

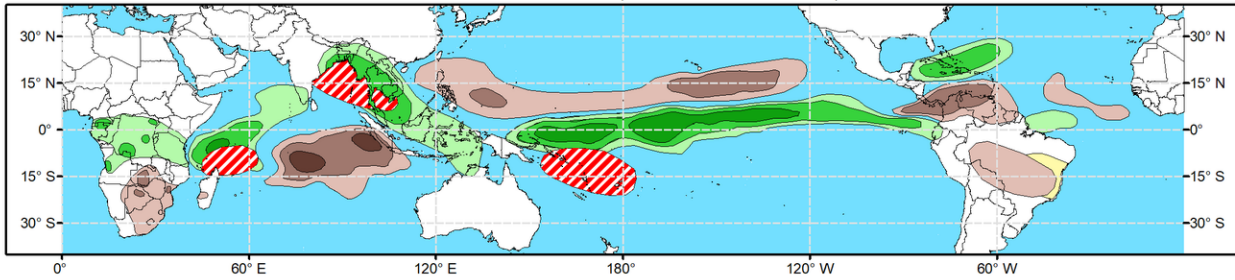


Global Tropics Hazards Outlook

Climate Prediction Center

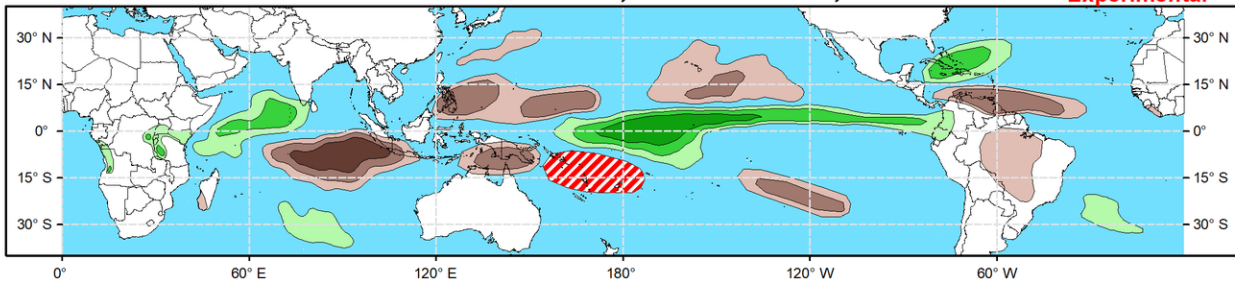


Week 2 - Valid: Dec 06, 2023 - Dec 12, 2023

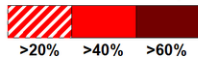


Week 3 - Valid: Dec 13, 2023 - Dec 19, 2023

**** Experimental ****

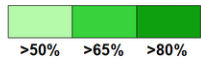


Tropical Cyclone (TC) Formation Probability



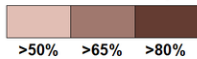
Tropical Depression (TD) or greater strength

Above-Average Rainfall Probability



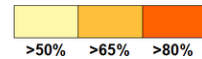
Weekly total rainfall in the Upper third of the historical range

Below-Average Rainfall Probability



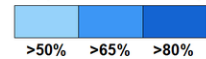
Weekly total rainfall in the Lower third of the historical range

Above-Average Temperatures Probability



7-day max temperatures in the Upper third of the historical range

Below-Average Temperatures Probability



7-day min temperatures in the Lower third of the historical range

Issued: 11/28/2023

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.

The RMM-based MJO signal continues to remain amplified and has propagated eastward into the Indian Ocean during the past week. A wave-1 asymmetry pattern is depicted in the spatial upper-level velocity potential anomalies with upper-level divergence (convergence) indicated across Africa and the Indian Ocean (Western Hemisphere), a pattern consistent with the MJO and the ongoing positive phase of the Indian Ocean Dipole (+IOD). Although destructive interference with the low frequency El Nino base state is favored in the near-term, both the GEFs and ECMWF ensembles are in good agreement regarding continued eastward propagation of the intraseasonal signal into the Pacific during the next 2 weeks, which favors more constructive interference with El Nino, and a return to a convective pattern more resembling the low frequency base state by mid-December.

The only tropical cyclone (TC) formation during the past week was Tropical Storm Ramon in the East Pacific on 11/23, which was a weak system with no impacts to land. Elsewhere, the global tropics have been quiet, although activity may begin to increase across the Indian Ocean given the favorable convective environment aloft. Invest 99W may develop into a tropical cyclone over the Bay of Bengal during the next few days, and this area could remain active into week-2, where a 20 percent chance of TC development is highlighted. The +IOD favors increased moisture over the western Indian Ocean, and it is plausible that a TC could spin up during the week-2 period, supporting a 20 percent chance of TC formation around the northern tip of Madagascar and extending eastward to around 60 deg E.

Consistent with the predicted MJO evolution, the main convective envelope is forecast to shift eastward later in week-2 and into week-3, and this could increase TC development chances across the southwestern Pacific during the

first half of December. TC track probabilities are elevated in the GEFS and ECMWF ensembles across the Coral Sea and near the Solomon Islands and Vanuatu, and a 20 percent chance of TC development is highlighted over these areas for weeks 2 and 3. The return to a convective pattern more typical of El Nino favors TC genesis chances shifting more eastward, tied to the continued propagation of the enhanced convective envelope into the Central Pacific, as well as increasing constructive interference with the reemerging low frequency base state. While the convective environment may also become more favorable across the western North Pacific during the next 2-3 weeks, no TC risk areas were designated given today's dynamical guidance generally depicting elevated chances of TC development in the Southern Hemisphere, and is more consistent with climatology going into December.

The precipitation outlook for weeks 2 and 3 are based on a historical skill weighted blend of the GEFS, CFSv2, ECCO, and ECMWF ensembles, influences from the El Nino and +IOD, with added consideration of MJO propagation from the Indian Ocean to the Western Pacific during Oct-Dec. Forecasts made over Africa are made in coordination with the International Desk at CPC. Heavy rainfall is likely over parts of central Africa and the western Indian Ocean, although chances diminish by week-3 as the +IOD weakens. Over South America, hot and dry weather is forecast to persist across eastern Brazil during week-2 with some areas having maximum temperatures exceeding 35 deg C (95 deg F).

For hazardous weather concerns in your area during the next two weeks, please refer to your local NWS office, the Medium Range Hazards Forecast produced by the Weather Prediction Center (WPC), and the CPC Week-2 Hazards Outlook.