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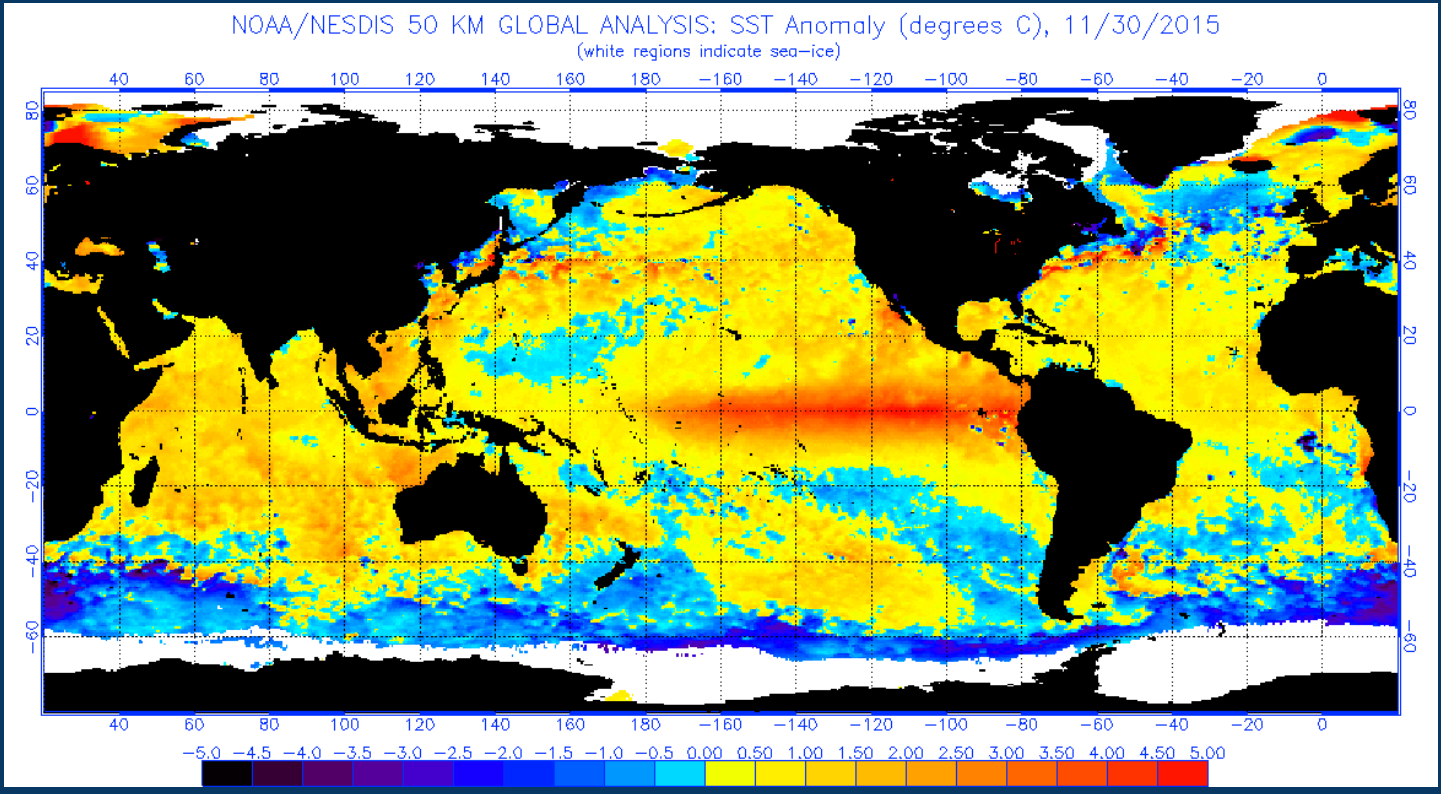

El Niño Southern Oscillation (ENSO) 2015–16

Latin American and Caribbean Region

Disaster Risk Reduction Program

Extreme Events Institute

Florida International University

FIU-DRR Report no. 5 (June 2016)

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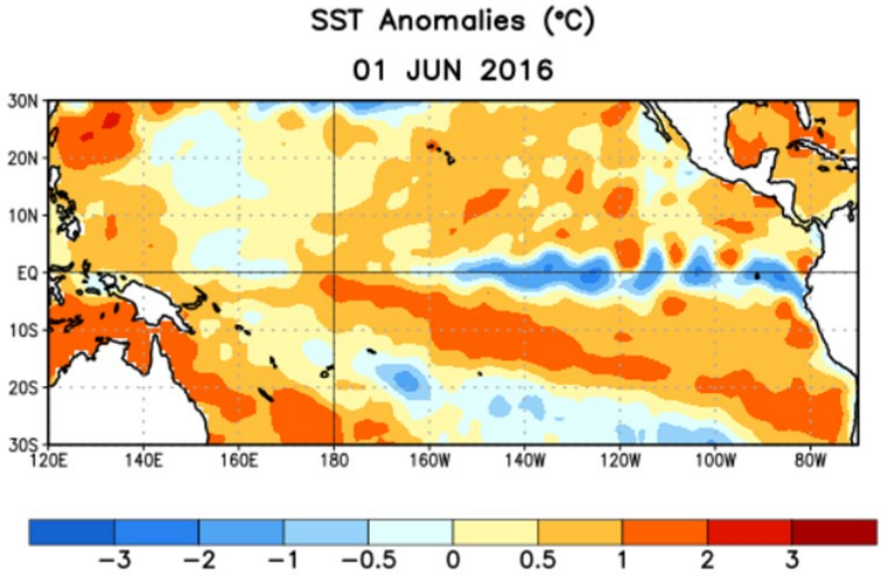
By May 2016, El Niño dissipated, with sea surface temperatures in the Niño-3.4 region of the east-central equatorial Pacific Ocean having fallen from the peak since January 2016. This signals the collapse of El Niño and the emergence of atmospheric conditions that indicate ENSO-neutral conditions in May 2016 (Climate Prediction Center, NOAA).

The sea surface temperatures across the eastern equatorial Pacific Ocean are mostly near-to-below average as seen in the figure below:



. Average sea surface temperature (SST) anomalies (°C) for the week centered on 1 June 2016. Anomalies are computed with respect to the 1981-2010 base period weekly means.

Figure source: Climate Prediction Center, NOAA

Current atmospheric anomalies are consistent with ENSO-neutral conditions. The June report by the Climate Prediction Center, NOAA, indicates that the traditional and equatorial Southern Oscillation indices were near zero, while the upper and lower-level winds were both near average across most of the tropical Pacific. Convection was also near-average over the central tropical Pacific and over most of Indonesia. Collectively, these atmospheric and oceanic anomalies reflect a transition from El Niño to ENSO-neutral conditions.

La Niña is favored to develop during the Northern Hemisphere summer 2016 (65% chance), with a 75% chance of La Niña during the fall and winter of 2016-17 (Climate Prediction Center, NOAA).

The Report by the Centro Internacional para la Investigación del Fenómeno de El Niño (International Center for the Research on El Niño Phenomenon, CIIFEN-ENOS) has indicated a decline of El Niño phenomenon 2015/2016 for the month of June, while the Southeast Pacific shows an increase of cooling conditions. During the month of May 2016, the Equatorial Pacific continued with the decline of anomalies in the sea surface temperatures (SSTs), with negative values of anomalies (-1°C) along the coasts of Panama and Colombia, while the north of the Caribbean and the Gulf of Mexico registered smaller SST anomalies.

The report notes that the predictions of recent global models indicate neutral conditions for the following weeks. Particularly, for the trimester May–July of 2016, greater probabilities of rainfall over normal values are expected for the Orinoco region (Venezuela), center and south Andean region of Ecuador, north coast and northeast of Peru, regions of Pando, Beni, and Oriental Plains of Bolivia; sectors of Paraguay and north of Uruguay. On the other hand, greater probabilities of rainfall under normal values are expected for most of the Andean region in Colombia, central coast and north Andean region of Ecuador, central region of Peru and most of Chile.

Source: CIIFEN-ENOS, "Condiciones Oceánicas-Atmosféricas- Evolución y Perspectivas", Junio 2016, http://www.ciifen.org/index.php?option=com_content&view=article&id=1423&catid=78&Itemid=95&lang=en