

SCIENTIFIC RESEARCH LICENSE

LICENSE # 04 033 26N-M

ISSUED TO: Jason Maas
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TEAM MEMBERS:

AFFILIATION: Polar Knowledge Canada

TITLE: Solar Resource Monitoring Station

OBJECTIVES OF RESEARCH:

The objective of the project is to monitor solar radiation and meteorological data in Cambridge Bay, including direct normal irradiance (DNI), diffuse horizontal irradiance (DHI), global horizontal irradiance (GHI), albedo, and longwave radiation. Other parameters to be monitored include temperature, wind speed and direction, humidity, air pressure, snow depth, and precipitation. Due to challenging environmental conditions, very few high-quality solar ground station datasets exist for Canada's Arctic. This data can provide valuable insights on solar radiation variability and can be used to calibrate and improve large weather models over polar regions. Lessons learned from the station design & operation will inform future weather stations and experiments in the Arctic, and the development of best practices for accurate and reliable solar radiation & weather data collection. The solar radiation data can also be used to support renewable energy integration in Arctic communities.

TERMS & CONDITIONS:

The holder of the licence will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report (NIRB File # 26YN018) and the Department of Culture & Heritage archaeological sites terms and conditions. These terms and conditions will form part of this licence.

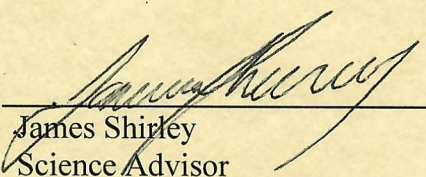
DATA COLLECTION IN NU:

DATES: July 01, 2026-December 31, 2026

LOCATION: Cambridge Bay

Scientific Research License 04 033 26N-M expires on December 31, 2026

Issued at Iqaluit, NU on June 29, 2026


James Shirley
Science Advisor

