EÑSO Cycles in the CNIVII

El Niño Southern Oscillation, or EÑSO cycles occur every 2-7 years, and have three phases. These are:

El Niño Phase

This phase includes more tropical storms, hotter temperatures, lower sea levels, and drought. Weather is unpredictable in the El Niño phase.

Right now, Saipan is at the end of the El Niño phase, which means it's hot and dry in Saipan.

Why? The ocean water in the Pacific is hot! During an El Niño phase water temperatures warm below the surface, and water circulation patterns which bring cool water from the Eastern Pacific to the Western Pacific shrink. This means that less cool water comes across the Pacific to Saipan, and the hot water that is here stays here. It also means that water below 150 feet deep, which is normally cool, heats up. Another element of this weather is the trade winds. The trade winds normally cool Saipan down by blowing cool air towards Saipan. During El Niño they don't blow as hard. In extreme El Niño phases they blow away from Saipan. Hot water and less wind mean Saipan is hotter than normal.

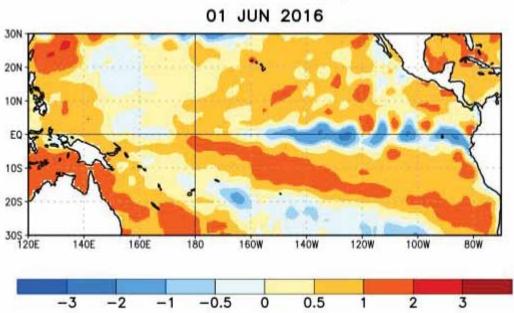
Neutral Phase

Weather is typically more mild and windy, with normal amounts of rainfall.

La Niña Phase

This phase is colder and wetter than normal. Flooding may be more likely to occur in the Pacific during the La Niña phase.

SST Anomalies (°C)



Saipan is also dry at the end of El Niño. Warmer sea surface temperatures and lower

air pressures mean that less rain is created in the atmosphere. Rain is created when water vapor in the atmosphere cools, but during an El Niño year in the Western Pacific the air is hot. This makes it harder to cool the water vapor in the atmosphere and there is less rain. When this happens drought occurs. Currently, Saipan is experiencing a drought brought on by El Niño. Many Pacific Islands are experiencing this drought, but it is the worst in Palau and in Yap, where it was the driest October to March on record. In Saipan we are about 40% below the normal amount of rain for April to June. Without this rain our freshwater supplies are saltier than normal, and there is more chance of fires from stray sparks. Fires can be dangerous and degrade our natural resources, but we can all work together to help prevent them. Please be careful and be aware!

Have questions? BECQ is here to help!
Please call DEQ at 664-8500 or DCRM 664-8300.





