

Bi-Weekly Z-GRAM 27 June 2008

[www.IOOS.NOAA.gov](http://www.IOOS.NOAA.gov)

The Z-gram- IOOS is an informal way of keep you up on what's going on in our NOAA IOOS Office and NOAA IOOS activities. Please advise of additional addrees, 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. If you want to see previous Z-grams go the IOOS website under program updates

Programmatics:

- Welcome in the IOOS Program:
  - Dr. Gustavo Goni has joined us on rotation through the Leadership Competency Development Program (LCDP). For those outside of NOAA, this is a highly competitive program to help develop the future leaders of NOAA. As part of the training the candidates perform several rotations to develop leadership skills above their current positions. We are very pleased that Gustavo chose to take a rotation in the NOAA IOOS Program. Gustavo comes to us from NOAA's OAR - Atlantic Oceanographic Meteorological Laboratory (AOML). He will spend 1 week a month with us in the program office and 50% of his time while at AOML for the next 5 months. Gustavo will work on the Data Integration Framework and programmatic interaction with partners across both NOAA and the Regional Associations.
- FY08: Remaining recommended awards still being processed: 2 Regional Associations, 3 FY07 - second year, 2 FY08 RCOOS.
- Congressional Report: My team met with NOS headquarters staff as we continue to work through internal NOAA questions.
- FY09: The House and Senate Appropriations Committees moved the fiscal 2009 spending bills. Within the House: NOAA IOOS: 8.5M, IOOS-Regional Observations 19.5M, Alliance for Coastal Technology (earmark) \$1M. In the Senate: NOAA IOOS \$8M; IOOS-Regional Observations \$30M.
- FY10: NOAA Line offices are briefing the Department of Commerce on the FY10 NOAA proposed budget.
- FY11-15: IOOS POP work is ongoing - we must be finished by 11 July.

Initial Operating Capability - Data Integration Framework (DIF)

- IOOS DMAC Standards Process: **WE NEED YOU**. Please log into the following website: <http://ioosdmac.fedworx.org/ioos/dmac.nsf/WhatsNew?OpenForm> and participate in the US DMAC standards process.
- What the DIF?: We have made great progress on the integration of variables and at the same time we needed to identify target customers in our 4 theme areas to measure the value of integration. This has taken a significant amount of coordination to get to an agreed to statements of work. Below is a synopsis of

where we are. This does not mean we are not working the broader area of data integration to multiple programs and projects both within NOAA and with our Regional Partners.

- IEAs: We continue to make progress towards defining a DIF application to support IEAs in collaboration with scientists from NOAA Fisheries, the NOAA Ecosystem Goal Team, NOAA's IEA Priority Area Task Team (PATT), the NODC's National Coastal Data Development Center, and the Farallon Institute for Advanced Ecosystem Research. The target application will involve applying recently developed web-based services and tools for data aggregation (funded by our office in FY07 and developed by NOAA Fisheries) to deliver DIF core variables and associated products to scientists and managers working on IEAs. The goal is to expand and refine these web-services per our emerging DIF standards to support IEA applications in perhaps one or two regions – the California Current and the Gulf of Mexico. Becky Shuford has additional meetings scheduled over the coming weeks with NOAA Fisheries in California, NOAA EGT staff, and the NOAA IEA PATT in the Gulf of Mexico. We expect to complete a project plan for IEAs by the end of August.
- HAB: A project plan or “statement of work” was completed in May for the initial effort to implement currents data from NDBC and CO-OPS based on DIF standards to the current HABs forecast bulletin in the Eastern Gulf of Mexico. The execution of coding to support this in-kind effort at CSC will begin soon and is scheduled to for beta-testing at the end of September. A “statement of work” for the next phase of the HABs collaboration is in progress and expected to be completed by the end of August. This work will involve bringing additional IOOS DIF core variables into the operational HABs forecast bulletin including modeled and high frequency radar currents, in-situ and modeled winds, and ocean color. Partners include CO-OPS, CSC, NCCOS, and CoastWatch.
- Hurricane Intensity: We have recently increased our efforts to define a feasible application for Hurricane Intensity working with NOAA/OAR's Atlantic Oceanographic and Meteorological Laboratory and NOAA/NWS's Tropical Prediction Center and other partners. Gustavo's, see above, assignment is to help us develop a project with the partners above that demonstrates the value of DIF standardized data to improvements in one or more aspects of modeling, predicting, forecasting or analyzing NOAA's work on hurricane intensity. We expect to complete a project plan by the end of August.
- Coastal Inundation: This week we initiated an end-to-end customer project to improve integration and use of critical water level observations for the operational storm surge model used by NWS forecasters and the NWS National Hurricane Center. The effort focuses on having critical data and products available in one place within the NWS forecast environment, with the expected result of improving forecast efficiency and confidence. Through the application of IOOS DIF standards at CO-OPS, real time water level observations and selected derived water level

products will be displayed together for the first time on NWS's operational NWS Sea, Lake and Overland Surges from Hurricanes (SLOSH) display program. This display program is used by NWS Weather Forecast Offices and emergency managers in many aspects of coastal inundation/storm surge planning, forecasting, response and evaluation, including media or other briefings. Participating partners include NWS's Meteorological Development Laboratory, NWS Tropical Prediction Center and NOS' CO-OPS. A detailed requirements analysis is in process, with coding expected to be completed prior to hurricane season in 2009, with full testing and evaluation to be completed by the end of December, 2009.

#### IWGGO:

- Due 7 July: Virtual review of the IOOS messaging material. This will allow the IWGGO members to discuss any major issues on 8 July. NOAA, Ocean.US, NFRA have been collecting comments as well. We will conclude the comment period on 7 July and then provide the final touches to this effort and roll this out for all.

#### Collaboration projects:

- Army Corps of Engineers collaboration on a National Waves Plan: The good news is that we got ALOT of comments, now the bad news is we have to adjudicate these comments. Actually it is not bad news the comments were very insightful from both a technical and programmatic perspective. We have collated all of these comments. Army Corps will take the lead on the technical comments and reach out to you as the community for answers. My office will take on the programmatic comments since they are in some sense specific to NOAA however they bring up valid points to understand how we need to articulate National IOOS requirements. Adjudication of comments will be completed by 1 August and then we are working for a next draft by 15 August and back to those entities that provides comments to us.
- NOAA-Navy collaboration on the GODAE server: Navy and NOAA have exchanged emails with an aim to reach agreement by 15 July. There is an IT security issue that the Navy needs to see if they can work through before final decisions can be made.
- Waves Initiatives: Great collaboration between USACE, USGC, MACOORA, NOAA CO-OPS, PORTS®, under US IOOS: The Cape Henry Buoy was deployed on June 23 with the skillful assistance of the Portsmouth Coast Guard crew under the direction of Chief Sciullo. We used their 57ft vessel - a great deployment platform! Thanks much to the Coast Guard. The data are available on the CDIP website, and should be available within a week or so on the NDBC website. Kate Bosley, Mark Bushnell, Dwayne Wright (NOAA CO-OPS) have offered their assistance in case the buoy breaks loose and have already the Maryland and VA Pilots. Thank you to Bill Boicourt, MACOORA for assistance

with buoy location. Coordination is already begun between Julie and Kate, Darren and Mark (NOAA PORTS) to incorporate this data into the PORTS® site. See the attached flyer for details.

- IOOS and OBIS: **No change**

Other:

- **Rutgers University - Across the Pond - 50W Milestone Reached:** Taken from Rutgers Blog: On 25 June, RU 17 crossed the 50 W line, an important milestone. Rutgers path planning gurus estimated it would take about 1 month for us to fly into and across the Gulf Stream Ring and Meander region, and reach the Tail of the Grand Banks at 50 W. RU17 was deployed on May 21, and crossed 50 W on June 24, 1 month and 3 days later. A 10% difference. That's a bullseye in oceanography. RU17 has now flown over 2500 km. We are now about 1250 km from Halifax, 1550 km from the Azores. Continuing east we cross the abyssal plain toward the Mid-Atlantic Ridge. We will soon be entering the next phase of operations for RU17. Our datasets will change, becoming more global and losing the detail we get in the coastal datasets. Our uncertainty about the environment will grow, and we will rely more and more on model forecasts. We'll be looking to Gregg Jacobs at NRL and Frank Bub at NAVO, our Navy forecasting gurus, a lot more in the future.  
<http://rucool.marine.rutgers.edu/index.php/COOL-Blogs/>
- **ICON/CREWS Station Metrics:** Thanks to Jim Hendee, [Jim.Hendee@noaa.gov](mailto:Jim.Hendee@noaa.gov), who passed this along to highlight success in operations and also to remind us on complexities of collecting data from our oceans. As part of the ongoing data quality control for the ICON/CREWS data, the team retrieves local data from the station's memory module whenever we visit a station so that we can recover anything that didn't make it through the satellite transmissions. As an example of how they do this, in a recent instance from a St. Croix station visit, they restored 132 missing records in the time frame from August 29, 2007 through March 11, 2008. Both raw data and QC'ed data are archived and transmitted to NOAA's Coral Reef Information System (CoRIS), along with relevant metadata, as required. They also produce a spreadsheet of station metrics focusing on station up-times. Up-times are calculated in two ways: one that considers if the station was operational and successfully transmitting, and the other that ignores the transmitter and considers only whether the station was operational and writing data to its memory module. The second metric is **close to 100%** for all four "new-style" stations (CMRC3, LPPR1, SRVI2 and DBJM1) for their lifetimes. The transmission uptimes for each station over their entire lifetime (through May 20, 2008) are:
  - CMRC3 (Lee Stocking Island, Bahamas): 95.7% (over 30 months)
  - LPPR1 (La Parguera, Puerto Rico): 92.9% (over 29 months)
  - SRVI2 (Salt River, St. Croix, USVI): 95.4% (over 21 months)
  - DBJM1 (Discovery Bay, Jamaica): 98.3% (over 12 months)

On the flip side a number of things that can affect performance. For example:

Aug 2007: LPPR1 impacted by Hurricane Dean (until Sept repair)

Nov 2006: SRVI2 mysteriously stops transmitting for about 10 days

Oct 2006: CMRC3 mostly stops transmitting between field trips

- Congressional briefing: On 16 June Timi Vann and Kim Cohen accompanied Glenn Boledovich (NOS PPAD) and April Black (OLA) to brief Kris Sarri, a new Majority Staff Director on the Senate Commerce Committee's Ocean Subcommittee. The briefing went very well and Kris expressed strong interest in our IOOS activities.
- Jason 2 launched: NASA partnered with European scientists to successfully launch Jason 2 - Ocean surface measurements. Why should we care? Because the new altimeter on board will enable an improved capability for obtaining altimetry-derived ocean currents which then should be integrated with the HFR-derived currents for a seamless nearshore to ocean basin coverage.
- ORRAP - Sub Panel on Ocean Observations: Tom Malone, Bill Birkemeier (Ocean.US); Stan Wilson (NOAA NESDIS); Julie Morris (NSF) and I dazzled (or overwhelmed) this astute panel on US IOOS, OOI and the challenges associated with remote sensing focused on ocean observations. We really look forward to working with this panel to move these initiatives forward.

Congressional: **No update**

Communications:

- Down East Instrumentation, LLC - Released a press release "Delivers Real-Time Monitoring Buoy System to Client" This buoy is part of the IOOS/SECOORA inventory.
- 20 June: Beaufort Gazette picked the SECOORA Press Release
- 26 June: CNN picked up the Rutgers Glider Effort during the 3pm news hour

Upcoming Meetings:

- 9-10 July: DIF IPT meeting - NOAA IOOS Program spaces
- 17 July: US IOOS - NOAA Brown Bag Seminar

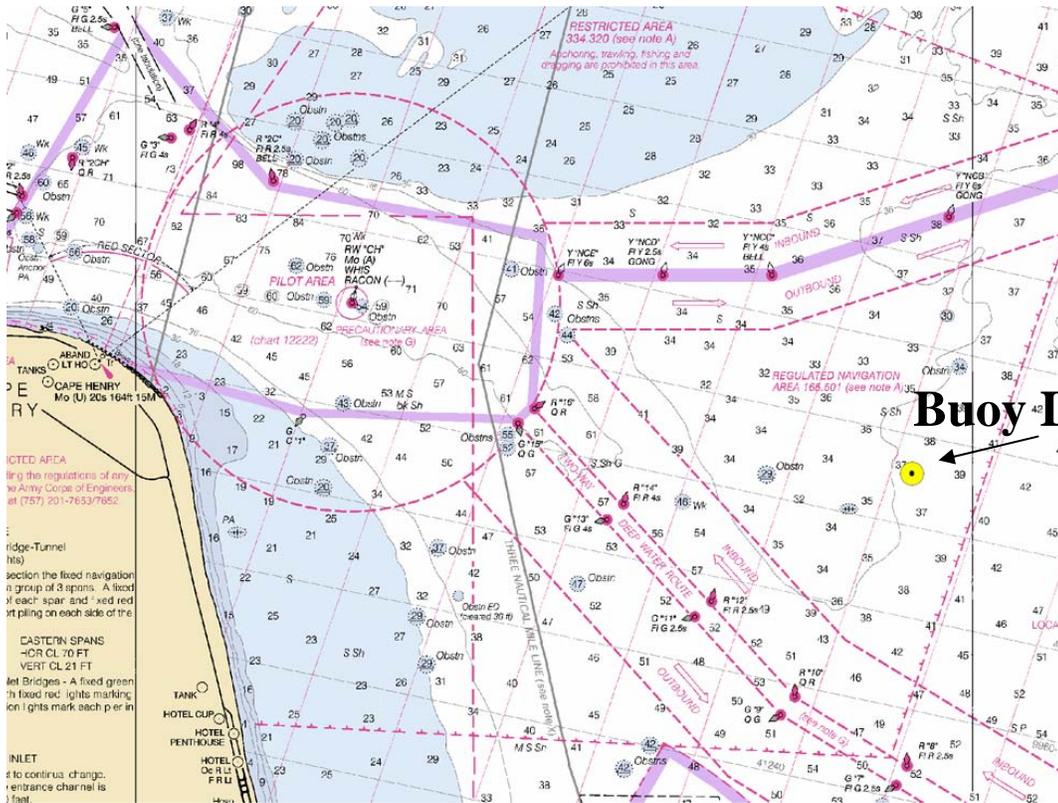
Cheers,  
Zdenka



# WAVE BUOY



## Cape Henry, VA – Station 147, NDBC 44099 Deployed June 2008



**Buoy Location**



**Location:** Lat.  $36^{\circ} 54.5'$   
Long.  $75^{\circ} 50.7'$   
**Water Depth:** 6.3 fm, 38 ft, 11.6 m

Buoys measure wave height, wave direction, wave period and sea surface temperature. The data are broadcast on the NWS Marine Weather Channel, and are also disseminated in near real-time on the web at

<http://cdip.ucsd.edu>

(click on RECENT).

<http://www.ndbc.noaa.gov/>

*At night, the buoy will emit a yellow color flashing light.*

Scripps Institution of Oceanography, La Jolla, CA  
858-534-3032

Email: [www@splash.ucsd.edu](mailto:www@splash.ucsd.edu)

This buoy is collaboratively maintained with NOAA/CO-OPS.

