

The MJO remains weak, and La Nina conditions continue to dominate the overall tropical convective pattern. There is evidence of a subseasonal signal, however, with an enhanced convective envelope rapidly propagating across the Western Hemisphere. Combined with the low frequency signal favoring persistently enhanced convection across the eastern Maritime Continent and far West Pacific, the spatial pattern of upper-level velocity potential anomalies has exhibited a Wave-2 asymmetry over the past week. This resulted in a poor projection of the MJO onto the CPC velocity potential based index, but an eastward propagating Western Hemisphere signal remains evident on the RMM-based index, albeit weak. In conjunction with the La Nina conditions, this intraseasonal signal promotes a continued favorable environment for tropical cyclogenesis across the western Atlantic basin. Dynamical model MJO index forecasts favor continued eastward propagation, with a potential new Indian Ocean MJO event materializing during Week-2. Should this occur, conditions would become increasingly favorable for Indian Ocean tropical cyclogenesis during the outlook period, and may promote renewed West Pacific activity beyond the two-week outlook period. Indian Ocean MJO events also teleconnect well with a two-week lagged midlatitude pattern featuring troughing over western North America and ridging over eastern North America, which is consistent with model guidance for the Week 3-4 period.

Tropical Storm Eta is currently meandering over the eastern Gulf of Mexico after bringing widespread flooding rainfall to southern Florida. Forecasts from the National Hurricane Center show very slow northward movement of this system, with gradual weakening before the cyclone is absorbed into an advancing cold front. Tropical moisture associated with Eta or its remnants is expected to generate widespread heavy rainfall along the U.S. Eastern Seaboard. Elsewhere, Subtropical Storm Theta developed over the north Atlantic well west of the Canary Islands, and is moving east-northeastward over open waters. Following typhoons Goni and Atsani over the West Pacific and South China Sea, tropical storms Etau and Vamco formed in similar locations. Tropical Storm Etau is currently making landfall over central Vietnam, while Vamco is favored to strengthen to typhoon intensity before making landfall over the northern Philippines. Underneath a persistent ridge, Vamco is forecast to move westward across the South China Sea and make yet another landfall over central Vietnam.

During Week-1, additional tropical cyclogenesis is favored over the western Caribbean, in a location close to where Hurricane Eta formed. As of 1 pm EST, the National Hurricane Center forecasts a 70-percent chance of a tropical depression forming over the next 5 days. Dynamical model track guidance is mixed, with some models favoring landfall over Central America, and others depicting a northward turn towards Cuba. Additionally, a disturbance passing near the Lesser Antilles during Week-1 has a low to moderate potential for development, though recent runs of the GFS show a closed low forming for only a brief time before dissipating. During Week-2, favorable conditions are anticipated to continue across the western Caribbean, and there is a moderate potential for a second tropical cyclone to develop near Central America. Elsewhere, dynamical models, supported by the forecasted MJO evolution, favor tropical cyclone development over the south-central Indian Ocean, either during late Week-1 or early Week-2.

Precipitation forecasts are based on track guidance for existing tropical cyclones, dynamical model consensus, the low frequency La Nina base state, and MJO composites given a potential event developing over the Indian Ocean by Week-2. The overall pattern favors a suppressed North Pacific ITCZ, with enhanced convection over parts of South America, Africa south of the Equator, and the central Indian Ocean. Precipitation forecasts over Africa were made in consultation with the International Desk at CPC, and can represent local-scale conditions in addition to global-scale variability.