

Navigating PacIOOS: Exploring and Visualizing Data with Voyager

PacIOOS | <https://pacioos.org>

NOAA CoastWatch/PacIOOS Satellite & Ocean Data Training Course

10 February, 2026 (9:00 AM FJT)



PacIOOS
PACIFIC ISLANDS OCEAN OBSERVING SYSTEM

Mission and Components

PacIOOS empowers ocean users and stakeholders throughout the Pacific Islands by providing accurate and reliable coastal and ocean information, tools, and services

Observations
Model Outputs
Forecasts
Partner Data



Data
Management



Data Access &
Visualization

Thematic Areas



Marine Operations



Coastal Hazards



Water Quality



Living Marine Resources

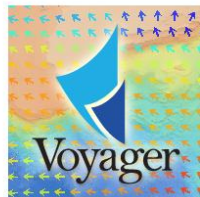
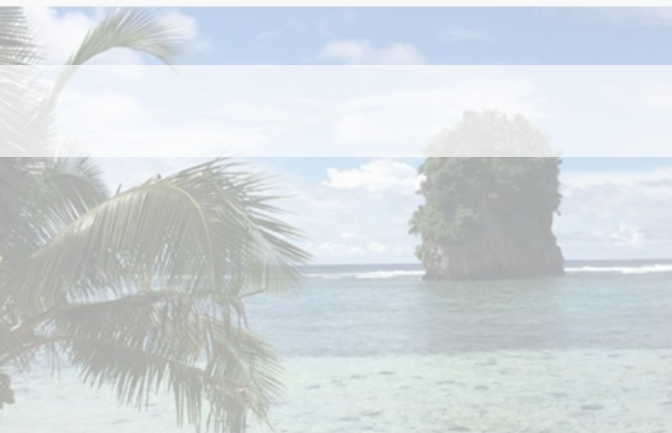


GEOSPATIAL DATA
& VISUALIZATION

PacIOOS Data Services

Data Services | Education Resources

Regions



PacIOOS Voyager

PacIOOS Voyager is a free, interactive, online mapping experience on the familiar Google Maps platform. View, combine, and download oceanographic data and beyond.

[See More >](#)



Data Access

PacIOOS supports a variety of data servers to provide easy and interoperable access to our data holdings, including ERDDAP, THREDDS, and GeoServer.

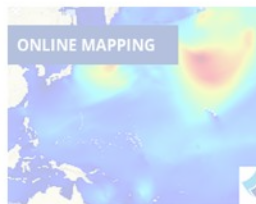
[See More >](#)



Data Search

Search for PacIOOS datasets by space, time, keyword, and access method using our OGC®-compliant Catalog Service for the Web (CSW).

[See More >](#)



PacIOOS Voyager

PacIOOS Voyager is a free, interact online mapping experience. Explor



PACIFIC ISLANDS OCEAN OBSERVING SYSTEM
Voyager

**NAVIGATING
VOYAGER**



Zoom to: Region

Which one?...



Enter an address or coordinates here...

Go!

link save image about

Select overlays:

collapse clear set region

Search overlays...

hazards

observations

remote sensing

forecasts

biology

navigation

seafloor

land

- Which one?...
- Global
- Pacific
- PacIOOS Regions**
- American Samoa
- Federated States of Micronesia
- Guam
- Hawai'i
- Hawai'i EEZ
- Mariana Islands
- Marshall Islands (RMI)
- Northern Mariana Islands (CNMI)
- Palau
- Other Regions**
- Cook Islands
- Easter Island (Rapa Nui)
- Fiji
- French Polynesia
- Kiribati
- Nauru

lat/lon range distance area [change units clear all]

show map dimensions



Australia

QUEENSLAND

NORTHERN TERRITORY

Papua New Guinea

Port Moresby

Kolonia

Solomon Islands

New Caledonia

Fiji

Tonga

Samoa

Cook Islands

French Polynesia

North Pacific Ocean

Honolulu HAWAII Hilo

More... Map Satellite



DATA

▼ forecasts

☑ weather forecast

Pacific

PacIOOS

Zoom to: Regio

Select overlays

collapse clear set

Search overlays:

▼ hazards

☑ hazards: observed

☑ hazards: forecasts

☑ hazards: base maps

☑ surf forecast

Global

auto-zoom:

show legend:

show value near click:

none

air temperature

wind

rain

humidity

pressure

☑ tide forecast

Pacific

auto-zoom:

show legend:

show value near click:

none

sea surface height

velocity

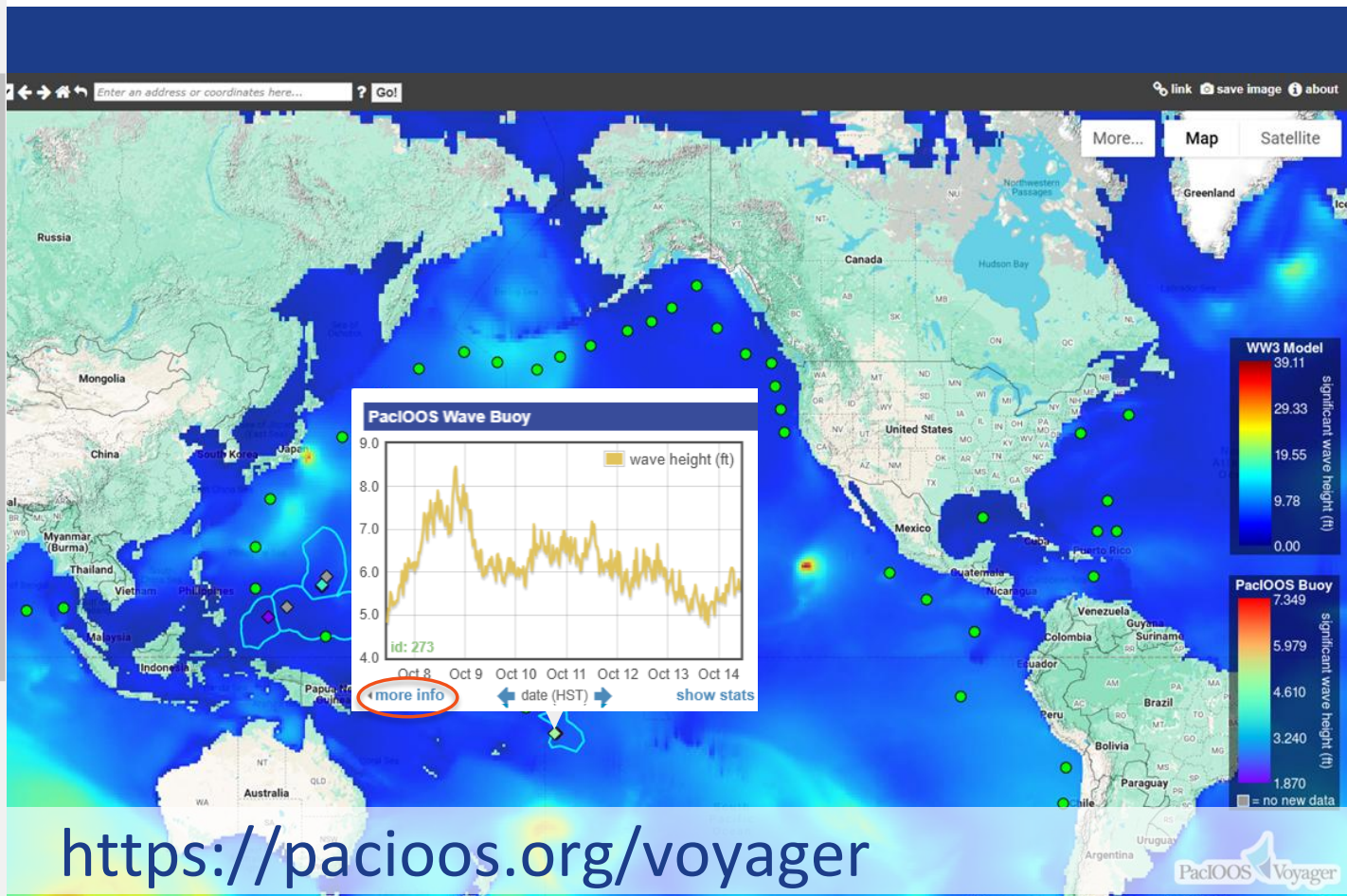
☑ ocean forecast

Pacific (drift model)

auto-zoom:

show legend:

show value near click:



<https://pacioos.org/voyager>

PacIOOS Voyager Example: Water Levels Across the Pacific

Zoom to: Region Which one?... Enter an address or coordinates here... ? Go!

link save image about

More... Map Satellite

Search overlays... hazards observations waves tide and water level select all clear all

- DART stations
 - column height unit: ft
 - date nearest: now other
- international stations
 - water level unit: ft
 - date nearest: now other
- NOS shore stations
 - sea surface height unit: ft
 - date nearest: now other

map options water quality water resources ocean acidification remotely operated vehicles

lat/lon range distance area [change units clear all] show map dimensions

Google

International Water Level Station

Mar 31, 2025 11:55 am water level (ft)

Time (HST)	Water Level (ft)
12:00	5.30
16:00	3.0
20:00	2.8
00:00	4.8
04:00	5.2
08:00	5.30

id: saip more info date (HST) show stats

int'l station saip: Saipan US (USA)

PacIOOS Voyager

Keyboard shortcuts Map data ©2025 Google, INEGI Imagery ©2025 NASA, TerraMetrics 500 km Terms

PacIOOS Voyager Example: SST for Fiji

Zoom to: Region | Fiji | ? Go!

Select overlays:
collapse clear set region
Search overlays...
hazards
observations
remote sensing
doppler
surface currents (HFR)
satellite data
CRW (coral, SST)
auto-zoom:
show legend:
show value near click:
none
 sea surface temperature
span: daily
unit: °C
 sea surface temperature: anomaly
 coral bleaching: alert area
 coral bleaching: alert area: 7-day max
 coral bleaching: hot spots

lat/lon range distance area [change units clear all]
show map dimensions

NOAA Coral Reef Watch (CRW)
lat, lon: -16° 38.01', 177° 1.99' (dms)(dd)
date: Oct 12, 2025 HST (daily composite)
sea surface temperature: 26.7°C (°F)(K)
show data plot: 1 week • 1 month • 3 months • 6 months
download data: 1 week • 1 month • 3 months • 6 months
scope: [?] format: time period: variables: [?]
 this point text before date this one
 map points Excel after date all
 all points XML 1/2 both
 NetCDF
Data Archive • Google Earth • WMS • GeoTIFF

More... Map Satellite

NOAA CRW sea surface temperature (°C)
29.49
27.41
25.34
23.26
21.18

PacIOOS Voyager Example: Wave Forecast for Tutuila

Zoom to: Region | American Samoa | Enter an address or coordinates here... | Go!

hazards: basemaps | More... | Map | Satellite

observations

- waves
 - PacIOOS wave buoys
 - wave height
 - unit: ft
 - wave direction
 - wave period
 - water temperature
 - unit: °F
 - date nearest:
 - now
 - other
 - Feb 18, 2020
 - 10:33 am HST
 - get: now • oldest
 - advanced options
 - show watch circles:
 - hide archive sites:
 - #FF3333
 - small
 - ID or location...
 - NDBC moored buoys
 - Backyard Buoys
- map options
- tide and water level
- water quality
- water resources
- ocean acidification
- remotely operated vehicles
- ocean observatories

lat/lon • range • distance • area [change units • clear all]

show map dimensions

-14° 16.14', -170° 28.41'

PacIOOS Wave Buoy

Feb 16, 2020 10:20 pm 24.08

25
20
15
10
5

Feb 15 12:00 0:00 Feb 16 12:00 0:00 Feb 17 12:00 0:00 Feb 18 12:00 0:00

id: 189

more info | date (HST) | show stats

SWAN Model 20.270

15.206

10.141

5.077

0.013

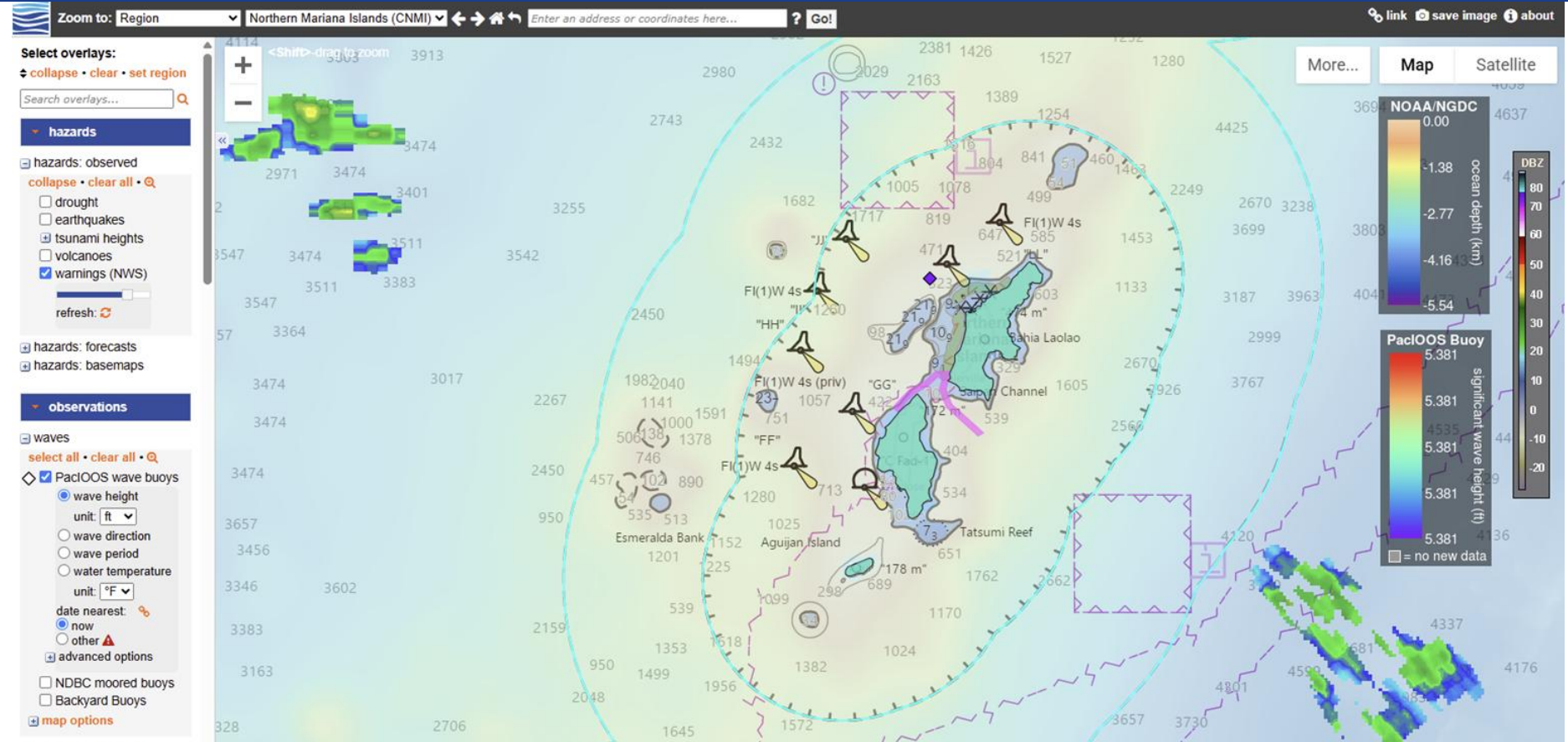
significant wave height (ft)

SAMOA ISLANDS

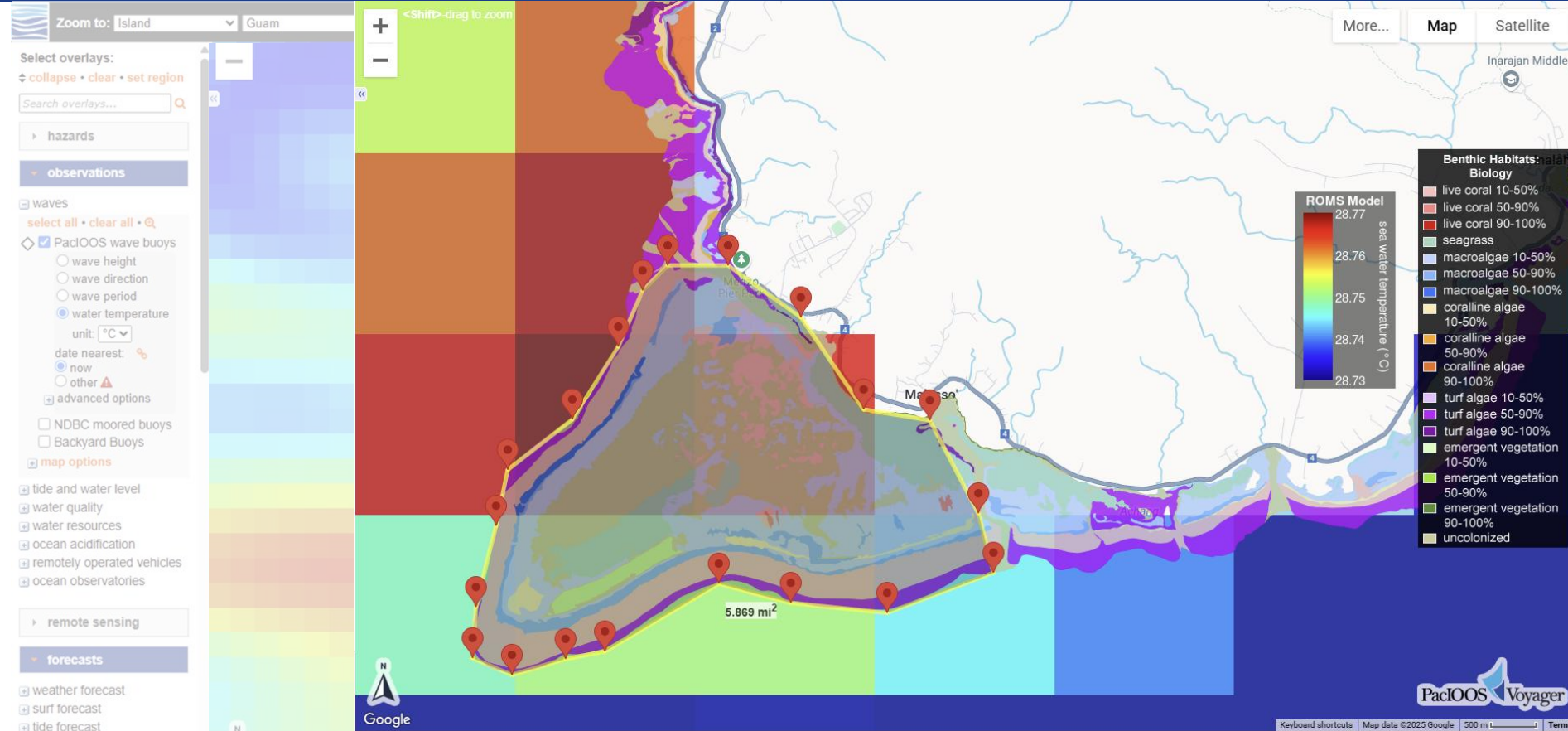
PacIOOS Voyager

Keyboard shortcuts | Map data ©2025 Google | 2 km | Terms

PacIOOS Voyager Example: Navigation around CNMI



PacIOOS Voyager Example: Marine Spatial Planning on Guam



Visit Our Website
pacioos.org



Explore PacIOOS Voyager
pacioos.org/voyager



Mahalo!

Lauren R. Kaiser
Data Management Specialist
LKaiser7@hawaii.edu



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