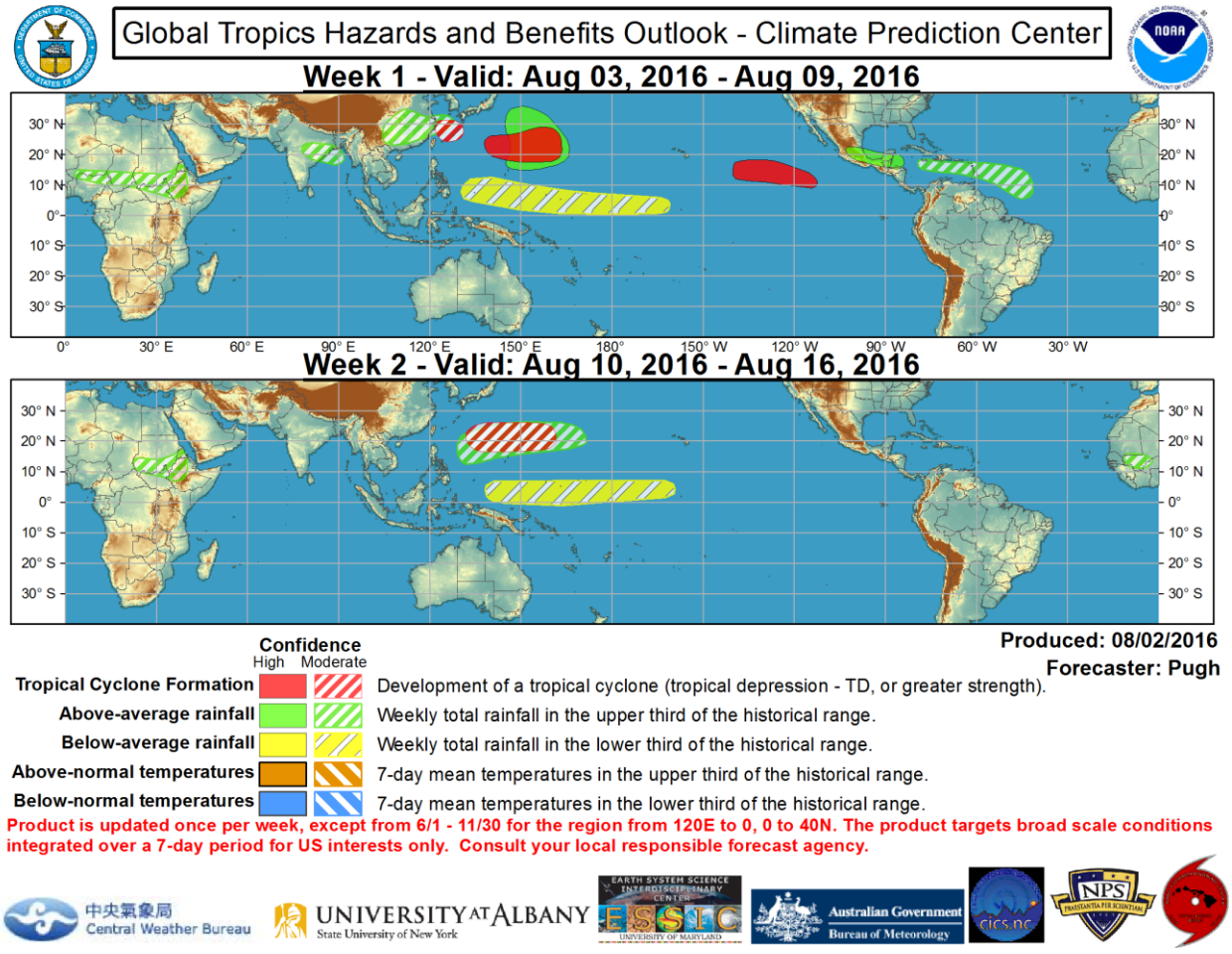

The amplitude of the MJO signal decreased during the final week of July according to the RMM and 200-hpa Velocity Potential indices. However, convection associated with its remnant enhanced phase continues to shift north across India, Southeast Asia, and the northwest Pacific which is a typical response during the Northern Hemisphere summer. Dynamical model forecasts generally indicate a continued weak MJO signal during the next week with an increase in amplitude during Week-2. This increasing amplitude by mid-August may be related to multiple tropical cyclones that are forecast to develop over the northwest Pacific.

During the past week, Typhoon Nida originated east of the Philippines and resulted in heavy rainfall (more than 10 inches) across northeast Luzon Island of the Philippines. Nida intensified as it crossed the South China Sea and made landfall near Hong Kong on August 2 with maximum sustained winds of 80 knots. Meanwhile, Tropical Storm Howard developed in the east Pacific at 14N/120W and is forecast to gradually weaken during the next 72 hours. On August 2, Tropical Storm Earl formed in the northwest Caribbean Sea and is forecast to track west across Belize and the Yucatan peninsula early in Week-1.

The remnant MJO signal and current satellite imagery support above-average rainfall during Week-1 across northeast India and the northern Bay of Bengal. Moisture associated with Nida is expected to result in above-average rainfall across southern China during the next week. The CFS and ECMWF model are in good agreement with a broad area of above-average rainfall across the northwest Pacific where at least one tropical cyclone is likely to develop during Week-1. Another favored area for tropical cyclone development is the East China Sea although with lower confidence. Below-average rainfall is forecast for the west Pacific, to the south of the enhanced convection, and is expected to extend to the Date Line. A broad area of low pressure is likely to become a tropical cyclone in the east Pacific (10-15N/120-140W) during the next five days. Improved model agreement raises forecast confidence for above-average rainfall (and the potential for flooding) along the future track of Tropical Storm Earl. This includes Belize, northern Guatemala, and southern Mexico. Another tropical wave is expected to bring above-average rainfall to parts of the tropical Atlantic, Lesser Antilles, and the Caribbean Sea later in Week-1. Models have trended towards less development with this tropical wave, but it will be monitored for the update released on Friday, August 5.

During Week-2, the precipitation outlook is based on model guidance and the slowly emerging low frequency state. Above-average rainfall is expected to persist across parts of the northwest Pacific where moderate confidence exists for tropical cyclone development, centered along 20N. Below-average rainfall is favored near the equator across the west-central Pacific. A lack of model agreement and uncertainty in the MJO evolution preclude additional favored areas of anomalous rainfall, except for Africa.

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