

Outline for the progress report on NEAR-GOOS

1. Introduction and justification

The NEAR-GOOS is a regional pilot project of GOOS from 1996 for a long-term operation, implemented by China, Japan, the Republic of Korea and Russia as one activity of IOC Sub-Commission for the Western Pacific (WESTPAC).

2. Time frame and objectives

The objectives of NEAR-GOOS are as following:

Objectives in first phase:

To facilitate the sharing of oceanographic data gathered by agencies of the partner countries using the internet, to support the daily mapping of conditions in the marginal seas bordered by the partner countries.

To develop a comprehensive and sustained ocean observing network in the North-East Asian regional seas and coastal regions, especially focused on observations, monitoring and other activities that cannot be easily implemented by countries acting independently.

Objectives in second phase:

To develop a basic integrated ocean observing and operational forecasting system in the NEAR-GOOS area adhering to the GOOS Principles and build on the data management and exchange mechanisms developed in the first phase through the inclusion of additional parameters, increased coverage in space and time, the generation of a generic suite of data products and adequate quality control and quality assurance procedures.

3. Major activities, outputs & outcomes over the last intersessional period (January 2022- December 2023)

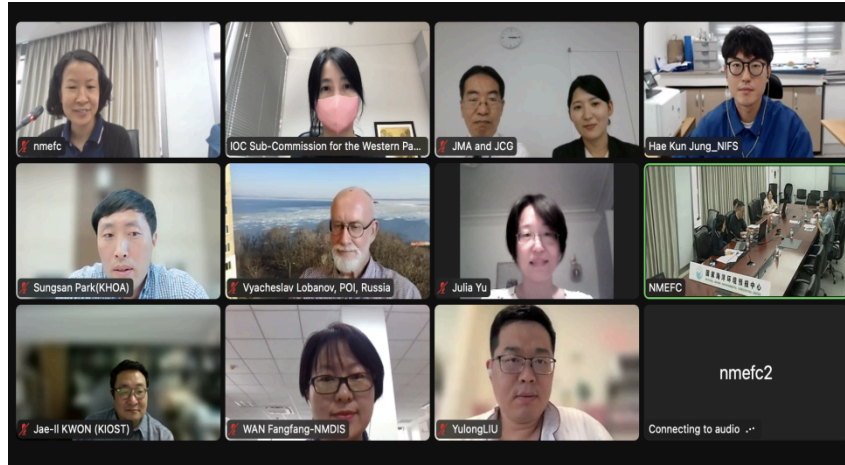
Oceanographic data from buoys, observation stations and volunteer ships and forecasting products of currents, wave, sea surface temperature, sea surface height have been provided in real-time and delayed mode through data bases from 4 Member States of NEAR-GOOS. Each member State of NEAR-GOOS has two ocean observing data sharing portals. One is National Real-Time Data Base (RTDB) , the other one is Regional Delayed Mode Data Base (DMDB) for sharing observing data with different timelines and data quality. For example, there are 59 types of data in DMDB of NEARGOOS in Japan. These data can be free and openly accessed. The total volume of data in DMDB of Japan is more than 235 GB, and has increased about 10GB since October 2021. As the RTDB of NEAR-GOOS in china published current, temperature and salinity once per day, and wave twice per day. From Jan. 1 2023 to Oct. 7 2023, the total number of products is over 12,760 , and the total data size is over 9GB.

There is synchronized observation carried by Japan and Russia though the NEAR-GOOS pilot project of climate monitoring section. The oceanographic and biogeochemical variables are observed by CTD and water sampling. The survey has been conducted 11 times from 2011. New findings like warming trend of bottom water have been found and analyzed through these observation data.

The new gateway website of NEAR-GOOS has been developed by the NMEFC (National Marine Environmental Forecasting Center) of China with support from Member States of NEAR-GOOS and the IOC-WESTPAC Office. But it is lack of fund to support its operational service. NEAR-GOOS is seeking fund support on it.

NEAR-GOOS Coordinating Committee (CC) Online Sessions was held in April 2022 and Oct. 2023. The list of NEAR-GOOS CC was updated, and new chairpersons of two NEAR-GOOS Working Groups

were selected. 8 actions and 8 recommendations was adopted to facilitate the development of NEAR-GOOS.



The NEAR-GOOS online meeting in Oct. 2023

4. A summary of key achievements since its establishment

An ocean observing network in the North-East Asian regional seas and coastal regions has been established and been in operational service for open and free observing data sharing through data bases from Member States of NEAR-GOOS.

Operational forecasting systems has been established in agencies of Member States of NEAR-GOOS, and forecasting products of currents, wave, sea surface temperature, sea surface height have been stably provided through data bases from Member States of NEAR-GOOS.

5. Priorities in short term and in long term

In short term, we are coordinating fund to put the near-goos gateway website in operational service as soon as possible. We elected some new chairpersons of NEAR-GOOS working groups and pilot project to revitalize their activities. We also plan to terminate the Pilot Project of Ferry Based Monitoring that its objective can not be completed in the future.

In long term, we plan to standardize observation data processing and sharing procedure for an integrated and sustained ocean observing data sharing system. we will also keep improving quality and timeliness of ocean forecasting products for a unified and timely ocean forecasting service.

6. Support from GOOS structures

We hope to strengthen partnerships with GOOS structures to increase visibility of NEAR-GOOS and attract more users or stakeholders. we also expect to acquire success story and best knowledge from other GRAs and the GRA Forum to develop the NEAR-GOOS observing network and data sharing service. Lack of fund a key question to support operational service of the NEAR-GOOS gateway website. It would be highly appreciated to get fund support from GOOS structures on it.