

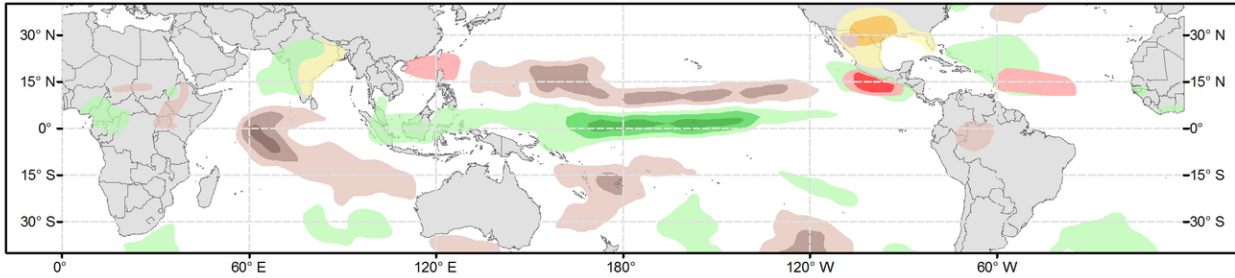


Global Tropics Hazards Outlook

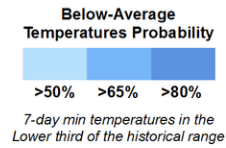
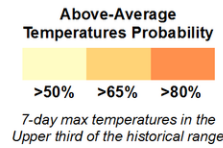
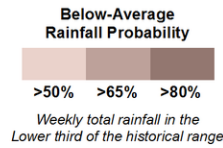
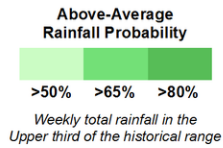
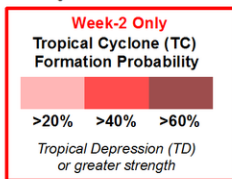
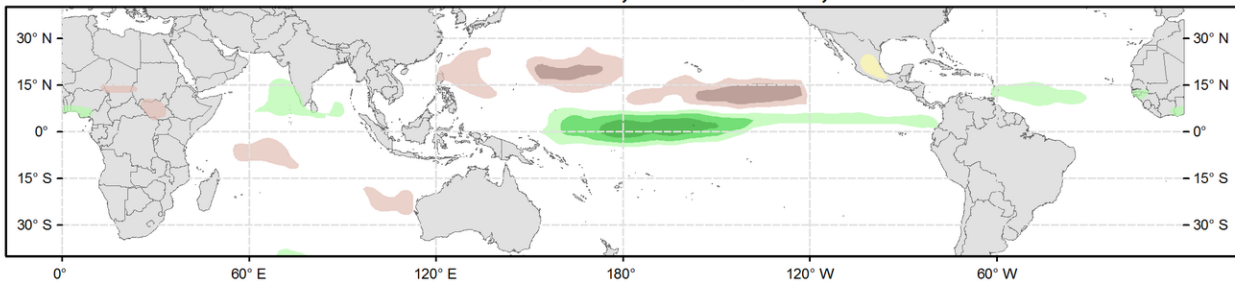
Climate Prediction Center



Week 2 - Valid: Jun 28, 2023 - Jul 04, 2023



Week 3 - Valid: Jul 05, 2023 - Jul 11, 2023



Issued: 06/20/2023
Forecaster: Pugh

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) weakened during mid-June based on a decrease in the amplitude of the RMM-based index and also smaller 200-hPa velocity potential anomalies. However, its spatial field continues to feature a coherent pattern with anomalous upper-level divergence (convergence) over the Maritime Continent and west-central Pacific (Americas, Atlantic, and Africa). Ahead of the weakening MJO, a Kelvin wave is crossing the Western Hemisphere. During late June and early July, the GFS and ECMWF are in good agreement that the MJO remains weak. The low frequency El Nino base state is expected to provide the greatest influence on global tropical rainfall and tropical cyclone (TC) development.

The only TC to develop across the globe during the past week was newly formed Tropical Storm Bret in the central Atlantic. The National Hurricane Center (NHC) forecasts Bret to approach the Lesser Antilles on June 22 and 23. Bret will bring a risk of flooding from heavy rainfall, strong winds, and dangerous waves. A tropical wave, located several hundred miles southwest of the Cabo Verde Islands, has a 80 percent chance of becoming a tropical depression during the next week. Please refer to the NHC for the latest updates on Bret and what is likely to be another TC in the Atlantic basin.

Another tropical wave is forecast to emerge over the eastern Atlantic by week-2. Based on dynamical model output, including ECMWF weekly anomalies, a 20 percent chance of TC development is posted for the central Atlantic basin during week-2. Over the eastern Pacific, the deterministic model runs remain consistent that a TC forms just offshore of southern Mexico just prior or at the beginning of week-2. The GFS model is most bullish with maintaining an increased chance of TC development through week-2. Based on dynamical model support and consistency, a 40 percent chance of TC development is designated

for the basin during week-2. Overall during week 2 across the West Pacific, the signal among tools is relatively weak for TC development. However, a 20 percent chance area is designated for the South China Sea and between Taiwan and the Philippines as recent model solutions have depicted an increased potential for a TC forming in that broad region and then tracking northward.

The precipitation outlook for weeks 2 and 3 are based on a historical skill weighted blend of the GEFS, CFS, ECCO, and ECMWF models, typical summertime influences associated with El Nino, and considerations of predicted TC tracks. Related to El Nino, above-average rainfall is likely across much of the equatorial Pacific with below-average rainfall favored to the north of the equator. The northward advance of the Indian monsoon is delayed, but the dynamical models favor above-average rainfall across parts of western and northern India during week-2. The North American monsoon remains suppressed and anomalous 500-hPa ridging is forecast to be displaced south of its typical position heading into the beginning of July. Therefore, below-average precipitation and above-normal temperatures are favored across northern Mexico and the southwestern United States through at least week-2. The enhanced probabilities for above-normal temperatures extends east across the Gulf Coast and Florida during week-2.

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.