Project Title
Monitoring the ice edge break-up in Eclipse Sound

Researcher's Name and Affiliation
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Project Location
Eclipse Sound, near Pond Inlet

Timeframe
May to August 2015

Project Description
The purpose of this project is to monitor and characterize the landfast ice sheet covering Eclipse Sound before, during and after its break-up in late spring and early summer, by way of two autonomous time-lapse camera systems deployed on high lands on both sides of the eastern end of Eclipse Sound. Each system consists in an insulated box containing the camera and hardware powered by one battery and one solar panel. The equipment will be brought on sites by snowmobiles for installation in May, and by boat for recovery at the end of summer, with the help of hunters from Pond Inlet. Images will be stored on locally and retrieved at the end of the season. Images will be processed by Dumont's research team at ISMER, used to characterize the ice edge break-up and to validate RADARSAT satellite images acquired during the project. Results will be shared with project partners and the community through the Ocean's North website. Research results and data will be shared with the community, the Nunavut Research Institute and Oceans North Canada, and may result in a publication in a scientific journal.

The proposed methodology is currently used to study ice dynamics in the St. Lawrence Estuary, Québec, Canada. Examples of time-lapse videos can be viewed here: https://vimeo.com/106835989.