

Impact of AMOC variability on Greenland, Arctic glaciers and Arctic sea-ice

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Increased poleward transport of heat in the North Atlantic has been linked to the loss of ice from the Greenland Ice Sheet, Arctic glaciers and Arctic sea-ice, in both observations and models and on a variety of timescales. Both for land-ice and sea-ice, however, the proposed mechanisms are still in question and include direct and indirect impacts. Here we review the main proposed mechanisms and supporting evidence both in models and observations as well as the extent to which these processes are accounted for in climate models.