

Interactive comment on “Ice Sheet Model Intercomparison Project (ISMIP6) contribution to CMIP6” by Sophie M. J. Nowicki et al.

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Review of Nowicki, Sophie M.J. and others (Geoscientific Model Development, gmd-2016-105)

The manuscript of Nowicki and others describes the foundation and reasoning of the Ice Sheet Model Intercomparison Project (ISMIP6) and its relation the coming CMIP6 exercise.

Under the frame of the Climate and Cryosphere (CliC) and World Climate Research Project (WCRP) model intercomparisons have been and will be a tool to project the future evolution of the earth's climate system. The understanding of how massive land ice masses — such as Antarctica and the Greenland ice sheet — will melt under a changing climate and contribute to an already globally raising sea level is crucial in the

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context of climate adaptation and mitigation efforts. The manuscript clearly contrasts the difference between various model experiment setups and motivates the usage of these experiments. It also highlights the relationship to former and coming “traditional” CMIP experiments. The manuscript will certainly act as the reference for the described ISMIP6 exercise.

The manuscript is very well written, has a clear structure and all tables and figures are necessary and well prepared. It was a pleasure to review this manuscript. I hope that the manuscript could be published soon, because I will be extremely helpful to have this information for the involved groups as well as the wider CMIP6 audience.

I recommend the publication of the manuscript after few minor corrections.

A detailed list of comments including the text above is given in the attached pdf-file.

Please also note the supplement to this comment:

<http://www.geosci-model-dev-discuss.net/gmd-2016-105/gmd-2016-105-RC1-supplement.pdf>

Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-105, 2016.