

Bi-Weekly Z-GRAM 6 February 2009

[www.IOOS.noaa.gov](http://www.IOOS.noaa.gov)

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 under program updates

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

Programmatics:

- Congressional Report: Remains with the Department of Commerce
- FY09: NOAA remains on a CR until 6 March.
- FY10: **No Change**
- FY11-15: The Program Decision Memorandum (PDM) has been issued and IOOS will participate across NOAA on drafting a data management concept paper and assist others in developing an ocean color white paper.

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, and; 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 and the first 5 areas

- IOOS DMAC Standards Process: DMAC Steering Team meeting will be held in May 2009: Get Involved: <http://ioosdmac.fedworx.org/ioos/dmac.nsf/WhatsNew?OpenForm>
- What the DIF: For all documents and information, please visit the [www.ioos.noaa.gov](http://www.ioos.noaa.gov) website and hit the button that says IOOS Data.
  - Coastal Inundation Project Update: Two main milestones will be reached this coming week: (1) CO-OPS water level predictions as well as observations will be able to be plotted on the SLOSH display; and (2) Quality flags will be added to the CO-OPS water level data so that the data will be equivalent in quality to currently available "Tides On-Line". Further the National Hurricane Center reported that they have started using the enhanced SLOSH Display Program in their training exercises for the upcoming hurricane season. **See more below on visit to WFO Slidell**
  - Hurricane Intensity Project Update: In January 2009, NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) and CoastWatch established a DIF standard THREDDS Web Coverage Service for profiles of

satellite-based temperature and salinity that were in DIF format for gridded data (netCDF with CF conventions) for 3 test cases - Emily, Rita and Wilma (all in 2005). There are 10 days of data total. For each date there are 8,755 temperature and salinity profiles available in a 0.5x0.5 degree grid in a geographic area bounded by: 99.5W - 7.5W; 5.5N - 34.5N. On February 4, 2009, AOML and CoastWatch converted the above datasets into BUFR using a netCDF to BUFR converter they developed. The BUFR files are currently available via FTP, but it is likely that new/future THREDDS software releases could handle distribution of BUFR files. AOML and CoastWatch will investigate this option.

- HAB-FS: With Becky's departure, Carmel Ortiz (Skjei Telecom) will act as interim project lead for the HABs project
- DMAC **"Industry Day"**: The goal of this industry day is to provide a program status to industry and set the stage for follow-on market research by the program. The Announcement published: NOAA/NOS Grants & Acquisition posted an official announcement on Dec 30th on the Federal Business Opportunities (FedBizOps) website for the public meeting we will conduct on March 12, 2009 in the NOAA Auditorium. The announcement can be accessed at:  
[https://www.fbo.gov/spg/DOC/NOAA/AGAMD/IOOS\\_DMAC\\_Briefing/listing.html](https://www.fbo.gov/spg/DOC/NOAA/AGAMD/IOOS_DMAC_Briefing/listing.html)
  - NOAA, along with Senior Staff from Environmental Protection Agency (EPA), United States Army Corps of Engineers (USACOE), United States Geological Survey (USGS), and US Navy will provide briefings on IOOS and related activities.
  - The High-Level Functional Requirements & DMAC Con-Ops reports are now available on the IOOS website: <http://ioos.noaa.gov/dif/> under the header Data Management and Communications Documents.

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

- **Army Corps of Engineers collaboration on a National Waves Plan:** I received the final plan on 4 February and will do a final review this week before send back to the Alliance for Coastal Technolgy (ACT), who will make it ready for publishing.
- **GODAE Server MOA:** The GODAE server MOA between NOAA and NRL has been sent to the Department of Commerce. We still have a goal for a signature by 1 March 2009.
- **Interagency Working Group on Ocean Observations (IWGOO) Sponsoring "Small Sea Changes: Big Business Impacts" Workshop:** The IWGOO is sponsoring a workshop in Silver Spring, Maryland on 14 April 2009 entitled Small Sea Changes: Big Business Impacts. The purpose of this workshop is to engage private industry and communicate the value of ocean science and ocean observations to business decision-making. The target audience is senior decision makers from the agriculture, aviation, construction, energy, finance, fishing, health care, insurance, leisure and tourism, manufacturing, mining, retail, transportation, and utility sectors. This workshop will

explore the improved business decision support that IOOS can facilitate. For the ocean science community, this workshop provides an opportunity to identify a cadre of industry professionals willing to support the need for ocean science and the Integrated Ocean Observation System. For industry, this workshop will explore the opportunities for better business decisions through examining the connection between weather forecasts, climate projections, and ocean observations. The workshop flyer, registration, and additional information are available at: <http://www.oceanleadership.org/iwgoo>.

- **Interagency Modeling Activities:** Rich Signell has agreed to set up a "Model Data Interoperability" Working Group discussion/web site, composed of modeling reps from RAs, National Backbone providers and other interested parties. This will be delivered through the DIF WebEx site. Invites will go out next week after we determine exactly how to set up the site. Please coordinate with Rich if you would like to participate!
- **National Science Foundation's Ocean Observatories Initiative (OOI)/IOOS Cyber-Infrastructure Collaboration:** Rich Signell met with Matthew Arrott (UCSD's OOI/CI program manager), Bill Howe, Steve Hankin, Roy Mendelsohn, and Roland Schweizer to continue discussions for a one-year implementation plan for server-side processing based on the Ferret-THREDDS Data Server and the Bill Howe's GridFields library. This will enable server-side subsetting of unstructured grid data, critical for delivery of unstructured grid data (such as that from ADCIRC and FVCOM) via web services.
- **National High Frequency Radar Plan:** The initial comment period ended February 4 - **Did you get your comments in!!** Comments have been received from NOAA (NOAA Observation Systems Council; NOAA Ocean Council, Center for Operational Oceanographic Products and Services (CO-OPS), and the National Data Buoy Center(NDBC)), the Regions (AOOS, GCOOS, GLOS, MACOORA, NANOOS, and SCCOOS), Navy, and USCG. If, by chance, you meant to send your comments but time got away from you, please send them immediately. We will begin processing these comments this week so we can get the final draft out soonest.
- **OBIS/Census of Marine Life:** Charly Alexander, NOAA IOOS, will continue as our representative as best he can until we are able to hire behind Becky.
- **GOOGLE Ocean:** Following the press release of this week, NOAA IOOS is now engaged with NOAA's Office of Oceanic and Atmospheric Research's (OAR) Alan Leonardi – on detail to Google – to discuss next steps for bringing IOOS data into the Google environment. National Data Buoy Center's Darrell Duncan will also join the discussion. Charly, Jeff, and Rich will lead this with ensuring we are working with our regions. As GLOS pointed out - we have a great programmer at GOOGLE who knows IOOS.

Other:

- **IOOS offshore Wind Energy Meeting 2 February:** The dialog and interaction was very productive between IOOS, the representatives from New Jersey, and the three offshore wind companies on needs and capabilities. President McCormick, Rutgers University, and President Gaffney, Monmouth University, kicked off the meeting which was followed by briefings on State plans and the United Kingdom plans, National IOOS perspective (Josie and myself) and the Regional perspective (MACOORA, SECOORA and NERACOOS), and then presentations from Bluewater Wind, Fishermen's Energy

and PSEG/DeepWaterWind. The afternoon started with a panel of industry members talking about their needs, which were followed up by breakout sessions to further define, needs, capabilities that IOOS can provide and next steps. The most immediate requirement is understanding the environmental collection requirements. To meet the New Jersey Governor's goal of 1000 megawatts by 2012, the companies will need to deploy their wind towers very soon. Please visit the following website being hosted by Rutgers Energy Institute <http://www.rei.rutgers.edu>. You will see the IOOS and Offshore Wind Power Meeting listed on the front page under latest announcements. Click on the read more -

[http://rei.rutgers.edu/index.php?option=com\\_content&task=view&id=41&Itemid=28](http://rei.rutgers.edu/index.php?option=com_content&task=view&id=41&Itemid=28). All the presentations have been uploaded as well as the list of attendees with their contact information. Thank you to Scott Glenn, Josh Kohut, Courteny Kohut (MACOORA), Malcom Spalding (NERACOOS), Harvey Seim (SECOORA), Josie Quintrell (NFRA), and Gabrielle Canonico, Jack Harlan (IOOS) for making this happen. I look forward to acting on the recommendations made during this meeting.

- **Successful Launch of NOAA N-Prime:** NOAA N-Prime was successfully launched Friday, February 6, 2009. The spacecraft was placed in its assigned orbit and was renamed NOAA-19 signaling mission success. NOAA-19 is in a nominal orbit with all spacecraft systems functioning properly. NOAA-19 will undergo its activation and checkout over the next 21 days under NASA control. The spacecraft will then be “handed” over to NOAA for operational control. NOAA-19 will replace NOAA-18 as NOAA’s primary afternoon satellite in a 2:00 p.m. local solar time orbit.
- **National Oceanographic Partnership Program (NOPP) seeks research proposals:** NOPP and the President's Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI) are currently seeking proposals meeting the goal of partnerships between at least two of the following three sectors: academia, industry (including NGOs), and government. Research proposals are being solicited for three topics:
  - Improving Wind Wave Predictions: Global to Regional Scales
  - Sensors for measurement of Biological, Bio-Optical, Optical, or Chemical Properties of the Ocean
  - Improving Cyclone Intensity Forecasting

Submission deadline is April 10, 2009. For more information, refer to the full Broad Agency Announcement: <http://www.onr.navy.mil/02/baa/> - BAA # 09-012. Up to \$21.5 M over four years may be available for this solicitation, subject to appropriation and final approval by the Interagency Working Group on Ocean Partnerships of the ICOSRMI. For more info: [NOPPO@oceanleadership.org](mailto:NOPPO@oceanleadership.org).

- **Visit to NOAA's National Weather Service - Weather Forecast Office Slidell, Louisiana:** Suzanne, Carl, and I had a chance to visit with WFO Slidell. Thanks very much to Mike Koziara (Science Operations Officer) and Frank Revitte (Warning Coordination Meteorologist) who spent several hours with us going over their operations and what is required of them during any hazardous weather conditions and in particular for Tropical Storms and Hurricanes. We had a chance to have an in depth conversation about the IOOS Coastal Inundation project and how having the water level data

integrated into SLOSH is very important. During these times, all information must be integrated together so they can communicate quickly to the Governors' Responders in both Mississippi and Louisiana. Mike and Frank were very complimentary of the collaboration with IOOS, but also stressed the need to incorporate additional water level data collected by the Army Corps. Another discussion item was differences in the display of data. The CO-OPS water level data is displayed in MLLW but SLOSH is based on NAVD88. While the NAVD88 information may be contained in the record, it would make their lives easier if the displays matched. This is not to say that displaying water level in MLLW is wrong, it continues to reinforce that how the data is being used is CRITICALLY important to the way we make it available. We must use technology to display the data in the way a customer needs the information. This continues to make the case for INTEGRATED AND INTEROPERABLE data. Suzanne, Carl, and I peppered Mike and Frank with many questions which they graciously answered. Thank you so much for a superb visit. Thank you to Marcia Weeks, NOAA IOOS, who helped to set this up and ensured we were well prepared.

- **Visit to NOAA's National Data Buoy Center (NDBC):** NOAA IOOS had a chance to interact with our strong partners at NDBC. Stennis was a happening place last week. The NOAA Data Archive and Access Working Group were meeting at Stennis. We had a programmatic meeting to kick off FY12-16 Planning, Programming, Budgeting and Execution (PPBES), NOAA's IEA Priority Area Task Team (reskeds due to a hurricane), and last, but certainly not least, we all bid Dr. Paul and Kathy Moersdorf a fond farewell as they retired with over 30 years of government service. IOOS was able to support all of these meetings. From both a technical and programmatic perspective the meetings went very, very well. The partnership with NDBC is stronger than ever. NDBC's commitment to ensuring the IOOS Regional Data is disseminated throughout the National Weather Service and the global community is a vital part of IOOS. NDBC is a committed DIF and DMAC partner. NDBC is committed to providing both oceanographic and atmospheric observations with the buoy systems they operate at the Federal level. Daily NDBC has an Operations brief so they focus exactly on where every buoy is and how well it is performing. They also brief on the partner and regional observations system.
- **Coordination of Conference calls for Surge/Coastal Inundation:** 13 NOAA experts in surge and coastal inundation held a conference call on 2/4 to discuss outputs from the recent LSU "Grand Challenges in Coastal Resiliency" workshop (January 20-21, 2009) and preparations for NOAA attendees of the USF Hurricane Surge workshop February 11-12, 2009 in St. Pete Beach. The group agreed to have another coordination call after the February surge workshop and before the next related workshop on unstructured grids March 17-18, 2009. Liz Smith and Barry Stamey (IOOS CIPS project), Josie Quintrell, Mary Erickson, Dave Eslinger, Gabrielle Canonico and Marcia Weeks held another in a series of conference calls about the IOOS-funded coastal inundation projects - specifically, how to become more connected among project PIs and involved Federal partners, with the goal to develop a national coastal inundation plan and specific plans for transitioning promising science and technology into operations.
- **Visit to the Naval Oceanographic Center (NAVOCEANO), Stennis Space Center, MS:** Charly, Jeff, and Kurt (NOAA IOOS) – joined by NDBC's Dick Crout - attended a series of briefs at NAVOCEANO, Stennis that included technical details about the

Navy's approach to data interoperability and standards. For example, they have been using JMBL (Joint METOC Broker Language) but are working to adopt OGC standards in some areas. Thanks to Kurt Nelson and the Navy's John Lever for coordinating the visit.

- **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.

#### Congressional:

- S22: It is expected that the House will bring S22 to the floor next week.
- Senate Committee on Commerce, Science, & Transportation: Meeting Date/Time: 02/12/2009 10:00AM - Agenda: Organizational business meeting to consider an original resolution authorizing expenditures for committee operations, and committee's rules of procedure for the 111th Congress; followed by a hearing to consider the nominations of Jane Lubchenco, of Oregon, to be Under Secretary for Oceans and Atmosphere, and John P. Holdren, of Massachusetts, to be Director of the Office of Science and Technology Policy.

#### Communications:

- IOOS partner participation in "Miracle on the Hudson" featured on <http://oceanservice.noaa.gov/>
- Check out the IOOS website for the new outreach materials. We have posted our IOOS in Action papers. Soon to follow will be IOOS linked to a number of Federal Agencies.
- CaRA in the News: Check out "Scientist Based at UVI testing Undersea Gliders" - [http://www.virginislandsdailynews.com/index.pl/article\\_home?id=17632645](http://www.virginislandsdailynews.com/index.pl/article_home?id=17632645)

#### Upcoming Meetings:

- 11-12 February: Surge/Inundation Meeting, St. Pete Beach, FL, the University of South Florida (USF) College of Marine Science is hosting a NOAA/FEMA chaired workshop to focus on 2 primary theme areas: (1) The science and decision making aspects of hurricane; and (2) Extra-tropical storm surge/inundation. 46 attendees are expected from a variety of Federal agencies and academic institutions. Marcia Weeks will represent the NOAA IOOS Office.
- 10-12 February: West Coast Regional Harmful Algal Bloom Summit done under the West Coast Governors' Agreement (WCGA) on Ocean Health which is looking to integrate specific actions to promote interstate coordination of HAB research and monitoring efforts. The NOAA lead is National Ocean Service Office's National Centers for Coastal Ocean Science (NCCOS). NOAA IOOS Program, NANOOS, CeNCOOS, SCCOOS will all be participating.
- 18-20 February: NERACOOS annual meeting; Zdenka will attend 19-20 Feb.

- 24 February: SCCOOS Senior Advisory Committee Meeting: Zdenka will attend.
- 25-26 February: GCOOS meeting: Suzanne Skelley will attend.
- 25 February: Great Lakes Shipping Stakeholders Forum: Zdenka will present alongside Jack Dunnigan, Assistant Administrator, NOAA's National Ocean Service (NOS)
- 10-11 March: NOAA IOOS Regional DMAC Workshop, Silver Spring, MD
- 12 March: IOOS Industry Day - Silver Spring, MD - see above for details
- 14 April: Small Sea Change: Big Business Impacts - IWGOO IOOS sponsored workshop. Silver Spring - A workshop to explore how enhanced understanding of the oceans improves weather and climate prediction enabling better informed business decisions. For more information: <http://www.oceanleadership.org/iwgoo>

Cheers,  
Zdenka