

KAIYO KY14-09 Bottle Sampling Water Chemical Analysis

Last Modified: 2017-07-28

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Cruise ID: [KY14-09](#)

Bottle Sampling Water Chemical Analysis: Processed (PI)

Data Policy: [JAMSTEC](#)

Observation Items: Temperature, Salinity, Dissolved oxygen, Fluorescence, Chlorophyll, Silicate, Nitrate, Nitrite, Phosphate, Ammonia, Total inorganic carbon, Alkalinity, Dissolved organic carbon, Dissolved organic nitrogen, Total dissolved Nitrogen, Potential temperature, Density

Science Keywords:

OCEANS > OCEAN CHEMISTRY > AMMONIA
OCEANS > OCEAN CHEMISTRY > DISSOLVED GASES
OCEANS > OCEAN CHEMISTRY > INORGANIC CARBON
OCEANS > OCEAN CHEMISTRY > NITRITE
OCEANS > OCEAN CHEMISTRY > NITRATE
OCEANS > OCEAN CHEMISTRY > NUTRIENTS
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OCEANS > OCEAN CHEMISTRY > CHLOROPHYLL
OCEANS > OCEAN TEMPERATURE > WATER TEMPERATURE
OCEANS > SALINITY/DENSITY > SALINITY
OCEANS > OCEAN CHEMISTRY > ALKALINITY
OCEANS > OCEAN CHEMISTRY > NITROGEN
OCEANS > OCEAN TEMPERATURE > POTENTIAL TEMPERATURE

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/KY14-09_all.pdf

For Using Data

Principal Investigator

Kazuhiko Matsumoto (JAMSTEC)

Use Constraints

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

Data Citation

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

Information on CTD data

Pressure sensor

Model : SBE9plus, Sea-Bird Electronics, Inc.
Measurement range : 0 to 10500 m
Accuracy : $\pm 0.015\%$ of full scale range
Resolution : 0.001% of full scale

Temperature sensor

Model : SBE3, Sea-Bird Electronics, Inc.
Measurement range : -5 to +35 °C
Accuracy : ± 0.001 °C
Resolution : 0.0002 °C

Salinity sensor

Model : SBE4, Sea-Bird Electronics, Inc.
Measurement range : 0 to 7 S/m
Accuracy : ± 0.0003 S/m
Resolution : 0.00004 S/m

Information on Chemical and Biological data

Salinity

Instruments : Autosal salinometer model 8400B (Guildline Instruments Ltd.)

Dissolved Oxygen

Instruments : Automatic photometric titrator DOT-01X manufactured by Kimoto Electronic Co. Ltd
Methods : Winkler method/photometric methods

Nutrients

Instruments : BL TEC K.K. QuAAtro 2-HR

Total Alkalinity

Instruments : automated TA analyzer (Nippon ANS, Inc.) based on spectrophotometer (Carry 50 Scan, Varian)
Methods : Single step acid additional procedure using bromocresol green/spectrophotometry

Dissolved inorganic carbon

Instruments : TCO₂ measuring system (Nippon ANS, Inc.) equipped with coulometer Model 5012(UIC Inc.)
Methods : coulometry

Chlorophyll a

Instruments : Fluorophotometer model 10-AU-005 (Turner design)
Methods : fluorometric determination (Non-acidification method/ Acidification method)

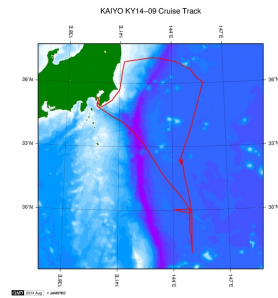
Dissolved organic carbon

Instruments : Shimadzu TOC-V (Shimadzu Co.)
Methods : High temperature catalytic oxidation

Dissolved Organic Nitrogen

Instruments : Shimadzu TOC-V (Shimadzu Co.)
Methods : High temperature catalytic oxidation

Related Information



[Enlarge Image](#)

KY14-09

Ship Name: KAIYO
Period: 2014-06-19 - 2014-06-30
Chief Scientist: Yoshimi Kawai (JAMSTEC)
Project Name: [Station S1, Station KEO]
Proposal Title: Transport and change processes of subtropical mode water and its effects on biogeochemical cycle

Update History

2017-07-28	An observation data was registerd.
2016-08-31	An observation data was registerd.

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[Feeds](#)

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[Publication List](#)
[Amount of Public Info.](#)
[Data](#)
[Map Search](#)
[Data Tree](#)
[Detailed Search](#)

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NATSUSHIMA
KAIYO
YOKOSUKA
MIRAI
KAIREI
CHIKYU
KAIMEI
SHINSEI MARU
HAKUHO MARU

Information of the Submersibles

KAIKO
SHINKAI 2000
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

Go to a Cruise Information

Cruise ID:

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ODV Format

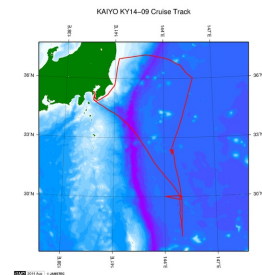
Please see the following link for details of ODV Format and ODV Software.

[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
5	hh:mm	Cast time
6	Longitude	-
7	Latitude	-
8	Bottom depth [m]	Bottom depth
9	Pressure [db]	Pressure
10	QF	Quality flags for CTD data
11	Depth [m]	Depth
12	QF	Quality flags for CTD data
13	Temp. [C]	Temperature
14	QF	Quality flags for CTD data
15	Salinity-CTD	Salinity
16	QF	Quality flags for CTD data
17	Theta [C]	Potential temperature
18	QF	Quality flags for CTD data
19	Sigma Theta [kg/m3]	Density
20	QF	Quality flags for CTD data
21	Salinity-Bottle	Bottle Salinity
22	QF	Quality flags for water samples
23	DO [umol/kg]	Oxygen
24	QF	Quality flags for water samples
25	Silicate [umol/kg]	Silicate
26	QF	Quality flags for water samples
27	Nitrate [umol/kg]	Nitrate
28	QF	Quality flags for water samples
29	Nitrite [umol/kg]	Nitrite
30	QF	Quality flags for water samples
31	Phosphate [umol/kg]	Phosphate
32	QF	Quality flags for water samples
33	Ammonia [umol/kg]	Ammonium
34	QF	Quality flags for water samples
35	TA [umol/kg]	Total alkalinity
36	QF	Quality flags for water samples
37	1TA [umol/kg]	Total alkalinity (replicate)
38	QF	Quality flags for water samples
39	DIC [umol/kg]	Dissolved Inorganic Carbon
40	QF	Quality flags for water samples
41	CHLWEL [ug/l]	Chlorophyll a (Non-acidification method)
42	QF	Quality flags for water samples
43	1CHLWEL [ug/l]	Chlorophyll a (Non-acidification method, replicate)
44	QF	Quality flags for water samples
45	CHLHOL [ug/l]	Chlorophyll a (Acidification method)
46	QF	Quality flags for water samples
47	1CHLHOL [ug/l]	Chlorophyll a (Acidification method, replicate)
48	QF	Quality flags for water samples
49	DOC [umol/kg]	Dissolved Organic Carbon
50	QF	Quality flags for water samples
51	TDN [umol/kg]	Total Dissolved Nitrogen
52	QF	Quality flags for water samples
53	DON [umol/kg]	Dissolved Organic Nitrogen
54	QF	Quality flags for water samples

Related Information



[Enlarge Image](#)

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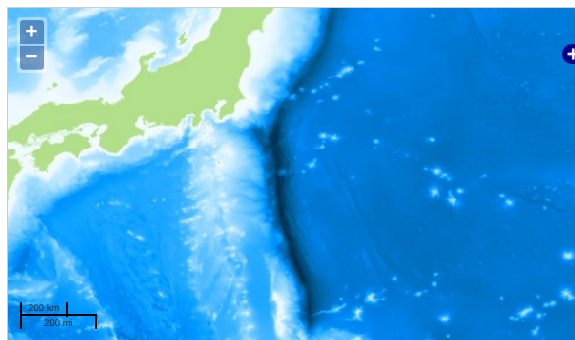
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Observation Map



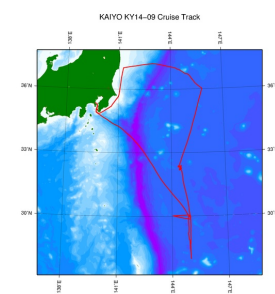
— ... Observation Line — ... Navigation ● ... Observation, Dive Point, Hole Imagery reproduced from ...

Data List

File names

☐ KY14-09 bottle data20160708.xlsx

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