

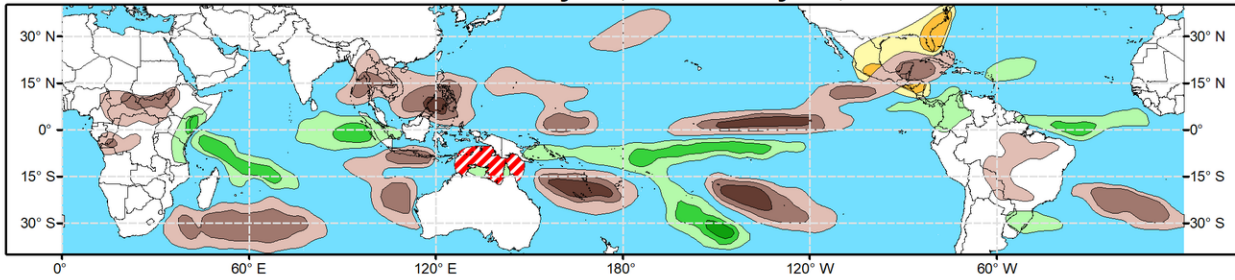


Global Tropics Hazards Outlook

Climate Prediction Center

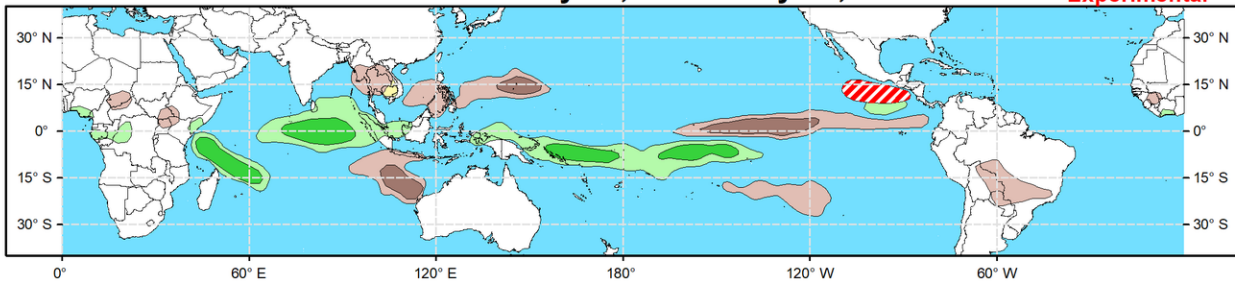


Week 2 - Valid: May 08, 2024 - May 14, 2024



Week 3 - Valid: May 15, 2024 - May 21, 2024

**** Experimental ****



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: 04/30/2024
Forecaster: Collow

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.

During mid- to late-April, the Madden Julian Oscillation weakened into the RMM-based unit circle. However, during the past few days, the MJO has shown signs of re-emerging over the Indian Ocean, aided in part by an enhanced low frequency convective signal across the region. Dynamical models agree in terms of eastward propagation of the intraseasonal signal through the Maritime Continent during the first week of May, but diverge thereafter. The ECMWF ensemble depicts a fast, but weak propagation of the MJO into the Western Hemisphere by mid-May, while the GEFs is slower and more unclear in the MJO propagation east of the Date Line.

No tropical cyclones (TCs) have developed in the past week, corresponding with the climatological quietest time of year for the global tropics. The Joint Typhoon Warning Center (JTWC) is monitoring a disturbance to the north of Madagascar (Invest 90S), which may develop into a TC during the next few days. By week-2, the evolution of the MJO favors enhanced chances of late-season TC development north of Australia, extending across parts of the Banda, Arafura, and Timor Seas and into the Gulf of Carpentaria where at least a 20 percent chance of TC formation is highlighted, although there is the potential that TC development occurs late in the week-1 period. A more robust eastward MJO propagation favors increasing chances of TC formation across the eastern North Pacific, corresponding with the May 15 start of the hurricane season in that region. Although early in the season, very warm sea surface temperatures (greater than 30 deg C off the west coast of Central America) combined with the convective environment potentially becoming more favorable, support a 20 percent chance or greater for TC formation is highlighted across the eastern North Pacific during week-3.

The precipitation outlook for weeks 2 and 3 are based on a historical skill

weighted blend of the GEFS, CFS, ECCO, and ECMWF models and MJO precipitation composites. Below-average rainfall is predicted across southeastern Asia and extending over the western North Pacific where a predicted high shear environment decreases chances of TC development despite the passing MJO. Above-average rainfall is favored over parts of eastern Africa, the Indian Ocean, and the south-central equatorial Pacific during early- to mid-May. Above-average temperatures are forecast across much of the eastern U.S., Mexico, Central America, and southeastern Asia during week-2, with relatively cooler conditions possible over the eastern U.S by week-3.

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.