

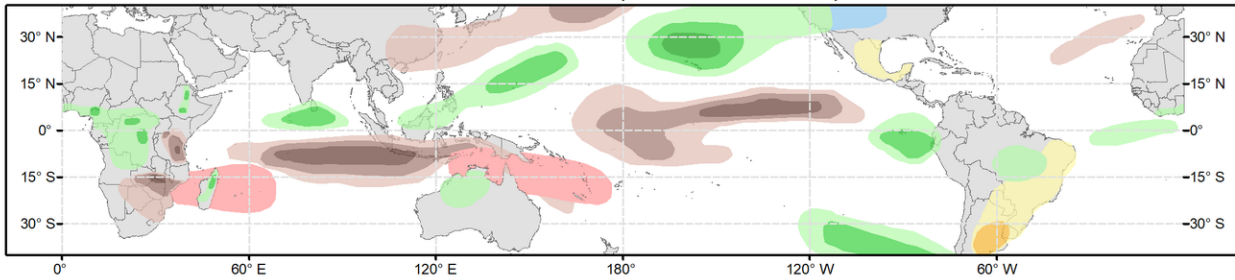


# Global Tropics Hazards Outlook

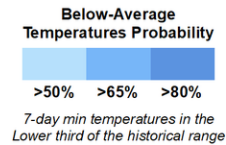
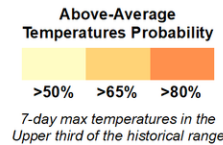
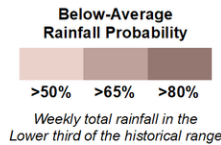
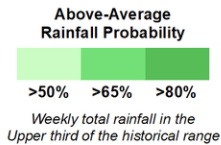
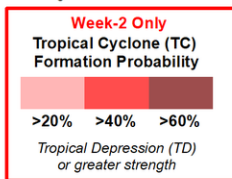
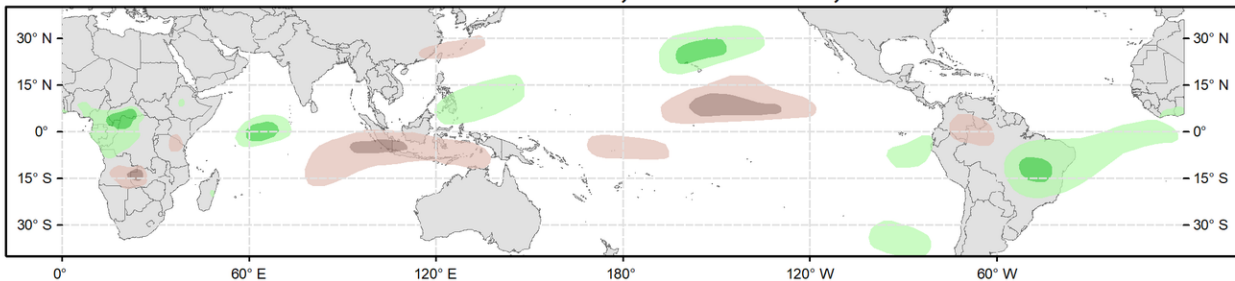
## Climate Prediction Center



**Week 2 - Valid: Mar 08, 2023 - Mar 14, 2023**



**Week 3 - Valid: Mar 15, 2023 - Mar 21, 2023**



**Issued: 02/28/2023**

**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 Madden-Julian Oscillation (MJO) has weakened over the last week after nearly a month of robust activity after being subject to interference from the La Nina base state and copious Rossby Wave activity. Currently the RMM index is roughly in phase 7 but well within the unit circle. Dynamical models are in good agreement in depicting a significant re-strengthening of the MJO during week-1 over the Western Pacific and resuming eastward propagation into the Western Hemisphere during week-2. The actual magnitude of MJO amplification is subject to a good deal of uncertainty; recent plentiful Rossby wave interference and a potential transition away from La Nina can skew the RMM signal strength. La Nina conditions remain but are weakening as enhanced trade winds over the tropical Pacific subside and periodic anomalous low-level westerlies continue to erode anomalously cold upper-ocean heat content of the Equatorial Pacific.

In the last week two tropical cyclones (TCs) formed, both in the Southern Hemisphere. On Feb 22 TC Enala formed west of the Cocos Islands. It strengthened modestly and tracked southwest to its current location near 30E, 20S. In the coming days it is expected to continue moving southward and transition to an extratropical system. On Feb 26 TC Judy formed north of Fiji. It initially tracked westward, then turned south towards Vanuatu. In the coming days the most likely track continues south, then southeastward, passing near Vanuatu then through the gap between Fiji and New Zealand, eventually transitioning to an extratropical system.

With the MJO favored to re-strengthen over the Western Pacific during the next week, along with lingering effects from the La Nina base state, conditions are favorable for tropical cyclone (TC) formation along the northeast coast of Australia and extending eastward to New Caledonia and Vanuatu during week-2. An

MJO in phase 7 and 8 also favors the potential for TC formation near Madagascar, which is also supported by dynamical guidance, therefore a slight chance for TC genesis is highlighted for the Mozambique Channel and the waters east of Madagascar.

The precipitation outlook for the next two weeks is based on anticipated TC tracks, ongoing La Nina conditions, and consensus of GEFS, CFS, and ECMWF ensemble mean solutions. Suppressed convection continues near and east of the Date Line due to lingering La Nina effects during week-2; this signal weakens during the week-3 time period. Below-normal precipitation is also indicated for much of the Equatorial Indian Ocean during both weeks, particularly during week-2 with a strong MJO in phase 7. Enhanced precipitation continues for the Hawaii region throughout the forecast period. Enhanced precipitation is also favored for eastern Brazil, and much of eastern South America tilts towards above-normal temperatures during weeks 2 and 3 especially for parts of Brazil and northern Argentina. Above-normal temperatures are also favored for much of Mexico and South Texas during week-2, while below-normal temperatures are indicated for the southwestern and south-central U.S.

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.