

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 localscale conditions in addition to global-scale variability.