

## MIRAI MR11-07 Leg1 Mie-scattering lidar data

Last Modified: 2014-02-28

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

Cruise ID: [MR11-07 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/MR11-07\\_leg1-2\\_all.pdf](http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR11-07_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:

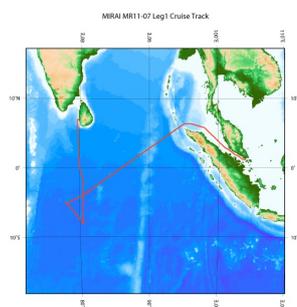
Flash lamp pumped Nd/YAG laser with Q-switching is employed as light source. Pulse repetition is 10 Hz.  
Diameter of telescope is 20 cm with 1mrad field of view. PMT/APD are employed for light detection and the intensities are digitized with 12bit A/D converters in 6 m range resolution.  
Data is acquired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



### Data Format

netCDF(self documentation)

### Related Information



 [Enlarge Image](#)

#### MR11-07 Leg1

Ship Name: MIRAI

Period: 2011-09-23 - 2011-10-27

Chief Scientist: Kunio Yoneyama (JAMSTEC)

Project Name: [Cooperative Indian Ocean experiment on intraseasonal variability in the Year 2011, MJO Research]

Proposal  Cooperative Indian Ocean experiment on intraseasonal variability in the Year 2011 (CINDY2011)

Title:

### Update History

2014-02-28	An observation data was registerd.
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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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JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

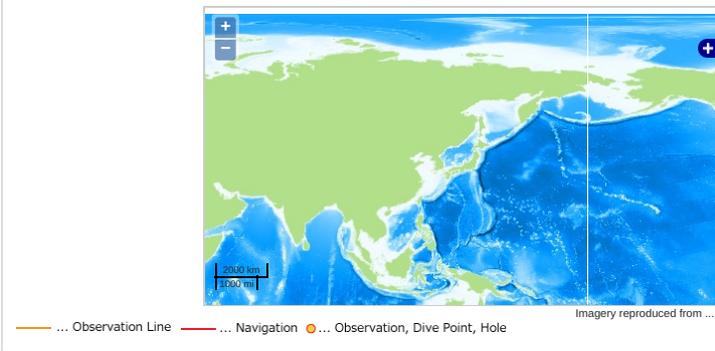
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**Observation Map**

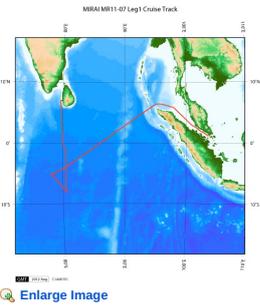


**Data List**

**File names**

MR11-07leg1\_lidar.ncdf

**Related Information**



**MR11-07 Leg1**

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 Proposal: ▶ Cooperative Indian Ocean experiment on intraseasonal variability in the Year 2011 (CINDY2011)  
 Title: (CINDY2011)

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