Bi-Weekly IOOS® Z-GRAM - 6 May 2011
www.IOOS.gov

The Z-Gram is an informal way of keeping you up-to-date on US 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:

- **DON'T BE SHY - WE NEED YOU: System Advisory Committee** [ICOOS ACT: Section 12304 (d)]: The FRN for membership is now out, please apply by **May 16th**. We are looking for all sectors of IOOS to apply: State, Local, Tribal Government, Academia, Industry, NGO. For the FRN visit: http://federalregister.gov/a/2011-6063.
- **How are we progressing on meeting the mandates of the ICOOS ACT**: Check out update progress sheets on www.ioos.gov

Data Management and Communications (DMAC) V0.9 Subsystem of IOOS® To get on the IOOS System Status list which announces service changes, please contact Jeff (Jeff.deLaBeaujardiere@noaa.gov) or Rob (Rob.Ragsdale@noaa.gov).

- **Navy/NDBC project to investigate Navy METOC Data Services Framework (NMDSF)**: Derrick held a project kickoff conference call (4/29) with principals at NDBC and Navy METOC to discuss the statement of work. The NMDFS is the Navy's internal data management solution for exchanging Met/Ocean data within the DoD. The NMDSF software will be evaluated at NDBC to determine if elements of the software architecture can be readily used to support DMAC development.
- **NOAA's National Weather Service' (NWS) NextGen Meeting with IOOS**: Jeff, Derrick and Carmel met with NWS' NextGen Weather Cube Capability Evaluation (CE) team. The purpose of the meeting was to explore whether IOOS data could be used in upcoming NextGen CEs planned for June and September or NWS/AWIPS projects. The NextGen CEs are essentially capability demonstrations using web services and registry technologies to access meteorological data for decision support. It is not clear at this time if technical issues can be resolved in time for the 2011 CEs, but it was agreed that IOOS Operations Division team members would participate in periodic CE data provider meetings to continue technical discussions. A longer term goal of the collaboration is to make IOOS data available to all NextGen 4-D Cube data consumers.
- **IOOS DATA PROVIDERS**
  - **NDBC SOS**: NDBC has provided a next draft of SensorML descriptions for multiple observation platforms such as DART, TAO, Wx Buoys, etc. Jeff reviewed the NDBC SensorML responses. The descriptions are available via the NDBC test server and are not yet released to the public. These provide much-improved metadata about individual platforms and the entire network.

- o **CO-OPS SOS**: Multi-station responses, and other enhancements, were recently added to the test server. These will be migrated to production by the end of May. An announcement is being coordinated between CO-OPS and Charly.
  - o **USACE SOS Project**: On track to meet key NOS milestone - June 30.
- **IOOS RA DMAC Workshop (April 26-28)**: 50 persons participated in the 2011 IOOS Regional DMAC Workshop. The IOOS Regional DMAC component was represented by RA DMAC Coordinators or alternates; guest attendees represented NOAA, USACE, USGS, OOI – CI, OBIS-USA, COL, and Open Geospatial Consortium (OGC). <u>Thank you to Rob for leading this very successful meeting and all of the US IOOS Program Ops Division for working together for another OUTSTANDING session.</u>
  - o Pre-workshop Archive and Metadata Training Session (4/26): The workshop this year included an optional day of training that preceded the plenary workshop discussion. National Oceanographic Data Center (NODC) hosted a half-day session on Archiving and Metadata that was very well received and we look to do again as part of future workshops.
  - o 4th Annual IOOS RA DMAC Workshop (4/27-28): Valuable information was exchanged, shared and revealed that will be used to form a plan for addressing select DMAC functional components. Topics were voted on by the workshop attendees and priority topics that rose to the top included Reference Implementations' Development, SOS Client development, and an "under the hood" assessment (e.g. review of the RAs data management infrastructure) to in part inform the Reference implementation development. One construct proposed in the workshop as a means to moving forward was to focus on selected priority areas in working groups or tiger teams. Which topics we move forward on will be considered in context to the DMAC Plan that Jeff, Carmel and Derrick have been developing and input from other meetings such as the DMAC ST. A summary report will be complete by the end of May.

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.

- **DMAC Steering Team**: No update
- **Fourth in the Series of IOOC Industry Work Shops - next one in the Great Lakes**: HOW GREAT LAKES OBSERVATIONS CAN WORK FOR YOU - The Great Lakes Observing System, in coordination with the IOOC, is holding Sweet Sea Observations: Making Great Lakes Observations Work for you, a workshop to explore how Great Lakes observations programs can provide economic, environmental and safety benefits to industries, government and citizens. The workshop will be held Tuesday, June 21, 2011 at the Edison Boat Club (100 Lycaste, Detroit, Michigan 48214). Who should attend?
  - o Representatives from energy and water utilities, agriculture, manufacturing and marine operations;
  - o Individuals with responsibility for implementation of management systems, government relations and other regulatory-related activities;
  - o Representatives from value-added services and information providers; and
  - o Developers of observing platforms and sensors.

The realization of the many benefits that the Great Lakes can provide depends on observing and monitoring these resources. Great Lakes observations are made by many federal, state and nongovernmental organizations, as well as by private companies. Many of these observations and data resources are being brought together by the Great Lakes Observing System – an integral part of the U.S. Integrated Ocean Observing System. These data, and the forecasts and predictions made from them, are a critical resource for managing the sustainable use of Great Lakes resources as well as contributing to understanding the role of the Lakes in weather and climate.

This workshop will provide attendees with an understanding of Great Lakes observing systems and their uses, will explore existing and emerging user needs for data and information, will provide an opportunity to match use needs with observing system capability, and will help to inform plans for the future enhancement of the Great Lakes Observing System. The focus of the day will be on the energy and water utilities, manufacturing, marine operations and agricultural sectors.

To register, and for more information, please visit www.iooc.us/greatlakes or contact Jennifer Read, Executive Director of the Great Lakes Observing System, jread@glos.us, 734-332-6101.

- **High Frequency Radar/Radio (HFR)**: For more information on all US National HFR efforts please contact the US Project Manager - Jack Harlan, Jack.Harlan@noaa.gov No update

- **IOOS and Links to the National Water Quality Monitoring Network: No update**
- **IOOS and The National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** Bi-weekly conference call with collaboration team (IOOS: Jeff DLB, Charly; OOI: Matt Arrott, Chris Mueller, John Graybeal, Rich Signell). Collaboration project "use case" is on schedule and Chris Mueller is working closely with Rutgers (John Wilkins), Univ. of HI (Brian Powell) and Rich on revised "workflows" for priority observation data needed by the modelers. Testing and assessment of these components will begin during the OOI-CI's first release "transition period" which will run from mid-May through early July.
- **IOOS Modeling Test bed and Related Modeling efforts:**
  - Coastal Inundation: The inundation test bed participants have made progress both in the Gulf of Maine/Scituate Harbor test case and in the Gulf of Mexico test case. In the Gulf of Maine, groups from UMass Dartmouth (FVCOM - C. Chen), VIMS (SELFE -H. Wang), UF (SLOSH - D. Slinn) and BIO (WWIII, SWAN - W. Perrie) have all completed runs for the selected 2005 & 2007 storms enabling inter-model comparisons. Both the FVCOM and SELFE model runs show the strong effect of wave current interaction on the response of Scituate Harbor to both storms. In the Gulf of Mexico, groups from Notre Dame (ADCIRC - J. Westerink), VIMS (SELFE -H. Wang), University of South Florida (FVCOM - B. Weisberg) and LSU (FVCOM - C. Li) have completed extensive tidal inter comparisons and preliminary comparisons for Hurricane Ike. Observational data from 59 stations are being used to evaluate models for tides; data is available from over 200 gauge locations for surge and inundation during Ike.

- o Shelf Hypoxia: Katja Fennel completed the compilation and documentation of multi-source Dead Zone hypoxia validation data for the 2004-2008 time period. She has provided to the CI team for installation on the SURA server and to Hernan Garcia for inclusion on NODC servers. Based on requests by Rich Signell (USGS) and Scott Cross (NOAA/NCDDC), Gabriel Brackman NOAA's Northern Gulf Institute (NGI) set up the archival service on the SURA-enhanced NGI/NOAA OceanNOMADS server at Mississippi State to distribute the Navy's real-time Fukishima and Sendai coastal ocean forecasts.
- o Cyber Infrastructure: Unstructured Grid Support, A beta-version of the library has been distributed that supports time-series extractions. The next development is tackling preliminary ability to extract subsetted gridded data. Matlab Toolbox, A new version of the NJToolbox has been developed by ASA under the guidance of Testbed Advisory Evaluation Group (TAEG) Team Lead Rich Signell.   ASA has implemented and evaluated Ramadda and GI-CAT. ASA and USGS are exploring the use of the ESRI Geoportal Toolkit.   A new branch of ncWMS has been developed by ASA and is available as part of the OpenSource project.

Other:

- **Chesapeake Bay Fisheries Telemetry Workshop (5/4; Annapolis, MD)**: Hassan gave a presentation on the IOOS Animal Telemetry Data Project at this workshop. The workshop focus was on integrating telemetry receivers with CBIBS (Chesapeake Bay Interpretive Buoy System); utilization of the data; integration of the data with IOOS; and improved utility of CBIBS tag data through shared databases. Animal tagging and telemetry experts from the Mid-Atlantic Region attended.

Congressional:

- **Phone call with Dan McCarthy (Senator Frank Lautenberg, D-NJ)**: A call was organized through Office of Legislative Affairs to discuss how the IOOS Regional funding process is conducted. We provided a general overview of the FFO process and the balancing act associated with building a sustainable national observing system through a competitive, appropriations-based process. Mr. McCarthy seems pleased with the information provided and expressed the Senator's continued support for IOOS and MACOORA and member institution Monmouth University.
- **Congressional Staff Update Meetings:** The next round of meetings is tentatively slated for the week of June 13.

Communications/Outreach and Website Updates:

- For coverage on the CaRICOOS buoy commissioning: http://www.governordejongh.com/blog/2011/04/governor-attends-data-buoy-launch.html

IOOS Conference Involvement: This section will highlight those conferences where US IOOS is a sponsor/has a session/relevant sessions of interest to US IOOS:

- **MTS/IEEE Oceans 2011**: No update.
- **Coastal and Estuarine Research Federation: Biennial Conference in Daytona Beach, Florida, 6-10 November 2011**. Julia Bos, *jbos461@ecy.wa.gov;* Kimberle Stark, *kimberle.stark@kingcounty.gov and* Stephanie Moore, *stephanie.moore@noaa.gov,* will co-chair the session - SCI-040; Integrating Automated Ocean Observing Systems with Traditional Monitoring. Please consider contributing an oral or poster presentation to a session they are convening titled "*Integrating Automated Ocean Observing Systems with Traditional Monitoring*". This session builds upon the CERF 2009 session on Automated Monitoring which was very successful in showcasing examples of data from automated sampling systems being applied to ecosystems assessments and sharing some important "lessons learned". **ABSTRACTS due on-line by *May 12*** Please note the session title and number (#SCI-040; Technology and Methods Advancement and Application; Monitoring) when you submit your abstract. A description of the session can be found at http://www.sgmeet.com/cerf2011/Monitoring.asp .

Upcoming Meetings: To see the IOOS calendar, please visit: http://www.usnfra.org/calendar.html or http://ioos.gov/calendar/

- DMAC ST: 10-11 May
- IOOS Biological Data Project Workshop 18-19 May: Hassan, Charly; Honolulu, Hawai'i
- IOOS Modeling Testbed: Storm Surge 5-6 May; First Year Program Results and Review (22-23 June – tentative); Doug; Washington, DC
- International Oil Spill Conference (5/22-27): Sam; Portland, OR
- Joint Workshop of the Acoustical Society of America and the American Fisheries Society (5/26-27): Hassan, Seattle, WA

Cheers,
Zdenka