



Hawai'i Ho'ohēkili

Skywarn Weather Spotter Newsletter
National Weather Service, Honolulu, HI



Dry Season Edition, 2019

Issued – April 2019

Spotter Newsletter Volume 18

Inside this edition: Weak El Nino conditions, Record rainfall April 2018, New Geostationary Satellite, and a new Skywarn training video

Weak El Nino conditions are likely to continue through the Northern Hemisphere.

- An 80% change it will continue through Spring, and a 60% change through the Summer.
- El Nino conditions strengthened during February 2019, as above-average sea surface temperatures increased across the equatorial Pacific Ocean.
- All the regions in the Niño 3, Niño 3.4 and Niño 4 regions all increased

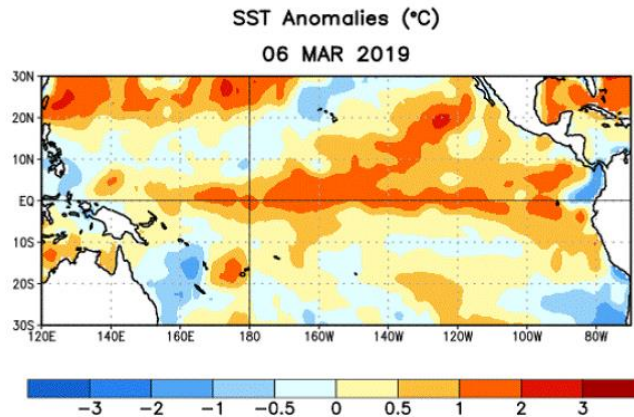


Figure 1. Average sea surface temperature (SST) anomalies (°C) for the week centered on 6 March 2019. Anomalies are computed with respect to the 1981-2010 base period weekly means.

Drought Monitor from March 12, 2019

- Hawaii has seen fairly consistent rainfall along the east facing slopes of the islands
- Drier conditions over leeward areas.
- Following wet conditions in February, areas that were experiencing abnormal dryness
- Big Island and Maui continue to recover well.
- Estimated population in Drought Areas: 4,044.

U.S. Drought Monitor Hawaii

March 12, 2019
(Released Thursday, Mar. 14, 2019)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	95.81	4.19	0.59	0.00	0.00	0.00
Last Week (2-26-2019)	95.78	34.22	0.59	0.00	0.00	0.00
3 Months Ago (12-11-2018)	58.62	41.38	0.00	0.00	0.00	0.00
Start of Calend. yr (1-1-2019)	57.03	42.97	4.57	0.00	0.00	0.00
Start of Water Year (2-25-2019)	95.97	4.03	1.36	0.00	0.00	0.00
One Year Ago (3-12-2018)	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:
■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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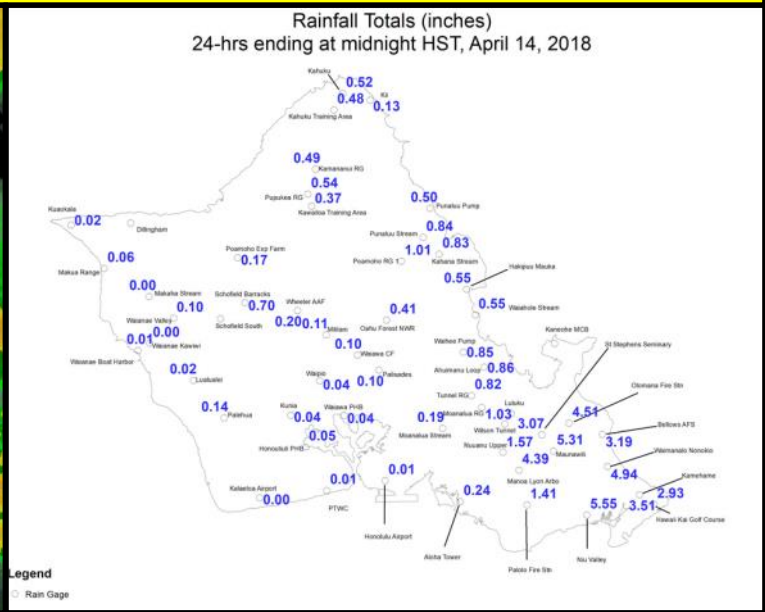
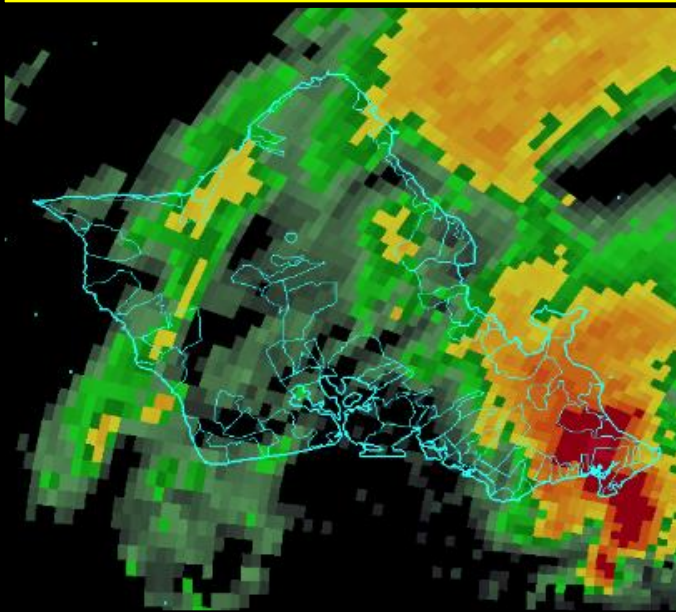
<http://droughtmonitor.unl.edu/>

**‘Olelo No’Eau Hawaiian Proverbs-
Hawaiian Proverb: “Kūkulu ka ‘ike i ka ‘ōpua”
English Translation: Knowledge is set up in the clouds**

Explanation: Clouds are observed for signs and omens. A knowledge of clouds can help infer different weather events. From fair weather to convective storms, the Hawaiians used clouds as a way of forecasting short term weather.

Kauai and Oahu Flash Flooding Event of April 13-15, 2018

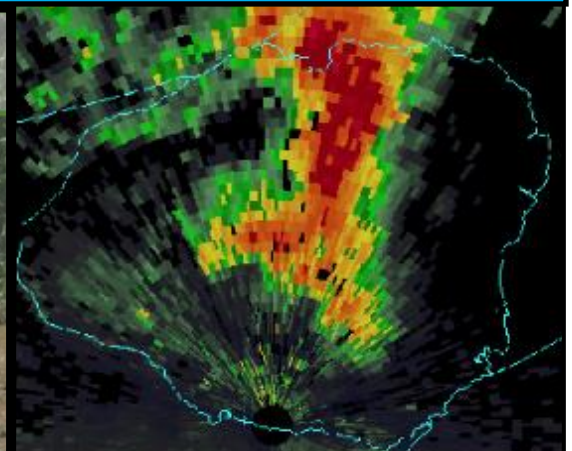
An upper level low pressure system tapped into enhanced moisture embedded within the low level trade winds and produced torrential rainfall and severe flooding over portions of Kauai and Oahu.



- Significant rainfall was confined to the eastern third of O’ahu with locations on the west of Honolulu mostly having less than 0.10 inches during the 24 hour period.
- At Waimanalo Stream on the windward side of the Ko’olau Range, the water level rose 3 feet in about 30 minutes and 5 feet in an hour (USGS)!

Kauai had record breaking rainfall of Waipā Gardens of 49.69” in a 24 hour period.

New National 24-hour Rainfall Record



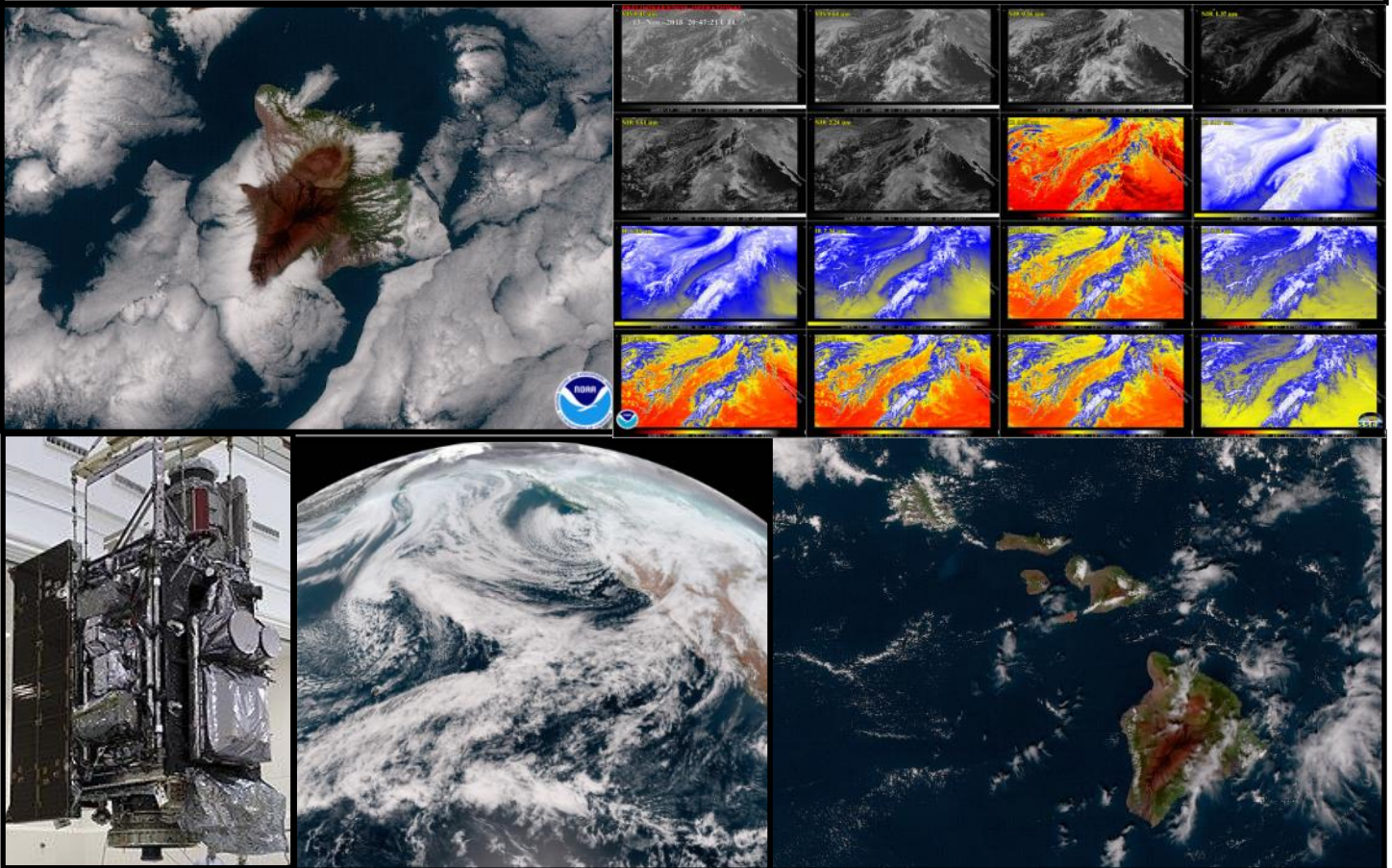
Unlike most heavy rain events which affect the island, this round of rainfall was centered along the lower elevations and coastal sections instead of over the upper slopes. This suggests that a significant portion of the event was driven by larger storm scale processes rather than the usual enhancement of rainfall by the mountainous terrain.

GOES-17 IS NOW OPERATIONAL

A NEW ERA HAS BEGUN

GOES-17 is now operational as NOAA's GOES West satellite! It will serve as the primary geostationary satellite for detecting and monitoring Pacific storm systems, fog, wildfires, and other weather phenomena focusing on the western United States, Alaska, and Hawaii.

GOES-17 reached its geostationary orbit at 22,000 miles above Earth. The satellite is located at 137.2 degrees West longitude. The high-resolution visible and infrared imagery will improve hurricane forecasts and allow our office (NWS HFO and the Central Pacific Hurricane Center) to also better predict areas of intense rainfall.



Quotes regarding the new satellite:

“The latest GOES series of satellites play a critical role protecting the public each day, ensuring better data reaches the forecasters who safeguard countless American lives from weather-related disaster.”

-Secretary of Commerce Wilbur Ross

“Extraordinary observations from GOES-17 are being infused into the forecast process, enabling us to offer new and improved forecasts, products, and services that save lives and property.”

-Louis W. Uccellini, Ph.D., Director, NOAA's National Weather Service

New Skywarn Video coming this year!

Skywarn training and refresher training will also be provided in an online format specifically produced for Hawaii's local weather!

A video format so you can get your refresher training done by watching the video, and then taking a short quiz to receive your initial or renewed Skywarn certification for another 3 years!

It will be provided online through our social media account and youtube. It will allow us to certify or recertify weather spotters even if they are not able to make it to in-person training.

We will still have our in-person training throughout the neighbor islands to interact with our customers and partners face to face.



Skywarn Video

In our video, you will be able to meet some of our staff. Chris Brenchley (Meteorologist in Charge), Ashley Evans (Director of Operations), John Bravender (Warning Coordinator Meteorologist), and Chevy Chevalier (Meteorologist) will guide you through the online training. Local videos and lessons are implemented to make sure spotters keep safety as a priority when reporting the weather to us.