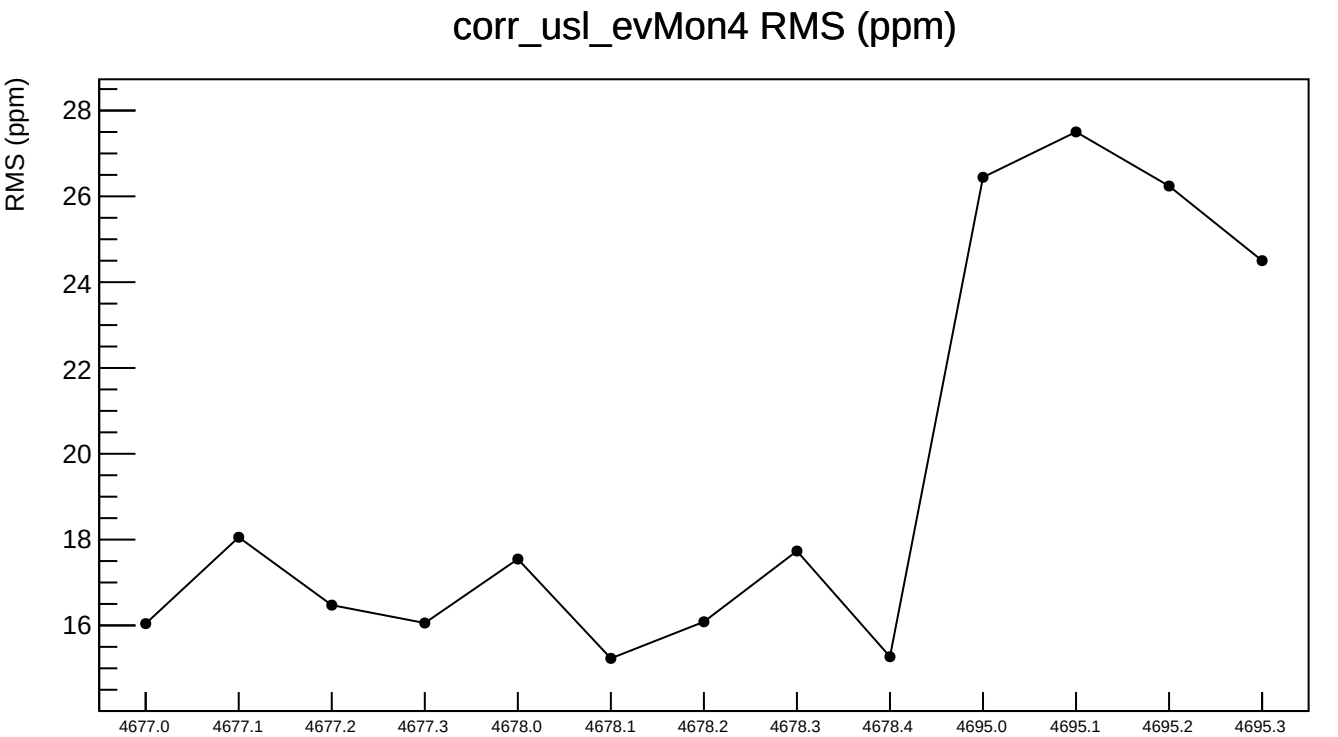

corr_usl_evMon3 (ppb)
χ² / ndf 18.13 / 12
p0 −96.78 ± 62.47
600
400
200
0
−200
−400
−600
−800
−1000
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.04005 ± 0.3273
Std Dev 1.18 ± 0.2314
Underflow 0
Overflow 0
χ² / ndf 1.548 / 4
Constant 2.428 ± 1.175
Mean −0.464 ± 0.587
Sigma 1.534 ± 0.840
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

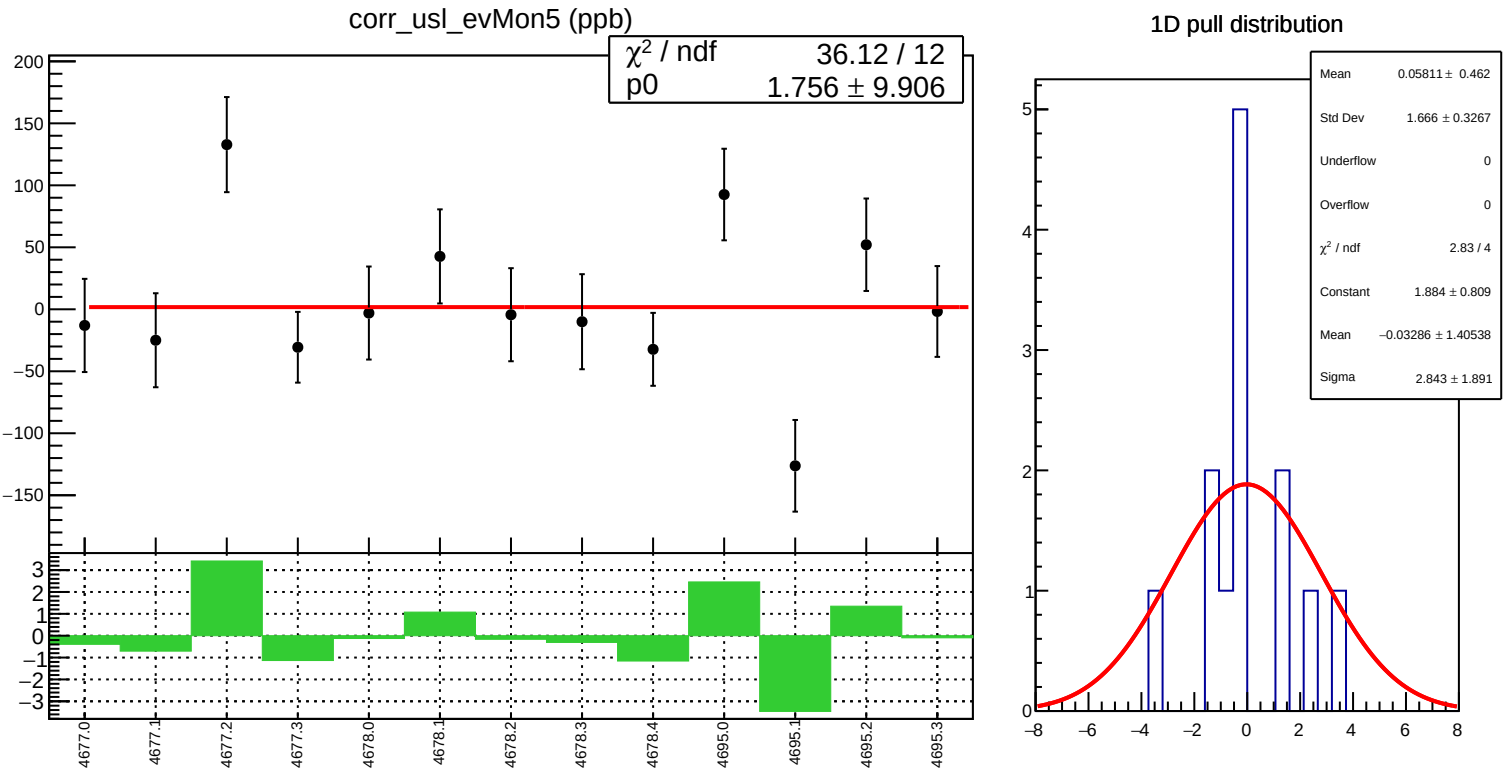
corr_usl_evMon3 RMS (ppm)



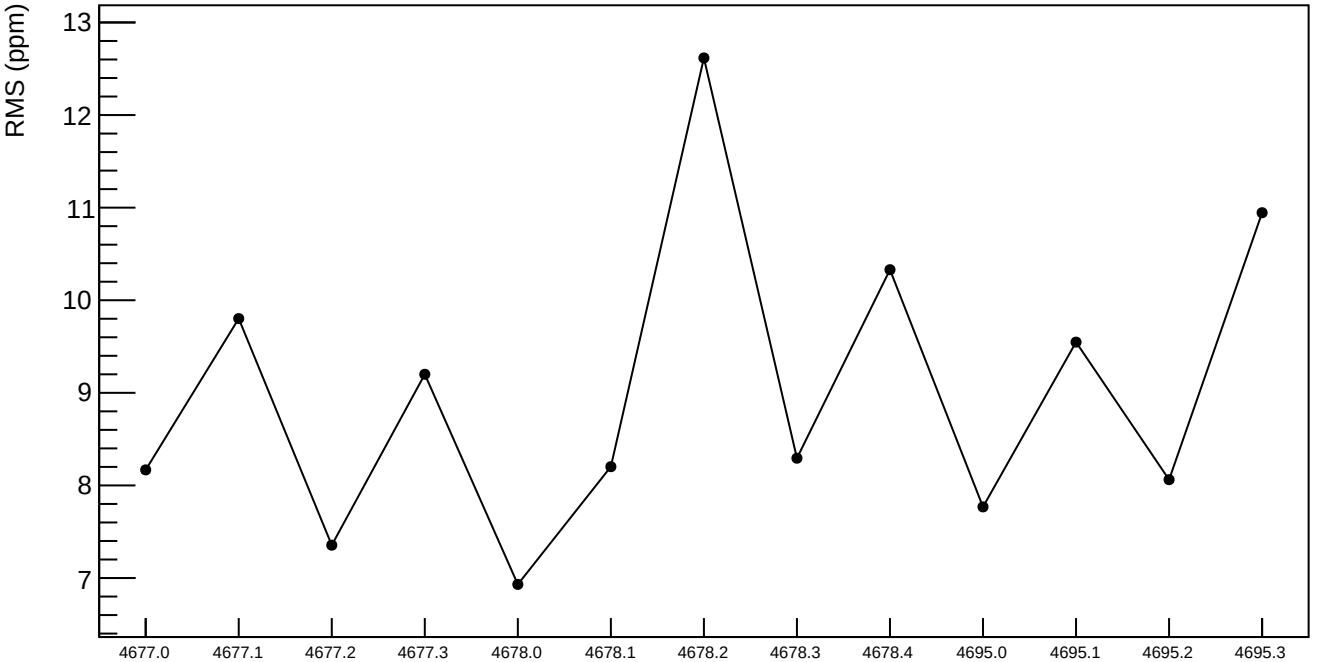

corr_usl_evMon4 (ppb)
χ² / ndf 2.028 / 12
p0 112.3 ± 118.7
1000
800
600
400
200
0
−200
−400
−600
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

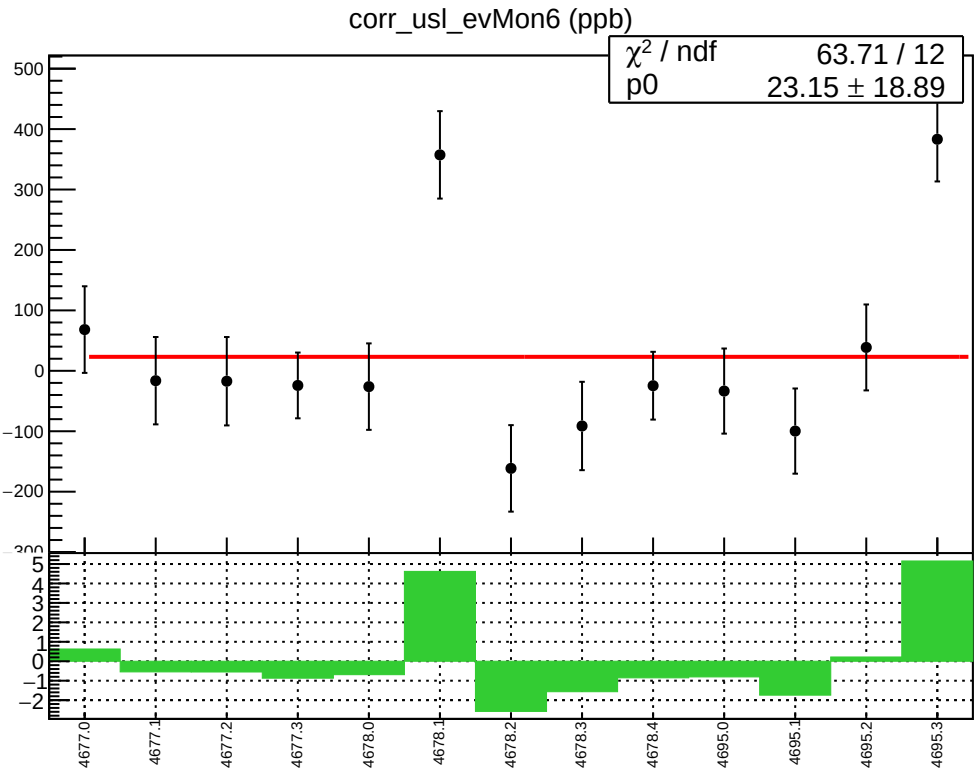

1D pull distribution
Mean 0.01115 ± 0.1095
Std Dev 0.3948 ± 0.07742
Underflow 0
Overflow 0
χ² / ndf 0.7099 / 1
Constant 5.524 ± 2.151
Mean 0.02624 ± 0.17283
Sigma 0.4832 ± 0.1494
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

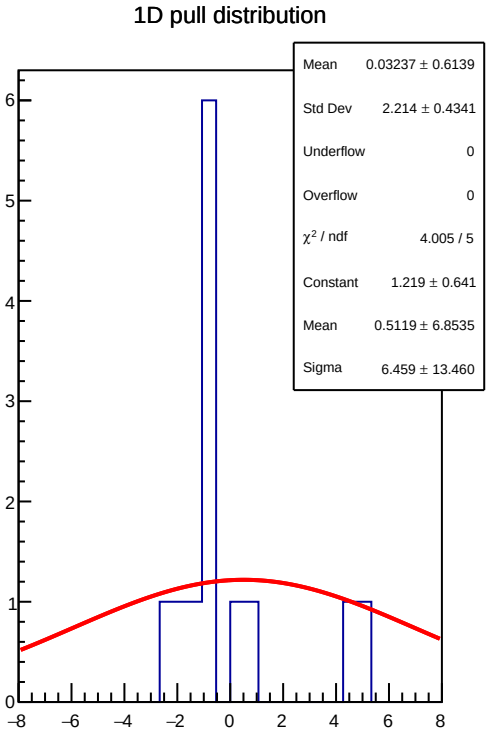

corr_usl_evMon4 RMS (ppm)
RMS (ppm)
28
26
24
22
20
18
16
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


corr_usl_evMon5 (ppb)
χ² / ndf 36.12 / 12
p0 1.756 ± 9.906
200
150
100
50
0
−50
−100
−150
3
2
1
0
−1
−2
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.05811 ± 0.462
Std Dev 1.666 ± 0.3267
Underflow 0
Overflow 0
χ² / ndf 2.83 / 4
Constant 1.884 ± 0.809
Mean −0.03286 ± 1.40538
Sigma 2.843 ± 1.891
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

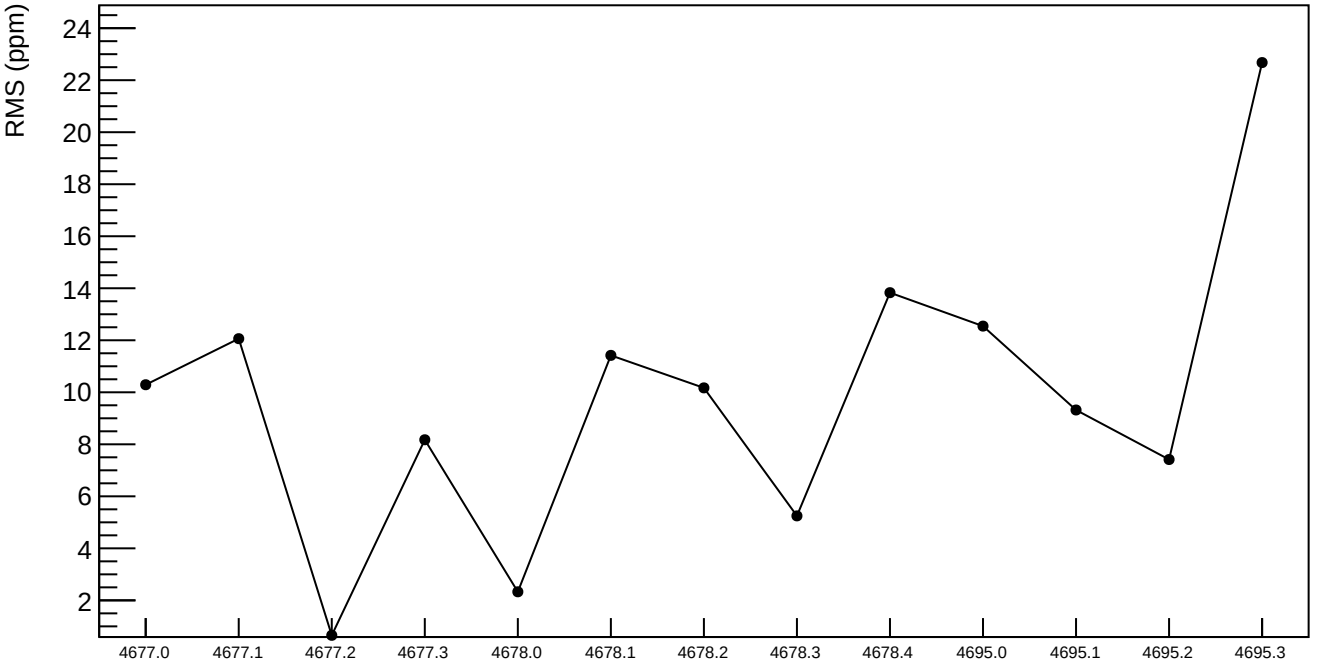
corr_usl_evMon5 RMS (ppm)

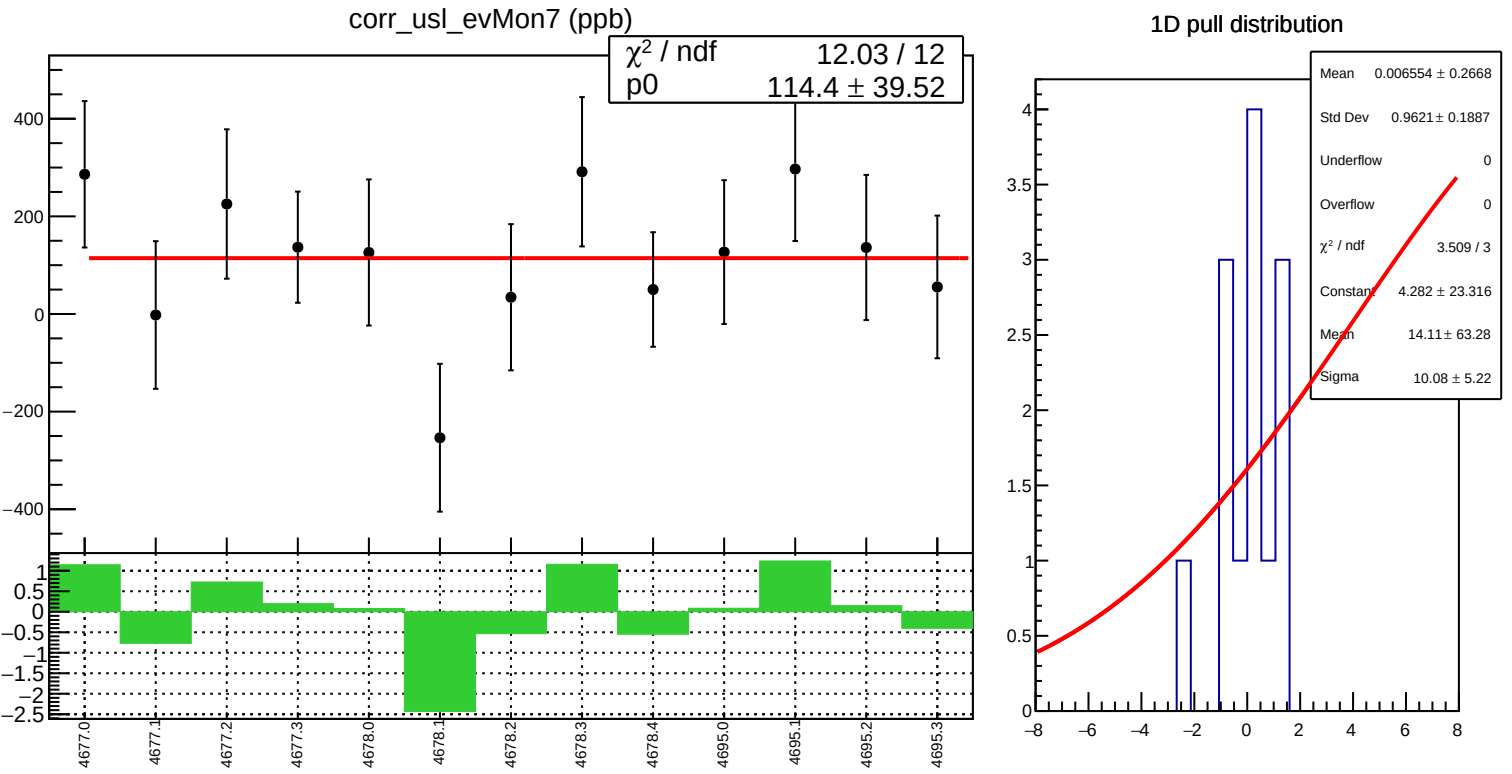



corr_usl_evMon6 (ppb)
χ² / ndf 63.71 / 12
p0 23.15 ± 18.89
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

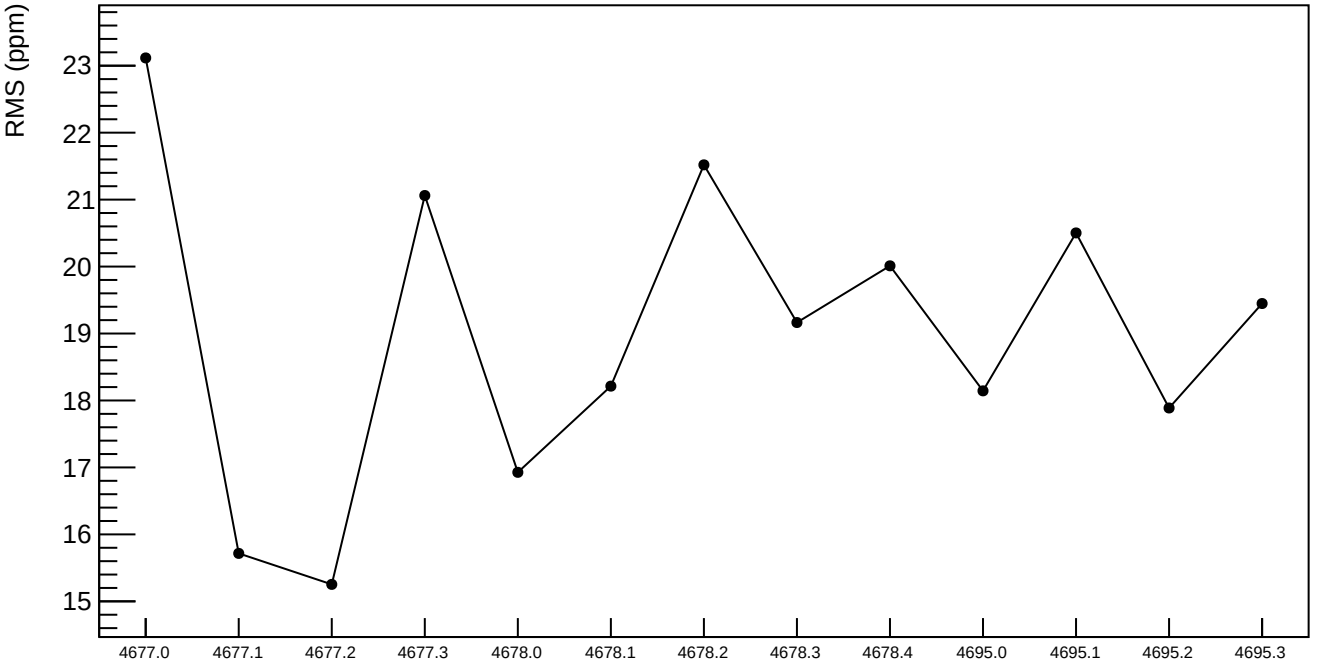

1D pull distribution
Mean 0.03237 ± 0.6139
Std Dev 2.214 ± 0.4341
Underflow 0
Overflow 0
χ² / ndf 4.005 / 5
Constant 1.219 ± 0.641
Mean 0.5119 ± 6.8535
Sigma 6.459 ± 13.460

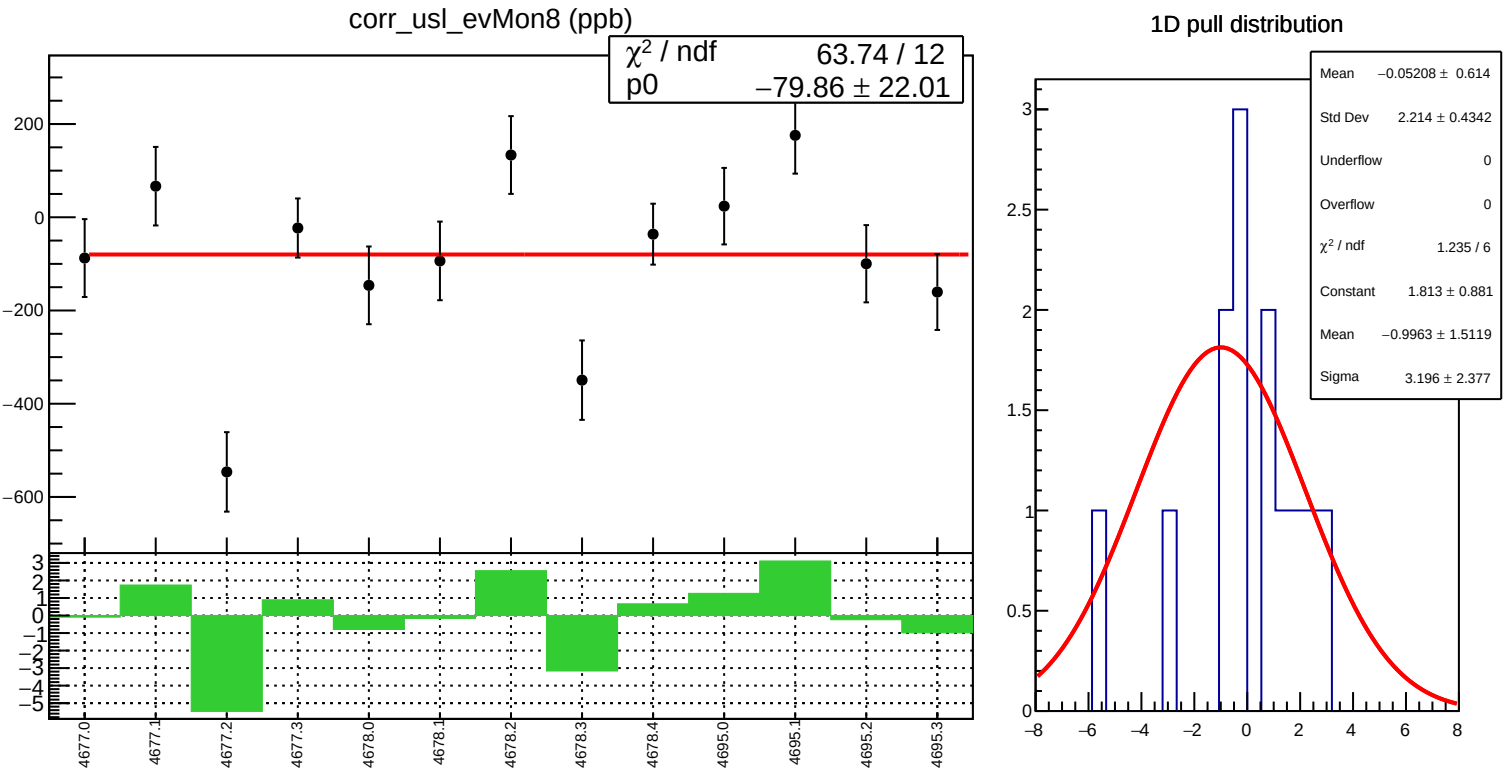
corr_usl_evMon6 RMS (ppm)

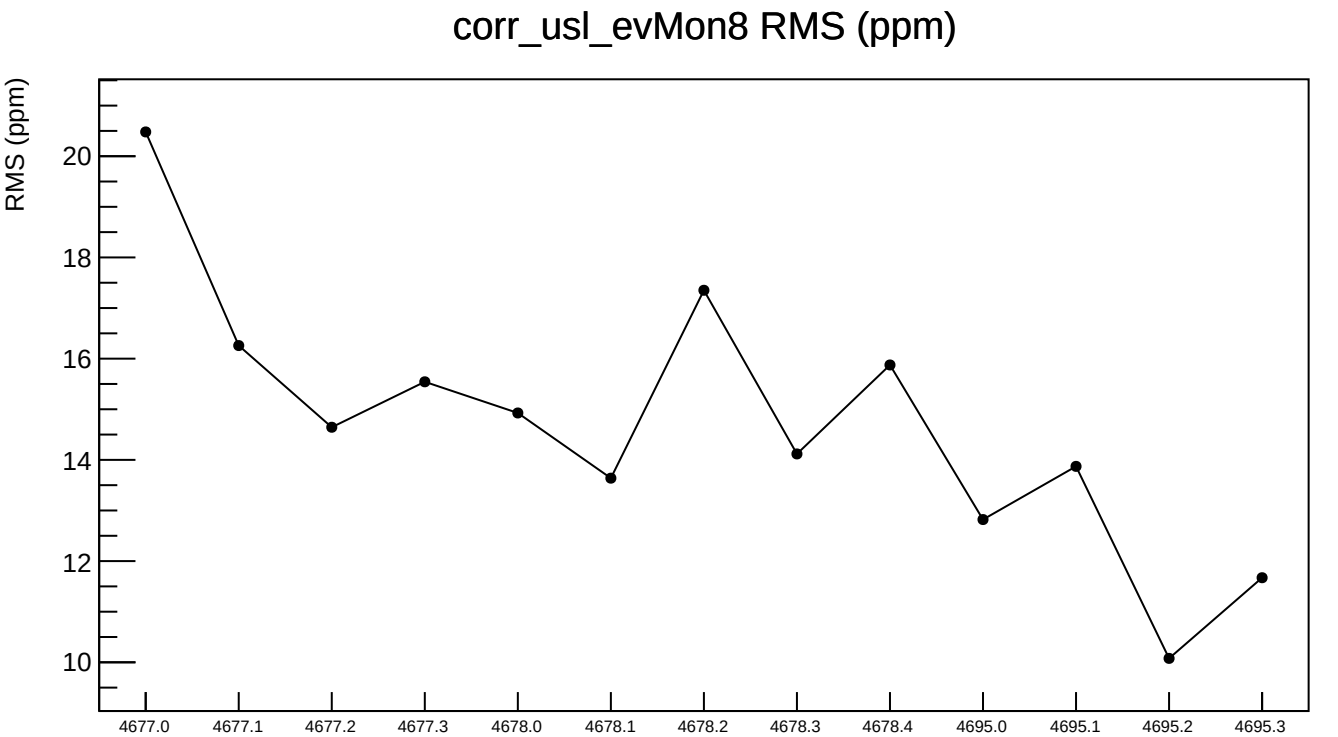


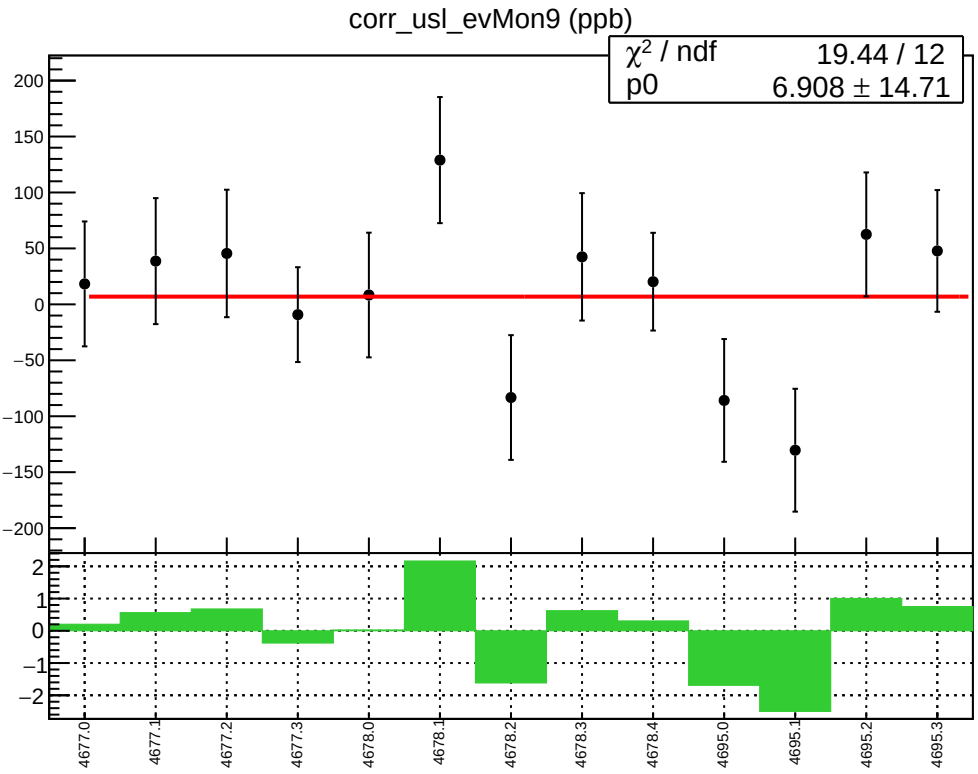

corr_usl_evMon7 (ppb)
χ² / ndf 12.03 / 12
p0 114.4 ± 39.52
400
200
0
−200
−400
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.006554 ± 0.2668
Std Dev 0.9621 ± 0.1887
Underflow 0
Overflow 0
χ² / ndf 3.509 / 3
Constant 4.282 ± 23.316
Mean 14.11 ± 63.28
Sigma 10.08 ± 5.22
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

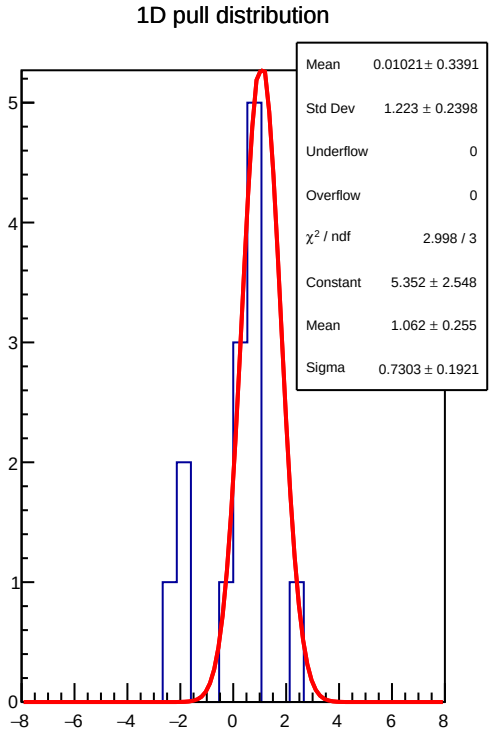
corr_usl_evMon7 RMS (ppm)



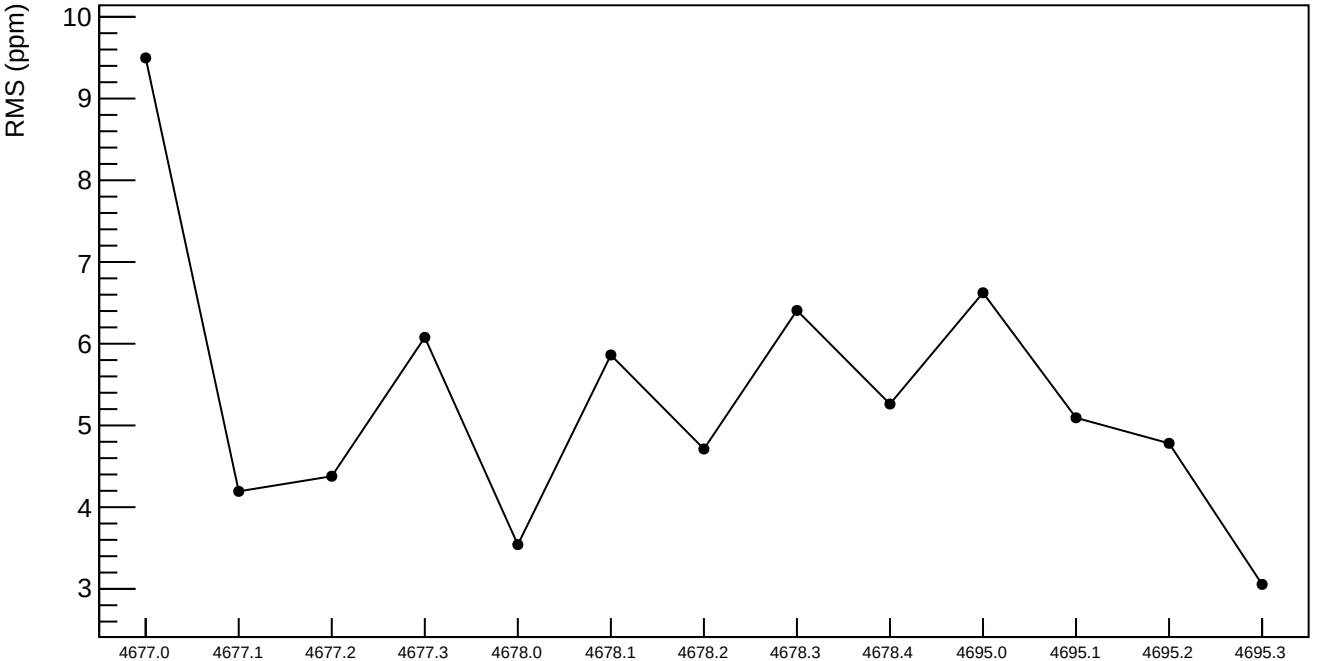

corr_usl_evMon8 (ppb)
χ² / ndf 63.74 / 12
p0 −79.86 ± 22.01
200
0
−200
−400
−600
3
2
1
0
−1
−2
−3
−4
−5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.05208 ± 0.614
Std Dev 2.214 ± 0.4342
Underflow 0
Overflow 0
χ² / ndf 1.235 / 6
Constant 1.813 ± 0.881
Mean −0.9963 ± 1.5119
Sigma 3.196 ± 2.377
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

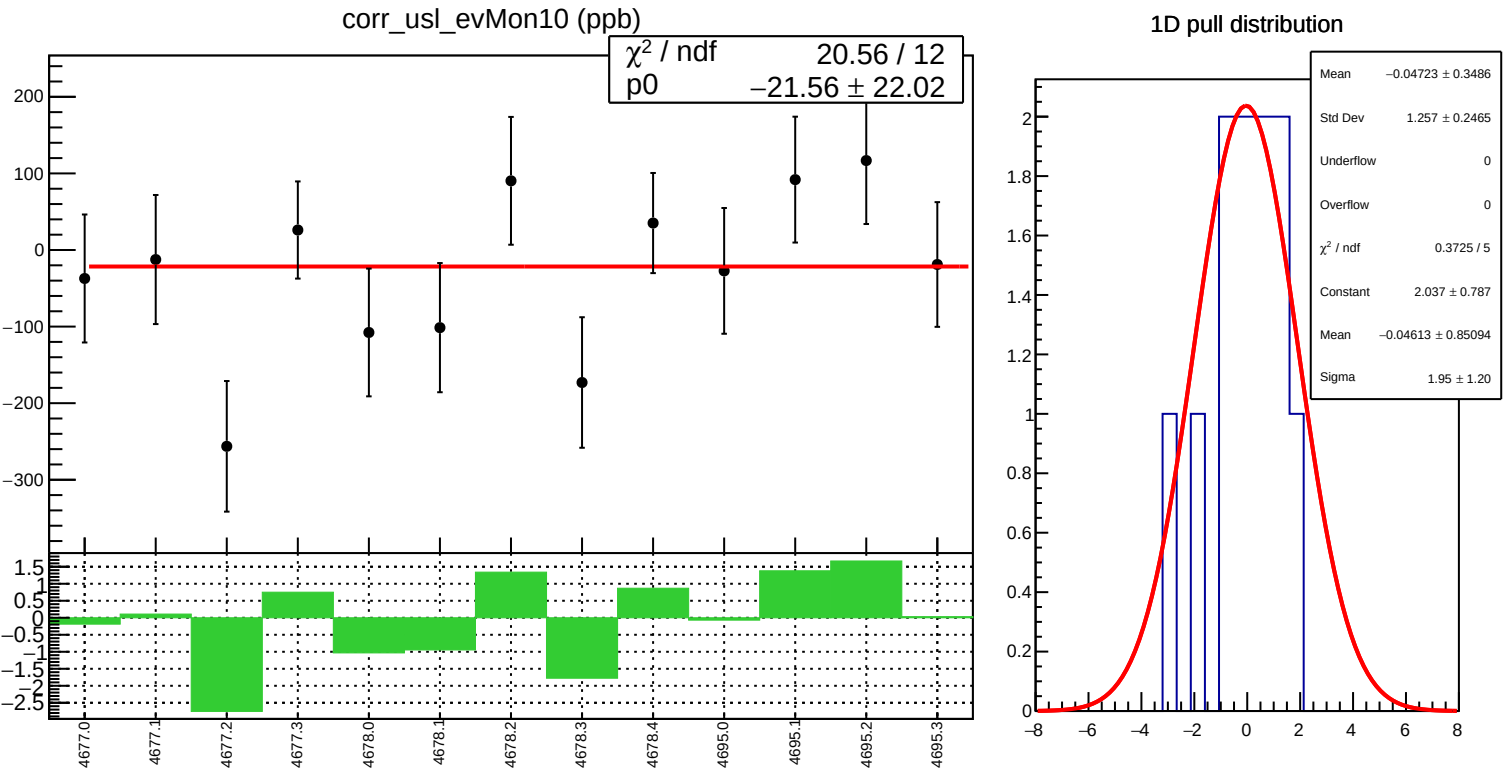

corr_usl_evMon8 RMS (ppm)
RMS (ppm)
20
18
16
14
12
10
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

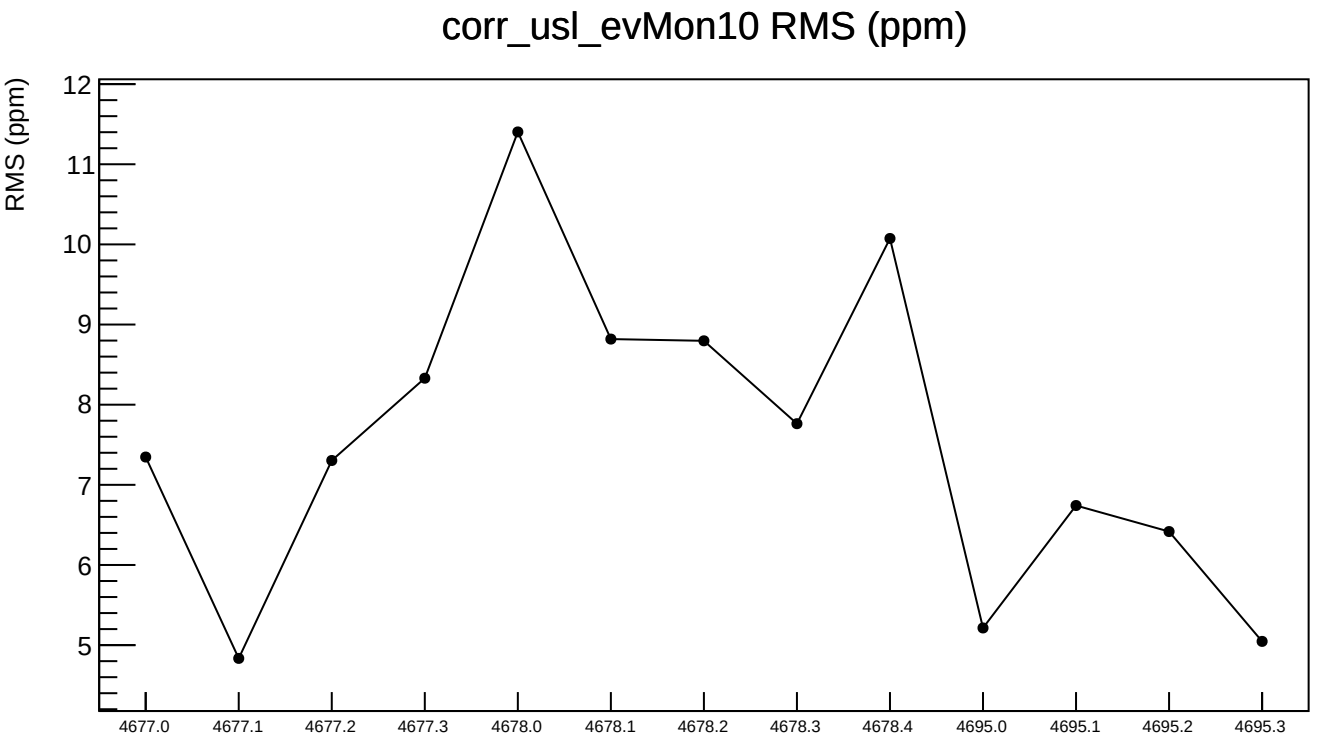

corr_usl_evMon9 (ppb)
χ² / ndf 19.44 / 12
p0 6.908 ± 14.71
200
150
100
50
0
−50
−100
−150
−200
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

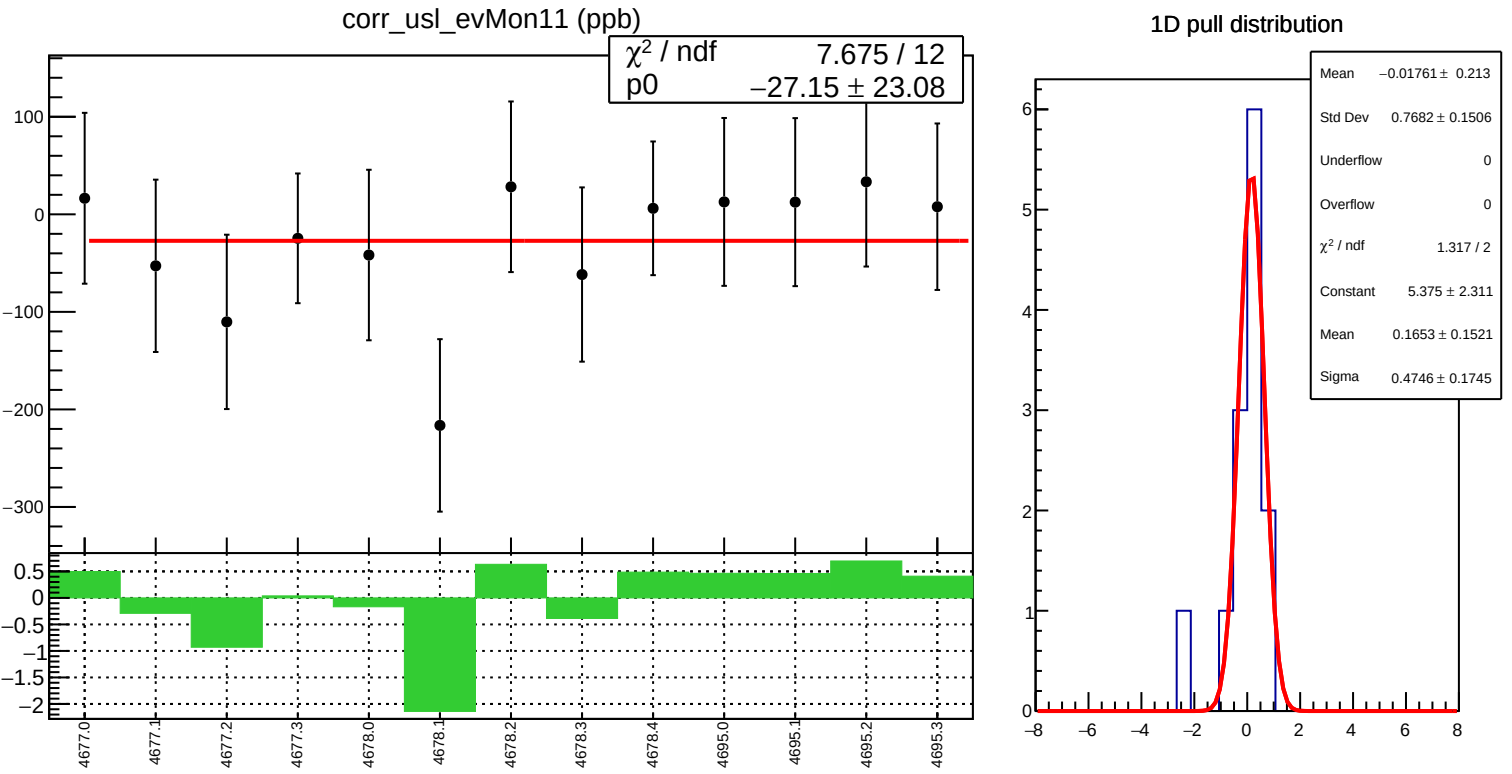

1D pull distribution
Mean 0.01021 ± 0.3391
Std Dev 1.223 ± 0.2398
Underflow 0
Overflow 0
χ² / ndf 2.998 / 3
Constant 5.352 ± 2.548
Mean 1.062 ± 0.255
Sigma 0.7303 ± 0.1921
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

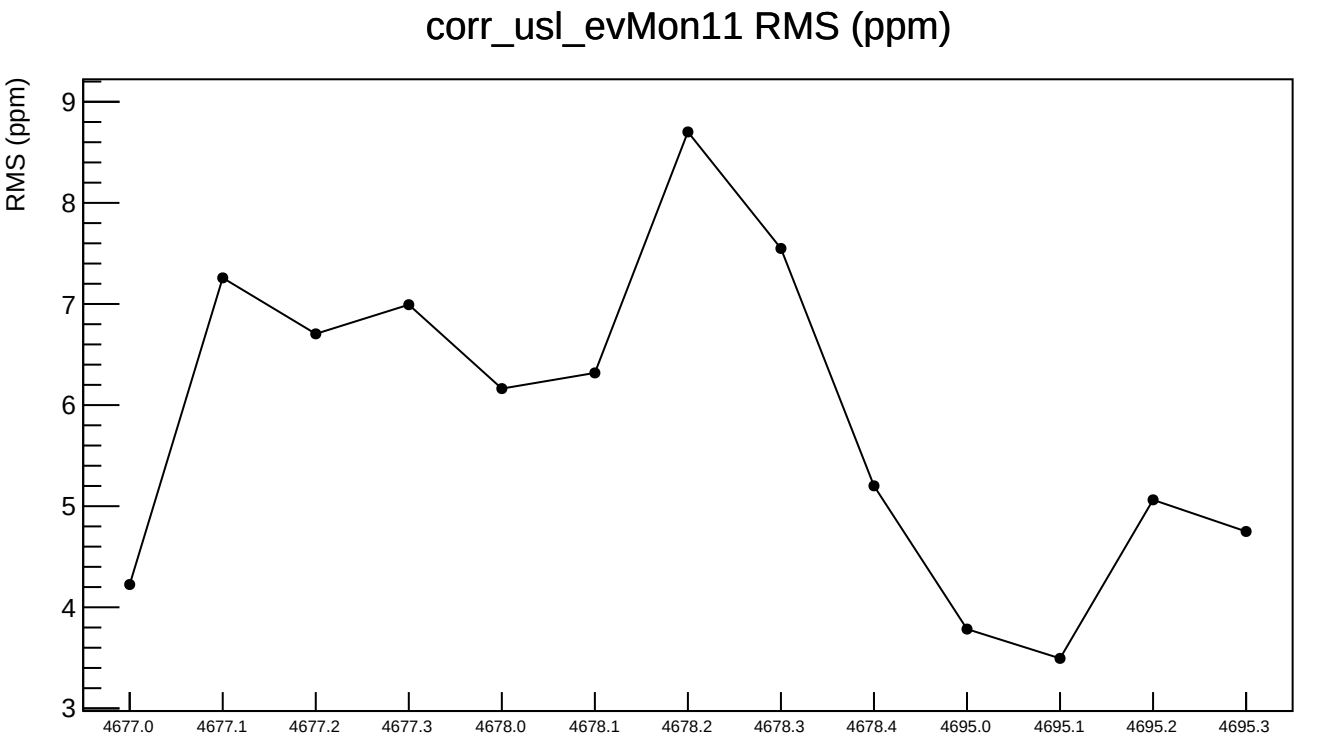
corr_usl_evMon9 RMS (ppm)

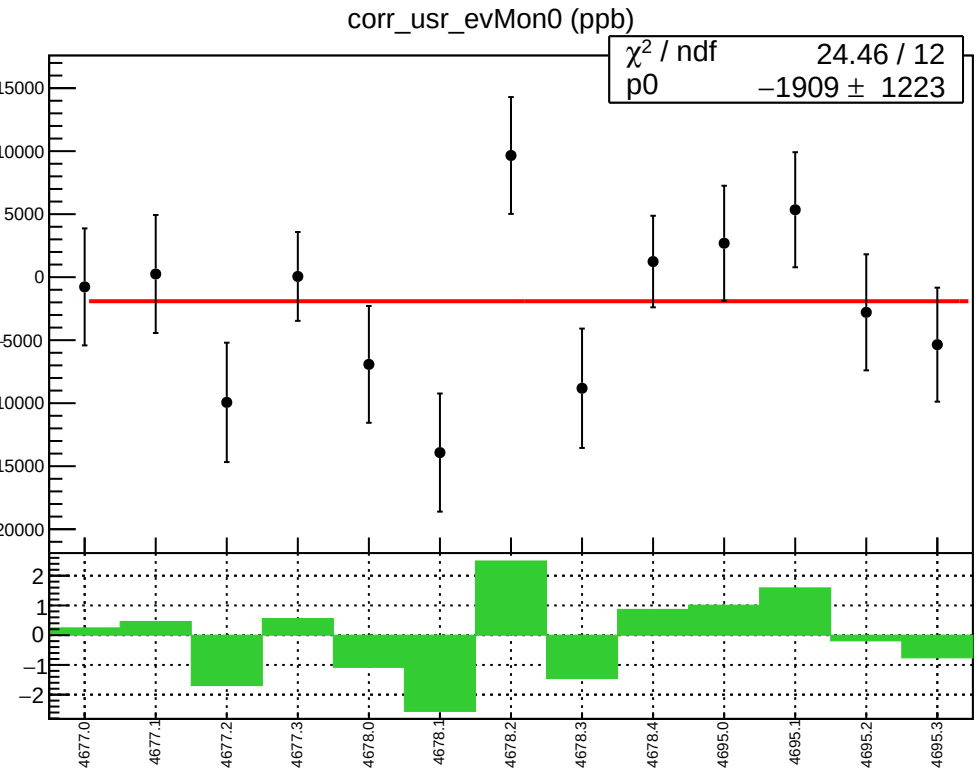


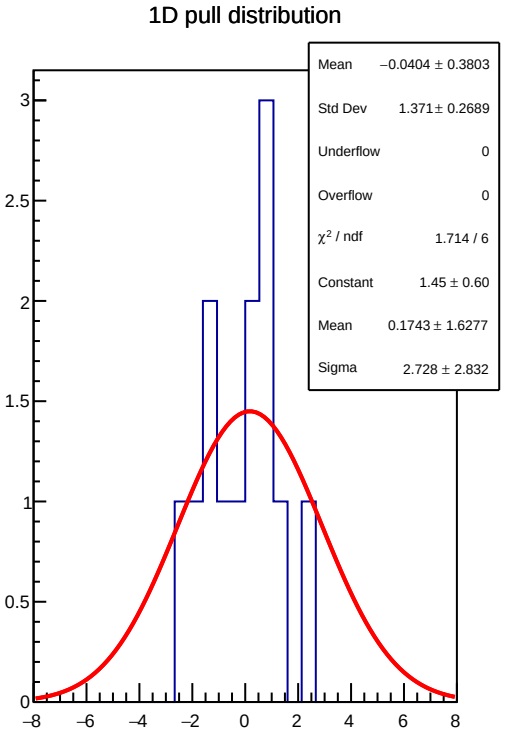

corr_usl_evMon10 (ppb)
χ² / ndf 20.56 / 12
p0 −21.56 ± 22.02
200
100
0
−100
−200
−300
1.5
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.04723 ± 0.3486
Std Dev 1.257 ± 0.2465
Underflow 0
Overflow 0
χ² / ndf 0.3725 / 5
Constant 2.037 ± 0.787
Mean −0.04613 ± 0.85094
Sigma 1.95 ± 1.20
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
−8
−6
−4
−2
0
2
4
6
8

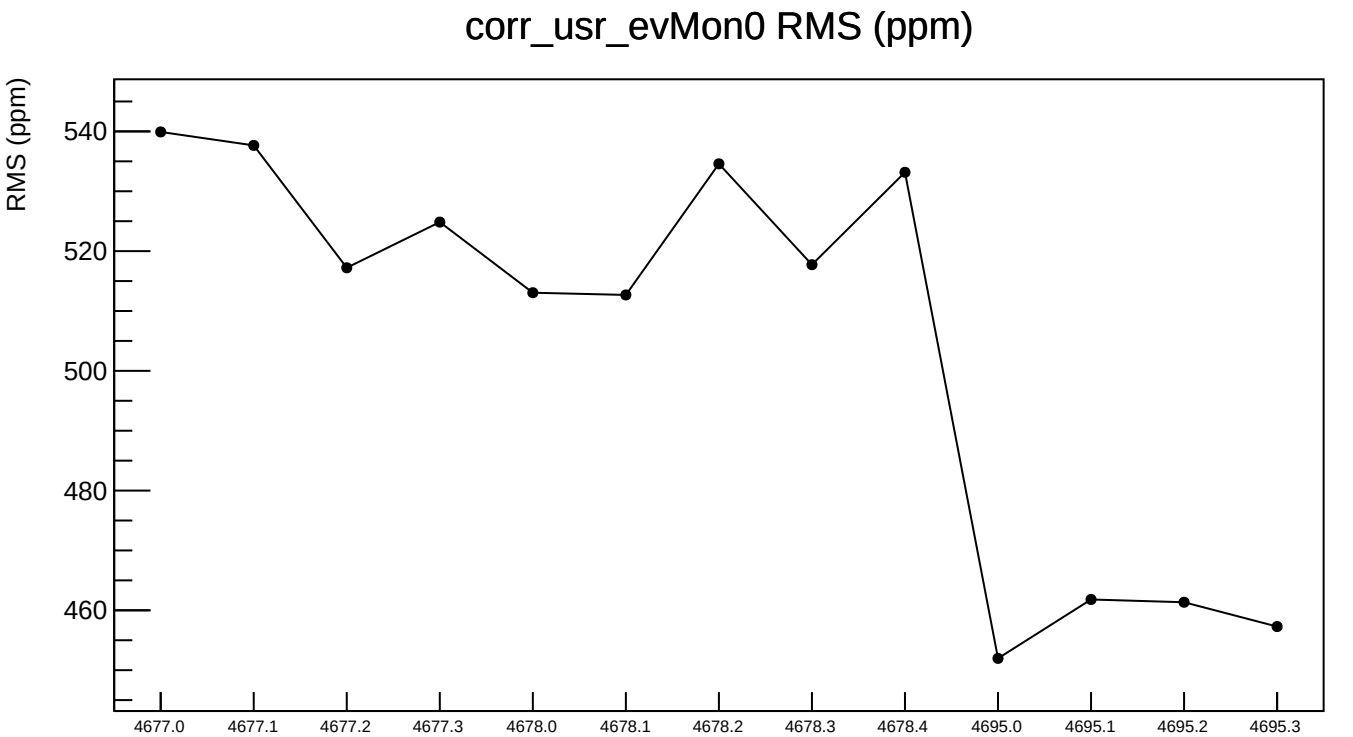

corr_usl_evMon10 RMS (ppm)
RMS (ppm)
12
11
10
9
8
7
6
5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

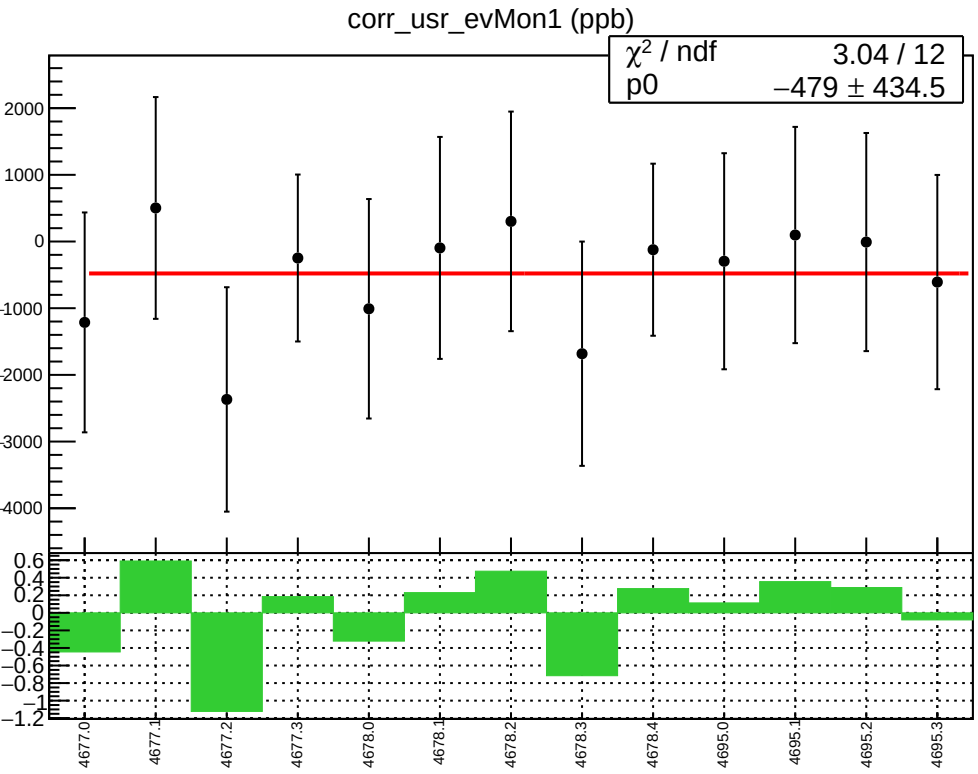

corr_usl_evMon11 (ppb)
χ² / ndf 7.675 / 12
p0 −27.15 ± 23.08
100
0
−100
−200
−300
0.5
0
−0.5
−1
−1.5
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.01761 ± 0.213
Std Dev 0.7682 ± 0.1506
Underflow 0
Overflow 0
χ² / ndf 1.317 / 2
Constant 5.375 ± 2.311
Mean 0.1653 ± 0.1521
Sigma 0.4746 ± 0.1745
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

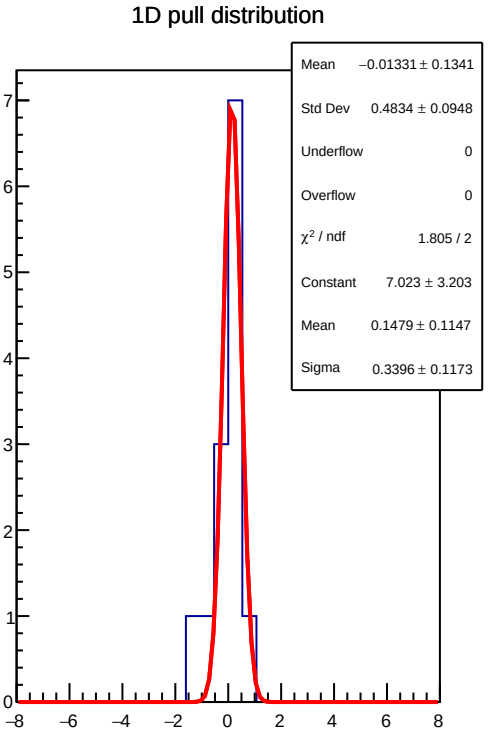

corr_usl_evMon11 RMS (ppm)
RMS (ppm)
9
8
7
6
5
4
3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

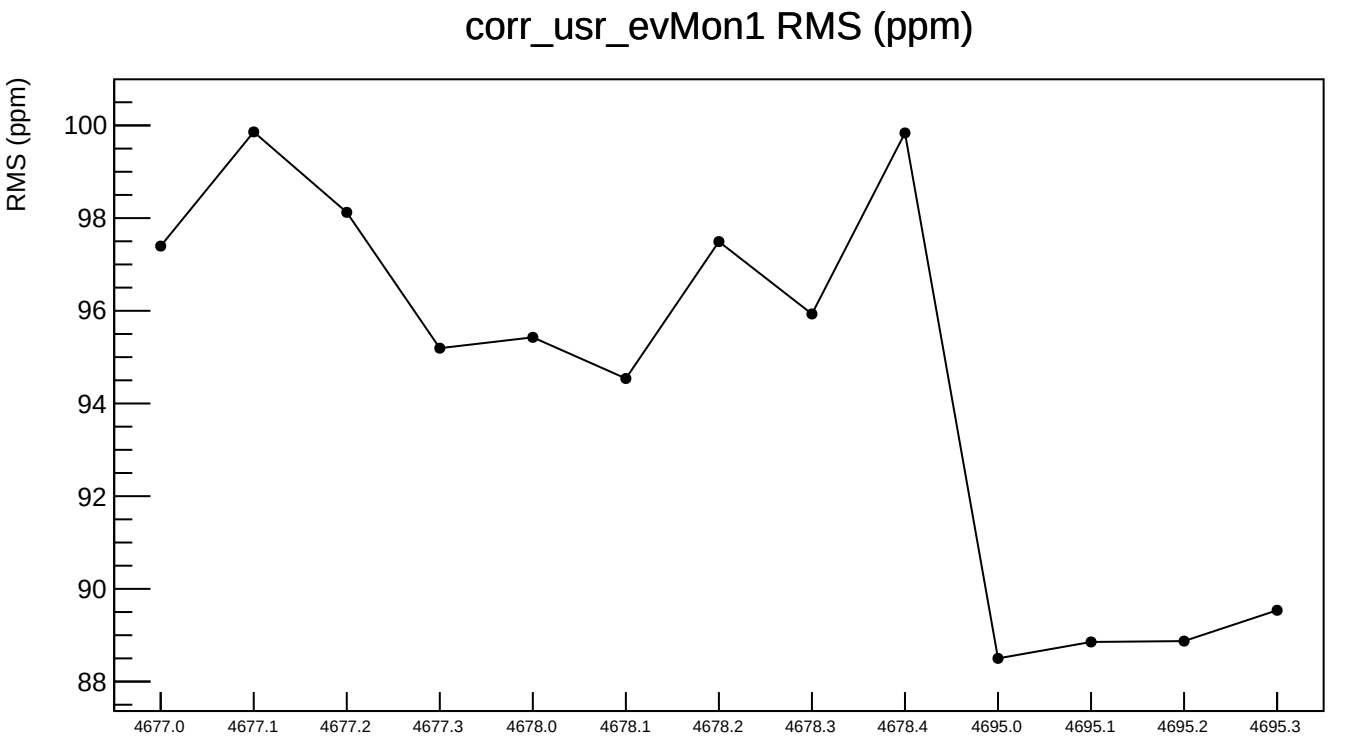

corr_usr_evMon0 (ppb)
χ² / ndf 24.46 / 12
p0 −1909 ± 1223
15000
10000
5000
0
−5000
−10000
−15000
−20000
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

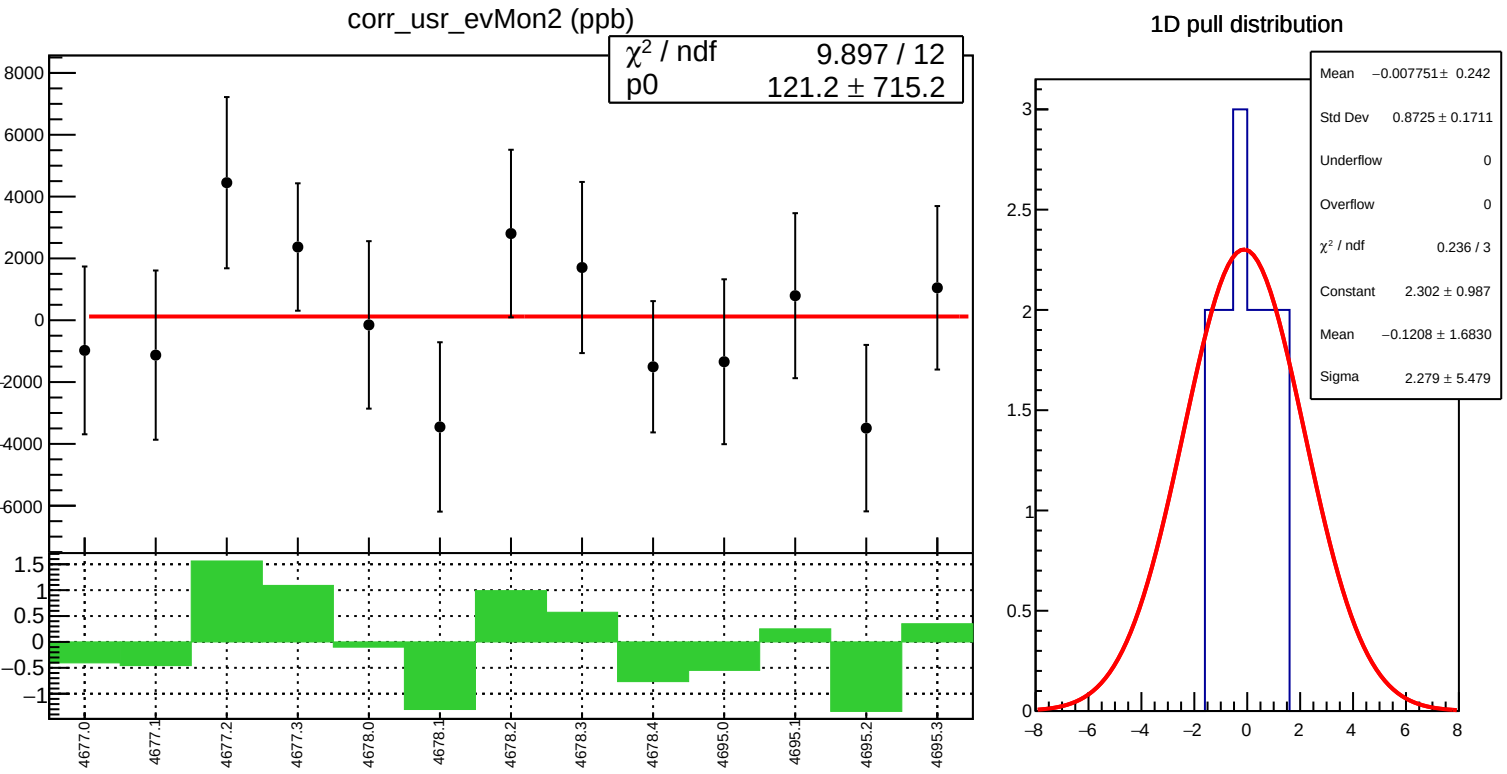

1D pull distribution
Mean −0.0404 ± 0.3803
Std Dev 1.371± 0.2689
Underflow 0
Overflow 0
χ² / ndf 1.714 / 6
Constant 1.45 ± 0.60
Mean 0.1743 ± 1.6277
Sigma 2.728 ± 2.832
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

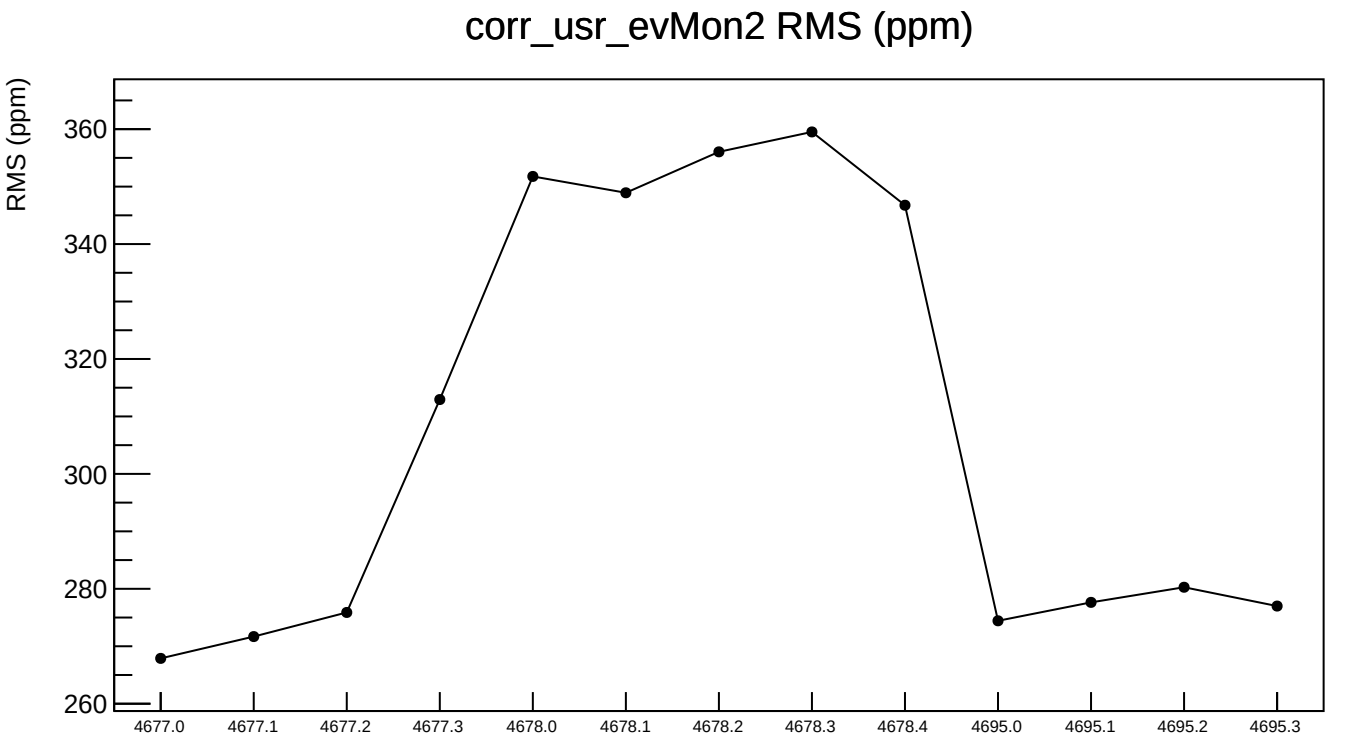

corr_usr_evMon0 RMS (ppm)
RMS (ppm)
540
520
500
480
460
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

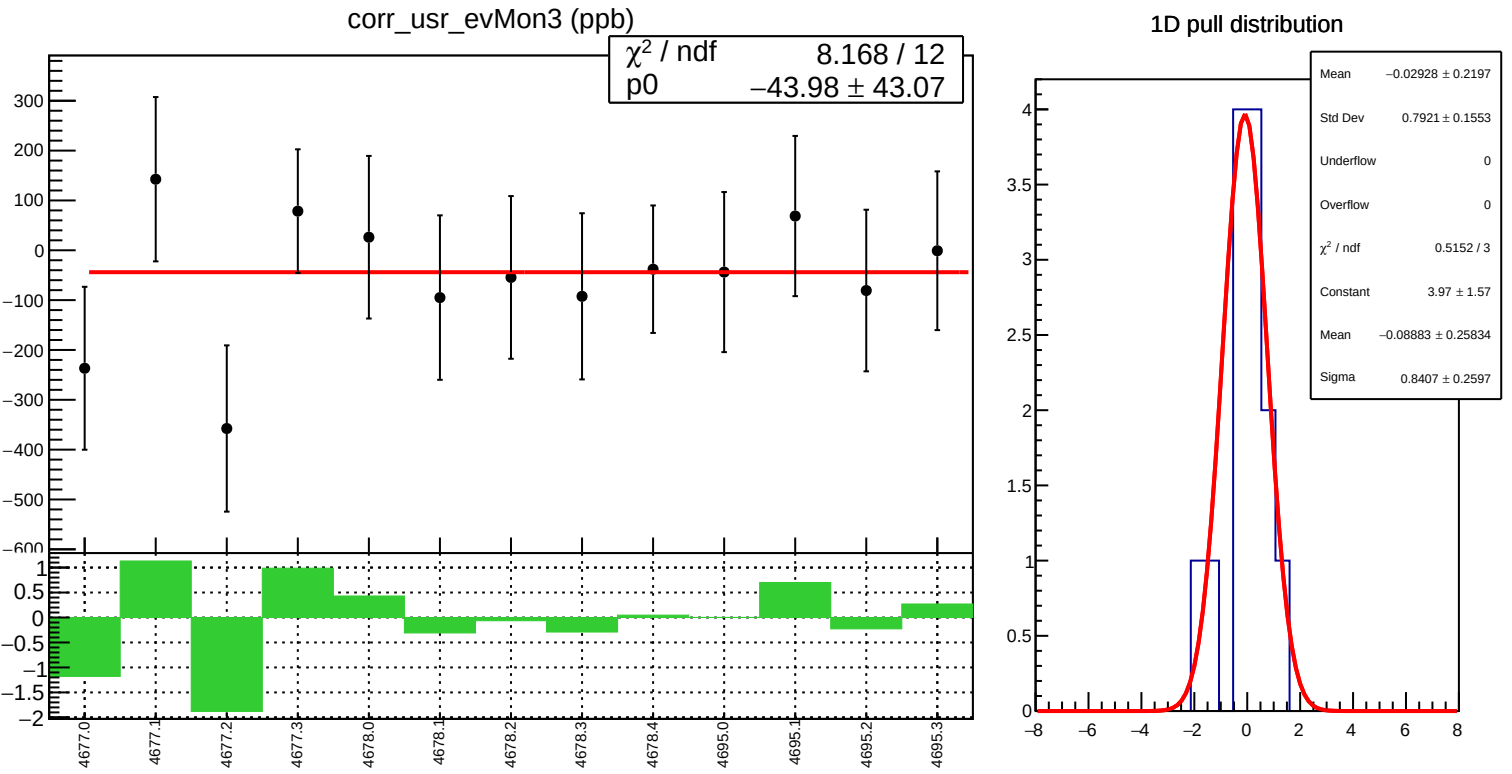

corr_usr_evMon1 (ppb)
χ² / ndf 3.04 / 12
p0 −479 ± 434.5
2000
1000
0
-1000
-2000
-3000
-4000
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
−1.2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

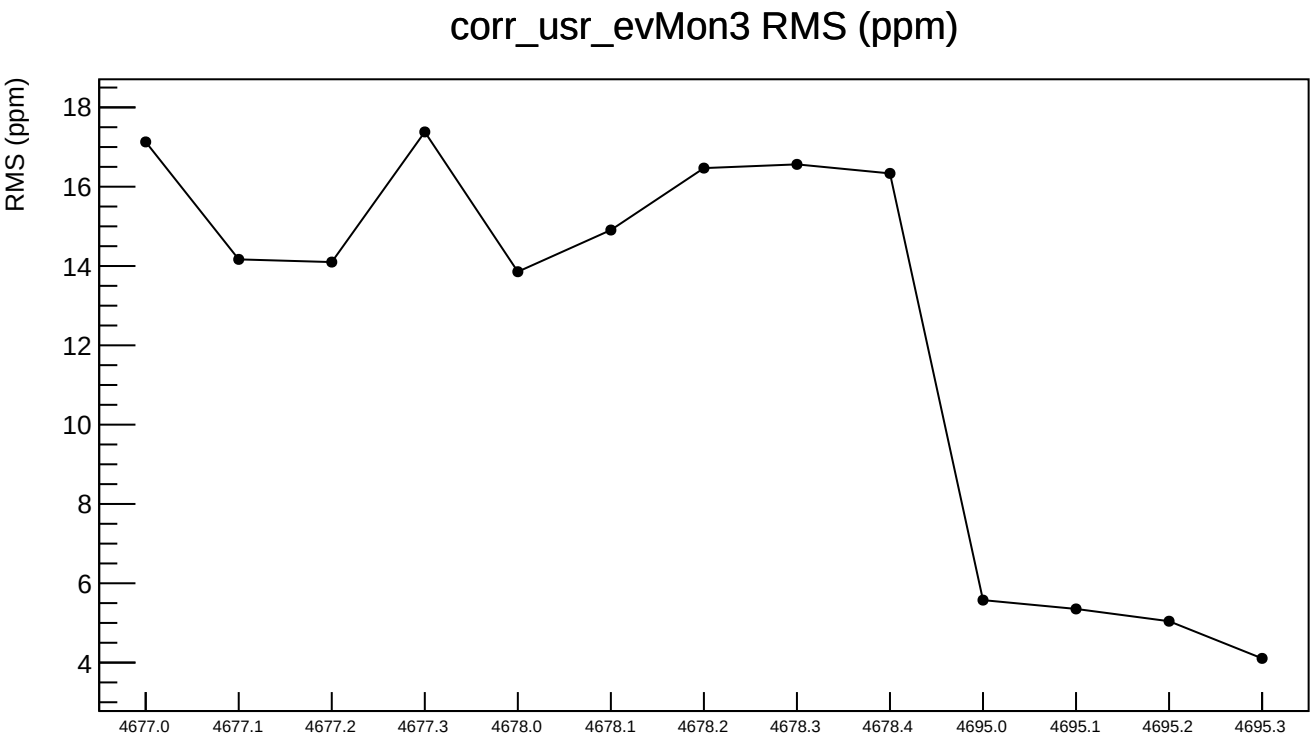

1D pull distribution
Mean −0.01331 ± 0.1341
Std Dev 0.4834 ± 0.0948
Underflow 0
Overflow 0
χ² / ndf 1.805 / 2
Constant 7.023 ± 3.203
Mean 0.1479 ± 0.1147
Sigma 0.3396 ± 0.1173
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8

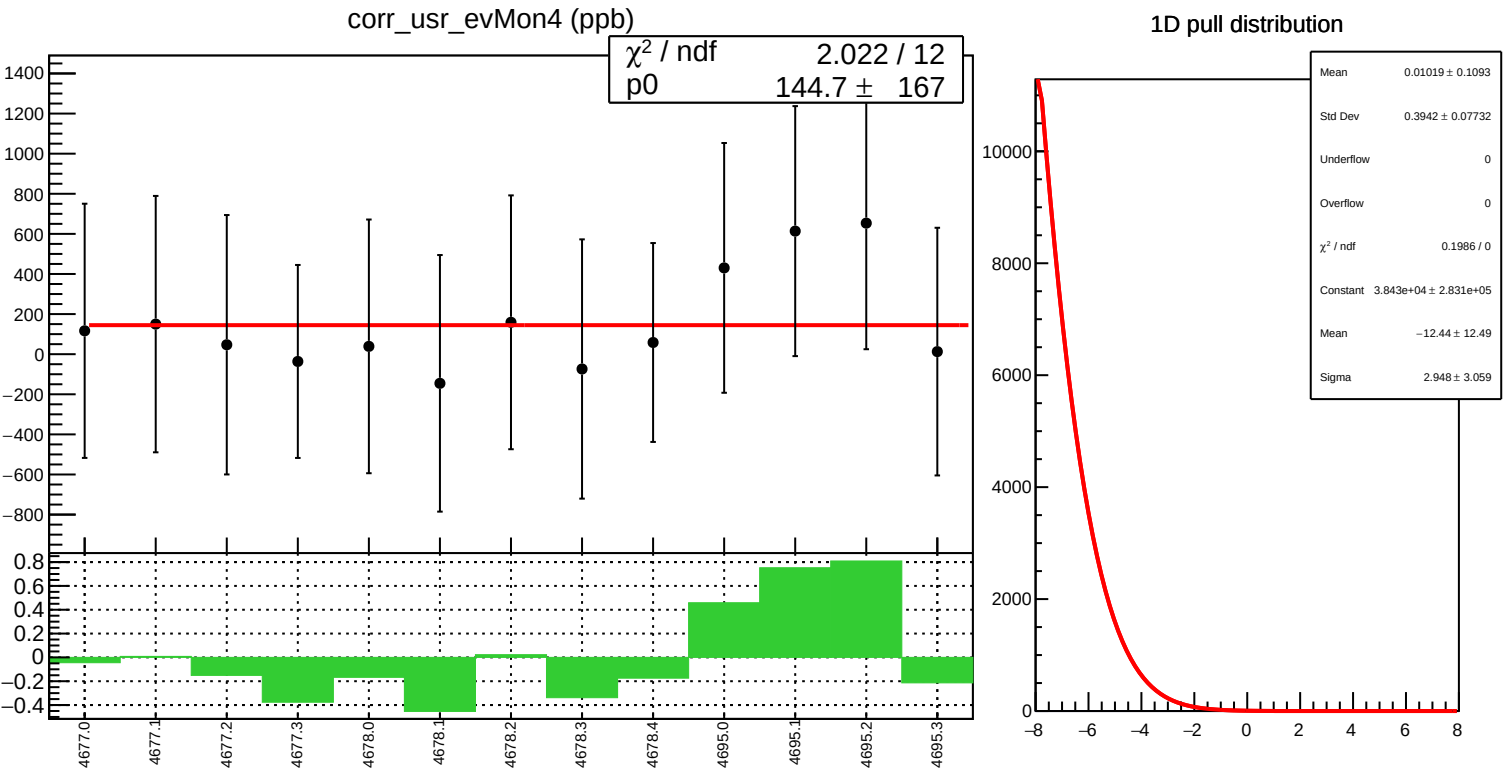

corr_usr_evMon1 RMS (ppm)
RMS (ppm)
100
98
96
94
92
90
88
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

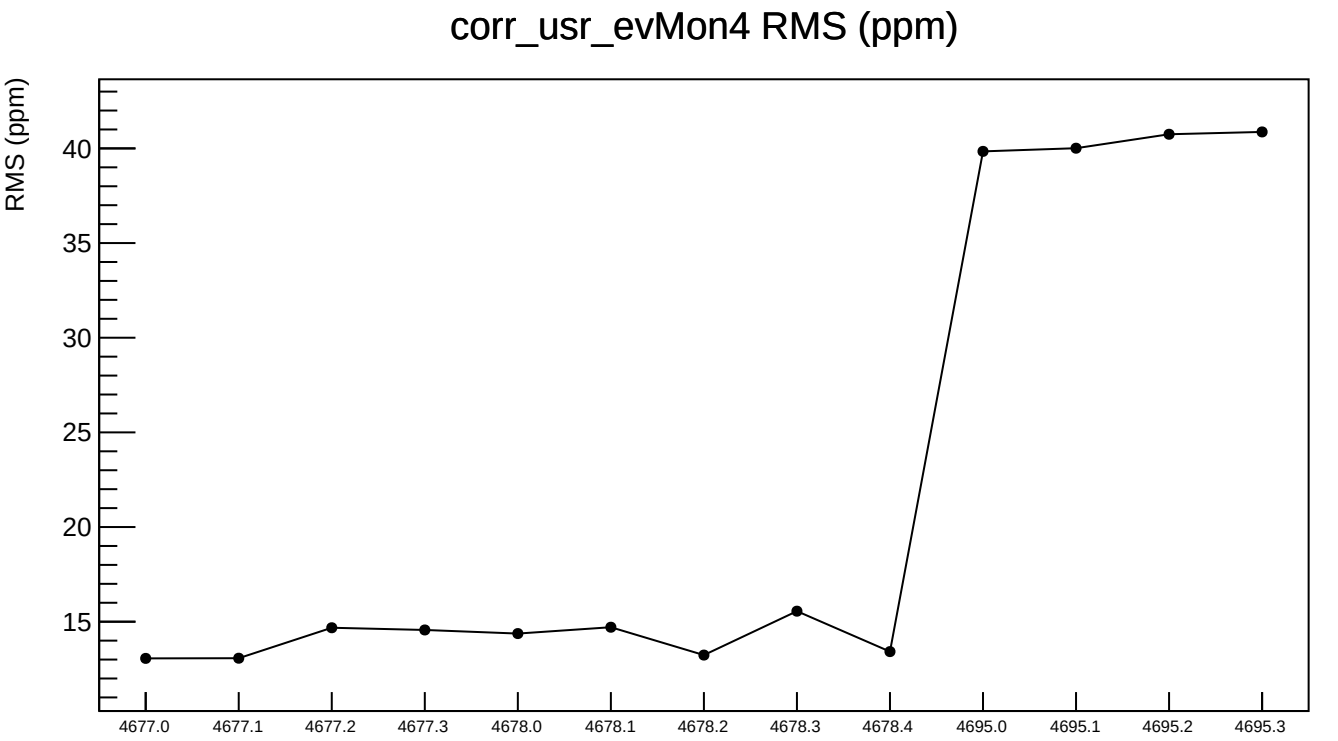

corr_usr_evMon2 (ppb)
χ² / ndf 9.897 / 12
p0 121.2 ± 715.2
8000
6000
4000
2000
0
-2000
-4000
-6000
1.5
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.007751 ± 0.242
Std Dev 0.8725 ± 0.1711
Underflow 0
Overflow 0
χ² / ndf 0.236 / 3
Constant 2.302 ± 0.987
Mean −0.1208 ± 1.6830
Sigma 2.279 ± 5.479
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

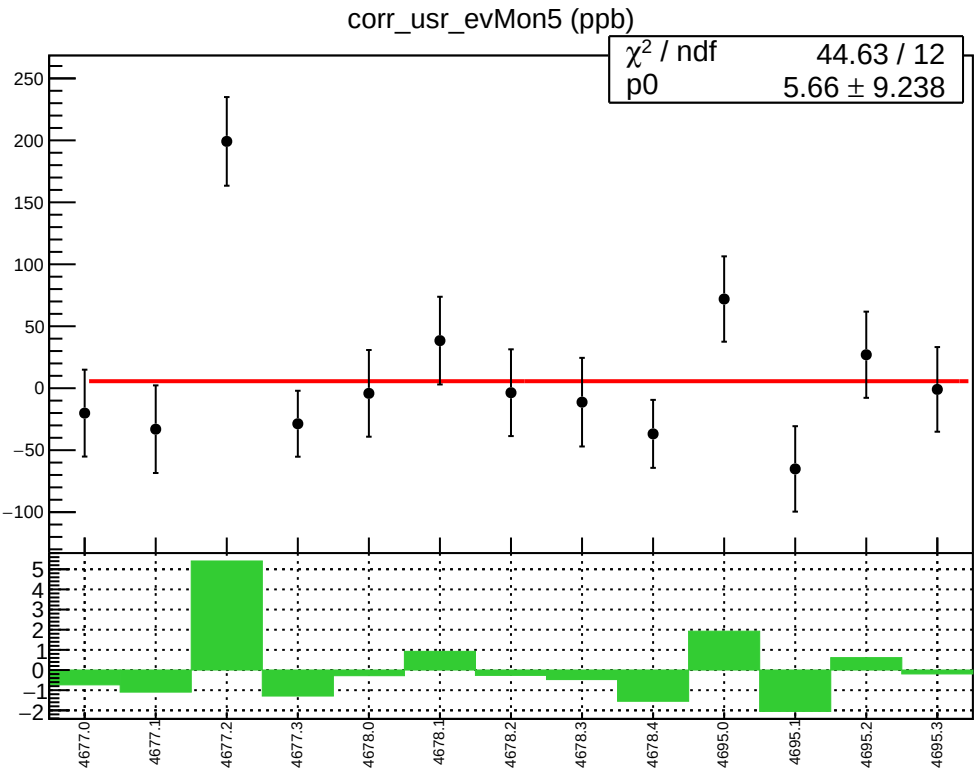

corr_usr_evMon2 RMS (ppm)
RMS (ppm)
360
340
320
300
280
260
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

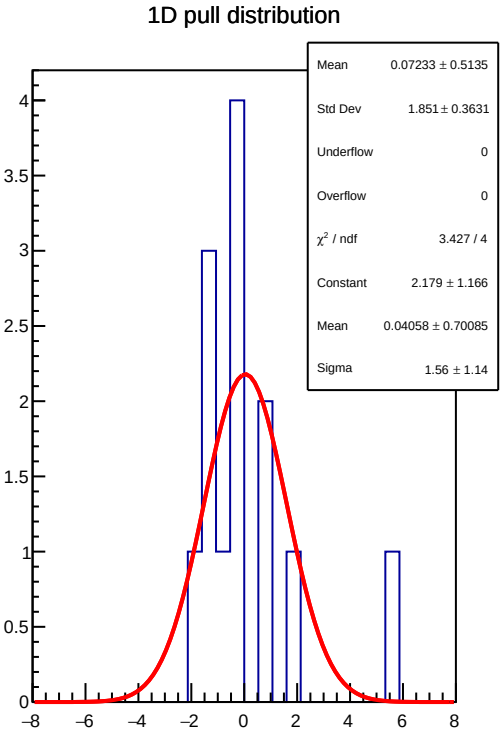

corr_usr_evMon3 (ppb)
χ² / ndf 8.168 / 12
p0 −43.98 ± 43.07
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.02928 ± 0.2197
Std Dev 0.7921 ± 0.1553
Underflow 0
Overflow 0
χ² / ndf 0.5152 / 3
Constant 3.97 ± 1.57
Mean −0.08883 ± 0.25834
Sigma 0.8407 ± 0.2597

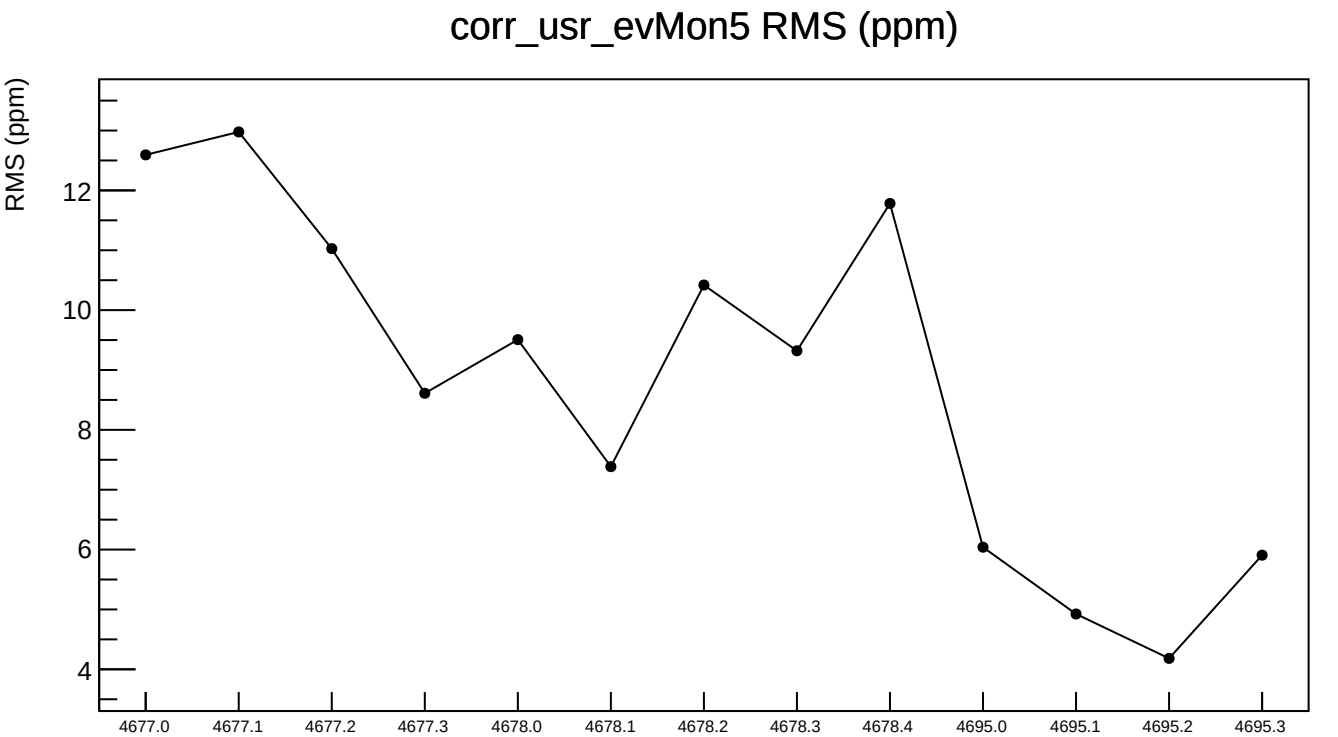

corr_usr_evMon3 RMS (ppm)
RMS (ppm)
18
16
14
12
10
8
6
4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

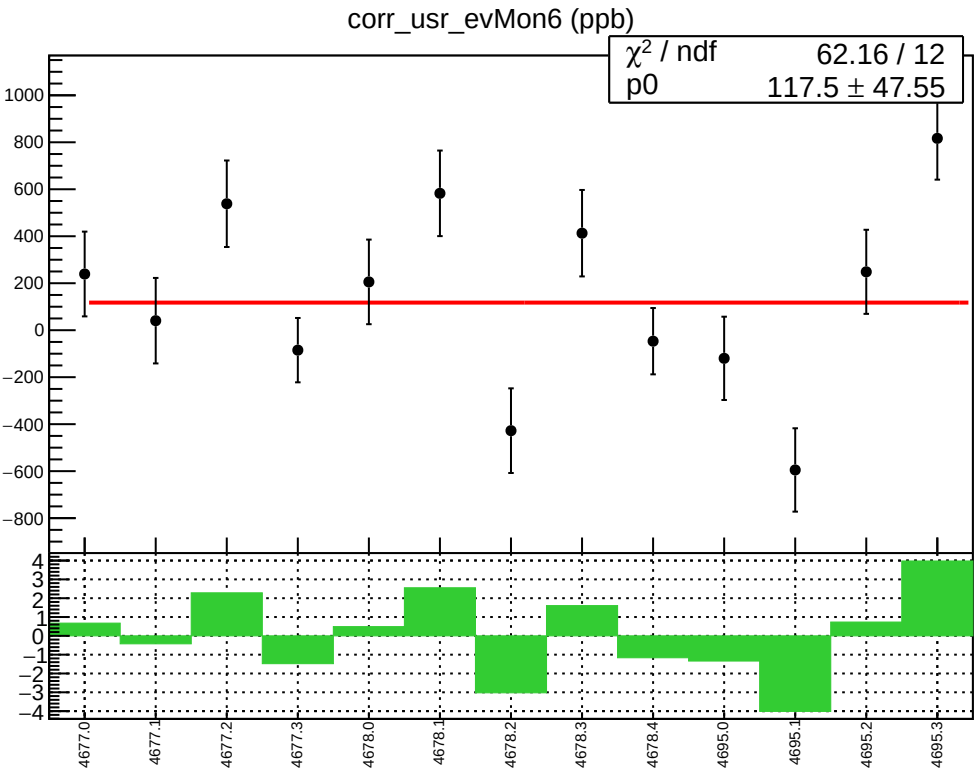

corr_usr_evMon4 (ppb)
χ² / ndf 2.022 / 12
p0 144.7 ± 167
1400
1200
1000
800
600
400
200
0
−200
−400
−600
−800
0.8
0.6
0.4
0.2
0
−0.2
−0.4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.01019 ± 0.1093
Std Dev 0.3942 ± 0.07732
Underflow 0
Overflow 0
χ² / ndf 0.1986 / 0
Constant 3.843e+04 ± 2.831e+05
Mean −12.44 ± 12.49
Sigma 2.948 ± 3.059
10000
8000
6000
4000
2000
0
−8
−6
−4
−2
0
2
4
6
8

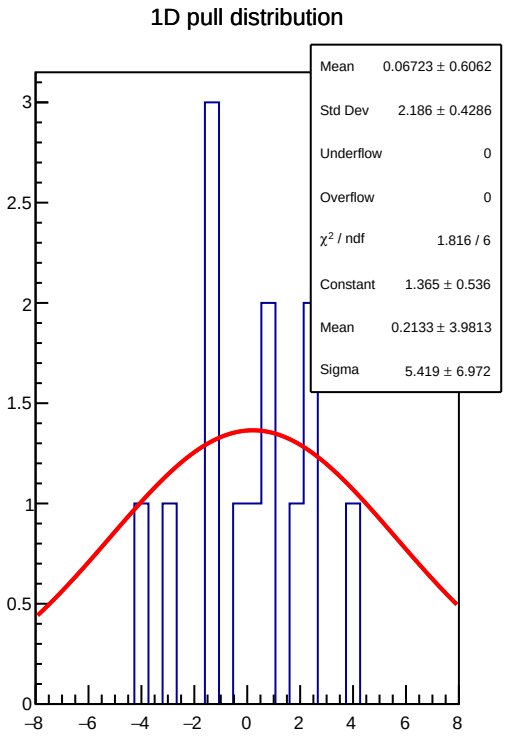

corr_usr_evMon4 RMS (ppm)
RMS (ppm)
40
35
30
25
20
15
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

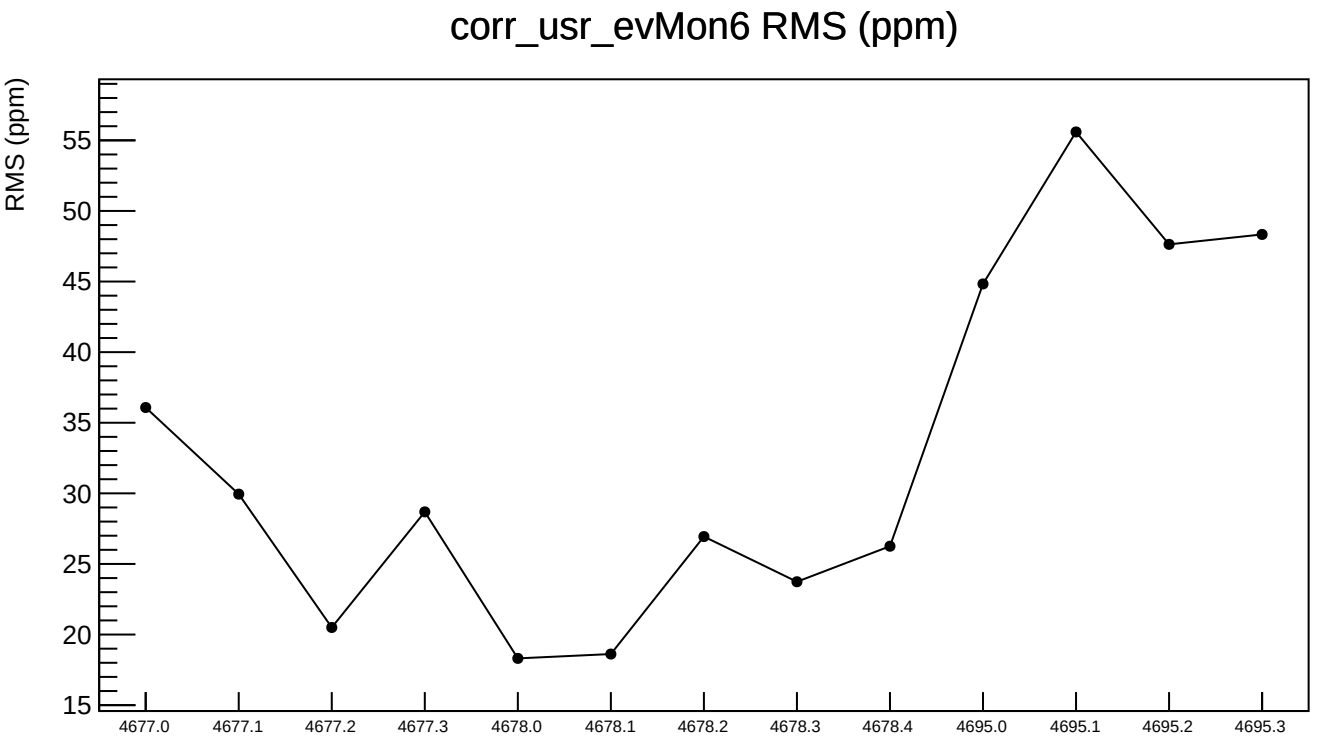

corr_usr_evMon5 (ppb)
χ² / ndf 44.63 / 12
p0 5.66 ± 9.238
250
200
150
100
50
0
−50
−100
5
4
3
2
1
0
−1
−2
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

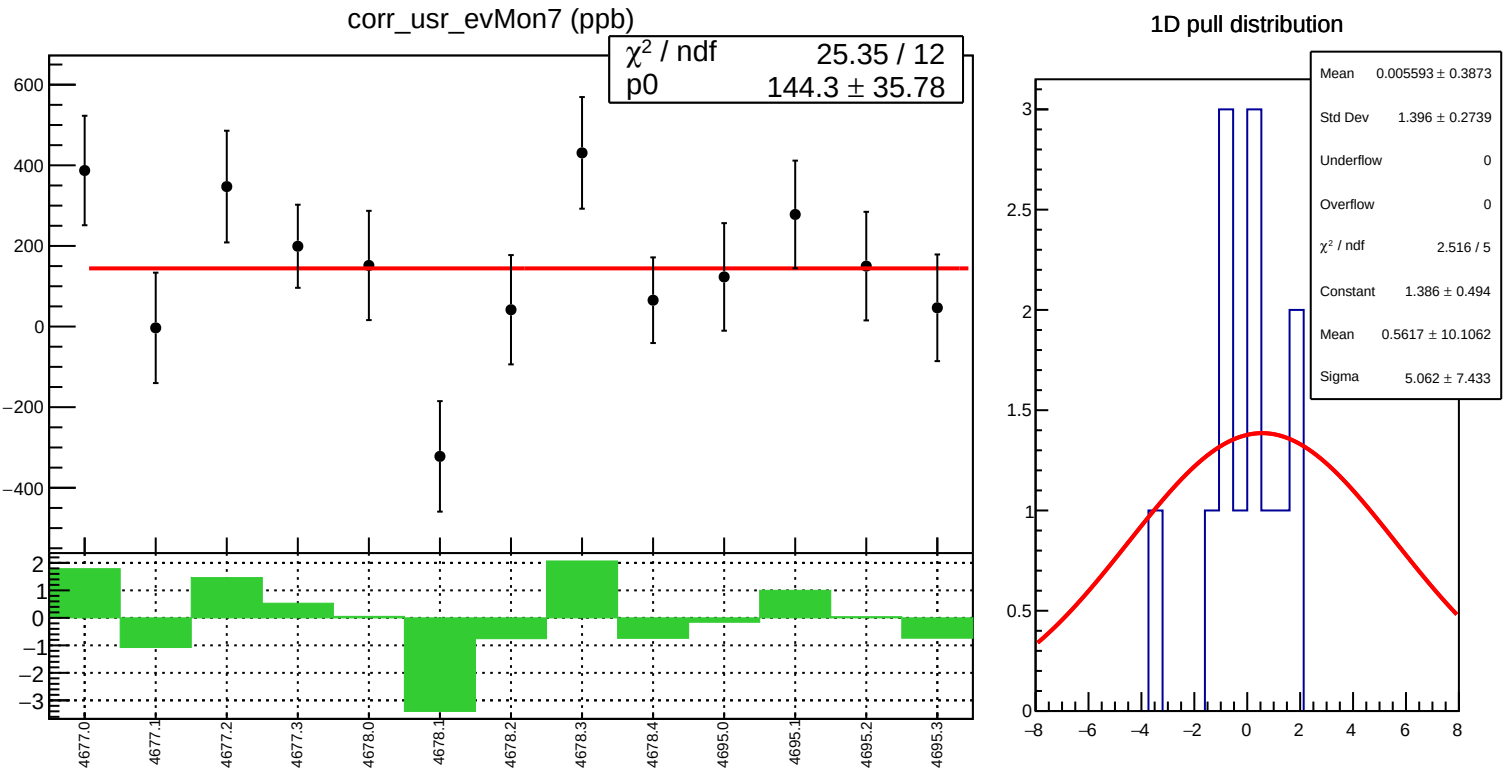

1D pull distribution
Mean 0.07233 ± 0.5135
Std Dev 1.851 ± 0.3631
Underflow 0
Overflow 0
χ² / ndf 3.427 / 4
Constant 2.179 ± 1.166
Mean 0.04058 ± 0.70085
Sigma 1.56 ± 1.14
4
3.5
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

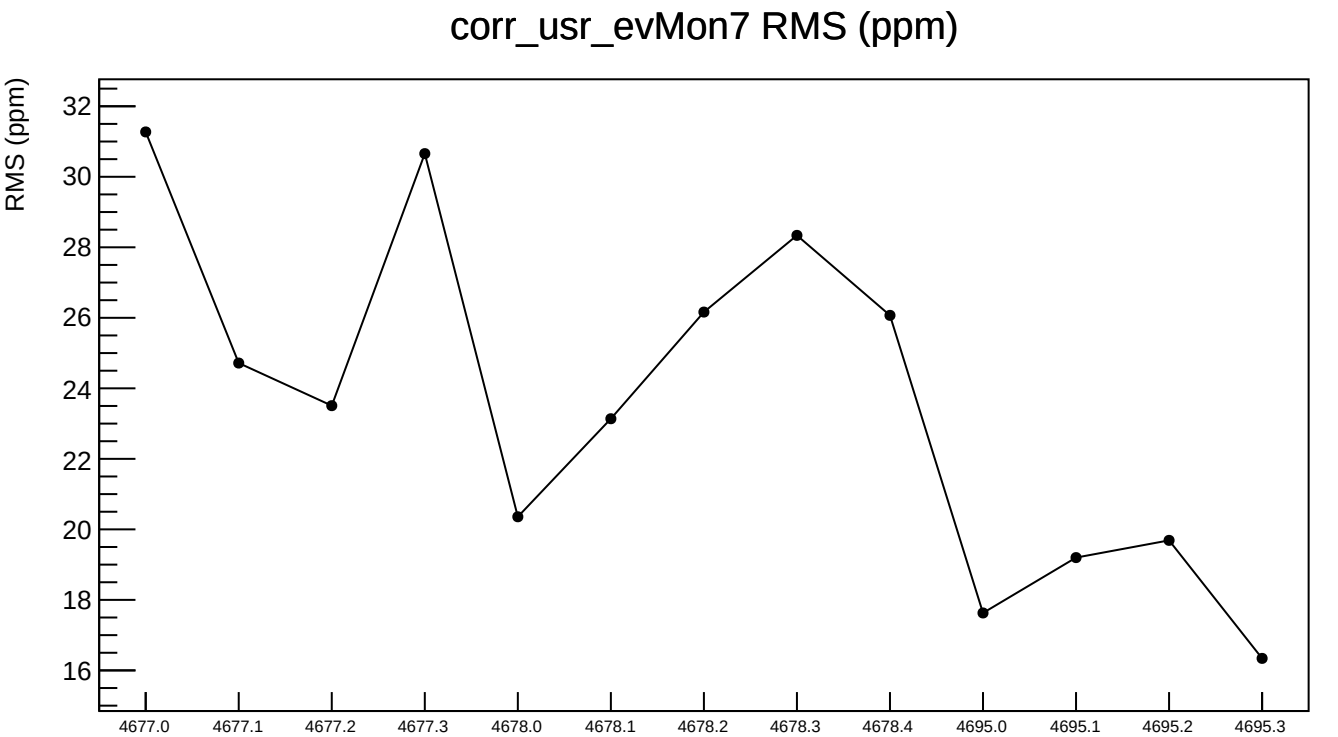

corr_usr_evMon5 RMS (ppm)
RMS (ppm)
12
10
8
6
4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

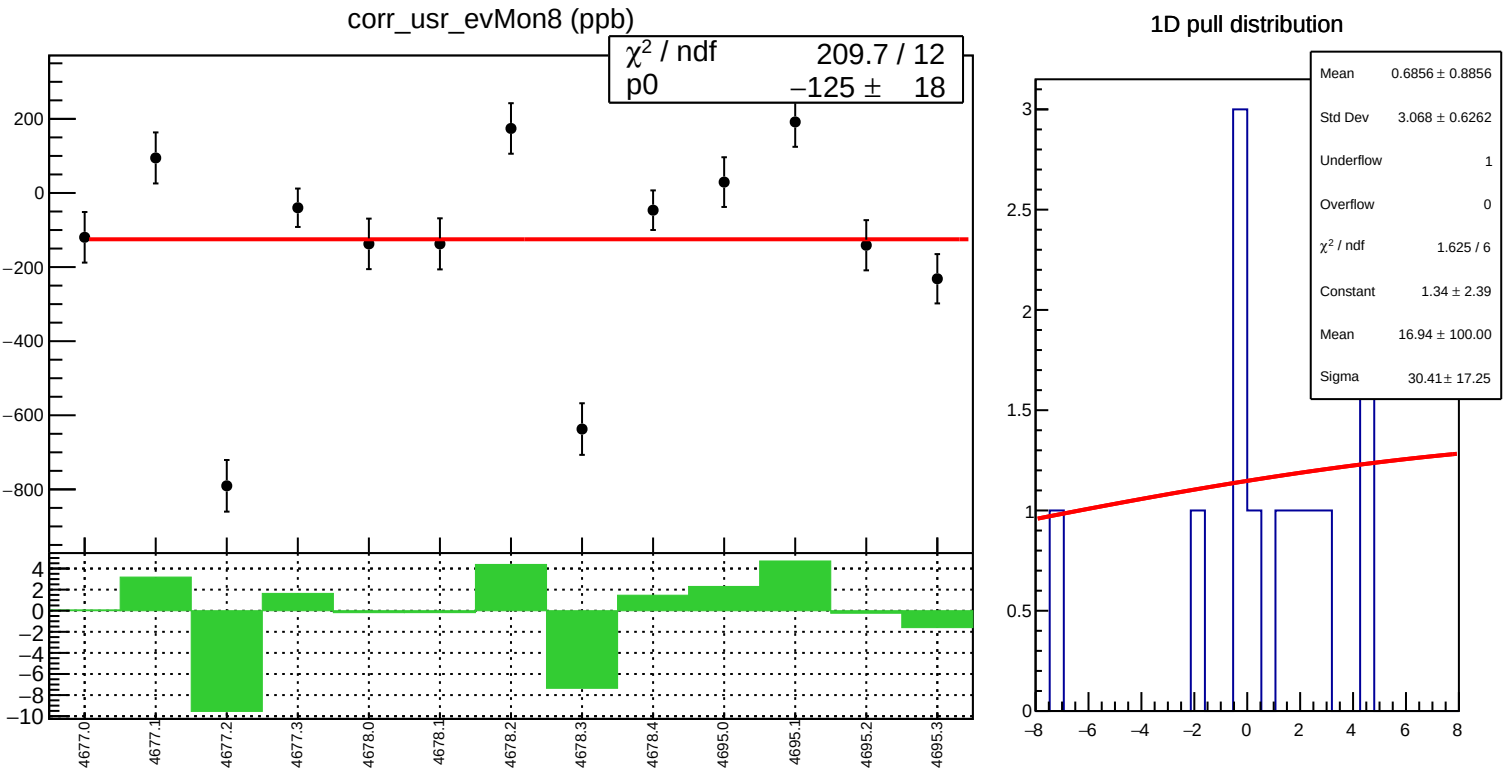

corr_usr_evMon6 (ppb)
χ² / ndf 62.16 / 12
p0 117.5 ± 47.55
1000
800
600
400
200
0
−200
−400
−600
−800
4
3
2
1
0
−1
−2
−3
−4
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


1D pull distribution
Mean 0.06723 ± 0.6062
Std Dev 2.186 ± 0.4286
Underflow 0
Overflow 0
χ² / ndf 1.816 / 6
Constant 1.365 ± 0.536
Mean 0.2133 ± 3.9813
Sigma 5.419 ± 6.972
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

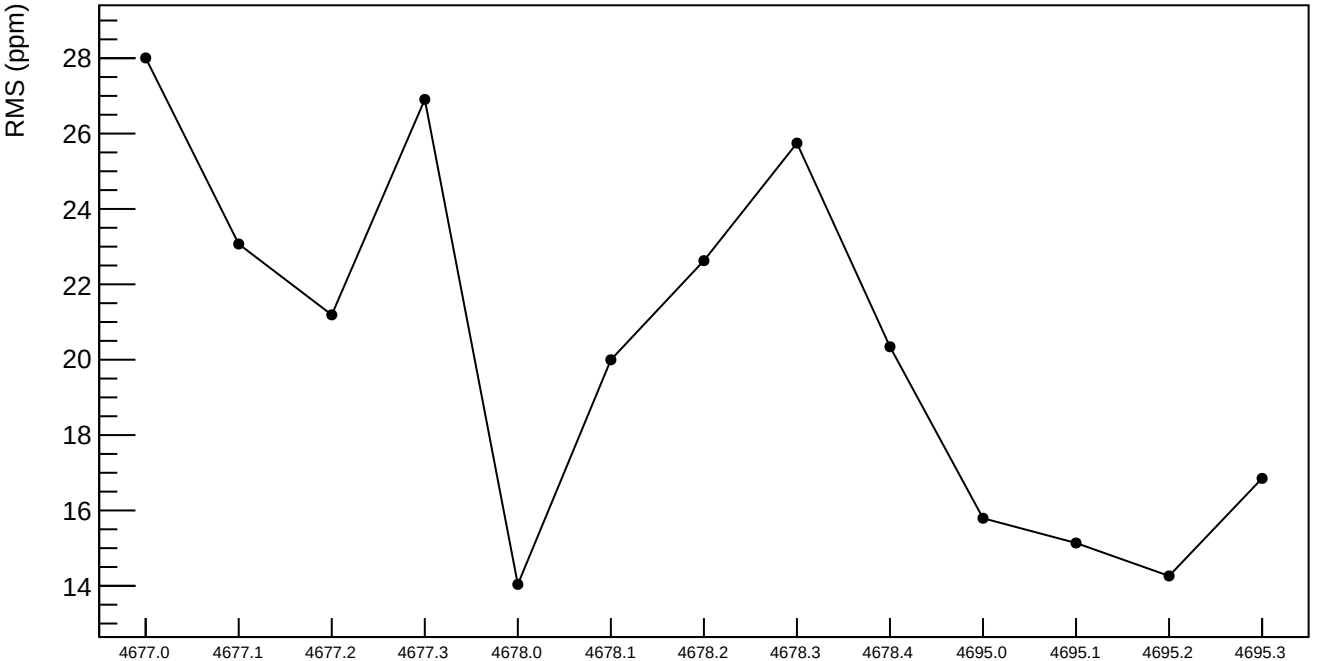

corr_usr_evMon6 RMS (ppm)
RMS (ppm)
55
50
45
40
35
30
25
20
15
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

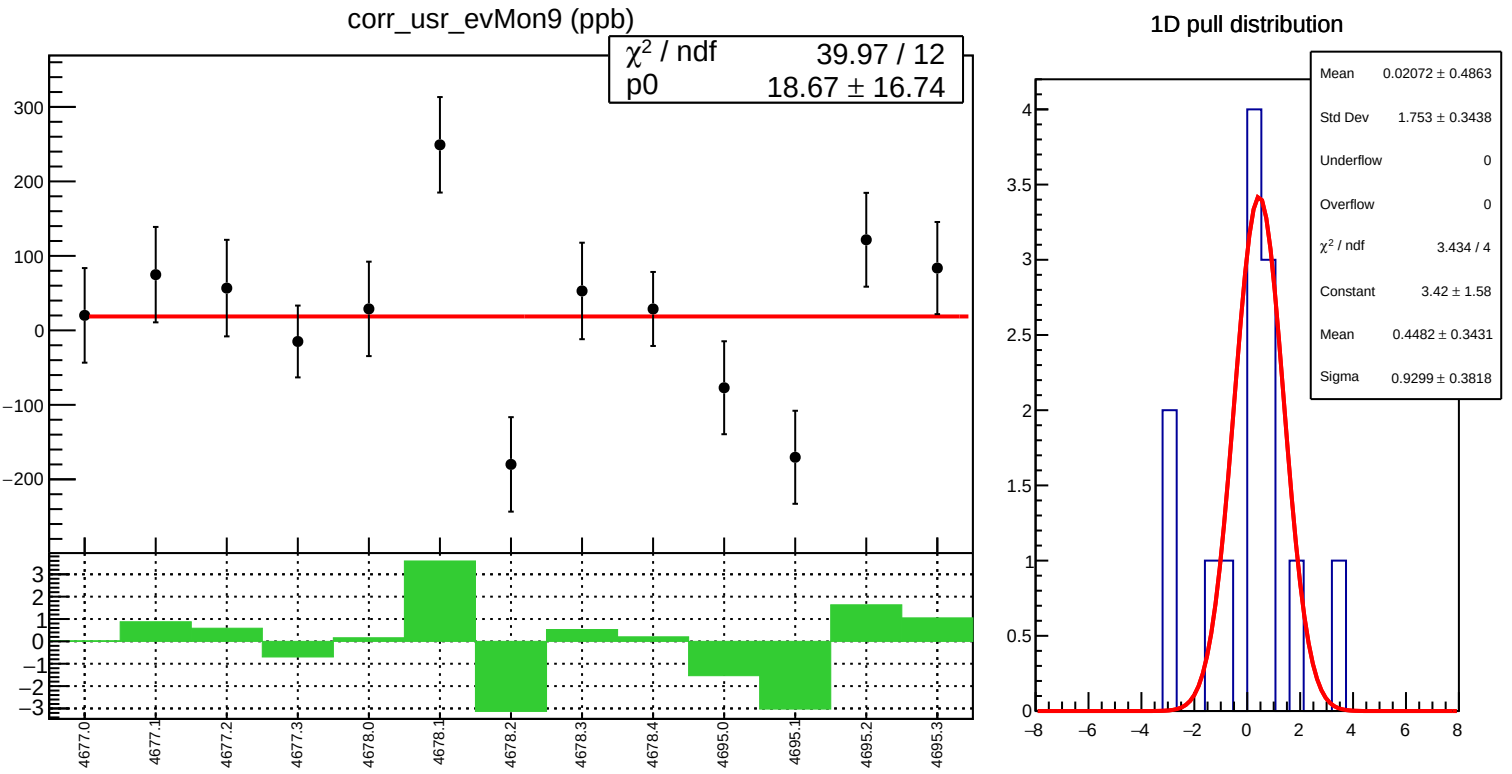

corr_usr_evMon7 (ppb)
χ² / ndf 25.35 / 12
p0 144.3 ± 35.78
600
400
200
0
−200
−400
2
1
0
−1
−2
−3
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.005593 ± 0.3873
Std Dev 1.396 ± 0.2739
Underflow 0
Overflow 0
χ² / ndf 2.516 / 5
Constant 1.386 ± 0.494
Mean 0.5617 ± 10.1062
Sigma 5.062 ± 7.433
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

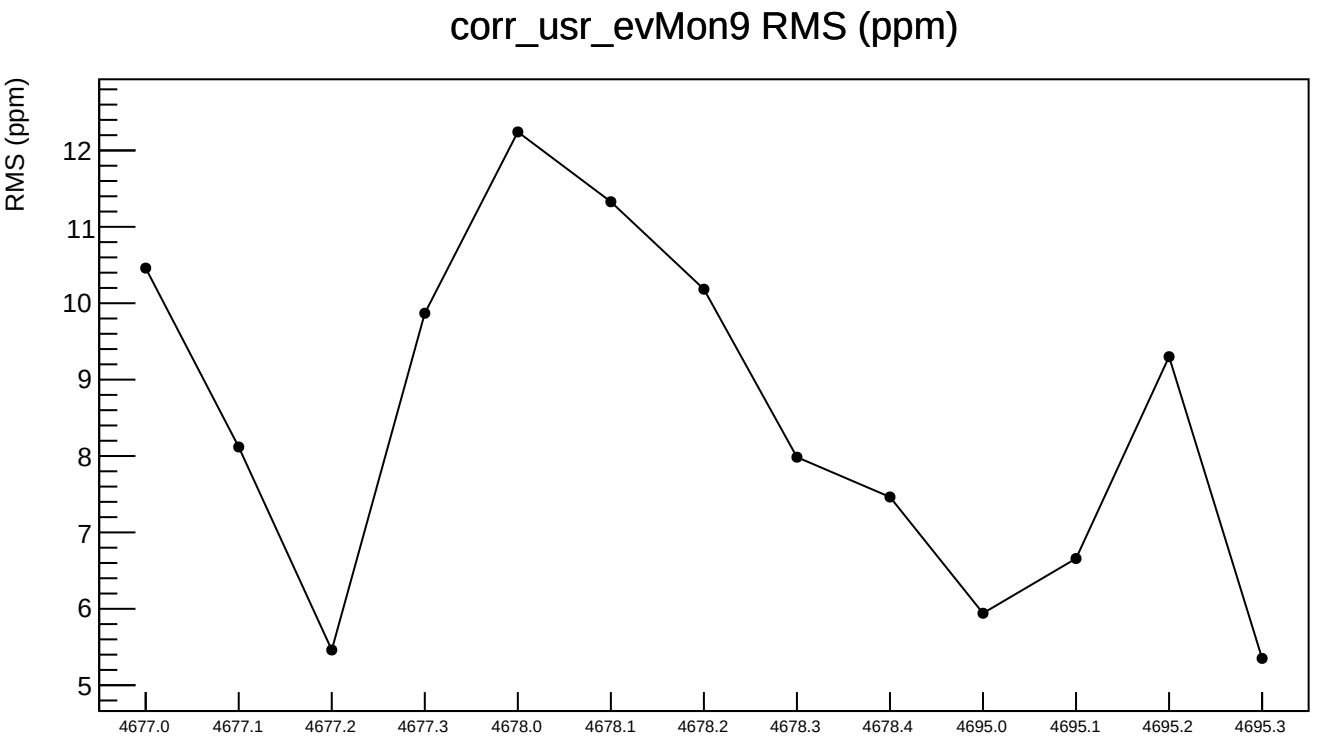

corr_usr_evMon7 RMS (ppm)
RMS (ppm)
32
30
28
26
24
22
20
18
16
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3

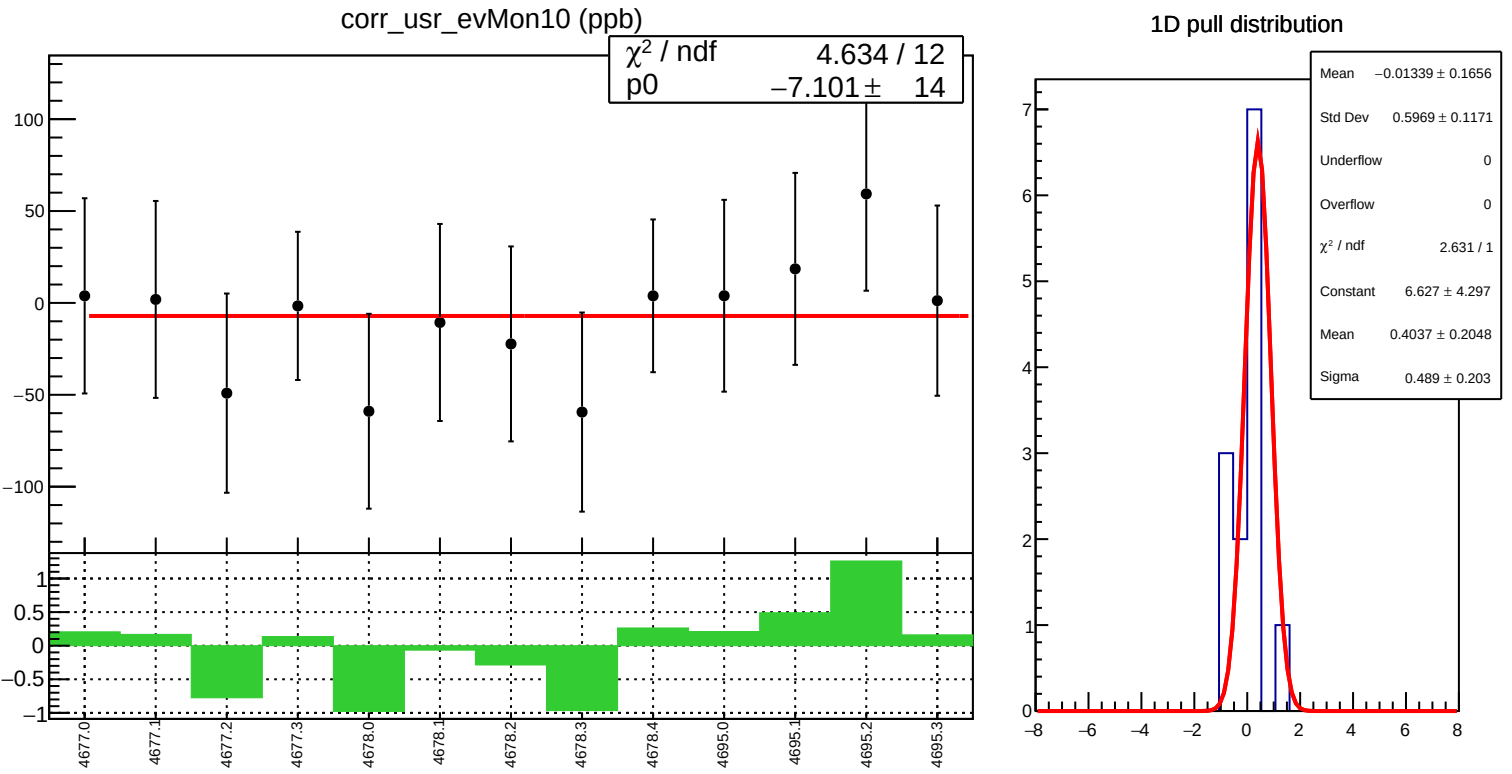

corr_usr_evMon8 (ppb)
χ² / ndf 209.7 / 12
p0 −125 ± 18
200
0
−200
−400
−600
−800
4
2
0
−2
−4
−6
−8
−10
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.6856 ± 0.8856
Std Dev 3.068 ± 0.6262
Underflow 1
Overflow 0
χ² / ndf 1.625 / 6
Constant 1.34 ± 2.39
Mean 16.94 ± 100.00
Sigma 30.41± 17.25
3
2.5
2
1.5
1
0.5
0
−8
−6
−4
−2
0
2
4
6
8

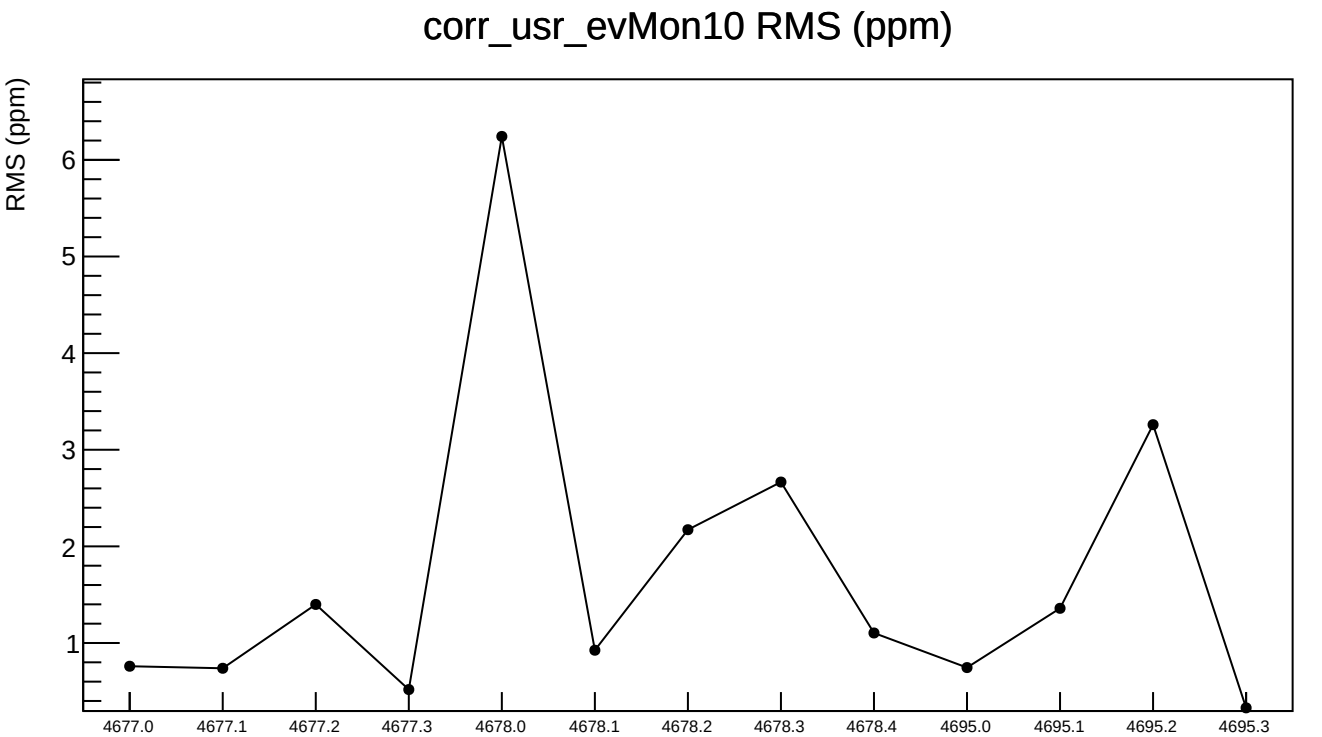
corr_usr_evMon8 RMS (ppm)

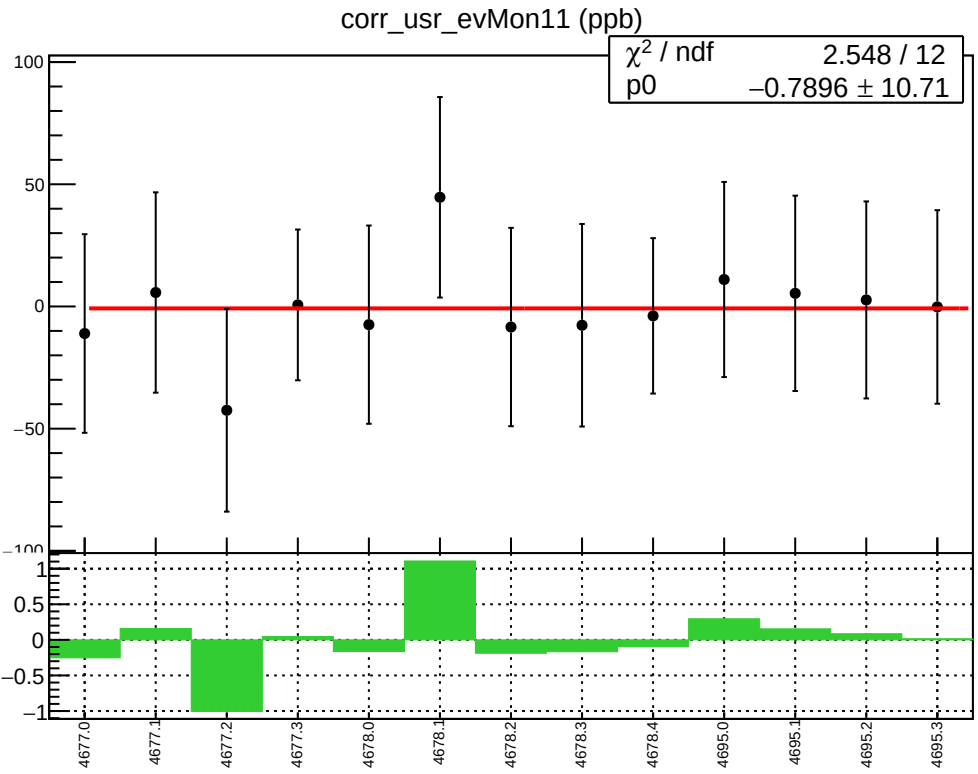


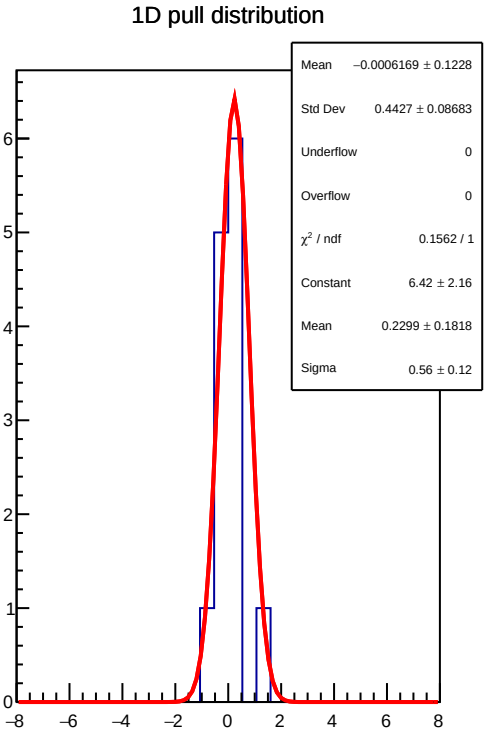

corr_usr_evMon9 (ppb)
χ² / ndf 39.97 / 12
p0 18.67 ± 16.74
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean 0.02072 ± 0.4863
Std Dev 1.753 ± 0.3438
Underflow 0
Overflow 0
χ² / ndf 3.434 / 4
Constant 3.42 ± 1.58
Mean 0.4482 ± 0.3431
Sigma 0.9299 ± 0.3818

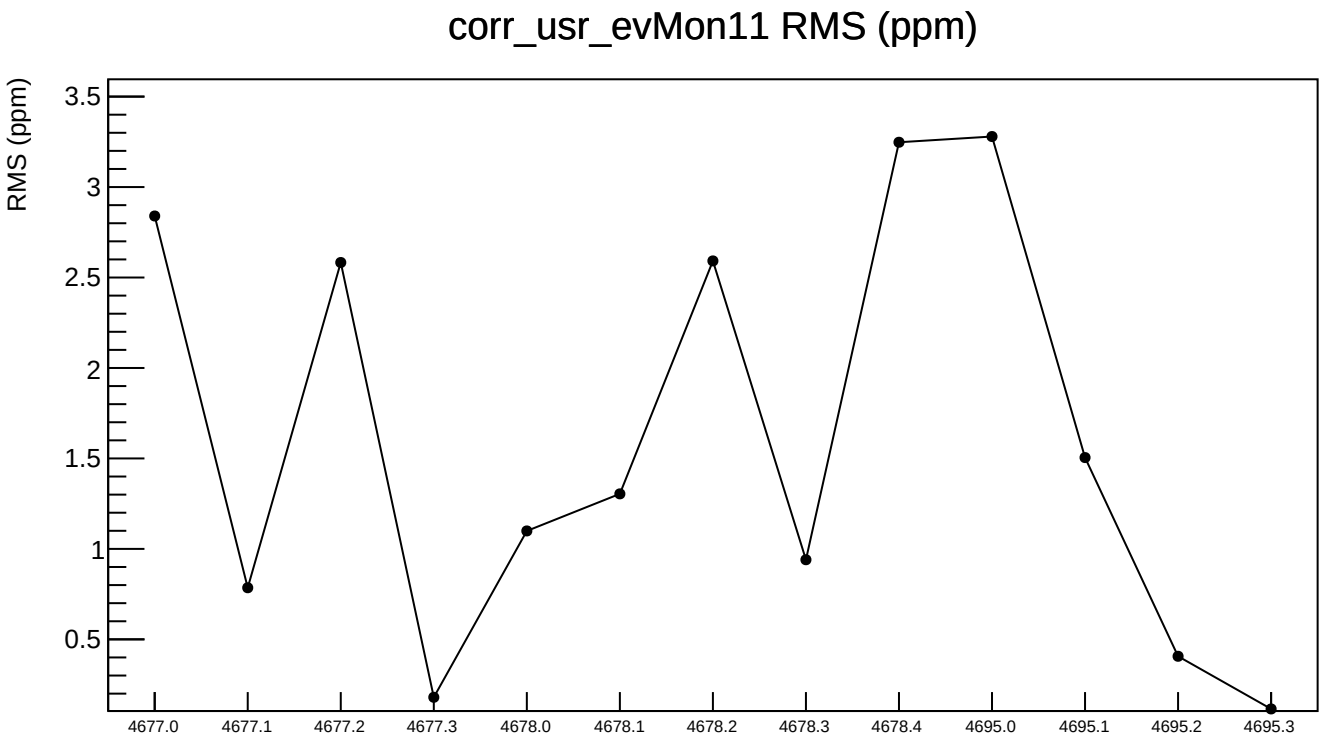

corr_usr_evMon9 RMS (ppm)
RMS (ppm)
12
11
10
9
8
7
6
5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


corr_usr_evMon10 (ppb)
χ² / ndf 4.634 / 12
p0 −7.101 ± 14
100
50
0
−50
−100
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3
1D pull distribution
Mean −0.01339 ± 0.1656
Std Dev 0.5969 ± 0.1171
Underflow 0
Overflow 0
χ² / ndf 2.631 / 1
Constant 6.627 ± 4.297
Mean 0.4037 ± 0.2048
Sigma 0.489 ± 0.203
7
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8


corr_usr_evMon10 RMS (ppm)
RMS (ppm)
1
2
3
4
5
6
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


corr_usr_evMon11 (ppb)
χ² / ndf 2.548 / 12
p0 −0.7896 ± 10.71
100
50
0
−50
−100
1
0.5
0
−0.5
−1
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3


1D pull distribution
Mean −0.0006169 ± 0.1228
Std Dev 0.4427 ± 0.08683
Underflow 0
Overflow 0
χ² / ndf 0.1562 / 1
Constant 6.42 ± 2.16
Mean 0.2299 ± 0.1818
Sigma 0.56 ± 0.12
6
5
4
3
2
1
0
−8
−6
−4
−2
0
2
4
6
8


corr_usr_evMon11 RMS (ppm)
RMS (ppm)
3.5
3
2.5
2
1.5
1
0.5
4677.0
4677.1
4677.2
4677.3
4678.0
4678.1
4678.2
4678.3
4678.4
4695.0
4695.1
4695.2
4695.3