

MIRAI MR98-06 Bottle Sampling Water Chemical Analysis

Last Modified: 2015-05-29

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Cruise ID: [MR98-06](#)

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

Data Policy: [JAMSTEC](#)

Observation Items: Temperature, Salinity, Dissolved oxygen, Silicate, Nitrate, Nitrite, Phosphate, Density

Science Keywords:

OCEANS > OCEAN CHEMISTRY	> NITRITE
OCEANS > OCEAN CHEMISTRY	> NITRATE
OCEANS > OCEAN CHEMISTRY	> NUTRIENTS
OCEANS > OCEAN CHEMISTRY	> OXYGEN
OCEANS > OCEAN CHEMISTRY	> PHOSPHATE
OCEANS > OCEAN CHEMISTRY	> SILICATE
OCEANS > OCEAN CHEMISTRY	> SALINITY
OCEANS > OCEAN TEMPERATURE	> WATER TEMPERATURE
OCEANS > SALINITY/DENSITY	> SALINITY

For Using Data

Principal Investigator

CTDTMP : Takashi Kikuchi/Akihiko Murata/Hirofumi Okano/Hideaki Kitauchi (JAMSTEC)
CTDSAL : Takashi Kikuchi/Akihiko Murata/Hirofumi Okano/Hideaki Kitauchi (JAMSTEC)
CTDOXY : Takashi Kikuchi/Akihiko Murata/Hirofumi Okano/Hideaki Kitauchi (JAMSTEC)
SILCAT : Hirofumi Okano (JAMSTEC)
NITRAT : Hirofumi Okano (JAMSTEC)
NITRIT : Hirofumi Okano (JAMSTEC)
PHSPHT : Hirofumi Okano (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



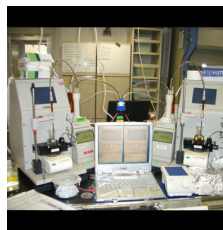
Instrument:

Nutrient analyzer(4ch) (- MR09-01)



Instrument:

Titratr for DO (- MR11-05 Leg2)



Notice

- In many other cruises unit of SILCAT, NITRAT, NITRIT and PHSPHT is umol/kg, however in this cruise they are measured in umol/l.
- In many other cruises unit of CTDOXY is umol/kg, however in this cruise they are measured in ml/l.

Information on CTD data

(1) Temperature sensor Model: Sea-Bird Electronics, Inc. (2) Salinity sensor Model: Sea-Bird Electronics, Inc. (3) Pressure sensor Model: SBE9plus, Sea-Bird Electronics, Inc. (4) DO sensor Model:-

Information on Chemical and Biological data

1. Silicate

- (1)Instruments: TRAACS800 (Bran+Luebbe)
- (2)Methods: Molybdenum blue method
- (3)Precision: -
- (4)Reference Material/Calibration: -

2. Nitrate

- (1)Instruments: TRAACS800 (Bran+Luebbe)
- (2)Methods: Diazotization method (reduced to nitrite by Cd - Cu tube)
- (3)Precision: -
- (4)Reference Material/Calibration: -

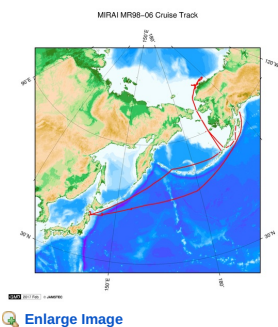
3. Nitrite

- (1)Instruments: TRAACS800 (Bran+Luebbe)
- (2)Methods: Diazotization method
- (3)Precision: -
- (4)Reference Material/Calibration: -

4. Phosphate

- (1)Instruments: TRAACS800 (Bran+Luebbe)
- (2)Methods: Molybdenum blue method
- (3)Precision: -
- (4)Reference Material/Calibration: -

Related Information



MR98-06

Ship Name: MIRAI

Period: 1998-07-30 - 1998-09-10

Chief Scientist: Takatoshi Takizawa (JAMSTEC)/Takashi Kikuchi (JAMSTEC)

Update History

2015-05-29	An observation data was registerd.
2013-08-09	An observation data was registerd.
2013-02-07	An observation data was registerd.

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Go to a Cruise Information

Cruise ID:

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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	CTDPRS	DBAR	F9.1	Pressure
14	CTDPRS_FLAG_W		I1	Quality flag for CTD data
15	CTDTMP	ITS-90	F9.4	Temperature
16	CTDTMP_FLAG_W		I1	Quality flag for CTD data
17	CTDSAL	PSS-78	F9.4	CTD Salinity sensor
18	CTDSAL_FLAG_W		I1	Quality flag for CTD data
19	CTDOXY	ML/L	F9.4	CTD Oxygen sensor
20	CTDOXY_FLAG_W		I1	Quality flag for CTD data
21	SILCAT	UMOL/L	F9.4	Silicate
22	SILCAT_FLAG_W		I1	Quality flags for water samples
23	NITRAT	UMOL/L	F9.4	Nitrate
24	NITRAT_FLAG_W		I1	Quality flags for water samples
25	NITRIT	UMOL/L	F9.4	Nitrite
26	NITRIT_FLAG_W		I1	Quality flags for water samples
27	PHSPHT	UMOL/L	F9.4	Phosphate
28	PHSPHT_FLAG_W		I1	Quality flags for water samples
29	SIG0	KG/CUM	F9.3	Density

ODV Format

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

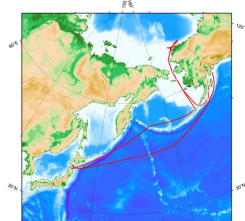
[Ocean Data View \(ODV\)](#)

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(Calculate from CTDPRS and LATITUDE)
10	QF	Quality flag for CTD data
11	CTDPRS[DBAR]	Pressure
12	QF	Quality flag for CTD data
13	CTDTMP[IITS-90]	Temperature
14	QF	Quality flag for CTD data
15	CTDSAL[PSS-78]	CTD Salinity sensor
16	QF	Quality flag for CTD data
17	CTDOXY[ML/L]	CTD Oxygen sensor
18	QF	Quality flag for CTD data
19	SILCAT[UMOL/L]	Silicate
20	QF	Quality flags for water samples
21	NITRAT[UMOL/L]	Nitrate
22	QF	Quality flags for water samples
23	NITRIT[UMOL/L]	Nitrite
24	QF	Quality flags for water samples
25	PHSPHT[UMOL/L]	Phosphate
26	QF	Quality flags for water samples
27	SIG0[KG/CUM]	Density
28	QF	Quality flag for CTD data
29	SAMPNO	Sample number
30	QF	Bottle quality flag

Related Information

MIRAI MR98-06 Cruise Track



[Enlarge Image](#)

MR98-06

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Chief Scientist: Takatoshi Takizawa (JAMSTEC)/Takashi Kikuchi (JAMSTEC)

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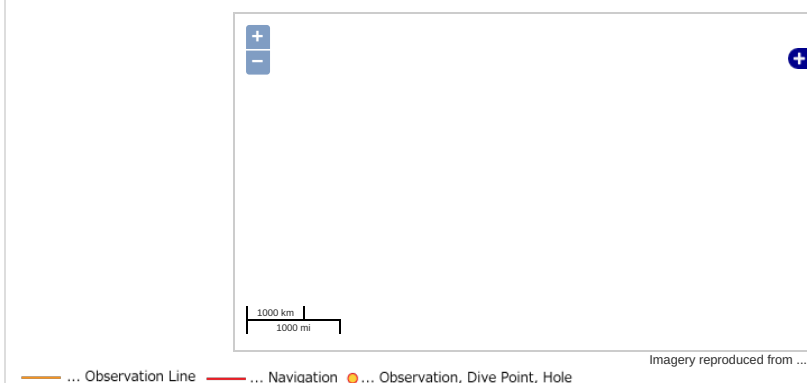
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OCEANS > OCEAN TEMPERATURE > WATER TEMPERATURE
OCEANS > SALINITY/DENSITY > SALINITY

Observation Map



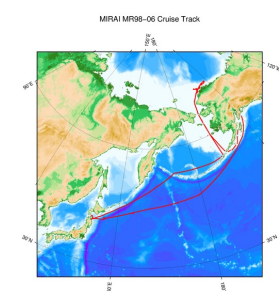
Data List

☐ File names

☐ MR980600_ex_bot.csv

☐ MR980600_odv_bot.txt

Related Information



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