

### Bi-Weekly IOOS® Z-GRAM – 7 March 2014

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.

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

#### From the IOOS Program Office:

- **March Madness DC style:** We convened our Annual Regional Review and Planning Session and Hill Briefings during the week of March 3rd. The leadership from the 11 regions and Alliance for Coastal Technologies of IOOS met with the U.S. IOOS Program Office, the leadership of National Ocean Service and the Office Directors within the Navigation, Observation and Positioning Offices to collaborate on coastal intelligence, ocean modeling, ocean acidification, and ecological forecasting. IOOS partners from both NOAA and the regions held two briefings for House and Senate staffers. The Senate and House briefings, sponsored by Senator Maria Cantwell (D-WA) and by Representative Don Young (R-AK) focused on IOOS making a difference to lives and livelihoods across the nation. Representative Don Young (R-AK) opened the House Briefing, and Nicole Teutschell, Legislative Assistant for Senator Cantwell, provided opening remarks for the Senate briefing. For the full story and all the presentations go to: [http://www.ioos.noaa.gov/communications/outreach/capitol\\_hill\\_briefing.html](http://www.ioos.noaa.gov/communications/outreach/capitol_hill_briefing.html). Two quotes: **Mr. Joe Schumaker** of the Quinault Indian Nation – “They (NANOOS) went out and looked for us, invited us in to their organization, asked us what we needed, and delivered to us what we needed.” And **Dr. Monty Graham**, University of Southern Mississippi, discussed how IOOS supported the Gulf of Mexico Deep Horizon Oil Spill – “GCOOS was there to help, and came through the tragedy with an improved sense of what is needed.”
- **Be Part of IOOS: The Gulf of Mexico Coastal Ocean Observing System Regional Association is seeking an Executive Director.** The Department of Oceanography, Texas A&M University, seeks a Research Scientist to serve as the Executive Director of the Gulf of Mexico Coastal Ocean Observing System-Regional Association (GCOOS-RA). The incumbent must be thoroughly committed to the GCOOS-RA’s mission. All candidates should have proven leadership and management experience. Applications should be directed to the head of the Search Committee, Dr. Worth D. Nowlin, Jr., in care of Dr. Ann Jochens, [ajochens@tamu.edu](mailto:ajochens@tamu.edu). The Search Committee will begin deliberations March 21, 2014, but applications will be accepted until the position is filled.
- **IOOS Industry Northeastern Seaboard Workshop:** Small sea changes can spell BIG coastal impacts. Do your part to help our nation prepare and respond better by attending the Northeastern Seaboard Workshop in New York City on April 22. **Workshop [Registration here](#). Space is limited.** The workshop will explore improved management, protection, and resiliency of Northeastern Seaboard infrastructure through better understanding and prediction of coastal hazards. For more information, please contact [ioosworkshop@noaa.gov](mailto:ioosworkshop@noaa.gov) or see our [flyer](#) and the near-final [agenda](#).

#### Observation Subsystem and Sensor Technologies

- **High Frequency Radar/Radio:** (Lead Jack Harlan, [Jack.Harlan@noaa.gov](mailto:Jack.Harlan@noaa.gov)):
  - High Frequency Radar radial velocity and total vector velocity (TVV) now available to NOAA modelers. This data is now being integrated in the “data tanks” at the National Center for Environmental Prediction (NCEP). From

Louis Uccellini, Assistant Administrator for the National Weather Service,  
“This is a big win for NOAA.”

- **International HF Radar News: New HF Radar in Northern Scotland:** The Brahan HF Radar Project (<http://www.thebrahanproject.com/>) is a partnership of industry, government and academia. The main project deliverable is a fully operational Long Range SeaSonde HF radar system (from Codar Ocean Sensors, Ltd) in the Shetland-Orkney area in Northern Scotland. The system will monitor the tidal and residual surface currents in two 180 km radius arcs on either side of the Fair Isle gap for 6 months. During this period, in situ observations will be made using a range of technologies including bottom mounted ADCPs, low-cost drifters, and gliders.
- **Gliders: Profiling Glider Plan V2 – comments due 21 March:** We really want your input – send comments to [Becky.Baltes@noaa.gov](mailto:Becky.Baltes@noaa.gov). The draft and comment revision synopsis is available on our website [here](#).

**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](mailto:Derrick.Snowden@noaa.gov), [Rob.Ragsdale@noaa.gov](mailto:Rob.Ragsdale@noaa.gov) ).**

- **QARTOD:** Subject matter experts are needed for a wind speed and wind direction committee. The committee kick-off is scheduled for April. Contact: Ray Toll, [ray.toll@noaa.gov](mailto:ray.toll@noaa.gov), if you can help.
- **Data Access Enhancements:**
  - IOOS worked with NOAA's Center for Operational Oceanographic Products and Services (CO-OPS) to enhance the metadata and increase the level of aggregation for the coastal [Operational Forecast Systems](http://tidesandcurrents.noaa.gov/models.html) (<http://tidesandcurrents.noaa.gov/models.html>) distributed by CO-OPS via their THREDDS Data Server (<http://opendap.co-ops.nos.noaa.gov/thredds/catalog.html>). Metadata records for these aggregations will be harvested into the Geoportal Server operated by the National Geophysical Data Center ([www.ngdc.noaa.gov/geoportal](http://www.ngdc.noaa.gov/geoportal)).
  - IOOS through the Mid-Atlantic Regional Association (MARACOOS) has enhanced the web services and metadata content for the East Coast ROMS ESPRESSO Real-Time Operational IS4DVAR Forecast System. The data is available via the THREDDS data server (<http://tds.marine.rutgers.edu/thredds/roms/espresso/>) and metadata records are being loaded into the NGDC Geoportal Server.
- **New NOAA Current Predictions Website Now Available:** Visit <http://tidesandcurrents.noaa.gov/noaacurrents/index.html> for CO-OPS beta product which provides expanded tidal current predictions for stations in NOAA's published Tidal Current tables. Benefits include customized predictions which are available in graphical and text format. Six-minute, half-hour and hourly tidal current predictions can be generated for all stations with harmonic constituents. The product also offers predicted time and speed of maximum flood/ebb current and timing of slack water (no current) for all stations available in the published current tables. This product will be maintained operationally with quarterly updates, providing the most up-to-date current predictions when new data are collected and analyzed by CO-OPS.

### **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)

- **New PacIOOS Regional Ocean Model for Samoa:** PacIOOS Regional Ocean Modeling System ([ROMS](#)) for the Samoa region provides 7-day, 3-hourly forecasts of

water temperature, currents, salinity, and sea surface height at various depth levels with approximately 3-km resolution.

## Interagency and International Collaboration/News

- **Attention Federal Agencies - Biological data survey launched:** The SOST Interagency Ocean Observation Committee, Biological Integration and Observation Task Team ([IOOC BIO-TT](#)) launched its biological data survey. Your response is requested by **April 4th**. The survey is open to Federal Agencies only and is designed to help the task team meet its stated goals: A) to improve the availability of observations on the five currently identified [IOOS core biological variables](#), and B) to identify and prioritize additional cross-cutting federal agency biological and ecosystem observation needs. For further information please contact the team chair Sam Simmons [ssimmons@mmc.gov](mailto:ssimmons@mmc.gov). Link to the Survey: [https://www.surveymonkey.com/s/BIO\\_TT\\_8\\_0](https://www.surveymonkey.com/s/BIO_TT_8_0)
- **USGS launches new nutrient loading maps:** New maps and data tables that describe nutrient loading to major estuaries throughout the conterminous U.S. are now available online on the National Water-Quality Assessment (NAWQA) Program web page titled [Tracking the Source and Quantity of Nutrients to the Nation's Estuaries](#). These new web pages describe the major sources and contributing areas of nutrients to 115 estuaries along the Atlantic Coast, Gulf of Mexico, and the Pacific Northwest coast and from 160 watersheds draining into the Great Lakes. In addition to the new web pages, water resource managers interested in a particular stream, reservoir, or estuary can use the online, interactive SPARROW model [Decision-Support System \(DSS\)](#) to estimate how reductions in nutrient sources affect downstream nutrient loads at a stream outlet.

## Delivering Benefits

- **Program Profile: SCCOOS Harbors Product:** The largest challenge for the Ports are to assure that all commercial traffic, including cargo, fishing, Harbor Pilots, and recreational boaters transit to and from the harbor safely. The cost to hold off a vessel offshore is greater than \$100,000 per day, therefore the SCCOOS sends automated messages to Long Beach pilots if the 3 day forecast shows >12 second waves. This is important for supertankers as they will start to pitch in longer period swell. Deepdraft vessels run the risk of hitting the bottom. A [customized website](#) was designed for Long Beach/Los Angeles Harbor entrances to provide critical marine conditions necessary for the safe passage inbound and outbound from LB/LA. The site is used for maritime traffic for either near real-time decisions as to their immediate transit, or for planning purposes through available forecast information. This effort illustrates the functional application of integrating regional assets, and the value of leveraging existing observations, models, and data management to develop useful products that contribute to maritime transport and commerce.
- **The Maritime Alliance Foundation releases the report - "*Marine Spatial Planning in San Diego & Stakeholder Overview*",** written by a team of graduate students from UCSD School of International Relations & Pacific Studies. As the Executive Summary concludes: "*We hope that the report will serve two principal objectives. First, we strive to provide insight into MSP's potential implications for a subset of existing and future ocean users. This subset includes interviewees in aquaculture, coastal tourism & recreation, energy, marine agriculture, and water. Second, we endeavor to further an inclusive decision-making process, which involves all stakeholders in the San Diego community. We hope that by producing this report, we can both educate readers about the potential benefits of MSP, as well as give voice to stakeholder opinions and*

concerns." The [full report \(PDF\)](#) can be downloaded from the [Research section](#) of the **Foundation** website.

- **AOOS Sea Ice Atlas Released:** AOOS launched a historic sea ice atlas with the University of Alaska Fairbanks and partners from the Alaska Center for Climate Assessment and Policy (ACCAP) and Scenarios Network for Alaska and Arctic Planning (SNAP). The interactive atlas covers the Beaufort, Chukchi, and Bering Seas, and extends back to the 1850's. The atlas compiles data from more than 10 sources spanning from the US Navy to 19<sup>th</sup> century whaling ship reports. Learn more: <http://www.aos.org/historical-sea-ice-atlas/>

**Congressional: Upcoming Events** – See March Madness DC style above

### Communications / Outreach / Education

- **Media:** NOS public affairs posted a Eureka Alert on the AOOS Sea Ice Atlas. There is at least one pick-up that we are aware of: <http://phys.org/news/2014-02-digital-atlas-alaska-sea-ice.html>
- **Dr. Holly Bamford talks about IOOS advancing NOS priorities:** <http://oceanservice.noaa.gov/aa-updates/ioos-022414.html>. Adapted from Holly's [Zgram](#) intro. Featured on the [home page](#) under the row of icons to the right. (Scroll down the page if you are viewing on a mobile phone.)
- **Coming Soon... SCCOOS Near-Real Time Data in the SD Airport:** San Diego International Airport has commissioned [Jason Bruges Studio](#) to create an exciting and innovative lounge for passengers as part of the airport's Terminal 2 expansion and on-going arts program. The "AirSpace" or "New MediaLounge", due to be opened Summer 2014, will be designed to reflect the landscape, terrain, cliffs and coastal areas surrounding the airport. The studio is working closely with SCCOOS to use their near-real time data combined with biological data from Dept. of Fish & Wildlife, NOAA Southwest Fisheries Science Center, and Scripps Institution of Oceanography to provide perspective on the mess such as the environment and sustainability.
- **AAAS** – Science News for Students: Sharks become science helpers; <https://student.societyforscience.org/article/sharks-become-science-helpers>

### Upcoming Meetings with IOOS participation

- **Call for papers and exciting events OCEANS'14 MTS/IEEE:** Calling on ALL IOOSians – please submit any abstracts by **26 March**. This is a great conference to highlight that IOOS WORKS! We are working with the organizers on 2 townhalls - (1) U.S. and Canada partnerships in ocean observing and (2) focused on the ocean enterprise. We are also evaluating whether we will do another InGite event as we did in OCEANS'12. Submit your abstract on-line through the conference website, [www.oceans14mtsIEEEestjohns.org](http://www.oceans14mtsIEEEestjohns.org)
- **Oceanology International 2014:** If you are attending please stop by the Ocean Observing Systems session. We have a great line up! For those attending we have a special treat – we will screen the trailer for the new DEEPSEA CHALLENGE. <http://www.oceanologyinternational.com/en/home/>

View the IOOS

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

Cheers,  
Zdenka

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