Dear Christian,

We appreciate the editor's comments. Indeed, if we extrapolate our emission observations we would estimate very large N losses from our site. However, our observations are only a short-term snapshot of the losses, taken during a dynamic emission period around fertilization application. It would be misleading to speculate too much about annual losses. We note the following:

1) The initial (pre-fertilization) emission rate of 0.6 mg m^{-2} h^{-1} is large (~ 50 kg ha^{-1} yr^{-1}). But the site is unusual in having a history of very large (and ongoing) N additions. And we have only a small sampling window before fertilization to establish this, so we don't have a lot of confidence in that number.
2) The integrated N loss over our micrometeorological measurement period (41 days) is 14.6 kg N ha^{-1}. This seems to us to be a reasonable N loss rate (3.7% of applied N).
3) We cannot say with confidence what happened after our measurements.

As suggested, the N_2O enhancement (Delta_CL_N_2O) (ppb) between two vertically separated slant paths is shown below:

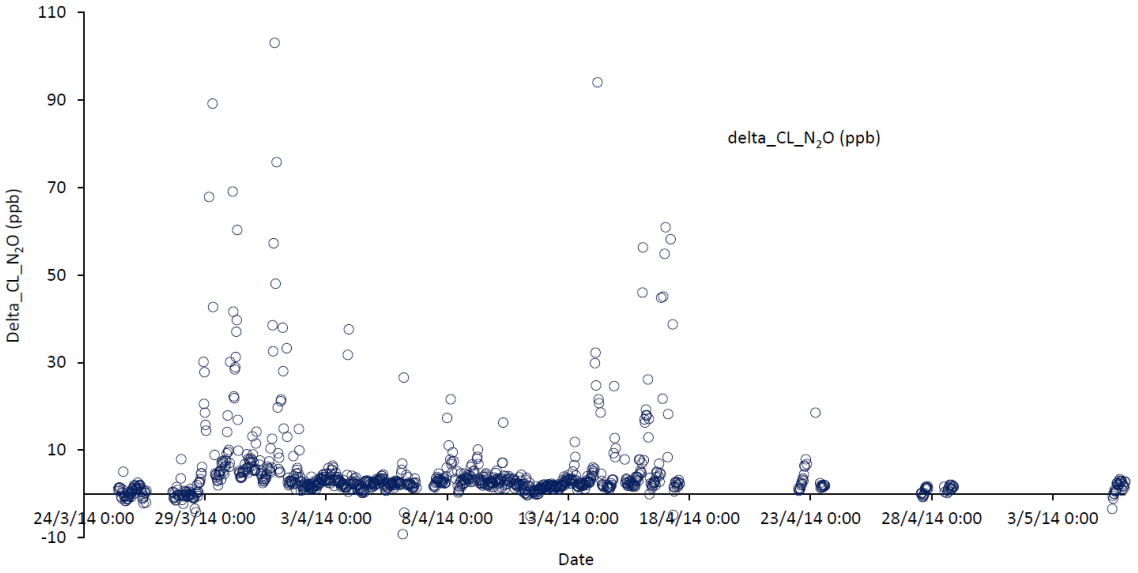

Figure 1. Enhanced N_2O concentrations from the vertical separated slant paths measured by FG/OP-FTIR from 25 March to 6 May 2014.