Interactive comment on "Modelling the Antarctic Ice Sheet across the Mid Pleistocene Transition – Implications for Oldest Ice" *by* Johannes Sutter et al.

Jorge Alvarez-Solas (Referee)

jorge.alvarez.solas@fis.ucm.es

The article by Sutter et al., describes a large ensemble of simulations for the evolution of the Antarctic ice sheet during the past 2 Ma with a continental scale 3D thermomechanical ice-sheet model. The goal of the paper is clearly described in the title and nicely addressed throughout the description of the results, the discussion and the conclusions. I think this is a good paper whose scientific question is clearly suitable for TC.

That being said, I think two main aspects of the paper need to be addressed before publication. They correspond to the two following general comments. Below, you will

also find an extensive list of more specific and technical issues.

Please also note the supplement to this comment:
https://www.the-cryosphere-discuss.net/tc-2019-24/tc-2019-24-RC2-supplement.pdf