Dear Editor,

Below, we copy the last comments from both reviewers and provide a point-by-point reply in blue.

Reviewer #1: Clara Burgard

I thank the authors for putting so much work into the revision of the manuscript! The new structure makes the reading more fluent and less confusing, and the main message is clearer. I also find the idea to put all the technical tuning information in the Appendix good. As the way the main messages are now formulated and there is an evaluation on Pine Island ice shelf, I find it more acceptable to both tune and evaluate on Dotson-Crosson ice shelf.

Dear reviewer,

We are happy that you are pleased with the revision of the manuscript. We agree that the current structure is a significant improvement upon the previous version.

I have two last minor comments.

(1) In L322, the authors refer to ESMs that do not resolve cavities. This information is important and I recommend mentioning it in the introduction, somewhere around L80.

This is a good suggestion, and we have mentioned this in the Introduction

(2) In L11, it is not completely clear what is meant by "without the need to retune parameters". Did the authors mean "without the need to retune parameters for each ice shelf individually"? I suggest clarifying.

Agreed, and we have specified this in the abstract

Thank you and looking forward to the opportunities that LADDIE opens, in particular for icesheet modelling!

Anonymous reviewer #2

I made only minor suggestions to the manuscript, and they have all been addressed.

however, one issue i have noticed with the code availability: the link https://github.com/erwinlambert/laddie-description is faulty.

Dear reviewer,

Thank you for your reviews. Unfortunately, we do not understand the problem with this link. We can open it properly and have asked a colleague to try to open the link, which he could. We therefore consider the link to be proper and have not modified it.