

2005 NOAA Data and Information Users' Workshop Poster Descriptions

Title: NOAA National Data Center Contributions to the NOAA Mission Goals: Climate, Weather & Water, Commerce & Transportation, Ecosystems, and Supporting NOAA's Mission

Authors and Affiliation: Peter Steurer, NOAA National Climatic Data Center

Description: NOAA has adopted a structure of four Mission Goals and a Mission Support Goal around which all work is planned and organized. Although the NOAA National Data Centers contribute to all five of the NOAA Mission Goals, the NCDC, NGDC, and NODC primary focus is under the Climate, Commerce and Transportation, and Ecosystem goals, respectively. Structuring NOAA's work around these Mission Goals allows for cross-organizational plans, initiatives, and performance measures which results in more efficient program operations and provides for improved customer service and more effective use of taxpayer funds.

Title: Advancing Interoperable Access to NOAA's Data and Products

Authors/Affiliation: Glenn K. Rutledge, NOAA National Climatic Data Center and Richard G. Reynolds, CLASS Program Manager

Description: Scientific Data Stewardship (SDS) and access to NOAA's products and services are being actively advanced through community-based partnerships. Initiated in 2000 by NCEP, GFDL and NCDC, the NOAA Operational Model Archive and Distribution System (NOMADS) is a distributed data services pilot providing interoperable access to Climate and Weather models and associated data. Under NOAA's Archive and Access programs, NOMADS and the Comprehensive Large Array-data Stewardship System (CLASS) are partnering to develop an interoperable methodology for distributed and interoperable access to even higher volume data sets provided by CLASS (e.g., Polar and Geostationary Satellite data). This new partnership will focus on the goals and objectives outlined in the U.S. Group on Earth Observations (US-GEO) Integrated Earth Observation System (IEOS) Data Management Framework to integrate into the developing "System of Systems" under US-GEO to study multiple earth systems under a sustainable system architecture.

Title: NEXRAD Data, Products, and Services at the National Climatic Data Center

Authors/Affiliation: Steve Del Greco, Dongsoo Kim, Steve Ansari, and Brian Nelson, NOAA National Climatic Data Center

Description: Use of NEXRAD data for in-situ quality control studies, radar-rainfall visualization, and multisensor precipitation estimation.

Title: Remote Sensing Applications Division

Authors/Affiliation: John Bates, NOAA National Climatic Data Center

Description: The Remote Sensing and Applications Division has been tasked by NOAA to provide a framework to ensure that satellite climate data are processed, archived, and distributed to users in a manner that is scientifically defensible for monitoring, understanding, predicting, modeling, and accessing climate variation and change. A new program element to specifically address the need for asserting national leadership for satellite based Climate Record generation is called Scientific Data Stewardship.

Title: Climate Monitoring Activities

Authors/Affiliation: Jay Lawrimore, NOAA National Climatic Data Center

Description: The National Climatic Data Center's (NCDC) Climate Monitoring Branch (CMB) monitors the U.S. and global climate on an ongoing basis to provide historical perspective on current and evolving climate conditions. Analyses are made available as monthly, seasonal, and annual State of the Climate reports. Through these web-based reports, as well as the U.S. and North American Drought Monitor programs, the CMB also provides operational assessments of drought conditions throughout North America. Since weather and climate impact economies and societies, the National Climate Impact Indicators program was created to better monitor the effects of climate on various economic and societal sectors of the nation such as aviation and energy. Other programs include the study of trends and variability in extreme events such as tornadoes and tropical storms, and snow monitoring that is an integral part of federal assessments of the impact of winter storms on the nation's populace.

Title: Integration of Surface Observation Systems

Authors/Affiliation: Tom Karl, Mike Cambell, and David Green, Goal Team leads for Climate, Commerce & Transportation, Weather and Water

Description: The Integration of Surface Observations involves the blending of aspects from a multitude of NOAA's observing platforms in the domains of space, the atmosphere, on land, and oceans to meet goals in Climate, Commerce Transportation, and Weather and Water.

Title: Integrated Inventory System Development (IISD)

Authors and Affiliation: Dave Urbanski, Information Manufacturing Corp (IMC) and Tom Ross, NOAA National Climatic Data Center, CDMP

Description: Poster describes the current NCDC process of trying to locate available data from NCDC holdings using incomplete, unlinked inventories. The goal of the IISD program is to develop the capability to identify data available from all NCDC holdings from a single, on-line, integrated inventory system. It further requests inputs from NCDC customers to help establish a comprehensive set of requirements from which IISD can be designed.

Title: Environmental Data Diversity: From the Core of the Earth to the Surface of the Sun

Authors and Affiliation: George F. Sharman, NOAA National Geophysical Data Center

Description: A graphic presentation of the incredible diversity of data managed by the NGDC, highlighting such data as the World Magnetic Model, the Nighttime Lights, and the Coastal Relief Model, all widely used and available from NGDC.

Title: The NOAA Observing System Database and Website

Authors and Affiliation: Ted Habermann, NOAA National Geophysical Data Center and Kelly Stroker, University of Colorado

Description: NOAA owns and operates many research and operational observing systems. During 2003 information about over 80 observing systems from all NOAA Line Offices was collected into a geospatial database with the assistance of the observing system managers. This database forms the basis for the NOAA Observing System Architecture website (<http://nosa.noaa.gov>). The website presents the data in several different ways. 1) A page for each observing system includes brief descriptions and pictures, supports queries based on station attributes and provides a link to the observing system homepages where users can read more about the observing systems they are interested in. 2) An interactive map allows users to display multiple observing systems as layers and provides access to information about (and data from) specific stations. 3) A “Find Your Place” section enables users to locate observing systems using states, congressional districts, or other regions. 4) A “Web Image Slide Tray” provides quick access to simple maps that make it easy to compare coverage of different observing systems in a given state or region. In addition to the website, the geospatial database supports network access to the observing system data for desktop GIS tools and Open GIS Consortium compliant clients.

Title: U.S. National Oceanographic Data Center Projects

Authors and Affiliation: Donald W. Collins, Daphne Johnson and Kurt J. Schnebele, NOAA National Oceanographic Data Center

Description: The National Oceanographic Data Center actively maintains and participates in a diverse array of data management projects for oceanographic data. This poster highlights ten NODC projects, including: the NODC Archive Management System, the Global Temperature/Salinity Profile Project (GTSP), Global Argo Data Repository, Salinity/Oxygen Anomalies Online and Heat Content 2004 Online, NOAALINC - the Online NOAA library catalog and the Video Data Management System, Coral Reef Information System (CoRIS), Metadata Enterprise Resource Management Aid (MERMAid), and Pathfinder AVHRR data at NODC. The poster briefly summarizes each project and provides a URL to project web pages.

Title: An Assessment of the Coastal Risk Atlas Methodology vs. Actual Events of Hurricane Charley

Authors and Affiliation: Kelly Boyd, Planning Systems, Inc., NOAA National Coastal Data Development Center

Description: The Coastal Risk Atlas (CRA) is an online hurricane preparedness resource that provides access to the data, ArcGIS tools, online mapping, and links to the coastal resources necessary to assess community vulnerability to coastal storms. Vulnerability assessment involves identifying the area most susceptible to hazards associated with hurricanes and tropical storms.