Providing scientific stewardship of marine data and information

NOAA’s Ocean Data Archive

Have you ever performed a Google search on “ocean data” or “ocean temperatures”? NODC comes up first! Hundreds of thousands of people use NOAA’s ocean data for research, coastal planning, business actions, commerce and transportation, or beach travel plans.

NODC Provides…

- The World’s largest collection of freely available oceanographic data
- Water temperatures dating back to the late 1700’s and measuring thousands of meters deep
- A “State of the Ocean Climate” from NODC’s Ocean Climate Lab and Satellite Team’s scientific analyses
- Scientific journals, rare books, historical photo collections and maps through the NOAA Central Library, a division of NODC
- Data management expertise including metadata training through NODC’s National Coastal Data Development Center

Experience Matters

For over fifty years, NODC has served the Nation with unmatched expertise in the scientific stewardship of marine data and information. NODC’s unique blend of oceanographers, computer scientists, data managers, and librarians, know that good decisions are based on good data. Acquiring and archiving ocean data from all over the world and from a variety of sources, NODC provides the services and products that decision makers and researchers need. Supported by NODC’s advanced technologies are people who understand that oceanographic research, satellite and observational data collected for the public’s benefit, must be archived, protected, and made available to everyone. After all, today’s data are the foundation for tomorrow’s decisions.
NODC Supports and Partners with OAR

NODC has made 1,100 archival data sets, submitted by OAR programs and labs, accessible to the public.

Office of Ocean Exploration and Research (OER)

NODC Provides onboard and onshore end-to-end data management support for the NOAA Ship Okeanos Explorer • Pioneered the Video Data Management System and the use of bibliometrics to analyze OER peer-reviewed publications • Partnered with the Northern Gulf Institute to establish an OER Exploration Command Centers at MS • Created and manages the OER tools that provides public access to a broad range of scientific data and information resulting from exploration • Serve as the IPT Lead

Climate Program Office (CPO)

NODC Provides archival services for oceanographic data streams including Argo and the tropical moored buoy arrays • Integrates data into NODC’s Global Temperature and Salinity Profile Program (GTSPP) and the World Ocean Database global ocean profile database • Derives ocean and salt content for the global ocean

Ocean Acidification Program (OAP)

NODC serves as the NOAA OA data management focal point by providing online data discovery, access to NODC-hosted and distributed data sources, and long-term archival for a diverse range of OA data

Pacific Marine Environmental Lab (PMEL)
Atlantic Oceanographic and Meteorological Lab (AOML)

NODC archives physical, chemical and meteorological buoy data from the PIRATA and RAMA arrays • Ingests real-time XBT data from AOML’s Shipboard Environmental Acquisition System (SEAS) Program • Automates the archiving of quality-controlled ThermoSalinoGraph (TSG) data • XBT bias correction • Comparison of Ocean Heat Content products

NOAA Research

Climate Goal • Deepwater Horizon • International Activities (GOOS, IODE, JCOMM, ICES, CEOS) • Sea Surface Temperature Climate Data Record • Satellite Altimetry: Jason -2/3 and Jason-CS • Pioneering efforts in bibliometrics • Climate Goal Sustainable Marine Ecosystem needs assessment

Contact nodc.services@noaa.gov for more information.