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## ISMIP6 Future Projections for Antarctica performed using the AWI PISM ice sheet model

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Ice sheets constitute the largest and most uncertain potential source of future sea-level rise. The Ice Sheet Model Intercomparison Project for CMIP6 (ISMIP6) brings together a consortium of international ice sheet and climate models to explore the contribution from the Greenland and Antarctic ice sheets to future sea-level rise.

We use the Parallel Ice Sheet Model (PISM, [pism-docs.org](http://pism-docs.org)) to carry out spinup and projection simulations for the Antarctic Ice Sheet. Our treatment of the ice-ocean boundary condition previously based on 3D ocean temperatures (initMIP-Antarctica) has been adopted to use the ISMIP6 parameterisation and 3D ocean forcing fields (temperature and salinity) according to the ISMIP6 protocol.

In this study, we analyse the impact of the choices made during the model initialisation procedure on the initial state. We present the AWI PISM results of the ISMIP6 projection simulations and investigate the ice sheet response for individual basins. In the analysis, we distinguish between the local and non-local ice shelf basal melt parameterisation.