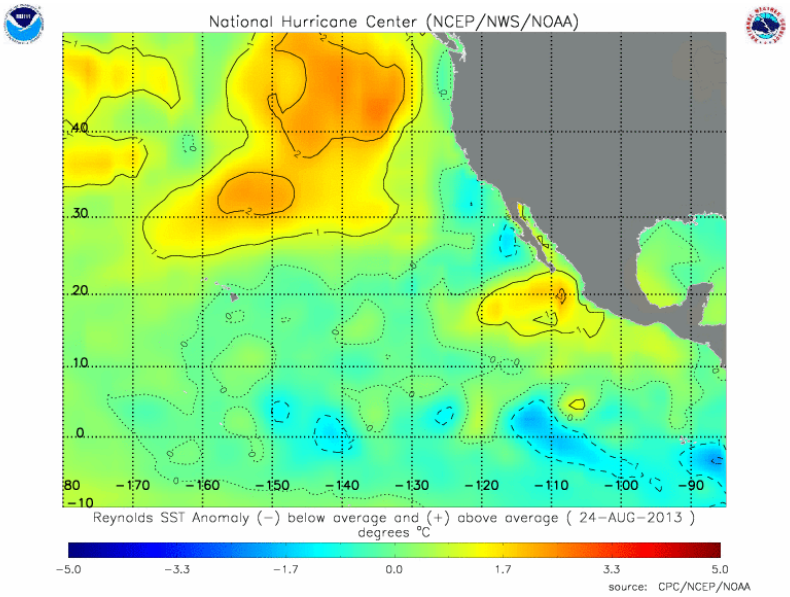
FloridaClimateCenter
Office of the State Climatologist

Climate Phase Forecast

Updated: August 31, 2013

The Pacific Ocean is likely to remain *Neutral* through the fall and winter of 2013.

Surface temperatures along the equator near the coast of South America have cooled slightly in the last 3 months, yet remain well within the "normal" range. Near normal sea surface temperatures in this area of the Pacific is known as Neutral conditions. Historically, neutral conditions occur roughly half the time. At other times, this area of the Pacific can swing into periods where it is much warmer than normal, known as El Niño, or much colder than normal, referred to as La Niña. Neutral conditions have prevailed since April of 2012, including last fall, winter, and spring, giving us the first "neutral" year since 2007.



Current East Pacific SST Anomaly Analysis

The Florida State University Center for Ocean-Atmospheric Prediction Studies
2035 E. Paul Dirac Dr., 223 R.M. Johnson Bldg., Tallahassee, FL, 32306-2840
Ph: (850) 644-3417 Fx: (850) 644-5092
http://climatecenter.fsu.edu

Neutral conditions are likely to continue through the remainder of 2013 and possibly into 2014. In spite of the recent cooling in the far eastern Pacific, temperatures in the central and western Pacific remain very close to normal. Deeper water temperatures along the whole equator are actually somewhat warmer than normal, lending little support any continued cooling at the surface. In addition, surface trade winds over the western and central Pacific are near normal giving little dynamic support for additional cooling. Most projections from both dynamical and statistical ocean models support the continuation of neutral conditions through the fall and winter of 2013.

What does a return to Neutral conditions in the Pacific mean for our climate in the next 1-3 months? Without a well-defined El Niño or La Niña in the Pacific, there is no indication that temperatures or rainfall will be either above normal or below normal in the near future. That means that near normal climate is the best forecast as we transition from summer into fall, but that cooler, warmer, wetter, or drier are all still likely, just like any year. The state of the Pacific Ocean does have a known influence on the Atlantic hurricane season. A developing El Niño has been shown to decrease hurricane activity in the Atlantic basin. Without an El Niño, we cannot anticipate this decrease. For more information on climate impacts in the Southeast, see the climate risk tool at AgroClimate.org.

Climate Risk Tool

The SECC tracks the temperatures of the Pacific Ocean using the JMA index. For more information and current JMA values, see the following link:

JMA Index

Other El Niño/La Niña Forecasts

Below are links to El Niño/La Niña forecasts from other centers in the U.S. and worldwide. Caution: the SECC may not agree with their forecasts and/or classification criteria.

NOAA's Climate Prediction Center

International Research Institute for Climate Prediction

Australian Government Bureau of Meteorology