

Climate Dynamics of the Final Glacial-Interglacial Transition

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Abstract

Subsequent to the Last Maximum of Glaciation (LGM) at 26,000 years before present, the planet began the exit from full glacial conditions, a “termination” that lasted until the onset of the Holocene approximately 10,000 years ago. This transition was punctuated by a sequence of rapid large amplitude swings in climate that pose significant challenges for coupled atmosphere-ocean climate models to explain. These events include Heinrich event 1, the Bolling-Allerod warming and the Younger–Dryas climate reversal. I will discuss the extent to which these events are explicable using a modern Earth System model.