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DEPARTMENT OF
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PUBLICATION

NODC

The National Oceanographic Data Center

U.S.
DEPARTMENT
OF
COMMERCE

National
Oceanic and
Atmospheric
Administration

Environmental
Data Service

The environment is described a second, a minute, a day, a year, an epoch at a time, point by point; the portrait is always a composite one of individual observations—data.

NOAA, the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce, and its Environmental Data Service have the task of moving the Nation's mountain of descriptive information, analyzing it, storing it, and distilling from it the important historical lessons taught by the physical world.

The National Oceanographic Data Center (NODC) is one of the Environmental Data Service's five major facilities;* it contains

* Others are the National Climatic Center, Asheville, N.C.; the National Geophysical and Solar-Terrestrial Data Center, Boulder, Colo.; the Environmental Science Information Center, Washington, D.C.; and the Center for Experiment Design and Data Analysis, Washington, D.C.

the world's largest usable collection of oceanographic data. Established in 1960 to acquire and disseminate oceanographic data, the Center was administered by the Navy until its transfer to NOAA in October 1970. It is a national service facility for the United States; it also administers World Data Center A, Oceanography.

NODC serves the oceanographic data needs of researchers in government, private institutions, and industry, of marine scientists and engineers, and of all who take their talents to the sea.

The National Oceanographic Data Center receives information for all oceans, seas, and estuaries from hundreds of sources, domestic and foreign, including the national data centers of other countries. Under the World Data Center system, World Data Center A re-

ceives material from international cooperative expeditions (for example, the Cooperative Investigations of the Caribbean & Adjacent Regions), Declared National Programs of nations represented in UNESCO'S Intergovernmental Oceanographic Commission, and other programs.

Data and publications are also obtained by exchange between the Center and individuals and organizations in 45 countries and such groups as the ICES, the International Council for the Exploration of the Sea, as gifts from scientists and organizations wishing to share their data, and through the purchase of valuable marine data collections.

Incoming data are handled by the Operations Division, which accessions, processes, and performs quality control. A records control center provides inventories of all data entering the Center and

notes their processing status and location. Data leave the Center through the Services Division, which provides copies, summaries, and analysis and information services on request. Archives include automated, miniaturized, and hard-copy forms. The Development Division carries forward the Center's work on innovative data processing, archiving, and retrieval systems. An IBM 360 series computer provides high-speed processing, direct-access retrieval, and cathode-ray tube displays of the holdings.

The Center collects the National Marine Data Inventory (NAMDI), which contains information on quantities and types of data, area of operations, and responsible personnel. Input is received from major United States activities contributing to the national effort in the marine sciences. The inventory, initiated in 1967, is queried through a computer system.

Oceanographic Data Available From NODC

- Mechanical and expendable bathythermograph data in analog and digital form.
- Oceanographic station data for surface and serial depths, giving values of temperature, salinity, oxygen, inorganic phosphate, total phosphorus, nitrite-nitrogen, nitrate-nitrogen, silicate-silicon, and pH.
- Continuously recorded salinity-temperature-depth data in digital form.
- Surface current information obtained by using drift bottles or calculated from ship set and drift.
- Biological data, giving values of plankton standing crop, chlorophyll concentrations, and rates of primary productivity; also bibliographic references to papers on marine biology.
- Geological sampling inventory, primarily for the New England Continental Shelf.
- Bottom sample information.

NODC Services

- Data processing.
- Data reproduction, including computer printouts, punched cards, magnetic tapes, and other forms.

- Analysis and preparations of statistical summaries based on archive holdings.
- Evaluation of various data records for specific requirements.
- Referral to organizations holding requested information.
- Provision of general marine sciences information.
- Supply of publications, including data processing manuals, catalogs of holdings, data reports, and atlases.

Requests for Services

Requests should define data required, geographic limits involved, and such other pertinent information as a description of the problem for which the data are required. They should also specify format—magnetic tape, punched cards, microfilm, or hard copy (computer print-outs, publications, analog charts).

Cost varies with amount of material, special analysis, computer time, and other factors. Requests for small amounts of information are completed free of charge; otherwise, a cost estimate is presented to the requester before work begins, and the request is handled upon receipt of funds.

The *User's Guide for NODC's Data Processing Systems*, available from NODC on request, provides detailed information concerning data holdings.

Visitors are welcome at the National Oceanographic Data Center; however, it is desirable to have advance notice if visitors wish to interview staff members. Special working space and technical assistance are provided on request. Call (202) 426-9052, or write:

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