

MIRAI MR02-K04 Leg1 Bottle Sampling Water Chemical Analysis

Last Modified: 2017-07-29

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

Cruise ID: [MR02-K04 Leg1](#)

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/MR02-K04_leg1_all.pdf

For Using Data

Principal Investigator

CTDTMP : Yoshifumi Kuroda / Hideaki Hase (JAMSTEC)
CTDSAL : Yoshifumi Kuroda / Hideaki Hase (JAMSTEC)
SALNTY : Yoshifumi Kuroda / Hideaki Hase (JAMSTEC)
CTDOXY : Hideaki Hase (JAMSTEC)
OXYGEN : Hideaki Hase (JAMSTEC)

JAMSTEC / BPPT joint cruise in the Indonesian waters.

Use Constraints

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

Data Citation

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

Instrument

Instrument:

Salinity measurement system



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 : SBE13, Sea-Bird Electronics, Inc.
Measurement range : 0-15ml/l (120% of surface saturation)
Accuracy : 0.1ml/l (2% of saturation)
Resolution : 0.01ml/l

Information on Chemical and Biological data

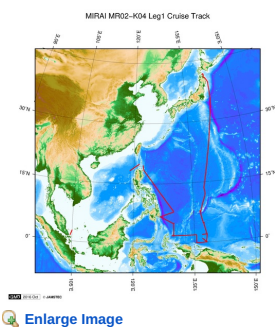
1. Dissolved Oxygen

- (1) Instruments : Titrator: Model 716 DMS Titrino (Metrohm)
Detector: Pt electrode
(2) Methods : Winkler method/potentiometric method
(3) Precision : -
(4) Reference Material/Calibration: -

2. Salinity

- (1) Instruments: Autosal salinometer model 8400B (Guildline Instruments Ltd.)
(2) Methods : -
(3) Precision : 0.0002PSU
(4) Reference Material/Calibration: IAPSO Standard Sea Water batch P142 (Ocean Scientific International Ltd.)

Related Information



[Enlarge Image](#)

MR02-K04 Leg1
 Ship Name: MIRAI
 Period: 2002-06-24 - 2002-07-23
 Chief Scientist: Yoshifumi Kuroda (JAMSTEC)

Update History

2017-07-29	An observation data was registered.
2017-07-28	An observation data was registered.
2016-10-17	An observation data was registered.

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Cruise 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	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	F9.1		CTD Oxygen sensor
24	CTDOXY_FLAG_W		I1		Quality flag for CTD data
25	OXYGEN	UMOL/KG	F9.1		Oxygen
26	OXYGEN_FLAG_W		I1		Quality flags for water samples
27	THETA	DEG C	F9.4		Potential temperature
28	SIG0	KG/CUM	F9.4		Density

ODV Format

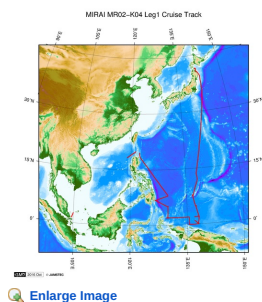
Please see the following link for details of ODV Format and ODV Software.

[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	THETA[DEG C]	Potential temperature
24	QF	Quality flag for CTD data
25	SIG0[KG/CUM]	Density
26	QF	Quality flag for CTD data
27	SAMPNO	Sample number
28	QF	Bottle quality flag

Related Information



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Observation Map



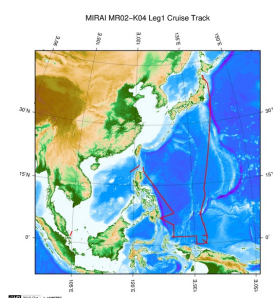
Data List

☐ File names

☐ MR02K0400_ex_bot.csv

☐ MR02K0400_odv_bot.txt

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