

# NANOOS & OOI

OOIFB Meeting  
December 7, 2021

Jan Newton, NANOOS Executive Director

[www.nanoos.org](http://www.nanoos.org)





- There has been strong NANOOS – OOI partnering for over a decade
- We are fortunate to have the Endurance Array in the PNW
- Several keys to success:
  - Strong leadership set the tone: top down
  - Scientific partnering came ‘naturally’: bottom up
  - Strong societal awareness in both programs
- There can never be too many tools for or too much analysis of data



# NANOOS

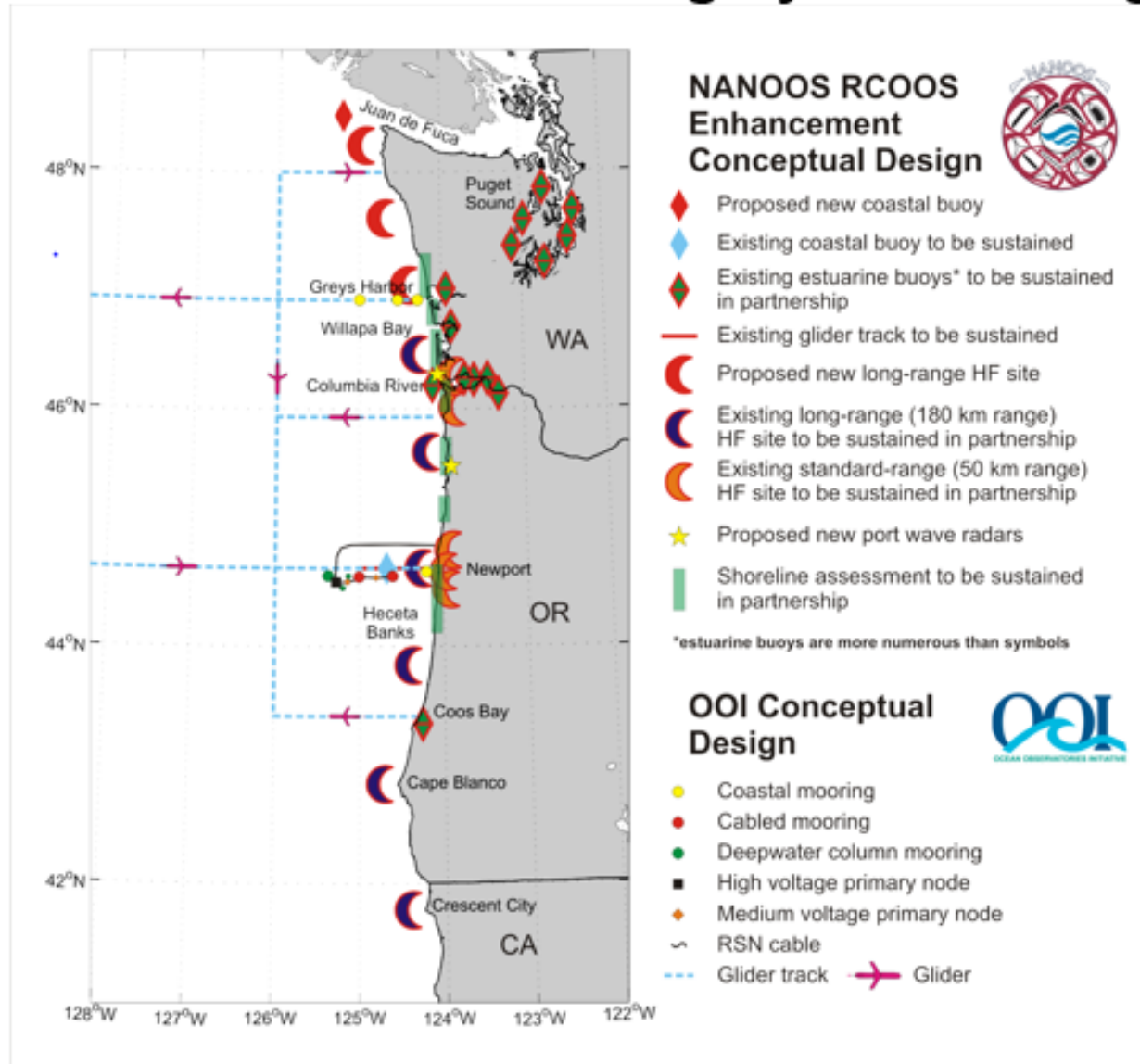
## NORTHWEST ASSOCIATION OF NETWORKED OCEAN OBSERVING SYSTEMS

WASHINGTON - OREGON - NORTHERN CALIFORNIA

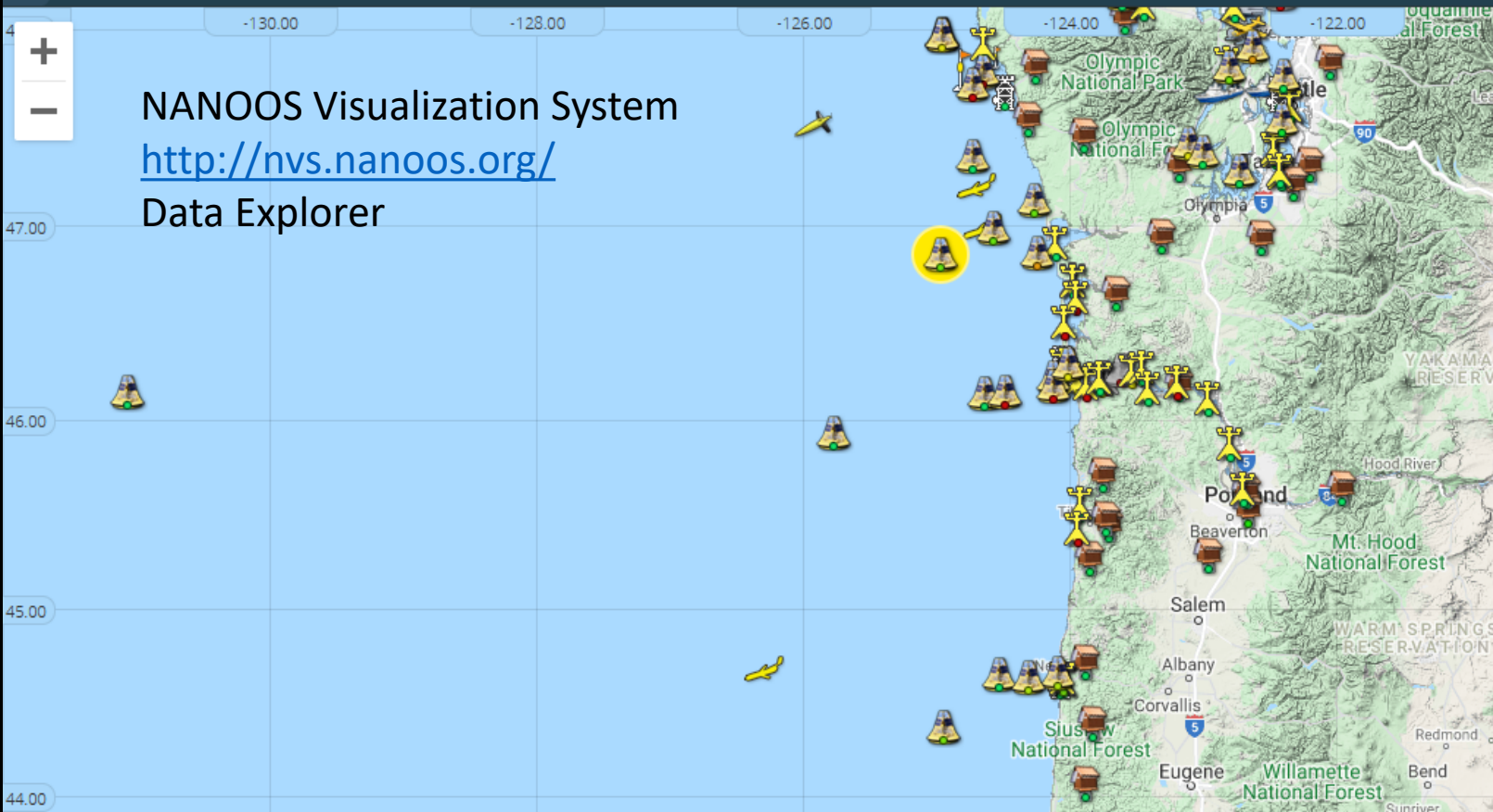


• 2010 slide

### PNW Ocean Observing Systems Design







NANOOS Visualization System  
<http://nvs.nanoos.org/>  
 Data Explorer

**WA Offshore Surface Mooring**

Observations Forecasts Comparator Details History

Data Updated: 6 Dec 2021 12:33 PST Provider: OOI

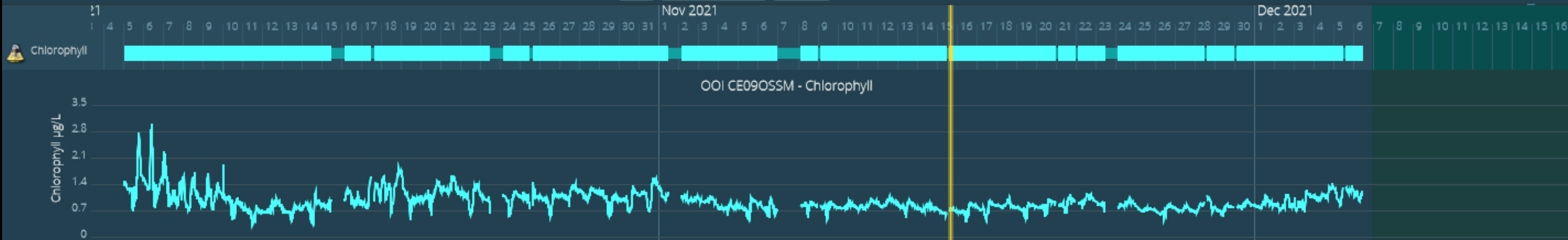
**ATMOSPHERIC**

Air Temperature (4.3 m)	11 °C	Download	Refresh
Baro. Pressure (4.3 m)	1,012.2 mbar	Download	Refresh
CO2 Air (1.85 m)	420 µatm	Download	Refresh
Longwave Radiation (4.3 m)	371 W/m²	Download	Refresh
Relative Humidity (4.3 m)	97 %	Download	Refresh
Solar Radiation (4.3 m)	113 W/m²	Download	Refresh
Wind Direction (4.7 m)	216 deg (from)	Download	Refresh
Wind Speed (4.7 m)	6.5 m/s	Download	Refresh

**HYDROGRAPHIC**

Avg. Wave Period (0 m)	5.8 sec	Download	Refresh
Chlorophyll (-7 m)	1.2 µg/L	Download	Refresh
CO2 Water		Download	Refresh
(-0.7 m)	364 µatm		

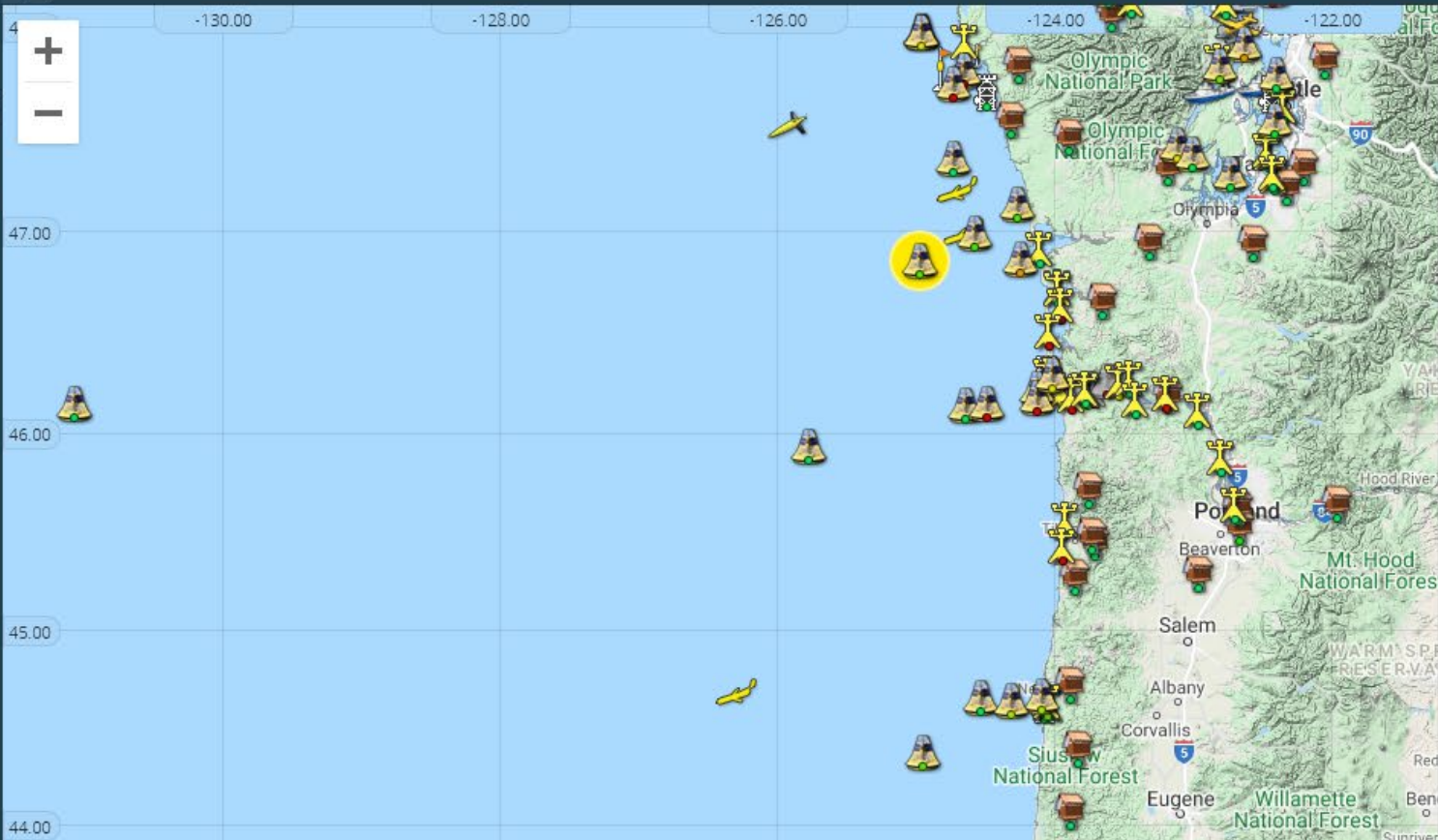
Link <http://nvs.nanoos.org/Explorer?action=oiw:fixe>



Lat 45.7512 Lon -131.3893

Terrain Map

- Layers
- Platforms
- Routes
- Filters
- Legend



### WA Offshore Surface Mooring

Observations Forecasts **Comparator** Details History

LiveOcean NAM OSU ROMS WAVEWATCH III

Provider: CMG-UW Data Source: CMG-UW/MSAzure

**HYDROGRAPHIC**

Nitrate	Download	Refresh
Oxygen Concentration	Download	Refresh
pH	Download	Refresh
Salinity	Download	Refresh
<b>Water Temperature</b>	Download	Refresh

[Link](#)

6 December 2021 10:33 pm PST



Layers

Salinity

Water Temperature

Platforms

HYCOM

Currents

Salinity

Water Temperature

Routes

LiveOcean

Aragonite Saturation

Nitrate Concentration

Oxygen Concentration

Filters

pH

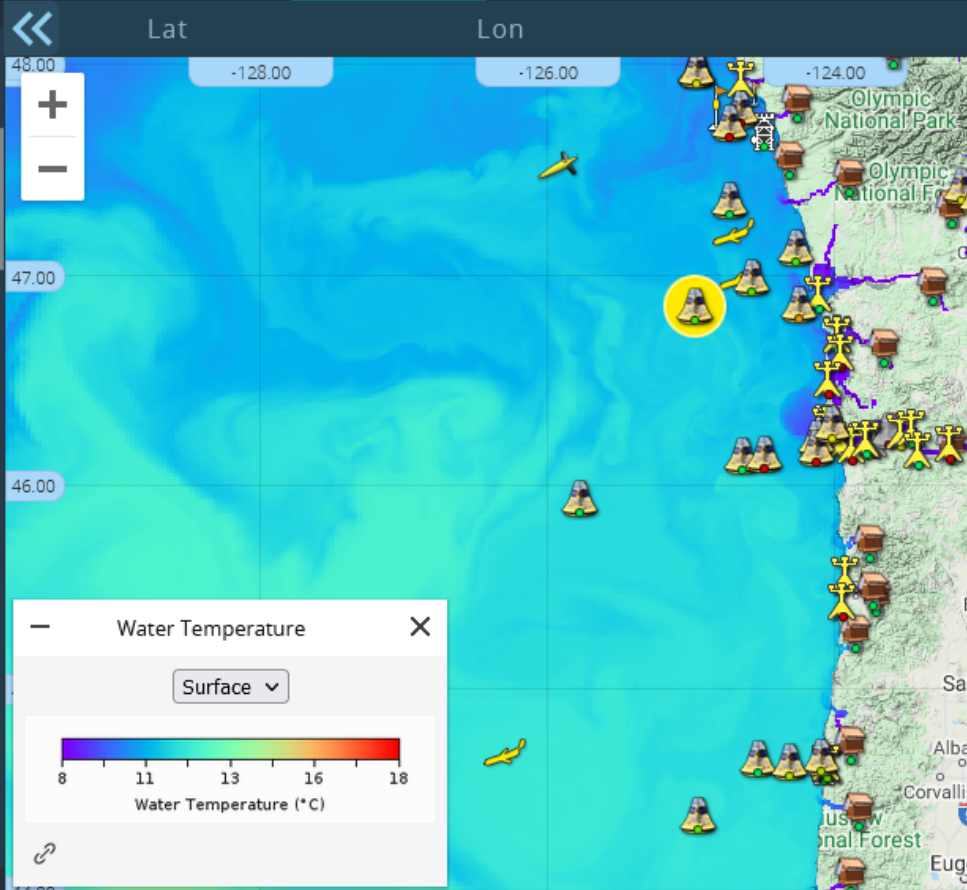
Phytoplankton

Salinity

Water Temperature

Legend

N. Amer. Mesoscale (NAM)

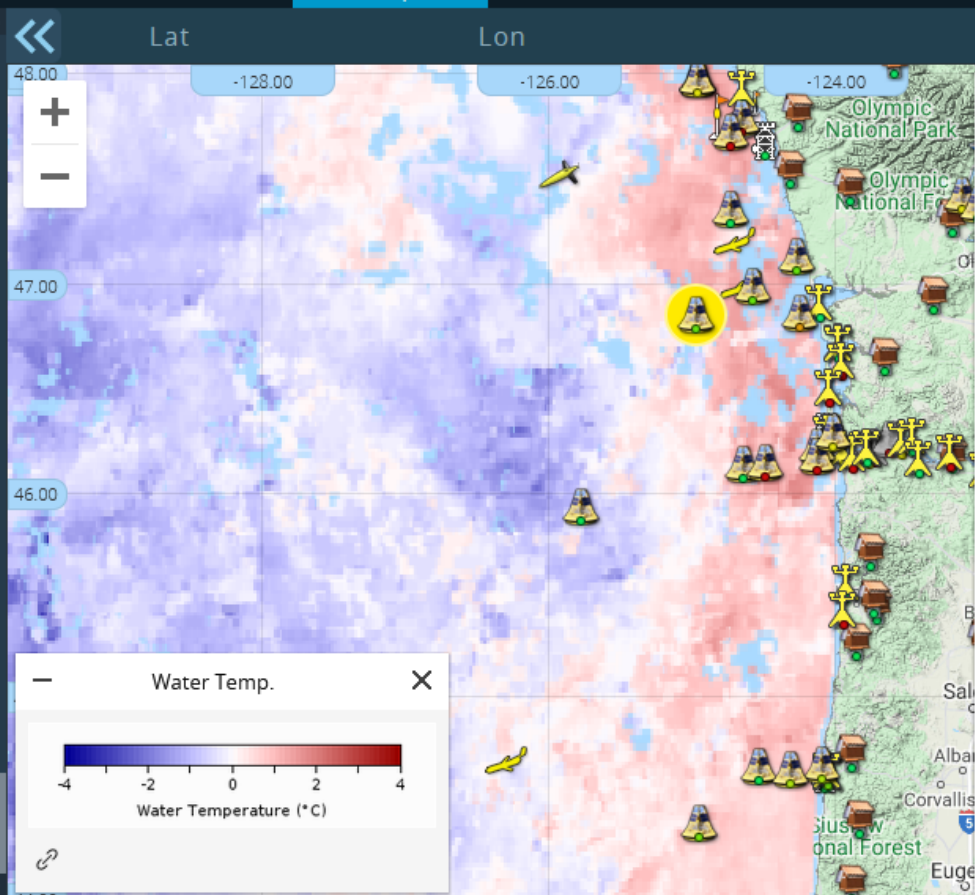


6 December 2021 10:34 pm PST





- Layers
  - Water Temp. (Climate)
  - Water Temp. (Anomaly)
  - Water Temp. (Mean)
- Platforms
  - NODC Ocean Atlas
  - Surface Salinity (Climate)
- Routes
  - OSU AVISO Climate
  - Sea Level (Climate)
  - Sea Level (Anomaly)
- Filters
  - OSU MODIS Climate
  - Chlorophyll (Climate)
  - Chlorophyll (Anomaly)
  - Chlorophyll (Mean)
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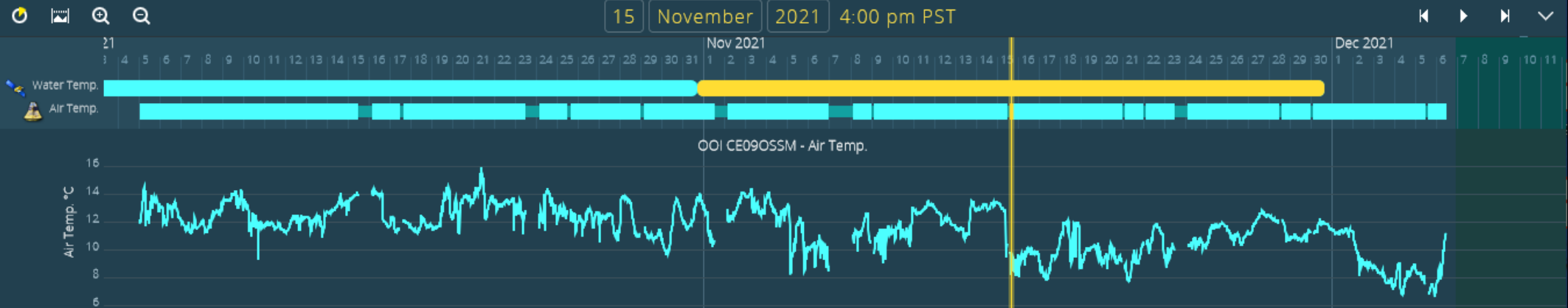
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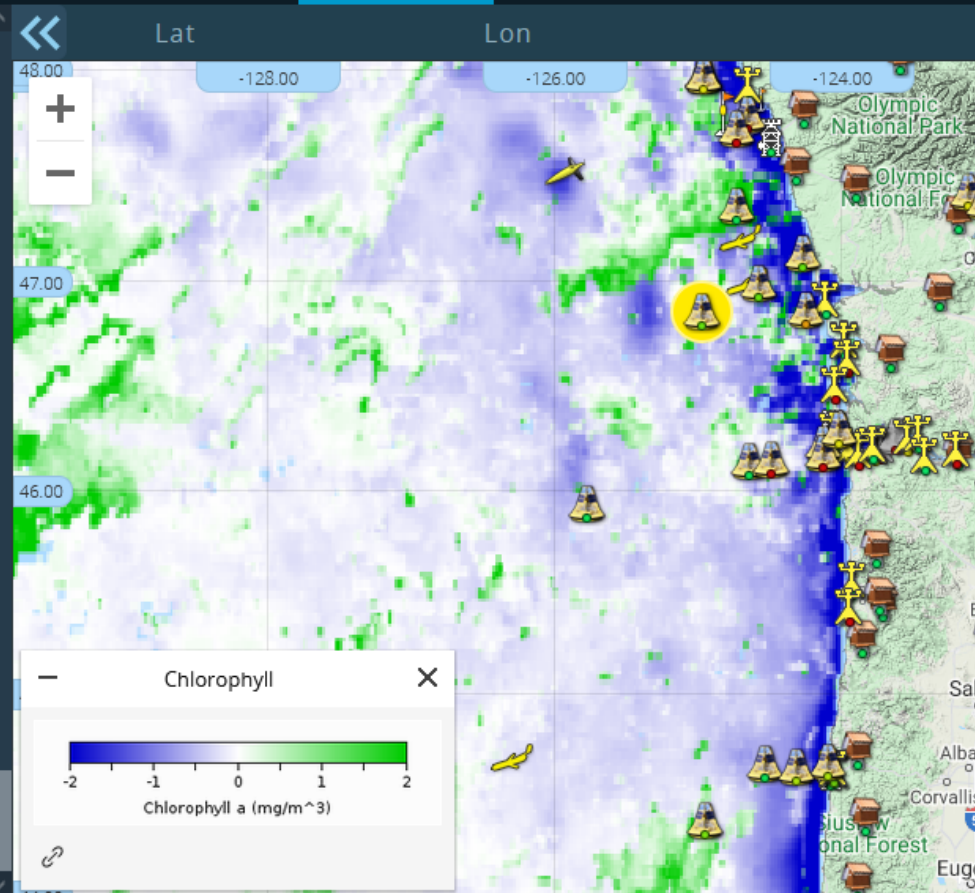
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[Link](#)



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Observations | Forecasts | Comparator | Details | History

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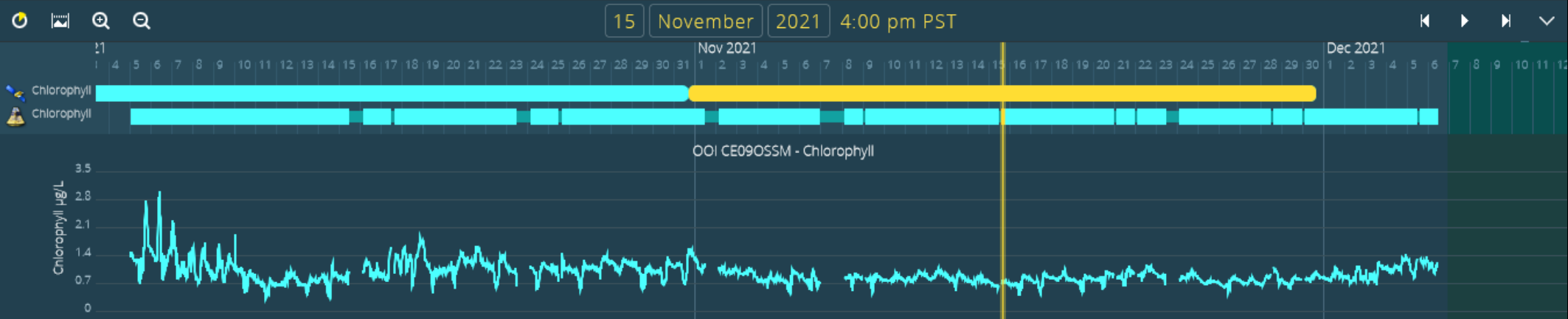
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[Link](#)







Data Explorer



Tsunami Evacuation Zones



Boaters



Tuna Fishers



Seacast



Surfers



Beach View



Shellfish Growers



Climatology



Beach and Shoreline Changes



Maritime Operations



Cruises



### Gliders



Washington Shelf Glider



Trinidad Head Glider



La Push Glider



OOI Newport Deep Glider



OOI Grays Harbor Shallow Glider



High Frequency Radar



Comment



Help



Overview

Plots

Missions 2019-Present

Type: Slocum

Provider: OOI

Contact: OOI

Temperature

Salinity

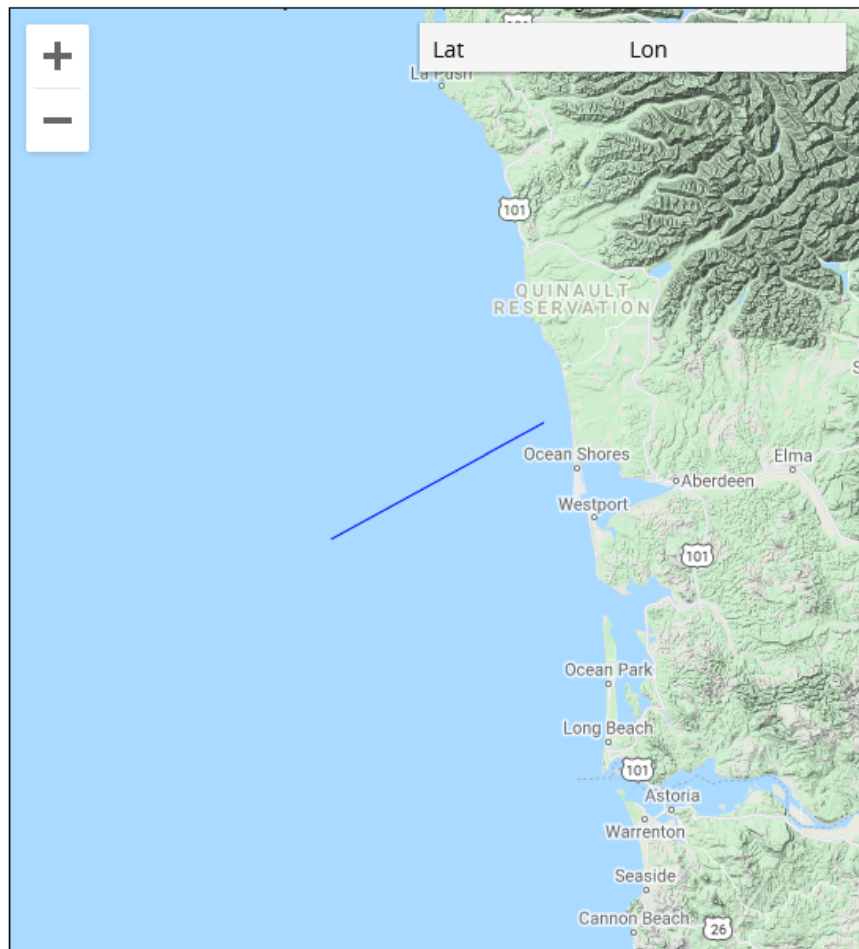
Density

Dissolved Oxygen

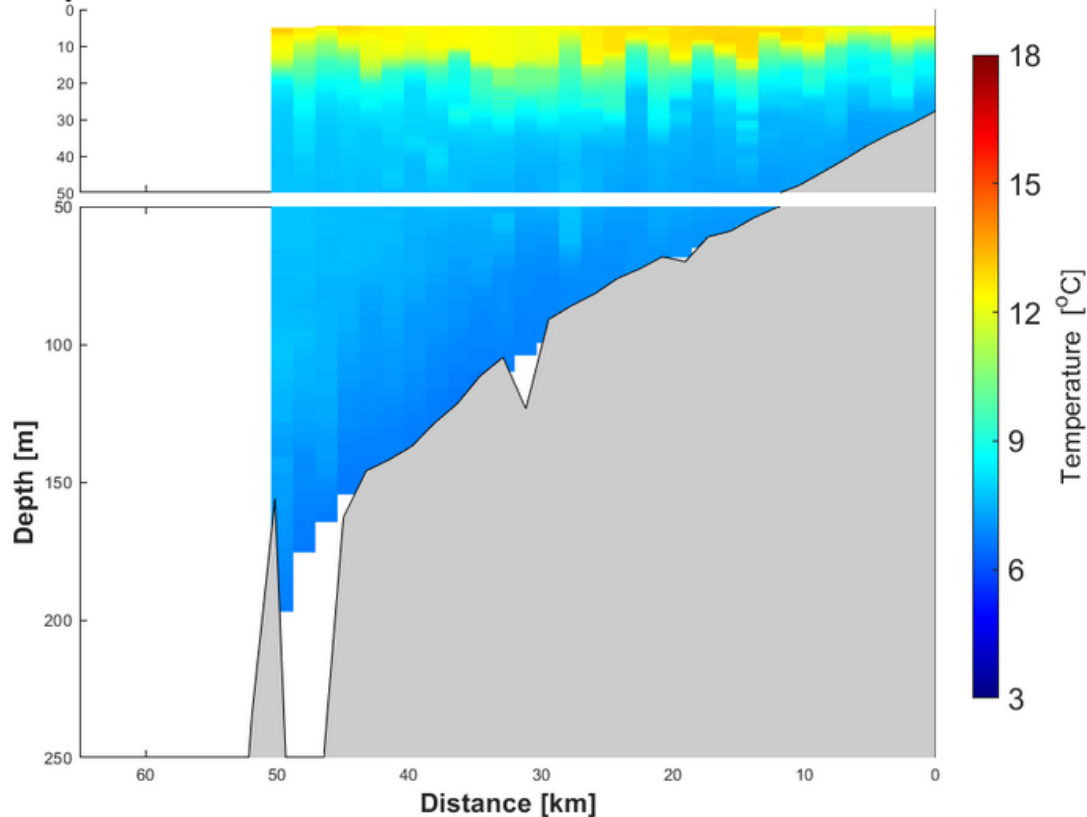
Chlorophyll

CDOM

Backscatter



Grays Harbor shallow Slocum 04-Jun-2021 to 09-Jun-2021



Download Data  
Glider DAC

Prev

9 June 2021 10:30 am

Next



Missions **2021 November** ▾

Type: Seaglider

Provider: Oregon State University

Contact: Jack Barth

Temperature

Salinity

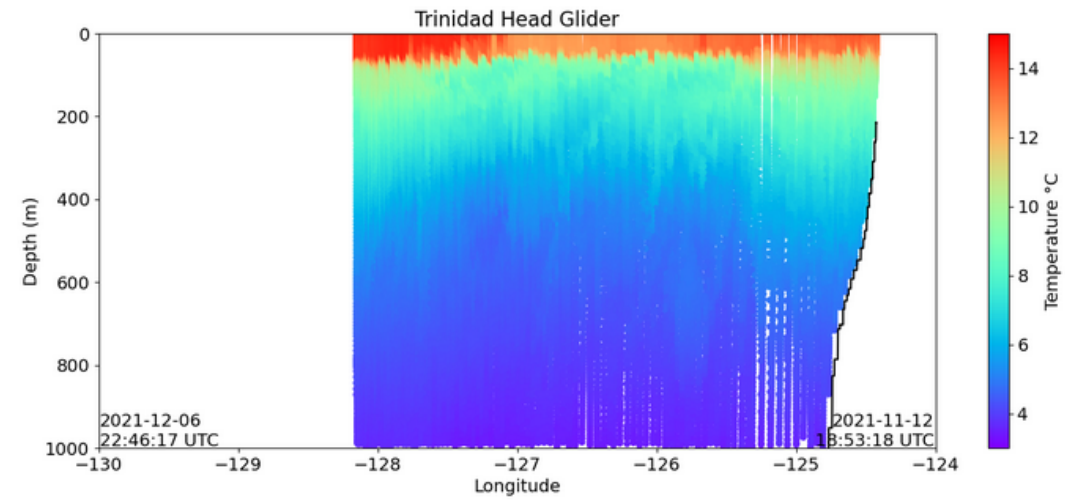
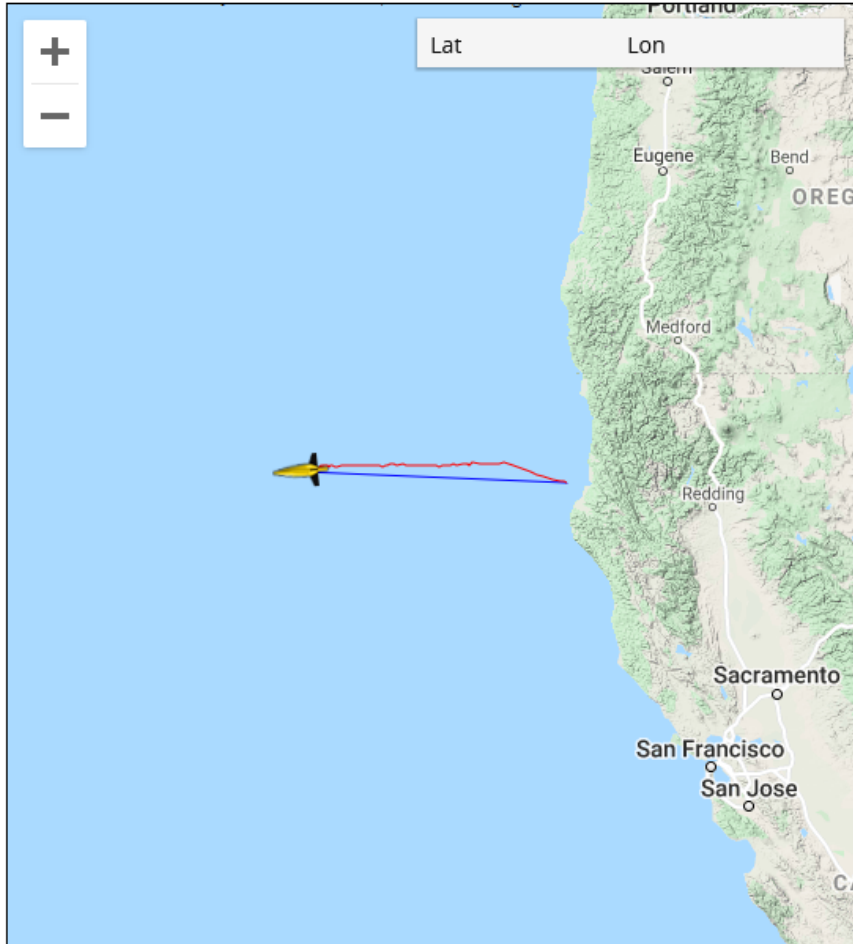
Density

Dissolved Oxygen

Fluorescence

CDOM

Backscatter



Download Data  
Glider DAC

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2 December 2021 9:00 pm

Next

Dec 2021







- We have enjoyed strong NANOOS – IOOS partnering for over a decade
- Geographic placement influenced NANOOS design and v.v.
- Scientific partnering strong, for both academic and societal outputs
- Public sees ocean data, not two different programs with no overlap
- There can never be too many tools for or too much analysis of data