

2nd Review of “Ocean-Induced Weakening of George VI Ice Shelf” by Zinck et al.

General comments:

Thanks a lot for your revisions that satisfactorily address my major comments. At present, the results and discussions shown in this study are made much more robust and convincing than the previous ones after the authors carefully considered the comments from the reviewers and the editor. Thus, I think this manuscript is ready for publication in The Cryosphere just after a few minor revisions listed below.

Thank you very much. Below we have pointed out all changes made below each comment.

Specific comments:

Title: “Ocean-Induced Weakening of George VI Ice Shelf” => “..., West Antarctica” or “... in West Antarctica”

We have changed the title to “Ocean-Induced Weakening of George VI Ice Shelf, West Antarctica”.

The insertion of all the figures and tables should be placed after their first mentioning in the main text.

We have been through the manuscript and done our best to ensure that that is the case now - at least to the extent to which LaTeX allows.

L. 203: “Because ocean models approximate physical processes, they require tuning to better match observations.”_The causality is still confused, just remove this sentence.

We have removed the sentence as suggested.

L. 241: “in both 2014/15 (372 m/yr to 395 m/yr, Fig. 4a) and 2015/16 (375 m/yr to 397 m/yr, Fig. 4b)” => “in both 2014/15 (minimum: 372 m yr⁻¹, maximum: 395 m yr⁻¹; Fig. 4a) and 2015/16 (minimum: 375 m yr⁻¹, maximum: 397 m yr⁻¹; Fig. 4b)”

We have changed it according to your suggestion.

Line 247: “the spatial analysis effective strain rates” => “the spatial analysis of effective strain rates”

We have changed it according to your suggestion.

Fig. 5: the channels marked in black are indiscernible from the base maps.

We have changed the colors of the channels to yellow to make them more visible on the maps.

Fig. 6: what do the dashed lines in (h) and (i) denote?

Thanks for pointing this out! The dashed lines are not supposed to be there, and are leftovers from a much older version of this figure. We have made sure to remove them again.