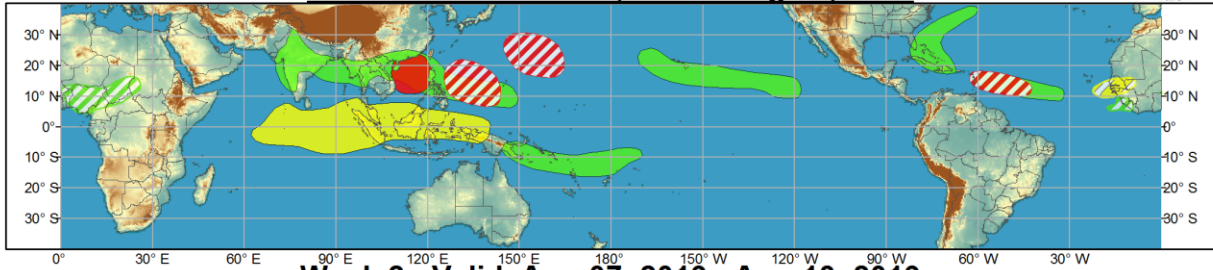




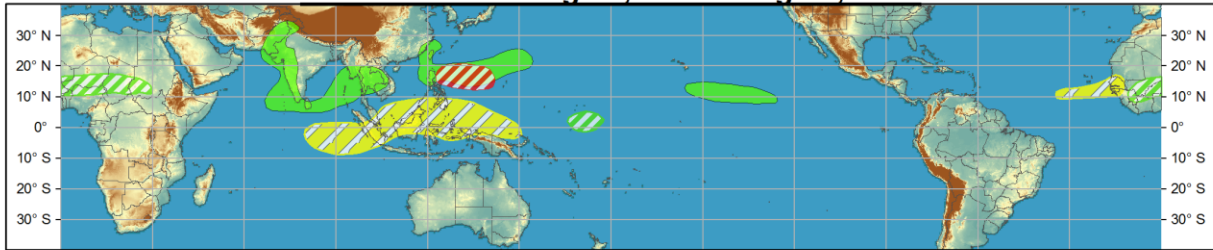
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 31, 2019 - Aug 06, 2019



Week 2 - Valid: Aug 07, 2019 - Aug 13, 2019



Produced: 07/30/2019

Forecaster: Allgood

- | Confidence | | |
|------------|----------|--|
| High | Moderate | |
| | | Development of a tropical cyclone (tropical depression - TD, or greater strength). |
| | | Weekly total rainfall in the upper third of the historical range. |
| | | Weekly total rainfall in the lower third of the historical range. |
| | | 7-day mean temperatures in the upper third of the historical range. |
| | | 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 conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



Recent observations and diagnostic tools continue to reflect weak MJO activity. The most coherent tropical signal during late July was a robust, convectively coupled Kelvin wave that propagated across the Pacific and Western Hemisphere. This Kelvin wave helped create a favorable environment in the East Pacific for the development of Hurricane Erick and Tropical Storm Flossie, but it weakened as it entered the Atlantic basin. This weakening signal reduces confidence in reinitiation of the MJO. Further complicating the tropical pattern is ongoing midlatitude influences from the Southern Hemisphere near the Maritime Continent. There are hints of a weak enhanced convective signal over the Maritime Continent, and the dynamical model precipitation anomalies broadly resemble canonical MJO composites for a Maritime Continent or West Pacific event, but dynamical model MJO index forecasts are mixed. The GEFS shows amplification of a signal over the Maritime Continent and some limited eastward propagation, but this signal lags the forecasted convective anomalies. The ECMWF maintains a more stationary and weak pattern over the next two weeks. Influences from developing tropical cyclones in the models may be interfering with the broader subseasonal signals.

Tropical Storm Nari formed in the West Pacific on 25 July, and made landfall over central Japan the following day. Following the passage of the afore-mentioned Kelvin wave, two tropical cyclones

developed over the East Pacific basin. Hurricane Erick formed on 27 July, and is currently moving west-northwestward over the east-central Pacific at Category-3 intensity on the Saffir-Simpson scale. Further intensification is possible over the next several days, before gradual weakening southeast of Hawaii. Tropical Storm Flossie developed just east of Hurricane Erick, and is also forecast to intensify and track towards the central Pacific basin. One or both of these storms may bring wave, rain, or wind impacts to Hawaii, particularly along the southeastern islands. During the next 24 hours, there is high confidence for a tropical cyclone to develop over the South China Sea, with dynamical models indicating a westward track. Additional tropical cyclogenesis is possible over the West Pacific just east of the Philippines, and further northeast (Invest 93W). There is a low potential for a third tropical cyclone to develop over the East Pacific, but conditions are less favorable as the suppressed phase of the Kelvin wave moves through the region. The NHC is currently monitoring two areas of interest over the Atlantic basin. A tropical disturbance in the central Caribbean is expected to move northwestward, bringing locally heavy rainfall to Puerto Rico and Hispaniola before approaching the Bahamas. Once near the Bahamas or off the Southeast U.S. coast, there is a potential for a tropical depression to form, but conditions are anticipated to be only marginally favorable. Locally heavy rainfall is possible across South Florida. Further east, dynamical models are beginning to depict a tropical cyclone developing over the central MDR (main development region), with a generally westward track towards the Lesser Antilles. The NHC currently has a 20 percent chance of development through Day-5, but conditions are anticipated to become increasingly favorable later in the Week-1 period, so there is a moderate potential for formation indicated on this outlook. During Week-2, conditions are expected to be less favorable for Western Hemisphere tropical cyclone formation, while additional tropical cyclogenesis is possible east of the Philippines.

Forecasts for above- and below-normal rainfall were made using a consensus of dynamical model forecasts and anticipated tropical cyclone tracks. During Week-1, enhanced monsoon rainfall is favored across South and Southeast Asia, with suppressed convection across the equatorial Indian Ocean and western Maritime Continent. Enhanced rainfall is favored east of New Guinea, and across the western and central Pacific in association with tropical cyclone activity. Enhanced rainfall along the track of the tropical disturbance emerging from the Caribbean is expected across the northern Caribbean Islands, the Bahamas, and South Florida, while tropical wave or developing tropical cyclone activity favors wetness over the central Atlantic. During Week-2, areas of enhanced monsoon rainfall are favored to continue across parts of South and Southeast Asia, with the ECMWF bringing rainfall as far northwest as Pakistan. Enhanced rainfall, possibly due to tropical cyclone activity, is forecast across the Northwest Pacific, northern Philippines, and Taiwan. Further east, the ECMWF indicates a return of low frequency supported rainfall just west of the Date Line, while enhanced rainfall, possibly due to tropical cyclone activity, is favored southeast of Hawaii.

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