NOAA IOOS OFFICE

• Focused on delivering 7 variables in near real-time to address HABs, IEAs, Inundation, hurricane intensity.
• DIF Regional Implementation
• DIF Evolution and Enhancement
• Development of best approach to DMAC
• High-frequency Radar National Network
• Support of IWGOC and IOOS DMAC process
IOOS DMAC

Working on adoption of standards and best practices

• Ocean.US (disbanded) ---> IWGOO now provides oversight
• Last Meeting November 2008
• Next Meeting May 2009
• Recommended:
  • OPeNDAP
  • netCDF+CF+OPeNDAP+aggregation
  • Metadata to Catalog Services (submit to GCMD etc.)
• Submitted
  • IOOS Vocabulary, SOS, WMS, WCS, BioGeographical
  • (potential submissions) Water Quality, Watershed boundaries, National Hydrography Data Set (NHD), Abstract data content model (from the DIF group)
IOOS DMAC - cont.

http://ioosdmac.fedworx.org

• Tabled in May 2008 but will be reconsidered after additional information received.
  • Real-Time QC for waves
  • HF Radar Surface Currents
  • QC for RDI ADCPs
• Working on Service Oriented Architecture system for Ocean Data.
• Working on test bed (OIE-II)
• Working on SOS install kits and docs
  • java, perl, python, ASP

http://www.oostethys.org/
NOAA IOOS Data Integration Framework

The NOAA IOOS program initiated development of a Data Integration Framework (DIF) to improve management and delivery of an initial subset of ocean observations. The DIF will establish the technical infrastructure, standards, and protocols needed to improve delivery of at least six of 20 IOOS core oceanographic variables defined in the U.S. IOOS Development Plan, as well as winds. Read More

Data Access

The following services are the first to be established by the NOAA IOOS program and its partners to provide access to data. These services are now undergoing beta-test and should still be considered experimental. The services will be modified and enhanced during the course of the DIF project.

- **NDBC Sensor Observation Service (SOS)** This server provides in-situ temperature, salinity, currents, water level, waves and winds data from National Data Buoy Center (NDBC) moorings, IOOS Regional Coastal Ocean Observing Systems, Deep-ocean Assessment and Reporting of Tsunamis (DART) buoys, and Tropical Atmosphere Ocean (TAO) buoys. The server is operated by the NOAA National Weather Service (NWS) NDBC. SOS is an Open Geospatial Consortium (OGC) standard.

- **CO-OPS SOS** This server provides in-situ temperature, conductivity, currents, water level, and waves data from the National Water Level Observing Network (NWON) and the Physical Oceanographic Real-Time System (PORTS). The server is operated by the NOAA National Ocean Service (NOS) Center for Operational Oceanographic Products and Services (CO-OPS).

- **NDBC THREDDS Data Server (TDS)** This server provides gridded surface currents derived from high-frequency radar (HFR) installations along the coasts. The server supports Web Coverage Service (WCS) and Open-source Project for a Network Data Access Protocol (OpenDAP) and is operated by NDBC. WSC is an OGC standard.

- **SECCORA SOS** This server provides a variety of in-situ parameters from a collection of data providers. Server is operated by SECCORA (Southeast Coastal Ocean Observing Regional Association). Software documentation on creating this service from the supporting database is at http://code.google.com/p/xenia/wiki/XeniaSOS

- **CoastWatch TDS (coming soon!)** This server will provide access to chlorophyll concentrations derived from satellite ocean color observations. (Expected November 2008). This server is operated by NOAA National Environmental Satellite, Data, and Information Service (NESDIS) CoastWatch program.

http://ioos.noaa.gov/dif/
HEADS UP - REQUEST YOUR SUPPORT: Oceans 2009 – Biloxi, MS (October 26-29, 2009): We began coordination with Dick Crout, heading the Technical Program about having a IOOS track during this meeting. We will be working with Dick and Bill Burnett on the details but I would like to ask as many of the Regions who are able to consider providing a paper on the IOOS products, services you are providing within your region. Details to follow soon.