

Thank you for your constructive feedback on our manuscript.

In this paper, the authors analyze ice-dammed glacier outburst floods in a model that couples subglacial hydrology to ice flow. Both the subglacial hydrology model and the ice flow model are deliberately simple, yet they still rely on a number of parameters. I really like the approach and, given that coupling hydrology to ice flow will be an important topic in the coming years (cf. D. Brinkerhoff, A. Aschwanden, and M. Fahnestock. Constraining subglacial processes from surface velocity observations using surrogate-based bayesian inference. *J. Glaciol.*, 67(263):385{403, 2021. doi: 10.1017/jog.2020.112.), think that this paper is quite timely. I don't have any strong suggestions, other than a possible citation to the Brinkerhoff paper and that I would like to see plots of the ice evolution, rather than exclusively plots of the peak discharge.

It is not clear to me whether this paper has already gone through one round of revisions and if I am seeing it in the second round of revisions? Nevertheless, this is a great paper, and I think it should be published.

Thank you for the positive comment on the relevance of our manuscript. We would like to clarify that our one-way coupled model only accounts for the impact of ice flow on the outburst floods and subglacial hydrology, but it does not consider the influence of the subglacial hydrology on ice flow. Therefore, we do not believe the Brinkerhoff citation is relevant to our paper as they deal with a fully-coupled model and do not look at short period discharge events over long timescales. We do however, thank you for pointing our attention to the importance of referencing relevant recent work. We will add one or two citations to the introduction to place our work into context with other work that has considered how discharge will vary as glaciers retreat.

We agree a figure including a plot of ice evolution is helpful. Thank you for this suggestion. To address this, we will add the figure below to the manuscript.

