

OceanWatch

A multi-pronged approach to disseminating ocean remote sensing data

CoastWatch/OceanWatch/PolarWatch mission:

Provide easy access for everyone to global and regional satellite data products for use in understanding, managing and protecting ocean and coastal resources and for assessing impacts of environmental change in ecosystems, weather, and climate.

<https://coastwatch.noaa.gov>

The OceanWatch – central Pacific node of the NOAA CoastWatch program facilitates access to available satellite remote sensing oceanographic datasets for a wide range of users (scientific community, management and conservation agencies, educators, fishermen and the general public). These users have varying needs and data acquisition/analysis skills. OceanWatch focuses on long-term global level 4 datasets for fisheries research as well as near-real time datasets for daily monitoring of fishing conditions and bycatch mitigation.

OceanWatch is located at the NOAA Pacific Islands Fisheries Science Center (PIFSC), in Honolulu, HI. PIFSC researchers are a key component of OceanWatch users.

CAPACITY BUILDING

Environmental satellite data is underutilized within the 'wet' part of NOAA (NMFS, NOS) because fisheries scientists and managers are often not familiar with the available datasets or with how to access and manipulate them.

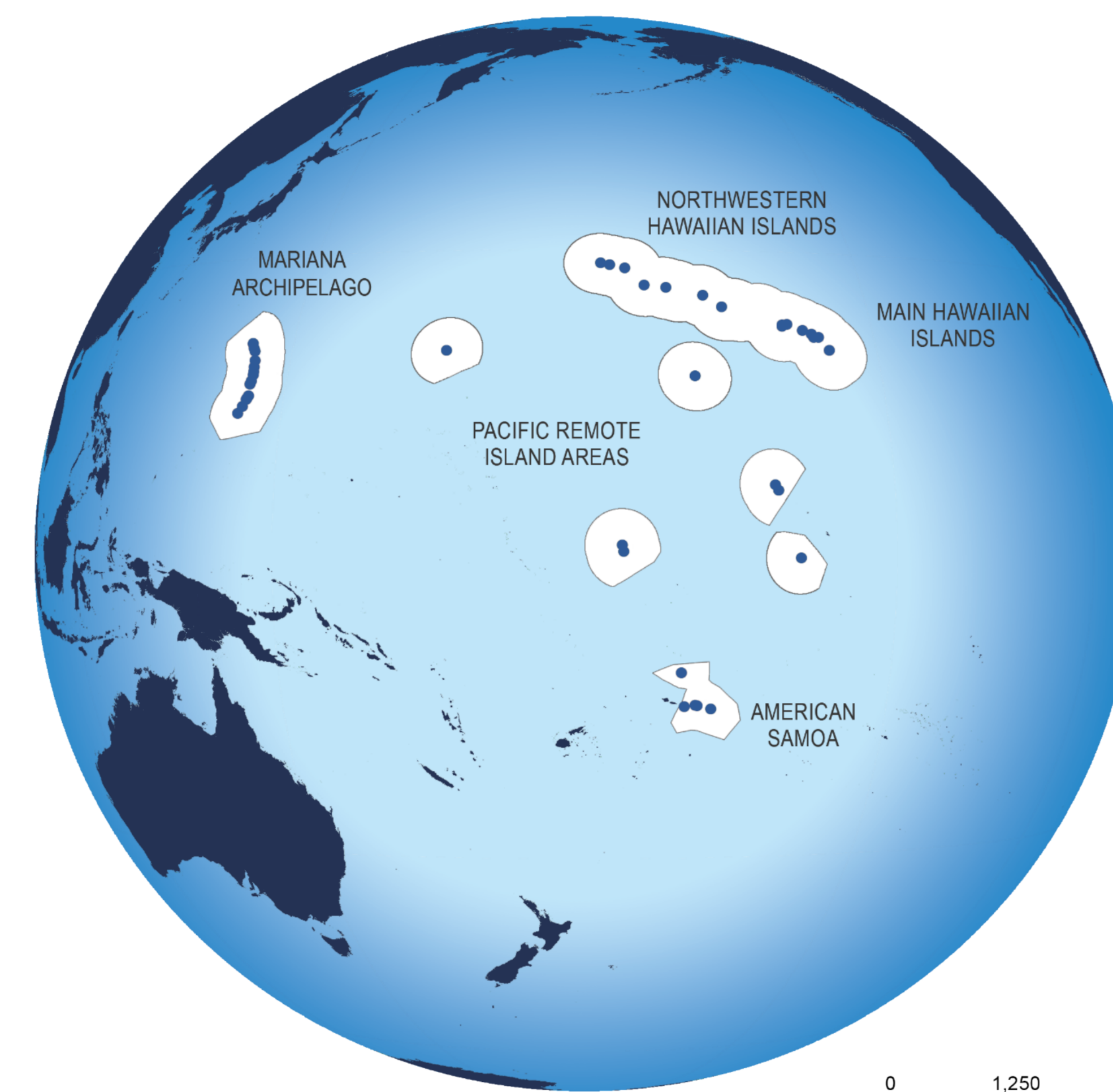
To bridge that knowledge gap, Cara Wilson and Dave Foley from the CoastWatch West Coast (CWWC) node developed an **Ocean Satellite Data Course** in 2006. CWWC has been offering the course every year since then and the East Coast node and OceanWatch started offering it in 2018. The course is primarily targeted at NOAA and university researchers.

Over the years, materials were developed and adapted by:

- Cara Wilson, Dave Foley, Dale Robinson, Roy Mendelssohn - CoastWatch West Coast, SouthWest Fisheries Science Center
- Shelly Tomlinson, Ron Vogel - CoastWatch East Coast
- Melanie Abecassis, Jeff Polovina - OceanWatch Central Pacific

All course materials (lectures, tutorials, R scripts) can be downloaded at: <https://oceanwatch.pifsc.noaa.gov/course.html>

Geographic scope of the NOAA Fisheries Pacific Islands Region



DATA

OceanWatch distributes sea surface temperature, ocean color, salinity, wind, currents, and precipitation data from various sensors with plans to add primary productivity, ocean subsurface data as well as in-situ data from PIFSC cruises.

VOYAGER

OceanWatch partnered with the Pacific Islands Ocean Observing System (PacIOOS) to implement a version of the map-based viewer Voyager to house OceanWatch data to improve user-friendliness and to serve the needs of less technical users. This web mapping platform allows users to visualize and interact with the data without needing to download and process it.

OceanWatch also funded PacIOOS to develop a new area statistics tool in Voyager for computing the mean, median, minimum, maximum, and/or standard deviation of the data products over a user-selected geographic bounding box in order to support users' frequent need for gathering trends and insights over large areas spanning multiple pixels.

DATA DISCOVERY

DATA CATALOG

DATA VISUALIZATION

LIVE ACCESS SERVER

VOYAGER

OceanWatch

SATELLITE COURSE

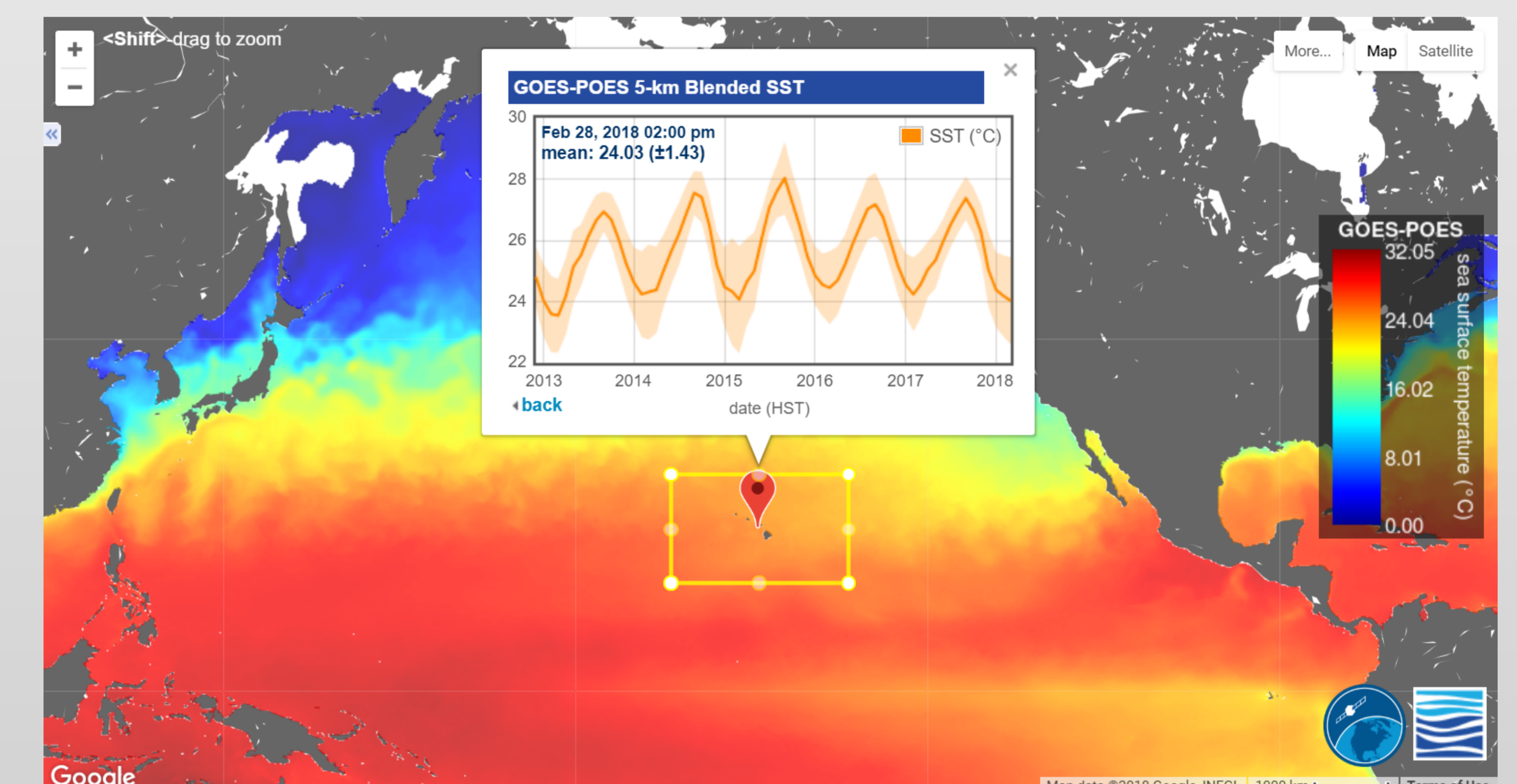
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DATA ACCESS

TRAINING CAPACITY BUILDING



<http://www.pacioos.hawaii.edu/voyager/oceanwatch.html>

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<https://oceanwatch.pifsc.noaa.gov>

