Bi-Weekly IOOS[®] Z-GRAM - 25 February 2011 www.IOOS.gov

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

Programmatics:

• System Advisory Committee [ICOOS ACT: Section 12304 (d)] - The Federal Register Notice is NOT out yet. In putting together the charter for the FACA, we did not extend the membership to Federal employees, however at the last Interagency Ocean Observing Committee (IOOC) meeting the question was raised about Federal participation. We have now check into the FACA rules and Federal employees may serve on a FACA. Since the FACA charter, submitted and approved by GSA, has the statement that the FACA will not have Federal members, we need to evaluate whether a new charter must be approved by GSA before going forward. We will keep you apprised of this effort through the Zgram. We want 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.

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 Animal Telemetry Workshop:** (March 2-3, 2011; Santa Cruz, CA): 40 participants from across the Nation's coastal regions, including several industry representatives, will meet for two days of briefings and discussions at the NOAA Fisheries Santa Cruz Lab. The goal is to focus on how to establish a sustainable U.S. marine animal telemetry "network" of observations and link these activities to the U.S. IOOS.
- **IOOS/NCCOS Water Quality Project Phase II Planning (2/24)**: Phase II elements that will be incorporated into a plan for establishing IOOS services to deliver water quality data in IOOS formats were discussed in our latest meeting. There has been significant discussion with SECOORA about their involvement. Preliminary discussions have taken place between Lynn Leonard (UNCW) and Doug Pirhalla (NCCOS) and Rob talked with Jeremy Cothran (SECOORA) about his possible involvement. Lynn Leonard worked previously with FIU to help them with development of data templates following the IOOS DIF schema. Doug Pirhalla is writing a first draft of the phase II project plan. The first draft will be produced in a couple of weeks for review.

- IOOS RA DMAC Workshop April 27-28: Workshop "Training" Sessions: Workshop "training" sessions are being developed for THREDDS service set-up (primarily for gridded data) with USGS's Rich Signell, SOS service set-up/enhancement with NDBC's Darrel Duncan, Kevin Kearn and Bill Smith, and metadata with NGDC's Ted Haberman. Regional DMAC Assessment: Rob and Alex continue to refine a tool to evaluate the relative readiness of IOOS Regions to execute DMAC per FY2011 FFO guidance and priorities emerging from the broader DMAC planning. This is also being coordinated with Carl Gouldman per the Regional Blueprint Assessment.
- Coastal and Marine Spatial Planning:
 - NOAA CMSP Data and Tools Team: Charly continues to participate as the US IOOS rep on the NOAA CMSP Data and Tools Team (last meeting 2/24). Emerging issues are regional data priorities, core NOAA data sets for improved access/use, role/intersection of "ecosystem based management," "integrated ecosystem assessments." with CMSP, and tools such as registry/catalog to facilitate data access. As discussions on registry/catalog move forward in particular, Charly will ensure IOOS's advancements are highlighted.
 - CMSP at NERACOOS: Charly also continues to stay engaged with emerging CMSP activities at NERACOOS (Ru Morrison) and the Northeast Ocean Data Partnership. NODP is scheduling a key metadata workshop in June.

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 Establishes the National Earth Observation (NEO) Task Force. The NEO TF will be co-chaired by Ms. Abbott, White House Office of Science and Technology (OSTP); Dr. Lubchenco, NOAA; Dr. McNutt, USGS, and Dr.Abdalati, NASA with intent to lead a process to establish a national strategy and governance plan for Earth observations. The NEO Task Force was established to fulfill the Administration's commitments that were documented in a December 2010 OSTP report to Congress. As NOAA's representative to US GEO, I will be part of the NOAA team that will support Dr. Lubchenco and Mary Kica, AA for NESDIS in this effort.
- **DMAC Steering Team**: With Sam back from Deep Water Horizon duty, it is full steam ahead on the constitution of the new US IOOS DMAC Steering Team. As you recall the US DMAC Steering Team began meeting in earnest with the stand up of the IOOS program in 2007. In 2009 we conducted a review and the IOOC made substantial changes to the make up and goals of the DMAC ST. Sam, is now targeting an April meeting. Sam continues to develop the agenda and engage federal and non-federal participants for the next DMAC Steering Team meeting.
- **High Frequency Radar/Radio** (**HFR**): For more information on all US National HFR efforts please contact our US Project Manager Jack Harlan, <u>Jack.Harlan@noaa.gov</u>
 - Frequency Licensing: This topic continues to evolve on a daily basis. Latest issues center around the USAF's recommendations against the requested US IOOS licenses. These negotiations, which include The National Telecommunications and Information Administration continue and we ask the

entire IOOS community to continue to provide continued support on the critical need for these frequencies.

- IOOS and Links to the National Water Quality Monitoring Network:
 - National Beach Conference Miami, FL, March 15-17: Poster Presentation: Eric Vowinkel (USGS) is leading the development of a poster for the IOOS Regional Water Quality Project that will be presented during the 2011 National Beach Conference in Miami, FL (March 15-17). A draft will be completed early next week and will include several maps highlighting different data types and IOOS Regional Examples.
 - Coordination with EPA: EPA's Gary Foley (EPA, Director of the Executive Office of Earth Observations and Acting Deputy Director of the Office of the Science Advisor) has made several useful technical contacts to senior EPA scientists/managers leading key elements of the Beach Conference meeting on behalf of US IOOS per possible collaboration on a beach water quality project. Rob is arranging for meetings EPA/IOOS meetings during the conference for further discussions.
- **IOOS and The National Science Foundation (NSF) Ocean Observatories Initiative** (**OOI):** Reviewed "use case" project status; on scheduled to be completed in June/July in coordination with OOI-CI's first software release (Chris Mueller completed updating project milestones).

• US IOOS Modeling Testbed and Related Modeling efforts:

Team Reports: Cyberinfrastructure (Eoin Howlett, Lead): The Testbed Cyberinfrastructure team continues to exercise a wide array of Opensource and community technologies and standards - evaluating these options for interoperability and identifying future needs to implement these tools for operational transition. The project has allowed for advances in model/observation metadata and catalog implementation, a new generation of Matlab tools for accessing model data, use of OGC standards to deliver model and observation data, and the first iteration of a library to manage unstructured gridded data. Shelf Hypoxia (John Harding, Lead): (1) established a direct collaboration between academic hypoxia researchers and NOAA CSDL operational Gulf of Mexico hypoxia model developers; (2) consolidated a multi-year hypoxia data set planned for transition into the NOAA Hypoxia Watch Data Portal; (3) accelerated development of NOAA NCDDC OceanNOMADS capability for archived operational ocean nowcast/forecast products; (4) is supporting transition of U.S. Navy operational Gulf of Mexico regional ocean nowcast/forecast capability and (5) is providing insight on regional model boundary conditions to NOAA CSDL operational Gulf of Mexico coastal nowcast/forecast system developers. Coastal Inundation (Dr. Rick Luettich, Lead): The Inundation team has posted Model-Data and Model to Model Comparisons on the Testbed website (http://testbed.sura.org).

Other:

• **ASLO session very Successful**: Thank you to my co-chairs - Chris Caldow, NOAA and Nasseer Idrisi and the OUTSTANDING presentations. With working together we are

able to explore from Federal to Regional; Terrestrial to Aquatic; Data Management to Studies; and the importance of effective consultation with 16 papers and 3 posters. Our session held a strong audience through out the day and topped out at at 70. We are collecting the presentations now and will post them on the IOOS and/or CaRICOOS website.

- **IOOS Regional Project Status/ Review Briefs (FA2/FA3 briefs)**: These meetings continued with an excellent presentation to IOOS headquarters on Fri Feb., 18th on Standards Integration of QA/QC Requirements for Oceanographic Observing Systems by Janet Fredericks from Woods Hole Oceanographic Institute. On February 25, Dan Holloway, from OPeNDAP, Inc., briefed IOOS on his project An OPeNDAP/OGC Gateway to Support Regional IOOS Interoperability.
- Special Screening of the award-winning documentary, *Atlantic Crossing A Robot's Daring Mission*: Thursday, March 3, at 10:00 a.m. in the NOAA Auditorium. The Film highlights the first unmanned, underwater robot---or "glider"---to cross an ocean. Launched by Rutgers University, a mid-Atlantic partner of the U.S. Integrated Ocean Observing System (IOOS®), this glider found and corrected inaccuracies in ocean models to provide greater insight into how the ocean works and how it controls climate change. Dr, Scott Glenn, the lead scientist on the project, will provide opening remarks. He will join the documentary's creator, Dena Seidel, after the film for questions. The program will run from 10 am noon. The event is being open to all NOAA employees, with supervisory approval.
- Farewell to Steve Ramp, CeNCOOS Program Director. On March 1st, Steve Ramp will depart as the Executive Director of CenCOOS and begin his own venture. We want to take this opportunity to thank Steve for his outstanding effort these past 3 years as CeNCOOS has evolved as a strong Regional Association. Personally, I have really enjoyed working with Steve and appreciate all his efforts. He is remaining in the business as they say and staying in Monterey so we expect we will continue work with Steve. Steve we wish you Fair Winds and Following Seas!
- CeNCOOS is advertising for a new Program Director: <u>http://www.mbari.org/oed/jobs/CeNCOOS_Program_Director_2011.html</u>
- **Basic Observation Buoy (BOB) Program**: Doug was contacted by Steve Morton, Research Oceanographer, Marine Biotoxins Program (Harmful Algal Bloom) to discuss use of BOBs as part of an Institute of Electrical and Electronics Engineers (IEEE) project his group is conducting with a high school in North Carolina.
- Quality Assurance Real-Time Oceanographic Data (QARTOD) V Workshop Report: The QARTOD V Workshop report summarizing results from the November 2009 meeting in Atlanta, GA (<u>http://nautilus.baruch.sc.edu/twiki/bin/view</u>) has been published. QARTOD is a grass roots organization with an interest in quality assurance and quality control of oceanographic observations. QARTOD V was held in November 2009 to address two focus areas: biogeochemical observations and waves and in situ current observations. Breakout groups for each focus area were formed to identify and define QC test for real-time biogeochemical observations and to review waves and in situ currents QC practices.
- **IOOS Supports Habitat Studies**: John Manderson, NOAA Fisheries and Josh Kohut, MARACOOS have been teamed up to see how US IOOS can support the Fisheries regional scale habitat studies. Last fall, John and Josh provided a paper and briefing at

the Mid Atlantic Fisheries Council meeting. John was able to provide a webinar to the US IOOS office. And quoting from John and Josh's paper - *What makes some parts of the ocean sticky to fish? Ocean Observing for marine habitat science & ecosystem management* - Quote: "Over the past six years we have been developing an approach to integrate IOOS remotely sensed data and short-term model forecasts into regional scale habitat studies.... We are nearing the completion of a NOAA Fisheries and the Environment Funded project in which we have used multivariate and single species modeling to evaluate the power of IOOS data to describe distributions of organisms with different vertical habitat preferences in the mid-Atlantic Region using abundance data collected on North East Fisheries Science center bottom trawl surveys... We found that most of our IOOS informed habitat models had greater explanatory power and out of sample prediction capabilities than previously published models built using the same analytical technique, but without the benefit of access to IOOS data streams." Endquote

Congressional: No Update

Communications/Outreach and Website Updates:

MEDIA OPPORTUNITY, Pacific Grove - CA: Scientists to Provide Tour of Marine Animal Tagging Operations - Media are invited to join scientists from NOAA and Stanford University for a marine

animal tagging event explaining how data collected by sensors on the animals will soon be available on the U.S. Integrated Ocean Observing System (IOOS®). Media will tour the worldrenowned facility at Hopkins Marine Station in Pacific Grove, Calif., observing various aspects of tagging operations of marine species in the laboratory, Monterey Bay and the open ocean. Video of actual tagging will also be provided.

<u>WHAT</u>: Marine animal tagging operation tour at Hopkins Marine Station <u>WHEN</u>: Friday, March 4, 2011, 10:00 a.m. PT

<u>WHERE</u>: Hopkins Marine Station of Stanford University, 120 Oceanview Blvd., Pacific Grove, Calif. 93950. (Media should gather in main parking lot and will be escorted into the facility) For more information please contact: Jennie Lyons, Jennie.Lyons@noaa.gov; 240-994-8855

- Feb 14 Greenwire article on spending increase mentions IOOS http://www.eenews.net/gw/2011/02/14/
- SPORTS FISHING MAGAZINE Column -News Headline Ocean Conservancy: Stop cuts to NOAA By Ocean Conservancy / Newswire/Tue, Feb 15, 2011
- Blommburg.com Liquid Robotics Lures BP, Navy, NOAA With Wave-Powered Glider, by By Karen A. Frenkel - Feb 15, 2011 - <u>http://www.bloomberg.com/news/2011-02-</u> <u>15/liquid-robotics-lures-bp-navy-noaa-with-wave-powered-glider.html</u>
- Website updates: RAs Websites Harmonization: Thank you to GCOOS and MARACOOS that have also implemented the IOOS banner.

IOOS Conference Involvement: This section will highlight those conferences where IOOS is a sponsor or has a session: No update.

• GEOSS Support for Decision-Making in the Coastal Zone: Managing and Mitigating the Impacts of Human Activities and Natural Hazards in the Coastal

Zone -A series of (regional) GEO Workshops organized by the GEO Coastal Zone **Community of Practice - Earth Observation Support for Sustainable Tourism in** Small Island States - March 9-11, 2011, Puerto Rico: The Third Regional Workshop in the Workshop Series of the GEO Coastal Zone Community of Practice (CZCP) will focus on the Caribbean and will be organized in partnership with the Caribbean Regional Association (CaRA) for the Caribbean Integrated Coastal Ocean Observing System (CarICOOS), the Global Ocean Observing System (GOOS), the Global Terrestrial Observing System (GTOS), the United Nation Educational, Scientific, and Cultural Organization (UNESCO), and the Intergovernmental Oceanographic Commission (IOC). The Third Regional Workshop of the series will focus on the specific needs, challenges and capabilities related to sustainable tourism in the small island states of the Caribbean. The workshop will bring together stakeholders in island tourism with Earth observation and service providers in order to investigate how Earth observation-based services could support decision making related to all facets of tourism and enable operational and planning practices for sustainable tourism. http://www.czcp.org/workshops/Puerto_Rico/

• 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.

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

- US IOOS Modeling Testbed Team Lead/ NCEP Meeting: Doug, Zdenka; NCEP; March 2
- National Ocean Telemetry Observation Workshop: March 2-3, 2011, Santa Cruz, CA: Zdenka, Charly, Hassan
- NSF-Sponsored Workshop on Geodata Integration, Life-Cycle and Citation (3/2-4): Jeff; Bloomfield, CO.
- National Beach Conference (3/14-17)): Rob; Miami, FL
- Unmanned Systems Common Lifecycle Infrastructure Workshop; Sam; Stennis, MS; March 29-31
- IOOS RA DMAC Workshop: Ops. Div.; Silver Spring, MD; April 27-28, 2011

Cheers, Zdenka