

October 2012



SCCOOS NEWS



Southern California Coastal Ocean Observing System

1. Dan Rudnick (SCCOOS) and Becky Baltes Integrated Ocean Observing System (IOOS) hosted a National Glider Strategy Development Workshop at Scripps August 1 – 3, 2012
2. Eric Terrill was recently announced as a NOAA/IOOS representative of the Federal Advisory Committee (FAC)
3. Julie Thomas, the executive director of SCCOOS, takes on an additional position as Director of Operations and Maintenance for the Ocean Observing Initiative (OOI).
4. *Tetraselmis* spp., a harmless phytoplankton, blooms in San Diego County beaches in July 2012
5. Orange County Sanitation Department (OCSD) diversion update
6. CeNCOOS and SCCOOS conduct ocean observing training for the State Water Resource Control Board in San Luis Obispo
7. Other SCCOOS recent education outreach activities
8. SoCal Niño Index and NOAA's Oceanic Niño Index remarkably correlated
9. Program Profile – Spray Gliders
10. Job/Internship wanted!

1. August 1 – 3, 2012 the US IOOS National Glider Strategy Development Workshop was held at Scripps Institution of Oceanography, in La Jolla, California. The goal of this workshop was to establish a plan for collecting sustained observations in U.S. coastal waters by utilizing a network of autonomous underwater gliders. This workshop was organized to frame priority requirements for broader coordination, collaboration, and promotion of glider operations for a national strategy.

The objectives included:

1. Define the mission, scope, and operations as well as the science objectives for a national glider network.
2. Outline a network plan and establish a timeline for production of a final document.
3. Identify potential pathways toward implementation.

Agenda and presentations from the glider workshop are available [on-line](#).

At the close of the workshop, authors were assigned sections of the outline with a goal of assembling a full draft of a sustainable glider plan focusing on data management, operational applications, and technology.



2. Eric Terrill has been nominated to the Federal Advisory Committee (FAC) as a NOAA/ IOOS representative. Congratulations to Eric, we are pleased that we will have regional voice representation on the committee.

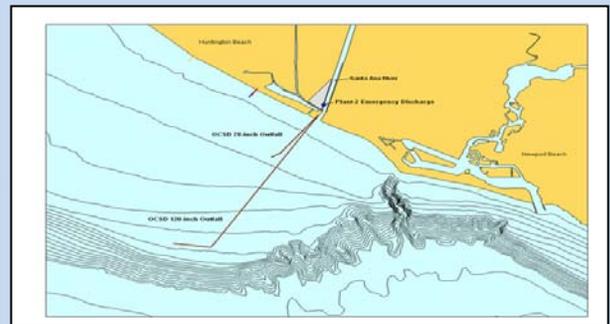
3. Julie Thomas, the executive director of SCCOOS, has accepted an additional position as Director of Operations and Maintenance of cyber infrastructure with [Ocean Observatories Initiative](#) (OOI). OOI's mission is to provide a link between ocean research and discovery. They are moving toward a new phase for continuous interactive access to information about the oceans. This network will be easily modified in order to include new sensors and platforms in the future.

4. On July 26, 2012, green foam was noticed throughout San Diego County beaches. This was not the first time *Tetraselmis* spp., a harmless phytoplankton bloom, has turned our coastal waters bright green. The flagellate is about 10 micrometers in size, and has been found in concentrations as dense as 15 million cells per liter of seawater.



The foam became more prevalent during the last week of July, though it has been observed sporadically since the first week of July. Its patchy distribution makes it visible only at some beaches. The foam becomes more apparent in the afternoon when the wind and waves mix the surface waters. *Tetraselmis* has bloomed each summer since 2009 with blooms lasting from one week to several months. There are no documented health hazards with swimming or fishing in areas of *Tetraselmis* blooms. Learn more about our Harmful Algal Bloom Monitoring Program [on-line](#).

5. Orange County Sanitation Department (OCSD) diverted flow from their 120 inch outfall pipe just 4.5 miles offshore to a 78 inch outfall pipe 1 mile offshore from September 11, 2012 to October 1, 2012. They diverted the flow as a part of a temporary maintenance project that aimed to fix corroded portions of the 5-mile pipe.



SCCOOS provided a real-time mooring and data for high frequency radar (HFR) trajectories. SCCOOS and Central and Northern California Coastal Ocean Observing System (CeNCOOS) will synthesize the results of the diversion's modeling and monitoring for a technical review of those activities as well as the results highlighting successes, failures, and lessons learned. The synthesis report will provide the foundation for further technical review as to the effectiveness and efficiency of the overall plan. You can view the environmental support data for the OCSD diversion at <http://www.sccoos.org/projects/ocsd-diversion/>.

6. CeNCOOS and SCCOOS conducted ocean observing training on Monday, September 24th at the State Water Resource Control Board (SWRCB) in San Luis Obispo.



Lisa Hazard, SCCOOS information manager, speaks to water board employees about the Cosco Busan spill response.



Leslie Rosenfeld, CeNCOOS Director, speaks to water board employees about numerical ocean models.

The coordination came from Johanna Weston, a Sea Grant Fellow at the SWRCB, with the goal of constructing a useful course to provide an overview and training on how to understand and utilize online ocean observing data sets and products for Water Board employees.

There will be 3 trainings total, the first in San Luis Obispo, the second will take place at region 9 location in Costa Mesa, the third at region 2 in Oakland with participants from all 9 regions. The dates for the 2nd and the 3rd training sessions are yet to be determined, even though both the OOSes and the Water Board are presently working together to set those dates. Agenda and presentations were customized for Water Board employees as a collaborative project with CeNCOOS & SCCOOS that would best suit this audience.

The training session was from 9 am to 4 pm. The topics that were covered were ...

Regional Ocean Monitoring System
Harmful algal bloom monitoring
Ocean acidification data collection

Weather and Wave Observations & Model Forecasts
Drifter trajectory tools
HF radar surface currents

Remote Sensing
Shore stations
Gliders

The first half of the day addressed which products and applications are available that could be useful to Water Board employees. Presenters switched between overview slides and live demos so attendees could see how to access the data/visualizations. The second half of the day was designed to walk through the specific case studies explaining how products were used in actual environmental events as well as having an open discussion for feedback.

7. SCCOOS most recent outreach activities and meetings



Dr. Melville speaks to the community at the FLIP 50th anniversary celebration.



Ocean Institute volunteers demonstrate water quality instruments on the R/V Sea Explorer.



Rick Baker, the director of the Ocean Institute, speaks to an audience of teachers about education.

| Date | Purpose | Host |
|----------------------|---|---|
| June 25, 2012 | Tour for Tess L. Freidenburg with MPA Monitoring Enterprise | SCCOOS |
| June 30, 2012 | SCCOOS booth at FLIP's 50 th Anniversary Celebration | SIO Marine Facility in Point Loma |
| July 2, 2012 | SCCOOS participated in a Scripps pier tour for CMBC, focused on familiarizing the students with instrumentation on the pier and the HAB's program. | Center for Marine Biodiversity & Conservation (CMBC) |
| Ongoing | SCCOOS participates in planning meetings with the CBCD to develop long-term research and environmental monitoring in San Diego Bay | Center for Bay and Coastal Dynamics (CBCD) and Port of San Diego |
| July 16, 2012 | SCCOOS participated in International Council for Local Environmental Initiatives (ICLEI) regional stakeholder workshop regarding San Diego Sea Level Rise | San Diego Foundation, San Diego |
| Ongoing | Harbor Safety Committee Meetings | Port of San Diego |
| July 27, 2012 | Meeting with SIO Director Office employees to familiarize with current SCCOOS projects and products | SCCOOS/SIO |
| July 31, 2012 | Tour for Dr. Robin Staffin, the Director of Basic Research in the office of the Deputy Under Secretary of Defense for laboratories and basic sciences | SIO |
| July 31, 2012 | Training for local educators at OI in Dana Point to familiarize teachers how to integrate SCCOOS products into their curriculum | Centers for Ocean Sciences Education Excellence (COSEE) West and Ocean Institute (OI) |
| August 7, 2012 | SCCOOS booth at UCSD's new chancellor, Pradeep Kohsla, reception | UCSD/SIO |
| August 9, 2012 | USIBWC Citizens Form public meeting | Unites States International Boundary & Water Commission (USIBWC) and Tijuana River National Estuarine Research Reserve (TRNERR) |
| August 22, 2012 | SCCOOS visited Ocean Institute to discuss further collaboration | Ocean Institute, Dana Pt., CA |
| August 22 & 23, 2012 | Mexico/US Area Committee Meeting discussing oil spill response to incidents | MEXUS |
| August 27, 2012 | WCGA Executive Committee Meeting | West Coast Governors Alliance (WCGA), Sacramento CA |
| August 30, 2012 | Roberto Garcia visits from Pt Mugu Naval Weather Station | SCCOOS/SIO |
| Sept. 5 & 6, 2012 | IOOC Data Management and Communication Steering Team meeting | Interagency Ocean Observing Committee (IOOC), Washington D.C. |
| Sept. 10-14, 2012 | IOOS Management and Communication meeting | U.S. Integrated Ocean Observing System (IOOS), Washington D.C. |
| Sept. 18-19, 2012 | Julie Thomas attended an Operations and Maintenance meeting in Washington D.C. | Ocean Observing Initiative |
| Sept. 20, 2012 | Julie and the National Federation Regional Association Executive Committee met with Dr. Jane Luchenko, Director of NOAA | NOAA |
| Sept. 20, 2012 | Kathleen Ritzman and Julie met with Office of Management and Budget, Energy and Water | NOAA |
| Sept. 24, 2012 | Bight '13 Regional Monitoring planning meeting | Southern California Coastal Water Research Project Authority (SCCWRP), Orange County CA |
| Sept 24, 2012 | SWRCB Ocean Observing training – See story above | State Water Resource Control Board (SWRCB) |
| Sept 25, 2012 | Meeting with Debbie Aeltline-Neilson with the Ca. Dept. of Fish & Game | SCCOOS |
| Sept 26, 2012 | Meeting with Timi Vann, Kevin Morris, and Michelle Stokes with NOAA's Western Regional Collaboration Team | SCCOOS |



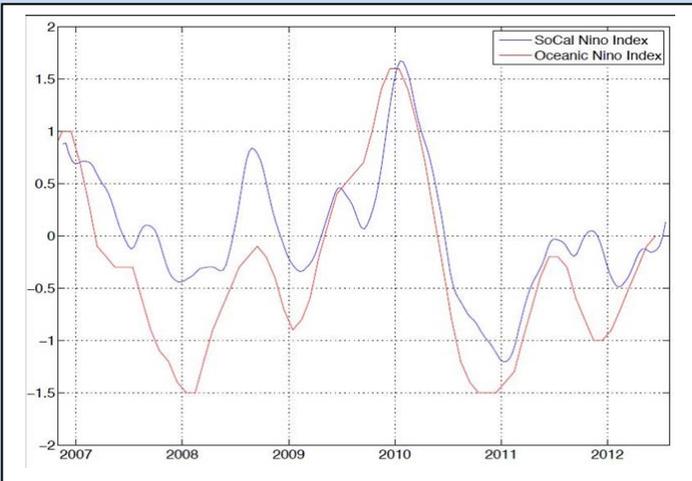
Kathleen Ritzman, Julie Thomas, Timi Vann, and Michelle Stokes lunch on the Directors office deck.



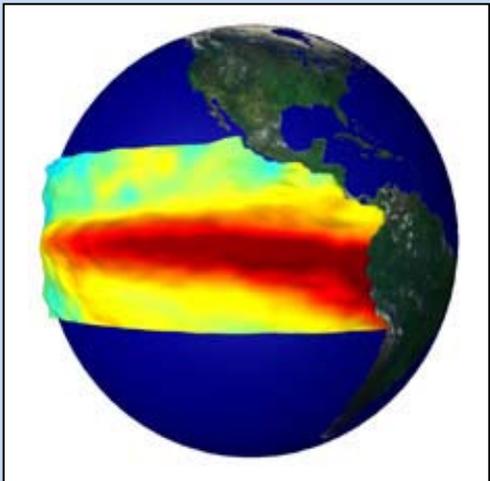
Michelle Stokes, Kevin Morris, and Timi Vann speak with Dan Rudnick in his glider lab at SIO.

8. An El Niño event is marked by warm water in the equatorial Pacific. Effects of El Niño are often felt in California as changes in the atmosphere and ocean, including increased rainfall and warmer temperatures. The Spray glider lab, headed by Dan Rudnick, has calculated a "SoCal Niño Index" using glider-measured temperatures at 50 m along CalCOFI line 90 (line 90 is off of Dana Point), averaged over the inshore 200 km and filtered with a 3-month running mean. For comparison the "Oceanic Niño Index" published by NOAA is SST in the Niño 3.4 region (The Niño 3.4 region spans the east-central equatorial Pacific between 5N-5S, 170W-120W), with a 3-month running mean. The indices are remarkably correlated. Temperatures have been rising over the last few months, with anomalies just recently becoming positive. NOAA is now predicting El Niño conditions in the next couple of months (temperature anomalies greater than 0.5C).

[NOAA ENSO Cycle recent update prepared by Climate Prediction Center/National Center for Environmental Prediction](#)



El Niño is a warming of the ocean waters; which leads to changes in weather patterns all around the globe.



9. Glider observations are supported by the [NOAA Ocean Climate Observation Program](#) through the Consortium on the Ocean's Role in Climate, BP through a cooperative agreement with Scripps Institution of Oceanography, and the Integrated Ocean Observation System (IOOS) through SCCOOS.

IOOS is developing a National Glider Plan. [Read](#) the white paper on the SCCOOS site.

10. *Job Posting:* Craig Foster is a recent graduate from the University of California Santa Cruz. He obtained a BS in Earth Science with Ocean Science Concentration with interests and strong background in, but are not limited to, physical, biological, and chemical oceanography, atmospheric-oceanic dynamics and processes, and large-scale climate phenomena such as El Niño and Madden-Julian Oscillations. You can check out his [curriculum vitae](#), [cover letter](#), or a [letter of recommendation](#). Best of luck, Craig!