

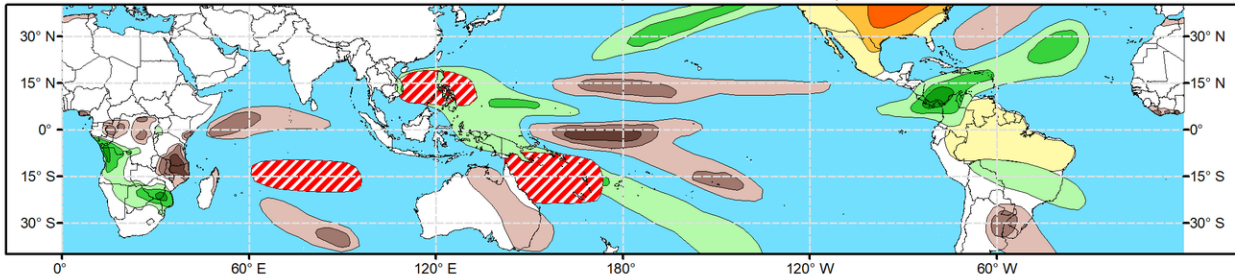


Global Tropics Hazards Outlook

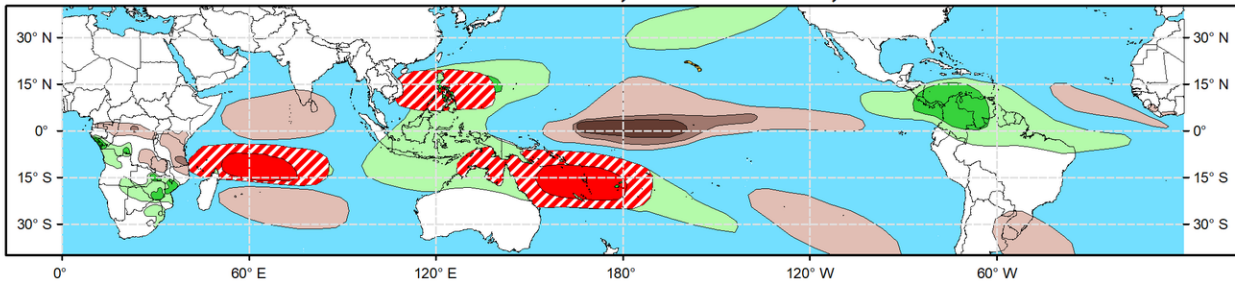
Climate Prediction Center



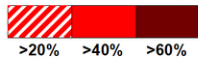
Week 2 - Valid: Dec 25, 2024 - Dec 31, 2024



Week 3 - Valid: Jan 01, 2025 - Jan 07, 2025

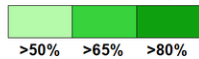


Tropical Cyclone (TC) Formation Probability



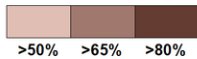
Tropical Depression (TD) or greater strength

Above-Average Rainfall Probability



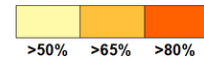
Weekly total rainfall in the Upper third of the historical range

Below-Average Rainfall Probability



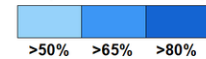
Weekly total rainfall in the Lower third of the historical range

Above-Average Temperatures Probability



7-day max temperatures in the Upper third of the historical range

Below-Average Temperatures Probability



7-day min temperatures in the Lower third of the historical range

Issued: 12/17/2024

Forecaster: Barandiaran

This product is updated once per week and targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

The MJO has continued to be a significant player in the tropics. However, the emerging La Niña base state has been a growing source of interference with both the propagation and amplitude of the MJO. Dynamical model forecasts depict continued eastward propagation of the MJO signal with a slow phase. Extended range RMM-index solutions indicate the potential for a surge in the strength of the MJO during weeks 3&4 as it shifts into the Western Hemisphere and La Niña interference lessens. A continued eastward MJO propagation over the Pacific would favor a period of below-normal temperatures across the northeastern U.S. to start off the New Year, as well as a wet start for the West Coast.

During the last week a sub-tropical system formed off the southern coast of Brazil, and was named Bigua by the Brazilian navy. While its status as a tropical cyclone (TC) is somewhat ambiguous, systems of this kind are rare in the South Atlantic and thus is a noteworthy inclusion to the weekly summary of TC activity. Other than this system, there has been no TC activity over the last week, although the Joint Typhoon Warning Center (JTWC) is monitoring an area of disturbed weather designated 96W, just east of the Philippines for TC development, which is favored to occur in the very near future. Please refer to the JTWC for more information regarding potential TC 96W.

With the MJO forecast to be in phases 6-8 (Western Pacific/Western Hemisphere) during the forecast period, the northern coast of Australia and the South Pacific are favored to be active regions for TC activity during weeks 2-3. For both weeks the ECMWF and GEFs depict steadily increasing probabilities of TC genesis in these regions, with a slight risk (20% probability) of TC genesis off northeast coast of Australia and the South Pacific for both weeks, with a moderate risk (40%) posted for the South Pacific during week-3. A slight risk for TC genesis is also posted for the South China Sea portions of the

Philippine Sea for both weeks due to favorable MJO positioning. Finally, a slight risk of TC genesis is posted for weeks 2&3 for the southwestern Indian Ocean with continued anomalous westerlies favored to persist through the forecast period. A moderate risk of TC genesis is posted for week-3 northeast of Madagascar, as the MJO moves into the Western Hemisphere, providing a more favorable environment for TC development over the region. MJO teleconnections generally favor wetter conditions for portions of the Pacific Northwest, and initially favor warm conditions over much of the Contiguous U.S. (CONUS). Extended RMM forecasts indicate that eastward propagation is favored to continue beyond week 3, colder conditions become favored over the Northeast U.S. as the MJO moves into phase 8.

The precipitation outlook for weeks 2 and 3 is based on potential TC activity, the anticipated state of ENSO and the MJO, and informed by GEFS, CFS, Canadian, and ECMWF ensemble mean solutions. During week-2 above-normal temperatures are indicated for much of northern South America, and strongly favored for much of the CONUS and Mexico, as well as the Hawaiian Island. For hazardous weather conditions in your area during the coming two-week period, please refer to your local NWS office, the Medium Range Hazards Forecast produced by the Weather Prediction Center, and the CPC Week-2 Hazards Outlook. Forecasts made over Africa are made in coordination with the International Desk at CPC.