

# Editor post-response for “A model of water extraction from the subglacial hydrologic system under idealized conditions”

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Thanks Caroline for suggesting improvements to our paper. Your comments are in black text and our responses are colored in blue text.

Thank you for making these detailed and substantive edits to your manuscript in response to reviewer feedback. I am happy with the vast majority of these edits, and the addition of Thwaites simulations is also valuable. One point that I don't feel was fully addressed is around the efficacy of extraction as an intervention method in terms of the slowdown effect produced in your simulations. I felt that some of the rewording in the revised discussion strengthens rather than moderates language around the extent to which water extraction can slow glaciers. For example, a comment by reviewer 1 indicated that slowdown is for winter conditions only, which is something you acknowledged in your response, but I'm not convinced that the rewording addresses this. For example, line 412 now states “As a glacier intervention strategy, our results suggest that water extraction can slow glaciers,” while the previous version of the manuscript used what I felt was softer language: “As a glacier intervention strategy, our results suggest that water extraction can act to moderately slow fast-moving glaciers, and that more research is required.” Can you please address this further prior to publication?

We appreciate the opportunity to clarify the language in our paper. We have now updated several locations in the text where we could qualify or give a direct estimate for the effect of intervention on ice velocity.