

MIRAI MR13-03 Leg2 Bottle Sampling Water Chemical Analysis

Last Modified: 2017-07-28

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

Cruise ID: [MR13-03 Leg2](#)

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

Data Policy: [JAMSTEC](#)

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

Science Keywords:

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

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR13-03_leg1-2_all.pdf

For Using Data

Principal Investigator

CTDTMP:Masaki Katsumata (JAMSTEC)
CTDSAL:Masaki Katsumata (JAMSTEC)
SALNTY:Masaki Katsumata (JAMSTEC)
CTDOXY:Masaki Katsumata (JAMSTEC)
OXYGEN:Masaki Katsumata (JAMSTEC)
FLUOR:Masaki Katsumata (JAMSTEC)

Use Constraints

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

Data Citation

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

Instrument

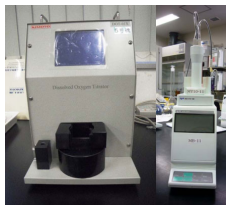
Instrument:

Salinity measurement system



Instrument:

Titration for DO Dissolved oxygen
titration equipment (MR11-06 -)



Information on CTD data

(1)Pressure sensor

Model : SBE9plus, Sea-Bird Electronics, Inc.
Measurement range : 0 to 10500 m
Accuracy : $\pm 0.015\%$ of full scale range
Resolution : 0.001% of full scale

(2)Temperature sensor

Model : SBE3, Sea-Bird Electronics, Inc.
Measurement range : -5 to +35 °C
Accuracy : ± 0.001 °C
Resolution : 0.0002 °C

(3)Salinity sensor

Model : SBE4, Sea-Bird Electronics, Inc.
Measurement range : 0 to 7 S/m
Accuracy : ± 0.0003 S/m
Resolution : 0.00004 S/m

(4)DO sensor

Model : SBE43, Sea-Bird Electronics, Inc.
Measurement range : 120% of surface saturation
Accuracy : $\pm 2\%$ of saturation

(5)Fluorometer

Model : Seapoint Sensors, Inc.
Measurement range : 0 - 5 $\mu\text{g/l}$
Resolution : 0.02 $\mu\text{g/l}$

Information on Chemical and Biological data

1. Dissolved Oxygen

(1)Instruments:

Burette : APB-620 and APB-510 (Kyoto Electronic Co. Ltd.) / 10 cm³ of titration vessel
Detector : Automatic photometric titrator DOT-01X (Kimoto Electronic Co. Ltd)

(2)Methods: Winkler method

(3)Precision: Standard deviation of the replicate measurement 0.07 $\mu\text{mol kg}^{-1}$

(4)Reference Material/Calibration: CSK standard of potassium iodate Lot DCE2131 (Wako Pure Chemical Industries Ltd.,)J0.0100N

2. Salinity

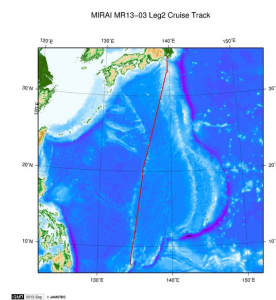
(1)Instruments: Autosal salinometer model 8400B (Guildline Instruments Ltd.)

(2)Methods: -

(3)Precision: The standard deviation of absolute defference were 0.0001

(4)Reference Material/Calibration: IAPSO Standard Sea Water batch P154

Related Information



[Enlarge Image](#)

MR13-03 Leg2

Ship Name: MIRAI

Period: 2013-06-12 - 2013-07-06

Chief Scientist: Masaki Katsumata (JAMSTEC)

Project Name: [MJO Research]

Proposal ▶ Observational Study on the Intraseasonal Variability over the western Pacific
Title:

Update History

2017-07-28	An observation data was registerd.
2015-07-29	An observation data was registerd.
2015-07-06	An observation data was registerd.

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[Feeds](#)

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[Amount of Public Info.](#)

Data

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[Data Tree](#)
[Detailed Search](#)

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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	EXPOCODE		A14	ExpoCode
2	SECT_ID		A6	Section ID
3	STNNBR		A6	Station Number
4	CASTNO		I3	Cast Number
5	SAMPNO		A7	Sample Number
6	BTLNBR		A7	Bottle Number
7	BTLNBR_FLAG_W		I1	Flag of the data on the left colum
8	DATE		I8	Cast date
9	TIME	UTC	A4	Cast time
10	LATITUDE	DEG	F8.4	-
11	LONGITUDE	DEG	F9.4	-
12	DEPTH	METERS	I5	Bottom depth
13	CTDDPT	METERS	F9.1	Depth
14	CTDDPT_FLAG_W		I1	Flag of the data on the left colum
15	CTDPRS	DBAR	F9.1	Pressure
16	CTDPRS_FLAG_W		I1	Flag of the data on the left colum
17	CTDTMP	ITS-90	F9.4	Temperature
18	CTDTMP_FLAG_W		I1	Flag of the data on the left colum
19	CTDTMP_1	ITS-90	F9.4	Temperature (secondary sensor)
20	CTDTMP_1_FLAG_W		I1	Flag of the data on the left colum
21	CTDSAL	PSS-78	F9.4	Salinity
22	CTDSAL_FLAG_W		I1	Flag of the data on the left colum
23	CTDSAL_1	PSS-78	F9.4	Salinity (secondary sensor)
24	CTDSAL_1_FLAG_W		I1	Flag of the data on the left colum
25	SALNTY	PSS-78	F9.4	Bottle Salinity
26	SALNTY_FLAG_W		I1	Flag of the data on the left colum
27	SALNTY_1	PSS-78	F9.4	Bottle Salinity (duplicate)
28	SALNTY_1_FLAG_W		I1	Flag of the data on the left colum
29	CTDOXY	UMOL/KG	F9.2	Oxygen_CTD
30	CTDOXY_FLAG_W		I1	Flag of the data on the left colum
31	CTDOXY_1	UMOL/KG	F9.2	Oxygen_CTD (secondary sensor)
32	CTDOXY_1_FLAG_W		I1	Flag of the data on the left colum
33	OXYGEN	UMOL/KG	F9.2	Oxygen
34	OXYGEN_FLAG_W		I1	Flag of the data on the left colum
35	OXYGEN_1	UMOL/KG	F9.2	Oxygen (duplicate)
36	OXYGEN_1_FLAG_W		I1	Flag of the data on the left colum
37	FLUOR	MG/CUM	F9.3	Fluorescence
38	FLUOR_FLAG_W		I1	Flag of the data on the left colum
39	THETA	DEG C	F9.4	Potential temperature
40	THETA_1	DEG C	F9.4	Potential temperature (secondary sensor)
41	SIG0	KG/CUM	F9.4	Density
42	SIG0_1	KG/CUM	F9.4	Density (secondary sensor)

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
5	hh:mm	Cast time
6	Latitude [degrees_north]	-
7	Longitude [degrees_east]	-
8	Bot. Depth [METERS]	Bottom depth
9	CTDDPT[METERS]	Depth
10	QF	Flag of the data on the left colum
11	CTDPRS[DBAR]	Pressure
12	QF	Flag of the data on the left colum
13	CTDTMP[ITS-90]	Temperature
14	QF	Flag of the data on the left colum
15	CTDTMP_1[ITS-90]	Temperature (secondary sensor)
16	QF	Flag of the data on the left colum
17	CTDSAL[PSS-78]	Salinity

Column No.	Column Heading	Comments
19	CTDSAL_1[PSS-78]	Flag of the data on the left colum
20	QF	Salinity (secondary sensor)
21	SALNTY[PSS-78]	Flag of the data on the left colum
22	QF	Bottle Salinity
23	CTDSAL_1[PSS-78]	Flag of the data on the left colum
24	QF	Bottle Salinity (duplicate)
25	CTDOXY[UMOL/KG]	Flag of the data on the left colum
26	QF	Oxygen_CTD
27	CTDOXY_1[UMOL/KG]	Flag of the data on the left colum
28	QF	Oxygen_CTD (secondary sensor)
29	OXYGEN[UMOL/KG]	Flag of the data on the left colum
30	QF	Oxygen
31	OXYGEN_1[UMOL/KG]	Flag of the data on the left colum
32	QF	Oxygen (duplicate)
33	FLUOR[MG/CUM]	Flag of the data on the left colum
34	QF	Fluorescence
35	THETA[DEG C]	Flag of the data on the left colum
36	QF	Potential temperature
37	THETA_1[DEG C]	Flag of the data on the left colum
38	QF	Potential temperature (secondary sensor)
39	SIG0[KG/CUM]	Flag of the data on the left colum
40	QF	Density
41	SIG0_1[KG/CUM]	Flag of the data on the left colum
42	QF	Density (secondary sensor)
43	SAMPNO	Flag of the data on the left colum
44	QF	Sample Number

Related Information

MR13-03 Leg2
 Ship Name: MIRAI
 Period: 2013-06-12 - 2013-07-06
 Chief Scientist: Masaki Katsumata (JAMSTEC)
 Project Name: [MJO Research]
 Proposal ▶ Observational Study on the Intreseasonal Variability over the western Pacific
 Title:

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2017-07-28	An observation data was registerd.
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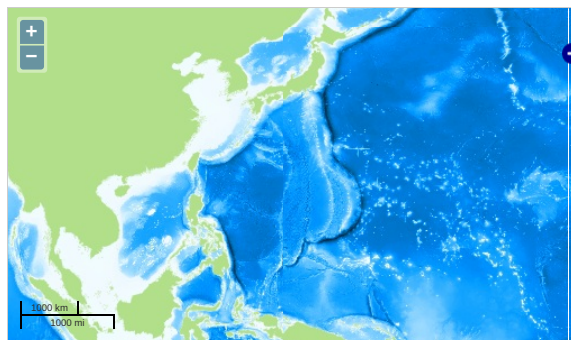
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OCEANS > SALINITY/DENSITY > SALINITY
OCEANS > OCEAN OPTICS > FLUORESCENCE
OCEANS > OCEAN TEMPERATURE > POTENTIAL TEMPERATURE

Observation Map



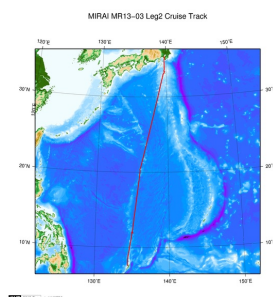
Imagery reproduced from ...

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

Data List

☐ File names
☐ MR130302_ex_bot.csv
☐ MR130302_odv_bot.txt

Related Information



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Update History
Feeds

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Publication List
Amount of Public Info.
Data
Map Search
Data Tree
Detailed Search

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