

Bi-Weekly Z-GRAM 12 June 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.

Programmatic:

- Congressional Report: No change.
- FY09: **No change.**
- FY10: House mark for IOOS includes \$6.55M for NOAA IOOS; \$20.0M for Regional IOOS; \$500K ACT earmark. The Senate is scheduled to take up the President's Budget this week.
- FY11: NOAA must submit its FY11 budget to the Department of Commerce on 23 June.
- **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.noaa.gov website and select the button that says 'IOOS Data.'
 - **Coastal Inundation OPERATIONAL:** The new SLOSH Display Program (SDP) Enhancement announcement was issued as a NOAA's National Weather Service (NWS) Technical Information Notice (TIN) on June 5, 2009. The TIN is issued to the NOAA Family of Services, the NOAA Weather Wire, Emergency Managers Weather Information Network, NOAAPORT and other NWS partners and employees.
 - **REGIONAL DIF IMPLEMENTATION:**
 - Service Implementation Options: Two locations – San Diego (SCCOOS) and Woods Hole (NERACOOOS) - are emerging for DIF installations via NDBC staff. Final details are in process.

- **DIF ENHANCEMENTS:** No updates.

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.

- **GODAE Server MOU:** Signed. This is a great example of Navy/NOAA collaboration. The server is located at the Naval Research Laboratory in Monterey, CA and provides a second global server for the ARGO program and makes Navy oceanographic data and model output available to the IOOS community. The server contains: real-time and historical oceanographic observations; real-time and historical surface atmospheric forcing fields from Navy's Fleet Numerical Meteorology and Oceanography Center (FNMOC) and NOAA's National Centers for Environmental Prediction (NCEP), suitable for driving GODAE ocean models, a full suite of real-time surface and upper-air fields from FNMOC's Navy Operational Global Atmospheric Prediction System (NOGAPS) model sufficient to meet the needs of the Cooperative Opportunity for NCEP Data Using Internet data distribution Technology (CONDUIT) program, selected U.S. Navy operational ocean products, ancillary data sets, ocean climatology and bathymetry, and GODAE demonstration products from various GODAE modeling groups.
- **Interagency Modeling Activities:** The Netcdf-Java Toolbox for MATLAB® (njTBX), co-developed by Rich Signell (NOAA IOOS) and Sachin Bhate from Mississippi State, with funding from National Oceanographic Partnership Program (NOPP), is now available on SourceForge at <http://njtbx.sourceforge.net>. This toolkit allows MATLAB users standardized access to IOOS-compliant gridded data. Using a single command, for example, a user can extract a 3D field of temperature or velocity with geospatial information from a variety of coastal forecast models being run in the IOOS regions.
- **High Frequency Radar:** Thank you for your comments, which we will adjudicate. The goal for publishing the final plan is early September.
- **IOOS and Links to the National Water Quality Monitoring Network:** We had a tremendous meeting on 10 June. Representatives from NOAA (IOOS, National Estuarine Reserves Program, National Centers for Coastal Ocean Science, National Data Buoy Center), USGS, Environmental Protection Agency (EPA), National Federation of Regional Associations, SECOORA, the University of South Carolina, the Gulf of Maine Ocean Partnership Program, MACOORA - Delaware Ocean Observing Program, and Alliance for Coastal Technologies were in attendance. This meeting was initiated by Pixie Hamilton (USGS) to maintain momentum on previous discussions. The discussion focused on the present use of data formats, regional efforts, and sensor-related issues. Rob (NOAA IOOS) briefed an update on the DIF; Nate Booth (USGS) briefed on the USGS/EPA WQX collaboration; Eric Vowinkel (USGS) provided a brief on a project in the Delaware Bay. On the topic of regional efforts, there is a project in the Gulf of Maine that is being funded to combine water quality data in the WQX format with other data types (i.e. buoy data) that is served in different formats. In other words, the development of a format for both discrete and continuous data. An outcome of this discussion is a follow-up meeting to learn more details about this project. A key point made in the discussion on which to follow-up is the transferability of this project to other regions. We also began the discussion on sensors and quality control of the data and how that is being

done. We ran out of time and, therefore, a second meeting will be held to keep this going. It was a great meeting but, as Chuck Spooner (EPA) stated, we have more to do. It is up to us to stay engaged.

- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** Charly (NOAA IOOS) met with the OOI/CI team at University of California, San Diego on Thursday, 4 June, including Matthew Arrott, Michael Meisinger, and Frank Vernon. Jeff de La Beaujardiere and Rich Signell joined part of the discussion to review progress on the data exchange project. Charly and Matthew also discussed a range of topics related to expanding the OOI/CI – IOOS/DMAC collaborations in FY2010 and the evolving status of the IWGOO's DMAC Steering Team.

Other:

- **CaRA launches new buoy:** On 7 June, CaRA christened their first buoy. Distinguished speakers included the First Lady of Puerto Rico, Lucé Vela; Ponce, PR Mayor, the Hon. María Meléndez; SRA Rosemary Vizcarrondo, District Representative to Puerto Rico's Congressional Delegate Pierluisi; Professor Roy Watlington, representing the US Virgin Islands, Dr. Julio Morell and Dr. Jorge Corredor (CaRA), and Dr. Neil Pettigrew (University of Maine/NERACOOS). Each talked about the importance of the buoy and the partnerships through IOOS. I was privileged to have a chance to speak and spoke on the importance of IOOS to our nation and how important the IOOS partnerships are. The First Lady and Mayor were gracious with their time and First Lady Vela properly commissioned the CaRA buoy. I was pleased to be joined by our federal partners - Mr. Diaz (United States Geological Survey [USGS]) and CAPT Pino (United States Coast Guard). I would like to extend sincere appreciation to Mr. Matos (National Weather Service -Meteorologist in Charge - Weather Forecast Office San Juan, Puerto Rico) and the senior NOAA representative in Puerto Rico who attended and who has been a big supporter of CaRA. CaRA is using a University of Maine-built buoy, which also speaks to the partnership across the IOOS Regional Associations. More importantly, the buoy was successfully launched on 8 July. The buoy will measure in real-time data on winds, waves, currents, SST, and salinity. This is the first buoy launched in CaRA and will be located near the Puerto Rico insular shelf break off Caja de Muertos Island (17° 51.58'N 66° 31.36' W). For buoy information check out: <http://gyre.umeoce.maine.edu/caricoos/>
- **The Scarlet Knight (RU27):** Scarlet Knight has traveled 3522 km since it launched on April 27. The Rutgers team is using both SST and Altimetry data to help navigate the glider from eddy to eddy. On June 5, Scarlett Knight passed east of the Tail of the Grand Banks and is currently located at 380 N, 46.20 W. What is great about this mission are the partners who are helping to provide data. Through the outreach of the Rutgers students, the University of the Azores Department of Oceanography and Fisheries is now sending SST imagery, thanks to Gene Feldman at NASA yesterday. John was able to download the MODIS imagery from their real-time system and started compositing a full North Atlantic product. Its global data is at 4 km resolution. It nicely complements the local 1 km data Ana Martins started sending us from the Azores. I have also enjoyed the interesting discussions on what the different data sets are telling us as compared to what Scarlet Knight reports. We will continue to reinforce the need for these types of scientific

missions. You may follow RU27's trans-Atlantic journey at <http://www.i-cool.org/?cat=38>

- **SCCOOS/SCRIPPS Visit:** I had a chance to sit down with the SCCOOS team to get caught up on the many exciting efforts to which IOOS continues to contribute. We met with Kathryn Mengerink of the Environmental Law Institute, who is looking at the cross-section of science and policy. They are soon to finish an Ecosystem-Based Management Implementation Handbook, which she promised to forward to us. Julie and Kathryn are starting to work to connect SCCOOS to these efforts. Kathryn has a new project in the Arctic so we passed along AOOS and NOAA POCs for that work. We then met with Kathleen Ritzman (SCRIPPS government relations) and Dr. Tony Haymet (Director of SCRIPPS) to talk about mutual support for both IOOS and SCRIPPS efforts. It was too short a visit!
- **United States Army Corps of Engineers (USACE) - Coastal Engineers Research Board (CERB):** The meeting focused on USACE data needs. USACE recently completed a survey of their data needs and discovered that, among them, their top needs include: Data Availability, Quality Issues, Spatial, Temporal and Analysis scales of data, data management, archiving and sharing. Sounds like IOOS! I was able to provide an IOOS overview and what we have accomplished over the last two years. Miki Schmidt (NOAA Coastal Services Center) provided a briefing on Digital Coast; John Haines (USGS) provided a briefing on observations and climate change and the strong partnership with USACE in collecting and providing data on wide range of temporal and spacial scales. Jennifer Wozencraft, Director, Joint Airborne, Lidar, Bathymetric Center of Excellence on IOCM provided a briefing on the Integrated Ocean and Coastal Mapping (IOCM) efforts. In the end, Jeff Lillycrop provided a look at working with IOOS DMAC and Digital Coast and how USACE could contribute and move to an enterprise-wide architecture. I had a chance to brief the National Operational Waves Plan, and Dick Seymour (SCRIPPS), a member of the CERB executive board, had a chance to reinforce the importance of that plan and the Coastal Data Information Program (CDIP). I sincerely appreciated the invitation and look forward to continued and close IOOS team efforts with USACE.
- **President Issues Memorandum Establishing Ocean Policy Task Force, Proclamation Declaring June 2009 National Oceans Month:** On June 12, President Obama issued a Presidential Memorandum Establishing an Interagency Ocean Policy Task Force and a Presidential Proclamation naming June 2009 National Oceans Month. The Memorandum calls for the Interagency Ocean Policy Task Force to, within 90 days, deliver recommendations for a National Policy for the Oceans, Coasts, and Great Lakes. Within 180 days, the Task Force shall develop a recommended framework for coastal and marine spatial planning. The Proclamation names June 2009 as National Oceans Month and calls for Americans to learn more about the oceans and what citizens can do to conserve them. To read the Memorandum and Proclamation, please visit: http://www.whitehouse.gov/the_press_office/Presidential-Proclamation-National-Oceans-Month-and-Memorandum-regarding-national-policy-for-the-oceans/.

Congressional:

- The IOOS Program provided an update briefing to Mike Conathan & Kris Lynch (Senate Commerce Minority Staff) on Thursday, June 4. Jack Dunnigan (NOS AA) and Suzanne Skelley (NOAA IOOS) provided the programmatic update.

Communications:

Upcoming Meetings:

- 7-10 July: PacIOOS site visit.

Cheers,
Zdenka