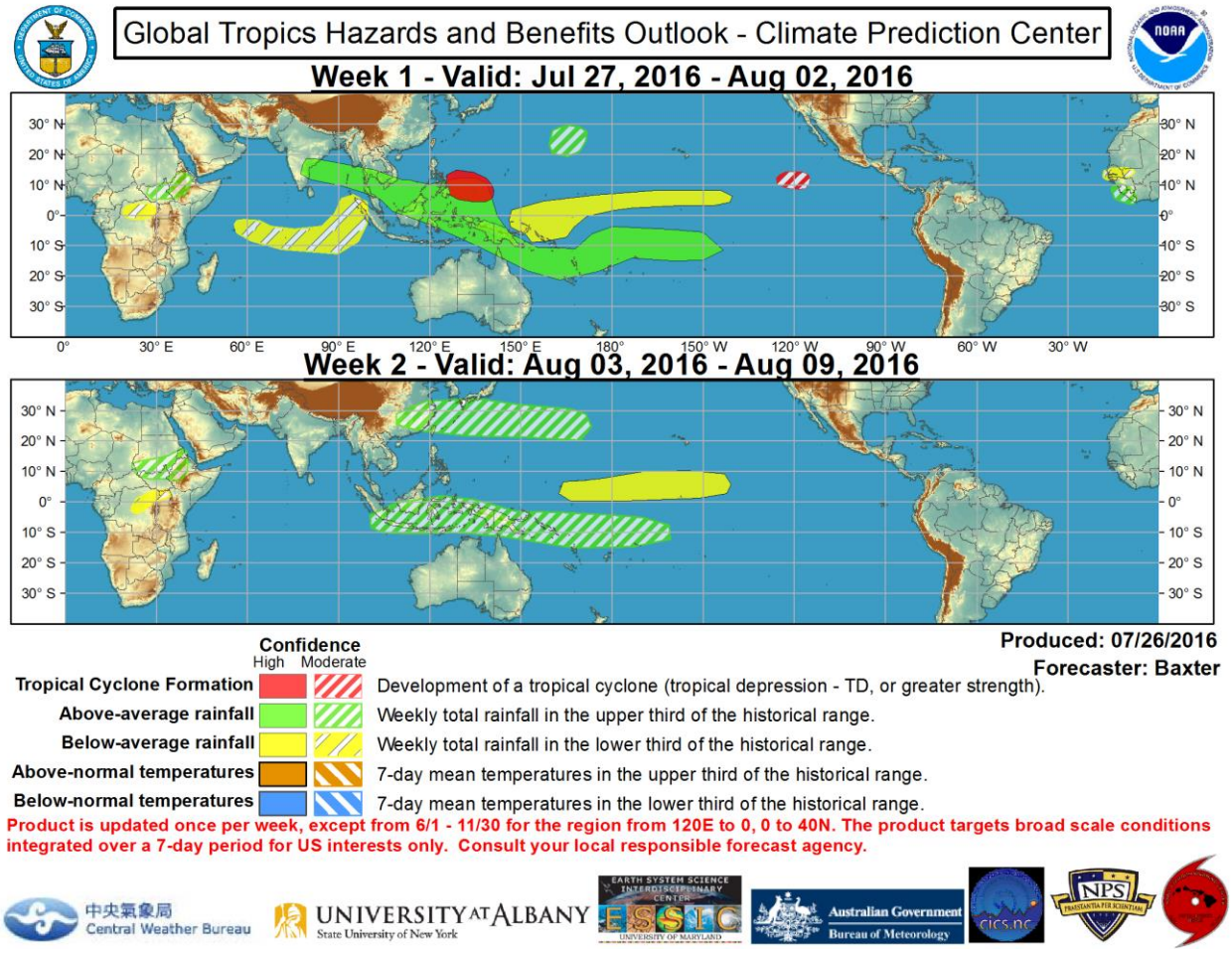


The MJO has been active over the past week, with both the RMM and CPC velocity potential indices showing the enhanced phase moving over the western Maritime continent. In fact, by examining the time-longitude diagrams of the different variables at play, as well as the RMM phase diagram, we can say with some confidence that the MJO has been a significant component of subseasonal tropical variability for much of the summer. Today's dynamical model guidance has come into somewhat better agreement, with the MJO forecast to propagate across the Maritime continent over the next one to two weeks. However, interference with other patterns of variability, including the slowly-evolving base state, increases uncertainty, especially with respect to forecast regions of enhanced and suppressed rainfall.

During the last week, Tropical Storm Frank and Hurricane Georgette formed over the East Pacific. Both are forecast to weaken over the next couple of days as they drift generally westward. Currently, the accumulated cyclone energy in the eastern and central Pacific is 237 percent of normal, and there is a moderate chance of tropical cyclone (TC) formation during the next week in this region, associated with a convectively coupled Kelvin wave. Beyond that, however, it appears that the East Pacific will become less active as the suppressed phase of the MJO propagates across the Western Hemisphere. The western North Pacific basin is at 40 percent of normal ACE for this time of year, and there is little

support from the various model guidance for a broad increase in activity over the next two weeks. That said, Tropical Storm Mirinae formed over the South China Sea, and TC formation is likely east of the Philippines during Week-1. In the Atlantic basin, some models are indicating an increase in the chances for tropical cyclone formation during late Week-1 or early Week-2, though this threat is best classified as low potential for the time being. This will be revisited in the Friday update.

Enhanced convection is forecast from parts of Southeast Asia, through the Maritime Continent, into parts of the South Pacific during Week-1. This signal is broadly consistent with ongoing and forecast MJO activity, as is the tendency toward below-average rainfall across parts of the tropical Indian Ocean. Model guidance and the low-frequency state strongly favor below-average rainfall across parts of the central and western equatorial Pacific. A subtropical low could break off from the midlatitude flow over the North Pacific, increasing the odds of above-average rainfall. There is a low probability that this system could transition to a tropical cyclone later in Week-1 or Week-2.

During Week-2, there is less coverage due to increased uncertainty. Only the regions in which the ECMWF and CFS agree are highlighted; these regions are somewhat consistent with eastward propagation of the MJO signal and the low-frequency dry signal forecast over the central Pacific.

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