

MIRAI MR14-04 Leg1 Bottle Sampling Water Chemical Analysis

Last Modified: 2021-06-29

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

Cruise ID: [MR14-04 Leg1](#)

Bottle Sampling Water Chemical Analysis: Processed (PI)

Data Policy: [JAMSTEC](#)

Observation Items: Temperature, Salinity, Dissolved oxygen, Transmittance, Fluorescence, Chlorophyll, PAR, Nitrate, Silicate, Nitrite, Phosphate, Ammonia, Total inorganic carbon, Total Alkalinity, pH, CDOM, Cs-134, Cs-137, I-129

Science Keywords:

OCEANS > OCEAN CHEMISTRY	> AMMONIA
OCEANS > OCEAN CHEMISTRY	> INORGANIC CARBON
OCEANS > OCEAN CHEMISTRY	> NITRATE
OCEANS > OCEAN CHEMISTRY	> NUTRIENTS
OCEANS > OCEAN CHEMISTRY	> OXYGEN
OCEANS > OCEAN CHEMISTRY	> pH
OCEANS > OCEAN CHEMISTRY	> PHOSPHATE
OCEANS > OCEAN CHEMISTRY	> SILICATE
OCEANS > OCEAN CHEMISTRY	> SALINITY
OCEANS > OCEAN CHEMISTRY	> CHLOROPHYLL
OCEANS > OCEAN TEMPERATURE	> WATER TEMPERATURE
OCEANS > SALINITY/DENSITY	> SALINITY
OCEANS > OCEAN OPTICS	> EXTINCTION COEFFICIENTS
OCEANS > OCEAN OPTICS	> PHOTOSYNTHETICALLY ACTIVE RADIATION
OCEANS > OCEAN CHEMISTRY	> ALKALINITY
OCEANS > OCEAN CHEMISTRY	> RADIONUCLIDES
OCEANS > OCEAN OPTICS	> FLUORESCENCE

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR14-04_leg1-2_all.pdf

For Using Data

Principal Investigator

CTD, SBE35, DNSSAL, Salinity, Transmittance, Fluorescence, PAR: Hiroshi Uchida (JAMSTEC)

Oxygen: Yuichiro Kumamoto (JAMSTEC)

Chl-a, CDOM: Kosei Sasaoka (JAMSTEC)

Nutrients: Michio Aoyama (Fukushima Univ./JAMSTEC)

TDIC, TALK, pH: Akihiko Murata (JAMSTEC)

DOC: Takeshi Yoshimura (CRIEPI)

Cs-134, Cs-137, I-129: Yuichiro Kumamoto (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(5ch) (MR09-02 -)



Instrument:

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



Instrument:

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



Instrument:

Titration for total alkalinity (MR14-03 -)



Instrument:

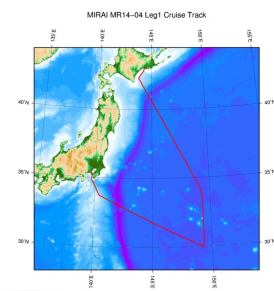
Fluorometer (TURNER DESIGNS)



Overview

For details about observation, please refer to the Data book "[WHP P01 REVISIT IN 2014 DATA BOOK](#)" (ISBN 978-4-901833-22-6) and [Cruise Report](#).

Related Information



[Enlarge Image](#)

MR14-04 Leg1

Ship Name: MIRAI

Period: 2014-07-08 - 2014-07-15

Chief Scientist: Hiroshi Uchida (JAMSTEC)

Project Name: [POST-WOCE Hydrography]

Proposal ▶ Collaborative study on the zonal distribution of dissolved organic carbon in the far North

Title: Pacific

Update History

2021-06-29	An observation data was registered.
2018-08-31	An observation data was registered.

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SHINKAI 6500
DEEP TOW
HYPER-DOLPHIN
URASHIMA
YOKOSUKA DEEP TOW
6K Camera DEEP TOW
6K Sonar DEEP TOW
KM-ROV
POWER GRAB SAMPLER (SHELL)
POWER GRAB SAMPLER (CLOW)
BMS

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ReadMe Observation Data **Data Format** Quality Information

Cruise ID: [MR14-04 Leg1](#)

Bottle Sampling Water Chemical Analysis: Processed (PI)

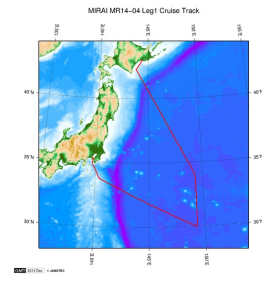
Data Policy: [JAMSTEC](#)

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 (S/N fixed to the sampling device)
7	BTLNBR_FLAG_W		I1	Bottle quality flags
8	DATE		I8	Cast date
9	TIME	UTC	A4	Cast time
10	LATITUDE	DEG	F8.4	Latitude
11	LONGITUDE	DEG	F9.4	Longitude
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	CTD-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	CTD-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	CTD-Oxygen
26	CTDOXY_FLAG_W		I1	Quality flags for CTD data
27	OXYGEN	UMOL/KG	F9.2	Bottle 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	CDOM	/M	F9.3	Absorption coefficient of CDOM
37	CDOM_FLAG_W		I1	Quality flags for water samples
38	PAR	UE/SQM/S	F9.3	PAR
39	PAR_FLAG_W		I1	Quality flags for CTD data
40	CTDNRA	UMOL/KG	F9.2	Nitrate_CTD
41	CTDNRA_FLAG_W		I1	Quality flags for CTD data
42	SILCAT	UMOL/KG	F9.2	Silicate
43	SILCAT_FLAG_W		I1	Quality flags for water samples
44	SILUNC	UMOL/KG	F9.2	Uncertainty of Silicate data
45	NITRAT	UMOL/KG	F9.2	Nitrate
46	NITRAT_FLAG_W		I1	Quality flags for water samples
47	NRAUNC	UMOL/KG	F9.2	Uncertainty of Nitrate data
48	NITRIT	UMOL/KG	F9.2	Nitrite
49	NITRIT_FLAG_W		I1	Quality flags for water samples
50	NRIUNC	UMOL/KG	F9.2	Uncertainty of Nitrite data
51	PHSPHT	UMOL/KG	F9.2	Phosphate
52	PHSPHT_FLAG_W		I1	Quality flags for water samples
53	PHPUNC	UMOL/KG	F9.2	Uncertainty of Phosphate data
54	AMMONIA	UMOL/KG	F9.2	Ammonium
55	AMMONIA_FLAG_W		I1	Quality flags for water samples
56	NH4UNC	UMOL/KG	F9.2	Uncertainty of Ammonium data
57	TCARBN	UMOL/KG	F9.1	Total Carbon
58	TCARBN_FLAG_W		I1	Quality flags for water samples
59	ALKALI	UMOL/KG	F9.1	Total Alkalinity
60	ALKALI_FLAG_W		I1	Quality flags for water samples
61	PH_TOT		F9.4	pH (total scale)
62	PH_TMP	DEG C	I9	pH analyzing temperature
63	PH_TOT_FLAG_W		I1	Quality flags for water samples
64	DOC	UMOL/KG	F9.2	Dissolved Organic Carbon
65	DOC_FLAG_W		I1	Quality flags for water samples
66	CS-134	MBQ/KG	F9.3	Cesium 134
67	CS-134_FLAG_W		I1	Quality flags for water samples

Column No.	Column Heading CS137ER Mnemonic	Units MBQ/KG Mnemonic	Reporting Precision F9.3 Format	Comments
69	CS-137	MBQ/KG	F9.3	Cesium 137 error
70	CS-137_FLAG_W		I1	Quality flags for water samples
71	CS137ER	MBQ/KG	F9.3	Cesium 137 error
72	I-129	MBQ/KG	F9.1	Iodine 129
73	I-129_FLAG_W		I1	Quality flags for water samples
74	I-129ER	MBQ/KG	F9.1	Iodine 129 error

Related Information



MR14-04 Leg1

Ship Name: MIRAI
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Chief Scientist: Hiroshi Uchida (JAMSTEC)
Project Name: [POST-WOCE Hydrography]
Proposal ▶ Collaborative study on the zonal distribution of dissolved organic carbon in the far North Pacific
Title:

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6K Sonar DEEP TOW
KM-ROV
POWER GRAB
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POWER GRAB
SAMPLER (CLOW)
BMS

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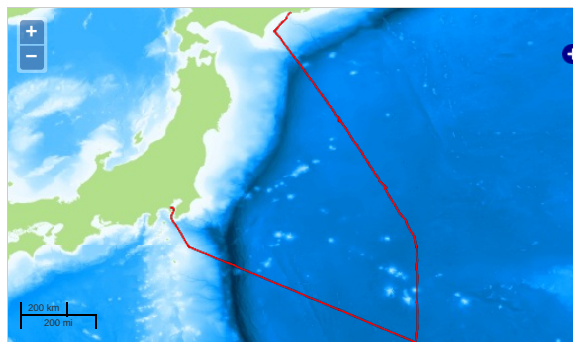
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Observation Map



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

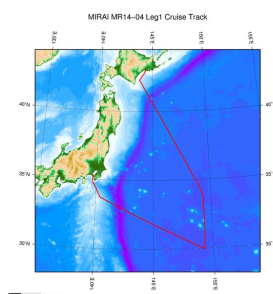
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Data List

File names

☐ 49NZ20140709_hy1.csv

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