

Arctic Ocean 2018 - Meteorological, Oceanographic and Ship Data Collected Onboard Icebreaker Oden

SND-ID: 2021-120-1. **Version:** 1. **DOI:** <https://doi.org/10.48515/e0s0-2w92>

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

Download data

Oden_Ship_Data_ArcticOcean2018.zip (104.6 MB)

Associated documentation

Arctic_Ocean_2018/Odendata Parametrar List 2018-2019.pdf (174.66 KB)

Download all files

2021-120-1-1.zip (~104.77 MB)

Citation

(2021) Arctic Ocean 2018 - Meteorological, Oceanographic and Ship Data Collected Onboard Icebreaker Oden (Version 1) [Data set]. Swedish Polar Research Secretariat. Available at: <https://doi.org/10.48515/e0s0-2w92>

Creator/Principal investigator(s)

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

Research principal

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

Description

The expedition Arctic Ocean 2018 was a collaboration between the Swedish Polar Research Secretariat and the U.S. National Science Foundation (NSF), using the Swedish icebreaker Oden as a platform for research in the High Arctic. The framework for the expedition was set out by the project "The life cycle of clouds in the high Arctic summer with linkages to the microbial life in ocean and life". The project had some crucial requirements such as a quick approach into the High Arctic and then finding a suitable ice flow, moor to this flow, and then stay there for scientific work during the minimum ice coverage period, and finally to cover the refreezing processes.

The NSF, and the Swedish Research Council and Formas selected several additional projects fitting into the overall layout of the expedition Arctic Ocean 2018. For more information on the research projects see: <https://www.polar.se/en/>

The data presented here are the meteorological, oceanographic and ship data collected onboard Icebreaker Oden during the expedition Arctic Ocean 2018.

This data set contains meteorological, oceanographical and ship data collected onboard IB Oden during the scientific expedition Arctic Ocean 2018, which was an international research cruise to the Arctic Ocean.

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

2018-07-20 - 2018-09-21

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: 2018-07-20 - 2018-09-21
- Temporal resolution: 1 minute

Geographic spread

Geographic location: [Arctic Ocean](#), [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)

-359, 90

-359, 85

-1, 85

-1, 90

-359, 90

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>

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 \(CSV\)](#)

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