

Earth Surf. Dynam. Discuss., author comment AC2
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Reply on RC1

Da Huo and Michael P. Bishop

Author comment on "Modeling Supraglacial Ponding and Drainage Dynamics: Responses to Glacier Surface Topography and Debris Flux Conditions" by Da Huo and Michael P. Bishop, Earth Surf. Dynam. Discuss., <https://doi.org/10.5194/esurf-2021-53-AC2>, 2021

Thank you for these very helpful comments, we plan to make the following changes accordingly:

1. Provide additional maps of the study area including the glacier, meltwater ponds and surrounding areas somewhere before the result section.
2. For Fig. 2, we plan to add more descriptive information on the figure to make it more readable, and we will add additional sub-figures to present a more comprehensive evolution lifecycle of the ponds.
3. For Fig. 4, the differences in A-D are difficult to detect for two reasons: 1. The ponds are relatively small and only account for a small portion of the glacier surface area, so they do not "stand out" in the context of the entire ablation zone of the glacier 2. The color bar and its scale did not highlight the differences very well. We plan to add some zoomed in figures and some descriptions in the figure caption to help readers better understand the information we want to present, and we will adjust the scale of the color bar to better highlight areas of interest.