

Bi-Weekly IOOS® Z-GRAM - 21 May 2011

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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

Programmatic:

- **Farewell:** We bid farewell to Judith Krauthamer, Executive Director to MACOORA. On behalf of the entire US IOOS community, we thank you for your leadership of MACOORA as we continue to grow the US IOOS program. We wish you all the best in your new endeavors. THANK YOU VERY MUCH FOR ALL YOU HAVE DONE.
- **Congressional Report:** The IOOS program has been working steadily to deliver the first IOOS Report to Congress, as required by The Integrated Coastal and Ocean Observing System Act of 2009 (P.L. 111-11) The report has cleared NOAA and is in the process of being delivered to the National Ocean Council Deputy-level who will review the report prior to submitting it to Congress. We will keep you updated as the report continues to make its way through the National Ocean Council. We will notify you when it gets delivered to Congress and posted for public viewing.
- **System Advisory Committee -Don't Be Shy – We need you – Still accepting applications:** System Advisory Committee [ICOOS ACT: Section 12304 (d)]: The Federal Register Notice (FRN) for membership closed on May 16th. We appreciate the strong response we have gotten so far. We are looking for all sectors of IOOS to apply: State, Local, Tribal Government, Academia, Industry, and NGOs. Panel reviews of the candidates will be conducted in June in order to make selection recommendations to the NOAA Administrator. We may accept applications up to the beginning of the panel review, so please keep sending in applications in the form of a resume or CV through the month of May to Jessica Snowden at Jessica.Snowden@noaa.gov. The FRN is still posted online at <http://federalregister.gov/a/2011-6063>.
- **US IOOS Blueprint Capability Assessments:** The IOOS program has been working through the process of gathering data about each federal and non-federal IOOS partner's ability to contribute to the functions and activities required to implement IOOS as defined in the [U.S. IOOS Blueprint for Full Capability](#). This comprehensive effort will enable us to establish a current capability status on the continuum of initial capability to full capability. For those of you participating, keep working through the online assessment tool and the detailed interview questions so we can wrap up data collection in June. For more information on the Assessment process, contact Carl.Gouldman@noaa.gov.
- **Certification:** Joint Working Group meeting held May 19 at Stennis Space Center in Mississippi. The focus of this meeting is coordinating the working group products and merging both products into one coordinated document.

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

- **Customer Project:**
 - 2nd Biological Data Project (5/18-19; Honolulu, HI): Hassan and Charly facilitated the two-day meeting to address the project implementation phase, requirements met and developments for future plans for addressing biological observing data. The workshop was hosted by the Western Pacific Regional Fisheries Management Council (WPRFMC) in Honolulu, HI. Hassan and Charly will be able to provide a more complete report of the workshop proceedings for the next Zgram.

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:** Sam hosted and chaired the IOOC DMAC-ST meeting - a forum that presented the opportunity to connect different agencies. In addition to providing Jeff Lillycrop (USACE) some collective insights, there were also some meaningful inter-agency connections made between NOAA-National Park Service(NPS), NOAA-BOEMRE, and NOAA-EPA. Meeting outcomes will be briefed to the IOOC on 24 May, and final meeting notes will be published by 1 June.
- **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?
 - Representatives from energy and water utilities, agriculture, manufacturing and marine operations;
 - Individuals with responsibility for implementation of management systems, government relations and other regulatory-related activities;
 - Representatives from value-added services and information providers; and
 - 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: GREAT LAKES HF Radar Experiment is underway and is planned to end about May 27. The joint Codar Ocean Sensors-University of Michigan project, funded by GLOS, will have gathered about 2 weeks of standard backscatter data as well as measurements of the radar signal at locations well offshore. Both 5 MHz and 42 MHz systems Codar SeaSondes have been running simultaneously.
- **IOOS and Links to the National Water Quality Monitoring Network: Coordination with EPA:** EPA – IOOS Conference Call (5/10): Rob and Charly, along with Eric Vowinkel, from USGS, talked with Gary Foley and John Wathen, from EPA, about partnering on the integrative beach water quality decision support tool. They discussed leveraging EPA’s Virtual Beach model, data types and variables that would be incorporated and geographic locations for demonstrating the tool. The Southeast Atlantic and Great Lake Beaches were suggested. A memorandum of agreement for this project is anticipated. The next call is scheduled for Thursday, May 26th.
- **IOOS and The National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** No Update
- **IOOS Modeling Test bed and Related Modeling efforts:** Preparations are underway for the year 1 program review of the US IOOS Testbed meeting that will be held 22-23 June, in Washington D.C.

Other:

- **AOOS in Action: New Wave Buoy Deployed in Lower Cook Inlet to Improve Boater Safety:** The first step in implementing the National Waves Monitoring Plan in Alaska occurred Monday, May 9 with the successful deployment of a new wave buoy off Anchor Point in Cook Inlet, Alaska. The buoy transmits real-time information about wave height, and direction, as well as sea surface temperature. The buoy is three feet in diameter, weighs about 400 pounds and is anchored with approximately 1,800 pounds of ballast chain. The anchor is attached to a mooring line approximately twice the water depth at the buoy’s location. It’s equipped with a light that flashes five times in a 20-second cycle (five flashes 2 seconds apart, followed by a 12-second pause). “This is a great example of collaboration among the Alaska ocean observing community,” said Molly McCammon, Executive Director of the Alaska Ocean Observing System (AOOS), the owner and manager of the new buoy. “It’s a key component of AOOS’ initiative to

improve ocean monitoring in Cook Inlet to meet the needs of the inlet's many users, including commercial and recreational fishermen, shipping, resource managers, and the oil and gas industry and oil spill responders. We could not have done this without our partners." The fishing community has expressed particular excitement. "Local mariners can benefit immediately", said Captain Bob Ward, head of the Homer Charter Association. "This data will provide every mariner, commercial, sport charter and private sport vessel operator the opportunity to determine what the sea conditions are before venturing out into these waters. We have tried for many years to establish local resources that will provide this information all in the sake of public safety. Now with the determination shown by the AOOS partners to develop this valuable resource, we can make voyage decisions based on real time information. "Speaking for the professional charter fleet operating on the Cook Inlet," he added, "the safety and enjoyment of our customers can be better provided for. This is one resource that every mariner can access and understand. We look forward to assisting the Alaska Ocean Observing System in developing more resources of this kind." The buoy is part of the national Coastal Data Information Program (CDIP) sponsored by the U.S. Army Corps of Engineers. The buoy was built by a Dutch company, prepped at Scripps Oceanographic Institute in San Diego, and then shipped to Alaska on a US Coast Guard cutter. The chain was provided by NOAA's National Data Buoy Center. Lake Clark National Park and Preserve provided their research vessel, the Chigmit, for deployment. The Kachemak Bay Research Reserve will be on call if the buoy separates from its line or has problems. The KBRR phone number is listed on the buoy if mariners see the buoy adrift. AOOS will own and maintain the buoy. Information from the buoy will be used to assist a wide array of marine operations. Cook Inlet receives high vessel traffic, as 95% of Alaska's goods arrive by barge through the inlet on the way to the Port of Anchorage. Additionally, an active sport fishing fleet departing from Homer and Anchor Point has desired a buoy for many years. Circulation patterns are complicated in the inlet, which also experiences high winds, seasonal sea ice, and tides up to 36 feet in places. For more information please contact: Molly McCammon, AOOS Executive Director, mccammon@aoos.org; Darcy Dugan, AOOS Program Manager, dugan@aoos.org; Terry Thompson, KBRR Manager, terry.thompson@alaska.gov; Julie Thomas, National CDIP Program Director.

- **SECOORA Board Meeting and Annual Members Meeting:** Dave, Linda (USACE) and I had a chance to join SECOORA for their board and annual meeting. Once again, we remain impressed with how far the regions have come in really supporting the goals of US IOOS. Our sincere appreciation for the efforts of Debra Hernandez and her SECOORA team as well as the SECOORA board to advance US IOOS. From SECOORA perspective: (Please go to the SECOORA website for a copy of the presentations - they really show support to stakeholders)
 - Outreach: SECOORA has put together a number of new outreach and legislative material to support both a regional and state by state perspective. They are working closely with GCOOS to ensure in Florida that both RCOOS as are seen as complementary and that Florida works well with both RCOOS.
 - Observations: SECOORA partners were the first to "see" the DWH oil spill from remote sensed capabilities. Satellites become a very important part of the United States government response but because remote sensing infrastructure was already in place the first imagery came from SECOORA partners. SECOORA

continues to support 13 HFR which have been used by a number of Federal Agencies - NWS for marine forecasting and USACE for dredging and local agencies such as the Police departments to help them solve cases. I really appreciated Lynn Leonard's talk on how buoys really open doors to the communities. She also reminded us that it takes constant communication to keep these observations going. Many of the SECOORA instruments are on piers and piers are in many cases privately owned. It takes continual communications to keep these going, particularly when piers are sold to new owners.

- DMAC: SECOORA's core capacity includes the “data commons” (1,000 platforms, 5,000 observations/hr, plus data from federal backbone (NOAA NDBC, NOS, NERRS, NWS, USGS); subregional programs (Carolinas RCOOS, FL COOS); state agencies (SCDNR, DHEC) and Data content and technical support for specific applications. I appreciated Madelyn Fletcher's characterization of DMAC as the “middle ground” for most SECOORA activities – its products and progress depend on observations, modeling, and outreach. Two featured success stories are the South East Marine Portal being adopted by the National Weather Service and the Biological and Habitat GIS being lead by SECOORA partner Florida Fish and Wildlife Conservation Commission.
- Modeling and Analysis: Both the regional model and testbed efforts were featured during the discussions. The South Atlantic Bight and Gulf of Mexico (SABGOM) Circulation Nowcast/Forecast Modeling System provides sea surface, temperature, salinity and currents to support both coastal managers and scientists. SECOORA is wrapping up a successful testbed and have developed a prototype Modeling System for Waves, Currents, Inundation and Hydrologic Flooding for Eastern North Carolina under the FY07 IOOS funding. A look forward includes continued support for the SABGOM system, providing real-time forecasting of inundation and storm surge; develop data products derived from satellite and in situ observations for fisheries stock assessment and providing a decision support tool for beach/shellfish water quality advisories.

In addition to having the subsystem leads provide briefings, there was also a Federal panel that featured NOAA (Regional Team and the National Data Buoy Center); EPA; USGS and USACE. Each panel member talked about efforts that they were part of that can work with/be part of SECOORA. This panel was than followed by breakout groups to foster continued partnership. A number of good ideas were recorded and we look forward to these partnerships to continue to blossom. We also appreciate the close relationship that SECOORA has with the South East Governors Alliance and the fall meeting will feature a joint session.

- **Fleet Numerical Meteorology and Oceanography Command (FNMOC) 50th anniversary and meeting with CeNCOOS, the National Marine Protected Area office and NOS AA staff:** It was my privilege to attend the FNMOC 50th anniversary celebration. It was great to connect with our Navy partner, and the opportunity to meet with RADM Titley, the Oceanographer/Navigator of the Navy who has now assumed additional duties in Marine Domain Awareness and Space; RDML White - Commander Naval Meteorology and Oceanography Command and Tom Cuff, Technical Director of the Naval Oceanographic Office with whom we have a Memorandum of Understanding

(MOU) with. Congressman Farr was the keynote speaker. All speakers talked about the importance of the support that FNMOC provides to defending our nation and support to many humanitarian efforts the United States Navy is engaged in. After the ceremony, FNMOC conducted three panels. The first panel featured a number of folks who had been part of the start up of FNMOC. It was very interesting to hear from Mrs Evelyn Starr about how, from the beginning (1969) they began to use programming to "visualize" what the ocean looked like. The panel took us from the history of the first years of programming, to our ability to use large plots to print weather maps where we would plot individual stations to the first system - the Naval Environmental Data Display System (NEDDS) that magically plotted weather stations on a screen. As I listened to this panel, I was stuck by the fact that today, we are still looking to "visualize" the atmosphere and ocean - the ability to integrate and display the data remains the #1 Requirement. The second panel focused on FNMOC of today and the panel members CAPT James Pettigrew, Commanding Officer -FNMOC; Dr. Simon Chang - Director, Naval Research Laboratory; and Mr. Fred Toepfer - NOAA; spoke on partnership between NOAA and Navy on a single system of atmospheric modeling that delivers the best information possible to both military and civilian leadership; the very close research to operations and the ability to transition new models and capabilities and the mission and dedication of folks who make up FNMOC. The final panel looked to the future of FNMOC and featured Congressman Farr, RADM Titley and RDML White. They focused on the continued importance of FNMOC and the critical nature of the partnerships with NOAA and US IOOS to be able to continue to deliver the best decision support tools to support both military and national crisis. In the afternoon I had a chance to meet with Charlie Wahle; Mimi Dior (CMSP and Marine Protected Area (MPA) respectively); Heather Kerkering, CeNCOOS and Luke Nachbar - NOS Staff. The discussion ranged over a number of issues. Very exciting efforts underway in which NOAA and CeNCOOS are involved in as America's Cup comes to San Francisco.

- **NOAA/USACE Coastal R&D Coordination Workshop (5/5-6; Duck, NC):** Doug presented on the status of the inundation component at the meeting. Other NOAA participants included Frank Aikman, Mary Erickson, Jesse Feyen, David Green, Nicole Kurkowski, Arthur Taylor, Fred Toepfer (by phone), and Andre Van der Westhuysen (NCEP). Notable USACE participants included Testbed members Bruce Ebersole and Jeff Hanson.

Congressional:

- **Briefing on IOOS Connections with the AK Maritime Community Requested by Dave Jansen:** Dave Jansen, Minority Staff Director of the House Transportation & Infrastructure Subcommittee on Coast Guard and Maritime Transportation, requested a briefing focused on IOOS activities and projects in AK with the USCG and the AK Maritime Exchange. This meeting has been scheduled for 1:00 pm on May 25th; Josie Quintrell and Molly McCammon have been contacted about this meeting as well.
- **Congressional Staff Update Meetings:** The following meetings have been scheduled:
 - June 14th – 2:00 pm – Karen Hyun (House Natural Resources Subcommittee)
 - June 15th – 11:00 am – Catherine Hazelwood & Kelly Pennington (Senate Commerce Committee)

- June 15th – 12:00 pm – Anna-Marie Laura (Senator Sheldon Whitehouse, D-RI)
- June 16th – 11:00 am - Nick Battista & Hannah Dean (Congresswoman Chellie Pingree, D-ME)

Communications/Outreach and Website Updates:

- NOS story on IOOS entering biological data world now live at <http://oceanservice.noaa.gov/>
- **Check it out:** DWH One Pager and 5 2011 Regional One Pagers have been added to the outreach section of the IOOS website: <http://www.ioos.gov/messaging/outreachmaterials.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:** We have moved forward with a few preliminary planning steps for the conference. We coordinated with the conference planners and IOOC executive secretariat to arrange for there to be two town hall type panel sessions at the conference on the topics of “Partnerships to integrate ocean observations for customer needs” and “Ocean Observing Technologies.” We will try to get senior program directors from various national and international programs on both of these panels and will try to structure the sessions to include lots of time for interaction and Q&A. Carl Gouldman is still the lead within our office and will be working to coordinate booth space and panel participation moving forward.

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

Cheers,
Zdenka