

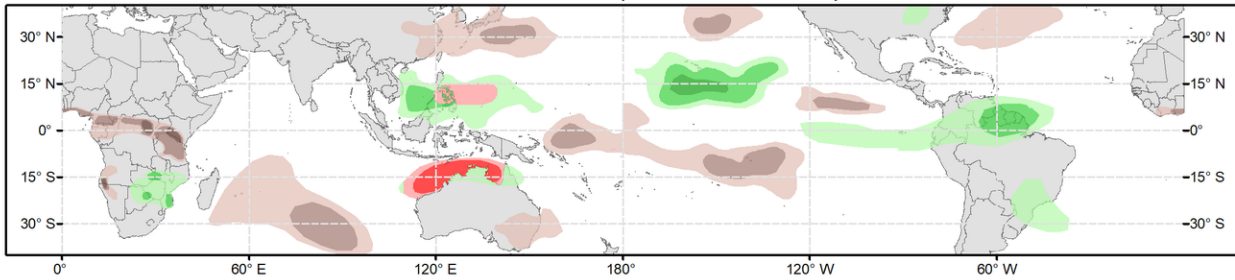


Global Tropics Hazards Outlook

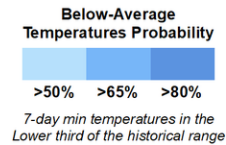
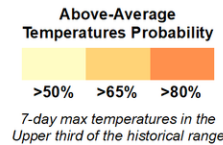
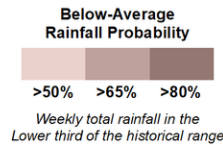
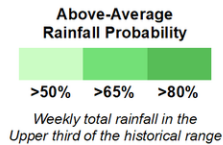
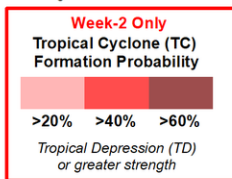
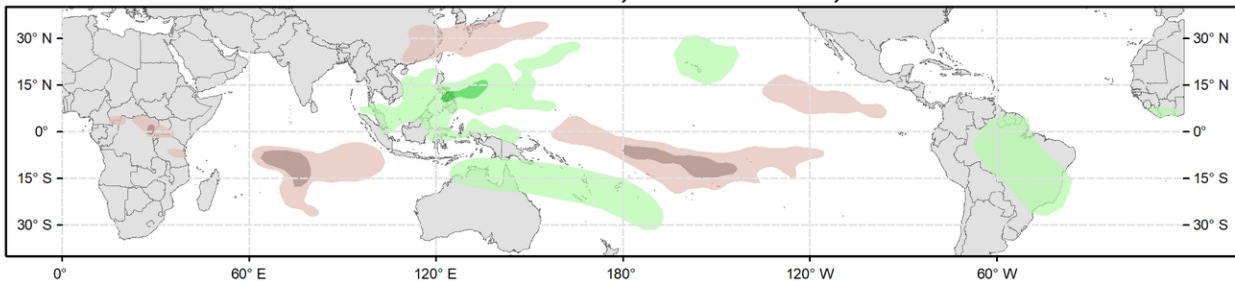
Climate Prediction Center



Week 2 - Valid: Feb 15, 2023 - Feb 21, 2023



Week 3 - Valid: Feb 22, 2023 - Feb 28, 2023



Issued: 02/07/2023
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.

A coherent Madden Julian Oscillation (MJO) signal has existed throughout January and early February. During the past week, the RMM-based MJO index indicated a slowing of the eastward propagation of the intraseasonal signal across the Indian Ocean due to increased equatorial Rossby Wave activity. This has also resulted in constructive interference with the background La Nina state, and a subsequent reemergence of a pattern typical of La Nina across the extratropics. The GEFS and ECMWF ensembles predict that the MJO will quickly resume its eastward propagation during the next week, possibly reaching the Western Pacific by week-2. Beyond week-2, model ensembles generally depict the MJO continuing to propagate into the Western Hemisphere, where it could help drive a pattern change across the U.S. during late February and early March, possibly bringing relatively cooler conditions to the eastern half of the country.

The MJO centered over the eastern Indian Ocean and associated enhanced convective envelope over much of the eastern Hemisphere has led to a more favorable environment for tropical cyclone (TC) development. Cyclone Freddy formed on 2/6 to the northwest of Australia, and is expected to track west to west-southwestward posing no threat to land. Two other disturbances are being monitored for potential development, 94S over the southeastern Indian Ocean, and 99P over the Coral Sea. In addition to being climatologically active, favorable conditions for TC development are forecast to persist into week-2 along the Kimberley Coast of northwestern Australia and extending into the Gulf of Carpentaria. This supports a 40 percent chance of TC formation during the period. A 20 percent chance of TC formation is noted near the Phillipines and to the east. Although not as climatologically active, the MJO shifting into the Western Pacific may aid in TC development in that region as indicated in the GEFS and CFS ensembles. There are also some increased signals in the dynamical

models for TC development across the southwestern Indian Ocean. However, given that the suppressed phase of the MJO is forecast to reach the Indian Ocean by this period, no risk area is highlighted in today's forecast.

The precipitation outlook for weeks 2 and 3 are based on a historical skill weighted blend of the GEFS, CFS, ECCO, and ECMWF models, MJO precipitation composites for phases 5 through 8, and considerations on the ongoing La Nina background state. The quick MJO propagation across the Pacific favors areas of above-average rainfall over parts of the western Pacific and northern Australia, the central equatorial Pacific north of the equator (including parts of Hawaii), and over parts of the Americas. Drier than average conditions are forecast over the Indian Ocean due to the suppressed phase of the MJO, and across the south-central equatorial Pacific due to La Nina.

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.