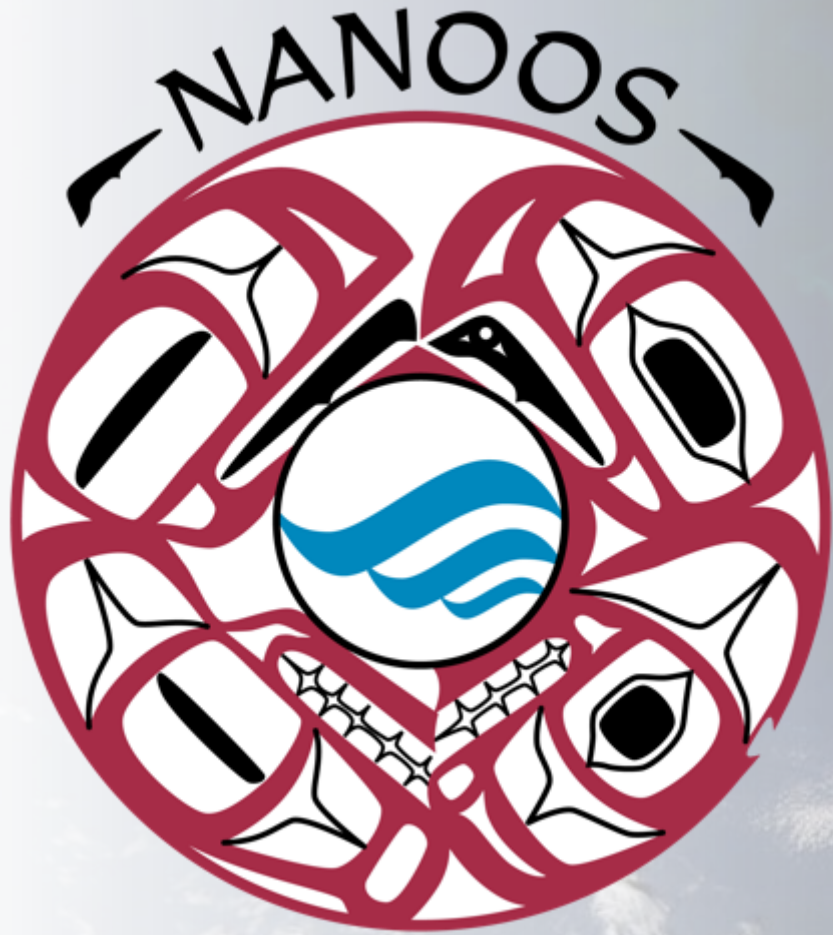




NOAA West Watch Update *13 March 2025*

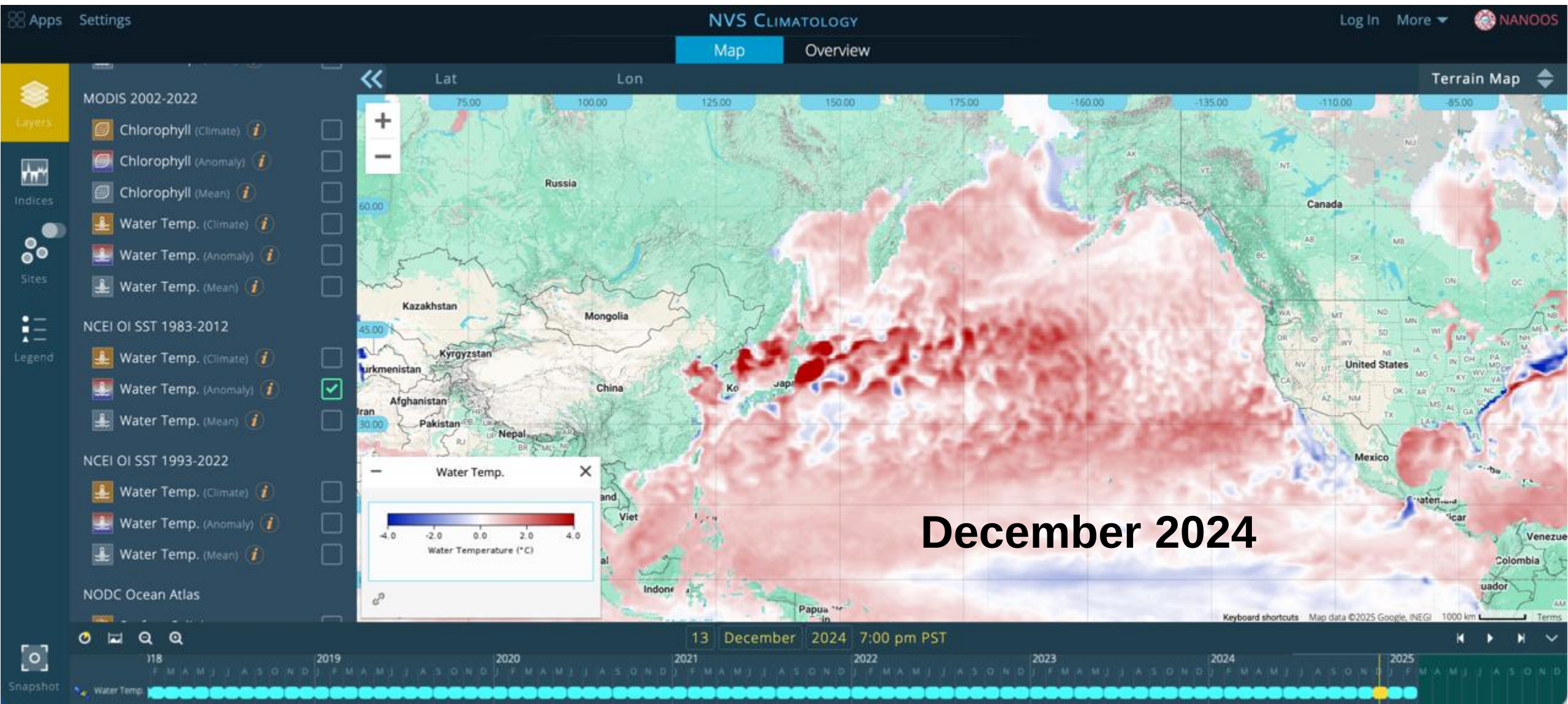
NANOOS Update

Jan Newton on behalf of many

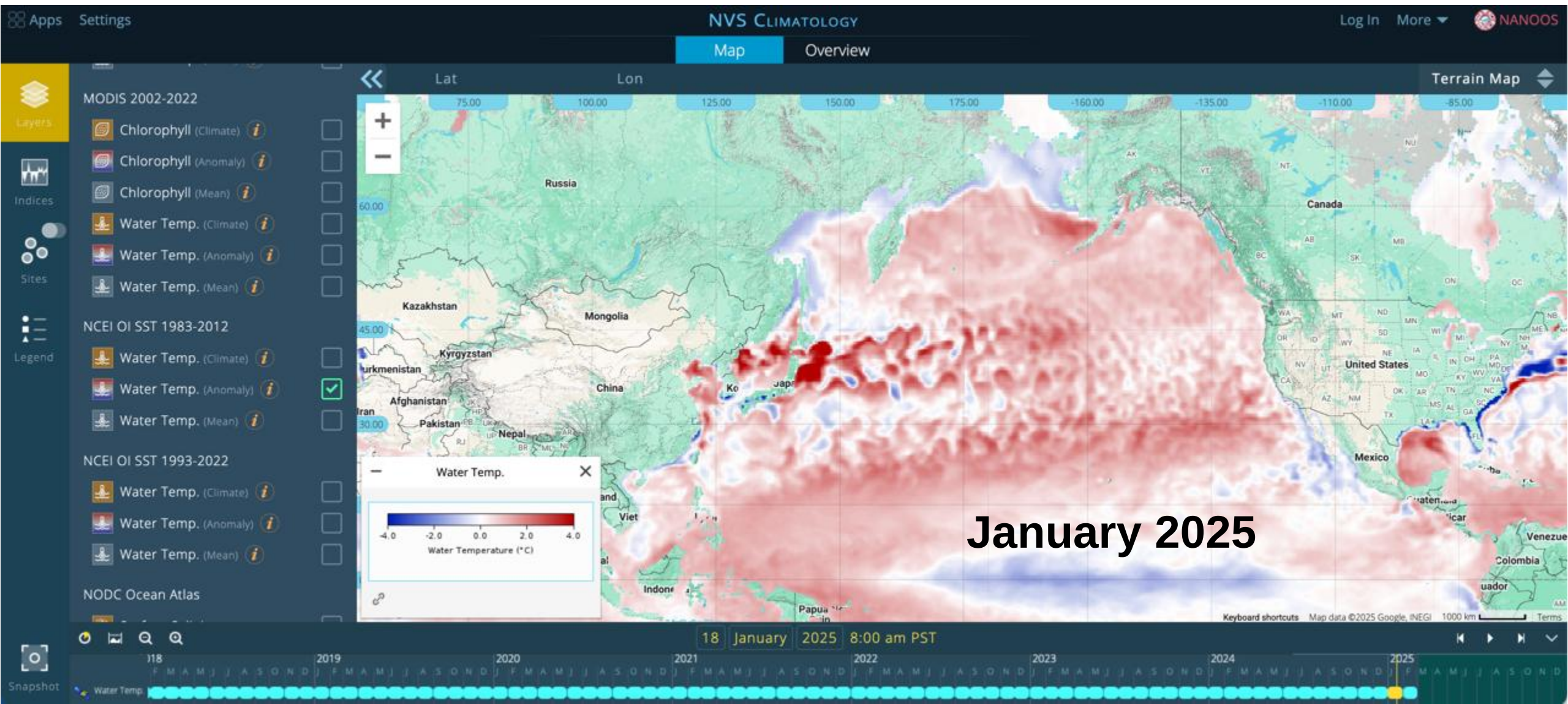
www.nanoos.org



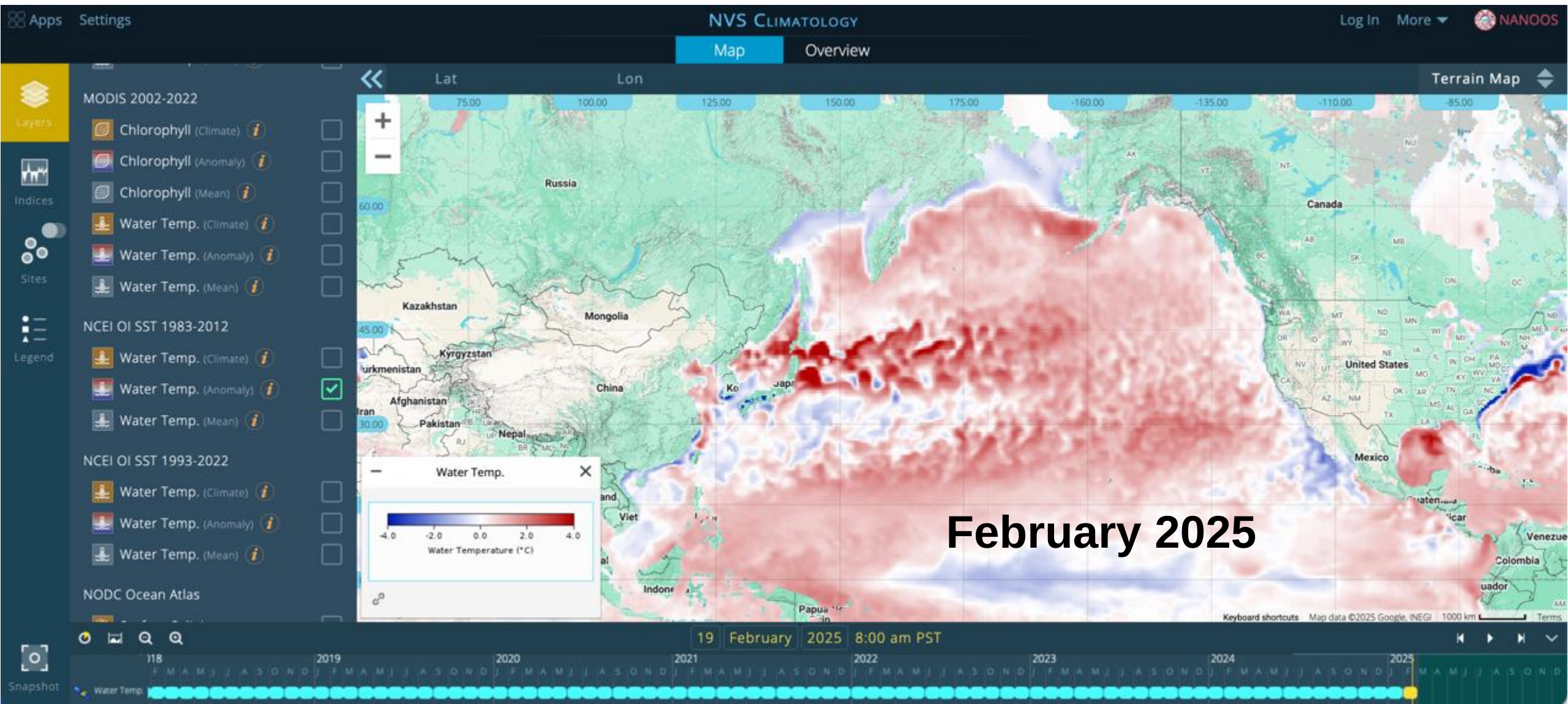
NCEI OI SST vs. 1983-2012



NCEI OI SST vs. 1983-2012



NCEI OI SST vs. 1983-2012



MARINE HEATWAVES

International Working Group

[HOME](#) [MHW OVERVIEW](#) [MHW IMPACTS](#) [TRACKER](#) [WORKSHOPS AND CONFERENCES](#) [PUBLICATIONS](#) [MEMBERS](#) [CODE](#)



Total cover
26.66



I Moderate
20.09



II Strong
5.12



III Severe
0.53



IV Extreme
0.92

Controls

* Ice mask ☐

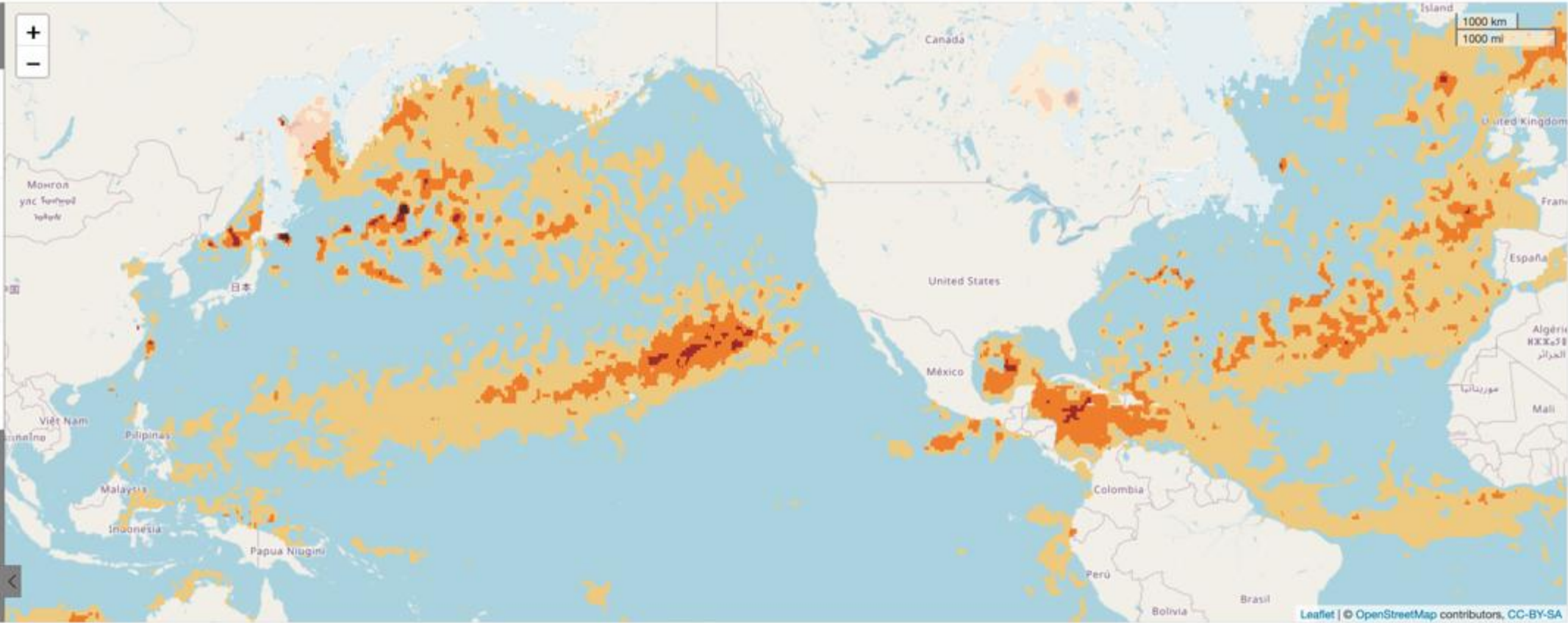
Baseline ☐

Date

2025-03-03

Map layer ☐

Download ☐



<http://www.marineheatwaves.org/tracker.html>

December 2024

OSU MODIS vs. 2002-2012



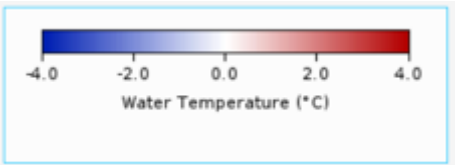
January 2025

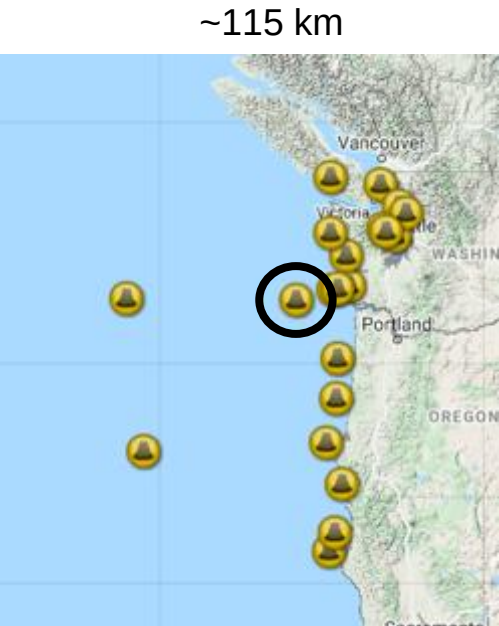
OSU MODIS vs. 2002-2012



February 2025

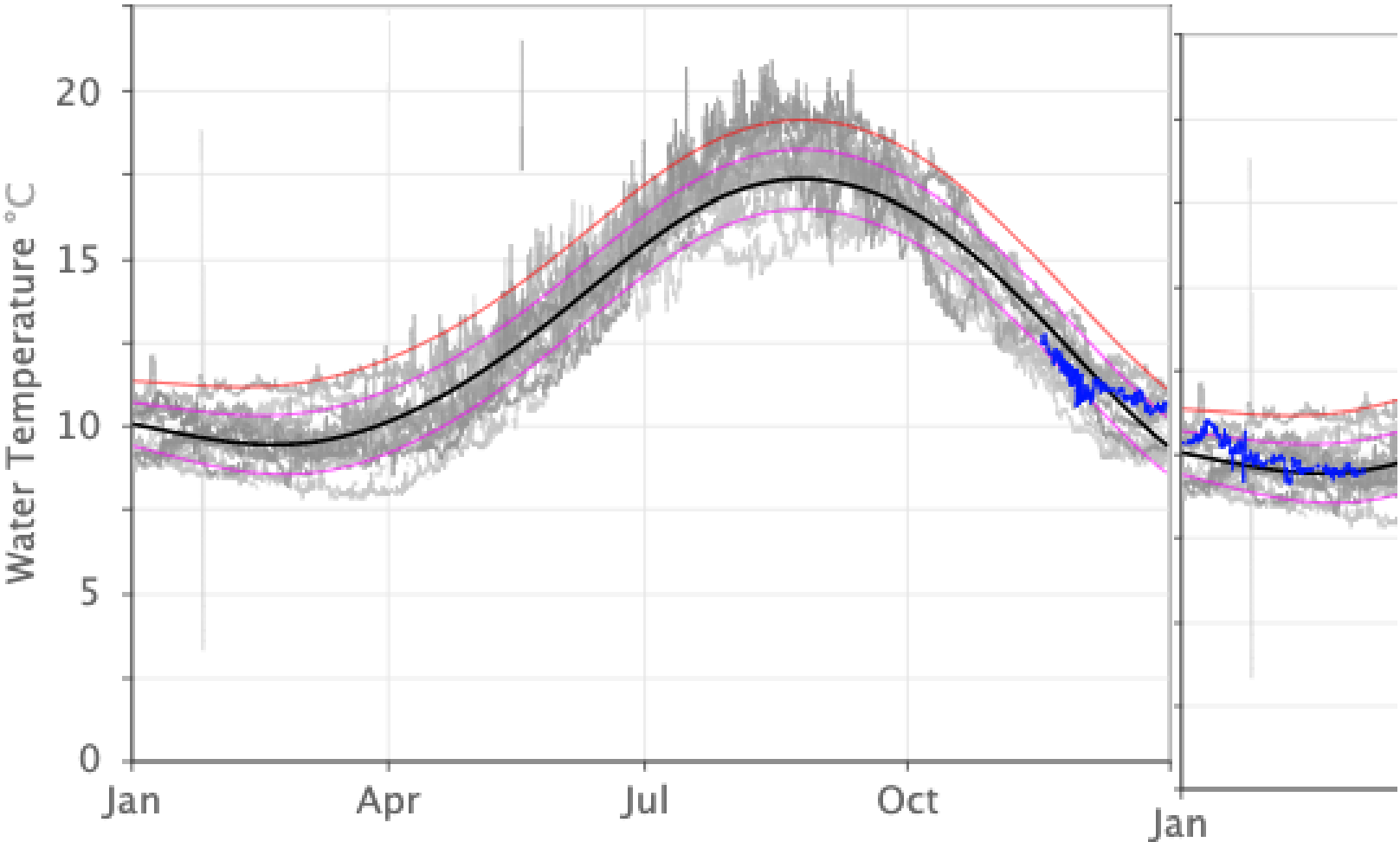
OSU MODIS vs. 2002-2012



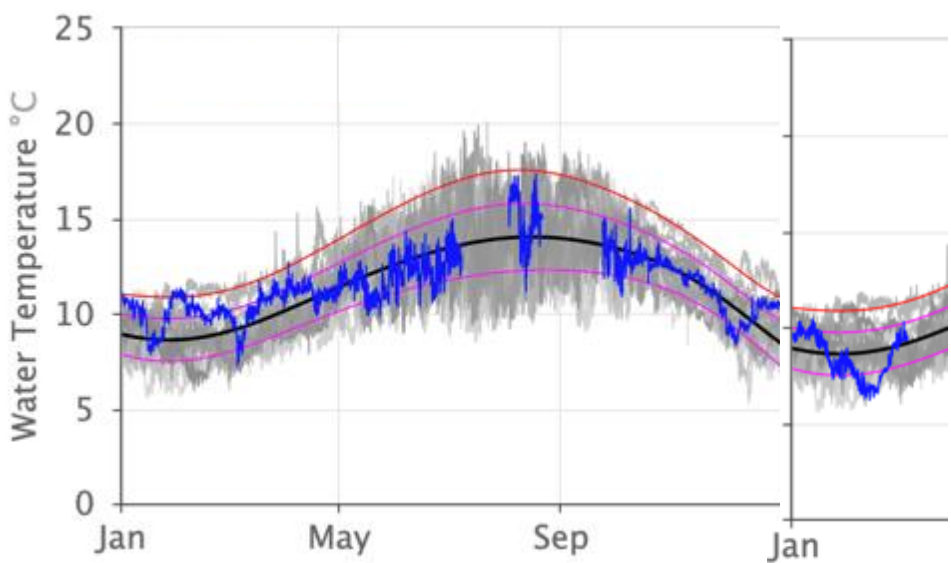


- Seasonal Cycle
n=17 Yrs
- 1 STD
- +1 STD
- +2 STD
- 2025
- 2024

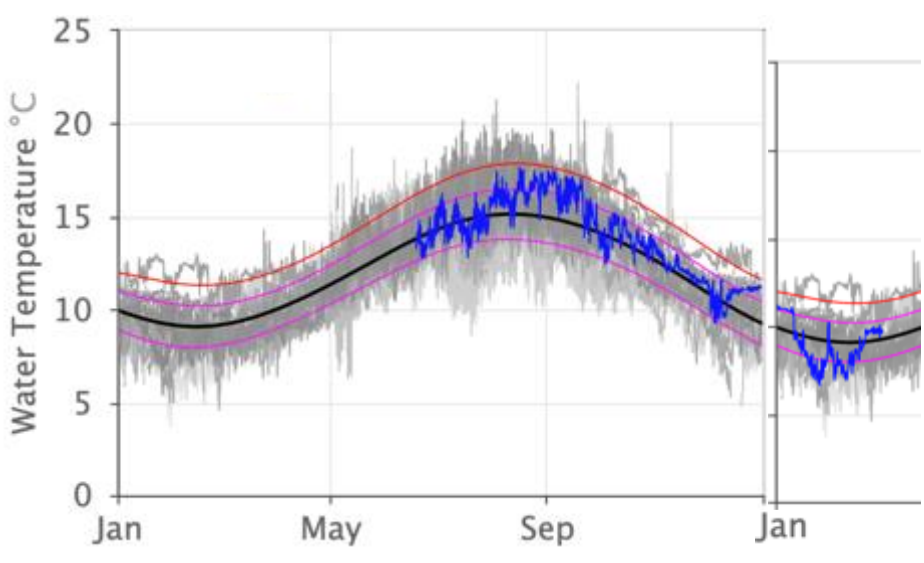
NDBC Tillamook



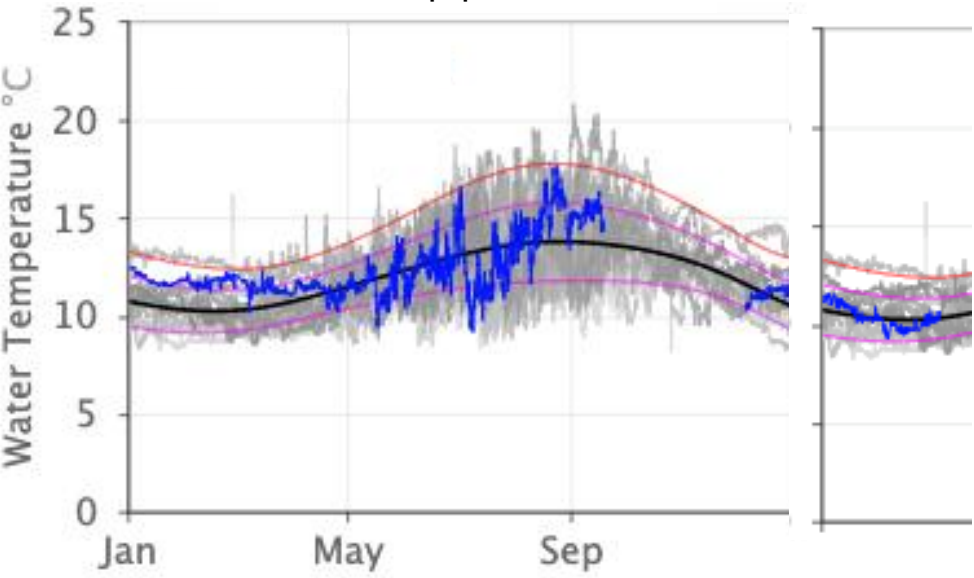
CDIP Grays Harbor 17 yrs



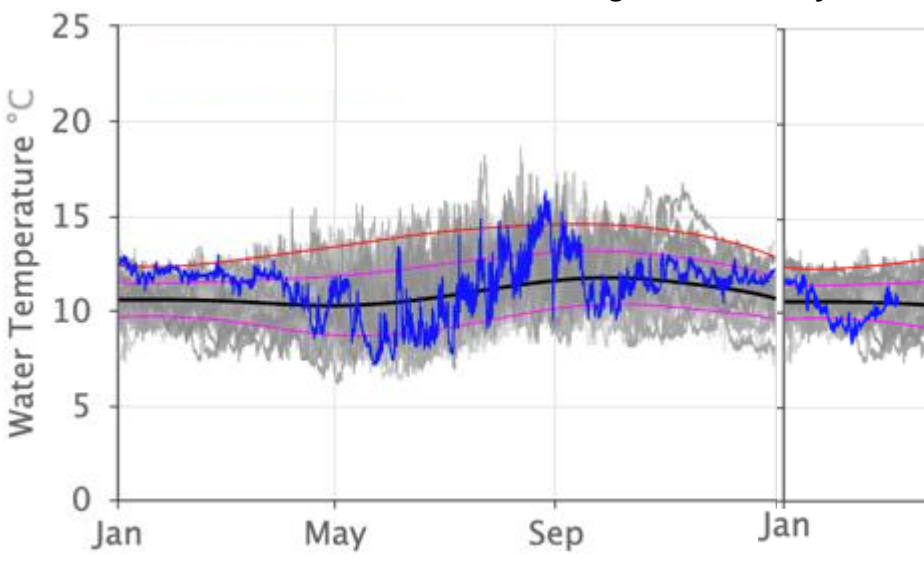
NDBC Columbia River Bar 37 yrs



CDIP Umpqua Offshore 16 yrs

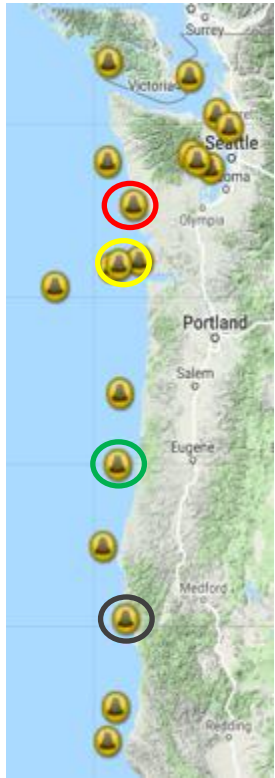


NDBC St. Georges 38 yrs



- Seasonal Cycle
- -1 STD
- +1 STD
- +2 STD
- 2023

~5-25 km

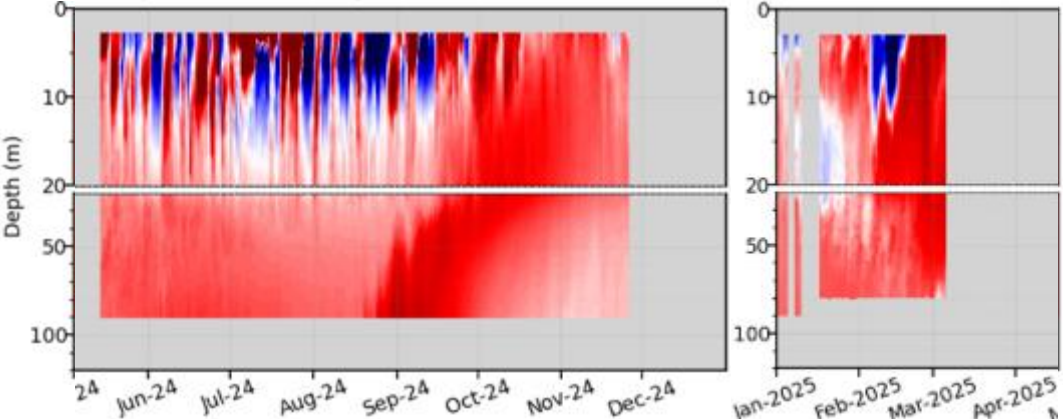


Temperature Anomalies

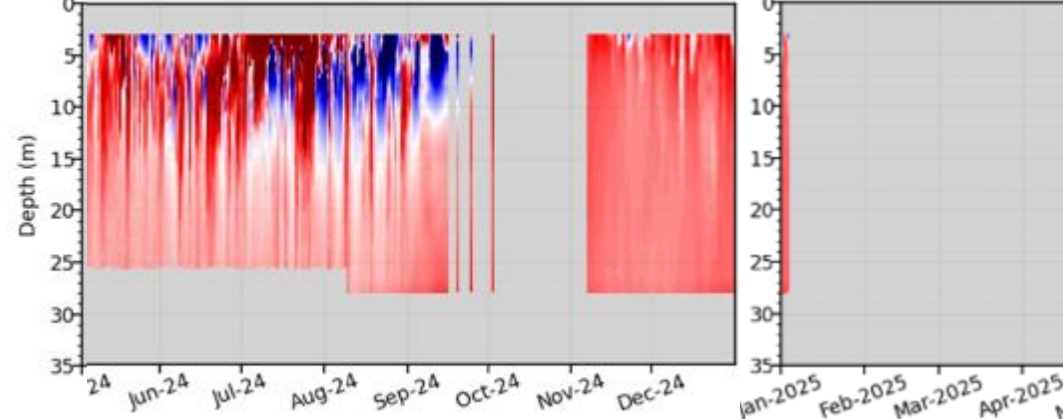
Climatology 2010-2024

Puget Sound Profiling Buoys

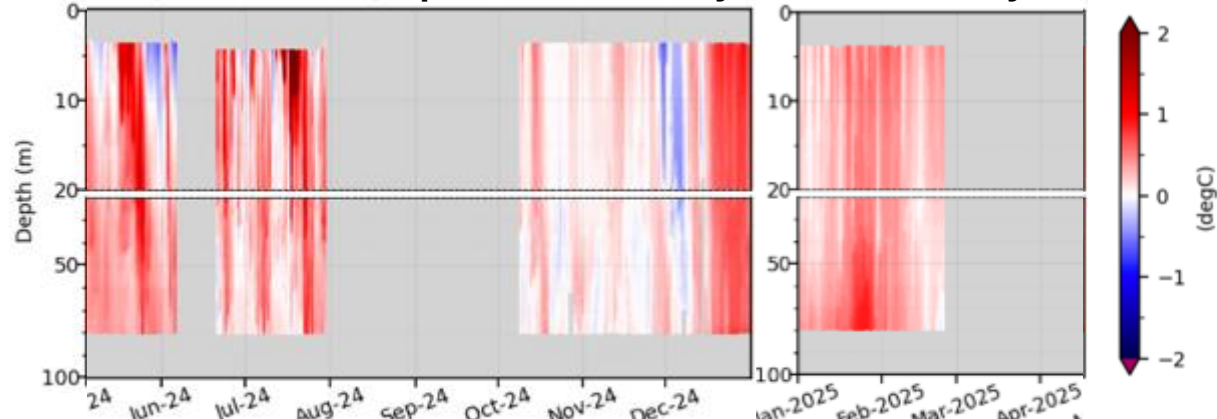
Hoodsport Temperature Anomaly, 2024-2025, 15 years



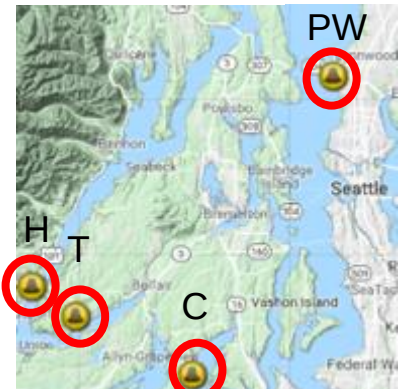
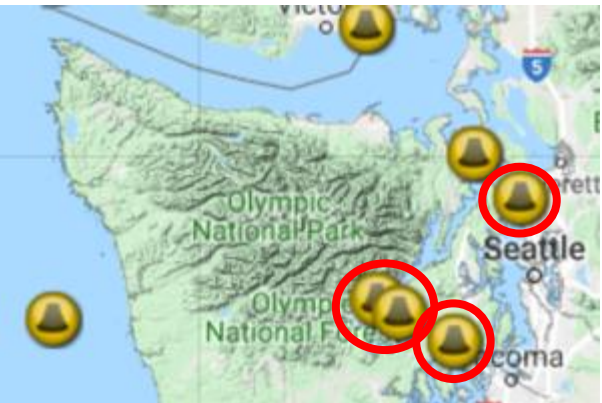
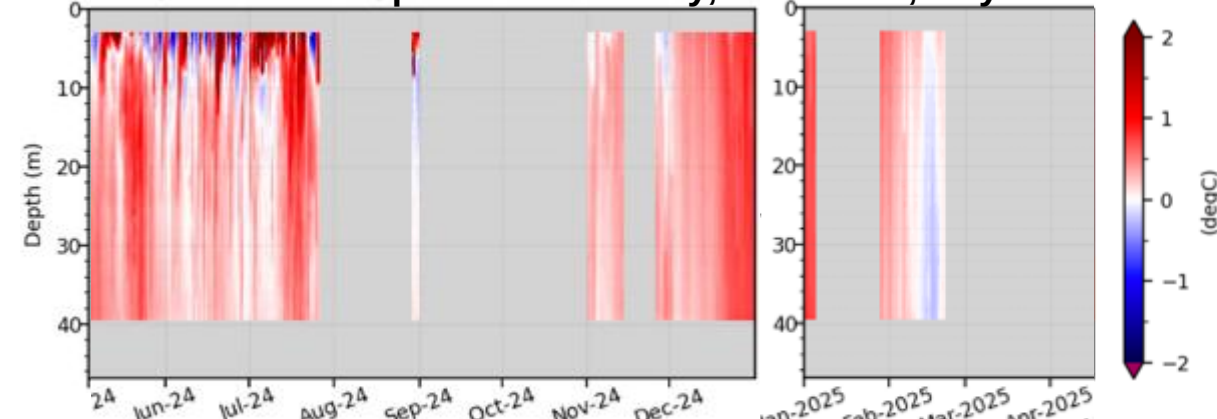
Twanoh Temperature Anomaly, 2024-2025, 15 years



Point Wells Temperature Anomaly, 2024-2025, 15 years



Carr Inlet Temperature Anomaly, 2024-2025, 15 years

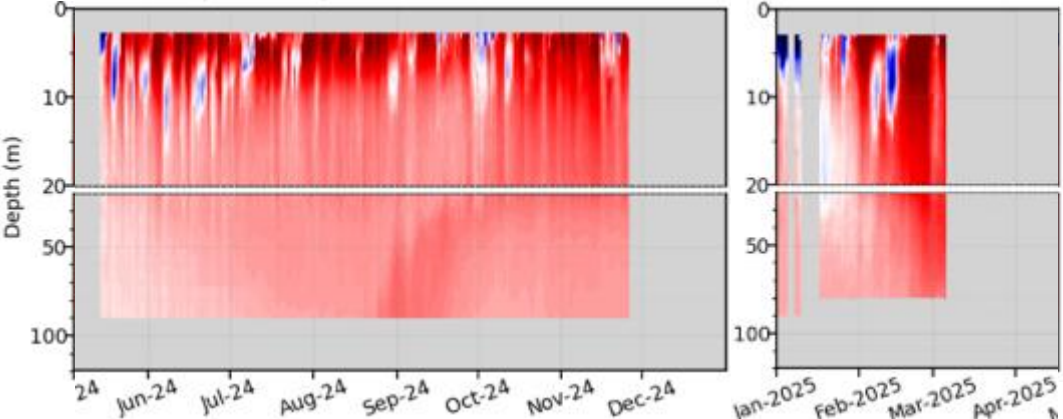


Salinity Anomalies

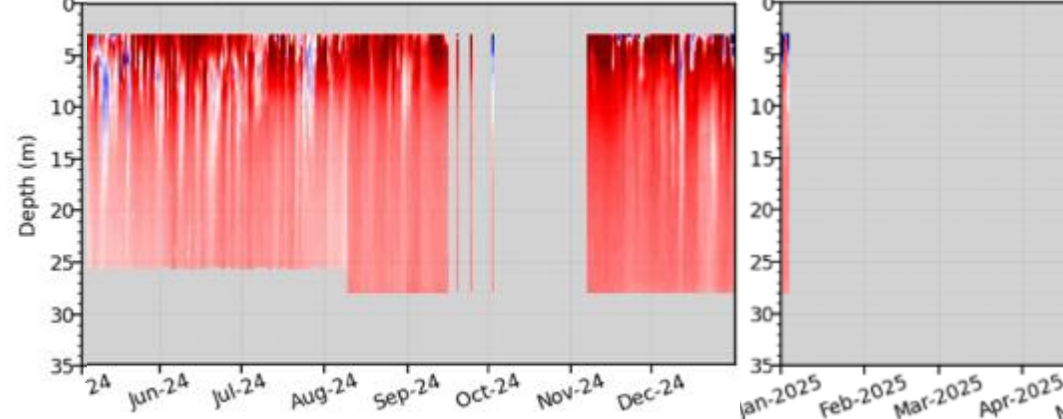
Climatology 2010-2024

Puget Sound Profiling Buoys

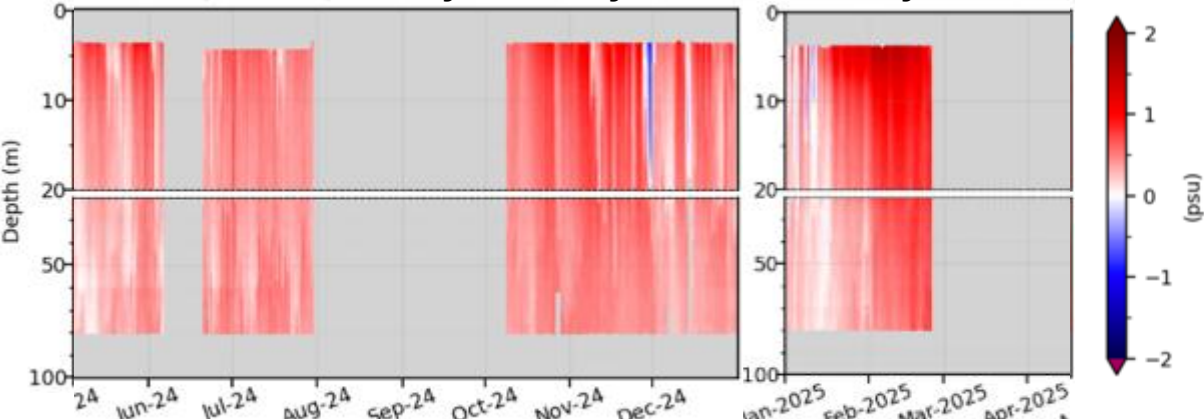
Hoodsport Salinity Anomaly, 2024-2025, 15 years



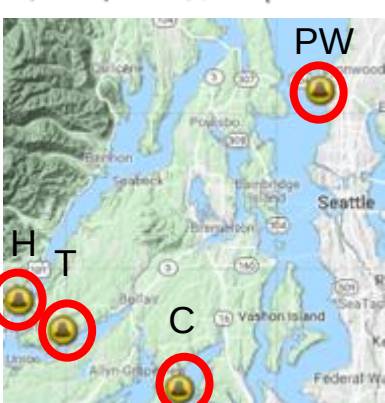
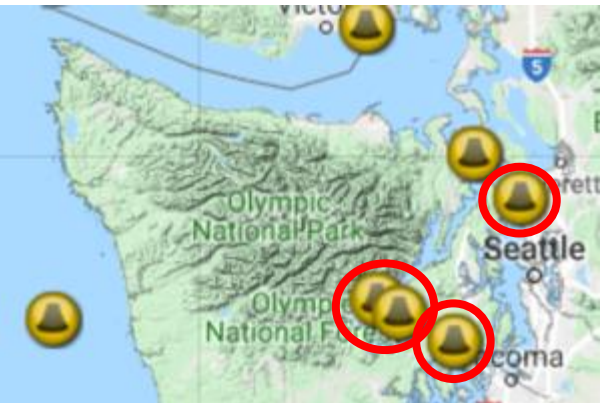
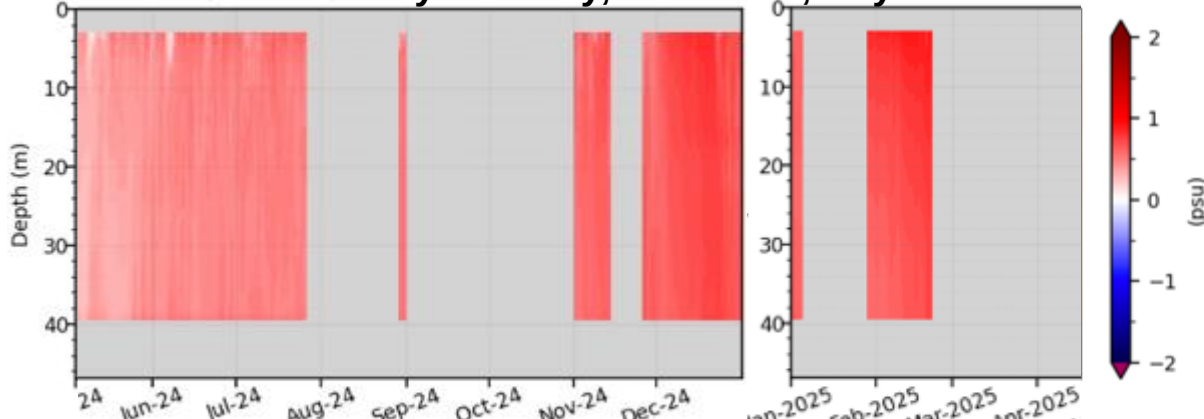
Twanoh Salinity Anomaly, 2024-2025, 15 years



Point Wells Salinity Anomaly, 2024-2025, 15 years



Carr Inlet Salinity Anomaly, 2024-2025, 15 years



December 2024

OSU MODIS 2002-2012



January 2025

OSU MODIS 2002-2012

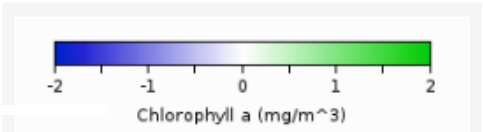


February 2025

OSU MODIS 2002-2012

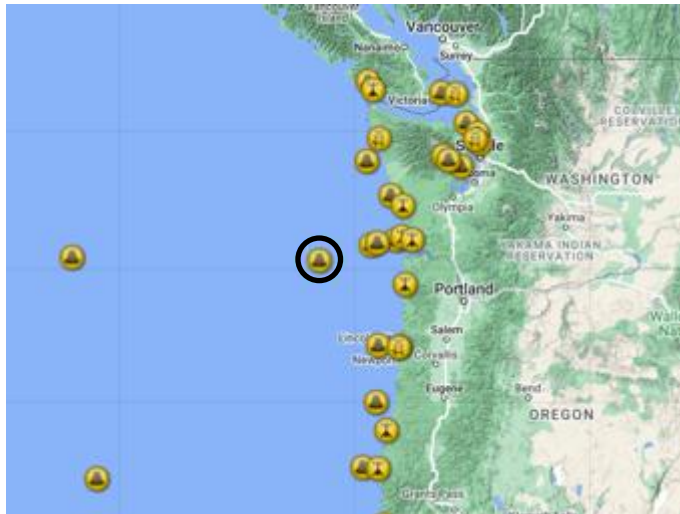


Chlorophyll



Waves

2024



New threat emerges as atmospheric river combines with once-in-a-decade bomb cyclone on the West Coast

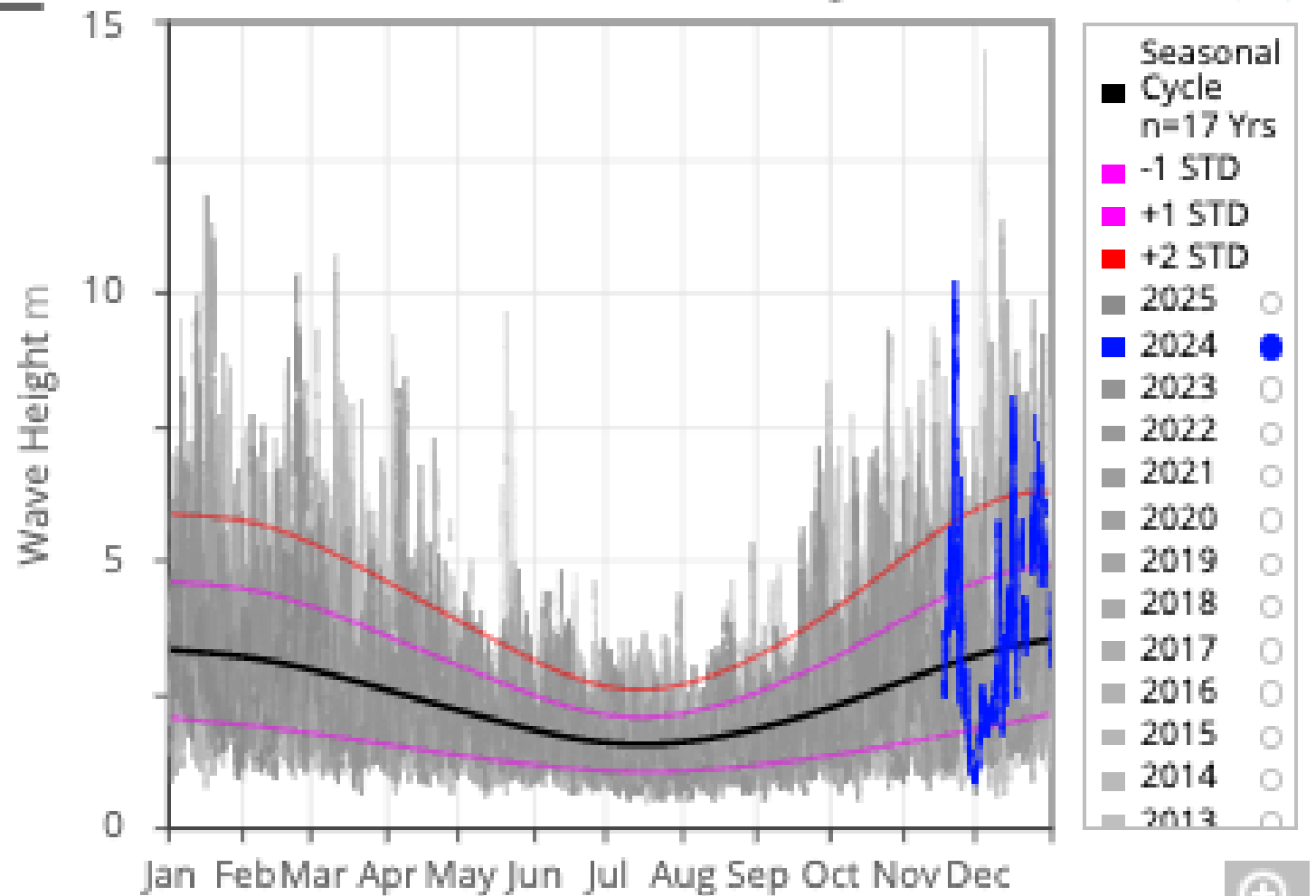
By Mary Gilbert, Karina Tsui and Robert Shackelford, CNN
© 5 minute read · Updated 10:05 PM EST, Wed November 20, 2024

Storm brings gusty winds to western Washington, cuts power to thousands

by KOMO News Staff | Mon, December 23rd 2024 at 11:33 PM
Updated Tue, December 24th 2024 at 11:10 AM

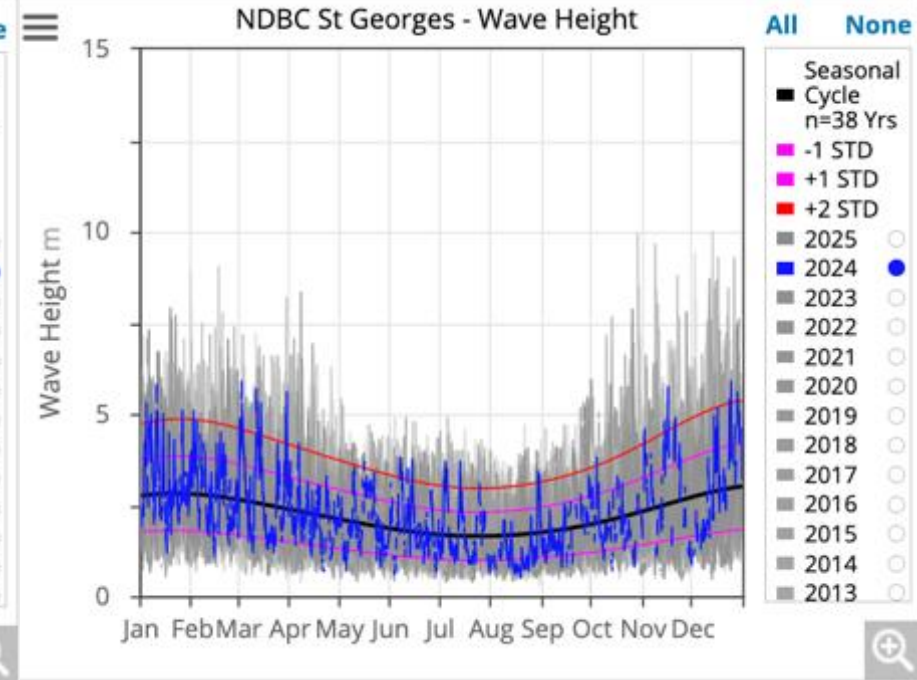
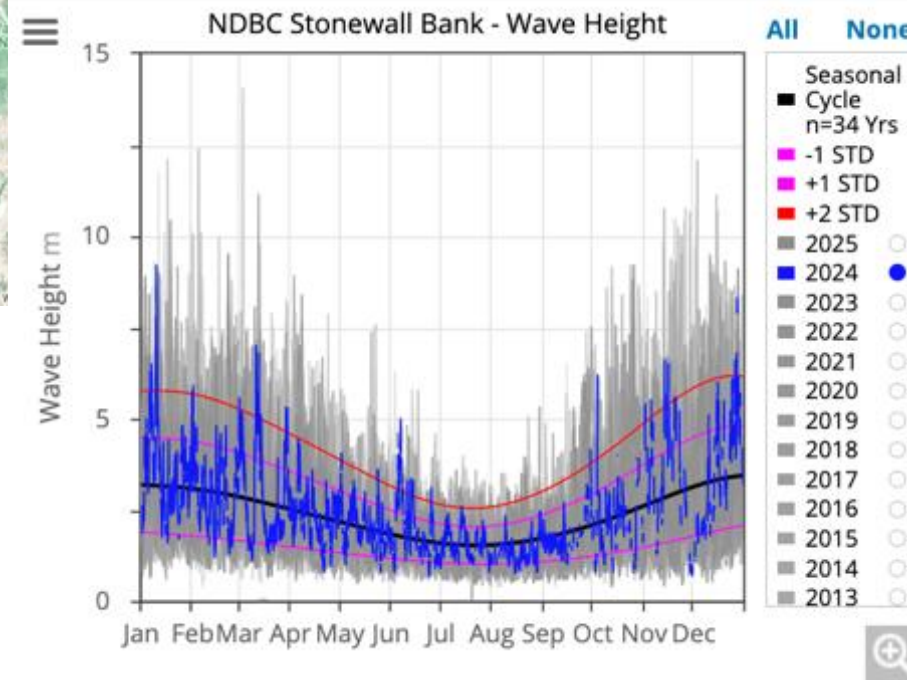
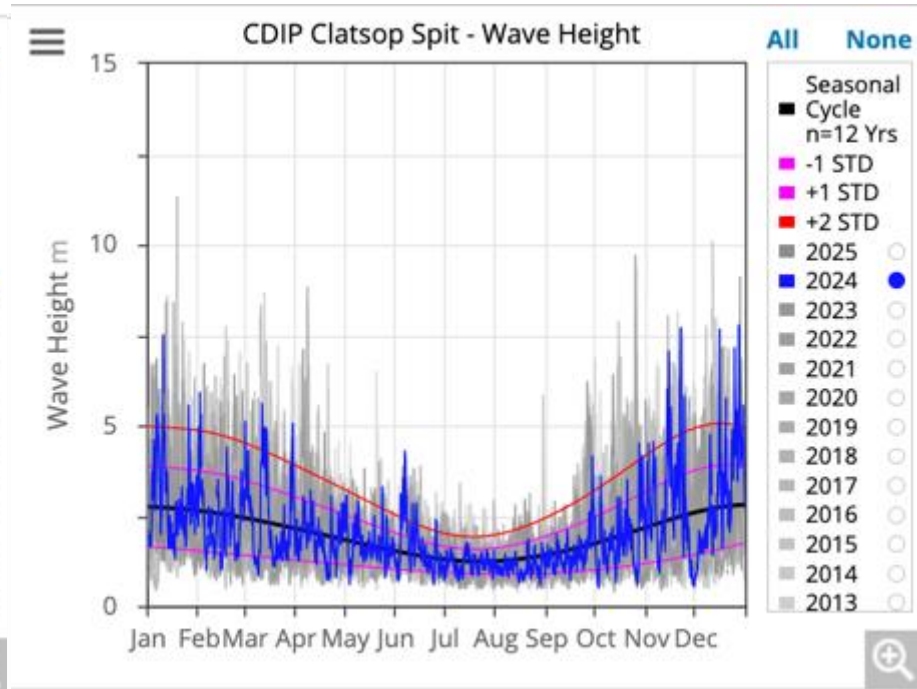
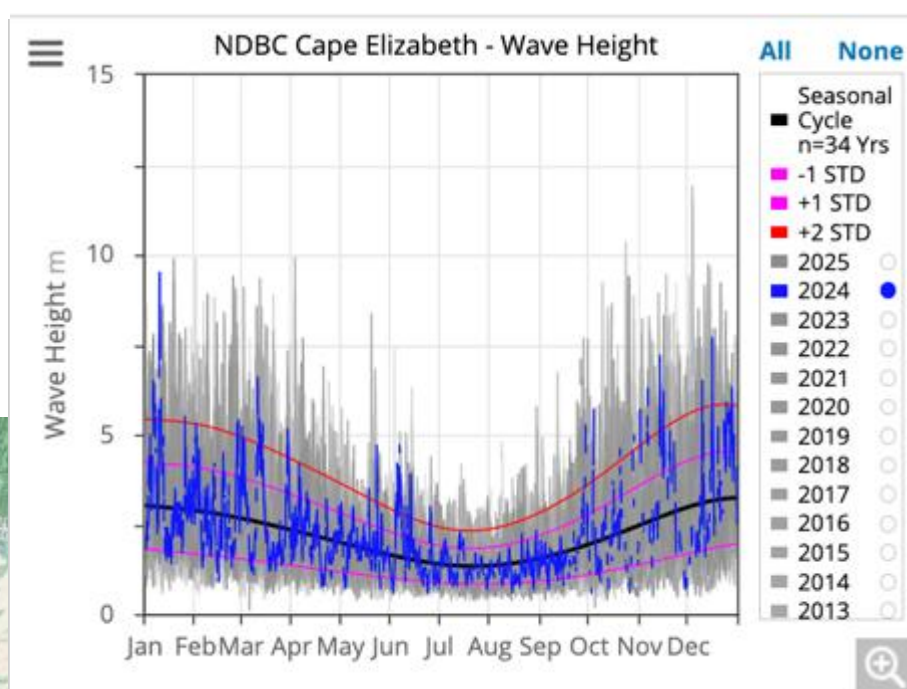
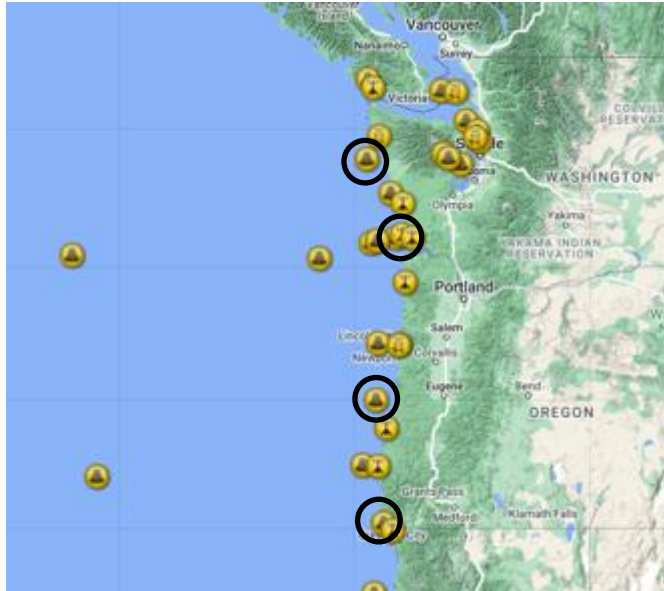


NDBC Tillamook - Wave Height



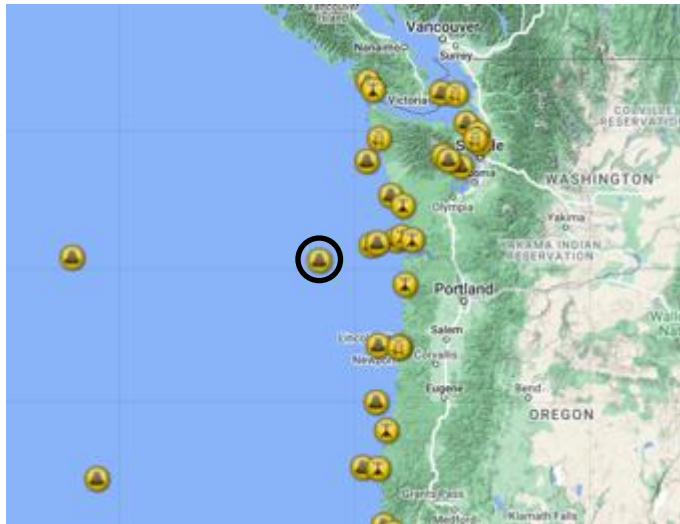
Waves

2024



Waves

2025

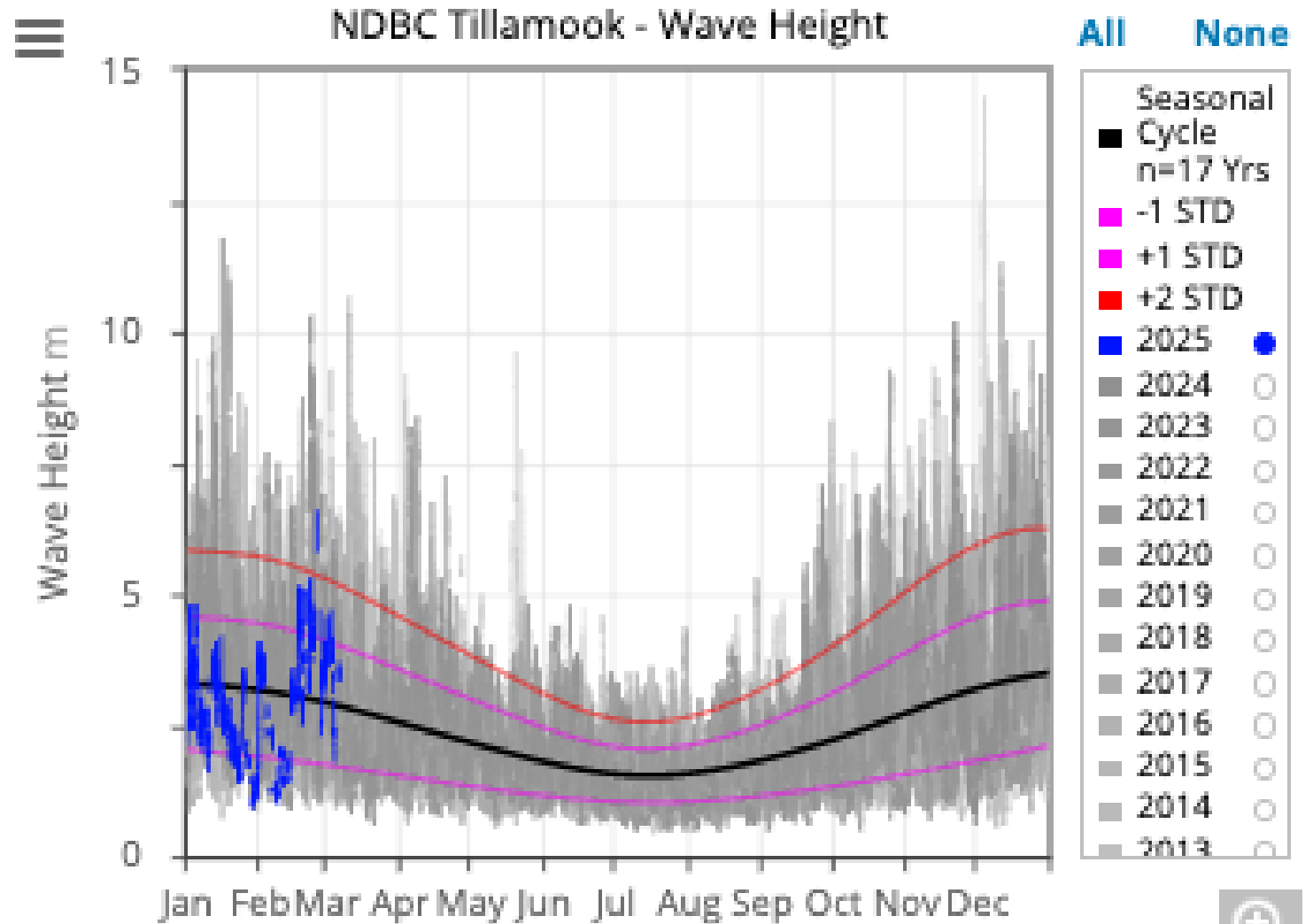


WEATHER IMPACT

These were the fastest recorded wind speeds during the overnight storm in western Washington

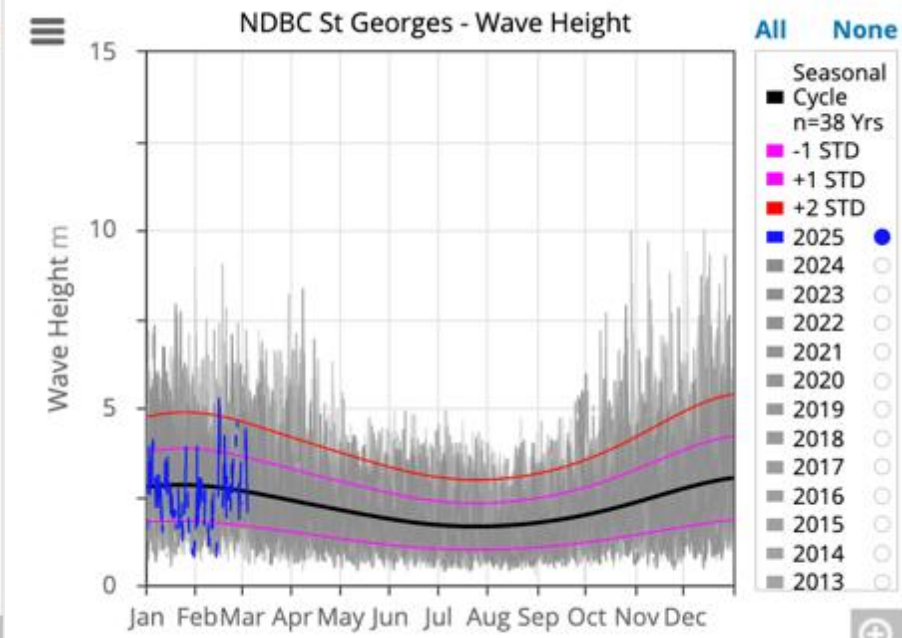
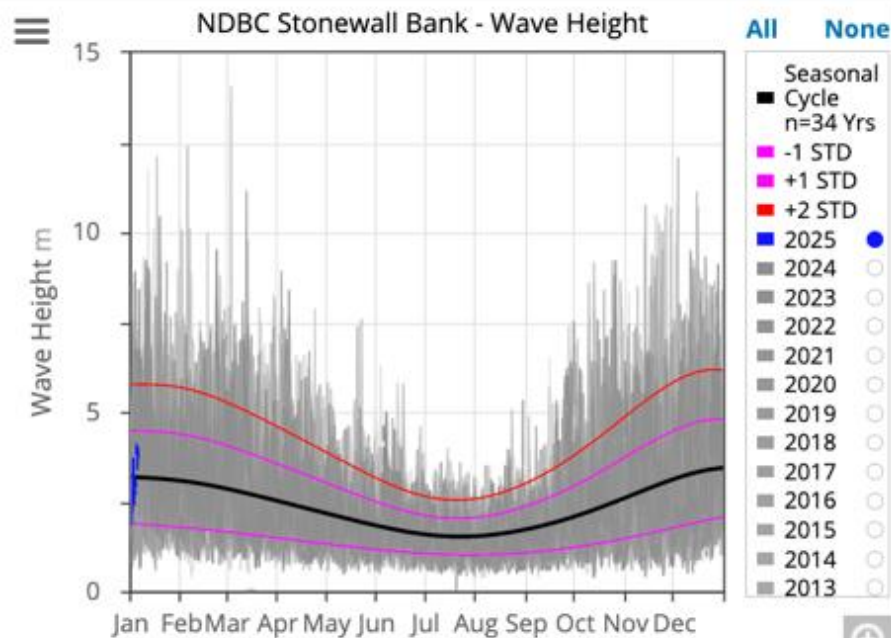
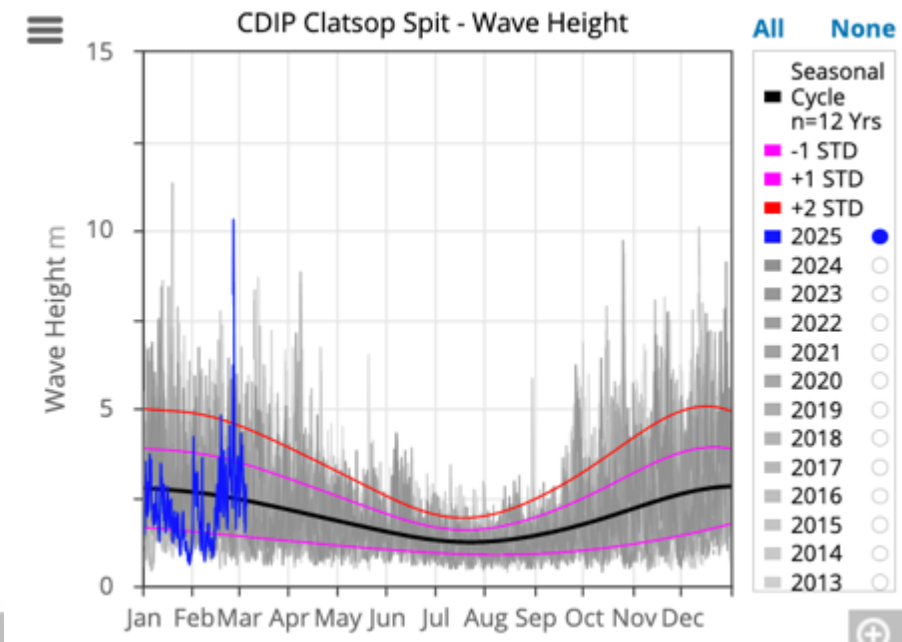
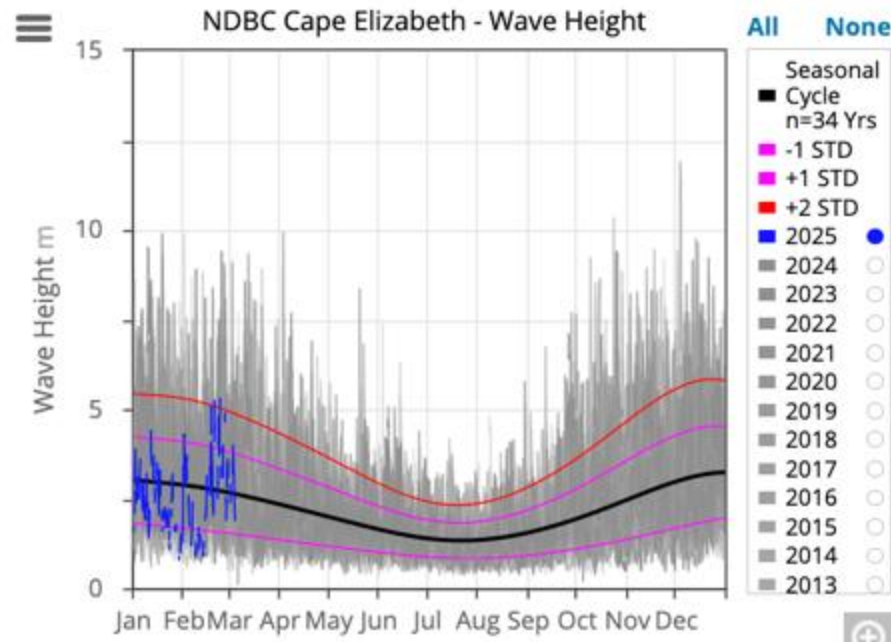
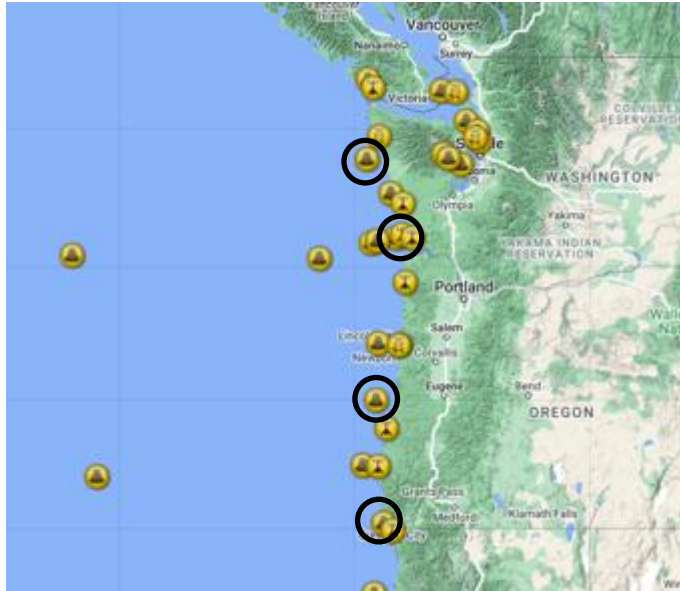
Winds over 60 mph were recorded in several parts of the region during the peak of the storm.

Published: 6:55 AM PST February 25, 2025



Waves

2025





To summarize:

Coastal conditions

- La Niña advisory.
- Water offshore (~115 km) cools from warmer than average to no signal. Temperature drops in late January to mid February at nearer shore (5-25 km) coastal buoys.

Puget Sound

- Warmer and saltier than average across all basins, cooler, fresher influence at surface in Hood Canal in February.

Chlorophyll & HABs

- Satellite data show coastal blooms during January and February; within Salish Sea in January.
- In December and January, HAB species have been present off and on, but in small numbers. The numbers increased slightly in February and March, but Domoic acid and PSP levels stayed below the closure limits.

Waves

- Big wave events late December and late February, linked to windstorms; regionally variable wave intensity.



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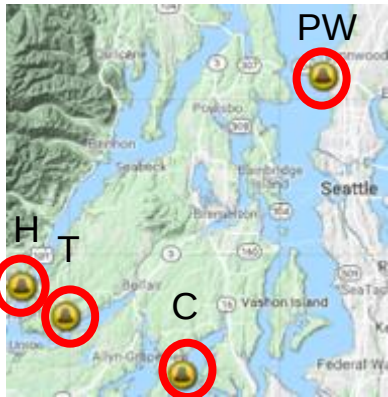
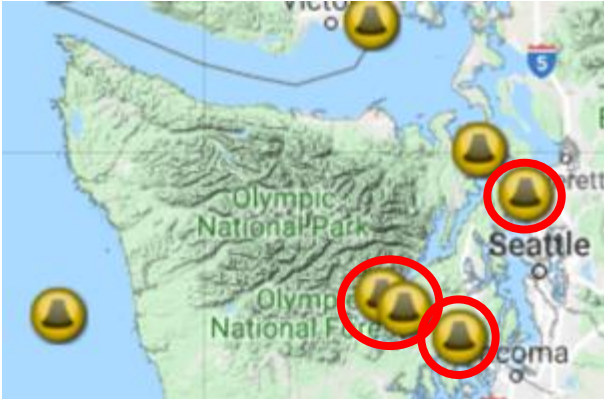
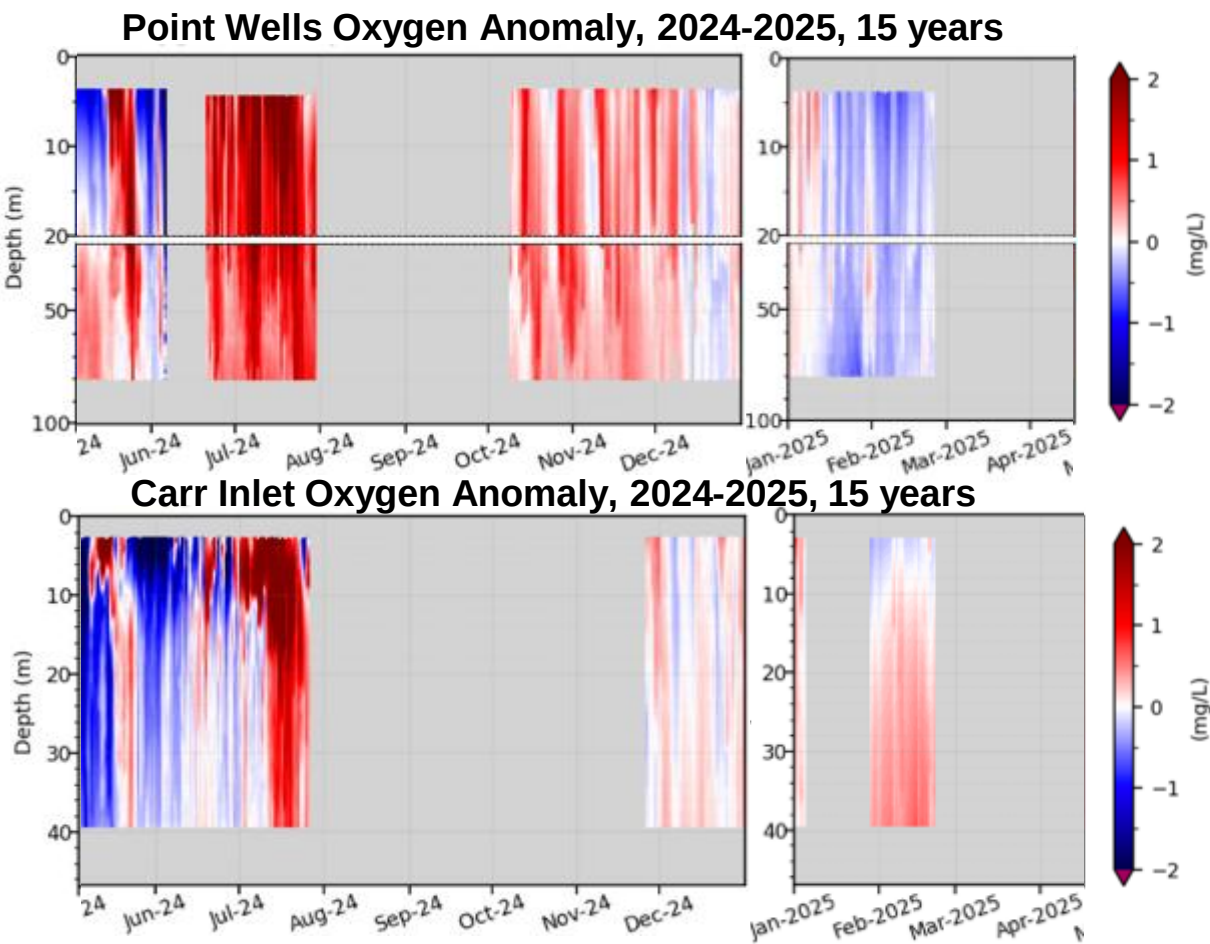
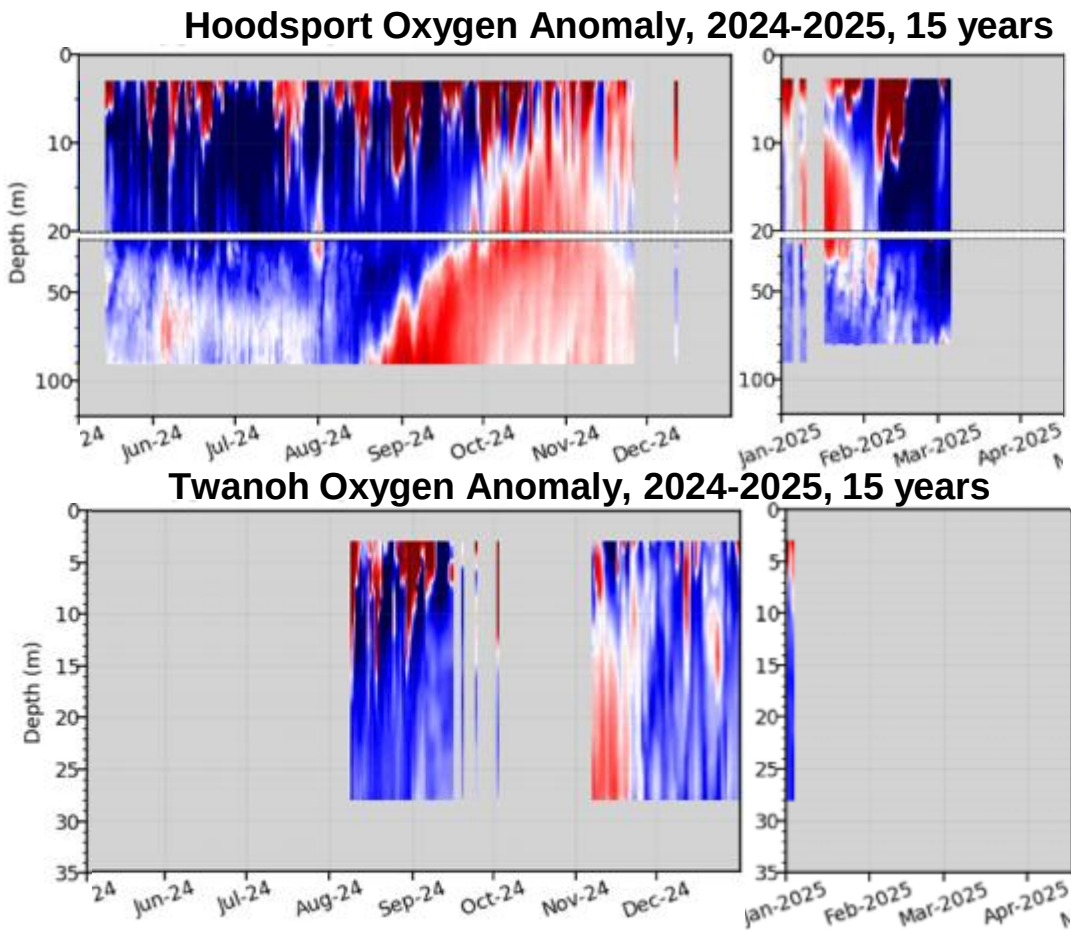
janewton@uw.edu

ricarini@uw.edu

Dissolved Oxygen Anomalies

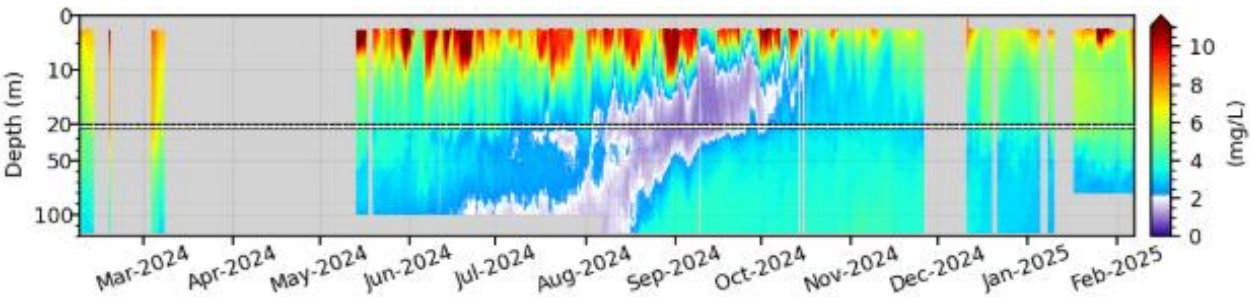
Climatology 2010-2024

Puget Sound Profiling Buoys



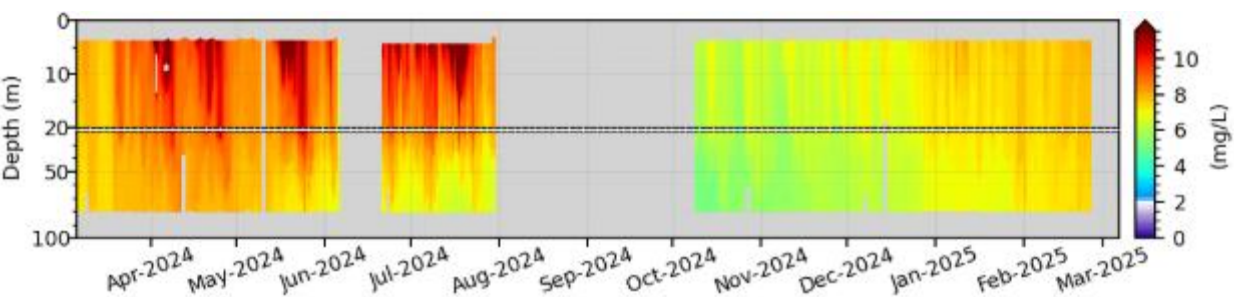
Oxygen Concentration

Hoodsport Oxygen Concentration, 2024-2025

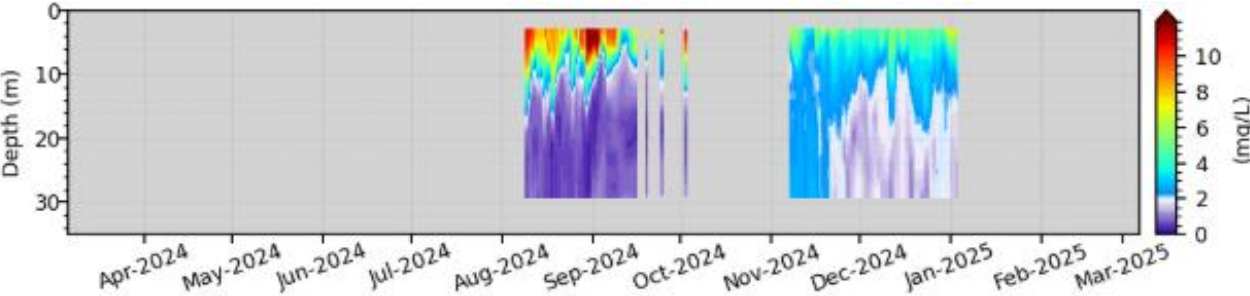


Puget Sound Profiling Buoys

Point Wells Oxygen Concentration, 2024-2025



Twanoh Oxygen Concentration, 2024-2025



Carr Inlet Oxygen Concentration, 2024-2025

