

Bi-Weekly Z-GRAM - 26 June 2009

www.IOOS.gov

Note new website name - we just launched the US IOOS website - check it out

The Z-Gram is an informal way of keeping you up-to-date on IOOS® activities. Please advise of additional addressees, or if you are receiving and no longer want to receive. If you think others could benefit from the Z-Gram please pass it on. To see previous Z-Grams go the IOOS website and view under 'program updates.'

IOOS® - Our Eyes On Our Oceans, Coasts, and Great Lakes.

Programmatics:

- Congressional Report: No change.
- FY09: All cooperative agreements are being processed and most of them have been obligated, so funds should be beginning to be available to you.
- FY10: Funding levels from the Senate Committee include \$6,555,000 is for program administration and \$27,500,000 for Regional IOOS. From here the House and Senate will conference and ultimately we will end up with FY10 Budget. No dates set for the conference.
- FY11: **No change**
- FY12-16: **No change.**

Initial Operating Capability - Data Management and Communications (DMAC) subsystem of IOOS®

In FY09 we are focused on 6 areas for this subsystem: (1) Data Integration Framework (DIF) support to Customer Applications: Harmful Algal Blooms forecast system (HAB-FS); Integrated Ecosystem Assessments (IEAs); Coastal Inundation; Hurricane Intensity; (2) DIF Regional Implementation; (3) DIF Evolution & Enhancements; (4) Development of the best approach to DMAC (5) High Frequency Radar (HFR) – A National Network; and (6) Continue strong support, with the Interagency Working Group on Ocean Observations (IWGOO), to the IOOS DMAC Standards Process and working with the DMAC Steering team.

- IOOS DMAC Standards Process - Get Involved:
<http://ioosdmac.fedworx.org/ioos/dmac.nsf/WhatsNew?OpenForm>
- **What the DIF:** For all documents and information, please visit the www.ioos.gov website
- **CUSTOMER IMPLEMENTATION:**
 - **Coastal Inundation OPERATIONAL:** Final release of the IOOS-funded SLOSH Display Program (SDP) was issued by NOAA's National Weather Service (NWS) Meteorological Development Laboratory on June 22. Unless major bugs are found, this will be the version that NWS Weather Forecast Offices and Tropical Prediction Center will use during this season's hurricane season. Originally, this new capability allowed the integration of NOAA's National Ocean Service (NOS) Center for Operational Oceanographic Products and Services (CO-

OPS) water level data and derived products with NWS surge products plus winds from NOS and NOAA's National Data Buoy Center (NDBC) was targeted for a limited number of NWS sites. But due to demand by other NWS forecast offices, it will be made available to all coastal offices. This version contains the "multiple collections" capability implemented at NDBC, which allows for multiple NOS CO-OPS water levels to be plotted on the map at one time. Another routine allows the forecaster to call up one CO-OPS water level station at a time and get a time series of water level and surge information plotted on graphs. These graphs show the trends of water levels and winds and surge information over a 2-day period. In addition, major improvements in the navigation and display of roads, population areas, county, and state boundaries and labeling and coloring, typical of a GIS interface, was implemented, as requested, by TPC so that the program could be used in media briefings. **Well Done.**

- **Harmful Algal Blooms:** Access to and use of the DIF data was successful, although impacts on the forecast model were not as favorable as the team would have liked. More favorable blooms transport and extent results were achieved using C-MAN winds. The team agreed to continue the winds analysis, attempting to forecast HAB transport and extent using NDFD forecast winds.
- **Hurricane Intensity:** There has been very exciting progress on this milestone. All the synthetic temperature and salinity files have been transferred to the operational NWS data tank, which means they are part of the operational data stream and the translator has been written to translate to the more traditional meteorological forecast. NOAA's National Center for Environmental Prediction (NCEP) is in the middle of migration to the new computer system and we have a delay in actually running the analysis for each of the past storms. The team is working very closely together to complete this effort and I extend my sincerest thanks.
- **REGIONAL DIF IMPLEMENTATION: No change**
- **DIF ENHANCEMENTS:**
 - **Coastwatch:** The CoastWatch program has requested several changes to the Ocean Color Data Content Standard based on results of testing. The suggested changes are being reviewed by the Ocean Color Working Group and then will be sent to the IOOS DIF WSDE for concurrence or additional suggestions. Changes to the DCS will result in changes to the encoding developed by the NMFS Southwest Fisheries Science Center's Environmental Research Division, which will be implemented by CoastWatch Central.
 - **NDBC:** A new version of DIF services has been released onto the NDBC Website. A subset of CO-OPS data collections are now available through NDBC's site and are also being incorporated into the enhanced SLOSH Display Project.
 - **Google Collaboration:** The KML + JSON format puts time series data into a format that will allow Google to harvest data every hour. The data will also be accessible in the Google prescribed format from the NDBC website so that it can be used directly by the user.
 - **DIF Interoperability Testing:** Testing was completed of the getobservations feature for NDBC and CO-OPS. All of the getcapabilities responses were well

formed and valid xml. Each file was compared against each other and against the Abstract Data Content Standard. Results: few errors were found. Works is moving ahead by comparing the regional associations.

Interagency Project Collaboration: The Z-Grams are certainly focused on providing information on IOOS® connections to these projects and it is not intended to provide programmatic updates of these specific projects because they all have project leads.

- **Interagency Modeling Activities:** Rich Signell traveled to the Stevens Institute of Technology in the MARCOOS region and to the University of Massachusetts Dartmouth in the NERACOOS region to help install and configure THREDDS Data Servers to serve CF-compliant model output via OpenDAP (IOOS DMAC approved standard for gridded data). Initial testing of forecast data delivery from the Stevens NYHOPS model (<http://hudson.dl.stevens-tech.edu/maritimeforecast/>) and the UMASSD NECOFS model (http://fvcom.smast.umassd.edu/research_projects/NECOFS/index.html) was successful, and the data access via THREDDS will be integrated into the NERACOOS and MARCOOS regional websites after additional testing.
- **IOOS and Links to the National Water Quality Monitoring Network:** One of the first actions we agreed to was to link the Alliance of Coastal Technologies website to the National Environmental Methods Index (NEMI). The first steps of putting up reciprocal links were completed. The next step is to discuss greater integration. Links: <http://www.nemi.gov> and http://www.act-us.info/tech_db.php. NEMI is maintained under the direction of the [Methods and Data Comparability Board](#), a partnership of water-quality experts from federal agencies, states, municipalities, industry, and private organizations. The Methods Board is chartered under the [National Water Quality Monitoring Council](#), whose mission since its charter in May 1997 is to coordinate and provide guidance on the implementation of a voluntary, integrated, and nationwide monitoring strategy.
- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** No update.

Other:

- **IOOS in Action - Buoy repositioning services multiple constituents:** This past week NOAA's National Data Buoy Center(NDBC) replaced buoy 44004 with buoy 44066. This is noteworthy because of the discussions that took place on the buoy placement and highlights a success that speaks to why many have called for an IOOS program. The stakeholders of IOOS' Mid-Atlantic Coastal Ocean Observing Regional Association (MACOORA) had requested that the buoy, when replaced, be located in the Hudson Canyon (100 miles closer to shore) to meet safety concerns they had for offshore mariners. NOAA's National Weather Service has the responsibility for issuing marine forecasts and providing for the regional scale ocean models and they depend on the NDBC buoys. The local Weather Forecast Office and NOAA's Ocean Prediction Center had to agree to the new placement. Gabrielle Canonico (NOAA IOOS) facilitated these discussions and the collaboration resulted in an agreement for the buoy re-positioning, which speaks directly to the user-driven focus on IOOS and ensuring that the observation

sites provide support to multiple missions. The partnership extends the United States Coast Guard who not only deployed the mission but conducted a moving dedication ceremony before the launching of the buoy. Officially named 44066, this new buoy will also be known as Texas Tower Four in memory of the men who served on the offshore radome Texas Tower 4 in the early 1960s.

- **The Scarlet Knight (RU27):** Two months at sea and going strong. The daily blogs have been interesting to follow as the Rutgers folks continue to evaluate both SST and Altimeter products - pros/cons as they continue to plan this historic flight. Sign up for the daily blogs and follow along: <http://www.i-cool.org/?cat=38>
- **Meeting with Coastal America:** Suzanne Skelley and I met with Virginia Tippie (Director, Coastal America) and Maggy Hunter (Coordinator, Coastal Ecosystem Learning Centers [CELC]). This was a first meeting on how IOOS and Coastal America could partner. Coastal America is a partnership between federal, state and local governments, and NGOs and cooperations. The purpose of Coastal America is the threefold: (1) Protect, preserve, and restore the nation's coastal ecosystems through existing federal capabilities and authorities, (2) Collaborate and cooperate in the stewardship of coastal living resources, and (3) Provide a framework for action. We discussed a number of exciting opportunities with them; we agreed to explore the first partnership based on the CELC effort. CELC's purpose is to increase public awareness of critical coastal issues and encourage involvement in activities that benefit coastal ecosystems. There are currently 21 CELC and they have the potential to provide a venue for showcasing IOOS information and services through IOOS Regional Associations and ACT. I will ask Jennie Lyons to take the lead on this, upon her return from maternity leave in late July, and she will work with Maggy to best involve our IOOS Education and Outreach coordinators with the CELC. Virginia and Maggy indicated that this is not a start-from-scratch effort, as a number of you are involved, but we are looking to make this an official partnership. For more information on Coastal America and the CELC program, please visit: <http://www.coastalamerica.gov>
- **Call for Nominees for the Ocean Research and Resources Advisory Panel (ORRAP):** The Office of Naval Research is now soliciting nominations for membership on the Ocean Research and Resources Advisory Panel (ORRAP). The ORRAP advises the heads of federal agencies that comprise the governing body of the National Oceanographic Partnership Program (NOPP), whose Program Office resides at Ocean Leadership. Nominations are sought from -- or on behalf of -- individuals who are eminent in the fields of marine science, marine policy, or related fields, including ocean resource management. All nominations should be made by Wednesday, July 1. Please visit [the ORRAP web page](#) for more details.
- **International summer school of for observing, assimilating, and forecasting the ocean, 11-22 January 2010 - Perth, Australia:** A 2-week program offered to early career scientists, professionals, and students on the current state of the art in operational oceanography and related advances in the ocean sciences. The course curriculum will include topics covering the leading edge science in ocean observing systems, as well as the latest methods and techniques for analysis, data assimilation, and ocean modeling. Lectures will be given by leading experts in these fields including: Harley Hurlburt - NRL, Stennis Space Center, USA; Eric Chassignet - Florida State University, COAPS, USA; Magdalena Balmaseda - ECMWF, UK; Pierre Brasseur - CNRS/LEGI, Genoble,

France; Pierre-Yves Le Traon - Ifremer, France; and Trevor McDougall - CSIRO, Australia. More details can be found at: <http://www.bom.gov.au/bluelink/summerschool>. We are now calling for international students to register online at: <http://www.bom.gov.au/bluelink/summerschool/registration.html>. POC: Gary Brassington - G.Brassington@bom.gov.au.

Congressional: No update.

Communications:

- Check out www.ioos.gov. Thank you very much to the hard work of Jennie Lyons, Deanna Eastman, and Marc Graves for getting this website launched. This replaces the NOAA IOOS website and is now the US IOOS website.
- There has been impressive press coverage surrounding the launching of the CariCOOS Data Buoy A: <http://www.uprm.edu/news/articles/as2009093.html>

<http://www.elnuevodia.com/amaltempo,datosmedidos-585827.html>

<http://www.laregatapr.com/links/arch.pdf/0905.pdf>

Don't miss the video at www.uprm or go directly to: <http://www.youtube.com/watch?v=m-m4dp7YpJk>

Upcoming Meetings:

- 7-10 July: PacIOOS site visit
- 19-23 July: Coastal Zone '09 - Rob Ragsdale is presenting a paper; Carl Gouldman is attending for the NOAA IOOS Program Office
- 26-30 July: AOOS site visit
- 11-12 Aug: DIF IPT workshop, Silver Spring

Cheers,
Zdenka