



NOAA SATELLITES AND INFORMATION SERVICE

GEOPHYSICAL DATA CENTER ARCHIVE, ACCESS, AND ASSESSMENT

The National Requirement: The Nation requires access to quality assured geophysical and space environment data that will improve our understanding of the Earth and the impact of solar-terrestrial processes on US lives and property, and the Nation's environmental, national, homeland, and economic security.

NOAA's Response: NOAA Satellites and Information Service operates the National Geophysical Data Center (NGDC), one of three NOAA National Data Centers. NGDC is the steward of the Nation's geophysical data maintaining the world's largest collection of seafloor and space environment data, geophysical observations such as geomagnetism. It is also the sole archive of data from the Defense Meteorological Satellite Program (DMSP). NGDC builds and maintains long-term archives of scientific data, with a special emphasis on scientific stewardship of data acquired by NOAA observing systems. NGDC is a critical part of the Nation's scientific infrastructure and at the same time provides public domain data to a commercial, military and public users. NGDC works closely with contributors of scientific data to prepare documented, reliable data sets, currently numbering more than 300 digital and analog databases. NGDC's archive is currently 115 Tera Bytes and will grow to 2,000 Tera Bytes by the year 2011. Select products developed from NGDC data archives include: Aurora, Bathymetry/Topography, Coastal Relief Model, Continental US, Cosmic Rays, Geodetic (GEOSAT), Geomagnetism, Gravity Data, Ionosphere, Marine Geology, Marine Seismic Reflection Data, NOS Hydrographic Survey Data, Ocean Drilling, Solar Data, Tsunamis, and Volcanology.

NGDC continually develops advanced data management techniques that reflect the changing world of geophysics. Using the latest computing and Internet technology, NGDC will continue to develop new systems to provide easy access to digital data and products and develop an innovative decision support system improving our ability to predict the impact of environmental factors on the economic health of the Nation. Innovative technology will transform the world's largest collection of seafloor data into an integrated marine database and will also be used to develop the first global database describing the long-term climate of the space environment.

Partners and Customers: NGDC is the data archive of select NOAA Oceans and Coasts programs. NGDC works closely with Federal and state governments, industry, academia, and foreign contributors to build the data resources required to monitor, understand, and predict the environment. NGDC data and products support industry, education and public requirements for environmental information. NGDC currently services 2.6 million requests per year; this is expected to grow to 4.2 million by the year 2011.

Financing: The FY2005 Budget requests **\$32.021 million** for Archive Access, and Assessment and includes funds to support NGDC activities.

For additional information: www.ngdc.noaa.gov/ and www.nesdis.noaa.gov