

MIRAI MR10-03 Leg2 Mie-scattering lidar data

Last Modified: 2012-10-25

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

Cruise ID: [MR10-03 Leg2](#)

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/MR10-03_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:

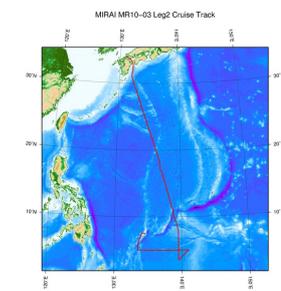
Flash lamp pumped Nd/YAG laser with Q-switching is employed as light source. Pulse repetition is 10 Hz.
Diameter of telescope is 20 cm with 1mrad field of view. PMT/APD are employed for light detection and the intensities are digitized with 12bit A/D converters in 6 m range resolution.
Data is acquired in every 10 minutes.



Data Format

netCDF(self documentation)

Related Information



[Enlarge Image](#)

MR10-03 Leg2

Ship Name: MIRAI

Period: 2010-05-13 - 2010-06-27

Chief Scientist: Hiroyuki Yamada (JAMSTEC)

Project Name: [MJO Research]

Proposal ▶ Observational Study on Air-Sea Interaction in the Tropical Western Pacific Ocean

Title:

Update History

2012-10-25 An observation data was registered.

Application for Data and Samples
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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

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Dive ID:

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海洋研究開発機構
JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

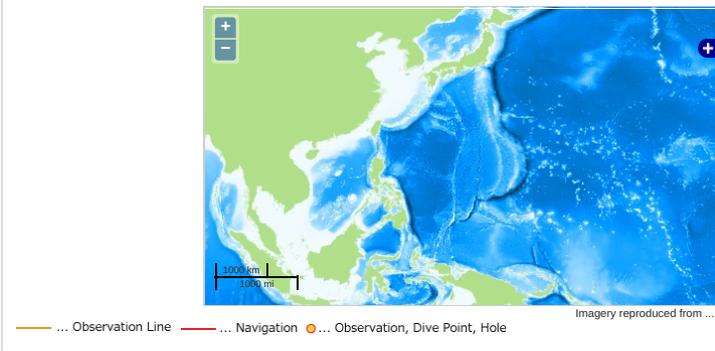
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Observation Map

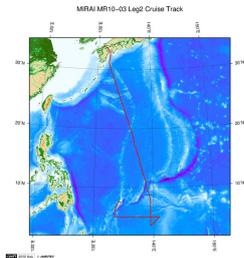


Data List

File names

MR10-03leg2_lidar.ncdf

Related Information



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