Atmos. Meas. Tech. Discuss., 4, C2276-C2277, 2011

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Interactive comment on "Integrated method for the measurement of trace atmospheric bases" by D. Key et al.

D. Brunner (Editor)

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Dear authors,

Both referees suggested to organize the manusctipt differently and I fully agree to that. However, it remains somewhat unclear how to best do that. I therefore would like to provide some guideline and would like to suggest the following structure:

Make the "Experimental" section short and only explain the basic concept of sampling (denuder/impinger) and offline analysis in the lab (indophenol blue method for NH3, derivatization and analysis of amines) without providing details. Instead of "Experimental" it could then be named "Experimental setup" or "Measurement concept" or

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similar. Actually, Figure 1 would probably fit into such a section. The section should also explain that methods have been developed separately for analysis by LC/MS and by GC/MS to allow labs equipped with only one of these instruments to perform the analysis. This doesn't become very clear in the manuscript as it is at the moment. Probably the LC/MS and GC/MS instruments should be introduced here as well. Finally, it should be explained that the detailed procedure had been developed in a number of lab experiments aimed to optimize recovery and detection efficiencies and that these experiments and the finally chosen procedure will be provided in the results and discussion sections.

Most of the material presented in the "Experimental" section would then have to be moved to "Results and discussion". In my view the method finally applied is the main result of the study and therefore should be presented in the results sections, not under "Experimental".

The three sections 3.1, 3.2 and 3.3. could then each be presented along the following lines (maybe each as a subsection):

- Introduction and existing approaches (not necessarily a subsection)
- Method development and optimization
- Improved method (what was previously in section 2) and performance characteristics (tables 1-4, figures, etc.).

Possibly the improved method could be presented in tabular form rather than in words, though I am not sure if that is easily possible.

Interactive comment on Atmos. Meas. Tech. Discuss., 4, 6007, 2011.