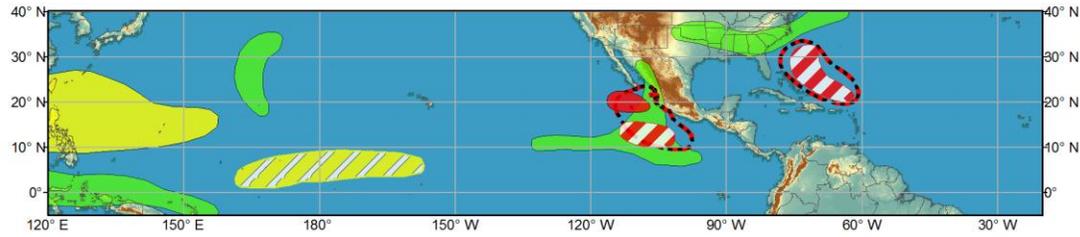




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 12 2017 - Aug 15 2017



Week 2 - Valid: Aug 16 2017 - Aug 22 2017



Confidence
High Moderate

Produced: 08/11/2017
Forecaster: Allgood

- 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.



The amplitude of the RMM-based MJO index remained weak during the past several days. Dynamical model MJO index forecasts are mixed, with the GEFS depicting an emerging signal over the Western Hemisphere over the next week, while the ECMWF and other tools maintain weak amplitude through the entire remaining outlook period. Based on recent observations and the available guidance, the MJO is not anticipated to play a role in the global tropical convective pattern over the next week or two.

Hurricane Franklin made a second landfall on 10 August along the southwest Gulf coast of Mexico at Category-1 intensity on the Saffir-Simpson scale. The remnants of Hurricane Franklin are expected to emerge over the East Pacific early in the period, and there is a high potential (90 percent, according to the NHC) for redevelopment during the next few days. Additional East Pacific development south of this region during Days 1-4 is also possible. In the Atlantic basin, a trough of low pressure near northeastern Florida has a low potential for tropical development. Another disturbance currently northeast of Puerto Rico has a moderate chance of development as it passes east of the Bahamas and begins to recurve southeast of the Carolinas over the next few days. Although upper-level winds are anticipated to become increasingly favorable for development, dry air in the surrounding environment and interaction with a frontal boundary are anticipated to limit robust intensification of this system. Over the West

Pacific, Tropical Storm 14W developed near Wake Island, and is forecast to recurve to the north and northeast during the next 5 days while maintaining tropical storm intensity.

During Days 5-11, a moderate potential for tropical cyclone development is maintained in this outlook over the Atlantic MDR, based on climatology and some dynamical model support. Tropical cyclone development is also possible in the East Pacific, near or west of the areas favored in Week-1. Dynamical model forecasts also indicate a potential for tropical cyclogenesis southeast of Hawaii during the Day 5-11 period. In contrast, no tropical cyclones are anticipated over the West Pacific, which is quieter than average for this time of year.

Forecasts for above- or below-normal precipitation were updated to reflect the latest dynamical model consensus and tropical cyclone track forecasts.

The original discussion released on 8 August follows.

The MJO weakened rapidly over the past several days, with the RMM-based MJO index showing no amplitude, and the CPC velocity potential based index, based on a 5-day mean, depicting weakening amplitude. The lack of MJO signal is primarily due to destructive interference between what was the enhanced convective envelope over the Maritime Continent and far West Pacific and mass injection onto the equator from a highly amplified southern hemisphere mid-latitude pattern. Recent OLR analyses suggest that near- to below-normal convection extends across the equatorial Maritime Continent and much of the Pacific. Additionally, the South Asian monsoon pattern weakened substantially during the past week, with anomalous low-level easterlies and suppressed convection over India, and pockets of enhanced convection over the central Indian Ocean, primarily south of the equator. Dynamical model MJO index forecasts generally depict little in the way of MJO evolution, but there are hints of a weak signal favoring the Western Hemisphere (GEFS and CFS, possibly due to East Pacific tropical cyclone activity), or the Indian Ocean (ECMWF). Statistical tools also depict little to no intraseasonal signal. Based on recent observations and these forecasts, the MJO is not anticipated to play a substantive role in the evolution of the global tropical convective pattern during the next two weeks.

Tropical Depression 11 briefly developed south of the Baja Peninsula on 4 August. Tropical Storm Franklin formed over the western Caribbean on 7 August, and is currently centered over the Yucatan Peninsula. Official guidance from the National Hurricane Center shows TS Franklin restrengthening and attaining near hurricane intensity once it emerges over the Bay of Campeche ahead of a second landfall over the southwestern Gulf coast of Mexico late Wednesday or early Thursday. Elsewhere, Typhoon Noru dissipated near the west coast of Japan's Honshu Island after causing extensive flooding during the past several days. During Week-1, a disturbance currently east of the Lesser Antilles has a moderate potential for development as it approaches the eastern Bahamas. There is moderate confidence for additional tropical cyclone development over the Atlantic MDR during Week-2, based on a combination of increasingly favorable climatology and a potential weak intraseasonal signal favorable for development. Over the East Pacific, tropical cyclogenesis from the remnants of TS Franklin is possible later in Week-1 near or south of the Baja Peninsula. Additionally, dynamical models favor a possible second tropical cyclone over the East Pacific basin further south of the Baja Peninsula, developing either during late Week-1 or early Week-2.

Given the lack of a robust MJO signal, forecasts for enhanced or suppressed tropical rainfall are based largely on dynamical model consensus. A continued lull in the South and Southeast Asia monsoon is anticipated during Week-1, although areas of locally heavy rainfall are possible over parts of Nepal, Bhutan, Bangladesh, northeastern India, and northern Myanmar. Heavy rainfall associated with frontal boundaries is likely across parts of southeastern China and across the southern tier of the US extending from the southern High Plains to the mid-Atlantic coast. Enhanced (suppressed) rainfall is anticipated across the equatorial Maritime Continent (west-central Pacific and central Atlantic), while tropical cyclone activity is expected to bring enhanced rainfall to parts of Mexico, the Gulf of Mexico, and the northeast Pacific.

During Week-2, there is reduced confidence due to the lack of a robust intraseasonal signal and increased divergence of the dynamical model solutions. A continuation of the lull in the South Asian monsoon is anticipated, with enhanced convection forecast across the Bay of Bengal and the northwestern and central Maritime Continent. Suppressed convection is favored from southeastern New Guinea through the Solomon Islands, as well as parts of Hawaii.

Forecasts over Africa are produced through consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.