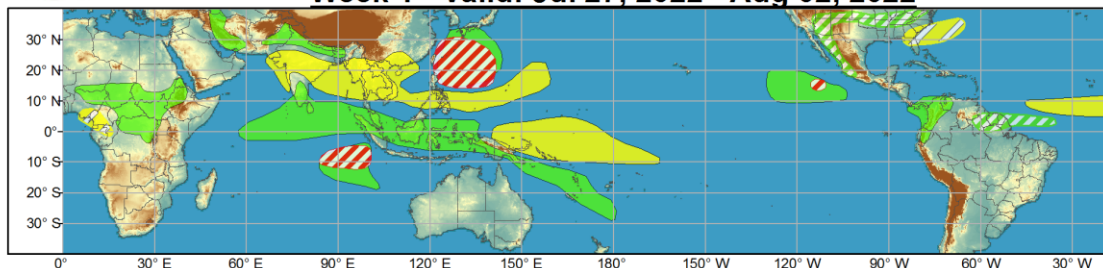


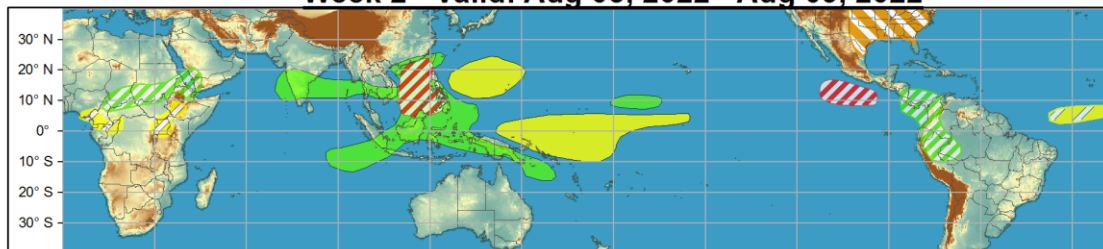


Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Jul 27, 2022 - Aug 02, 2022



Week 2 - Valid: Aug 03, 2022 - Aug 09, 2022



Confidence		Produced Forecasts
High	Moderate	
		Tropical Cyclone Formation Development of a tropical cyclone (tropical depression - TD, or greater strength).
		Above-average rainfall Weekly total rainfall in the upper third of the historical range.
		Below-average rainfall Weekly total rainfall in the lower third of the historical range.
		Above-normal temperatures 7-day mean temperatures in the upper third of the historical range.
		Below-normal temperatures 7-day mean temperatures in the lower third of the historical range.

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



The footprint of the Madden-Julian Oscillation (MJO) remained weak as diagnosed by the CPC potential index, but exhibited some amplitude over the Western Hemisphere on the RMM-based index. Following a fairly robust intraseasonal signal through early June, the MJO weakened as an enhanced convective phase reached the Pacific and encountered destructive interference from an unusually robust La Nina base state. Convectively coupled Kelvin wave activity helped bring some enhanced convection across the Western Hemisphere, and may have aided in the formation of Storm Frank over the East Pacific basin south of Mexico. More recently, the upper-level velocity rapidly shifted, with enhanced divergence aloft overspreading Africa and the Indian Ocean. The transition does not seem to be related to the Kelvin wave activity, and may be reflective of mid-tropospheric influences. Regardless of the origins of this pattern shift, enhanced convection has begun to form over the eastern Indian Ocean, and this signal may result in renewed MJO activity over the next couple of weeks. Dynamical model MJO index forecasts are generally reflective of MJO activity, depicting

vorticity both north and south of the Equator over the eastern Indian Ocean tied to potential wind burst. Dynamical model guidance and forecasts from the Joint Typhoon Warning Center indicate that there is a moderate potential for unusual tropical cyclogenesis over an area of the southern Indian Ocean between Diego Garcia and the Cocos Islands. Any development, should it occur, will be brief given marginal sea surface temperatures (SSTs) in the region. Elsewhere, there is a brief period of favorability for tropical cyclone development over the Northwest Pacific northeast of the Philippines and south of Japan. Over the East Pacific, a brief tropical cyclone may form from a disturbance associated with Tropical Storm Frank before dissipating due to interference from the stronger system. While Indian Ocean MJO events are typically tied to increased favorability for Atlantic tropical cyclone activity, the presence of a Saharan Air Layer (SAL) precludes any development during Week-1. During Week-2, dynamical models indicate a potential for tropical cyclone formation over the South China Sea. Based on climatology, a somewhat favorable environment, and support from the GEFS model indicate a potential for new tropical cyclogenesis over the East Pacific south of Mexico. No tropical cyclone development is anticipated across the Atlantic basin, possibly due to additional SAL intrusions.

Forecasts for above- and below-average precipitation reflect tropical cyclone track forecasts, the consensus among the dynamical model guidance, and precipitation composites of boreal summer La Nina events and Indian Ocean and Maritime Continent MJO events. A break in monsoon activity over South and Southeast Asia is favored for Week-1 with enhanced convection shifting towards the Philippines. In contrast, enhanced monsoon moisture is favored for northwestern Mexico and the southwestern United States, bringing a potential for localized flash flooding. A blocking ridge over western Asia favors continued enhanced rainfall across portions of eastern Africa and southwestern Asia, while a strong dry signal over the Pacific near the Date Line is favored to persist due to the La Nina response. During Week-2, wet conditions are favored to return to portions of South and Southeast Asia and the Philippines, while increased ridging over North America favors an outbreak of a heatwave event across the central and eastern CONUS.

For hazardous weather concerns during the next two weeks across the U.S., please refer to your local weather office, the Medium Range Hazards Forecast from the Weather Prediction Center, and the Weekly Weather and Climate Hazards Outlook at CPC. Forecasts over Africa are made in coordination with the International Research Institute for Climate Prediction (IIRIC).