

Modeling the large-scale ocean circulation around Greenland

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ABSTRACT:

This talk will review the present understanding of the ocean circulation around Greenland. We describe the circulation on the Greenland shelves, in the adjacent deep basins, and the interactions between them. The oceanic conditions adjacent to key fjords draining the Greenland Ice Sheet are discussed, and the mechanisms that control those conditions are explored. We describe the upstream pathways, timescales, and transformation of water parcels present at the mouths of Kangerdlugsuak and Sermilik fjords in southeast Greenland. Finally, we speculate on how future changes in Arctic climate will impact ocean circulation around Greenland.

Solicited oral presentation

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