

We thank reviewer #3 for their helpful comments. We have addressed each point in turn below.

Specific comments

RC: I share the concerns of reviewer 2 on the many citations of not yet published manuscripts in this work. As long as the cited manuscripts are not published, it is critical to not only cite them, but to at least also summarise the relevant outcomes where they are critical for this manuscript. On the other hand, some of the references to not-yet-published-manuscript can be left out.

AR: We have addressed the concerns of reviewer 2 in detail and we would refer you to our response to him/her.

RC: p. 11979: When describing the setup and flow rates of the main sampling line, add also information on whether the sample flow was controlled or not.

AR: The flow was not controlled. We have added this information to the revised manuscript along with the other methodological details requested by the other reviewers.

RC: p. 11983-11984: Comparison of IRGA- and PTR-MS latent heat fluxes. In their reply to reviewer 1 the authors already recognized that the disjunct sampling cannot account for the 30 % systematic difference. I am somewhat more concerned about the rather weak correlation of IRGA- and PTR-MS-water vapour fluxes. In fact, I would not conclude a systematic 30% underestimate by the PTR-MS from this plot, the regression seems largely affected by outliers. Have the authors tested the influence of a more rigorous data selection (increasing u^* threshold or selecting based on a signal/noise ratio) on the quality of this correlation? If the flow rate through the main sampling line was not controlled, could varying pump speed the reason for such a large scatter?

AR: We were also troubled with the 30% discrepancy between IRGA and PTR-MS λE fluxes, to us this value seemed much too high given the very close agreement achieved between open and closed path IRGA instruments. The reviewer's suggestion of a more rigorous data selection is a good one and we have revisited this data to attempt to reduce the influence of the outliers in the regression plot. Removal of these points did slightly improve the regression, but we noticed that the time stamps of the open path and PTR-MS were out of sync by 1 data file. Correcting for this reduces the systematic offset to 17%. We have revised the text and figures accordingly.

Technical corrections

RC: p. 11984, 1.24: Specify what the 30 % refer to (ppb, ppbC?).

AR: These values refer to 30% of ppb of compound. We have clarified this in our revised manuscript.

RC: p. 12000: Two different papers are referred to as "Hewitt et al. 2010a"

AR: Thank you for pointing out our mistake. We have now corrected this.