

Dear Dr. Lubbers,

thanks a lot for your feedback. We provided short responses to all comments and describe the actions taken. Please note that in the version with author's tracked changes we compared against the original submission published in Soil Discussions, and not the version that we uploaded in October. Also, all figures that are supposed to be published as supporting information are not part of the main document anymore, but contained in a separate document.

Referee #1 stated he/she was happy with your suggested corrections. I also agree that the solution for the PCA analysis is a good one. I have one more suggestion added to referee report #1. Indeed you address your objectives in the conclusion section, and the section has improved greatly, but it still reads rather as a conclusive summary. If your writing style allows it, I would propose to use phrases like "To conclude...", "Our findings recognize...", or "We found meaning".

Response: Agreed. We have rephrased the conclusions accordingly.

The last sentence of your newly written Conclusions is very long with a couple of dependent clauses. I think it would be good to rewrite this sentence so readers do not need to struggle with the very last sentence of the Conclusions section (the contents of the sentence I totally agree with!). Also, I remember reading "field moisture content" in the manuscript, instead of "field water content" which you now write in the new conclusions; I prefer field moisture content myself, but as long as the same formulation is used in the ms it will be fine. This also holds true for any other terminology, obviously, but I am sure the authors will consider this when revising the ms.

Response: The sentence has been split into two shorter sentences and the terminology has been streamlined. We now always refer to field water saturation, when we refer to the ratio of field water content over porosity. We avoid using the term moisture as it is a more generic term that is not well defined.

Referee #2 has not send a response concerning your proposed revisions. Having read your response to the referee report, I think your explanations (e.g. concerning using the field moisture content for basal respiration measurement, and also softening a couple of statements, such as the manuscript title) and proposed revisions will satisfy referee #2 and will also improve the original manuscript.

Response: Agreed. No further actions taken, as the proposed revisions had already been incorporated in October.

A general suggestion I would like to make is that when revising the manuscript, it would help readers to reduce sentence length here and there. For a number of cases (e.g. the sentences that include more than one dependent clause) this should be rather easy to achieve, and I think it will improve the readability of the manuscript as a whole.

Response: Agreed. We went through the MS again and split overly long sentences into smaller ones on 16 occasions. Also, we streamlined present and past tense in the MS.

I wish you all the best revising the manuscript, and I am looking forward to reading the revised version.

Kind regards,
Ingrid