Interactive comment on “Conditional CO$_2$ flux analysis of a managed grassland with the aid of stable isotopes” by M. J. Zeeman et al.

M. J. Zeeman
matthias.zeeman@ipw.agrl.ethz.ch

Received and published: 27 May 2009

We would very much like to thank the editor and the two referees for their effort and time to review our work.

Reviewer #1 is of the opinion that “the present work is not yet ready to be published” and states that “there are only 4 days worth of data here” and “more experiments and more thought will make this much stronger”. Obviously we were not clear enough in saying that these are the first such measurements with high temporal resolution that even allow to start thinking of such applications. With four days of data it is certainly possible to draw first conclusions. In our view it is definitely not a statistical problem (which would require more data), whereas the aspect of “more thought” is certainly well taken.

We however think that a different conceptual approach is necessary to make progress, which goes beyond the length of the measurement period. It would involve using lower measurement heights over short-statured vegetation. In contrast to reviewer #1’s view we definitely think this knowledge gain is of interest to other scientists and merits publication. The technical and financial resources needed to perform such measurements are substantial and it is to the benefit of the scientific community to openly inform everyone interested in this topic about possible pitfalls.

We also believe in the potential of the method used and really appreciate the constructive comments which will help us to revise our manuscript in a satisfactory manner.

Interactive comment on Biogeosciences Discuss., 6, 3481, 2009.