

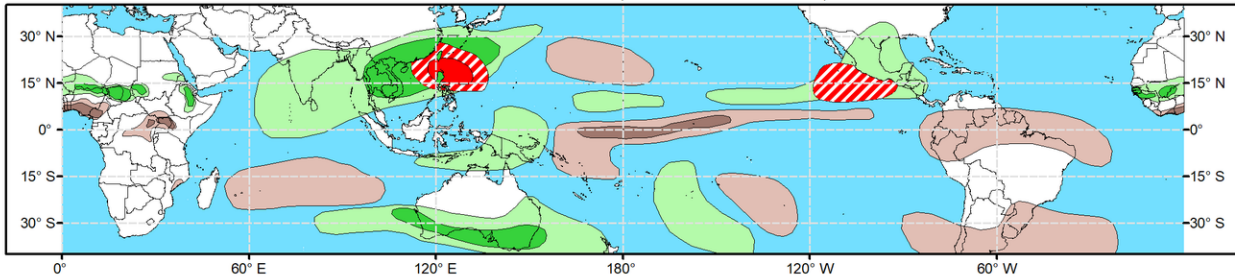


Global Tropics Hazards Outlook

Climate Prediction Center

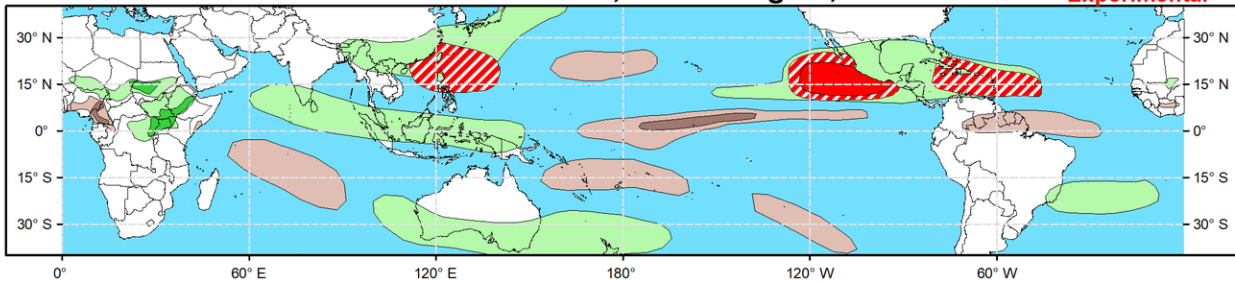


Week 2 - Valid: Jul 24, 2024 - Jul 30, 2024



Week 3 - Valid: Jul 31, 2024 - Aug 06, 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: 07/16/2024

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.

A coherent wave-1 pattern has recently emerged in 200-hPa velocity potential (VP) anomalies and has shown some modest eastward propagation over the last week or so. The RMM index currently places the MJO in phase 5 (Maritime Continent) just outside the unit circle. There is quite a diversity of opinion among forecast models with regard to MJO evolution in the coming weeks. Some models, notably the GFS favor a very weak RMM signal with little propagation, while many models including the ECMWF, BoM, and CFS models favor higher amplitudes and steady eastward movement of the enhanced convective envelope into and across the Pacific throughout the forecast period. The current strength and apparent movement of the wave-1 VP dipole would tend to favor the more bullish MJO forecasts.

One tropical cyclone (TC) formed over the last week. On July 14 TC 03W formed in the South China Sea southeast of Da Nang, Vietnam. It quickly moved ashore over the central Vietnamese coast and dissipated by the 15th.

Synoptic conditions over the Western Pacific forecast to be initially conducive for tropical cyclone (TC) genesis at the outset of week-2 but are forecast to become less favorable as the forecast period continues, with the MJO depicted as either propagating away from the Maritime Continent or weakening in amplitude. For today's preliminary forecast a moderate risk (40% probability) of TC genesis is posted for portions of the South China Sea and Philippine Sea for week-2 and a slight risk (20% probability) for the same areas for week-3.

Meanwhile, the anticipated propagation of the MJO would tend to produce an increasingly favorable environment for TC genesis over the eastern Pacific Ocean. The ECMWF is very bullish in this regard, depicting probabilities of TC activity for the basin exceeding 60% into week-3 and beyond. Therefore, a

slight risk for TC genesis is posted for portions of the Eastern Pacific basin for week-2 and a moderate risk for week-3. A slight risk for TC genesis is also posted for portions of the Caribbean and the tropical Atlantic where SSTs are very warm, and which also become more favored for TC development as the convectively enhanced phase of the MJO propagates further into the central Pacific.

The precipitation outlook for weeks 2 and 3 is based on potential TC activity, the anticipated state of El Nino and the MJO, and informed by GEFS and ECMWF ensemble mean solutions. Enhanced precipitation is favored over portions of Southeast Asia and the Maritime Continent throughout the forecast period. Increased chances for above-normal precipitation are also indicated for much of Central America for both weeks. Below-normal precipitation is favored over the equatorial Central Pacific for both weeks, potentially a result of a weakening El Nino, as well as for the southern Indian Ocean.

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.