

## MIRAI MR15-03 Leg2 MAX-DOAS data

Last Modified: 2020-07-14

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

Cruise ID: [MR15-03 Leg2](#)

MAX-DOAS data: Processed (PI)

Data Policy: [JAMSTEC](#)

Observation Items:

Science Keywords:

### Data Information

MAX-DOAS (Multi-AXis Differential Optical Absorption Spectroscopy) is a technique measuring UV/Visible hyperspectra of scattered sunlight at several different elevation angles. The raw spectra are analyzed based on the DOAS method to derive the differential slant column density (DSCD) of the oxygen collision complex (O<sub>2</sub>-O<sub>2</sub> or O<sub>4</sub>) and NO<sub>2</sub>, using QDOAS software (<http://uv-vis.aeronomie.be/software/QDOAS/>). Vertical column densities (VCDs) are retrieved by using custom VCD conversion software (Y. Kanaya, test121218.exe).

### Cruise Report

[http://www.godac.jamstec.go.jp/catalog/data/doc\\_catalog/media/MR15-03\\_leg2\\_all.pdf](http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR15-03_leg2_all.pdf)

### For Using Data

#### Principal Investigator

Hisahiro TAKASHIMA (Environmental Geochemical Cycle Research Group)

#### Use Constraints

Since MAX-DOAS is a remote sensing technique, further improvement in data quality is anticipated. It is recommended to contact the above investigator before use for publication.

#### Data Citation

Since MAX-DOAS is a remote sensing technique, further improvement in data quality is anticipated. It is recommended to contact the above investigator before use for publication.

### Instrument

Instrument:

MAX-DOAS (Multi-AXis Differential Optical Absorption Spectroscopy)

Instrument Information:

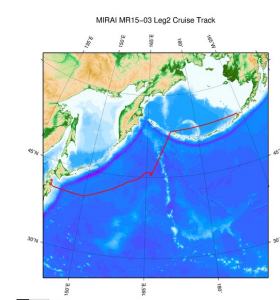
Daytime data only. The measured spectra were selected with a criterion for the elevation angle to be within  $\pm 0.5^\circ$  of the target elevation angle and averaged every 1 minute.



### Data Format

Text format. See the header of the data files for more details.

### Related Information



 [Enlarge Image](#)

### MR15-03 Leg2

Ship Name: MIRAI

Period: 2015-10-09 - 2015-10-21

Chief Scientist: Shigeto Nishino (JAMSTEC)

Project Name: [Arctic Ocean Climate System Research]

Proposal ▶ Observational studies on the Arctic Ocean climate and ecosystem variability

Title:

### Update History

2020-07-14	An observation data was registered.
2018-03-30	An observation data was registered.

### JAMSTEC

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### Lists

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### Data

[Map Search](#)  
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[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

### Go to a Cruise Information

Cruise ID:

### Go to a Dive Information

Dive ID:

KM-ROV  
POWER GRAB SAMPLER  
(SHELL)  
POWER GRAB SAMPLER  
(CLOW)  
BMS

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Technology



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

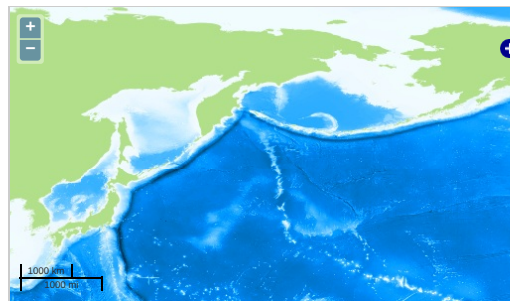
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Science Keywords:

### Observation Map



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

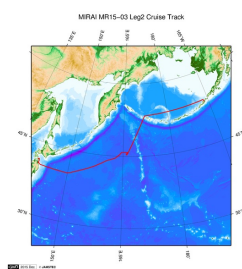
Imagery reproduced from ...

### Data List

[Add to Basket](#)

☐ File names  
☐ max\_mr1503\_aer476\_c\_leg2.dat  
☐ max\_mr1503\_no2\_c\_leg2.dat

### Related Information



[Enlarge Image](#)

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