

Bi-Weekly Z-GRAM - 30 April 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:

- **Job Announcement:** IOOS Program Vacancy Announcement: Band 4 Physical Scientist with a strong focus on data management at IOOS is now posted on USA Jobs. This position is the backfill slot for Marcia Weaks, who is retired (as April 30th). Job Announcement Number: NOS-AA-2010-0004.

### Initial Operating Capability - Data Management and Communications (DMAC) Subsystem of IOOS®:

- **DMAC Implementation Guidelines Posted on the IOOS Website:** As we move together to DMAC, we have posted Version 1 of Guidance for Implementation of the Integrated Ocean Observing System (IOOS®) Data Management and Communications (DMAC) Subsystem, NOAA IOOS® Program Office White Paper (v1.0), March 12, 2010. As we look forward to assessing RCOOS development, please use this white paper as guidance: [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.
- **Technical Updates:** No Updates.
- **IOOS Data Portal (Registry/Catalog/Viewer):** Sam Walker (IOOS Program) continued documentation of IOOS community requirements for the Viewer. The initial target audience is program managers, but this will expand after beta publication. So far, Sam has surveyed 16 people representing all major sectors. Sam will be providing the Program Office with a summary once the functional needs have been aligned with the existing list of technical requirements.
- **IOOS Regional DMAC Team Conference Call (4/21):** The team reviewed suggestions made by Jim Potemra and Kyle Wilcox as part of the Model Interoperability Working Group in a previous days' call for addressing the Model Interoperability issues identified in the IOOS Regional DMAC Workshop. One issue was how to monitor the THREDDS catalogs and suggestions made were to identify and collate a list of the THREDDS Server POCs from the regions and employ NetCheck, an automated tool used by Rich Signell and downloadable from the CoastWatch's West Coast Regional Node Website, to check a THREDDS server's status. On the tool/code sharing action, Lisa Hazard (SCCOOS) and Matt Howard (GCOOS) are leads and they are drafting a white paper that will be presented for the next conference call. The next conference call is May 5th.

**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.

- **IWGOO 3rd Industry Day - 25 May 2010 - La Jolla, CA:** The Interagency Working Group on Ocean Observations (IWGOO) is cosponsoring a stakeholder workshop on 25 May 2010 at the Scripps Institution of Oceanography in La Jolla, California. The workshop will explore how monitoring and understanding the ocean delivers economic and environmental benefits to industries, government, and the citizens of California. For more information, or to register for this workshop, please visit: [www.oceanleadership.org/iwgoo/california](http://www.oceanleadership.org/iwgoo/california).
- **High Frequency Radar/Radio (HFR):** A letter has been sent to the IOOS RA Executive Directors to nominate Regional Reps to the HFR Steering Team. Jack Harlan will work with federal partners to identify members.
- **IOOS and Links to the National Water Quality Monitoring Network: Seventh National Monitoring Conference - Monitoring From the Summit to the Sea (4/25-29; Denver, CO):** Over 750 individuals from state, non-profit organizations, local municipalities, and the federal government attended and presented on the wide range of water issues facing the coastal ocean to the upland rivers. IOOS was mentioned in several of the presentations that Rob Ragsdale attended. A few included: Briefs from Ru Morrison and Paul Currier on the development of eelgrass-based nutrient criteria in New Hampshire's Great Bay Estuary; Steve Wolfe (FL DEP), for Ann Jochens (GCOOS), presented the development of a Harmful Algal Bloom Integrated Observing System for the Gulf of Mexico; and Paul Currier briefed on the Ocean Data Partnership Exchange Network. Rob discussed collaboration opportunities with Ru Morrison regarding a regional water quality project, specifically to address beach water quality issues (suggested by Ru in the IOOS-Regional Water Quality Workshop January 2010). He also talked with Gunnar Lauenstein (Manager NOAA Mussel Watch Program) about collaboration opportunities, and Chuck Spooner in regards to working more closely with EPA on data interoperability. Rob also noted opportunities to engage with the National Park Service through their long-term Inventory and Monitoring Program per the biological observations they collect. Rob will follow up on these opportunities and stay engaged with the water quality community.
- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** OOI Community Workshop (April 29-30; Tempe, AZ): Charly was invited to present an IOOS brief to the participants attending this workshop. In particular, Charly's brief focused on the IOOS DMAC and OOI-CI (cyberinfrastructure component) collaboration project that will "stress test" the OOI infrastructure while using IOOS standards and protocols. This workshop is one in a series being staged for the purpose of introducing the Ocean Observatories Initiative to a breadth of ocean scientists, educators, and the broader science community who may be unaware of what is OOI, its design, and its capabilities. The first workshop was held in Baltimore in November 2009. The agenda for the April 2010 workshop and additional information about OOI can be found at: <http://www.oceanleadership.org/programs-and-partnerships/ocean-observing/ooi/ooi-community-workshops/>
- **DMAC ST:** Sam Walker (DMAC ST Chair) has drafted Version 2 of the Terms of Reference and continues to develop the membership roster.

## Other:

- **Response to Deep Horizon:** All of NOAA is providing support to this oil spill. The lead for NOAA is the National Ocean Service's Office of Response and Restoration and NOAA's Homeland Security Office. The IOOS Program and the IOOS Regional Partners are providing support to OR&R and NOAA HS. It is very important that this support be coordinated. Jack Harlan is our liaison to communicate IOOS Regional Support. Jack has coordinated the re-installation of HF radars in the NE Gulf of Mexico, which are now back on line- SUPER. Regional partners in this activity are the University of Southern Mississippi (USM), Codar Ocean Sensors, and Scripps. The information is up on the NDBC and SCRIPPS HFR servers. Other support as follows: GCOOS partners Texas A&M are running a Regional Oceans Model System (ROMS) being used by OR&R. GCOOS has consolidated oil spill response products from the GCOOS region: <http://gcoos.tamu.edu/products/oilspill.html>. SECOORA and SECOORA partner USF have the following websites up: <http://secoora.org/groups/staff/oil-spill-gulf-secoora> and <http://ocgweb.marine.usf.edu>. and CSTARS-UMiami (Graber) satellite radar and electro-optical imagery <http://cstars.rsmas.miami.edu/> At the request of NOAA's Homeland Security office, on April 30 the IOOS Program provided a graphic of the observation asset layout, which was based on the IOOS Registry. Daily, Jack Harlan is providing an update to NOAA on assets that the IOOS Regional Partners have offered and thank you in advance for all of the efforts. Coordination is key and I really appreciate that all of you are going through Jack on support, the Director of OR&R has expressed his thanks for that.
- **GLOSS Annual Meeting:** Dave Easter and I attended the GLOS annual meeting. We were joined by Rex Hervey (NDBC), Jennifer Day (NOAA Regional Collaboration Team), and Steve Ruberg (GLERL). Additionally, we had representation from USACE as well as USGS partners. The first afternoon was spent talking with stakeholders on problems that they face that are not being addressed. This information was collected as the GLOS board is undertaking an adaptive management framework to determine GLOS priorities. The second morning consisted of a series of presentations on GLOS activities. We were able to provide: an update of IOOS from the National Program; an update on data management and modeling efforts (see communications below to view the link to the YouTube video on the dye test); the very successful mash-ups workshops conducted last fall; and the status of the observing system within the area, including a successful transition of buoy technology from the University of Michigan to S2 and local company. Additionally, this meeting was a joint US/Canada meeting (held in Canada) and we were briefed on the GEOSS US/Canada testbed and the survey that Canada is doing on understanding the state of play with observing systems within Canada. My sincerest thanks to GLOS for the invite, and Dave and I really appreciate the progress that GLOS is making. Furthermore, the meeting was also broadcast over webinar and conference call for additional participation.
- **NOS Acting Assistant Administrator - David Kennedy Meeting with the Alliance for Earth Observations:** Charly and I joined David Kennedy (NOS AA) and Peter Hill in a meeting with members of the Alliance for Earth Observation. Kennedy began with expressing his understanding and support for IOOS and that he is seeing some positive momentum in IOOS. As the Chair of the Interagency Working Group on Ocean

Observing (IWGOO), Kennedy stated that he has just taken over but he is seeing the other federal agencies coming back to support IOOS and that the JSOST was showing interest in the work of the IWGOO. Kennedy expressed our desire to partner with industry to build US IOOS. Kennedy then had a good dialog with members of the Alliance for Earth Observations on the challenges they see and how we might overcome these together.

- **IOOS Obs Registry Visit to the University of South Florida (4/14-16; Tampa, FL):** Hassan Moustahfid (IOOS) traveled to the University of South Florida (USF) to meet with Vembu Subramanian about the IOOS Obs Registry. The Registry maintenance schedule and changes to be made were discussed. A maintenance schedule and list of improvements to be made were developed if IOOS continues to maintain this Registry. Near-term issues to address include: Observation Registry Security Issues, update to validation tool, modifications to the record builder, and update of website text. Hassan also met with several other USF faculty members and individuals from NOAA's Southeast Fisheries Science Center and Florida Fish and Wildlife Research Institute:
  - Dr. Robert Weisberg (Professor of Physical Oceanography, College of Marine Science, University of South Florida; and SECOORA Board of Directors). Hassan had a good conversation with Bob Weisberg about SECOORA and IOOS. He is encouraging IOOS to focus more on fisheries related issues.
  - Hassan met with individuals from NOAA's Southeast Fisheries Science Center Regional Office and Florida's Fish and Wildlife Research Institute (FWRI) about the IOOS Biological Observations Project.
  - Dr. William Hogarth (Dean, College of Marine Science, University of South Florida). Hassan discussed IOOS and thanked Dr. Hogarth for his support in hosting the IOOS Observation Registry. Hassan and Bill also discussed fisheries and the needs for programs such as IOOS to coordinate ocean observations and data management to serve the fisheries community.
  - Dr. Frank Muller-Karger (Professor of Biological Oceanography and Remote Sensing, College of Marine Science, University of South Florida) invited Hassan to give a presentation about IOOS to his graduate students. It was a great opportunity to inform them on IOOS and of the role of the Regional Associations in the IOOS enterprise. This was the first time many of the students had heard about IOOS.
- **International Council for the Exploration of the Seas (ICES) working group on the Northwest Atlantic Regional Sea (WGNARS) (4/20-22; Woods Hole, MA):** IOOS was represented at this meeting by Ru Morrison (NERACOOS), Josh Kohut (MACOORA), and Hassan Moustahfid (IOOS). IOOS briefs were presented during the joint meeting of WGNARS and ICES Global Ocean Observing System WG. Ru Morrison presented on Ocean Observing - a U.S. Perspective and NERACOOS. Josh Kohut gave a short presentation about MACOORA. Hassan presented the IOOS Biological Observations Project: Making observing data "talk" amongst the data sets and making it accessible. Questions were focused on how to access IOOS data. Participants in this WG want to see an easy and accessible way to obtain observing data, for example an IOOS data Access Portal. Draft recommendations and terms of references were proposed and a report will be published in June 2010. Five terms of references were proposed for this ICES WG: (1) Initiate the development of an integrated assessment of the Northwest

Atlantic region to support ecosystem approaches to science and management; (2) Develop a framework of coordinated ocean observation systems in the Northwest Atlantic region to support an integrated assessment of climate change and its effects on the marine ecosystem; (3) Develop a framework for compilation and synthesis of ecosystem survey data throughout the Northwest Atlantic region to support the assessment of biodiversity and climate impacts; (4) Develop an integrated approach to the conservation of coastal habitats to support place-based ecosystem management; and (5) Propose scientific objectives and governance structure within the ICES RSP.

- **NOAA Buoy Data Reader for iPhone:** A New iAPP, made by Verona Solutions, LLC, identifies NOAA weather buoy locations near you and brings buoy data to your iPhone, allowing you to read weather data on your cellphone:  
<http://itunes.apple.com/us/app/noaa-buoy-data-reader/id292148184?mt=8>
- **CONGRATS to CODAR for selection of NOAA SBIR award:** Congrats to CODAR, who was awarded a Phase 1 SBIR award, which will evaluate the use of Automatic Identification System and Ships of Opportunity to calibration of HFR.

### Congressional:

- Suzanne and April concluded all the quarterly updates on the progress of the ICOOS Act. All briefs went well and the Hill is very interested in how the federal and non-federal partners are progressing in implementing and building US IOOS.

### Communications:

- See the GLOS video on the dye study that they conducted last summer to test the Huron to Erie Corridor NowCast/Forecast Model:  
<http://www.youtube.com/watch?v=pzdEbrHVyzU>.
- The Basic Observation Buoy (BOB) project, a partnership between COSEE-SE, SECOORA and the NOAA Chesapeake Bay Office (CBO), has been showcased in two South Carolina newspapers recently: "Student buoy project keeps Beaufort River data collection afloat": <http://www.islandpacket.com/2010/04/10/1202865/student-buoy-project-keeps-beaufort.html#ixzz0lGkBDoyh>, and "Student project provides stream of scientific data": <http://www.thestate.com/2010/04/12/1240090/student-project-provides-stream.html>

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

- **New - JSOST Workshop on Attaining Operational Marine (Oceans, Coasts, and Great Lakes) Biodiversity Observations – 24-27 May 2010 – Washington, DC:** IOOS is co-sponsoring this invitation-only workshop with other NOAA partners as well as NASA, MMS, and ONR. The goal of the workshop is to identify the best options for implementing a local, national, and global biodiversity observing network. The expert group will address current biodiversity observation capabilities and scope future solutions for shallow and deep hard bottom, soft bottom, and pelagic environments. Workshop

results will be posted on a Wiki for public comment, June-December 2010. Outcomes will be presented to the Interagency Working Group on Ocean Partnerships Ad Hoc Group on Biodiversity (including Gabrielle Canonico and Hassan Moustahfid from the IOOS program office) for discussion of next steps and how to implement a Biodiversity Observing Network.

- **MTS / IEEE OCEANS'10 - Call for Papers:** OCEANS is the annual conference of your Marine Technology Society. This year's North American OCEANS Conference will be held in Seattle, WA, 20-23 September 2010. It is sponsored jointly by MTS and the Oceanic Engineering Society of IEEE. More information on the conference can be found at [www.oceans10mtsieeseattle.org](http://www.oceans10mtsieeseattle.org). Dave Martin and Jan Newton (NANOOS) are leading the IOOS charge this year. I encourage everyone to submit their abstracts by **15 May 2010**. The **IOOS session is SEA 01 - "Operational Ocean Observing Systems."** Having said that, there are also other sessions into which IOOS activities fit. I will ask that if you're a part of the IOOS community, please use the **IOOS PowerPoint template** so that IOOS is well-recognized at this meeting. Last year, forty papers were tied to IOOS and it did make a difference in folks' understanding that U.S. IOOS is really providing value to the nation.
- **ASLO - Advancing Science of Limnology and Oceanography** (formerly the American Society for L&O), **session submitted.**
- **AMS - Ninth Conference on Coastal Atmospheric and Oceanic Prediction and Processes, 27 September – 1 October 2010, Annapolis, MD - Call for Papers:** Special IOOS session - "Coastal Oceanography and Meteorology -from Observations to Improved Forecasting." The Ninth Conference on Coastal Atmospheric and Oceanic Prediction and Processes, sponsored by the American Meteorological Society, and organized by the AMS Committee on Coastal Environment, will be held in Annapolis, MD, from 27 September to 1 October 2010. Preliminary programs, registration, hotel, and general information has been posted on the AMS website (<http://ametsoc.org/MEET/fainst/201017asi17sm9caopp.html>). Papers for this conference are being solicited for both basic and applied research issues involving the understanding, analysis, and prediction of the coastal atmosphere and ocean, with a special emphasis on the coupling of atmospheric, oceanic, and hydrological processes and their effects on biological response, coastal urban effects, ocean and air quality, river discharges, floods, storm surges, coastal inundation, climate analysis and predictions, tsunamis, interdisciplinary field programs, advances in remote sensing and in-situ observational networks, and advances in modeling and forecasting. In particular, with the development and growth of the coastal ocean component of the Integrated (and Sustained) Ocean Observing System (IOOS), and with its emphasis on fostering Operational Oceanography, this will be an excellent opportunity for presentations from the eleven IOOS Regional Associations and their federal- and private-sector counterparts. Joint sessions with the 17th Conference on Air-Sea Interaction and the 17th Conference on Satellite Meteorology and Oceanography will be highlighted, and interdisciplinary topics are highly encouraged, including: Regional Examples of Wind and SST Interaction; Satellite Analysis of Coastal and Global Ocean Current Dynamics; Integration of Coastal and Global Ocean In Situ Observations with Satellite Data; Ocean Bio-Optical Observations and Requirements for Coastal and Global Oceans; Use of Satellite Data in Weather and Climate Predictions over the Oceans including Data Assimilation and

Model Skill Assessment; and Applications of Active Microwave Systems (Altimeter, Scatterometer, Synthetic Aperture Radar, etc). We are also planning a special joint session with the Meteorological Aspects of Air Pollution committee on all aspects of air and ocean pollution in coastal zones. Please submit your abstract electronically by **Wednesday, 3 May 2010** on the AMS webpage:

[http://www.ametsoc.org/meet/online\\_submit.html](http://www.ametsoc.org/meet/online_submit.html). For more information, please contact the program chairpersons, Darko Koraćin ([darko.koracin@dri.edu](mailto:darko.koracin@dri.edu)) or Christopher Mooers ([cmooers@cecs.pdx.edu](mailto:cmooers@cecs.pdx.edu)). Regarding the joint session on air pollution aspects in coastal zones, you may also contact Michael Brown ([mbrown@lanl.gov](mailto:mbrown@lanl.gov)).

- **Marine Technology Society (MTS, NOAA Research, and IOOS - TechSurge Workshop, 8-9 June, 2010: Ocean Observing: Thinking Outside the Basin:** The TechSurge Workshop will provide innovative knowledge and an interdisciplinary perspective to enhance our ability to collect, deliver, and use ocean information. This is the can't-miss event for all marine communities — the U.S. Navy, U.S. Coast Guard, NOAA, and all federal and regional partners involved with marine spatial planning and ecosystem-based management.
  - Tap into a variety of perspectives on platforms such as sensors and data infrastructure, led by knowledgeable speakers from the ocean science and technology community.
  - Gain insights from other communities such as space exploration, data services, and biotech/pharmacy.
  - Engage with speakers and colleagues through facilitated panel discussions designed to draw out best practices and forward-thinking concepts that will accelerate innovative ocean observing.

For more information, please visit

<https://www.mtsociety.org/conferences/OceanObserving2010.aspx> and register at [www.regonline.com/mtsoos](http://www.regonline.com/mtsoos)

**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.usnra.org/calendar.html> or <http://ioos.gov/calendar/>

- May 3: NERACOOS Board Meeting, Portsmouth, NH - Gabrielle attending
- May 11-13: Savannah GA; SECOORA Annual Meeting; Zdenka Willis and Dave Easter (IOOS) to attend.
- May 17-19: Ann Arbor, MI; NFRA Product Developer's Workshop; Charly Alexander and Dave Easter (IOOS) to attend.
- May 25: La Jolla, CA; Small Sea Changes: Big California Impacts Workshop; IWGOO, CeNCOOS, SCCOOS.
- June 14-18: Sliver Spring, MD; Open Geospatial Consortium and Ocean Interoperability Day.

Cheers,  
Zdenka