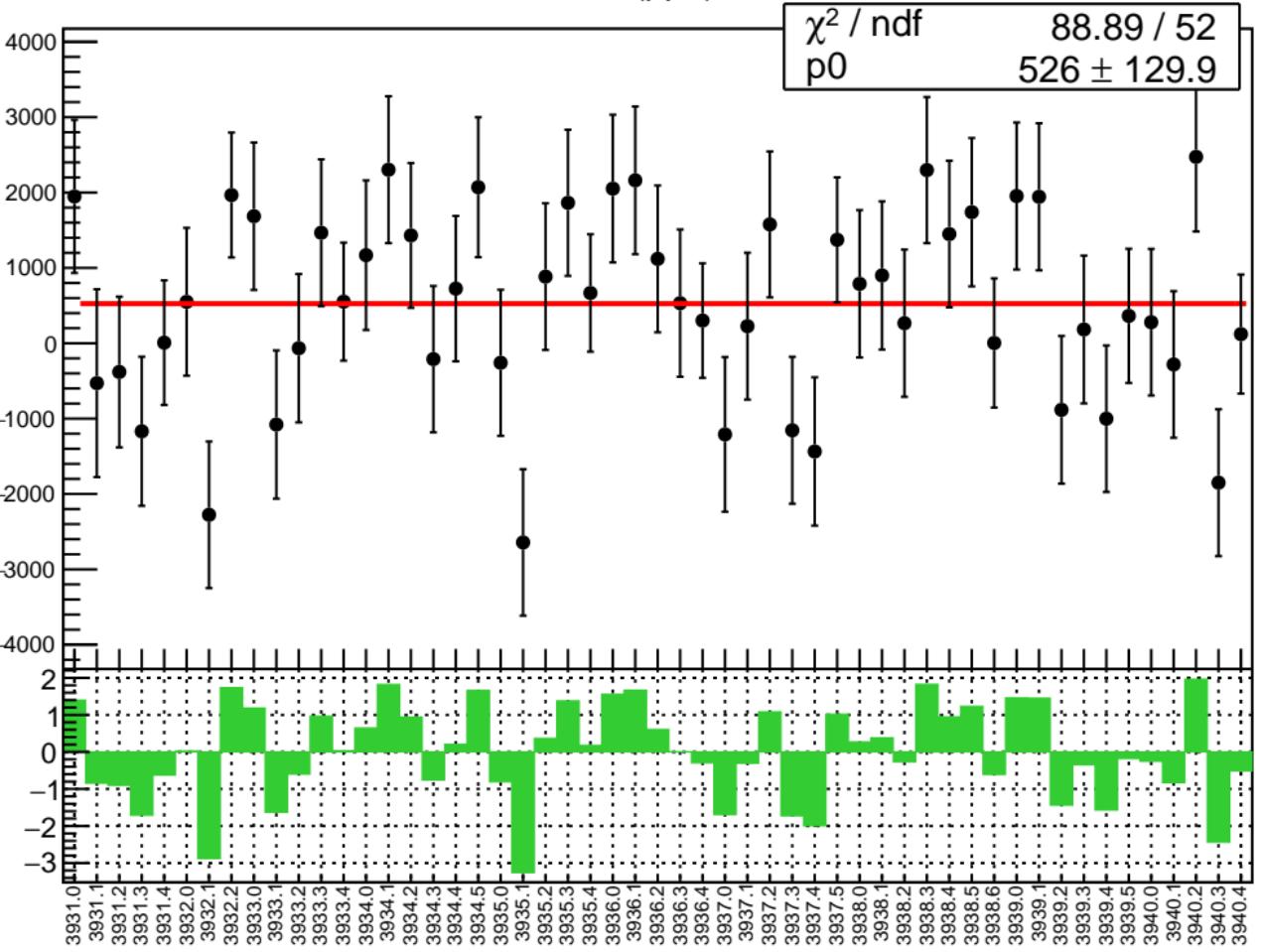
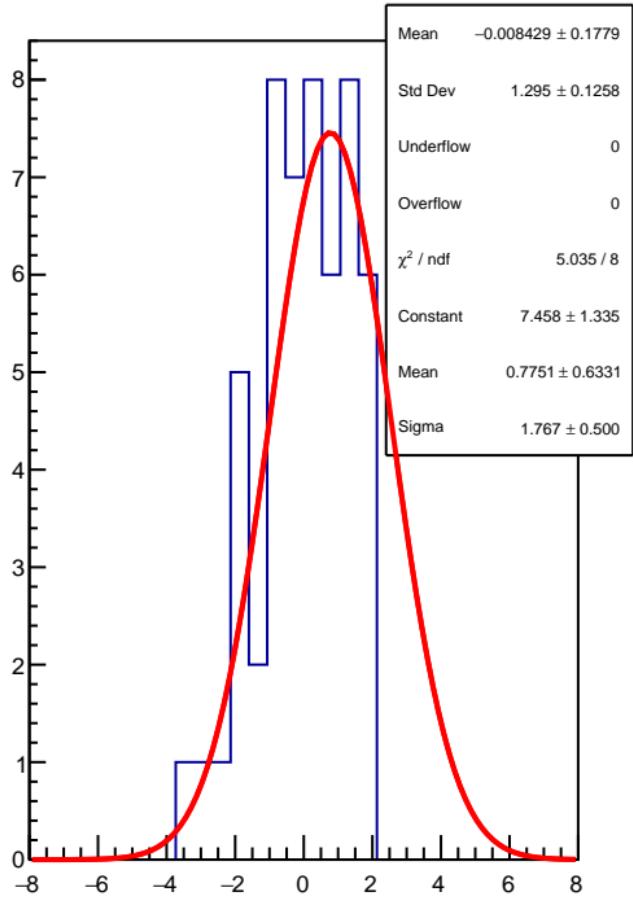


Adet (ppb)

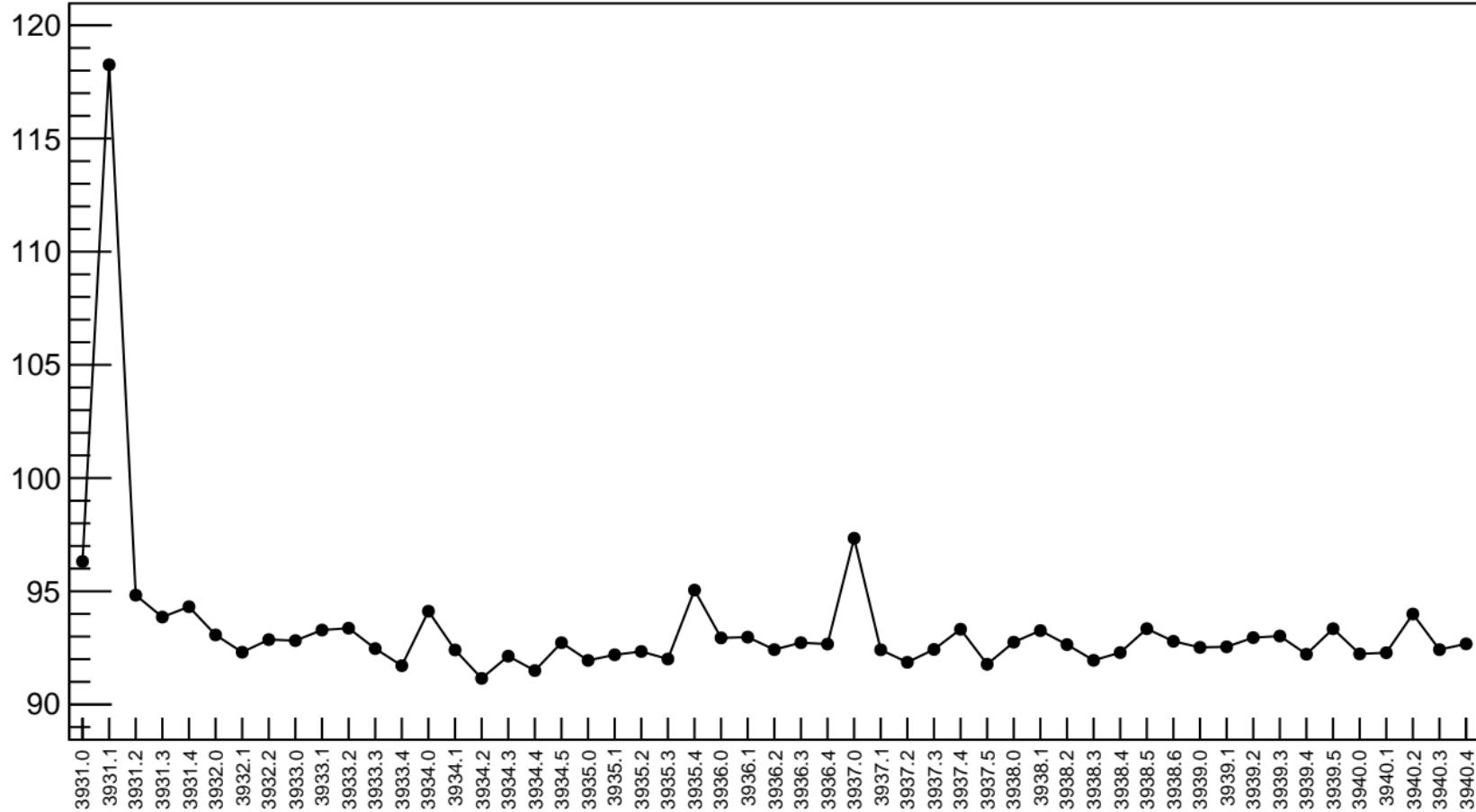


1D pull distribution



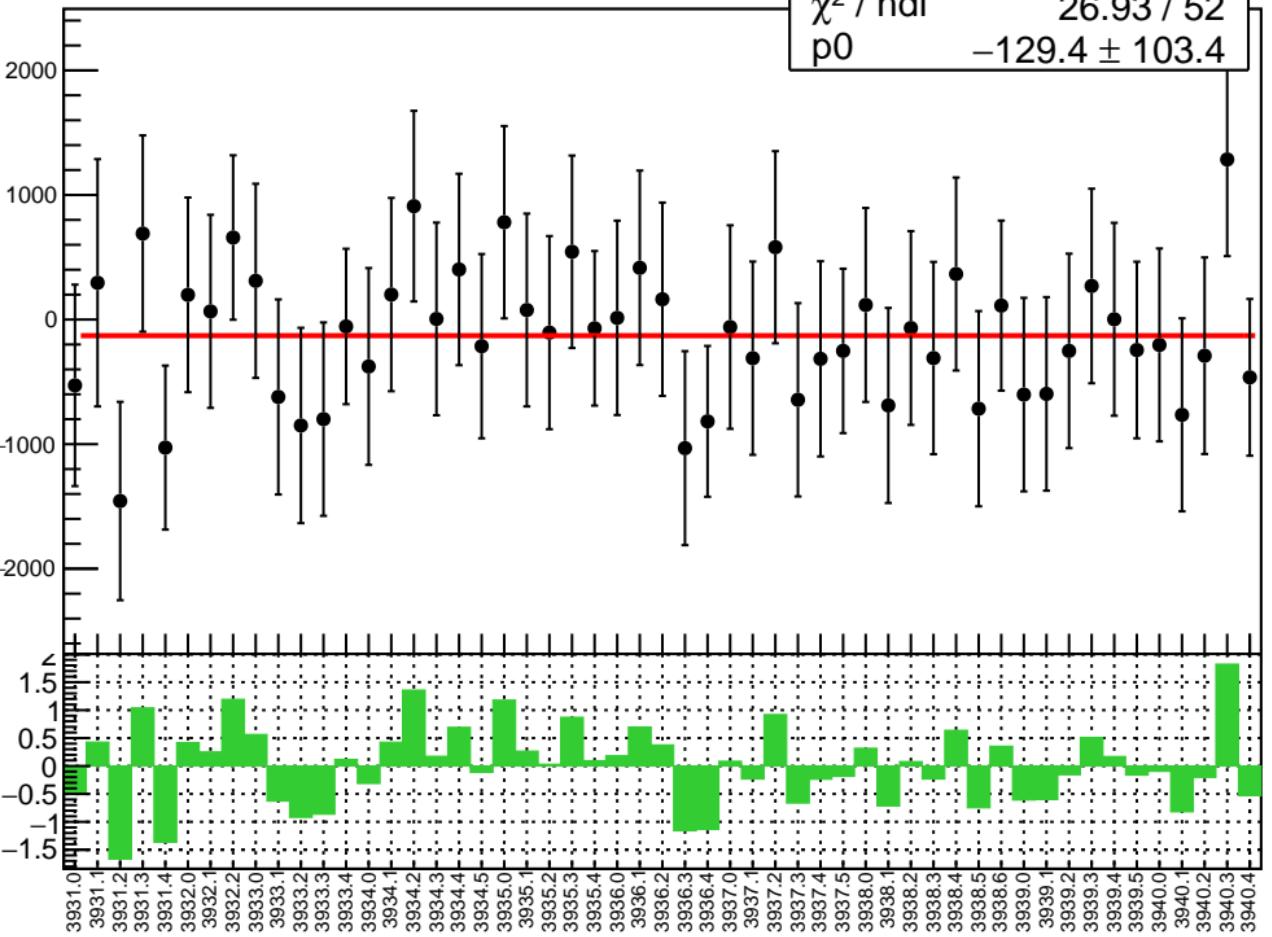
Adet RMS (ppm)

RMS (ppm)

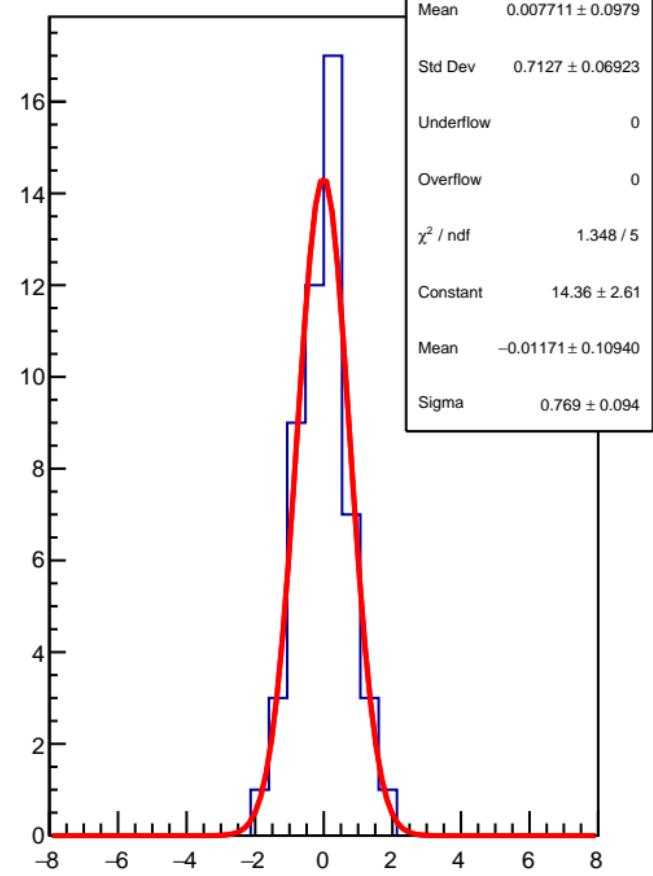


corr_Adet_bpm4eX (ppb)

χ^2 / ndf 26.93 / 52
p0 -129.4 ± 103.4

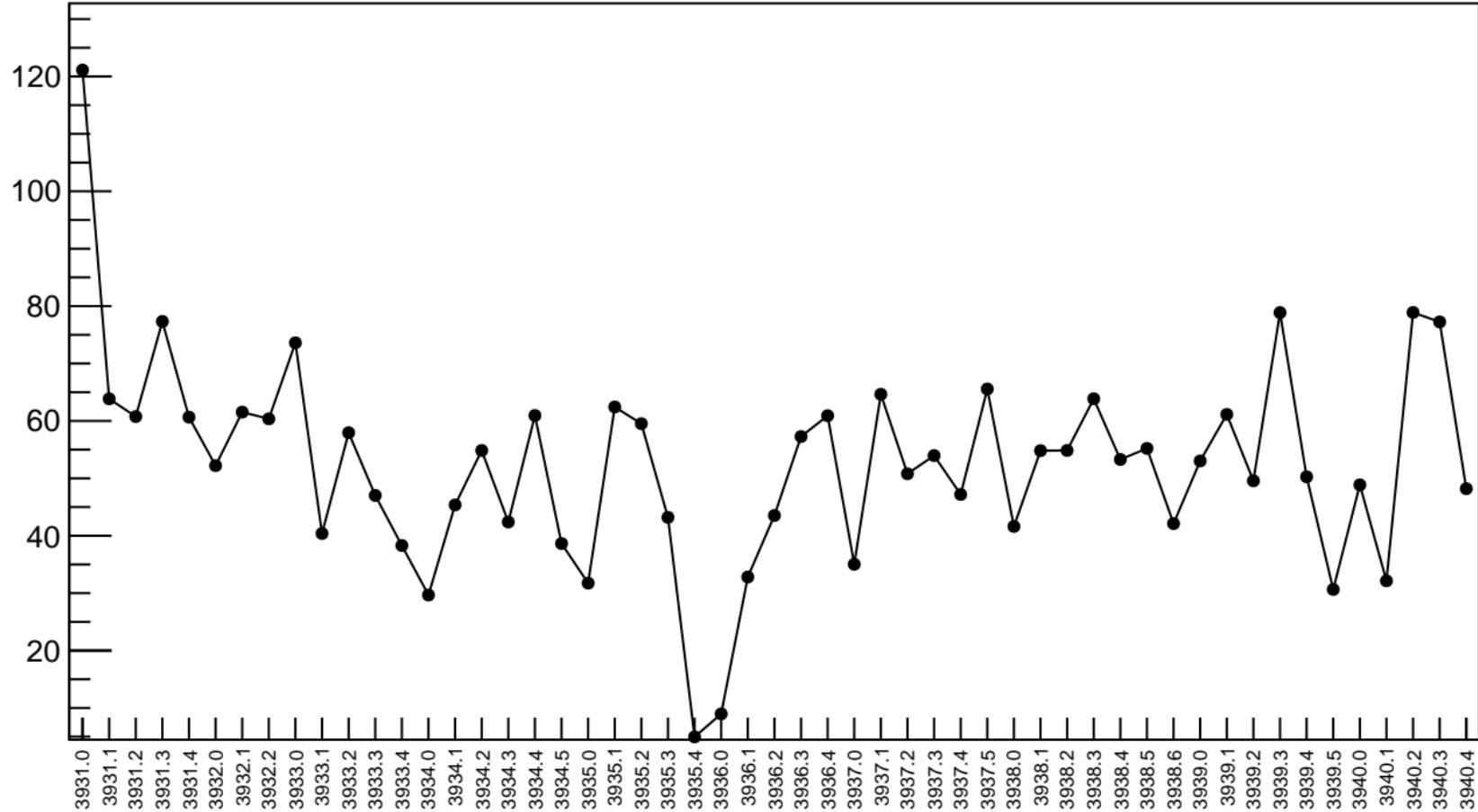


1D pull distribution

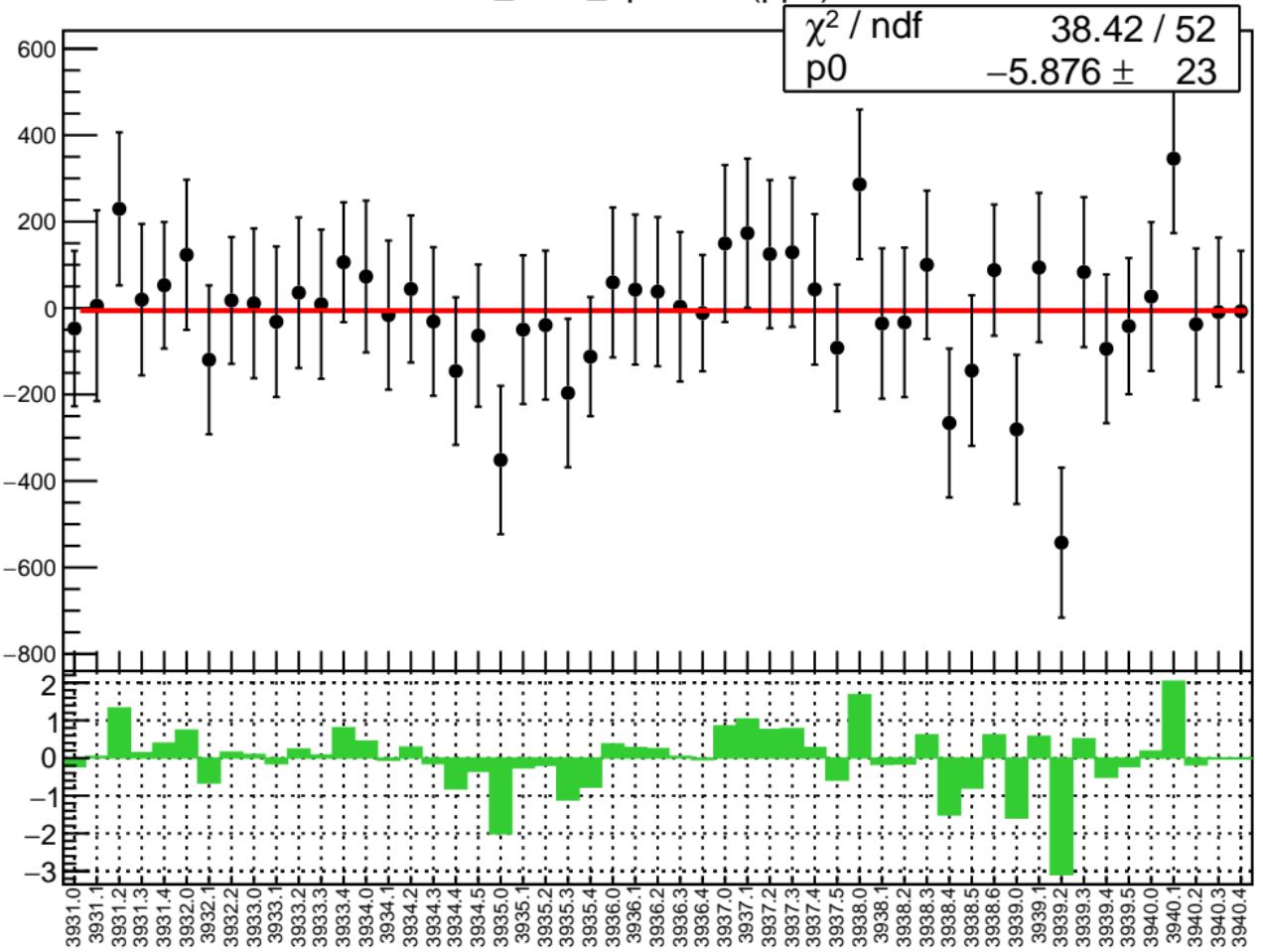


corr_Adet_bpm4eX RMS (ppm)

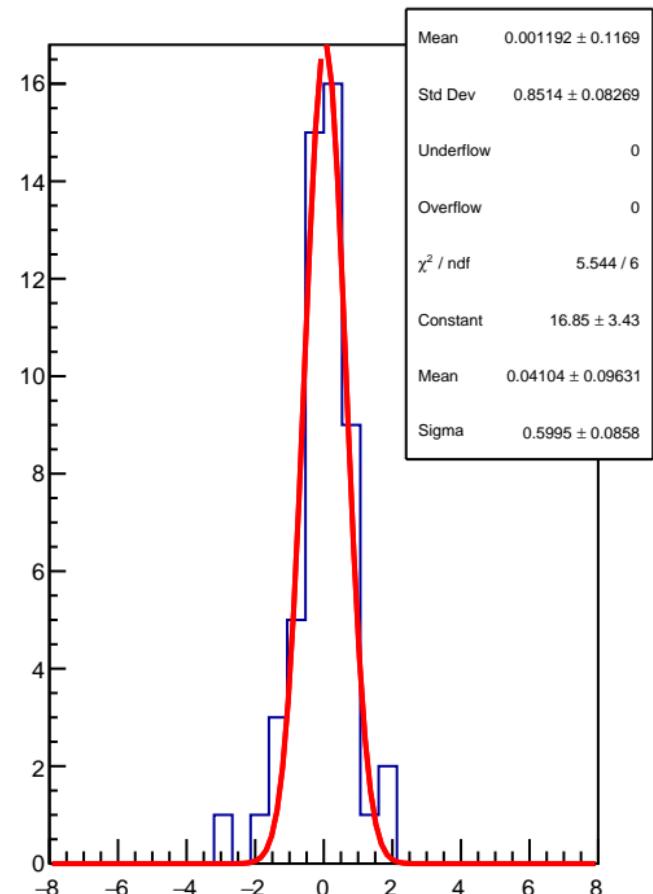
RMS (ppm)



corr_Adet_bpm4eY (ppb)

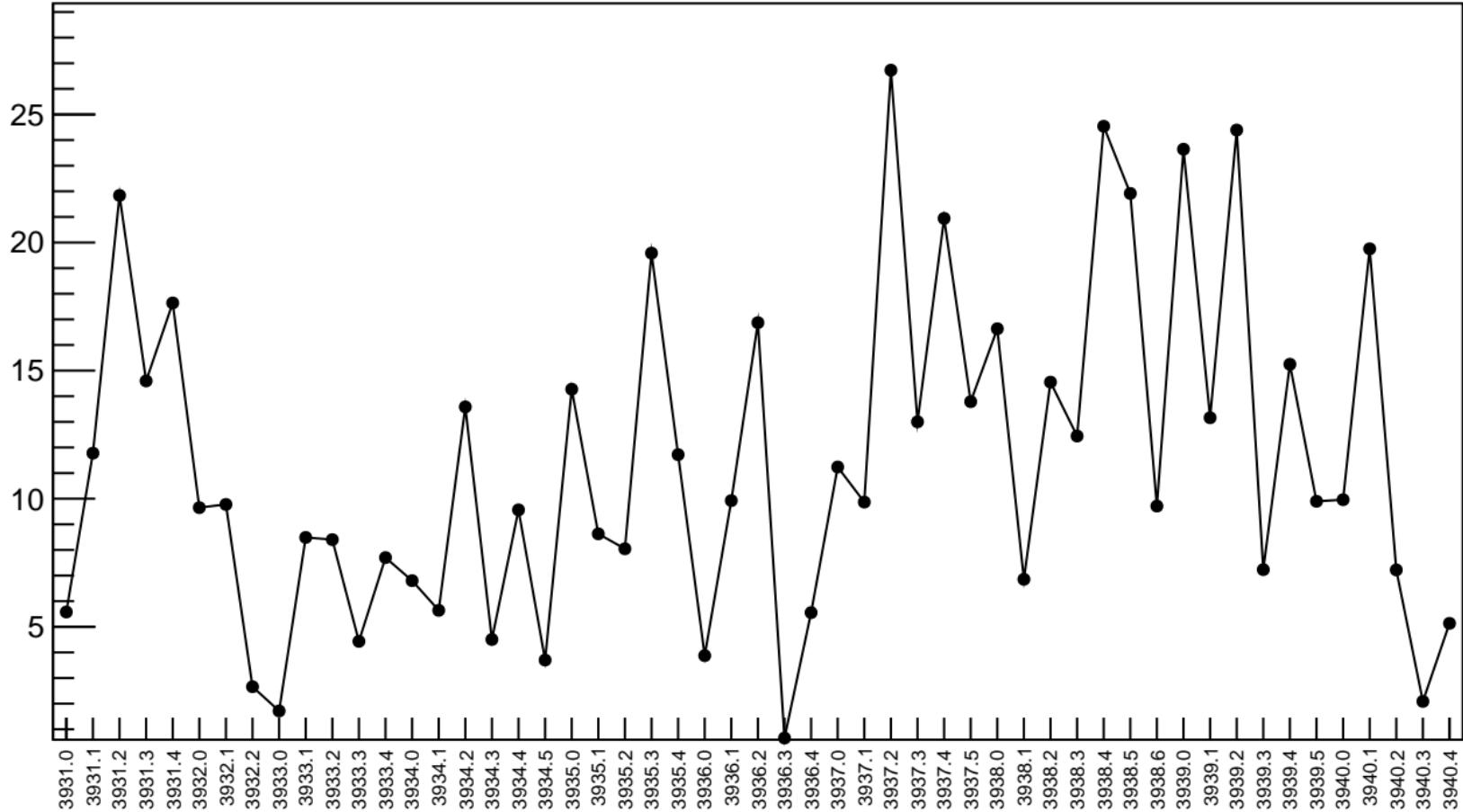


1D pull distribution

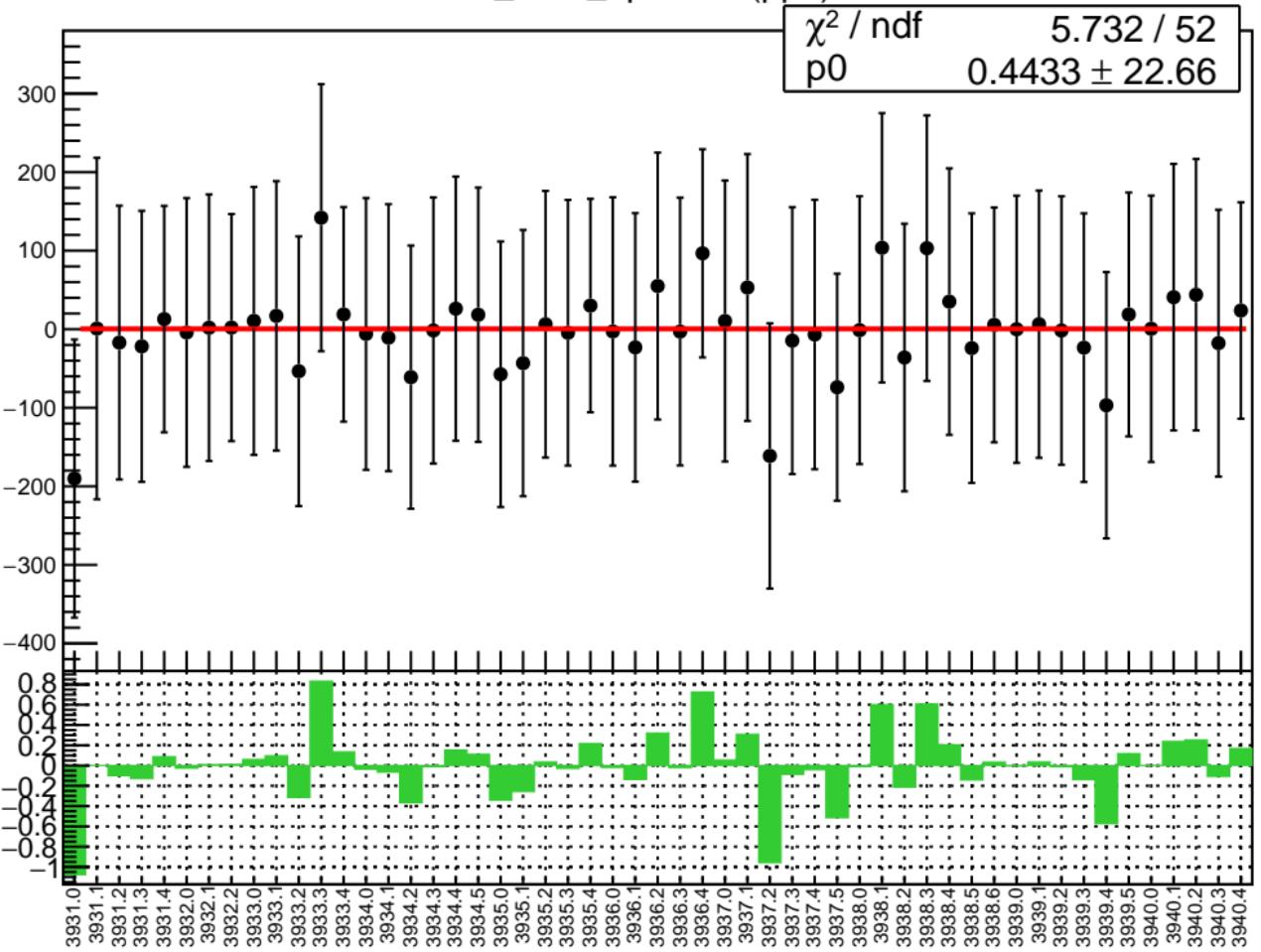


corr_Adet_bpm4eY RMS (ppm)

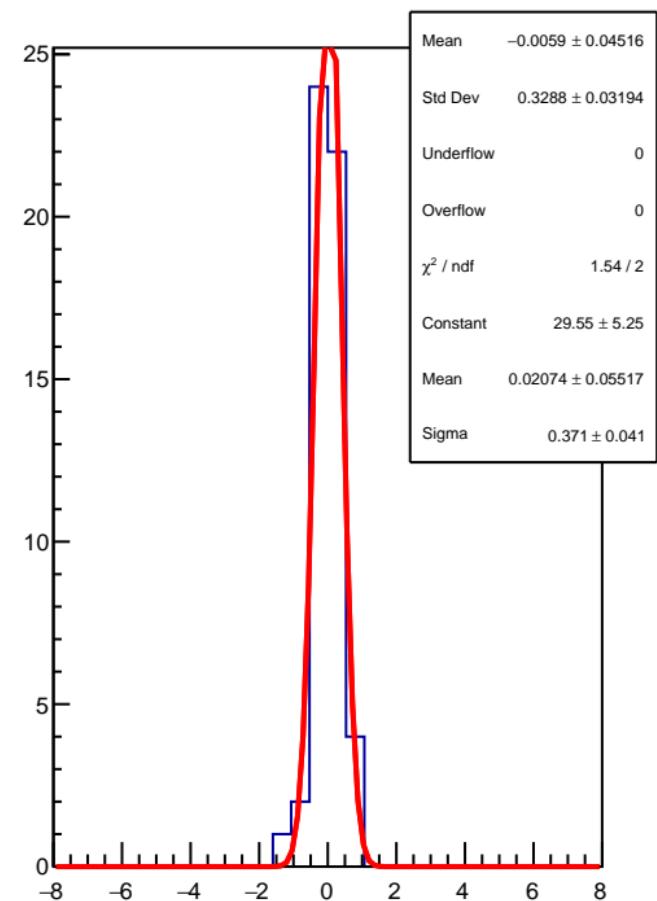
RMS (ppm)



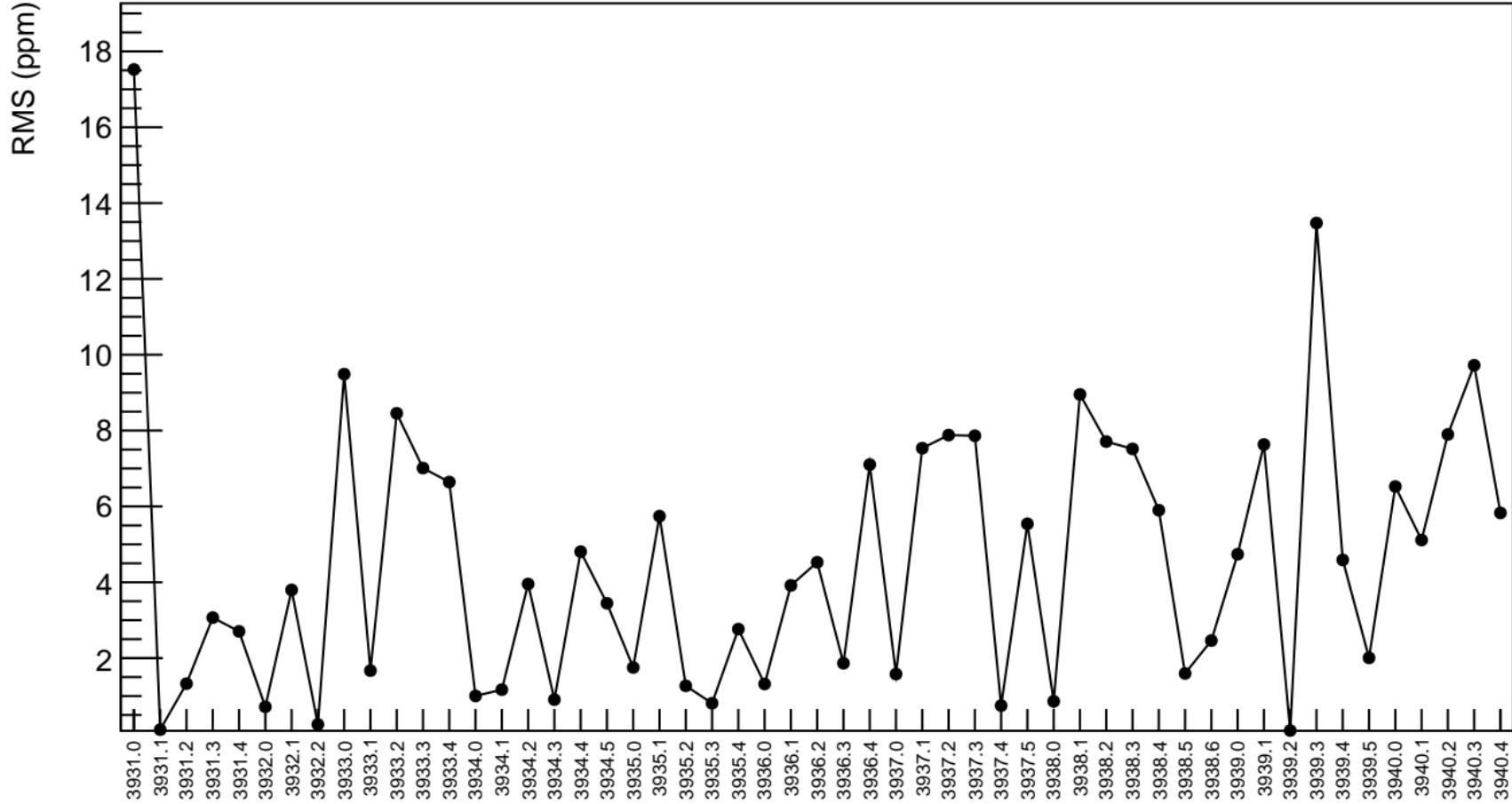
corr_Adet_bpm4aX (ppb)



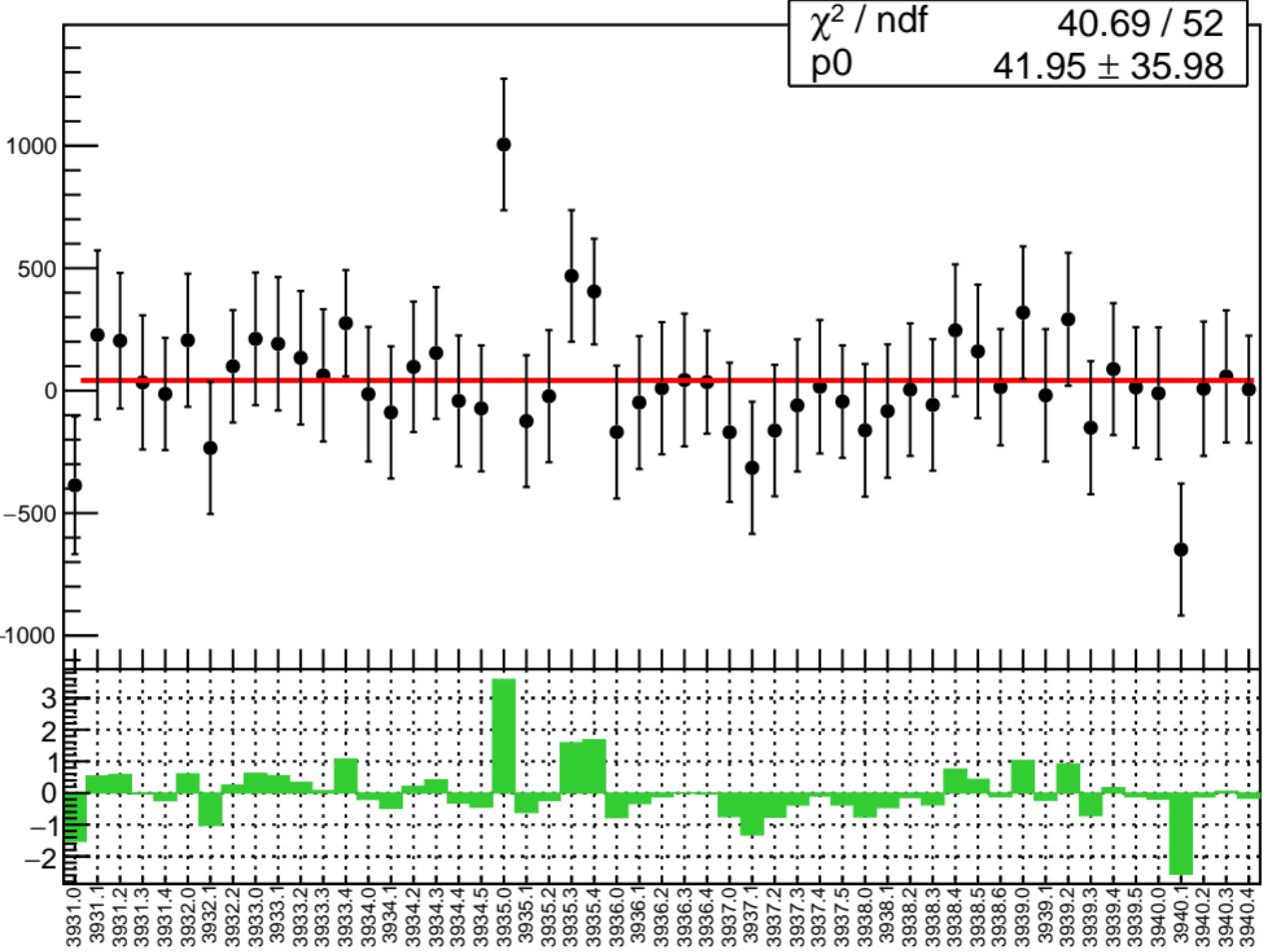
1D pull distribution



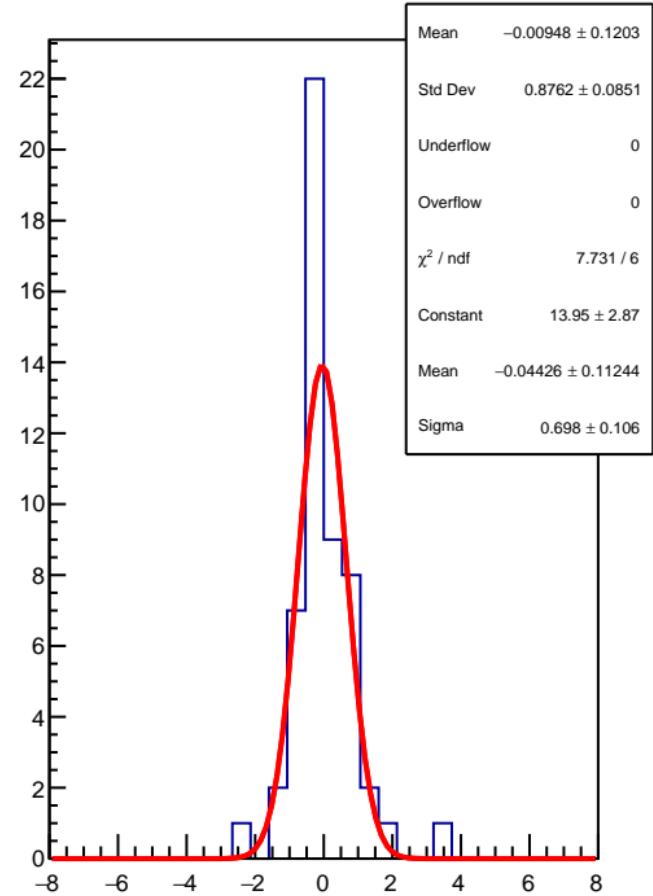
corr_Adet_bpm4aX RMS (ppm)



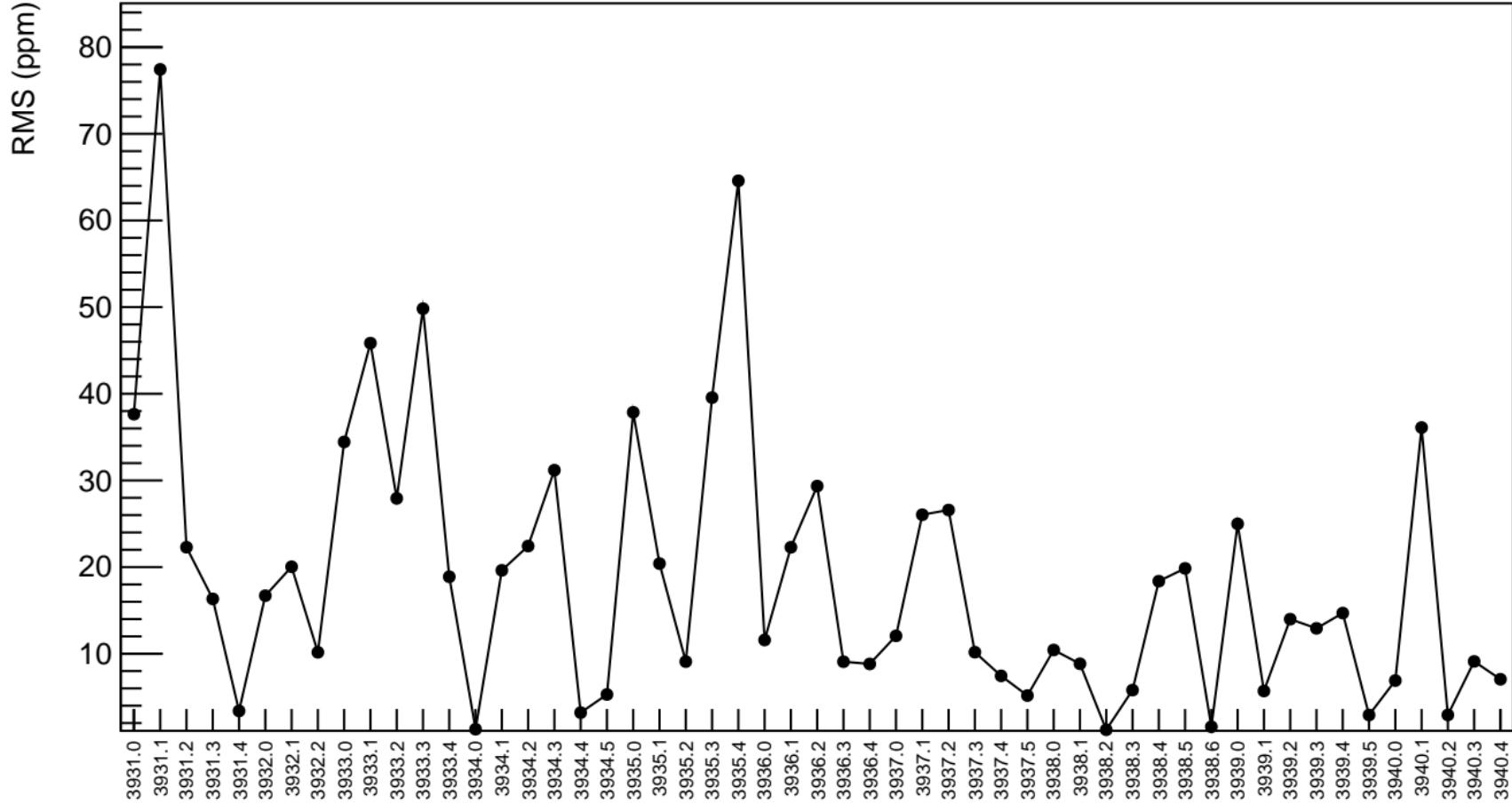
corr_Adet_bpm4aY (ppb)



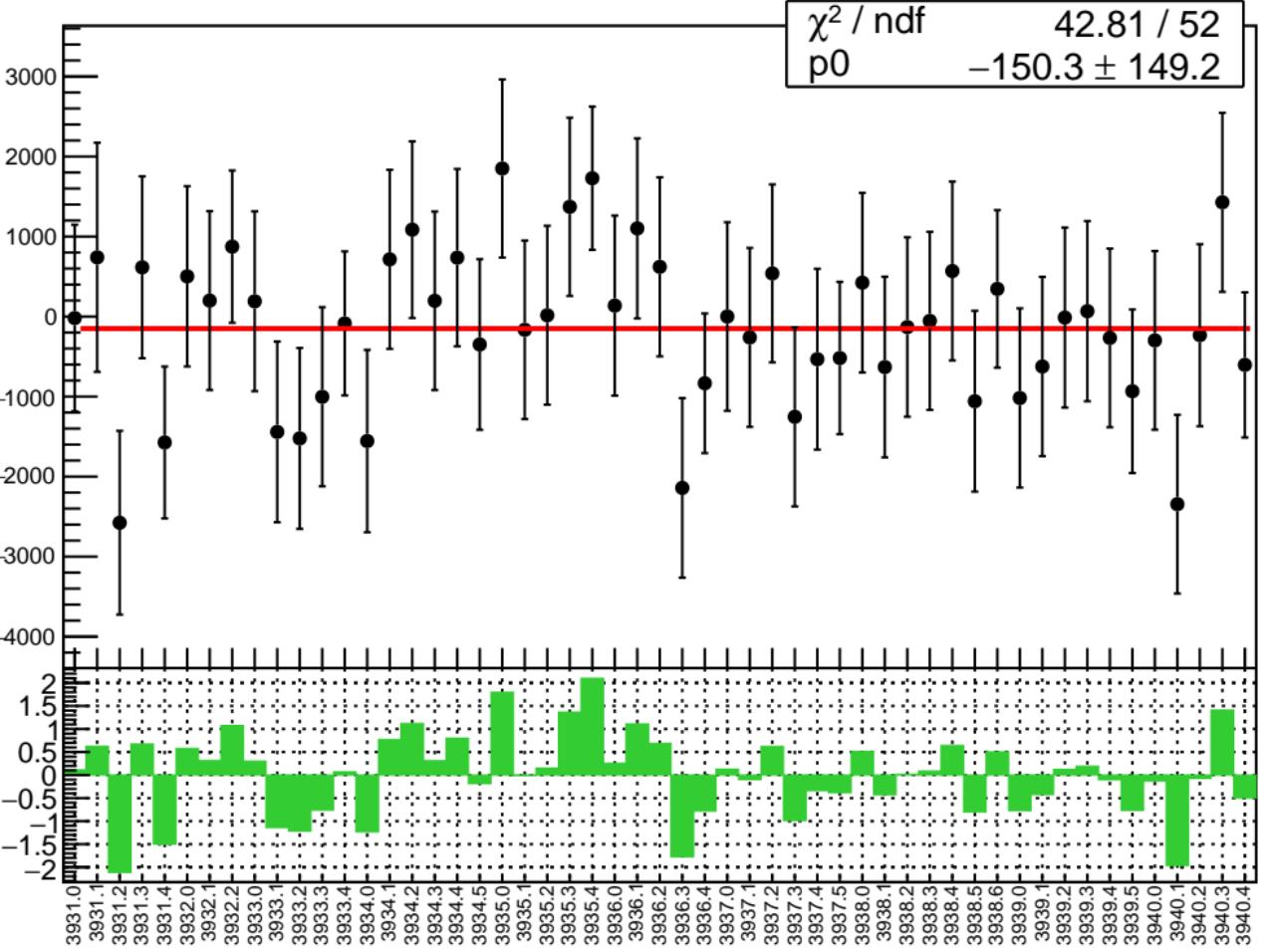
1D pull distribution



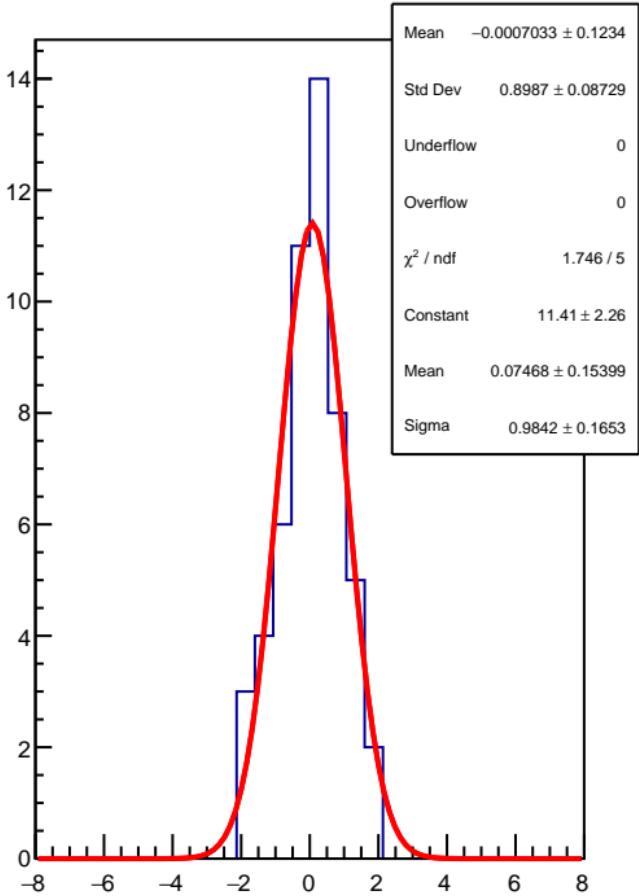
corr_Adet_bpm4aY RMS (ppm)



corr_Adet_bpm1X (ppb)

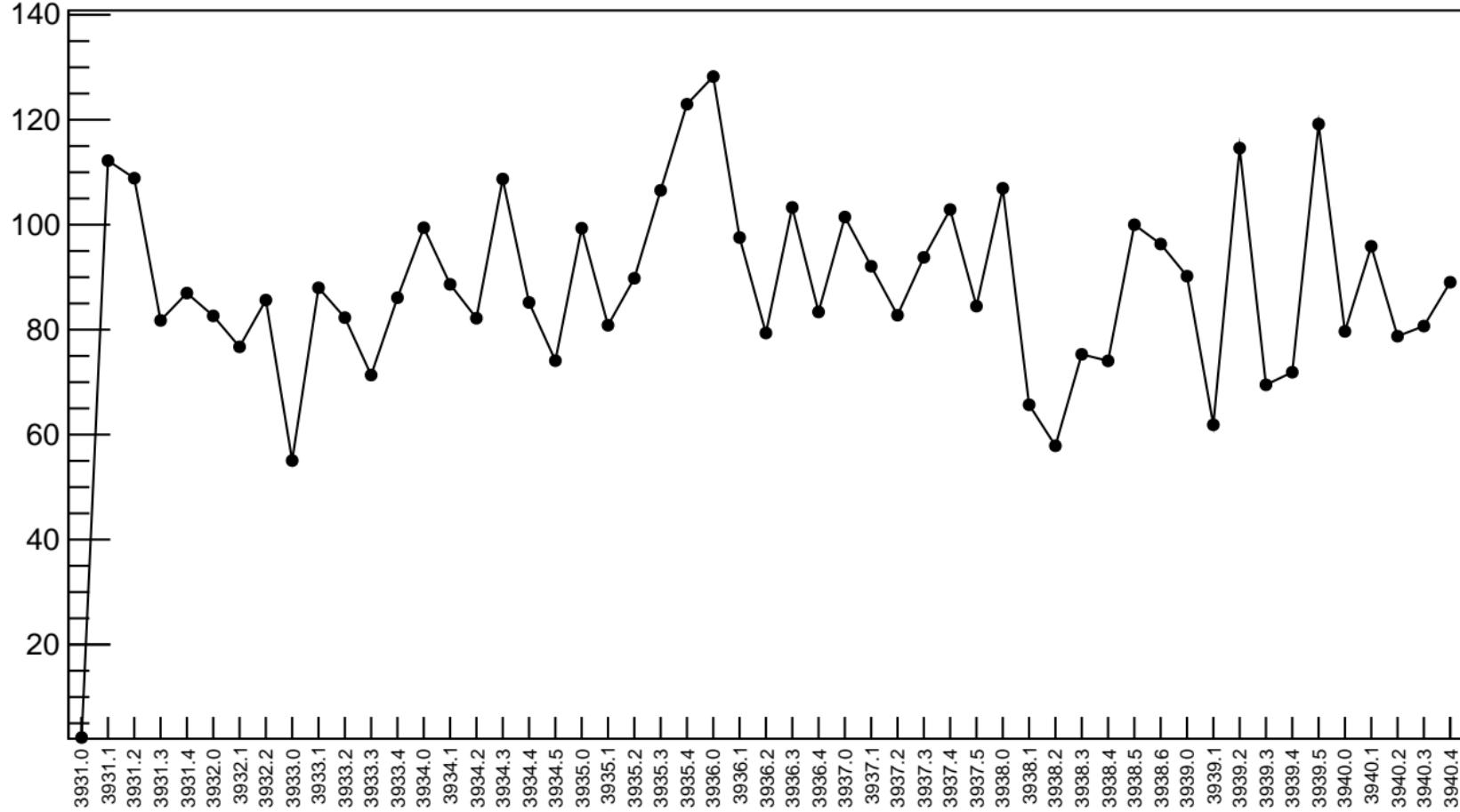


1D pull distribution

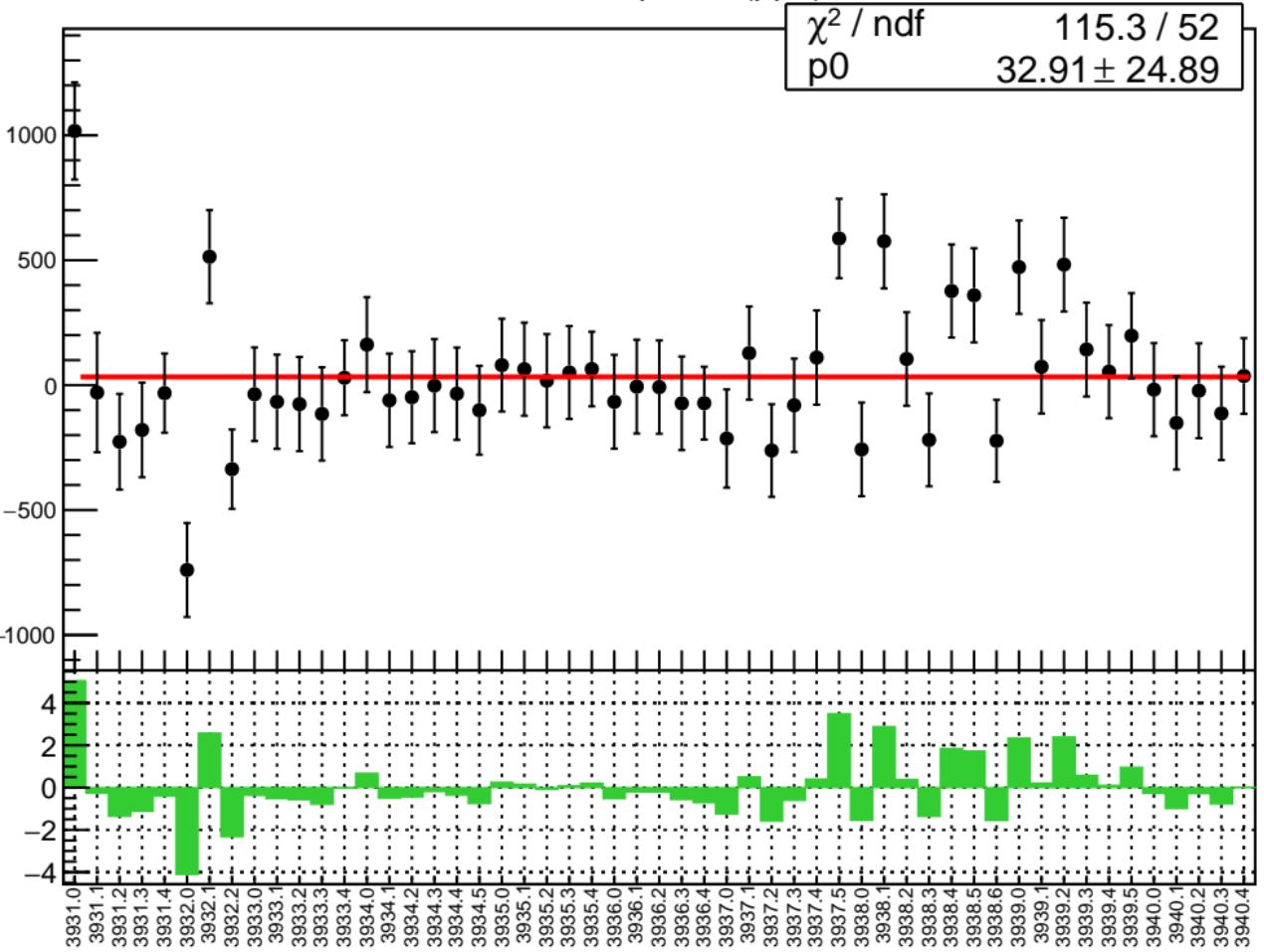


corr_Adet_bpm1X RMS (ppm)

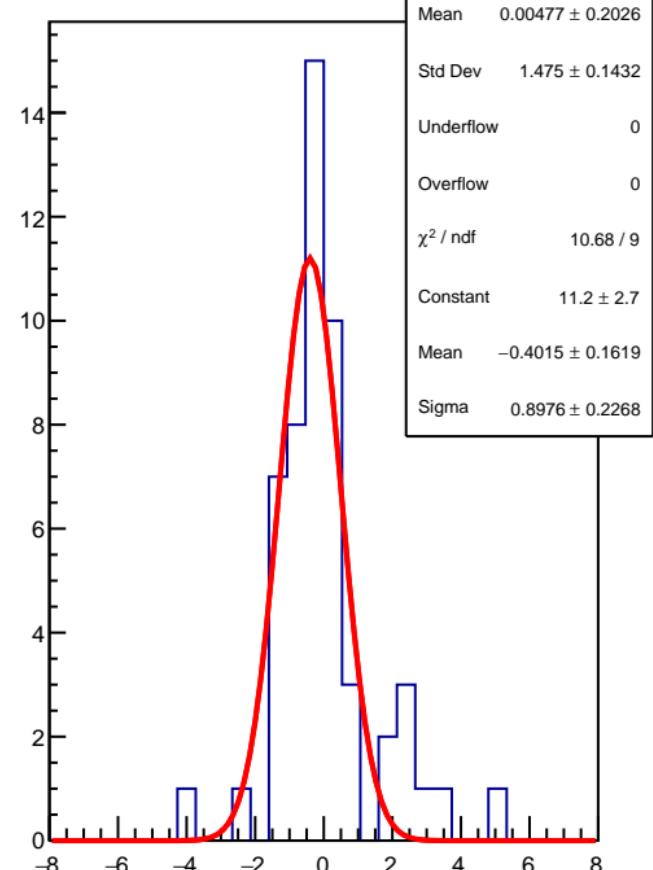
RMS (ppm)



corr_Adet_bpm1Y (ppb)

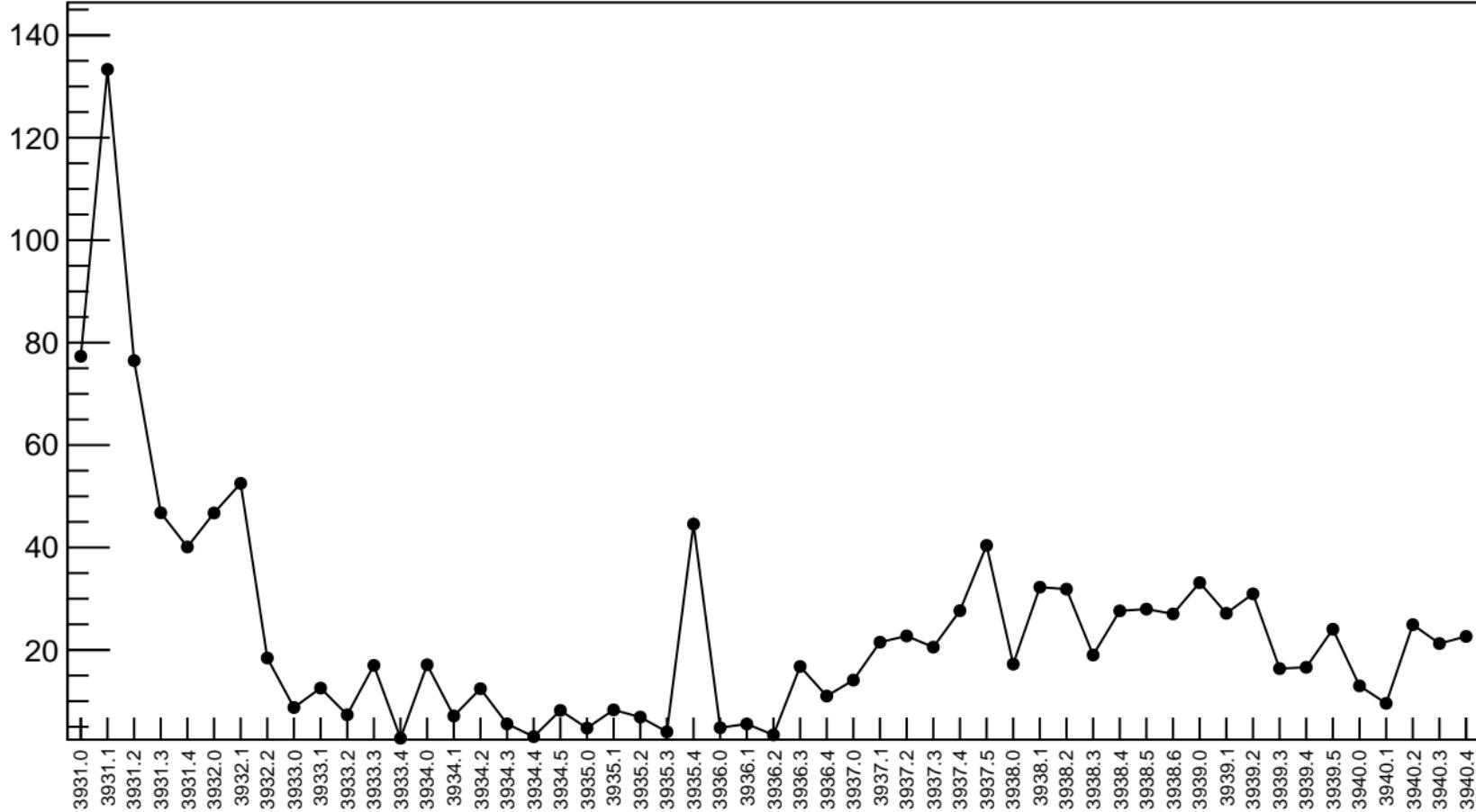


1D pull distribution

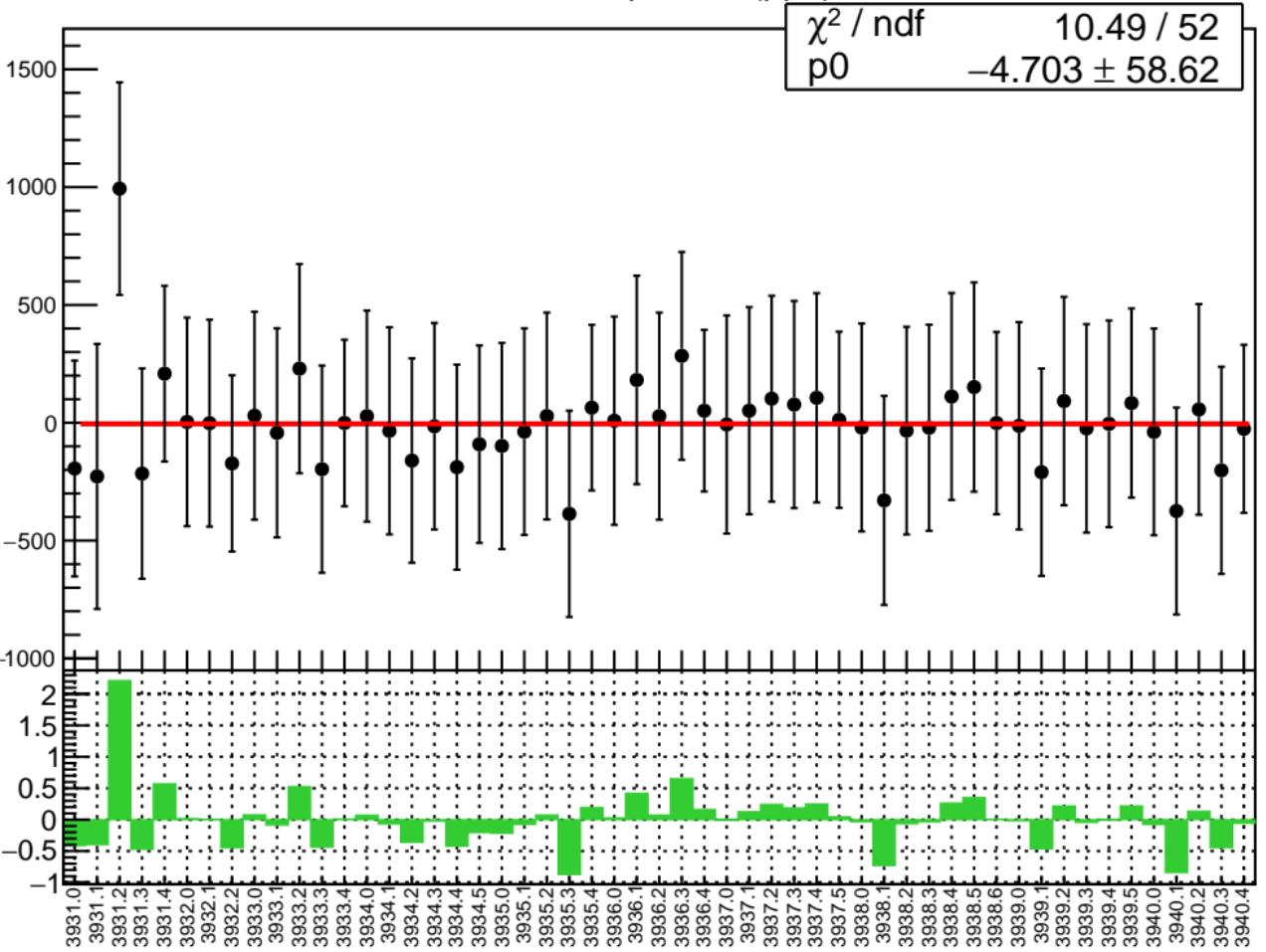


corr_Adet_bpm1Y RMS (ppm)

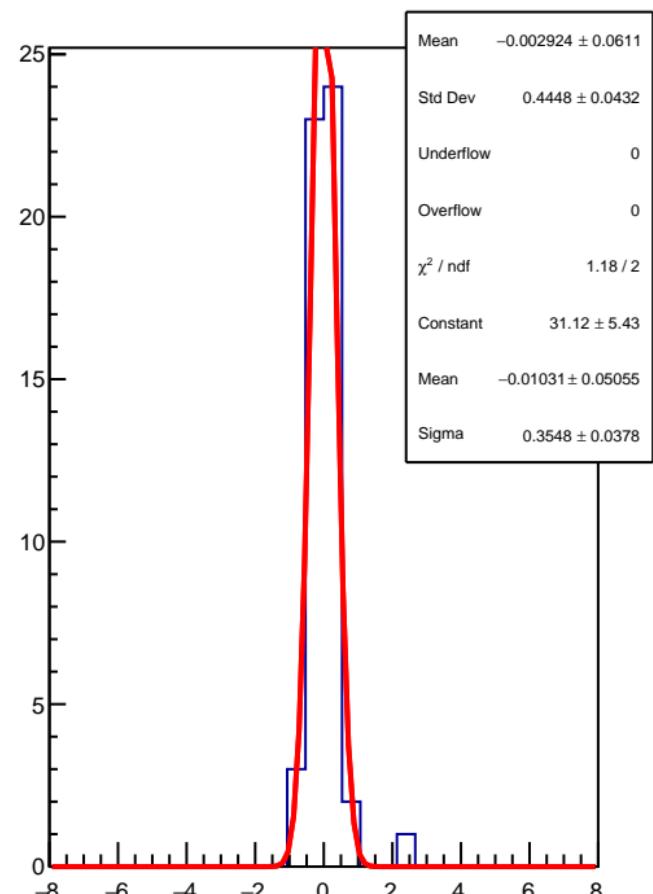
RMS (ppm)



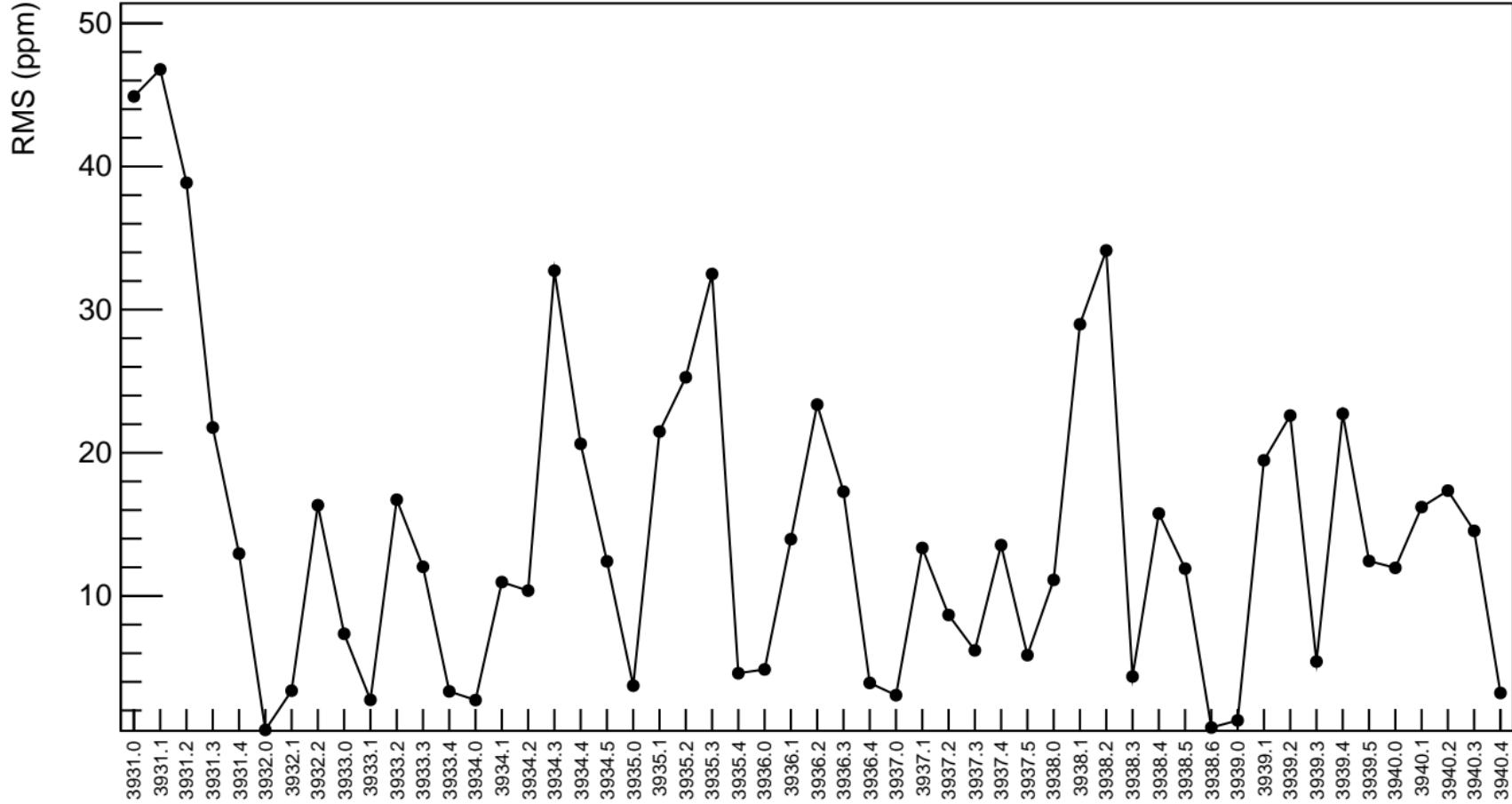
corr_Adet_bpm16X (ppb)



1D pull distribution

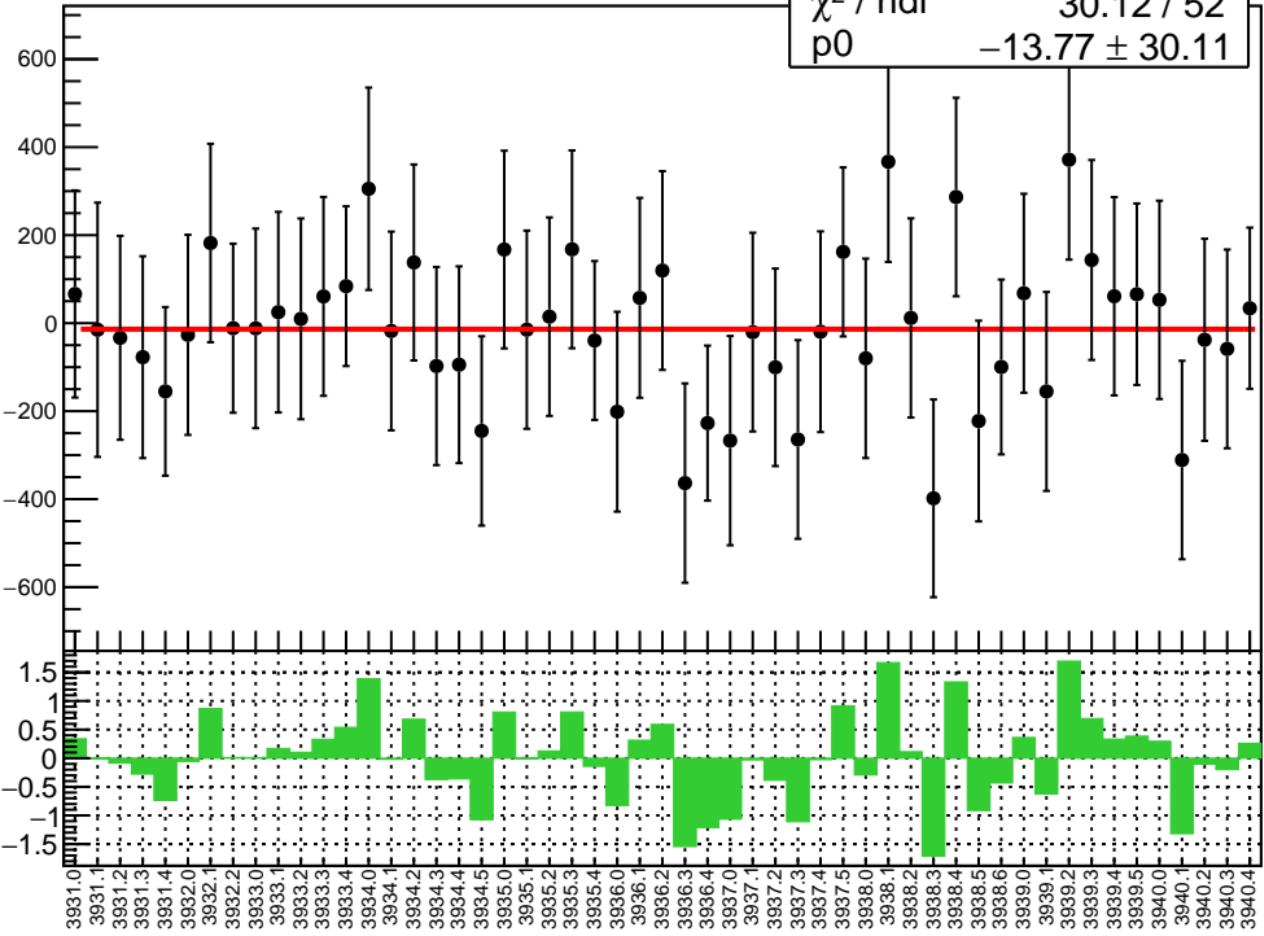


corr_Adet_bpm16X RMS (ppm)

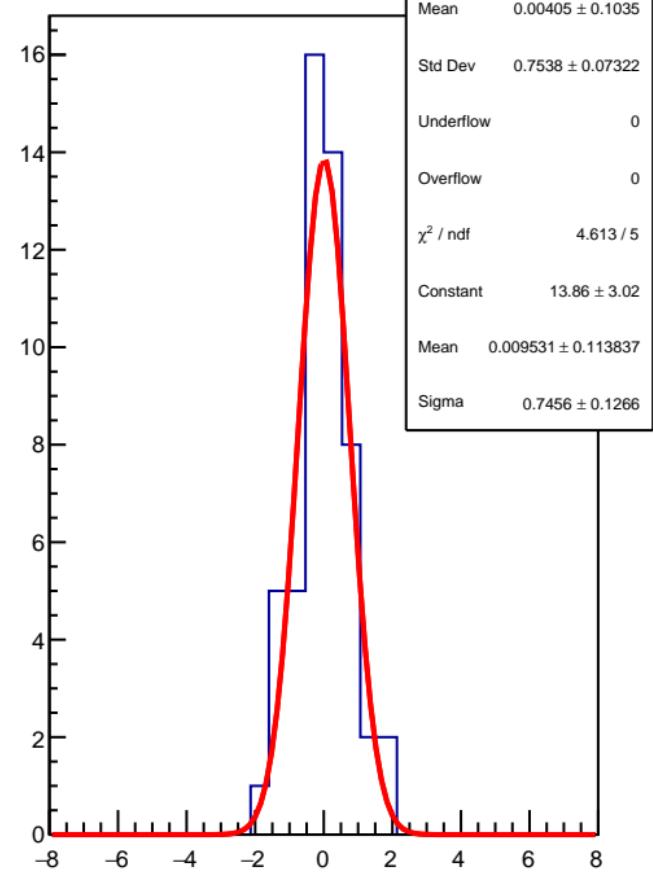


corr_Adet_bpm16Y (ppb)

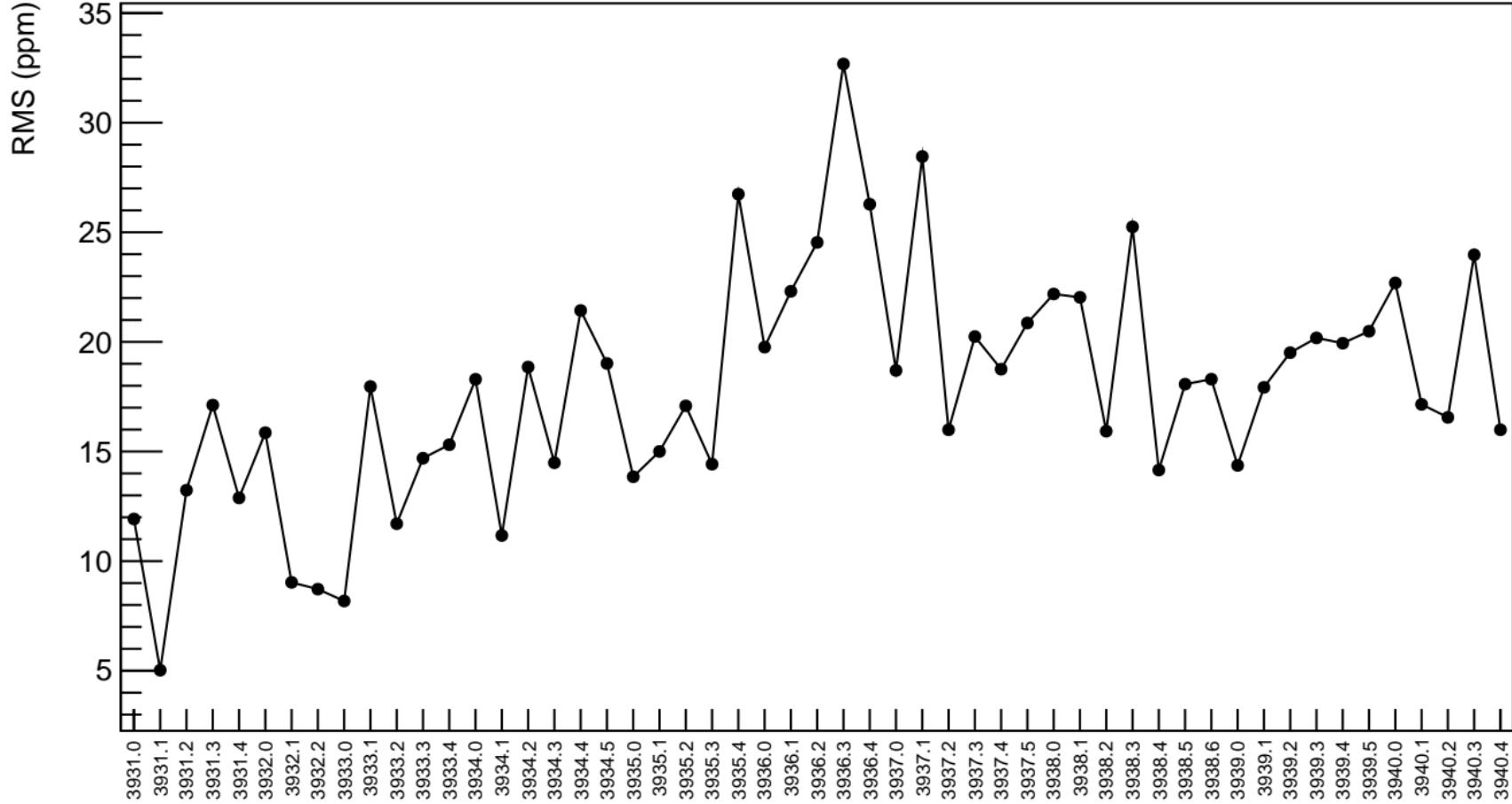
χ^2 / ndf 30.12 / 52
p0 -13.77 ± 30.11



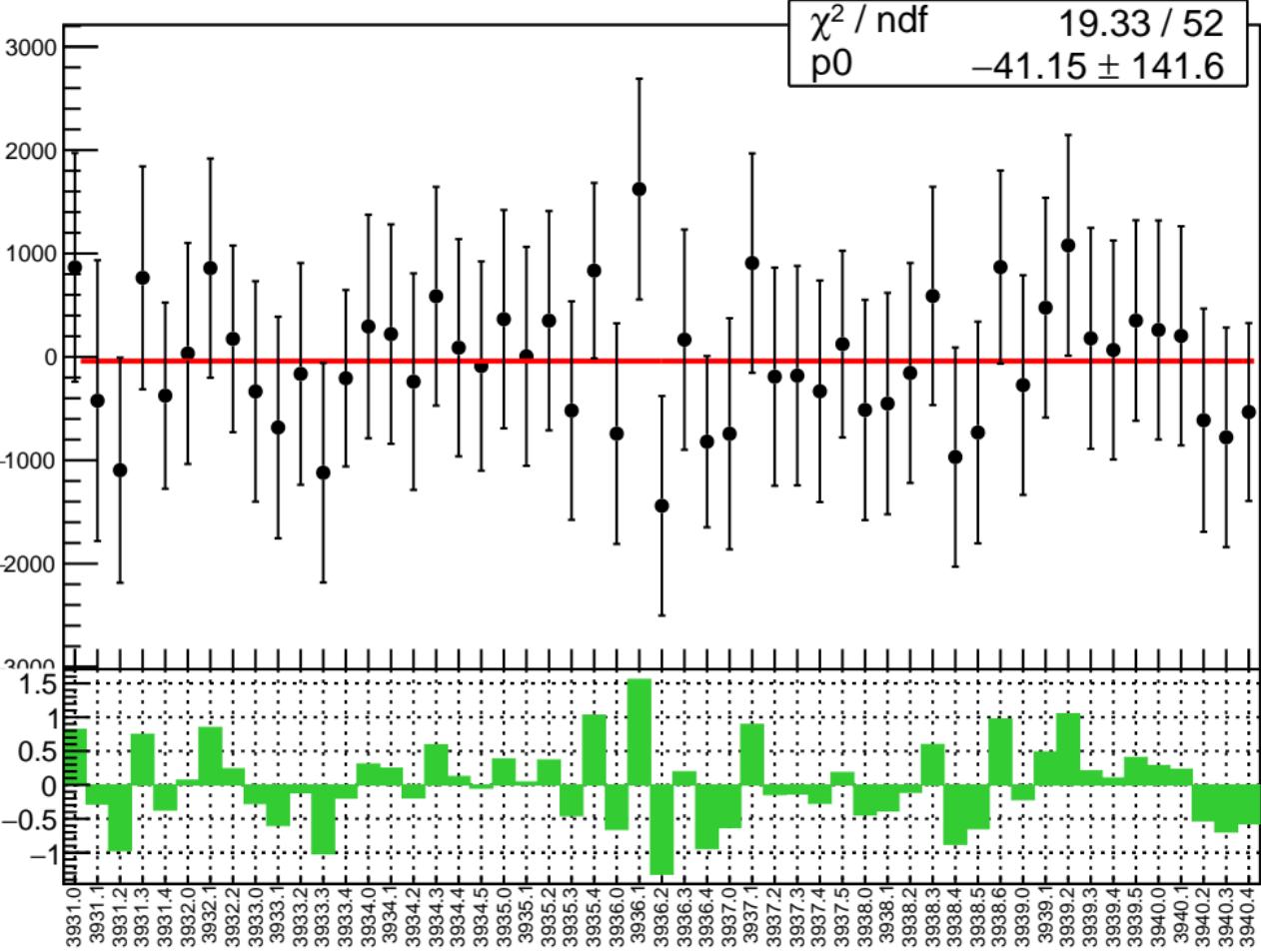
1D pull distribution



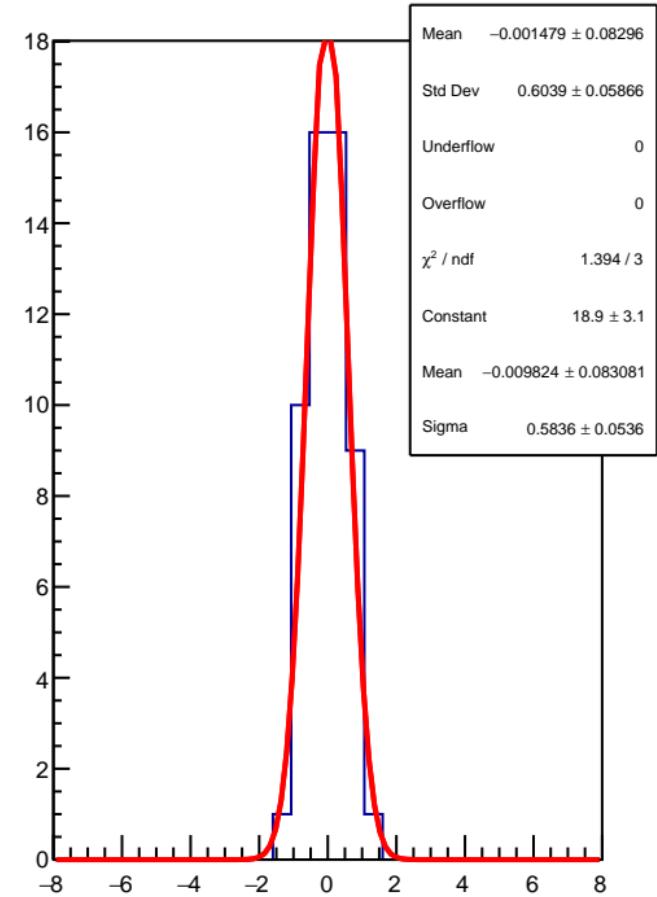
corr_Adet_bpm16Y RMS (ppm)



corr_Adet_bpm12X (ppb)

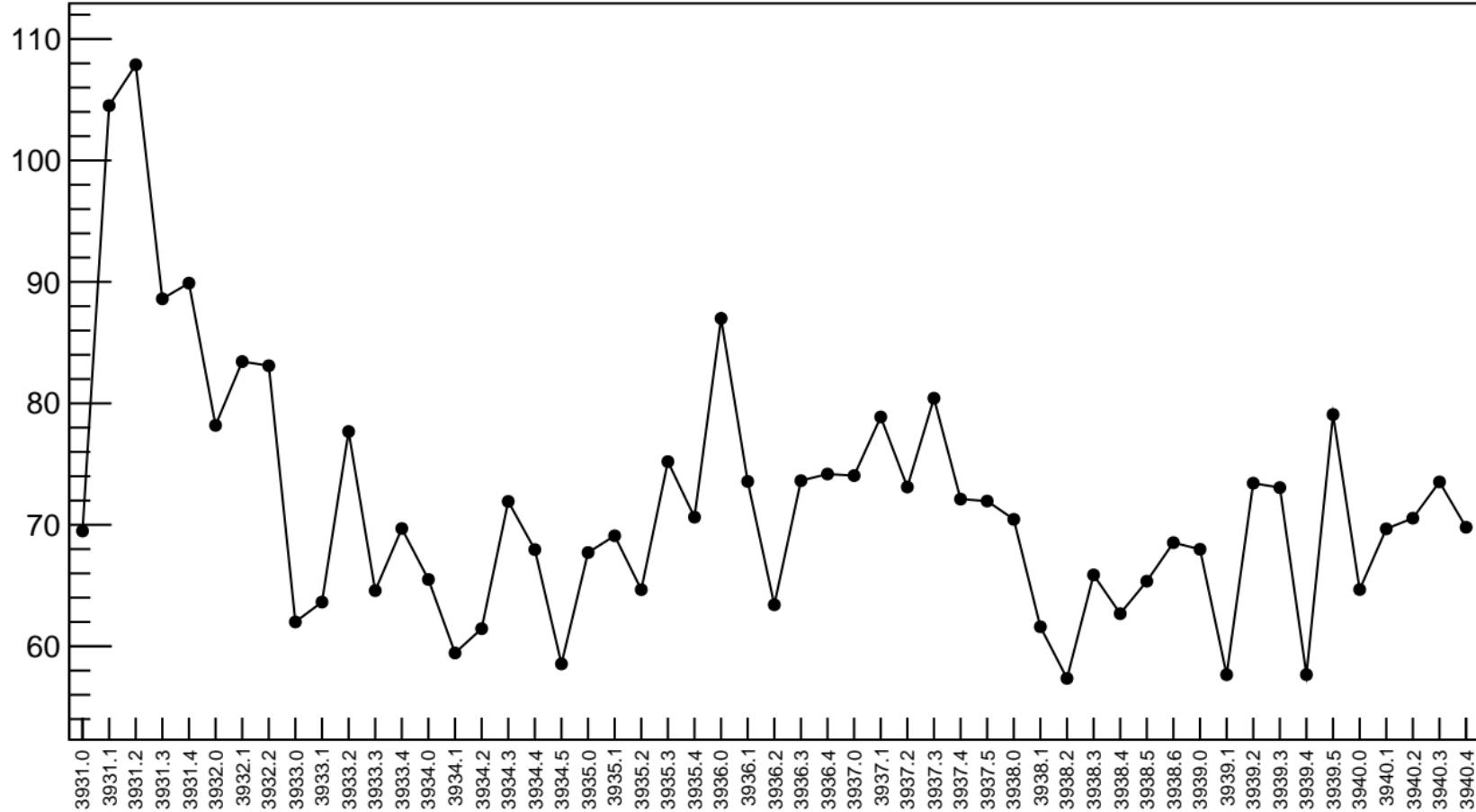


1D pull distribution

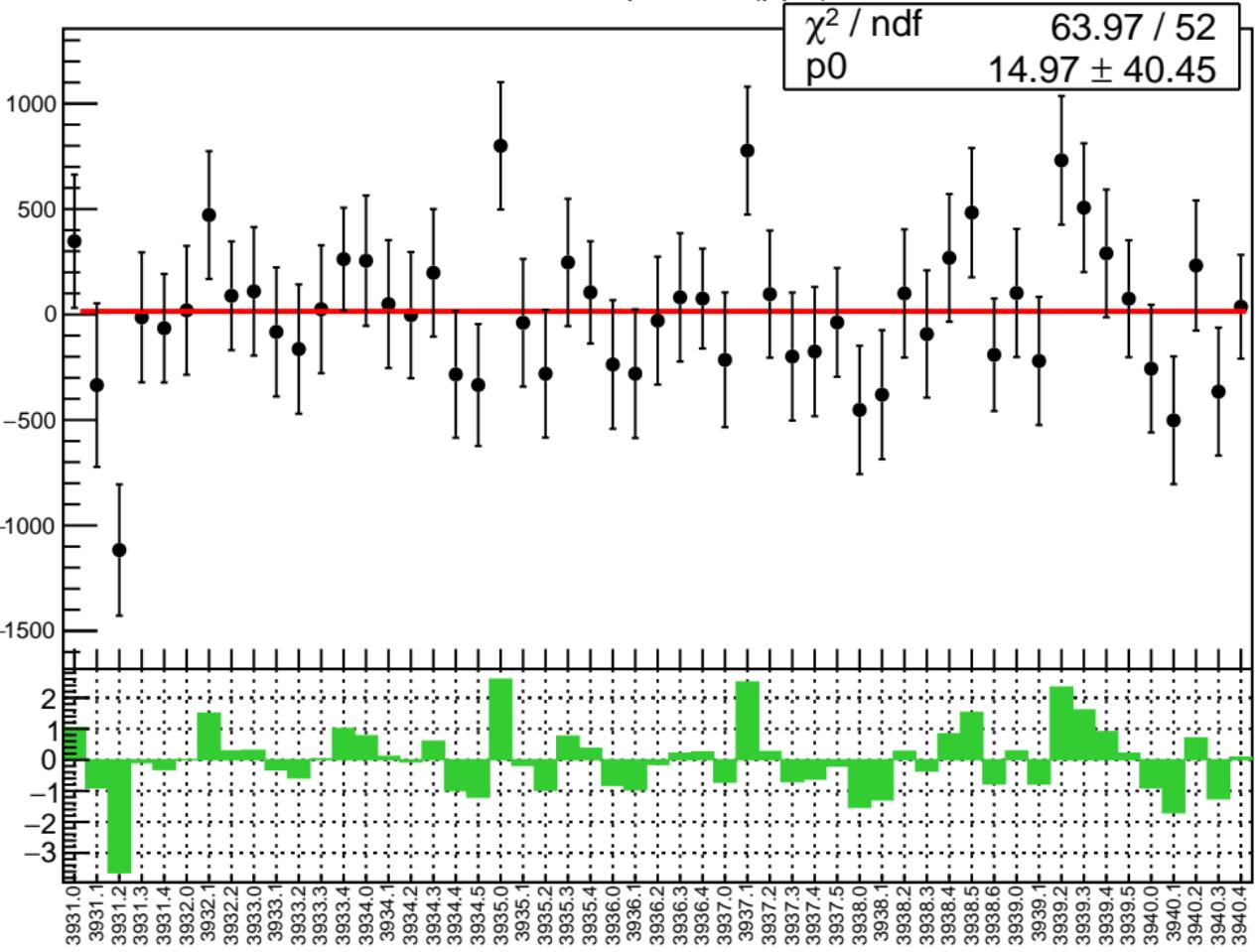


corr_Adet_bpm12X RMS (ppm)

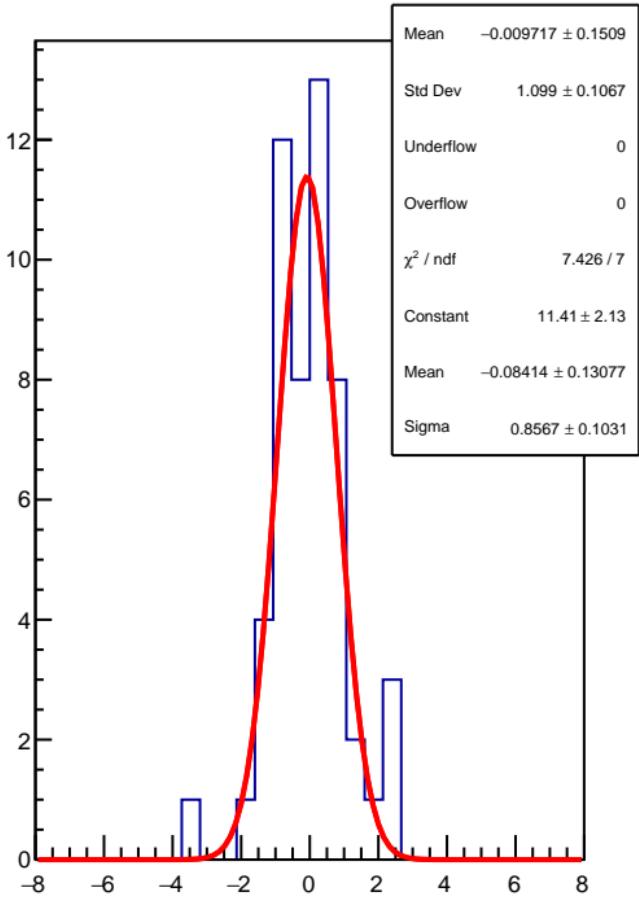
RMS (ppm)



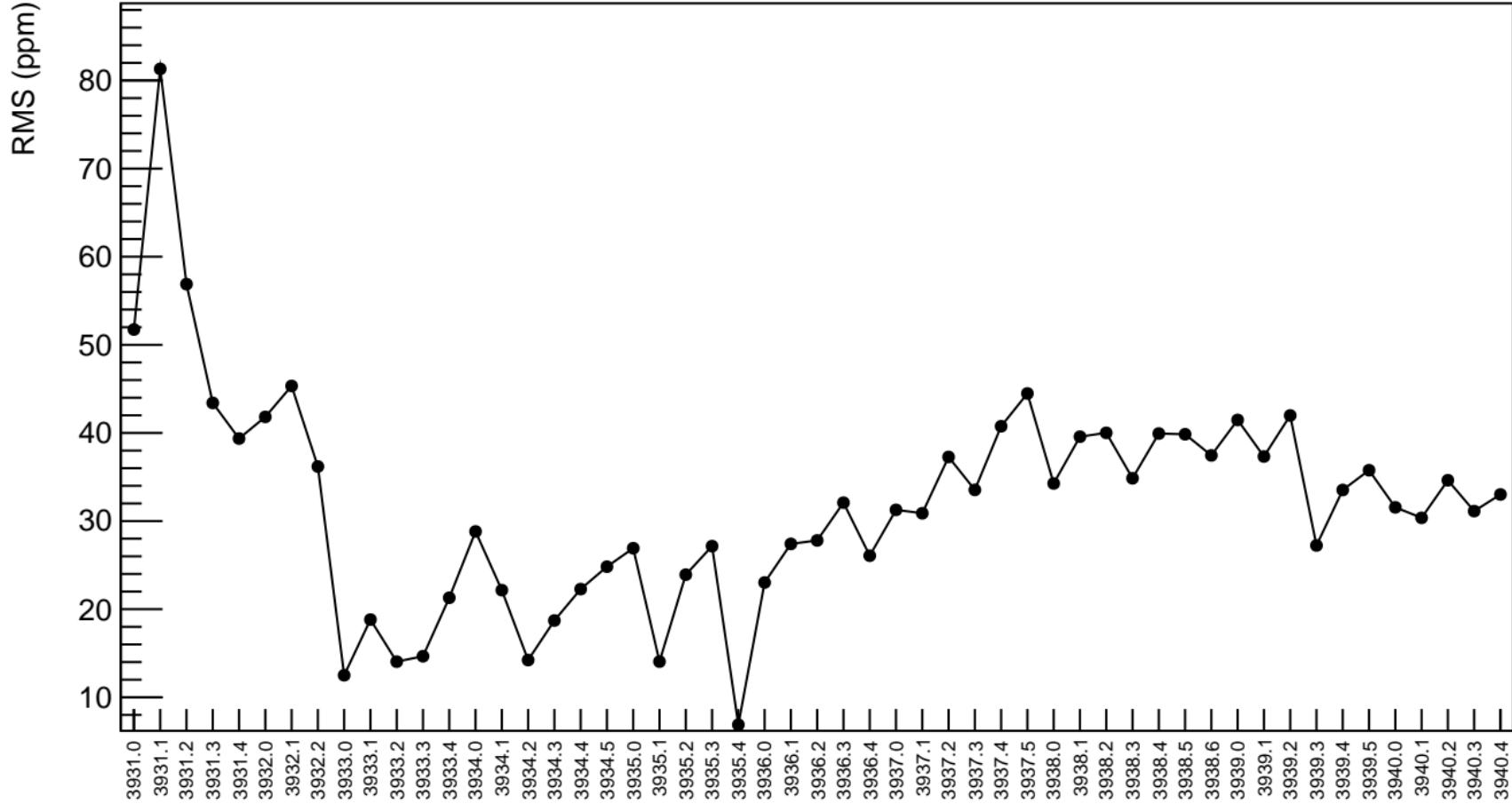
corr_Adet_bpm12Y (ppb)



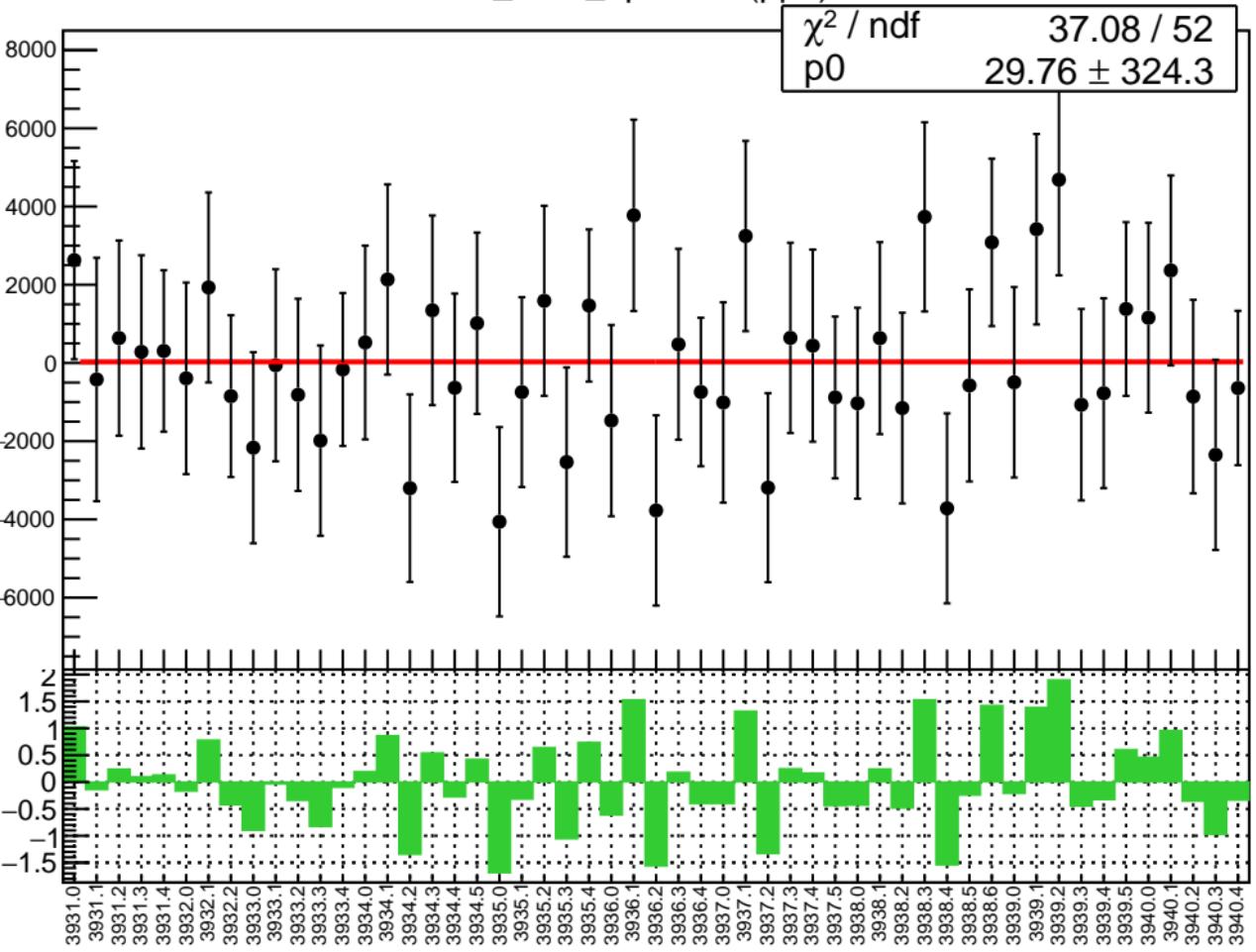
1D pull distribution



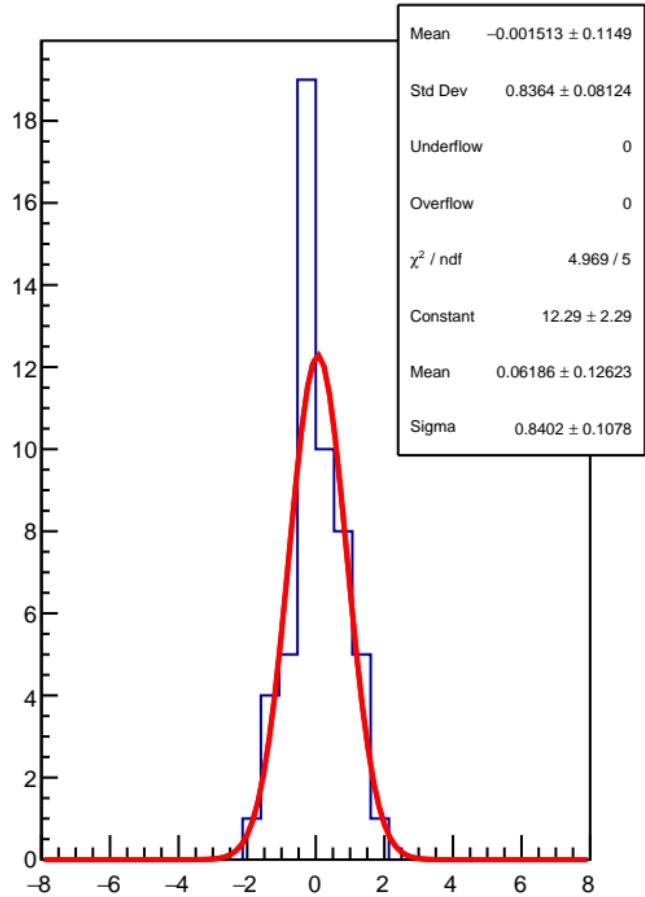
corr_Adet_bpm12Y RMS (ppm)



corr_Adet_bpm11X (ppb)

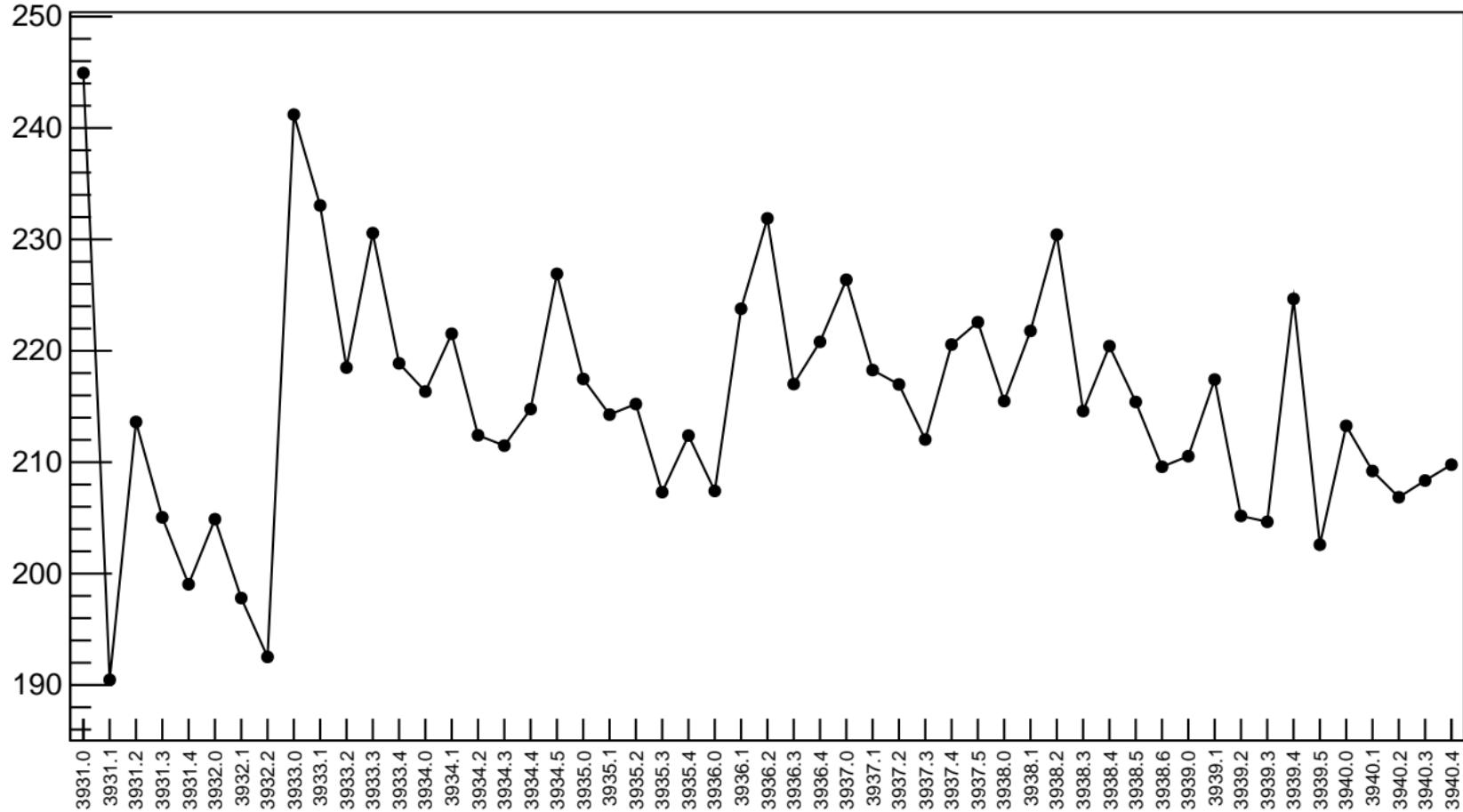


1D pull distribution



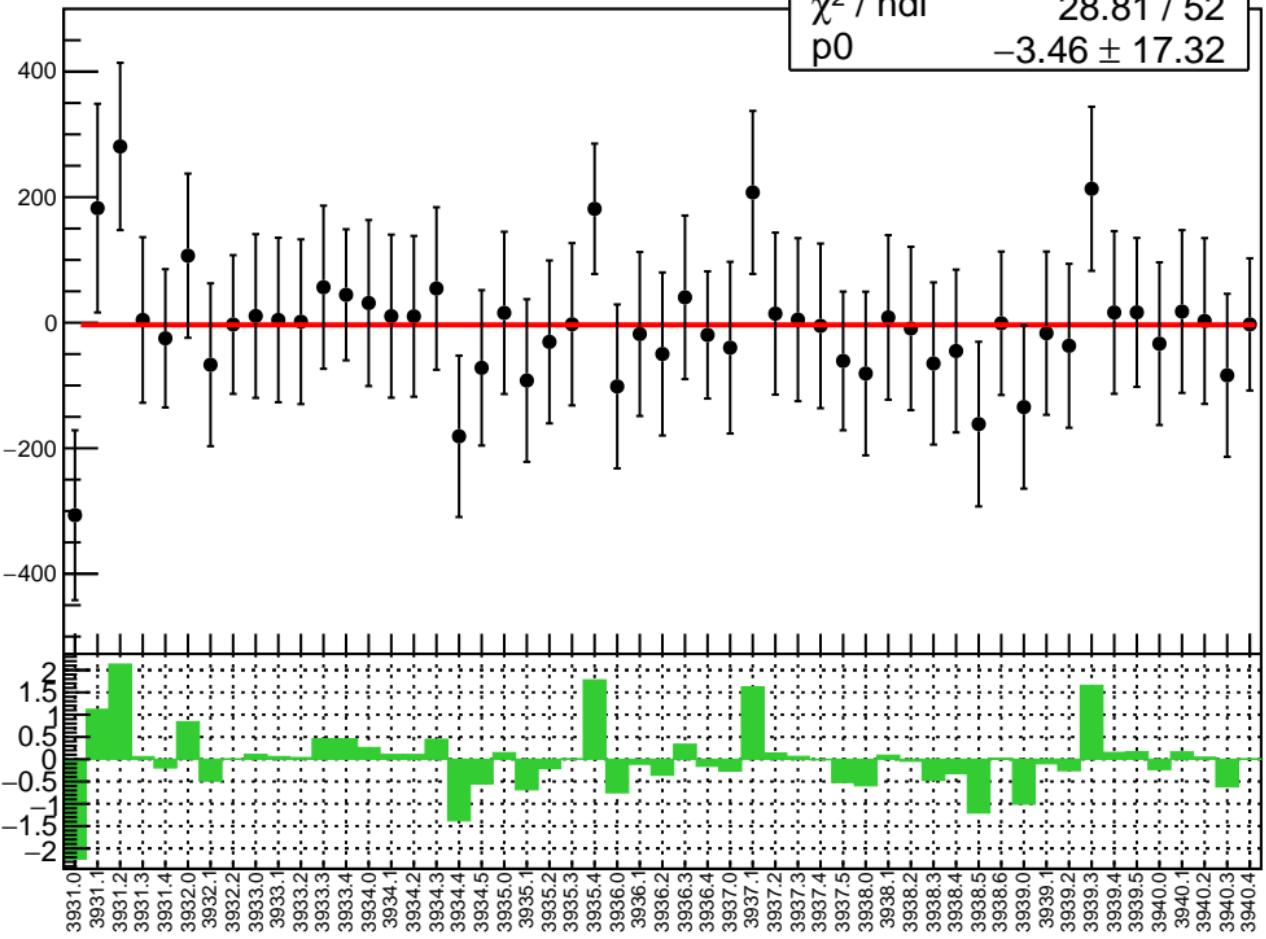
corr_Adet_bpm11X RMS (ppm)

RMS (ppm)

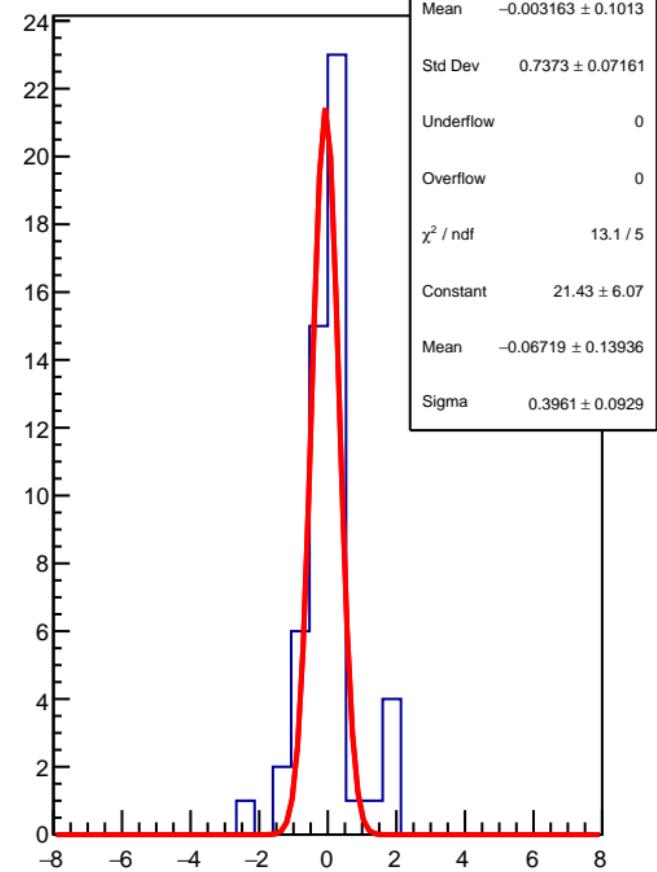


corr_Adet_bpm11Y (ppb)

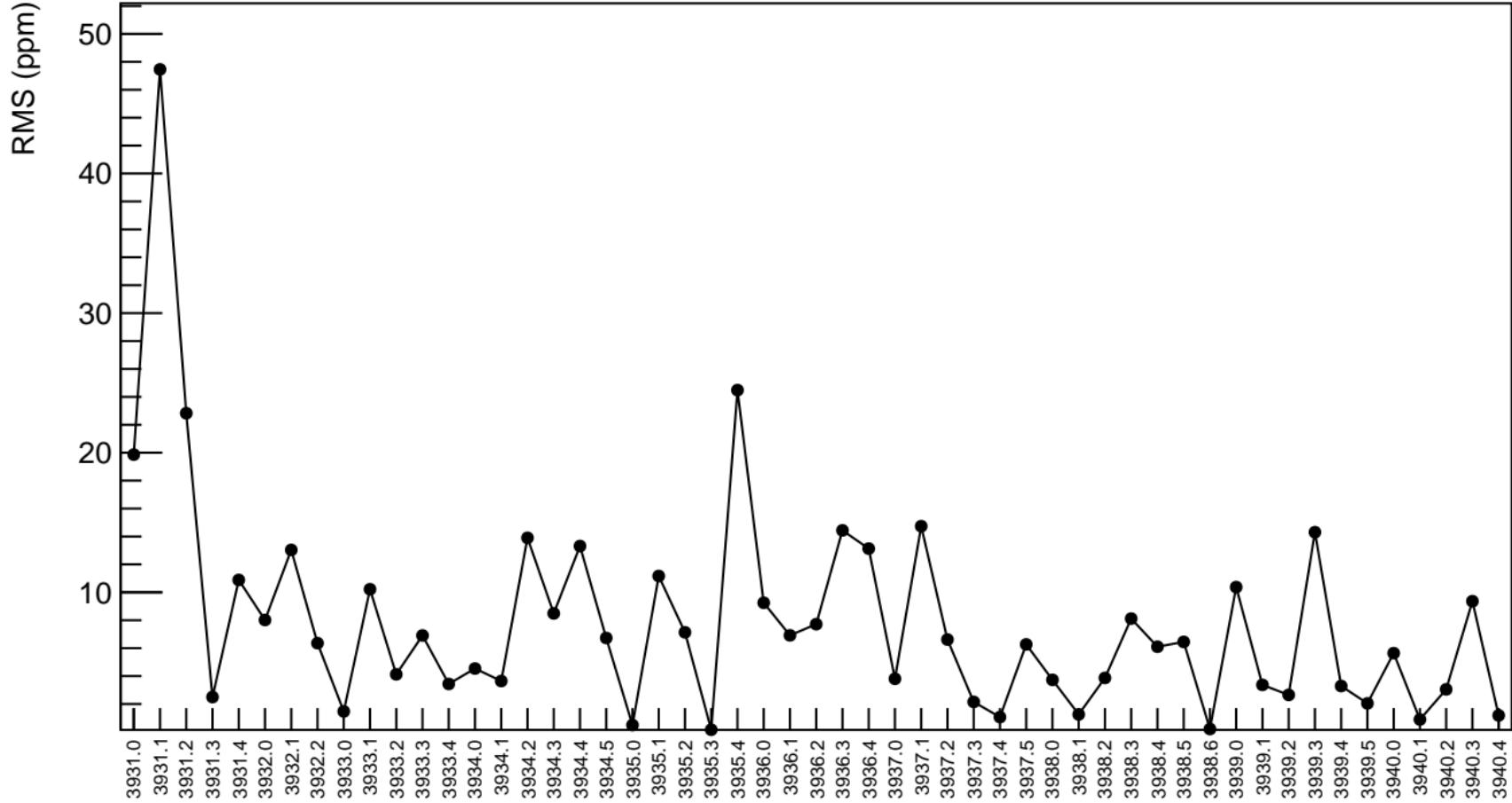
χ^2 / ndf 28.81 / 52
p0 -3.46 ± 17.32



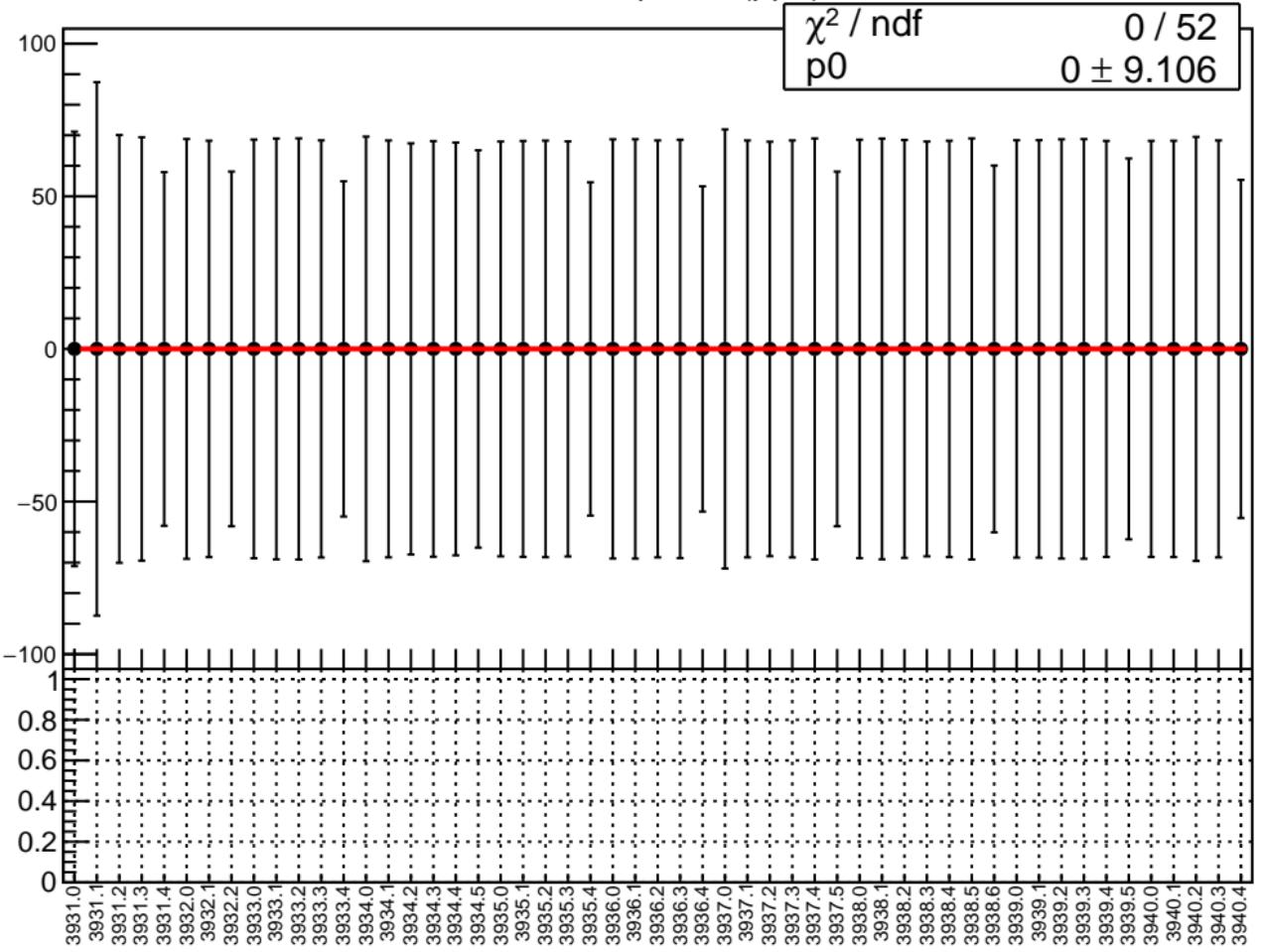
1D pull distribution



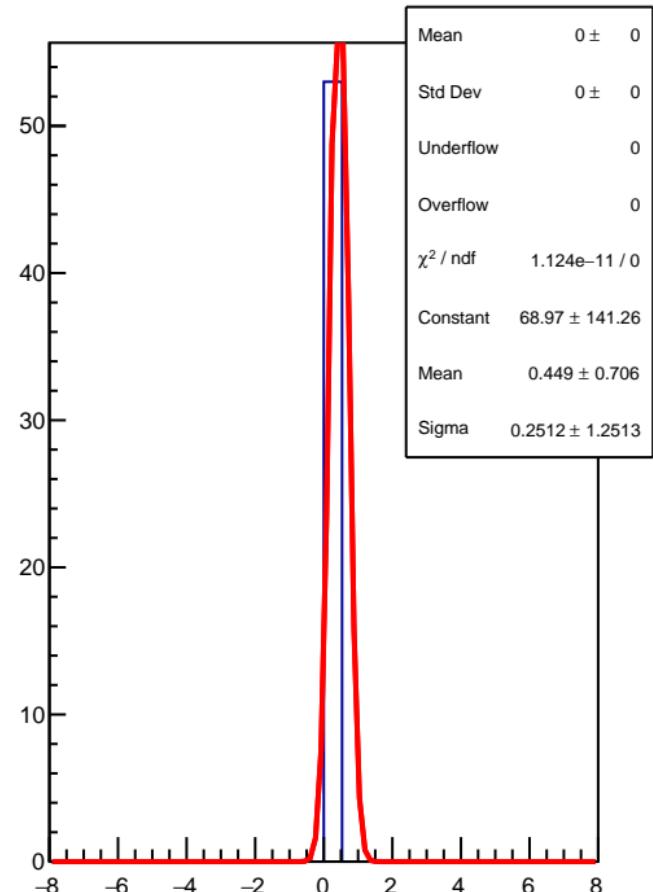
corr_Adet_bpm11Y RMS (ppm)



corr_Adet_bpm8X (ppb)

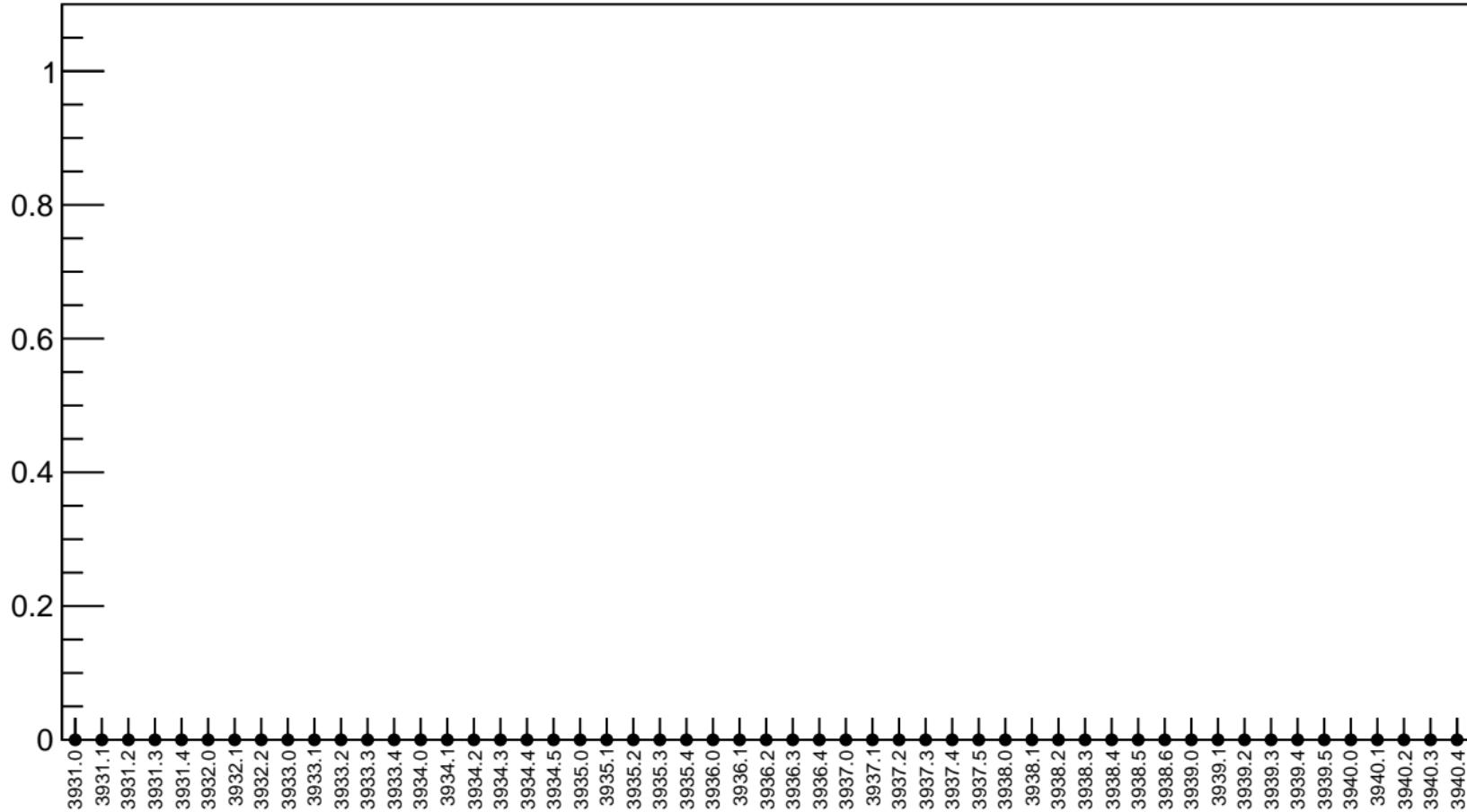


1D pull distribution

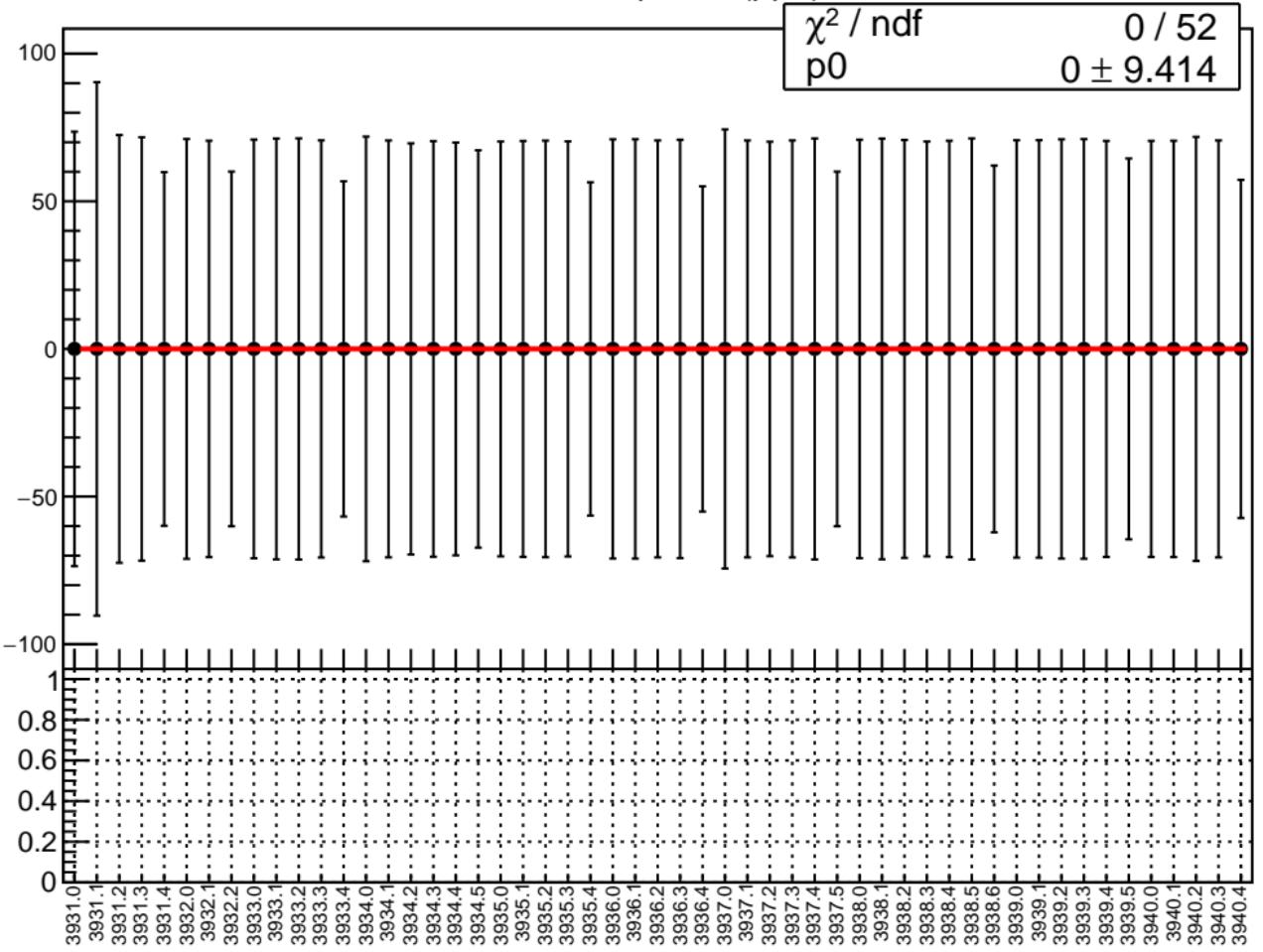


corr_Adet_bpm8X RMS (ppm)

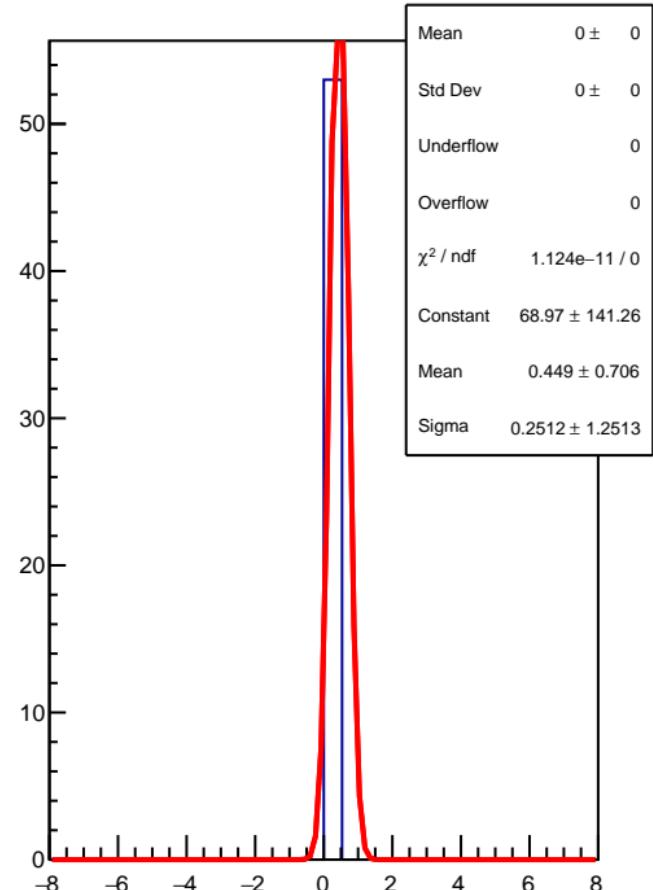
RMS (ppm)



corr_Adet_bpm8Y (ppb)

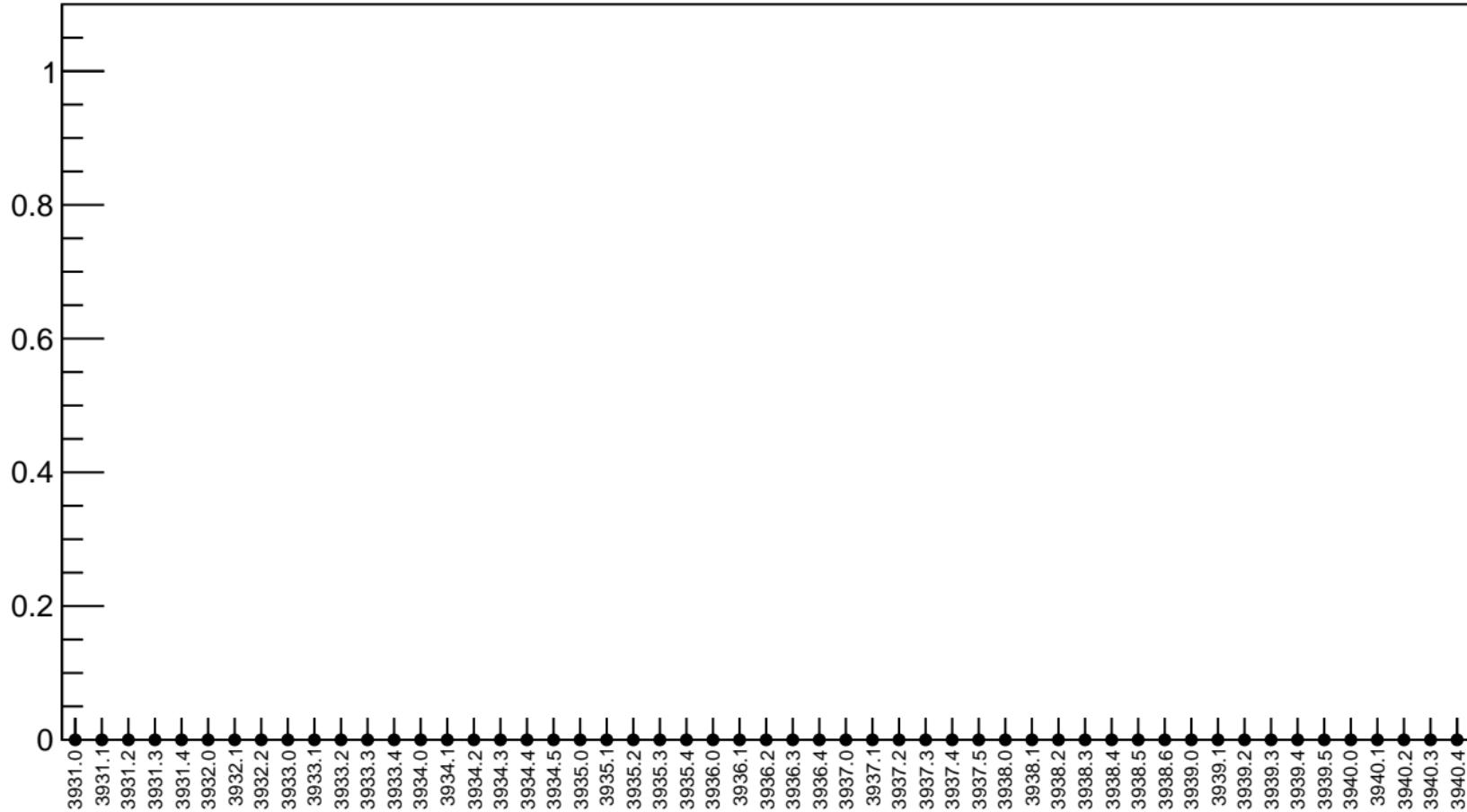


1D pull distribution

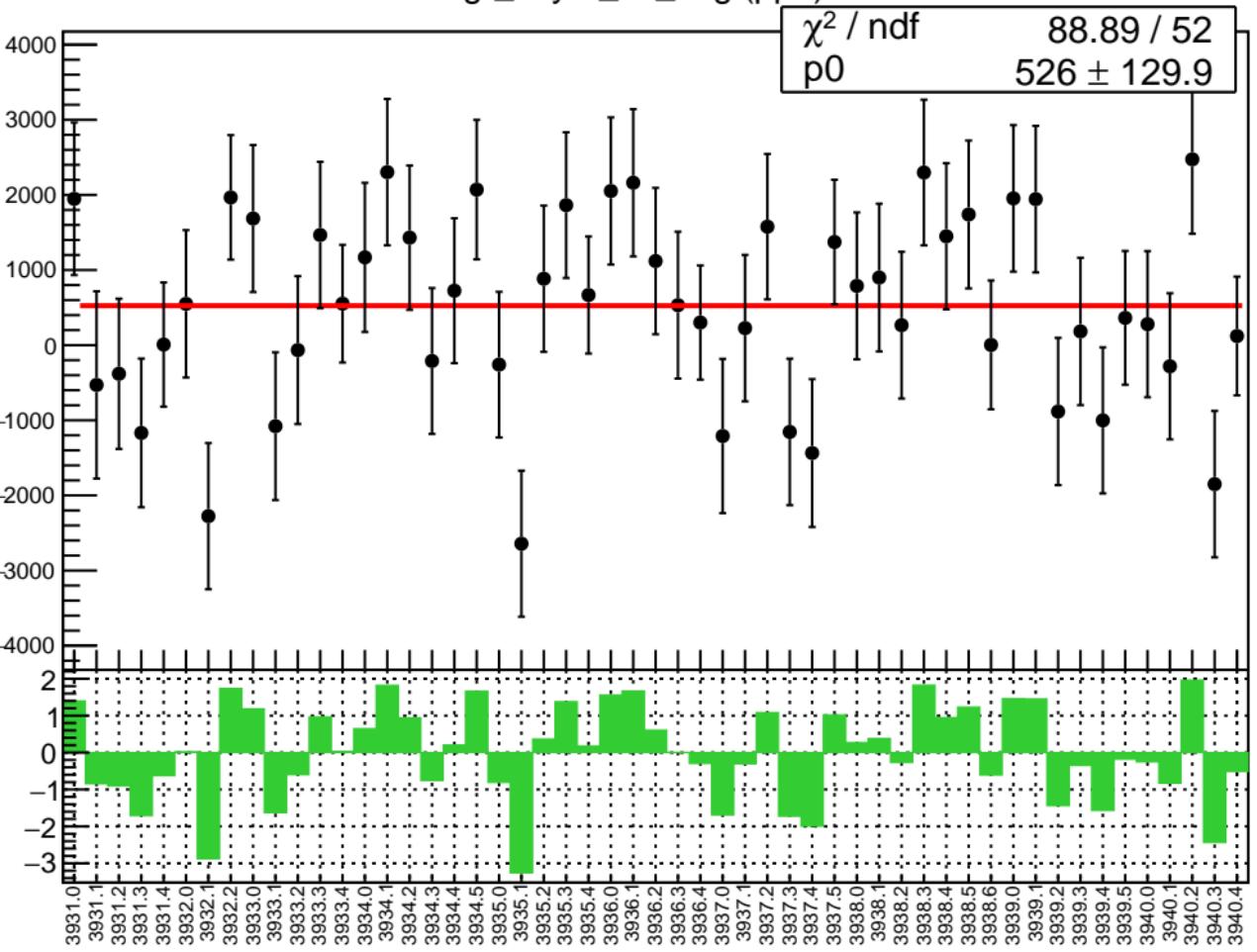


corr_Adet_bpm8Y RMS (ppm)

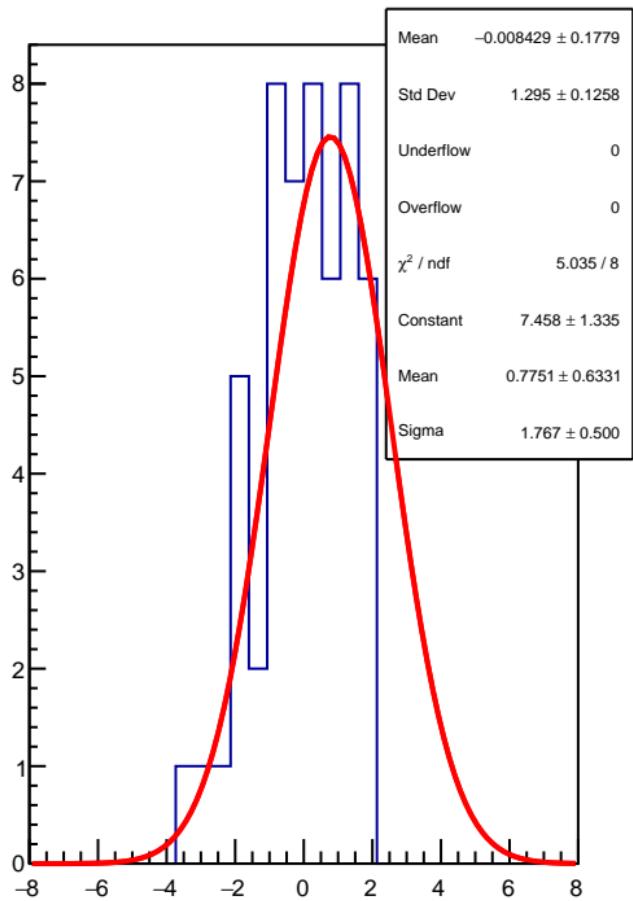
RMS (ppm)



lagr_asym_us_avg (ppb)

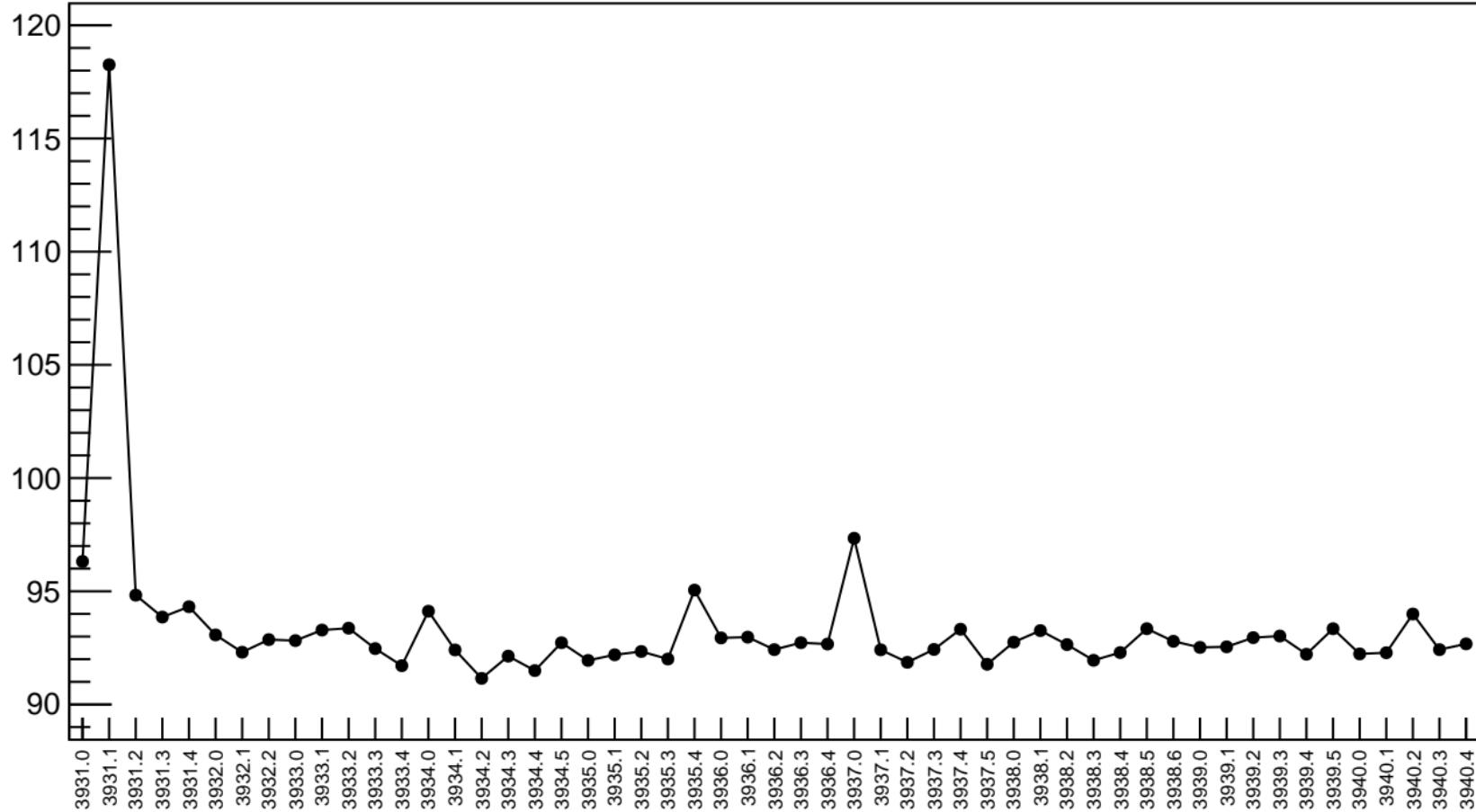


1D pull distribution

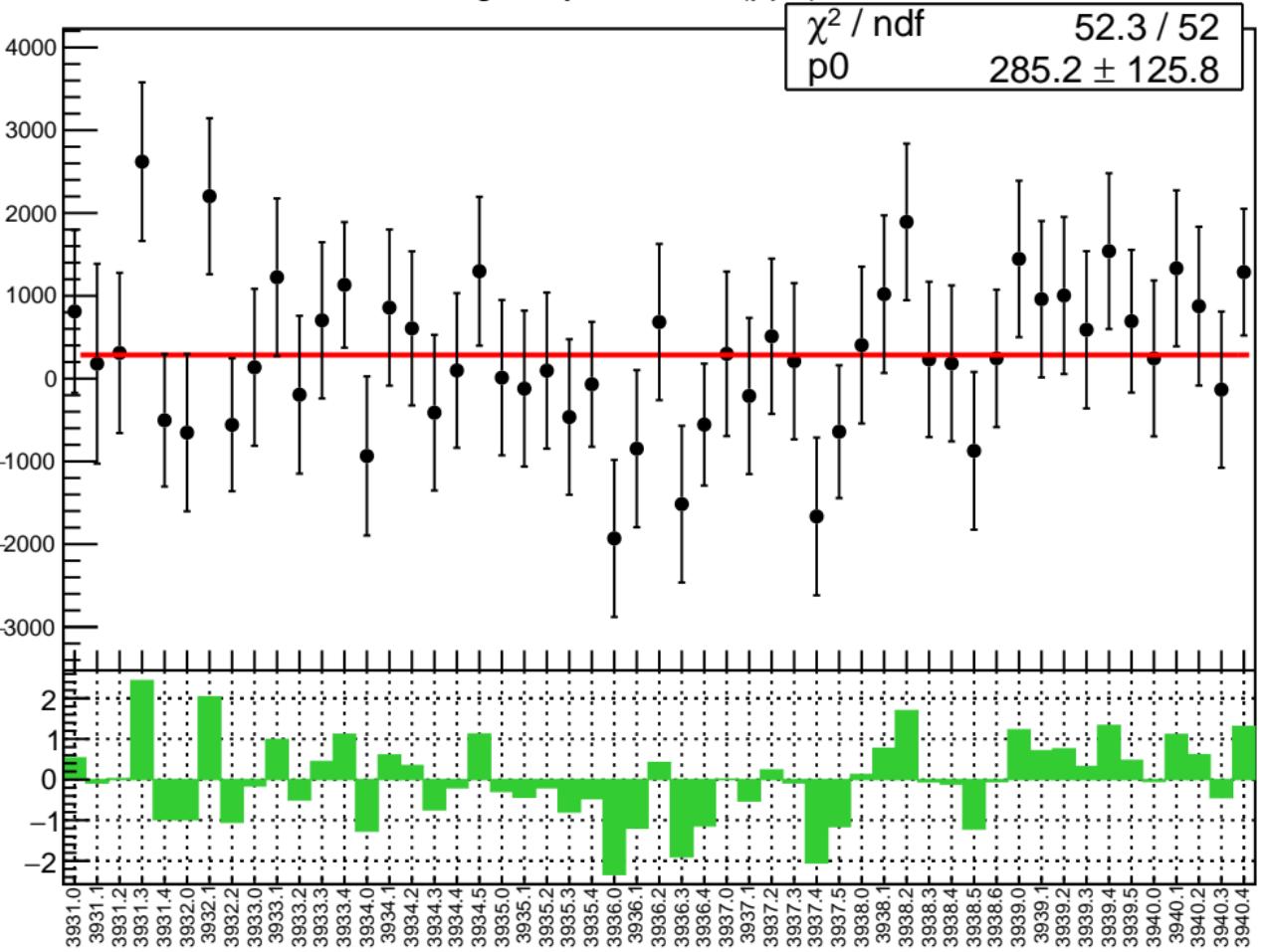


lagr_asym_us_avg RMS (ppm)

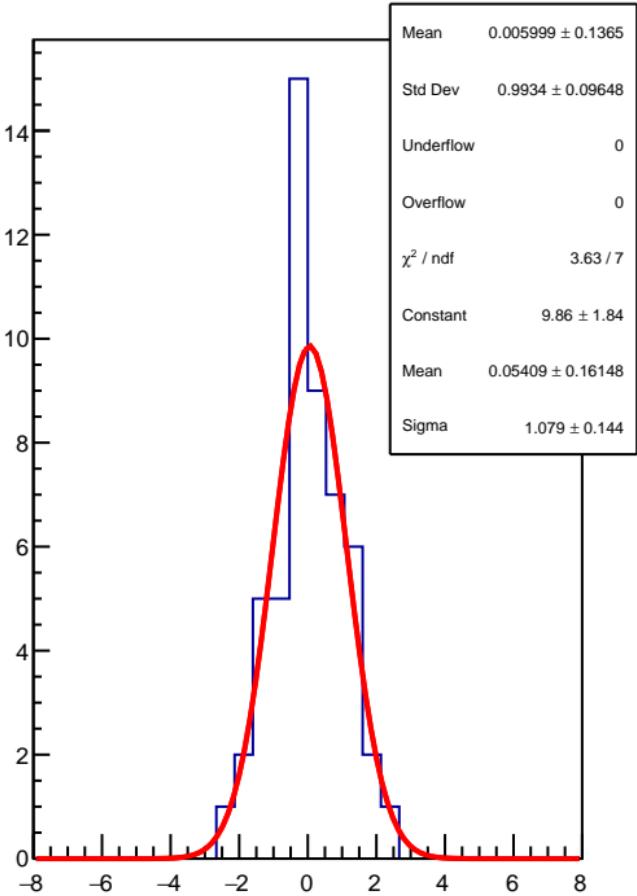
RMS (ppm)



lagr_asym_us_dd (ppb)

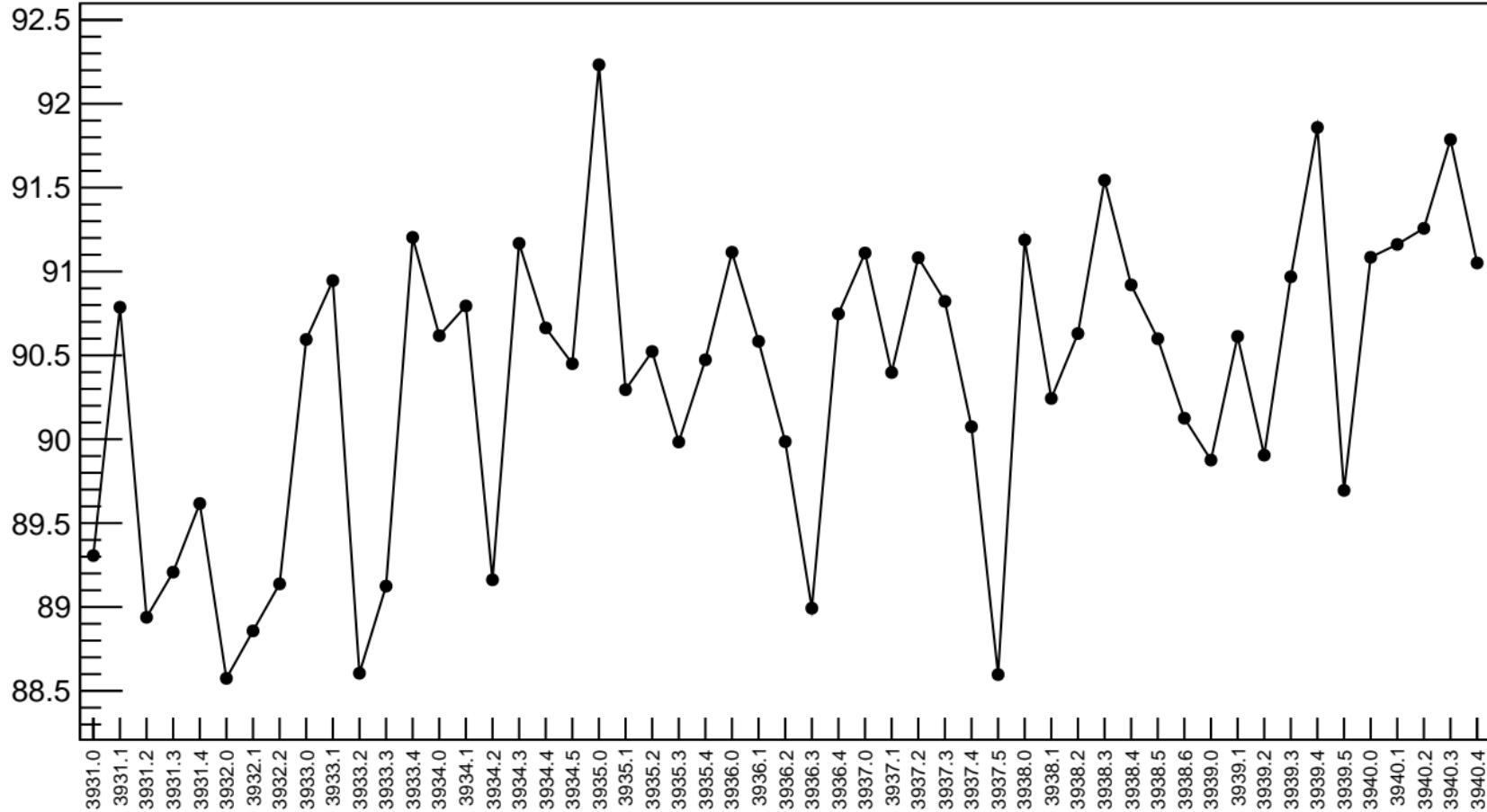


1D pull distribution



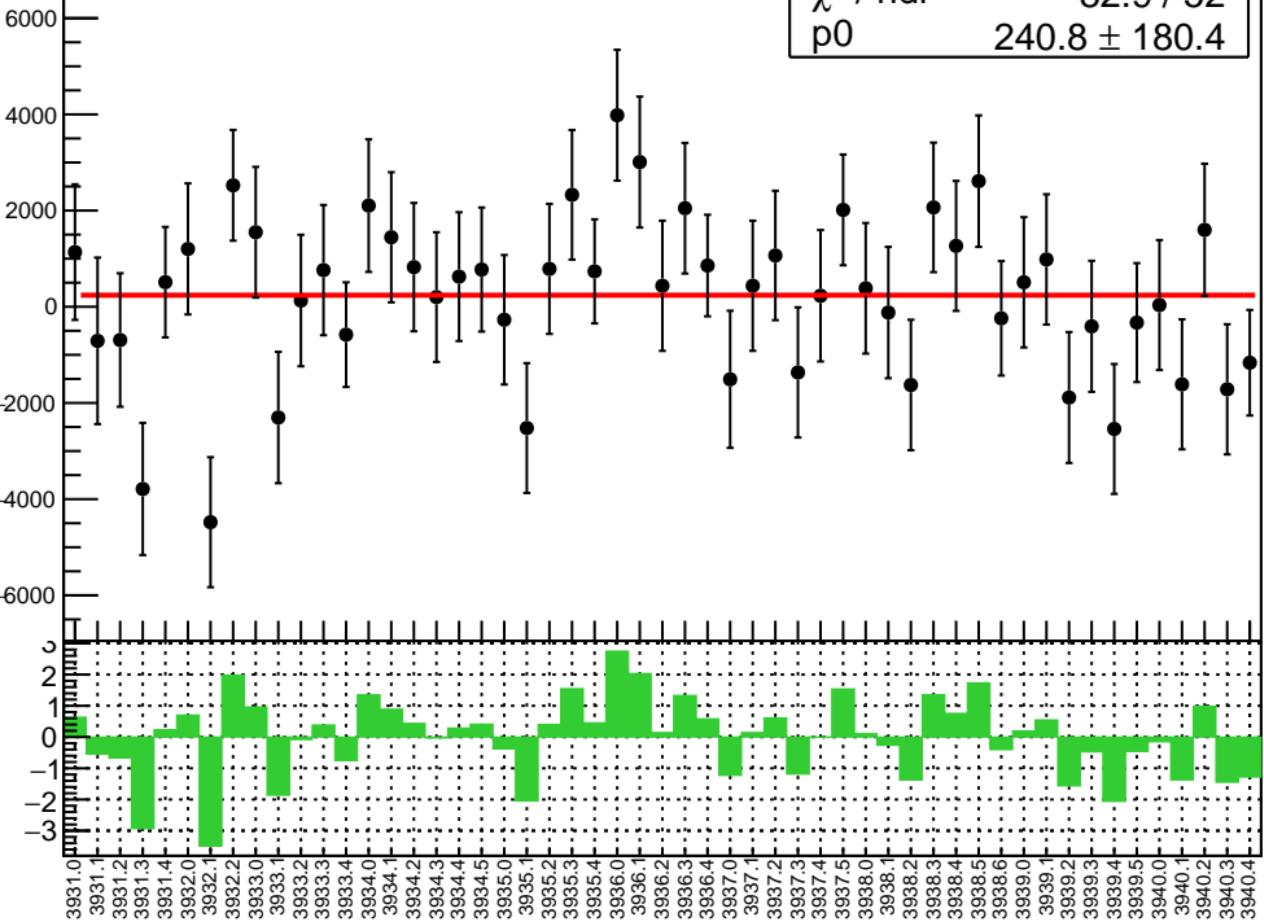
lagr_asym_us_dd RMS (ppm)

RMS (ppm)

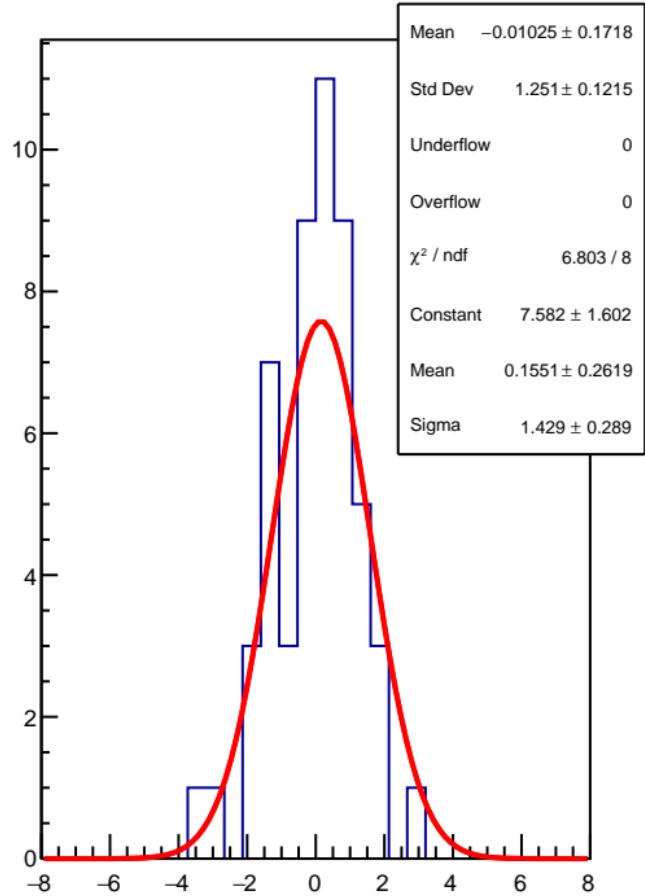


lagr_asym_usr (ppb)

χ^2 / ndf 82.9 / 52
p0 240.8 ± 180.4

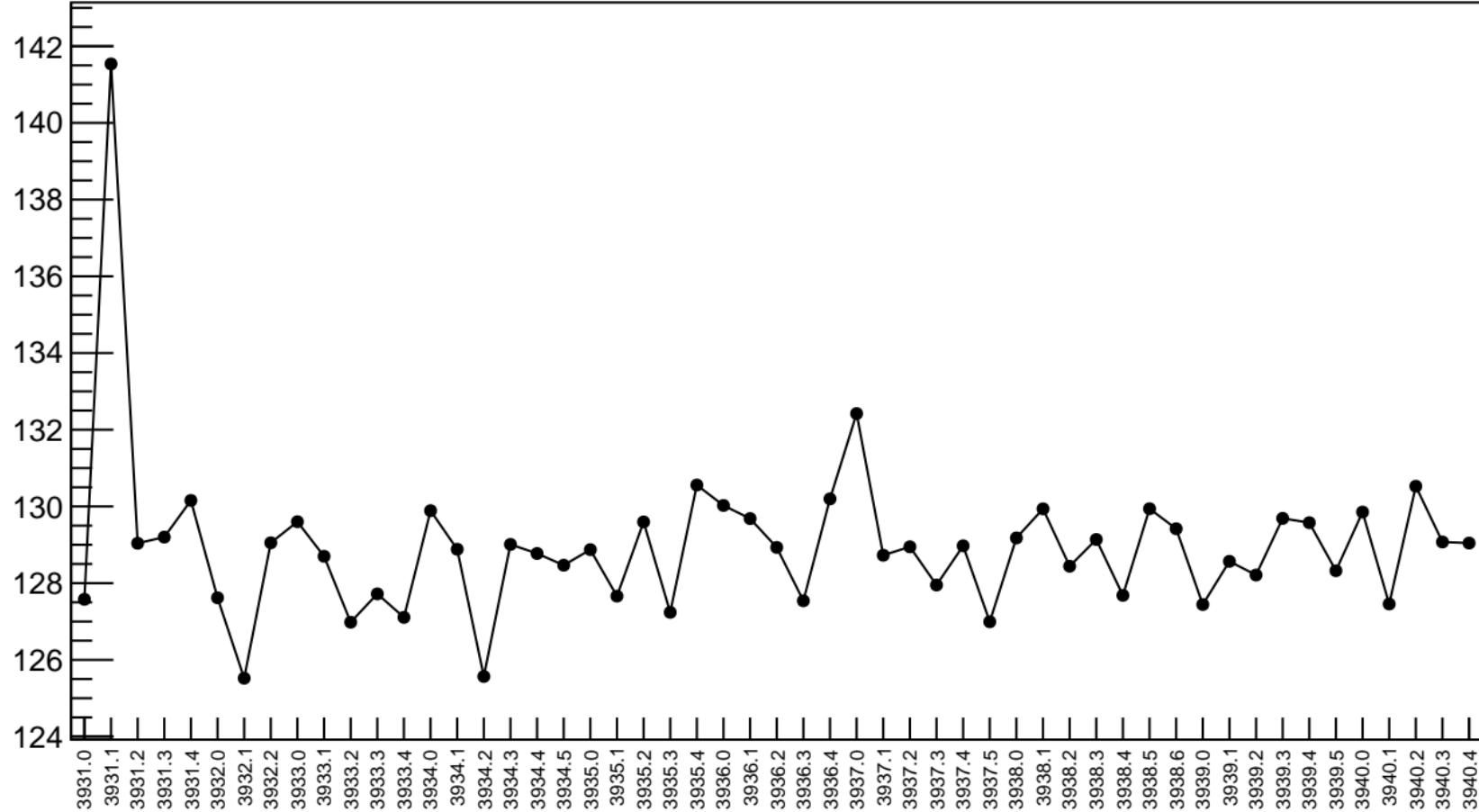


1D pull distribution



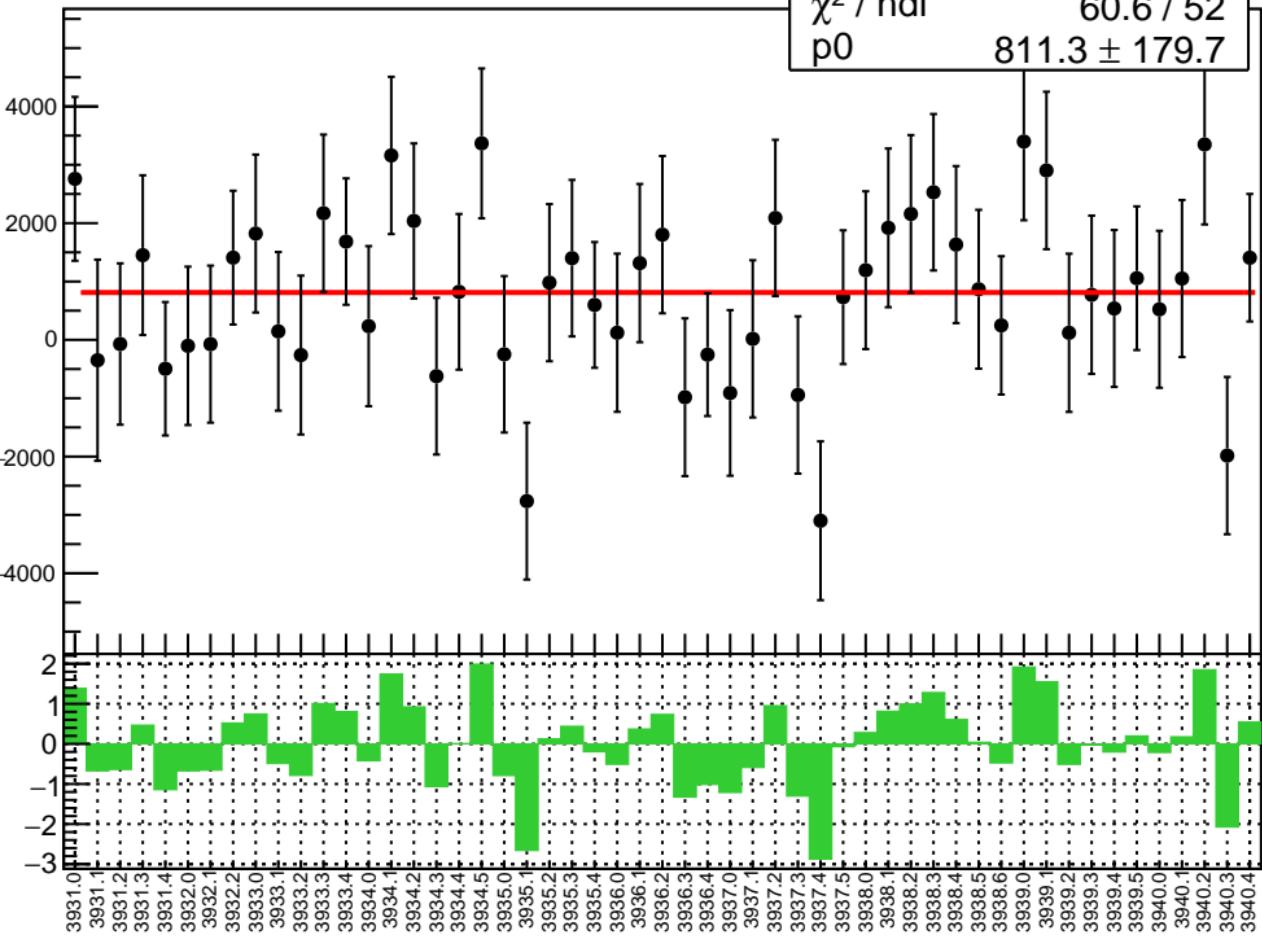
lagr_asym_usr RMS (ppm)

RMS (ppm)

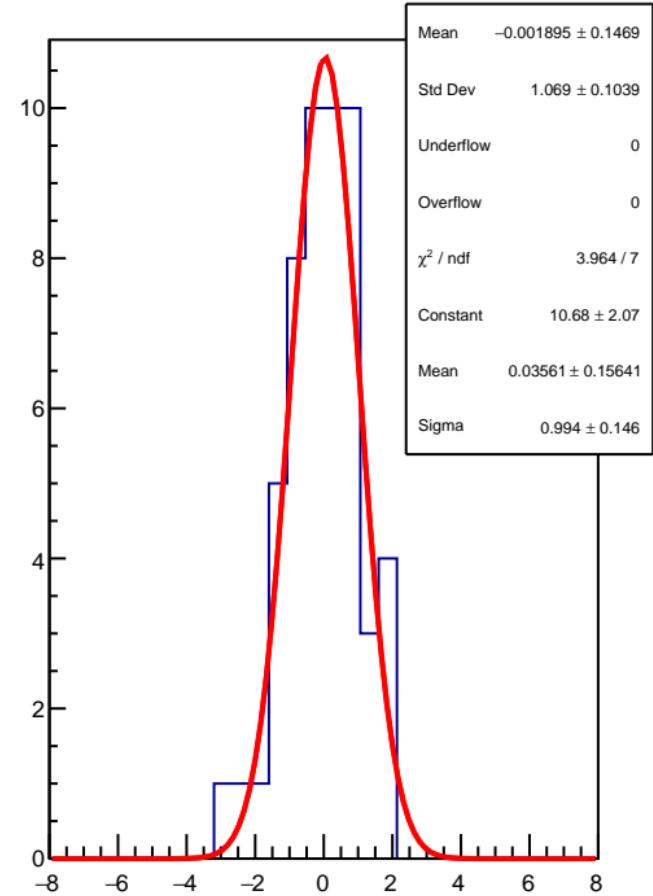


lagr_asym_usl (ppb)

χ^2 / ndf 60.6 / 52
p0 811.3 ± 179.7

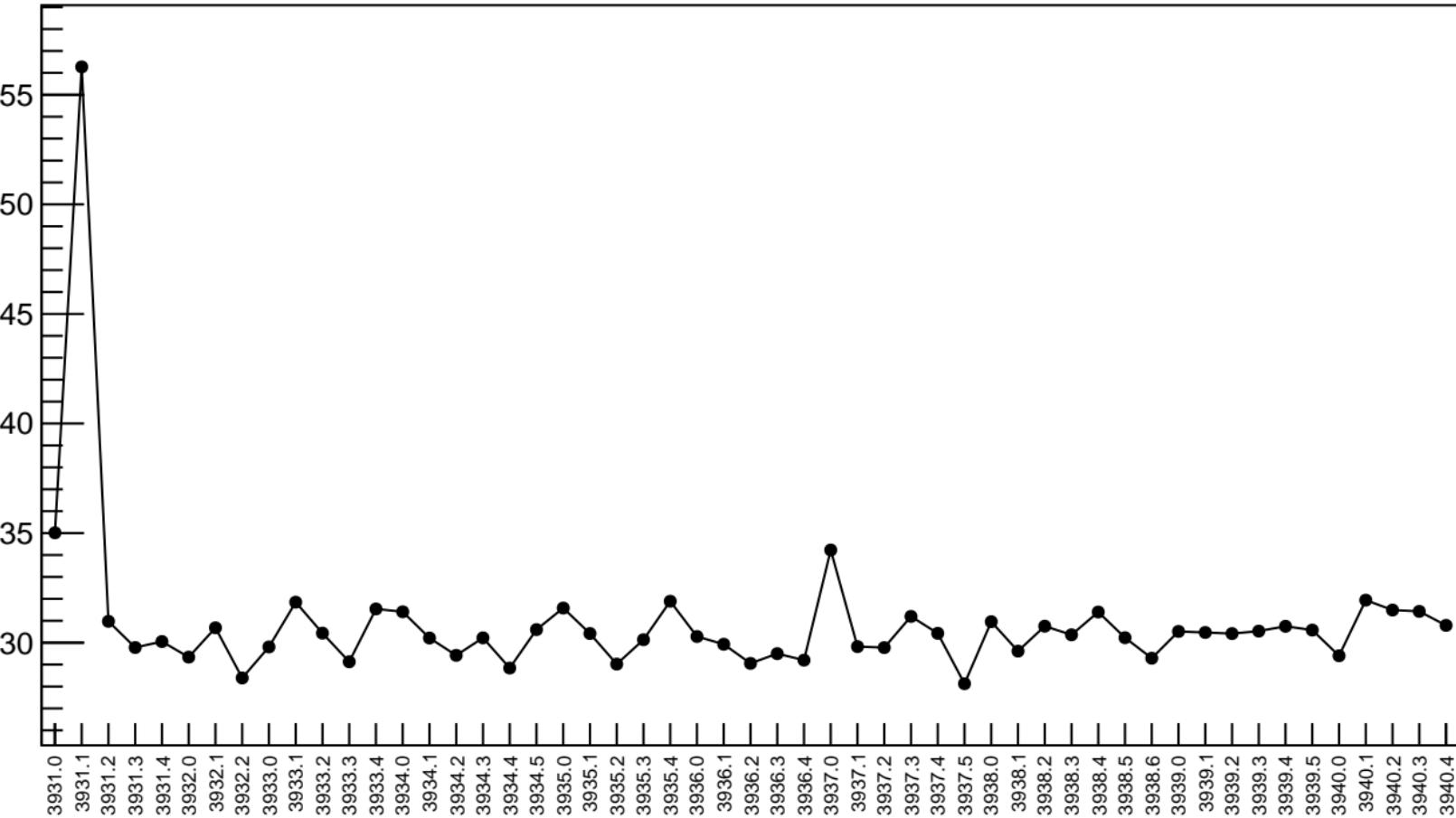


1D pull distribution

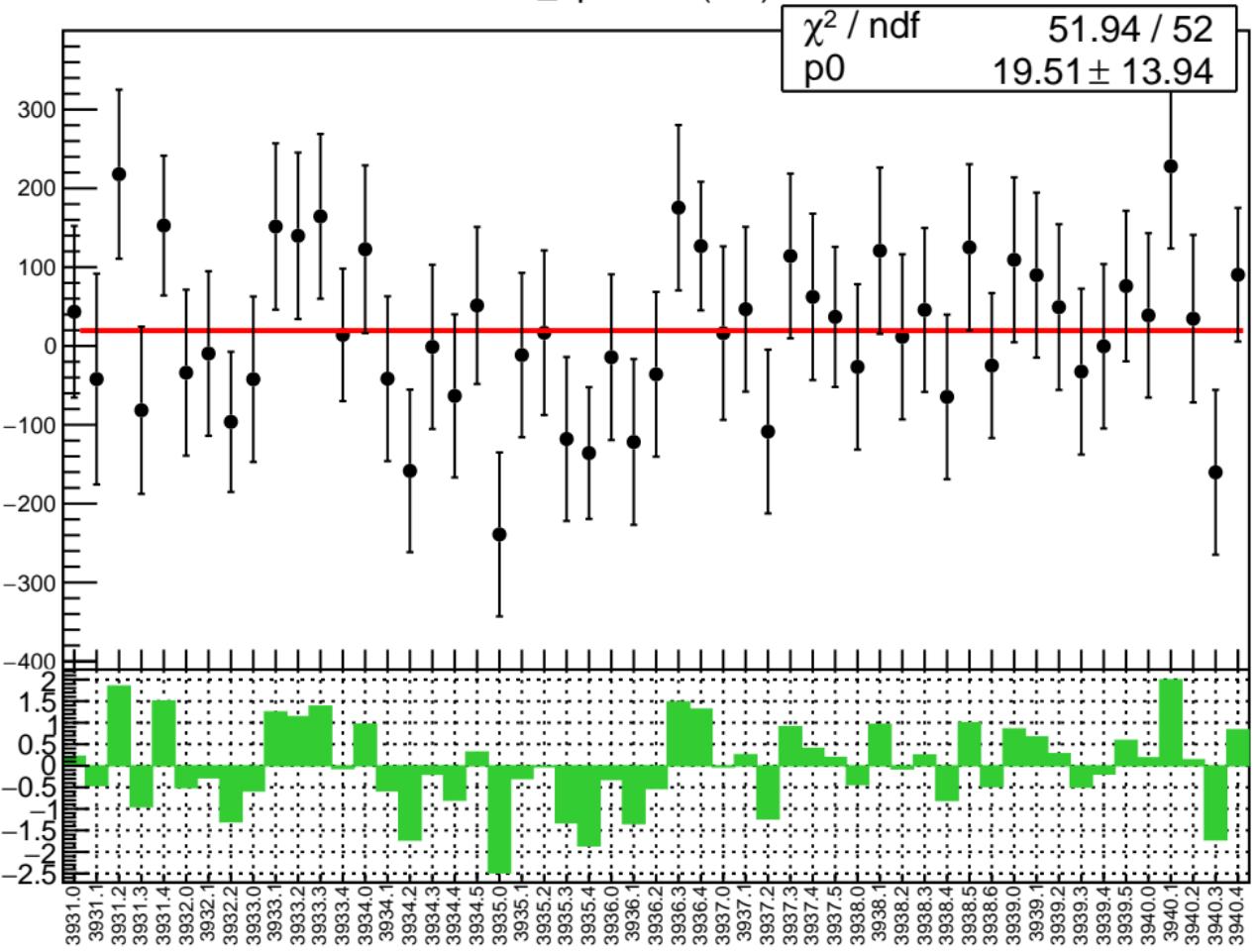


lagr_asym_usl RMS (ppm)

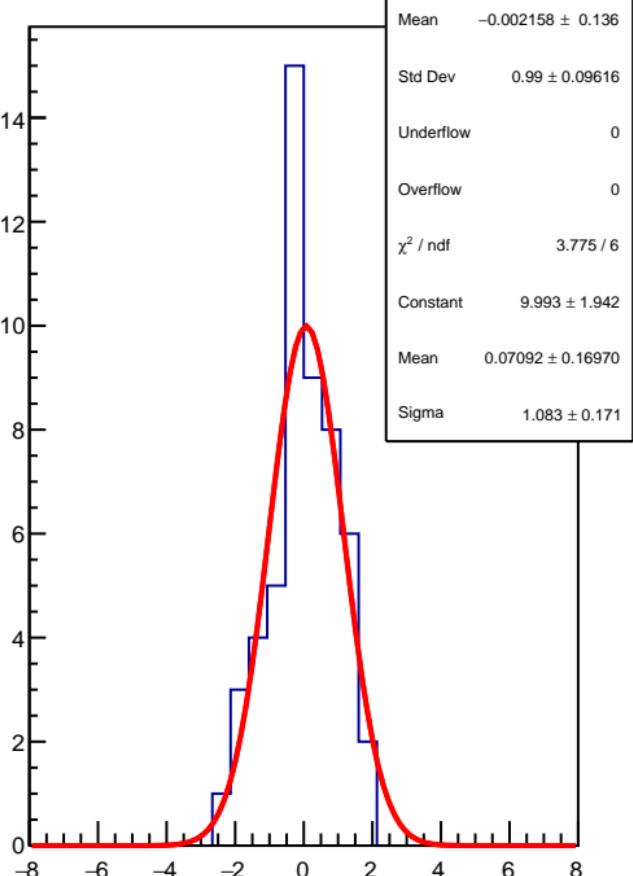
RMS (ppm)



diff_bpm4eX (nm)

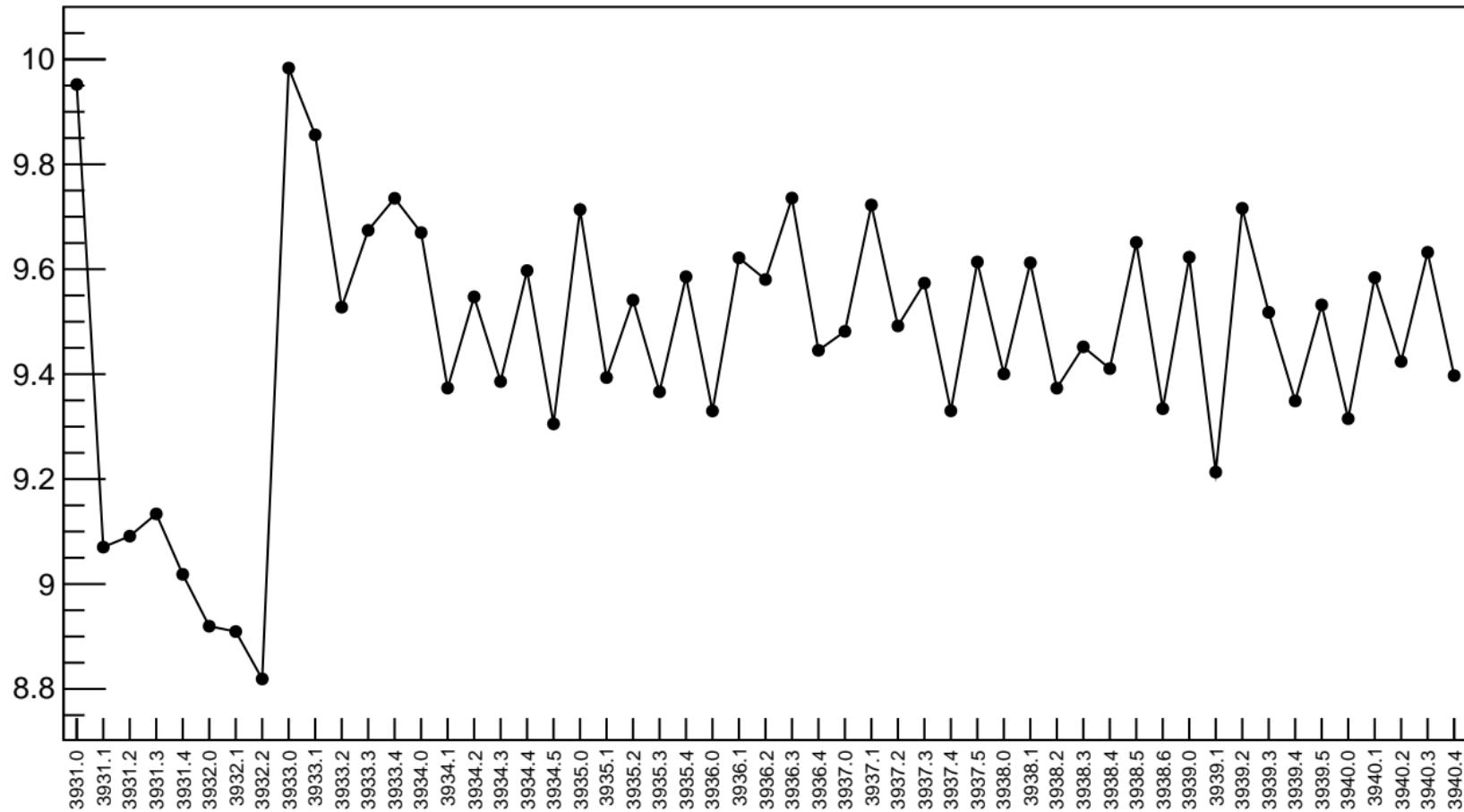


1D pull distribution



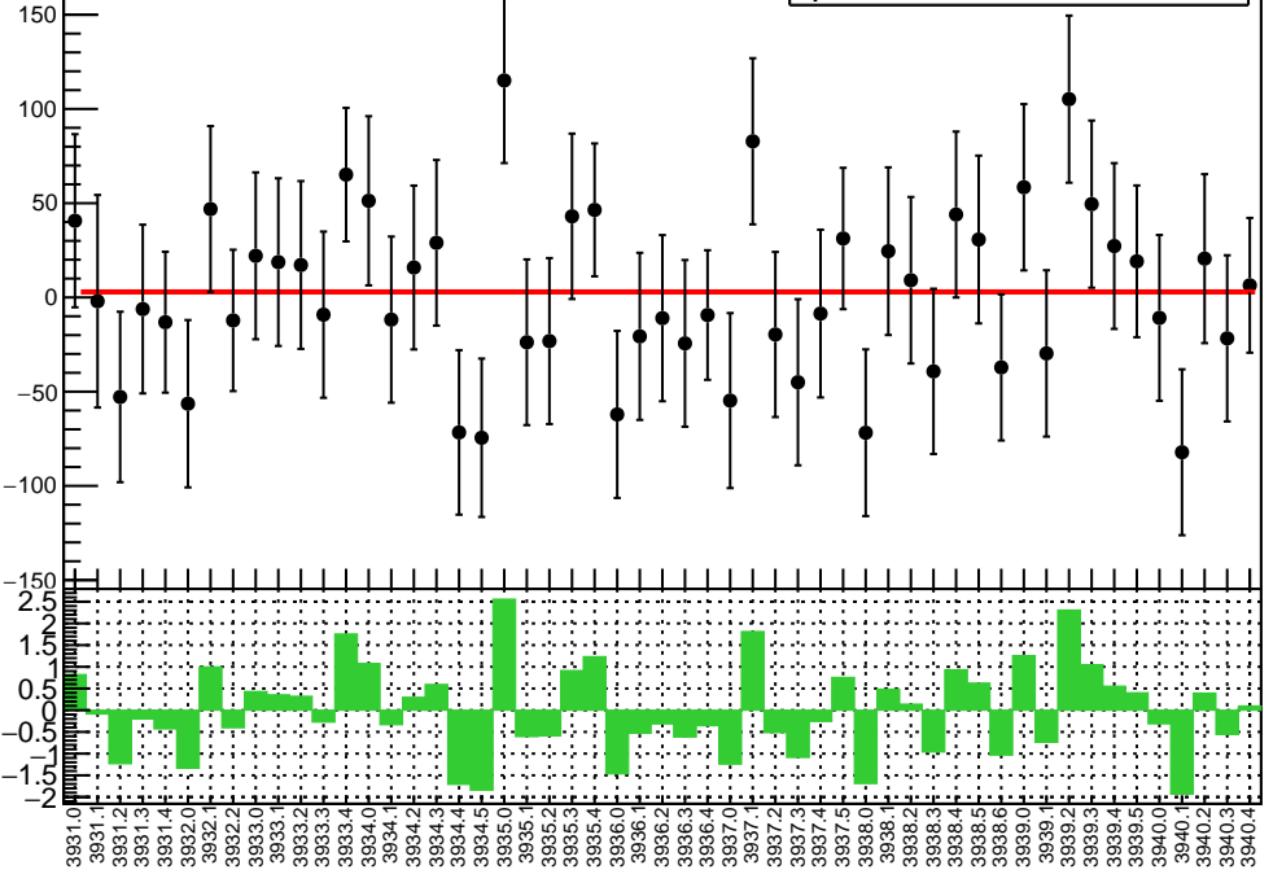
diff_bpm4eX RMS (um)

RMS (um)

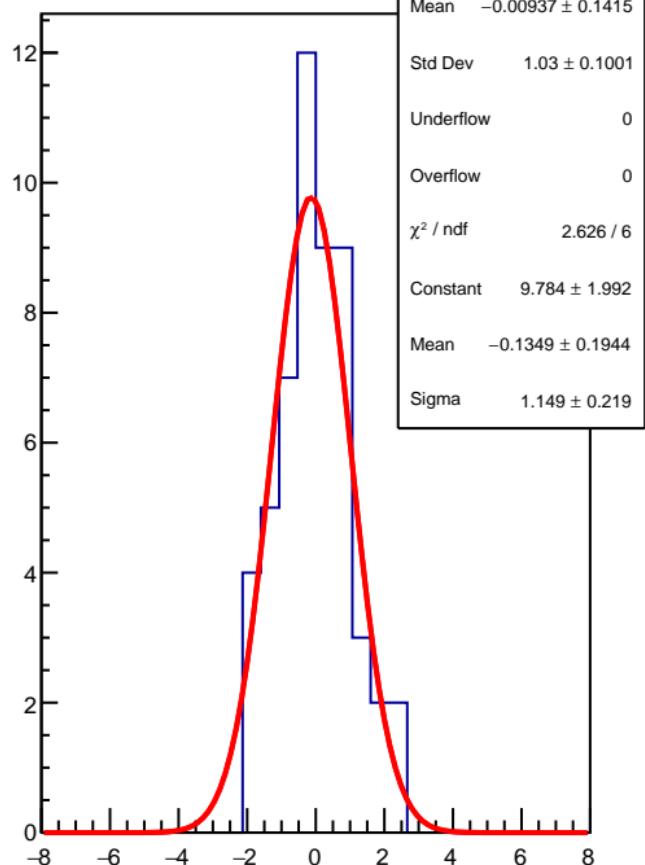


diff_bpm4eY (nm)

χ^2 / ndf 56.27 / 52
p0 2.926 ± 5.878

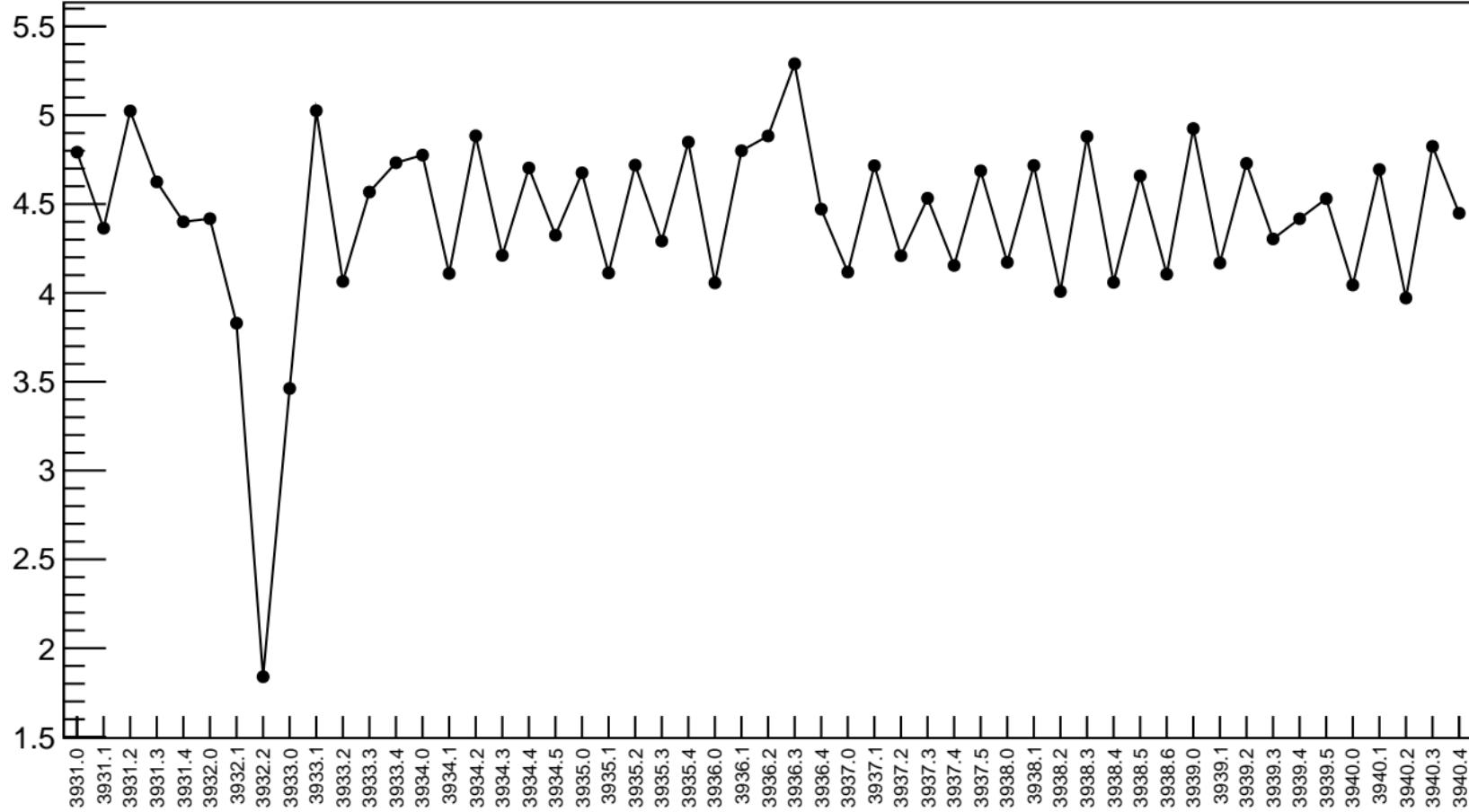


1D pull distribution



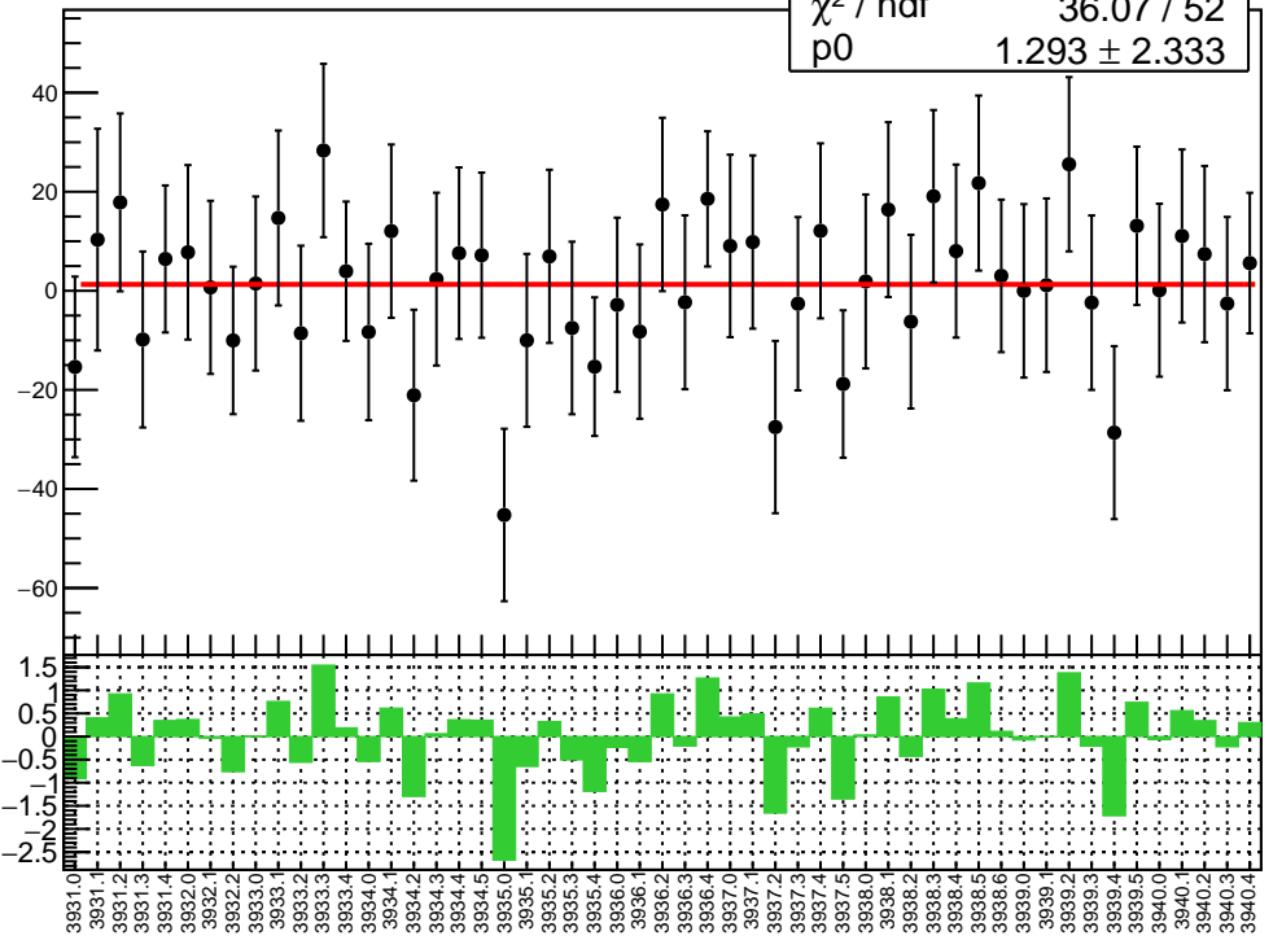
diff_bpm4eY RMS (um)

RMS (um)

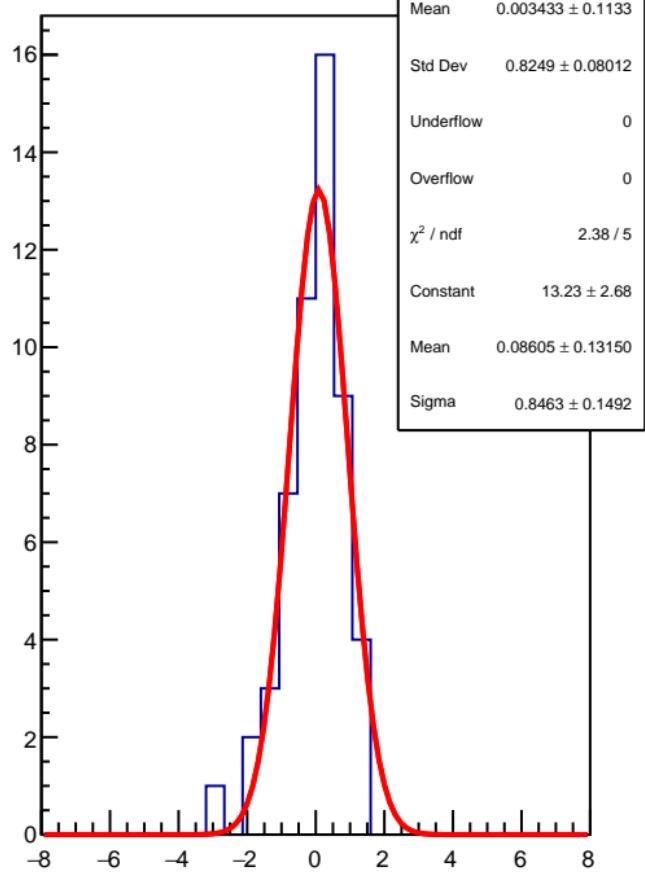


diff_bpm4aX (nm)

χ^2 / ndf 36.07 / 52
p0 1.293 ± 2.333

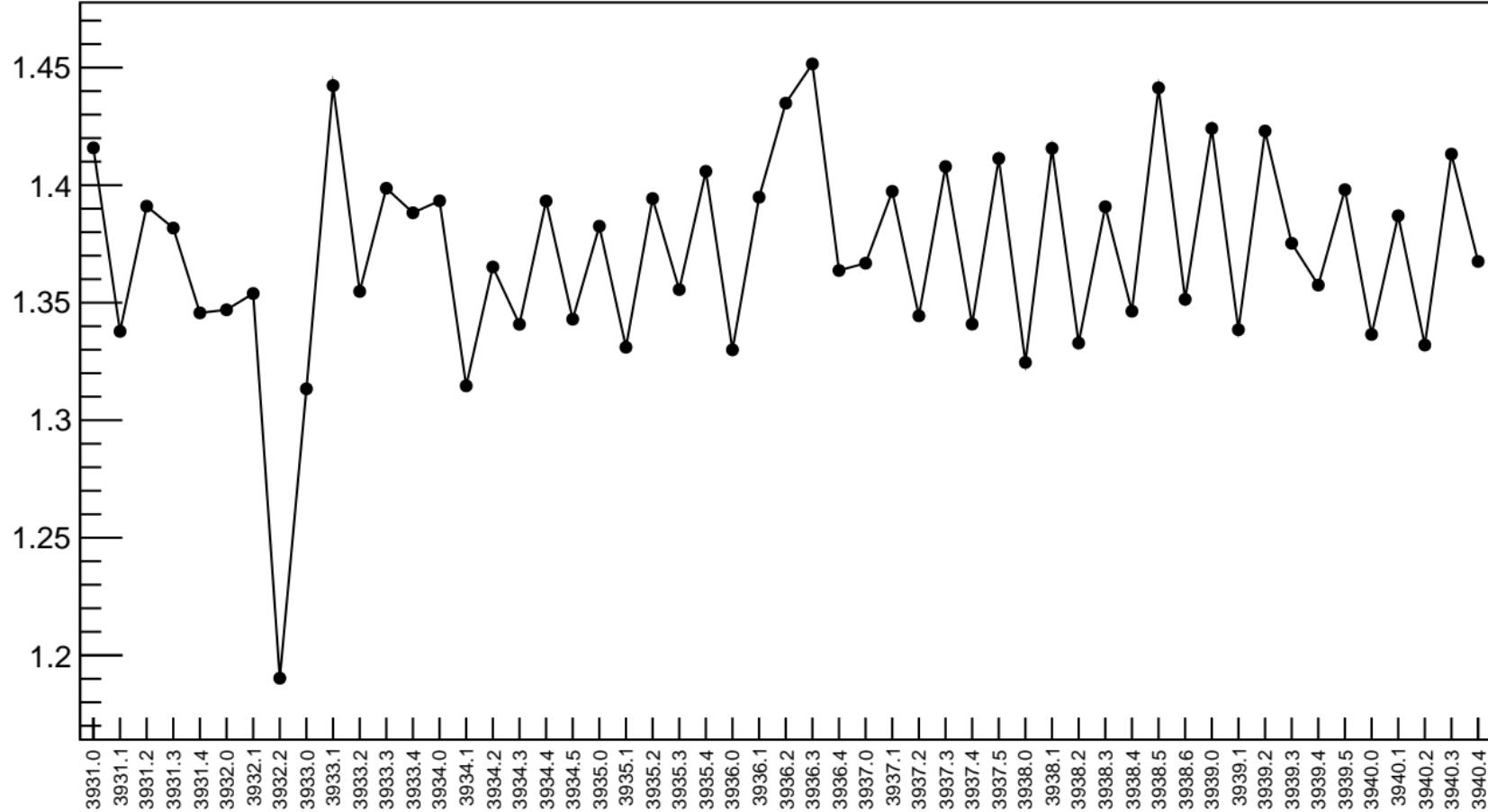


1D pull distribution



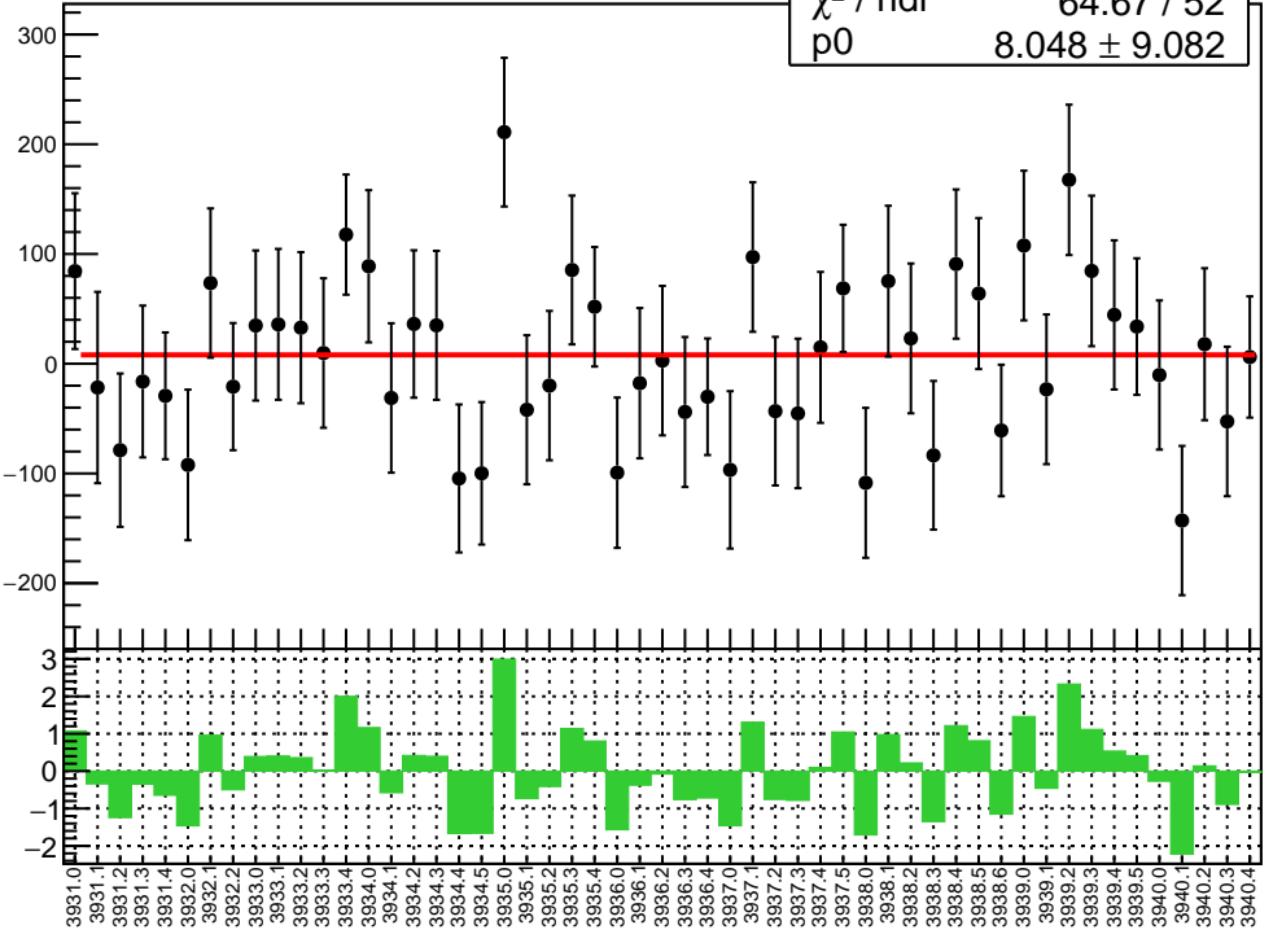
diff_bpm4aX RMS (um)

RMS (um)

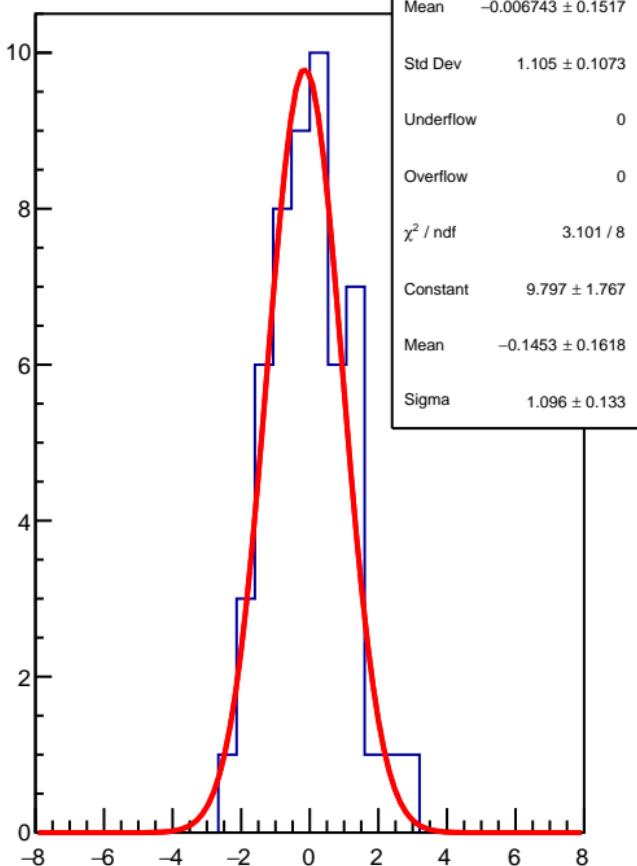


diff_bpm4aY (nm)

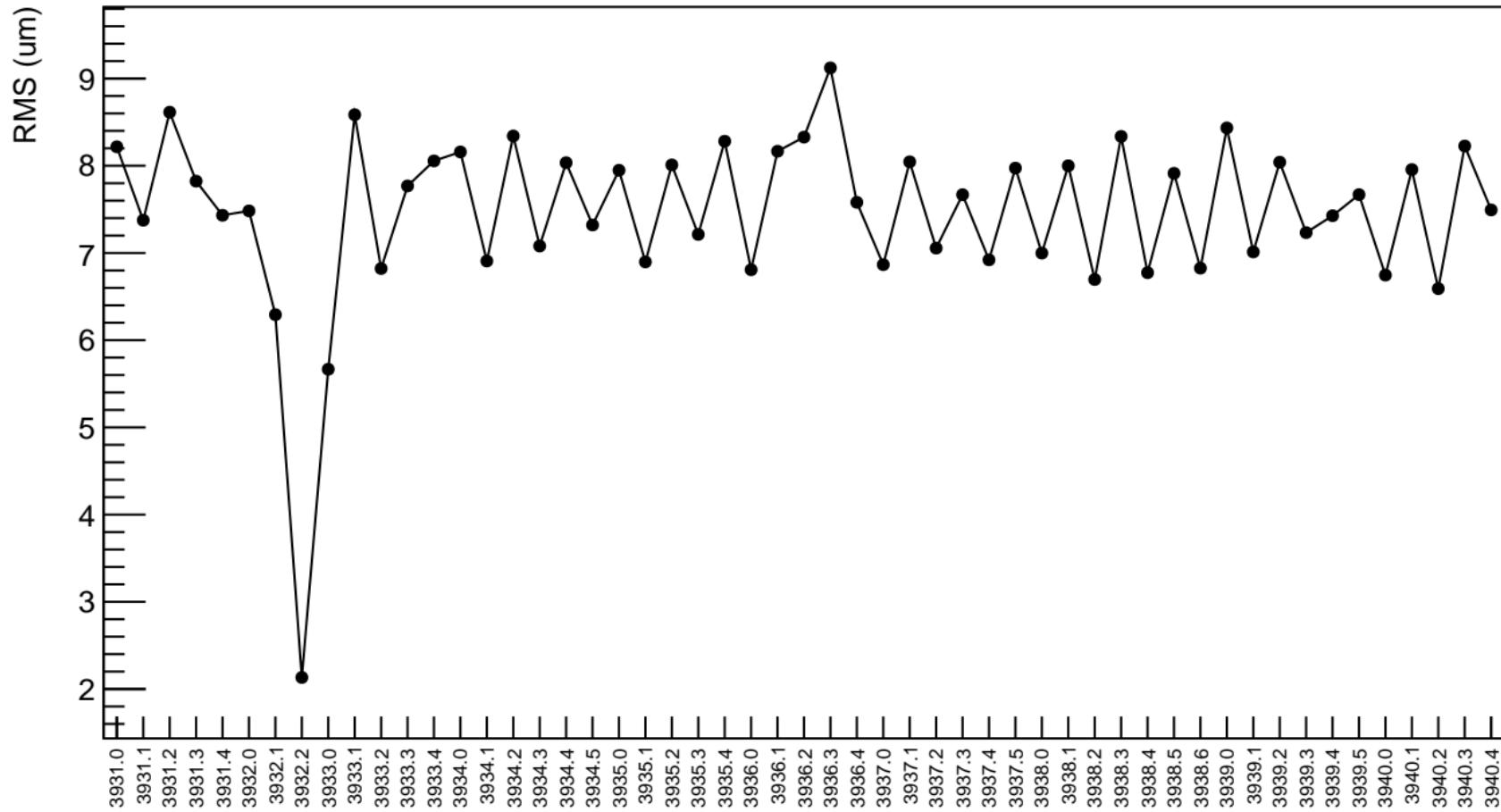
χ^2 / ndf 64.67 / 52
p0 8.048 ± 9.082



1D pull distribution



diff_bpm4aY RMS (um)



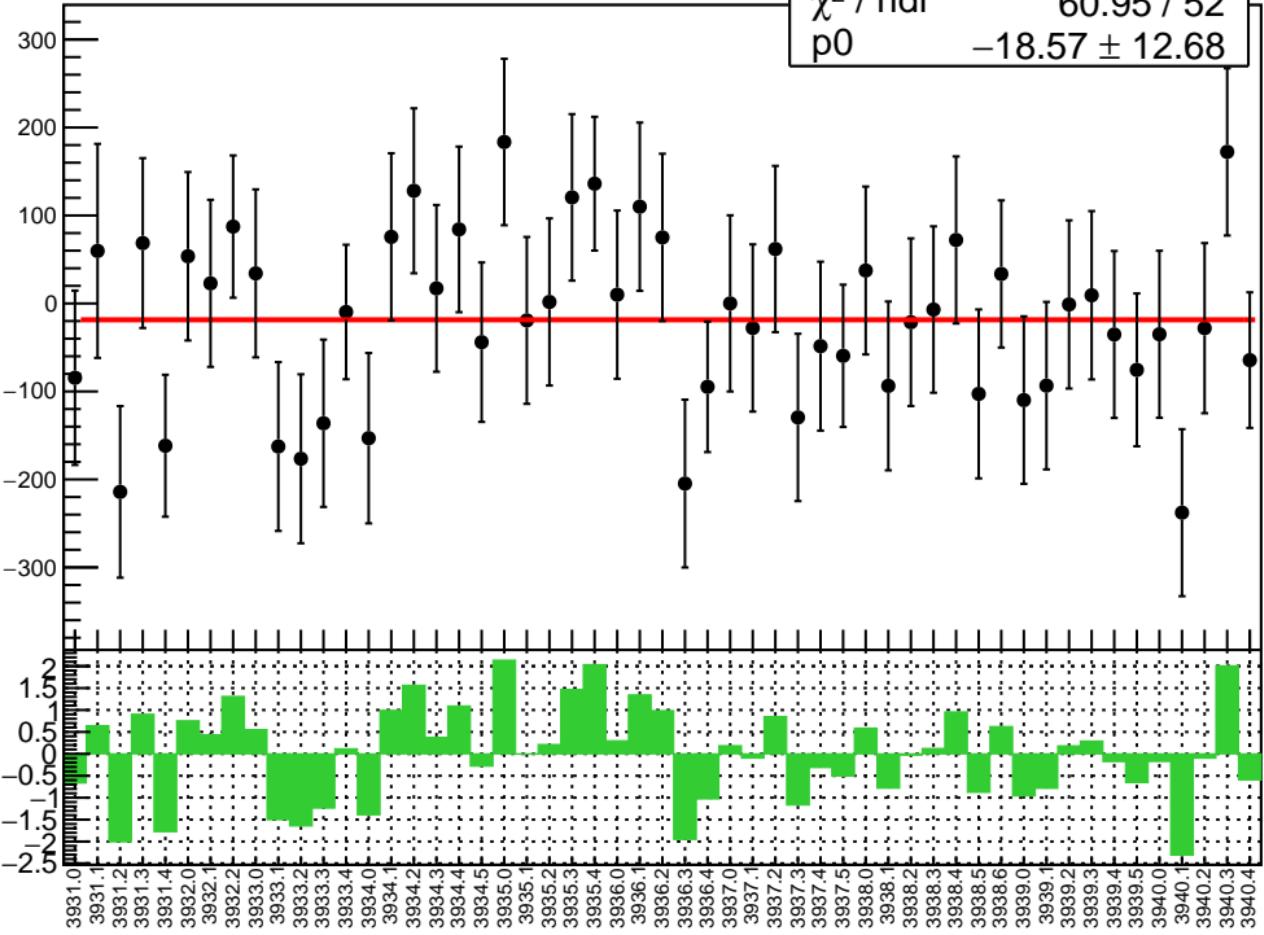
diff_bpm1X (nm)

χ^2 / ndf

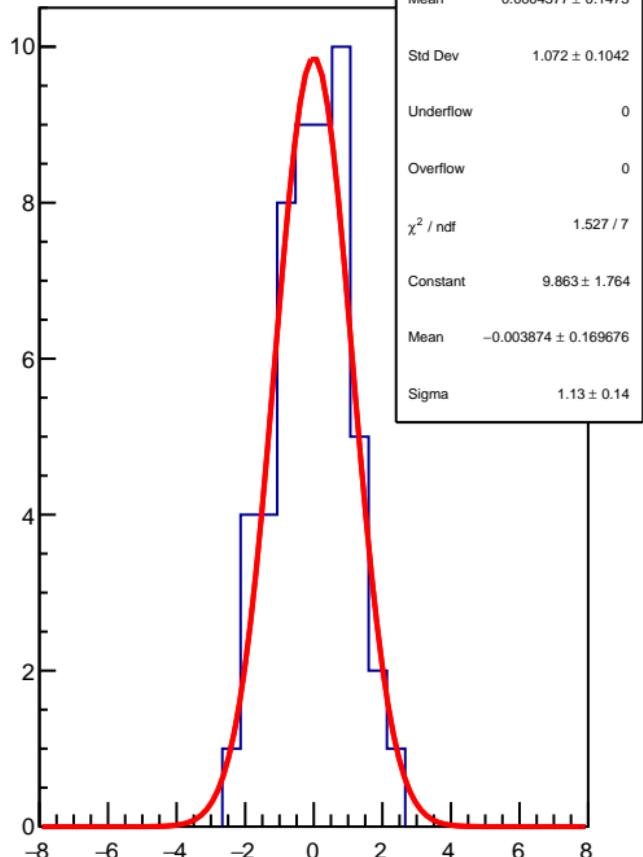
60.95 / 52

p0

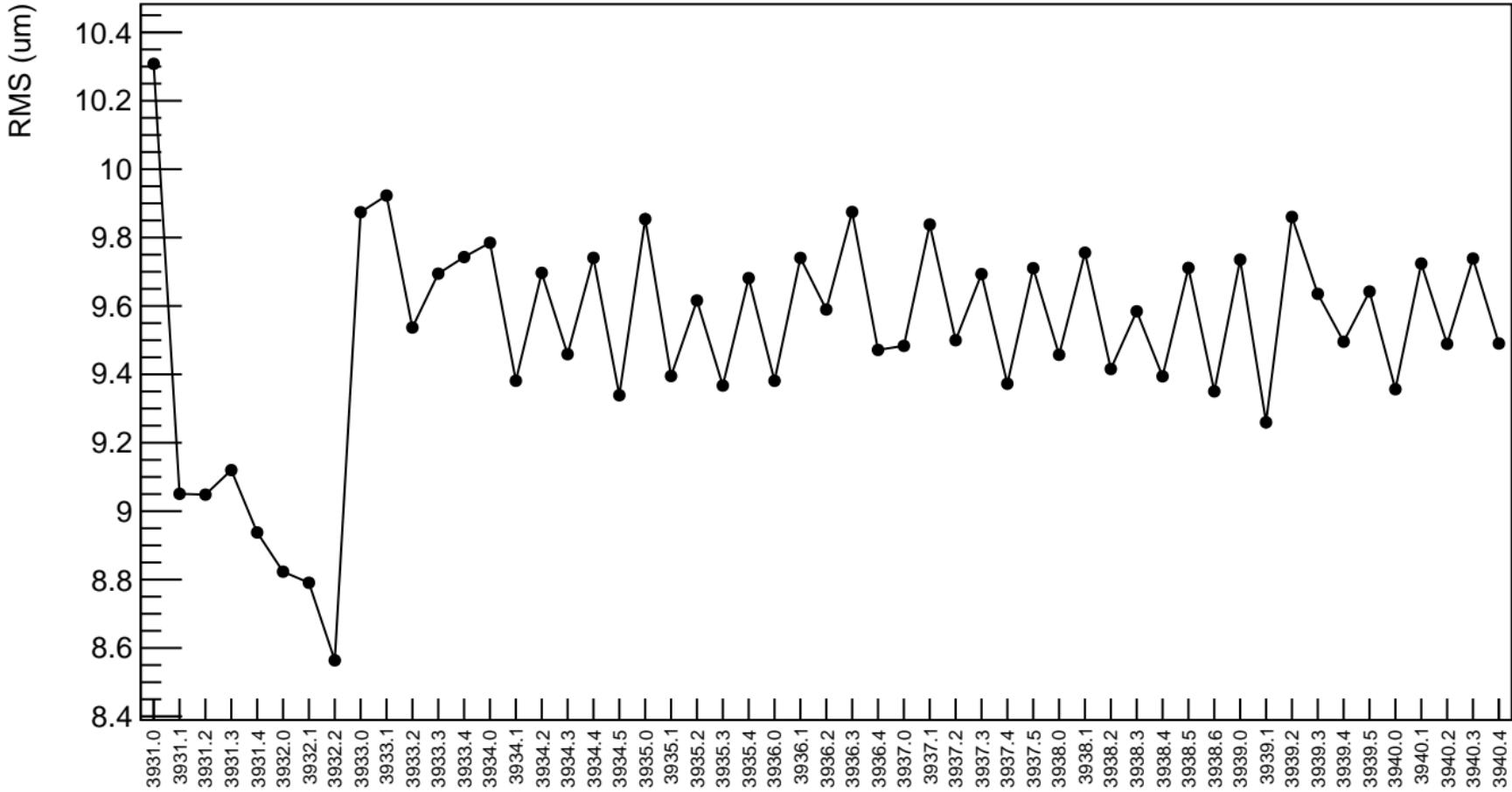
-18.57 ± 12.68



1D pull distribution

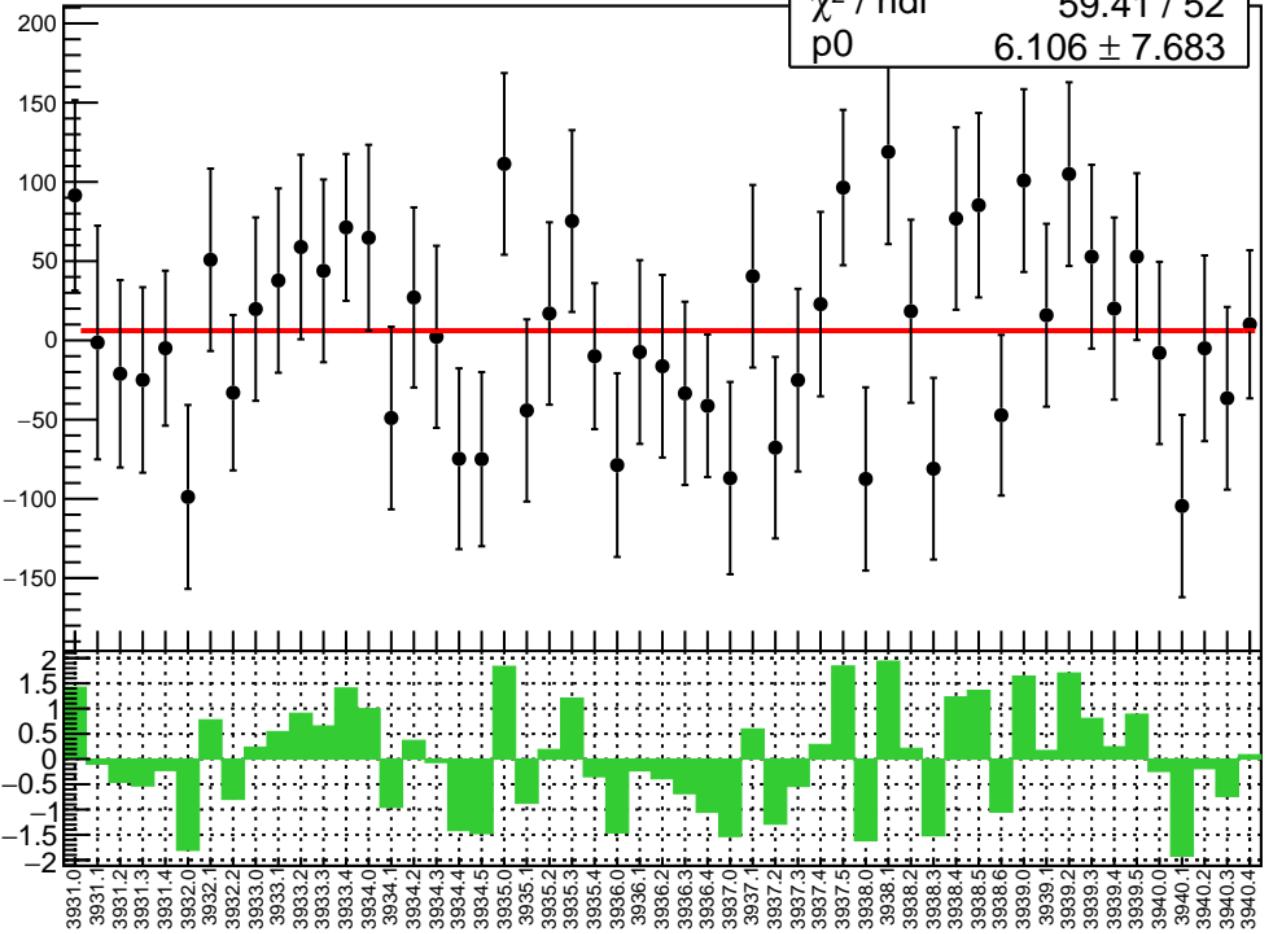


diff_bpm1X RMS (um)

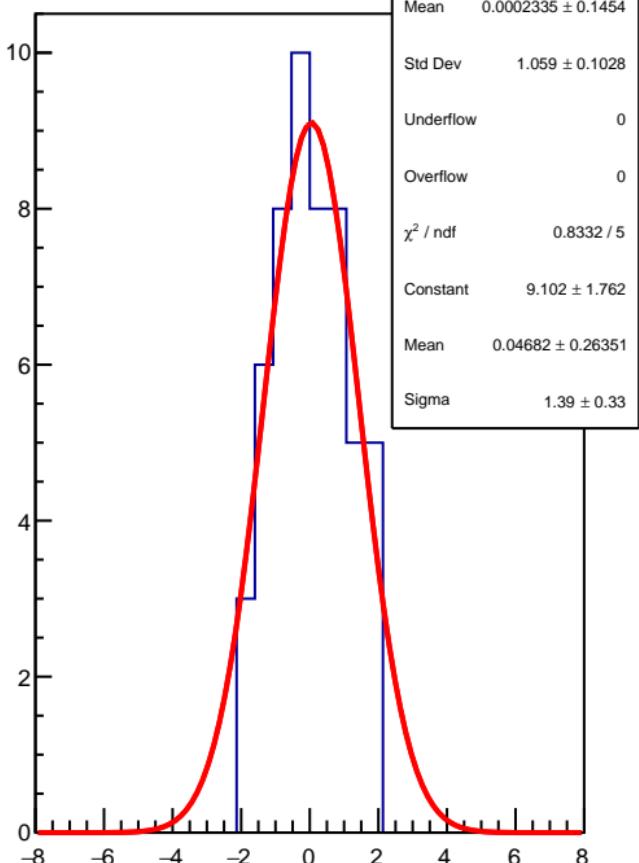


diff_bpm1Y (nm)

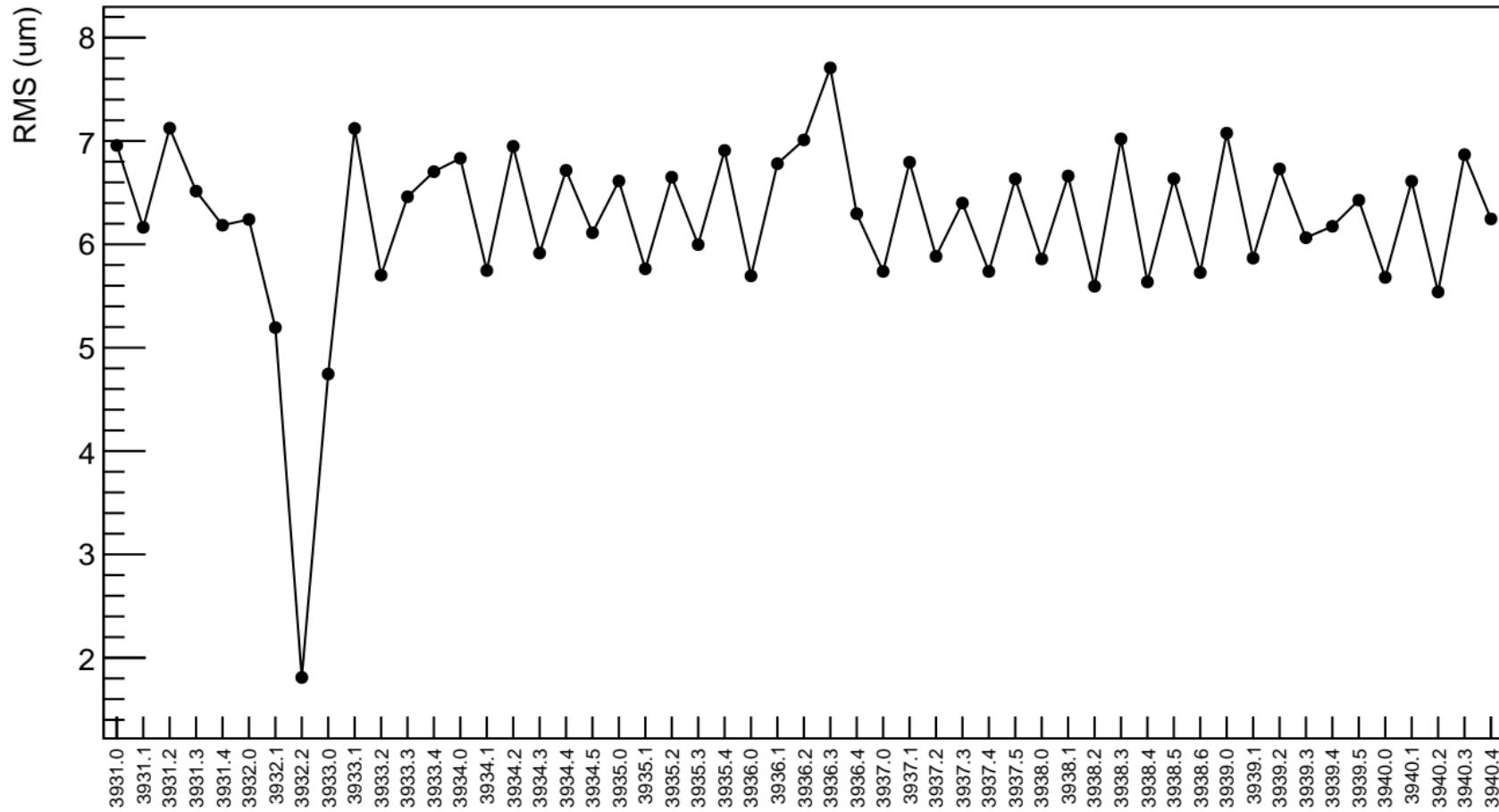
χ^2 / ndf 59.41 / 52
p0 6.106 ± 7.683



1D pull distribution

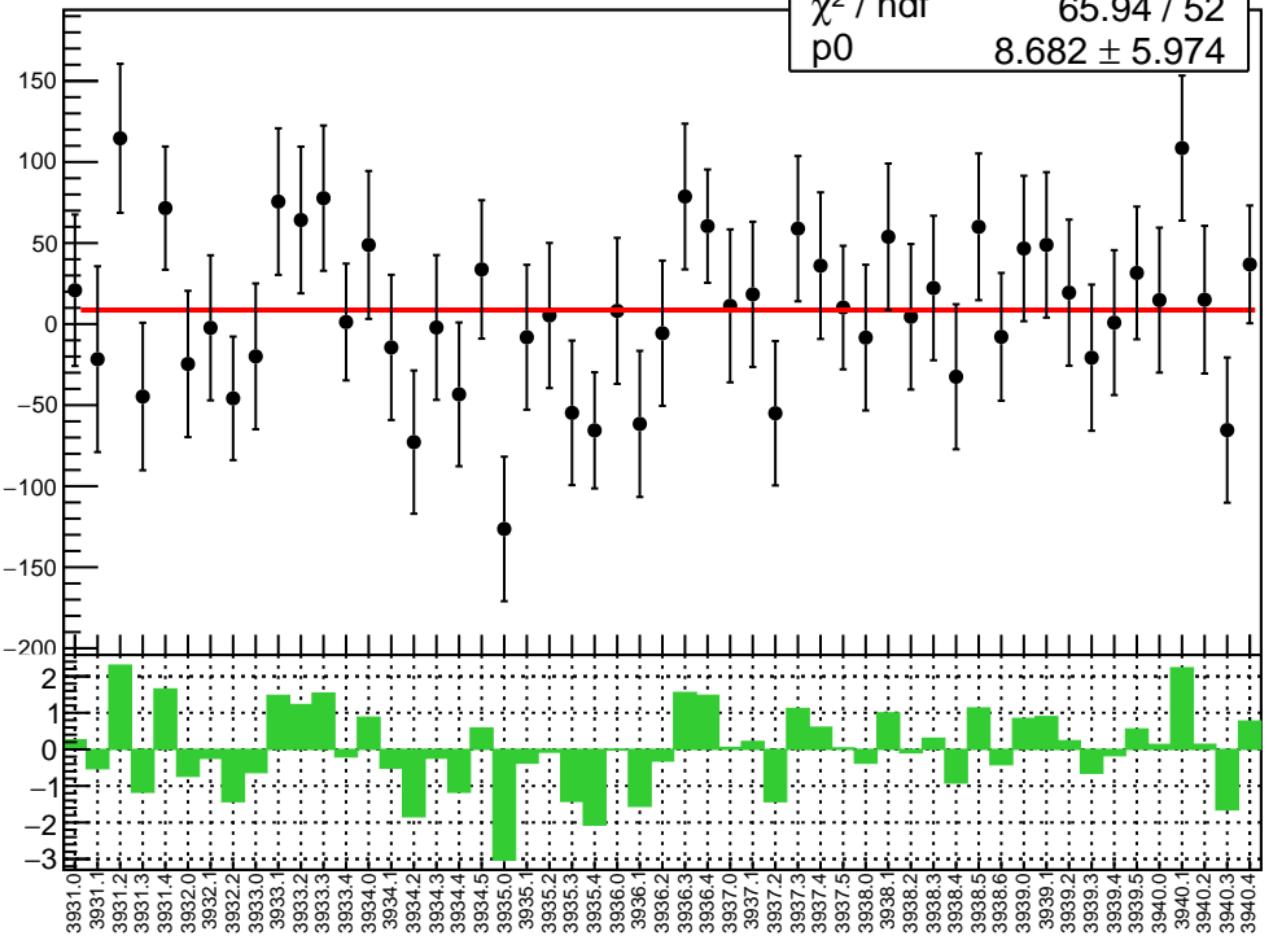


diff_bpm1Y RMS (um)

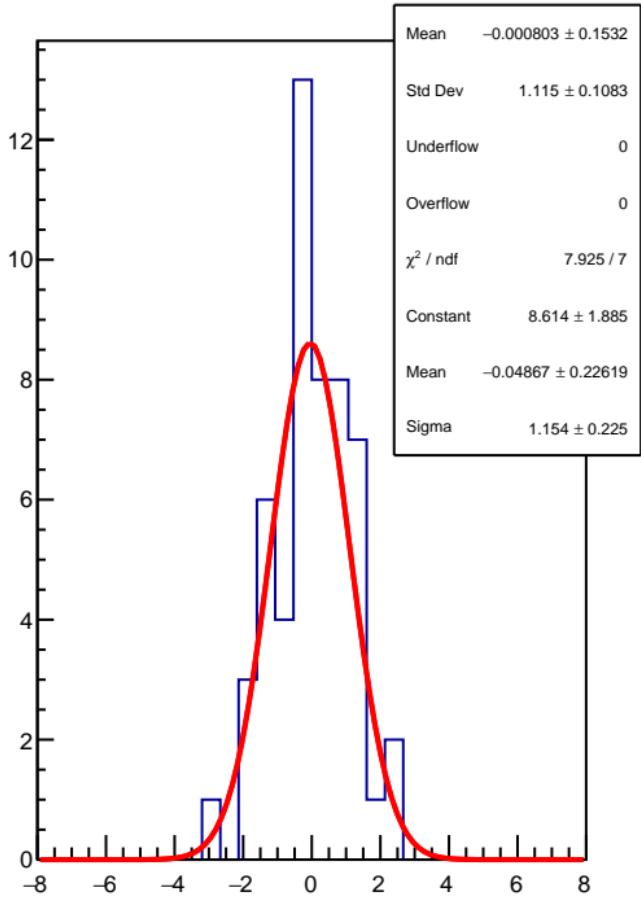


diff_bpm16X (nm)

χ^2 / ndf 65.94 / 52
p0 8.682 ± 5.974

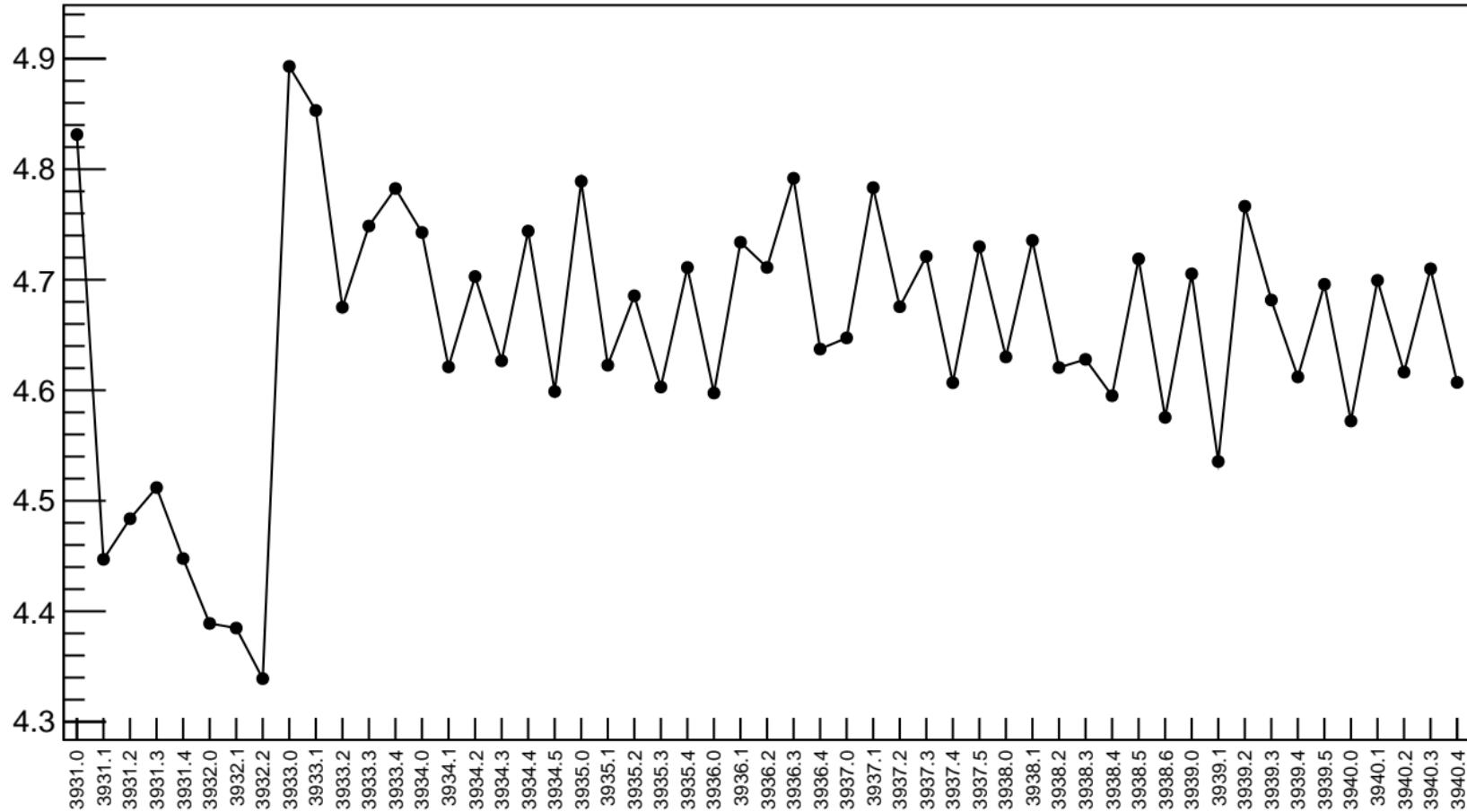


1D pull distribution



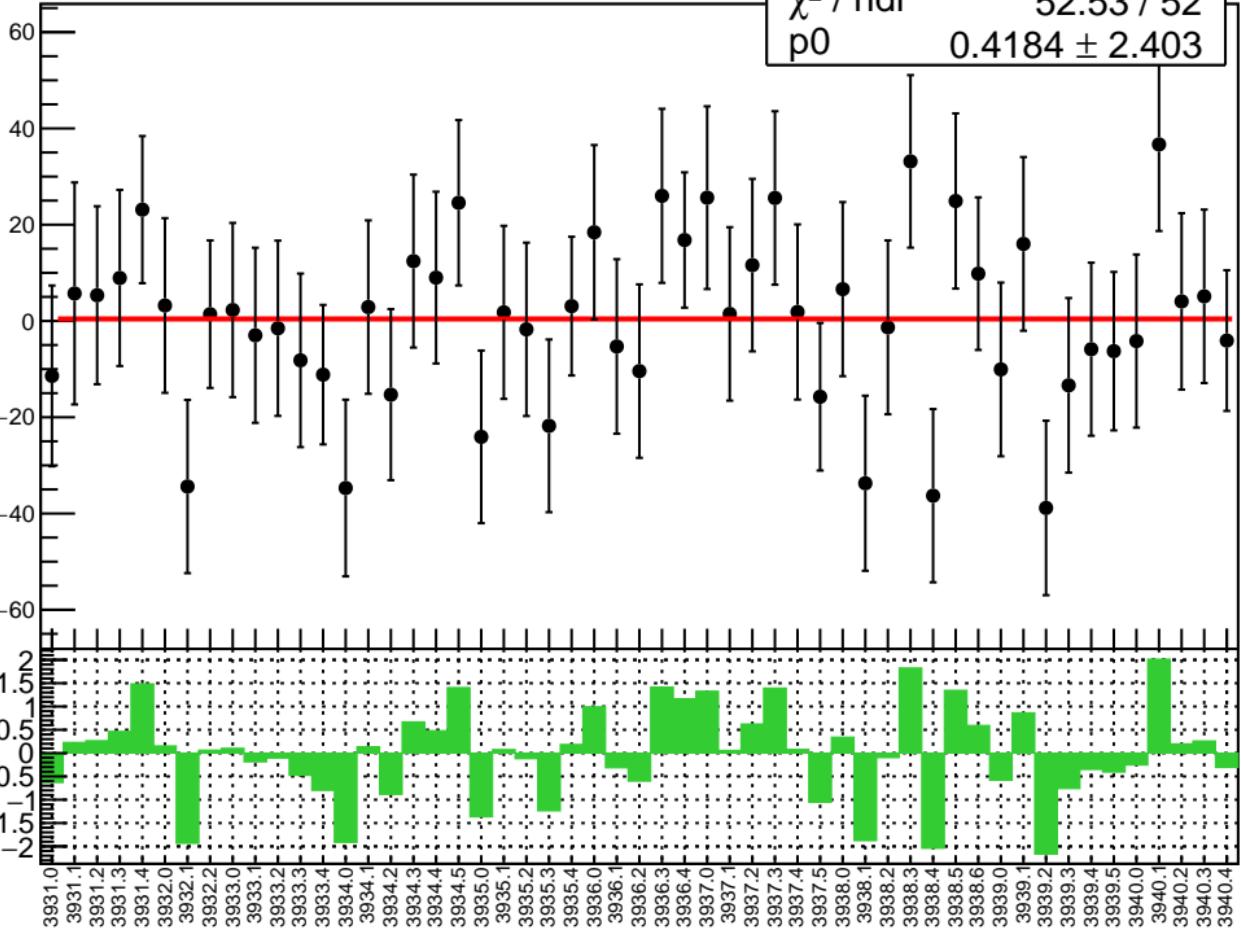
diff_bpm16X RMS (um)

RMS (um)

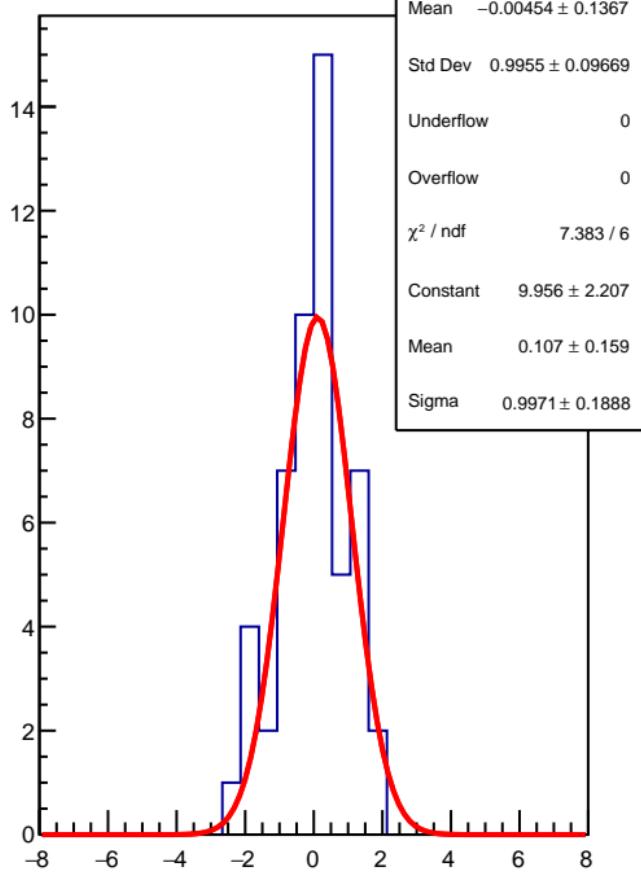


diff_bpm16Y (nm)

χ^2 / ndf 52.53 / 52
p0 0.4184 ± 2.403



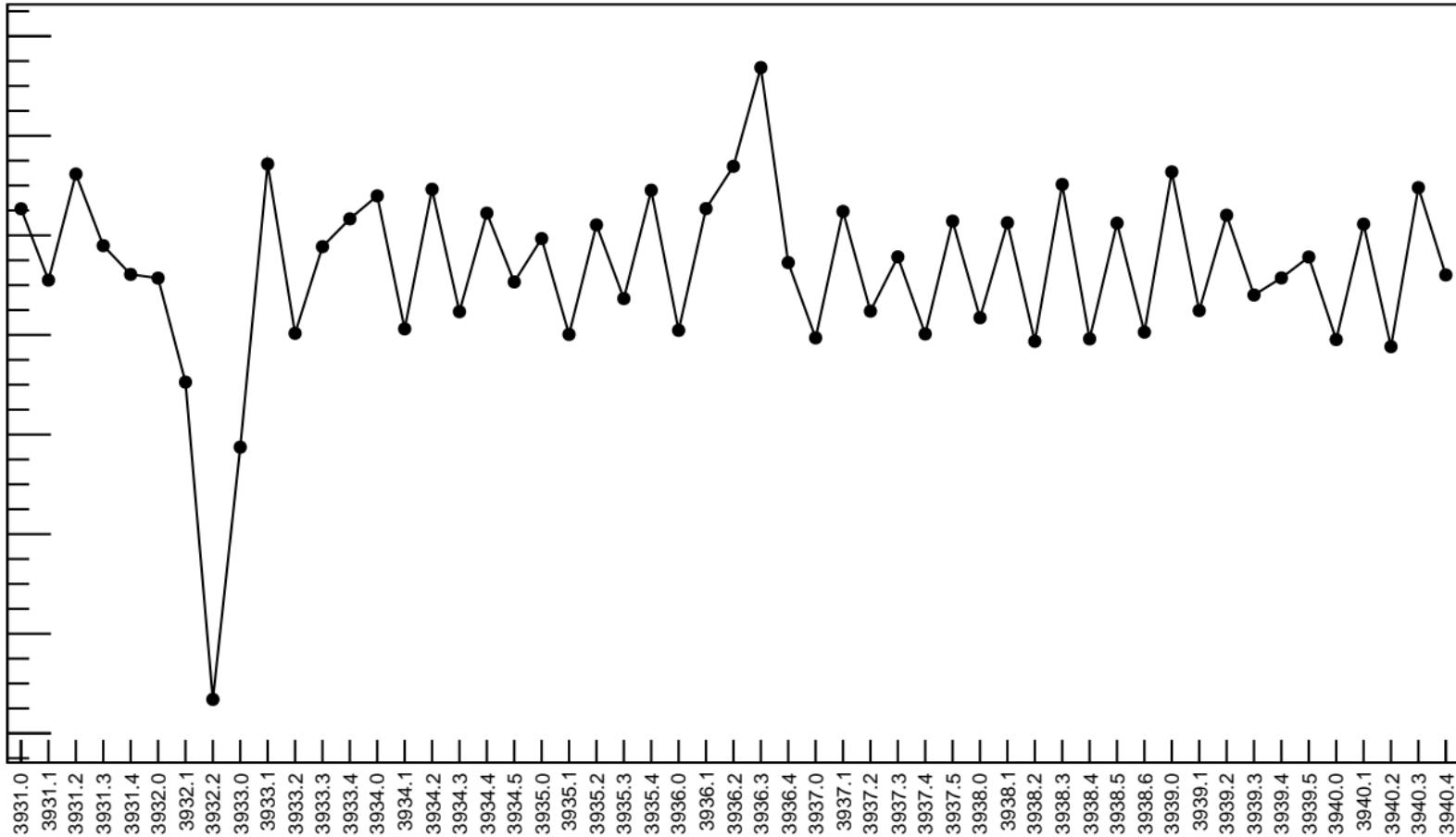
1D pull distribution



diff_bpm16Y RMS (um)

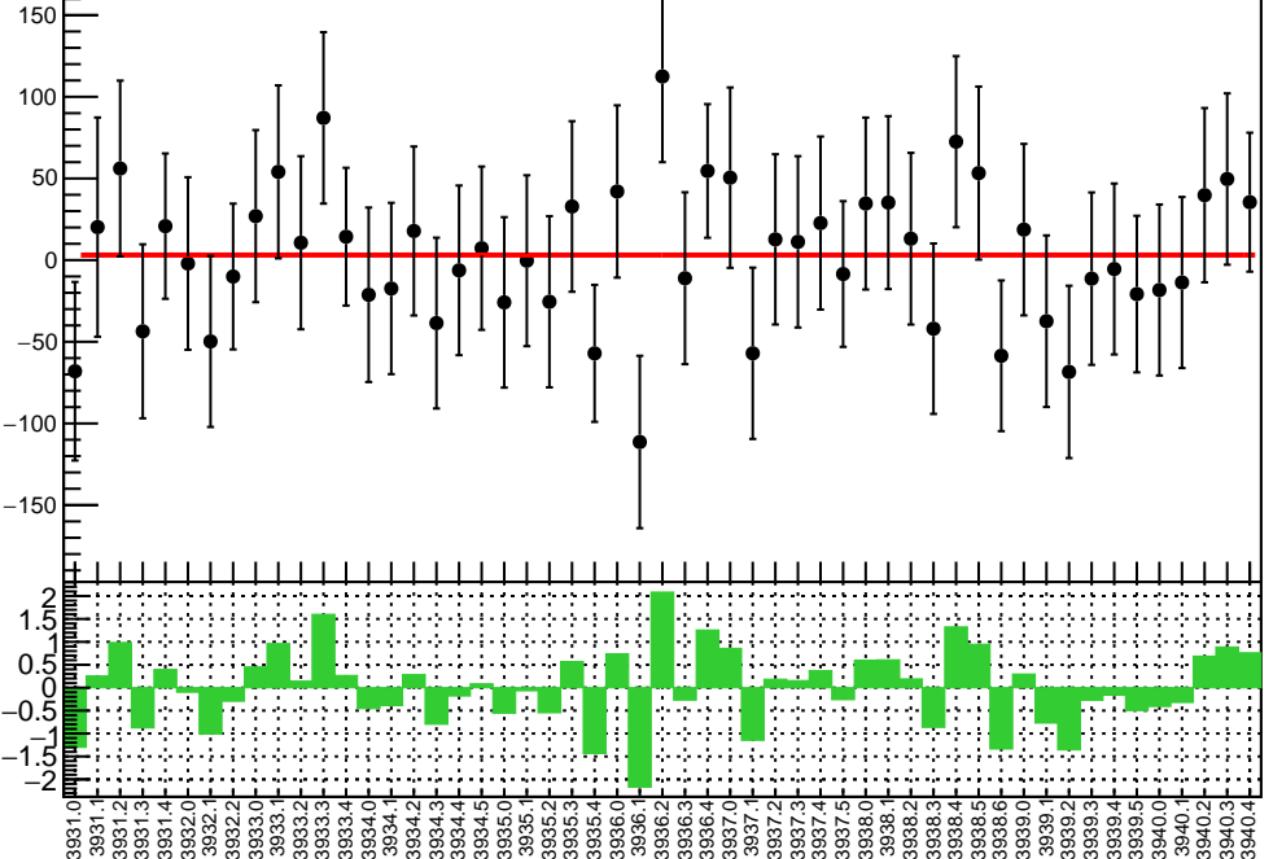
RMS (um)

2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0

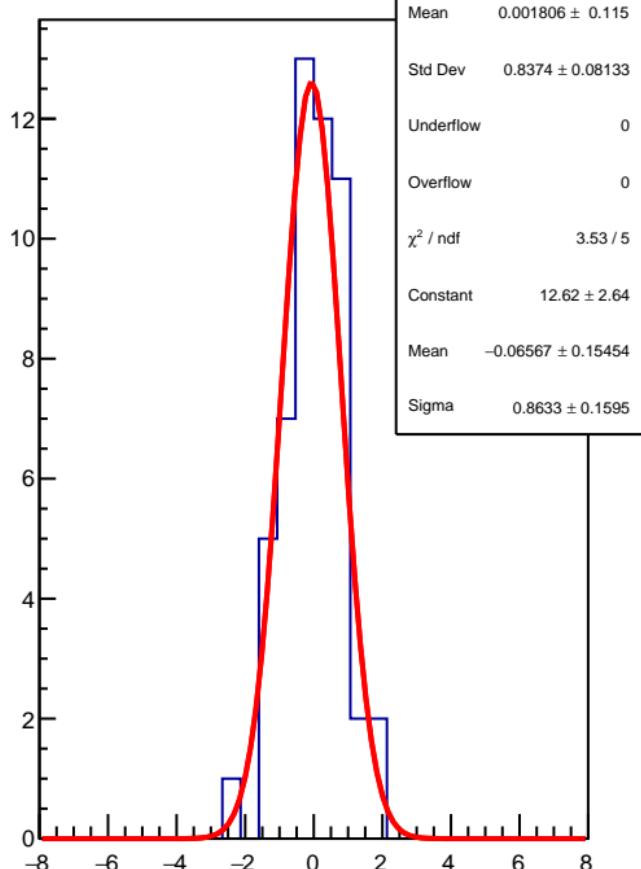


diff_bpm12X (nm)

χ^2 / ndf 37.16 / 52
 p_0 3.111 ± 6.995

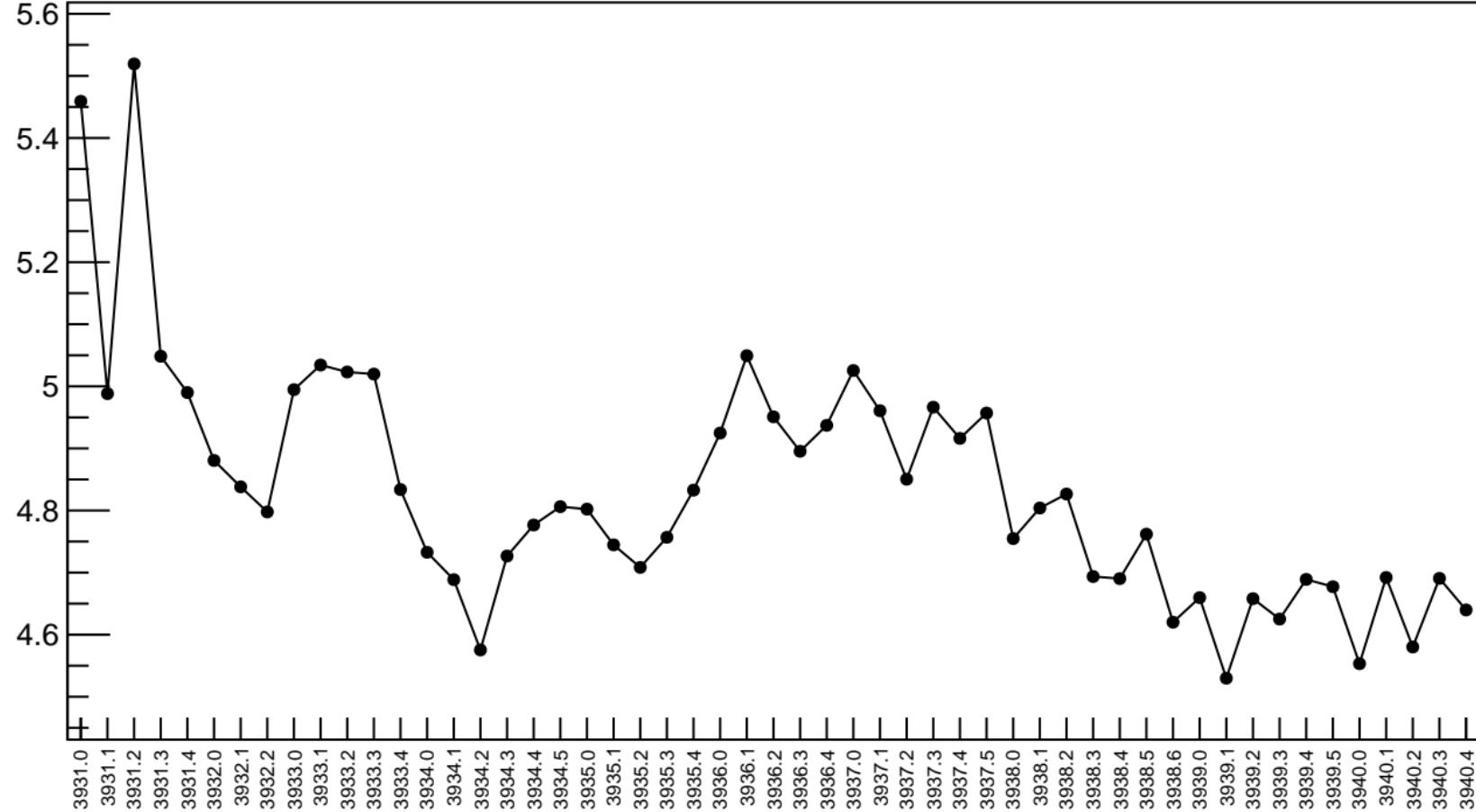


1D pull distribution



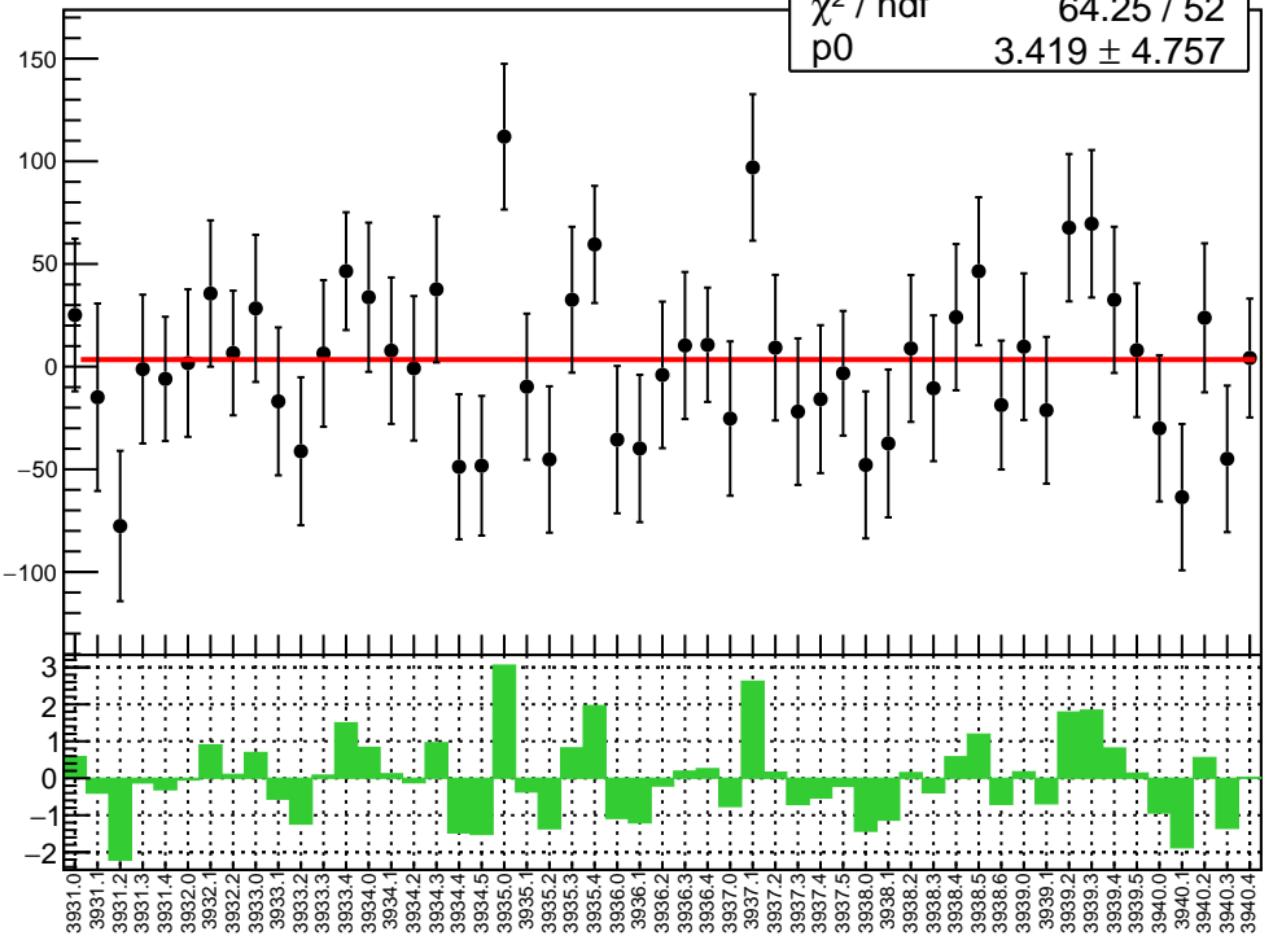
diff_bpm12X RMS (um)

RMS (um)

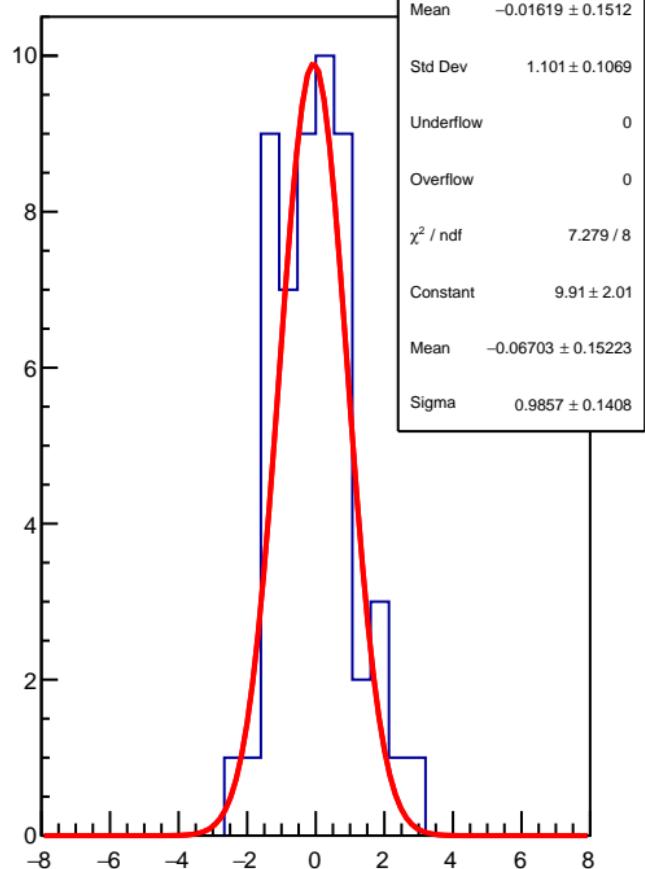


diff_bpm12Y (nm)

χ^2 / ndf 64.25 / 52
p0 3.419 ± 4.757

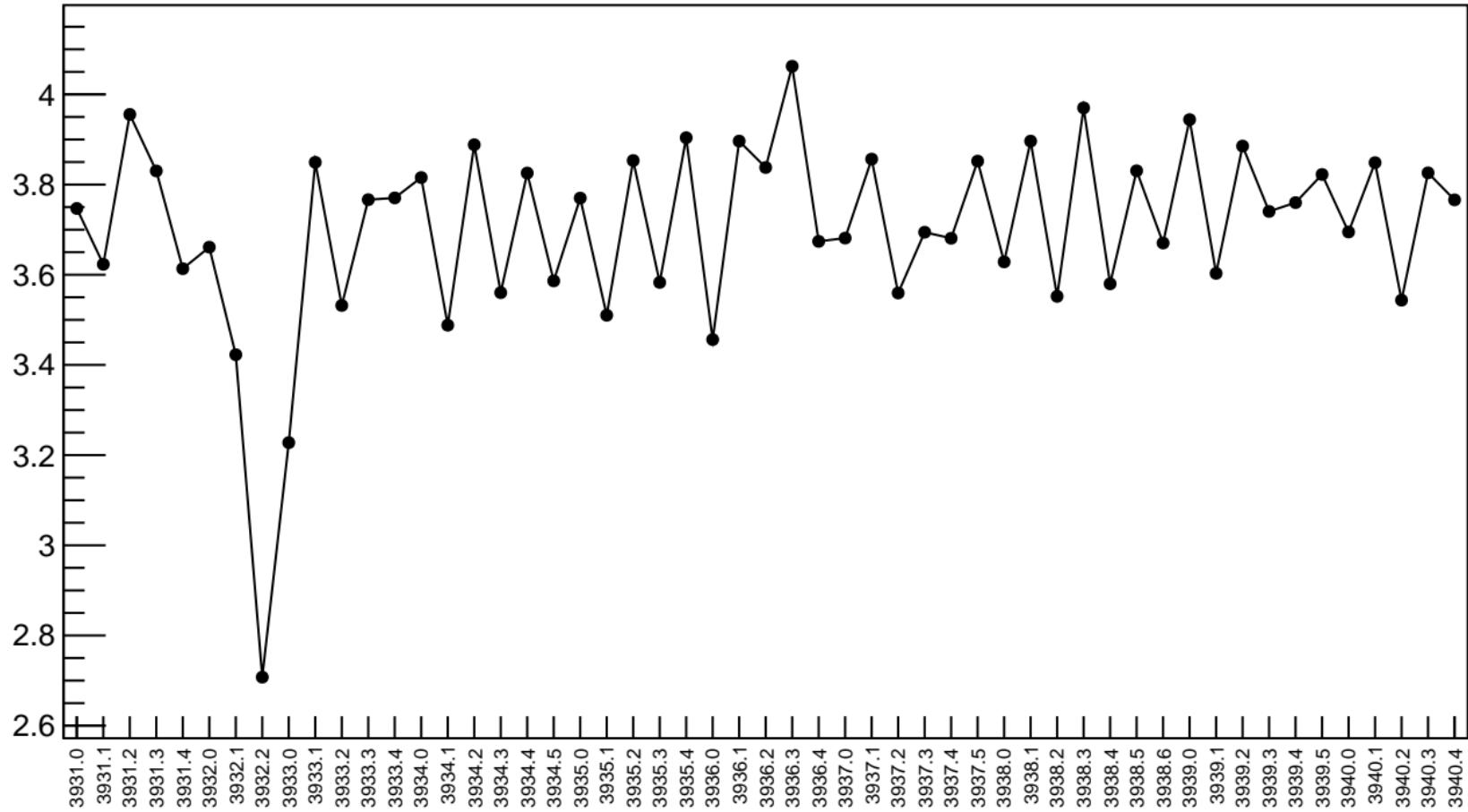


1D pull distribution



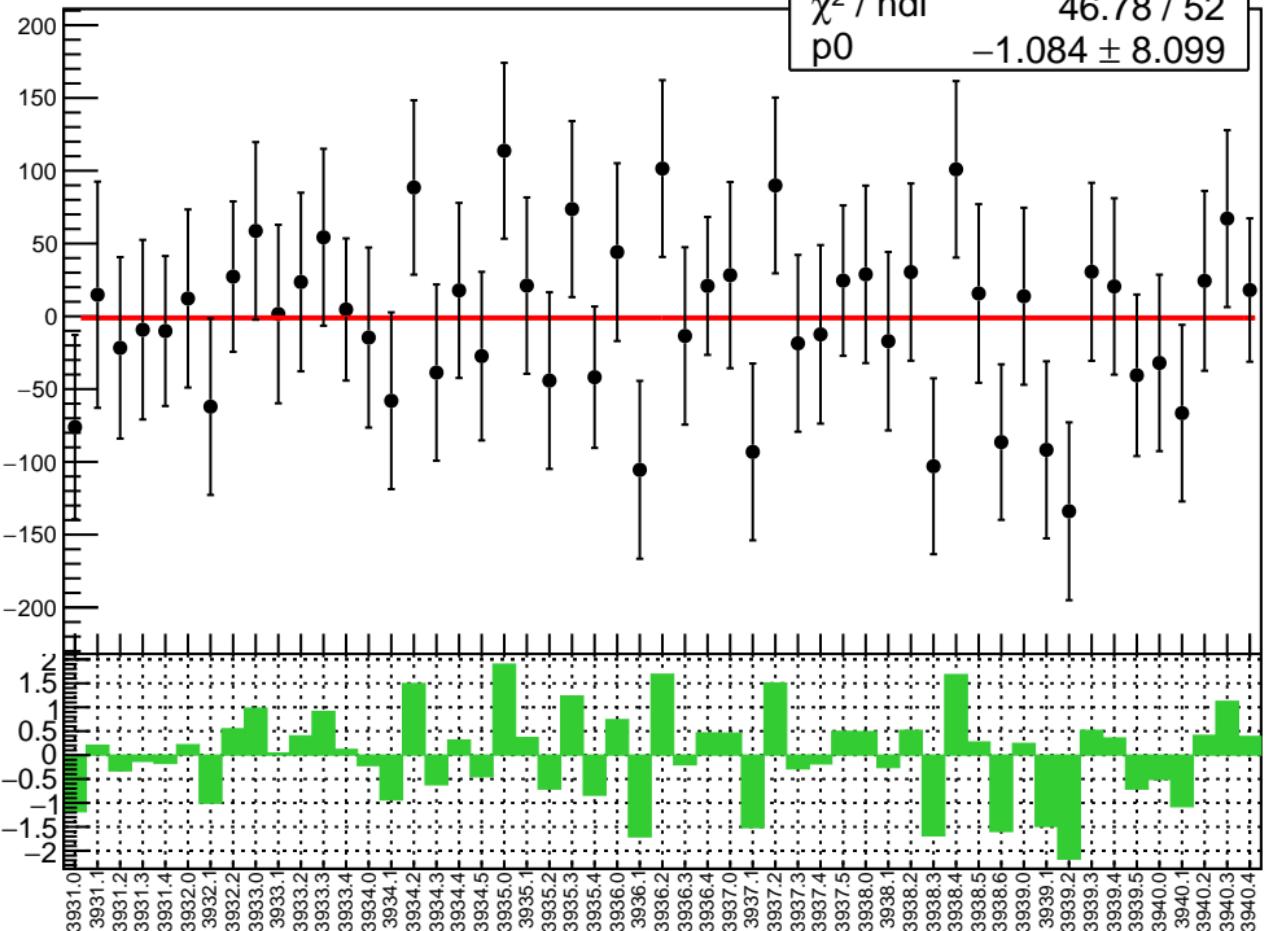
diff_bpm12Y RMS (um)

RMS (um)

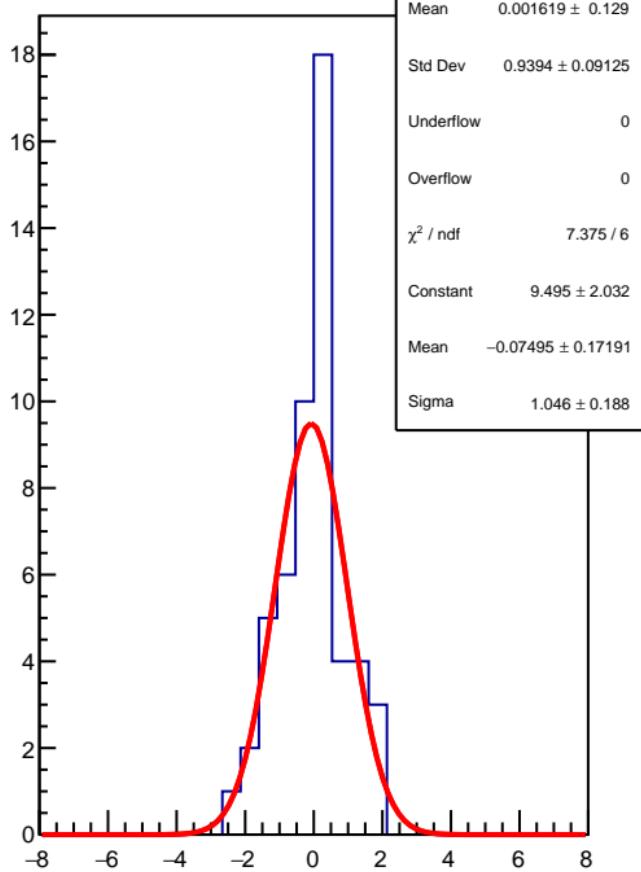


diff_bpm11X (nm)

χ^2 / ndf 46.78 / 52
p0 -1.084 ± 8.099

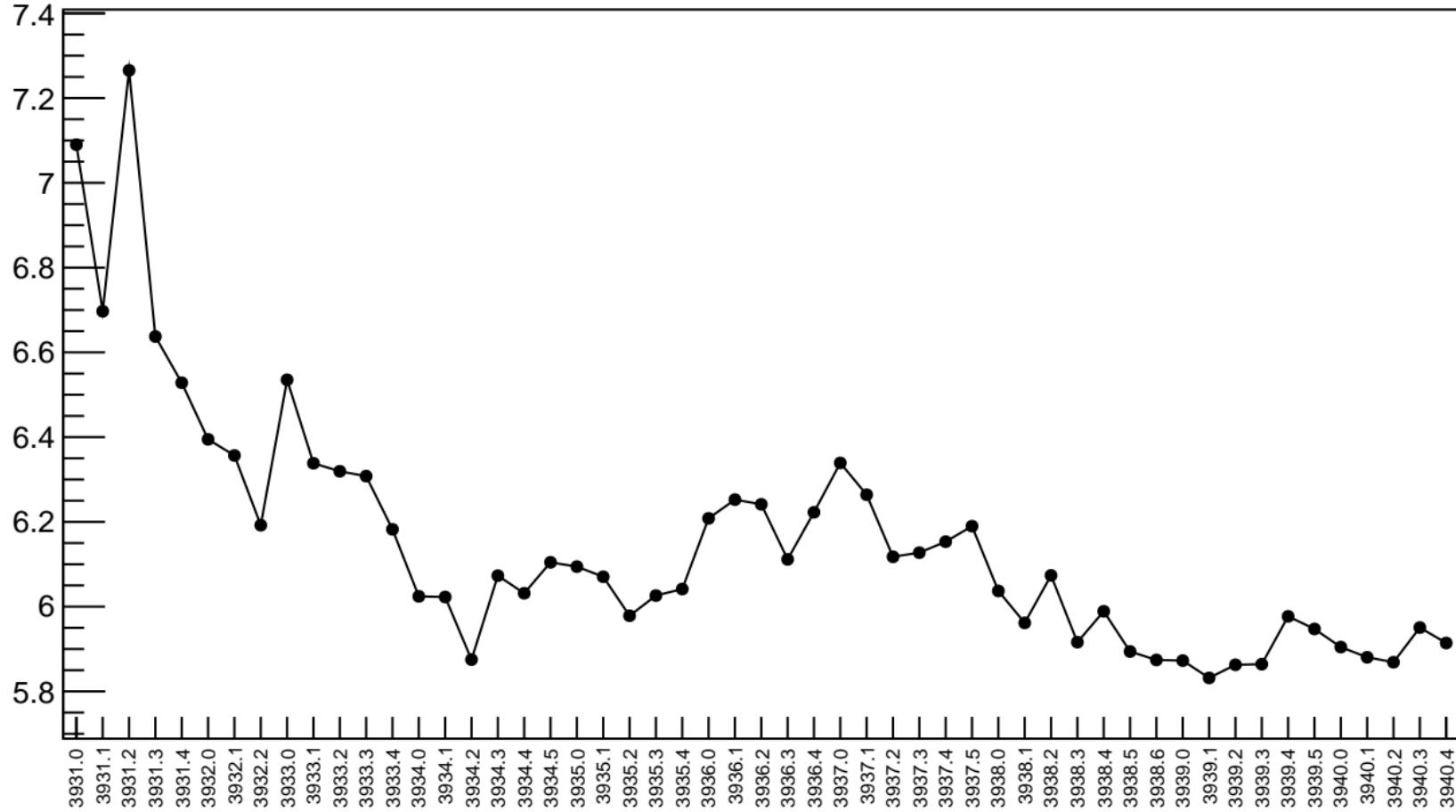


1D pull distribution

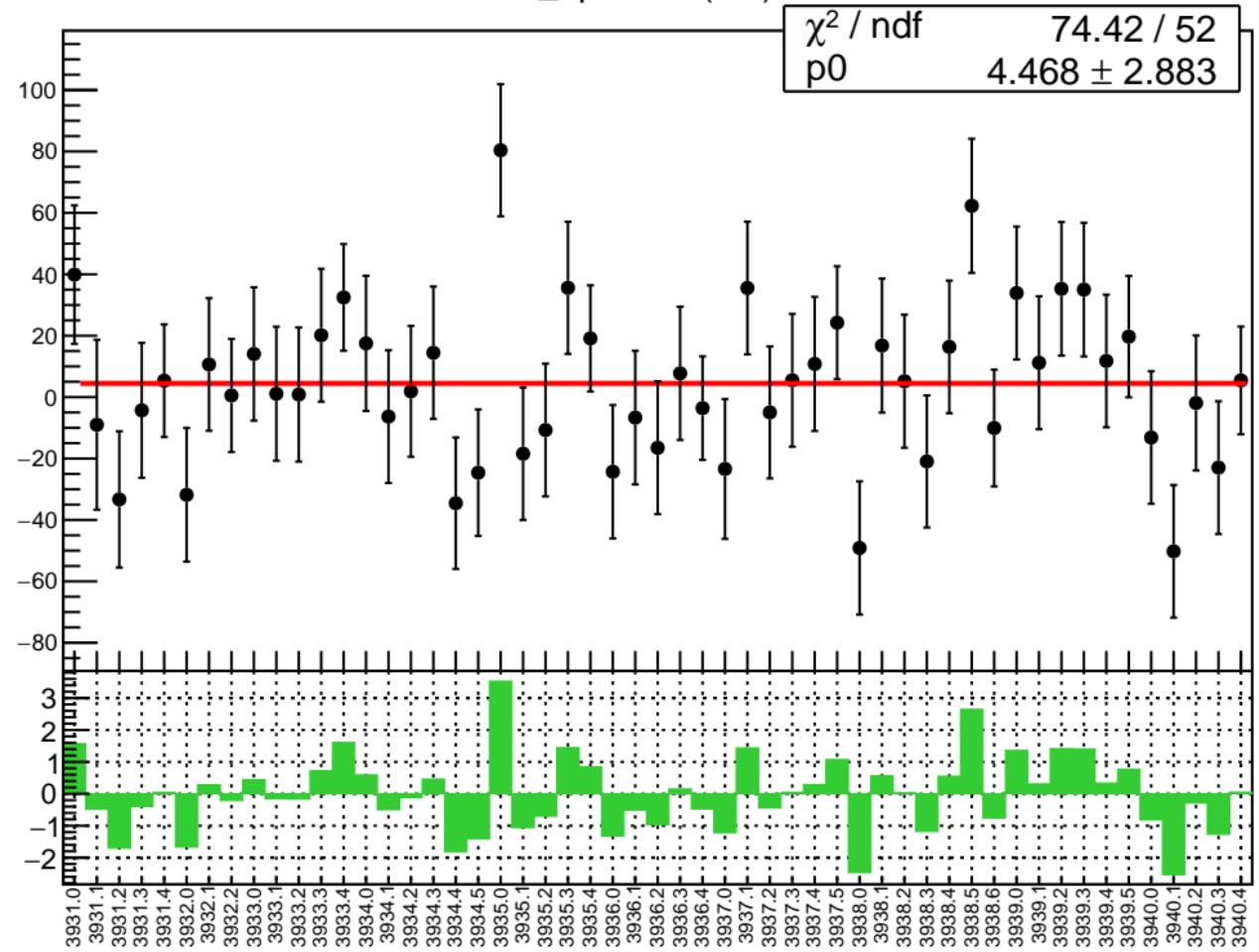


diff_bpm11X RMS (um)

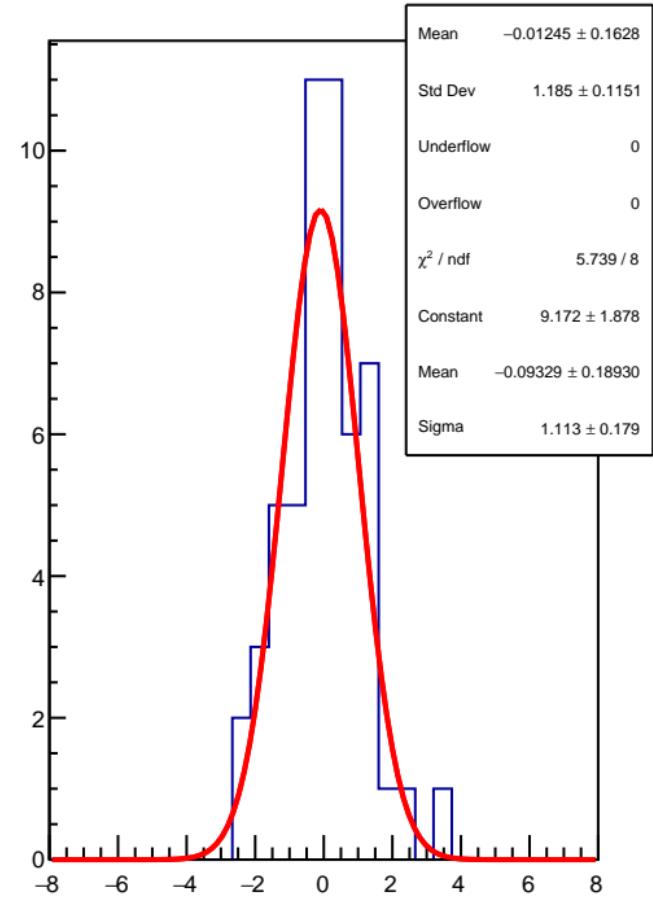
RMS (um)



diff_bpm11Y (nm)

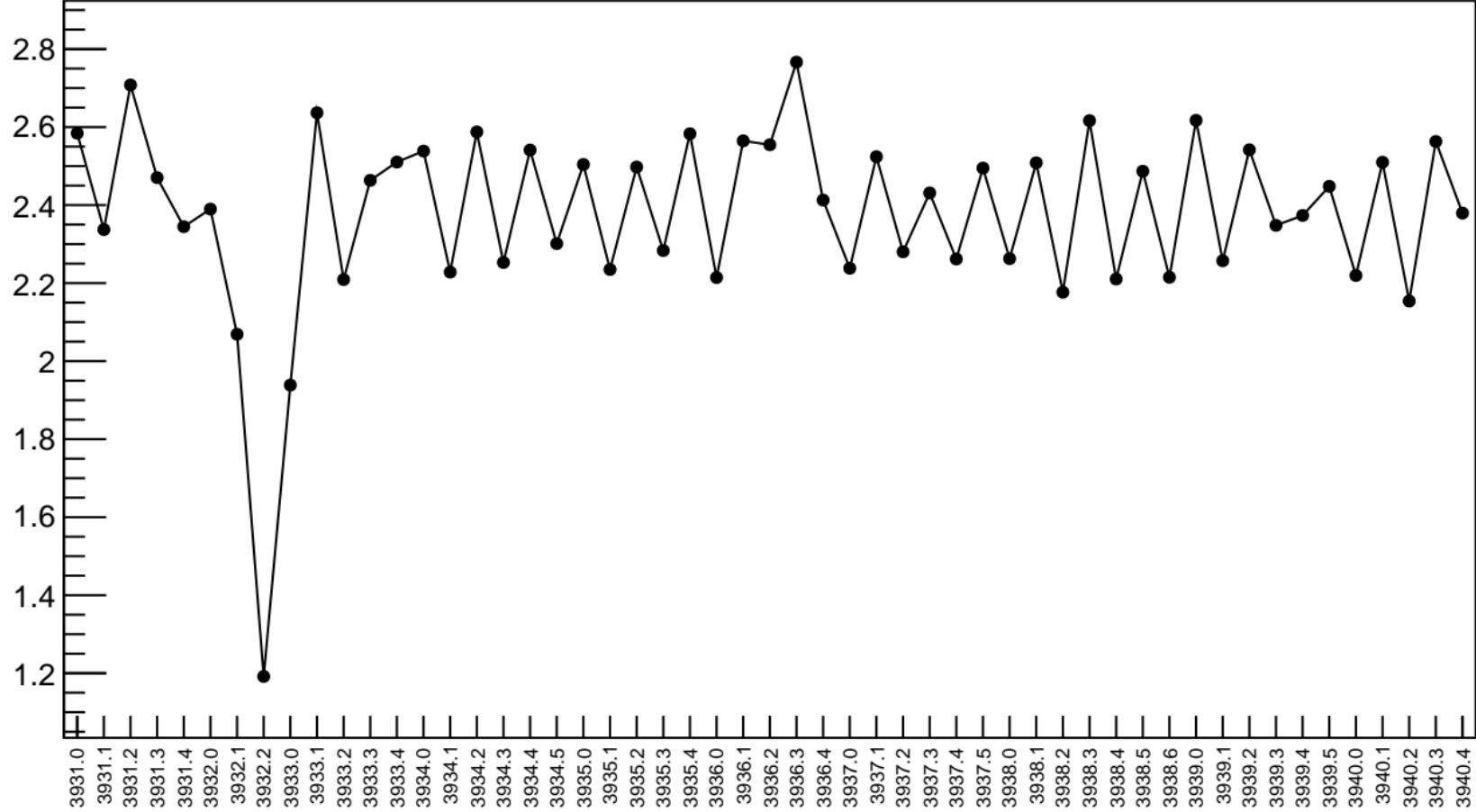


1D pull distribution

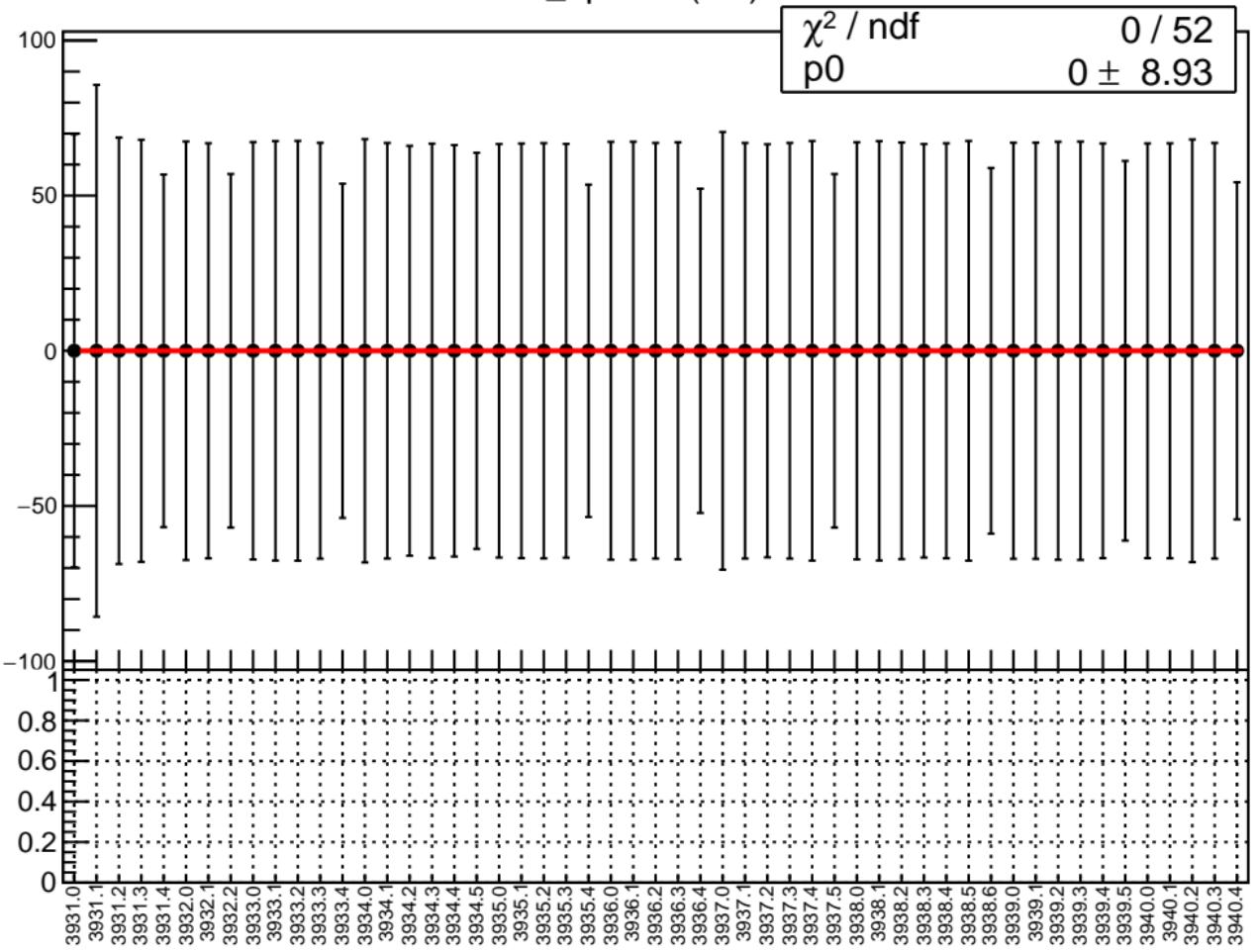


diff_bpm11Y RMS (um)

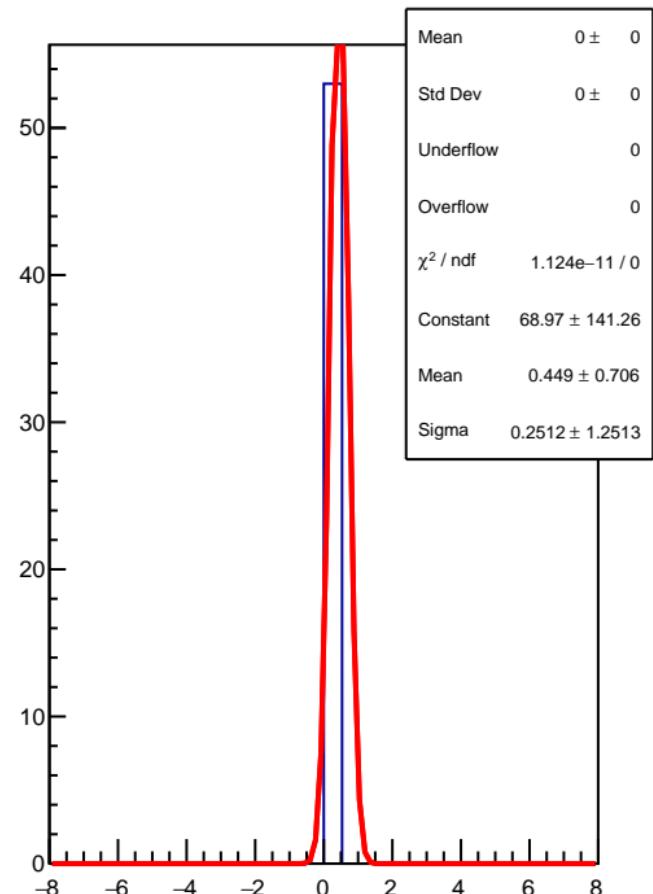
RMS (um)



diff_bpm8X (nm)

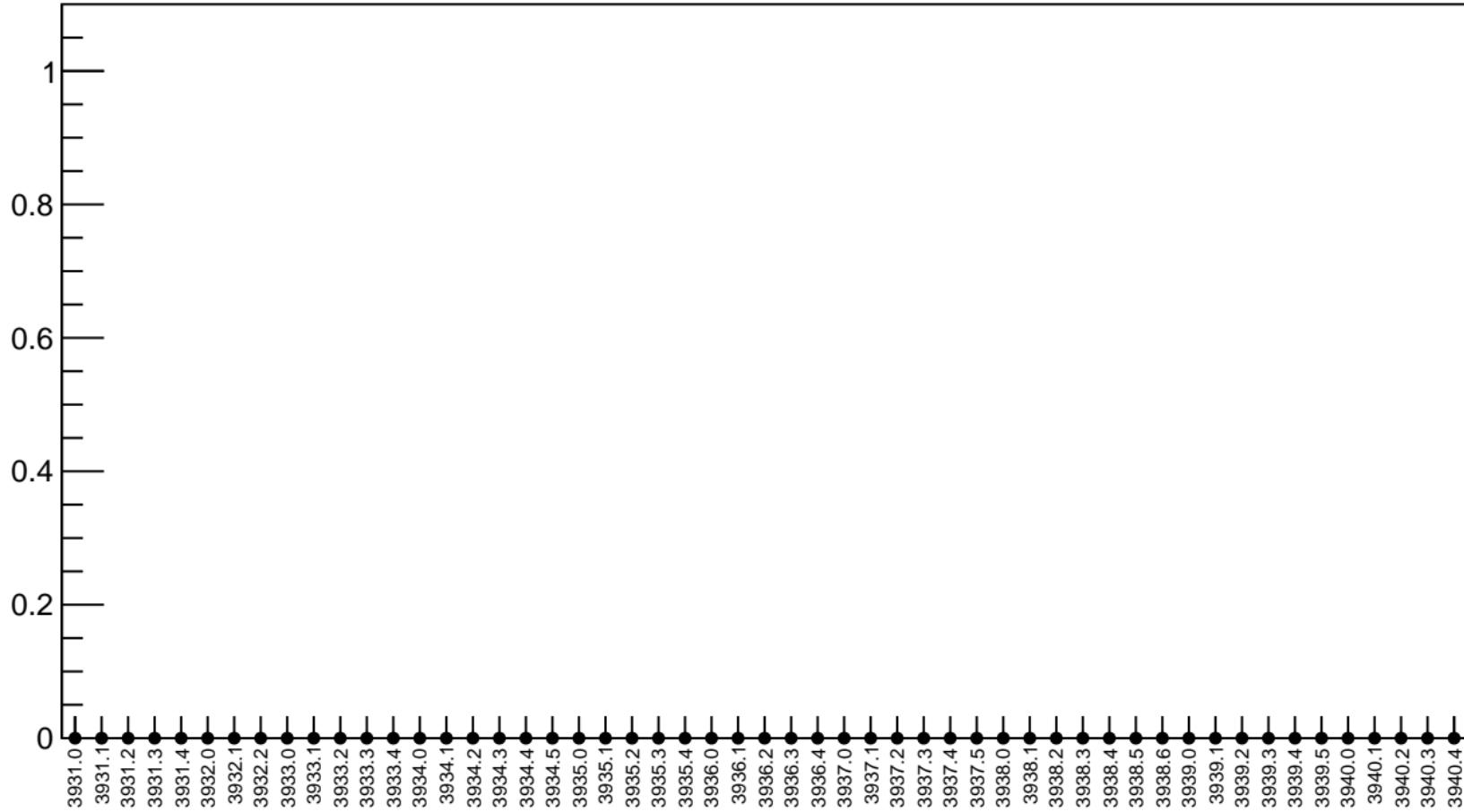


1D pull distribution



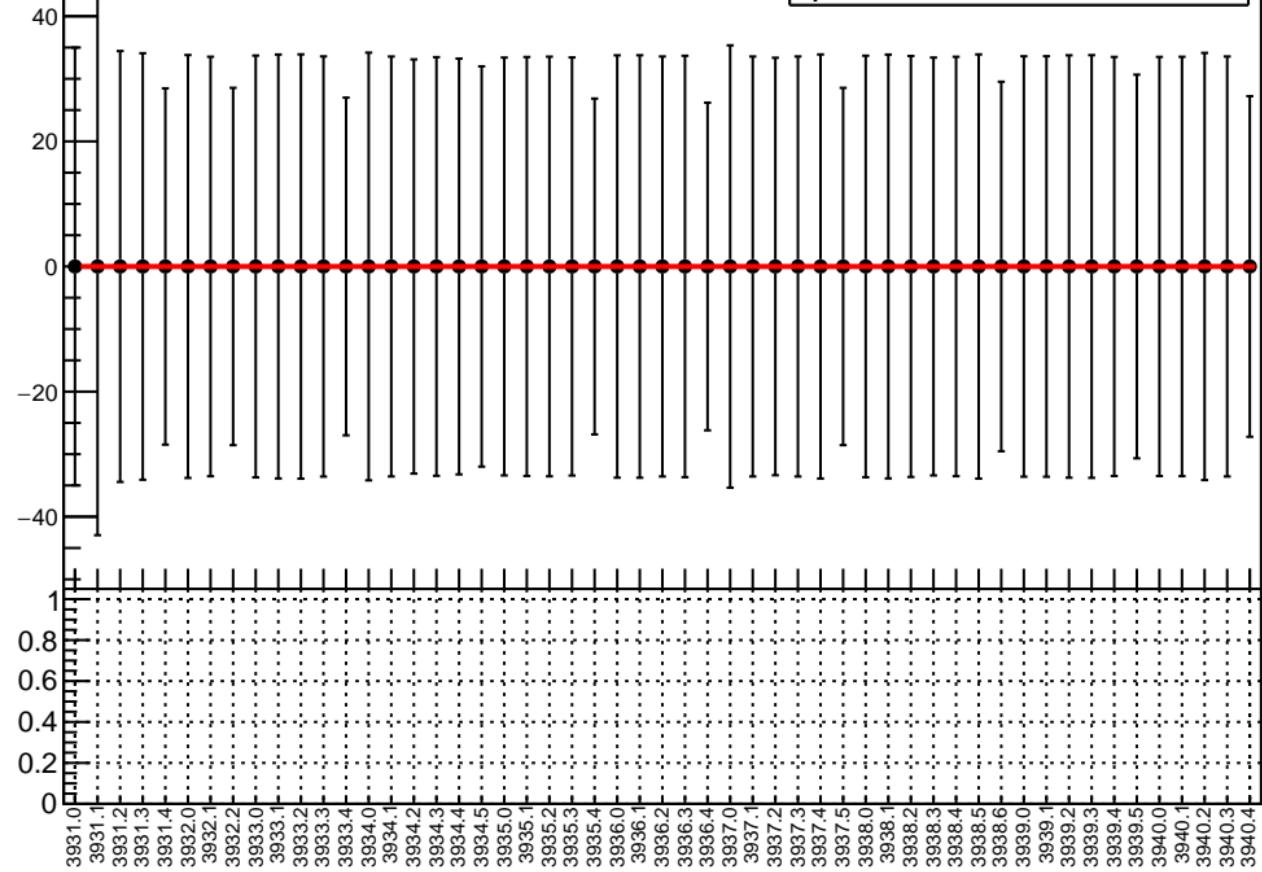
diff_bpm8X RMS (um)

RMS (um)

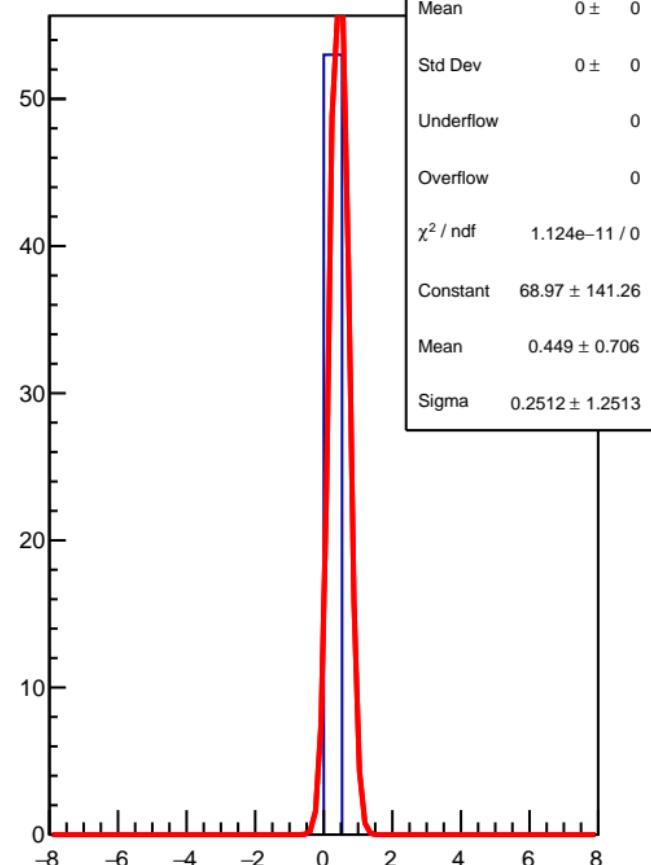


diff_bpm8Y (nm)

χ^2 / ndf 0 / 52
p0 0 ± 4.476

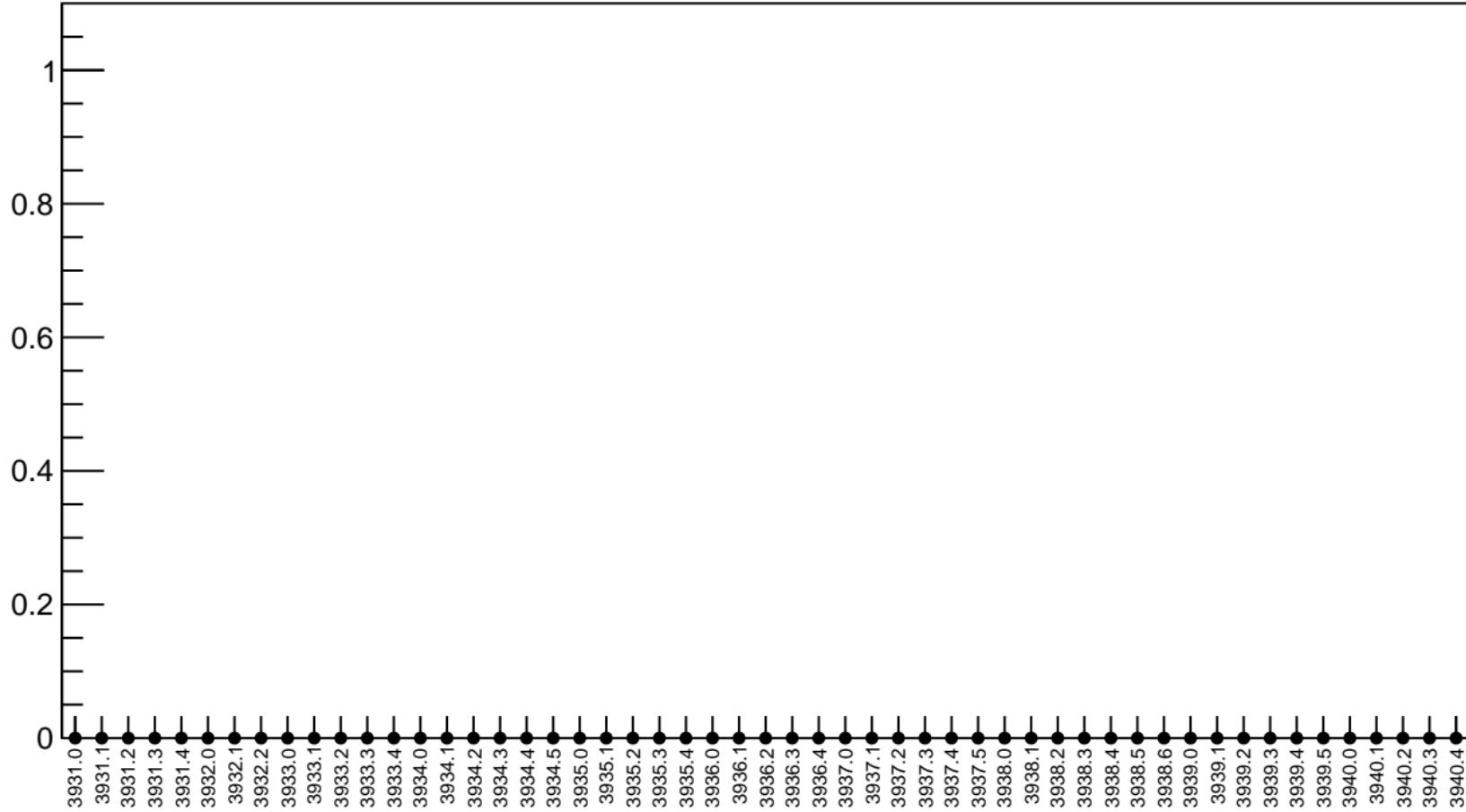


1D pull distribution



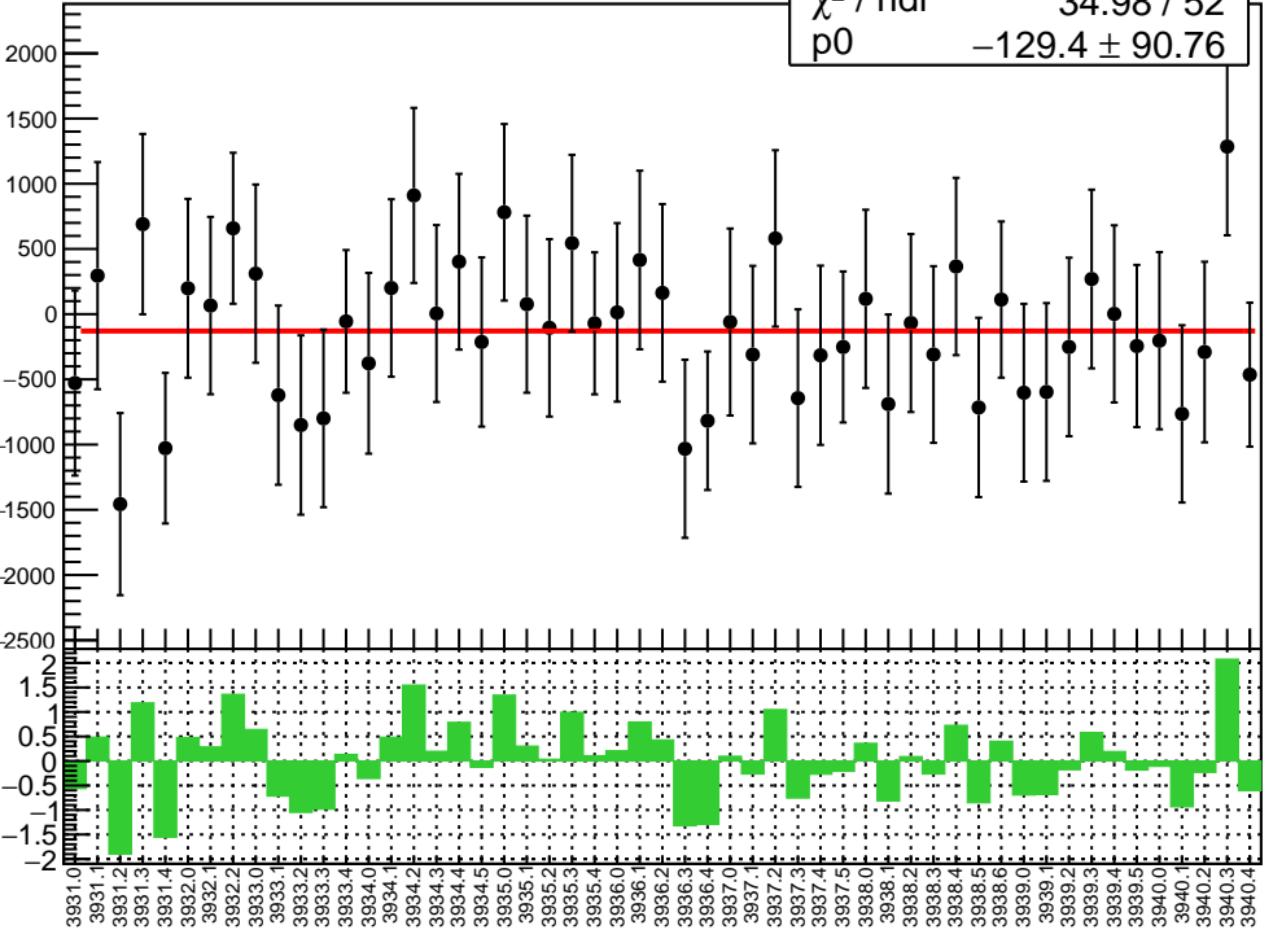
diff_bpm8Y RMS (um)

RMS (um)

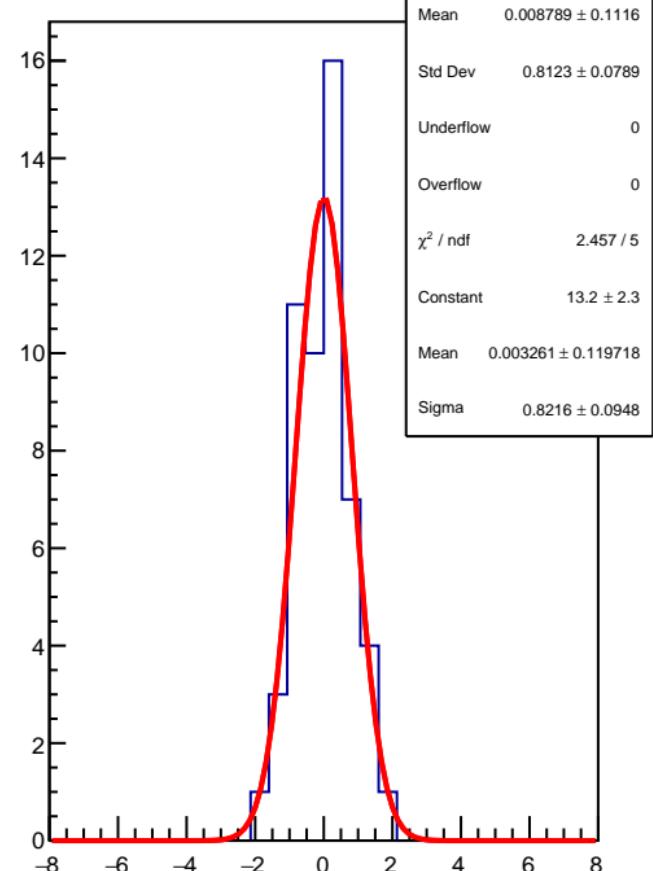


corr_us_avg_bpm4eX (ppb)

χ^2 / ndf 34.98 / 52
p0 -129.4 ± 90.76

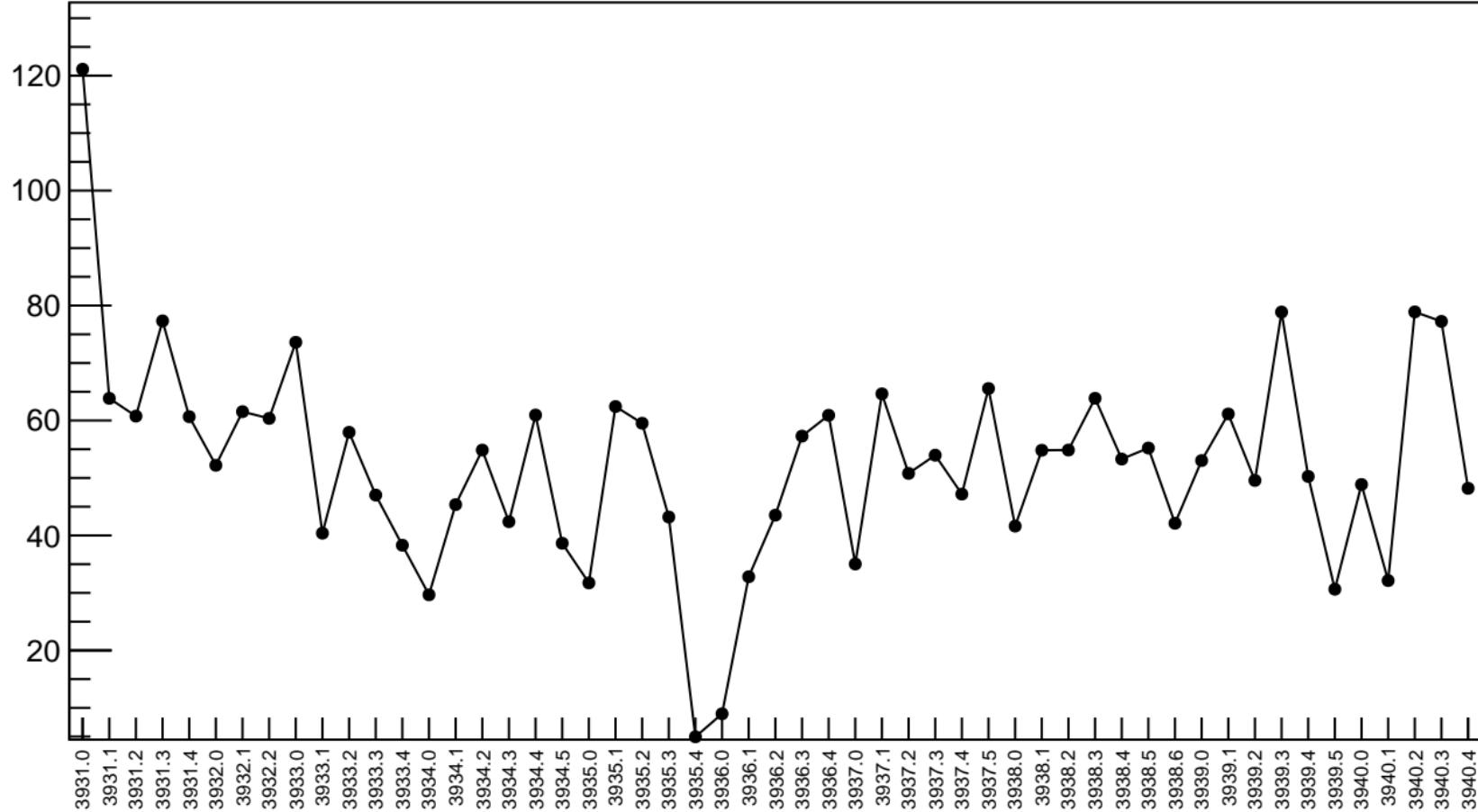


1D pull distribution

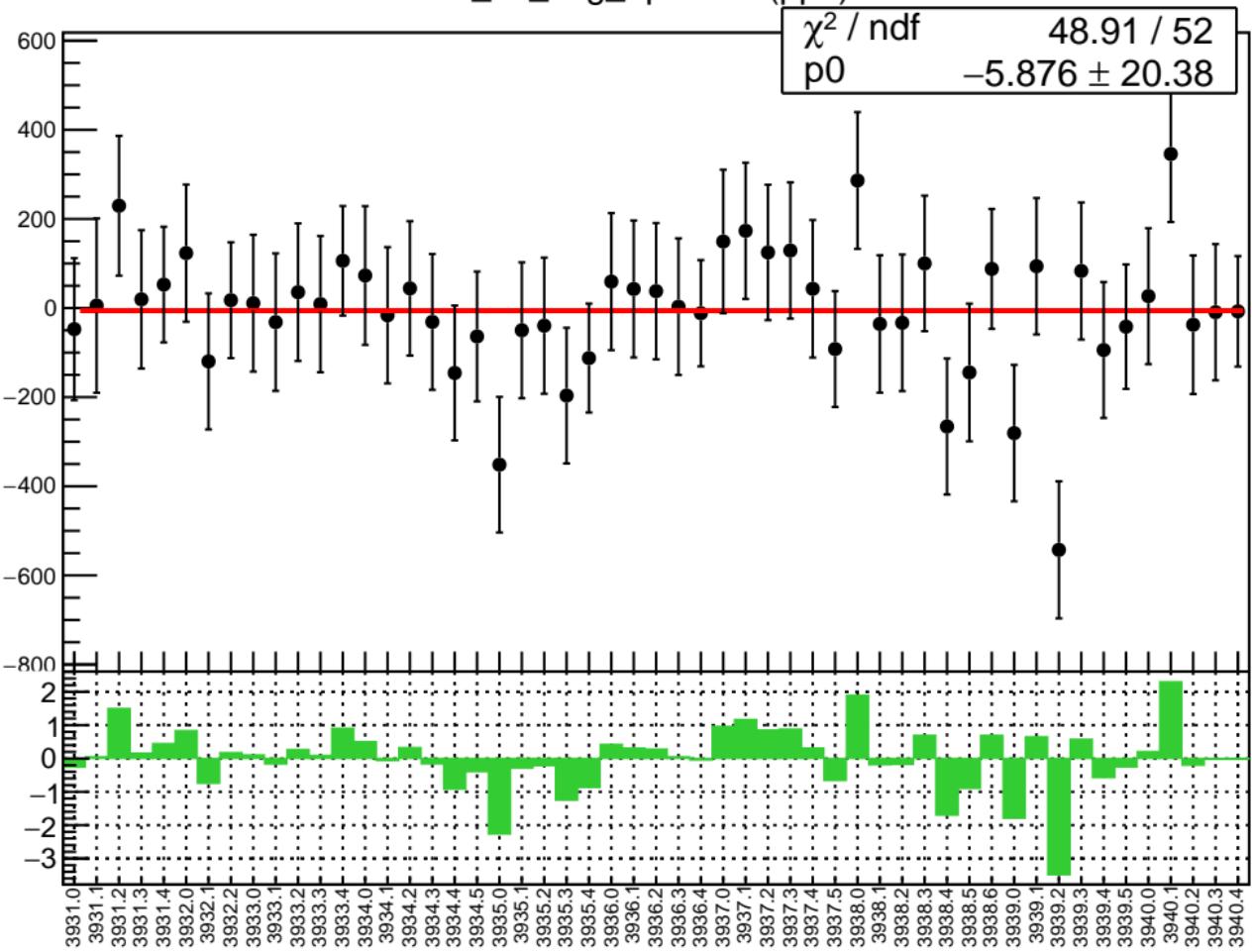


corr_us_avg_bpm4eX RMS (ppm)

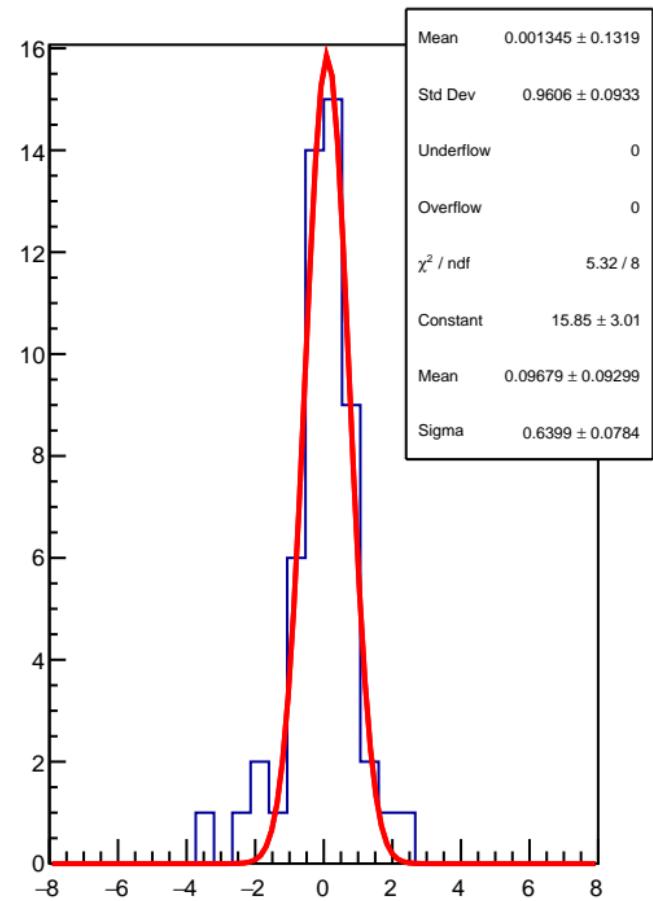
RMS (ppm)



corr_us_avg_bpm4eY (ppb)

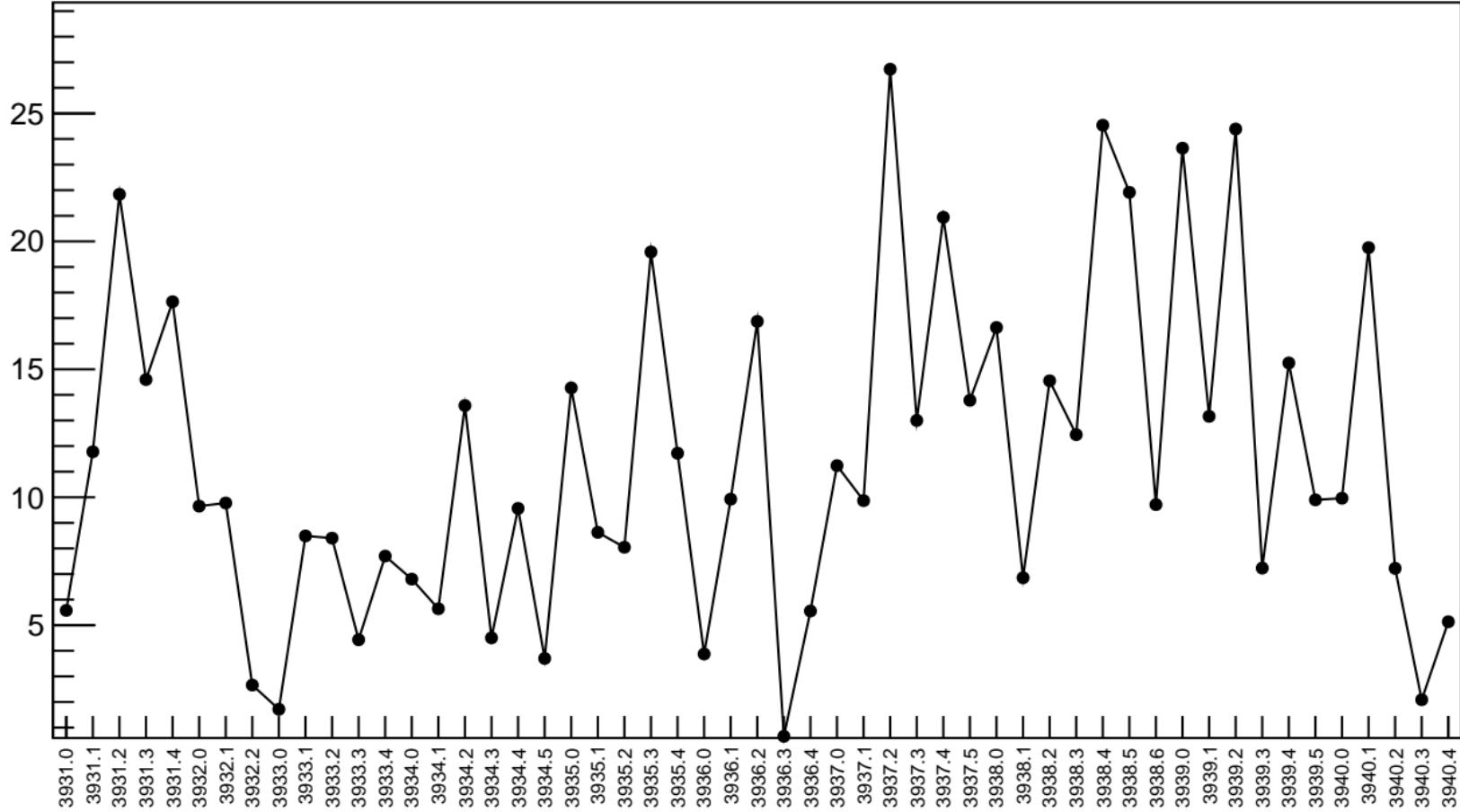


1D pull distribution



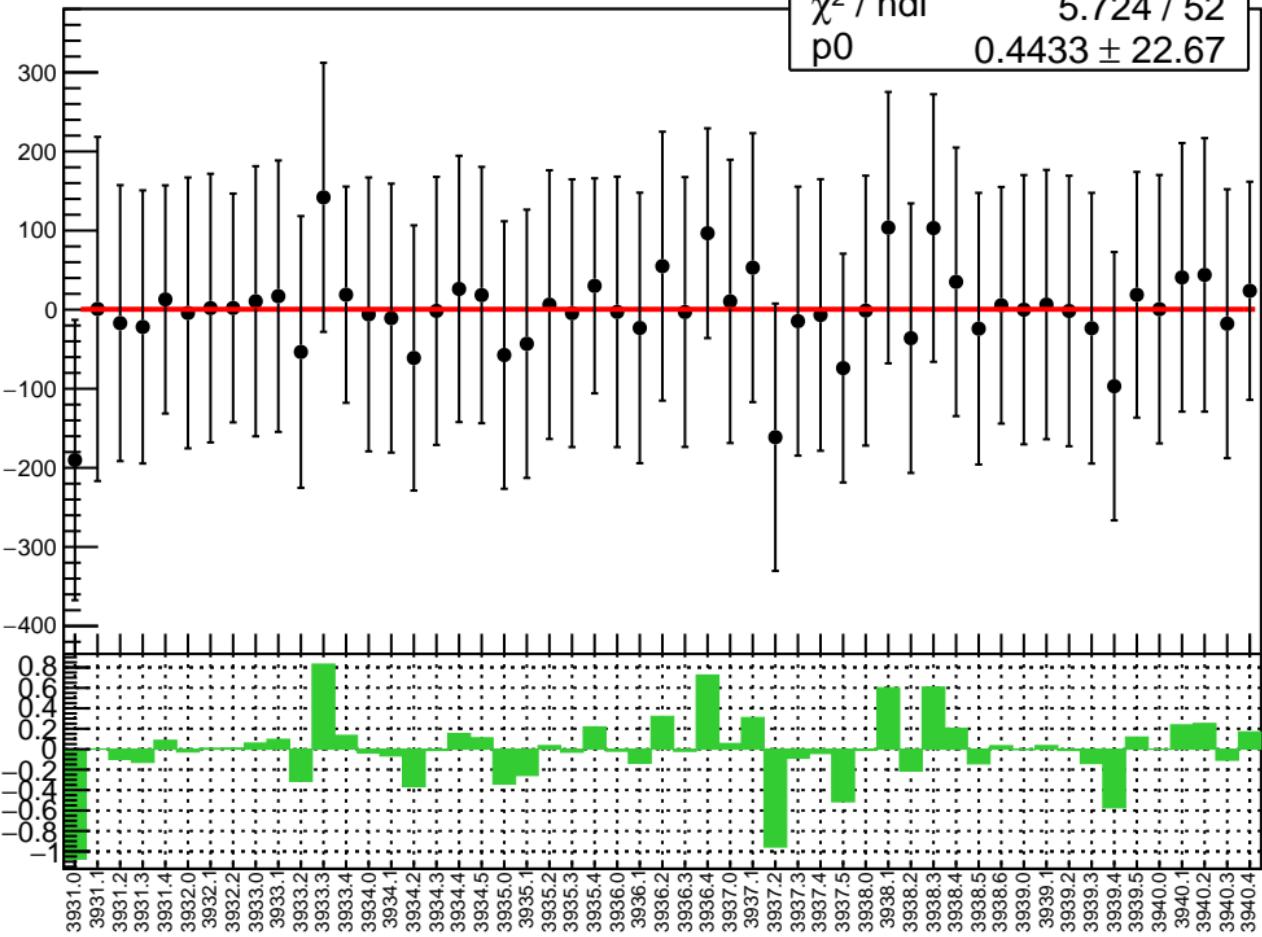
corr_us_avg_bpm4eY RMS (ppm)

RMS (ppm)

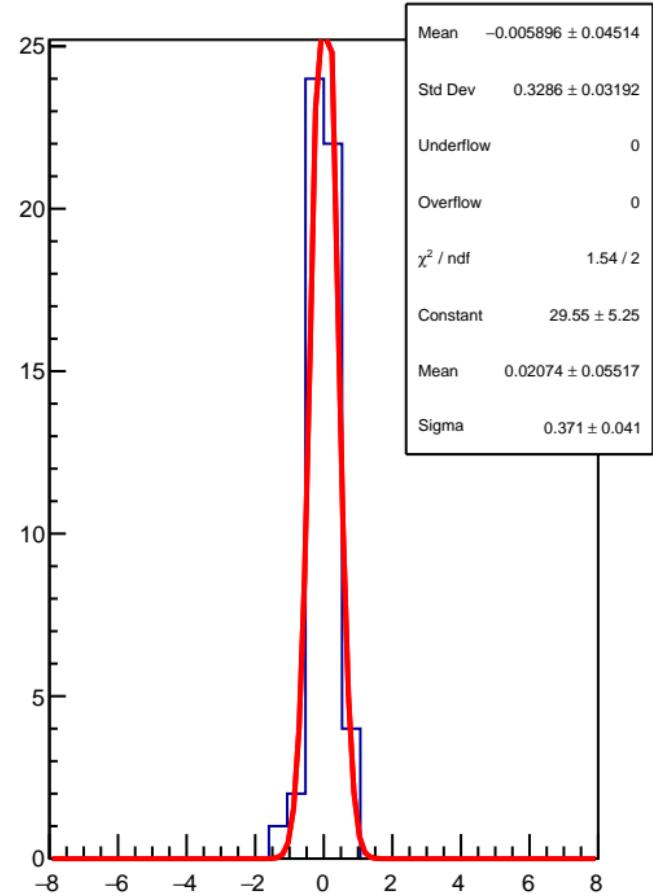


corr_us_avg_bpm4aX (ppb)

χ^2 / ndf 5.724 / 52
p0 0.4433 ± 22.67

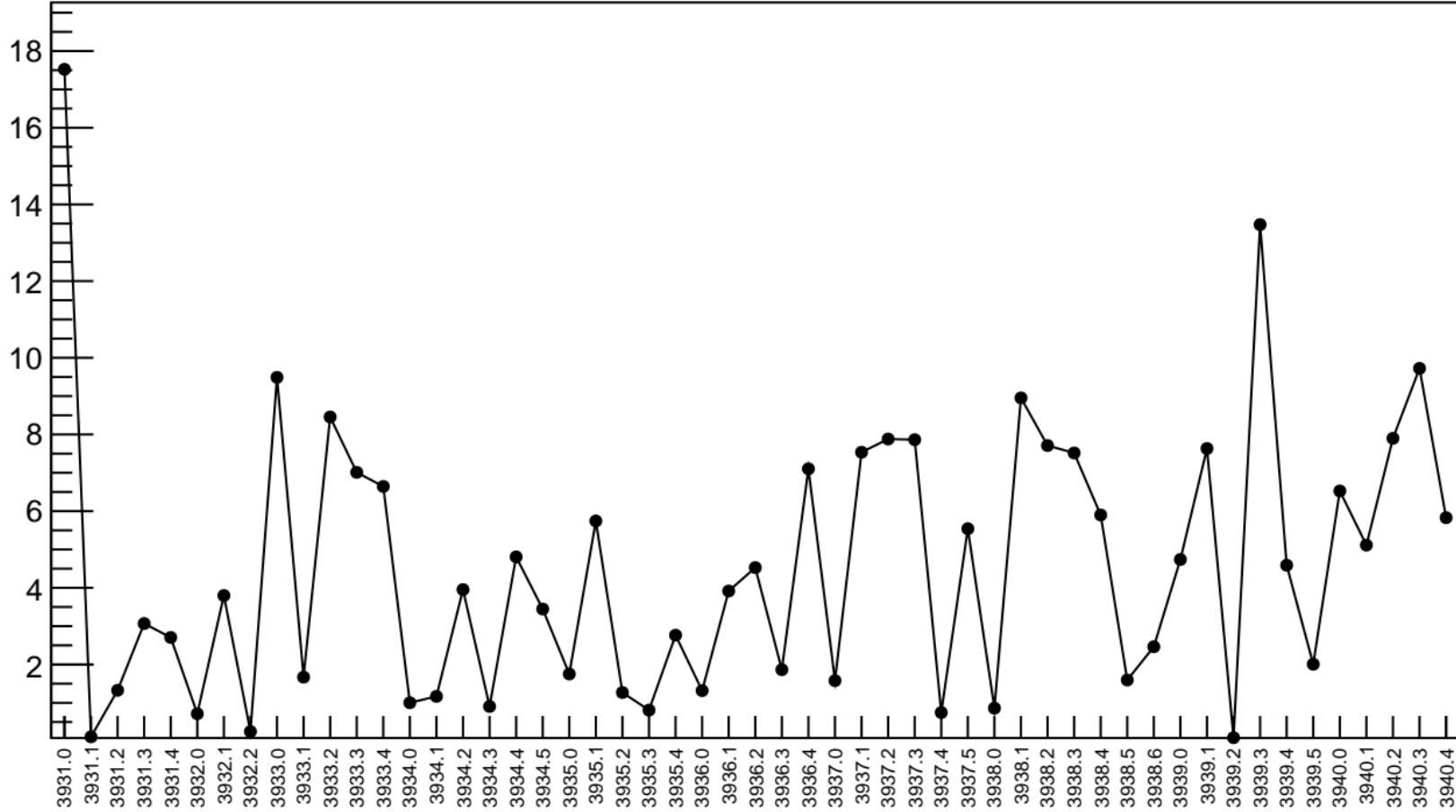


1D pull distribution



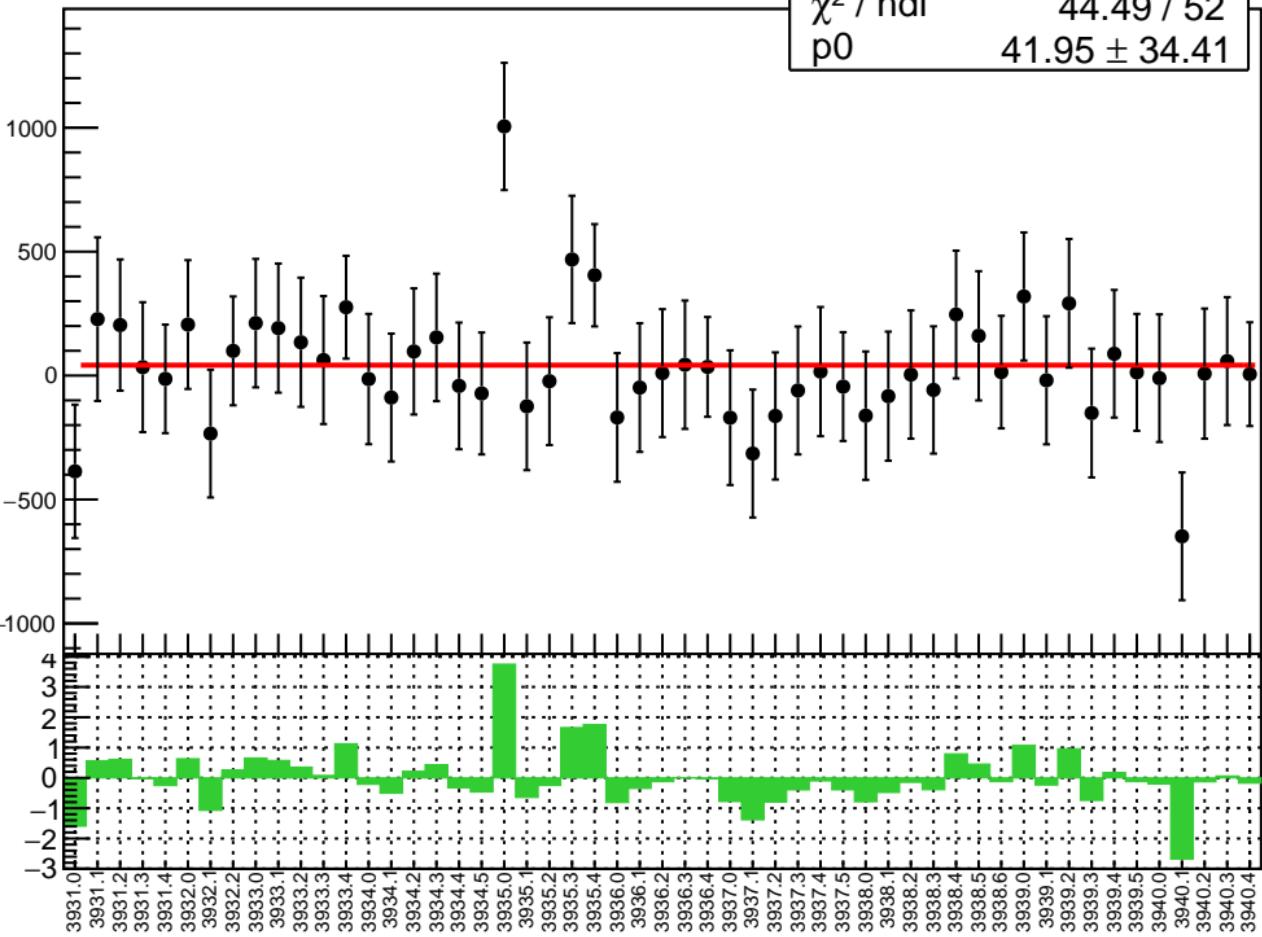
corr_us_avg_bpm4aX RMS (ppm)

RMS (ppm)

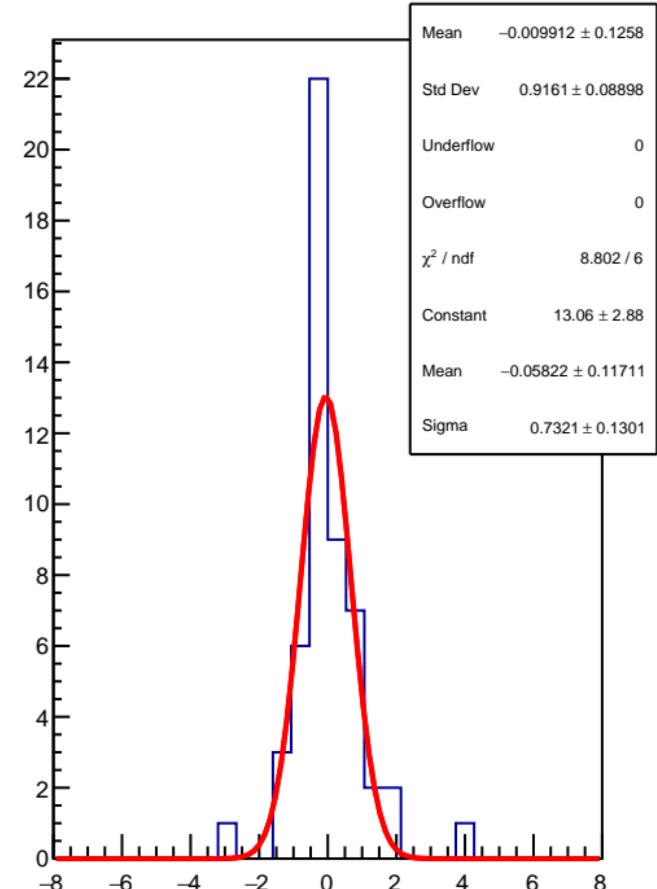


corr_us_avg_bpm4aY (ppb)

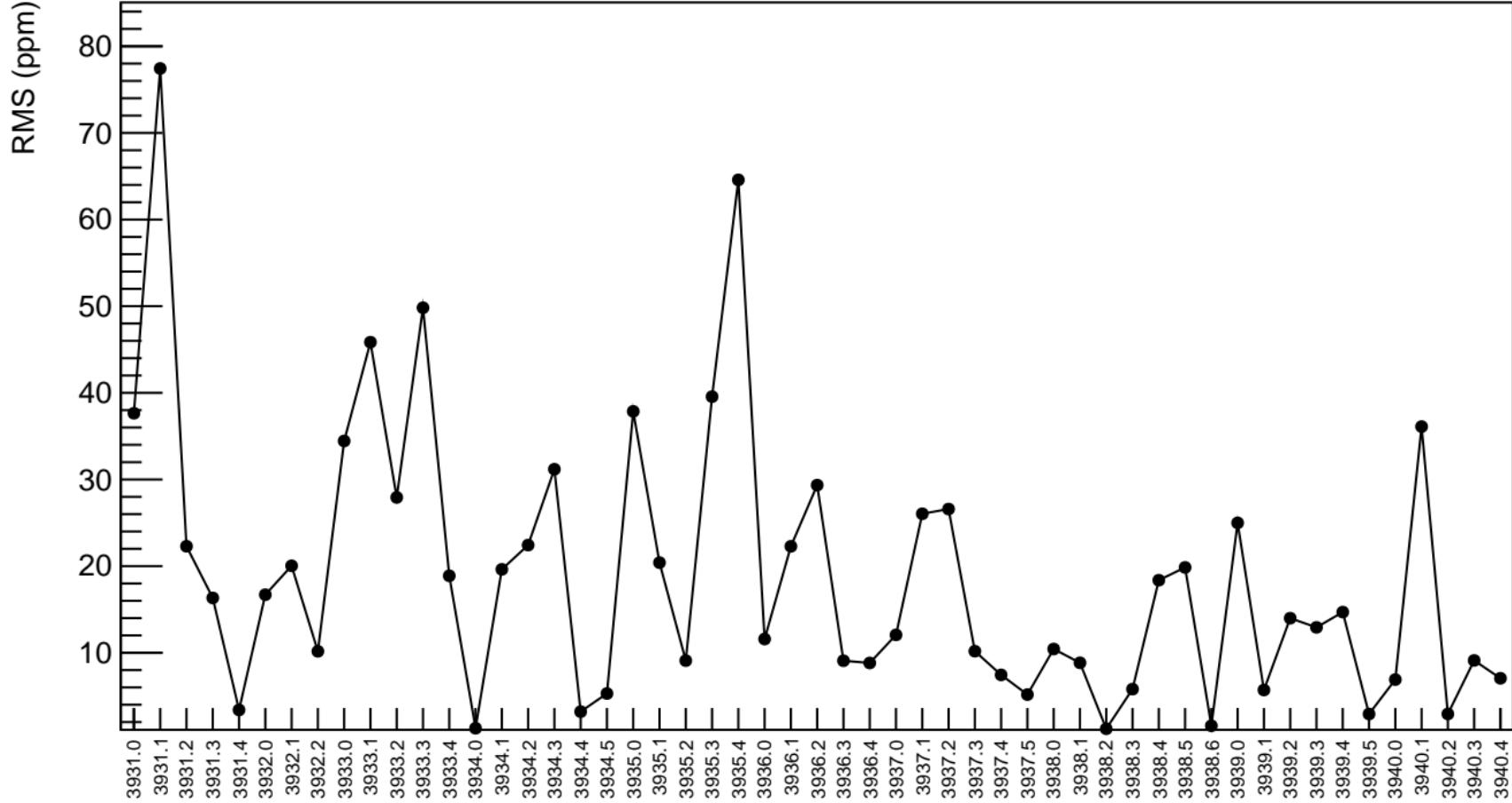
χ^2 / ndf 44.49 / 52
p0 41.95 ± 34.41



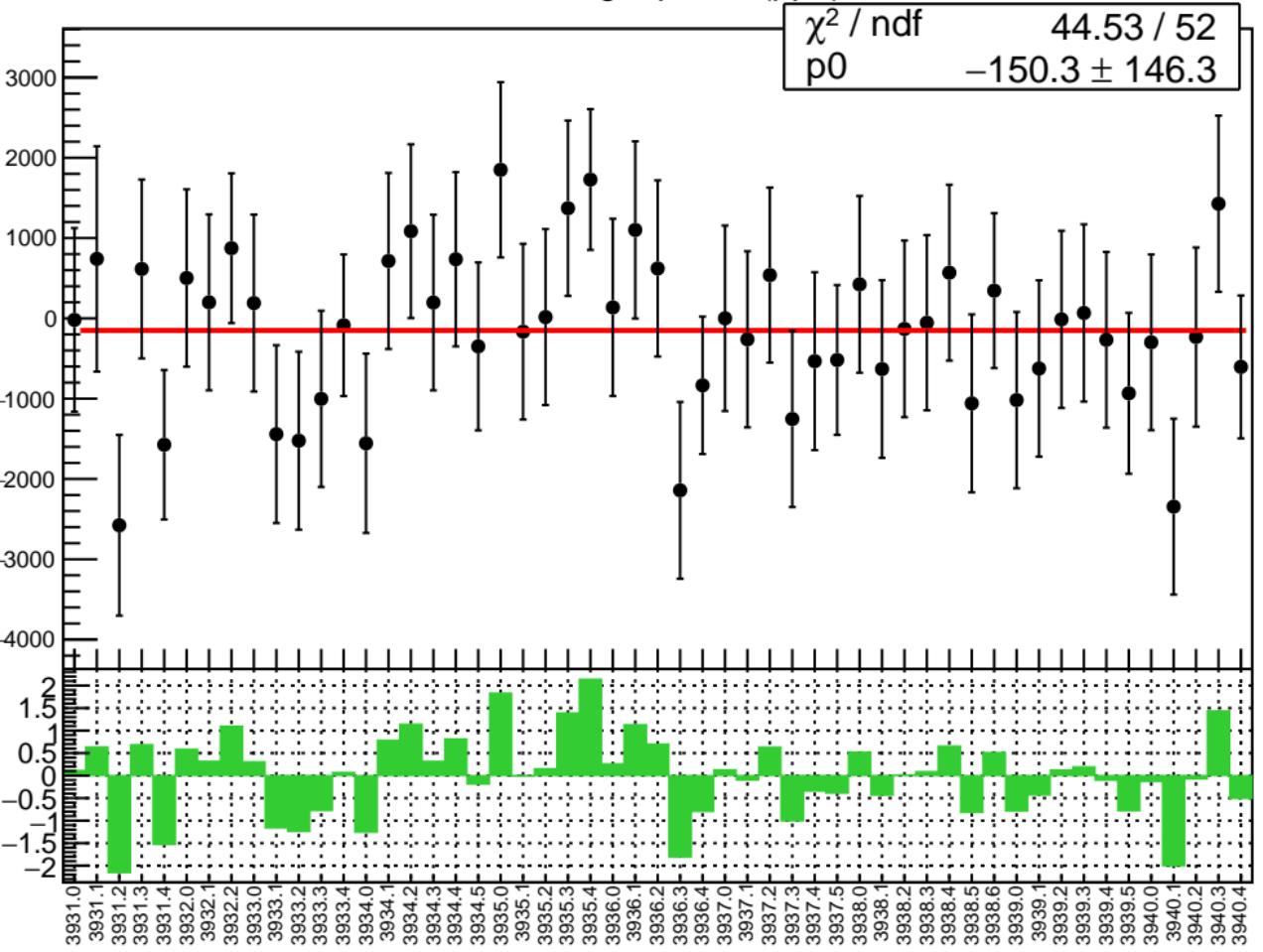
1D pull distribution



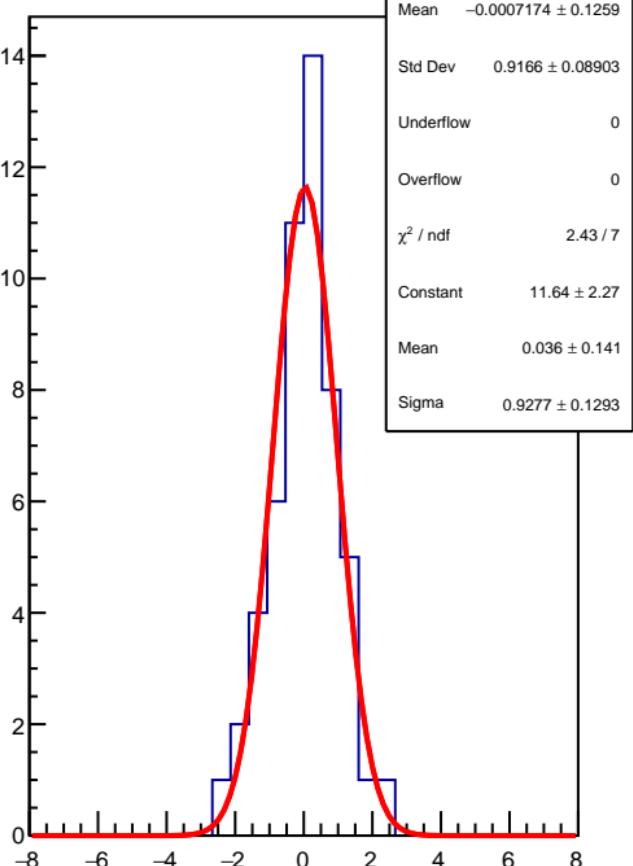
corr_us_avg_bpm4aY RMS (ppm)



corr_us_avg_bpm1X (ppb)

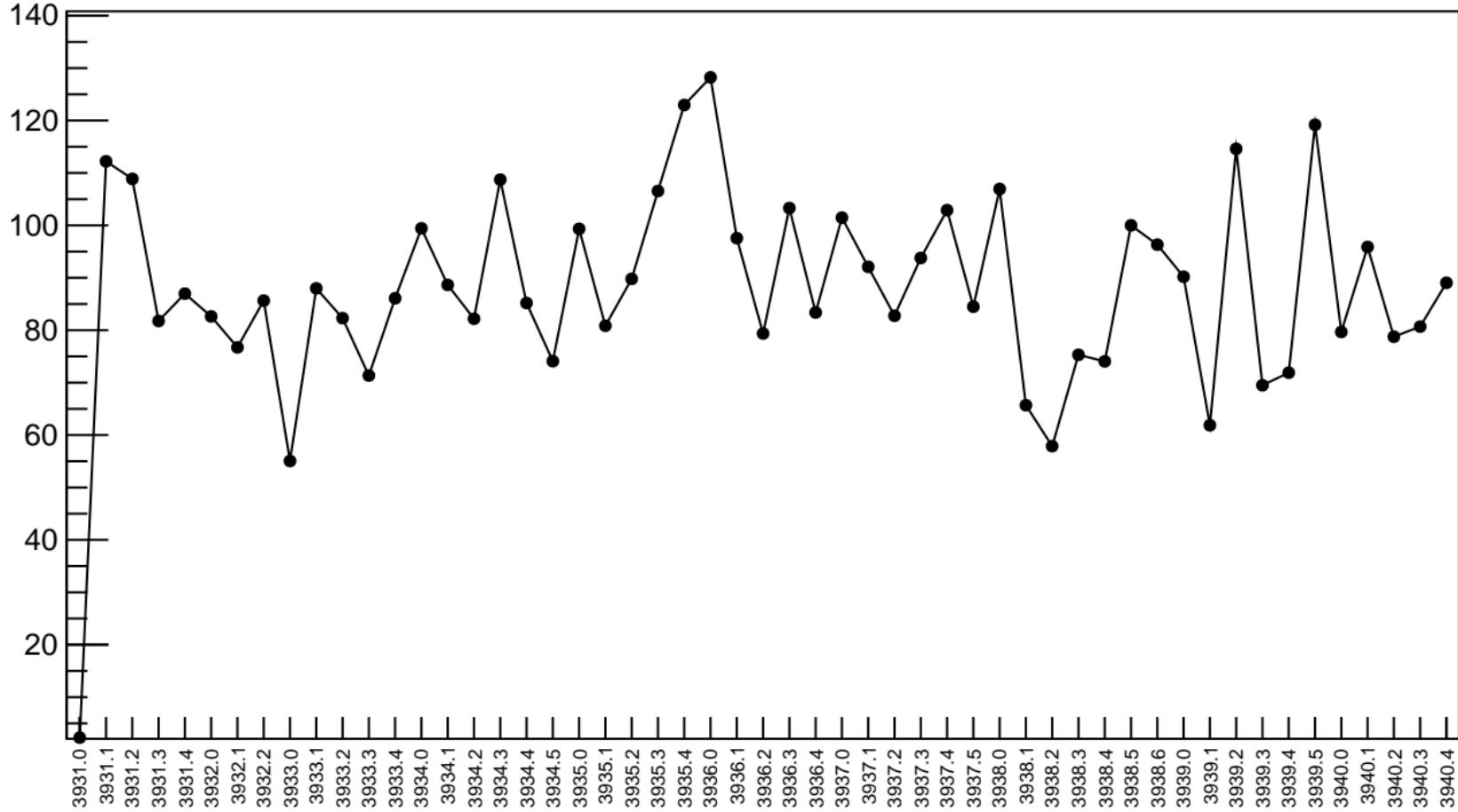


1D pull distribution

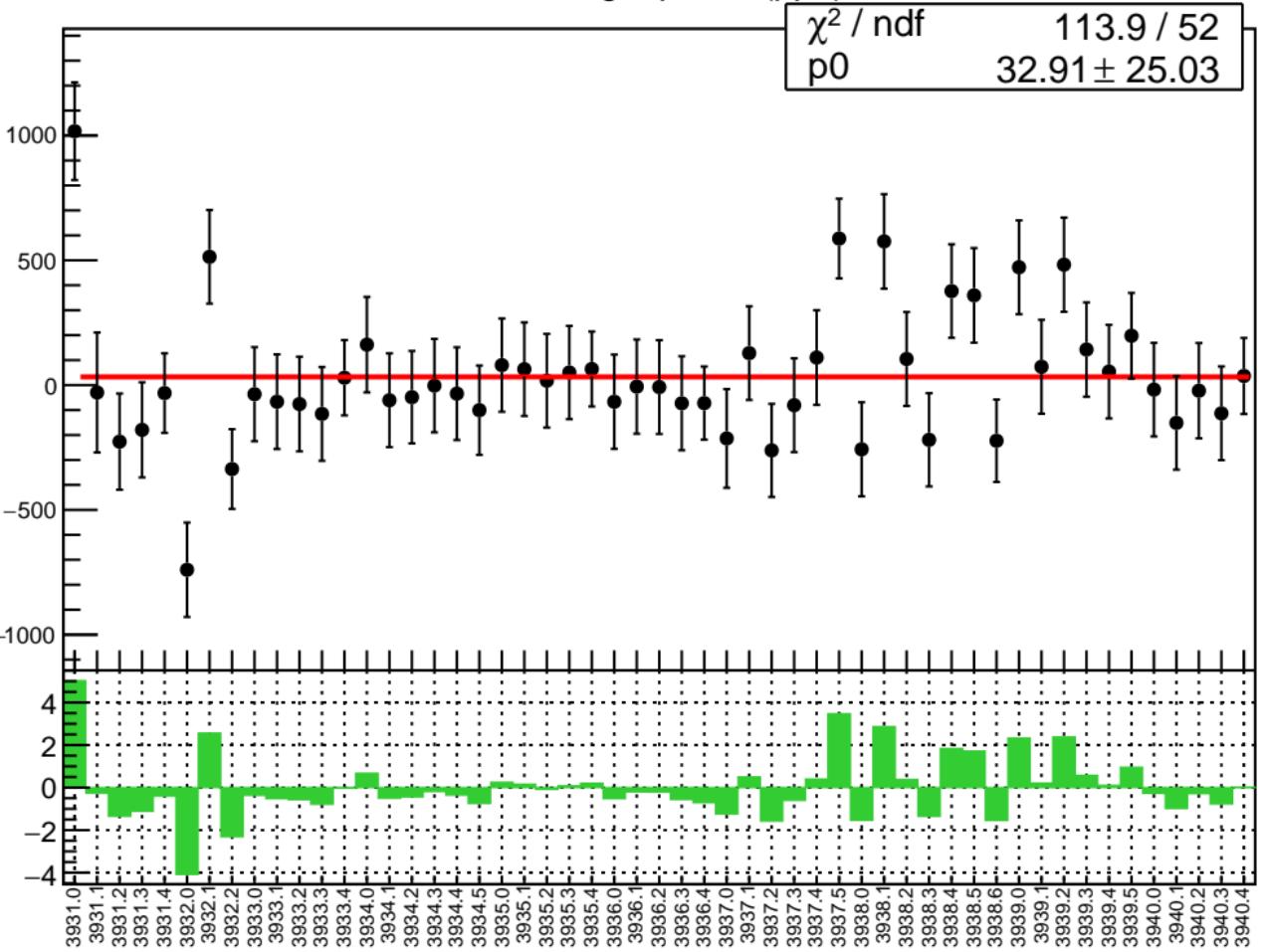


corr_us_avg_bpm1X RMS (ppm)

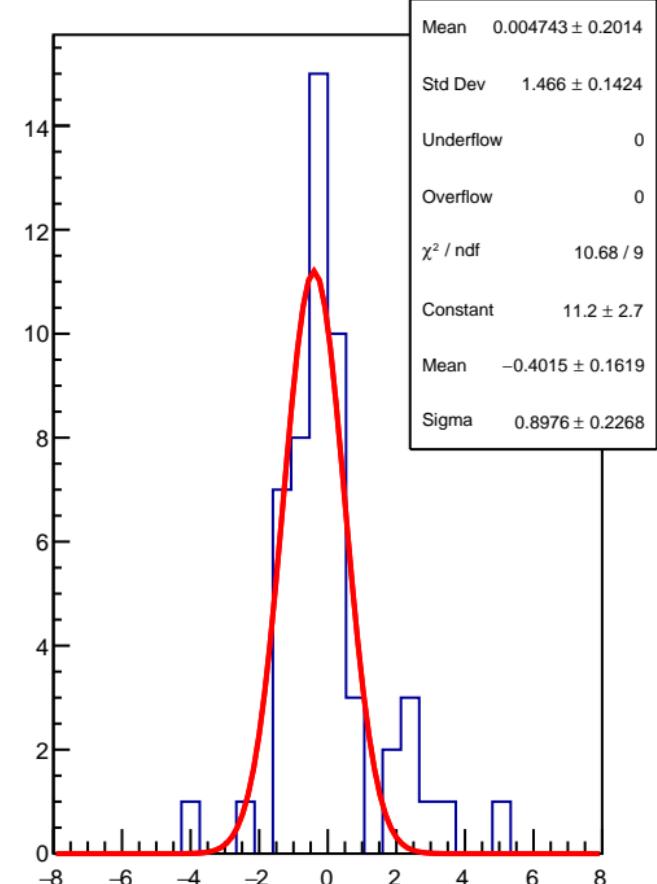
RMS (ppm)



corr_us_avg_bpm1Y (ppb)

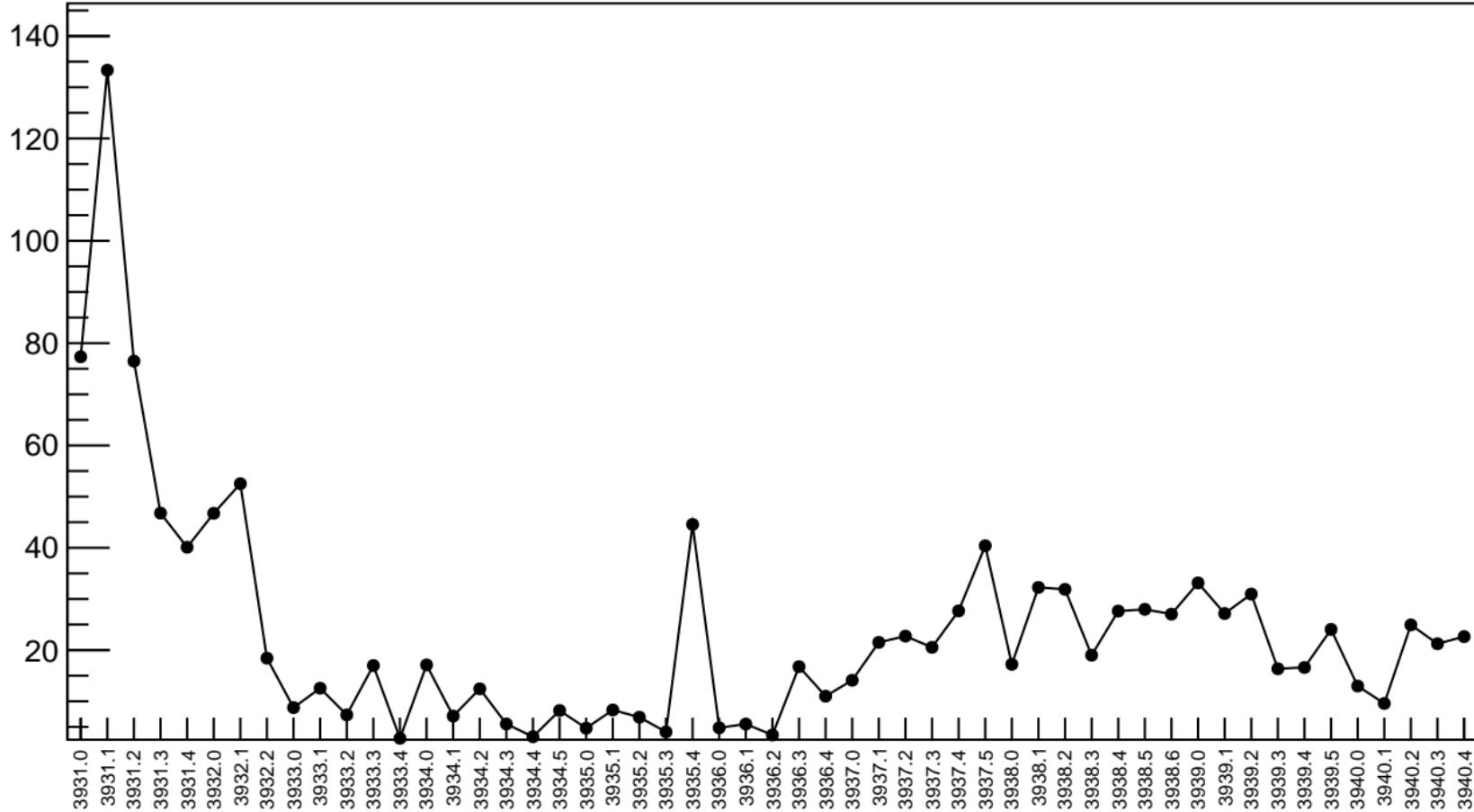


1D pull distribution



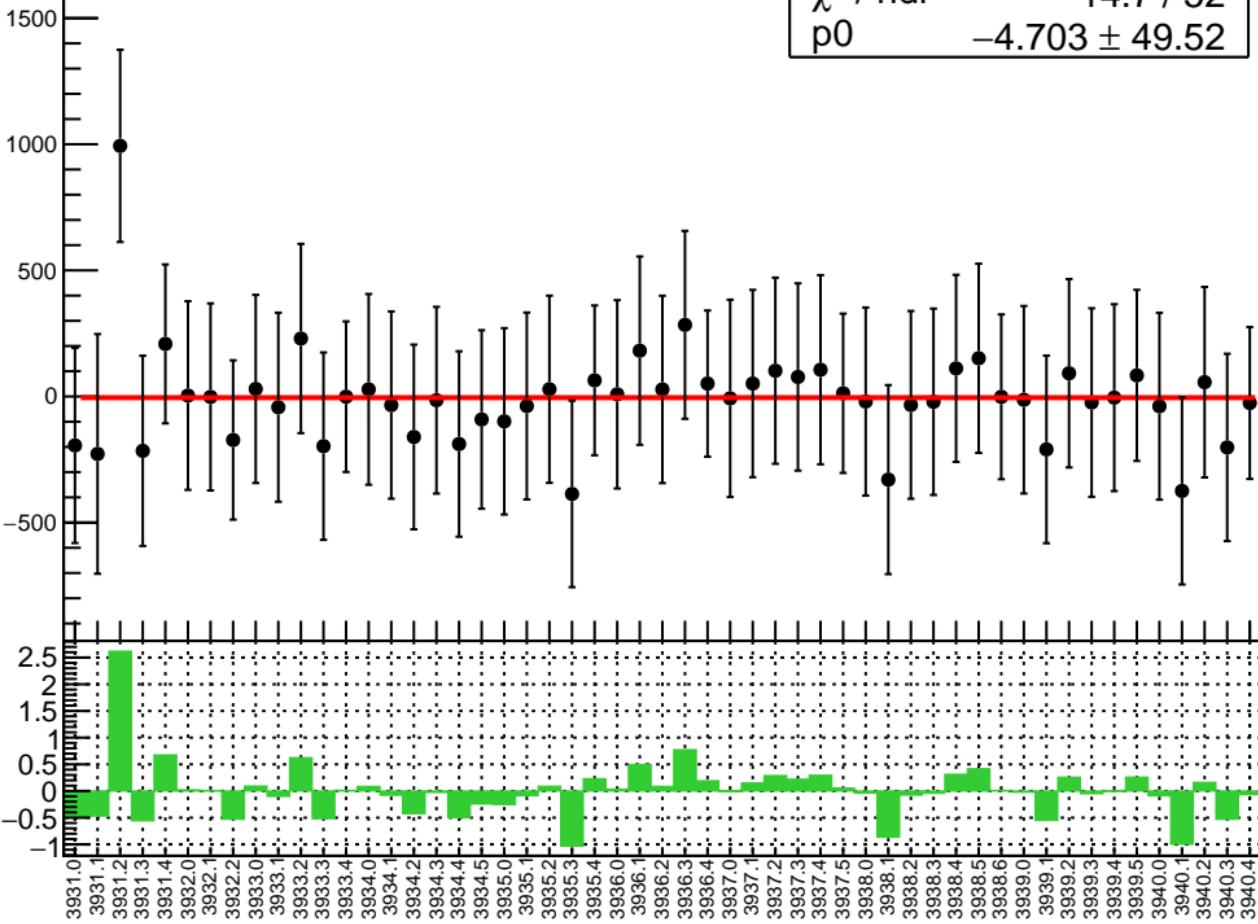
corr_us_avg_bpm1Y RMS (ppm)

RMS (ppm)

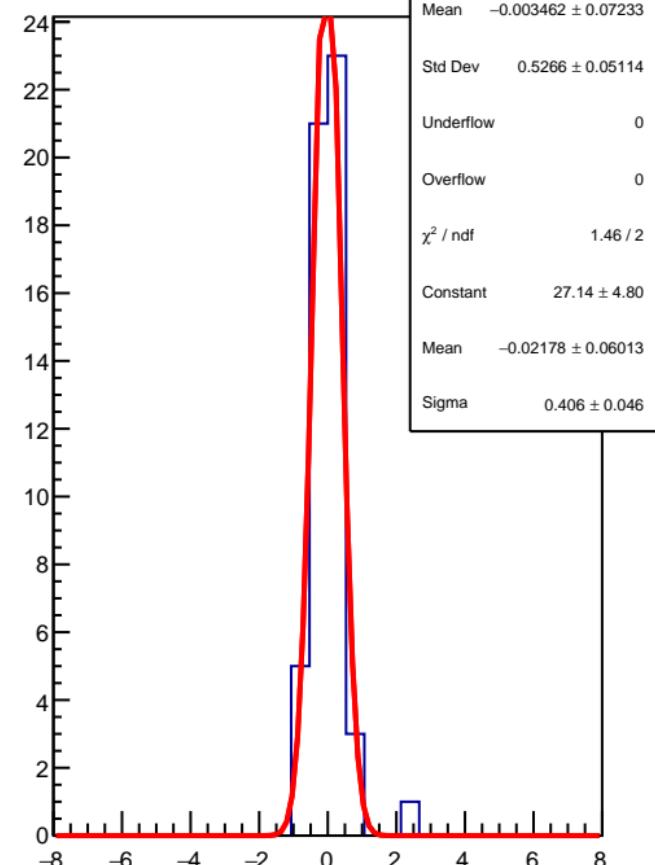


corr_us_avg_bpm16X (ppb)

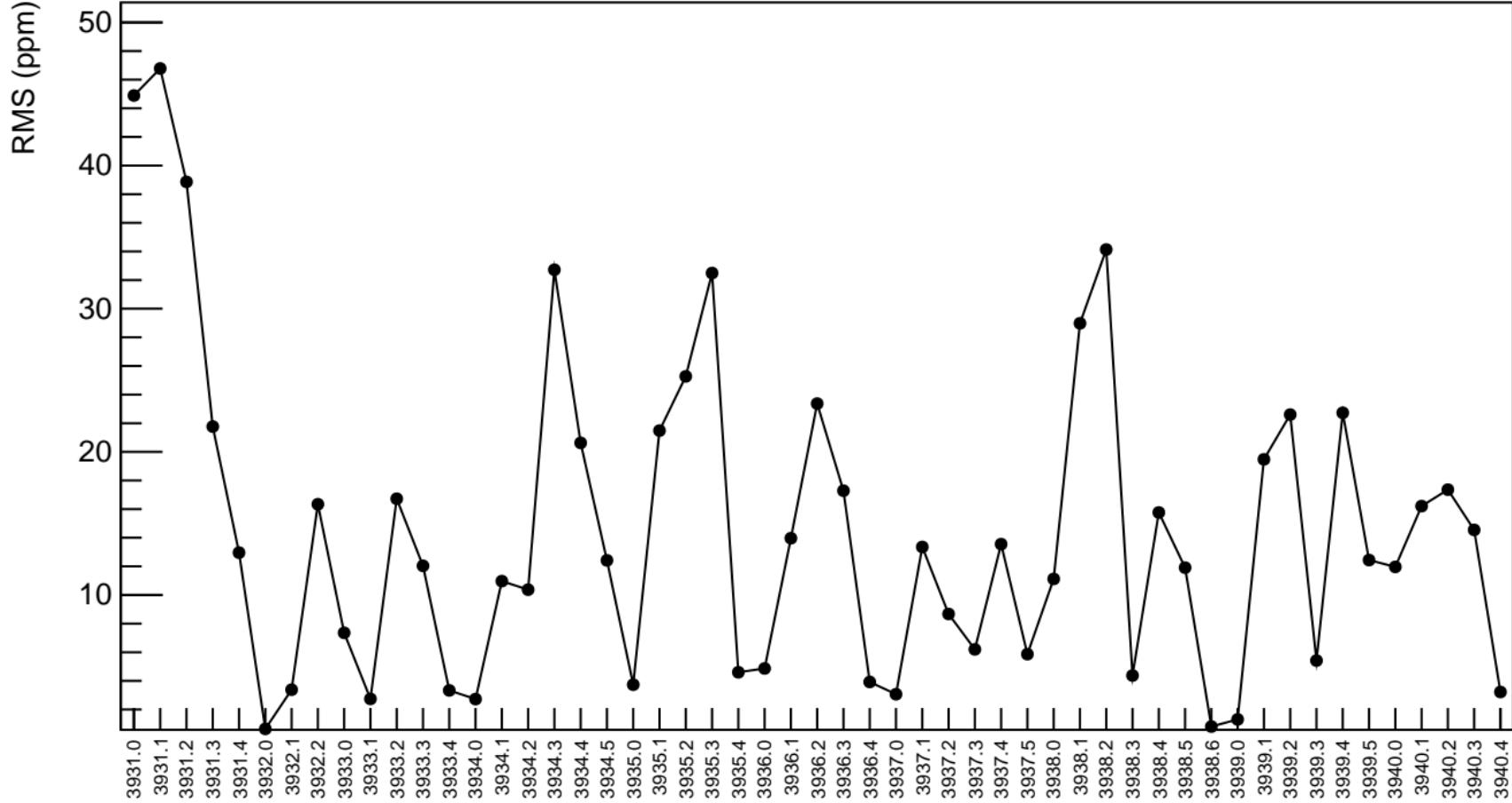
χ^2 / ndf 14.7 / 52
p0 -4.703 ± 49.52



1D pull distribution

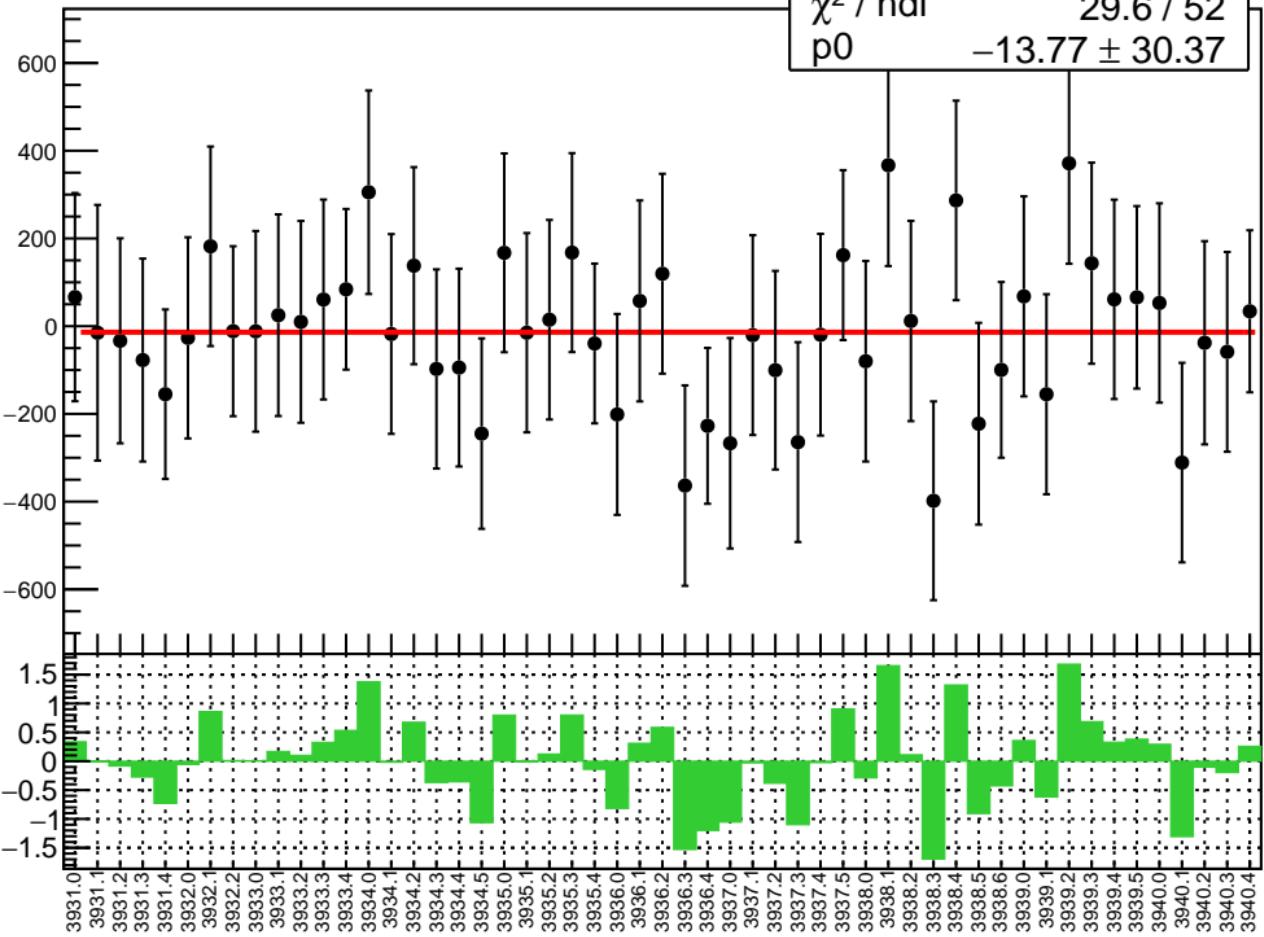


corr_us_avg_bpm16X RMS (ppm)

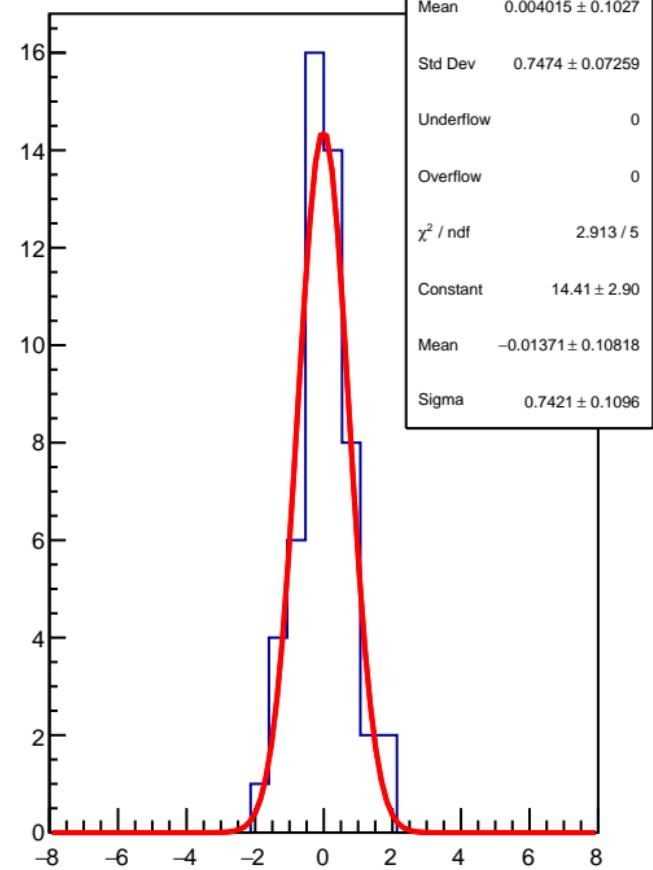


corr_us_avg_bpm16Y (ppb)

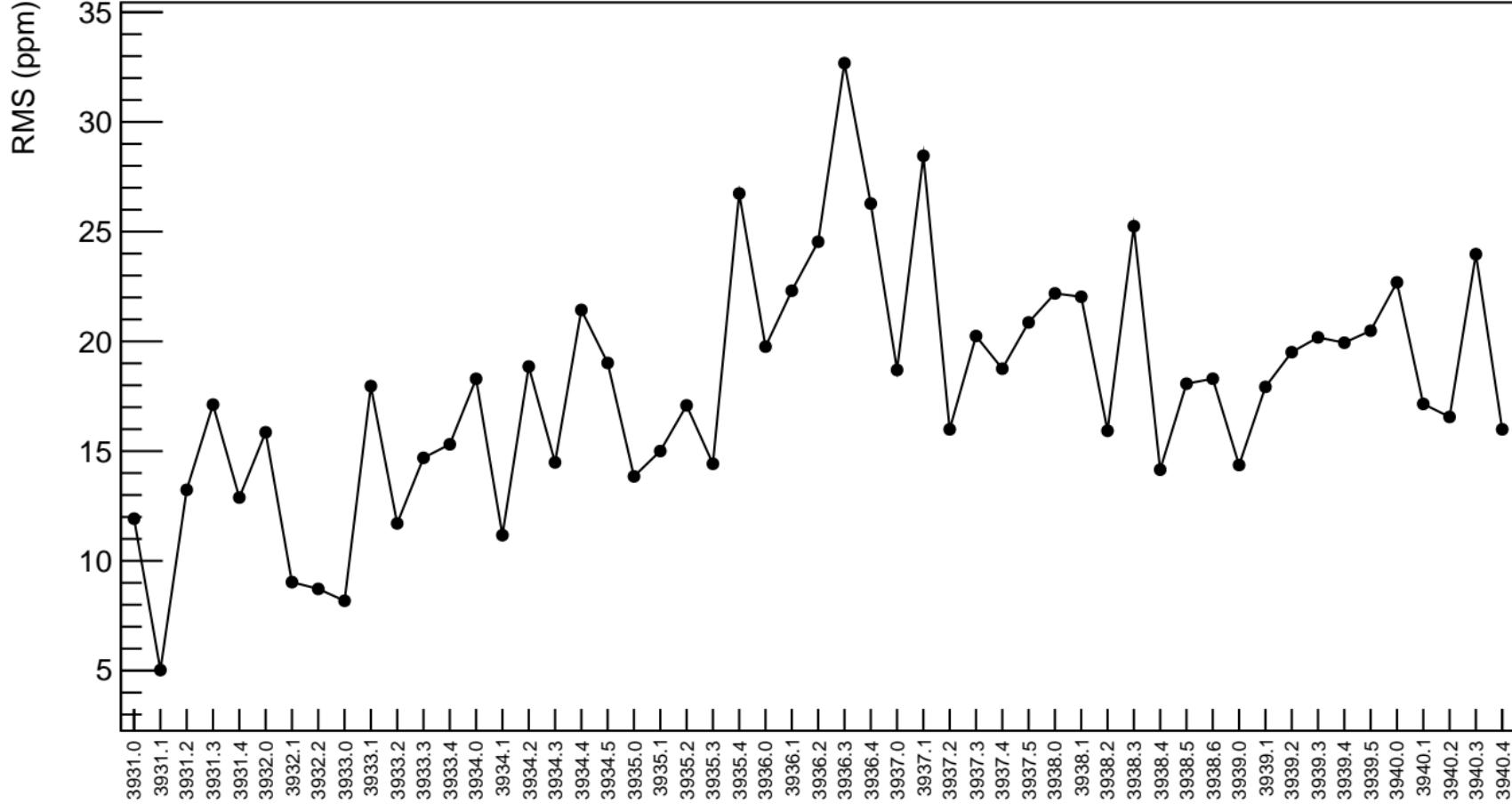
χ^2 / ndf 29.6 / 52
p0 -13.77 ± 30.37



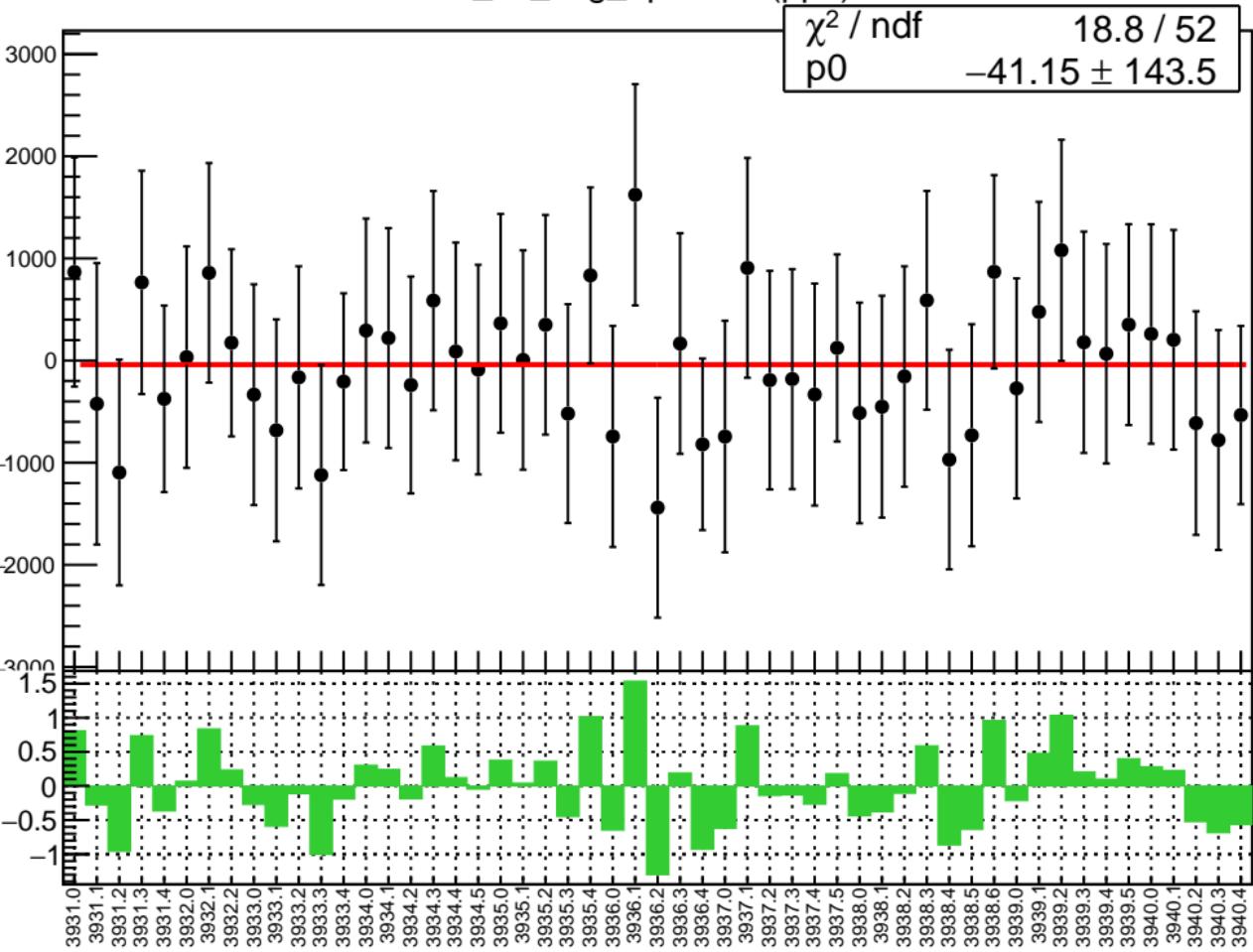
1D pull distribution



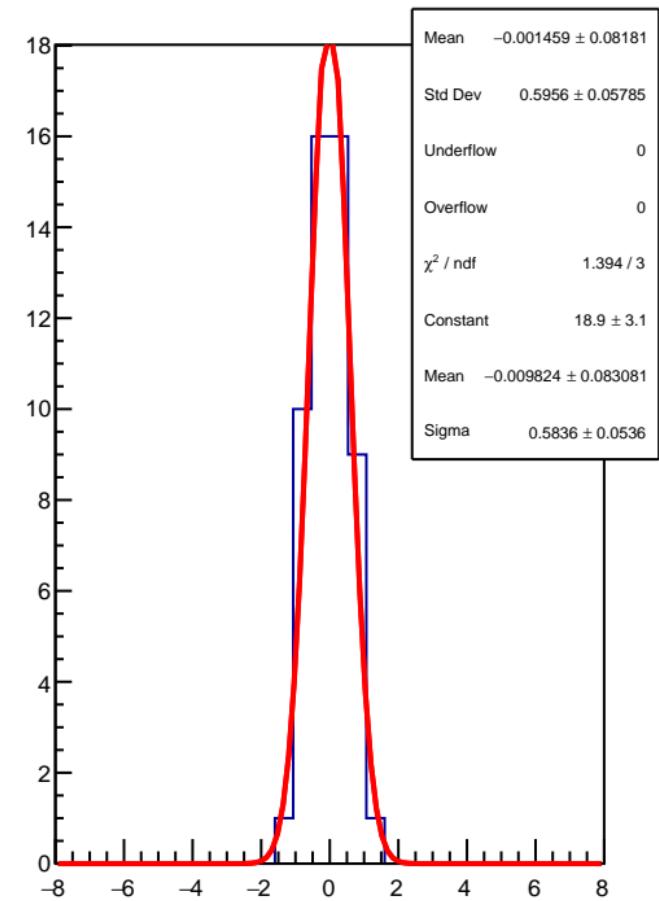
corr_us_avg_bpm16Y RMS (ppm)



corr_us_avg_bpm12X (ppb)

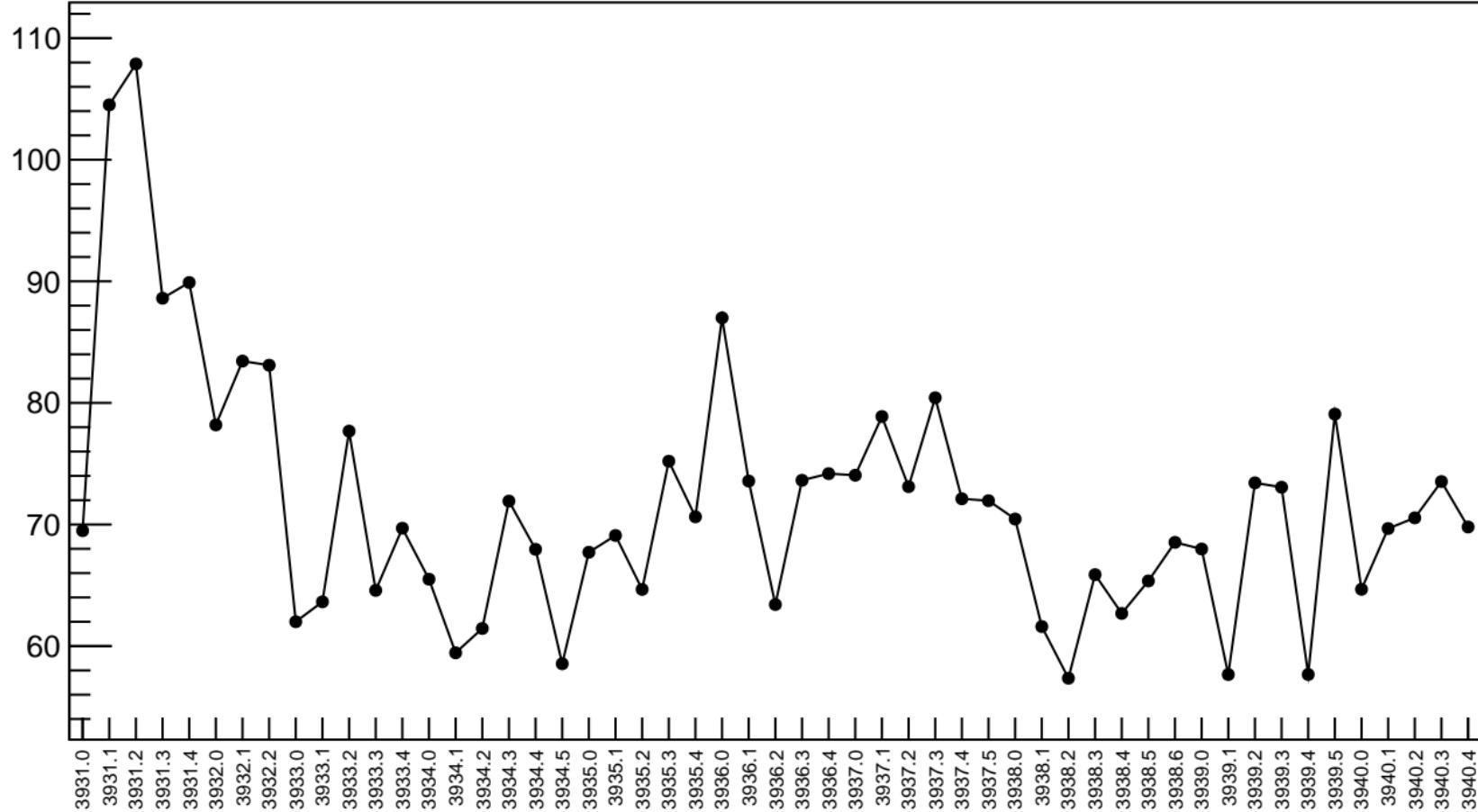


1D pull distribution

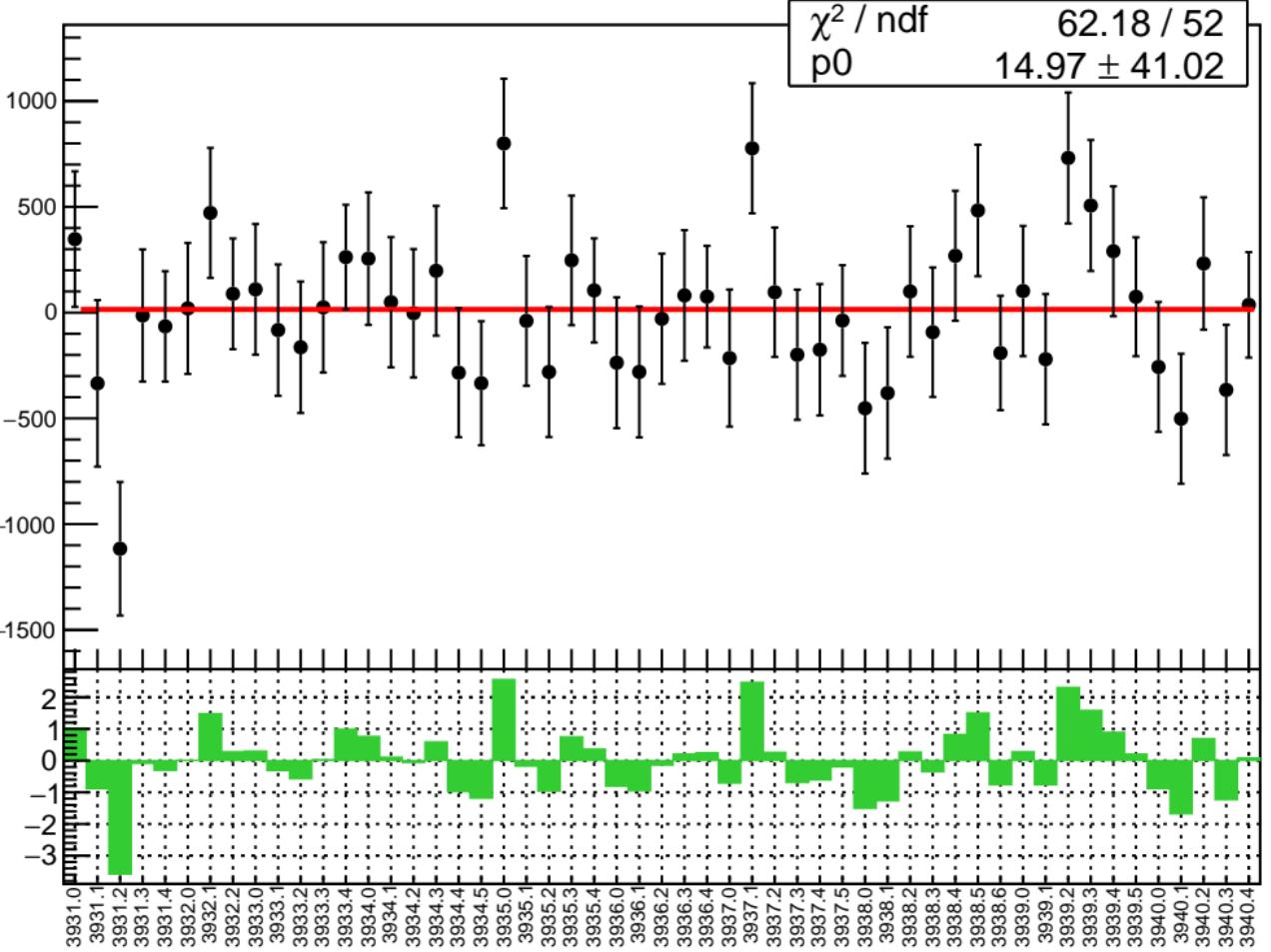


corr_us_avg_bpm12X RMS (ppm)

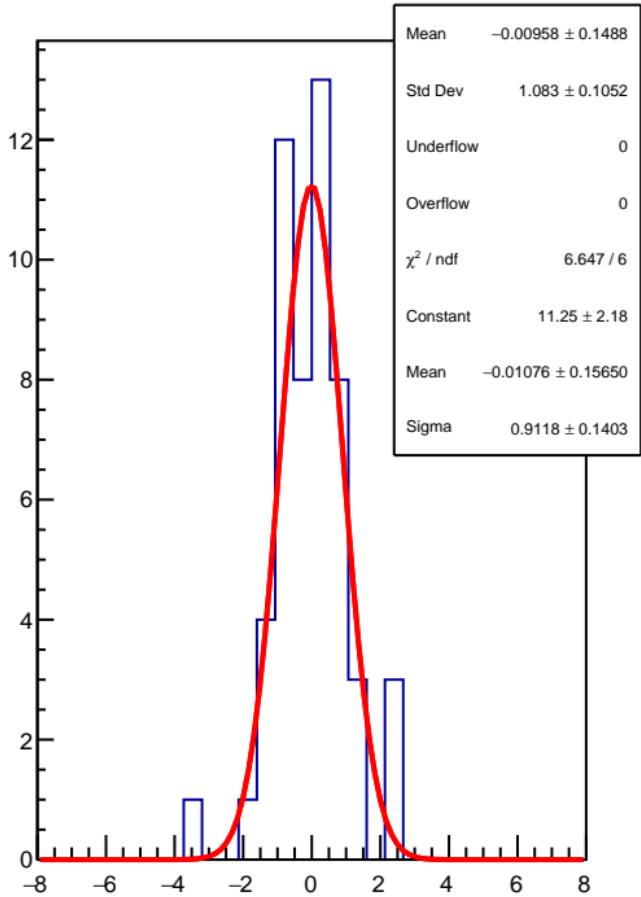
RMS (ppm)



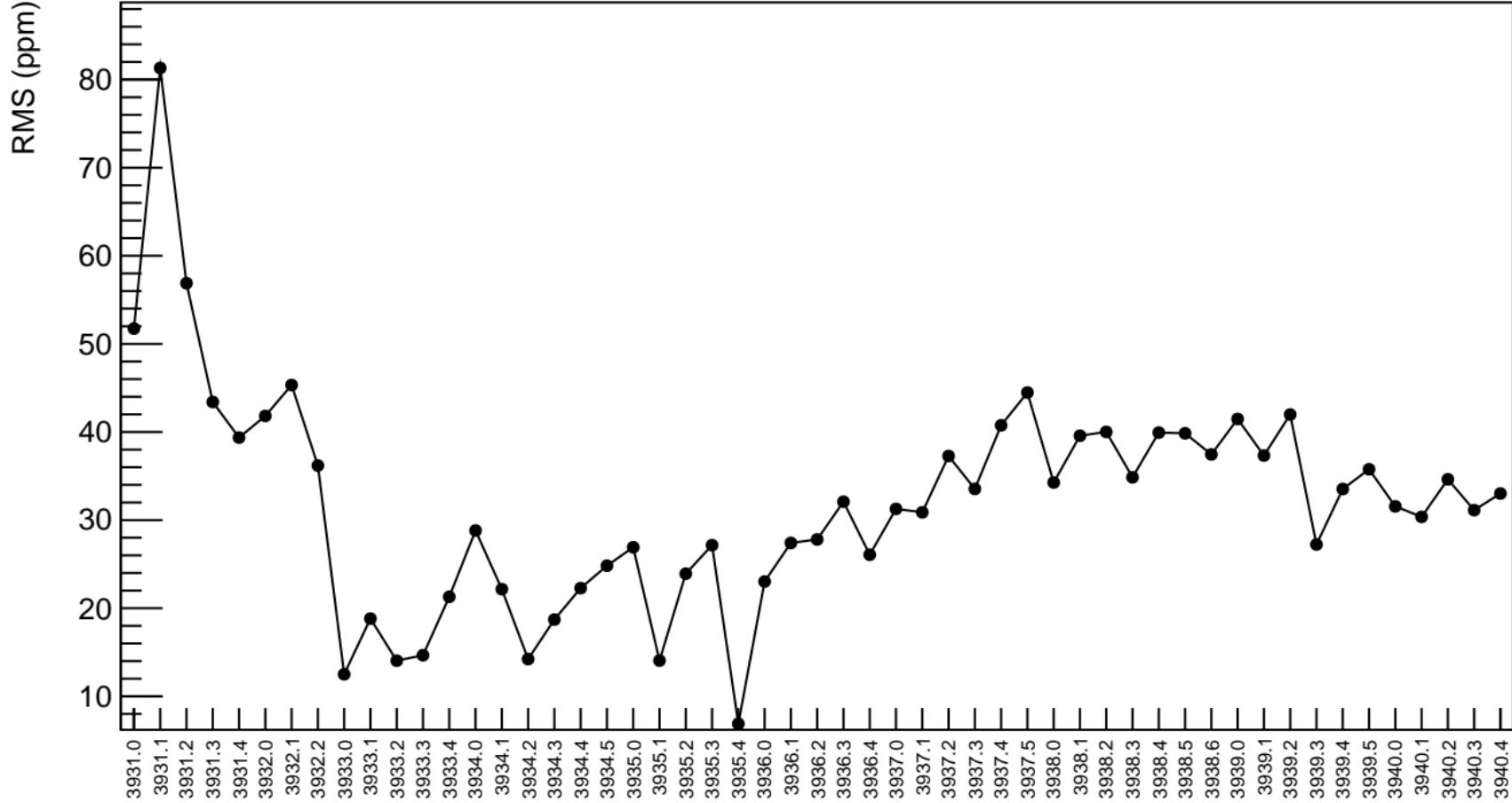
corr_us_avg_bpm12Y (ppb)



1D pull distribution

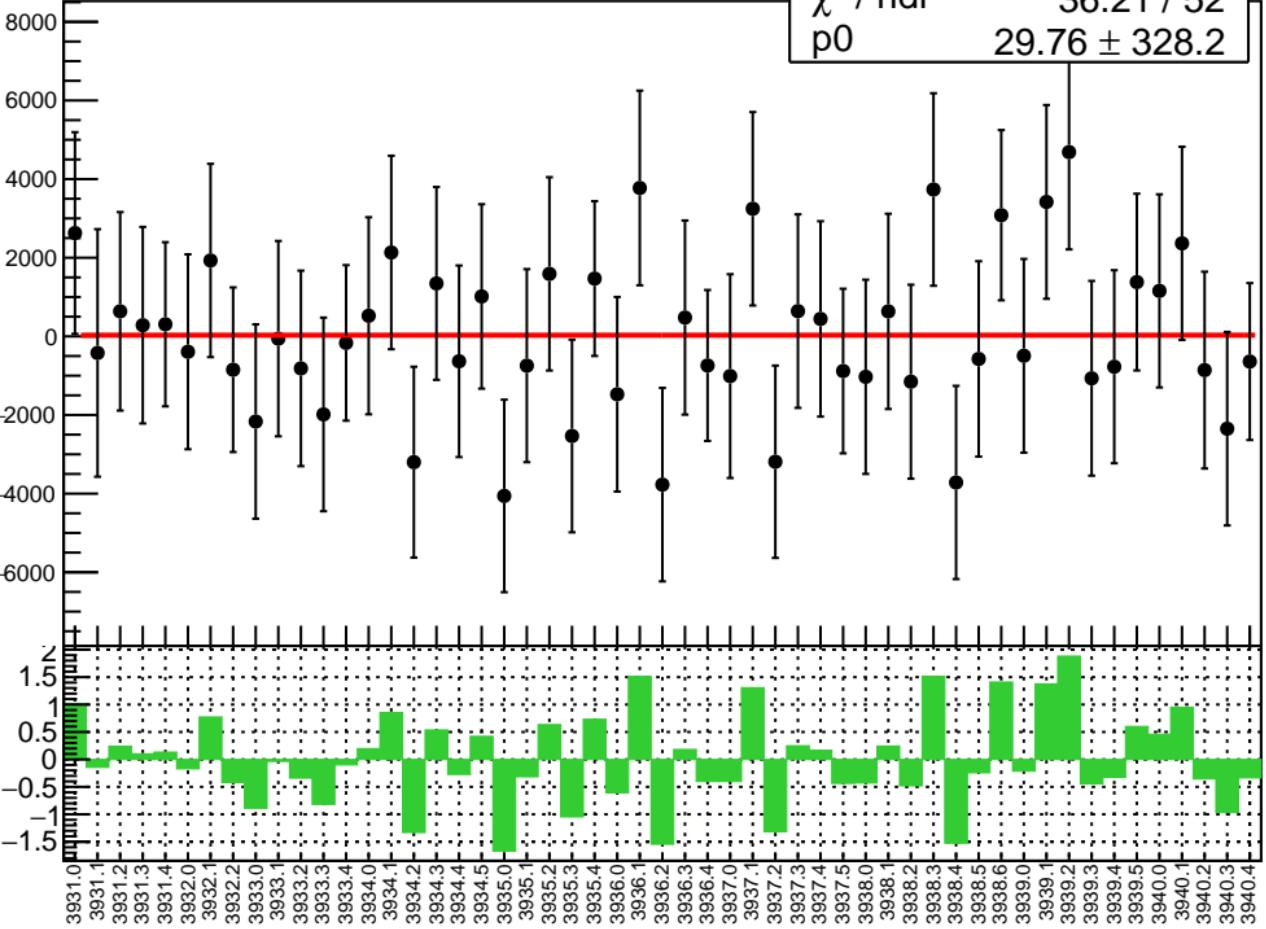


corr_us_avg_bpm12Y RMS (ppm)

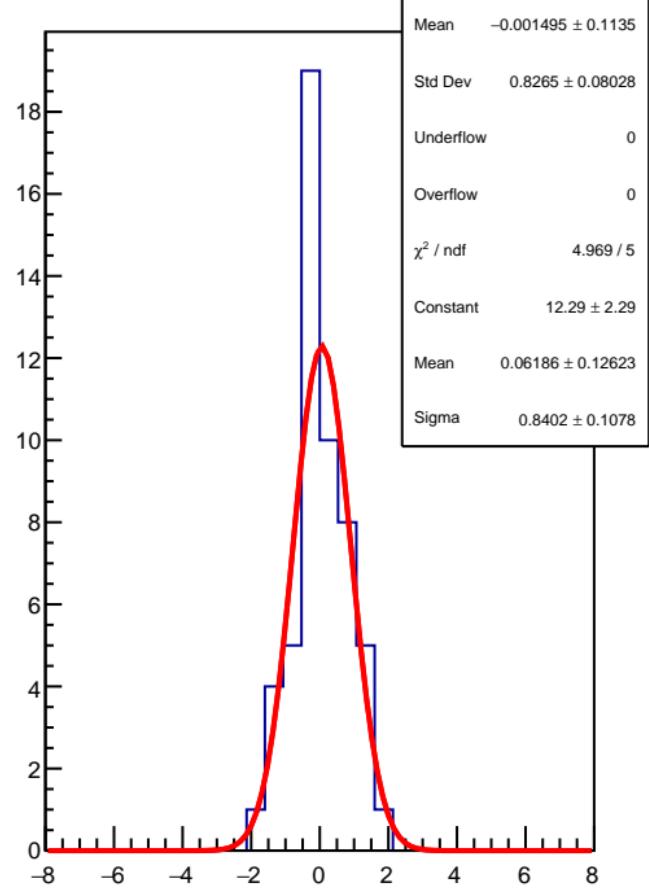


corr_us_avg_bpm11X (ppb)

χ^2 / ndf 36.21 / 52
p0 29.76 ± 328.2

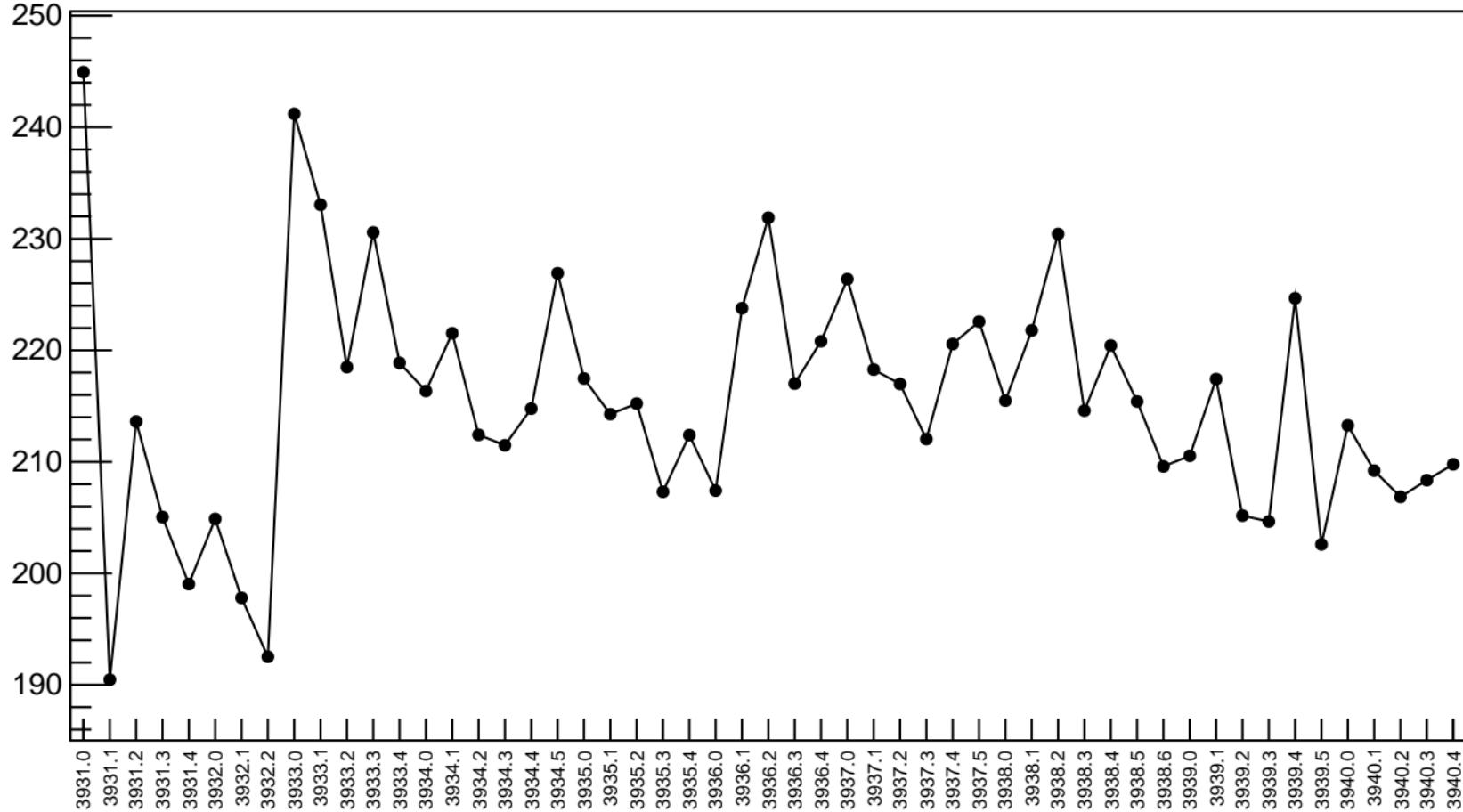


1D pull distribution

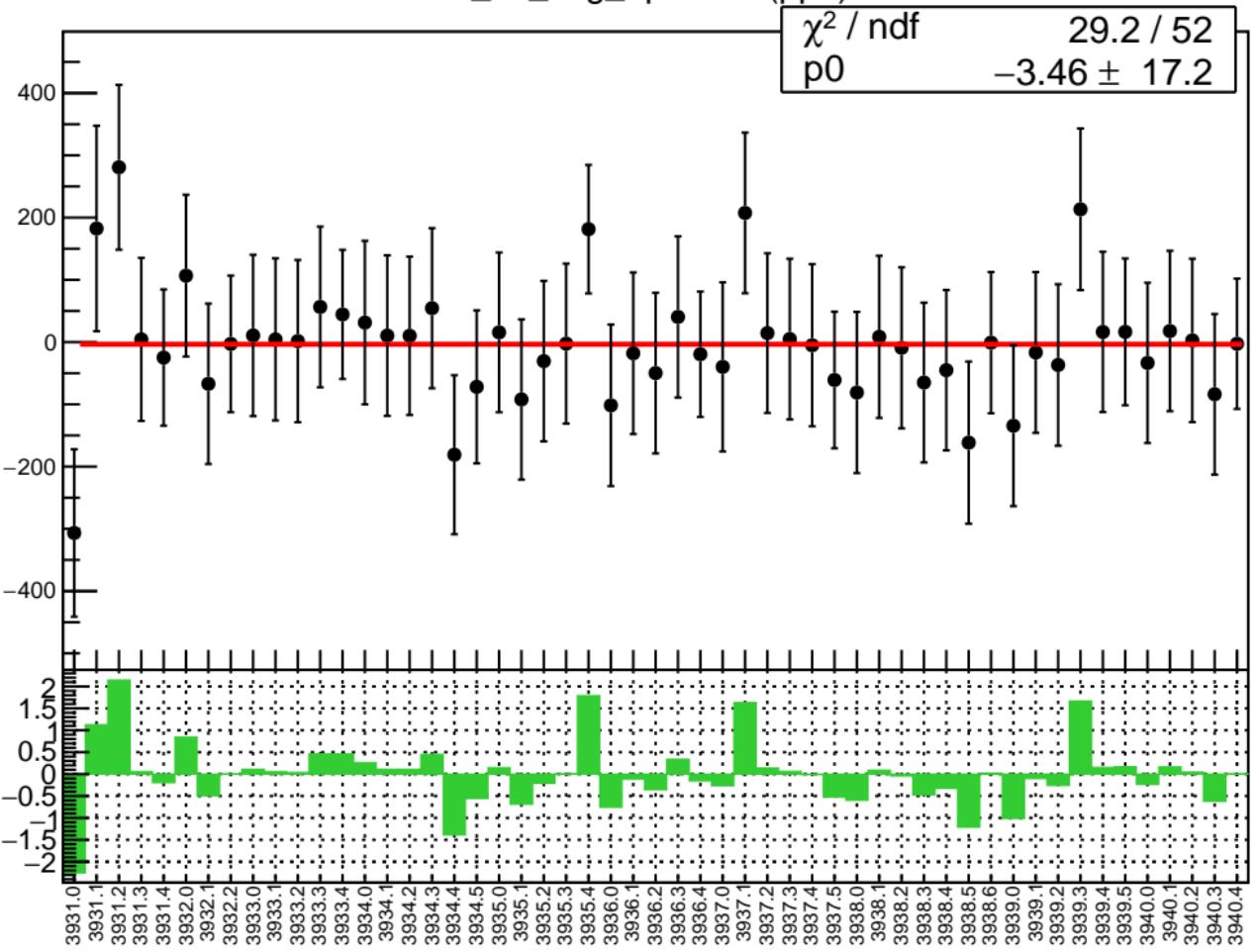


corr_us_avg_bpm11X RMS (ppm)

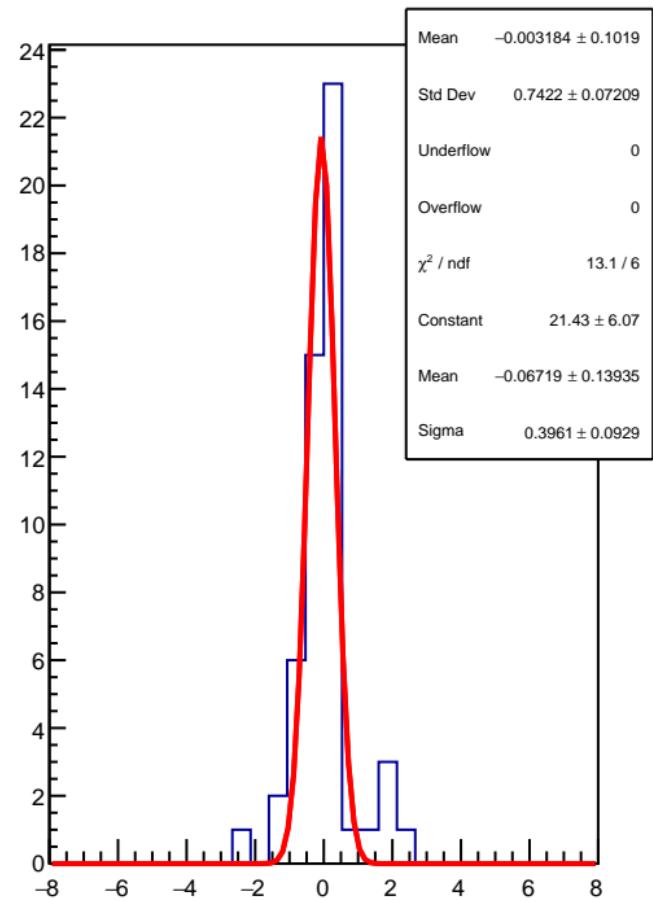
RMS (ppm)



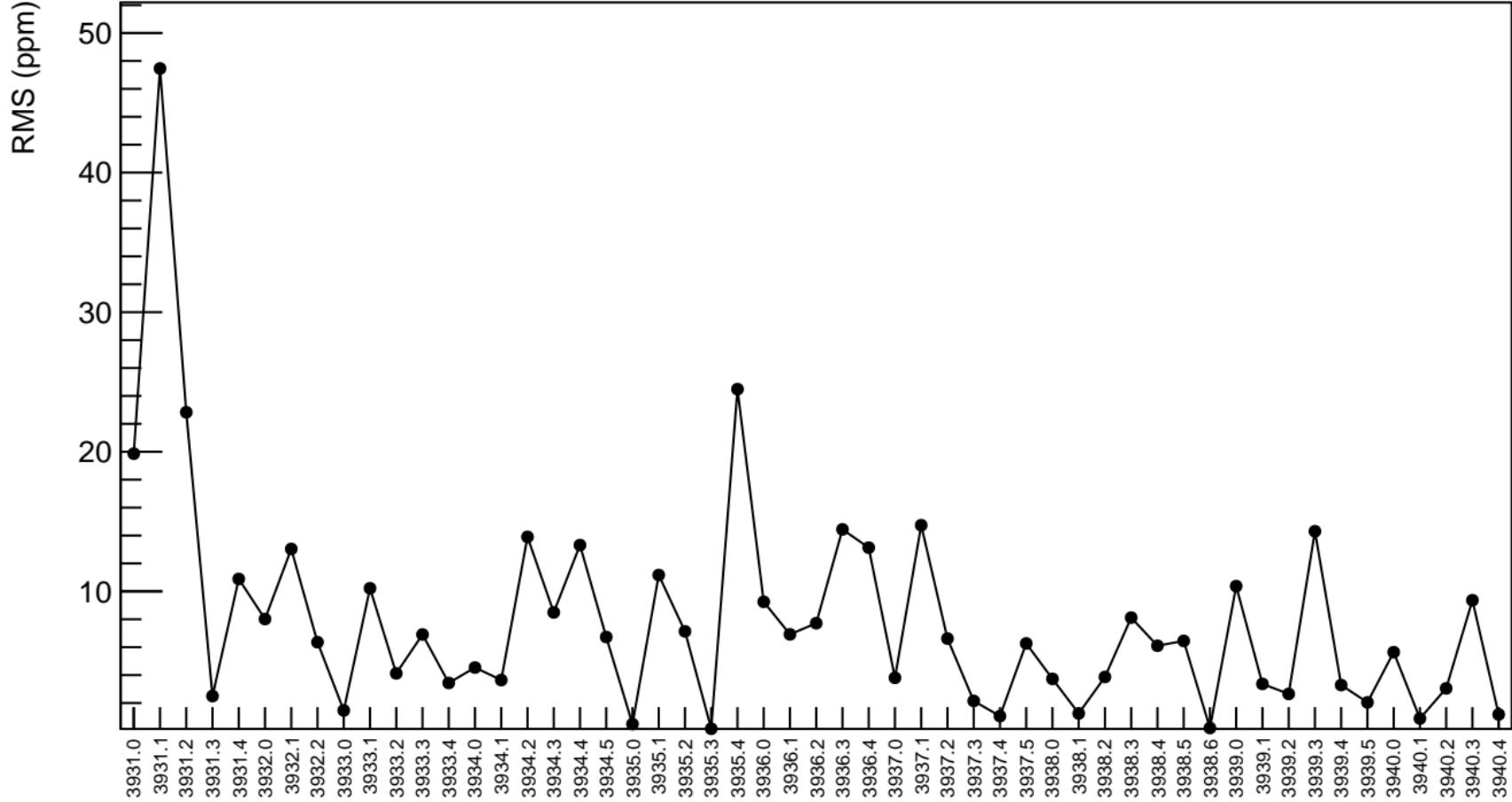
corr_us_avg_bpm11Y (ppb)



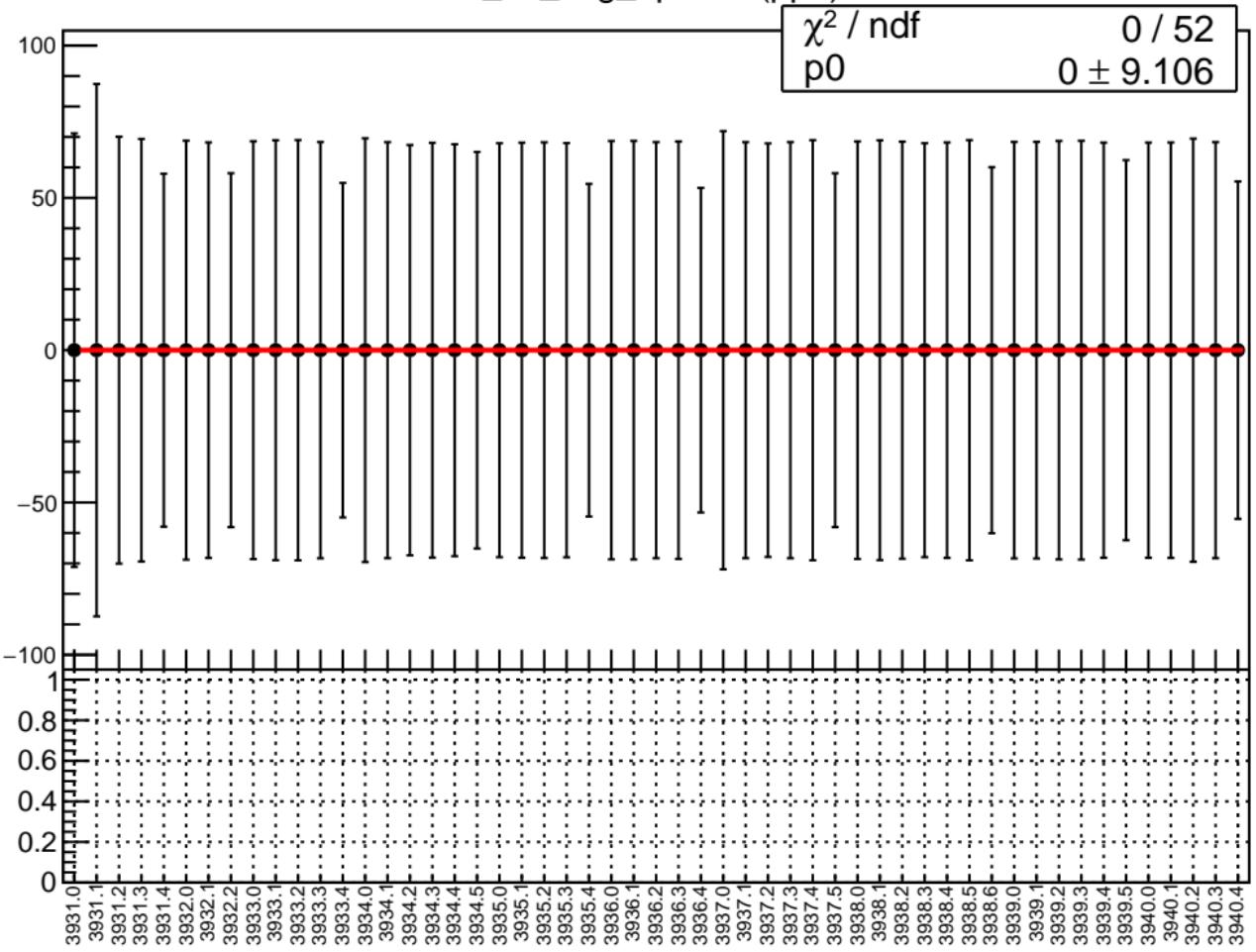
1D pull distribution



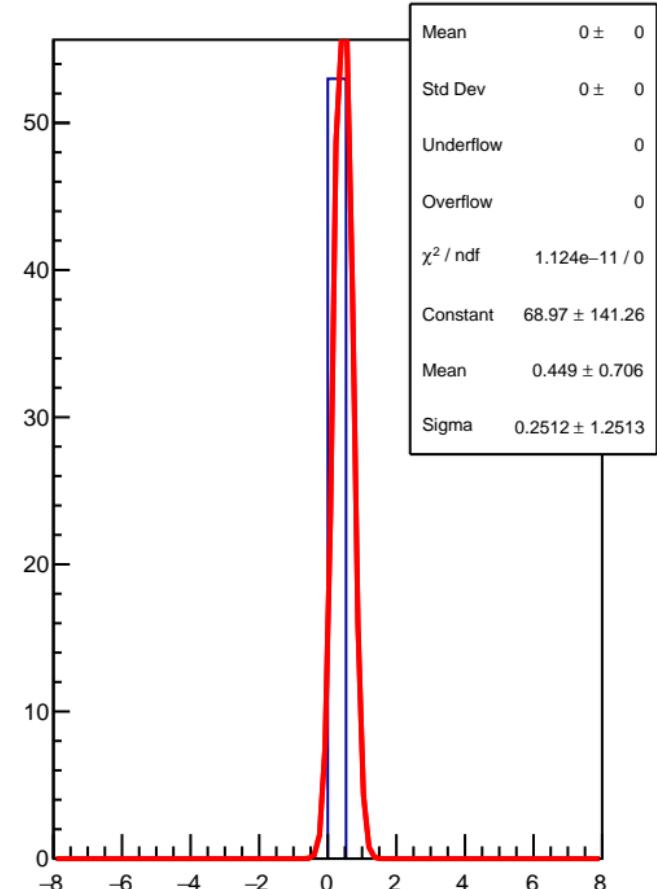
corr_us_avg_bpm11Y RMS (ppm)



corr_us_avg_bpm8X (ppb)

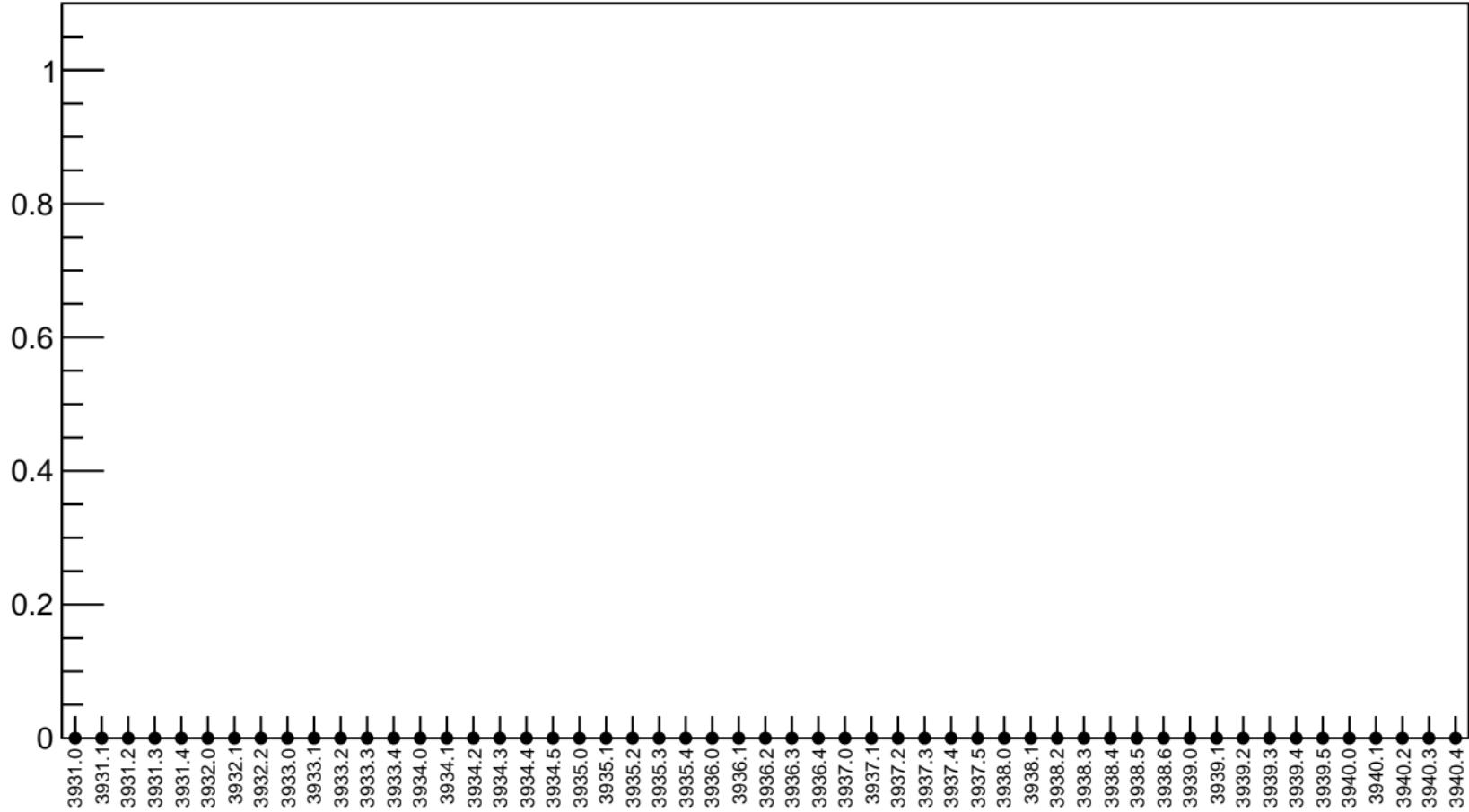


1D pull distribution

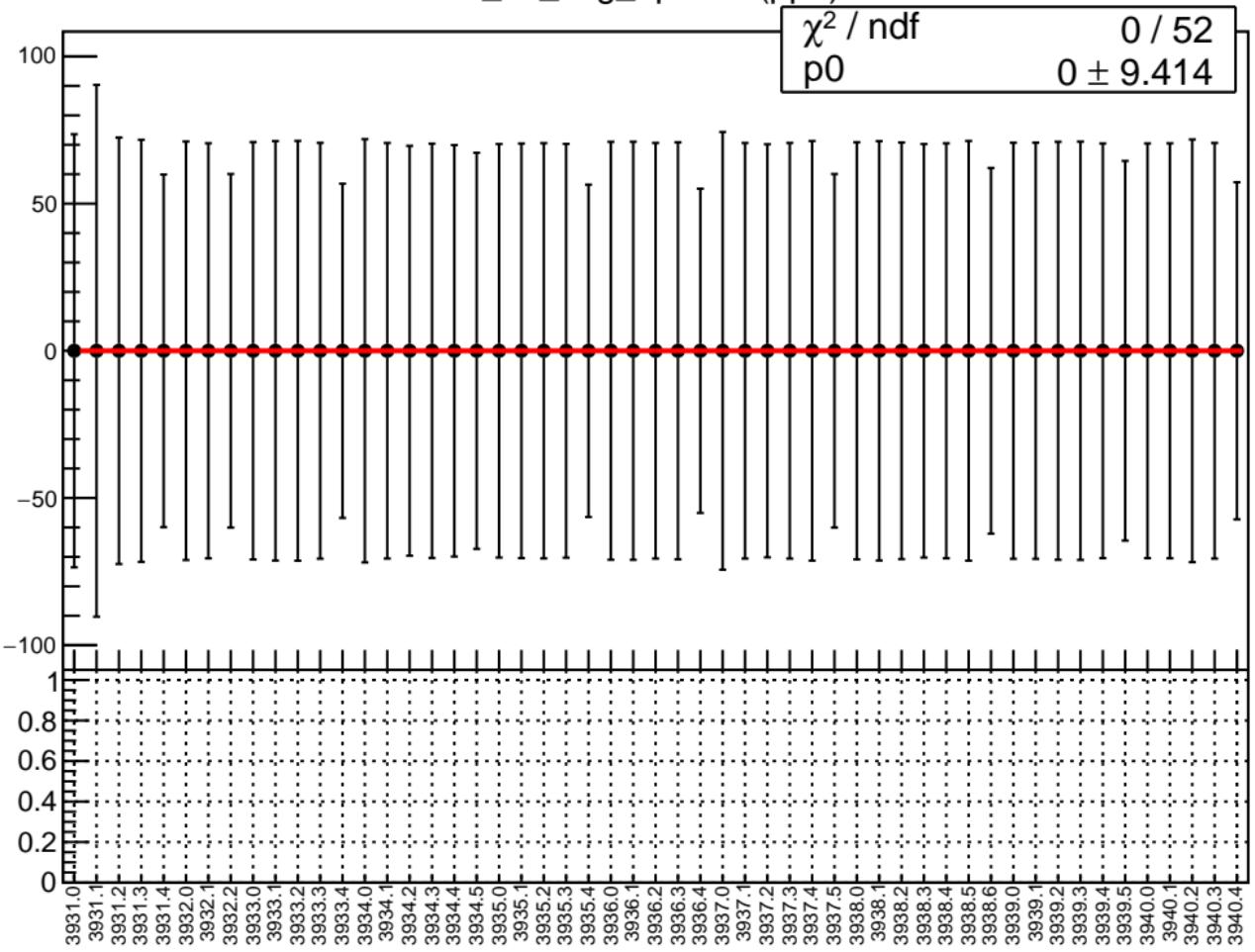


corr_us_avg_bpm8X RMS (ppm)

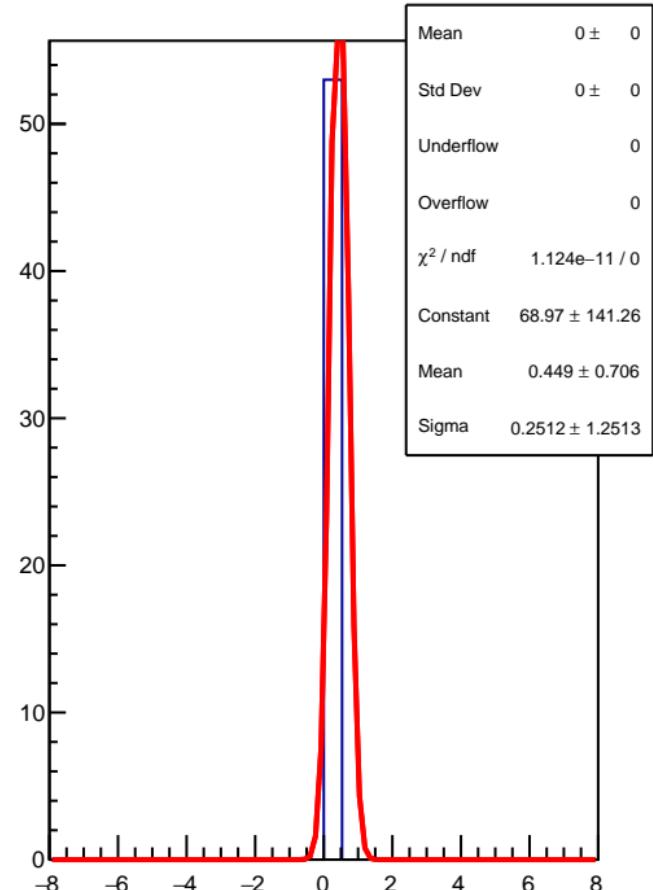
RMS (ppm)



corr_us_avg_bpm8Y (ppb)

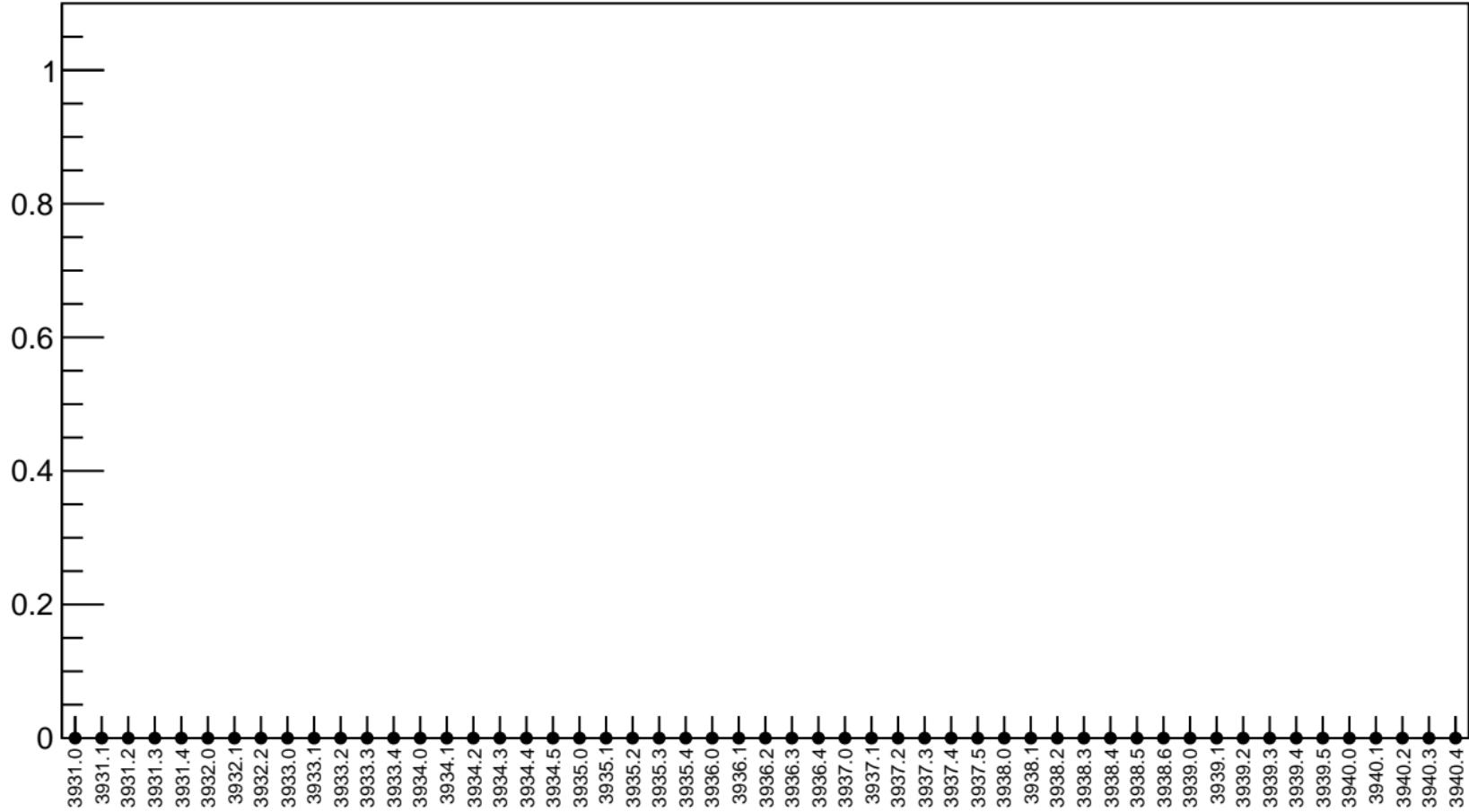


1D pull distribution

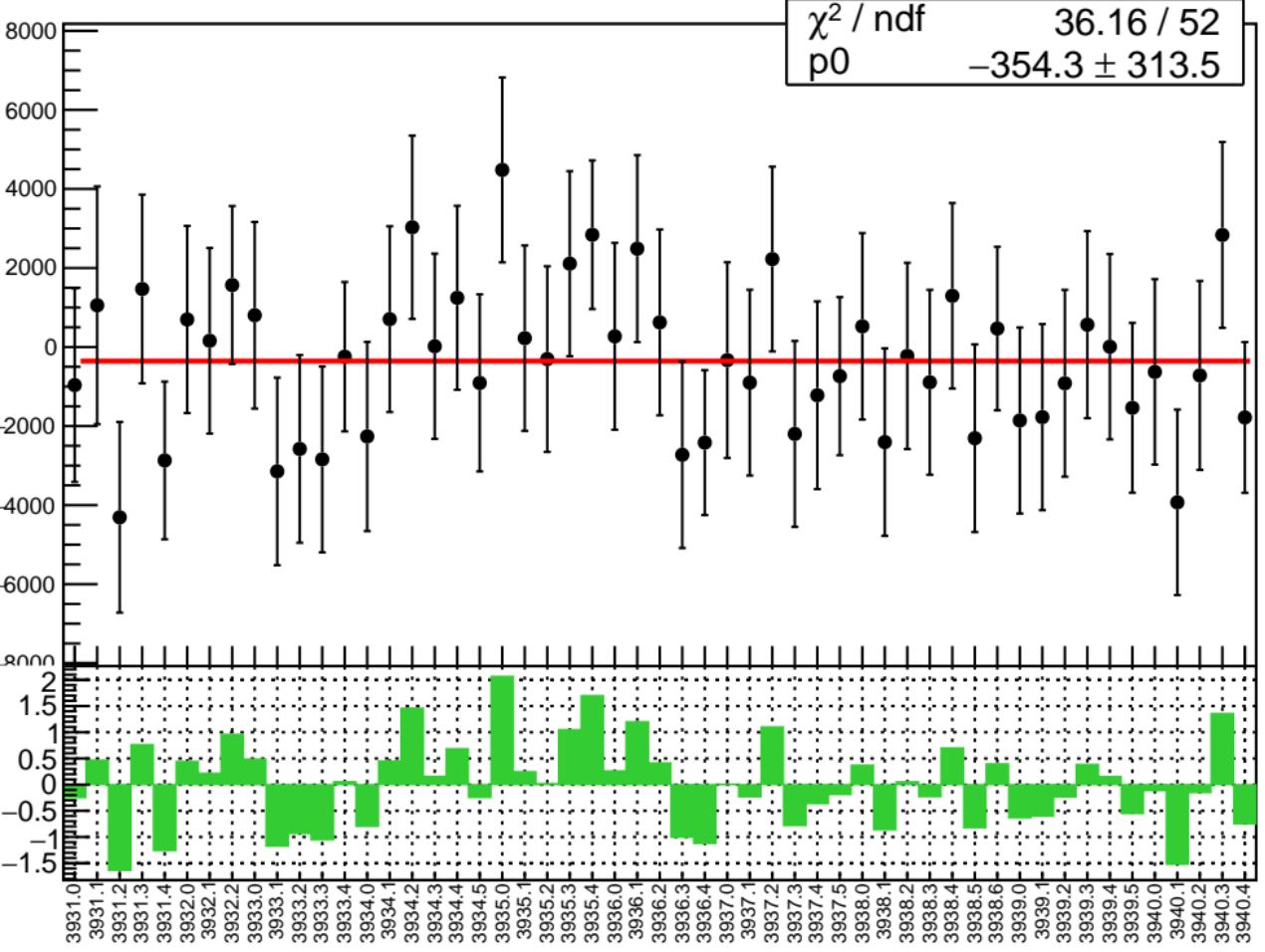


corr_us_avg_bpm8Y RMS (ppm)

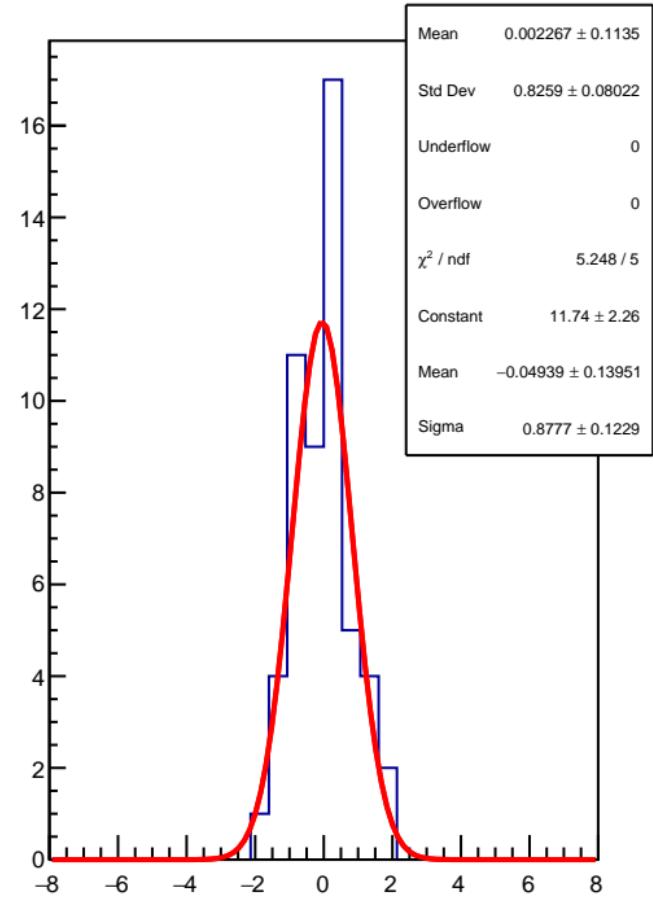
RMS (ppm)



corr_us_dd_bpm4eX (ppb)

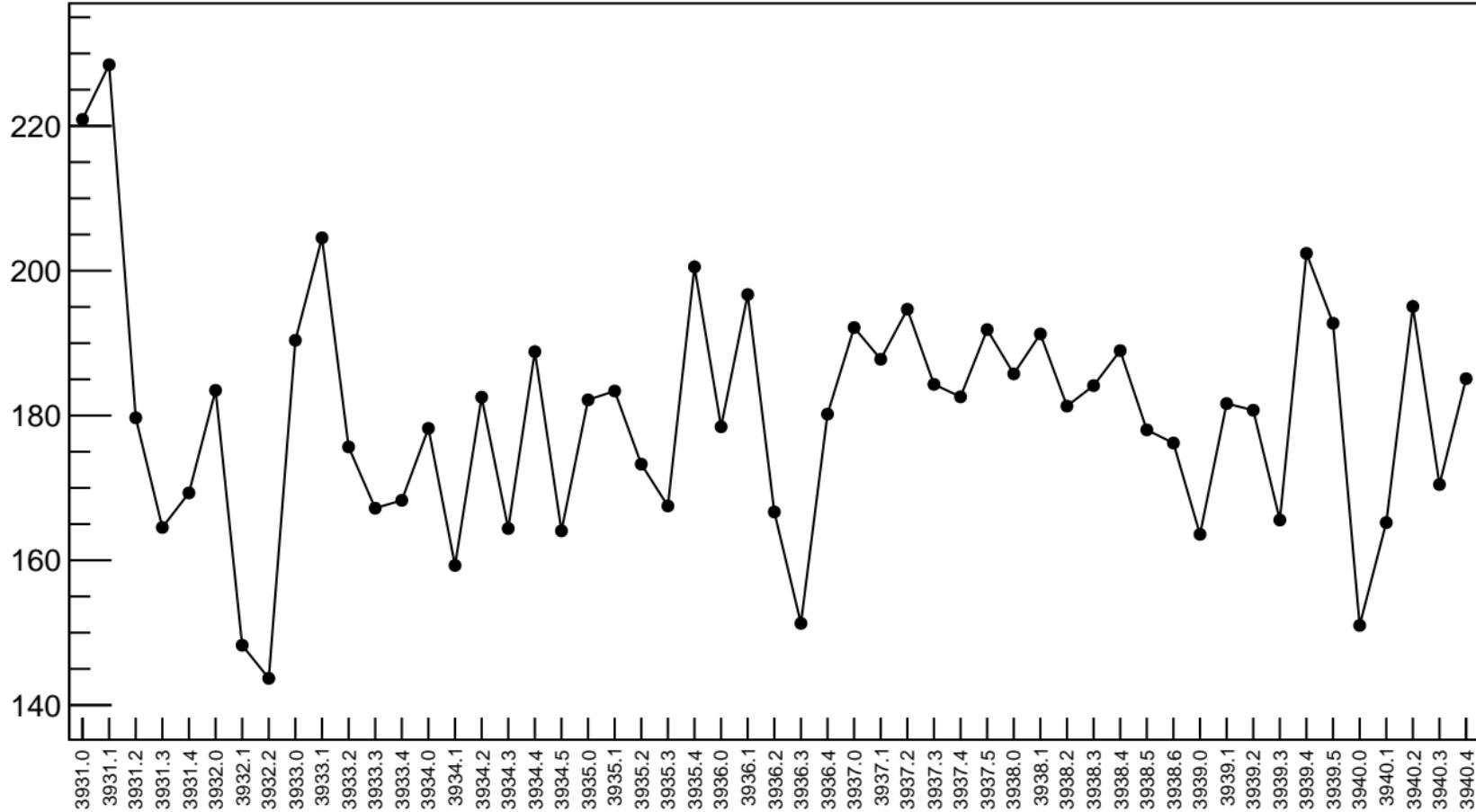


1D pull distribution



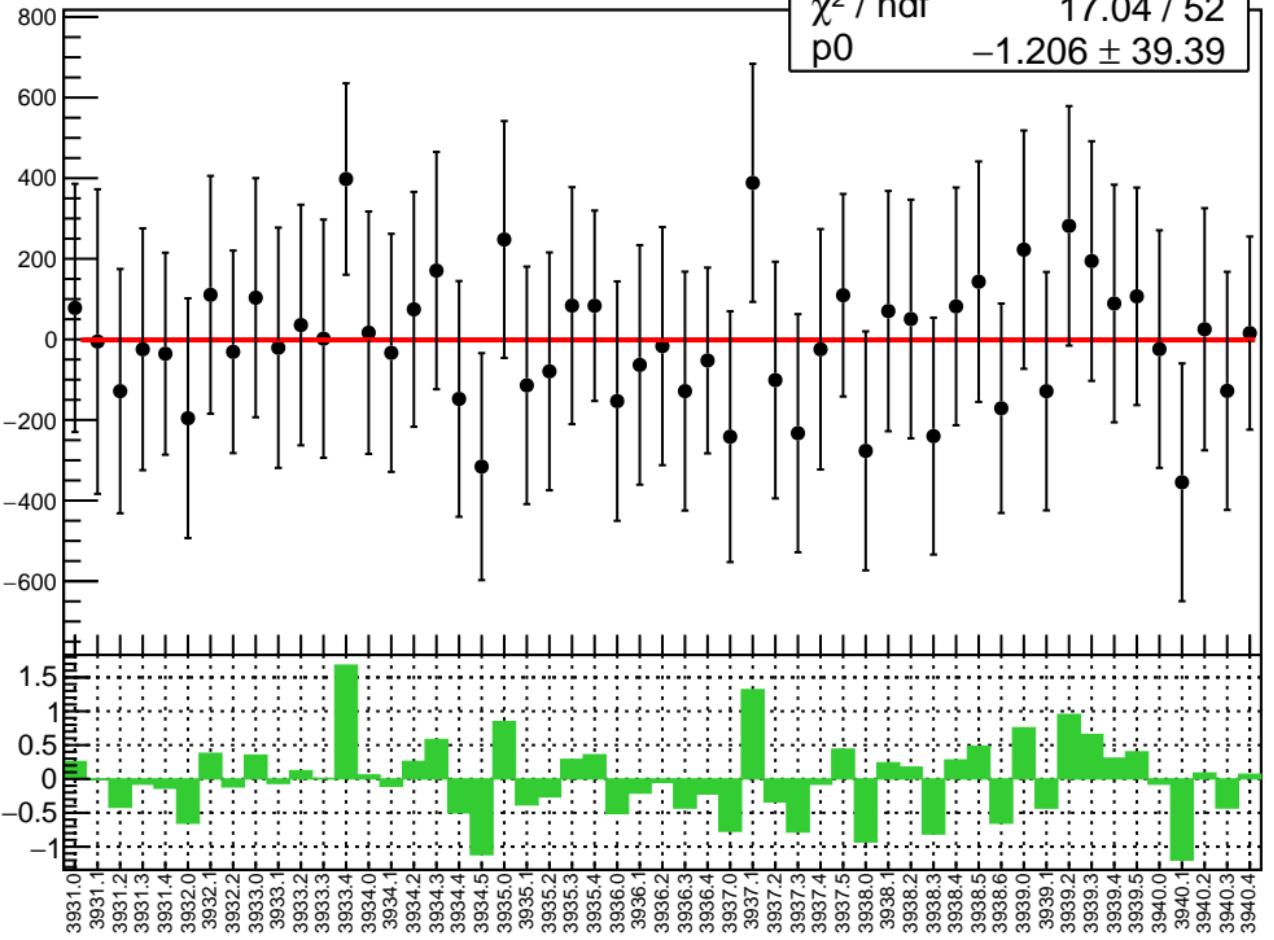
corr_us_dd_bpm4eX RMS (ppm)

RMS (ppm)

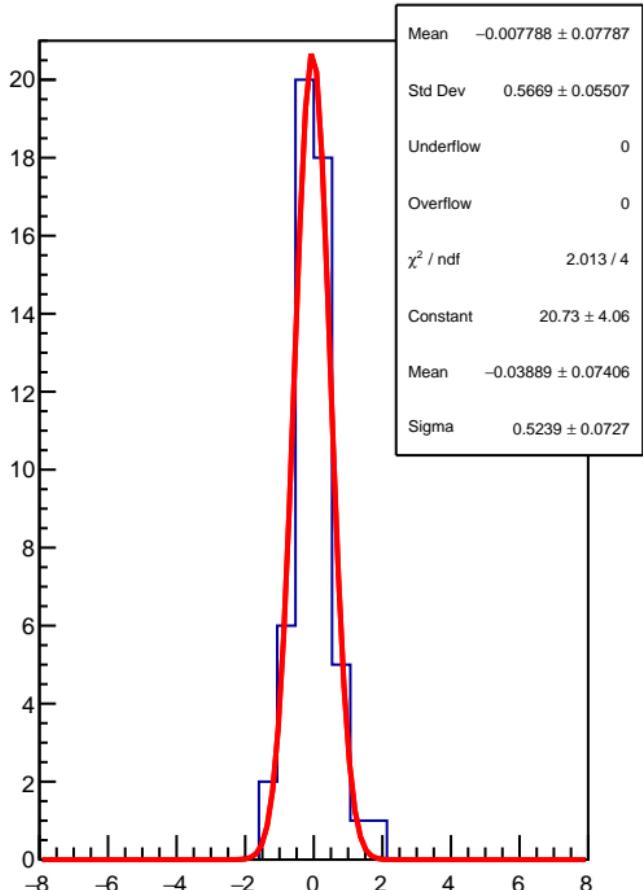


corr_us_dd_bpm4eY (ppb)

χ^2 / ndf 17.04 / 52
p0 -1.206 ± 39.39

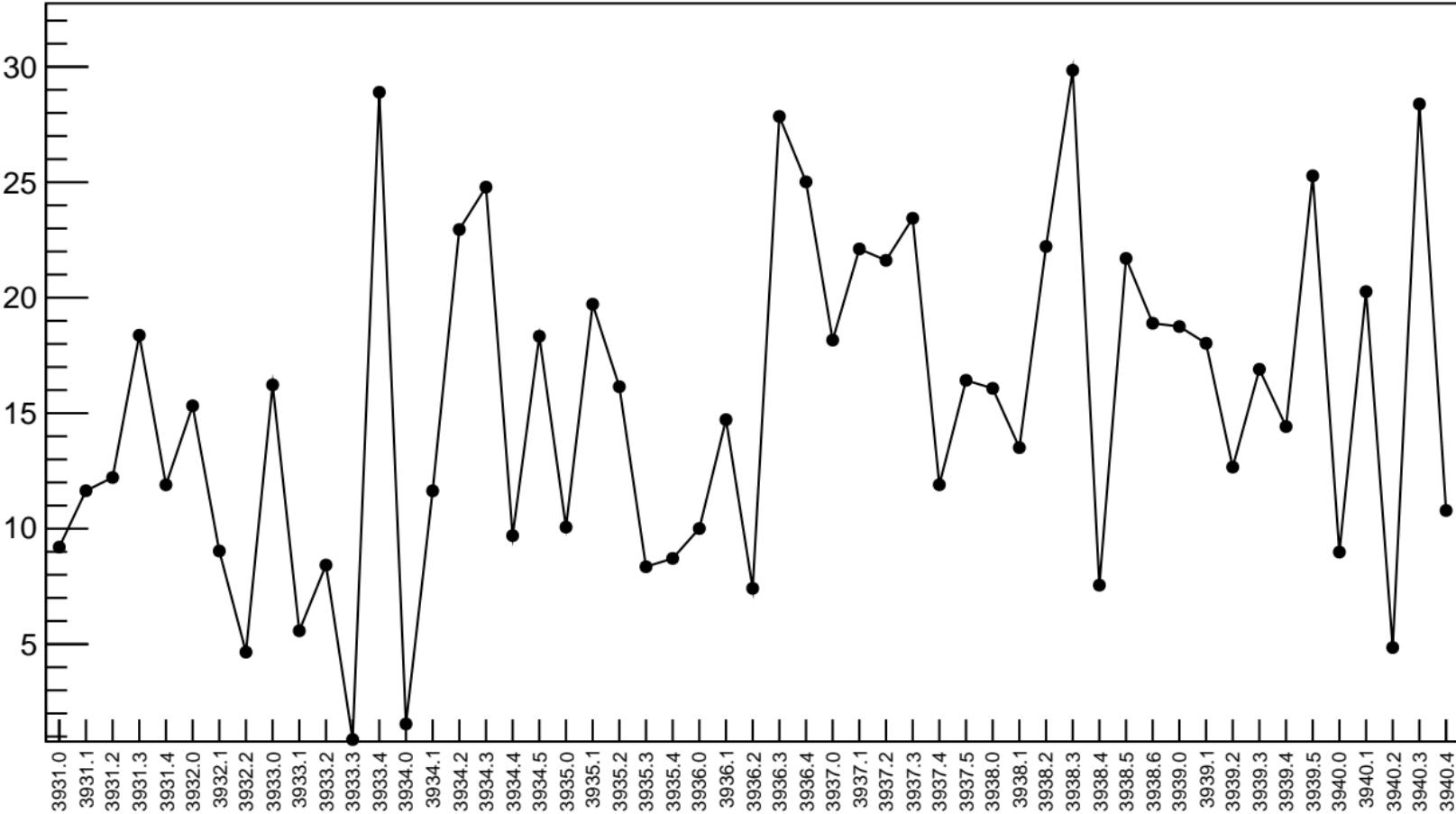


1D pull distribution

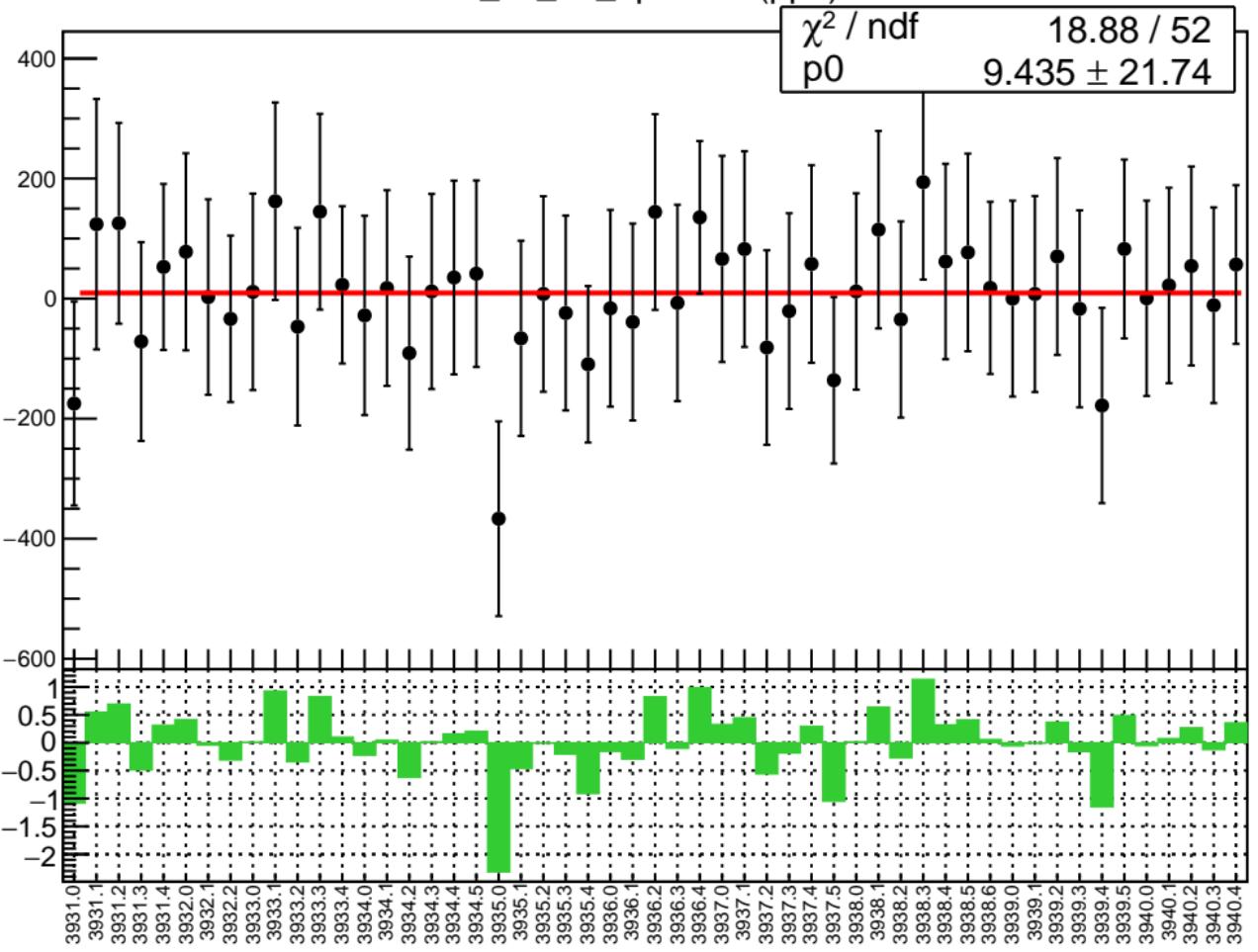


corr_us_dd_bpm4eY RMS (ppm)

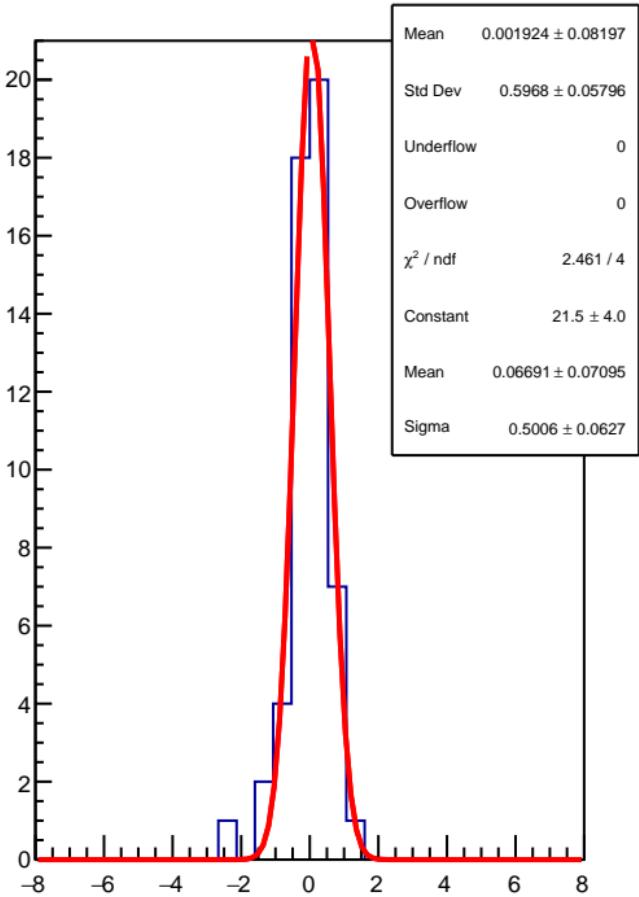
RMS (ppm)



corr_us_dd_bpm4aX (ppb)

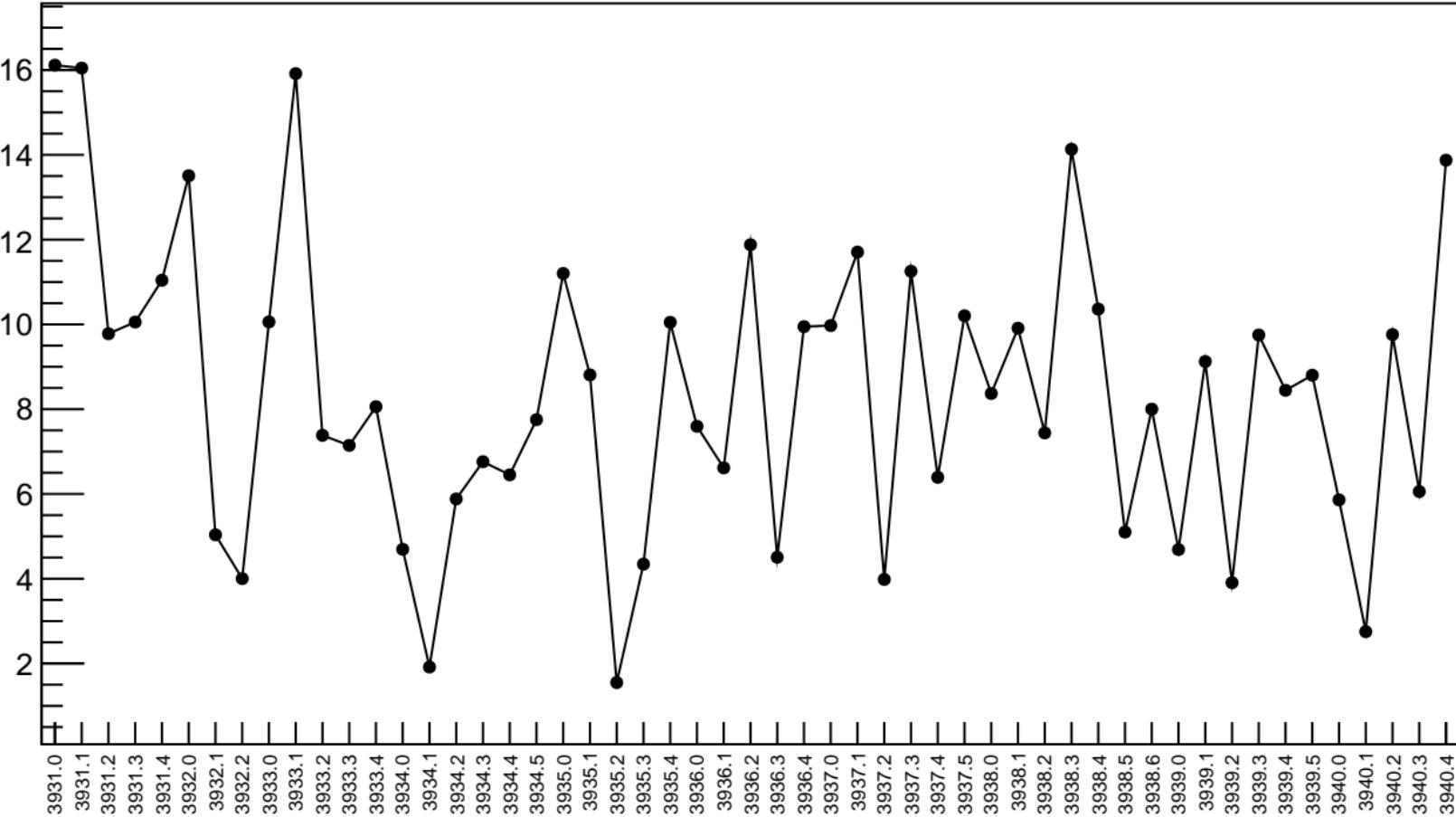


1D pull distribution



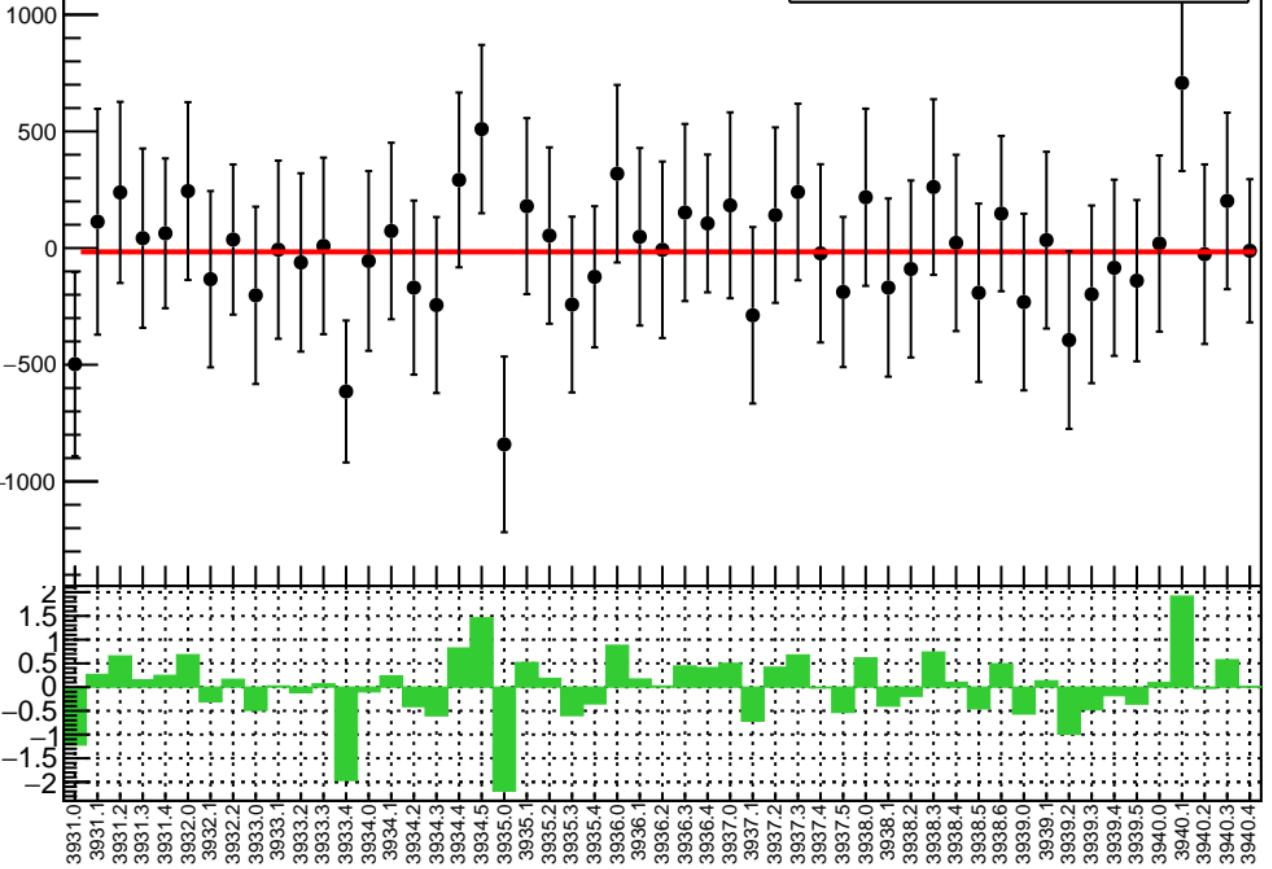
corr_us_dd_bpm4aX RMS (ppm)

RMS (ppm)

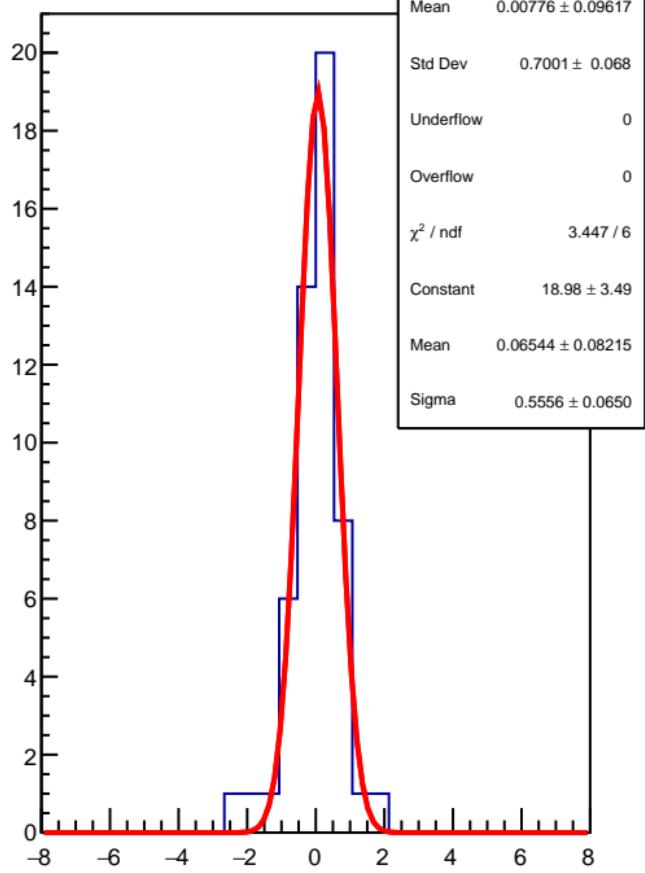


corr_us_dd_bpm4aY (ppb)

χ^2 / ndf 25.98 / 52
p0 -16.23 ± 50.44

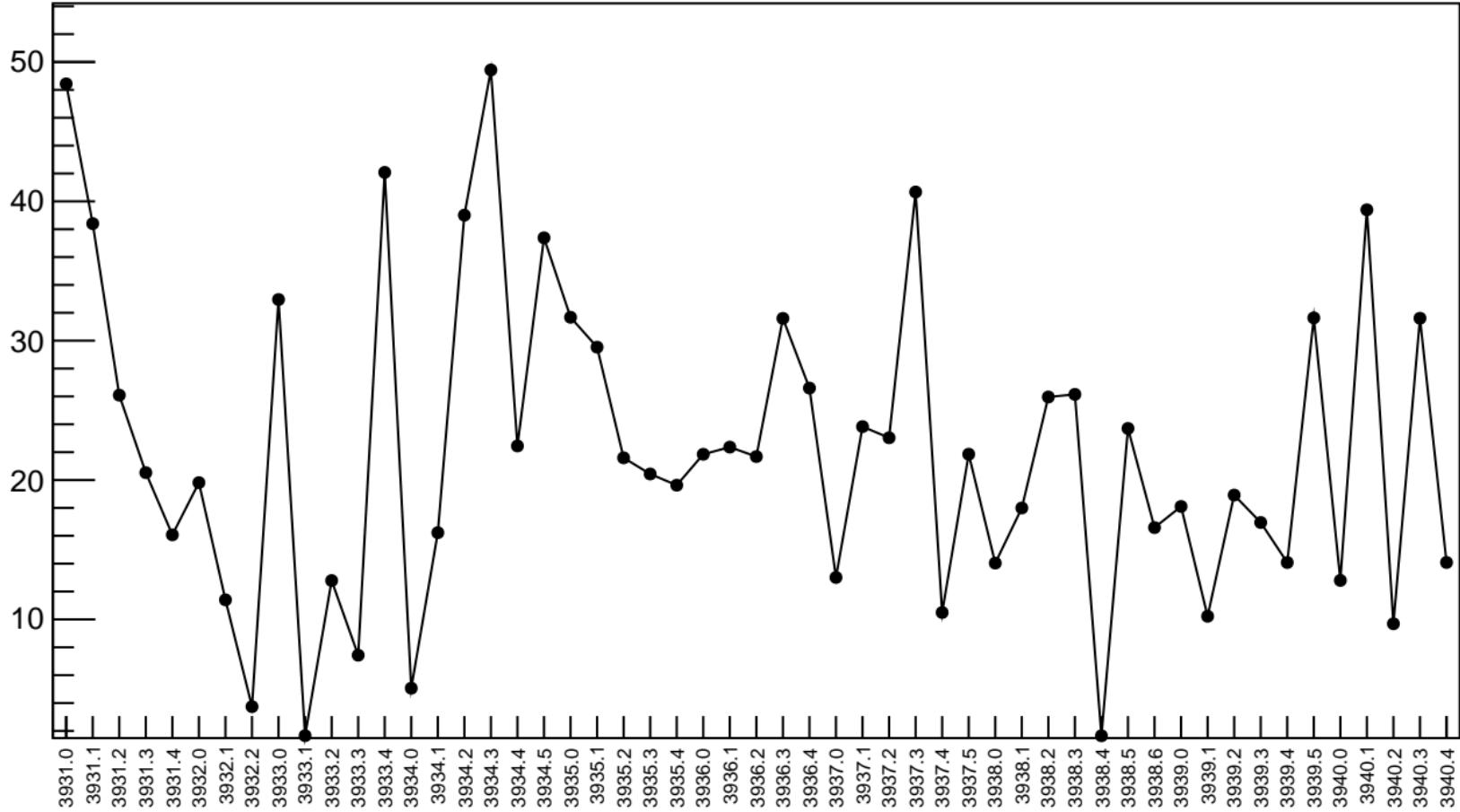


1D pull distribution

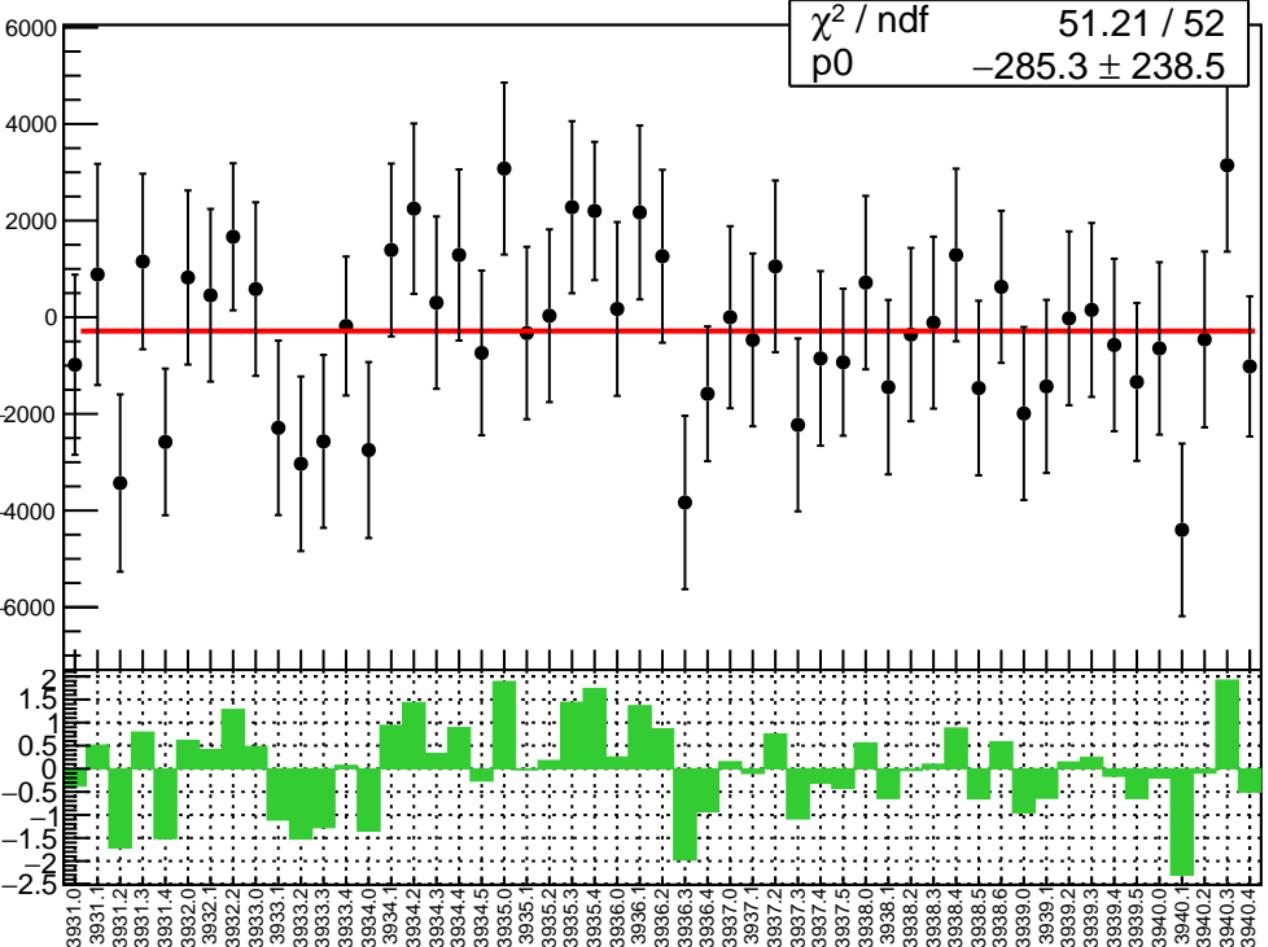


corr_us_dd_bpm4aY RMS (ppm)

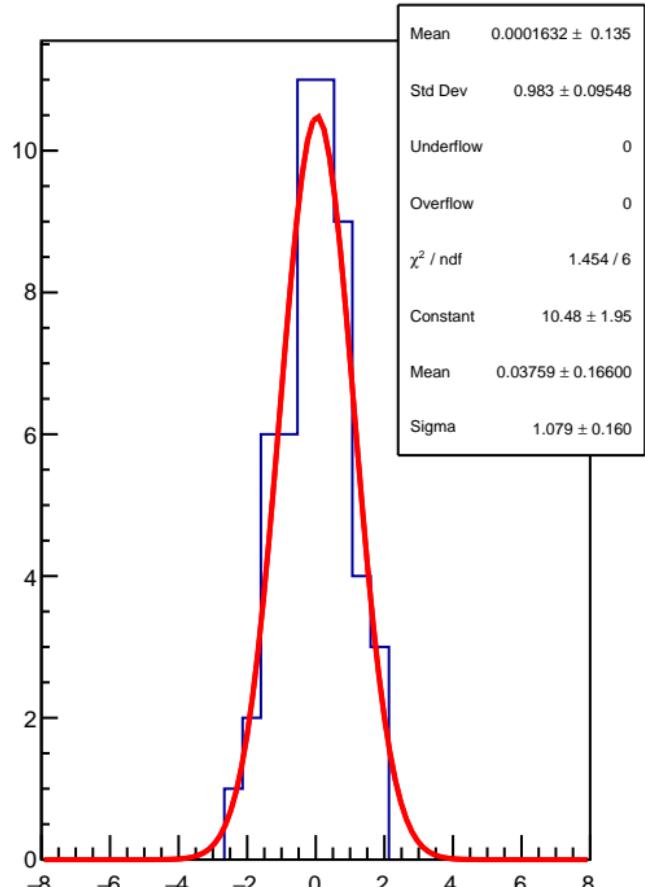
RMS (ppm)



corr_us_dd_bpm1X (ppb)

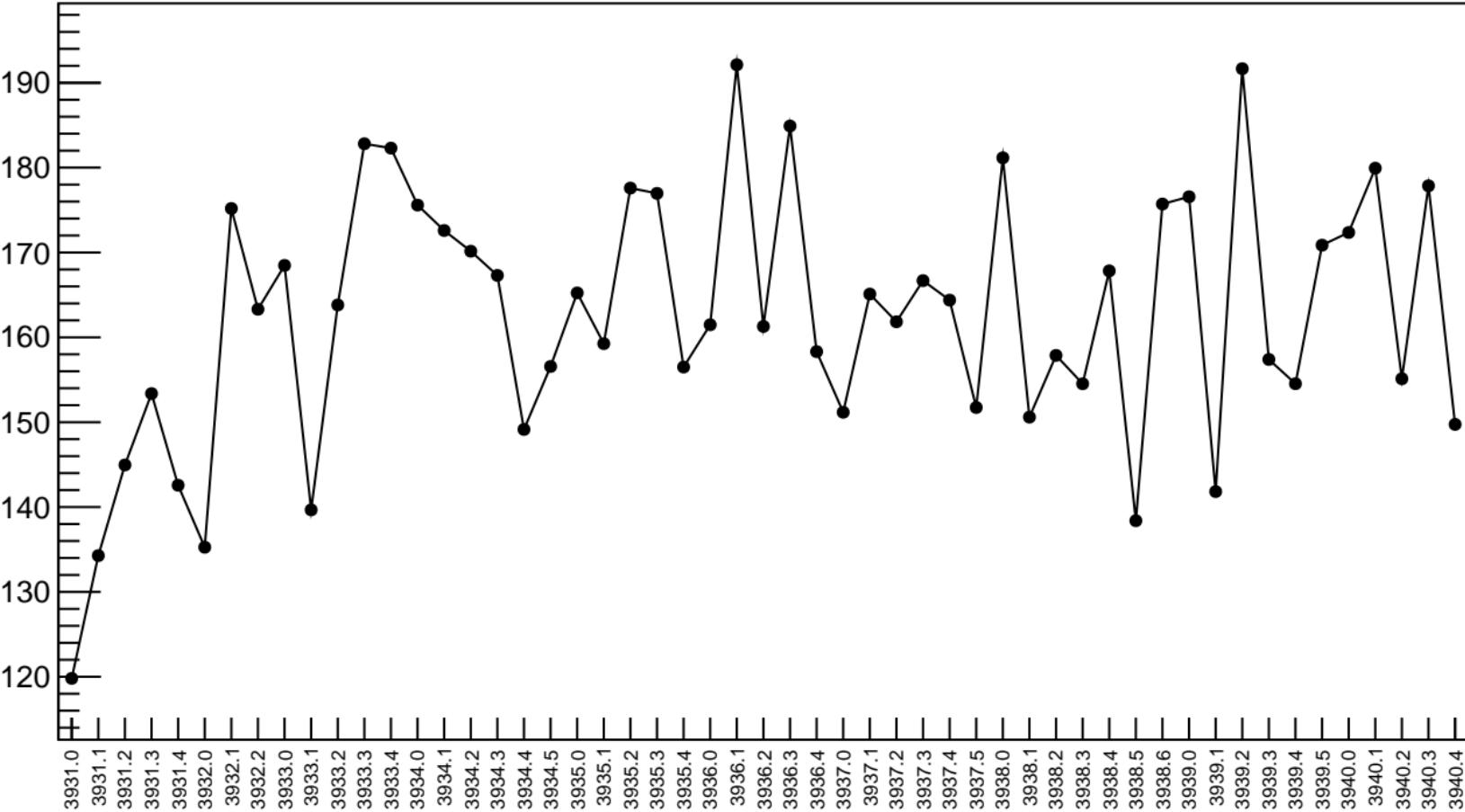


1D pull distribution



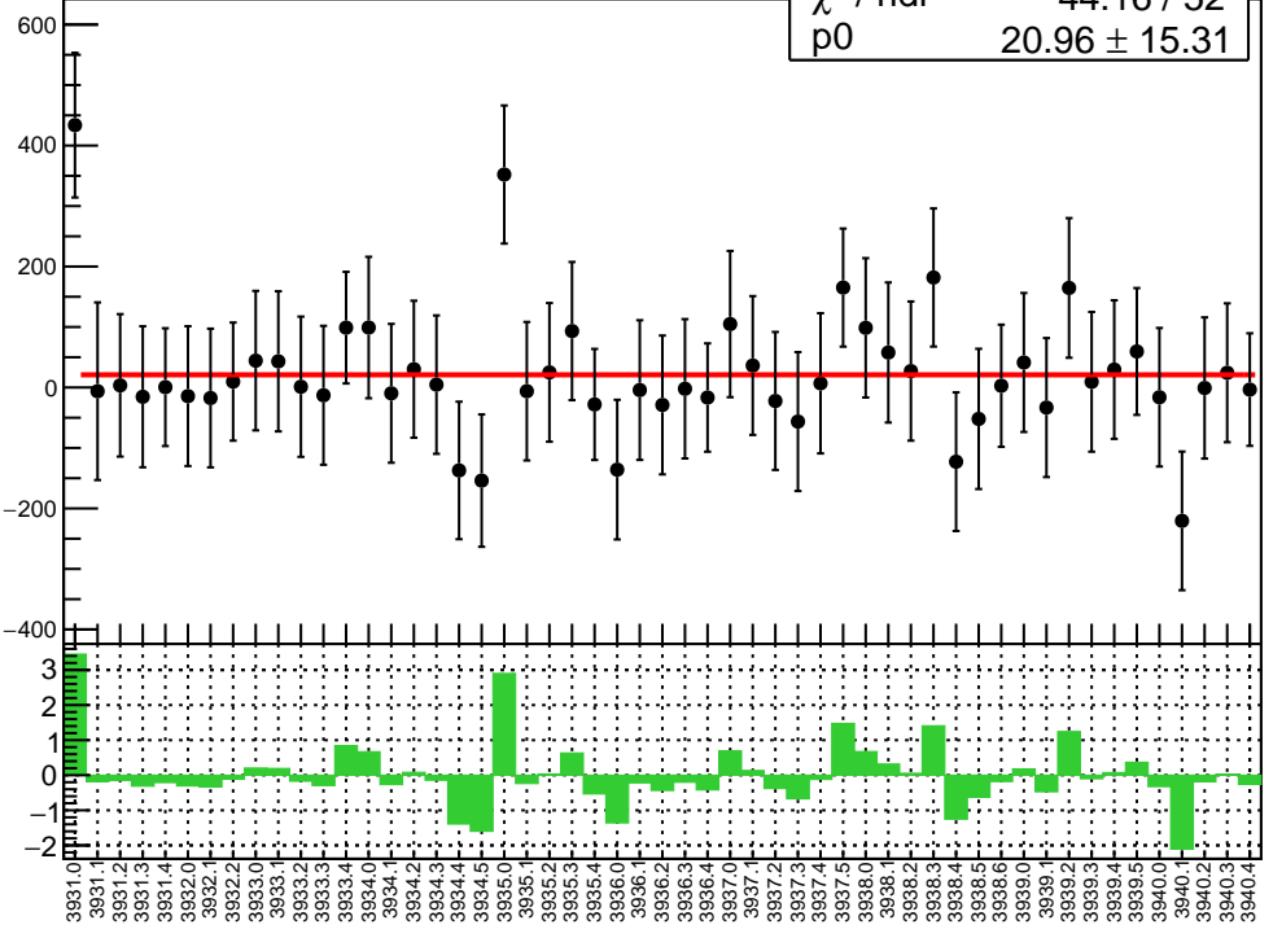
corr_us_dd_bpm1X RMS (ppm)

RMS (ppm)

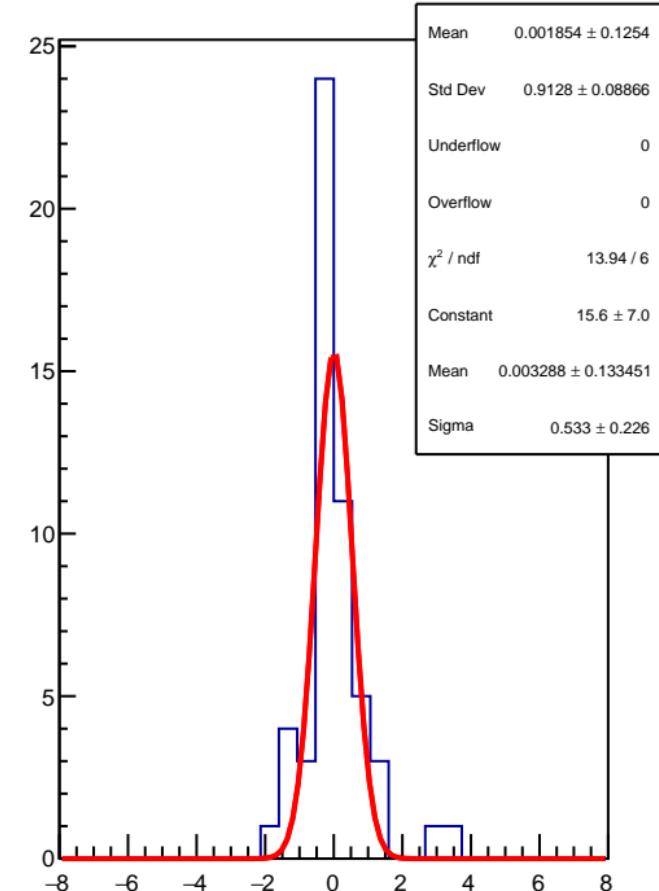


corr_us_dd_bpm1Y (ppb)

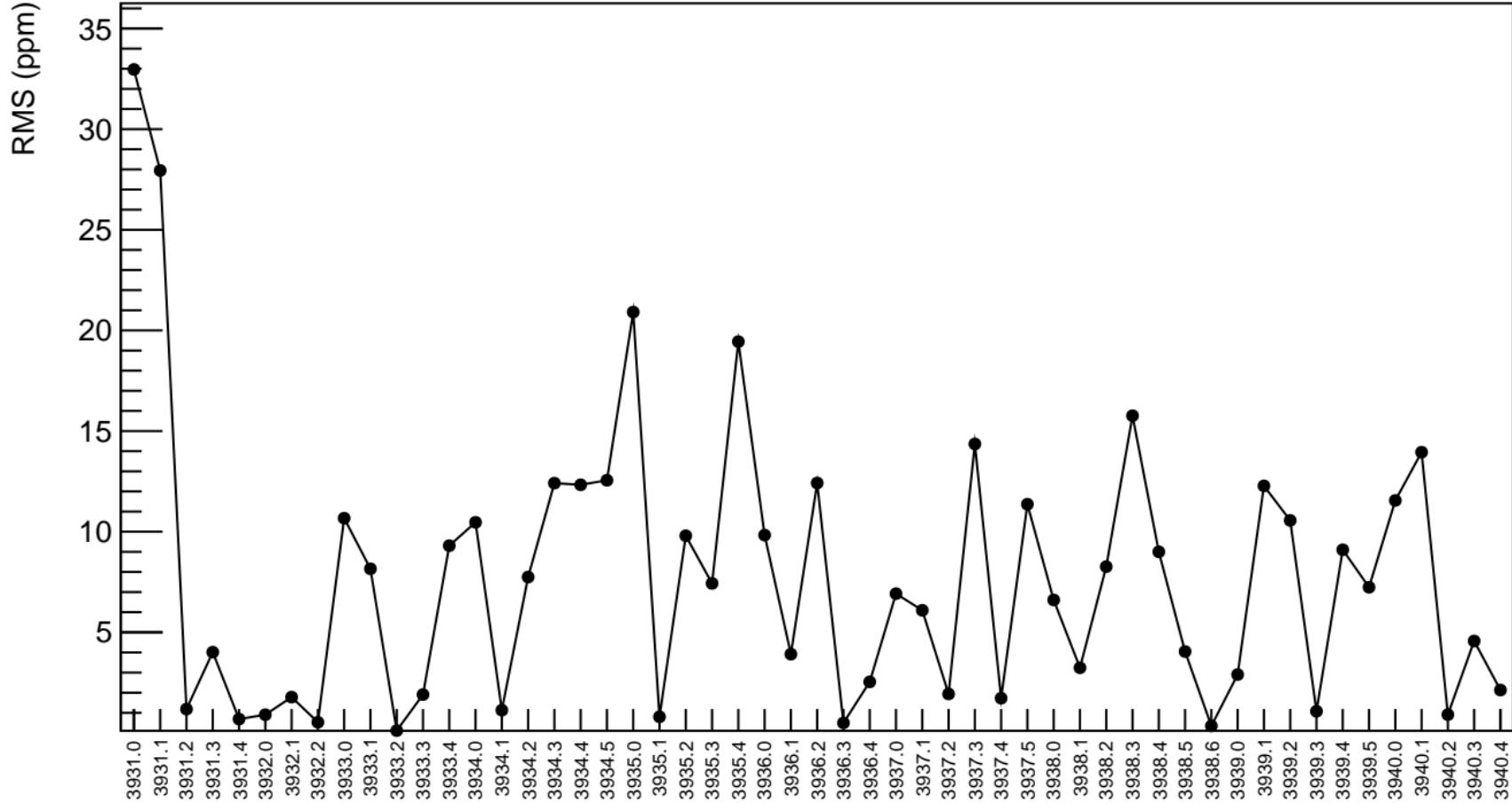
χ^2 / ndf 44.16 / 52
p0 20.96 ± 15.31



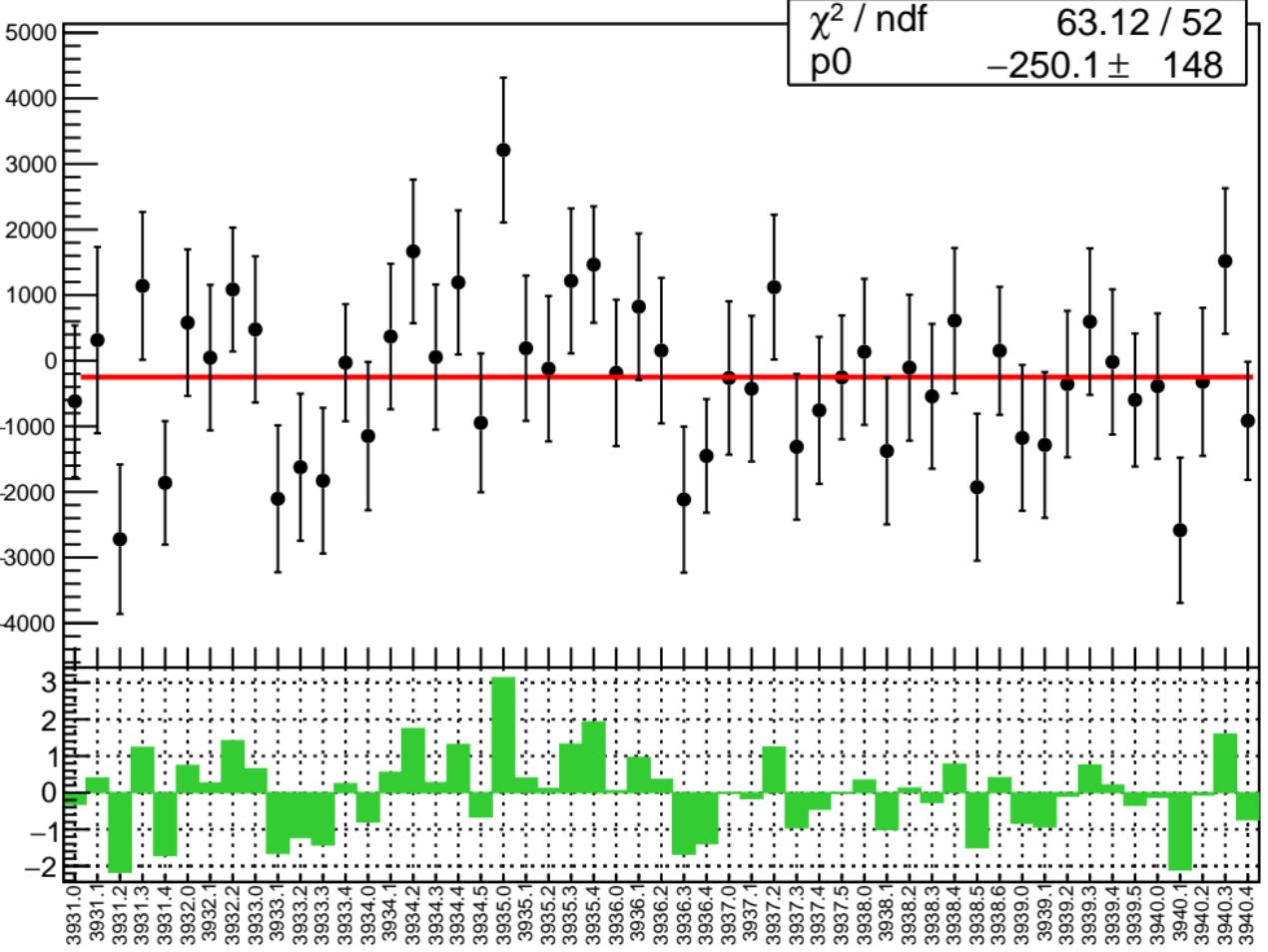
1D pull distribution



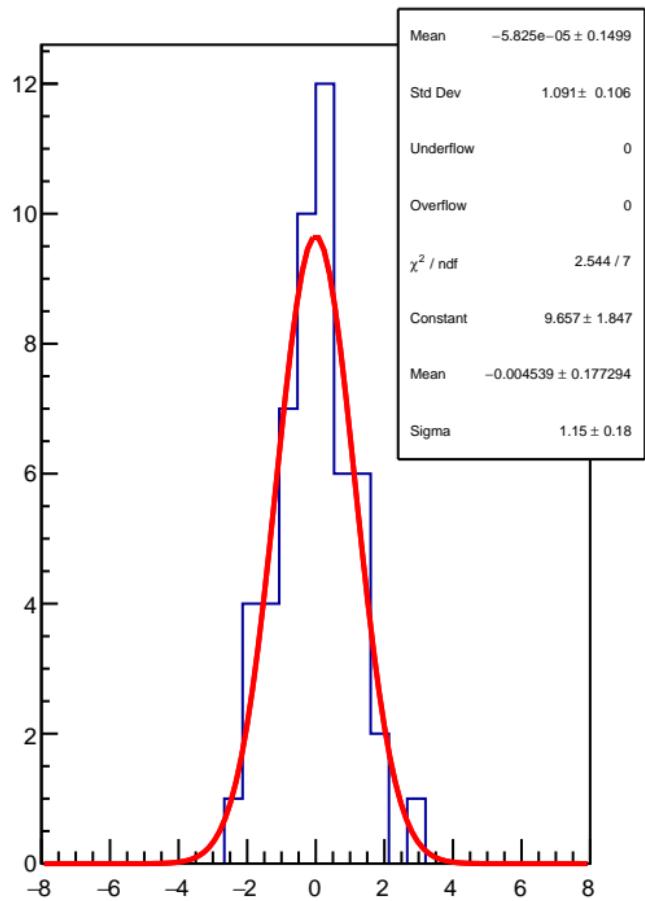
corr_us_dd_bpm1Y RMS (ppm)



corr_us_dd_bpm16X (ppb)

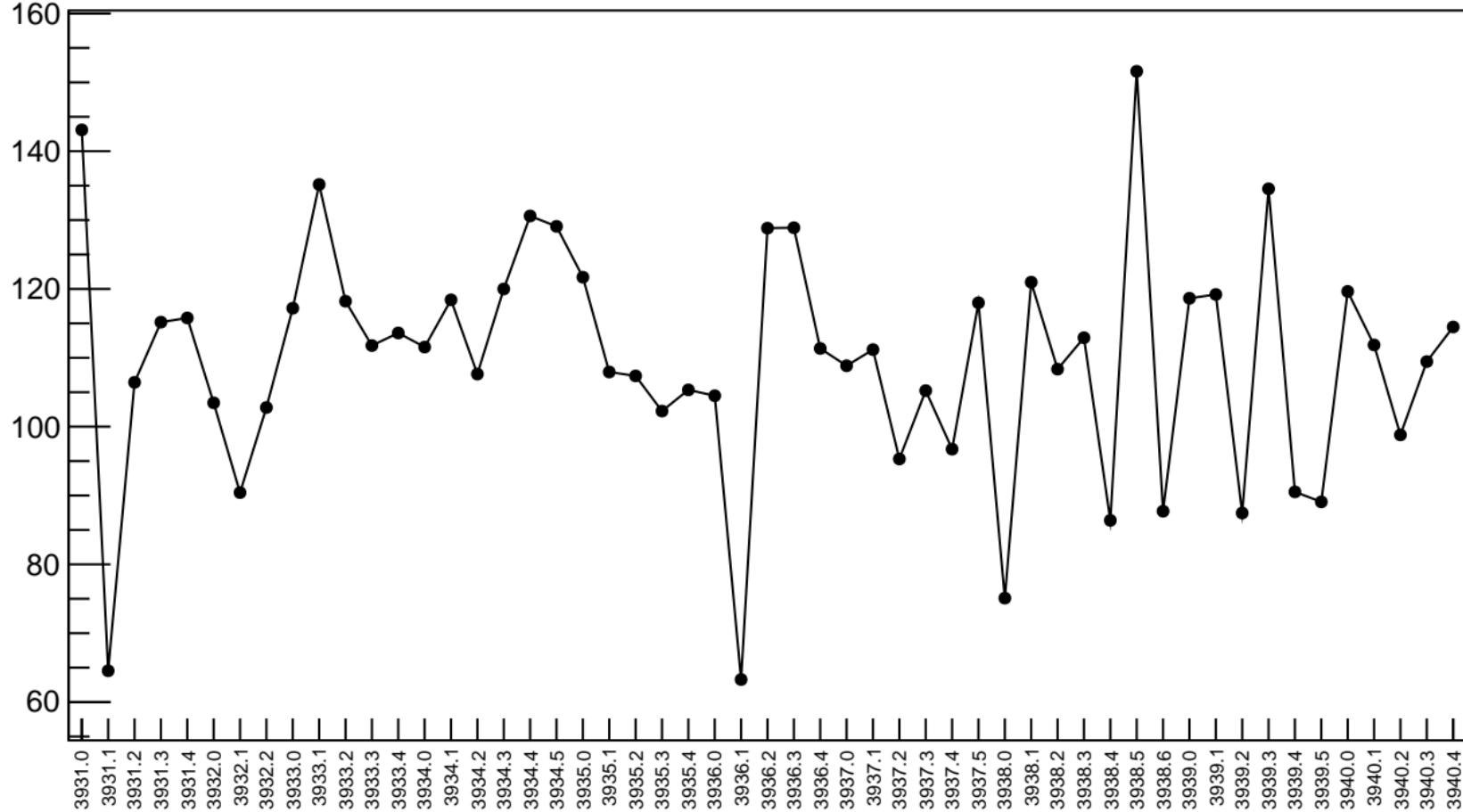


1D pull distribution



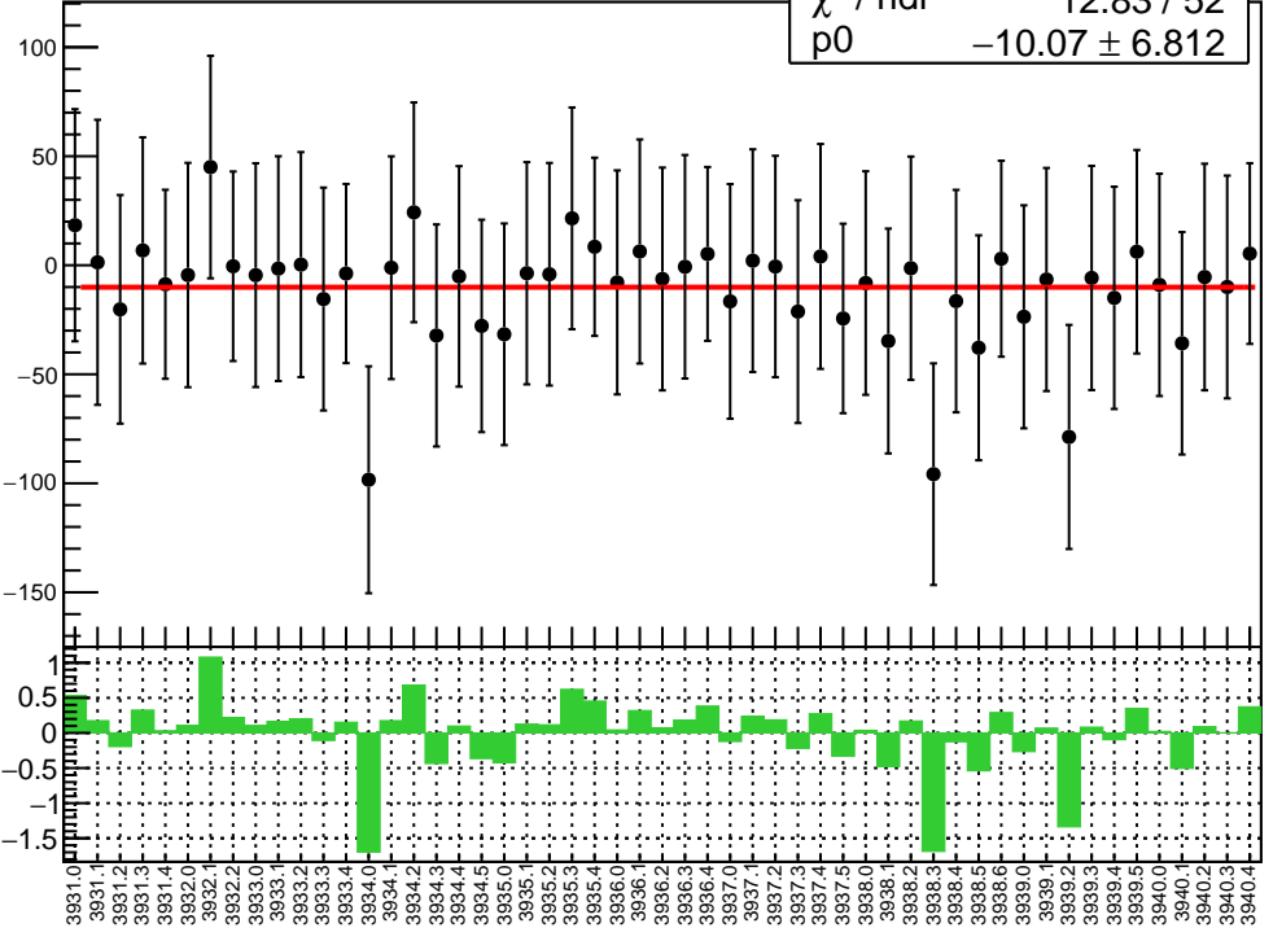
corr_us_dd_bpm16X RMS (ppm)

RMS (ppm)

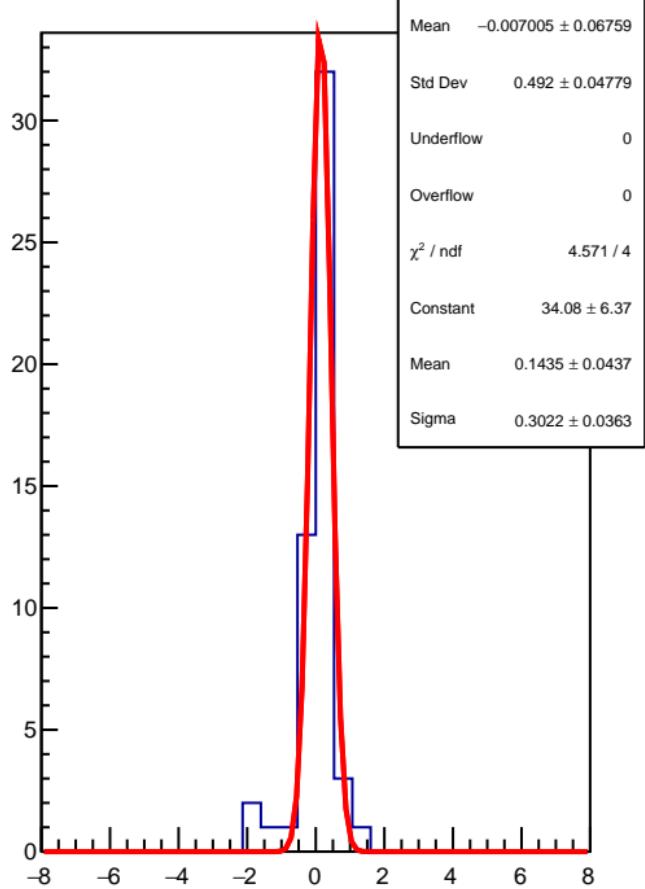


corr_us_dd_bpm16Y (ppb)

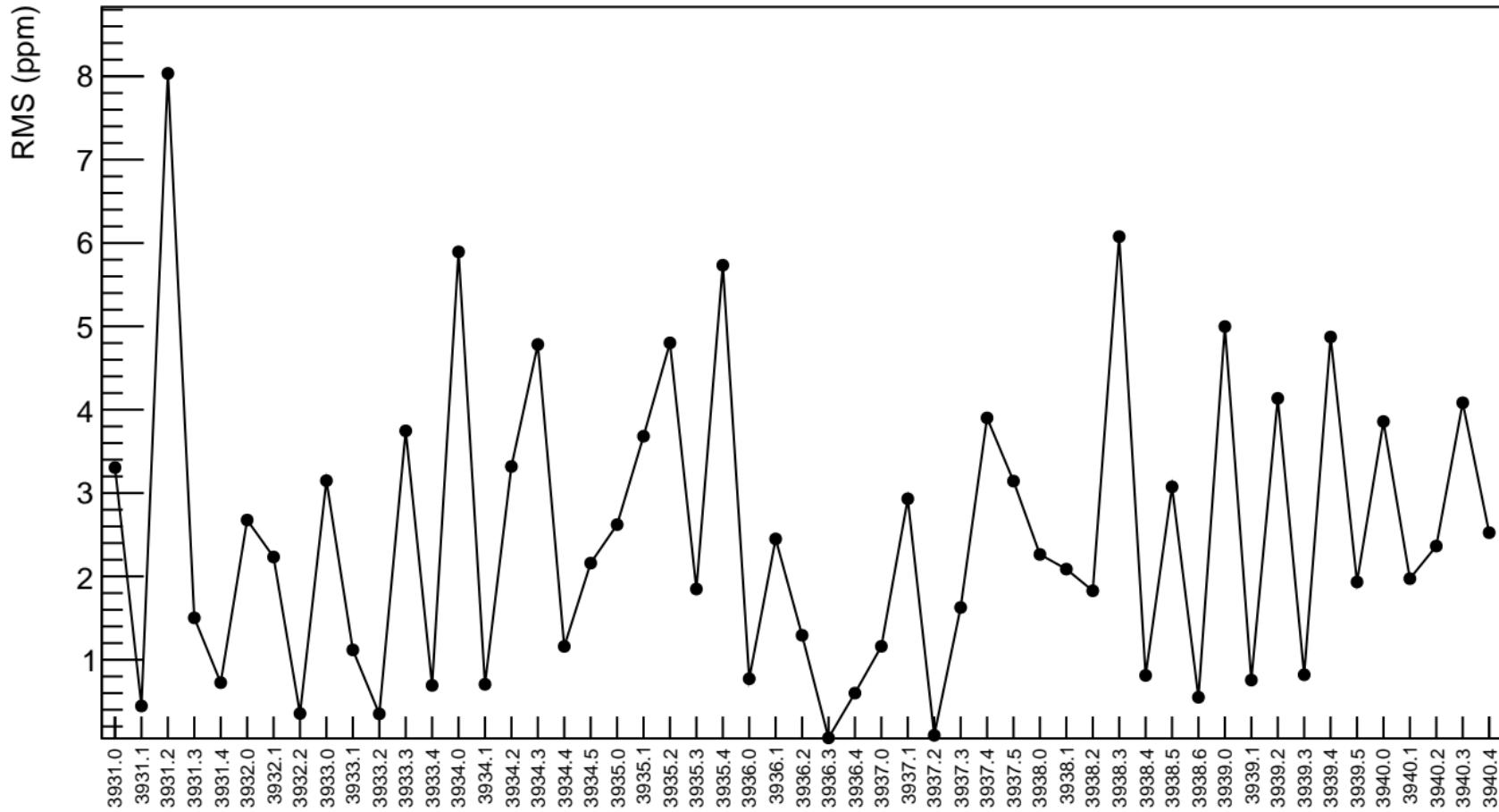
χ^2 / ndf 12.83 / 52
 p_0 -10.07 ± 6.812



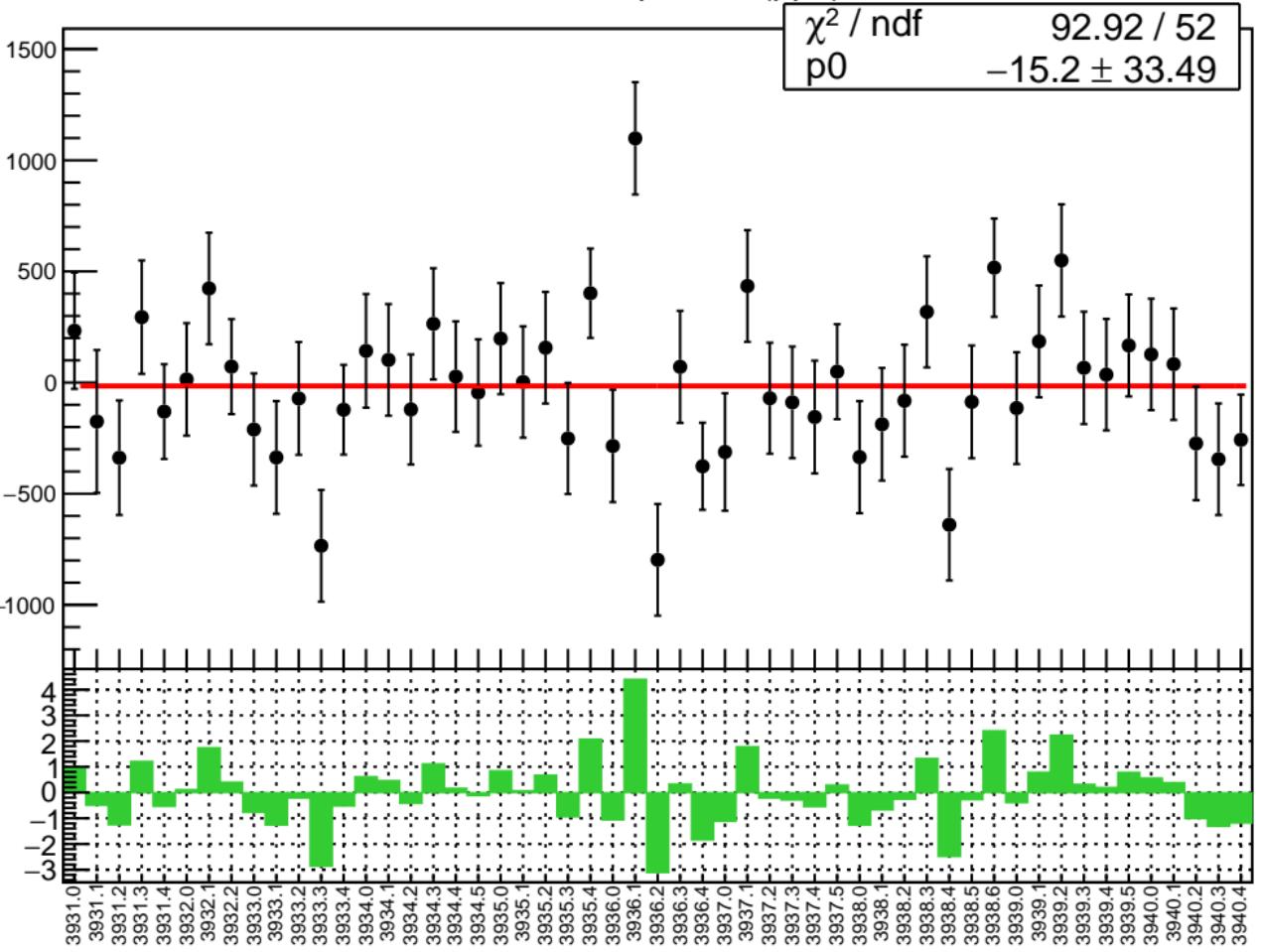
1D pull distribution



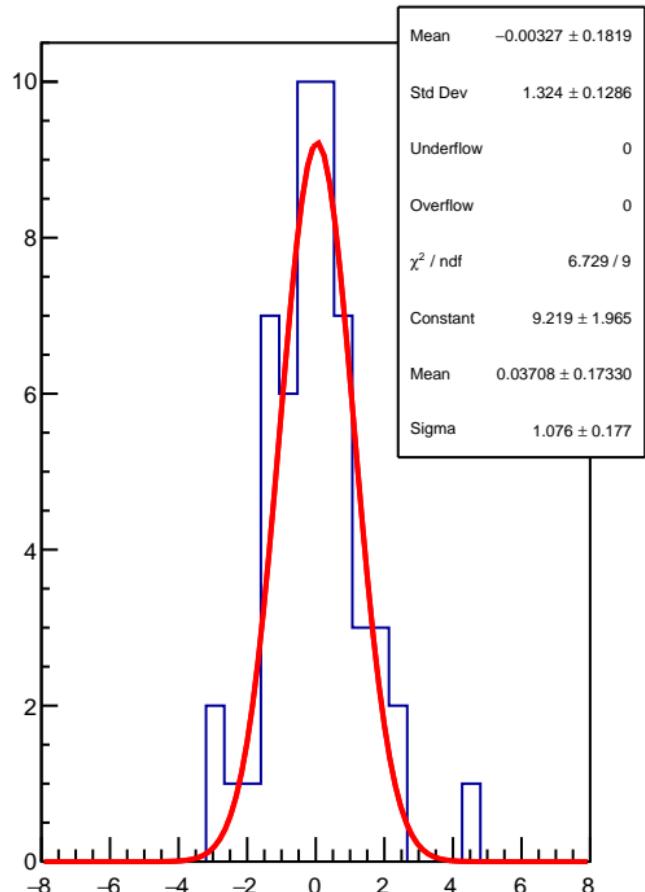
corr_us_dd_bpm16Y RMS (ppm)



corr_us_dd_bpm12X (ppb)



1D pull distribution



corr_us_dd_bpm12X RMS (ppm)

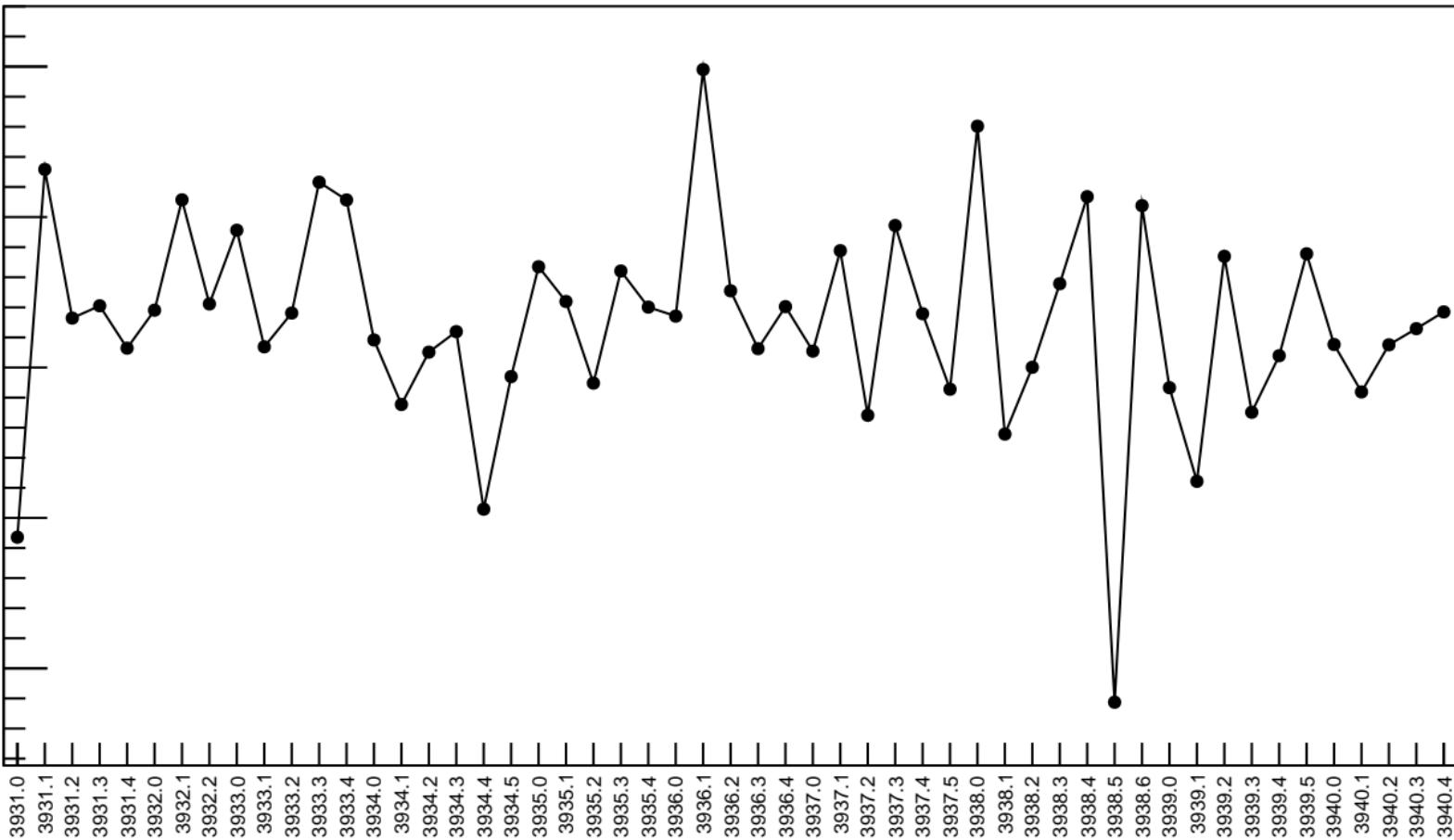
RMS (ppm)

50

40

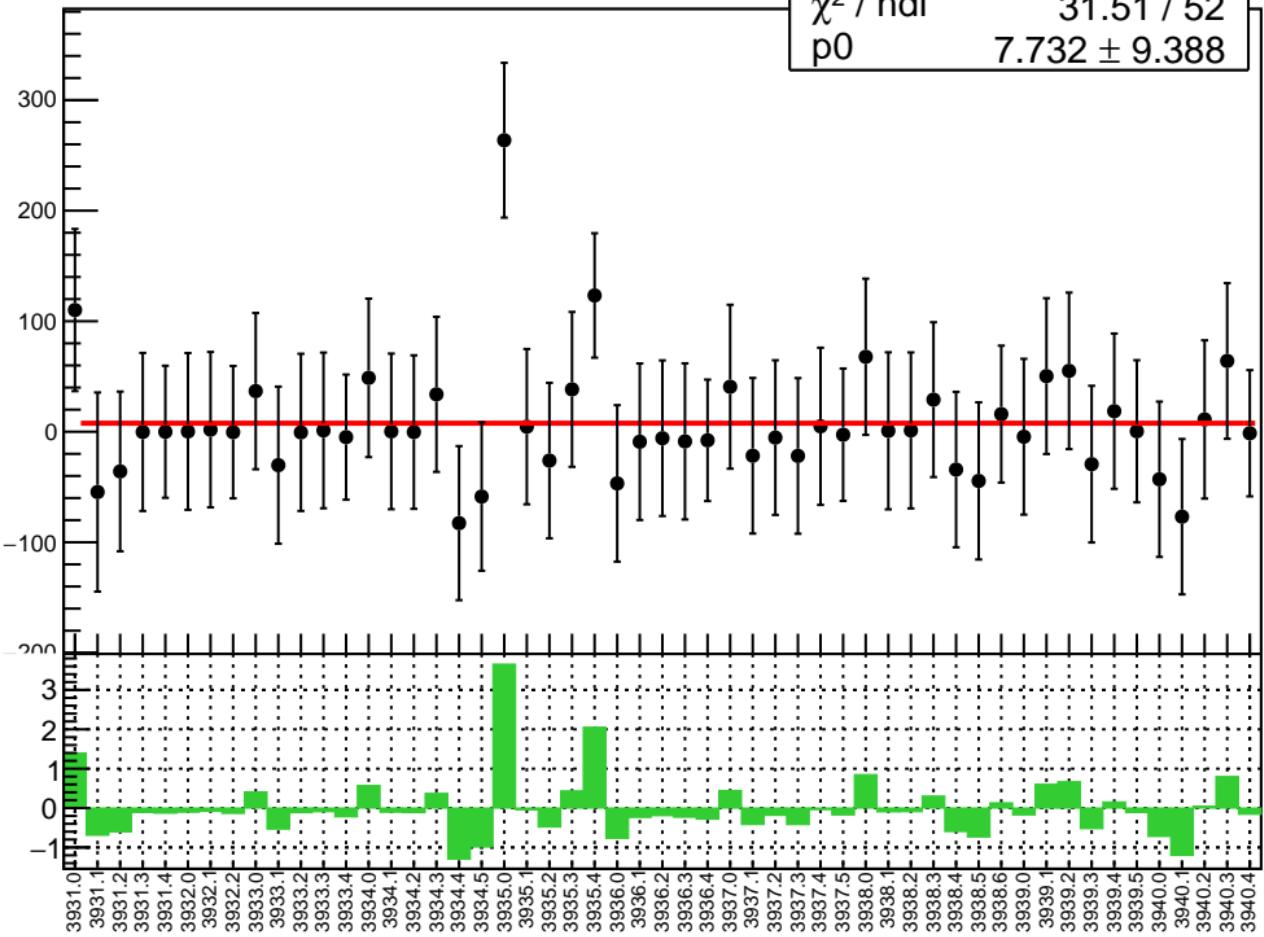
20

10

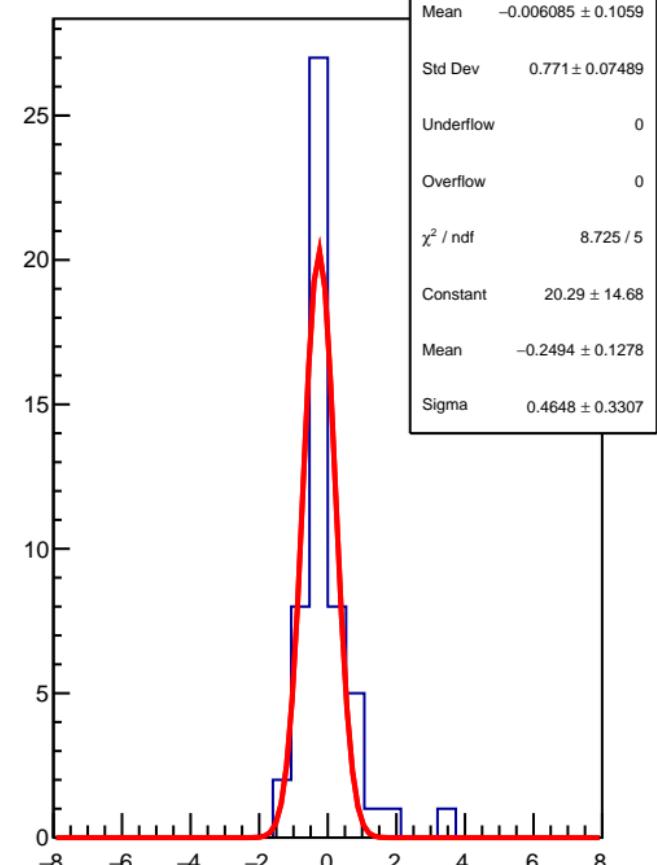


corr_us_dd_bpm12Y (ppb)

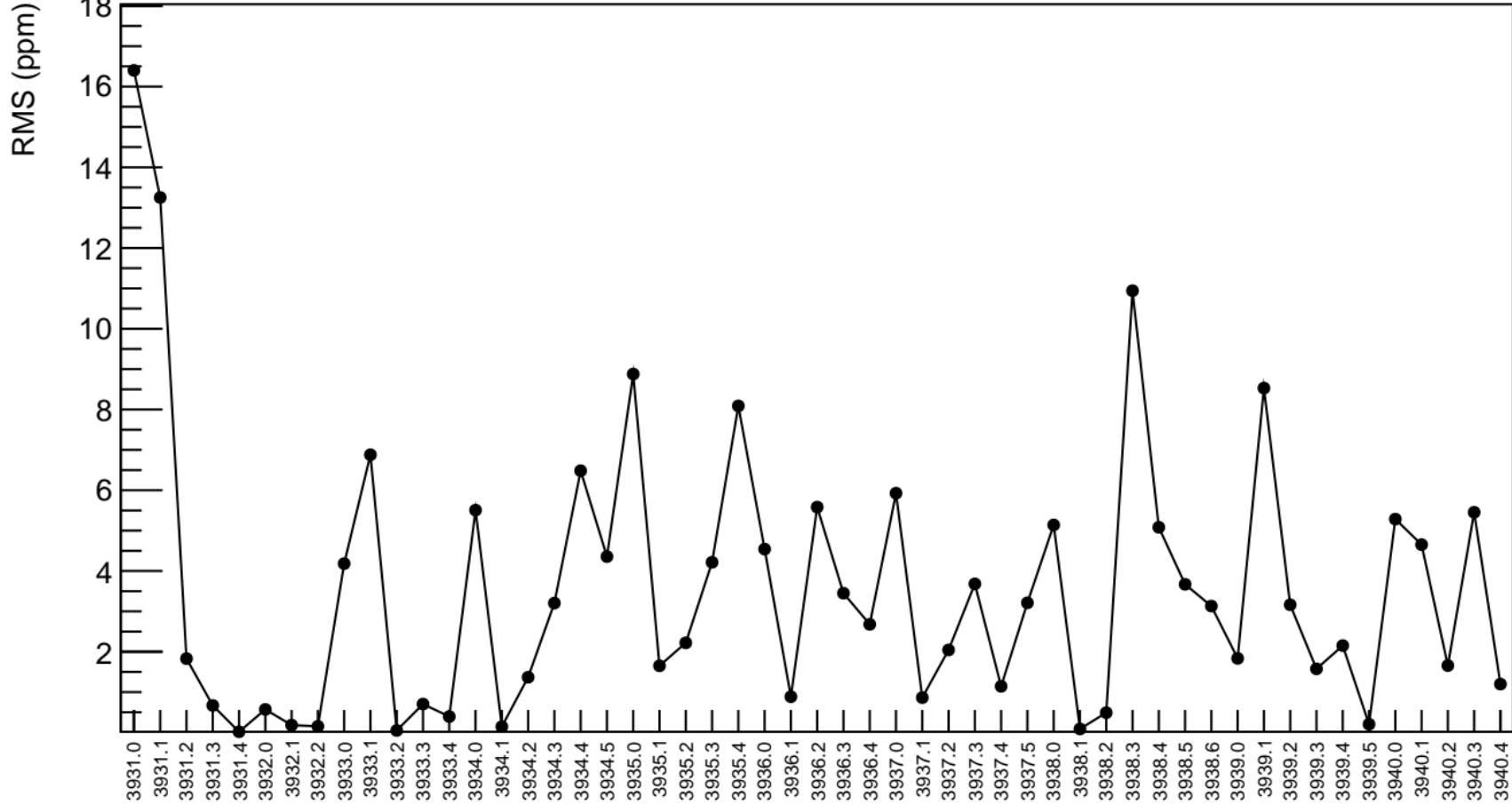
χ^2 / ndf 31.51 / 52
p0 7.732 ± 9.388



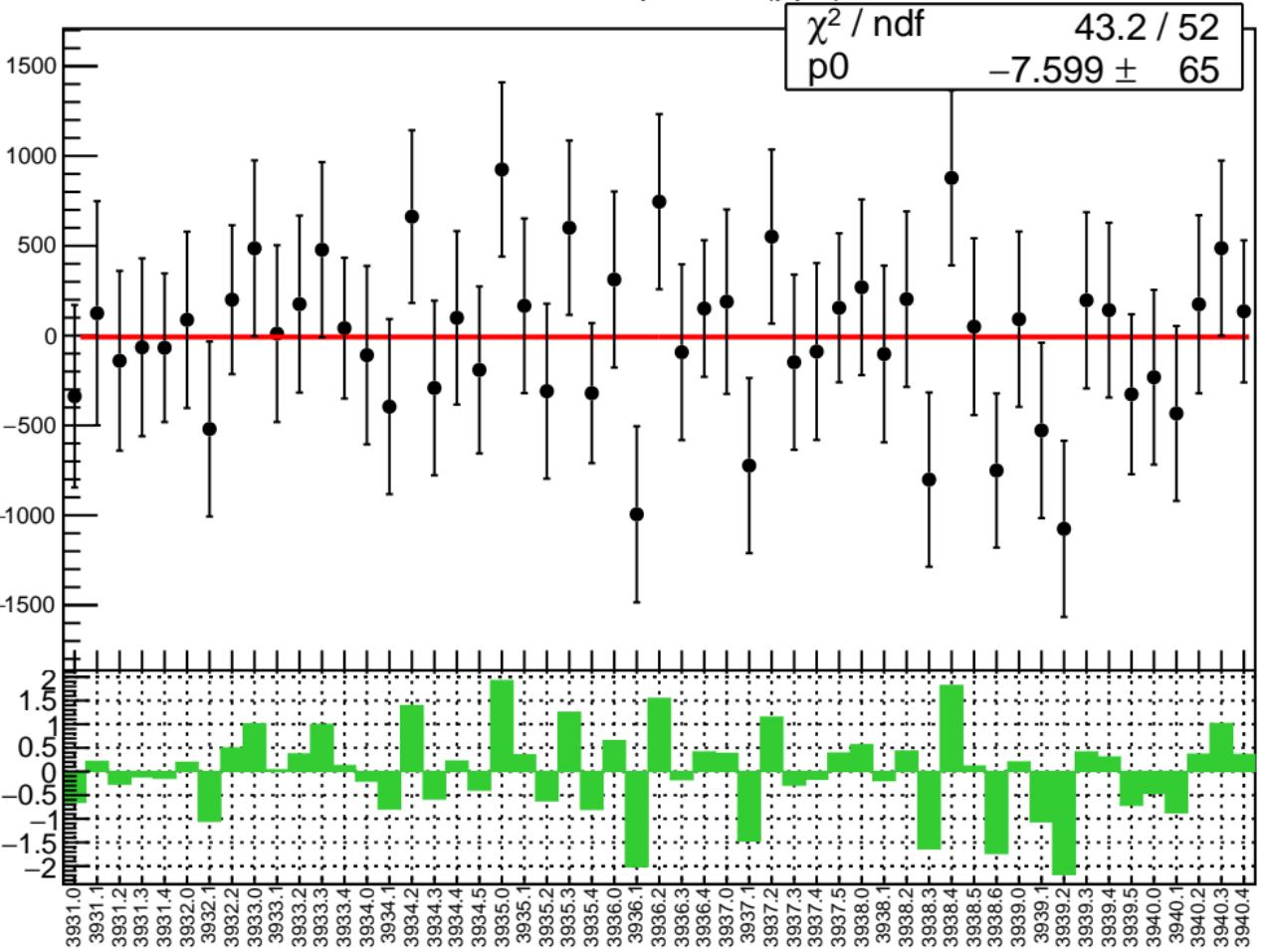
1D pull distribution



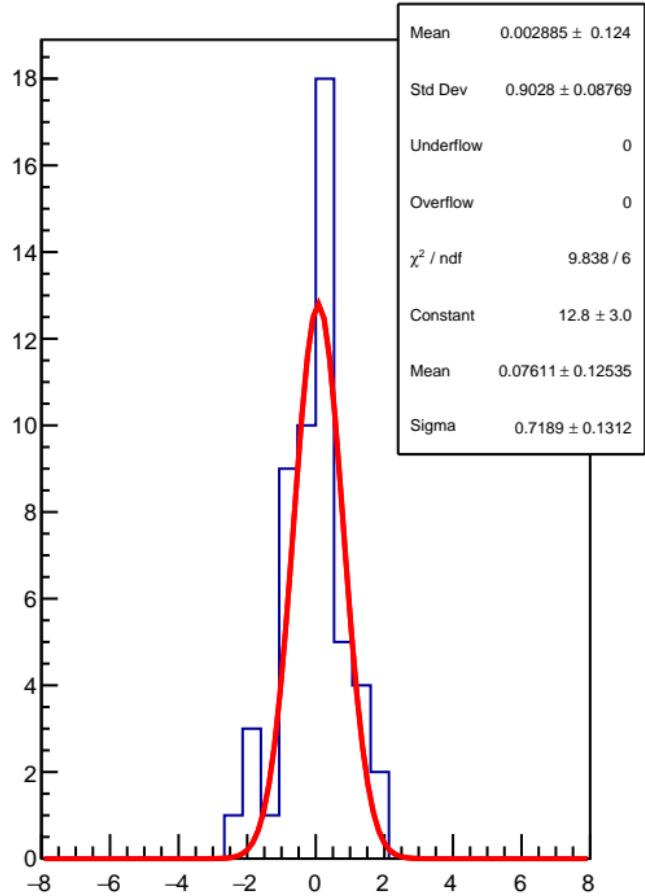
corr_us_dd_bpm12Y RMS (ppm)



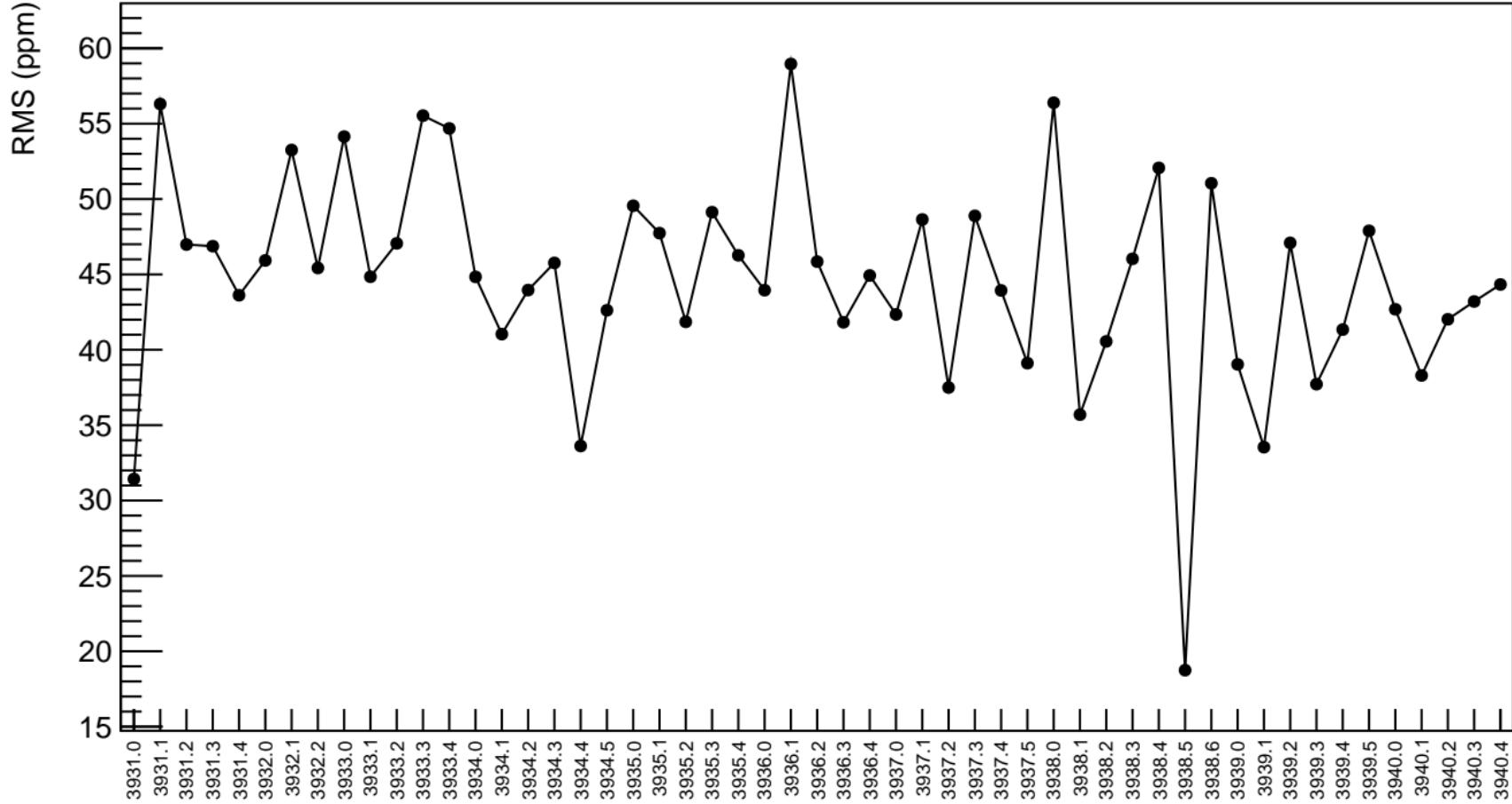
corr_us_dd_bpm11X (ppb)



1D pull distribution

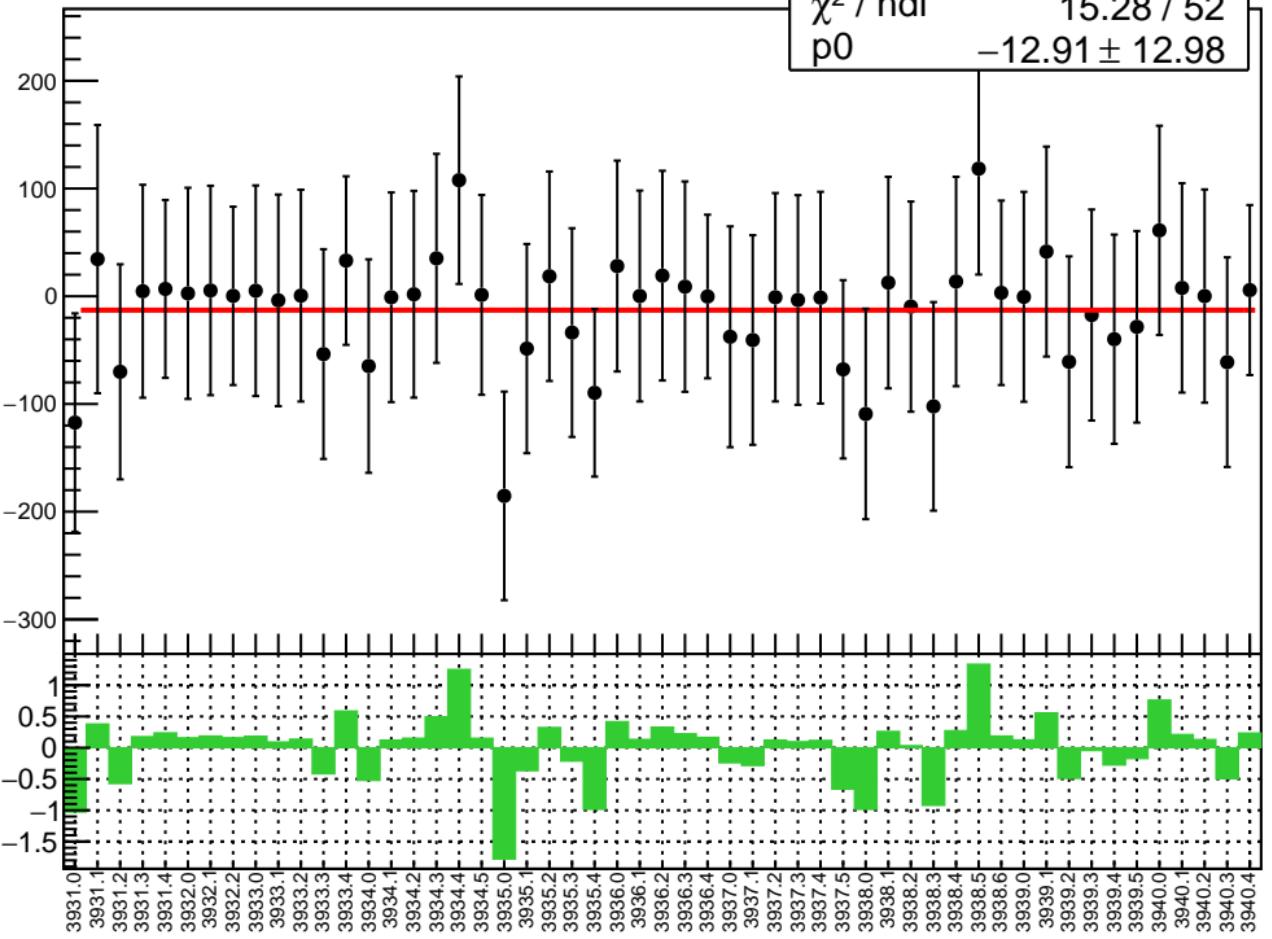


corr_us_dd_bpm11X RMS (ppm)

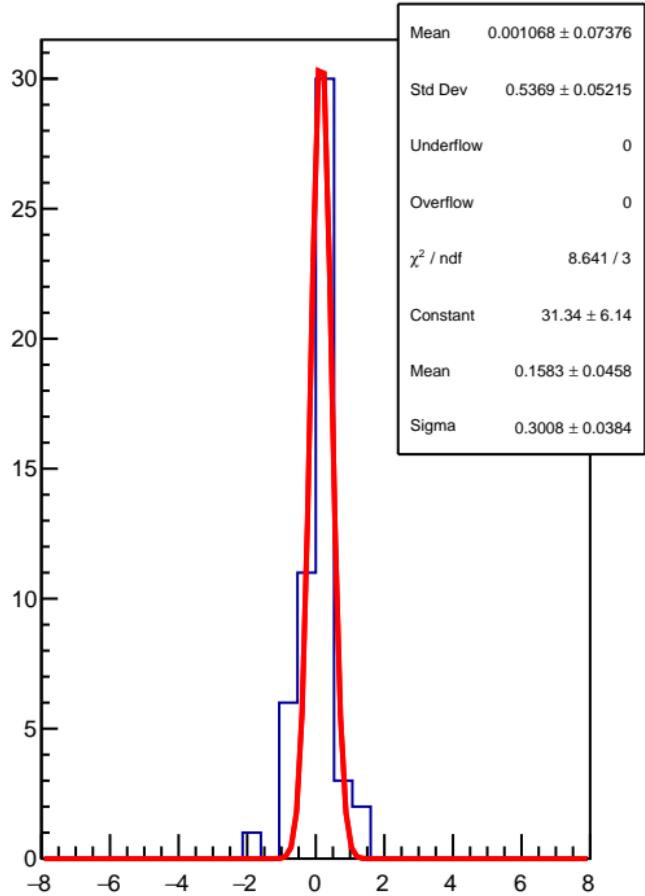


corr_us_dd_bpm11Y (ppb)

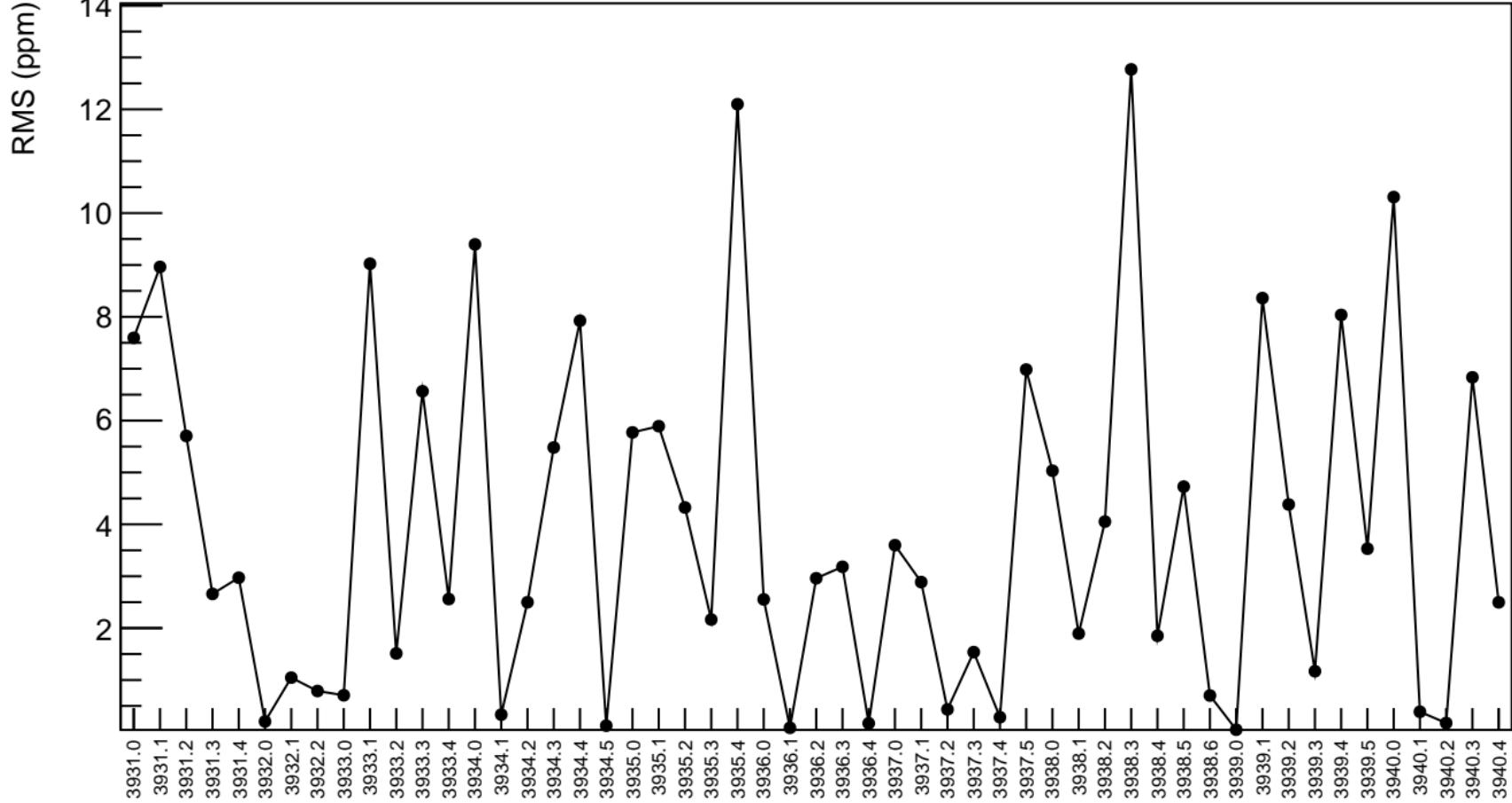
χ^2 / ndf 15.28 / 52
p0 -12.91 ± 12.98



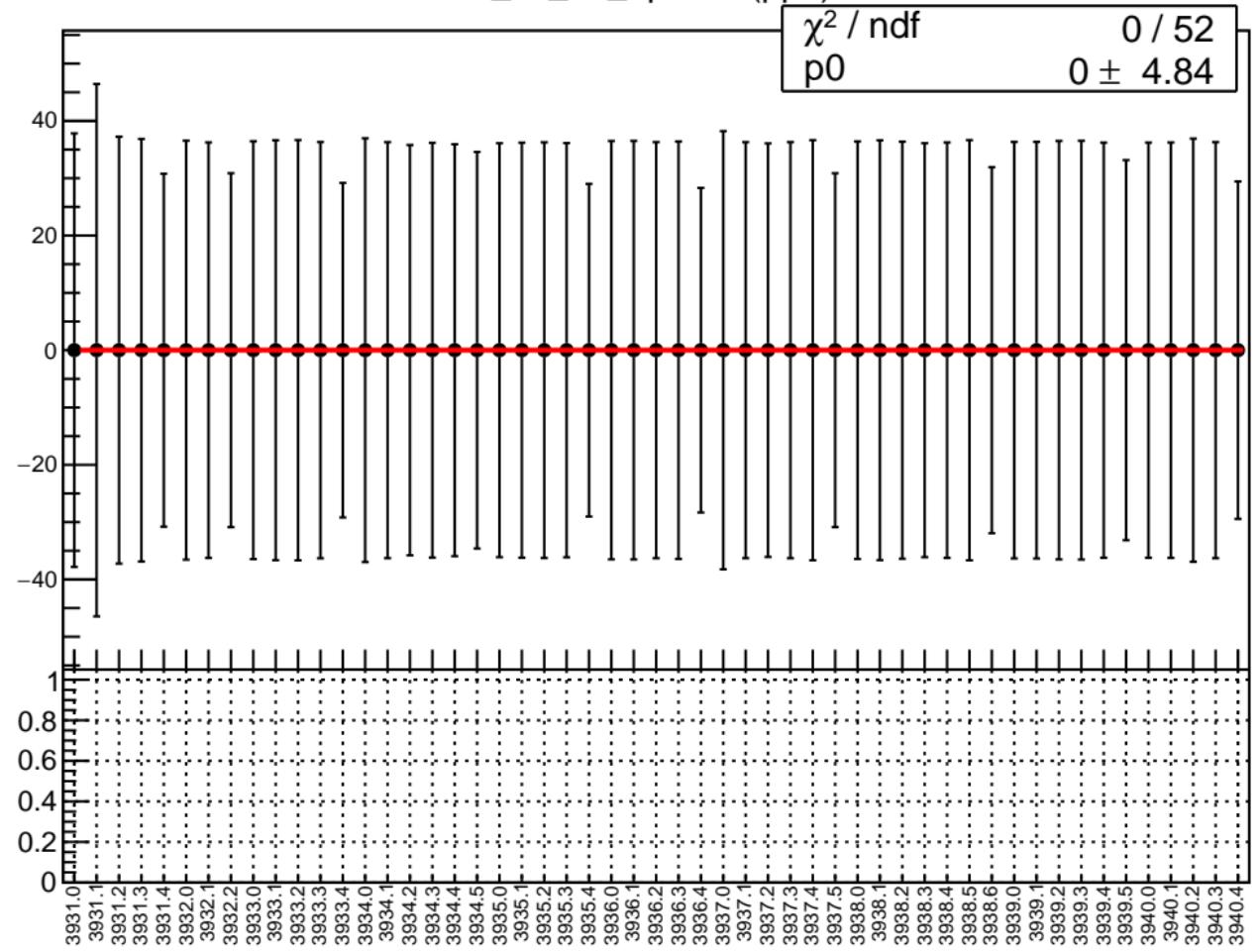
1D pull distribution



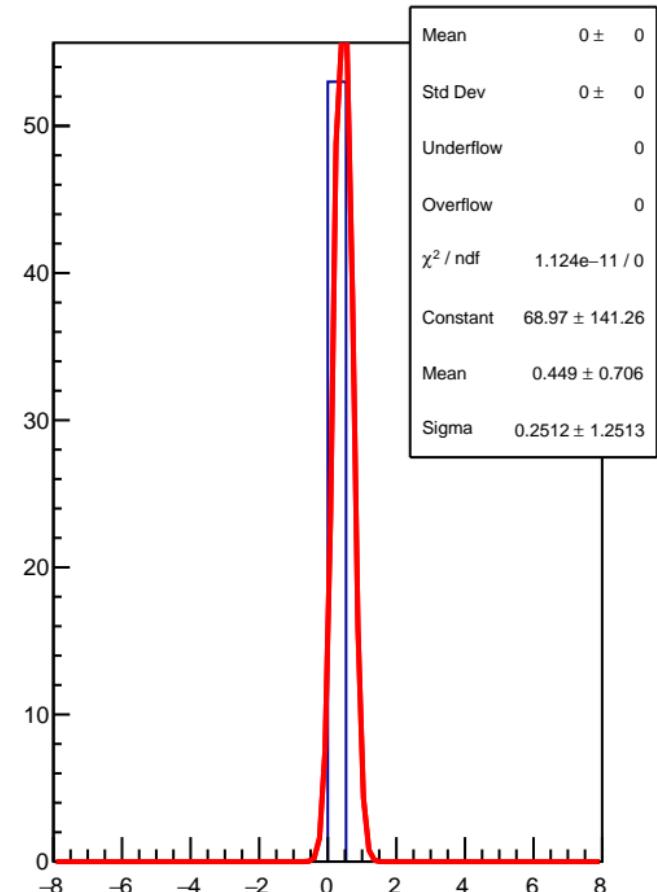
corr_us_dd_bpm11Y RMS (ppm)



corr_us_dd_bpm8X (ppb)

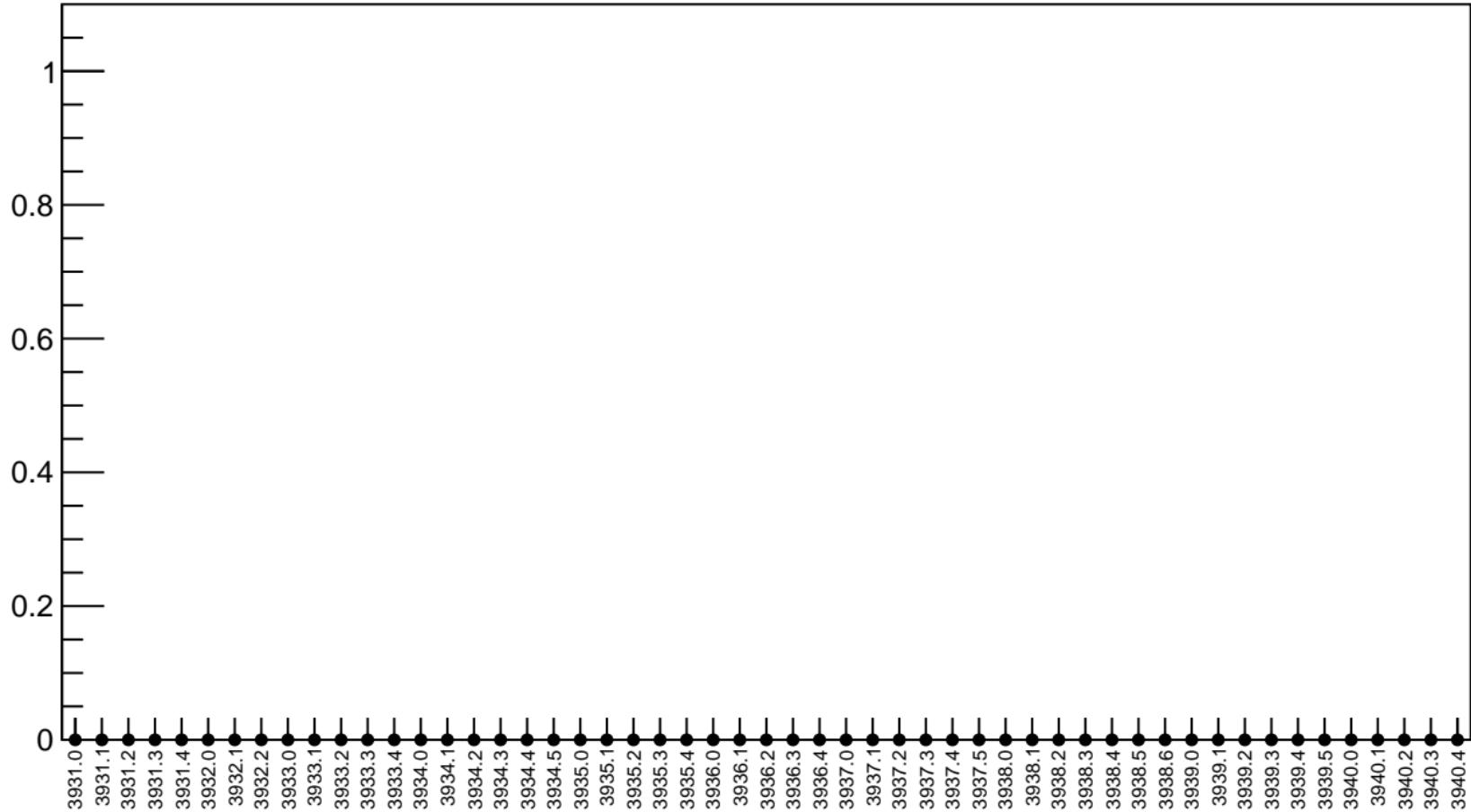


1D pull distribution

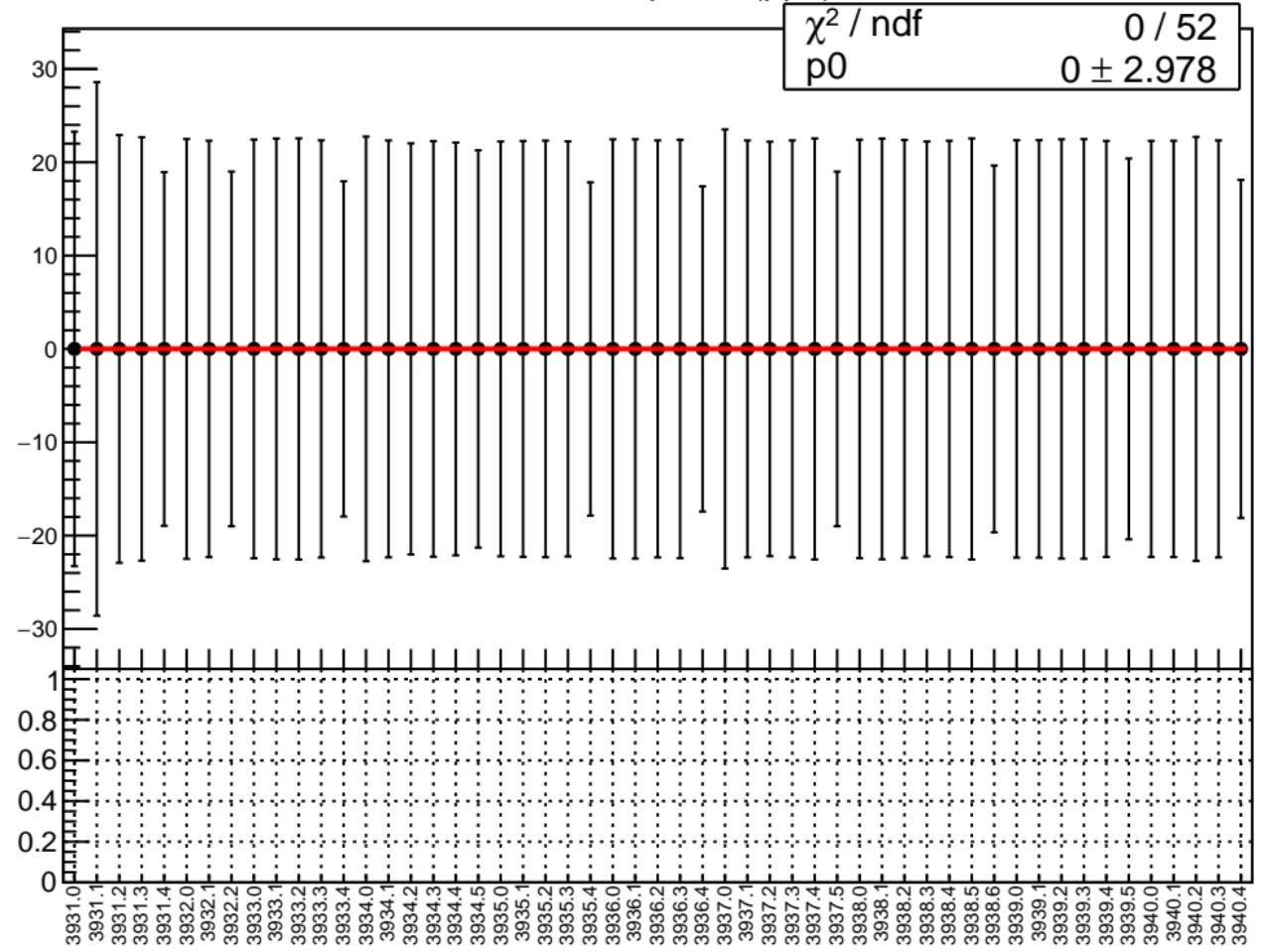


corr_us_dd_bpm8X RMS (ppm)

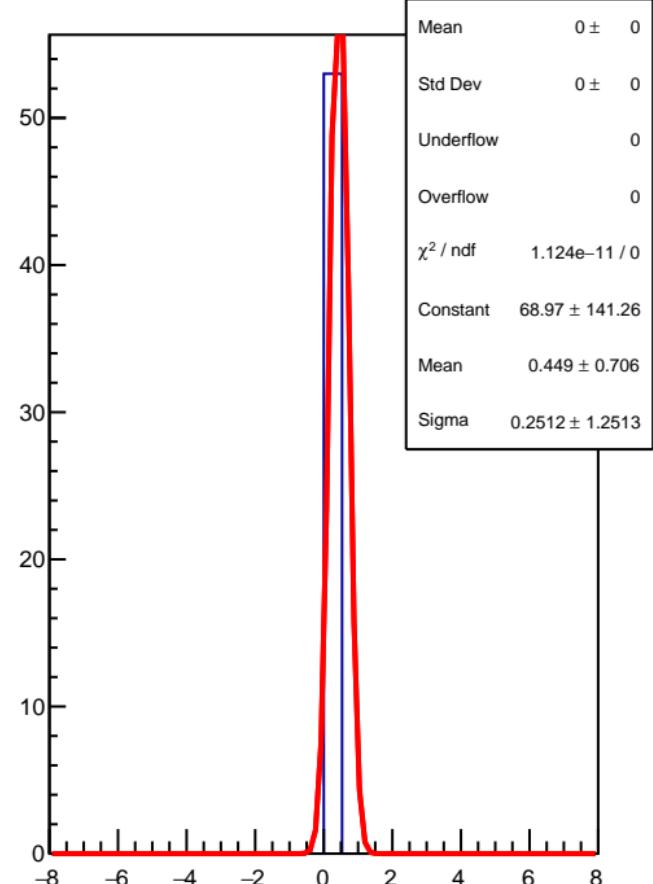
RMS (ppm)



corr_us_dd_bpm8Y (ppb)

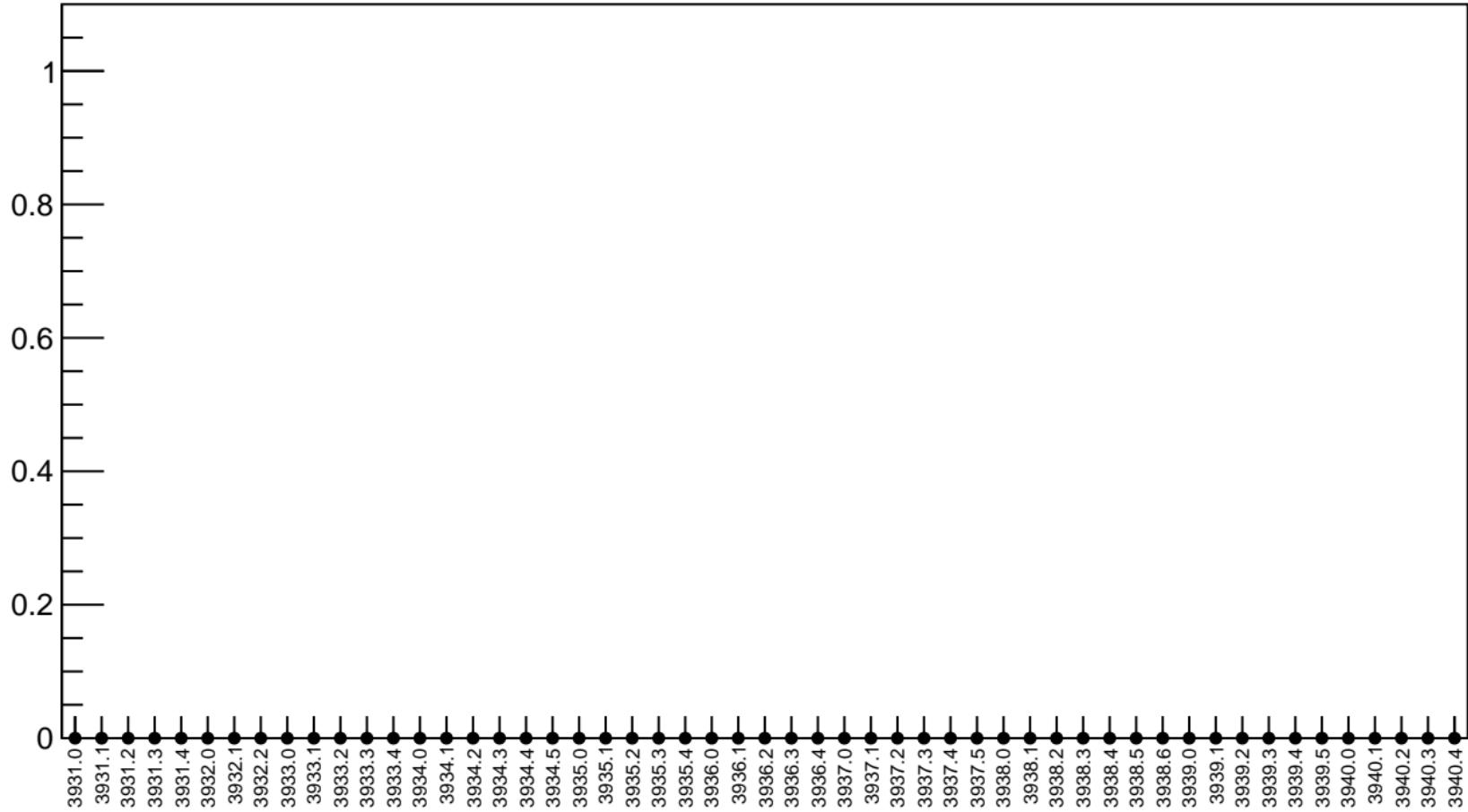


1D pull distribution

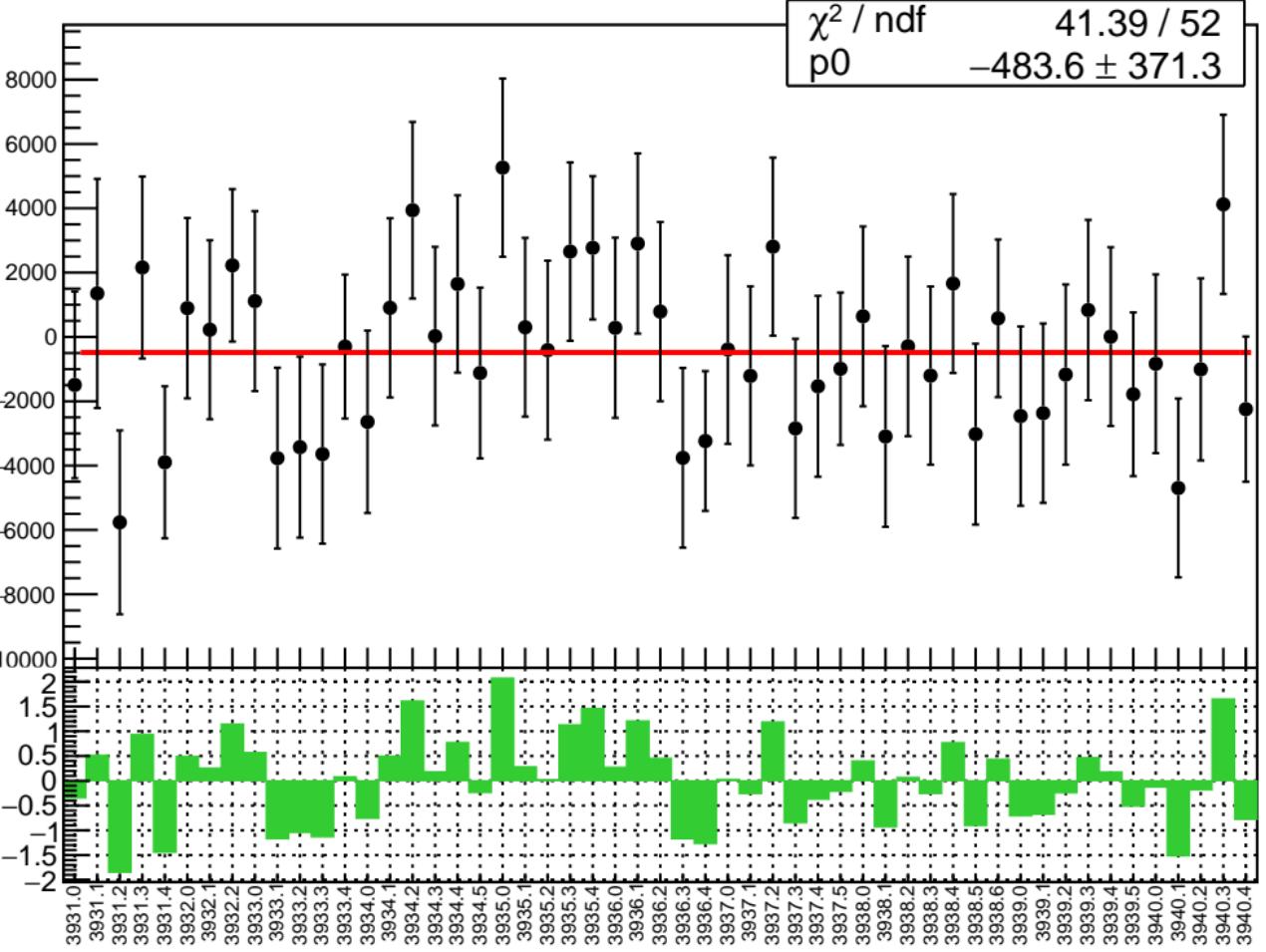


corr_us_dd_bpm8Y RMS (ppm)

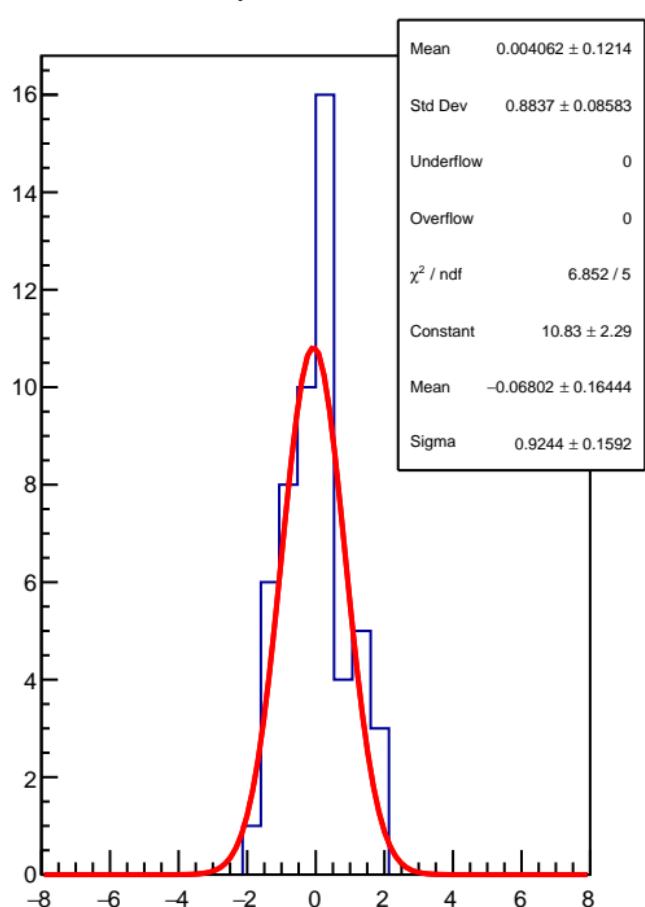
RMS (ppm)



corr_usl_bpm4eX (ppb)

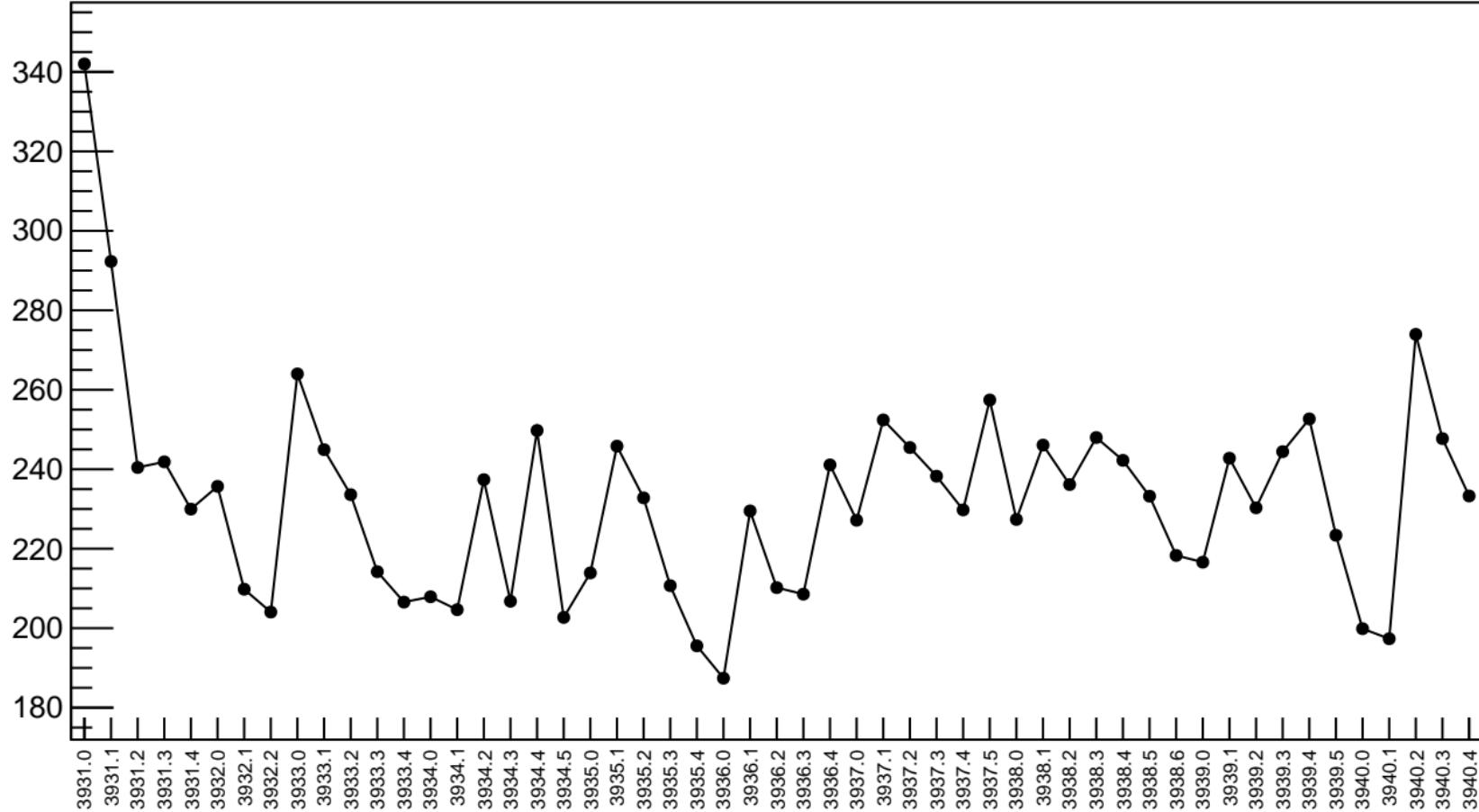


1D pull distribution

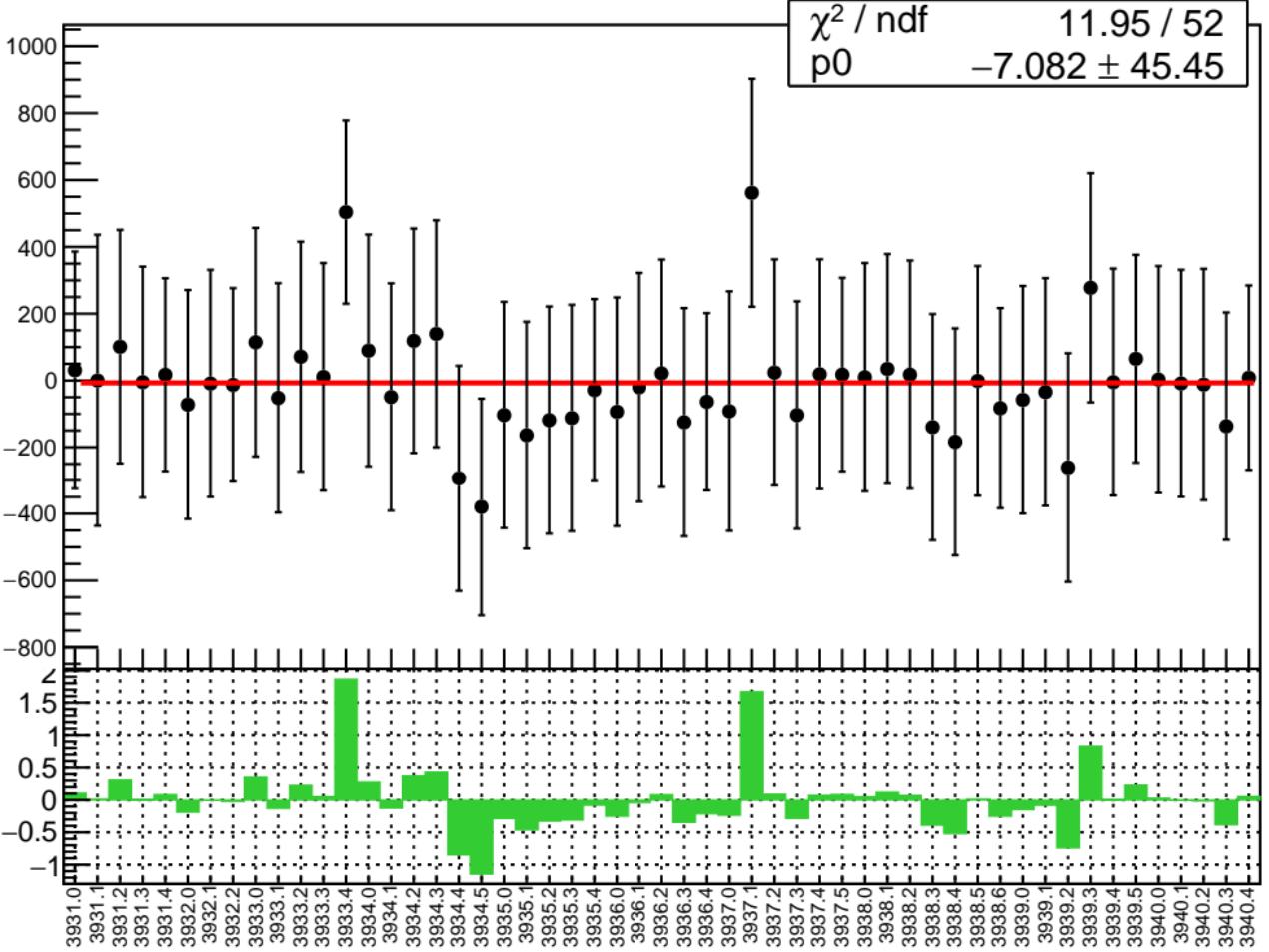


corr_usl_bpm4eX RMS (ppm)

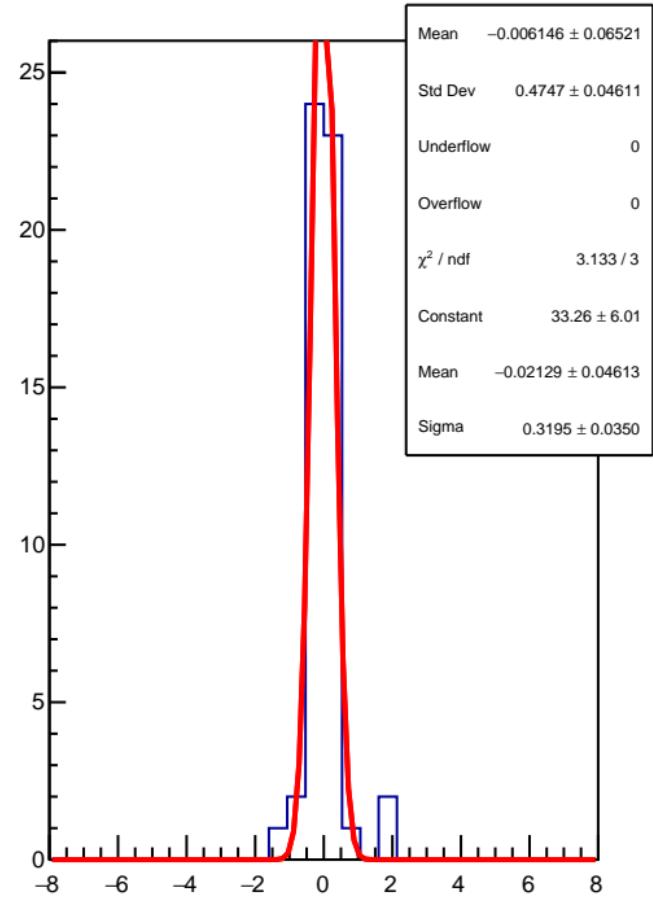
RMS (ppm)



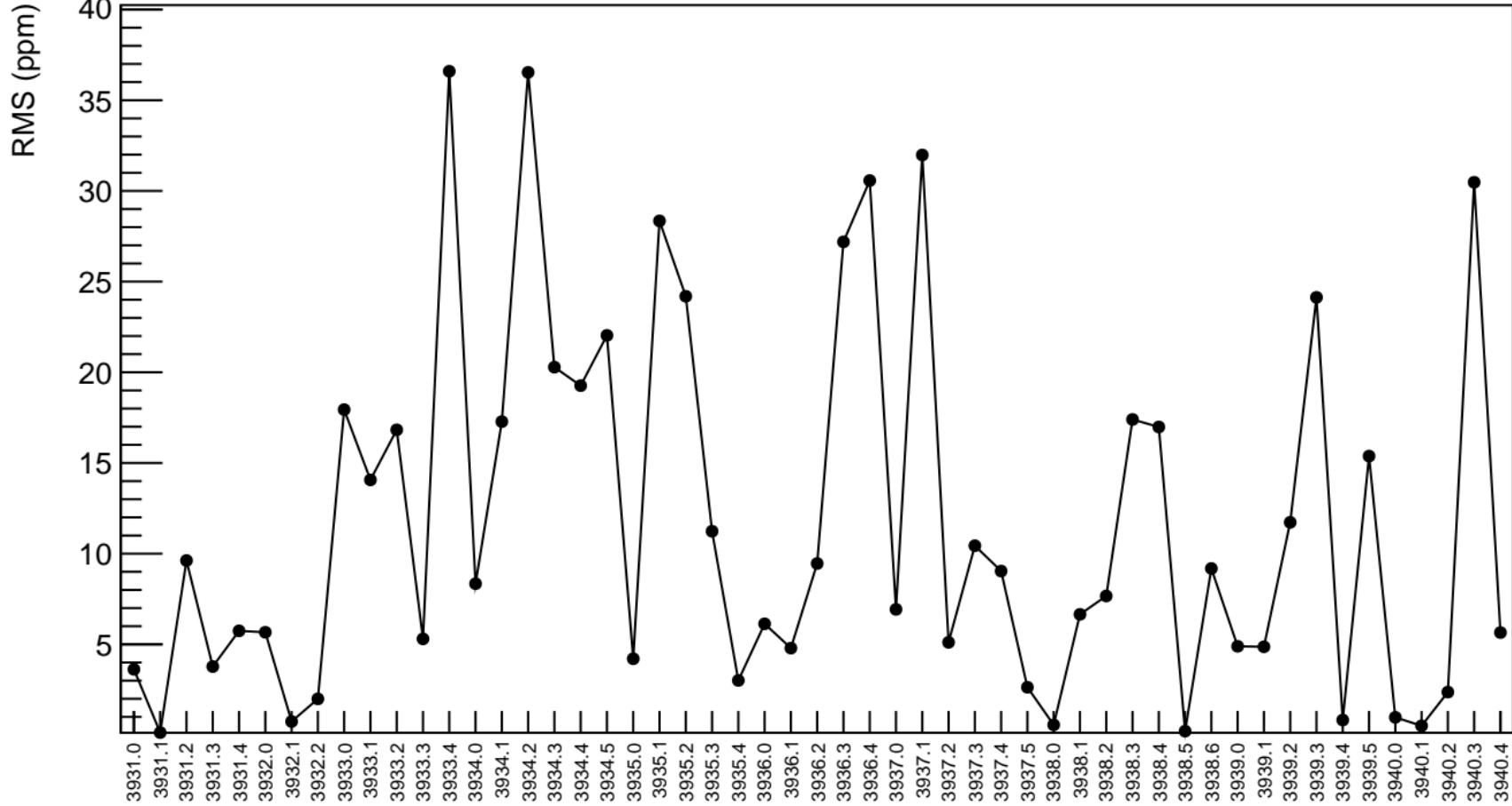
corr_usl_bpm4eY (ppb)



1D pull distribution

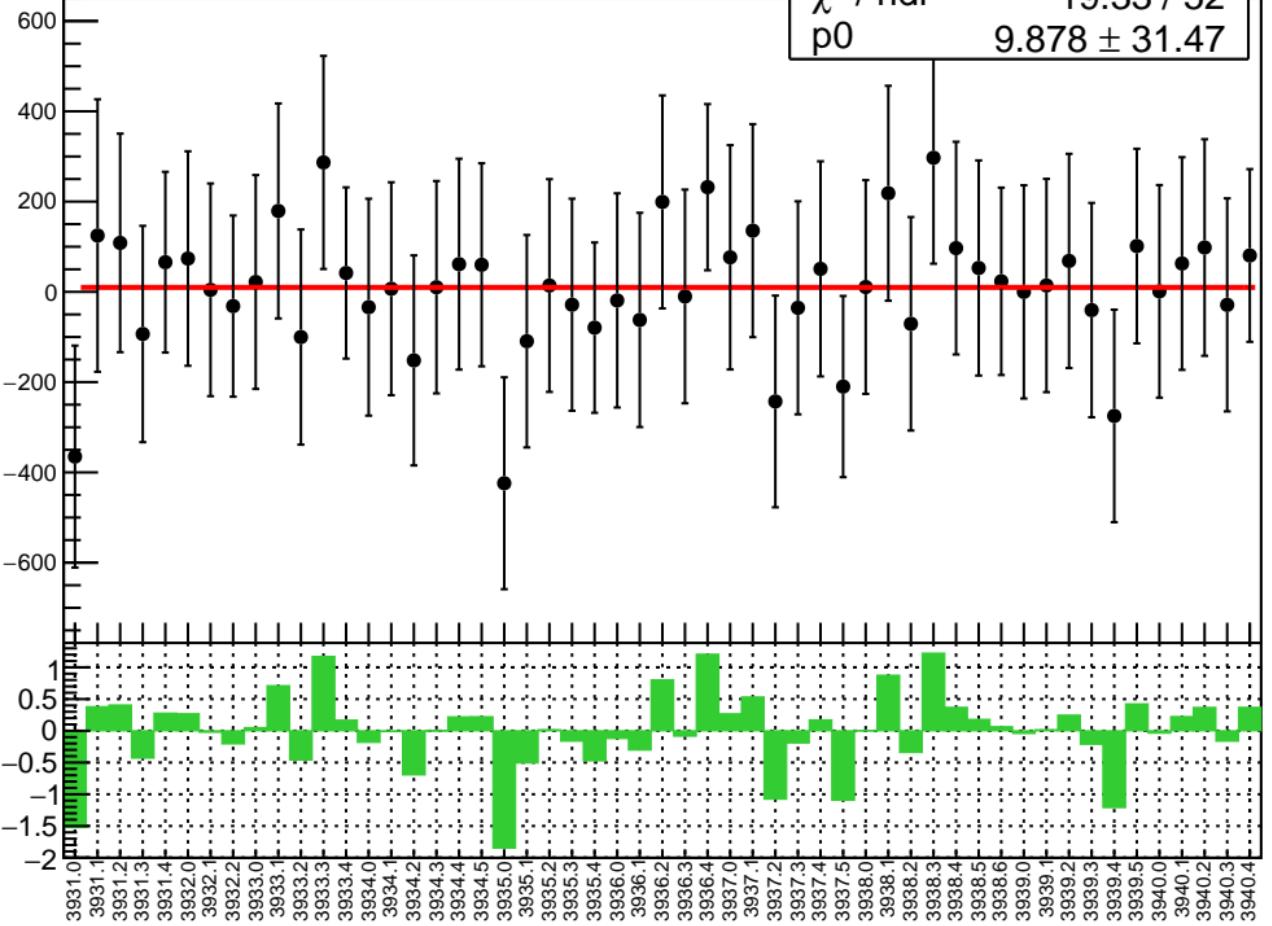


corr_usl_bpm4eY RMS (ppm)

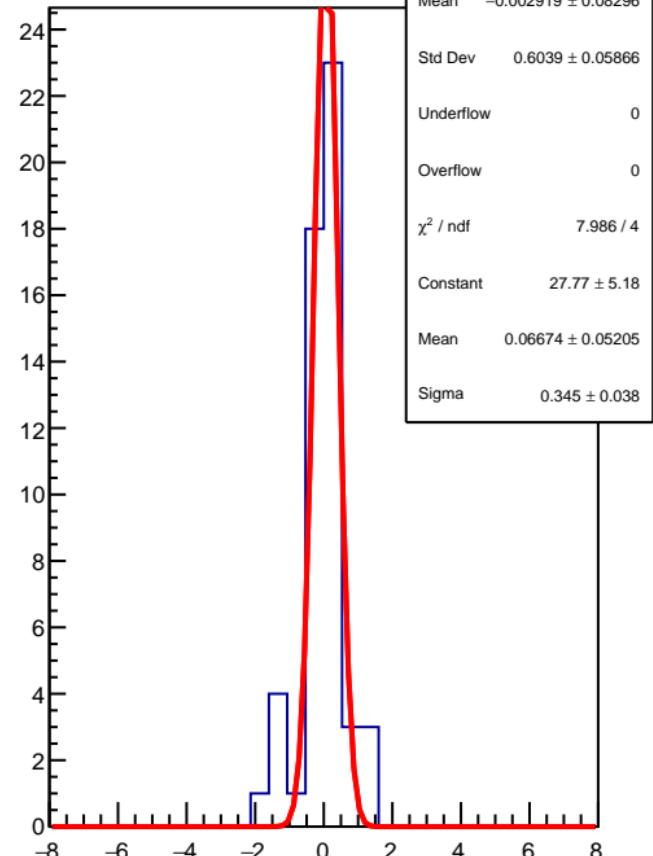


corr_usl_bpm4aX (ppb)

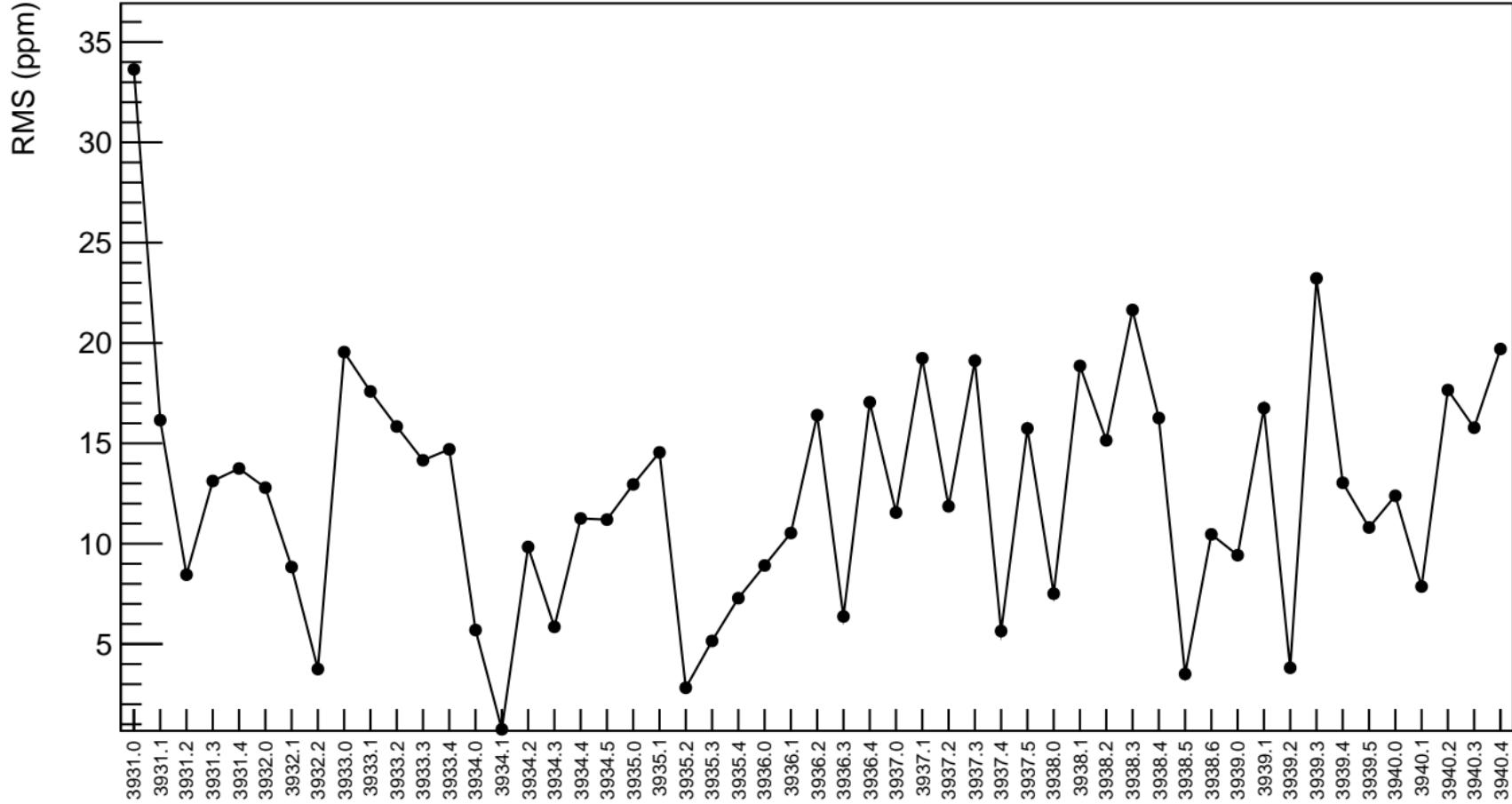
χ^2 / ndf 19.33 / 52
p0 9.878 ± 31.47



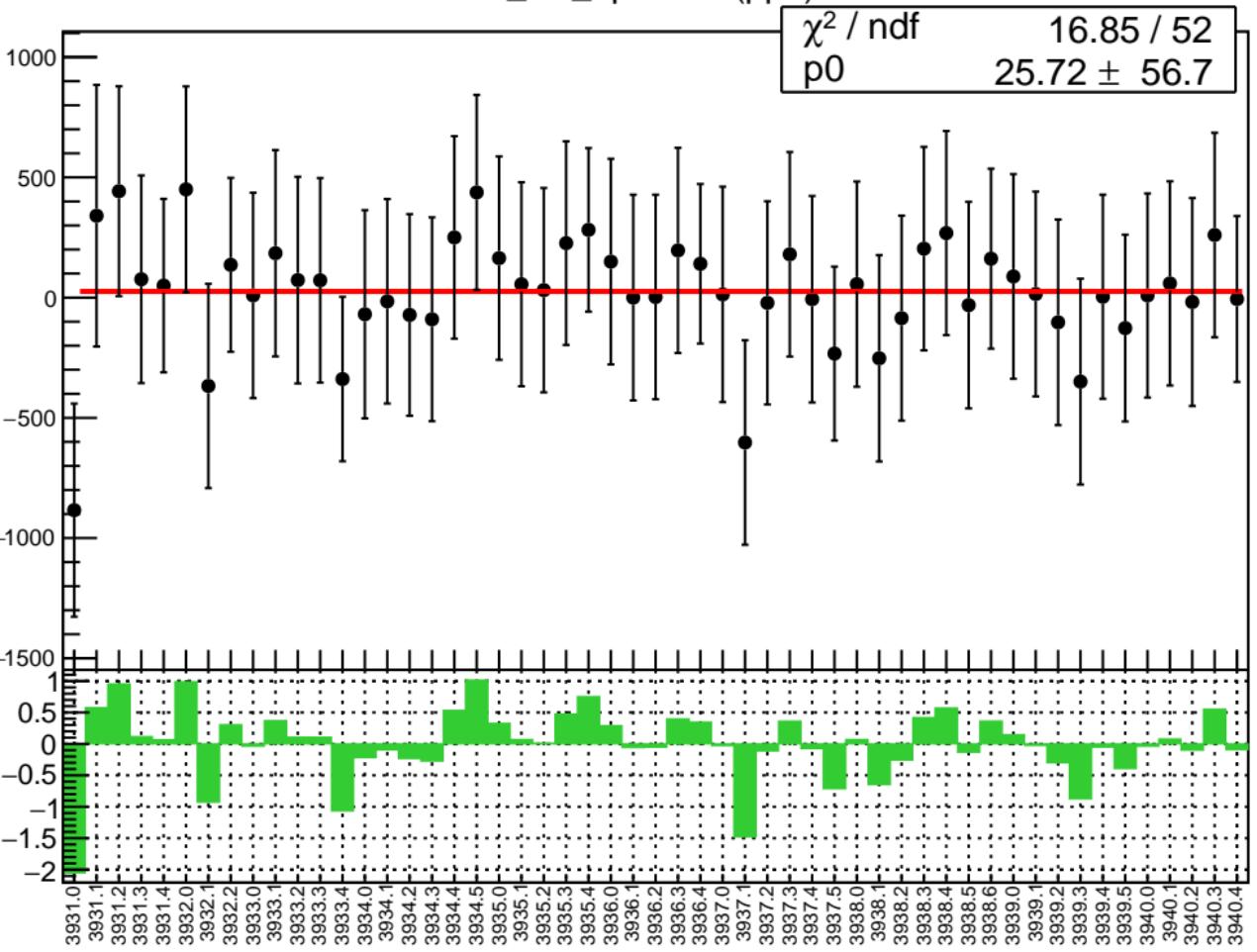
1D pull distribution



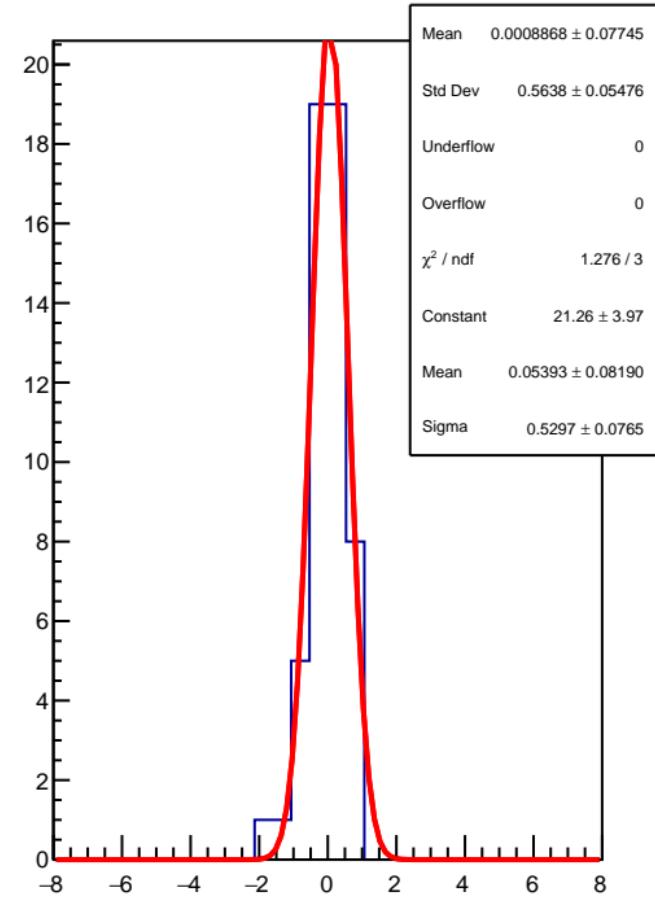
corr_usl_bpm4aX RMS (ppm)



corr_usl_bpm4aY (ppb)

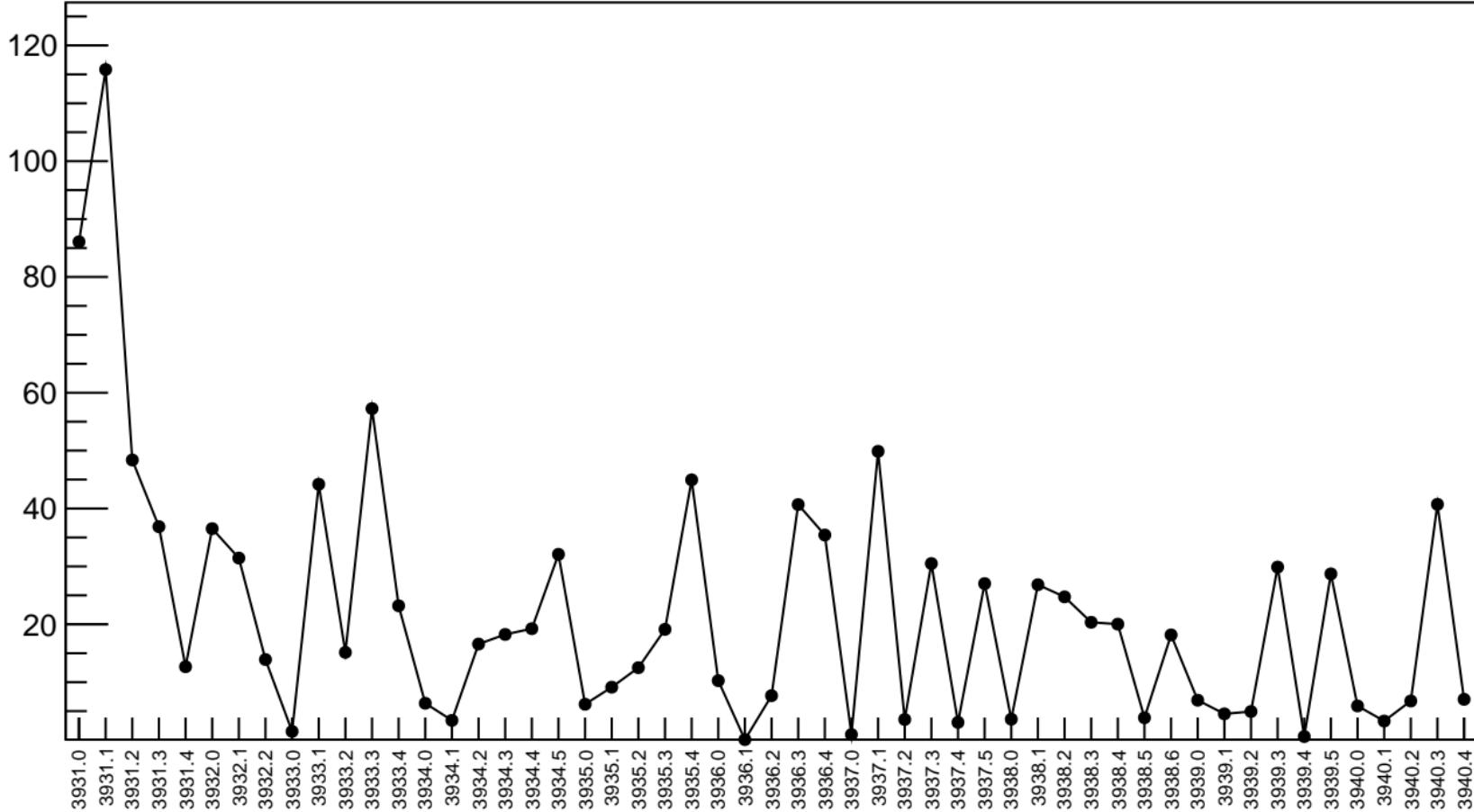


1D pull distribution

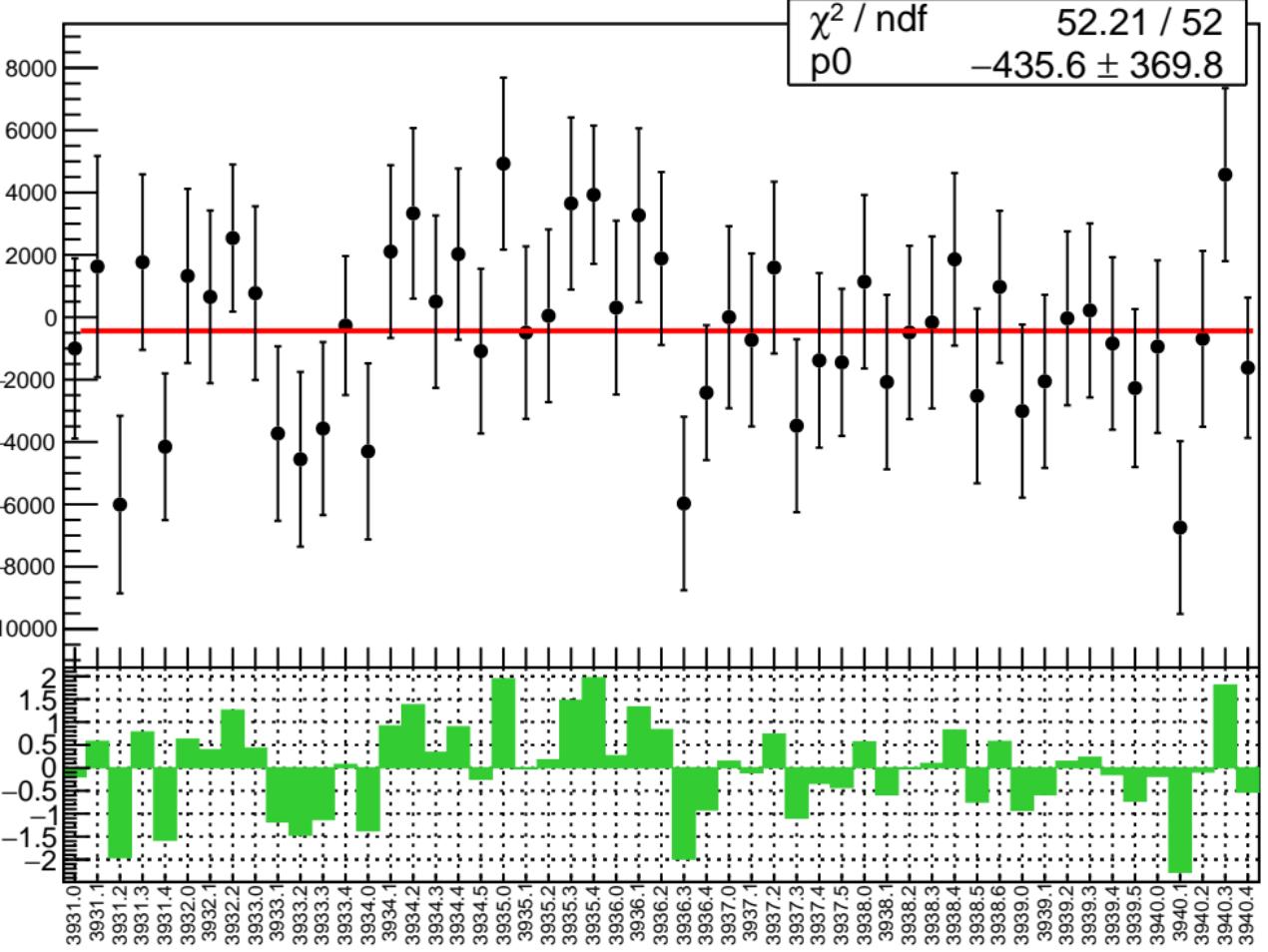


corr_usl_bpm4aY RMS (ppm)

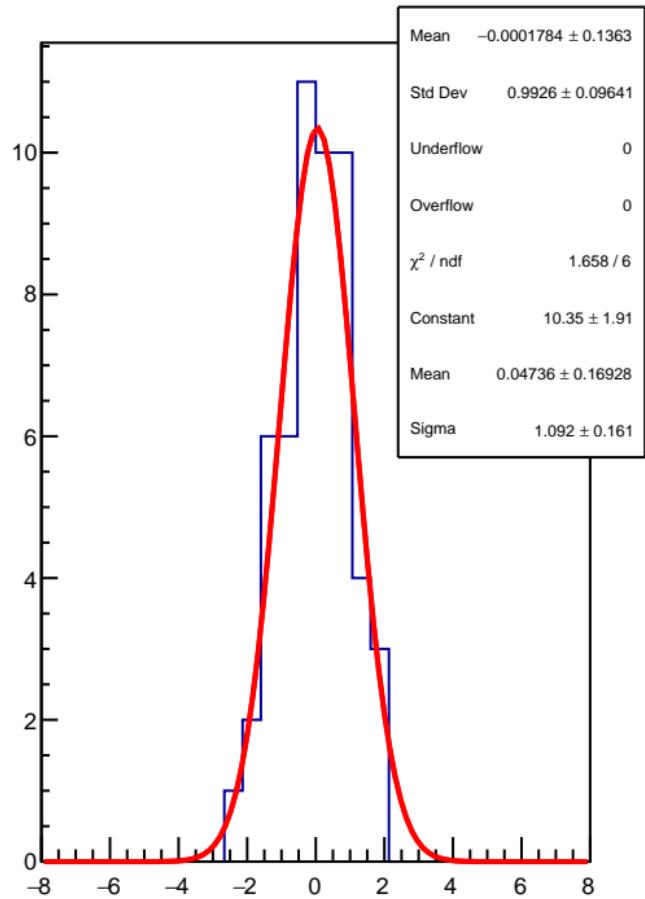
RMS (ppm)



corr_usl_bpm1X (ppb)

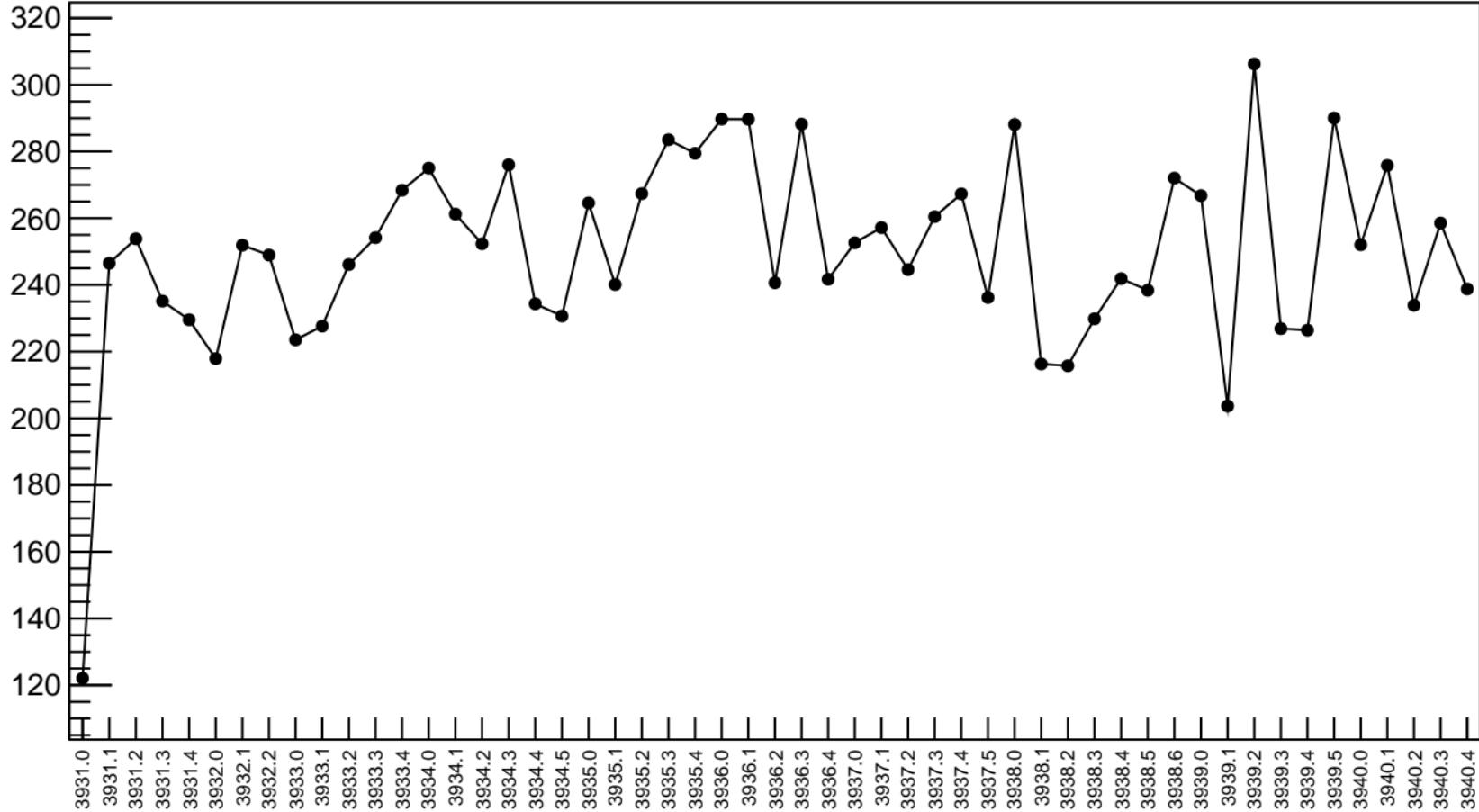


1D pull distribution



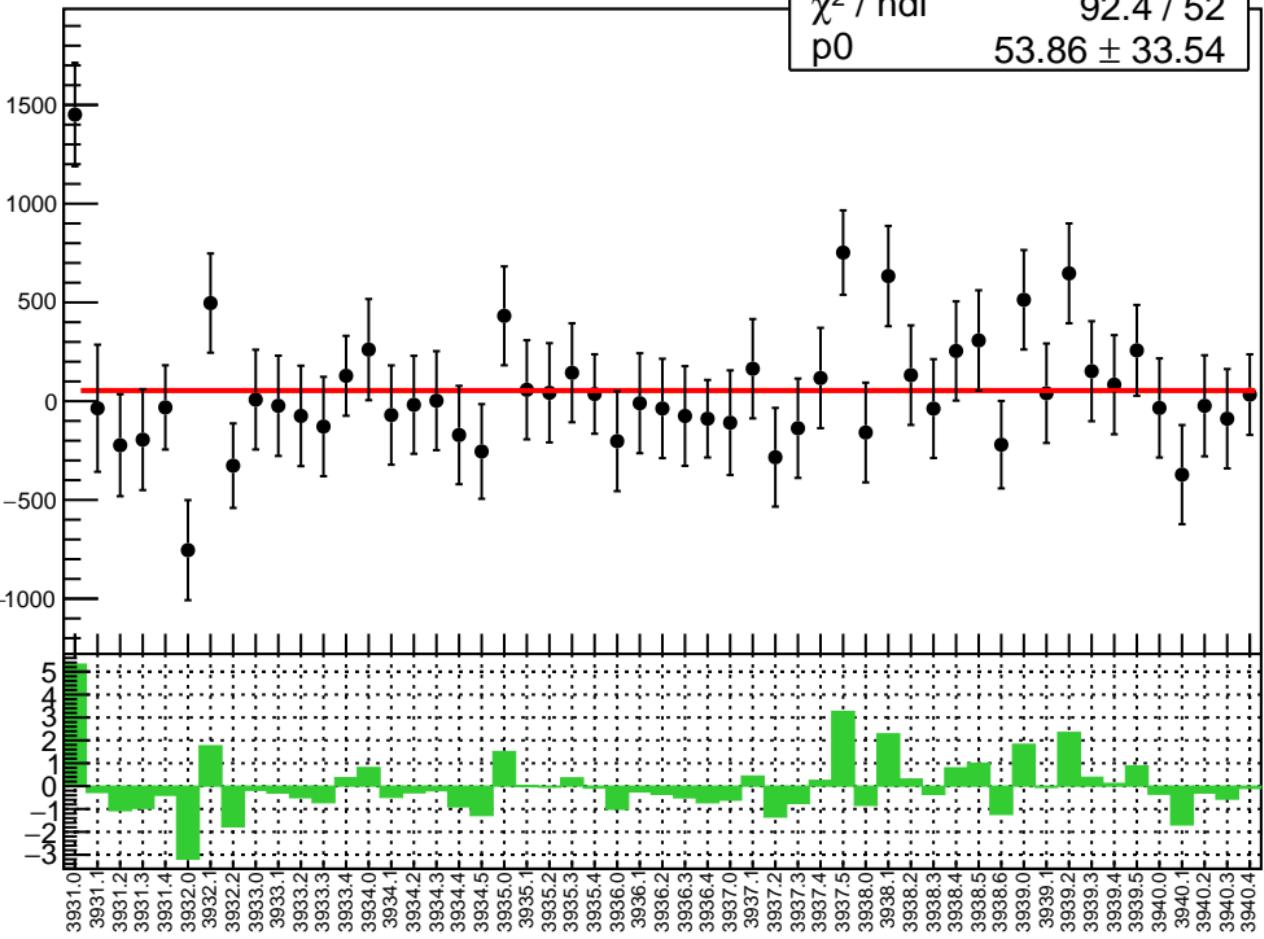
corr_usl_bpm1X RMS (ppm)

RMS (ppm)

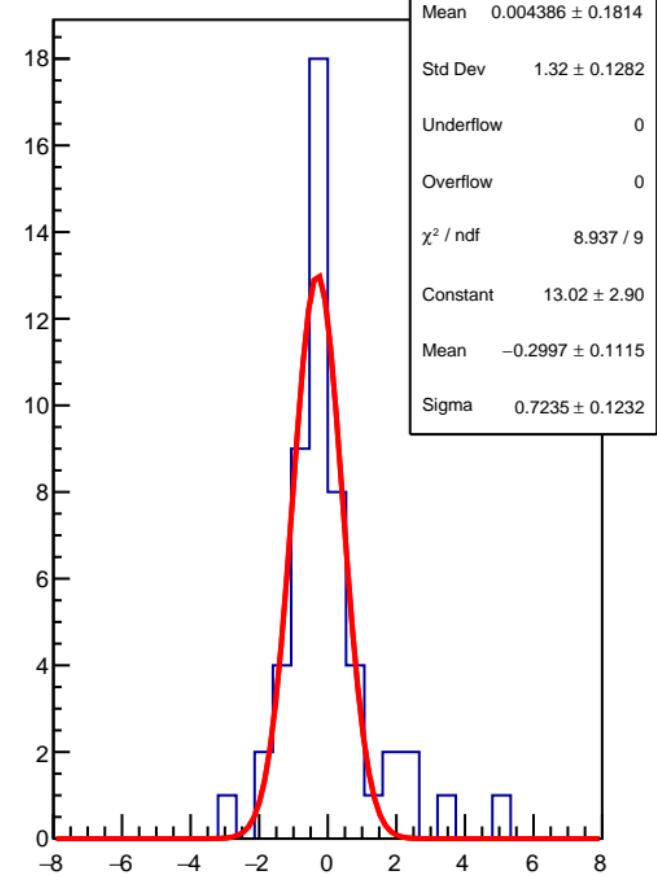


corr_usl_bpm1Y (ppb)

χ^2 / ndf 92.4 / 52
p0 53.86 ± 33.54

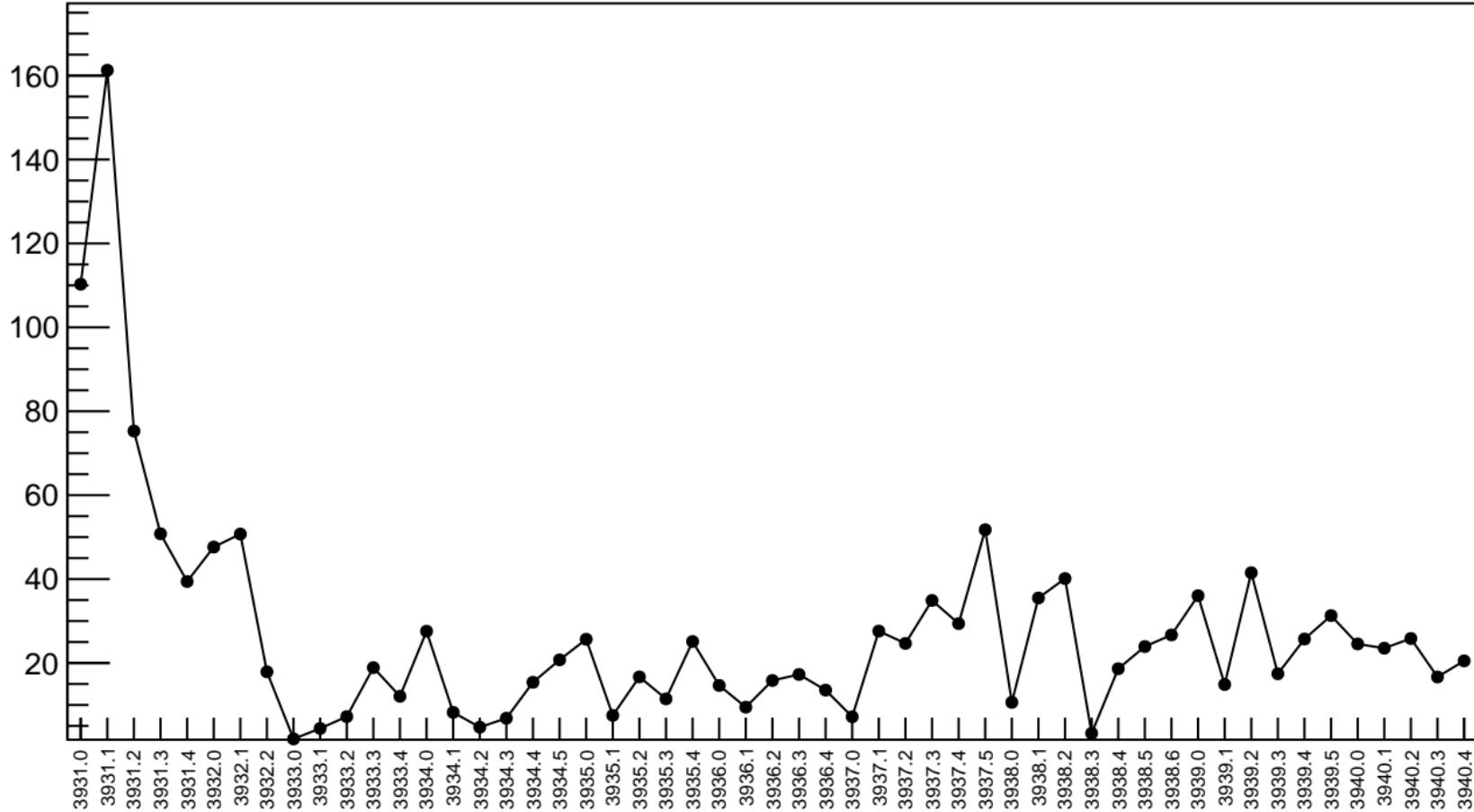


1D pull distribution



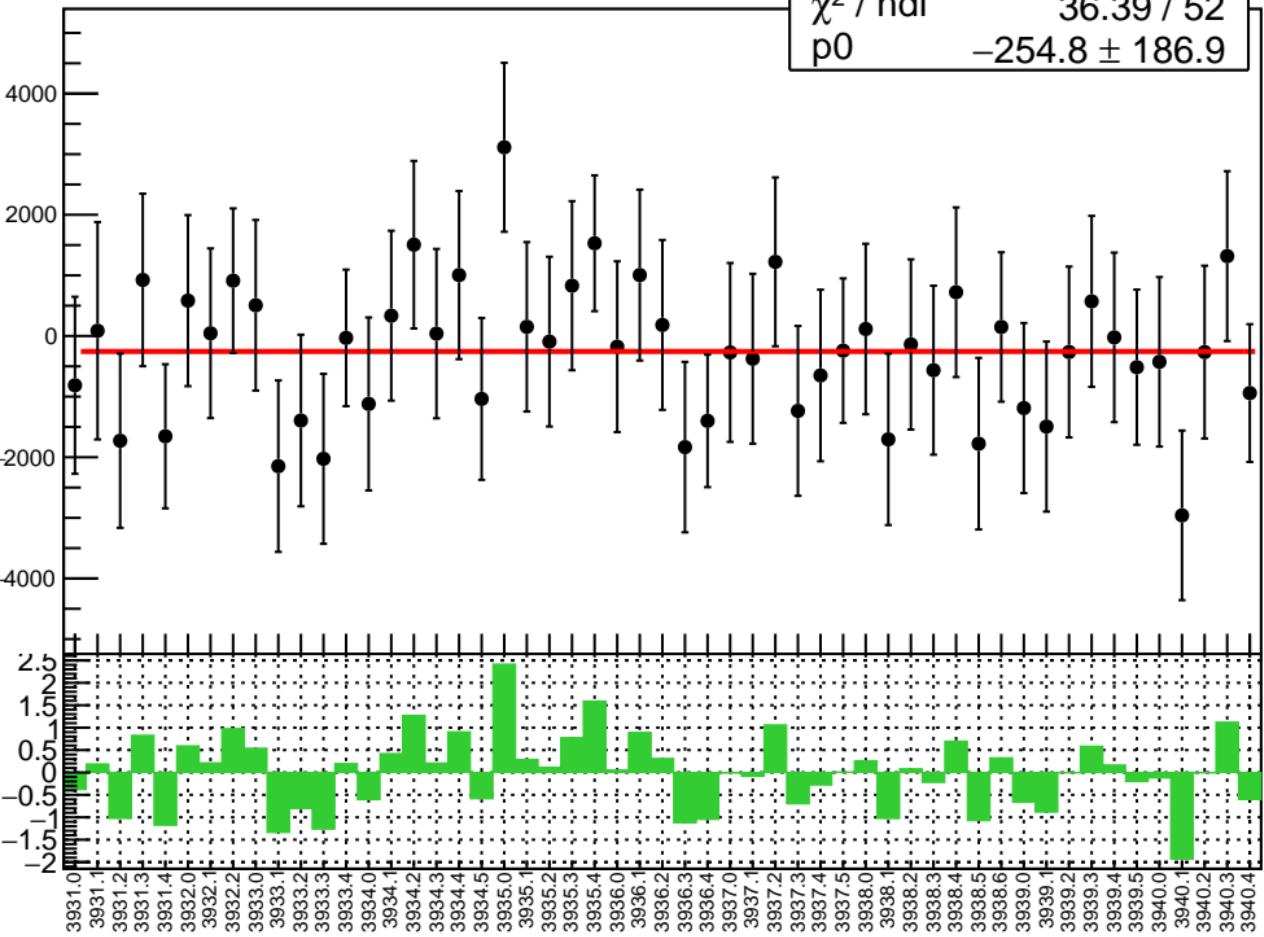
corr_usl_bpm1Y RMS (ppm)

RMS (ppm)

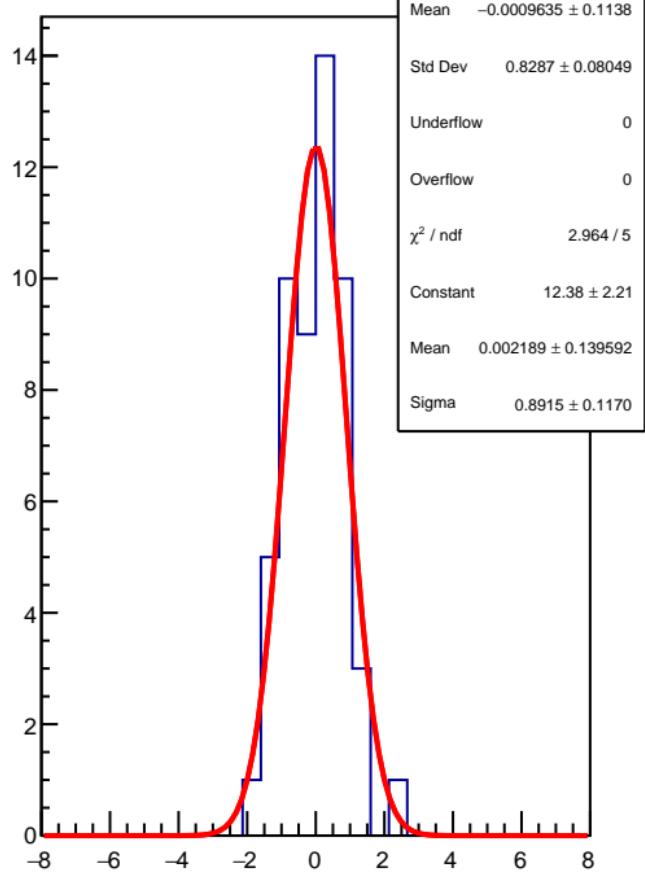


corr_usl_bpm16X (ppb)

χ^2 / ndf 36.39 / 52
p0 -254.8 ± 186.9

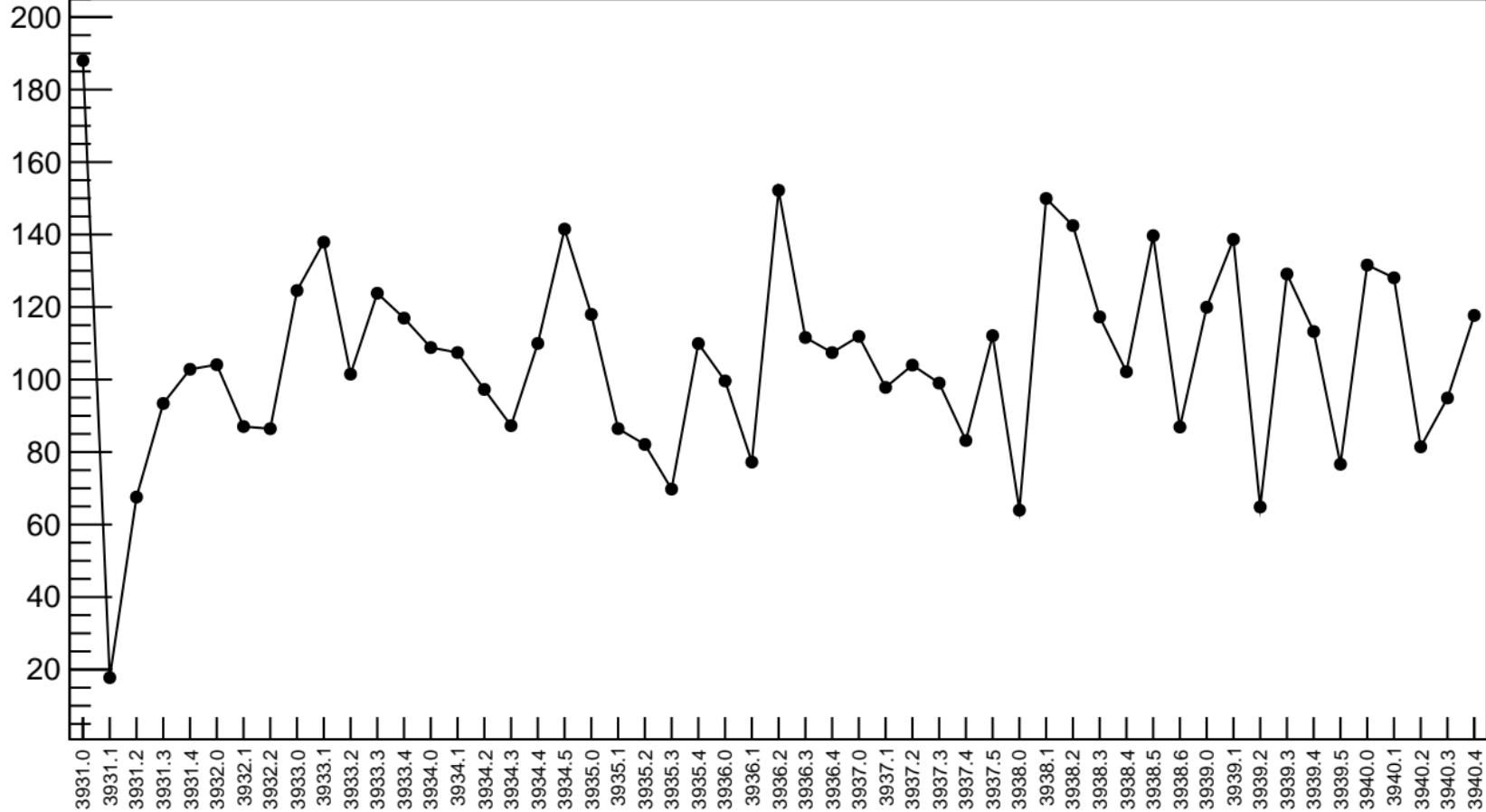


1D pull distribution



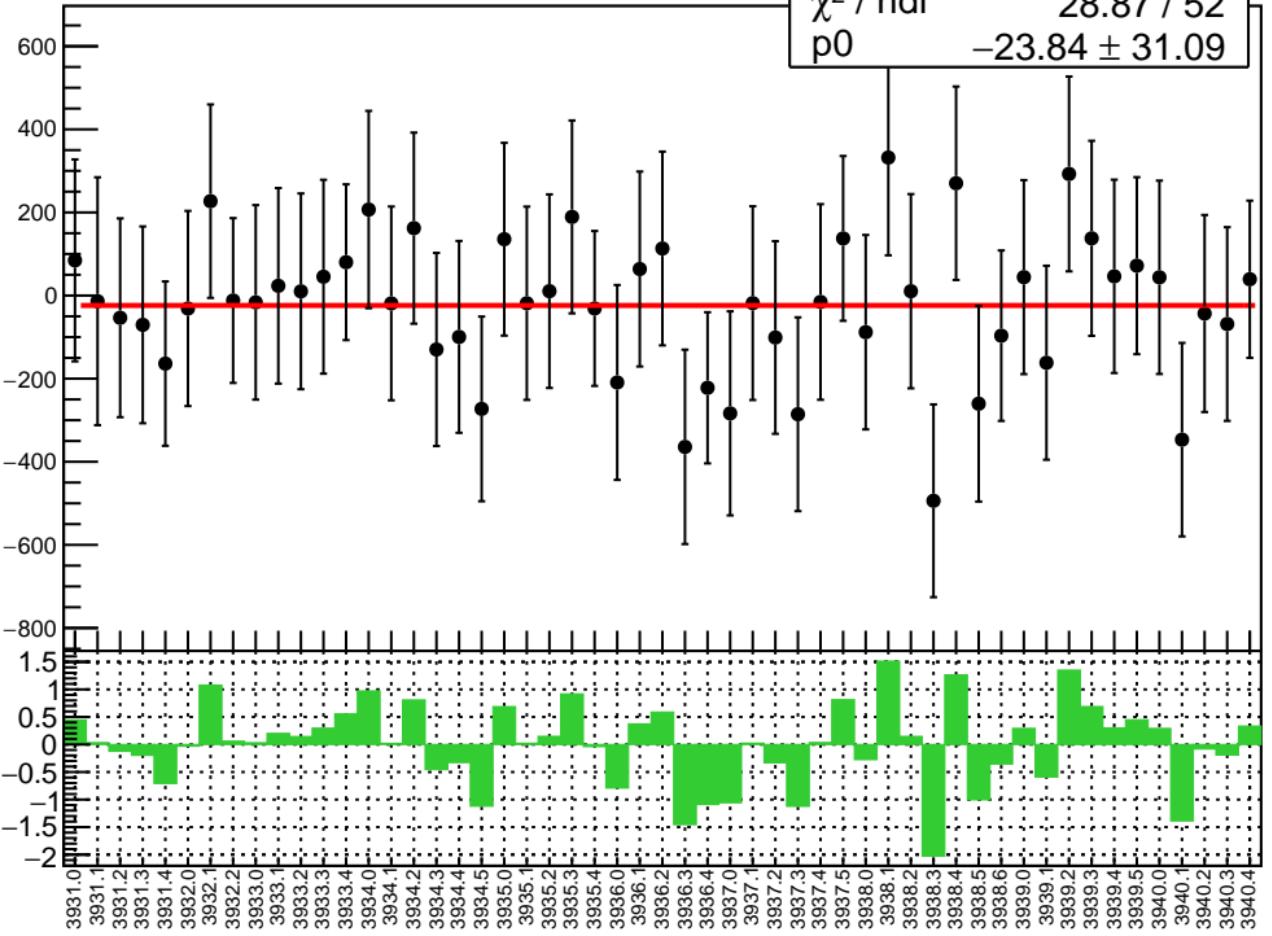
corr_usl_bpm16X RMS (ppm)

RMS (ppm)

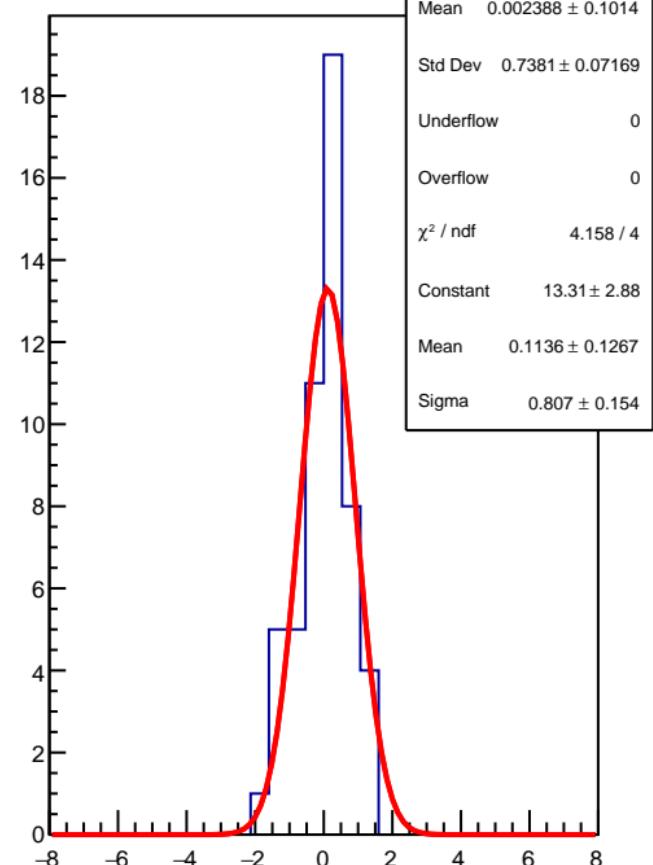


corr_usl_bpm16Y (ppb)

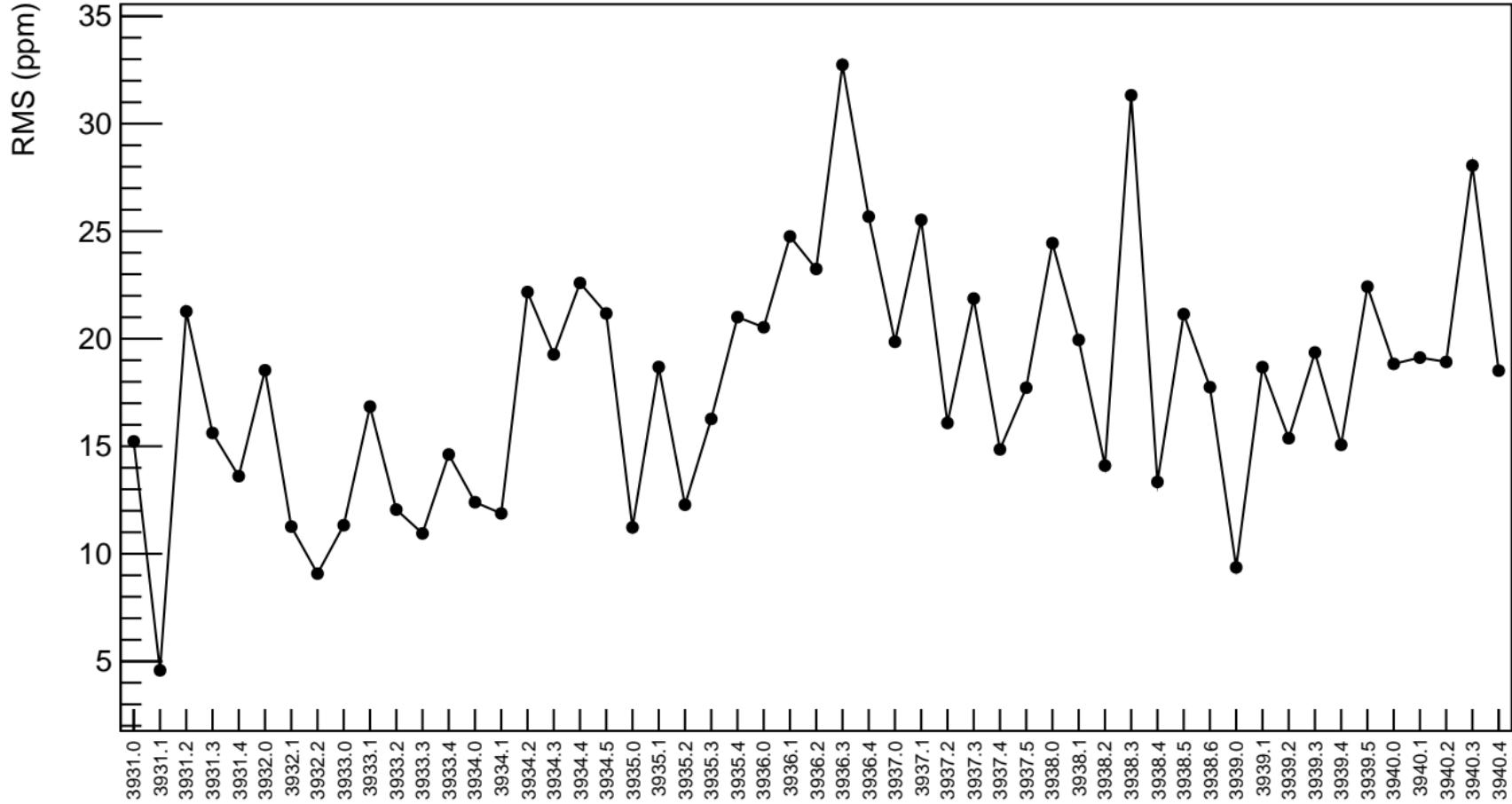
χ^2 / ndf 28.87 / 52
p0 -23.84 ± 31.09



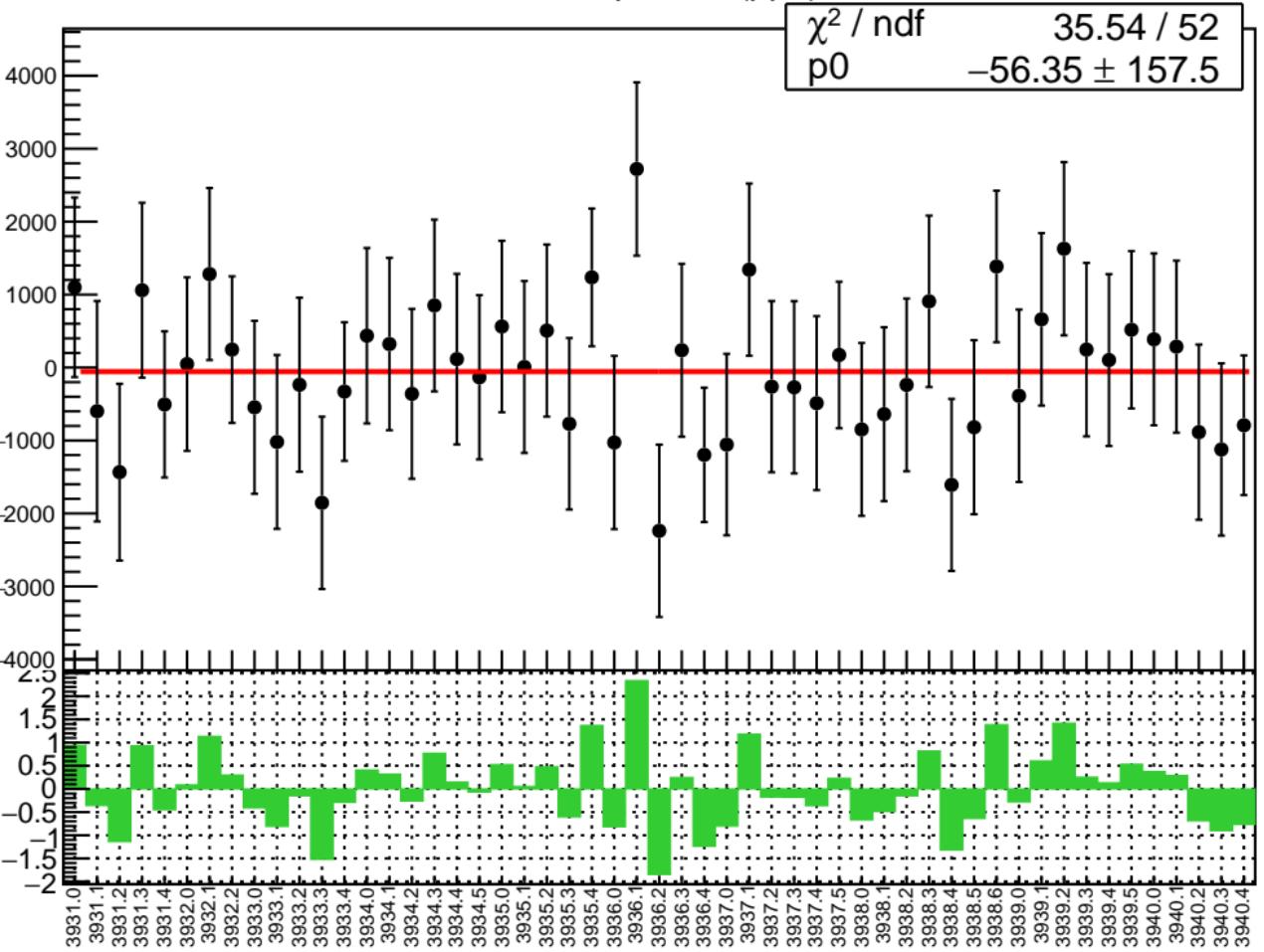
1D pull distribution



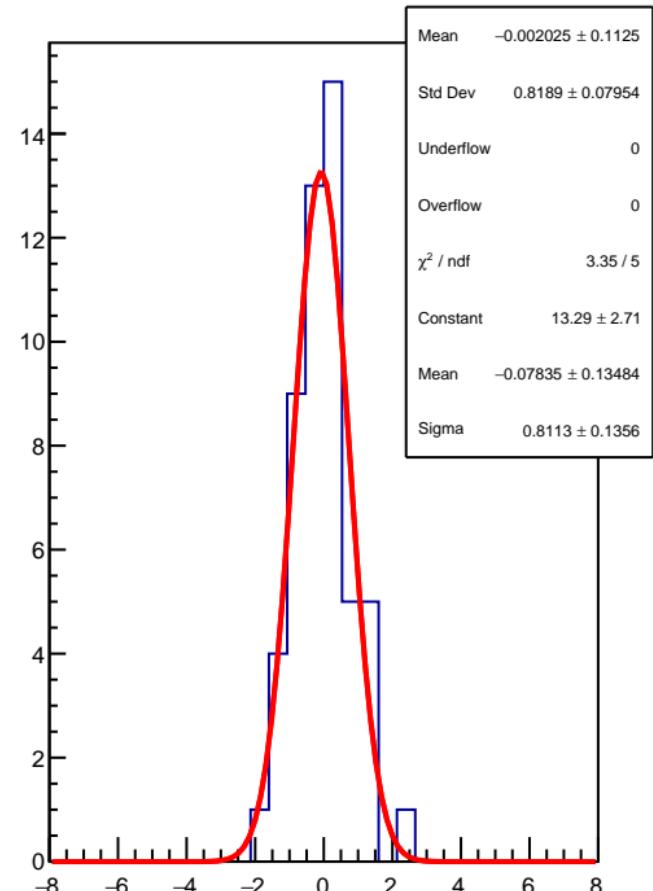
corr_usl_bpm16Y RMS (ppm)



corr_usl_bpm12X (ppb)

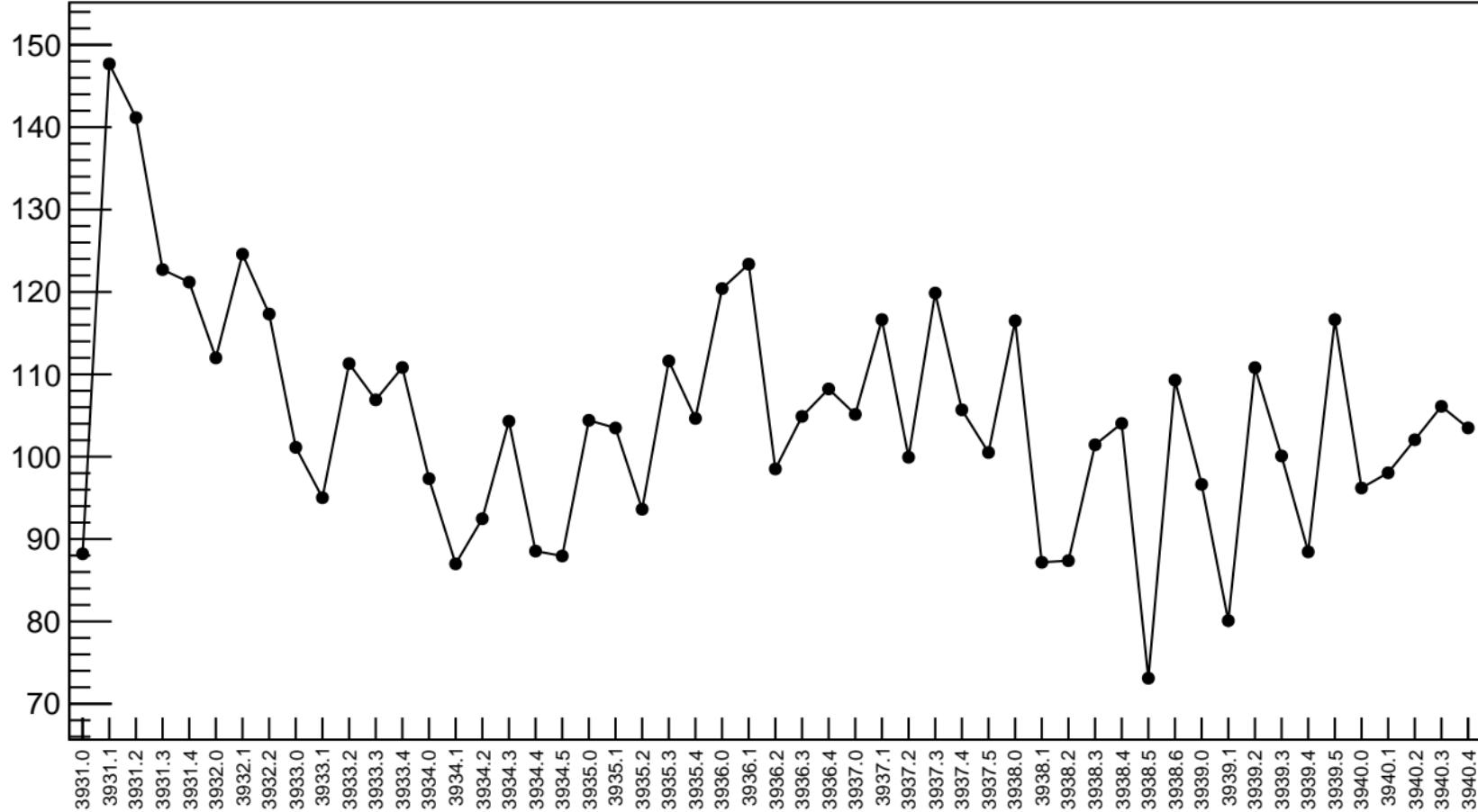


1D pull distribution



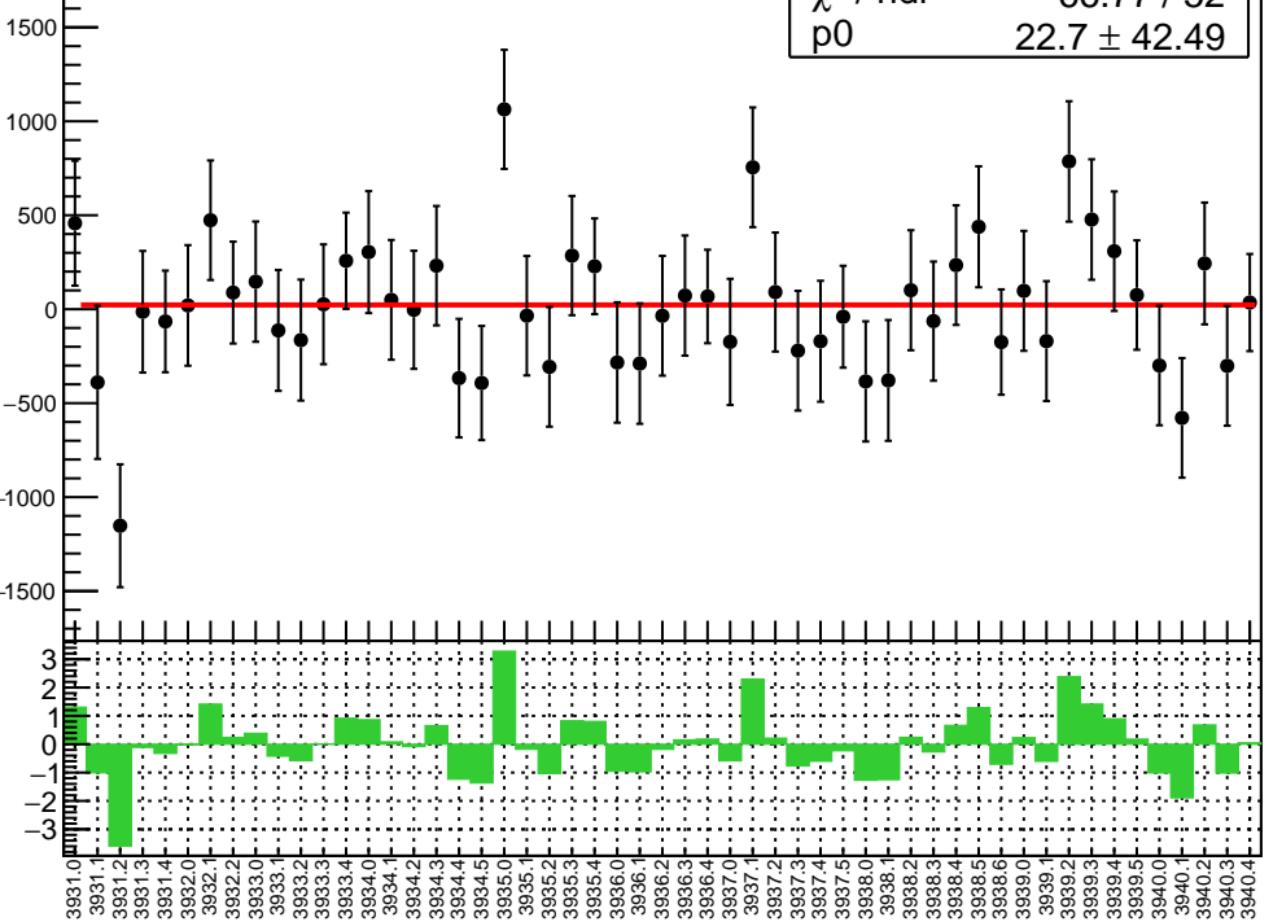
corr_usl_bpm12X RMS (ppm)

RMS (ppm)

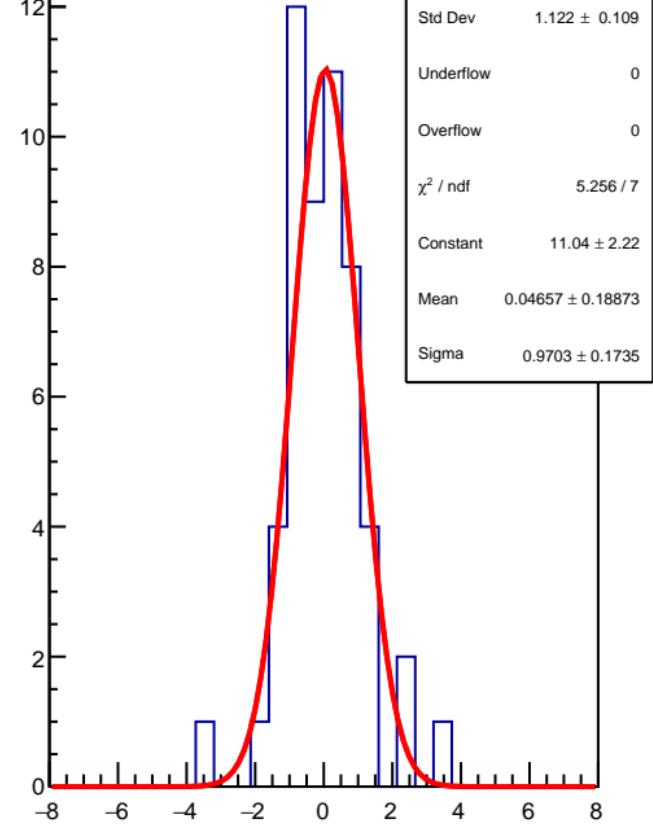


corr_usl_bpm12Y (ppb)

χ^2 / ndf 66.77 / 52
p0 22.7 ± 42.49

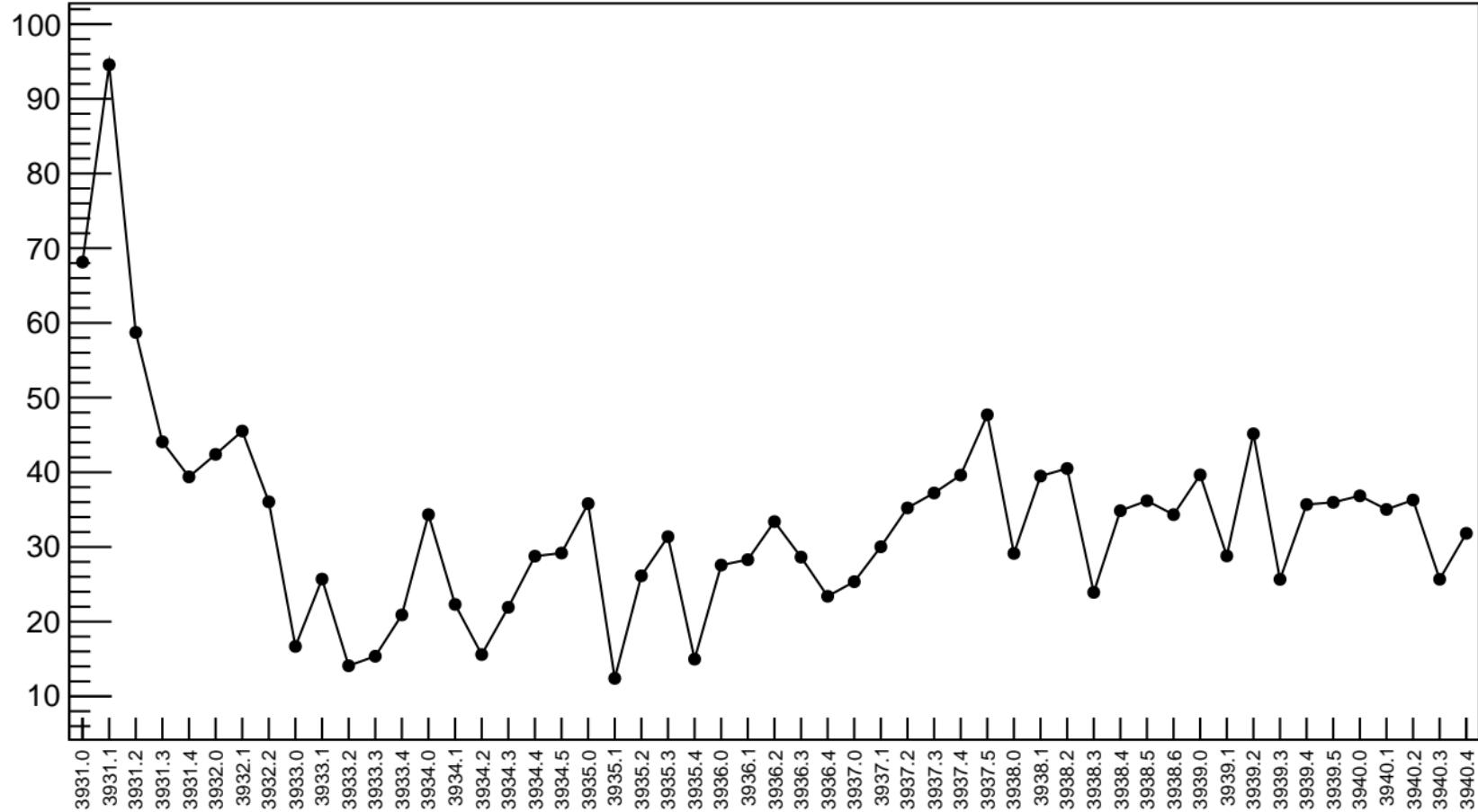


1D pull distribution

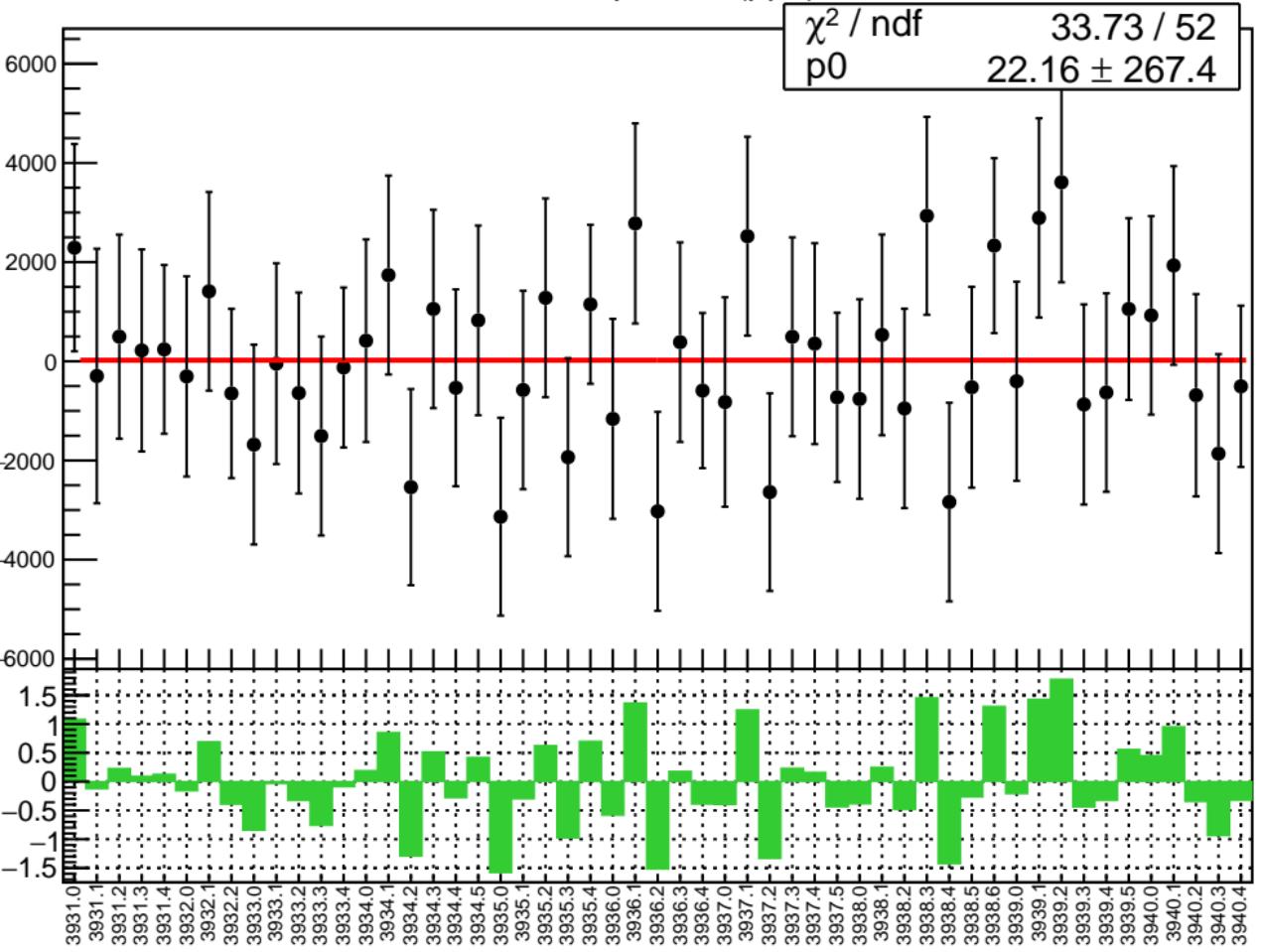


corr_usl_bpm12Y RMS (ppm)

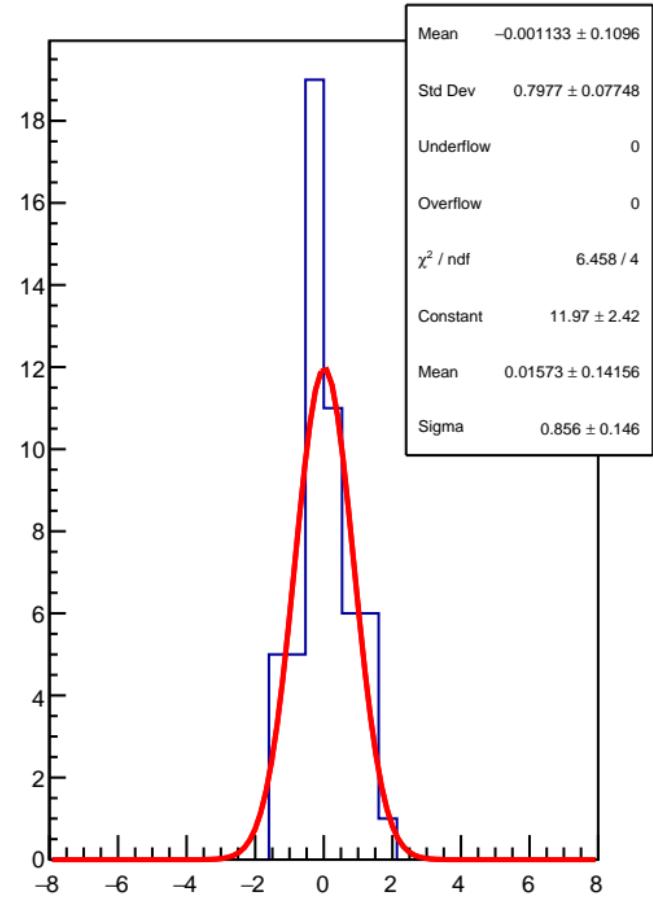
RMS (ppm)



corr_usl_bpm11X (ppb)

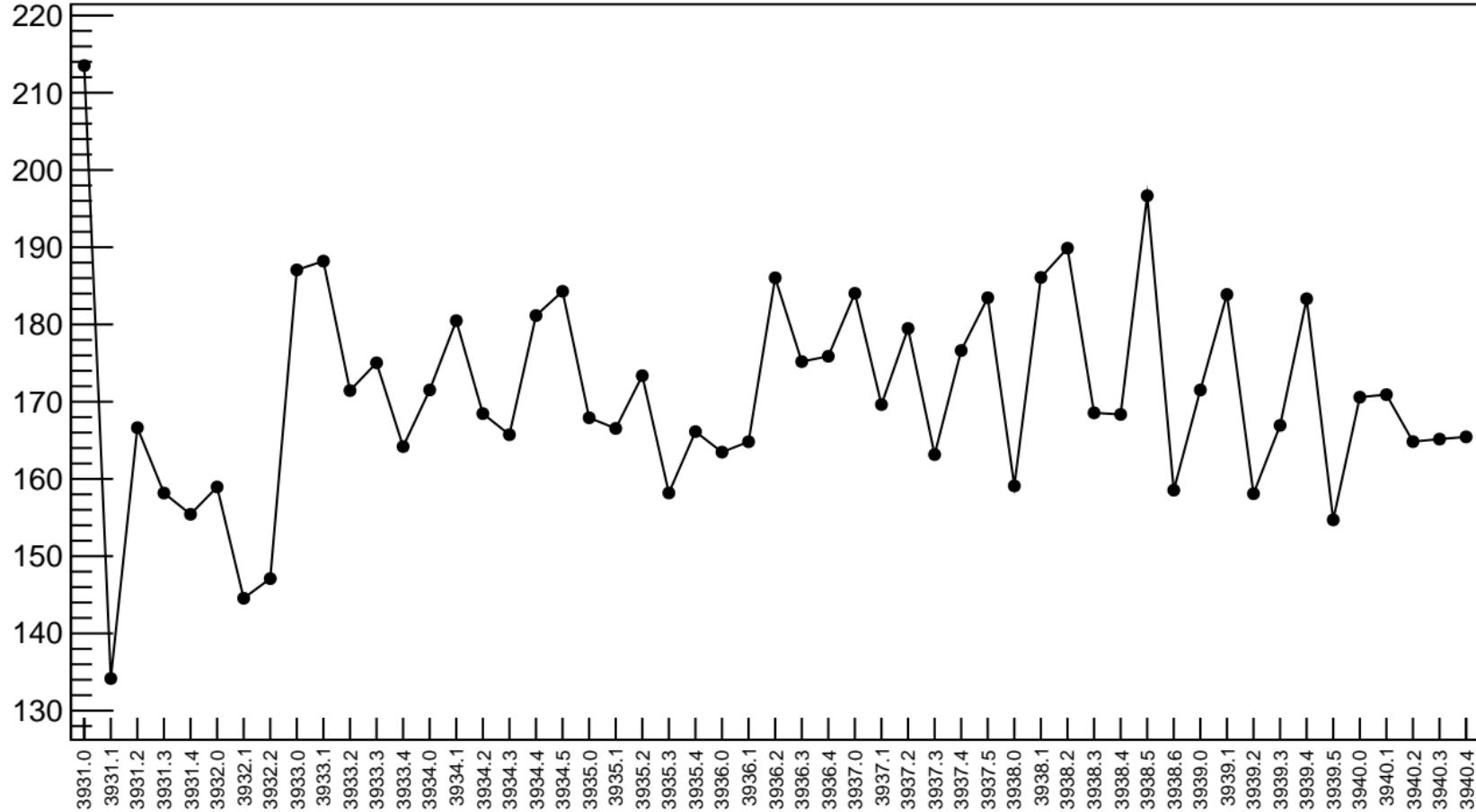


1D pull distribution

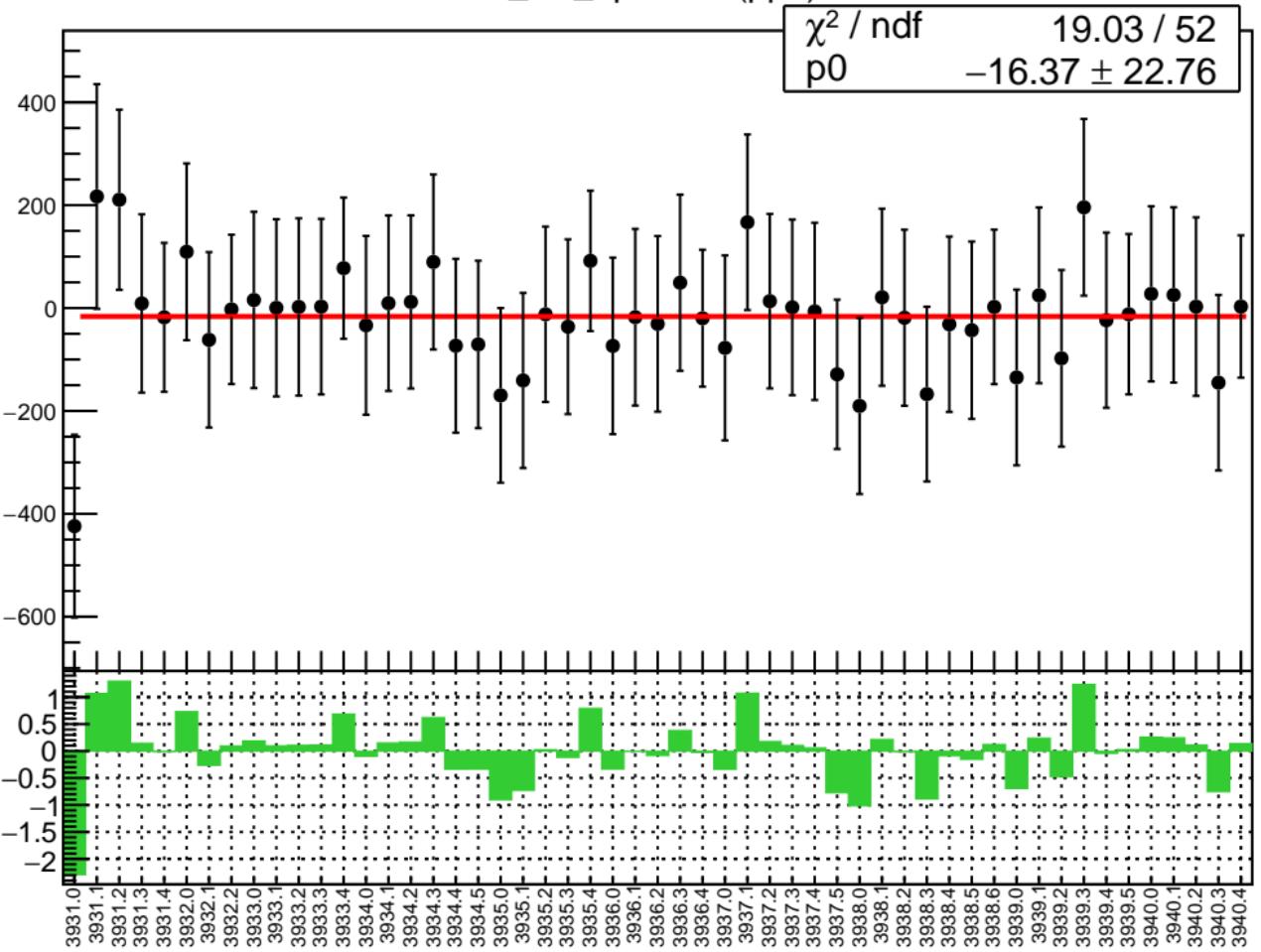


corr_usl_bpm11X RMS (ppm)

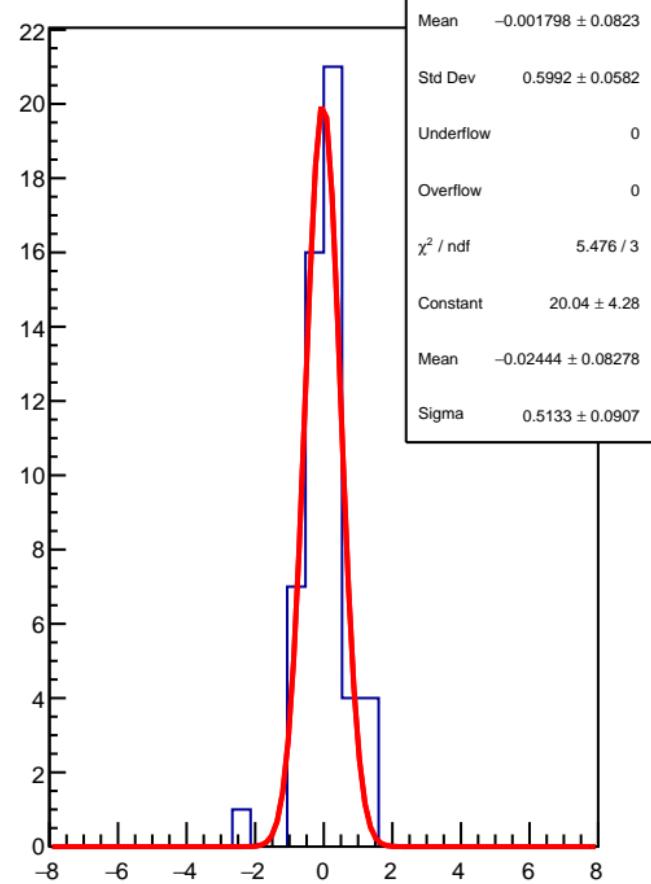
RMS (ppm)



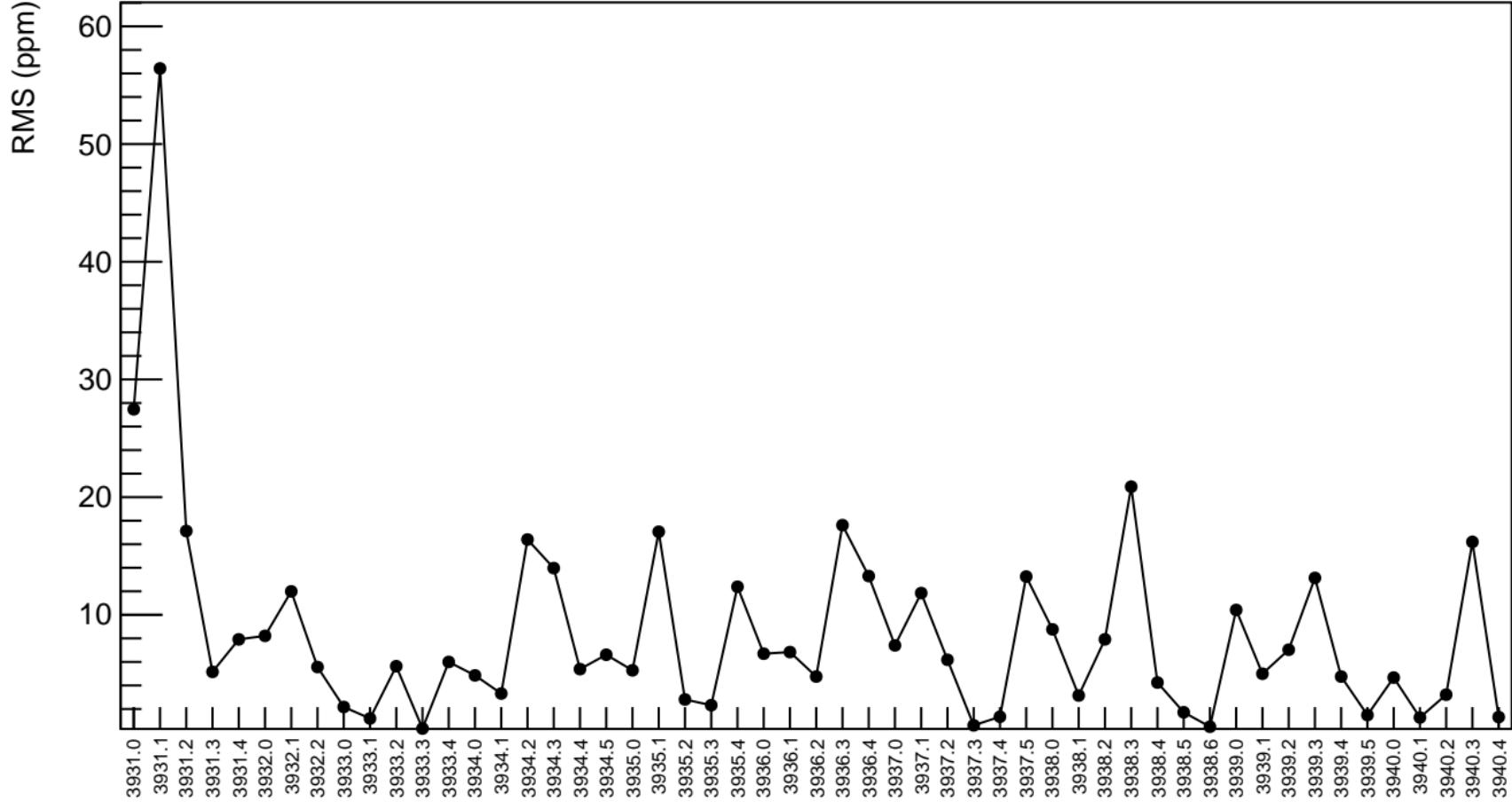
corr_usl_bpm11Y (ppb)



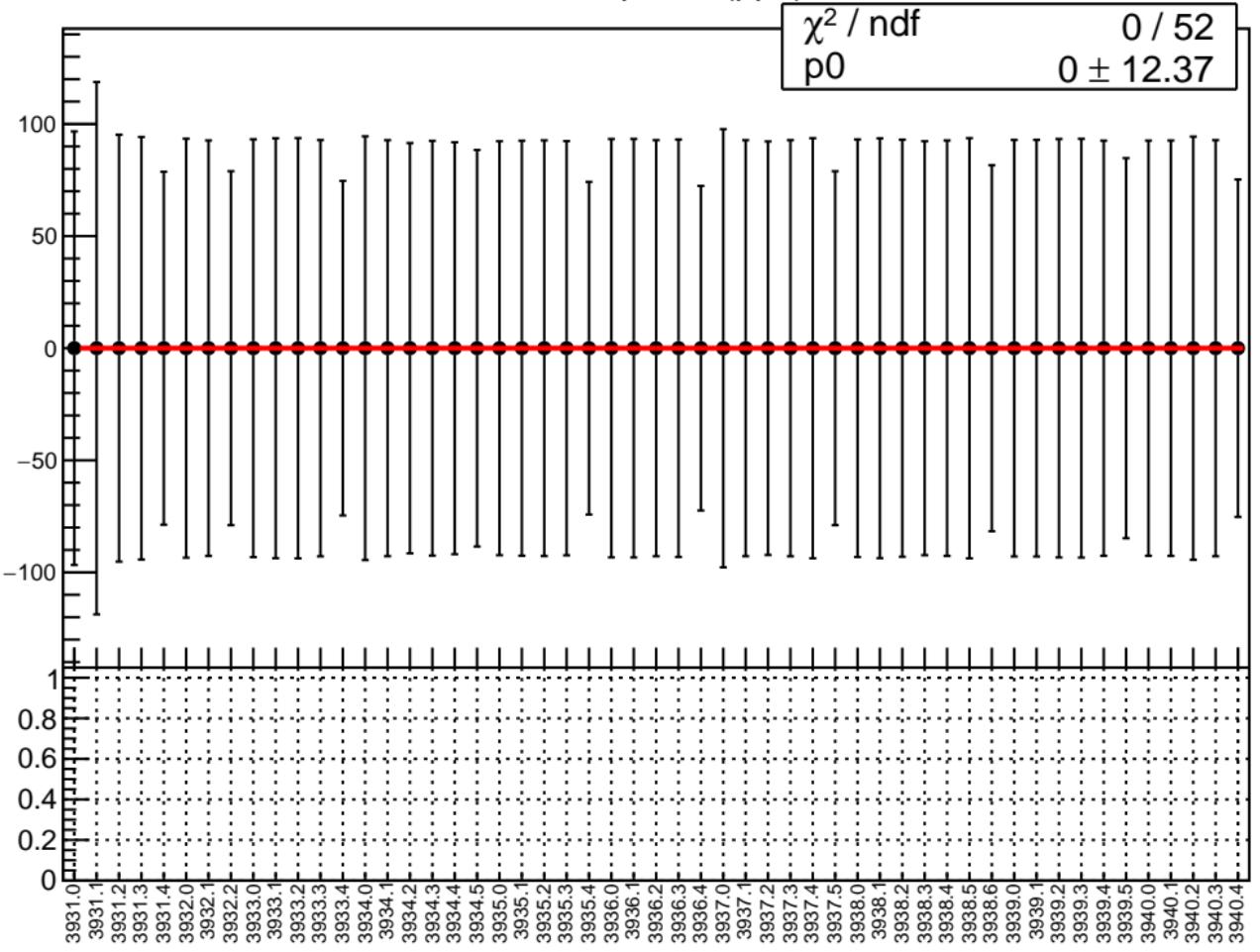
1D pull distribution



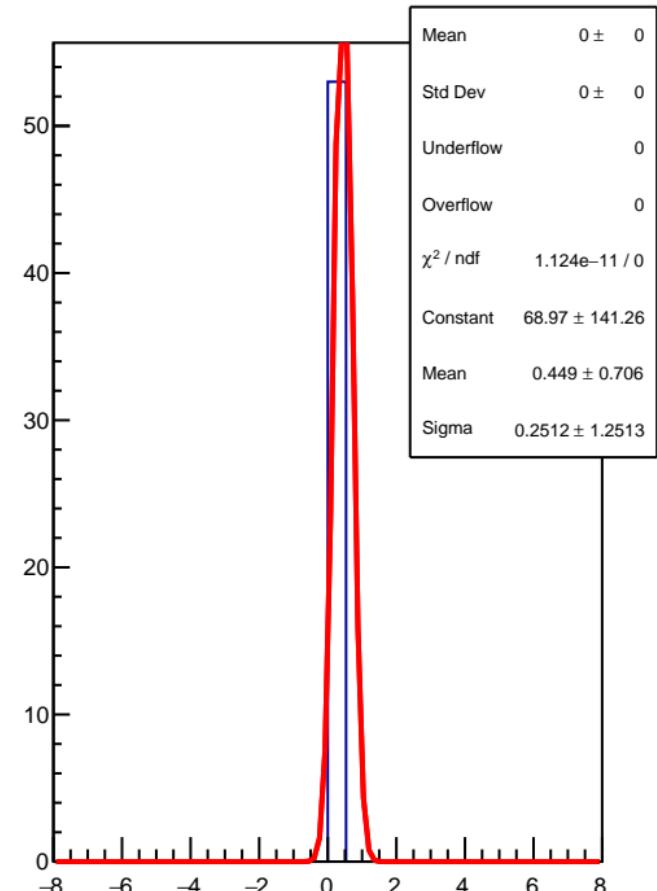
corr_usl_bpm11Y RMS (ppm)



corr_usl_bpm8X (ppb)

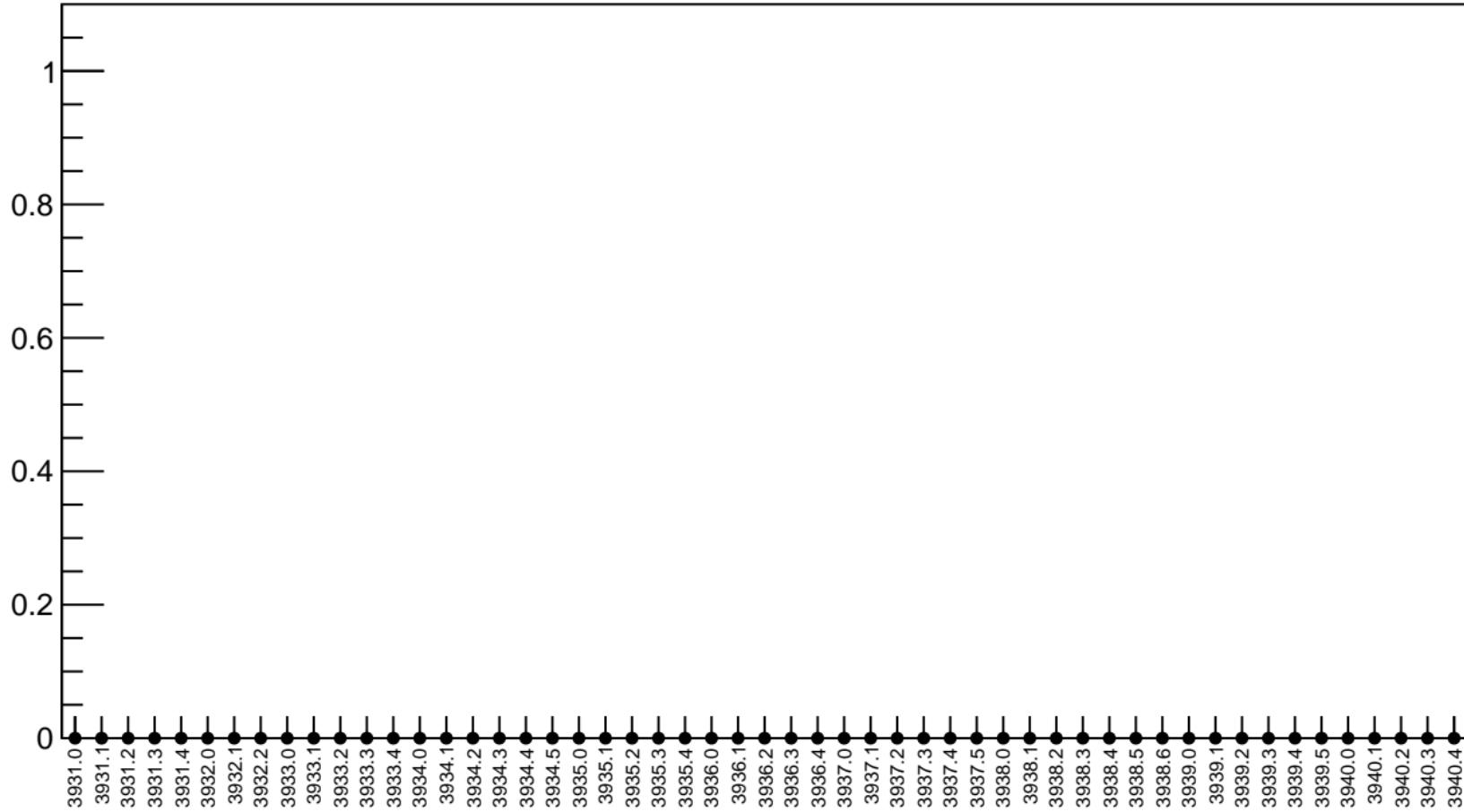


1D pull distribution

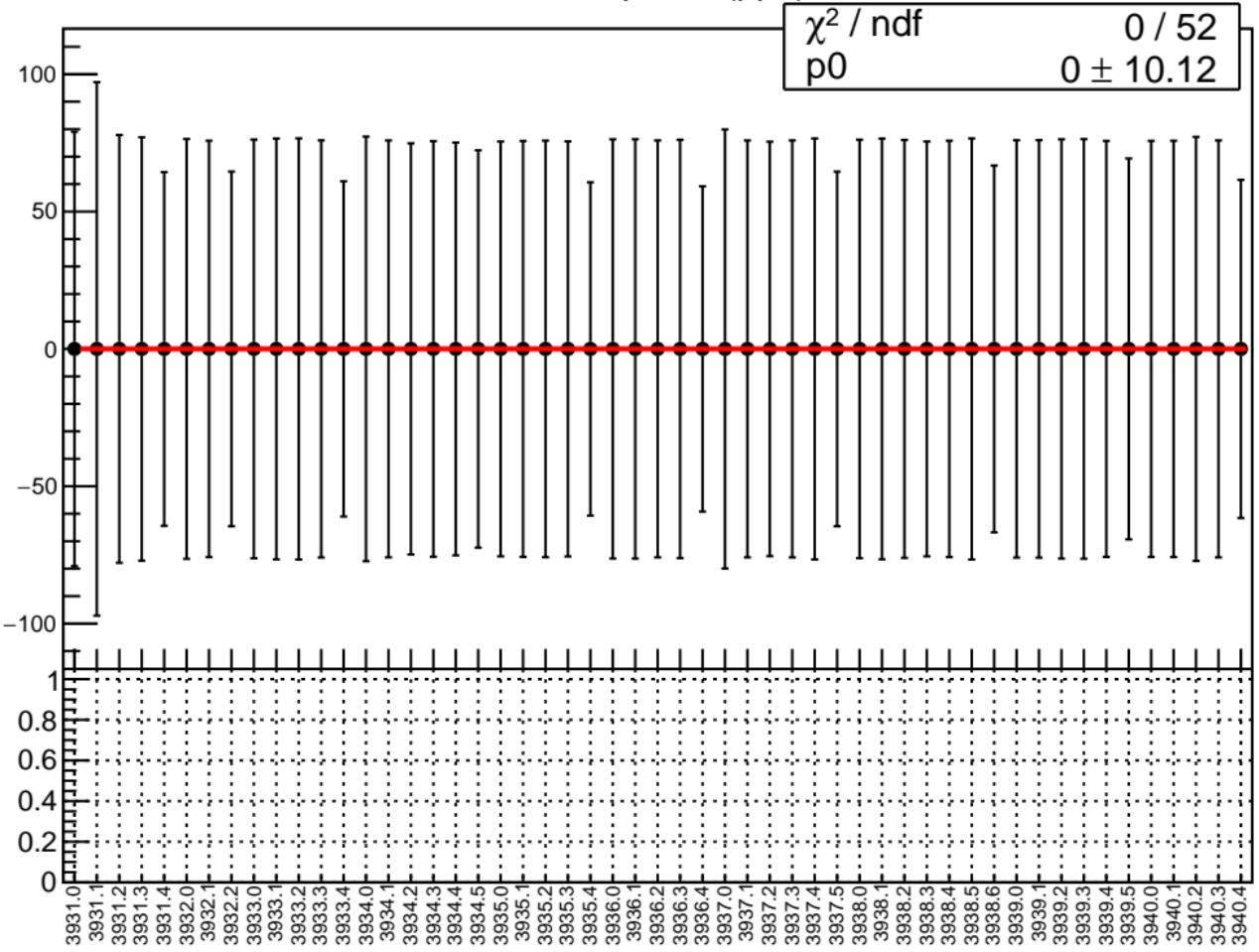


corr_usl_bpm8X RMS (ppm)

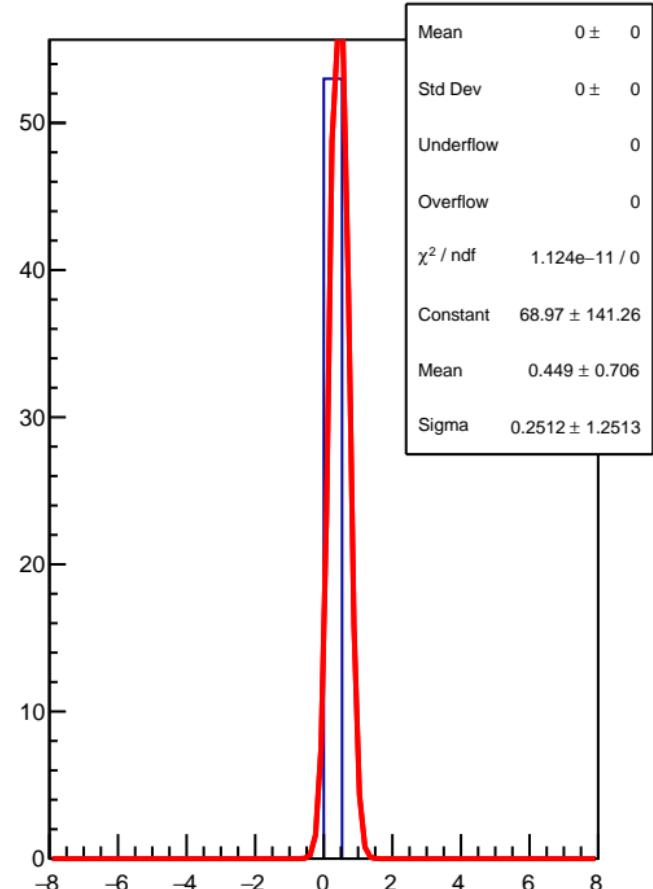
RMS (ppm)



corr_usl_bpm8Y (ppb)

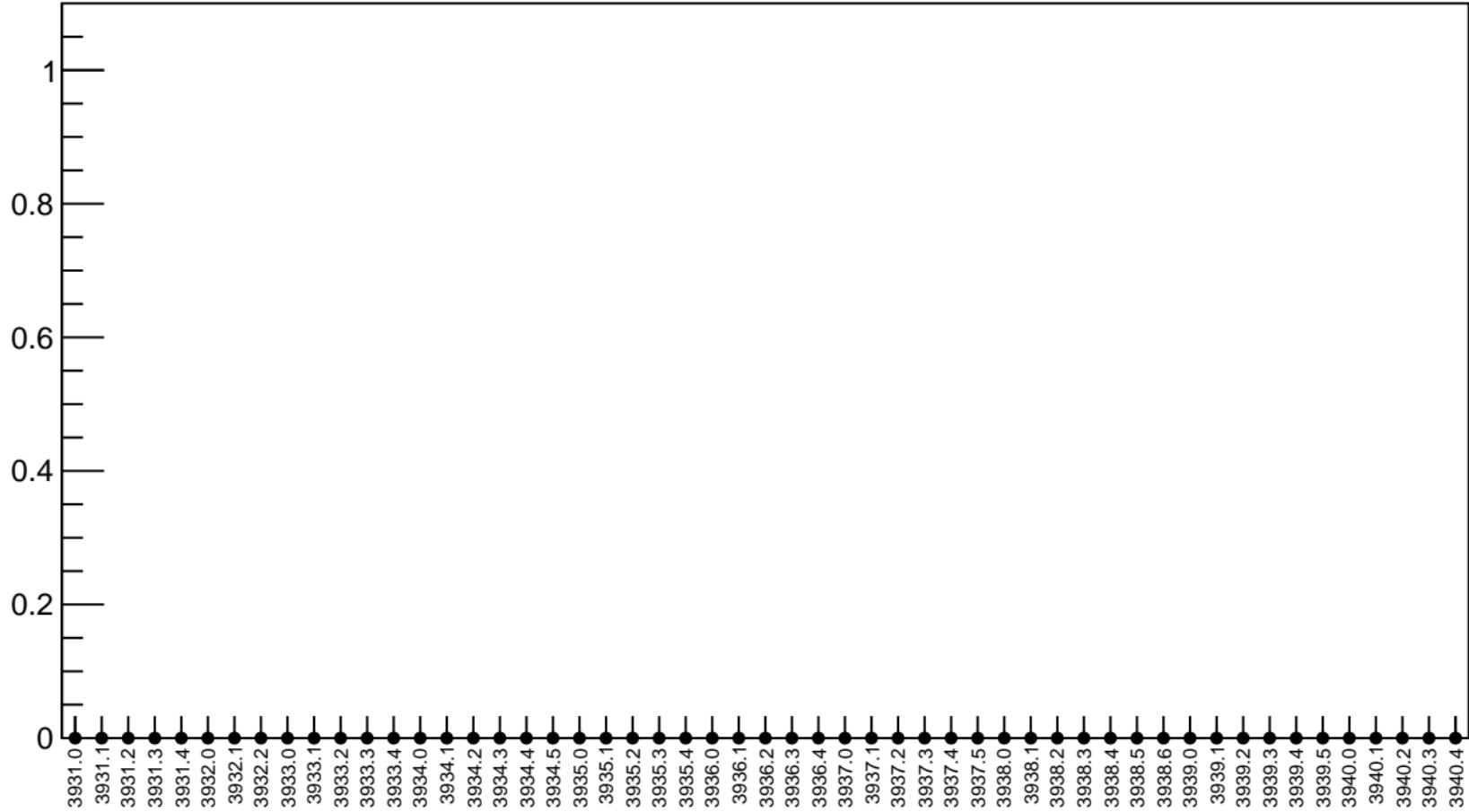


1D pull distribution

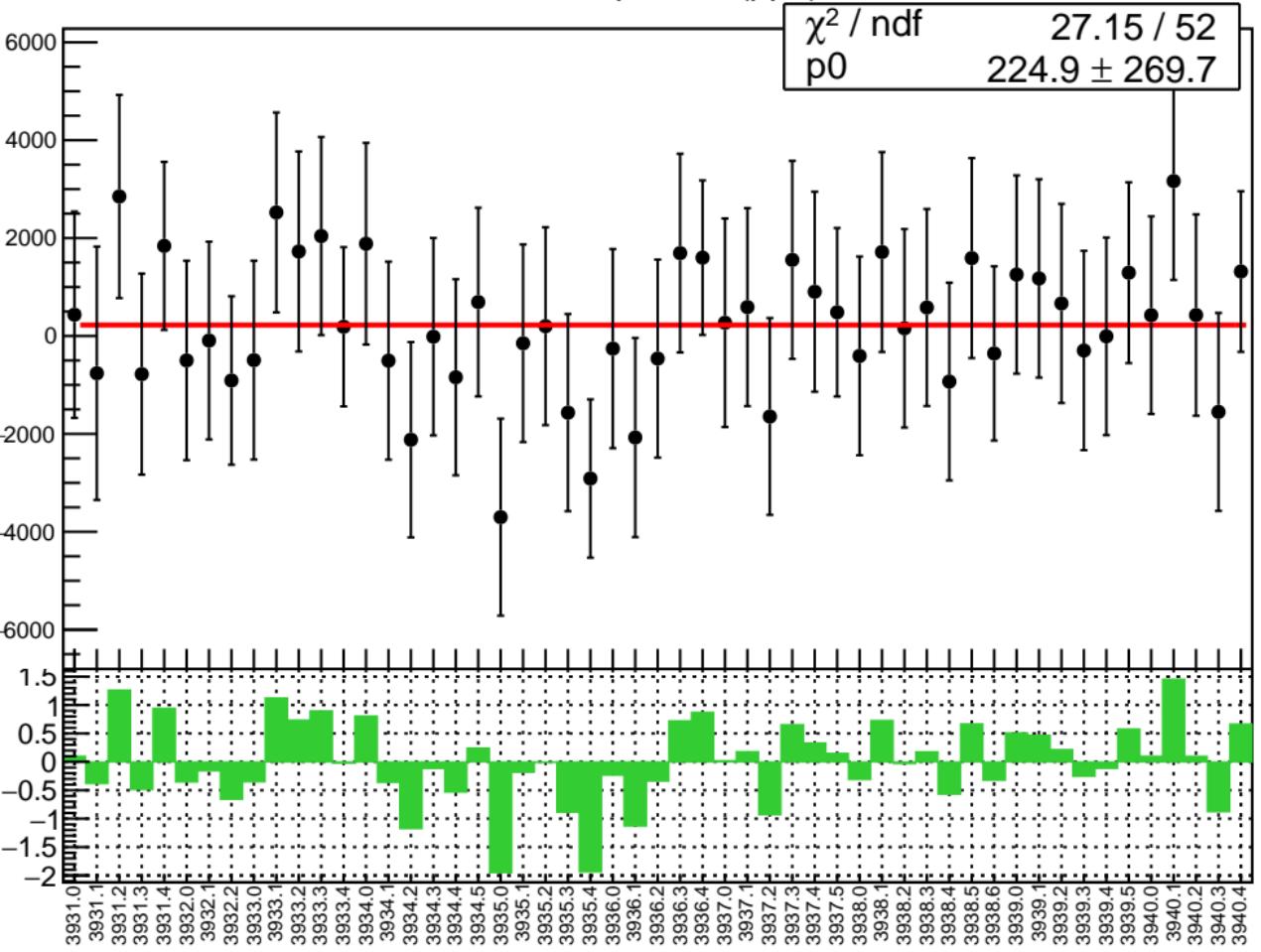


corr_usl_bpm8Y RMS (ppm)

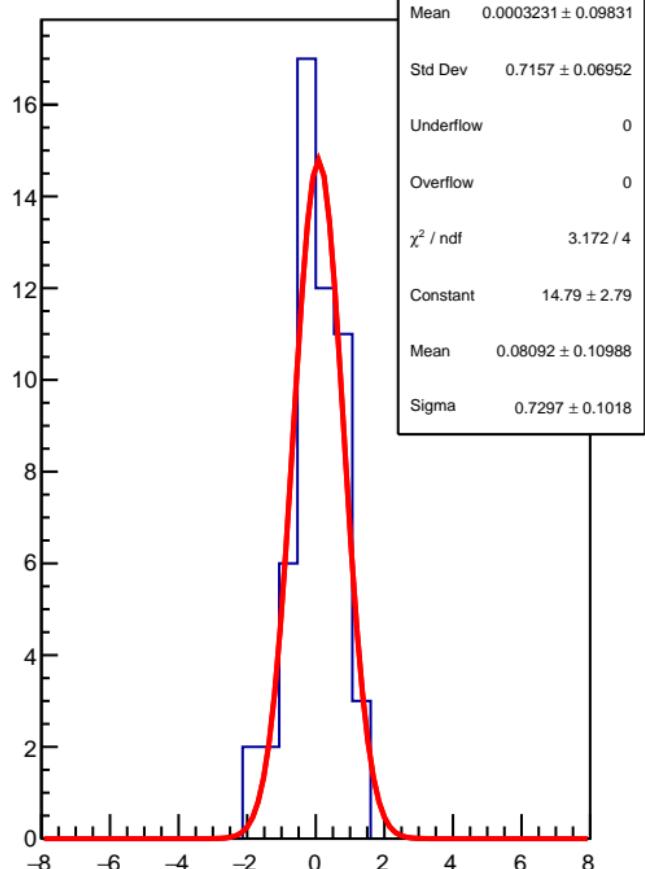
RMS (ppm)



corr_usr_bpm4eX (ppb)

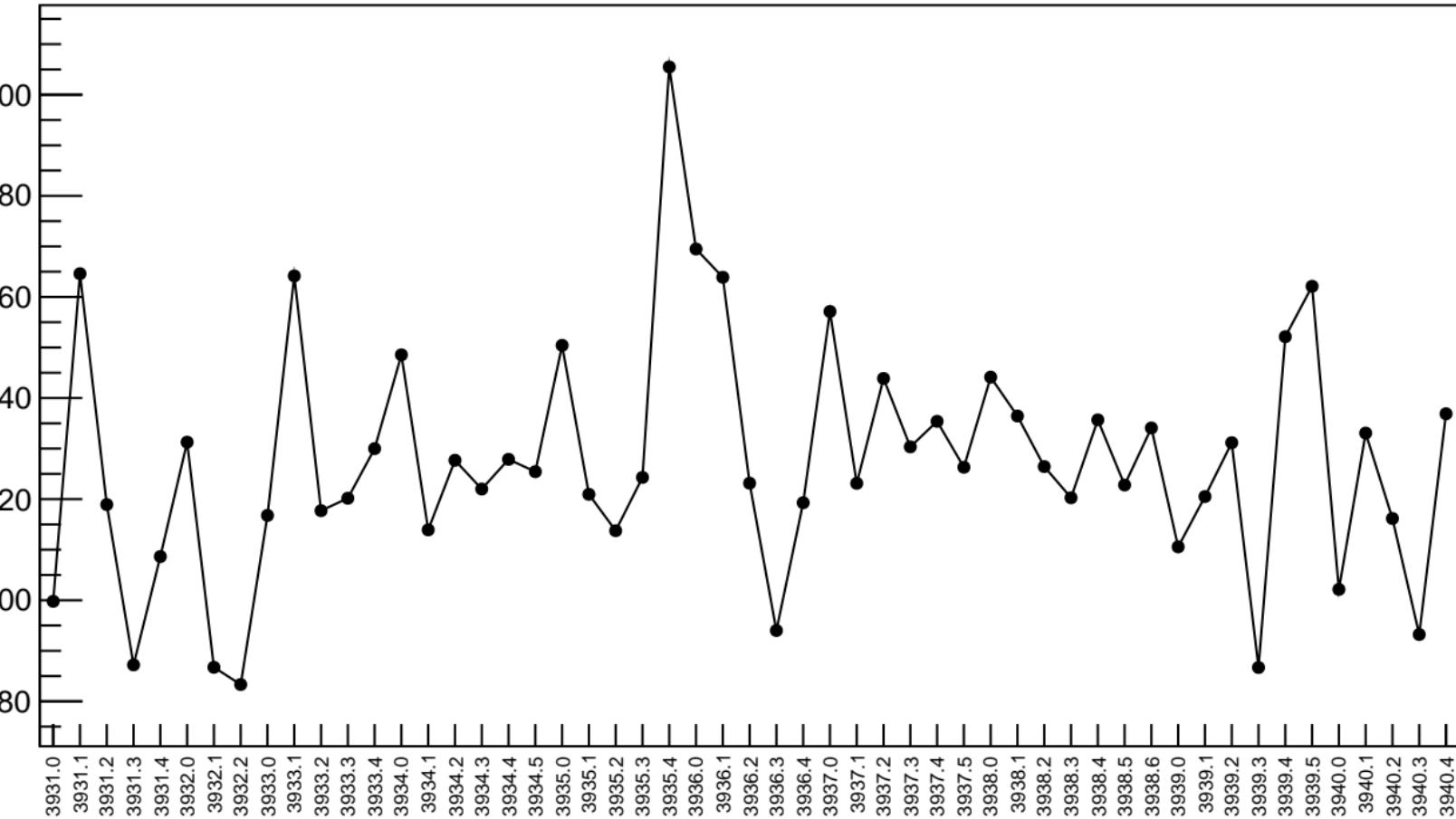


1D pull distribution



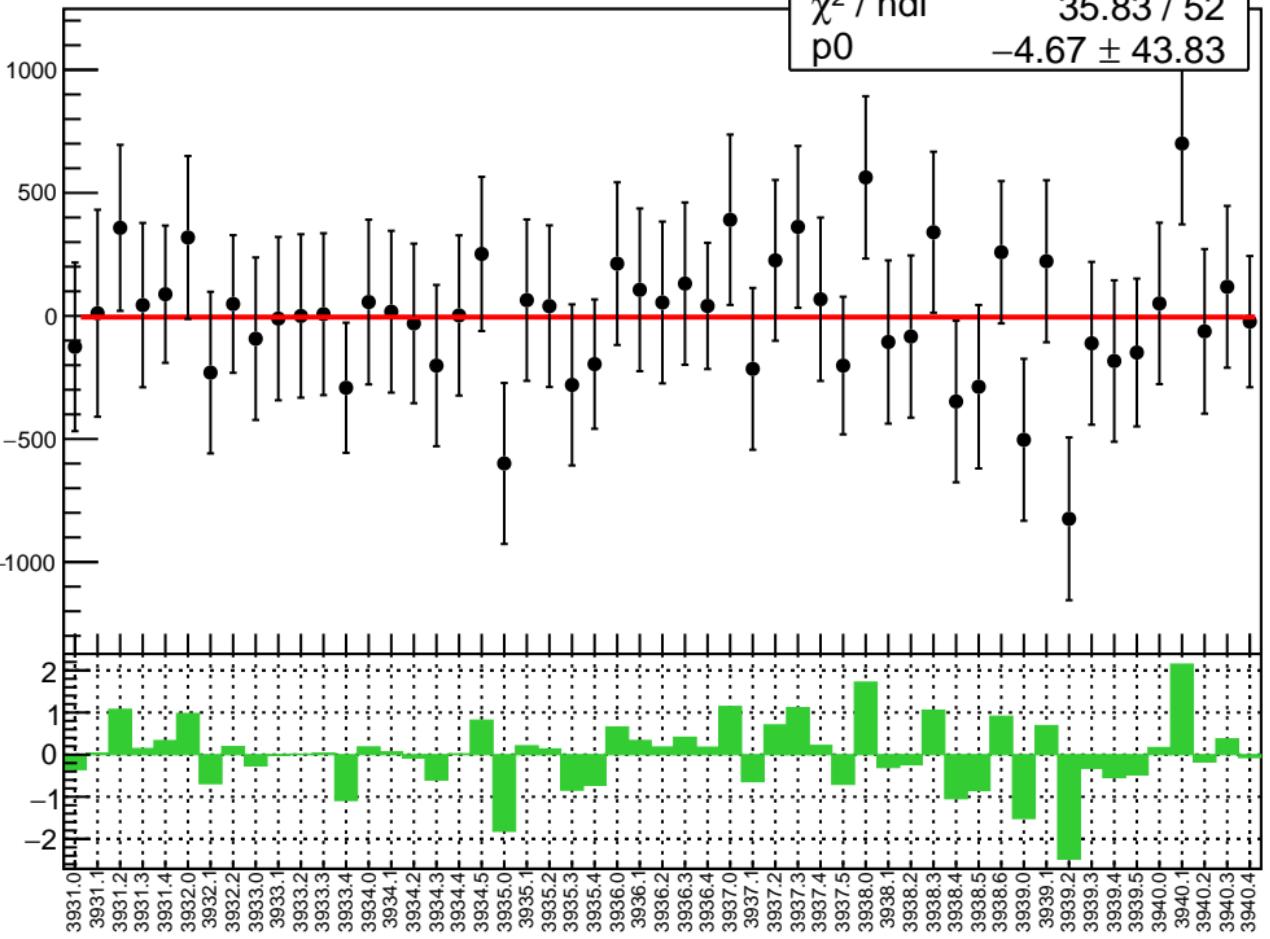
corr_usr_bpm4eX RMS (ppm)

RMS (ppm)

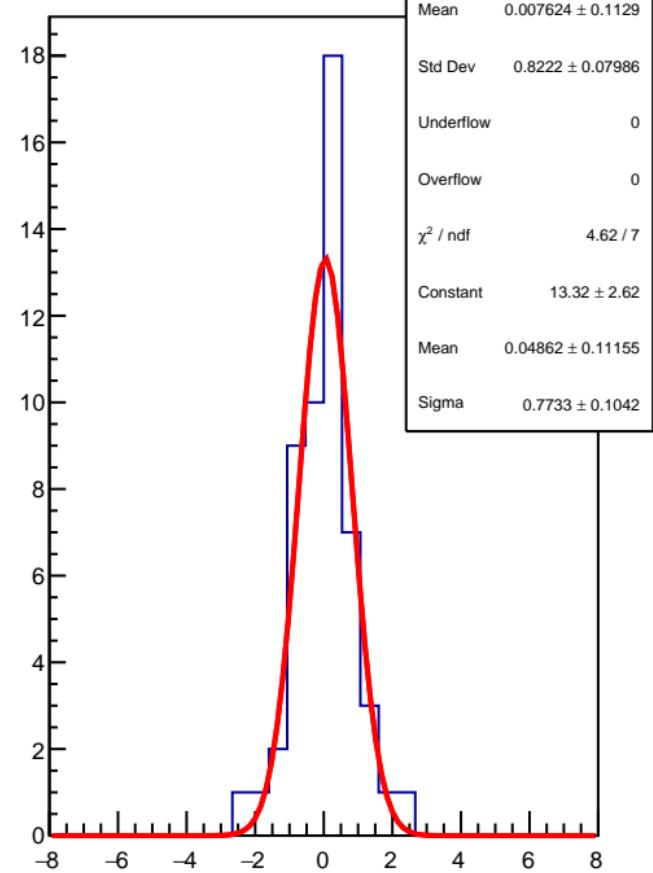


corr_usr_bpm4eY (ppb)

χ^2 / ndf 35.83 / 52
p0 -4.67 ± 43.83

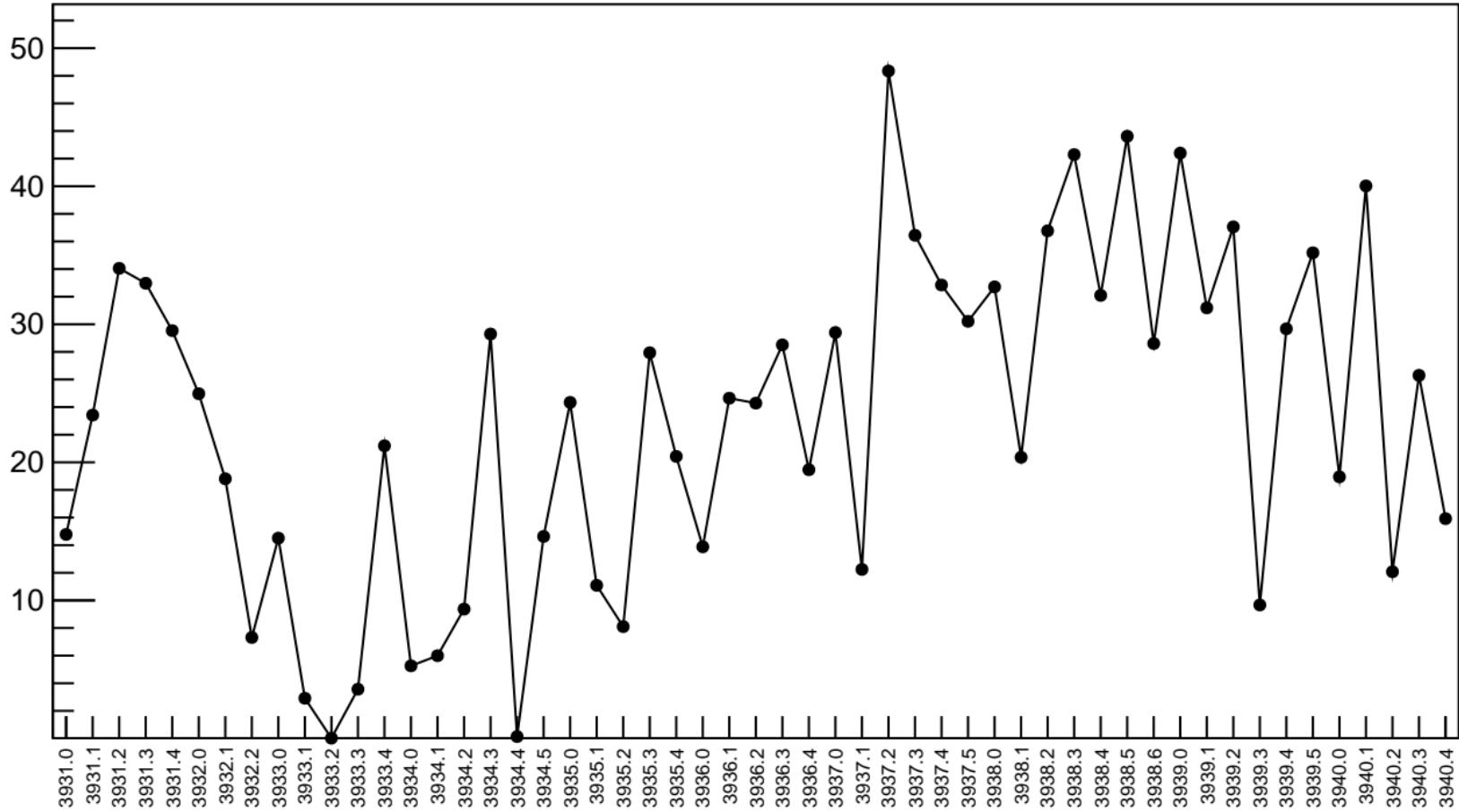


1D pull distribution



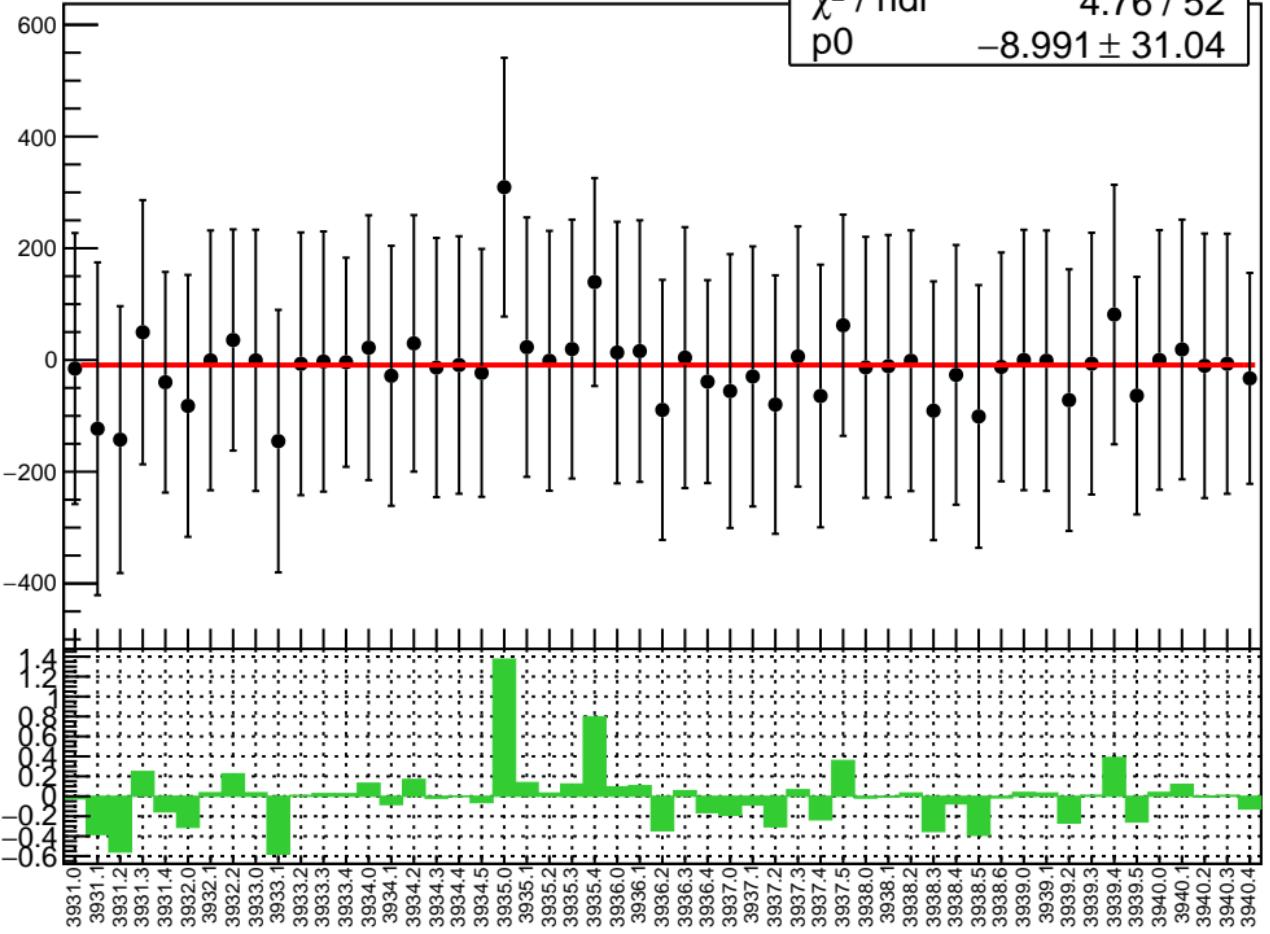
corr_usr_bpm4eY RMS (ppm)

RMS (ppm)

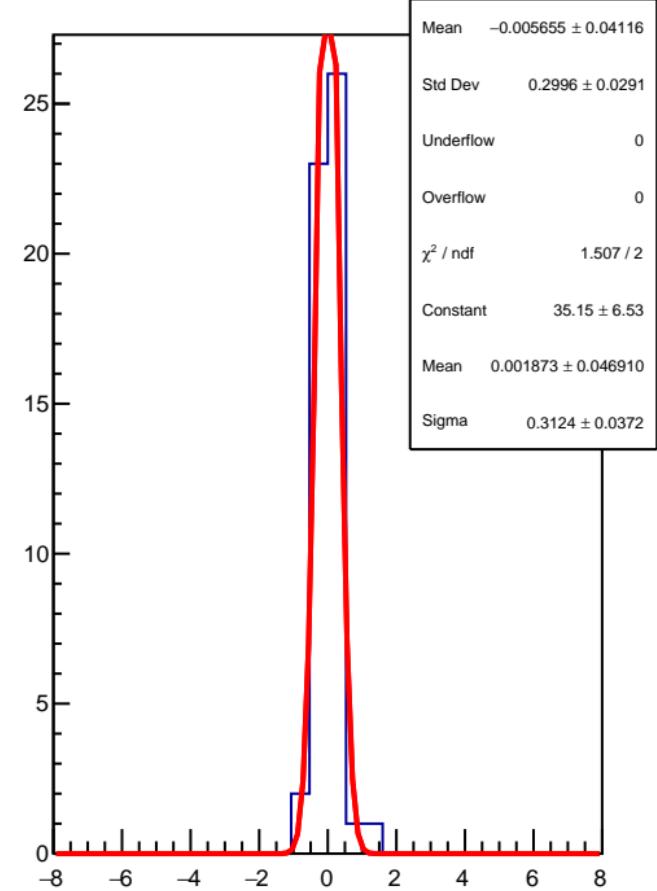


corr_usr_bpm4aX (ppb)

χ^2 / ndf 4.76 / 52
p0 -8.991 ± 31.04

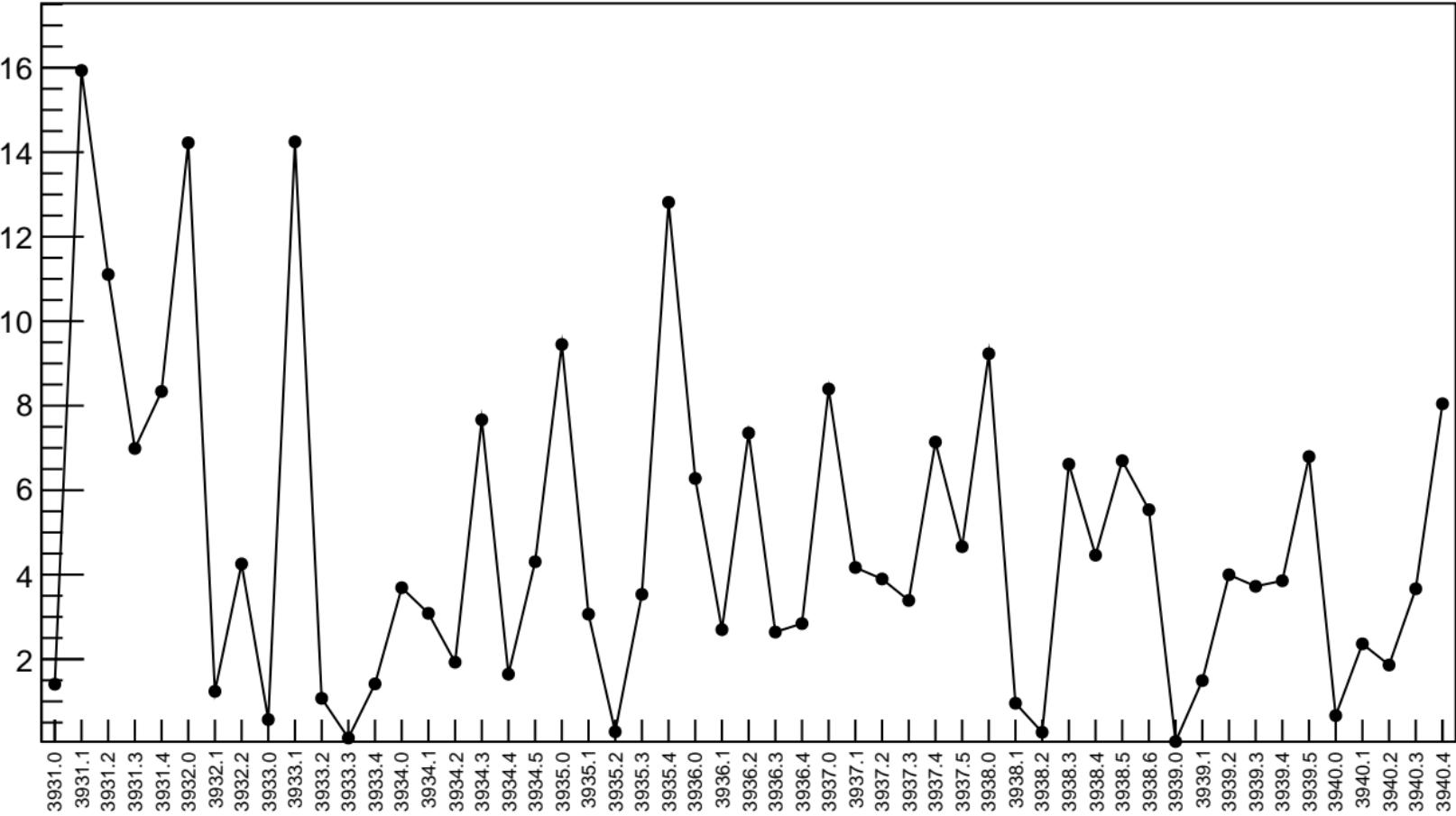


1D pull distribution



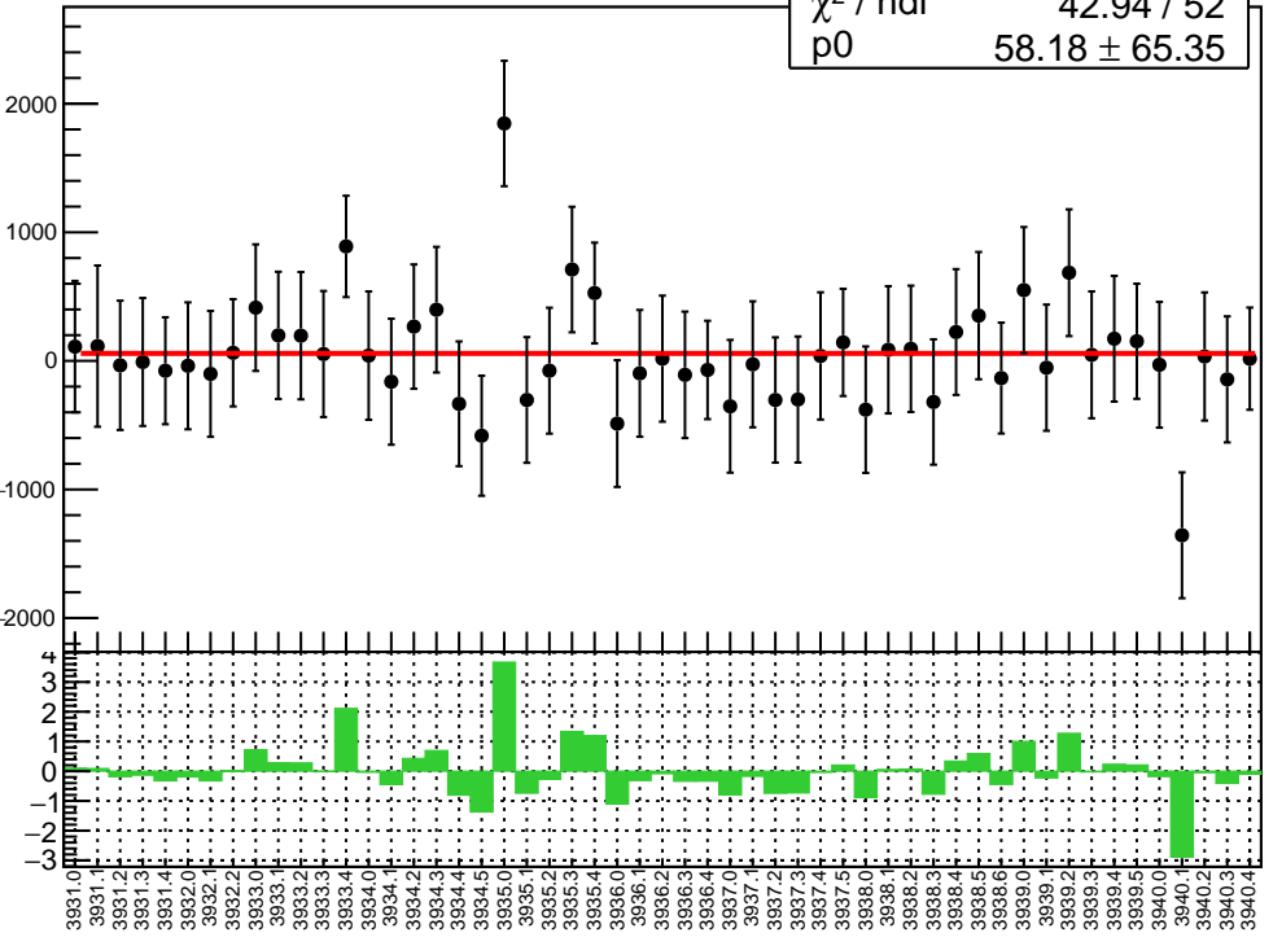
corr_usr_bpm4aX RMS (ppm)

RMS (ppm)



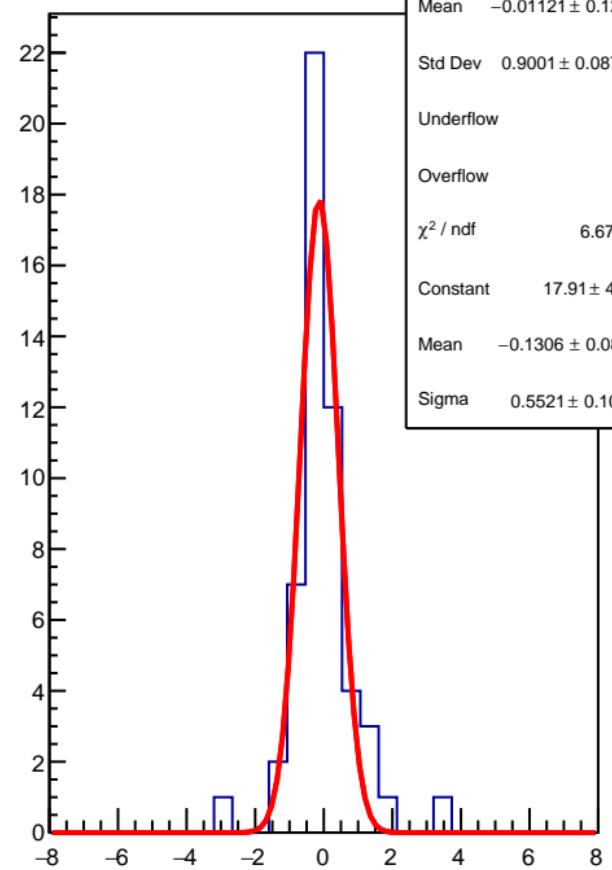
corr_usr_bpm4aY (ppb)

χ^2 / ndf 42.94 / 52
p0 58.18 ± 65.35



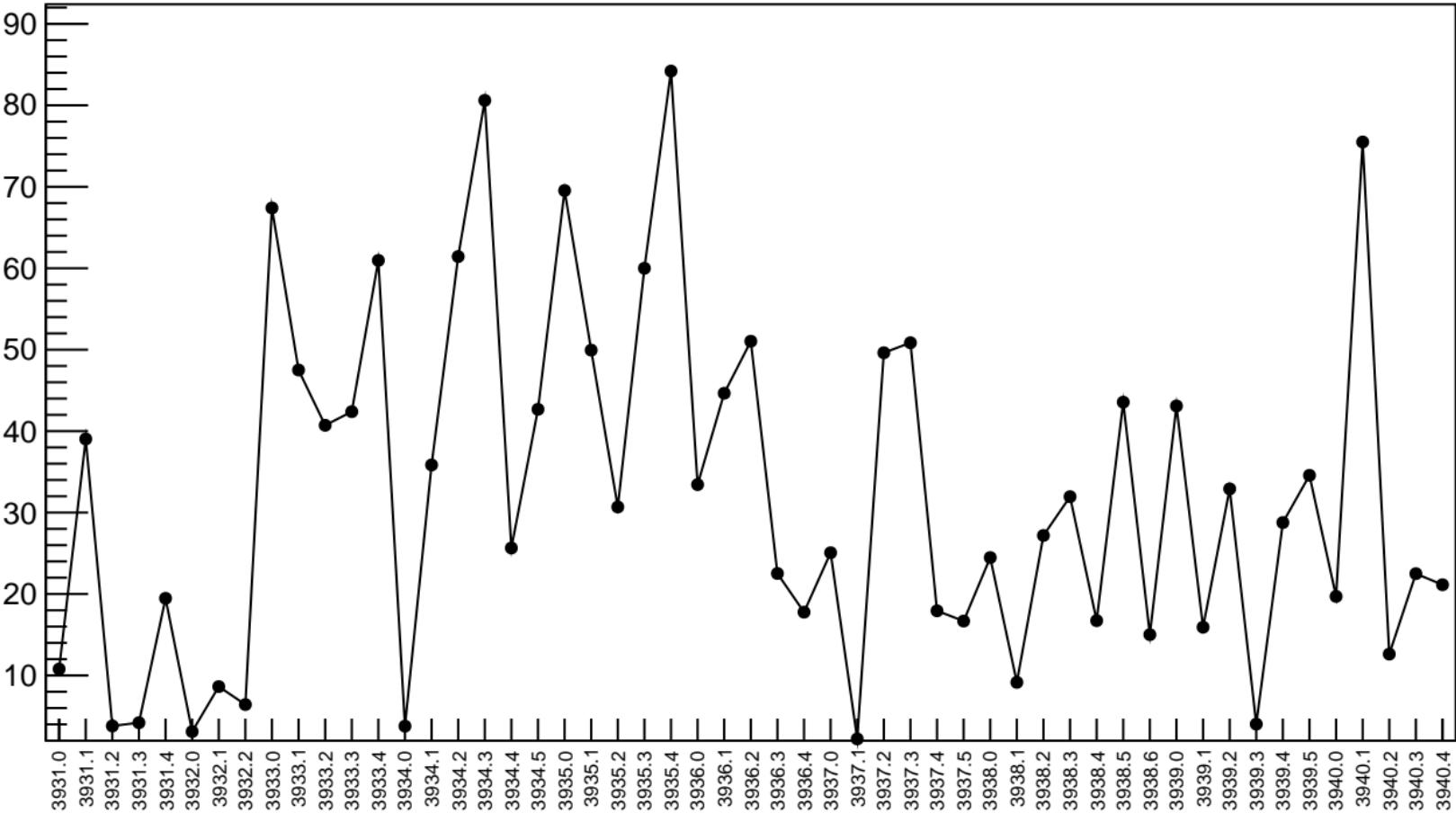
1D pull distribution

Mean -0.01121 ± 0.1236
Std Dev 0.9001 ± 0.08742
Underflow 0
Overflow 0
 χ^2 / ndf 6.67 / 6
Constant 17.91 ± 4.15
Mean -0.1306 ± 0.0859
Sigma 0.5521 ± 0.1014



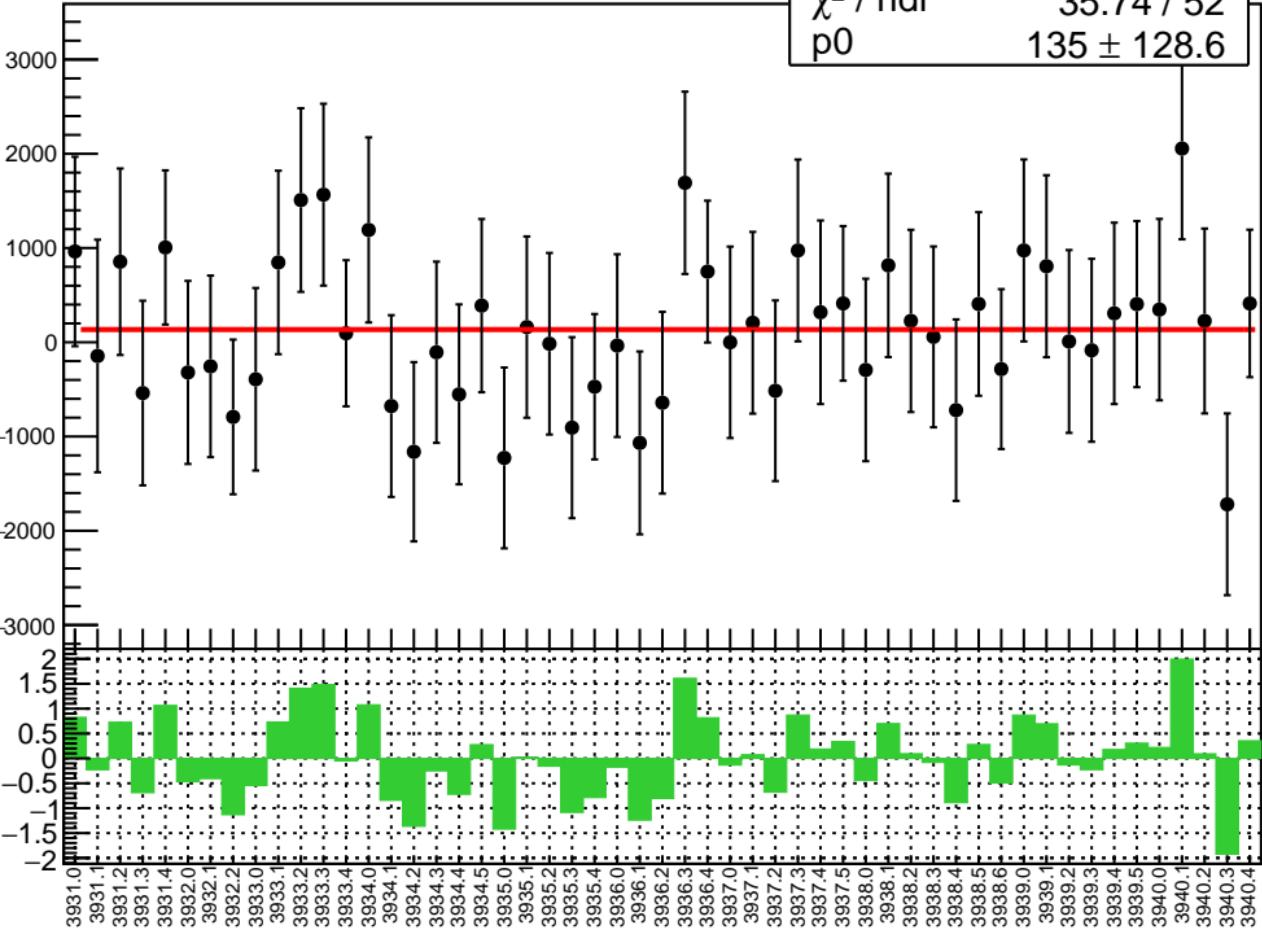
corr_usr_bpm4aY RMS (ppm)

RMS (ppm)

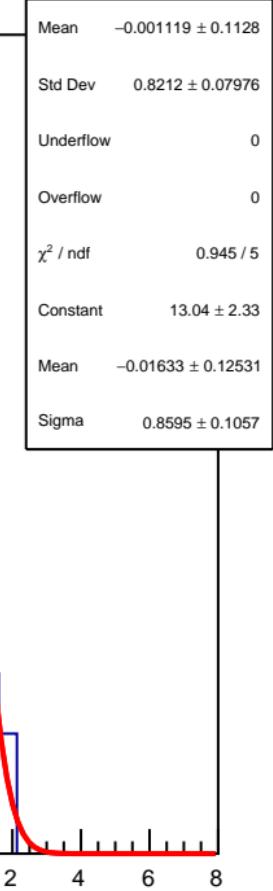


corr_usr_bpm1X (ppb)

χ^2 / ndf 35.74 / 52
p0 135 ± 128.6

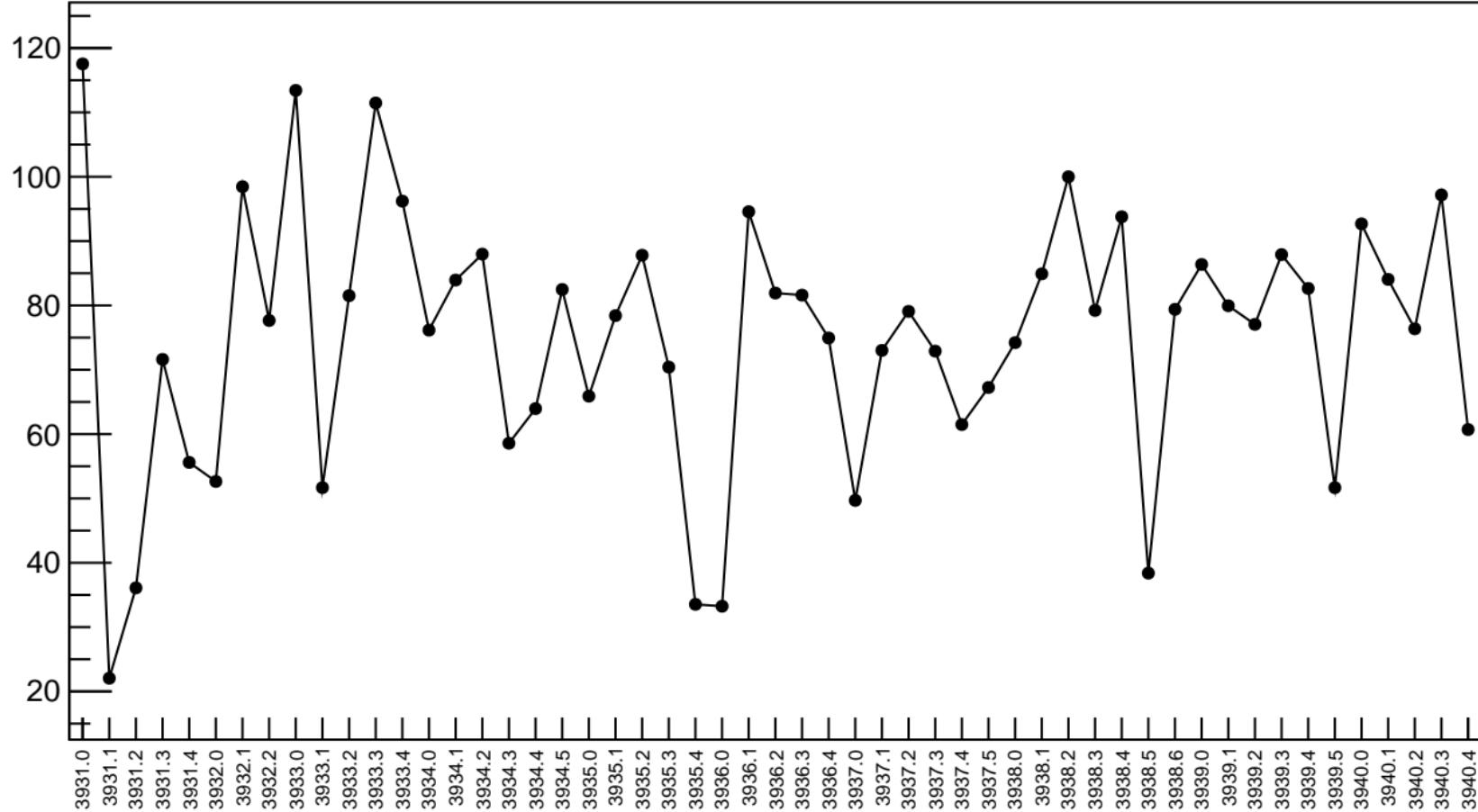


1D pull distribution

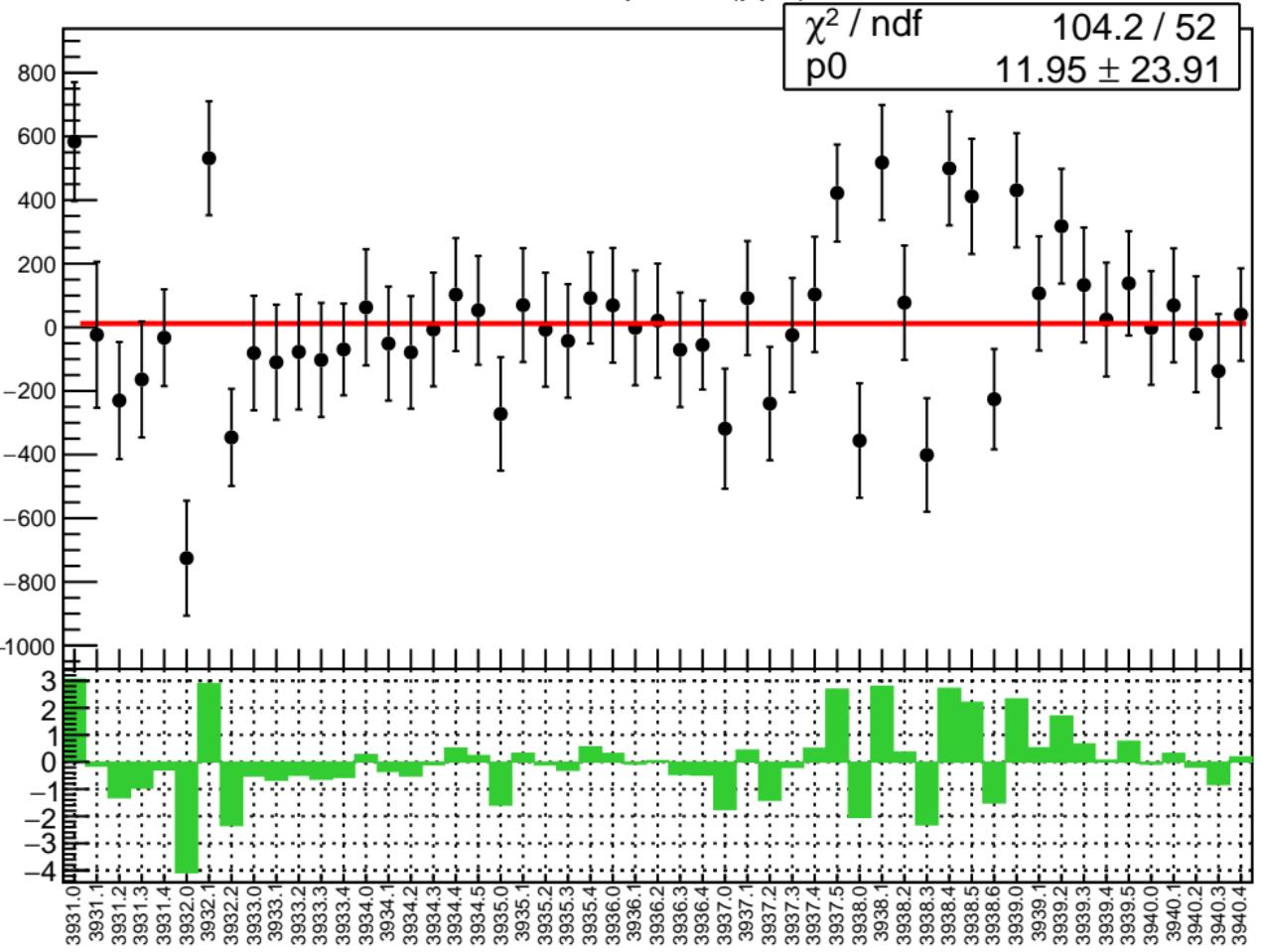


corr_usr_bpm1X RMS (ppm)

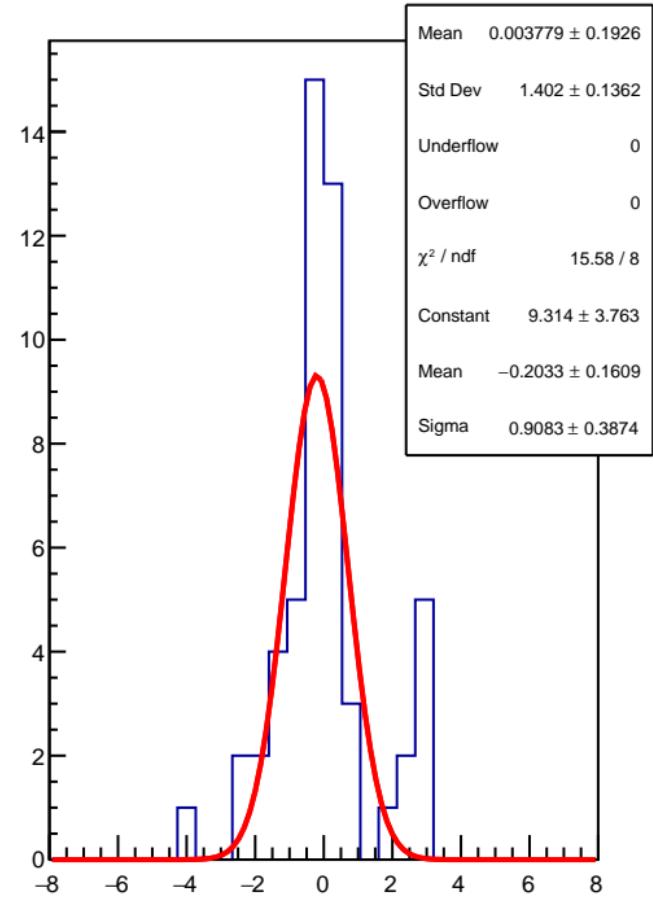
RMS (ppm)



corr_usr_bpm1Y (ppb)

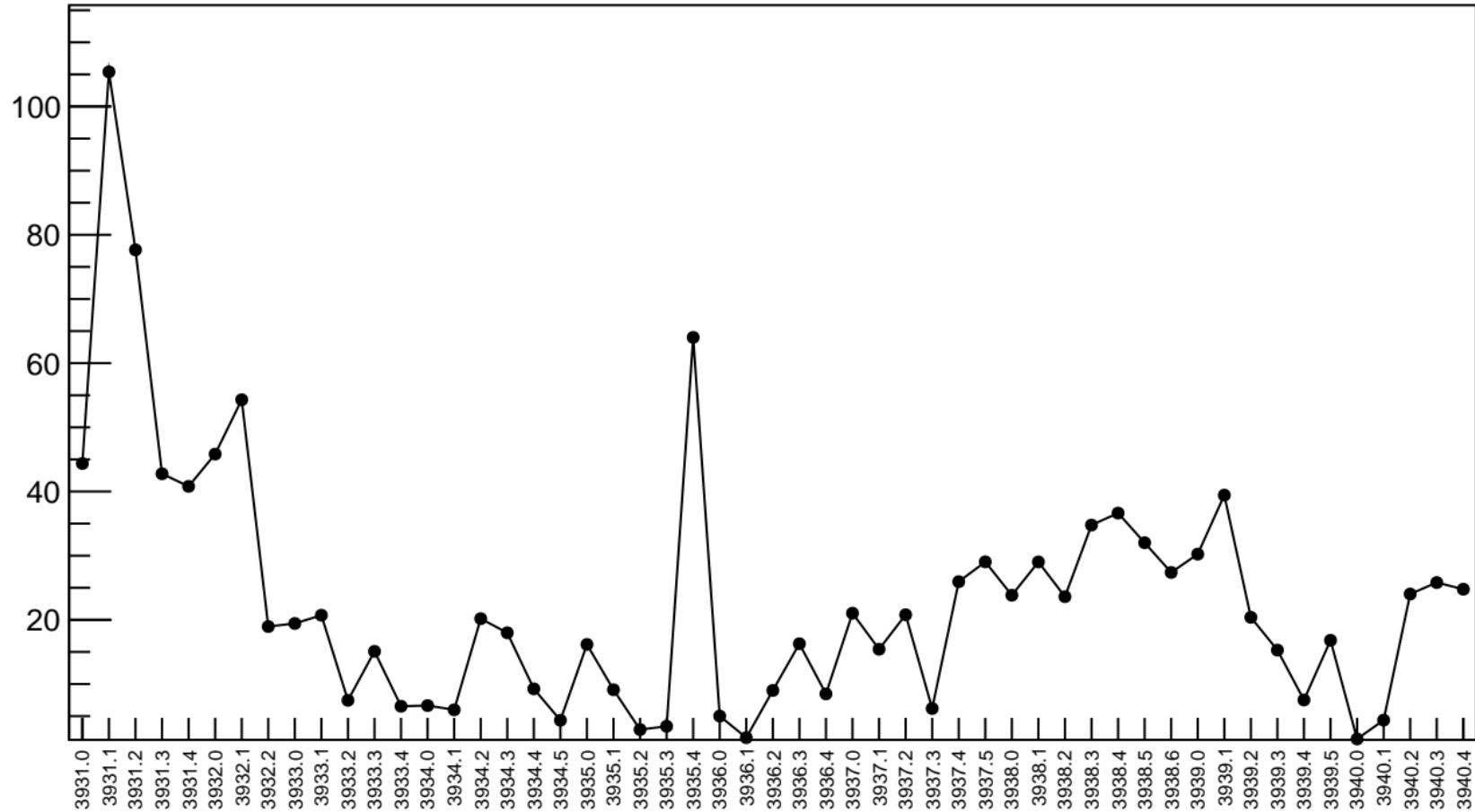


1D pull distribution



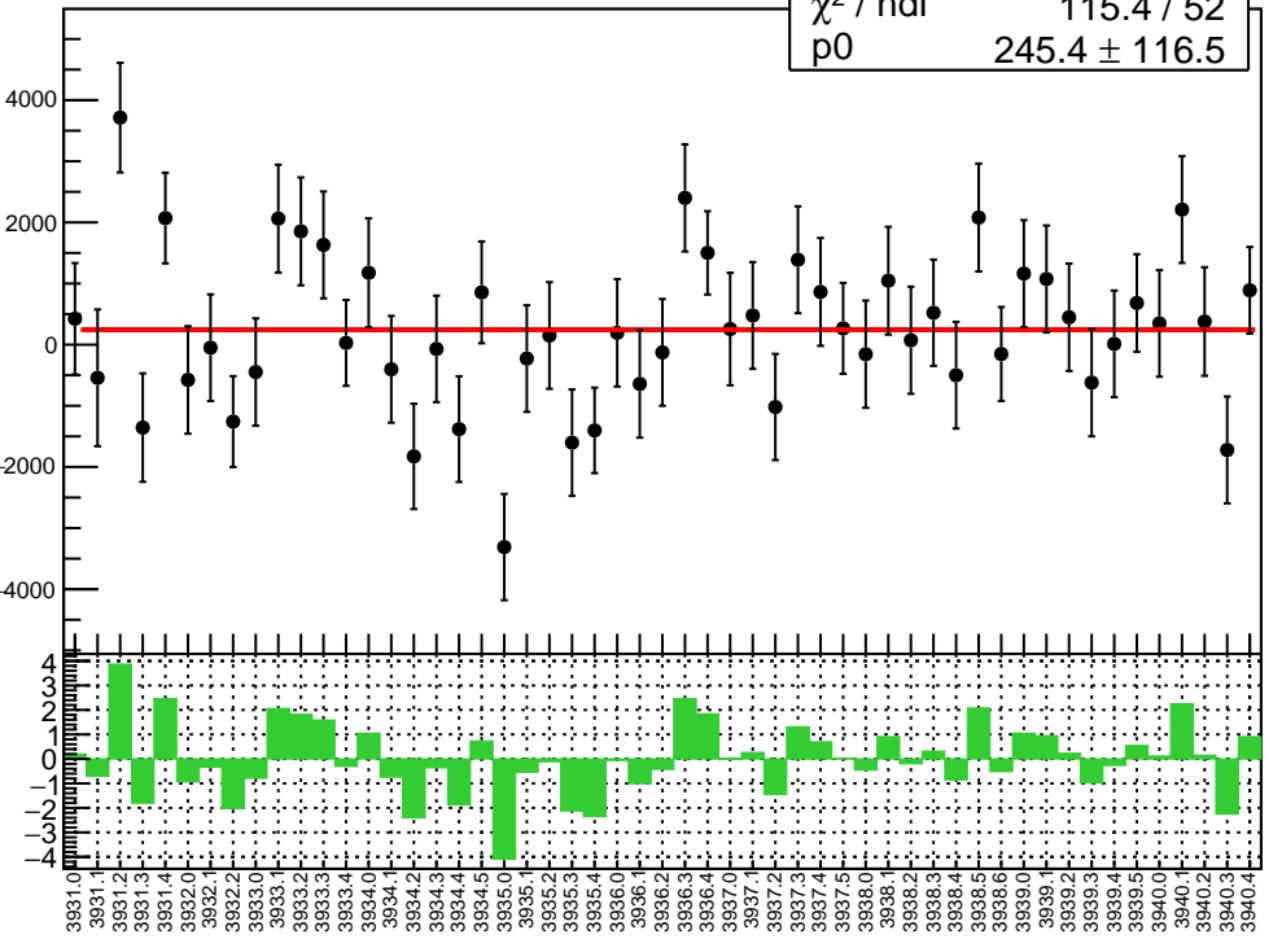
corr_usr_bpm1Y RMS (ppm)

RMS (ppm)



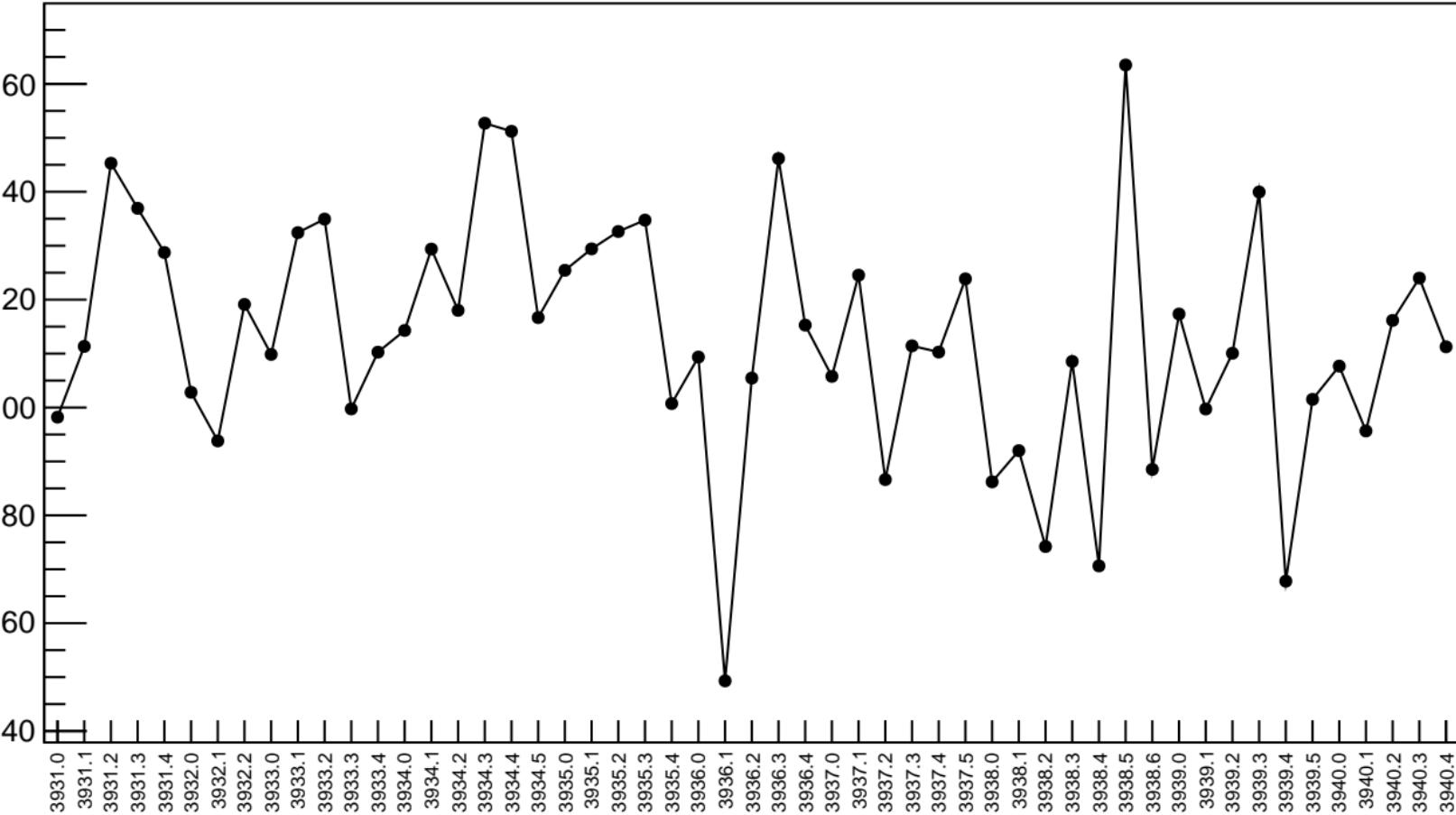
corr_usr_bpm16X (ppb)

χ^2 / ndf 115.4 / 52
p0 245.4 ± 116.5

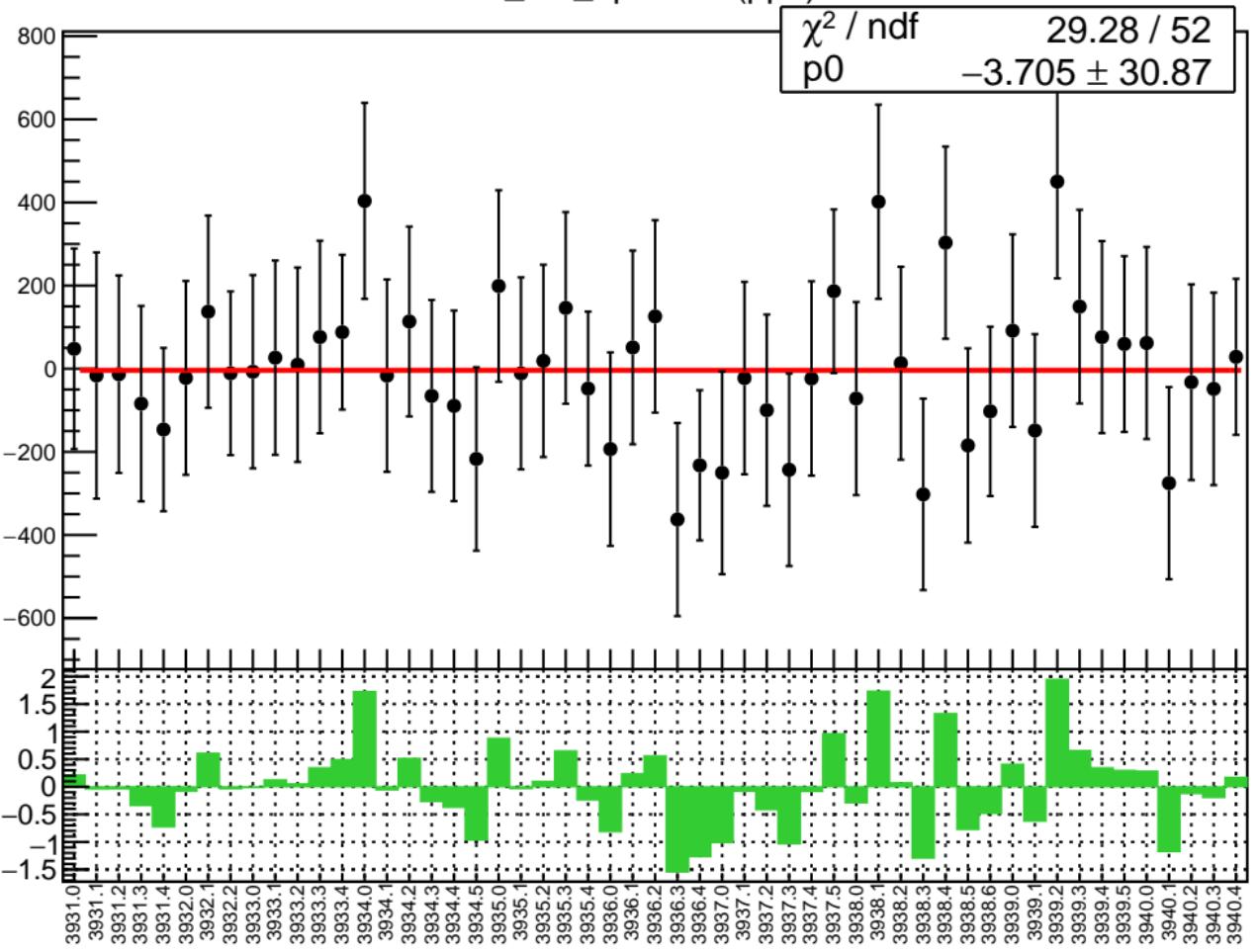


corr_usr_bpm16X RMS (ppm)

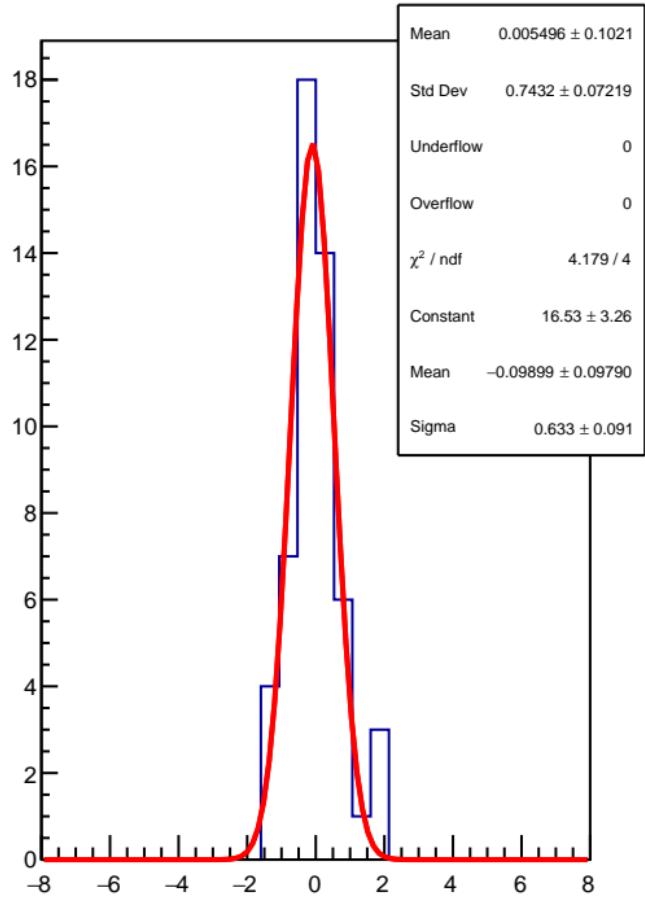
RMS (ppm)



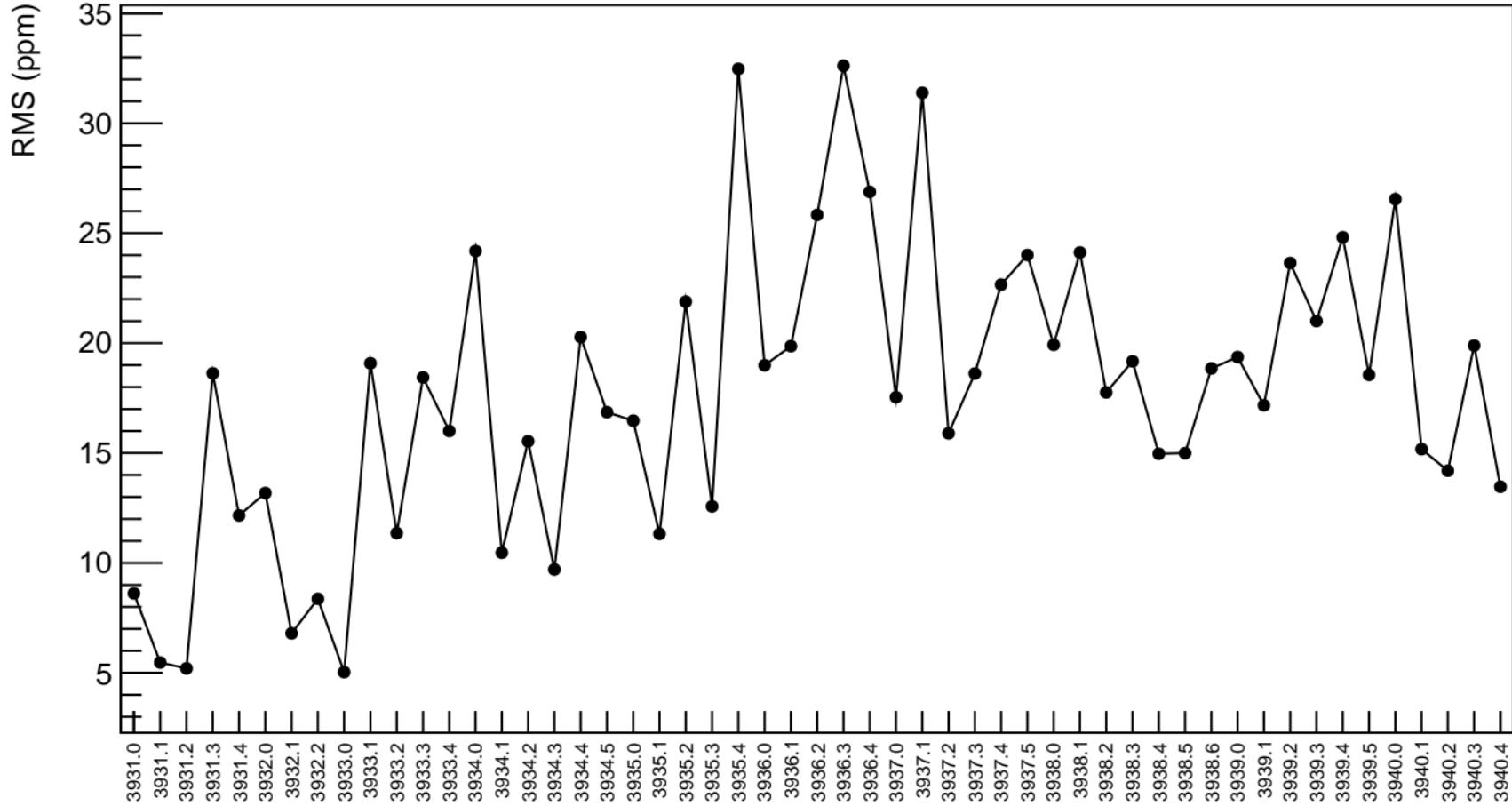
corr_usr_bpm16Y (ppb)



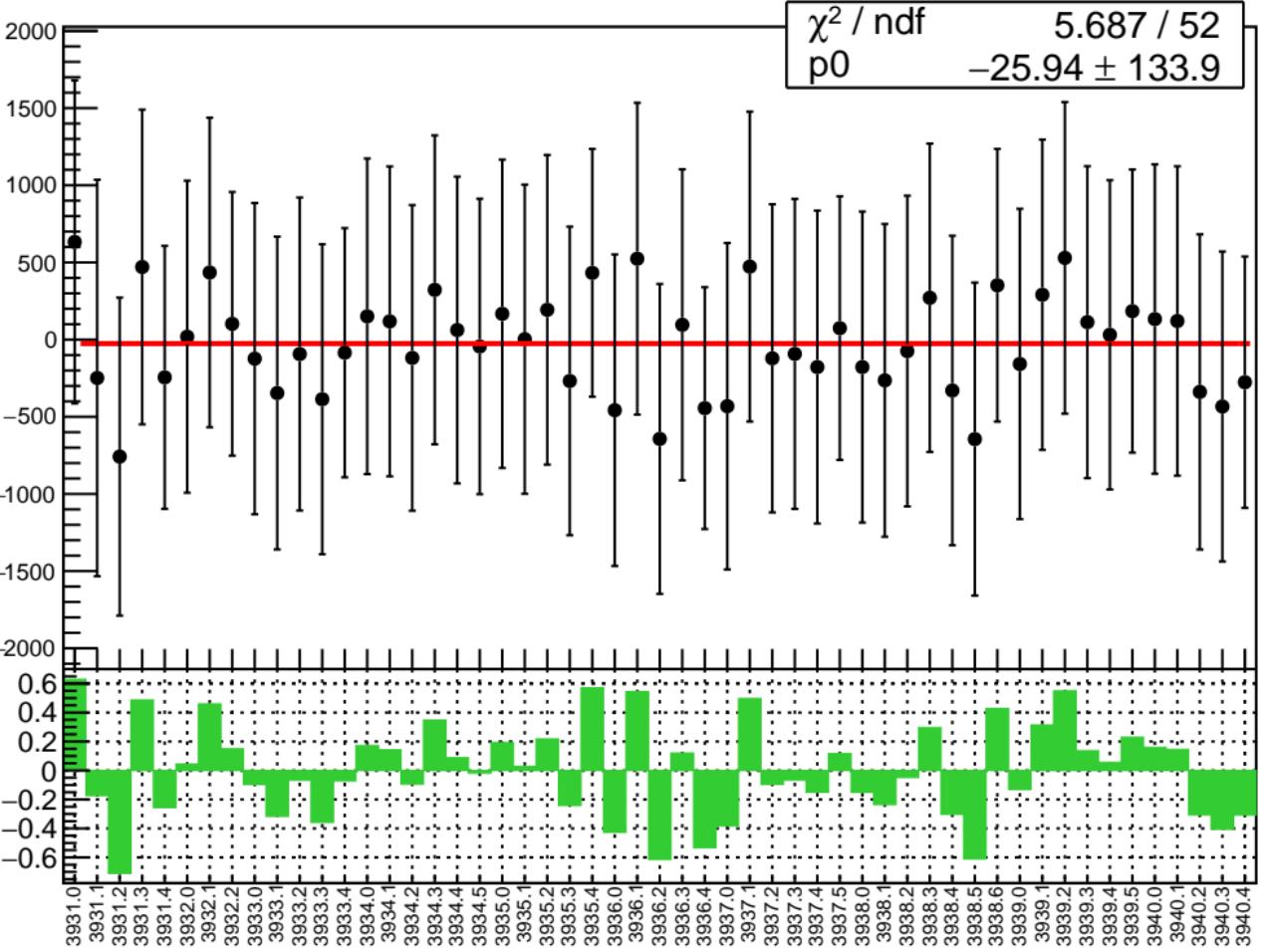
1D pull distribution



corr_usr_bpm16Y RMS (ppm)

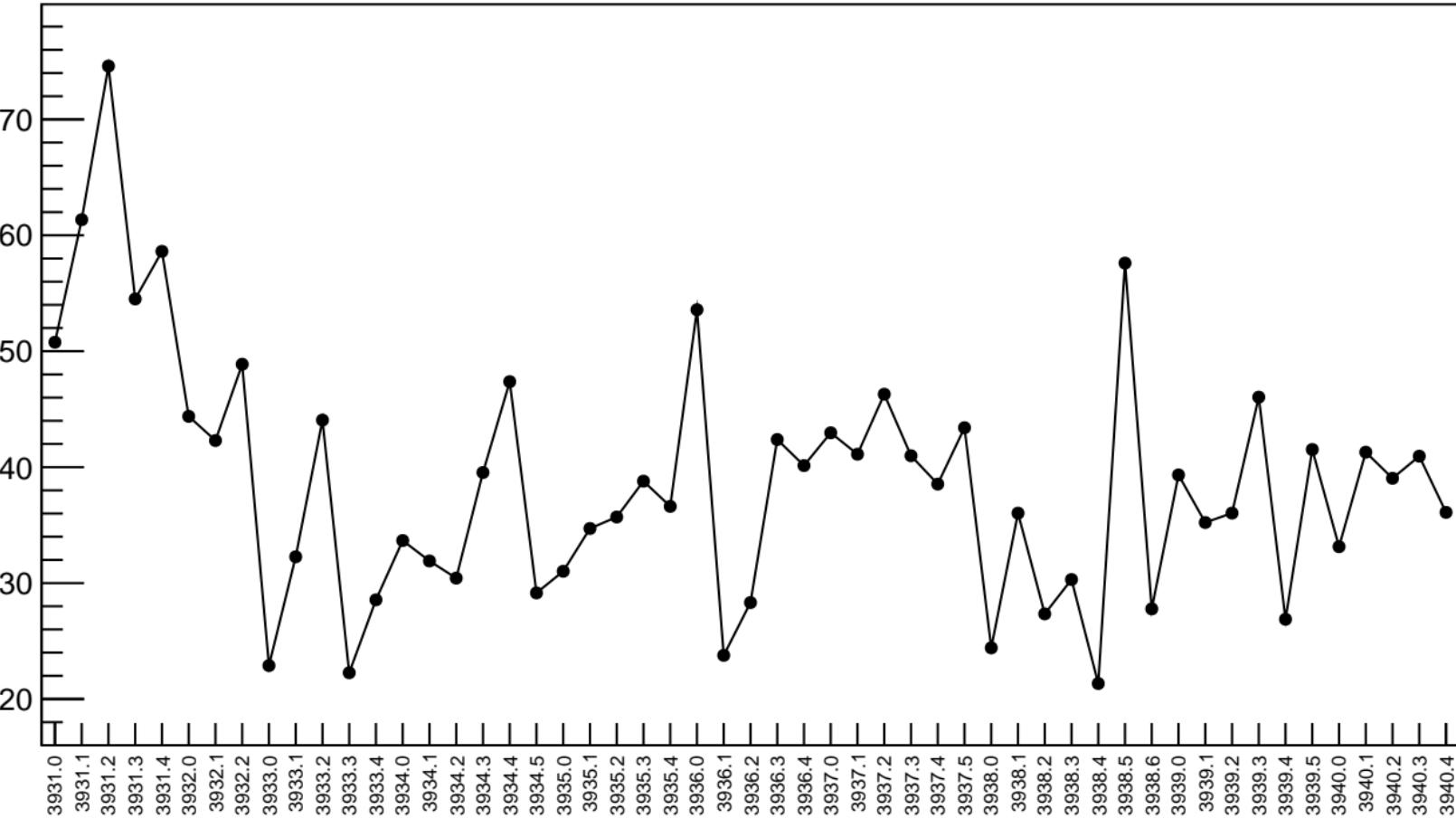


corr_usr_bpm12X (ppb)

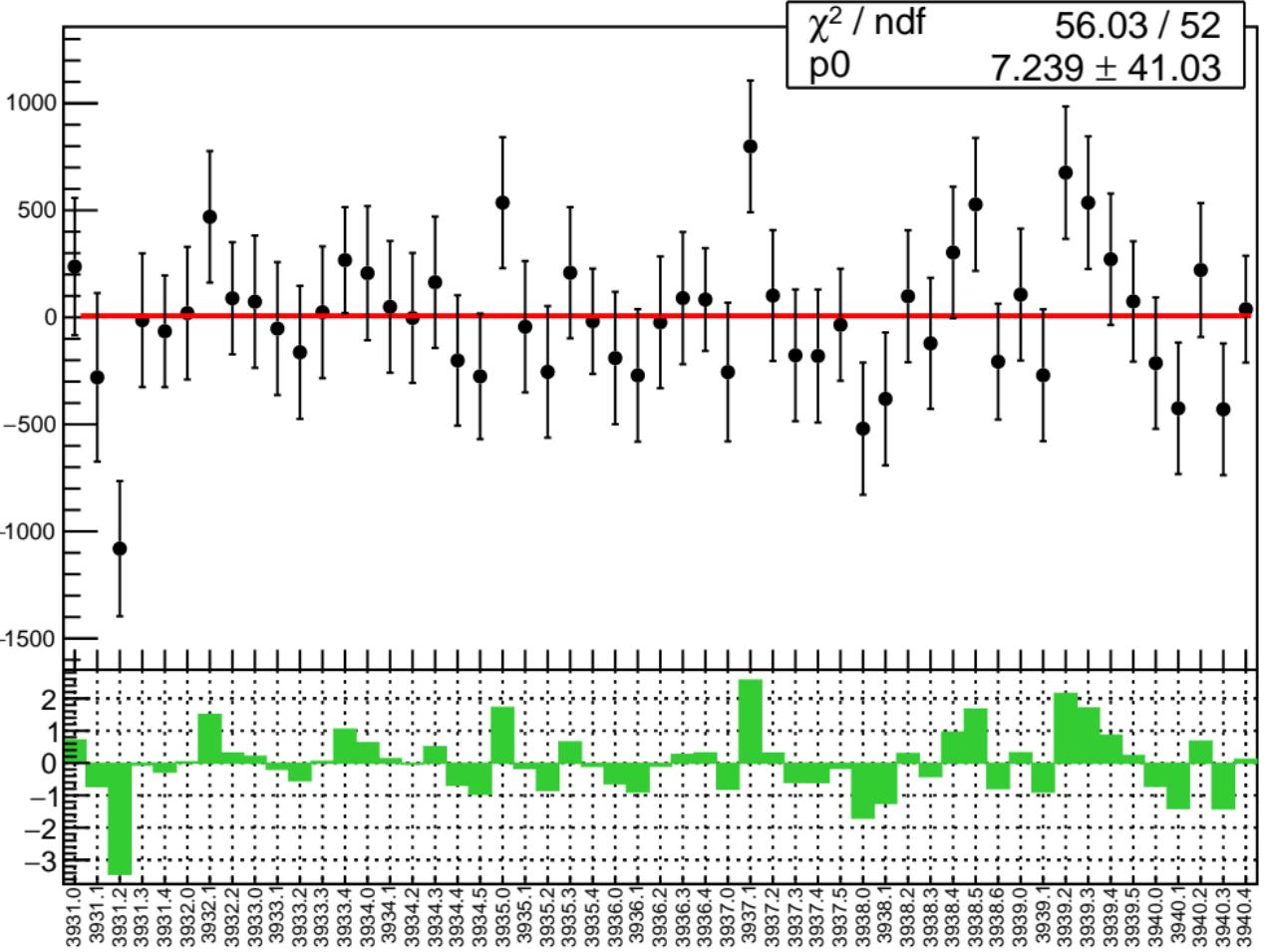


corr_usr_bpm12X RMS (ppm)

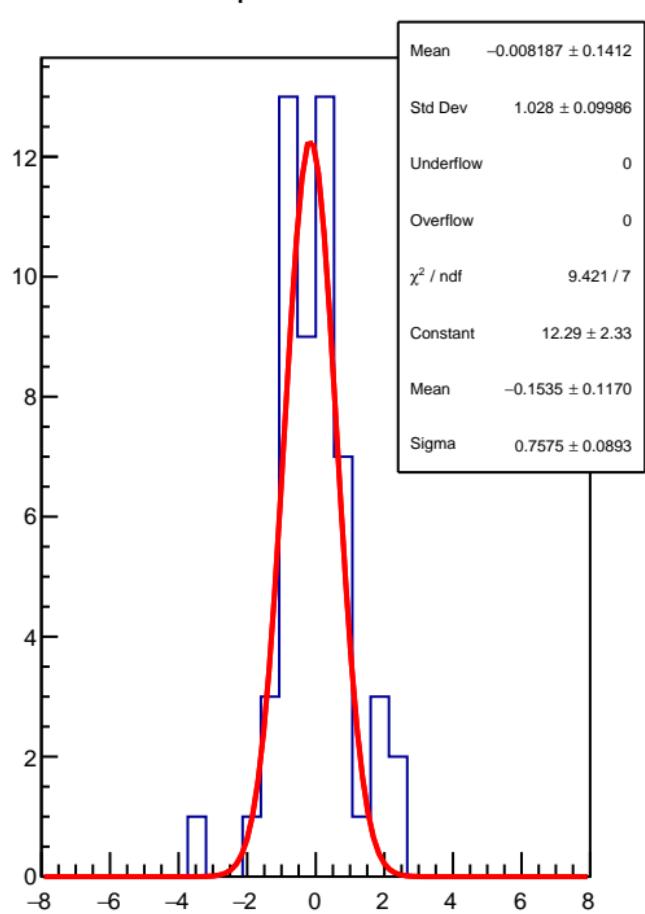
RMS (ppm)



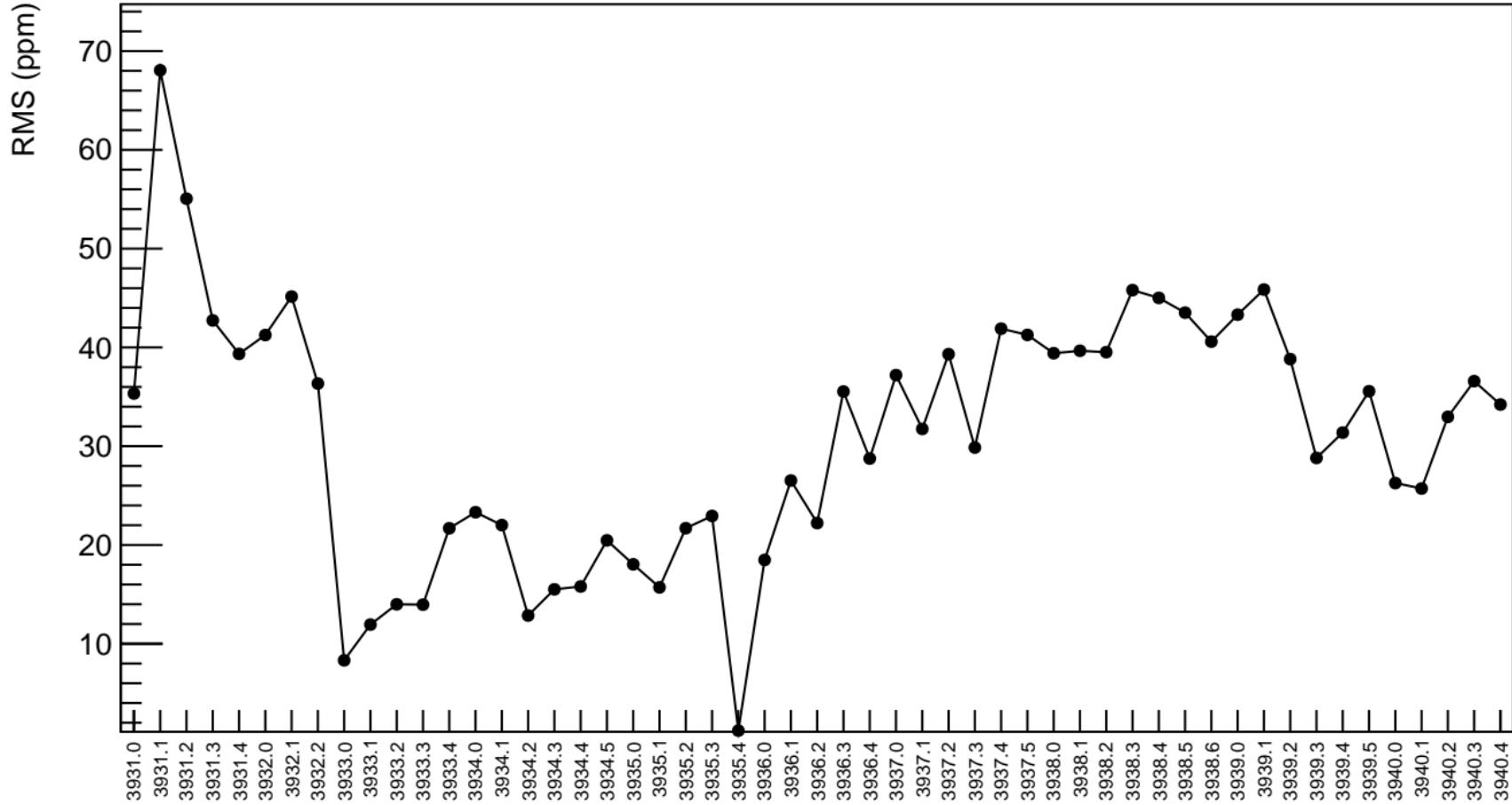
corr_usr_bpm12Y (ppb)



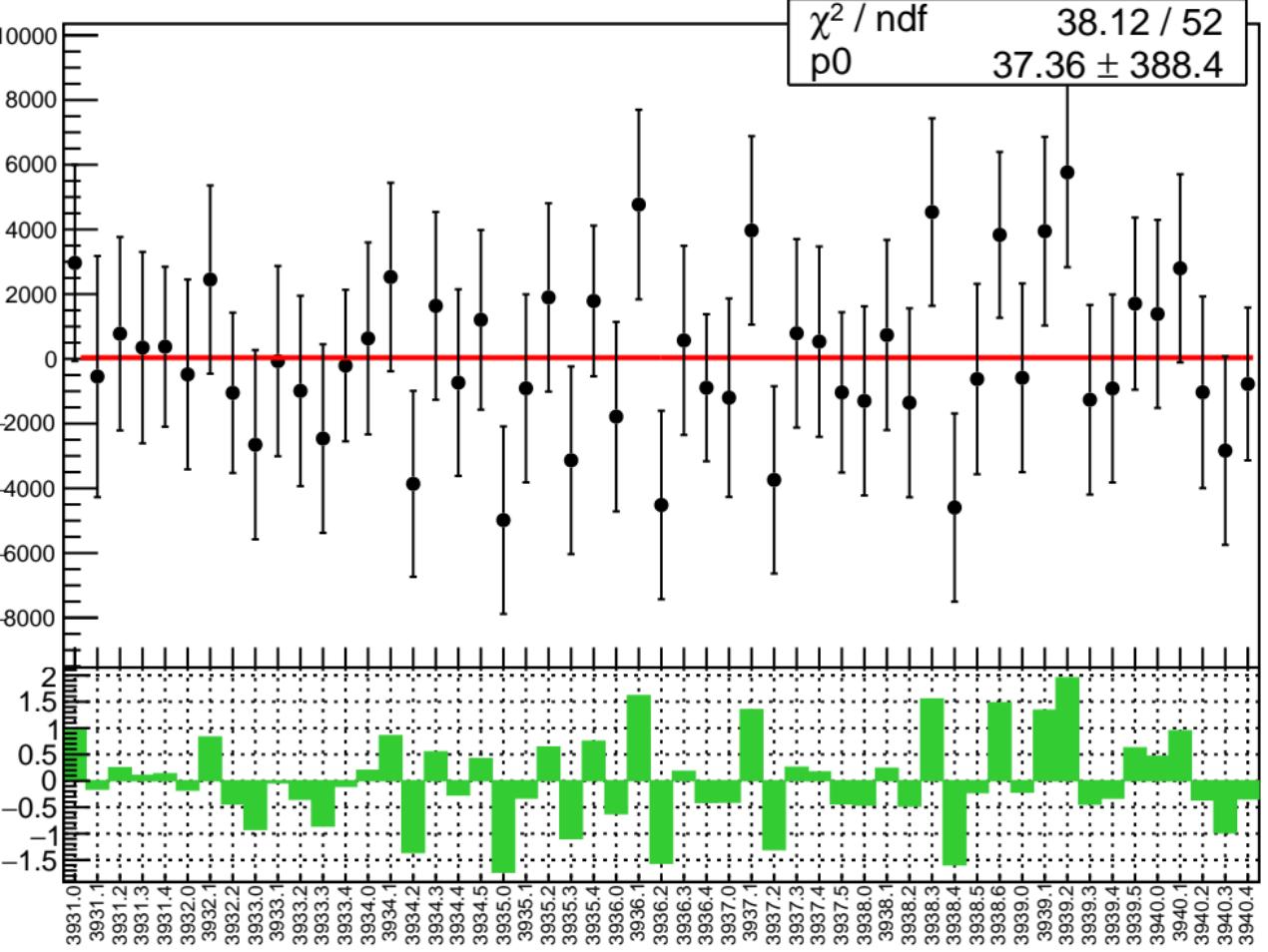
1D pull distribution



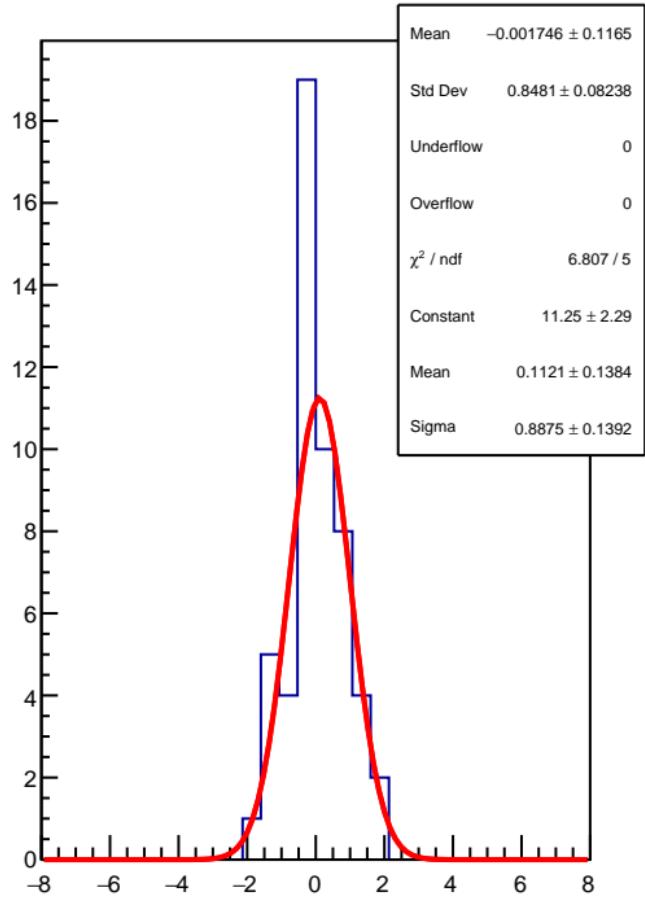
corr_usr_bpm12Y RMS (ppm)



corr_usr_bpm11X (ppb)

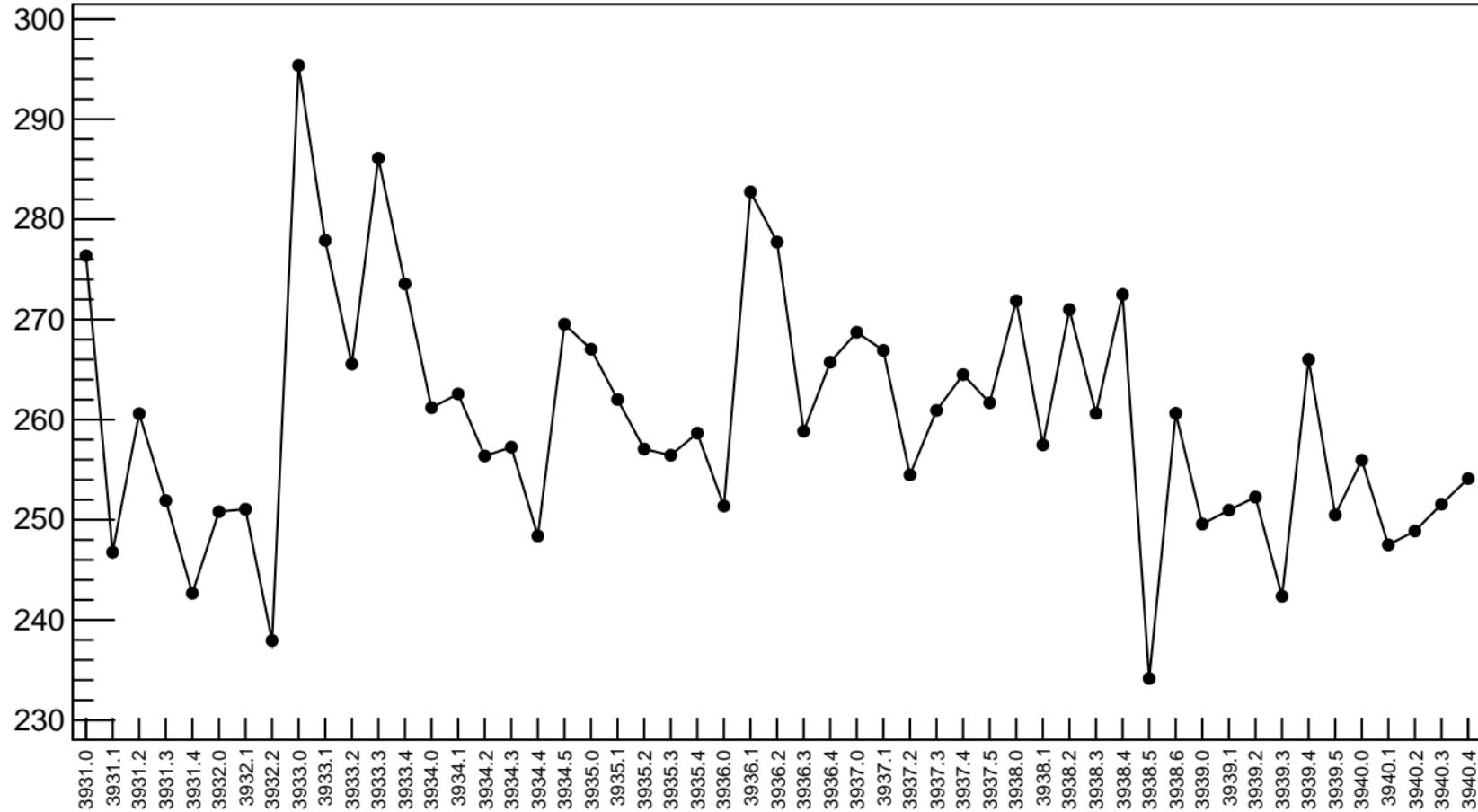


1D pull distribution



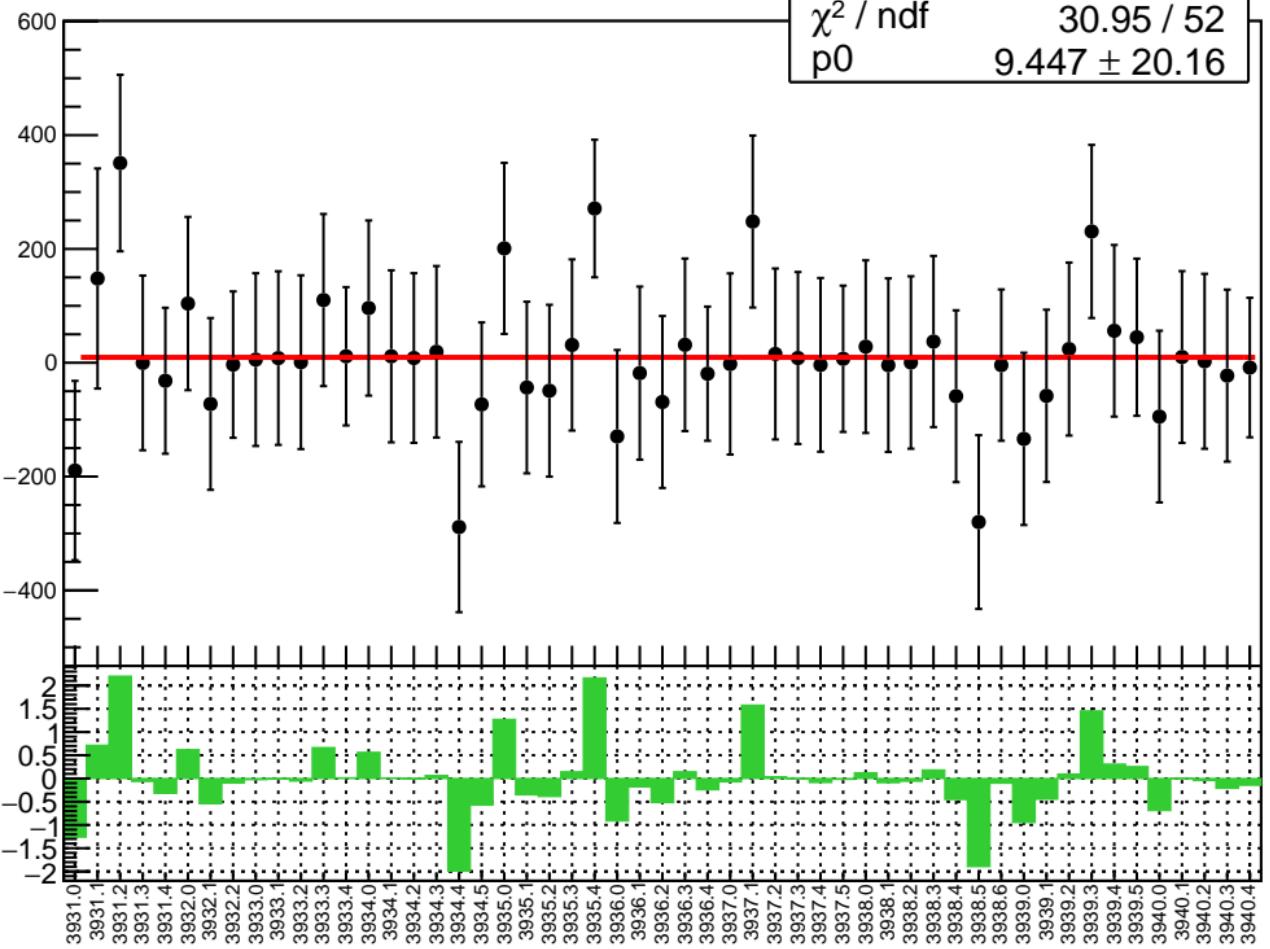
corr_usr_bpm11X RMS (ppm)

RMS (ppm)

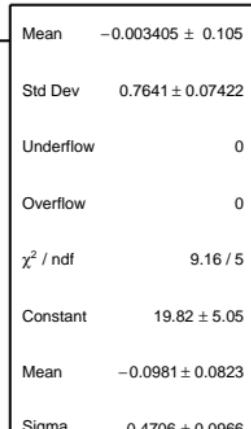


corr_usr_bpm11Y (ppb)

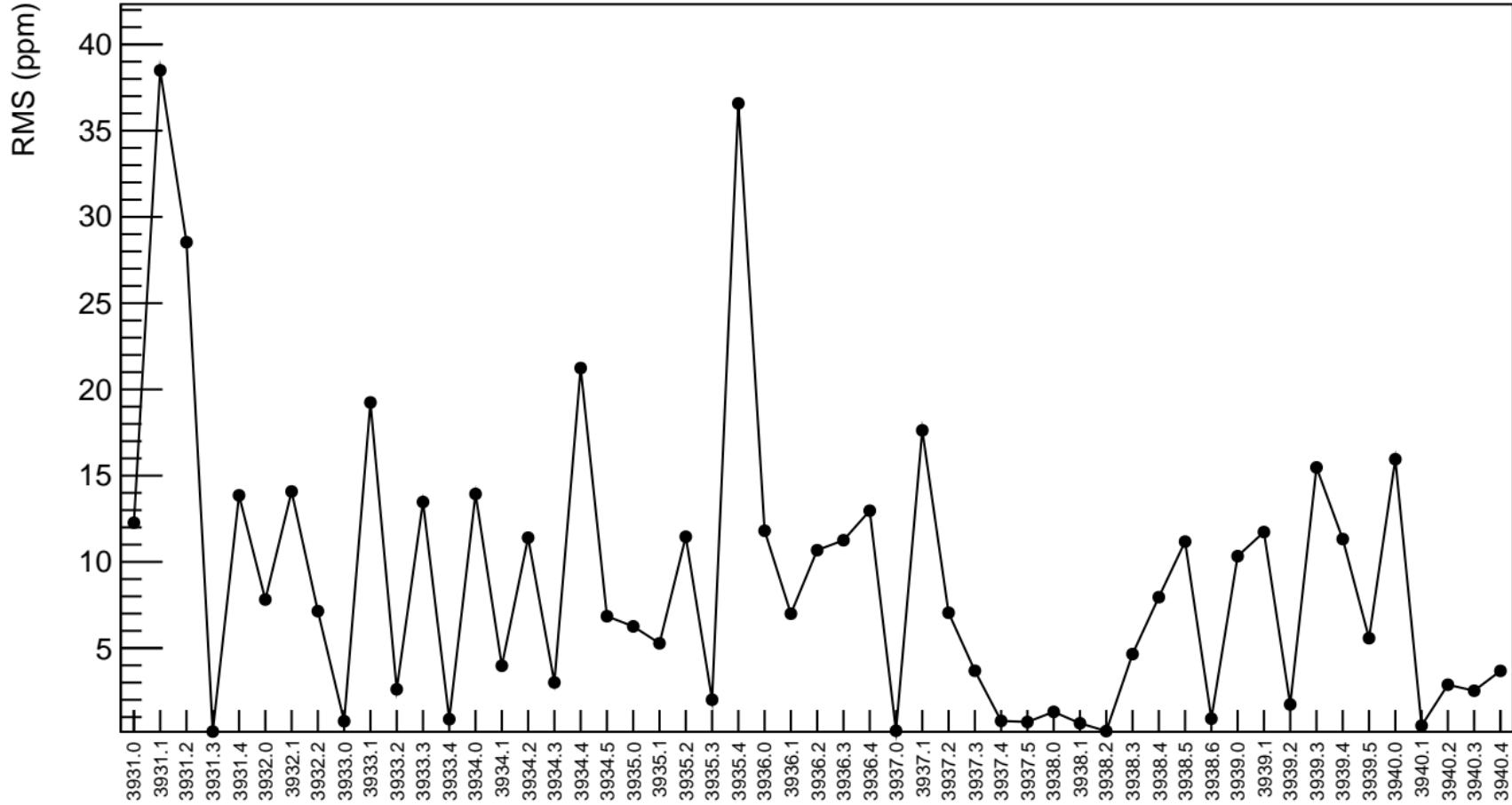
χ^2 / ndf 30.95 / 52
p0 9.447 ± 20.16



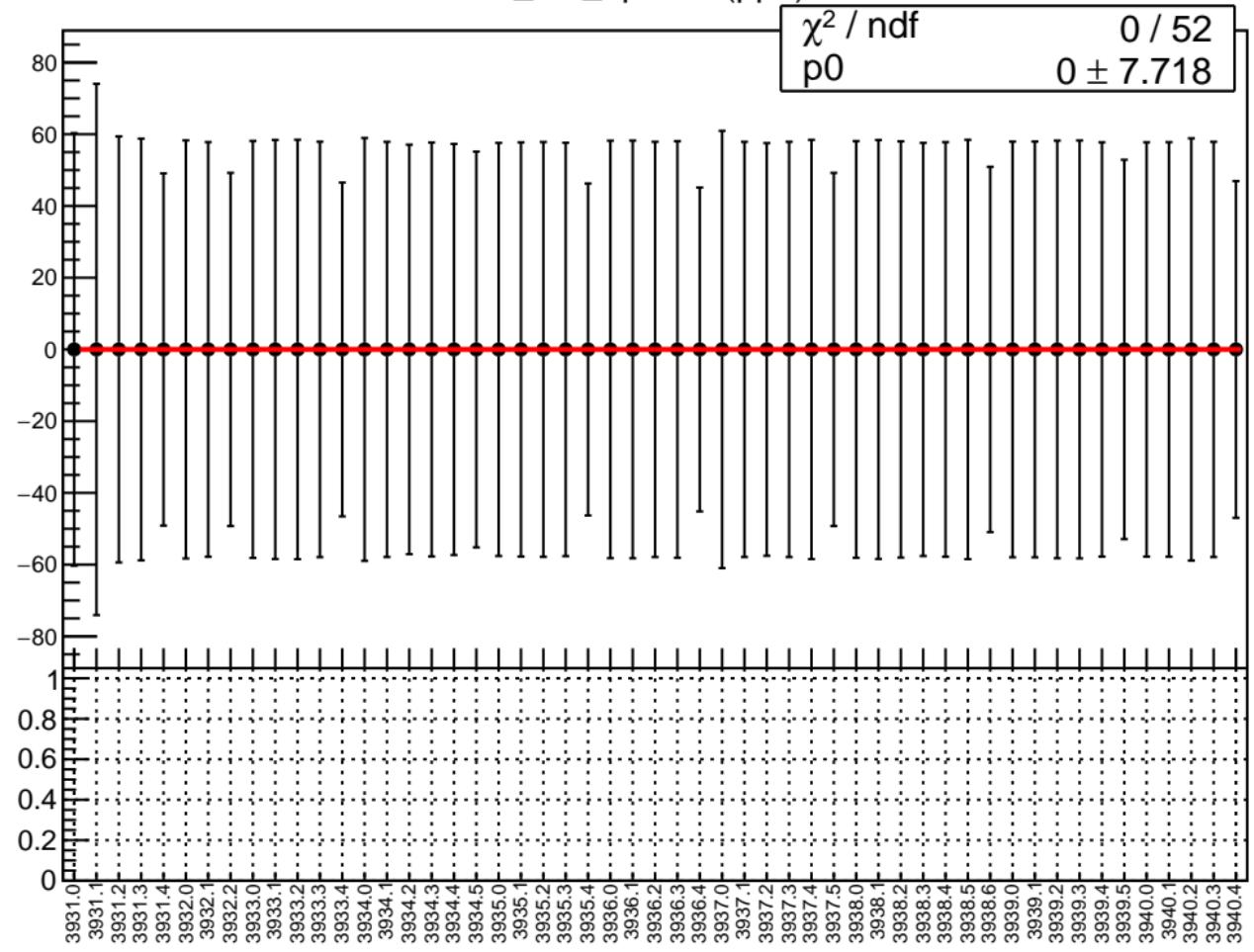
1D pull distribution



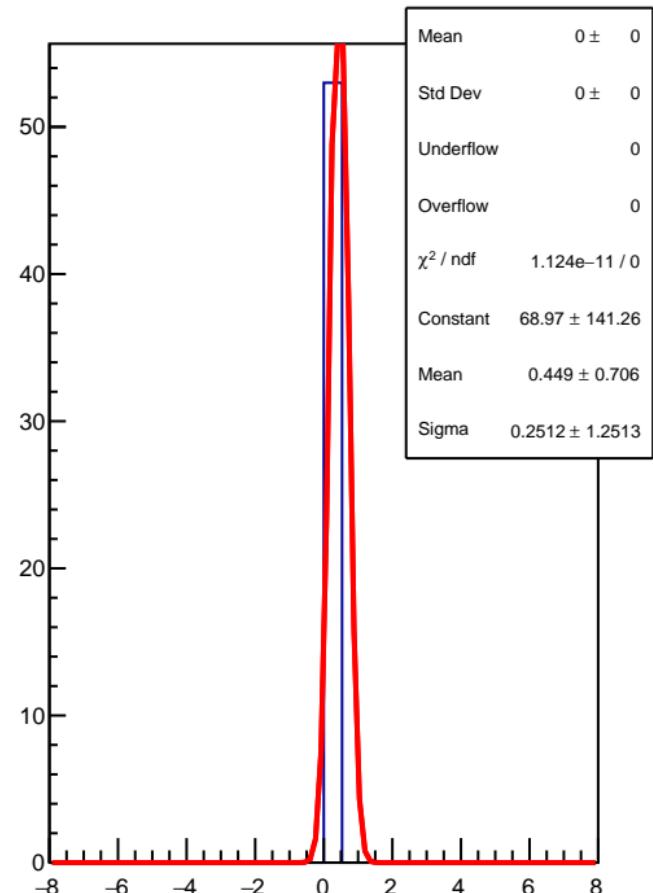
corr_usr_bpm11Y RMS (ppm)



corr_usr_bpm8X (ppb)

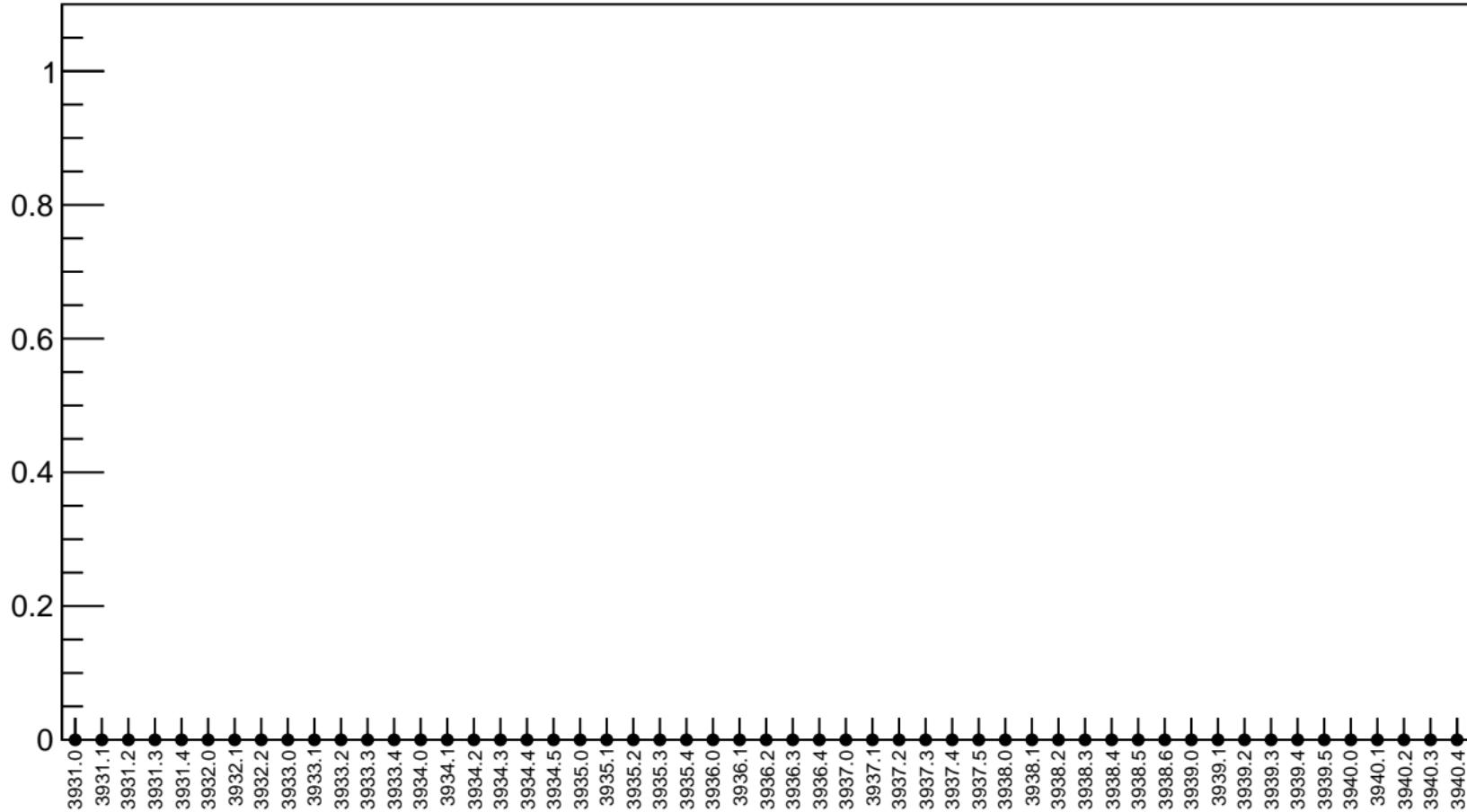


1D pull distribution

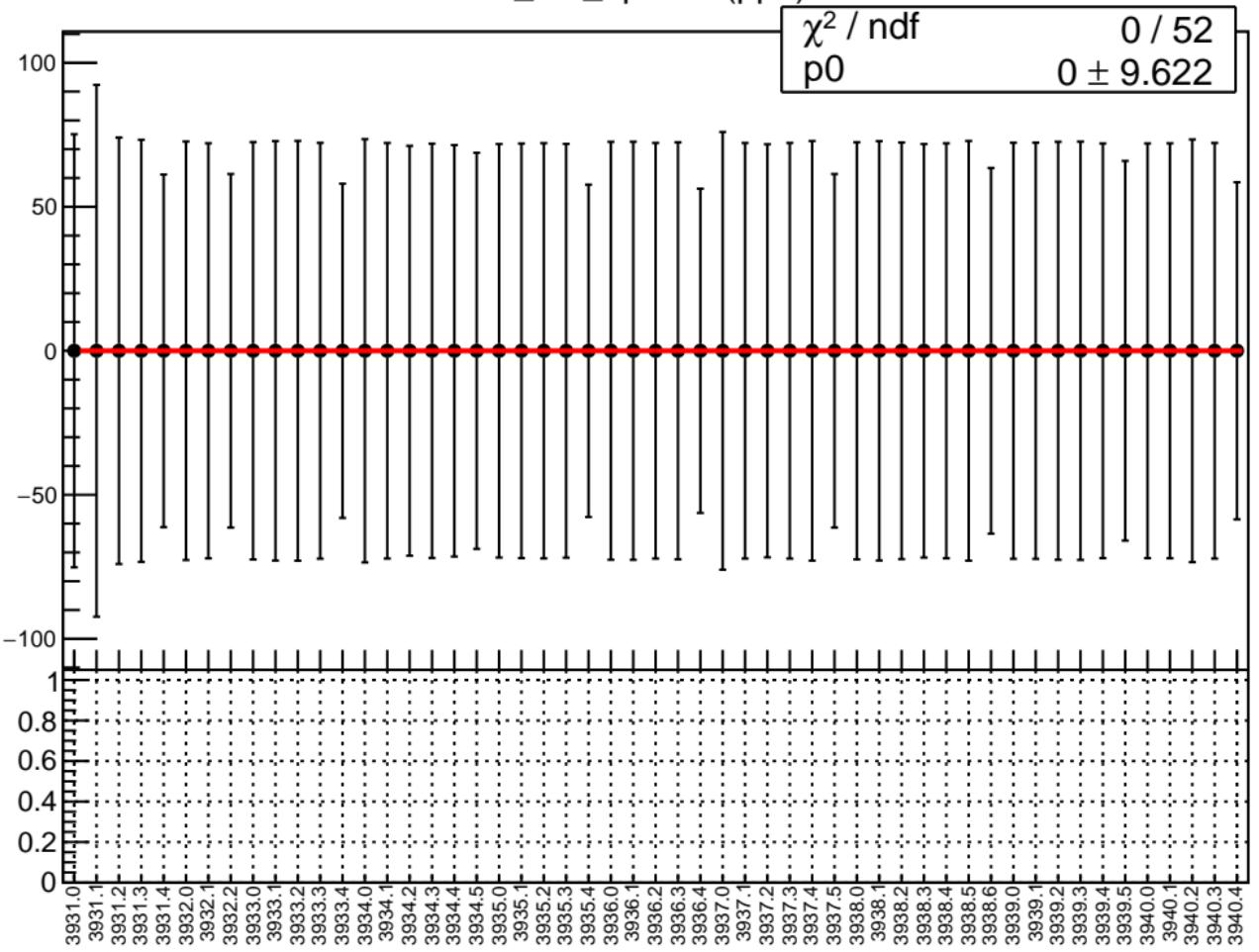


corr_usr_bpm8X RMS (ppm)

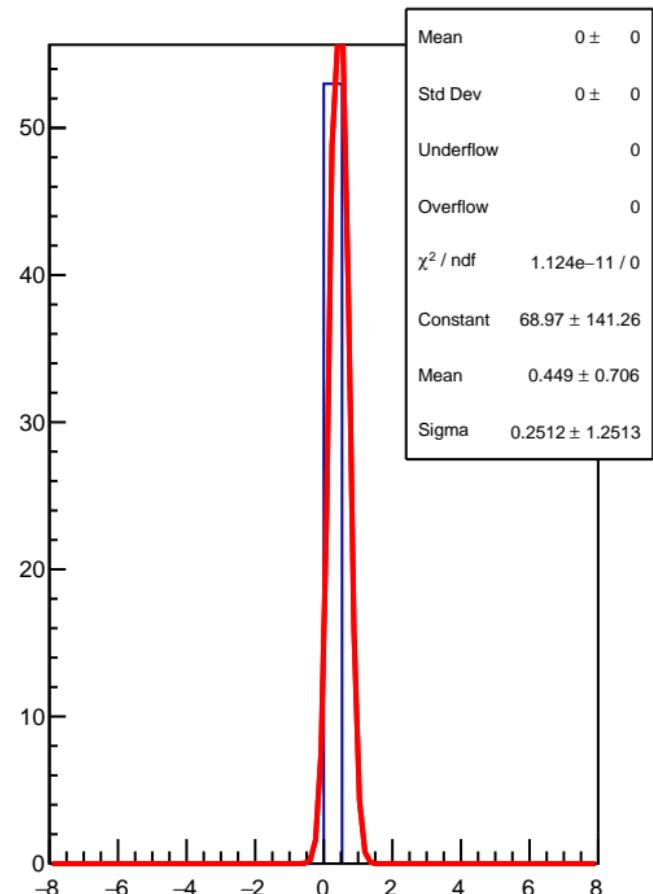
RMS (ppm)



corr_usr_bpm8Y (ppb)



1D pull distribution



corr_usr_bpm8Y RMS (ppm)

RMS (ppm)

