

# **COUNTRY REPORT**

## **NATIONAL OCEANOGRAPHIC DATA CENTER OF THE PHILIPPINES**

By:

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### **INTRODUCTION**

The Philippine National Oceanographic Data Center (NODC) is a unit of the Oceanography Division (OS) of the Coast and Geodetic Survey Department (CGSD) of the National Mapping and Resource Information Authority (NAMRIA) tasked to collect, archive, store, process and disseminate various oceanographic information to local and international data users.

As part of its international activities, the Philippines participated in the first GODAR\_WESTPAC International Workshop held in Tokyo, Japan in 2002. The Philippine NODC has been collecting and storing oceanographic data from our survey vessels and other agencies particularly CTD, XBT and ADCP data. Tidal data shares a large part of our NODC oceanographic data collection and digitization has been ongoing to safeguard and store the data into modern media.

In addition to the collection and archiving of oceanographic data, we have sent personnel to train in data management in particular at the IOC-WESTPAC Oceanographic Data Management Training held in JODC. Plans and programs are being implemented for the improvement of oceanographic data collection and management by acquiring modern equipment and developing technical skills through international trainings and seminars.

### **OCEANOGRAPHIC SURVEYS**

NAMRIA's mandate in relation to oceanographic surveying activity dwells specifically on physical oceanography. Data collected are in oceanographic parameters such as tides, currents, temperature, salinity and depth among others. However, data collection is not limited to the physical characteristics but can explore other marine related data in the course of combined hydrographic and oceanographic surveying activities. In the area of tidal observation, the office has a considerable amount of data acquired.

Continuous tidal observations in the Philippines monitored in the primary tide stations are mostly concentrated in strategic coastal areas and distributed in different ports of economic and industrial convergence.

The Philippines being an archipelago, densification of its tide gauge network is very important to support development and studies relating to our coastal environment. The Philippines is confronted with problems and issues distinct from a land lock state. Linking the many islands and islets thru efficient transport system entails huge resources that developing countries can hardly afford.

### **OCEANOGRAPHIC DATA COLLECTION, INFORMATION AND DISSEMINATION:**

The Philippine NODC since 1988 tried collecting oceanographic/marine data from other agencies involved in data collection. Due to limited resources (funds, computers, technical personnel etc.) it fell short to effectively implement this objective. Other constraints were the lack of digitized data format of their own observations. Due to this limitation, the mandatory requirement of all government and private agencies, educational institutions involved in marine science to submit oceanographic data was in a state of temporary inactivity until the NODC is capable of taking full responsibility in this undertaking. While marine/oceanographic data from other agencies are available, most of them have not been deposited in the IODE system.

The data in the archives of the Philippine NODC has been mostly in the area of Physical Oceanography. The NODC can provide service to users by referrals to other marine/oceanography related organizations. Requests for marine information should identify completely specific data needed in the application submitted. The NODC products and services are provided for free (mutual exchange basis) or on a cost recovery basis in accordance with guidelines and policies established by the NAMRIA.

### **DATA HOLDINGS OF NODC:**

Primarily, data holdings in the NODC are only those carried out by NAMRIA in the conduct of its regular activities and collaborative undertakings with other agencies:

1. From result of observations of cooperative projects on oceanographic surveying activities observed by Filipino scientists and researchers.
2. Data acquired through direct bilateral exchange with other countries and through the IODE system.
3. Data observed by NAMRIA in the performance of its function as a hydrographic and oceanographic agency of the Philippine government.

Other Philippine agencies with archived/observed marine information:

<b>Agency</b>	<b>Nature of Data</b>
National Mapping and Resource Information Authority (NAMRIA)	Physical Oceanography, Geology, Geophysics and meteorology, Satellite Information
Bureau of Fisheries and Aquatic Resources (BFAR)	Biology, Fisheries and Chemical Oceanography
Mines and Geo-Sciences Bureau	Geology and Geophysics
Marine Science Institute (MSI) University of the Philippines	Biology, Fisheries, Chemical and Physical Oceanography
Philippine Council for Aquatic and Marine Research and Development (PCAMRD)	Biology, Fisheries and Chemical Oceanography
Philippine Coast Guard (PCG)	Contamination/Pollution
Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)	Meteorology, Geology, Geophysics and Physical Oceanography
Institute of Marine Fisheries and Oceanography, College of Fisheries (UP-CF), University of the Philippines in the Visayas	Chemical Oceanography, Biology and Fisheries
Tawi-Tawi College of Technology and Oceanography (TCTO)	Chemical Oceanography, Biology and Fisheries
National Museum (MN)	Marine Archeological Properties/Resources
Mindanao State University	Chemical and biological Oceanography

#### **NODC ACTIVITY OF NAMRIA/OTHER AGENCIES:**

With the arrival of two survey vessels in the year 1999, data collection in Hydrography and Oceanography was increased. Various oceanographic instruments onboard the two survey vessels further increased data holdings. With oceanographic instruments onboard, the office has built capability to acquire these many oceanographic data in consonance to its hydrographic surveying activities. Data gathering commenced in the year 1999, collection and processing of data has been performed by officers aboard the survey vessels and submitted to the main office for archiving and storage.

**CONCLUSION:**

The Philippine NODC of the Coast and Geodetic Survey Department has much to accomplish in the years ahead. The various national agencies within the National Committee for Marine Sciences are the key contributors to determine the effectiveness of the NODC. Support from within the national level is much needed to greatly reinforce the existing data management and oceanographic observations of the country. International seminars and workshops that aim to develop and improve our NODC are openly welcome in considering the importance of such in the dissemination of information. Trainings and scholarship grants to a developing country like the Philippines is needed to fully harness the efficiency of personnel involved in oceanographic surveying activities. Lastly it is our privilege to be invited in gatherings like this, because it promotes more understanding of our ocean resource not only regionally but also globally.