

Bi-Weekly IOOS® Z-GRAM – 30 May 2014

The Z-Gram is an informal way of keeping you up-to-date on US IOOS® activities. Pass it on! Please send me an e-mail with additional addresses or if you no longer want to receive the Z-Gram.



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IOOS® - Enables Decision Making Every Day; Fosters Advances in Science and Technology

From the IOOS Program Office:

- **Fair winds and following seas to Suzanne Skelley:** On Friday, we said goodbye to Suzanne who has an exciting opportunity as the new Director of the Cooperative Oxford Laboratory in Oxford, Maryland. The Oxford Lab is part of the National Ocean Service's National Centers for Coastal Ocean Science or NCCOS. Suzanne has served as the Deputy Director of IOOS since the program's beginning in February 2007. As those of you closest to IOOS know, the last seven years have been a time of tremendous change for IOOS, as we formalized the program within NOAA, advanced our relationships with other federal agencies and grew Regional IOOS into a robust, dynamic enterprise serving the information needs of local, regional and national stakeholders. While we will miss Suzanne, we are very happy for her as she takes on this leadership role for NOS and NOAA. And as the Cooperative Oxford Lab is on Maryland's Eastern Shore and within the area served by MARACOOS, we look forward to new partnerships that may result. We thank her for her outstanding efforts as our deputy and while this is personally bittersweet for me, I am thrilled for her as this is a wonderful and well deserved opportunity and she is staying with the NOS family. P.S. Her email is the same, so we know how to reach her.
- **Congrats to Carl Gouldman – new IOOS Deputy:** I am also excited to announce that Carl is the new Deputy for the IOOS Program Office. Carl has been with US IOOS from the very early days, even before NOAA established a formal program. He brings a wealth of knowledge, commitment and passion about our oceans, coasts, and Great Lakes to the job. I look forward to working with him and the whole team to continue to advance the US IOOS enterprise.
- **RB&P Division Chief:** Carmen Davila will serve as acting RB&P Division Chief, Carl's previous position, while we complete the recruitment for the position.
- **IOOS Regional Associations supports NOAA's 2014 Atlantic Hurricane Outlook:** Read about this on the IOOS web site: [related research](#) (pdf) and [Predicting Severe Weather](#).

Observation Subsystem and Sensor Technologies

- **High Frequency Radar/Radio** (Lead Jack Harlan, Jack.Harlan@noaa.gov):
 - **HF Radar Surface Currents 1.1 Released into Production:** The newest version of the High Frequency (HF) Radar Surface Currents web product has been released into production. This new release significantly improves the accessibility of the product on a wide range of mobile devices. Using the bootstrap technology and Google Web Toolkit the product is now responsive and optimized to the user's screen size and resolution. This is the final update to the product under CRR #98; however surface currents within an additional region (New York Harbor) will be added through a separate effort over the coming months. The new version can be found at: <http://tidesandcurrents.noaa.gov/hfradar/>. For more information contact Greg.Dusek@noaa.gov.

- Minutes of the 7th ROWG Meeting, held in San Francisco March 3-4, are now on the IOOS HF radar page under "Meetings" tab: <http://www.ioos.noaa.gov/hfradar/>
- **US IOOS Marine Sensor Innovation Project at Work:** *New sensor array to monitor impacts of changing Gulf of Maine conditions on New England red tide* -We are now into the 4th week of the ESP time series at the three Northeast mooring locations -- about half way through the 3 missions. All 3 ESPs sampled autonomously on both Friday (May 23) and Monday (May 26). ESP-1 (don) and ESP-2 (jake) have returned from the *A. fundyense* levels detected last week (500-700 cells/Liter) to levels that are now below background. Upstream in the coastal flow, ESP-3 (dennis) is showing successive positive signals with the estimate of the *A. fundyense* concentration coming in low, but above background, at about 120 cells/L. A partnership with many including: IOOS-NERACOOS; WHOI; NOAA-NCCOS; and North Carolina State University: http://omgsrv1.meas.ncsu.edu/GoMaine_Redtide/2014/weekly_nowcast_for_ecast/
- **NANOOS incorporates new asset:** NANOOS has incorporated a new near-real-time in-situ asset on NVS from Penn Cove Shellfish located on Whidbey Island in the Puget Sound: http://nvs.nanoos.org/Explorer?action=oiw:fixed_platform:PCS_Penncove1:history
- **PacIOOS New Ocean Glider Visualizations:** PacIOOS Voyager currently hosts two types of ocean gliders. The first is called a wave glider and remains at the surface of the ocean while gathering data. The second is a profiling glider, which grabs data at depths alternating between 0 and 1000 meters from the ocean's surface. [Liquid Robotics, Inc.](#) is responsible for the development and operation of the wave gliders. Profiling gliders are made possible through operating teams at the University of Hawaii's School of Ocean and Earth Science and Technology ([SOEST](#)) and through development teams at the University of Washington (UW) Applied Physics Laboratory ([APL](#)). Users can easily manipulate display features for these data. Color-coding, depth scales, direction arrows, and custom icons are a few of the new visualization tools available on PacIOOS Voyager. Simply change the attributes by going to the "advanced" folder of the selected glider. Explore all these new data sets on ocean gliders have to offer; customize the data and aesthetics to best fit your needs, and share your experience!

Data Management and Communications (DMAC) Subsystem and Tools Built on IOOS

data: (Contact Derrick or Rob to get on the list serve for changes Derrick.Snowden@noaa.gov, Rob.Ragsdale@noaa.gov).

- **QARTOD: Quality Assurance and Control Standards for Ocean and Great Lakes Water Level Measurements Released:** This week, the nation's ocean observing community received a [new report](#) on recommended quality assurance and control standards for real-time water level measurements. This manual, highlighting water level data, includes commonly used sensors in all coastal regions, including the Great Lakes. These manuals are developed in close collaboration with community experts and provide valuable guidance for the processing and distribution of high quality ocean observations. This manual is the fifth in a series of similar quality control manuals, each focused on a different oceanographic variable. NOAA's Center for Center for Operational Oceanographic Products and Services (CO-OPS) led this effort, which reflects best practices within CO-OPS augmented with input from other water level observing system operators in industry, academia, and other federal agencies.
- **Bravo Zulu: Archiving a FIRST:** SECOORA has been working with NOAA's National Oceanographic Data Center on a pilot to automatically archive the IOOS Regional Association data. We are pleased to announce the first two as examples of the more than 50 that have been archived (so far) at these

urls:<http://accession.nodc.noaa.gov/0118722>, <http://accession.nodc.noaa.gov/0118735>

. NODC is working with other RAs to replicate the process.

- **Past DMAC Webinars: SECOORA presented on implementing QARTOD recommended QC control tests for in situ current data:** A recording of the presentation is available [here](#). Jeff Donovan and Michael Lindemuth from the University of South Florida College of Marine Science discussed how to implement QC tests to ADCPs attached to moorings that are part of the Coastal Ocean Monitoring and Prediction System deployed on the West Florida Shelf.
- **Upcoming DMAC Webinars: Wednesday, June 11, 2014, 3:00 pm Eastern Daylight Time**

Topic: Demonstration of next generation HTML 5 data portals

Meeting Number: 748 233 776

Meeting Password: ioos

To join the online meeting:

1. Go

to <https://mmancusa.webex.com/mmancusa/j.php?MTID=m3b8abf2d63fc46ee655b0add148336eb>

2. If requested, enter your name and email address.

3. If a password is required, enter the meeting password: ioos

4. Click "Join".

Call-in toll-free number (Verizon): [1-866-759-4289](tel:1-866-759-4289) (US)

Call-in number (Verizon): [1-210-406-8964](tel:1-210-406-8964) (US)

Attendee access code: 143 876 9

Modeling and Analysis Subsystem

For information on the US IOOS Coastal and Ocean Modeling Testbed (COMT), contact our project manager Becky Baltes, Becky.Baltes@noaa.gov

- The modeling page has been updated on the US IOOS website:<http://www.ioos.noaa.gov/modeling/welcome.html>
- **Chesapeake Bay Modeling Symposium:** Becky, IOOS PO, attended the symposium and there were multiple COMT Estuarine Hypoxia team talks. There was also an excellent panel discussion between policy makers, researchers, and political appointees from across the Bay area discussing what our focus should be and how to continue to improve the Bay community.

Interagency and International Collaboration/News

- **CONGRATS to Canada's Ocean Networks Canada – 250 TB of data:** In May the ONC data archive reached a stored data volume of 250 TB or a quarter of a petabyte (PB)! This volume is stored in no less than 10 million files spread across many hard disk drives, both in the data centre at ONC and at the University of Saskatchewan. The total disk space used is over 3/4th of a PB if one also takes into account the disk redundancies. For perspective, in fiscal year 2013-14, over 6000 hours of video were captured in the archive. And since 2007, over 1.2 million data searches were supported.
- **GEO Appathon:** GEO has announced their first Appathon, a global applications development competition that aims to develop new Apps using Earth observation data from the data sets in the GEOSS Common Infrastructure. The Appathon runs from May 7 to August 31. More information can be found

at www.geoappathon.org. And be sure to check out the short video produced by the U.S. Mission in Geneva at http://youtu.be/5sEH8go_DCI.

Delivering the Benefits:

- **New PacIOOS High Sea Level Forecast for Apra Harbor, Guam:** PacIOOS High Sea Level Forecasts provide advanced notice of potential high seas throughout the Pacific. Forecasts show observed sea levels for the previous three days and predicted sea levels for the next six days. The newest forecast is for Apra Harbor in Guam.
- **Animal Telemetry Network:** Navy funded satellite tags as part of the ATN effort. Dan Costa and Barb Block's team at Stanford have transferred over 2500 profiles from 11 elephant seals to the Naval Oceanographic Office (NAVOCEANO) from Feb 10 to May 18. NAVOCEANO has been assimilating these profiles and are pleased with the quality of the data. BZ to the ATN team.
- **Great Lakes mobile beach app to be enhanced:** Great Lakes Commission (GLC) reminds beachgoers and boaters to download myBeachCast, beachcast.glin.net <<http://beachcast.glin.net/>> , to get the latest swim advisories, weather conditions and hazard alerts for more than 2,000 beaches in the Great Lakes region. MyBeachCast will add an iOS (iPhone) version in the year ahead, as well as additional information about hazards and dangerous currents to increase the safety of beachgoers. Funding for the beach app enhancements comes through a recently awarded grant from the National Oceanic and Atmospheric Administration (NOAA) Coastal Storms Program. To help protect swimmers from dangerous currents, myBeachCast now features beach hazard statements issued by NOAA. Beach hazard statements are issued for Great Lakes beaches by the NOAA National Weather Service (NWS) when the potential for strong and dangerous (rip) currents and waves is medium or high. The Great Lakes Commission, in partnership with the Great Lakes states, LimnoTech, and the Great Lakes Observing System (GLOS) developed myBeachCast. Funded by the Great Lakes Restoration Initiative, the app also includes real-time and forecasted weather and lake conditions, and nearshore marine forecasts. For additional information, visit beachcast.glin.net. For the full story see: <http://glc.org/announce/2014-great-lakes-beach-app-enhanced/>

Congressional:

- **House Transportation and Infrastructure Committee Coast Guard and Maritime Transportation Subcommittee hearing Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability.** Chairman Hunter, began by talking about the work that the Maritime Alliance has done on advancing the understanding of the maritime sector. Rep Hunter stated that this area of the economy is growing and providing high technology around the world. We will learn how they can be best used and how we can improve the fielding of technologies. He ended the hearing by talking about how we need to continue to raise awareness of this part of our economic sector. Ranking Member, Rep Garamendi began by saying: "We need to understand how private sector and academia community are collaborating with the Federal agencies. We need to know how that collaborations can be leveraged to advance the innovation in ocean science and engineering. The implications are huge." IOOS received favorable mention by several witnesses. A huge thank you to Michael Jones, Maritime Alliance; Tom Altshuler, Vice President & Group General Manager, Teledyne Marine Systems; Casey Moore, President, Sea-Bird Scientific; and Eric J. Terrill, Ph.D., Director, Coastal Observing Research and Development Center, Marine Physical Laboratory - Scripps Institution of Oceanography, for their enthusiastic support for IOOS. You can listen to the full hearing and read the written testimony at: <http://transportation.house.gov/calendar/eventsingle.aspx?EventID=378393>

Communications / Outreach / Education: No update

Upcoming Meetings with IOOS participation:

- **Marine Technology Society Tech Surge 3-4 June, Old Dominion University, Norfolk VA: Technical Support for Coastal Resiliency:** The conference will investigate the technical capabilities required to increase coastal resiliency •Announcement of a sea level rise pilot project for Hampton Roads. A combinedgovernment-industry approach for mitigating and adapting to sea level rise.
 - **Who Should Attend:**
 - Technical experts in observation techniques for measuring coastalflooding and coastal resiliency
 - Decision-makers and engineers dependent on those observations tohelp formulate a strategy for addressing the impacts of sea levelrise.
 - Dr. Russell Callender - Deputy Director, National Oceanic and Atmospheric Administration (NOAA)/ National Ocean Service (NOS) will give a Keynote Address. Eric Letvin, White House National Security Staff and CDR John Marburger, Navy Task Force Climate Change, will announce the Hampton Roads Whole of Government Plus Industry Sea Level Rise Pilot Project.
 - To find out more and register: <http://www.mtshamptonroads.org/>
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View the IOOS calendar: <http://www.ioosassociation.org/calendar> or <http://www.ioos.noaa.gov/about/calendar.html>

Cheers,
Zdenka

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