

Past and current changes in the marine outlets of the Northeast Greenland ice stream

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The dynamic mass loss from marine terminating outlet glaciers is a significant contribution to the current mass budget of the Greenland ice sheet. Using the Uá shallow shelf approximation model, this study presents initial results on the past and current seasonal variations of basal properties of the marine outlets of the Northeast Greenland ice stream, one of which recently has been found to exhibit an accelerated retreat since 2012. Further more, the groundwork is laid out for future work on correlating such changes with climatic parameters and determining possible impacts on the up-stream catchment area.