

MIRAI MR12-05 Leg2 Bottle Sampling Water Chemical Analysis

Last Modified: 2018-01-25

ReadMe Observation Data Data Format Quality Information

Cruise ID: [MR12-05 Leg2](#)

Bottle Sampling Water Chemical Analysis: Processed (PI)

Data Policy: [JAMSTEC](#)

Observation Items: Temperature, Salinity, Dissolved

oxygen, Transmittance, Fluorescence, Chlorophyll, PAR, Silicate, Nitrate, Nitrite, Phosphate, CFC11, CFC12, CFC113, SF6, Total inorganic carbon, Alkalinity, pH, Carbon13, Carbon14, 134Cs, 137Cs

Science Keywords:

OCEANS > OCEAN CHEMISTRY > DISSOLVED GASES
OCEANS > OCEAN CHEMISTRY > INORGANIC CARBON
OCEANS > OCEAN CHEMISTRY > NITRITE
OCEANS > OCEAN CHEMISTRY > NITRATE
OCEANS > OCEAN CHEMISTRY > NUTRIENTS
OCEANS > OCEAN CHEMISTRY > OXYGEN
OCEANS > OCEAN CHEMISTRY > pH
OCEANS > OCEAN CHEMISTRY > PHOSPHATE
OCEANS > OCEAN CHEMISTRY > RADIOCARBON
OCEANS > OCEAN CHEMISTRY > SILICATE
OCEANS > OCEAN CHEMISTRY > SALINITY
OCEANS > OCEAN CHEMISTRY > CHLOROPHYLL
OCEANS > OCEAN TEMPERATURE > WATER TEMPERATURE
OCEANS > SALINITY/DENSITY > SALINITY
OCEANS > OCEAN OPTICS > PHOTOSYNTHETICALLY ACTIVE RADIATION
OCEANS > OCEAN CHEMISTRY > ALKALINITY
OCEANS > OCEAN CHEMISTRY > CARBON
OCEANS > OCEAN CHEMISTRY > RADIONUCLIDES
OCEANS > OCEAN CHEMISTRY > OCEAN TRACERS
OCEANS > OCEAN CHEMISTRY > STABLE ISOTOPES
OCEANS > OCEAN OPTICS > FLUORESCENCE

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR12-05_leg1-3_all.pdf

For Using Data

Principal Investigator

CTDTMP : Hiroshi Uchida (JAMSTEC)
SBE35 : Hiroshi Uchida (JAMSTEC)
CTDSAL : Hiroshi Uchida (JAMSTEC)
SALNTY : Hiroshi Uchida (JAMSTEC)
DNSSAL : Hiroshi Uchida (JAMSTEC)
CTDOXY : Hiroshi Uchida (JAMSTEC)
OXYGEN : Yuichiro Kumamoto (JAMSTEC)
XMISS : Hiroshi Uchida (JAMSTEC)
FLUOR : Hiroshi Uchida (JAMSTEC)
CHLORA : Osamu Yoshida (Rakuno Gakuen University) / Hiroshi Uchida (JAMSTEC)
PAR : Hiroshi Uchida (JAMSTEC)
SILCAT : Michio Aoyama (Meteorological Research Institute)
NITRAT : Michio Aoyama (Meteorological Research Institute)
NITRIT : Michio Aoyama (Meteorological Research Institute)
PHSPHT : Michio Aoyama (Meteorological Research Institute)
CFC-11 : Kenichi Sasaki (JAMSTEC)
CFC-12 : Kenichi Sasaki (JAMSTEC)
CFC113 : Kenichi Sasaki (JAMSTEC)
SF6 : Kenichi Sasaki (JAMSTEC)
TCARBN : Sohiko Kameyama (Hokkaido University) / Akihiko Murata (JAMSTEC)
ALKALI : Sohiko Kameyama (Hokkaido University) / Akihiko Murata (JAMSTEC)
PH_TOT : Sohiko Kameyama (Hokkaido University) / Akihiko Murata (JAMSTEC)
DELC13 : Yuichiro Kumamoto (JAMSTEC)
DELC14 : Yuichiro Kumamoto (JAMSTEC)
CS-134 : Yuichiro Kumamoto (JAMSTEC)
CS-137 : Yuichiro Kumamoto (JAMSTEC)

Use Constraints

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

Data Citation

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Instrument

Instrument:

Salinity measurement system



Instrument:

Gas chromatograph



Instrument:

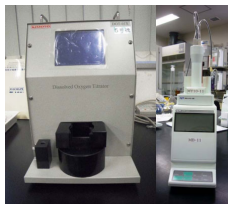
Nutrient analyzer(5ch) (MR09-02 -)



Instrument:
Total dissolved inorganic carbon
measurement system (MR11-05 Leg1
-)



Instrument:
Titrator for DO Dissolved oxygen
titration equipment (MR11-06 -)



Instrument:
Fluorometer (TURNER DESIGNS)



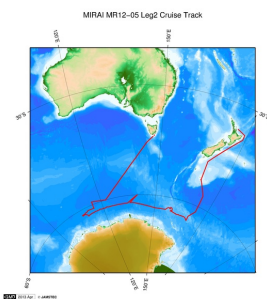
Overview

Please see the [Data book](#) for details of data.

About this data

There are some description error for nutrient data of this cruise.
Please refer to the errata of the cruise report.

Related Information



[Enlarge Image](#)

MR12-05 Leg2

Ship Name: MIRAI
Period: 2012-11-27 - 2013-01-03
Chief Scientist: Katsuro Katsumata (JAMSTEC)
Proposal ▶ WOCE-revisit in the western Pacific and Southern oceans
Title:

Update History

2018-01-25	An observation data was registered.
2017-04-11	An observation data was registered.
2015-05-31	An observation data was registered.

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SHINKAI 6500
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URASHIMA
YOKOSUKA DEEP TOW
6K Camera DEEP TOW
6K Sonar DEEP TOW
KM-ROV
POWER GRAB SAMPLER (SHELL)
POWER GRAB SAMPLER (CLOW)
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Bottle Sampling Water Chemical Analysis: Processed (PI)

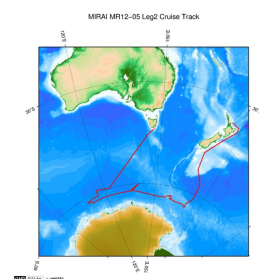
Data Policy: [JAMSTEC](#)

DATA Format

Column No.	Column Heading Mnemonic	Units Mnemonic	Reporting Precision FORTRAN Format	Comments
1	EXPCODE		A14	ExpoCode
2	SECT		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	Bottle quality flags
8	DATE		I8	Cast date
9	TIME	UTC	I4	Cast time
10	LATITUDE	DEG	F8.4	-
11	LONGITUDE	DEG	F9.4	-
12	DEPTH	METERS	I5	Bottom depth
13	CTDPRS	DBAR	F9.1	Pressure
14	CTDPRS_FLAG_W		I1	Quality flags for CTD data
15	CTDTMP	ITS-90	F9.4	Temperature
16	CTDTMP_FLAG_W		I1	Quality flags for CTD data
17	SBE35	ITS-90	F10.5	Temperature from Deep Ocean Standards Thermometer
18	SBE35_FLAG_W		I1	Quality flags for CTD data
19	CTDSAL	PSS-78	F9.4	Salinity
20	CTDSAL_FLAG_W		I1	Quality flags for CTD data
21	SALNTY	PSS-78	F9.4	Bottle Salinity
22	SALNTY_FLAG_W		I1	Quality flags for water samples
23	DNSSAL	G/KG	F9.4	Quality-controlled density salinity data
24	DNSSAL_FLAG_W		I1	Quality flags for water samples
25	CTDOXY	UMOL/KG	F9.2	Oxygen_CTD
26	CTDOXY_FLAG_W		I1	Quality flags for CTD data
27	OXYGEN	UMOL/KG	F9.2	Oxygen
28	OXYGEN_FLAG_W		I1	Quality flags for water samples
29	XMISS	%TRANS	F9.3	Transmissometer
30	XMISSCP	/METER	F9.4	Beam attenuation coefficient
31	XMISS_FLAG_W		I1	Quality flags for CTD data
32	FLUOR	MG/CUM	F9.3	Fluorescence
33	FLUOR_FLAG_W		I1	Quality flags for CTD data
34	CHLORA	MG/CUM	F9.2	Chlorophyll a
35	CHLORA_FLAG_W		I1	Quality flags for water samples
36	PAR	UE/SQM/S	F9.3	PAR
37	PAR_FLAG_W		I1	Quality flags for CTD data
38	SILCAT	UMOL/KG	F9.2	Silicate
39	SILCAT_FLAG_W		I1	Quality flags for water samples
40	SILUNC	UMOL/KG	F9.2	Uncertainty of Silicate data
41	NITRAT	UMOL/KG	F9.2	Nitrate
42	NITRAT_FLAG_W		I1	Quality flags for water samples
43	NRAUNC	UMOL/KG	F9.2	Uncertainty of Nitrate data
44	NITRIT	UMOL/KG	F9.2	Nitrite
45	NITRIT_FLAG_W		I1	Quality flags for water samples
46	NRIUNC	UMOL/KG	F9.2	Uncertainty of Nitrite data
47	PHSPHT	UMOL/KG	F9.2	Phosphate
48	PHSPHT_FLAG_W		I1	Quality flags for water samples
49	PHPUNC	UMOL/KG	F9.2	Uncertainty of Phosphate data
50	CFC-11	PMOL/KG	F9.3	Freon-11TM
51	CFC-11_FLAG_W		I1	Quality flags for water samples
52	CFC-12	PMOL/KG	F9.3	Freon-12TM
53	CFC-12_FLAG_W		I1	Quality flags for water samples
54	CFC113	PMOL/KG	F9.3	Freon-113TM
55	CFC113_FLAG_W		I1	Quality flags for water samples
56	SF6	FMOL/KG	F9.3	Sulfur Hexafluoride
57	SF6_FLAG_W		I1	Quality flags for water samples
58	TCARBN	UMOL/KG	F9.1	Total Carbon CT
59	TCARBN_FLAG_W		I1	Quality flags for water samples
60	ALKALI	UMOL/KG	F9.1	Total alkalinity
61	ALKALI_FLAG_W		I1	Quality flags for water samples
62	PH_TOT		F9.4	pH referred to total scale
63	PH_TMP	DEG C	I9	Temperature to be reported if pH is reported
64	PH_TOT_FLAG_W		I1	Quality flags for water samples
65	DELC13	/MILLE	F9.3	Carbon 13
66	DELC13_FLAG_W		I1	Quality flags for water samples
67	DEL C13		F9.3	DEL C13

Column No.	Column Heading DEL C14 Mnemonic	Units /MILLE Mnemonic	Reporting Precision F9.3 F9.1 Format	Comments
69	DEL C14_FLAG_W		I1	Quality flags for water samples
70	C14ERR	/MILLE	F9.1	DEL C14 Error
71	CS-134	MBQ/KG	F9.3	Cesium 134
72	CS-134_FLAG_W		I1	Quality flags for water samples
73	CS134ER	MBQ/KG	F9.3	Expected error
74	CS-137	MBQ/KG	F9.3	Cesium 137
75	CS-137_FLAG_W		I1	Quality flags for water samples
76	CS137ER	MBQ/KG	F9.3	Expected error

Related Information



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6K Sonar DEEP TOW
KM-ROV
POWER GRAB
SAMPLER (SHELL)
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Bottle Sampling Water Chemical Analysis: Processed (PI)

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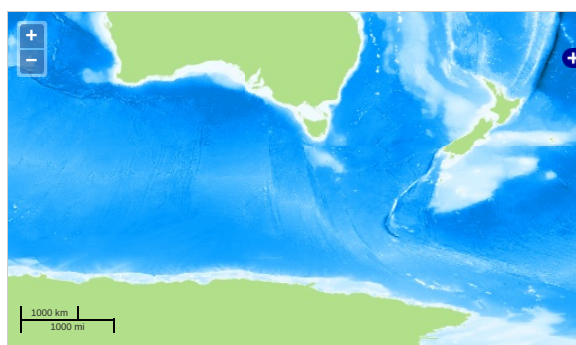
Observation Items: Temperature, Salinity, Dissolved

oxygen, Transmittance, Fluorescence, Chlorophyll, PAR, Silicate, Nitrate, Nitrite, Phosphate, CFC11, CFC12, CFC113, SF6, Total inorganic carbon, Alkalinity, pH, Carbon13, Carbon14, 134Cs, 137Cs

Science Keywords:

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Observation Map



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

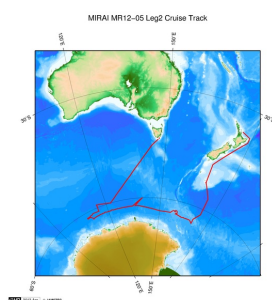
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File names

☐ 49NZ20121128_hy1.csv

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