

Bi-Weekly Z-GRAM 1 May 2009

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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:

- Welcome to the newest member of the IOOS family: Jennie and Josh welcomed Marissa Grace Lyons on April 30th. This is our long range succession planning, just kidding. Mom and baby are doing well and Congrats from all of us. While Jennie is home taking care of their new daughter, Deanna Eastman will step up to lead our communications effort. Deanna has been with our team since October and before that with Ocean.US so this will be a seamless transition.
- Congressional Report: Back in the review chain
- FY09: Thank you to our intended recipients, NOAA Coastal Services Center (CSC) who have been working hard to put the recommended cooperative agreements into NOAA's Grants on Line and to the IOOS team (Gabrielle and Carmen) who have been working their magic to keep the recommended awards moving through the system. Thank you very much to all.
- FY10: We expect the Administration to deliver the detailed FY10 budget to Congress next week. After this, Dr. Lubchenco, NOAA Administrator, will then provide a number of briefings associated with the FY10 President's Budget.
- FY11-15: Budgeting phase continues.
- 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 Inter Agency 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 website and hit the button that says IOOS Data.

- **Coastal Inundation:** Latest SLOSH Display Program enhancements released (4/27): Latest enhancements in this release focused on Tropical Prediction Center (TPC) requirements. Only a few major requirements remain for inclusion in the next release (due on or around 5/15). NOAA's National Weather Service (NWS) - Weather Forecast Offices (WFO) -WFO Slidell and Wakefield, and the TPC agreed to "test" the new SLOSH Display Project (SDP) in a training session to be hosted by TPC Storm Surge Team lead Jamie Rhome on May 21st. If there are no problems, the CI users will begin using the new SDP for operations. An evaluation of any issues or concerns will be scheduled after 30 days or sooner if needed. Jamie will host a series of training sessions in late May and early June that will feature the new SDP, along with other TPC surge support.
 - **Hurricane Intensity:** The initial analysis of ocean conditions using DIF data versus not using DIF data will be completed by the end of June 2009. This is the first key step to evaluating the impact of the synthetic T-S profiles provided by the DIF project and will serve as the baseline for the project.
- **DATA Provider Implementation:** National Data Buoy Center (NDBC) test of SOS installation now supports collections of multiple stations in single request: Collections for 5 of the 6 core variables are on the NDBC test server located at: <http://sdfest.ndbc.noaa.gov/sos/>. The approach is still being finalized for NDBC to offer collections of CO-OPS water level stations.
- **REGIONAL DIF IMPLEMENTATION:** The IOOS program office team met with 7 of 11 RA DMAC leads to review an implementation tracking/status table developed by SECOORA's Sam Walker to document progress by standard services and core variables. The discussion was very productive. In real-time, the matrix was revised to illustrate which services will be eligible to be DIF compliant at the end of FY 09 per input received by the regional DMAC leads. Working toward completing this matrix, there will be follow-up with the regional DMAC leads that were unable to participate in the call to capture their input.
- **DIF ENHANCEMENTS:**
 - KML for IOOS: Held next in series of telecons with Google. Converging on format (KML+JSON) that Google can use for Google Oceans layer. Initially, Google will harvest existing SOS data format and convert to KML on their side. Goal is to have fresh data without overloading IOOS servers.
 - DIF Interoperability Re-Testing: John Ulmer (CSC) is the IOOS DIF SOS Implementation at NDBC and CO-OPS for the DIF core variable data (except ocean color which is served by only one data provider, CoastWatch) for level of interoperability. The results of the retest will be compared with previous interoperability testing conducted in June 2007 or December 2008.
 - Guide for Data Providers: Coordinating with GEO-IDE to post DIF Guide for Data Providers on the GEO-IDE Guidelines and Best Practices Wiki. Will continue to coordinate with GEO-IDE to see if this wiki could be used for other DIF technical documentation.
- **DIF-DMAC/NATIONAL DMAC:**
 - The RFI deadline was extended to 7 May, we have received seven responses to date. https://www.fbo.gov/index?s=opportunity&mode=form&id=ceeb3dbd09e71a4f48e70ccdb3793daf&tab=core&_cview=0 -

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 all of them have project leads.

- **GODAE Server MOA:** We have been working with Naval Research Lab and are confident that we will have the MOU signed within the next week.
- **Interagency Modeling Activities:**
 - ADCIRC User Group Meeting, Silver Spring (4/20-21): Rich presented "Unstructured Grid Model Data Interoperability" Briefing. There was strong support for the idea of distributing unstructured grid data using CF conventions via web services, but server side sub-setting is critical for this group, as they are now running grids in excess of 2.4 million nodes. A prototype demonstrating server-side sub-setting of unstructured grids is scheduled to be delivered by OOI-CI in September. Note that ADCIRC is a research model used for solving/predicting time-dependent, free surface circulation and transport questions in two and three dimensions primarily for coastal oceanic environments.
 - OOI-CI Modeling meeting at Rutgers (4/28-29): Rich met with scientists at this meeting to discuss the model data interoperability framework being implemented for the IOOS regions. This approach will also be used to provide virtual ocean environments for developing new glider planning and control systems.
- **High Frequency Radar:**
 - Next draft will be sent for comment in mid-May.
 - Jack Harlan met with Scripps, NOAA's National Marine Fisheries Service (NMFS) Jonathan Phinney (Southwest Fisheries Science Center) on HFR modeling efforts and how it can support our fisheries missions. Jack met with Scripps Coastal Observing and Research Development Center (CORDC) to develop detailed tasks for FY09 data server management, development and quality control enhancement including sub-awards to UC-Santa Cruz and Codar Ocean Sensors Ltd.
- **IOOS and Links to the National Water Quality Monitoring Network:** Rob Ragsdale (NOAA IOOS) coordinated with CUAHSI (Consortium of Universities for the Advancement of Hydrologic Science) leads David Valentine and Ilya S. on holding the USGS/EPA/NOAA water quality discussion inside OGC's (Open Geospatial Consortium) Hydrology Working Group. The goal is for the working group to serve as a central forum for the various ad hoc discussions taking place in the water quality community. Rob is working with CUAHSI to determine schedule for the next conference. The first official meeting of the WG will take place during the Boston OGC 2009 Technical Committee Meeting.
- **US GEO:** The United States will host the GEO IV Plenary in Washington DC - November 2009. Planning is underway.

Other:

- **NOAA's Climate Program Office Requests Input from Policy Makers on Research Priorities:** NOAA's Climate Program Office is soliciting information from stakeholders, including state coastal managers, that will help them develop priorities for a limited set of academic/research centers that work with NOAA to improve its capabilities in aspects of climate, climate prediction, and efforts to bring climate science and information into policy and decision making. In a second request, they are seeking

information on state-of-the-art climate risk management research and practices on timescales ranging from weeks to decades and adaptation techniques and strategies for dealing with climate change in developing countries. Responses to the requests, which can be read in their entirety online, are due May 15. For more information:

http://www.cpo.noaa.gov/index.jsp?pg=/news/news_index.jsp&news=2009/3-30_request_sustained.html;

http://www.cpo.noaa.gov/index.jsp?pg=/news/news_index.jsp&news=2009/3-30_reques_climate.html

- **The Scarlet Knight (RU27) underway:** The Scarlet Knight was 27 was deployed on April 27. From the Rutgers Blog: "We used two boats for this deployment. Rutgers R/V Arabella carried RU27. The Seatow vessel Hatteras from Atlantic City carried a dive team. We would be filming this glider on its first few test dives." You can sign up for the twitter; follow along on the blog at: <http://www.i-cool.org/?cat=38>
- **HFR Network grows in Alaska:** HFR are being deployed to support specific projects but we continue to try to increase the HFR coverage. There are 3 new HFR sites in Cook Inlet, Alaska, that will be operational for about a month. On the horizon...this summer (July/August) there will be about a month long deployment in Prince William Sound, and then from August - December of this year and the following couple of years, AOOS hopes to deploy in the Chukchi Sea.
- **NOAA's National Ocean Service (NOS)/US Army Corps (USACE) partnership:** Jack Dunnigan, AA for NOS, has led a strong partnership with USACE. On 28 April NOS met with USACE MGen Temple to discuss a number of efforts we can share that included: celebrating the publishing of the Waves Plan; IOOS legislation and request for support from USACE; getting close to signing the MOU between CO-OPS and USACE for the inclusion of waves in PORTS; continued efforts through IOCM, NOAA CSC and IOOS on data integration and efforts between National Centers for Coastal Ocean Science (NCCOS) and USACE on the science surrounding water quality issues. There are already strong ties in the inundation efforts.
- **Meeting with Ocean Sciences Division of SAIC:** I was briefed on number of new technologies for ocean observing. I am highlighting one technology I was briefed on - the Wave Glider. SAIC, in conjunction with Liquid Robotics, Inc. (LRI) to the groundbreaking Wave Glider autonomous ocean vehicle. Powered completely by wave motion, Wave Glider requires no fuel and can operate at sea for extended periods without maintenance. Its solar panels generate power for payloads, including sensors and communications gear. Whether following preset courses or directed by satellite link in real time, Wave Glider can go wherever the mission requires. Wave Glider provides significant flexibility, availability and reliability options for missions that include ocean observation; scientific research; intelligence, surveillance and reconnaissance; oceanographic, weather and climate monitoring; homeland security; and border protection. One of the missions in the works is a transit from HI to California transit. Form more information

Congressional: April and I had the chance to meet with Maria Carro from Rep Pierluisi's (Puerto Rico) and brief her on IOOS and CaRA activities. Maria was very generous of her time

and as the Representative and staff are new, we were pleased to be asked to provide an IOOS briefing.

Communications:

- Check out www.ioos.gov - under outreach. See the new 1 pagers posted for IOOS in Action: The Mid Atlantic; IOOS in Action: The Northeast; IOOS in Action: The Pacific Island
- Check out two new IOOS podcasts (www.ioos.noaa.gov/outreach materials) - Ocean Glider Set to Attempt Atlantic Crossing and IOOS Aids in Hudson River Plane Crash Response
- Check out the press coverage for the launching of The Scarlet Knight:
<http://www.dailytargum.com/news/glider-launch-successful-following-months-of-work-1.1735526>;
<http://www.dailyrecord.com/article/20090428/UPDATES01/904280367>;
http://videos.nj.com/star-ledger/2009/04/rutgers_launches_an_underwater.html

Upcoming Meetings:

- 5-6 May: University of Florida: Second Annual Workshop of the IOOS/SECOORA Regional Storm Surge and Inundation Model testbed - Marcia Weeks to attend from NOAA IOOS
- 11-12 May: The Marine Board of the Transportation Research Board will be holding its 2009 Spring Meeting at the Aquarium of the Pacific in Long Beach, California. Zdenka will provide an IOOS brief.
- 12-13 May: SECOORA board meeting - Zdenka attending/briefing
- 26-28 May: Visit to Humboldt State University
- 28-29 May: GODAE High Resolution Sea Surface Temperature Project meeting - CA: Zdenka will provide kick off the conference
- 27-29 May: 11th Annual Harbor Safety Committee Conference - Tampa, FL. Zdenka will join others from NOAA to participate in a panel on 29 May.

Cheers,
Zdenka