NEAR-GOOS

25-27 Nov. 2008
GRA IV Forum
Guayaquil,Ecuador

NEAR-GOOS progress report and work plan in the near future

the Co-ordinating Committee for NEAR-GOOS

Out Line

- NEAR-GOOS description
- The Strategy, Mission and Objectives of NEAR-GOOS in its Second Phase
- Activities in the last intersessional period
- The direction and the work plan in Near Future

NEAR-GOOS

Project description

- NEAR-GOOS is a North-Eastern Asian regional ocean observing initiative being undertaken in partnership between China, Japan, the Republic of Korea and the Russian Federation.

  It was initiated in 1996 upon the formal adoption by the 29th Executive Council of IOC.

- The primary aim of the project in its first phase was to facilitate the sharing of oceanographic data in order to improve the availability of information and ocean services in the region.

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Project description (cont.)

- The Project was successfully in the fist phase with achieved by establishing NEAR-GOOS database system, included real-time and delay mode database and both Web-side were set up in each member state in the regin.

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Based on the achievement in the first phase, **NEAR-GOOS developed its Strategic Plane for the 2nd phase.**

The Vision of NEAR-GOOS

Through the coordination of ocean observations and associated research in the reginal coasts and seas, NEAR –GOOS will become recognised as a key source of integrated marine information, services and products to support sustainable social and economic development, welfare and safety in the regin.

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The mission of NEAR-GOOS in the 2nd phase is：

- To develop a comprehensive and sustained ocean observing network in the regional seas and coastal regions especially focused on observations, monitoring and other activities that can not be easily implemented by countries acting independently
- This network will embrace a wide range of data types and will be accompanied by pilot observing experiments, trials and demonstrations, training and useful products for use by the participating members and as a contribution to the GOOS and other globlal observing initiatives.

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The Objectives of NEAR-GOOS in the 2nd phase is :

In accordance with the overall mission, four major objectives will define the actions and tasks for its Second Phase:

i) Restructuring to provide a more comprehensive and flexible and expandable operational capability

ii) Enhancing and consolidating the Database Networks established in phase I

iii) Defining, planning and implementing NEAR-GOOS labelled Pilot Projects and Experiments

iv) Developing outreach programs directed towards awareness raising, stakeholder recruitment (including more national agencies and participating experts), training and capacity building.

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Activities in the last intersessional period

- The co-coordinating committee (CC) for NEAR-GOOS, the management body, met at its annual meetings in Jan. , 2006 Fusan/Korea, in January 2007, Bangkok/Thailand, and in May 2008, Sabah/Malaysia. Continually to reviewed the status of operation, working group activities cooperation with regional and international programmes and discussed future direction and work plan of NEAR-GOOS.

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NEAR-GOOS-CC-XI, January 2007, Bangkok, Thailand

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Activities in the last intersessional period

There are two working groups which are NGSST working group and data management working group have been major working bodies of NEAR-GOOS during the intersessional period.

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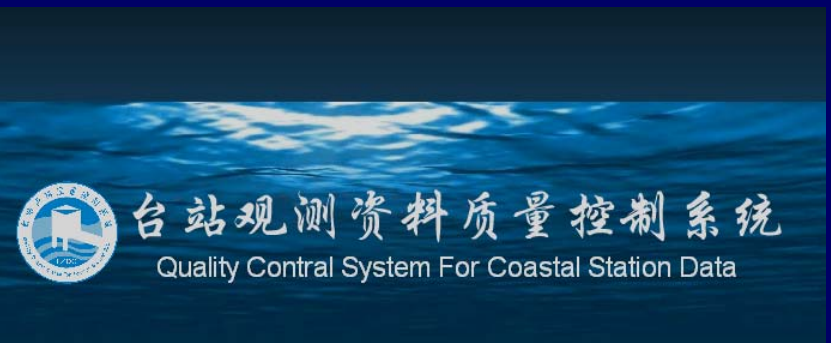
Activities in the last intersessional period

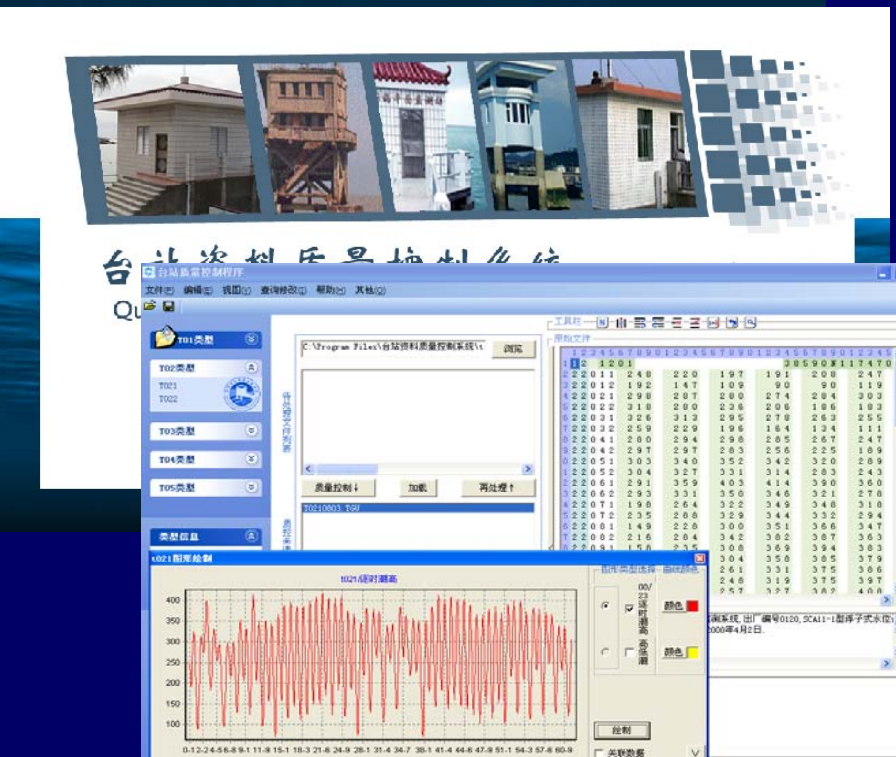
Status of operation

- The database system has been operated without serious problems. Each participating agency has worked to improve the real time or delayed mode database. It resulted in the increase of available amount and types of data and oceanographic products.
- The database network has been well operated by each members update

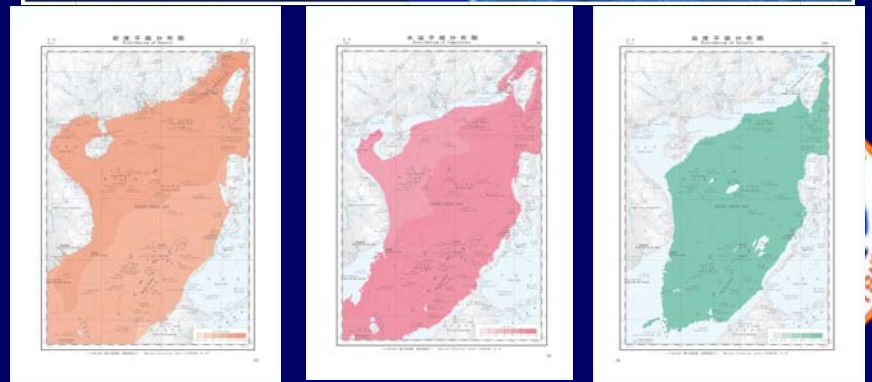
Status of China NEAR-GOOS Delayed Mode Database

Visual quality-control system





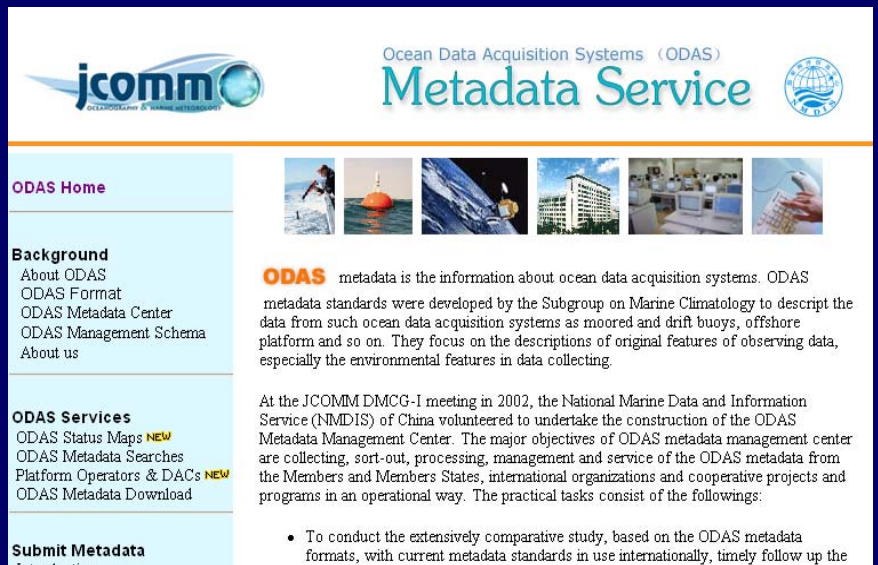
Develop data products and compilation the atlas In the south china sea



cooperation with other international programs by NMDIS

ODAS/JCOMM Metadata Management Center website was established and the Metadata Service (ODASMS) was set up and holds more than 9000 platform records.

China GTSPP Data Center website was established both in Chinese and English, Since Jan., 2007, the DM data of over 1 million stations 1.27GB and 1.13GB R-T data were downloaded, processed QC and released on the website.



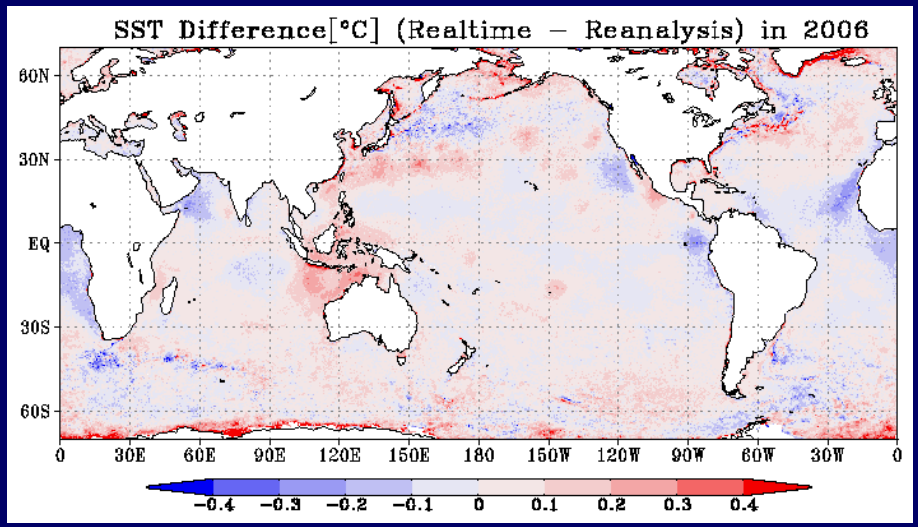
NEAR-GOOS RRTDB by JMA

The Real-Time database has been collected by JMA from difference oceanographic and marine meteorological observations

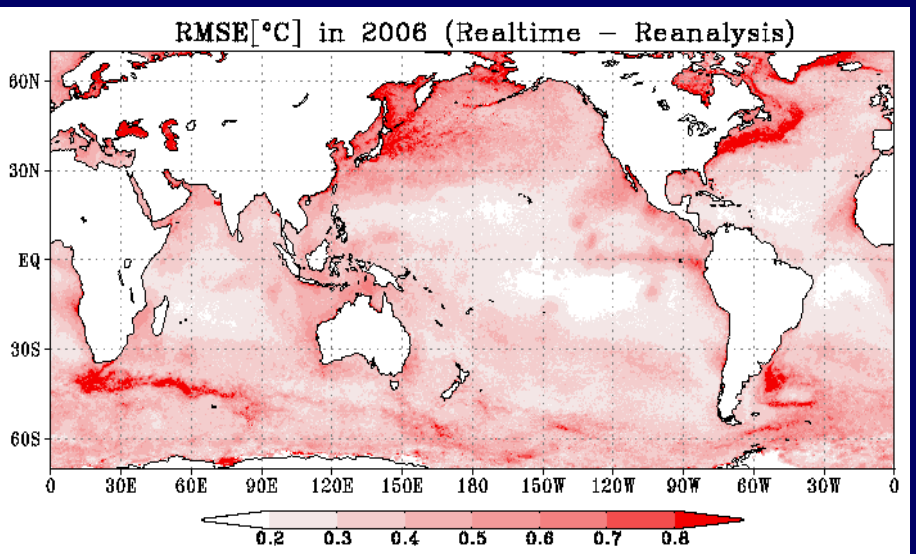
Description of data Source Type	Source	Type
-GTS Reports (oceanographic and marine meteorological observations) FM13 SHIP, FM18 BUOY, FM62 TRACKOB, FM63 BATHY, FM64 TESAC	GTS	in situ data
- Data provided by users (sea water temperature observations)	JAFIC	in situ data
- Decoded Data (temperatures and winds)	GTS	in situ data
- GTSPP (quality controlled temperature and salinity data)	MEDS	in situ data
- JMA Products 1) Merged satellite and in situ data Global Daily Sea Surface Temperatures (MGDSST), 2) Daily Sea Surface Temperatures in the seas adjacent to Japan, 3)Western North Pacific Sea Surface Temperatures, 4) Monthly Mean Sea Surface Temperatures (COBE-SST), 5) Subsurface Temperatures and Surface Currents in the seas around Japan, 6) Pacific Subsurface Temperatures, 7) Sea Surface Heights in the Pacific, 8) Sea Ice oncentration in the north-east Asian marginal seas	JMA	Analyzed GPVs and charts
- Observations by JMA Research Vessels	JMA	charts

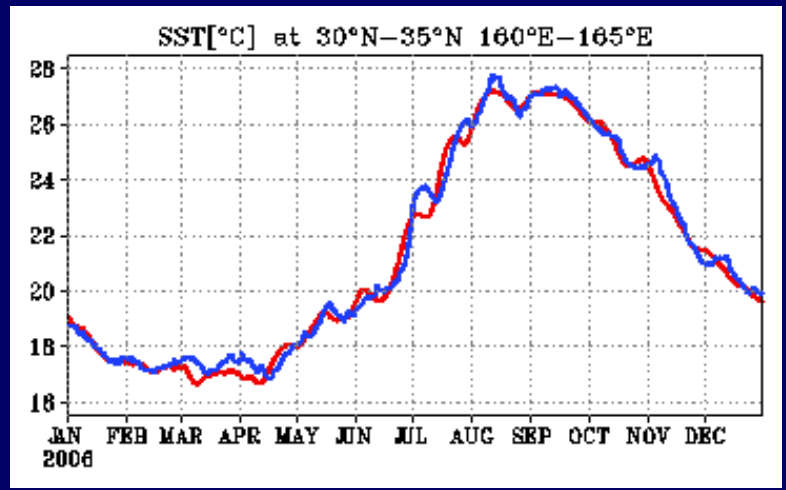
JMA Operational MGDSST R-T and delayed analysis has development

MGDSST : Merged satellite and in-situ data Global Daily SST



JMA High resolution GPVs (temperature and current) from ocean data assimilation (Japan).





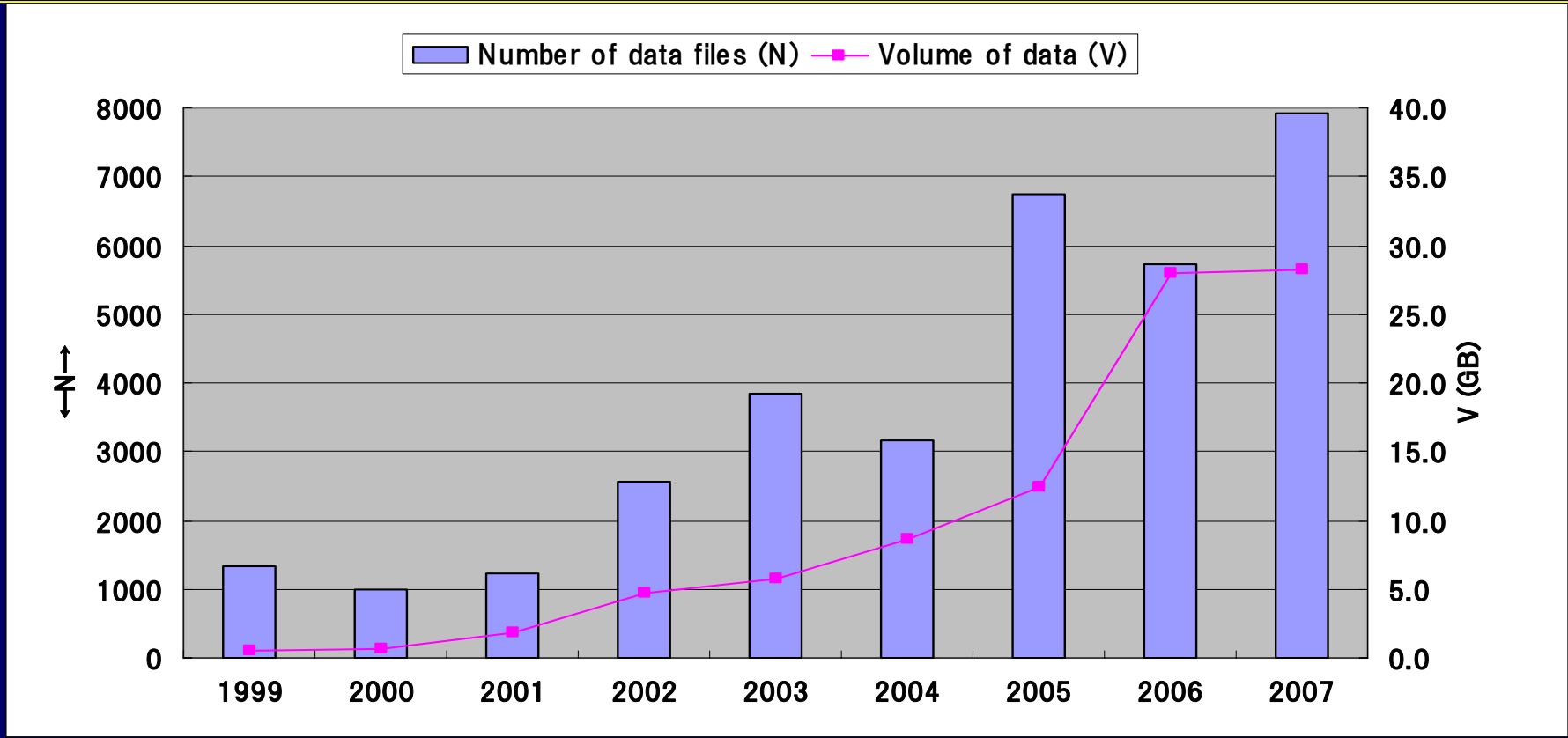
blue : real time red : reanalysis

NEAR-GOOS RDMDB by JODC

The Total of DM Database Volume 46545.3 MB was collected by JODC

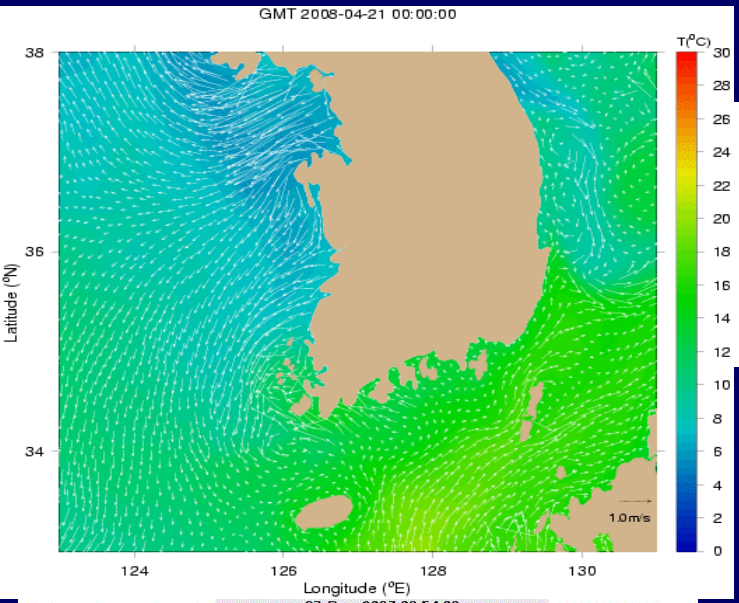
Type of Data	Description of Data	Data Volume
GTSPP	Quality controlled temperature and salinity data by MEDS, Canada	435.8 MB
MGDSST	Global daily sea surface temperature merged satellite and in situ data	4439.6 MB
PARIWAVE	Japanese nationwide coastal wave data of MLIT, Japan	141.9 MB
SEAICE	Sea ice concentration in the north east Asian marginal seas	920.8 MB
SSDH	Sea surface dynamic heights in the Pacific	243.4 MB
SSHA	Sea surface heights anomalies in the Pacific	243.4 MB
TS	Sub surface temperature and salinity decode	1086.6 MB
ADJSUBS (JMA)	Monthly Mean Subsurface Temperature in seas around Japan (100m, 200m, 400m)	20.1 MB
SUBST	Sub Surface Temperature decoded at RRTDB	1013.3 MB
SUBST_ ERROR	Sub Surface Temperature decoded Error Report	5.8 MB
PACSUBS (JMA)	Monthly Mean Subsurface Temperature in Pacific (100m, 200m, 400m)	33.5 MB
WIND	Wind decoded Data at RRTDB	158.2 MB
WIND2	Format ver2.0 of WIND	133.5 MB
WIND_ ERROR	Wind decoded Error Report	1.5 MB
FERHRI	Marine Meteorological observation data on board by FERHRI, Russia	3.9 MB
FERHRI_station	Station Marine Meteorological observation data by FERHRI, Russia	0.2 MB
JAFIC	Sea Surface/Sub surface Temperature from JAFIC, Japan	59.9 MB
PALACE	Sub surface temperature profile observed by PALACE float operated by ORI, University of Tokyo, Japan	0.1 MB
TOHKU_Uv.	XBT data observed by Tohoku University, Japan	10.1 MB
30s*	30 sec interval tide data at the JHD tidal stations, Japan	8164.6 MB

Annual change of the number of data files which was downloaded from RDMDB, and the data volume which was downloaded from RDMDB

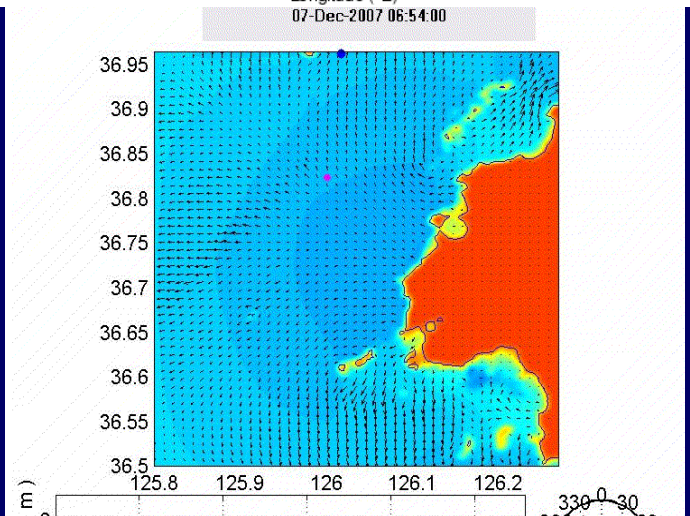


About 8,000 data files were download from RDMDB in 2007.
The data volume downloaded from RDMDB was about 28GB in 2007.

Korea Status of R-T ocean/coastal observing stations Was increased and the Example of Operational Oceanographic System has development

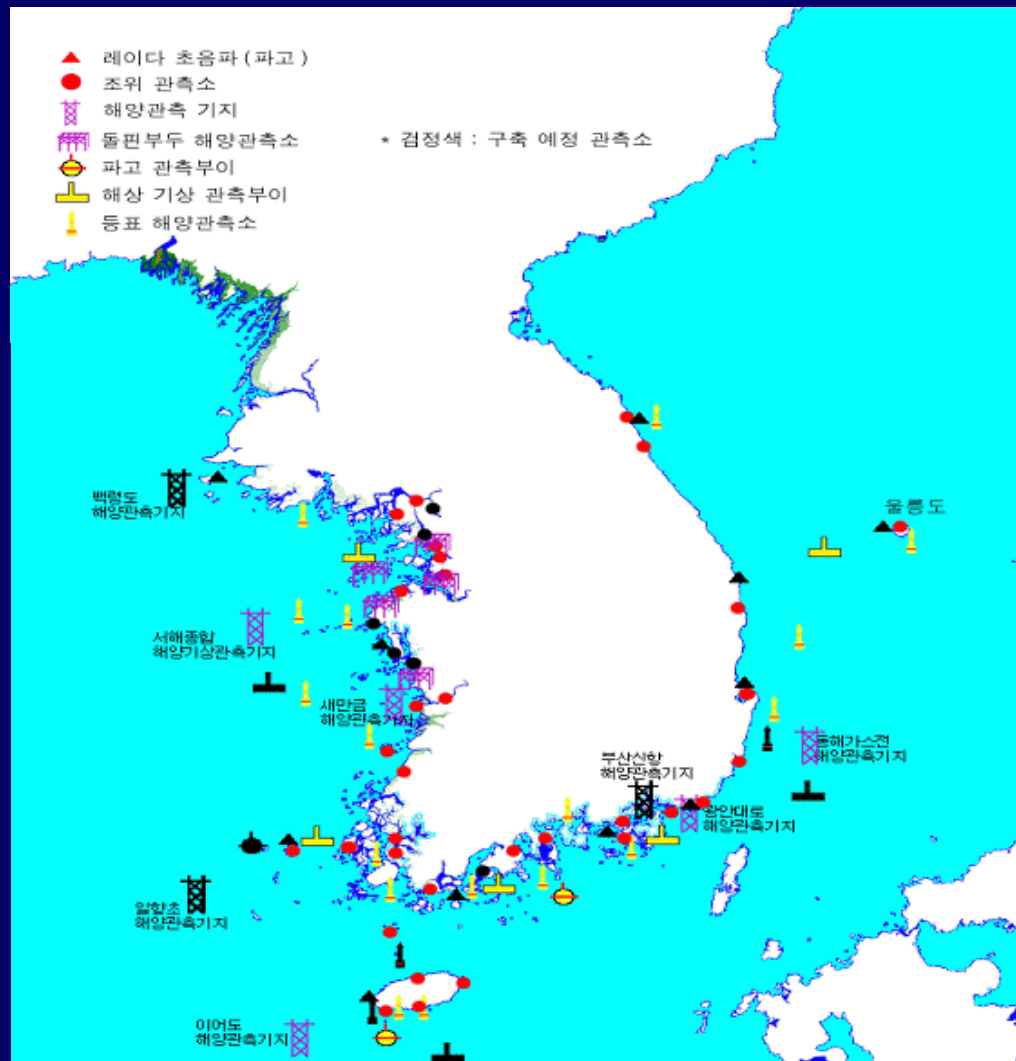


C & T



OIL SPIL

Total 79 stations

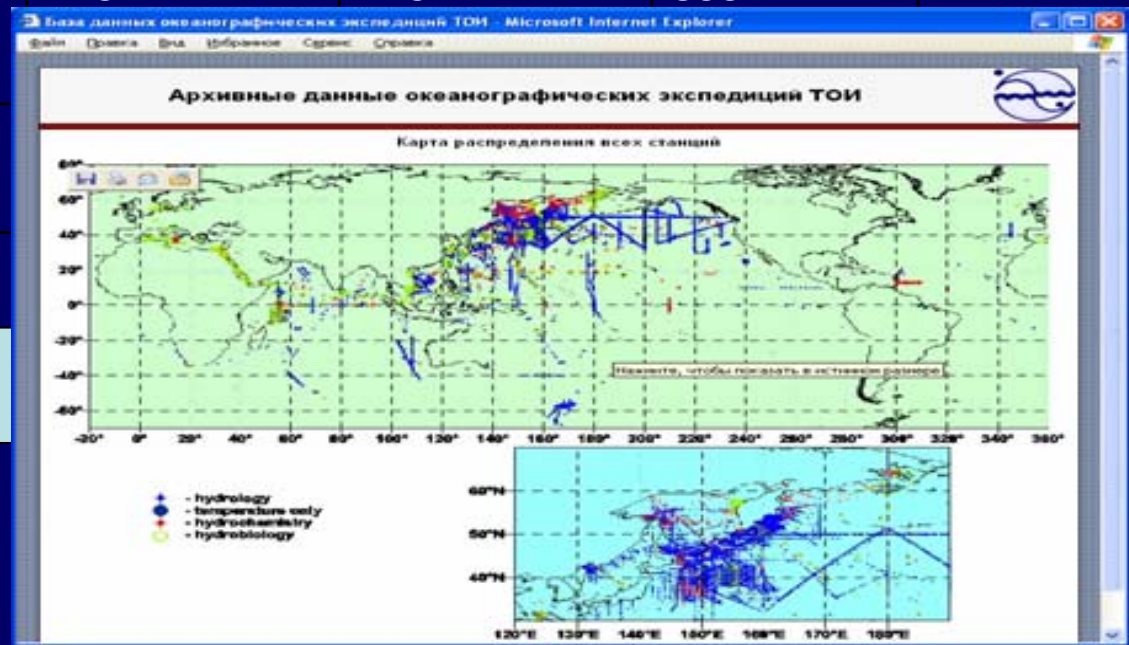


Oceanographic cruises of Russia in the NEAR-GOOS area was merged to 11480 stations with T/S for 1996-2007

Organization	Numb. of cruises	Numb. of stations with T and S	Numb. of stations with Hydrochemistry	Numb. of stations with Hydrobiology
POI	31	2006	1389	760
FERHRI	38	2020	483	-
TINRO-Centre	176	7452	745	3557
Others	~ 25			

Total: ~ 270 cruises;

11480 stations with T/S



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Working group activities

- The working group on NEAR-GOOS data management (DM) met twice in June 2006, Tokyo, Japan, and in May 2008, Sabah, Malaysia.
- It reviewed the present database network and considered the way to improve it.
- To meet the requirement of observed oceanographic elements for satellite remote-sensed data validation and develop integrated R-T SST database.
- The QC technique was discussed during the workshop and will be more development in the future
- The new chair was elected --Dr. Hee-Dong Jeong

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Working group activities (cont.)

The inventory of chlorophyll-a, biological and chemical data is being set up

- JMA's chlorophyll data holdings: more than 18,000 stations observed from 1968 to 2007
- JODC providing world wide station data including 170,000 chlorophyll profiles
- POI inventory of chlorophyll and suspended material data
- Chinese observations are available in the global archive (NMDIS)

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Working group activities(cont.)

- The working group on New Generation SST (NGSST) token its workshops on May,2008 in Saba, Malaysia and reviewed present status of satellite SST usage and refined the NGSST user requirements.
- For the whole intersessional period, NGSST demonstration operation has been conducted and continuously provides regional high resolution SST digital data.

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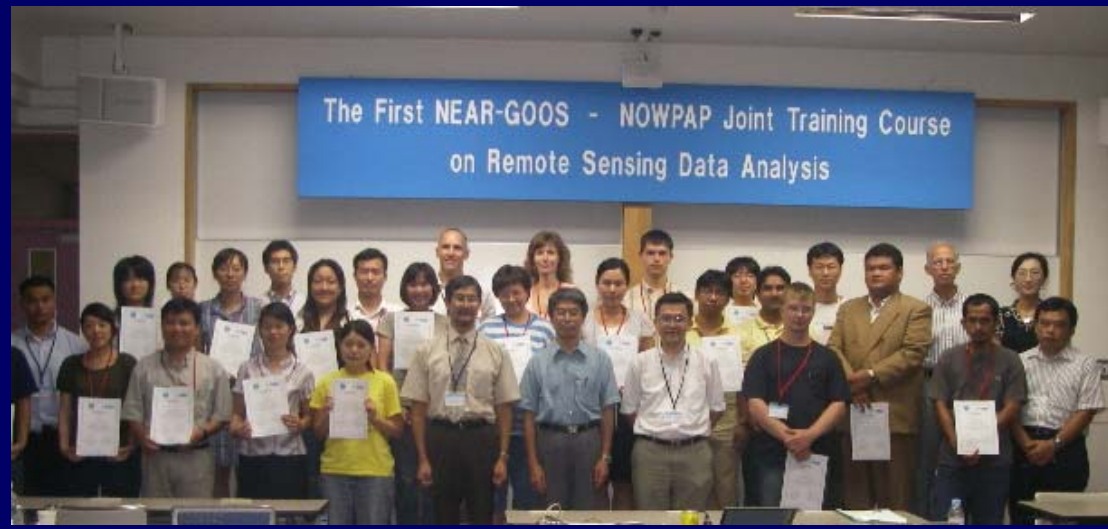
- The 8th IOC/WESTPAC training course on NEAR-GOOS data management and the 1st NEAR-GOOS-NOWPAP Joint Training Course on Remote Sensing Data Analysis were held in February 2006 and September 2007, respectively.



Twenty three participants

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The work plan in the near future

- Intensive discussion on the future direction of NEAR-GOOS and work plan was discussed at 12th session of the CC meeting in Saba, Malaysia.
- While NEAR-GOOS became a useful source of oceanographic data in the region and according to the mission in the second phase of NEAR-GOOS, it will embrace a wide range of data types and will be accompanied by pilot experiments, demonstration, training and useful products to the members and contribution to the GOOS, other regional and global programmes.
- So the CC recognized the necessity to develop the operational oceanography system, improve the NEAR-GOOS services and demonstrate the value of NEAR-GOOS are very important.

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Future direction and work plan

For the future direction, the CC also agreed to continue closely cooperate with other regional and international cooperation programmes and projects. Such NOWPAP, ODINWESTPAC/IODE, PICES, YSLME and SEAGOOS etc.

NOWPAP Northwest Pacific Action Plan

North Pacific Marine Science Organization

IODE Intergovernmental Oceanographic Commission of UNESCO
International Oceanographic Data and Information Exchange

GOOS

jcomm OCEANOGRAPHY & MARINE METEOROLOGY

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Work Plane--The CC decided to take the actions

- **Action 1**: To hold a workshop on NEAR-GOOS products during the next intercessional period. It will be discussion on the collecting and providing more data products and information to the users and to develop more products to improve the NEAR-GOOS services in the future.
- **Action 2**: With the recognition of the importance of data quality control, the working group on DM and CC will seek the possibility to hold a workshop on the data quality control technology.
- **Action 3**: The CC agreed to cooperate with NOWPAP for the 2nd training course on ocean remote sensing to be held before end of 2008.
- **Action 4**: The chairperson of the NEAR-GOOS will represent the NEAR-GOOS to attend the GRA IV forum in Guayaquil of Ecuador on 25-27 Nov. 2008 and will share the information of the forum with CC members through e-mail

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Action 5: The CC recognized the significant progress in NGSST and asked the working group to consider introducing new element such as ocean color etc. in their work and Name and TOR of the working group will be amended accordingly.

After discussing, the changing name of WG may concern on Ocean Remote Sensing Application (ORSA), and the TOR of WG could be

1. The Experts from the member states of NEAR-GOOS;
2. Function of the WG: (a) Under the framework of IOC/WESTPAC and NEARGOOS, (b) Through cooperation among the WESTPAC Ocean Remote Sensing Program and others, the WG on ORSA carry out Review the NEARGOOS concerns and identify the WG requirements: (c) Set up WG tasks through consultation with the CC members Promote efficient and cost-effective R&D;.

The further discussion will take through email to get common understand and will provide the suggestion to the next CC meeting.

Action 6: The next CC meeting will take place in Vladivostok of Russia in September 2009.

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Action required

- The WESTPAC7 had invited to make comment on the progress of NEAR-GOOS and endorsed its work plan in the next session.

Have Successful Cooperation Between US!

Thanks very much for your attention!