

El Niño and *La Niña* are temperature fluctuations in surface waters of the tropical Eastern Pacific Ocean. *El Niño* was originally recognized by fisherman off the coast of South America as the appearance of unusually warm water in the Pacific ocean, occurring near the beginning of the year. El Niño means The Little Boy or Christ child in Spanish. This name was used for the tendency of the phenomenon to arrive around Christmas.

La Niña means The Little Girl. La Niña is sometimes called El Viejo, anti-El Niño, or simply "a cold event" or "a cold episode".

El Niño and La Niña are officially defined as sustained sea surface temperature anomalies of magnitude greater than 0.5°C across the central tropical Pacific Ocean. < than five months, its classified as El Niño or La Niña conditions

five months or longer, its classified as an El Niño or La Niña episode.

occures at irregular intervals of 2-7 years and has usually lasted one or two years.

In the Pacific, La Niña is characterized by unusually cold ocean temperatures in the eastern equatorial Pacific, compared to El Niño, which is characterized by unusually warm ocean temperatures in the same area.

The first signs of an El Niño are:

Rise in air pressure over the Indian Ocean, Indonesia, and Australia

Fall in air pressure over Tahiti and the rest of the central and eastern Pacific Ocean

Trade winds in the south Pacific weaken or head east

Warm air rises near Peru, causing rain in the northern Peruvian deserts

Warm water spreads from the west Pacific and the Indian Ocean to the east Pacific. It takes the rain with it, causing extensive drought in the western Pacific and rainfall in the normally dry eastern Pacific.

http://en.wikipedia.org/wiki/El_Ni%C3%B1o-Southern_Oscillation

<http://www.pmel.noaa.gov/tao/elnino/la-nina-pacific.html>