

SUMMARY REPORT
Ocean Observing Community Workshop & Data Portal Training Co-Design Session – Spring 2025
Port San Luis, Avila Beach
9 May 2025

Executive Summary

The Ocean Observing Community Workshop & Data Portal Training Co-Design Session was hosted by CeNCOOS with support from SCCOOS and Axiom Data Science. The event took place on May 9, 2025 at the Port San Luis Coastal Gateway Multipurpose Room in Avila Beach, California. The workshop aimed to strengthen the community and relationships around ocean observing in California, and equip participants with a foundational understanding of how to use the CalOOS Data Portal for their work and research needs. Approximately 30 participants from the central California coastal community attended the meeting, including members from the state, research institutions, harbor district, tribal communities, and environmental NGOs. Taken together, this wide array of backgrounds and expertises resulted in rich conversations and meaningful relationships.

The meeting included presentations, breakout group discussions, and a technical, expert led training of the CalOOS Data Portal. Presentations featured the work of CalOOS Principal Investigators from Cal Poly State University, San Luis Obispo. Specifically, speakers highlighted the use and application of core ocean observing infrastructure to their research. The goals of this meeting were to: i) convene regional communities to share information about ocean data collection and availability; ii) identify community information needs; iii) discuss strategies to improve the delivery of existing information and strengthen resilience efforts; and iv) identify gaps and prioritize opportunities to address unmet needs. To read the full summary, [click here](#).

Session Overviews

Session 1: Overview of California Ocean Observing Systems: CeNCOOS and SCCOOS

Overview:

In this first session, Alex Harper (CeNCOOS Deputy Director) and Megan Medina (SCCOOS Deputy Director) provided a high-level overview of [CalOOS](#) (California Ocean Observing System) and its core components—[CeNCOOS](#) (Central and Northern California Ocean Observing System) and [SCCOOS](#) (Southern California Coastal Ocean Observing System). CalOOS is a statewide data integration and delivery platform that aggregates, curates, and disseminates real-time ocean data to support decision-making in areas like weather forecasting, maritime operations, ecosystem health, and coastal resilience. It is part of the national [U.S. Integrated Ocean Observing System](#) (IOOS) and serves as a critical information hub for diverse stakeholders across California.

CeNCOOS and SCCOOS are regional observing systems that feed data into CalOOS using an extensive network of ocean sensors, models, and data products. They gather physical, chemical, and biological data from coastal and offshore environments, which is then integrated into CalOOS's user-driven tools and dashboards. These efforts support applications such as harmful algal bloom tracking, water quality monitoring, weather forecasting, and marine navigation—helping communities, researchers, and agencies



make informed, science-based decisions across California's coast. If you are interested in learning more, see the slides linked below.

Panelists:

- **Alex Harper**, CeNCOOS | aharper@mbari.org & **Megan Medina**, SCCOOS | memedina@ucsd.edu – California Ocean Observing Systems ([slides](#))

Session 2: Updates from CalOOS Regional Researchers

Overview:

CalOOS is powered by a strong network of principal investigators whose work spans a wide range of ocean and coastal topics. In this session, we heard from several researchers at Cal Poly San Luis Obispo who shared how their research is directly supported by ocean observing infrastructure and systems. They highlighted the critical role these tools play in advancing their work and demonstrated the real-world applications of their research—from informing resource management to enhancing public safety and environmental resilience. Learn more by reviewing the linked presentations below.

Panelists:

- **Ben Ruttenberg**, Cal Poly State University San Luis Obispo | bruttenb@calpoly.edu –
 - Cal Poly, the Ocean Economy, and Fisheries Monitoring on the Central Coast ([slides](#))
- **Ryan K. Walter**, Cal Poly State University San Luis Obispo | rkwalter@calpoly.edu –
 - Coastal Ocean Observing and Applications Along the Central Coast of California ([slides](#))
- **Emily Bockmon**, Cal Poly State University San Luis Obispo | ebockmon@calpoly.edu –
 - Central California Coastal Acidification and Hypoxia ([slides](#))
- **Alexis Pasulka**, Cal Poly State University San Luis Obispo | apasulka@calpoly.edu –
 - Cal Poly Central Coast HAB Monitoring ([slides](#))
- **Kevin Johnson**, Cal Poly State University San Luis Obispo | kjohn263@calpoly.edu –
 - Aquaculture-Focused Environmental Monitoring
- **Serena Lee**, Cal Poly State University San Luis Obispo | slee518@calpoly.edu –
 - Changing Coasts: Understanding Sea Level Variability to Improve Coastal Management ([slides](#))

Session 3: High Level Overview of the CalOOS Portal

Overview:

The CalOOS Portal Training exercises walk users through how to explore real-time ocean data, assess ecological trends, and compare multiple data streams. They are designed to address realistic information and data needs in the context of coastal and marine monitoring and management.

Panelists:

- **Iwen Su**, Axiom Data Science at Tetra Tech Company
 - CalOOS Portal Training Session ([slides](#))
 - Access portal training exercises [here](#).



Participant List

Name	Affiliation/Organization	Email	Attended?
Dustin Barth	Port San Luis Harbor District	dustinb@portsanluis.com	Y
Emily Bockmon	Cal Poly State University, SLO; CalOOS Principal Investigator	ebockmon@calpoly.edu	Y
Ali Boutros	CeNCOOS; MBARI	aboutros@mbari.org	Y
Nathalí Cordero Quiros	SCCOOS; Scripps Institute of Oceanography	ncorderoquiros@ucsd.edu	Y
Melissa Daugherty	State Water Board	Melissa.Daugherty@waterboards.ca.gov	Y
Brenna Eikenbary	Oregon State University	brenna.eikenbary@gmail.com	Y
Ann Fletcher	San Luis Obispo County Public Works	AFletcher@co.slo.ca.us	Y
Tom Hafer	Morro Bay Commercial Fishermen's Organization	somethingsfishy@charter.net	N
Alex Harper	CeNCOOS; Cal Poly State University, Humboldt	aharper@mbari.org	Y
Heather Harris	The Marine Mammal Center; Cal Poly State University, SLO	harrish@tmmc.org	Y
Ernest Houston	Northern Chumash	ernest@northernchumash.org	N
Kevin Johnson	Cal Poly State University, SLO; California Sea Grant	kjohn263@calpoly.edu	Y
Ann Kitajima	Morro Bay National Estuary Program	annk@mbnep.org	Y
Becka Kelly	Morro Bay Harbor Department	bkelly@morrobayca.gov	Y
Isabel Kent	Central Coast Ambient	ikent@mbnep.org	Y

	Monitoring Program		
Serena Lee	Cal Poly State University, SLO	slee518@calpoly.edu	Y
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Megan Medina	SCCOOS; Scripps Institute of Oceanography	memedina@ucsd.edu	Y
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Alexis Pasulka	Cal Poly State University, SLO; CalOOS Principal Investigator	apasulka@calpoly.edu	Y
Joe Phelan	Tenera Environmental	jphelan@tenera.com	Y
Ian Robbins	Cal Poly State University, SLO; CalOOS Principal Investigator	irobbins@calpoly.edu	Y
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Pike Spector	California Ocean Protection Council	pike.spector@resources.ca.gov	Y
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