



Hawai'i Ho'ohēkili

Skywarn Weather Spotter Newsletter
National Weather Service, Honolulu, HI



Dry Season Edition, 2013

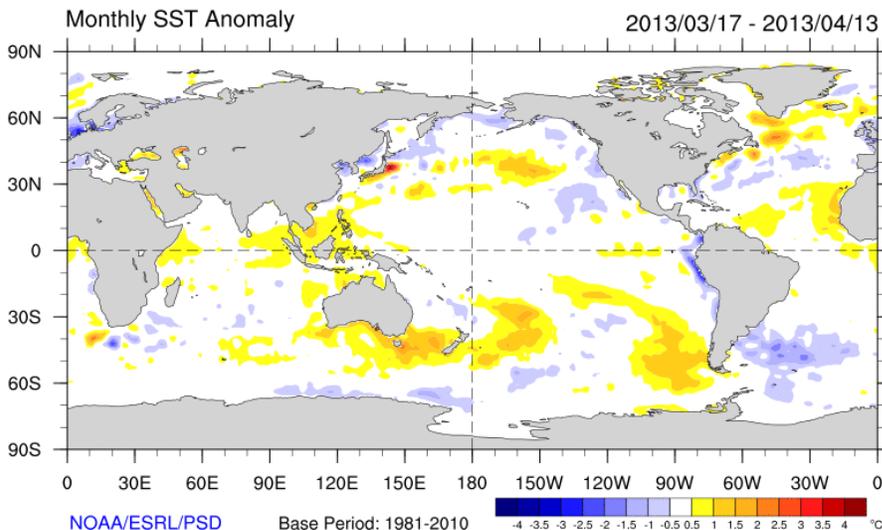
Issued — April 2013

Spotter Newsletter Volume 7

Inside this edition: -What the heck is the CoCoRAHs program? Flashing Flooding! A real-life story of storm spotting in Hawaii. El Nino? La Nina? Huh? Severe Drought Persists...

ENSO Neutral Conditions Expected

Climate indicators such as Sea Surface Temperature (see fig), winds in the tropics, and thunderstorms activity across the tropical Pacific Ocean all point to neutral ENSO conditions continuing into the summer. For Hawaii that translates into slightly below normal temperatures through the summer with below average sea surface temperatures keeping the air temperatures cooler. Lower than normal rainfall is also expected through June.



Hawaii Drought Status — Kevin Kodama, Service Hydrologist

U.S. Drought Monitor

Hawaii

April 9, 2013

Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	16.92	83.08	43.20	19.52	4.00	0.00
Last Week (04/02/2013 map)	34.46	65.54	43.20	19.52	4.00	0.00
3 Months Ago (01/08/2013 map)	26.22	73.78	58.63	26.20	11.80	0.00
Start of Calendar Year (01/01/2013 map)	17.25	82.75	63.34	25.55	10.36	0.00
Start of Water Year (09/25/2012 map)	22.16	77.84	55.86	27.35	10.77	0.00
One Year Ago (04/03/2012 map)	45.33	54.67	44.32	32.93	5.83	0.00

Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional



...Severe to extreme drought areas on the Big Island and in Maui County are expected to survive as the end to the 2012-2013 wet season approaches...

Several cold fronts affected the State of Hawaii during March but most of the associated rainfall occurred over areas not under drought conditions. The main exception is Molokai which received significant rainfall bringing continued improvements through the month.

Limited rainfall occurred in late March over the existing extreme drought areas on the Big Island and Maui. Localized showers on the western side of the Pohakuloa region on the Big Island allowed for a small amount of improvement to the D2 level but the remaining D3 areas remained unchanged. On the lower Kona slopes of the Big Island...rainfall activity helped bring severe drought down to the moderate level. Drought is also in a slow retreat on Lanai where severe drought has been reduced to a small coverage over the southwest side of the island.

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



Released Thursday, April 11, 2013

David Miskus, NOAA/NWS/NCEP/Climate Prediction Center

<http://droughtmonitor.unl.edu>

Elsewhere...Kauai remains drought-free. Oahu has just a small area of moderate drought over the leeward slopes of the Waianae Range. Recent rainfall may have been sufficient to produce regrowth of pastures to show improvement in drought category.

Flash Floods—A Threat to Hawaii—Ian Morrison

Flash flooding is Hawaii’s most common weather hazard. It is a flood caused by heavy or excessive rainfall in a short period of time characterized by raging torrents that rip through stream beds, streets, or mountain valleys...sweeping everything before them. They can occur within minutes or a few hours of excessive rainfall. They can also occur even if no rain has fallen, for instance after a levee or dam has failed, or after a sudden release of water by a debris jam. A flash flood is normally produced by slow moving thunderstorms, or thunderstorms which move quickly but redevelop over the same area. If you are storm spotting and encounter deep water running over a roadway, report it immediately. **DO NOT TRY AND DRIVE THROUGH THE WATER!** Roadways underneath may not always be intact.



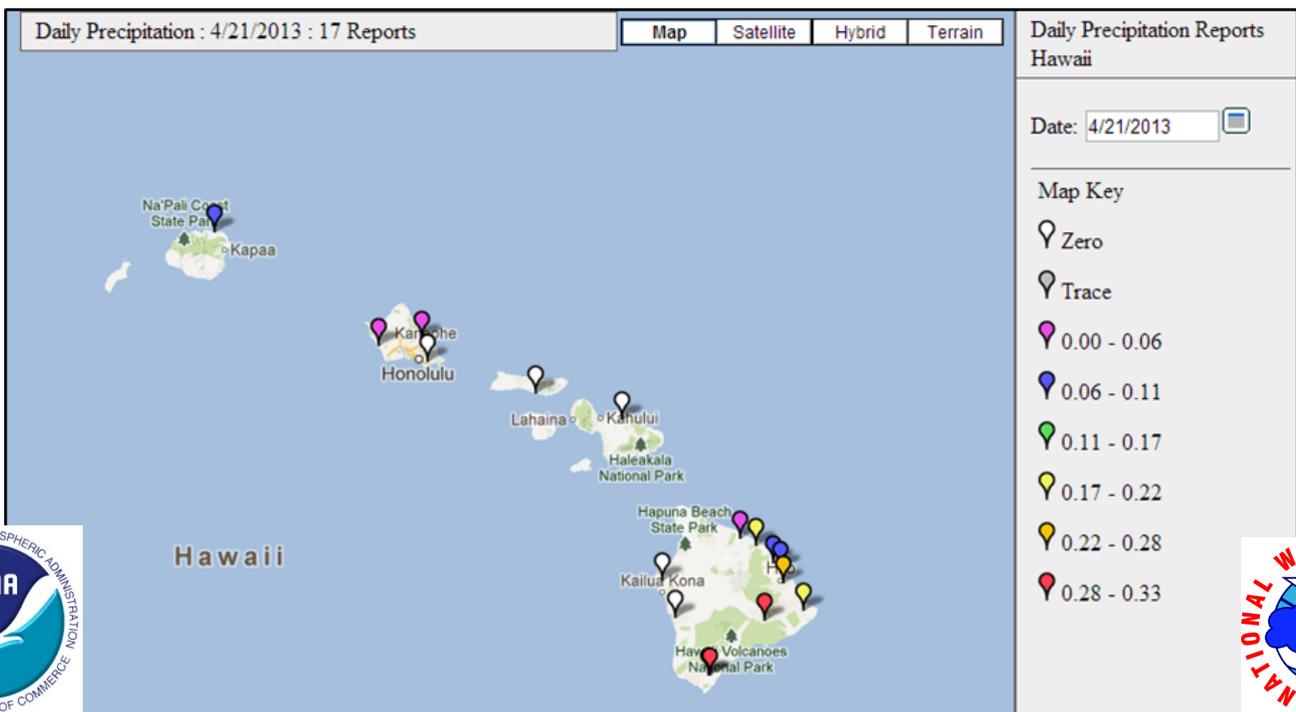
Put Your Observation Skills to the Test...Join CoCoRAHs!

Each day the meteorologists at the Honolulu Forecast Office are searching for and viewing weather data. This important information is gathered from around the state and helps to produce our forecasts and hazardous weather products for your neighborhood.

Since there are not weather instruments in every neighborhood, finding representative data can be quite the challenge.

One way you can assist in filling the gaps is to join the CoCoRAHs program. CoCoRAHs stands for Community Collaborative Rain, Hail & Snow Network. Here in Hawaii it’s the “rain” portion of CoCoRAHs that is most applicable. As a CoCoRAHs volunteer you will report daily precipitation from your home, giving us access to real “local” data to assist in our forecast and warning operations. Joining the network is free, and all you’ll need is a 4 inch diameter rain gauge to take readings. To join, go to www.cocorahs.org and click on “Apply to be a Cocorahs observer”. From there you’ll be guided through the steps to get set up. Depending on whether you have a rain gauge or not, you might have to purchase one before you get started. It is recommended that you use a standard 4 inch diameter rain gauge as your observing tool.

We encourage you to become part of the CoCoRAHs team and help our office here in Hawaii understand better the variability of rainfall patterns around the state. If you have questions about the program please feel to contact Mark Farnsworth (mark.farnsworth@noaa.gov) or Mike Cantin (michael.cantin@noaa.gov). Happy observing!!



Spotters Aid NWS Response to Maui Flooding

- Michael Cantin, Warning Coordination Meteorologist

On February 21st, 2013 a line of heavy rain showers impacted portions of upcountry Maui. The heavy rainfall quickly filled the streams in and around Hailu, with many roads becoming impassable. In addition, the heavy rainfall washed away a cottage.

As the event unfolded, the operations team at the Honolulu Forecast Office was monitoring the situation closely via radar and local stream gauges. Unfortunately that area of Maui does not contain a dense network of gauges, so the team was utilizing radar data as the primary way to get a handle on the amount of rainfall impacting the area. By the time the radar beam from the PHMO radar (on Molokai) reaches upcountry Maui the radar beam is over 5000 feet above sea level. With rainfall in this event being maximized closer to the surface it was very difficult to ascertain the true rainfall rates.



Two spotters came to the rescue by calling in reports of both total rainfall and rainfall rates for the area. These spotter reports, along with reports from Maui County authorities, helped the operations team issue the needed Flash Flood Warnings.

Your spotter calls make a difference, and we appreciate all the information you share. In this case, the spotter reports led directly to the issuance of potentially life-saving warnings. With much of Hawaii lacking a dense network of weather gauges, your reports are essential to our mission. Thank you for your efforts!



Editor: Ian Morrison, Incident Meteorologist
National Weather Service, Honolulu, HI
ian.morrison@noaa.gov

