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最終間氷期の気候条件がグリーンランド氷床に与える影響について
Sensitivity of Greenland ice sheet to climatic parameters during the last interglacial

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In the last interglacial (LIG), sea level was 5 to 9 m above present, including contribution from Antarctica. Whole melting of the Greenland ice sheet (GIS) can contribute to the global sea-level rise of up to 7 m. It is important source of sea-level change. In the previous IPCC report in 2007 (IPCC AR4), estimates the GIS contribution to sea-level change during LIG range between 4 to 6 m. New IPCC AR5 points out that based on ice-sheet model simulations consistent with elevation changes derived form a new Greenland ice core, the Greenland ice sheet *very likely* contributed between 1.4 to 4.3 m sea level equivalent.

In this study, we present numerical experiments of GIS from 140 ka to 110 ka by using anomaly approach (present-day climate + perturbation obtained from MIROC-AGCM simulations including dynamic vegetation). We focus on the influence of the climatic parameters such as AMOC or northern hemisphere ice sheets. Our results are consistent with IPCC AR5. Considering of transient response to transient climate change are important to moderate ice melting. Several uncertainties remain however, such as the reference climate condition (influence melt from south, north or both?). and related the ice sheet model itself, more numerical studies are required.

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