

MIRAI MR10-05 Leg1 Mie-scattering lidar data

Last Modified: 2013-02-25

[ReadMe](#) [Observation Data](#)

Cruise ID: [MR10-05 Leg1](#)

Mie-scattering lidar data: Processed (PI)

Data Policy: [JAMSTEC](#)

Observation Items:

Science Keywords:

Data Information

Time-height sections of attenuated backscatter coefficients at 532/1064nm, and volume depolarization ratio at 532 nm. Attenuated backscatter coefficient is estimated using results of inversion with Fernald's method($S_1=50sr$). Definition of depolarization ratio is S/P. Resolutions are 10 min and 30 m.

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR10-05_leg1-2_all.pdf

For Using Data

Principal Investigator

Nobuo Sugimoto (NIES)
Ichiro Matsui (NIES)
Atsushi Shimizu (NIES)
Tomoaki Nishizawa (NIES)

Use Constraints

Attenuated backscatter coefficients include both of backscatter from molecules and aerosols. They are attenuated by two-way transmittance between the lidar and the target air volume. There is no special treatment above clouds etc.

Data Citation

When lidar data is published, include at least one of scientists in NIES lidar team.

Instrument

Instrument:

NIES dual wavelength polarization lidar

Instrument Information:

Flash lamp pumped Nd/YAG laser with Q-switching is employed as light source. Pulse repetition is 10 Hz.

Diameter of telescope is 20 cm with 1mrad field of view. PMT/APD are employed for light detection and the intensities are digitized with 12bit A/D converters in 6 m range resolution.

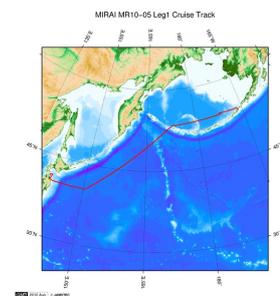
Data is acquired in every 10 minutes.



Data Format

netCDF(self documentation)

Related Information



[Enlarge Image](#)

MR10-05 Leg1

Ship Name: MIRAI

Period: 2010-08-24 - 2010-09-01

Chief Scientist: Motoyo Ito (JAMSTEC)

Project Name: [Arctic Ocean Climate System Research]

Proposal ▶ Arctic Climate Oceanography

Title:

Update History

2013-02-25 An observation data was registered.

Application for Data and Samples
Data Policy
Data Tree
What's New
Update History
Feeds

Data
Map Search
Data Tree
Detailed Search

YOKOSUKA
MIRAI
KAIREI
CHIKYU
KAIMEI
SHINSEI MARU
HAKUHO MARU

SHINKAI 2000
SHINKAI 6500
DEEP TOW
HYPER-DOLPHIN
URASHIMA
YOKOSUKA DEEP TOW
6K Camera DEEP TOW
6K Sonar DEEP TOW
KM-ROV
POWER GRAB SAMPLER (SHELL)
POWER GRAB SAMPLER (CLOW)
BMS

Go to a Dive Information

Dive ID:

Copyright 2011 Japan Agency for Marine-Earth Science and Technology



JAMSTEC 国立研究開発法人
海洋研究開発機構
JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

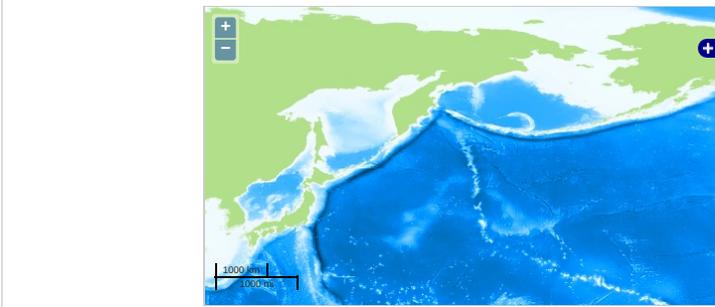
MIRAI MR10-05 Leg1 Mie-scattering lidar data

Last Modified: 2013-02-25

ReadMe **Observation Data**

Cruise ID: [MR10-05 Leg1](#)
 Mie-scattering lidar data: Processed (PI)
 Data Policy: [JAMSTEC](#)
 Observation Items:
 Science Keywords:

Observation Map



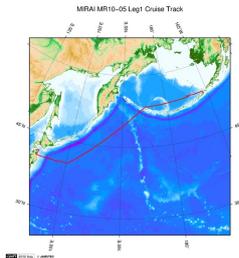
— ... Observation Line — ... Navigation ● ... Observation, Dive Point, Hole

Data List

File names

MR10-05leg1_lidar.ncdf

Related Information



MR10-05 Leg1
 Ship Name: MIRAI
 Period: 2010-08-24 - 2010-09-01
 Chief Scientist: Motoyo Ito (JAMSTEC)
 Project Name: [Arctic Ocean Climate System Research]
 Proposal: ▶ Arctic Climate Oceanography
 Title:

Update History

2013-02-25 An observation data was registerd.

JAMSTEC
 Site Policy
 Privacy Policy
 Application for Data and Samples
 Data Policy
 What's New
 Update History
 Feeds

Lists
 Publication List
 Amount of Public Info.
 Data
 Map Search
 Data Tree
 Detailed Search

Information of the Ships
 NATSUSHIMA
 KAIYO
 YOKOSUKA
 MIRAI
 KAIREI
 CHIKYU
 KAIMEI
 SHINSEI MARU
 HAKUHO MARU

Information of the Submersibles
 KAICO
 SHINKAI 2000
 SHINKAI 6500
 DEEP TOW
 HYPER-DOLPHIN
 URASHIMA
 YOKOSUKA DEEP TOW
 6K Camera DEEP TOW
 6K Sonar DEEP TOW
 KM-ROV
 POWER GRAB SAMPLER (SHELL)
 POWER GRAB SAMPLER (CLOW)
 BMS

Go to a Cruise Information

Cruise ID:

Go to a Dive Information

Dive ID: