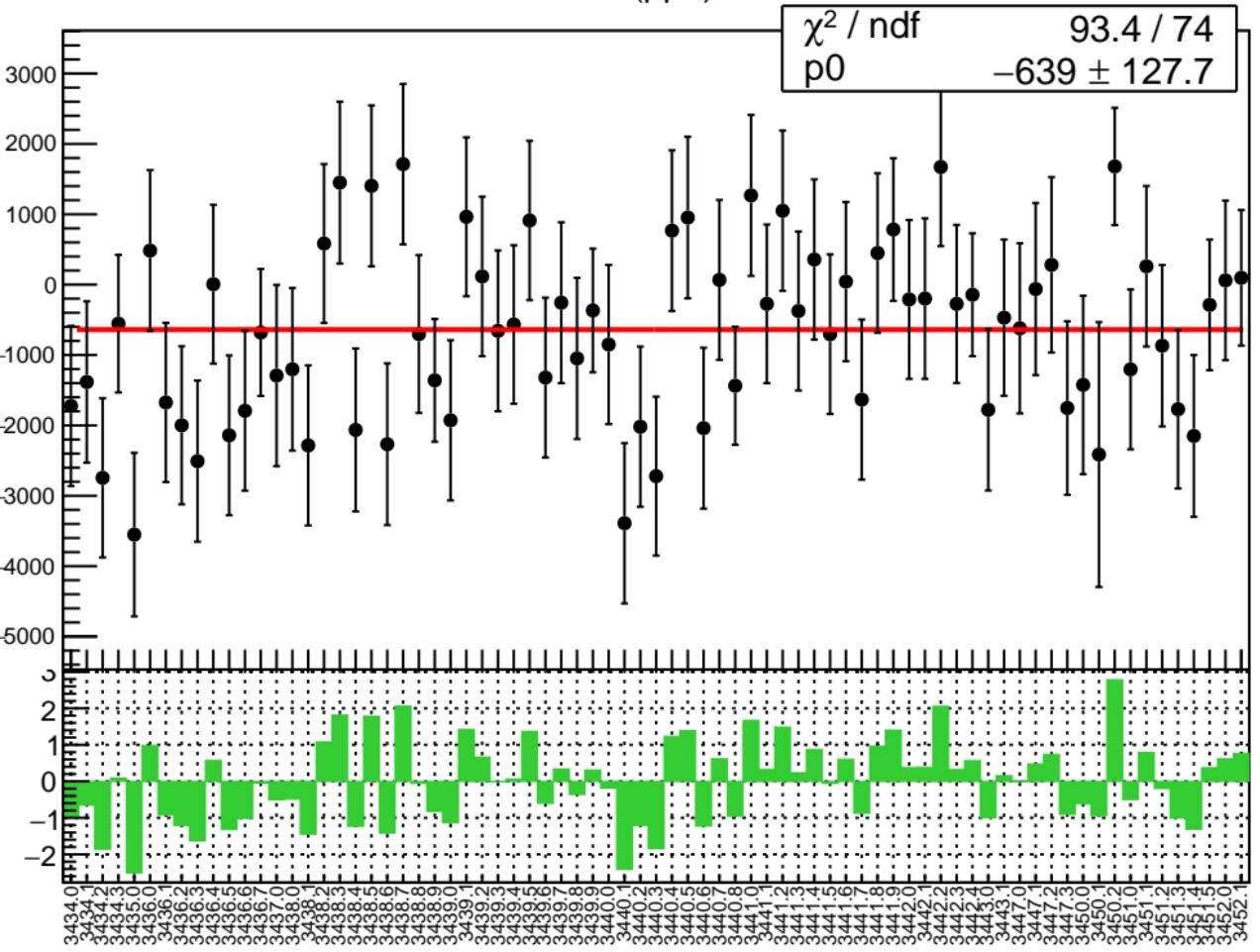
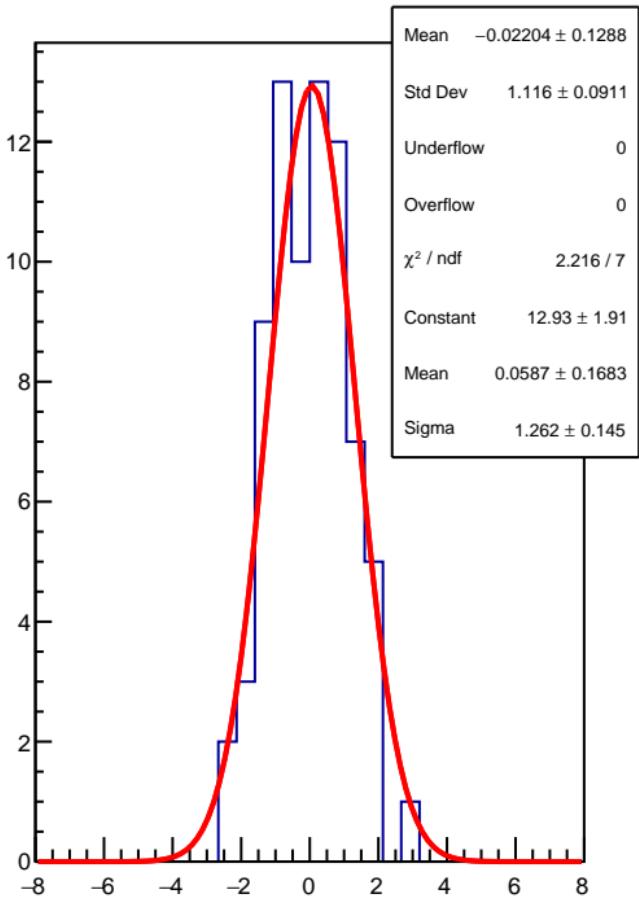


Adet (ppb)

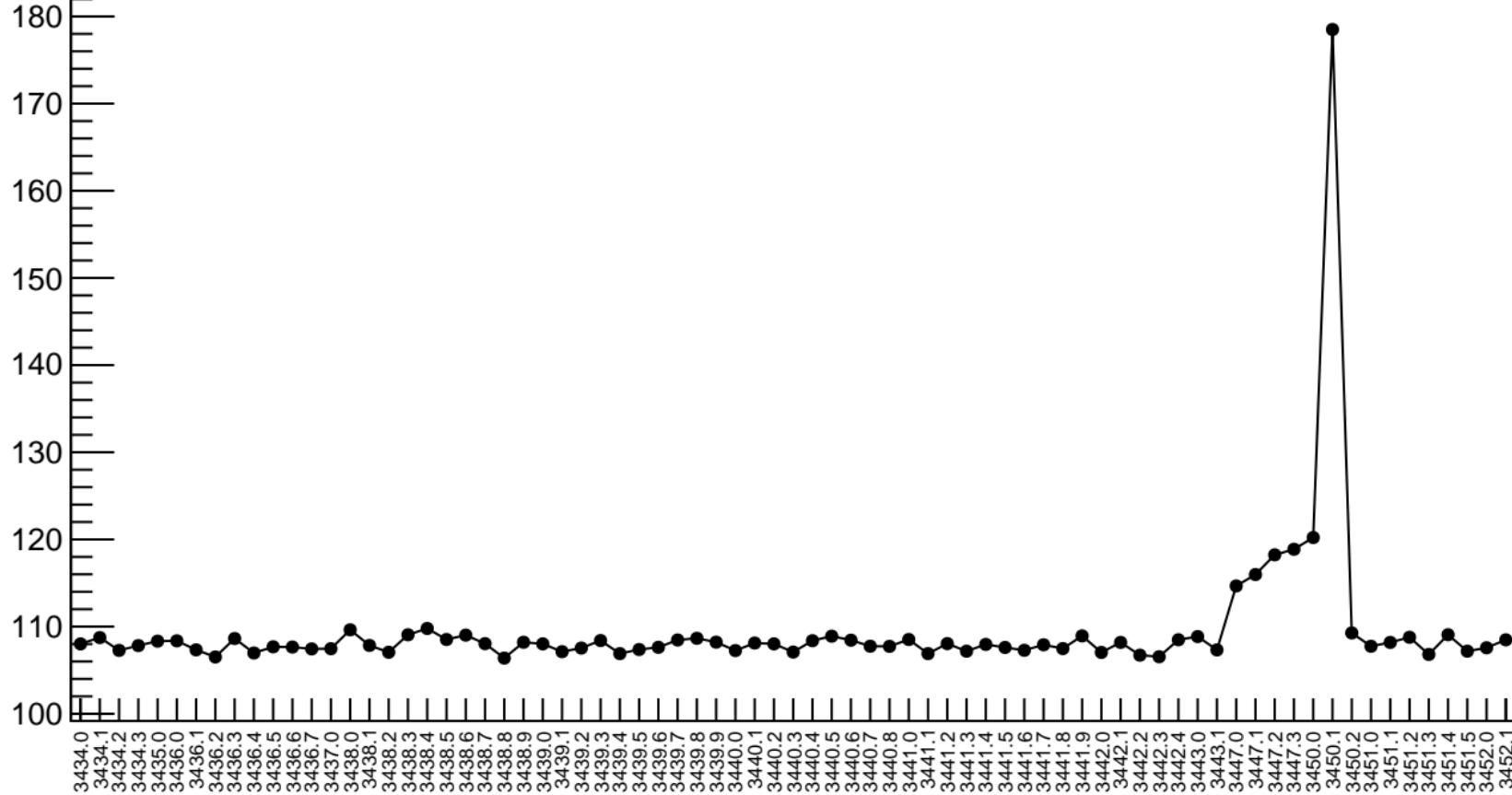


1D pull distribution



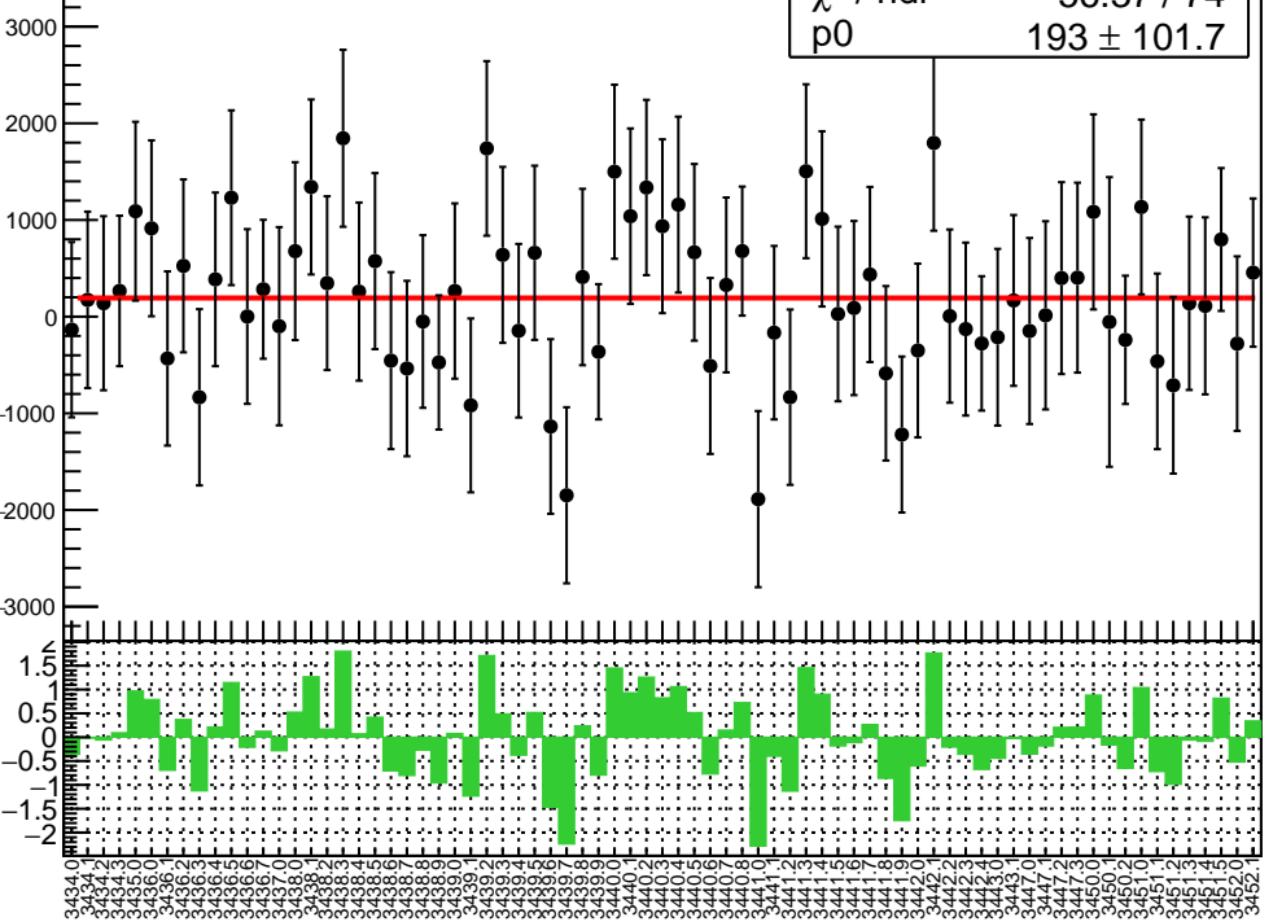
Adet RMS (ppm)

RMS (ppm)

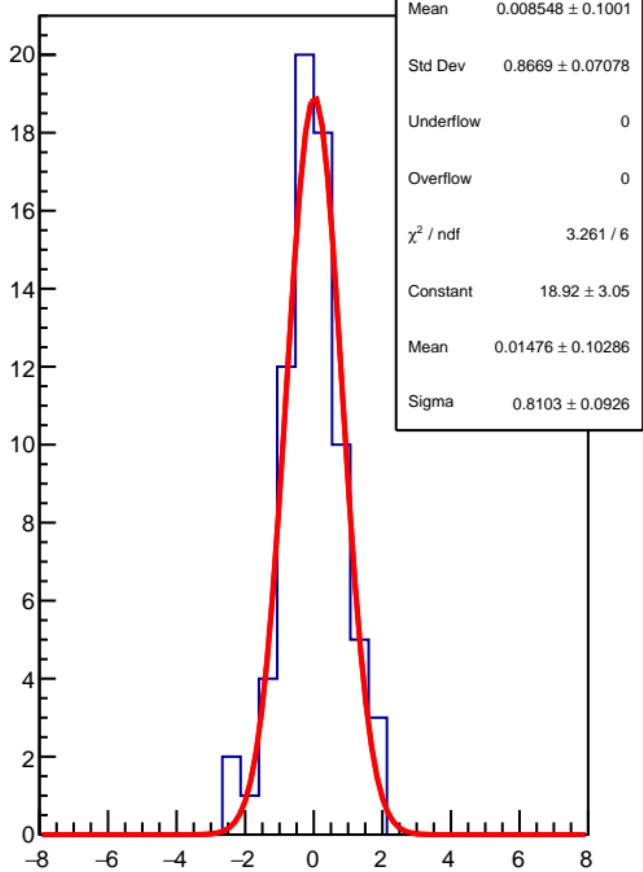


corr_Adet_bpm4eX (ppb)

χ^2 / ndf 56.37 / 74
p0 193 ± 101.7

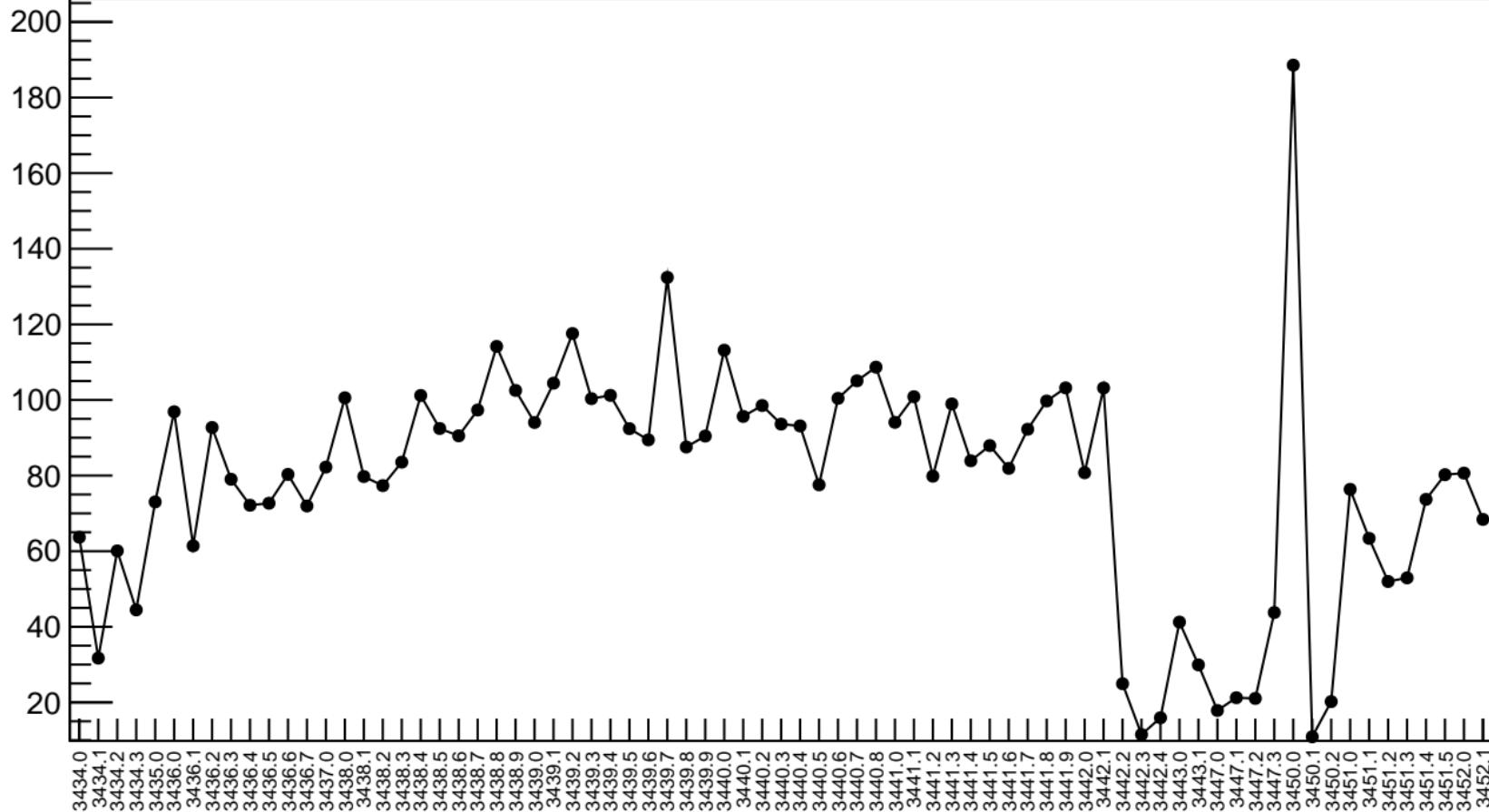


1D pull distribution



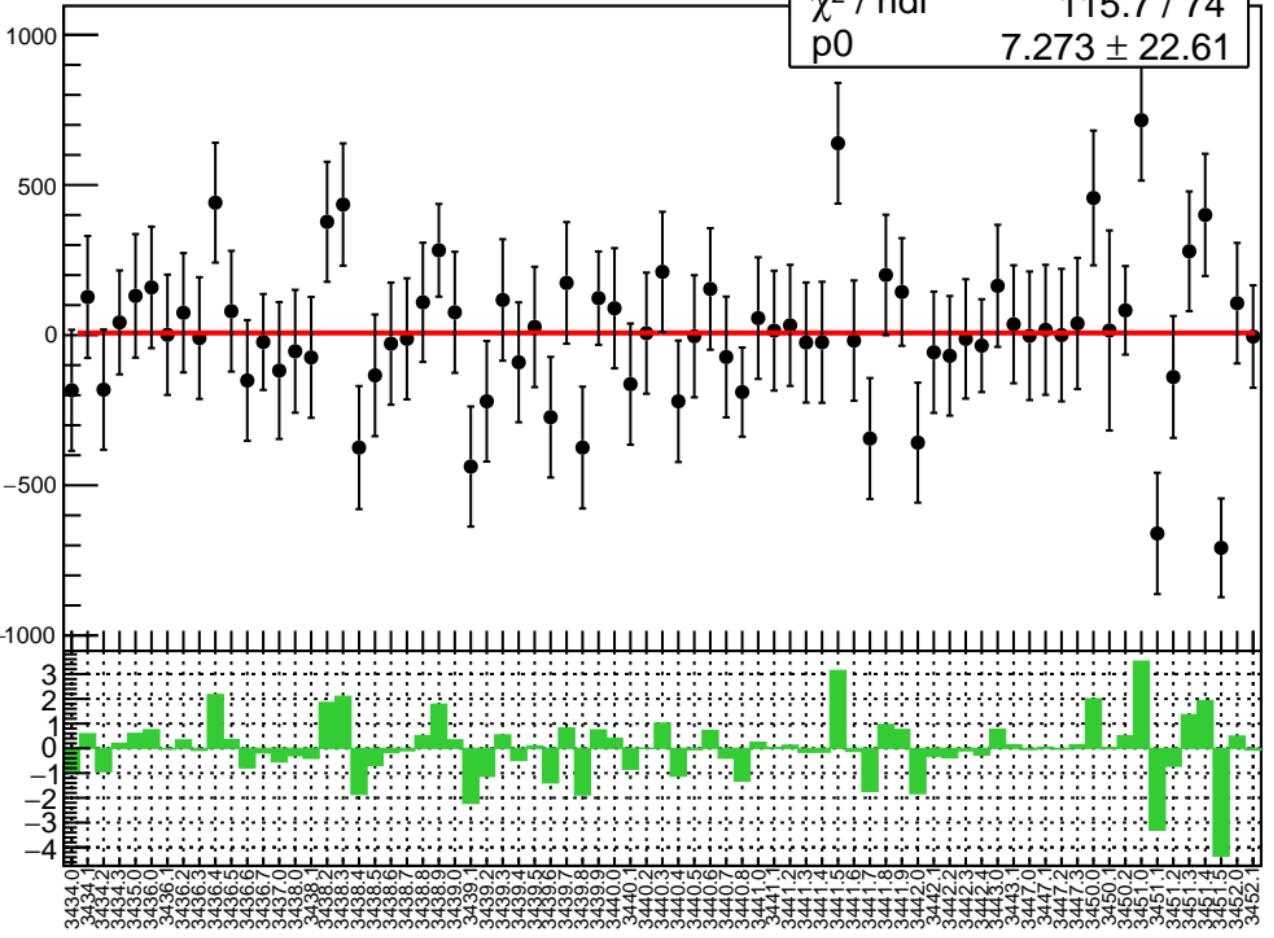
corr_Adet_bpm4eX RMS (ppm)

RMS (ppm)

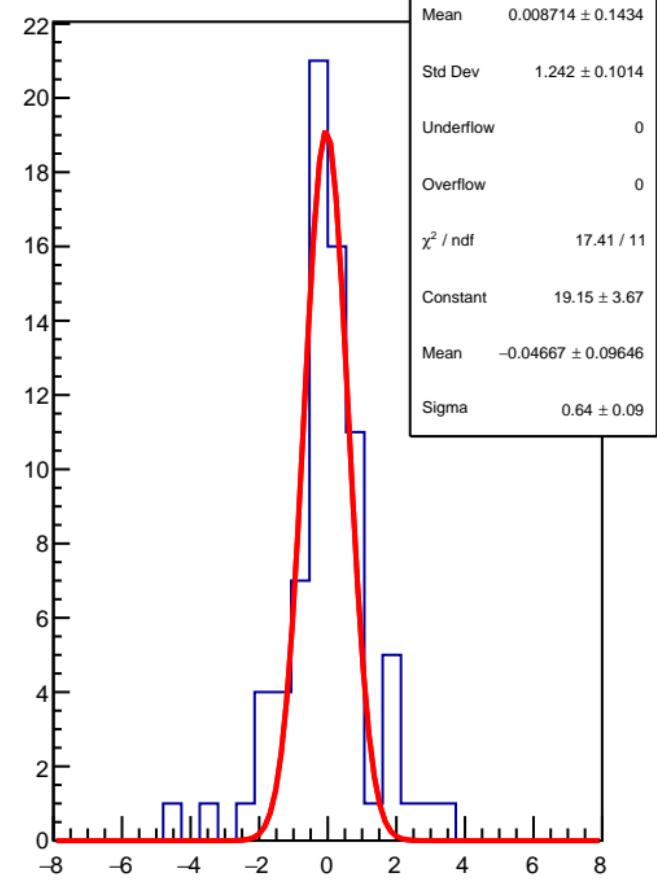


corr_Adet_bpm4eY (ppb)

χ^2 / ndf 115.7 / 74
p0 7.273 ± 22.61

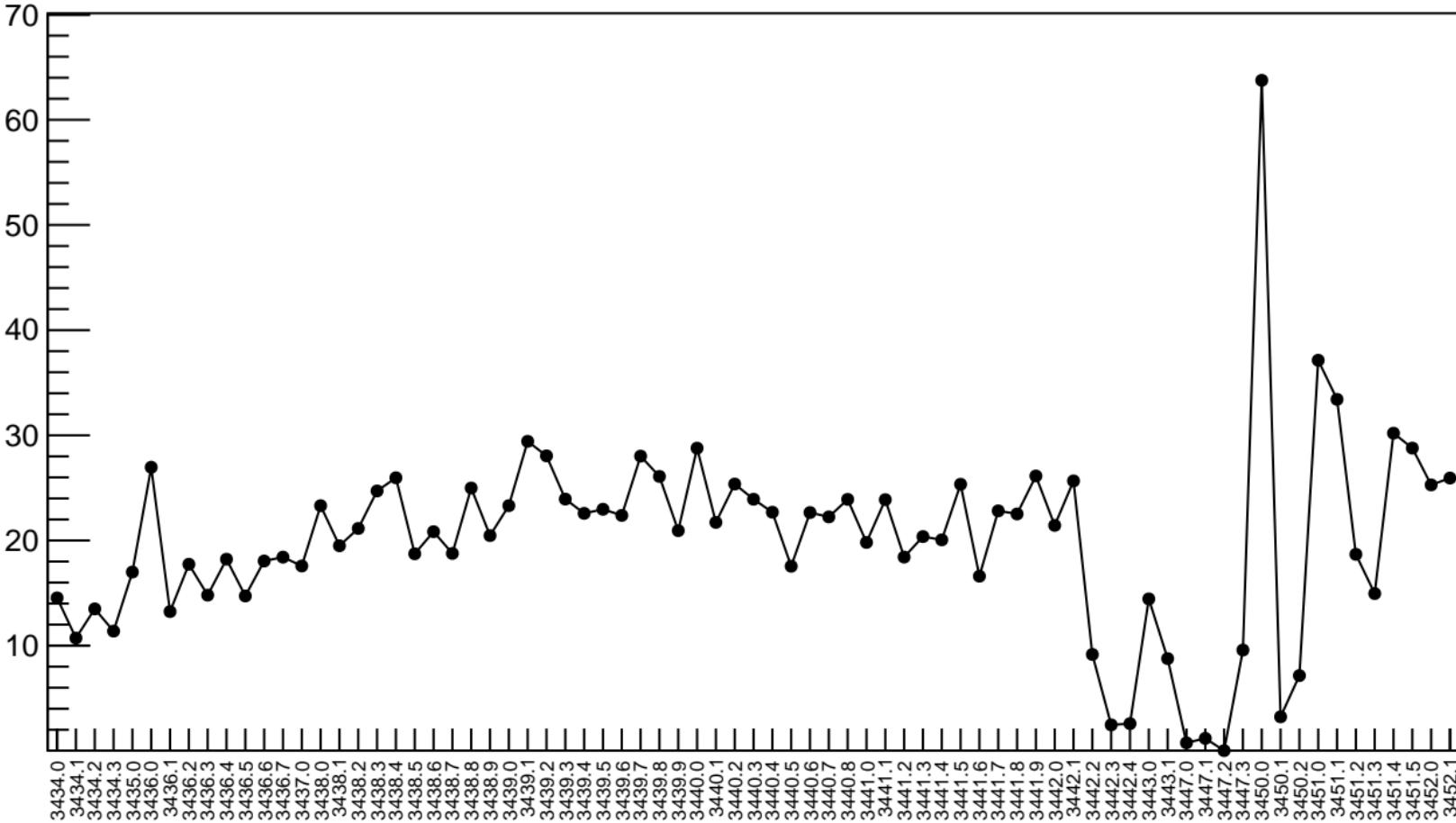


1D pull distribution



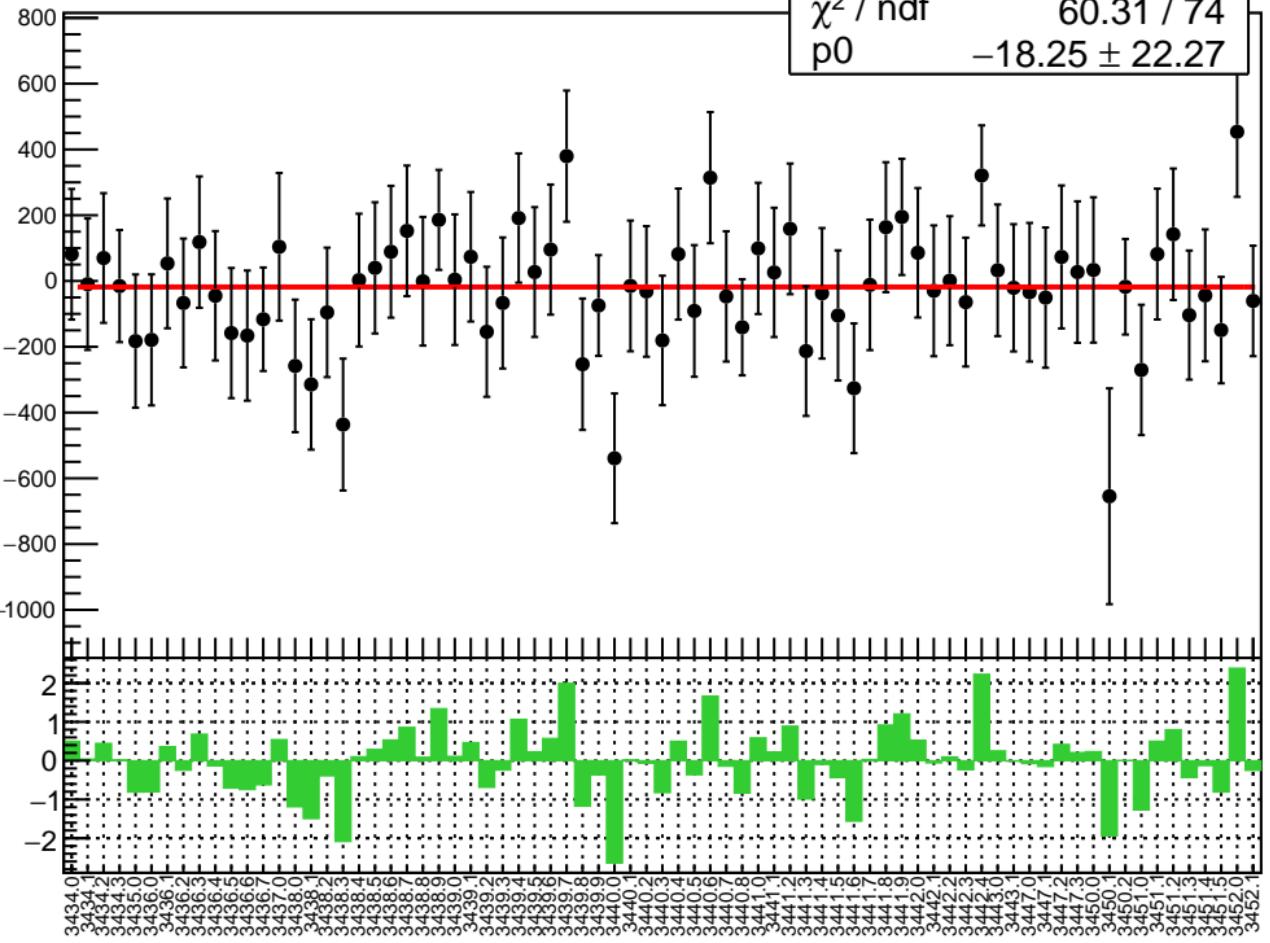
corr_Adet_bpm4eY RMS (ppm)

RMS (ppm)

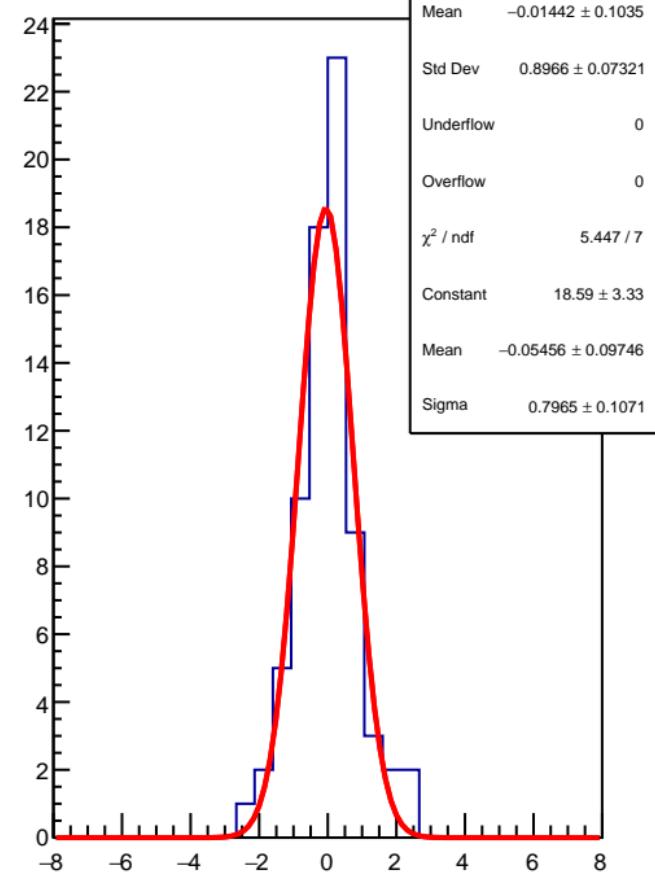


corr_Adet_bpm4aX (ppb)

χ^2 / ndf 60.31 / 74
p0 -18.25 ± 22.27

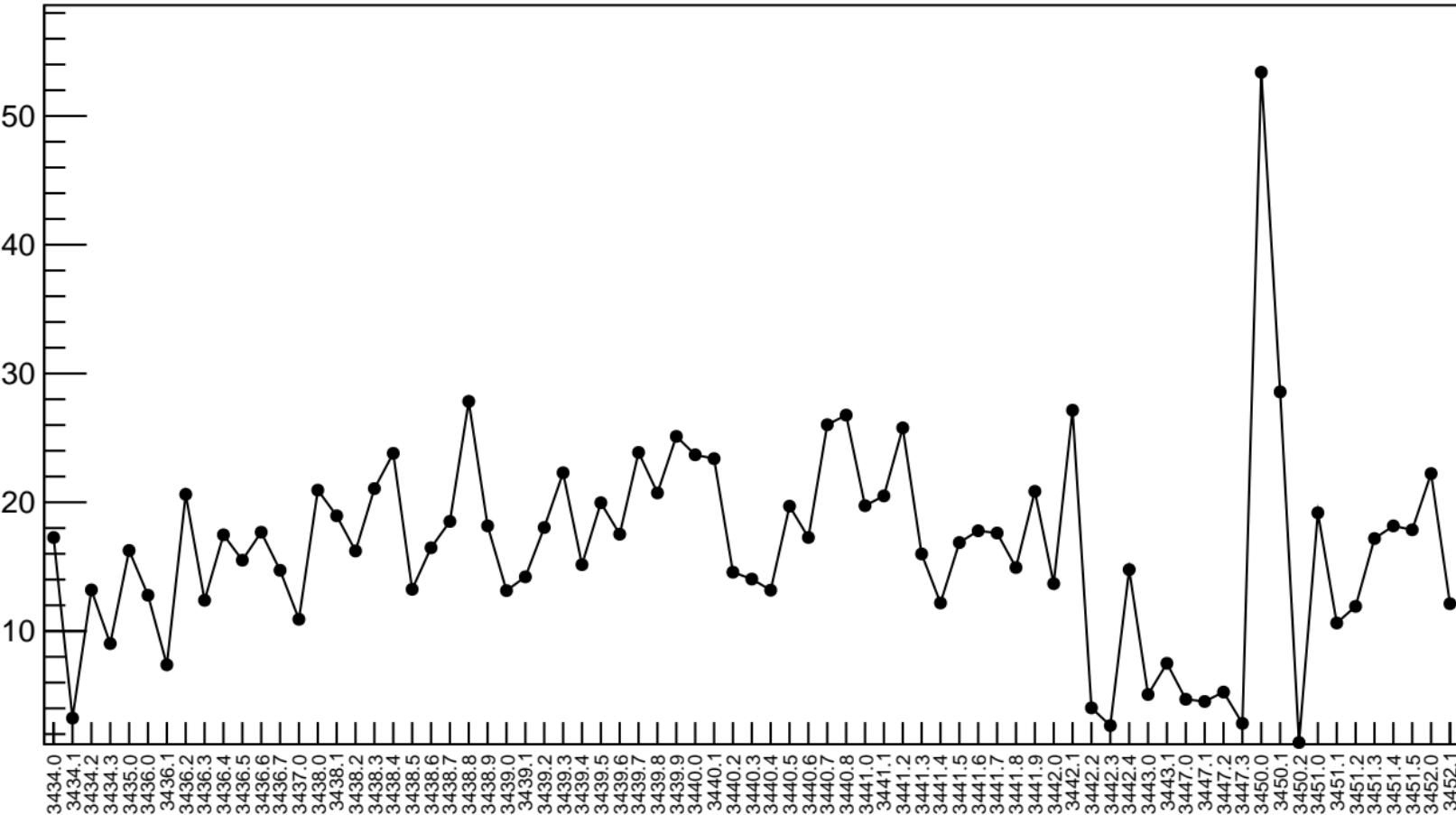


1D pull distribution

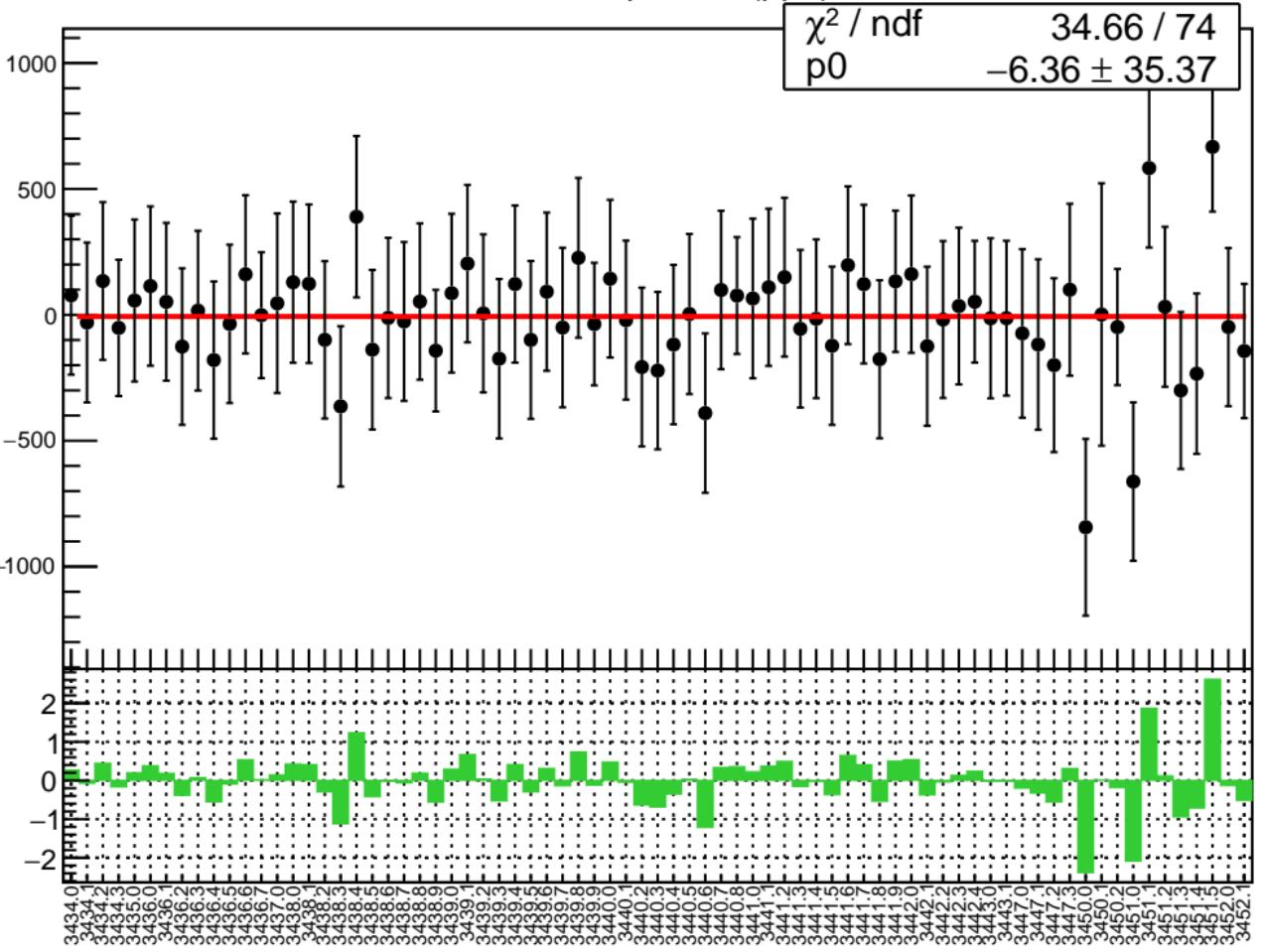


corr_Adet_bpm4aX RMS (ppm)

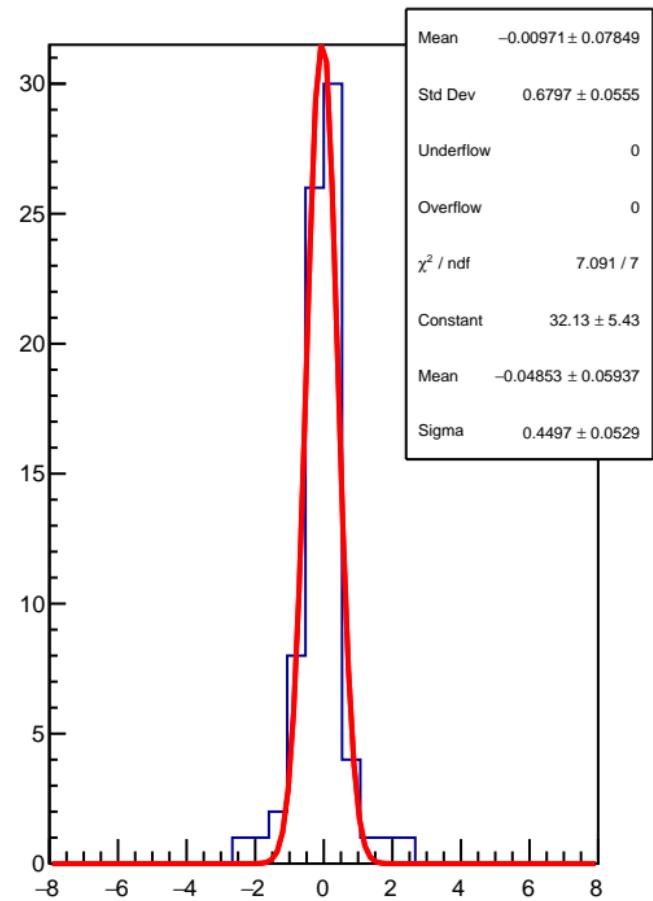
RMS (ppm)



corr_Adet_bpm4aY (ppb)

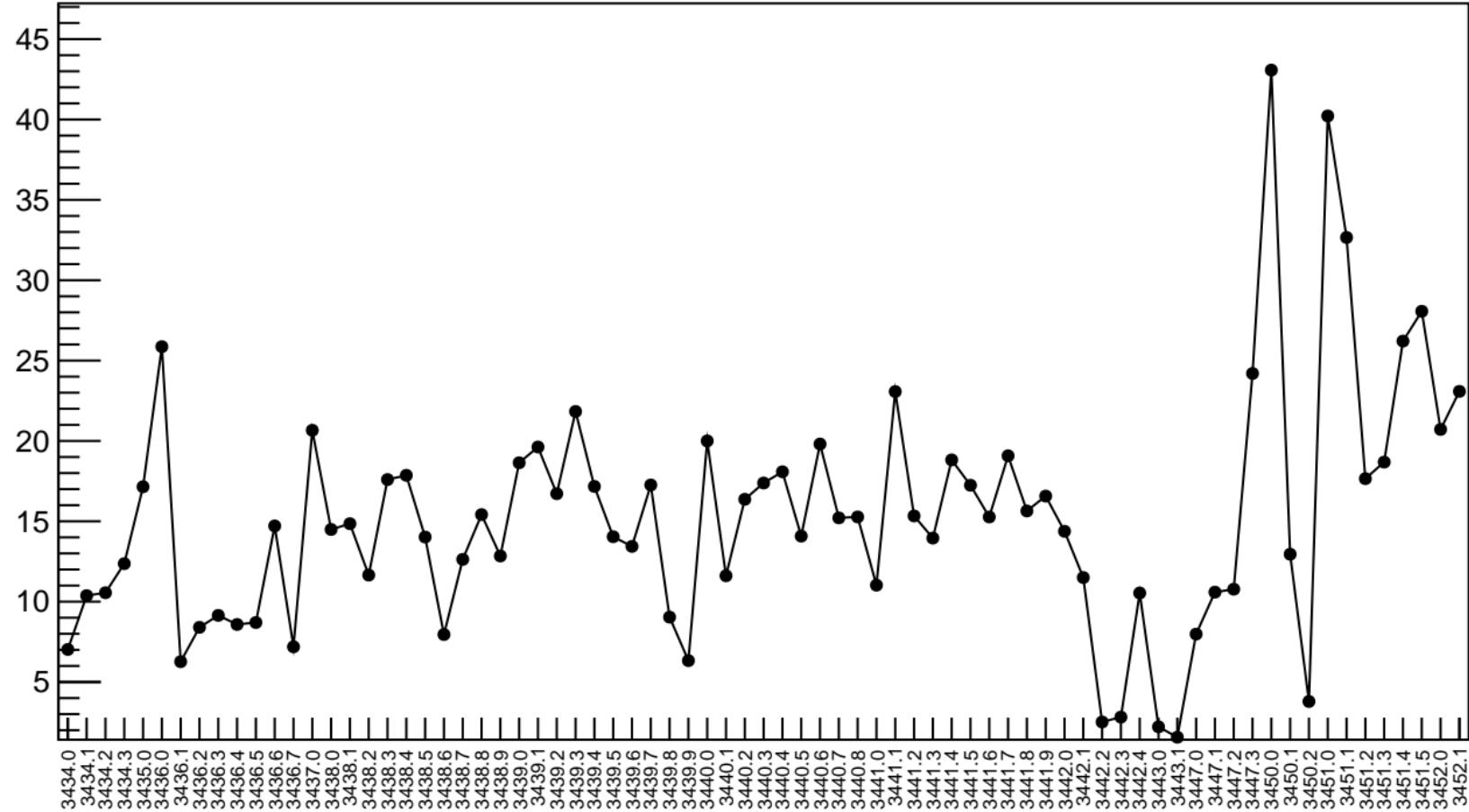


1D pull distribution

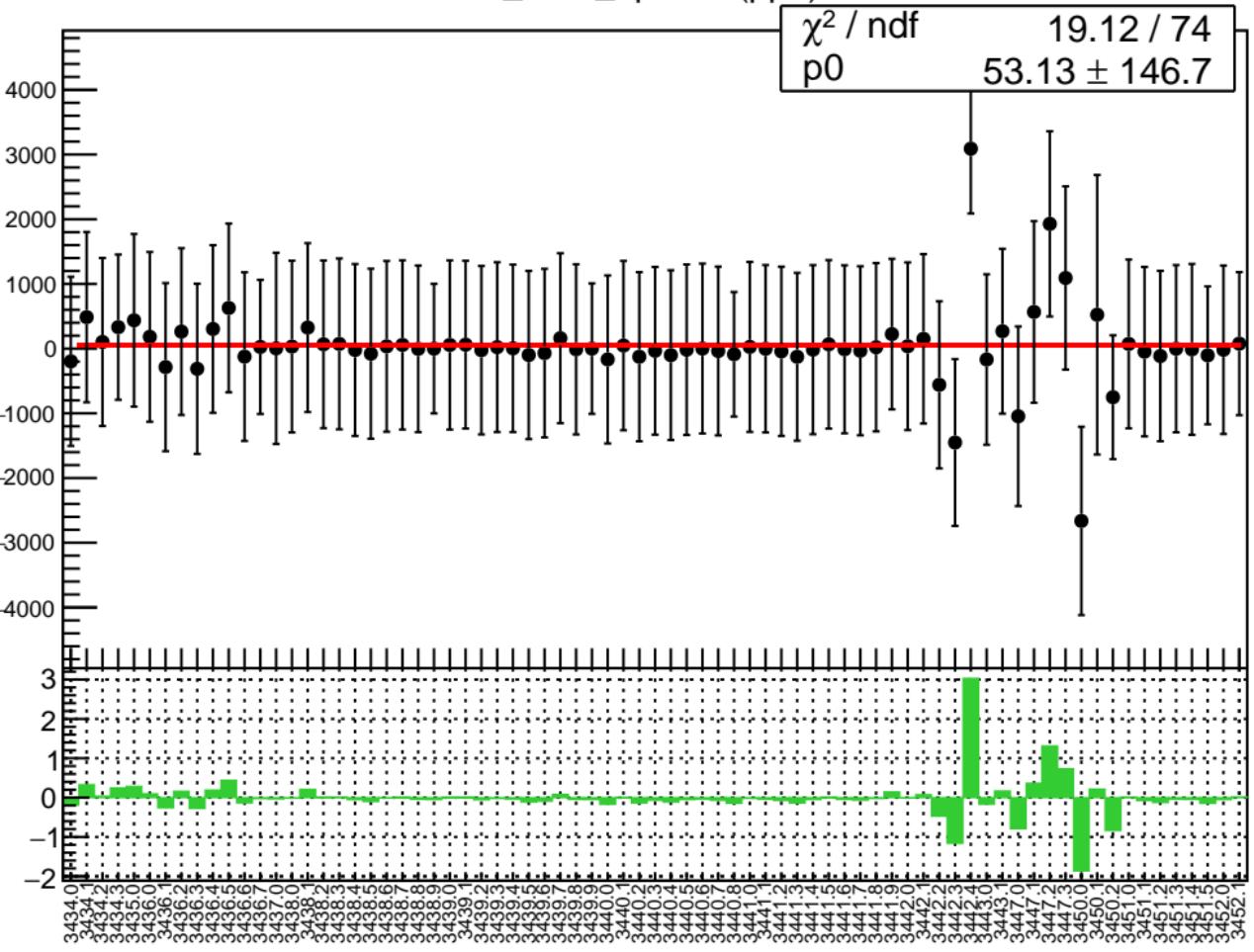


corr_Adet_bpm4aY RMS (ppm)

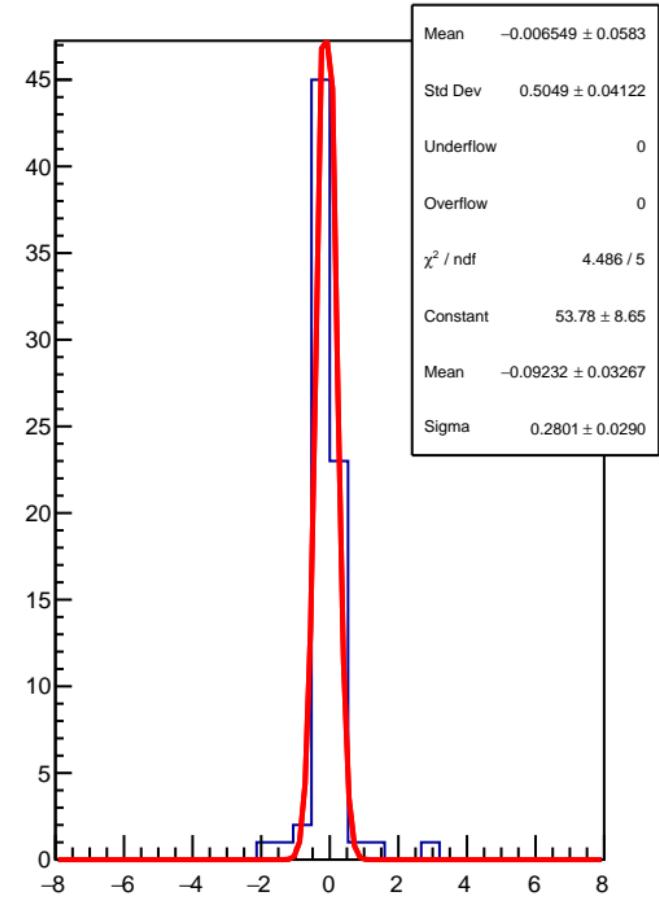
RMS (ppm)



corr_Adet_bpm1X (ppb)



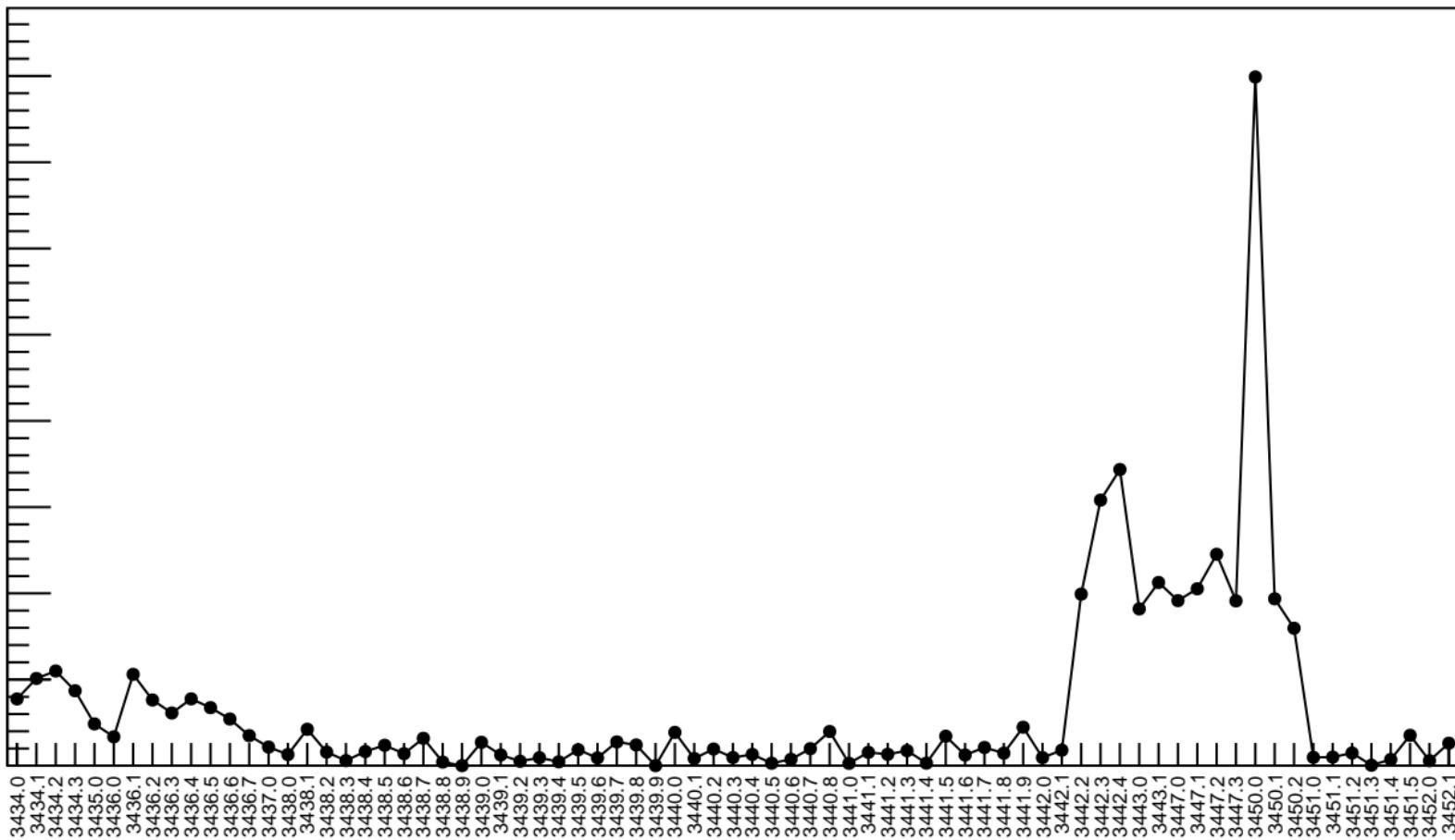
1D pull distribution



corr_Adet_bpm1X RMS (ppm)

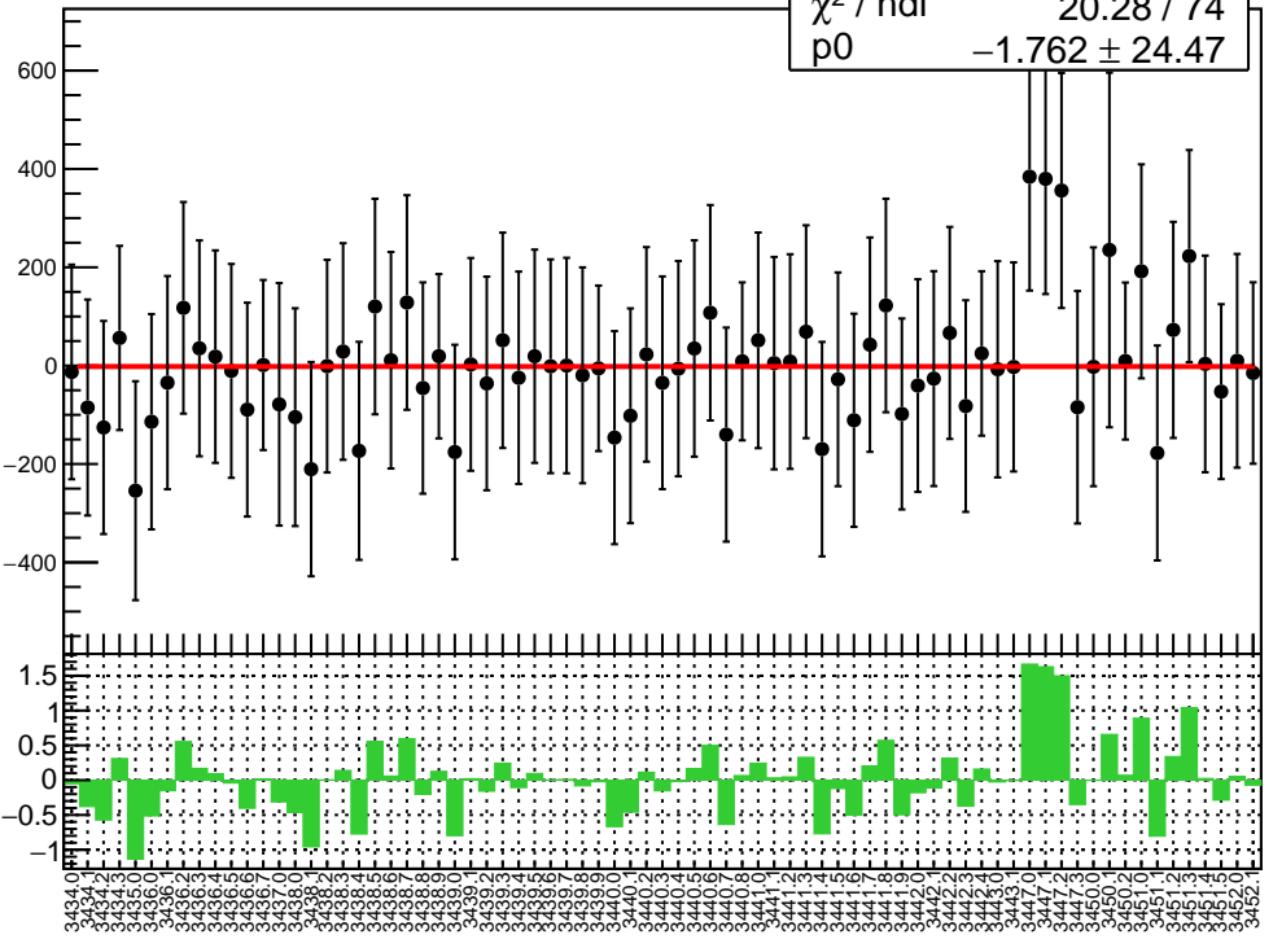
RMS (ppm)

400
350
300
250
200
150
100
50

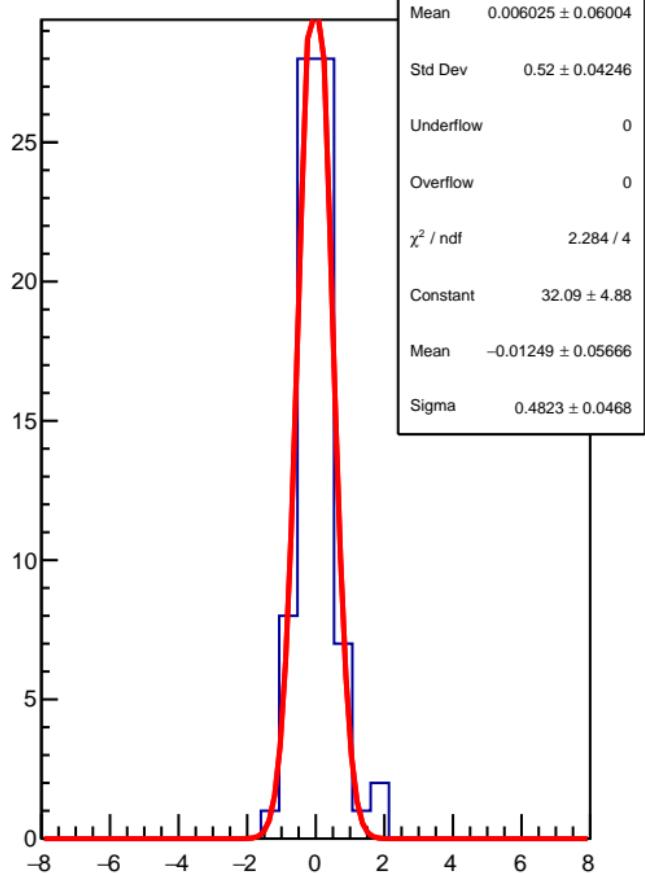


corr_Adet_bpm1Y (ppb)

χ^2 / ndf 20.28 / 74
 p_0 -1.762 ± 24.47

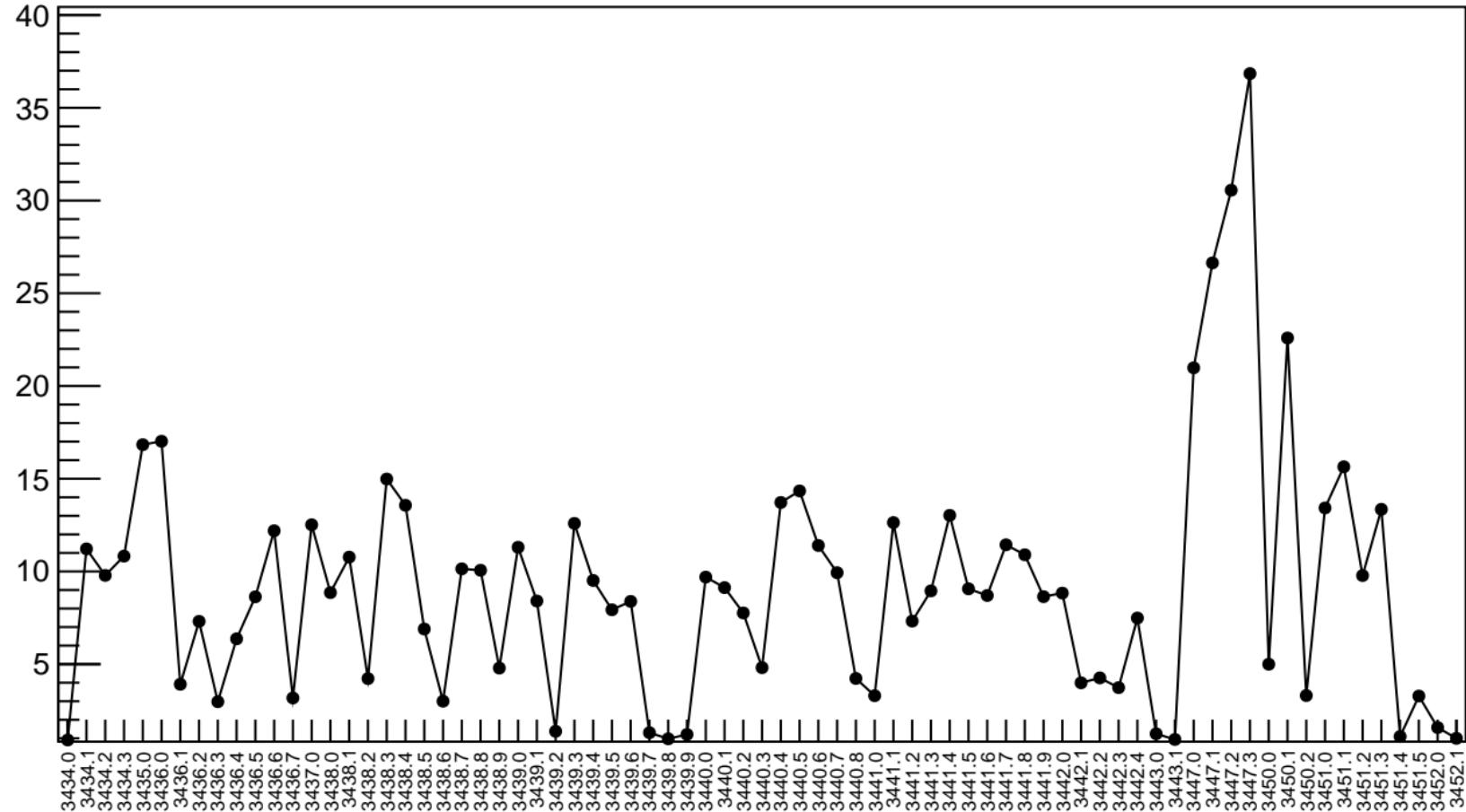


1D pull distribution



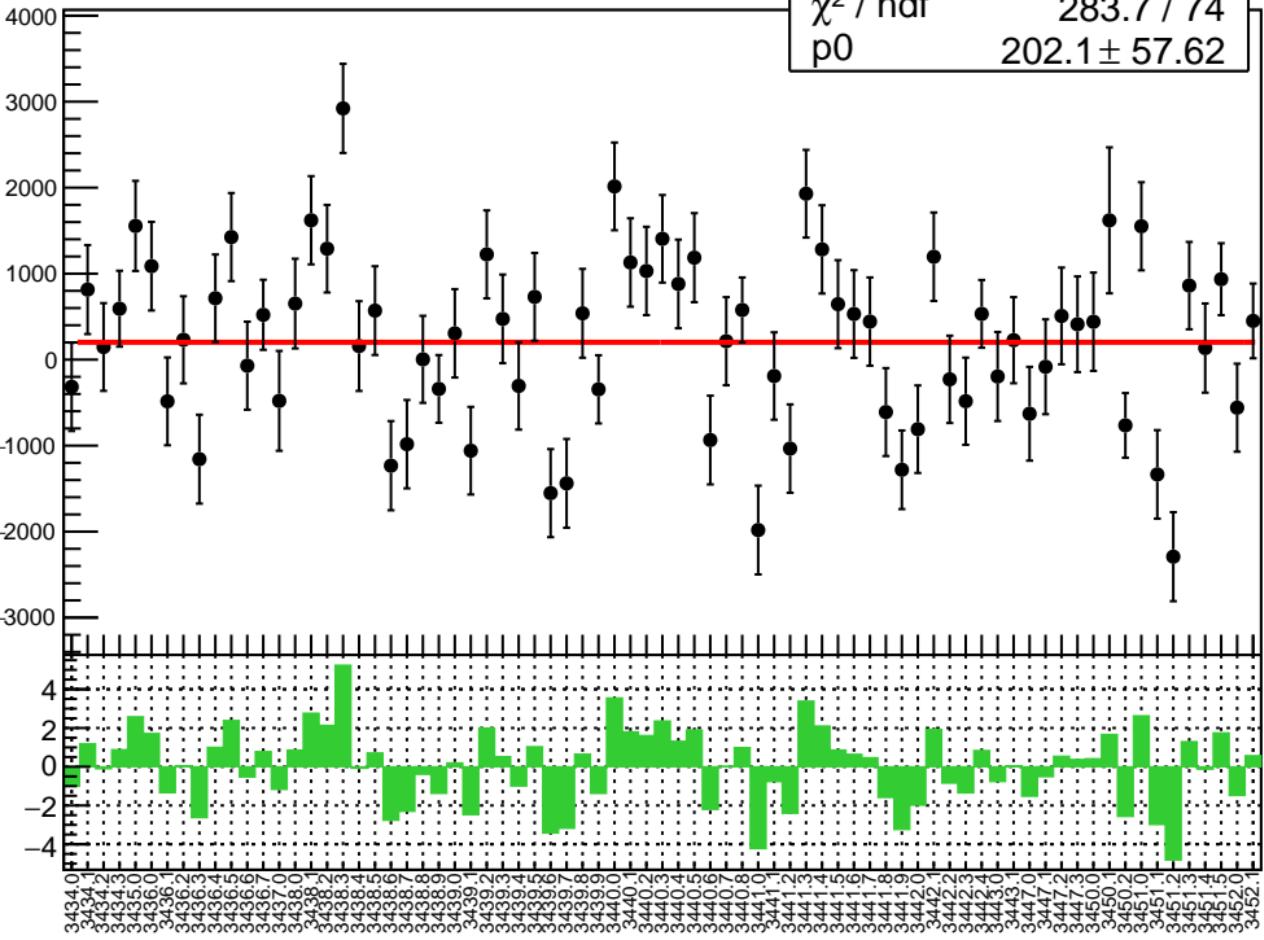
corr_Adet_bpm1Y RMS (ppm)

RMS (ppm)



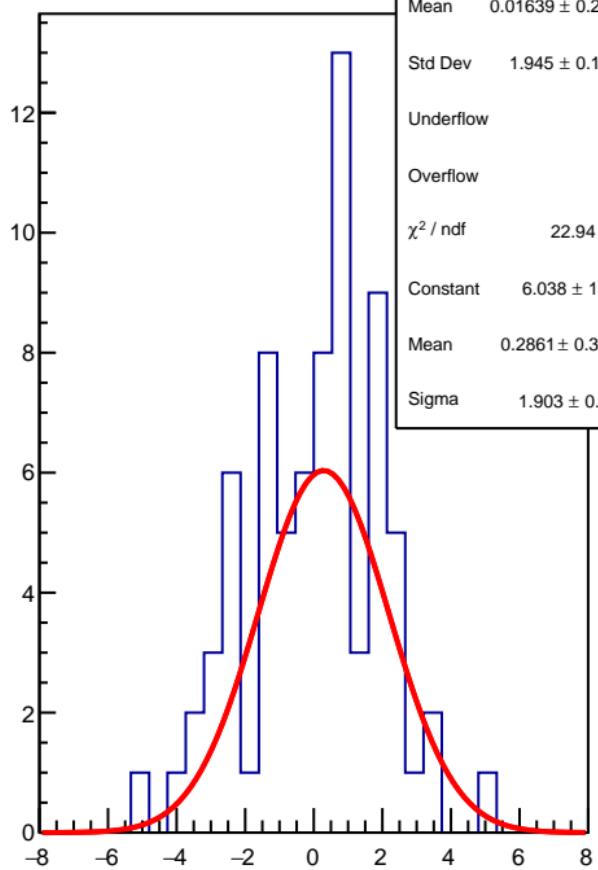
corr_Adet_bpm16X (ppb)

χ^2 / ndf 283.7 / 74
p0 202.1 ± 57.62



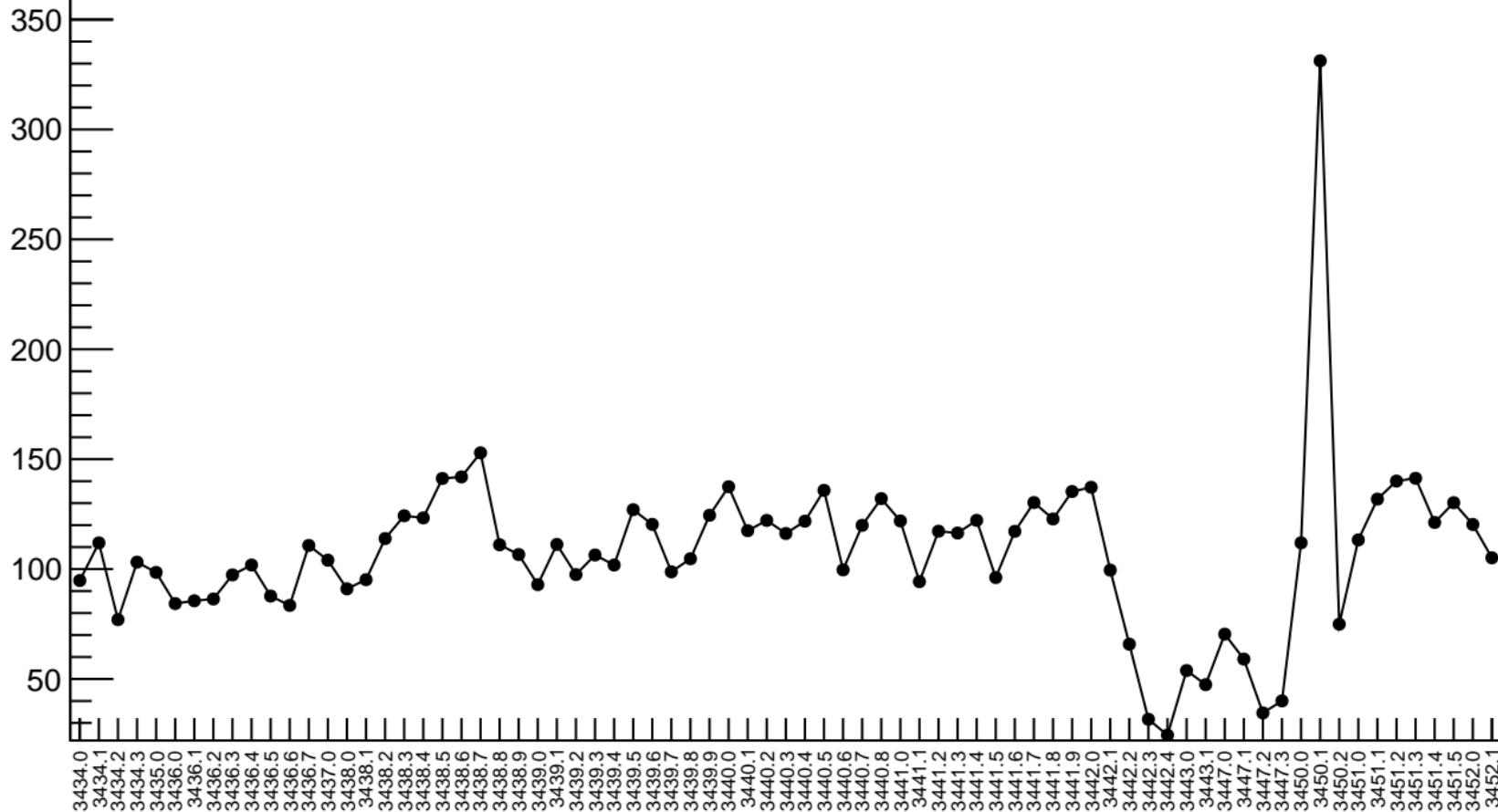
1D pull distribution

Mean 0.01639 ± 0.2246
Std Dev 1.945 ± 0.1588
Underflow 0
Overflow 0
 χ^2 / ndf 22.94 / 14
Constant 6.038 ± 1.611
Mean 0.2861 ± 0.3034
Sigma 1.903 ± 0.509



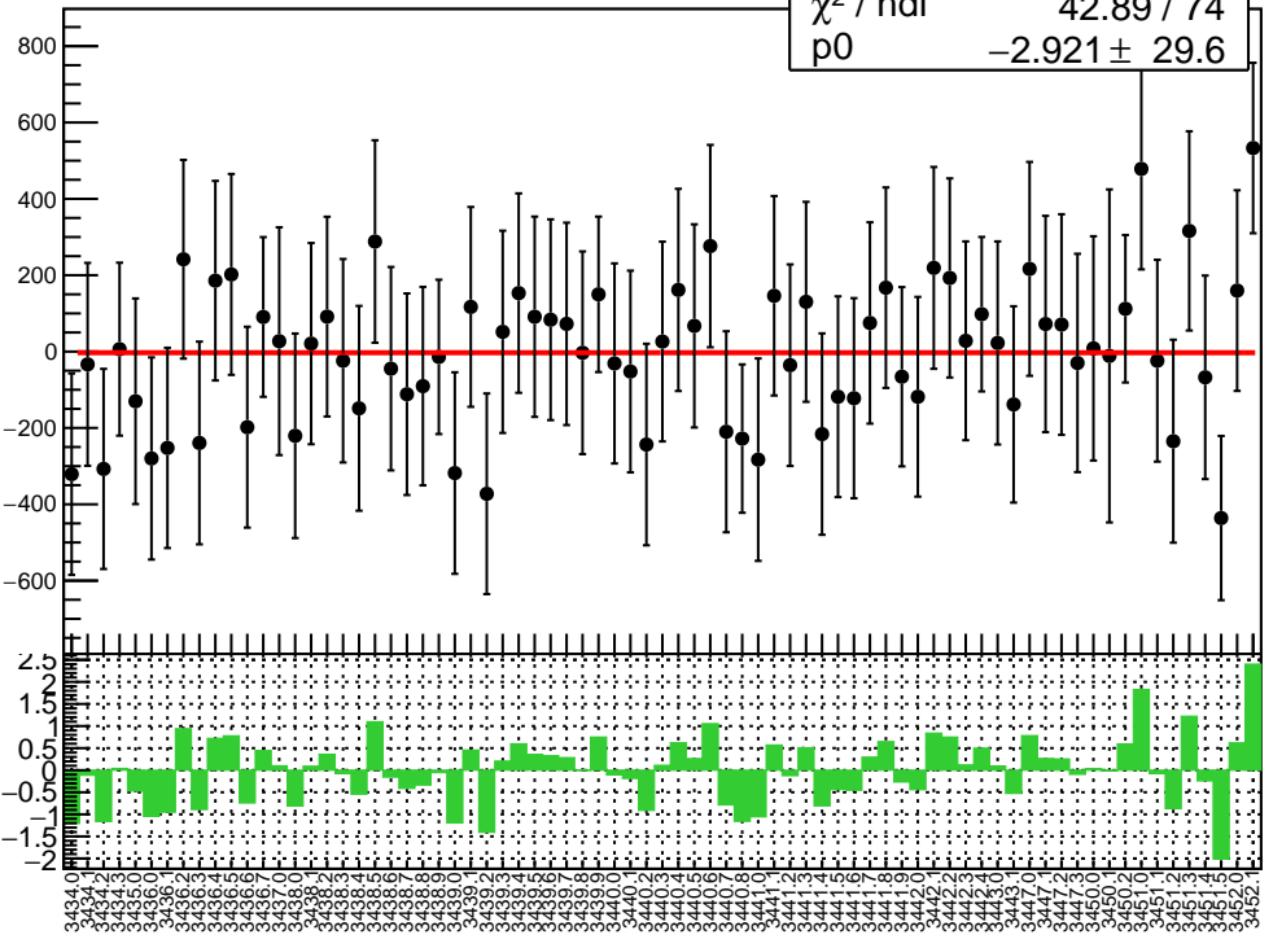
corr_Adet_bpm16X RMS (ppm)

RMS (ppm)



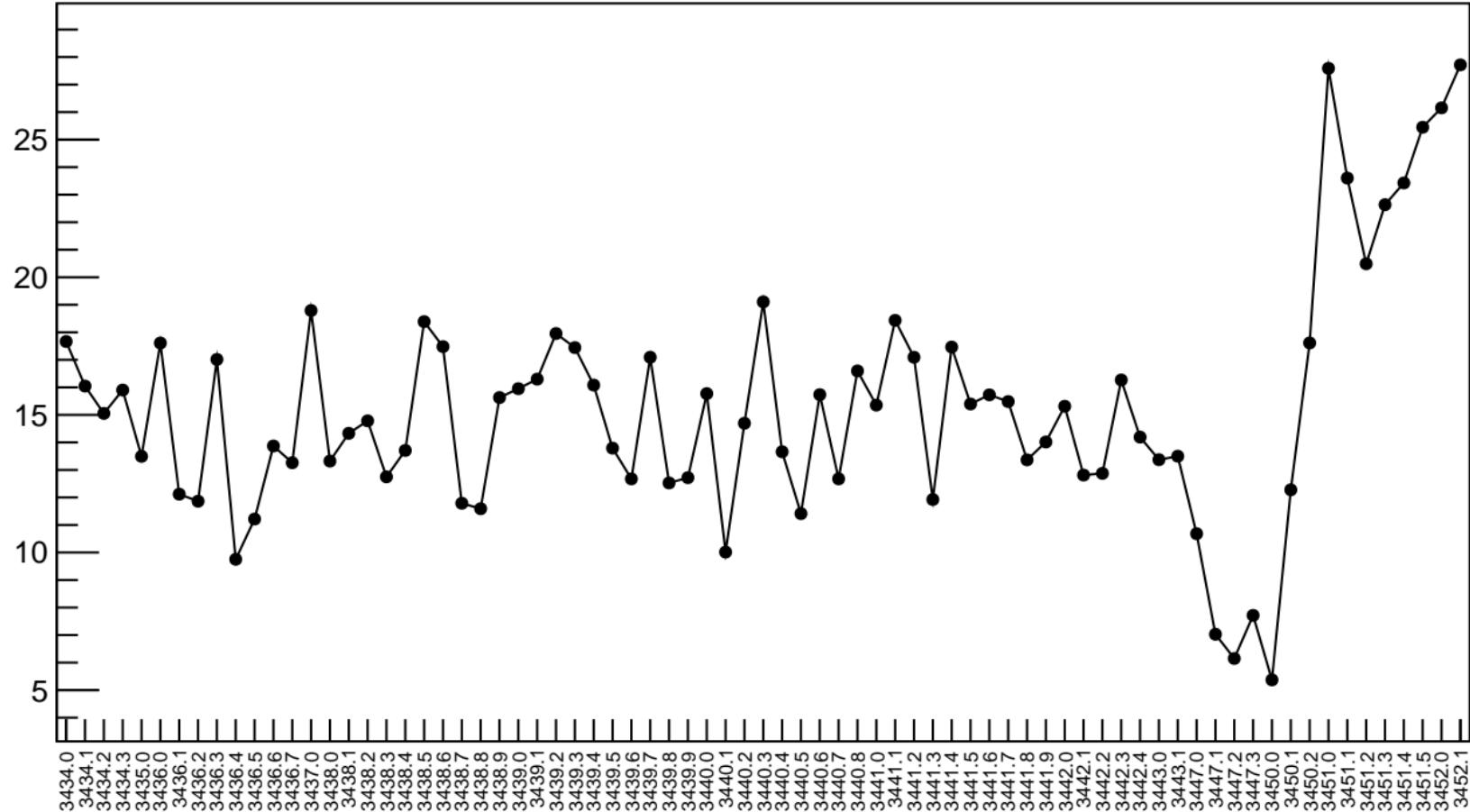
corr_Adet_bpm16Y (ppb)

χ^2 / ndf 42.89 / 74
 p_0 -2.921 ± 29.6



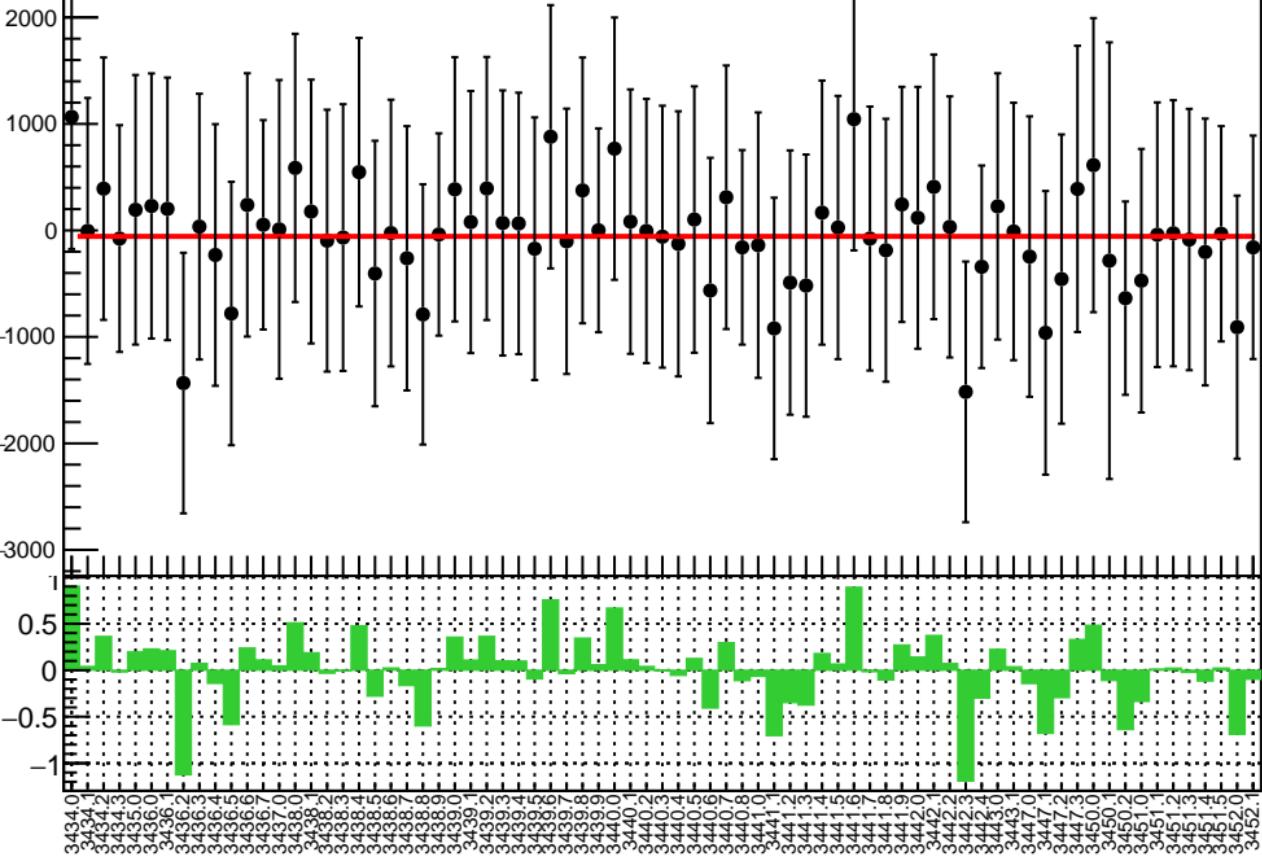
corr_Adet_bpm16Y RMS (ppm)

RMS (ppm)





χ^2 / ndf 10.9 / 74
 p0 -56.33 ± 139.2

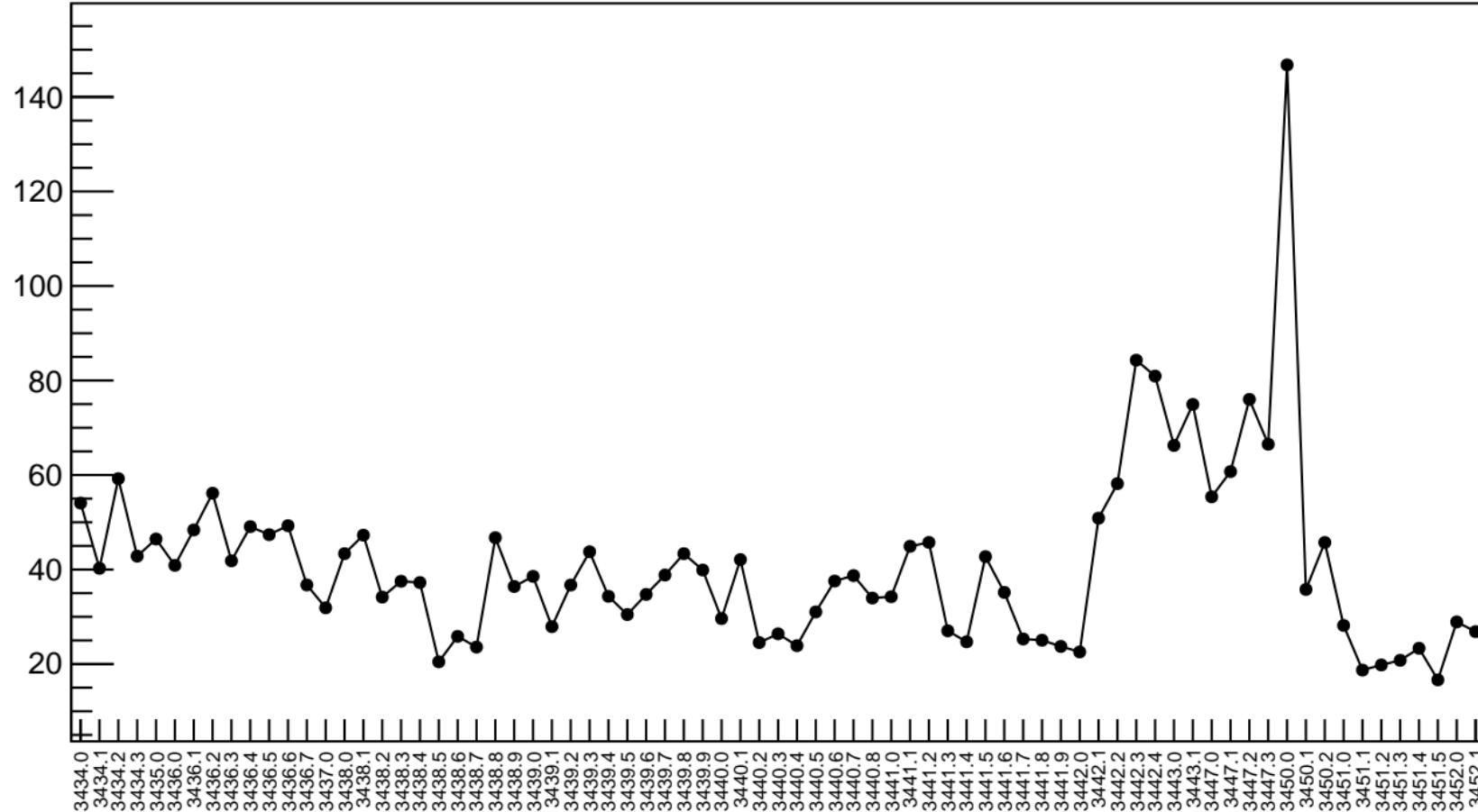


1D pull distribution

Mean	0.004094 ± 0.04402
Std Dev	0.3812 ± 0.03112
Underflow	0
Overflow	0
χ^2 / ndf	4.549 / 2
Constant	39.18 ± 6.82
Mean	0.03078 ± 0.05808
Sigma	0.3833 ± 0.0493

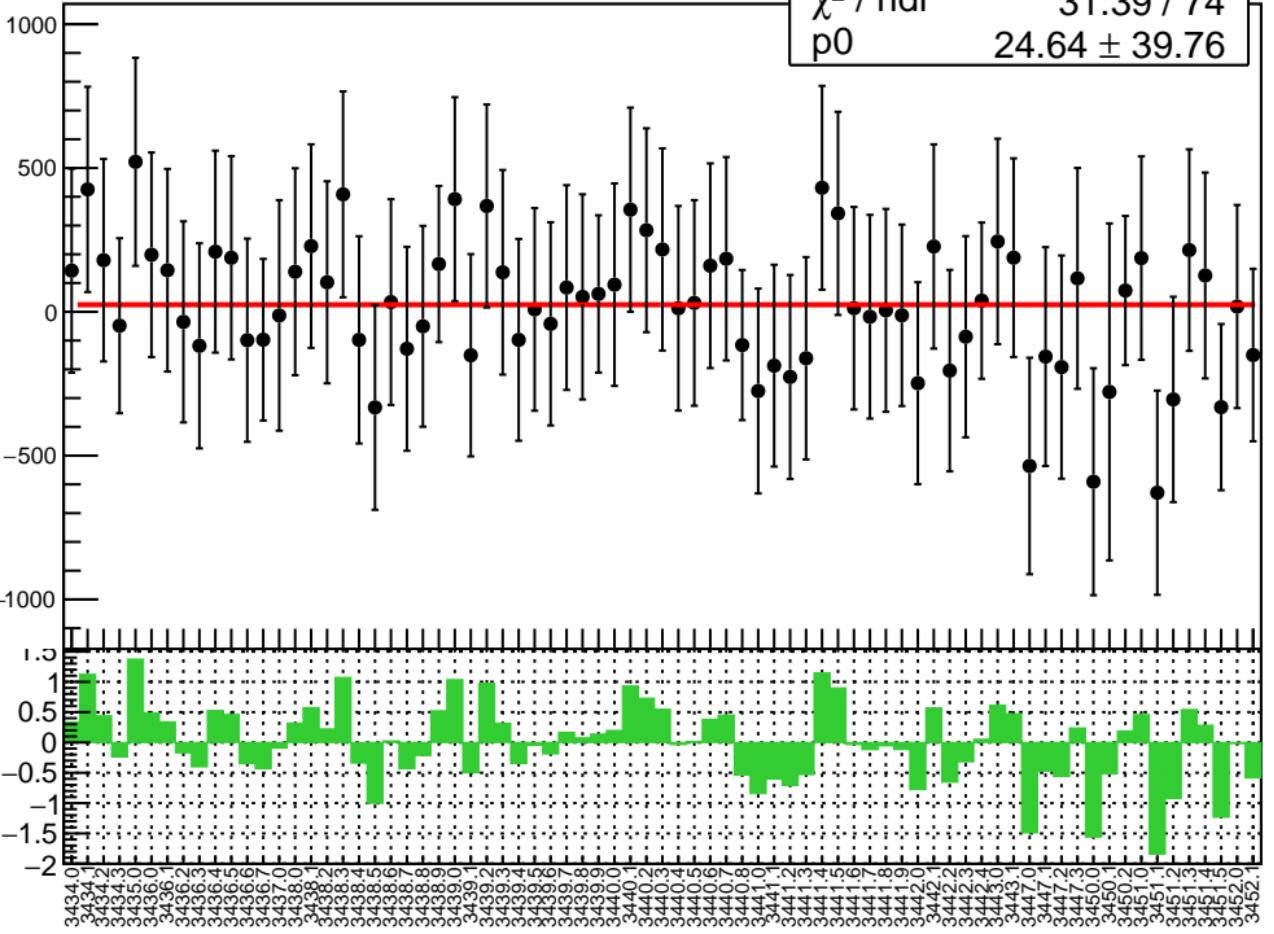
corr_Adet_bpm12X RMS (ppm)

RMS (ppm)

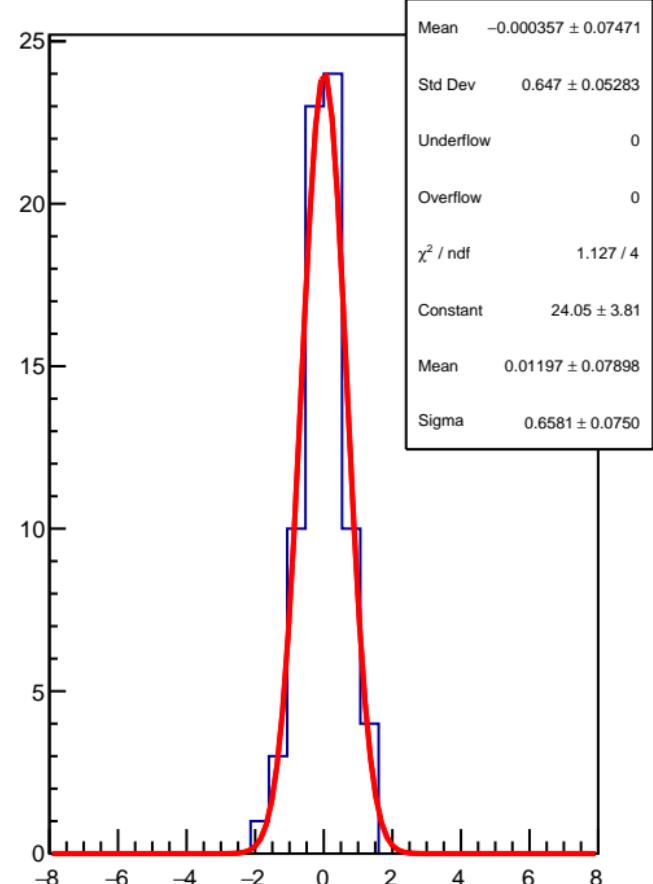


corr_Adet_bpm12Y (ppb)

χ^2 / ndf 31.39 / 74
p0 24.64 ± 39.76

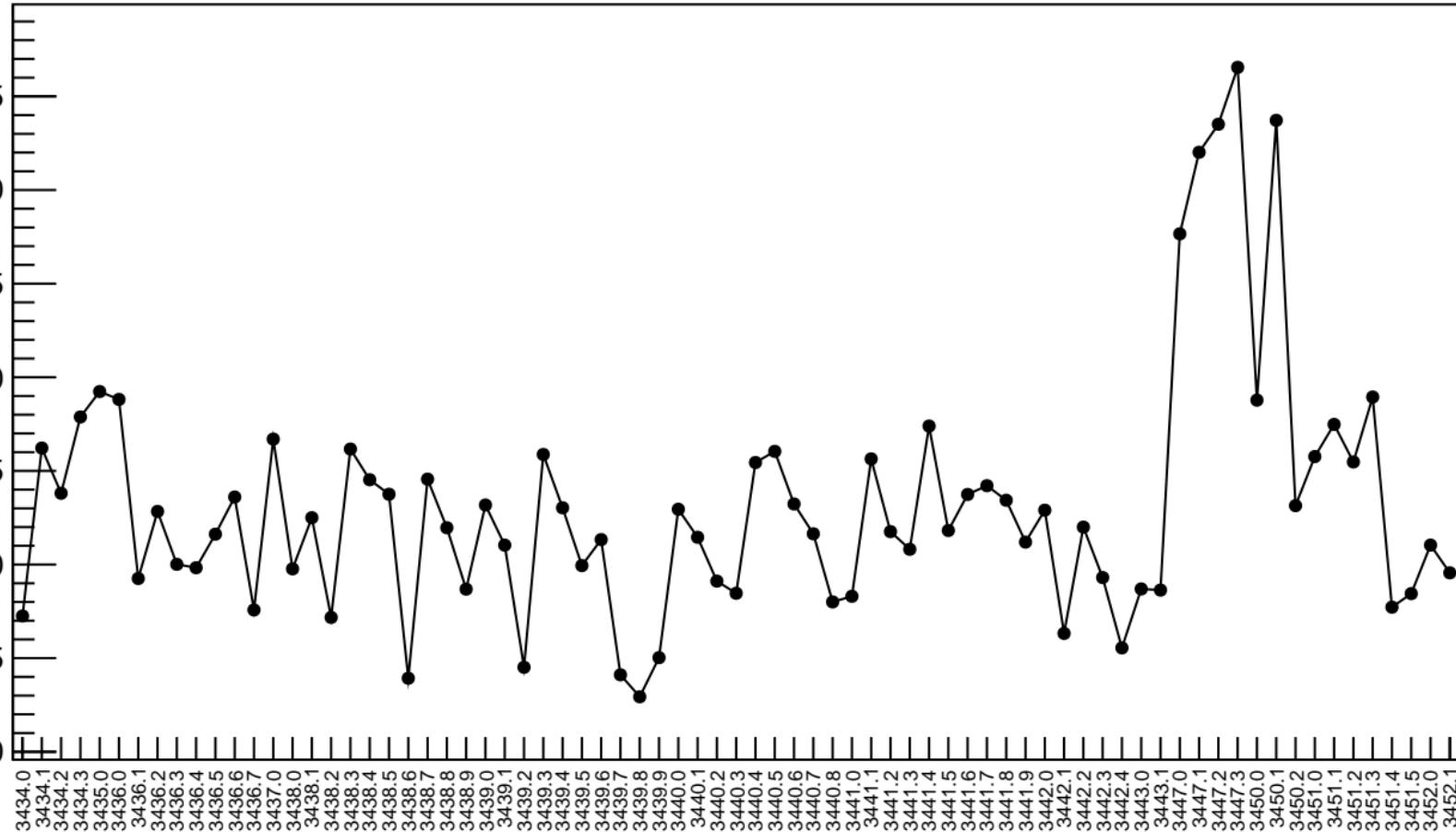


1D pull distribution

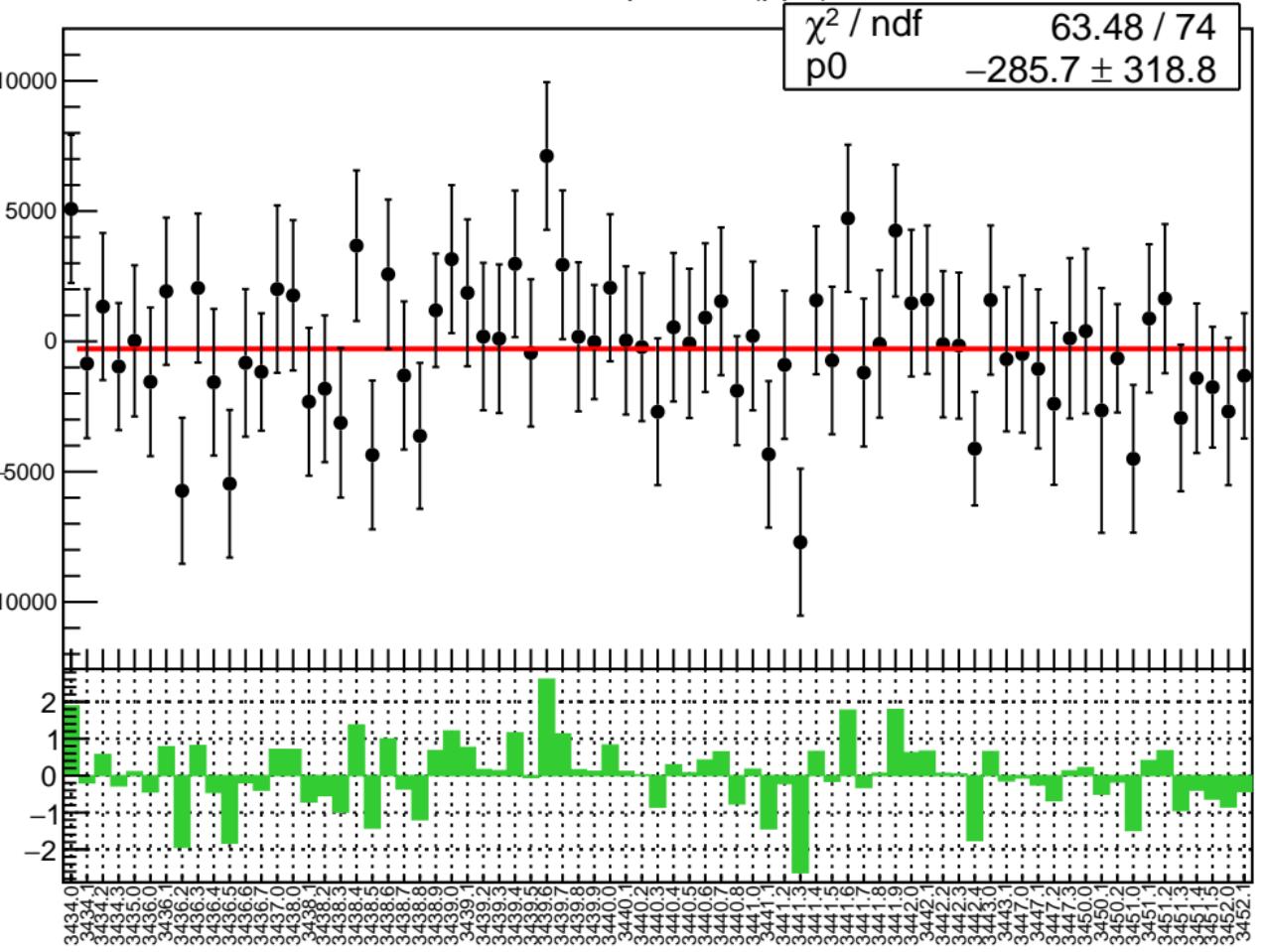


corr_Adet_bpm12Y RMS (ppm)

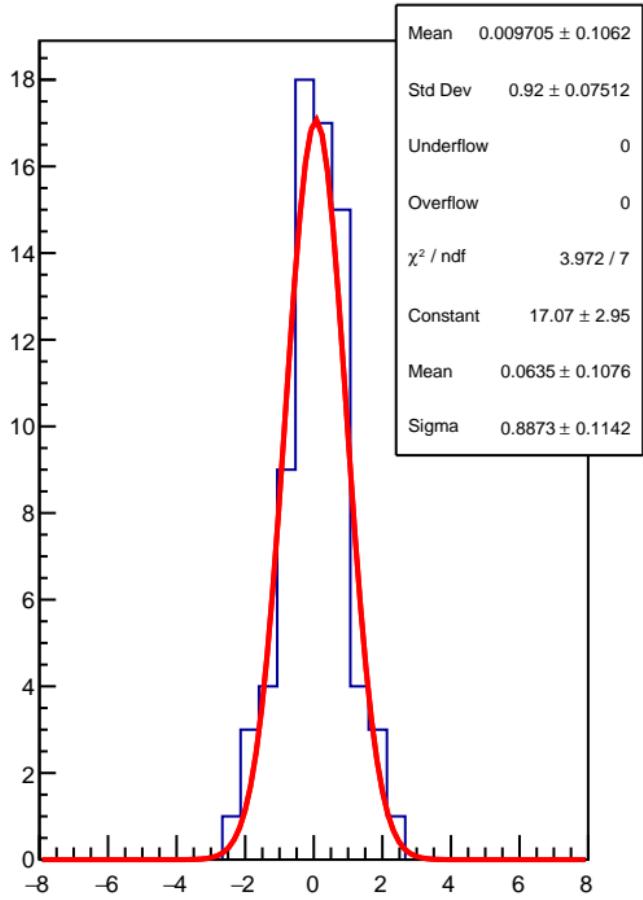
RMS (ppm)



corr_Adet_bpm11X (ppb)

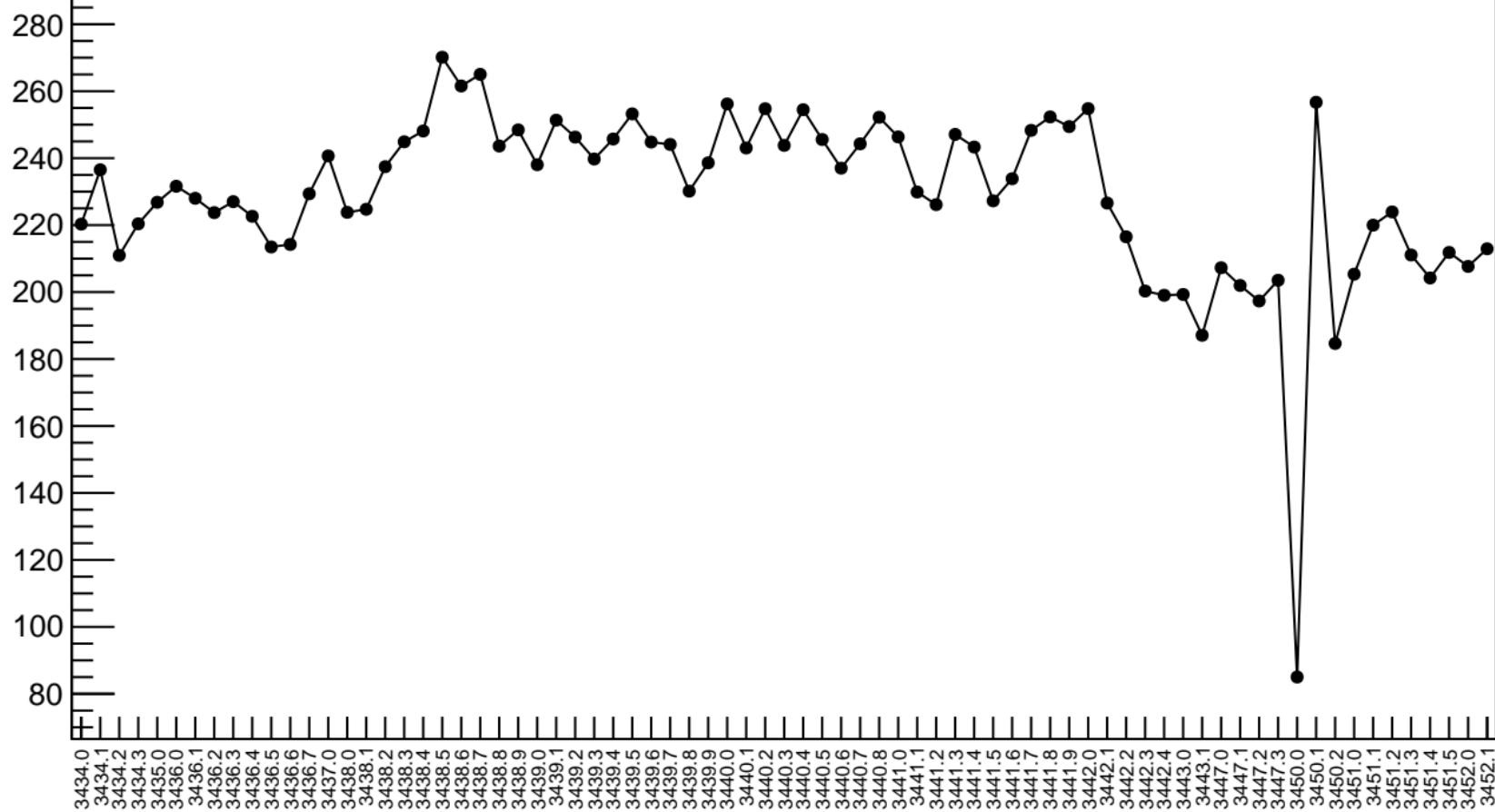


1D pull distribution



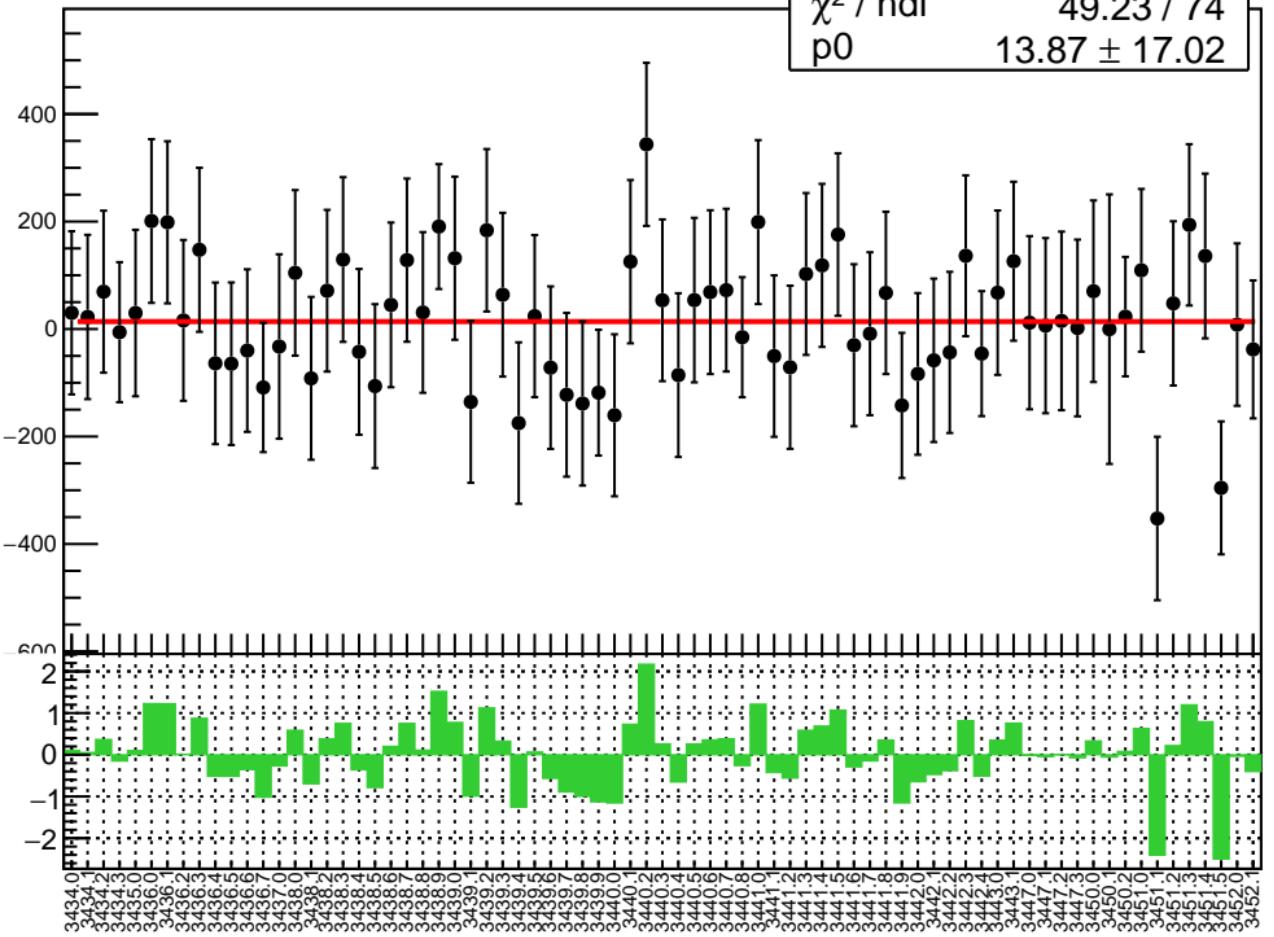
corr_Adet_bpm11X RMS (ppm)

RMS (ppm)



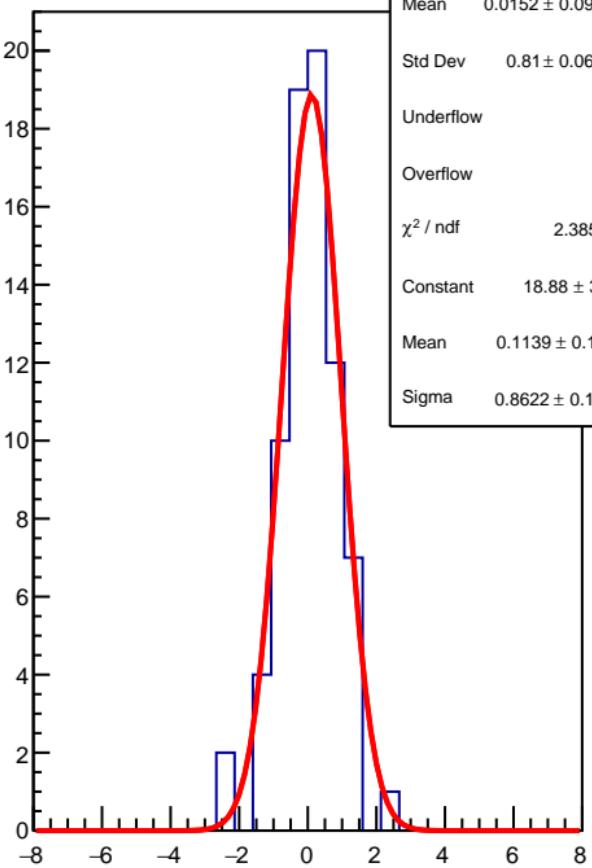
corr_Adet_bpm11Y (ppb)

χ^2 / ndf 49.23 / 74
p0 13.87 ± 17.02



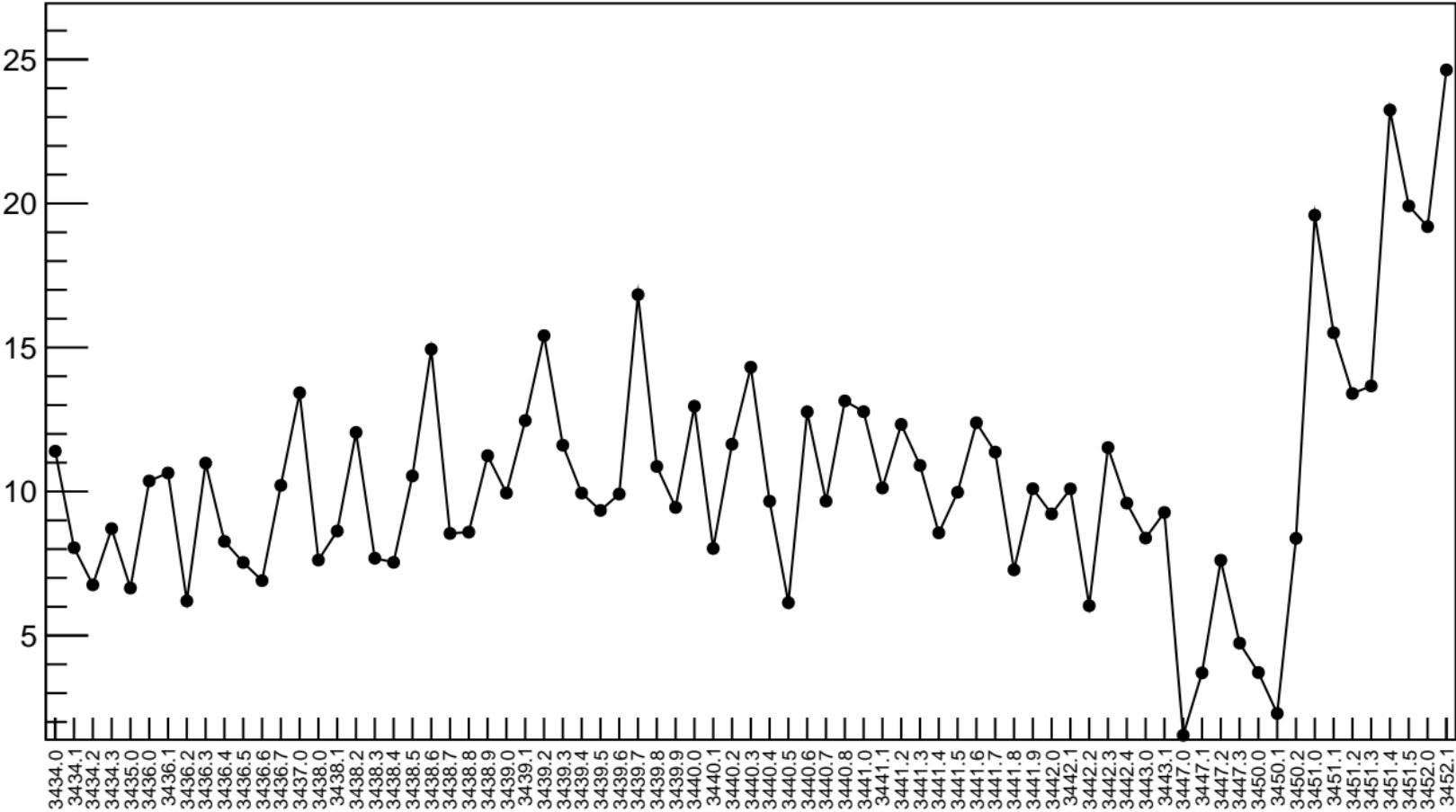
1D pull distribution

Mean 0.0152 ± 0.09353
Std Dev 0.81 ± 0.06614
Underflow 0
Overflow 0
 χ^2 / ndf 2.385 / 5
Constant 18.88 ± 3.23
Mean 0.1139 ± 0.1151
Sigma 0.8622 ± 0.1356



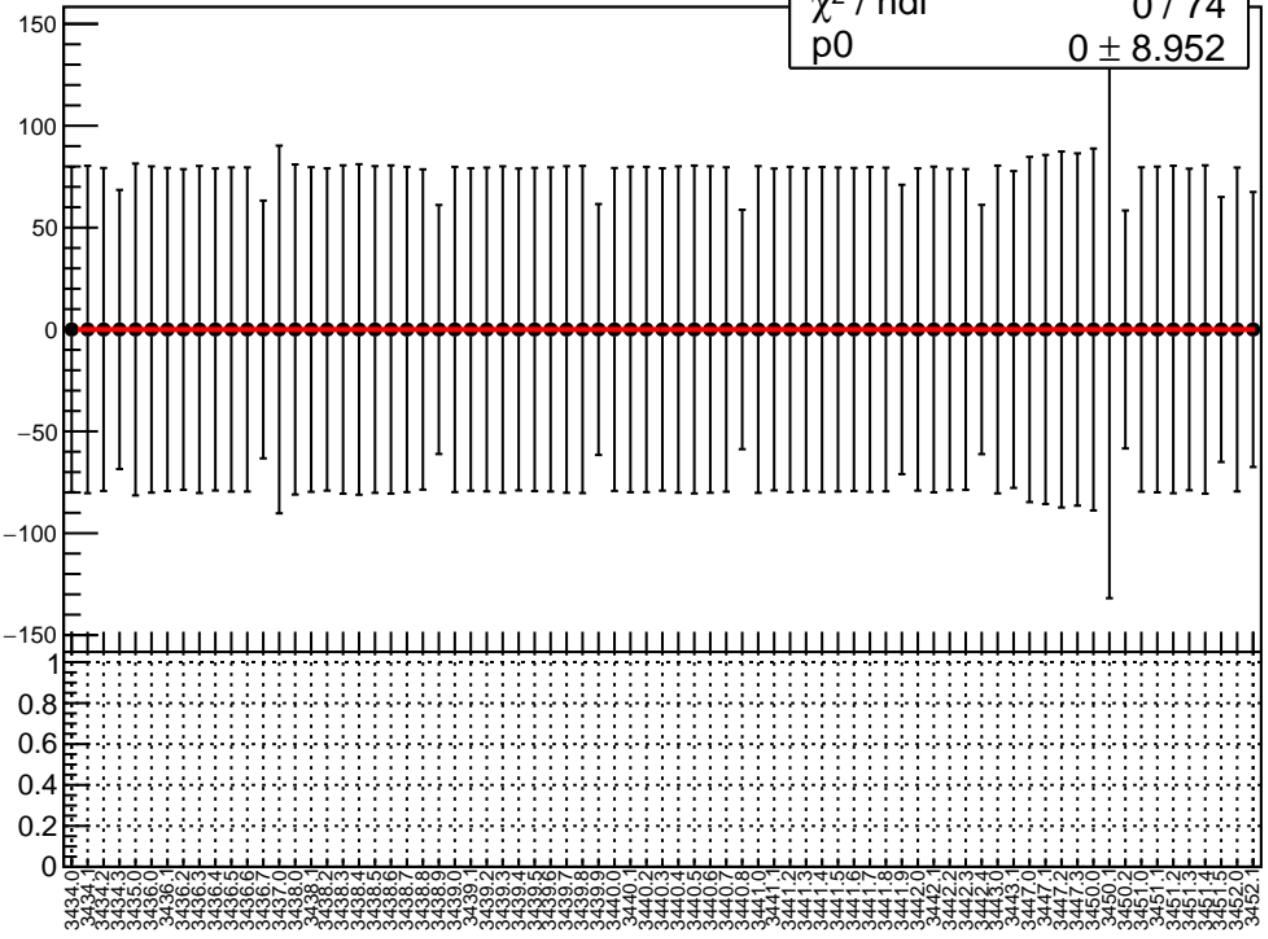
corr_Adet_bpm11Y RMS (ppm)

RMS (ppm)

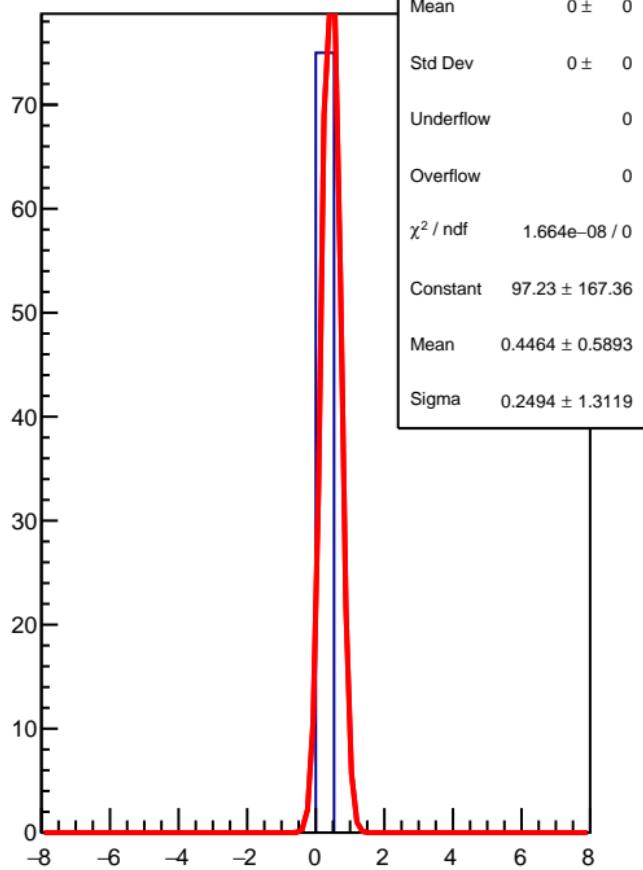


corr_Adet_bpm8X (ppb)

χ^2 / ndf 0 / 74
p0 0 ± 8.952

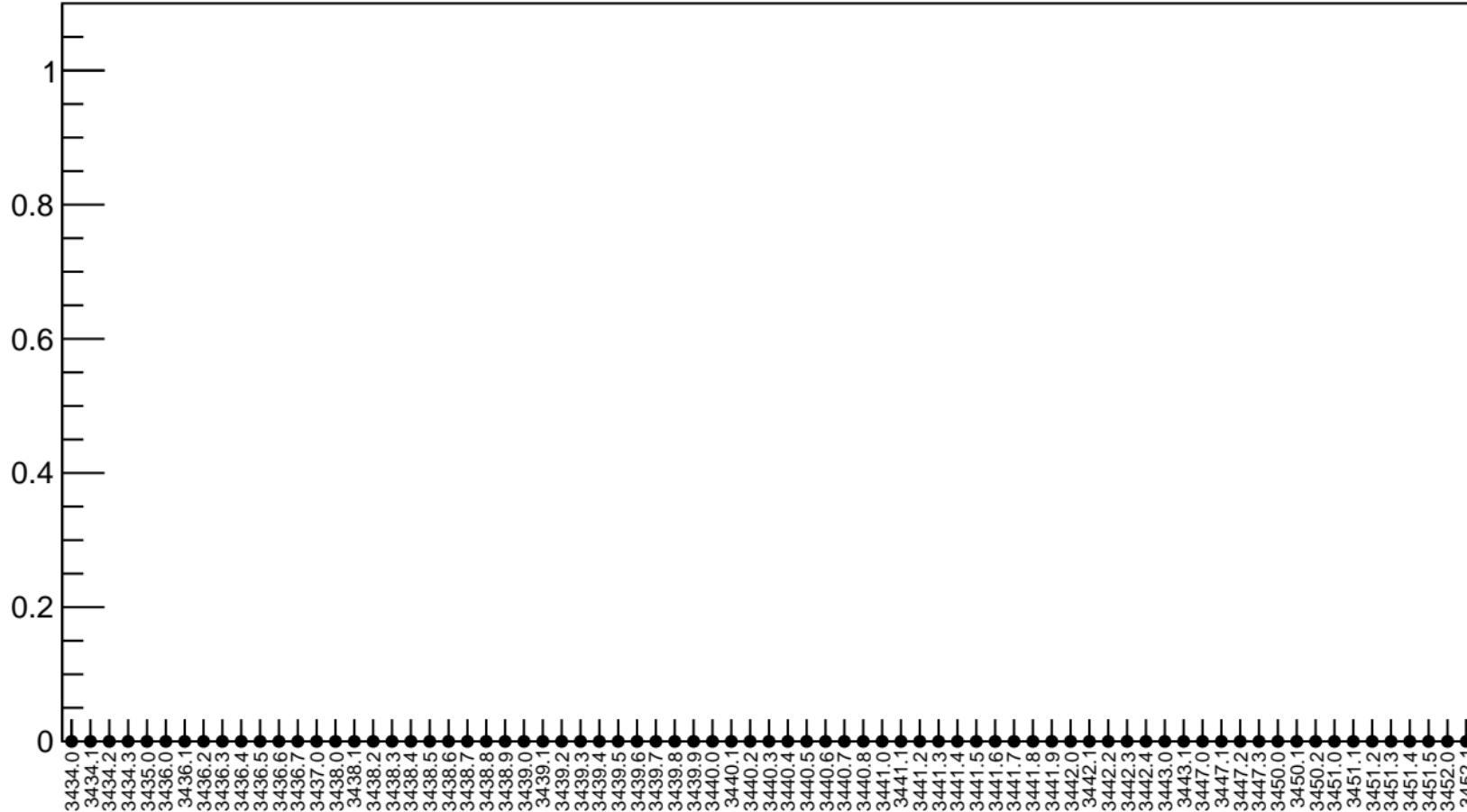


1D pull distribution



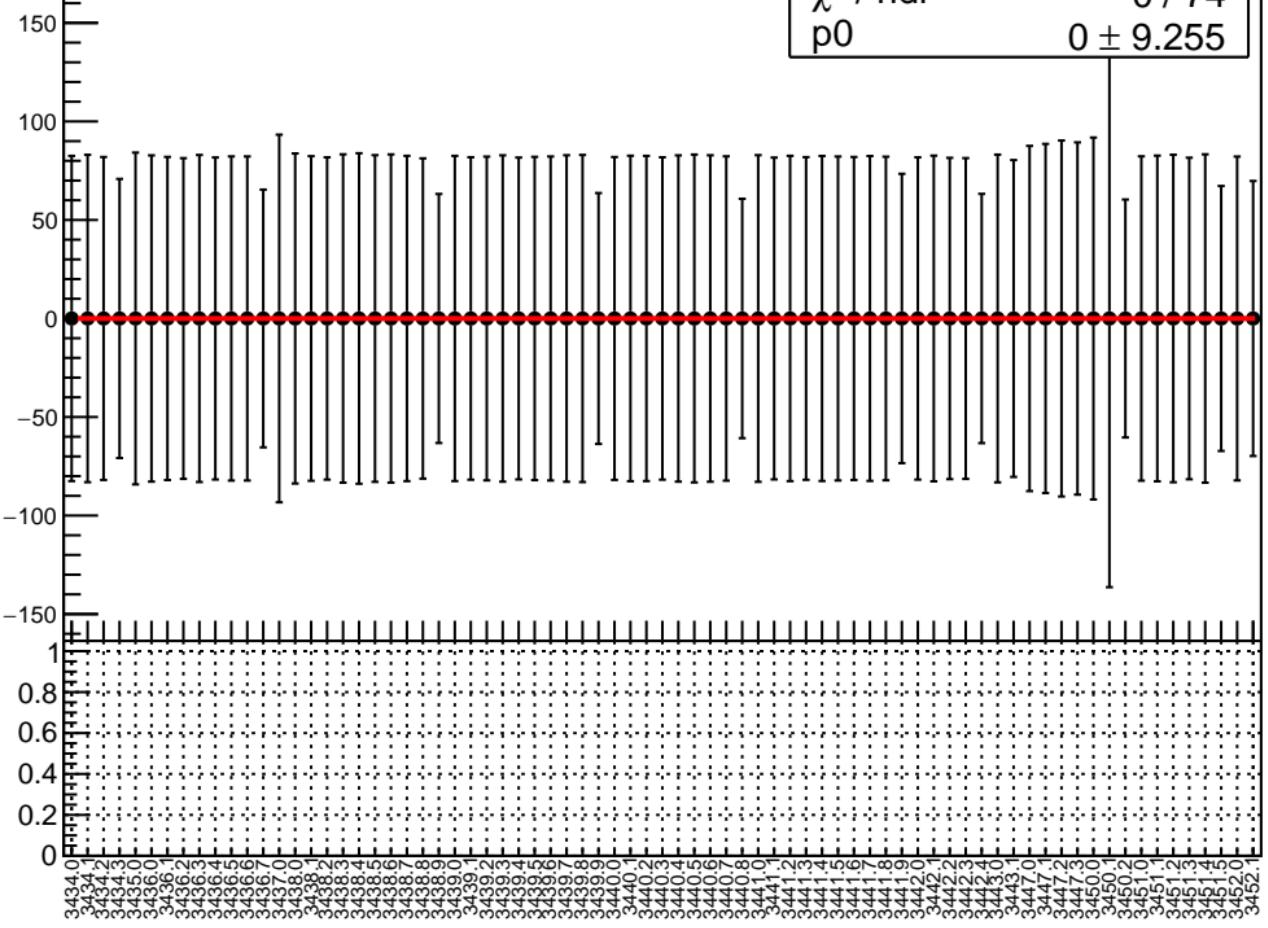
corr_Adet_bpm8X RMS (ppm)

RMS (ppm)

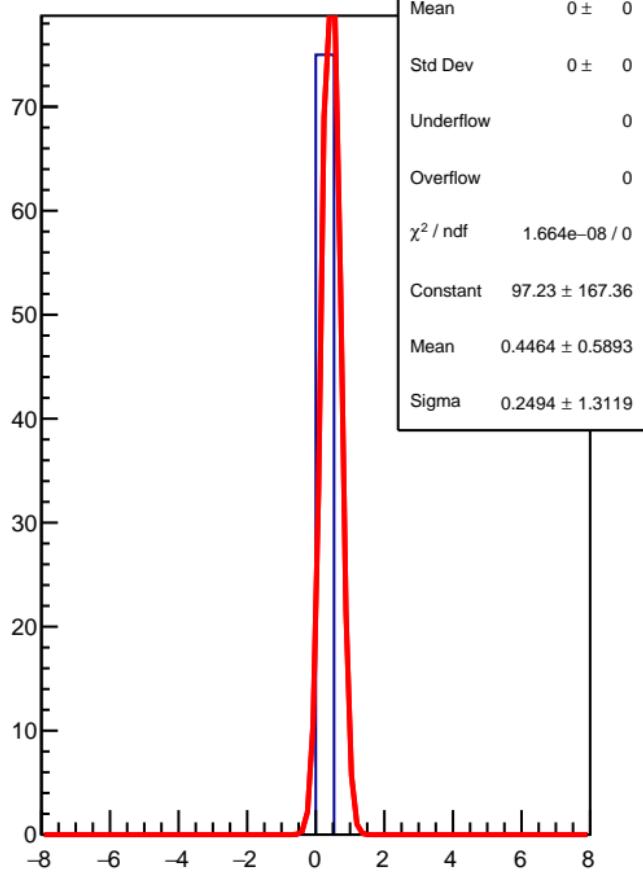


corr_Adet_bpm8Y (ppb)

χ^2 / ndf 0 / 74
p0 0 ± 9.255

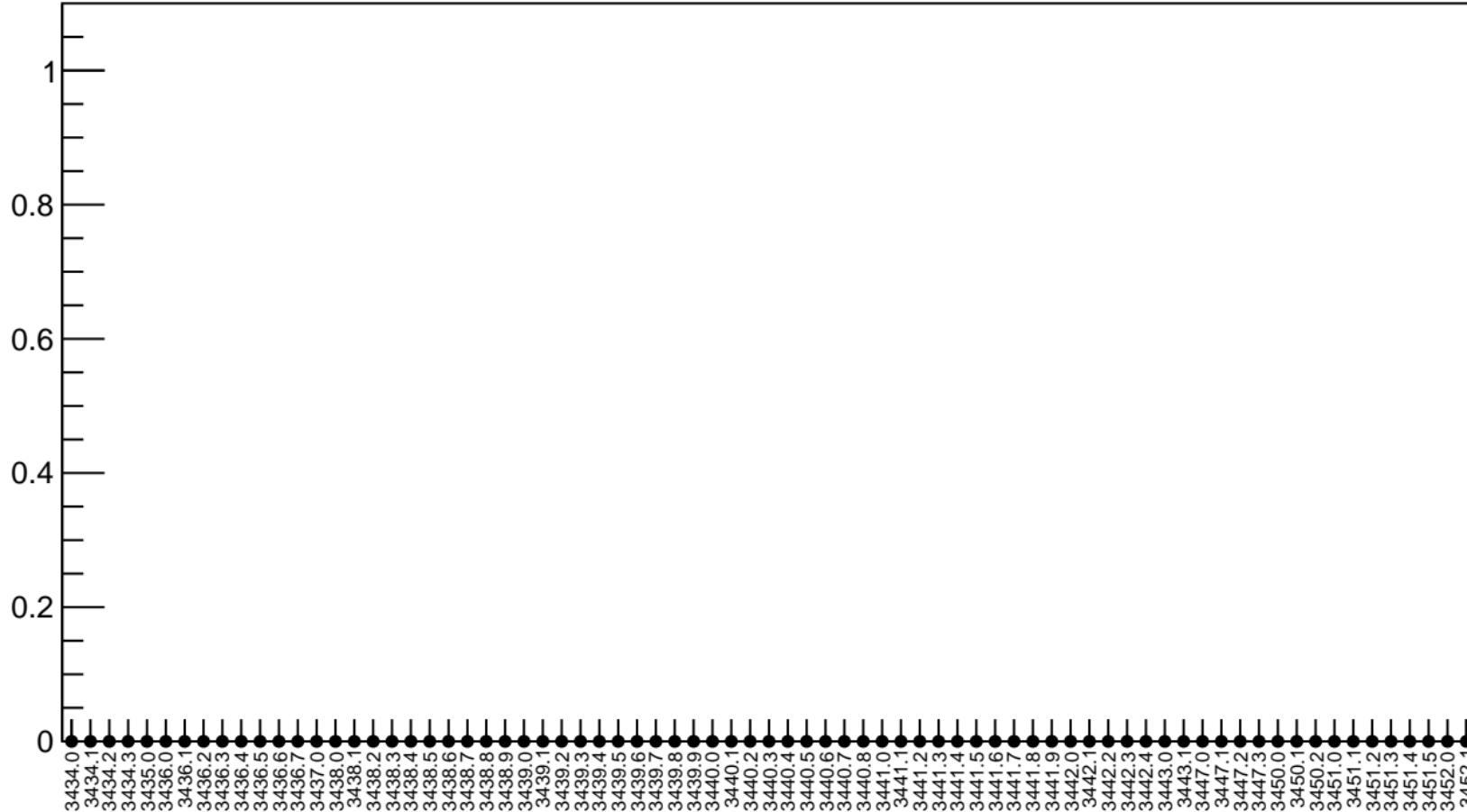


1D pull distribution

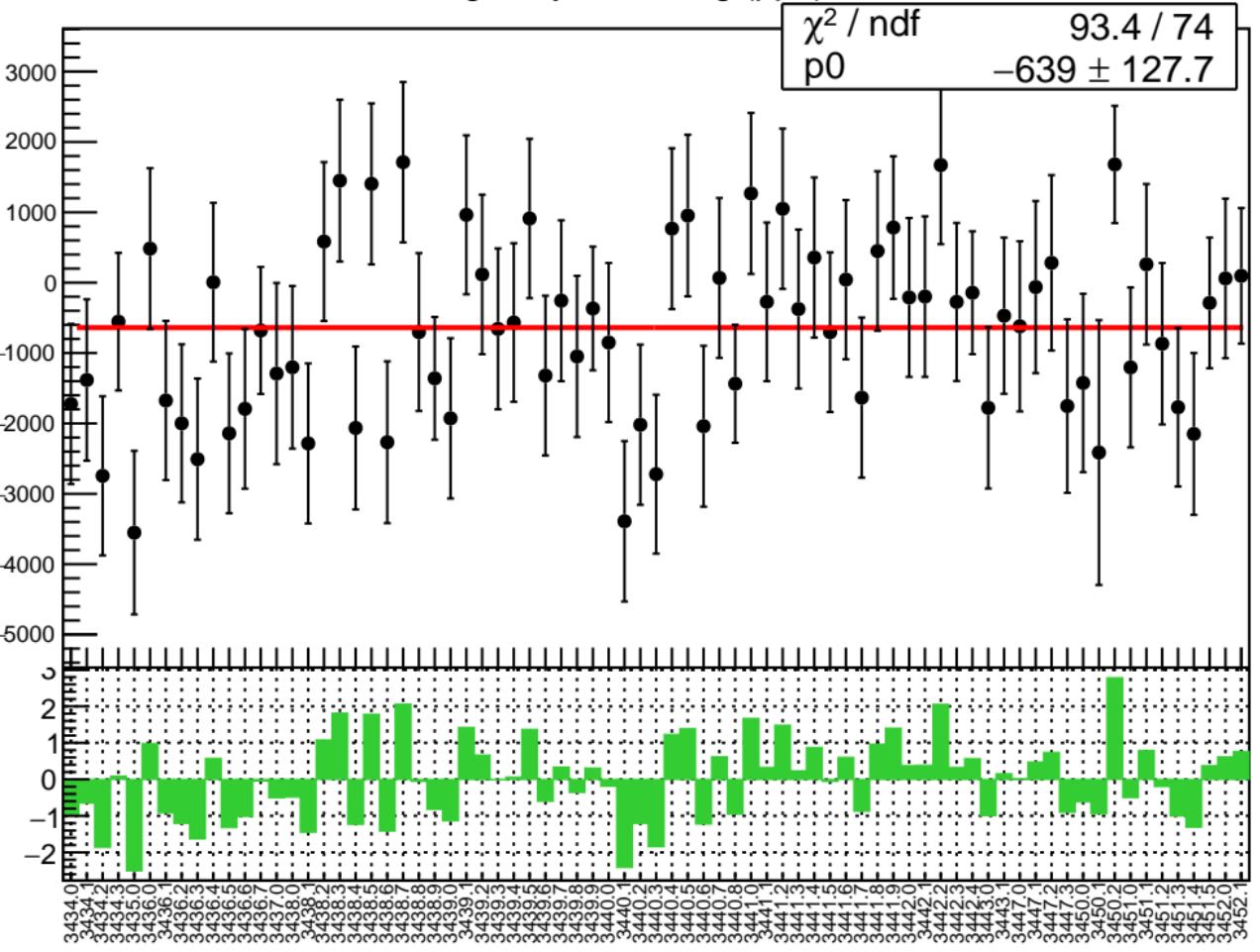


corr_Adet_bpm8Y RMS (ppm)

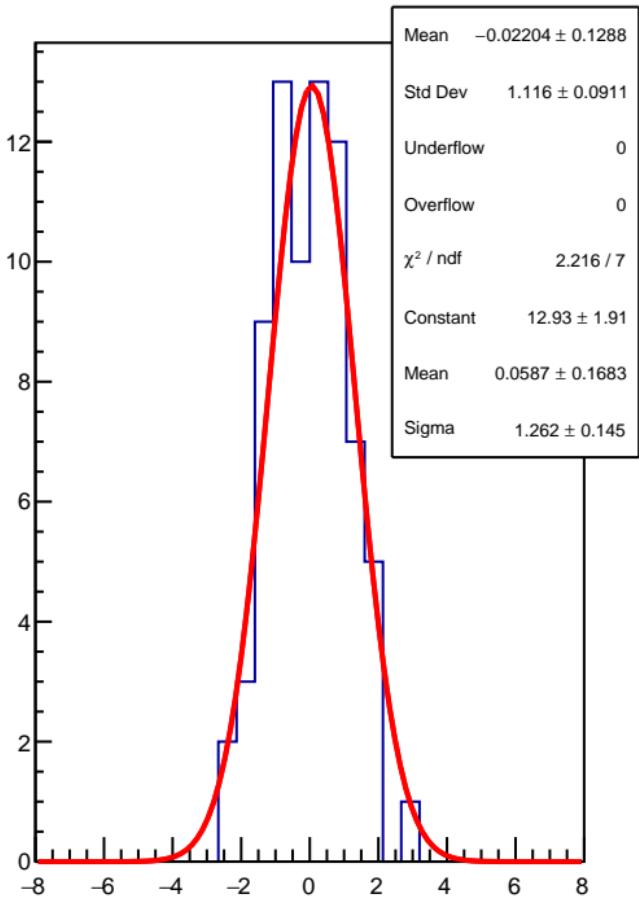
RMS (ppm)



lagr_asym_us_avg (ppb)



1D pull distribution

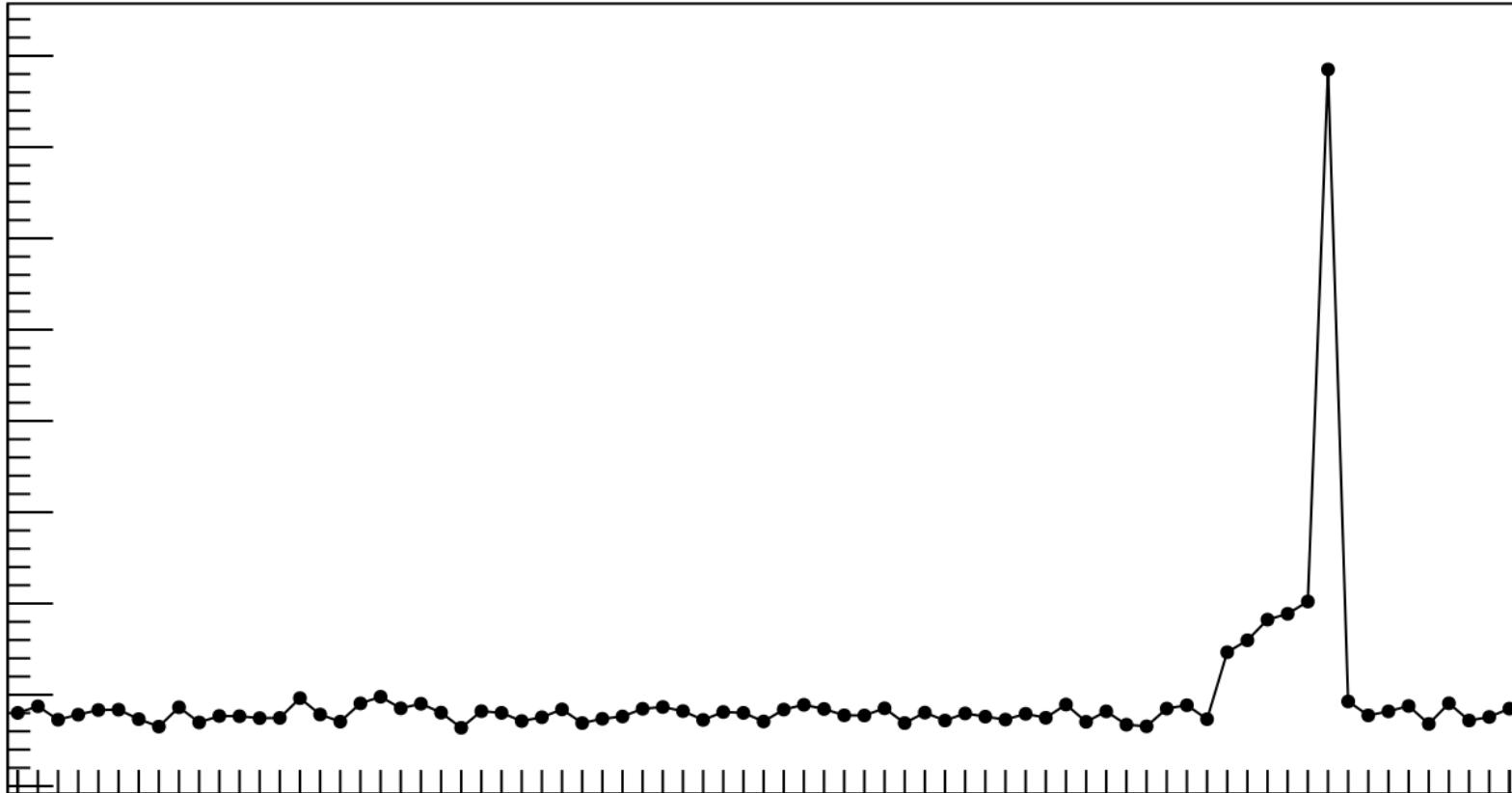


lagr_asym_us_avg RMS (ppm)

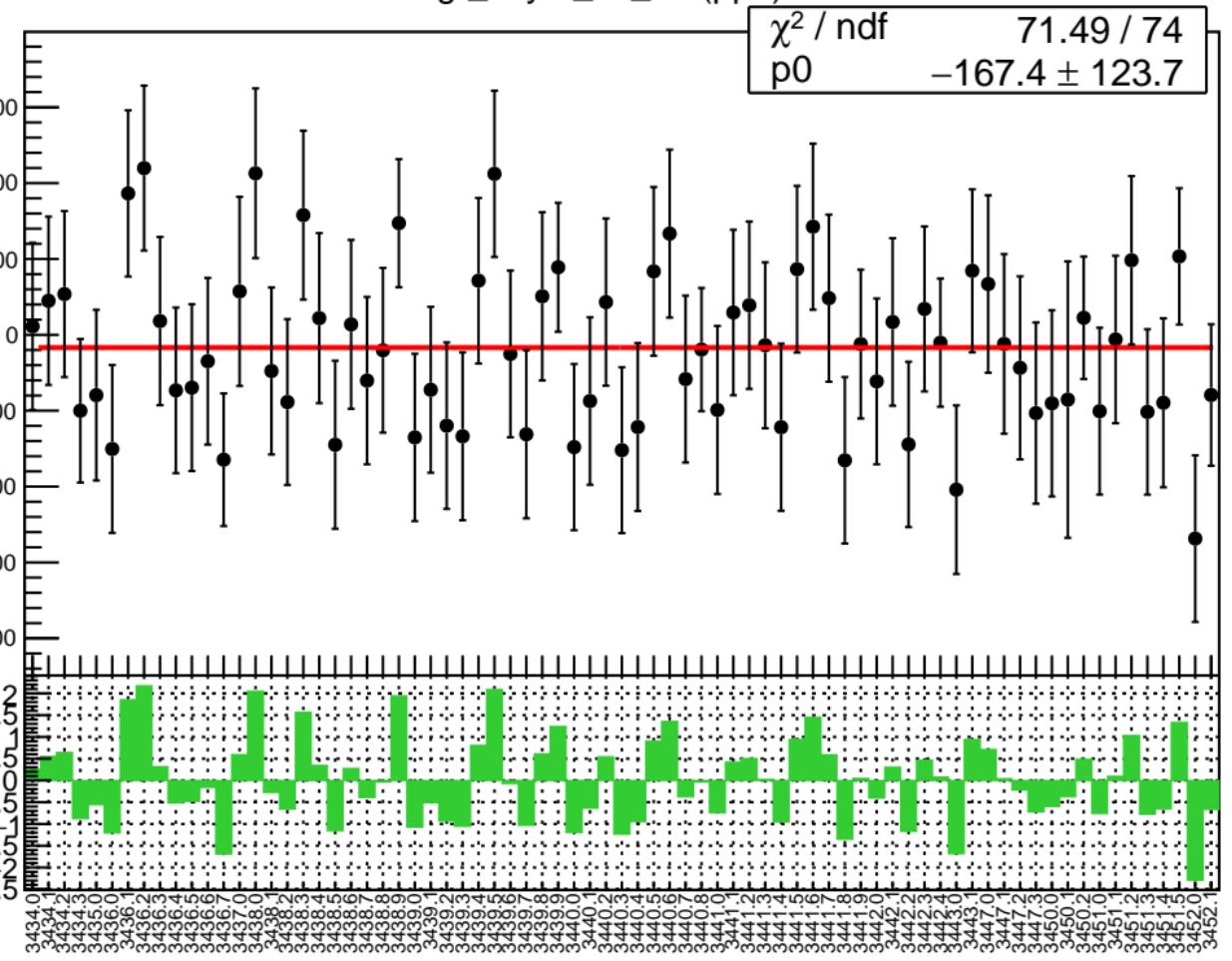
RMS (ppm)

180
170
160
150
140
130
120
110
100

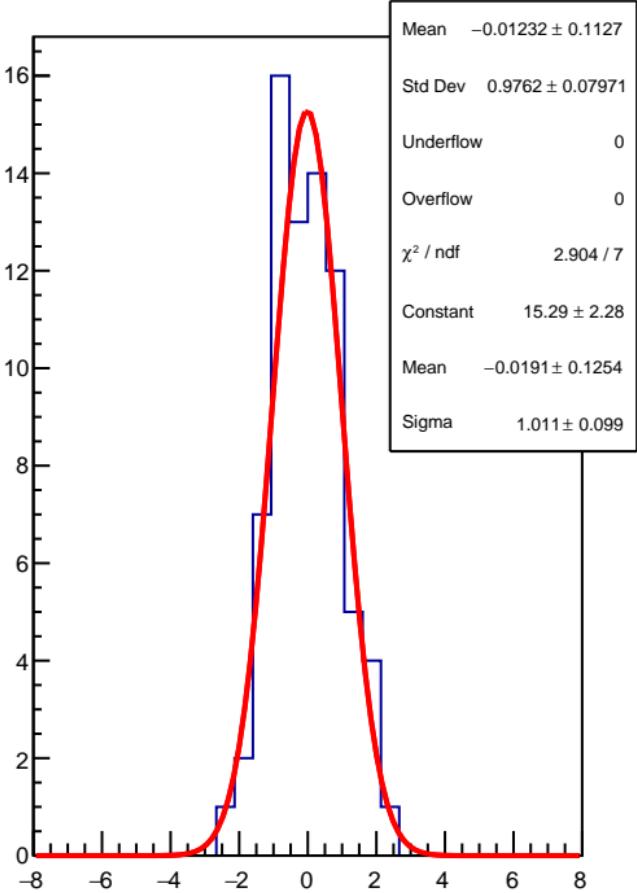
3434.0
3434.1
3434.2
3434.3
3435.0
3436.0
3436.1
3436.2
3436.3
3436.4
3436.5
3436.6
3436.7
3437.0
3438.0
3438.1
3438.2
3438.3
3438.4
3438.5
3438.6
3438.7
3438.8
3438.9
3439.0
3439.1
3439.2
3439.3
3439.4
3439.5
3439.6
3439.7
3439.8
3439.9
3440.0
3440.1
3440.2
3440.3
3440.4
3440.5
3440.6
3440.7
3440.8
3441.0
3441.1
3441.2
3441.3
3441.4
3441.5
3441.6
3441.7
3441.8
3441.9
3442.0
3442.1
3442.2
3442.3
3442.4
3443.0
3443.1
3447.1
3447.2
3447.3
3450.0
3450.1
3450.2
3451.0
3451.1
3451.2
3451.3
3451.4
3451.5
3452.0
3452.1



lagr_asym_us_dd (ppb)

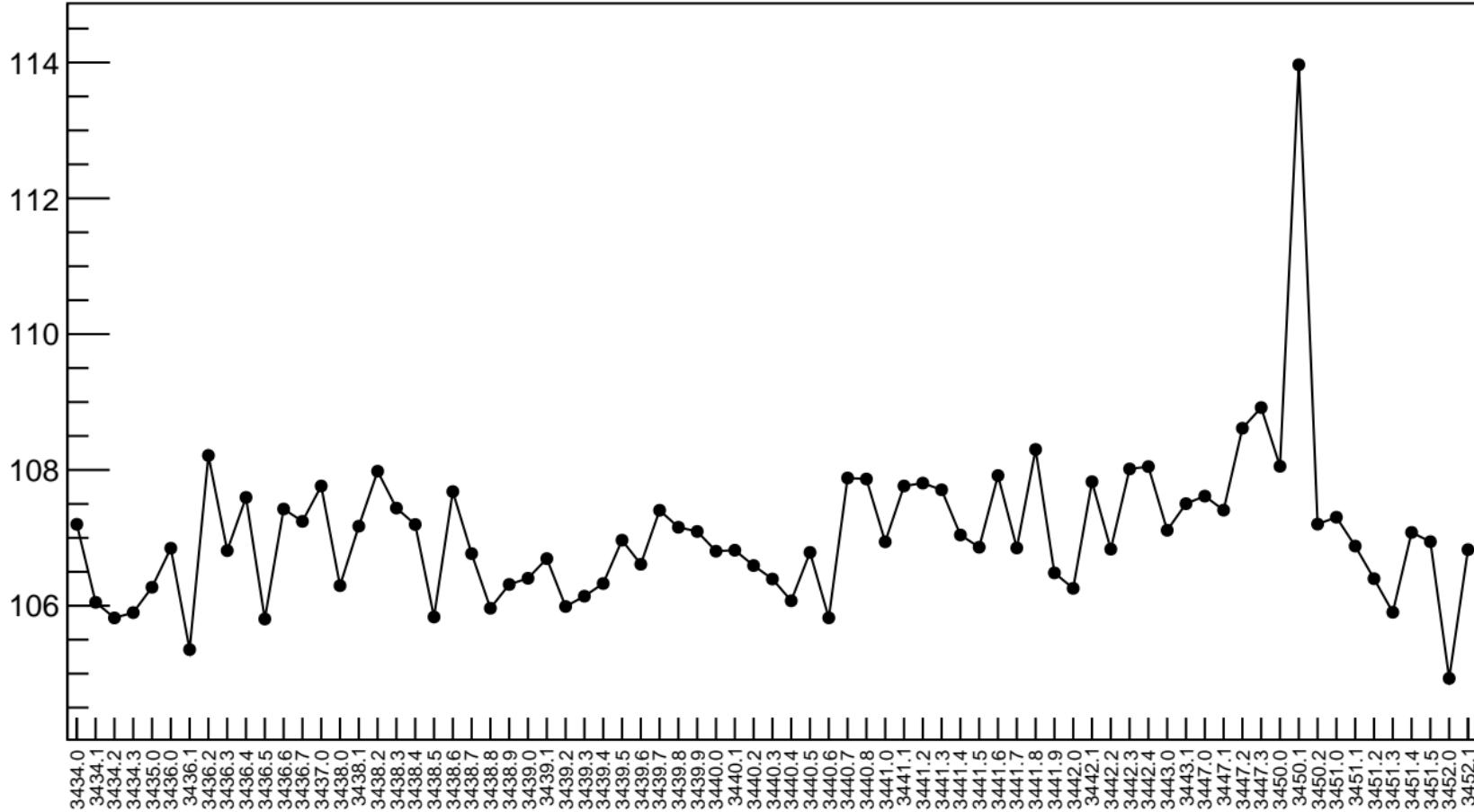


1D pull distribution



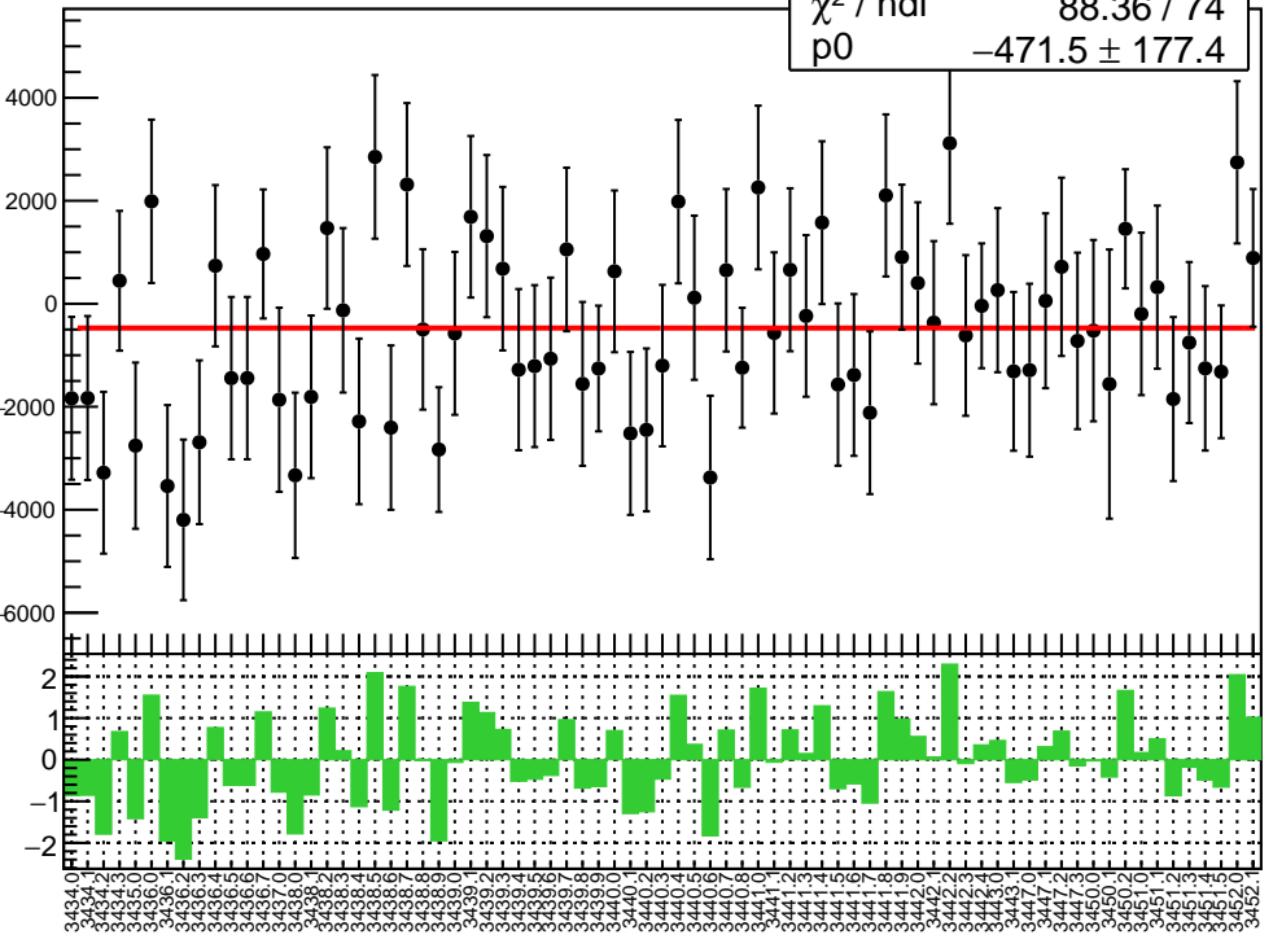
lagr_asym_us_dd RMS (ppm)

RMS (ppm)



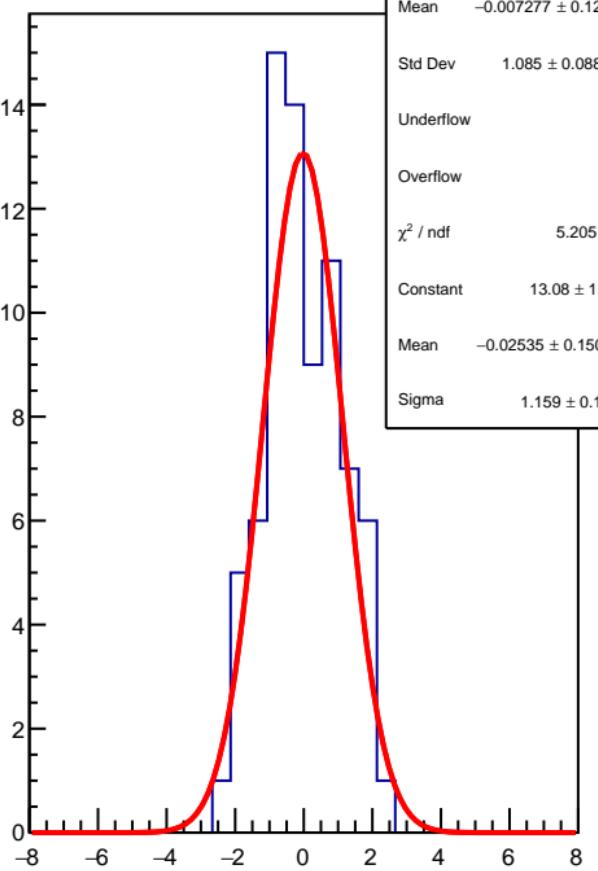
lagr_asym_usr (ppb)

χ^2 / ndf 88.36 / 74
p0 -471.5 ± 177.4



1D pull distribution

Mean -0.007277 ± 0.1253
Std Dev 1.085 ± 0.08862
Underflow 0
Overflow 0
 χ^2 / ndf 5.205 / 7
Constant 13.08 ± 1.92
Mean -0.02535 ± 0.15021
Sigma 1.159 ± 0.113



lagr_asym_usr RMS (ppm)

RMS (ppm)

200

190

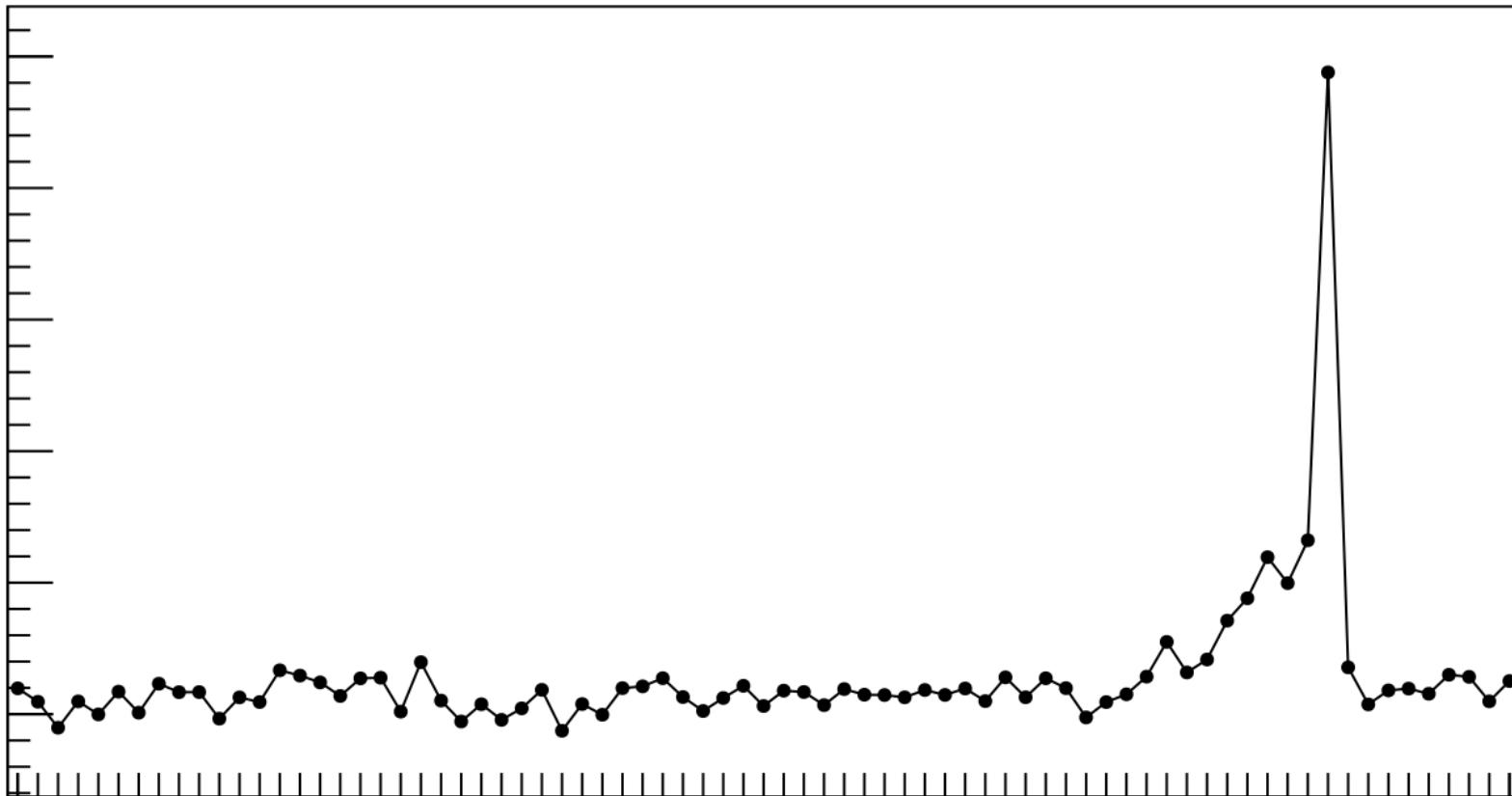
180

170

160

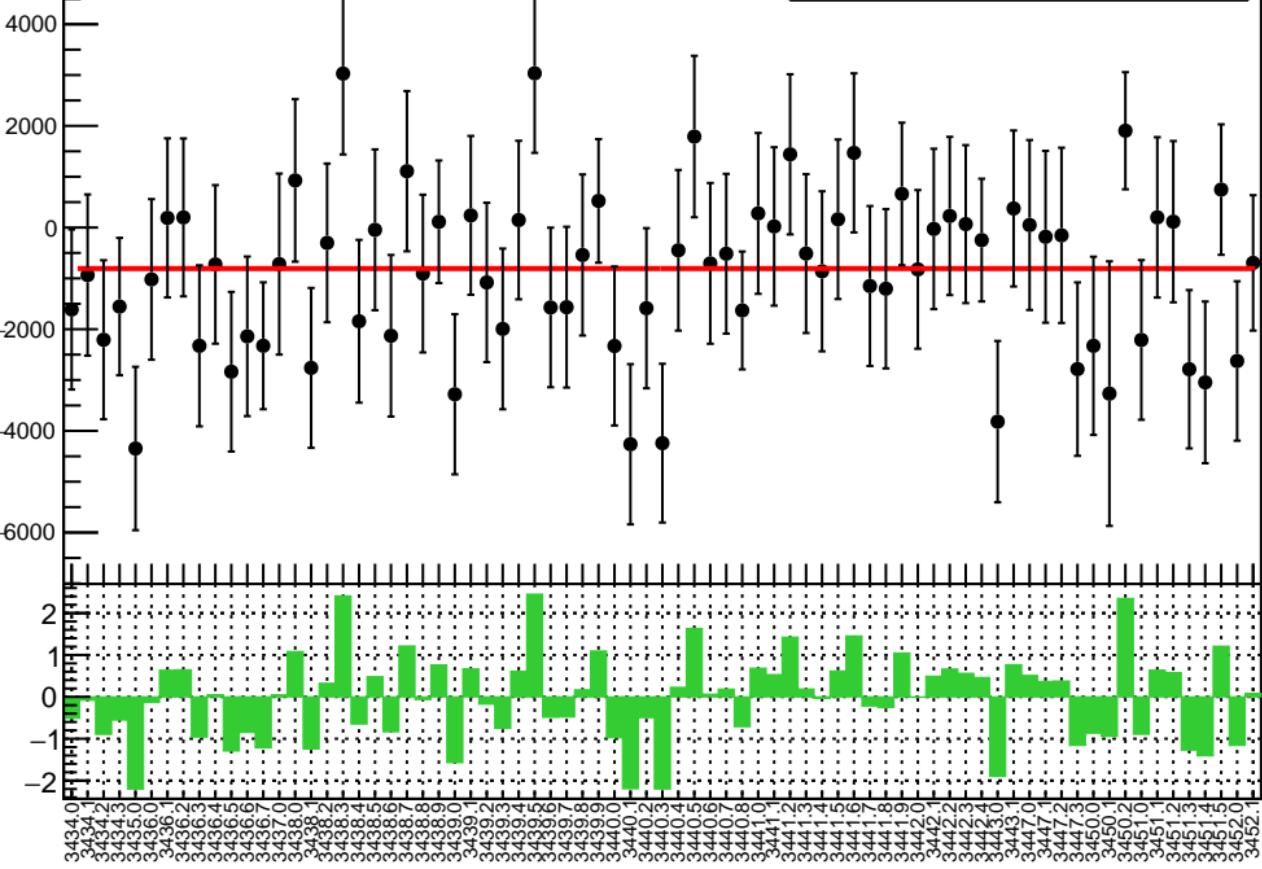
150

3434.0
3434.1
3434.2
3434.3
3435.0
3436.0
3436.1
3436.2
3436.3
3436.4
3436.5
3436.6
3436.7
3437.0
3438.0
3438.1
3438.2
3438.3
3438.4
3438.5
3438.6
3438.7
3438.8
3438.9
3439.0
3439.1
3439.2
3439.3
3439.4
3439.5
3439.6
3439.7
3439.8
3439.9
3440.0
3440.1
3440.2
3440.3
3440.4
3440.5
3440.6
3440.7
3440.8
3441.0
3441.1
3441.2
3441.3
3441.4
3441.5
3441.6
3441.7
3441.8
3441.9
3442.0
3442.1
3442.2
3442.3
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3443.1
3444.0
3444.1
3444.2
3444.3
3444.4
3444.5
3444.6
3444.7
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3445.0
3445.1
3445.2
3445.3
3445.4
3445.5
3445.6
3445.7

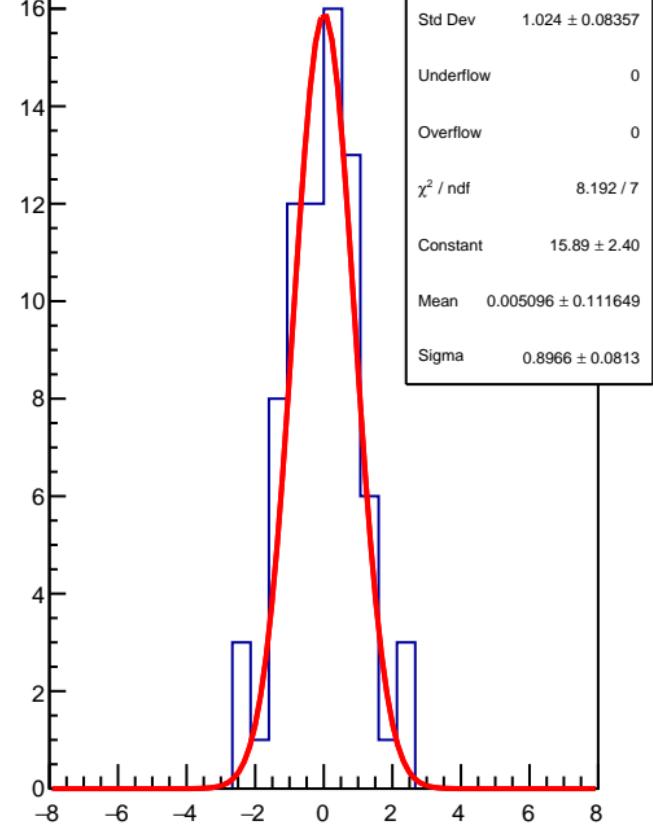


lagr_asym_usl (ppb)

χ^2 / ndf 78.62 / 74
p0 -806.4 ± 176.6

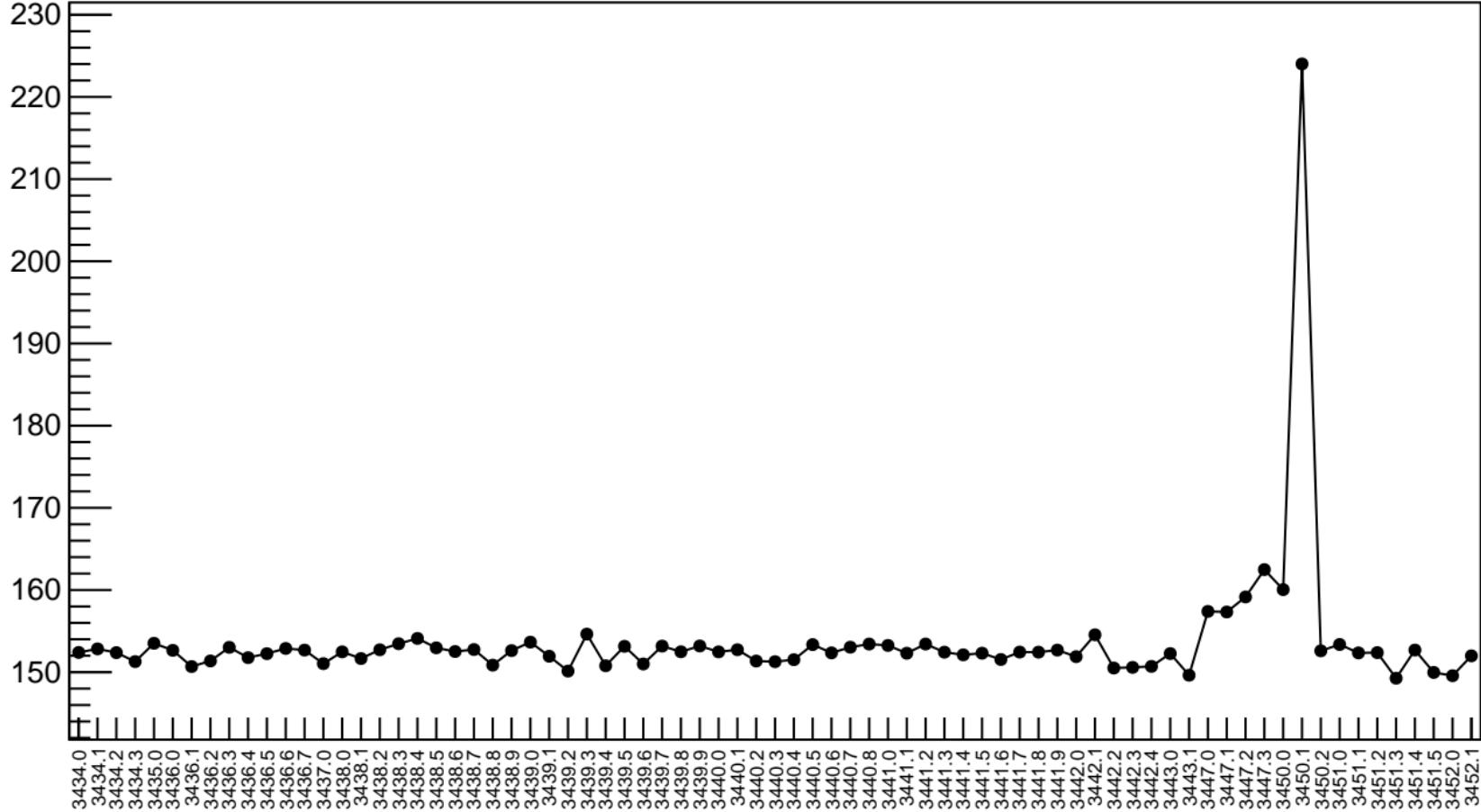


1D pull distribution



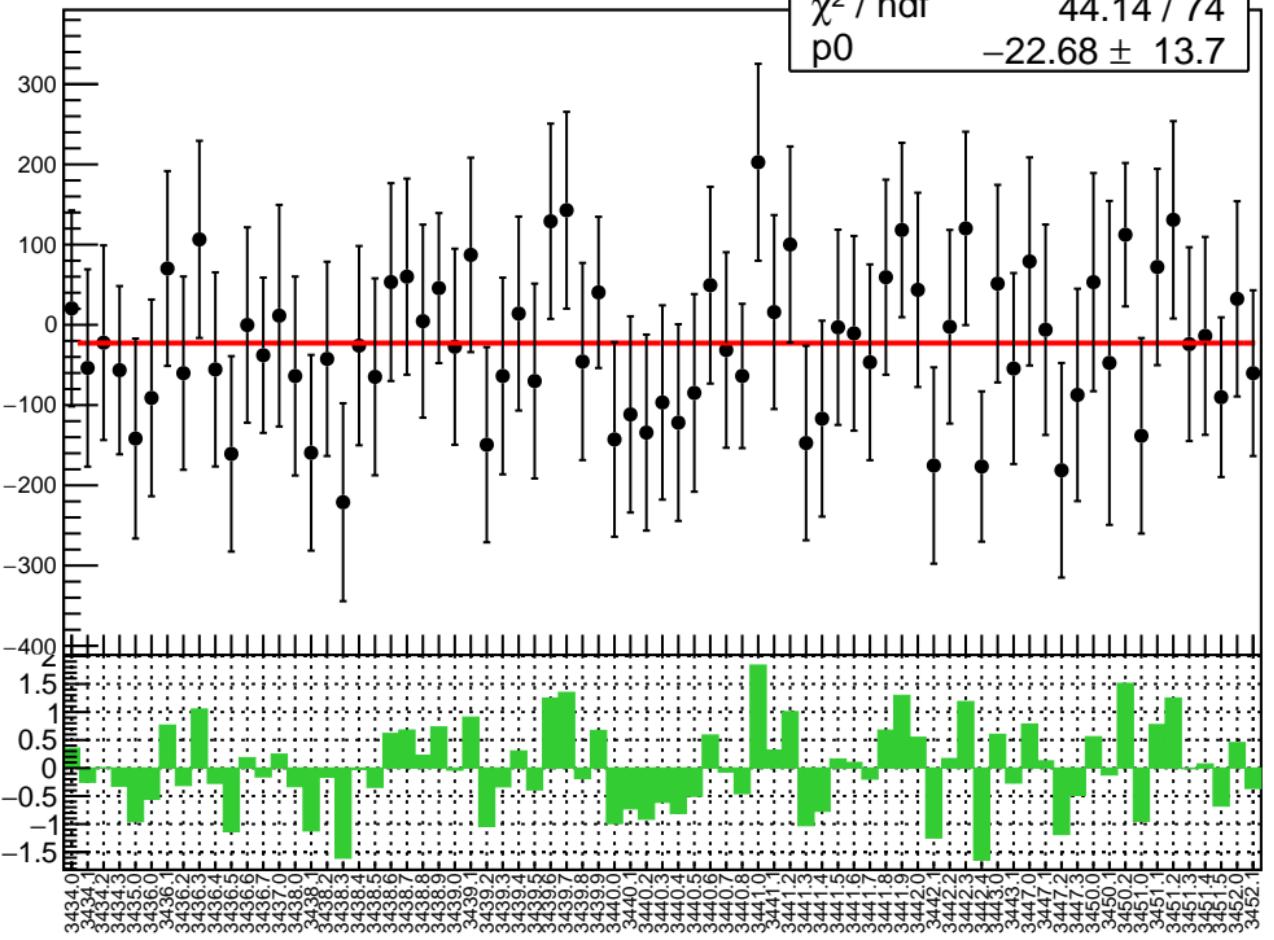
lagr_asym_usl RMS (ppm)

RMS (ppm)



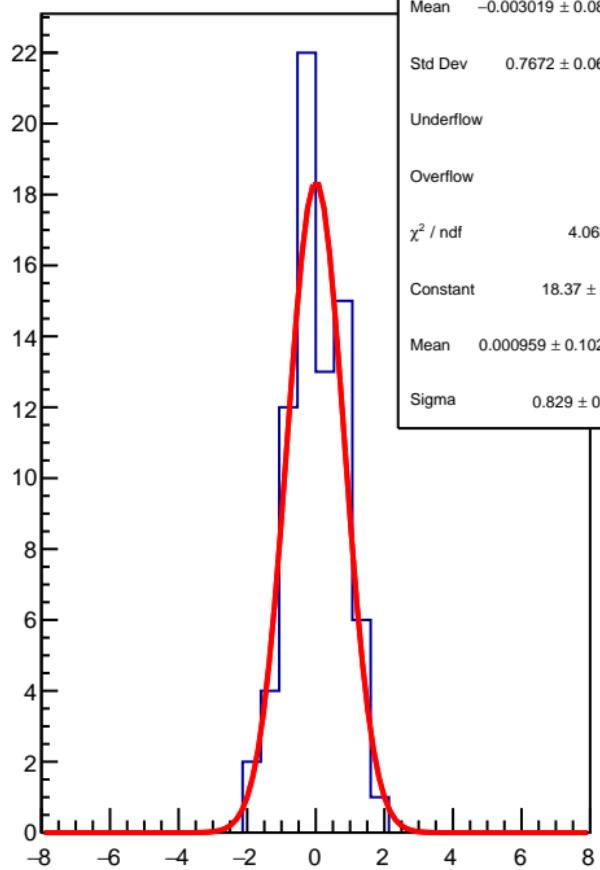
diff_bpm4eX (nm)

χ^2 / ndf 44.14 / 74
p0 -22.68 ± 13.7



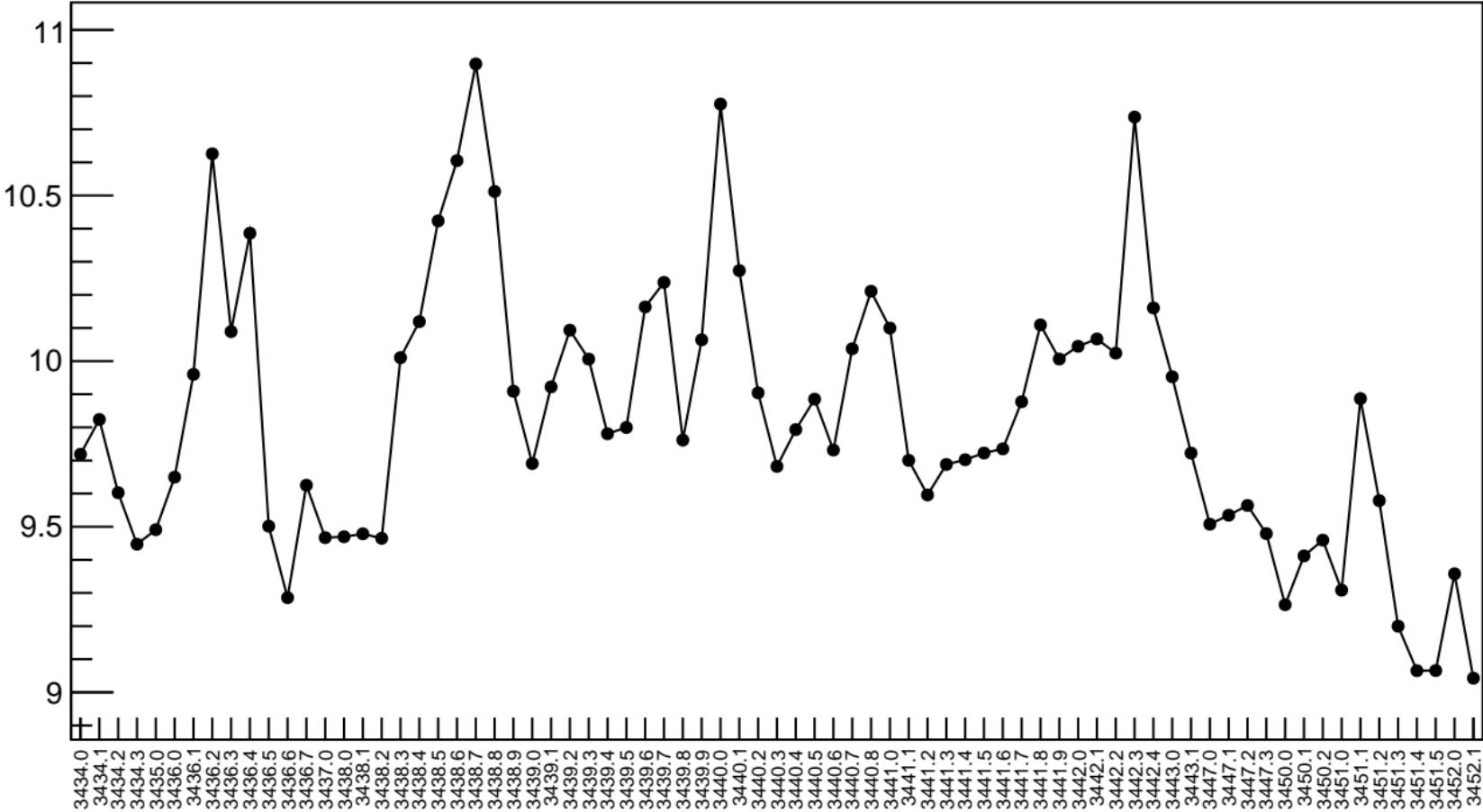
1D pull distribution

Mean -0.003019 ± 0.08859
Std Dev 0.7672 ± 0.06264
Underflow 0
Overflow 0
 χ^2 / ndf 4.063 / 5
Constant 18.37 ± 2.69
Mean 0.000959 ± 0.102192
Sigma 0.829 ± 0.077

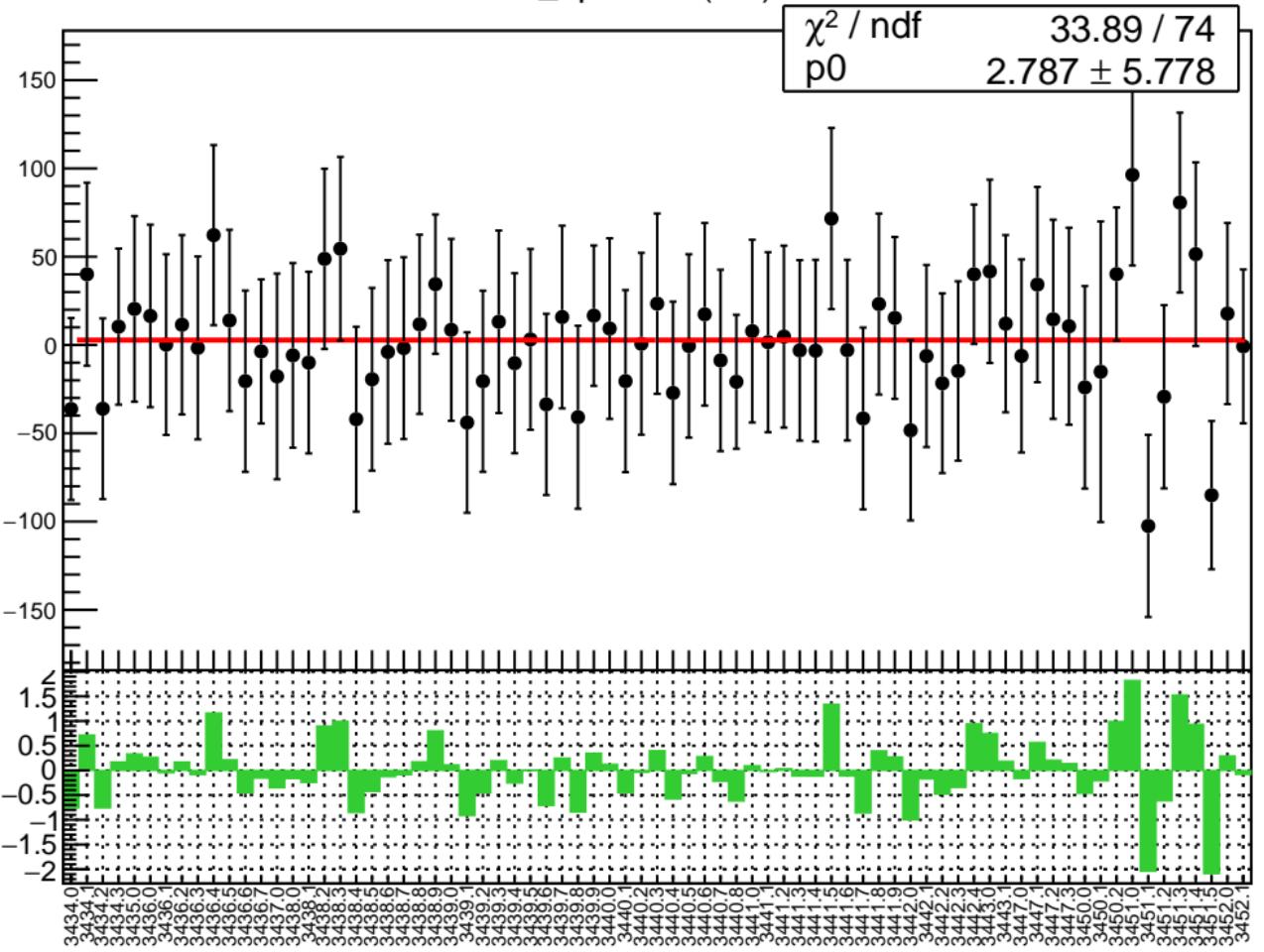


diff_bpm4eX RMS (um)

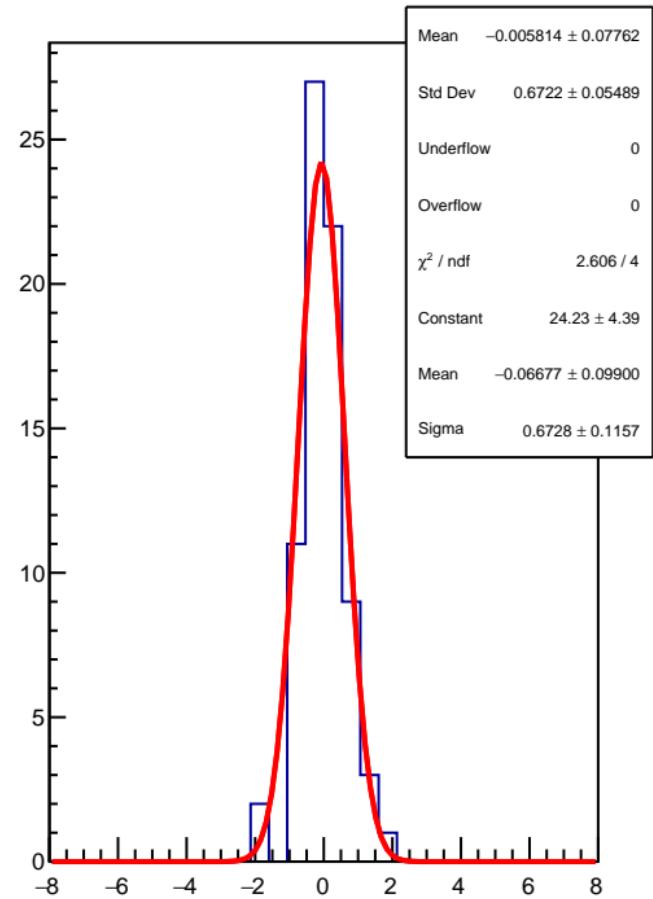
RMS (um)



diff_bpm4eY (nm)

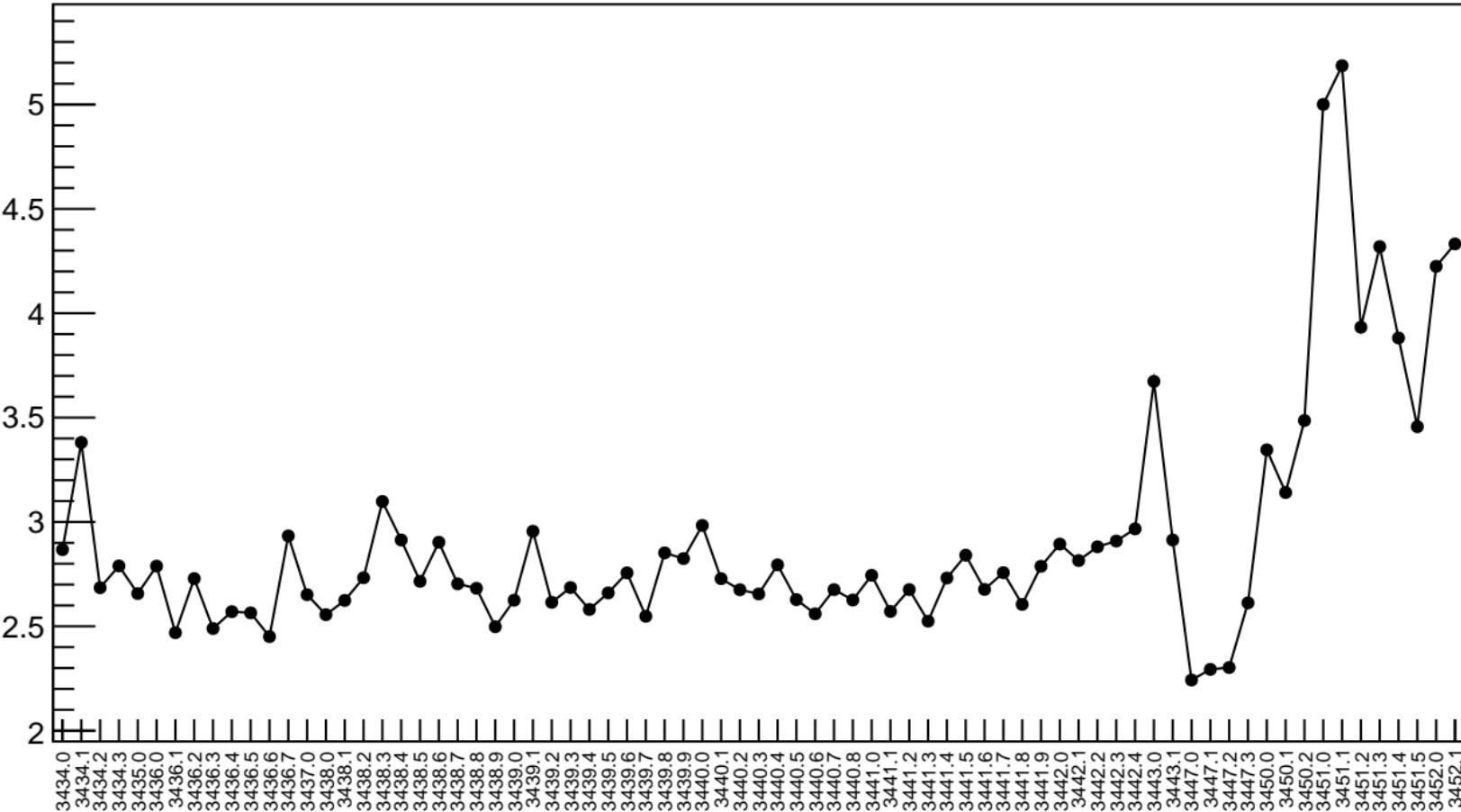


1D pull distribution



diff_bpm4eY RMS (um)

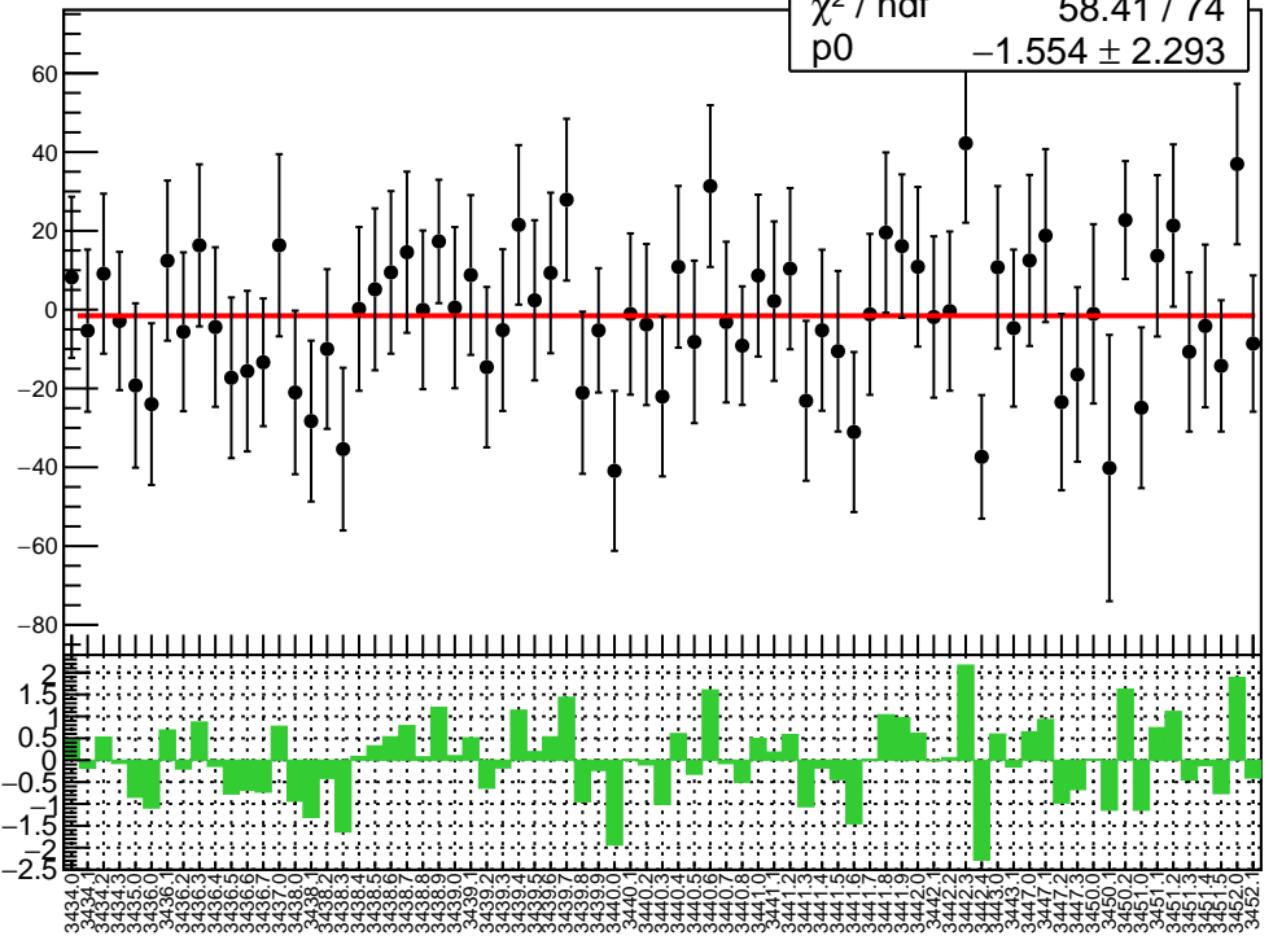
RMS (um)



diff_bpm4aX (nm)

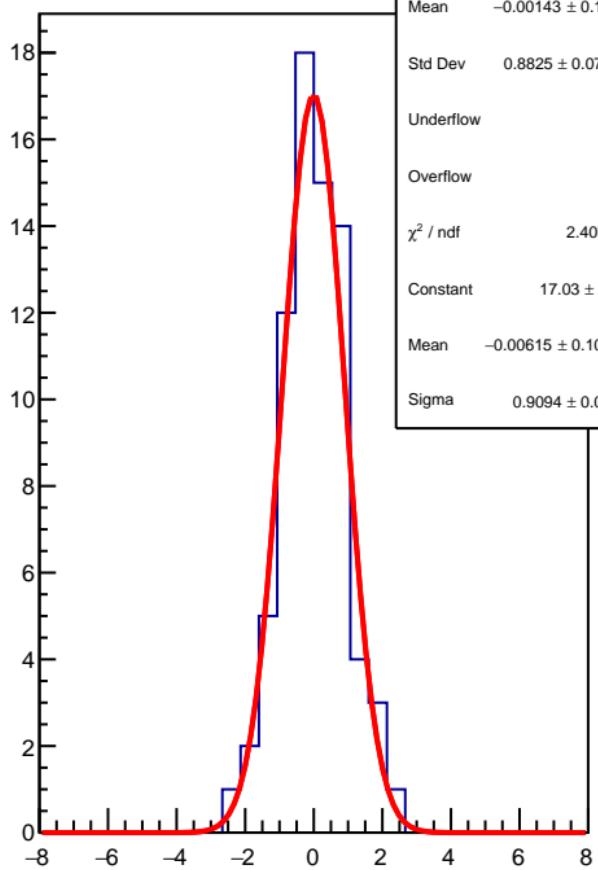
χ^2 / ndf
p0

58.41 / 74
 -1.554 ± 2.293



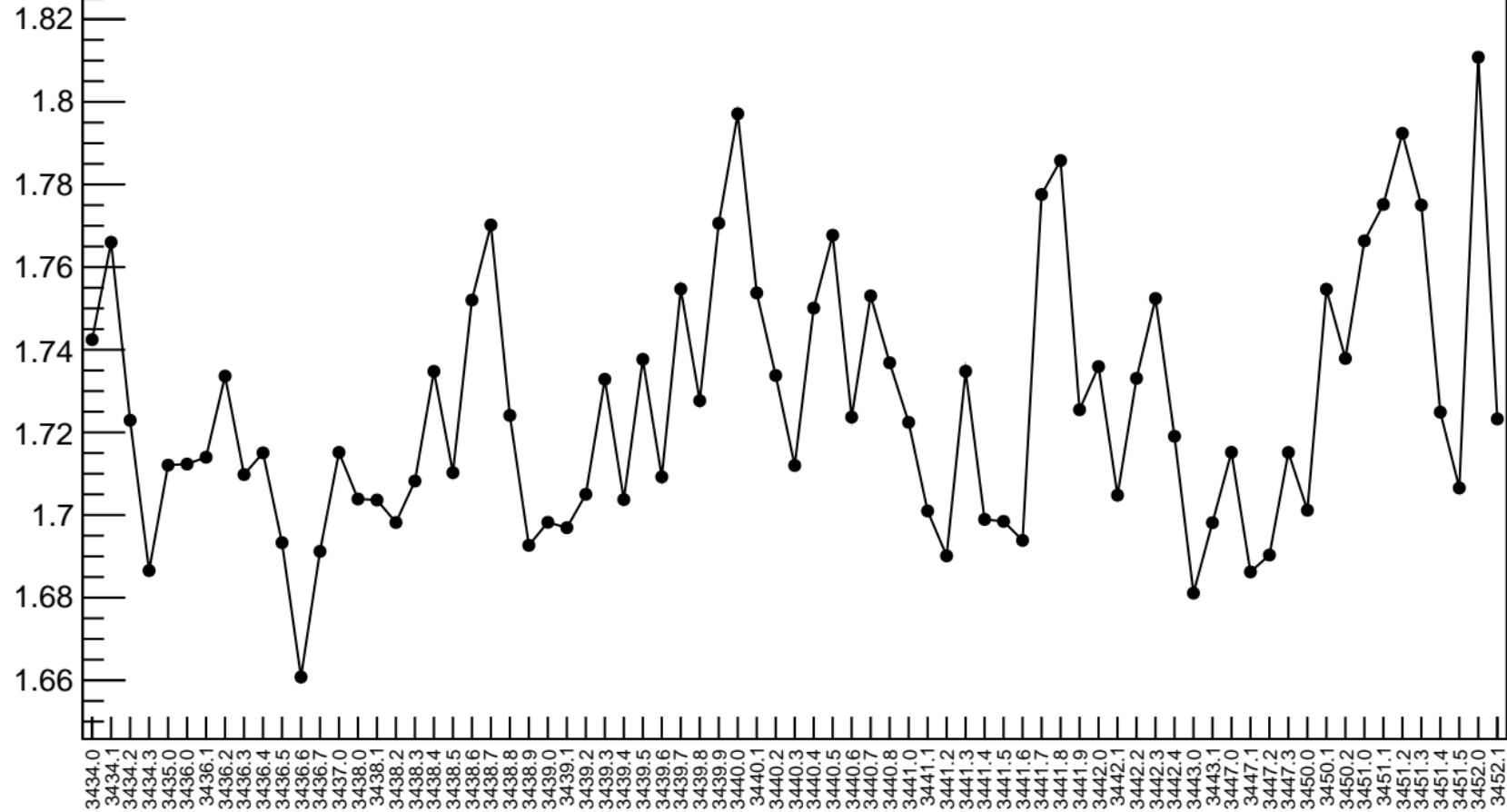
1D pull distribution

Mean -0.00143 ± 0.1019
Std Dev 0.8825 ± 0.07206
Underflow 0
Overflow 0
 χ^2 / ndf 2.407 / 7
Constant 17.03 ± 2.68
Mean -0.00615 ± 0.10863
Sigma 0.9094 ± 0.0984



diff_bpm4aX RMS (um)

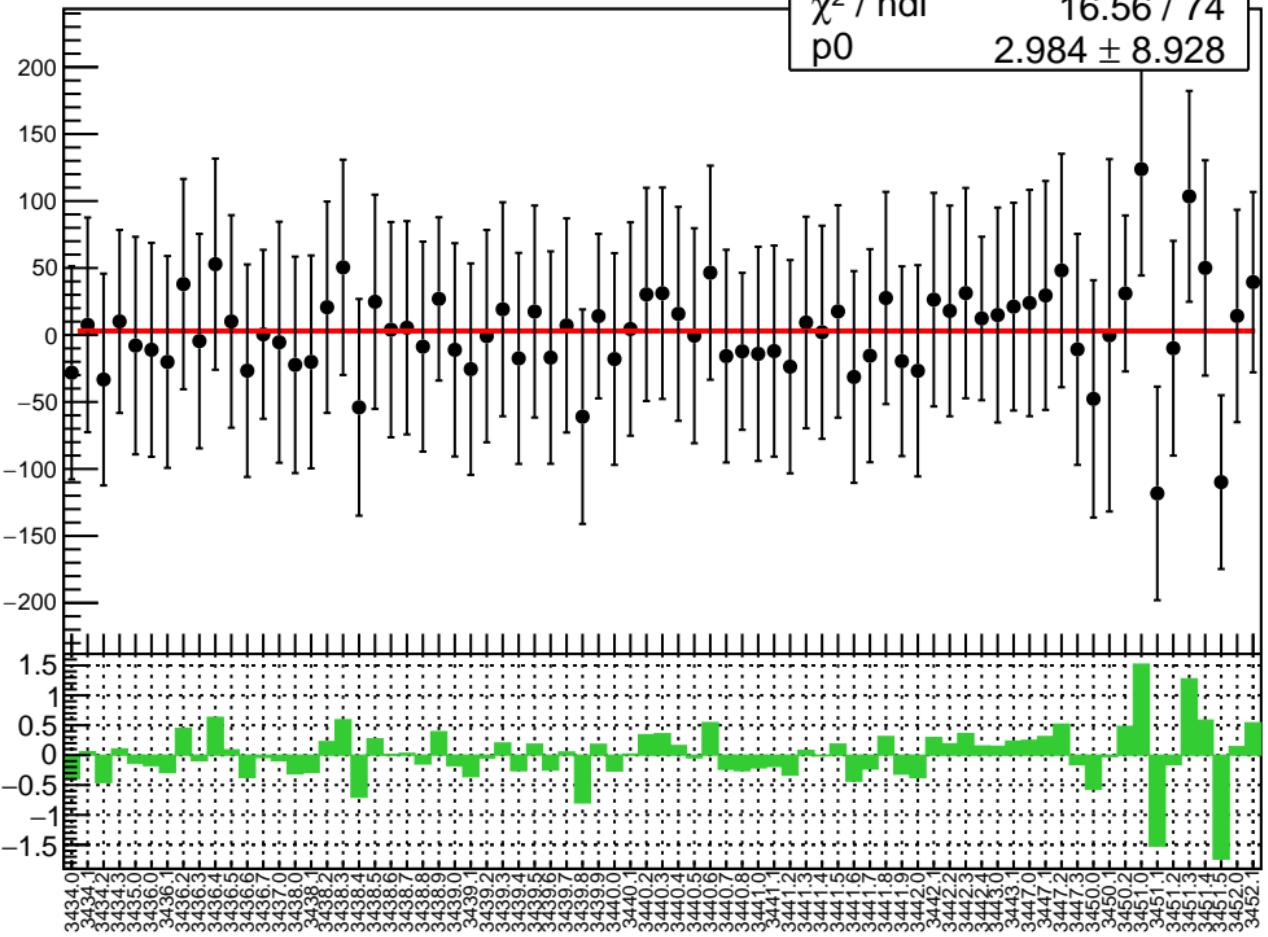
RMS (um)



diff_bpm4aY (nm)

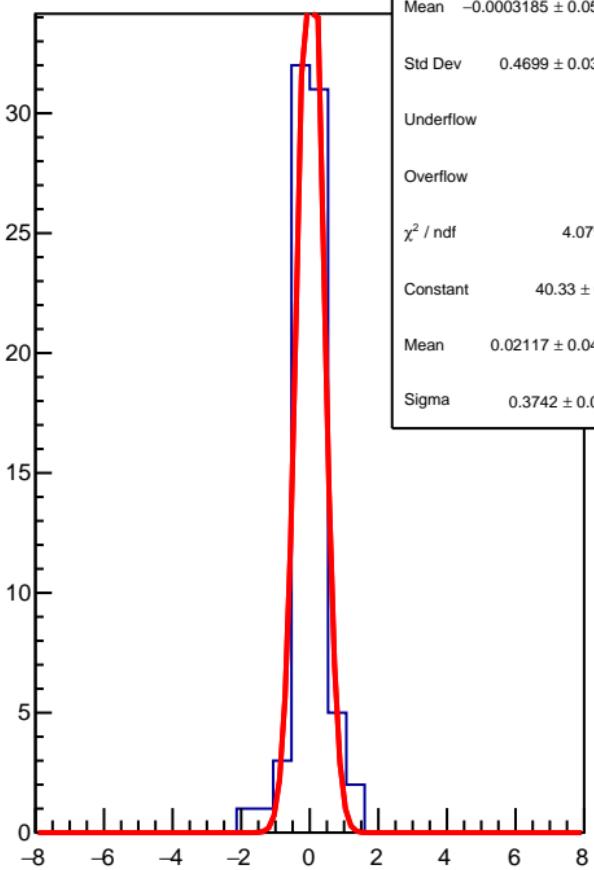
χ^2 / ndf
p0

16.56 / 74
 2.984 ± 8.928

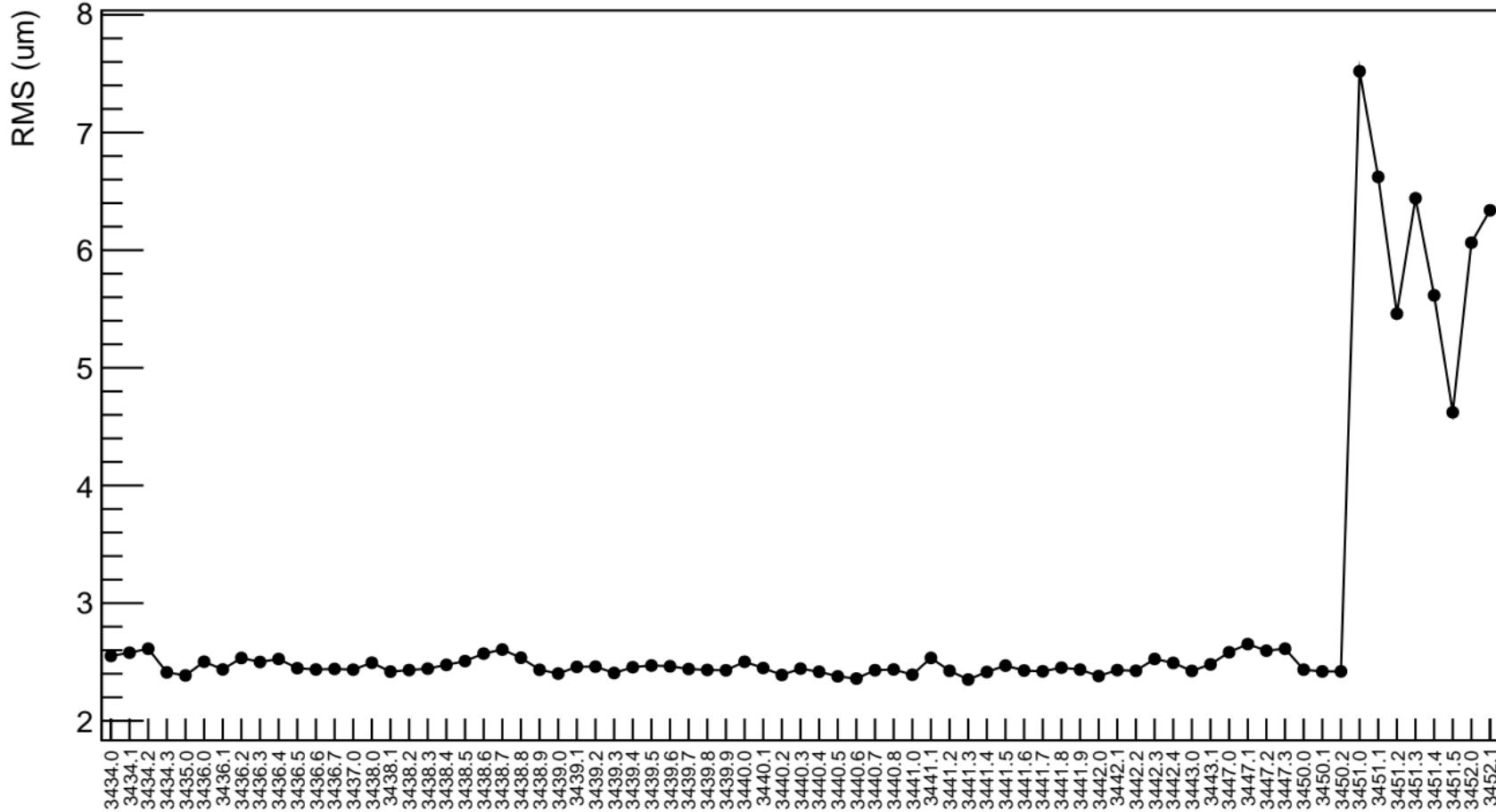


1D pull distribution

Mean -0.0003185 ± 0.05426
Std Dev 0.4699 ± 0.03837
Underflow 0
Overflow 0
 χ^2 / ndf 4.079 / 4
Constant 40.33 ± 6.15
Mean 0.02117 ± 0.04572
Sigma 0.3742 ± 0.0356

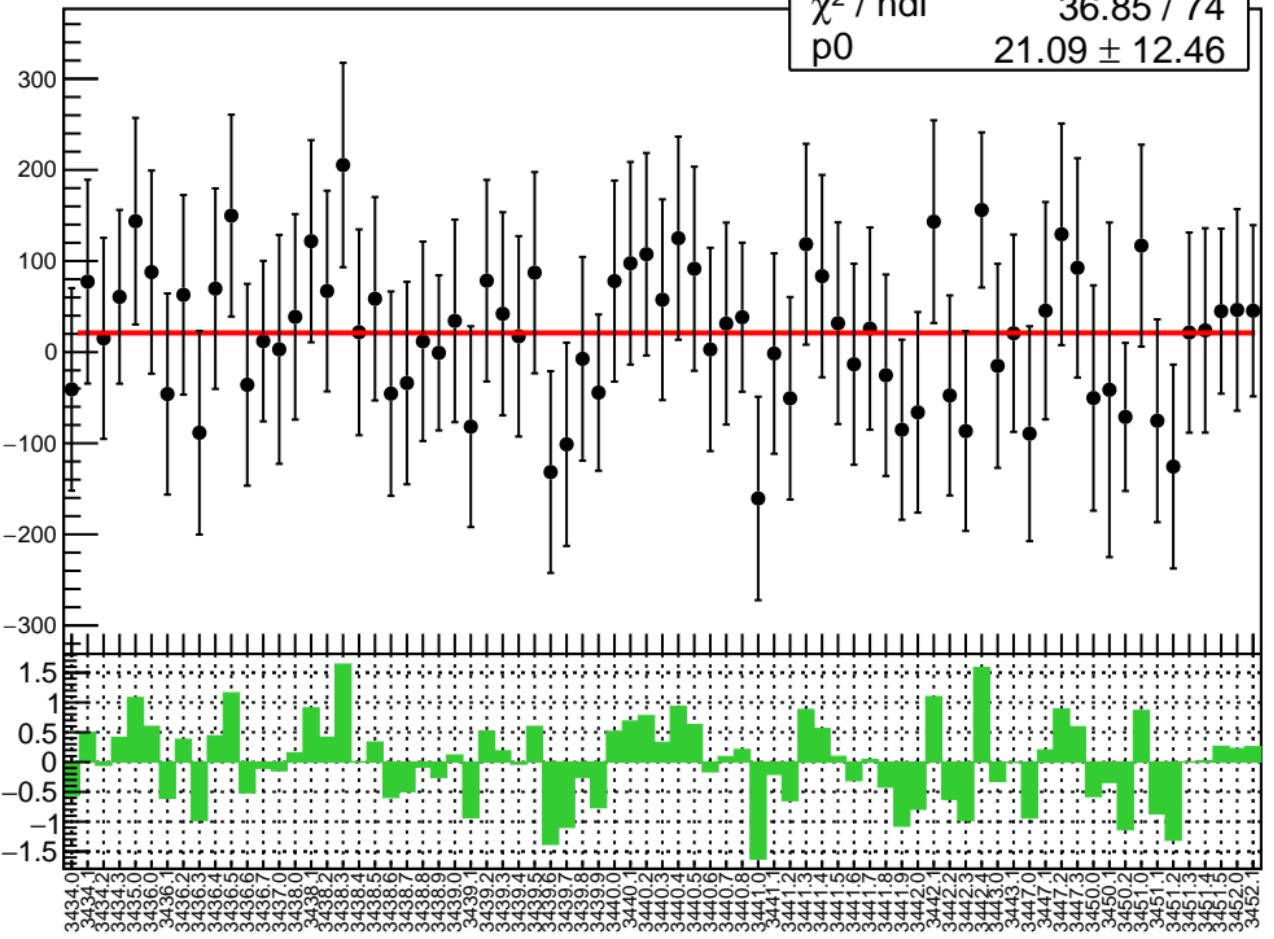


diff_bpm4aY RMS (um)

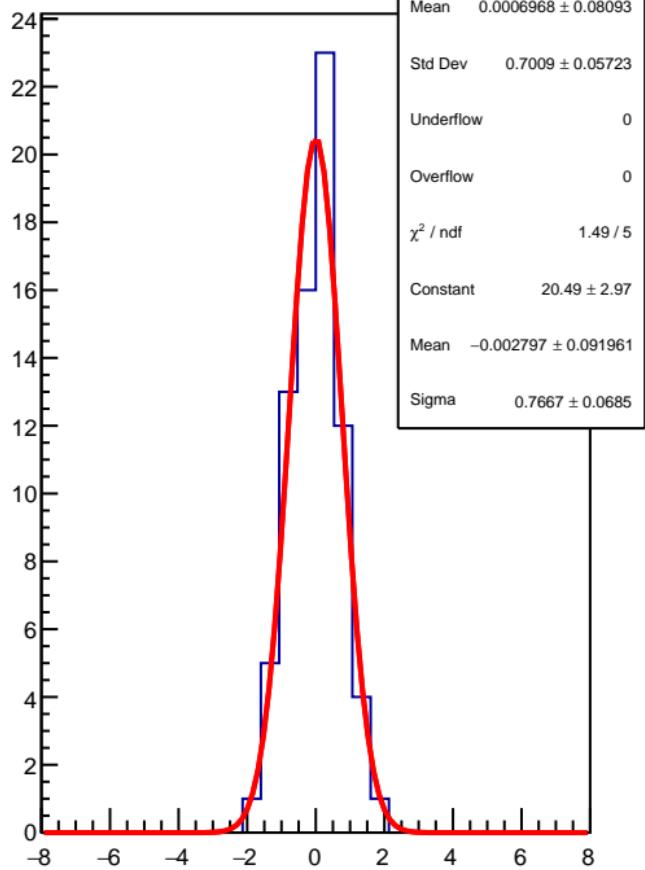


diff_bpm1X (nm)

χ^2 / ndf 36.85 / 74
p0 21.09 ± 12.46

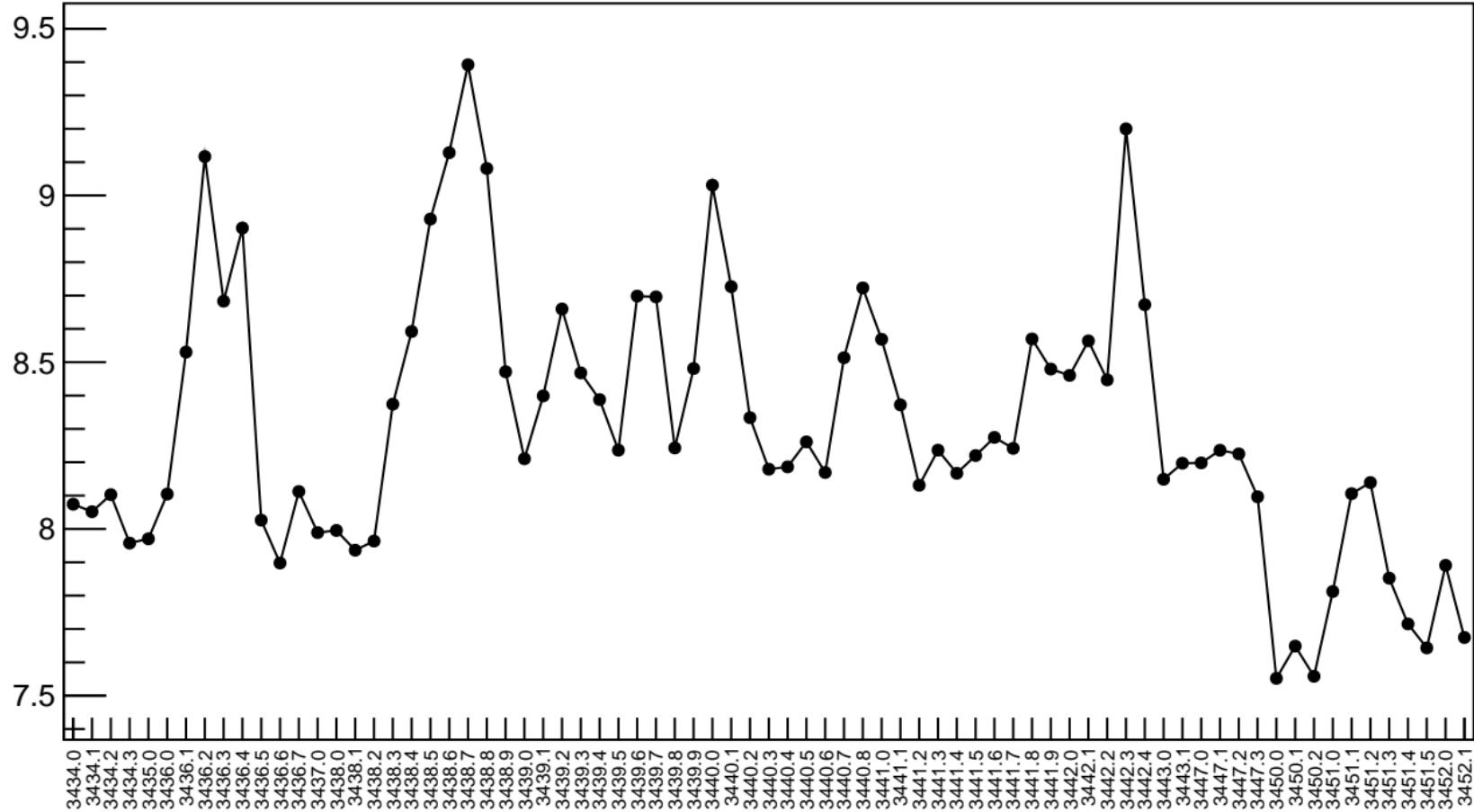


1D pull distribution



diff_bpm1X RMS (um)

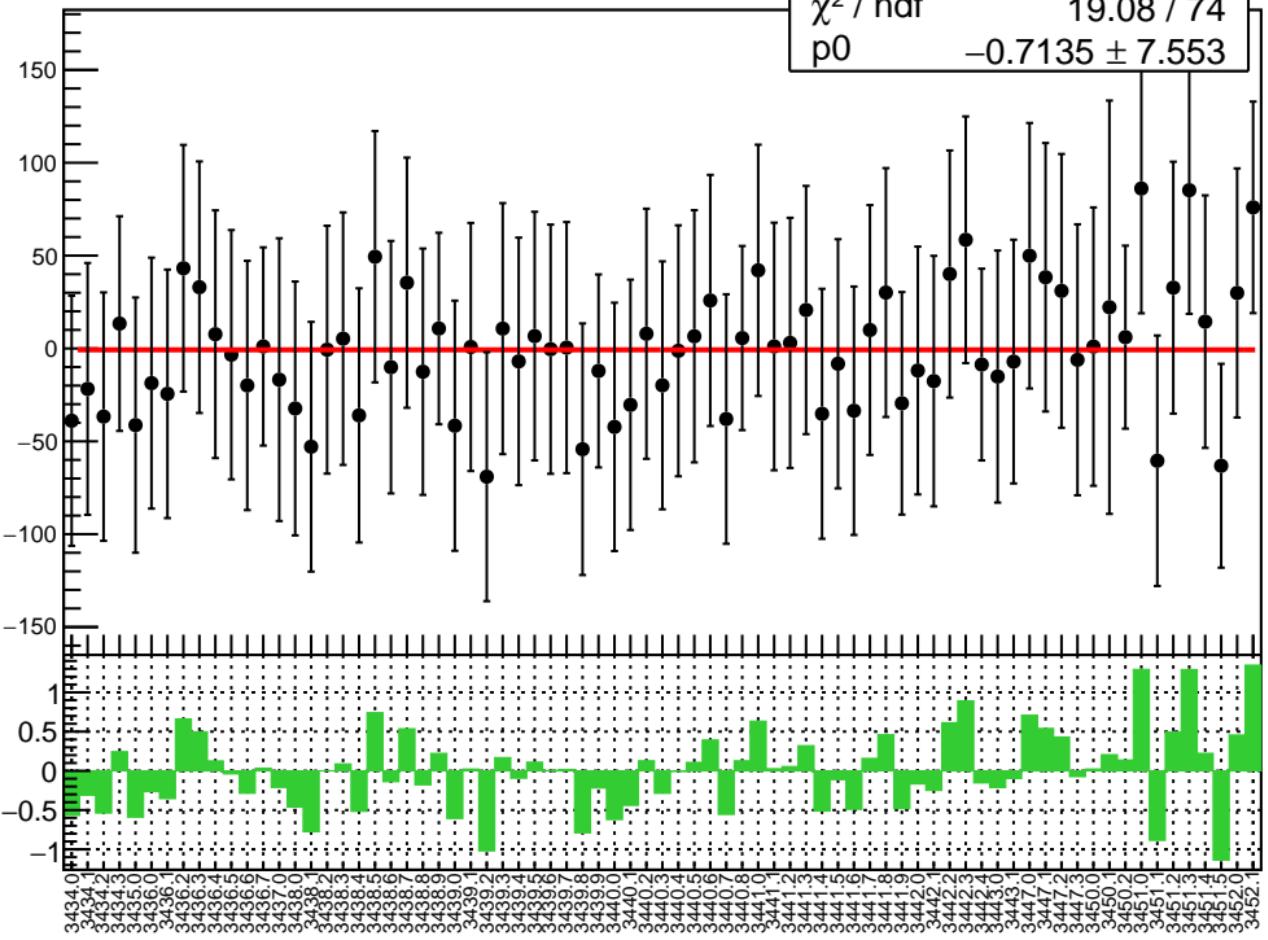
RMS (um)



diff_bpm1Y (nm)

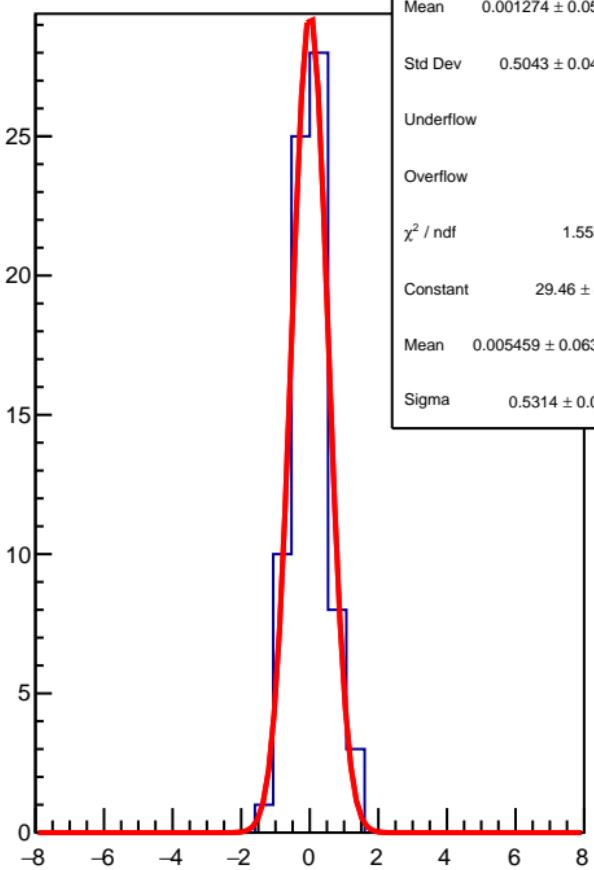
χ^2 / ndf
p0

19.08 / 74
 -0.7135 ± 7.553



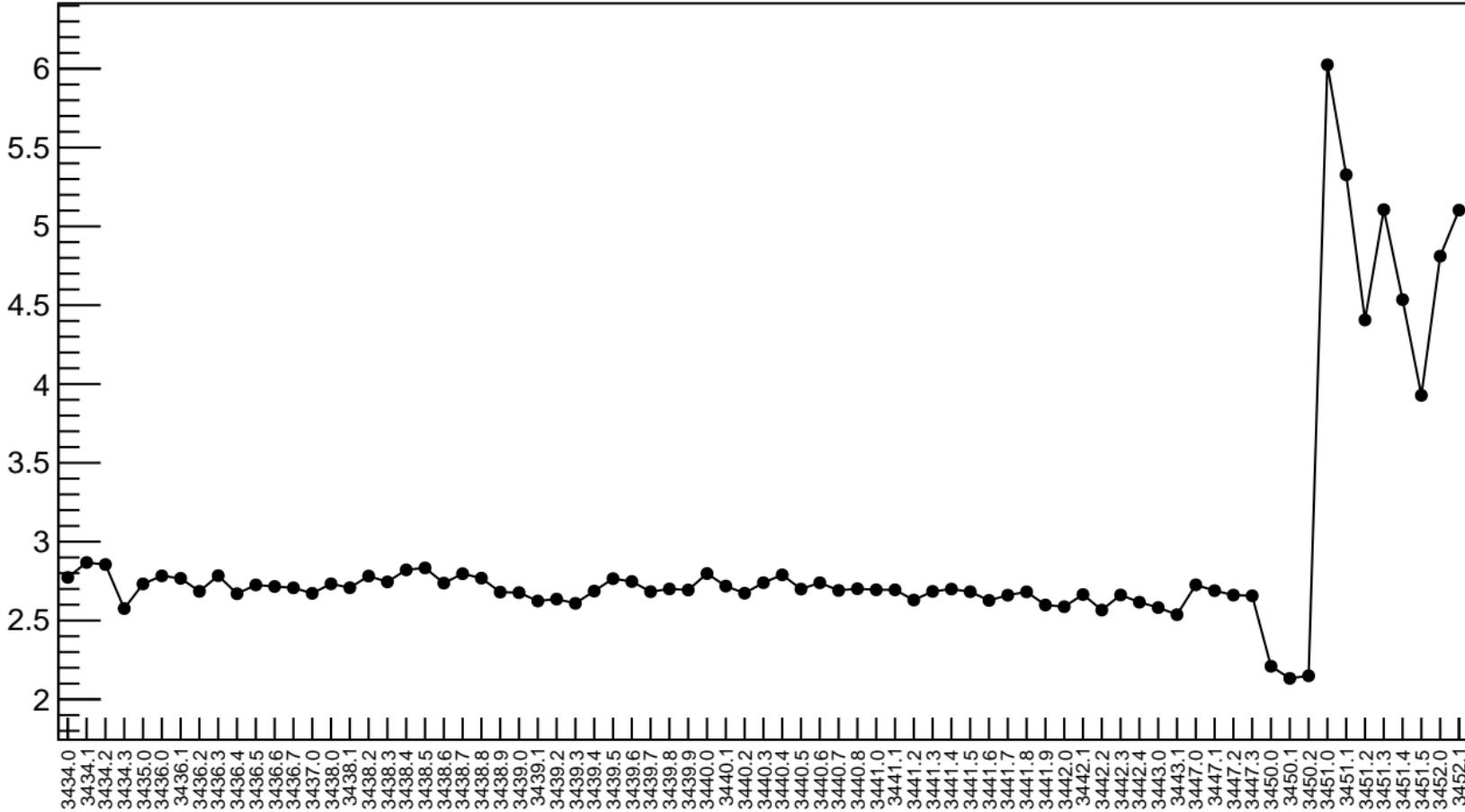
1D pull distribution

Mean 0.001274 ± 0.05823
Std Dev 0.5043 ± 0.04118
Underflow 0
Overflow 0
 χ^2 / ndf 1.553 / 3
Constant 29.46 ± 4.44
Mean 0.005459 ± 0.063603
Sigma 0.5314 ± 0.0517



diff_bpm1Y RMS (um)

RMS (um)

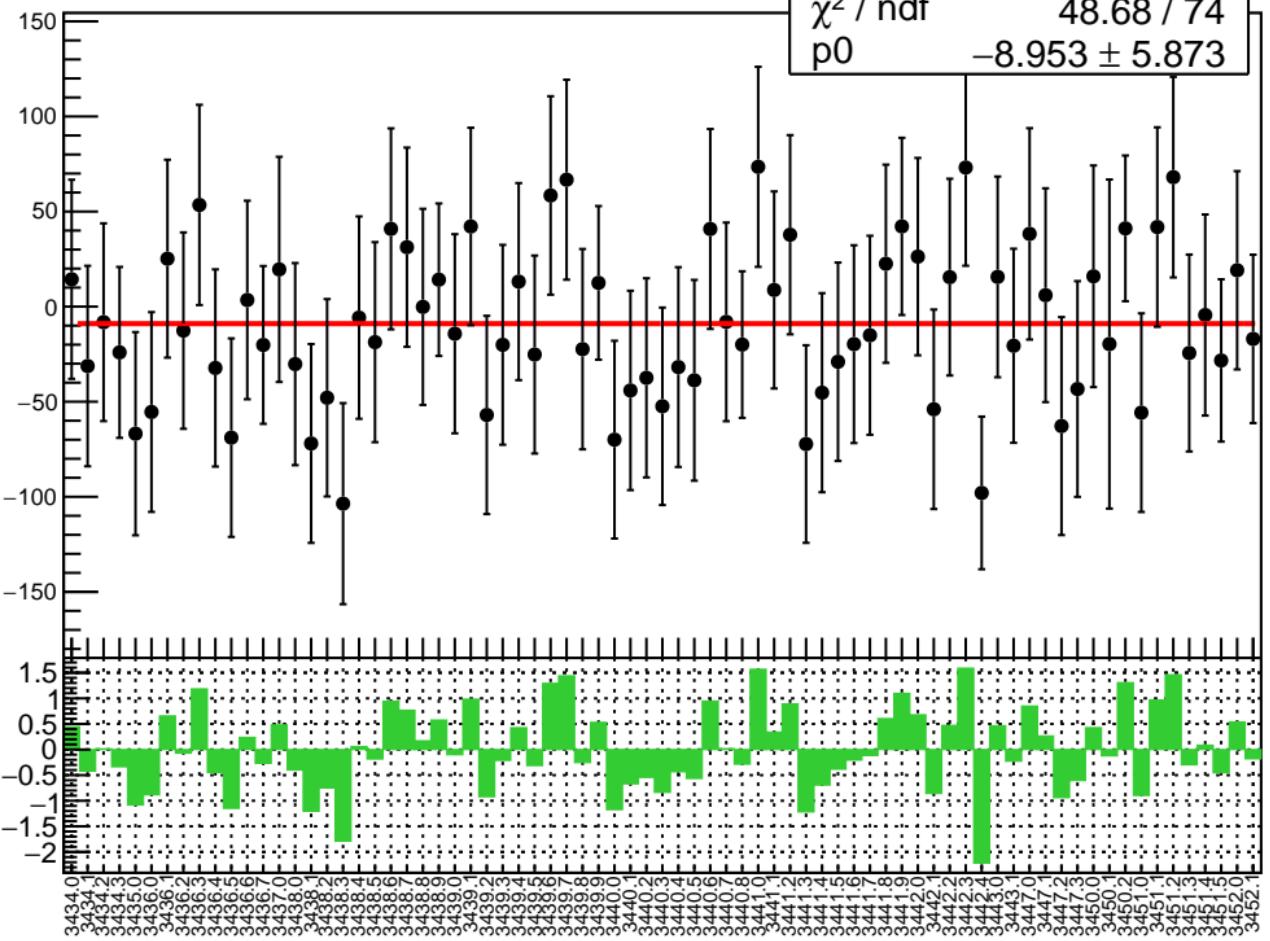


diff_bpm16X (nm)

χ^2 / ndf

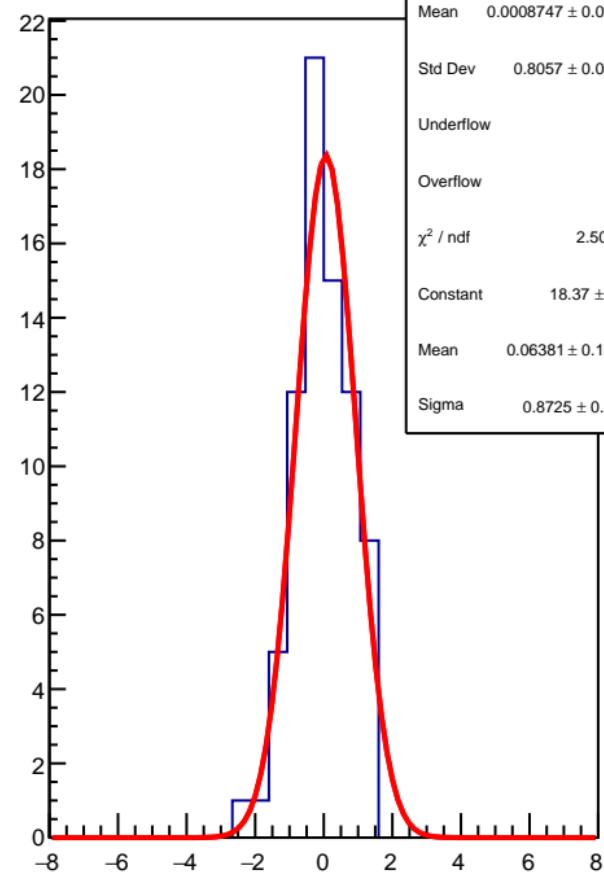
48.68 / 74

p0
 -8.953 ± 5.873



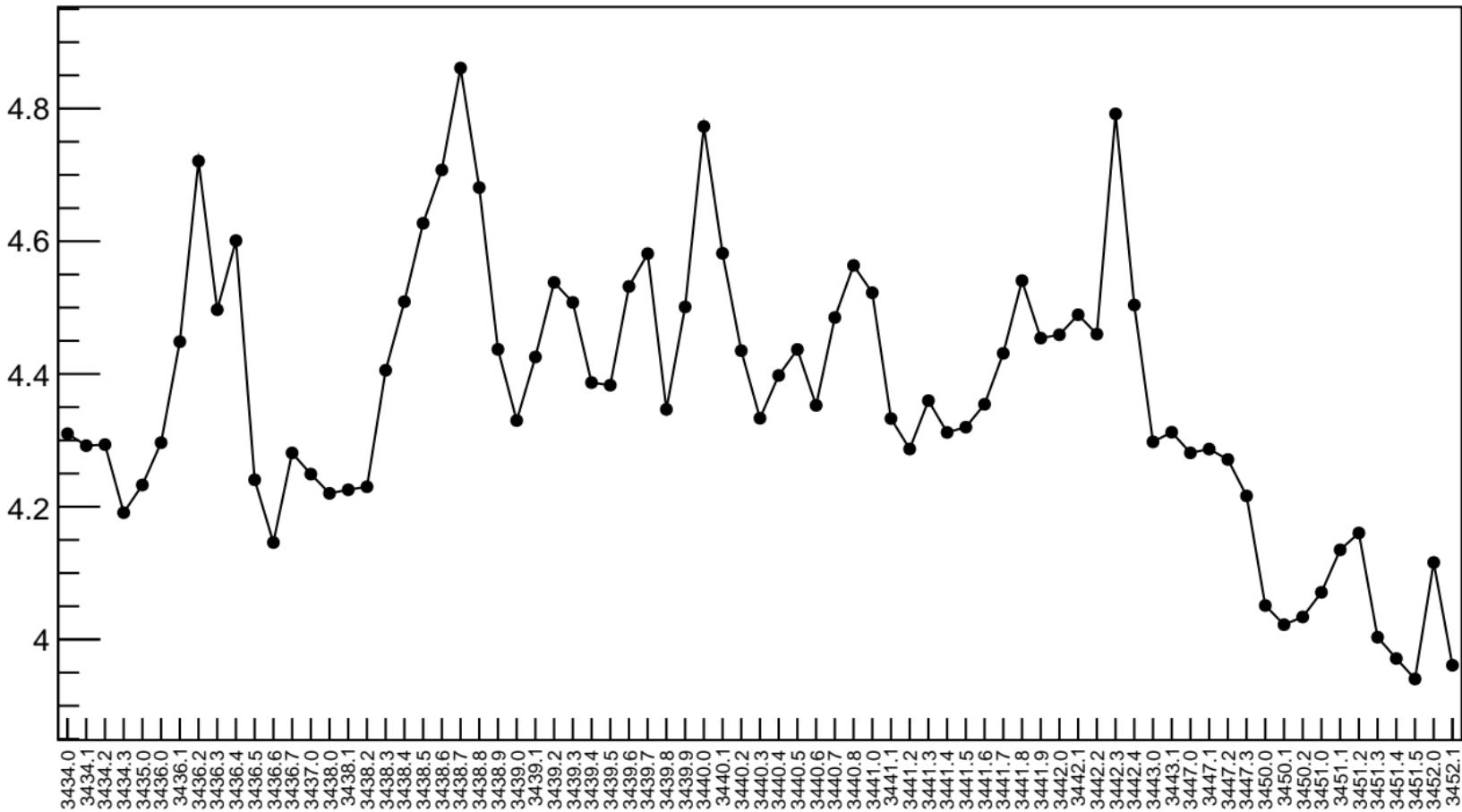
1D pull distribution

Mean	0.0008747 ± 0.09303
Std Dev	0.8057 ± 0.06578
Underflow	0
Overflow	0
χ^2 / ndf	2.501 / 5
Constant	18.37 ± 2.79
Mean	0.06381 ± 0.13425
Sigma	0.8725 ± 0.1073



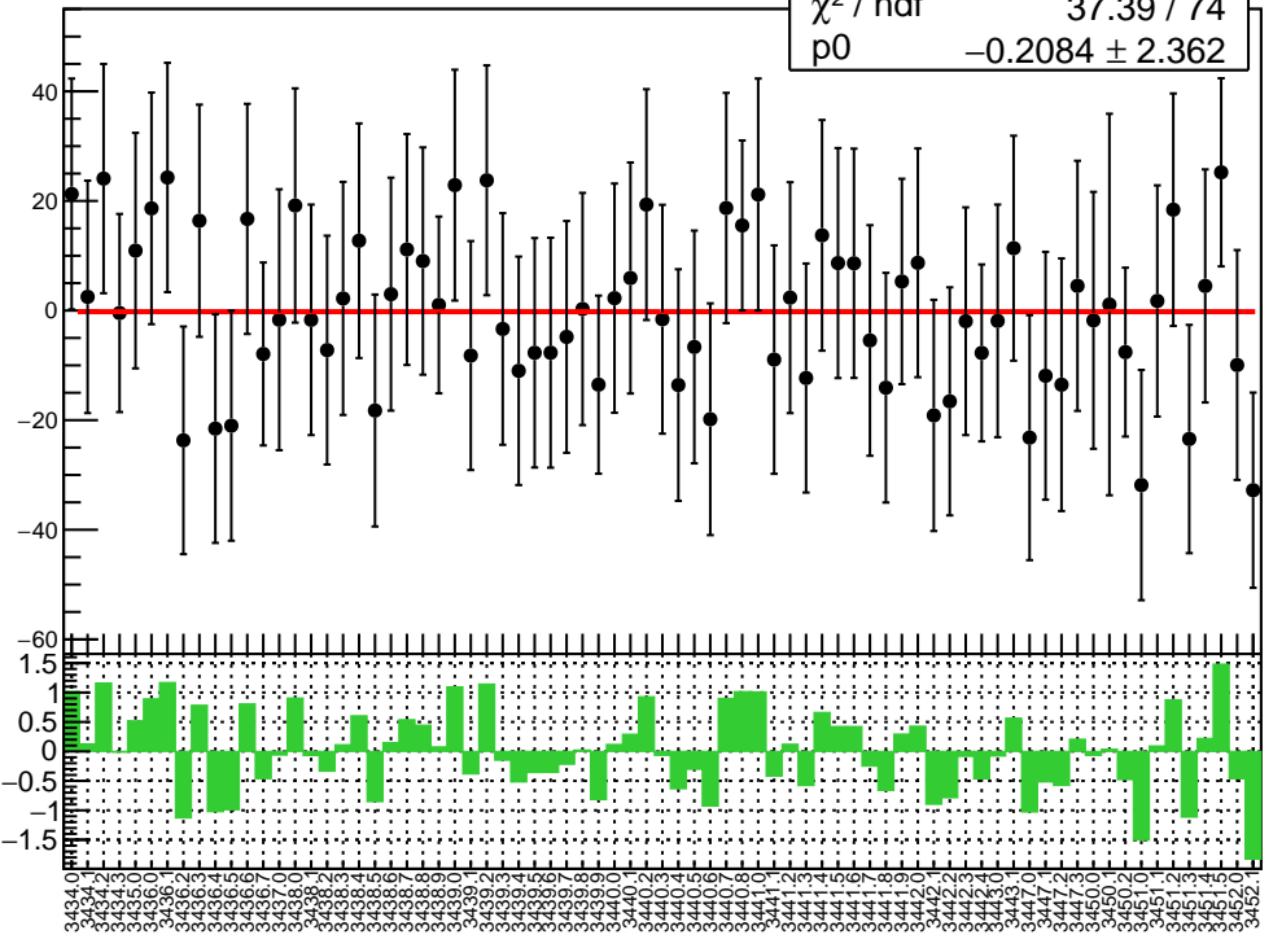
diff_bpm16X RMS (um)

RMS (um)

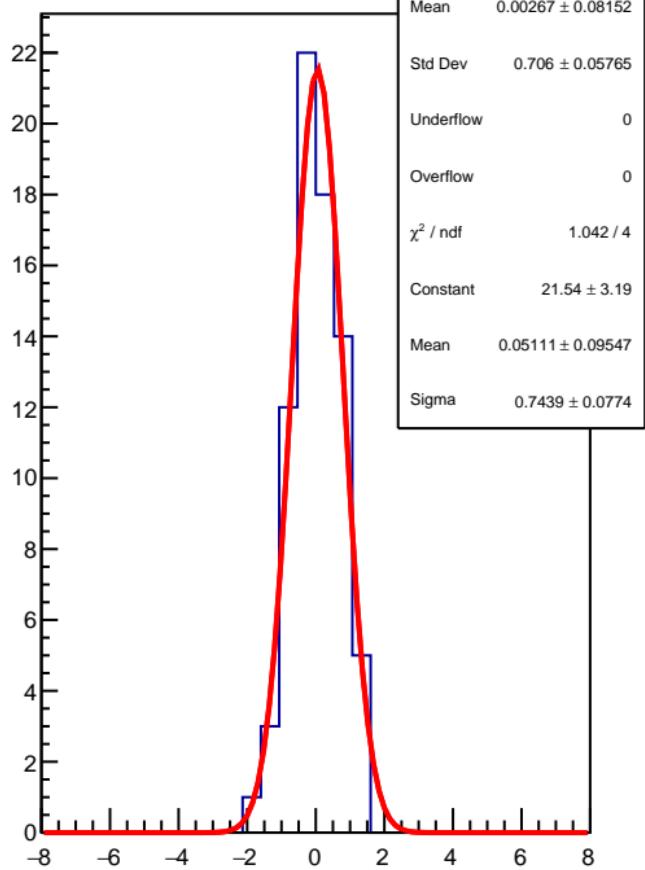


diff_bpm16Y (nm)

χ^2 / ndf 37.39 / 74
 p_0 -0.2084 ± 2.362

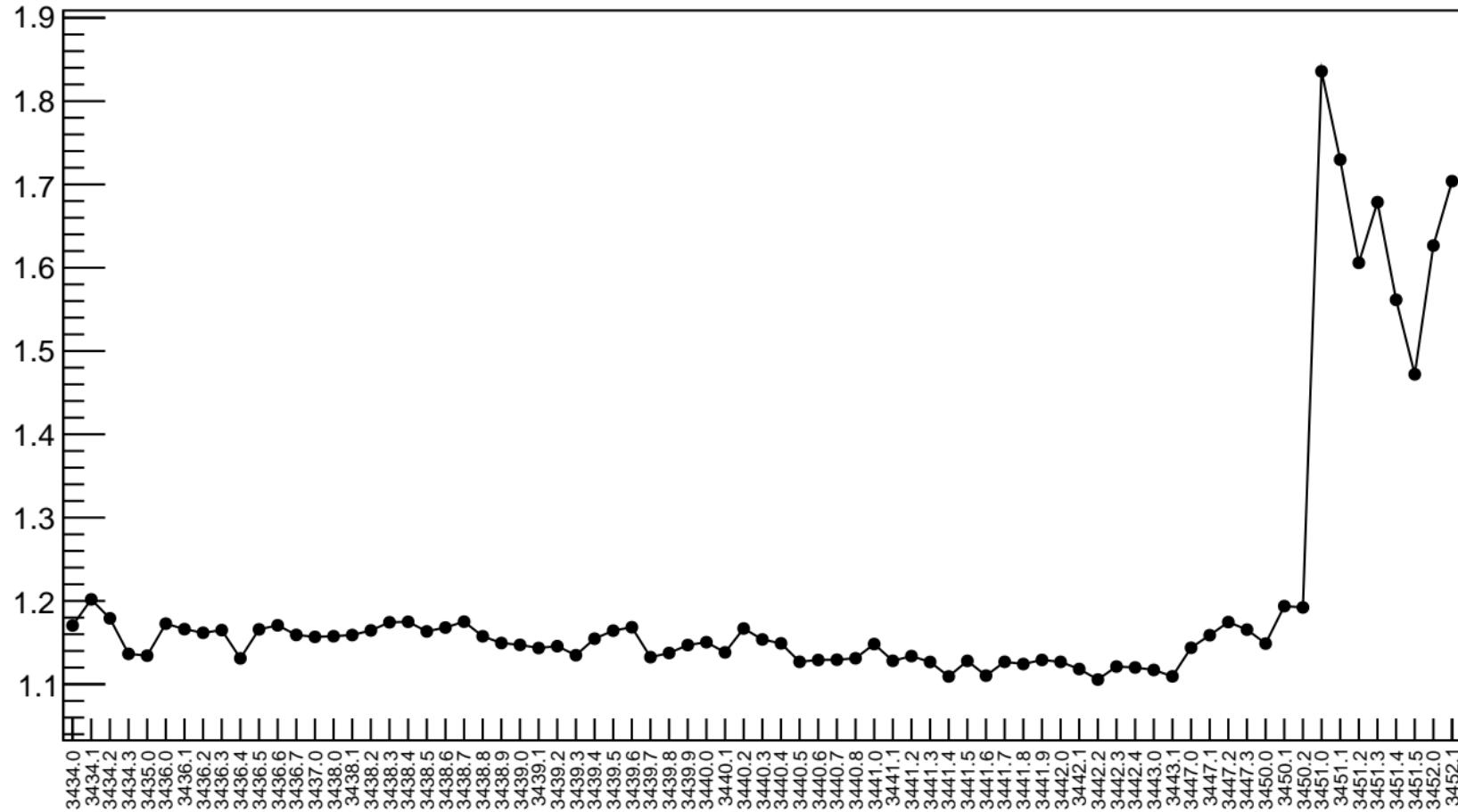


1D pull distribution

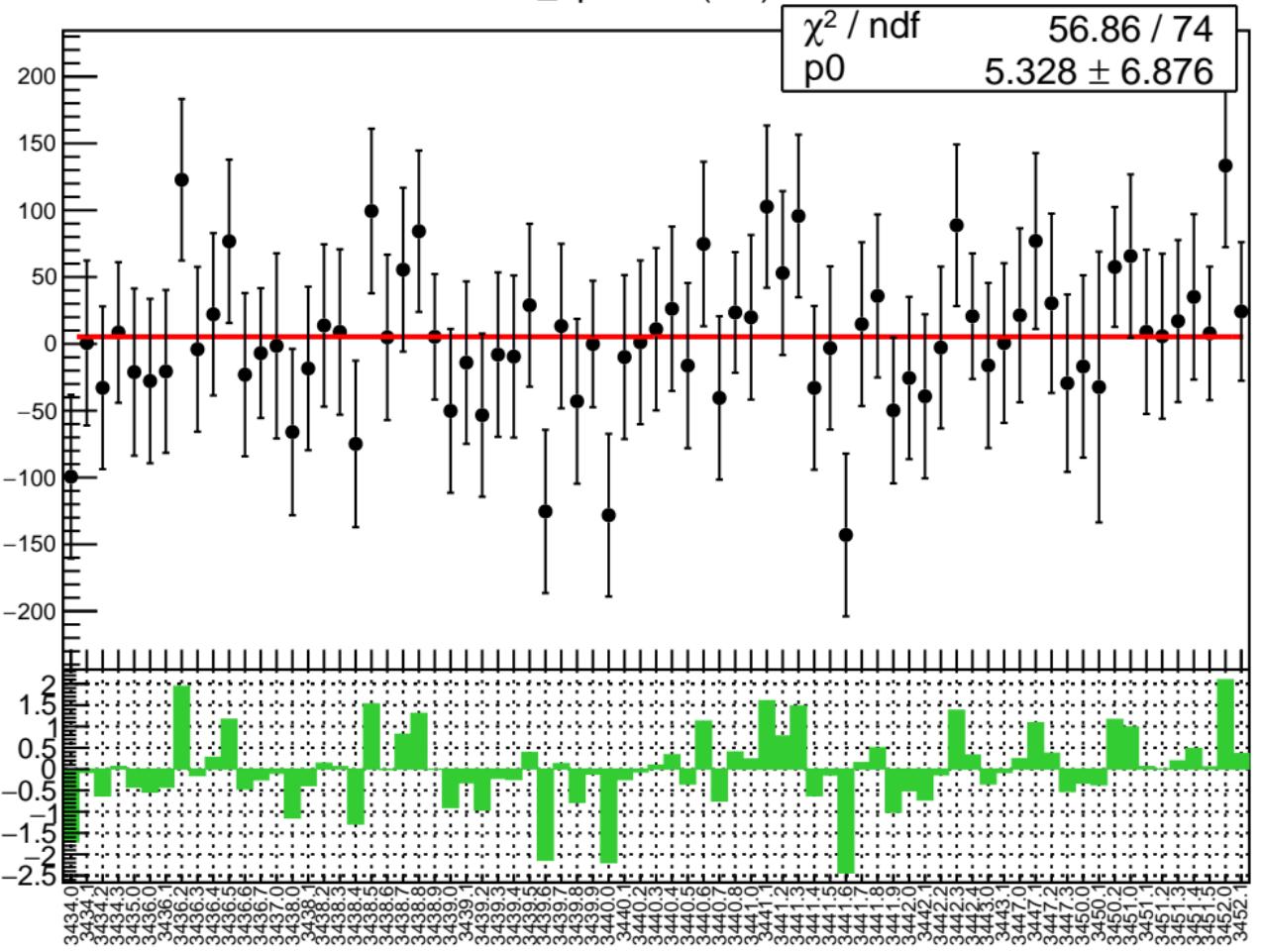


diff_bpm16Y RMS (um)

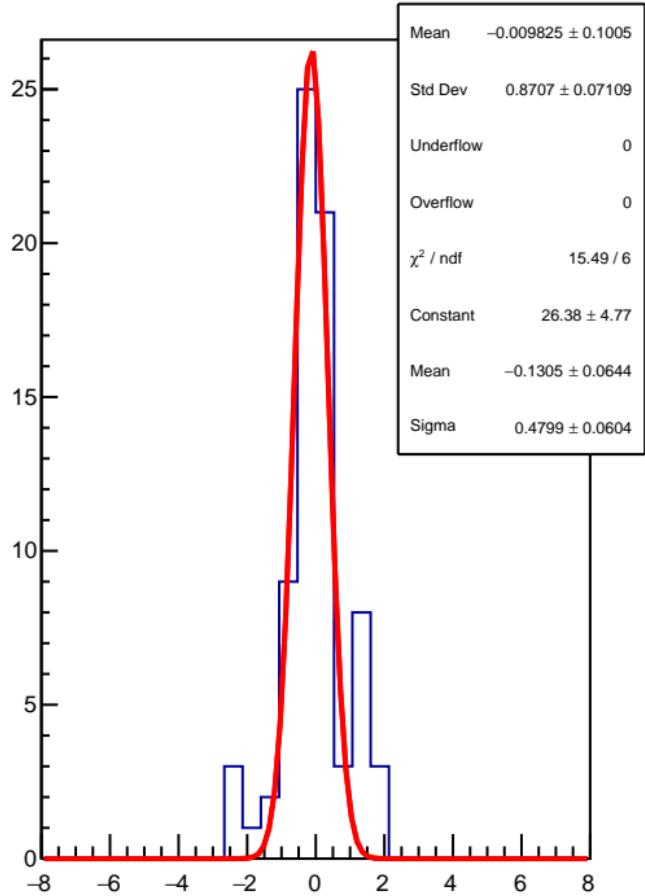
RMS (um)



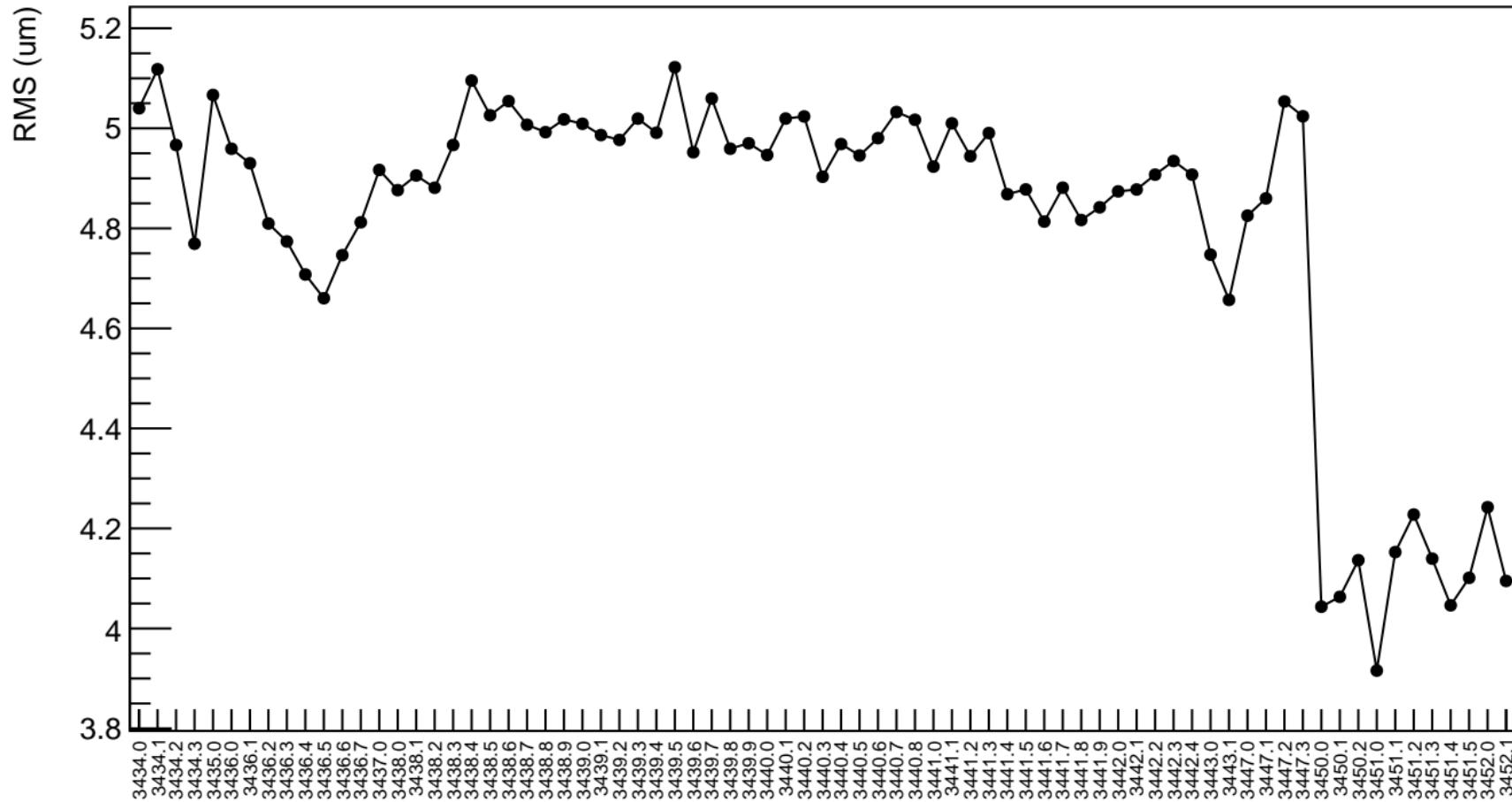
diff_bpm12X (nm)



1D pull distribution



diff_bpm12X RMS (um)

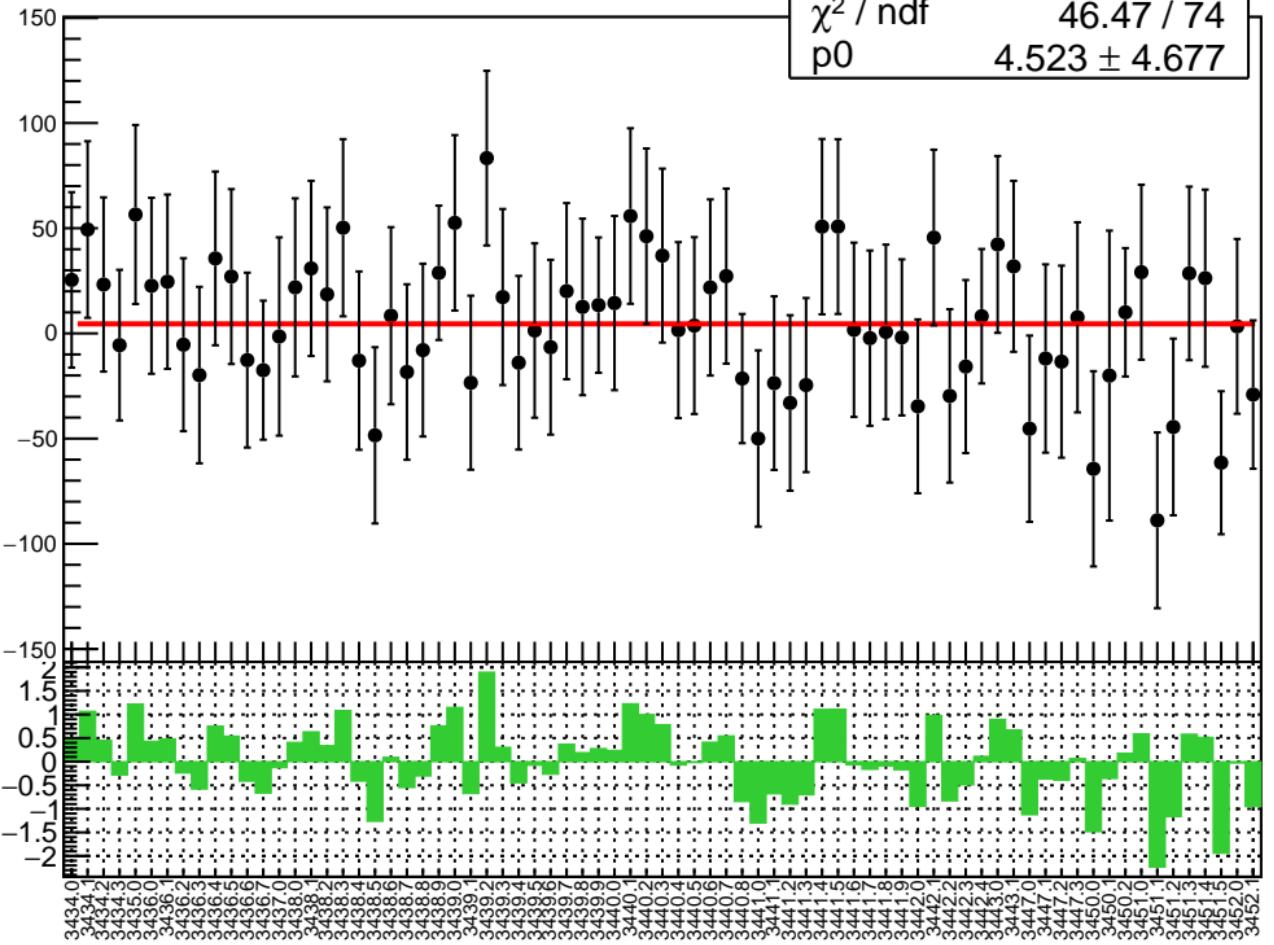


diff_bpm12Y (nm)

χ^2 / ndf

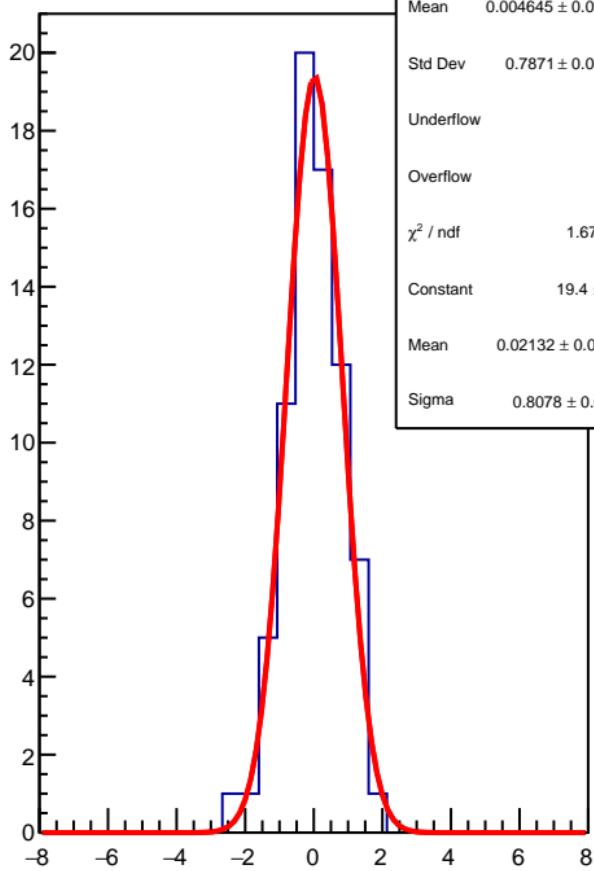
46.47 / 74

p0
 4.523 ± 4.677



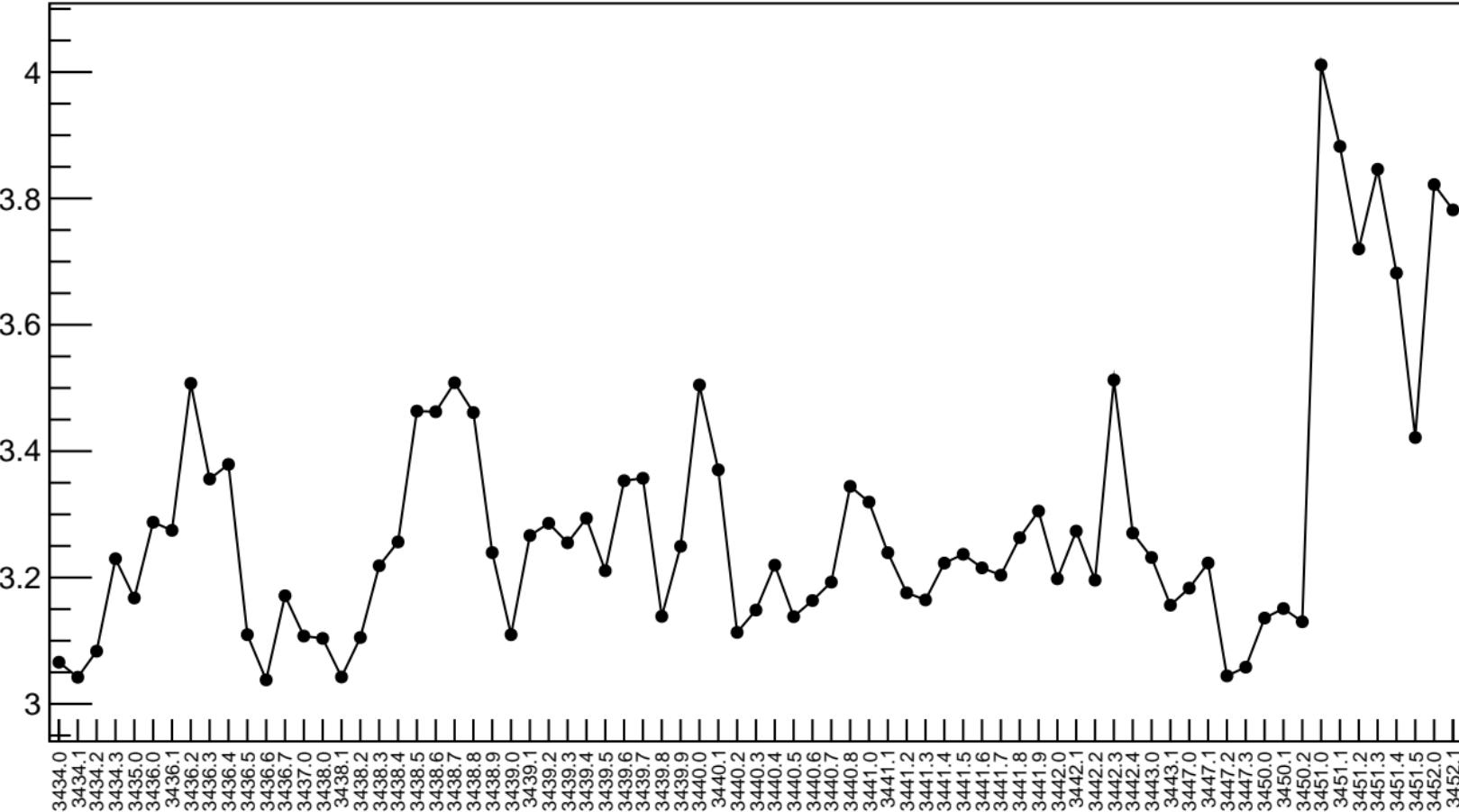
1D pull distribution

Mean	0.004645 ± 0.09089
Std Dev	0.7871 ± 0.06427
Underflow	0
Overflow	0
χ^2 / ndf	1.677 / 6
Constant	19.4 ± 2.8
Mean	0.02132 ± 0.09611
Sigma	0.8078 ± 0.0715

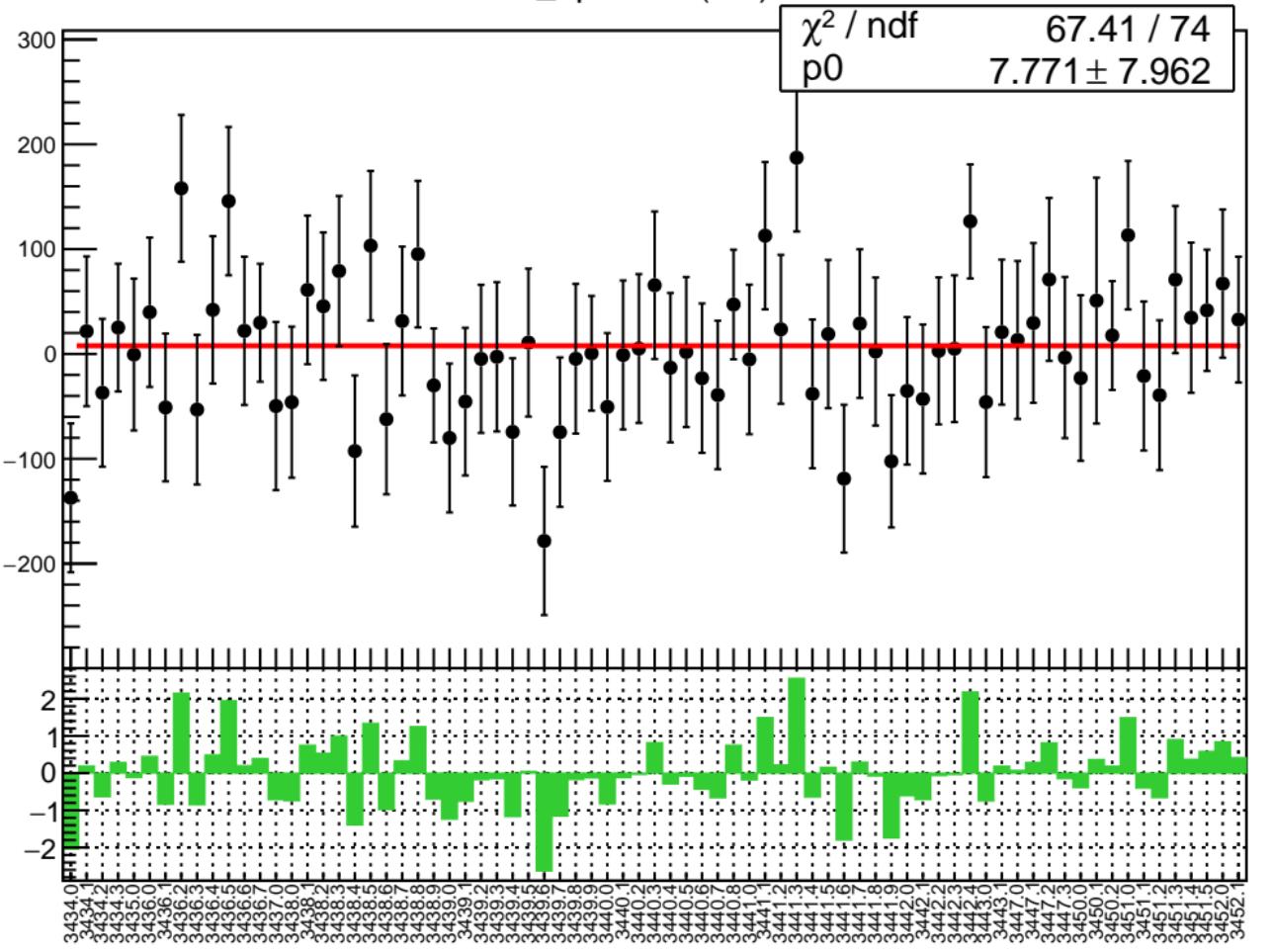


diff_bpm12Y RMS (um)

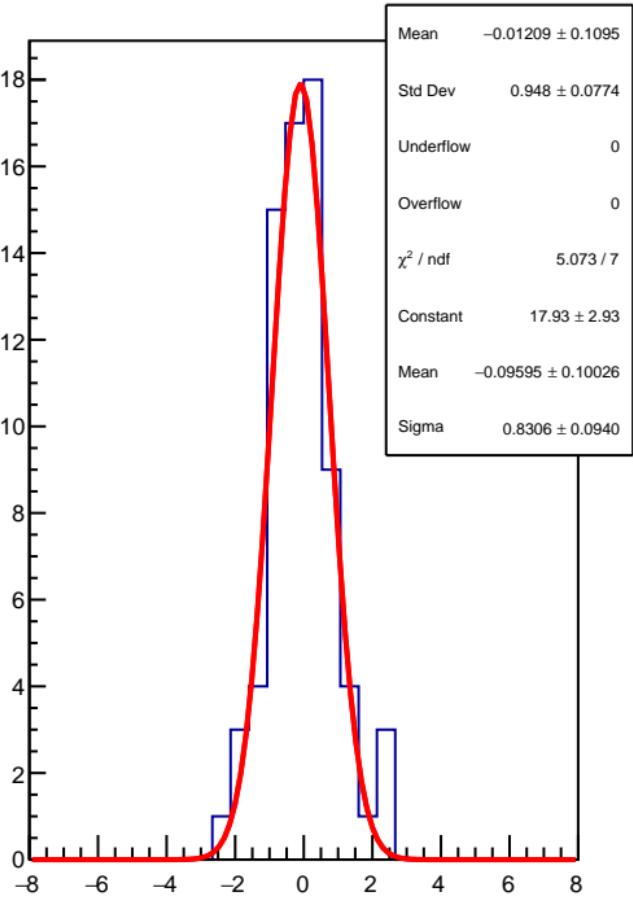
RMS (um)



diff_bpm11X (nm)

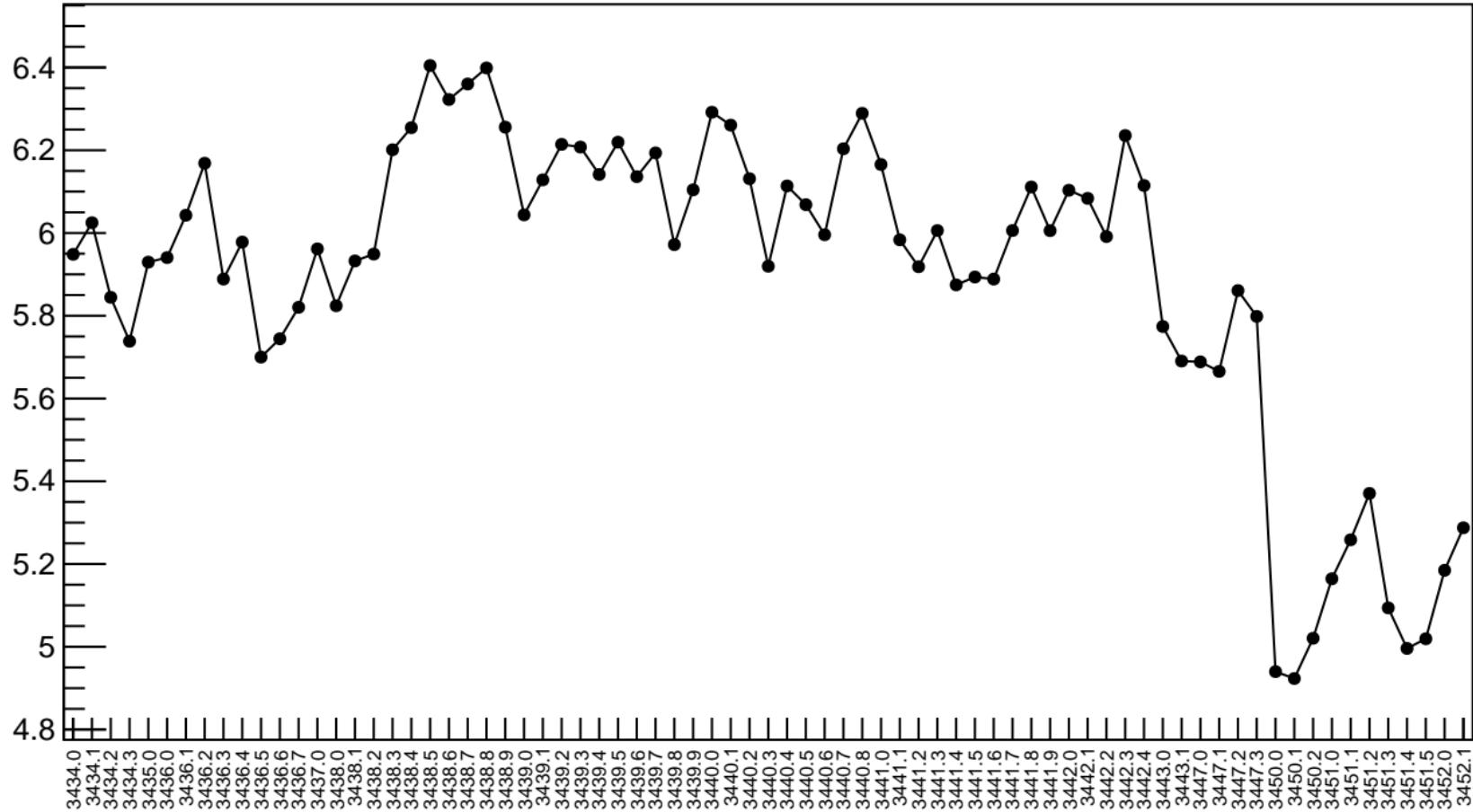


1D pull distribution

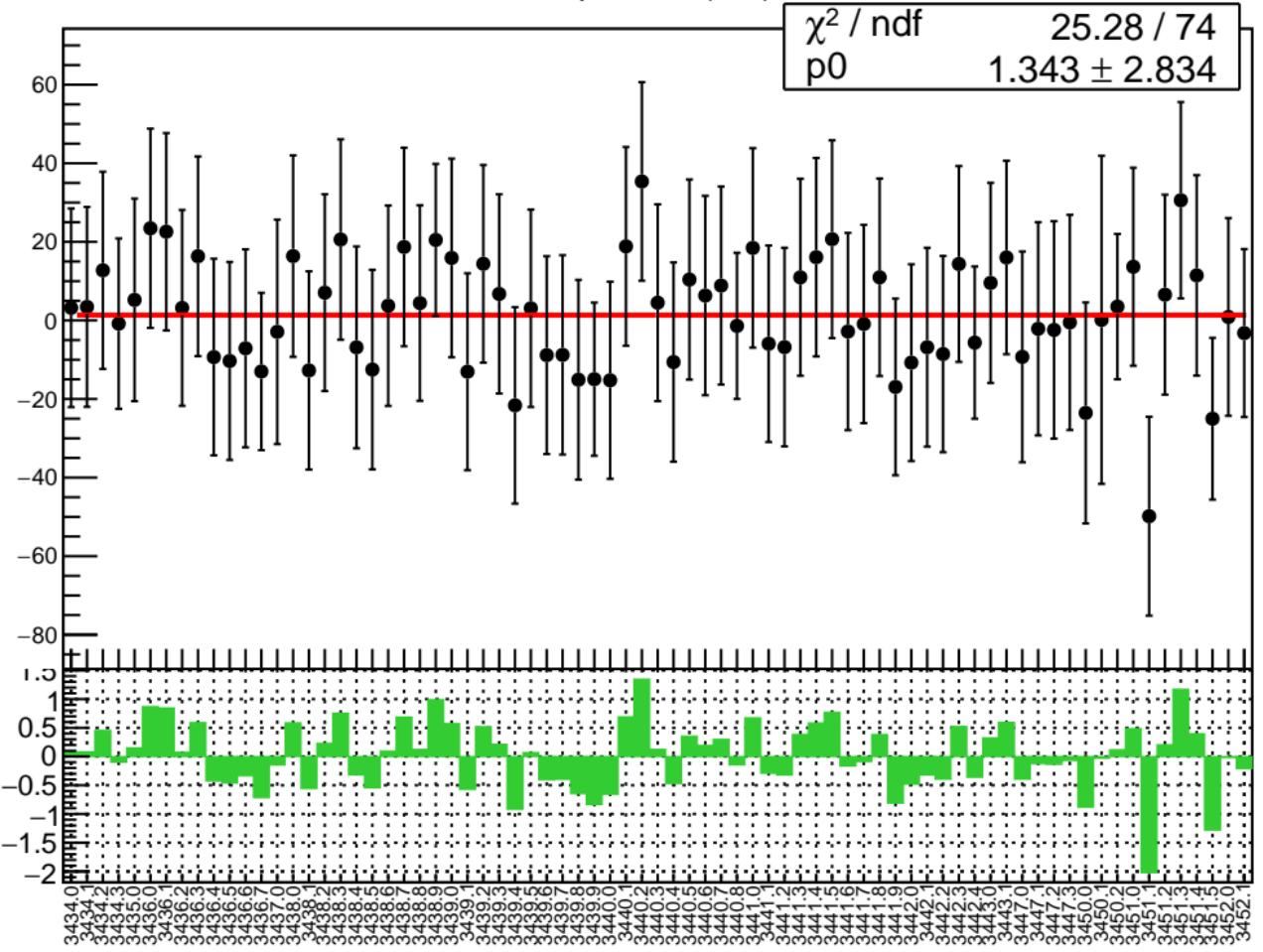


diff_bpm11X RMS (um)

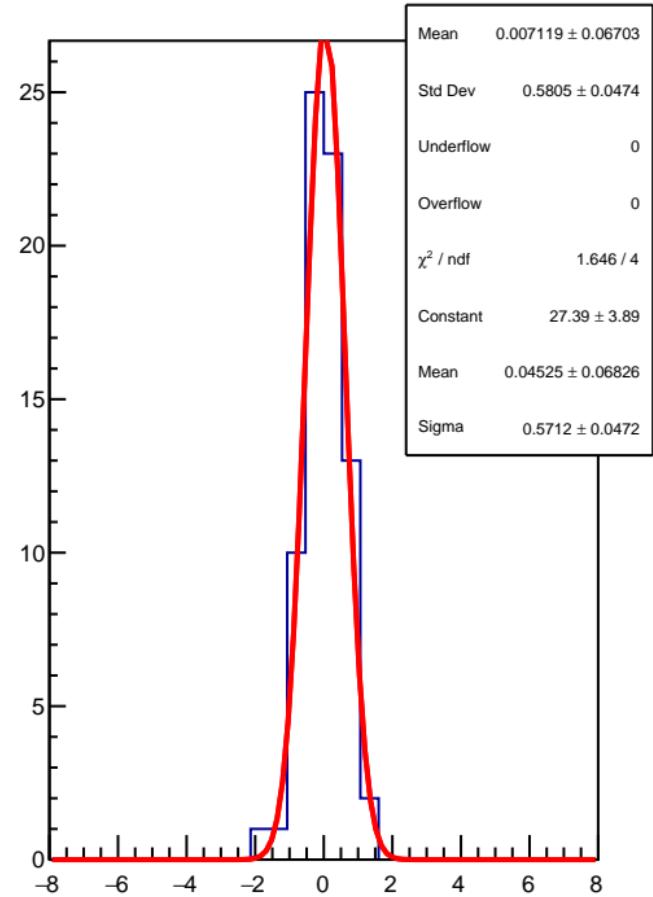
RMS (um)



diff_bpm11Y (nm)

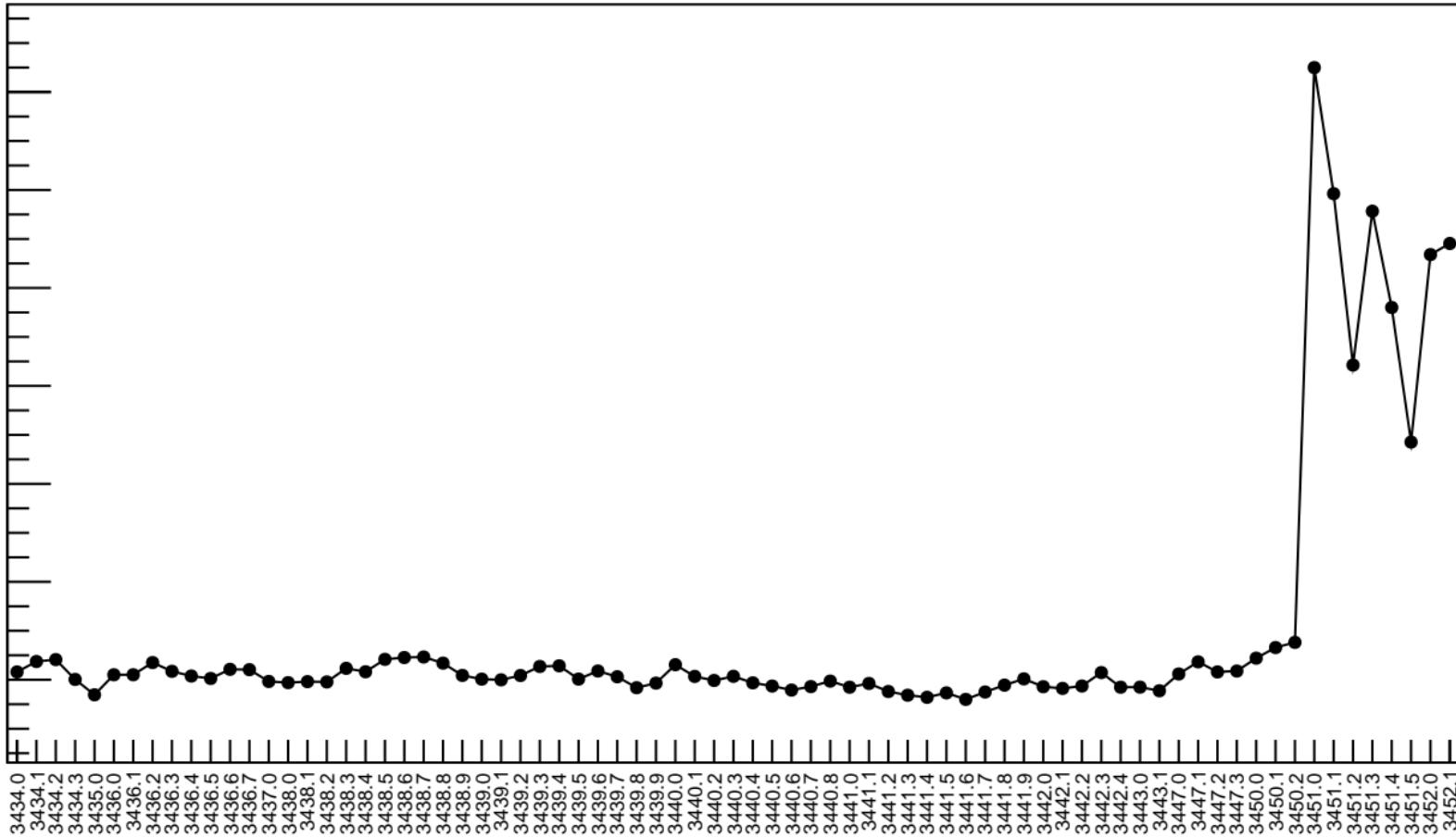


1D pull distribution



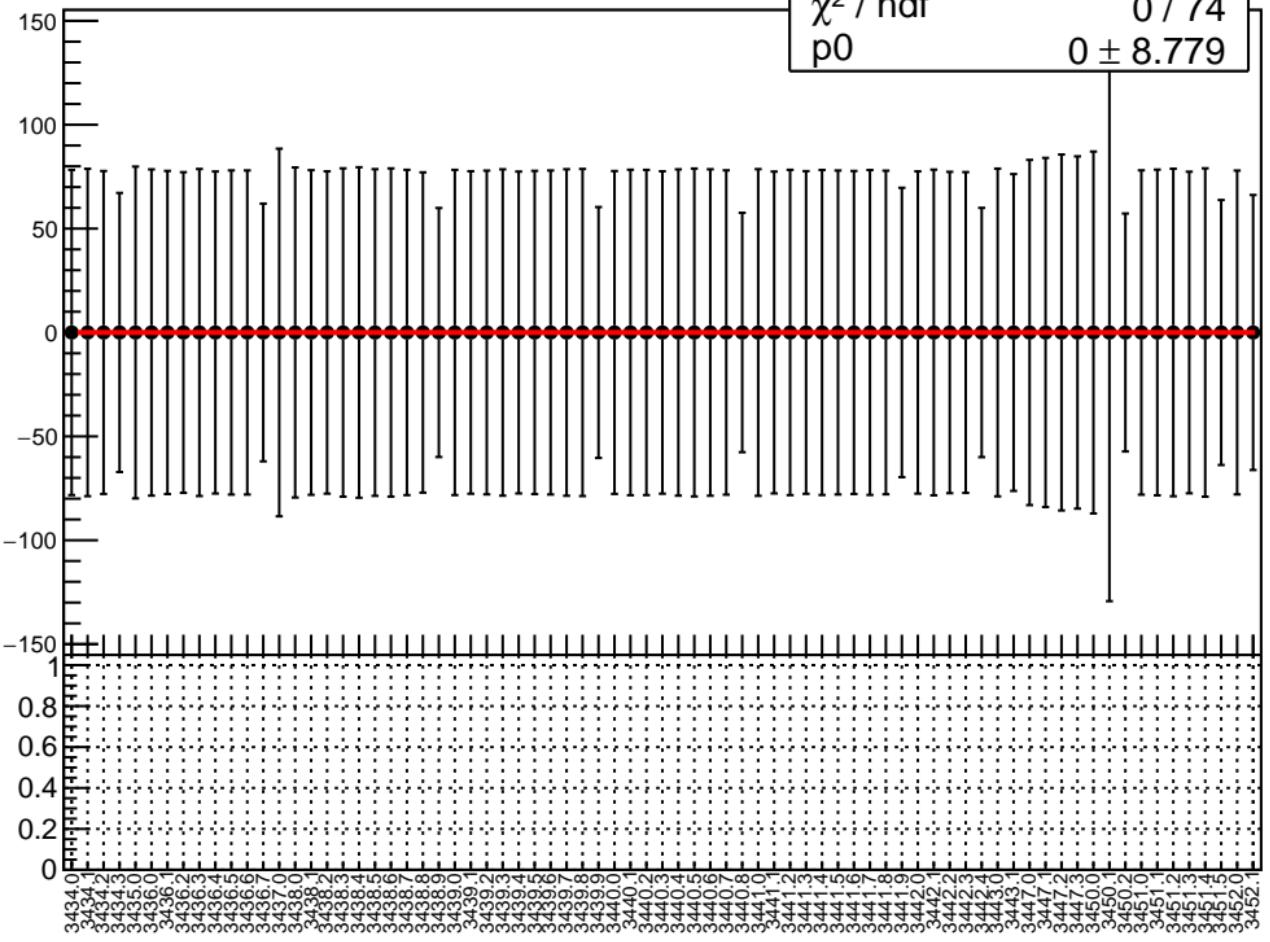
diff_bpm11Y RMS (um)

RMS (um)

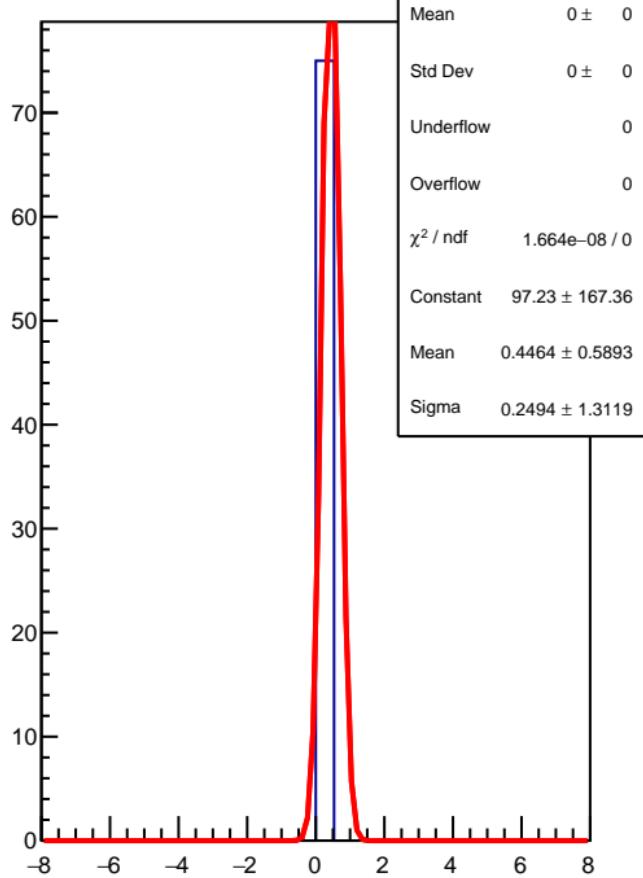


diff_bpm8X (nm)

χ^2 / ndf 0 / 74
p0 0 ± 8.779

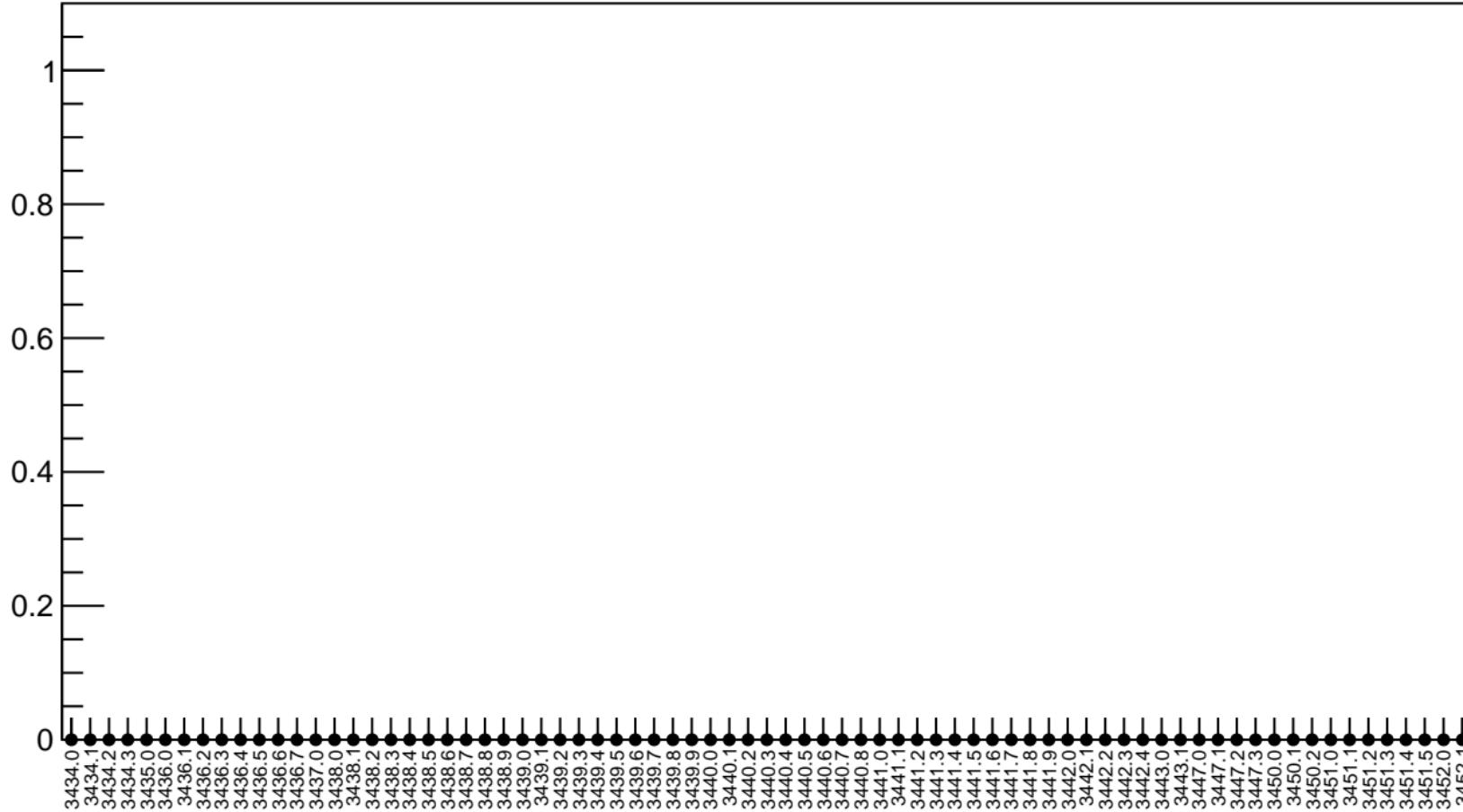


1D pull distribution

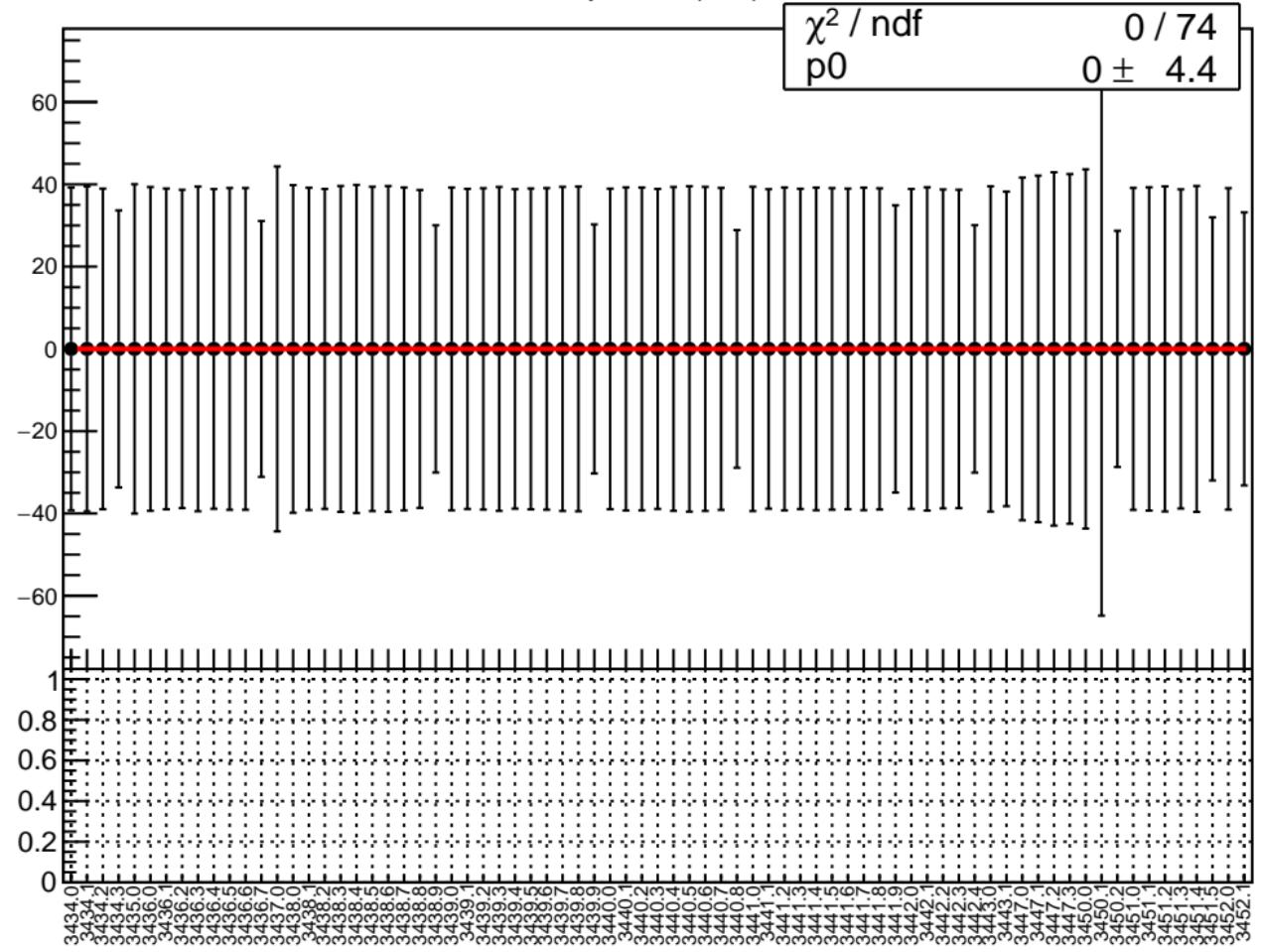


diff_bpm8X RMS (um)

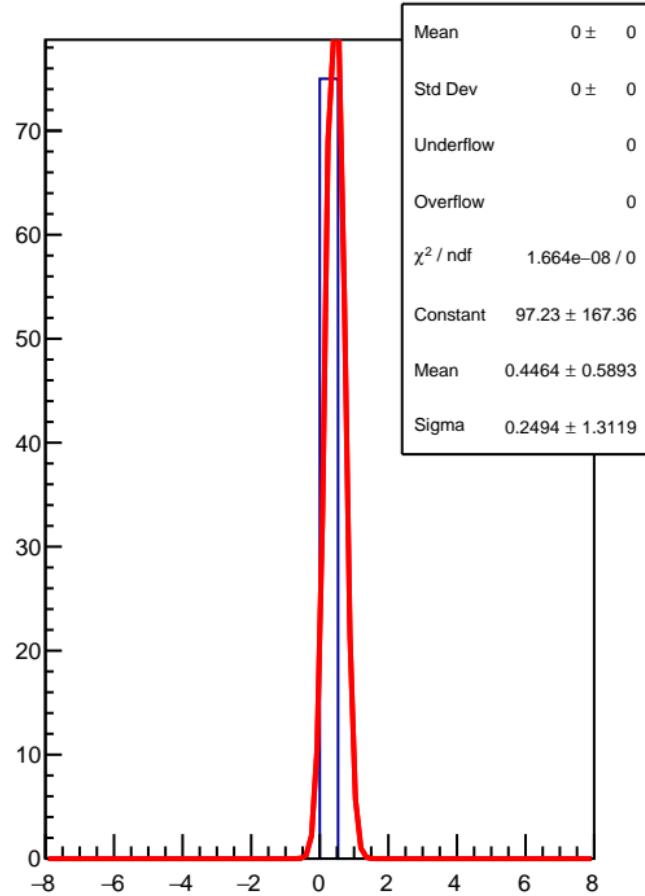
RMS (um)



diff_bpm8Y (nm)

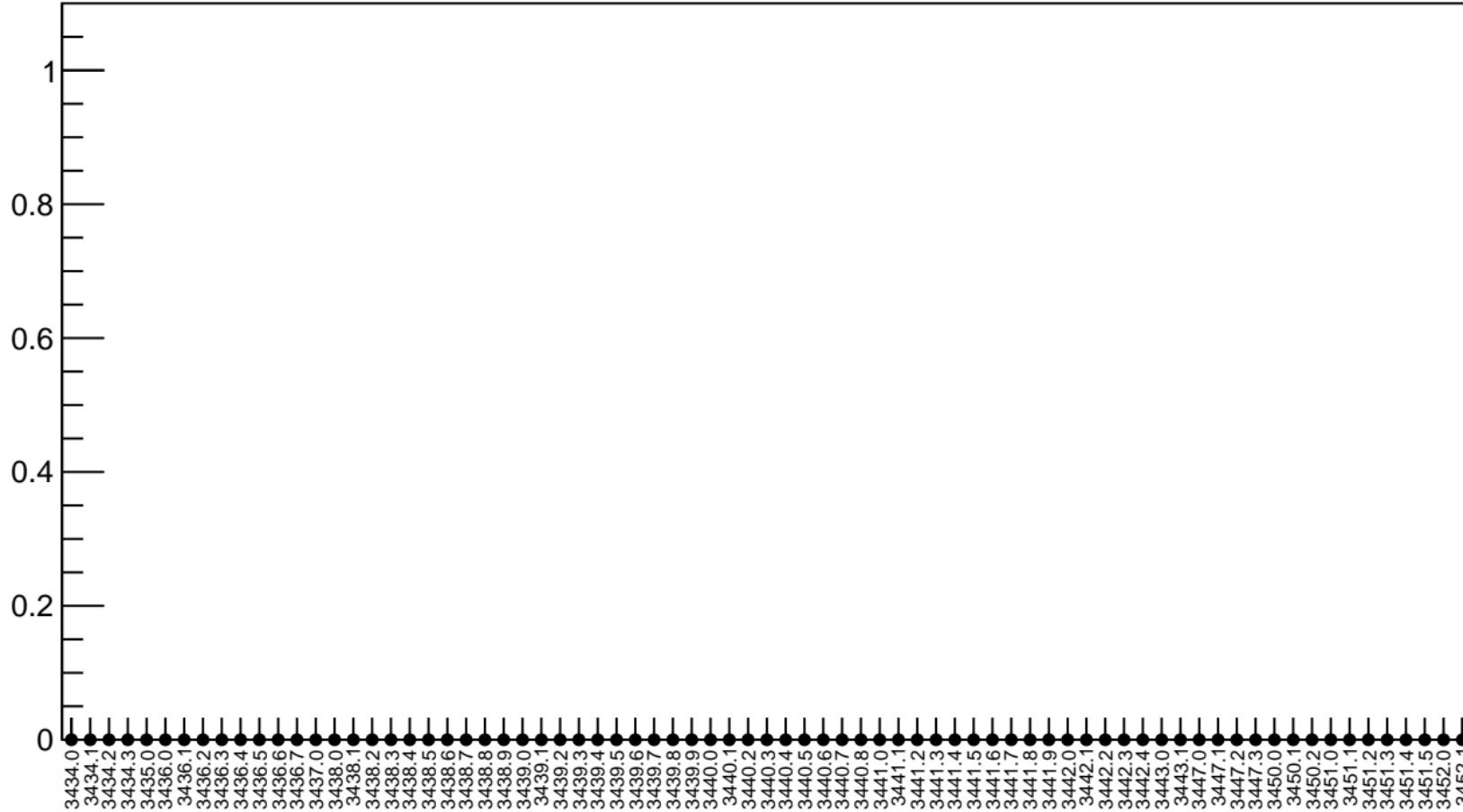


1D pull distribution

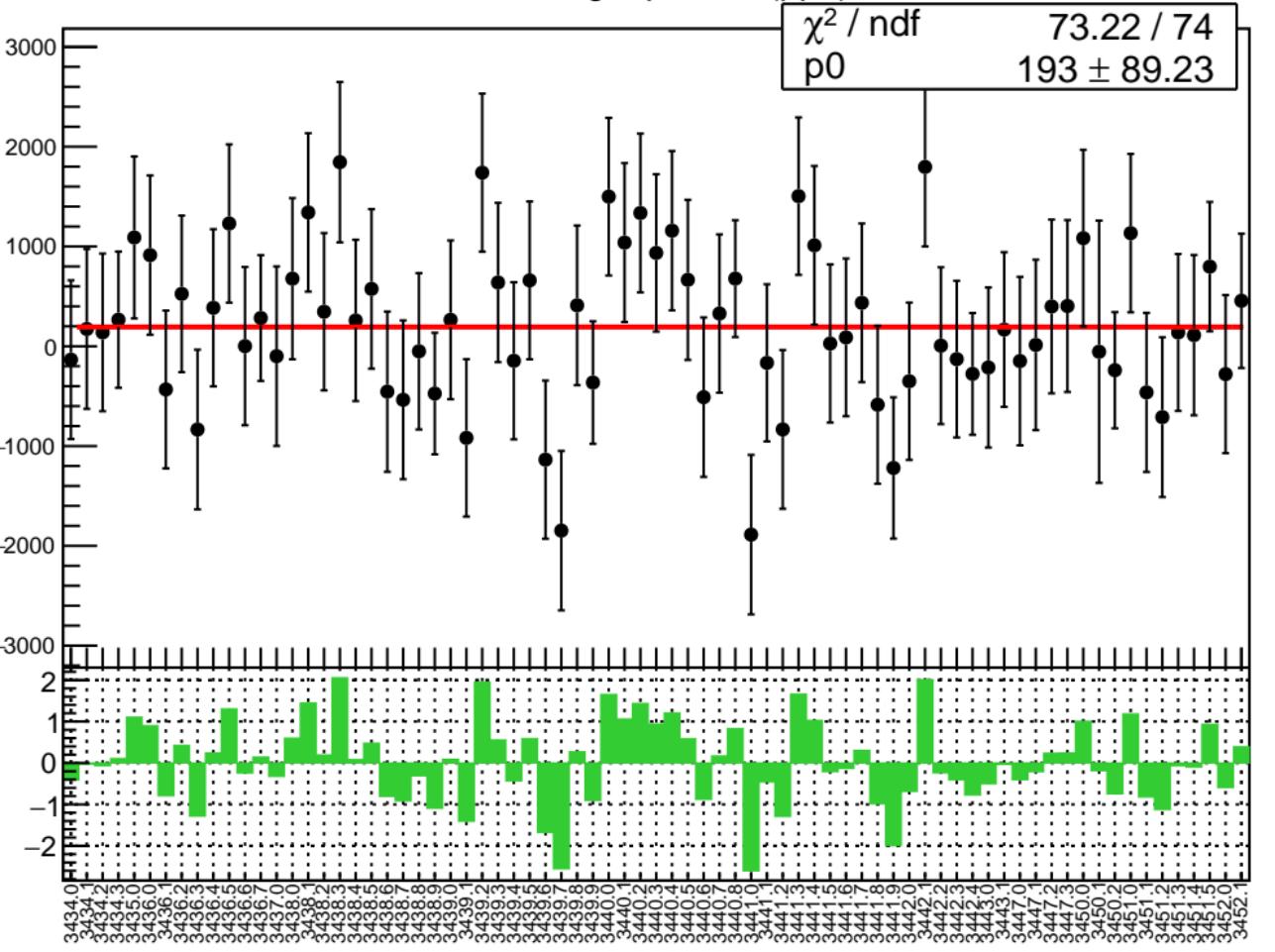


diff_bpm8Y RMS (um)

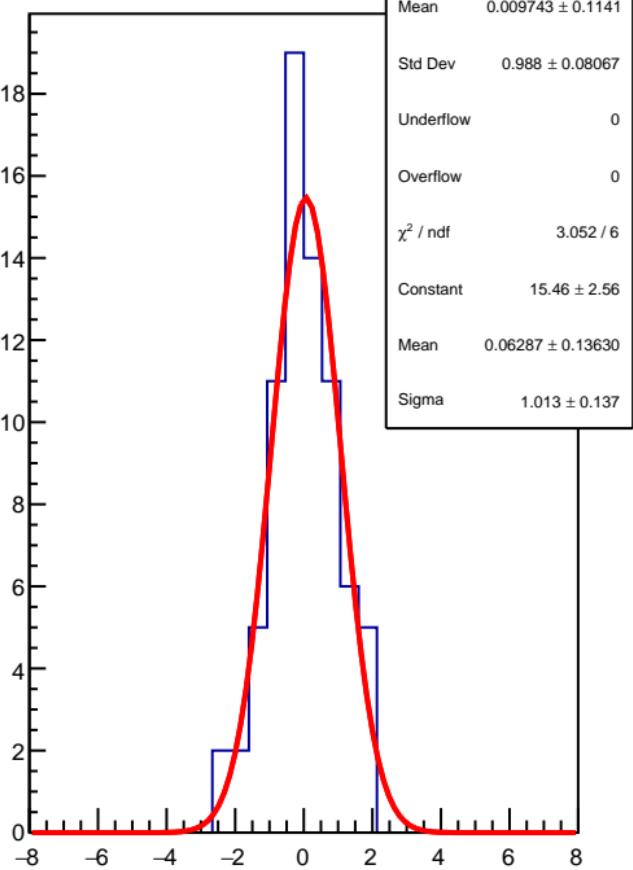
RMS (um)



corr_us_avg_bpm4eX (ppb)

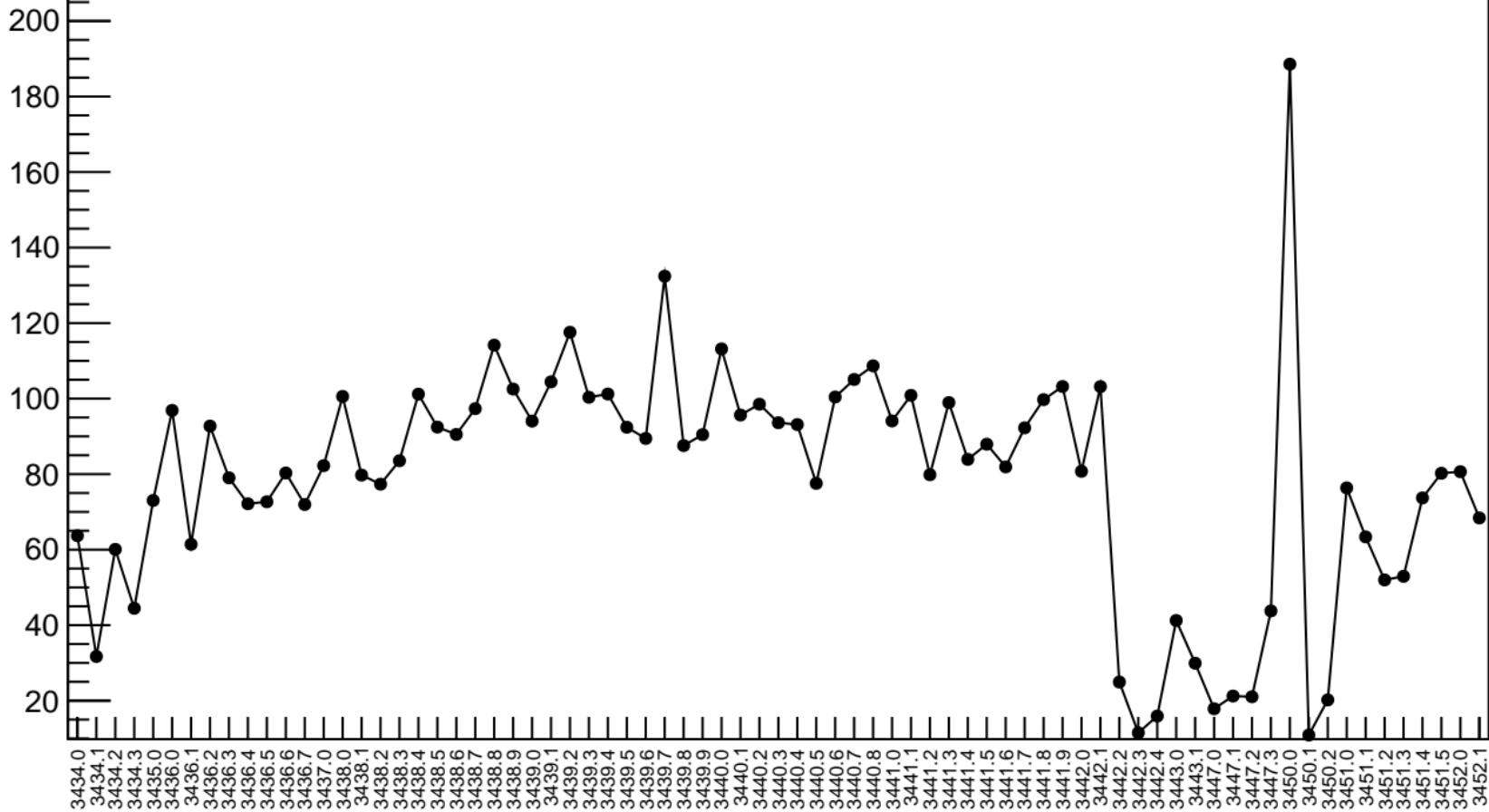


1D pull distribution



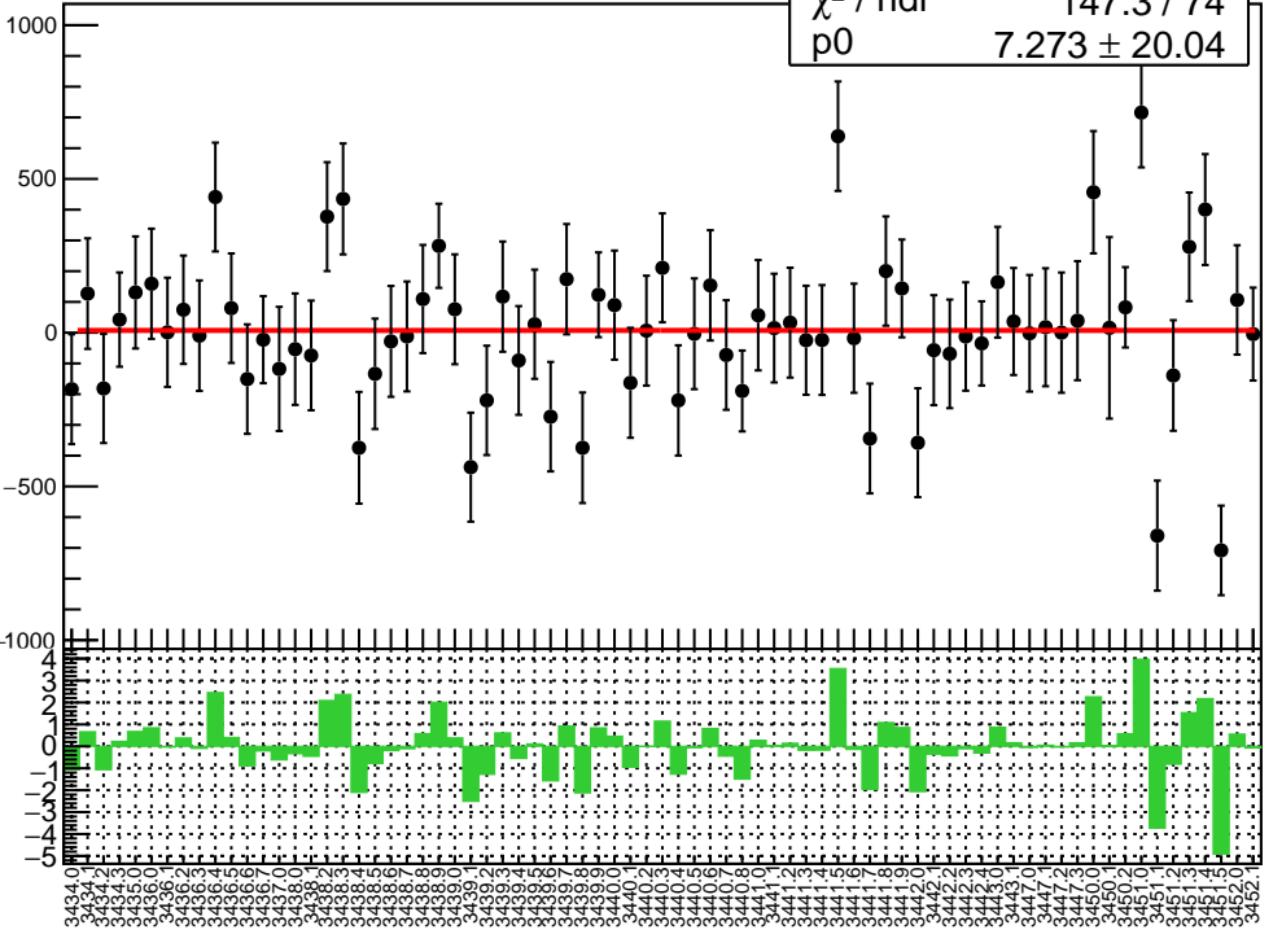
corr_us_avg_bpm4eX RMS (ppm)

RMS (ppm)

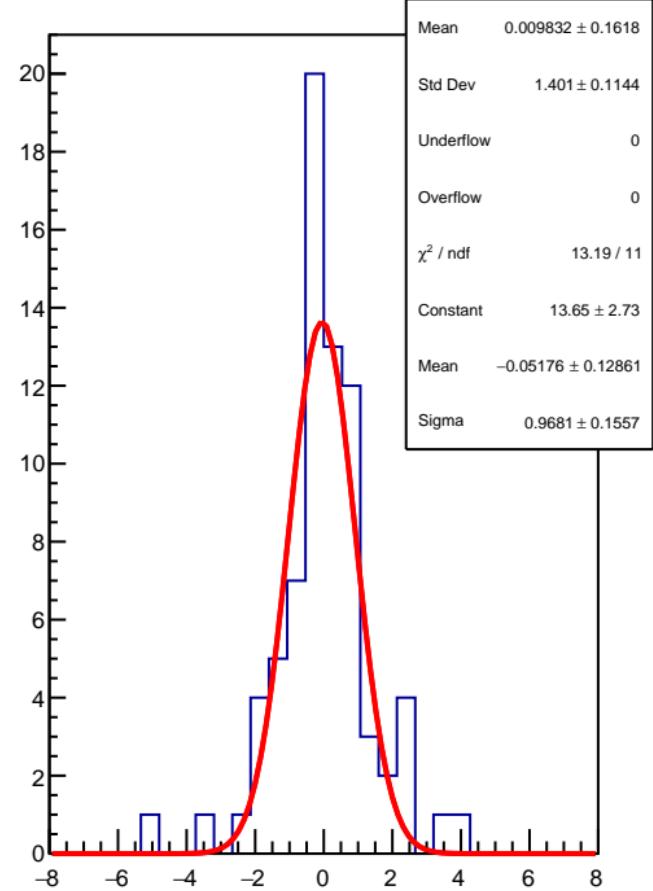


corr_us_avg_bpm4eY (ppb)

χ^2 / ndf 147.3 / 74
p0 7.273 ± 20.04

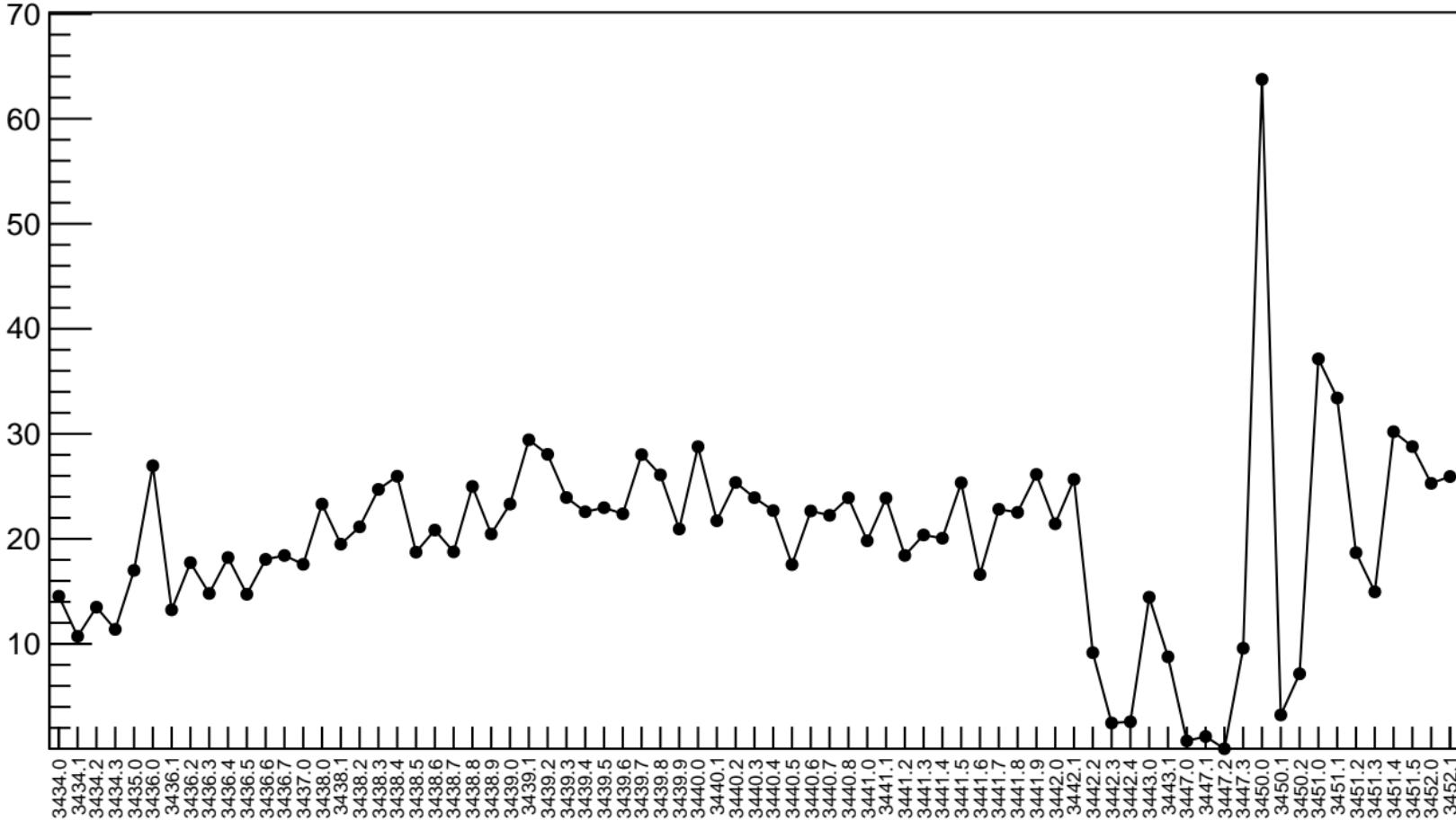


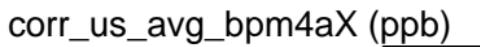
1D pull distribution



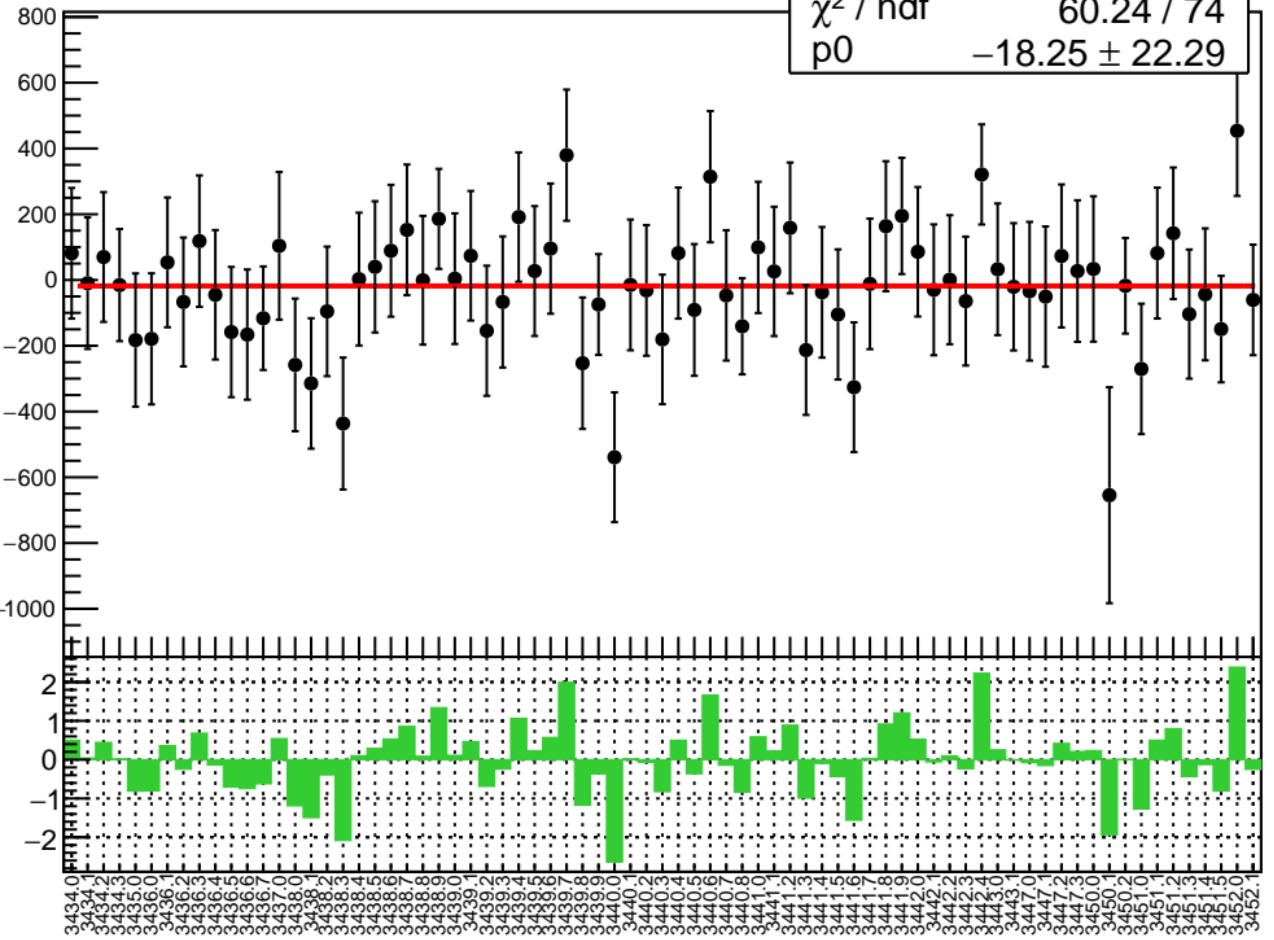
corr_us_avg_bpm4eY RMS (ppm)

RMS (ppm)





χ^2 / ndf 60.24 / 74
 p0 -18.25 ± 22.29

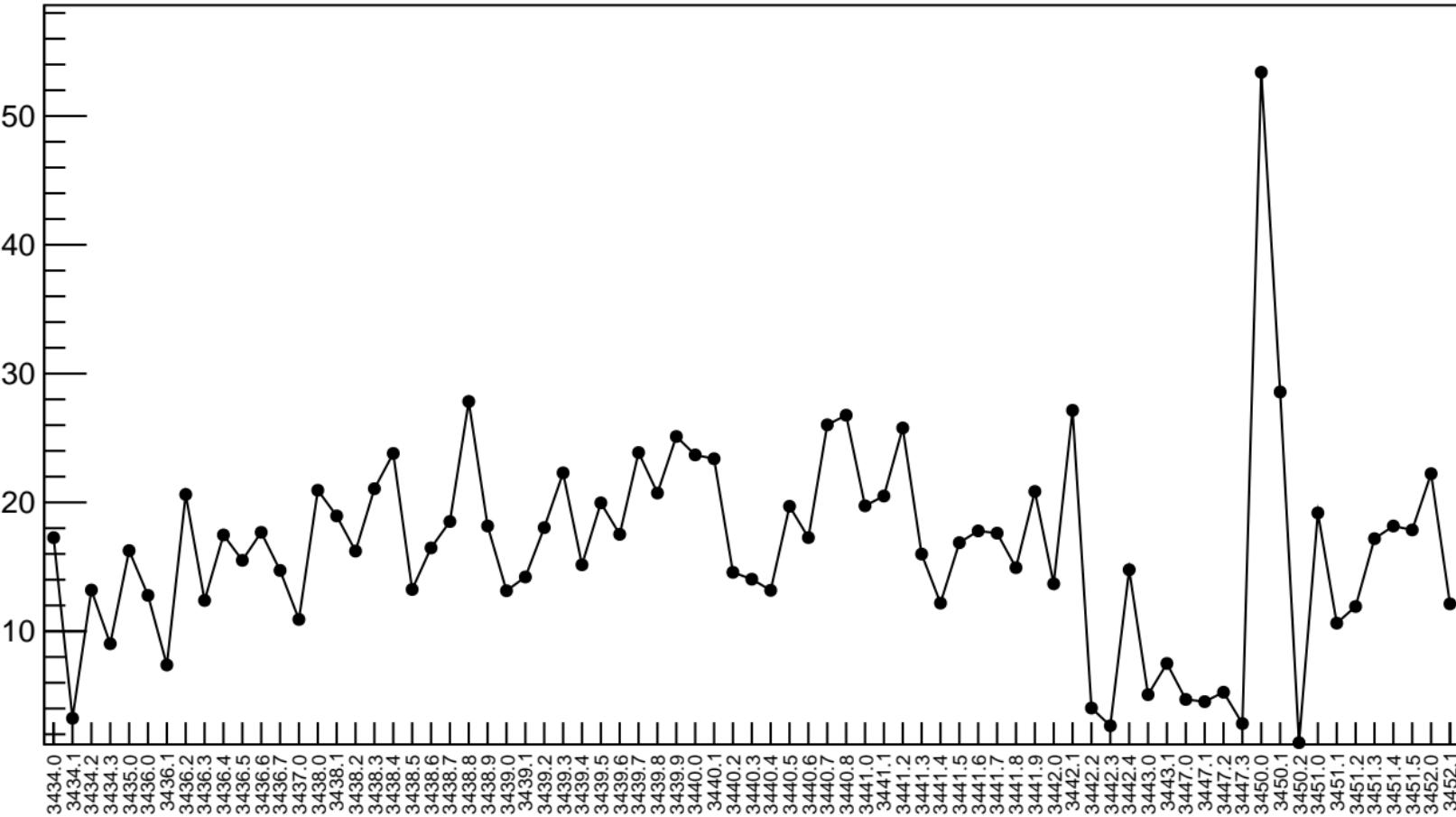


1D pull distribution

Mean	-0.01441 ± 0.1035
Std Dev	0.8961 ± 0.07316
Underflow	0
Overflow	0
χ^2 / ndf	6.512 / 7
Constant	19.68 ± 3.52
Mean	-0.06989 ± 0.09768
Sigma	0.7408 ± 0.0982

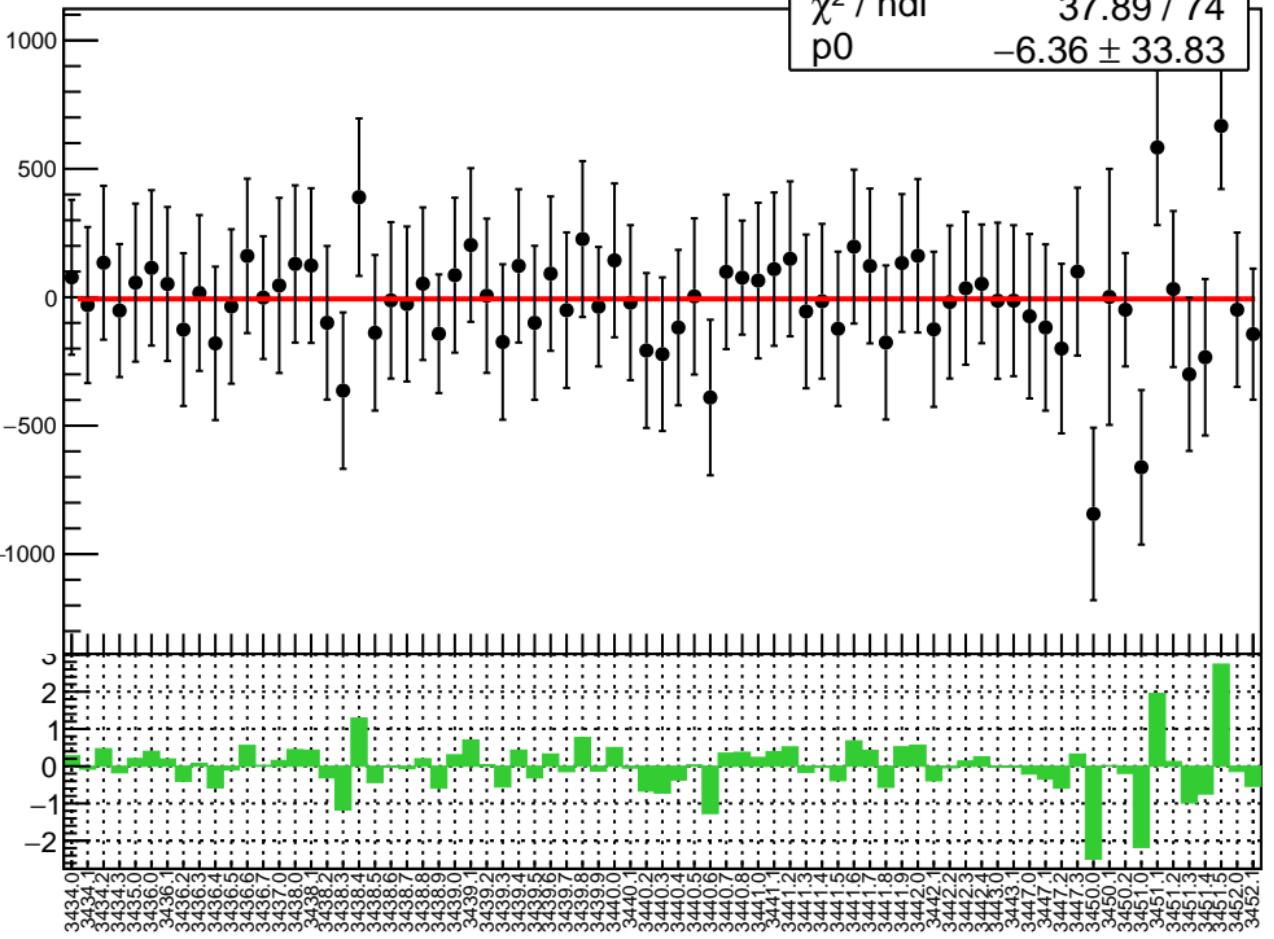
corr_us_avg_bpm4aX RMS (ppm)

RMS (ppm)

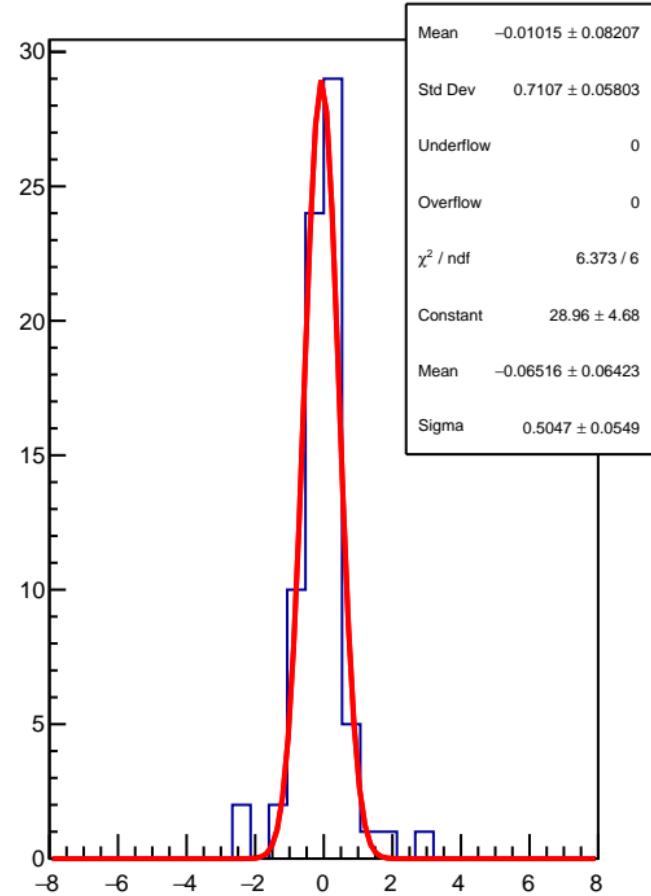


corr_us_avg_bpm4aY (ppb)

χ^2 / ndf 37.89 / 74
p0 -6.36 ± 33.83

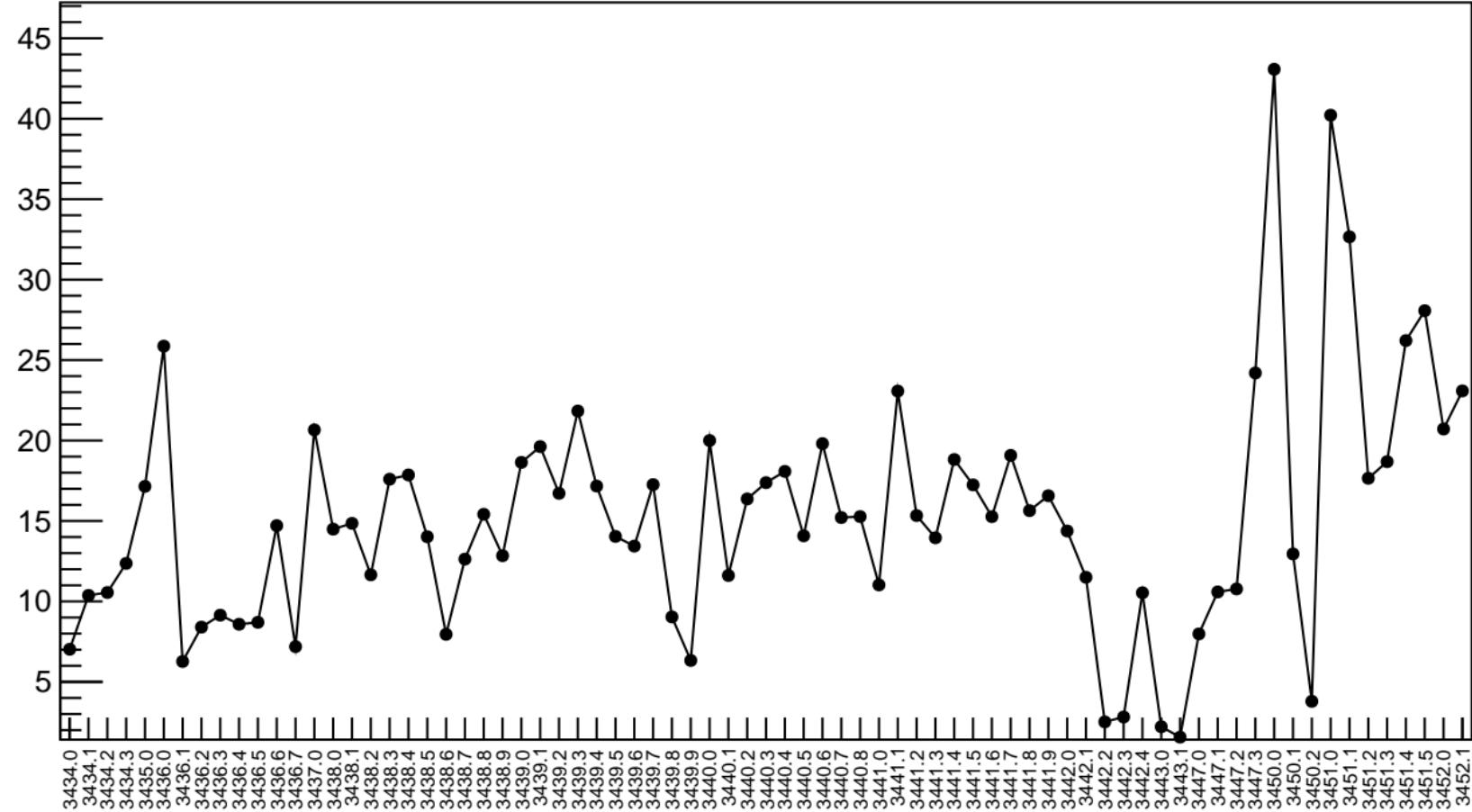


1D pull distribution

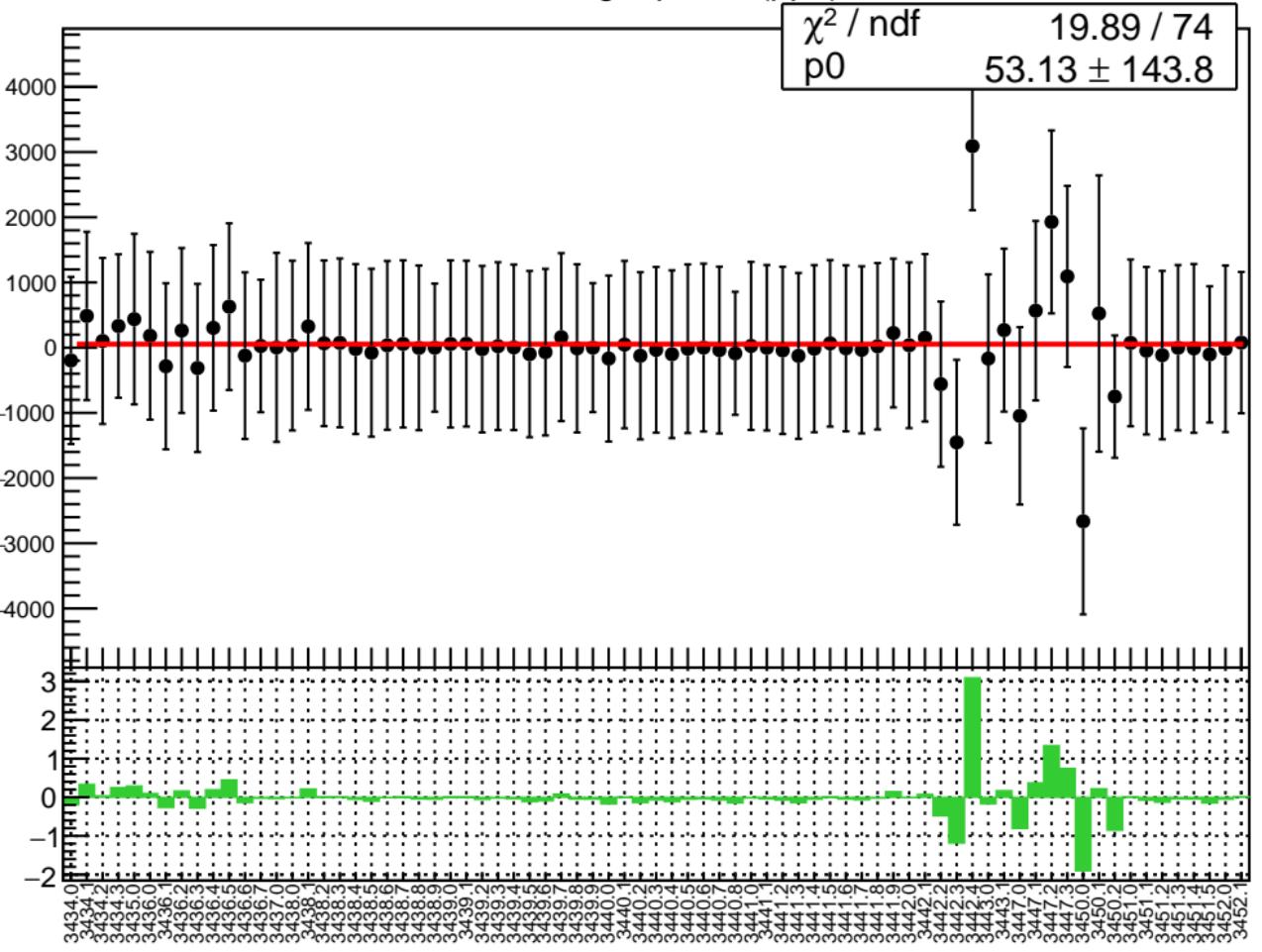


corr_us_avg_bpm4aY RMS (ppm)

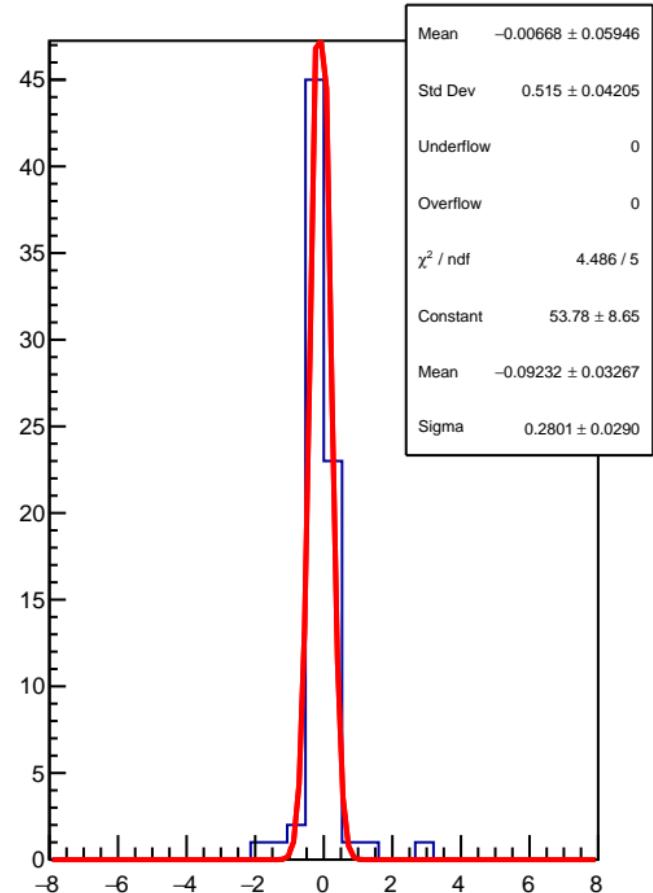
RMS (ppm)



corr_us_avg_bpm1X (ppb)



1D pull distribution

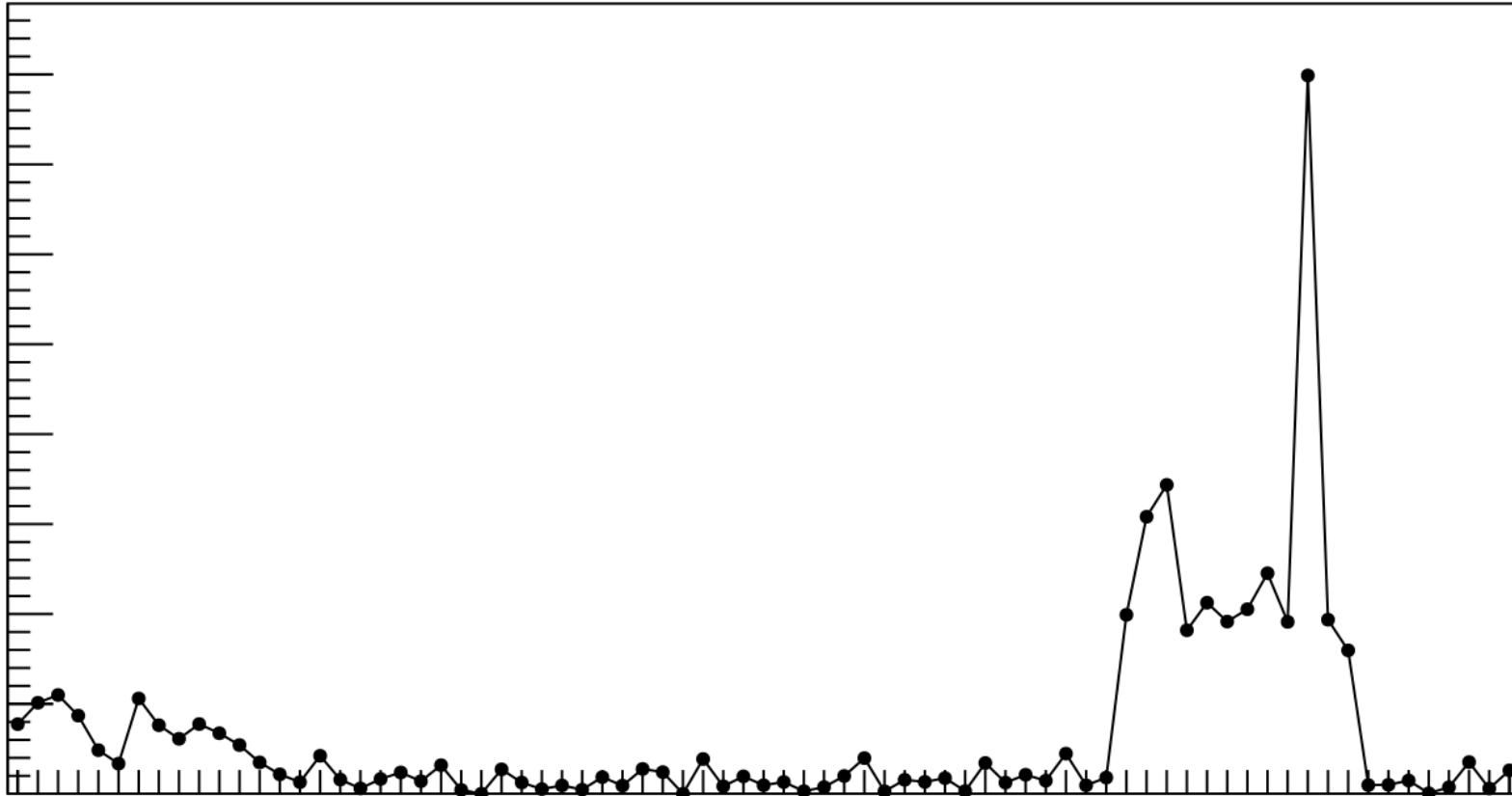


corr_us_avg_bpm1X RMS (ppm)

RMS (ppm)

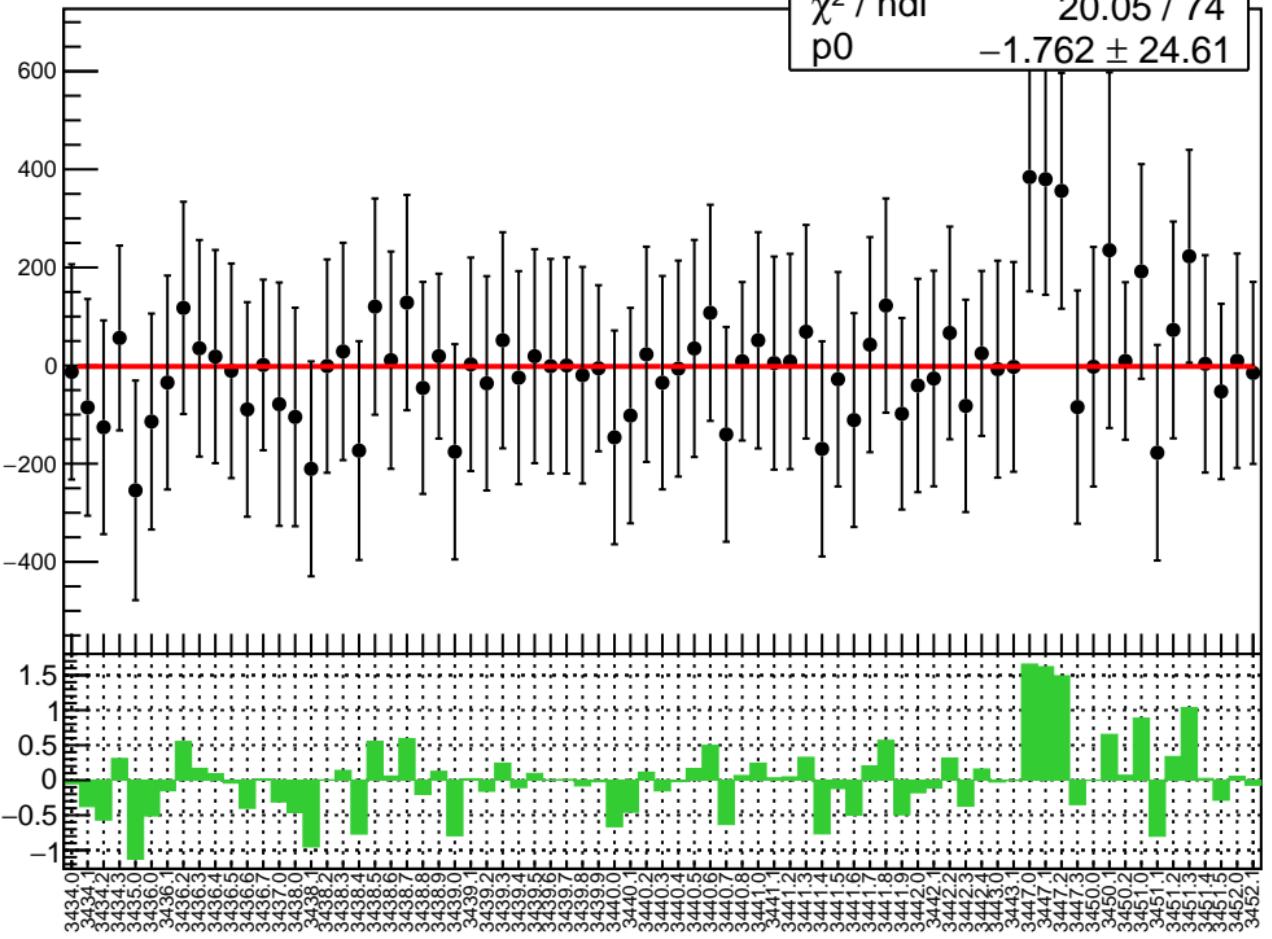
400
350
300
250
200
150

3434.0 3434.1 3434.2 3434.3 3435.0 3436.0 3436.1 3436.2 3436.3 3436.4 3436.5 3436.6 3436.7 3437.0 3438.0 3438.1 3438.2 3438.3 3438.4 3438.5 3438.6 3438.7 3438.8 3438.9 3439.0 3439.1 3439.2 3439.3 3439.4 3439.5 3439.6 3439.7 3439.8 3439.9 3440.0 3440.1 3440.2 3440.3 3440.4 3440.5 3440.6 3440.7 3440.8 3441.0 3441.1 3441.2 3441.3 3441.4 3441.5 3441.6 3441.7 3441.8 3441.9 3442.0 3442.1 3442.2 3442.3 3443.0 3443.1 3444.1 3444.2 3444.3 3444.4 3444.5 3444.6 3444.7 3444.8 3444.9 3445.0 3445.1 3445.2 3445.3 3445.4 3445.5 3445.6 3445.7 3445.8 3445.9 3445.10 3445.11 3445.12 3445.13 3445.14 3445.15 3445.16 3445.17 3445.18 3445.19 3445.20 3445.21

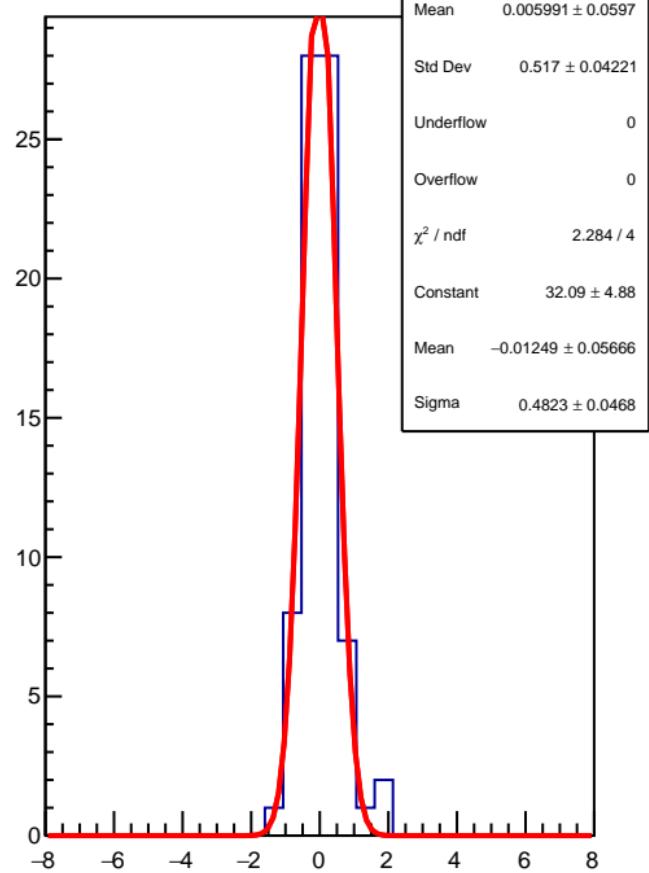


corr_us_avg_bpm1Y (ppb)

χ^2 / ndf 20.05 / 74
 p_0 -1.762 ± 24.61

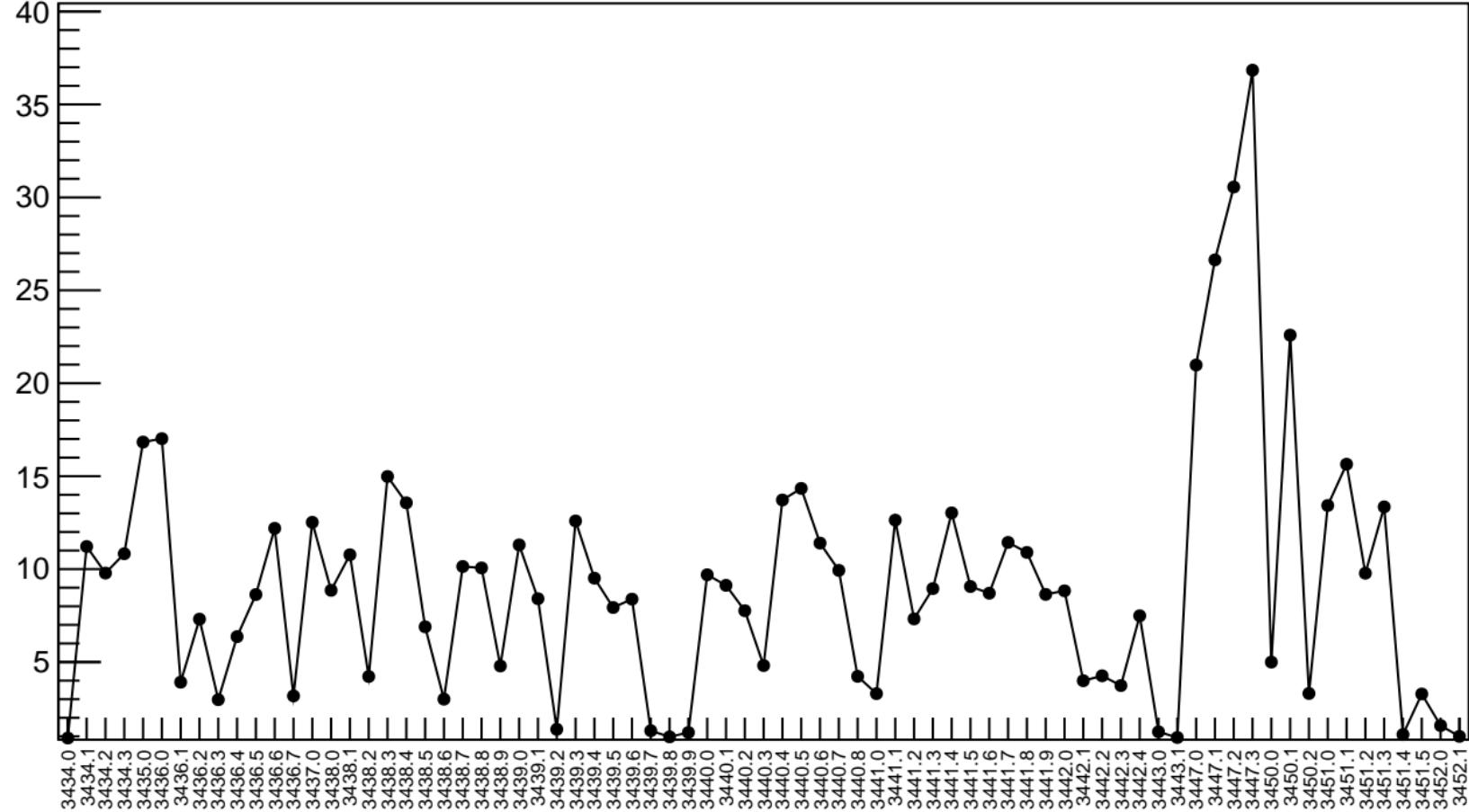


1D pull distribution



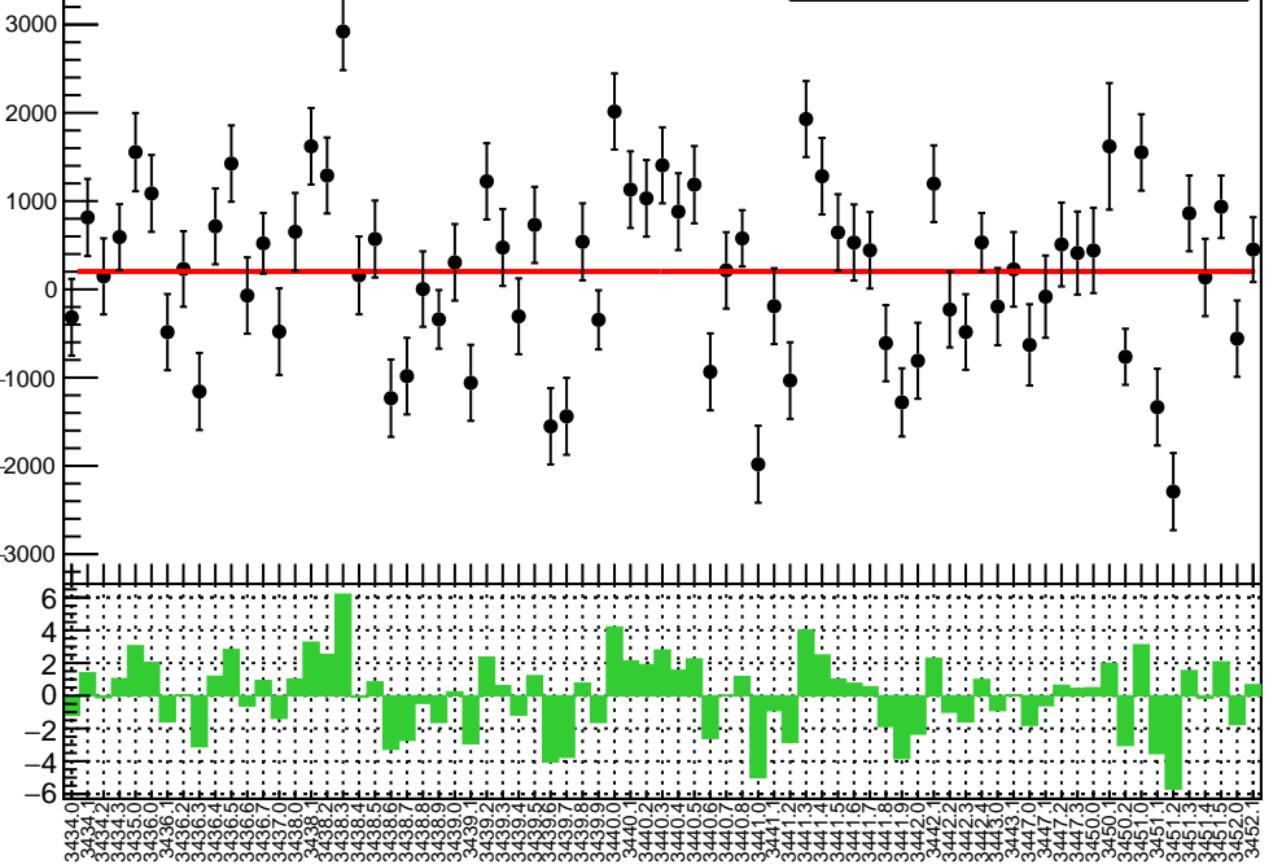
corr_us_avg_bpm1Y RMS (ppm)

RMS (ppm)

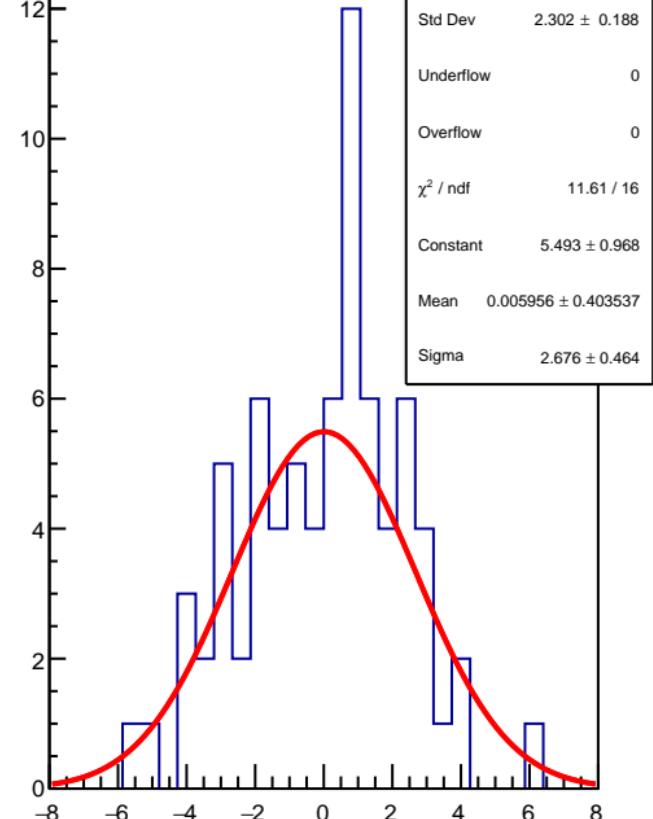


corr_us_avg_bpm16X (ppb)

χ^2 / ndf 397.5 / 74
p0 202.1 ± 48.68

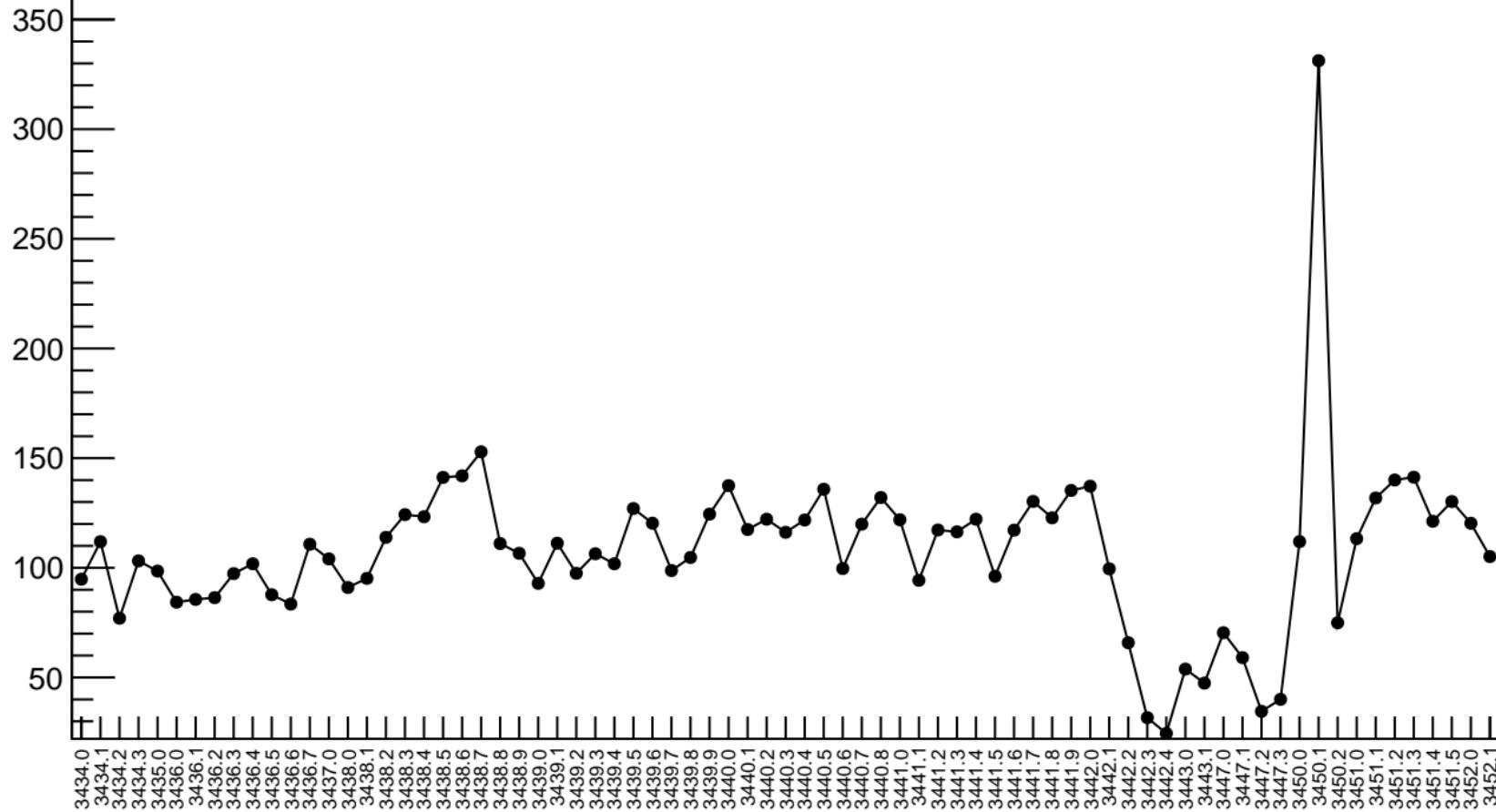


1D pull distribution



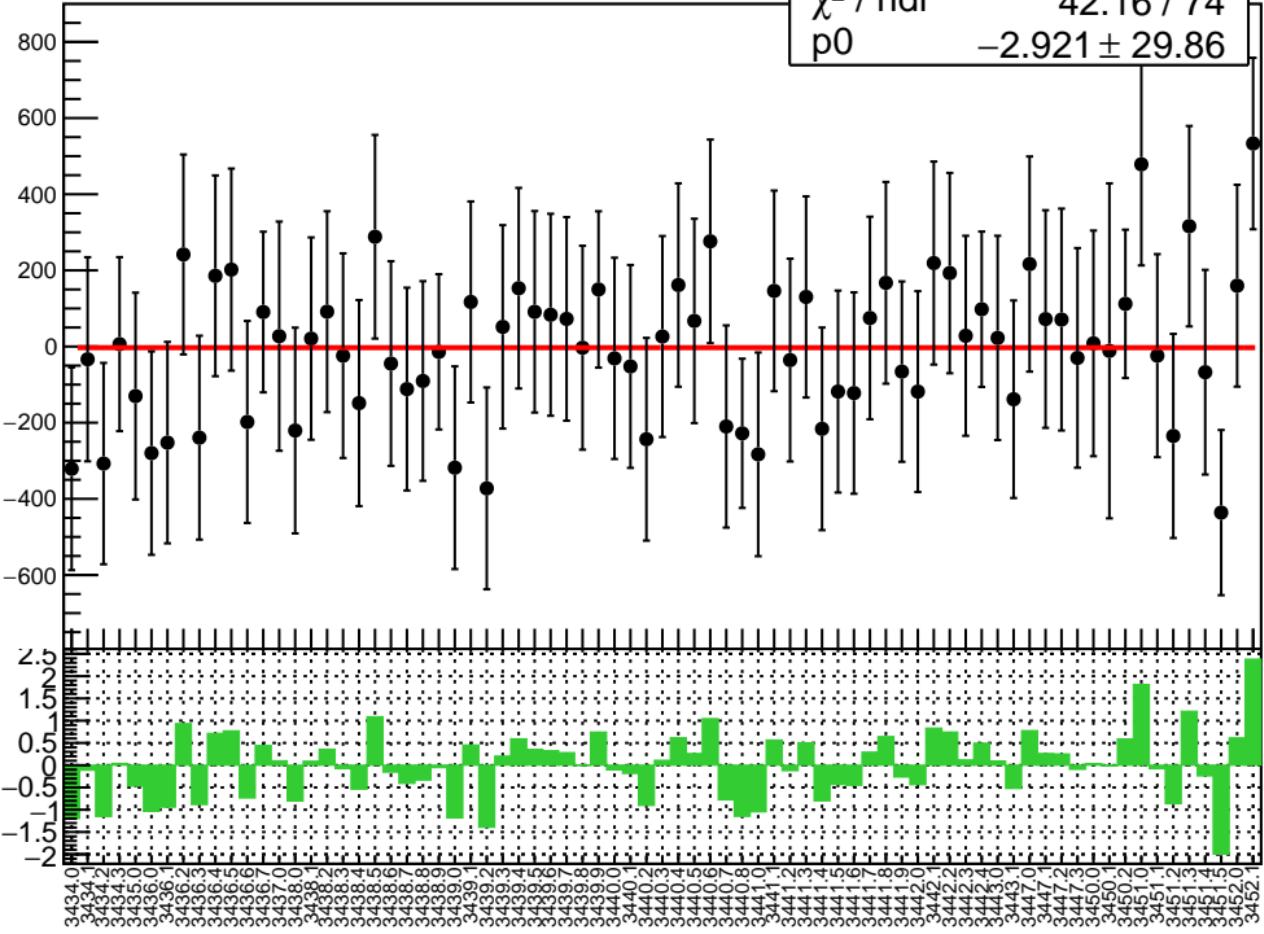
corr_us_avg_bpm16X RMS (ppm)

RMS (ppm)

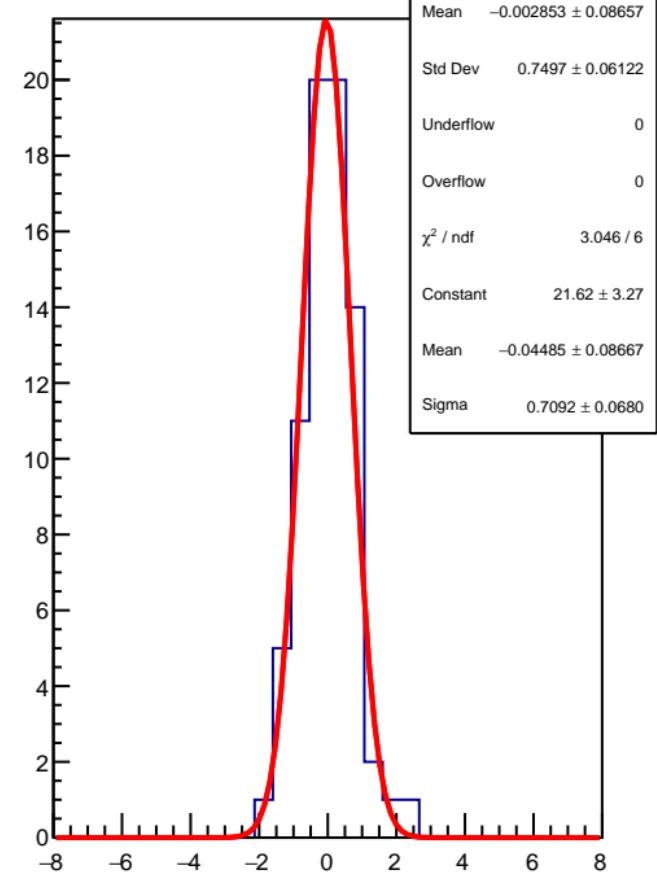


corr_us_avg_bpm16Y (ppb)

χ^2 / ndf 42.16 / 74
p0 -2.921 ± 29.86



1D pull distribution



corr_us_avg_bpm16Y RMS (ppm)

RMS (ppm)

25

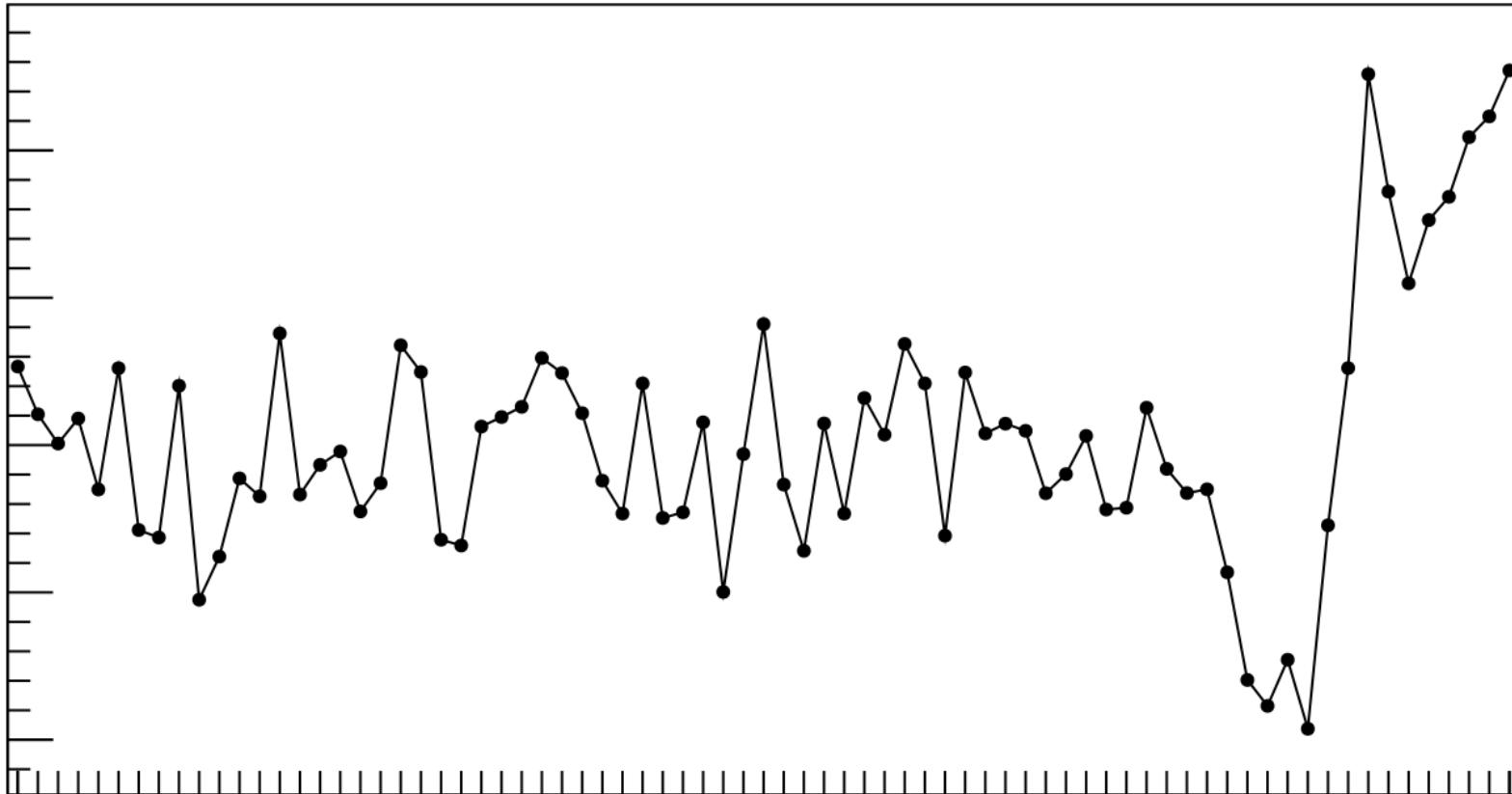
20

15

10

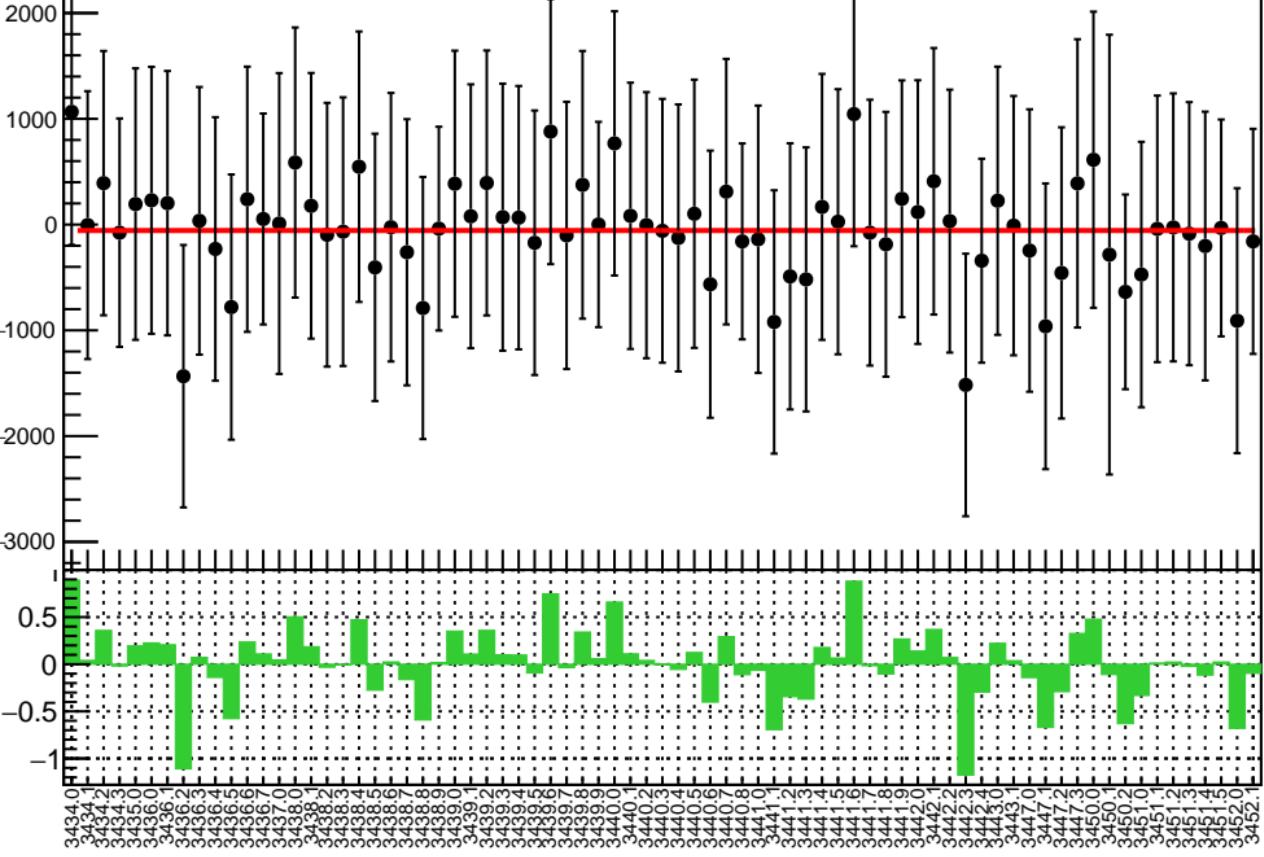
5

3434.0
3434.1
3434.2
3434.3
3435.0
3436.1
3436.2
3436.3
3436.4
3436.5
3436.6
3436.7
3437.0
3438.0
3438.1
3438.2
3438.3
3438.4
3438.5
3438.6
3438.7
3438.8
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3445.18
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3445.20
3445.21

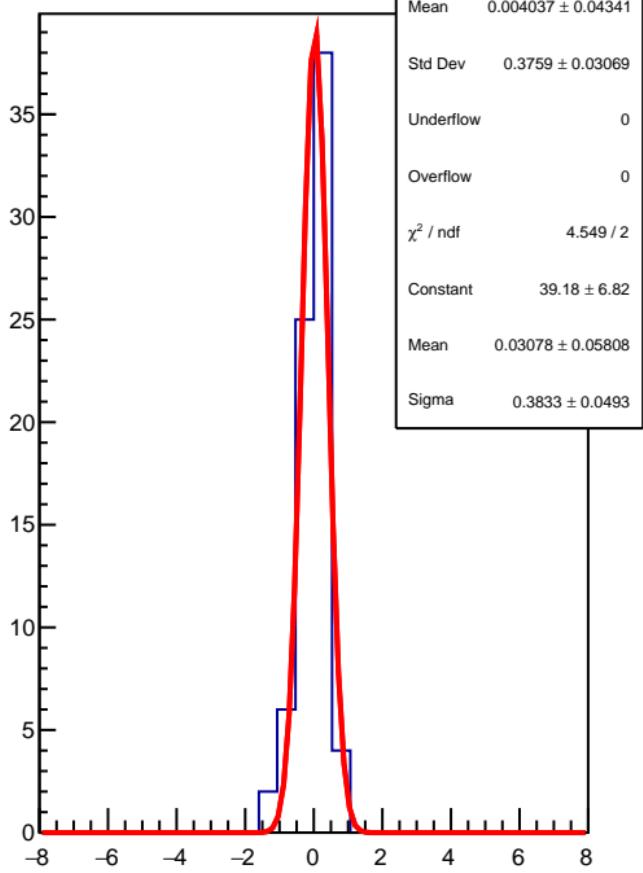


corr_us_avg_bpm12X (ppb)

χ^2 / ndf 10.6 / 74
p0 -56.33 ± 141.1

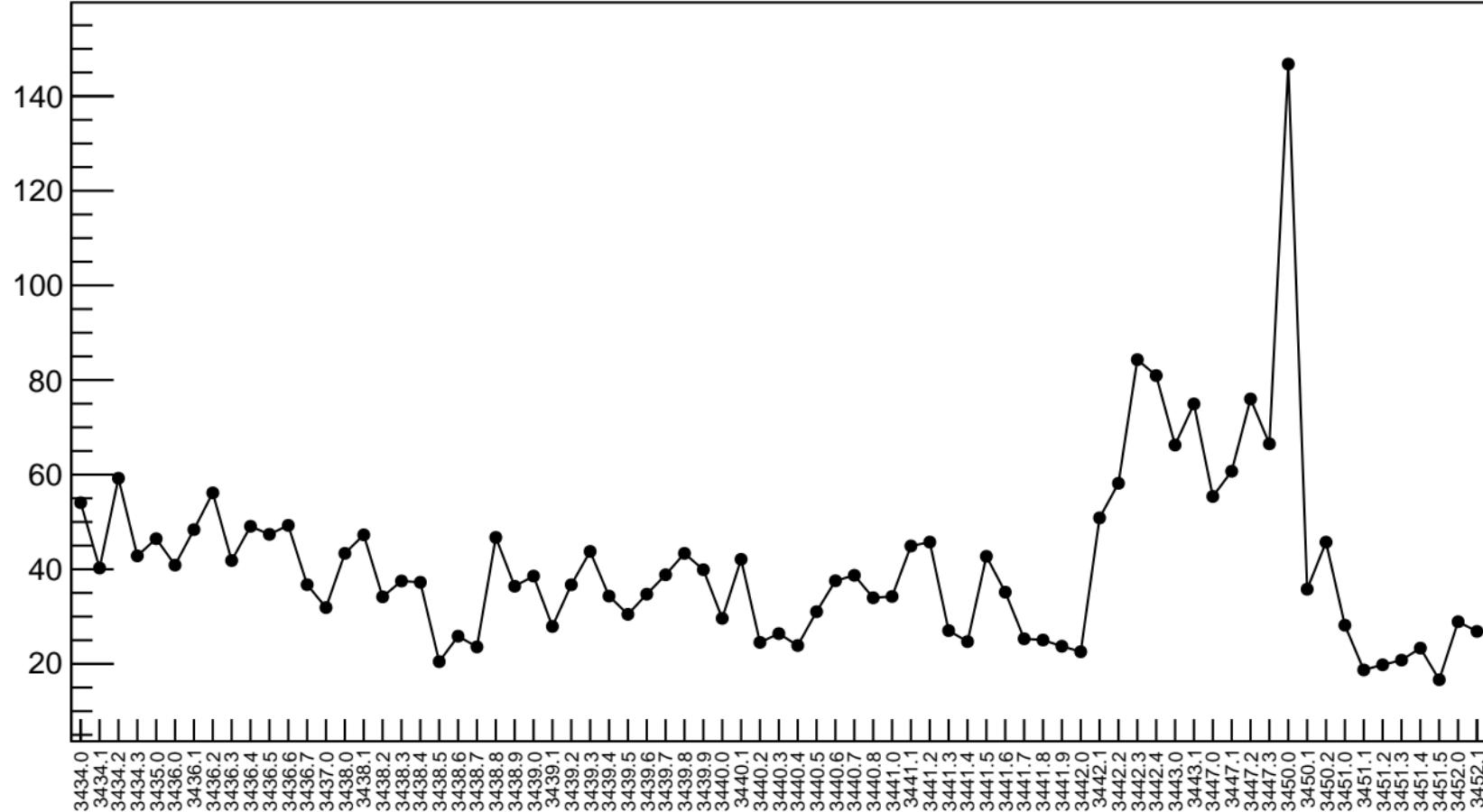


1D pull distribution



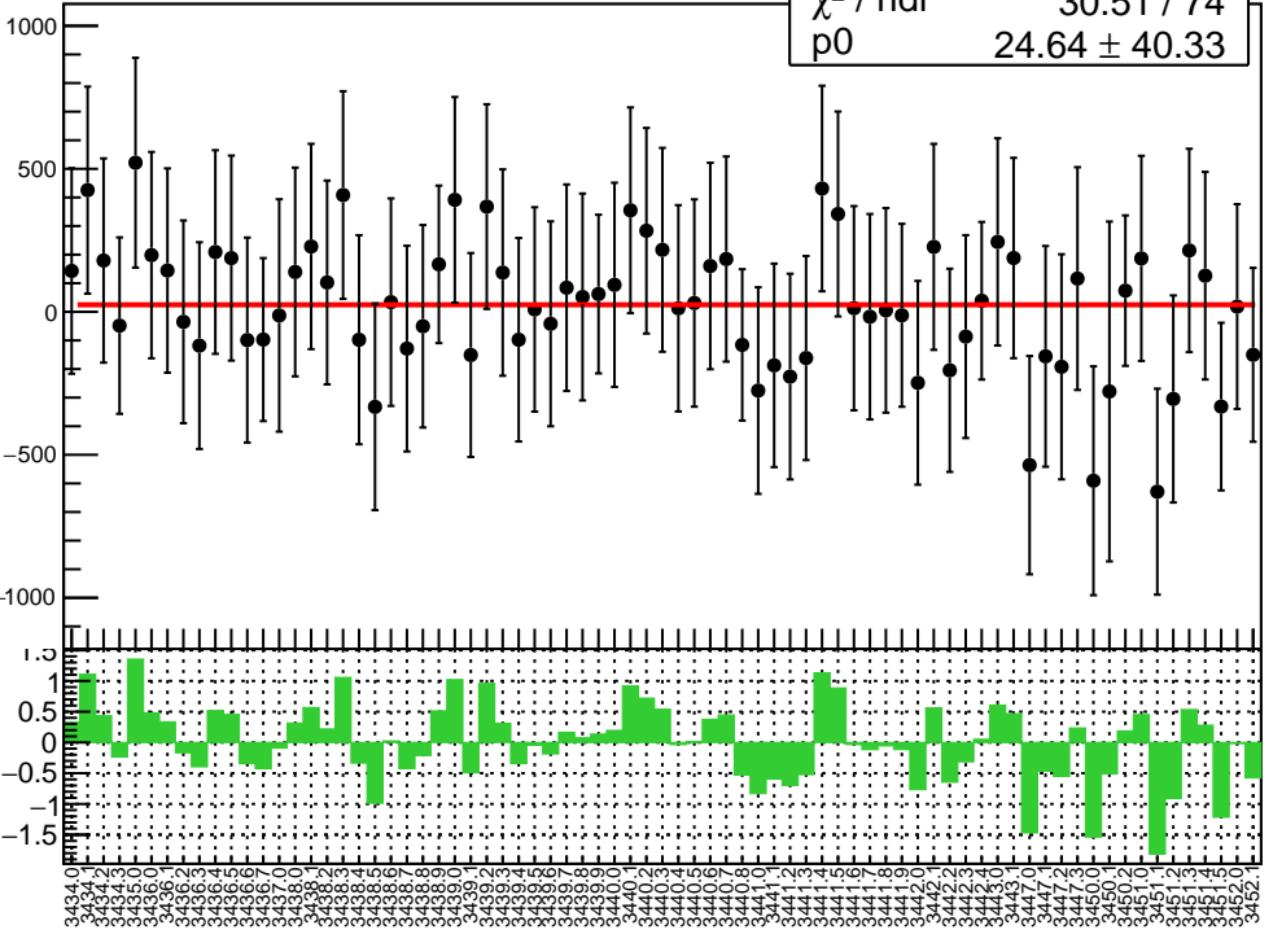
corr_us_avg_bpm12X RMS (ppm)

RMS (ppm)

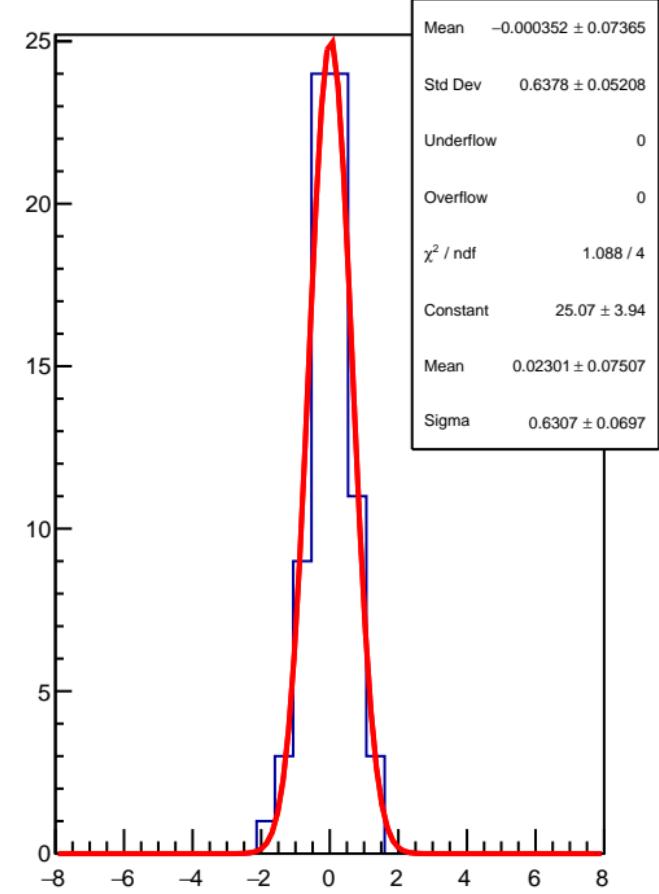


corr_us_avg_bpm12Y (ppb)

χ^2 / ndf 30.51 / 74
p0 24.64 ± 40.33

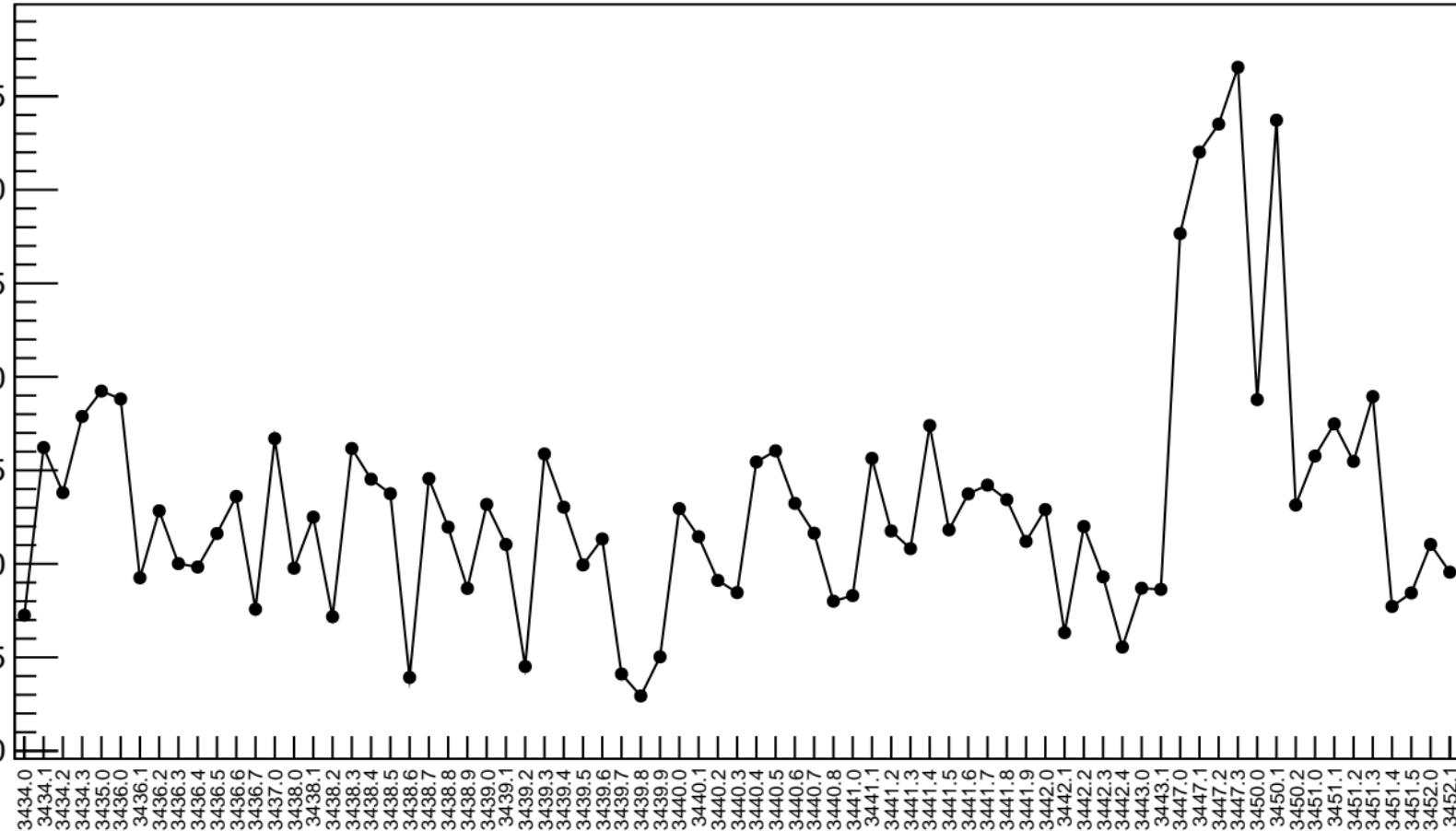


1D pull distribution



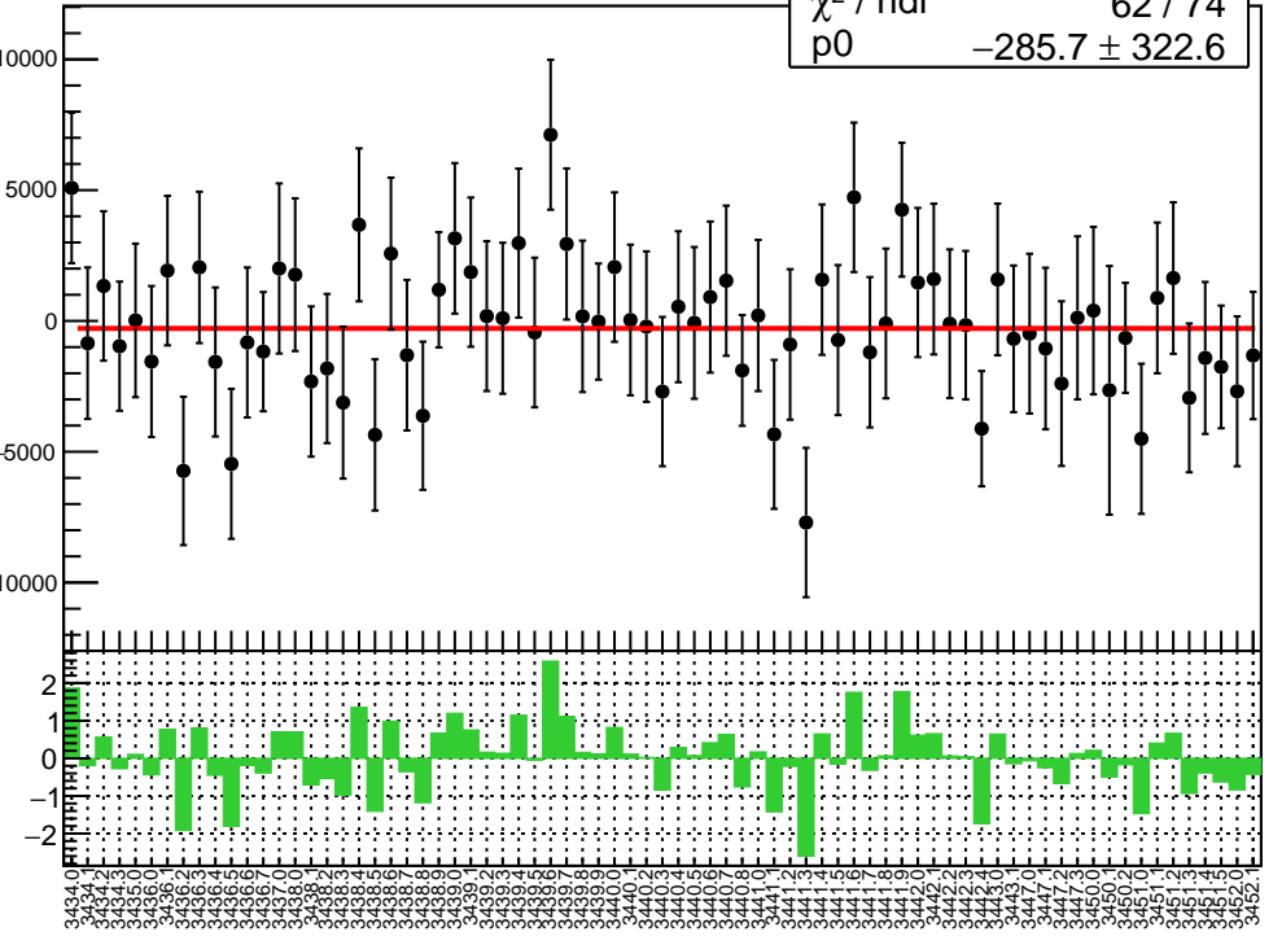
corr_us_avg_bpm12Y RMS (ppm)

RMS (ppm)

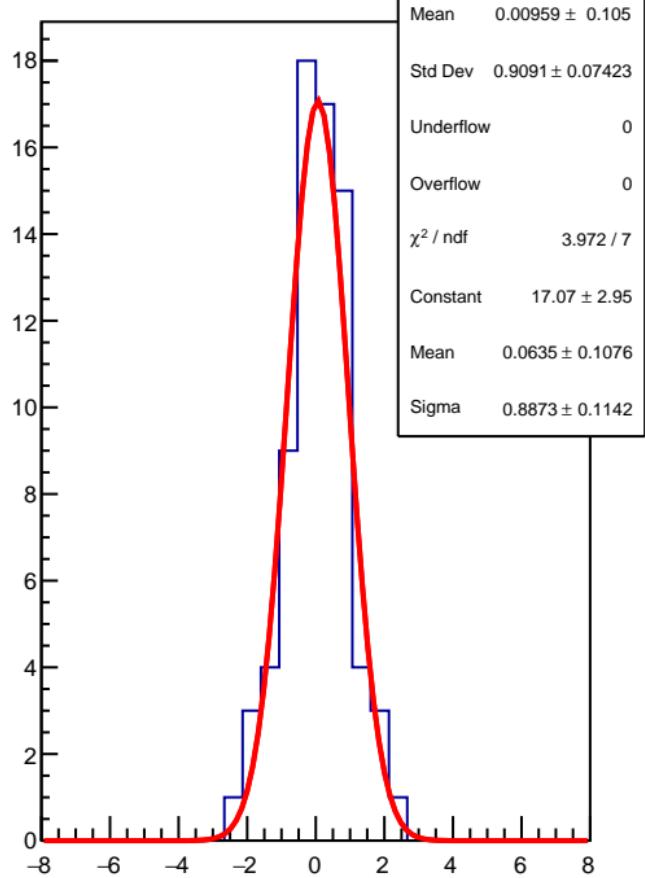


corr_us_avg_bpm11X (ppb)

χ^2 / ndf 62 / 74
p0 -285.7 ± 322.6

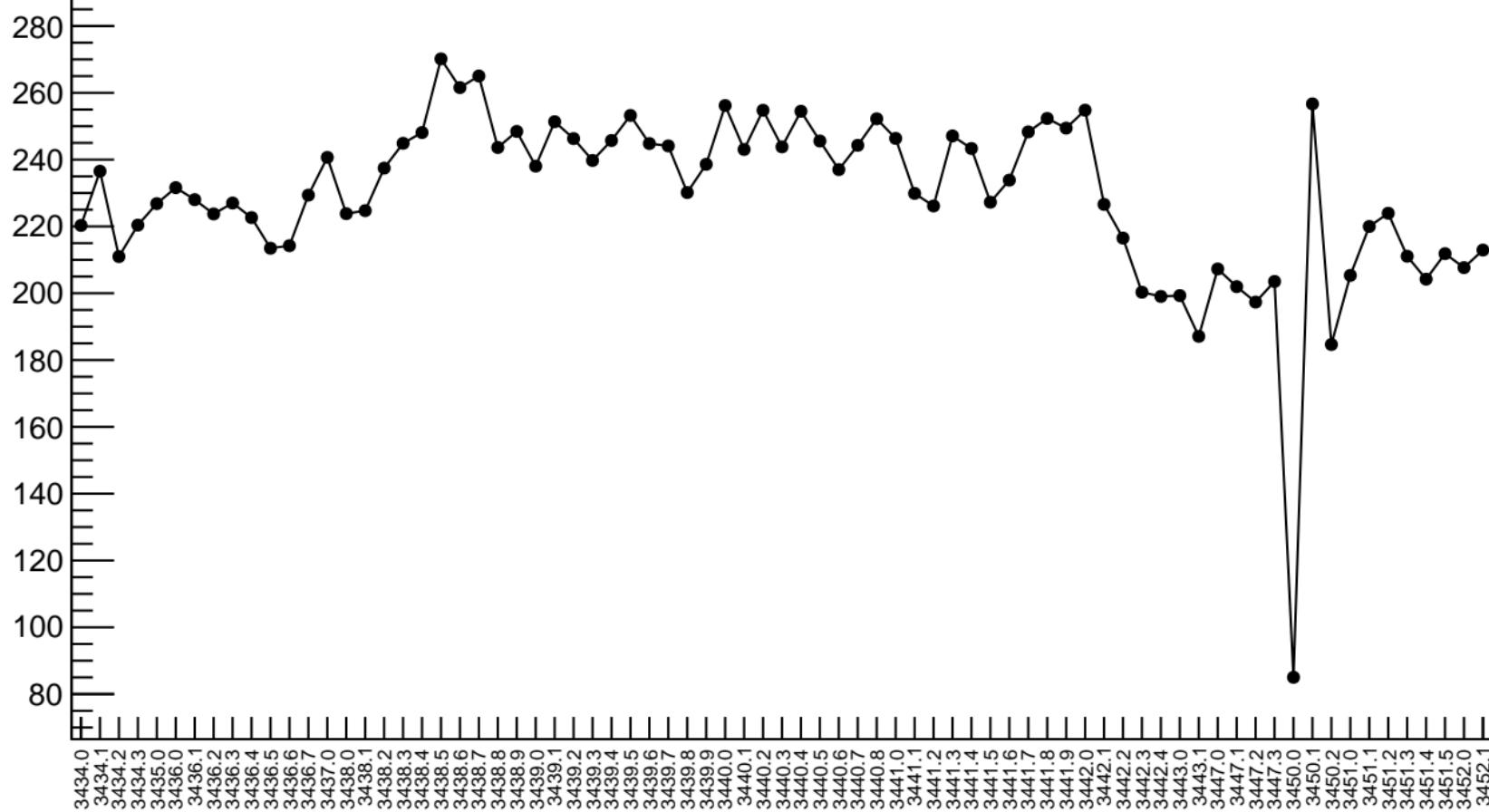


1D pull distribution



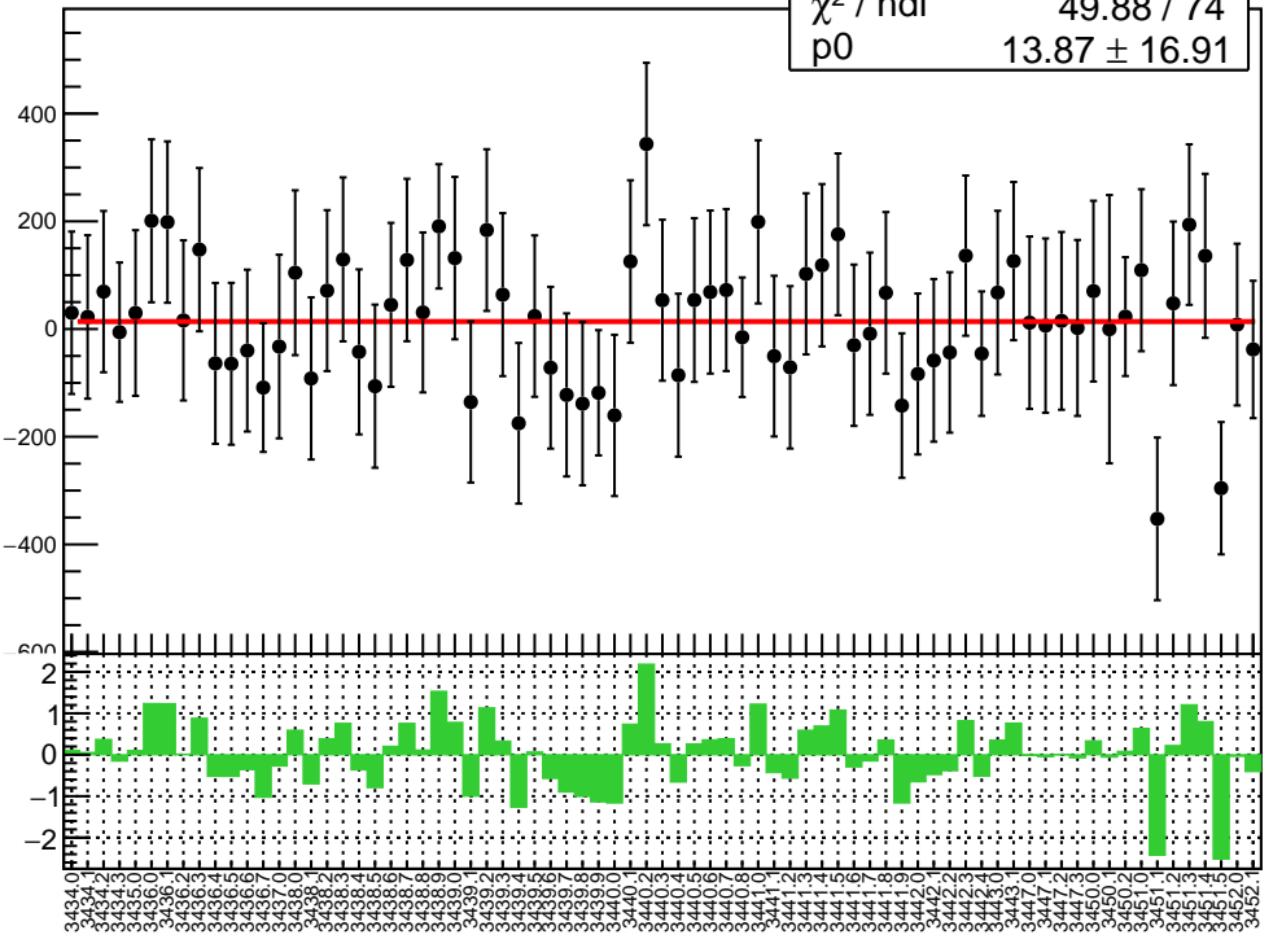
corr_us_avg_bpm11X RMS (ppm)

RMS (ppm)

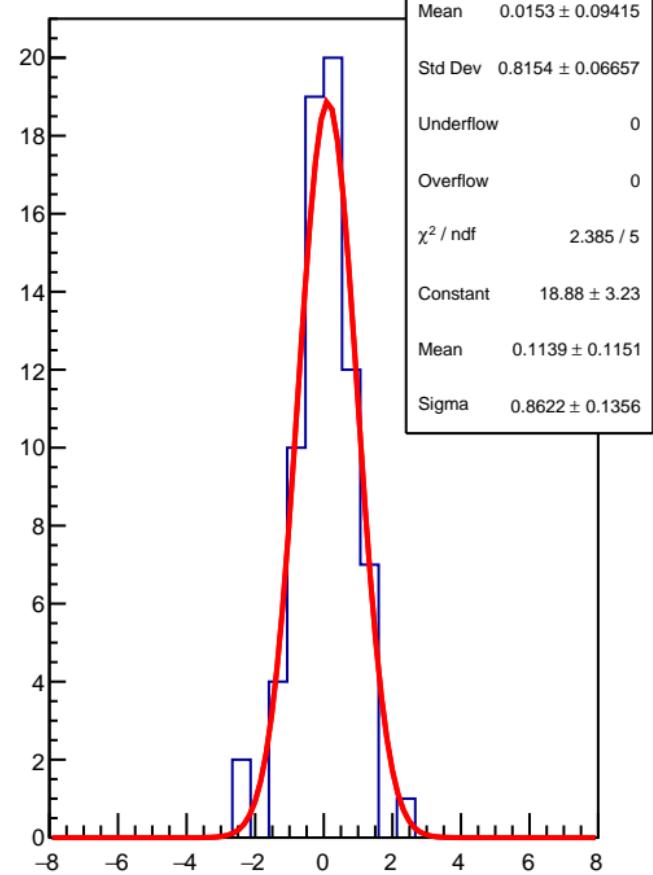


corr_us_avg_bpm11Y (ppb)

χ^2 / ndf 49.88 / 74
p0 13.87 ± 16.91



1D pull distribution



corr_us_avg_bpm11Y RMS (ppm)

RMS (ppm)

25

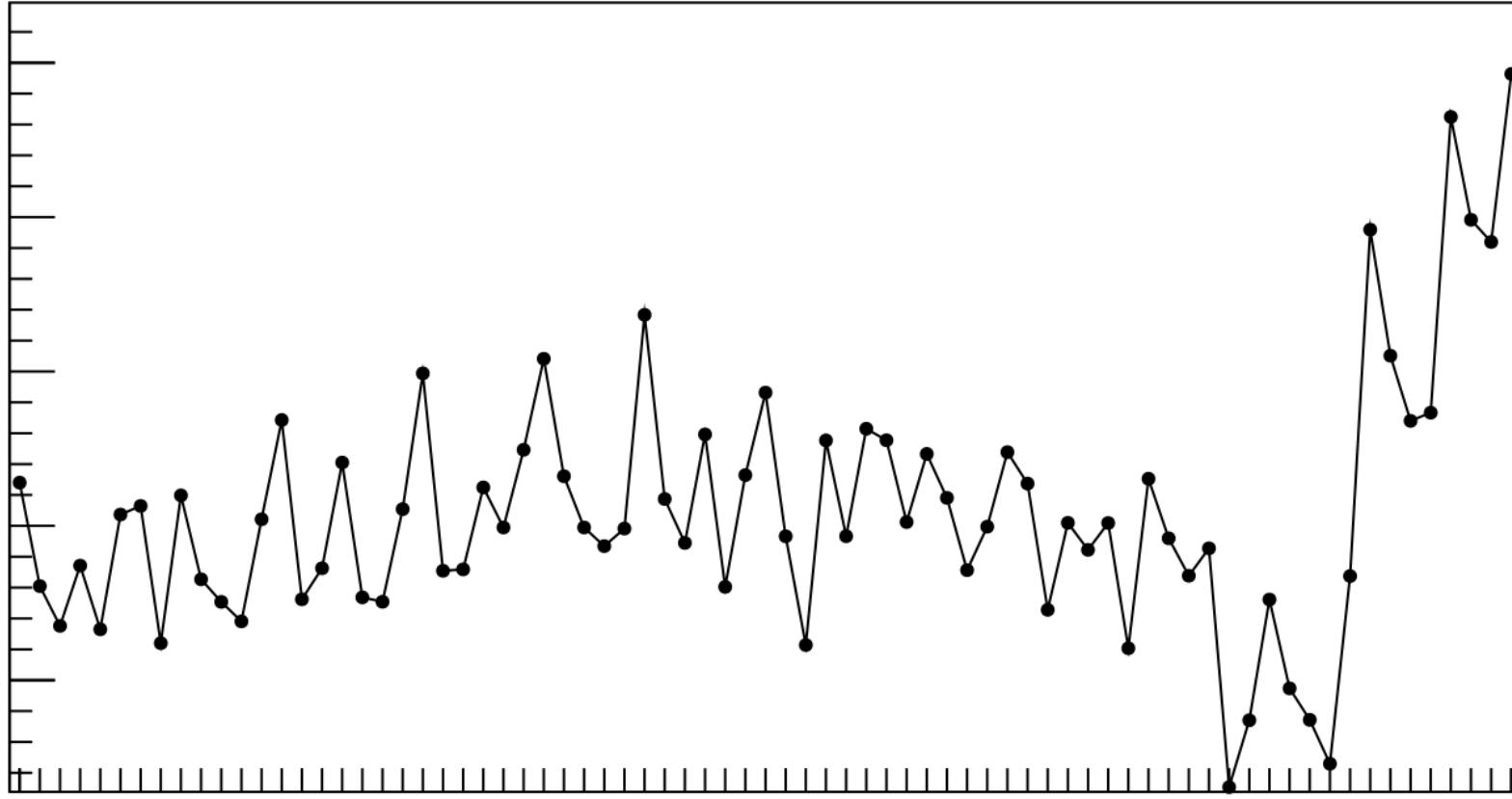
20

15

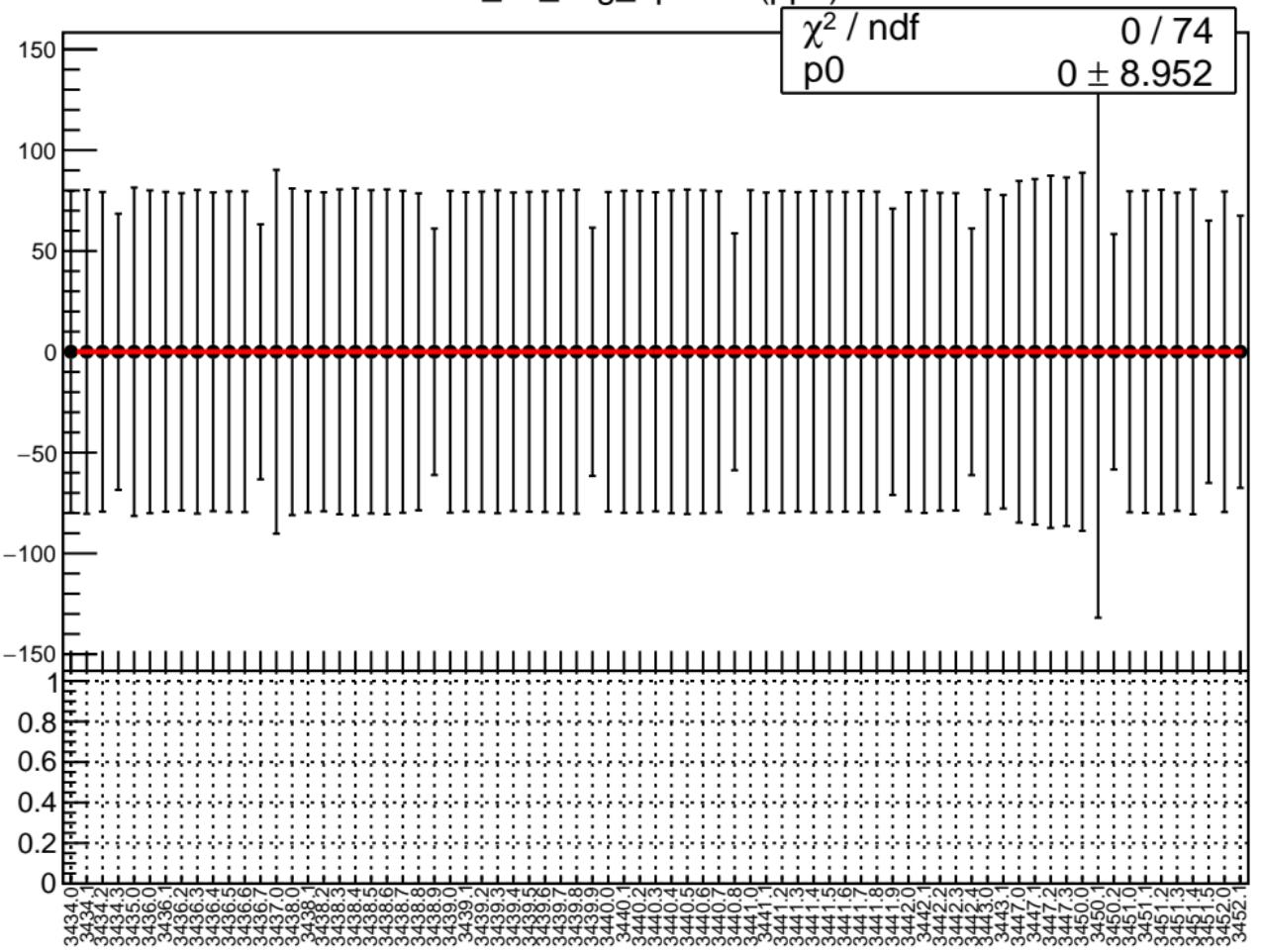
10

5

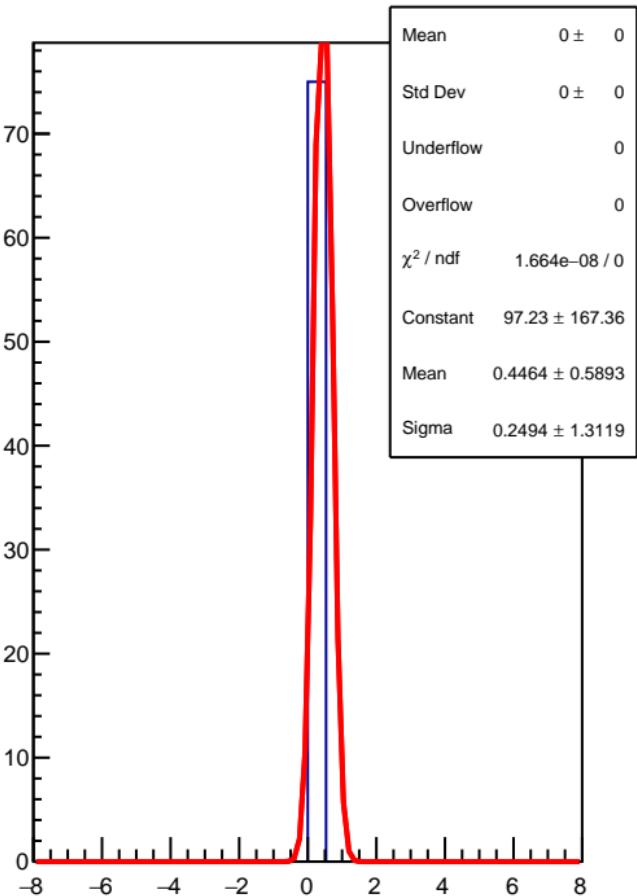
3434.0
3434.1
3434.2
3434.3
3435.0
3436.1
3436.2
3436.3
3436.4
3436.5
3436.6
3436.7
3437.0
3438.0
3438.1
3438.2
3438.3
3438.4
3438.5
3438.6
3438.7
3438.8
3438.9
3439.0
3439.1
3439.2
3439.3
3439.4
3439.5
3439.6
3439.7
3439.8
3439.9
3440.0
3440.1
3440.2
3440.3
3440.4
3440.5
3440.6
3440.7
3440.8
3441.0
3441.1
3441.2
3441.3
3441.4
3441.5
3441.6
3441.7
3441.8
3441.9
3442.0
3442.1
3442.2
3442.3
3443.0
3443.1
3447.0
3447.1
3447.2
3447.3
3450.0
3450.1
3450.2
3451.0
3451.1
3451.2
3451.3
3451.4
3451.5
3452.0
3452.1



corr_us_avg_bpm8X (ppb)

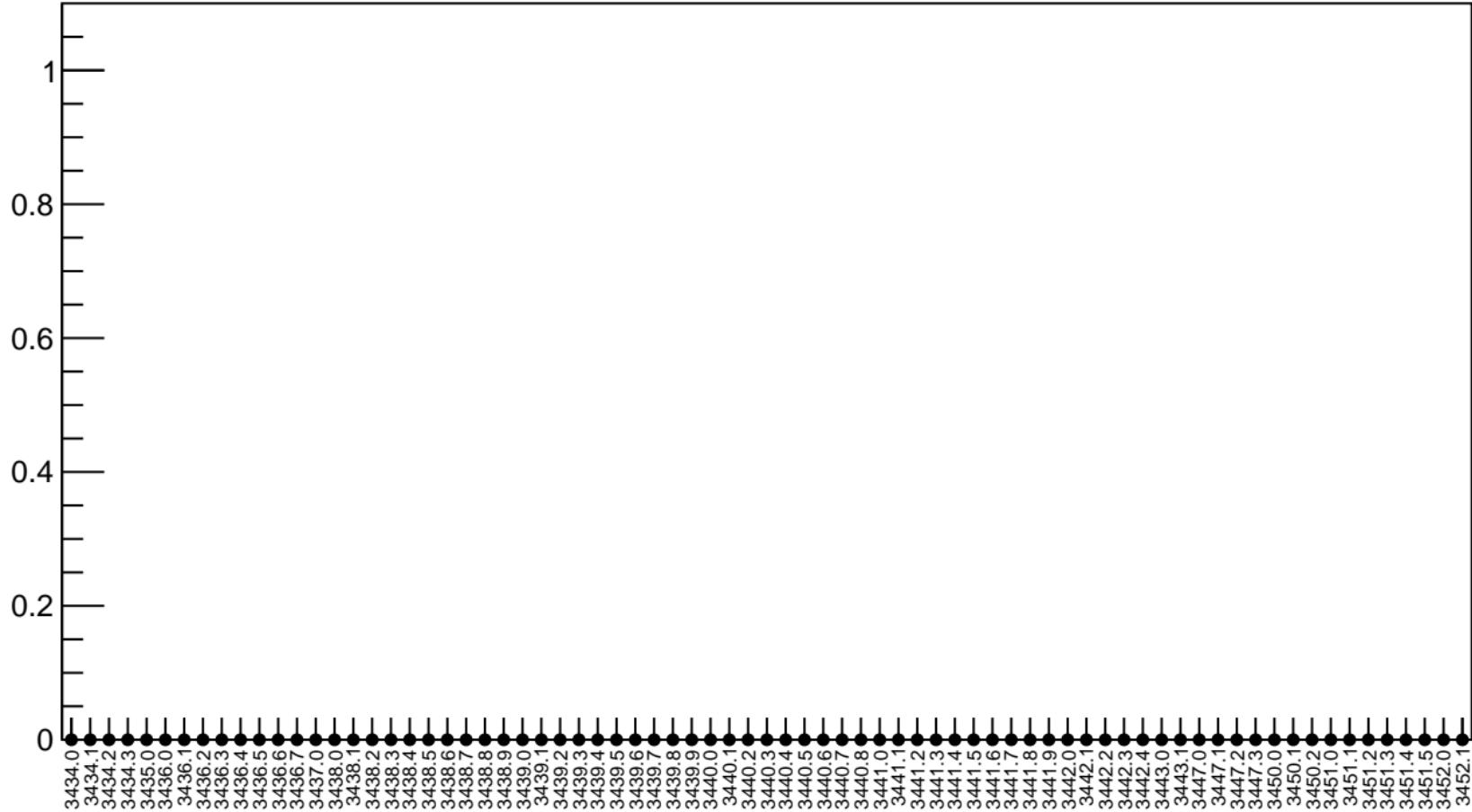


1D pull distribution

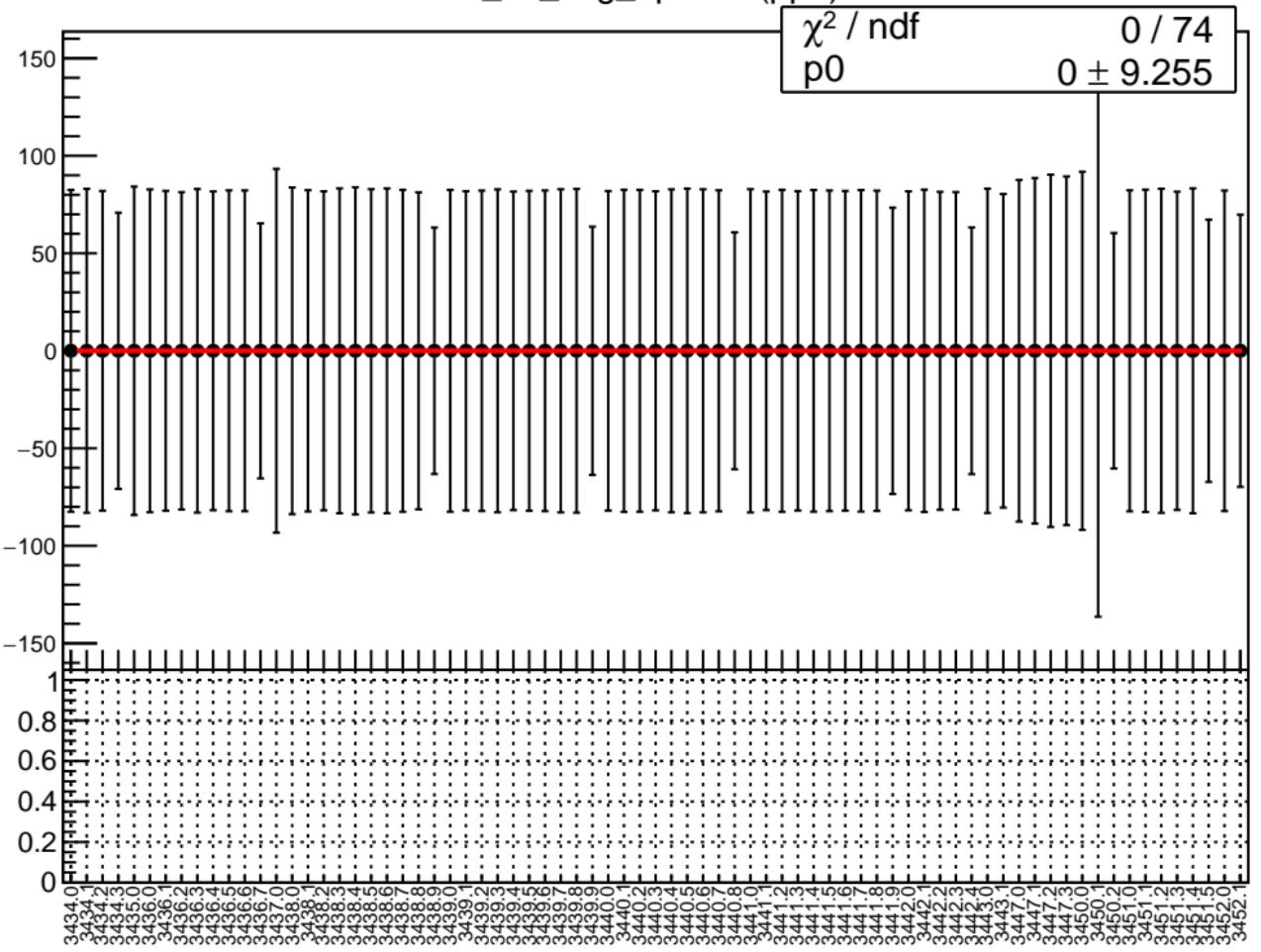


corr_us_avg_bpm8X RMS (ppm)

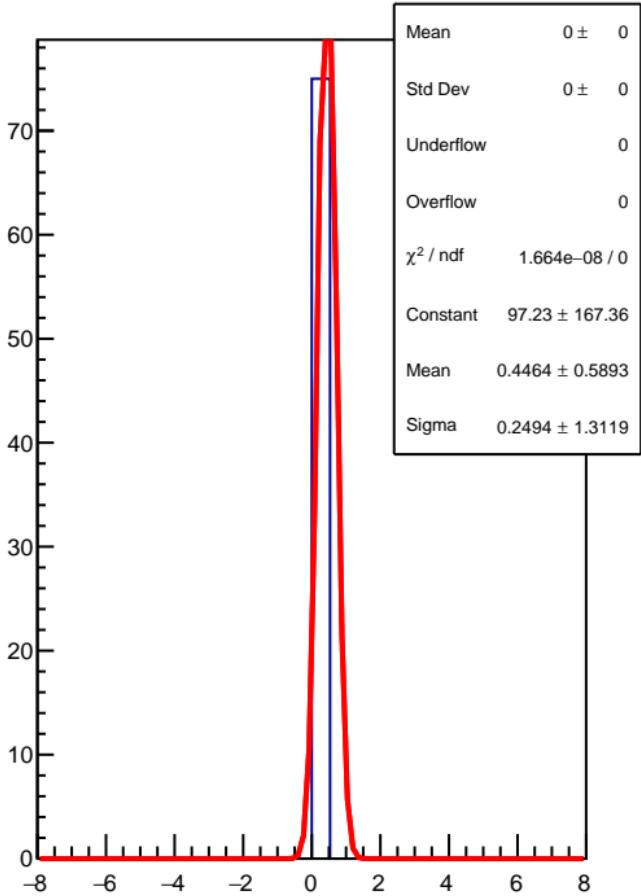
RMS (ppm)



corr_us_avg_bpm8Y (ppb)

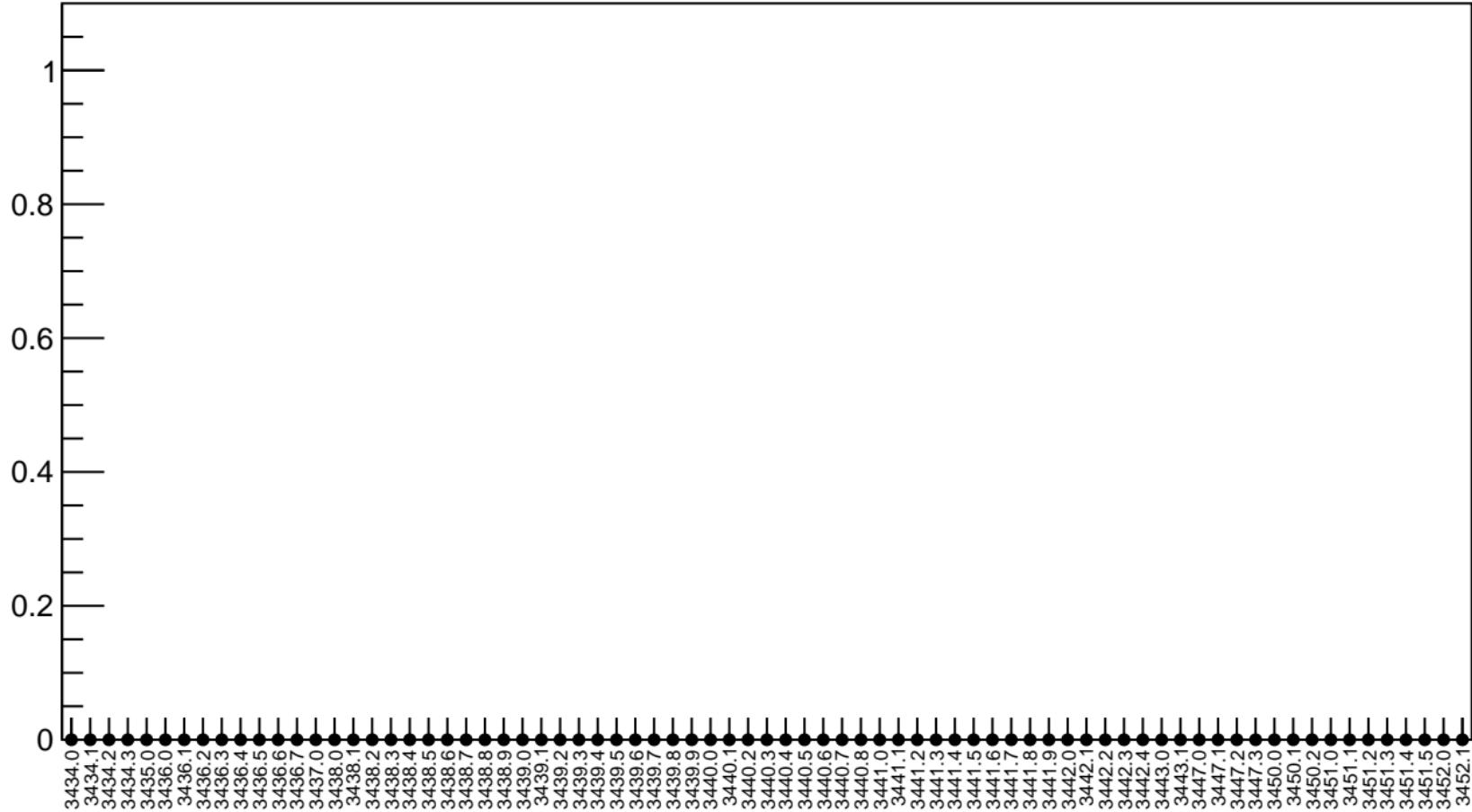


1D pull distribution



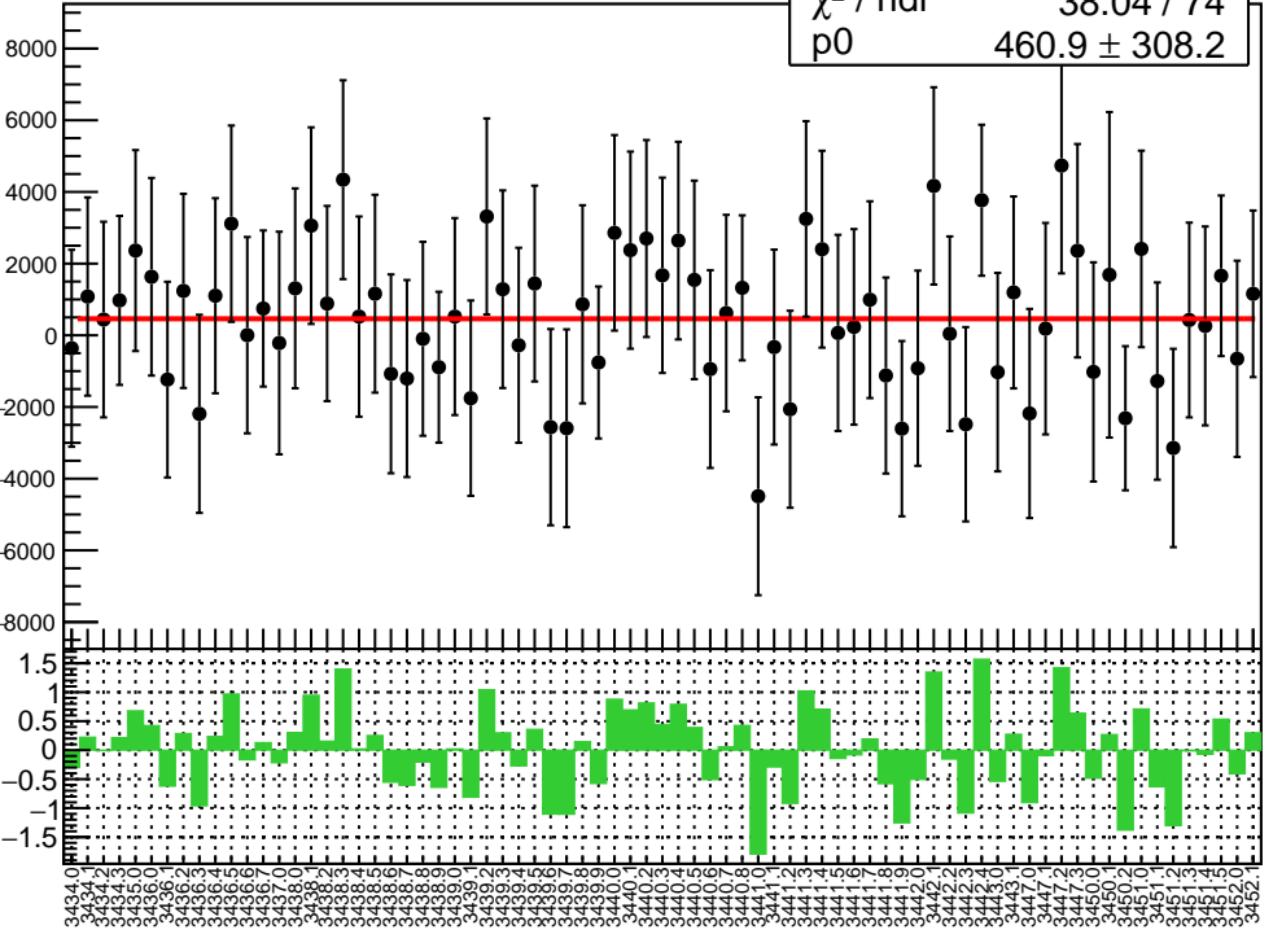
corr_us_avg_bpm8Y RMS (ppm)

RMS (ppm)

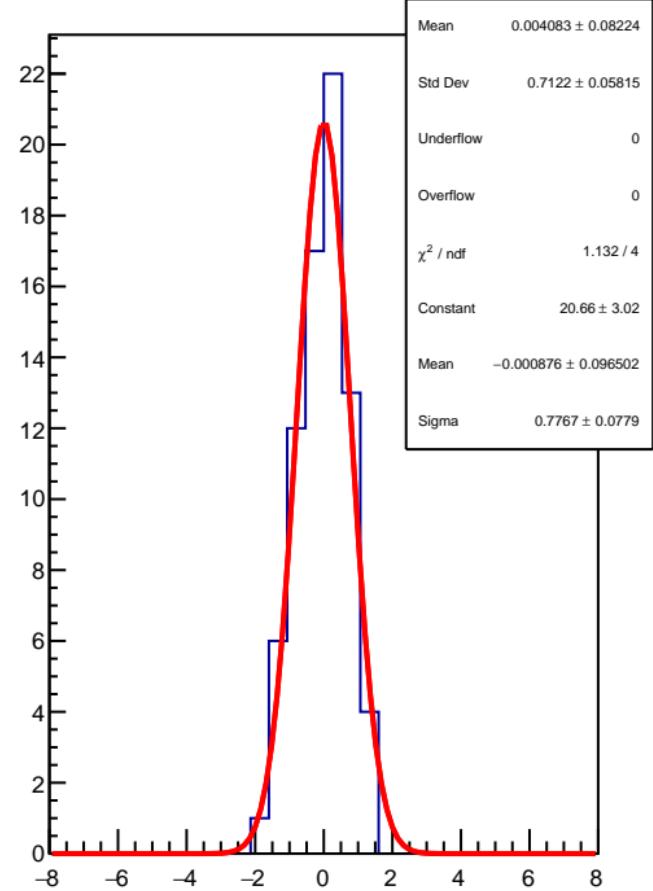


corr_us_dd_bpm4eX (ppb)

χ^2 / ndf 38.04 / 74
p0 460.9 ± 308.2

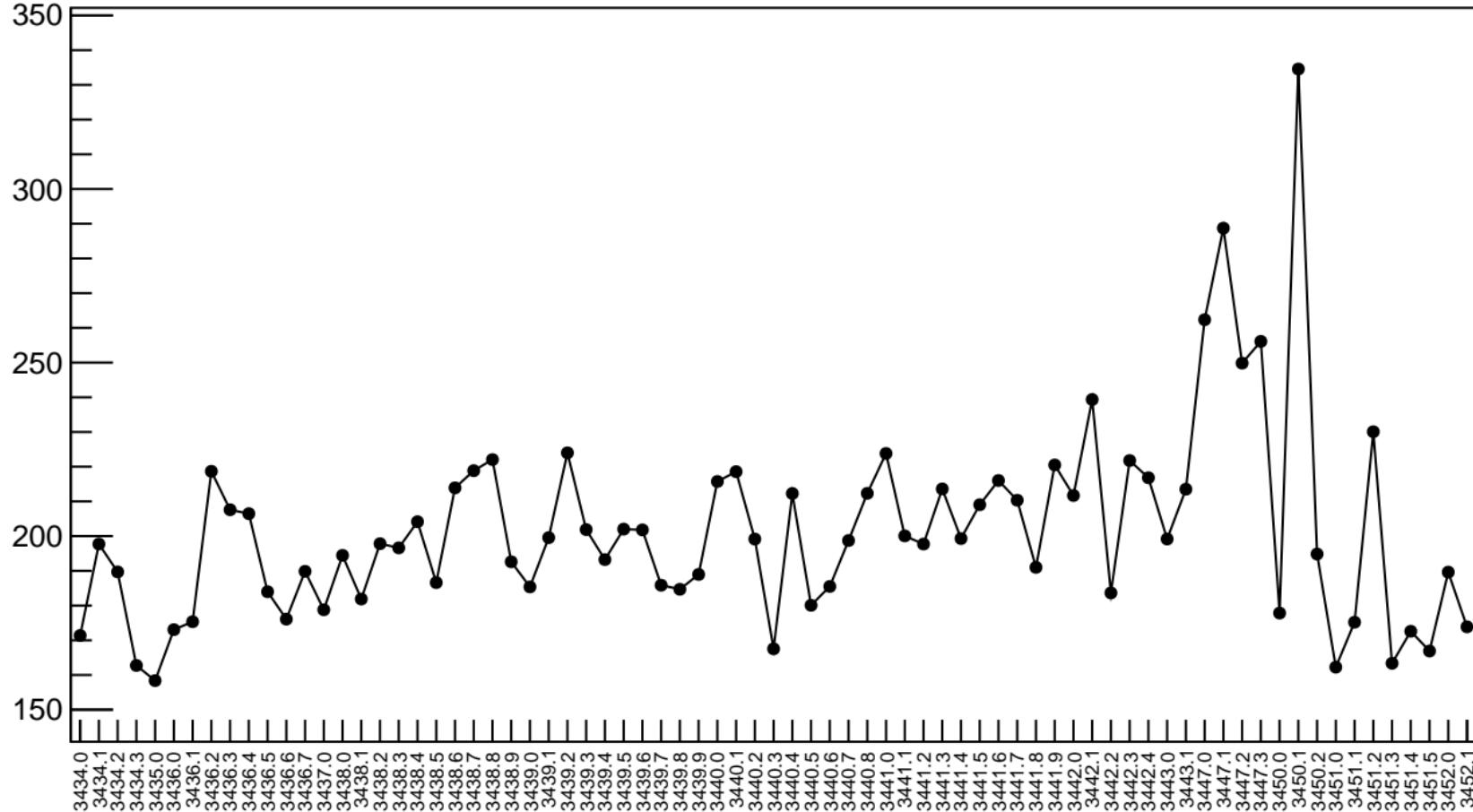


1D pull distribution



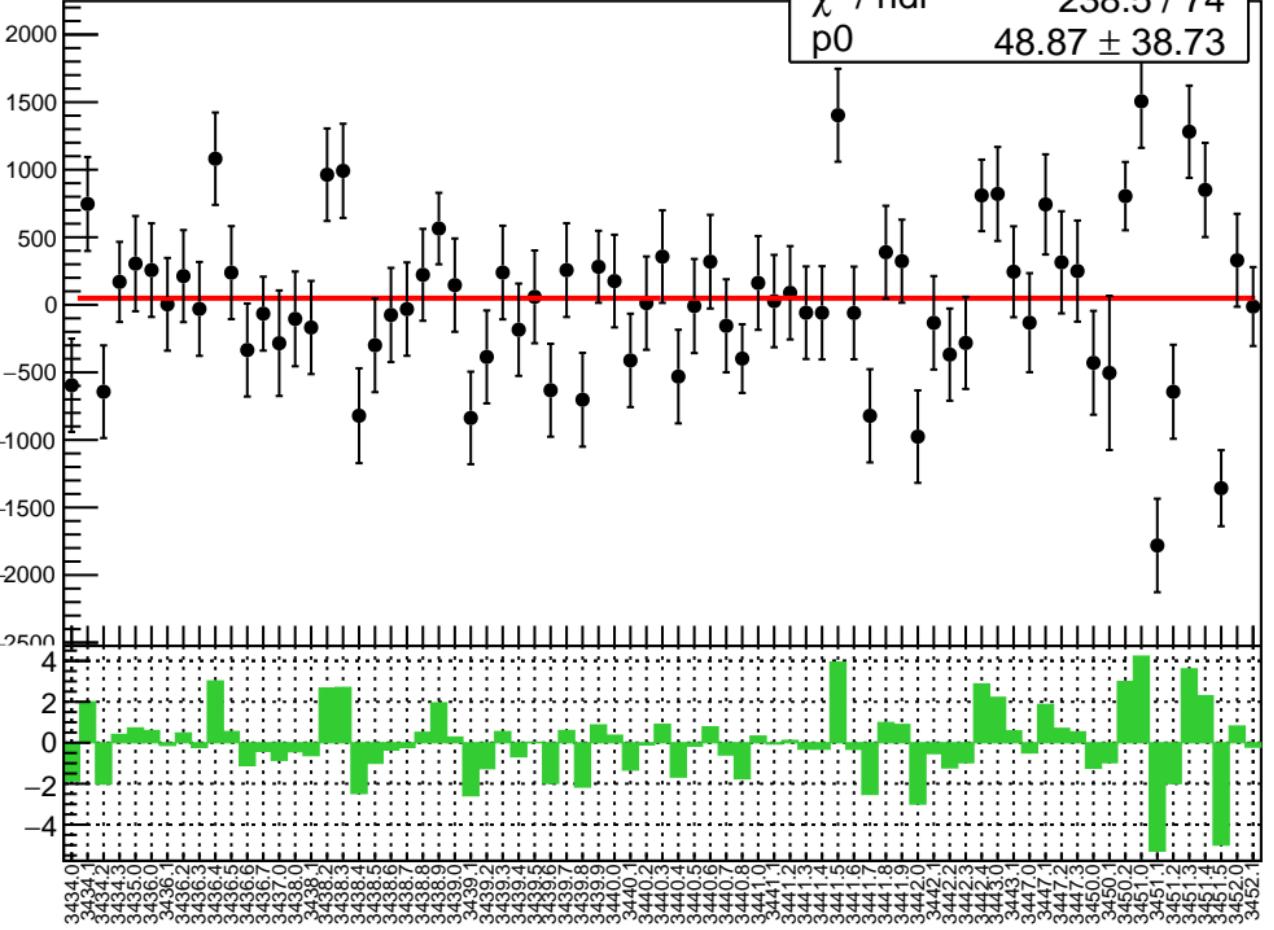
corr_us_dd_bpm4eX RMS (ppm)

RMS (ppm)

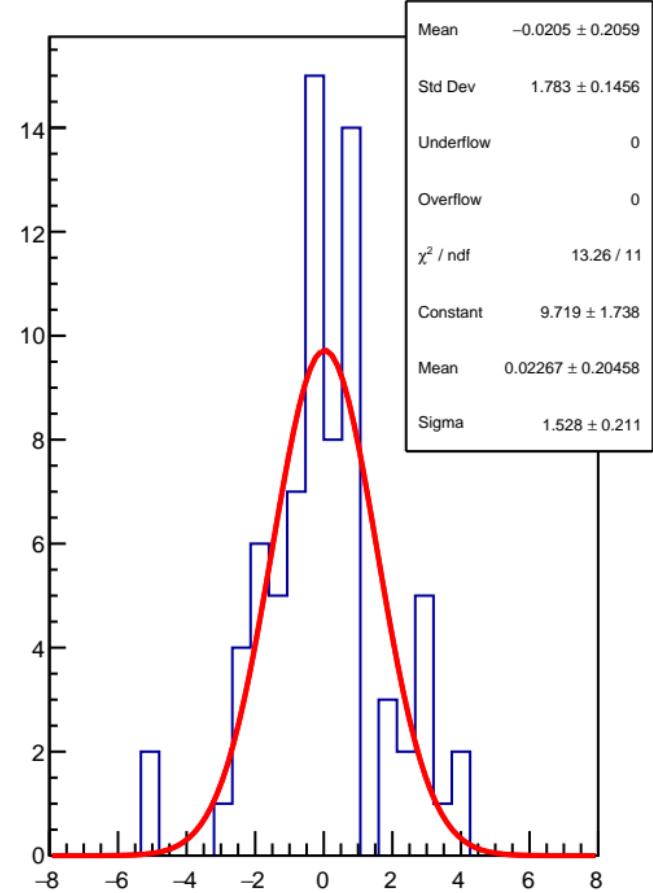


corr_us_dd_bpm4eY (ppb)

χ^2 / ndf 238.5 / 74
p0 48.87 ± 38.73

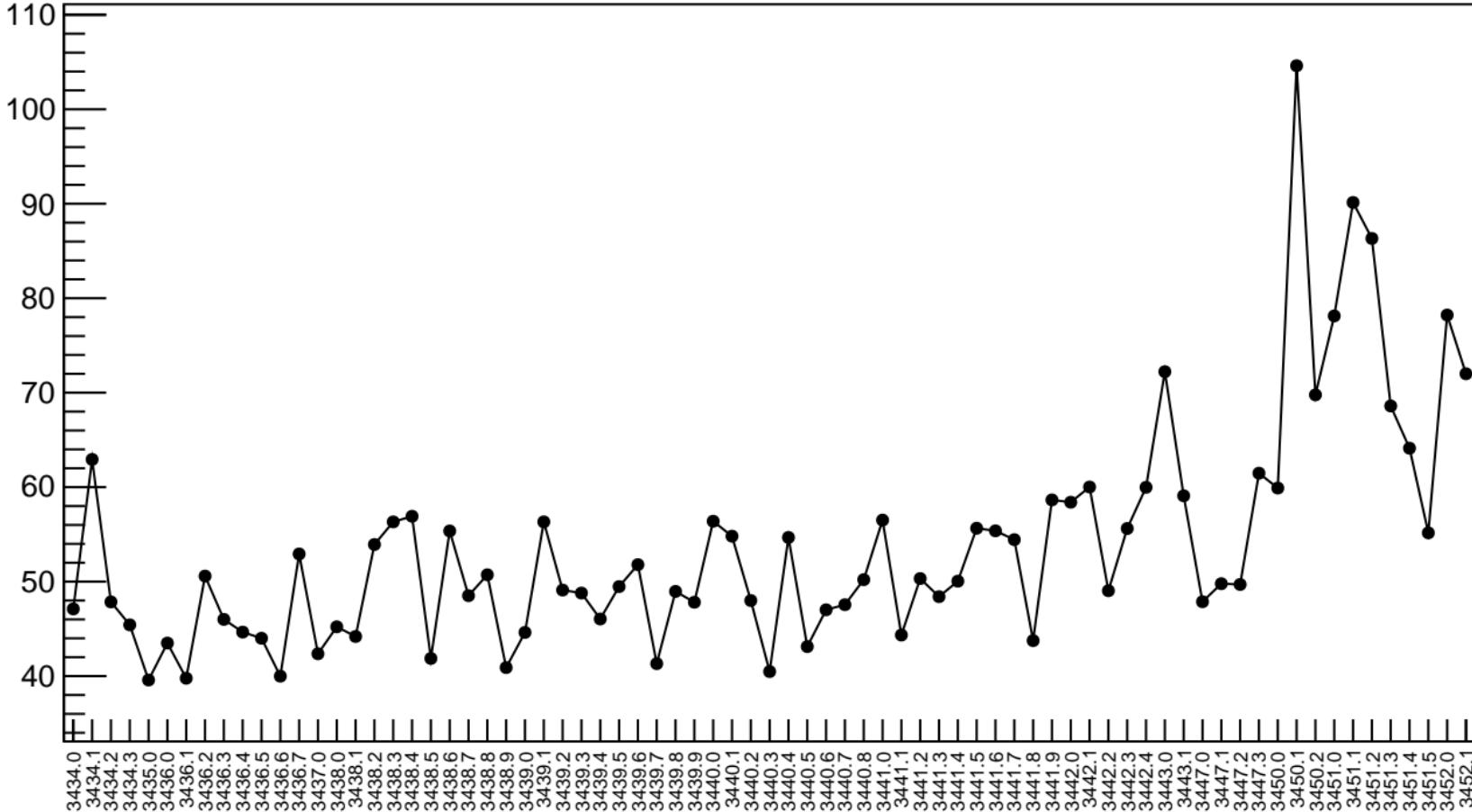


1D pull distribution

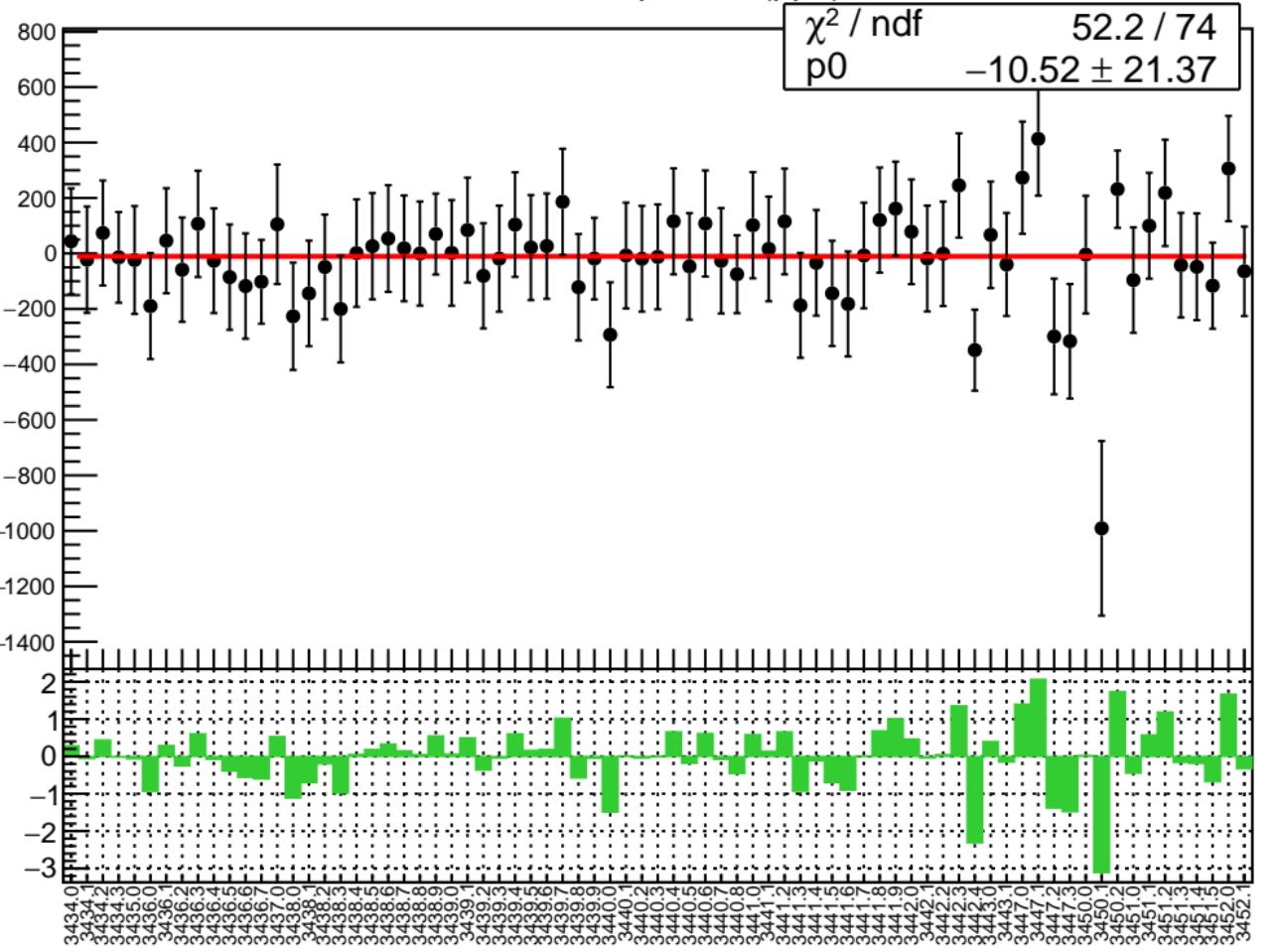


corr_us_dd_bpm4eY RMS (ppm)

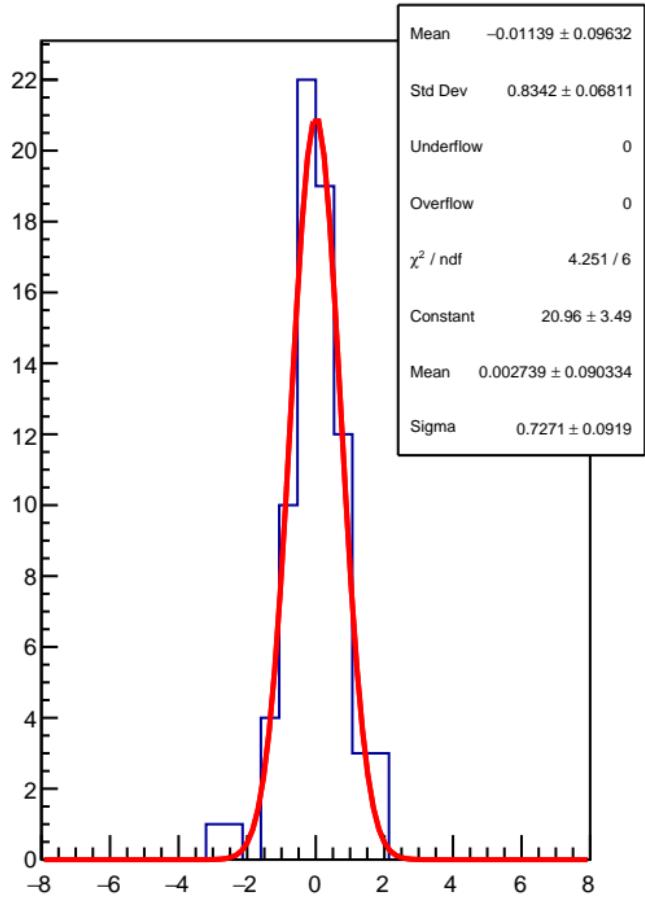
RMS (ppm)



corr_us_dd_bpm4aX (ppb)



1D pull distribution

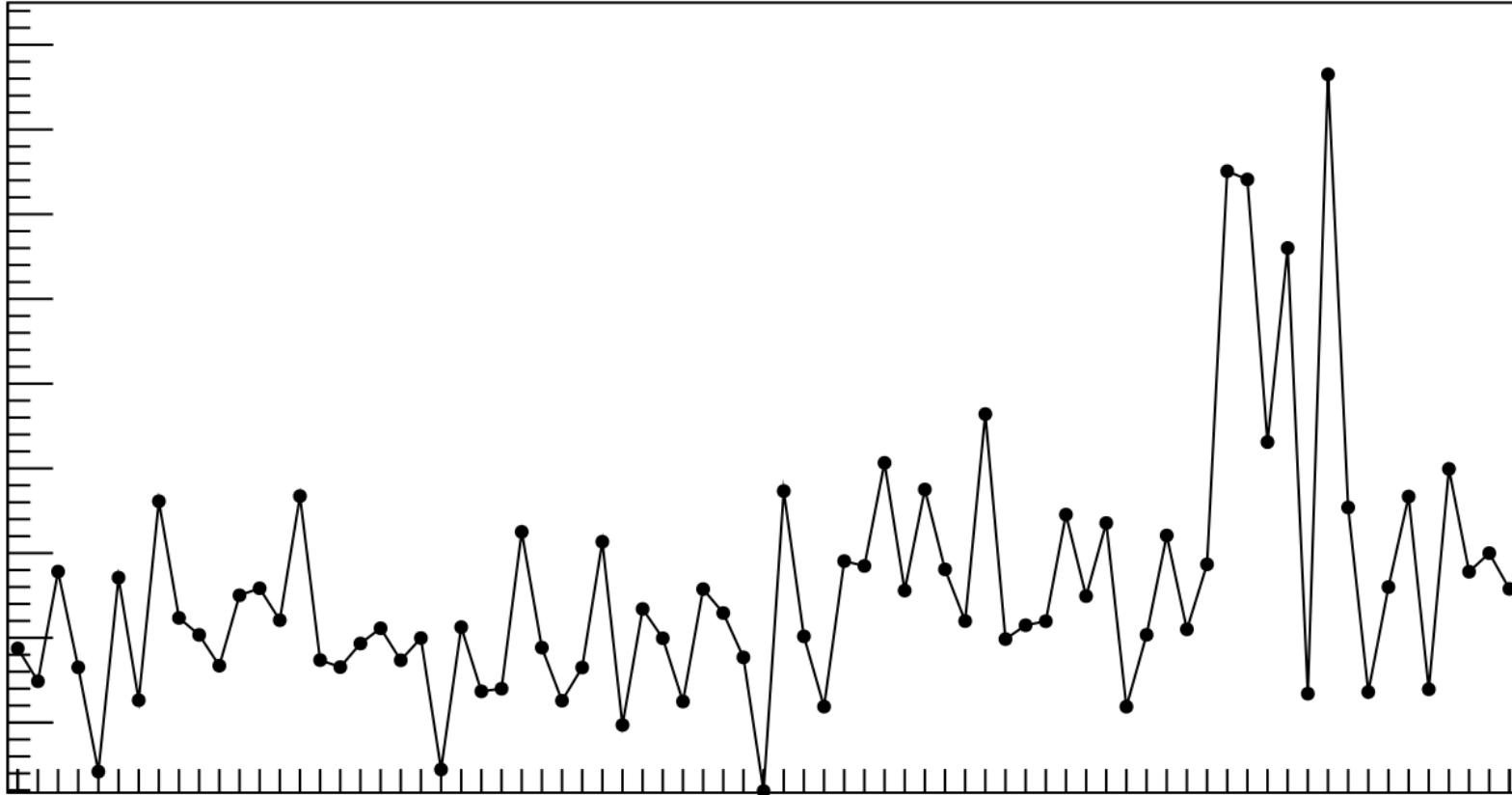


corr_us_dd_bpm4aX RMS (ppm)

RMS (ppm)

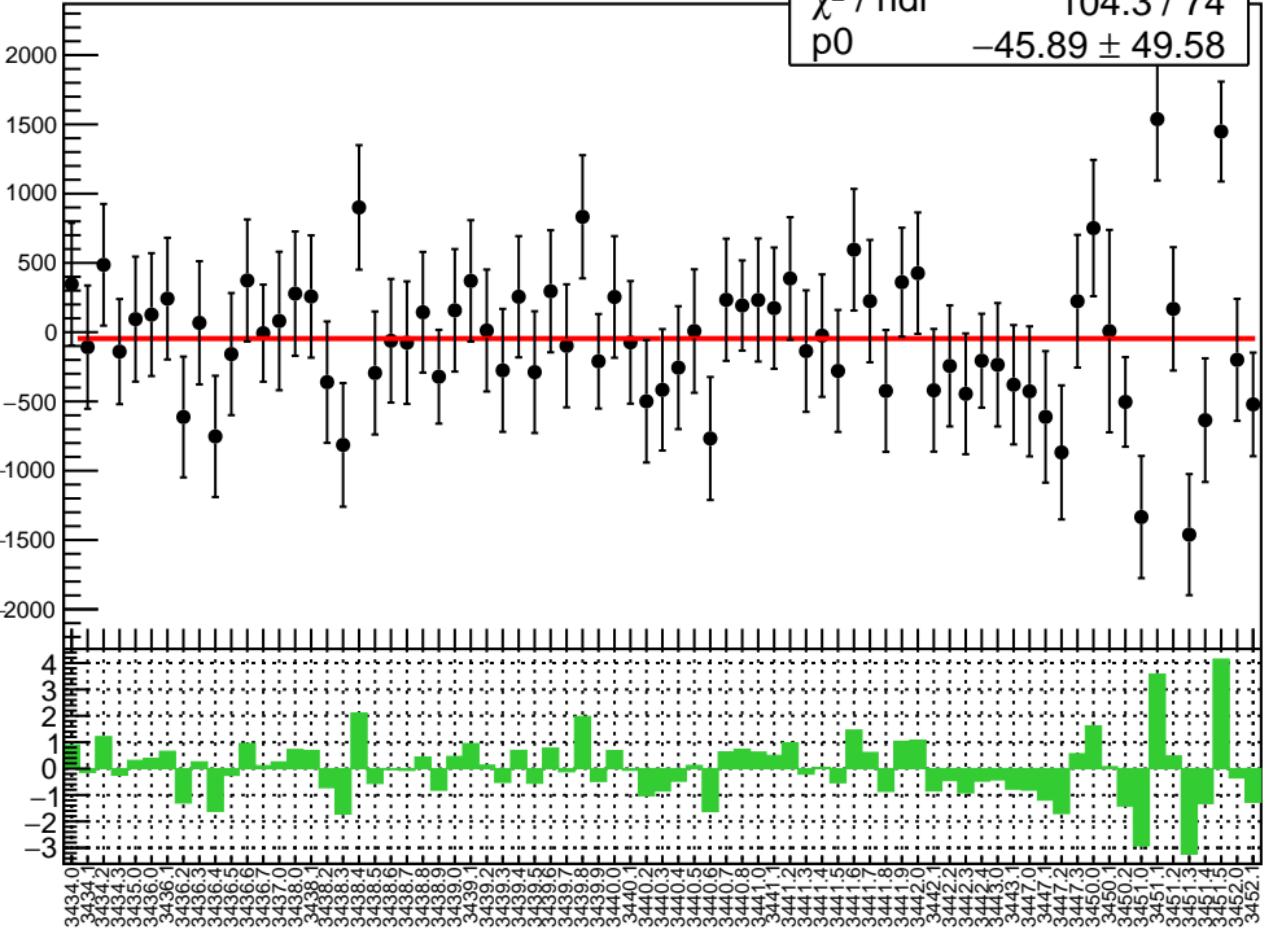
45
40
35
30
25
20
15
10
5

3434.0
3434.1
3434.3
3435.0
3436.1
3436.2
3436.3
3436.4
3436.5
3436.6
3436.7
3437.0
3438.0
3438.1
3438.2
3438.3
3438.4
3438.5
3438.6
3438.7
3438.8
3438.9
3439.0
3439.1
3439.2
3439.3
3439.4
3439.5
3439.6
3439.7
3439.8
3439.9
3440.0
3440.1
3440.2
3440.3
3440.4
3440.5
3440.6
3440.7
3440.8
3441.0
3441.1
3441.2
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3441.4
3441.5
3441.6
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3441.8
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3447.1
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3447.3
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3451.0
3451.1
3451.2
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3451.4
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3452.0
3452.1

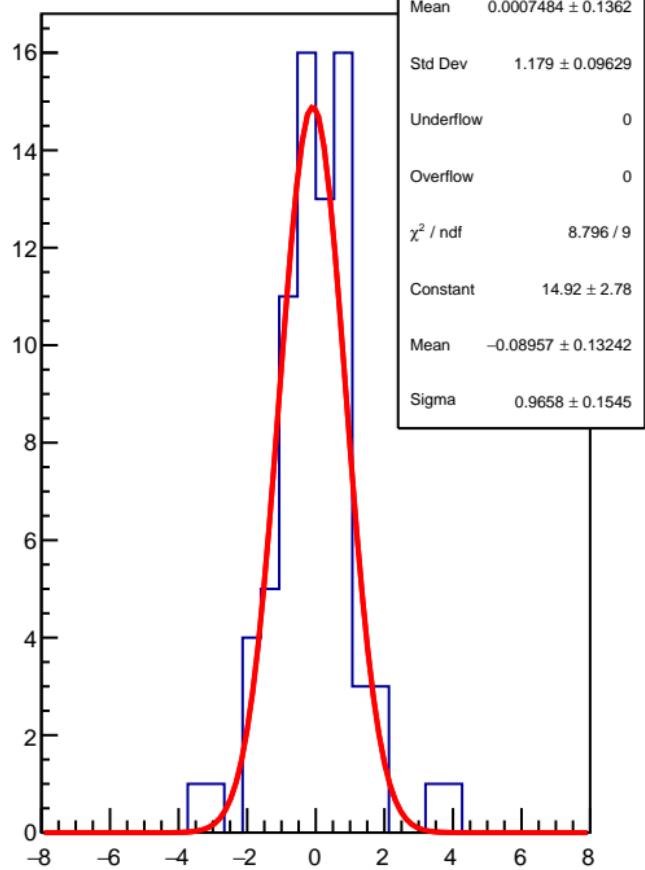


corr_us_dd_bpm4aY (ppb)

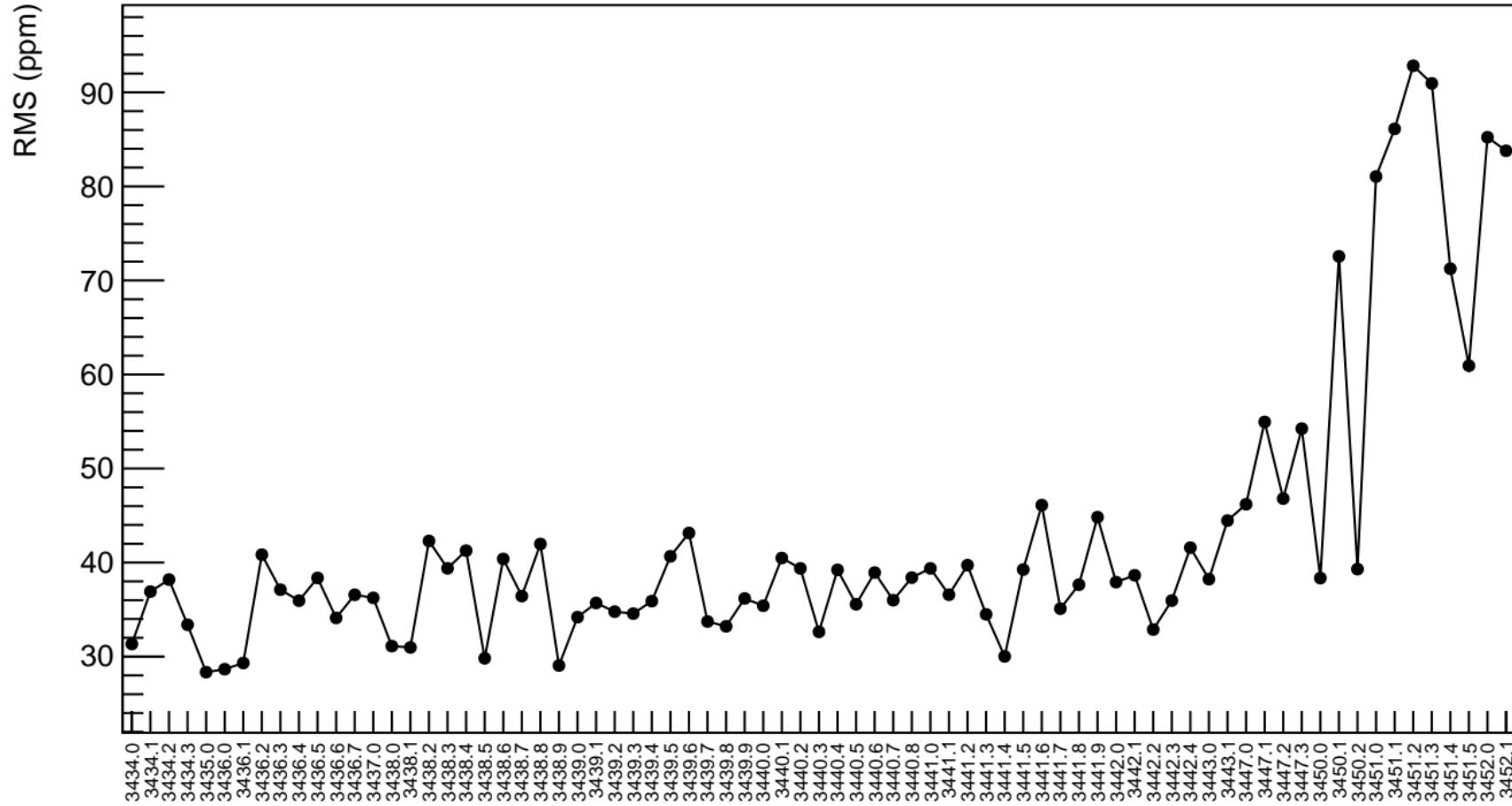
χ^2 / ndf 104.3 / 74
p0 -45.89 ± 49.58



1D pull distribution

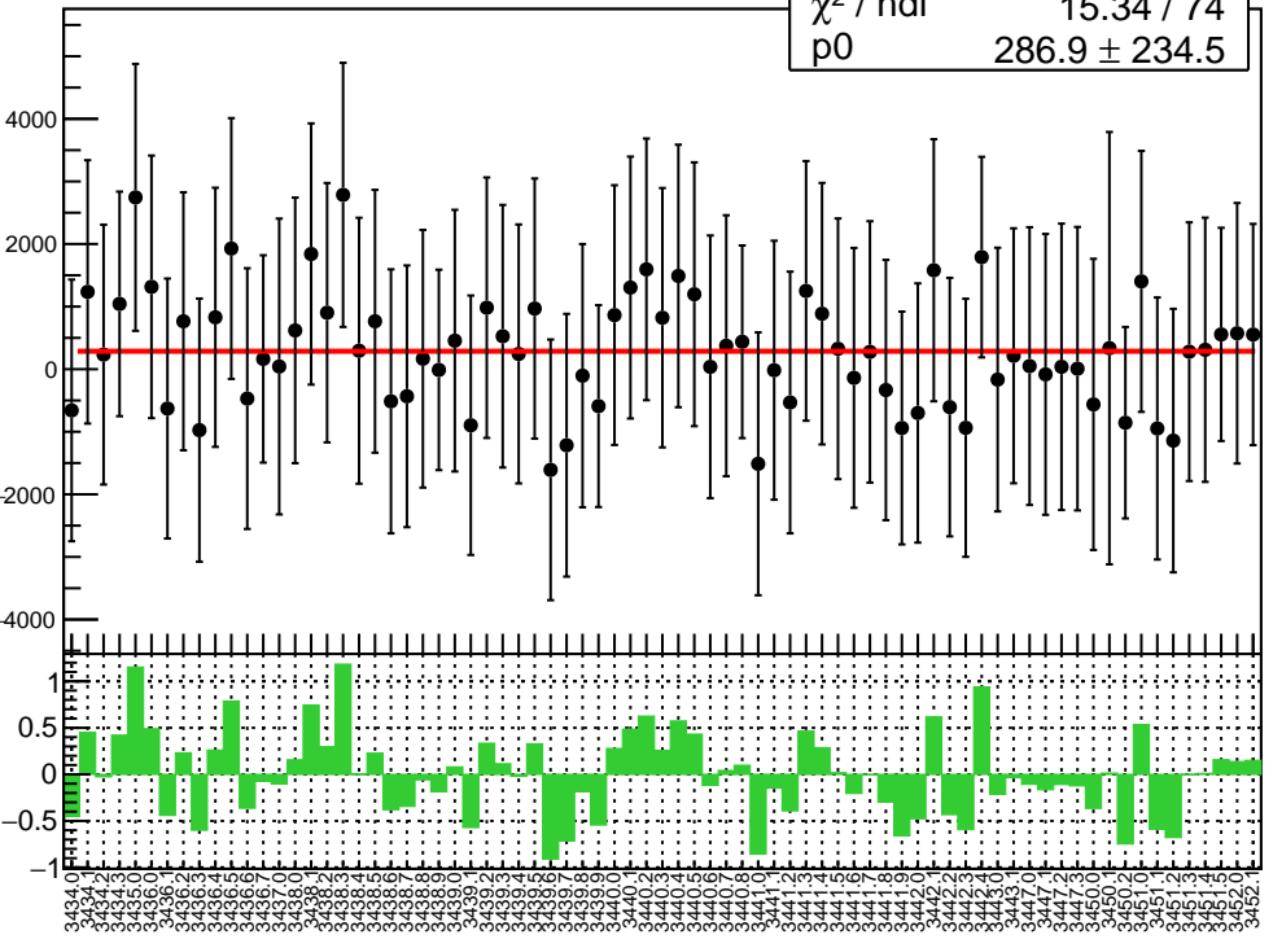


corr_us_dd_bpm4aY RMS (ppm)

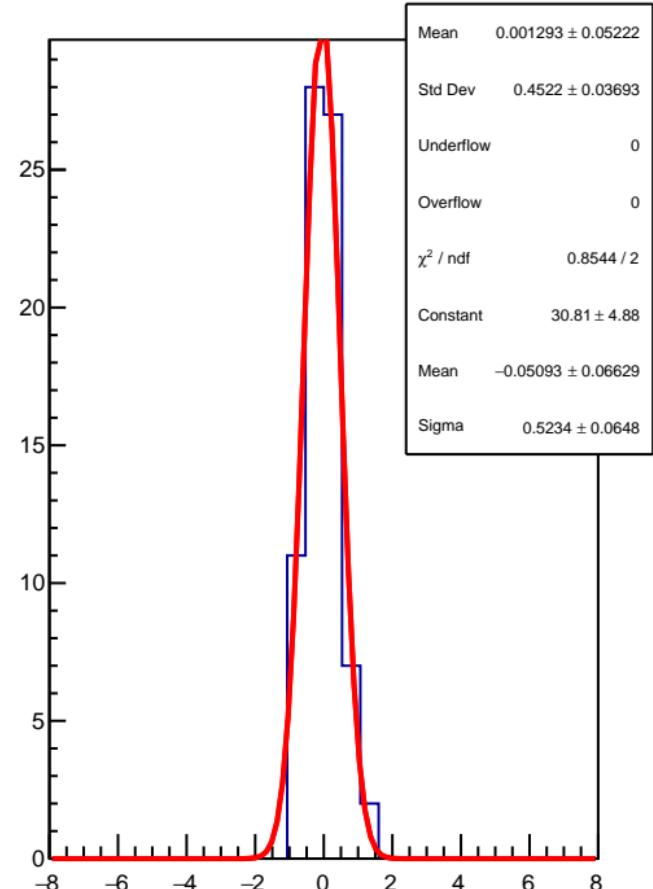


corr_us_dd_bpm1X (ppb)

χ^2 / ndf 15.34 / 74
 p_0 286.9 ± 234.5

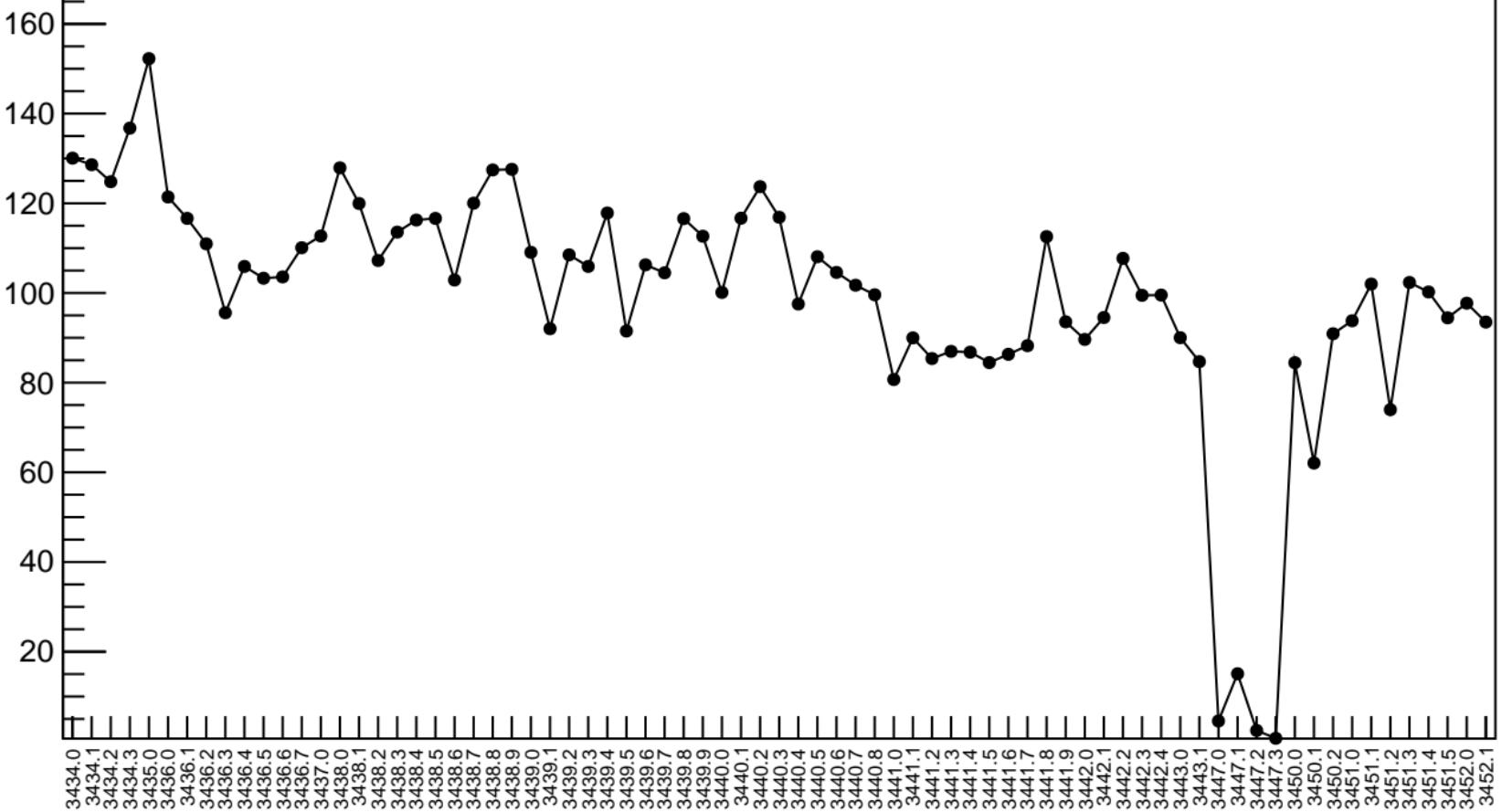


1D pull distribution



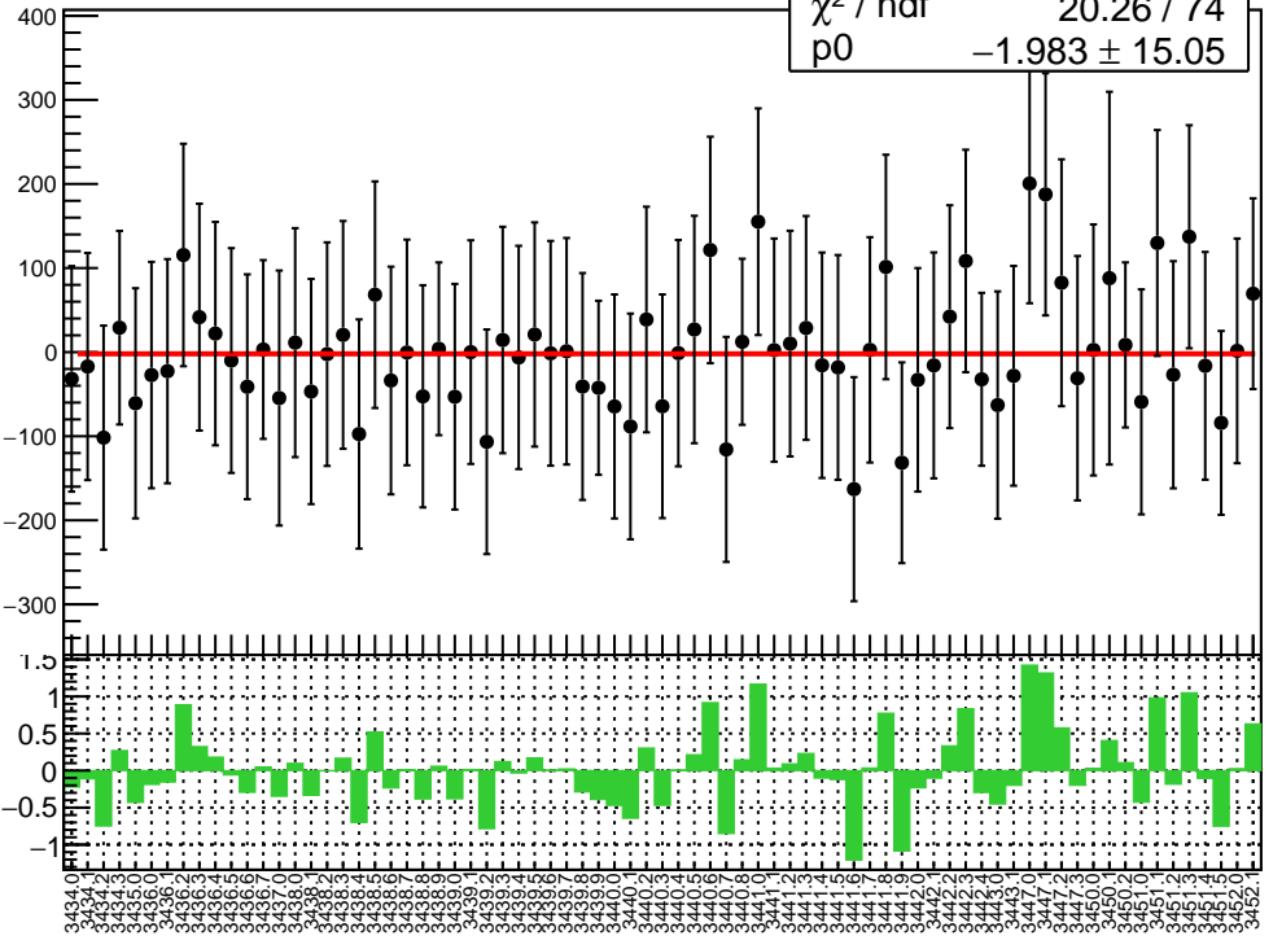
corr_us_dd_bpm1X RMS (ppm)

RMS (ppm)

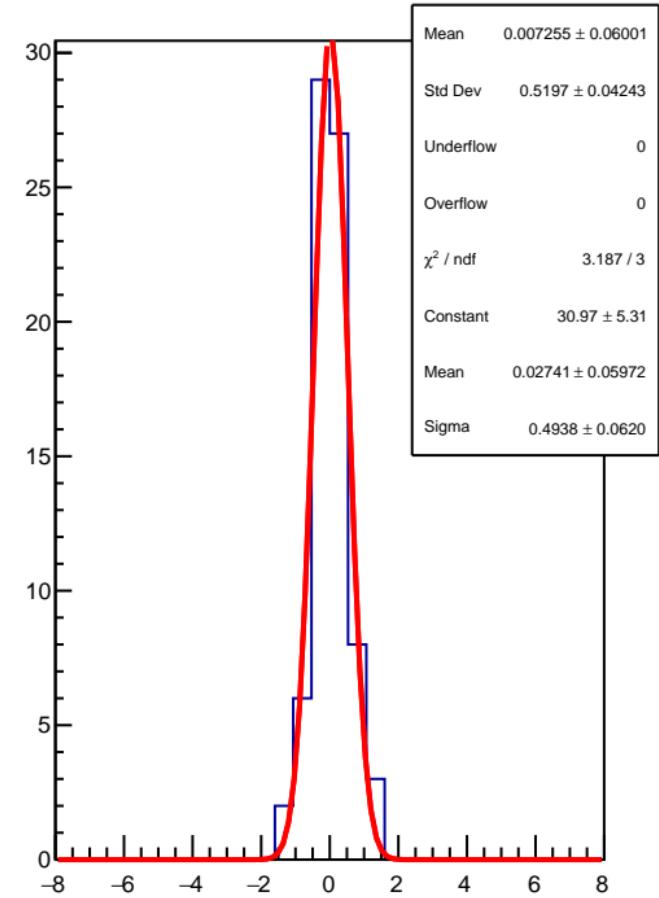


corr_us_dd_bpm1Y (ppb)

χ^2 / ndf 20.26 / 74
p0 -1.983 ± 15.05



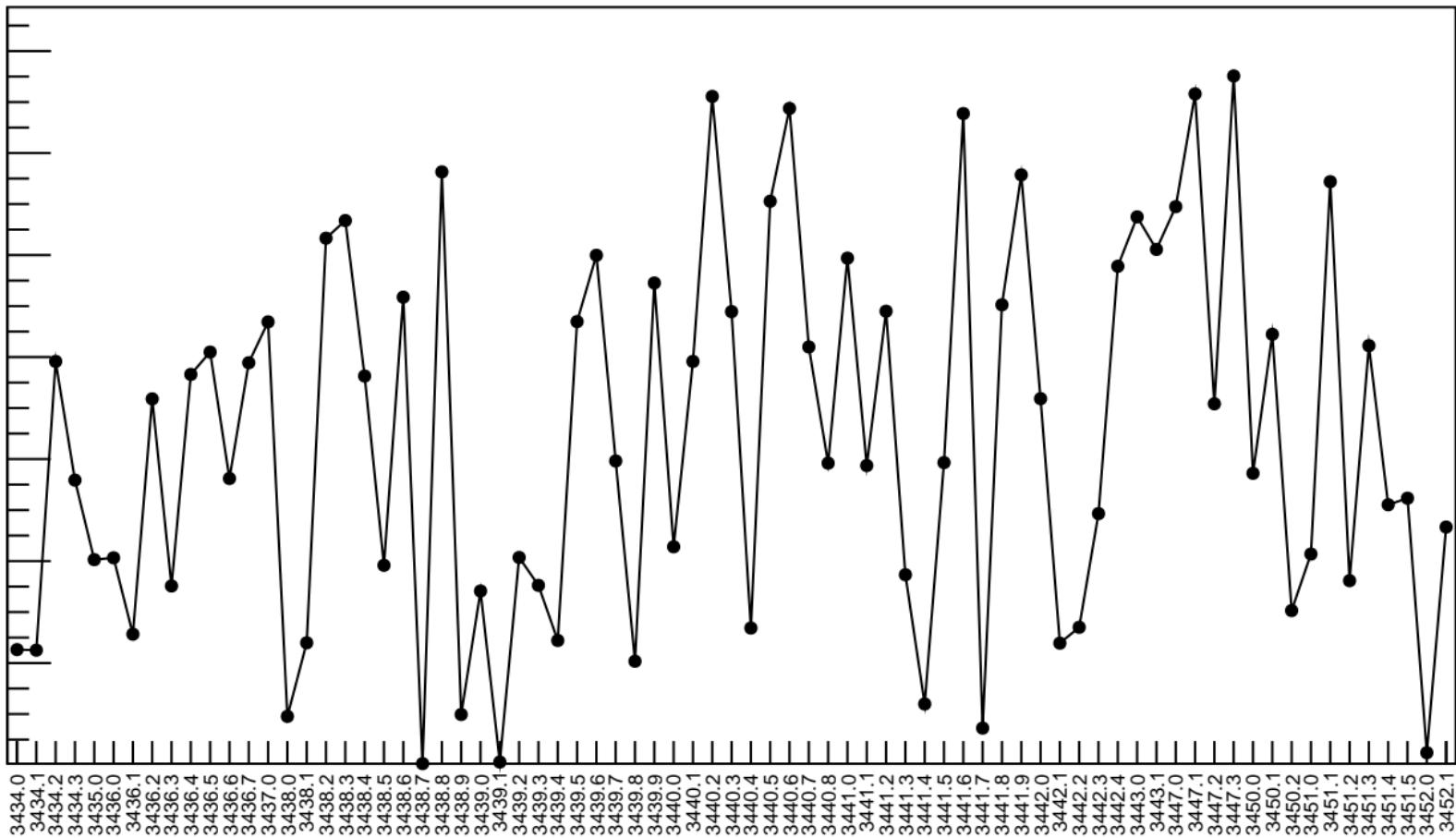
1D pull distribution



corr_us_dd_bpm1Y RMS (ppm)

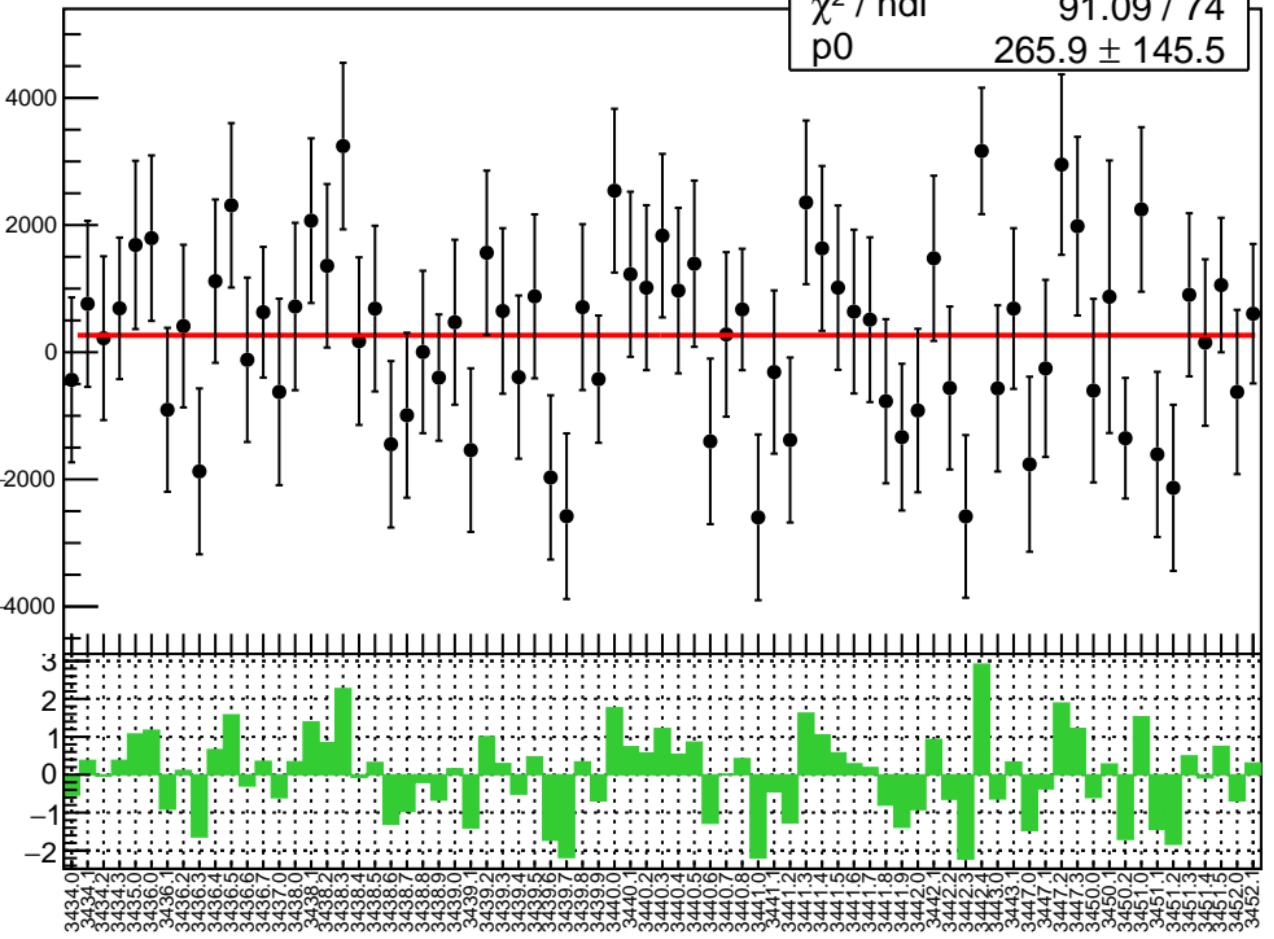
RMS (ppm)

14
12
10
8
6
4
2

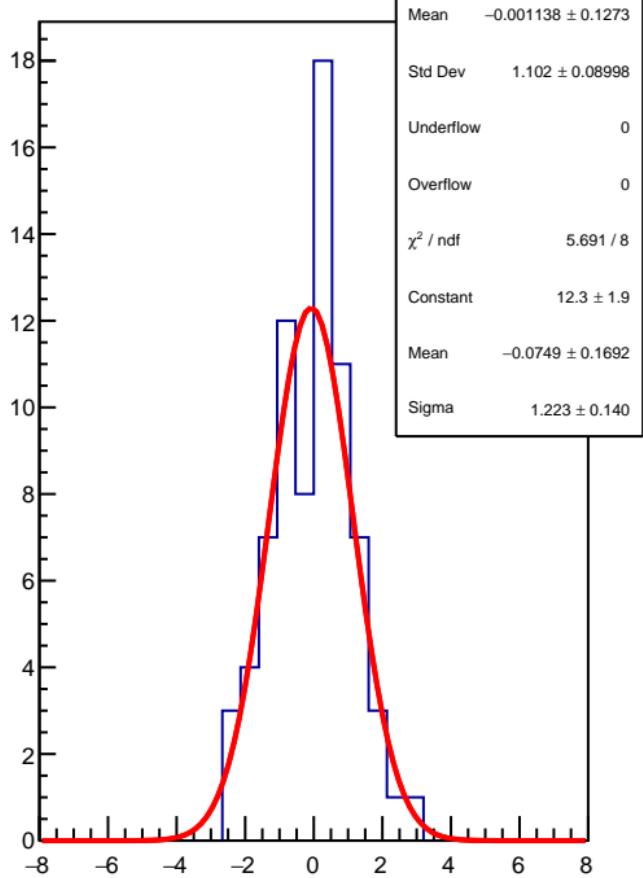


corr_us_dd_bpm16X (ppb)

χ^2 / ndf 91.09 / 74
p0 265.9 ± 145.5

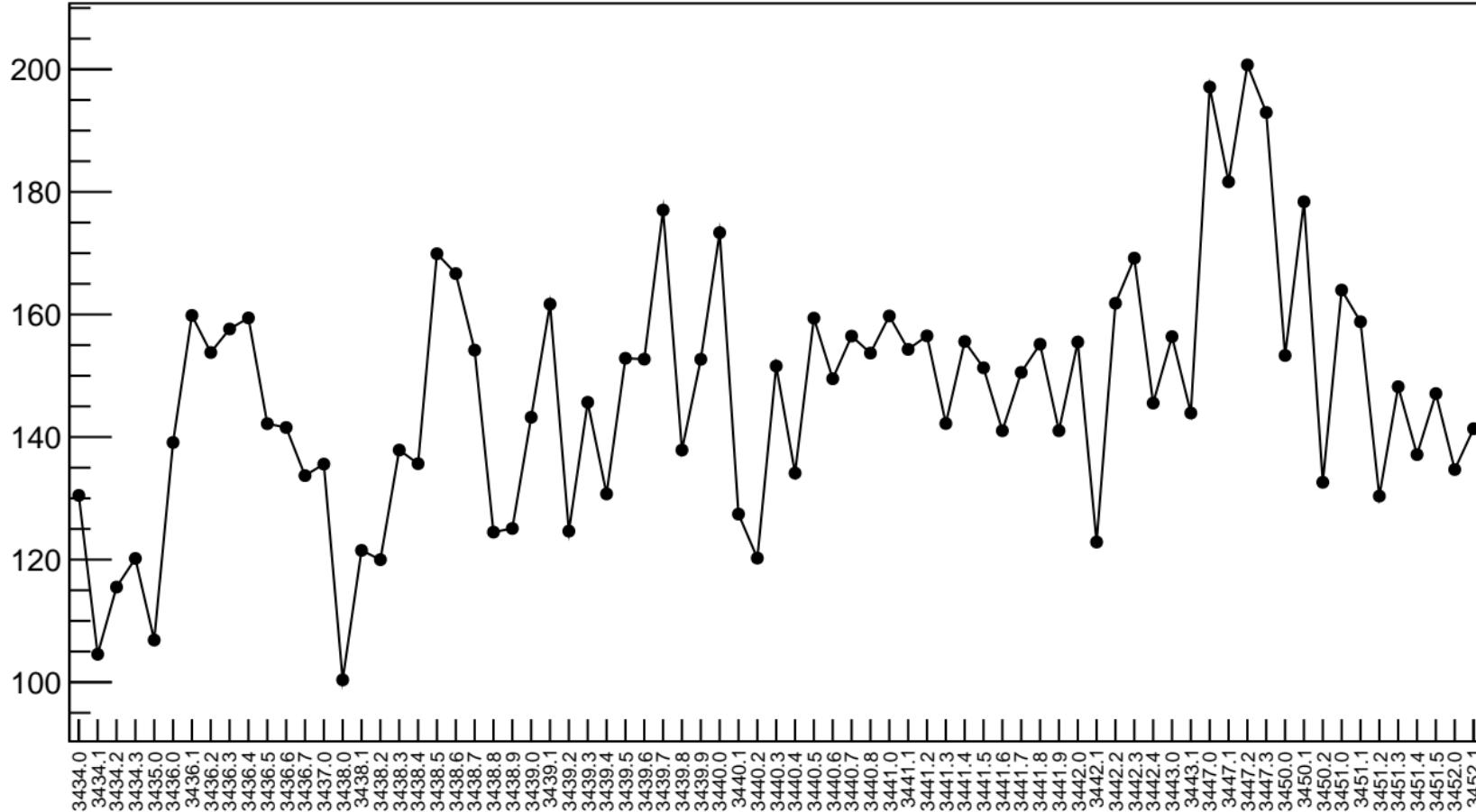


1D pull distribution



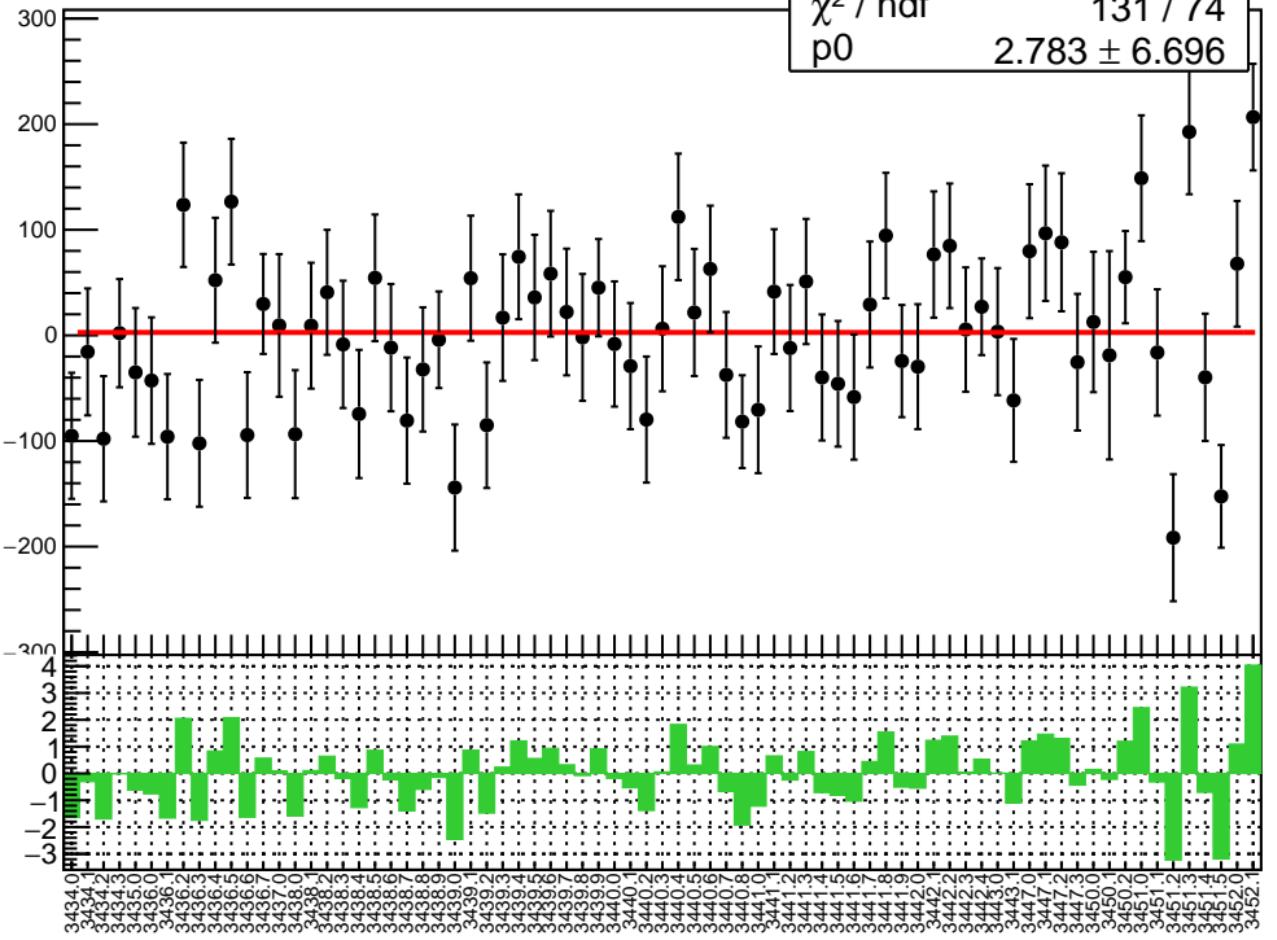
corr_us_dd_bpm16X RMS (ppm)

RMS (ppm)

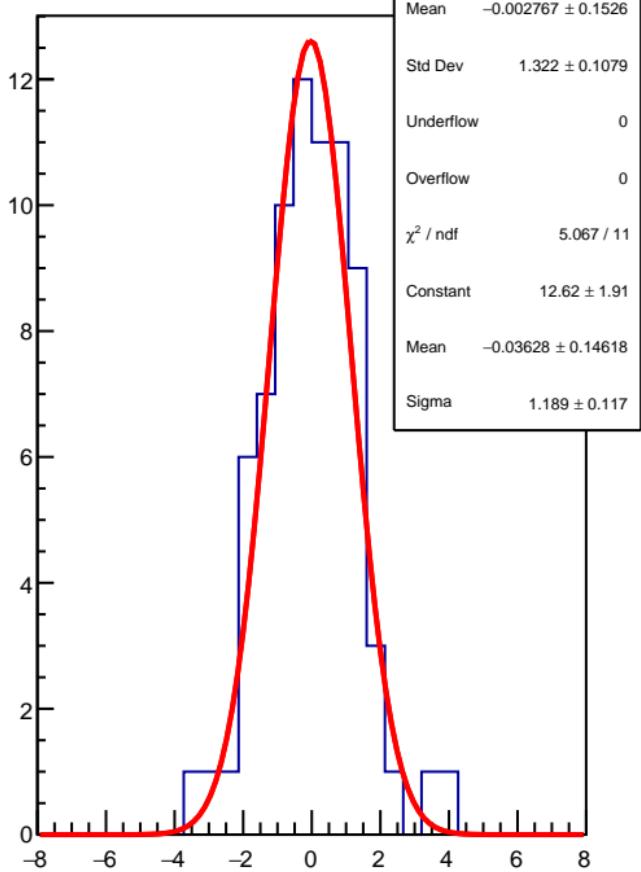


corr_us_dd_bpm16Y (ppb)

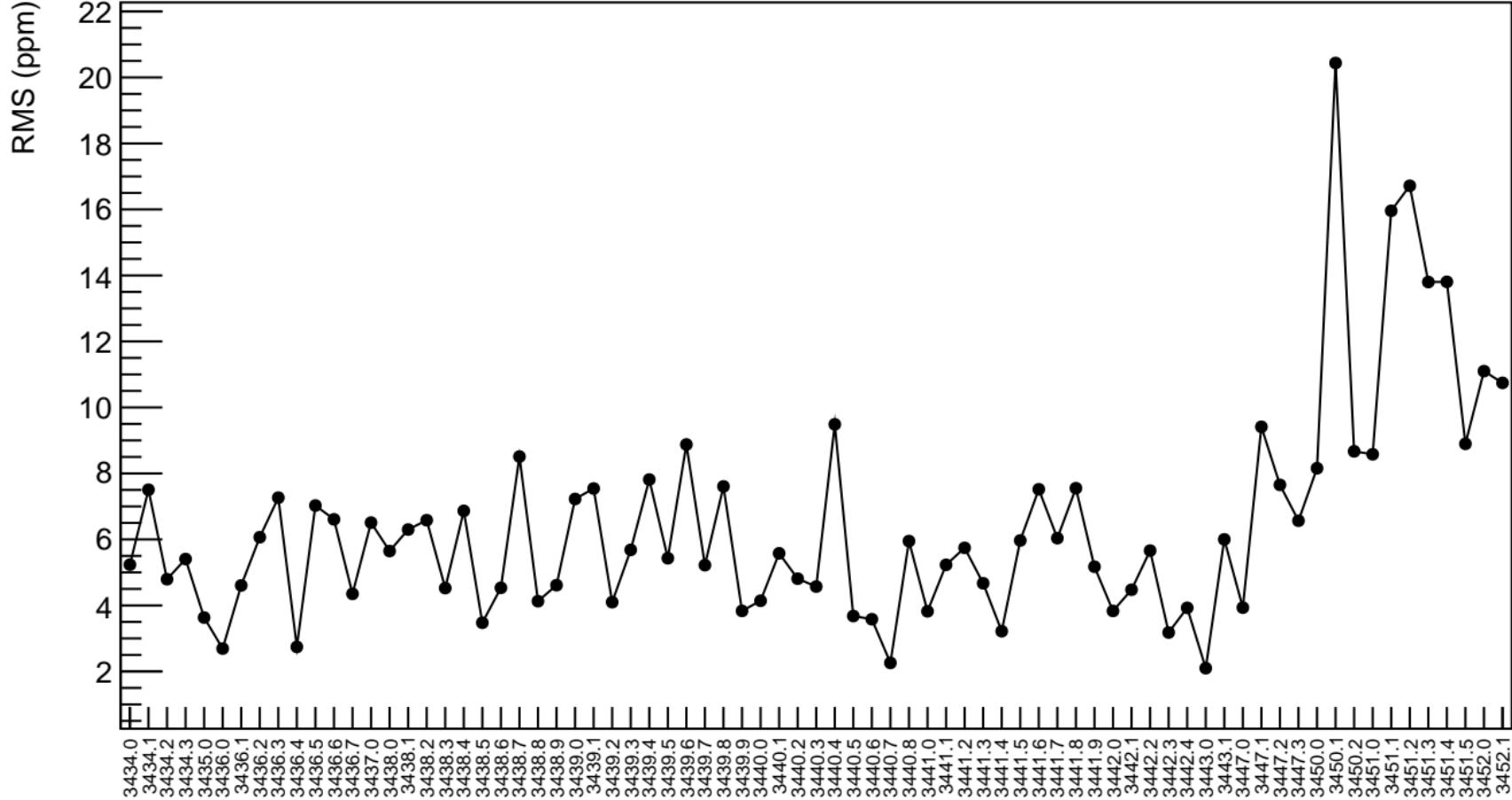
χ^2 / ndf 131 / 74
p0 2.783 ± 6.696



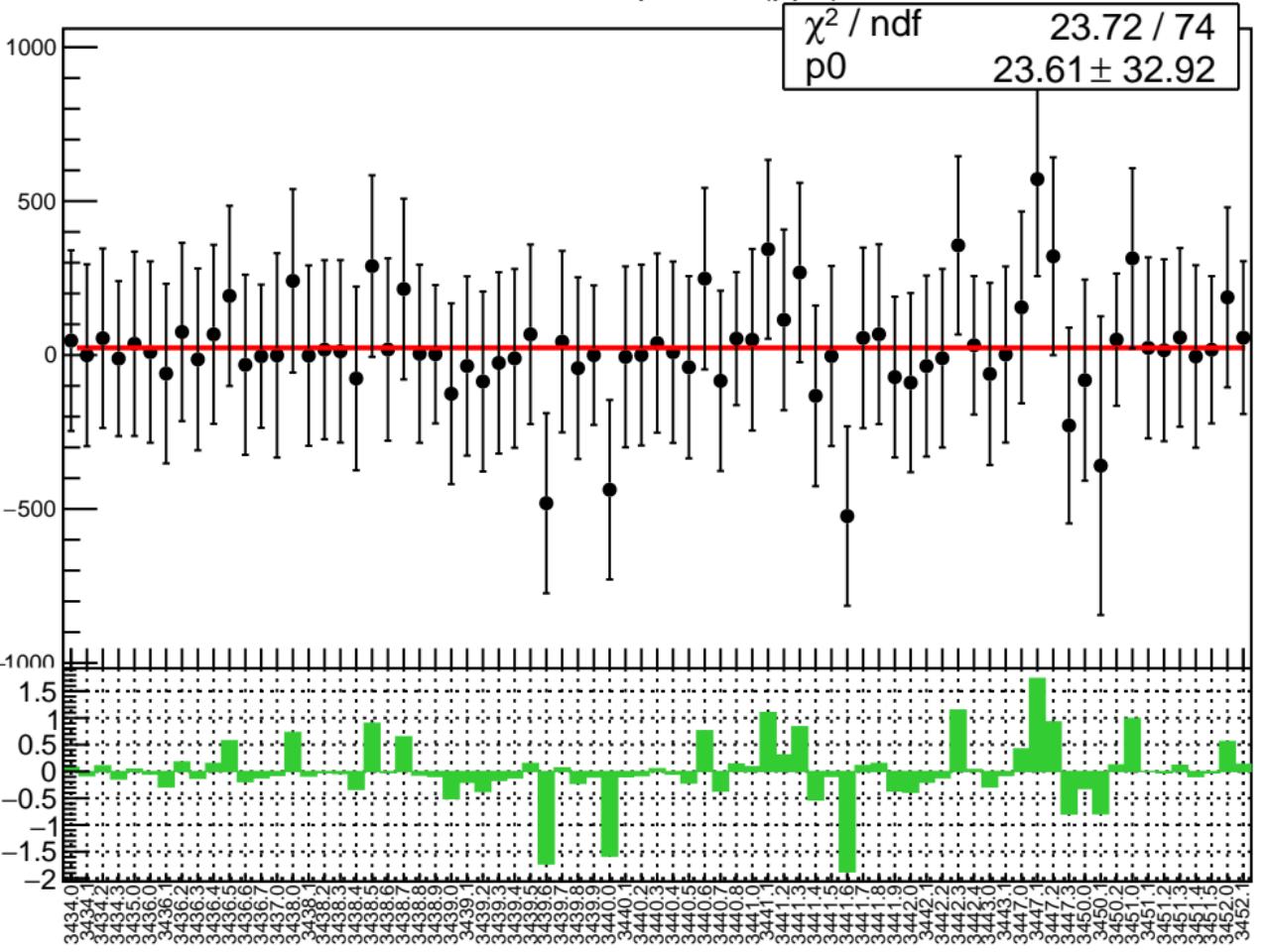
1D pull distribution



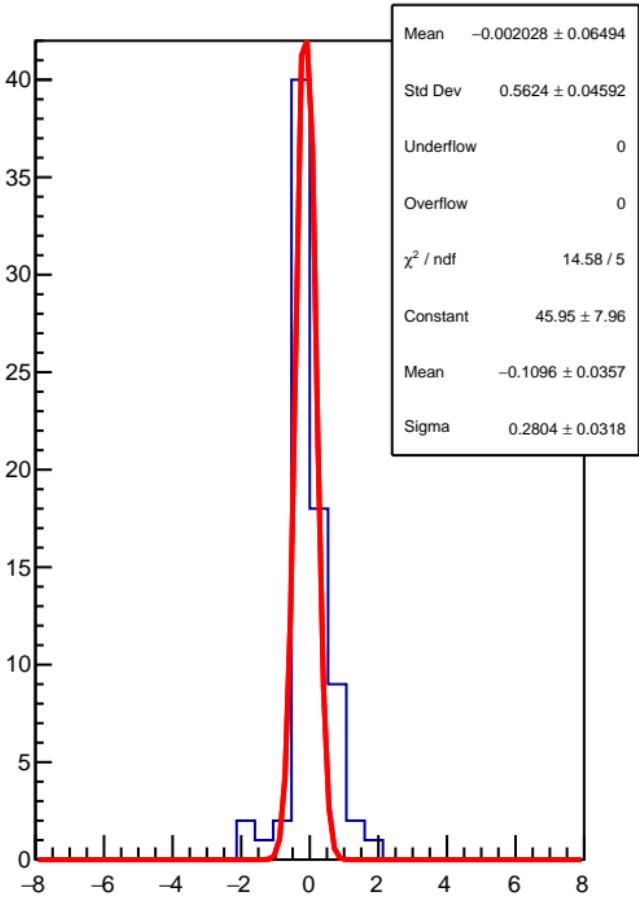
corr_us_dd_bpm16Y RMS (ppm)



corr_us_dd_bpm12X (ppb)

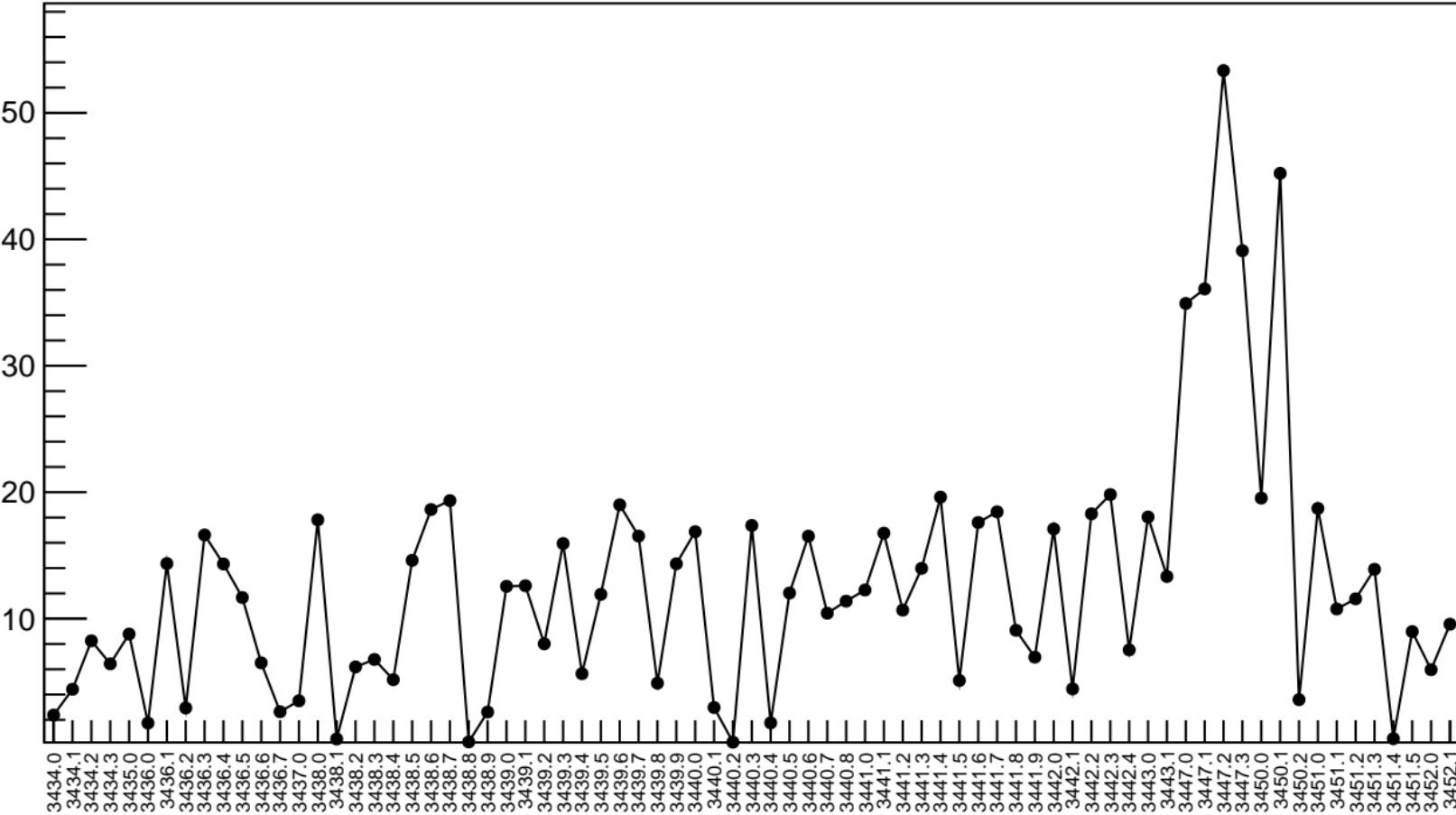


1D pull distribution



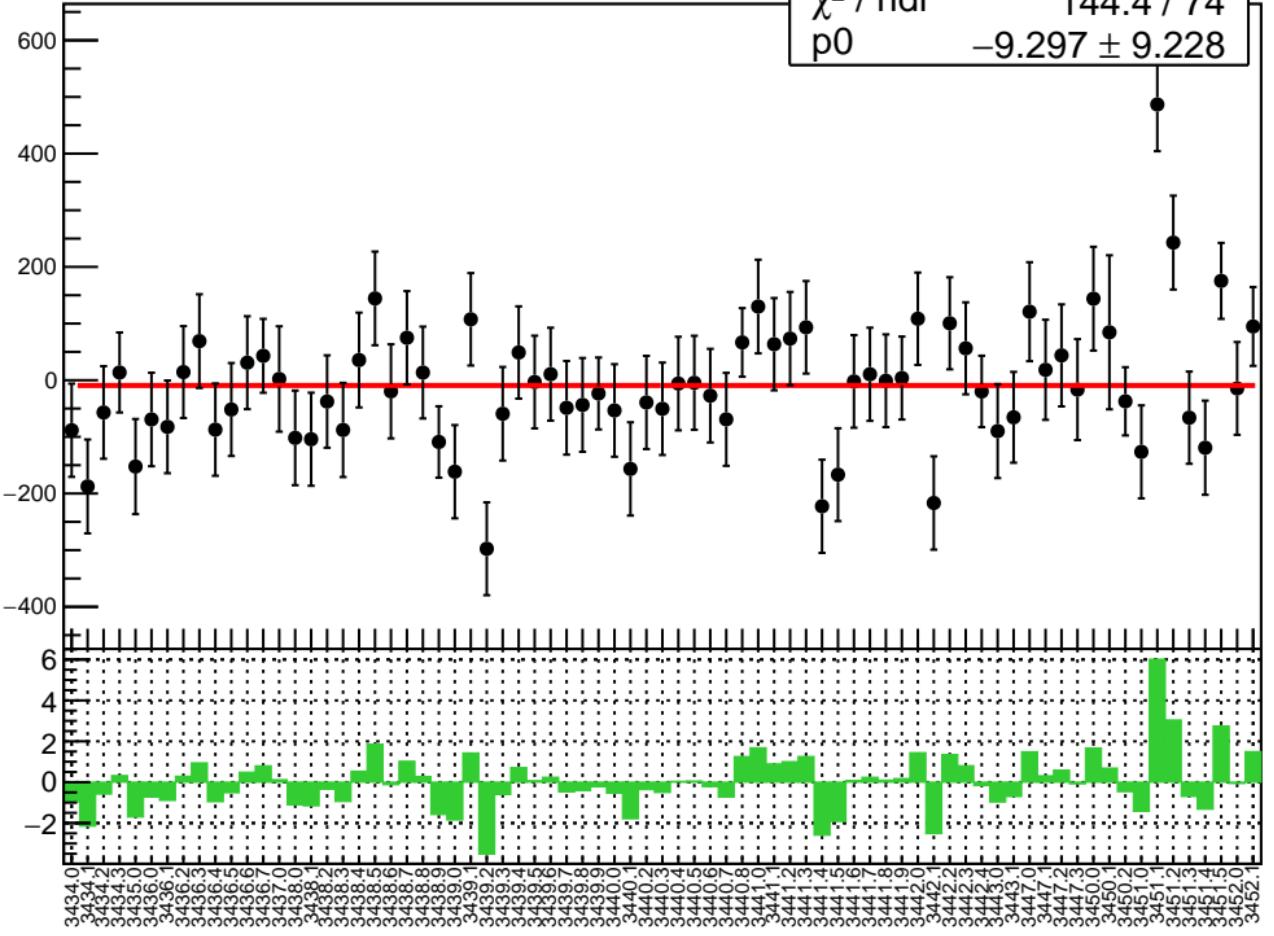
corr_us_dd_bpm12X RMS (ppm)

RMS (ppm)

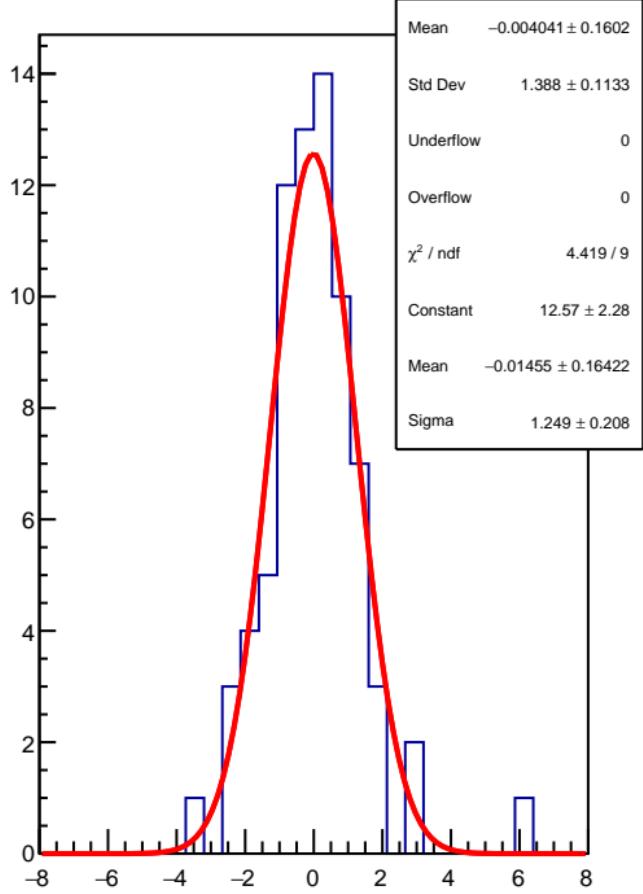


corr_us_dd_bpm12Y (ppb)

χ^2 / ndf 144.4 / 74
 p_0 -9.297 ± 9.228



1D pull distribution

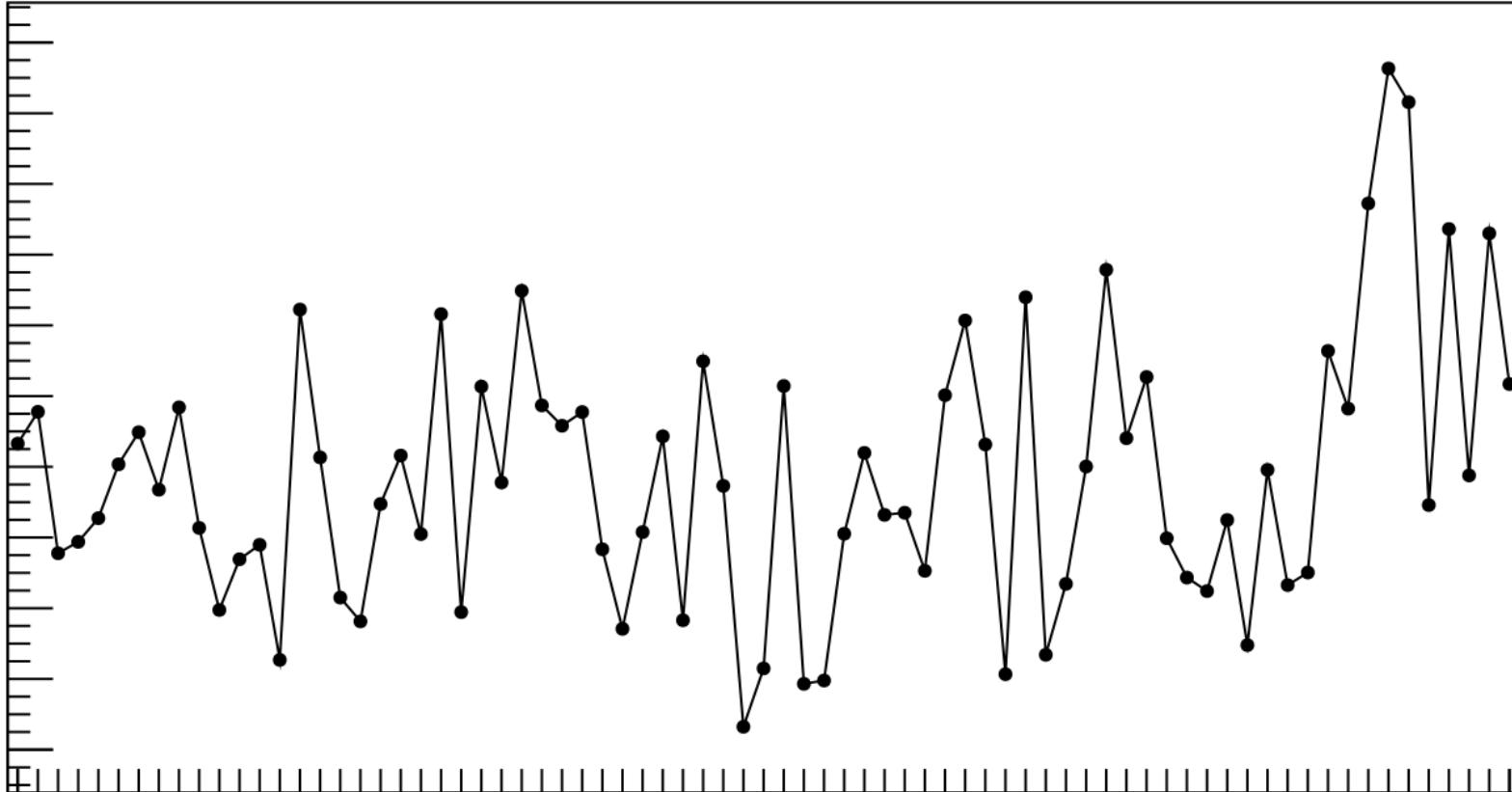


corr_us_dd_bpm12Y RMS (ppm)

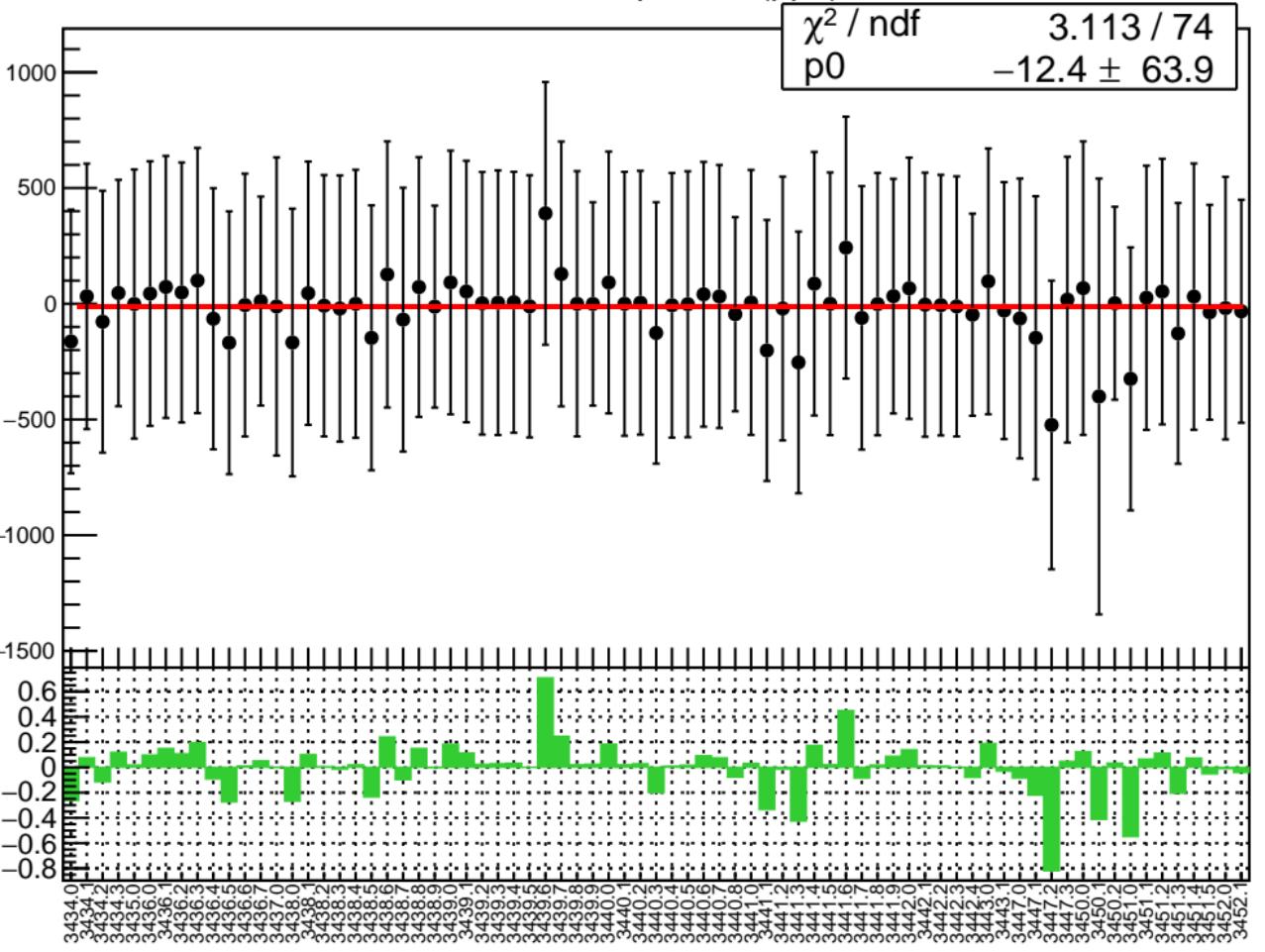
RMS (ppm)

22
18
16
14
12
10
8
6
4
2

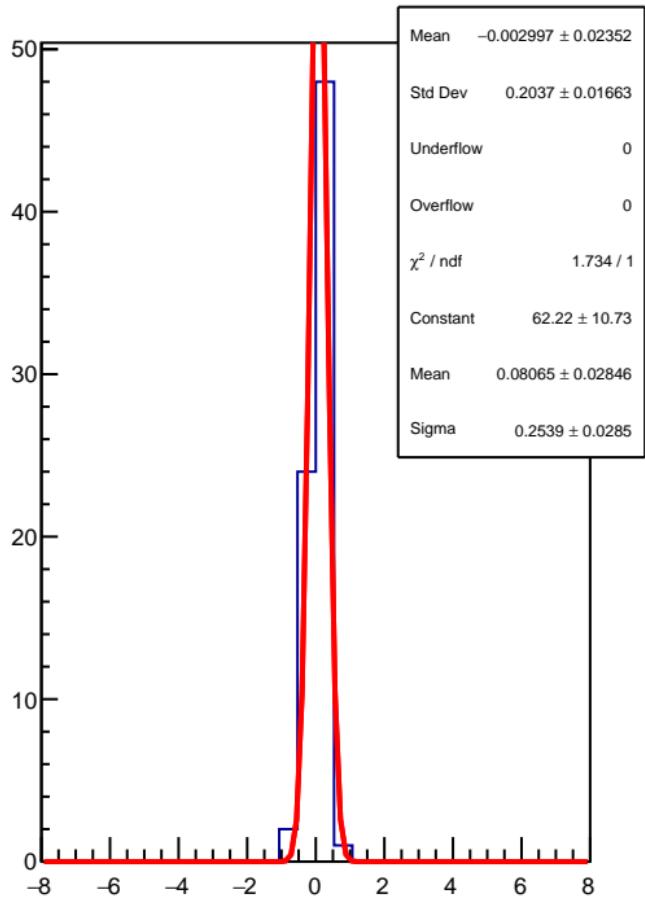
3434.0
3434.1
3434.2
3434.3
3435.0
3436.1
3436.2
3436.3
3436.4
3436.5
3436.6
3436.7
3437.0
3438.0
3438.1
3438.2
3438.3
3438.4
3438.5
3438.6
3438.7
3438.8
3438.9
3439.0
3439.1
3439.2
3439.3
3439.4
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3439.6
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3444.6
3444.7
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3444.10
3445.0
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3445.2
3445.3
3445.4
3445.5
3445.6
3445.7
3445.8
3445.9
3445.10
3445.11
3445.12
3445.13
3445.14
3445.15
3445.16
3445.17
3445.18
3445.19
3445.20
3445.21



corr_us_dd_bpm11X (ppb)

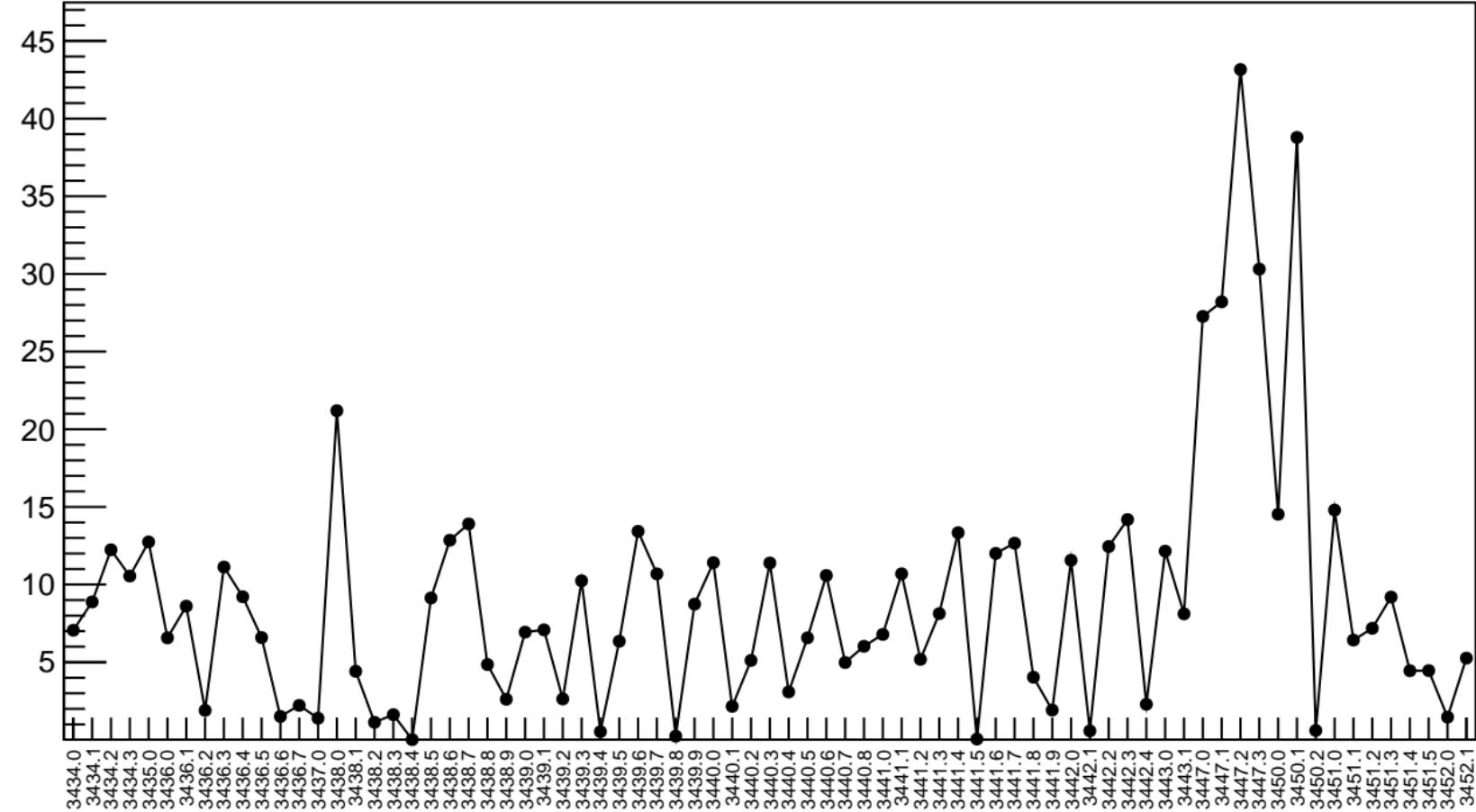


1D pull distribution



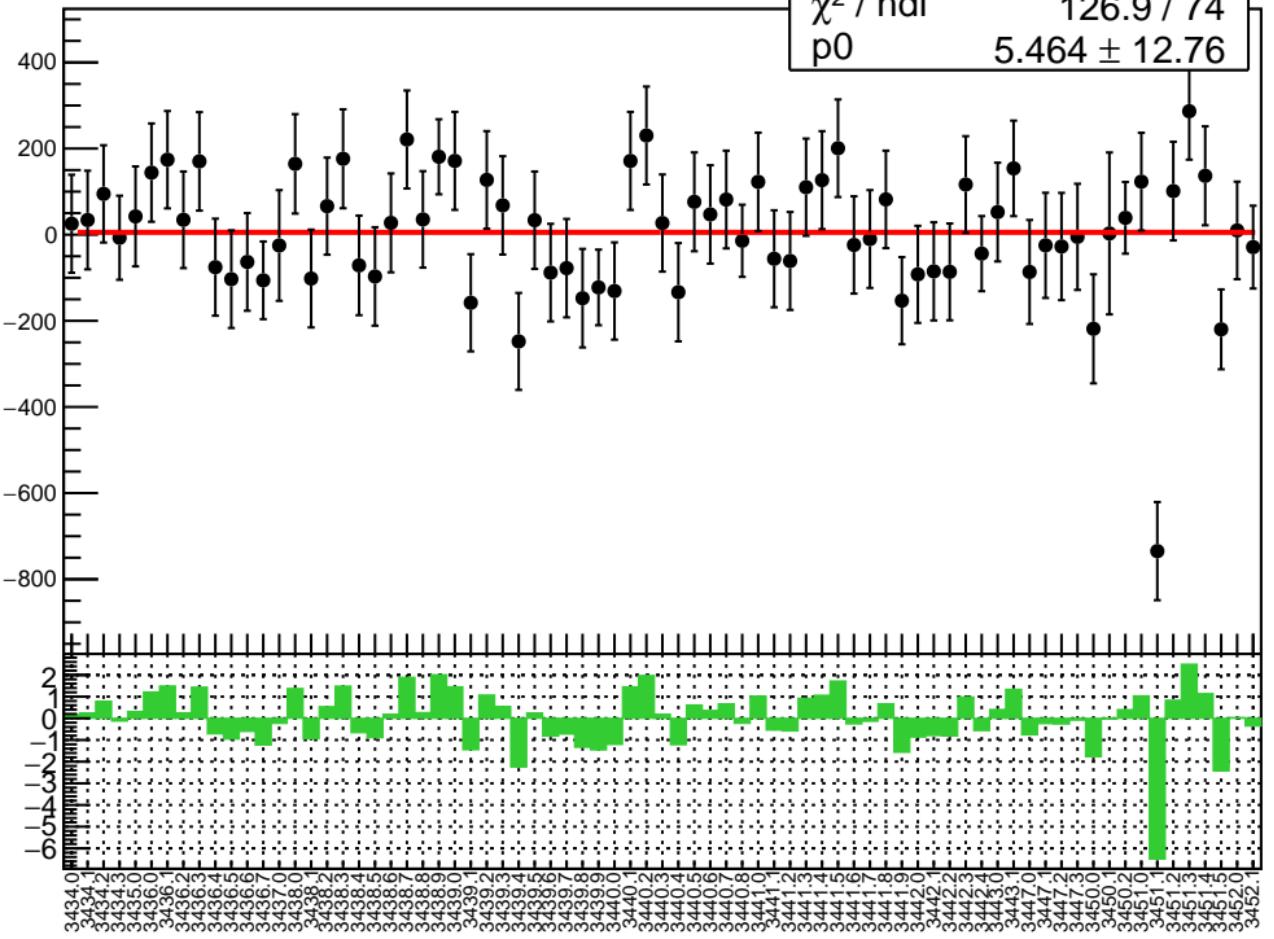
corr_us_dd_bpm11X RMS (ppm)

RMS (ppm)

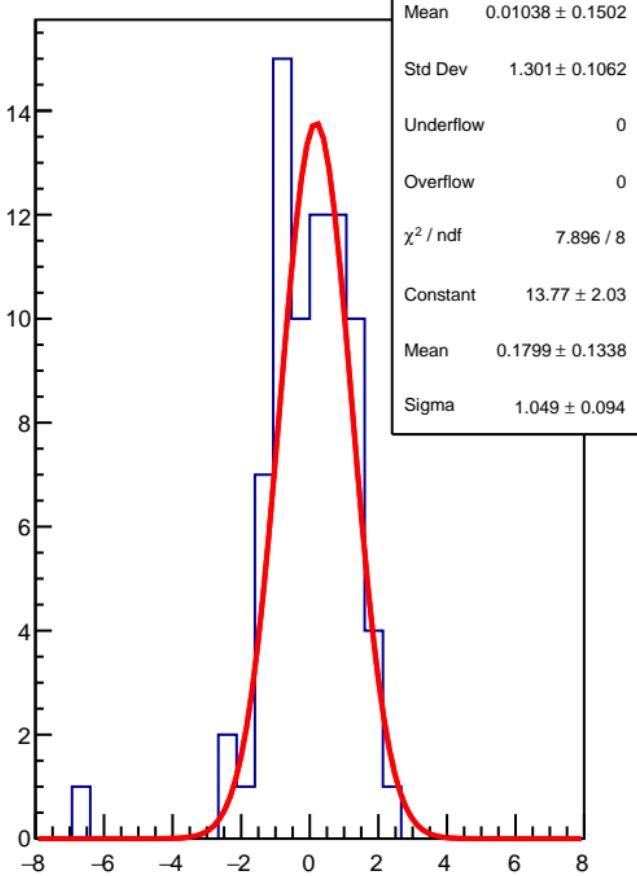


corr_us_dd_bpm11Y (ppb)

χ^2 / ndf 126.9 / 74
 p_0 5.464 ± 12.76

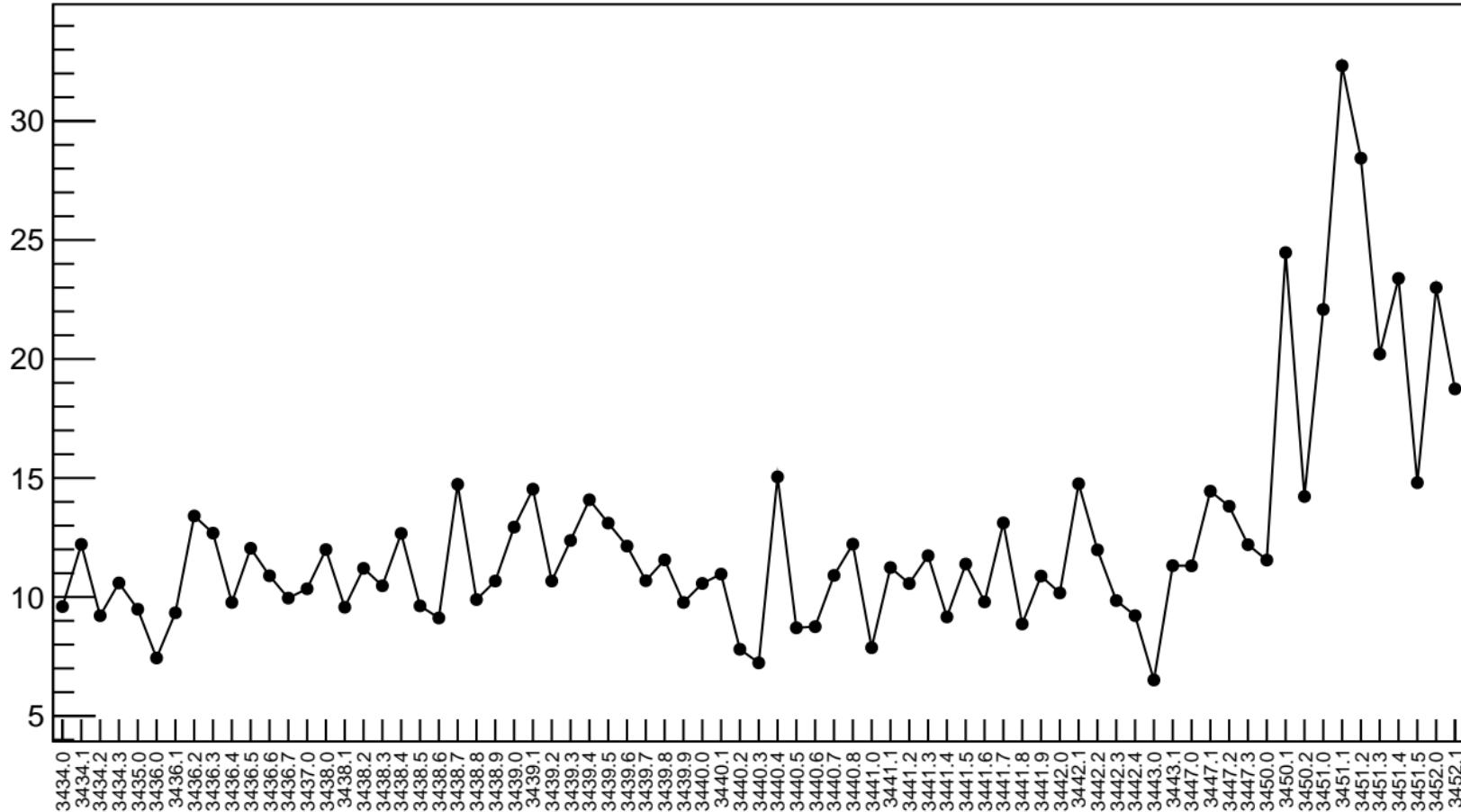


1D pull distribution

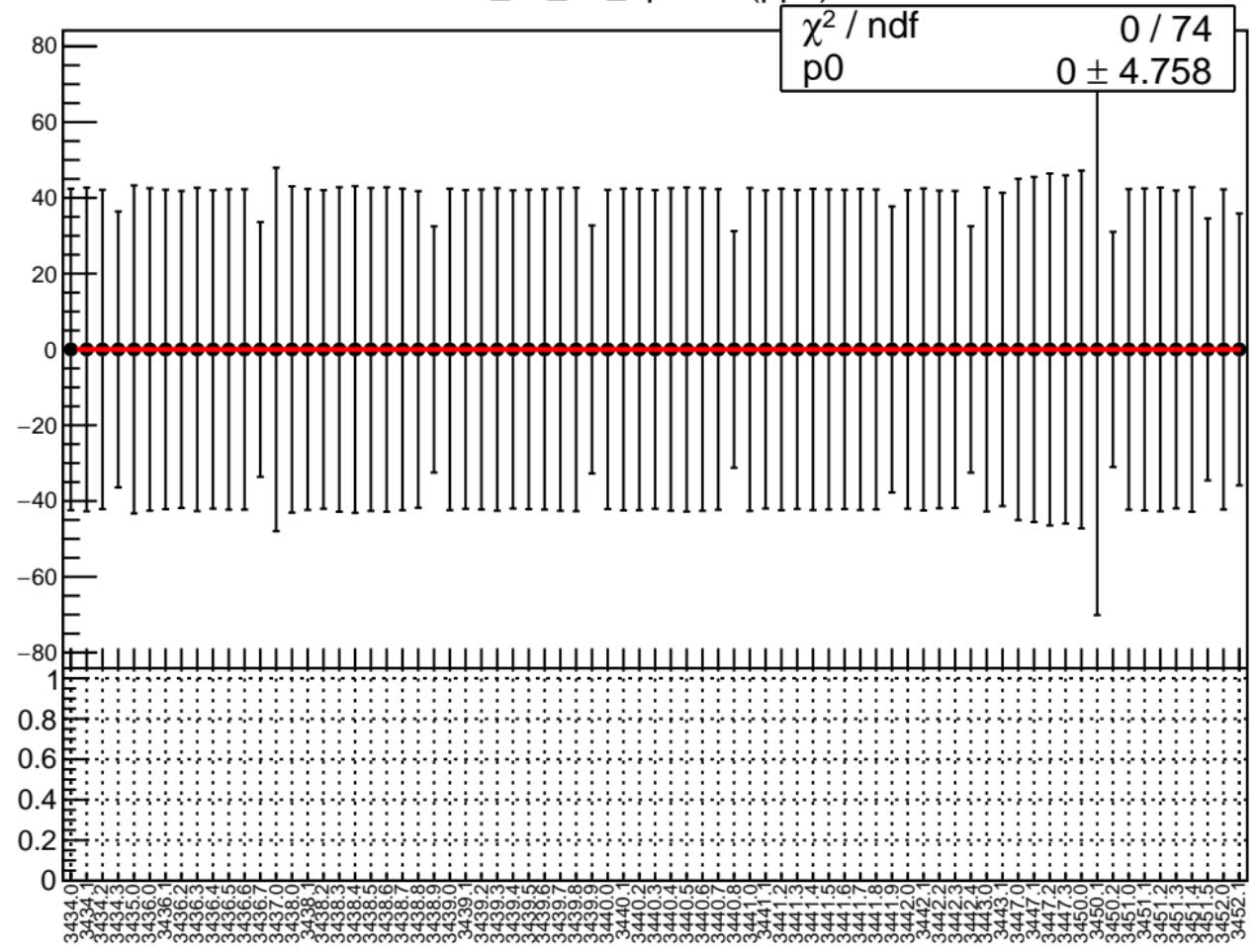


corr_us_dd_bpm11Y RMS (ppm)

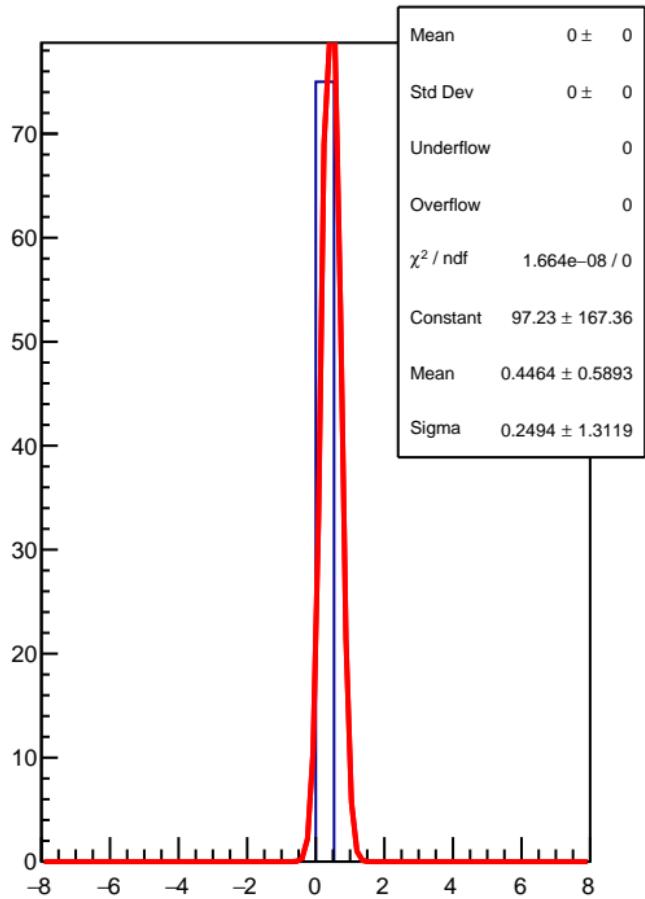
RMS (ppm)



corr_us_dd_bpm8X (ppb)

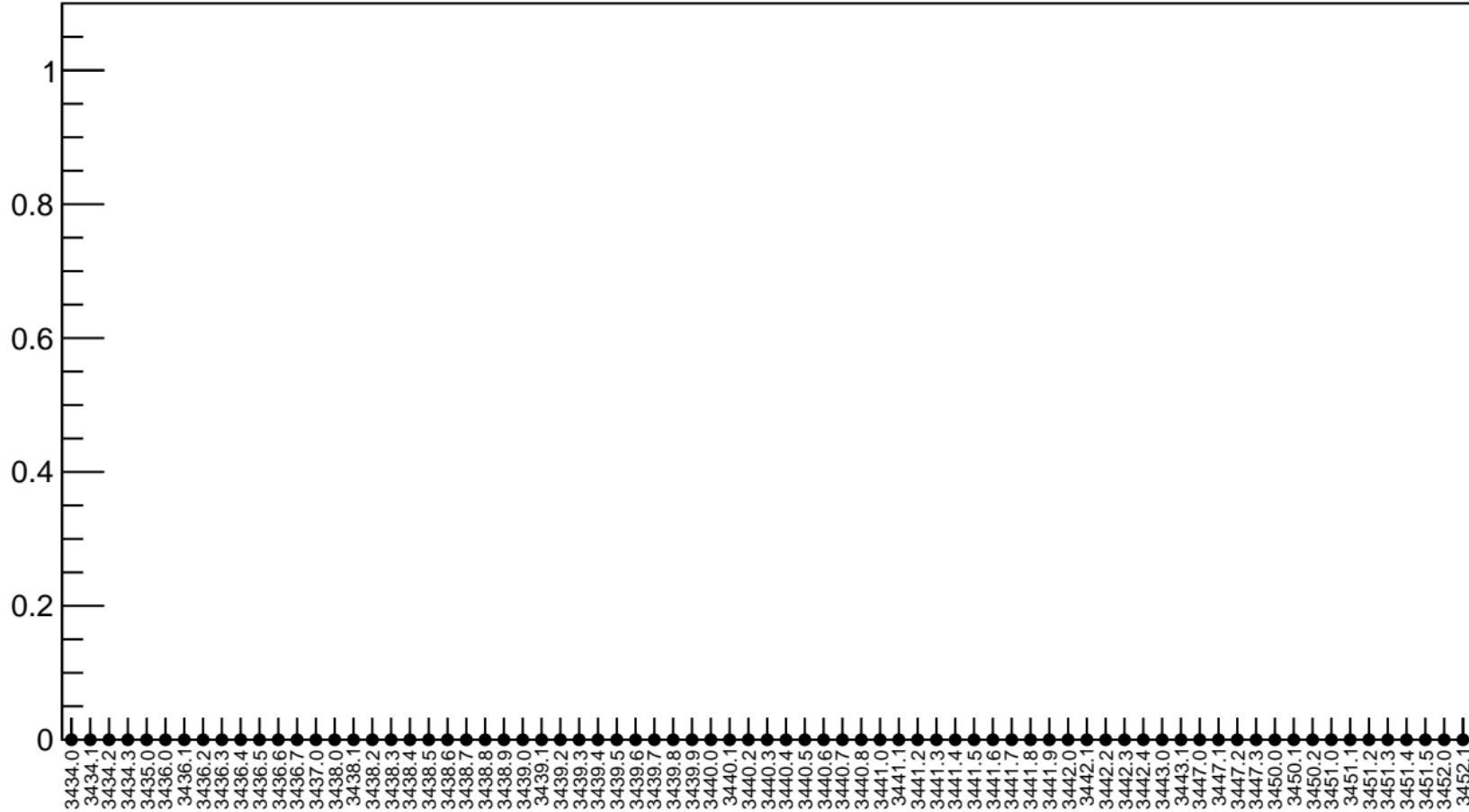


1D pull distribution



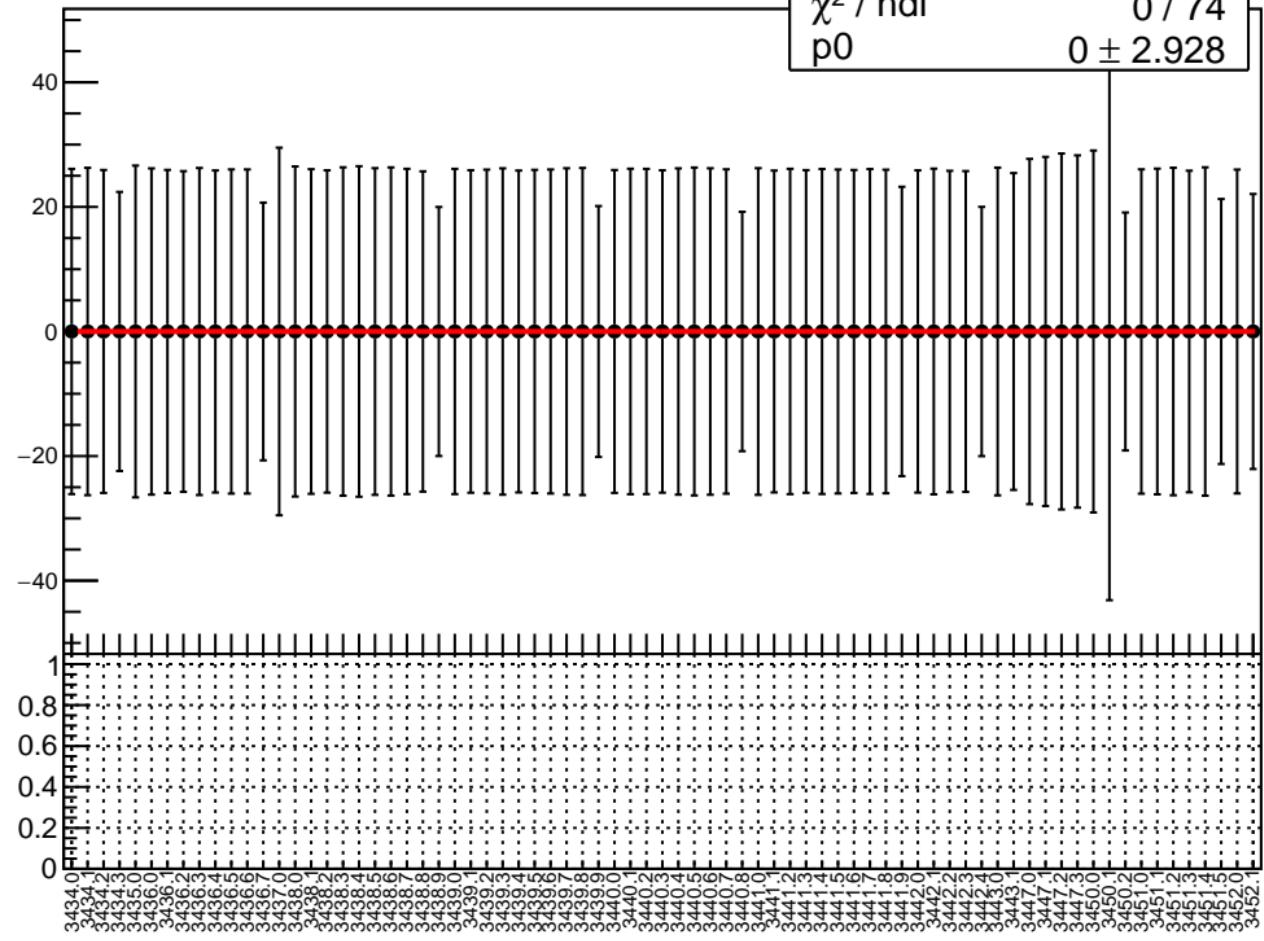
corr_us_dd_bpm8X RMS (ppm)

RMS (ppm)

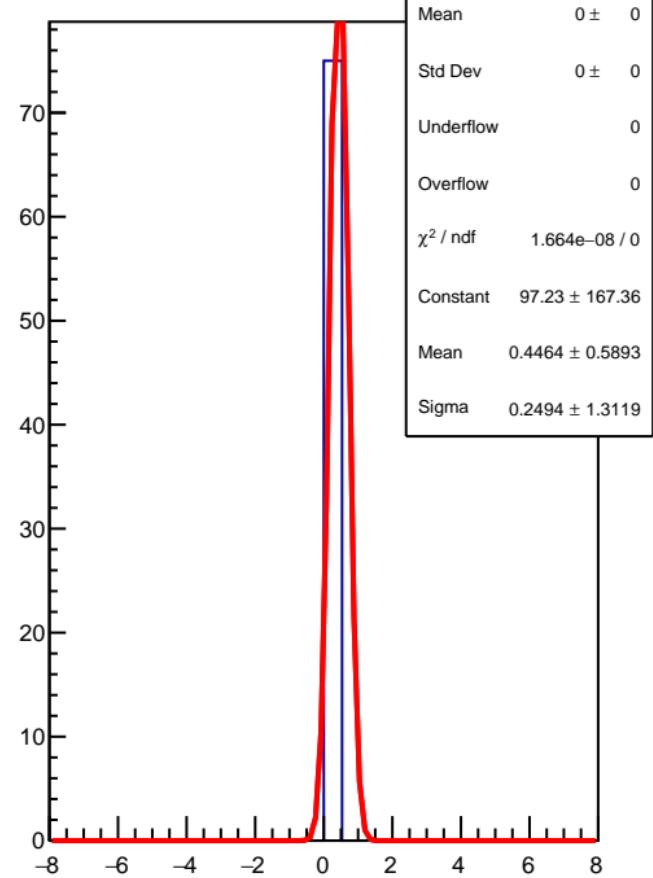


corr_us_dd_bpm8Y (ppb)

χ^2 / ndf 0 / 74
 p_0 0 ± 2.928

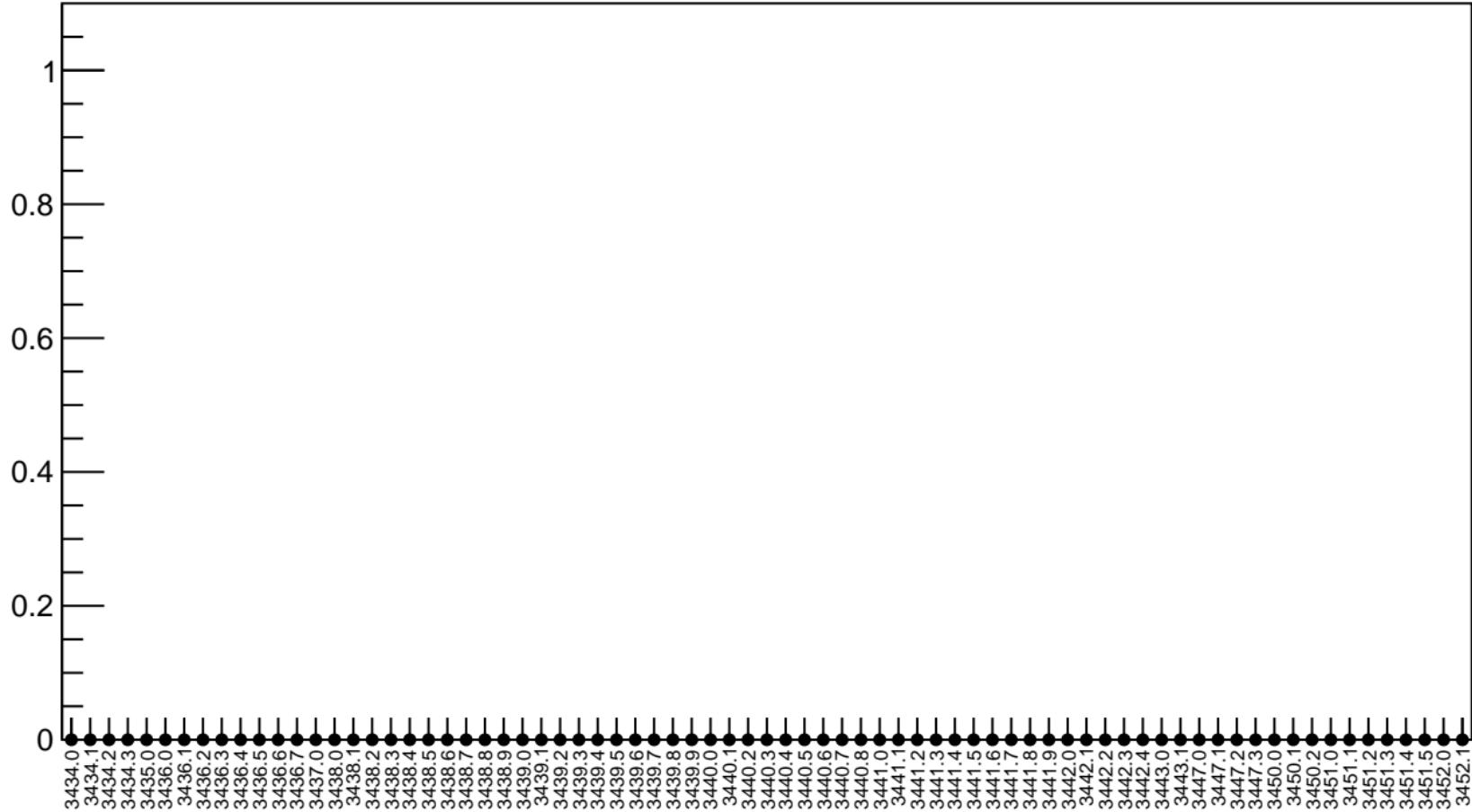


1D pull distribution

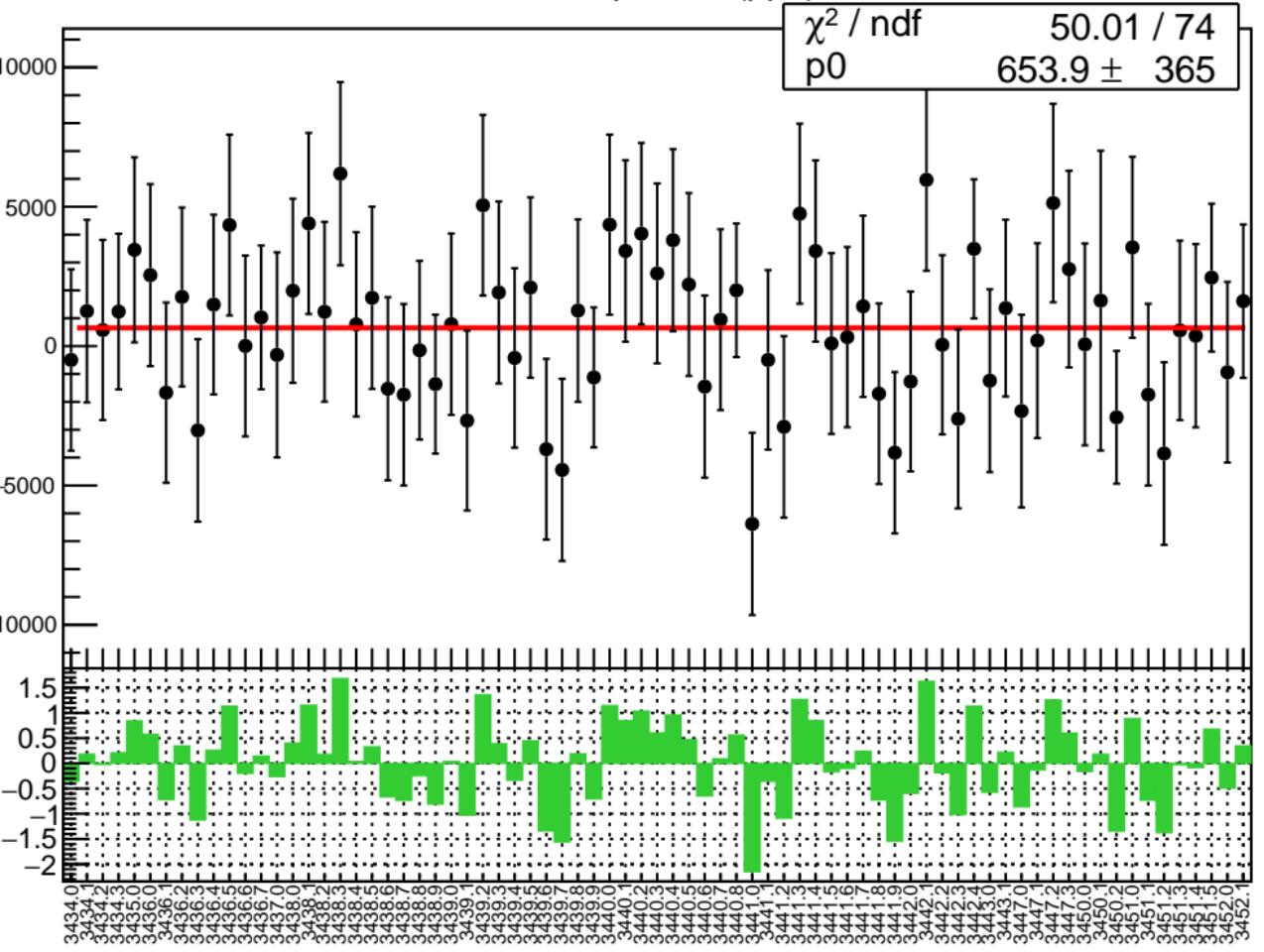


corr_us_dd_bpm8Y RMS (ppm)

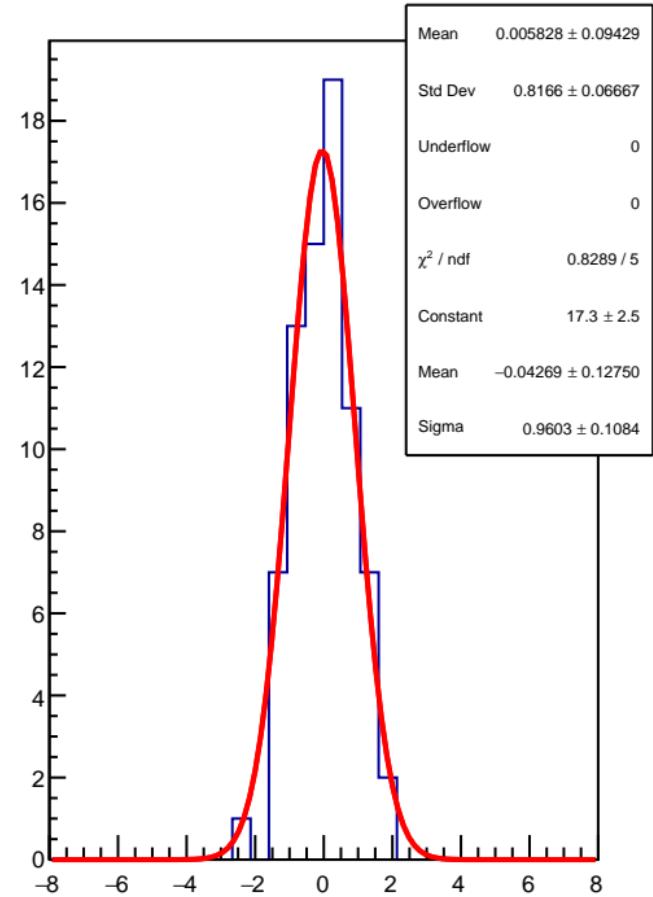
RMS (ppm)



corr_usl_bpm4eX (ppb)

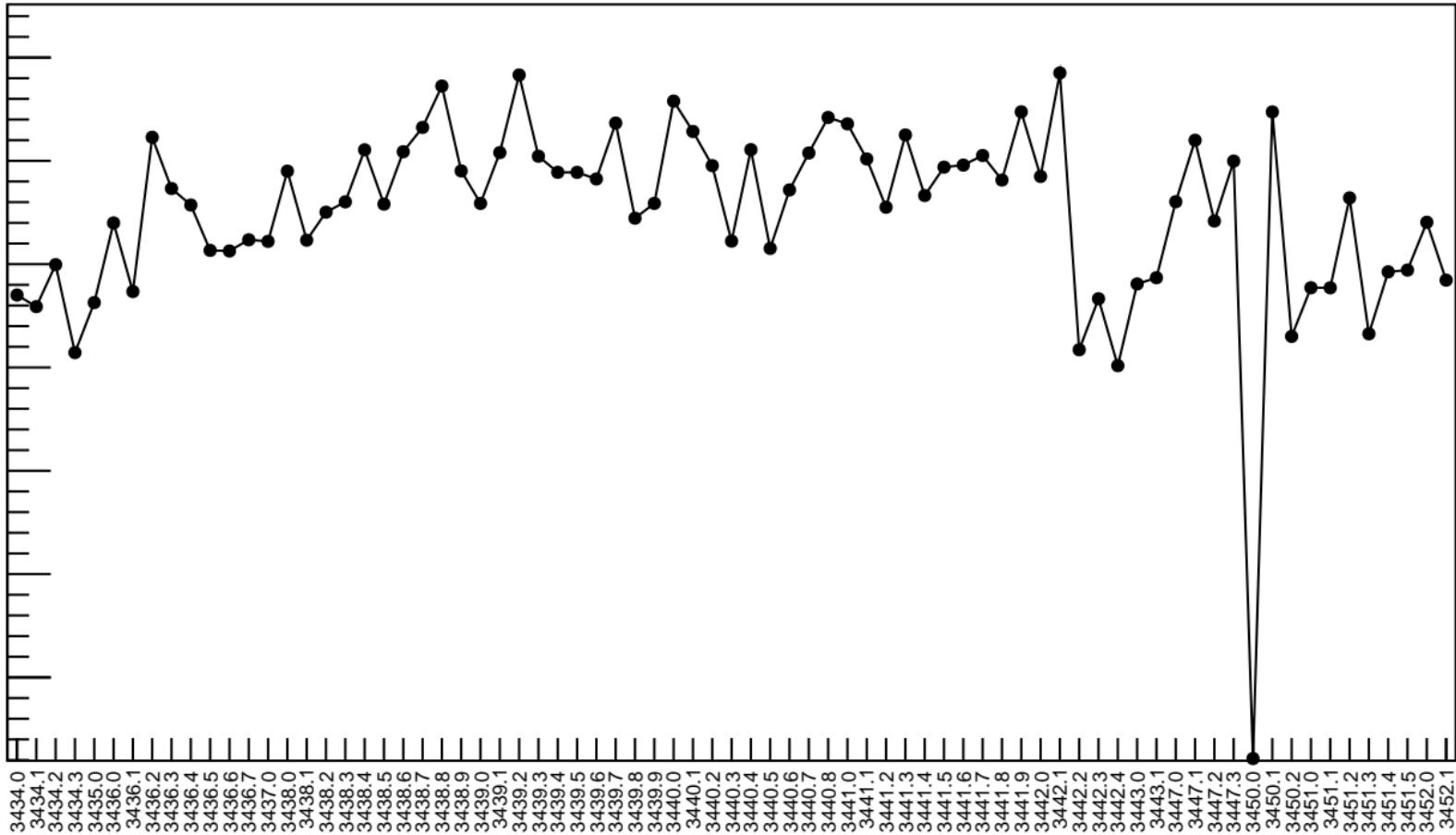


1D pull distribution

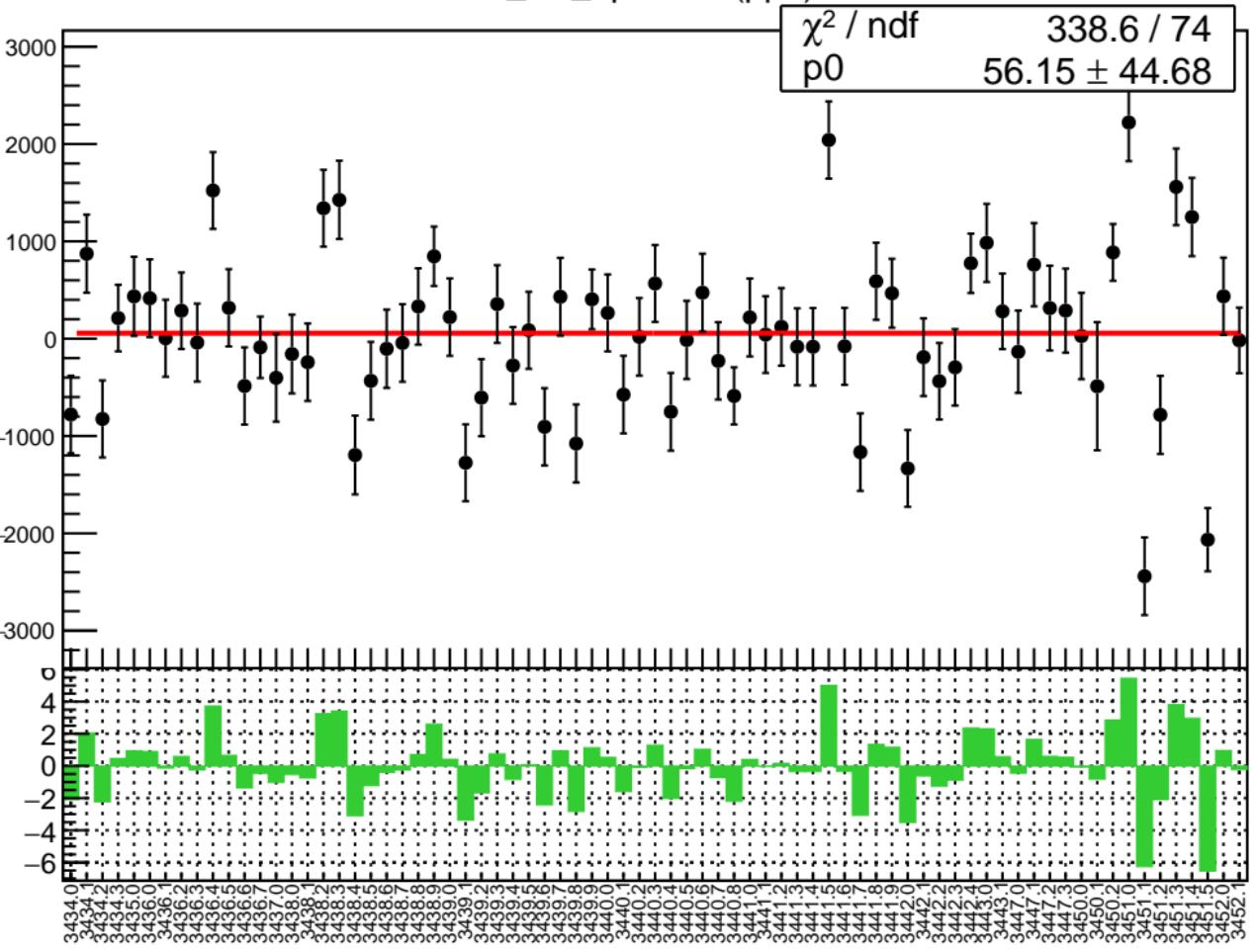


corr_usl_bpm4eX RMS (ppm)

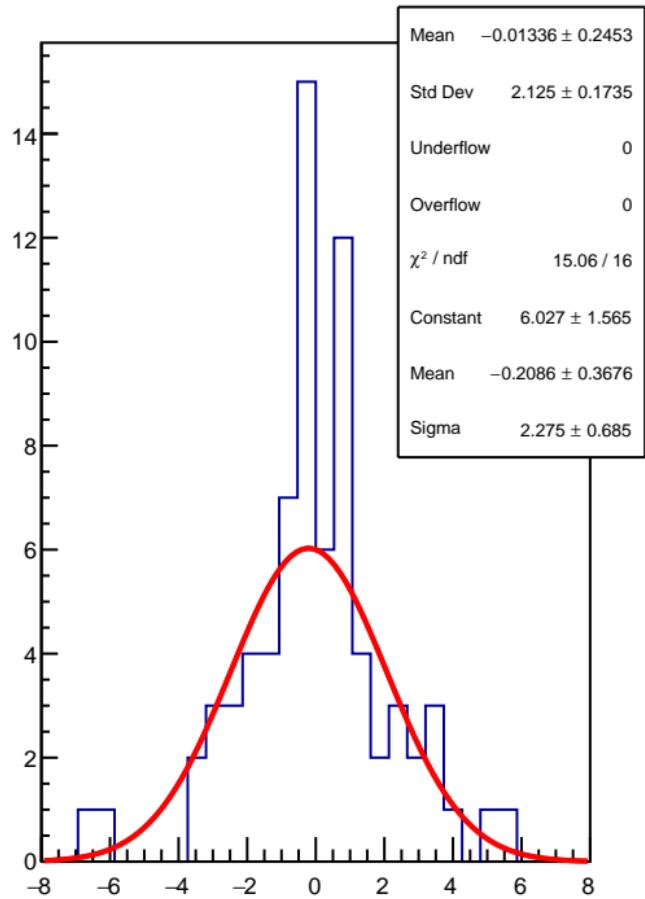
RMS (ppm)



corr_usl_bpm4eY (ppb)

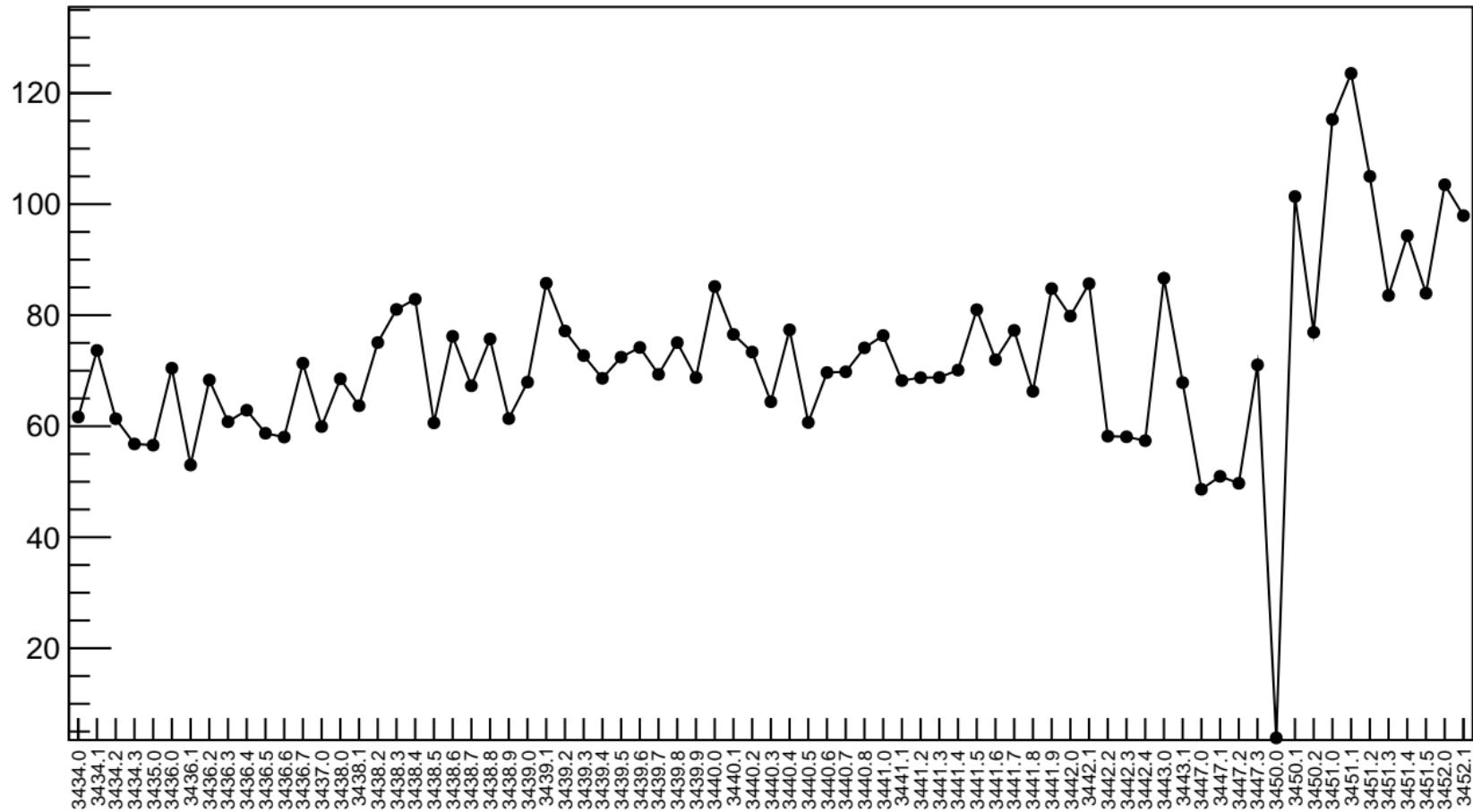


1D pull distribution

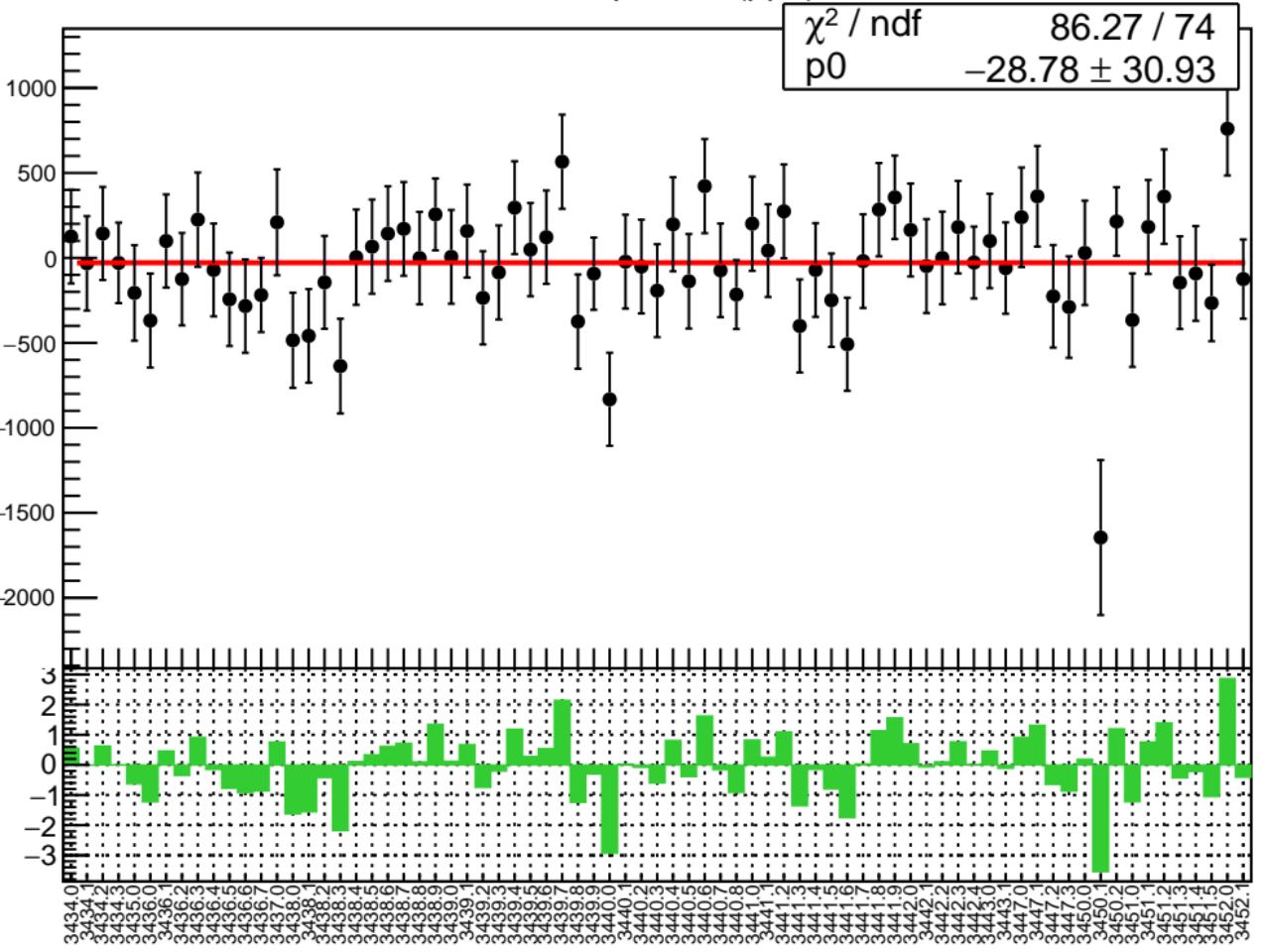


corr_usl_bpm4eY RMS (ppm)

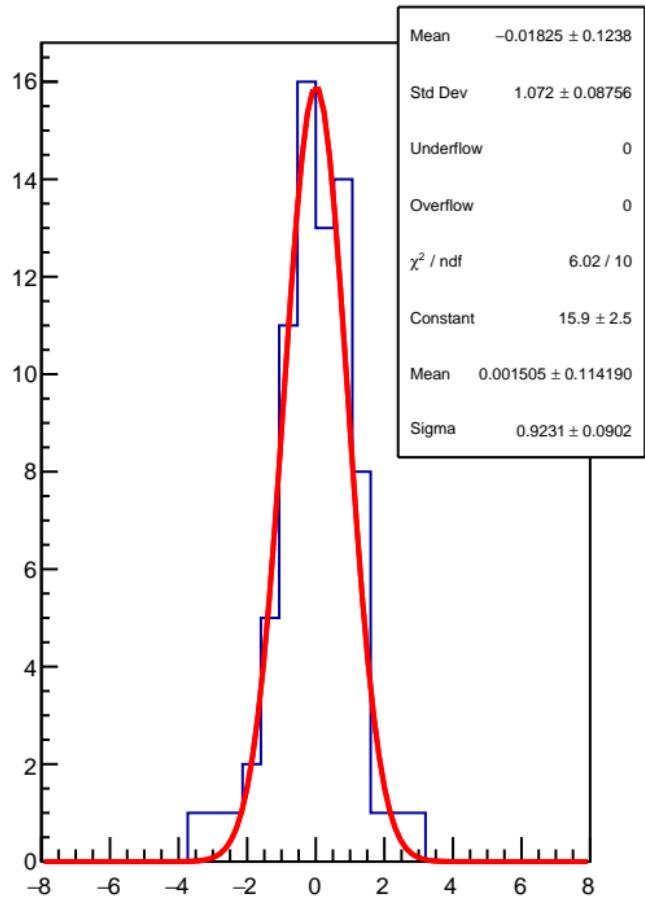
RMS (ppm)



corr_usl_bpm4aX (ppb)

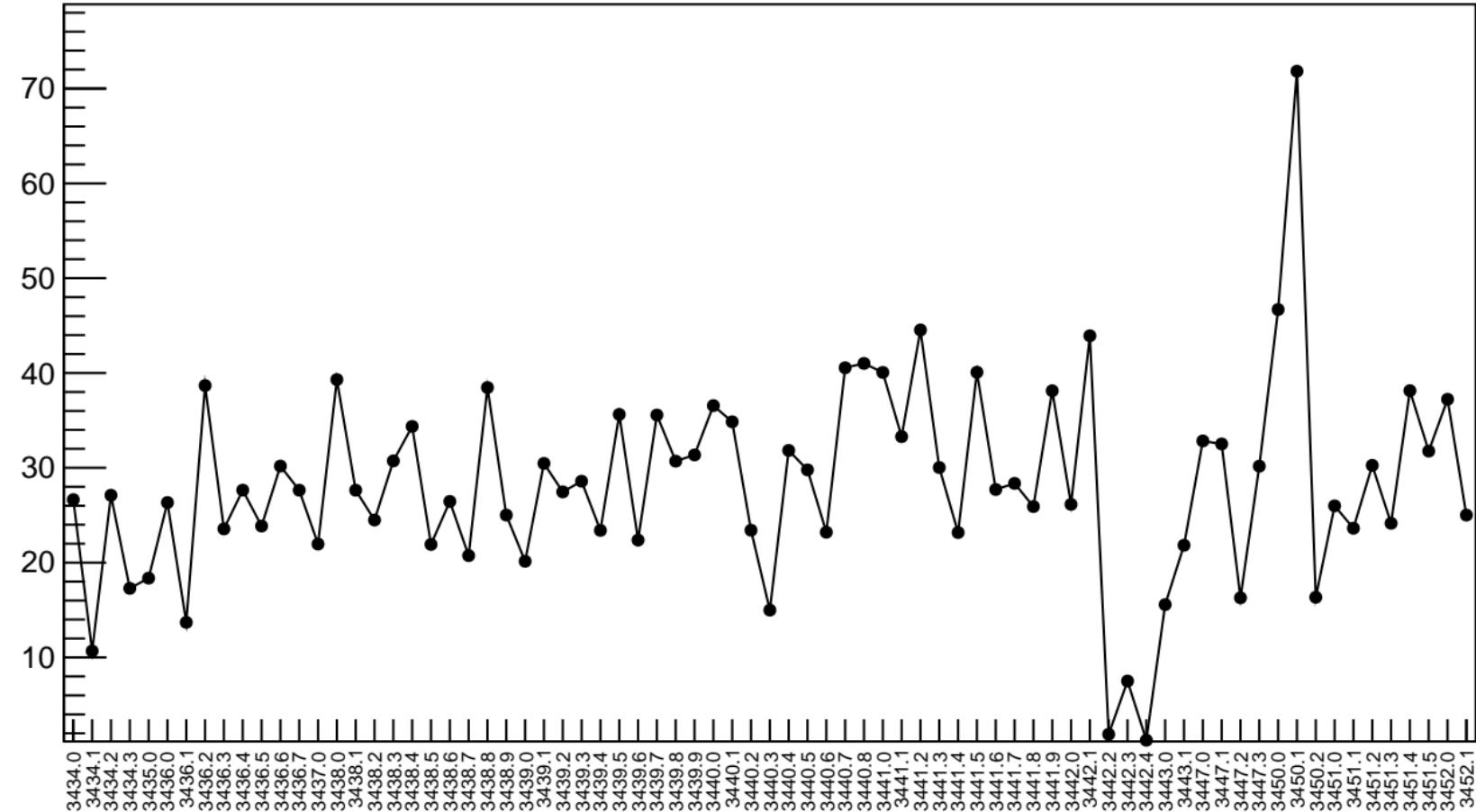


1D pull distribution

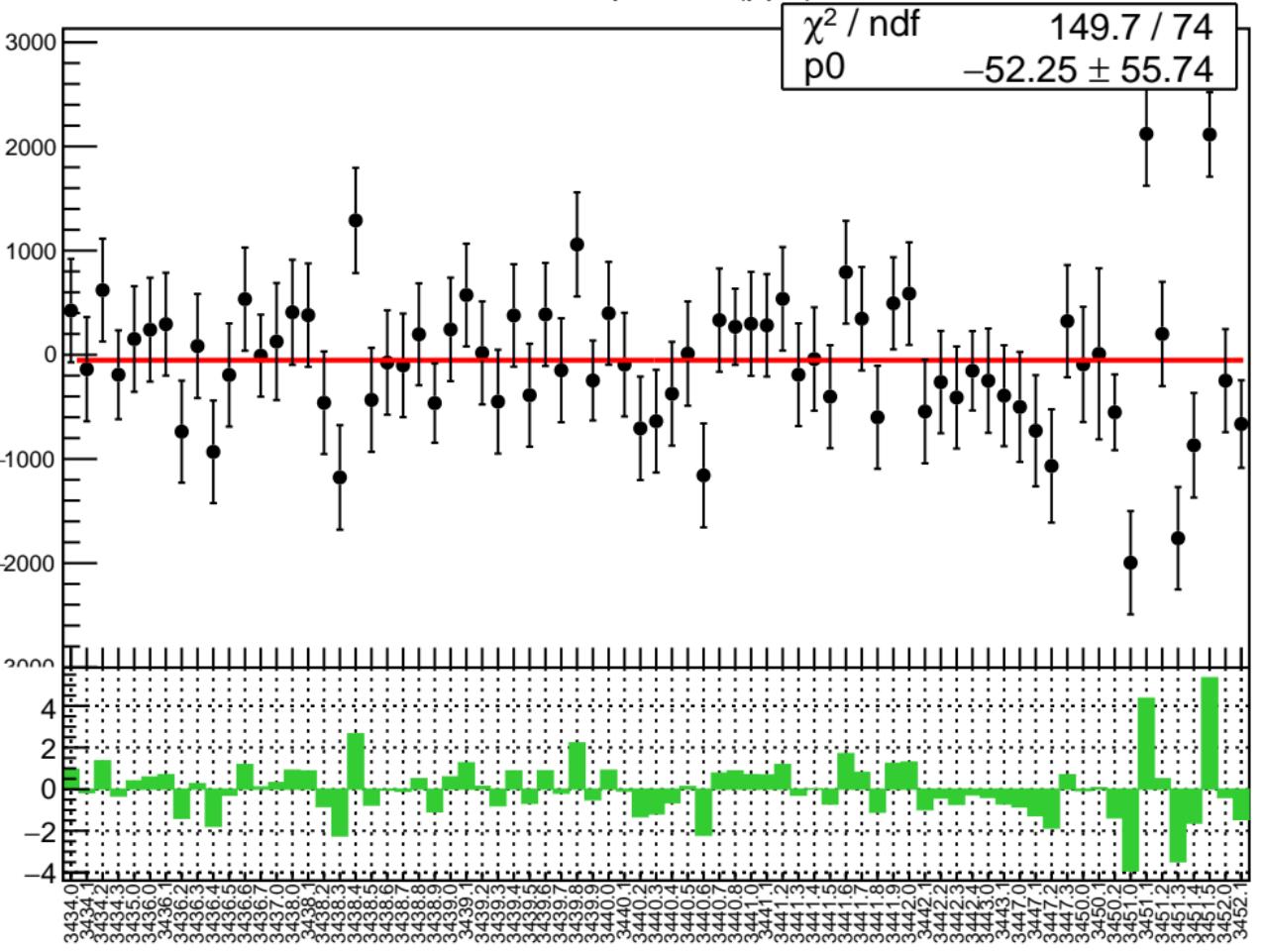


corr_usl_bpm4aX RMS (ppm)

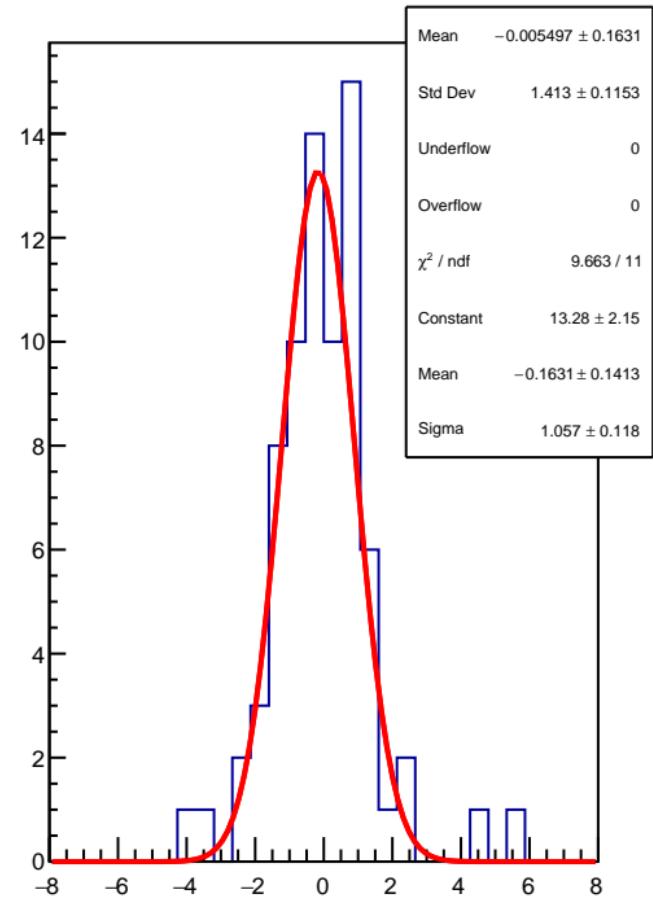
RMS (ppm)



corr_usl_bpm4aY (ppb)

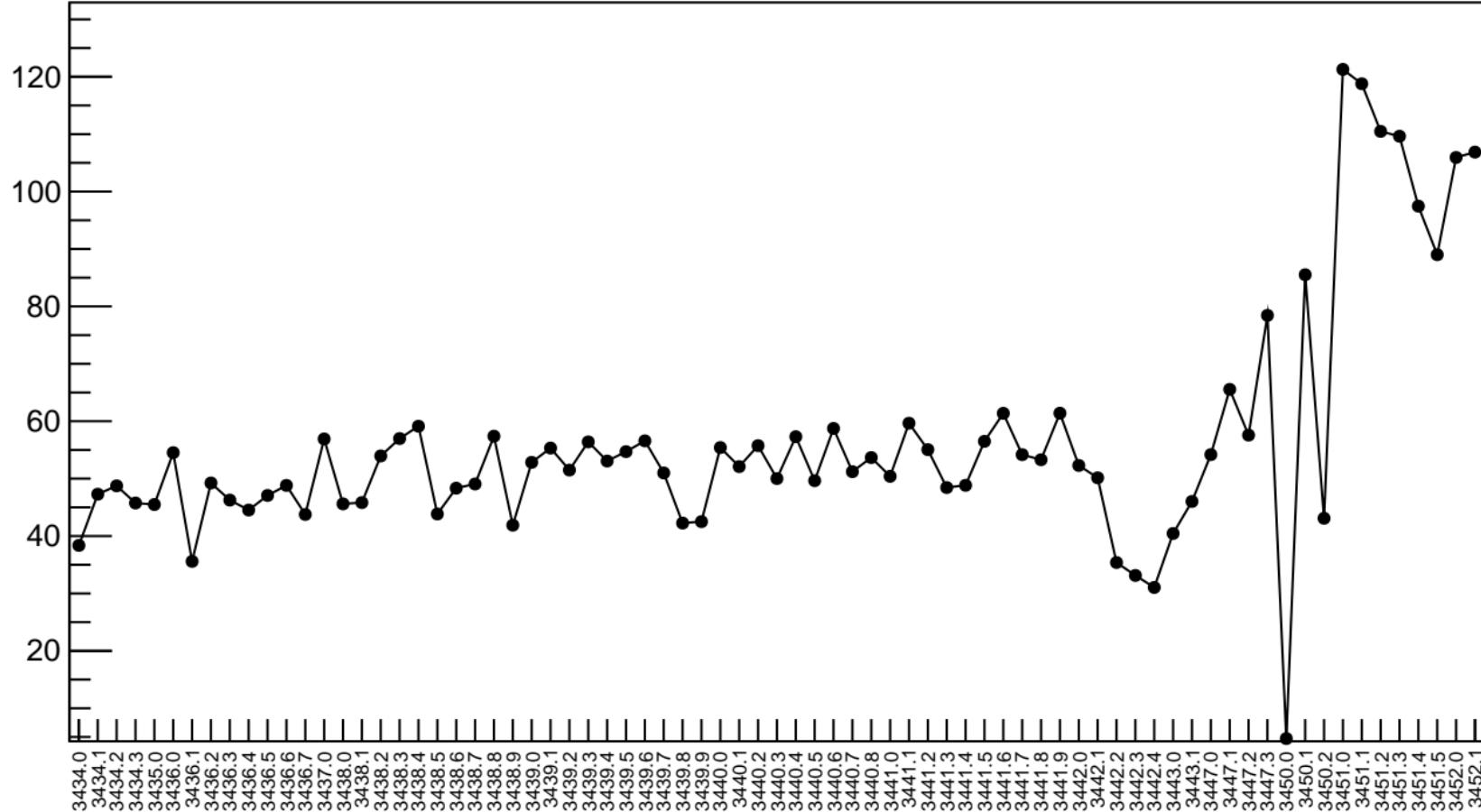


1D pull distribution

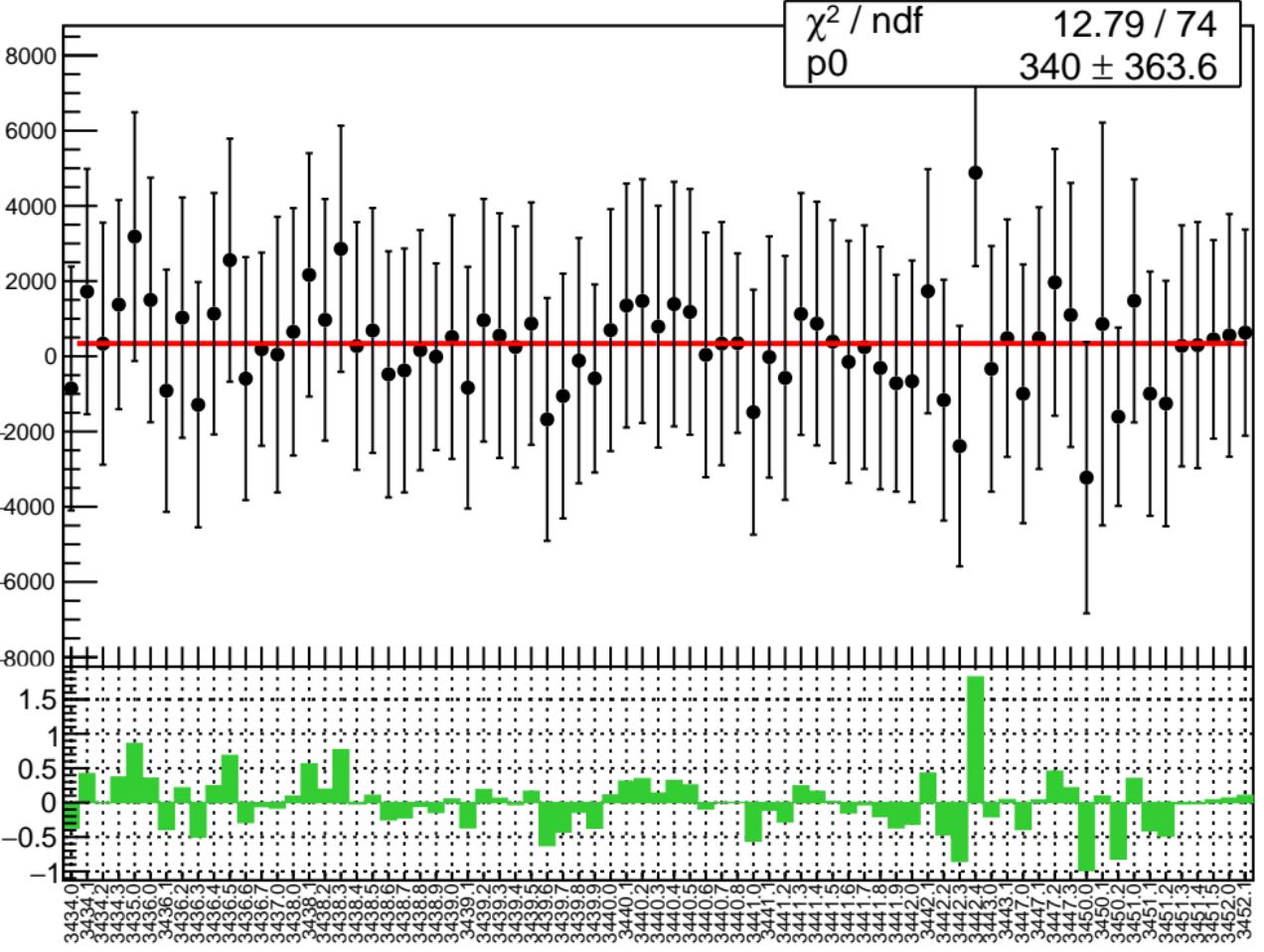


corr_usl_bpm4aY RMS (ppm)

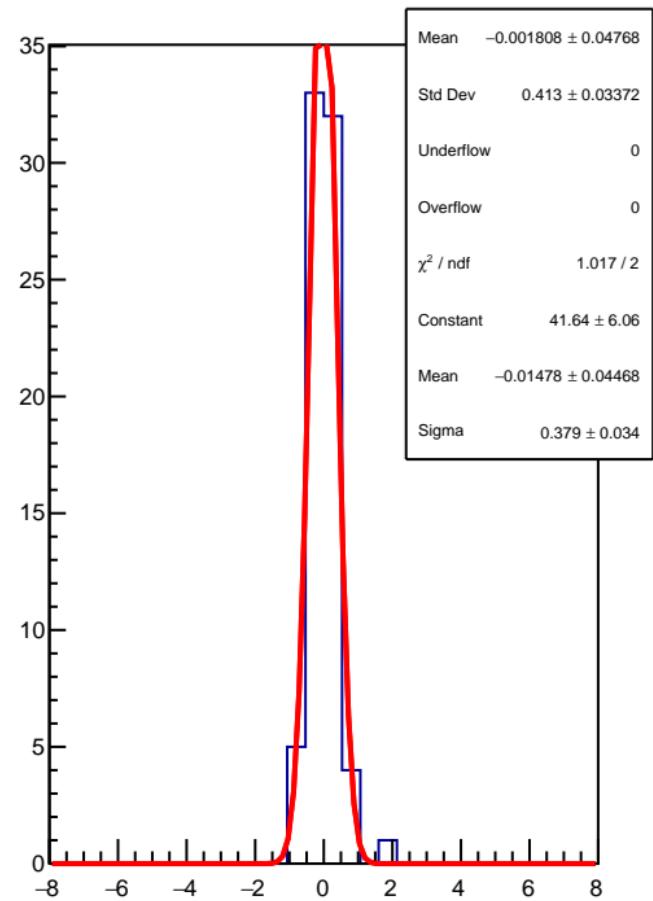
RMS (ppm)



corr_usl_bpm1X (ppb)

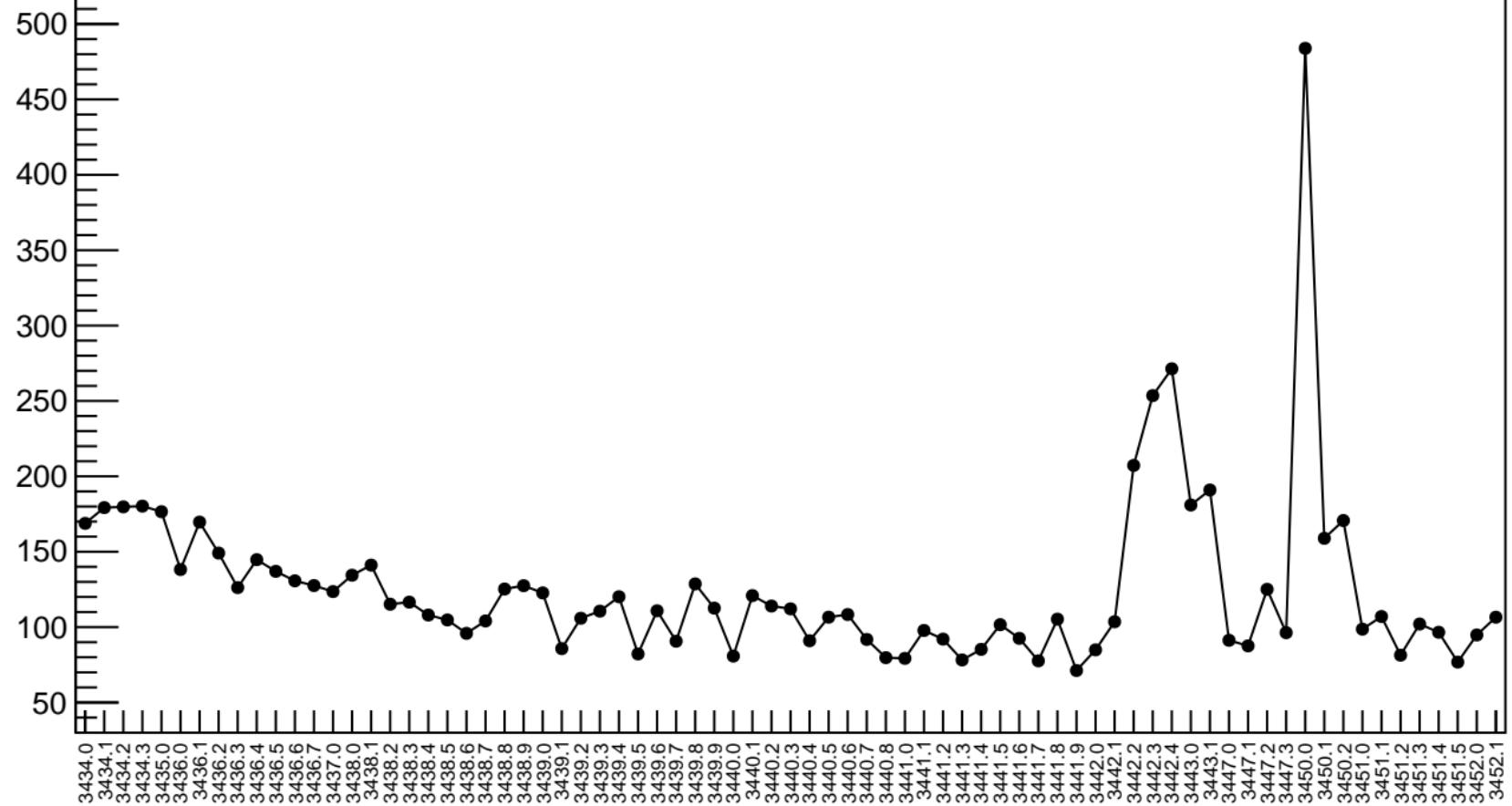


1D pull distribution

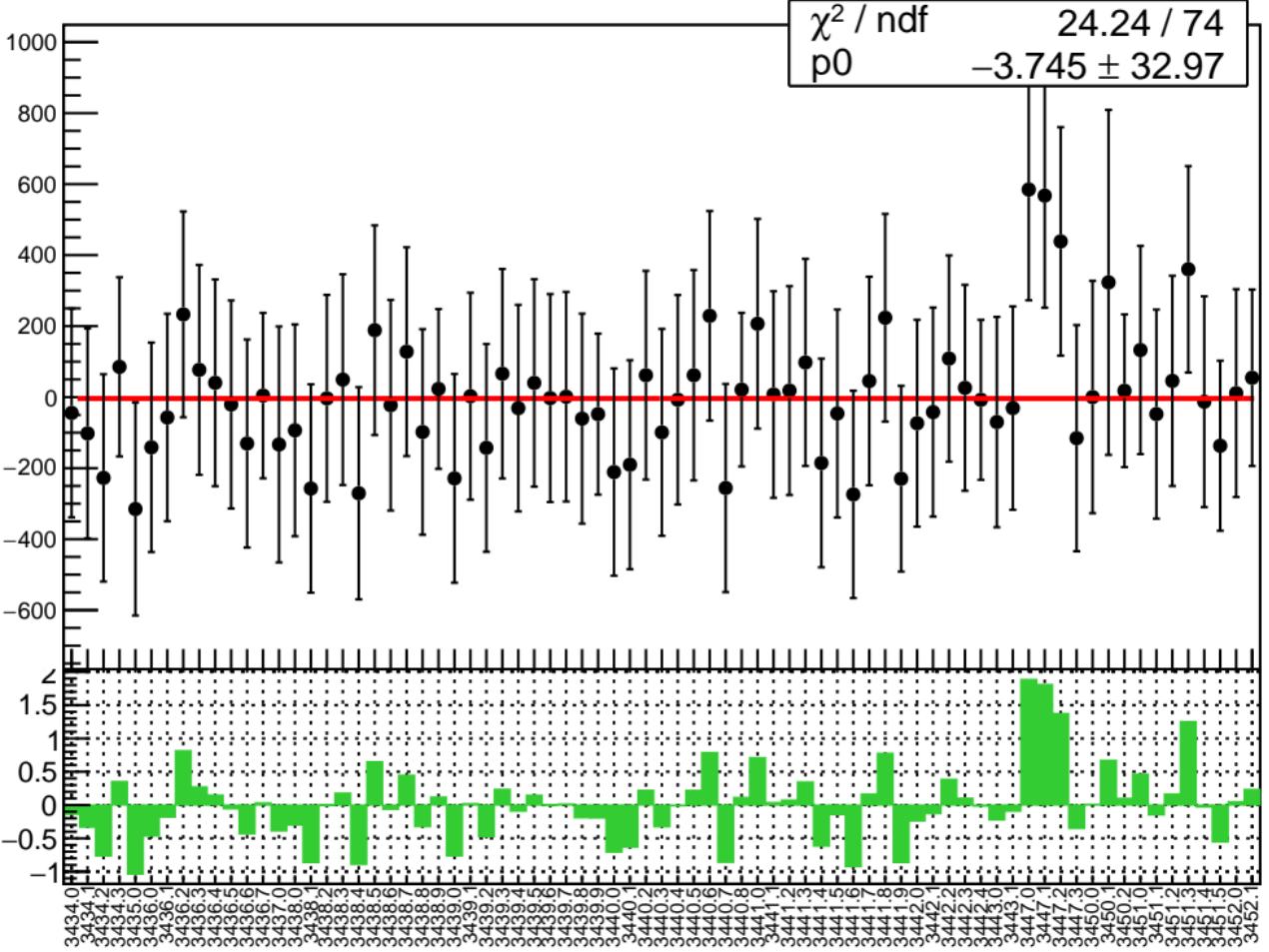


corr_usl_bpm1X RMS (ppm)

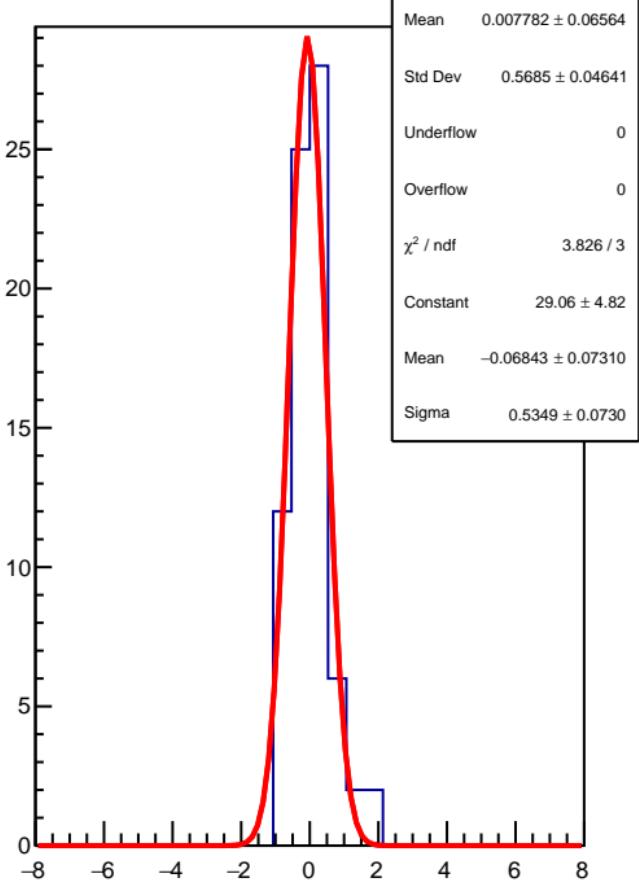
RMS (ppm)



corr_usl_bpm1Y (ppb)



1D pull distribution



corr_usl_bpm1Y RMS (ppm)

RMS (ppm)

50

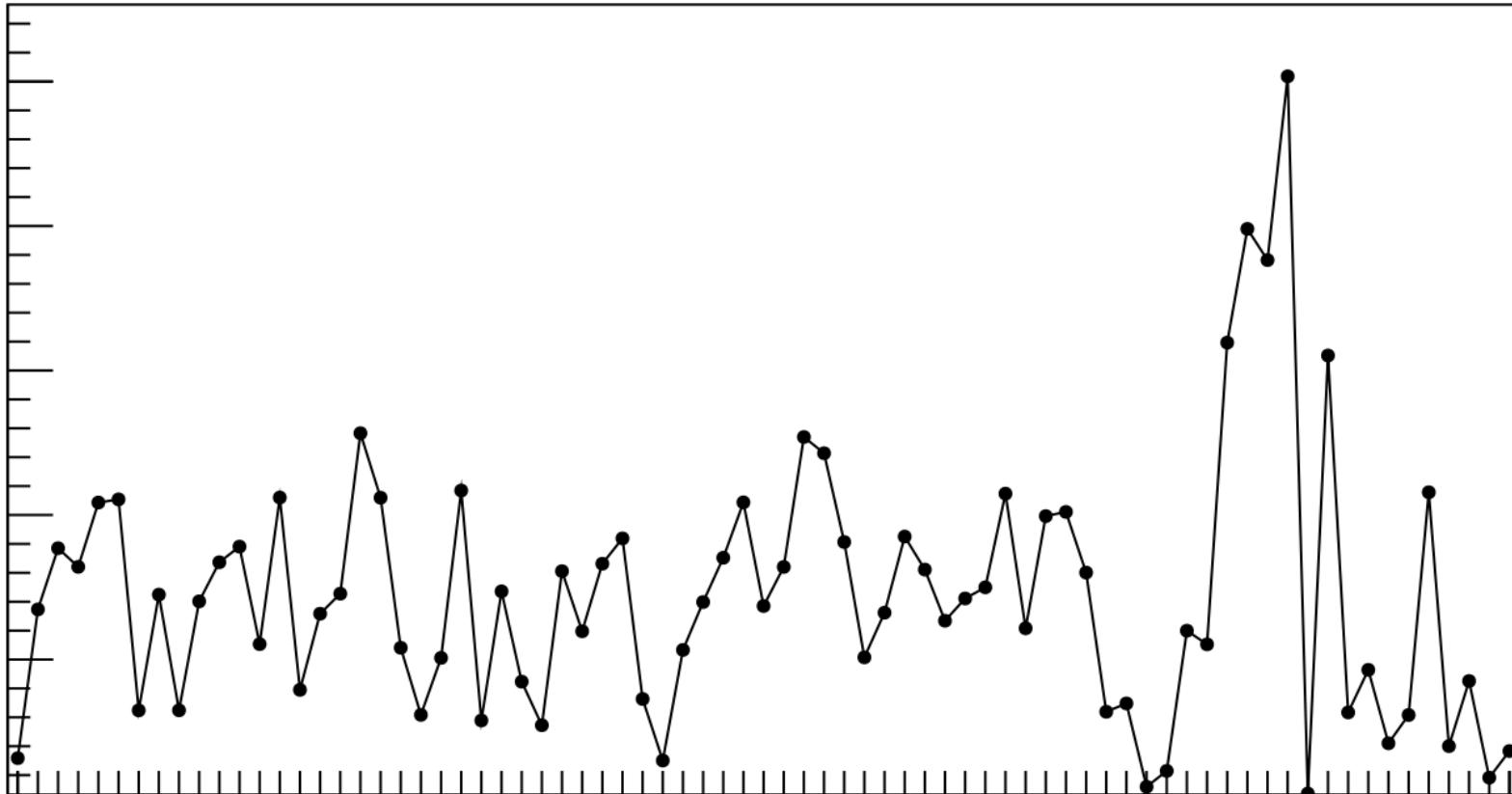
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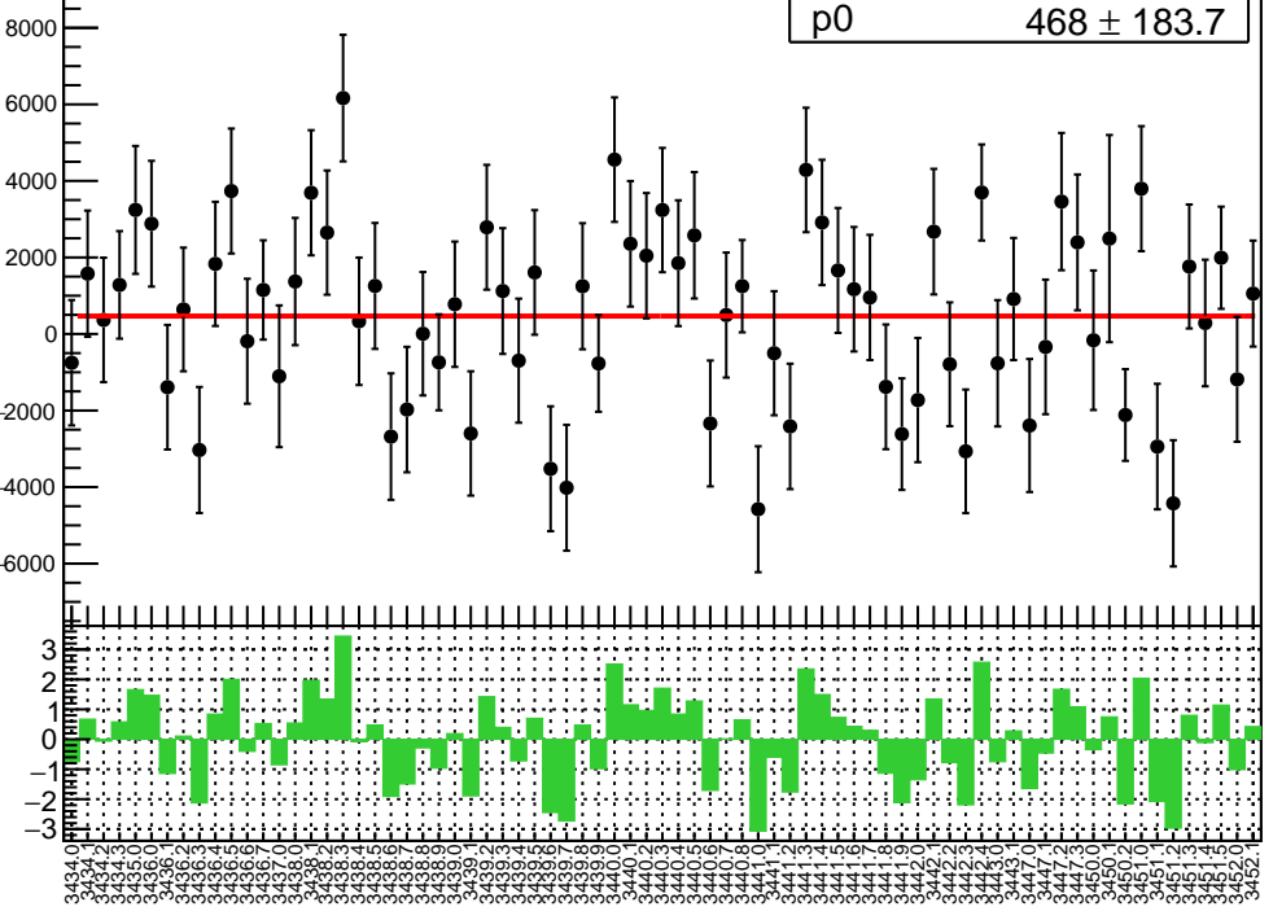
10

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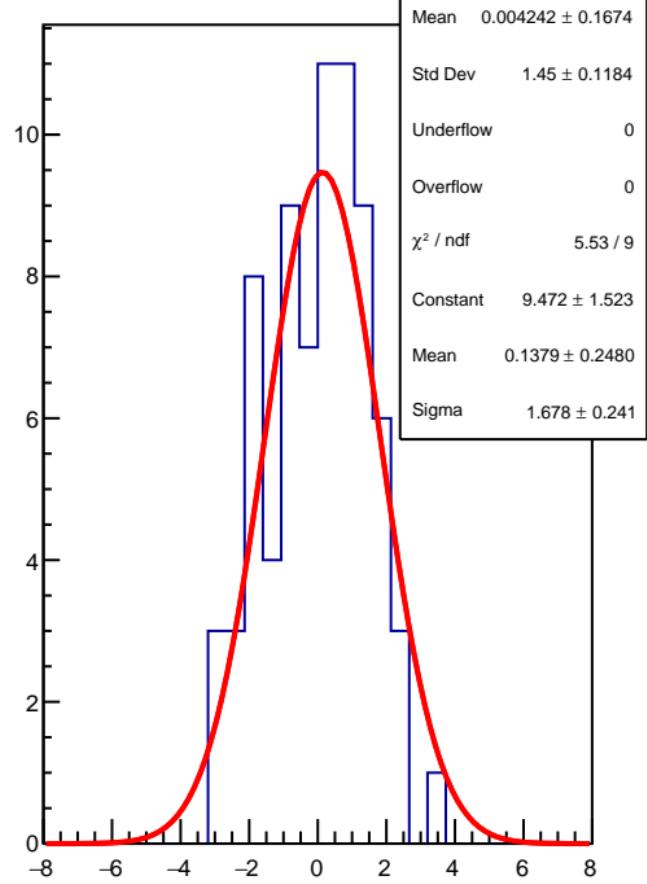


corr_usl_bpm16X (ppb)

χ^2 / ndf 157.6 / 74
p0 468 ± 183.7

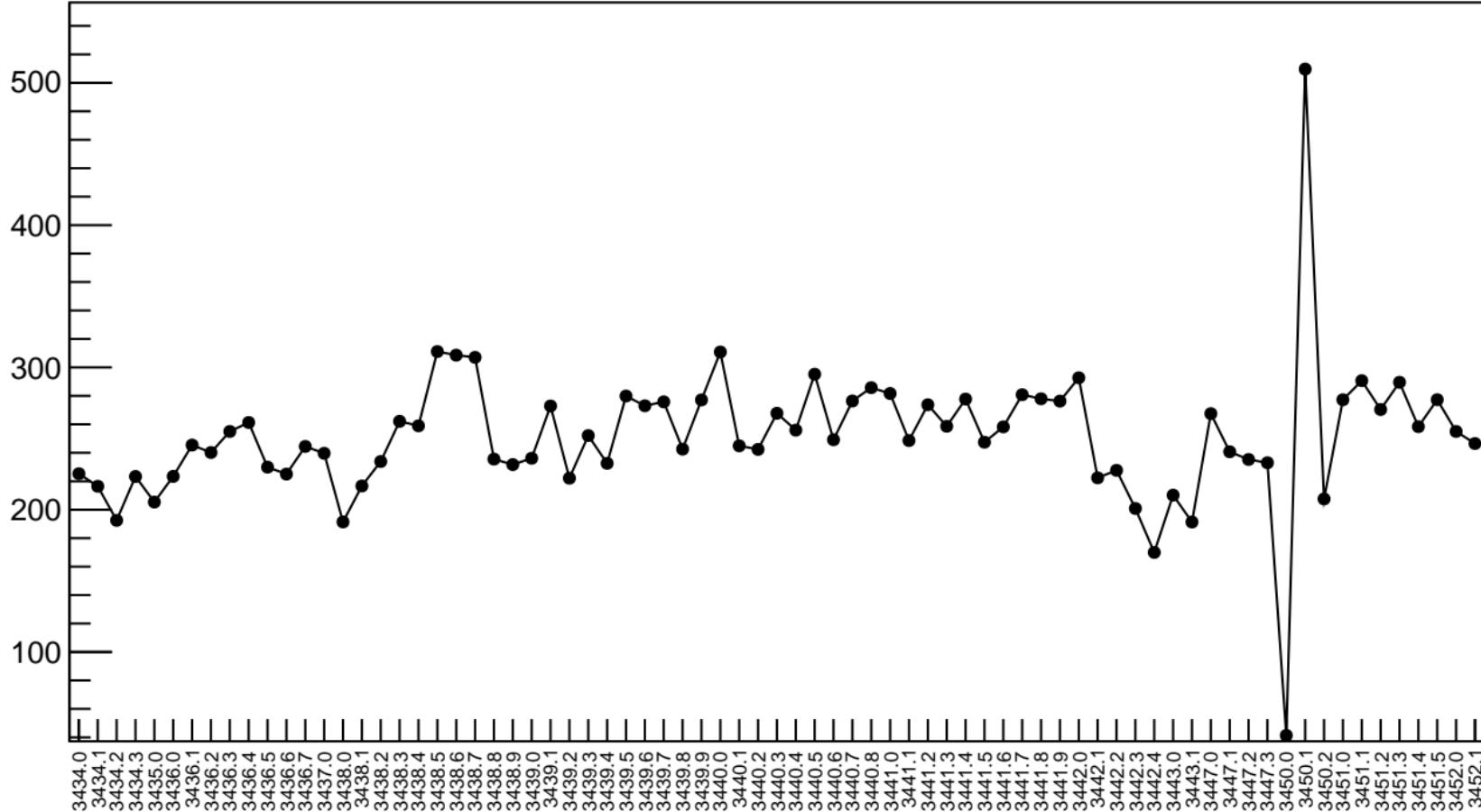


1D pull distribution



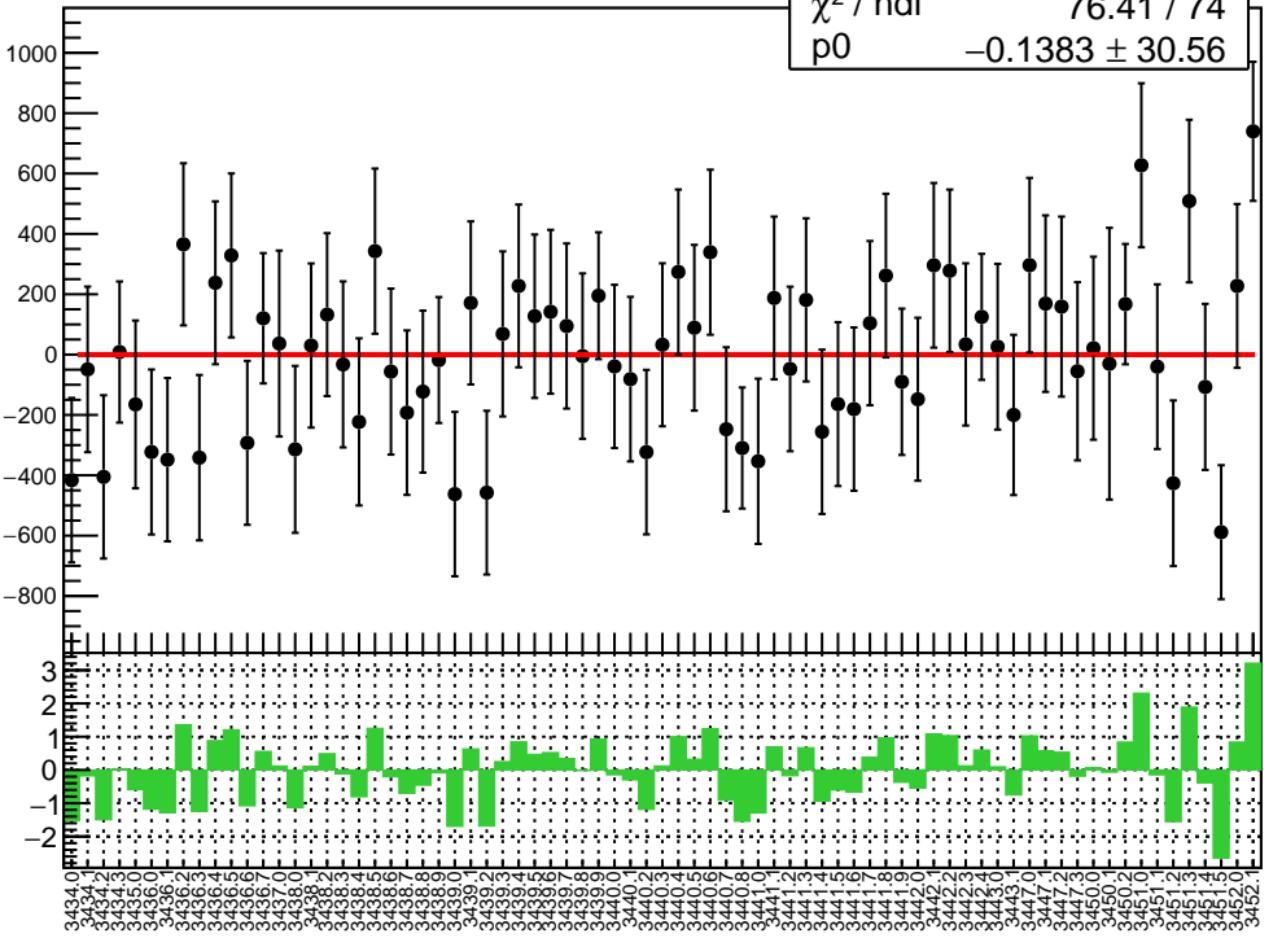
corr_usl_bpm16X RMS (ppm)

RMS (ppm)

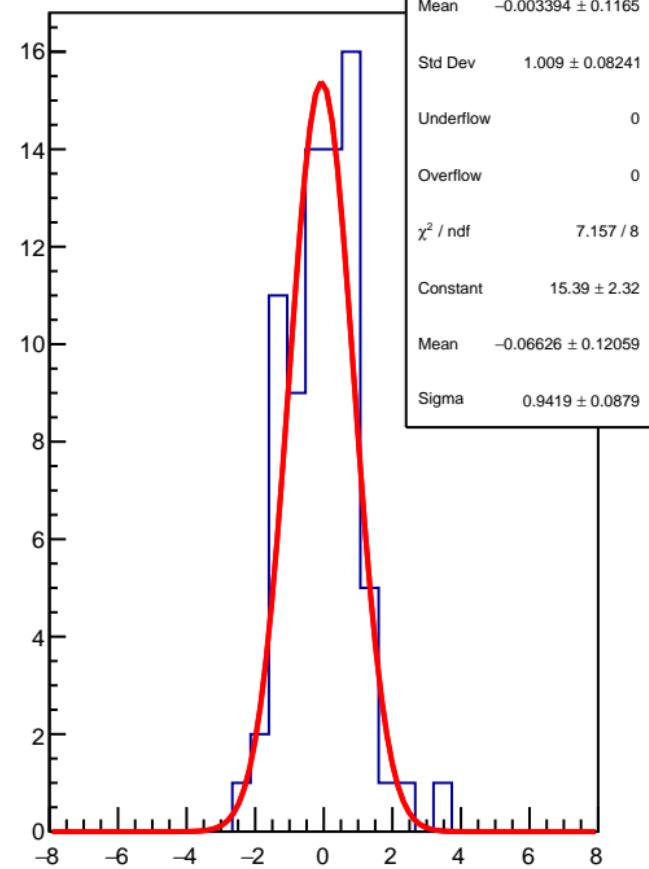


corr_usl_bpm16Y (ppb)

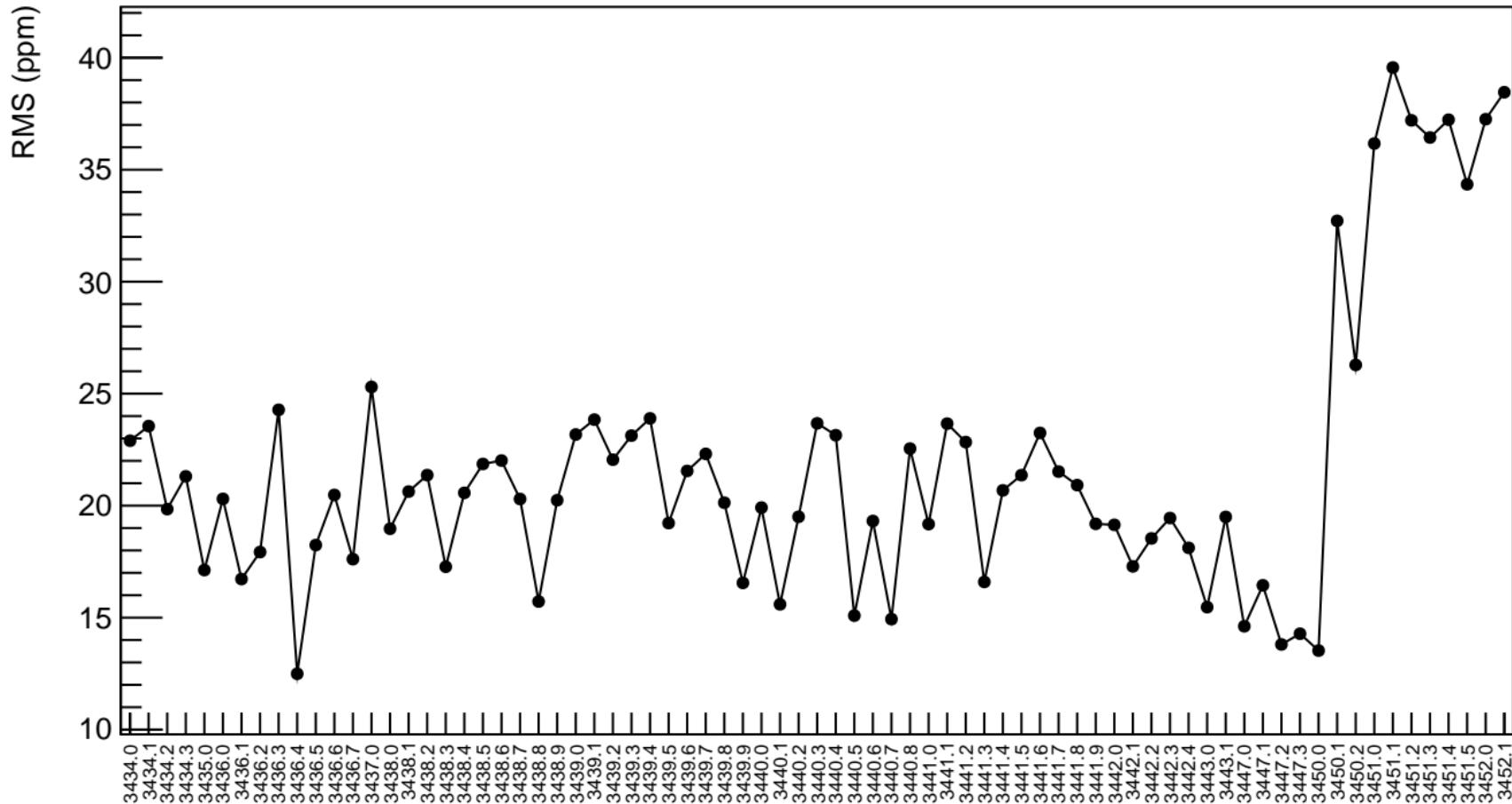
χ^2 / ndf 76.41 / 74
p0 -0.1383 ± 30.56



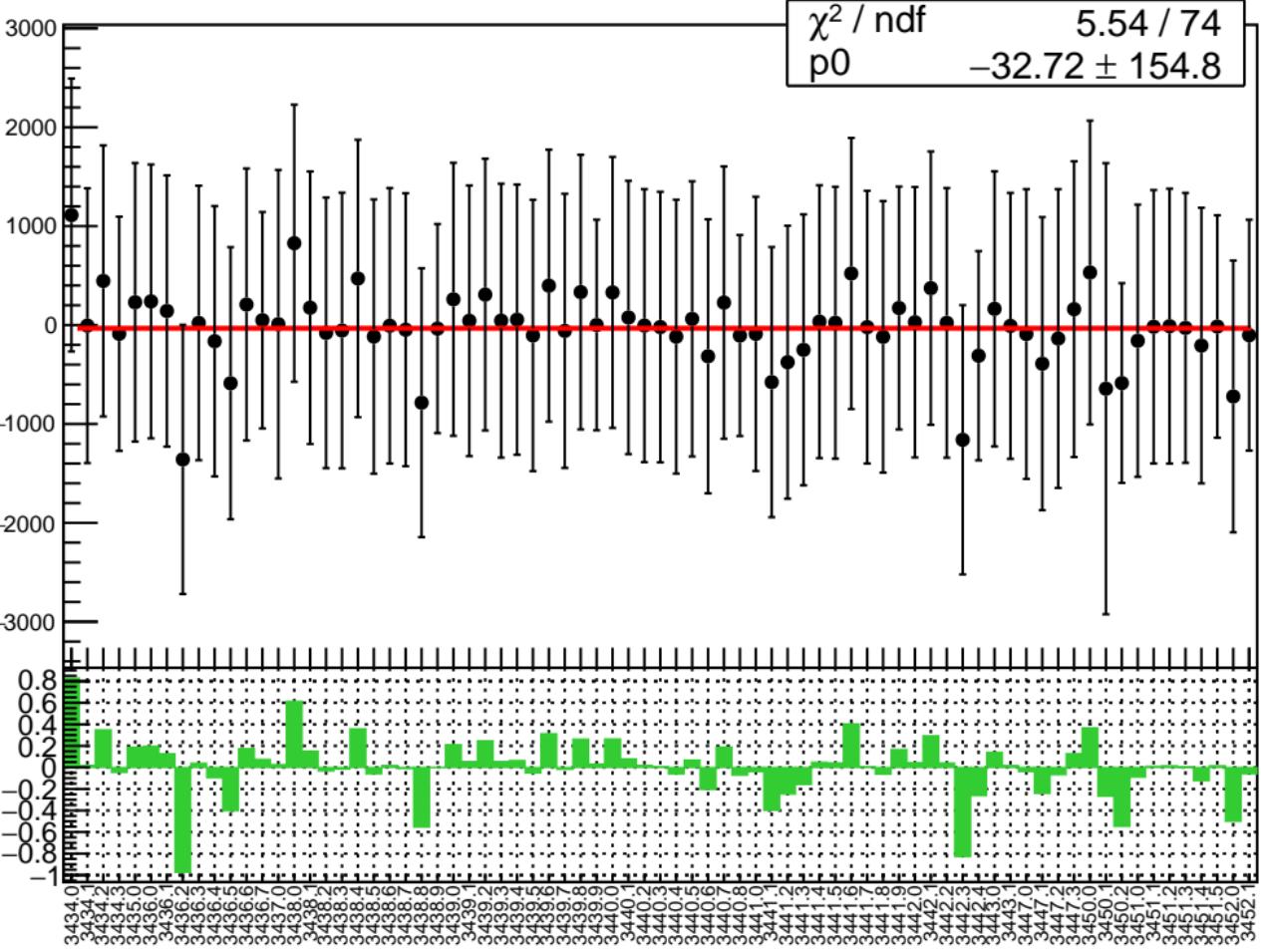
1D pull distribution



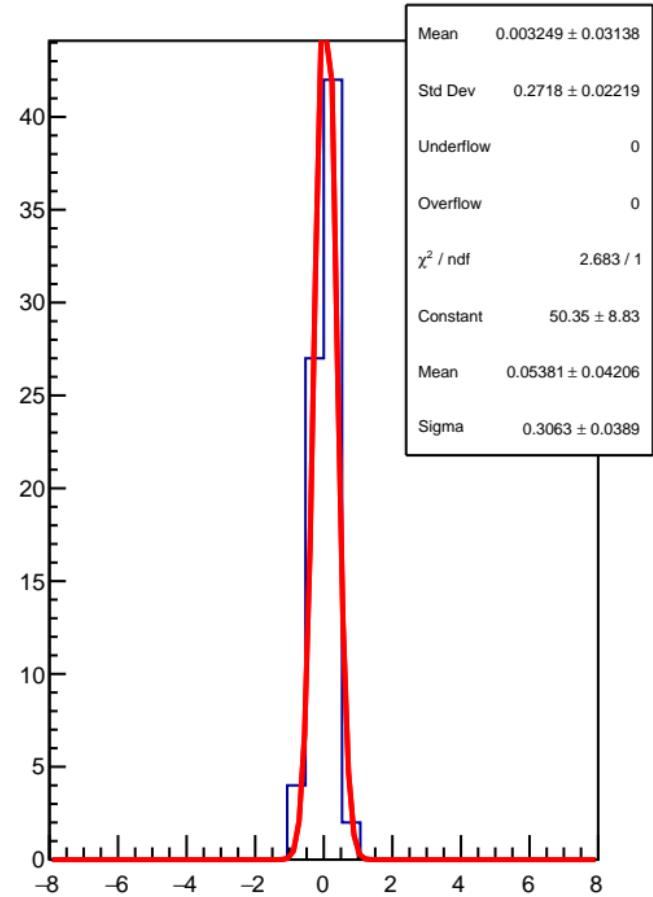
corr_usl_bpm16Y RMS (ppm)



corr_usl_bpm12X (ppb)

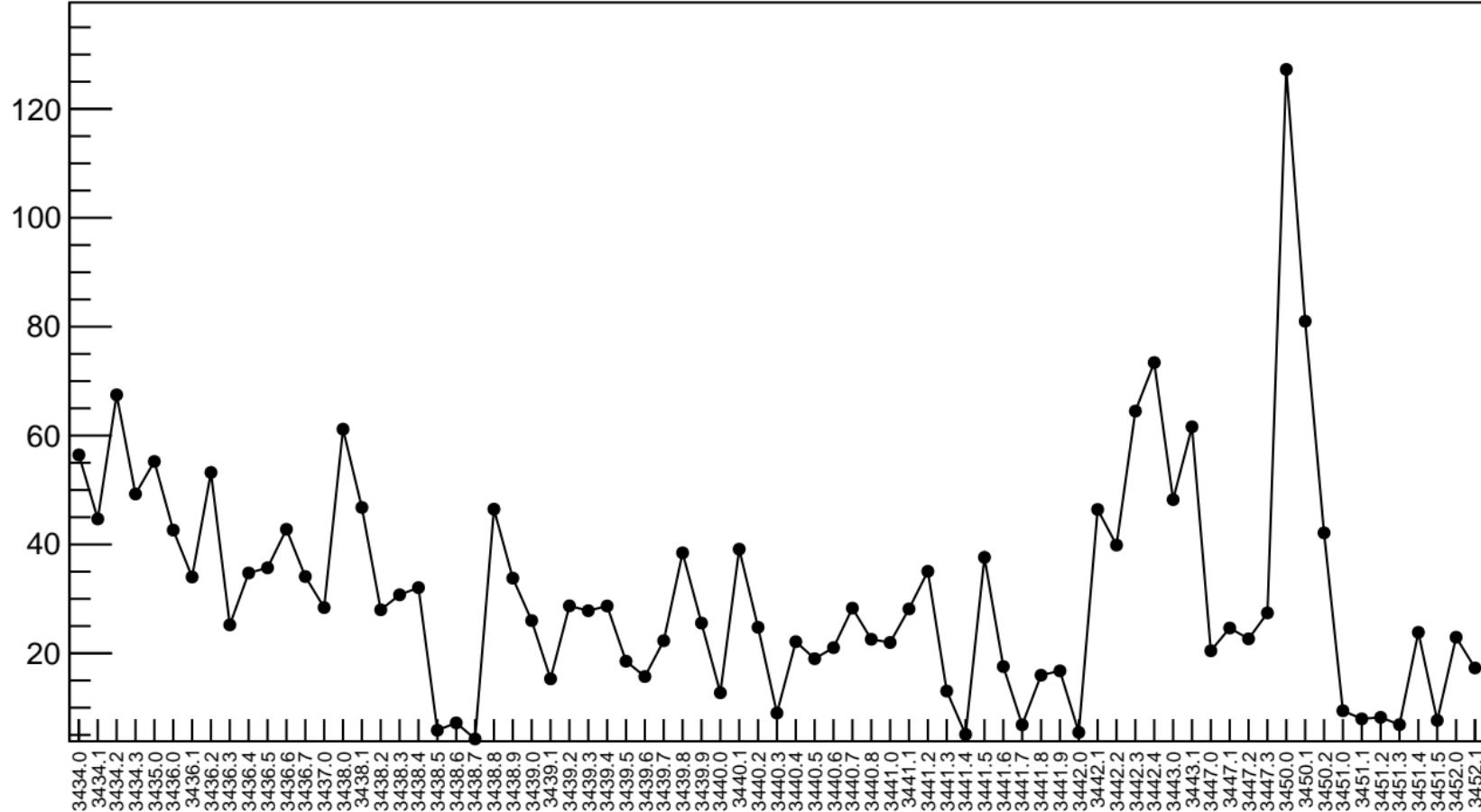


1D pull distribution



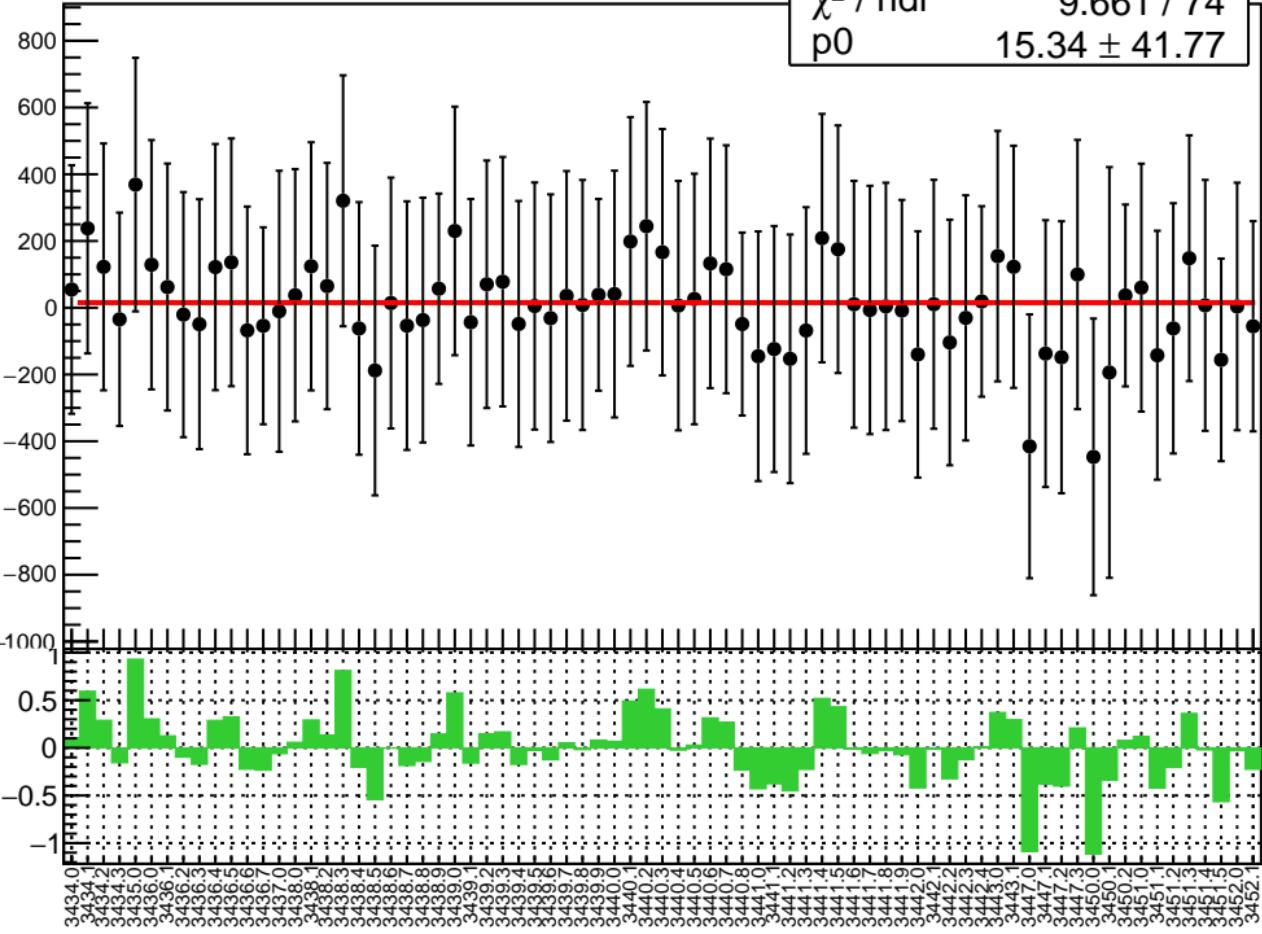
corr_usl_bpm12X RMS (ppm)

RMS (ppm)

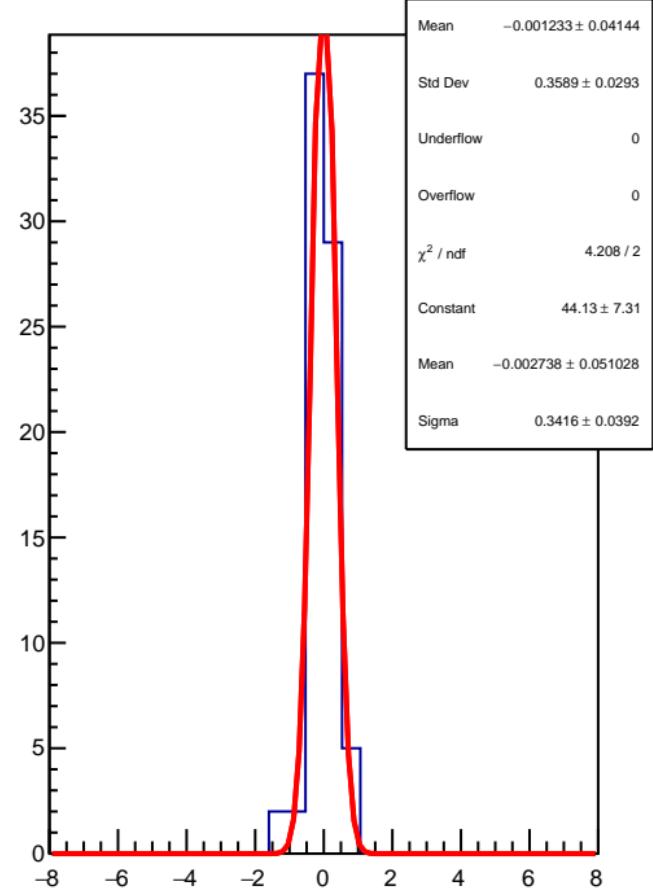


corr_usl_bpm12Y (ppb)

χ^2 / ndf 9.661 / 74
 p_0 15.34 ± 41.77

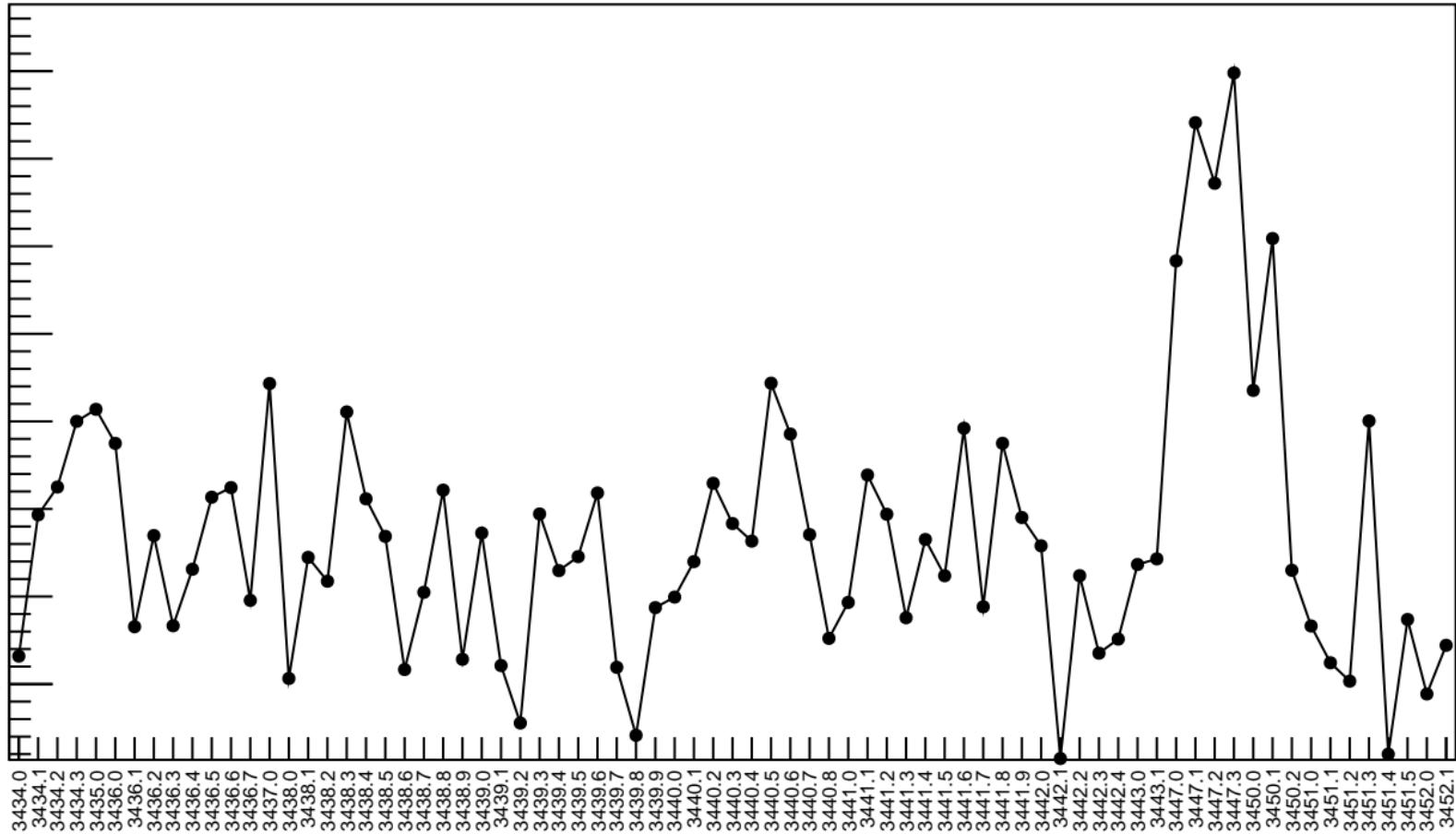


1D pull distribution



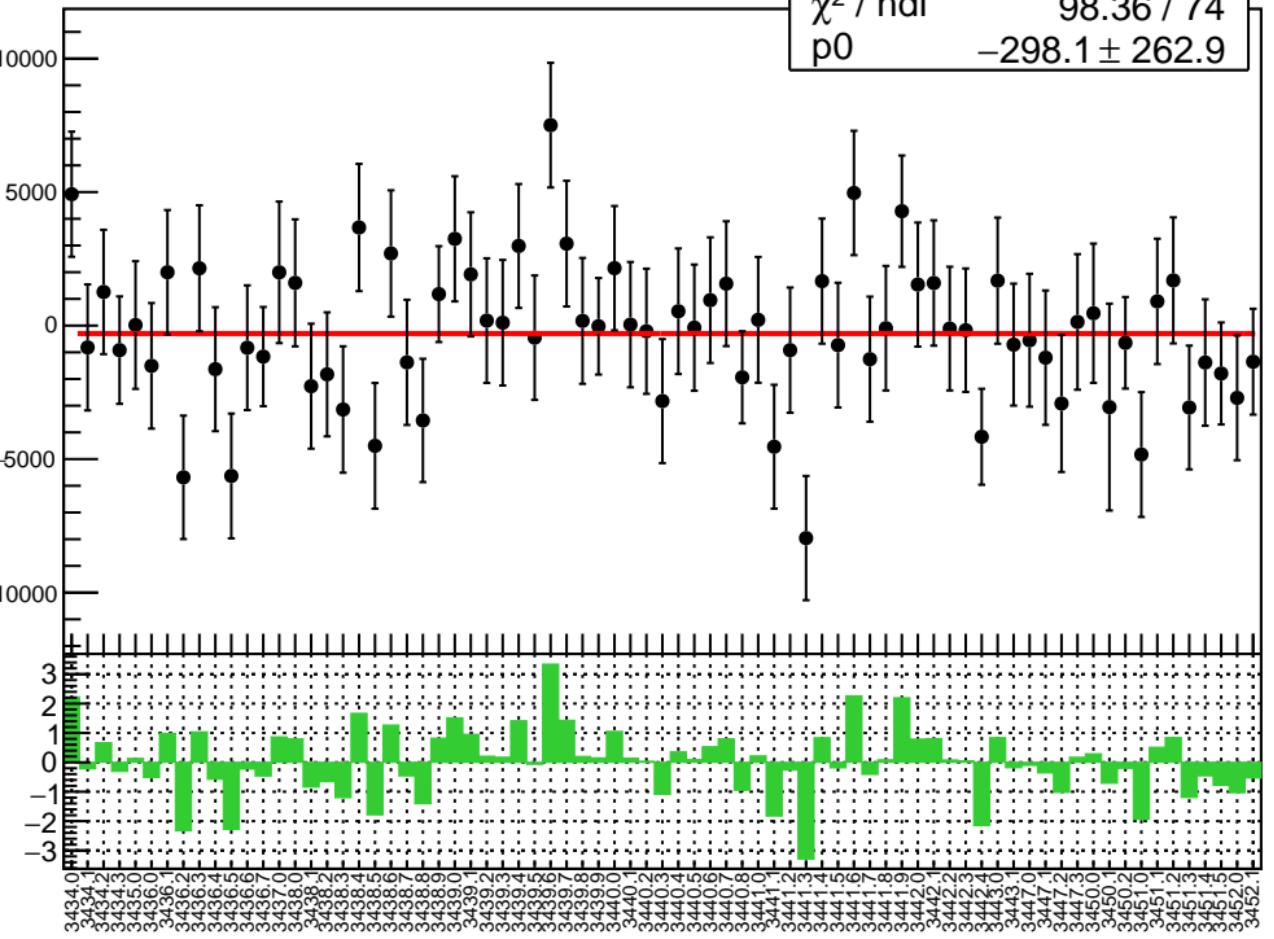
corr_usl_bpm12Y RMS (ppm)

RMS (ppm)





² / ndf 98.36 / 74
0 -298.1 ± 262.9



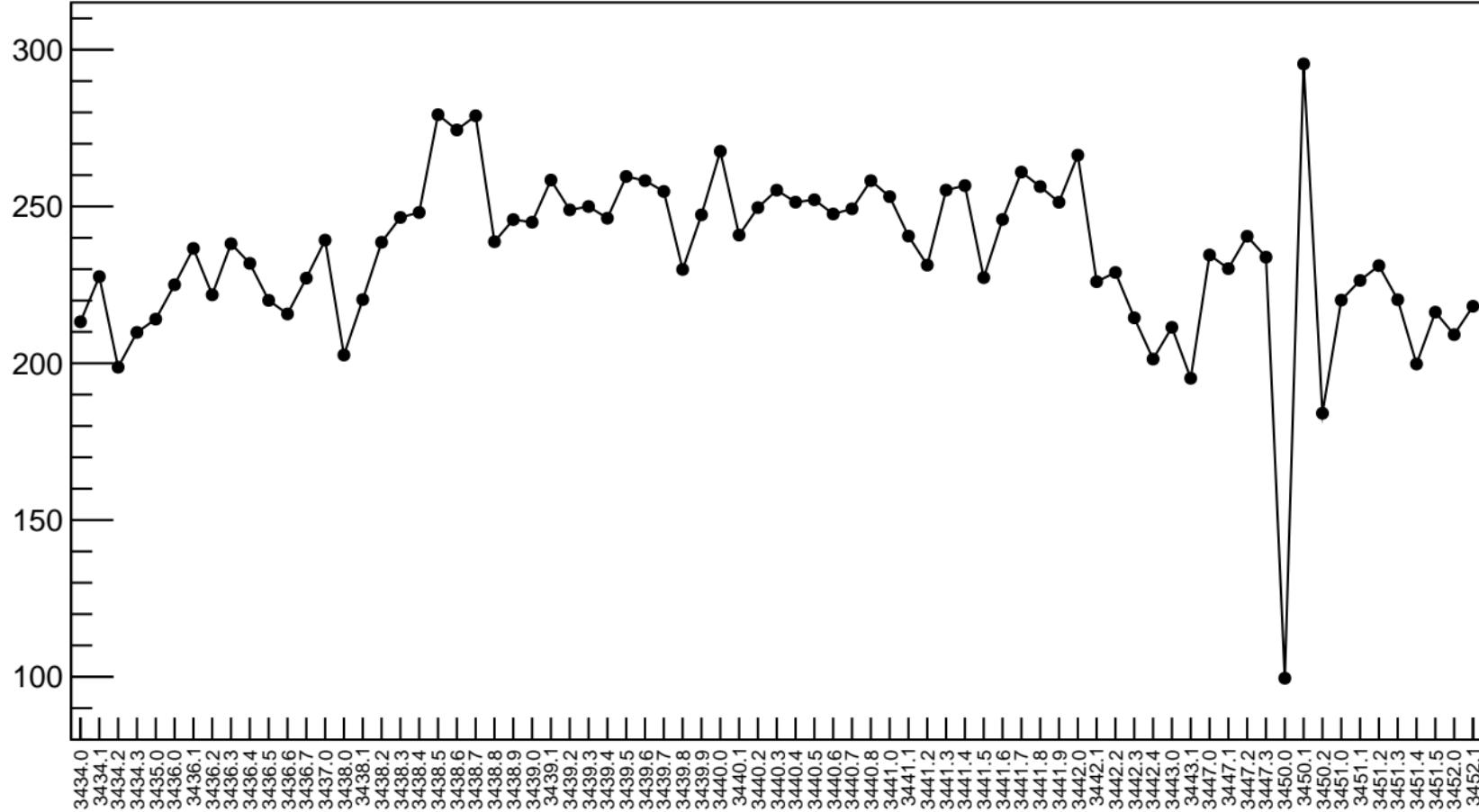
1D pull distribution

A histogram showing the distribution of normalized energy difference. The x-axis ranges from -8 to 8, and the y-axis ranges from 0 to 16. The histogram bars are blue, and a red Gaussian curve is fitted to the data. The distribution is centered near zero, with a peak around 1.75.

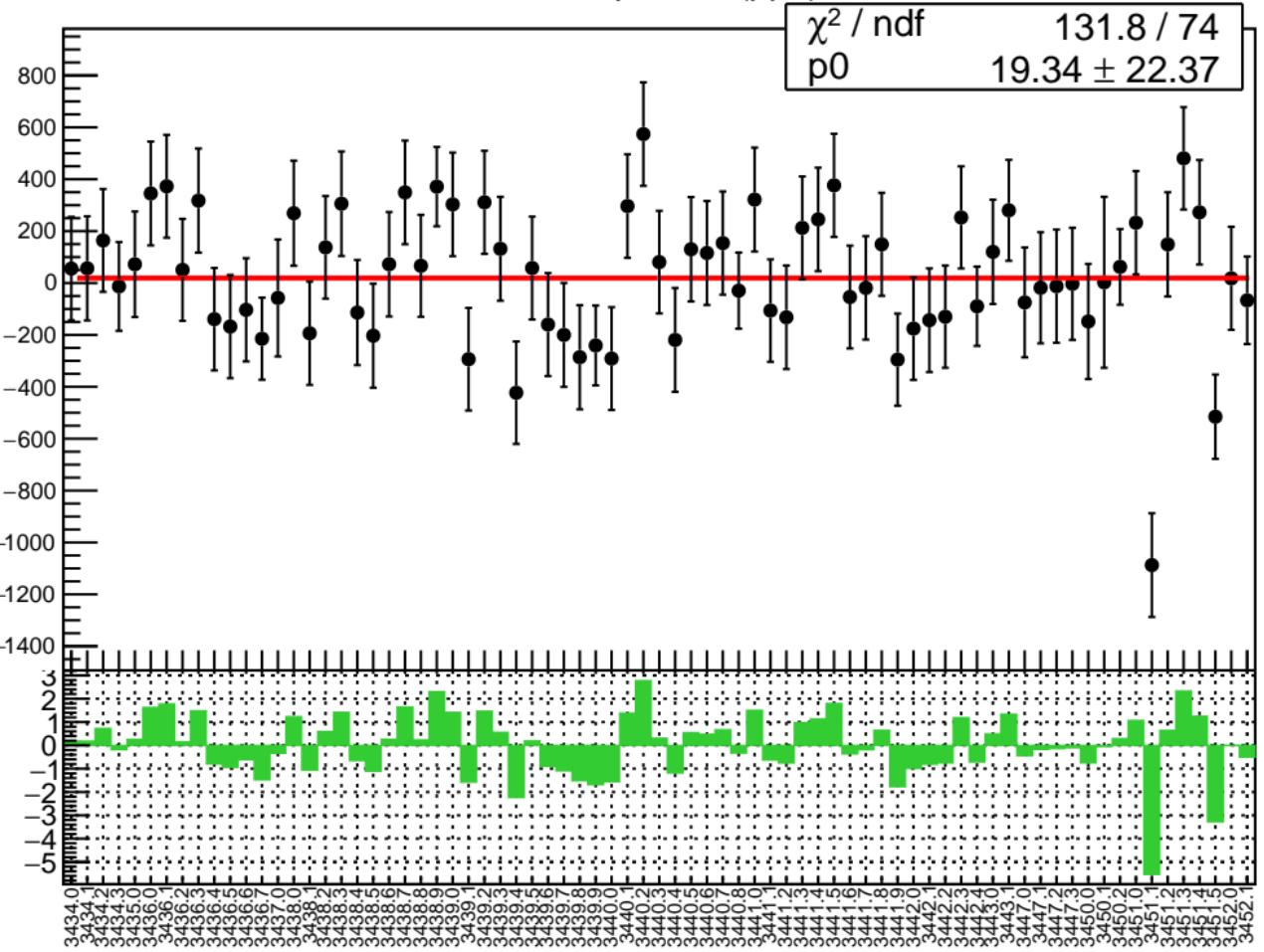
Parameter	Value
Std Dev	1.145 ± 0.0935
Underflow	0
Overflow	0
χ^2 / ndf	9.782 / 9
Constant	16.74 ± 3.06
Mean	0.04414 ± 0.11554
Sigma	0.8297 ± 0.11125

corr_usl_bpm11X RMS (ppm)

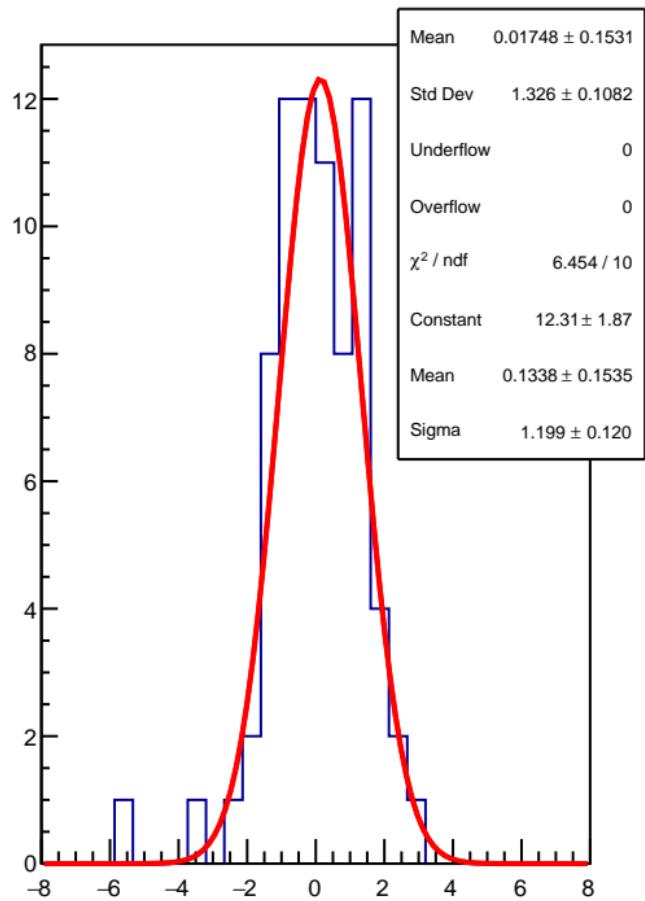
RMS (ppm)



corr_usl_bpm11Y (ppb)

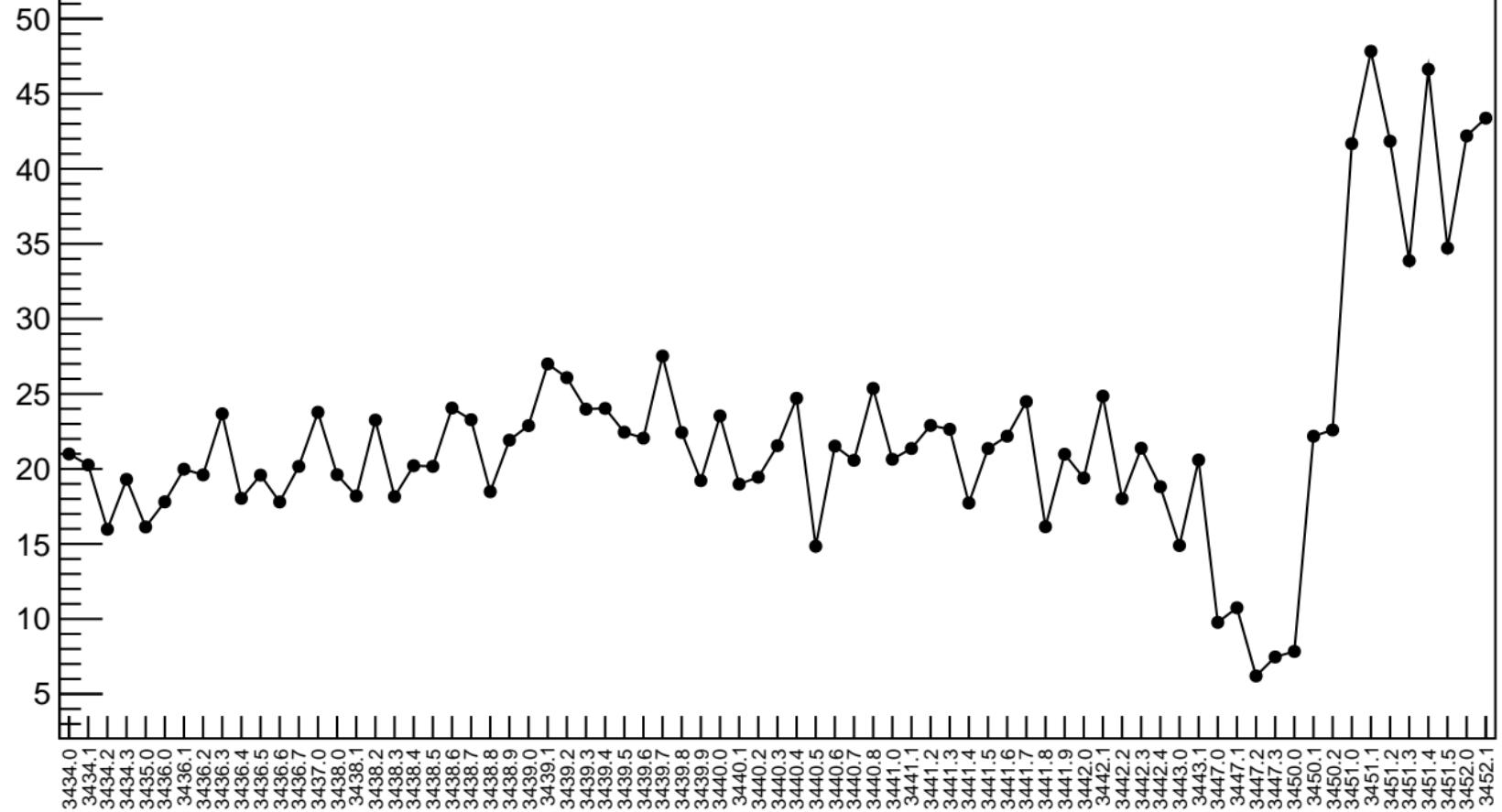


1D pull distribution

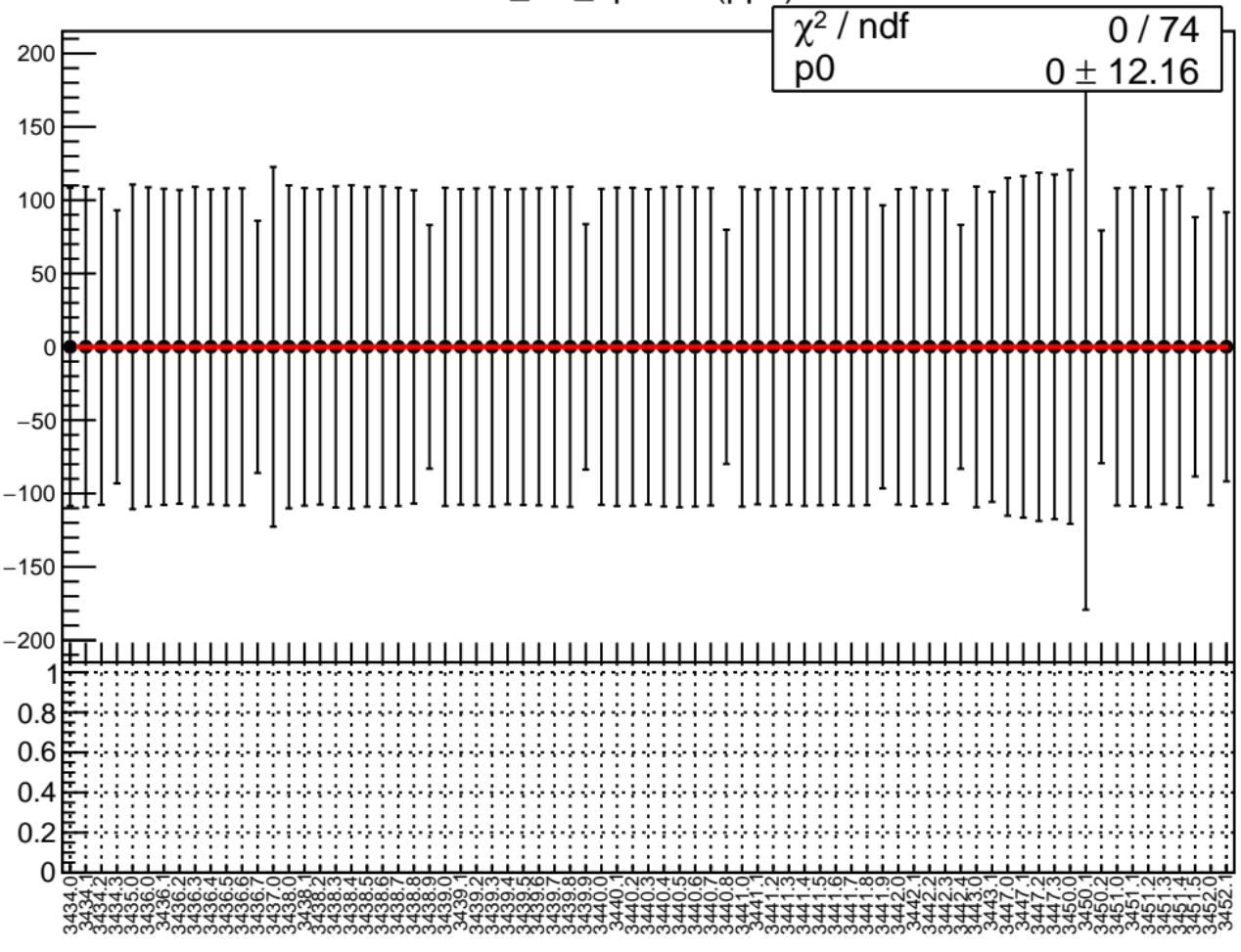


corr_usl_bpm11Y RMS (ppm)

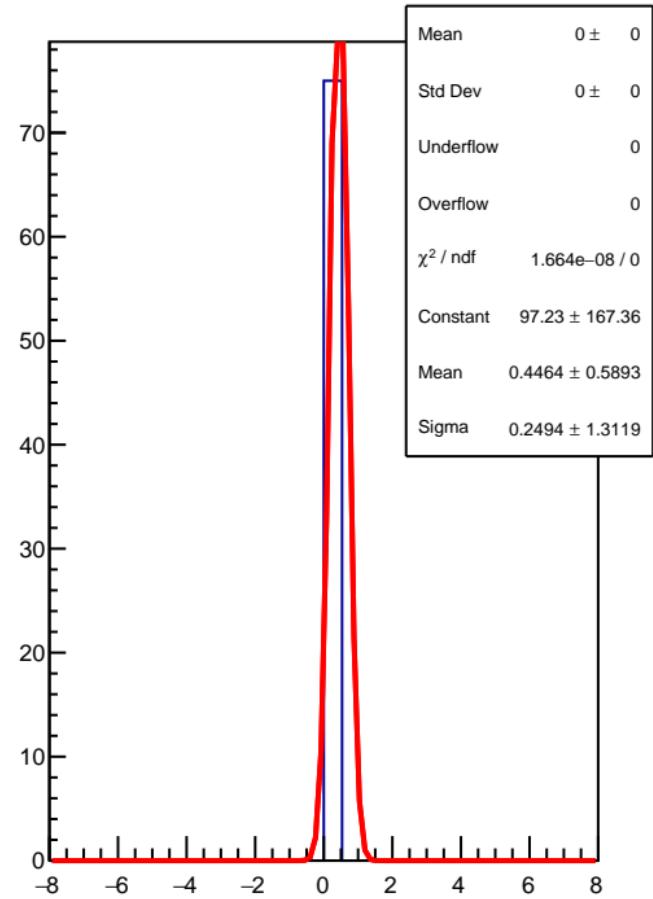
RMS (ppm)



corr_usl_bpm8X (ppb)

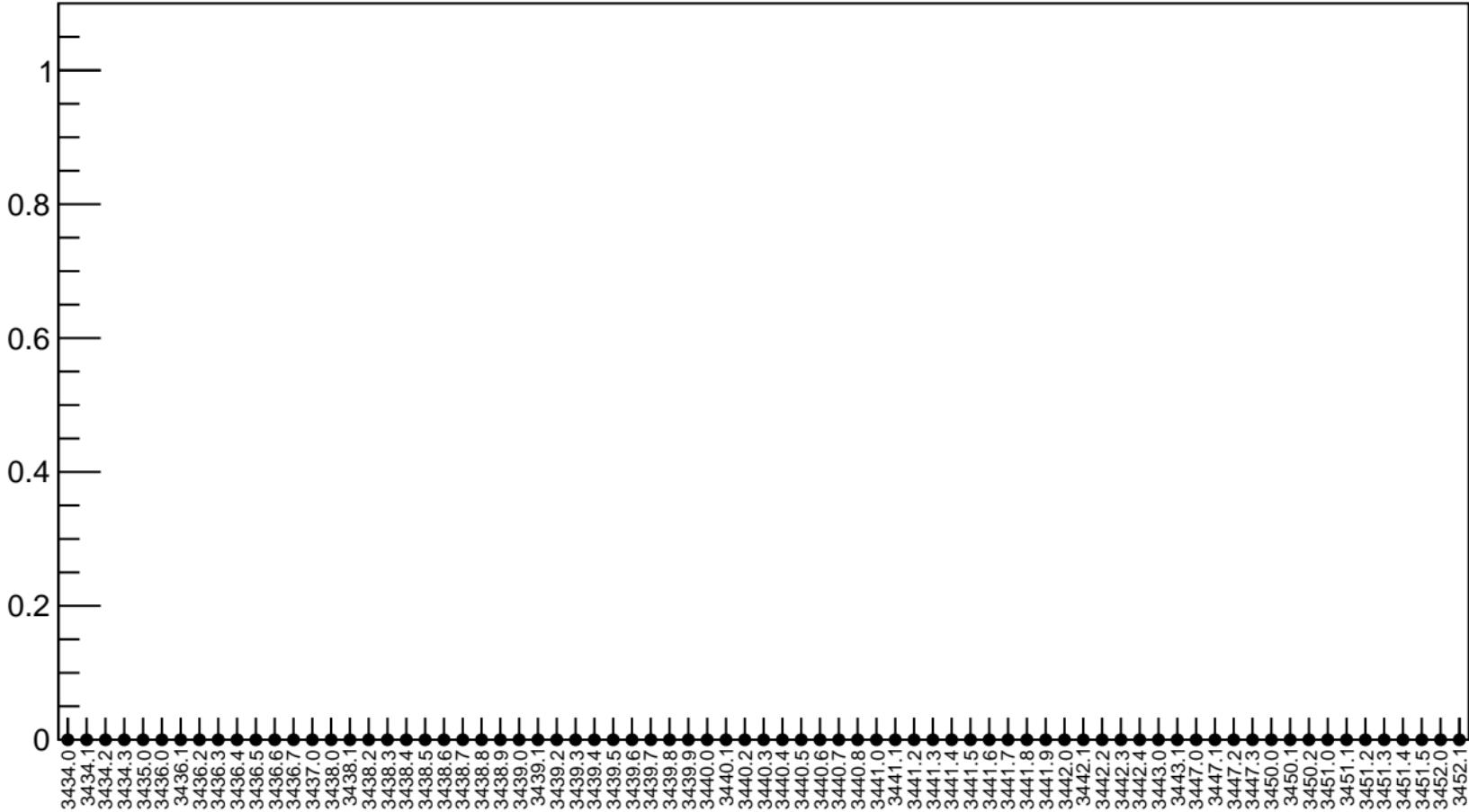


1D pull distribution

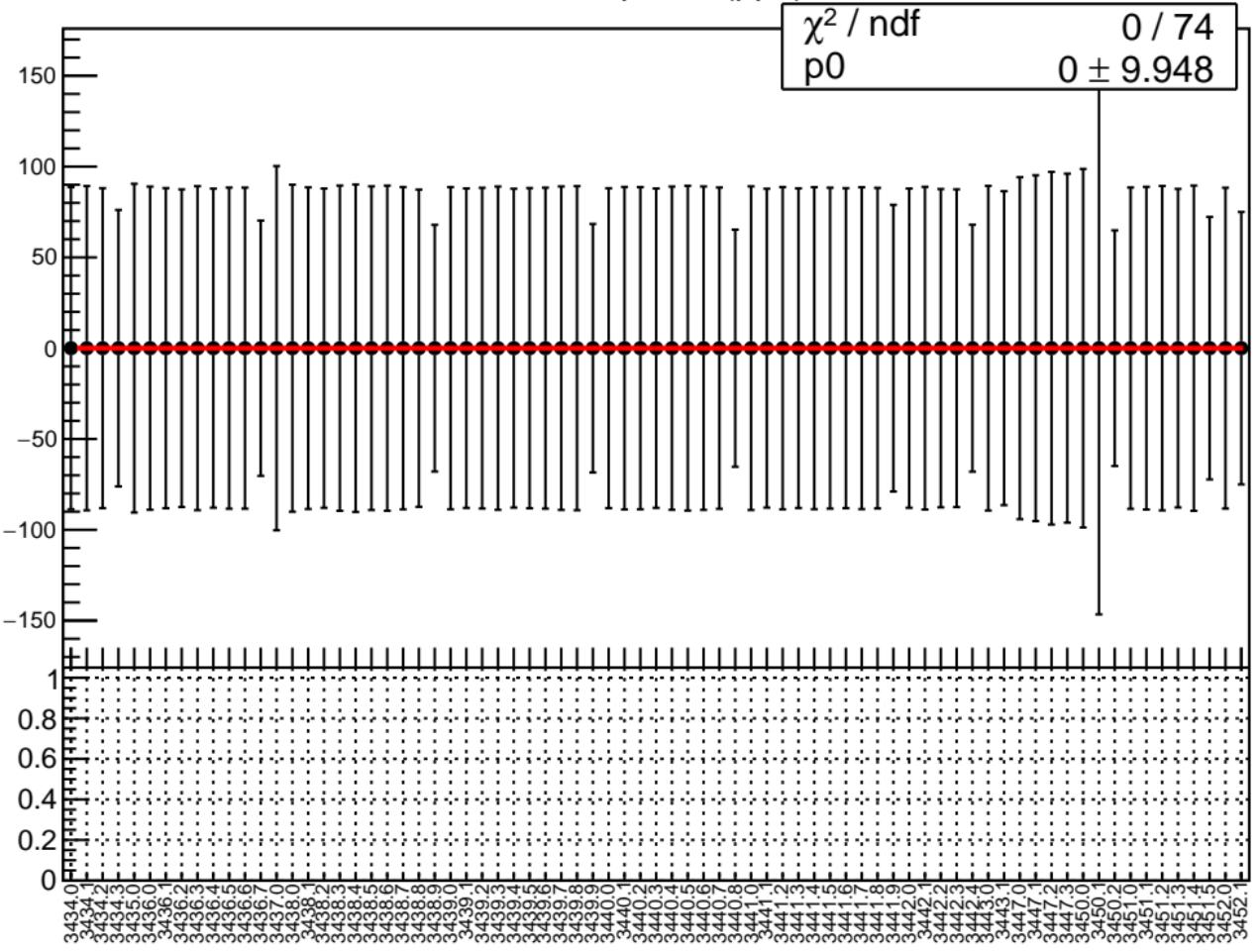


corr_usl_bpm8X RMS (ppm)

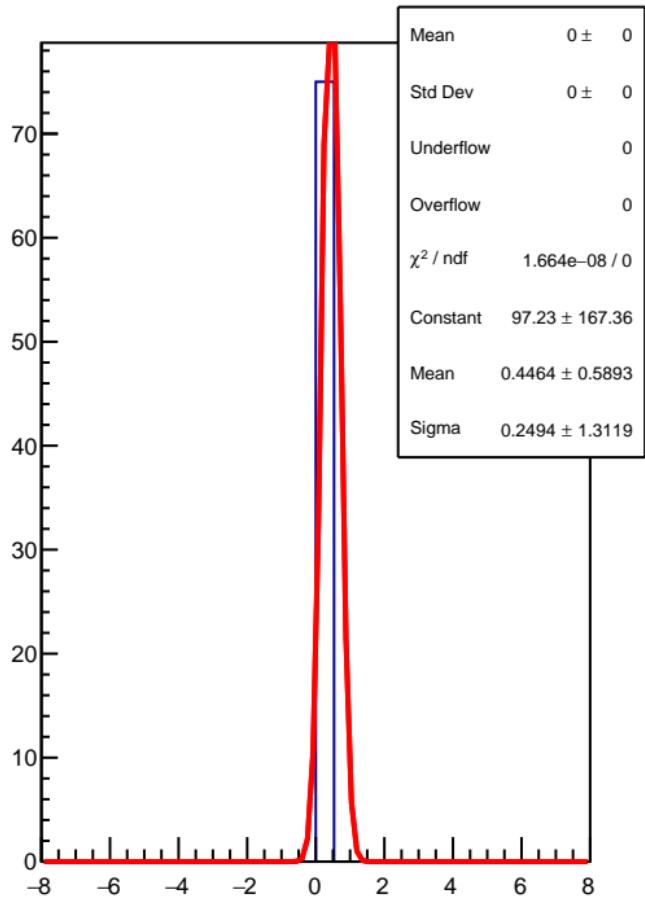
RMS (ppm)



corr_usl_bpm8Y (ppb)

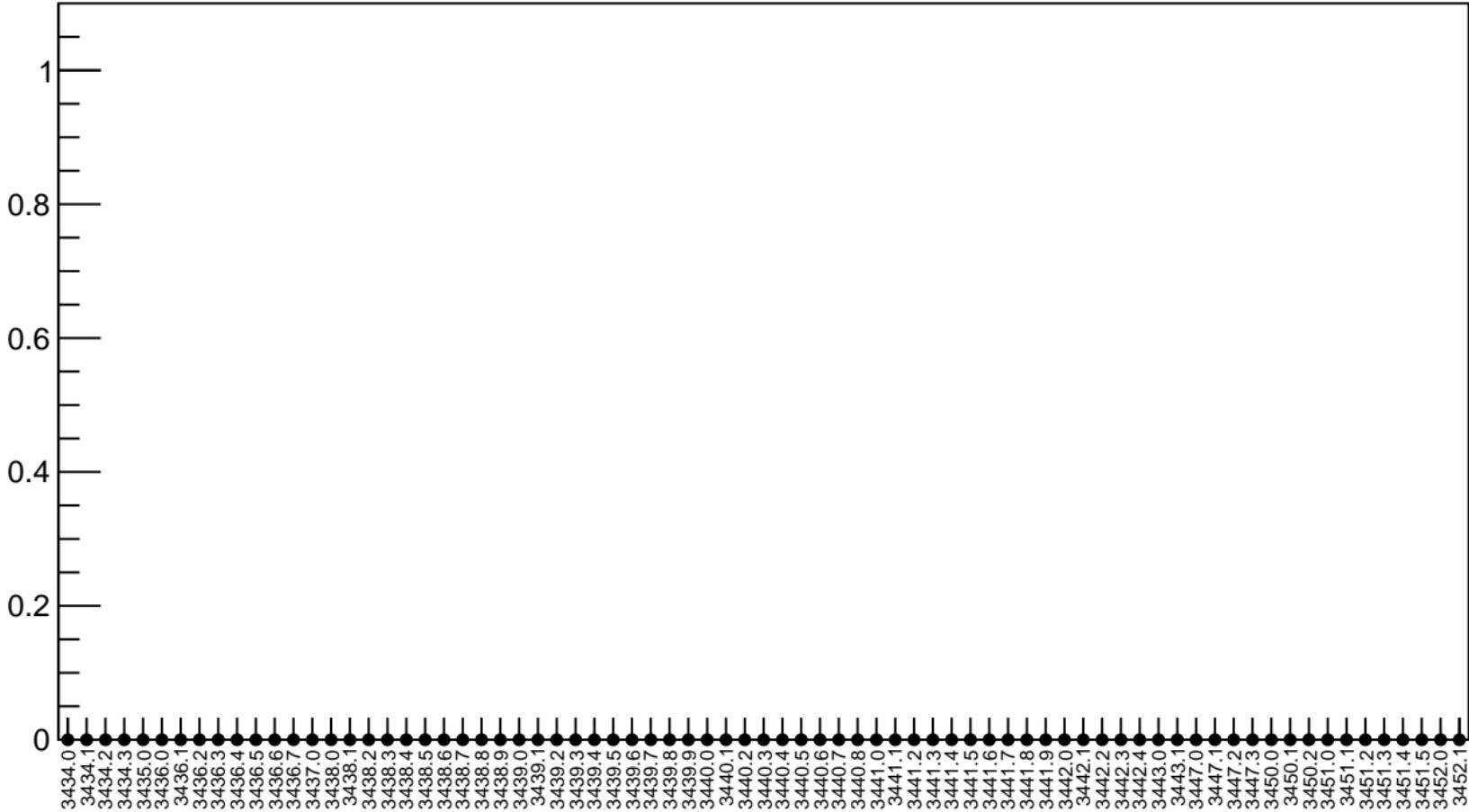


1D pull distribution

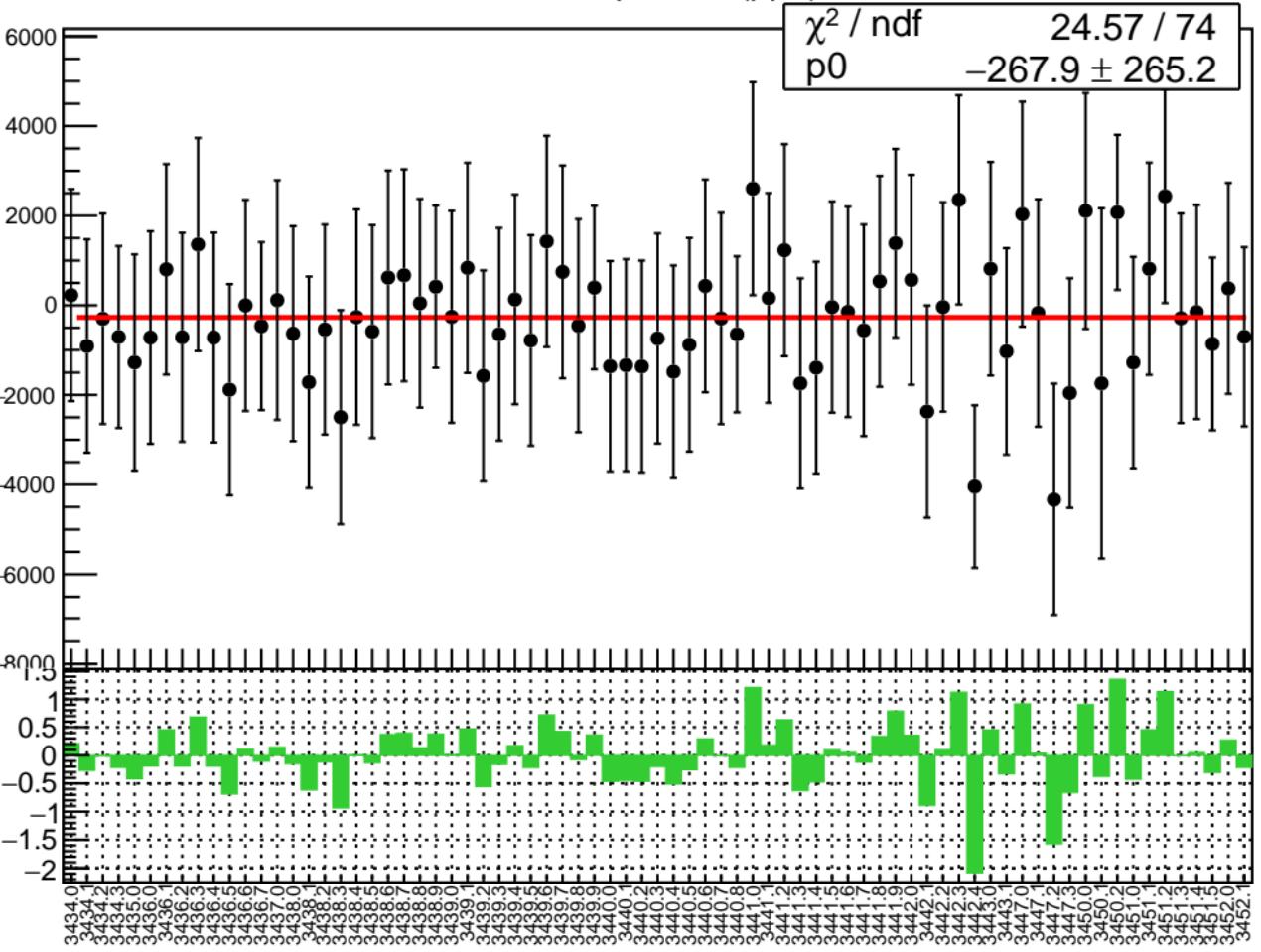


corr_usl_bpm8Y RMS (ppm)

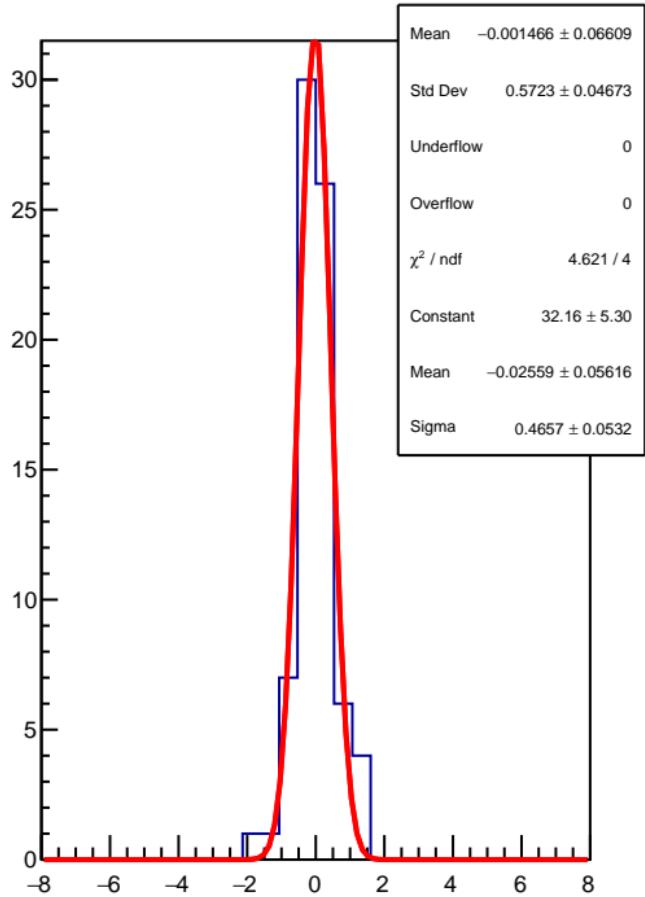
RMS (ppm)



corr_usr_bpm4eX (ppb)

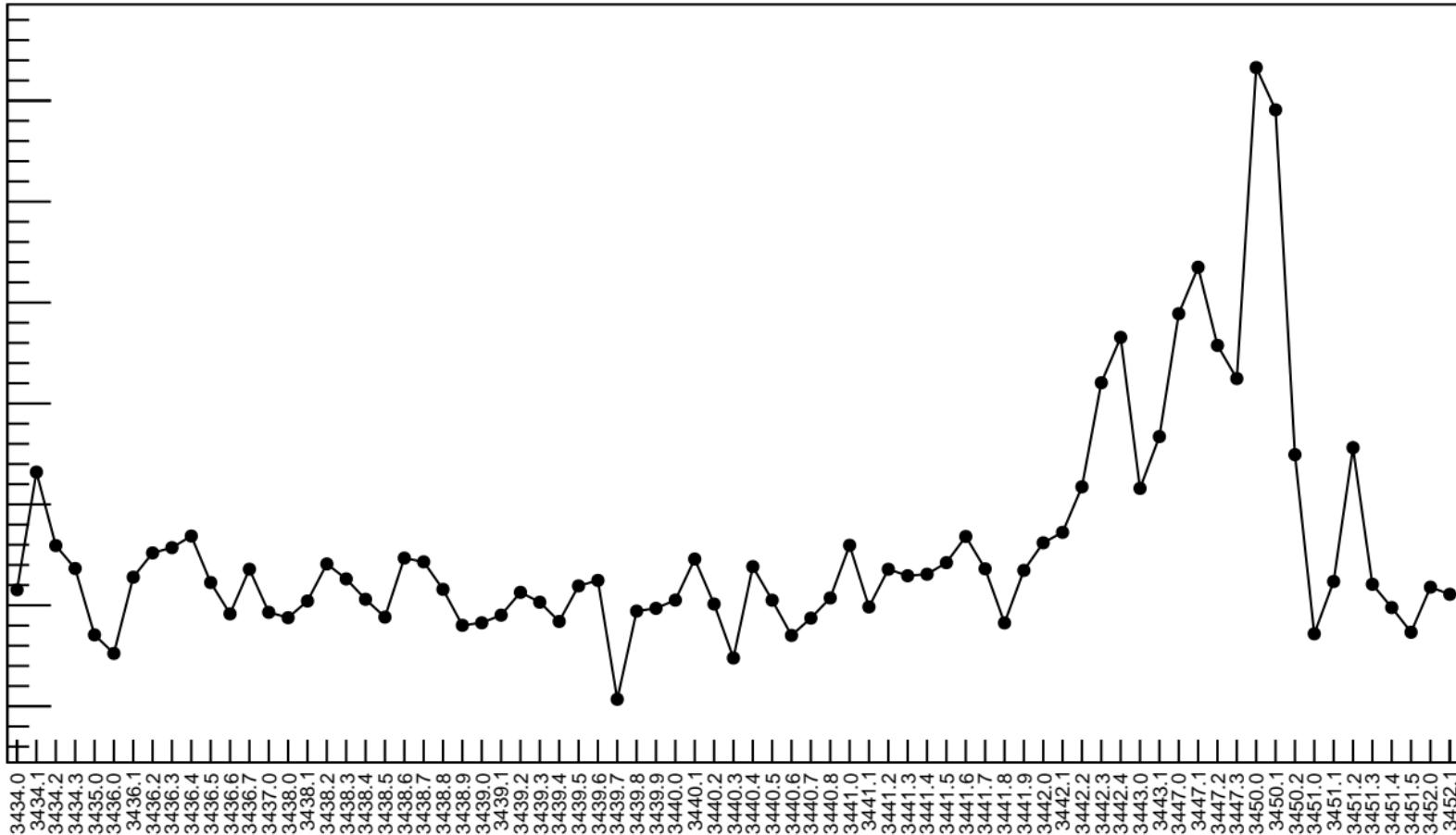


1D pull distribution



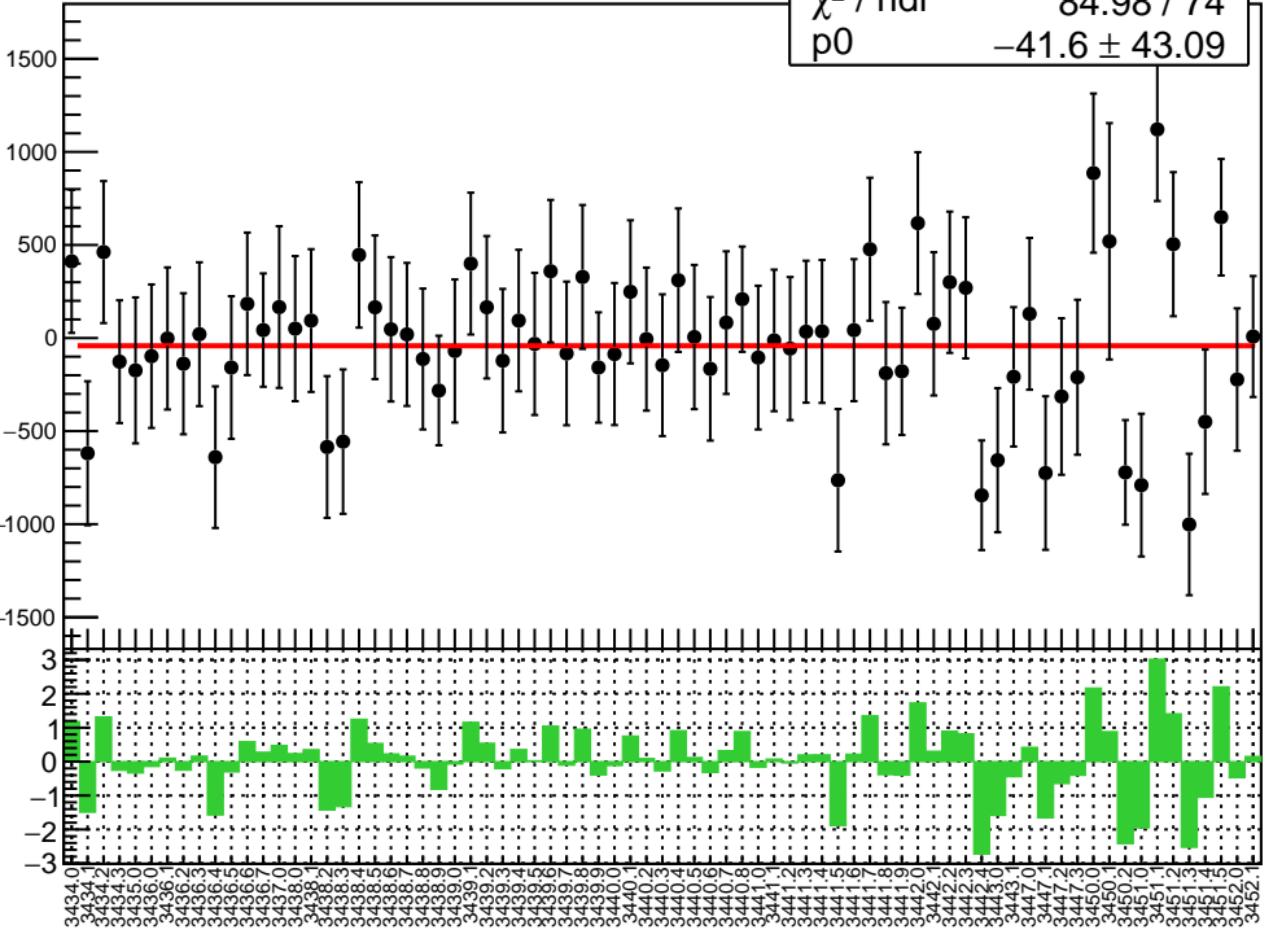
corr_usr_bpm4eX RMS (ppm)

RMS (ppm)

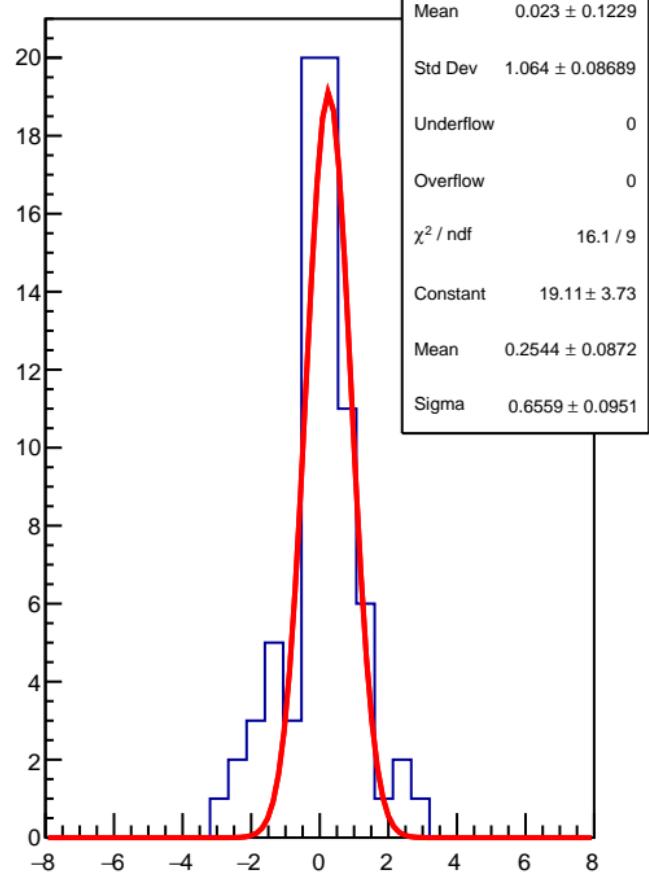


corr_usr_bpm4eY (ppb)

χ^2 / ndf 84.98 / 74
p0 -41.6 ± 43.09

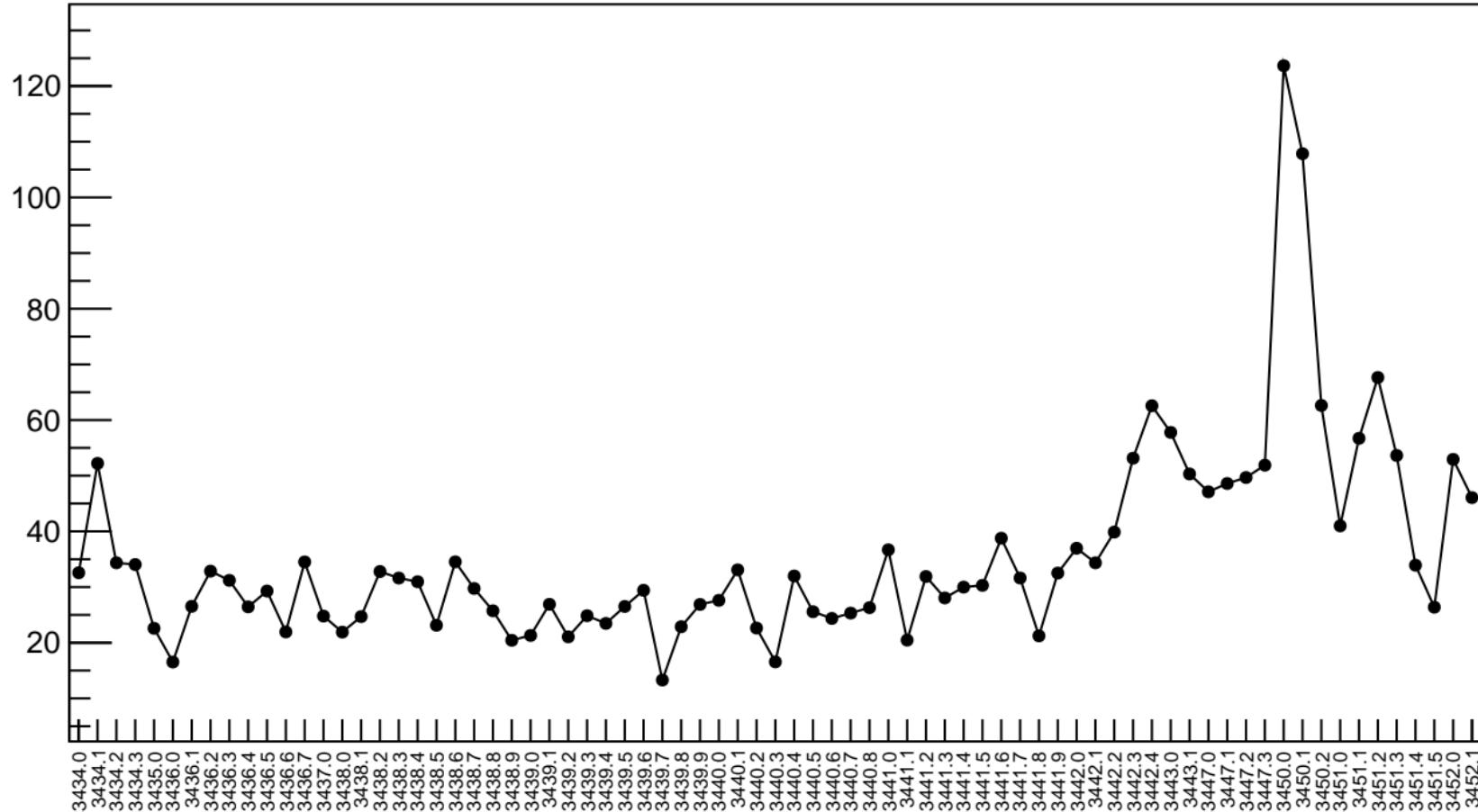


1D pull distribution

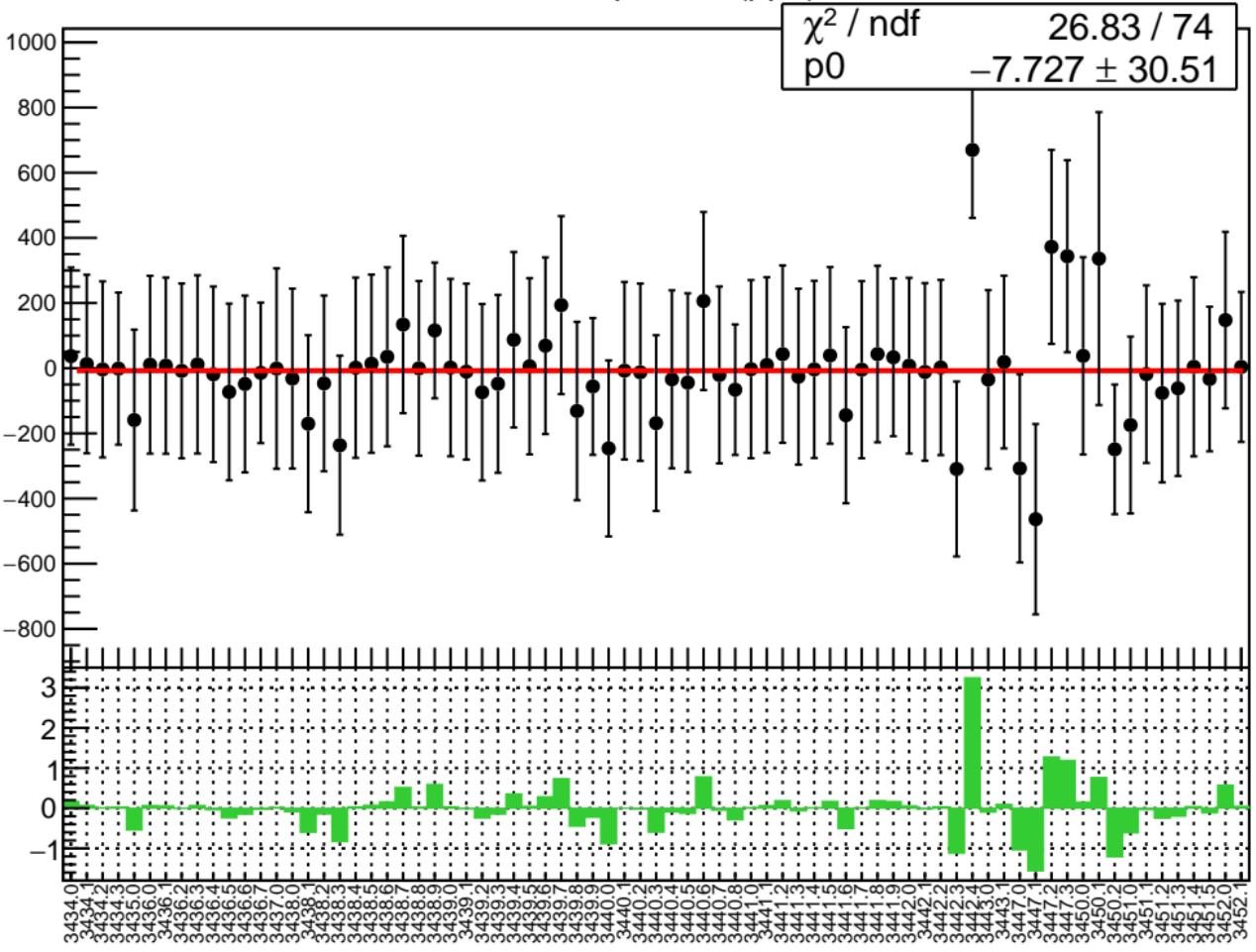


corr_usr_bpm4eY RMS (ppm)

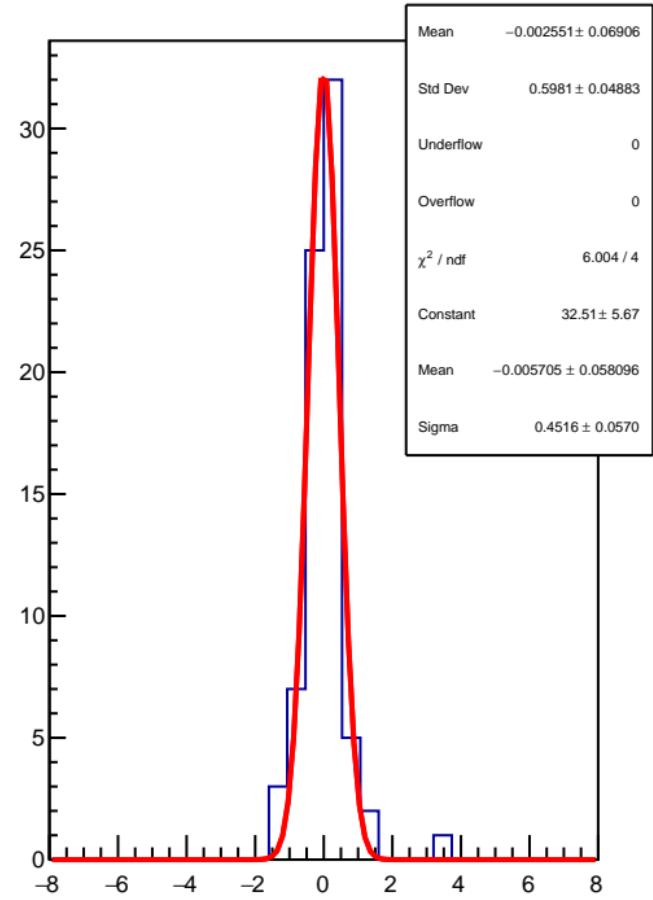
RMS (ppm)



corr_usr_bpm4aX (ppb)

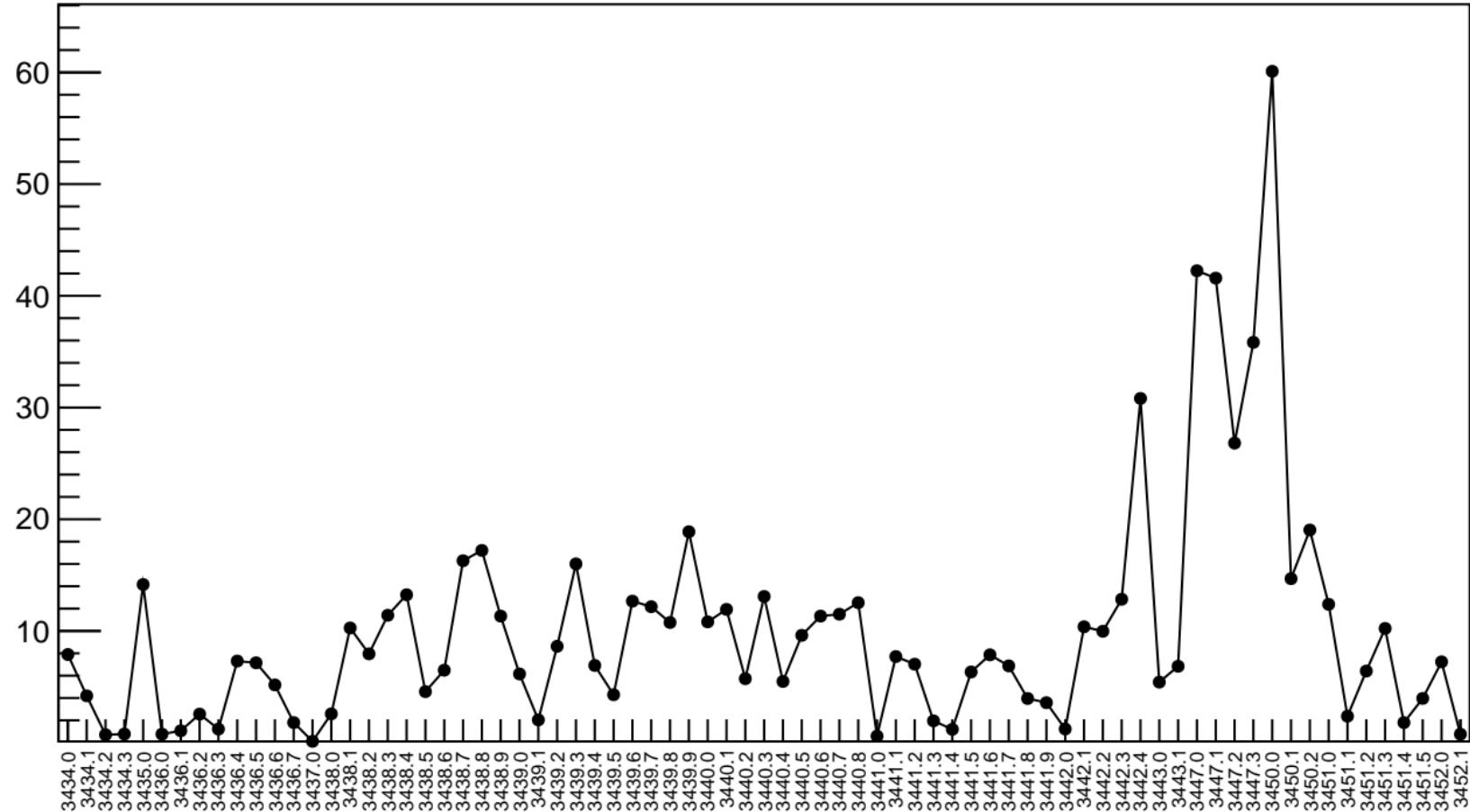


1D pull distribution



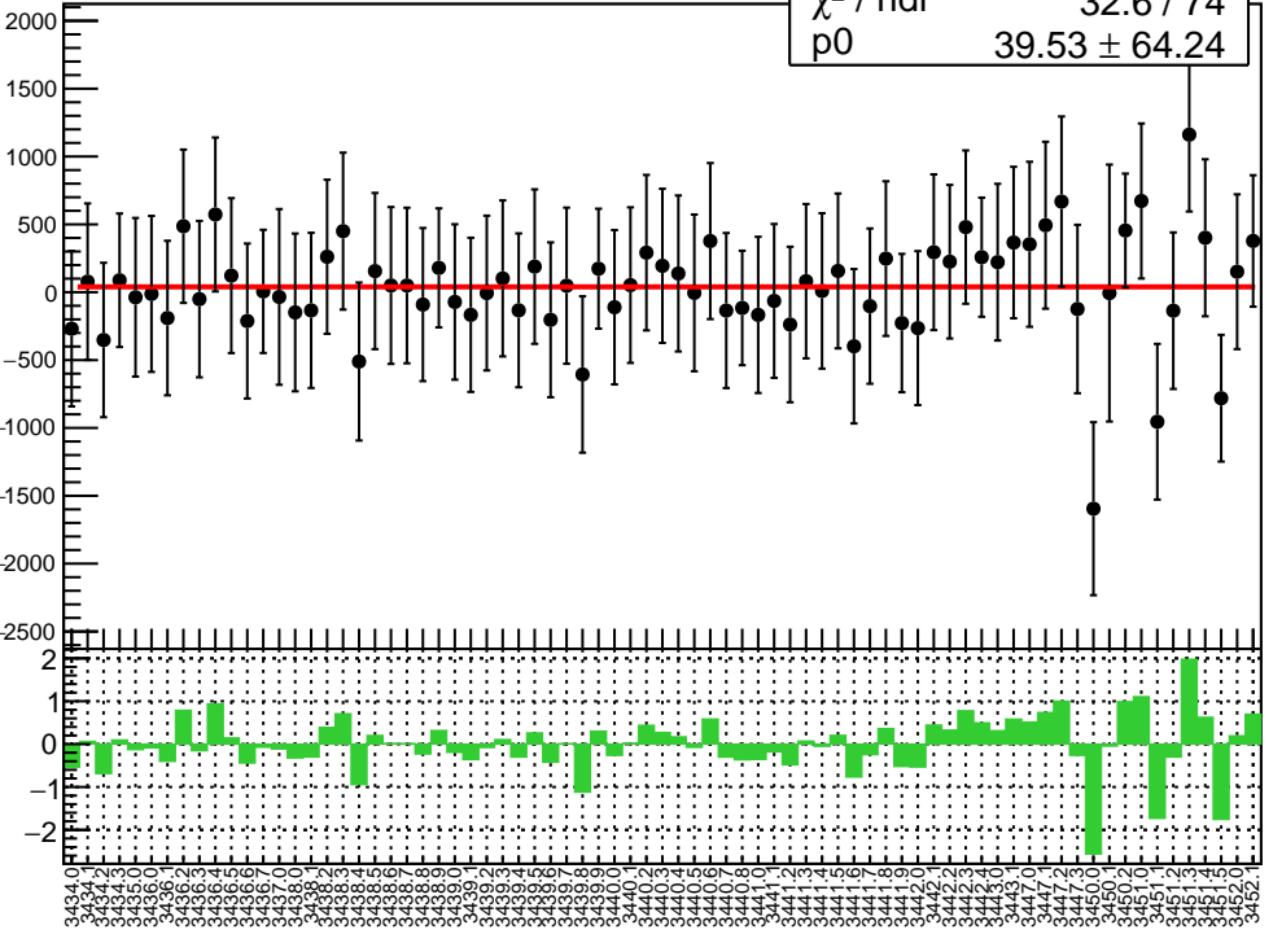
corr_usr_bpm4aX RMS (ppm)

RMS (ppm)

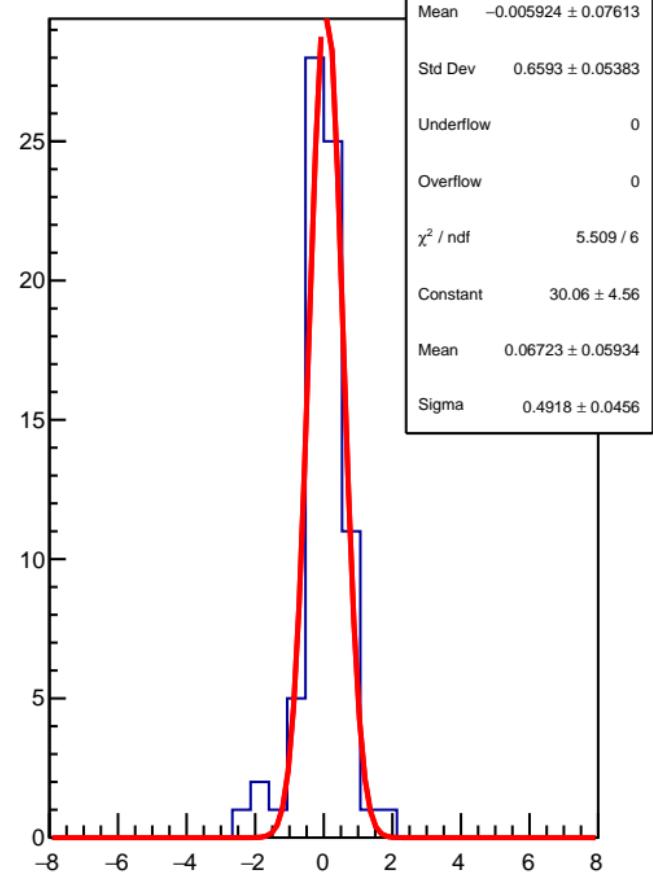


corr_usr_bpm4aY (ppb)

χ^2 / ndf 32.6 / 74
p0 39.53 ± 64.24

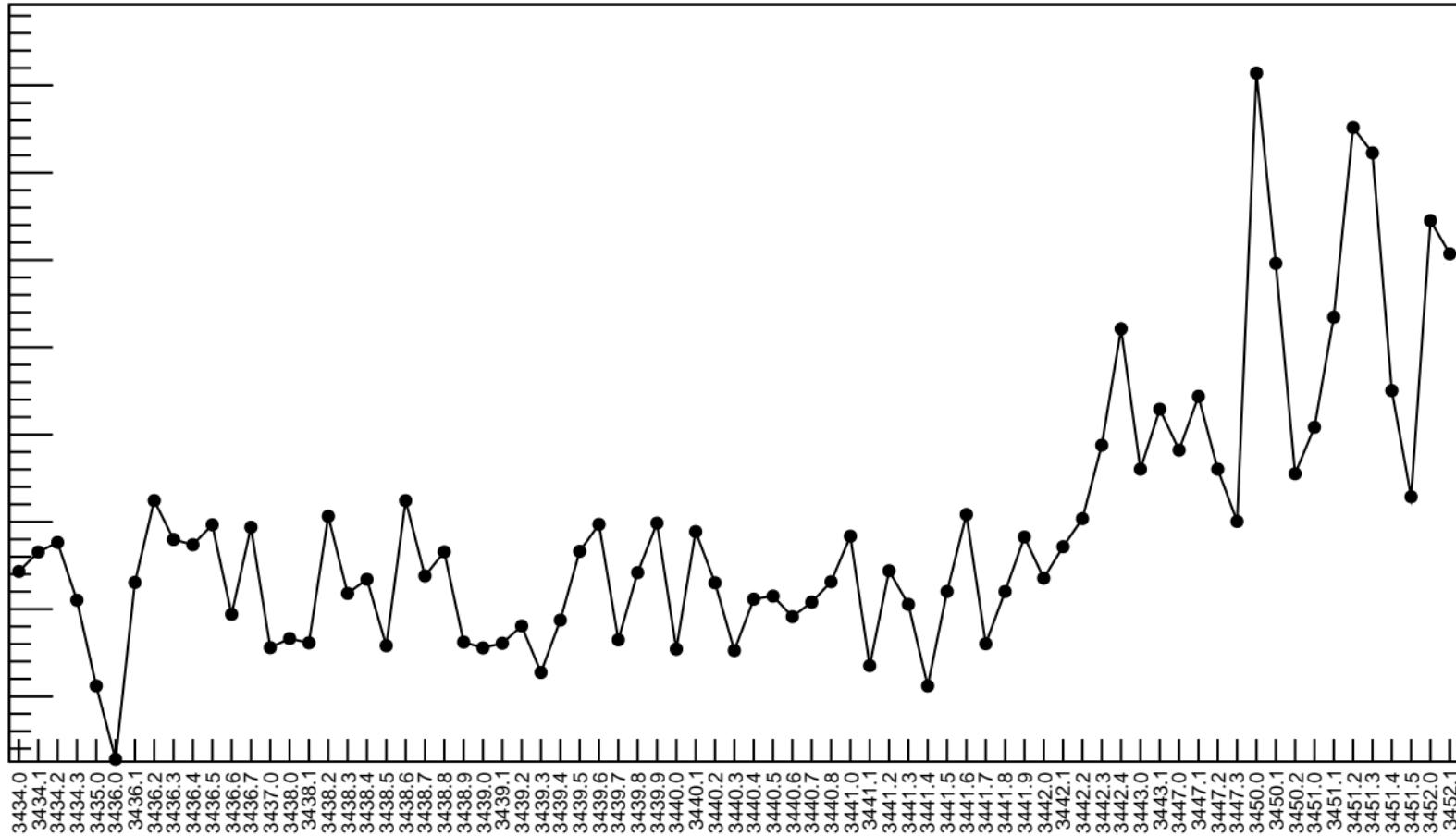


1D pull distribution

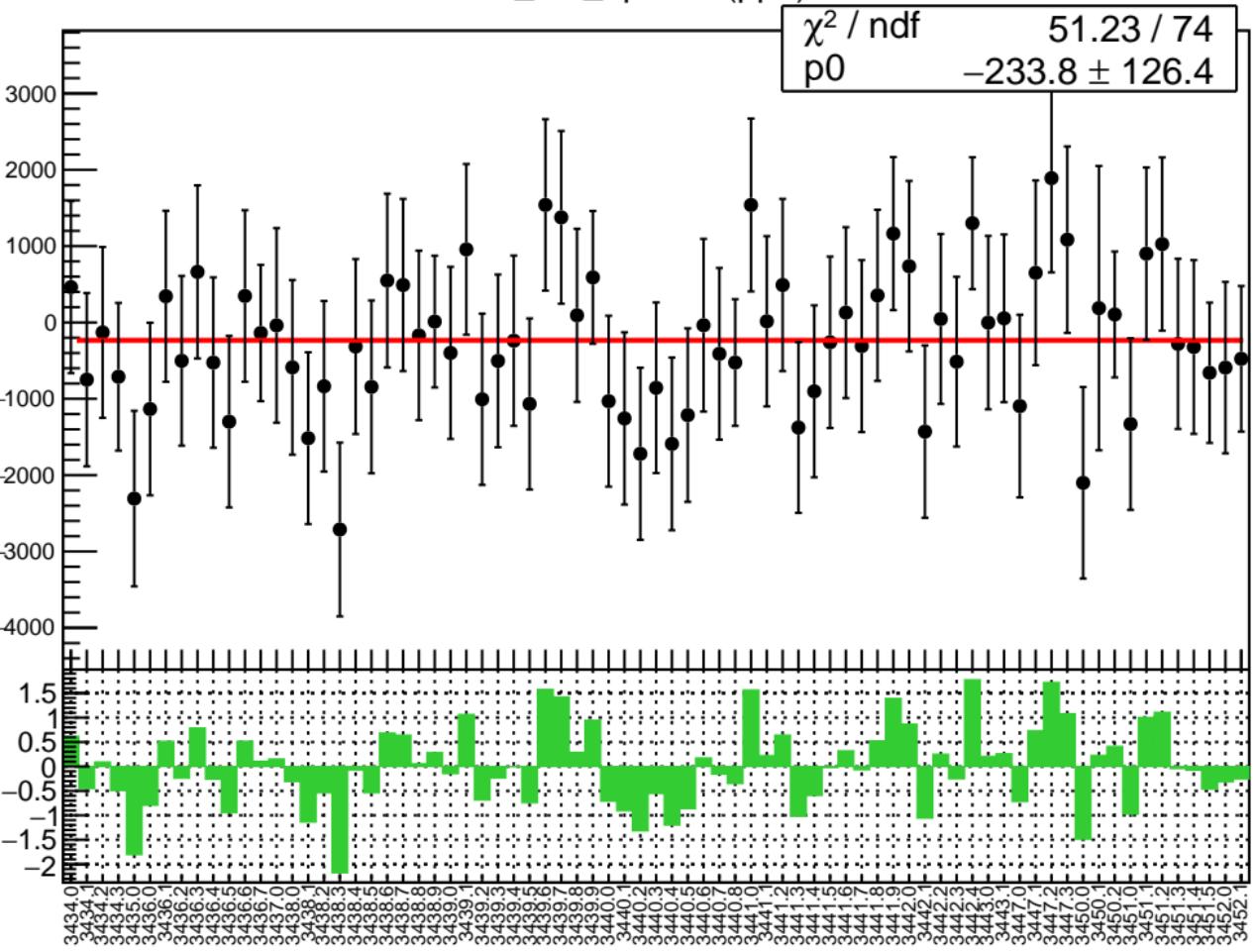


corr_usr_bpm4aY RMS (ppm)

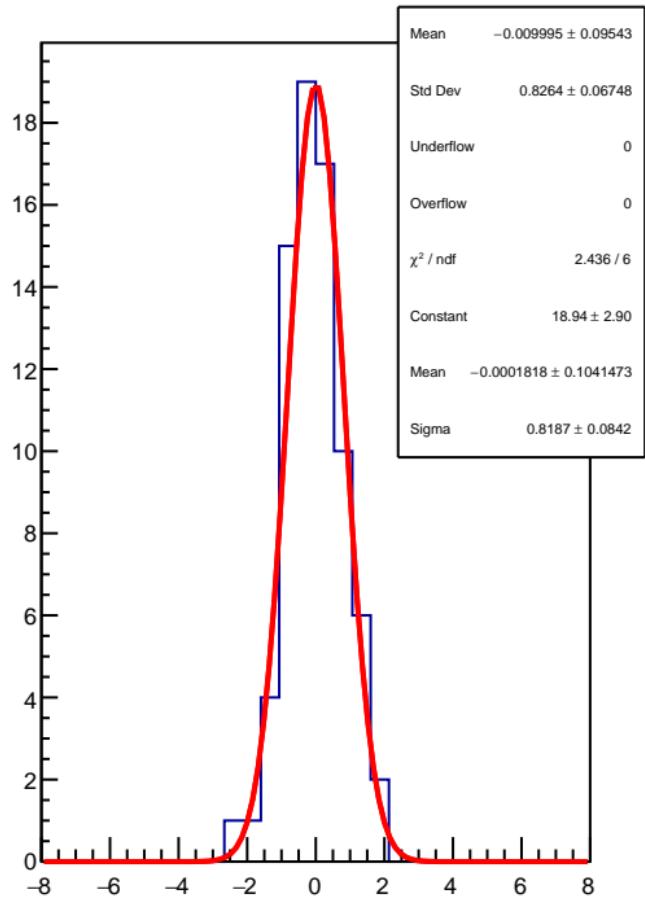
RMS (ppm)



corr_usr_bpm1X (ppb)

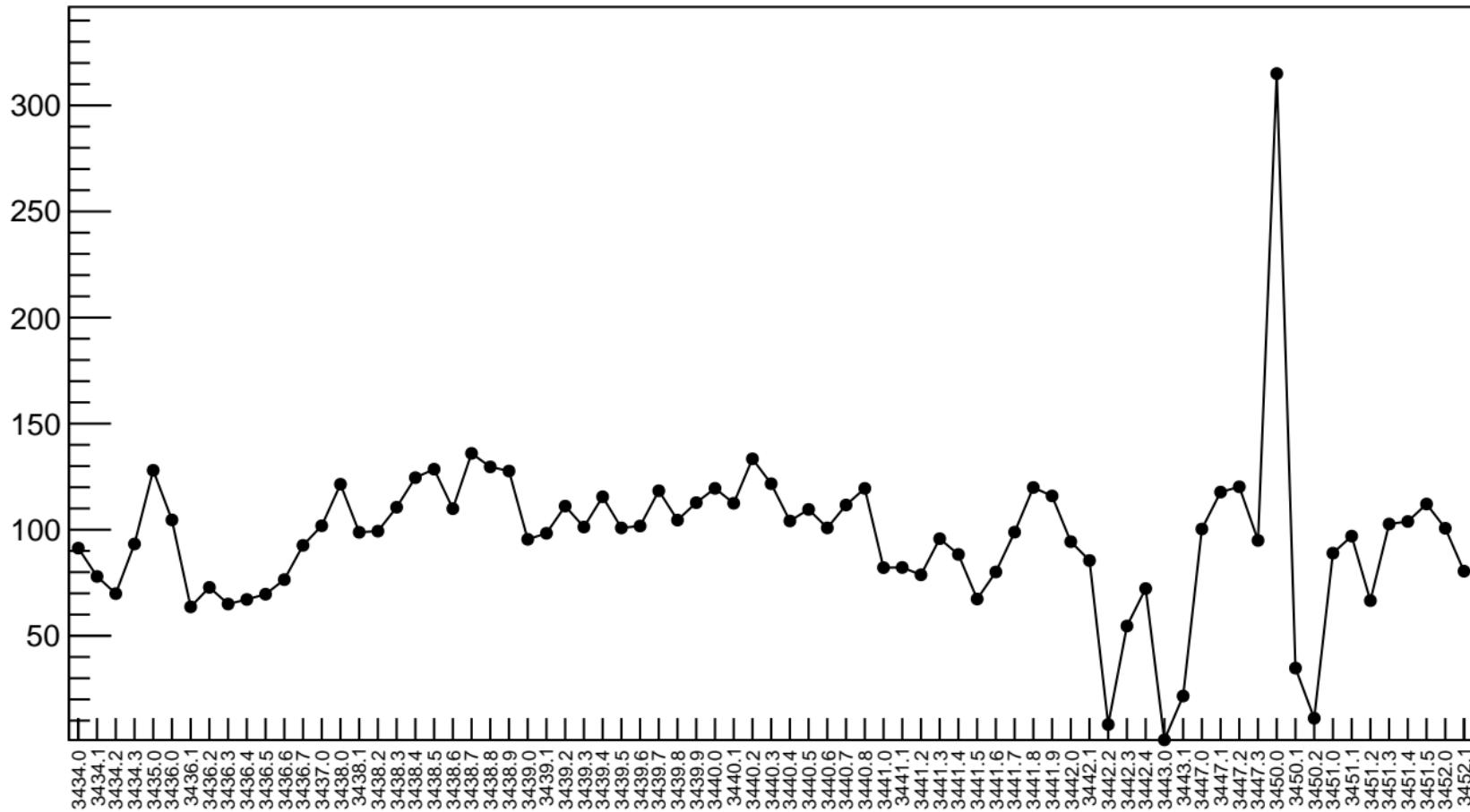


1D pull distribution

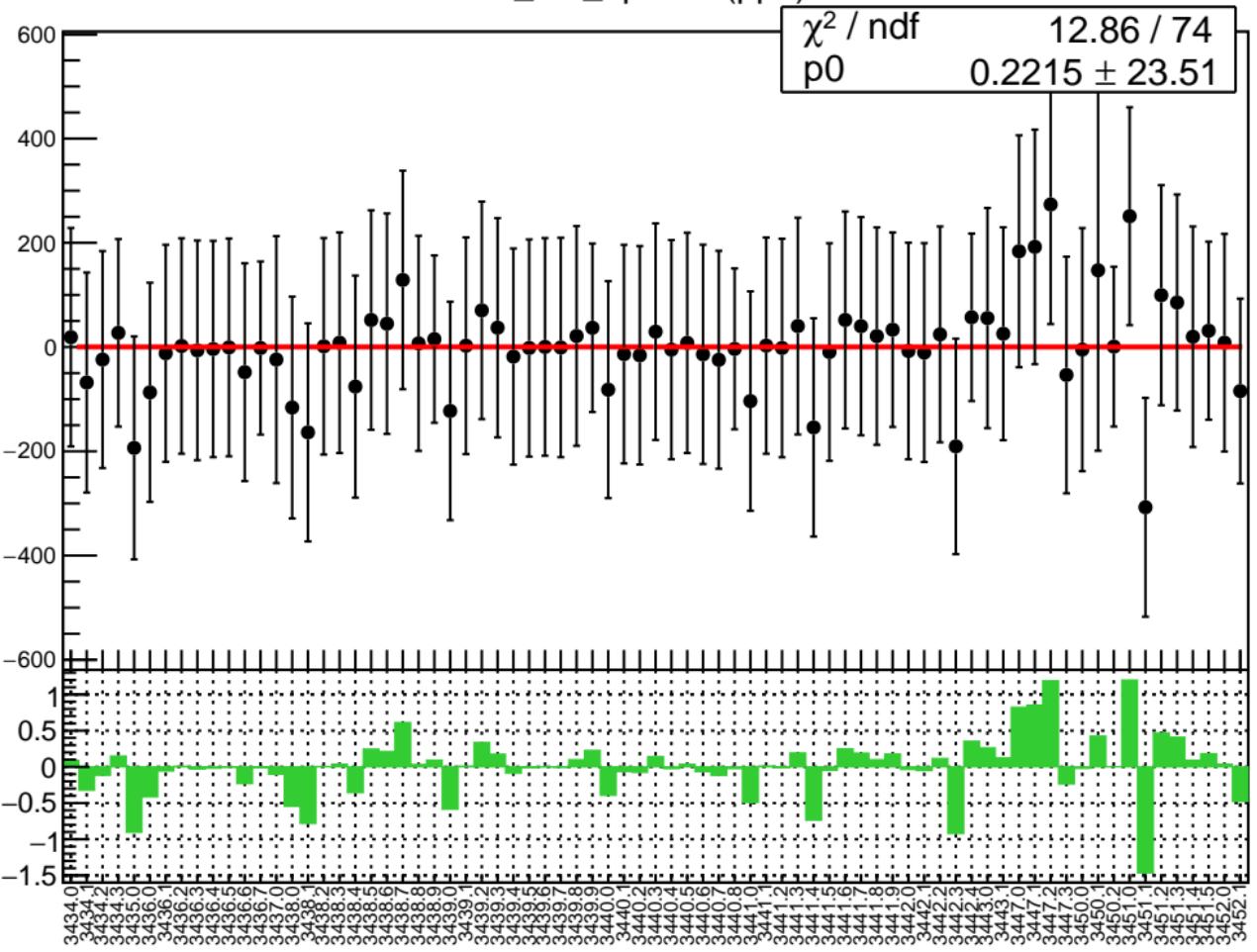


corr_usr_bpm1X RMS (ppm)

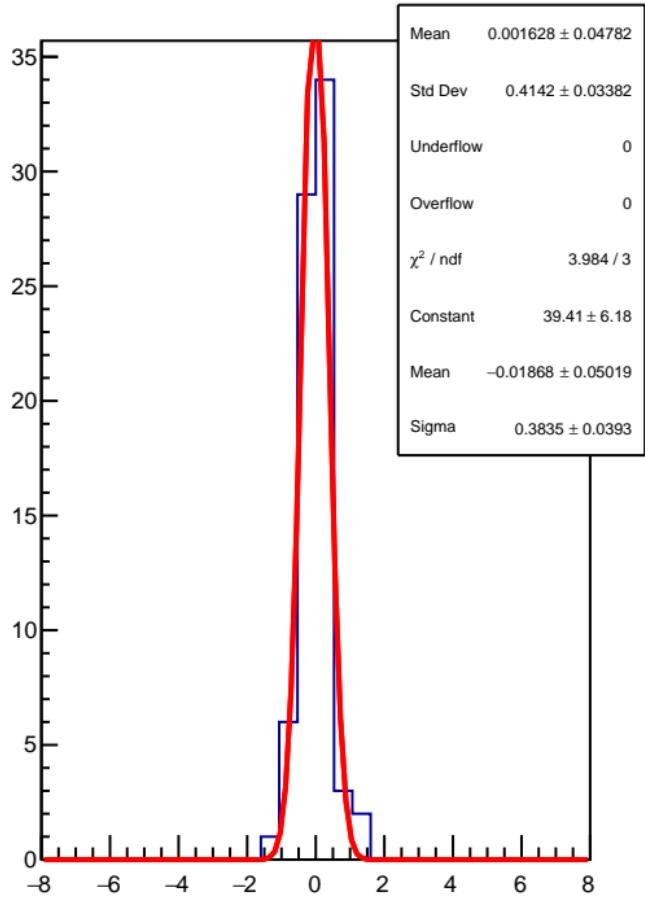
RMS (ppm)



corr_usr_bpm1Y (ppb)



1D pull distribution



corr_usr_bpm1Y RMS (ppm)

RMS (ppm)

25

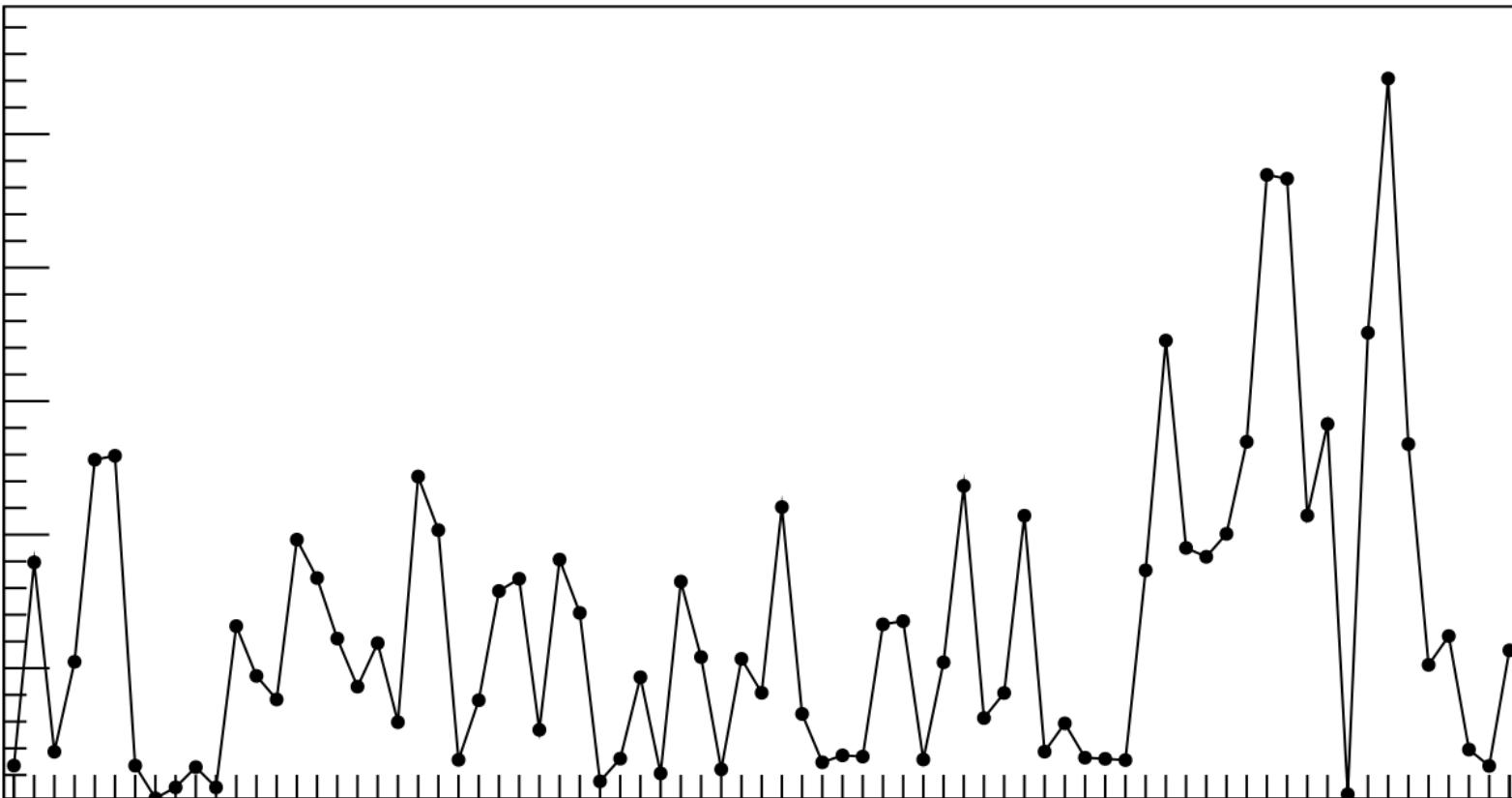
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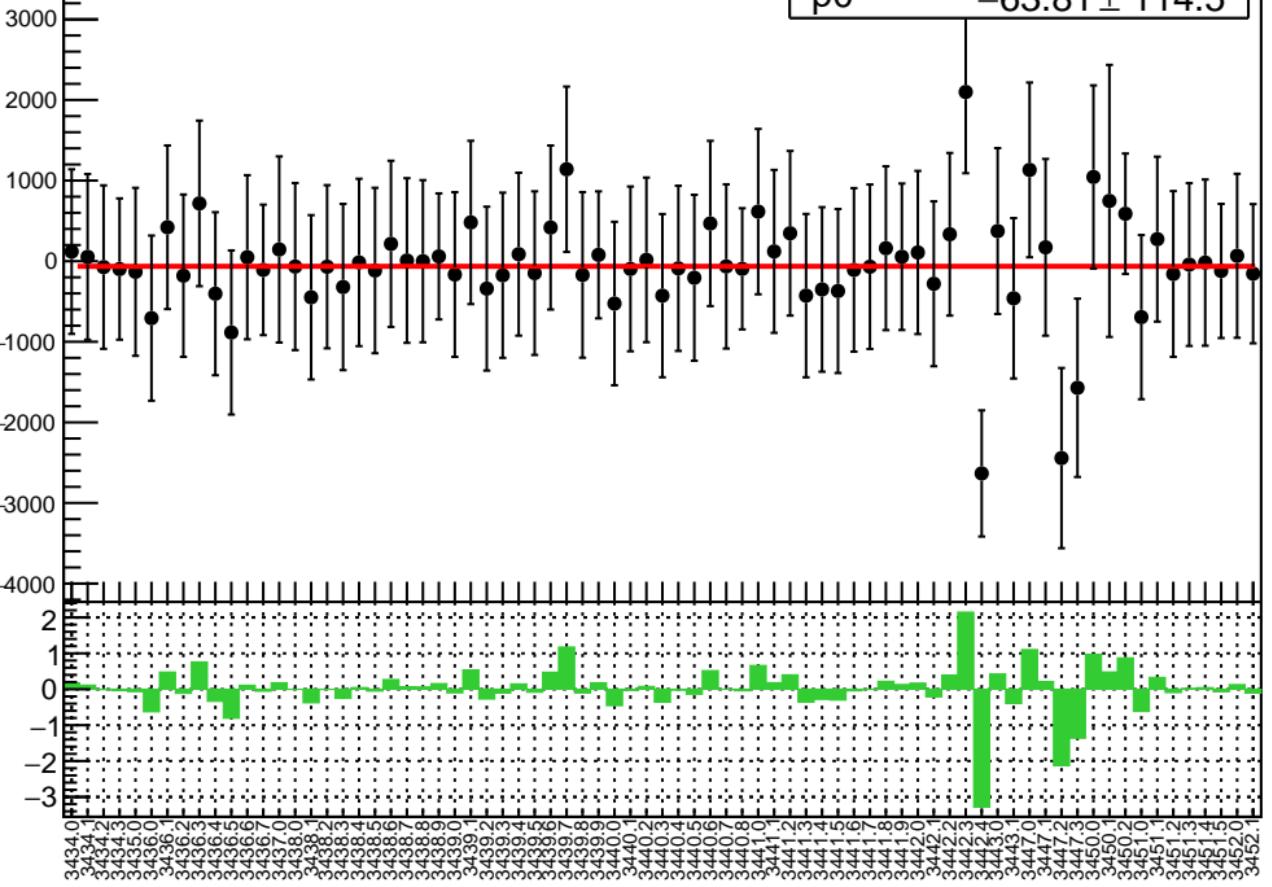
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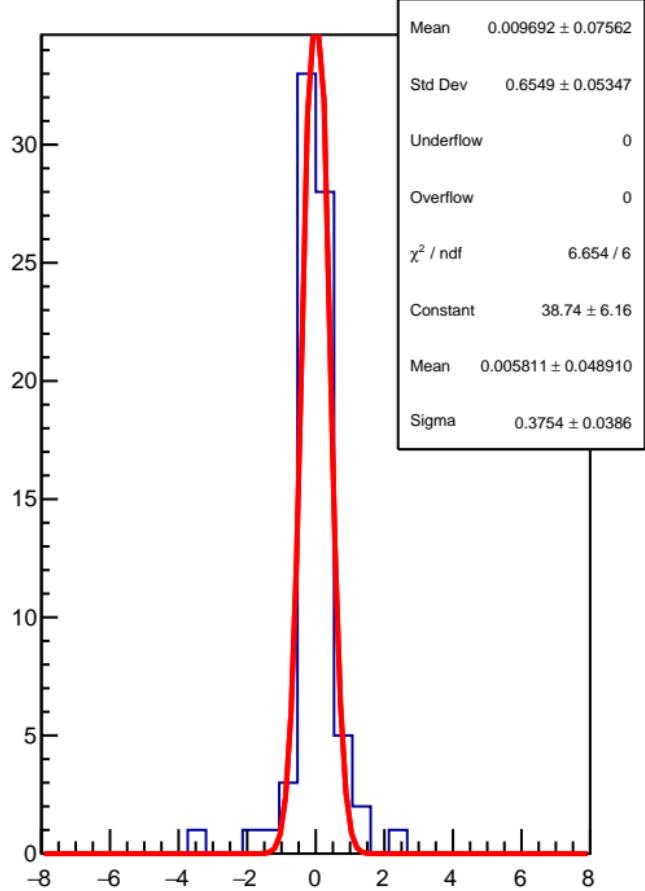


corr_usr_bpm16X (ppb)

χ^2 / ndf 32.18 / 74
p0 -63.81 ± 114.5

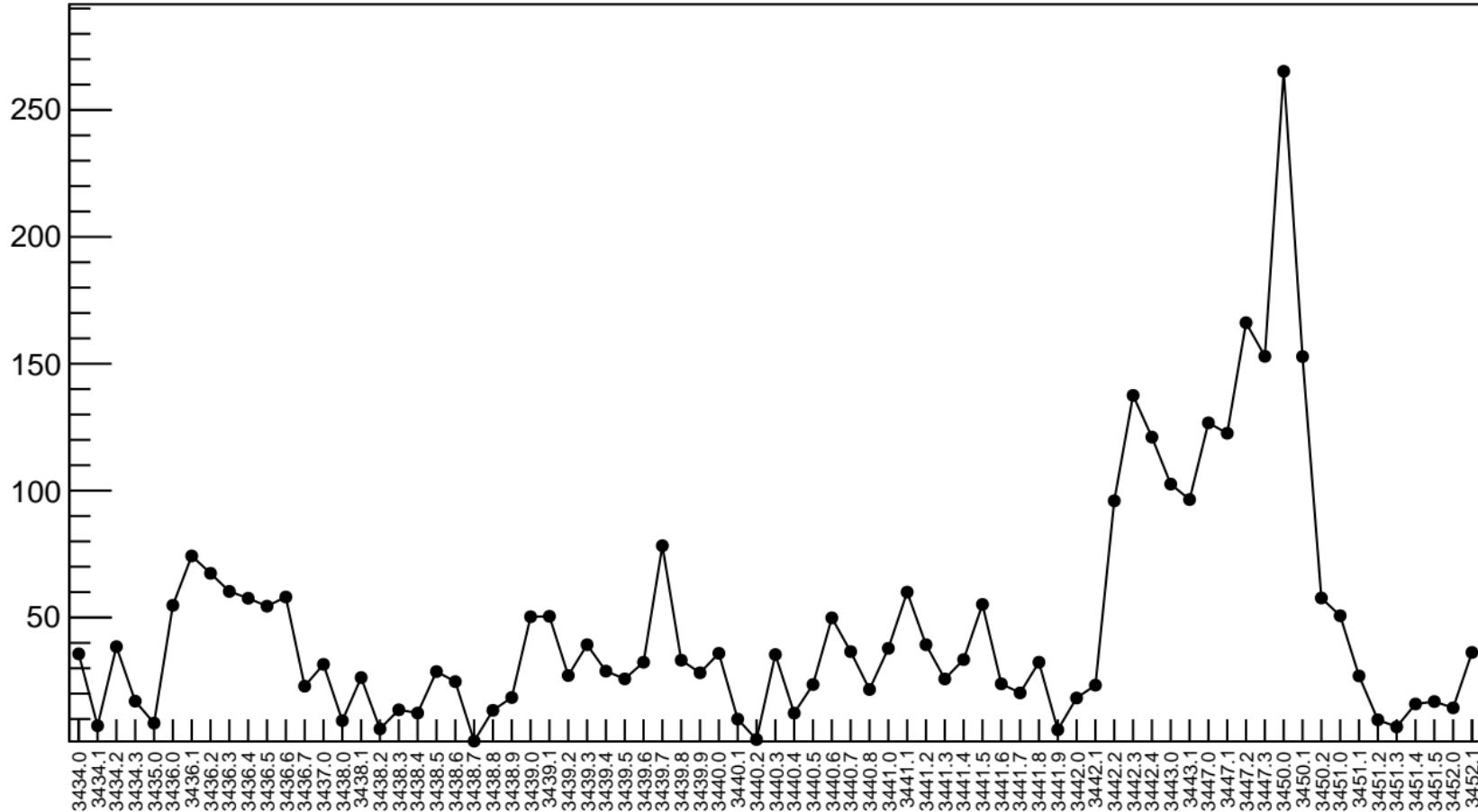


1D pull distribution



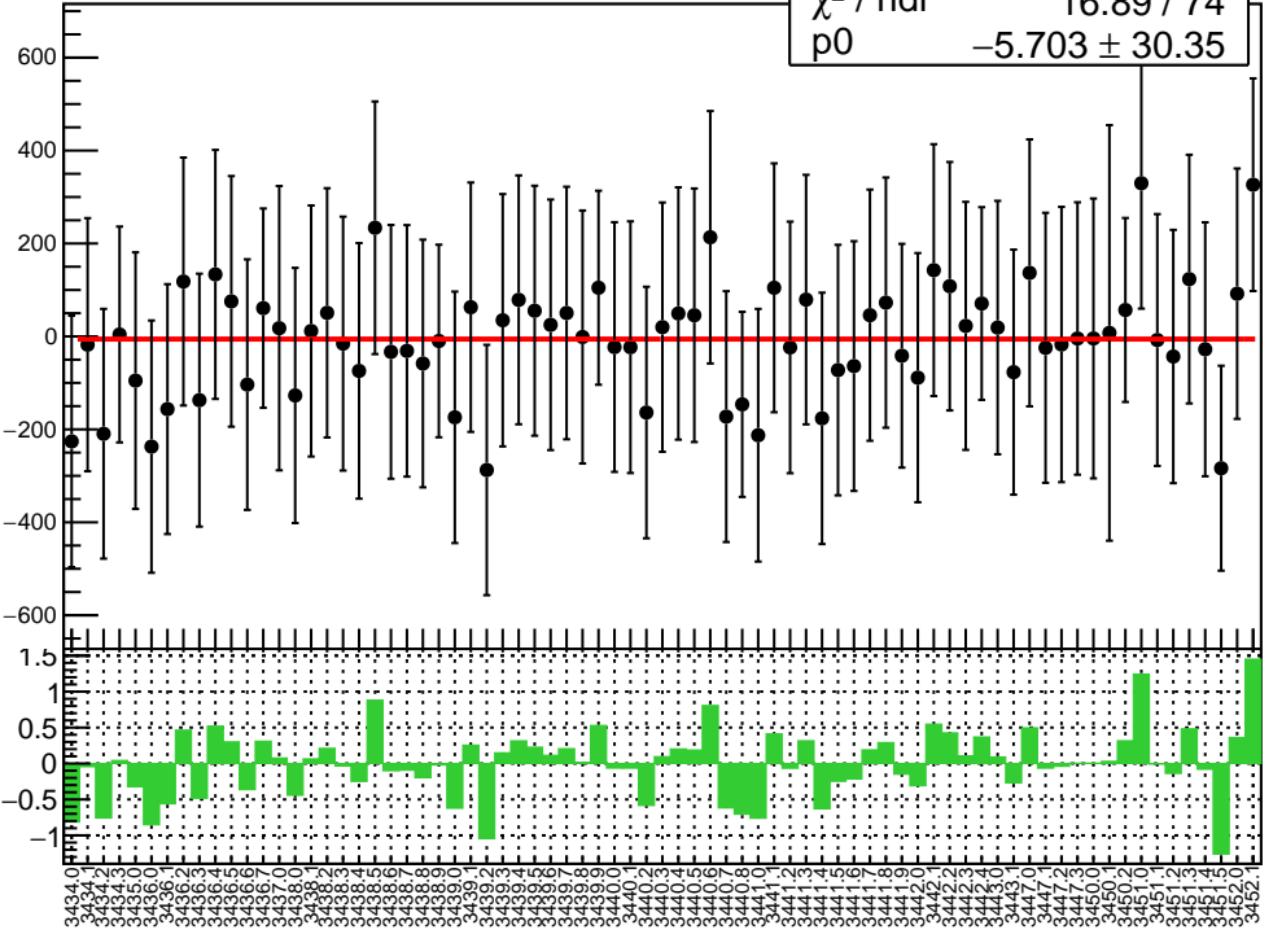
corr_usr_bpm16X RMS (ppm)

RMS (ppm)

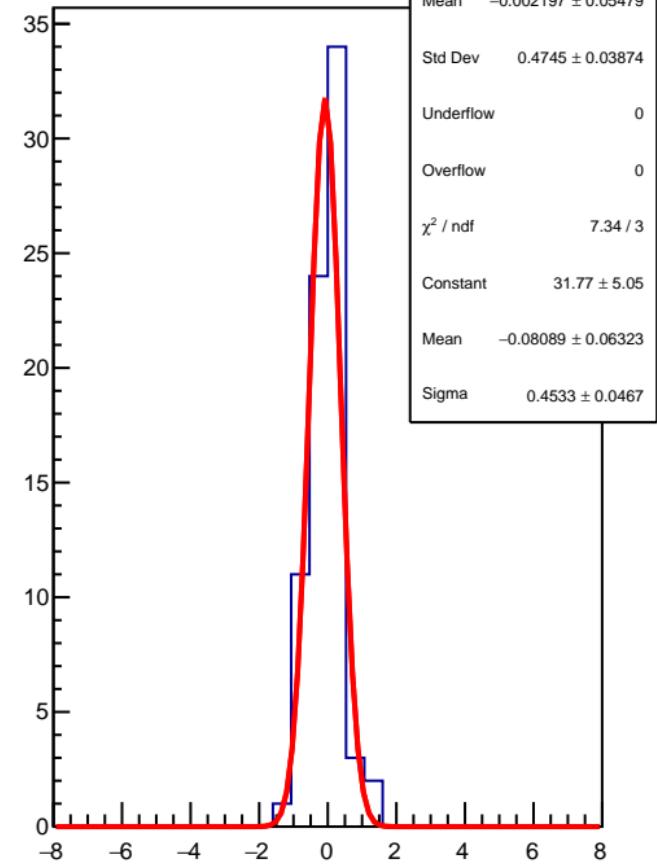


corr_usr_bpm16Y (ppb)

χ^2 / ndf 16.89 / 74
p0 -5.703 ± 30.35

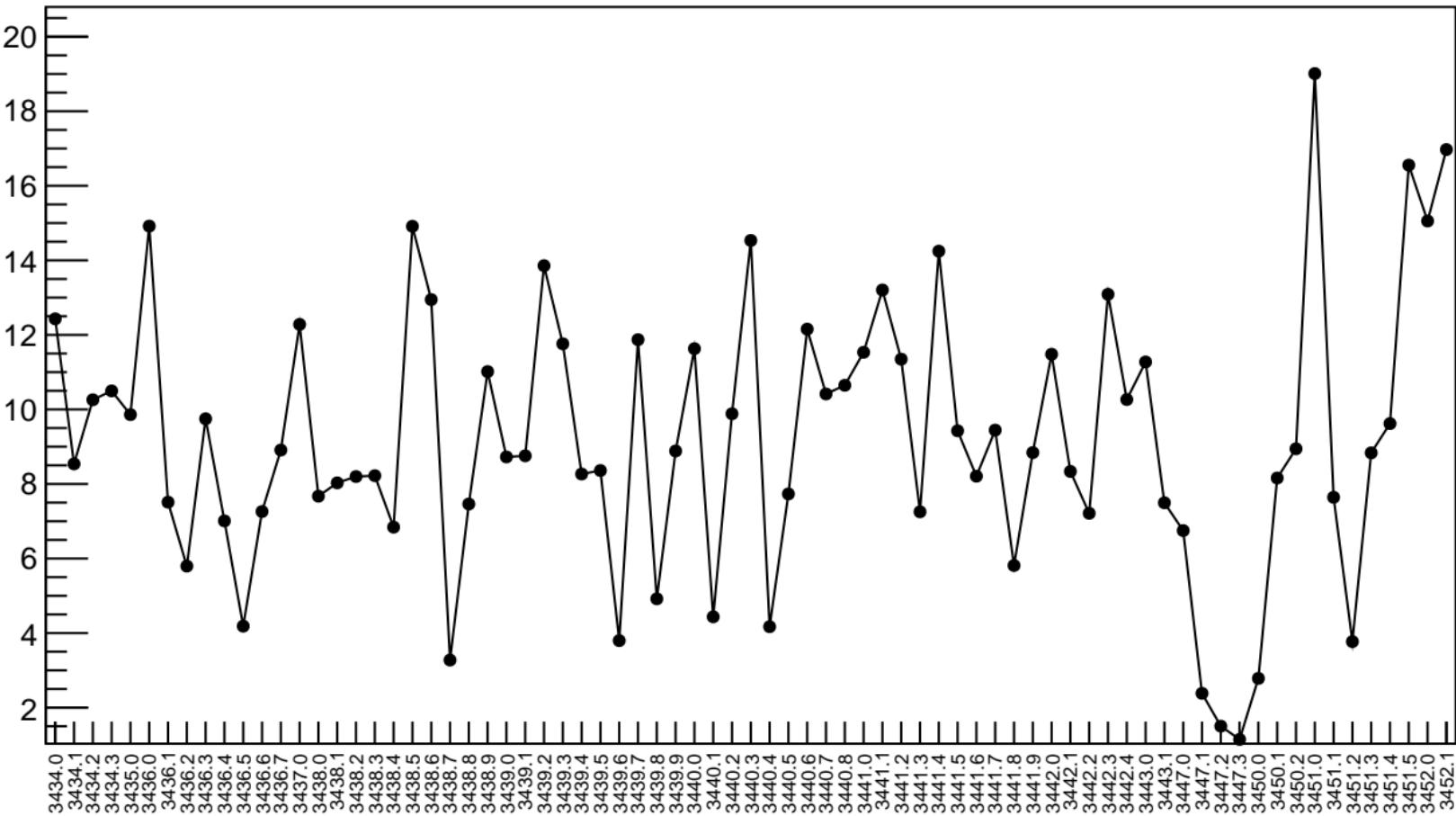


1D pull distribution



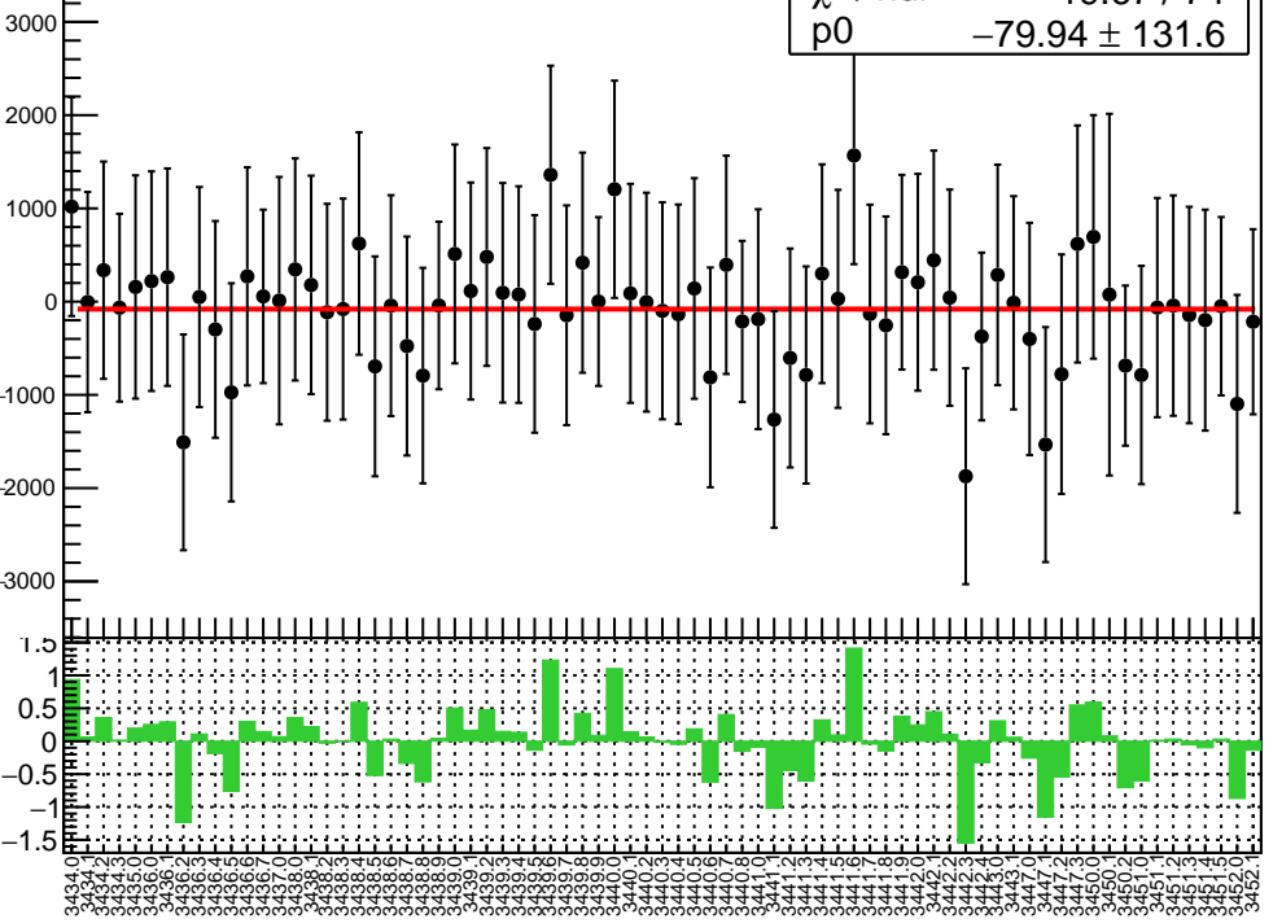
corr_usr_bpm16Y RMS (ppm)

RMS (ppm)



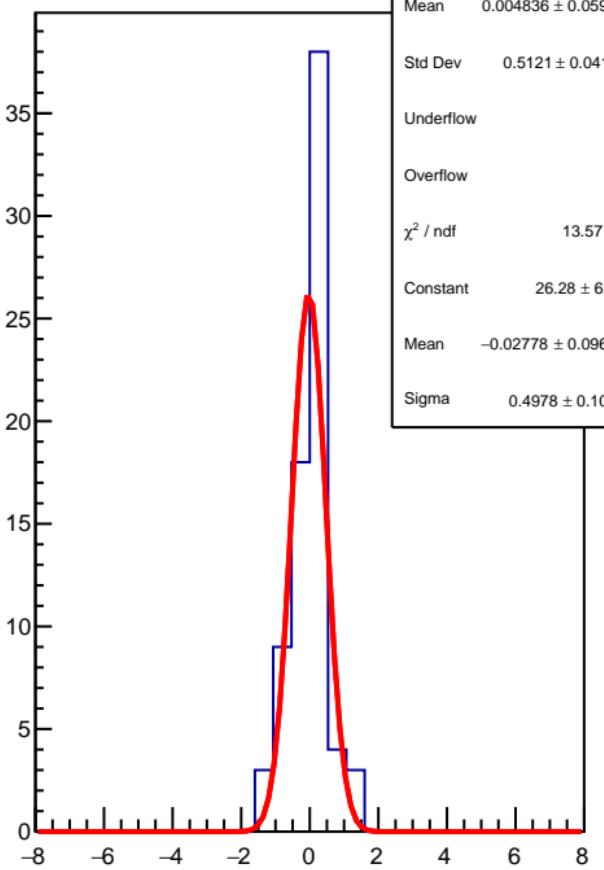
corr_usr_bpm12X (ppb)

χ^2 / ndf 19.67 / 74
p0 -79.94 ± 131.6



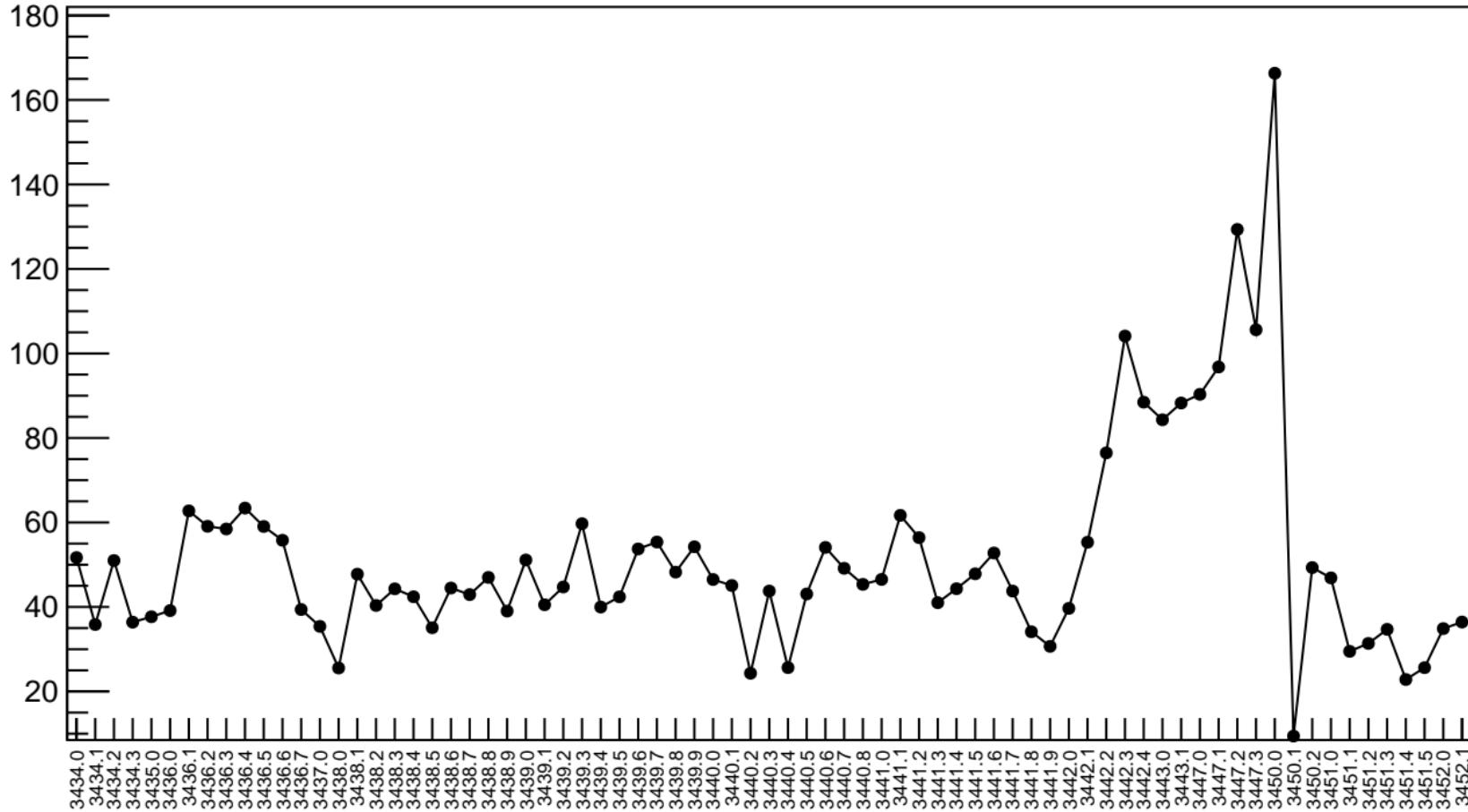
1D pull distribution

Mean 0.004836 ± 0.05913
Std Dev 0.5121 ± 0.04181
Underflow 0
Overflow 0
 χ^2 / ndf 13.57 / 3
Constant 26.28 ± 6.29
Mean -0.02778 ± 0.09657
Sigma 0.4978 ± 0.1019



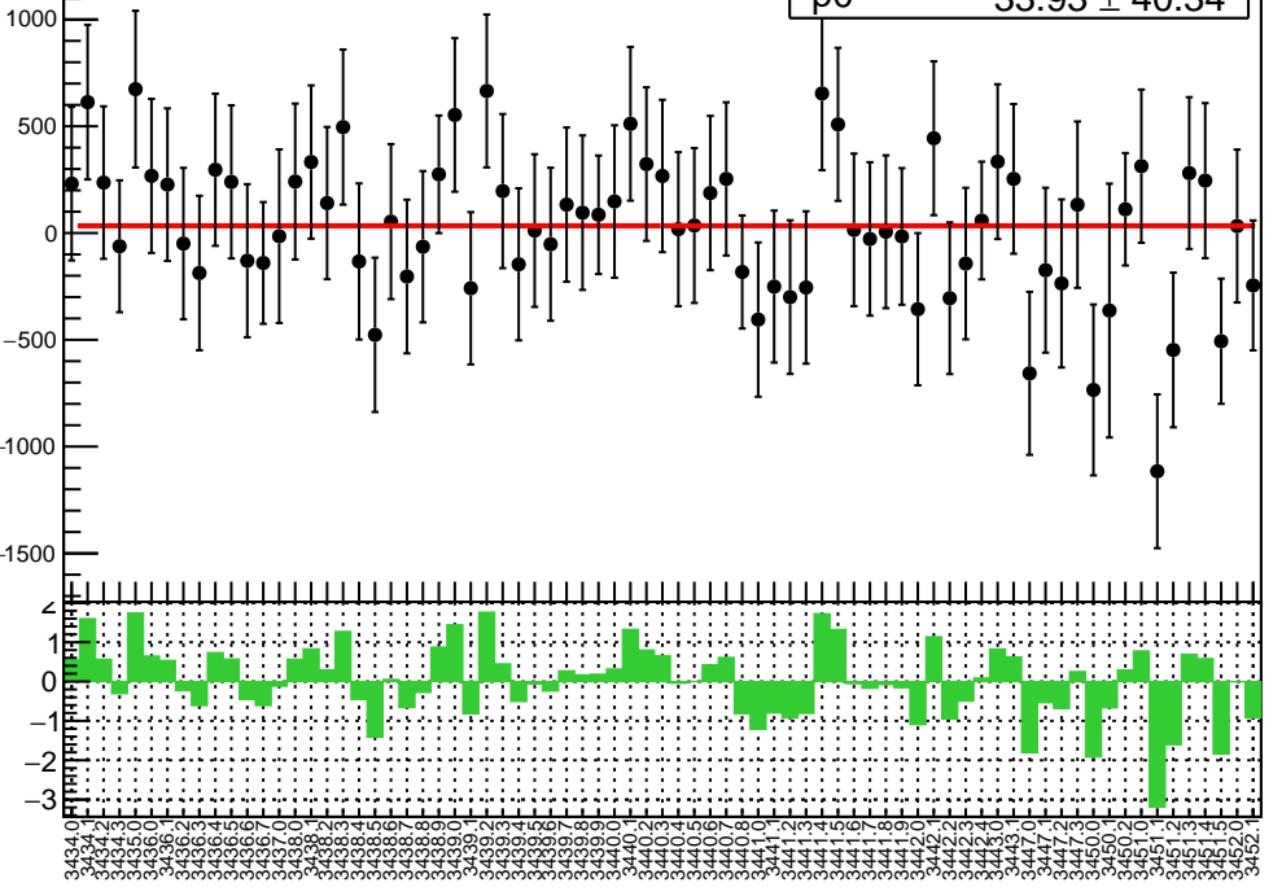
corr_usr_bpm12X RMS (ppm)

RMS (ppm)

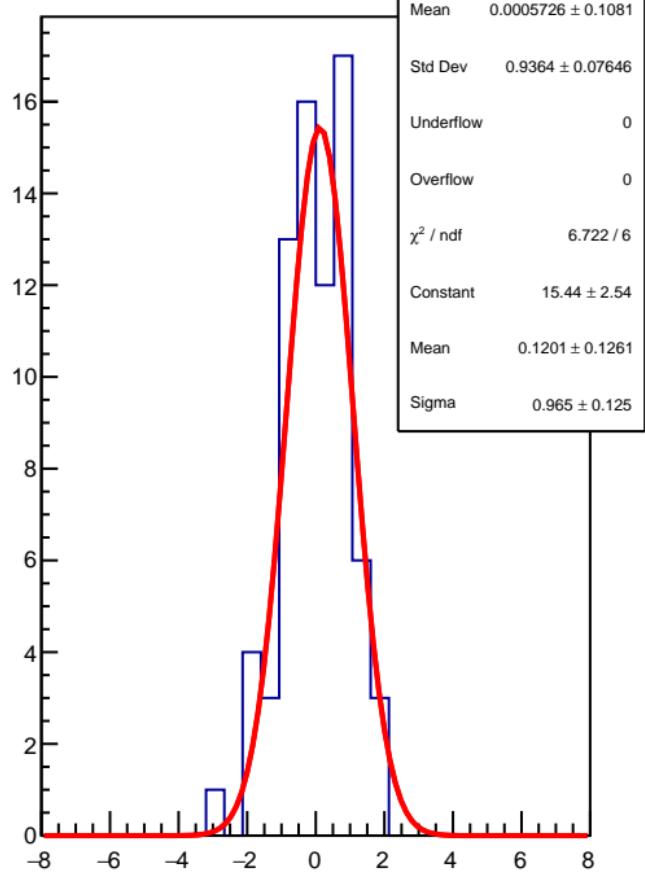


corr_usr_bpm12Y (ppb)

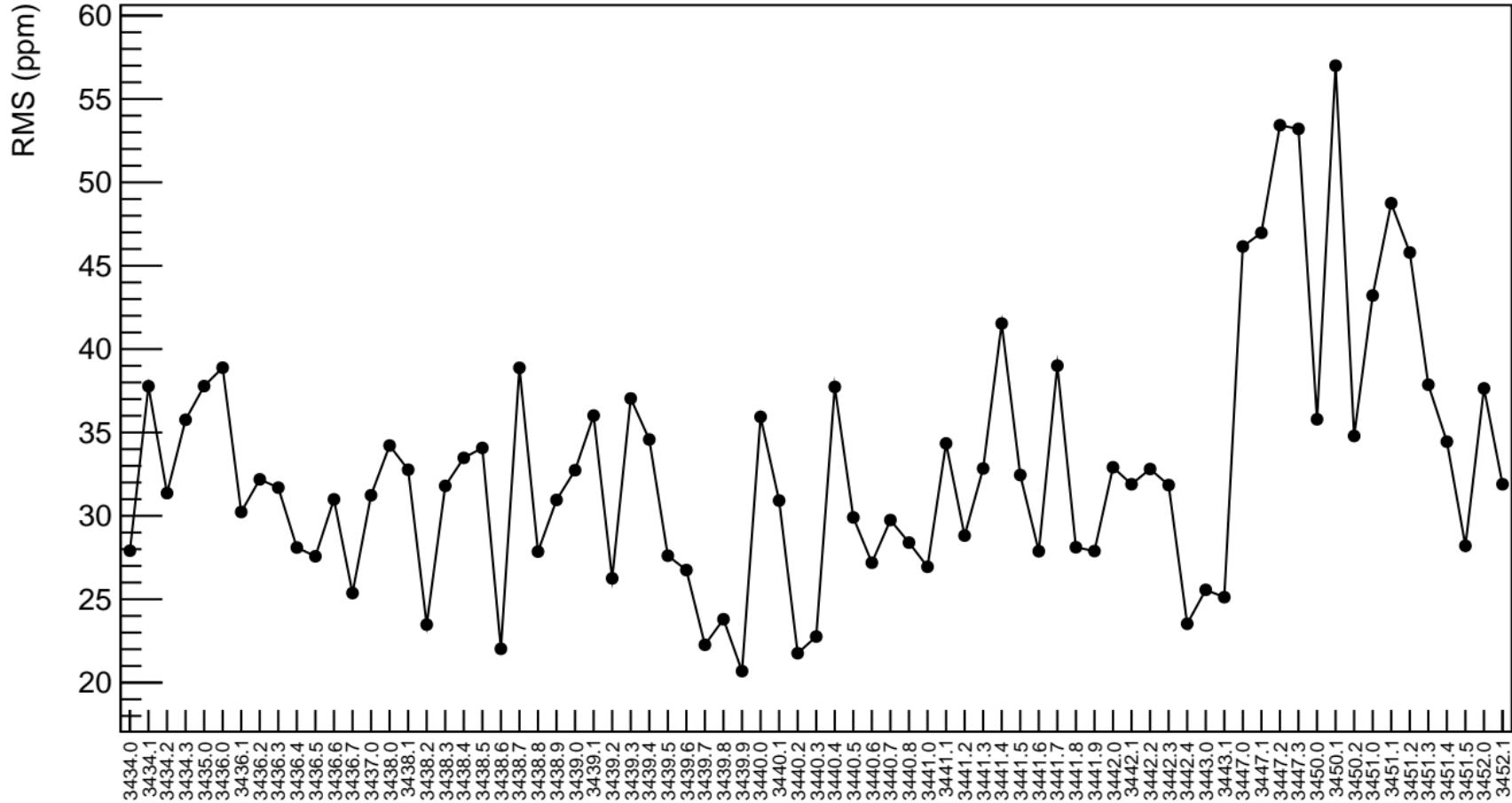
χ^2 / ndf 65.77 / 74
 p_0 33.93 ± 40.34



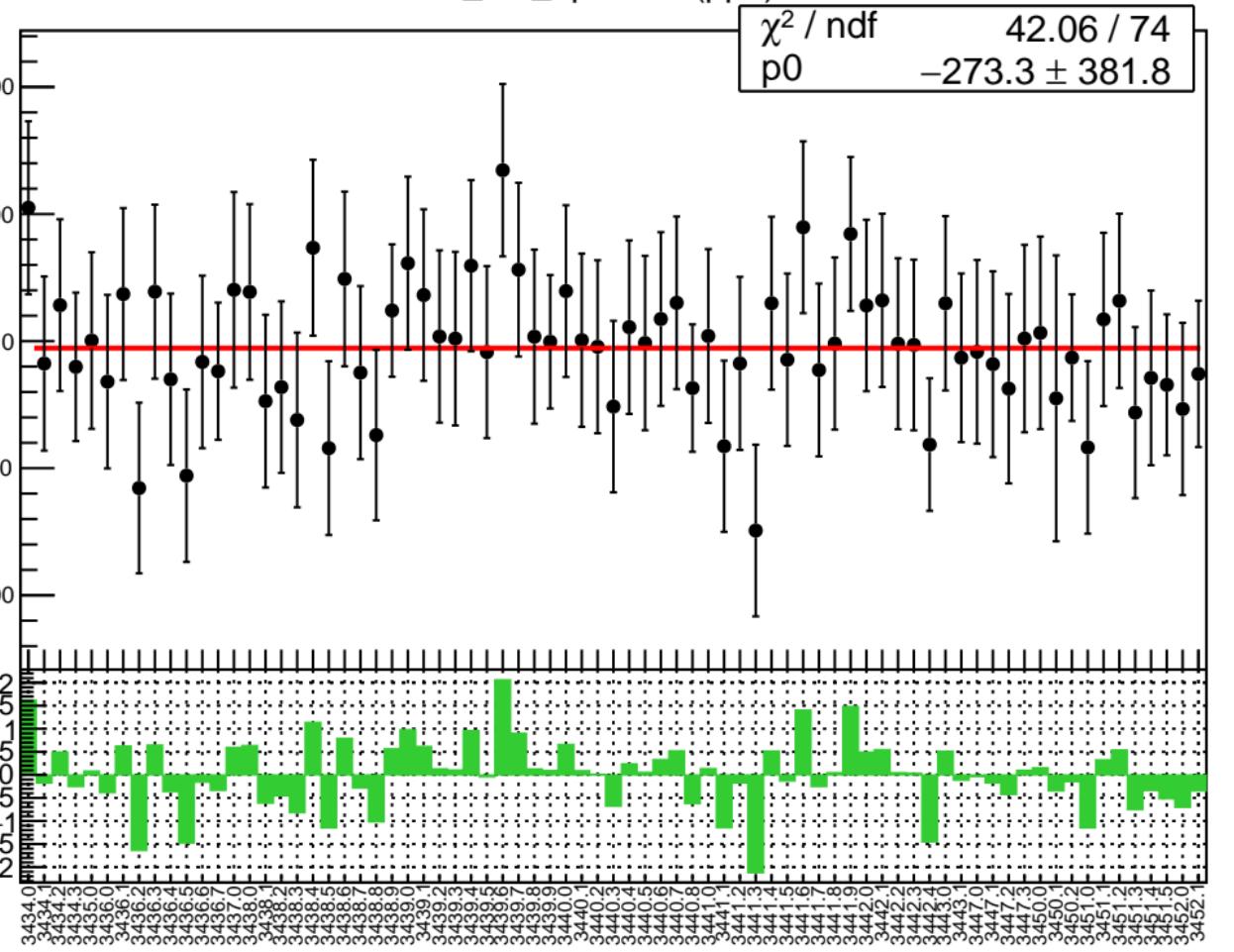
1D pull distribution



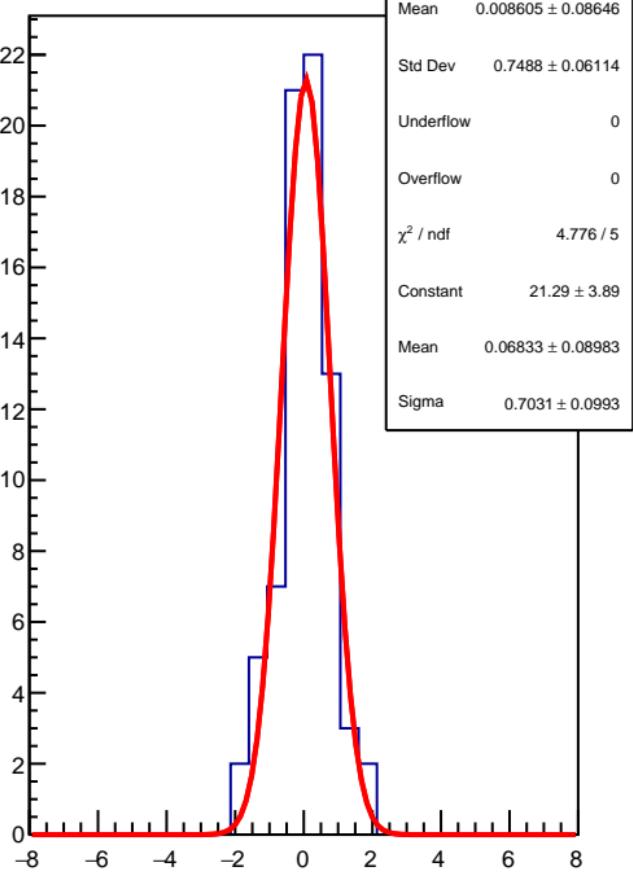
corr_usr_bpm12Y RMS (ppm)



corr_usr_bpm11X (ppb)

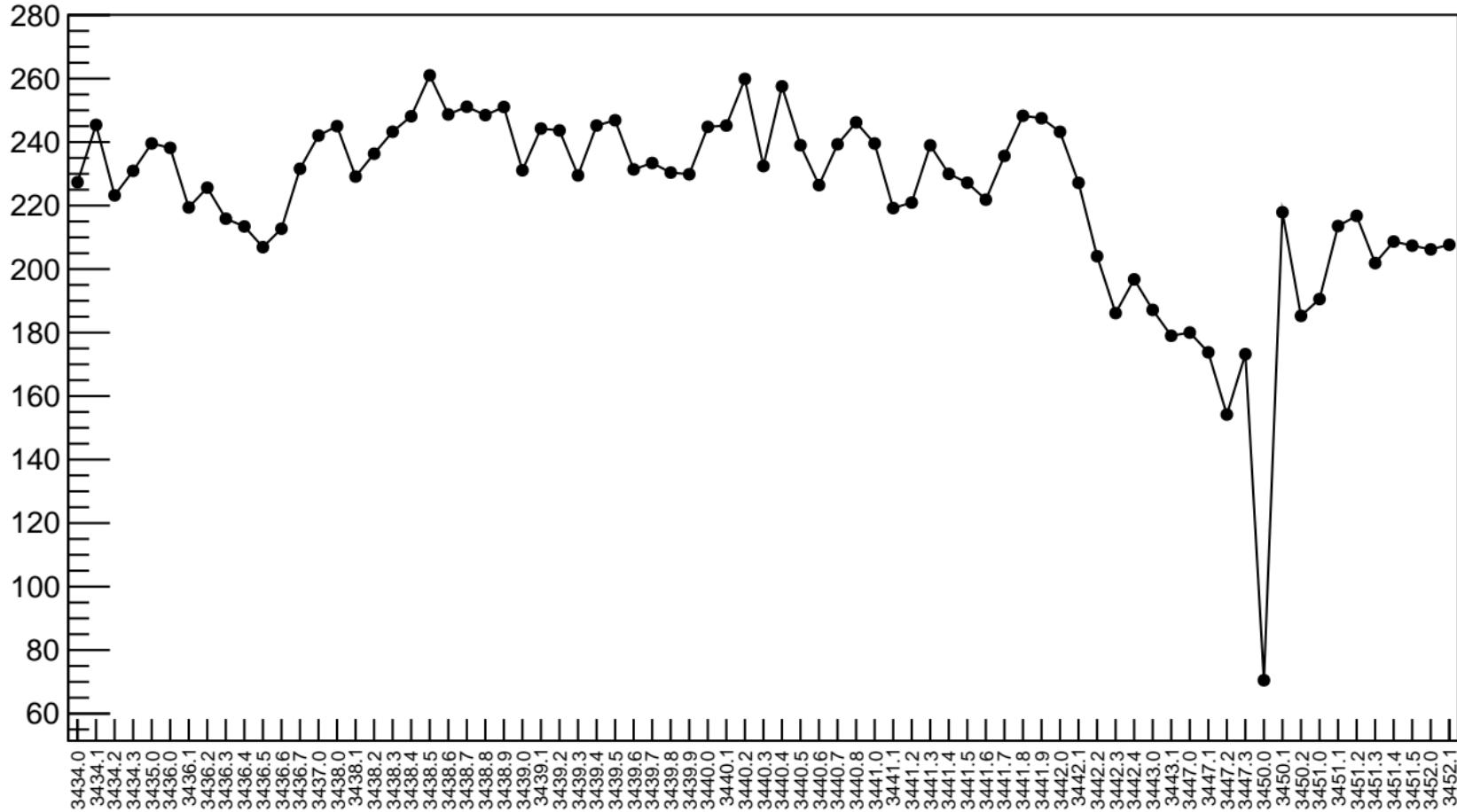


1D pull distribution



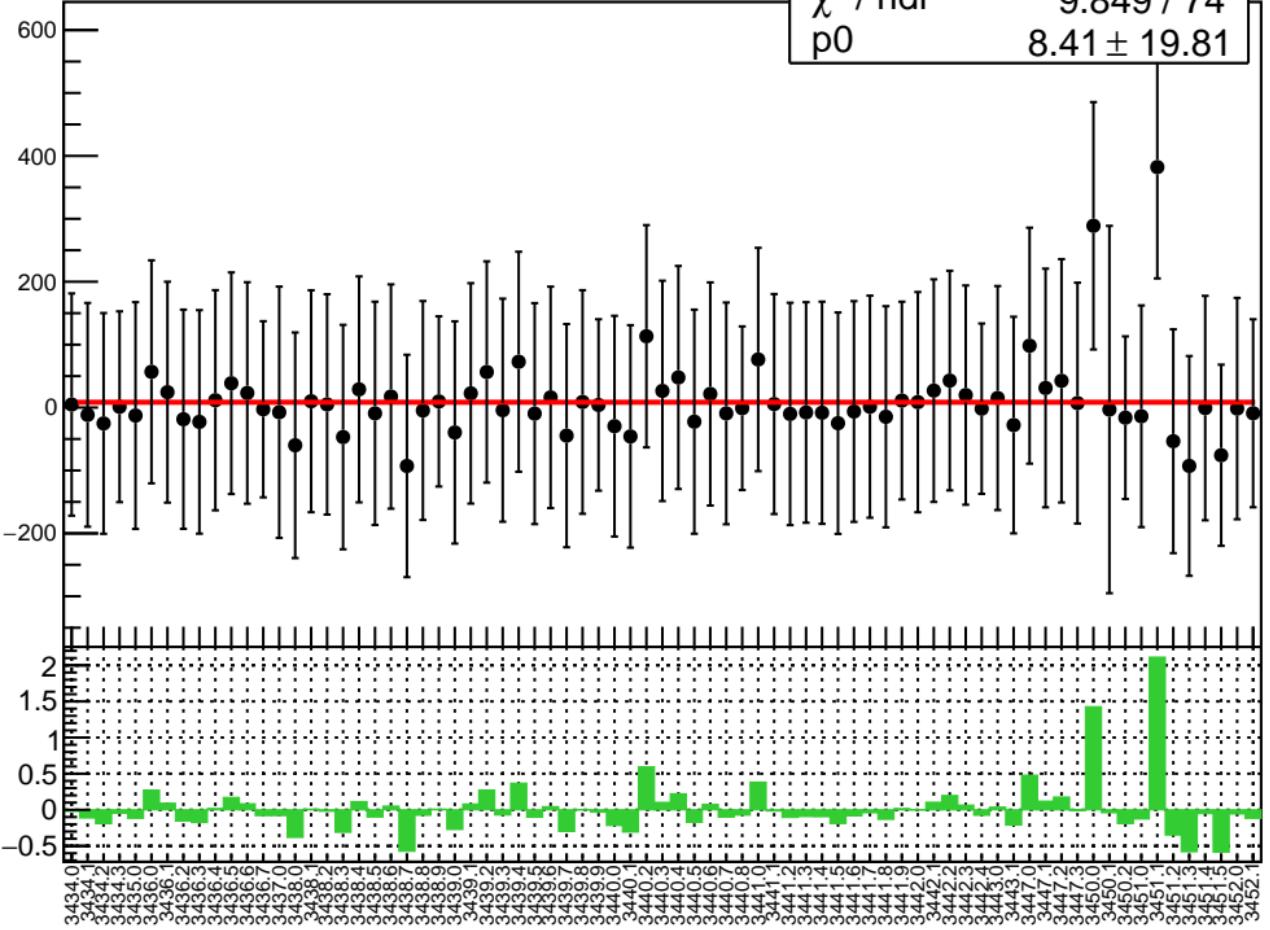
corr_usr_bpm11X RMS (ppm)

RMS (ppm)





χ^2 / ndf 9.849 / 74
 00 8.41 ± 19.81

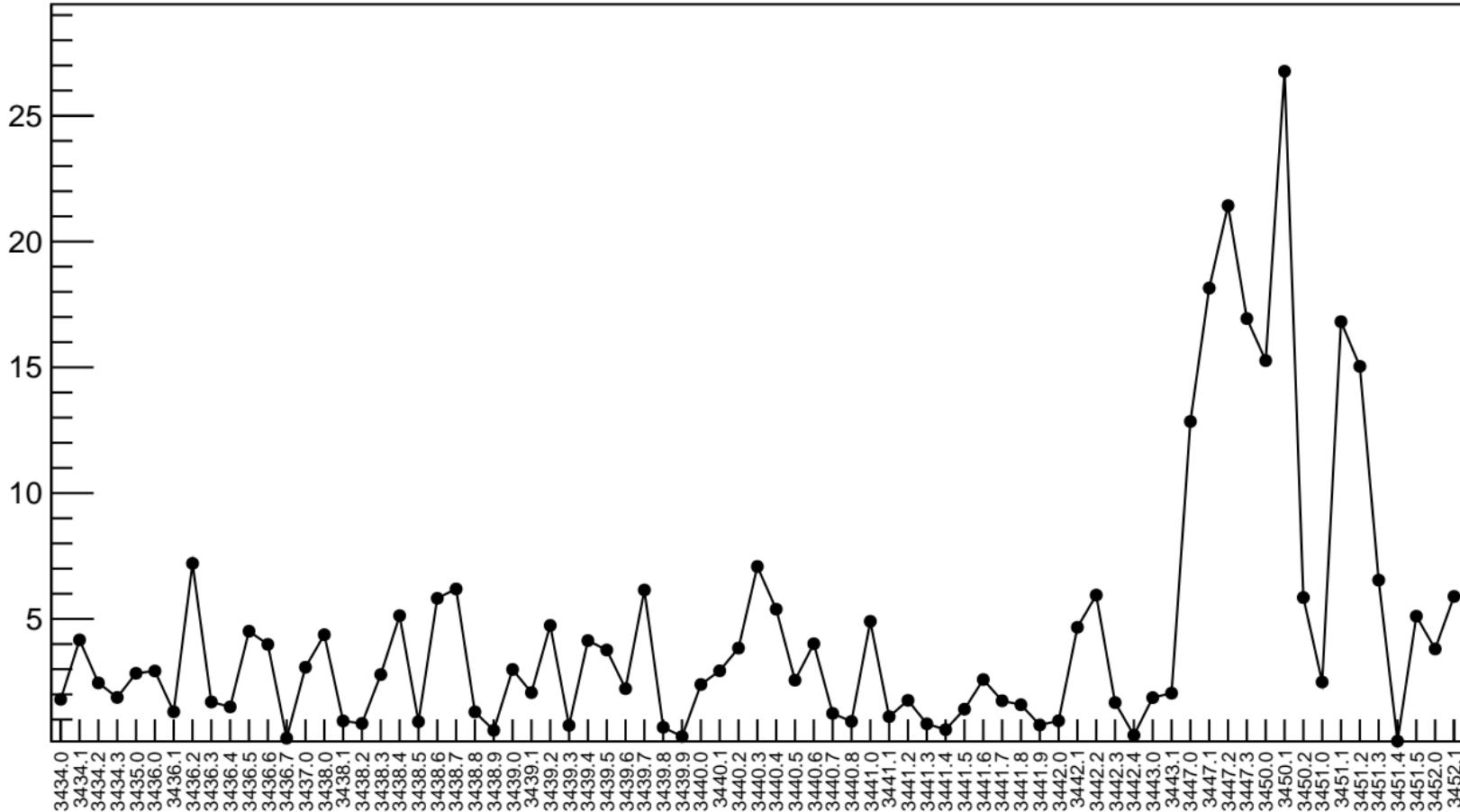


1D pull distribution

Mean	0.006376 ± 0.04184
Std Dev	0.3623 ± 0.02958
Underflow	0
Overflow	0
χ^2 / ndf	2.023 / 3
Constant	50.67 ± 7.59
Mean	-0.07455 ± 0.03556
Sigma	0.307 ± 0.028

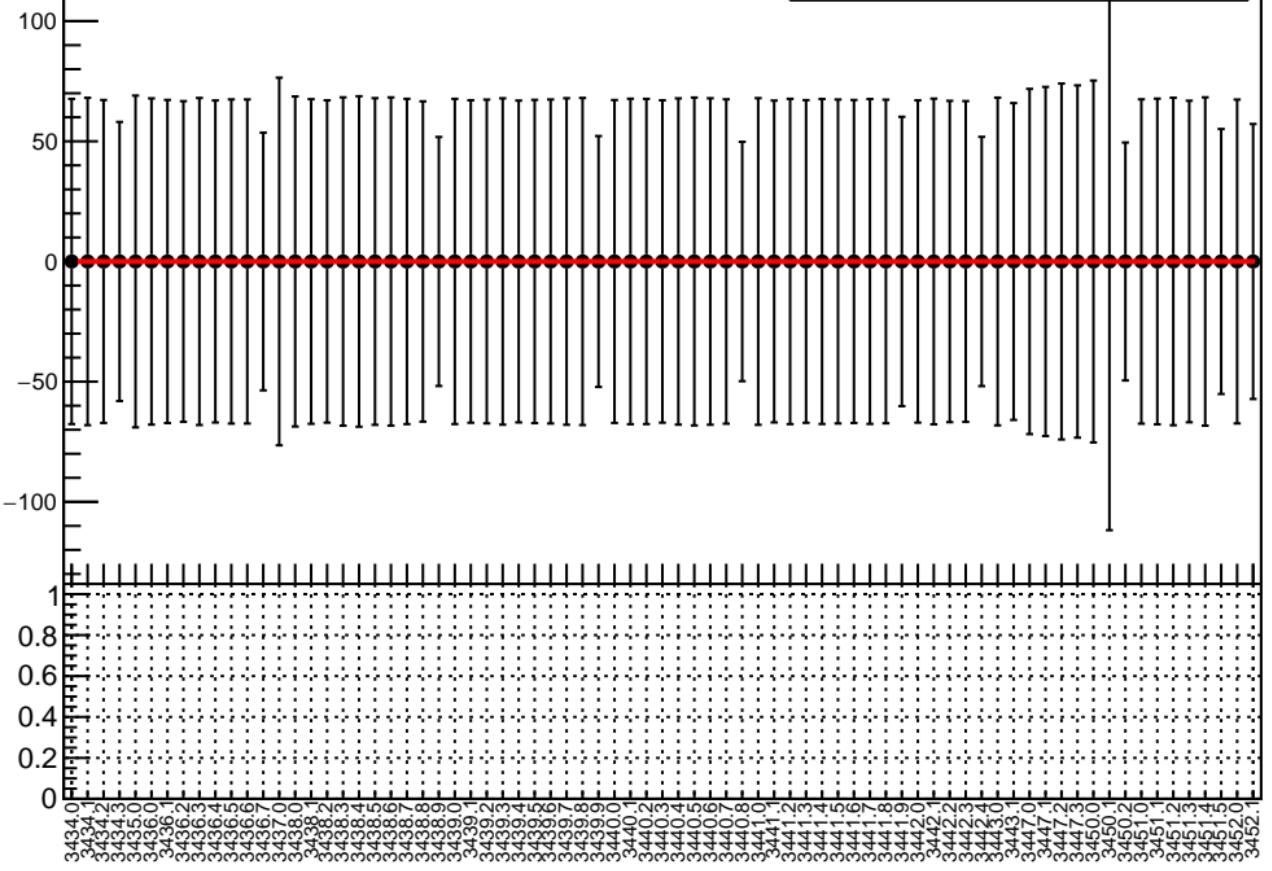
corr_usr_bpm11Y RMS (ppm)

RMS (ppm)

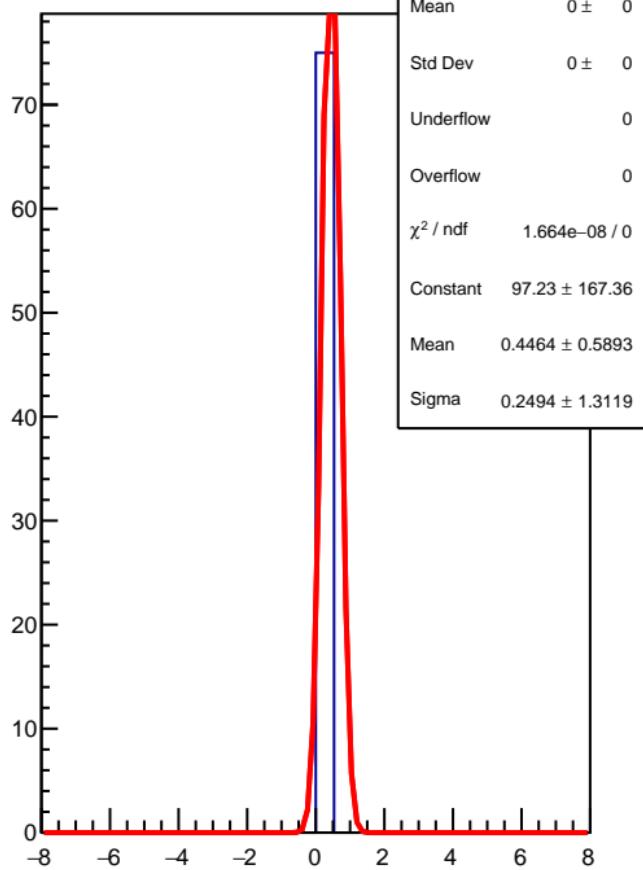


corr_usr_bpm8X (ppb)

χ^2 / ndf 0 / 74
 p_0 0 ± 7.587

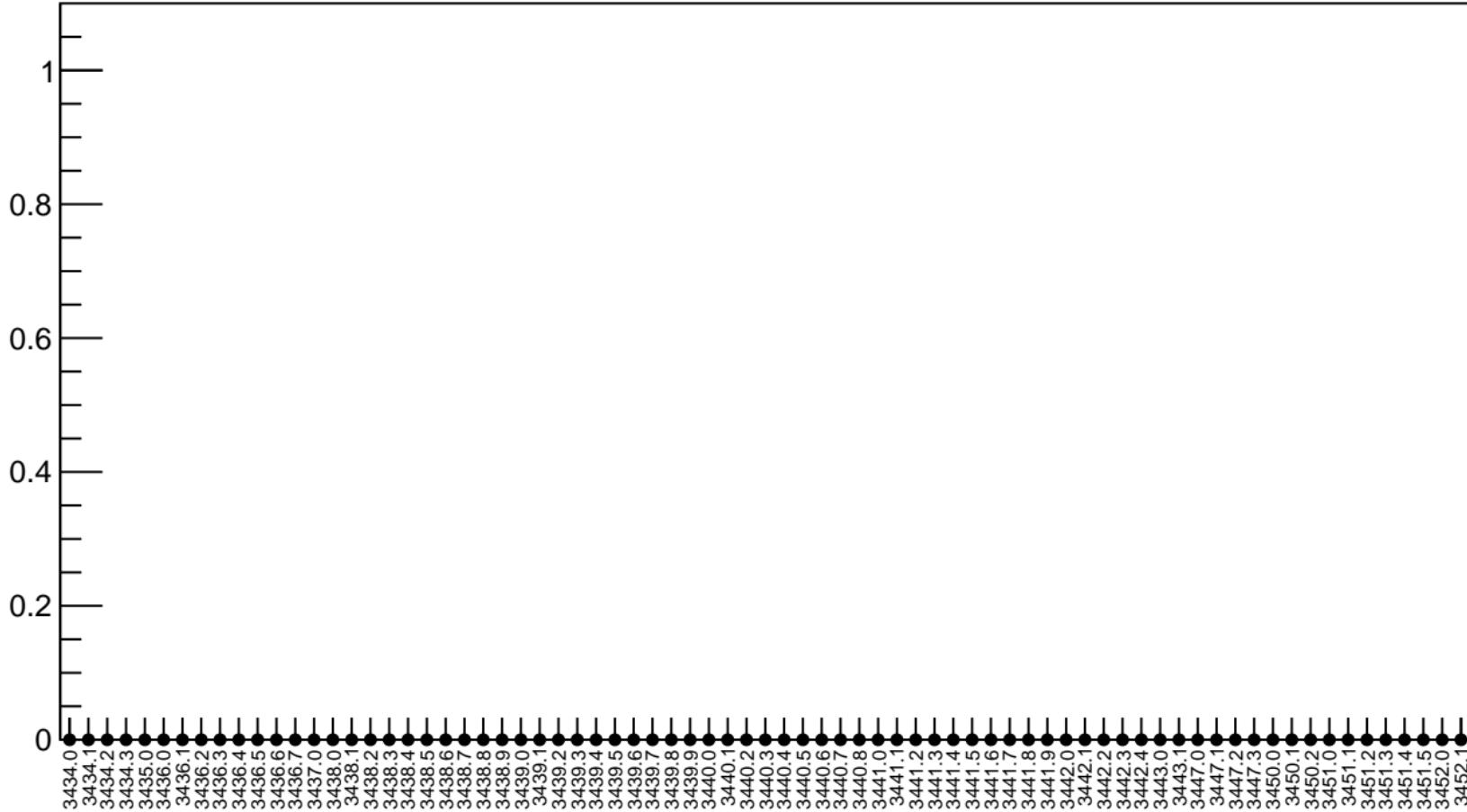


1D pull distribution



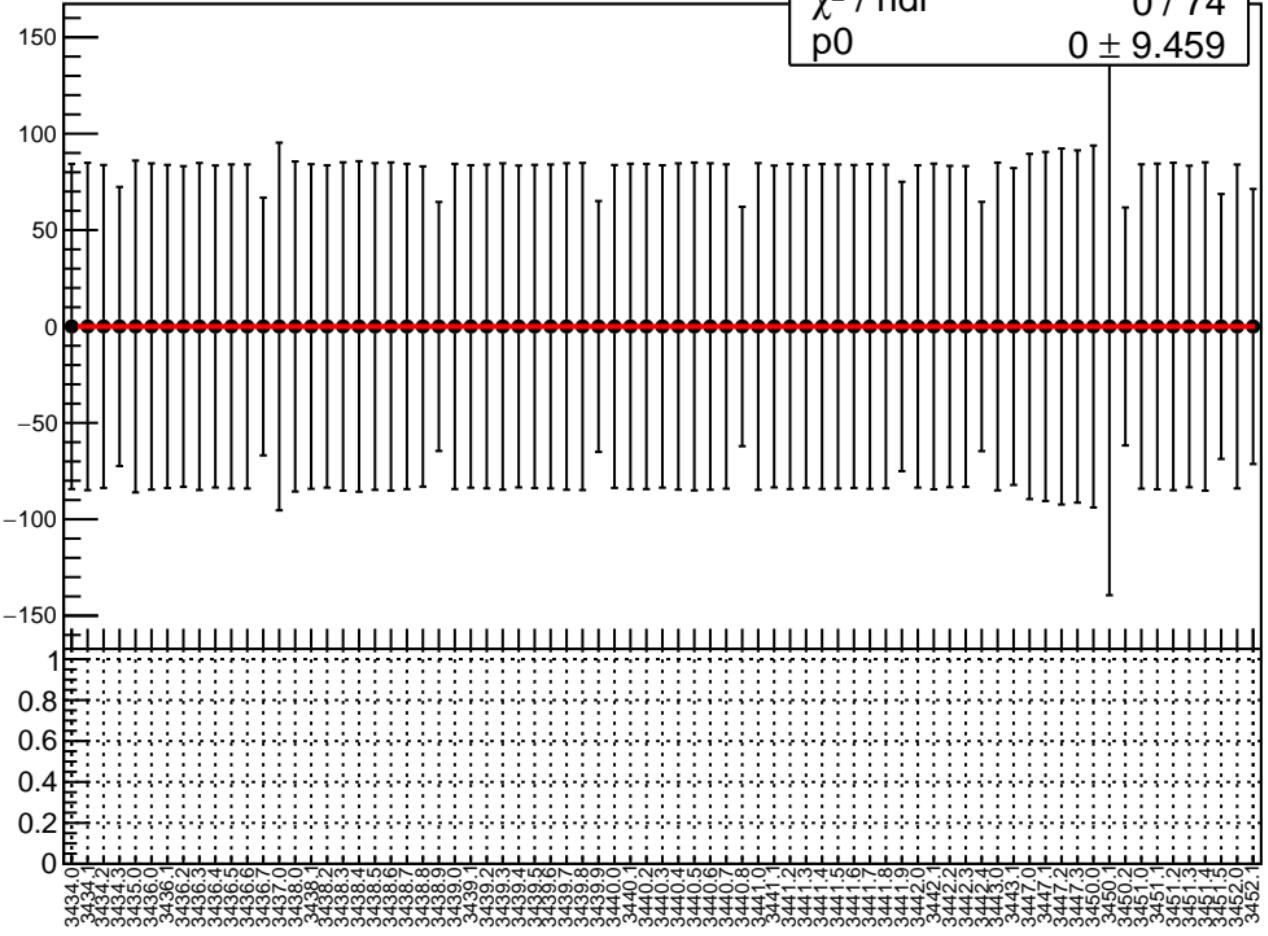
corr_usr_bpm8X RMS (ppm)

RMS (ppm)

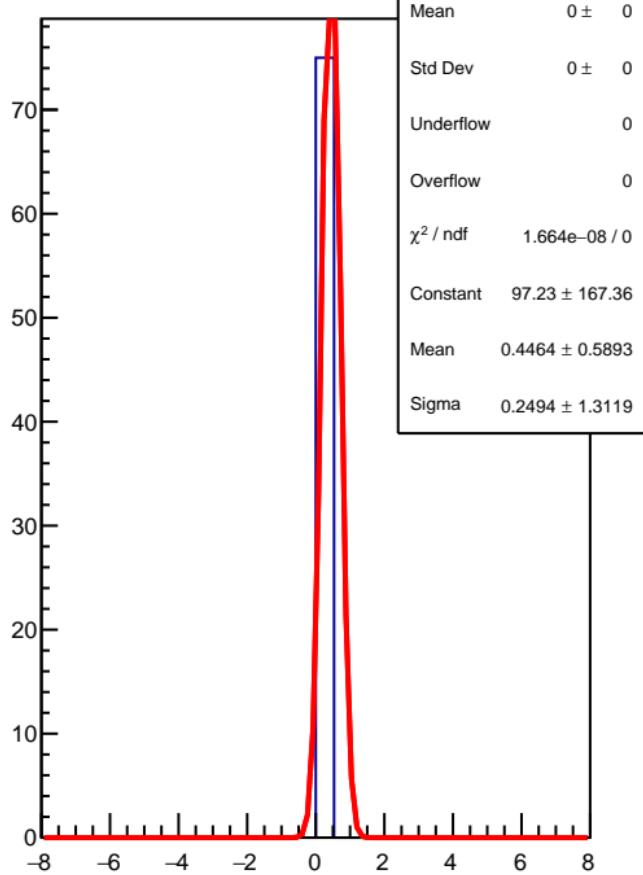


corr_usr_bpm8Y (ppb)

χ^2 / ndf 0 / 74
 p_0 0 ± 9.459



1D pull distribution



corr_usr_bpm8Y RMS (ppm)

RMS (ppm)

