

Interactive comment on “Ice sheet dynamics within an Earth system model: coupling and first results on ice stability and ocean circulation” by D. Barbi et al.

D. Barbi et al.

dirk.barbi@awi.de

Received and published: 25 August 2013

Dear referee,

thank you for your kind reply, and the many helpful suggestions. We overworked the article in its entirety, so I hope you will forgive me if I don't answer to every single suggestion in detail, but rather mention the main changes:

* We included the missing information about ice sheet temperature initialization * and the reference to the PDD implementation. * We also removed most references to Antarctica, as the sheet was neither realistically simulated nor coupled. We postpone the ice shelf simulation and coupling until a later publication. * We also rearranged the

C1304

paragraph about impact on ocean circulation, making it an outlook on future work as it was not possible to present a detailed analysis within the time since your comment.

I hope that the new version will find your interest and acceptance. I want to apologize for the delay - we tried to change the RIMBAY version for a more adequate discussion, but as the main author is working on different project, we finally decided to concentrate on the modelling issues concerning Greenland.

Best regards,

Dirk Barbi

Interactive comment on Geosci. Model Dev. Discuss., 6, 1, 2013.