

Lomonosov Ridge off Greenland II (LOMROG II) - Meteorological, Oceanographic and Ship Data Collected Onboard Icebreaker Oden during July 31 through September 9 2009

SND-ID: ecds0201-1. **Version:** 1.0. **DOI:** <https://doi.org/10.5879/ecds/2016-07-07.4/1>

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

This data description and associated data have been migrated from the ECDS portal to SND's research data catalogue. The level of documentation may therefore differ from other data descriptions in the catalogue. For more information about the migration of data from ECDS to SND click [here](#).

Download data

ECDS 0201-001-V1.0.zip (17.71 MB)

Associated documentation

Lomrog2_small.png (620.2 KB)

Download all files

ecds0201-1-1.0.zip (~18.31 MB)

Citation

(2017) Lomonosov Ridge off Greenland II (LOMROG II) - Meteorological, Oceanographic and Ship Data Collected Onboard Icebreaker Oden during July 31 through September 9 2009 (Version 1.0) [Data set]. Swedish Polar Research Secretariat. Available at: <https://doi.org/10.5879/ecds/2016-07-07.4/1>

Creator/Principal investigator(s)

Swedish Polar Research Secretariat

Research principal

[Swedish Polar Research Secretariat](#)

Description

The LOMROG II expedition was carried out in the summer of 2009 by the Danish Continental Shelf Project in cooperation with the Swedish Polar Research Secretariat and the Swedish Maritime Administration.

The expedition was a follow-up to LOMROG, which was conducted in 2007.

The Swedish icebreaker Oden served as the research platform, while the actual research areas was selected based on the prevailing ice situation, particularly in the area around the North Pole.

In 2009 Oden operated without the assistance of another icebreaker. The expedition focused on the areas around the North Pole, although the area northeast of Greenland also was included. The researchers were particularly interested in the Lomonosov Ridge, a mountain ridge on the ocean floor. To break through the nearly impenetrable icepack, Oden was assisted by one of the world's most powerful icebreakers, the Russian 50 Let Pobedy. The Danish researchers mainly worked on the Continental Shelf Project, which is affiliated with the UN Convention on the Law of the Sea (UNCLOS)

regarding national claims to the ocean floor. Using advanced multi-beam 3D echo sounding, seismology, and water and sediment samples, the researchers gathered information about the appearance and structure of the ocean floor. A group of marine geologists from Stockholm University also took part in the Danish project.

A sequence of sediment cores was collected from the slope of the Lomonosov Ridge as part of a project called "Reconstructing Central Arctic Ocean Paleoceanography Using Sediment Cores from the Lomonosov Ridge". The sediment cores could provide answers to questions about how the dynamics of the inland ice sheets have affected the global climate.

The expedition started and ended in Longyearbyen in Svalbard.

Purpose:

The study's purpose was to collect meteorological, oceanographic and ship data during the Danish-Swedish expedition Lomonosov Ridge off Greenland II.

These data were collected onboard the icebreaker Oden during the Lomonosov Ridge off Greenland II (LOMROG II) expedition 2009 and are published by the Swedish Polar Research Secretariat. Obviously erroneous data have been omitted. No other processing of the data has been undertaken.

The dataset contains the following files:

Lomrog2.txt - Main file containing data as described below.

Lomrog2_overview.txt - File containing an hourly data excerpt from the full data file above.

Lomrog2_depth.txt - File contains water depth. (Different time resolution compared to main file)

Lomrog2.shp - Shape file of LOMROG II route.

Lomrog2.kml - Google Earth file of LOMROG II route.

Data contains personal data

No

Language

[English](#)

Time period(s) investigated

2009-07-31 – 2009-09-09

Data format / data structure

[Numeric](#)

[Geospatial](#)

Data collection 1

- Mode of collection: Field observation
- Time period(s) for data collection: 2007-07-31 – 2007-09-09

Geographic spread

Geographic location: [Arctic Ocean](#)

Identifiers

DOI: <https://doi.org/10.5879/ECDS/2016-07-07.4/1>

Research area

[Engineering and technology](#) (Standard för svensk indelning av forskningsämnen 2011)

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

[Meteorology and atmospheric sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Oceanography, hydrology and water resources](#) (Standard för svensk indelning av forskningsämnen 2011)

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

[Oceans](#) (INSPIRE topic categories)

[Environment](#) (INSPIRE topic categories)

Keywords

[Meteorology](#), [Atmosphere](#), [Atmospheric winds](#), [Surface winds](#), [Atmospheric temperature](#), [Air temperature](#), [Atmospheric water vapor](#), [Humidity](#), [Atmospheric pressure](#), [Surface pressure](#), [Oceans](#), [Salinity](#), [Conductivity](#), [Ocean temperature](#), [Water temperature](#), [Water depth](#), [Seafloor topography](#), [Bathymetry](#), [The icebreaker oden](#)

Publications

Link to publication list:

[Publications and data](#)

Polygon (Lon/Lat)

-42, 85

-42, 80.1

29.4, 80.1

29.4, 85

-42, 85

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 1.0. 2017-09-12

Homepage

[LOMROG II Homepage](#)

Related research data in SND's catalogue

[Lomonosov Ridge off Greenland \(LOMROG\) - Meteorological, Oceanographic and Ship Data Collected Onboard Icebreaker Oden during August 12 through September 19 2007](#)

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

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