

Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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SCIENTIFIC RESEARCH LICENSE

LICENSE # 01 001 22N-A

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AFFILIATION: Environment & Climate Change Canada

TITLE: Environment & Climate Change Canada Eureka Snow on Ice Sea Ice Campaign 2022

OBJECTIVES OF RESEARCH:

The Canadian Arctic Archipelago (CAA) is a unique sea ice region located in northern Canada, adjacent to the Arctic Ocean. The northern CAA represents a region of the Last Ice Area, which will become the only refuge for sea ice-dependent species when the majority of the Arctic Ocean becomes sea ice-free during the summer. As the CAA warms, it will also become a source of freshwater via increased inflow of Multi-Year Ice (MYI), potentially impacting freshwater concentrations and large-scale ocean circulation patterns. Moreover, the increased inflow of thick MYI is a serious maritime safety concern for shipping. Traditional monitoring of sea ice within the CAA has lacked volumetric / ice thickness information. The recently launched (2018) NASA ICESat-2 satellite holds potential to provide high-spatial resolution estimates of sea ice thickness, which should be able to more accurately estimate volumetric freshwater MYI in-flows, and identify thick MYI shipping hazards.

TERMS & CONDITIONS:

The holder of the licence will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report and the Department of Culture & Heritage archaeological sites terms and conditions. The license holder will abide by all special public health protection measures imposed by Nunavut's Chief Medical Officer of Health in response to the Covid-19 Pandemic, including restrictions on non-essential travel to Nunavut. These terms and conditions will form part of this licence.

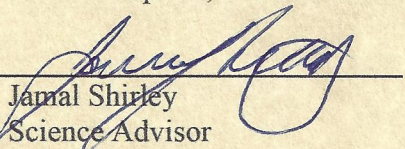
DATA COLLECTION IN NU:

DATES: April 06, 2022-May 05, 2022

LOCATION: Eureka

Scientific Research License 01 001 22N-A expires on December 31, 2022

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Jamal Shirley
Science Advisor

