

Author response to comments from the Editor to the revised version of manuscript No. tc-2020-353, “PISM-LakeCC: Implementing an adaptive proglacial lake boundary into an ice sheet model”

submitted to The Cryosphere by Sebastian Hinck et al.

Comments to the author:

Dear Sebastian Hinck et al. thanks again for revising your manuscript to TCD. I am happy to accept the current version for publication in TC.

Dear Kerim Nisancioglu,

we are glad to have finally finished the review process. Thank you for your thoughtful comments that helped improve our manuscript.

Non-public comments to the Author:

Please find a few very minor technical corrections with suggested edits to the language:

In some cases, this also results in an advance of the ice margin that causes the emergence of ice lobes.

-> In some cases, this also results in an advance of the ice margin AND the emergence of ice lobes.

The results of our study demonstrate that glacio-lacustrine interactions play a significant role of the retreat of land terminating ice sheet margins.

-> The results of our study demonstrate that glacio-lacustrine interactions play a significant role IN the retreat of land terminating ice sheet margins.

In reality, however, sub-glacial drainage also can happen on much smaller scales through channels underneath the ice.

-> In reality, however, sub-glacial drainage can ALSO happen on much smaller scales through channels underneath the ice.

This process could also lead to repeated lake drainage and refilling events.

-> This process could lead to repeated lake drainage and refilling events.

We have applied the requested changes to the final manuscript. Furthermore, minor changes (rephrasing and spelling) were applied to the supplementary material.

Best regards,
Sebastian Hinck
