

Bi-Weekly IOOS® Z-GRAM - 28 January 2011  
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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

**Budget Notice:** NOAA FY12 2010 Budget Briefing: February 16th from 1:300 to 3:00 pm at the Department of Commerce Auditorium, Dr. Lubchenco, Department of Commerce Under Secretary for Oceans and Atmosphere/NOAA Administrator, will host a briefing on the President's fiscal year 2012 NOAA Budget Request. NOAA senior leaders will join Dr. Lubchenco to answer questions and respond to comments. If you cannot attend in person, the toll-free teleconference number is (888) 234-7537 and the verbal passcode to provide the operator is "NOAA Budget." If you will attend in person, RSVP at the following link: <https://events.r20.constantcontact.com/register/eventReg?oeidk=a07e3b42ptna6effc4d&oseq=>. If you plan to phone in, please RSVP to [External.Affairs@noaa.gov](mailto:External.Affairs@noaa.gov)

**Programmatics - CY11 Focus:**

- **Develop Certification Standards for Non-Federal Assets** [ICOOS ACT: Section 12304 (c)(2)(E)]
  - Interagency Ocean Observation Committee (IOOC) approved formation of two working groups to develop certification criteria: (1) Data Partners Working Group and (2) Regional Information Coordination Entity (RICE) Working Group
  - Working Groups are charged with delivering recommended criteria to the IOOC for approval by the end of February 2011.
  - IOOC approved criteria will be published in the Federal Register for public comment and review before being finalized by IOOC.
  - US IOOS Program will draft program guidelines to certify and integrate non-federal assets, using the approved criteria.
- **System Advisory Committee** [ICOOS ACT: Section 12304 (d)] - **If you are interested in serving on or want to recommend someone to serve on this this FAC** please let Jessica Geubtner, [Jessica.Geubtner@noaa.gov](mailto:Jessica.Geubtner@noaa.gov), know.
  - The SAC has been administratively established via DOC and GSA
  - We expect solicitation to be published in **Federal Register by end of Feb 2012** . This is the formal mechanism for soliciting membership but see note above we are looking for your help in identifying outstanding individuals to serve on this FAC. Our aim is approximately 12 members for the FAC.
  - We expect the Committee to be formed in early 2012
- **Biennial Report to Congress** [ICOOS Act -Section 12307]
  - Due March 30, 2011
  - Drafted by Lead Federal Agency (NOAA) through the NOAA Administrator; delivered to Congress through the National Ocean Council

- Draft is currently within NOAA correspondence system after being reviewed by the member agencies of the IOOC, the National Federation of Regional Associations (NFRA) and the Executive Directors of the IOOS - Regional Coastal Ocean Observing Systems (RCOOS).
- **Independent Cost Estimate** [ICOOS Act: Section 12309]
  - We will complete an independent and a government estimate
  - IOOC approved initiation of foundation documents: a) Ground Rules & Assumptions; b) Cost Element Structure; and, c) Work Breakdown Structure. US IOOS Program is currently completing the foundation documents for IOOC review.
- **Gaps in Observation Coverage** [ICOOS Act Section 12304 (c)(2)(F) & (c)(3)(D)]
  - Will be informed by assessments of contributors to IOOS in accordance with US IOOS: A Blueprint for Full Capability (Blueprint Assessments).
  - Will also be informed by Regional IOOS Working Group.
  - Sam Walker (US IOOS) has re-initiated the inventory activity that will be ongoing for the next few months.
- **US IOOS: A Blueprint for Full Capability -**  
[http://www.ioos.gov/library/us\\_ioos\\_blueprint\\_ver1.pdf](http://www.ioos.gov/library/us_ioos_blueprint_ver1.pdf)
  - The assessment tool has been developed and has been tested within US IOOS Program and the US Army Corps of Engineers (USACE).
  - Blueprint Assessments are beginning with the Federal Agencies and the RCOOS
- **FY11 - Federal Funding Opportunity:** All of the merit panels were completed in December. The US IOOS Program is working internally on funding alternatives and with the Grants and Acquisition Division and NOS staff to preview our proposed cooperative agreements. By doing these previews we will shorten the amount of time the Grants Division will need to award the cooperative agreements after we are able to work with the intended recipients for final proposals. No announcements can be made until the Federal government receives an FY11 appropriation.
- **Regional Milestones:** As NOAA is transitioning to a new budget and execution process called Strategic Evaluation and Execution (SEE) we have begun an effort to assimilate the RCOOS milestones into this process. Reporting template for regional milestones was sent to the regions responsible for Q1 reporting, and responses with status update and comments have been compiled. This information will be shared with the RCOOS and NFRA.

**Data Management and Communications (DMAC) V0.9 Subsystem of IOOS®**  
[http://ioos.gov/library/dmac\\_implementation\\_2010.pdf](http://ioos.gov/library/dmac_implementation_2010.pdf)

**CY11 Focus:** The DMAC subsystem of US IOOS continues to be a strong focus for the US IOOS. As the architect for this subsystem, we are focusing this year on getting from the high level requirements document to an implementation plan based on the activities and functions outlined in the US IOOS Blueprint. From there we are working with the entire US IOOS enterprise, our Federal partners, Regional partners, NSF-OOI and the National Water Quality Monitoring network and GEOSS to harmonize the cyber infrastructure activities. We are continuing to expand DMAC services and improving them through two of our data providers NOAA's National Data Buoy Center (NDBC) and the Center for Operational Oceanographic

Products (CO-OPS). We have tremendous capability within the 11 IOOS Regions which we are counting on to help us build the national infrastructure. We will continue to advance the capability to increase the number of variables, as outlined in the US IOOS Blueprint, that can be made interoperable. We will continue to work with organizations like the Open Geospatial Consortium, GEOSS to ensure that we are part of the data management community. **There is a lot going on and we very much want you to join us as we continue to make progress together to provide the nation with a DMAC that is brings provides all types of Ocean, Coastal and Great Lakes data in the right format, to the right users, at the right time.**

- **Data Providers:** To get on the IOOS System Status list which announces service changes, please contact Jeff ([Jeff.deLaBeaujardiere@noaa.gov](mailto:Jeff.deLaBeaujardiere@noaa.gov)) or Rob ([Rob.Ragsdale@noaa.gov](mailto:Rob.Ragsdale@noaa.gov)).
  - CO-OPS: The CO-OPS Sensor Observation Service (SOS) test server has now been upgraded to offer data in comma- and tab-separated values (CSV, TSV) formats, to update the identifiers for stations, sensors and phenomena to match current IOOS standards. Minor fixes revealed in testing are presently being made. An email will be sent when the output modifications are available on the CO-OPS' Evaluation SOS web site. The test server is accessible at <http://opendap.co-ops.nos.noaa.gov/ioos-dif-sos-test/>.
  - Production release of the upgraded CO-OPS Sensor Observation Service (SOS) (<http://opendap.co-ops.nos.noaa.gov/ioos-dif-sos/>) is scheduled on or about February 3, 2011.
  - NDBC: The NDBC SOS is in the process of being augmented to include data from Voluntary Observing Ships (VOS).
- **IOOS Biological Biological Data Project Conference Call (1/24):** The following topics were discussed on the most recent project conference call: Final data access and delivery services to be deployed; Data integration capacity for key analyses (biomass estimates, data/metadata); Project status briefs to IOOS team and to IOOS regional data management meeting; and Topics/agenda and dates for the second project workshop this spring.
- **Navy Collaboration:**
  - NOAA as public face for Navy data: There have been several recent discussions with stakeholders aimed at moving this project forward. In the near future the participants' local to Stennis will meet to identify Navy data sets that NOAA organizations will be willing to assume responsibility for serving to the public. Derrick Snowden, IOOS project lead, is working with all involved to bring together the many Navy activities into a coordinated strategy.
  - Naval Meteorology and Oceanography Command (NAVMETOPCOM)/NDBC collaboration: Derrick is beginning a project we have been discussing with the Navy's John Lever and NDBD's Bill Burnett to experiment with the Navy METOC Data Services Framework (NMDSF) architecture and software through an implementation at NDBC and opening a door for joint development of a national IOOS data services framework.
- **IOOS RA DMAC Workshop:** A draft agenda, developed by steering team members Matt Howard (GCOOS), Eric Bridger (NERACOOS) and Rick Blair (NANOOS), has been distributed to all of the IOOS DMAC Coordinators for review. RA Readiness for

implementing IOOS data services and DMAC Planning will be a major focus in this year's workshop. The workshop dates are April 27 & 28 and the meeting will be held at the IOOS Office in Silver Spring, MD.

- **IOOS RA DMAC Survey:** Alex and Rob are beginning a process that will reveal the current and near-term (next 12 months) state of the IOOS data services and formats that exist within each IOOS Regional Association. This survey will consist of a set of questions that will be asked to the IOOS RA DMAC Coordinators. The results will be reviewed and discussed in the IOOS RA DMAC Workshop.

**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.

- **High Frequency Radar/Radio (HFR): For more information please on all US National HFR efforts please contact our US Project Manager - Jack Harlan, [Jack.Harlan@noaa.gov](mailto:Jack.Harlan@noaa.gov)**
  - Radiowave Operators Working Group (ROWG) Meeting Website URL was released to the ROWG mailing list to announce registration. The meeting Website can be accessed from: <http://www.joss.ucar.edu/events/2011/rowg/index.html>. The meeting is scheduled for April 2011 in Santa Barbara, CA.
  - Extensive interactions with the Office of Radio Frequency Management (ORFM), Codar, USCG and DoD partners on objections to the NOAA proposal for primary frequency allocations has led to support by Navy and NSF while USAF is now beginning to negotiate. Sam Walker has been working with Jack and USCG to establish a more formal stance from that agency on HFR primary frequencies. We really appreciate the support from our the entire IOOS team on this effort.
  - Developing GLOS - HFR Field experimenting: Jack has been facilitating between GLOS and CODAR on this effort.
  - Jack and Zdenka met with Tom Tomaiko, Program Manager, Maritime and Port Security, Department of Homeland Security, Science & Technology Directorate to discuss a pilot effort he has initiated using HFR to support a comprehensive Maritime Domain Awareness Common Operational Picture. This works stems from DHS/S&T University Program - Maritime Security Centers of Excellence and involves our IOOS Partners from MARACOOS, CaRa, AOOS and PacIOOS. We are excited about extending this partnership with DHS and look to increased participation with them over the next year.
- **IOOS and Links to the National Water Quality Monitoring Network:**
  - IOOS/NOAA's NCCOS Water Quality Project: We continue our planning to bring the Florida Keys water quality data on-line using IOOS standards. Planning for phase 2 was discussed with regards to the implementation of the IOOS standards and services. SECOORA was discussed as a potential partner that could potentially help in the data access element in the next phase of the project.
  - Beach Water Quality Project: We continue to engage in discussions with members of the IOOS Regional Water Quality Project Team focused on the development of a beach water quality project. Project team members (including: Eric Vowinkel (USGS/MACOORA), Ru Morrison (NERACOOS), Judy Krauthamer (MACOORA), Dwayne Porter and Megan Treml (SECOORA))

drafted an abstract pertaining to the project and submitted to the 2011 National Beach Conference in Miami, FL (3/15-17). The project discussions have led to interest from scientists at EPA Region 2 to participate. We will know in early February if the abstract was accepted.

- **IOOS and The National Science Foundation (NSF) - Ocean Observatories Initiative (OOI):** Jeff (US IOOS Program) participated in a conference call for the review of the External Observatories Integration (EOI) component. EOI refers to the inclusion of data from sensors outside OOI into the OOI-CI Data Distribution Network (DDN).
- **Modeling Testbed - “State of the Testbed” Brief (12/15):** Testbed Advisory Evaluation Group (TAEG) Lead Rich Signell (United States Geological Survey (USGS)) briefed Jerry Draayer, President of SURA; Don Wright, Testbed Principal Investigator; Louis Uccellini, Director of National Centers for Environmental Prediction (NCEP); and Zdenka. Rich did a masterful job of relaying the success and challenges of each Testbed Team. An outcome of the brief was an invitation to the Testbed team lead from Louis Uccellini to visit NCEP to discuss future partnerships with the Coastal Environmental Modeling Community. This meeting is scheduled for March 2nd. The meeting objective is to define a process that optimizes the relationship between the research/academic community and the federal operational centers that use the models. **ConOps for Transition to Operations:** Doug (IOOS Project Manager) has drafted a Concept of Operations describing a process for model transition into federal operation centers is in preparation. Contributors include IOOS, US Coast Guard, Naval Oceanographic Office, Naval Research, USGS, NOAA's NCEP and Coast Survey Development Lab (CSDL)
  - Estuarine Hypoxia Testbed Team: Dr. Carl Friedrichs, the Estuarine Hypoxia Testbed Team Lead, shared their progress on Hypoxia Modeling with the EPA Chesapeake Bay Program's modeling group. "The Bay Program continues to be very open and anxious to partner with us".
  - NFRA Modeling Webinar 2/22: A review on-going/emerging IOOS modeling activities, particularly the SURA Testbed and the OOI/IOOS collaboration is scheduled for February 22nd.

#### Other:

- **National Ocean Council Request for Public Comment:** The National Ocean Council (NOC) is seeking public input on the development of strategic action plans for the nine priority objectives described in the Final Recommendations of the Interagency Ocean Policy Task Force: ecosystem-based management, coastal and marine spatial planning, inform decisions and improve understanding, coordinate and support, resiliency and adaptation to climate change and ocean acidification, regional ecosystem protection and restoration, water quality and sustainable practices on land, changing conditions in the Arctic, and ocean, coastal, and Great Lakes observations, mapping, and infrastructure. To submit your comments, visit the NOC website at: <http://www.whitehouse.gov/administration/eop/oceans/sap>. For more information about the request for comment, see the [Federal Register Notice](#). The NOC plans to release the draft strategic action plans in the summer of 2011, at which time there will be an additional opportunity for public comments.

- **CONGRATS to David Kennedy:** David was just named as the NOAA assistant administrator for the National Ocean Service effective immediately. He has served in an acting capacity since January 2010 when John Dunnigan was named a senior policy advisor to the NOAA administrator. Kennedy stated: “I am both honored and pleased to accept this appointment,” said Kennedy. “The National Ocean Service is made up of highly dedicated, enthusiastic and extremely knowledgeable professionals. Over the past few months I have been able to see them directly in action. The Ocean Service is a diverse organization with a wide range of responsibilities involving scientific research, hazmat response and restoration, coastal and resource management and now the center of the national ocean policy, coastal and marine spatial planning. With NOS being the lead for NOAA’s coastal goal their synergy will be extremely important as we move forward.” Kennedy, a 22-year NOAA career employee, was previously director of NOAA’s Office of Ocean and Coastal Resource Management (OCRM). He previously served as director of NOAA’s Office of Response and Restoration. Kennedy has more than 20 years of experience leading hazardous materials management and response efforts, including coordinating federal scientific response to more than 100 oil and chemical spill incidents, including the Argo Merchant, Amoco Cadiz, IXTOC I oil-well blowout, Presidente Rivera, World Prodigy, and Exxon Valdez. Prior to 1976, Kennedy was director of the spilled oil research team at the University of Alaska Geophysical Institute.
- **Deepwater Horizon Support:** In support of the USCG, Sam Walker (US IOOS) completed briefings on the Deepwater Horizon (DWH) Operation Science Advisory Team (OSAT) Report to multiple Louisiana Parish Presidents. Results were met very favorably, and the science-based efforts that characterized the response observing efforts provided a solid basis for drawing conclusions and supporting Command decision-making.
- **National Council for Science and the Environment “Our Changing Oceans” Conference:** A number of IOOS folks had a chance to attend and we were able to showcase US IOOS within the NOAA booth. Here are high level take aways from the opening day Plenary on Deepwater Horizon and ocean acidification (OA) breakouts with an focus on impacts to the shell fish industry. With parallel sessions this represents only a small sample of discussions that took place over the three days:

  - Ocean observing/monitoring is a high priority across many agencies and stakeholders. DWH exposed a lot of knowledge gaps for researchers, but more importantly exposed a lot of practical programs/industries that benefit from ocean observing.
  - A lot of the focus is shifted to restoration efforts in the Gulf - and not simply from the oil spill, but the larger scale restoration of the coastal wetlands and habitats. So, for those thinking about future ocean observing needs in that region - they need to be thinking about what can be deployed that will help with these kinds of restoration efforts.
  - Defining and documenting explicit requirements is key to moving our regional efforts forward. Gulf of Mexico (for all aspects of oil/gas exploration), Pacific NW for shellfish growing industry, Great Lakes for navigation/recreation are all great examples of specific focus areas that have led to increased interest and potential for development.
  - Knowing the economics behind the observing needs is also crucial.



- The shellfish growing industry has identified 4 primary elements that they are currently employing (and need to refine) in order to stay in business: monitoring/observing; predictive modeling; hatchery management; and stock security/selection. IOOS can assist with the first two directly. The growers are providing their own monitoring right at the intakes, but larger scale observing and predictive modeling are beyond their capacity/capability
- **Basic Observation Buoy (BOB) III Workshop: A Collaborative Success:** Doug Levin (US IOOS) was co-lead with Lundie Spence (COSEE-SE) of Basic Observation Buoy workshop. The workshop was attended by 38 individuals, including Debra Hernandez and Megan Trembl (SECOORA). In November, SECOORA announced that both of their mini-grants went to projects that involve BOBs. One will result in a BOB being deployed at the Smithsonian Marine Station in Fort Pierce, Florida as part of their Ocean Explorers Program. The second involves an A-BOB (Advanced BOB) to be deployed in conjunction with the NERR System Wide Monitoring Program (SWAMP) with real time display in the Guana Tolomato Matanzas National Estuarine Research Reserve Education Center. This workshop expanded on the previous workshops by exploring applications of the BOB platforms. This workshop was a very successful mix of students, scientists and educators that resulted in broadening the pool of BOB aficionados, trouble shooting data collection issues, and sharing experiences and ideas in using BOB for educational opportunities. High school students from Beaufort High School, Hilton Head Preparatory School and Charleston's Academic Magnet school interacted with scientists from a variety of organizations including University of Georgia, University of North Florida, University of North Carolina, Old Dominion University, North Carolina State University, Kennesaw State University, University of Connecticut and the Guana Tolomato Matanzas National Estuarine Research Reserve among others. This participant-driven workshop provided the opportunity to understand the range of sensor options, thanks to the input of two sensor vendors (YSI and Pasco) participating and was a forum for developing outreach strategies for broader communities. Presentations from BOB III are posted on the SECOORA Web site
- **GLOS in Action:** Call on GLOS for Your "Next Top Model" Search: GLOS has released the [Great Lakes Model Inventory](#), a collection of information on more than 150 models and decision-support applications developed for the Great Lakes region.
- **United States Air Force and Observation Interoperability:** Charly responded to a 12/29 inquiry from a vendor (Ben Watson – Booz-Allen) supporting DOD programs (Joint Space & ISR, Global Sensor Integration on Networks) with an interest in the standards-based approaches at IOOS for data management. Charly provided additional contacts for Mr. Watson, including John Lever at the Navy Meteorology and Oceanography Command whose team as developed tools for improved Navy access to/use of Navy oceanographic data.
- **Aquatic Sensor Workgroup of the Methods and Data Comparability Board** At the request of the Board's co-chair Dan Sullivan, Charly gave a WebEx presentation to this team on Jan 19th on IOOS efforts over the past few years on data interoperability. The presentation was well received.
- **IOOS Regional Project Status/ Review Briefs:** Meetings are being scheduled with most of the IOOS Focus Area 2 (Specialized Applications and Products for Regional Stakeholders) and Focus Area 3 (Local and Regional Data Management and

Communications) PIs to review accomplishments and possible next steps. The following is a list of meetings conducted or scheduled to date. Remaining meetings will be scheduled in the next 4-6 weeks.

- Jan 27th - Standardization of Local Data Nodes in the GCOOS Regional Association (GCCOS's Ann Jochens and Matt Howard)
- Jan 28th - Chesapeake Inundation Prediction System (CIPS): Flood Forecasts for Coastal-Bay-Estuary Resiliency to Storm Surge (Chesapeake Research Consortium's Kevin Sellner and team)
- Feb 11th - Using ocean data assimilation to incorporate environmental variability into sardine and squid assessments (Scripps' Art Miller and team)
- Feb 18th - Standards Integration of QA/QC Requirements for Oceanographic Observing Systems (WHOI's Janet Fredericks and team)
- March 7th - A Regional Storm Surge and Inundation Model Testbed for SECOORA (Univ. of FL's Peter Sheng and team)

### Congressional:

- Quarter Hill visits updating Congress on the progress towards building US IOOS were conducted by Suzanne Skelley and April Donnelly (US IOOS) and they were accompanied by Eric Lindstrum, NASA, IOOC co-chair. Visits were conducted with House Natural Resources Minority Staff – Karen Hyun & Corey Ridings; House Transportation & Infrastructure Committee, Coast Guard and Maritime Transportation Subcommittee Minority Staff - Dave Jansen; Senator Daniel Inouye staffer – Whit Saumweber; Senate Commerce Committee, Oceans Subcommittee Majority and Minority Staff -Catherine Hazelwood and Mike Conathan; and Congresswoman - Nick Battista. All of the briefings went well. Progress on building US IOOS was noted, and we also got feedback on the austere budget climate the nation is facing.

### Communications/Outreach and Website Updates:

- NOAA's National Ocean Service (NOS) has two outreach programs. Diving Deeper and Making Waves. US IOOS topped the charts in both for 2010
  - Making waves -Salute to the Scarlet Knight (IOOS)/January 6, 2010 was the **#1 download** - if you missed it:  
[http://oceanservice.noaa.gov/podcast/supp\\_jan10.html#mw42](http://oceanservice.noaa.gov/podcast/supp_jan10.html#mw42)
  - Diving Deeper - Benefits of Ocean Observing Data (IOOS)/January 27, 2010 was the **#1 download** for 2009 and 2010:  
[http://oceanservice.noaa.gov/podcast/supp\\_jan10.html](http://oceanservice.noaa.gov/podcast/supp_jan10.html)
  - Subscribe to the feeds for "Making Waves" and "Diving Deeper" (as well as our feeds for NOS news, ocean facts, and video) at  
<http://oceanservice.noaa.gov/rss.html>. Feed subscriptions are a great way to receive notifications when new content is posted on the NOS Web site
- **Glider Smithsonian podcast now live** at <http://oceanservice.noaa.gov/podcast.html>.
- **Sea Technology** - Annual Review and Forecast: Zdenka Willis, Director US IOOS provided an outlook on US IOOS; Mario Tamburri provided an outlook on the Alliance For Coastal Technology



- **Have you gotten your copy of MTS Journal** - Part 1 now available. Report highlighting special MTS journals now live on NOS website - <http://oceanservice.noaa.gov/news/weeklynews/jan11/ioos.html>
- **NOAA World article** now live at <http://oceanservice.noaa.gov/news/weeklynews/dec10/glider.html>
- **IOOS in the News** – mentioned in Scituate Mariner article on Massachusetts prediction system: <http://www.wickedlocal.com/scituate/news/x1958217085/Scituate-is-target-site-for-prediction-program-IN-THIS-WEEKS-PAPER>
- **IOOS in the News (SCCOOS):** Ocean currents mean sewage pollution potential persists. Mike Lee, The San Diego Union-Tribune, Wednesday, January 19, 2011. <http://web.signonsandiego.com/news/2011/jan/19/ocean-currents-mean-sewage-pollution-potential-rem/>
- **Thankyouocean.org features SCCOOS and CeNCOOS podcast:** Thank You Ocean is pleased to present a guest podcast for a special Thank You Ocean Report. Up and down the coast of California, abalone farmers, bar pilots and environmentalists — among others — are staking their profits, well being, and peace of mind on real-time ocean data provided by California’s two Ocean Observing Systems, [SCCOOS](#) and [CeNCOOS](#). *Credit: Ari Daniel Shapiro with COSEE NOW.* Please listen to this video podcast by visiting [thankyouocean.org/news/podcasts](http://thankyouocean.org/news/podcasts).
- **ioos.gov Website updates:** Added and populated a new Grants and Funding Opportunities section under “NOAA Program” tab. This section is available on the public site: <http://www.ioos.gov/funding/>
- **US IOOS part of the NOAA booth as the NCSE Exhibit:** Our Changing Oceans exhibit on Jan 20-21. The glider video link and various IOOS-related websites were highlighted. IOOS materials were also distributed.

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

- **CMSP and US IOOS Session at ASLO (15 Feb) - Join Us:** Having had a chance to look at the ASLO technical program there will US IOOS partners involved in a number of the sessions. The following Special Session is being chaired by US IOOS (Zdenka); NOAA’s National Centers of for Coastal Ocean Sciences (NCCOS) (Chris Caldw) and Nasseer Idrisi (CaRA/University of the Virgin Islands).
  - **S75: Coastal and Marine Spatial Planning: Current Needs and Future Challenges:** The goal of this session is to explore the means of integrating the necessary scientific, management, and policy requirements to assist representatives from various global regions in the utilization of Coastal and Marine Spatial Planning (CMSP) as a tool for the protection, maintenance, and restoration of the oceans, coasts and major aquatic systems and for assuring sustainable usages for humankind’s health and welfare within their ecosystems. Within the US Integrated Ocean Observing System (IOOS) Regional Associations, for example, this planning is to be implemented by federal, state, and tribal experts and authorities within each regional association. Since CMSP is data-driven and ecosystem-based, this session is expected to assemble marine and coastal ecologists, ocean observing scientists, natural resource managers and policy-

makers to identify current needs, best practices and persistent challenges in CSMP. In the US, IOOS RAs have taken an active role in driving the CMSP concept. Invited presenters will define the background and framework for the discussion with additional speakers providing geographic, scientific and organizational diversity to the session. We have 16 papers confirmed for this session and 3 posters. Our presenters included Federal partners (NOAA, BOEMRE and DOI), papers for the US IOOS regions from MARACOOS, NERACOOS, AOOS, CaRA, and GCOOS, and international partners - Australia.

- **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/](http://www.czcp.org/workshops/Puerto_Rico/)

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

- NFRA Board Meeting and Hill Visits, Washington D.C., February 9-10
- NOAA OR&R ERD Deepwater Horizon “Hotwash”: Sam Walker; Santa Barbara, CA; February 7-11
- SURA Modeling Testbed Team Lead/ NCEP Meeting: Doug; NCEP; March 2
- 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

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