Bi-Weekly IOOS® Z-GRAM – 8 Aug 2014

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From the IOOS Program Office:

- **Next IOOS Advisory Committee Meeting**: Scheduled for October 2-3, 2014, at the Large Lakes Observatory in Duluth, MN. Additional information will be posted on the committee website as it is available. www.ioos.noaa.gov/advisorycommittee

- **GCOOS Build-Out Plan V2 available**: The plan is a living document and is posted at: http://gcoos.tamu.edu/BuildOut/BuildOutPlan-V2.pdf. It includes a new ecosystem monitoring section.

- **SECOORA Annual Report**: 10, 22%, 71%, 253 real-time stations, 3,000 obs per hour – curious to know what all these numbers represent? Read SECOORA's annual report. http://secoora.org/node/438. Patterned after NERACOOS' report (http://neracoos.org/files/documents/communication/NERACOOS-2013-Annual-Report-WEBVERSION.pdf), this 8 page report gives you a great synopsis on SECOORA's efforts.

Observation Subsystem and Sensor Technologies

- **High Frequency Radar/Radio:** (Lead Jack Harlan, Jack.Harlan@noaa.gov): Senator Maria Cantwell (D-WA), toured the U.S. Coast Guard's Air Station in Port Angeles on August 8th to learn about search and rescue operations. One of the topics she discussed was the need for high-frequency radar. http://www.peninsuladailynews.com/article/20140807/NEWS/140809982/sen-cantwell-to-visit-port-angeles-coast-guard-base-friday

- **Gliders Deployments:**

  - **GLIDERPALOOZA 2014 BEGINS!** MARACOOS is coordinating even more gliders this year and gliders have started going in the water. Read more about all the participants and goals http://maracoos.org/blogs/main/?p=814. The glider group has grown from last year, and the current team now includes (north to south): 1) Memorial University, 2) Dalhousie University, 3) University of Maine, 4) Woods Hole Oceanographic Institution, 5) University of Massachusetts Dartmouth, 6) Teledyne Webb, 7) OOI Pioneer Array, 8) Rutgers University, 9) University of Delaware, 10) University of Maryland, 11) Virginia Institute of Marine Science (College of William & Mary), 12) North Carolina State University, 13) Bermuda Institute of Ocean Sciences, 14) Skidaway, 15) Naval Oceanographic Office, and 16) Texas A&M. With the boosted number of participants this year, the number and span of glider spatial coverage has increased for Gliderpalooza 2014. 30+ glider deployments are

planned between now and November, and deployments will range from Newfoundland to the Gulf of Mexico covering both coastal and oligotrophic oceanic regions. The number of new partners, glider deployments, spatial coverage, and regional models that will use the glider data is still growing. Got a glider? Want to be involved? Contact Grace Saba, saba@marine.rutgers.edu.

- **Second Glider in the Caribbean:** NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) and National Data Buoy Center, along with CariCOOS deployed a second glider 14nmi off the coast of San Juan, Puerto Rico, from the R/V La Sultana of the University of Puerto Rico at Mayaguez (UPRM). Data from the first deployment are already being widely distributed (including GTS) and data of today's deployment already appears in the project web page at: http://www.aoml.noaa.gov/phod/goos/gliders/observations.php

Data Management and Communications (DMAC) Subsystem and Tools Built on IOOS Data: (Contact Derrick or Rob to get on the list serve for changesDerrick.Snowden@noaa.gov, Rob.Ragsdale@noaa.gov)

- **Biological Data Available**: Check out GCOOS-RA's new link to The Comparative Assessment of Gulf Estuarine EcoSystems (CAGES) http://gcoos.org/products/index.php/bio. This complements SECOORA's efforts posted here -http://secoora.org/node/394

- **Ocean Acidification Data available through PacIOOS**: PacIOOS Voyager now contains a new "ocean acidification" category, which provides near real-time monitoring of atmospheric and oceanic carbon dioxide (CO2) levels at 13 moored buoys across the insular Pacific. These three-hourly data are obtained from NOAA's Pacific Marine Environmental Laboratory (PMEL) Carbon Program.--PMEL cautions users that these data are near real-time and have not been post-calibrated or quality controlled. For scientific usage, please access the quality controlled dataset available from the Carbon Dioxide Information Analysis Center (CDIAC).

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

- **COMT Update**: We held the IOOS Coastal and Ocean Modeling Testbed All Hands this week at NCWCP and had a great meeting. Each of the project teams provided updates on their work, but we also had a great presentation by Jamie Rhome, National Hurricane Center and Chris Magee from NCEP Production. Jamie reminded us that victory does not have to mean lines of code or models transitioned, but ideas or best practices or recommendations can also be transitioned. There have been changes to the way NHC does some of their forecasting based in part from recommendations from the last round of inundation testing in COMT. Chris also talked to us about what it actually takes to get lines of code into production so all the PIs could have a better understanding of the restrictions and requirements to move things into operations. More information about the meeting can be foundhttp://testbed.sura.org/node/724, and the presentations will be posted there soon.

- **Call for AMS Abstracts due August 15, 2014**: Andre Van der Westhuysen, COMT PI, is one of the leads for the AMS meeting next year and is calling for abstracts: For submissions, please visit: https://ams.confex.com/ams/95Annual/oasys.epl, and select "13th Symposium on the Coastal Environment". The overall theme for the 2015 AMS Annual Meeting is “Fulfilling the Vision of Weather, Water, and Climate Information for Every Need, Time, and Place”. The 13th Symposium on the Coastal Environment will explore these information needs and solutions in U.S. coastal zones and abroad. We encourage abstract submissions for a variety of sessions ranging from modeling and observations to application, pertaining to the above theme or otherwise. Our symposium will also include two joint sessions on Air-Sea Interaction and Social Science in the Coastal Environment.

Interagency and International Collaboration/News

- **JCOMM data architect report**: A great report by Bob Keeley on improving the use and interoperability of the data, both on a network and a variable basis. The final report on data architecture for observing networks of the global ocean observing system, available on the Observations Programme Area page of the JCOMM website (www.jcomm.info). In summary, the report contains four sections (don’t worry about the repetition of content, especially in Part 3 as the chapters were written so that each can stand on their own):
  - Work Description – background to the report including charges by JCOMM and GOOS
  - An Analysis by Observing System – there is a chapter per observing platform; these chapters have been reviewed and commented upon by the JCOMM Observations Coordination Group and friends.
  - An Analysis by ECV – these chapters have been very lightly reviewed and were compiled to help the OOPC in their task of defining requirements and evaluations for observing based on variables.
  - Concluding Remarks and Recommendations – these were reviewed by OCG and friends, and contain common recommendations that have been broadened from the specifics of the individual chapters and serve as overall recommendations.

Delivering the Benefits:

- **Improving our Understanding of Ocean Acidification:** Last summer, NERACOOS was instrumental in establishing the Northeast Coastal Acidification Network (NECAN). This regional partnership is tasked with coordinating ocean acidification engagement, research, and modeling endeavors. Since the launch of NECAN last year many scientists, managers and policy makers have been aggressively working to learn more about ocean acidification in the Northeast. For example, the State of Maine has set up a groundbreaking Commission and introduced laws to better understand the effects of Ocean Acidification. To learn more about the work NECAN has done click here.

- **PacIOOS new Six-Day High Sea Level Forecast in and around** Malakal, Palau: The Malakal forecast shows observed sea levels for the past three days, predicted sea levels for the next six days, and an indication of whether a "high sea level" threshold (red line based on historical records) will be reached. The forecast can be found on the PacIOOS website, or in PacIOOS Voyager.

- **LSU Study Used Oil and Gas Industry Data to Understand Gulf of Mexico Currents: A Public-Private Partnership Provides Important Insight to Help Protect Public Safety in the Gulf:** http://gcoos.tamu.edu/?p=7124. The study, funded through the U.S. Bureau of Ocean Energy Management (BOEM) Environmental Studies Program (ESP), uniquely shows how the oil and gas industry and public agencies and universities can collaborate to provide important public information. The study's results provide insight into how the Gulf of Mexico currents move, which is critical for improving oil spill response, protecting the safety of the 40,000 citizens working in the Gulf offshore oil and gas industry, and understanding the development and characteristics of hurricanes. To read the study, visithttp://www.data.boem.gov/PI/PDFImages/ESPIS/5/5366.pdf.

Congressional: No update.

Communications / Outreach / Education:

- **Catch the videos**: Zdenka and Michael Bruno speak at Oceanology International: http://www.oceanologyinternational.com/Media-Centre/Video-Gallery/#

- **Read the 2014 Worldwide OOS update**: file:///C:/Users/Home/Downloads/ONT_Aug14_OOS.pdf. Led by Donna Kocak on behalf of the Marine Technology Society with input from many.

- **Great Lakes FieldScope**: GLOS partnered with National Geographic, Michigan Sea Grant and the United States Geological Survey to develop and launch the Great Lakes Field Scope. This tool is aimed at K-12 students and citizen science groups conducting water quality studies and can be explored here:http://greatlakes.fieldscope.org/. National Geographic has developed a mobile app that allows users to enter data when they do not have a cellular signal. The data is automatically uploaded once the user is back in an area with coverage. This functionality makes FieldScope much more practical for users. The app is called the FieldScope Data Collector; links to the Android and iOS versions can be found here.

- **Catalina Sea Ranch holds a press conference:** Catalina Sea Ranch has secured the first permit for offshore aquaculture in U.S. Federal waters from the U.S. Army Corps of Engineers, which was unanimously approved by the California Coastal Commission. Terminal Island, Calif., Thursday, July 31, 2014**.** http://www.ocregister.com/articles/ranch-630334-sea-.html,http://www.dailybreeze.com/business/20140731/catalina-sea-ranch-off-terminal-island-poised-to-grow-millions-of-pounds-of-shellfish

- **Ocean Acidification in Alaska**: New paper released led by Jeremy Mathis with a number of NOAA and non-NOAA OAP PIs. The major points of the article: The intensity, extent and duration of ocean acidification in the coastal areas around Alaska will increase as anthropogenic CO2 continues to rise. Important commercial and subsistence fisheries in Alaska are co-located where enhanced ocean acidification will occur. Coastal human communities in southeast and southwest Alaska are highly reliant on fishery harvests and face the highest risk from ocean acidification. http://www.sciencedirect.com/science/article/pii/S0079661114001141.

- Here is a link to a Washington Post article which highlighted both this paper and the pteropod paper, also led by NOAA PMEL PIs.

- **Discussion on California Ocean Acidification:** Recently, CeNCOOS OA expert 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 KQED's website.

- **CIT Awarded Subcontract to Support Ocean Research**: The Center for Innovative Technology (CIT) announced today a $50,000 subcontract with Rutgers University to provide site support for six high frequency (HF) radar systems along the Virginia-Maryland coast, as part of the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS) project. With this award, CIT begins its eighth year supporting a mid-Atlantic partnership of academia, industry and government to advance coastal ocean observing, data management and forecasting capacities.Read more: http://www.digitaljournal.com/pr/2104254#ixzz3A1PlR3Fo andhttp://www.chron.com/default/article/CIT-Awarded-Subcontract-to-Support-Ocean-Research-5671560.php

Upcoming Meetings with IOOS participation:

- **Oceans'14 MTS/IEEE St. John's - Oceans: Where Challenge Becomes Opportunity - September 14-19:**
  - We are coordinating two town halls at this meeting:

- Partnerships in Observing – Canada and USA: We will explore the existing partnerships and best practices for engagement, how the nations' ocean observing systems successfully delivering needed services to their citizens and can we provide more services if there were a more formal North American observing infrastructure.

- Developing the Marine Technologies and Services Enterprise: Marine technology and services companies are important partners and stakeholders of the ocean observing program and in have gown as a result of ocean observing programs. Quantifying their impact has been difficult. We will hear from both industry and government representatives on the opportunities, barriers and how we can clearly communicate the value of this enterprise to Canada's and the United States' economy.

View the IOOS calendar: http://www.ioosassociation.org/calendar orhttp://www.ioos.noaa.gov/about/calendar.html

Cheers,
Zdenka

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