



# Hawai'i Ho'ohēkili

Skywarn Weather Spotter Newsletter  
National Weather Service, Honolulu, HI



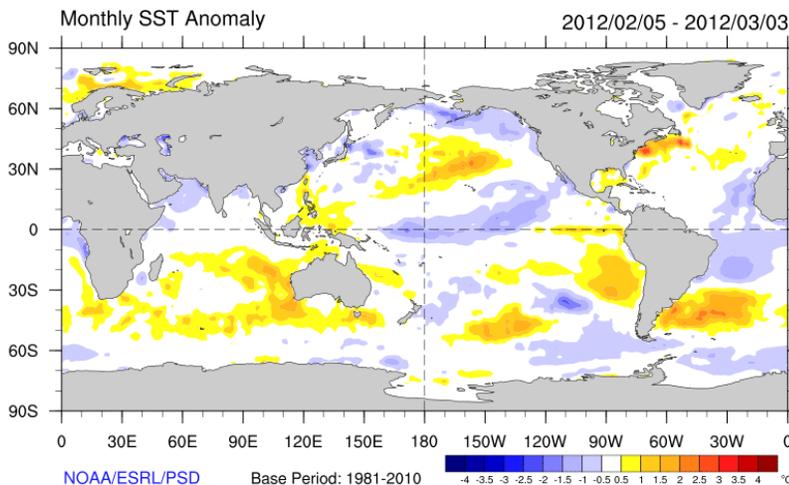
Dry Season Edition, 2012

Issued — April 2012

Spotter Newsletter Volume 5

## La Niña Fades

A mature La Niña continued during January 2012, as below-average sea surface temperatures (SST) persisted across the equatorial Pacific Ocean (see figure). A majority of models predict La Niña to weaken through the rest of the Northern Hemisphere winter 2011-12, and then to dissipate during the spring 2012. Also, there is evidence pointing toward an increase in temperatures across the Pacific in the next couple of months. The combination of a weakening temperature anomaly, the historical seasonal evolution, and dynamical model prediction favors a return to ENSO-neutral conditions during the Northern Hemisphere spring, which are likely to continue into the summer. Therefore La Niña is likely to transition to ENSO-neutral conditions during March-May 2012.



## Maui County and Big Island Drought remains while Kauai/Oahu Get Drenched - Kevin Kodama, Senior Hydrologist

### U.S. Drought Monitor

March 13, 2012  
Valid 7 a.m. EST

Hawaii

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	44.52	55.48	44.32	32.93	5.83	0.00
Last Week (03/06/2012 map)	42.25	57.75	45.73	35.38	7.67	1.15
3 Months Ago (12/13/2011 map)	36.32	63.68	51.19	29.36	2.92	0.00
Start of Calendar Year (12/27/2011 map)	43.55	56.45	47.37	28.72	1.86	0.00
Start of Water Year (09/27/2011 map)	5.02	94.98	44.93	14.84	0.85	0.00
One Year Ago (03/08/2011 map)	27.79	72.21	66.04	10.31	1.00	0.00

**Intensity:**

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



Late February and early March low pressure systems brought torrential rains to the west half of the state but produced much lower amounts over the drought-plagued areas of Maui County and the Big Island. West Molokai worsened to exceptional drought...or D4 conditions, but was short-lived with March rains alleviating the drought status to D3, or severe drought. Recent rainfall in March also helped ease drought over leeward Maui...extending upslope to Kula.

The Big Island showed a strong contrast in moisture conditions with portions of windward slopes receiving excessive rainfall while most leeward areas remained dry. Extreme drought persisted over the South Kohala District and Pohakuloa region of the Hamakua District. Severe drought...D2 conditions...expanded in the South Kona District to include all of the lower elevations. The Kau District received several rounds of needed rainfall producing some improvements in drought conditions.

On Oahu, drought conditions have disappeared as recent rains in March have alleviated drought conditions.

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

<http://droughtmonitor.unl.edu>



## NCEP 3-month Predictions for Hawaii

National Center for Environmental Prediction models predict a tendency for below normal temperatures for Hilo this spring, with normal temperatures over the summer. Above normal temperatures for Honolulu are expected from the late spring through summer. For Lihue, above normal temperatures are expected over the spring and summer. Above average rainfall is forecast for the State of Hawaii from March through May.

**Keys to Storm Spotting:** Get informed, observe, identify, report, SAFETY!

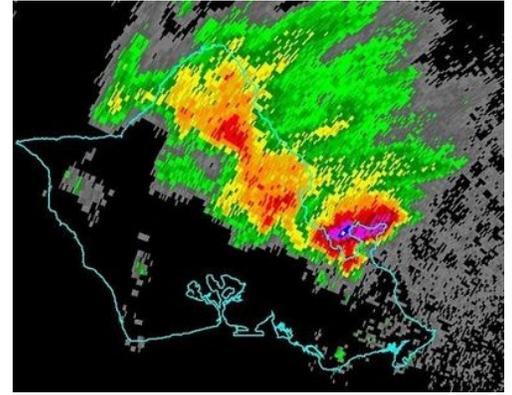
Get information—through the Internet, weather radio, or even phone apps, which provide everything from storm warnings to radar images. Observe and identify—be aware of strong winds, lightning, flash flooding, and hail. REPORT—provide information about your identity, location and your storm observations. SAFETY—Stay well away from any hazardous weather!

# Hawaii Spotter's on Point During Severe Weather Episodes in March 2012!

- Ian Morrison, Meteorologist

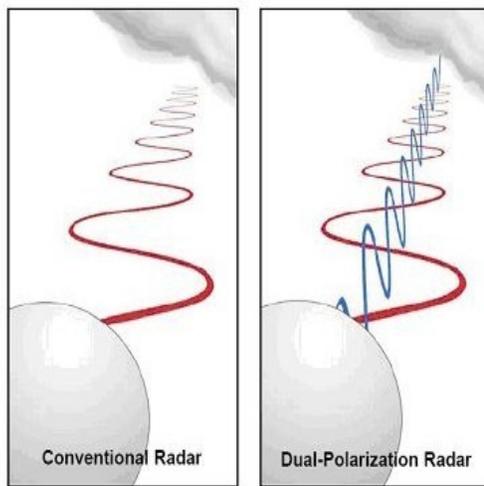
The unprecedented severe and hazardous weather in March of 2012 brought out

the best in Hawaii's Skywarn Spotter network. From pea size hail to hail-stones 4 inches across, waterspouts, tornadoes, strong straight-line winds, to massive amounts of rainfall—March of 2012 has seen it all. Hawaii's Skywarn Spotters were on point during all of the events, keeping forecasters at the National Weather Service in Honolulu apprised of the ongoing events, adding valuable weather reports to the decision making process of issuing our Severe Weather Warnings. All of the staff here at the NWS Honolulu office send a BIG MAHALO to the Skywarn Spotter Team!!!!



## New Dual Polarization technology coming to Hawaii's Radars

- Ian Morrison, Meteorologist



The four NWS Doppler radars serving Hawaii are scheduled for upgrade to the latest dual polarization technology in 2012/2013. Dual-pol radar technology can better detect heavy rainfall in flooding events, improve hail detection in thunderstorms and improve classification of precipitation types (rain, snow, ice). "This is the most significant upgrade to the nation's weather radar network since Doppler radar was first installed in the early 1990s," said Jack Hayes, director of NOAA's National Weather Service. "Dual-pol technology provides significantly more information and a clearer picture of current weather conditions, helping meteorologists provide more accurate and timely forecasts."

Current NWS radars provide forecasters information on precipitation intensity and movement (direction and speed). Dual-pol adds new information about the size and shape of an object, which will improve estimates of how much rain is falling, improving flash flood detection and warnings. During winter weather, dual polarization radar can tell the difference between rain, snow and ice, which gives forecasters a much better idea of what to expect at the ground.

Installation at the Kauai radar will begin by late spring with the other 3 Hawaii radars upgraded in the following months, ending with the South Hawaii radar next winter. Installation is expected to take two weeks and the radar sites will be offline during those periods. For more information on dual-pol radar and training opportunities got to <http://www.wdtb.noaa.gov/courses/dualpol/outreach/>



The pictures above depict two ways of visualizing how dual-pol radar works.



Editor: Ian Morrison, Incident Meteorologist  
National Weather Service, Honolulu, HI  
[ian.morrison@noaa.gov](mailto:ian.morrison@noaa.gov)

