

What data will you collect or create in the research?

The SCCOOS automated shore stations consist of a suite of sensors that are mounted on and cabled to a processing computer on the pier. All of these automated sensors measure temperature, salinity, chlorophyll and pressure at frequent intervals in the nearshore coastal ocean.

Locations of the stations are as follows:

- 1.) Stearns Wharf - Operated and maintained by the Marine Institute at the University of California, Santa Barbara. The instrument package is mounted at a nominal depth of 2 meters Mean Lower Low Water (MLLW). Historical data has been collected continuously since August 16, 2005.
- 2.) Santa Monica Pier – DECOMMISSIONED. Previously operated by the Scripps Institution of Oceanography (SIO) in collaboration with Institute of the Environment at the University of California, Los Angeles. The instrument package is mounted at a nominal depth of 2 meters MLLW. Historical data have been collected from April 4, 2005 to January 1, 2016.
- 3.) Newport Pier - Operated by SIO in collaboration with Orange County Sanitation District. The instrument package is mounted at a nominal depth of 2 meters MLLW. Historical data have been collected continuously since February 10, 2005.
- 4.) Scripps Pier - Operated by SIO. The instrument package is mounted at a nominal depth of 5 meters MLLW. Historical data has been collected continuously since April 4, 2005.

How will you capture or create the data?

Describe how the data are ingested (IOOS Certification, 997.23 f 2.)

The automated shore station instrument package includes a Seabird SBE 16plus SeaCAT Conductivity, Temperature, and Pressure recorder, and a WetLabs WetSTAR Chlorophyll Fluorometer with a 0-75 ug/L range. Data are captured using a serial-to-Ethernet server which transmits the data from the pier shore station to the SCCOOS server for ingestion.

Describe how data are managed (IOOS Certification, f 2.)

Data are managed by a process on the SCCOOS server which listens on a specified port for incoming serial data. Raw serial data are time stamped and written to daily ASCII files, and subsequently written to a MySQL database. Another background process checks every 2 minutes for new data, appending to a yearly NetCDF file. QARTOD quality control is applied with the appropriate flags.

Describe how data are distributed (IOOS Certification, f 2.)

Access to Data (<http://sccoos.org/data/autos/>)

1. THREDDS data are organized into Archived and Real-time folders:
2. ERDDAP <http://sccoos.org/erddap/>

997.23 Strategic Operational Plan 3) Describes the data quality control procedures that have been applied to data, not obtained through a federal data source, that are distributed by the RA. All data shall be quality controlled and QARTOD procedures shall be employed for data with QARTOD manuals. For each data stream, describe the quality control procedure applied to the data, by the RA or other named entity, between the data's collection and publication by the RA. The description will also include a reference to the procedure used.

For all parameters (temperature, salinity, pressure, chlorophyll), quality control are implemented and described at (<http://sccoos.org/about/dmac/autossqc/>)

The following parameters are using QARTOD:

- Temperature and salinity
(http://www.ioos.noaa.gov/qartod/temperature_salinity/welcome.html)
- Pressure (https://www.ioos.noaa.gov/wp-content/uploads/2016/04/qartod_wave_data_manual.pdf)

The following parameter uses “best practices thresholds” established by the SCCOOS Principal Investigators:

- Chlorophyll (spike, range, flat line, syntax tests)

What metadata/ documentation will be submitted alongside the data or created on deposit/transformation in order to make the data reusable?

The metadata are available in multiple formats, ASCII FGDC, XML FGDC, and Supplemental metadata can be found here: <http://www.sccoos.org/meta/browse> .

ISO 19115 metadata are available, on the following link: <http://sccoos-obs0.ucsd.edu/thredds/SASS/catalog.html>.

Which archive/repository/database have you identified as a place to deposit data?

997.23 Strategic Operational Plan 6) Documents the RA's data archiving process or describes how the RA intends to archive data at the national archive center (e.g. NODC, NGDC, NCDC0 in a manner that follows guidelines outlined by that center. Documentation shall be in the form of a Submission Agreement, Submission Information Form (SIF) or other, similar data producer-archive agreement.

SCCOOS automated shore station data are maintained, curated and archived at SIO and the University of California, San Diego Supercomputer Center.

National Centers for Environmental Information (NCEI) archive: Completed as of 9/6/16.

Will any permission restrictions need to be placed on the data?

Current funding is provided by the National Oceanic and Atmospheric Administration (NOAA). When used for web displays and online resources, please provide a link to the SCCOOS homepage. For instance, in standard html:

Data courtesy of SCCOOS

For offline references, please choose the appropriate form from the recommended acknowledgements below.

- Short form (figure captions, etc.)

"... data from SCCOOS"

- Longer form (in text)

"...data were furnished by the Southern California Coastal Ocean Observing System."

- Full form (acknowledgements at conclusion of papers, etc.)

"...data were furnished by the Southern California Coastal Ocean Observing System (SCCOOS), a regional partner of the United States Integrated Ocean Observing System (IOOS®)."

Who will hold the intellectual property rights to the data and how might this affect data access?

The University of California, San Diego through a contractual agreement.