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Tuna Fishers App

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Powered by Vizer

Data Explorer

Tsunami Evacuation Zones

Boaters

Tuna Fishers

Shellfish Growers

Beach and Shoreline Changes

Maritime Operations

Climatology

High Frequency Radar

Cruises

Gliders

Help

ADDITIONS & UPDATES

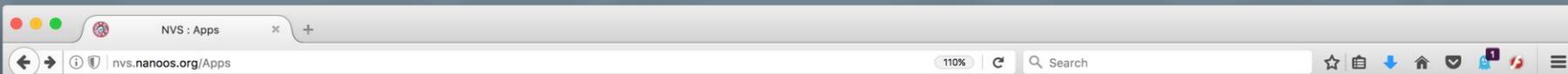
View Last 3 Months

 **HMSC Newport**
Station is offline since 6/22 due to sensor malfunction. It will likely be a few months before station is back online. *Updated on 6 Jul 2017*

 **OSU CB-06**
New NANOOS shelf mooring deployed 6/10, 6 nm off Coos Bay / Cape Arago as relocation of now-decommissioned NH-10 mooring. Measures (in near-real-time) weather, temp. & salt (1.5 m), and currents. PMEL air & water CO2 and 1-m temp. & salt also deployed. *Added on 5 Jul 2017*

 **OSU NH-10**
The NH-10 mooring has been relocated to a new location offshore of Coos Bay, designated as CB-06. See the OOI CE02SHSM mooring for continued data near the NH-10 station location. *Updated on 5 Jul 2017*

 **CMOP Saturn02**
Mooring was redeployed in early June. NVS harvesting is now restored, with an updated weather and water sensor configuration for this multi-depth asset. *Updated on 23 Jun 2017*



Data Explorer



Tsunami Evacuation Zones



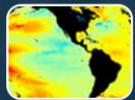
Boaters



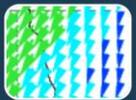
Tuna Fishers



Maritime Operations



Climatology



High Frequency Radar



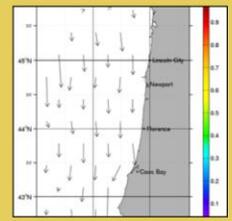
Cruises

Provides sea surface data and forecasts most popularly used by tuna fishers to plan fishing trips. Measurements include sea surface temperature & currents, chlorophyll-a satellite data, wind and wave forecasts, and more.

Snapshot



Water Temperature and Currents overlay



3-day composite Chl-a / HF Radar plot

ADDITIONS & UPDATES

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Tuna Fishers app uses estimates from an ocean model developed at OSU by Alex Kurapov. In addition to using wind, tides and fresh-water forcing, this advanced model “assimilates” measured data to keep it more accurate.

It highlights the locations where sea surface temperature is expected to be above 59 degrees F. Warmer waters are shown in red, cooler waters are shown in blue.

Surface currents from the model are also shown.

You can:

- map tuna fishing waters for Oregon and adjacent waters
- zoom in or out to get more detail
- look at estimated tuna waters for yesterday, today, tomorrow, ... hour by hour
- use your cursor to determine the latitude and longitude of a particular feature of interest
- plan routes using your cursor, and download the routes as a spreadsheet, as a GPX file (mapping software) and as a KML file (for Google Earth).
- examine maps of measured ocean currents, of satellite-sensed chlorophyll,

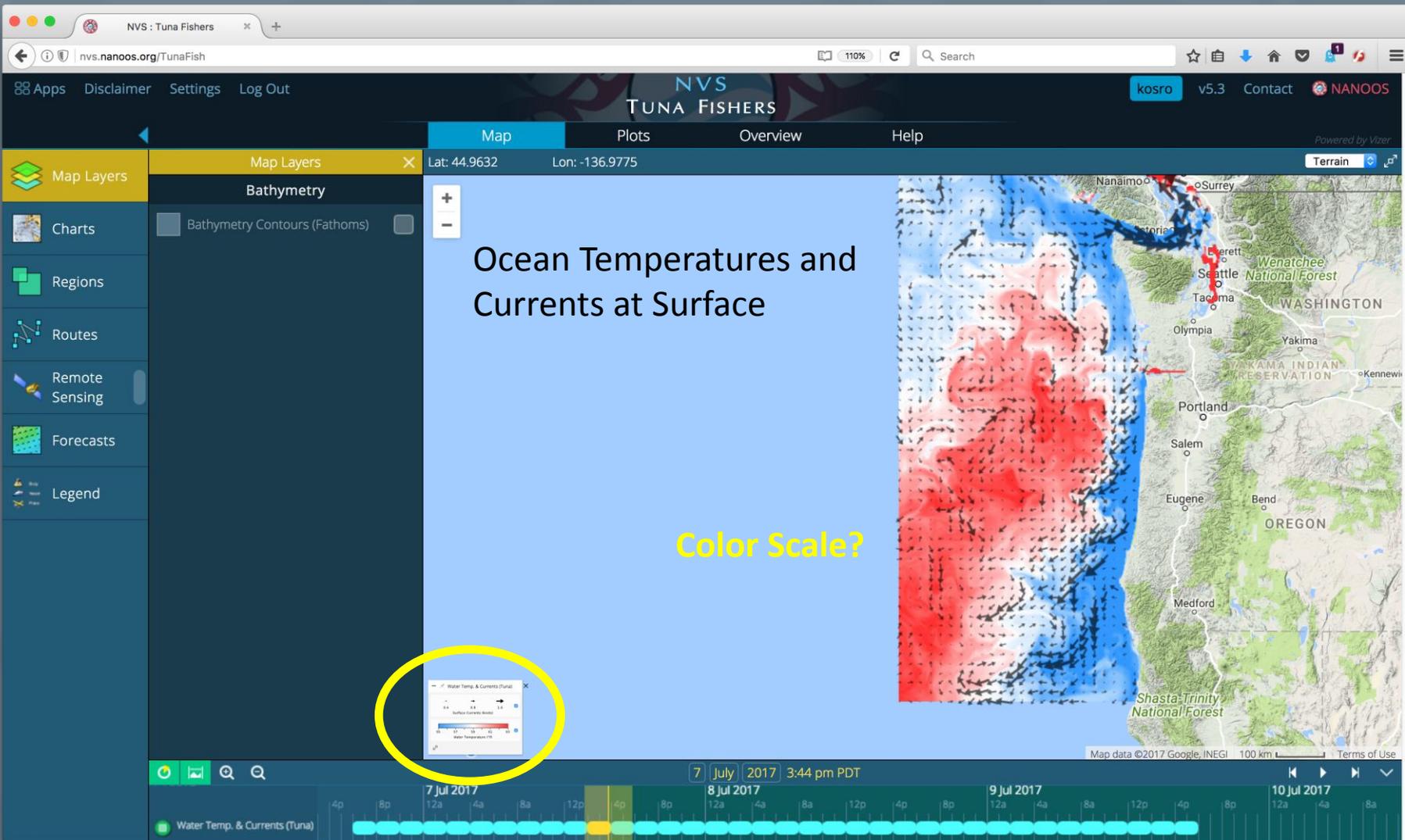


- Task 1:
Locate “Warm (tuna) waters” in the region
- Select the Tuna Fishers app



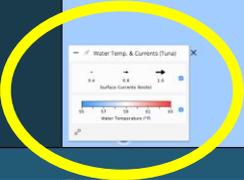
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Ocean Temperatures and Currents at Surface

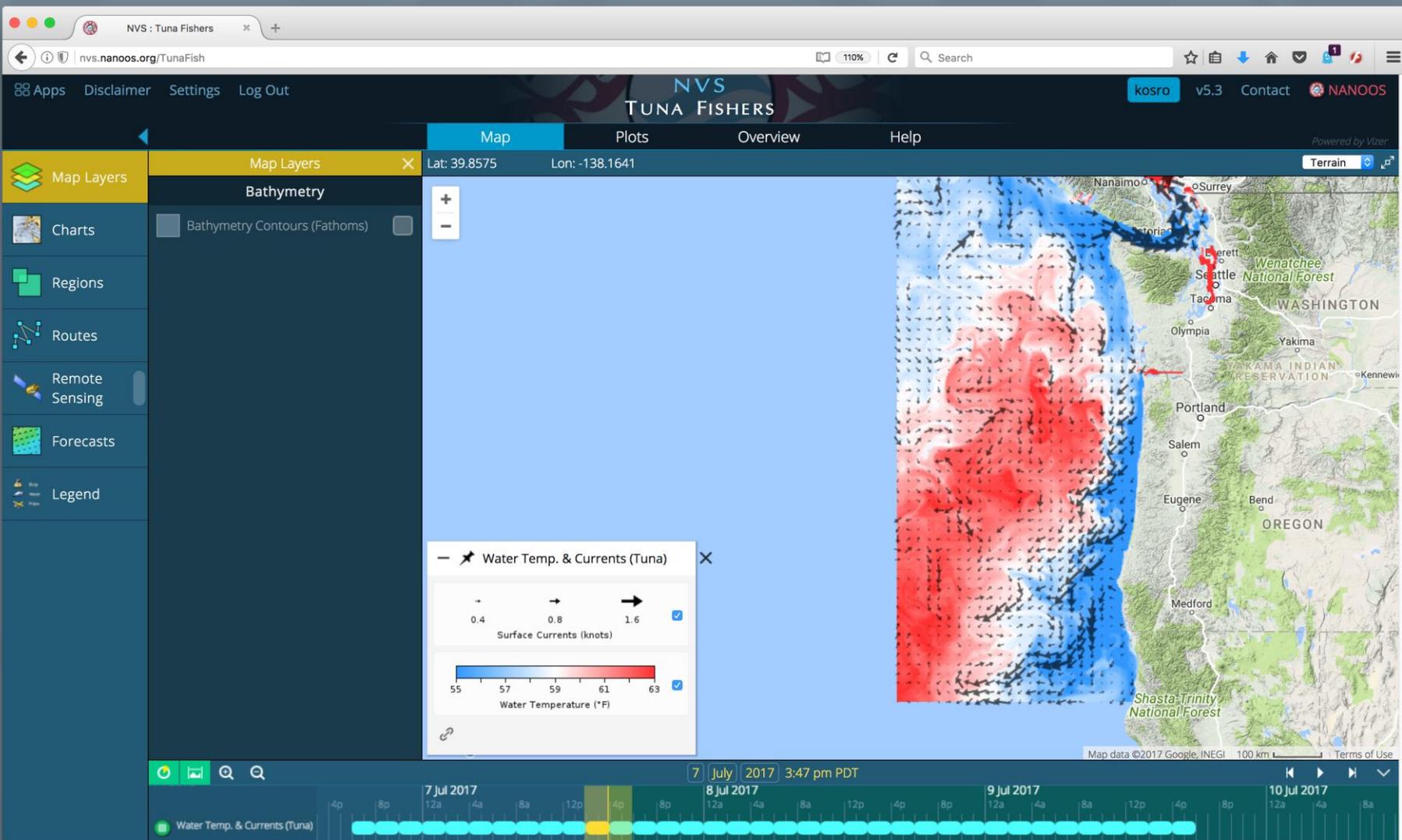
Color Scale?





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- Task 2:
Zoom in or out



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Map Plots Overview Help

Map Layers Bathymetry

Bathymetry Contours (Fathoms)

Zoom in/out?

Water Temp. & Currents (Tuna)

7 Jul 2017 8 Jul 2017 9 Jul 2017 10 Jul 2017

Water Temp. & Currents (Tuna)

Map data ©2017 Google, INEGI 100 km Terms of Use

Powered by Vizer

Terrain

Lat: 44.9632 Lon: -136.9775

Map Layers

Charts

Regions

Routes

Remote Sensing

Forecasts

Legend

Map Layers

Water Temp. & Currents (Tuna)

Surface Velocity (m/s)

Water Temperature (°C)

7 Jul 2017 8 Jul 2017 9 Jul 2017 10 Jul 2017

4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a



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Map Layers Bathymetry

Map Layers Bathymetry Contours (Fathoms)

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Legend

Map Plots Overview Help

Lat: 44.9632 Lon: -136.9775

Terrain

Zoom in/out?

Water Temp. & Currents (Tuna)

7 Jul 2017 8 Jul 2017 9 Jul 2017 10 Jul 2017

4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a

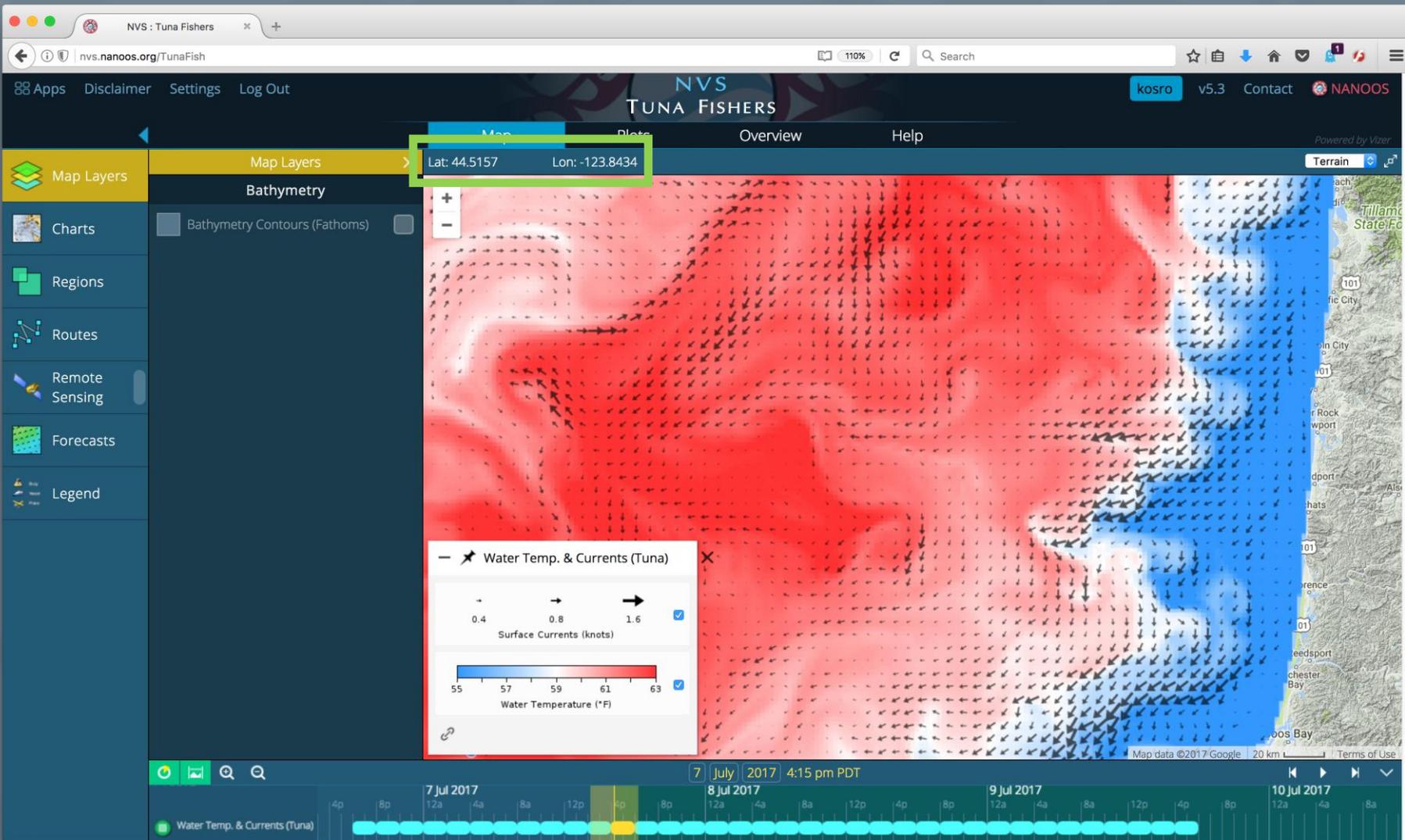
Water Temp. & Currents (Tuna)

Map data ©2017 Google, INEGI 100 km Terms of Use



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- Task 3:
Look at a different day/time!



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Map Plots Overview Help

Map Layers Bathymetry

Bathymetry Contours (Fathoms)

Charts

Regions

Routes

Remote Sensing

Forecasts

Legend

Lat: 44.9632 Lon: -136.9775

Terrain

Plan for a different time?
Use the timeline

SLIDER

Water Temp. & Currents (Tuna)

7 Jul 2017 8 Jul 2017 9 Jul 2017 10 Jul 2017

4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a

3:44 pm PDT

Map data ©2017 Google, INEGI 100 km Terms of Use



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Bathymetry Contours (Fathoms)

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Legend

Lat: 44.9632 Lon: -136.9775

Terrain

Plan for a different time?
Use the timeline

SLIDER

Water Temp. & Currents (Tuna)

7 Jul 2017 8 Jul 2017 9 Jul 2017 10 Jul 2017

4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a

3:44 pm PDT

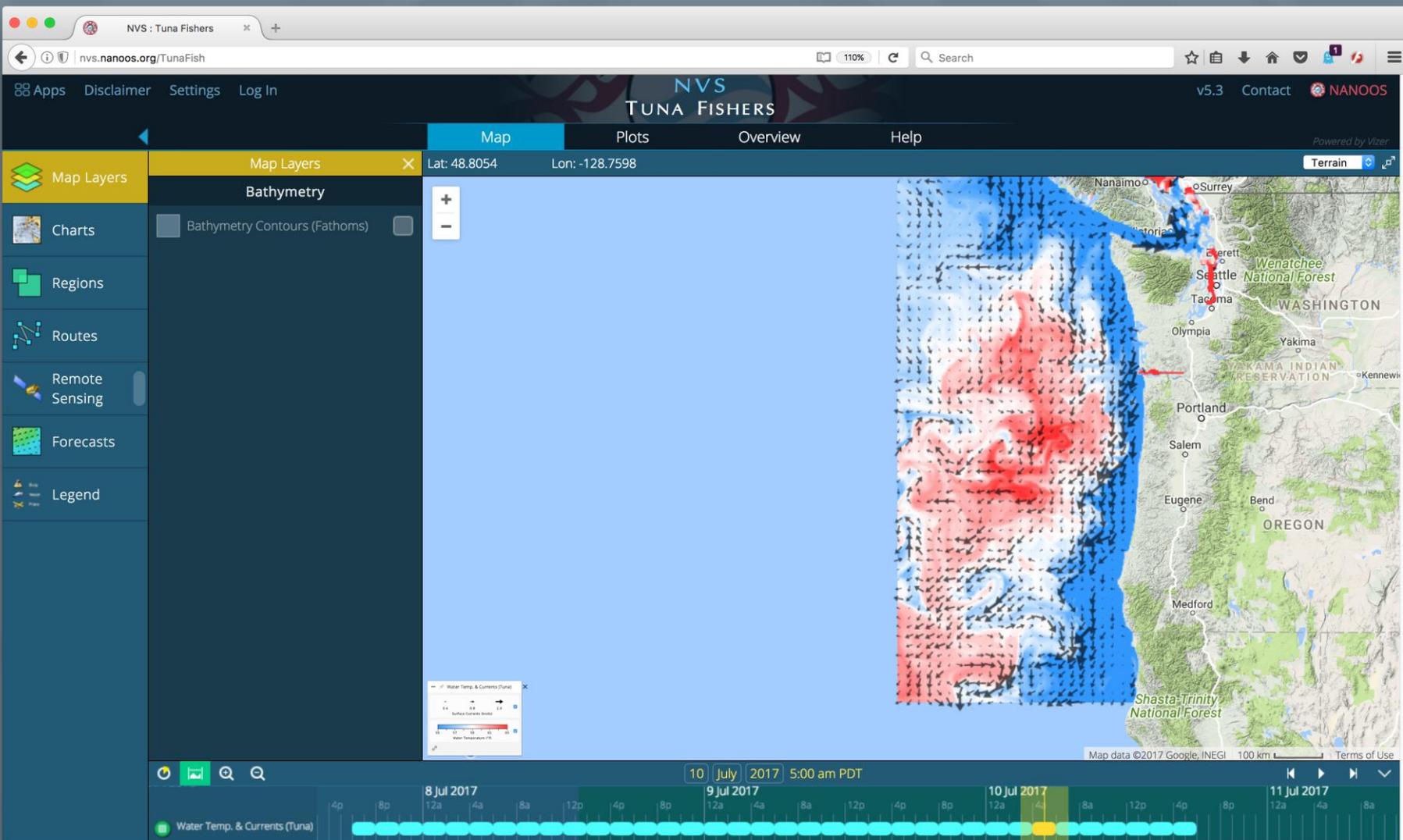
Water Temp. & Currents (Tuna)

Map data ©2017 Google, INEGI 100 km Terms of Use



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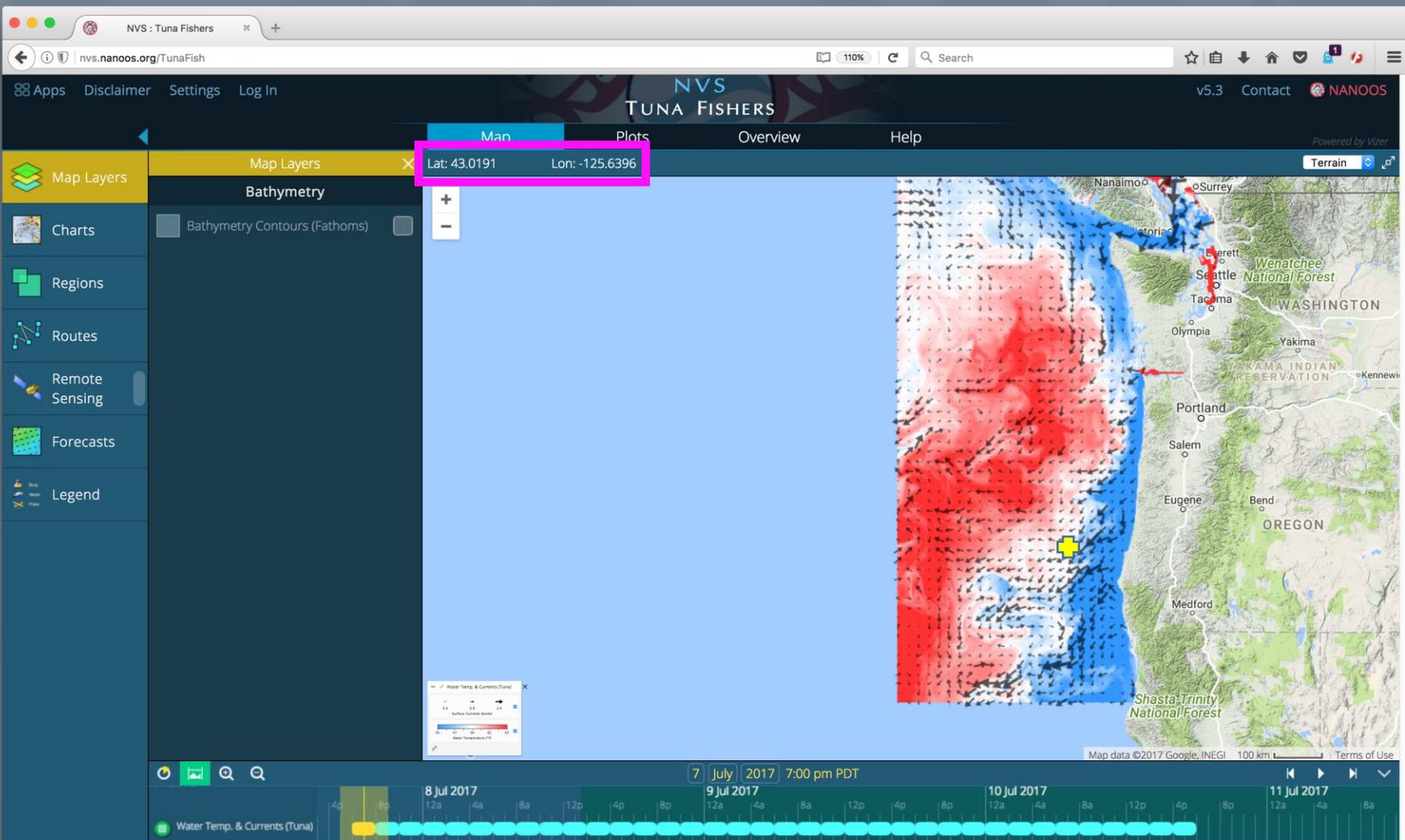


- Task 4:
Find location of a feature
- Solution:
Move your mouse cursor to the feature
Read Position at upper left



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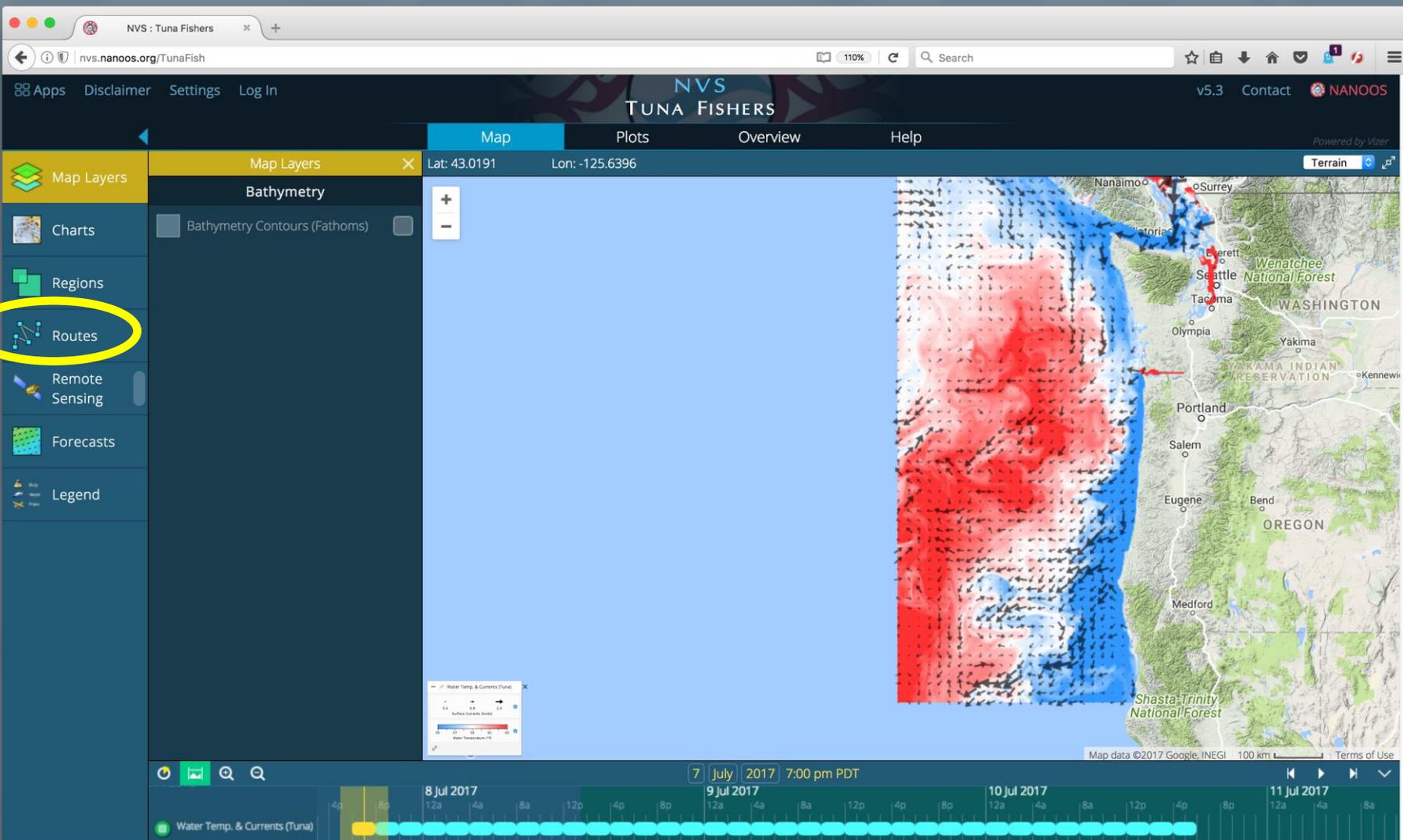


- Task 5:
Plan and record a route
- Solution:
Use the “Routes” tool at the far left



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Map Plots Overview Help

Map Layers

Routes

Charts

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Routes

Remote Sensing

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Legend

Lat: 46.0648 Lon: -123.6841

+ New Route

Click the 'New Route' button to start a new route.

If you sign in, route information will automatically be saved to your account.

Water Temp. & Currents (Tuna)

Surface Currents (km/h)

Water Temperature (°C)

8 Jul 2017 9 Jul 2017 10 Jul 2017 11 Jul 2017

4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a

1:48 pm PDT

Water Temp. & Currents (Tuna)

Map data ©2017 Google, 50 km

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Terrain

Seattle Tacoma Olympia Portland Beaverton Salem Albany Corvallis Eugene

Olympic National Forest Mt. Hood National Forest Umpqua National Forest

YAKAMA RESERVE WARM SPRINGS RESERVATION



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Map Plots Overview Help

Map Layers

Routes

Lat: 46.6788 Lon: -131.8359

Terrain

+ New Route

New Route 1

End Route Edit

Edit Route

Click and drag on a waypoint to move.
Right-click on a waypoint to delete.

Water Temp. & Currents (Tuna)

8 Jul 2017 9 Jul 2017 10 Jul 2017 11 Jul 2017

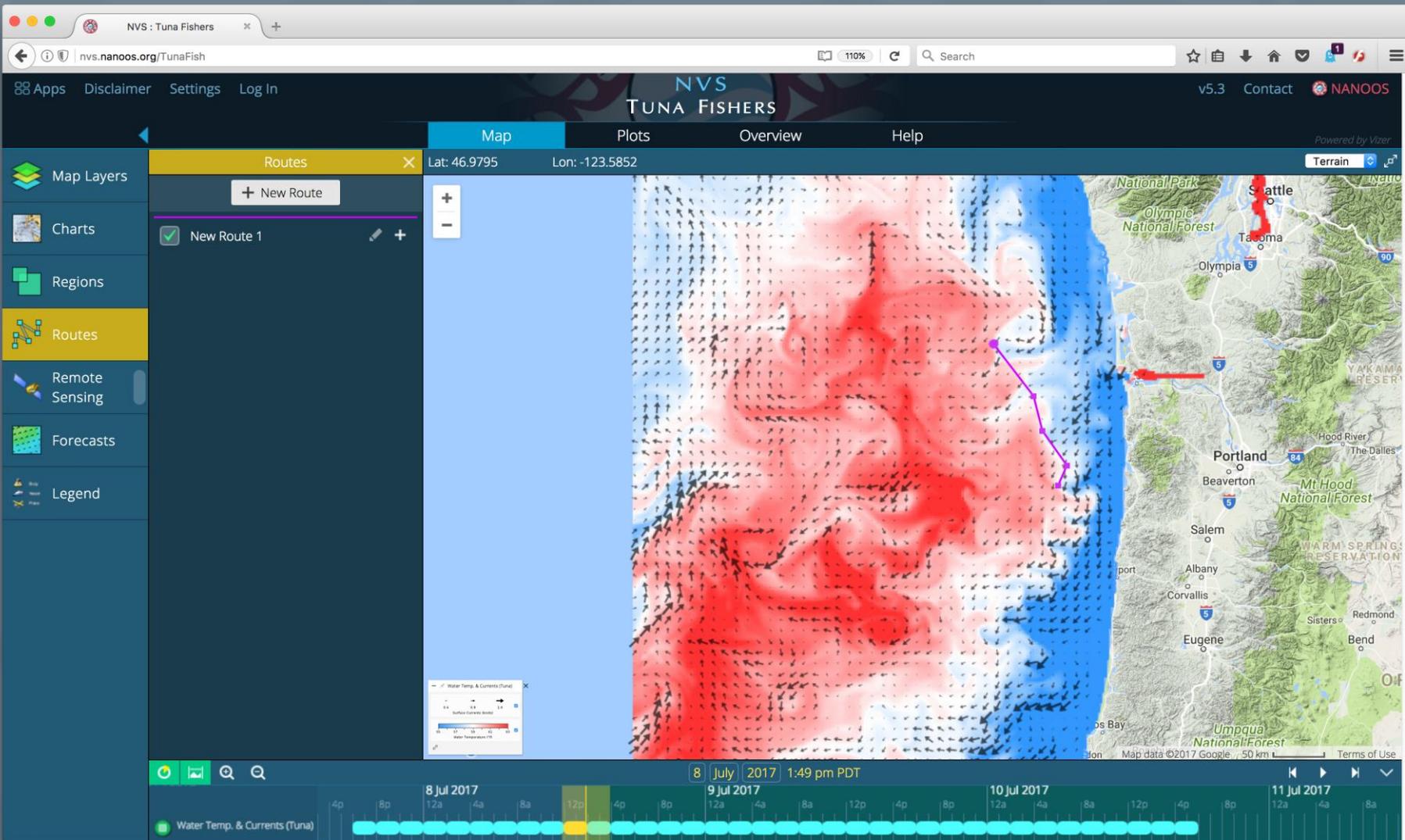
1:49 pm PDT

Water Temp. & Currents (Tuna)



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Routes

Lat: 46.8670 Lon: -131.7590

+ New Route

New Route 1

	Latitude	Longitude
1	46.49764	-125.44189
2	46.08771	-124.99146
3	45.81272	-124.89258
4	45.53637	-124.61792
5	45.37453	-124.71680

Total Route Length: 90.7 miles

Download Route

Water Temp & Currents (Tuna)

8 Jul 2017 9 Jul 2017 10 Jul 2017 11 Jul 2017

4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a

Water Temp. & Currents (Tuna)

Map data ©2017 Google, 50 km

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Terrain



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Routes

+ New Route

Lat: 46.8670 Lon: -131.7590

New Route 1
 Latitude Longitude
 1 46.49764 -125.44189
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Water Temp. & Currents (Tuna)

8 Jul 2017 9 Jul 2017 10 Jul 2017 11 Jul 2017

4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a 12p 4p 8p 12a 4a 8a

Water Temp. & Currents (Tuna)

8 July 2017 1:51 pm PDT

Map data ©2017 Google, 50 km



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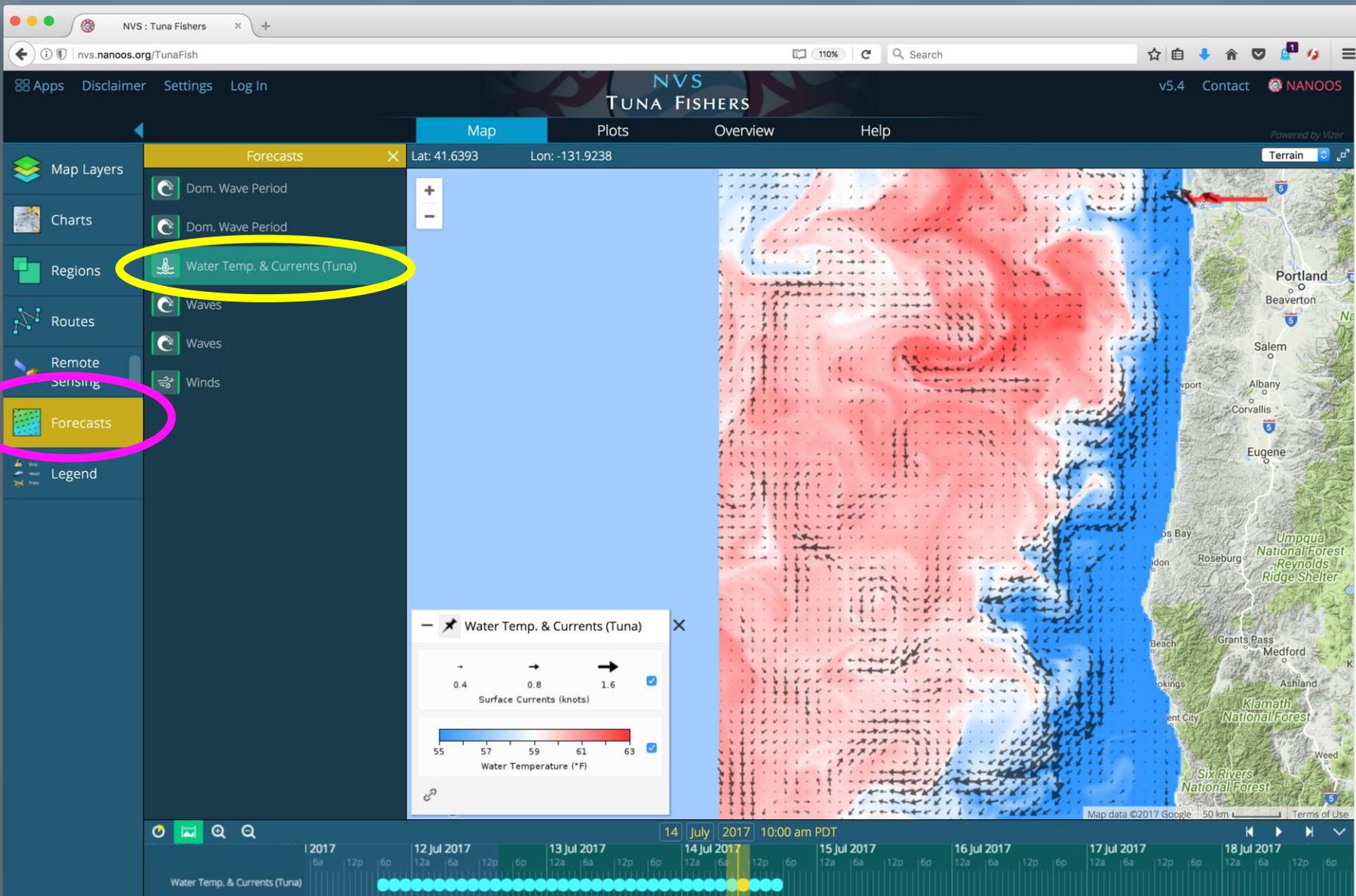


- Other Products from Tuna page



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Map Plots Overview Help

Forecasted by Vizer

Map Layers

- Dom. Wave Period
- Dom. Wave Period
- Water Temp. & Currents (Tuna)
- Waves**
- Waves
- Winds

Charts

Regions

Routes

Remote Sensing

Forecasted

Legend

Lat: 43.0119 Lon: -133.1433

Terrain

Wave Forecast

Waves

3.3 9.8 19.7

Wave Height (feet)

0 5 10 15 20

Wave Height (feet)

3.3 9.8 19.7

Wave Height (feet)

0 5 10 15 20

Wave Height (feet)

Map data ©2017 Google 50 km

11 July 2017 12:00 pm PDT

12 Jul 2017 13 Jul 2017 14 Jul 2017 15 Jul 2017



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Map Plots Overview Help

Powered by Vizer

Map Layers

- Dom. Wave Period
- Dom. Wave Period
- Water Temp. & Currents (Tuna)
- Waves
- Waves
- Winds
- Forecasts
- Legend

Forecast: Lat: 43.0119 Lon: -133.1433

Terrain

Wind Forecast

Winds

9.7 19.4 29.2

Wind Speed (knots)

0 10 20 30 40 50

Wind Speed (knots)

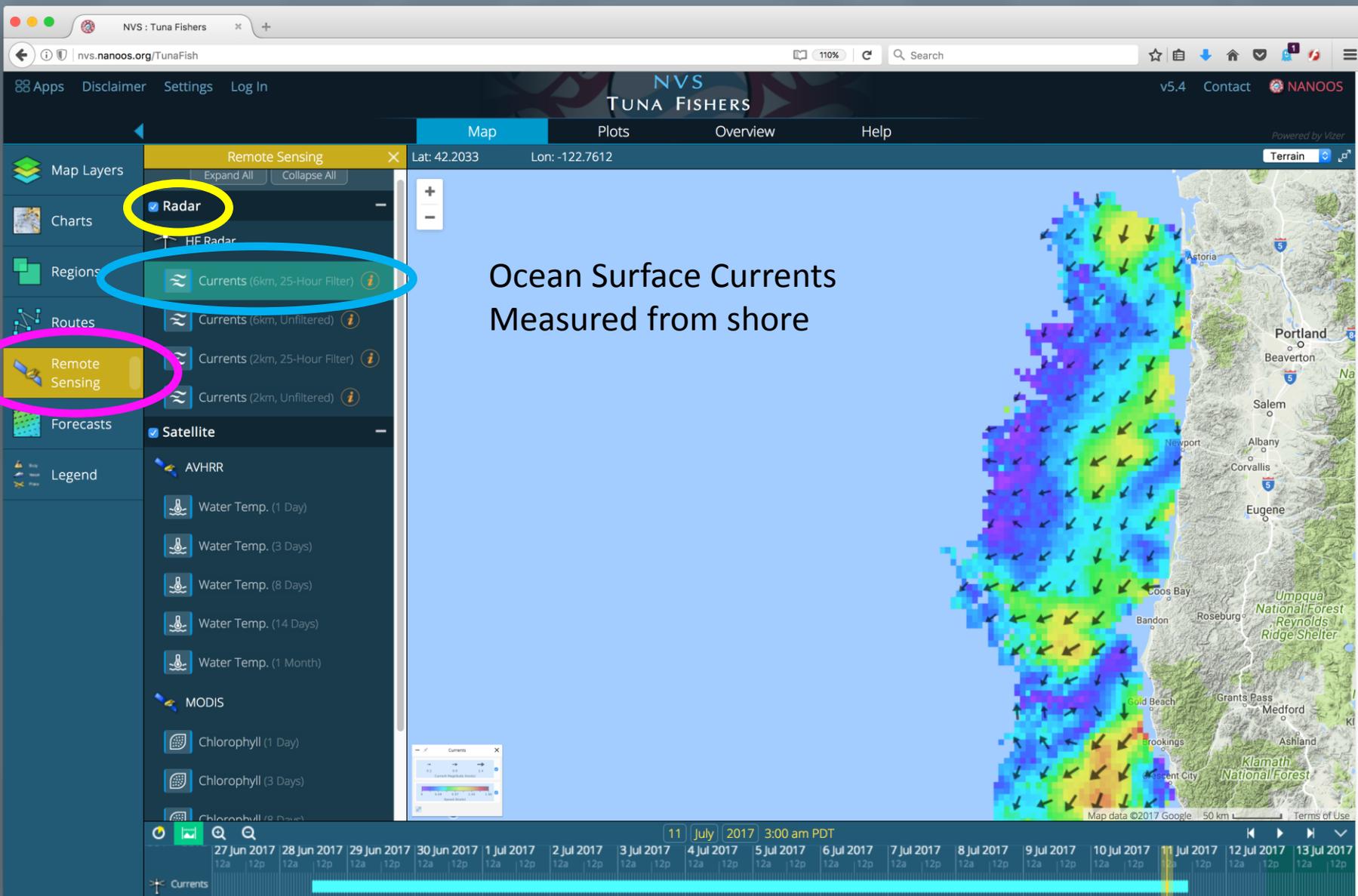
17 July 2017 6:00 am PDT

12 jul 2017 13 jul 2017 14 jul 2017 15 jul 2017 16 jul 2017 17 jul 2017 18 jul 2017 19 jul 2017

12p 6p 12p 6p

Winds

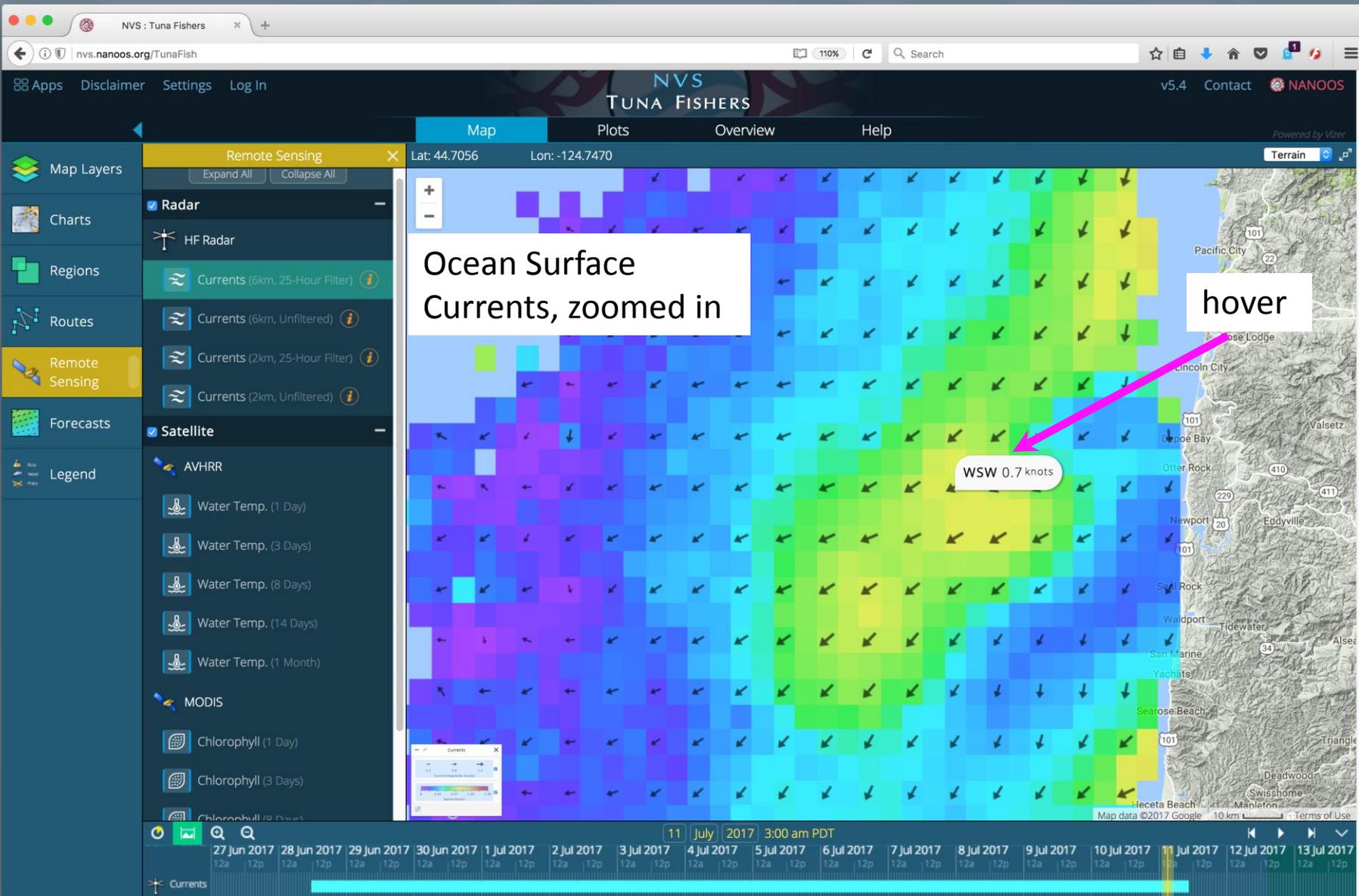
Map data ©2017 Google 50 km Terms of Use

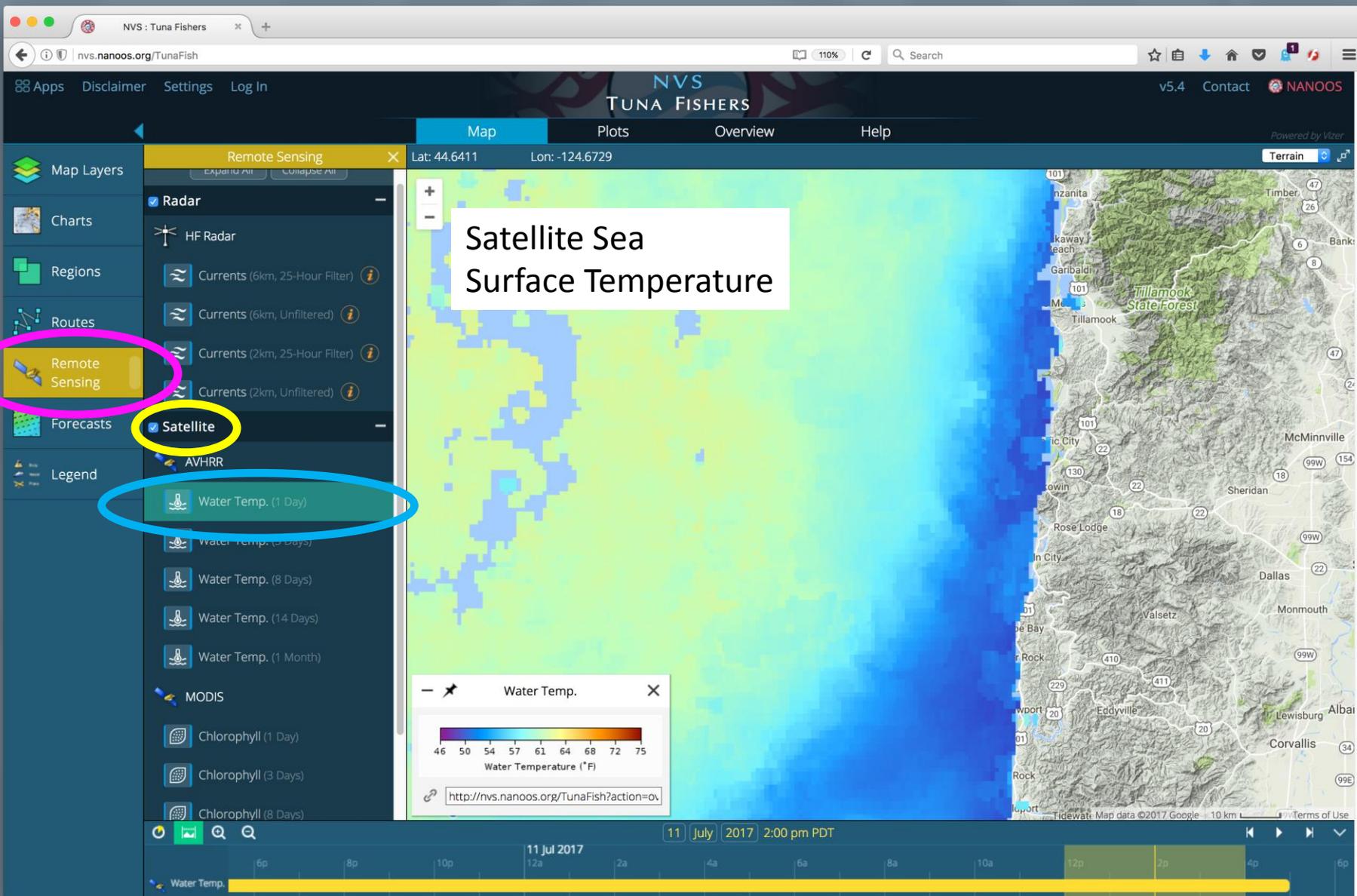




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Map Plots Overview Help

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Remote Sensing

Map Layers

- Currents (6km, 25-Hour Filter)
- Currents (6km, Unfiltered)
- Currents (2km, 25-Hour Filter)
- Currents (2km, Unfiltered)
- Satellite**
- AVHRR
- Water Temp. (1 Day)
- Water Temp. (3 Days)
- Water Temp. (8 Days)
- Water Temp. (14 Days)
- Water Temp. (1 Month)
- MODIS
- Chlorophyll (1 Day)
- Chlorophyll (3 Days)**
- Chlorophyll (8 Days)
- Chlorophyll (14 Days)
- Chlorophyll (1 Month)

Charts

Regions

Routes

Remote Sensing

Forecasts

Legend

Map

Lat: 44.7914 Lon: -125.5682

Terrain

Satellite Sea Surface Chlorophyll

Chlorophyll

Chlorophyll a (mg/m^3)

0.03 0.1 0.4 10 30

8 Jul 2017 9 Jul 2017 10 Jul 2017 11 Jul 2017

Chlorophyll



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IOOS



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Discussion of Tuna Fishers app

Note-taker?

Rapporteur?

Strategy: looking for feedback in this group on the Tuna Fishers app. Other groups will ask similar questions about other apps



Who is a current user of the
Tuna Fishers app?

Yes:

No:



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Is the app giving the data you need?



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Can you find the information that you are looking for in a way that is useful?



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When do you use the app?

Before going to sea?

While at sea?



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Do you use the “Current Conditions”
feature?

For what purpose?



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Do you use the “Routes” feature?

If so, how?



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Are you using the Timeline?

Has that been successful?

Do you use ~~the graphed data in the~~
~~timeline, and/or~~ the pop-up values?



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Are you mainly interested in:

- forecasts (models)
- observations of current conditions
- historical data?

How do you use them?



If data are needed, how easy is it to get from NVS?

What formats are most useful to you?:

- Graphs/maps/visual output
- Numerical values?
 - as spreadsheets?
 - as GPX (for charting)?
 - as simple listing?



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What specific types of data products would be most beneficial to you?

Delivered how?



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Do you use/expect-to-use NVS mainly:
From home/office (computer)?
From a mobile device?



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Thank you for your participation!



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