

The Madden-Julian Oscillation (MJO) remained weak during the past seven days, with the RMM index indicating the signal focused towards Africa or the Western Indian Ocean. The signal shift towards the Indian Ocean appears due to the long-term mean removal methodology in CPC's RMM index calculation, as other centers show the RMM index to be negligible, rather than near emerging. Objective filtering of 200-hPa velocity potential anomalies places low frequency enhancement of convectoin near the Maritime Continent since late May, and tracks an eastward propagating signal from near the Prime Meridian in late April to presently near 140W (too slow to be considered tied to the MJO). Observed convective anomalies are weak throughout the global tropics and generally consistent with Rossby wave activity. Dynamical model ensembles show varied treatment of intraseasonal activity over the next two weeks, but nothing consistent with an emerging MJO signal. As such, any impact from the tropics on the mid-latitudes in the current outlook are anticipated to be solely due to possible tropical cyclone (TC) activity.

Tropical Storm Nanmadol formed in the West Pacific near 21N/127E on 2 July. The system intensity peaked at 60 kt the following day as it recurved through the East China Sea, eventually making landfall at Nagasaki on 4 July. The National Hurricane Center (NHC) is monitoring several areas for possible TC

formation in the Atlantic and East Pacific over the coming days. First, an easterly wave near 9N/35W as of 2 PM EDT on 4 July is given a 70% (80%) of becoming a tropical depression in the next 48 hours (5 days) due to its presence over waters above 27 degrees C and anomalously low wind shear in its vicinity. This system is forecast to track west-northwest around the base of the subtropical ridge, eventually recurving to the east of the Bahamas. No impacts are forecast for the U.S. from this system at present. High risk of formation is given to this system in the current outlook. In the East Pacific, NHC is monitoring 3 areas for possible development. The first may become a depression prior to this forecast period, and is presently near 16N/111W with NHC giving a 70% chance of developing over the next 48 hours as it drifts westward. To the southeast of this system, another area is being monitored for TC development in association with a broad low pressure area that currently has minimal convection. Organization for this second system is forecast to gradually increase over the course of the week with NHC giving it a 70% chance of forming over the next 5 days as it tracks westward. The combined areas for the two aforementioned East Pacific systems are combined into one high risk area on the forecast map. A third area is being monitored in the East Pacific by NHC near 12N/100W associated with a disturbance forecast to track west-northwestward off the Mexican coastline. NHC gives this system a 20% chance of becoming a tropical depression over the next 5 days, but confidence is insufficient to be highlighted on the Global Tropical Hazards outlook. Lastly, in the West Pacific a moderate risk of tropical cyclone formation is indicated from the South China Sea through 140E centered on 15N during Week-2 where statistical guidance suggests ideal conditions for a disturbance to develop, while dynamical model guidance also portrays this area as wet during Week-2.

Above-normal precipitation is forecast in association with each of the aforementioned TC formation areas and their subsequent tracks. Moderate confidence of above-normal rains are forecast across eastern India in association with the southwestern monsoon, while a break in precipitation is forecast across southern India resulting in high confidence of below-normal precipitation for this region. The Meiyu front is anticipated to lift into Korea and northern China, bringing moderate confidence of above-normal rains with it. Moderate confidence of below-normal precipitation is forecast across Japan in the wake of Tropical Storm Nanmadol. Above-normal precipitation forecast in the vicinity of the Maritime Continent in both weeks is associated with low frequency conditions that favor enhanced convection. Remaining forecast areas during Week-1 are due to dynamical model consensus between the CFS and ECMWF ensembles.

During Week-2, continued dryness is forecast from the Western Ghats of India southward through the equator with moderate confidence. Lingering moderate confidence of above-normal precipitation is forecast in association with what could be recurving TC Don by Week-2. Ensemble guidance forecasts anomalously dry conditions in the vicinity of Central America in Week-2, which would also help to suppress TC activity in the East Pacific and western Caribbean or Gulf of Mexico.

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