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(S1=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

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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.

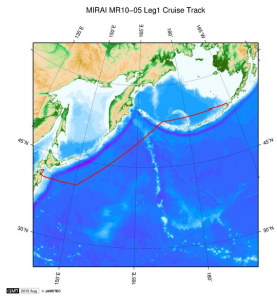
Instrument

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 Reaserch]
Proposal ▸ Arctic Climate Oceanography
Title:

Update History

2013-02-25	An observation data was registerd.

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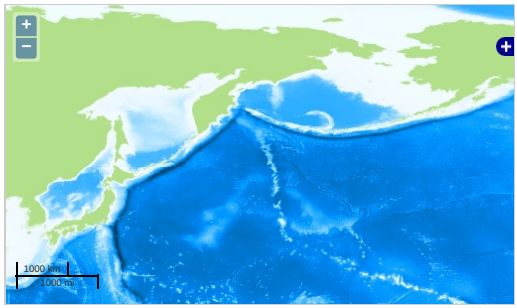
Observation Map



Imagery reproduced from ...

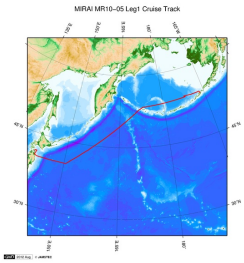
... Observation Line ... Navigation ... Observation, Dive Point, Hole

Data List

Add to Basket

	File names
☐	MR10-05leg1_lidar.ncdf

Related Information



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