

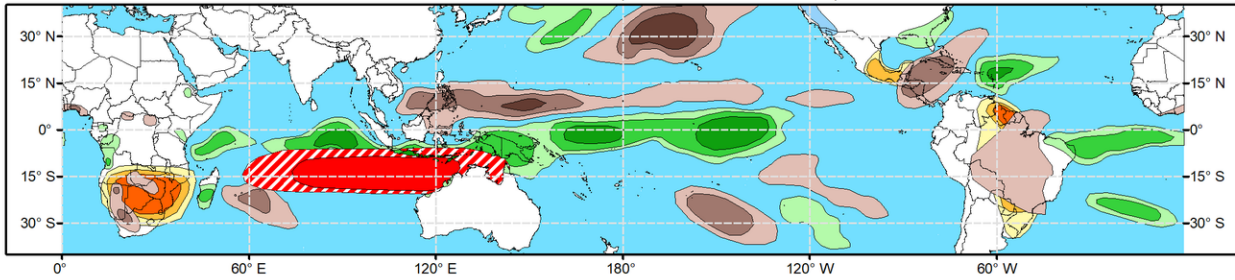


Global Tropics Hazards Outlook

Climate Prediction Center

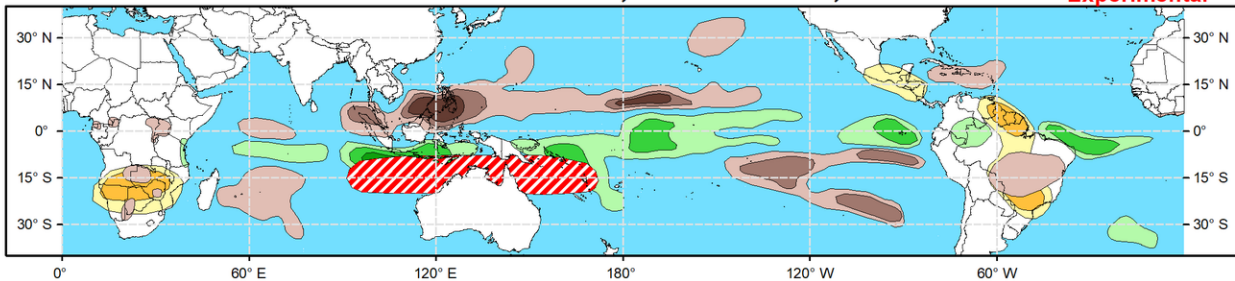


Week 2 - Valid: Mar 06, 2024 - Mar 12, 2024

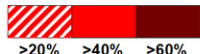


Week 3 - Valid: Mar 13, 2024 - Mar 19, 2024

**** Experimental ****



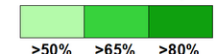
Tropical Cyclone (TC) Formation Probability



>20% >40% >60%

Tropical Depression (TD) or greater strength

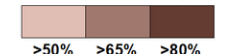
Above-Average Rainfall Probability



>50% >65% >80%

Weekly total rainfall in the Upper third of the historical range

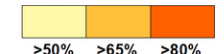
Below-Average Rainfall Probability



>50% >65% >80%

Weekly total rainfall in the Lower third of the historical range

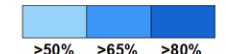
Above-Average Temperatures Probability



>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: 02/27/2024
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.

The RMM-based Madden Julian Oscillation (MJO) has retreated into the unit circle during the past week. However, increased divergence in the upper-level velocity potential fields and negative outgoing longwave radiation (OLR) anomalies are more suggestive of an active MJO across Africa and crossing into the western Indian Ocean. It is plausible that the 120-day mean removal is resulting in a rightward skewing of the RMM-based plots due to the strong Indian Ocean Dipole event last Fall. The GEFs and ECMWF ensembles indicate continued eastward MJO propagation with a quick phase speed, although the amplitude may be overdone due to the aforementioned rightward bias. The degree of interference from Rossby Wave activity is likely to play a role in the propagation speed but all models indicate the MJO remaining active with increased potential for a global circumnavigation by the end of March.

The global tropics have been quiet for the past week, with no new tropical cyclone (TC) formations. TC activity is forecast to increase across the Indian Ocean with potential development to the east of Madagascar during the next few days as the MJO propagates into the Indian Ocean. By week-2, the convective envelope is forecast to continue moving eastward, with the highest chances for TC formation (greater than 40 percent) favored across the south-central and southeastern Indian Ocean to the northwest of Australia. The faster phase speed depicted in the ECMWF may allow for favorable conditions to extend along the north coast of Australia and into the Gulf of Carpentaria, supporting at least a 20 percent chance for TC formation in those regions. For week-3, a broad region with at least a 20 percent chance of TC formation is highlighted from the southeastern Indian Ocean, along the northern coast of Australia, and through the Coral Sea to Vanuatu. As with week-2, uncertainties regarding the phase speed of the MJO warrant a larger shape, but confidence is too low to increase probabilities, due in part to the longer lead time and less than

expected TC activity during previous episodes of favorable conditions over this area.

The precipitation outlook for weeks 2 and 3 is based on potential TC activity, the anticipated state of the MJO, and a skill-weighted consensus of GEFS, CFS, Canadian, and ECMWF ensemble mean solutions. Continued El Nino conditions support elevated probabilities for above-normal rainfall across the Equatorial Pacific for both periods, with the active MJO favoring above-normal rainfall across the southern Indian Ocean and southwestern Pacific. Above-normal rainfall is also predicted across portions of the southeastern U.S. Enhanced chances of below-normal rainfall are highlighted to the north of the Equator over the Pacific extending across the Phillipines to just south of Hawaii. High temperatures are a concern across southern Africa, and also across portions of Central and South America, which when combined with below normal rainfall, may exacerbate drought conditions and water shortages over some areas.

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.