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IODE Regional Coordinator Report for WESTPAC

(Noboyuki Shibayama)

1. Region: Western Pacific

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4. Countries covered by IODE Regional Coordinator:

Australia, China, P.R., Fiji, France, Indonesia, Japan, Korea, D. P. R., Korea, R., Malaysia, New Zealand, Philippines, Russian Federation, Samoa, Singapore, Solomon Islands, Thailand, Tonga, United Kingdom, United States of America, and Vietnam

5. Activities undertaken during the inter-sessional period to fulfill your role as IODE regional coordinator as described in Recommendation IODE-XVI/2

IOC/WESTPAC Training Course on NEAR-GOOS Data Management
Since 1982, JODC has organized the training course on oceanographic data management every year, under the auspices of Japan-UNESCO Fund in Trust. In 1997, the training course was reformed to be suitable for the concept of the NorthEast Asian Regional GOOS (NEAR-GOOS) project, and was named the IOC/WESTPAC Training Course on NEAR-GOOS Data Management. One of its objectives is to provide personnel currently involved in oceanographic data and information management from WESTPAC member countries with basic concepts of the IODE system and its function, especially in the WESTPAC region, and acquisition, procession and compilation of oceanographic data.

Within the inter-sessional period, JODC organized the training course three times. The fourth IOC/WESTPAC Training Course on NEAR-GOOS Data Management was held in Tokyo from 27 Nov. to 7 Dec. 2000. It was attended by 5 trainees from 5 countries, China, Indonesia, Malaysia, the Republic of Korea, and the Russian Federation.

The fifth IOC/WESTPAC Training Course on NEAR-GOOS Data Management was held from 5 Nov. to 16 Nov. 2001. Six trainees attended the training course from China, Philippines, the Republic of Korea, the Russian Federation, Thailand, and Vietnam. Mr. Greg Reed, IOC secretariat, was invited as a lecturer. He gave lectures on the outline of the IODE system, MEDI and quality control of oceanographic data using IODE Resource Kit.

The sixth IOC/WESTPAC Training Course on NEAR-GOOS Data Management was held from 21 Oct. to 1 Nov. 2002. Seven trainees attended training course from 7 countries, China, Fiji, Indonesia, Malaysia, the Republic of Korea, the Russian Federation, and Thailand. Its course programme is attached as Annex I. Mr. Robert Gelfeld of WDC-A for oceanography was invited as a lecturer. He gave lectures on IODE system, activities of WDC-A for oceanography, and GODAR project.

WESTPAC discussion group on the data management

International Conference on the International Oceanographic Data and Information Exchange in the Western Pacific 1999 (ICIWP'99) was held in Malaysia during 1-4 Nov. 1999, in order to discuss the many new challenges facing IODE in the region and to identify measures for increasing the effectiveness of the system. The conference recognized the need to improve communications and discussion on cooperation and collaboration of data management and exchange activities in the WESTPAC region. The conference requested JODC to investigate establishing a mailing list for a discussion group on data management related activities.

In response to its request, JODC started operating a mailing list system for WESTPAC discussion group on the data management in 2000. As of 1 Nov. 2002, 161 scientists and data managers from 22 countries have participated in the discussion group.

A visit to the oceanographic research organizations in Vietnam

The oceanographic research organizations in Vietnam have long histories of oceanographic observation and accumulate many observation data. In order to survey oceanographic data management activities in the region, JODC dispatched a member to National Oceanographic Data Center (VNODC), Institute of Oceanography (IO), and Center for Hydrometeorology of South Vietnam on behalf of the IODE Regional Coordinator for WESTPAC, in September 2001.

Investigation of the oceanographic data kept by domestic marine research organizations have been carried out by the National Committee for IOC of Vietnam, and as the result, data catalogs have been submitted from these organizations. IO implemented a national project entitled “Establishment of the Vietnam Oceanographic Data Bank the Oceanographic Database of the South China Sea and Adjacent Waters” as a five-year project from 1996. The second phase of the project started in 2001.

International Workshop for GODAR-WESTPAC

IODE-XVI recommended that the GODAR-WESTPAC (Global Oceanographic Data Archaeology and Rescue project in WESTPAC) be carried out in Western Pacific region as a regional project of GODAR. The GODAR-WESTPAC aims to locate, rescue and make available marine data from the WESTPAC region that is in danger of being lost. Data that is stored on paper or on old media and is not presently available to the WESTPAC scientists will be sort for this project. Work will be undertaken to digitize the data or re-write the data onto

modern media in an effort to safeguard it for future use. The data will also be quality controlled and then made available through the IODE system.
In order to start GODAR-WESTPAC, JODC organized the International Workshop for GODAR-WESTPAC during 5-7 March 2002, with support from the Ministry of Land, Infrastructure and Transport (MLIT) Japan. It was attended by the representatives from 12 WESTPAC member countries, China, Fiji, France, Indonesia, Japan, the Republic of Korea, Malaysia, Philippines, the Russian Federation, Thailand, USA, and Vietnam. It was co-chaired by Mr. Sydney Levitus, the Director of WDC-A and the Project Leader of GODAR, and Dr. Tadahiko Katsura, the Director of JODC. Each representative reported the present status of oceanographic research and data management in each country, and also reported the current activities concerning the oceanographic data archaeology and rescue.

The workshop adopted the Work Plan for GODAR-WESTPAC (Annex II), which contains the following items,

- The term of project is from 2002 to 2006.
- The project focuses on the data types that are exchanged routinely within the IODE system.
- The project establishes a steering committee.
- JODC is in charge of the project office.
- It is anticipated that assistance with the digitization of the paper-based data will come from NODC's and DNA's within the region.
- The data policy of the project is according to the IODE data policy, "Full and Open Sharing".

Establishment of GODAR-WESTPAC web site
JODC, the project office of GODAR-WESTPAC, has developed the GODAR-WESTPAC web site. Its URL is http://www.jodc.go.jp/project/GODAR/index.htm . The web site shows the purpose, background, and history of the project, and the contact point of each participating country.

Participation in the Fifth Session of the IOC Sub-Commission for the Western Pacific
The Fifth Session of the IOC Sub-Commission for the Western Pacific (WESTPAC-V) was held in Fremantle, Australia, 9 – 13 September 2002. JODC reported the recent activities of RNODC-WESTPAC, including IOC/WESTPAC Training Course on NEAR-GOOS Data Management, NEAR-GOOS Regional Delayed Mode Data Base, and International Workshop for GODAR-WESTPAC.

6. Comments

Continuous efforts will be paid by the IODE Regional Coordinator for WESTPAC, in order to increase the effectiveness of IODE system in the region.

(Annex I)

COURSE PROGRAMME

Sixth IOC/WESTPAC Training Course on NEAR-GOOS Data Management

Monday, 21 October 2002
Morning: Opening Ceremony and Course Orientation
Afternoon: Lecture on Outline about IOC, WESTPAC, and NEAR-GOOS

Tuesday, 22 October 2002
Morning: Study Visit to Hydrographic and Oceanographic Department
Afternoon: Country Report
Introduction of Oceanographic Data Management in the Participant's Country

Wednesday, 23 October 2002
Morning: Introduction to the IODE Resource Kit (I)
Afternoon: Introduction to WDC-A and NODC activities

Thursday, 24 October 2002
Morning: Introduction to the IODE system and GODAR project
Afternoon: Introduction to the IODE Resource Kit (II)
Lecture on Oceanographic Data and Information Management in JODC

Friday, 25 October 2002
Morning: Lecture on NEAR-GOOS Real Time Data Exchange System
Afternoon: Study Visit to Japan Meteorological Agency

Monday, 28 October 2002
Morning: Lecture on Research for Ocean and Utilization and Management
Afternoon: Lecture on CTD and BT Data Processing
Lecture on Tidal Data Processing

Tuesday, 29 October 2002
Study Visit to the National Research Institute of Fisheries Science and the Japan Marine Science and Technology Center

Wednesday, 30 October 2002
Morning: Lecture on Ocean Current Data Processing
Afternoon: Lecture on Practice Data Management by using PC
Lecture on NEAR-GOOS Delayed Mode Data Exchange System and JODC Data On-line Service System

Thursday, 31 October 2002
Morning: Lecture on Marine Chemical Data Processing and Management
Afternoon: Lecture on Marine Biological Data Processing and Management

Friday, 1 November 2002
Morning: Course Evaluation and Closing Ceremony
Afternoon: Customized Special Study

(Annex II)

WORK PLAN FOR THE GODAR IN THE WESTPAC REGION
Year 2002 - 2006

1. INTRODUCTION

The Global Ocean Data Archaeology and Rescue (GODAR) project has been established by the Intergovernmental Oceanographic Commission (IOC) in 1993 in order to save oceanographic data from a risk of losing by degradation of recording media or disaster etc., and to increase the volume of historical data available to climate change and other researches. The workshops related the program were held in each region to promote the project.

The large volume of data showed as followings, are collected at US-NODC/WDC-A through the program under the cooperation of the IOC member states,
- 2.0 million temperature profiles;
- 120,000 Chlorophyll profiles;
- 600,000 plankton taxa.

> list of data number in the region (Levitus)
> Specific contributions made by Member States (Levitus).

These data have been made available internationally without restriction via CD-ROM and on-line as World Ocean Database 1998 by US-NODC/WDC-A.

However, there are many data that were reported at the GODAR II, in Tianjin, China, 1994, still in manuscript form in this region.

The importance of promoting the GODAR program in the region was recognized again at the International Conference for the International Data & Information Exchange in the WESTPAC region 1999 (ICIWP'99) held in Langkawi, Malaysia, Nov. 1999. And ICIWP'99 recommended the establishment of a working group chaired by the representative from Malaysia in order to start a GODAR type project in the WESTPAC region. This paper describes a work plan to support the development of the GODAR type project according to the recommendation of ICIWP'99.

It was adopted to promote the GODAR project in the WESTPAC region (GODAR-WESTPAC) at the 16th Session of the IOC committee on International Oceanographic Data & Information Exchange (IODE-XVI) in Lisbon, Portugal, Nov. 2000.

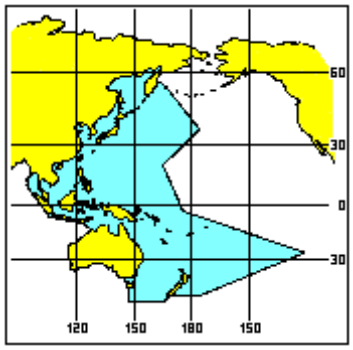
2. PURPOSE

The project aims to locate, rescue and make available marine data from the WESTPAC region that is in danger of being lost. Data that is stored on paper or on old media and is not presently available to the WESTPAC scientists will be sort for this project. Work will be undertaken to digitise the data or re-write the data onto modern media in an effort to safeguard it for future use. The data will also be quality controlled and then made available through the IODE system.

It is also expected that the project will enhance the IODE activities in the region.

3. PROJECT AREA

The project area of interest is the WESTPAC region as shown in the following figure;



4. PROJECT TERM

The project commences from 2002 as five years plan.

5. DATA TYPES

The project will focus on the data types that are exchanged routinely within the IODE system, especially focussing on the following data and any additional data collected at the time of observation:

- Hydrographic casts including all chemical and biological observations,
- CTD casts,
- Expendable Bathythermograph casts,
- Mechanical Bathythermograph casts,

6. STEERING GROUP

The project will establish a steering group to evaluate the progress of the project, review and update the work plan as necessary, and advise the Project Office for the project implementation. The steering group will consist of the IODE coordinators from the region, and from agencies participating in the project.

7. PROJECT OFFICE

A Project Office will be located at Japan Oceanographic Data Centre.

In general the Project Office coordinates project activities, implements the work plan, and enhances project communication as advised by the Steering Group.

Specific responsibilities of the Project Office:

1). PROJECT WEB SITE
The Project Office will develop a web site to promote the project, providing information on the projects activities and results.

2). BROCHURE
The Project Office will publish a brochure describing the GODAR activities in the region as a mechanism to promote the project within ocean research institutes of the region. The brochure will also include information on the full range of IODE activities to help promoting the IODE programme in this region.

3). INFORMATION RELATED TO MARINE RESEARCH RESOURCES
The Project Office will collect information on the various marine research resources such as institutes, vessels and research facilities in the region. Much of this information will be collected based on the recommendation of the IODE Group of Experts in Marine Information Management (GE-MIM).

4). INFORMATION ON DATA LOCATED
The Project Office will collect information on data that is in need of 'rescue' as identified by the member states. This will assist in the development of priorities for the data rescue process. Details of these data sets will also be made available on the project web site.

5). COLLECTION OF DATA
The Project Office will work to identify resources for digitisation of manuscript data.

6). WORKSHOP
The Project Office will arrange workshops to evaluate the progress of the project and share information, knowledge and techniques related the project.
At the end of the project, a workshop will be held in order to:
- Evaluate the success of the project and establish a follow-up plan.
- Share new knowledge and products from the project among the IODE data centres, coordinators and marine researcher community.

After the final workshop, the coordinators will be expected to disseminate the results of the project in own countries.

8. CHECK OF DUPLICATION

It is important that duplication of effort should be avoided and every effort will be made to ensure that the data identified for rescue has not already been digitised. This will require close cooperation with other IODE centres and the World Data Centres

9. DIGITIZATION OF DATA

It is anticipated that assistance with the digitisation of the paper-based data will come from NODC's and DNA's within the region. It is anticipated that:
1) If NODCs or DNAs are able to digitise other country's data, they inform the Project Office. So that, the Project Office will make arrangement for data digitising plan.
2) NODCs and DNAs should send data digitised as part of the project to the Project Office for inclusion into the IODE system. The Project Office will inform users via the web site that new data are available.

10. DATA POLICY

The data gathered by the project will be made available to users according to the IODE data policy, "Full and Open Sharing".

11. TECHNICAL COOPERATION

It is anticipated that the developed countries in the region will provide technical assistance to the developing countries for this project. The assistance will be based on cooperative schemes and training courses and provide a transfer of technology where possible. One area of support that will be investigated is the provision of equipment to countries to assist with the digitisation of rescues data. Other equipment such as CD-ROM drives to provide access to rescued data sets are also an option.

12. ESTIMATED COST AND TIME FRAME

The estimated cost and time frame of the project are indicated as following,

	2002	2003	2004	2005	2006	COST	Possible Sources
Establishment of SG	✓						
Establishment of Project Office	✓					US$30k	JODC
Establishment of Web page	✓					US$20k	Project Office
Brochure	✓					US$2k	PO
Information and data Collecting	✓	✓	✓	✓	✓		Donor & PO
Digitising Data & Data QC		✓	✓	✓	✓		Donor, PO and IODE GODAR Trust Fund
Training	✓	✓	✓	✓	✓	US$150k	IOC & Donor
GODAR WESTPAC CD-ROM data set					✓	US$40k	Donor & PO
Workshop			✓		✓	US$60k	IOC & Donor

List of Acronyms

CD ROM	Compact Disk Read Only Memory
CSR	Cruise Summary Report
CTD	Conductivity Temperature Depth profiler
DNA	Designated National Agency
GE-MIM	IODE Group of Experts in Marine Information Management
GODAR	Global Ocean Data Archaeology and Rescue Program
ICIWP'99	International Conference for the International Data & Information Exchange in the WESTPAC region 1999
IOC	Intergovernmental Oceanographic Commission
IODE	International Oceanographic Data and Information Exchange
JODC	Japan Oceanographic Data Centre
MBT	Mechanical Bathythermograph
MEDI	Marine Environmental Data Information
NODC	National Oceanographic Data Centre
ODA	Official Development Assistance
PO	Project Office
RNODC	Responsible National Oceanographic Data Centre
SG	Steering Group
UNESCO	United Nations Educational, Scientific, and Cultural Organization
US-NODC	National Oceanographic Data Centre of United State
WDC	World Data Centre
WESTPAC	Western Pacific
WOD98	World Ocean Database 1998
XBT	Expendable Bathythermograph

Revised at

- The International Workshop for the Global Ocean Data Archaeology & Rescue project in the Western Pacific region (GODAR-WESTPAC), March 5-7, 2002, Tokyo, Japan

[end]