

Bi-Weekly IOOS® Z-GRAM - 11 March 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:

- **WE NEED YOUR HELP: System Advisory Committee** [ICOOS ACT: Section 12304 (d)] - **The Federal Register Notice is expected for publication Wednesday (3/16)**. I'd like to follow up on the issue of revising the charter, which I mentioned in my last Z Gram. After doing further research, we determined it unnecessary to revise the current charter. With the IOOC already providing Federal guidance to US IOOS, we moved forward to publish the FRN. **We need 2 things from you:** (1) if you interested in serving on the SAC please submit your resume as required in the FRN and (2) we **desired widest distribution** of the Notice calling for memberships, so **if you have a distribution list that we can use to publicize this please let contact Jessica Geubtner, Jessica.Geubtner@noaa.gov**. Part of the process of ensuring diversity is we will need to report how many folks were made aware of the call for participation on the FACA, so if you are offering a list to Jessica, please also let her know the size of the distribution list.
- **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 is to be delivered to Congress no later than March 30, 2011. The IOOS Program worked closely with the IOOC, NFRA and the Regional Associations to produce a report that provides a well-rounded summary of IOOS activities to date, as well as future plans for the system. The report is presently working through the NOAA clearance process and then as the Act requires the NOAA Administrator will submit this to the National Ocean Council who submits this to Congress. The IOOS program has been working with NOAA policy staff and the staff of the NOC on submission of this report. Watch for a future Z Gram announcing that the report has been delivered to Congress and posted for public viewing.
- **FY12 Budget:** The FY 12 Blue Book has been completed and is available online at www.noaa.gov/budget
- **Certification:** After consultations the recommendations from the Data Partner Working group are under revision. The final draft recommendations will be delivered to the IOOC during the April meeting. If the draft recommendations are approved they will then be published in a Federal Register Notice for comment. The RICE working group's initial meeting was a success. The next meeting is scheduled for week of Mar 14.

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).

- **IOOS - Digital Coast linkage:** With help from Miki Schmidt and Josh Murphy at NOAA's Coastal Services Center, a link to the IOOS Data Catalog has been added to the Digital Coast's Data Webpage under "Featured Resources", which can be accessed from the link: <http://www.csc.noaa.gov/digitalcoast/data/index.html>
- **IOOS/NCCOS Water Quality Project – Phase II Planning:** Doug Pirhalla (NCCOS) has projected to have a first draft of the work plan complete by mid-next week (3/14). In preparing to move ahead on this project, Doug received agreement from UNCW to host a SOS server for the FIU water quality data sets.
- **NOAA Chesapeake Bay Office - Next Data Provider:** Discussions between IOOS and NOAA's CBO on implementing the IOOS SOS Web services at NCBO indicate that CBO should be able to do this in roughly three months, first installing an SOS layer on the CBIBS database and then a second data base that serves a variety of data sources (e.g. NERRS, MD DNR).
- **IOOS Data Catalog & Service Registry:** Work on v.2.0 of the IOOS Data Catalog will commence in April, in collaboration with NGDC and GMRI. The Catalog is built by harvesting metadata from compatible data access services. See <http://www.ioos.gov/catalog/>. New work items include:
 - Improve GUI (graphic user interface)
 - Implement API (application programming interface)
 - Simplify access to data from multiple servers
 - Provide routine monitoring & metrics capability
 - Assess possible use of ESRI GeoPortal Toolkit
 - Metadata enhancements at IOOS partners (Regional Associations).
- **Coastal and Marine Spatial Planning:** Charly continues to participate as a member of NOS's CMSP Data and Tools Team. Three meetings took place last week:
 - CMSP Registry: A subset of the CMSP/DTT and some invited guests (i.e. Jeff DLB) met to discuss how best to move forward with a registry. IOOS's progress on the IOOS Registry is a viable option.
 - IOOS and CMSP: CSC's Tony Lavoie (also chair of the CMSP/DTT) spent about 90 minutes with Charly and Jeff talking in more detail regarding opportunities for technical collaboration with IOOS, particularly with respect to v2.0 of the IOOS catalog.
 - CMSP NOAA Data and Tools Bi-weekly meeting: Regular meeting of this team. Agreed to move forward on a DTT implementation "plan" that will include the following items:
 - Priority data integration plan (based on priority data identified so far)
 - Data discovery/metadata
 - Data services/registry
 - Analytical and decision support tools inventory
 - Regional community of practice.
 - Other CMSP highlights:
 - National CMPS Workshop – planning continues for a May3-5 National meeting that is anticipated to include app. 250 participants
 - NOAA CMPS Ecosystems Team – this additional team to be led by Charlie Wahle will spin up in the next 2-3 weeks and focus in particular on the intersections between CMSP, IEA's and EBM.

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.

- **White House National Earth Observation (NEO) Task Force.** The National Earth Observation (NEO) Task Force co-chairs the have confirmed the following individuals as members of the NEO Policy Team to draft the 1st chapter and other policy elements of the national Earth observations strategy and governance plan. The team must complete a draft document by the end of April/early May. The team members are: Glen Bethel, USDA Remote Sensing Advisor, Foreign Agricultural Service, USDA; Peter Colohan, Senior Policy Analyst, OSTP; Jim Devine, Senior Science Advisor, Office of the Director, USGS; Wanda Ferrell, Scientist, Biological and Environmental Research Division, DOE; David Halpern, Scientist, Earth Science Division/HQ and Jet Propulsion Lab, NASA; James Whetstone, Special Assistant to the Director for Greenhouse Gas Measurements, Office of the Director, NIST and Zdenka Willis, Director, Integrated Ocean Observing System (IOOS), National Ocean Service, NOAA.
- **DMAC Steering Team:** Sam has continued to make progress on the DMAC Steering Team development, including confirmation of agency representatives to the DMAC-ST from NPS, MMC, NSF, USGS, NOAA, Navy, USCG. He also began to prepare a roster of non-federal participants for approval by IOOC co-Chairs. An initial meeting agenda is in draft and he worked with the Consortium for Ocean Leadership (COL) to prepare for logistics and web-based information sharing. This WG is addressing specific elements of the ICOOS Act.
- **High Frequency Radar/Radio (HFR):** For more information on all US National HFR efforts please contact our US Project Manager - Jack Harlan, Jack.Harlan@noaa.gov
 - Frequency Licensing: The National Ocean Council took a briefing on this subject. The DOD representative to the NOC requested a month to look into the issue. The negotiations between NTIA (Federal position) and FCC (non-Federal position) are on hold.
- **IOOS and Links to the National Water Quality Monitoring Network:** Beach Water Quality Project - National Beach Conference – Miami, FL, March 14-17: Rob, Eric Vowinkel (USGS/MACOORA) and Craig Swanson (NERACOOS/ASA, Inc.) will be presenting a poster and leading a discussion on the IOOS Regional Beach Water Quality Project at the conference's Predictive Tools Forum on Monday, as part an all day Pre-conference training session. The Predictive Tools Forum will cover aspects, challenges and development in predictive modeling and examine EPA's Virtual Beach model and other current approaches. In addition to this presentation, a poster will also be presented. In addition to Eric, Craig and Rob as well as Judy Krauthamer whom will be attending the conference, Ru Morrison, Dwayne Porter, Megan Tremel, Josh Kohut and Heath Kelsey are on the working group developing this project.
- **IOOS and The National Science Foundation (NSF) - Ocean Observatories Initiative (OOI): No update**
- **IOOS Modeling Testbed and Related Modeling efforts:**
 - Collaboration Meeting with NOAA/NWS's National Center for Environmental Prediction (NCEP): Dr. Louis Uccellini (NCEP Director) invited the U.S. IOOS/SURA Testbed Team Leads to discuss academic partnerships with NCEP.

Dr. Uccellini is very interested in discussing the development of a Coastal Environmental Modeling Testbed as part of NCEP. Doug, Zdenka and NOAA/Coast Survey Development Lab's Mary Erickson also attended. The meeting objective was to explore tactics for easing the transition of model improvements into the Federal Operational Centers. To facilitate next steps in this discussion it was agreed that NOAA/Doug would begin drafting a "programmatic" concept of operations to document how these activities could emerge.

- Shelf Hypoxia: John Harding hosted a meeting of the testbed Shelf Hypoxia team at SURA. The meeting included an introduction by Don Wright, a status and summary of the Estuarine Hypoxia team (Carl Friedrichs) progress and a number of presentations by team members. The agenda and accompanying materials can be found on the Testbed website at <http://testbed.sura.org> under the Shelf Hypoxia tab. Notable testbed accomplishments within Shelf Hypoxia include "accelerated development of NOAA NCDDC OceanNOMADS capability as Navy "White Front Door" for archived operational ocean nowcast/forecast products". Doug attended.
- Inundation: Rick Luettich hosted the testbed Inundation team at UNC-CH. Doug Levin presented the concept of the 6 steps for Transition to Operations and requested help from the group with regards to content and thoughts on where to publish. The agenda for this meeting can also be found on the <http://testbed.sura.org> web site under the Inundation Team tab.
- Meeting with Gavin Smith, Executive Director of UNC's Center for the Study of Natural Hazards and Disasters (3/9): Doug discussed with Gavin the center's capabilities and its ability to support and work strategically with IOOS to help achieve the Seven Societal Goals.
- Transition from Research to Operations Technical Report: The latest draft was distributed for review, with newly integrated material received from Chris Mooers.
- State of the Testbed" Brief: On Monday March 14th, Doug will present the "State of the Testbed" report to NOAA's Research Council.

Other:

- **IOOS Animal Telemetry Observations Workshop**: More than 40 scientists and technical managers attended the workshop representing federal and state agencies, academia and industry. The goal of the workshop was to discuss the establishment of a sustainable U.S. marine animal telemetry "network" of observations and link these activities to the U.S. Integrated Ocean Observations System (IOOS). The meeting was hosted by the NOAA Fisheries Southwest Fisheries Science Center /Fisheries Ecology Division Lab in Santa Cruz. Participants identified current challenges, opportunities and customers for telemetry data as potential roles for IOOS per coordinating a national network. A list of action items and recommendations for next steps was also developed. Key immediate items will include:
 - a Wiki for post-workshop collaborations

- detailed workshop synthesis report (anticipated by June 2011)
- an overview of existing telemetry/tagging capacity
- presentation to NOAA leadership of workshop results/recommendations.
- workshop participants and the agenda can be found on the IOOS Website: http://www.ioos.gov/animal_tagging/welcome.html)
- **GCOOS Parties Meeting in Houston:** IOOS staff attended this meeting and gave a presentation on certification, Independent Cost Estimate (ICE), gaps analysis, and Blueprint Assessments. While at the meeting, staff provided input on gaps analysis and regional observing plan development; answered questions on national activities.
- **New Data products hosted on the AOOS Data Portal:** A series of new atmospheric/oceanographic models, in addition to other observational data products, are now available off the AOOS model explorer application. This new resources include the NDFD atmospheric model, the ROMS Gulf of Alaska and North Pacific Circulation forecast, and the newly released Multisensor Analyzed Sea Ice Extent (MASIE) data product developed by the National Snow and Ice Data Center.
- **CONGRATS to Oregon and Science University's (OHSU) -Center for Coastal Margin Observation & Prediction (CMOP) Awarded \$17 Million Renewal Grant from the National Science Foundation:** CMOP received this renewal grant to continue its research of coastal margins for the next five years. Coastal margins are the biologically rich but highly vulnerable environments where rivers meet the ocean. “A major goal of CMOP is to better integrate science in society’s quest for the sustainable management of coastal margins,” says Antonio Baptista, Director of CMOP. The center’s geographic research focus is the Columbia River, from the Bonneville Dam to the coasts of Oregon and Washington. CMOP routinely works with federal and state agencies, Native American tribal organizations, industry, academia, and the Oregon congressional delegation, to constructively inform management, policy and environmental health decisions.” CMOP has a strong partnership with NANOOS and we are very pleased that CMOP has been renewed for another 5 years. It is another example of 2 observing programs US IOOS and CMOP linking together and in a coordinated way providing a continuous stream of ocean and coastal observation, data management, modeling and analysis and ultimately products and services - BRAVO ZULU.
- **The Group on Earth Observation’s (GEO) third Coastal Zone Community of Practice regional workshop - focused on earth observations and the wider Caribbean:** I participated in this successful workshop that focused on how Earth Observations can support sustainable tourism in small island states. Our goal within the community of Earth observations and derived information was to start the conversation with the tourism industry and small island states – emphasizing the Caribbean. We talked about specific needs, challenges, and capabilities related to sustainable tourism and explored how Earth observation related services can support decision making related to all facets of the tourism industry. We saw strong participation from diverse stakeholders such as marine, water and environmental scientists and modelers; earth and climate sciences specialists; government planners; non-governmental organizations, and operators of tourism infrastructure and programs. Our Caribbean region of IOOS hosted the workshop. What struck me most was the significant reliance on tourism across the wider Caribbean and as one of the briefers stated - the targets that are of the greatest importance to the national economy of tourism, but what is visited is not protected e.g. mangroves, spawning grounds and corals reefs. We need to be able to communicate the

need for observations, monitoring and good coastal zone practices in a way that resonates in the short-term to financial return and in the long-term of sustainable tourism. And AGAIN data integration was one of the major needs identified by this group.

- **National Science Foundation GeoData Workshop on Data Life Cycle, Integration and Citation Workshop:** Copies of briefings and notes from the break-out sessions have been posted to <http://tw.rpi.edu/web/Workshop/Community/GeoData2011>. Jeff reported, of greatest interest for future work was the concept of Data Citation, because IOOS data partners should have a way of getting credit for the data they provide, and data users may need to track lineage back to the source. Jeff was also able to spend time with NGDC's Ted Haberman who we are collaborating with on v2.0 of the IOOS Catalog.
- **Meeting with Fleet Numerical Meteorological and Oceanography Center in Monterey, CA:** Charly and Hassan met with FNMOC Technical and Science Director Mike Clancy, while on travel for the Ocean Telemetry Workshop. FNMOC CO Captain James C. Pettigrew provided an overview brief about FNMOC and Mike gave us a short tour of the facility. We also discussed the on-going planning to potentially have U.S. IOOS host the "public-facing" Navy ocean data.
- **Meeting with NOAA Fisheries – Environmental Research Division, Pacific Grove, CA (3/1):** Charly and Hassan visited with Roy Mendelssohn and team to discuss the IOOS Biological Observation Data Project, Animal Telemetry Observations and the OOI-CI Collaboration.
- **Field Trip to Ano Nuevo State Park, Pescadero, CA:** Hosted by UCSC's Dan Costa, Zdenka, Charly, Hassan and Jennie were give a behind-the-scenes, up close and personal tour of the beach area of Ano Nuevo where thousands of California elephant seals come to give birth and breed each spring. Dan guided us past hundreds of seals – mostly males and pups – and gave us an excellent overview of their natural history. This trip was originally planned as a second media-event to give the press more insight into how tagging of these animals helps scientists better understand both the animals and their ocean environment. Jennie will work with Dan on a possible media event here later this spring.

Congressional: No Update

Communications/Outreach and Website Updates:

- Media outreach to announce the partnership between US IOOS and the Animal Tagging and Telemetry community was very successful. The event took place at Stanford University, Hopkins Marine Lab. The even attracted media from: KION (CBS/FOX affiliate in Monterey), KGO (ABC in San Francisco), The Monterey Herald, Access Monterey TV, and KGO radio station from San Francisco and San Jose showed up to the event. Ongoing work on national story through viewing of elephant seal tagging on Ano Nuevo Island. Hundreds of media related pick-ups from story. Most significant highlighted below:
 - KGO TV (ABC Station from San Francisco):
http://abclocal.go.com/kgo/story?section=resources/lifestyle_community/green&id=7995692
 - The Monterey Herald:
http://www.montereyherald.com/local/ci_17545748?nclick_check=1#

- Eureka Alert!: http://www.eurekaalert.org/pub_releases/2011-03/nh-noo030311.php
 - Ocean Leadership: http://www.eurekaalert.org/pub_releases/2011-03/nh-noo030311.php
 - PHYSORG.com: <http://www.physorg.com/news/2011-03-national-ocean-marine-animal-migration.html>
 - SeaDiscovery.com: <http://www.seadiscovery.com/mt/mtStories.aspx?ShowStory=1044032055>
- **AOOS in Action: Faces of Climate Change Videos** - The AOOS website now features three compelling short videos that showcase the dramatic changes in Alaska's marine ecosystems through interviews with scientists and Alaska Natives, whose ancestors have lived on the shores of these northern seas for thousands of years. *Climate Change in Alaska's Seas, Disappearing Sea Ice and Life on the Ice*. COSEE Alaska, the Alaska Marine Conservation Consortium, Alaska Sea Grant, and the Alaska Ocean Observing System produced the videos. A related podcast, "Imminent Thaw," produced by COSEE NOW and COSEE Alaska, can be heard at www.coseealaska.net.
 - **Website updates:** RAs Websites Harmonization continues and sincerely appreciate that all RAs are working with us to accomplish: Thank you to NERACOOS, PacIOOS and CeNCOOS who have implemented the changes.

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:** The call for papers is now open. We are evaluating how best we can show case Ocean Observing at this meeting. One of the ideas that we are mulling over is going beyond just presenting papers to a coordinated Ocean Observing - Delivering the Benefits display/room. Chris Ostrander, (US IOOS/PacIOOS) has confirmed that he has flat screens that we can use, and has access to a small science on the sphere. We could do this via booth space or even potentially coordinating this in one of the rooms where talks will be held and have a set of talks with the displays behind us. We are also evaluating ideas for town halls that are in concert with the Partnerships across the Pacific. If you are interested in participating please send me an email over the next several weeks.
- **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> . When submitting an abstract to this session, *select this session in the first Session Choice drop-down*. Sessions are listed in numerical order in the drop-down (i.e., SCI-001, SCI-002, etc.). Submitters are also required to select a second choice session in the second drop-down. The session will focus on approaches for integrating data from multiple monitoring techniques, with an emphasis on techniques utilizing data from automated high-frequency observing systems, to conduct ecosystem assessments in coastal and estuarine environments. Merging data from automated and traditional sources can be problematic, as is extrapolating data collected on a small spatial scale to a large scale. However, integration of complex datasets from automated systems with datasets from traditional collection sources can extend monitoring and assessment capabilities. Abstracts are invited that highlight examples where inventive, tailored techniques have been used to combine multi-dimensional data into powerful, comprehensive, ecosystem narratives.

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

- National Beach Conference (3/14-17): Rob; Miami, FL
- Unmanned Systems Common Lifecycle Infrastructure Workshop; Sam; Stennis, MS; March 29-31
- CaRA General Assembly and Buoy Launch: 12, 14 April
- IOOS RA DMAC Workshop: Ops. Div.; Silver Spring, MD; April 27-28, 2011
- Radio Operators Working Group Meeting (4/25-28): Jack; Santa Barbara, CA
- DMAC Steering Team (April): Sam; Washington, D.C.
- IOOS Biological Data Project Workshop (mid-May): Hassan, Charly; Honolulu, Hawai'i
- IOOS Modeling Testbed - First Year Program Results and Review (5/26-27 – tentative); Doug; Washington, DC
- International Oil Spill Conference (5/22-27): Sam; Portland, OR
- Northeast Coastal and Ocean Data Partnership Annual Meeting and Metadata Workshop (6/8-9): Charly (tentative); Rye, NH

Cheers,
Zdenka

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