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How changing the height of the Antarctic ice sheet affects global climate: a mid-Pliocene case study

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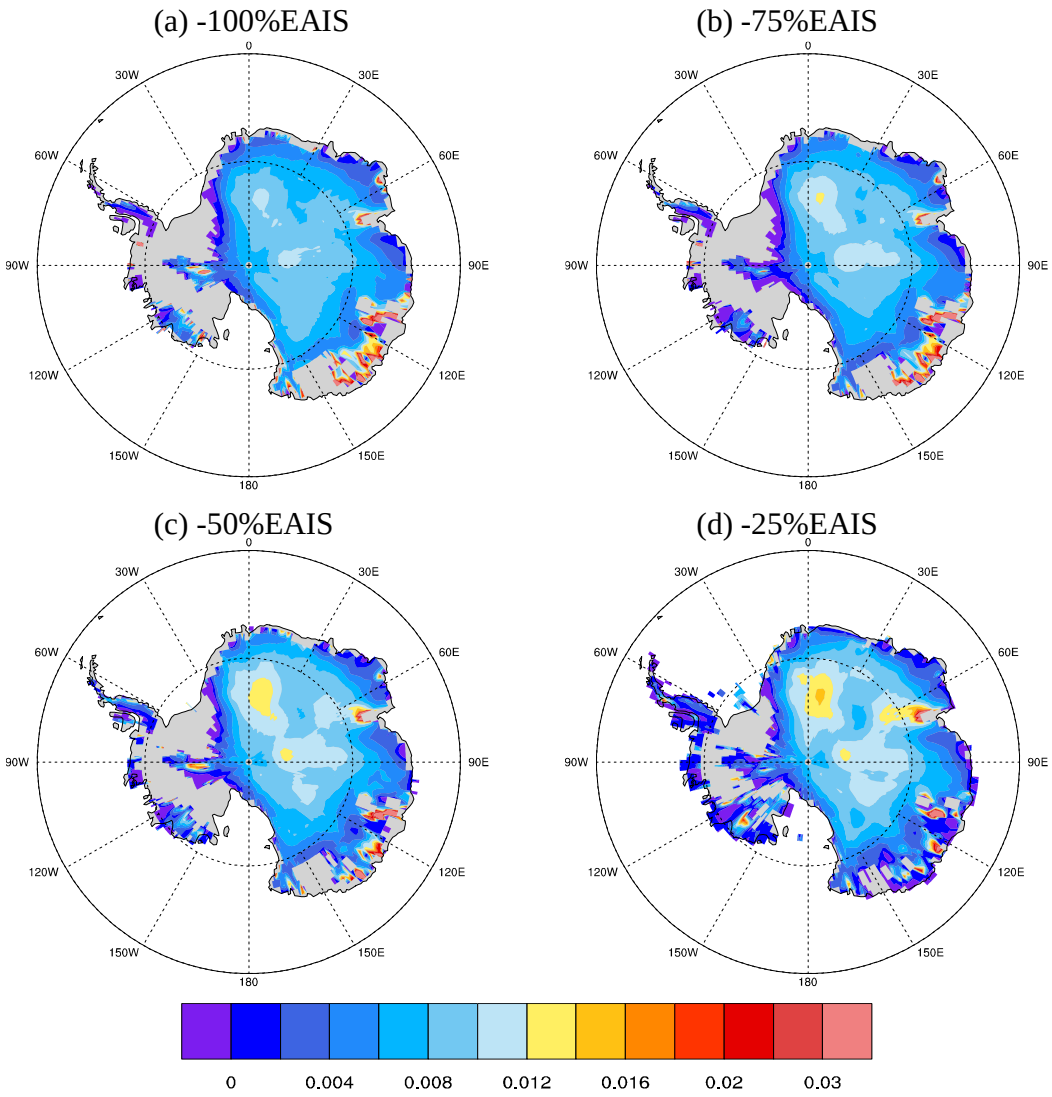

Figure S1. Change in temperature due to changing surface height (℃/m) over Antarctica for each sensitivity experiments

Sea surface temperature changes

Analysis of sea surface temperature (SST) for all sensitive experiments shows the presence of the cooling, which extends across all ocean basins of the world (Figure S2). SST decreases are greatest in -100%EAIS (~1–2 ℃; Figure S2a), while smallest in -25%EAIS (~0 ℃; Figure S2d). Moreover, similar to the anomalous patterns of the SAT, the global surface ocean is — with a few exceptions of regional warming — characterized by decreased SST, a pattern that is more pronounced in the Southern Ocean.

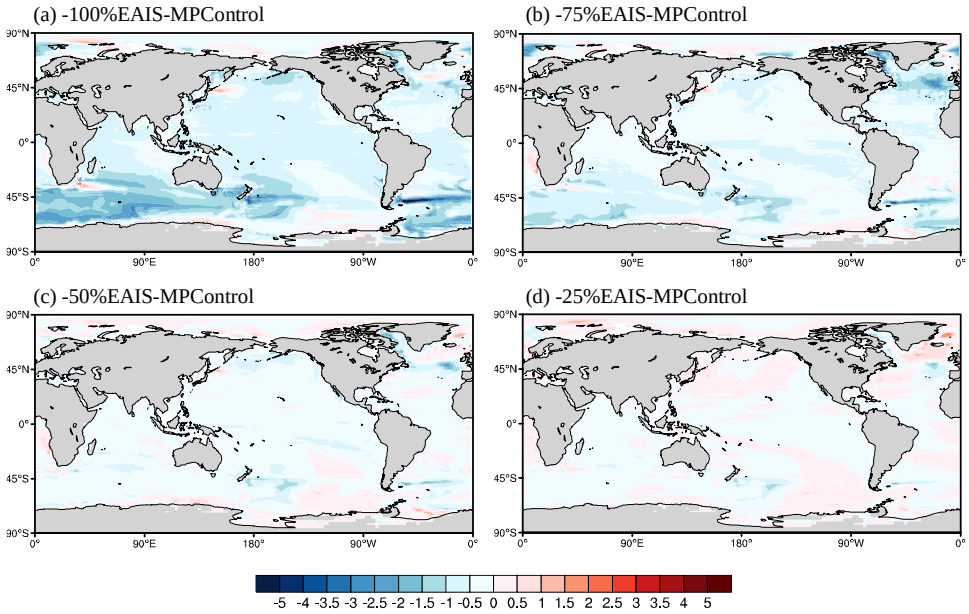

Figure S2. Spatial distribution of the annual mean sea surface temperature anomalies (units: ℃) over global between sensitivity experiments and MPControl experiments.