

## MIRAI MR12-03 Bottle Sampling Water Chemical Analysis

Last Modified: 2015-05-29

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

Cruise ID: [MR12-03](#)

Bottle Sampling Water Chemical Analysis: Processed (DMO)-QCed

Data Policy: [JAMSTEC](#)

Observation Items: Temperature, Salinity, Dissolved oxygen, Potential temperature, Density

Science Keywords:

OCEANS > OCEAN CHEMISTRY > OXYGEN  
OCEANS > OCEAN CHEMISTRY > SALINITY  
OCEANS > OCEAN TEMPERATURE > WATER TEMPERATURE  
OCEANS > SALINITY/DENSITY > SALINITY  
OCEANS > OCEAN TEMPERATURE > POTENTIAL TEMPERATURE

Cruise Report

[http://www.godac.jamstec.go.jp/catalog/data/doc\\_catalog/media/MR12-03\\_all.pdf](http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR12-03_all.pdf)

### For Using Data

#### Principal Investigator

CTDTMP : Yuuji Kashino (JAMSTEC)

CTDSAL : Yuuji Kashino (JAMSTEC)

SALNTY : Yuuji Kashino (JAMSTEC)

CTDOXY : Yuuji Kashino (JAMSTEC)

#### Use Constraints

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

#### Data Citation

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

### Instrument

Instrument:

Salinity measurement system



### Overview

#### Notice

#### Information on CTD data

##### (1) Temperature sensor

Model: SBE03-04/F, Sea-Bird Electronics, Inc.

Measurement range: -5.0 to +35degC

Accuracy: 0.001degC

Resolution: 0.0002degC

##### (2) Salinity sensor

Model: SBE04-04/0, Sea-Bird Electronics, Inc.

Measurement range: 0.0 to 7S/m

Accuracy: 0.0003S/m

Resolution: 0.00004S/m

##### (3) Pressure sensor

Model: SBE9plus, Sea-Bird Electronics, Inc.

Measurement range: up to 6800m

Accuracy: 0.015%F.S.

Resolution: 0.001%F.S.

##### (4) DO sensor

Model: SBE43, Sea-Bird Electronics, Inc.

Measurement range: 120% of surface saturation

Accuracy: 2% of saturation

#### Information on Chemical and Biological data

##### 1. Salinity

(1) Instruments: Autosol salinometer model 8400B (Guildline Instruments Ltd.)

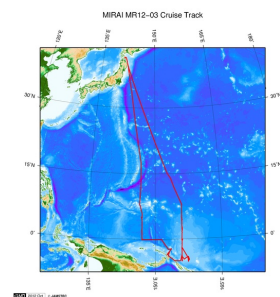
(2) Methods: -

(3) Precision: The average of the double conductivity ratio was 1.99986 and standard deviation was 0.00003.

(4) Reference Material/Calibration: IAPSO Standard Sea Water batch P154 (Ocean Scientific International Ltd.)

#### Note

#### Related Information



#### MR12-03

Ship Name: MIRAI

Period: 2012-07-16 - 2012-08-29

Chief Scientist: Yuji Kashino (JAMSTEC)

Project Name: [Tropical Ocean Climate Study (TOCS)]

#### Update History

2015-05-29	An observation data was registerd.
2015-01-23	An observation data was registerd.
2014-08-29	An observation data was registerd.

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#### Go to a Cruise Information

Cruise ID:

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Dive ID:

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国立研究開発法人  
海洋研究開発機構

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### Exchange Format

Provided in the Exchange Format of CCHDO (CLIVAR and Carbon Hydrographic Data Office).

Please see the following link for details of Exchange Format.

[CCHDO | CLIVAR & Carbon Hydrographic Data Office](#)

Format Information

Column No.	Column Heading Mnemonic	Units Mnemonic	Reporting Precision FORTRAN Format	Comments
1	EXPCODE		A14	Expedition code
2	SECT		A6	For WOCE data the WHP section identifier
3	STNNBR		A6	Station number
4	CASTNO		I3	Cast number
5	SAMPNO		A7	Sample number
6	BTLNBR		A7	Bottle identification number
7	BTLNBR_FLAG_W		I1	Bottle quality flag
8	DATE		I8	Cast date(UTC)
9	TIME	UTC	I4	Cast time (UTC)
10	LATITUDE	DEG	F8.3	LATITUDE
11	LONGITUDE	DEG	F9.3	LONGITUDE
12	DEPTH	M	I5	Reported depth to bottom.
13	CTDDPT	M	F9.1	Depth
14	CTDDPT_FLAG_W		I1	Quality flag for CTD data
15	CTDPRS	DBAR	F9.1	Pressure
16	CTDPRS_FLAG_W		I1	Quality flag for CTD data
17	CTDTMP	ITS-90	F9.4	Temperature
18	CTDTMP_FLAG_W		I1	Quality flag for CTD data
19	CTDSAL	PSS-78	F9.4	CTD Salinity sensor
20	CTDSAL_FLAG_W		I1	Quality flag for CTD data
21	SALNTY	PSS-78	F9.4	Salinity
22	SALNTY_FLAG_W		I1	Quality flags for water samples
23	CTDOXY	UMOL/KG	F9.3	CTD Oxygen sensor
24	CTDOXY_FLAG_W		I1	Quality flag for CTD data
25	THETA	DEG C	F9.4	Potential temperature
26	SIG0	KG/CUM	F9.4	Density

### ODV Format

Please see the following link for details of ODV Format and ODV Software.

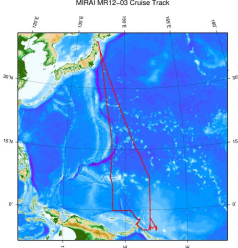
[Ocean Data View \(ODV\)](#)


Format Information

Column No.	Column Heading	Comments
1	Cruise	Cruise Label
2	Station	Station number_Cast number
3	Type	Station type
4	mon/day/yr	Cast date(UTC)
5	hh:mm	Cast time (UTC)
6	Latitude [degrees_north]	LATITUDE
7	Longitude [degrees_east]	LONGITUDE
8	Bot. Depth [m]	Reported depth to bottom.
9	CTDDPT[M]	Depth
10	QF	Quality flag for CTD data
11	CTDPRS[DBAR]	Pressure
12	QF	Quality flag for CTD data
13	CTDTMP[ITS-90]	Temperature
14	QF	Quality flag for CTD data
15	CTDSAL[PSS-78]	CTD Salinity sensor
16	QF	Quality flag for CTD data
17	SALNTY[PSS-78]	Salinity
18	QF	Quality flags for water samples
19	CTDOXY[UMOL/KG]	CTD Oxygen sensor
20	QF	Quality flag for CTD data
21	THETA[DEG C]	Potential temperature
22	QF	Quality flag for CTD data
23	SIG0[KG/CUM]	Density
24	QF	Quality flag for CTD data
25	SAMPNO	Sample number
26	QF	Bottle quality flag

### Related Information

MIRAI MR12-03 Cruise Track



 [Enlarge Image](#)

MR12-03

Ship Name: MIRAI  
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Chief Scientist: Yuji Kashino (JAMSTEC)  
Project Name: [Tropical Ocean Climate Study (TOCS)]

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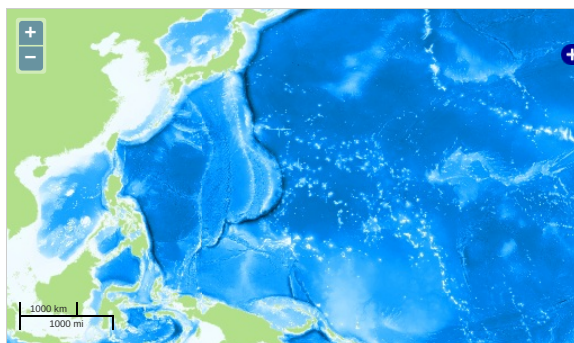
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OCEANS > OCEAN TEMPERATURE > POTENTIAL TEMPERATURE

### Observation Map



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

Imagery reproduced from ...

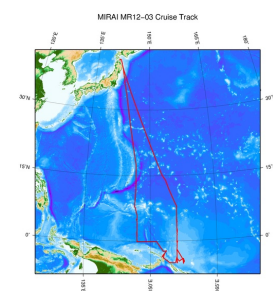
### Data List

☐ File names

☐ MR120300\_ex\_bot.csv

☐ MR120300\_odv\_bot.txt

### Related Information



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