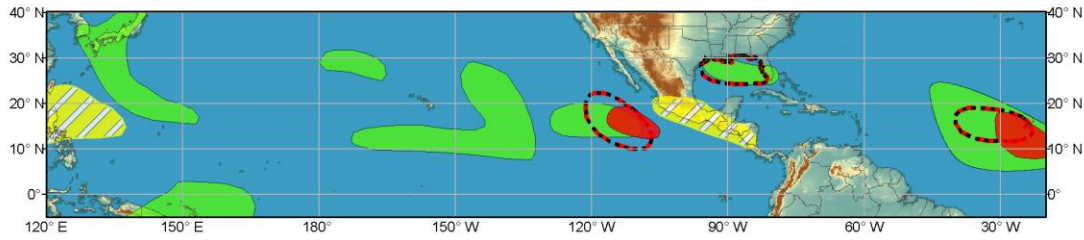




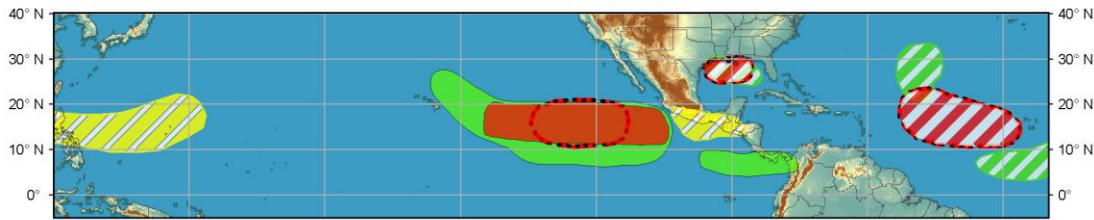
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Sep 01 2018 - Sep 04 2018



## Week 2 - Valid: Sep 05 2018 - Sep 11 2018



**Confidence**  
High Moderate

**Produced: 08/31/2018**  
**Forecaster: MacRitchie**

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Prior TC Formation Outlook** Tropical cyclone outlook from previous release.
- 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. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.**



Today's Friday update focuses on updates to areas of potential tropical cyclone development during the remainder of the Week-1 and Week-2 periods. Our general thinking about the large-scale state of the tropics in relation to the MJO and ENSO has not changed since Tuesday's forecast.

The Week-1 forecast tropical cyclone development area just west of the Cape Verde islands has been tweaked slightly to reflect the latest NHC guidance. As of the 2 pm EDT update today (Aug. 31), the NHC is forecasting a 90% chance that a tropical cyclone will form in this region within the next 48 hours. The associated forecast region of above-average rainfall has been expanded to account for this storm's forecast track as well as the latest model forecasts of the ITCZ. Similarly, the forecast region of tropical cyclone development over the Gulf of Mexico has been removed due to model guidance indicating reduced formation potential. The forecast TC formation region in the Gulf in Week-2 remains on the map, but model guidance has become more bearish about formation chances over the past few days so the forecast will be re-visited on Tuesday.

The region of tropical cyclone development in the East Pacific was modified to match NHC's latest predictions during Week-1 and expanded during Week-2 to match the latest model guidance, which suggests that tropical cyclone activity in the Eastern Pacific will remain high throughout the Week-2 period.

----- Previous forecast discussion follows: -----

The MJO remains weak, as reflected in both the CPC velocity potential based and RMM-based MJO indices. A low frequency signal favoring large-scale enhanced divergence (convergence) aloft over the central Pacific (Indian Ocean) has become increasingly apparent in time-longitude plots of velocity potential and upper-level wind anomalies, which is reflective of a gradual transition towards El Nino conditions. In addition to the base state, a robust equatorial Rossby wave is currently crossing the Maritime Continent, while a Kelvin wave is apparent in the OLR anomaly field over the Western Hemisphere. Dynamical model MJO index forecasts have shifted considerably from one week ago, and now depict a gradually enhancing convective signal over the Western Hemisphere by Week-2 instead of the Maritime Continent, albeit with little in the way of eastward propagation. It is possible that a combination of factors, including the aforementioned Rossby and Kelvin wave activity, model-generated tropical cyclone activity, and extratropical wave breaking into the tropics that increases upper-level ventilation over the Indian Ocean, are resulting in this projected amplification. Due to the absence of a clear intraseasonal signal in the upper levels, there is low confidence that the MJO will play a substantive role in the evolution of the global tropical convective pattern.

Three tropical cyclones formed over the Pacific during the past week. Tropical Storm Miriam is currently moving westward towards the central Pacific, and is forecast to strengthen to hurricane intensity before turning on a more northward track well east of Hawaii. To the east, Tropical Depression 16-E formed just prior to the release of this outlook south of the Baja California Peninsula. NHC forecasts indicate fairly rapid intensification of this depression as it moves on a generally westward or west-southwestward track over the next five days. Longer range forecasts indicate a continued westward track to the central Pacific. Over the West Pacific, Tropical Storm Jebi is currently northeast of Guam, and the Joint Typhoon Warning Center forecasts the storm to become a powerful typhoon over the next several days as it moves generally west-northwestward. A gradual turn to the northwest and north is anticipated later in the Week-1 period, with a potential for impacts across Japan. During Week-1, there is a moderate potential for additional tropical cyclogenesis over the East Pacific, near where TD 16-E developed. Additional development is possible during Week-2. A tropical disturbance is forecast to move from the

Bahamas across Florida and over the Gulf of Mexico during the next week and there is a moderate potential for this system to become a tropical cyclone. A moderate confidence shape was included in this outlook for both Week-1 and Week-2, reflecting the potential for development either towards the end of Week-1 or early in Week-2. Additionally, dynamical models indicate a potential for tropical cyclone development over the Atlantic MDR region. The NHC currently has a 20 percent chance for tropical cyclone development by Day-5 of a tropical wave anticipated to emerge off the coast of Africa over the next couple of days. Due to the potential for development in association with this wave or subsequent waves, a moderate confidence for development is indicated both in Week-1 and Week-2, with the latter shape expanded to the north and west. The majority of the model-based track forecasts depict recurving over the central Atlantic, but a few ensemble members depict tropical cyclone activity approaching the Lesser Antilles by Week-2.

Precipitation forecasts reflect a consensus of dynamical model forecasts and official tropical cyclone track forecasts. During Week-1, areas of enhanced monsoonal precipitation are favored across northern India, southern China, and parts of Southeast Asia, with a break in monsoon activity to the south. The CFS and ECMWF both forecast enhanced rainfall over the equatorial West Pacific, and an enhanced North Pacific ITCZ south of Hawaii. An increase in tropical wave activity over Africa and the eastern Atlantic is also favored. Enhanced rainfall along the forecast tracks of Tropical Storm Jebi, Tropical Storm Miriam, TD 16-E, and the disturbance approaching Florida and the Gulf of Mexico are also reflected in the Week-1 outlook. Suppressed convection is favored along the southern coast of Mexico and parts of Central America.

During Week-2, reduced monsoonal precipitation is favored to continue across parts of South and Southeast Asia, while convection, possibly associated with a weak intraseasonal signal, returns to the equatorial central and eastern Indian Ocean. Areas of enhanced convection are favored across parts of southern Central America and northern South America, and across the Atlantic MDR. Suppressed convection is anticipated to continue along Mexico's southern coast.

Forecasts over Africa are made in consultation with the CPC international desk, and can represent local-scale conditions in addition to global-scale variability.