


 1st NEARGOOS-NOWPAP Training Course
on Remote Sensing Data Analysis
September 3rd, 2007
@Nagasaki University 

Introduction of RDMDB (NEAR-GOOS) & Data Management at JODC

Eiji MUKAINAKA
Japan Oceanographic Data Center
Japan Coast Guard 



CONTENTS

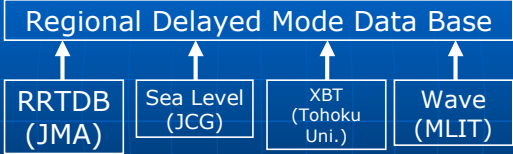
- RDMDB of NEAR-GOOS
- Data Management at JODC
- International Data Exchange

RDMDB of NEAR-GOOS (1/6)

Regional Delayed Mode Data Base of North East Asian Regional – Global Ocean Observing System

RDMDb of NEAR-GOOS (2/6)

RDMDb



RDMDb is an abbreviation for Regional Delayed Mode Data Base. This RDMDb is operated by the Japan Oceanographic Data Center (JODC). The RRTDB deals with real time data, and the RDMDb is non real time data. Data of the RDMDb are transferred from the RRTDB. And the RDMDb also has other kinds of data, such as Sea Level data, XBT data, Wave data. Of course, these data are not real time data but more than 30 days passed after observation.

RDMDb of NEAR-GOOS (3/6)

Items of RDMDb

BATHY, BUOY, SHIP, TESAC, TRACKOB, SUBST, TS, ASMDAY, GLBTS, WIND, GLBWIND, SSTANL, DAILY SST, WNPSST, GLBSST, ADJSUBS, PACSUBS, SSDH, SSHA, SEA_ICE, MGDSST, COBESST, GTSPP, FERHRIShip, FERHRISation, JAFIC...etc
30s_tide data, TOHOKU Univ, NOWPHAS (only RDMDb)

The RDMDb has several kinds of data as well as the RRTDB. Above list shows items of the RDMDb data. The number of items is 40. Almost data are from the RRTDB of the Japan Meteorological Agency. But TOHOKU University, NOWPHAS and 30s_tide data are original data of the RDMDb.

Tohoku University data is temperature data observed by XBT. This data is also available from another data base system of JODC. NOWPHAS is Japanese nation wide coastal wave data observed by the Port and Airport Research Institute of the Ministry of Land, Infrastructure and Transport. 30s_tide data is 30 seconds interval sea tide data at 29 tide stations observed by the Japan Coast Guard.

RDMDb of NEAR-GOOS (4/6)

RDMDb Data Processing



Data transferred to the RDMDb after 30 days since they are received by the RRTDB are classified by type and each of the classified data received in a period of one month counting from the date of reception are compiled into one file. After that, these data are registered in the RDMDb data retrieval system, so that they can be accessed by users. Basically, the same data format used at the RRTDB is accepted when data are compiled into files, and contents of data are not edited.

JODC receives a compressed file from JMA by ftp through the Internet automatically everyday. But JODC processes the data once a month. First of all, these data are uncompressed. These data are filed that each file has a name indicating the date of observation, the date of reception at the RRTDB. These files are re-filed by year, month, data type by JODC. Finally, these data are registered in the server as delayed mode data.

RDMDB of NEAR-GOOS (5/6)

Enter your email address or 'guest@onetime'

How to get RDMDB Data

JODC Top Page
www.jodc.go.jp

RDMDB of NEAR-GOOS (6/6)

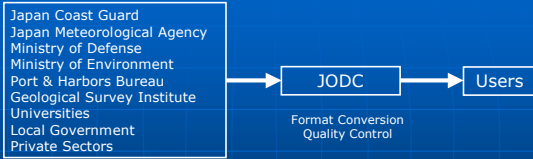
To access the RDMDB, please access to JODC top page directly; www.jodc.go.jp. Click an indication 'NEAR-GOOS' on the left part of the page. The RDMDB page shows up. And click 'RDMDB Data Retrieval System', a page shows up that you are requested to enter your email address. Before you enter your email address, you have to register your address. But if you use this site as a one-time user, it is ok to enter 'guest@onetime'. And you can chose the data as you need. You can also chose a file format from 4 type formats, such as Normal, Compress, GZIP, LHA. Anyway, we suggest that you access the RDMDB and try to get the data.

Data Management at JODC (1/10)

Data Management
at
Japan Oceanographic Data Center

Data Management at JODC (2/10)

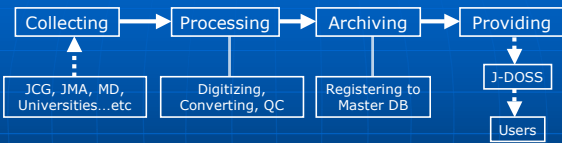
Data Flow in Japan



JODC, as the synthetic marine data bank, collects many kinds of ocean data. Physical-chemical oceanographic data like Temperature, Salinity, Oxygen and so on were observed by the Japan Coast Guard, the Japan Meteorological Agency, the Fishery Agency, the Ministry of Defense, Universities, Local governments and so on. They offer those data to JODC by their own format. JODC provides the data with users after format conversion and quality control.

Data Management at JODC (3/10)

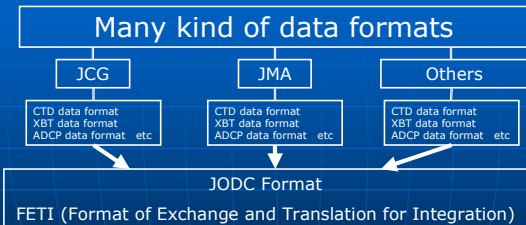
Detail of Data Flow



This is a flow of data processing at JODC. First of all, JODC collects data from observation organizations, universities and so on. Next is processing. If the data is not digital but papers, we have to digitize them. And if the data is made by the originator's format, we have to convert them to the JODC format. After the data are digitized and converted, we check the data on format style, characters, observation time and position, data value and so on. This is the Quality Control. Basically, JODC adopts the originator's value. So, JODC attaches a flag to the data whether the data is good or not. After all QC are completed, these data are registered in the JODC master database as archive data. And then, those data are also registered in J-DOSS for providing to users.

Data Management at JODC (4/10)

Format conversion



Each data is described on each data format by each data originator. Therefore, JODC converts from various format to integrated format standardized by JODC. The name of format is FETI. FETI is an abbreviation for Format of Exchange and Translation for Integration. Most of data that JODC owns are converted as FETI.

International Data Exchange (1/3)

International Data Exchange

International Data Exchange (2/3)

IODE system

International Oceanographic Data and Information Exchange

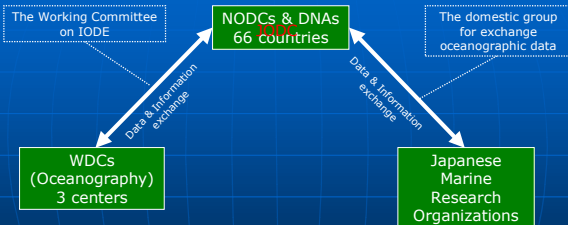
Main objectives

- To facilitate and promote the exchange of all marine data and information including metadata, products and information in real-time, near real time and delayed mode;
- To ensure the long term archival, management and services of all marine data and information;
- To promote the use of international standards, and develop or help in the development of standards and methods for the global exchange of marine data and information , using the most appropriate information management and information technology;
- To assist Member States to acquire the necessary capacity to manage marine data and information and become partners in the IODE network;
- To support international scientific and operational marine programmes of IOC and WMO and their sponsor organizations with advice and data management services.

The IODE was established in 1961 to enhance marine research, exploitation and development by facilitating the exchange of oceanographic data and information between participating Member States of IOC, the Intergovernmental Oceanographic Commission of UNESCO, and by meeting the needs of users for data and information products. The main objectives of the IODE programme are as above.

International Data Exchange (3/3)

IODE system



The IODE system forms a worldwide service oriented network consisting of Designated National Agencies, National Oceanographic Data Centers and World Data Centers for Oceanography. There are currently a total of 65 NODCs (56) & DNAs (9). JODC is one of NODCs. JODC exchanges oceanographic data and information with WDCs and Japanese Marine Research Organizations and so on. There are 3 WDCs for oceanography, WDC-A in Silver Spring, Maryland, US, WDC-B in Obninsk, Russia and WDC-D in Tianjin, China. JODC submits new data that JODC received from organizations to WDCs basically every year. There is the domestic group between JODC and Research organizations. JODC holds the domestic group for exchange oceanographic data every year in Tokyo.

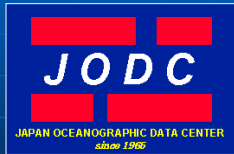
Add-Up

It is important to quality control after observation.

Your data should be leveraged at any fields.

We have been waiting for your data.

Thank you for your attention
and enjoy your staying in
Nagasaki!



If you need more information or detail about today's lecture,
please email us, mail@jodc.go.jp
