

## *Interactive comment on* "Ideas and perspectives: why Holocene thermokarst sediments of the Yedoma region do not increase the northern peatland carbon pool" *by* G. Hugelius et al.

## G. Hugelius et al.

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Dear Reviewer 2

Thank you for this constructive review of our submitted manuscript.

You suggest two main ways in which a resubmitted manuscript could alter the focus to provide clearer insight into the issues (see detailed responses below) and go on to list suggestions regarding all three arguments that we make in our manuscripts and how these need to be clarified. We find all of these suggestions constructive and agree that the manuscript could be more informative and clear with updates and clearer

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argumentation.

Your main comment 1 is that the readers need more information and clarity regarding the calculations of overlap between estimates (figure 2). Specifically, we do not want the readers to have to go back to other papers to evaluate the issue. This is a good point and something we would strive to do in a revised manuscript. We would propose to revise the figure by adding explanatory footnotes of how the numbers were derived and give the details of all calculations in an extended Method supplement for any reader with a special interest in delving into the details (see corresponding response to Reviewer 1).

Your main comment 2 is that the discussion on terminology is of less importance and that the focus here should be diverted somewhat. We agree that this is not the main issue and that it can be toned down, especially in the abstract and conclusion sections. We do think that it is important to high-light how terminology varies and that it is important to account for this when comparing results across disciplines. We would also propose to make this discussion more pertinent by referring to studies that show how soils with higher organic carbon (i.e. true peats) are expected to respond differently to changed environmental conditions (see input from Reviewer 3 who has strong suggestions for additions here).

In addition to these main comments you provided us a number of smaller comments, both editorial and requests for more information or clarity. These are all good points/comments which would be addressed in a resubmitted manuscript.

On behalf of the co-authors, Gustaf Hugelius

Interactive comment on Biogeosciences Discuss., 12, 18085, 2015.