

MIRAI MR16-09 Leg3 Underway Thermosalinograph

Last Modified: 2019-07-31

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

Cruise ID: [MR16-09 Leg3](#)

Underway Thermosalinograph: Processed (PI)

Data Policy: [JAMSTEC](#)

Observation Items: Temperature, Salinity, Dissolved oxygen, Fluorescence, Chlorophyll, Turbidity

Science Keywords:

| | | |
|-----------|--------------------|--------------------|
| OCEANS | > OCEAN CHEMISTRY | > OXYGEN |
| OCEANS | > OCEAN CHEMISTRY | > SALINITY |
| BIOSPHERE | > VEGETATION | > CHLOROPHYLL |
| OCEANS | > OCEAN CHEMISTRY | > CHLOROPHYLL |
| OCEANS | > SALINITY/DENSITY | > SALINITY |
| OCEANS | > OCEAN | > SEA SURFACE |
| OCEANS | TEMPERATURE | TEMPERATURE |
| OCEANS | > OCEAN CHEMISTRY | > SUSPENDED SOLIDS |
| OCEANS | > OCEAN OPTICS | > FLUORESCENCE |

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR16-09_leg1-4_all.pdf

For Using Data

Principal Investigator

Hiroshi Uchida (JAMSTEC)

Use Constraints

See [Terms and Conditions](#) about constrain of use.

Data Citation

See [Terms and Conditions](#) about data citation.

Instrument

Instrument:

Continuous sea surface water
monitoring system (MR14-03 -)



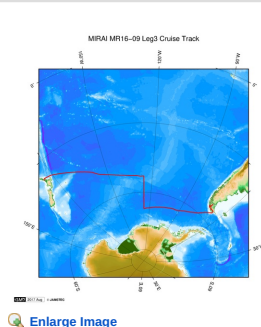
Data Citation

Refer [WHP P17E Revisit in 2017 Data Book](#) (doi: 10.17596/0000003) .

Overview

For details about observation, please refer to the Data book "[WHP P17E Revisit in 2017 Data Book](#)" (doi: 10.17596/0000003) .

Related Information



MR16-09 Leg3

Ship Name: MIRAI

Period: 2017-02-08 - 2017-03-04

Chief Scientist: Hiroshi Uchida (JAMSTEC)

Project Name: [POST-WOCE Hydrography]

Proposal ▶ Ship-borne measurements of aerosols in the marine atmosphere: Investigation of potential

Title: influence of marine aerosol particles on the climate;

Update History

| | |
|------------|-------------------------------------|
| 2019-07-31 | An observation data was registered. |
| 2017-09-27 | An observation data was registered. |

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YOKOSUKA
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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

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Dive ID:



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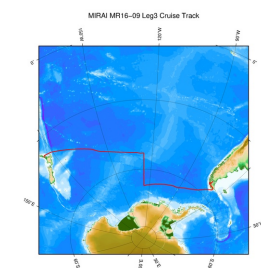
Data Format

| Column No. | Column Heading Mnemonic | Units Mnemonic | Reporting Precision FORTRAN Format | Comments |
|------------|-------------------------|----------------|------------------------------------|---|
| 1 | EXPCODE | - | A12 | Expedition code |
| 2 | DATE | - | I8 | Date |
| 3 | TIME | UTC | I4 | Time |
| 4 | LATITUDE | degrees | F10.5 | Latitude |
| 5 | LONGITUDE | degrees | F10.5 | Longitude |
| 6 | SPEED | knot | F6.1 | Ship speed |
| 7 | FLOW | litter/minute | F6.1 | Flow rate of the seawater sample |
| 8 | INTAKE-TEMPERATURE | ITS-90 | F9.4 | Temperature measured by the temperature sensor (SBE38) before the pump close to the seawater intake |
| 9 | INTAKE-TEMPERATURE_FLAG | - | I1 | INTAKE-TEMPERATURE data quality flag (see below) |
| 10 | TSG-TEMPERATURE | ITS-90 | F9.4 | Temperature measured by the thermosalinograph (SBE45) |
| 11 | TSG-TEMPERATURE_FLAG | - | I1 | TSG-TEMPERATURE data quality flag (see below) |
| 12 | TSG-SALINITY | PSS-78 | F9.4 | Practical Salinity measured by the thermosalinograph (SBE45) |
| 13 | TSG-SALINITY_FLAG | - | I1 | TSG-SALINITY data quality flag (see below) |
| 14 | SALINITY | PSS-78 | F9.4 | Practical Salinity measured by the AUTOSAL salinometer |
| 15 | SALINITY_FLAG | - | I1 | SALINITY data quality flag (see below) |
| 16 | TSG-OXYGEN | μmol/kg | F9.2 | Dissolved oxygen measured by the oxygen sensor (RINKO-II) |
| 17 | TSG-OXYGEN_FLAG | - | I1 | TSG-OXYGEN data quality flag (see below) |
| 18 | OXYGEN | μmol/kg | F9.2 | Dissolved oxygen measured by the oxygen titlator |
| 19 | OXYGEN_FLAG | - | I1 | OXYGEN data quality flag (see below) |
| 20 | FLUORESCENCE | RFU | F9.2 | Fluorescence measured by the C3 fluorometer |
| 21 | FLUORESCENCE_FLAG | - | I1 | FLUORESCENCE data quality flag (see below) |
| 22 | TSG-CHLOROPHYLL-A | mg/cum | F9.3 | Chlorophyll-a estimated from the FLUORESCENCE data |
| 23 | TSG-CHLOROPHYLL-A_FLAG | - | I1 | TSG-CHLOROPHYLL-A data quality flag (see below) |
| 24 | CHLOROPHYLL-A | mg/cum | F9.2 | Chlorophyll-a measured by the Turner fluorometer (10-AU-005) |
| 25 | CHLOROPHYLL-A_FLAG | - | I1 | CHLOROPHYLL-A data quality flag (see below) |
| 26 | TURBIDITY | NTU | F9.2 | Turbidity measured by the C3 turbidity meter |
| 27 | TURBIDITY_FLAG | - | I1 | TURBIDITY data quality flag (see below) |

Data quality flag

- 1: Not calibrated (post-cruise calibration)
- 2: Acceptable measurement
- 3: Questionable measurement
- 4: Bad measurement
- 5: Not reported
- 6: Interpolated
- 7: Despiked
- 8: Low-pass filtered
- 9: Not sampled

Related Information



[Enlarge Image](#)

MR16-09 Leg3

Ship Name: MIRAI
Period: 2017-02-08 - 2017-03-04
Chief Scientist: Hiroshi Uchida (JAMSTEC)
Project Name: [POST-WOCE Hydrography]
Proposal ▶ Ship-borne measurements of aerosols in the marine atmosphere: Investigation of potential influence of marine aerosol particles on the climate;

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CHIKYU
KAIMEI
SHINSEI MARU
HAKUHO MARU

HYPER-DOLPHIN
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YOKOSUKA DEEP TOW
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Dive ID:

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Observation Map



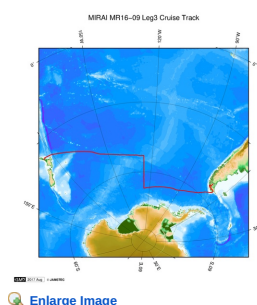
— ... Observation Line — ... Navigation ● ... Observation, Dive Point, Hole

Data List

File names

☐ 49NZ20170208_tsg.csv

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