

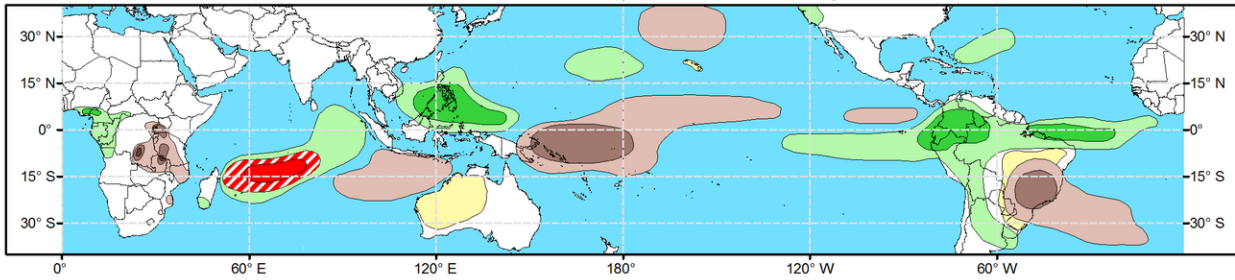


# Global Tropics Hazards Outlook

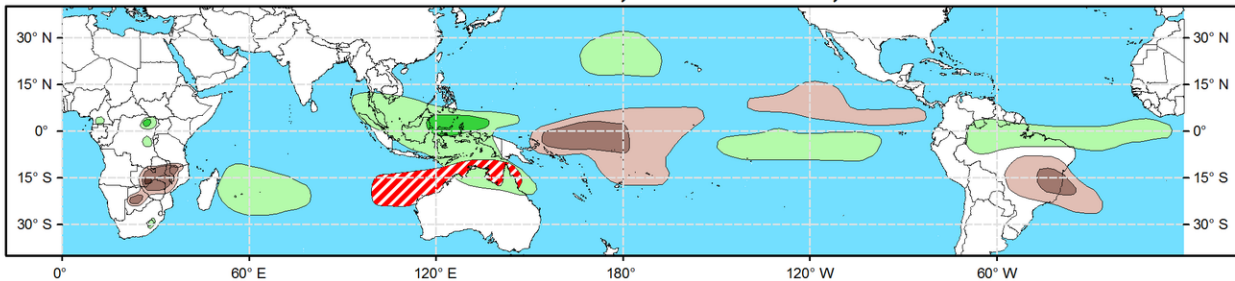
## Climate Prediction Center



**Week 2 - Valid: Mar 05, 2025 - Mar 11, 2025**



**Week 3 - Valid: Mar 12, 2025 - Mar 18, 2025**



**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: 02/25/2025**  
**Forecaster: Long**

**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.**

After having a strong, canonical signal over the past few months, the Madden-Julian Oscillation (MJO) has encountered interference that has slowed its eastward progression. The RMM observations show the MJO signal quickly traversing the Western Pacific and moving into the Western Hemisphere in the first half of the month when it then stalls and moves into the unit circle. This interruption in the signal is due to deconstructive interference from a strong equatorial Rossby Wave and the low-frequency La Nina base state. This interference also caused convection along the equator which impacted the strong, dry La Nina footprint in the central Pacific near the Date Line. Over the past few days, the MJO signal has slowly begun propagating eastward again just inside the unit circle into Phase 1. After about a week of getting reorganized, the MJO signal is predicted to gain strength at the end of Week-1 and move into the Indian Ocean by the end of Week-2. By Week-3, the models offer varying solutions on the strength and speed of the MJO signal in RMM space with significant spread amongst the individual members. However, the model forecasts for 200-mb velocity potential anomalies show more agreement among the models with a wave-1 pattern reforming by Week-3 and the enhanced convective envelope organizing over the Indian Ocean. Model guidance also suggests the return and strengthening of the dry signal along the equator associated with La Nina in the coming weeks.

The start of last week continued a quiet period for Tropical Cyclone (TC) activity with no new cyclogenesis and the long-lasting Taliah finally losing its tropical characteristics on 2/19 and being absorbed into the westerlies. The Southern Hemisphere then woke up with five new tropical systems forming since 2/20. TC Alfred formed on 2/22 in the North Coral Sea after being tracked by the Joint Typhon Warning Center (JTWC) as a depression since 2/20. Alfred tracked eastward before shifting to a nearly straight southward path. It is

forecasted to curve west toward the eastern Australian coast. TC Rae also formed on 2/22 in the open waters of the South Pacific near the dateline and quickly intensified to 90 kts but has since begun to weaken. TC Bianca formed on 2/23 after being tracked as a depression in the Timor Sea by the JTWC since 2/20. It rounded the subtropical ridge over Western Australia and then began moving southward where it currently continues to track along the western periphery of the steering ridge. TC Seru formed north of New Caledonia on 2/24 after being tracked as a depression by the JTWC beginning the day prior. It continues its southeasterly track as it heads toward the Date Line. Finally, TC Garance formed off the northeast coast of Madagascar on 2/25. The storm is tracking eastward, but is forecasted to encounter a deep subtropical ridge to the east, causing it to turn sharply southward towards Reunion Island. During the Week-1 period, there is also the possibility for additional tropical development to the east of Madagascar over the next 24 hours. Please refer to the JTWC for updates on these ongoing and potential systems.

With the MJO forecasted to be fairly weak and undergoing reorganization during Weeks-1 and -2, there is more uncertainty in the TC formation outlook at this time period. Enhanced convection is forecasted for the western Indian Ocean which may lead to TC genesis which is consistent with increased chances for TC genesis in the MJO composites during Phases 1 and 2. Both the ECMWF and GEFS also favor TC formation in this region, therefore 40-60% chances of TC genesis are issued in the Indian Ocean centered around 60E with 20%-40% chances extending from northern Madagascar to about 80E. A region in the South Pacific Ocean near the dateline was also considered for development from model guidance, but the signal looks to be remnants of current tropical systems and subsidence is forecasted in the region. By Week-3, there is slightly more confidence in the MJO forecast with the signal reorganizing into a wave-1 pattern, and the leading edge of the enhanced convective envelope reaching Australia. This along with model guidance favors a slight risk of TC genesis from the western South Indian Ocean eastward to the Gulf of Carpentaria.

Forecasts for enhanced and suppressed precipitation are based on the continued La Nina response, historical MJO composites for phases 1-3 during Feb-Apr, anticipated TC tracks and a skill weighted consolidation of GEFS, CFSv2, and ECMWF ensemble forecast systems. Because of the less organized MJO signal and the signal being at odds with La Nina, probabilities were dampened over much of the tropics. A forecast for above-average temperatures remains in northwestern Australia mainly for the early part of Week-2. The warm, dry conditions are also expected to continue in Southern Brazil and central South America.

For hazardous weather conditions in your area during the next two weeks, please refer to your local NWS office, the Medium Range Hazards Forecast from the Weather Prediction Center (WPC), and the CPC Week-2 Hazards Outlook. Forecasts issued over Africa are made in coordination with the International Desk at CPC.