

Tropical Storm Boris developed over the East Pacific basin near 133W, well to the southwest of Mexico, and is forecast to gradually dissipate in an increasingly unfavorable environment. Additional tropical cyclogenesis remains possible further east over the East Pacific, though probabilities have decreased compared to the initial outlook. NHC maintains a 40 percent chance of a tropical cyclone developing south of Mexico during the remainder of the Week-1 period. During Week-2, dynamical models continue to favor a second tropical cyclone forming closer to the southern Mexican coast.

Saharan dust plumes remain the feature of note across the Atlantic basin, with the extremely thick first plume now arriving over the Gulf Coast states, and a second plume extending across the MDR to the eastern Caribbean. Although the dynamical model guidance does not exhibit a strong precipitation signal, elevated chances of below-normal rainfall associated with the dust plumes remains in place across the Caribbean basin.

Elsewhere, enhanced and suppressed precipitation forecasts were updated to reflect the latest model guidance. Hazardous heat is anticipated to persist across Florida under a deep layer ridge, and although seabreeze convection will continue, the coverage is favored to be less than normal.

The original discussion released on 23 June 2020 follows.

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The Tropics are especially active right now due to strong convectively coupled Kelvin wave activity (CCKW) in the East Pacific and Saharan dust throughout the Main Development Region (MDR) in the North Atlantic. The CCKW over the East Pacific is forecast to coincide with an area of anomalous convection, which will result in increased probabilities of tropical cyclogenesis over the East Pacific during the next two weeks. Today's GTH forecast features three regions in the East Pacific with a high risk of tropical cyclone formation during Week-1, which coincide with the latest forecasts from the National Hurricane Center (NHC). This threat will likely continue into Week-2, so a moderate risk of tropical cyclone formation has been posted for Week-2.

The NASA GEOS model indicates that a thick layer of dust reaches from the Sahara westward to Hispaniola during Week-1. A high risk of below normal rainfall has been posted as a result of this dust forecast. The GEOS suggests that the dust will play a weaker role during Week-2. At the same time, we expect the area of upper-level divergence associated with the aforementioned CCKW to propagate over the MDR, which could offset some of the enhanced dryness from the anomalous dust and lead to rainfall levels closer to climatology. This is especially difficult to forecast though, and given the recent drought conditions throughout Puerto Rico and the Virgin Islands, we advise affected parties throughout the Antilles to closely monitor precipitation forecasts from their local forecast offices.

Tropical storm Dolly formed earlier today in the North Atlantic according to the NHC. Dolly is forecast to track northeastward over the next couple of days, staying out at sea. We have forecast high confidence in above normal rainfall around the immediate path of this storm as it moves northeast and transitions into a cold core extratropical storm.

An area of enhanced convection associated with another CCKW has been over the eastern Indian Ocean this past week and is likely to propagate eastward during Week-1. There is a moderate chance of tropical cyclone formation just south of the equator in the central Indian Ocean due to a forecast

equatorial Rossby wave during Week-1. Otherwise, the forecast rainfall areas over the Indian Ocean and Maritime Continent are due to expected CCKW activity. There is high confidence in below normal rainfall areas just west of the antimeridian related to low frequency variability that has been consistent throughout the past several weeks.

Forecasts over Africa are made in consultation with CPC's international desk and can represent localscale conditions in addition to global-scale variability.