

Northwest Passage Project 2019 - Meteorological, Oceanographic and Ship Data Collected Onboard Icebreaker Oden

SND-ID: 2021-119-1. **Version:** 1. **DOI:** <https://doi.org/10.48515/bhnx-4z85>

Is part of collection at SND: [Icebreaker Oden](#)

Download data

Oden_Ship_Data_NWP2019.zip (34.86 MB)

Associated documentation

2019 NWP (b).jpg (215.63 KB)

Odendata Parametrar List 2018-2019.pdf (174.66 KB)

Download all files

2021-119-1-1.zip (~35.24 MB)

Citation

(2021) Northwest Passage Project 2019 - Meteorological, Oceanographic and Ship Data Collected Onboard Icebreaker Oden (Version 1) [Data set]. Swedish Polar Research Secretariat. Available at: <https://doi.org/10.48515/bhnx-4z85>

Creator/Principal investigator(s)

[Swedish Polar Research Secretariat, Ship-Based Research Support](#)

Research principal

[Swedish Polar Research Secretariat](#) - Ship-Based Research Support

Description

The Northwest Passage Project 2019 was a US National Science Foundation funded program in collaboration with the Swedish Polar Research Secretariat to explore the changing Arctic through an innovative expedition onboard the Swedish Icebreaker Oden. The science activities were motivated by the overarching goal to understand how waters of the Canadian Arctic Archipelago have changed as a consequence of the secular warming trend over the Arctic Circle.

Undergraduate and graduate students participated in the expedition along with scientists, historians, journalists, and a documentary film crew. The expedition engaged diverse audiences through real time interactions from sea, a high definition 2-hour documentary, and related community events. Visit <https://northwestpassageproject.org> for more information about the expedition and the research projects.

The data presented here are the meteorological, oceanographical and ship data collected onboard Icebreaker Oden during the expedition Northwest Passage Project 2019.

This data set contains meteorological, oceanographical and ship data collected onboard IB Oden

during the expedition Northwest Passage Project 2019, which was a research cruise to the Canadian Arctic Archipelago.

Meteorological variables: Air temperature, Humidity, Wind direction/speed, Atmospheric pressure, Cloud height/cloudiness, Photosynthetic Active Radiation (PAR).

Oceanographical variables: Sea water temperature, Conductivity, Salinity and Sound velocity.

Ship data: Position, Speed, Course, Heading, Water depth.

A "Parameter list" which describes the dataset is attached.

Quality Information: No quality check or other processing of the data has been undertaken. Users should be aware of this in further data handling and analysis.

Data contains personal data

No

Language

[English](#)

Time period(s) investigated

2019-07-17 - 2019-08-04

Variables

589

Data format / data structure

[Numeric](#)

Data collection 1

- Description of the mode of collection: Data collection onboard IB Oden is based around a server system and a MySQL database. Sensors are directly connected to this system and data are stored in the original time resolution, as delivered from each individual sensor. The data is published as 1-minute averages. Higher resolution is available upon request. The data collection system on IB Oden ("Nyval 17") has been in operation since 2017.
- Time period(s) for data collection: 2019-07-17 - 2019-08-04
- Temporal resolution: 1 minute

Geographic spread

Geographic location: [Greenland](#), [Canada](#), [Arctic Ocean](#), [Greenland Sea](#), [Arctic](#)

Responsible department/unit

Ship-Based Research Support

Research area

[Earth and related environmental sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Natural sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Geoscientific information](#) (INSPIRE topic categories)

[Climatology / meteorology / atmosphere](#) (INSPIRE topic categories)

[Oceans](#) (INSPIRE topic categories)

[Location](#) (INSPIRE topic categories)

Keywords

[Atmosphere](#), [Atmospheric winds](#), [Wind speed](#), [Wind direction](#), [Visibility](#), [Weather events](#), [Atmospheric temperature](#), [Air temperature](#), [Precipitation amount](#), [Precipitation rate](#), [Humidity](#), [Cloud frequency](#), [Cloud base height](#), [Atmospheric pressure](#), [Sea level pressure](#), [Atmospheric pressure measurements](#), [Salinity/density](#), [Salinity](#), [Conductivity](#), [Photosynthetically active radiation](#), [Water temperature](#), [Water depth](#), [Atmospheric conditions](#), [Coordinate reference systems](#), [Hydrography](#), [Meteorological geographical features](#), [Oceanographic geographical features](#)

Polygon (Lon/Lat)

-108.45703125, 77.617709052797

-108.45703125, 72.84202111046

-66.796951761746, 72.84202111046

-66.796951761746, 77.617709052797

-108.45703125, 77.617709052797

Accessibility level

Access to data through SND

Data are freely accessible

Use of data

[Things to consider when using data shared through SND](#)

License

[CC BY 4.0](#)

Versions

Version 1. 2021-05-20

Homepage

<https://polar.se>

<https://northwestpassageproject.org>

Contact for questions about the data

Fartyg Datamanager

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Is part of collection at SND

[Icebreaker Oden](#)

Download metadata

[DataCite](#)

[DDI 2.5](#)

[DDI 3.3](#)

[DCAT-AP-SE 2.0](#)

[JSON-LD](#)

[PDF](#)

[Citation \(CLS\)](#)

[File overview \(CSV\)](#)

Published: 2021-05-20

Last updated: 2022-12-05