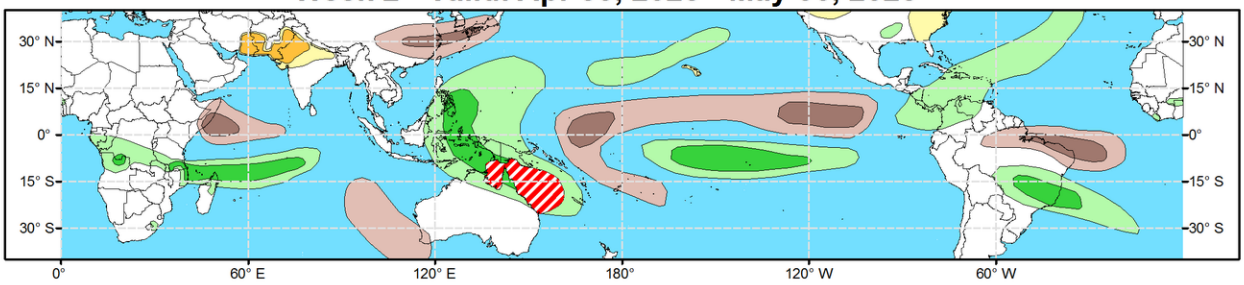
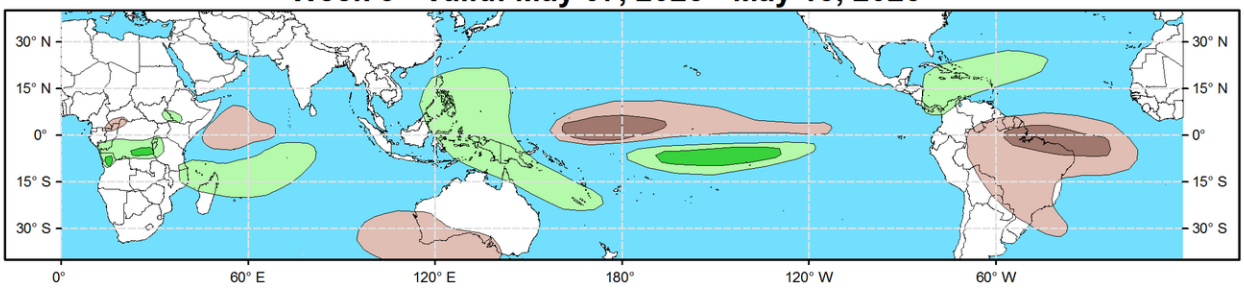
Global Tropics Hazards Outlook

Climate Prediction Center

Week 2 - Valid: Apr 30, 2025 - May 06, 2025



Week 3 - Valid: May 07, 2025 - May 13, 2025



Tropical Cyclone (TC) Formation Probability
>20% >40% >60%
Tropical Depression (TD) or greater strength

Above-Average Rainfall Probability
>50% >65% >80%
Weekly total rainfall in the Upper third of the historical range

Below-Average Rainfall Probability
>50% >65% >80%
Weekly total rainfall in the Lower third of the historical range

Above-Average Temperatures Probability
>50% >65% >80%
7-day max temperatures in the Upper third of the historical range

Below-Average Temperatures Probability
>50% >65% >80%
7-day min temperatures in the Lower third of the historical range

Issued: 04/22/2025
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 been a minimal contributor to tropical variability since late March with the RMM-based index meandering within the unit circle for the past couple of weeks. RMM-based forecasts differ between the GEFS and ECMWF ensemble means. Many of the GEFS ensemble members depict a strengthening MJO propagating east over the Western Hemisphere during the next two weeks and shifting back to the Indian Ocean by mid-May. However, the ECMWF model maintains a weak MJO into early May. If the MJO gains amplitude and propagates eastward over the Western Hemisphere during the next two weeks, then the large-scale environment could become more favorable for an early season tropical cyclone (TC) in the East Pacific, though this appears to be a low-probability event.

One TC formed during the last week. On April 18 a TC formed in the Arafura sea, designated 31P by the Joint Typhoon Warning Center (JTWC), and meandered near the mouth of the Gulf of Carpentaria before tracking westward near Cape Arnhem. It has not become very well-organized and has fluctuated between depression and storm intensity. TC 31P is still active, and is forecast to move northwestward toward the Tanimbar Islands, with no large changes in intensity. Please refer to the JTWC for the latest information on TC 31P.

Dynamical models generally indicate continued weak MJO activity during the forecast period. TC activity is fairly low climatologically during this time of the year as well, indicating a potentially fairly quiet week 2-3 period with respect to TCs. Enhanced convection remains over the Maritime Continent, likely residual forcing from rapidly diminishing La Nina conditions. To the extent that there is a signal in the RMM forecasts, models generally place the MJO in phases 6 and 7 which favors TC formation along the northern coast of Australia and into the Coral Sea. ECMWF probabilistic guidance indicates enhanced probabilities of TC activity over the Gulf of Carpentaria and Coral Sea during

weeks 1-2, then becoming weaker thereafter. Therefore, a slight risk (20-40% probability) of TC genesis is posted for the regions listed above for week-2 (Apr 30-May 6).

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 the Hawaiian Islands, as well as portions of the southeastern and western contiguous U.S. Above-normal temperatures are also likely for much of Pakistan as well as portions of northern India and eastern Iran. 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.