Bi-Weekly Z-GRAM - 7 Aug 2009
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.

Programmatics:

- Congressional Report: **No change.**
- **Congrats** to April Black who will join IOOS as a Federal Employee. April has been with us as a contractor but successfully competed for the ZA4 – Program Analyst position. We had a strong pool of candidates that were interviewed and April was unanimously scored as the most qualified candidate by the selection panel. This was the position previously held by Kim Cohen.
- FY09: Congrats to the following FY09 IOOS awardees. As always I recognize that there are many partners involved in each award and I am listing the organization and institution for the IOOS Regional Associations and Regional Coastal Ocean Observing Systems (RCOOS) Awards. For the final year of our IOOS projects I will list the lead PI and institution. IOOS Regional Association Awards: GLOS-GLOS; CaRA - University of Puerto Rico Mayaguez; IOOS RCOOS development: NANOOS - University of Washington; SCCOOS - Scripps Institute of Oceanography; GLOS-GLOS.
- FY10: NOAA's FY10 Omnibus has been released, check out http://ioos.gov/funding/ for the IOOS FFO.

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 Steering Team Review**: The IWGOO has approved a proposed process for taking a fresh look at the DMAC ST over the next five months. The process will include a survey of key persons (including all current ST members) and a workshop to review the results. Charly (NOAA IOOS) will be working with National Science Foundation's (NSF) Alex Isern, the current DMAC ST Chair Anne Ball of NOAA/CSC, and NASA's Lucia Tsaoussi. The Consortium for Ocean Leadership will provide key resources to support the workshop and staff support from Nick Rome and Josh Young. This project will begin in earnest in mid-August. The first activity will be for folks to

answer a series of questions related to the current activities of the DMAC ST and where we should take this team. We will be soliciting names to answer this short questionnaire. IF YOU WANT TO PARTICIPATE please let Anne Ball know: anne.ball@noaa.gov.

- **What the DIF**: For all documents and information, please visit the www.ioos.gov website.
    - **IPT workshop (8/11-12)**: The purpose for this workshop is to: (1) Inform on the current status of IOOS work; (2) Obtain strategic recommendations for F2010 projects and (3) Identify technical problems in need of solutions. This year, workshop representation will extend beyond the "regular" IPT membership, which is limited to cross-NOAA line offices, and will include representatives from: Other federal agencies (Nathan Wilkes [EPA], Nate Booth [USGS], Linda Lillycrop [USACE], and Roy Ladner [Navy]); Regional data management representation: Eoin Howlett (MACOORA) and Rob Cermak (AOOS); IOOS Grantee Project PIs: Dan Holloway (OPeNDAP-OGC Gateway Project) [Julie Bosch will brief on the QARTOD to OGC Project and Charly/ Jeff will update on the IOOS Obs Registry Project], and other collaborative partnership representatives: Matthew Arrott (OOI-CI). The workshop agenda has been finalized and is populated with presentation and discussion regarding present status and next steps on the multiple DIF elements: customer applications, data providers, IPT Working Groups (Metadata, Registry), Grantee Projects and Federal/ Regional collaboration work, new/other technologies and governance.
- **CUSTOMER IMPLEMENTATION**:
    - Hurricane Intensity: NOAA's National Center for Environmental Prediction (NCEP) has completed the assimilation of the IOOS DIF Temperature-Salinity profiles for "baseline" basin wide model HYCOM. Two of the three storms have been completed and it is anticipated that the third and final storm will be done between August 15 and August 30. The results from these runs are the initial conditions and boundary conditions for the coupled HWRF-HYCOM model runs. Avichal Mehra (NCEP) and Gustavo Goni (AOML) will be analyzing the model output to determine the impacts of the T-S data.
- **REGIONAL DIF IMPLEMENTATION**: **On track.**
- **DIF ENHANCEMENTS**: No update.

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.

- **Interagency Modeling Activities**: **Significant Accomplishment**. All 11 IOOS Regions now operational with THREDDS Data Server (TDS) version 4 serving model which means all of the IOOS Regions have accessible model output data.
- **IOOS and Links to the National Water Quality Monitoring Network**: The 10 August meeting has been postponed, new date TBD.
- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI)**: No update.

Other:

- **The Scarlet Knight (RU27)**: This blog says it all. "Distance to Flores is about 350 km. RU27 made 19 km along track in the last 24 hours. Assuming favorable currents and few fans from the deep, that makes it about 3 weeks to Flores. I would double the estimate to get the most likely range, making it somewhere between 3-6 weeks. Once we pass Flores, we are in less than 1/2 day range of the research vessels in Faial. We really want to see this glider, and come back with about 1,000 pictures. Biologists want a sample of what is growing on it. Battery usage remains just below the target of 3 amp-hours/day so we have plenty of power for the full mission. Number of iridium redials has a long history of zeros, indicating no drops and good connections each time, so our communications are also good to go for the full mission. One pressure sensor appears to be clogged, but that's why a glider has two, so the second pressure sensor remains good to go. The occasional spins on the glider are even more random, sometimes none, last night one to the left and two to the right, further supporting Antonio's suggestions of an occasional passive passenger like a jellyfish.. Read about the Scarlet Knight's guest that sent it spinning to the right and left several days ago." I guess my family and Scarlet Knight have one thing in common - jellyfish - unfortunately jellyfish hit the coast of South Carolina during our beach week, thank goodness for vinegar and meat tenderizer to soothe the stings! However, not sure that will work for Scarlet Knight. Sign up for the daily blogs and follow along: http://www.i-cool.org/?cat=38
- **Visit to AOOS region and Sound Predictions 2009:** A short but great visit. Monday and Tuesday we were in Valdez, Alaska for Sound Predictions 2009. Sound Predictions 2009 is a partnership between AOOS, Prince William Sound Oil Spill Recovery Institute of Cordova, and the Prince William Sound Science Center of Cordova that has, at its goal, to evaluate regional forecast models for their effectiveness in predicting wind, waves, and ocean circulation in Prince William Sound. Observations included SNOTEL weather stations, NDBC weather buoys, tide gauges, high-frequency radars, C-mann weather stations, oceanographic moorings, a glider and Remus AUV, drifters, and plankton recorders. Teaming up with NASA, JPL the observation data was being evaluated in the Regional Ocean Modeling System, Simulating WAves in the Nearshore, and the Weather Research Forecast. I saw examples of model runs with and without data that showed how important the observations are to the models. Additionally, the NOAA Office of Response and Restoration was testing their GNOME with observation data as was ASA testing their oil spill model in the area. On Tuesday it was the public event for Sound Predictions 2009. We started out on the local coffee hour radio show followed by briefings at the convention center for the public. We were joined by the Speaker of the House of Representatives for Alaska, the Mayor of Valdez, and the Commissioner. From there we met at the dock for an open house on one of the vessels being used through the field study. We were joined by students who had developed remote vehicles to "eat oil," which was simulated by using popcorn. On Wednesday it was up to Barrow, where Glenn Sheehann (BASC) was our host for the day. Glenn is with the Barrow Arctic Science Consortium - read more at http://www.arcticscience.org. We also visited with the Acting Mayor, Harry Brower, Alaska Eskimo Whaling Commission, and even had a by-chance meeting with Rear Admiral Titley; Oceanographer/Navigator of the Navy and Rear Admiral Carr, Chief of Naval Research as they debarked the USCGC HEALY. We spent Thursday in Juneau with the NOAA Alaska Regional Team, Alliance for Coastal Technologies (Alaska Rep), and with NOAA's Alaska Fisheries Science Center Auke

Bay Laboratories, Ted Stevens Marine Research Institute. NOAA's Alaska Regional Team has done a great job of including NOAA's extramural partners such as AOOS and Alaska Center for Climate Assessment and Policy. We had good discussions on the importance of sustained observations.

- **New weather buoy deployed successfully in Little Traverse Bay:** Courtesy of Harbor Springs Harbor Light (Michigan). The launch of a new Little Traverse Bay weather buoy (NDBC 45022) scheduled for 8 a.m. Thursday, July 30, was a success. The buoy is a project of the University of Michigan Marine Hydrodynamics Laboratories, a division of the Department of Naval Architecture and Marine Engineering. The buoy is located at 45º 24.176' N, 85º 05.284 W in 122' of water. Data is available at the University of Michigan website at: http://141.213.128.28/station_page.php?station=45022&unit=M. Live data will also be available on the NDBC website: www.ndbc.noaa.gov/maps/WestGL.shtml. The idea behind the buoy is to have it become part of an established system of buoys on the Great Lakes surveying weather and water conditions, similar to what the National Weather Service has on land. The one slated for Little Traverse Bay has appeal to local boaters as it would provide data from a source much closer to home than is currently available. In addition to the federal funding grant, a coalition of local partners including the cities of Harbor Springs, Petoskey and Charlevoix, Little Traverse Yacht Club, Bay Harbor Lake Marina, Bay Harbor Yacht Club, Irish Boat Shop, and Walstrom Marine have committed $1,500 each toward the buoy's deployment. The commitments could also include in-kind service such as deploying, maintaining, and storing the buoy.
- President Obama's Interagency Task Force on Ocean Policy seeks input; NFRA and OOI briefed the task force. Josie (NFRA) and Tim Cowles, did a great job briefing the Interagency Task Force on the importance of sustaining ocean observing through IOOS and OOI and why the partnerships with our Regional Associations and Academic Institutions are so critical to both programs. The Task Force is led by the Chair of the White House Council on Environmental Quality and the other members are composed of senior-level officials from the agencies, departments, and offices on the existing Committee on Ocean Policy. (See attached.) The Task Force has been instructed to provide its recommendations in 90 days for the first three issue areas and 120 days for the last. **The Task Force seeks input on its work from interested communities, governments, tribes, businesses, associations, non-governmental organizations, and from the general public. If you would like to provide comments, please click here.** The task force asks that you focus your comments on the following issues:
    - National policy for oceans and for coastal and Great Lakes ecosystems;
    - Ocean governance framework;
    - Implementation Strategy to meet the objectives of the national policy; and
    - Coastal and marine spatial planning.

In addition, please feel free to include information about the impact of significant emerging issues in your area of expertise or concern, like climate change or offshore renewable energy development, on jobs and the economics of your business or activity, and any experience you have with current policies and programs — with an emphasis on specific suggestions for improvement where possible. Please note that to meet the ambitious time-frame outlined in the President's Memorandum, the Task Force will build upon the work of the U.S. Commission on

Ocean Policy and the Pew Oceans Commission. These reports, appendices, and the extensive public engagement and records will serve as important foundations for the work of the Ocean Policy Task Force.

- **IOOS and BP/API America Inc Metocean data meeting:** As a follow-up to the NOAA IOOS briefing to the Marine Transportation Research Board meeting, NOAA IOOS and BP America Inc/API led an exploratory meeting on 21 July to discuss Metocean data. Attendees included participants from NOAA's National Data Buoy Center, BP America Inc., API, OTRC, Texas A&M - Corpus Christi, University Corporation for Atmospheric Research, Noble Denton, Consortium for Ocean Leadership, and GCOOS. The purpose of the meeting was to determine if a system similar to wind monitoring can be developed/utilized for waves during and post-hurricane for the entire Gulf of Mexico; formalize a method of BP sharing metocean data with NOAA (and others) and offshore industry, expanding where possible; develop a scope of work and conduct an independent review of current metocean criteria/methodologies in GoM. The IOOS concept was not well understood prior to the meeting; a good discussion on how IOOS and API can better work together was fostered. The next steps include a white paper written by the participants on how we might move forward on the sharing of observation data, enhancing GoM observations for forecasting/ hindcasting hurricanes, and advancing a model and extending the observation network throughout the GoM.
- **NOAA and NSF call for proposals**: The National Oceanic and Atmospheric Administration's National Marine Fisheries Service and the National Science Foundation's Division of Ocean Sciences are pleased to announce a call for proposals for the Comparative Analysis of Marine Ecosystem Organization (CAMEO) Program, which is implemented as a partnership between the two agencies. The purpose of CAMEO is to strengthen the scientific basis for an ecosystem approach to the stewardship of our ocean and coastal living marine resources. The program will support fundamental research to understand complex dynamics controlling ecosystem structure, productivity, behavior, resilience, and population connectivity, as well as the effects of climate variability and anthropogenic pressures on living marine resources and critical habitats. CAMEO encourages the development of multiple approaches, such as ecosystem models and comparative analyses of managed and unmanaged areas (e.g. marine protected areas) that can ultimately form a basis for forecasting and decision support. More information is available at http://cameo.noaa.gov. Proposals must be submitted no later than October 5, 2009. For further information, contact: NSF, Cynthia Suchman (scuchman@nsf.gov) or Dave Garrison (dgarriso@nsf.gov); NOAA, Mike Ford (Michael.Ford@noaa.gov) or Lora Clarke (Lora.Clarke@noaa.gov).
- **NOAA's Center for Sponsored Coastal Ocean Research (CSCOR) announces the opportunity for funding for Fiscal Year 2010 for the Harmful Algal Blooms (HAB) Programs, Coastal Hypoxia Research Program (CHRP), and Sea Level Rise Program.** CSCOR leads the development of predictive, multidisciplinary, regional ecosystem scale research to support sound coastal management decisions. Through CHRP, the focus will be on predictive model development to provide managers with actionable information on the causes and ecological and socioeconomic impacts of hypoxia. The HAB programs will, for the first time, be targeted more specifically to identify regional management needs. ECOHAB will accept proposals from the West

Coast, Alaska, and Great Lakes, MERHAB from the Gulf of Mexico and Caribbean/Pacific Islands, and PCMHAB from the South Atlantic, mid-Atlantic, and Gulf of Maine. The Ecological Effects of Sea Level Rise (EESLR) Program solicits proposals to develop predictive modeling and mapping tools that will enable proactive management of coastal ecosystems in the northern Gulf of Mexico in the face of sea level rise. Coastal management agencies are encouraged to apply as part of the multidisciplinary teams. Full applications for all competitions must be received by 3:00 p.m. EDT on October 14, 2009. To search on all the CSCOR announcements please use CFDA # 11.478. For more information visit: http://www.cop.noaa.gov/research/2009_omnibus.html.

Congressional:

- 29 July: NOAA IOOS (Suzanne Skelley, April Black) and Gary Carter, Director NWS Office of Hydrologic Development, NOAA Integrated Water Forecasting Program Manager, briefed Congressman Maurice Hinchey (D-NY, 22nd District) on Hudson River Monitoring Project with Beacon Institute for Rivers and Estuaries (Beacon). The briefing went very well. Follow-up actions are underway; we anticipate the next meeting with Beacon and NWS colleagues in Silver Spring during the week of September 14. We also spoke with MACOORA to inform their Executive Director on the briefing to ensure that Judith provides information to Stevens Institute to ensure all players are aware of on-going progress.

Communications:

- Linking IOOS with Ocean and Coastal Mapping now posted in www.ioos.gov.
- Chicago Tribune/About 40 Regional AP Stories: U-M launches Great Lakes environmental buoy deal; Associated Press - 3:03 AM CDT, July 30, 2009, Petoskey, MI.
- July/August magazine: *Ocean News and Technology* has the MACOORA press release on the Hudson Buoy and the successful partnership of IOOS, MACOORA, the Weather Service, and the National Data Buoy Center - pp 23-24.

Upcoming Meetings:

- 11-12 Aug: DIF IPT Summer meeting - Silver Spring
- 13 Aug: OOI/CI - IOOS Collaboration Update - Silver Spring
- 13-14 Aug: GEO-IDE Registry Workshop: Silver Spring - Jeff de La Beaujardiere will attend
- 19-12 Aug: Analysis of Acquisition Alternative Workshop (by invite) - Sliver Spring, involves a number of individuals from NOAA, IWGOO, and invited Regional Association members
- 25-27 Aug: Seattle, WA - 2009 IOOS Regional Coordination Workshop
- 9-11 Sept: OOI/CI Planning Meeting - NOAA IOOS (Ops) to participate
- 21-25 Sept: OceanOBS09: Zdenka Willis and Jeff de La Beaujardiere to represent NOAA IOOS
- 26-29 Oct: MTS/IEEE Oceans 09 - US IOOS and OOI - Ocean Observing for the Nation

Cheers,
Zdenka