

Bi-Weekly Z-GRAM - 16 April 2010

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:

- **Farewell to Marcia Weaks:** This has been the month of farewells to folks who have substantially contributed to IOOS. Marcia will retire from Federal Service at the end of the month with over 30 years of public service. First, thank you for your dedication to serving our nation. Marcia has worked in three of NOAA's line offices and contributed everywhere she has been. I initially met Marcia in the late 1980s when I was assigned to the National Ice Center. For the past five years she has focused her attention on taking IOOS from PowerPoint slides to reality. Marcia is a key reason for the success of IOOS today. She always has the customer foremost in her mind, and she has artfully directed the successful integration of winds/waves from NOS data providers using IOOS standards in the National Weather Service's operational SLOSH model. She has worked across NOAA and the interagency on four coastal inundation projects that are part of the foundation of a NOAA Storm Surge Road Map. She also led the delivery of the Industry Concept Designs, which are still being used today as the foundation of the US IOOS Road Map. This is but a tiny fraction of projects Marcia has led. As she retires we wish her all the best. We will miss you in IOOS, but we know that you will still be an IOOSian at heart.
- **Report to Congress:** On 6 April 2010, the Integrated Ocean Observing System Report was transmitted to Congress. The accompanying letter stated: "Enclosed is the National Oceanic and Atmospheric Administration's (NOAA) Report to the Congress on Integrated Ocean Observing System (IOOS), as requested in the Senate Appropriates Committee Report, 2008 (S. Rept. 110-124) and referenced in the Explanatory Statement accompanying the Consolidated Appropriations Act, 2008 (P.L. 110-161). The conference report directs NOAA to develop a 'comprehensive 5-year plan for the entire agency to fully implement a viable ocean observing paradigm for the Nation,' including associated funding requirements. In addition, the Explanatory Statement accompanying the Omnibus Appropriations Act, 2009 (P.L. 111-8) directed NOAA to develop 'a strategy for incorporating observations systems from estuaries, bays and other near shore waters as part of the IOOS regional network of observatories.' This report to Congress addresses both the 2008 and 2009 Explanatory Statements' requirements." **Report is posted on www.ioos.gov** under of Special Note.
- **FY10:** The awards are in process and we will keep you advised on the progress to award.
- **FY11: NEW** - In FY11, the IOOS Regional Funding will be competed across the entire IOOS Enterprise. The intent is to combine the Regional Association and Regional Coastal Ocean Observing System awards into a single award. Further, we will be using the NOPP process to provide additional areas of interest from the Federal Agencies. We

have just started a 'Frequently Asked Questions' section on our website for the FY11 competition. The draft language for the FY11 FFO has been submitted by the IOOS office to NOAA Grants and Management Division. It is estimated that the FFO will be released in early July. Proposals will be due on 1 October 2010. I urge you to visit www.ioos.gov, and on the left side of the webpage you will see 'Federal Funding Opportunities,' and then click there to get to the FAQ. Have a question of your own? Please submit them to Gabrielle Canonico (Gabrielle.Canonico@noaa.gov) or Regina Evans (Regina.Evans@noaa.gov).

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
- **Customer Projects:** **Contact Charly Alexander** at Charles.Alexander@noaa.gov if you want to be part of the action.
- **Technical Updates:**
 - NDBC issued plain-text CSV encoding. Main comment by the Web Services and Data Enhancement & Regional Data Management Working Groups: Use tabs instead of commas. Now testing tab-separated values (TSV) at: <http://sdfest.ndbc.noaa.gov/sos/>.
 - Discussion about whether to support instead (or in addition to) the plain-text TSV encoding conventions used by European projects Ocean Data View (ODV) and SeaDataNet. Turns out, ODV is used by PMEL scientists for ocean acidification (OA) and it would be very useful for us to support it! We need some detailed discussion with ODV persons to answer specific questions about using the format.
 - NDBC is starting work on KML+JSON format for Google Oceans. Pete Giencke (Google) and Jeremy Cothran (SECOORA) are part of the discussions that are coinciding with this work.
- **IOOS Data Portal (Registry/Catalog/Viewer):**
 - National Geophysical Data Center (NGDC) efforts: A Statement of Work (SOW) has been completed for NGDC's part in the development, enhancement, and operation of software components for the IOOS Data Portal. An interface between components at the Gulf of Maine Research Institute and NGDC will be developed as part of this work.
 - The Gulf of Maine Research Institute (GMRI) will be also developing the IOOS Data Portal and we will do this through NOAA's Cooperative Institute for the North Atlantic Region (CINAR). GMRI has the first iteration of IOOS-specific viewer: a mock-up with a static set of dots and the IOOS banner across the top and bottom. Eric Bridger is working assiduously on the back-end part.
 - Existing IOOS Obs Registry: Hassan traveled to St. Petersburg, FL 14-16 April to meet with University of South Florida staff (Vembu Subramanian – GCOOS) on

the status of the IOOS Obs Registry, which has now been re-located from the Monterey Bay Sanctuary Foundation to USF. Discussions focused on the requirements for maintenance as well as ideas for improvements — ideas that will inform the development of the emerging IOOS Portal, which will eventually replace this tool.

- **IOOS Regional Association Annual DMAC Workshop:** Actions that were identified in the workshop were coordinated with the Regional DMAC leads. The IOOS Data Portal (Registry/Catalog/Viewer) platform identifications, and gridded data issues and related activities, were activities identified in the workshop and discussed. Regarding the IOOS Data Portal, Eric Bridger (NERACOOS) is working closely with Jeff de La Beaujardiere on the IOOS Data Portal. Additional work on the IOOS Data Portal is needed before the regions become more involved. The regions asked for more information regarding NOAA's Unified Access Framework (UAF) and the standards being implemented. Standards compliance with NOAA's UAF was listed as activity for the regions to accomplish in Rich Signell's briefing. Will request a one-pager from Rich for additional information on compliance. IOOS Regional DMAC Workshop Report: Final revisions are being made to the workshop. A final version should be released the week of 19 April and will be posted on the IOOS website (www.ioos.gov).

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.
- **High Frequency Radar/Radio (HFR): ISSUES** - Jack Harlan continues to work the sensitive and complicated issue of securing operational licenses for existing regional high frequency radar installations, which are typically operating with experimental licenses to use specific radio frequencies. Potentially significant obstacles have emerged from the U.S. Department of Defense that complicate the consensus support desired prior to an international meeting on this topic in Geneva next month. Jack and Zdenka continue to work the channels to try and resolve DOD concerns.
- **IOOS and Links to the National Water Quality Monitoring Network:** No Update.
- **IOOS and National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** Charly met with OOI-CI's Matthew Arrott and USGS's Rich Signell to review the status and next steps for the IOOS "use case" developed to collaborate with the OOI-CI team. We agreed to several specific follow-up items including candidate coastal modelers to expand this collaboration to. Rich and Charly are working schedule/task revisions to accommodate the next steps.

Other:

- **NOAA Environmental Data Management Committee Workshop:** Planning - Jeff met with the NOAA Environmental Data Management Committee (EDMC), and subgroup thereof, to help plan the NOAA Data Management workshop (25-26 May). The workshop will include an IOOS talk, IOOS demo, and a break-out session on data access featuring IOOS and other projects. Please visit <http://www.regonline.com/builder/site/Default.aspx?eventid=842367> for more information.
- **International Marine Data and Information Systems Conference (IMDIS 2010) (29-31 March; Paris, France):** Jeff de La Beaujardiere presented a paper about the progress on IOOS DMAC. In addition to Jeff's presentation on IOOS and Interoperability Standards, Bill Burnett (NDBC) and Janet Fredericks (WHOI) gave a talk on QARTOD and Jim Potemra (PacIOOS) presented on "Developing PacIOOS." The array of sessions at the conference focused on infrastructures, technologies, and services for different users. For more information, please visit www.seadatanet.org/imdis2010
- **SeaDataNet Meeting (1-2 April; Paris, France):** Jeff also attended this meeting, which immediately followed the IMDIS conference, also in Paris, France, to meet with technical staff at SeaDataNet to discuss mutual approaches to interoperability, access, and transport of ocean observations. SeaDataNet is an Integrated Infrastructure Initiative that brings together 49 partners from major scientific marine research institutes. They have federated open digital repositories to manage, access, and share data, information, products, and knowledge originating from oceanographic fleets, new automatic observation systems, and space sensors. For more information, please visit www.seadatanet.org
- **3rd Annual Global Marine Renewable Energy Conference (14-15 April; Seattle, WA):** Jack Harlan attended for IOOS and was a speaker in a session entitled, "Lessons from Other Industries." The conference's focus was on the future development of renewable energy from diverse sources and technologies. International experts on wave and current power (tidal, ocean, and river currents) participated. For more information, please visit www.globalmarinerenewable.com
- **FY 09 Exchange Network Project Workshop (8 April):** The primary objectives of this workshop were to review and discuss/define specific marine resource management use cases and applications and to discuss and begin to identify potential data sets that might be available to support these use case applications. A list of potential project areas were reviewed and narrowed. The narrowed down group of prioritized projects was the outcome of this meeting. The project leads (Tom Shyka and Riley Young Morse, GMRI) will further refine the list and research the selected topics and develop into use cases. Rob Ragsdale attended for NOAA IOOS via conference call.
- **Thailand Ministry of Science and Technology (MOST) (14 April):** Charly attended on behalf of NOAA IOOS. The NOAA Office of Climate Obs and the Office of International Affairs sponsored meeting with Thailand's Minister of Science and Technology, Dr. Khunying Kalaya Sophonpanich, and numerous other senior officials from MOST. The purpose of this meeting was to target opportunities to collaborate on science and services associated with climate change.
- **Korea Ocean Research Development Institute (KORDI) (16 April):** Charly joined OCO's Sid Thurston and Dave Goodrich for a seminar from a KORDI senior scientist regarding existing US-Korea science/research collaboration in the Western Pacific and Indian Oceans and a proposal to expand this work with a KORDI visiting scientist at NOAA.

- IEEE/OES; IOOS; IOC; NSF;ONR - South America International Symposium - Buenos Aires, Argentina - 12-14 April:** A strong US delegation teamed up with our colleagues from Argentina, Chile, and Uruguay to discuss Oceanic Engineering, Ocean Observing, Climate Change, and Coastal Zone Management. I had the chance to present a US IOOS overview and Bob Weller (WHOI) presented the OOI overview and, as you can imagine, it generated great interest in the observing station that will be established off the coast of Argentina in 2012. I chaired in the ocean observing and climate change working group. Gustavo Goni (NOAA AOML) provided an overview of the Global Component of US IOOS and chaired the Coastal Zone Management and Observing working group. Harvey Seim provided a briefing on the Regional aspect of IOOS and how SECOORA is supporting Coast Zone Management. NOAA (IOOS and the Climate Observation Division) co-sponsored this event and we were able to have four of the Knauss Fellows join us and provide presentations. I extend my sincerest appreciation and a hearty well-done to Drs. Michelle Johnson, Long Zhou, Heather Havens, and Ms. Caitlin Snyder, all of whom gave excellent presentations, and I thank them for their interaction with our South American colleagues. Sandy Williams (WHOI) led the technical program and was the US chair for the Oceanic Engineering Working Group. Each of us had a Argentinian colleague as co-chairs for our sessions. The results of the sessions will be posted on the IEEE/OES website. And finally, I would also like to thank Andy Clark (Senior Member IEEE and US Industry Rep, US National Committee for the IOC) and Javier Valladares, (Chairman, IOC, Argentina) for doing a superb job of co-chairing this symposium.
- AOOS- Notice of Intent to Hold an Open Competition to Provide Data Management Services for AOOS - 5 April 2005:** This announcement provides early notice of the intent of the Alaska Ocean Observing System to issue a Request for Proposals in early to mid May 2010 to provide data warehouse, access and discovery, transport, and archive functions for AOOS for the next 5 years. The RFP will also include a request for proposals to meet specific user interface and user product needs. Proposals would be due approximately 4-6 weeks later. Universities, research institutions, federal or state agencies, and private sector companies are all eligible to apply under this RFP. Partnerships and collaborations are encouraged. For more information, please contact Molly McCammon at mccammon@aoos.org.

Congressional:

Below is the schedule of the upcoming quarterly updates to the Hill on the progress towards building IOOS and the progress on the ICOOS Act implementation.

When: Thursday, April 15 at 10:00am - Completed

Who: Nick Battista, staff for Congresswoman Chellie Pingree (D-ME)

Suzanne Skelley and April Black provided this update. The efforts on certification of the non-federal partners were of great interest. The IOOS office in NOAA and the IWGOO are now scoping that effort and methodologies to move forward on this topic.

When: Wednesday, April 21 at 2:00pm

Who: Heather Havens, staff for Congresswoman Lois Capps (D-CA)

When: Wednesday, April 21 at 3:00pm

Who: Natural Resources Committee Staff (Majority and Minority)

When: Friday, April 23 at 1:30pm

Who: Senate Committee Staff (Majority and Minority)

Communications:

- Scott Glenn and several of the Rutgers students will bring Scarlet Knight to the Smithsonian for "The Scientist Is In" on 5 June 2010 (World Ocean Day).
- Scarlet Knight will then be displayed in the Atrium off the front entrance of the Department of Commerce from 5-7 June. After that, Scarlet Knight will be on display on Capitol Hill in support of Capitol Hill Oceans Week (CHOW).

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

- **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. Further information on the conference can be found at www.oceans10mtsieeseattle.org. Dave Martin and Jan Newton (NANOOS) are leading the IOOS charge this year. I encourage everyone to submit your abstracts by **15 May**. 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), **Call for Sessions:** ASLO will be celebrating its Aquatic Sciences Meeting in San Juan 13-18 February 2011 and Jorge Corredor (CaRA), together with Claudia Benitez-Nelson and María Gonzalez, will have the honor of chairing the meeting. The focus on climate change and on nearshore processes makes this an excellent venue for discussing IOOS -- specifically ICOOS issues. I urge you to consider convening one or more special sessions (<http://www.aslo.org/forms/sanjuan2011.html>) for the meeting. Deadline for submissions is **30 April 2010**. For more info contact Jorge Corredor at jorge.corredor@upr.edu
- **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 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). For more information, please contact the program chairpersons, Darko Koraćin (darko.koracin@dri.edu) or Christopher Mooers (cmooers@cecs.pdx.edu). Regarding the joint session on air pollution aspects in coastal zones, you may also contact Michael Brown (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

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/>

- April 25-29: National Water Quality Monitoring Conference, Denver, CO: Rob Ragsdale to attend from NOAA IOOS and support from a number of IOOS regions.
- April 22-23: Humboldt Bay Symposium, in Eureka, CA; CeNCOOS is sponsoring, presenting, and running a session.
- April 28-29: Oakville, Ontario, Canada; GLOS Annual Meeting; Zdenka and Dave Easter, from NOAA IOOS, to attend.
- May 11-13: Savannah GA; SECOORA Annual Meeting; Zdenka and Dave Easter, from NOAA IOOS, to attend.
- May 25: SMALL SEA CHANGES: BIG CALIFORNIA IMPACTS WORKSHOP - La Jolla, CA; IWGOO, CeNCOOS, SCCOOS.

Cheers,
Zdenka

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