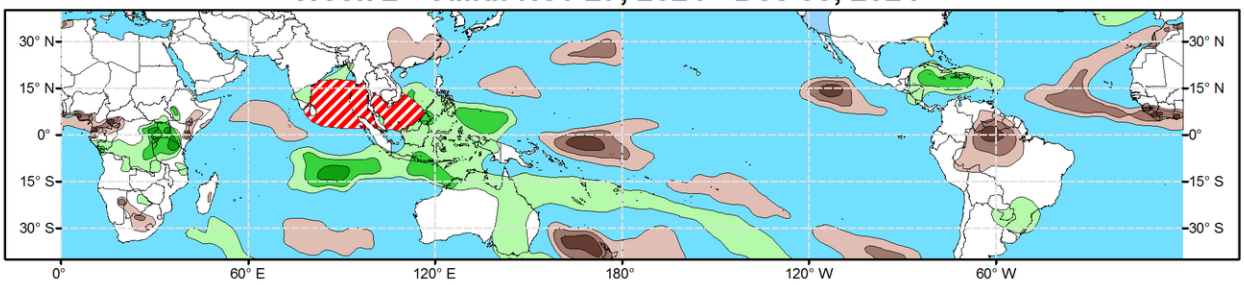
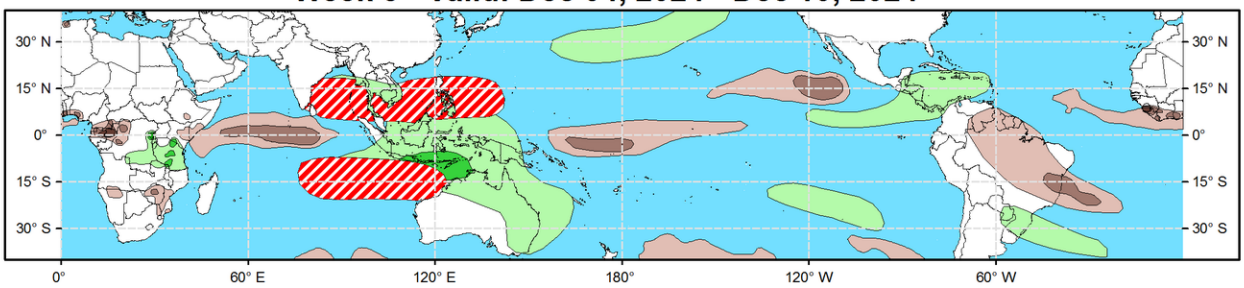
Global Tropics Hazards Outlook

Climate Prediction Center

Week 2 - Valid: Nov 27, 2024 - Dec 03, 2024



Week 3 - Valid: Dec 04, 2024 - Dec 10, 2024



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: 11/19/2024
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.

ï»¿The MJO has been quite active over the last month, completing a full circumnavigation of the globe during that period, and at a high amplitude as the enhanced convective envelope moved over the Maritime Continent and Western Pacific. The MJO has slowed and weakened somewhat as the enhanced convective envelope moved over the Indian Ocean during the last week, likely the result of interactions with the emerging La Nina footprint and other modes of tropical variability. This forecast slowing of the enhanced convective envelope is likely to promote enhanced tropical cyclone (TC) activity across the Southern Indian Ocean and Bay of Bengal during the next two weeks. TC activity is also possible in week-3 over the Western Pacific due to MJO forcing despite the basin being less climatologically active in December.

Two TCs formed over the last week. On November 14, TC Sara formed in the Western Caribbean. It reached Tropical Storm strength while tracking along the Honduran coast before making landfall over Belize on Nov 17. Also on Nov 14, TC Bheki formed southeast of Diego Garcia and began tracking southwestward. Bheki reached a Category 3 intensity on the Saffir-Simpson scale but has since weakened from this peak. Over the coming days Bheki is favored to continue tracking southwest towards Port Mathurin and Mauritius. For the latest information on TC Bheki please refer to the Joint Typhoon Warning Center (JTWC).

With the MJO forecast to be in phases 3-5 (Indian Ocean and Maritime Continent) during the forecast period, the Indian Ocean (IO) is favored to be the most active region for TC activity during weeks 2-3. Both the ECMWF and GEFS depict high probabilities of TC activity in the southern IO, although genesis is most likely to occur during week-1, precluding a corresponding TC area for week-2. However, 20% chances are posted from the Bay of Bengal to the South China Sea

based on some support in the tools favoring development during the week-2 period. As these enhanced probabilities shift eastward to the northwest coast of Australia by late week-2 and into week-3, both models also indicate the potential for TC genesis in the Bay of Bengal and South China Sea for both weeks, as well as enhanced TC potential spreading into the Western Pacific during. As a result, 20% chances are issued from the Bay of Bengal to the Philippine Sea, as well as 20% chances posted over the southwestern Indian Ocean for week-3 as the MJO enhanced convective envelope propagates across the Maritime Continent.

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 below-normal temperatures are indicated for western portions of the Contiguous U.S, while above-normal temperatures are favored for the Florida region. 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.