North East Asian Regional Global Ocean Observing System – NEAR-GOOS

current status

Vyacheslav Lobanov
NEAR-GOOS Co-ordinating Committee
NEAR-GOOS: one of 13 GOOS Regional Alliances
NEAR-GOOS area, structure, products, users...

Free and open access to Regional data bases

Users

Regional Real Time Data Base (JMA)
Regional Delayed Mode Data Base (JODC)

National Real Time Data Base
National Delayed Mode Data Base

GTS

Data provider

NEAR-GOOS partner
Personal Use
Private Company
Academic Organization
Operational Agency
Research Inst. (Fisheries)
Research Inst. (Others)
Misc.

NEAR-GOOS: Regional Real Time Data Base
NEAR-GOOS: Regional Delayed Mode Data Base

The NEAR-GOOS Regional Real Time Database is operated by the Japan Meteorological Agency (JMA) for the exchange of oceanographical data among the participating institutions in the North-East Asian Regional GOOS (NEAR-GOOS).

NEAR-GOOS is a regional pilot project of the Global Ocean Observing System (GOOS), and it’s being implemented by China, Japan, the Republic of Korea and the Russian Federation.

Correspondence to the database operator should be addressed to: neargoos@jma.go.jp

Data provider

Free and open access to Regional data bases
11th Session of IOC/WESTPAC Coordinating Committee for the NEAR-GOOS,
Bangkok, Thailand, 18-19 January 2007  (V.Lobanov – PICES represent)

- to review the status of NEAR-GOOS and progress since last session (2006);
- to discuss the follow up activities towards the goals of NEAR-GOOS strategy
- identify the role of NEAR-GOOS in global GOOS development and effective ways of interactions with other GRAs and related regional programs and projects
NEAR-GOOS Status

NEAR-GOOS provides through its data-base system various oceanographic data that are useful for PICES community.

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<th>Country</th>
<th>Data base</th>
<th>Responsible organization</th>
<th>Address</th>
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<td>POI</td>
<td><a href="http://www.pacificinfo.ru">http://www.pacificinfo.ru</a></td>
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NEAR-GOOS Regional Real-Time Data Base

Registered uses of RRTDB - 105
FTP accesses - 3,000 to 10,000 hits/month.

Decadal dynamics (1997-2007) stable for last 2-3 years

T. Yoshida, JMA
New products

Global Sea Surface Temperature (COBE-SST)

- A new historical SST dataset became available recently (late 2006)
- Monthly mean global SST GPVs from 1891 to the latest month

T. Yoshida, JMA
NEAR-GOOS Regional Delayed Mode Data Base

- RDMDB processes 40 items at present
  - (1) 37 items from RRTDB
    - GTS, NRTDB and other organizations, JMA products
    - As new type data, "COBESST" and "COBESSTNORM" was added to RDMDB in July 2006
  - (2) 3 items from other source
    - "30s_TIDEST", "NOWPHAS" and "Tohoku Univ".

- The data volume of RDMDB was total 35GB
  - Data volume has increased 10GB or more in 12 months.
  - The following items have increased 1GB or more.
    - GLBTS(3.8GB), 30s_TIDEST(1.0GB), MGDSST(1.2GB),
    - Buoy G(1.6GB)
The total numbers which were accessed to the top page in 2006, increased about 4,000 counts against the total number in 2005.
The number of data files that were downloaded from RDMDB in 2006, decreased about one thousand against the number in 2005. The data volume that was downloaded in 2006 was about 25GB, and increased about 14GB against the data volume that was downloaded in 2005.
Volume of available data at RRTDB and RDMDB, number of parameters, data providers and users have been steadily increasing. However, some problems of easy and fast international data exchange still exist.

Further improvements and modifications in national NEAR-GOOS data bases in China, Korea and Russia were reported.

An increase of amount of data, number of data providers, sources of information and its accessibility were presented for most data holdings, however with different success.
Extensive development of the observing system involved in NEAR-GOOS was demonstrated in Korea where it consists of growing network of coastal stations, moorings, buoys and open sea platforms. Joint Korean-China activity, development of Yellow Sea Operational Oceanography System (YOOS) will essentially contribute to NEAR-GOOS. In addition to regional data sets the most of the data bases are linked with other international project, such as Argo, GTSP, JCOMM.
NEAR-GOOS Working Groups Activity

2 NEAR-GOOS WGs had started their activity in 2006:

- **WG on NEAR-GOOS Data Management:**
  revise practice of data management – more focus availability of chemical and biological data and integrated SST databases. Will prepare an inventory of existing in situ Chl-a and sediment material data

- **WG on New Generation SST:**
  implementation of satellite based technology of SST retrieval developed under the WESTPAC ORSP/NGSST project (H.Kawamura) to meet practical users requirements and develop satellite coastal SST monitoring
Further development of NEAR-GOOS

- inclusion of chemical and ecological parameters into NEAR-GOOS data bases (requests of PICES, NOWPAP and other organizations).  
  It would take some time to make necessary arrangements. However some products as graphical information, metadata, etc. useful for marine chemists and biologists in addition to physical parameters has been getting available in the web pages of NEAR-GOOS partner-organization. In some cases it is done jointly with PICES under TCODE supported projects.

- development of satellite remote sensing and promotion of satellite data (not only SST but also ocean color). To support initiative of NOWPAP to organize the Remote Sensing Training Course on Data Analysis for Oceanography in 2007.
1st NEAR-GOOS - NOWPAP Joint Training Course on Remote Sensing Data Analysis
3-7 Sept. 2007, Nagasaki Univ., Japan

- 23 trainees (post-grad. students, researchers) from 8 countries;
- lectures and hands-on practical sessions on the analysis of satellite data;
- introduced practical satellite remote sensing applications, especially related to eutrophication, red tides and oil spills.

nowpap.org
New IOC/WESTPAC web site – more on NEAR-GOOS – westpac.unescobkk.org
Conclusion (1)

1. NEAR-GOOS provides various oceanographic data that are useful for PICES community. Some problems of easy and fast international data exchange still exist. However, the volume of available data, number of parameters, data providers and users have been steadily increasing.

2. Over its more than ten years history NEAR-GOOS developed technology of oceanographic data management, exchange and services, communication with data providers and users. This experience would be useful for developing of new ocean observing systems in the eastern PICES area.
Conclusion (2)

3. On other hand, an experience of developing observing systems in the American coast of Pacific on the base of comprehensive modern instruments would help NEAR-GOOS in improving its observational network.

4. Further development of NEAR-GOOS would require to increase public awareness to involve more partners/data providers as organizations and individual scientists. It may be expected that with increasing of NEAR-GOOS consolidation and sharing resources with PICES this would be improved.
Attention!!
The 7th IOC/WESTPAC International Scientific Symposium
"Natural Hazards and Changing Marine Environment in the Western Pacific"

21-25 May 2008, Sabah, Malaysia

No registration fee,
Possible travel support,
Abstract by 21 Jan. 2008

westpac.unescobkk.org