MIRAI MR09-01 Leg1 Expendable Conductivity-Temperature-Depth Profiler (XCTD)

Last Modified: 2017-04-13

ReadMe | Observation Data | Data Format

Cruise ID: MR09-01 Leg1

Expendable Conductivity-Temperature-Depth Profiler (XCTD): Processed (PI)

Data Policy: JAMSTEC

Observation Items: Depth, Temperature, Salinity

Science Keywords:

OCEANS > OCEAN TEMPERATURE > WATER TEMPERATURE

OCEANS > SALINITY/DENSITY > SALINITY

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR09-01_leg1-3_all.pdf

For Using Data

Principal Investigator

Hiroshi Uchida (JAMSTEC)

Use Constraints

See Terms and Conditions about constrain of use.

Data Citation

See Terms and Conditions about data citation.

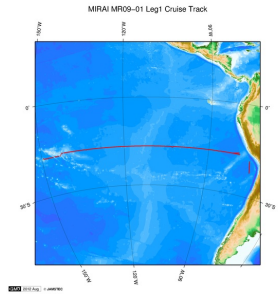
Instrument

Instrument:
Expendable conductivity temperature depth measurements (XCTD) (- MR11-E02)

Overview

Please see the Data book for details of data.

Related Information



Enlarge Image

MR09-01 Leg1
Ship Name: MIRAI
Period: 2009-04-10 - 2009-05-19
Chief Scientist: Akihiko Murata (JAMSTEC)
Project Name: [POST-WOCE Hydrography,South Pacific Ocean Research Activity 2009]

Update History

2017-04-13	An observation data was registerd.
2012-09-28	An observation data was registerd.

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XCTD DMO

Format Description for the Corrected Data

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

Data in following cruise is not expressed with Exchange Format. Please see the site of each cruise for format.
MR02-K05 Leg1
MR04-05

Format Description for the QCed Data

Each data file contains one line header (meta data) followed by data lines for each cast.
The number of data lines are recorded in the header.

Header part

No.	Column	Content	Format	Remarks
1	1	Header ID	a1	fixed as '#'
2	3 - 6	Data ID	a4	XCTD
3	8 - 22	Cruise ID	a15	
4	33 - 40	Date	i8	YYYYMMDD (UTC)
5	42 - 45	Time	i4	hhmm (UTC)
6	47 - 55	Latitude	i2,a1,f5.2,a1	dd-mm.mmN(S)
7	57 - 66	Longitude	i3,a1,f5.2,a1	ddd-mm.mmE(W)
8	68 - 71	Number of data lines	i4	
9	72 - 73	Terminator	-	CR+LF

Data part

No.	Column	Content	Unit	Format	Remarks
1	1 - 11	Depth	m	f11.1	
2	12 - 22	Temperature	deg-C	f11.2	ITS-90
3	23 - 33	Salinity	PSU	f11.3	PSS-78
4	45 - 55	Flag	-	i11	1 - 7 : space 8 : flag of depth 9 : flag of temperature 10 : flag of salinity 11 : space * reference : 'Definition of Quality Control Flags'
5	56 - 57	Terminator	-	-	CR+LF

Each contents of the data part is stored in 11 bytes.
Missing value is presented by '-5', and error value is presented by '-9'.

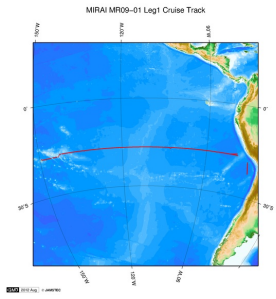
Definition of Quality Control Flags
1. Depth Flags
- 0 - accepted value
- 1 - error in recorded depth (same or less than previous depth)
- 2 - density inversion

2. Observed Level Flags
- N - missing value
- 0 - accepted value
- 1 - range outlier (outside of broad range check)
- 2 - failed inversion check
- 3 - failed gradient check
- 4 - zero anomaly
- 5 - failed combined gradient and inversion checks
- 6 - failed range and inversion checks
- 7 - failed range and gradient checks
- 8 - failed range and zero anomaly checks
- 9 - failed range and combined gradient and inversion checks
- A - failed visual check

QCed data were added flag according to the NODC (National Oceanographic Data Center) quality control procedure, additionally visually checked. Please see the site of NODC of the following link for quality control procedure.
QUALITY CONTROL AND PROCESSING OF HISTORICAL OCEANOGRAPHIC TEMPERATURE, SALINITY, AND OXYGEN DATA

Sample Program
ex_read2.f

Related Information



Enlarge Image

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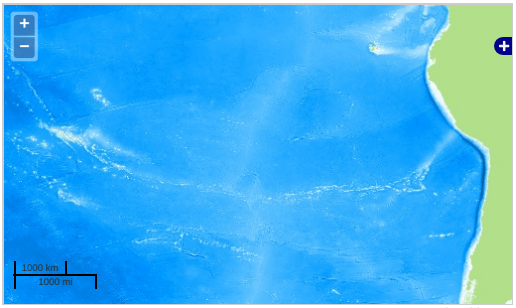
Observation Map



Imagery reproduced from ...

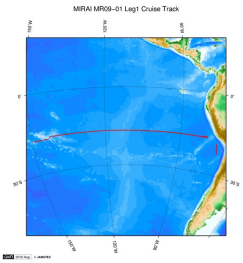
... Observation Line ... Navigation ... Observation, Dive Point, Hole

Data List

Add to Basket

File names
P21_145_1_xc1.csv
P21_146_1_xc1.csv
P21_151_1_xc1.csv
P21_156_1_xc1.csv
P21_29_2_xc1.csv
P21_30_1_xc1.csv
P21_31_1_xc1.csv
P21_32_1_xc1.csv
P21_33_1_xc1.csv
P21_34_1_xc1.csv
P21_34_2_xc1.csv
P21_41_1_xc1.csv
P21_41_2_xc1.csv
P21_42_1_xc1.csv
P21_42_2_xc1.csv
P21_96_1_xc1.csv
P21_96_2_xc1.csv
P21_97_1_xc1.csv
P21_97_2_xc1.csv
P21_98_1_xc1.csv
P21_98_2_xc1.csv
ex_read2.f (Sample Program)

Related Information



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