

Cruise track position data from R/V Oden cruise ASCOS2008 from the High Arctic Ocean in 2008 (87degs N, 1-6degs E) (Marine Microgels project)

Website: <https://www.bco-dmo.org/dataset/3592>

Version: 04 January 2010

Version Date: 2012-01-04

Project

» [Marine microgels: A microlayer source of summer CCN in high Arctic open lead](#) (Marine Microgels)

Program

» [Arctic Summer Cloud Ocean Study](#) (ASCOS)

| Contributors | Affiliation | Role |
|-------------------------------------|--|---------------------------|
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Dataset Description

Icebreaker ODEN ASCOS 2008 Cruise Track - 1 minute fixes

Methods & Sampling

Collected aboard the ODEN via the meteorological station

Data Processing Description

Generated by BCO-DMO staff from original file Matrai_OdenWeatherStation_cruisetrack.xls contributed by Paty Matrai

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Data Files

| File |
|---|
| CruiseTrack.csv (Comma Separated Values (.csv), 2.31 MB) MD5:b4b0eb7ac5b86881a98b0276c3a1c3ba |
| Primary data file for dataset ID 3592 |

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Parameters

| Parameter | Description | Units |
|-----------|--------------------------------------|-----------------|
| date | date (GMT) | YYYYMMDD |
| time | time (GMT) | HHMMSS |
| lon | Station longitude (West is negative) | decimal degrees |
| lat | Station latitude (South is negative) | decimal degrees |
| cruise_id | cruise_id | text |

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Instruments

| | |
|---|---|
| Dataset-specific Instrument Name | Global Positioning System Receivers |
| Generic Instrument Name | Global Positioning System Receiver |
| Generic Instrument Description | The Global Positioning System (GPS) is a U.S. space-based radionavigation system that provides reliable positioning, navigation, and timing services to civilian users on a continuous worldwide basis. The U.S. Air Force develops, maintains, and operates the space and control segments of the NAVSTAR GPS transmitter system. Ships use a variety of receivers (e.g. Trimble and Ashtech) to interpret the GPS signal and determine accurate latitude and longitude. |

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Deployments

ASCOS2008

| | |
|--------------------|---|
| Website | https://www.bco-dmo.org/deployment/58764 |
| Platform | R/V Oden |
| Report | http://articascos.blogspot.com/ |
| Start Date | 2008-08-01 |
| End Date | 2008-09-08 |
| Description | The Arctic Summer Cloud Ocean Study is a scientific ice-breaker borne mission to the high Arctic Ocean. The focus is on the physical and chemical processes leading to cloud formation, and scientists ranging from chemists and biologists to oceanographers and meteorologists will contribute. Arctic Summer Cloud Ocean Study (ASCOS) ARCTIC ASCOS blog */ ASCOS Special Issue in Atmospheric Chemistry and Physics |

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Project Information

Marine microgels: A microlayer source of summer CCN in high Arctic open lead (Marine Microgels)

Website: <http://www.ascos.se/>

Coverage: High Arctic Ocean (87degs N, 1-6degs E)

Investigators from the Bigelow Laboratory for Ocean Sciences and the Institute for Systems Biology received funding to identify and quantify organic molecules in the Arctic Ocean that serve as cloud condensation nuclei. They investigated the possibility that organic particles on the surface of the Arctic ocean form microgels which become airborne and play a significant role in cloud formation. They will determine the origins of the gels through a variety of chemical analyses. The project will help understand the dynamics of stratocumulus clouds and their effects on Arctic climate. Data will be collected in collaboration with Swedish scientists as part of the Arctic Summer Cloud Ocean Study (ASCOS).

[Arctic Summer Cloud Ocean Study \(ASCOS\)](#)

[ARCTIC ASCOS blog](#)

[ASCOS Special Issue in Atmospheric Chemistry and Physics](#)

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Program Information

Arctic Summer Cloud Ocean Study (ASCOS)

Website: <http://www.ascos.se/>

Coverage: High Arctic Ocean (87degs N, 1-6degs E)

The Arctic Summer Cloud Ocean Study is a scientific ice-breaker borne mission to the high Arctic Ocean. The focus is on the physical and chemical processes leading to cloud formation, and scientists ranging from chemists and biologists to oceanographers and meteorologists will contribute.

[Arctic Summer Cloud Ocean Study \(ASCOS\)](#)

[ARCTIC ASCOS blog](#)

[ASCOS Special Issue in Atmospheric Chemistry and Physics](#)

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Funding

| Funding Source | Award |
|---|-----------------------------|
| NSF Arctic Sciences (NSF ARC) | ARC-0707555 |
| NSF Arctic Sciences (NSF ARC) | ARC-0707513 |

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