

MIRAI MR08-02 Bottle Sampling Water Chemical Analysis

Last Modified: 2017-07-28

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

Cruise ID: [MR08-02](#)

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 > OCEAN TEMPERATURE > POTENTIAL TEMPERATURE

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR08-02_all.pdf

For Using Data

Principal Investigator

CTDTMP : Kunio Yoneyama (JAMSTEC)
CTDSAL : Kunio Yoneyama (JAMSTEC)
SALNTY : Kunio Yoneyama (JAMSTEC)
CTDOXY : Kunio Yoneyama (JAMSTEC)
OXYGEN : Kunio Yoneyama (JAMSTEC)
FLUOR : Kunio Yoneyama (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 (- MR11-05 Leg2)



Notice

Data flags of FLUOR are Unknown (flag1) because of lack of the calibration.

Information on CTD data

(1) Temperature sensor

Model : SBE3, Sea-Bird Electronics, Inc.
Measurement range : -5.0 to +35degC
Accuracy : 0.001degC
Resolution : 0.0002degC

(2) Salinity sensor

Model : SBE4, 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 10500m
Accuracy : 0.015%F.S.
Resolution : 0.001%F.S.

(4) DO sensor

Model : SBE43, Sea-Bird Electronics, Inc.
Measurement range : 0-15ml/l
Accuracy : 0.1ml/l
Resolution : 0.01ml/l

(5) Fluorometer

Model : Seapoint Sensors, Inc.

Information on Chemical and Biological data

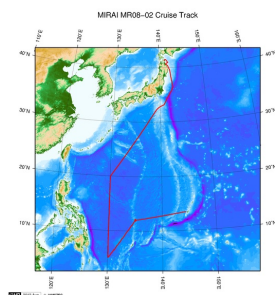
1. Dissolved Oxygen

- (1) Instruments : Burette: APB-510 manufactured by Kyoto Electronic Co. Ltd. / 10 cm3 of titration vessel
Detector and Software: Automatic photometric titrator manufactured by Kimoto Electronic Co. Ltd
(2) Methods : Winkler method/photometric methods
(3) Precision : 0.08 umol kg-1
(4) Reference Material/Calibration : 0.001667M KIO3 solution

2. Salinity

- (1) Instruments : Autosol salinometer model 8400B(Guildline Instruments Ltd.)
(2) Methods : -
(3) Precision : 0.0004 PSU
(4) Reference Material/Calibration : IAPSO Standard Sea Water batch P149(Ocean Scientific International Ltd.)

Related Information



[Enlarge Image](#)

MR08-02

Ship Name: MIRAI

Period: 2008-05-26 - 2008-06-30

Chief Scientist: Kunio Yoneyama (JAMSTEC)

Project Name: [MJO Research]

Proposal ▶ Observational Study on the Air-Sea Interaction in the Tropical Western Pacific Ocean

Title:

Update History

2017-07-28	An observation data was registerd.
2015-05-29	An observation data was registerd.
2013-08-29	An observation data was registerd.
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Go to a Cruise Information

Cruise ID:

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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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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	FORTTRAN 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		F9.2		CTD Oxygen sensor
24	CTDOXY_FLAG_W				I1		Quality flag for CTD data
25	OXYGEN		UMOL/KG		F9.2		Oxygen
26	OXYGEN_FLAG_W				I1		Quality flags for water samples
27	FLUOR		UG/L		F9.2		Fluorometer
28	FLUOR_FLAG_W				I1		Quality flags for CTD data
29	THETA		DEG C		F9.4		Potential temperature
30	SIG0		KG/CUM		F9.4		Density

ODV Format

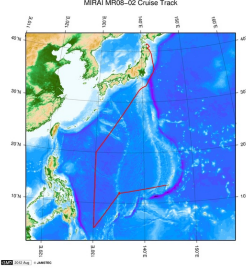
Please see the following link for details of ODV Format and ODV Software.

[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	OXYGEN[UMOL/KG]	Oxygen
22	QF	Quality flags for water samples
23	FLUOR[UG/L]	Fluormeter
24	QF	Quality flag for CTD data
25	THETA[DEG C]	Potential temperature
26	QF	Quality flag for CTD data
27	SIG0[KG/CUM]	Density
28	QF	Quality flag for CTD data
29	SAMPNO	Sample number
30	QF	Bottle quality flag

Related Information



MIRAI MR08-02 Cruise Track

 [Enlarge Image](#)

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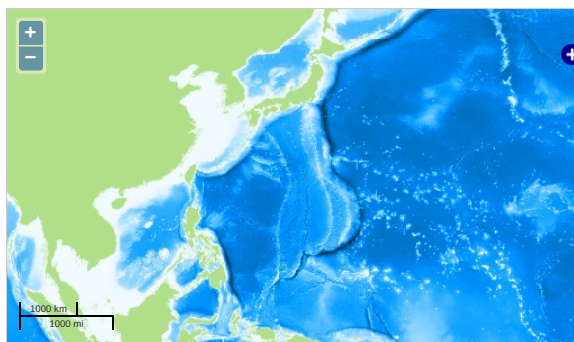
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Observation Map



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

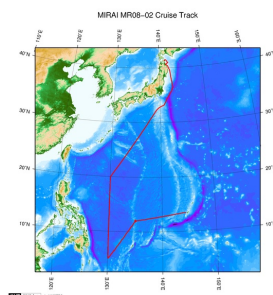
Data List

☐ File names

☐ MR080200_ex_bot.csv

☐ MR080200_odv_bot.txt

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