

## MIRAI MR14-05 Aerosol optical properties

Last Modified: 2018-01-23

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

Cruise ID: [MR14-05](#)

Aerosol optical properties: Processed (PI)

Data Policy: [JAMSTEC](#)

Observation Items:

Science Keywords:

### Data Information

Objective of this observation is to study distribution and optical characteristics of marine aerosols by using a ship-borne sky radiometer. Furthermore, collections of the data for calibration and validation to the remote sensing data were performed simultaneously.

### Cruise Report

[http://www.godac.jamstec.go.jp/catalog/data/doc\\_catalog/media/MR14-05\\_all.pdf](http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR14-05_all.pdf)

### For Using Data

#### Principal Investigator

Kazuma Aoki (University of Toyama)

#### Use Constraints

If you are used our data, please contact me (Kazuma Aoki, Univ. of Toyama). Because Ship-borne results is unstable due to difficult observation over the Ocean.

#### Data Citation

Please describe R/V Mirai and Kazuma Aoki (University of Toyama) in the Acknowledgment when your research including data in this cruise. You may consider including Kazuma Aoki as a co-author depending on the situation.

### Instrument

Instrument:

Sky radiometer (POM-01 MK-II,  
PREDE Co. Ltd., Tokyo, Japan)

Instrument Information:

The sky radiometer measures the direct solar irradiance and the solar aureole radiance distribution with seven interference filters (0.34, 0.4, 0.5, 0.675, 0.87, 0.94, and 1.02  $\mu\text{m}$ ). Analysis of these data was performed by SKYRAD.pack version 4.2 developed by Nakajima et al. 1996. Aerosol optical thickness used fifth aerosol wavelength (0.4, 0.5, 0.675, 0.87 and 1.02  $\mu\text{m}$ ).



### Data Format

No Y M D H Lon Lat Day(LT) Alpha T400 T500 T675 T870 T1020:

No(Number),

Y(Year),

M(Month),

D(Day),

H (Hour),

Lon (Longitude),

Lat(Latitude),

Day(Locat Time),

Alpha ( $\text{\AA}$ ngström exponent),

T400(Aerosol optical thickness at 400 nm),

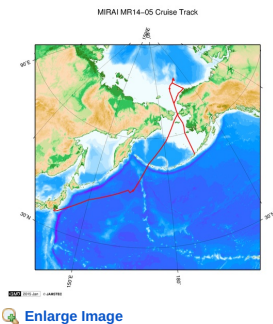
T500(Aerosol optical thickness at 500 nm),

T675(Aerosol optical thickness at 675nm),

T870(Aerosol optical thickness at 870 nm),

T1020(Aerosol optical thickness at 1020 nm)

### Related Information



#### MR14-05

Ship Name: MIRAI

Period: 2014-08-31 - 2014-10-10

Chief Scientist: Jun Inoue (JAMSTEC)

Project Name: [Arctic Ocean Climate System Reaserch]

Proposal ▶ Predictability study of Arctic cyclones

Title:

#### Update History

|            |                                    |
|------------|------------------------------------|
| 2018-01-23 | An observation data was registerd. |
| 2016-11-30 | An observation data was registerd. |

#### JAMSTEC

Site Policy

Privacy Policy

Application for Data and

Samples

Data Policy

What's New

Update History

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#### 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

KAIKO

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

#### Go to a Dive Information

Dive ID:

Go

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**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

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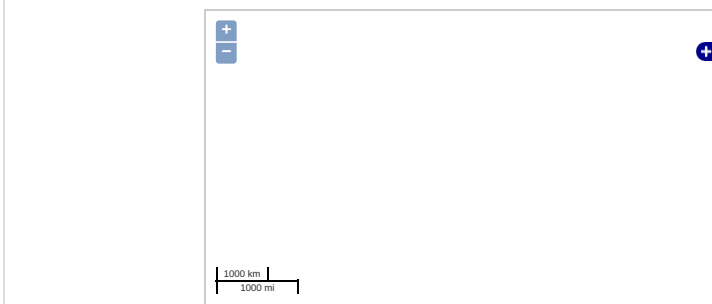
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Data Policy: [JAMSTEC](#)

Observation Items:

Science Keywords:

### Observation Map



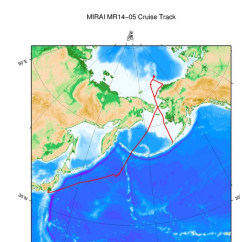
Imagery reproduced from ...

### Data List

#### File names

☐ MR1405\_V42L0A.txt

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POWER GRAB SAMPLER (CLOW)  
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Cruise ID:

#### Go to a Dive Information

Dive ID:

