

# The Central and Northern California Ocean Observing System: SUPPORTING AN EXTREME CLIMATE CHANGE DESK

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*Working with more than 60 members and interested parties!*



## Federal Partners



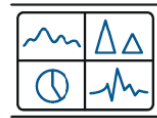
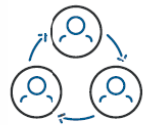
# Vision, Mission & Strategy

CeNCOOS STRATEGIC PLAN 2020-25  
ADVANCING OCEAN OBSERVING IN  
CENTRAL & NORTHERN CALIFORNIA

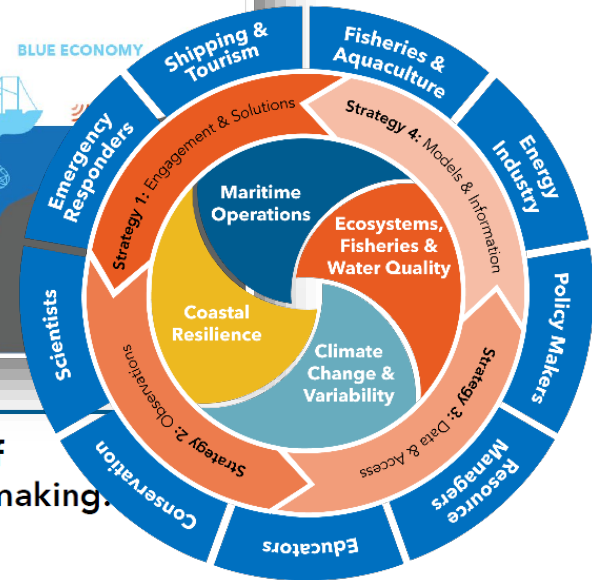


**Vision**  
A healthy and prosperous California coastal ocean powered by information solutions.

**Mission**  
Translating data into action through the production, curation, and delivery of high-quality ocean information.



Ocean observation and disseminated information are at the intersection of healthy ocean and coastal ecosystems and a thriving "Blue Economy"

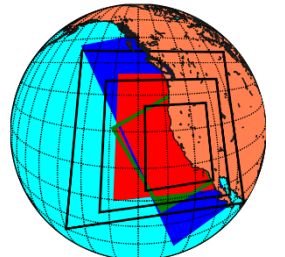
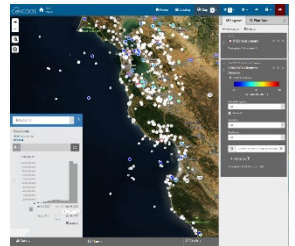


★ **Strategy 1:** Engage marine stakeholders to drive the creation of integrated information products that are valuable for decision-making.

★ **Strategy 2:** Observe coastal and ocean physical, biogeochemical, biology, and ecosystem variables to meet regional stakeholder needs.

★ **Strategy 3:** Streamline access to information, including through a publicly accessible Data Portal.

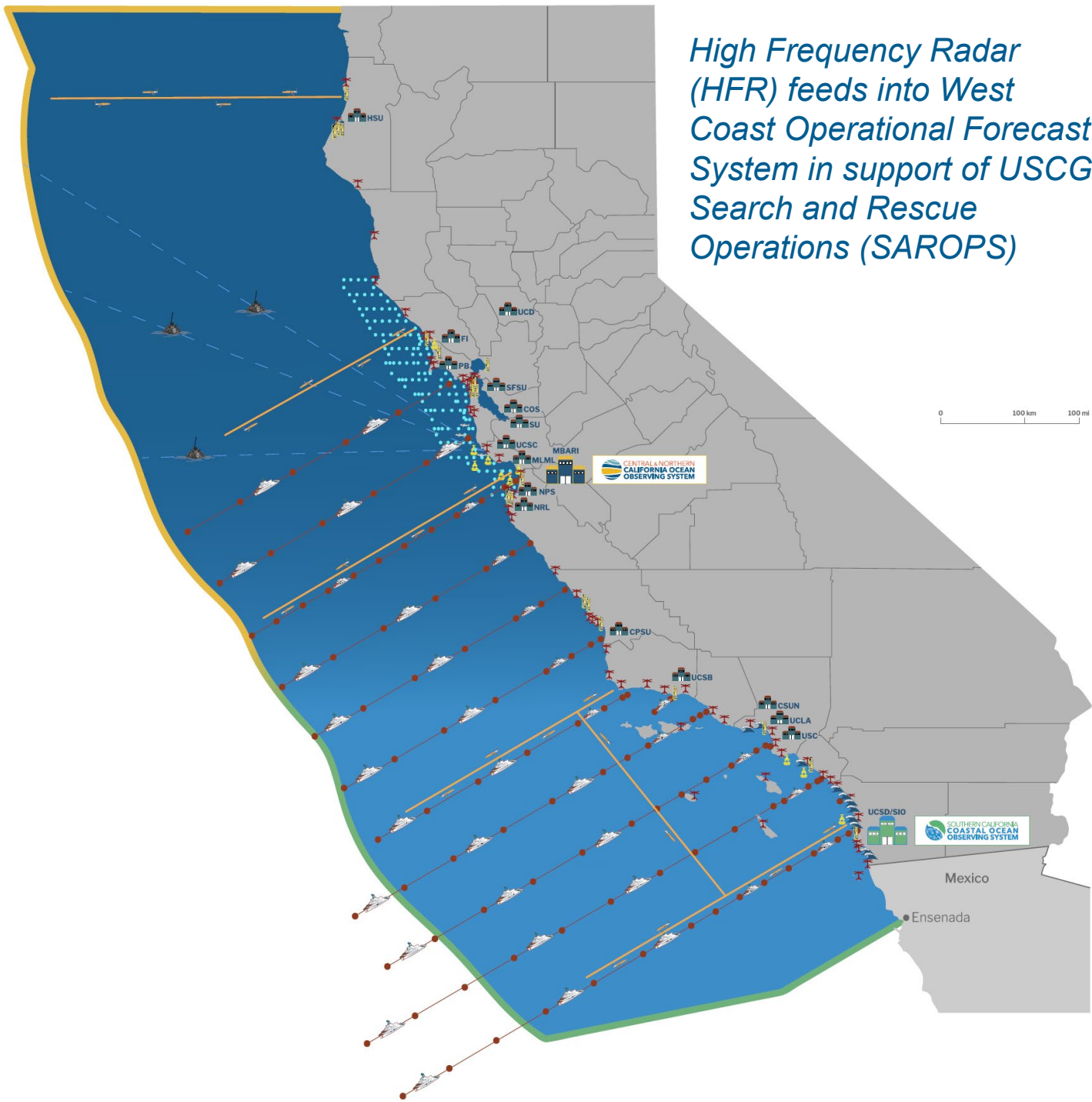
★ **Strategy 4:** Provide access to improved ocean models and other tools to scale information from individual observations and to make data relevant for policy and management.



<https://www.cencoos.org/strategic-plan/>

<https://data.caloos.org/>

*High Frequency Radar (HFR) feeds into West Coast Operational Forecast System in support of USCG Search and Rescue Operations (SAROPS)*



**CeNCOOS & SCCOOS by the Numbers:**



**California High Frequency Radar Network**

**62 HF Radars**



**California Underwater Glider Network**

**6 Glider Lines**



**California Coastal Observing Network**

**21 Shore Stations**



**10 Moorings and Buoys**



**California Coastal Flood Network**

**6 Sites**



**Animal Telemetry Network**

**13 Tagged Northern Elephant Seals**



**42 Tagged White Sharks**



**Marine Mammal, Seabird, and Sea Turtle Observations**

**CalCOFI Cruises**

**ACCESS Cruises**

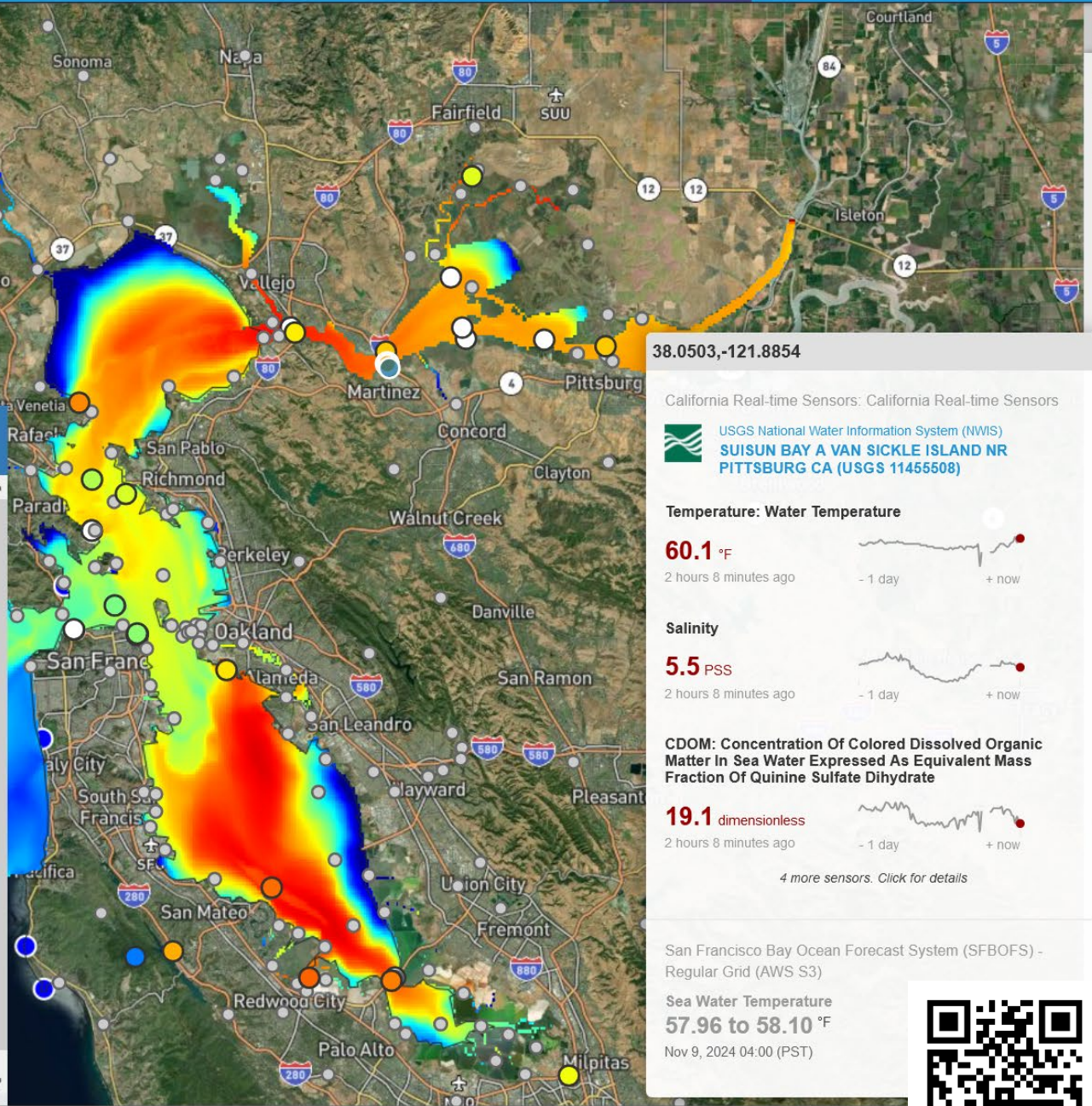
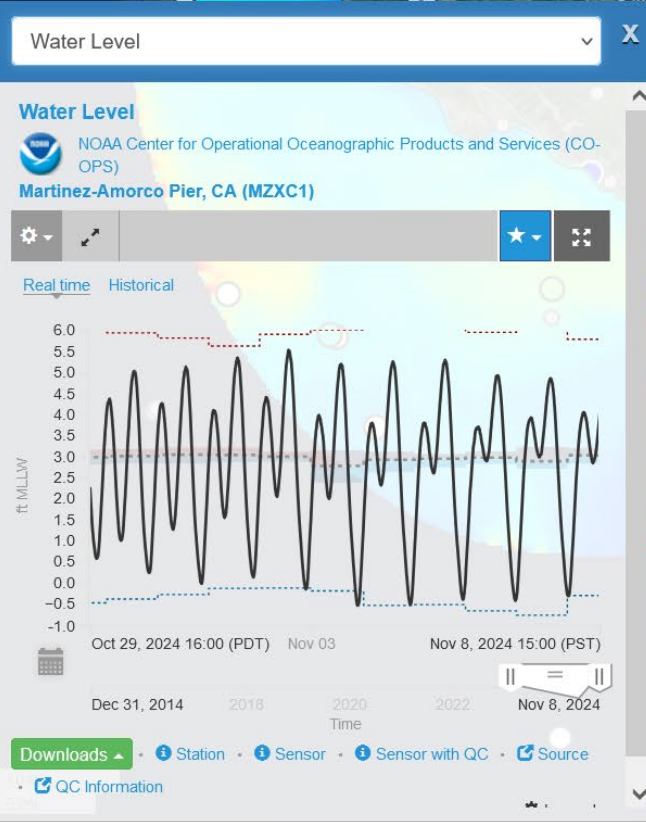
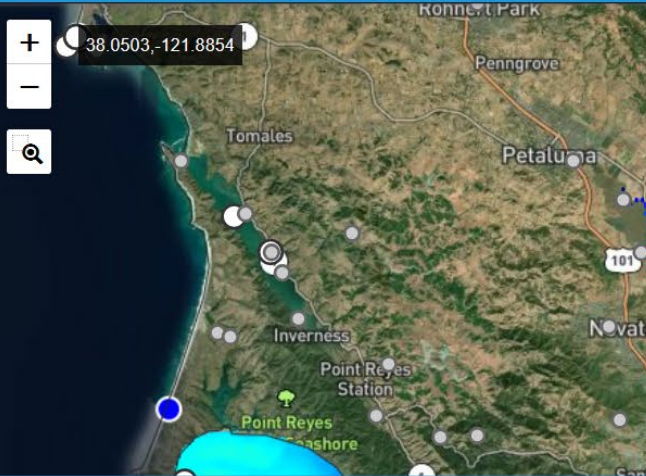


**6 Predictive Models**



**18 Funded Partner Institutions and**

**44 Principal Investigators**



**Legend** **Find Data**

Minimize all Hide all

California Real-time Sensors

**California Real-time Sensors**

↓ -3,213 to 75 m

46 56 65  
Water Temperature (°F)

Filters

Variable types: All

Show all

Sources: All

Platform: All

Tags: All

Search available sensor stations

+ Advanced

Total points: 914 On screen: 213

San Francisco Bay Ocean Forecast System (SFBOFS) - Regular Grid (AWS S3)

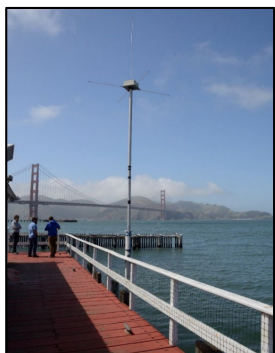
**Sea Water Temperature**

Nov 9, 2024 04:00 (PST)

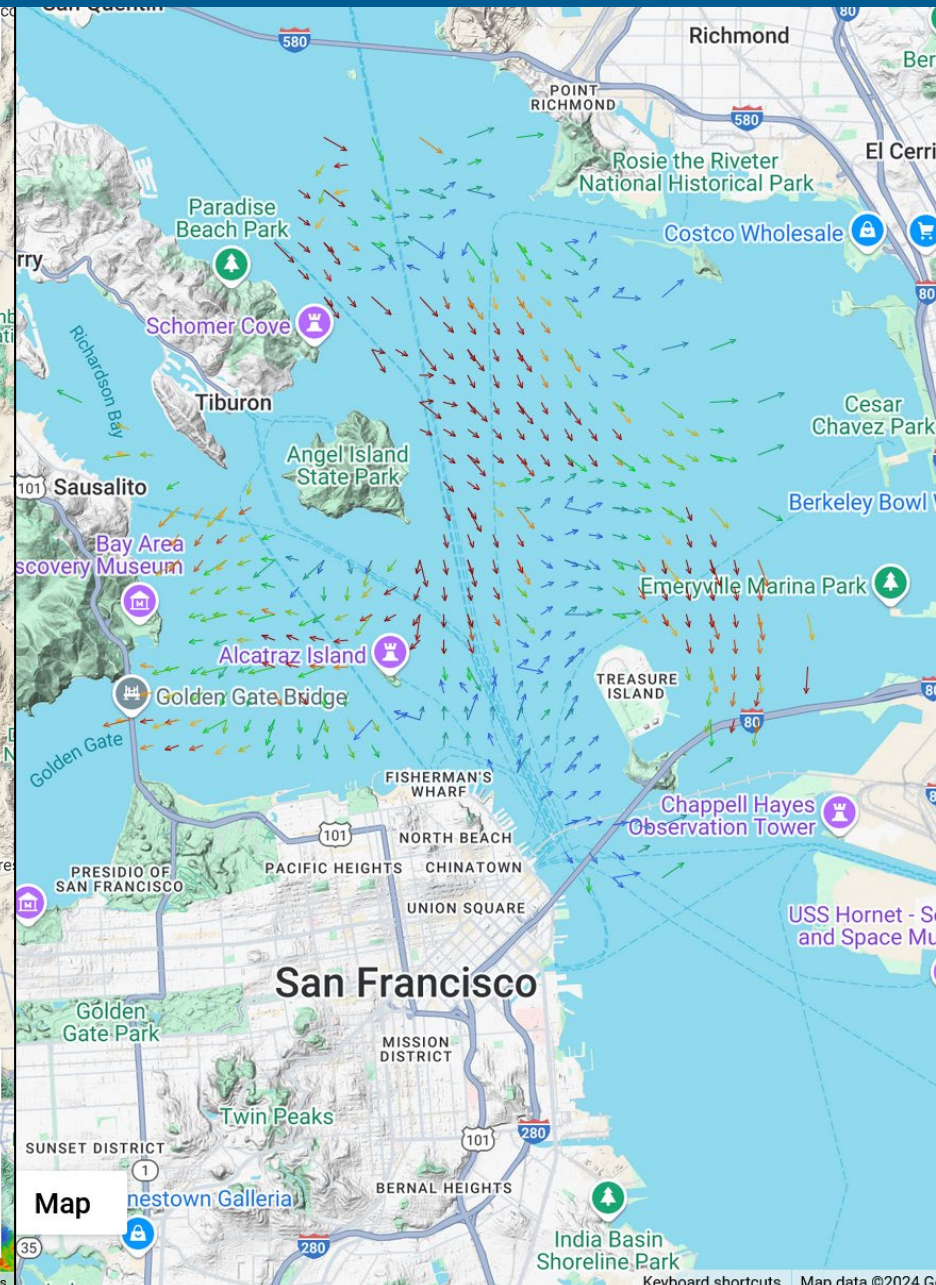
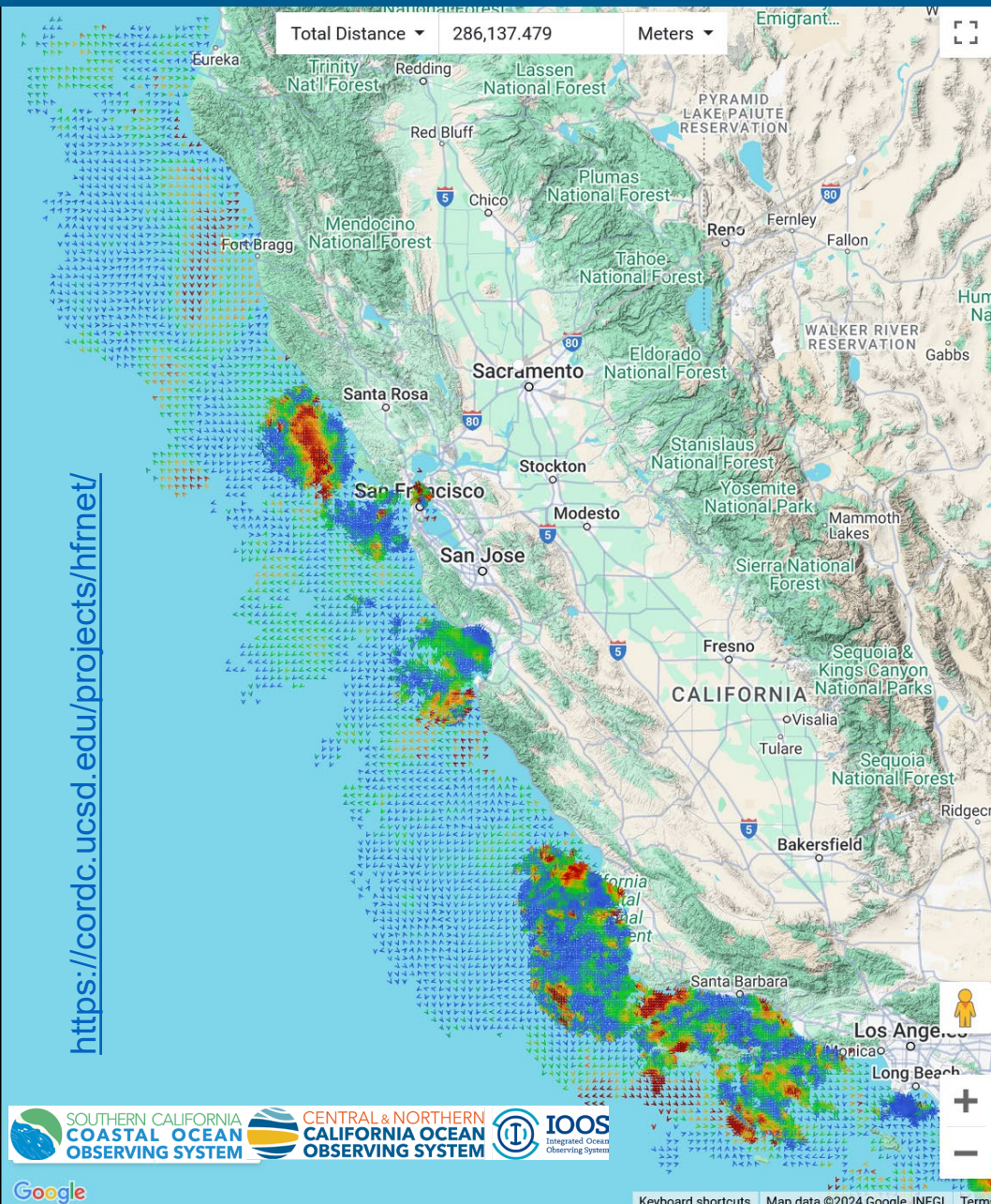
↓ 0 m

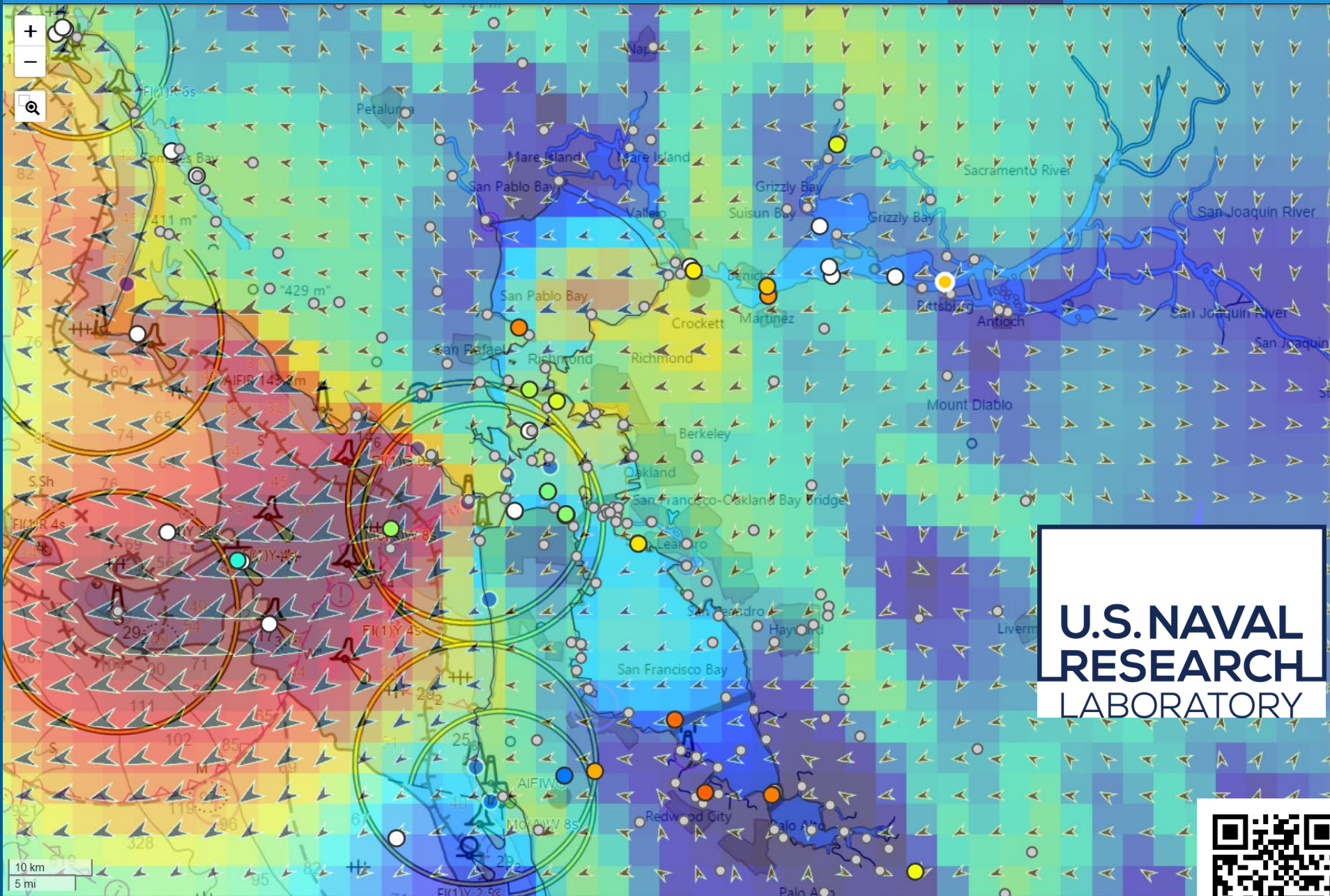
52.1 56.3 60.5  
Water Temperature (°F)

Selected Depth (m): 0



**OCEAN PROTECTION COUNCIL**





**U.S. NAVAL  
RESEARCH  
LABORATORY**



**Legend** **Find Data**

Minimize all Hide all

California Real-time Sensors

**California Real-time Sensors**

↑ ↓ -3.213 to 75 m

Water Temperature (°F)

Filters

Variable types

All

Show all

Sources

All

Platform

All

Tags

All

Search available sensor stations

+ Advanced

Total points: 914 On screen: 213

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San Francisco Bay Ocean Forecast System (SFBOFS) - Regular Grid (AWS S3)

Sea Water Temperature

Layer hidden

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HF Radar Stations

**HF Radar Stations**

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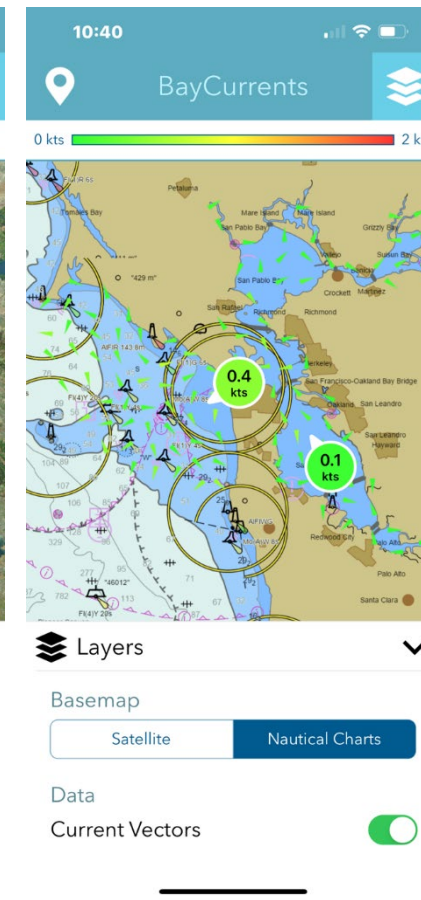
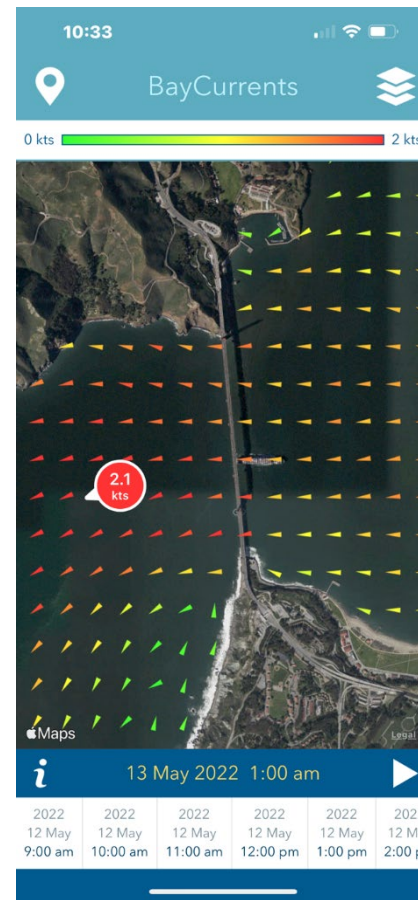
COAMPS CeNCOOS Forecast (4km)

**Winds**

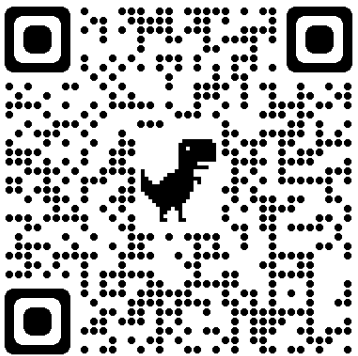
Nov 9, 2024 04:00 (PST)

↑ ↓ -10 m

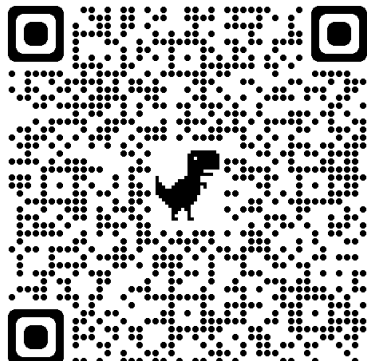
- Refresh of app in use several years ago
- Mobile and tablet versions
- Leverages PORTS/SFBOFS
- SST, waves, wind, and visibility under development also using NRL COAMPS
- West Coast app planned in coming years built w/WCOFS and select additional data



Apple



Google Play



<https://apps.apple.com/us/app/baycurrents/id1591997070>

[https://play.google.com/store/apps/details?id=org.cenoos.baycurrentsandroid&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=org.cenoos.baycurrentsandroid&hl=en_US&gl=US)

- Operations and maintenance of kit on vessels transiting through SF Bay can be managed by regional CeNCOOS partners, e.g. Cal Maritime
- This can be tied to Science Technology Engineering and Math (STEM) education objectives that build workforces
- Address issues of diversity, equity and inclusion
- Regional effort contributing to GOOS and UN Sustainability outcomes
- Alex Parker, Fred Meitz will build example cases:
- Potential examples relate to:
  - <https://www.cprsurvey.org/>
  - <https://www.aoml.noaa.gov/phod/soop/index.php>
  - <https://www.ferrybox.com/>
  - <https://berringdatacollective.com/>
  - <https://seabed2030.org/>

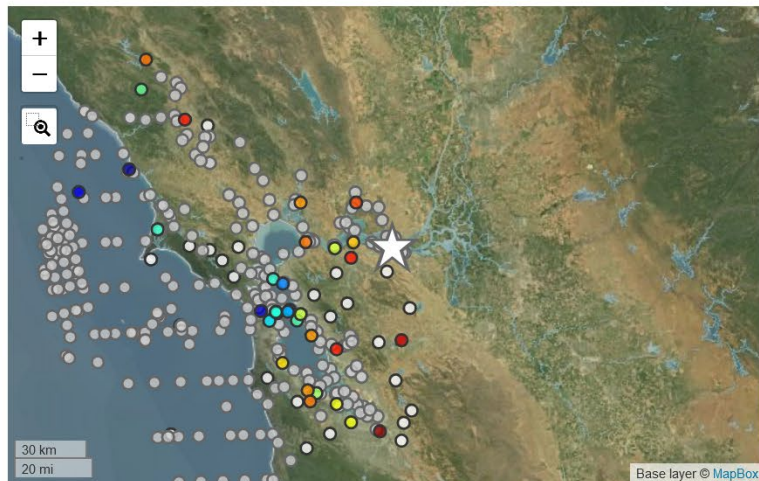




- Coastal and Climate Resilience Manager
- Place-Based Management Data Specialist
- California Ocean Observing Systems Data Portal
  - Customized data visualizations
  - Research Workspace – work data where it sits
- Training on how to use our tools and data

USGS National Water Information System (NWIS)

SUISUN BAY A VAN SICKLE ISLAND NR PITTSBURG CA (USGS 11455508)

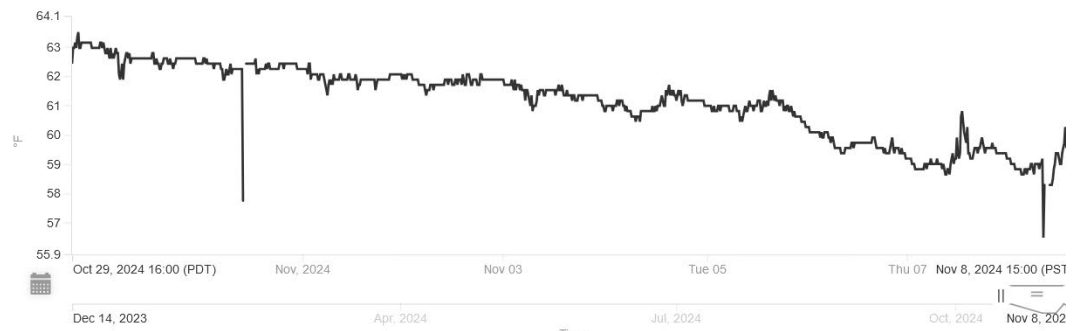


Data Inventory Latest measurements

Temperature: Water Temperature

Autoscale Time bin: all Auto

Real time Historical



*Thanks!*

## California Ocean Observing Systems Data Portal

Integrated Ocean Observing for a Changing California Coastline

 SEARCH 1100+ DATASETS

