

Southern California Coastal Ocean Observing System



March 2013 Newsletter

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February 2013 Activities



| Date | Activity | Host/Location |
|----------------------|---|--|
| February 11, 2013 | National Weather Service (NWS) San Diego Forecasting Office Meteorologist-in-Charge, Roger Pierce, visits SCCOOS program office | SCCOOS Isaacs Hall Suite 100 8855 Biological Grade La Jolla, CA 92093 |
| February 21, 2013 | U.S. International Boundary Water Commission (USIBWC) Citizens Forum | USIBWC 2225 Dairy Mart Road San Ysidro, CA 92173 |
| February 27-28, 2013 | Integrated Ocean Observing Committee (IOOC) Data Management & Communication (DMAC) Steering Committee meeting | IOOC Washington D.C. |



Southern California Beach Survey Update

Left: Sand from offshore was placed on San Diego County beaches in 2012.

Middle: High tides and energetic waves can flood coastal infrastructure.

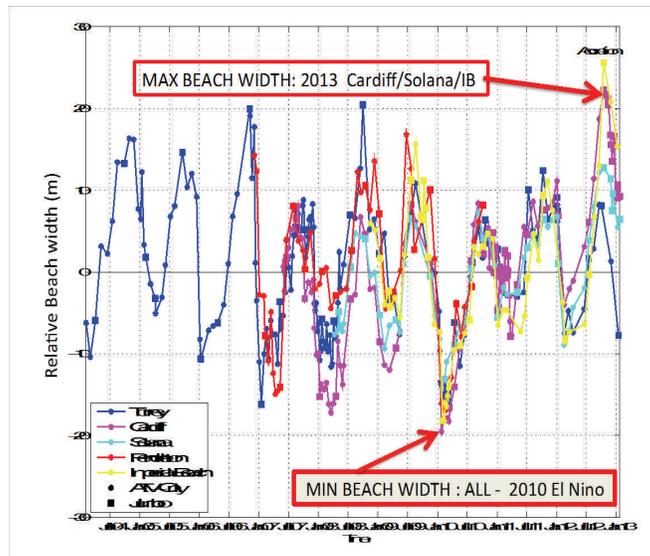
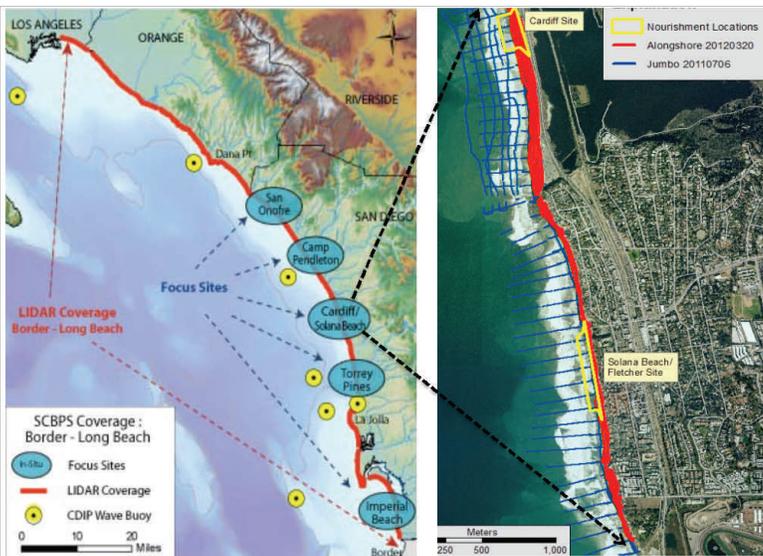
Right: damaged coastal property



The [Cardiff Beach Erosion and Inundation Project](#), part the SCCOOS Coastal Hazards Program, is developing a field-validated, site-specific model for use in providing real-time warnings of wave and tide-induced inundation. After a reliable model is developed, inundation warnings will be disseminated to users via the Internet and/or automated phone calls.

The objective is to understand the physics at work, and to help answer relevant management questions. Model predictions are expected to improve with additional observations and feedback on the accuracy of the inundation warnings from end-users. Potential impacts of beach nourishments (or a lack of beach nourishments) include effects on lobster and other biota, surfing, cliffs, tourism, Hwy 101, and the Amtrak rails. SCCOOS and SeaGrant specifically support outreach on local beach management issues.

Ongoing monitoring is building a database of sand level changes and waves at local beaches, including an El Nino and the recent 2012 nourishment at Solana-Cardiff beaches (below left and middle). Beach widths (below right) were minimum in the recent El Nino at all sites, and maximum at the recently nourished sites.



Left: Beach survey “focus” sites are within a larger area infrequently surveyed with airborne Lidar.
 Middle: Cardiff and Solana Beaches were nourished in 2012
 Right: Alongshore averaged beach width (mean removed) versus time. Each dot is one beach survey.

Roger Pierce Visits SCCOOS



On February 11th Roger Pierce, the Meteorologist-in-Charge (MIC) of the National Weather Service (NWS) [San Diego Forecast office](#), visited the SCCOOS Program Office at the Scripps Institution of Oceanography (SIO) in La Jolla, California. We dove into the details of which observations and models are most effectively used by the NWS office. We also discussed how OOS data products could enhance NWS forecasting, and brainstormed on how future collaboration could benefit both offices. Roger explained how the high quality sea surface temperatures from the gliders could be valuable input to their forecast models. SCCOOS is interested in the effectiveness of communications within their office as well as the community. The visit was concluded by a tour of the [Coastal Data and Information Program](#) (CDIP) lab and the [Coastal Observing Research and Development Center](#) (CORDC). SCCOOS, CDIP, and CORDC all look forward to further strengthening collaborative partnership with the NWS.



Roger Pierce NWS-San Diego MIC (left), Darren Wright SCCOOS DMAC manager (middle), Julie Thomas SCCOOS Executive Director (right) tour the CDIP workshop.



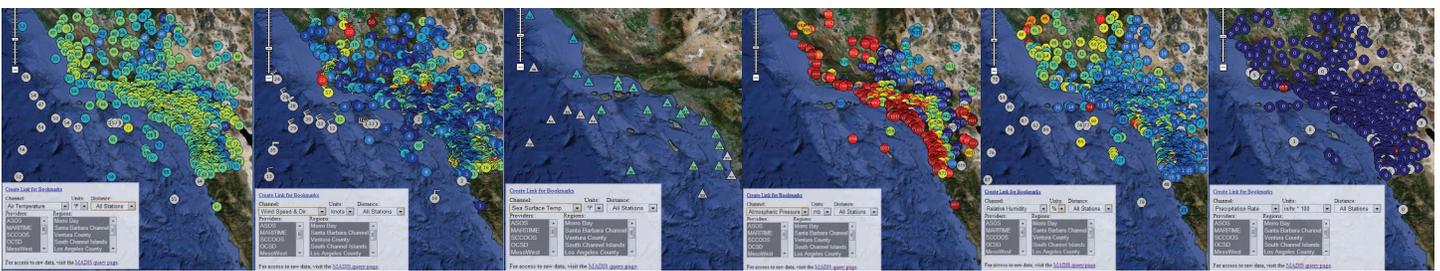
Program Profile: Meteorological Observations



The demands for finer scale meteorological services have increasingly required higher resolution observations to initialize and evaluate weather and climate models, applications, and products. In response to these demands, the [National Oceanic and Atmospheric Administration \(NOAA\) Research \(Oceanic and Atmospheric Research\) Earth System Research Laboratory \(ESRL\) Global Systems Division \(GSD\)](#) developed the Meteorological Assimilation Data Ingest System ([MADIS](#)) to collect, integrate, quality control (QC), and distribute observations from NOAA and non-NOAA organizations. MADIS leverages partnerships with international agencies; federal, state, and local agencies (e.g. state Departments of Transportation); universities; volunteer networks; and the private sector (e.g. airlines, railroads) to integrate observations from their stations with those of NOAA to provide a finer density, higher frequency observational database for use by the greater meteorological community. MADIS observational products and services were first provided to the public in July of 2001.

The meteorological observations that are [visualized](#) on the SCCOOS website incorporates 1648 stations.

The information that is incorporated comes from many [different providers](#).



Announcements



Central and Northern Coastal Ocean Observing System (CeNCOOS) and SCCOOS will hold their Joint Strategic Advisory Committee Meeting (JSAC) on June 20, 2013 at Scripps Institution of Oceanography in La Jolla, California

The JSAC provides guidance for SCCOOS and CeNCOOS operation and planning efforts, and connects ocean observing to stakeholders within the region. Working in partnership with ocean observing staff, committee members formulate suggestions for the development of decision-making tools and products. The JSAC also serves as ocean observing advocates for public outreach and education efforts.



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