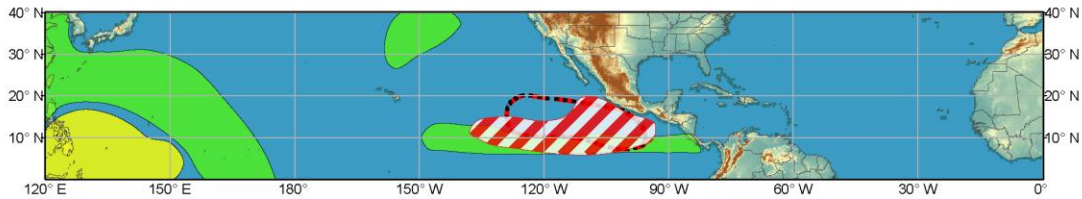




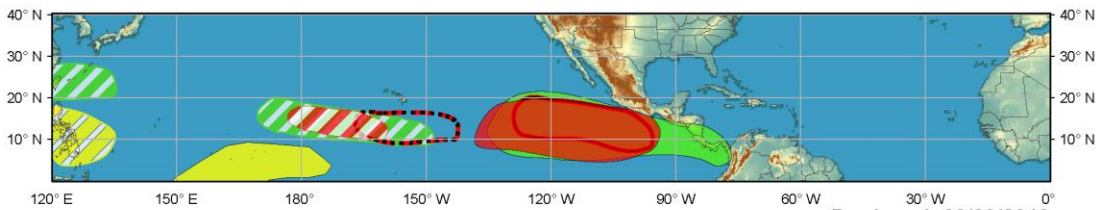
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 10 2019 - Aug 13 2019



Week 2 - Valid: Aug 14 2019 - Aug 20 2019



Confidence
High Moderate

Produced: 08/09/2019
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.



The primary changes today regard the regions of predicted tropical cyclone development in the East Pacific. The last few runs of the ECMWF ensembles have expanded the area of highest probabilities of TC development westward. The moderate risk region during Week-1 has been re-drawn slightly to match the National Hurricane Center's 5-day forecast, as well as to mirror the latest model guidance.

The moderate risk area in the Central Pacific has been shifted about 30 degrees west so that it is more in line with the latest ECMWF track density forecast. The central Pacific is a particularly difficult region to forecast for this time of year and users are urged to keep an eye on the Central Pacific Hurricane Center's forecasts over the next several days. We have also adjusted the area of above normal rainfall over eastern China to match up with JTWC's latest forecast that Typhoon Lekima will track into the Yellow Sea.

More broadly speaking, we still believe that the MJO will remain weak during the next two weeks. The RMM index has entered Phase 4 due to the westerly wind burst mentioned below, but it is forecast to weaken back into the circle during the next couple of days.

----- Original discussion from Tuesday, August 6, 2019 follows: -----

The tropics are relatively quiet for this time of the year. The MJO, which has been weak throughout the past month, is expected to remain weak during the next two weeks. The GEFS provides some weak evidence that the MJO will strengthen into Phase 4 soon, but we believe that this forecast is a consequence of the model producing a trade wind surge east of the Date Line, which projects onto the lower-level RMM wind field and creates a false jump in the RMM index. Elsewhere, the main source of tropical wave activity during the next week is an equatorial Rossby wave that has been associated with the development of at least three tropical cyclones in the western Pacific and is expected to propagate westward over the Indian ocean during the next 10 days. A convectively coupled Kelvin wave is expected to pass through the central and eastern Pacific towards the end of Week-1 and early Week-2, producing a favorable environment for tropical cyclogenesis.

The main tropical activity during Week-1 will be in the western Pacific. Above normal rainfall is expected around the East China Sea in association with tropical storms Lekima, Francisco, and Krosa. A monsoon low in the northern Bay of Bengal is expected to bring above-normal rainfall to much of the surrounding region during Week-1. There is a small chance that the low could reach tropical storm status before making landfall in northeastern India on Wednesday morning, but we do not think the probability of this happening is high enough to warrant a shape on the map. Below normal rainfall is expected over much of the Maritime Continent and Indian Ocean south of India during Week-1 in association with the passage of the aforementioned equatorial Rossby wave. There is a moderate risk of tropical cyclogenesis in the East Pacific towards the end of Week-1 in association with a Kelvin wave, which is evident in the latest ECMWF ensemble runs.

There are indications that the eastern Pacific will become more active during Week-2. Both the GFS and ECMWF predict multiple lows to develop into tropical storms during this time as the aforementioned Kelvin wave passes through. The probability of TC development increases in the eastern Pacific during Week-2 and there is a secondary moderate risk area in the central Pacific. Models also indicate below normal rainfall over the Maritime Continent and India as tropical wave activity over the region diminishes.