

## Bi-Weekly IOOS® Z-GRAM – 19 Sept 2014

The Z-Gram is an informal way of keeping you up-to-date on US IOOS® activities. Pass it on! Please reply with 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:

- **Congrats to National Ocean Service 2014 Award Winners:** IOOS Program Office members were among those recognized by the National Ocean Service for outstanding contributions in support of the NOS mission. Holly Bamford, NOS Assistant Administrator sent her congratulations this week. Congratulations and well done to:
  - **Gabrielle Canonico** – Employee of the Year for her work on the first interagency Marine Biodiversity (Marine BON) project and her leadership as a co-chair (with NASA and BOEM) of the interagency working group on Marine BON;
  - **Vicki Kromer** – Team Member of the Year for her outstanding support to the IOOS Federal Advisory Committee;
  - **Margot Bohan**, Office of Exploration – Peer Rafting Award for her support to the Marine BON;
  - **Charly Alexander** – NOS Assistant Administrator Special Recognition Group Award as part of the Sandy working group; and
  - **Carmen Davila** – Equal Employment Opportunity and Diversity Award for her support to the AA/MB/IOOS People's Committee.
  
- **2015 NOAA Student Scholarships Is Open:** NOAA's Office of Education is accepting applications for the 2015 class of undergraduate scholars. Complete applications must be submitted by January 30, 2015. Over 100 students are selected each year to participate in the Ernest F. Hollings and Educational Partnership Program (EPP) scholarship programs. These generous scholarships include support for two years of study in the junior and senior year and summer internship opportunities at NOAA facilities, including IOOS Regional Associations, across the country. Eligibility requirements:
  - US Citizen
  - 3.0 GPA (Hollings) or 3.2 GPA (EPP)
  - Majoring in NOAA mission disciplines, including but not limited to: atmospheric science, biology, cartography, chemistry, computer science, education, engineering, environmental science, geodesy, geography, marine science, mathematics, meteorology, oceanography, physical science, photogrammetry, physics, etc.
  - Enrolled at a Minority Serving Institution (EPP only)

For information on these programs and how to apply:

- Ernest F. Hollings Undergraduate Scholarship Program: <http://www.oesd.noaa.gov/scholarships/hollings.html>
- Educational Partnership Program Undergraduate scholarship: [http://www.epp.noaa.gov/ssp\\_undergrad\\_page.html](http://www.epp.noaa.gov/ssp_undergrad_page.html)

For additional questions, please contact the Scholarship Program Managers at: [studentscholarshipprograms@noaa.gov](mailto:studentscholarshipprograms@noaa.gov) and [EPP.USP@noaa.gov](mailto:EPP.USP@noaa.gov)

### Observation Subsystem and Sensor Technologies

- **High Frequency Radar/Radio** (Lead Jack Harlan, [Jack.Harlan@noaa.gov](mailto:Jack.Harlan@noaa.gov)): No update.
- **Gliders:** Gliderpalooza has 10 gliders in the water right now. More info [here](#).
- **Announcing the release of the Glider Plan:** “Toward a U.S. IOOS® Underwater Glider Network Plan: Part of a comprehensive subsurface observing system” comes after two extensive review and adjudication processes. It will serve as a starting point for IOOS to begin building out a Network and to put a steering group in place. Thanks to all that took the time to provide input on a valuable observing system and its potential for IOOS and the sub-surface observing community in the future. Special thanks to the main authors Dan Rudnick, Chad Lembke, Craig Lee, Jack Barth and Oscar Schofield. Download here: <http://www.ioos.noaa.gov/glider/strategy/welcome.html>.
- **MSU, NOAA, and Liquid Robotics, Inc. Deploy Wave Gliders for Hurricane Predictions:** Researchers at Mississippi State University, NOAA, and Liquid Robotics, Inc. are deployed three Liquid Robotics Wave Gliders in the Gulf of Mexico to provide data aimed at improving hurricane forecasting. The wave- and solar-powered gliders were in three strategic locations for a 90-day mission, and will be directed into hurricanes as they enter the Gulf. While in their pre-deployment positions, they will also measure air temperature, pressure, winds, water temperature, ocean salinity, ocean oxygen, waves, and ocean currents. The goals are to test the gliders robustness in different weather environments including hurricanes; compare instrument accuracy against nearby buoys; and utilize these unique measurements to improve hurricane prediction. Co-PIs are Dr. Robert Moorhead (Mississippi State University) and Dr. Alan Leonardi (NOAA). Read more at <http://www.wlox.com/story/26365680/msu-noaa-liquid-robotics-team-to-improve-hurricane-forecasting>
- **NANOOS New water quality asset:** NANOOS has a new in-situ water quality monitoring asset for Coos Bay, Oregon in NVS. This near-real-time monitoring site is the product of a partnership between the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians (CTCLUSI) and the South Slough National Estuarine Research Reserve (SSNERR). It's located outside the South Slough NERR proper. Use this link to go directly to the site on NVS: [http://nvs.nanoos.org/Explorer?action=oiw:fixed\\_platform:NERRS\\_SOSNSWQ](http://nvs.nanoos.org/Explorer?action=oiw:fixed_platform:NERRS_SOSNSWQ)

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

**data:** (Contact Derrick or Rob to get on the listserv for changes [Derrick.Snowden@noaa.gov](mailto:Derrick.Snowden@noaa.gov), [Rob.Ragsdale@noaa.gov](mailto:Rob.Ragsdale@noaa.gov) ).

- **QARTOD**
  - Wind Speed and Direction Draft: This new draft is out for Federal Agency and International Review.
  - Ocean Color: Kick off at the Ocean Color committee at OCEANS OPTICS conference in Portland, ME October 26<sup>th</sup>. See <http://www.tos.org/oceanopticsconference/>. POC: Steve Ackleson.

- Next Variables: The board has proposed to address Ocean Color and Dissolved Nutrients in FY15. Both efforts will include NASA and Navy. Please let us know your thoughts and any comments, and if you would like to a part of these variable committees. Contact Ray Toll – [rtoll@odu.edu](mailto:rtoll@odu.edu)

- **IOOS DMAC Webinar: QARTOD Webinar:** The IOOS RA DMAC Webinar was a discussion with the IOOS RA Data Assembly Center (DAC) managers on implementing quality control procedures at the DACs. Tad Slawecki, from GLOS/Limnotech, facilitated the discussion that led us to a list of proposed activities which would help scope a project. One of the next steps will be to identify the relevant, common parts to all RAs of quality control procedures. There will be a series of discussions between the RA DAC managers in order to identify how this can be done collectively. The next Webinar on this topic will be October 15<sup>th</sup>, and Tad has offered to continue to facilitate this discussion. The webinar can be streamed [here](#).

### 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](mailto:Becky.Baltes@noaa.gov)

- **CeNCOOS Harmful Algal Bloom Modeling:** With NASA funding, UCSC researchers and CeNCOOS have been transitioning a predictive Harmful Algal Bloom (HAB) model for the region. The forecasts from this model of Pseudo-nitzschia blooms and Domoic Acid (the potentially harmful biotoxin which Pseudo-nitzschia releases) probabilities along the California coast are still in a beta form; however, CeNCOOS are posting some products at the link below. The interface is still in flux; new capabilities will be added so keep checking back, [view currently available HAB modeling products](#)
- **National Ocean Service CO-OPS Releases the new Northern Gulf of Mexico Operational Forecast System (NGOFS):** Two new operational forecast systems for the Northwest and Northeast Gulf of Mexico (NWGOFS and NEGOFs) were implemented on NOAA's High-Performance Computing System – Weather and Climate Operational Supercomputing System (WCOSs) – and became operational on September 16. NWGOFS and NEGOFs are two nested models of the existing NGOFS. The web products of these three models are integrated into a single web application so that customers can seamlessly and easily access their web products in one location. Compared with NGOFS, the nested NWGOFS and NEGOFs provide higher resolution forecast information for the northern Gulf of Mexico and cover seven critical ports: Matagorda Bay, Galveston Bay, Sabine Neches, Lake Charles, Gulfport, Pascagoula Bay and Mobile Bay, six of which are Center for Operational Oceanographic Products and Services (CO-OPS) PORTS<sup>®</sup> partners. The new NGOFS will significantly benefit a range of maritime activities including commercial and recreational boating, fishing and sailing, shipment and vessel transit planning, storm tides, hazardous material tracking, and Search and Rescue. Additionally the nested models resolve Jetty/Dike within model domains (near bay entrances) by using new features developed by FVCOM developers to produce more accurate current forecast guidance to our major users of the navigation community. The accomplishment was achieved through successful collaborations between CO-OPS, OCS/CSDL, NCEP, and FVCOM developers at the University of Massachusetts. View the model: <http://tidesandcurrents.noaa.gov/ofs/ngofs/ngofs.html>.

**Interagency and International Collaboration/News:** No update.

## Delivering the Benefits:

- **GCOOS Board Meeting:** Carl Gouldman and Dave Easter, IOOS Program Office, had the pleasure of joining the GCOOS Board of Directors Sept. 11th in Houston for their fall meeting. The meeting featured representatives from the major funding programs that have been set up in response to the Deepwater Horizon spill, giving presentations about their programs. The following discussion centered on how GCOOS can support the goals and objectives of these programs and highlighted the role GCOOS can play in addressing the challenge of coordinating across these programs and providing data management leadership. The Program Office wants to thank Barb Kirkpatrick, the staff at GCOOS, and the GCOOS Board of Directors for the opportunity to participate in the meeting.
- **Honoring Ann Jochens:** Carl Gouldman and Dave Easter represented the U.S. IOOS Program Office at the dinner honoring Ann Jochens. The dinner was a nice tribute to Ann's contribution to GCOOS and IOOS. Ann has been with GCOOS since 2005, becoming the Executive Director in 2011. She was recognized for her leadership in the region, her passion in communicating the importance of GCOOS regionally and U.S. IOOS nationally, and for her belief that partnerships are the way to be successful. Carl presented a framed citation that folks signed at the Spring 2014 meeting along with a fleece IOOS vest. As we all know, once an IOOSian, always an IOOSian. To read more about the dinner honoring Ann, click here <http://gcoos.tamu.edu/?p=7948>
- **MAPTITE ArcGIS Application Available on CO-OPS Website:** CO-OPS in partnership with other NOAA offices, U.S. Army Corps of Engineers, and the National Aquarium in Baltimore, developed The Marsh Analysis and Planning Tool Incorporating Tides and Elevations (MAPTITE) ArcGIS add-in application, and it is now available online. As understanding has grown of the critical part wetlands play in the health of the world's oceans, and how they act as protective, productive buffers against wave action and storms, so has the awareness grown of a critical need to both protect remaining wetlands and to begin a focused and coordinated effort to restore lost wetlands. MAPTITE is based on the premise that wetland plant communities are organized by their various tolerances to environmental stresses brought upon by periodic inundation and salinity intrusion. It provides an ESRI ArcGIS add-in tool that aids in the selection of vegetation types for different restoration elevations determined by a combination of a digital elevation model, local tidal datums, and wetland vegetation information. By delineating planting areas and providing point data that can be uploaded to GPS receivers for those areas, MAPTITE allows users to accurately plant appropriate species during restoration, promoting growth of native species in order to successfully create or restore ecosystem functions of the marsh. The tool addresses a need of government, academic, and coastal manager communities for coastal restoration planning.

**Congressional:** No update.

## Communications / Outreach / Education:

- **IOOS Animal Telemetry Network (ATN) web page:** The updated [ATN webpage](#) is now available. It contains the latest ATN documents such as the **ATN Strategic plan and Recommendation recently published under a NOAA Technical Memorandum**.

The data and services tab display the recent reconciled conventions and standards for ATN data and metadata. The mapping interface to visualize ATN data is "coming soon". Please check out the ATN page and visit us in few weeks to explore the ATN mapping interface.

- **SECOORA recognizes the great work of their EPP intern:** SECOORA posted a great story and video highlighting the experiences of the NOAA EPP intern Pedro Matos-Llavona during his internship with SECOORA partners University of South Florida and Florida Gulf Coast University over the summer. The story and video can be seen at <http://secoora.org/node/447>.
- **San Juan Islander** – Sept. 15, 2014: "Shellfish Growers and Marine Scientists: Ocean Degradation a Fact. Next Steps: Collaboration and Adaptation", <http://www.sanjuanislander.com/env-sci-whales/17092> . This article highlights a meeting of Washington state area shellfish growers and marine managers that happened on Friday. The meeting focused on next steps in dealing with ocean acidification, including the kind of monitoring done by NOAA's Ocean Acidification Program and the U.S. Integrated Ocean Observing System, as a key to helping shellfisheries adapt.
- **Discussion on California Ocean Acidification:** CeNCOOS' John Largier joined Terry Sawyer of Hog Island Oyster Company (a CeNCOOS partner), Congressman Jared Huffman, and others to discuss the impacts of ocean acidification on Northern California. The conversation took place on KQED's "forum" program and is available on <http://cencoos.us2.list-manage.com/track/click?u=81ae6d479bde74fa12e8a0f78&id=d6aec10789&e=b996e6ea2c>

#### **Upcoming Meetings with IOOS participation:**

View the IOOS

calendar: <http://www.ioosassociation.org/calendar> or <http://www.ioos.noaa.gov/about/calendar.html>

Cheers,

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Zdenka Willis

Director, US IOOS Program Office

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