

SCCOOS News

The IOOS Regional Association Serving Southern California

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October 2016 Issue

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September Activities	
September 7 & 8	California Adaptation Conference – Long Beach, CA
September 14 & 15	IOOS Strategy Meeting – Washington DC
September 15	MBON / OAP California Roundtable Webinar
September 16	Tour of SCCOOS for Meagan Hepner
September 17	Weatherfest Rally at NWS San Diego Forecasting Office
September 19-22	Oceans '16 – Monterey, CA
September 24-October 1	IOOS Fall Meeting – Anchorage, AK
September 28	San Diego Harbor Safety Committee Meeting
September 27 & 28	Prevention First Conference – Long Beach, CA
September 29	Tour and Meeting with California Surf Museum Representatives

SCCOOS Hosts a Booth at San Diego Weather Fest Rally

The National Weather Service (NWS) San Diego forecasting office invited SCCOOS to a weather preparedness event that

brought out families from all over San Diego. The highlight of the day was the <u>Young Meteorologist</u> <u>Program</u> and video game. If you weren't able to attend this year, they hold this event every year.





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Program Profile: Shore Stations and Their 100 Year Temperature and Salinity Records



The story goes that on August 22, 1916 Scripps Institution of Oceanography (SIO) had finished their 1000 ft. pier, and later on that day scientists walked to the end and took the sea surface temperate (19.5 C / 67.1 F). The very next day they decided to add salinity to their measurements too.

Then, in July 1926 ocean temperatures near the seafloor were added as well. Now here we are 100 years later, and <u>these consistent measurements</u> have become one of the oldest ocean temperatures and salinity records in the world!

In 2005, SCCOOS started their <u>automated shore station program</u> that consist of a suite of sensors attached to piers along the Southern California Coast. Also our California Ocean Observing partner, CeNCOOS, have <u>automated shore stations</u> along the Central and Northern California coast (shore stations locations pictured right). These growing databases provide an opportunity to parse out the anthropogenic changes from the natural, and can be accessed throughout the year.



SCCOOS Observations Featured in Ocean News and Technology

IOOS funded ocean observation activities are the editorial focus for September Ocean News and Technology Magazine. This update will be rolled out in two parts, Part 1 – Europe and the Americas appears in the September issue and Part 2 – Asia and Oceana will appear in the October issue.

Highlighted topics in this issue are:

- IOOS's involvement with the National Animal Telemetry Network
- IOOS's involvement with Marine Biodiversity Observation Network
- SCCOOS's involvement with an Under Keel Clearance Project at the Ports of Los Angeles and Long Beach
- AOOS's many projects investigating ice and water level observations





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Questions and Answers: What is First Flush and Why is it Important to Know?

Southern California just experienced what experts call a first flush or an urban runoff event in September, and we thought it an opportune time to inform you what this term means.

First flush or Urban Runoff occurs when pollutants build up on the ground due to long periods of time without rain, and are flushed down stormwater drains and into our waterways after a rain event. These are non-point sources, which is another term for water pollution that does go through a sanitation process before it is released out into the water. Our stormwater system is an example of a non-point source



system, and carries fertilizers, oil and copper (amongst other pollutants) directly to our waterways.

Some of this pollution have health risks associated with them, and that is why you will find beaches will post advisories after a rain event. There are many agencies and non-profit organizations throughout Southern California that <u>post warnings</u> or <u>rate</u> the water quality of beaches to aid the public in staying safe. You will find that the standard is not to swim, surf or play in the water for three days after a storm.

Another notable byproduct of urban runoff is marine debris, or all the trash that collects that eventually ends up in our waterways after as little as ¼ of an inch of rain. Our friends over at <u>San Diego Coastkeeper</u> has some tips for anyone to minimize problems associated with urban runoff.

- Invest in Low Impact Development, such as bioswales, rain gardens and planter boxes around your home.
- Fix your leaky car
- Pick up litter BEFORE it has a chance to make it to the ocean
- Participate in coastal cleanups such as California Coastal Commission's Coastal Cleanup Day.

App Challenge Encourages San Diego High School Students Highlight their STEM Skills!

Students can their send their app along with a short video explaining the app and the lessons learned along the way by NOVEMBER 2, 2016. <u>The challenge</u> is intended to showcase the value of computer science and STEM (Science, Technology, Engineering and Math), encouraging students to engage in these fields.

Check out last year's winner, QUANTUM, which was featured on the US House of Representatives website!



