

## ***Interactive comment on “Modelling the late-Holocene and future evolution of Monacobreen, northern Spitsbergen” by J. Oerlemans***

### **Anonymous Referee #1**

Received and published: 26 March 2018

Thank you for your quick response. I think if you clearly state (in the paper) the purposes that you have outlined in this initial response, the paper will be greatly improved and the reader will have an easier time of discerning the most important points of the paper. For example, if there were a sentence at the end of section one that read (something like): The central purposes of this study are to: (1) . . .

If I understand correctly, you have identified several purposes of the paper, all of which I find to be valid, among them:

(a) The modeling of a large complex glacier system in Spitsbergen and its response to future climate change, which is of interest to those seeking to understand future sea

C1

level rise from glacier melting.

(b) The development of a simple model to simulate a relatively complex system that could also potentially be used to model other complex glacier systems.

I don't disagree with your other points, and I think if the text is clarified to explain these arguments (e.g. what assumptions do go into deriving this mean ice thickness; why minimal model results are more reproducible than those for a more complex model in the absence of well-constrained observations) and those I outline in my initial review, then the average reader will be able to understand and reproduce your results more easily.

---

Interactive comment on The Cryosphere Discuss., <https://doi.org/10.5194/tc-2018-10>, 2018.

C2