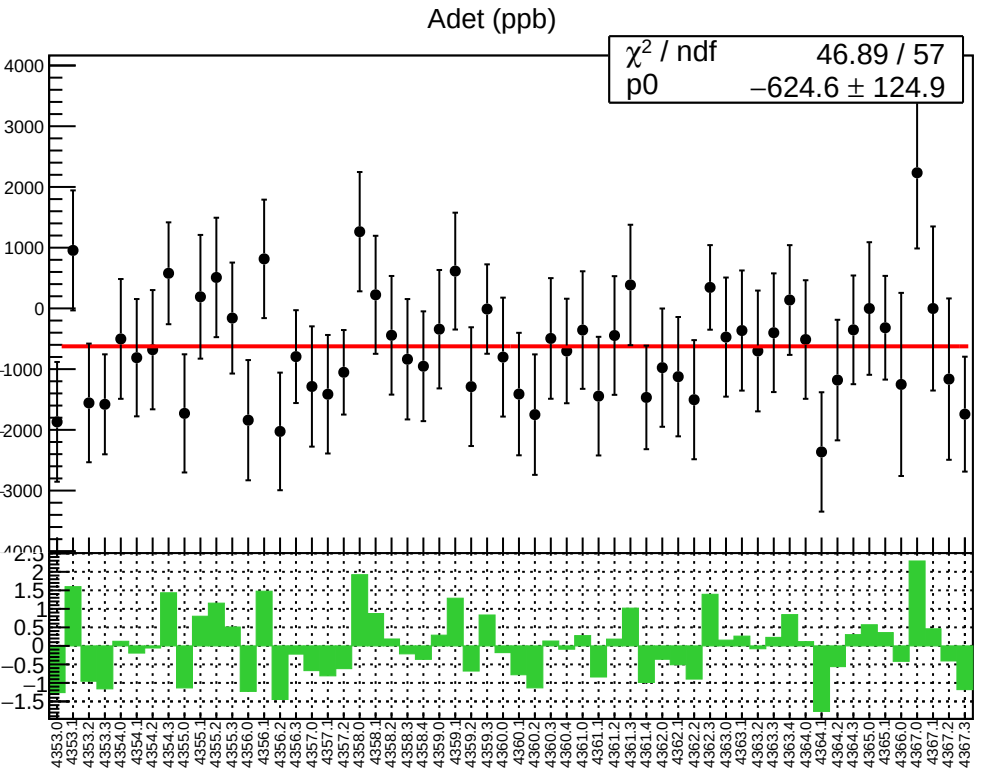
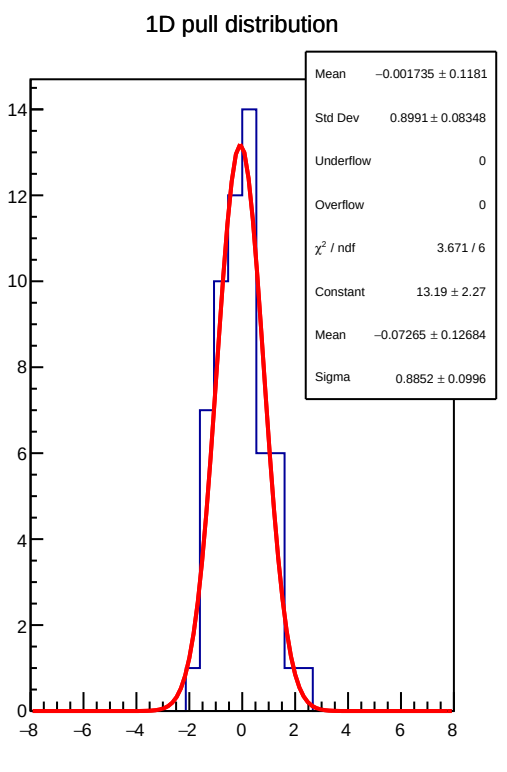
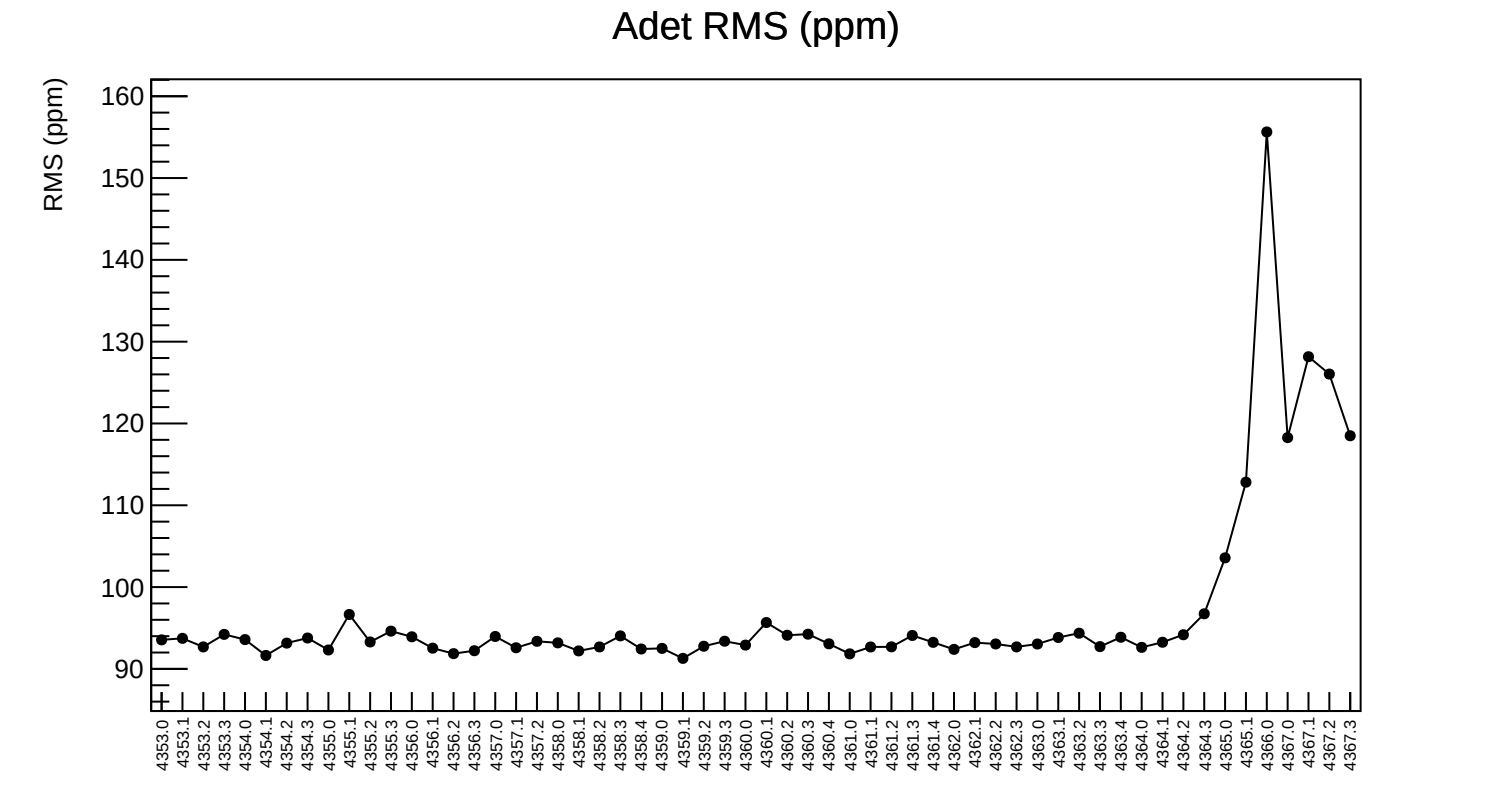

Adet (ppb)
χ² / ndf 46.89 / 57
p0 −624.6 ± 124.9
4000
3000
2000
1000
0
-1000
-2000
-3000
2
1.5
1
0.5
0
−0.5
−1
−1.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean −0.001735 ± 0.1181
Std Dev 0.8991 ± 0.08348
Underflow 0
Overflow 0
χ² / ndf 3.671 / 6
Constant 13.19 ± 2.27
Mean −0.07265 ± 0.12684
Sigma 0.8852 ± 0.0996
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


Adet RMS (ppm)
RMS (ppm)
160
150
140
130
120
110
100
90
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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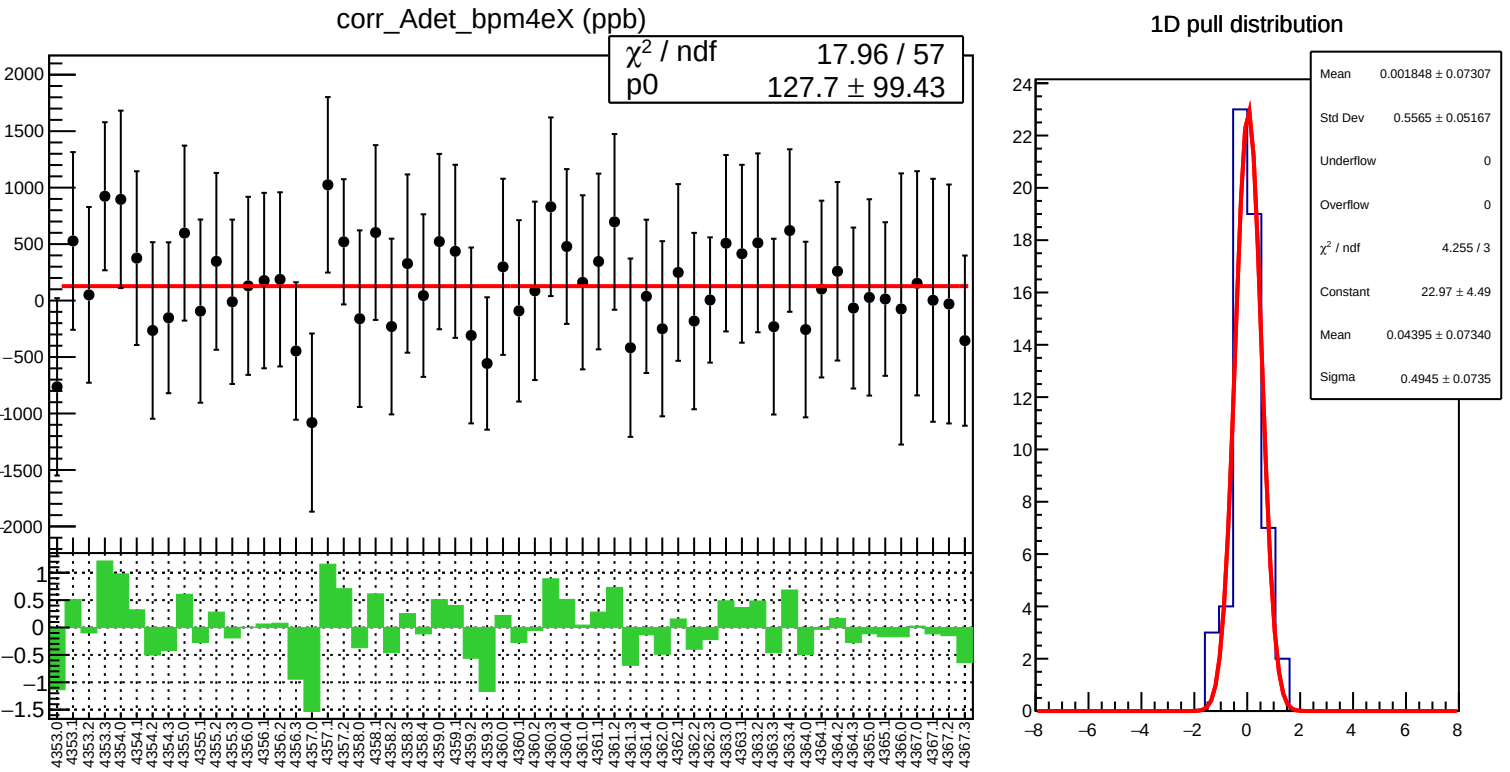
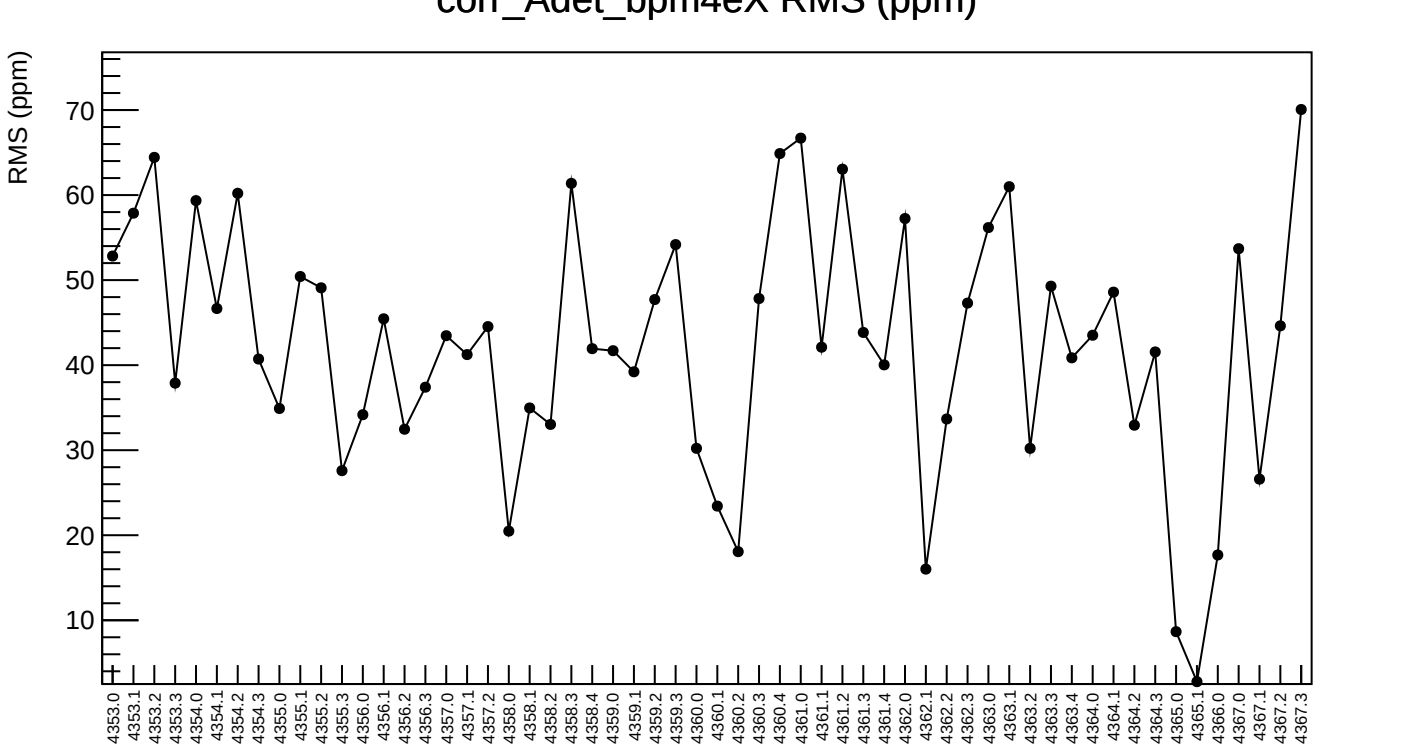
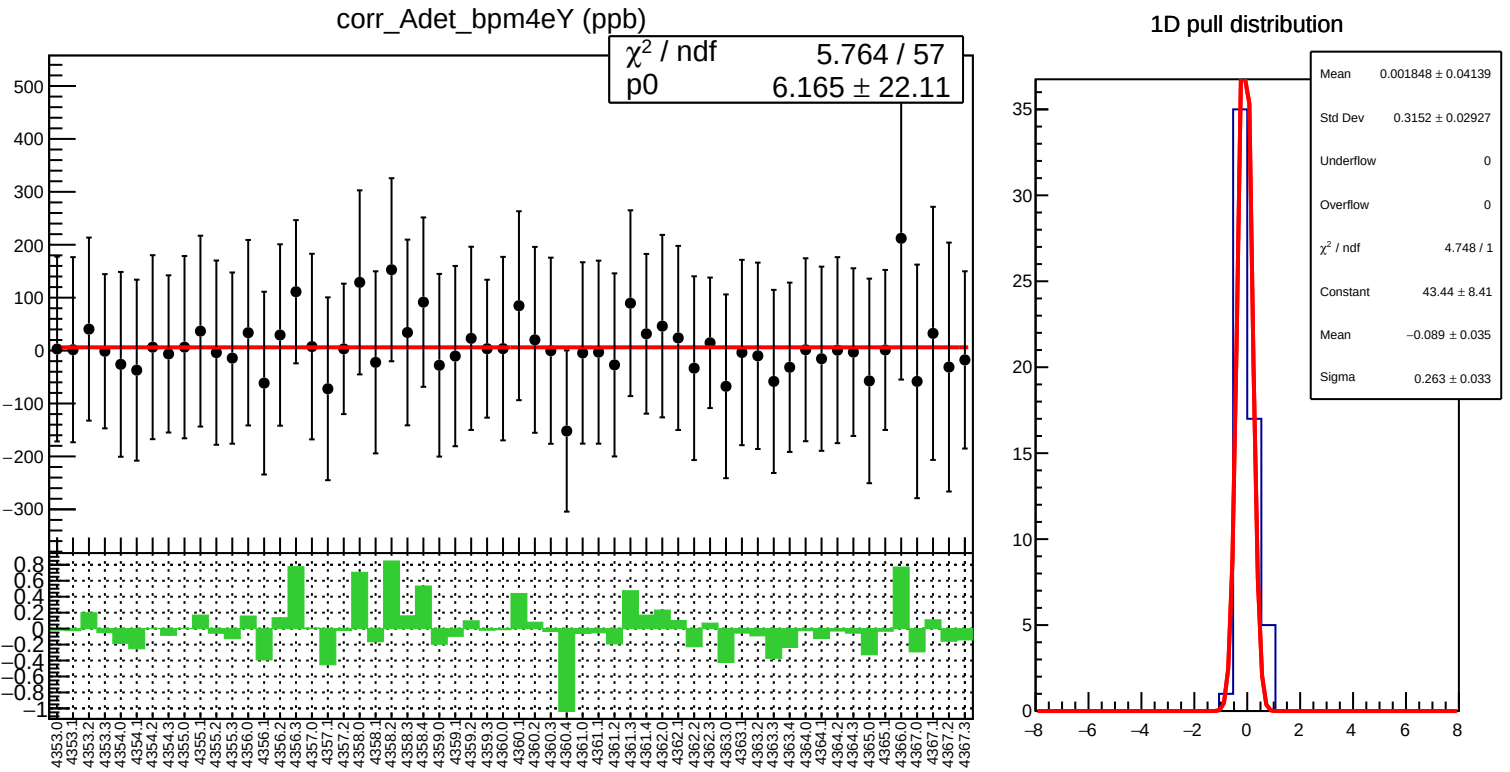
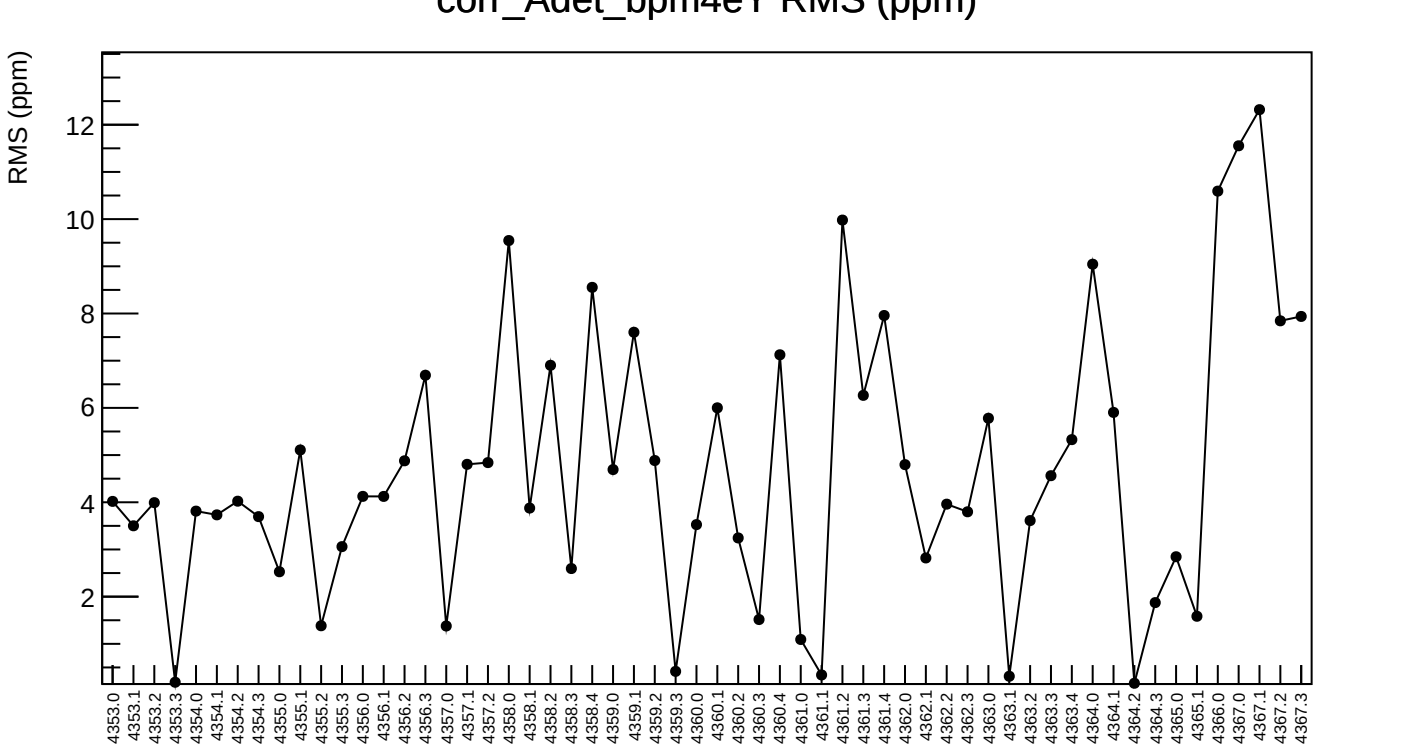
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm4eX (ppb)
χ² / ndf 17.96 / 57
p0 127.7 ± 99.43
1D pull distribution
Mean 0.001848 ± 0.07307
Std Dev 0.5565 ± 0.05167
Underflow 0
Overflow 0
χ² / ndf 4.255 / 3
Constant 22.97 ± 4.49
Mean 0.04395 ± 0.07340
Sigma 0.4945 ± 0.0735


corr_Adet_bpm4eX RMS (ppm)
RMS (ppm)
70
60
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm4eY (ppb)
χ² / ndf 5.764 / 57
p0 6.165 ± 22.11
1D pull distribution
Mean 0.001848 ± 0.04139
Std Dev 0.3152 ± 0.02927
Underflow 0
Overflow 0
χ² / ndf 4.748 / 1
Constant 43.44 ± 8.41
Mean −0.089 ± 0.035
Sigma 0.263 ± 0.033


corr_Adet_bpm4eY RMS (ppm)
RMS (ppm)
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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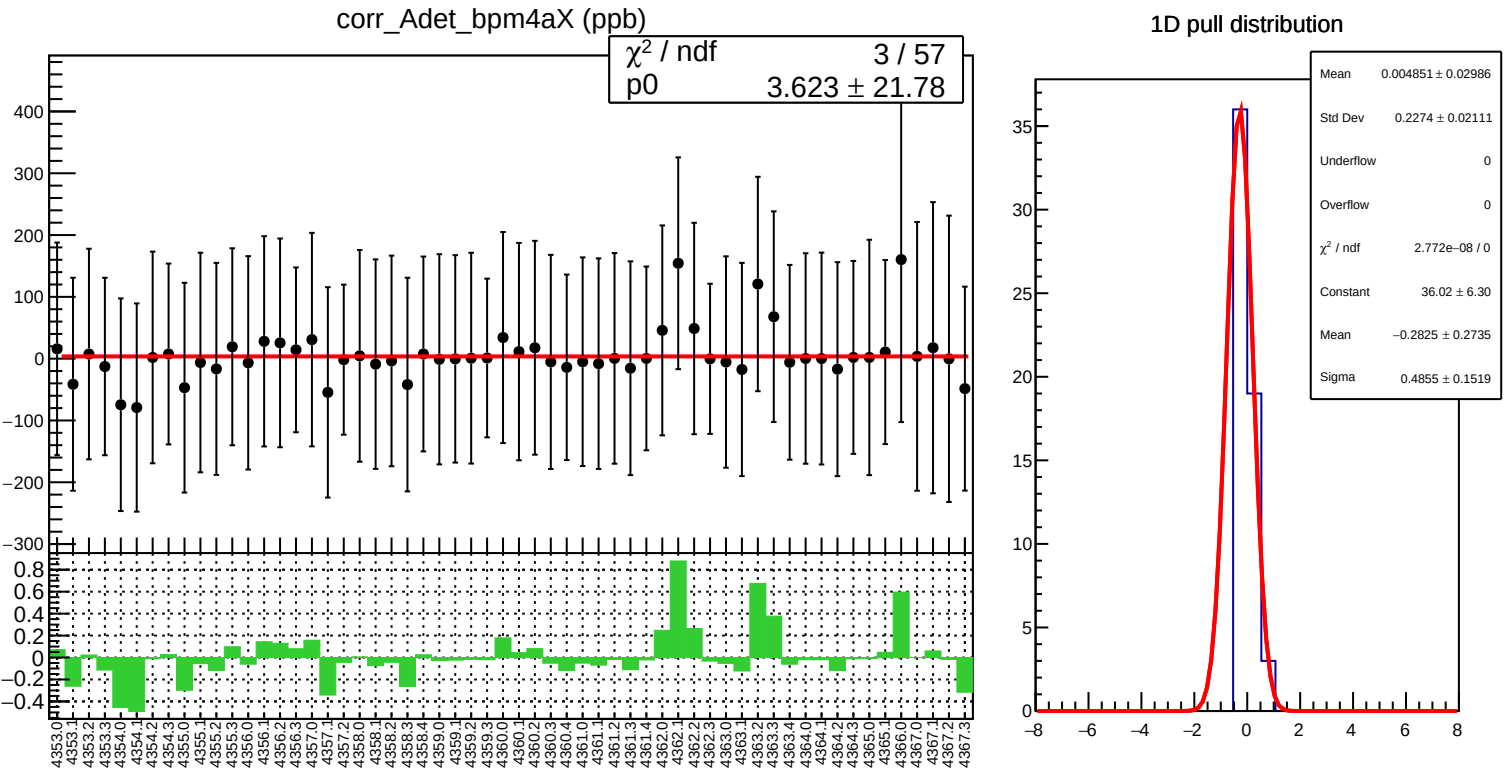
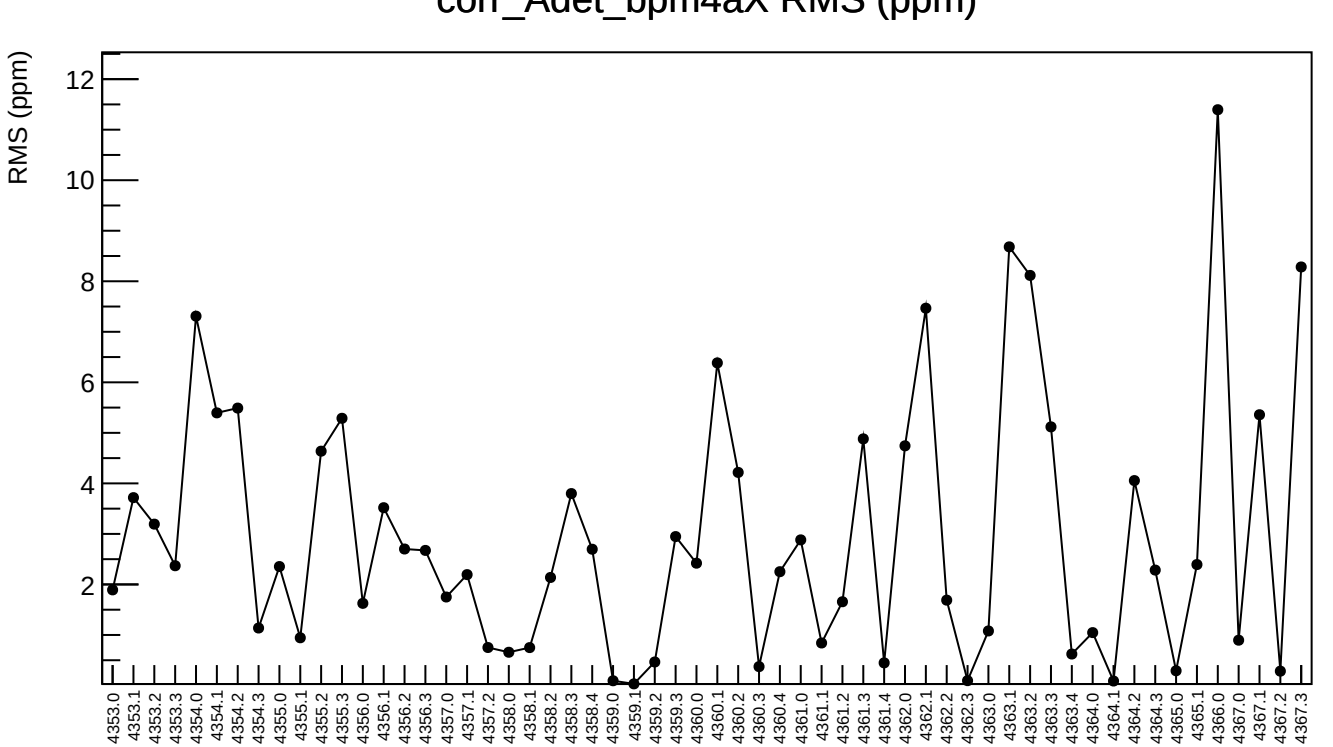
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm4aX (ppb)
χ² / ndf 3 / 57
p0 3.623 ± 21.78
1D pull distribution
Mean 0.004851 ± 0.02986
Std Dev 0.2274 ± 0.02111
Underflow 0
Overflow 0
χ² / ndf 2.772e−08 / 0
Constant 36.02 ± 6.30
Mean −0.2825 ± 0.2735
Sigma 0.4855 ± 0.1519


corr_Adet_bpm4aX RMS (ppm)
RMS (ppm)
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
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4362.3
4363.0
4363.1
4363.2
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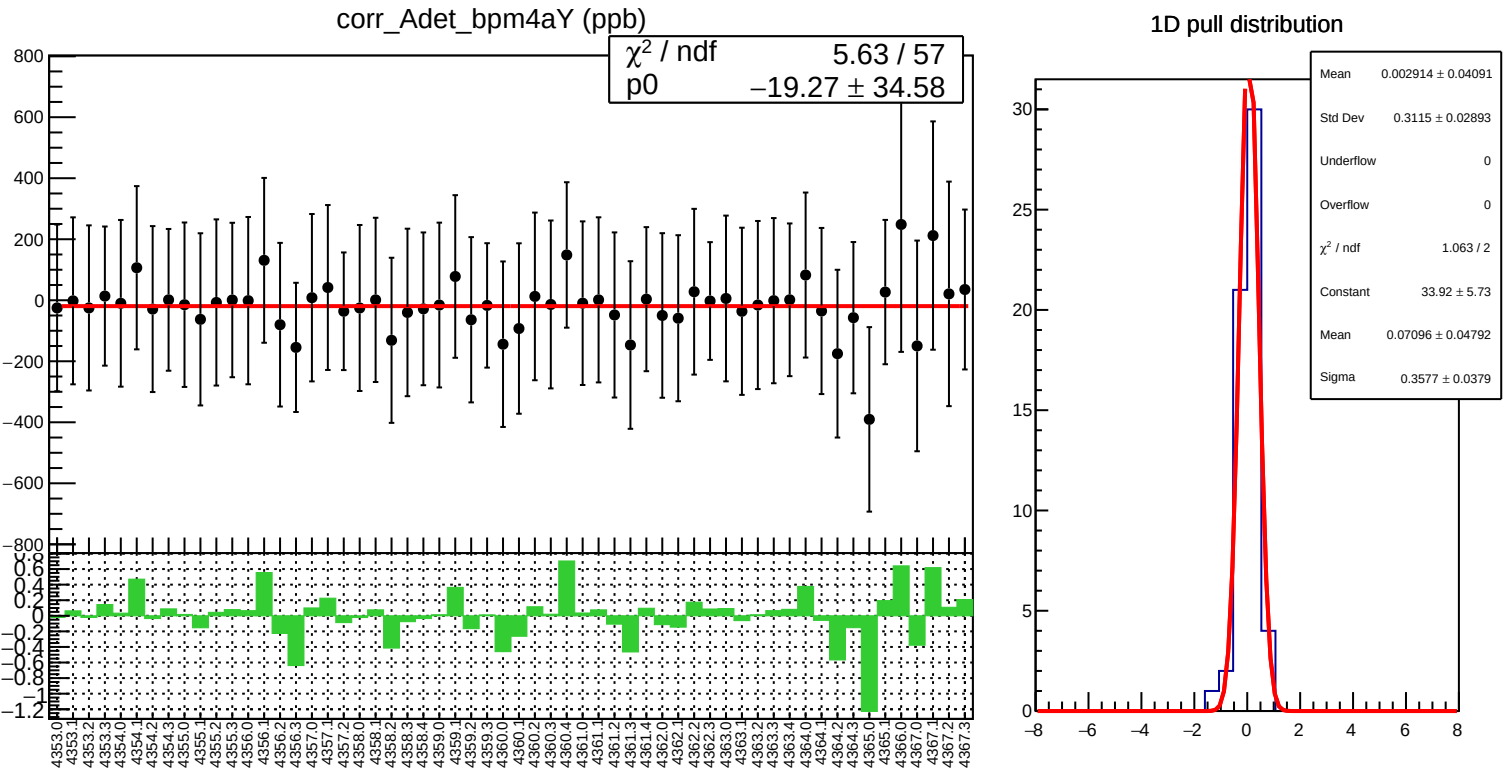
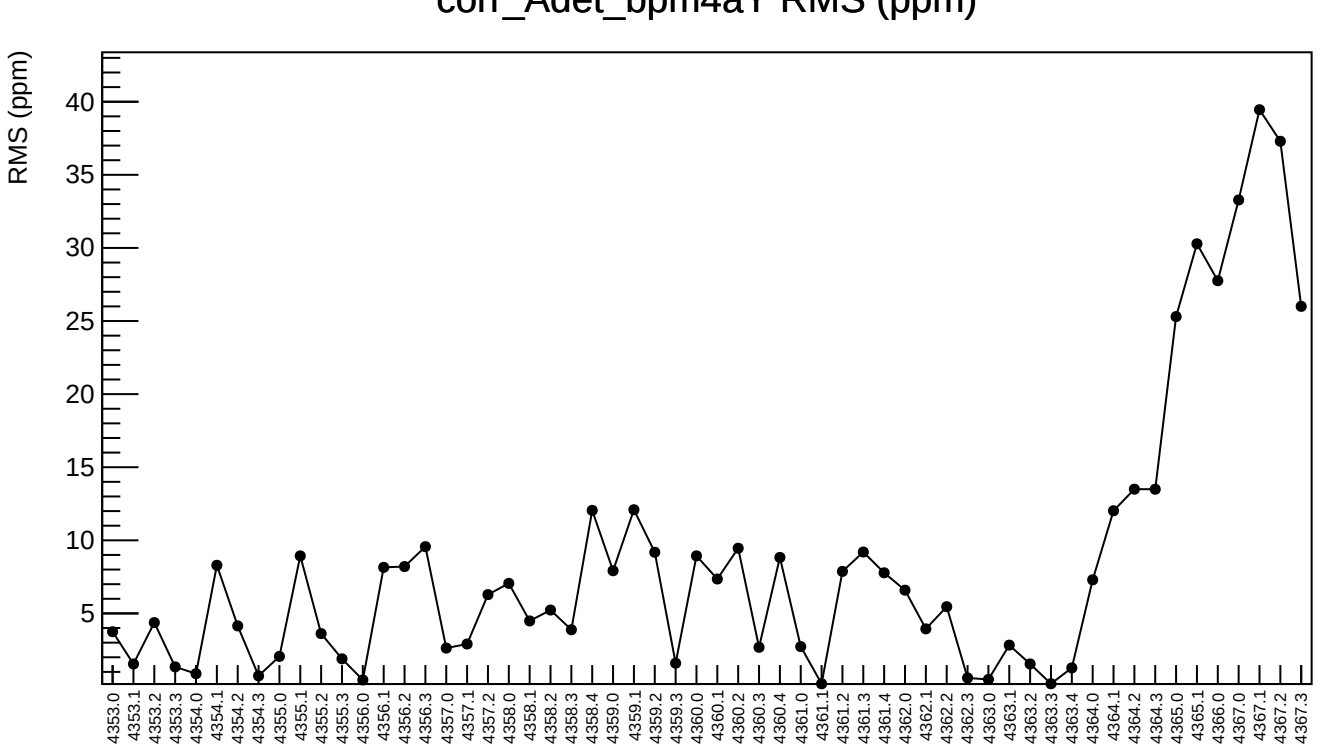
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm4aY (ppb)
χ² / ndf 5.63 / 57
p0 −19.27 ± 34.58
1D pull distribution
Mean 0.002914 ± 0.04091
Std Dev 0.3115 ± 0.02893
Underflow 0
Overflow 0
χ² / ndf 1.063 / 2
Constant 33.92 ± 5.73
Mean 0.07096 ± 0.04792
Sigma 0.3577 ± 0.0379


corr_Adet_bpm4aY RMS (ppm)
RMS (ppm)
40
35
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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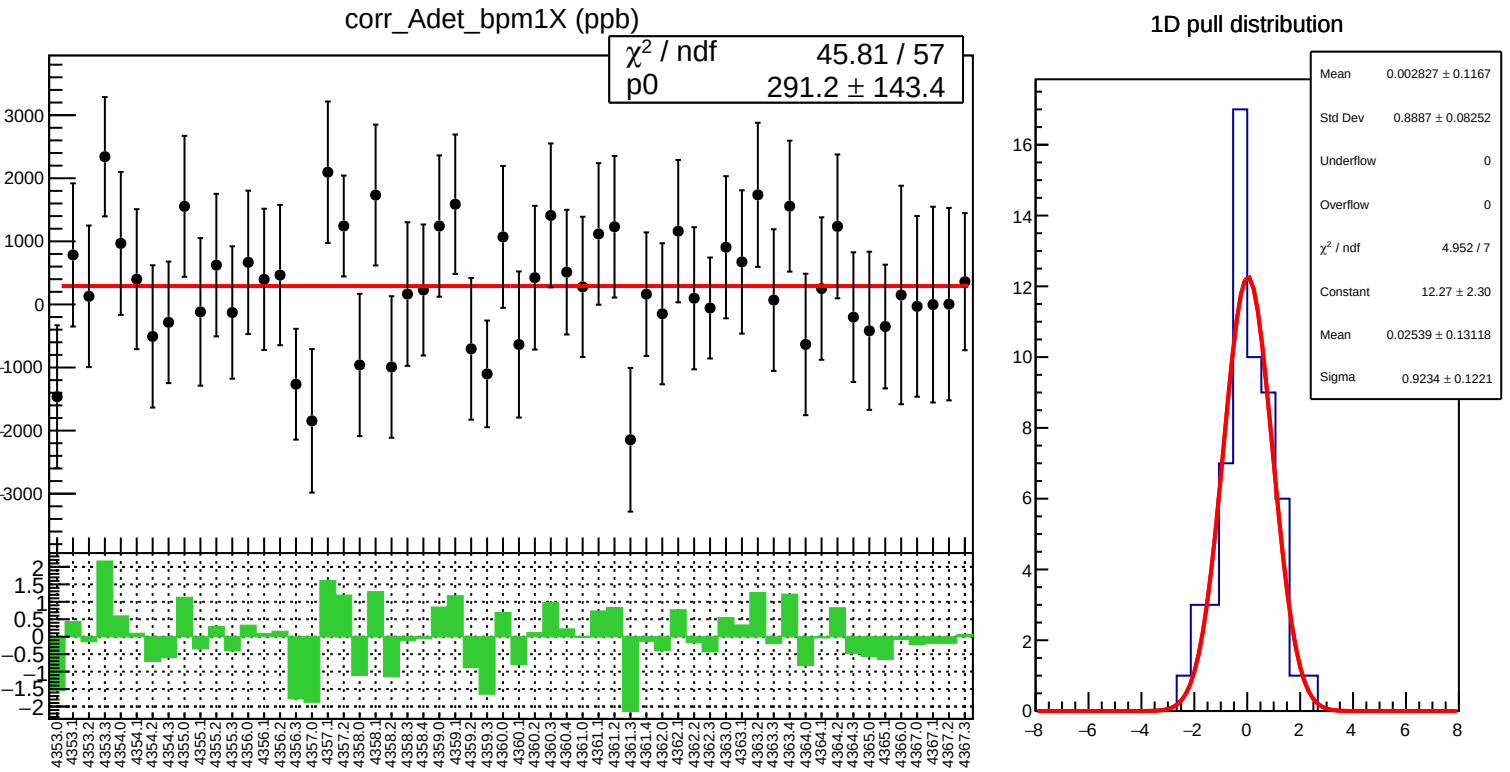
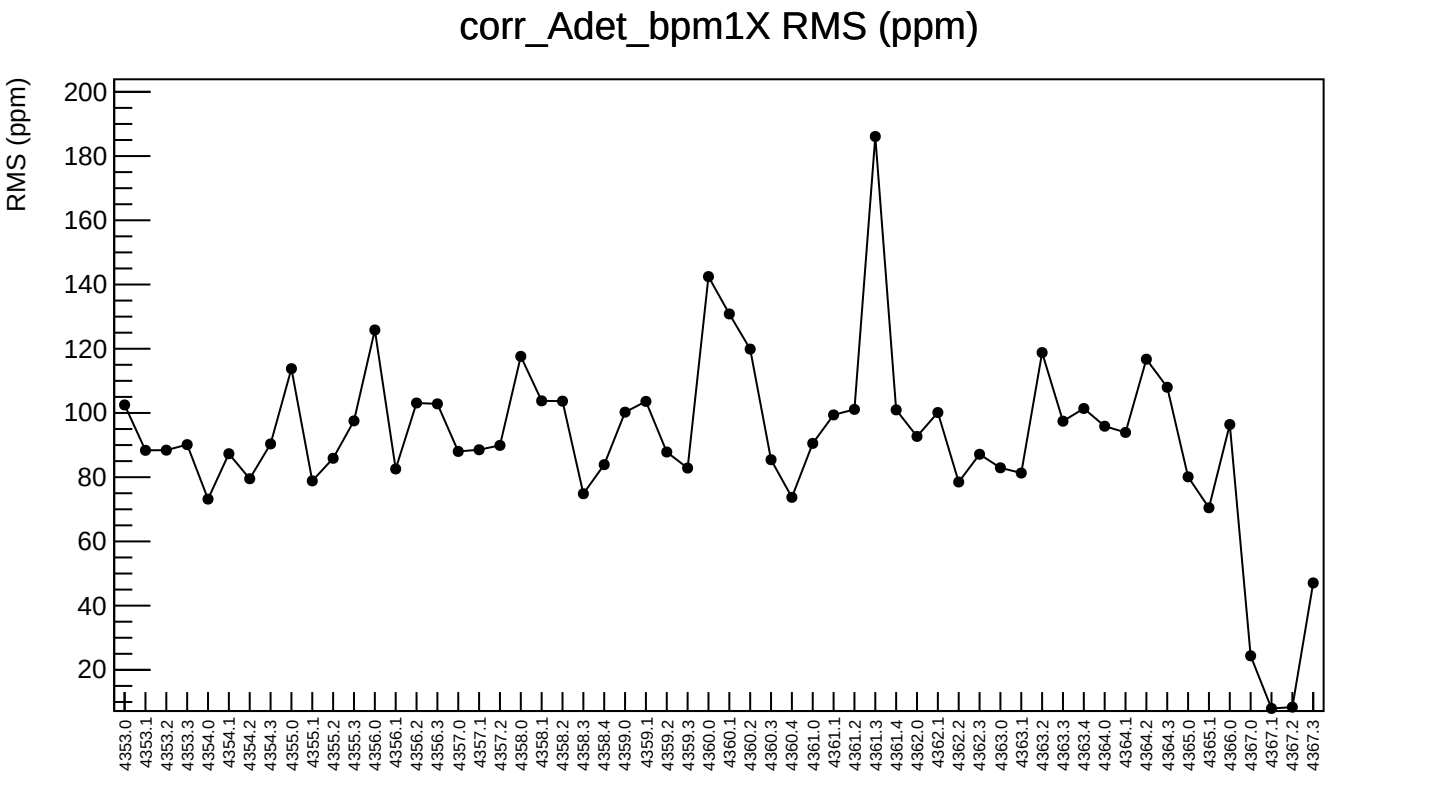
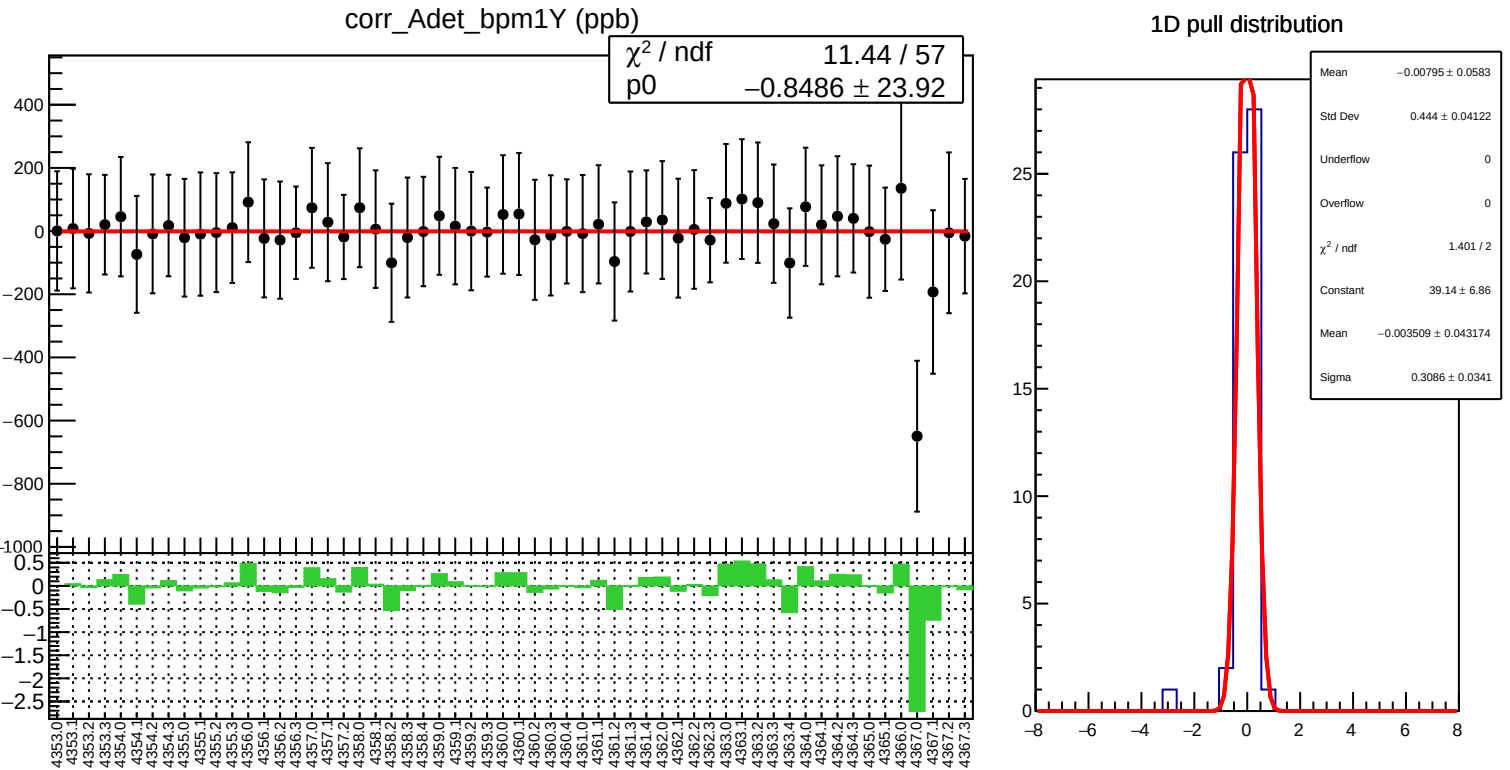
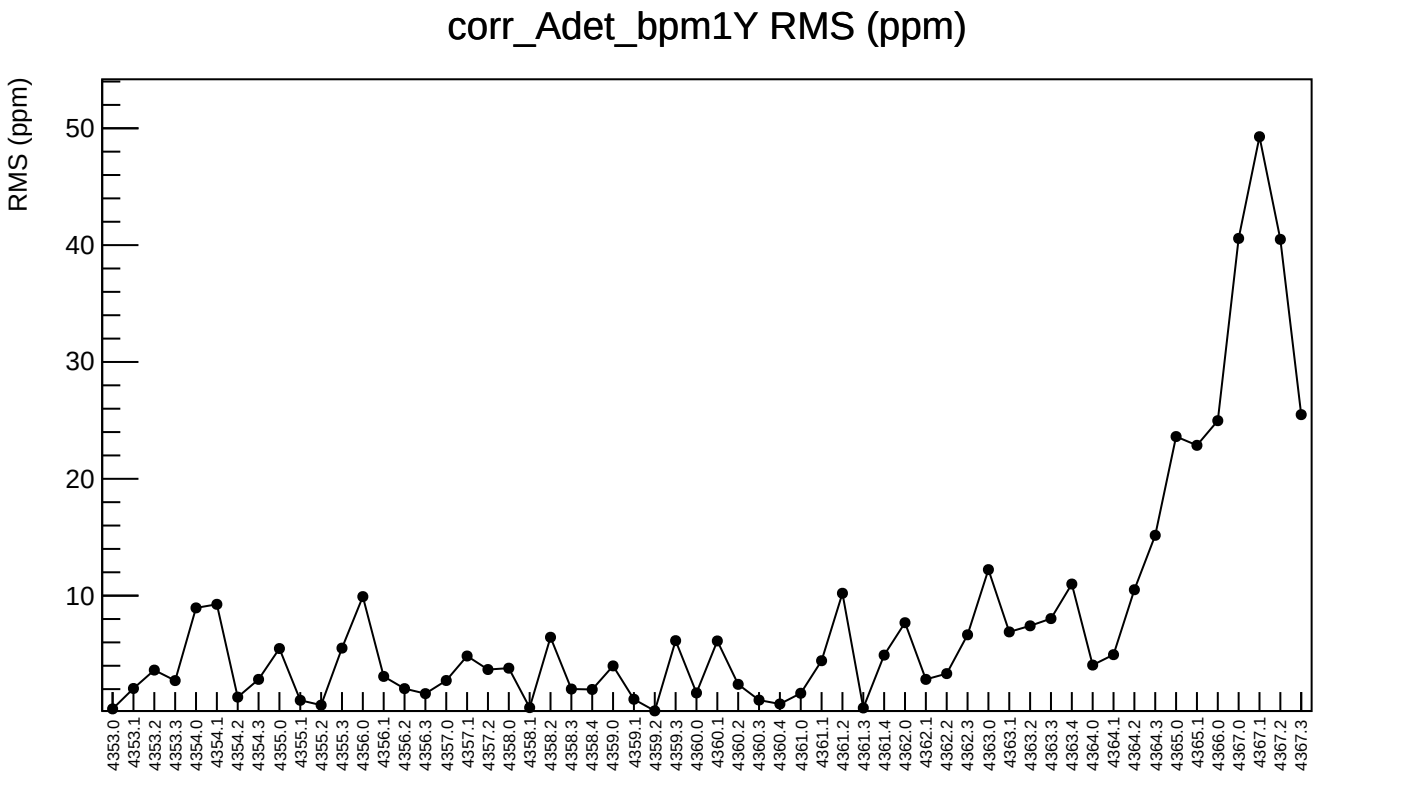
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm1X (ppb)
χ² / ndf 45.81 / 57
p0 291.2 ± 143.4
1D pull distribution
Mean 0.002827 ± 0.1167
Std Dev 0.8887 ± 0.08252
Underflow 0
Overflow 0
χ² / ndf 4.952 / 7
Constant 12.27 ± 2.30
Mean 0.02539 ± 0.13118
Sigma 0.9234 ± 0.1221


corr_Adet_bpm1X RMS (ppm)
RMS (ppm)
200
180
160
140
120
100
80
60
40
20
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm1Y (ppb)
χ² / ndf 11.44 / 57
p0 −0.8486 ± 23.92
1D pull distribution
Mean −0.00795 ± 0.0583
Std Dev 0.444 ± 0.04122
Underflow 0
Overflow 0
χ² / ndf 1.401 / 2
Constant 39.14 ± 6.86
Mean −0.003509 ± 0.043174
Sigma 0.3086 ± 0.0341


corr_Adet_bpm1Y RMS (ppm)
RMS (ppm)
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
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4364.0
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4364.3
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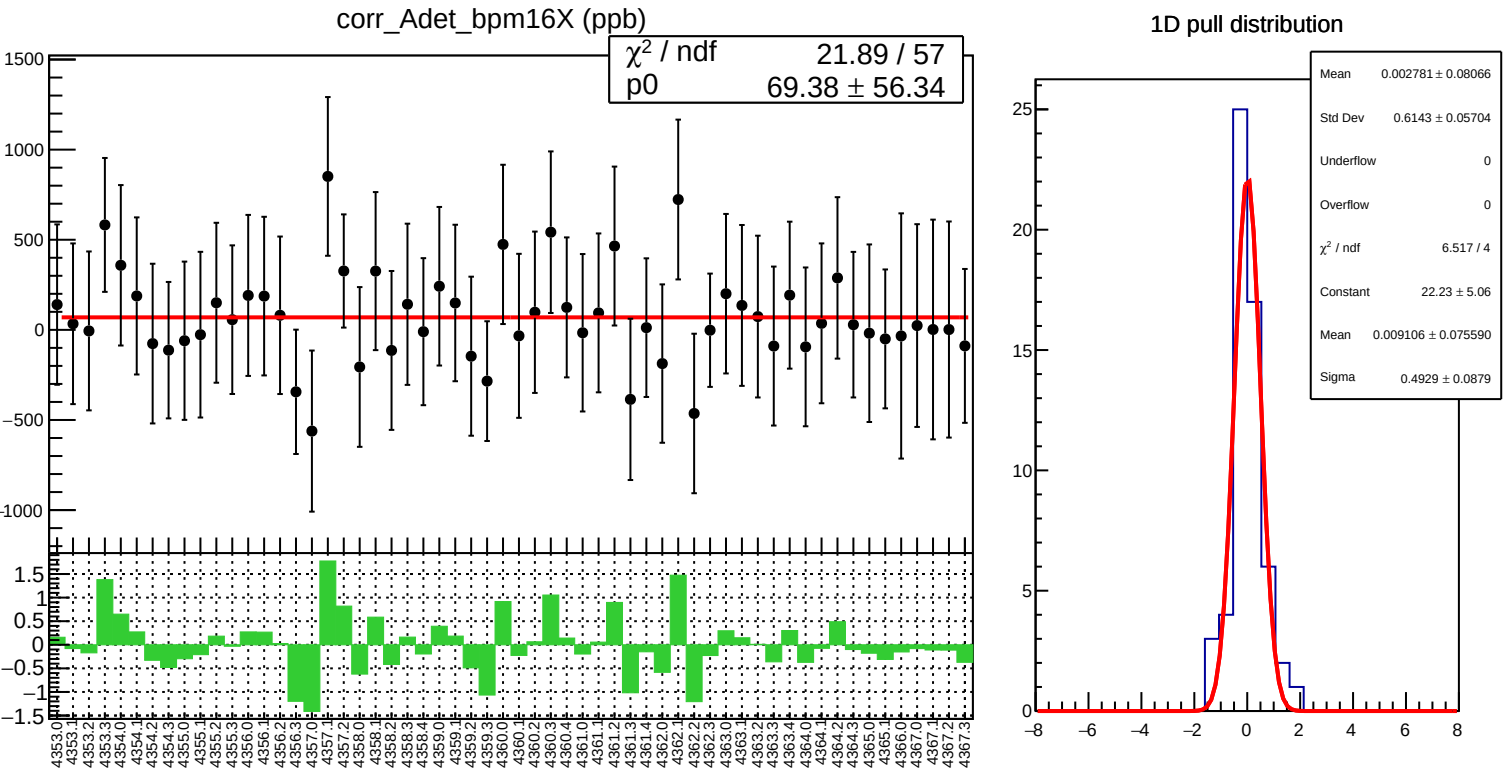
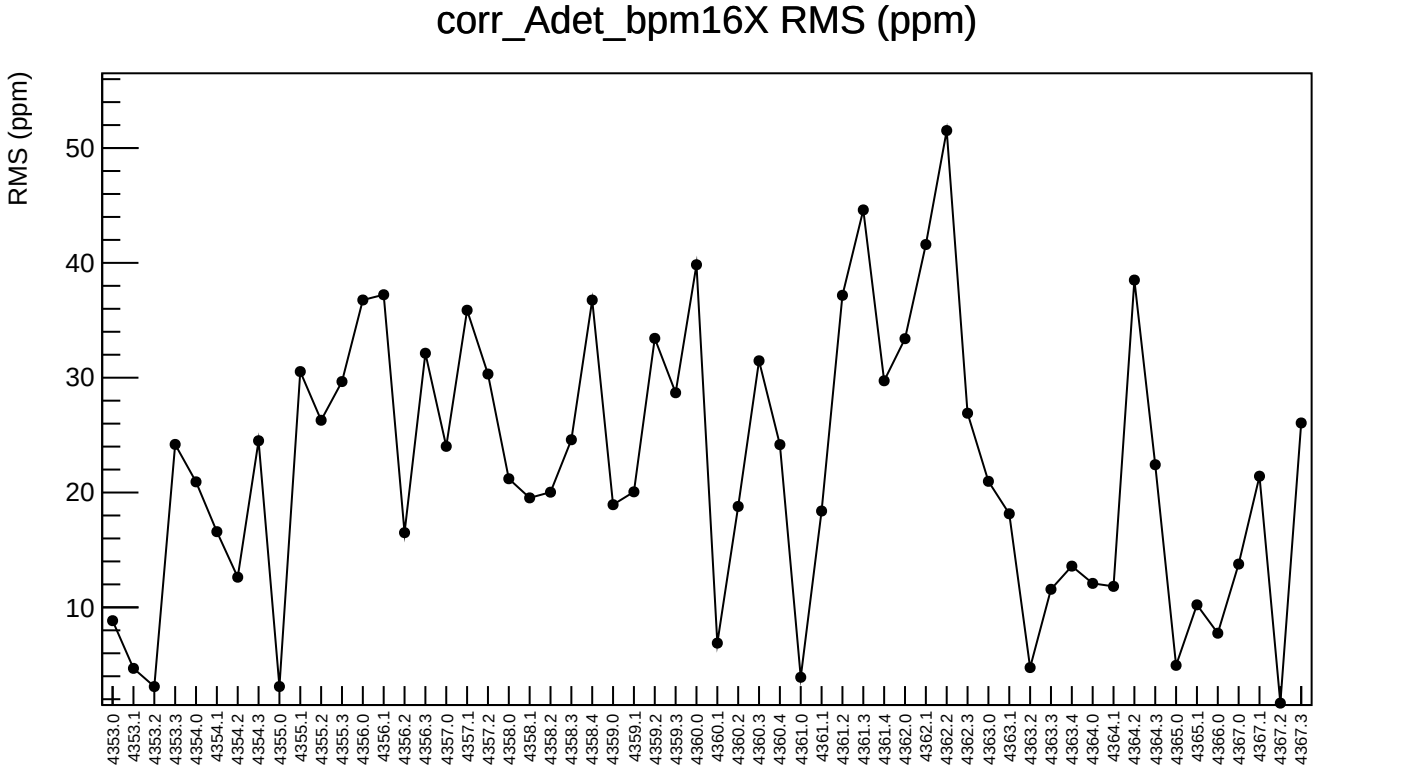
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm16X (ppb)
χ² / ndf 21.89 / 57
p0 69.38 ± 56.34
1D pull distribution
Mean 0.002781 ± 0.08066
Std Dev 0.6143 ± 0.05704
Underflow 0
Overflow 0
χ² / ndf 6.517 / 4
Constant 22.23 ± 5.06
Mean 0.009106 ± 0.075590
Sigma 0.4929 ± 0.0879


corr_Adet_bpm16X RMS (ppm)
RMS (ppm)
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
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4358.2
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4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
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4362.1
4362.2
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4363.1
4363.2
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4366.0
4367.0
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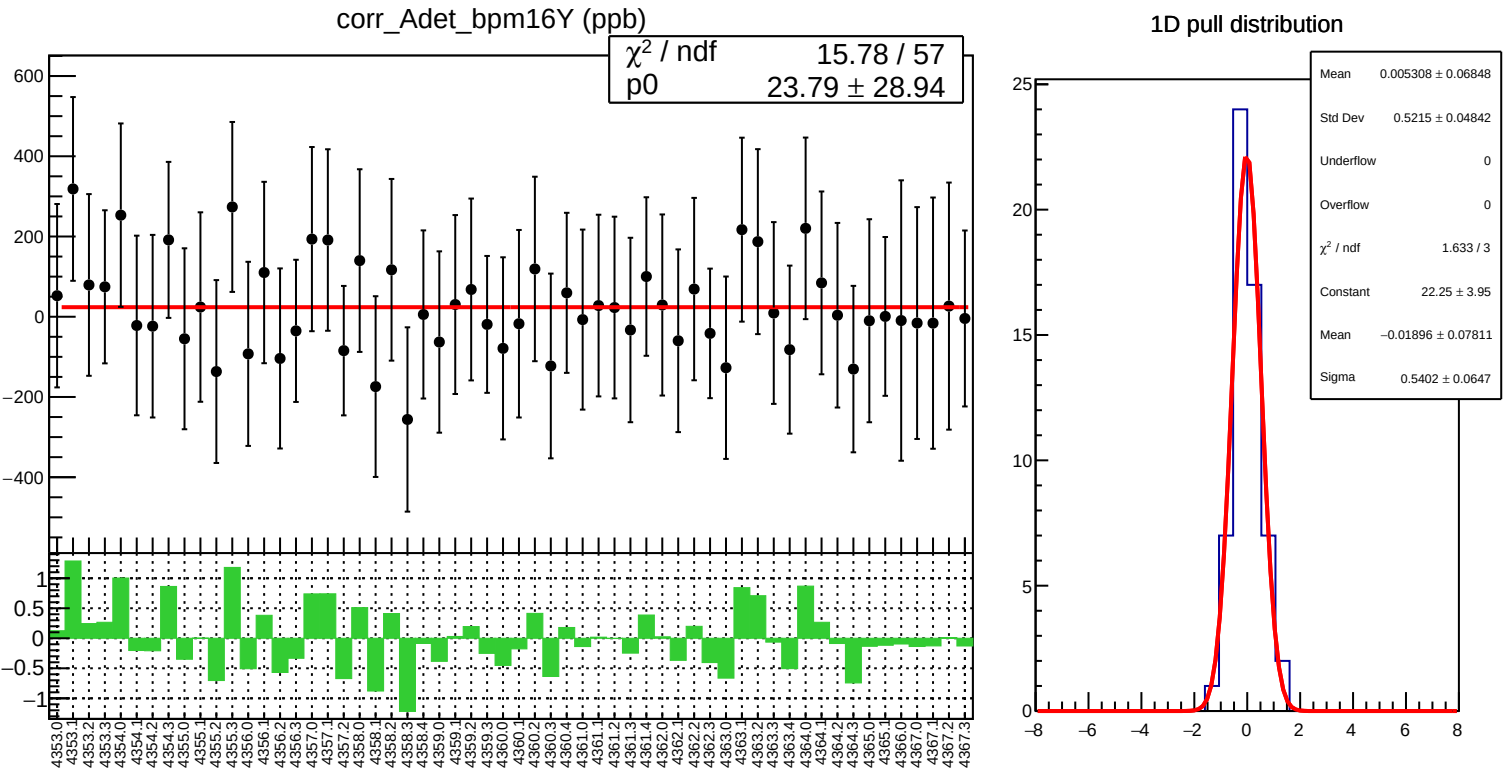
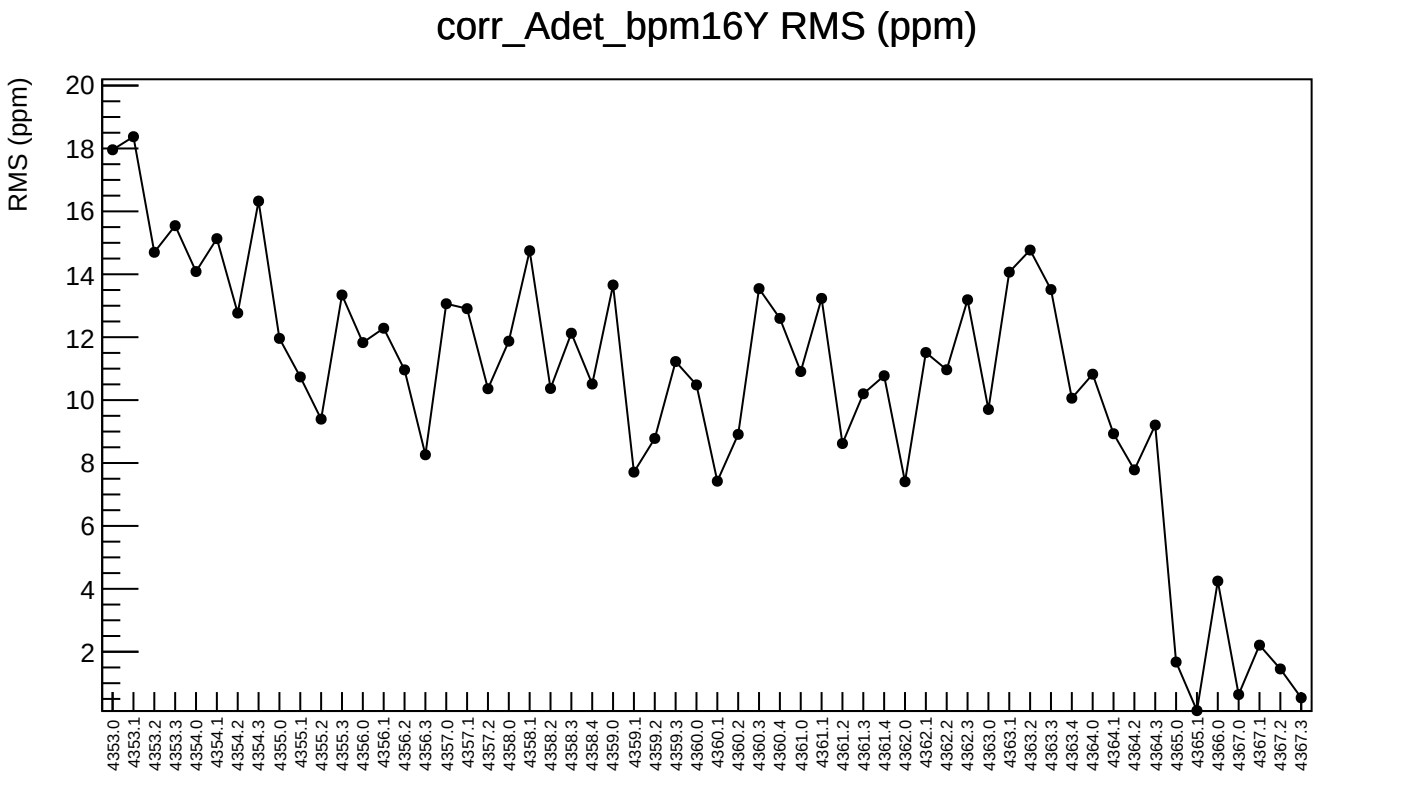
4367.2
4367.3


corr_Adet_bpm16Y (ppb)
χ² / ndf 15.78 / 57
p0 23.79 ± 28.94
1D pull distribution
Mean 0.005308 ± 0.06848
Std Dev 0.5215 ± 0.04842
Underflow 0
Overflow 0
χ² / ndf 1.633 / 3
Constant 22.25 ± 3.95
Mean −0.01896 ± 0.07811
Sigma 0.5402 ± 0.0647


corr_Adet_bpm16Y RMS (ppm)
RMS (ppm)
20
18
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
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4358.0
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4361.0
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4367.0
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4367.2
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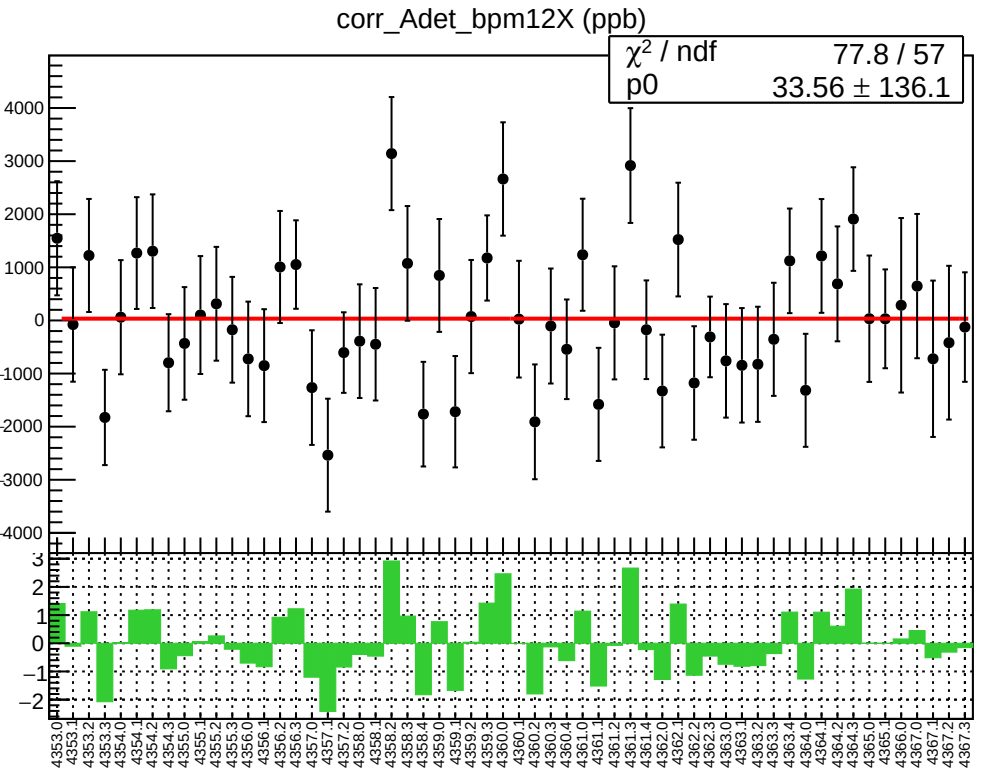
corr_Adet_bpm12X (ppb)
χ² / ndf 77.8 / 57
p0 33.56 ± 136.1
4000
3000
2000
1000
0
-1000
-2000
-3000
-4000
3
2
1
0
−1
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
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4355.2
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4364.3
4365.0
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4367.0
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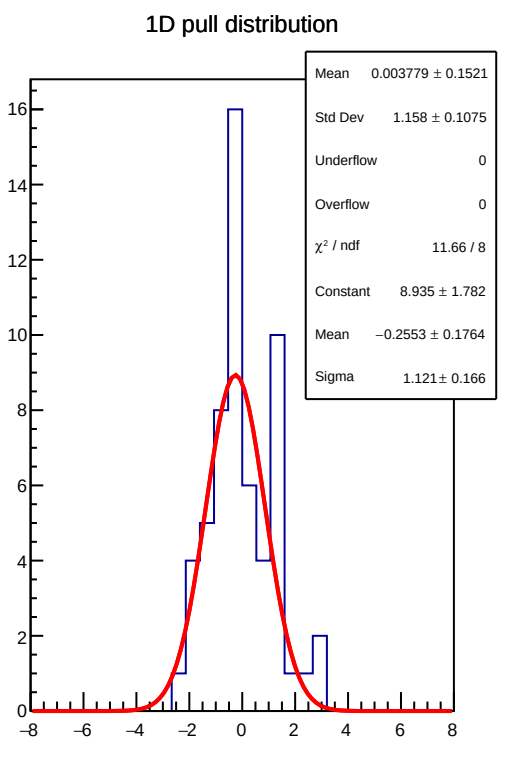
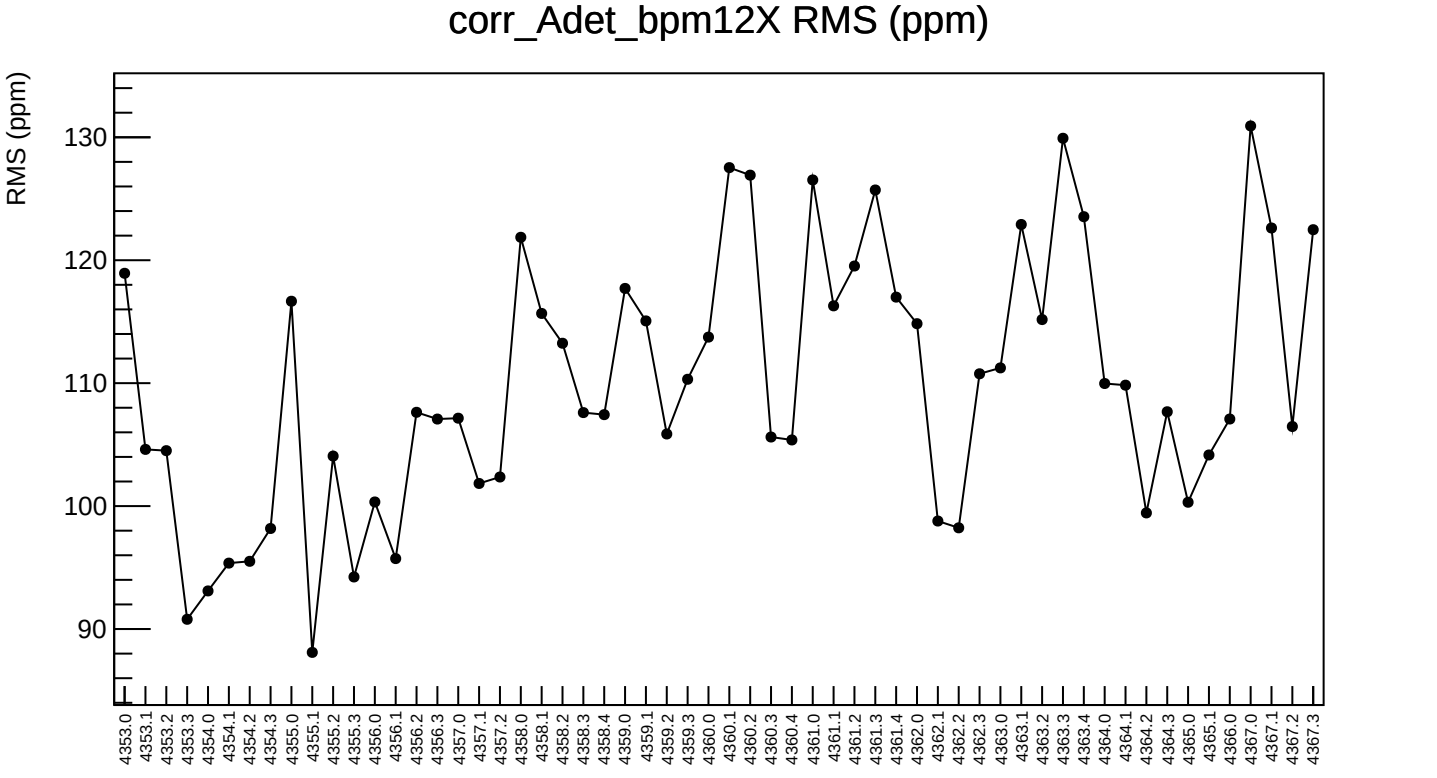
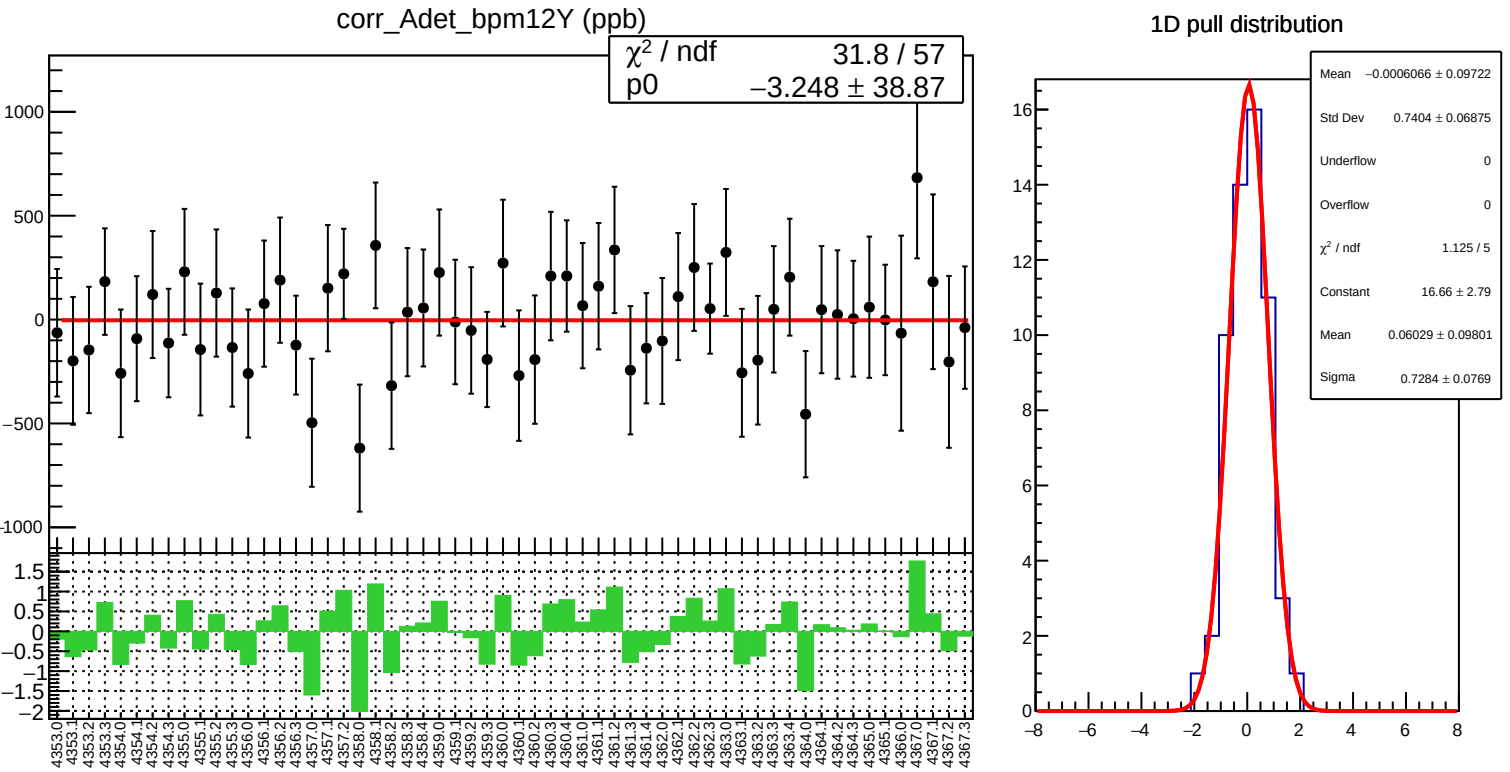
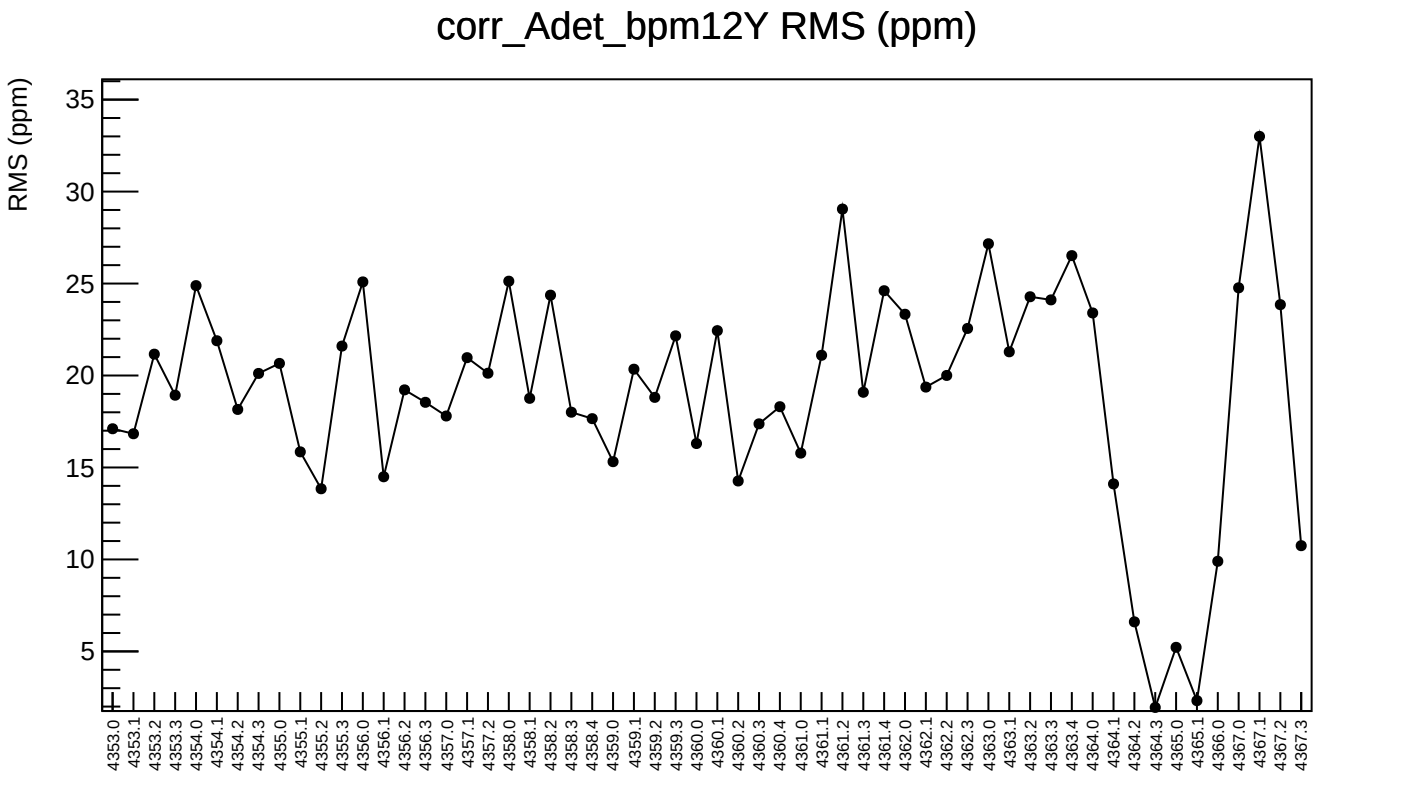
4367.2
4367.3


1D pull distribution
Mean 0.003779 ± 0.1521
Std Dev 1.158 ± 0.1075
Underflow 0
Overflow 0
χ² / ndf 11.66 / 8
Constant 8.935 ± 1.782
Mean −0.2553 ± 0.1764
Sigma 1.121± 0.166
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_Adet_bpm12X RMS (ppm)
RMS (ppm)
130
120
110
100
90
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm12Y (ppb)
χ² / ndf 31.8 / 57
p0 −3.248 ± 38.87
1000
500
0
−500
−1000
1.5
1
0.5
0
−0.5
−1
−1.5
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean −0.0006066 ± 0.09722
Std Dev 0.7404 ± 0.06875
Underflow 0
Overflow 0
χ² / ndf 1.125 / 5
Constant 16.66 ± 2.79
Mean 0.06029 ± 0.09801
Sigma 0.7284 ± 0.0769
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_Adet_bpm12Y RMS (ppm)
RMS (ppm)
35
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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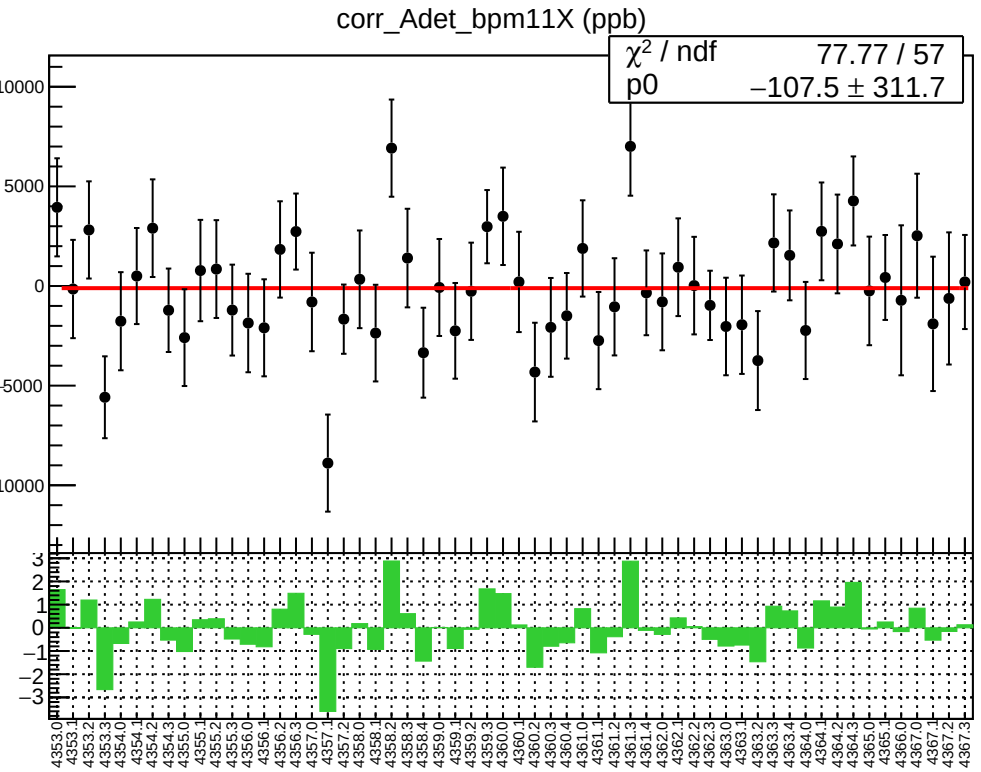
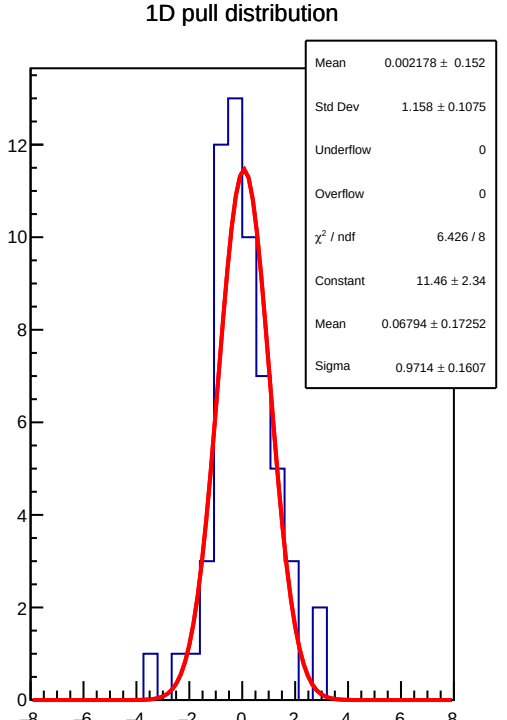
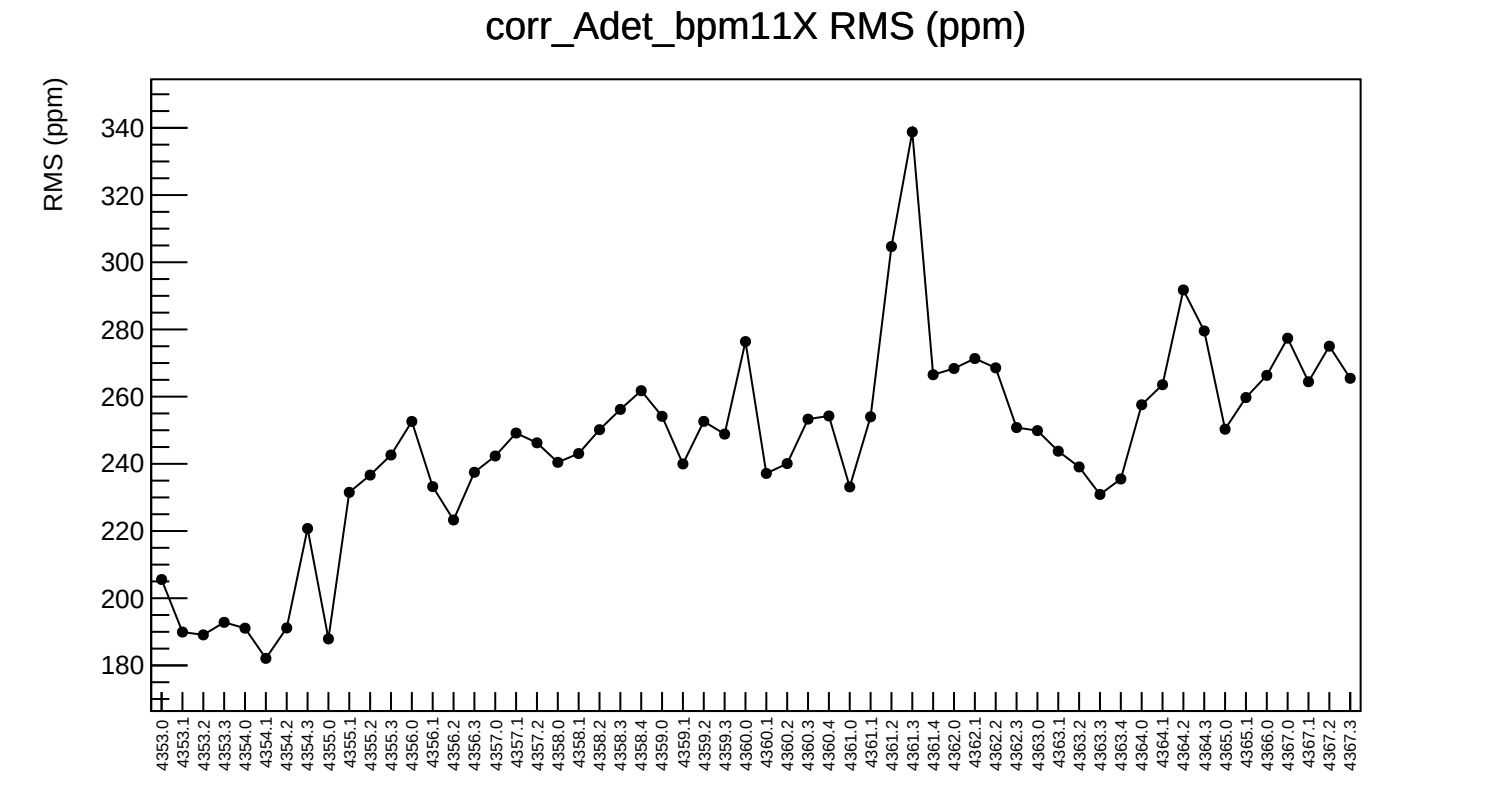
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm11X (ppb)
χ² / ndf 77.77 / 57
p0 −107.5 ± 311.7
10000
5000
0
-5000
-10000
3
2
1
0
−1
−2
−3
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean 0.002178 ± 0.152
Std Dev 1.158 ± 0.1075
Underflow 0
Overflow 0
χ² / ndf 6.426 / 8
Constant 11.46 ± 2.34
Mean 0.06794 ± 0.17252
Sigma 0.9714 ± 0.1607
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_Adet_bpm11X RMS (ppm)
RMS (ppm)
340
320
300
280
260
240
220
200
180
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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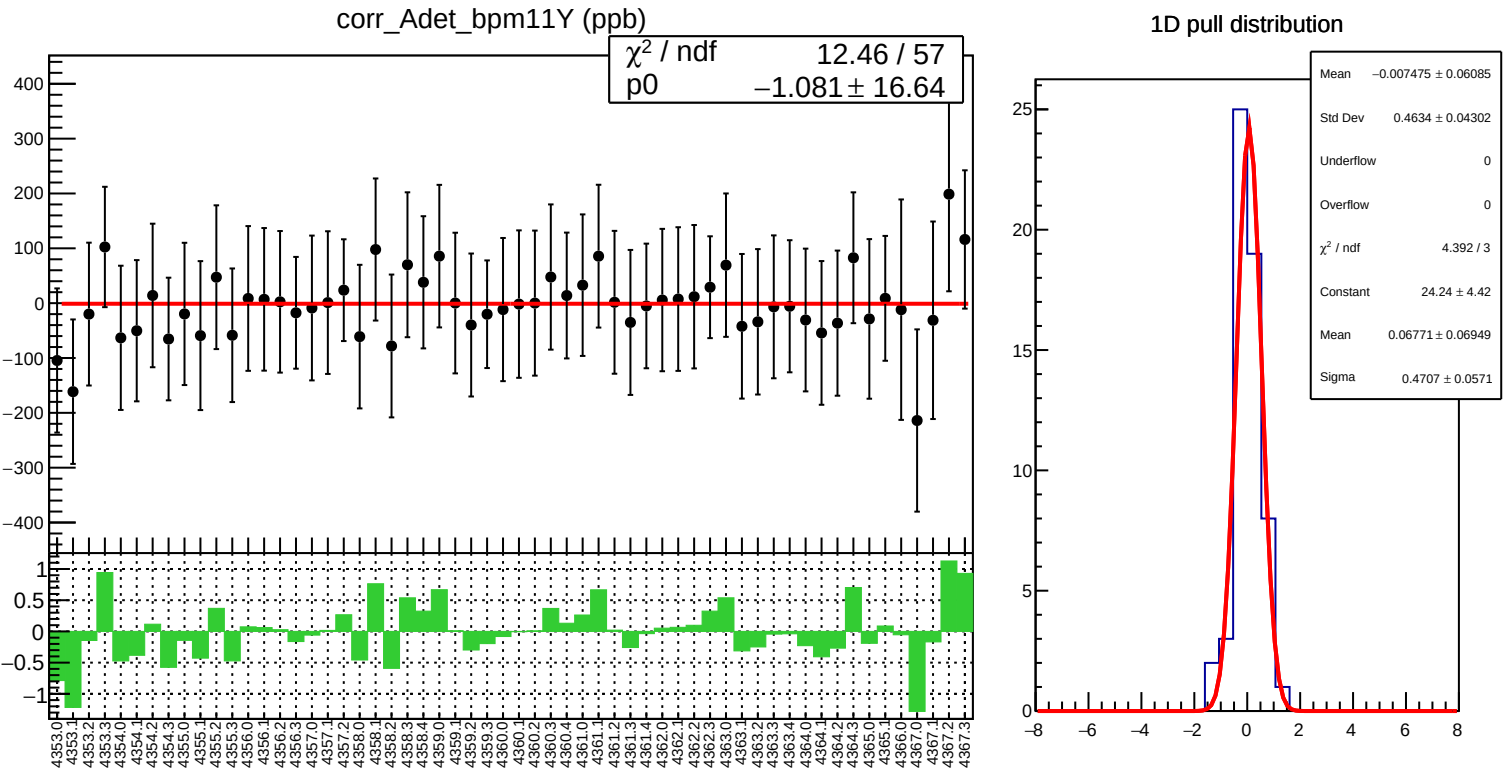
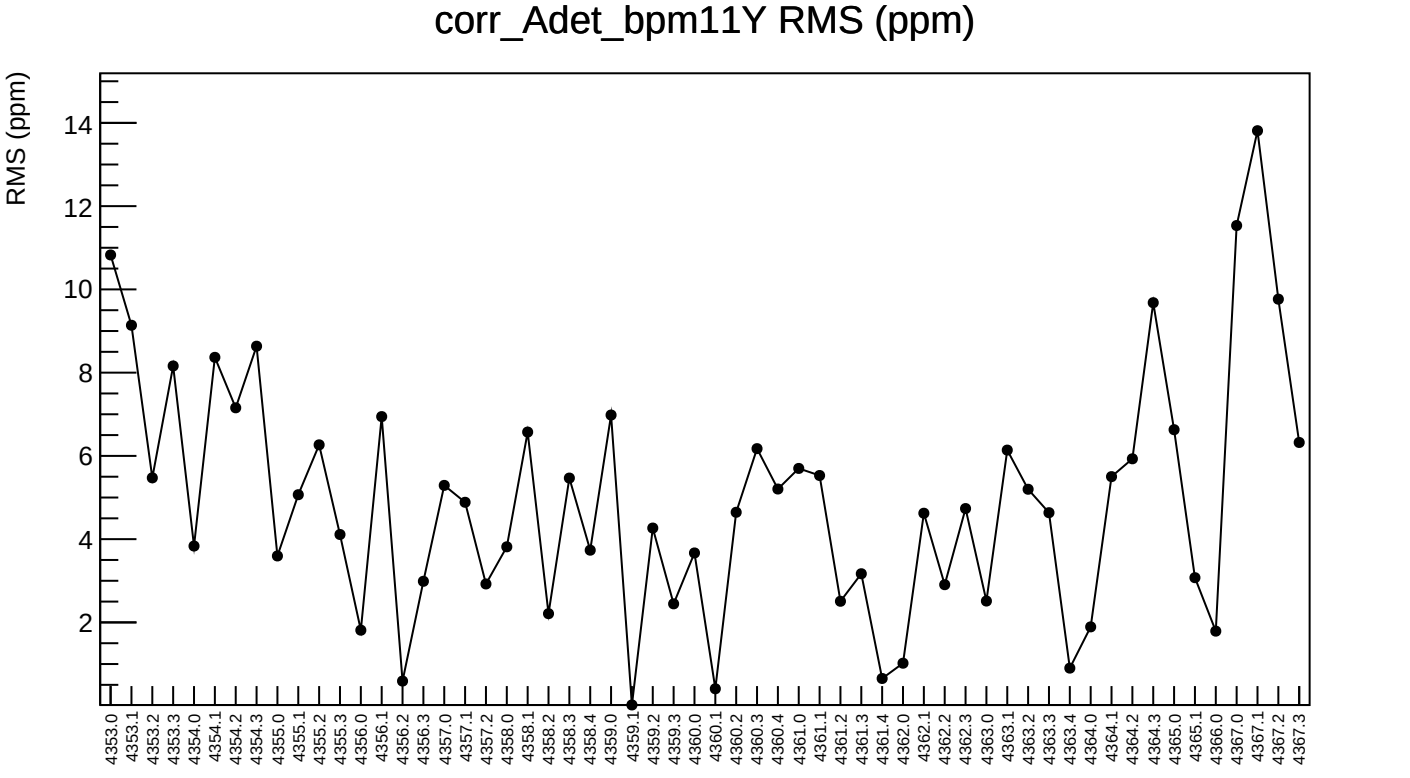
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_Adet_bpm11Y (ppb)
χ² / ndf 12.46 / 57
p0 −1.081 ± 16.64
1D pull distribution
Mean −0.007475 ± 0.06085
Std Dev 0.4634 ± 0.04302
Underflow 0
Overflow 0
χ² / ndf 4.392 / 3
Constant 24.24 ± 4.42
Mean 0.06771 ± 0.06949
Sigma 0.4707 ± 0.0571


corr_Adet_bpm11Y RMS (ppm)
RMS (ppm)
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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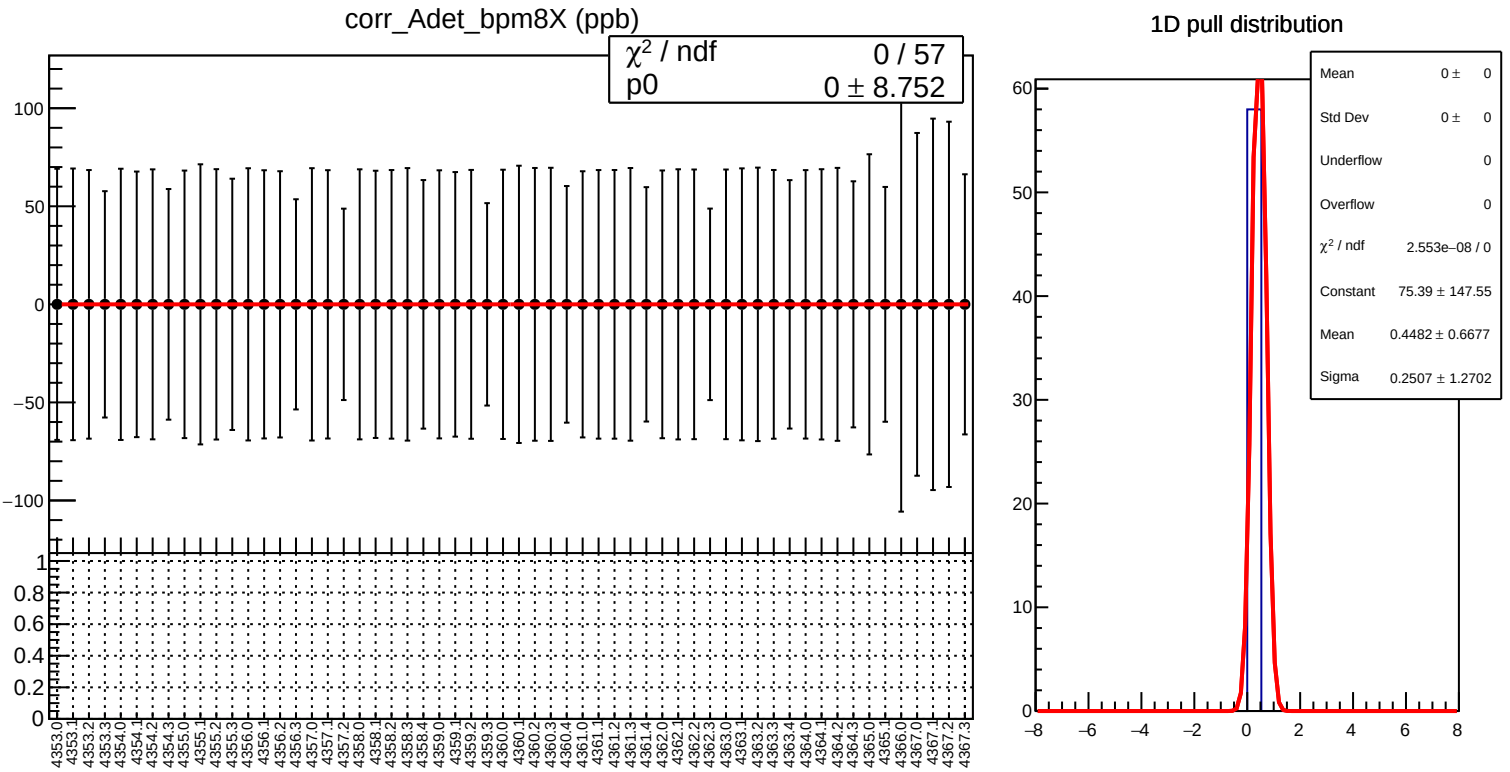
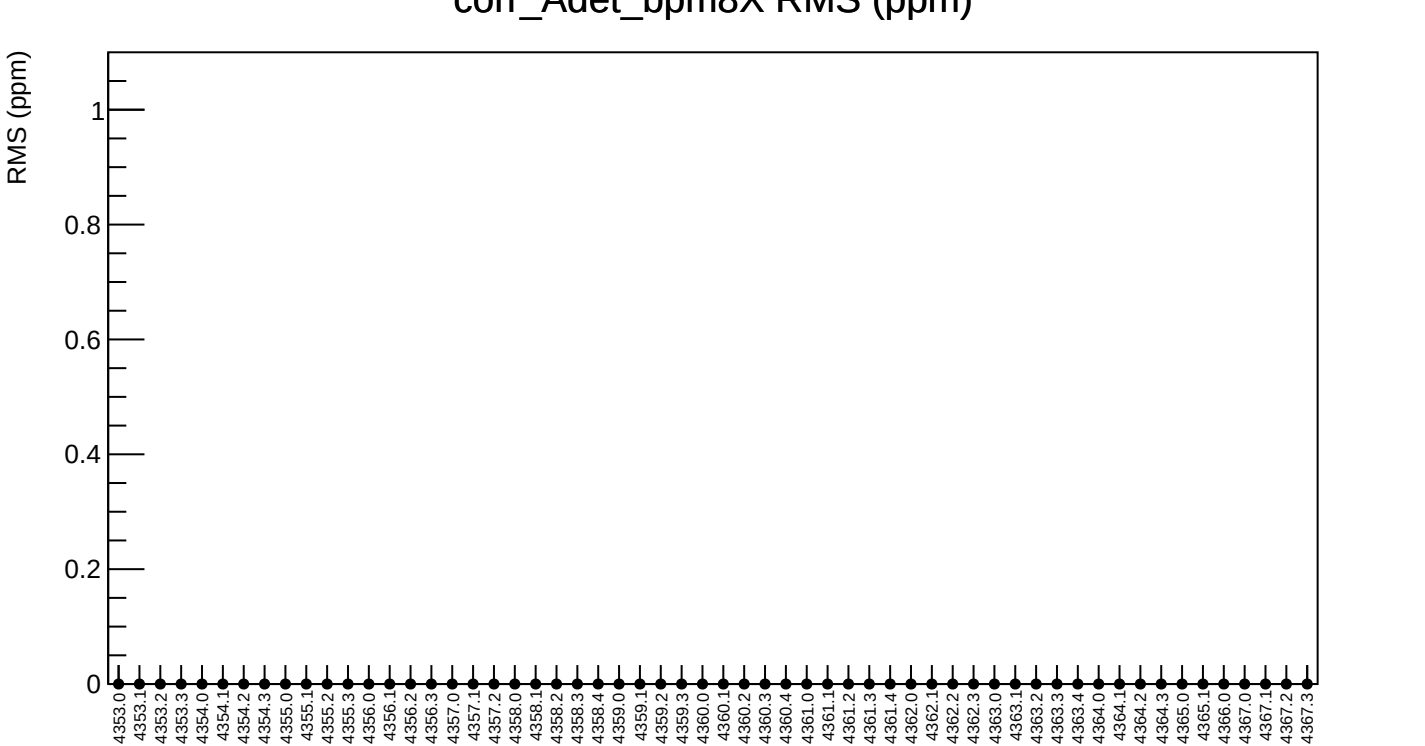
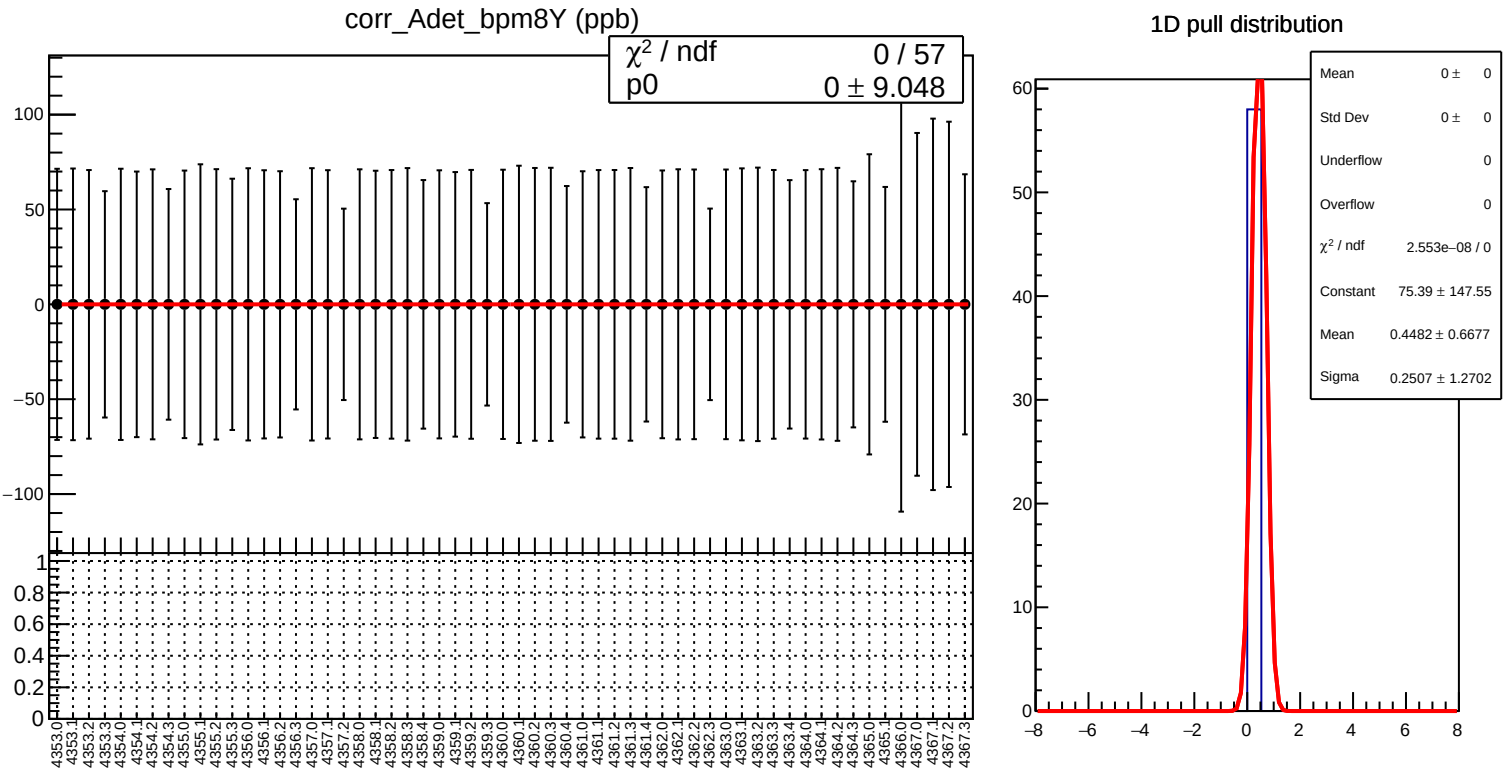
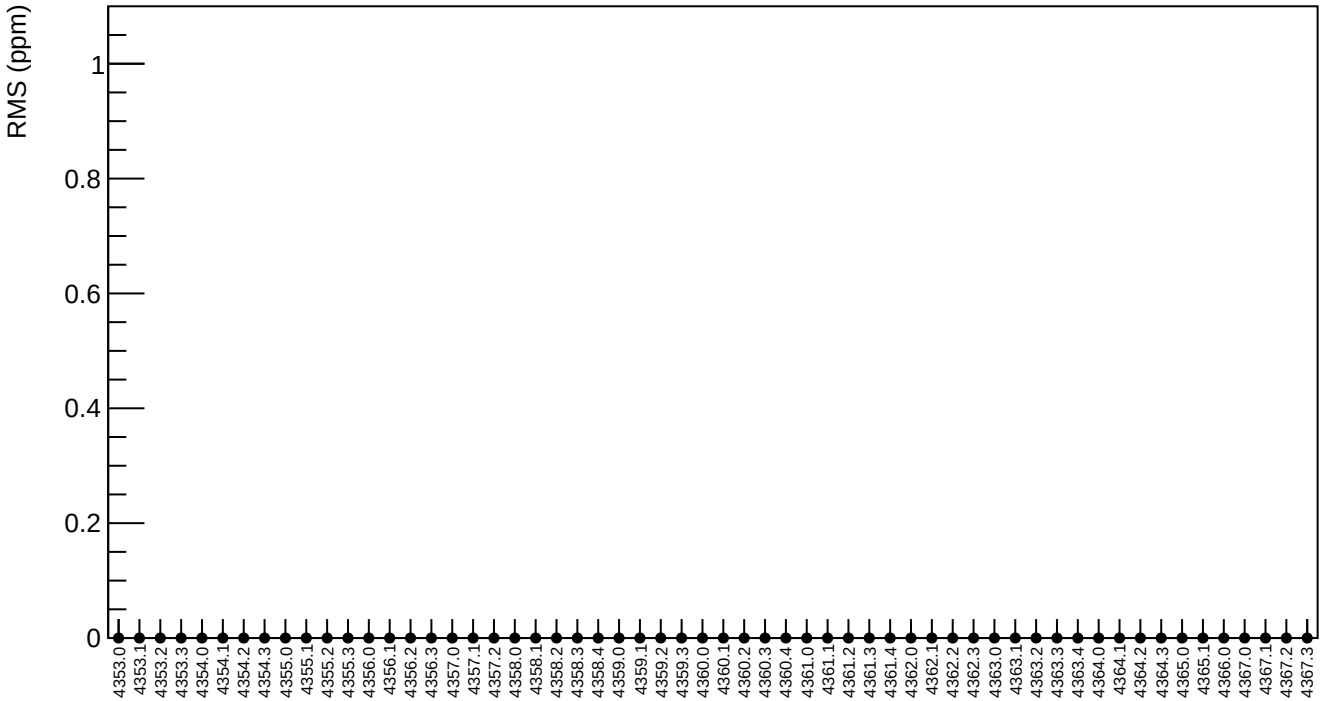
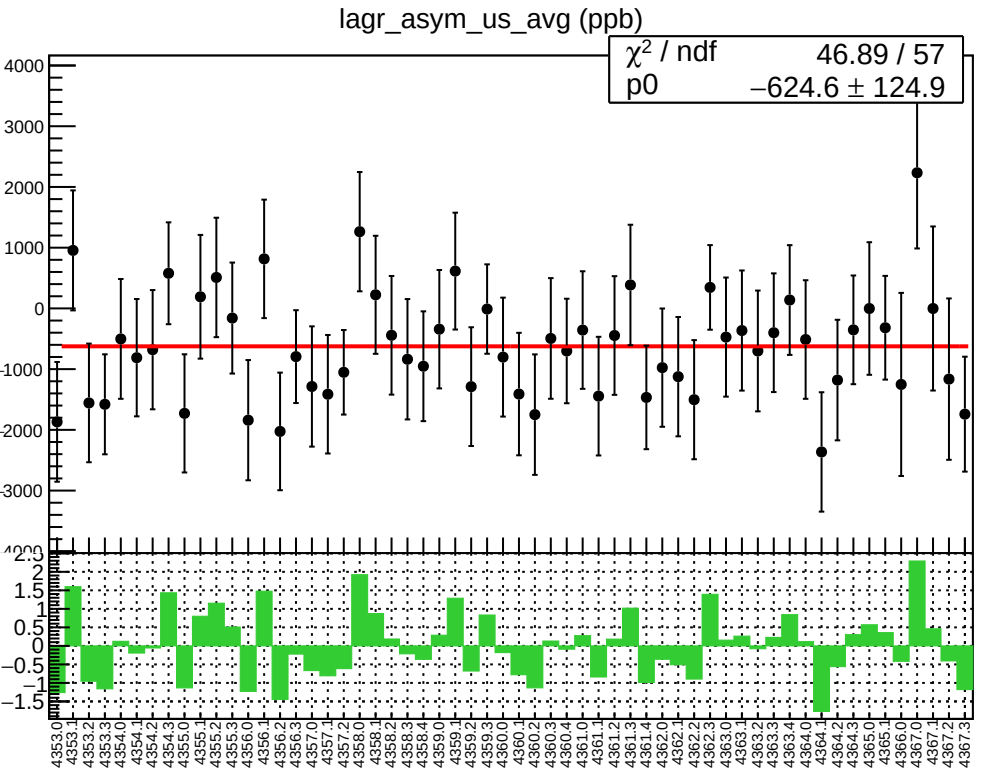
4366.0
4367.0
4367.1
4367.2
4367.3

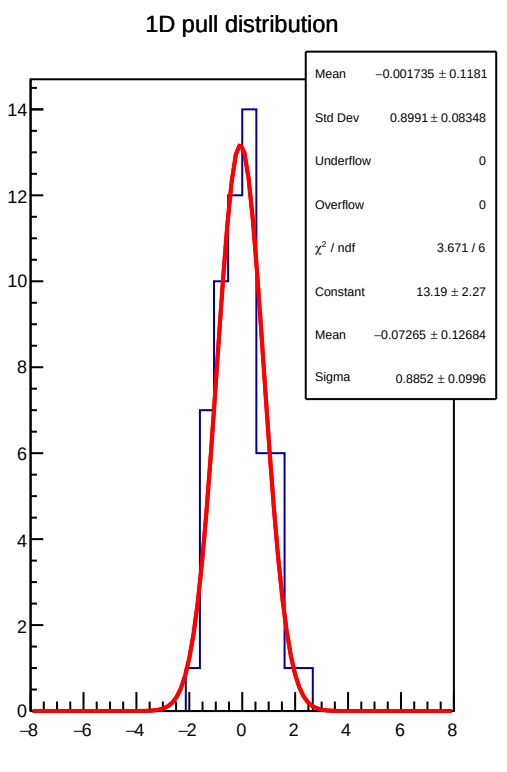

corr_Adet_bpm8X (ppb)
χ² / ndf 0 / 57
p0 0 ± 8.752
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702

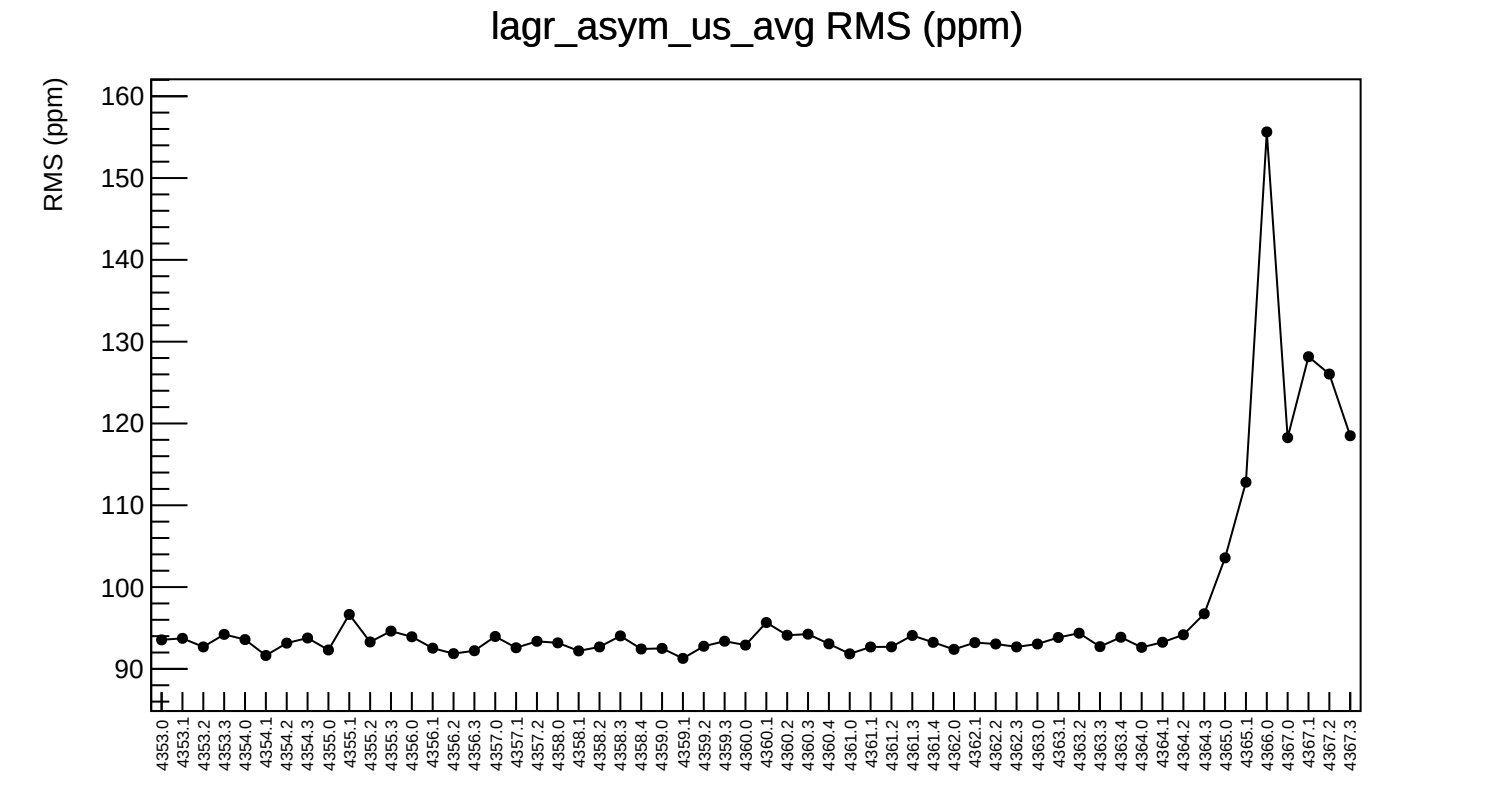

corr_Adet_bpm8X RMS (ppm)
RMS (ppm)
0
0.2
0.4
0.6
0.8
1
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

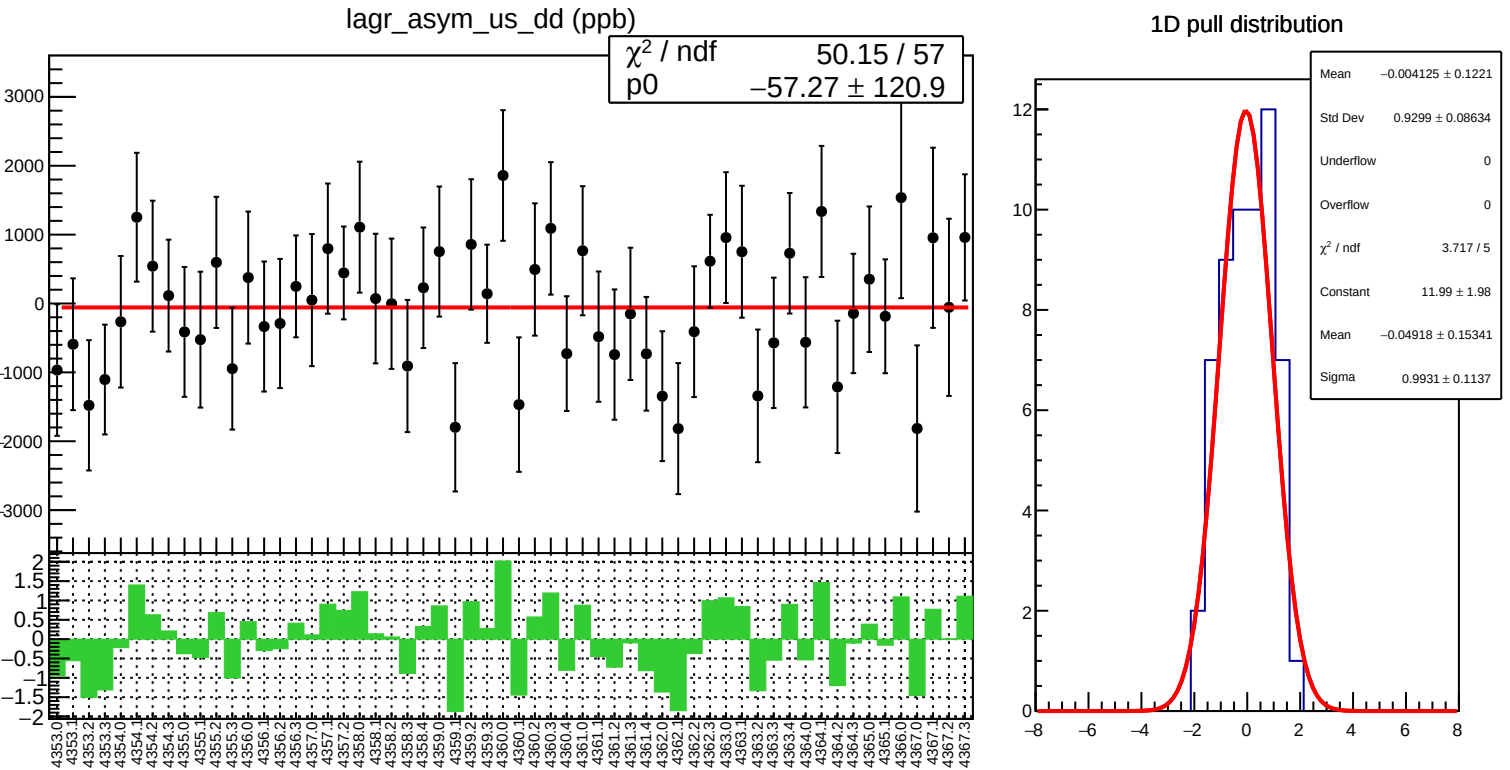

corr_Adet_bpm8Y (ppb)
χ² / ndf 0 / 57
p0 0 ± 9.048
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702

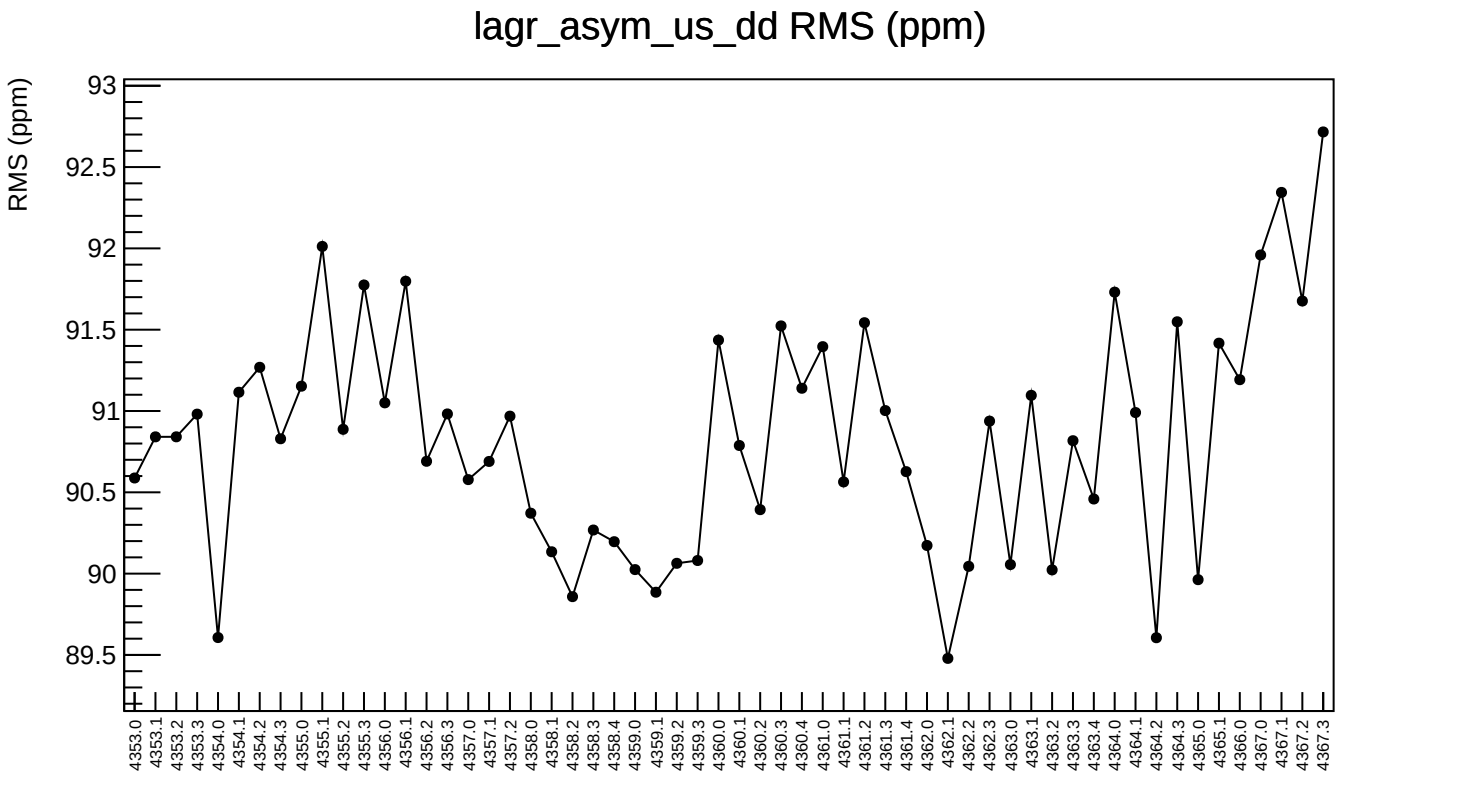

corr_Adet_bpm8Y RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

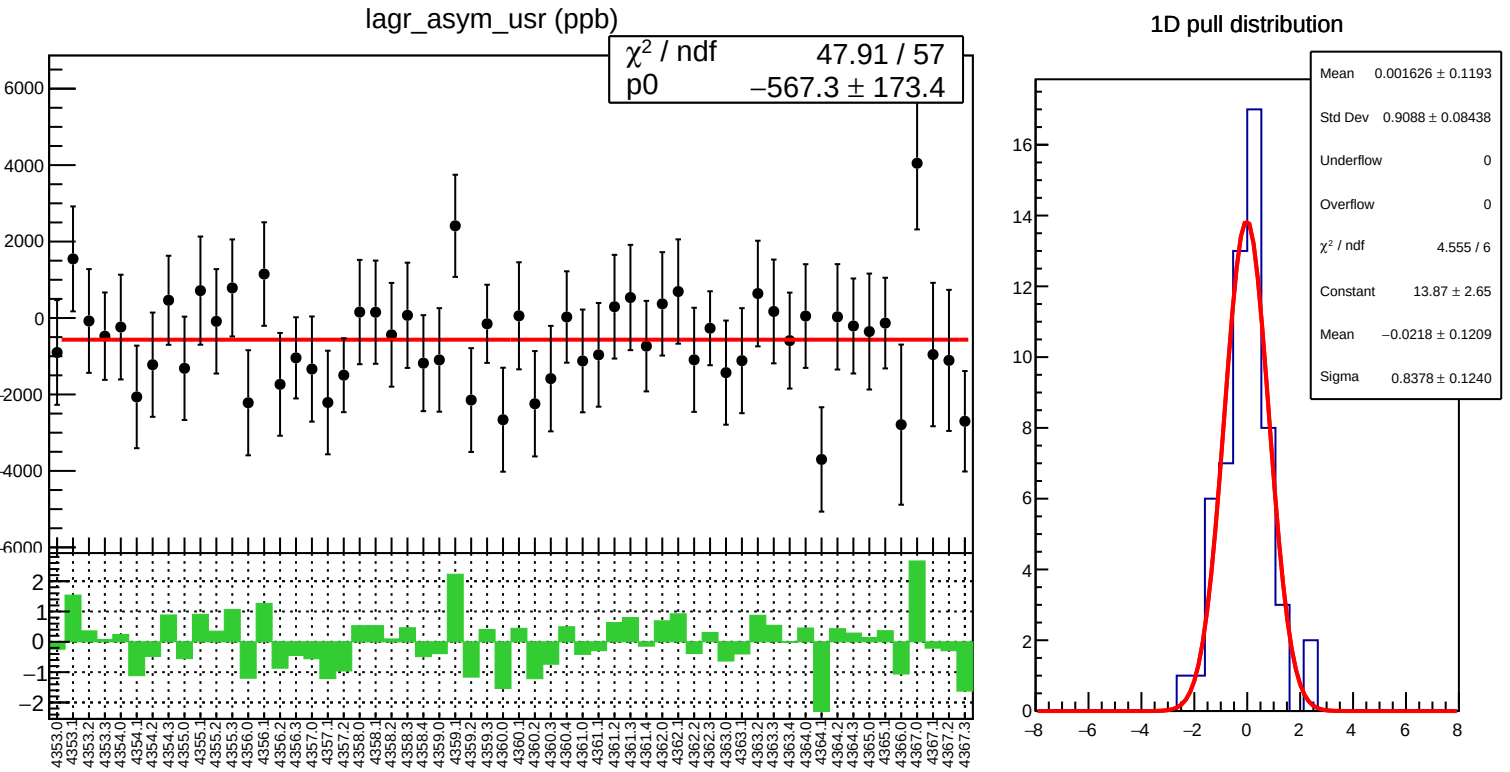

lagr_asym_us_avg (ppb)
χ² / ndf 46.89 / 57
p0 −624.6 ± 124.9

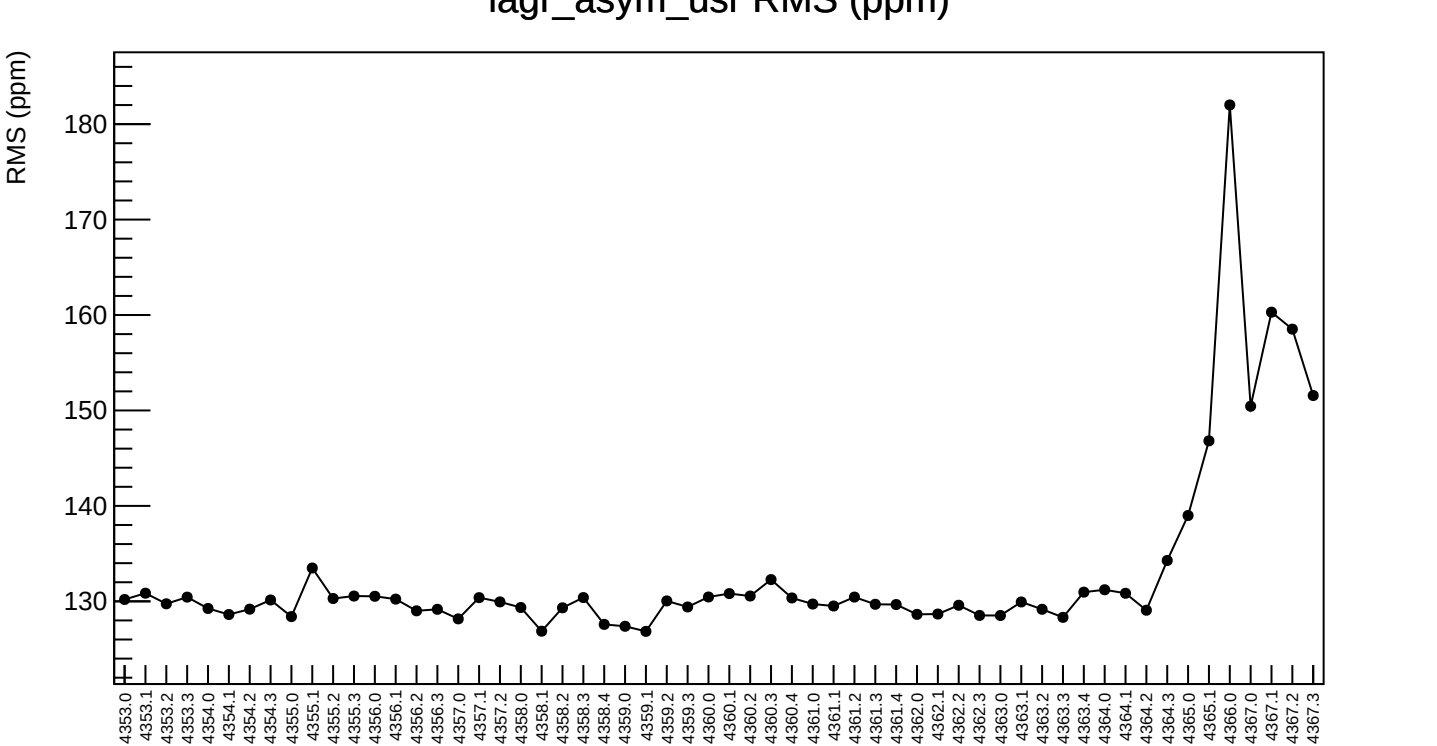

1D pull distribution
Mean −0.001735 ± 0.1181
Std Dev 0.8991 ± 0.08348
Underflow 0
Overflow 0
χ² / ndf 3.671 / 6
Constant 13.19 ± 2.27
Mean −0.07265 ± 0.12684
Sigma 0.8852 ± 0.0996

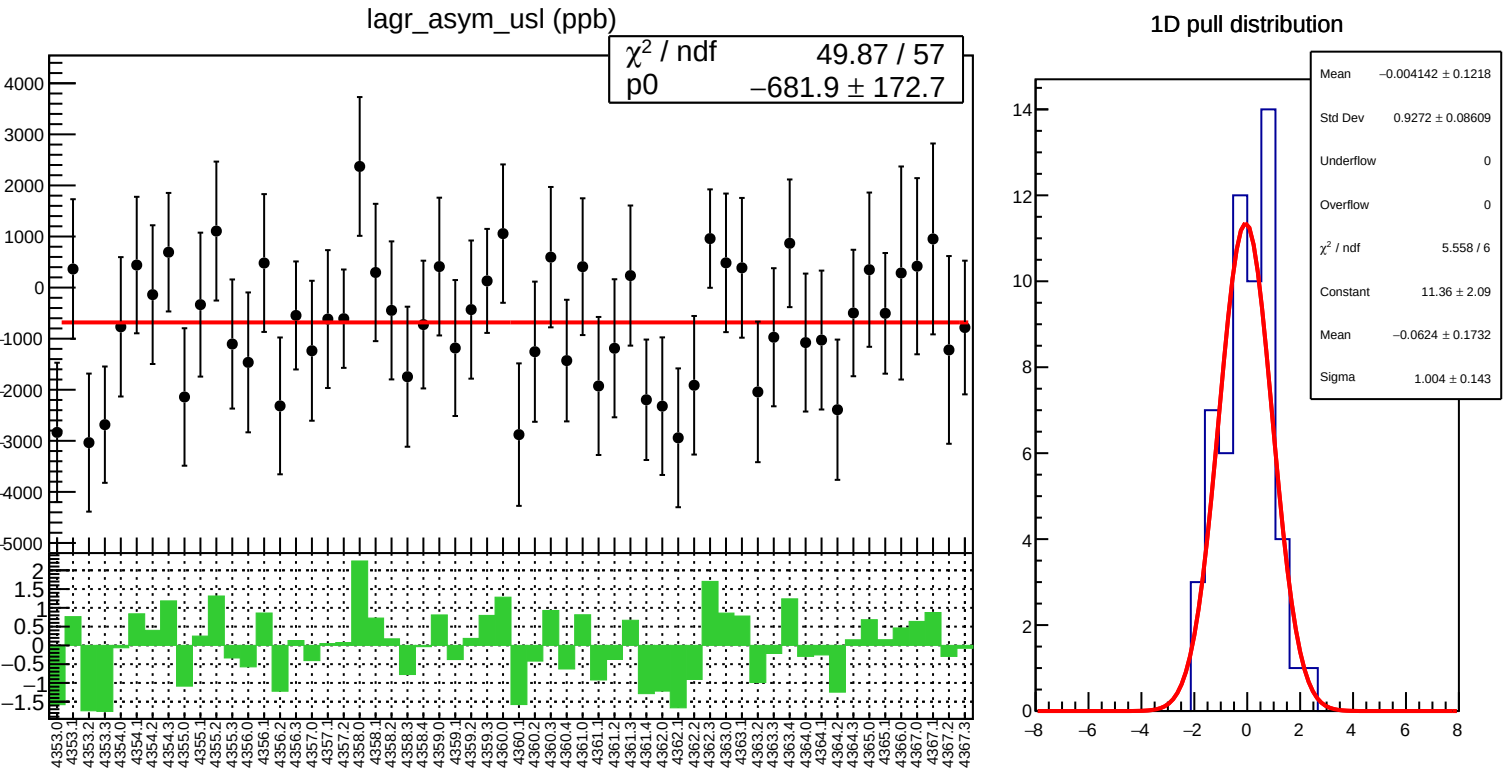

lagr_asym_us_avg RMS (ppm)
RMS (ppm)
160
150
140
130
120
110
100
90
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

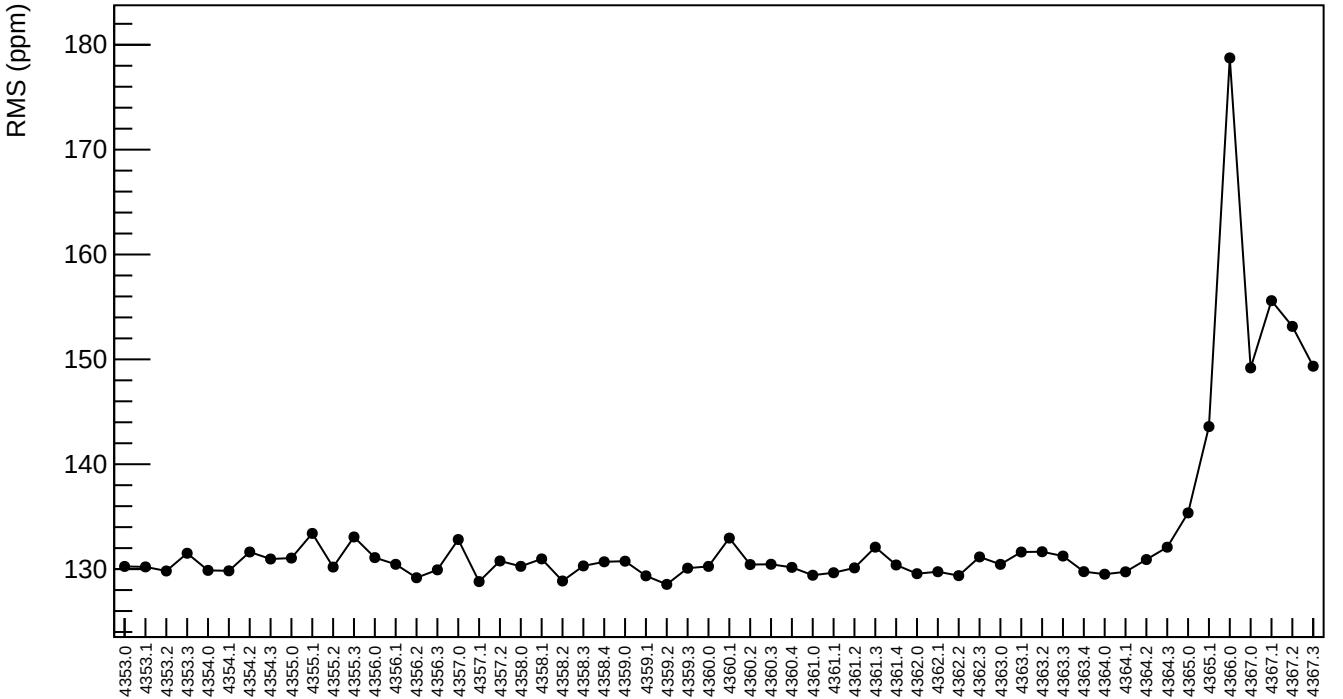

lagr_asym_us_dd (ppb)
χ² / ndf 50.15 / 57
p0 −57.27 ± 120.9
1D pull distribution
Mean −0.004125 ± 0.1221
Std Dev 0.9299 ± 0.08634
Underflow 0
Overflow 0
χ² / ndf 3.717 / 5
Constant 11.99 ± 1.98
Mean −0.04918 ± 0.15341
Sigma 0.9931 ± 0.1137

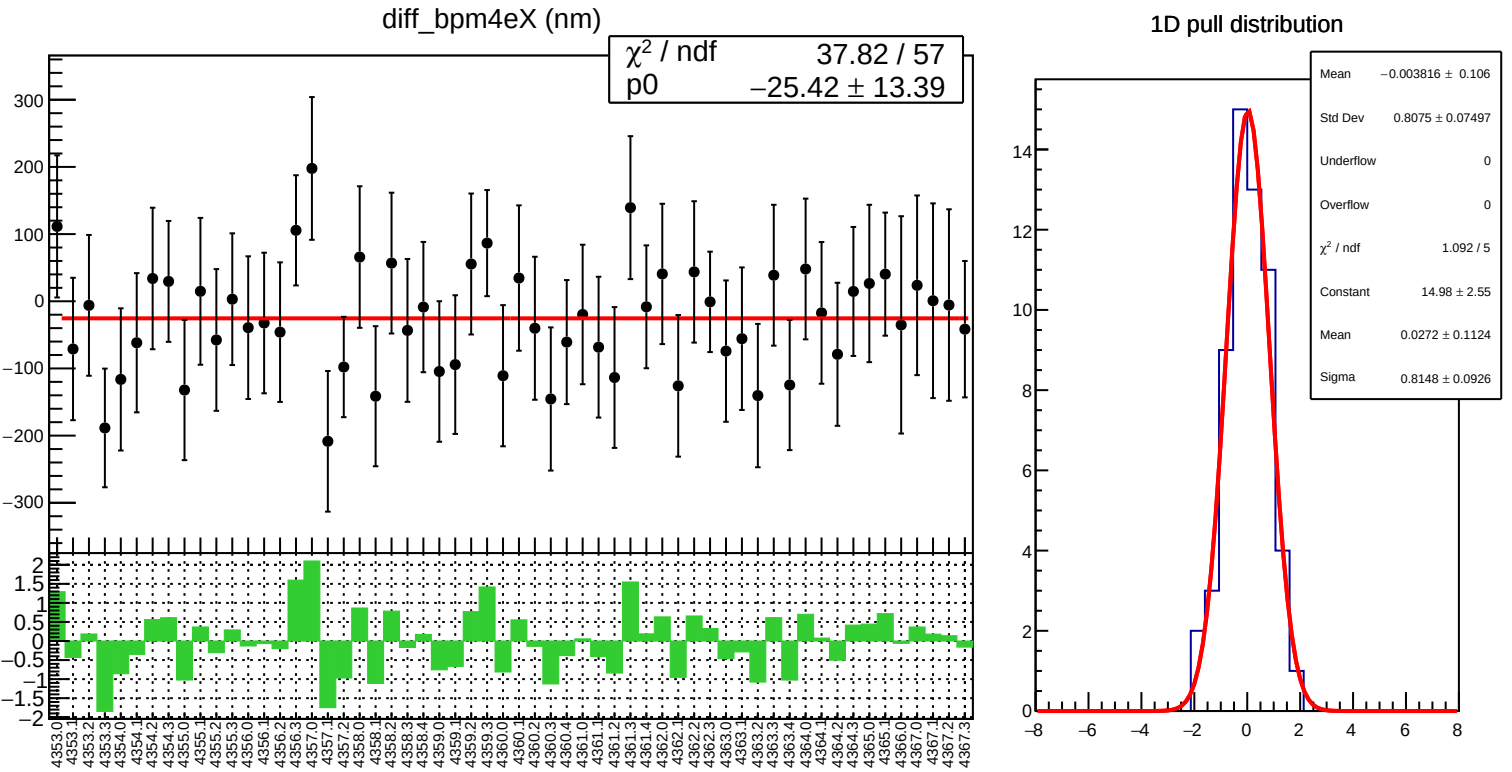

lagr_asym_us_dd RMS (ppm)
RMS (ppm)
93
92.5
92
91.5
91
90.5
90
89.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

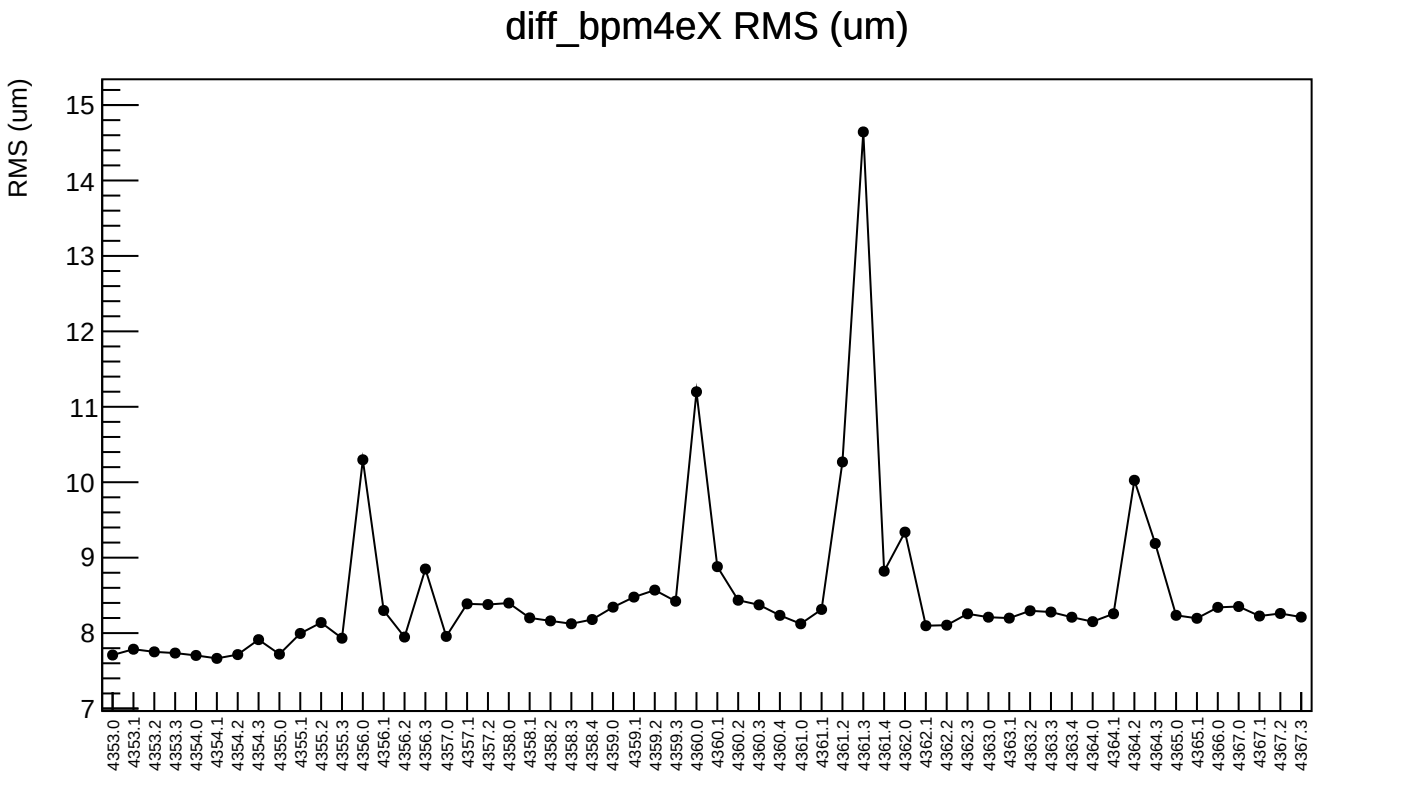

lagr_asym_usr (ppb)
χ² / ndf 47.91 / 57
p0 −567.3 ± 173.4
1D pull distribution
Mean 0.001626 ± 0.1193
Std Dev 0.9088 ± 0.08438
Underflow 0
Overflow 0
χ² / ndf 4.555 / 6
Constant 13.87 ± 2.65
Mean −0.0218 ± 0.1209
Sigma 0.8378 ± 0.1240

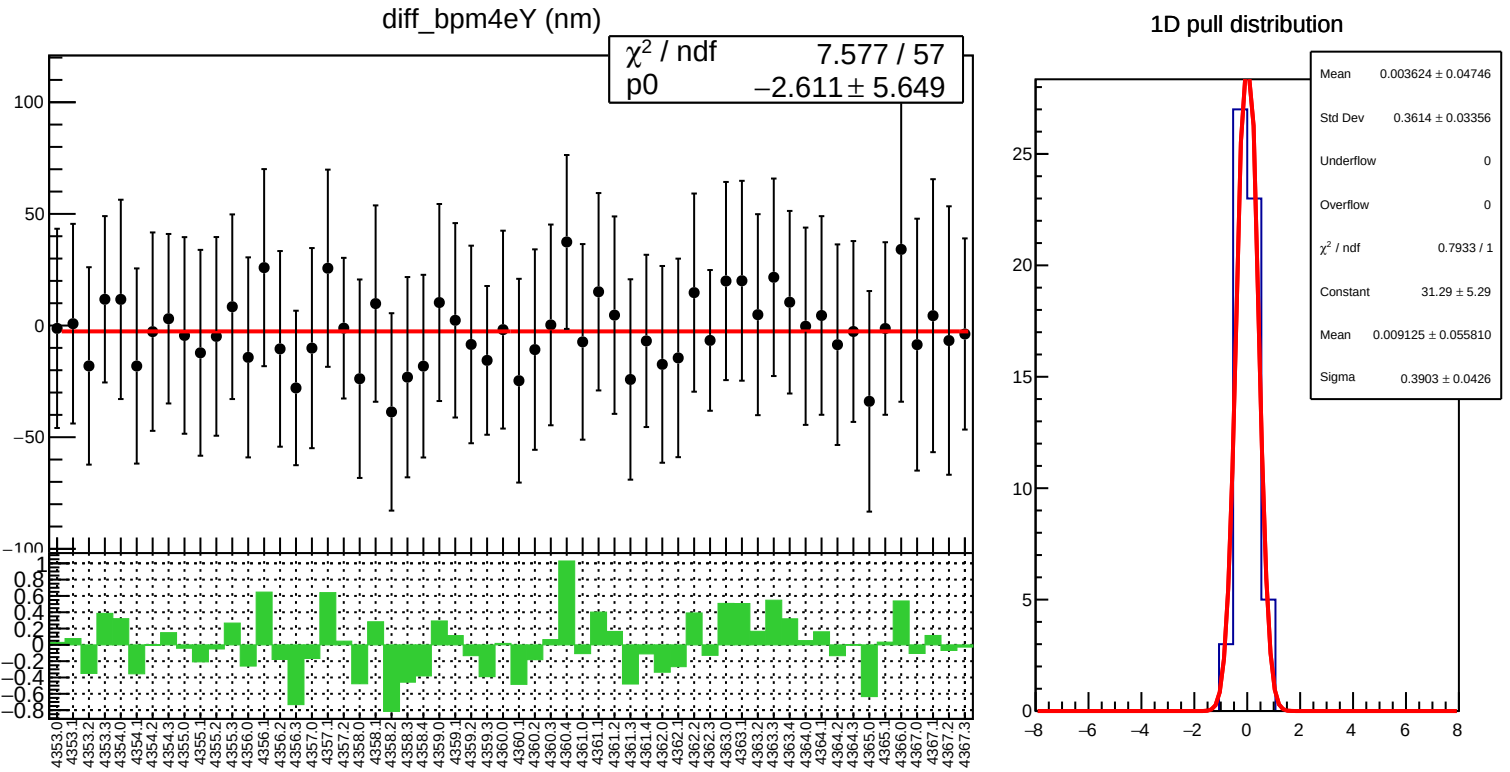

lagr_asym_usr RMS (ppm)
RMS (ppm)
180
170
160
150
140
130
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

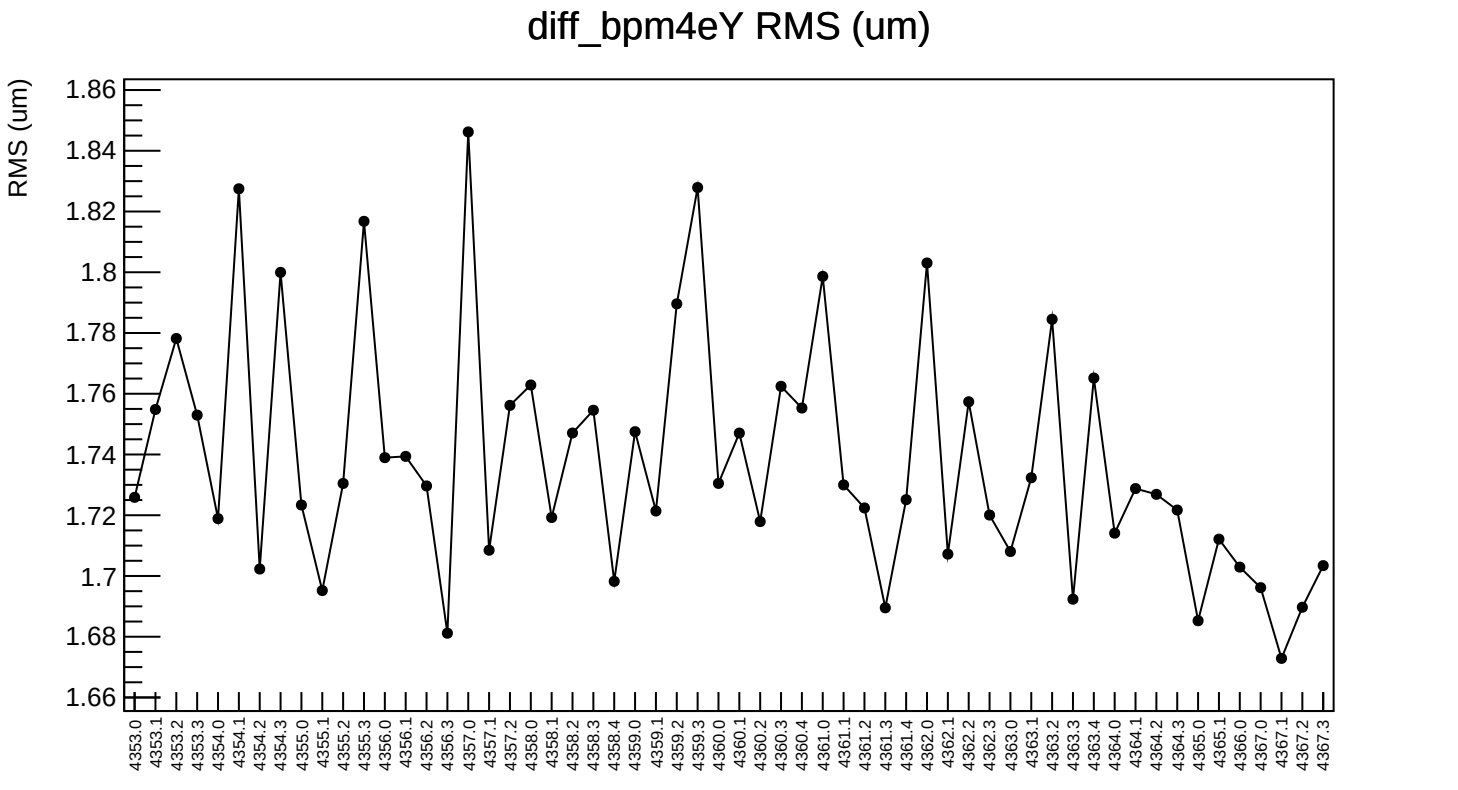

lagr_asym_usl (ppb)
χ² / ndf 49.87 / 57
p0 −681.9 ± 172.7
1D pull distribution
Mean −0.004142 ± 0.1218
Std Dev 0.9272 ± 0.08609
Underflow 0
Overflow 0
χ² / ndf 5.558 / 6
Constant 11.36 ± 2.09
Mean −0.0624 ± 0.1732
Sigma 1.004 ± 0.143

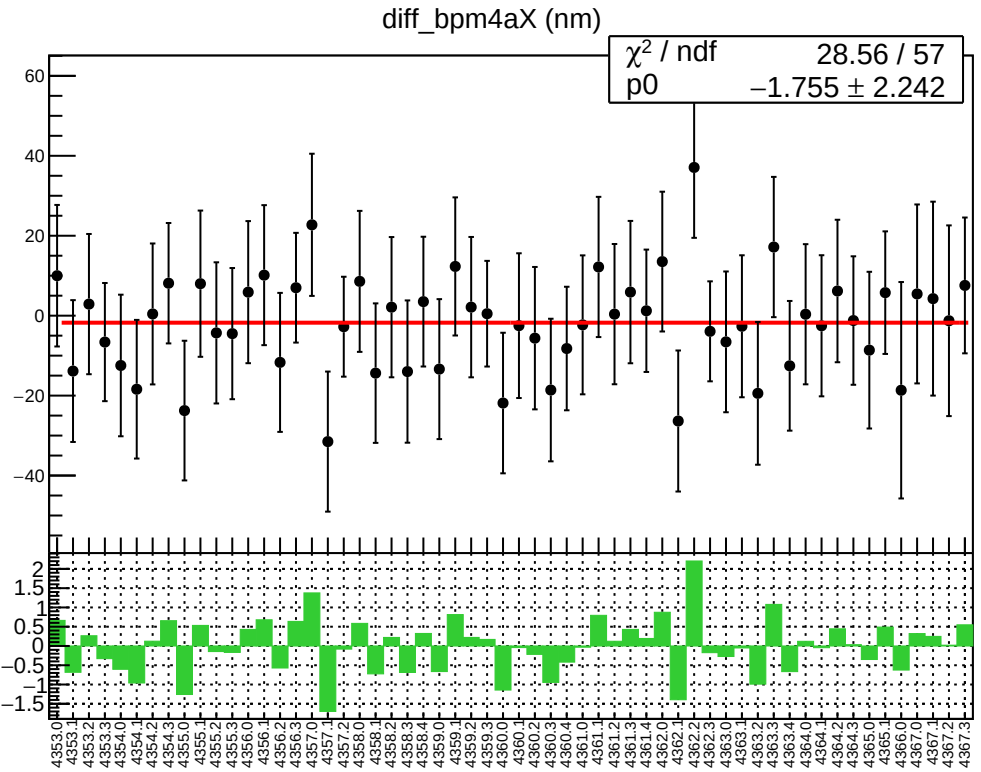

lagr_asym_usl RMS (ppm)
RMS (ppm)
180
170
160
150
140
130
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

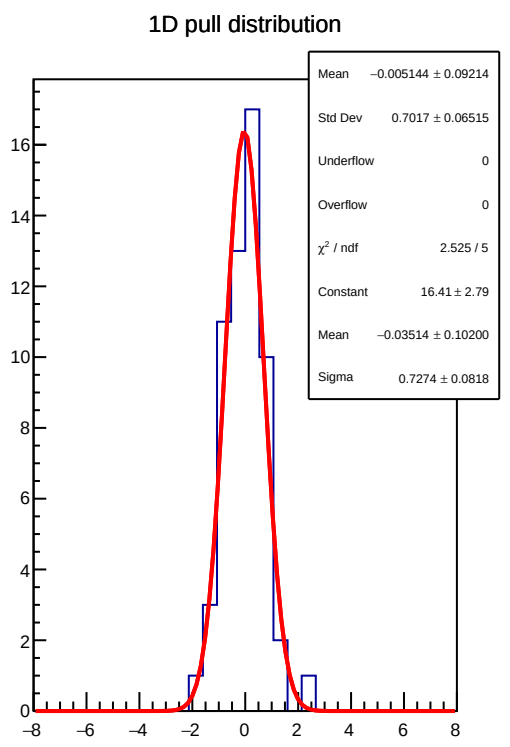

diff_bpm4eX (nm)
χ² / ndf 37.82 / 57
p0 −25.42 ± 13.39
1D pull distribution
Mean −0.003816 ± 0.106
Std Dev 0.8075 ± 0.07497
Underflow 0
Overflow 0
χ² / ndf 1.092 / 5
Constant 14.98 ± 2.55
Mean 0.0272 ± 0.1124
Sigma 0.8148 ± 0.0926

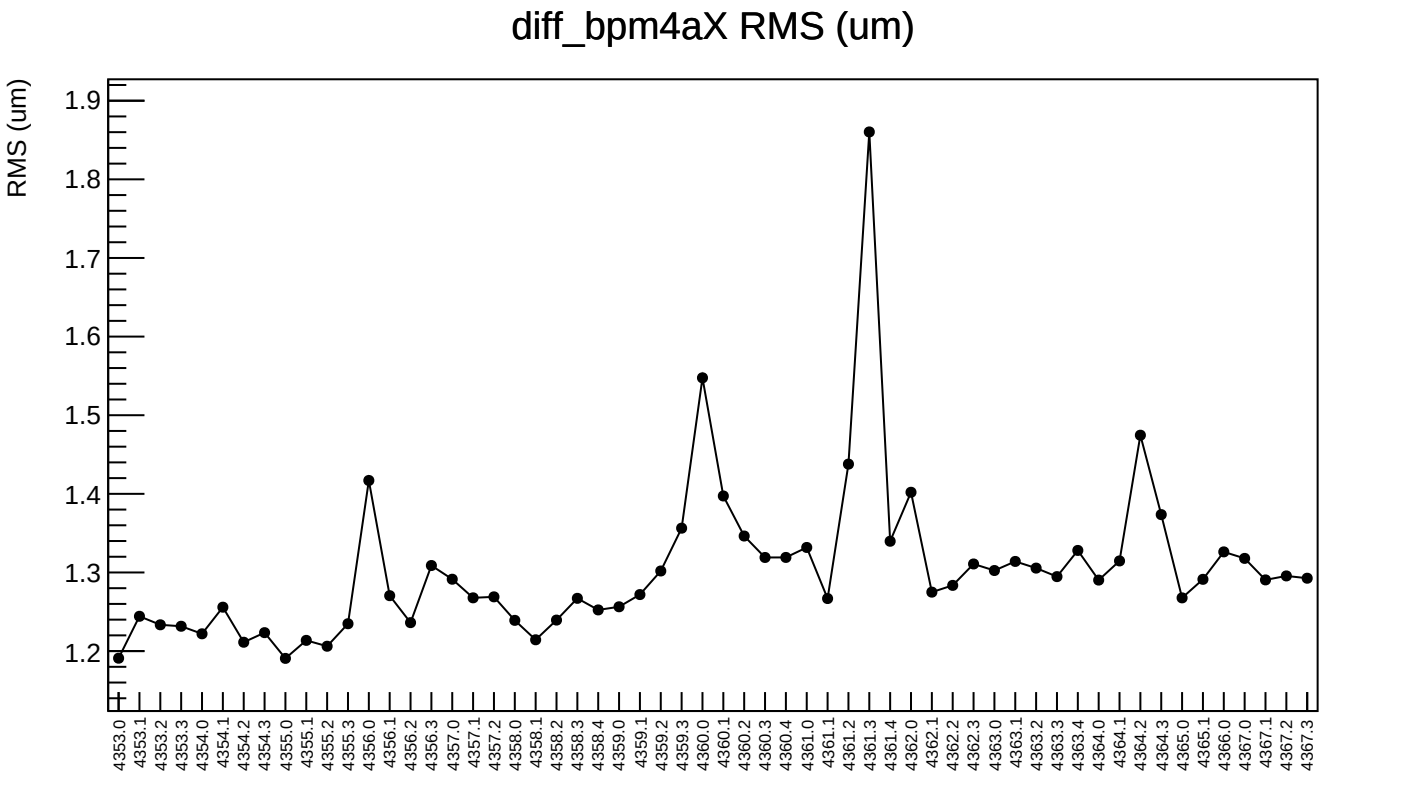

diff_bpm4eX RMS (um)
RMS (um)
15
14
13
12
11
10
9
8
7
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

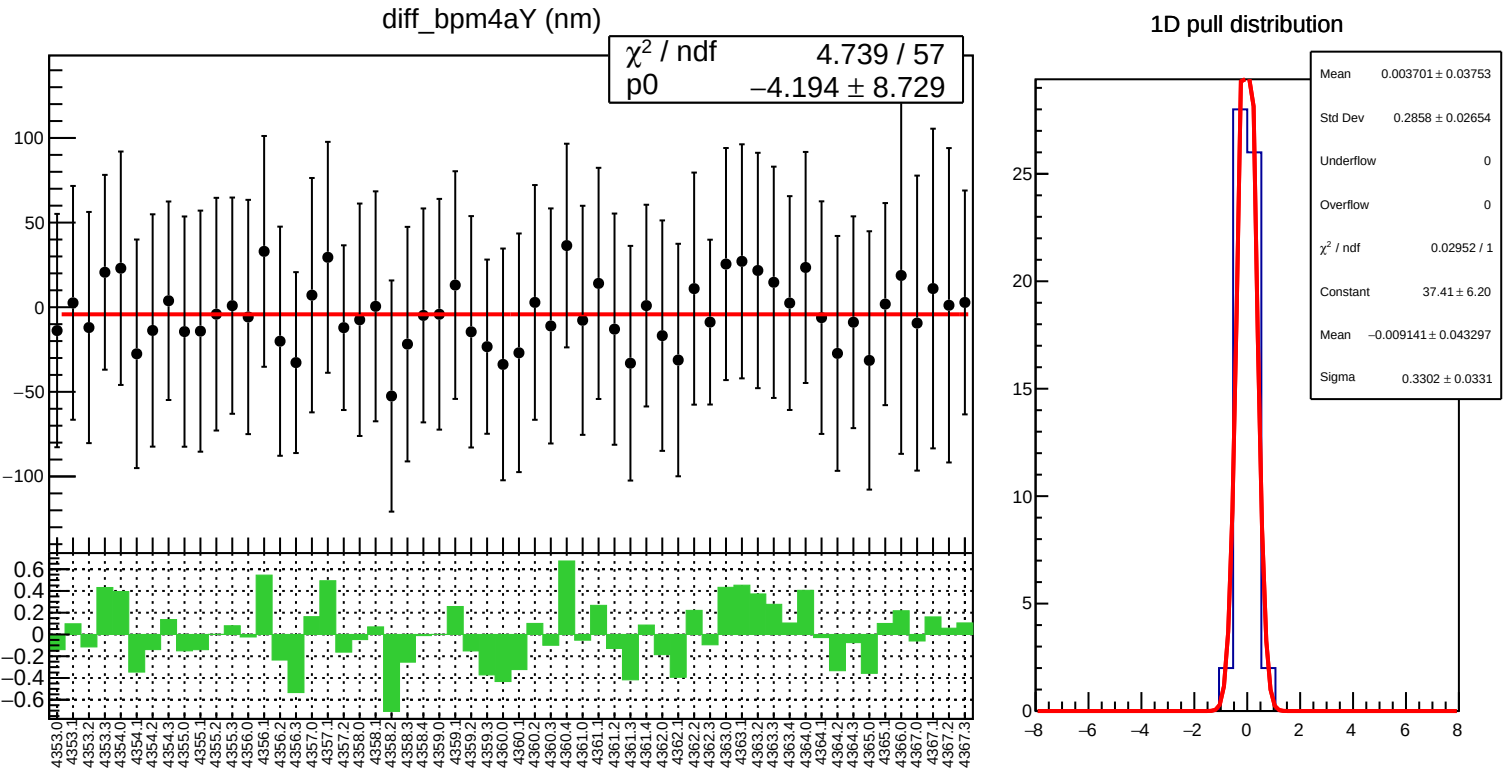

diff_bpm4eY (nm)
χ² / ndf 7.577 / 57
p0 −2.611 ± 5.649
1D pull distribution
Mean 0.003624 ± 0.04746
Std Dev 0.3614 ± 0.03356
Underflow 0
Overflow 0
χ² / ndf 0.7933 / 1
Constant 31.29 ± 5.29
Mean 0.009125 ± 0.055810
Sigma 0.3903 ± 0.0426

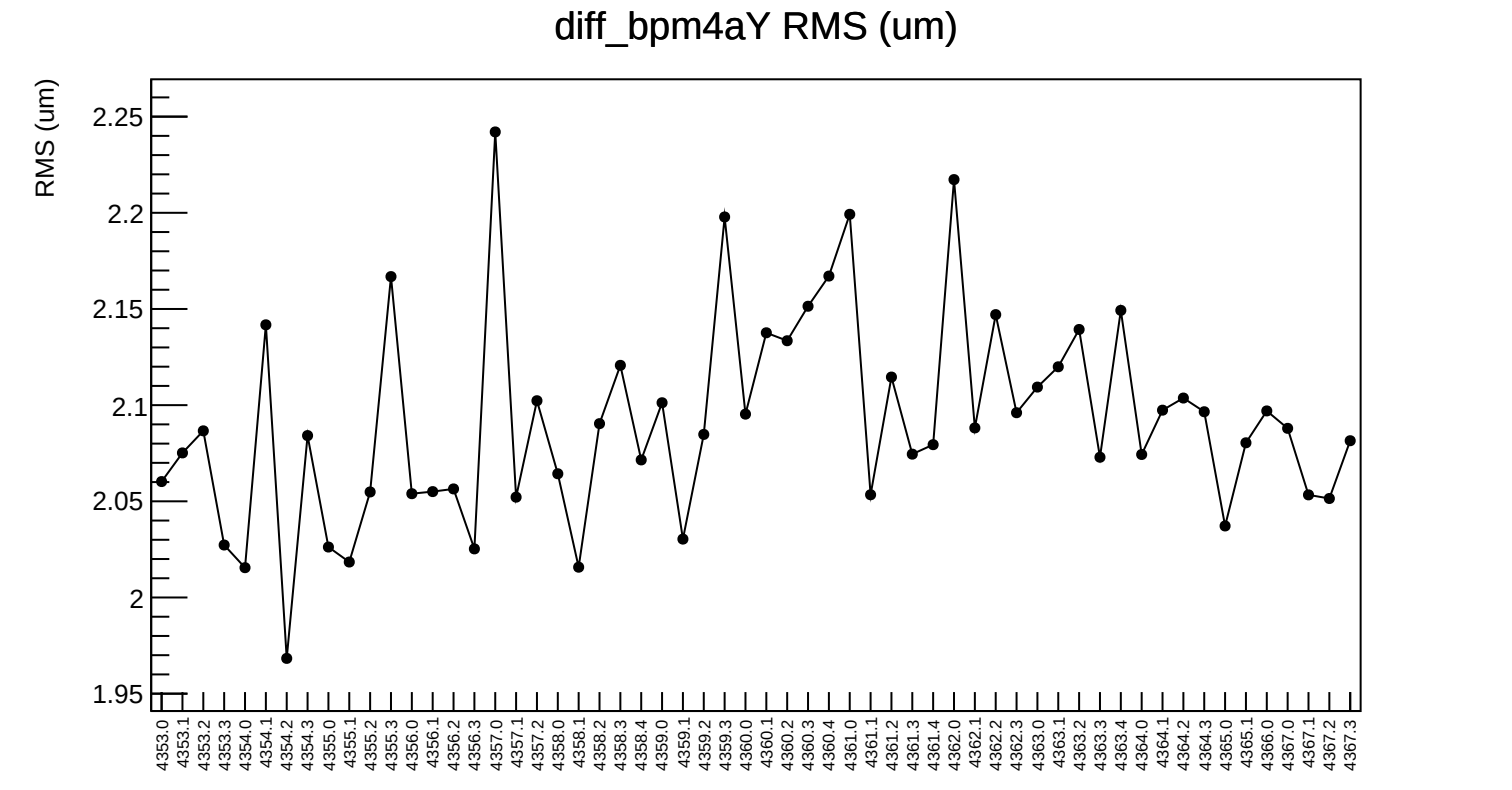

diff_bpm4eY RMS (um)
RMS (um)
1.86
1.84
1.82
1.8
1.78
1.76
1.74
1.72
1.7
1.68
1.66
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

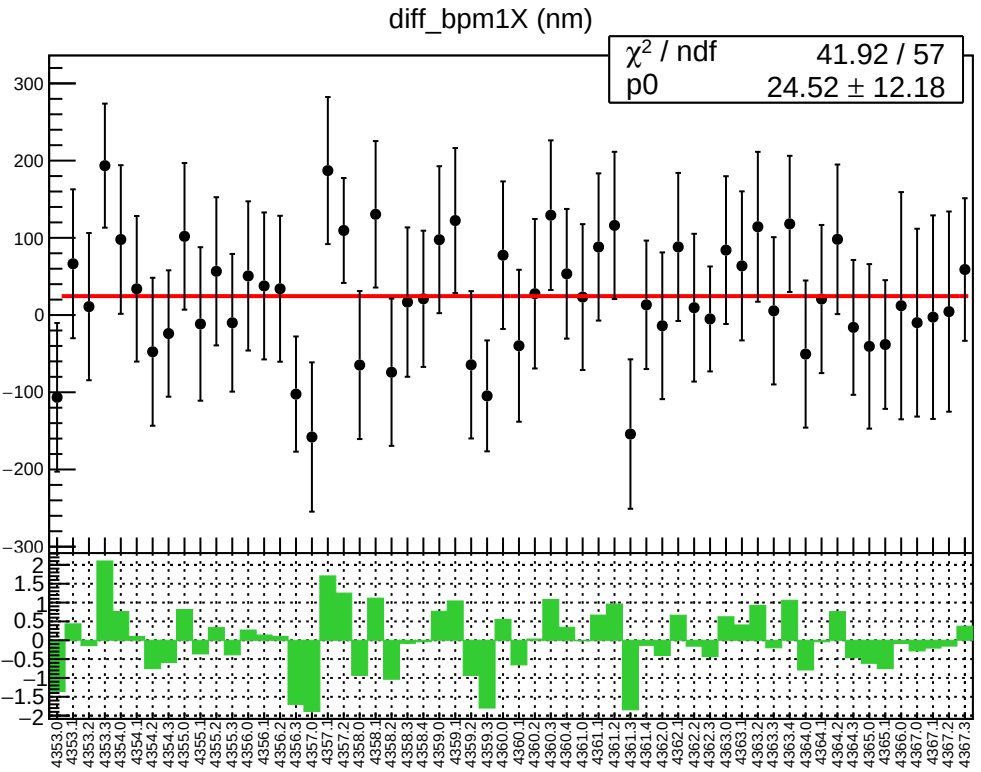

diff_bpm4aX (nm)
χ² / ndf 28.56 / 57
p0 −1.755 ± 2.242

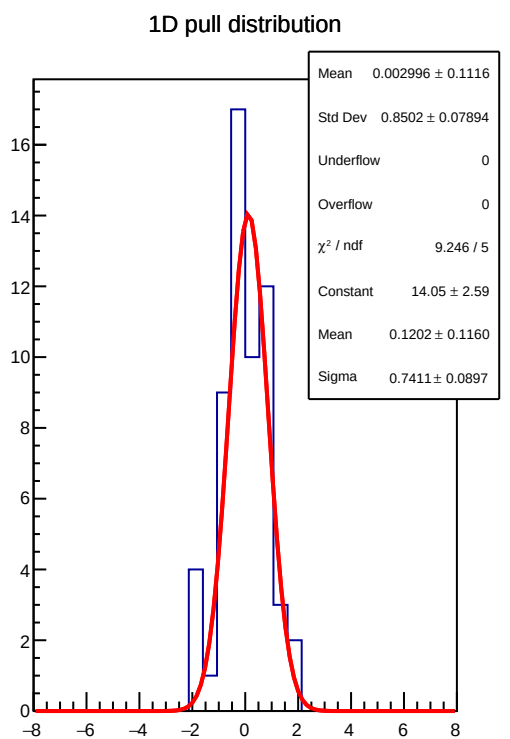

1D pull distribution
Mean −0.005144 ± 0.09214
Std Dev 0.7017 ± 0.06515
Underflow 0
Overflow 0
χ² / ndf 2.525 / 5
Constant 16.41 ± 2.79
Mean −0.03514 ± 0.10200
Sigma 0.7274 ± 0.0818

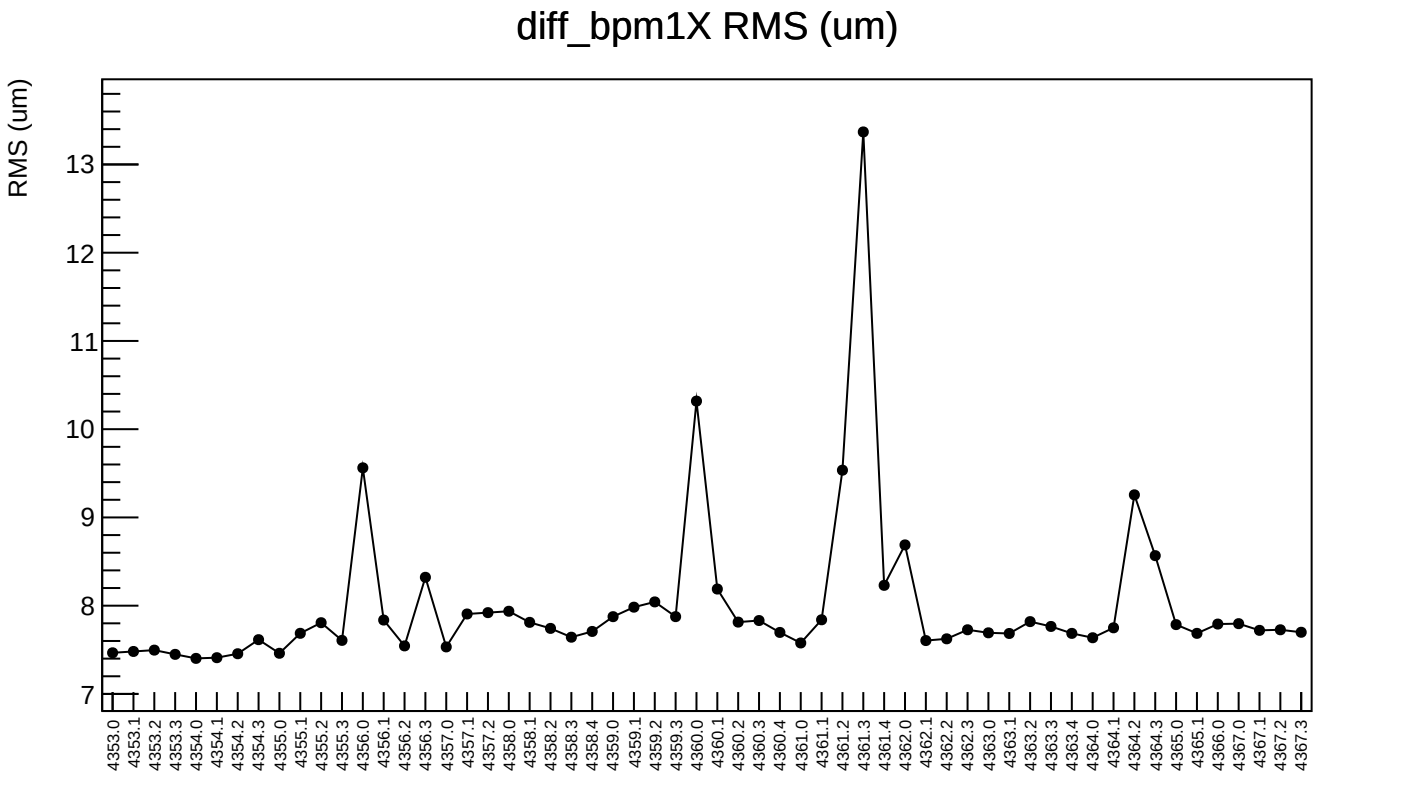

diff_bpm4aX RMS (um)
RMS (um)
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

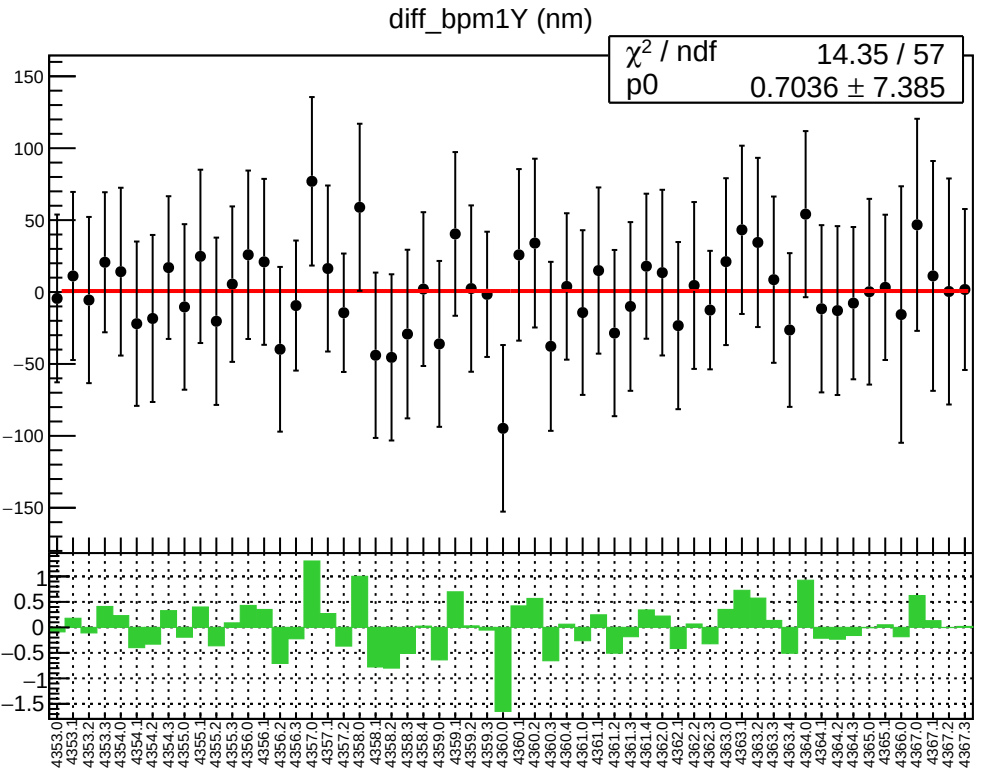

diff_bpm4aY (nm)
χ² / ndf 4.739 / 57
p0 −4.194 ± 8.729
1D pull distribution
Mean 0.003701 ± 0.03753
Std Dev 0.2858 ± 0.02654
Underflow 0
Overflow 0
χ² / ndf 0.02952 / 1
Constant 37.41 ± 6.20
Mean −0.009141 ± 0.043297
Sigma 0.3302 ± 0.0331

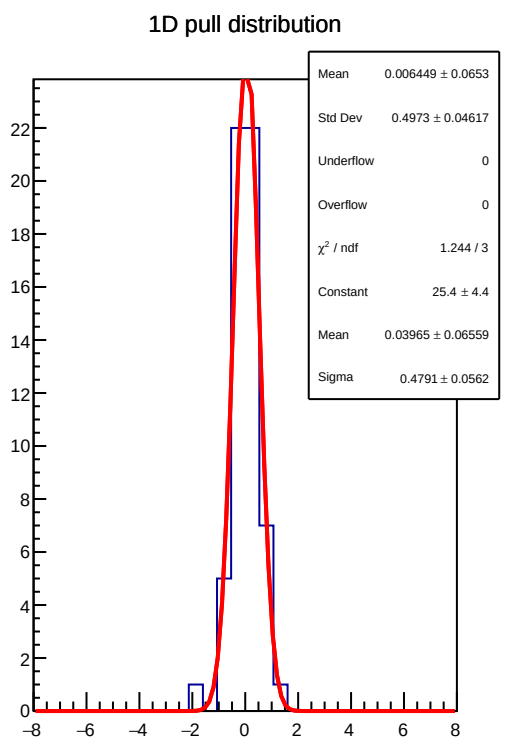

diff_bpm4aY RMS (um)
RMS (um)
2.25
2.2
2.15
2.1
2.05
2
1.95
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

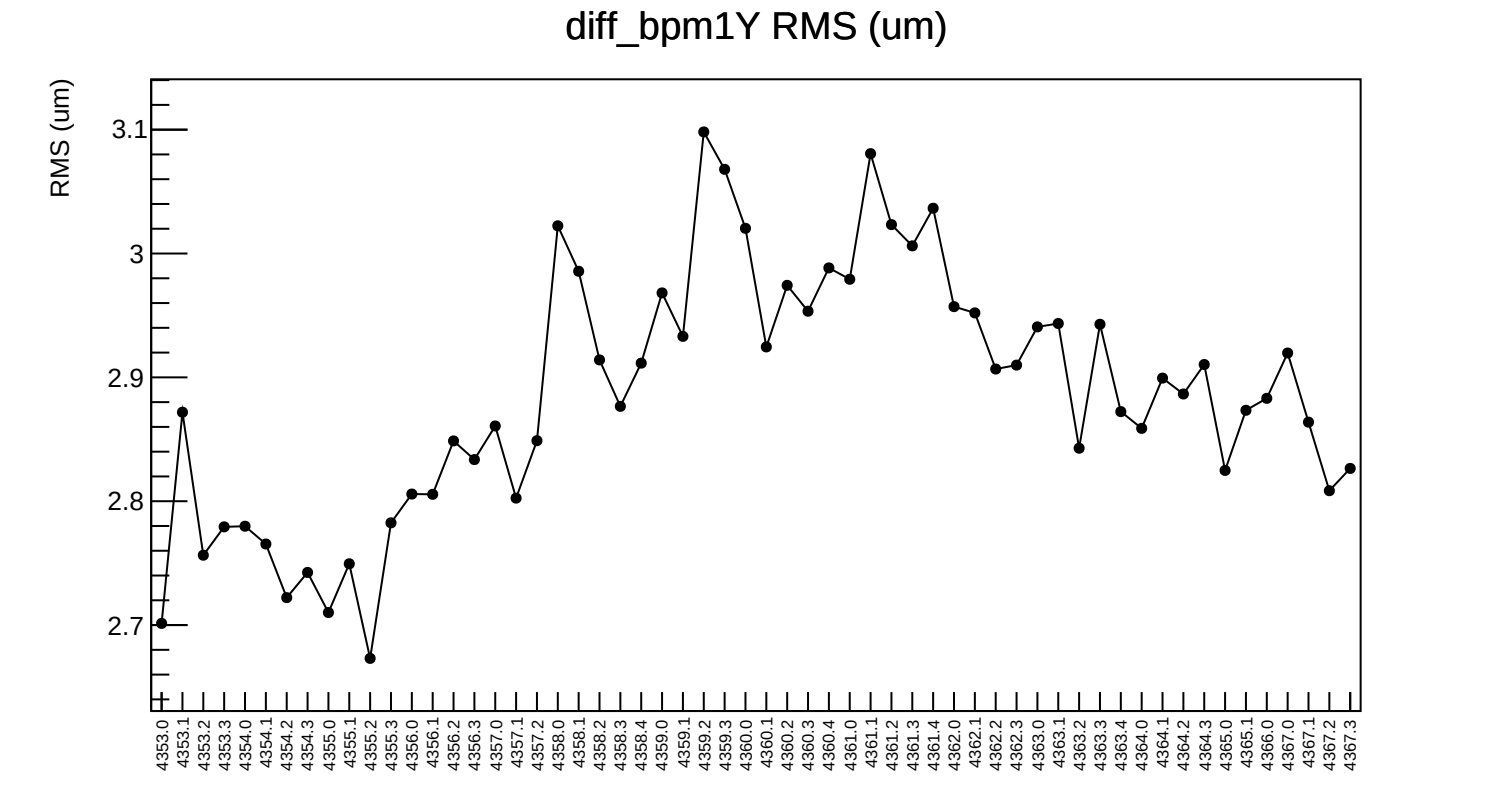

diff_bpm1X (nm)
χ² / ndf 41.92 / 57
p0 24.52 ± 12.18

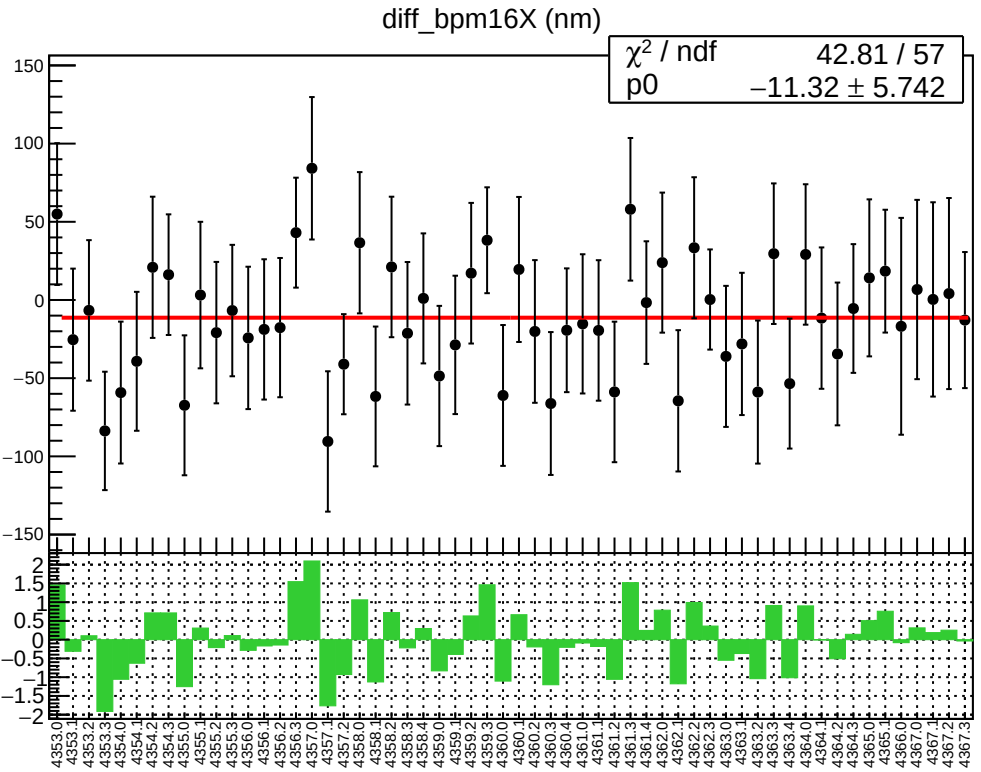

1D pull distribution
Mean 0.002996 ± 0.1116
Std Dev 0.8502 ± 0.07894
Underflow 0
Overflow 0
χ² / ndf 9.246 / 5
Constant 14.05 ± 2.59
Mean 0.1202 ± 0.1160
Sigma 0.7411 ± 0.0897

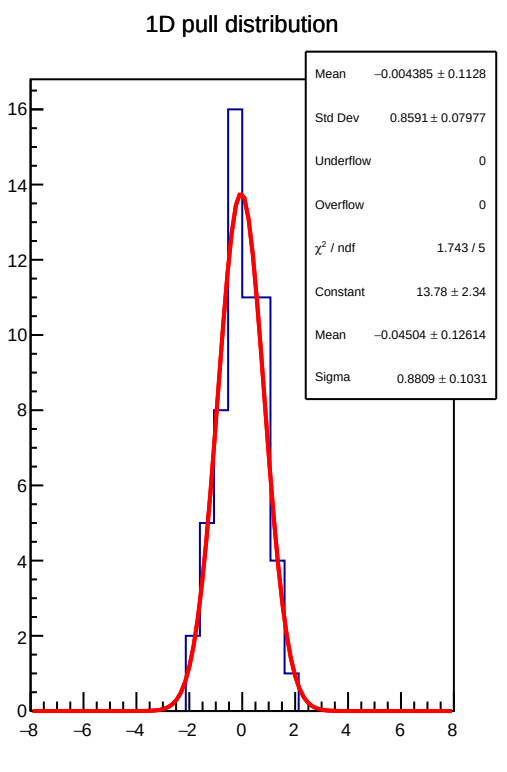

diff_bpm1X RMS (um)
RMS (um)
13
12
11
10
9
8
7
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

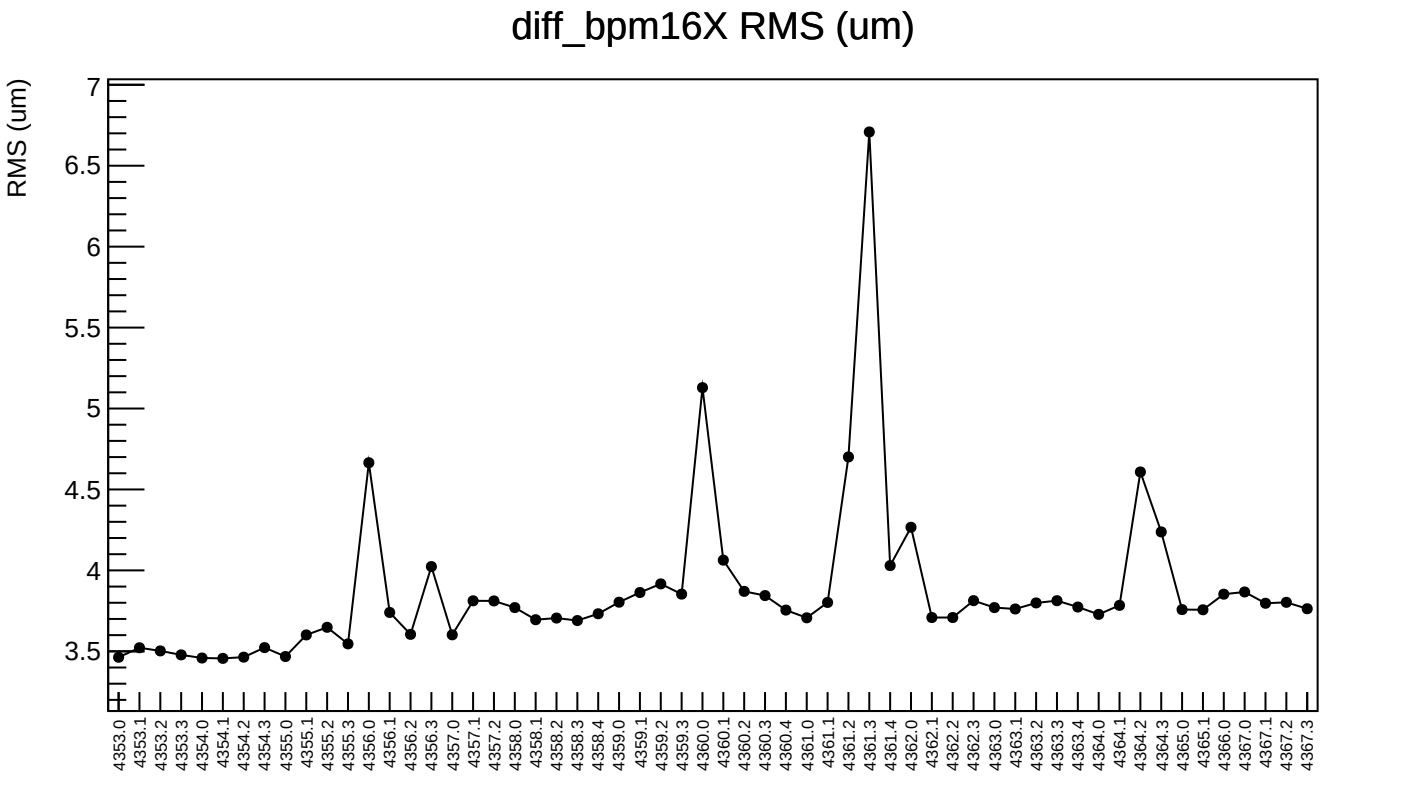

diff_bpm1Y (nm)
χ² / ndf 14.35 / 57
p0 0.7036 ± 7.385


1D pull distribution
Mean 0.006449 ± 0.0653
Std Dev 0.4973 ± 0.04617
Underflow 0
Overflow 0
χ² / ndf 1.244 / 3
Constant 25.4 ± 4.4
Mean 0.03965 ± 0.06559
Sigma 0.4791 ± 0.0562


diff_bpm1Y RMS (um)
RMS (um)
3.1
3
2.9
2.8
2.7
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


diff_bpm16X (nm)
χ² / ndf 42.81 / 57
p0 −11.32 ± 5.742


1D pull distribution
Mean −0.004385 ± 0.1128
Std Dev 0.8591 ± 0.07977
Underflow 0
Overflow 0
χ² / ndf 1.743 / 5
Constant 13.78 ± 2.34
Mean −0.04504 ± 0.12614
Sigma 0.8809 ± 0.1031


diff_bpm16X RMS (um)
RMS (um)
7
6.5
6
5.5
5
4.5
4
3.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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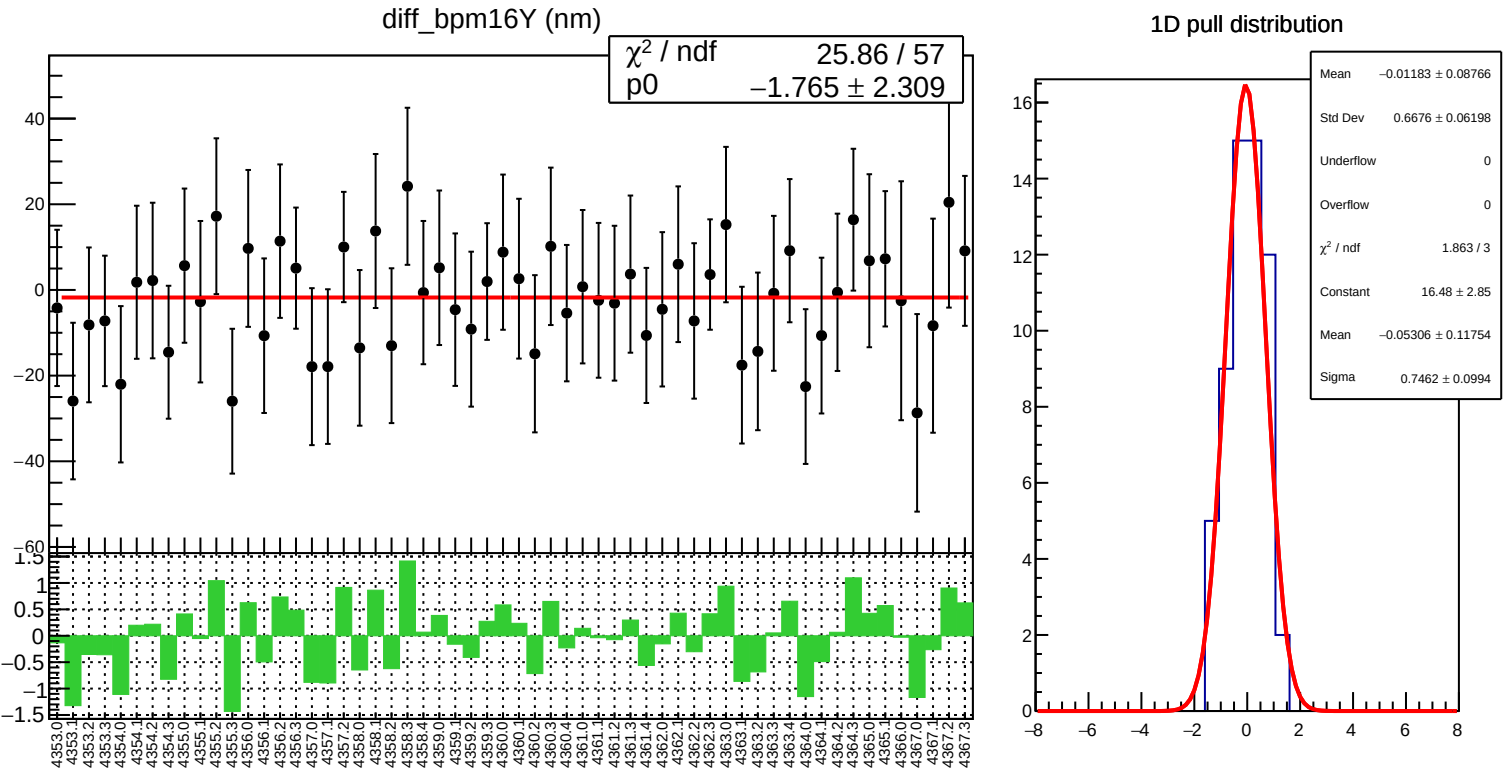
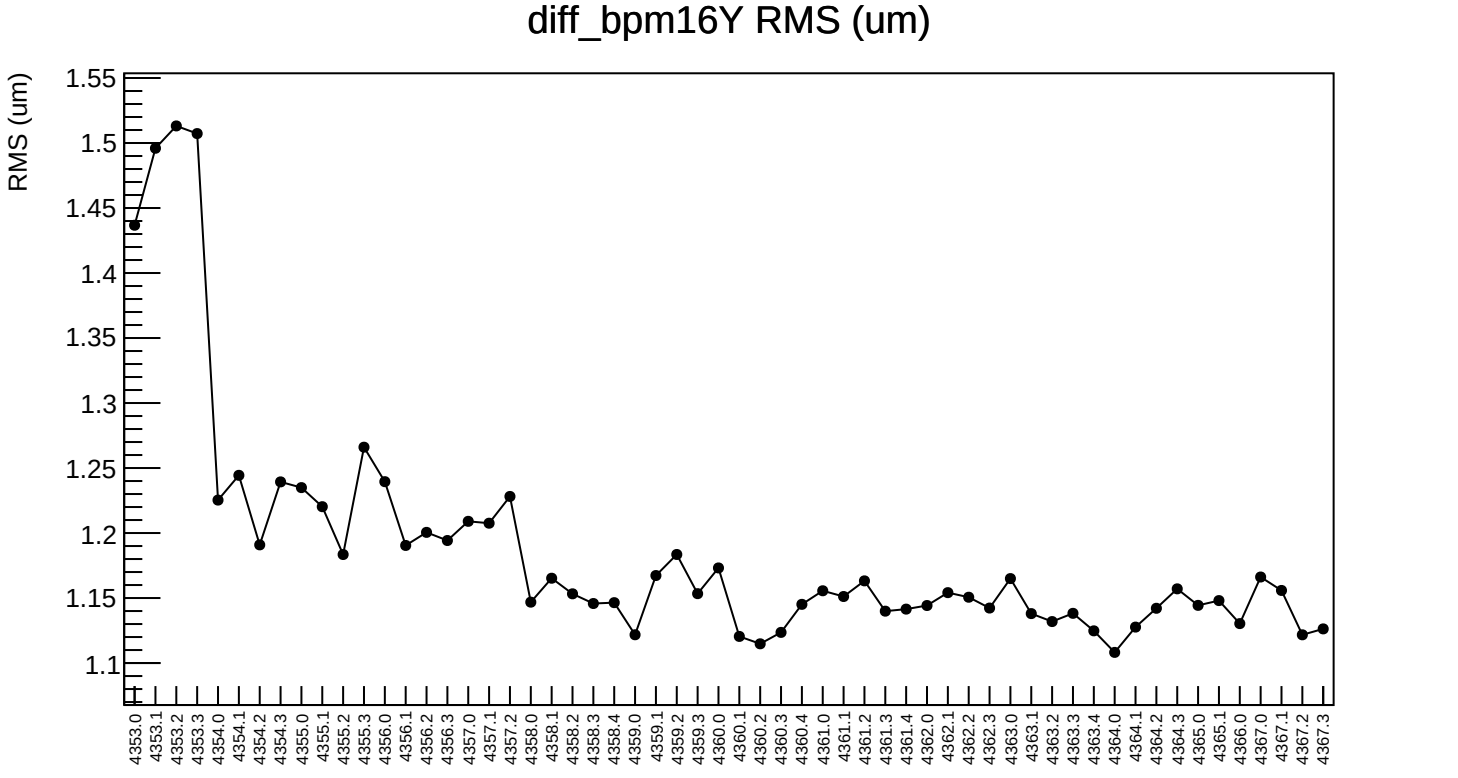
4366.0
4367.0
4367.1
4367.2
4367.3


diff_bpm16Y (nm)
χ² / ndf 25.86 / 57
p0 −1.765 ± 2.309
1D pull distribution
Mean −0.01183 ± 0.08766
Std Dev 0.6676 ± 0.06198
Underflow 0
Overflow 0
χ² / ndf 1.863 / 3
Constant 16.48 ± 2.85
Mean −0.05306 ± 0.11754
Sigma 0.7462 ± 0.0994


diff_bpm16Y RMS (um)
RMS (um)
1.55
1.5
1.45
1.4
1.35
1.3
1.25
1.2
1.15
1.1
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
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4358.1
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4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
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4361.2
4361.3
4361.4
4362.0
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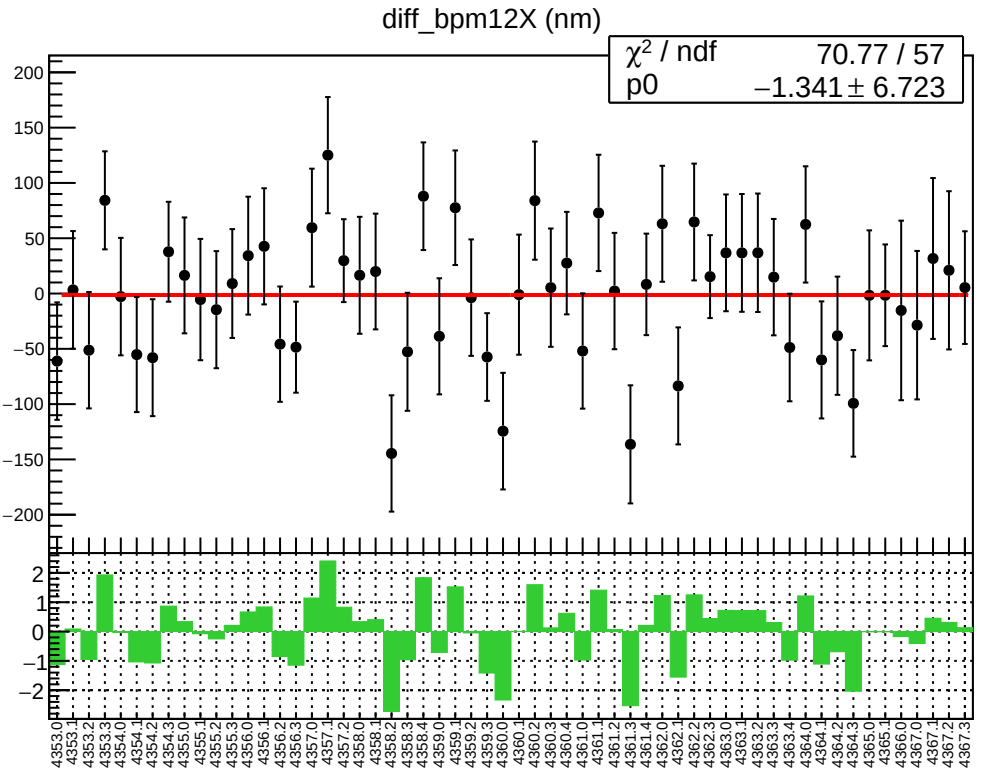
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


diff_bpm12X (nm)
χ² / ndf 70.77 / 57
p0 −1.341 ± 6.723
200
150
100
50
0
−50
−100
−150
−200
2
1
0
−1
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
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4363.4
4364.0
4364.1
4364.2
4364.3
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4365.1
4366.0
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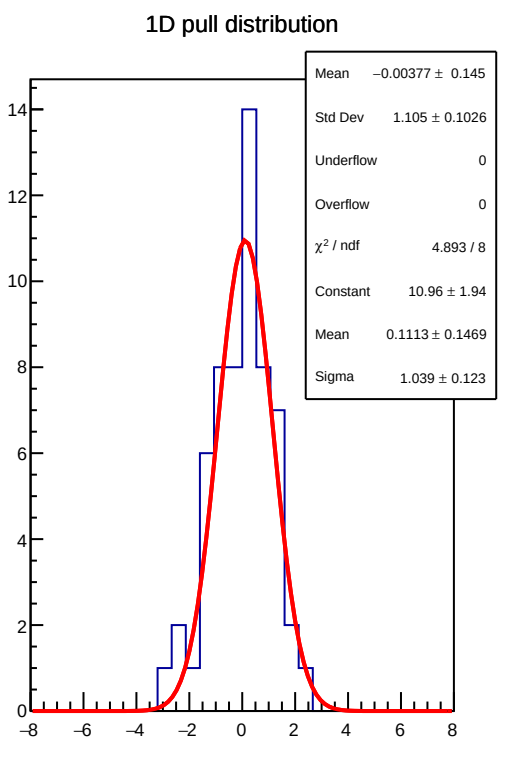
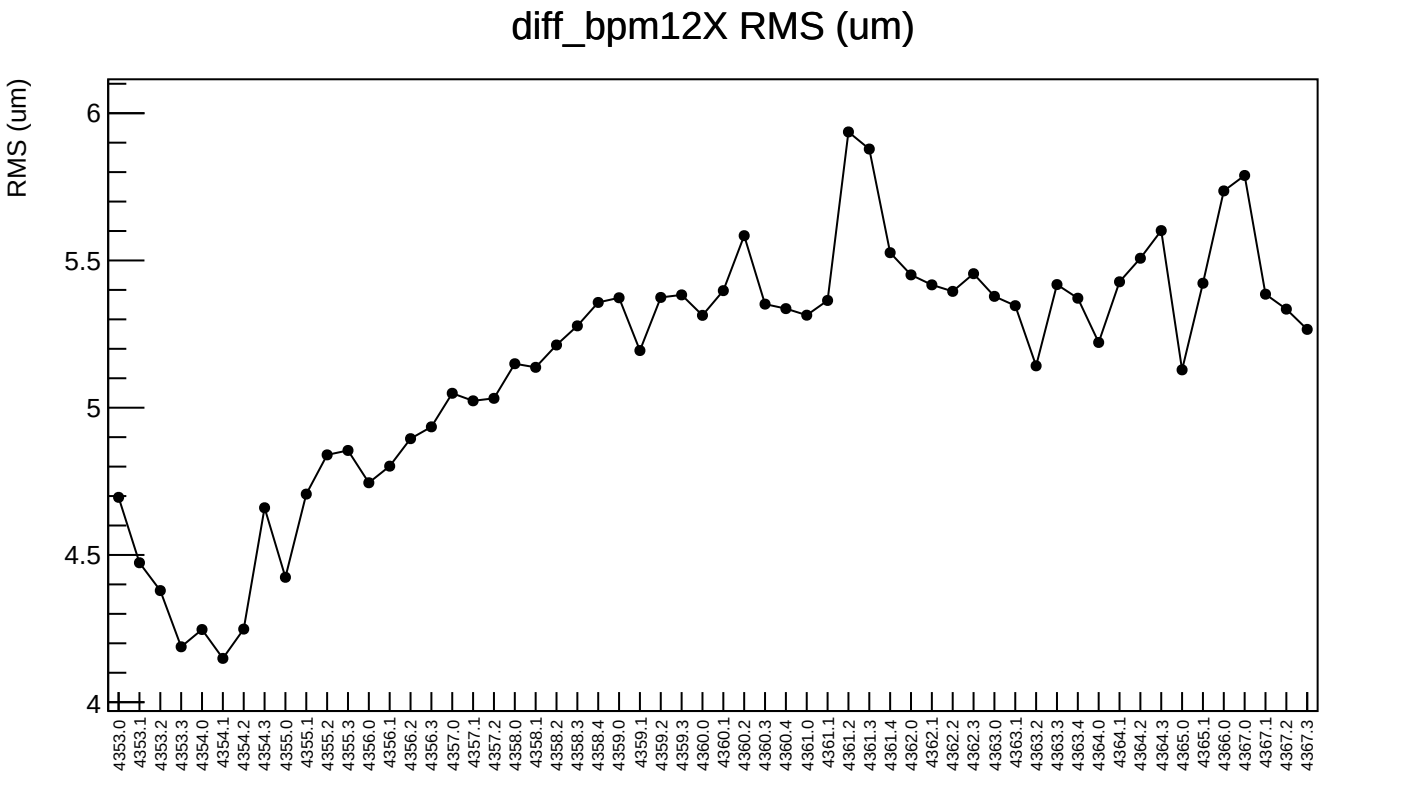
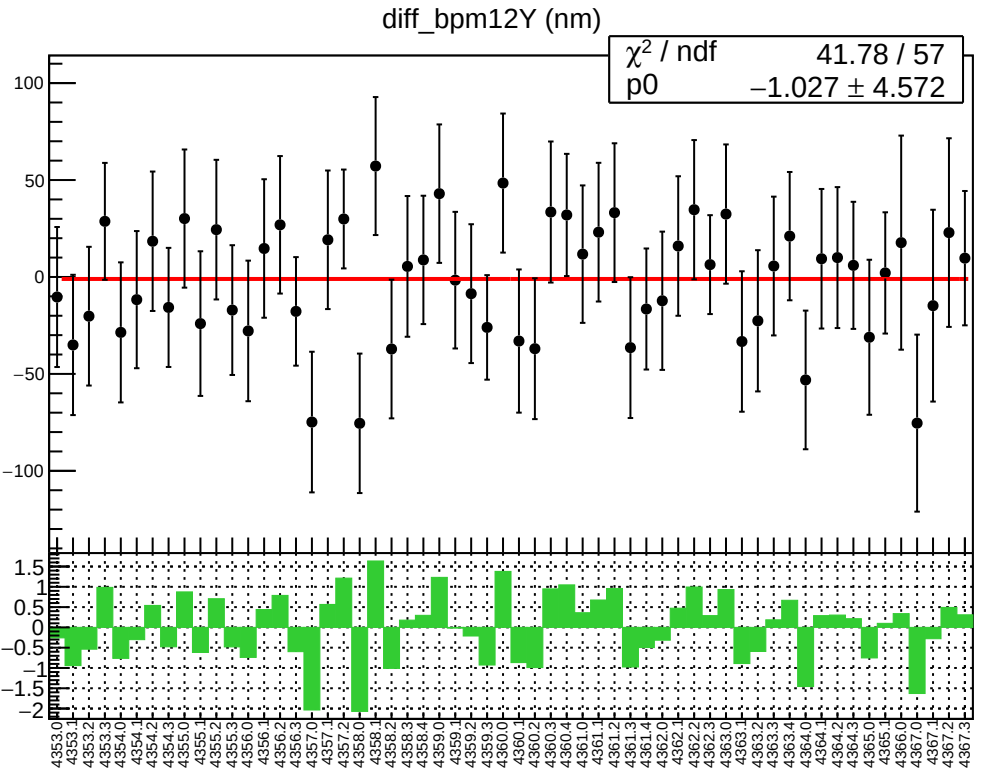
4367.1
4367.2
4367.3


1D pull distribution
Mean −0.00377 ± 0.145
Std Dev 1.105 ± 0.1026
Underflow 0
Overflow 0
χ² / ndf 4.893 / 8
Constant 10.96 ± 1.94
Mean 0.1113 ± 0.1469
Sigma 1.039 ± 0.123
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


diff_bpm12X RMS (um)
RMS (um)
6
5.5
5
4.5
4
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


diff_bpm12Y (nm)
χ² / ndf 41.78 / 57
p0 −1.027 ± 4.572
100
50
0
−50
−100
1.5
1
0.5
0
−0.5
−1
−1.5
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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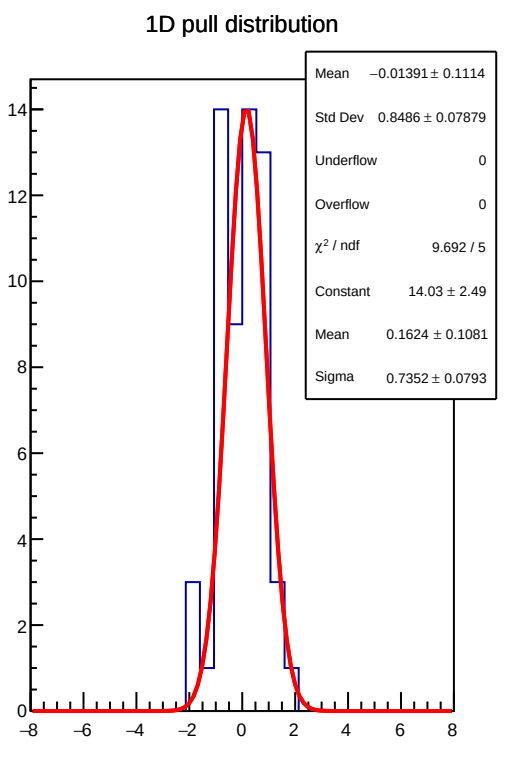
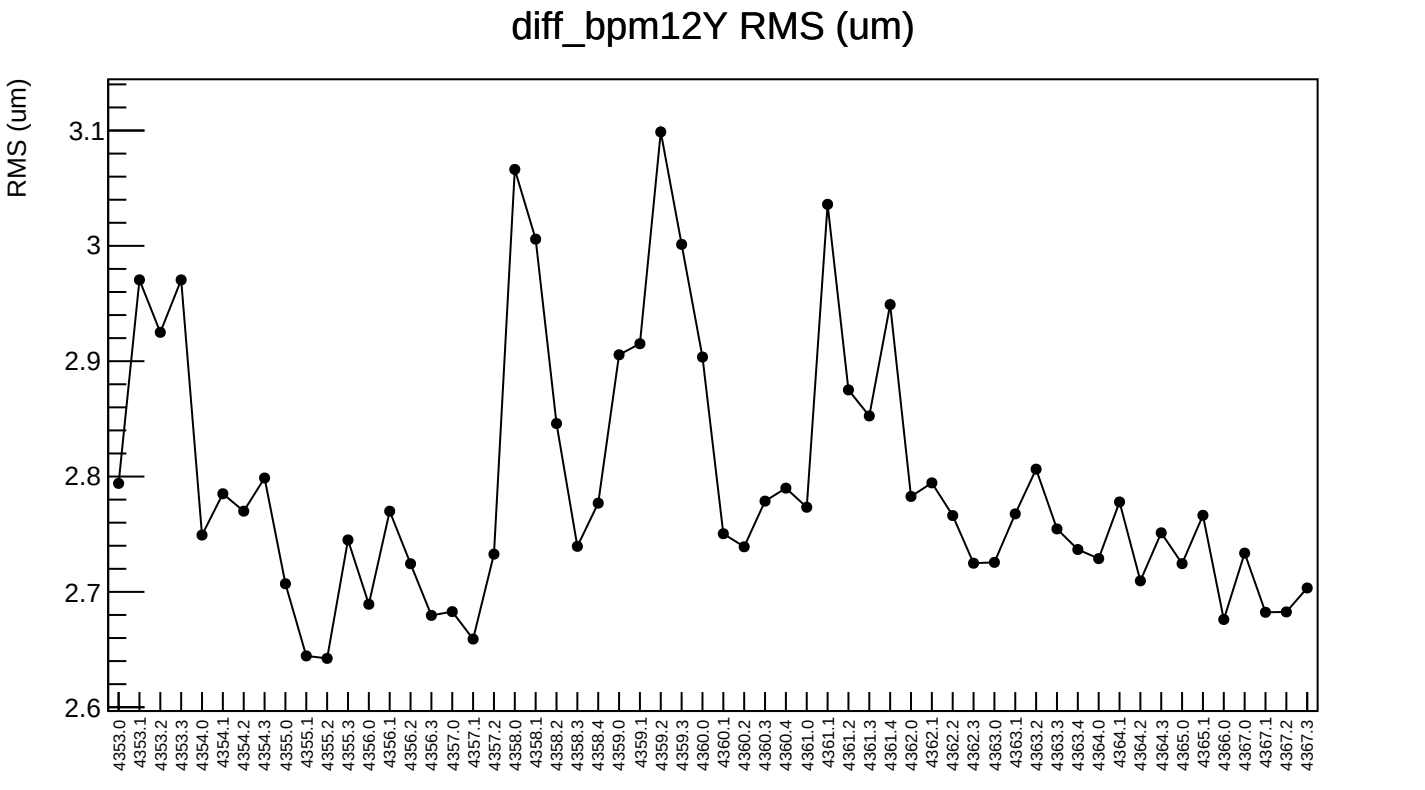
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean −0.01391 ± 0.1114
Std Dev 0.8486 ± 0.07879
Underflow 0
Overflow 0
χ² / ndf 9.692 / 5
Constant 14.03 ± 2.49
Mean 0.1624 ± 0.1081
Sigma 0.7352 ± 0.0793
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


diff_bpm12Y RMS (um)
RMS (um)
3.1
3
2.9
2.8
2.7
2.6
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
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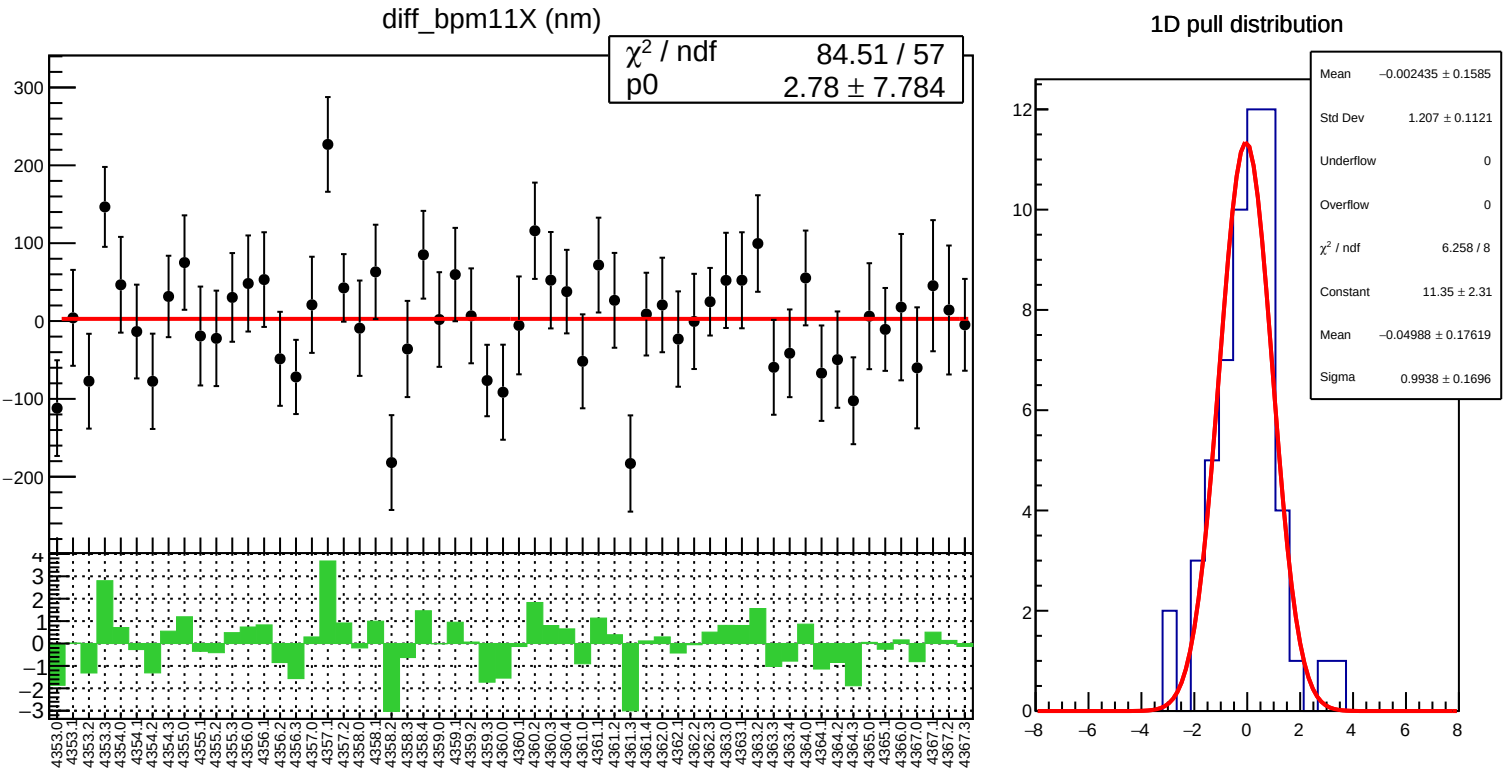
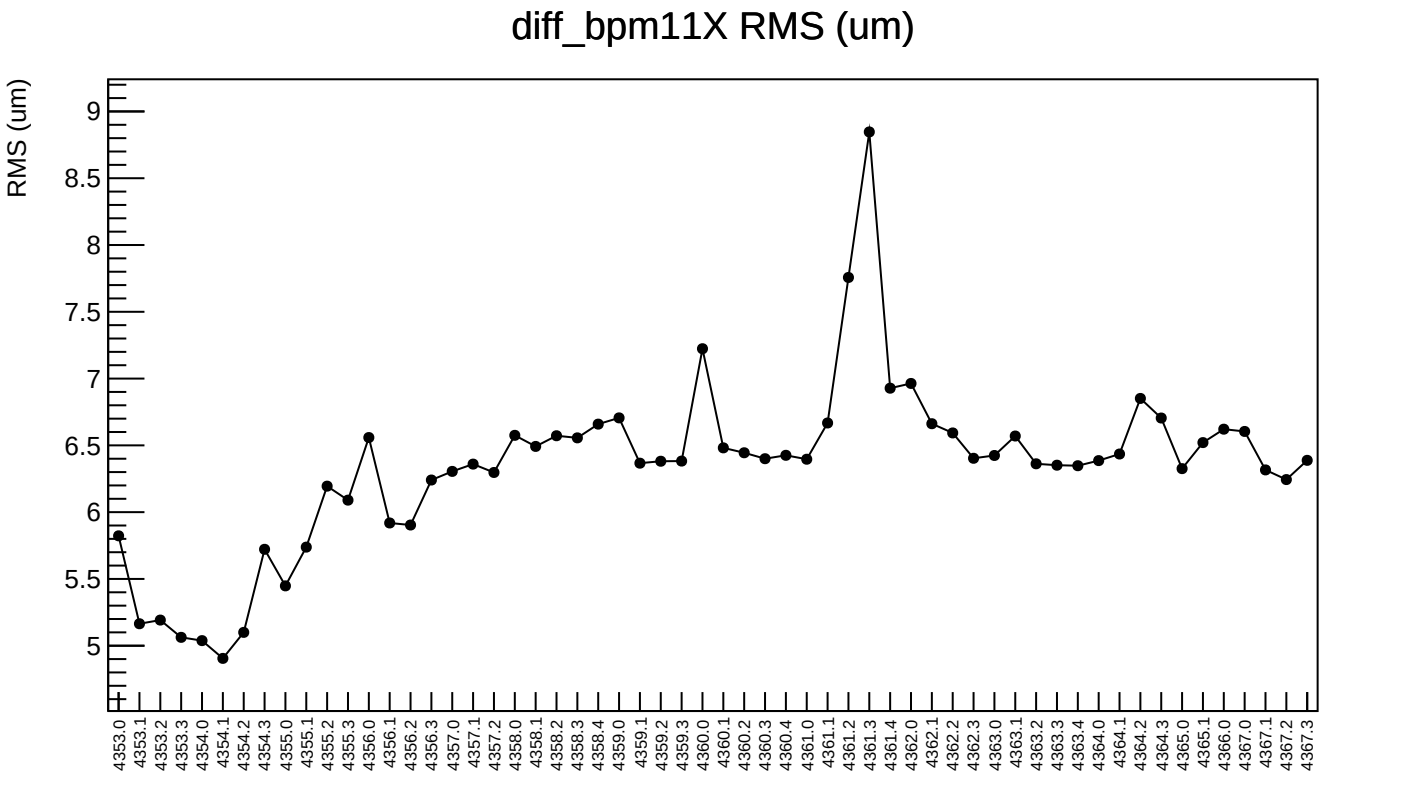
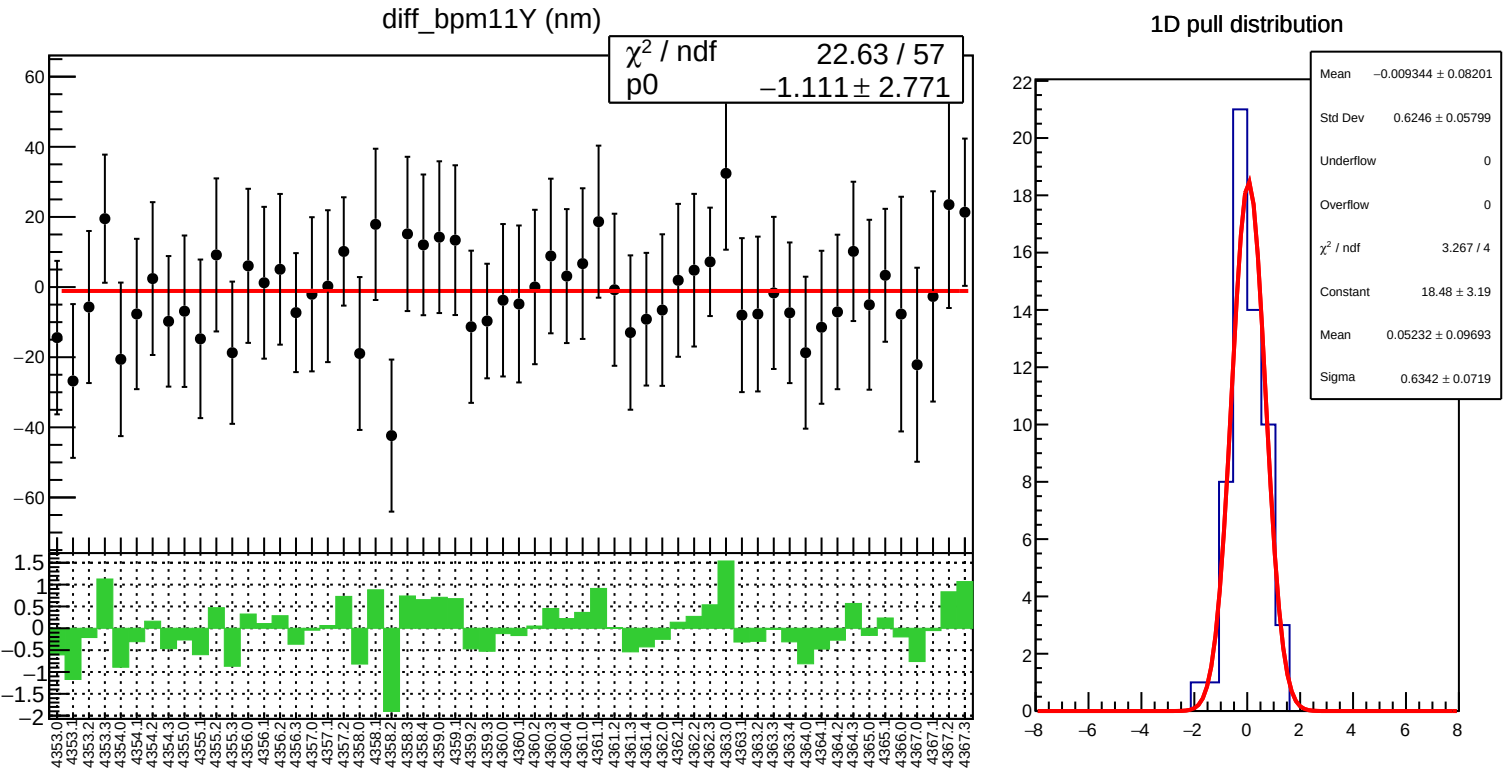
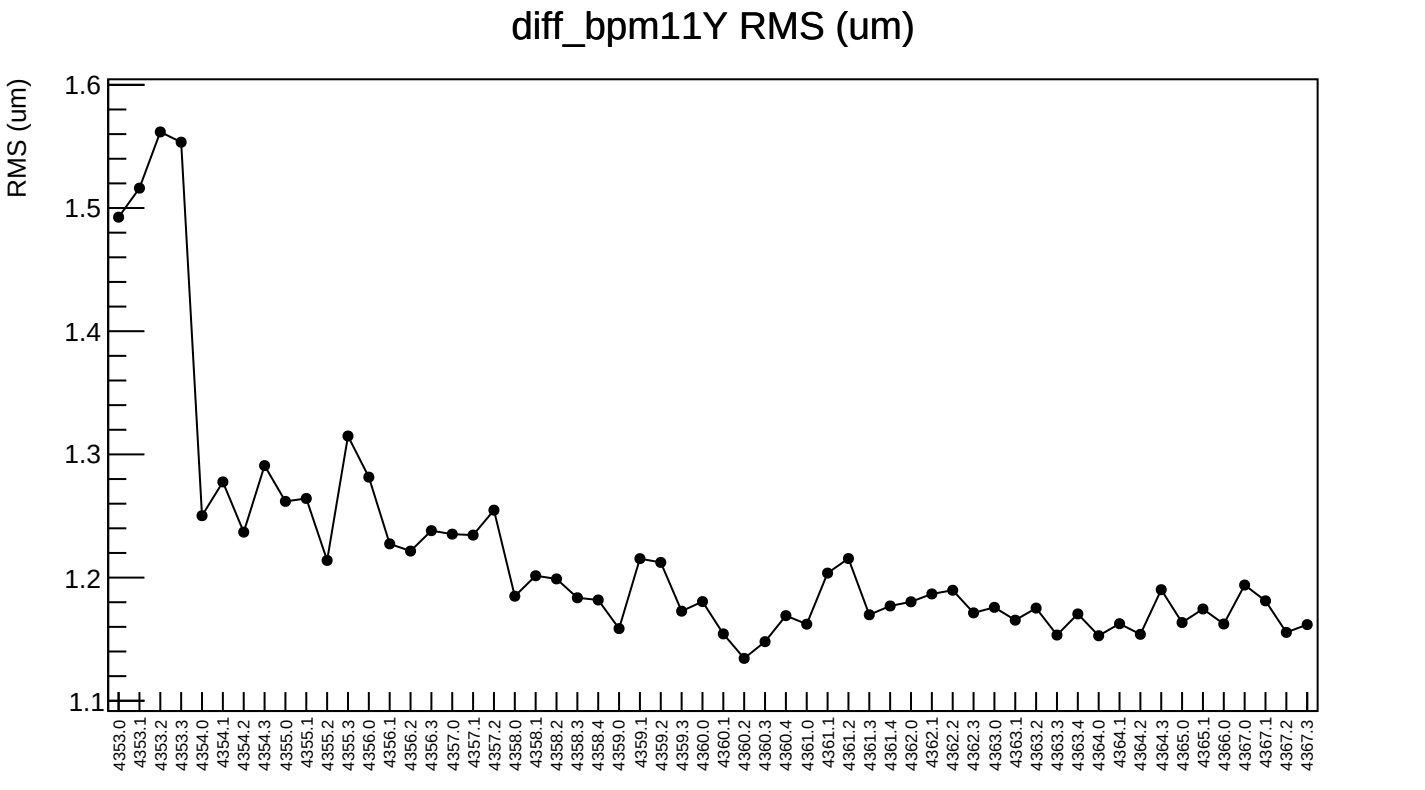
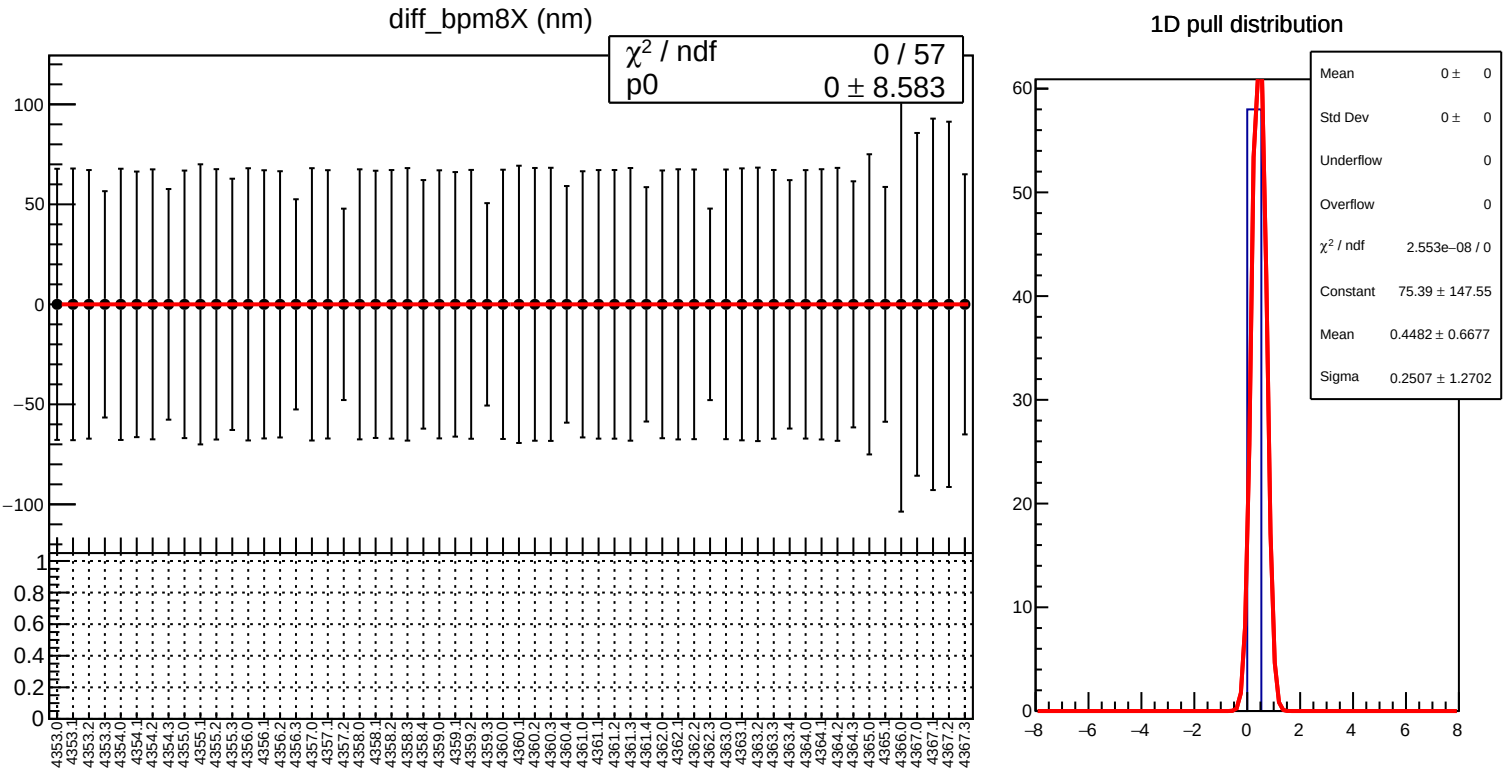
4366.0
4367.0
4367.1
4367.2
4367.3

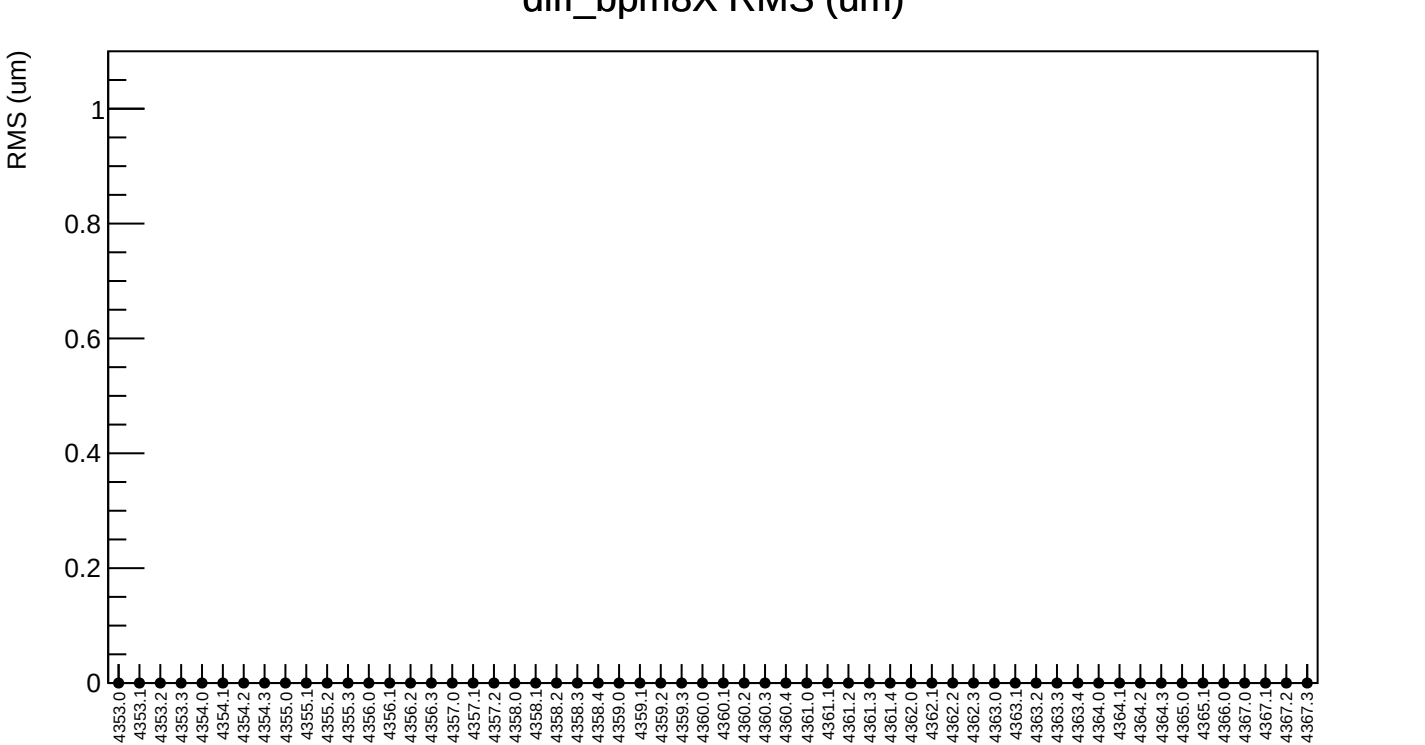

diff_bpm11X (nm)
χ² / ndf 84.51 / 57
p0 2.78 ± 7.784
1D pull distribution
Mean −0.002435 ± 0.1585
Std Dev 1.207 ± 0.1121
Underflow 0
Overflow 0
χ² / ndf 6.258 / 8
Constant 11.35 ± 2.31
Mean −0.04988 ± 0.17619
Sigma 0.9938 ± 0.1696

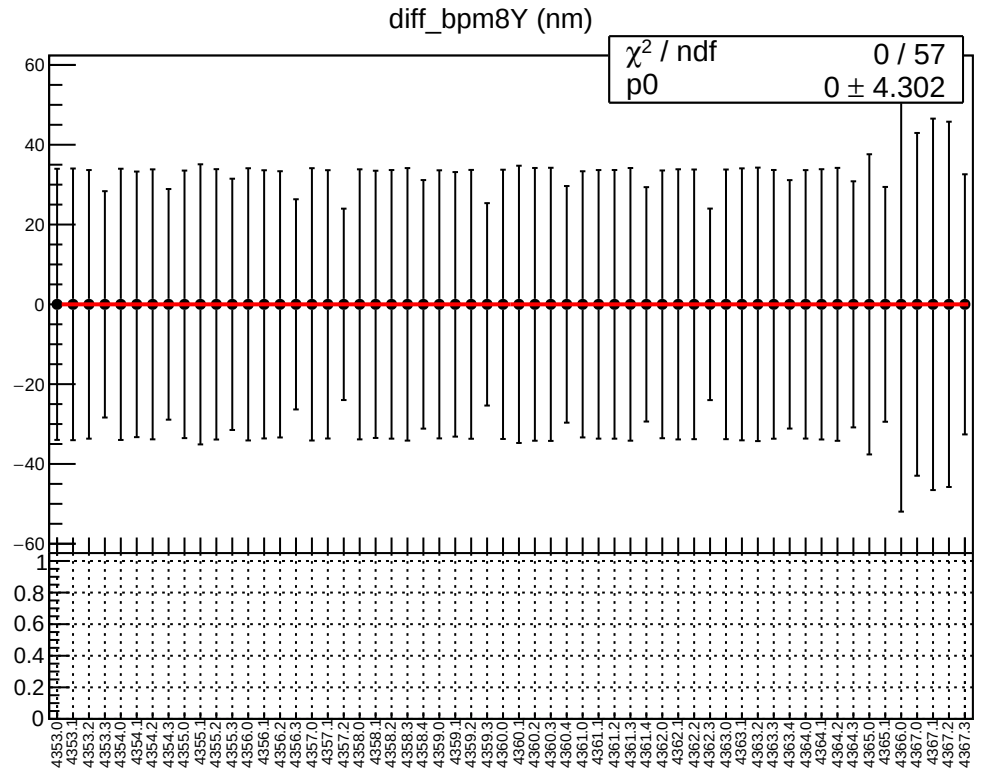

diff_bpm11X RMS (um)
RMS (um)
9
8.5
8
7.5
7
6.5
6
5.5
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

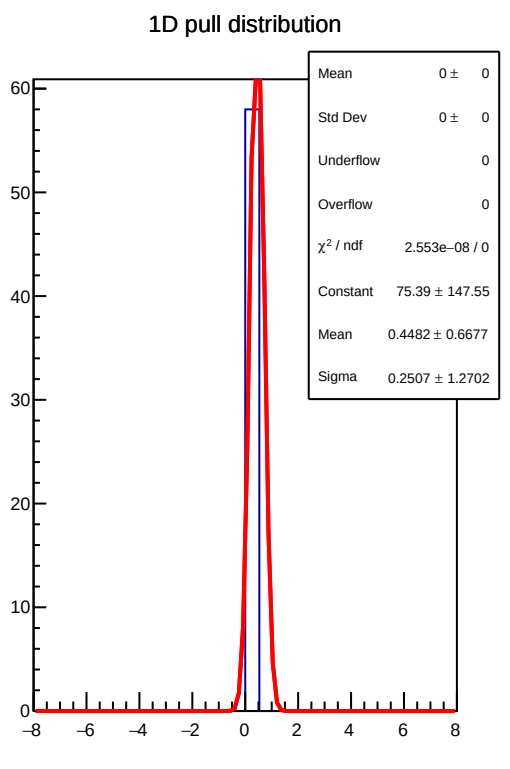

diff_bpm11Y (nm)
χ² / ndf 22.63 / 57
p0 −1.111 ± 2.771
1D pull distribution
Mean −0.009344 ± 0.08201
Std Dev 0.6246 ± 0.05799
Underflow 0
Overflow 0
χ² / ndf 3.267 / 4
Constant 18.48 ± 3.19
Mean 0.05232 ± 0.09693
Sigma 0.6342 ± 0.0719

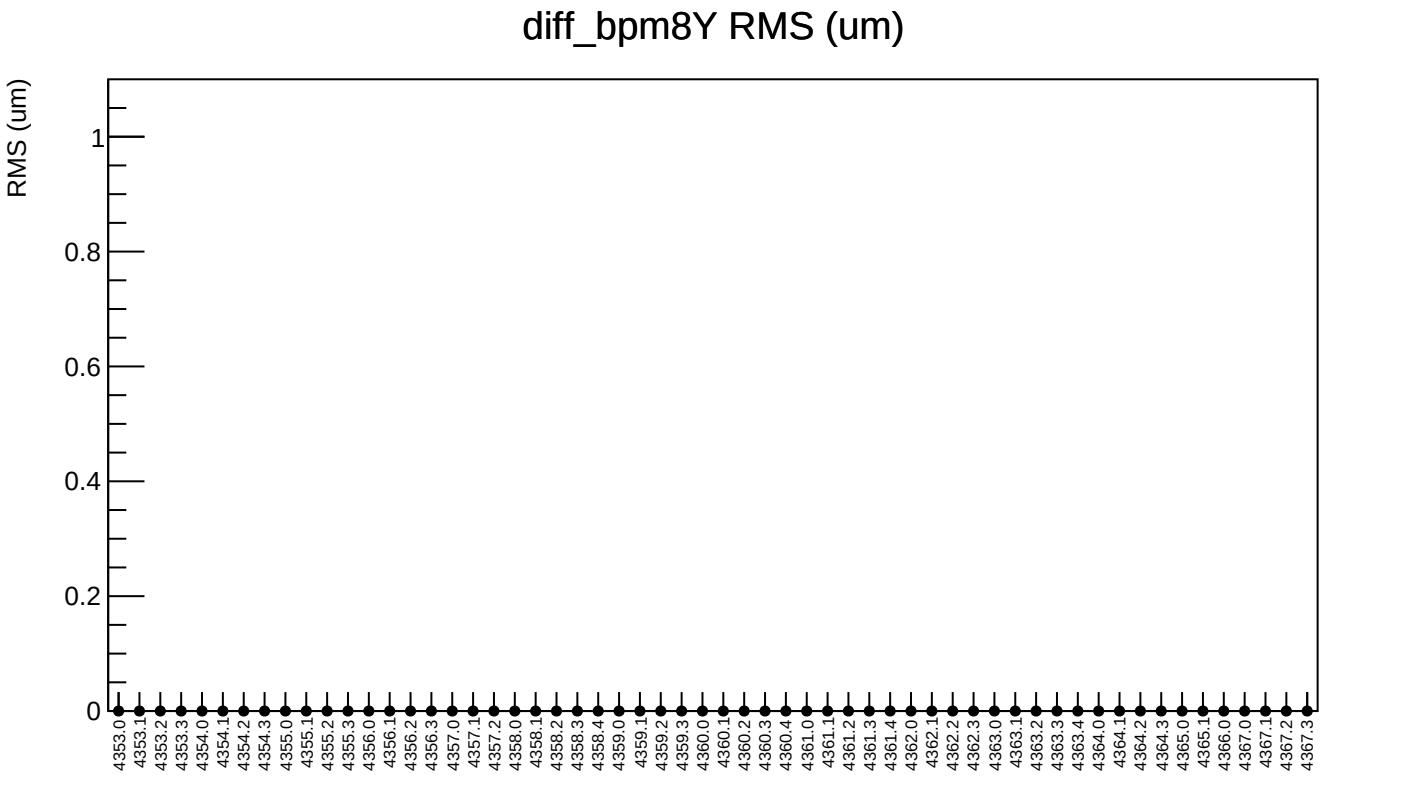

diff_bpm11Y RMS (um)
RMS (um)
1.6
1.5
1.4
1.3
1.2
1.1
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

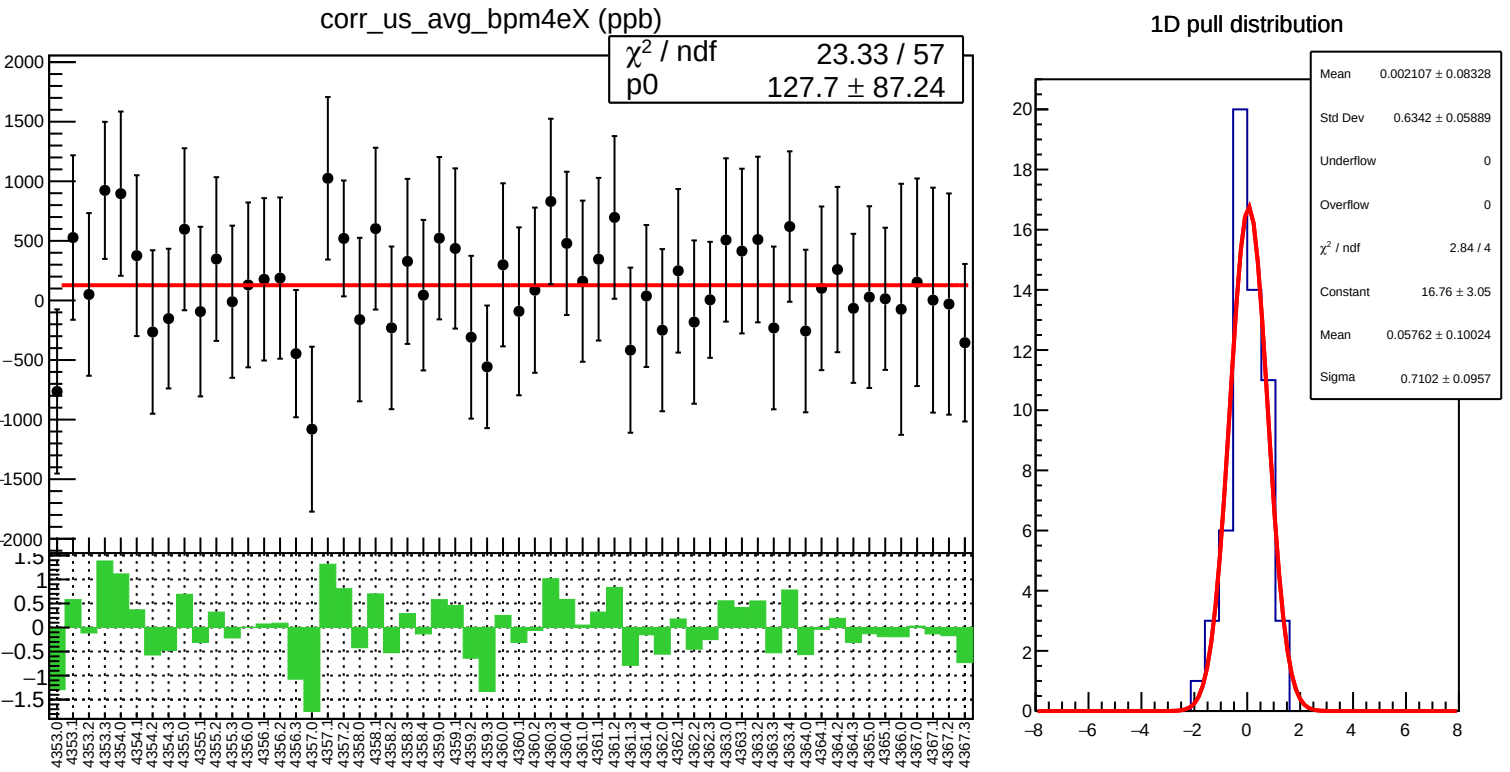

diff_bpm8X (nm)
χ² / ndf 0 / 57
p0 0 ± 8.583
100
50
0
−50
−100
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702
60
50
40
30
20
10
0
−8
−6
−4
−2
0
2
4
6
8

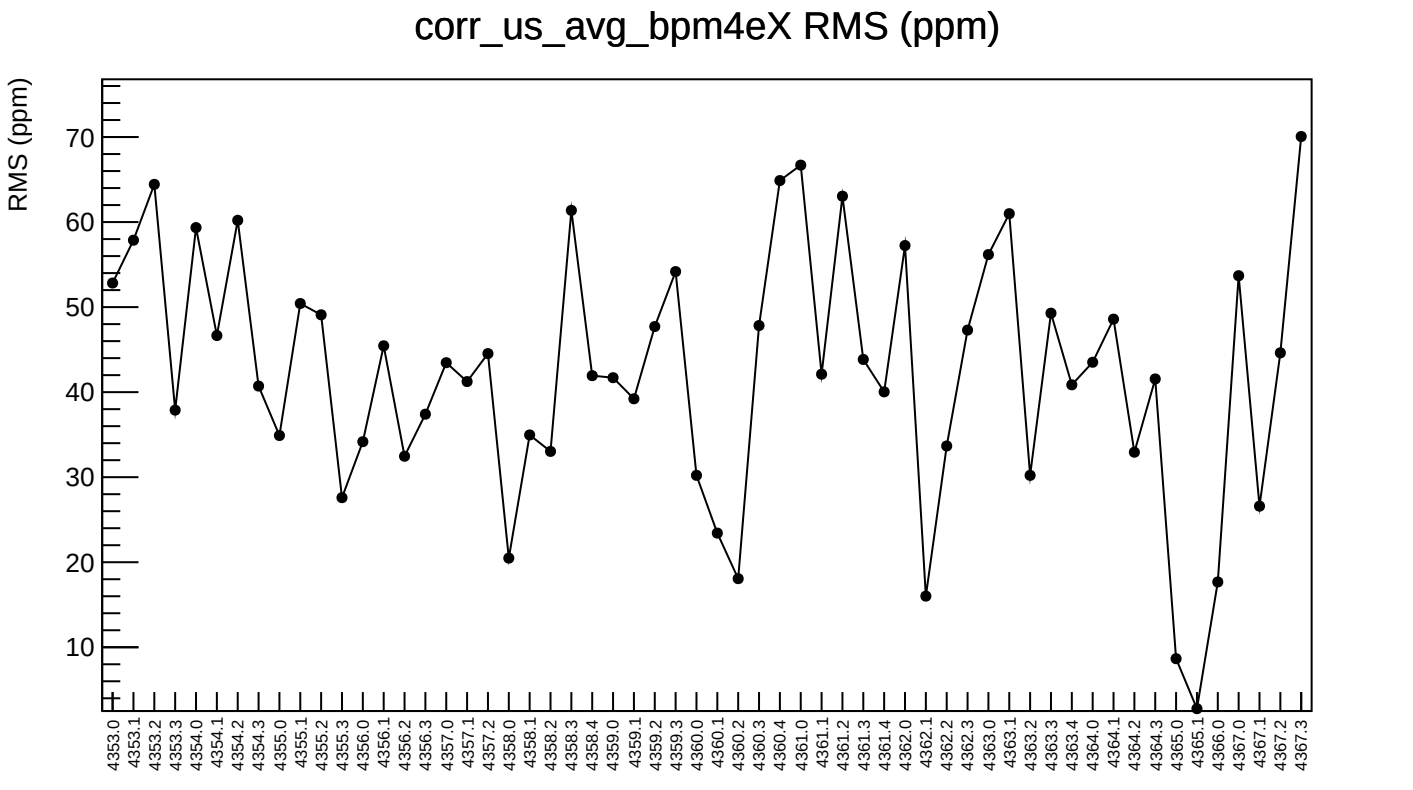

diff_bpm8X RMS (um)
RMS (um)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


diff_bpm8Y (nm)
χ² / ndf 0 / 57
p0 0 ± 4.302


1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702


diff_bpm8Y RMS (um)
RMS (um)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm4eX (ppb)
χ² / ndf 23.33 / 57
p0 127.7 ± 87.24
1D pull distribution
Mean 0.002107 ± 0.08328
Std Dev 0.6342 ± 0.05889
Underflow 0
Overflow 0
χ² / ndf 2.84 / 4
Constant 16.76 ± 3.05
Mean 0.05762 ± 0.10024
Sigma 0.7102 ± 0.0957


corr_us_avg_bpm4eX RMS (ppm)
RMS (ppm)
70
60
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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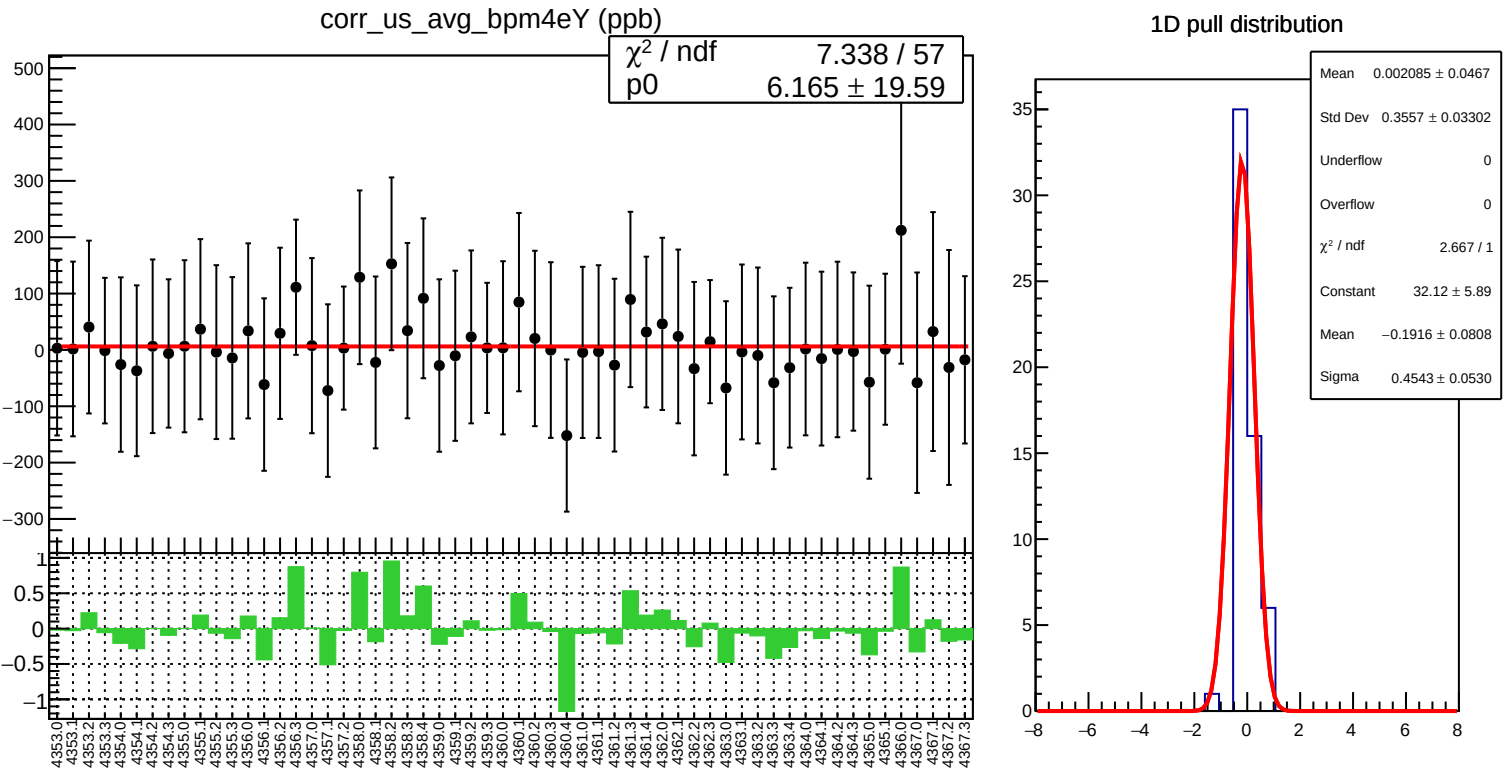
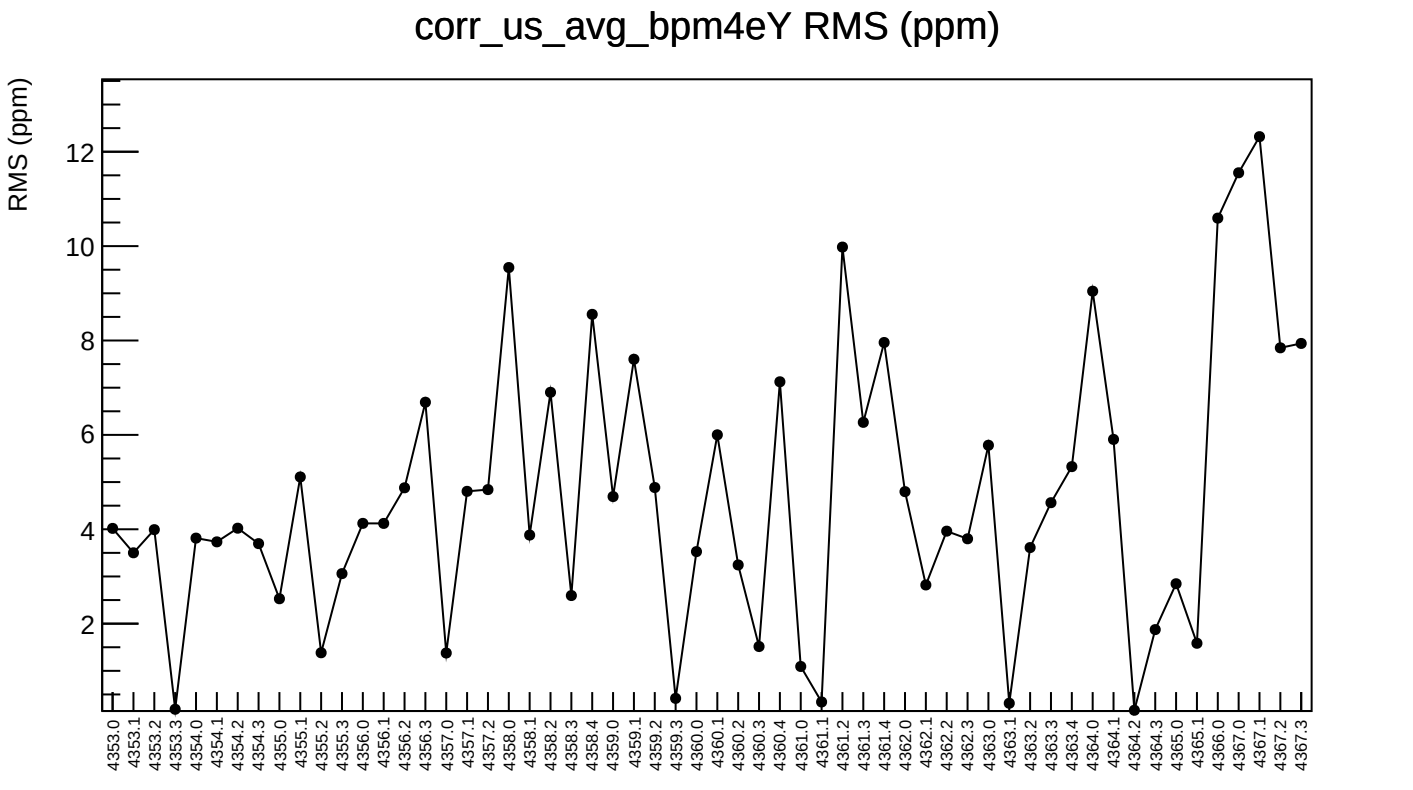
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm4eY (ppb)
χ² / ndf 7.338 / 57
p0 6.165 ± 19.59
1D pull distribution
Mean 0.002085 ± 0.0467
Std Dev 0.3557 ± 0.03302
Underflow 0
Overflow 0
χ² / ndf 2.667 / 1
Constant 32.12 ± 5.89
Mean −0.1916 ± 0.0808
Sigma 0.4543 ± 0.0530


corr_us_avg_bpm4eY RMS (ppm)
RMS (ppm)
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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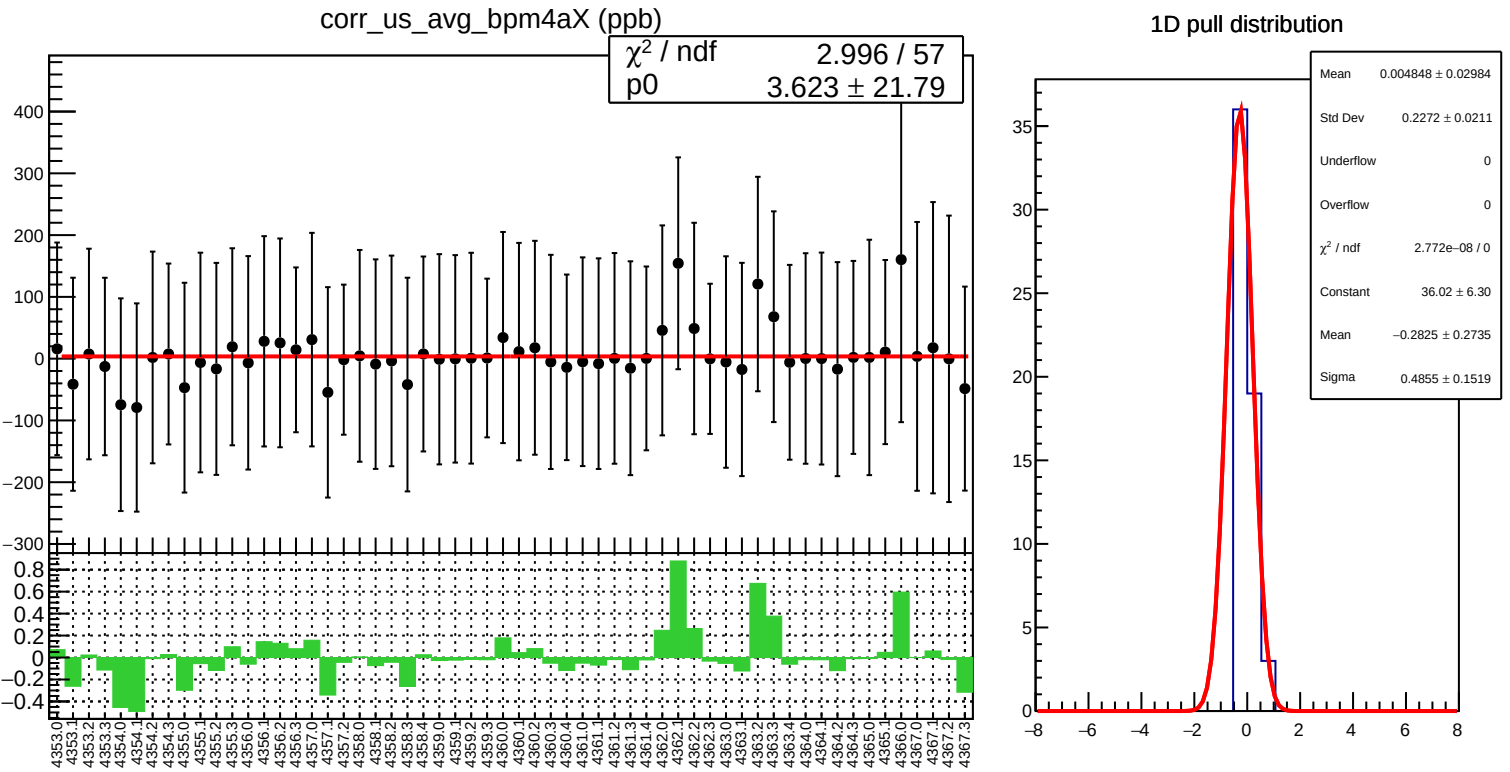
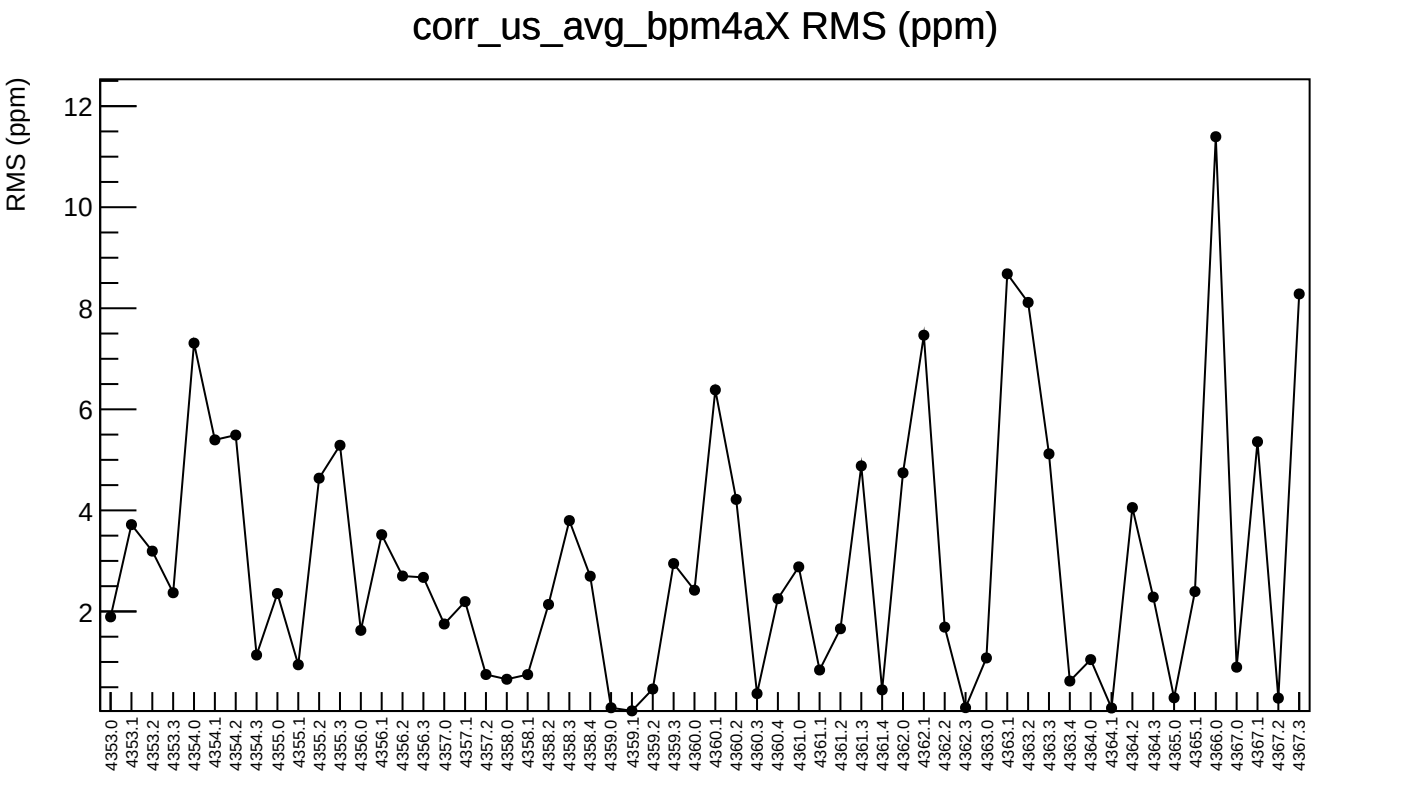
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm4aX (ppb)
χ² / ndf 2.996 / 57
p0 3.623 ± 21.79
1D pull distribution
Mean 0.004848 ± 0.02984
Std Dev 0.2272 ± 0.0211
Underflow 0
Overflow 0
χ² / ndf 2.772e−08 / 0
Constant 36.02 ± 6.30
Mean −0.2825 ± 0.2735
Sigma 0.4855 ± 0.1519


corr_us_avg_bpm4aX RMS (ppm)
RMS (ppm)
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
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4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
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4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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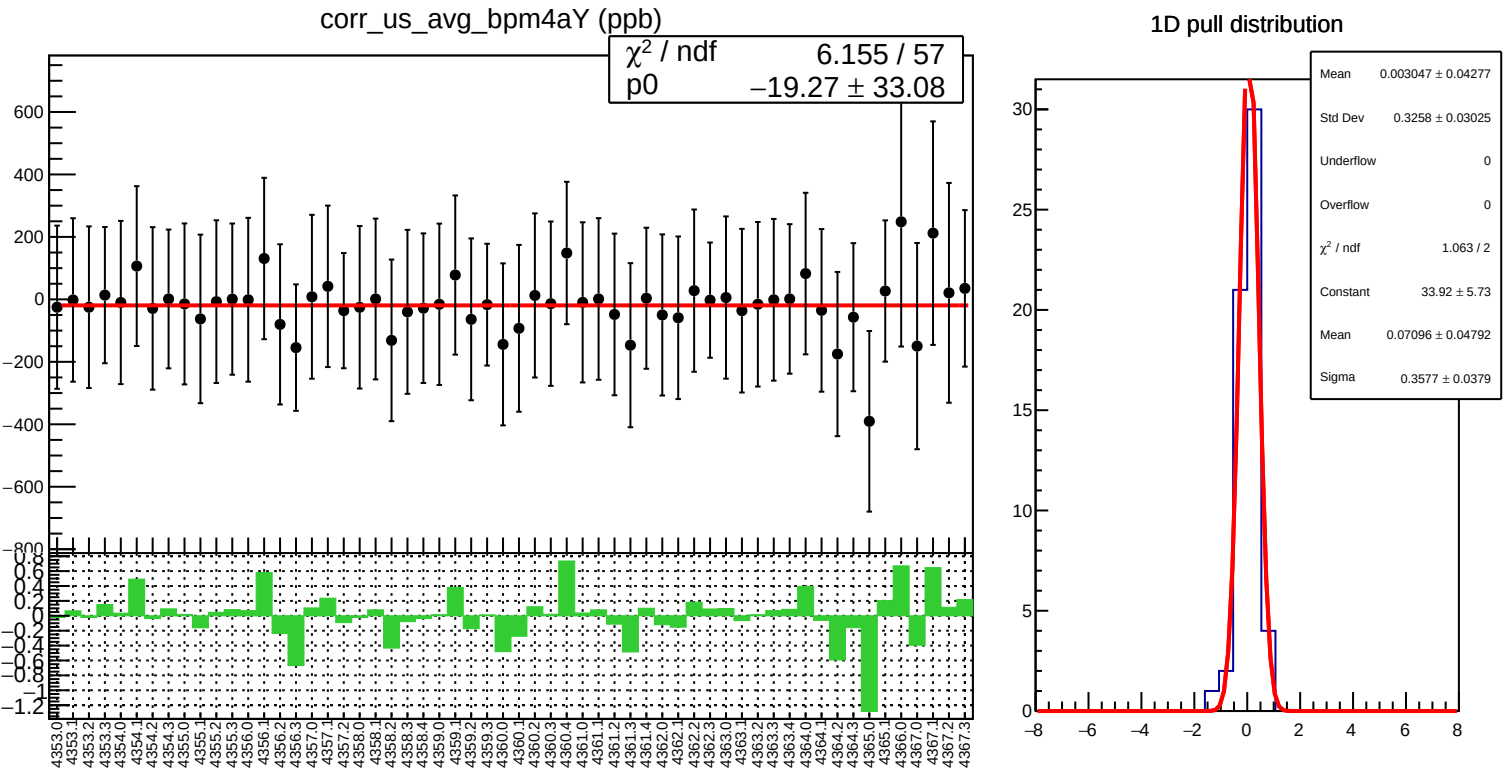
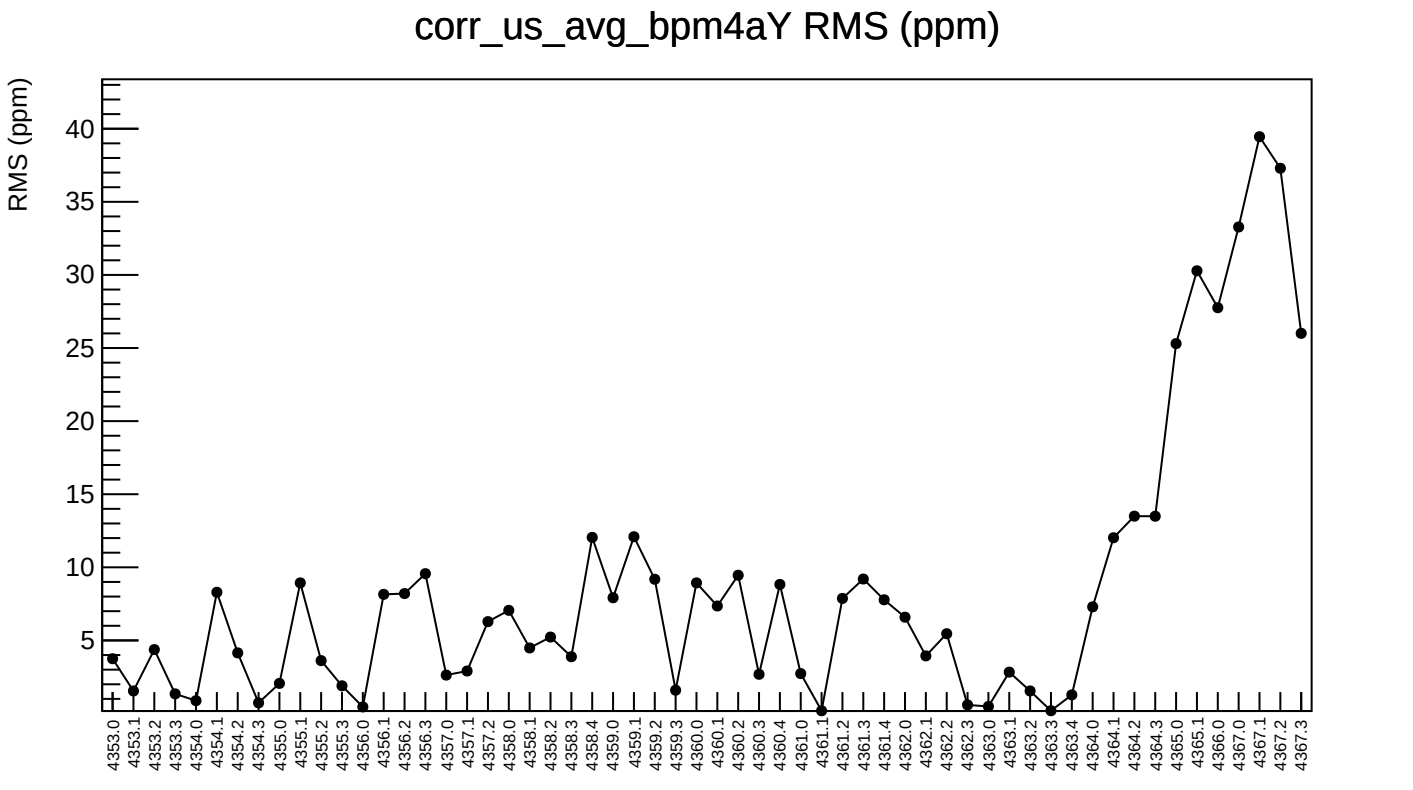
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm4aY (ppb)
χ² / ndf 6.155 / 57
p0 −19.27 ± 33.08
1D pull distribution
Mean 0.003047 ± 0.04277
Std Dev 0.3258 ± 0.03025
Underflow 0
Overflow 0
χ² / ndf 1.063 / 2
Constant 33.92 ± 5.73
Mean 0.07096 ± 0.04792
Sigma 0.3577 ± 0.0379


corr_us_avg_bpm4aY RMS (ppm)
RMS (ppm)
40
35
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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4364.3
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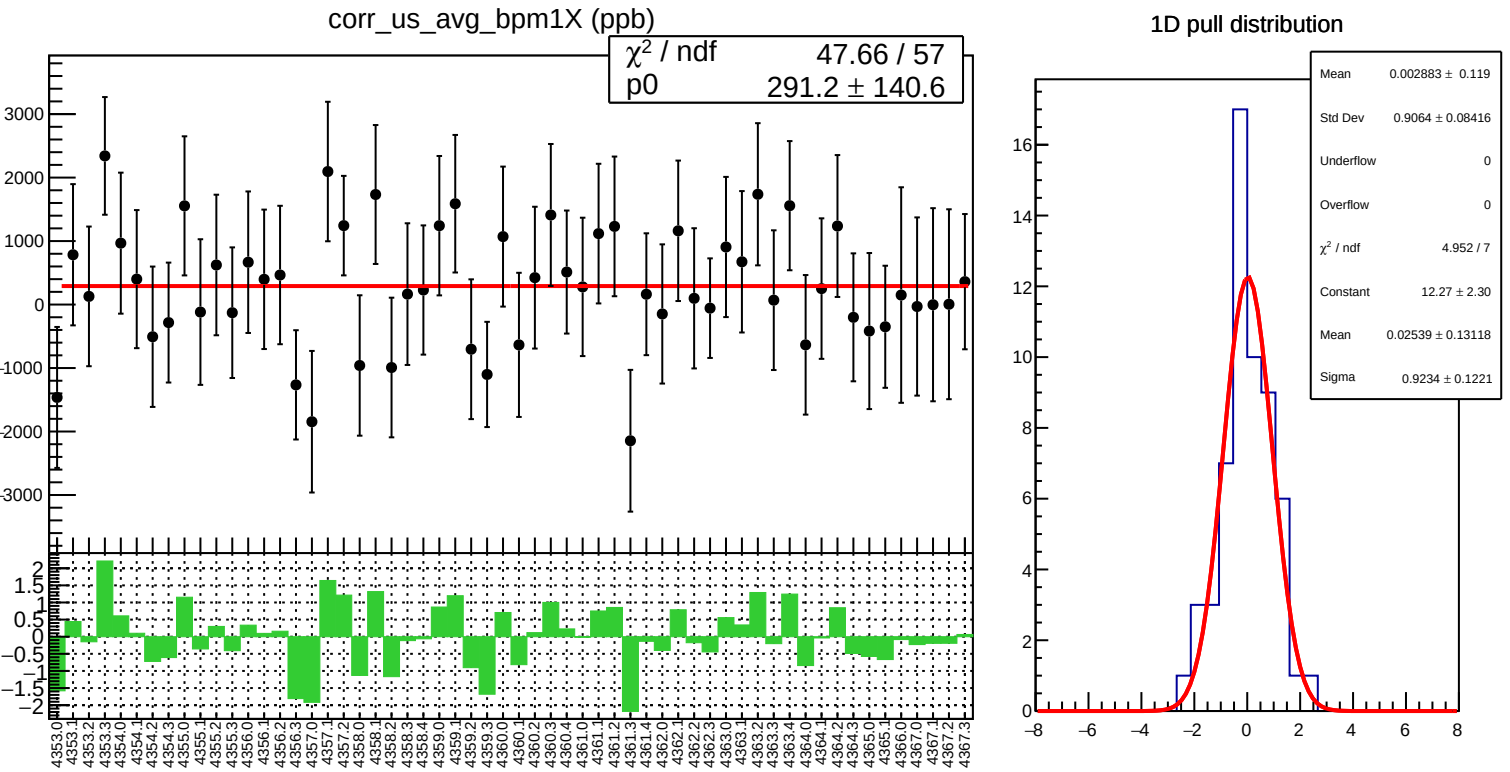
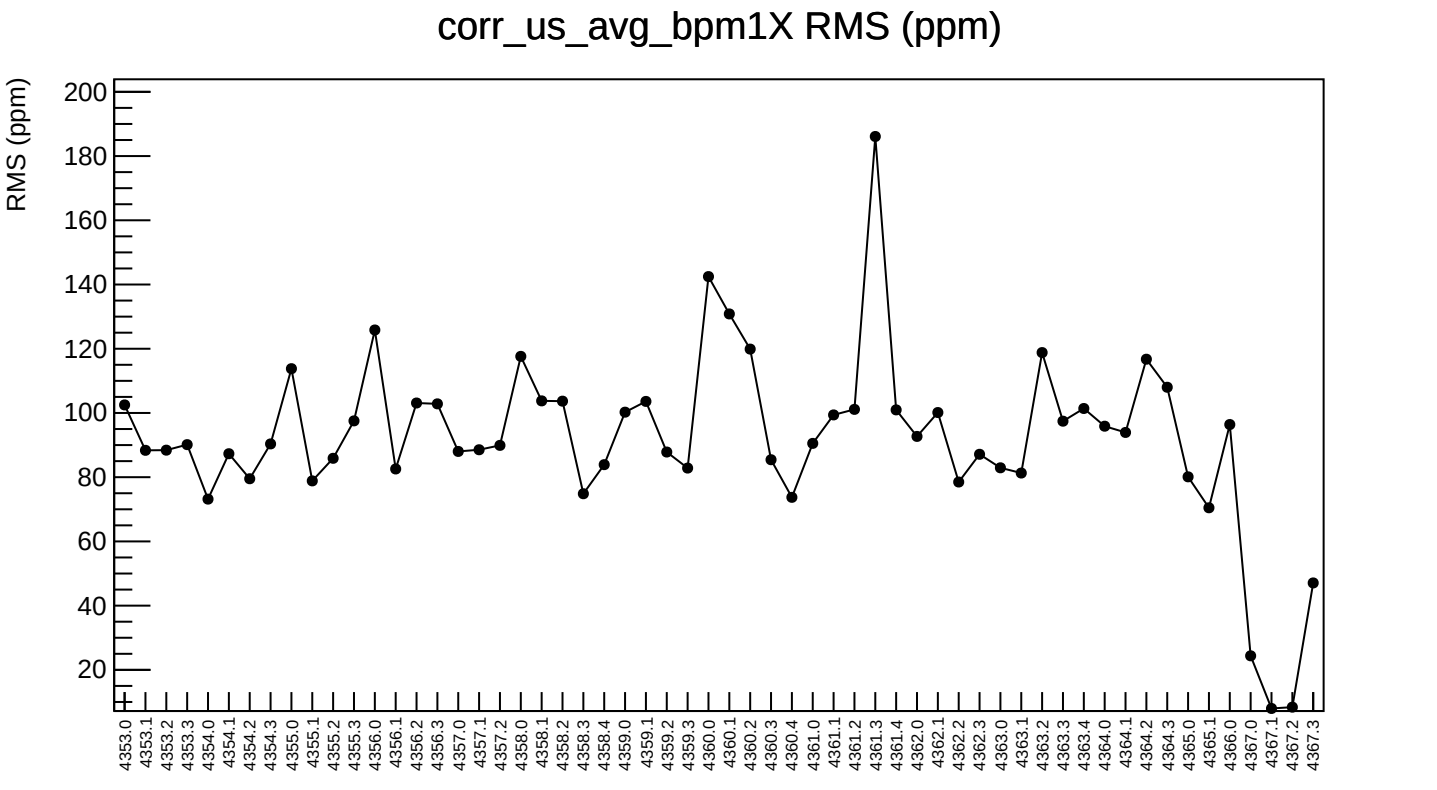
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm1X (ppb)
χ² / ndf 47.66 / 57
p0 291.2 ± 140.6
1D pull distribution
Mean 0.002883 ± 0.119
Std Dev 0.9064 ± 0.08416
Underflow 0
Overflow 0
χ² / ndf 4.952 / 7
Constant 12.27 ± 2.30
Mean 0.02539 ± 0.13118
Sigma 0.9234 ± 0.1221


corr_us_avg_bpm1X RMS (ppm)
RMS (ppm)
200
180
160
140
120
100
80
60
40
20
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
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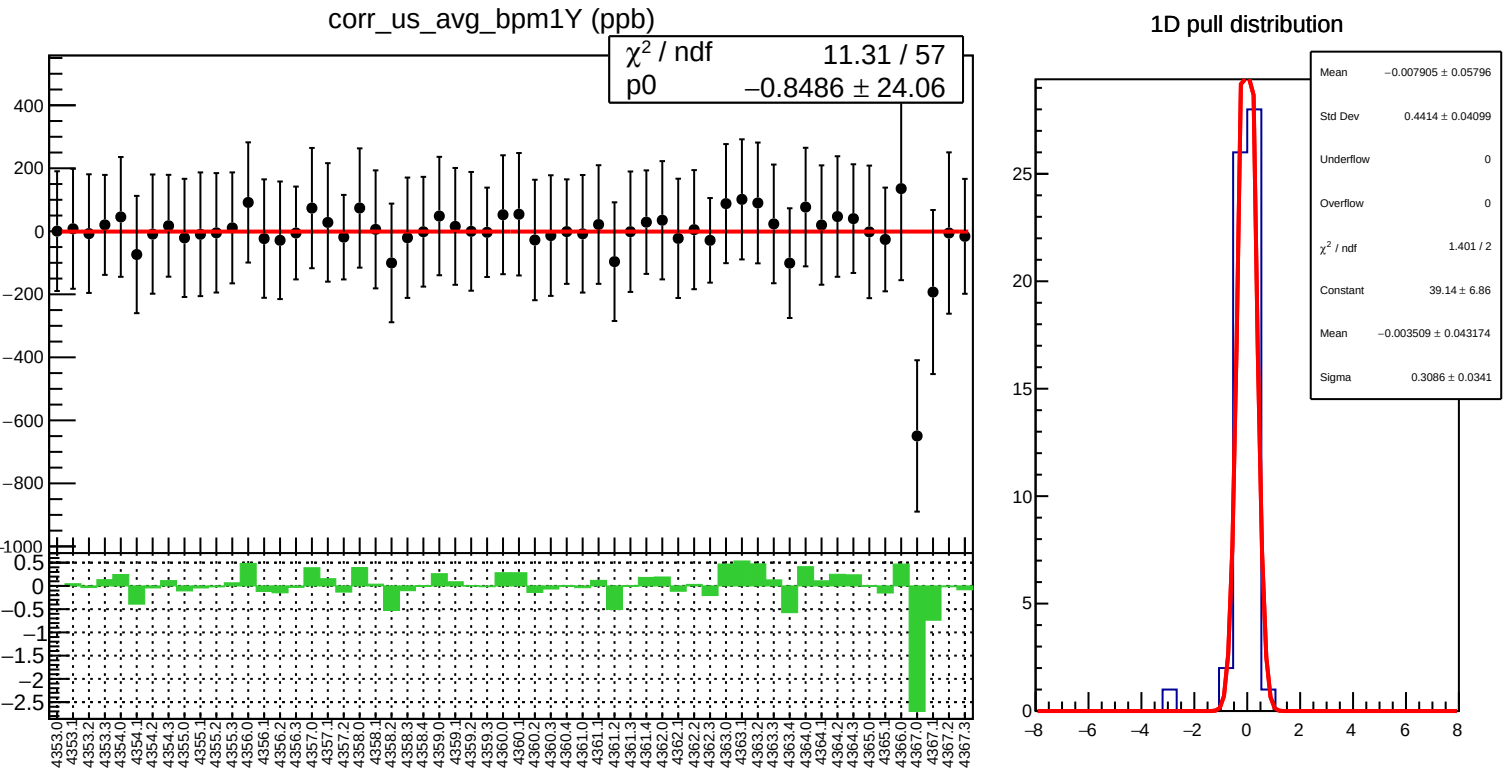
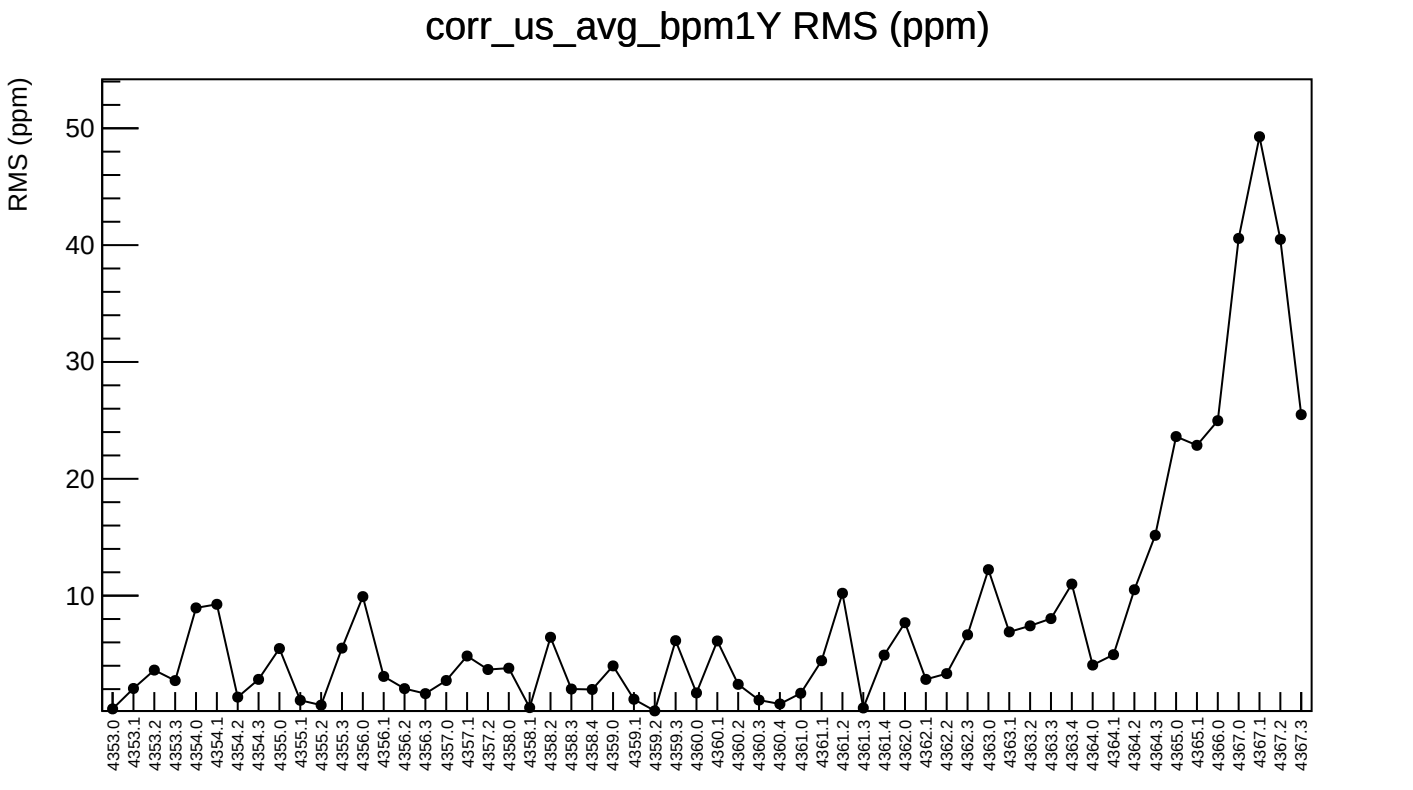
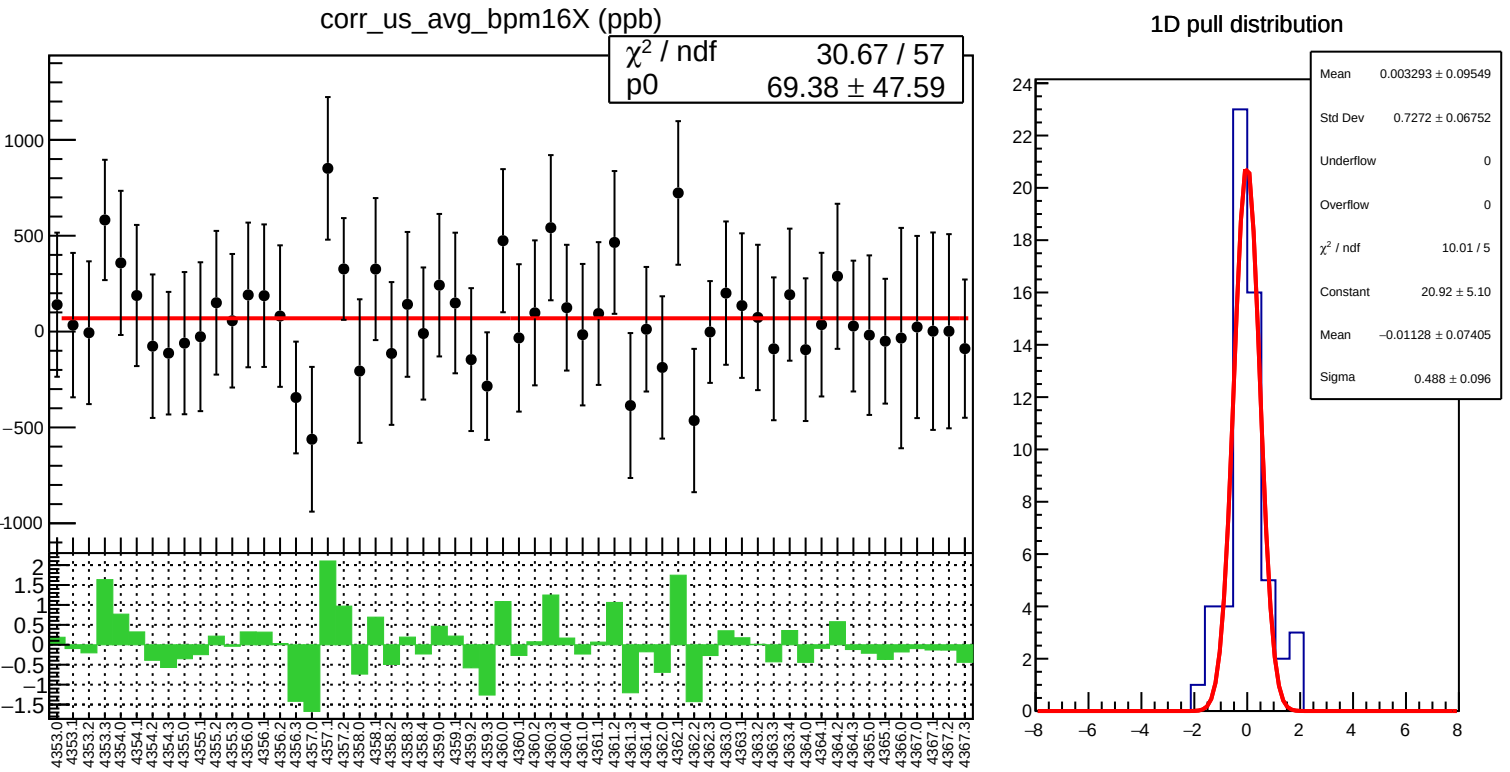
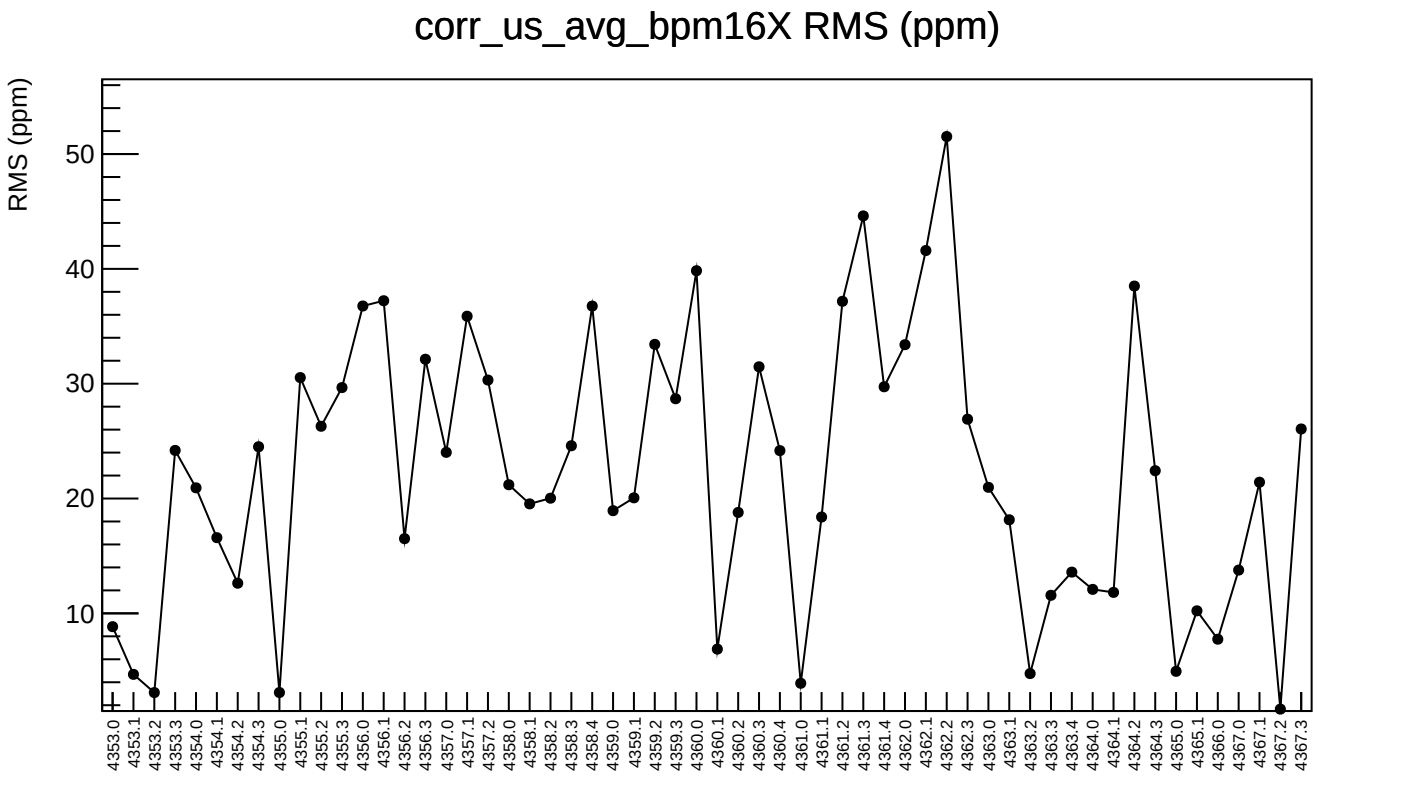
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm1Y (ppb)
χ² / ndf 11.31 / 57
p0 −0.8486 ± 24.06
1D pull distribution
Mean −0.007905 ± 0.05796
Std Dev 0.4414 ± 0.04099
Underflow 0
Overflow 0
χ² / ndf 1.401 / 2
Constant 39.14 ± 6.86
Mean −0.003509 ± 0.043174
Sigma 0.3086 ± 0.0341


corr_us_avg_bpm1Y RMS (ppm)
RMS (ppm)
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm16X (ppb)
χ² / ndf 30.67 / 57
p0 69.38 ± 47.59
1000
500
0
−500
−1000
2
1.5
1
0.5
0
−0.5
−1
−1.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean 0.003293 ± 0.09549
Std Dev 0.7272 ± 0.06752
Underflow 0
Overflow 0
χ² / ndf 10.01 / 5
Constant 20.92 ± 5.10
Mean −0.01128 ± 0.07405
Sigma 0.488 ± 0.096
24
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_avg_bpm16X RMS (ppm)
RMS (ppm)
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
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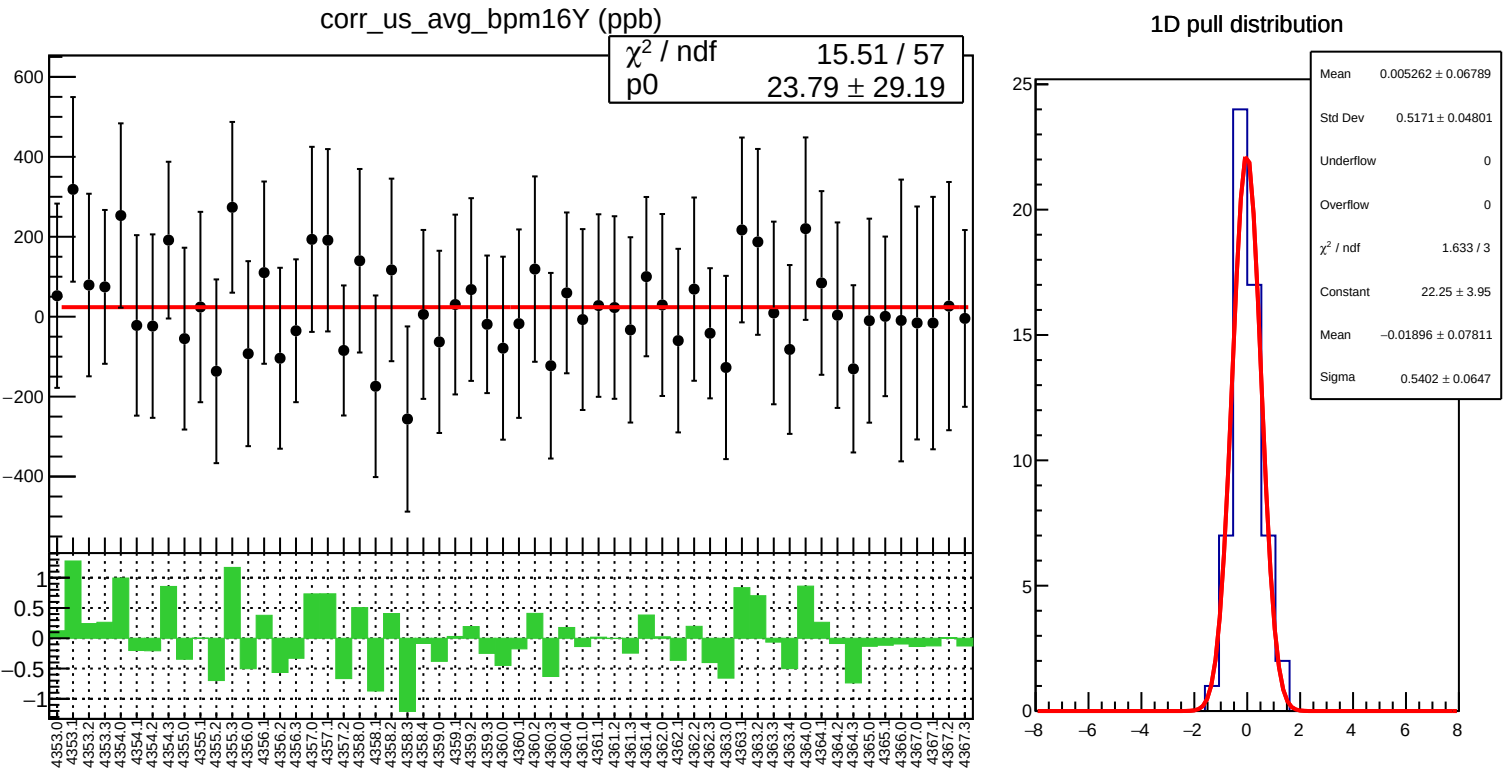
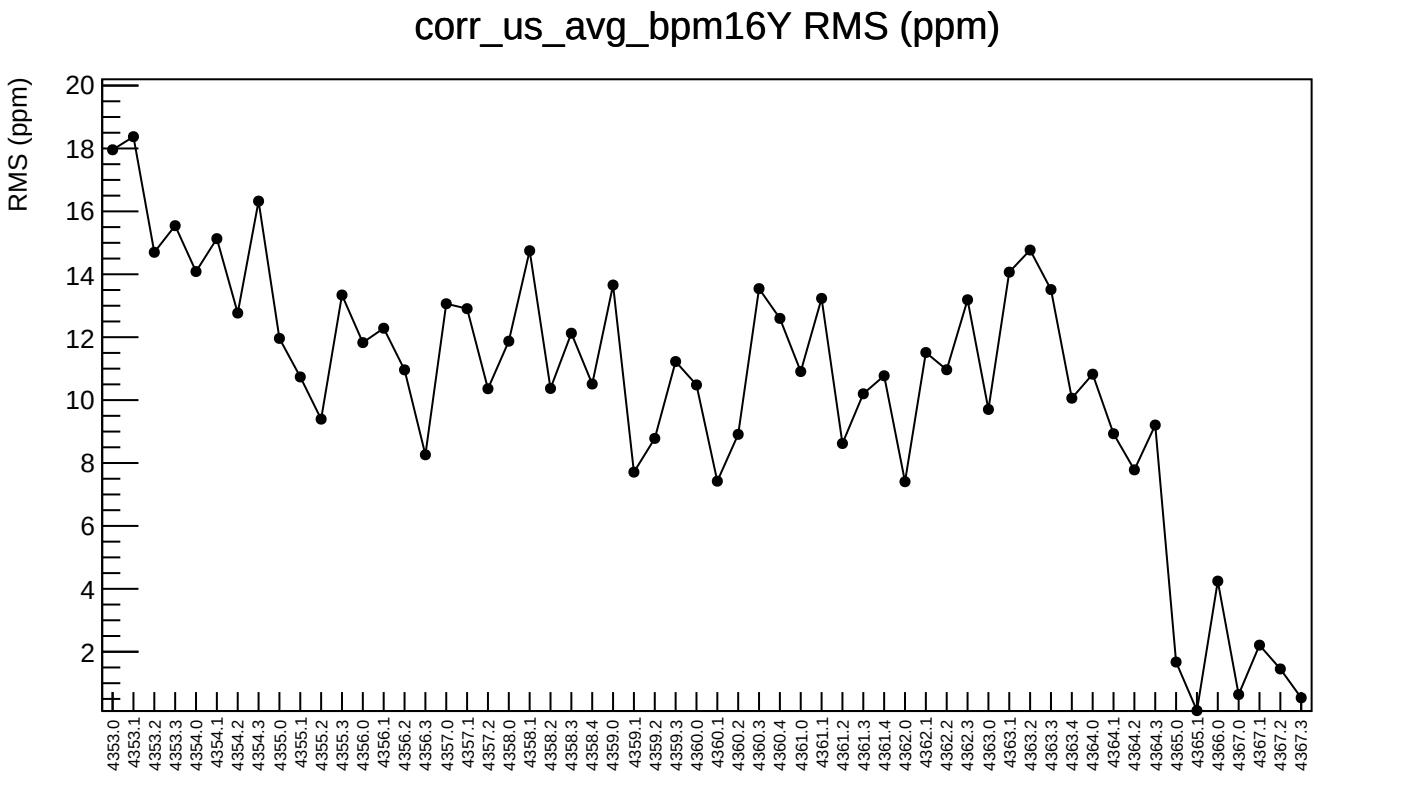
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm16Y (ppb)
χ² / ndf 15.51 / 57
p0 23.79 ± 29.19
1D pull distribution
Mean 0.005262 ± 0.06789
Std Dev 0.5171 ± 0.04801
Underflow 0
Overflow 0
χ² / ndf 1.633 / 3
Constant 22.25 ± 3.95
Mean −0.01896 ± 0.07811
Sigma 0.5402 ± 0.0647


corr_us_avg_bpm16Y RMS (ppm)
RMS (ppm)
20
18
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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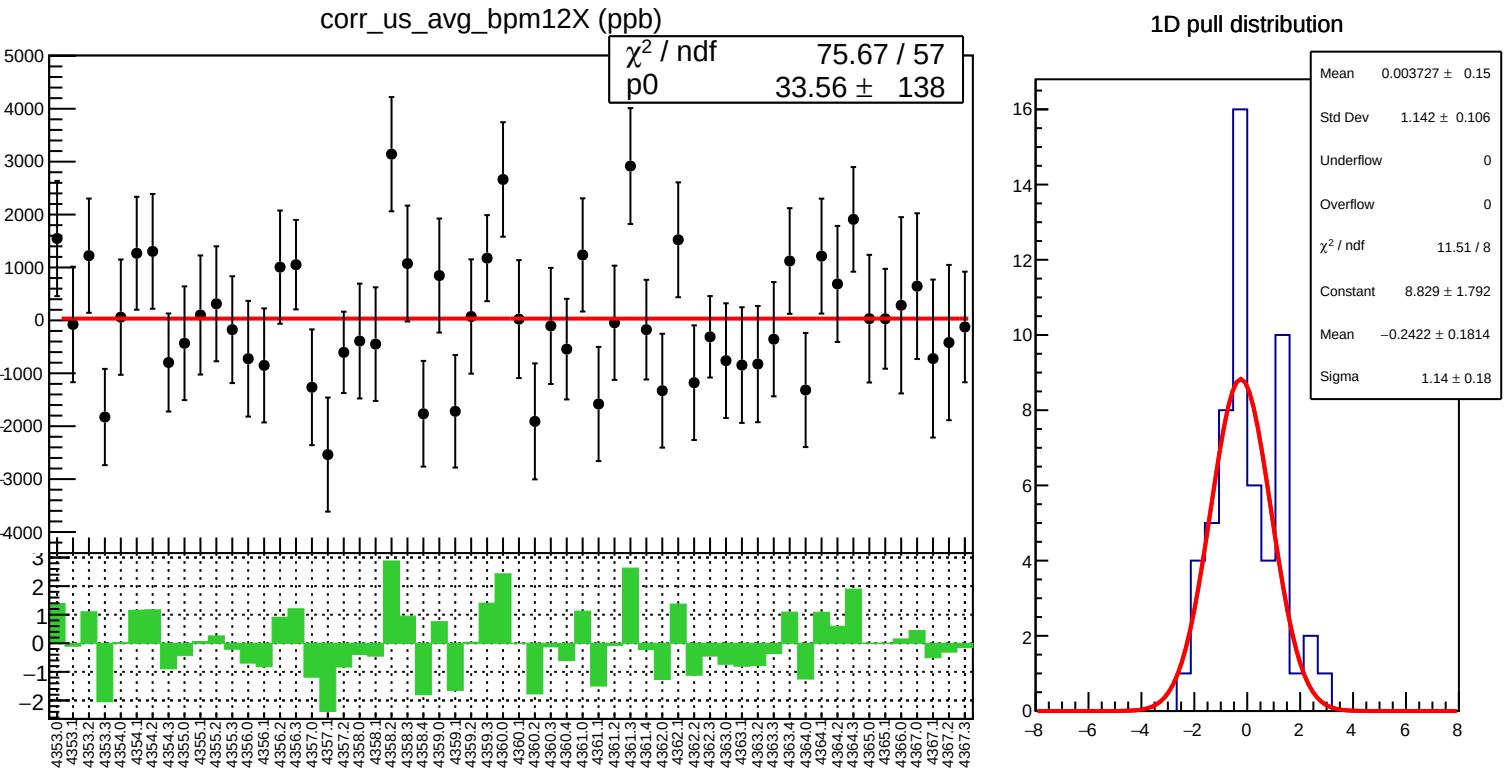
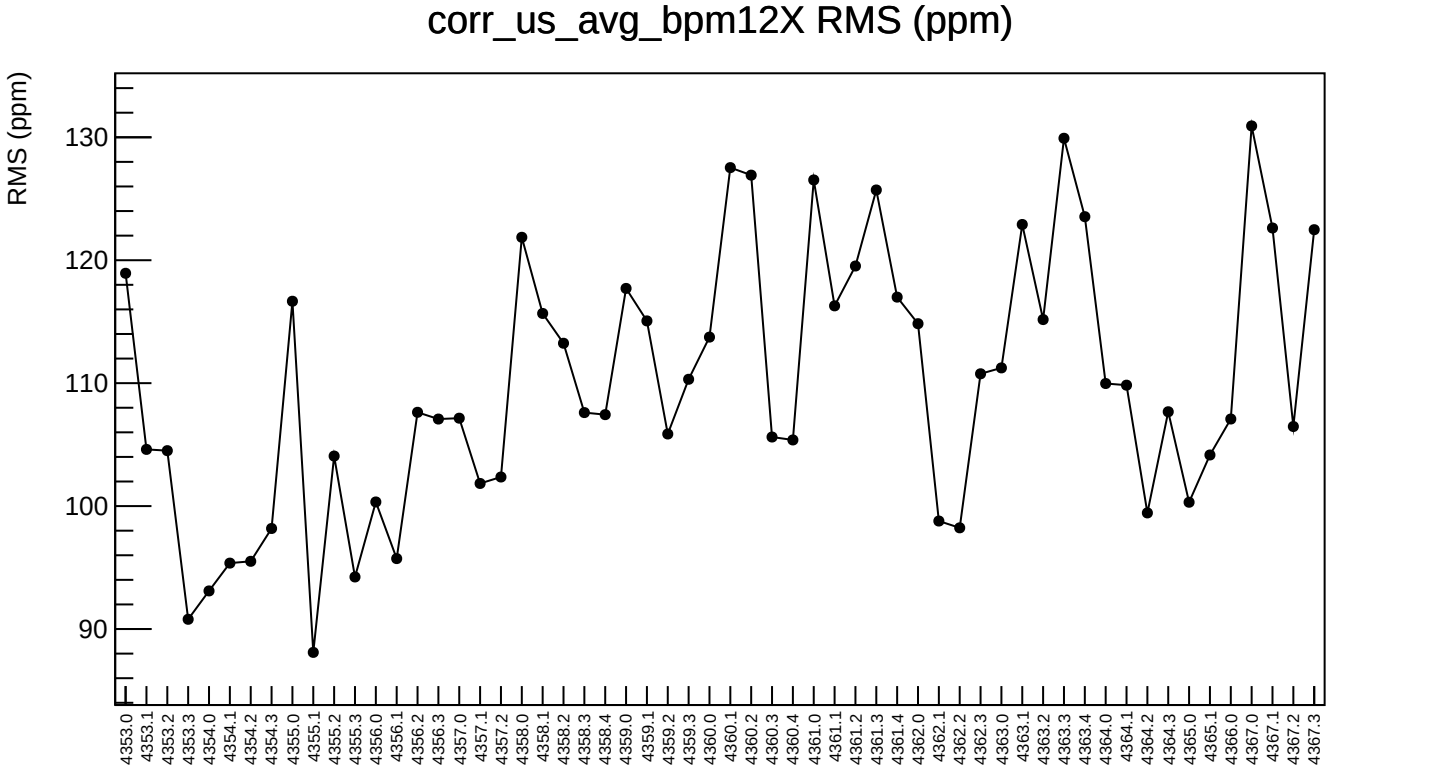
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm12X (ppb)
χ² / ndf 75.67 / 57
p0 33.56 ± 138
1D pull distribution
Mean 0.003727 ± 0.15
Std Dev 1.142 ± 0.106
Underflow 0
Overflow 0
χ² / ndf 11.51 / 8
Constant 8.829 ± 1.792
Mean −0.2422 ± 0.1814
Sigma 1.14 ± 0.18


corr_us_avg_bpm12X RMS (ppm)
RMS (ppm)
130
120
110
100
90
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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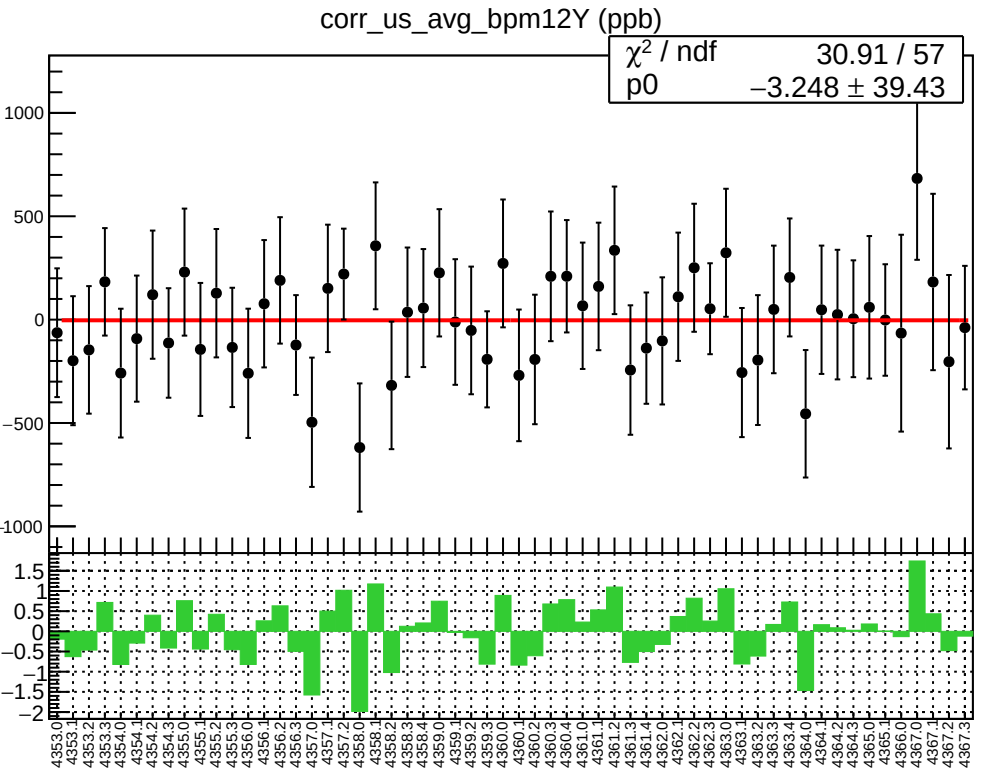
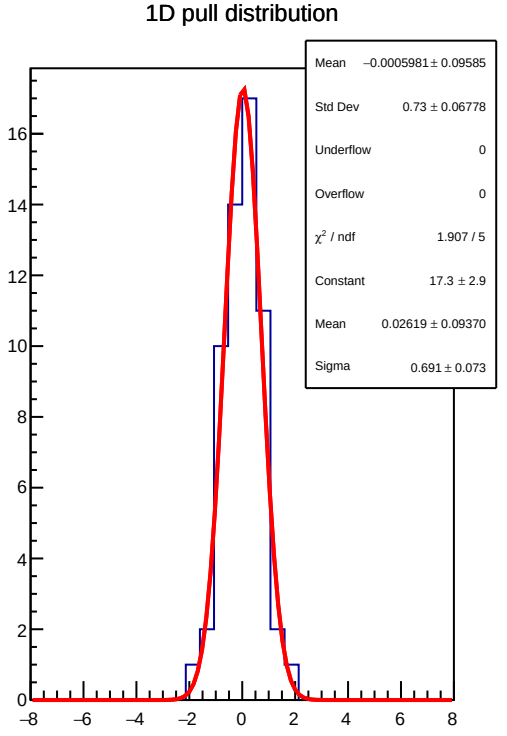
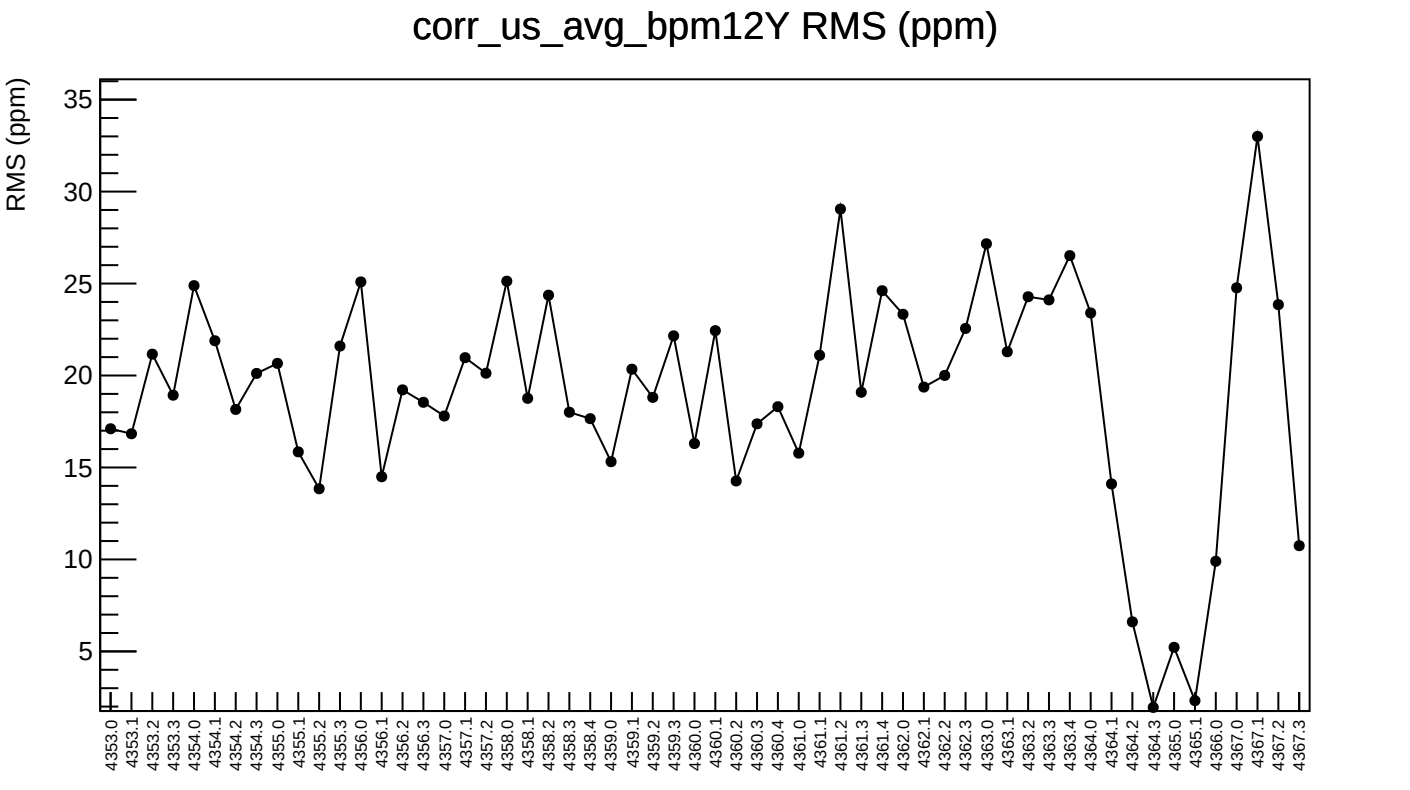
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm12Y (ppb)
χ² / ndf 30.91 / 57
p0 −3.248 ± 39.43
1000
500
0
−500
−1000
1.5
1
0.5
0
−0.5
−1
−1.5
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean −0.0005981 ± 0.09585
Std Dev 0.73 ± 0.06778
Underflow 0
Overflow 0
χ² / ndf 1.907 / 5
Constant 17.3 ± 2.9
Mean 0.02619 ± 0.09370
Sigma 0.691 ± 0.073
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_avg_bpm12Y RMS (ppm)
RMS (ppm)
35
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
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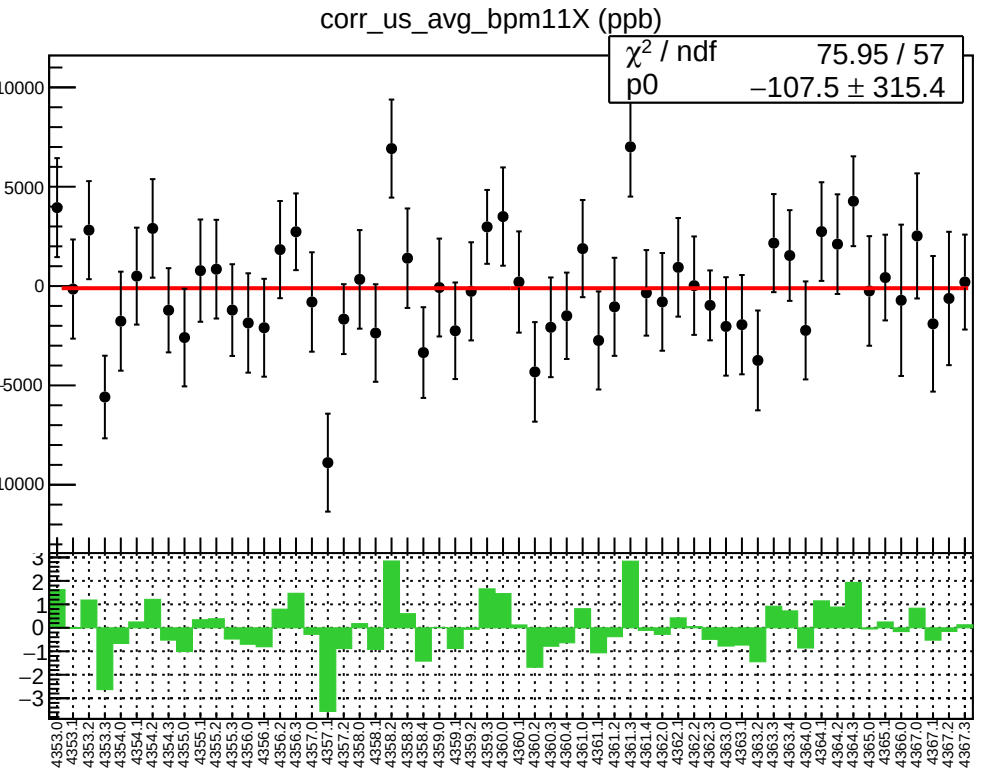
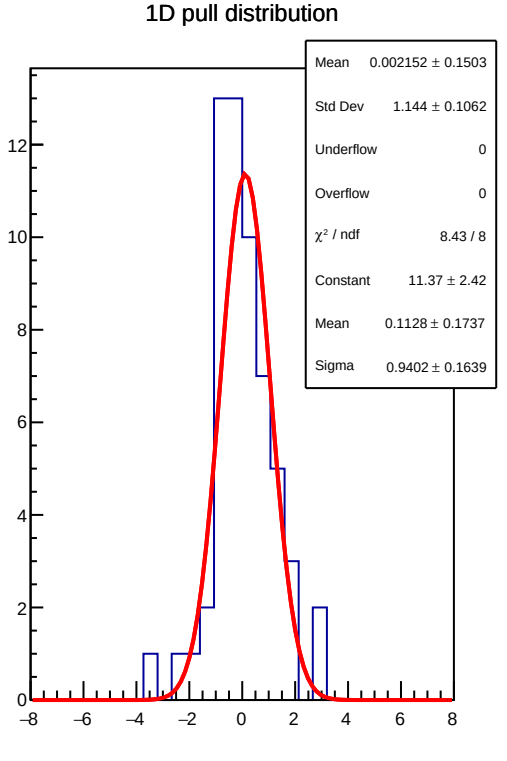
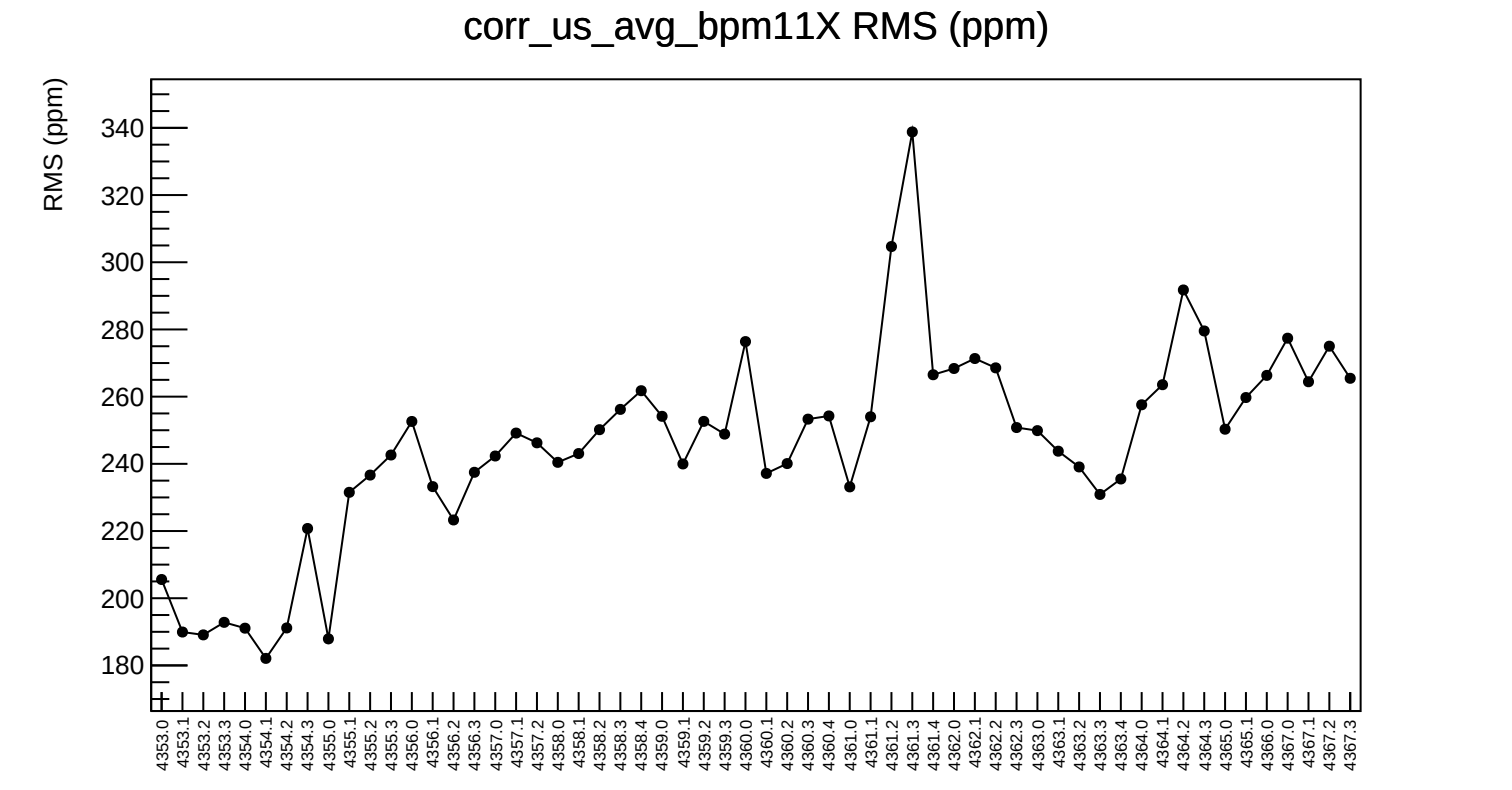
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm11X (ppb)
χ² / ndf 75.95 / 57
p0 −107.5 ± 315.4
10000
5000
0
−5000
−10000
3
2
1
0
−1
−2
−3
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean 0.002152 ± 0.1503
Std Dev 1.144 ± 0.1062
Underflow 0
Overflow 0
χ² / ndf 8.43 / 8
Constant 11.37 ± 2.42
Mean 0.1128 ± 0.1737
Sigma 0.9402 ± 0.1639
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_avg_bpm11X RMS (ppm)
RMS (ppm)
340
320
300
280
260
240
220
200
180
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
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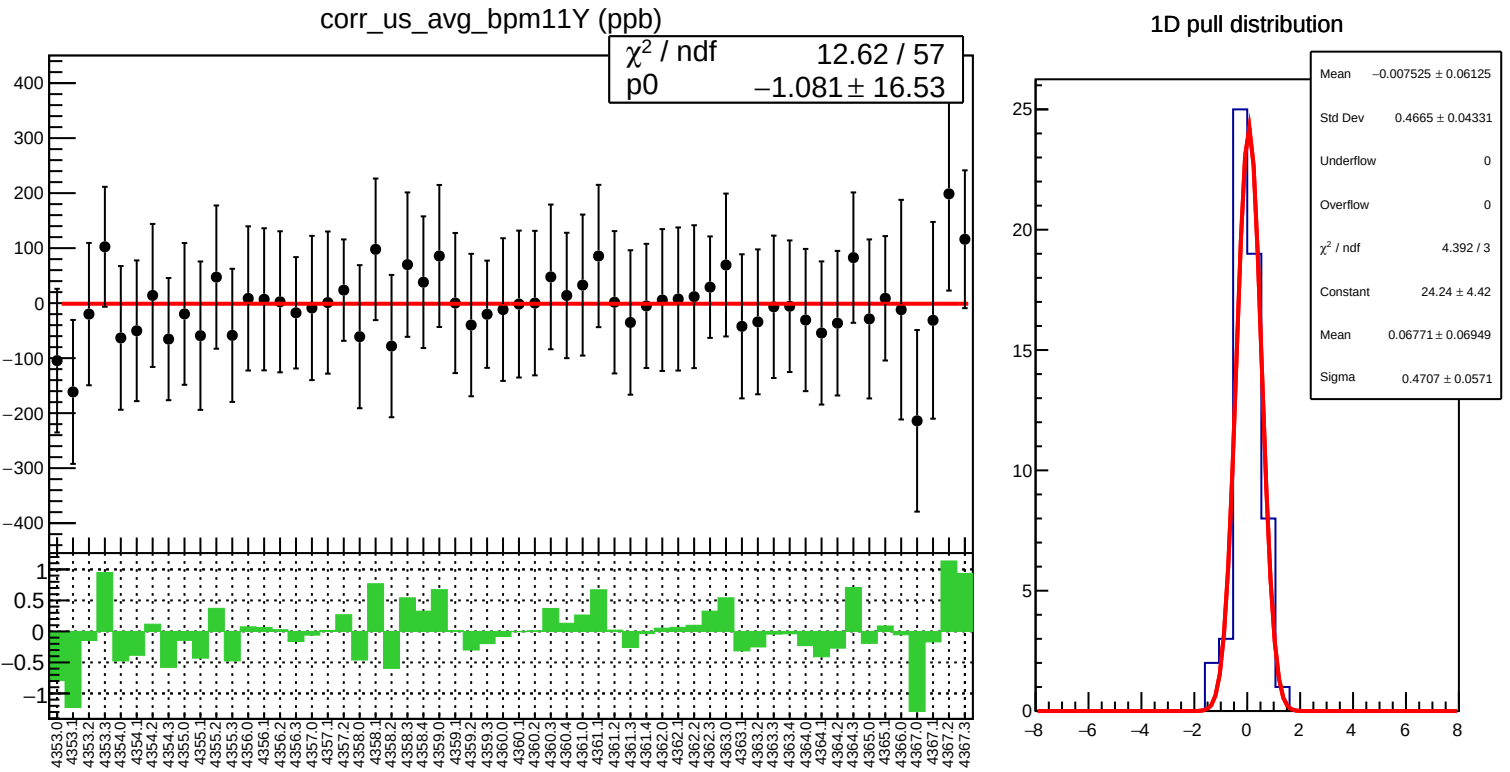
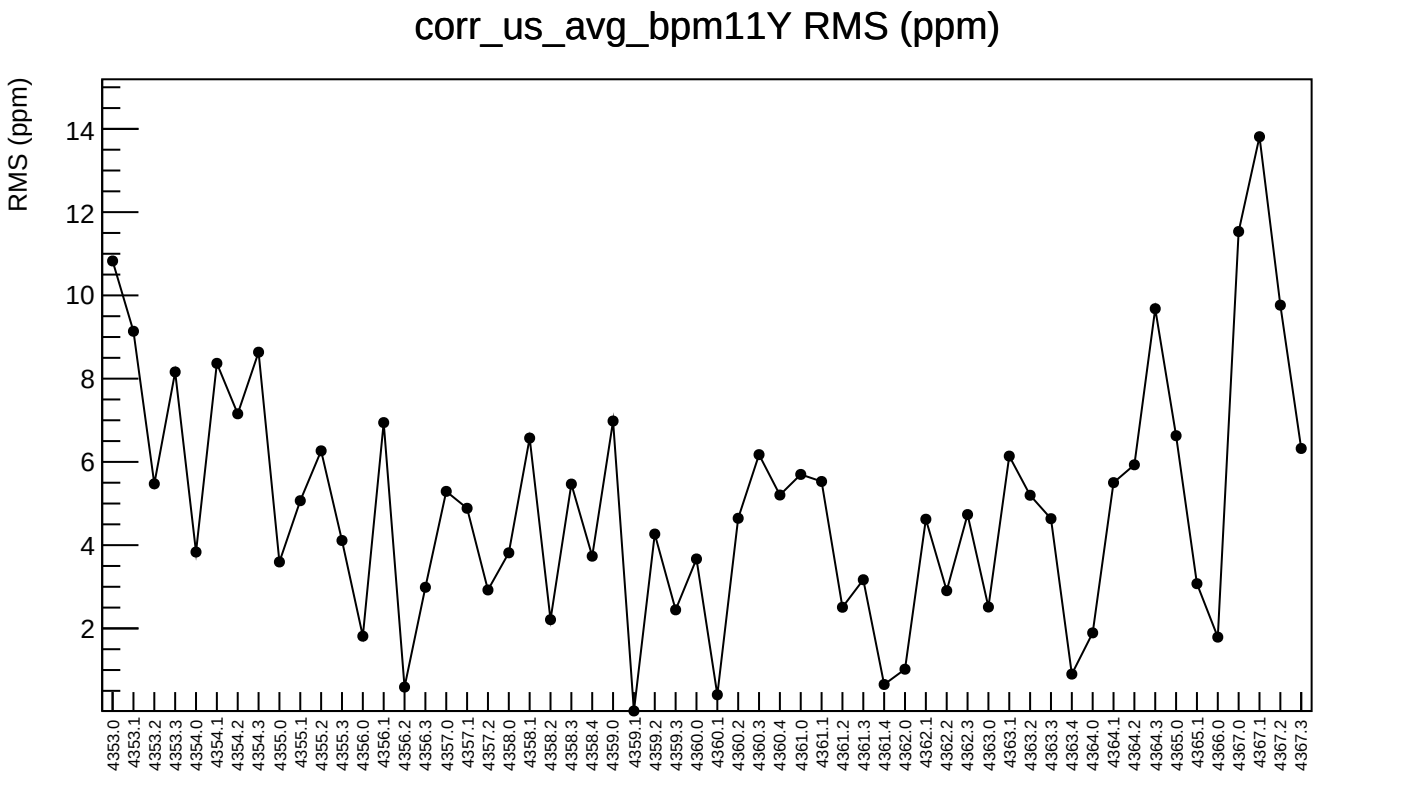
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm11Y (ppb)
χ² / ndf 12.62 / 57
p0 −1.081 ± 16.53
1D pull distribution
Mean −0.007525 ± 0.06125
Std Dev 0.4665 ± 0.04331
Underflow 0
Overflow 0
χ² / ndf 4.392 / 3
Constant 24.24 ± 4.42
Mean 0.06771 ± 0.06949
Sigma 0.4707 ± 0.0571


corr_us_avg_bpm11Y RMS (ppm)
RMS (ppm)
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
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4355.3
4356.0
4356.1
4356.2
4356.3
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4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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4364.3
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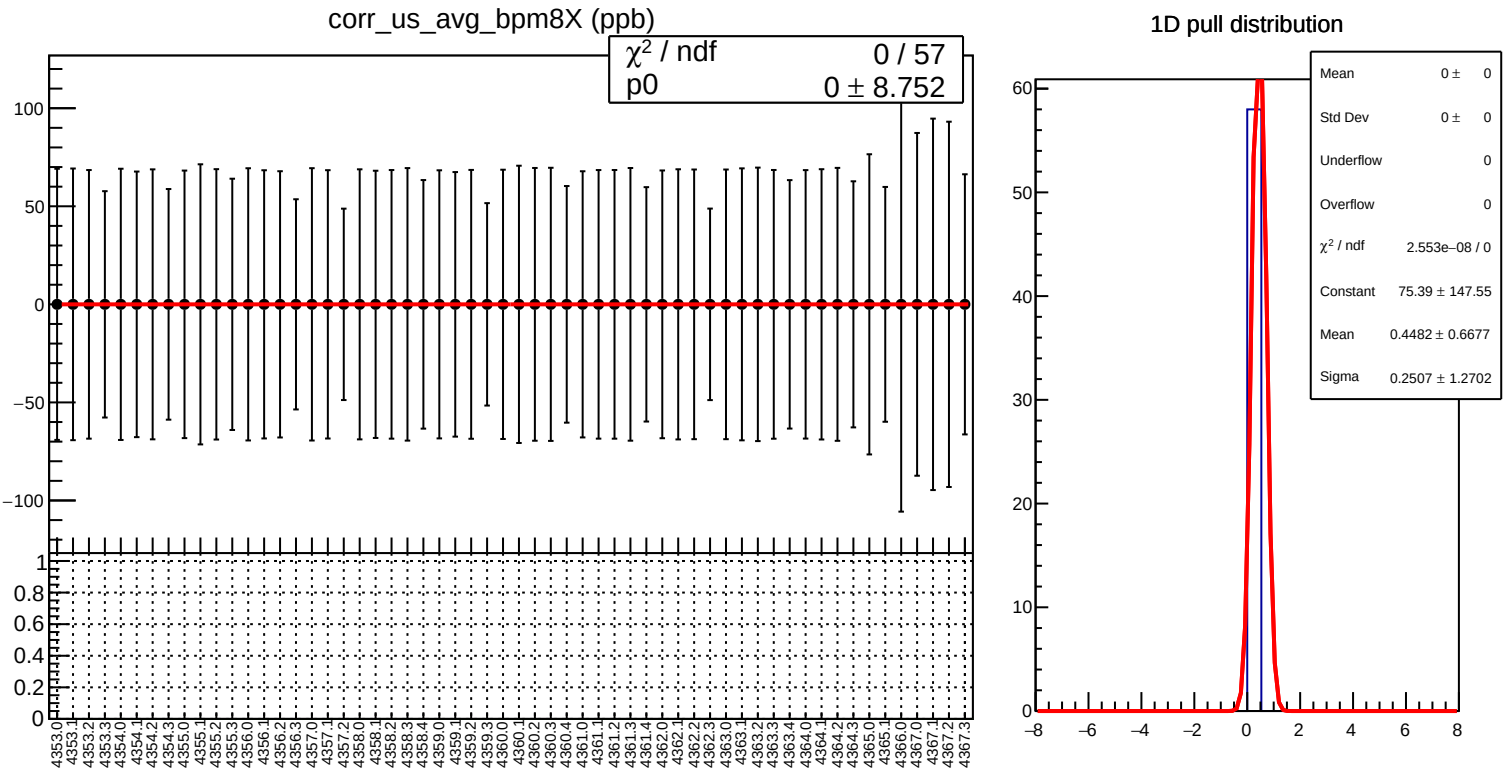
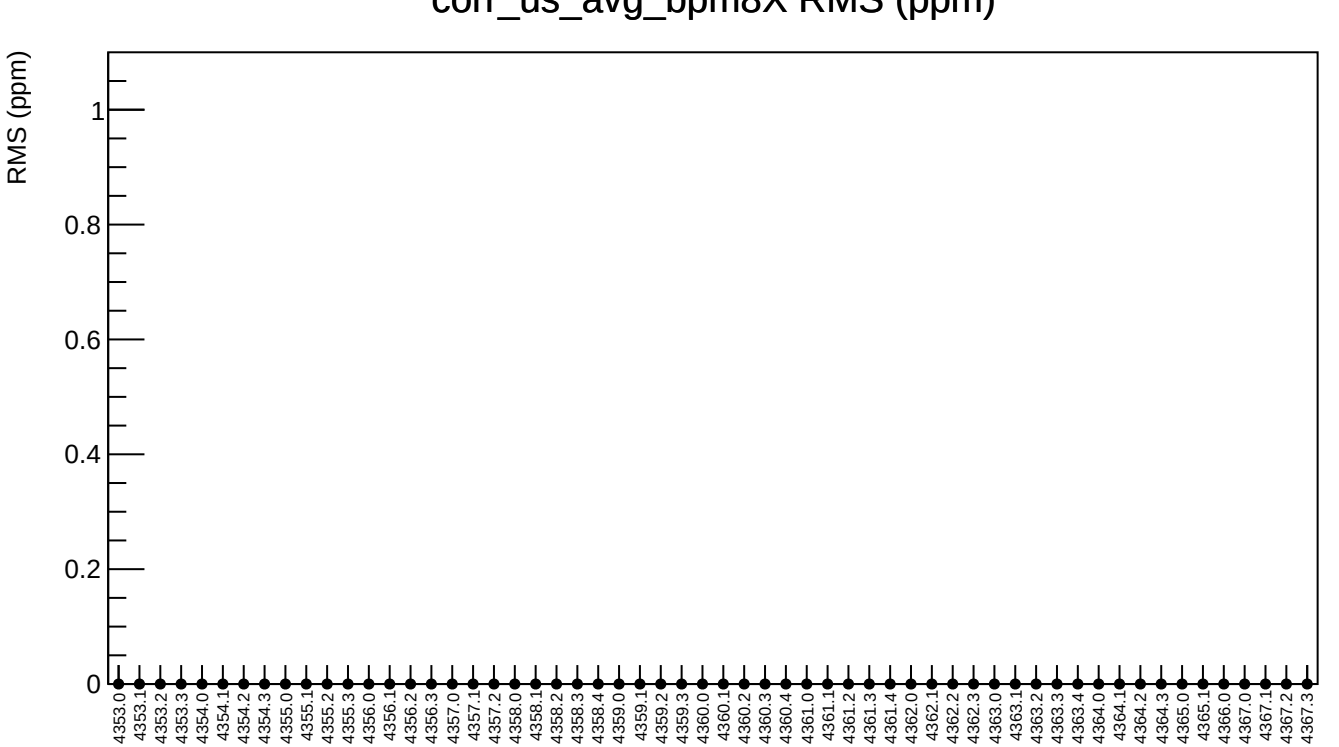
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm8X (ppb)
χ² / ndf 0 / 57
p0 0 ± 8.752
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702


corr_us_avg_bpm8X RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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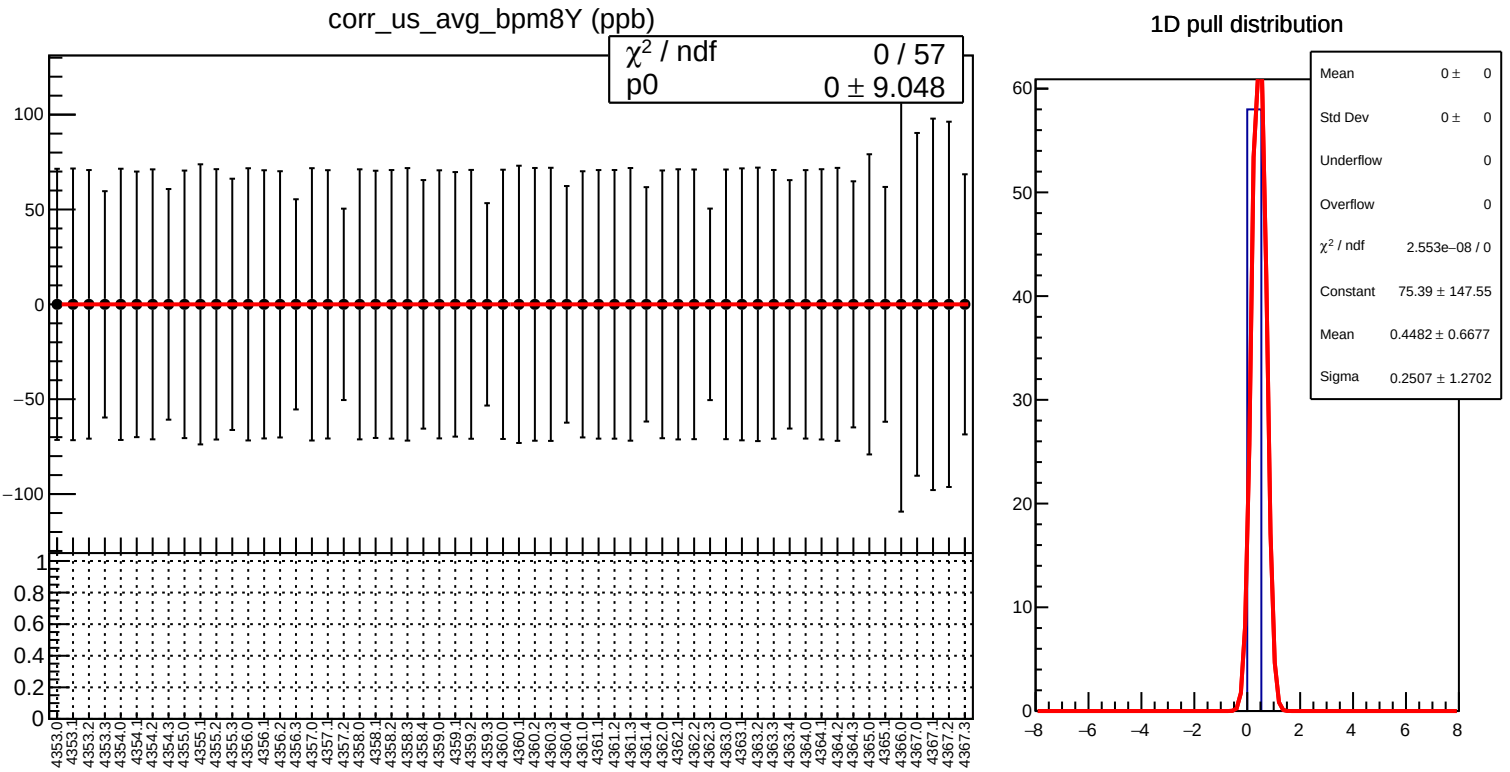
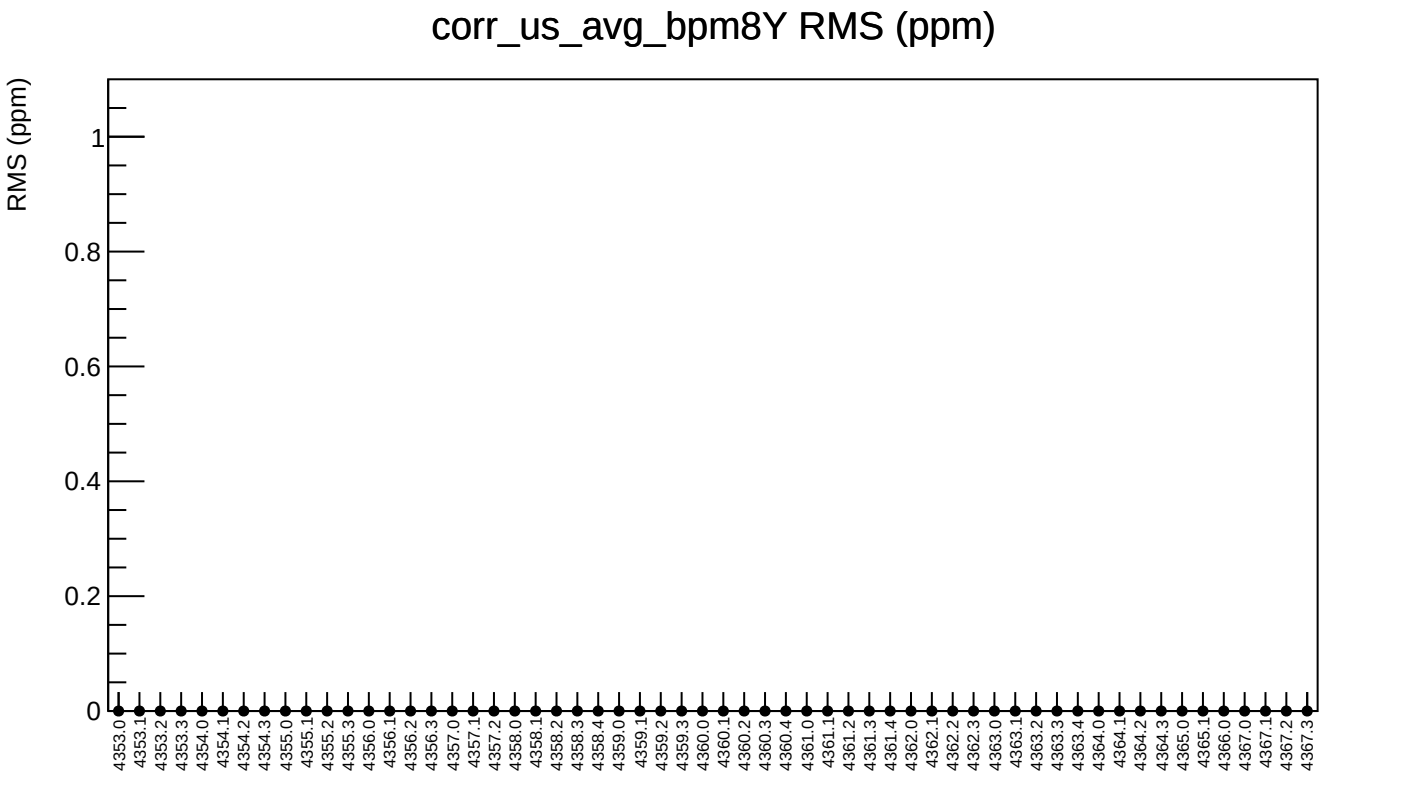
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_avg_bpm8Y (ppb)
χ² / ndf 0 / 57
p0 0 ± 9.048
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702


corr_us_avg_bpm8Y RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
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4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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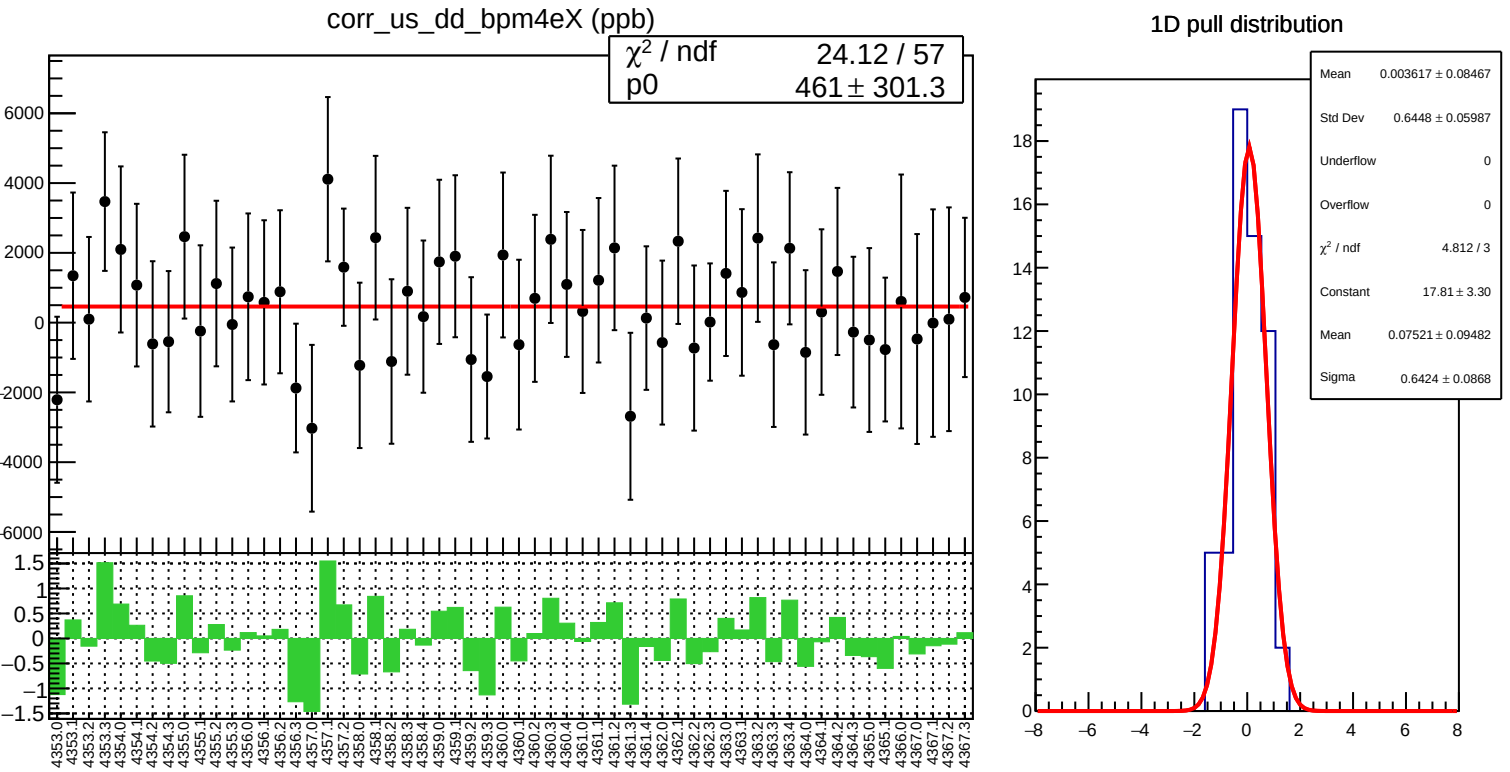
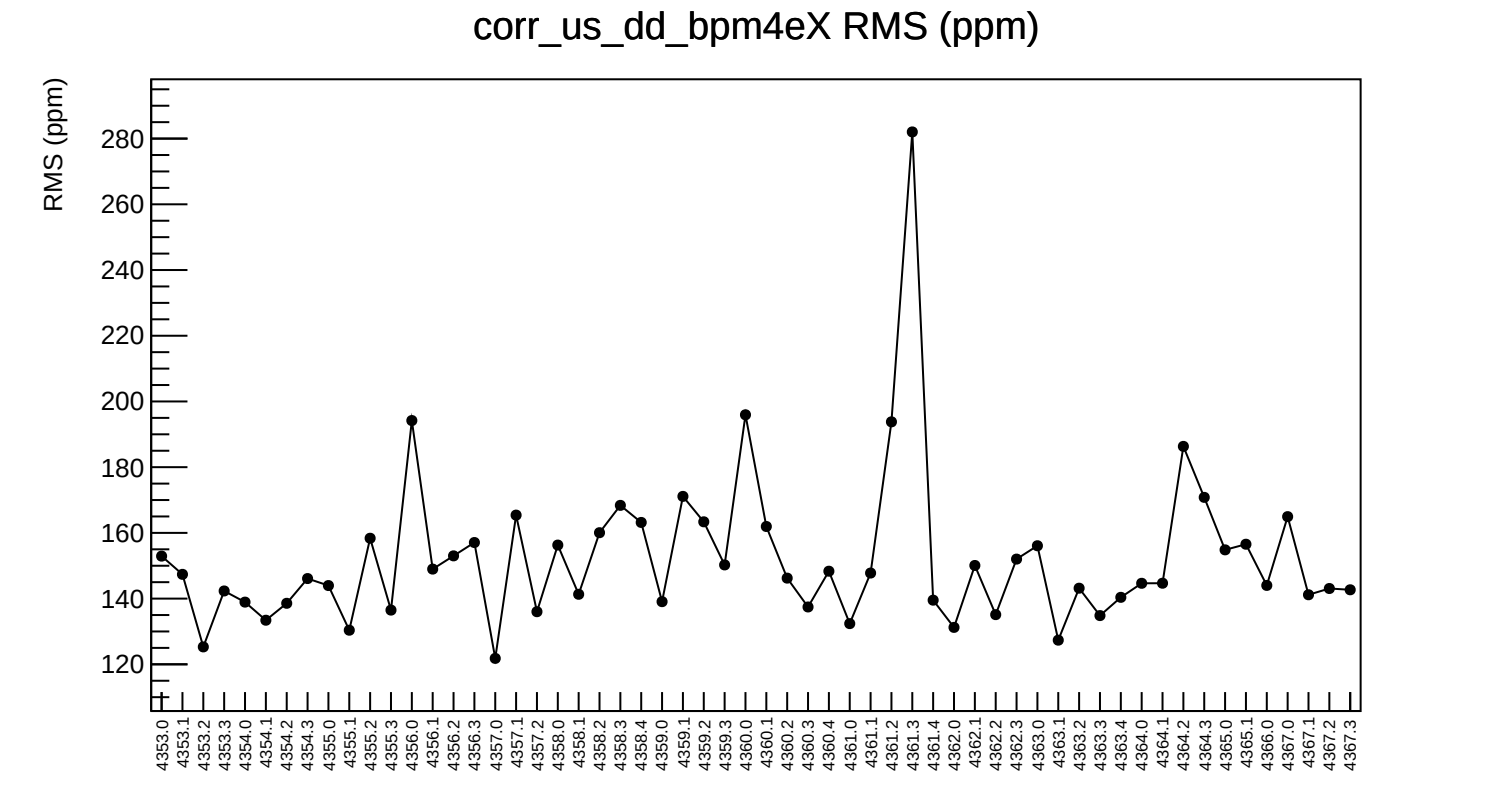
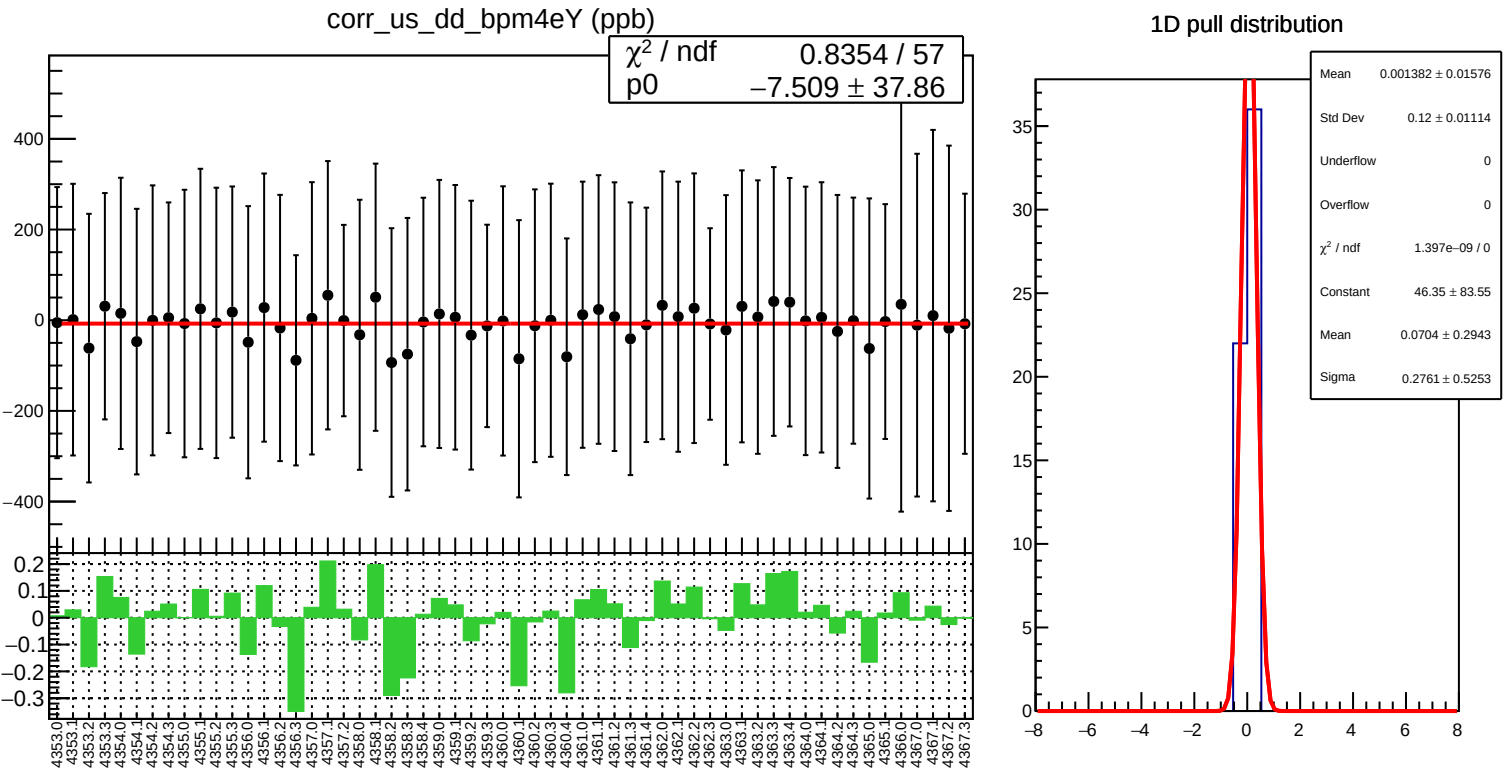
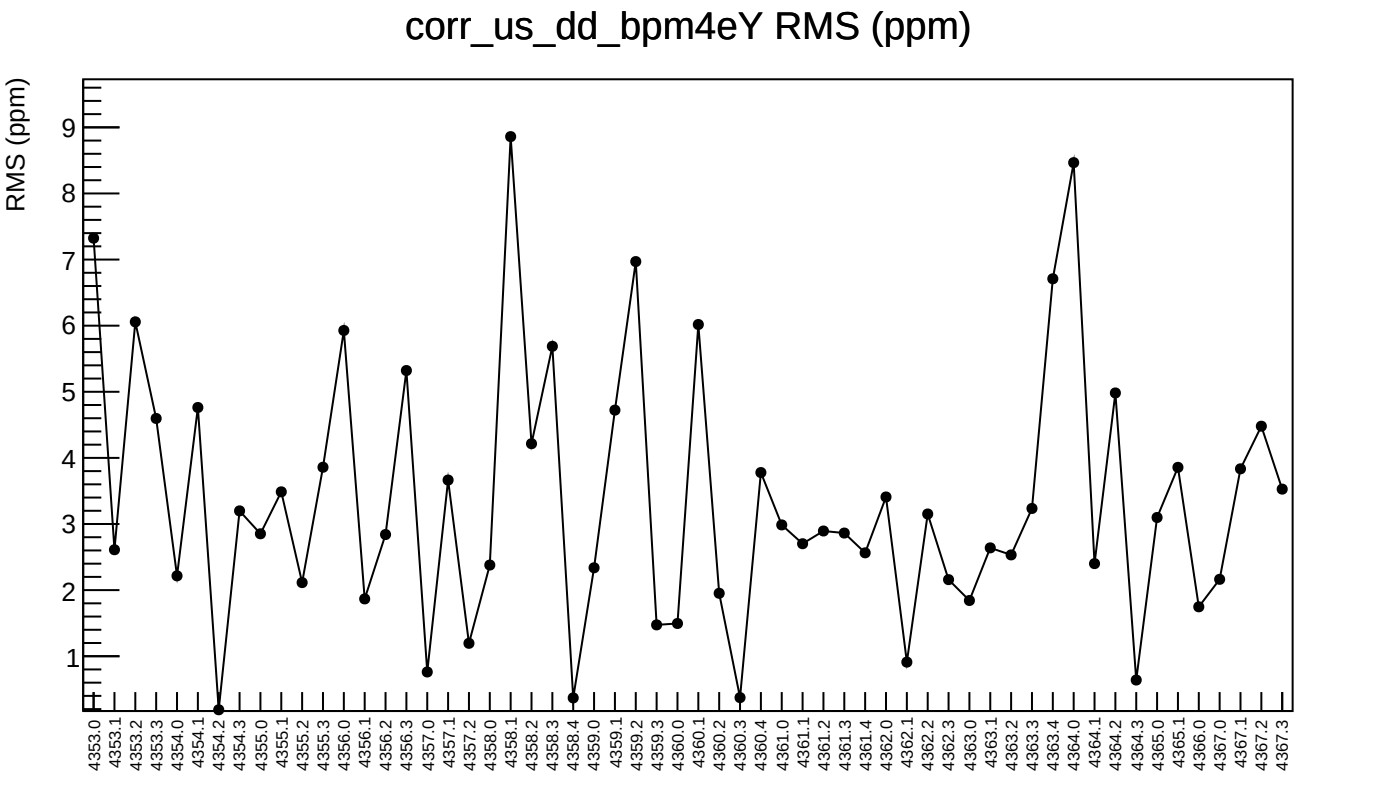
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_dd_bpm4eX (ppb)
χ² / ndf 24.12 / 57
p0 461 ± 301.3
1D pull distribution
Mean 0.003617 ± 0.08467
Std Dev 0.6448 ± 0.05987
Underflow 0
Overflow 0
χ² / ndf 4.812 / 3
Constant 17.81 ± 3.30
Mean 0.07521 ± 0.09482
Sigma 0.6424 ± 0.0868


corr_us_dd_bpm4eX RMS (ppm)
RMS (ppm)
280
260
240
220
200
180
160
140
120
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_dd_bpm4eY (ppb)
χ² / ndf 0.8354 / 57
p0 −7.509 ± 37.86
400
200
0
−200
−400
0.2
0.1
0
−0.1
−0.2
−0.3
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean 0.001382 ± 0.01576
Std Dev 0.12 ± 0.01114
Underflow 0
Overflow 0
χ² / ndf 1.397e−09 / 0
Constant 46.35 ± 83.55
Mean 0.0704 ± 0.2943
Sigma 0.2761 ± 0.5253
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_dd_bpm4eY RMS (ppm)
RMS (ppm)
1
2
3
4
5
6
7
8
9
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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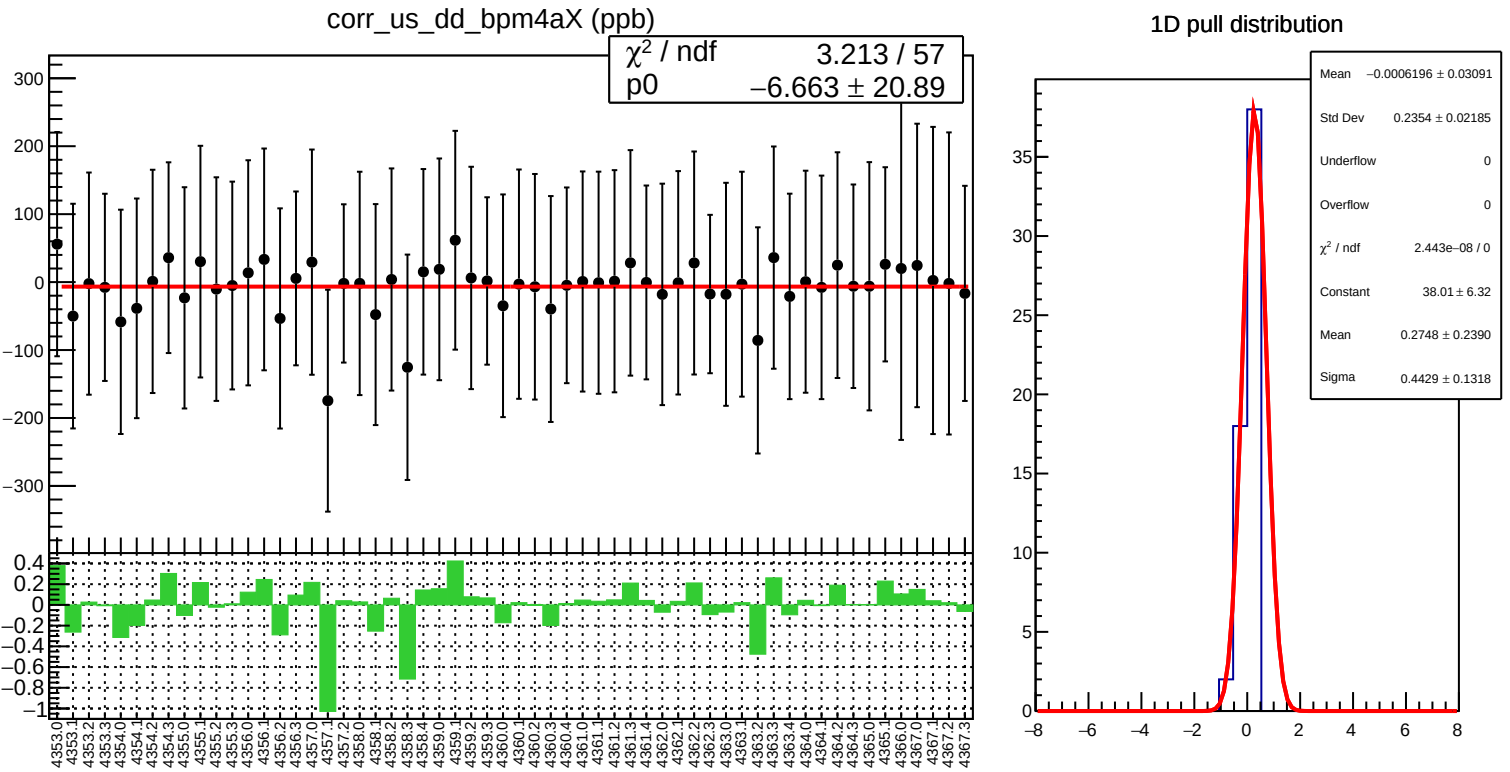
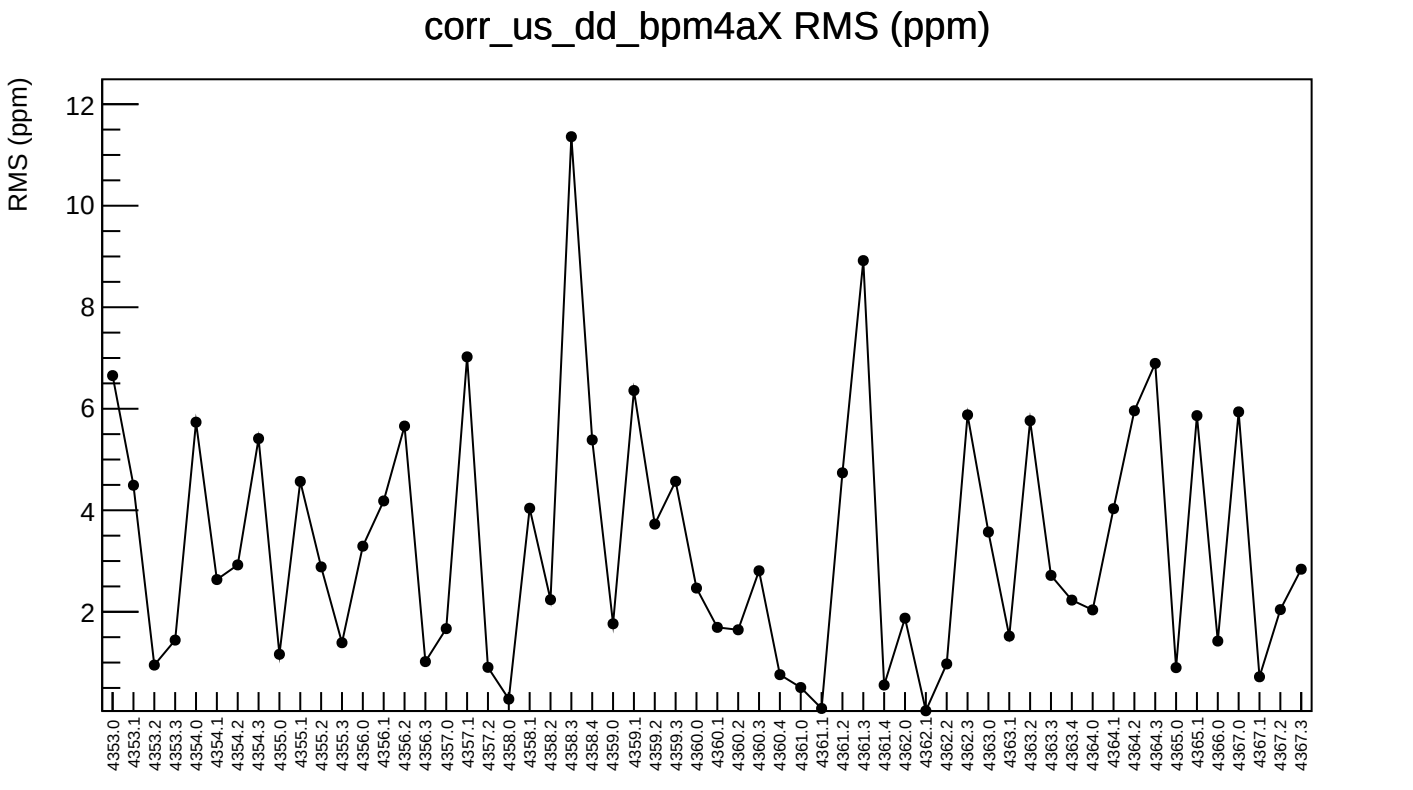
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_dd_bpm4aX (ppb)
χ² / ndf 3.213 / 57
p0 −6.663 ± 20.89
1D pull distribution
Mean −0.0006196 ± 0.03091
Std Dev 0.2354 ± 0.02185
Underflow 0
Overflow 0
χ² / ndf 2.443e−08 / 0
Constant 38.01 ± 6.32
Mean 0.2748 ± 0.2390
Sigma 0.4429 ± 0.1318


corr_us_dd_bpm4aX RMS (ppm)
RMS (ppm)
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
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4355.3
4356.0
4356.1
4356.2
4356.3
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4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
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4366.0
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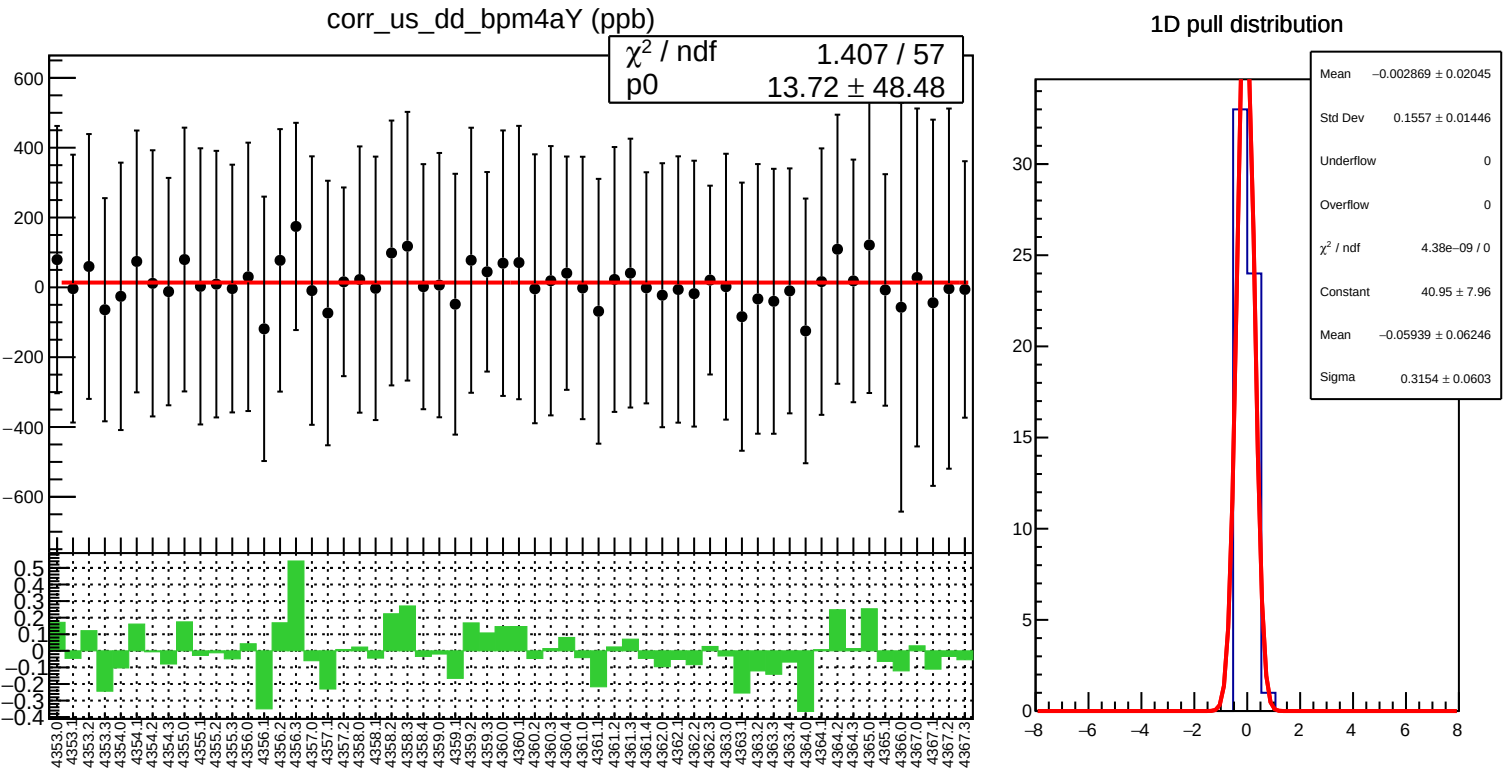
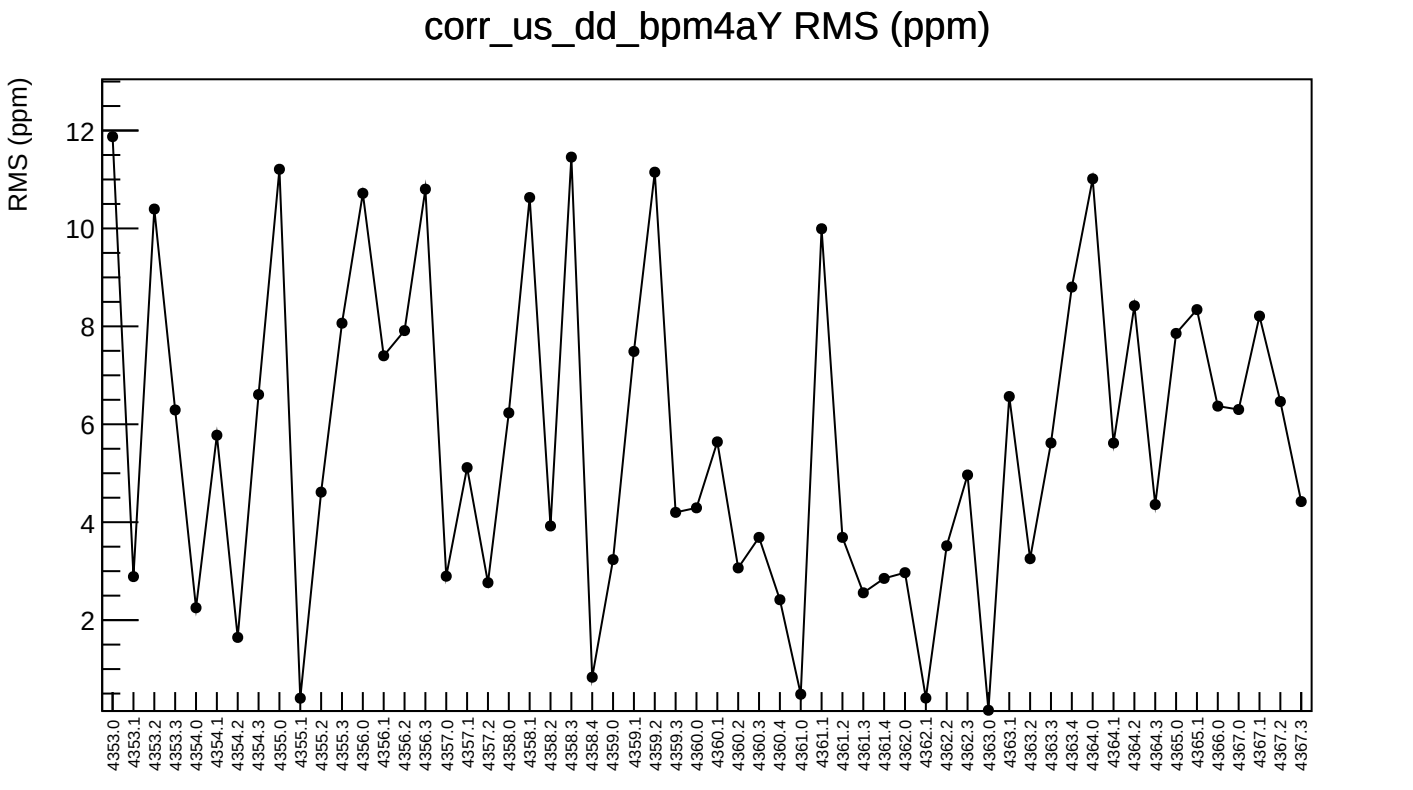
4367.2
4367.3


corr_us_dd_bpm4aY (ppb)
χ² / ndf 1.407 / 57
p0 13.72 ± 48.48
1D pull distribution
Mean −0.002869 ± 0.02045
Std Dev 0.1557 ± 0.01446
Underflow 0
Overflow 0
χ² / ndf 4.38e−09 / 0
Constant 40.95 ± 7.96
Mean −0.05939 ± 0.06246
Sigma 0.3154 ± 0.0603


corr_us_dd_bpm4aY RMS (ppm)
RMS (ppm)
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
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4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
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4362.0
4362.1
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4364.0
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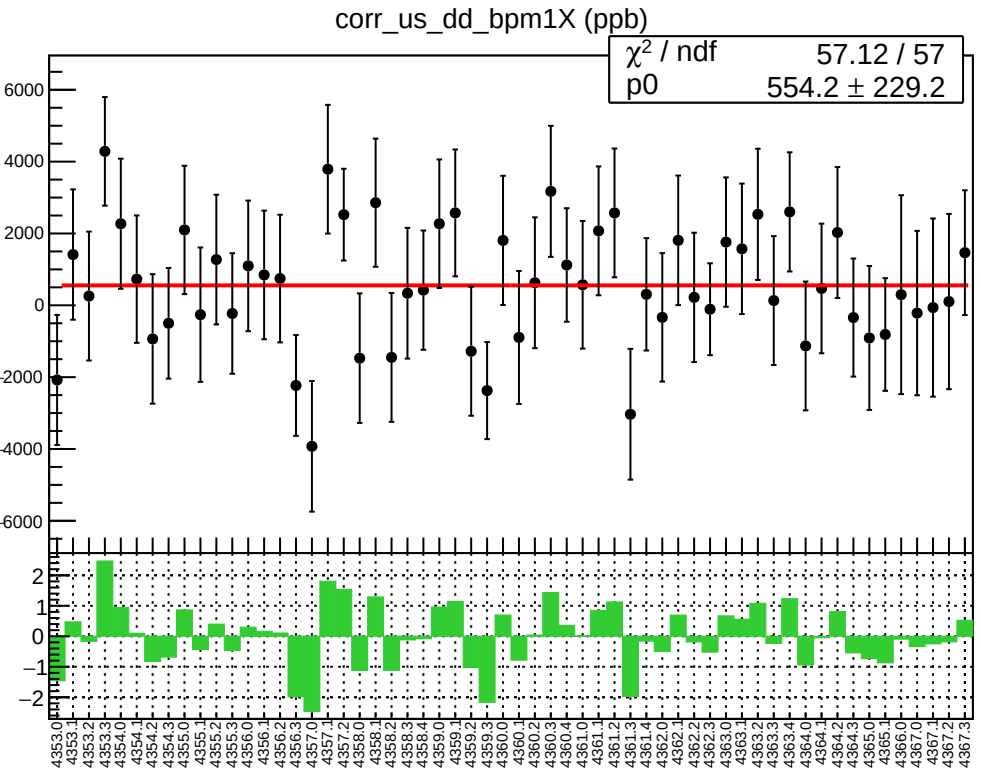
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_dd_bpm1X (ppb)
χ² / ndf 57.12 / 57
p0 554.2 ± 229.2
6000
4000
2000
0
-2000
-4000
-6000
2
1
0
−1
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
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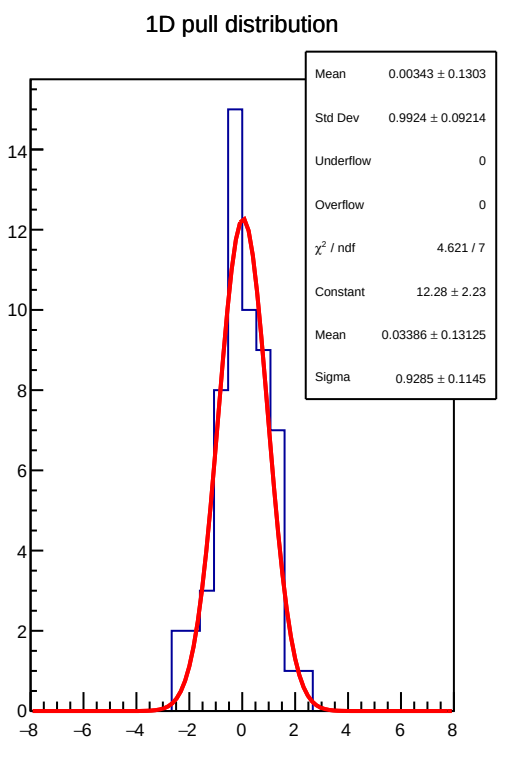
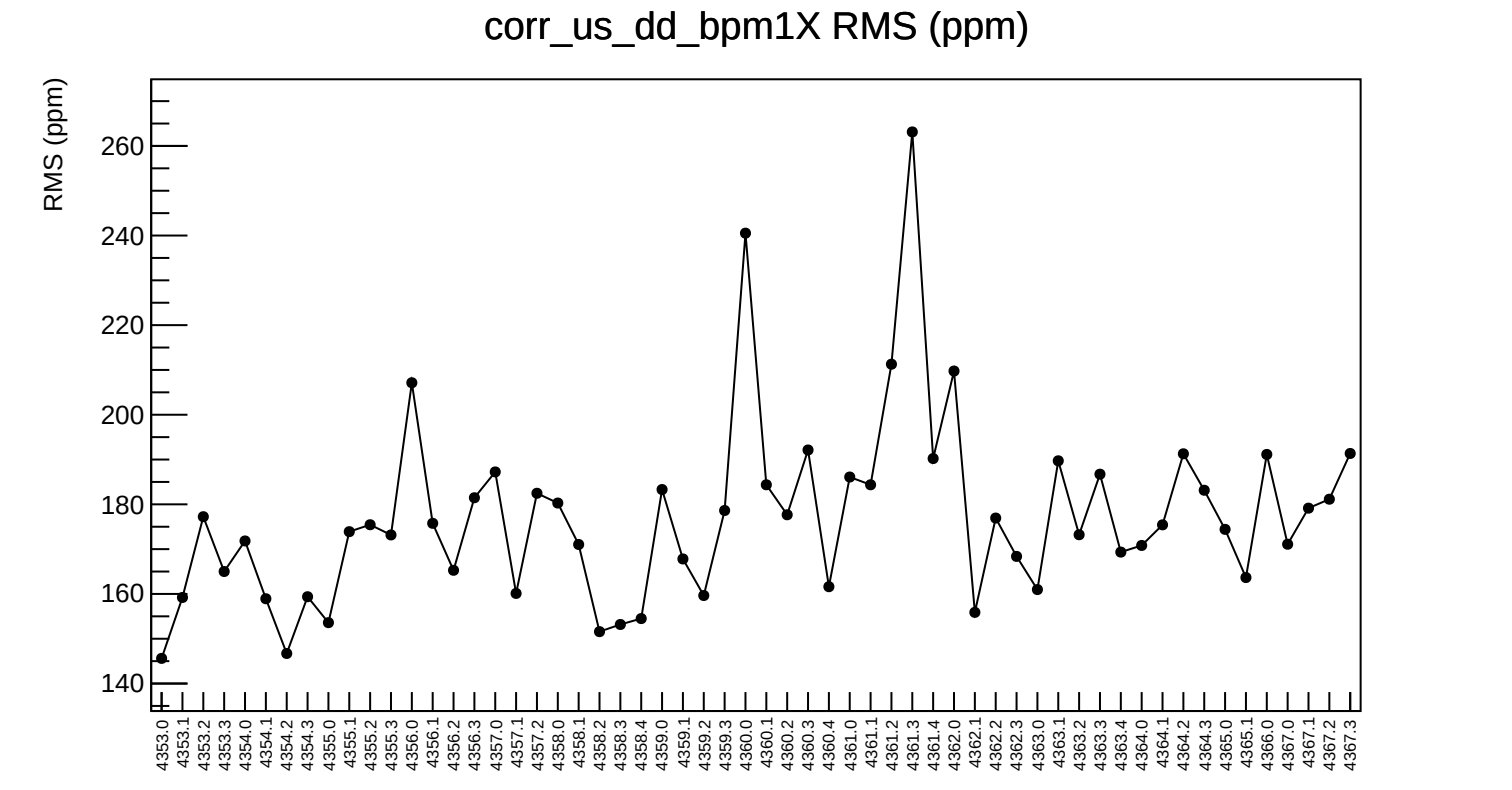
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean 0.00343 ± 0.1303
Std Dev 0.9924 ± 0.09214
Underflow 0
Overflow 0
χ² / ndf 4.621 / 7
Constant 12.28 ± 2.23
Mean 0.03386 ± 0.13125
Sigma 0.9285 ± 0.1145
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_dd_bpm1X RMS (ppm)
RMS (ppm)
260
240
220
200
180
160
140
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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4365.0
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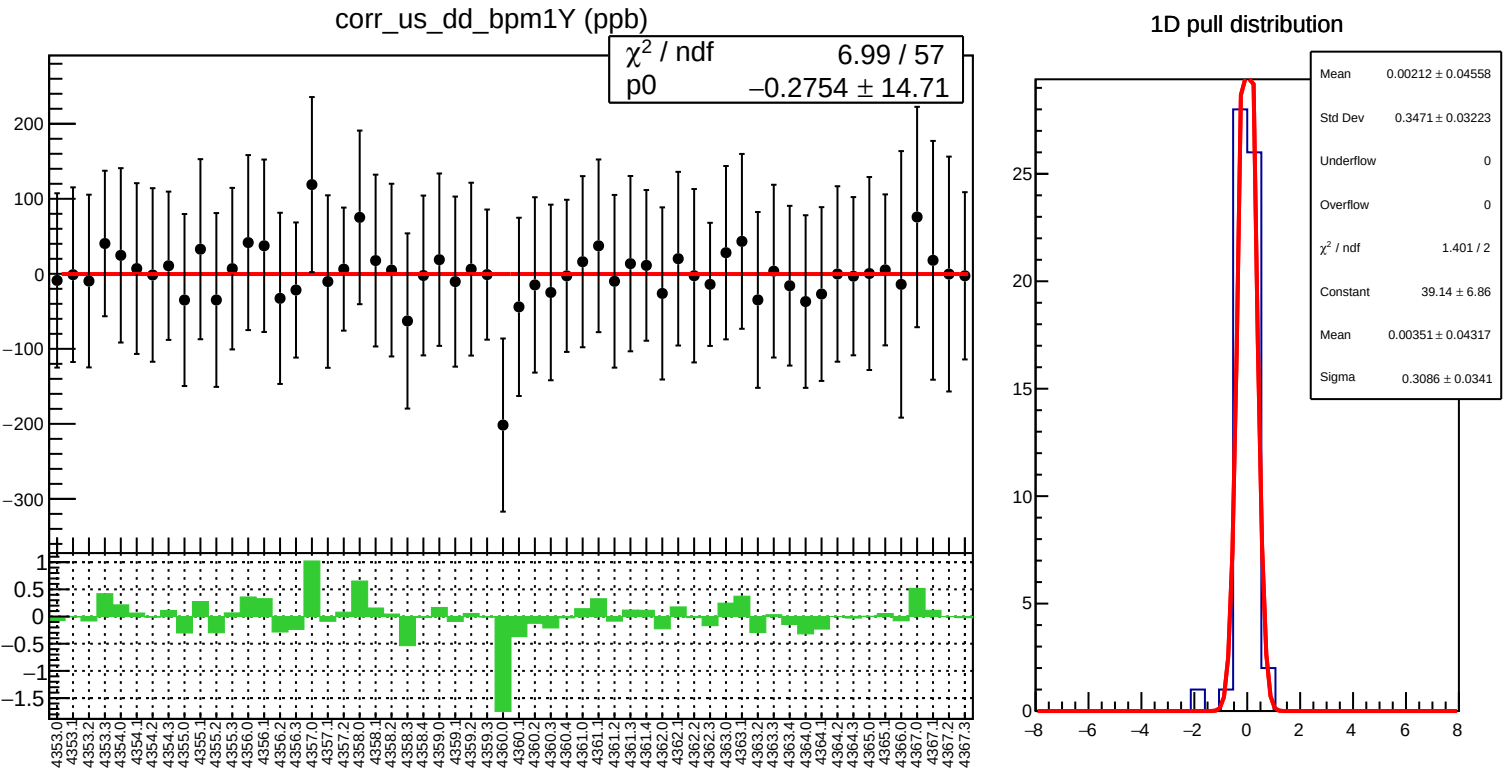
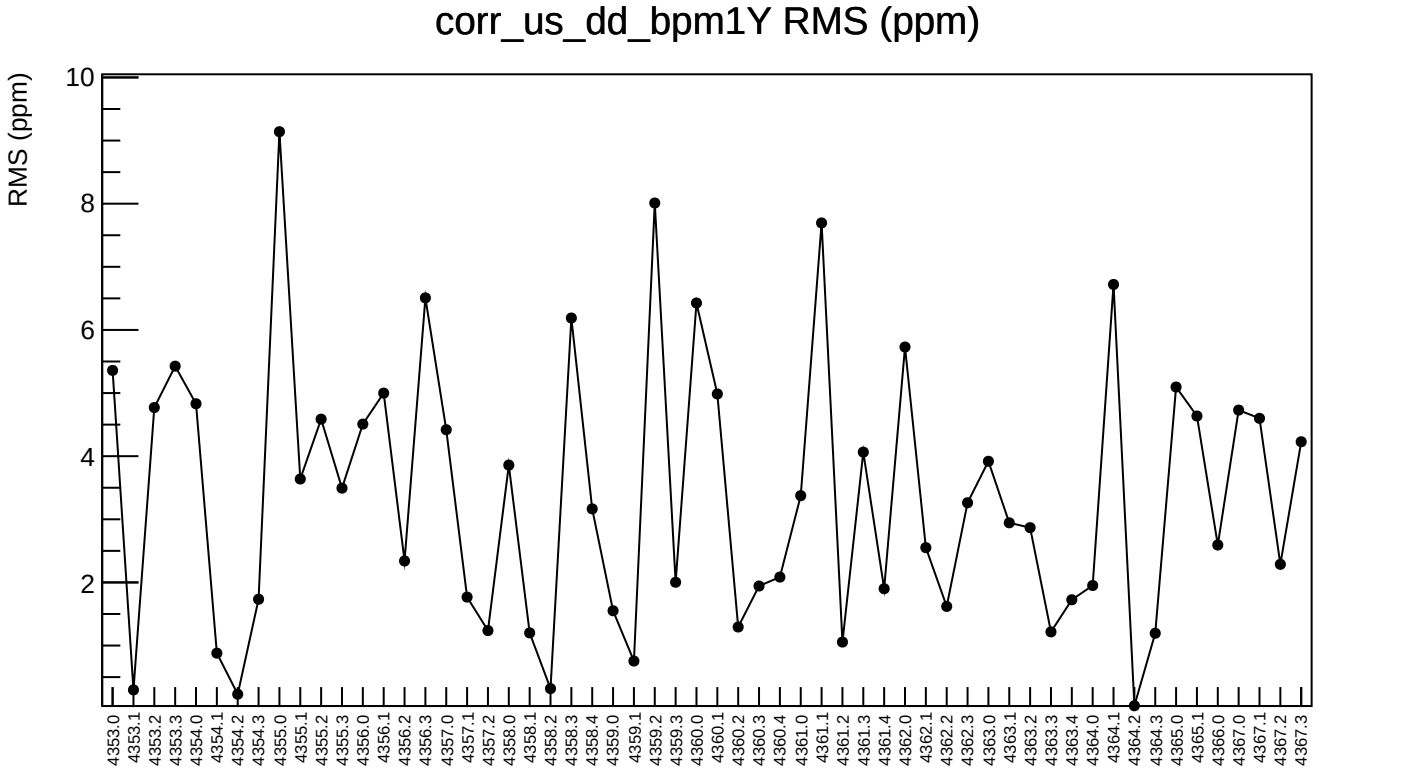
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_dd_bpm1Y (ppb)
χ² / ndf 6.99 / 57
p0 −0.2754 ± 14.71
1D pull distribution
Mean 0.00212 ± 0.04558
Std Dev 0.3471 ± 0.03223
Underflow 0
Overflow 0
χ² / ndf 1.401 / 2
Constant 39.14 ± 6.86
Mean 0.00351 ± 0.04317
Sigma 0.3086 ± 0.0341


corr_us_dd_bpm1Y RMS (ppm)
RMS (ppm)
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
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4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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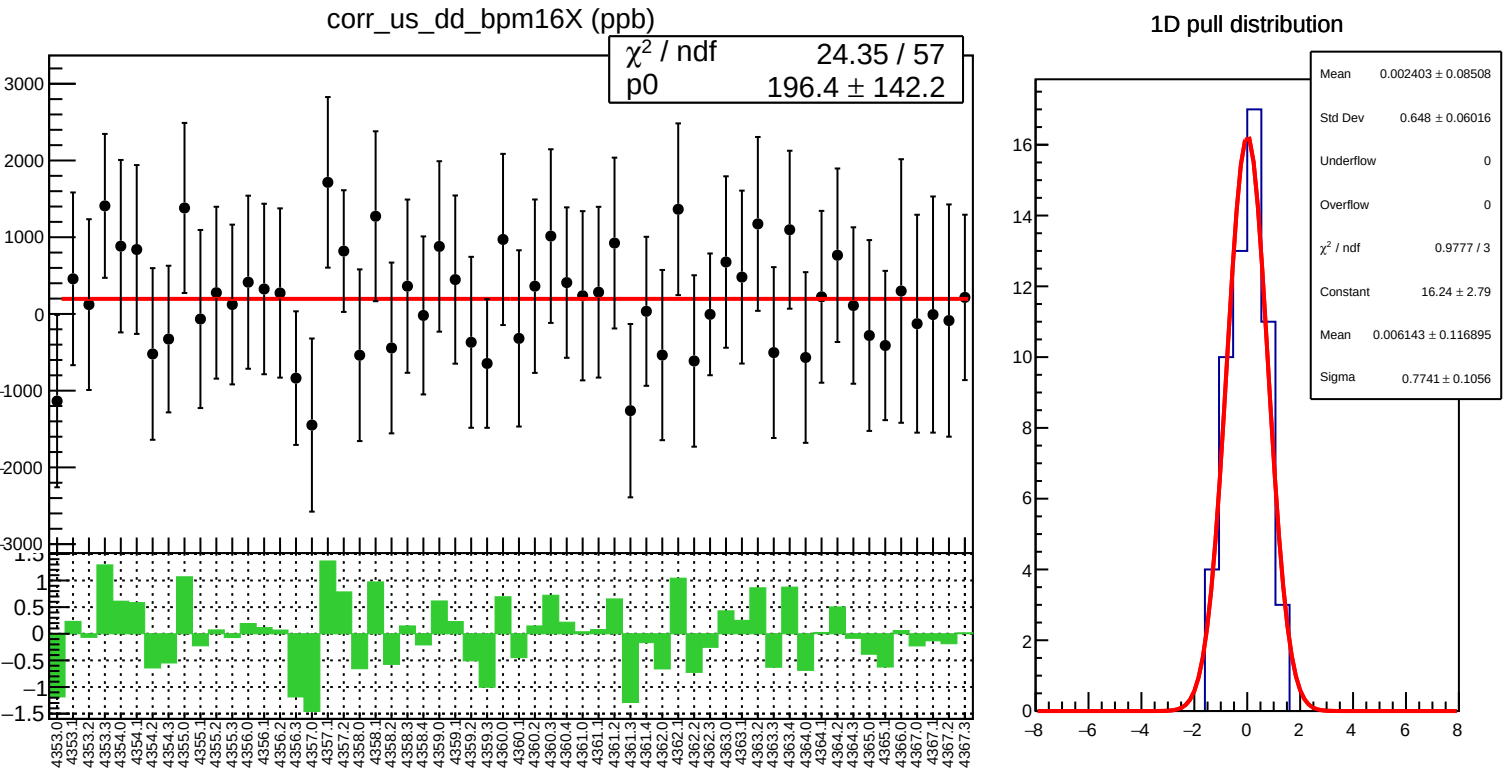
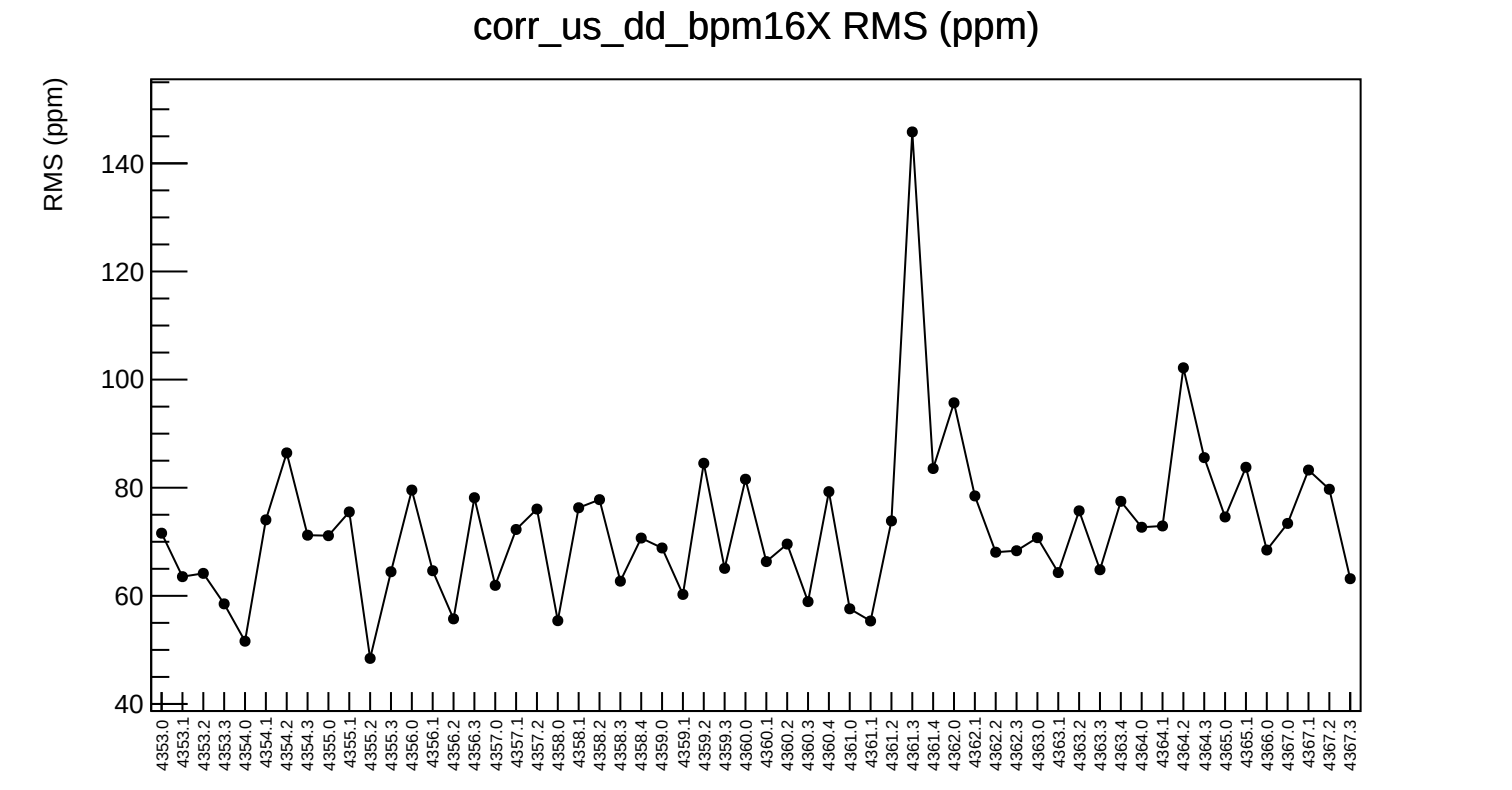
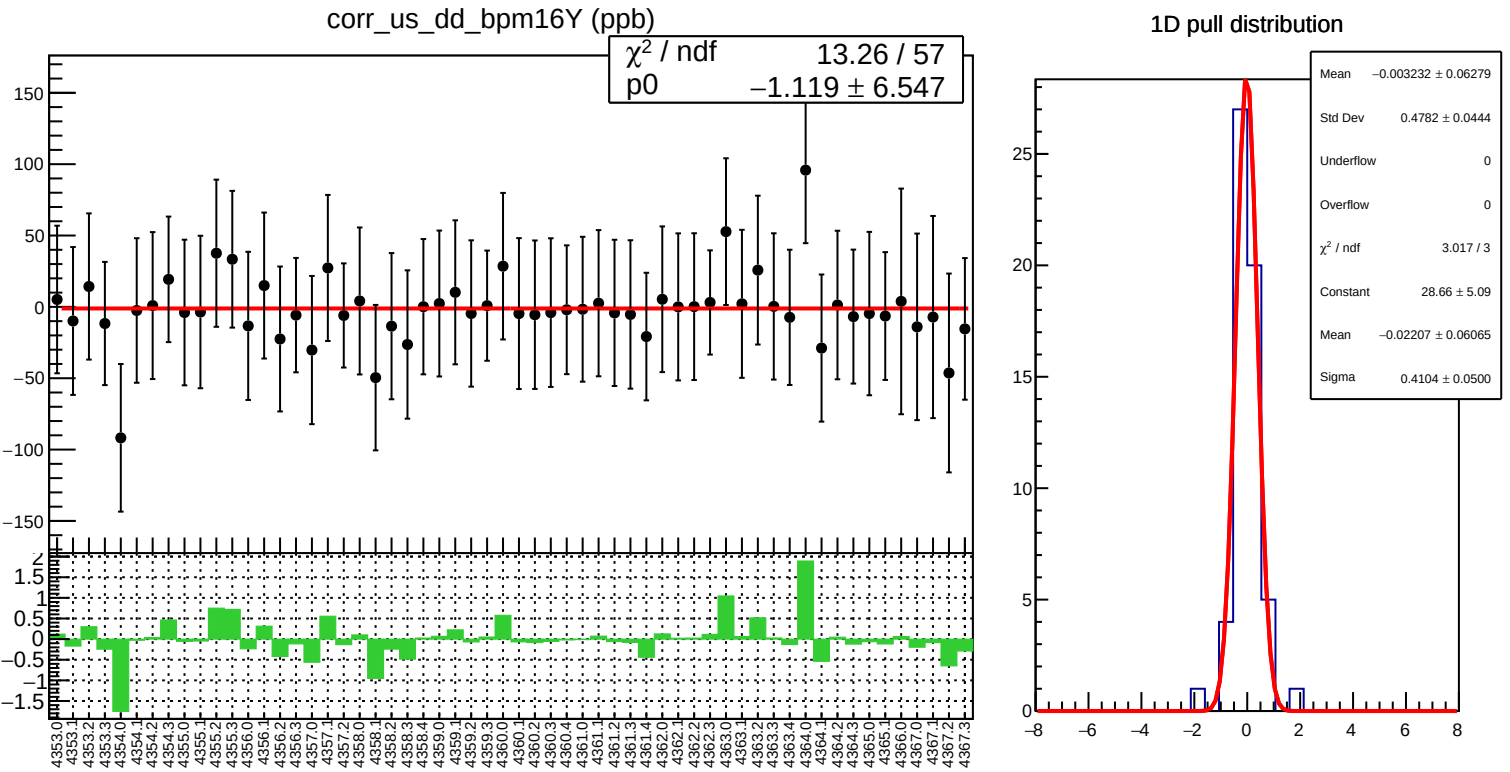
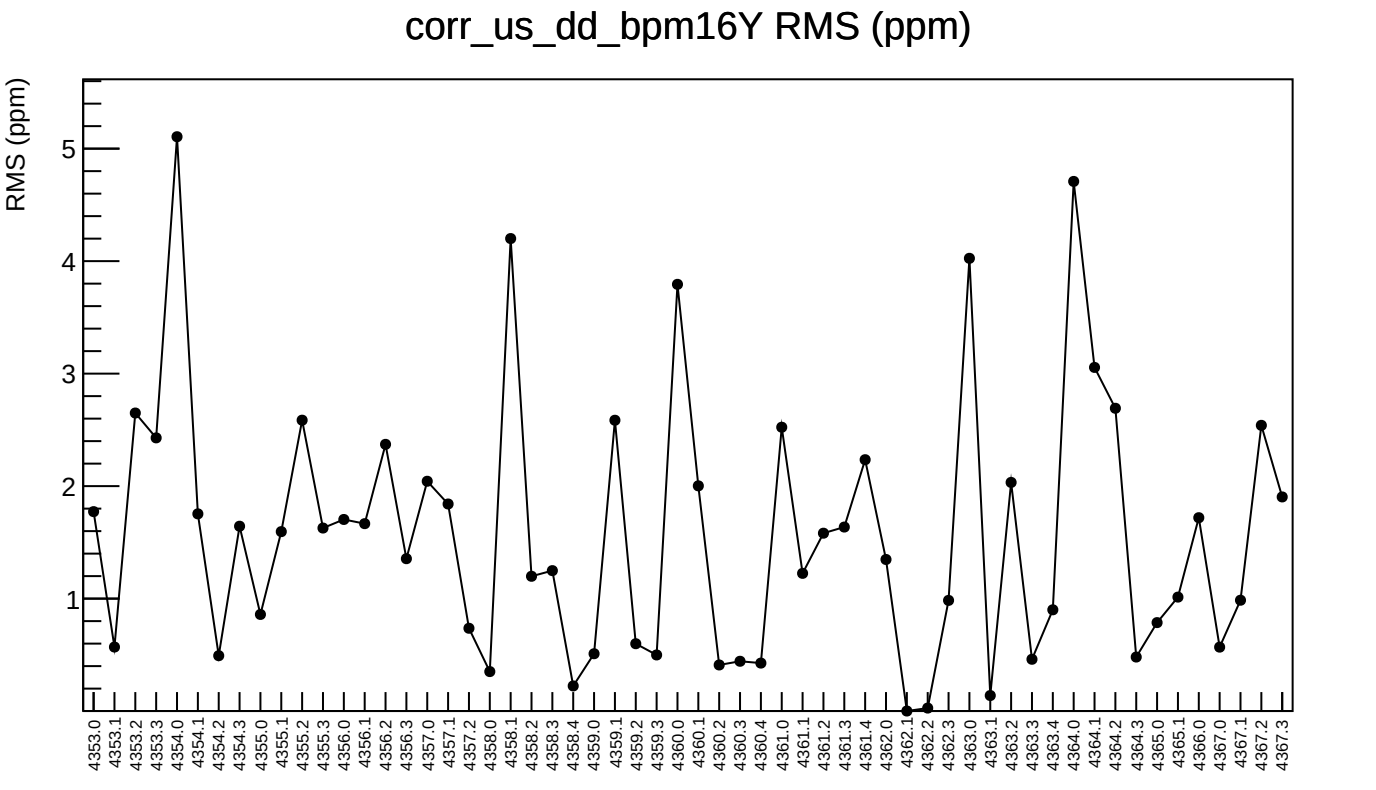
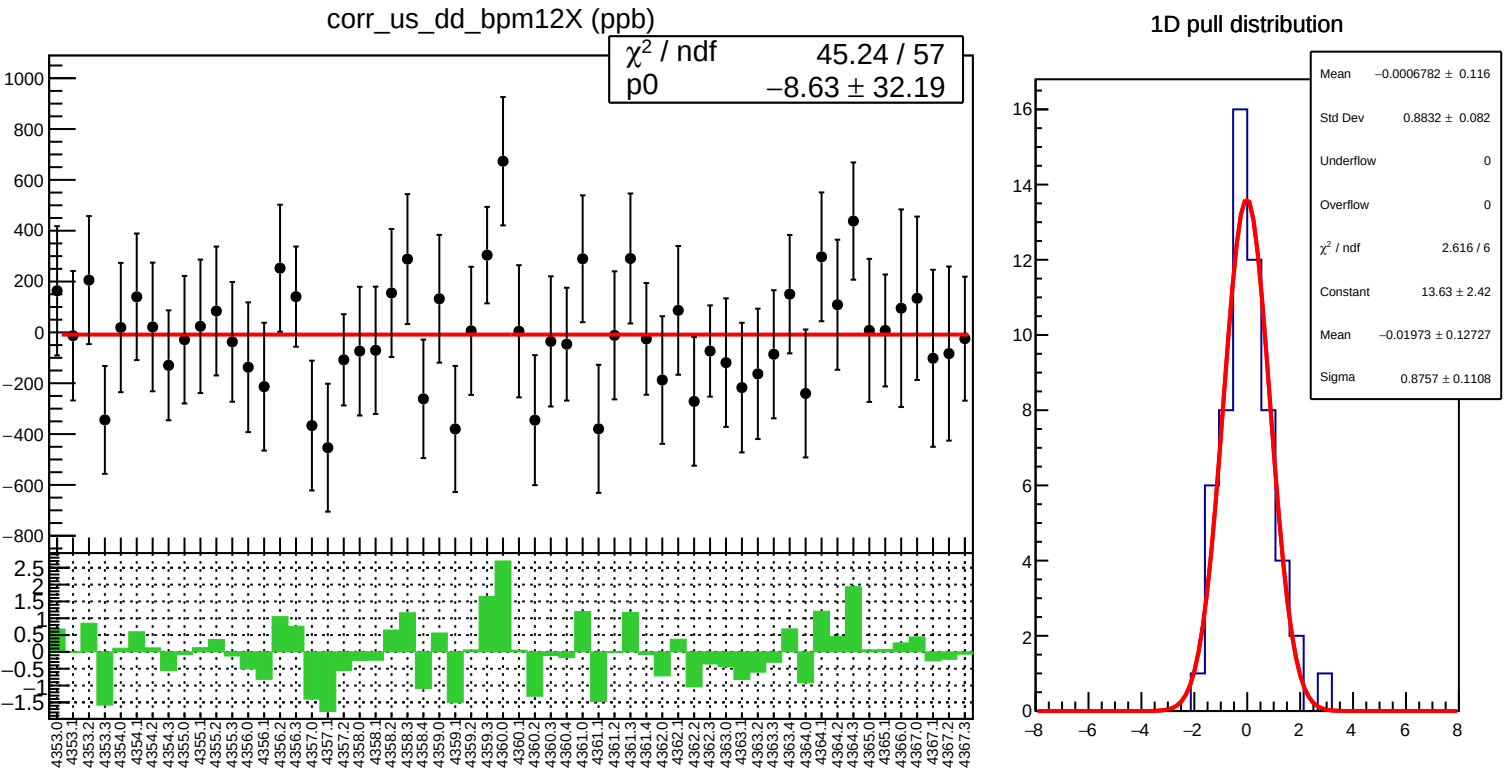
4366.0
4367.0
4367.1
4367.2
4367.3

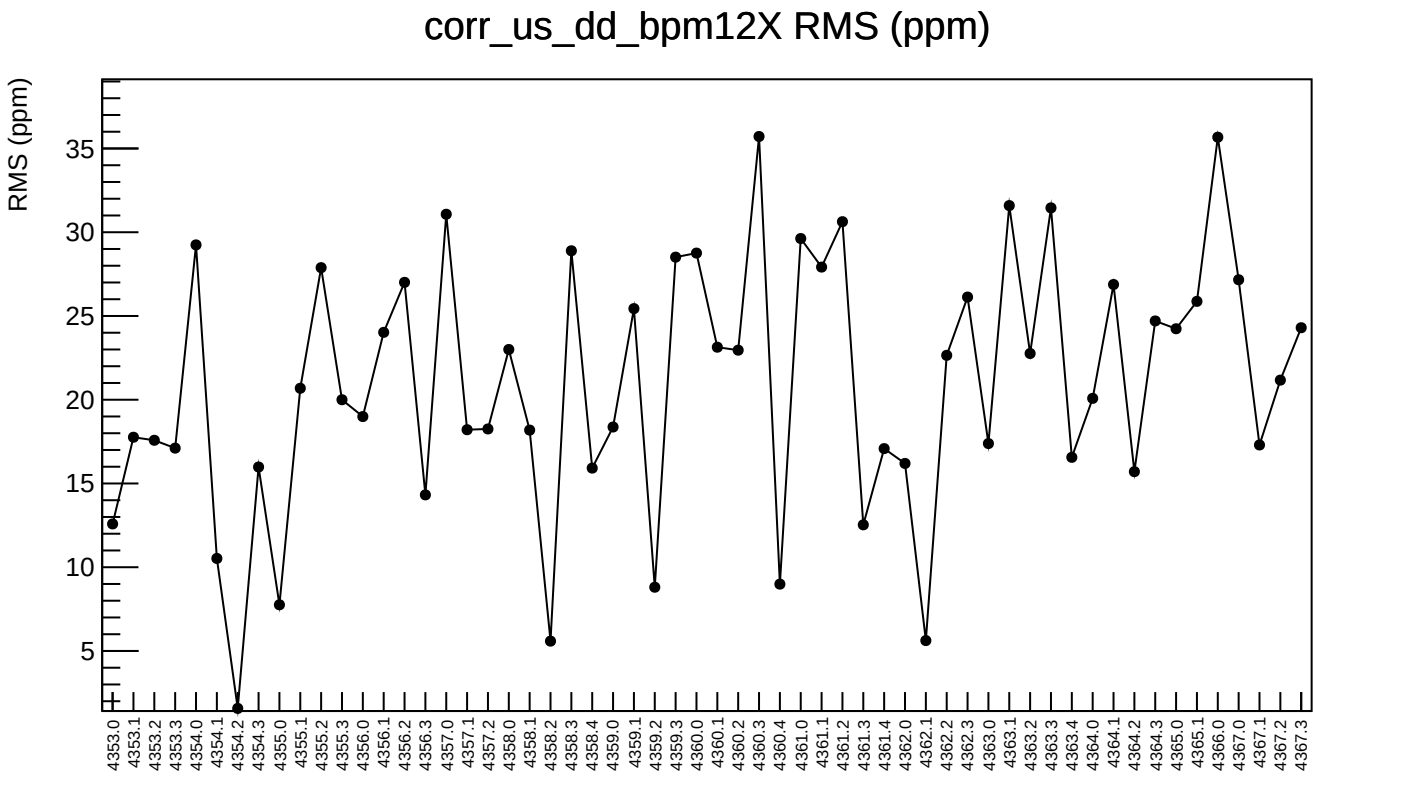

corr_us_dd_bpm16X (ppb)
χ² / ndf 24.35 / 57
p0 196.4 ± 142.2
1D pull distribution
Mean 0.002403 ± 0.08508
Std Dev 0.648 ± 0.06016
Underflow 0
Overflow 0
χ² / ndf 0.9777 / 3
Constant 16.24 ± 2.79
Mean 0.006143 ± 0.116895
Sigma 0.7741 ± 0.1056

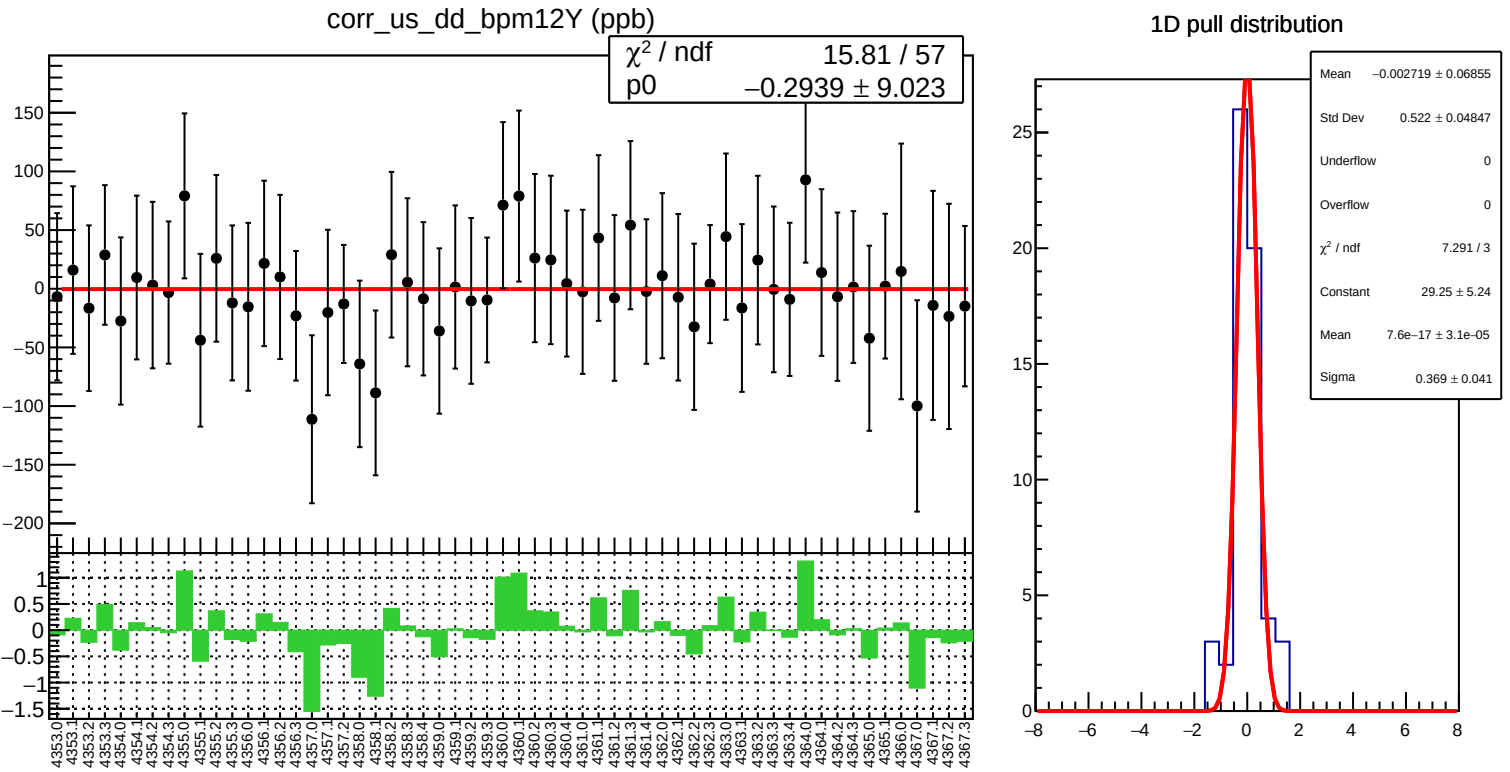

corr_us_dd_bpm16X RMS (ppm)
RMS (ppm)
140
120
100
80
60
40
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

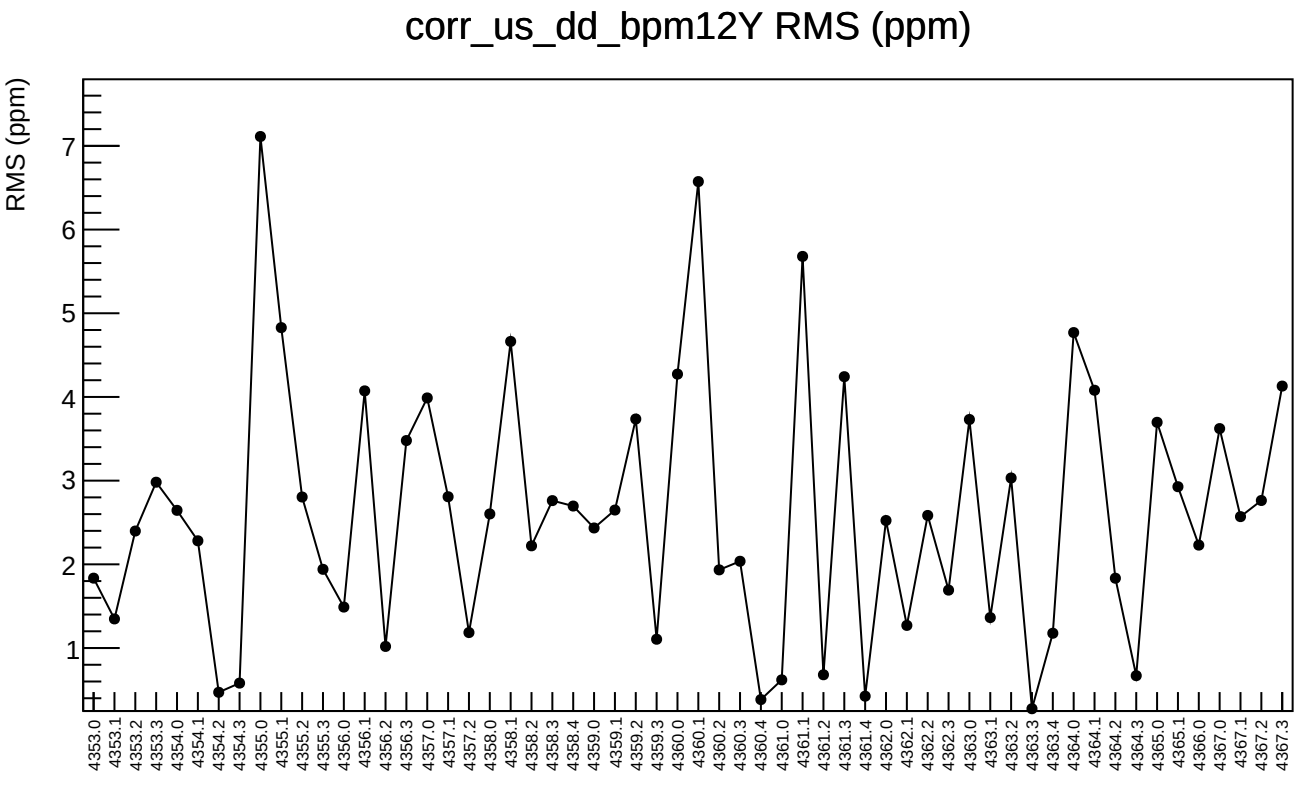

corr_us_dd_bpm16Y (ppb)
χ² / ndf 13.26 / 57
p0 −1.119 ± 6.547
1D pull distribution
Mean −0.003232 ± 0.06279
Std Dev 0.4782 ± 0.0444
Underflow 0
Overflow 0
χ² / ndf 3.017 / 3
Constant 28.66 ± 5.09
Mean −0.02207 ± 0.06065
Sigma 0.4104 ± 0.0500

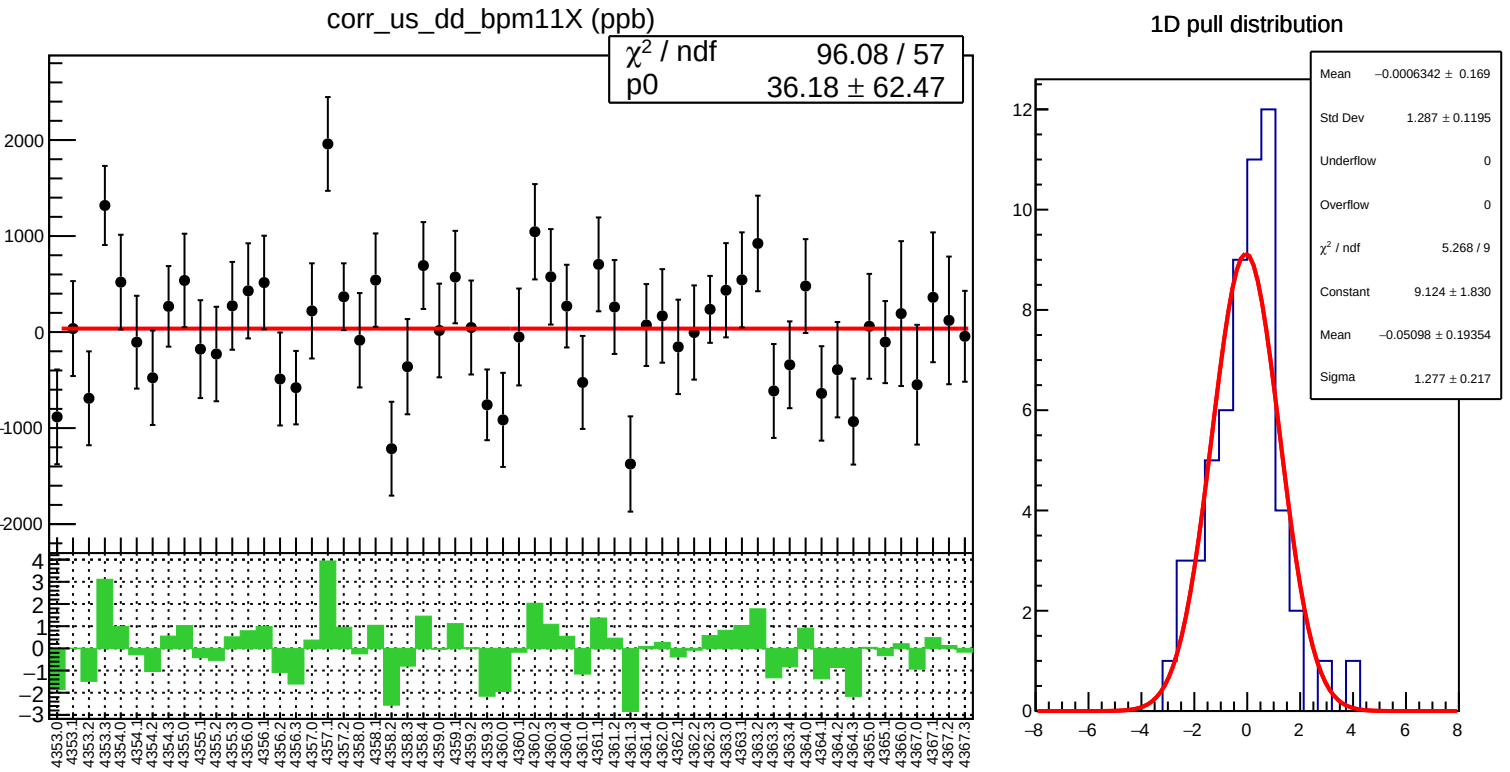

corr_us_dd_bpm16Y RMS (ppm)
RMS (ppm)
1
2
3
4
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

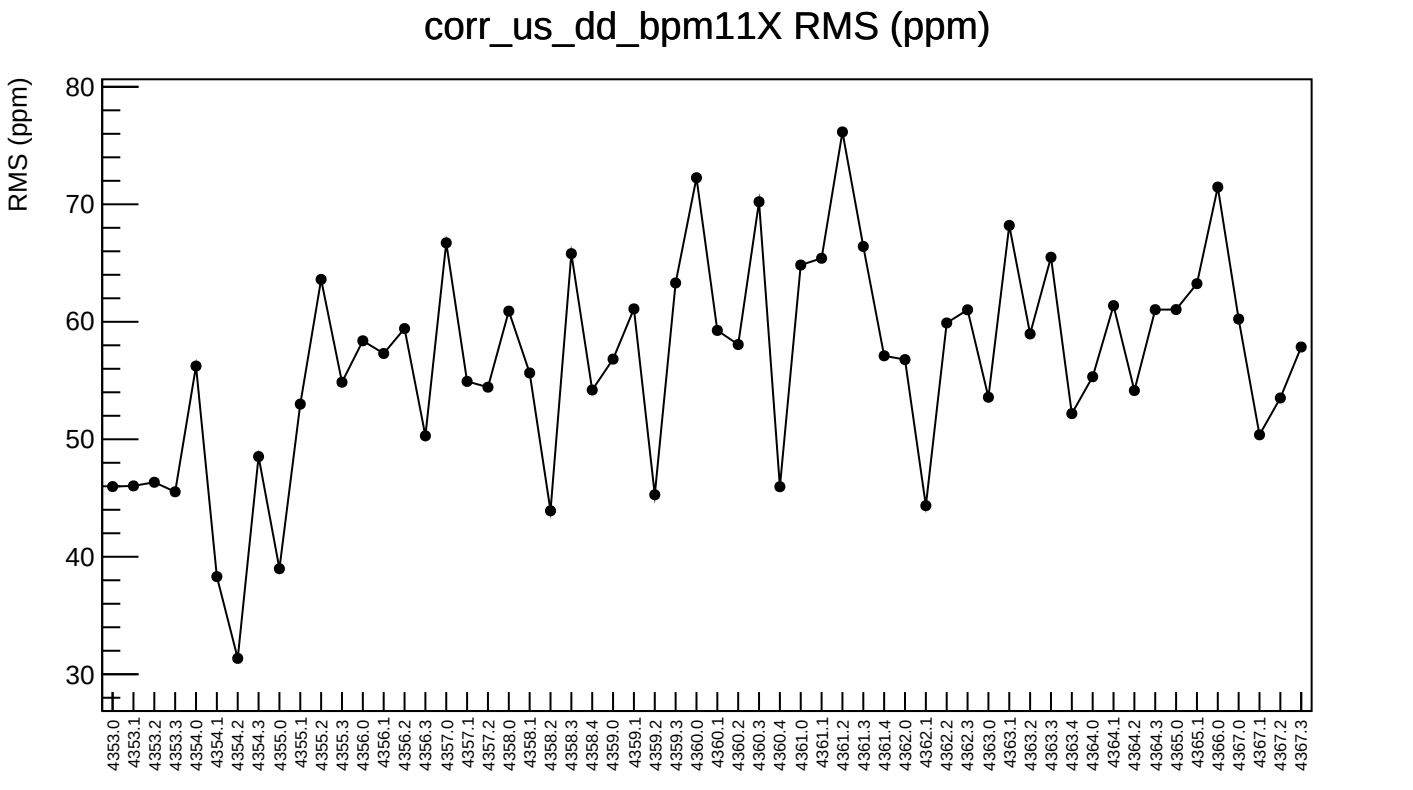

corr_us_dd_bpm12X (ppb)
χ² / ndf 45.24 / 57
p0 −8.63 ± 32.19
1000
800
600
400
200
0
−200
−400
−600
−800
2.5
2
1.5
1
0.5
0
−0.5
−1
−1.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean −0.0006782 ± 0.116
Std Dev 0.8832 ± 0.082
Underflow 0
Overflow 0
χ² / ndf 2.616 / 6
Constant 13.63 ± 2.42
Mean −0.01973 ± 0.12727
Sigma 0.8757 ± 0.1108
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_dd_bpm12X RMS (ppm)
RMS (ppm)
35
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_dd_bpm12Y (ppb)
χ² / ndf 15.81 / 57
p0 −0.2939 ± 9.023
150
100
50
0
−50
−100
−150
−200
1
0.5
0
−0.5
−1
−1.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean −0.002719 ± 0.06855
Std Dev 0.522 ± 0.04847
Underflow 0
Overflow 0
χ² / ndf 7.291 / 3
Constant 29.25 ± 5.24
Mean 7.6e−17 ± 3.1e−05
Sigma 0.369 ± 0.041
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_dd_bpm12Y RMS (ppm)
RMS (ppm)
1
2
3
4
5
6
7
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_us_dd_bpm11X (ppb)
χ² / ndf 96.08 / 57
p0 36.18 ± 62.47
2000
1000
0
-1000
-2000
4
3
2
1
0
−1
−2
−3
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean −0.0006342 ± 0.169
Std Dev 1.287 ± 0.1195
Underflow 0
Overflow 0
χ² / ndf 5.268 / 9
Constant 9.124 ± 1.830
Mean −0.05098 ± 0.19354
Sigma 1.277 ± 0.217
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_us_dd_bpm11X RMS (ppm)
RMS (ppm)
80
70
60
50
40
30
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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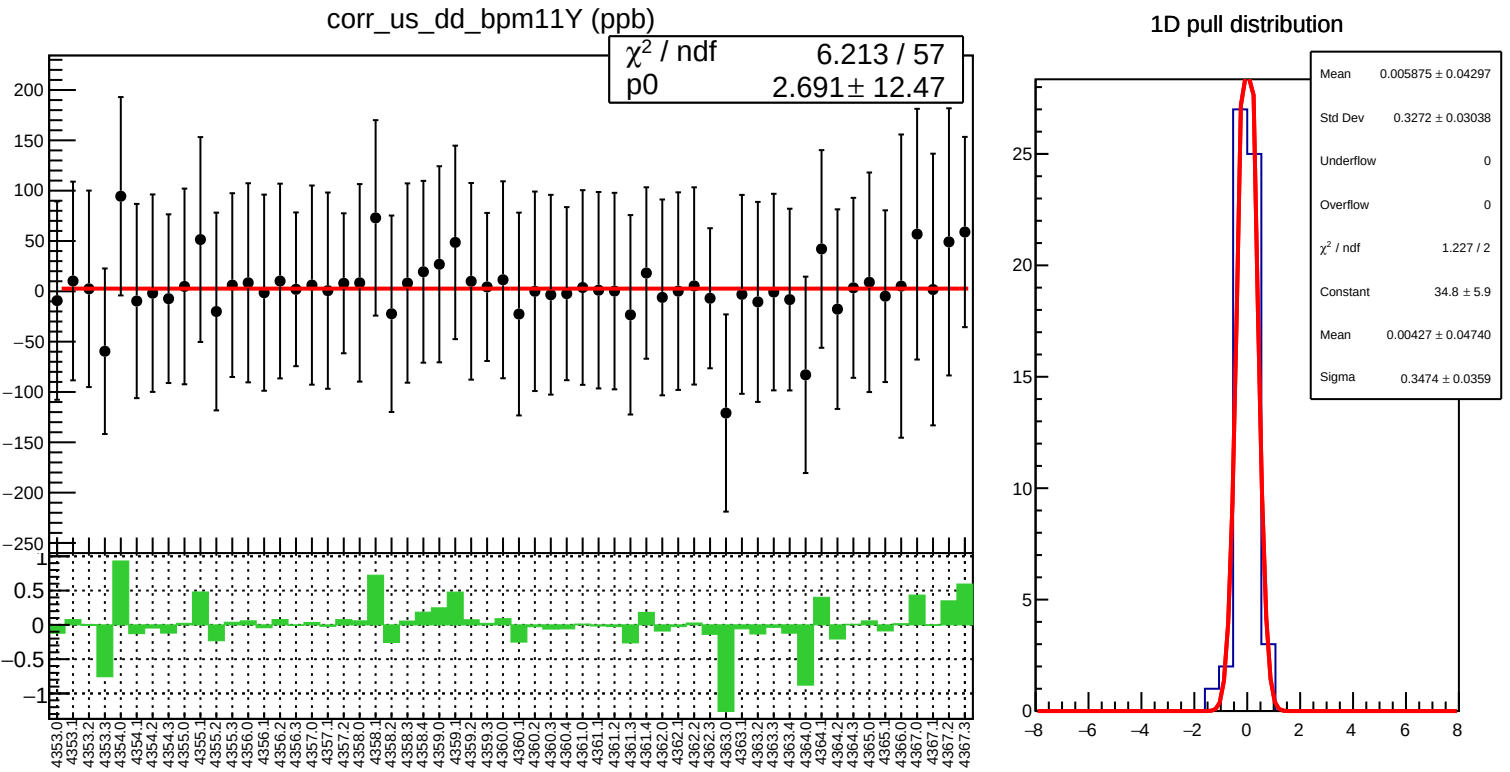
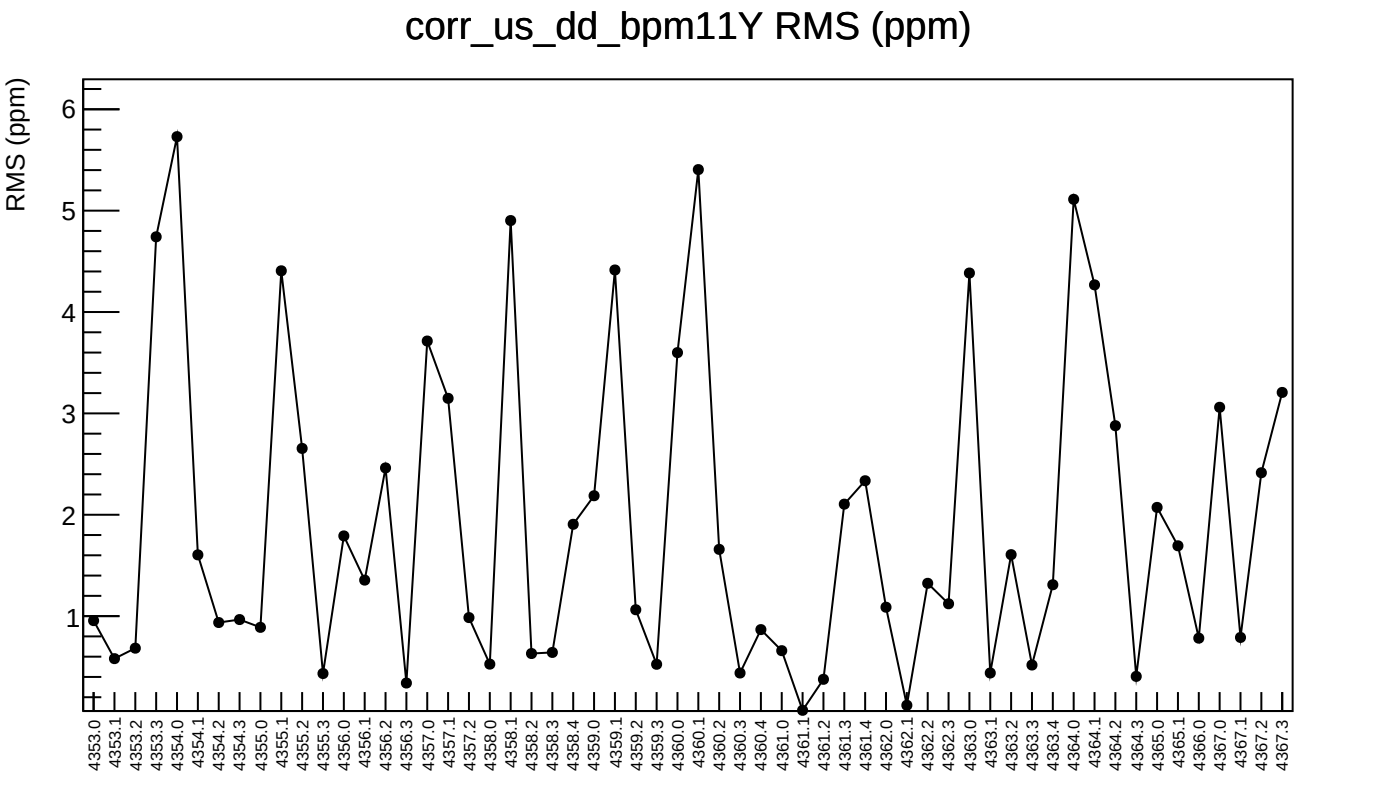
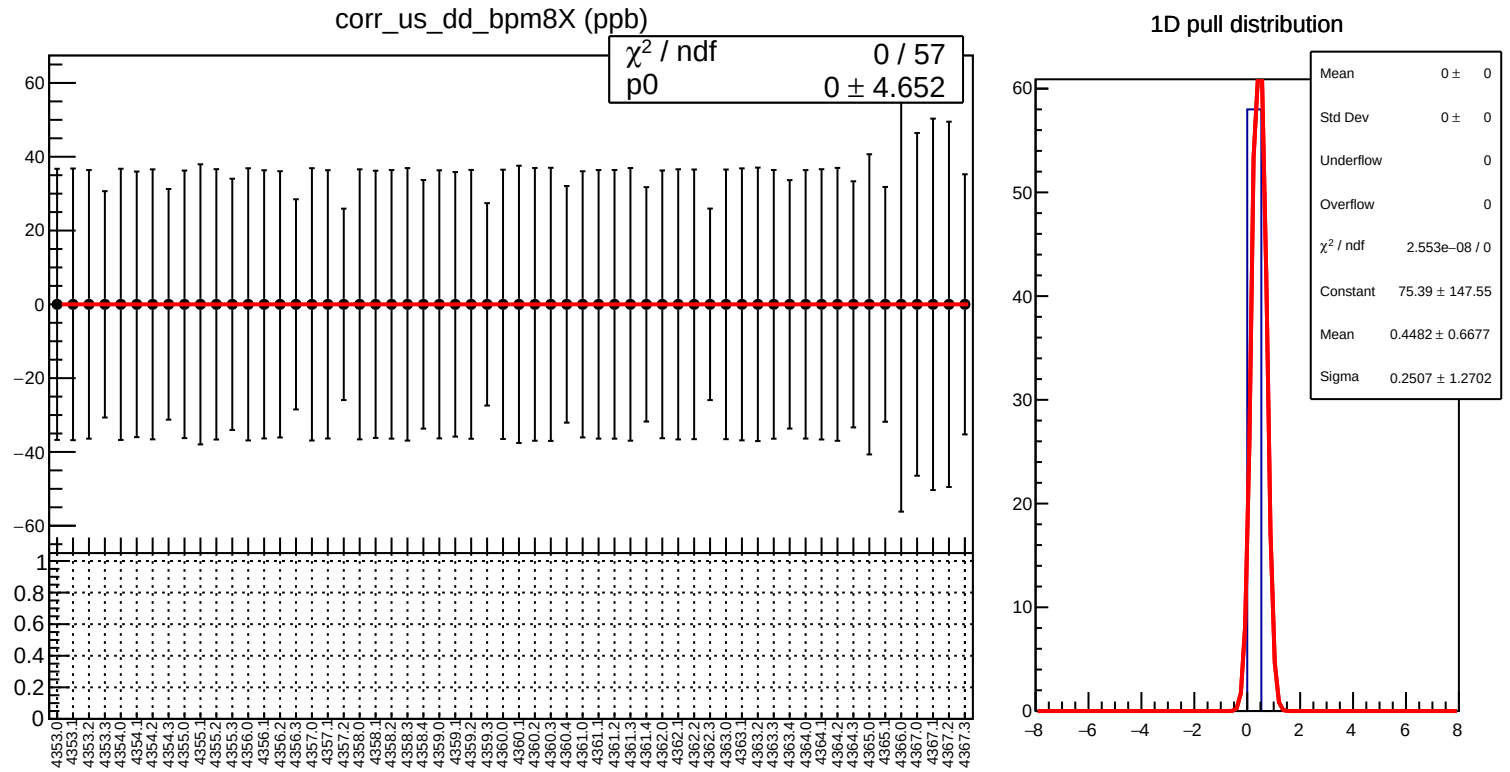
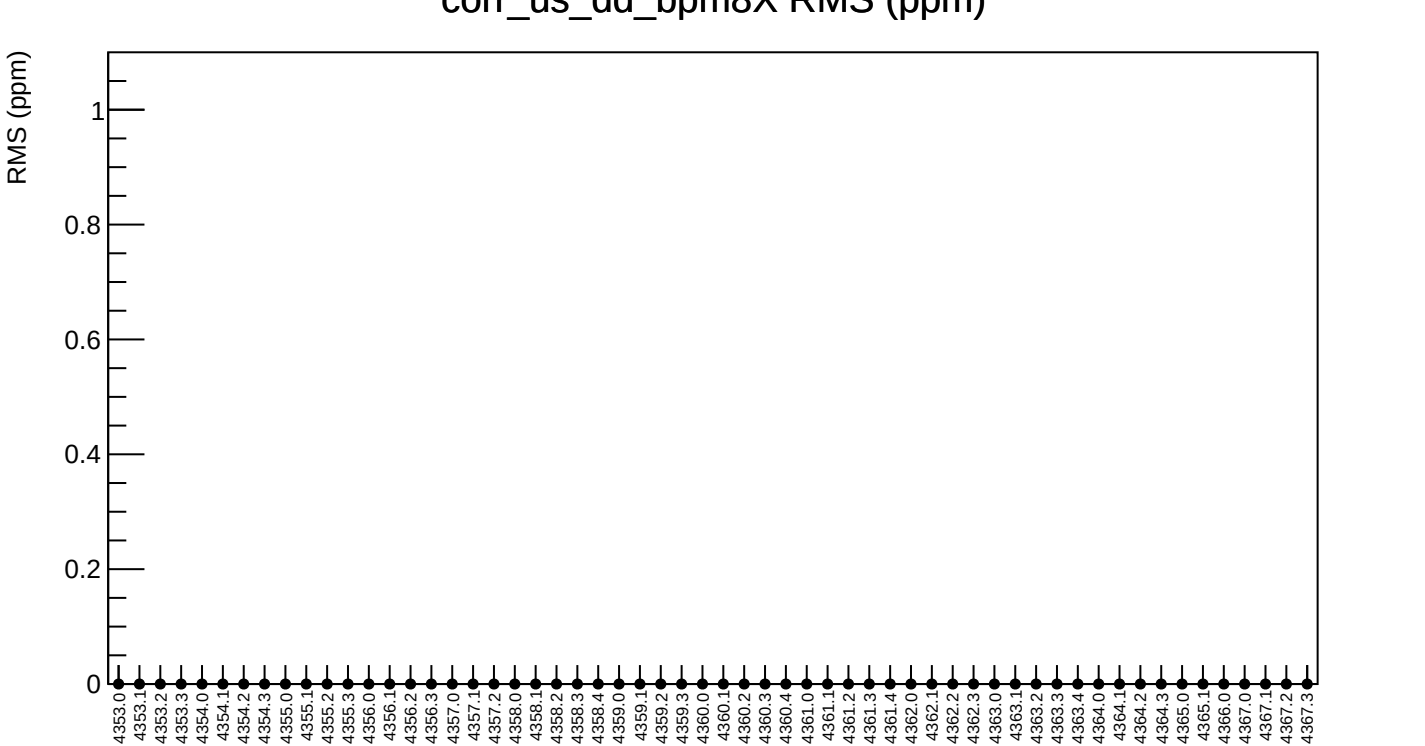
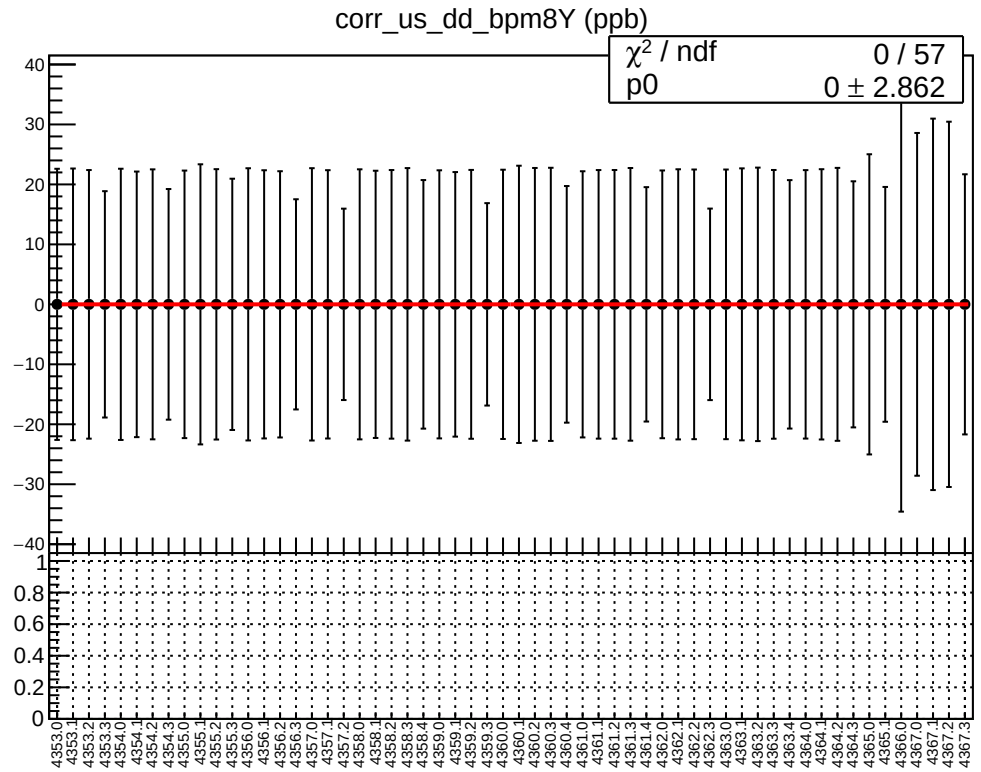
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

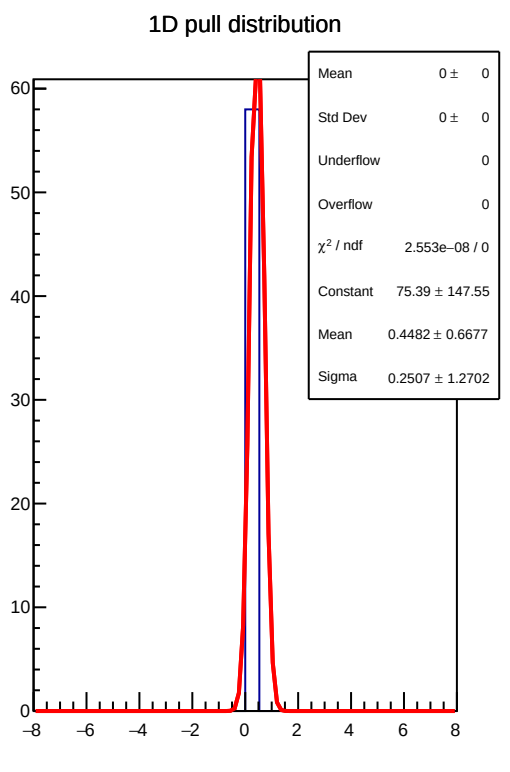

corr_us_dd_bpm11Y (ppb)
χ² / ndf 6.213 / 57
p0 2.691 ± 12.47
1D pull distribution
Mean 0.005875 ± 0.04297
Std Dev 0.3272 ± 0.03038
Underflow 0
Overflow 0
χ² / ndf 1.227 / 2
Constant 34.8 ± 5.9
Mean 0.00427 ± 0.04740
Sigma 0.3474 ± 0.0359

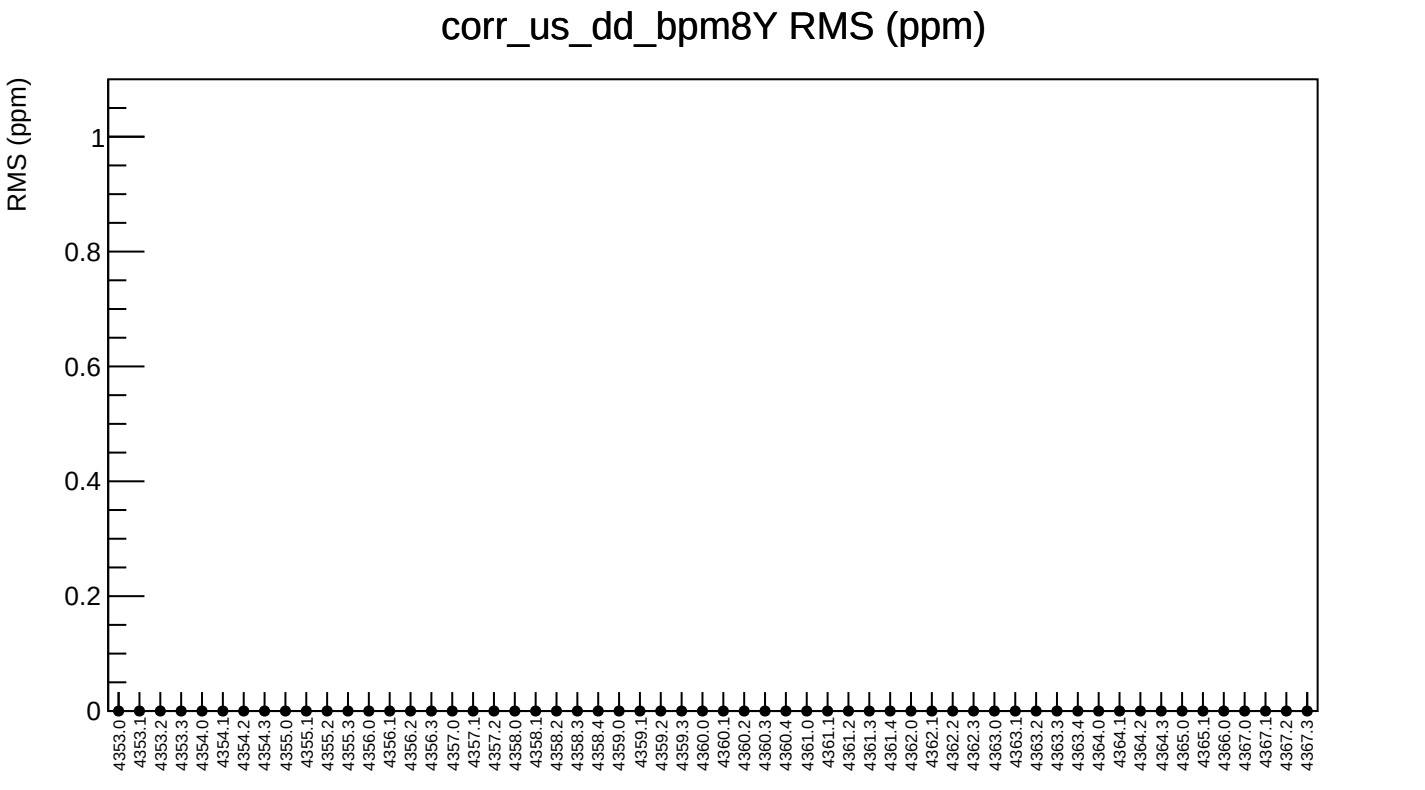

corr_us_dd_bpm11Y RMS (ppm)
RMS (ppm)
6
5
4
3
2
1
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

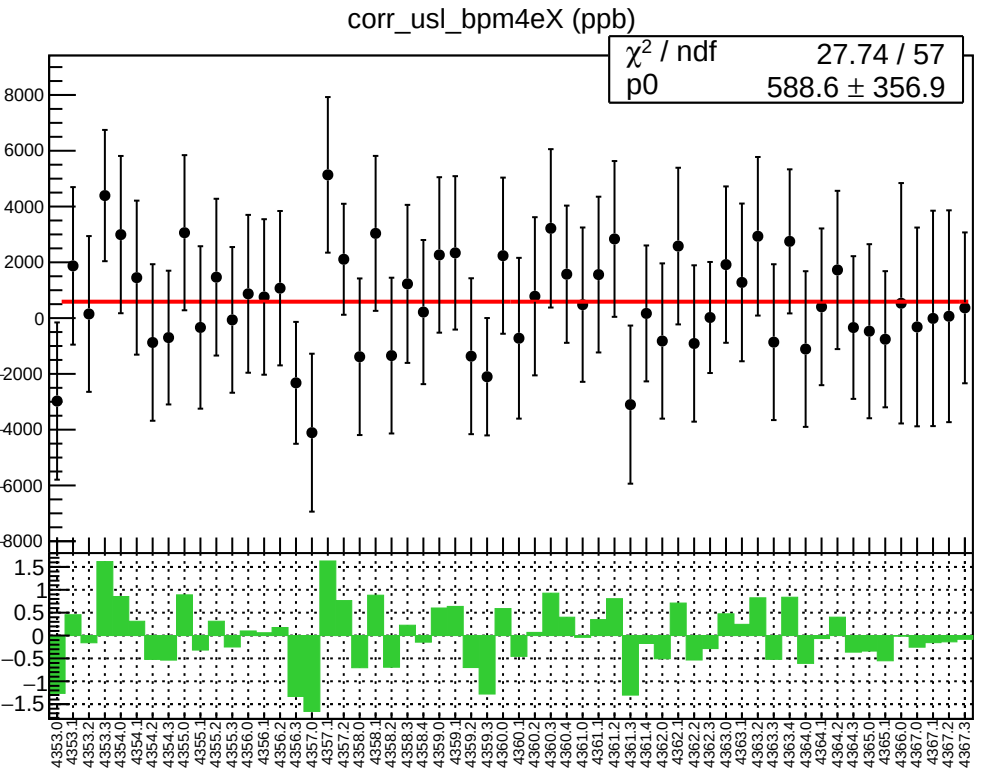

corr_us_dd_bpm8X (ppb)
χ² / ndf 0 / 57
p0 0 ± 4.652
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702

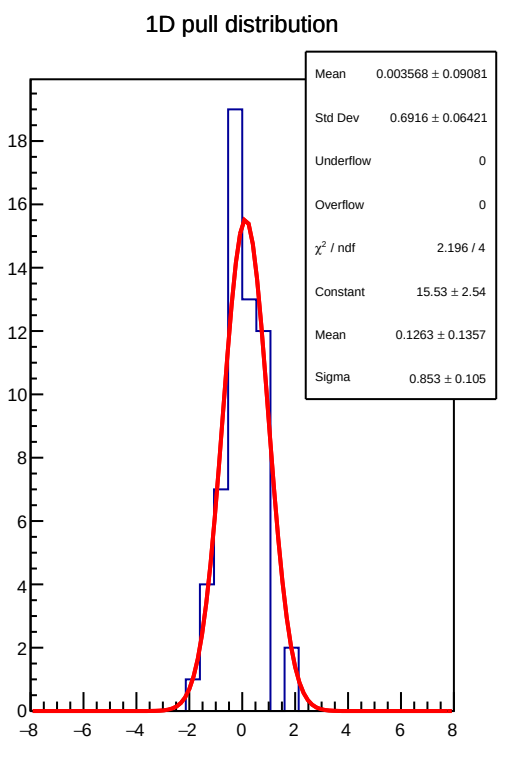

corr_us_dd_bpm8X RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

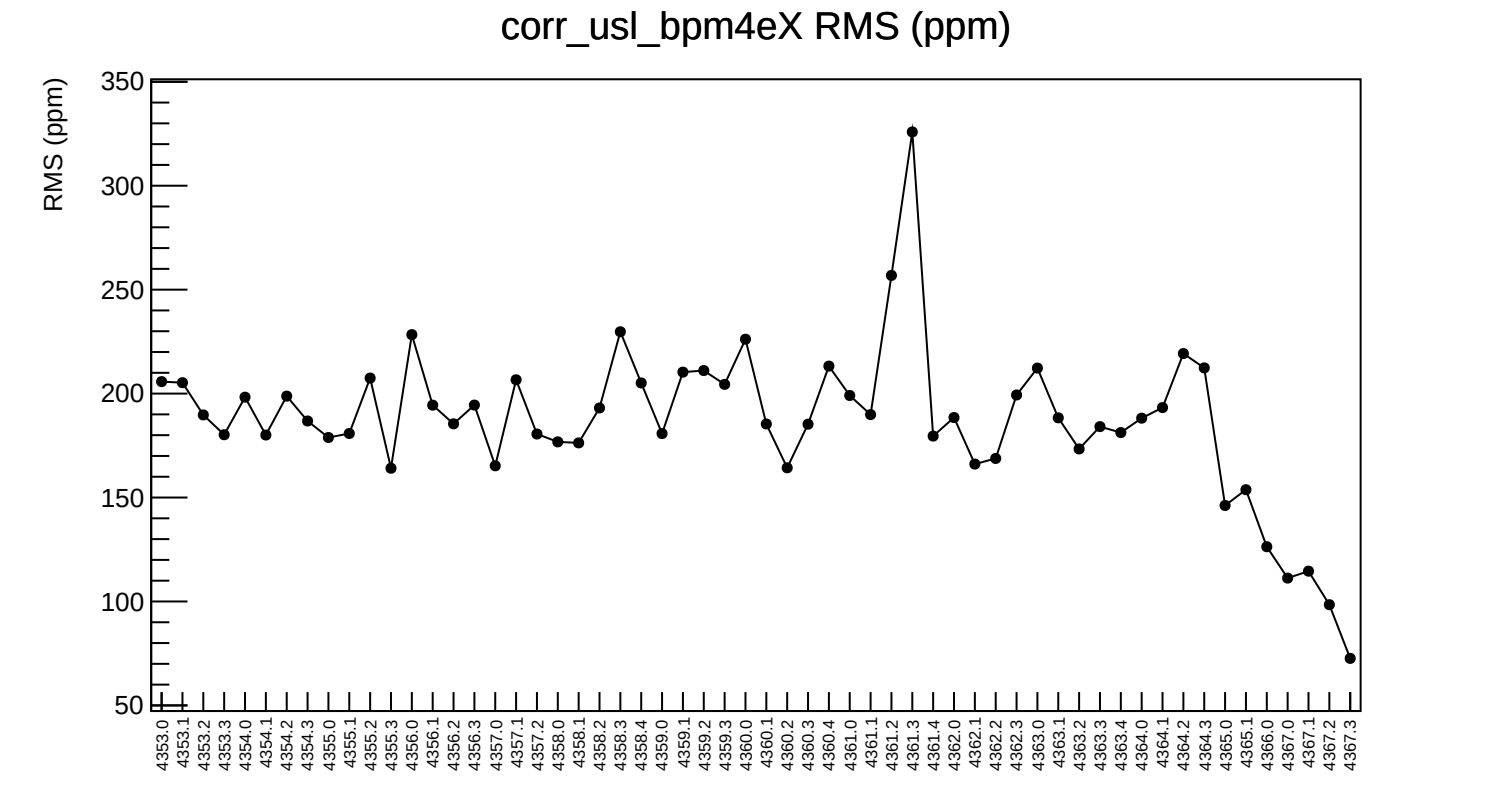

corr_us_dd_bpm8Y (ppb)
χ² / ndf 0 / 57
p0 0 ± 2.862

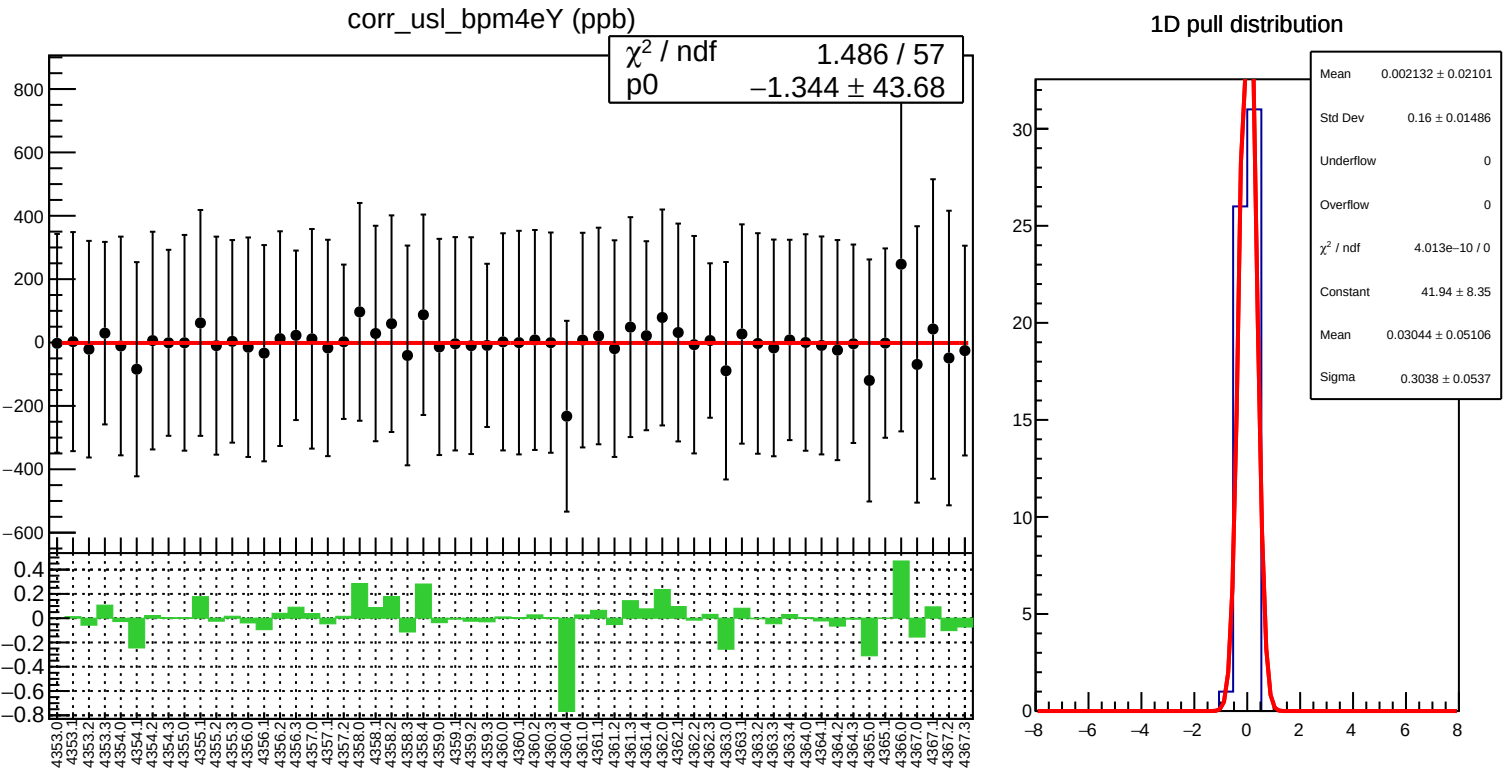

1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702

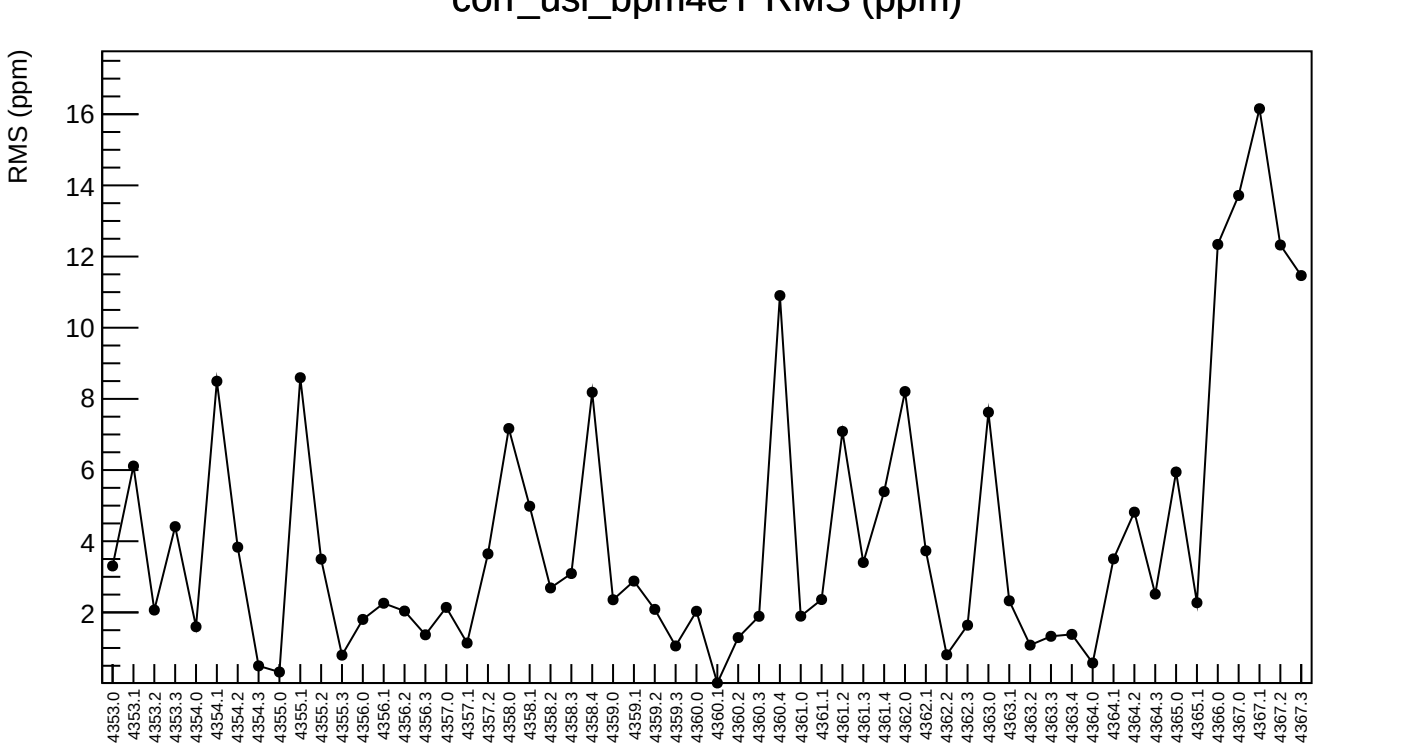

corr_us_dd_bpm8Y RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

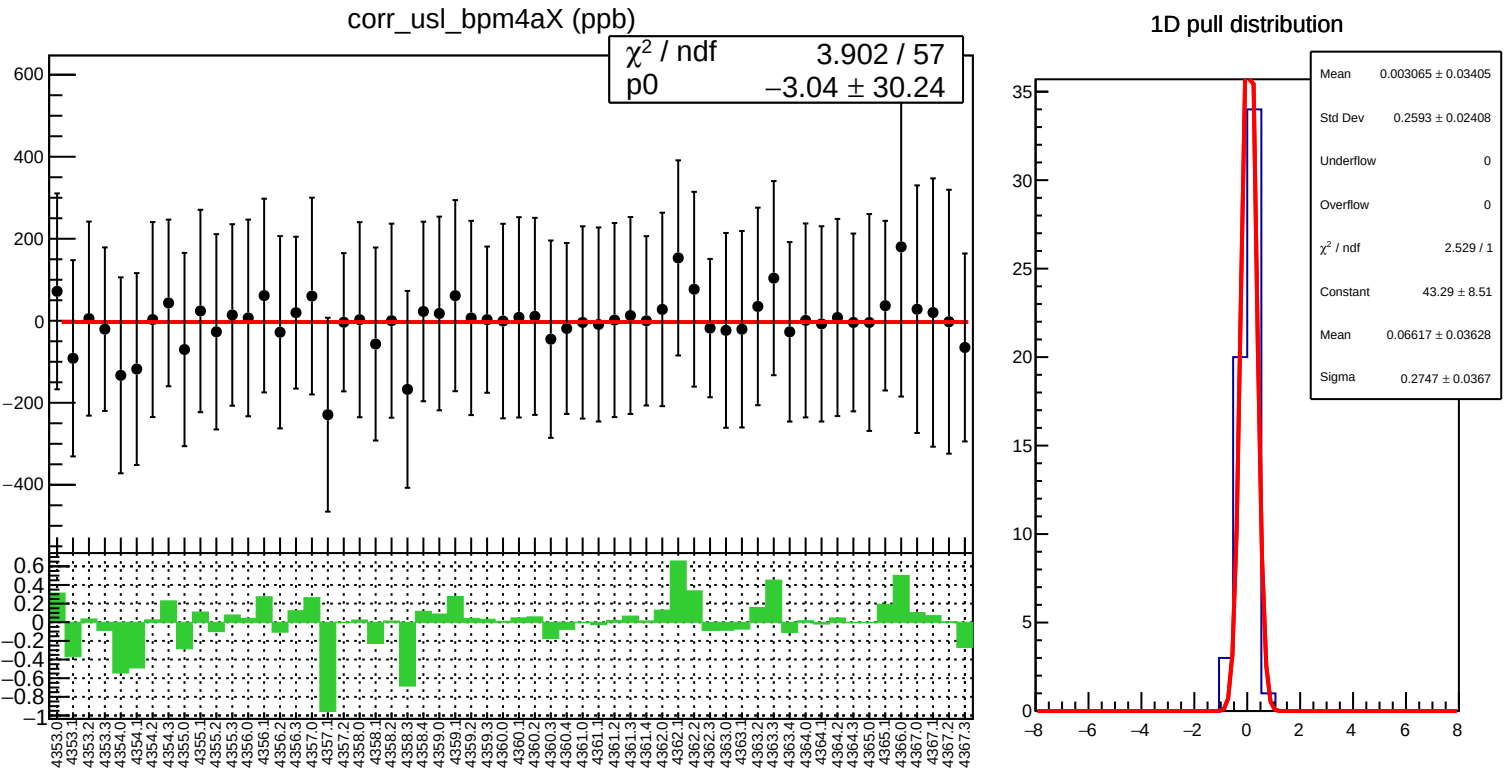

corr_usl_bpm4eX (ppb)
χ² / ndf 27.74 / 57
p0 588.6 ± 356.9

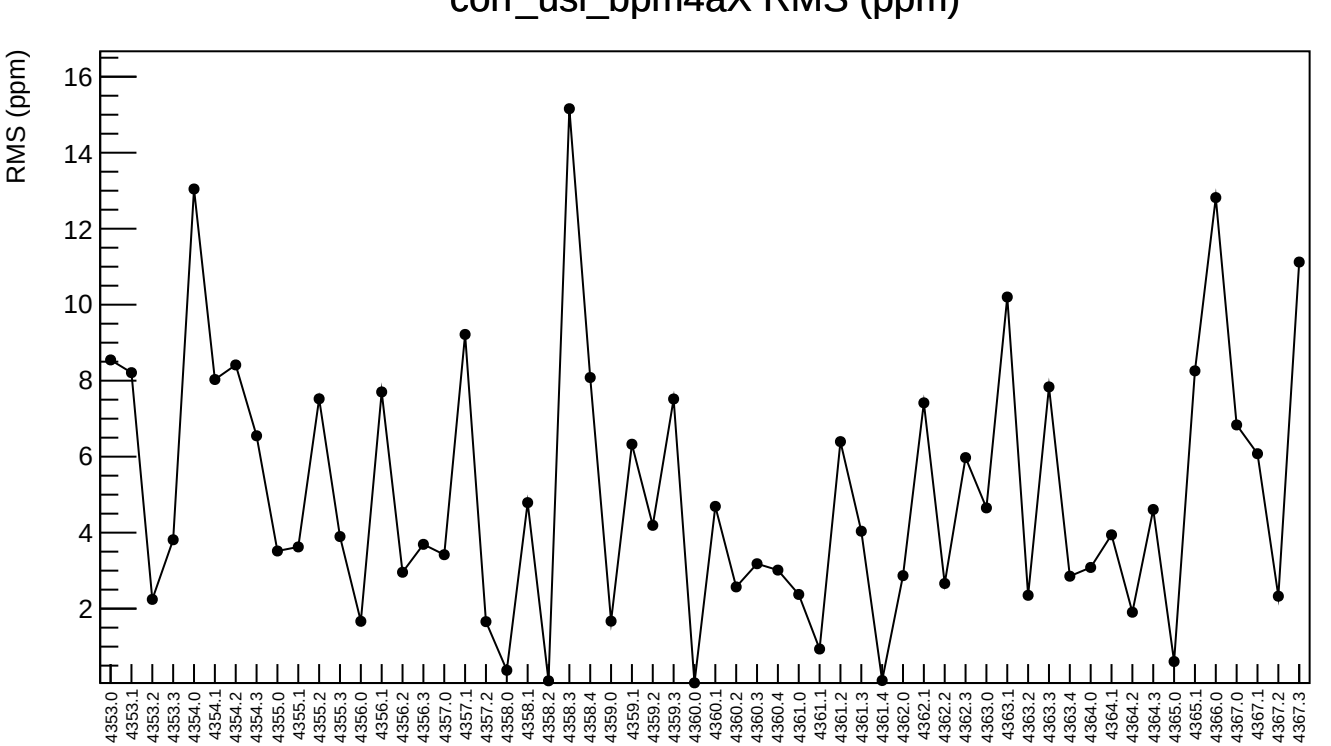

1D pull distribution
Mean 0.003568 ± 0.09081
Std Dev 0.6916 ± 0.06421
Underflow 0
Overflow 0
χ² / ndf 2.196 / 4
Constant 15.53 ± 2.54
Mean 0.1263 ± 0.1357
Sigma 0.853 ± 0.105

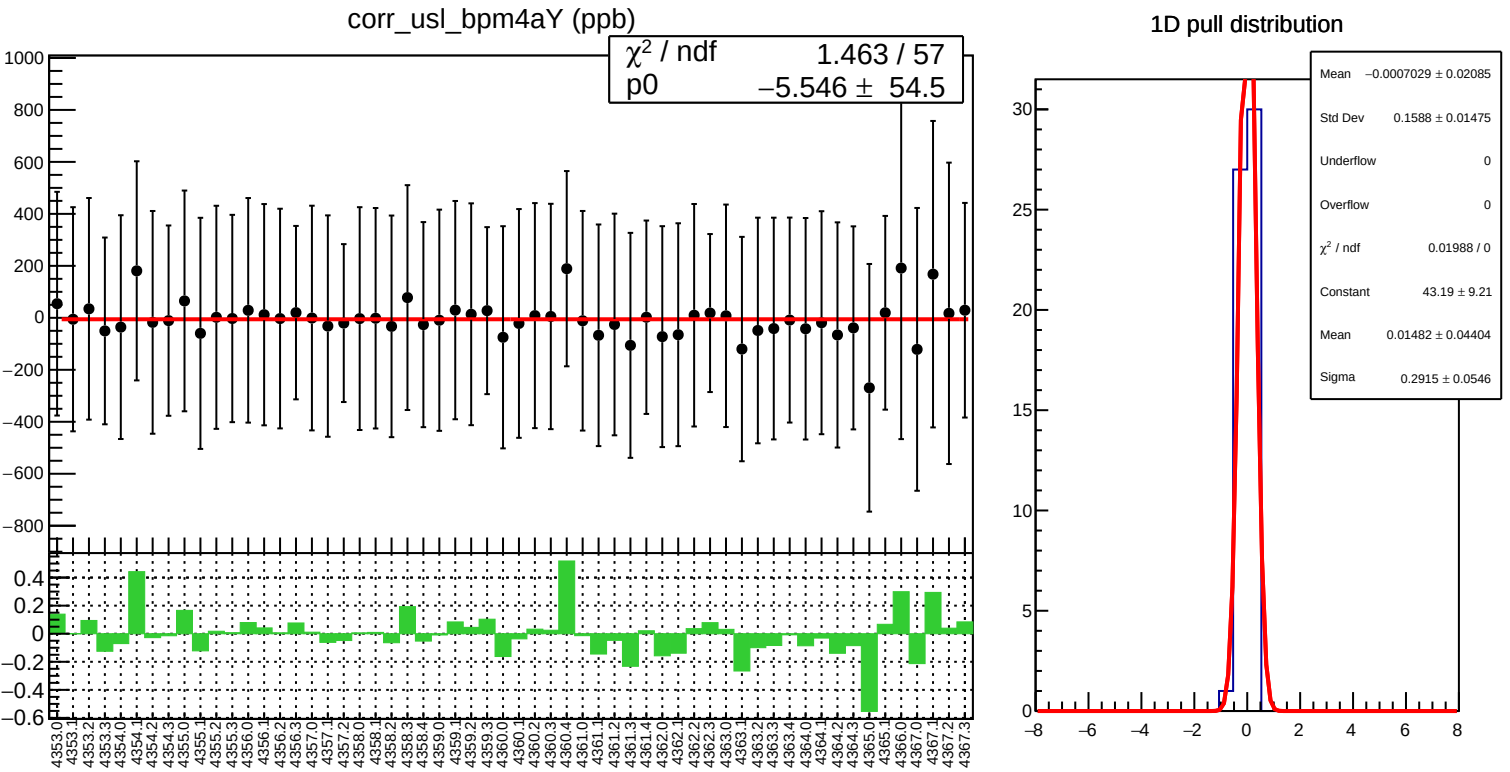

corr_usl_bpm4eX RMS (ppm)
RMS (ppm)
350
300
250
200
150
100
50
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

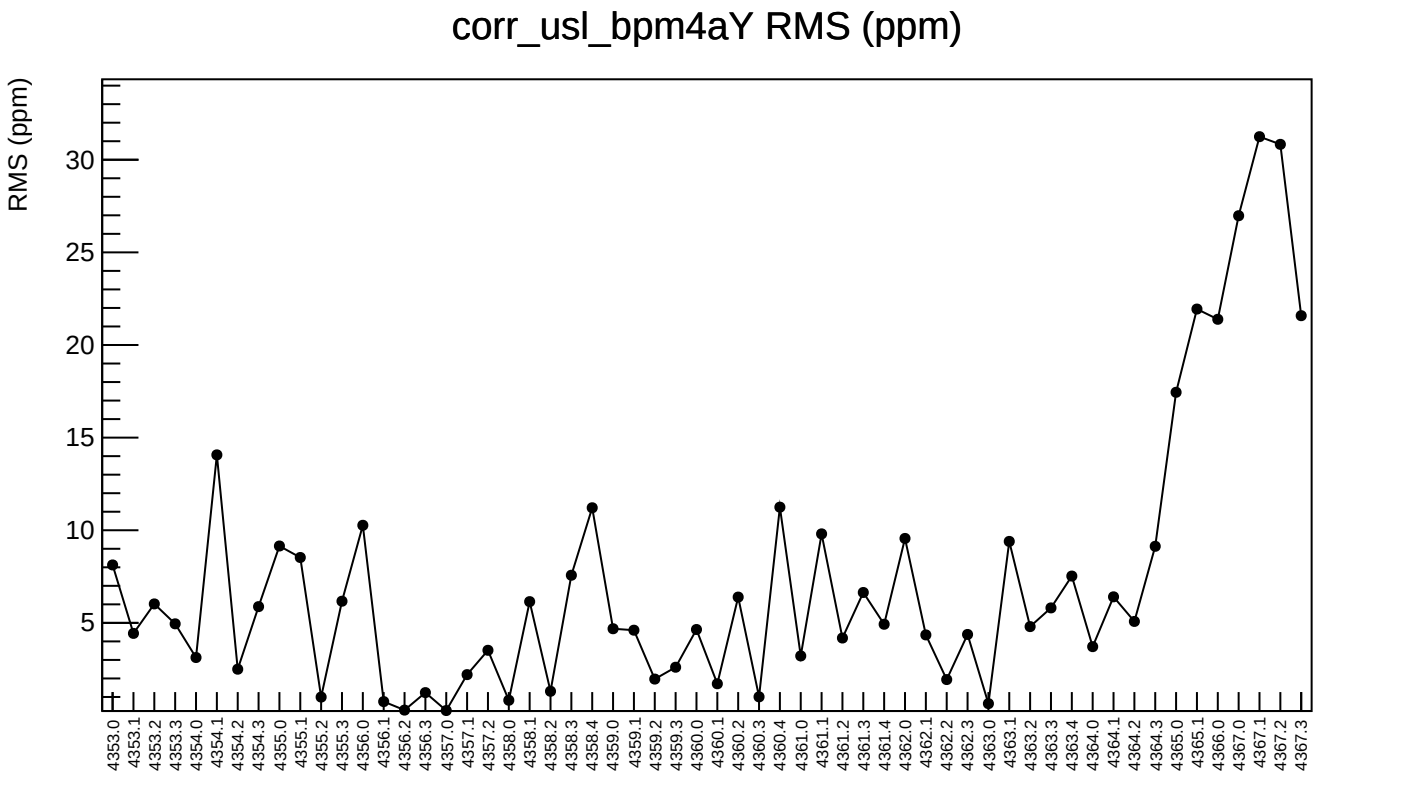

corr_usl_bpm4eY (ppb)
χ² / ndf 1.486 / 57
p0 −1.344 ± 43.68
1D pull distribution
Mean 0.002132 ± 0.02101
Std Dev 0.16 ± 0.01486
Underflow 0
Overflow 0
χ² / ndf 4.013e−10 / 0
Constant 41.94 ± 8.35
Mean 0.03044 ± 0.05106
Sigma 0.3038 ± 0.0537

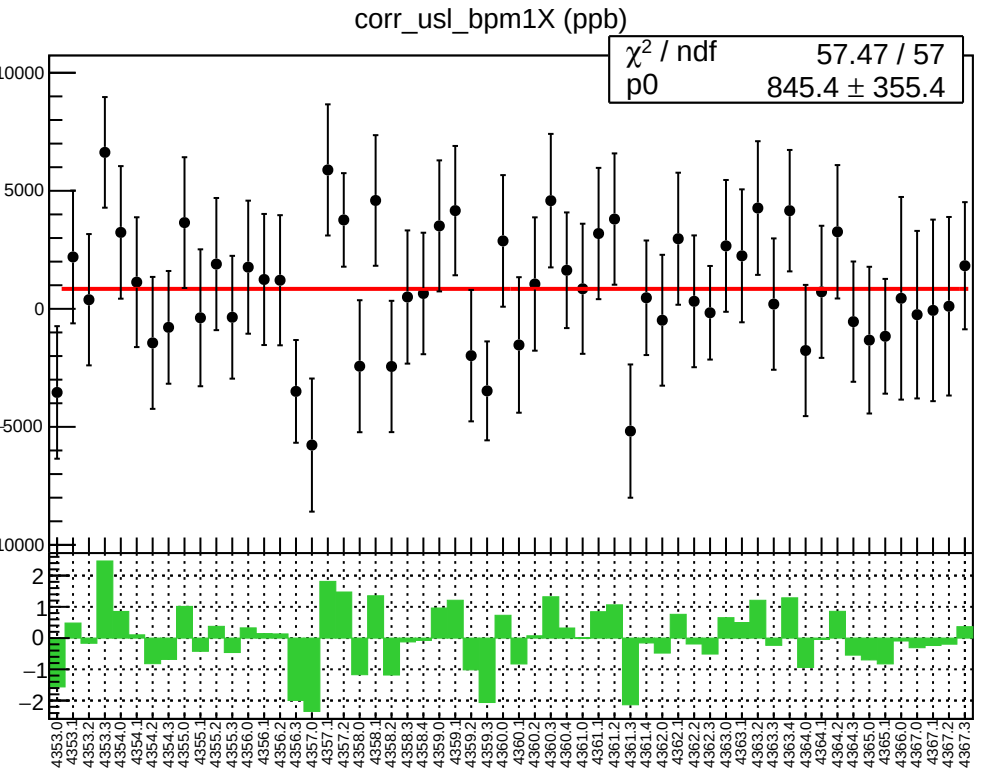

corr_usl_bpm4eY RMS (ppm)
RMS (ppm)
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

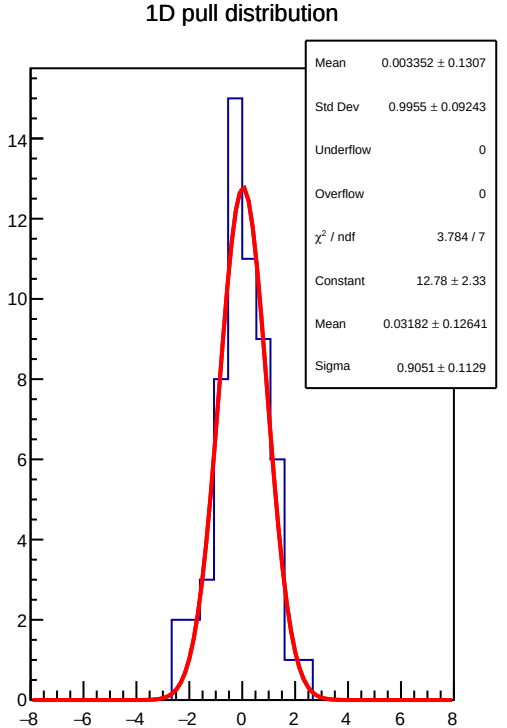

corr_usl_bpm4aX (ppb)
χ² / ndf 3.902 / 57
p0 −3.04 ± 30.24
1D pull distribution
Mean 0.003065 ± 0.03405
Std Dev 0.2593 ± 0.02408
Underflow 0
Overflow 0
χ² / ndf 2.529 / 1
Constant 43.29 ± 8.51
Mean 0.06617 ± 0.03628
Sigma 0.2747 ± 0.0367

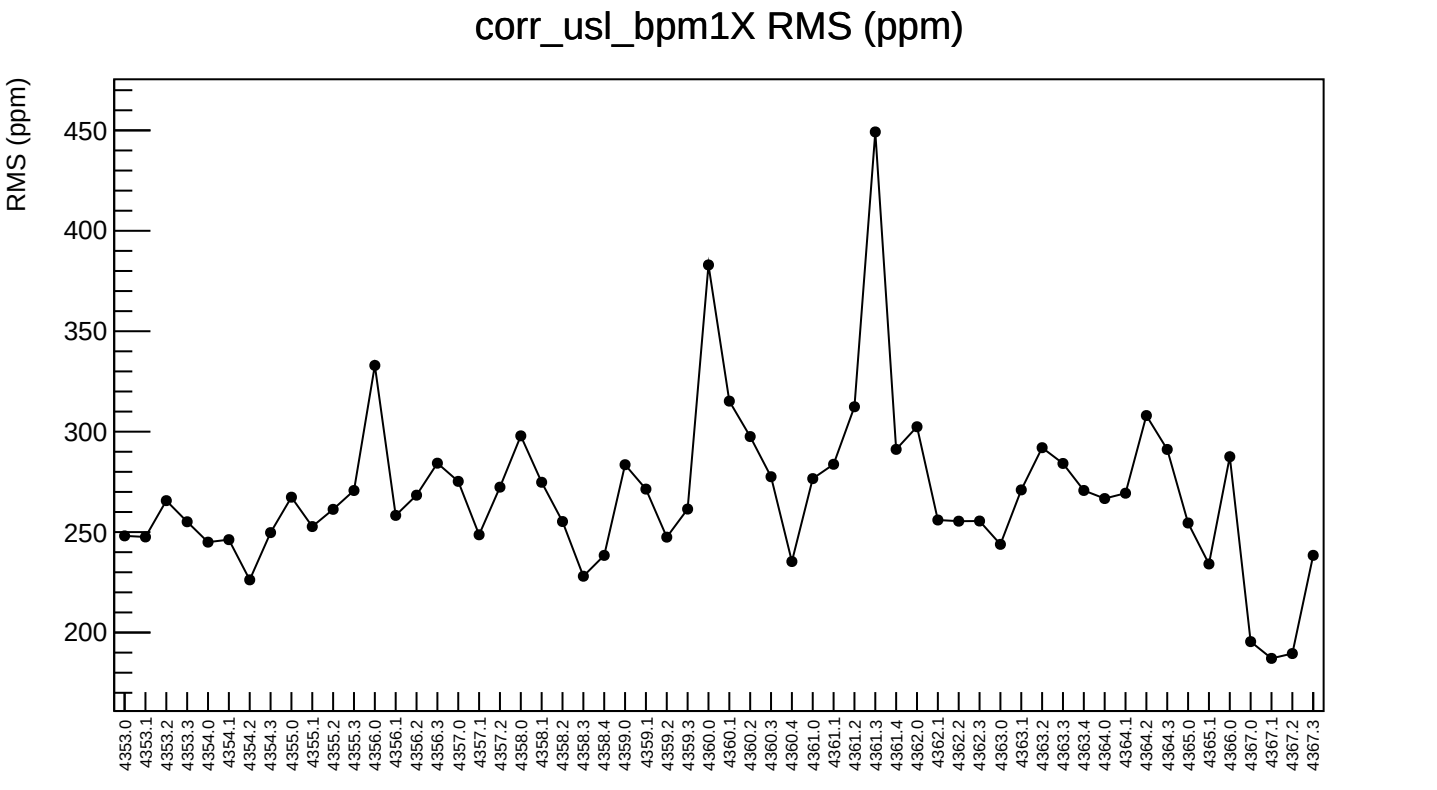

corr_usl_bpm4aX RMS (ppm)
RMS (ppm)
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm4aY (ppb)
χ² / ndf 1.463 / 57
p0 −5.546 ± 54.5
1D pull distribution
Mean −0.0007029 ± 0.02085
Std Dev 0.1588 ± 0.01475
Underflow 0
Overflow 0
χ² / ndf 0.01988 / 0
Constant 43.19 ± 9.21
Mean 0.01482 ± 0.04404
Sigma 0.2915 ± 0.0546


corr_usl_bpm4aY RMS (ppm)
RMS (ppm)
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm1X (ppb)
χ² / ndf 57.47 / 57
p0 845.4 ± 355.4
10000
5000
0
-5000
-10000
2
1
0
−1
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean 0.003352 ± 0.1307
Std Dev 0.9955 ± 0.09243
Underflow 0
Overflow 0
χ² / ndf 3.784 / 7
Constant 12.78 ± 2.33
Mean 0.03182 ± 0.12641
Sigma 0.9051 ± 0.1129
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_usl_bpm1X RMS (ppm)
RMS (ppm)
450
400
350
300
250
200
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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4365.0
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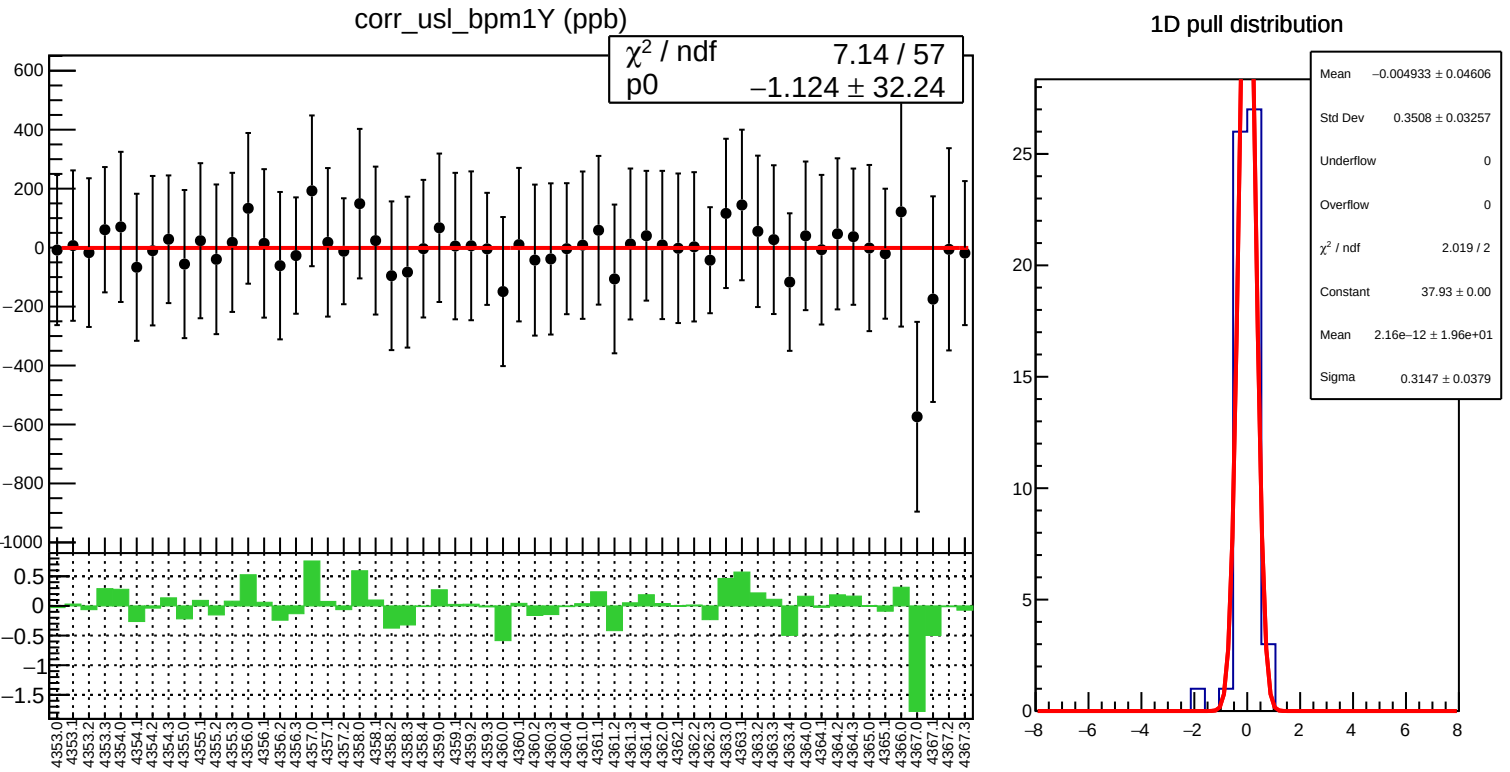
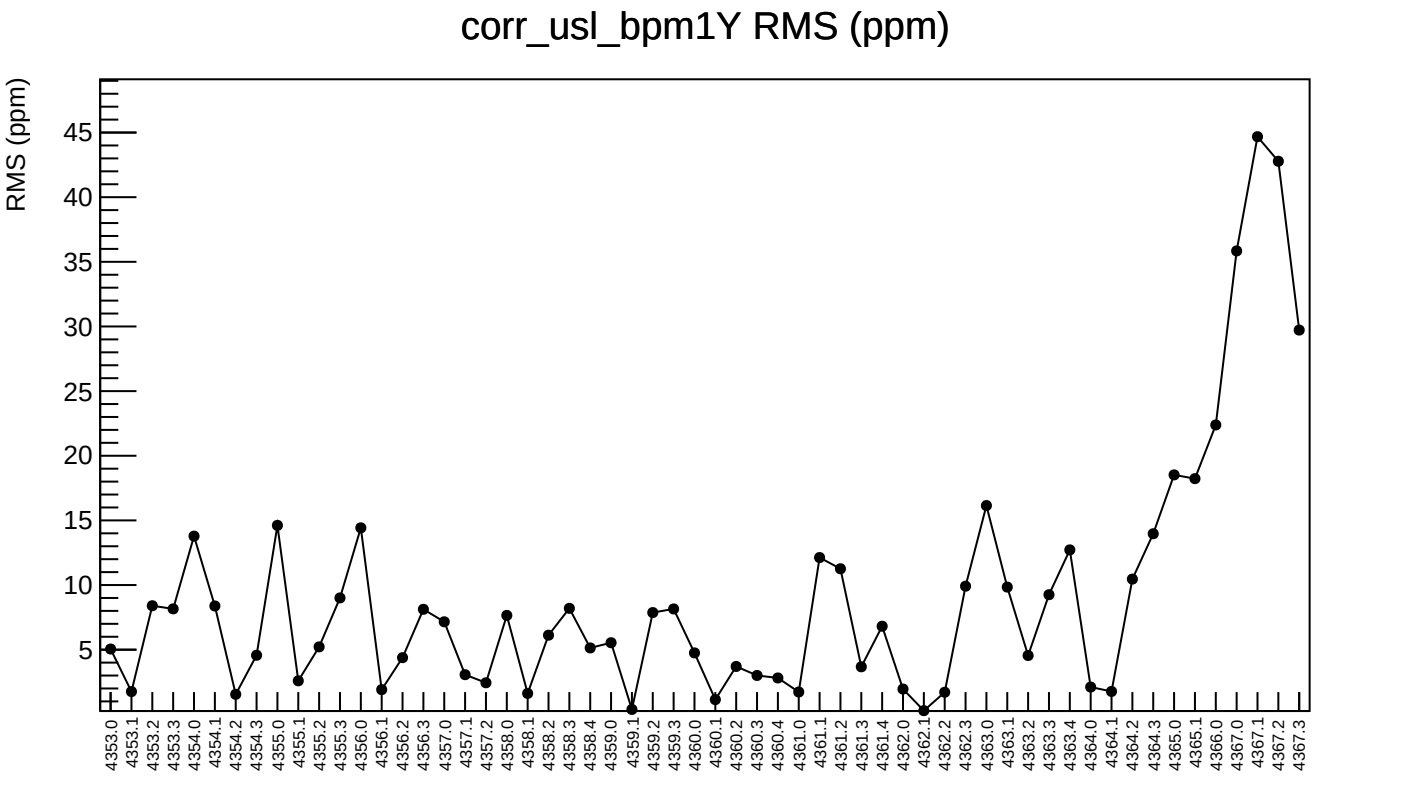
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm1Y (ppb)
χ² / ndf 7.14 / 57
p0 −1.124 ± 32.24
1D pull distribution
Mean −0.004933 ± 0.04606
Std Dev 0.3508 ± 0.03257
Underflow 0
Overflow 0
χ² / ndf 2.019 / 2
Constant 37.93 ± 0.00
Mean 2.16e−12 ± 1.96e+01
Sigma 0.3147 ± 0.0379


corr_usl_bpm1Y RMS (ppm)
RMS (ppm)
45
40
35
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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4364.2
4364.3
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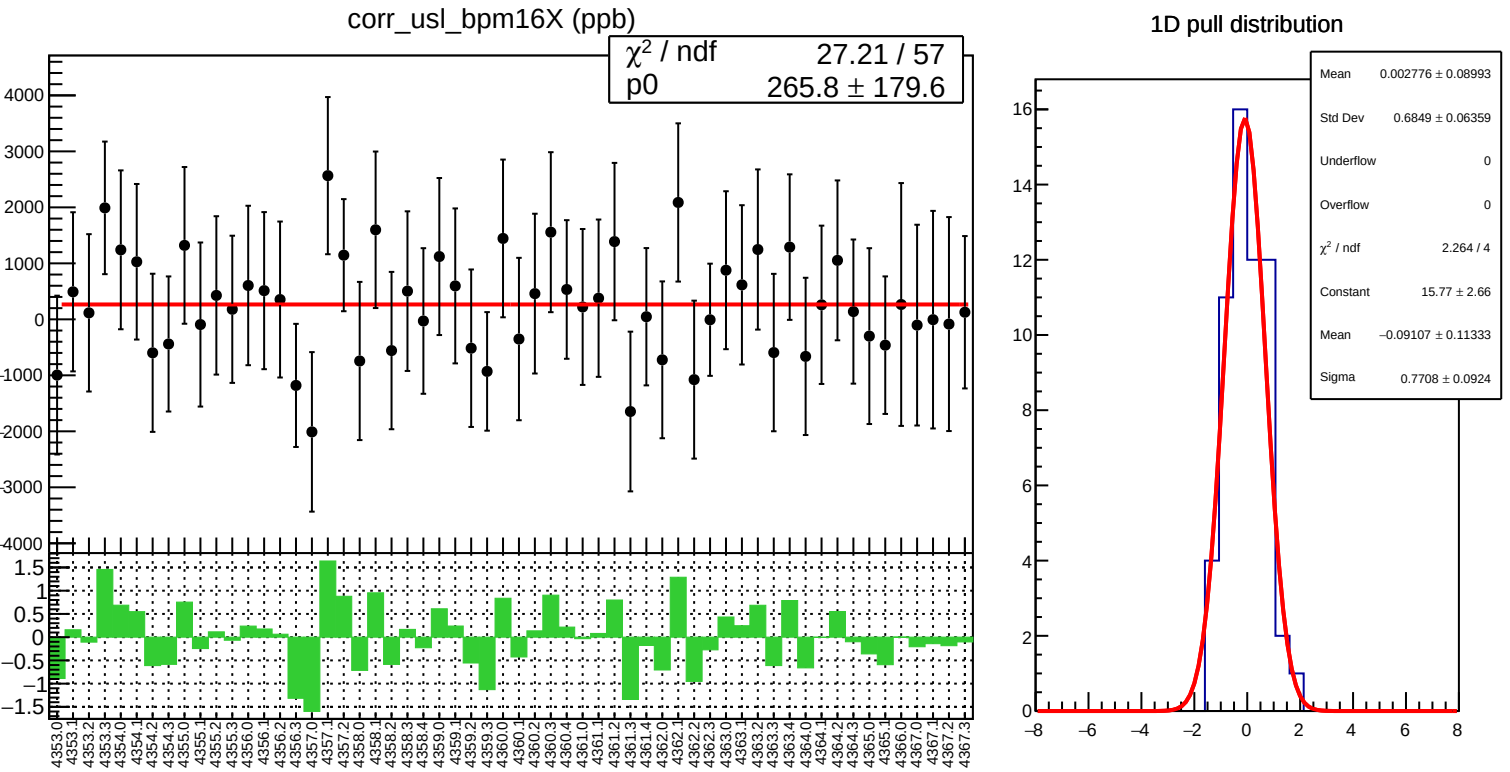
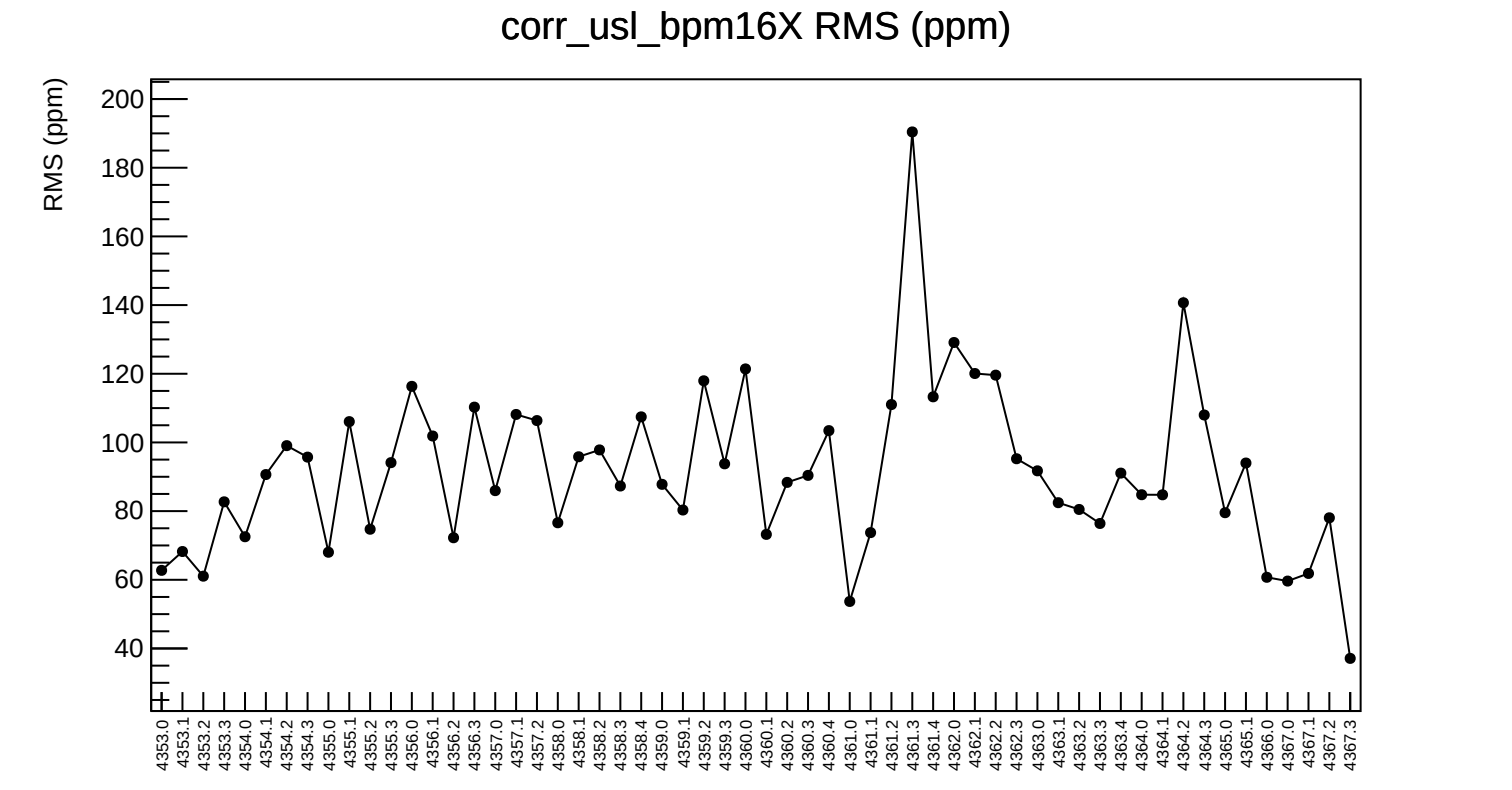
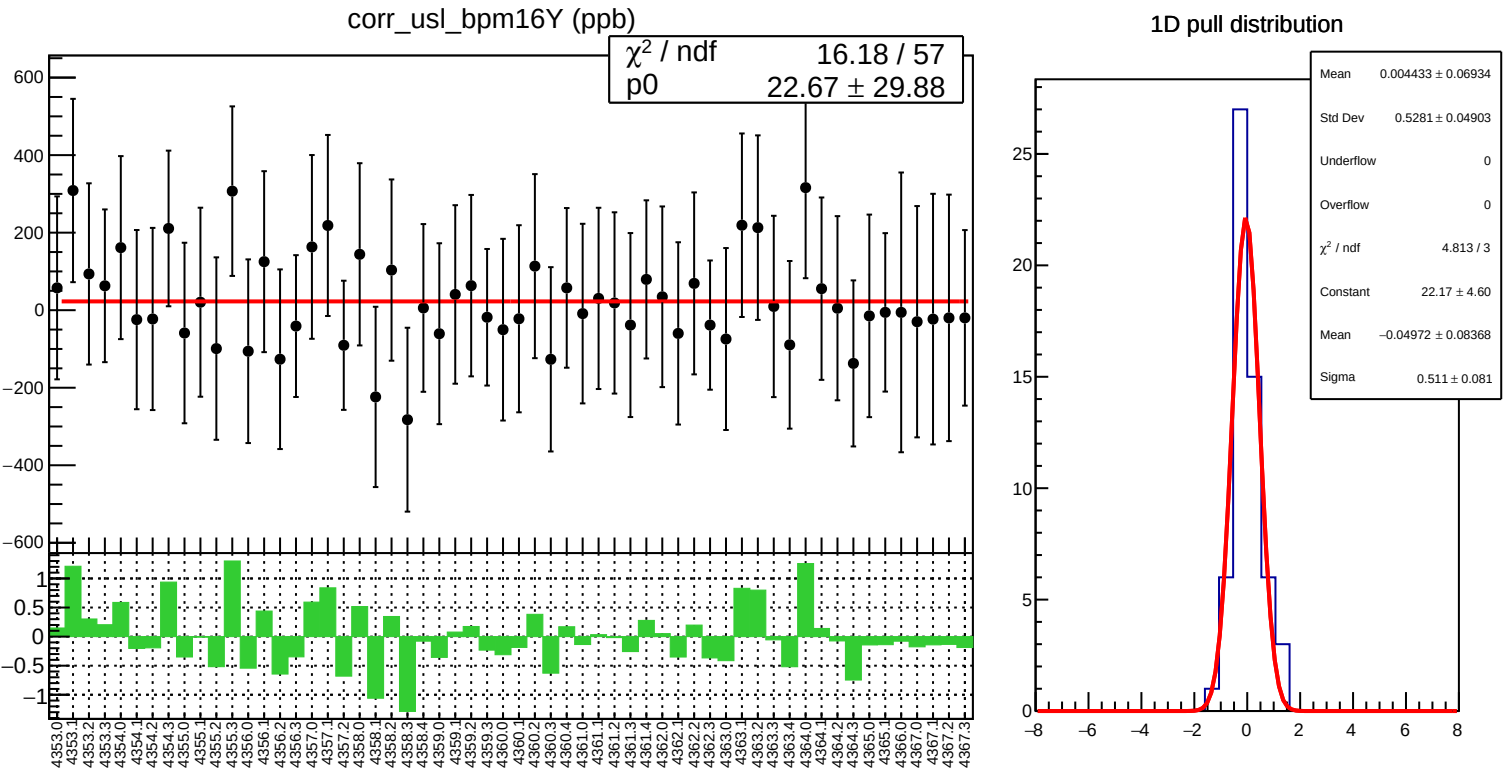
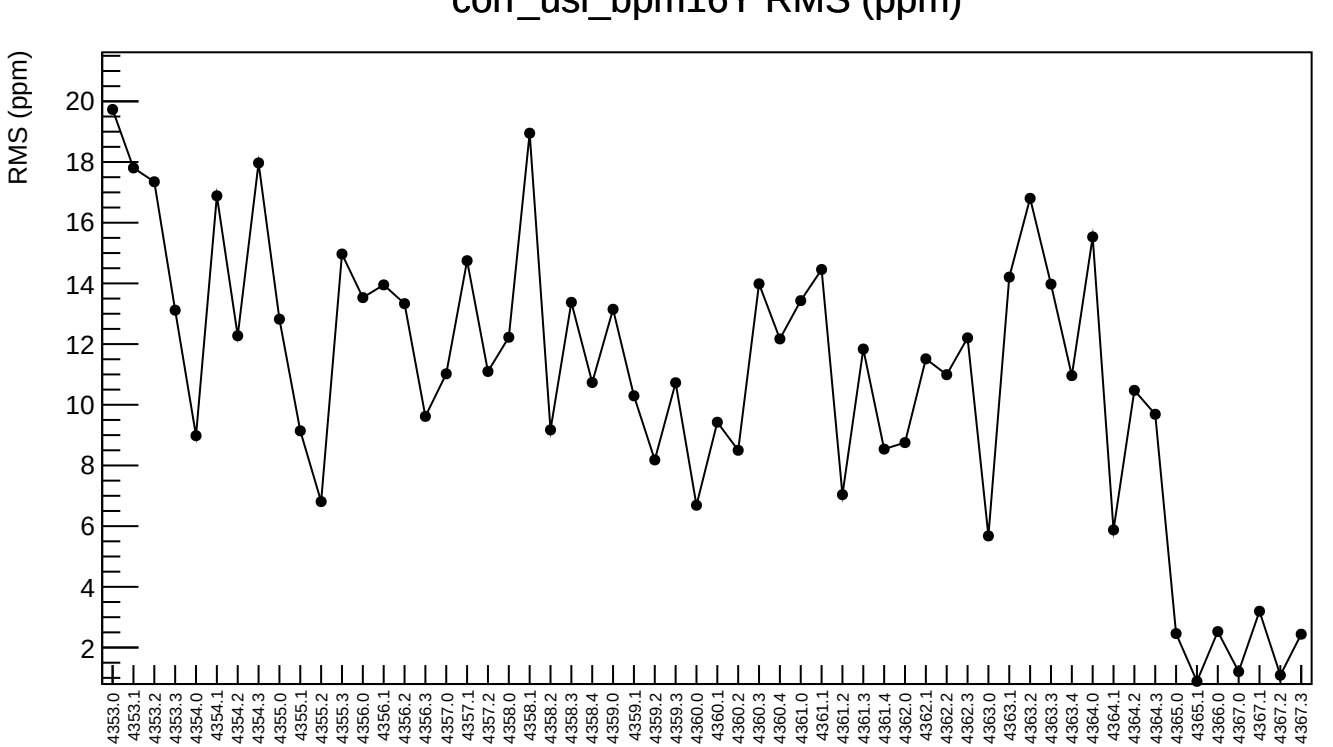
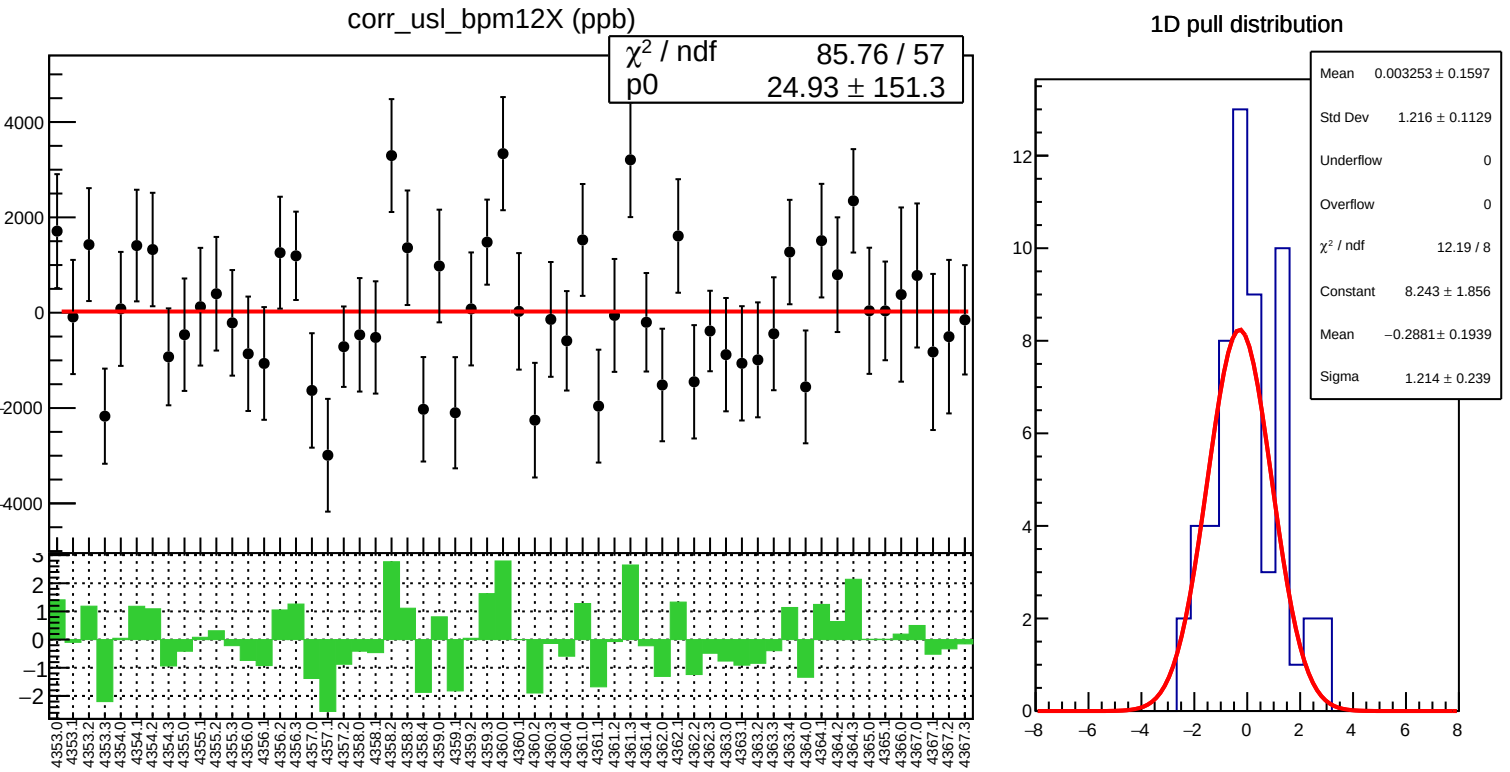
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

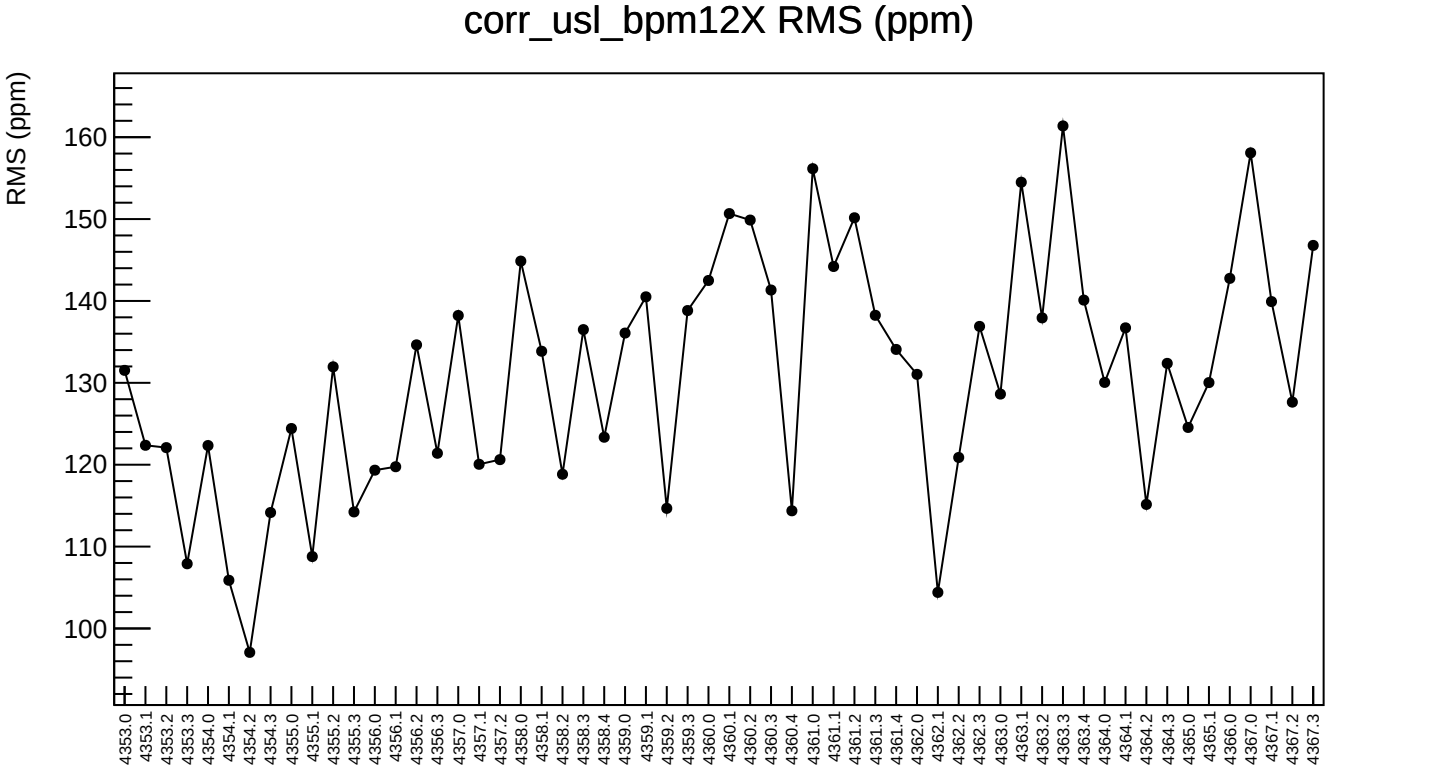

corr_usl_bpm16X (ppb)
χ² / ndf 27.21 / 57
p0 265.8 ± 179.6
1D pull distribution
Mean 0.002776 ± 0.08993
Std Dev 0.6849 ± 0.06359
Underflow 0
Overflow 0
χ² / ndf 2.264 / 4
Constant 15.77 ± 2.66
Mean −0.09107 ± 0.11333
Sigma 0.7708 ± 0.0924


corr_usl_bpm16X RMS (ppm)
RMS (ppm)
200
180
160
140
120
100
80
60
40
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm16Y (ppb)
χ² / ndf 16.18 / 57
p0 22.67 ± 29.88
1D pull distribution
Mean 0.004433 ± 0.06934
Std Dev 0.5281 ± 0.04903
Underflow 0
Overflow 0
χ² / ndf 4.813 / 3
Constant 22.17 ± 4.60
Mean −0.04972 ± 0.08368
Sigma 0.511 ± 0.081


corr_usl_bpm16Y RMS (ppm)
RMS (ppm)
20
18
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm12X (ppb)
χ² / ndf 85.76 / 57
p0 24.93 ± 151.3
4000
2000
0
-2000
-4000
3
2
1
0
−1
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean 0.003253 ± 0.1597
Std Dev 1.216 ± 0.1129
Underflow 0
Overflow 0
χ² / ndf 12.19 / 8
Constant 8.243 ± 1.856
Mean −0.2881 ± 0.1939
Sigma 1.214 ± 0.239
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_usl_bpm12X RMS (ppm)
RMS (ppm)
160
150
140
130
120
110
100
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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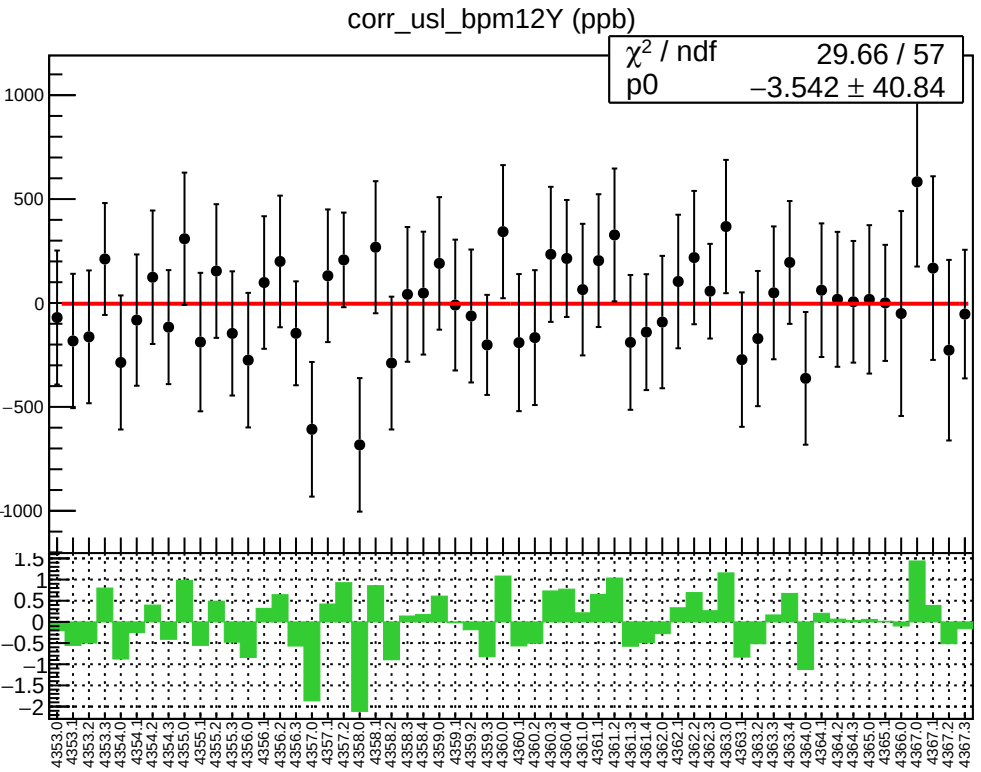
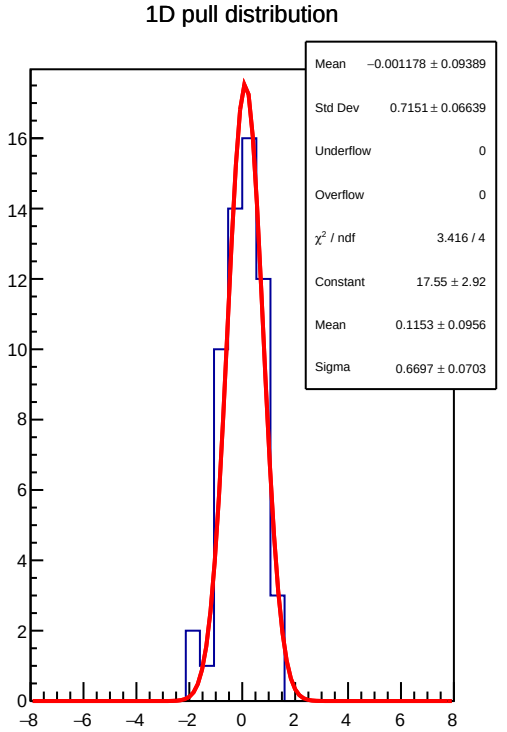
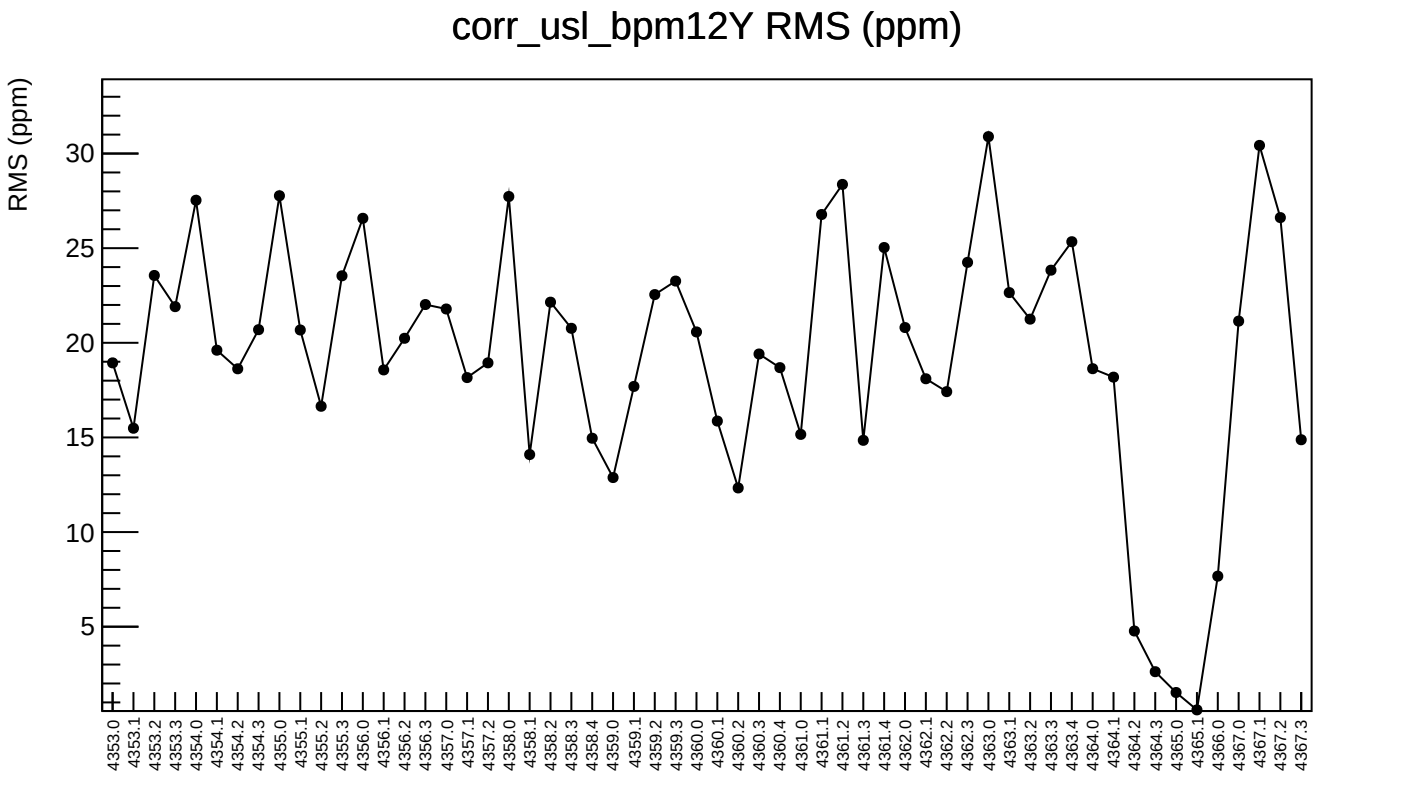
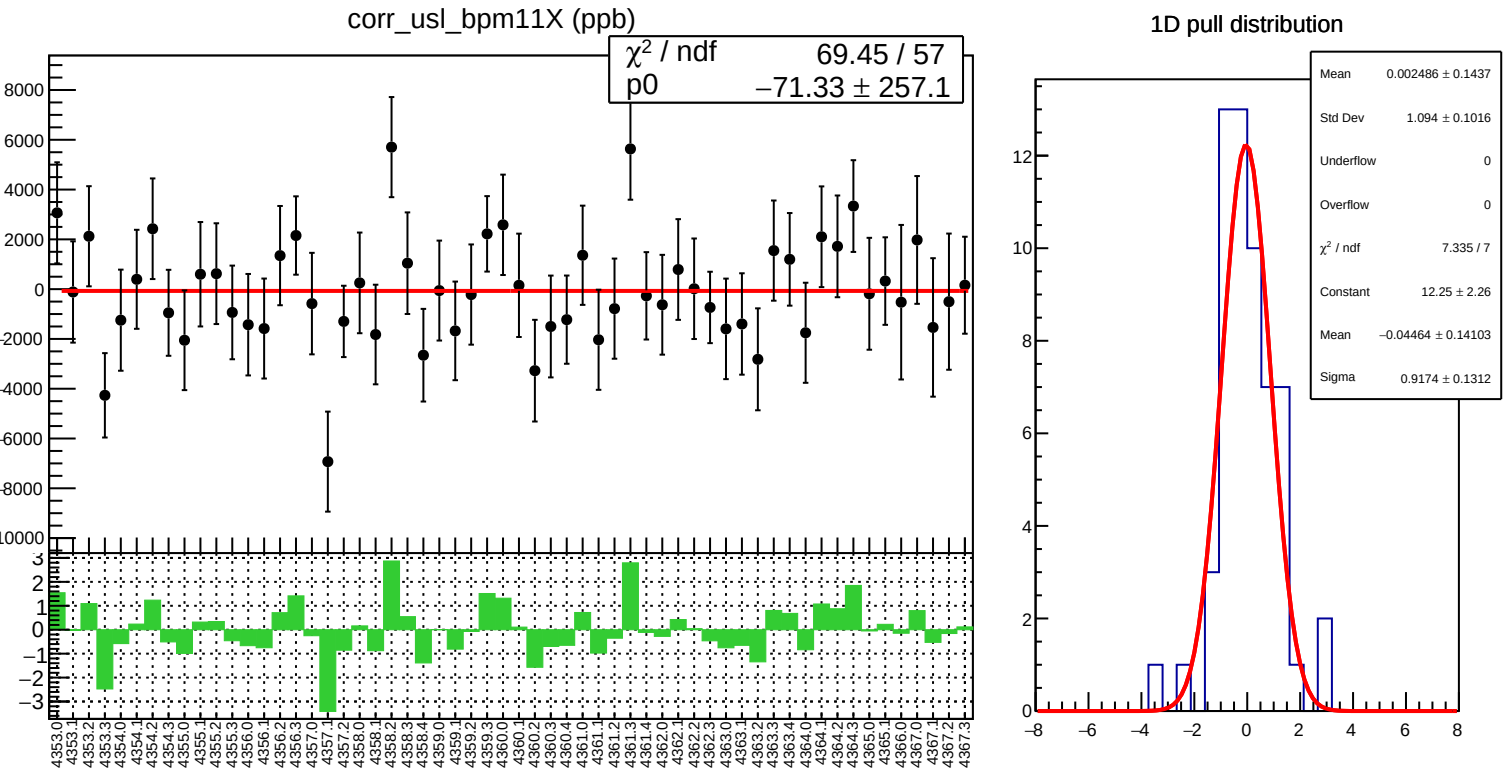
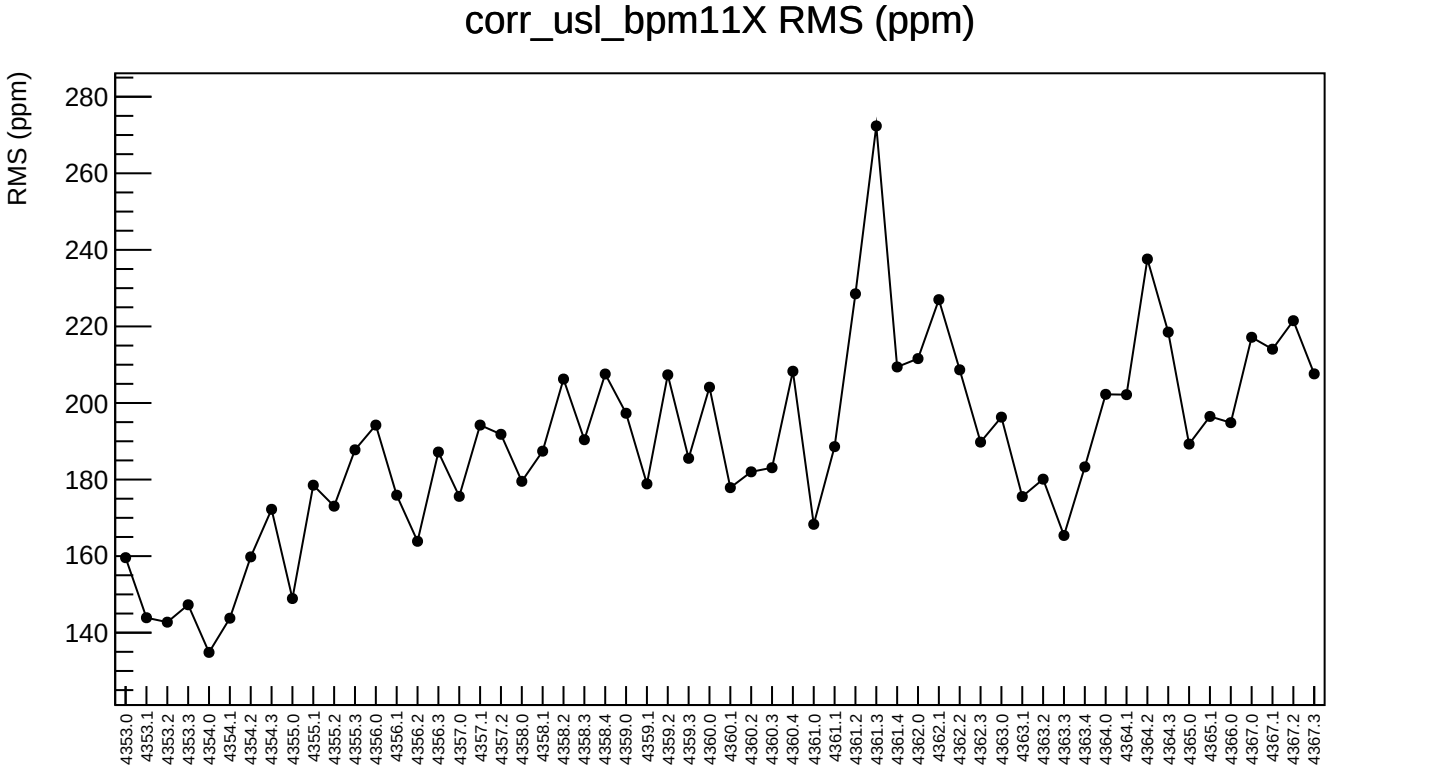
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

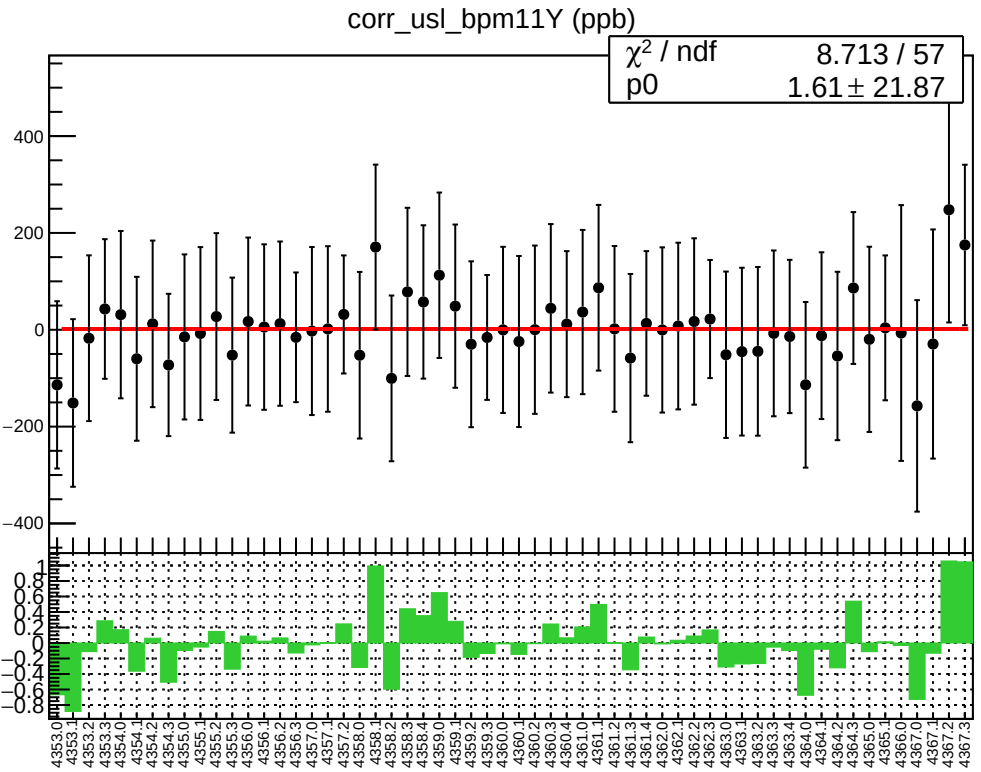

corr_usl_bpm12Y (ppb)
χ² / ndf 29.66 / 57
p0 −3.542 ± 40.84
1000
500
0
−500
−1000
1.5
1
0.5
0
−0.5
−1
−1.5
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean −0.001178 ± 0.09389
Std Dev 0.7151 ± 0.06639
Underflow 0
Overflow 0
χ² / ndf 3.416 / 4
Constant 17.55 ± 2.92
Mean 0.1153 ± 0.0956
Sigma 0.6697 ± 0.0703
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_usl_bpm12Y RMS (ppm)
RMS (ppm)
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm11X (ppb)
χ² / ndf 69.45 / 57
p0 −71.33 ± 257.1
1D pull distribution
Mean 0.002486 ± 0.1437
Std Dev 1.094 ± 0.1016
Underflow 0
Overflow 0
χ² / ndf 7.335 / 7
Constant 12.25 ± 2.26
Mean −0.04464 ± 0.14103
Sigma 0.9174 ± 0.1312


corr_usl_bpm11X RMS (ppm)
RMS (ppm)
280
260
240
220
200
180
160
140
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm11Y (ppb)
χ² / ndf 8.713 / 57
p0 1.61 ± 21.87
400
200
0
−200
−400
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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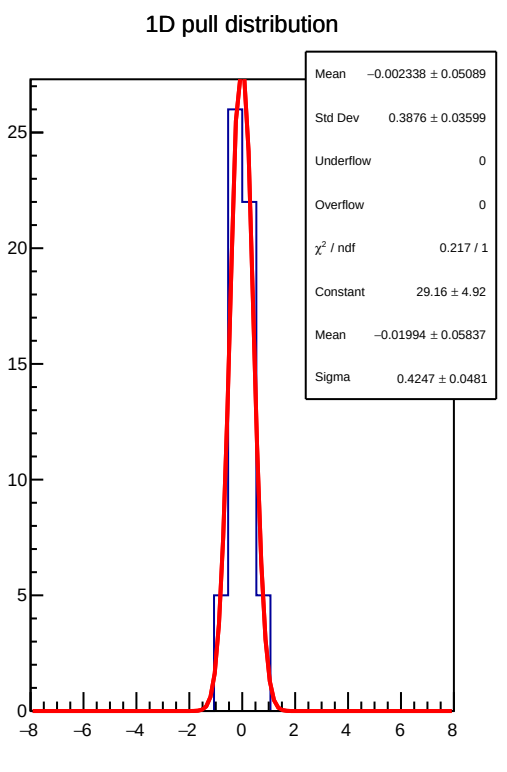
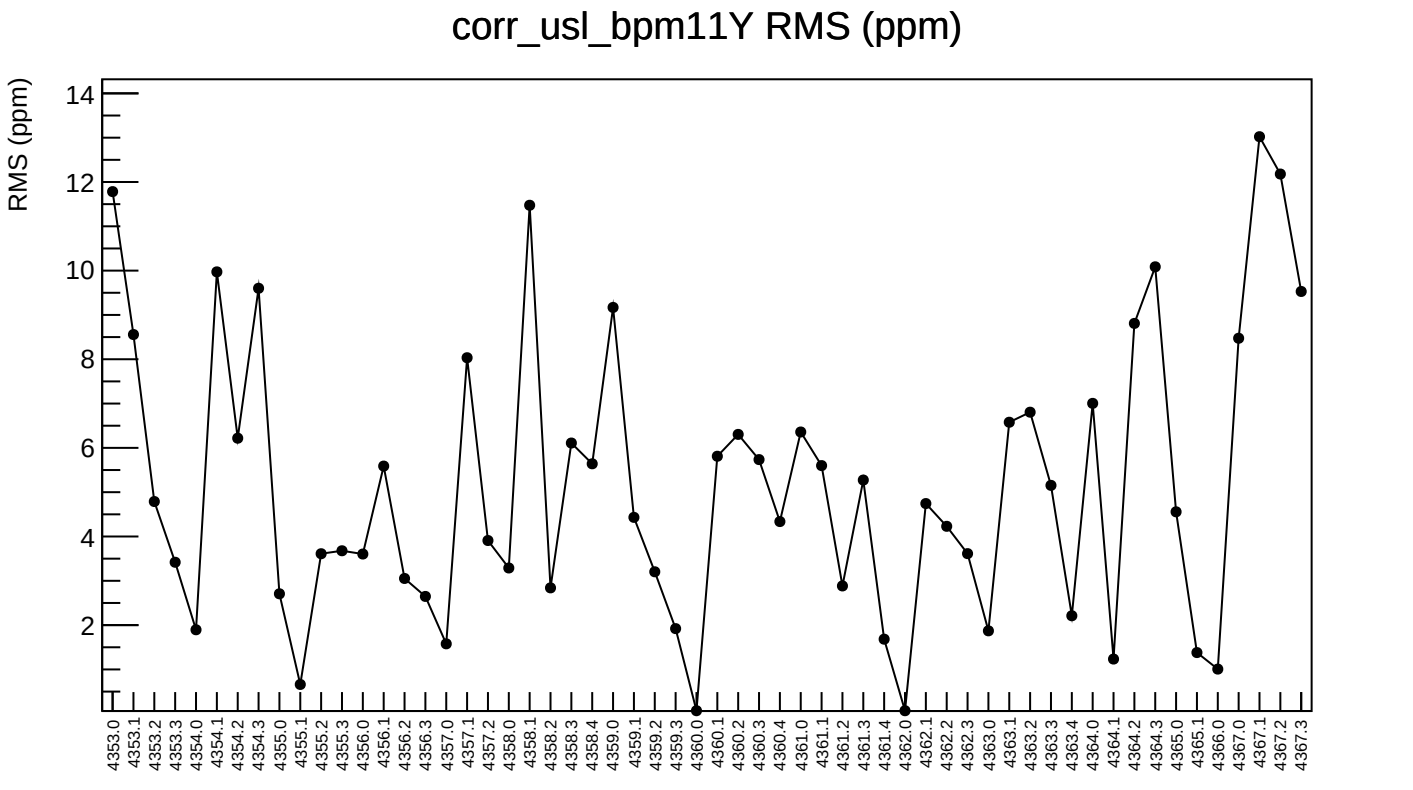
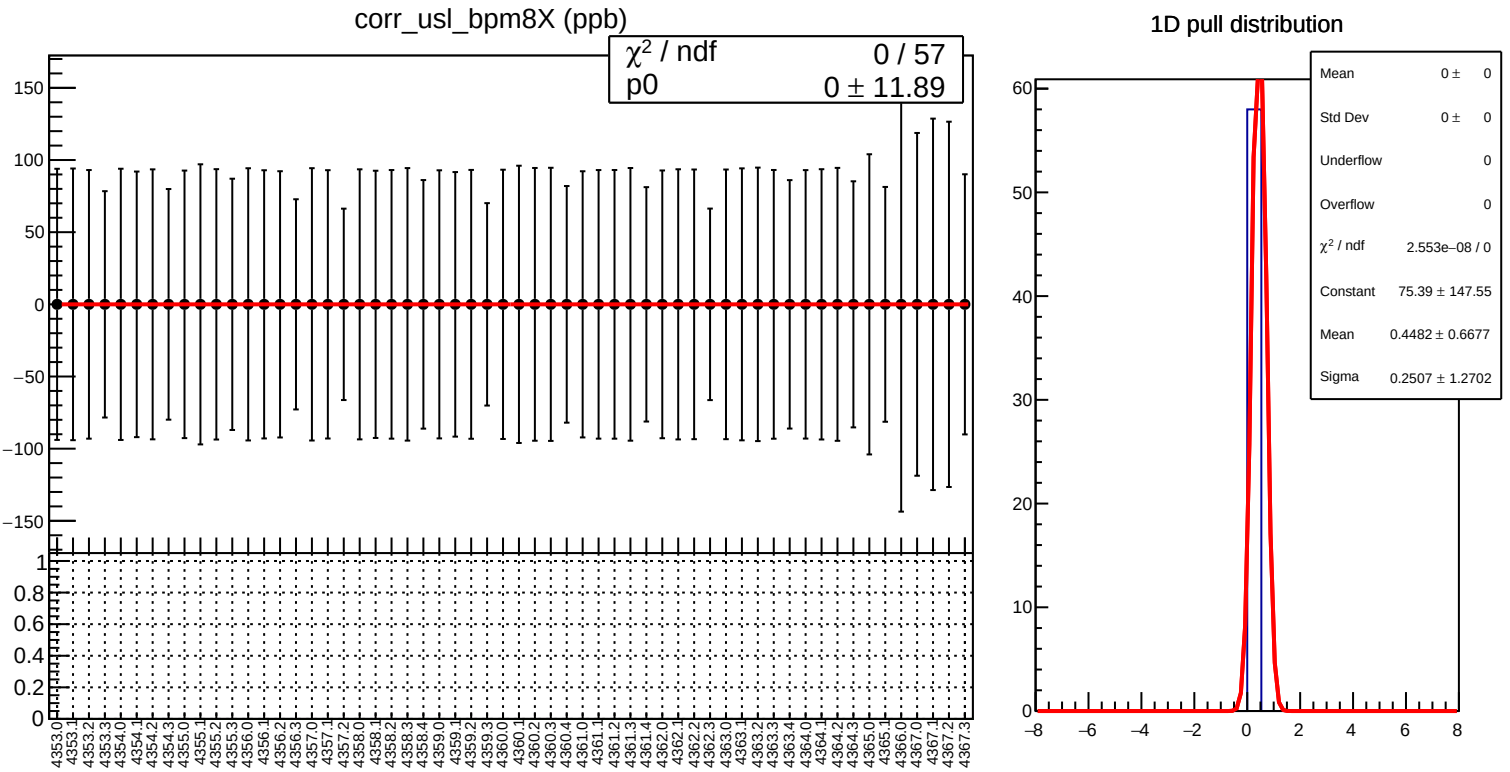
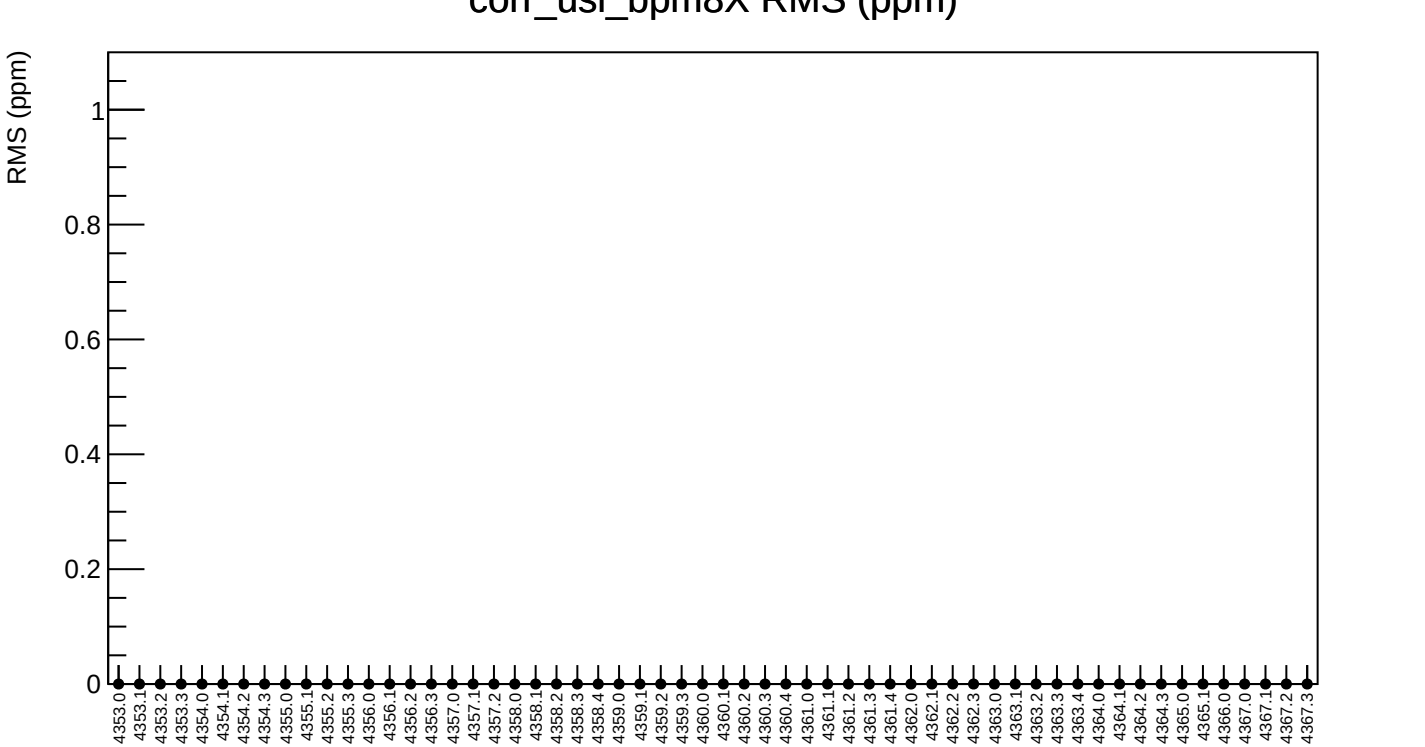
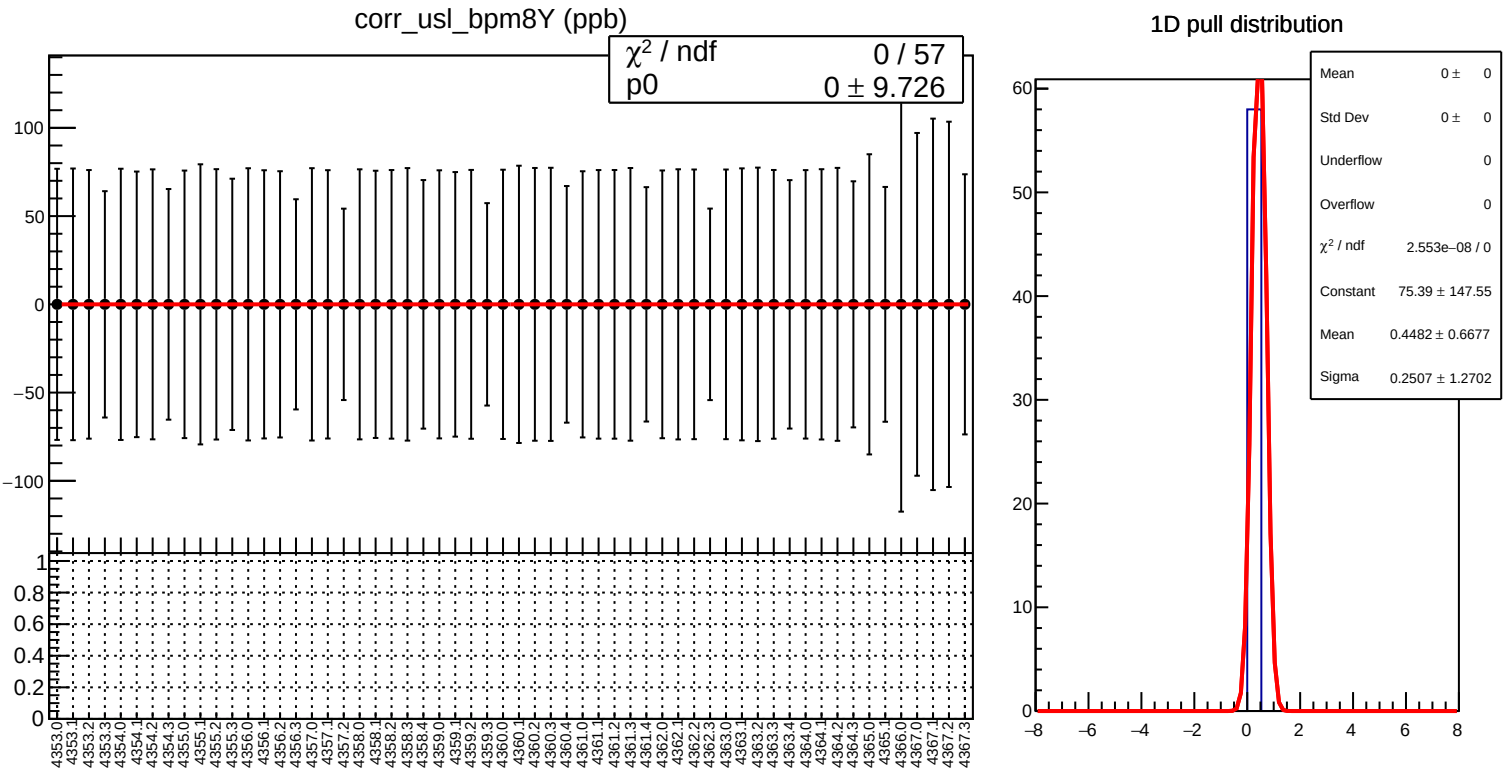
4366.0
4367.0
4367.1
4367.2
4367.3

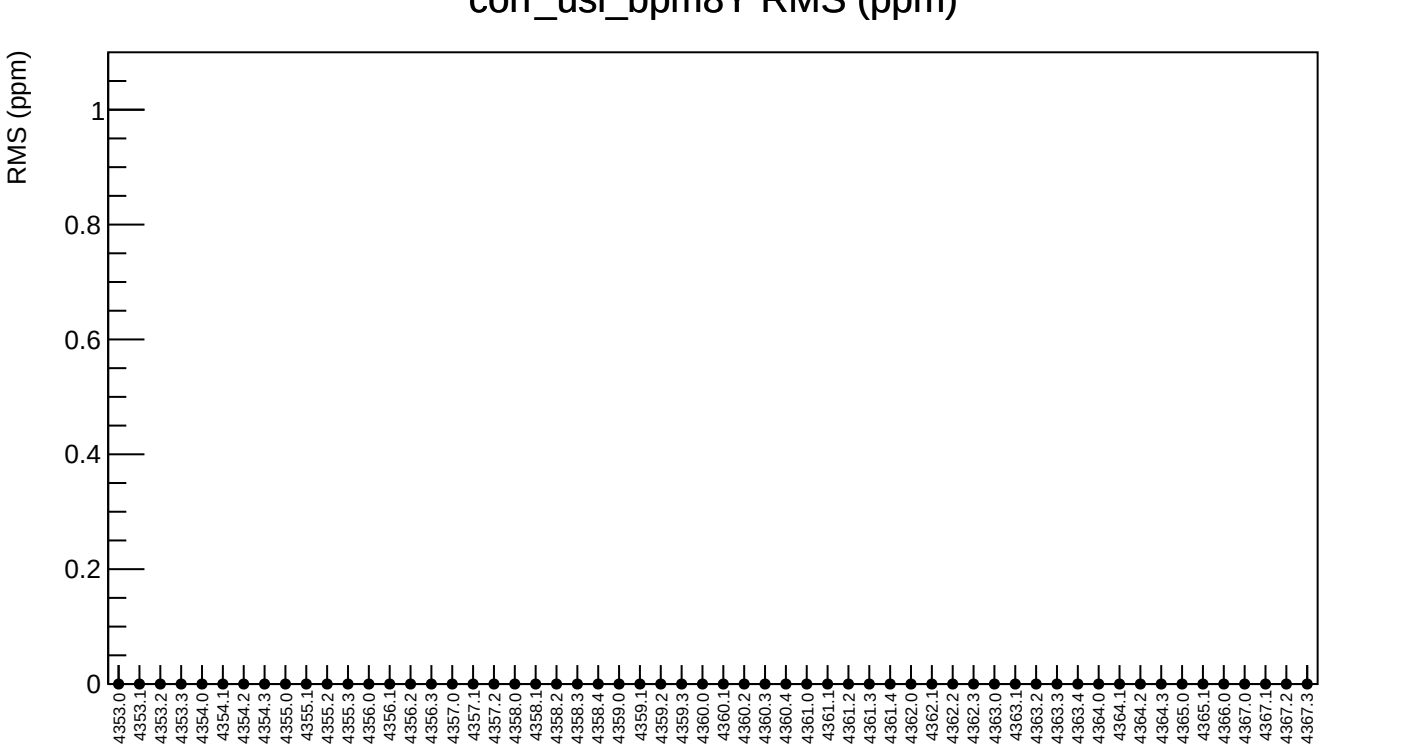

1D pull distribution
Mean −0.002338 ± 0.05089
Std Dev 0.3876 ± 0.03599
Underflow 0
Overflow 0
χ² / ndf 0.217 / 1
Constant 29.16 ± 4.92
Mean −0.01994 ± 0.05837
Sigma 0.4247 ± 0.0481
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8


corr_usl_bpm11Y RMS (ppm)
RMS (ppm)
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm8X (ppb)
χ² / ndf 0 / 57
p0 0 ± 11.89
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702


corr_usl_bpm8X RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usl_bpm8Y (ppb)
χ² / ndf 0 / 57
p0 0 ± 9.726
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702


corr_usl_bpm8Y RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
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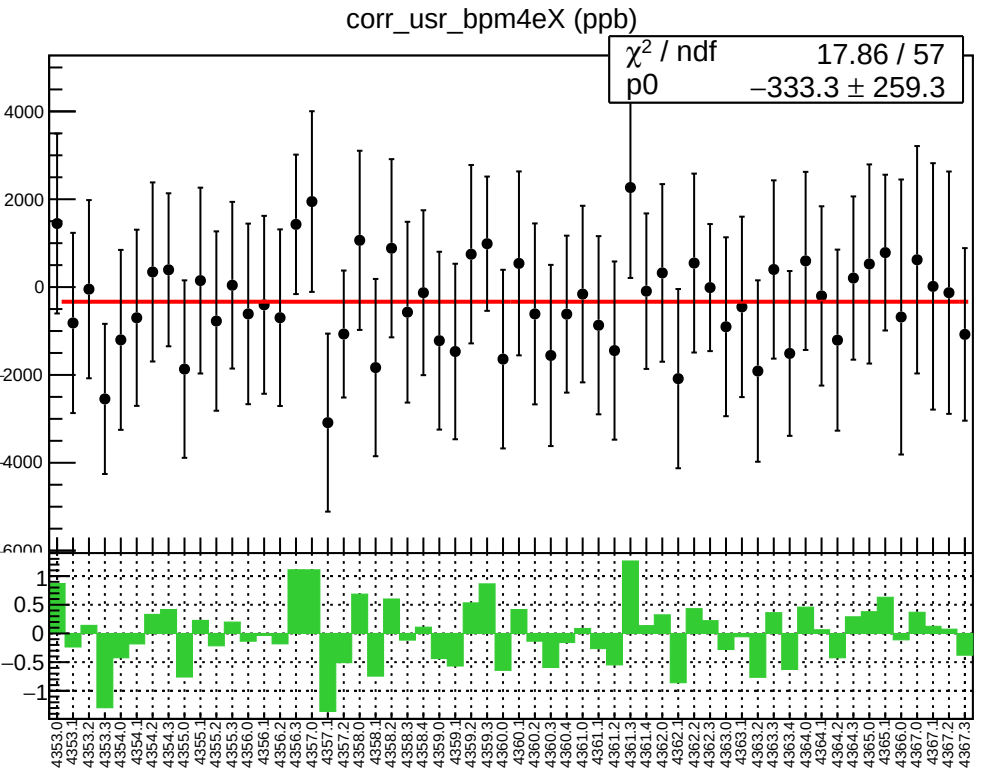
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usr_bpm4eX (ppb)
χ² / ndf 17.86 / 57
p0 −333.3 ± 259.3
4000
2000
0
-2000
-4000
-6000
1
0.5
0
−0.5
−1
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
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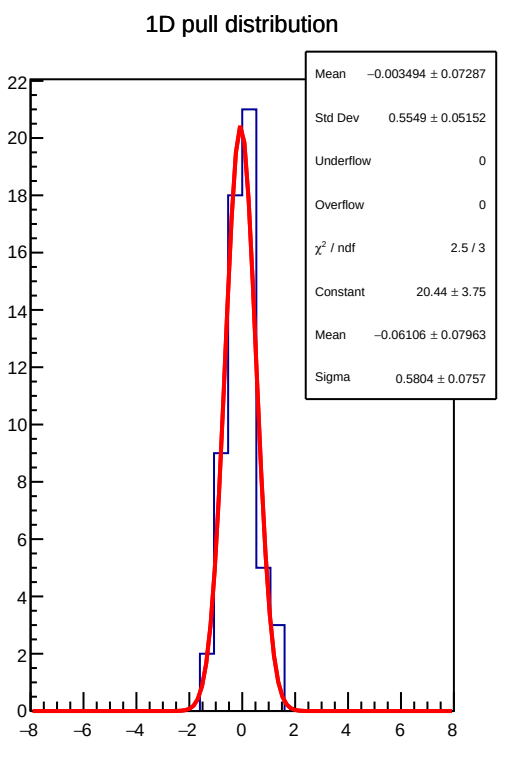
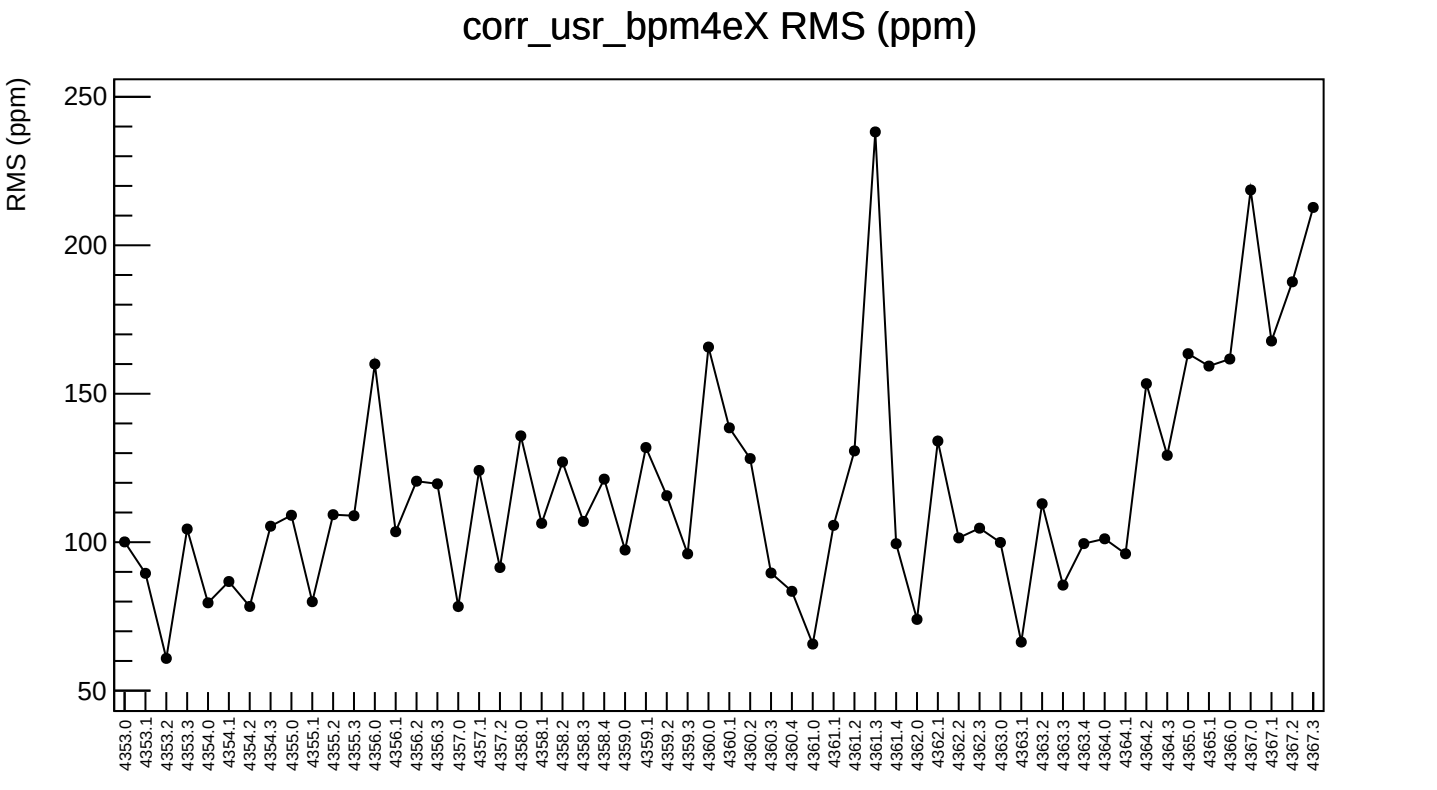
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


1D pull distribution
Mean −0.003494 ± 0.07287
Std Dev 0.5549 ± 0.05152
Underflow 0
Overflow 0
χ² / ndf 2.5 / 3
Constant 20.44 ± 3.75
Mean −0.06106 ± 0.07963
Sigma 0.5804 ± 0.0757
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8


corr_usr_bpm4eX RMS (ppm)
RMS (ppm)
250
200
150
100
50
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
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4363.2
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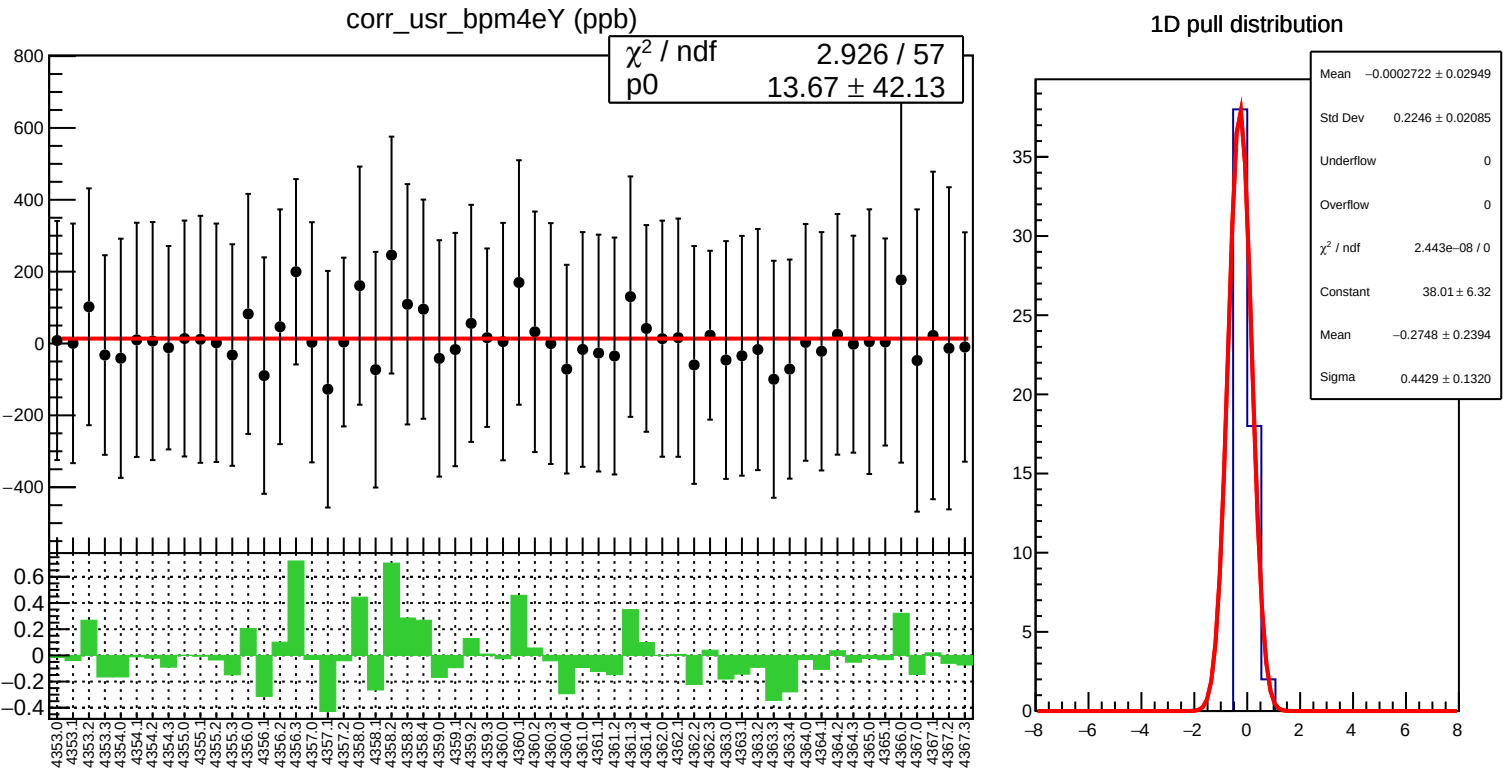
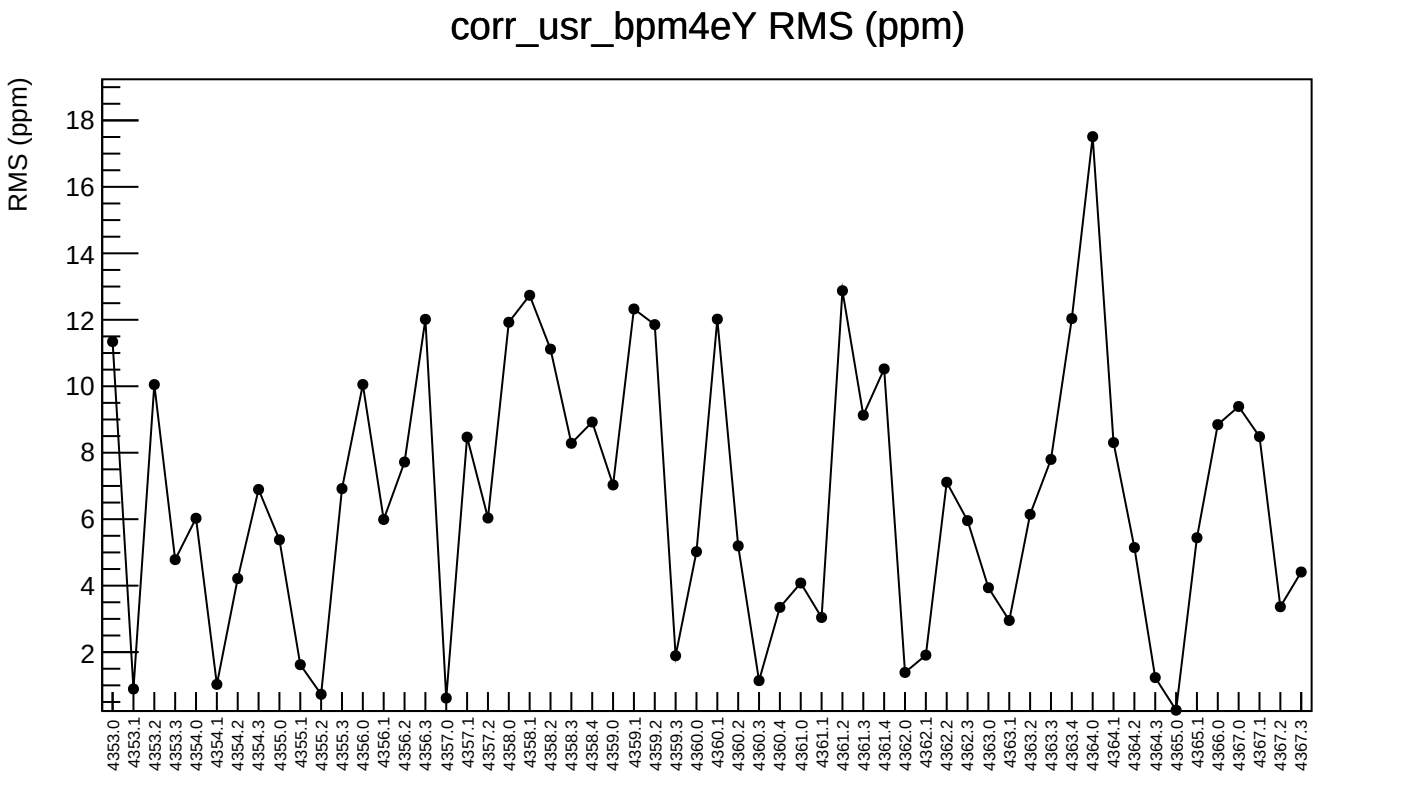
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usr_bpm4eY (ppb)
χ² / ndf 2.926 / 57
p0 13.67 ± 42.13
1D pull distribution
Mean −0.0002722 ± 0.02949
Std Dev 0.2246 ± 0.02085
Underflow 0
Overflow 0
χ² / ndf 2.443e−08 / 0
Constant 38.01 ± 6.32
Mean −0.2748 ± 0.2394
Sigma 0.4429 ± 0.1320


corr_usr_bpm4eY RMS (ppm)
RMS (ppm)
18
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
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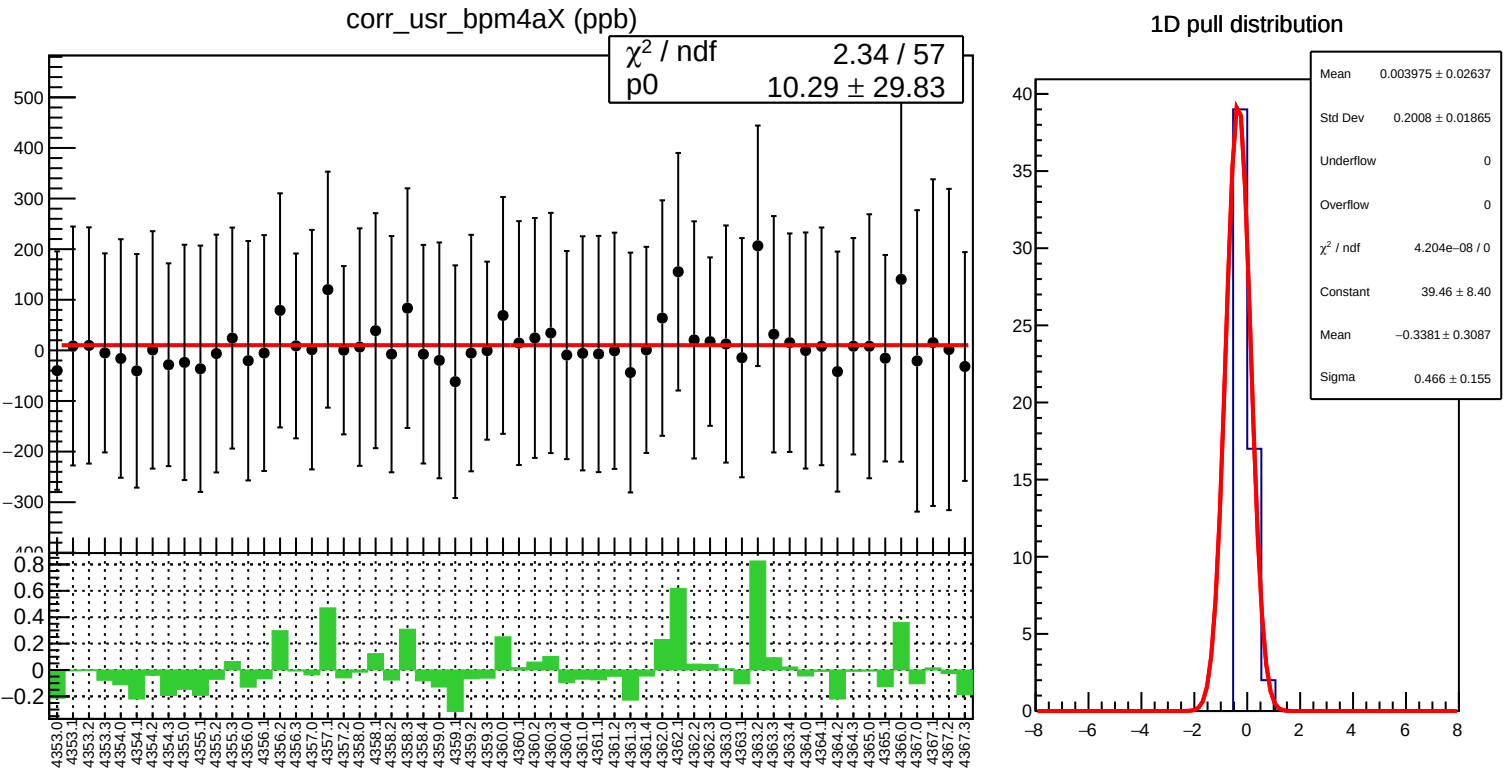
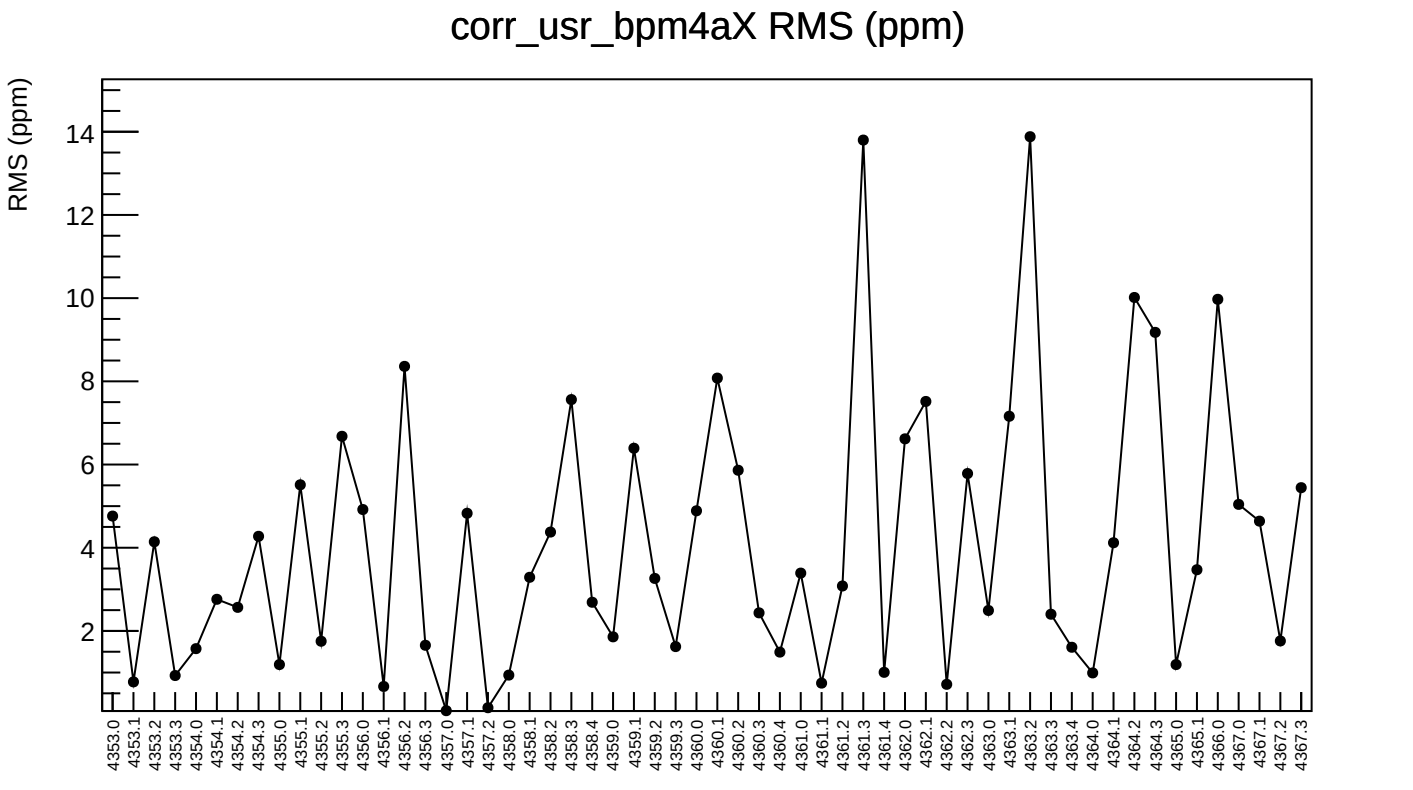
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usr_bpm4aX (ppb)
χ² / ndf 2.34 / 57
p0 10.29 ± 29.83
1D pull distribution
Mean 0.003975 ± 0.02637
Std Dev 0.2008 ± 0.01865
Underflow 0
Overflow 0
χ² / ndf 4.204e−08 / 0
Constant 39.46 ± 8.40
Mean −0.3381 ± 0.3087
Sigma 0.466 ± 0.155


corr_usr_bpm4aX RMS (ppm)
RMS (ppm)
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
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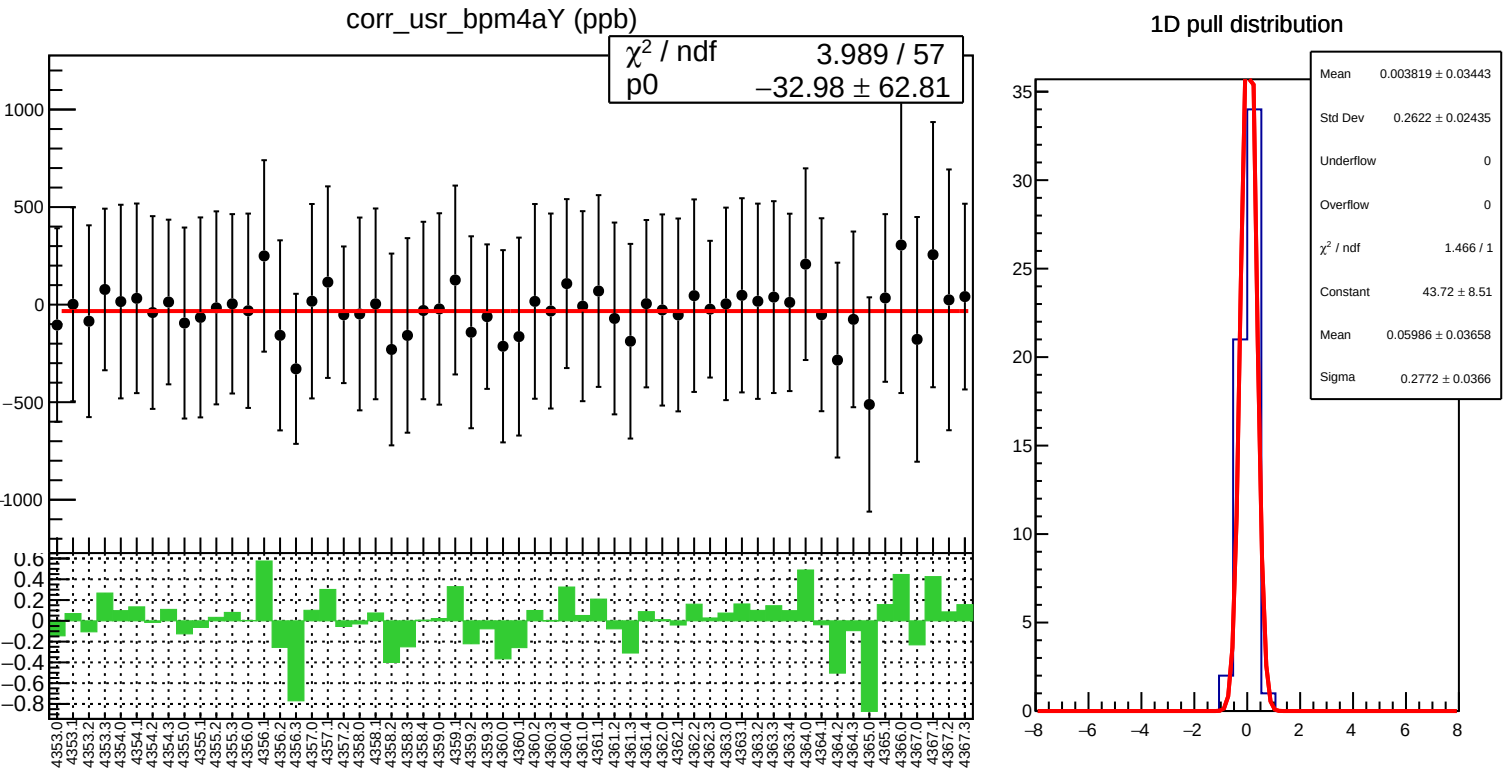
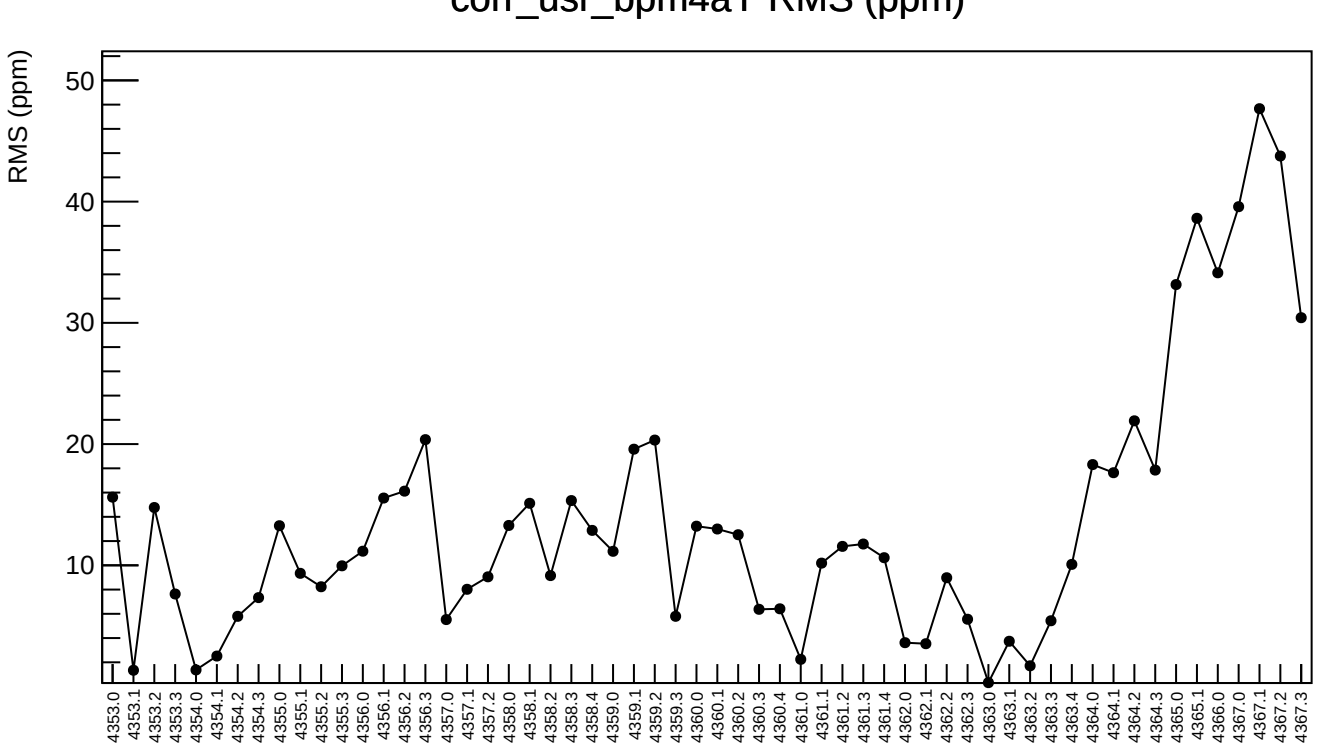
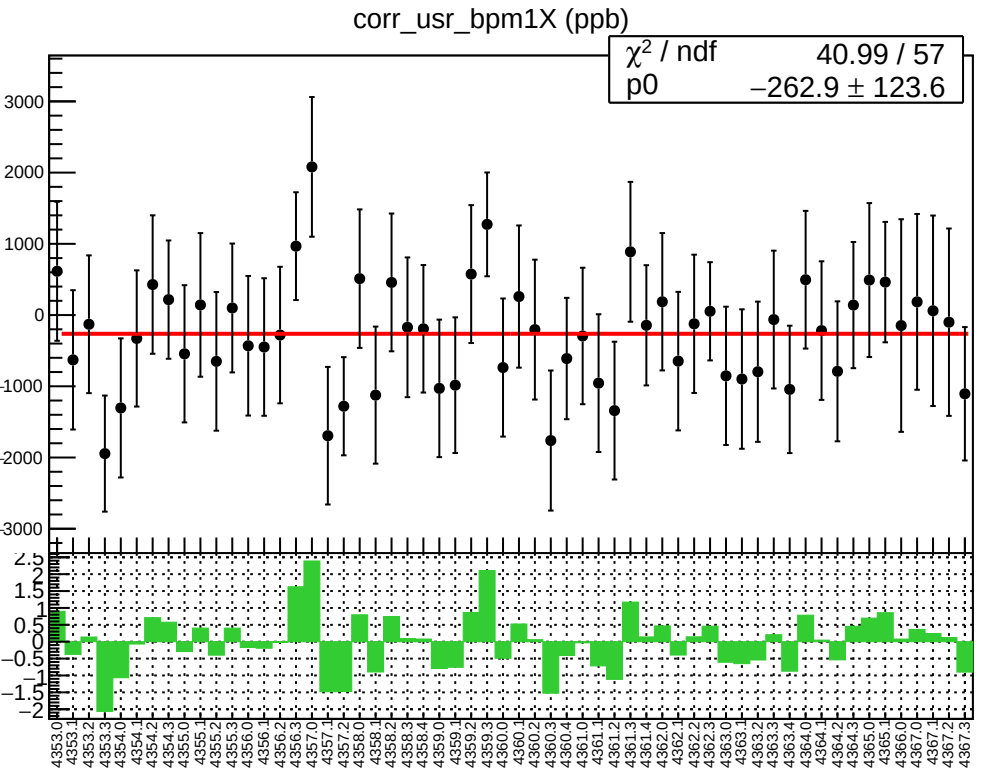
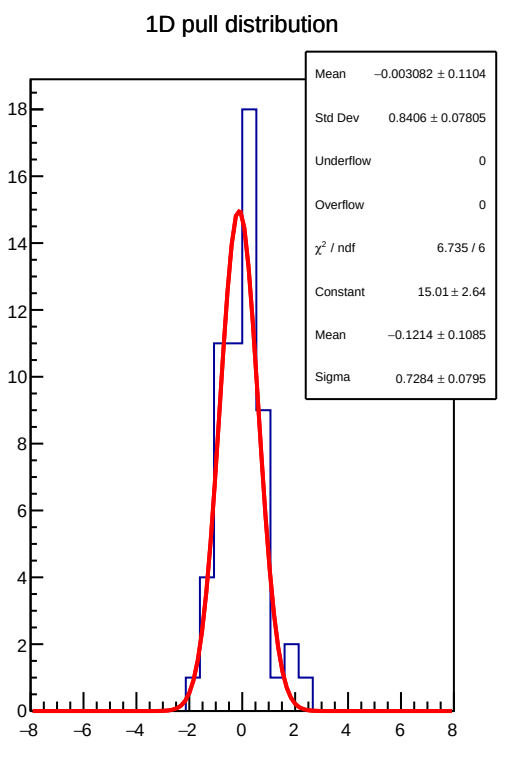
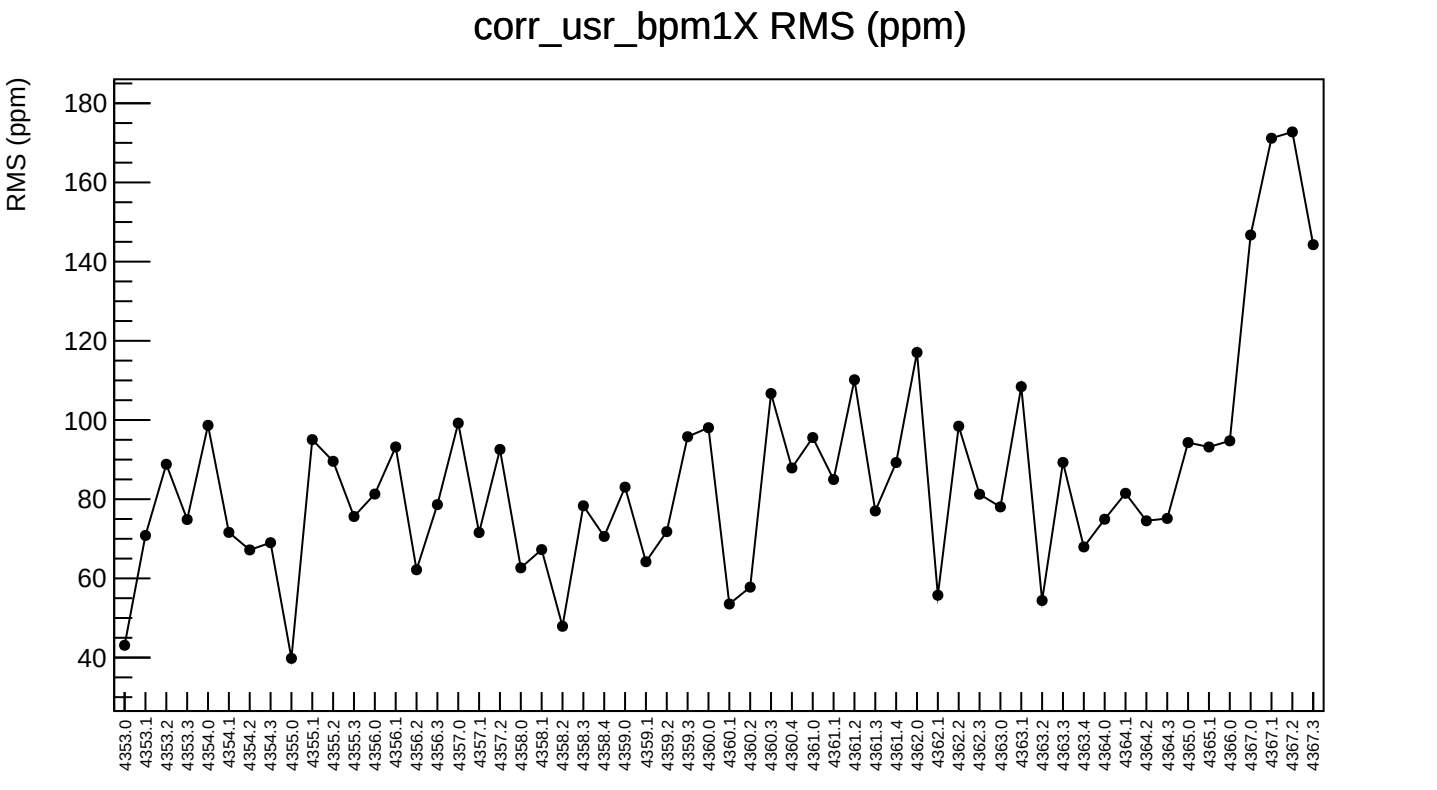
4366.0
4367.0
4367.1
4367.2
4367.3

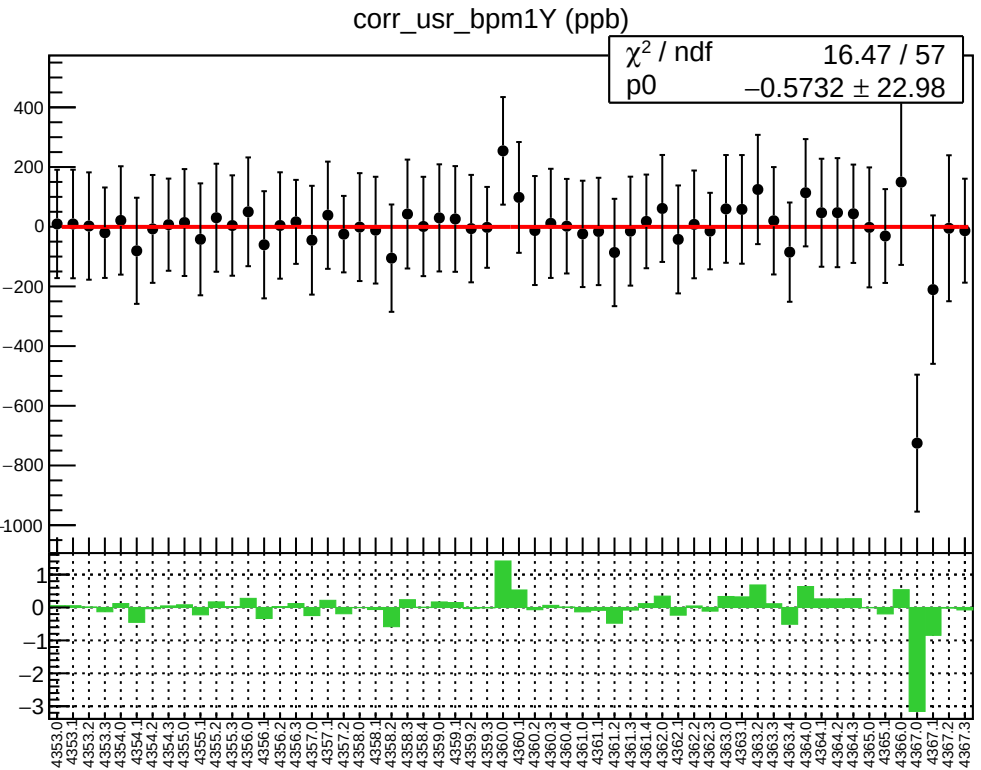

corr_usr_bpm4aY (ppb)
χ² / ndf 3.989 / 57
p0 −32.98 ± 62.81
1000
500
0
−500
−1000
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean 0.003819 ± 0.03443
Std Dev 0.2622 ± 0.02435
Underflow 0
Overflow 0
χ² / ndf 1.466 / 1
Constant 43.72 ± 8.51
Mean 0.05986 ± 0.03658
Sigma 0.2772 ± 0.0366
35
30
25
20
15
10
5
0
−8
−6
−4
−2
0
2
4
6
8

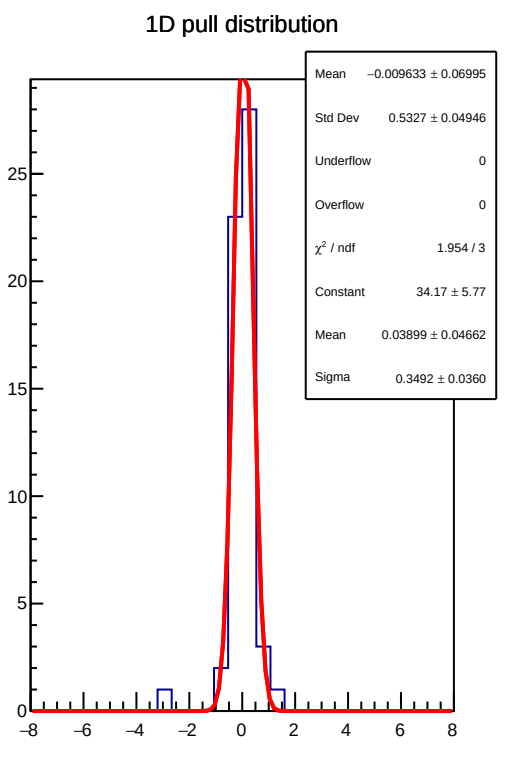

corr_usr_bpm4aY RMS (ppm)
RMS (ppm)
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

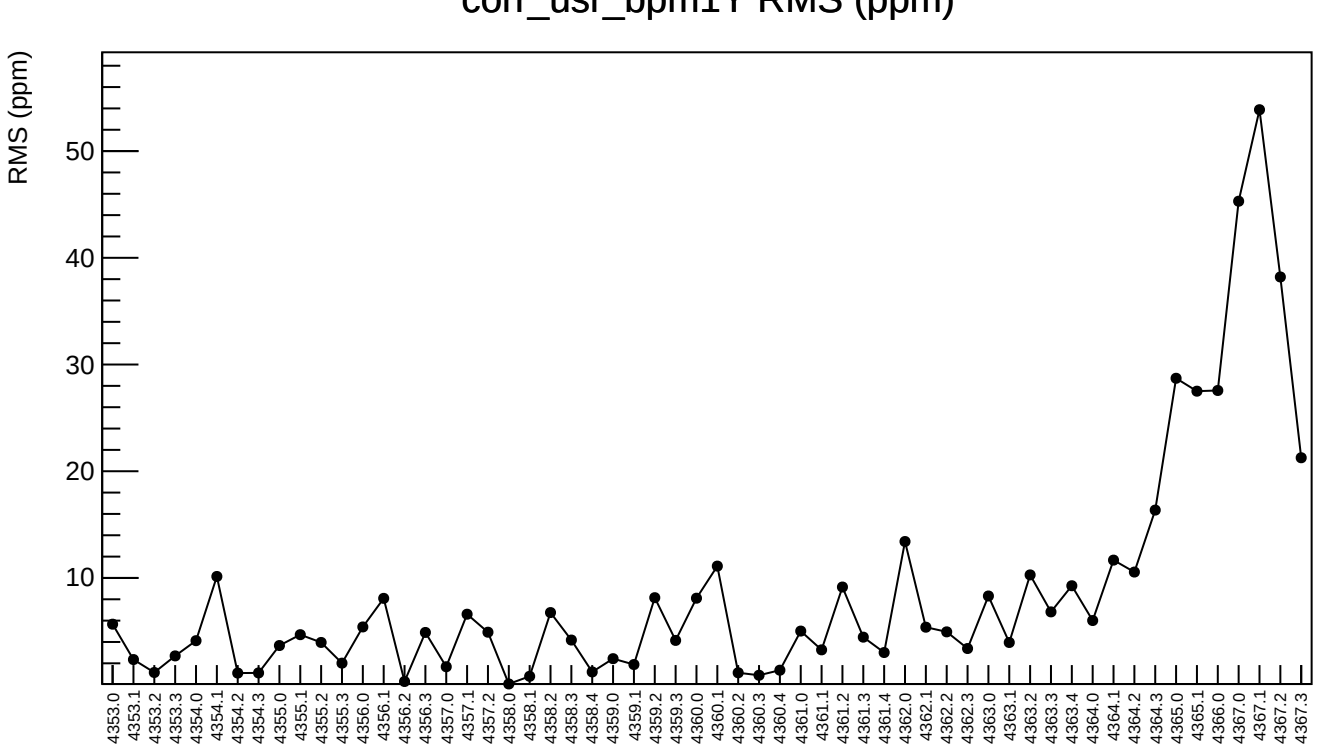

corr_usr_bpm1X (ppb)
χ² / ndf 40.99 / 57
p0 −262.9 ± 123.6
3000
2000
1000
0
-1000
-2000
-3000
2.5
1.5
0.5
−0.5
−1
−1.5
−2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

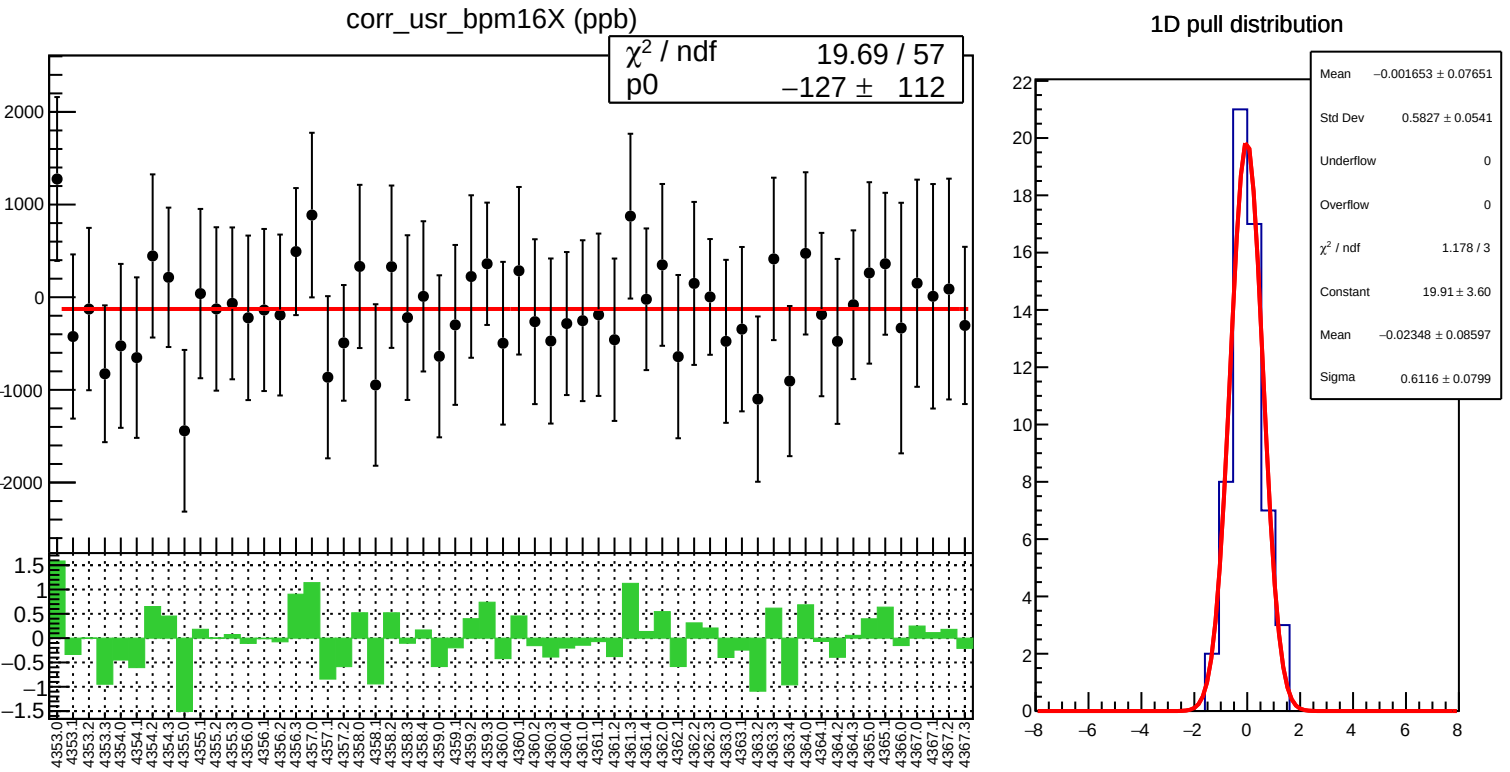

1D pull distribution
Mean −0.003082 ± 0.1104
Std Dev 0.8406 ± 0.07805
Underflow 0
Overflow 0
χ² / ndf 6.735 / 6
Constant 15.01 ± 2.64
Mean −0.1214 ± 0.1085
Sigma 0.7284 ± 0.0795
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

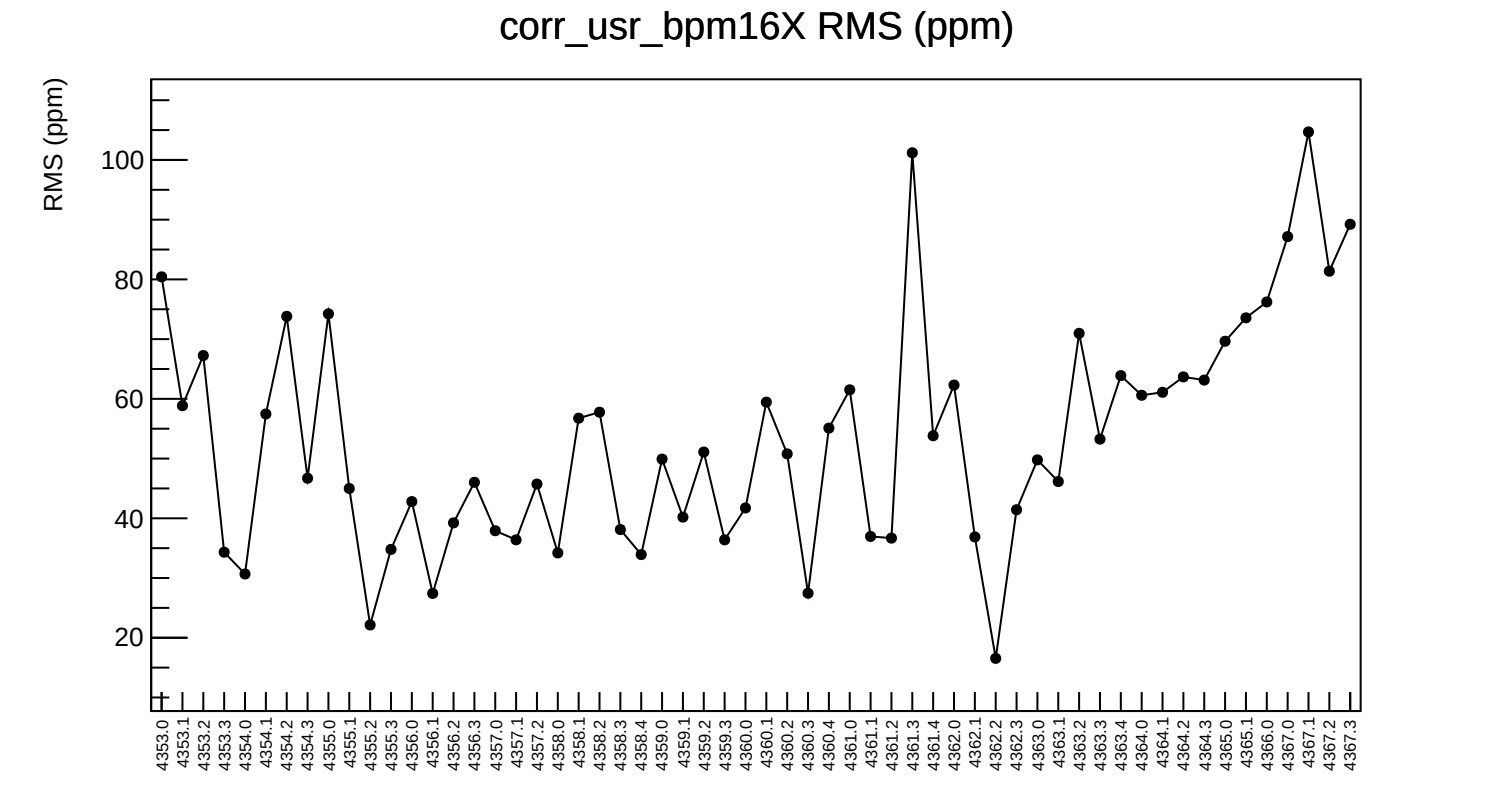

corr_usr_bpm1X RMS (ppm)
RMS (ppm)
180
160
140
120
100
80
60
40
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

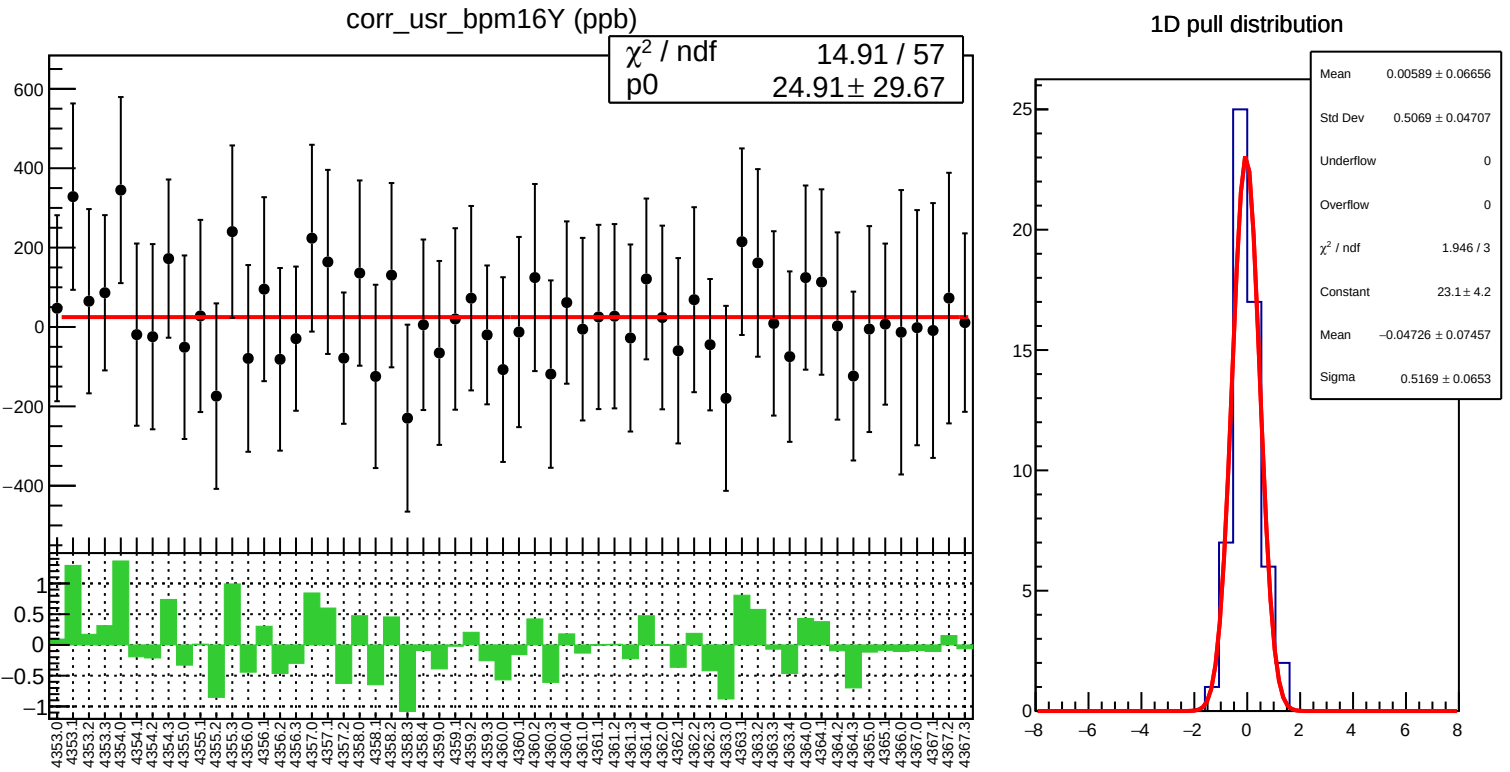

corr_usr_bpm1Y (ppb)
χ² / ndf 16.47 / 57
p0 −0.5732 ± 22.98

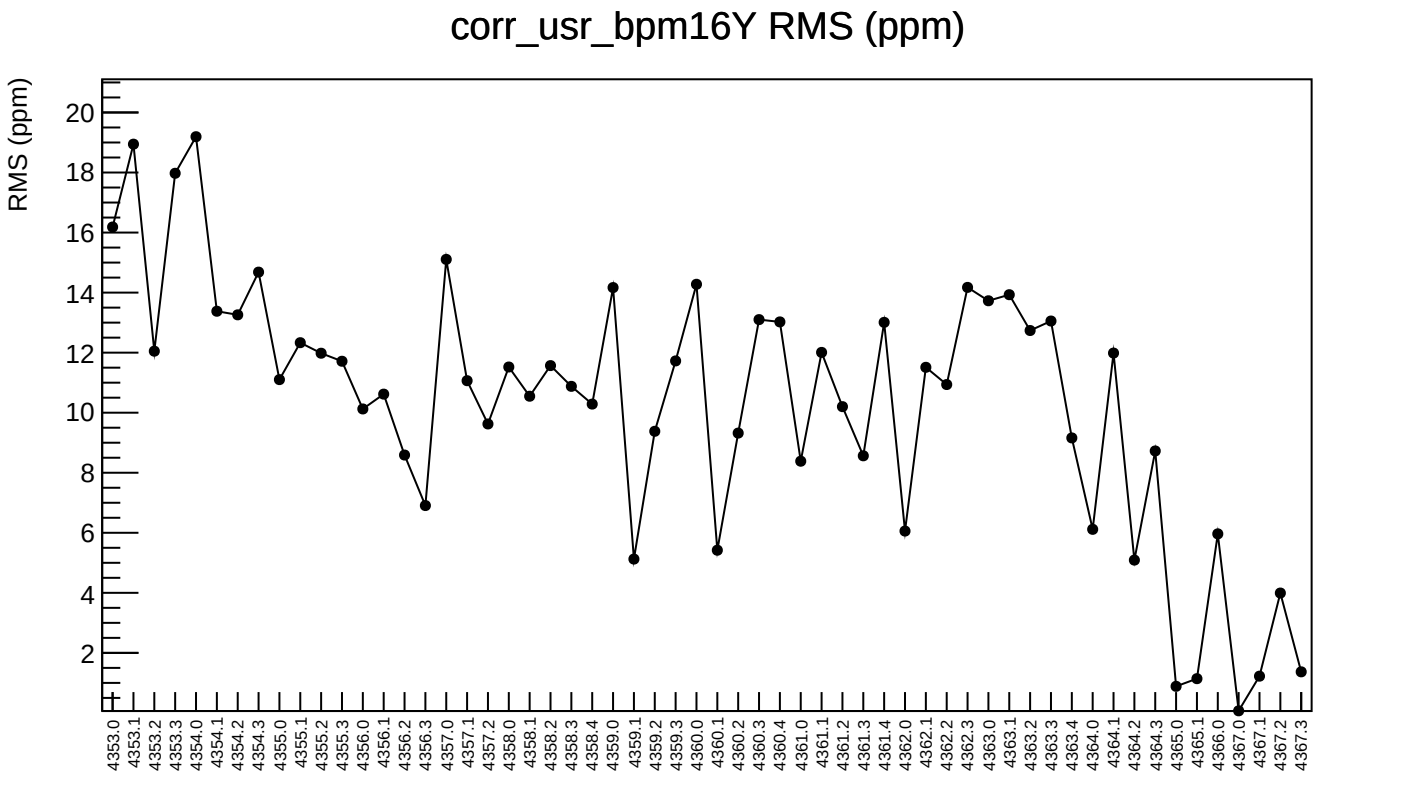

1D pull distribution
Mean −0.009633 ± 0.06995
Std Dev 0.5327 ± 0.04946
Underflow 0
Overflow 0
χ² / ndf 1.954 / 3
Constant 34.17 ± 5.77
Mean 0.03899 ± 0.04662
Sigma 0.3492 ± 0.0360

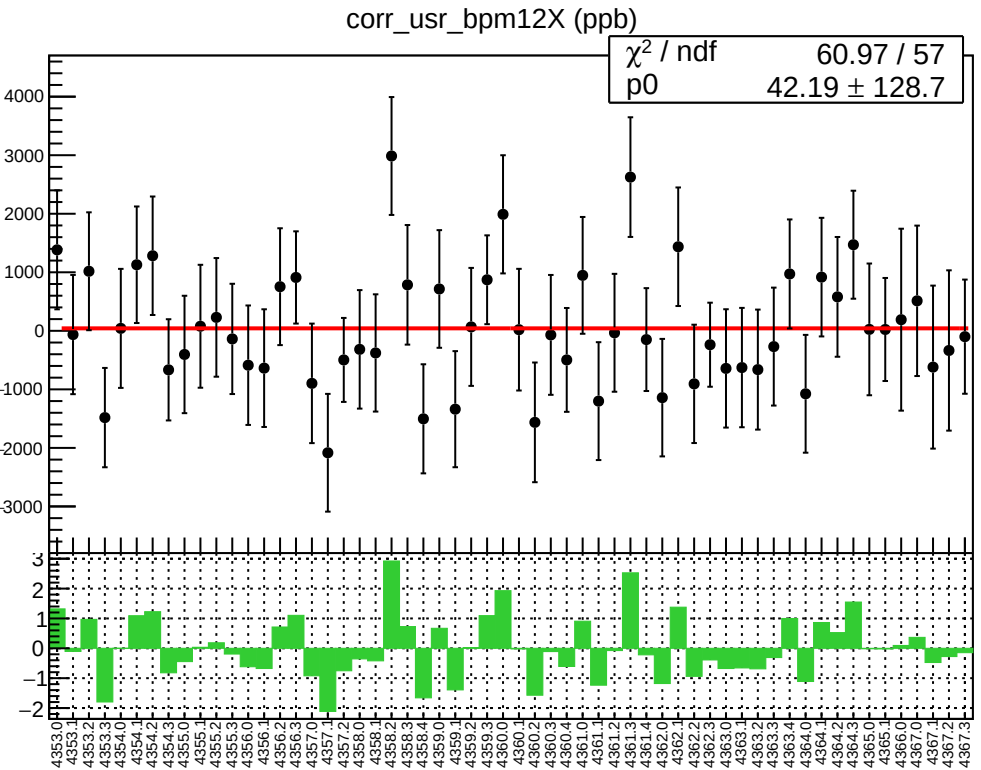

corr_usr_bpm1Y RMS (ppm)
RMS (ppm)
50
40
30
20
10
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

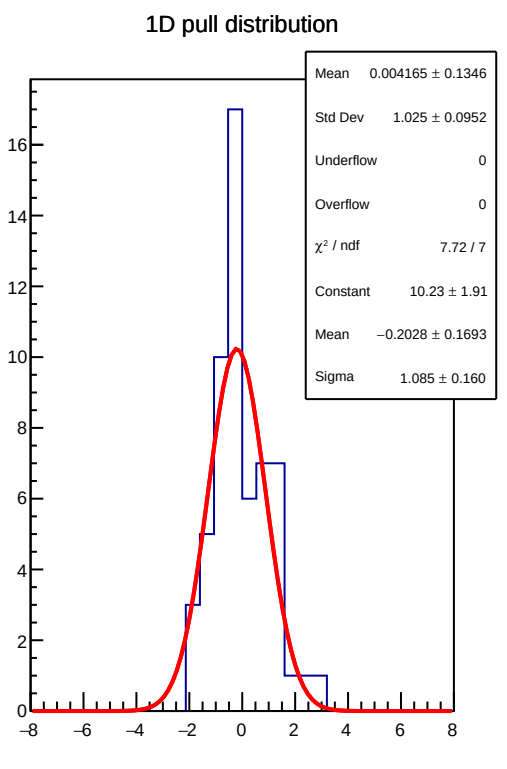

corr_usr_bpm16X (ppb)
χ² / ndf 19.69 / 57
p0 −127 ± 112
2000
1000
0
-1000
-2000
1.5
1
0.5
0
−0.5
−1
−1.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3
1D pull distribution
Mean −0.001653 ± 0.07651
Std Dev 0.5827 ± 0.0541
Underflow 0
Overflow 0
χ² / ndf 1.178 / 3
Constant 19.91 ± 3.60
Mean −0.02348 ± 0.08597
Sigma 0.6116 ± 0.0799
22
20
18
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

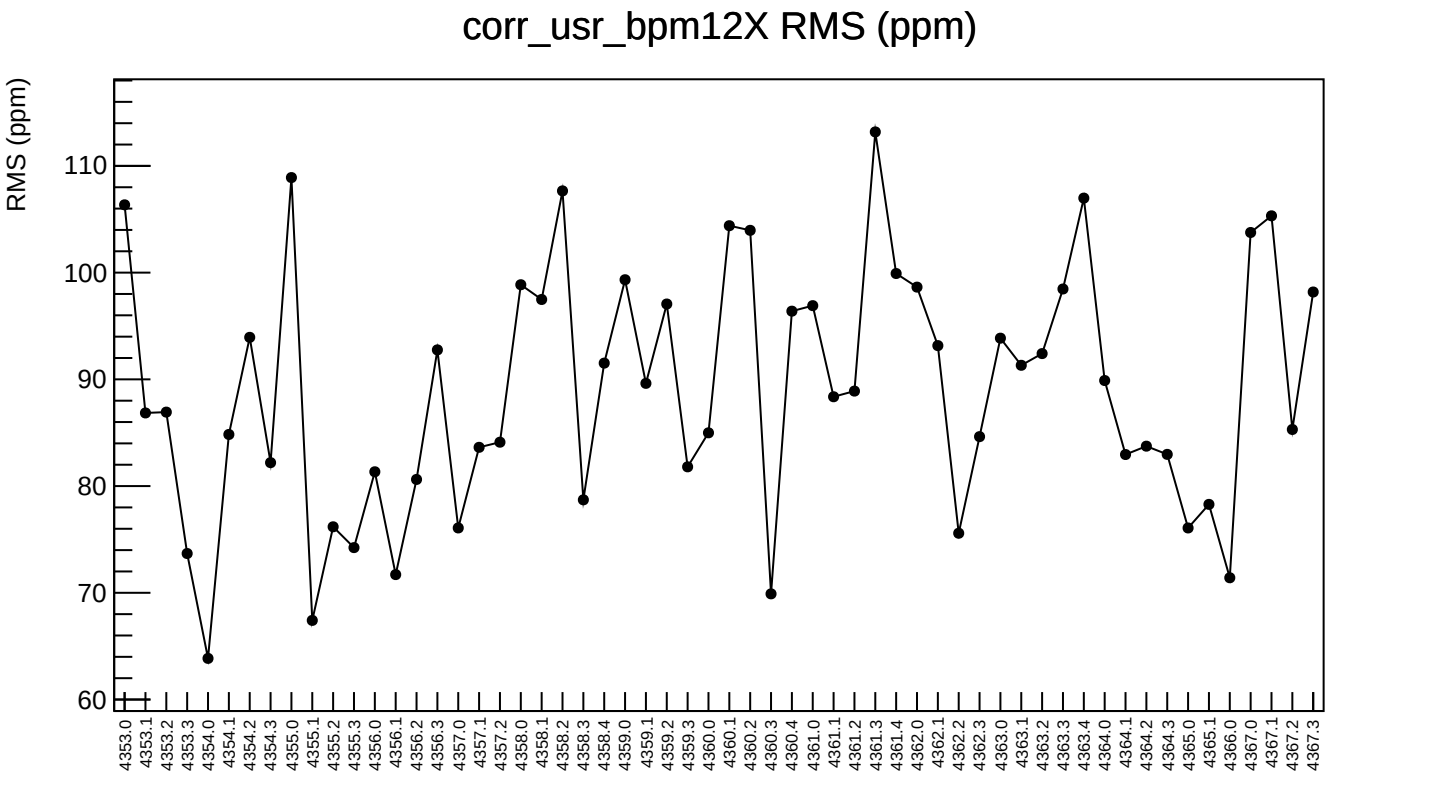

corr_usr_bpm16X RMS (ppm)
RMS (ppm)
100
80
60
40
20
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

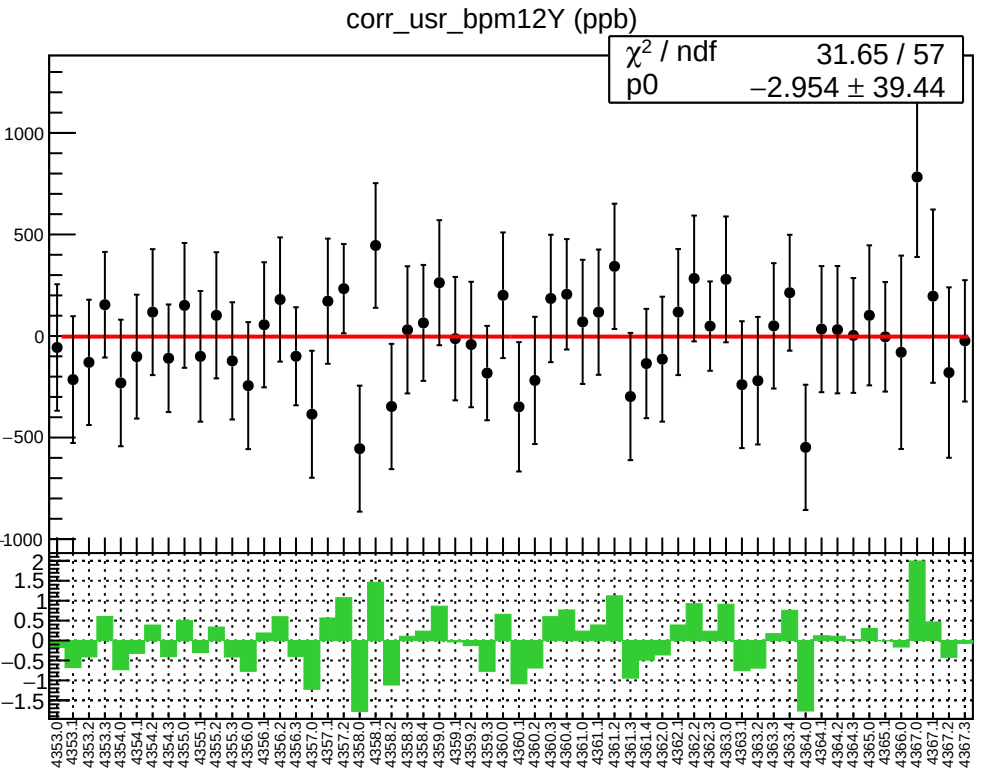

corr_usr_bpm16Y (ppb)
χ² / ndf 14.91 / 57
p0 24.91 ± 29.67
1D pull distribution
Mean 0.00589 ± 0.06656
Std Dev 0.5069 ± 0.04707
Underflow 0
Overflow 0
χ² / ndf 1.946 / 3
Constant 23.1 ± 4.2
Mean −0.04726 ± 0.07457
Sigma 0.5169 ± 0.0653

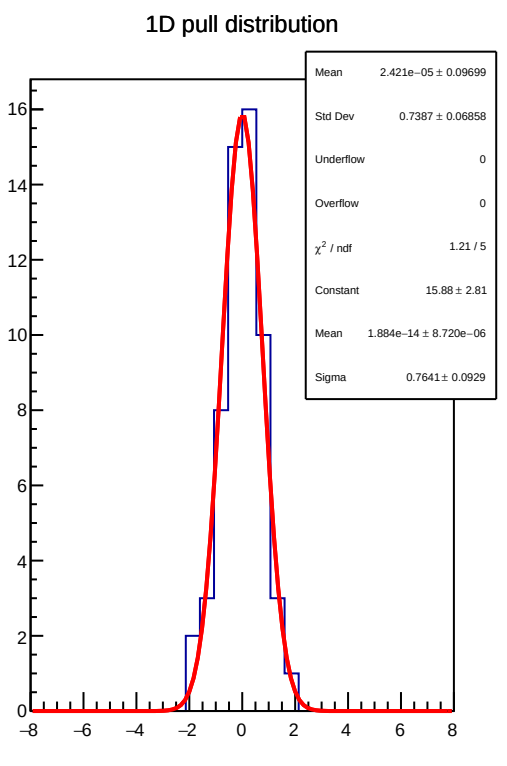

corr_usr_bpm16Y RMS (ppm)
RMS (ppm)
20
18
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

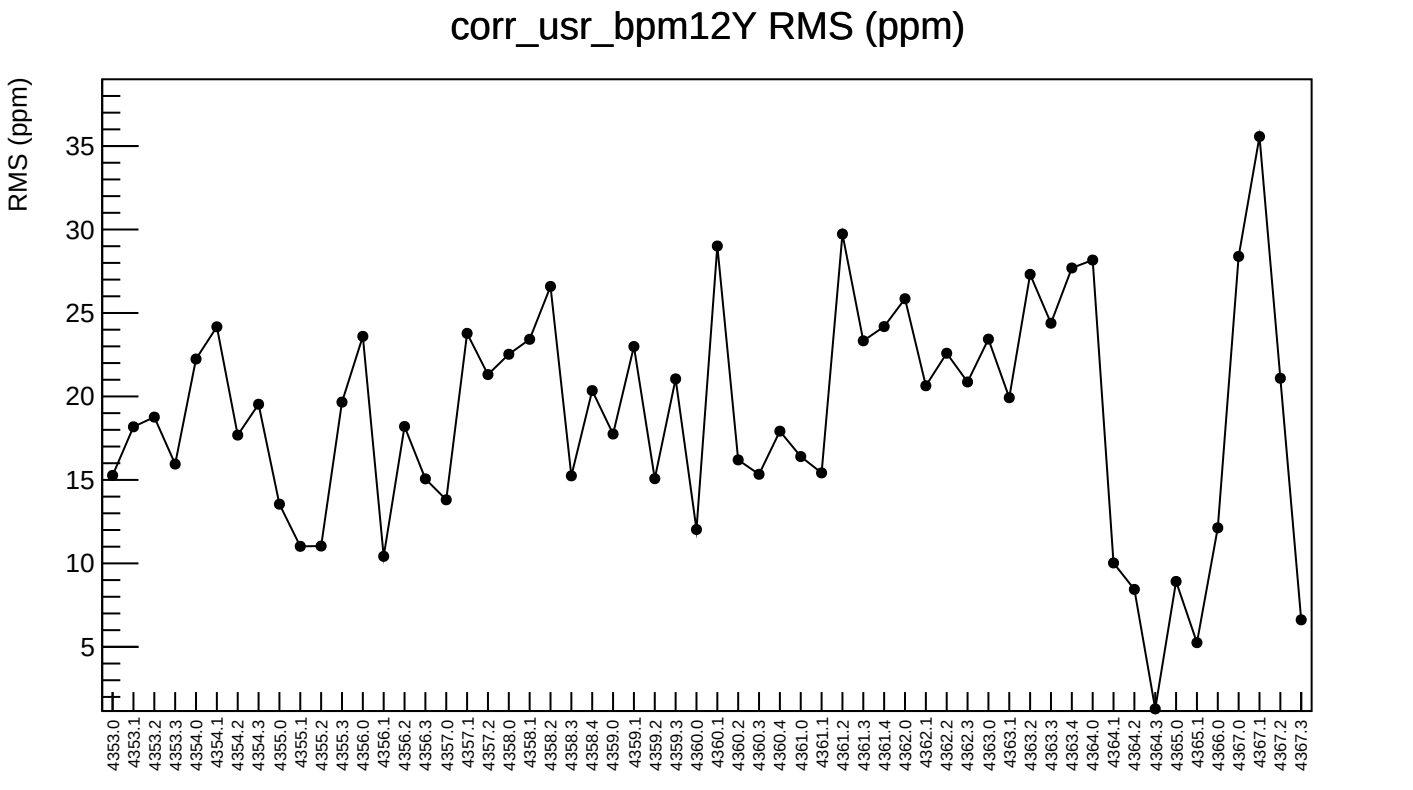

corr_usr_bpm12X (ppb)
χ² / ndf 60.97 / 57
p0 42.19 ± 128.7

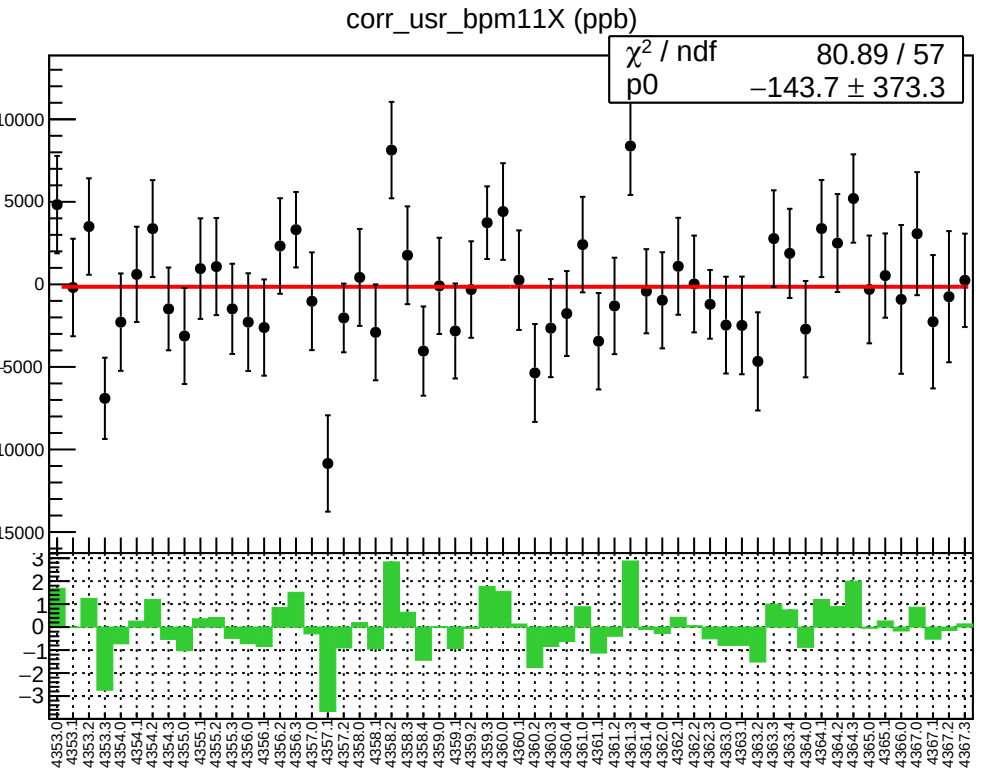

1D pull distribution
Mean 0.004165 ± 0.1346
Std Dev 1.025 ± 0.0952
Underflow 0
Overflow 0
χ² / ndf 7.72 / 7
Constant 10.23 ± 1.91
Mean −0.2028 ± 0.1693
Sigma 1.085 ± 0.160

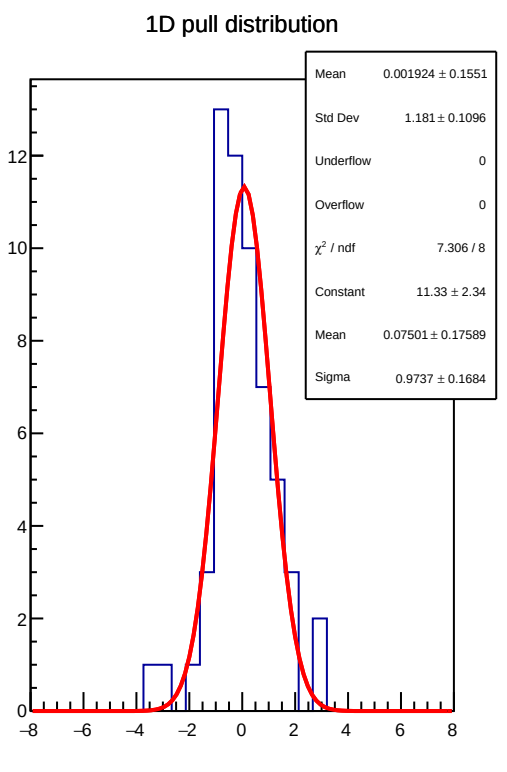

corr_usr_bpm12X RMS (ppm)
RMS (ppm)
110
100
90
80
70
60
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

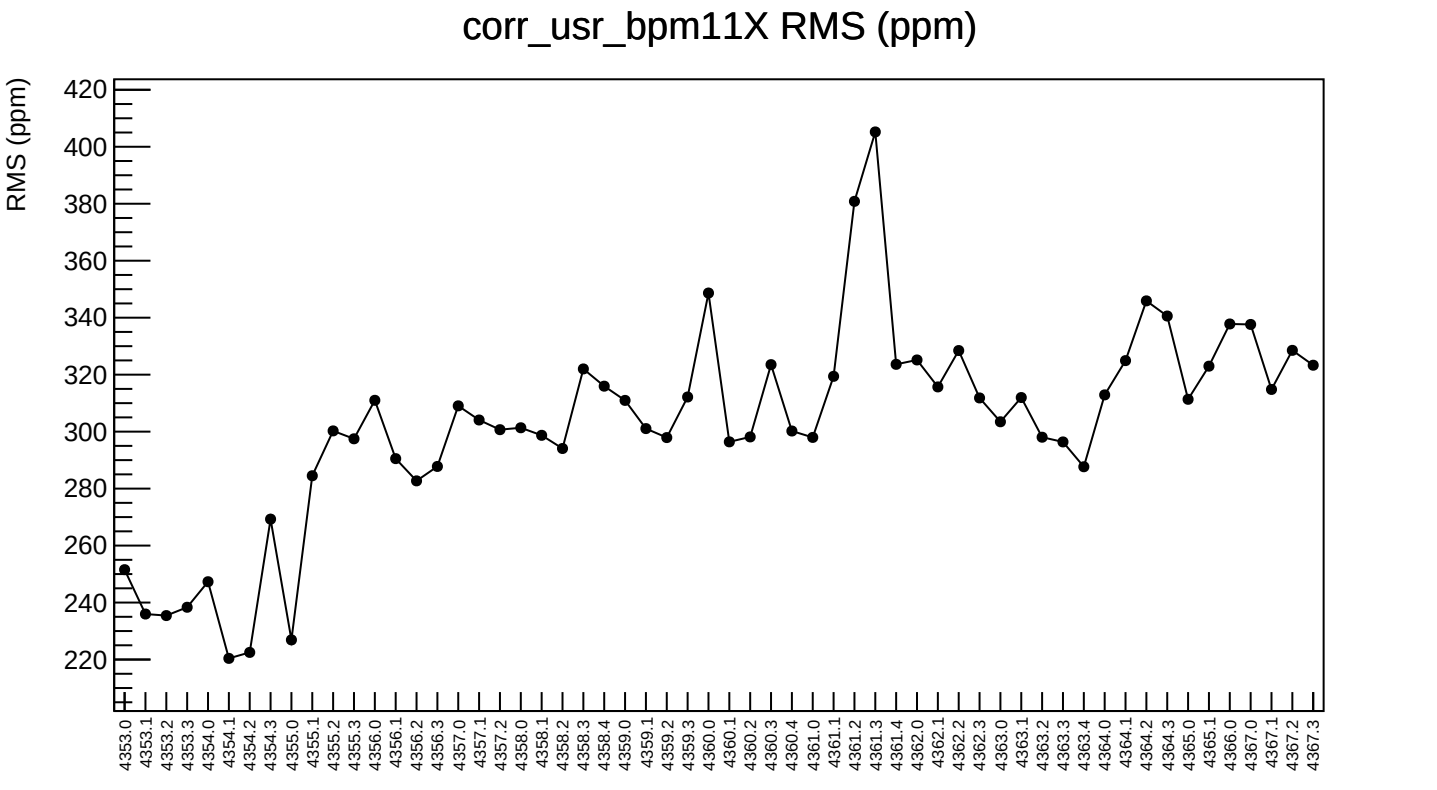

corr_usr_bpm12Y (ppb)
χ² / ndf 31.65 / 57
p0 −2.954 ± 39.44
1000
500
0
−500
−1000
2
1.5
1
0.5
0
−0.5
−1
−1.5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

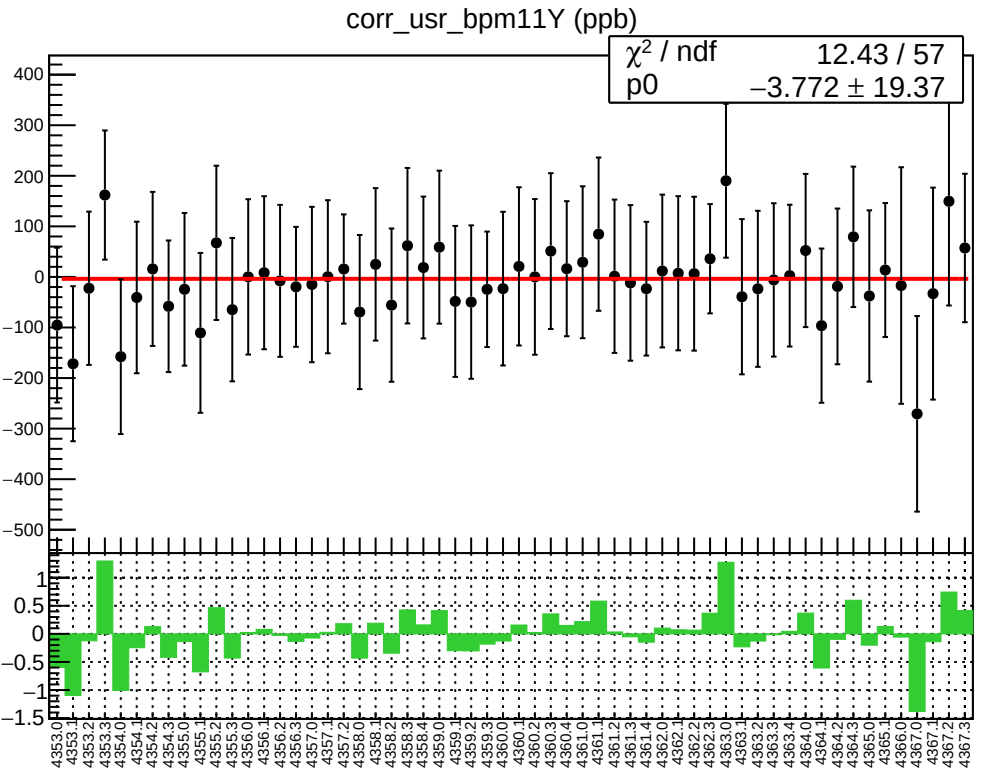

1D pull distribution
Mean 2.421e−05 ± 0.09699
Std Dev 0.7387 ± 0.06858
Underflow 0
Overflow 0
χ² / ndf 1.21 / 5
Constant 15.88 ± 2.81
Mean 1.884e−14 ± 8.720e−06
Sigma 0.7641 ± 0.0929
16
14
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

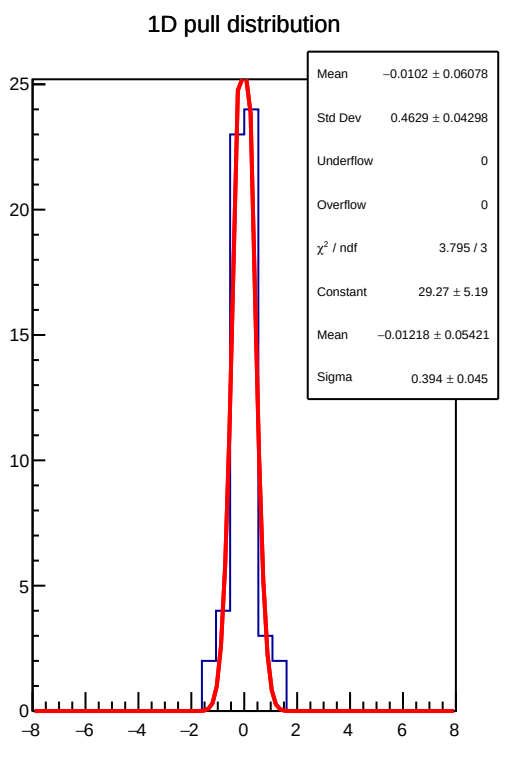

corr_usr_bpm12Y RMS (ppm)
RMS (ppm)
35
30
25
20
15
10
5
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

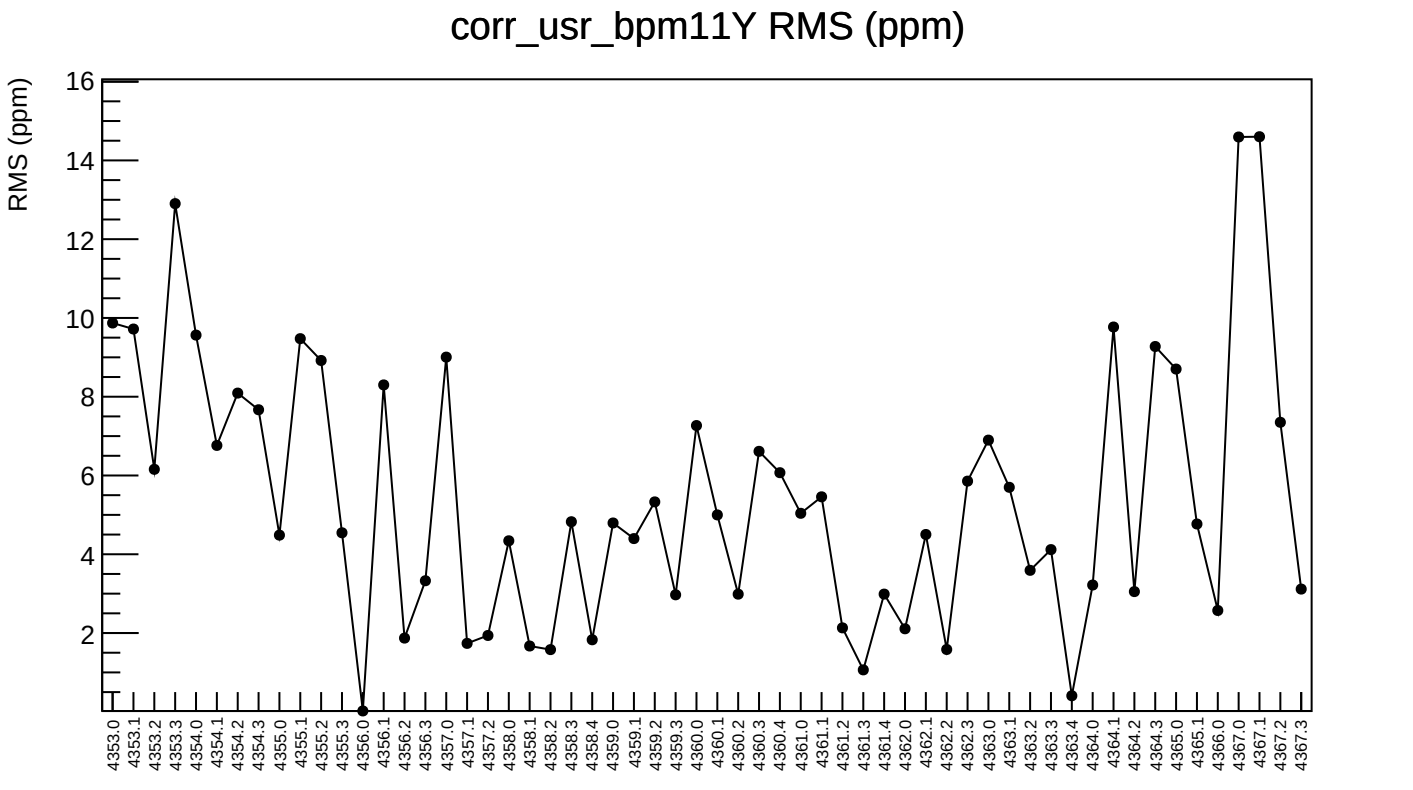

corr_usr_bpm11X (ppb)
χ² / ndf 80.89 / 57
p0 −143.7 ± 373.3
10000
5000
0
−5000
−10000
−15000
3
2
1
0
−1
−2
−3
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

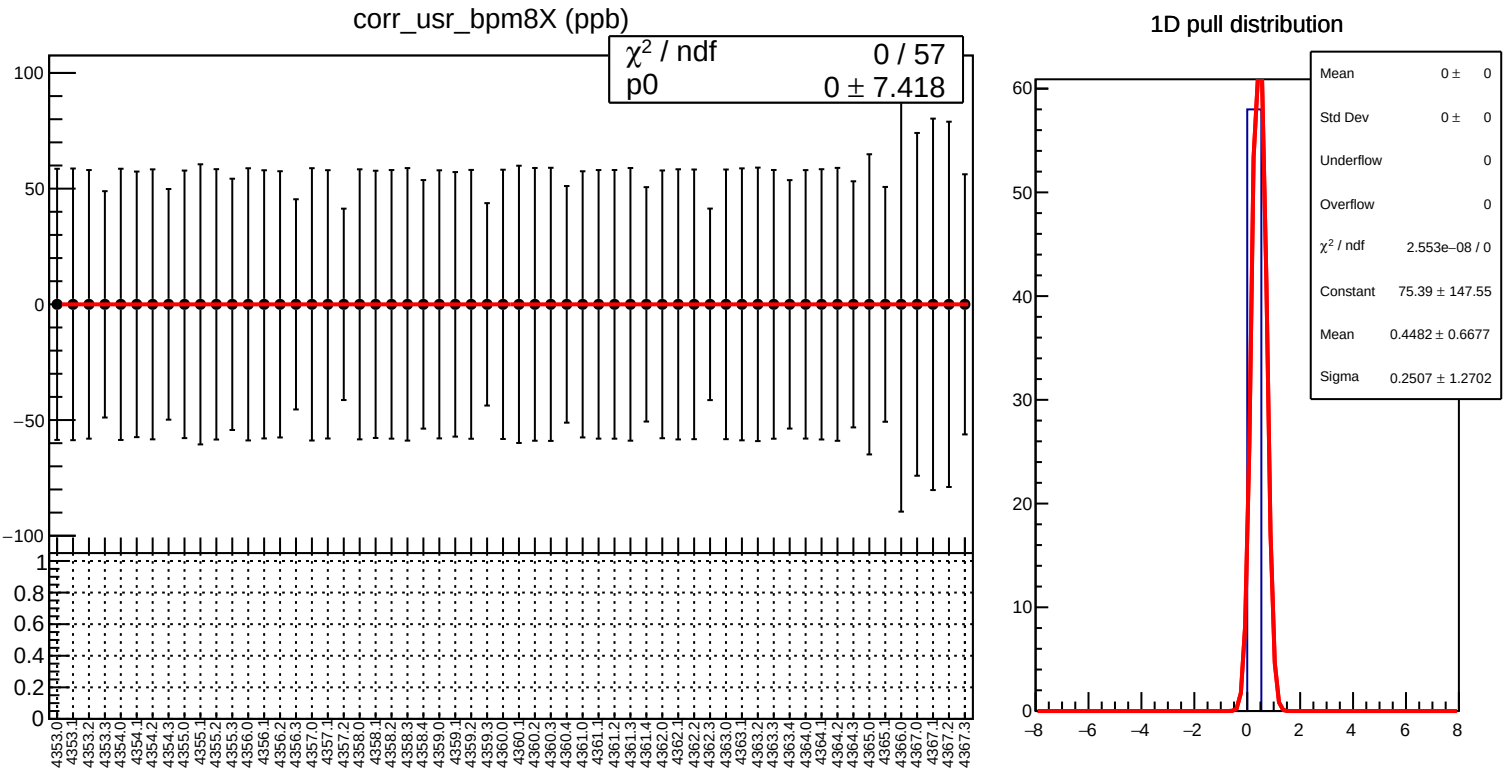

1D pull distribution
Mean 0.001924 ± 0.1551
Std Dev 1.181 ± 0.1096
Underflow 0
Overflow 0
χ² / ndf 7.306 / 8
Constant 11.33 ± 2.34
Mean 0.07501 ± 0.17589
Sigma 0.9737 ± 0.1684
12
10
8
6
4
2
0
−8
−6
−4
−2
0
2
4
6
8

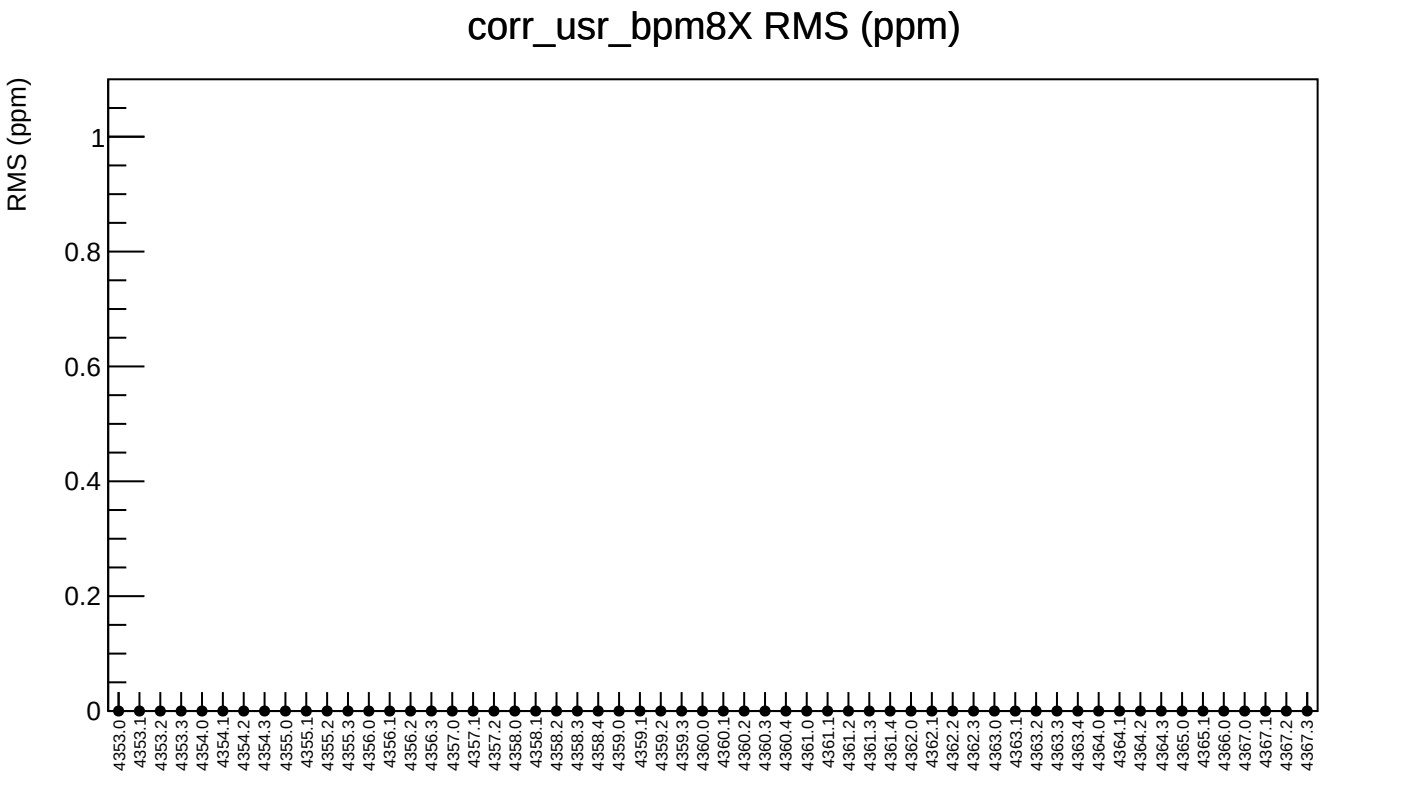

corr_usr_bpm11X RMS (ppm)
RMS (ppm)
420
400
380
360
340
320
300
280
260
240
220
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3

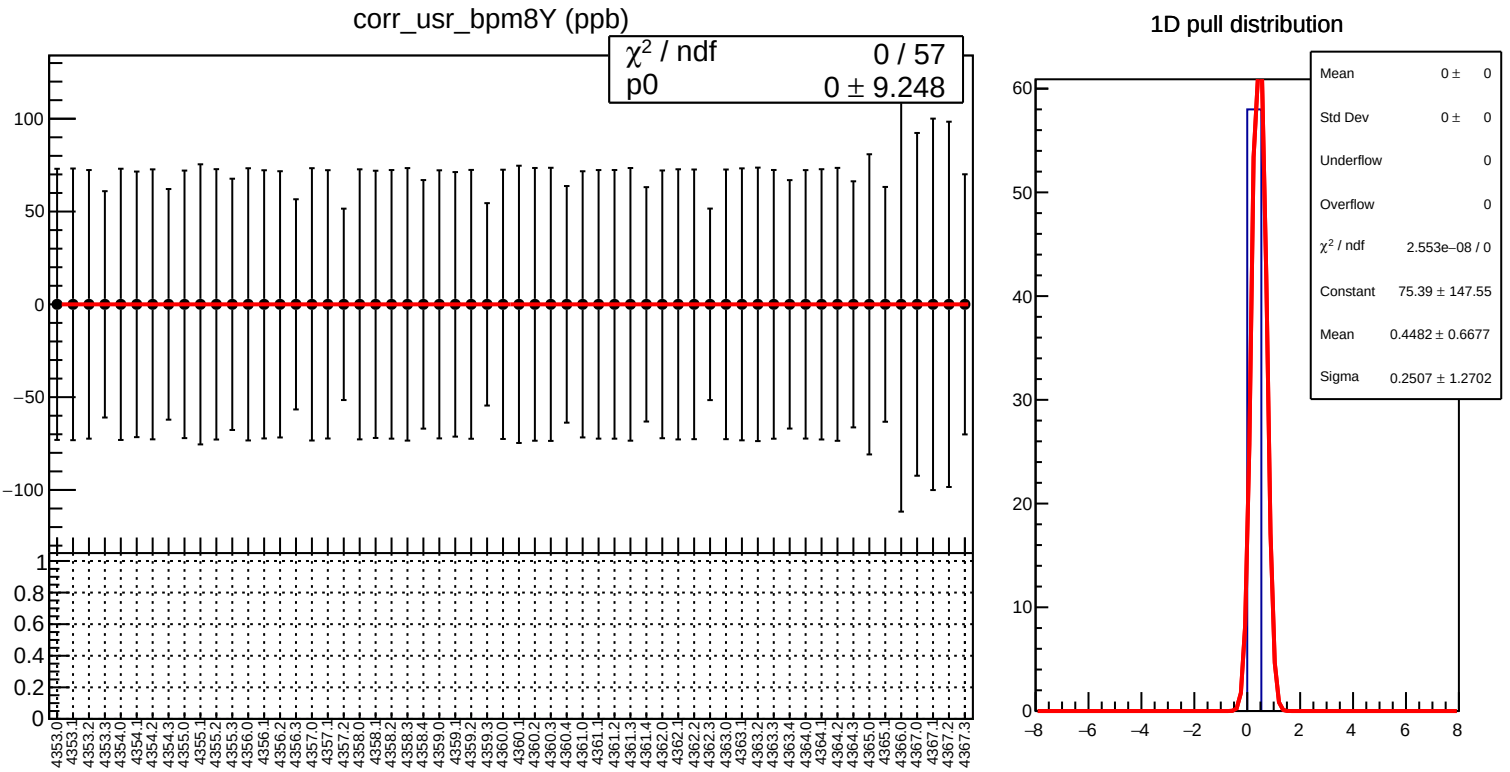

corr_usr_bpm11Y (ppb)
χ² / ndf 12.43 / 57
p0 −3.772 ± 19.37

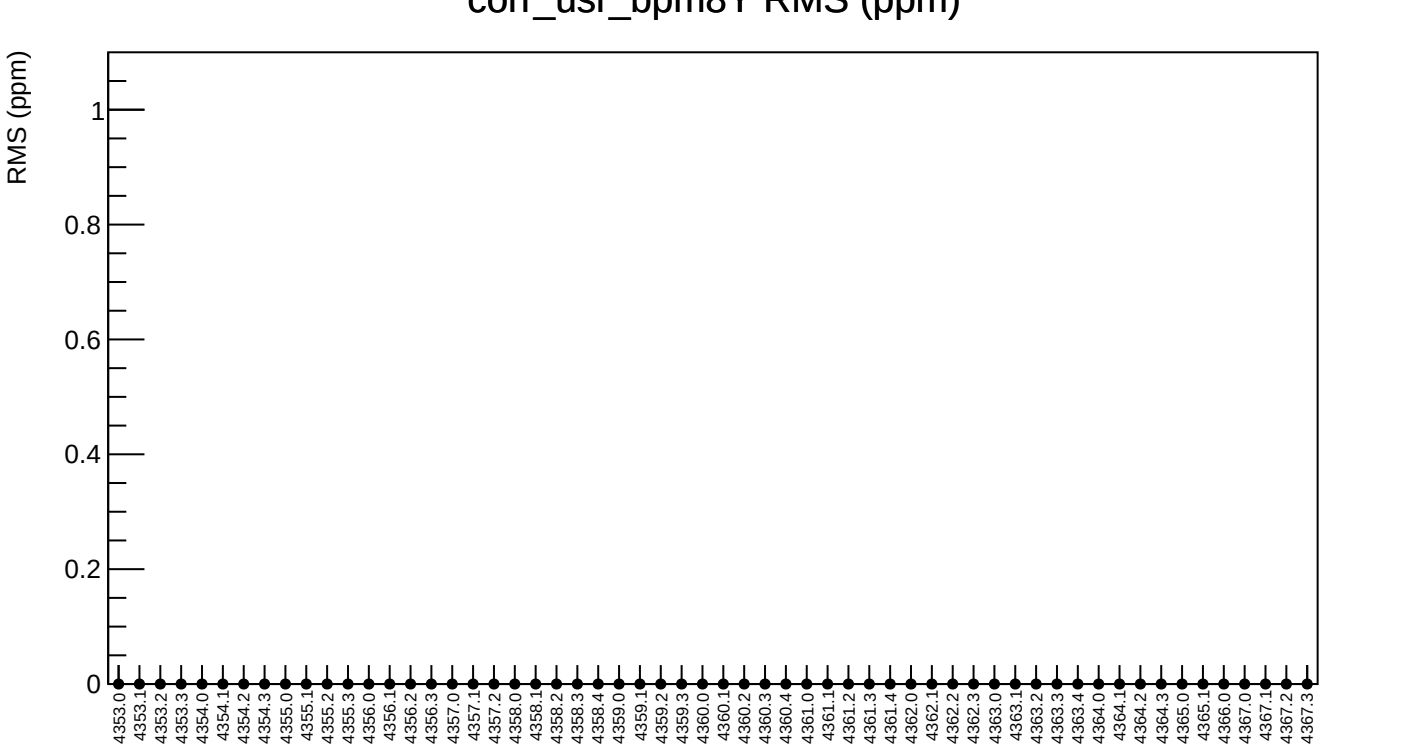

1D pull distribution
Mean −0.0102 ± 0.06078
Std Dev 0.4629 ± 0.04298
Underflow 0
Overflow 0
χ² / ndf 3.795 / 3
Constant 29.27 ± 5.19
Mean −0.01218 ± 0.05421
Sigma 0.394 ± 0.045


corr_usr_bpm11Y RMS (ppm)
RMS (ppm)
16
14
12
10
8
6
4
2
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usr_bpm8X (ppb)
χ² / ndf 0 / 57
p0 0 ± 7.418
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702


corr_usr_bpm8X RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3


corr_usr_bpm8Y (ppb)
χ² / ndf 0 / 57
p0 0 ± 9.248
1D pull distribution
Mean 0 ± 0
Std Dev 0 ± 0
Underflow 0
Overflow 0
χ² / ndf 2.553e−08 / 0
Constant 75.39 ± 147.55
Mean 0.4482 ± 0.6677
Sigma 0.2507 ± 1.2702


corr_usr_bpm8Y RMS (ppm)
RMS (ppm)
1
0.8
0.6
0.4
0.2
0
4353.0
4353.1
4353.2
4353.3
4354.0
4354.1
4354.2
4354.3
4355.0
4355.1
4355.2
4355.3
4356.0
4356.1
4356.2
4356.3
4357.0
4357.1
4357.2
4358.0
4358.1
4358.2
4358.3
4358.4
4359.0
4359.1
4359.2
4359.3
4360.0
4360.1
4360.2
4360.3
4360.4
4361.0
4361.1
4361.2
4361.3
4361.4
4362.0
4362.1
4362.2
4362.3
4363.0
4363.1
4363.2
4363.3
4363.4
4364.0
4364.1
4364.2
4364.3
4365.0
4365.1
4366.0
4367.0
4367.1
4367.2
4367.3