

Bi-Weekly Z-GRAM - 14 October 2010

[www.IOOS.gov](http://www.IOOS.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 and view under program updates.

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

### Programmatic:

- **Certification:** On 15 Oct we published a Federal Register Notice seeking your comments on the subject of IOOS Certification of Non-Federal Assets. Please provide your comments by 15 November. The Notice is part of a larger effort to gather input on certification standards, or criteria, for the integration of non-federal assets into IOOS as required by the Integrated Coastal and Ocean Observation System (ICOOS) Act of 2009. For further information about this notice, please contact either the Integrated Ocean Observation Committee (IOOC) Support Office at 202-787-1622, or by email at [certification@iooc.us](mailto:certification@iooc.us); or the Integrated Ocean Observation System (IOOS) Program Office at 301-427-2422. Weblink: [http://www.ioos.gov/library/frn\\_certifictn\\_design\\_procs\\_101510.pdf](http://www.ioos.gov/library/frn_certifictn_design_procs_101510.pdf)
- **SAVE The DATE:** On 9 December, US IOOS and Rutgers will commemorate the anniversary of the completion of the Scarlet Knight's Atlantic Crossing. Scarlet Knight will be permanently displayed in the Smithsonian Ocean Hall. The evening will include invited speakers from the White House, Congress, NOAA, Navy and Rutgers, a viewing of the awarding winning documentary - "Atlantic Crossing", followed by a ribbon cutting and reception.

### Initial Operating Capability - Data Management and Communications (DMAC) Subsystem of IOOS® [http://ioos.gov/library/dmac\\_implementation\\_2010.pdf](http://ioos.gov/library/dmac_implementation_2010.pdf)

- **Customer Projects:** **Contact Charly Alexander** at [Charles.Alexander@noaa.gov](mailto:Charles.Alexander@noaa.gov) if you want to be part of the action.
  - **IOOS Biological Efforts:** Hassan has distributed a summary of the action items agreed to for the next 60 days of the project which include planning out the implementation phase of the project and working closely with end users/customers to define candidate “applications.”
- **DMAC Functional Areas:**
  - **Data Standards:** The US Federal Geographic Data Committee (FGDC) has officially endorsed a number of standards from ISO, OGC and elsewhere. The list includes standards in use by IOOS such as ISO 19115 metadata and OGC Sensor Observation Service (SOS), Web Map Service (WMS), Web Coverage Service (WCS), Sensor Model Language (SensorML), and Network Common Data Form (NetCDF). For more information see <http://www.fgdc.gov/standards/fgdc-endorsed-external-standards/index.html>

- Archive: Derrick worked with NDBC to design the first draft of the Weather Buoy/C-MAN station Submission Information Package (SIP). The SIP will be a monthly transfer of weather buoy data for permanent archival at NODC.

**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.

- **High Frequency Radar/Radio (HFR):** Jack has begun work with NDBC and SCRIPPS on an archiving schema for HFR data.
- **IOOS and Links to the National Water Quality Monitoring Network:** No Update.
- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** No Update.
- **Modeling Testbed:** The Testbed Advisory Evaluation Group, continue to be impressed with the progress made over the first quarter of the program. Each of the four teams has moved forward with tangible accomplishments.
  - Estuarine Hypoxia: The team is focusing on the following issues: (1) the role of vertical coordinate representation in estuarine regions with broad shallows and deep channels, (2) open boundary conditions for temperature, salinity, and flow that have more skill than climatology, (3) benefit of simple vs. complex water quality models, and (4) benefit of model resolution vs. other factors.
  - Cyberinfrastructure (CyI): The CyI Team has made significant progress on the web-based graphical browse tools, allowing mapping and time series extraction of testbed model results.
  - Shelf Hypoxia: The Shelf Hypoxia Team continues to make progress assembling the in-situ and modeling datasets. The new EDAC/OceanNOMADS servers have been installed and set up with THREDDS. Work continues on determining additional hypoxia metrics. Maps of oxygen saturation, oxygen utilization and of a stratification metric (potential energy anomaly) are currently being tested.
  - Coastal Inundation: The inundation team has overcome hurdles of large computational domains. They have worked through the preliminary issues that needed to be resolved before meaningful model skill assessments and comparisons can be completed. The Extra Tropical Component Group is initiating runs using the forcing provided by Chen for the selected 2005 and 2007 storms. For the Tropical Component, gridded wind fields are being generated for Hurricane Ike on a 2 km regular grid of the Gulf of Mexico for use by the group and a 450,000 node grid is currently being evaluated for stability.

#### Other:

- **Response to Deepwater Horizon:** NODC has put together a nice summary of the oceanographic data collected during the response phase – publishing the data in accessible formats and showing the comprehensive nature of the observing. The link to this is at: <http://www.nodc.noaa.gov/General/DeepwaterHorizon/oceanprofile.html>
- **Chesapeake Bay Program – E.O. Kick-off Meeting (Fri Oct 8th):** Charly attended an all day coordination meeting in Annapolis at the NOAA Chesapeake Bay Program offices

with other NOAA staff who are collaborating on implementation of the Chesapeake Bay Executive Order. The meeting was called by NOAA CBP Director Peyton Robertson and resulted in a very successful discussion of NOAA priorities and leveraging during FY2011 in particular.

- **CeNCOOS/SCCOOS** – New Podcast: Check it out on YouTube: <http://www.youtube.com/watch?v=zZr8NIByB7I> CeNCOOS/SCCOOS and the Center for Ocean Sciences Education Excellence Networked Ocean World (COSEE NOW) traveled the California coast to document how several very different people use California's Ocean Observing Systems. The incredible results of this collaboration can be found on our homepage: [www.cencoos.org](http://www.cencoos.org) From the website, you can view the movie in Quicktime or listen to the audio only. You can also download the podcast to iTunes! All of these options are also available on the COSEE NOW Ocean Gazing Podcast page for "California's Ocean" <http://coseenow.net/podcast/2010/09/california/>. CeNCOOS and SCCOOS would like to thank - San Francisco Bar Pilots: Captains Rick Hurt and John Carlier; WiLD Coast: Ben McCue; Monterey Abalone Company: Art Seavey; SCCOOS: Julie Thomas and Special thanks to Producer Ari Daniel Shapiro.
- **Follow the Bloom!** CeNCOOS is involved in a multi-institutional effort to identify, track and predict phytoplankton blooms in Monterey Bay. The experiment runs from October 4 – 29th. On the first day of the experiment, October 4th, scientists detected a significant bloom of the diatom, *Pseudo-nitzschia australis*, with its associated toxic domoic acid. Check out our website to see what happened to the bloom and how it was affected by changing ocean conditions. Also find out who is working on the project, what exciting technology scientists are using, and when/where the technology is being deployed in the Bay! You can also check out what types of data and images scientists are studying to understand more about blooms in Monterey Bay. Click to the website daily to explore information and images: [http://www.cencoos.org/sections/news/MontBay\\_HAB\\_experiment\\_2010.shtml](http://www.cencoos.org/sections/news/MontBay_HAB_experiment_2010.shtml)
- **A Unified Approach for Sustainability in a Changing World: From Ocean Policy to Observations:** I joined Margaret Davison, Director NOAA CSC and other US colleagues for a very interesting meeting sponsored by NOAA CSC and The meeting was sponsored by FLAD and NOAA (CSC). The Luso-American Development Foundation (FLAD) is a private, financially independent Portuguese legal entity that was established in 1985. Its primary goal is to contribute towards Portugal's economic, social, and cultural development through financial and strategic support for innovative projects and by promoting cooperation between Portugal and the United States. Its initial assets were based on monetary transfers made by the Portuguese state, as a result of the Agreement on Cooperation and Defense signed by Portugal and the United States in 1983. Following the receipt of an initial endowment, since 1992 the Foundation has operated exclusively from the turnover of its assets. The Foundation financially supports a range of innovative programs, namely through scholarships, grants for research, innovation and development activities, training programs, and academic exchanges. The meeting focused on exploring how to value the natural environment in the discussion of policy-makers. We explored the combining of socioeconomic observations with the natural observations and understand the assessment and indices initiatives. Highlights included bringing together two communities: 1.) The observing element with the 2.) socioeconomic and assessment community. We agreed we need to better understand

what each community is doing and how we can work together. One interesting initiative briefed was the Ocean World Health index – can we come up with a “Dow Jones” number for the oceans? [www.nceas.ucsb.edu/globalmarine](http://www.nceas.ucsb.edu/globalmarine)

**Congressional: No Update**

**Communications and Outreach: No update.**

**IOOS Conference Involvement: This section will highlight those conferences where IOOS is a sponsor or has a session:**

- **November 3-4: Renewable Ocean Energy & the Marine Environment: Responsible Stewardship for a Sustainable Future.**  
Don't miss this important opportunity to interact with researchers, developers, policymakers, and scientists to discuss and identify gaps in the current state of knowledge regarding the environmental impacts of renewable ocean energy. SECOORA is a major sponsor this conference and is helping to coordinate the "Coastal and Marine Spatial Planning" plenary session and also a "Managing Information to Support Decision Making" track. **Register today at:** <http://www.ces.fau.edu/coet/>. SECOORA will also be hosting a workshop entitled, "Data and Information for Offshore Energy Development in the Southeast: How Ocean Observing Can Help to Fill the Gaps," on November 2, 2010, just prior to the conference.

**Upcoming Meetings:** We have merged our calendars and now there is single calendar that allows you to view the IOOS-related meetings. To see this calendar, please visit:

<http://www.usnfra.org/calendar.html> or <http://ioos.gov/calendar/>

- **MACOORA Annual Meeting:** October 28-29, 2010; Stevens Institute of Technology, Hoboken, NJ.
- **Annual Ocean Tracking Network Conference:** Hassan Moustahfid; November 2 – 5; Halifax, NS, Canada.
- **Ocean Energy Conference:** Jack Harlan; November 2 – 5; Palm Beach, FL.
- **Seventh Plenary Session of the Group on Earth Observations (GEO-VII) & Beijing Ministerial Summit:** November 3-5 in Beijing, China; Dr. Robinson will be the NOAA principal attending; Zdenka will attend as NOAA's representative to U.S. GEO along with other NOAA colleagues who are on the U.S. delegation and are supporting this summit.

Cheers,  
Zdenka

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