

Dear Dr McCormack,

Thanks for your time and effort in turning this around quickly.

- Both reviewers had comments around the basal friction law overview in Section 2. I appreciate your response to contrasting suggestions for more detail and shortening of this section! However, to address any confusion, I suggest that a brief overview is added at the start of this section, with a few sentences describing why this section is included in the manuscript. This could include parts of the description in the response to reviewer 2, e.g. :

“A major focus of this paper is to try to systematically separate the effective pressure response (near grounding line weakening) from the friction type (Coulomb versus Weertman).” To this end, in this section, we review/provide context on...

Done.

- Please provide a brief overview text in the supplementary material to accompany the figures. For figure S1, could you please comment on how the mesh resolution is determined / refined? Why are there linear features of coarser resolution in the interior of the catchment?

Done.

- I note that you have prepared the data for archiving - thanks very much. Do you have a DOI of the data and model inputs? In accordance with TC open access requirements, I would like to check that before approving the final version.

Active Dryad link provided in revision.

I likely will be starting a course of chemo and radiation the week after next (prognosis so far is quite good). If I get the green light to upload before then, I will do my best to get it done ASAP. Once treatment has started, I maybe a bit slower to response. Thanks in advance for your patience.

Ian