

May 2023 Micronesia ENSO and Climate Update

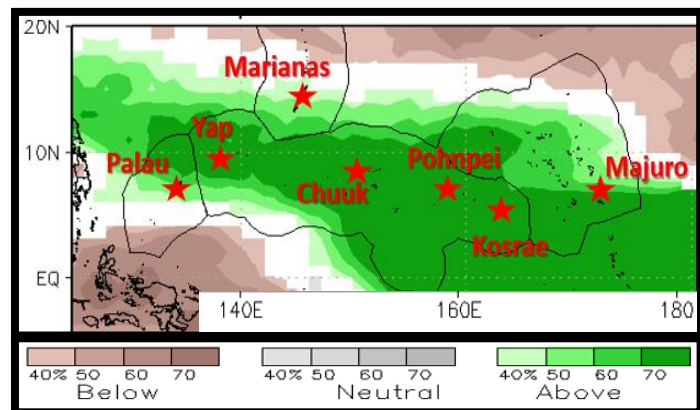
Released: Tuesday, May 16, 2023

Prepared by: WFO Guam

OVERVIEW AND ENSO ALERT STATUS: [El Niño Watch](#). This means that conditions are favorable for the development of El Niño within the next six months. **El Niño may develop as early as June. A strong El Niño is possible later this year** (38% chance during the Aug-Sep-Oct timeframe*). Pulses of westerly winds have developed along the equator the last few months, helping to warm sea surface temperatures (SSTs) across the central and eastern Pacific. Convective activity has started to shift farther east in response to the warming SSTs. Historic high sea levels continue to lower across Micronesia.

TROPICAL CYCLONES (TCs): El Niño typically brings an increased risk of TCs (and typhoons) to most islands of Micronesia, especially central/eastern Micronesia. This is due to an eastward shift in the TC development region. This eastward shift increases the risk of stronger systems for most islands of Micronesia. Palau may see reduced activity. NWS Guam will issue its official seasonal TC Outlook on June 1, 2023.

RAINFALL: Rainfall is expected to be near or above normal for most islands over the next several months. Tropical systems, regardless of overall strength, may bring excessive rainfall at times. Palau may see drier conditions develop in October or November. The image to the right shows the likelihood of above, below, or near-normal rainfall chances for the 3-month Jul-Aug-Sep period. [North American Multi-Model Ensemble \(NMME\) model data](#).



SEA LEVELS AND CORAL BLEACHING: Regional sea level heights are forecast to lower the next several months as the climate system moves towards El Niño. While this should reduce the likelihood of nuisance high tide flooding, large swell events and local storm activity can lead to coastal impacts regardless of El Niño or La Niña. Lowering sea levels will raise the risk of coral bleaching. The greatest concern will be for shallow reef systems and lagoons.

LOOKING AHEAD TO 2024: Significant drought often follows El Niño events as large-scale rainfall patterns shift areas of heavier rainfall farther east across the central and eastern tropical Pacific. If the upcoming rainfall patterns follow these historical El Niño patterns, there would be localized water supply shortages, negative impacts to crops and vegetation, and a greater risk of wildfires for larger islands such as Guam.

QUICK LINKS:

[National Weather Service Guam Homepage](#) & [Guam Homeland Security Typhoon Preparedness Tips](#)

Note that preparedness tips may vary greatly island to island. Contact your local Weather Service Office (WFO Guam, WSO Palau, WSO Yap, WSO Chuuk, WSO Pohnpei, and WSO Majuro) and emergency management office for island-specific information.

* based on the Climate Prediction Center ENSO strength probabilities (From Paragraph #1, Overview and ENSO Alert Status)