Last Modified: 2013-05-25

KAIREI KR12-10 Bathymetry (MBES)

ReadMe Observation Data Format

Cruise ID: KR12-10

Bathymetry (MBES): Processed (DMO)-QCed

Data Policy: JAMSTEC

Observation Items: Depth

Science Keywords:

> BATHYMETRY/SEAFLOOR TOPOGRAPHY

> BATHYMETRY

SOLID EARTH > GEOMOROHOLOGY

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/KR12-10_all.pdf

For Using Data

Principal Investigator

Data Management Office

See Terms and Conditions about constrain of use

Data Citation See Terms and Conditions about data citation

Instrument

Multi beam echo sounder (- KR13-09)



The data provided here are the bathymetric data obtained from the multibeam echo sounder system (MBES). The system transmits the shape echo sounder beam from the transmitter and receives the beam reflected from the seabed using the hydrophone. The water depth is calculated from the travel time of the beam between the transmitter and the receiver. Having many transmitters make fan beams across the keel, this system can obtain a lot of bathymetric data on a wide angle at

The travel time of the beam (from the transmitter to the seabed and from the seabed to the receiver) is corrected using the vertical profile of the sound velocity obtained from the in situ observations. (see section Sound velocity profile correction). The raw data with the low reliability such as the noise are removed using the software (see section Processed data).

Measurement System

Manufacturer: SEABEAM INSTRUMENTS Type: SEAREAM 2112 004

Frequency: 12kHz Swath angle: Max 150° Beam angle: 2 * 20 Beam number: 151 Range: 50m - 11 000m

Center beam [Depth (m) * 0.2%], Side beam [Depth (m) *

Resolution (Depth): 0.5%]

Sound velocity profile correction

In the survey area, the sound velocity profile correction is made using the XBT data acquired during the cruise. On the other hand, in the transit area, e.g., from the survey area to the port, where we do not conduct the XBT observations, the data are corrected using the historical XBT data or the Argo float data.

Processed Data

Following raw data with the low reliability are removed using the processing software "HIPS and SIPS 7.0" of CARIS Inc.

- · Navigation error data.
- · Data more than manufacturer specification (see section 2. System)
- · Spike noise data (If both of slopes calculated from the evaluated beam and prior/post one on the same swath are less than 5 degrees.)
- · Side beam (Beam No.1-21,131-151: Starboard is No.1 beam.)

The data quality is different in the survey and transit area because of the difference of the temperature data for the sound velocity profile correction. Therefore, we open the survey and transit area data separately. The rule of the file name is as follows

File name :

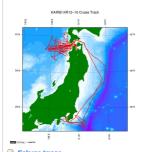
- · Survey area data : YYYYMMDD.dat
- · Transit area data : TYYYYMMDD.dat

YYYY: year, MM: month, DD: day

"T" of the header indicates the transit area data

- (1) Geodetic system: WGS84
- (2) The tide is not corrected
- (3) These data are compressed in zip format, please use that after unpacking.
- (4) If you would like the raw data set, please contact us from "Contact Us" above

Related Information



KR12-10
Ship Name: KAIREI
Period: 2012-04-02 - 2012-05-13
Chief Scientist: Tetsuo No (JAMSTEC)
Project Name: [Seismic study]
Proposal Intensive seismic study around the deformed zone in the eastern margin of the Japan Sea Title:

Q Enlarge Image

Update History

2013-05-25 2012-10-03 An observation data was registerd. An observation data was registerd.

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What's New Update History

Publication List Amount of Public Info

Data Map Search Data Tree Detailed Search

Information of the Ships NATSUSHIMA KAIYO YOKOSUKA MIRAI KAIREI CHIKYU KAIMEI SHINSEI MARU HAKUHO MARU

Information of the Submersibles KAIKO SHINKAI 2000 SHINKAI 6500 DEEP TOW HYPER-DOLPHIN 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:

Go to a Dive Information Dive ID: Go

JAMSTEC 国立研究開発法人 海洋研究開発機構 JAPAN AGENCY FOR MARINE EARTH SCIENCE AND TECHNOLOGY

Go

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Search

Last Modified: 2013-05-25

Application User Registration Q Data

KAIREI KR12-10 Bathymetry (MBES)



Cruise ID: KR12-10

Bathymetry (MBES): Processed (DMO)-QCed

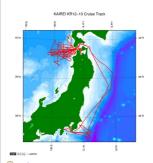
Data Policy: JAMSTEC

Bathymetry XYZ

The one record length of the Processed Data file is 33 bytes.

| No. | Column | Description | Format | Unit | Remarks |
|-----|---------|-------------|--------|--------|--|
| 1 | 1 - 11 | Longitude | f11.6 | degree | + : Eastern hemisphere - : Western hemisphere |
| 2 | 13 - 22 | Latitude | f10.6 | degree | + : Northern hemisphere - : Southern hemisphere |
| 3 | 24 - 31 | Depth | f9.3 | m | |
| 4 | 32 - 33 | Terminator | a2 | | [CR][LF] |

Related Information



KR12-10 Ship Name: KAIREI Period: 2012-04-02 - 2012-05-13 Chief Scientist: Tetsuo No (JAMSTEC)
Project Name: [Seismic study]

Proposal Intensive seismic study around the deformed zone in the eastern margin of the Japan Sea Title:

Q Enlarge Image

| Update History | |
|--------------------------|---|
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Map Search Data Tree Detailed Search

NATSUSHIMA

YOKOSUKA MIRAI CHIKYU SHINSEI MARU HAKUHO MARU

KAIKO SHINKAI 2000 SHINKAI 6500 DEEP TOW HYPER-DOLPHIN URASHIMA 6K Camera DEEP TOW 6K Sonar DEEP TOW

KM-ROV POWER GRAB SAMPLER (SHELL) POWER GRAB SAMPLER (CLOW)

Cruise ID: Go

Go to a Dive Information



JAMSTEC 国立研究開発法人 海洋研究開発機構

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20120417.zip 20120418.zip
20120419.zip
20120420.zip
20120421.zip 20120421.zip 20120424.zip 20120425.zip 20120428.zip 20120429.zip
20120430.zip
20120501.zip 20120502.zip 20120502.zip 20120505.zip 20120506.zip 20120507.zip
20120508.zip T20120402.dat
T20120405.dat T20120406.dat T20120406.dat
T20120407.dat
T20120408.dat T20120410.dat T20120410.dat T20120413.dat T20120414.dat T20120415.dat T20120415.dat
T20120416.dat
T20120417.dat T20120418.dat
T20120419.dat
T20120420.dat
T20120421.dat
T20120423.dat T20120423.dat
T20120424.dat
T20120425.dat T20120427.dat T20120427.dat T20120430.dat T20120502.dat
T20120504.dat T20120501.dat

T20120505.dat

| | Fig 12090S .dat | |
|---|------------------------|--|
| 1 | T20120507.dat | |
| 1 | T20120508.dat | |
| 1 | T20120509.dat | |
| | T20120510.dat | |
| 1 | T20120511.dat | |
| 7 | T20120512.dat | |



Update History

2013-05-25 An observation data was registerd.
2012-10-03 An observation data was registerd.

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Lists
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VOKOSUKA DEEP TOW
RAIMEI
URASHIMA
Who Sonar DEEP TOW
RK SONAR DE