

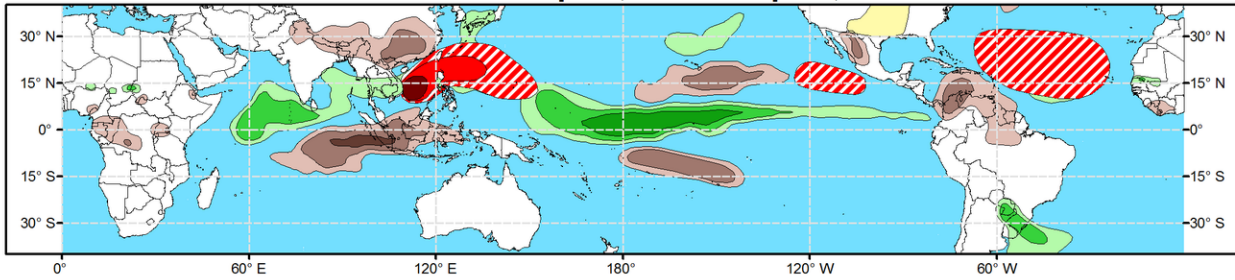


# Global Tropics Hazards Outlook

## Climate Prediction Center

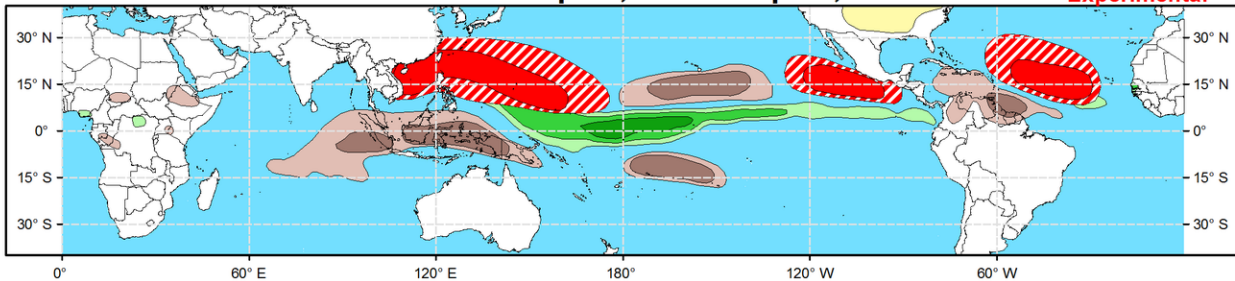


**Week 2 - Valid: Sep 06, 2023 - Sep 12, 2023**



**Week 3 - Valid: Sep 13, 2023 - Sep 19, 2023**

**\*\* 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: 08/29/2023**  
**Forecaster: Allgood**

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 atmospheric response to the ongoing El Niño conditions across the central and eastern Pacific remains the primary driver of global tropical convective anomalies. A downwelling oceanic Kelvin wave is currently bringing a new round of warmer upper-ocean water across the central Pacific, which should reinforce the ongoing ENSO event, and ocean temperatures over the West Pacific Warm Pool have begun to decrease, which may further weaken the Walker circulation with time, resulting in a more canonical atmospheric response. Following a period of incoherence, the MJO has recently become more active, with the CPC upper-level velocity potential index reflecting an eastward propagating signal across the Western Hemisphere. Although the signal is less substantial on the RMM-based MJO index, dynamical model MJO index forecasts have become increasingly confident in continued evolution of the intraseasonal signal, with a robust amplitude MJO footprint over the Maritime Continent during Week-2, and many ensemble members propagating the signal to the West Pacific in Week-3. Based on these forecasts, the MJO is favored to play an increasing role in the global tropical convective pattern over the next few weeks, with its impacts somewhat destructively interfering with the ENSO base state during Week-2, with constructive interference increasing during Week-3.

Several tropical cyclones formed during the past week. Tropical Storm Harold formed over the Gulf of Mexico on 22 August, just prior to making landfall over southern Texas. The system brought widespread heavy rainfall to southern Texas and the lower Rio Grande Valley. Hurricane Idalia formed over the far western Caribbean on 27 August, and is currently moving northward over the eastern Gulf of Mexico. Forecasts from the National Hurricane Center indicate a potential for rapid intensification over the next day, with devastating impacts possible along Apalachee Bay, and more widespread wind and rain impacts across the far southeastern CONUS. Tropical Depression Eleven also formed over the central

Atlantic, with little impacts anticipated over the next few days. Across the East Pacific, Tropical Storm Irwin formed well southwest of Mexico, and is forecast to gradually dissipate while moving westward over cooler waters. Over the West Pacific, Typhoon Saola has meandered near Luzon for several days, and is forecast to move into the South China Sea during Week-1, while Tropical Storm Haikui is favored to strengthen to typhoon intensity while tracking gradually west-northwestward away from Guam and towards the East China Sea.

During Week-2, the enhanced convective phase of the MJO propagating from the Maritime Continent to the West Pacific is typically associated with enhanced tropical cyclone activity over the South China Sea and portions of the Northwest Pacific. This activity is supported by dynamical model forecasts. Therefore, there is high confidence for tropical cyclone formations over the South China Sea, with moderate confidence extending eastward to the Northwest Pacific northwest of Luzon. A broader region exceeding 20-percent chances for formation exists across much of the Northwest Pacific near and west of Guam. During Week-3, a broader region of favorability is highlighted, extending further southeast across the West Pacific basin. Across the East Pacific, the forecasted MJO activity is generally unfavorable for development, but due to ongoing El Nino conditions and some dynamical model support, a region of 20-percent chances for development is included well southwest of Mexico. Across the Atlantic basin, both the El Nino and MJO states would favor a break in activity; however, due to very warm SSTs across much of the basin, as well as peak climatology occurring during the outlook period, a broad area of 20-percent chances for formation was included across the MDR, with favorability extending into higher latitudes based on the ocean temperatures. During Week-3, confidence for development increases somewhat across both the East Pacific and Atlantic basins, although dynamical models show a relatively quiet Caribbean and Gulf of Mexico.

Forecasts for above- and below-normal precipitation are based on composites of historical El Nino events, MJO activity over the Maritime Continent and West Pacific, and a skill weighted consensus of dynamical model guidance. A highly amplified ridge over South America is favored to shift, bringing a potential for wet conditions across southern Brazil, northwestern Argentina, Uruguay, and Paraguay, while persistent ridging continues to favor above-normal temperatures for the central U.S. Subsidence south of enhanced precipitation associated with El Nino conditions may bring drier conditions to American Samoa. 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.