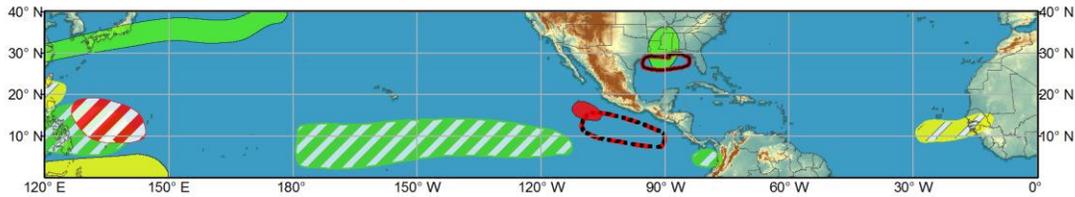




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 13 2019 - Jul 16 2019



Week 2 - Valid: Jul 17 2019 - Jul 23 2019



Confidence
High Moderate

Produced: 07/12/2019
Forecaster: Baxter

- 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 MJO remains fairly weak as monitored by both the RMM and CPC velocity potential index. The anomalous tropical divergent circulation has devolved to a wave-2 pattern as equatorial Rossby wave activity remains prominent. The forecast issued earlier in the week remains largely on track to this point.

Tropical Storm Barry formed over the Gulf of Mexico and is forecast to make landfall Saturday over Louisiana as a weak Hurricane, bringing copious amounts of rainfall to the Lower Mississippi Valley this weekend. NHC is currently monitoring a disturbance over the main development region with a low risk of development over the next 48 hours, before environmental conditions become too hostile for development.

Over the East Pacific, there is a disturbance being monitored by NHC near 15N/106W with an 80% chance of tropical cyclogenesis; advisories could begin later today. The latest guidance suggests this system could be fairly short-lived as it tracks northwestward. Both the ECMWF and GEFS indicate a moderate risk of tropical cyclone formation during the original Week-2 period over a large swath of the East Pacific main development region.

There is also good agreement between the GEFS and ECWMF ensemble systems on the potential for tropical cyclone formation east of the Philippines early next week, lingering into Week-2, when a second disturbance has a chance to develop. Forecast wind shear anomalies appear broadly favorable through the forecast period.

Regions favoring above- and below-average rainfall are updated to account for the latest tropical cyclone tracks and dynamical model consensus.

The previous discussion, issued 9 July, follows below:

In an RMM sense the MJO weakened within the unit circle early last week and then re-emerged into Phase 1 later in the week. This re-emergence is likely due to interference from an equatorial Rossby (ER) wave. Model guidance suggests that the MJO will collapse back into the circle as the ER wave passes through this week. From a velocity potential standpoint, the large-scale upper-level pattern has weakened in accordance with the MJO's RMM signal and is now fairly noisy with multiple local centers of convection dominating the upper-level signal.

Tropical storms Barbara and Cosme both dissipated during the last week in the Northeastern Pacific. The National Hurricane Center forecasts a 20% chance of another tropical cyclone forming in this region during the next five days, and we have placed a moderate risk shape for development through the end of Week-1. This is in-line with the GEFS forecast, which suggests that tropical cyclone development could occur between days 5 and 7 over the Northeastern Pacific. Notably, the ECMWF is more bearish about this outcome.

For several days there was poor agreement between the GFS and ECMWF that a tropical cyclone would form in the Gulf of Mexico this week, but as of the 12z GFS run on 9 Jul 2019, the models are in nearly perfect agreement. The NHC forecasts an 80% chance that a tropical cyclone will form in this region over the next five days. Regardless of whether or not this area of low pressure develops into a bonafide tropical cyclone, there is the potential for heavy rainfall around the Gulf Coast later this week and interested parties should pay close attention to the forecast.

Elsewhere, the precipitation forecasts are based largely on the ECMWF guidance. Enhanced rainfall remains likely associated with the Meiyu front over parts of southern and eastern Asia. There is also the possibility of tropical cyclone development northeast of the Philippines during Week-2. The GEFS forecasts this TC to ride the baroclinic zone northeast during Week-2 over the northwest Pacific.

Below-average rainfall is forecast over northern India, southeastern Asia, and along the Maritime Continent during Week-1. The below-average rainfall is expected to weaken and turn more normal over southeastern Asia during Week-2. Above-average rainfall is possible during Weeks-1 and 2 over parts of the Indian Ocean and central Pacific.

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