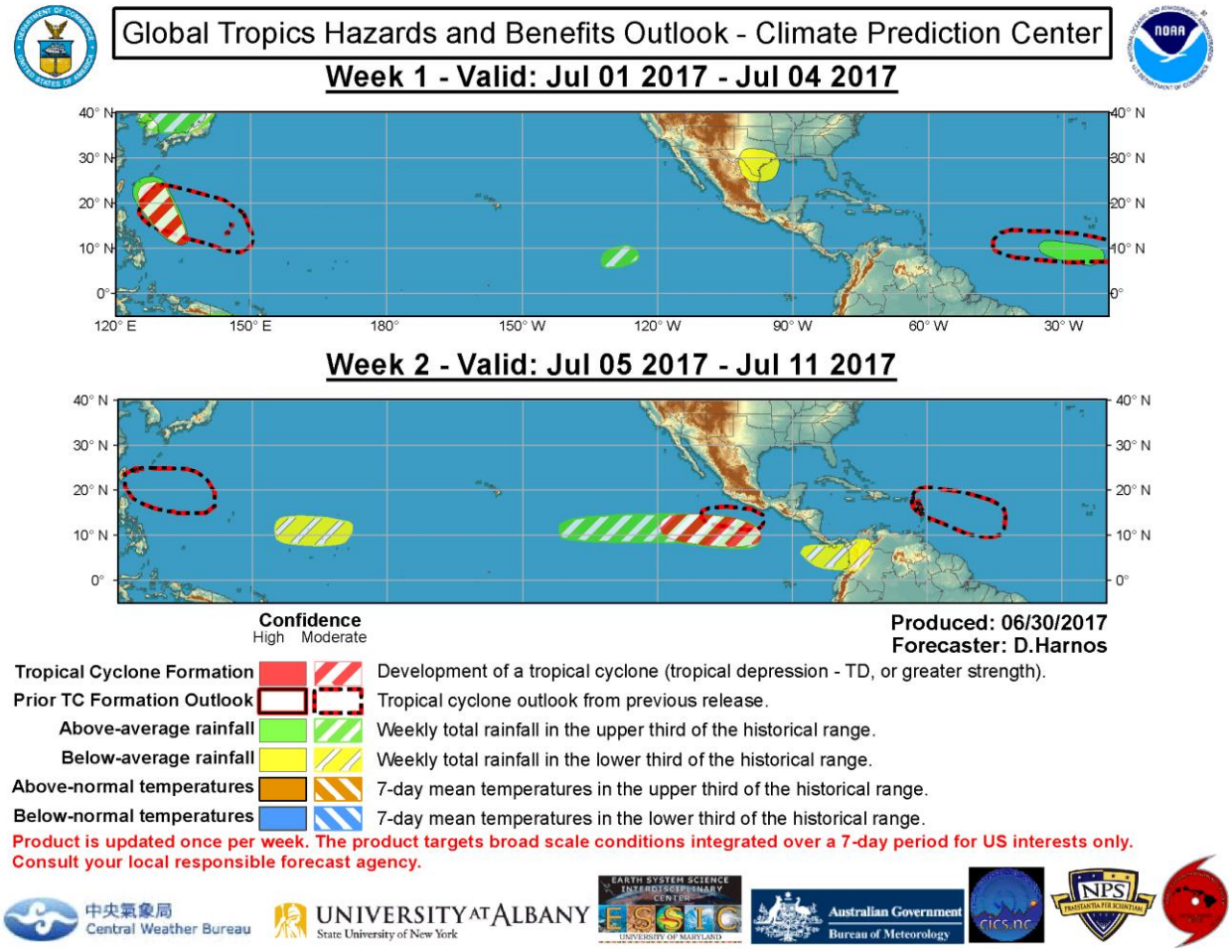

Intraseasonal activity remains generally incoherent and weak since the initial outlook release. There appears to be a slowly eastward propagating mode in the tropics near 150W with a period of around 120 days, but otherwise there are limited cohesive convective signatures throughout the tropics. Dynamical model guidance forecasts a continuation of limited intraseasonal activity and no MJO-related signals over the next 11 days.

The tropical cyclogenesis area in the Atlantic from the initial outlook is removed for both forecast periods due to wind shear values above 30 m/s over much of the main development region, in addition to satellite analyses suggesting widespread presence of mid-latitude dry air and Saharan dust as far south as 10N. Each of these factors appear to be suppressing convection and associated intensification as easterly waves enter the Atlantic. Tropical cyclone development continues to be favored in both the western North Pacific in Week-1 and East Pacific during Week-2. In the western North Pacific, the Joint Typhoon Warning Center forecasts a disturbance near 11N/136E to have a medium chance of development in the next 24 hrs due to gradually increasing convective organization and its location within a region of low wind shear and sea surface temperatures above 30 degrees C. The orientation of the track for this system has changed from the initial forecast, now being favored to lift northwestward

towards the East China Sea. In the East Pacific, moderate odds of development continue for Week-2 as dynamical models continue to indicate anomalously low surface pressure colocated with an area of anomalously low wind shear and sea surface temperatures above 29 degrees C. Updates to precipitation forecasts in this forecast release are predominantly due to adjustments in tropical cyclone expectations, with remaining shifts due to ensemble guidance consensus.

----- Previous discussion from 27 June follows below. -----

The MJO remained weak during the past seven days. Atmospheric Kelvin waves and Equatorial Rossby Waves (ERW) are dominating the distribution of tropical convection, as tropical cyclone activity has been below average this year for most basins. The MJO is not predicted to strengthen significantly or contribute to tropical convection during the next two weeks. Other modes of variability are likely to contribute to signals in the RMM-based and CPC Velocity Potential Index, so those indices are still used as proxies for locations of convection across the globe.

Tropical Storm Cindy developed over the Gulf of Mexico and moved northward, making landfall in Louisiana. Hurricane Dora formed over the eastern Pacific, and is forecast to move away from major landmasses. During the next week, tropical cyclone formation odds are elevated for portions of the tropical Atlantic and portions of the western North Pacific. Odds for formation over the Atlantic ramp up later in Week-1, so the indicated area on the CPC outlook is further west and north relative to the area indicated on the NHC 5-day tropical weather outlook. NHC also indicates a low threat of tropical cyclone formation for the eastern Pacific, again with a signal increasing through day 5. Signals for an increased threat of tropical cyclogenesis over the Western North Pacific are present in multiple dynamical model and statistical model tools, and also increase throughout the week. Tropical cyclone formation odds remain enhanced for tropical Atlantic into Week-2, though further north and west of the Week-1 area. Over the Western North Pacific, two areas are highlighted by different models (GEFS and multiple statistical models), both of which are included in the official outlook. Some dynamical models indicate an uptick in tropical cyclone potential over the eastern Pacific into Week-2, so that is included in the outlook. The signals ramping up in the eastern Pacific and Atlantic are consistent with the likely progression of a Kelvin wave into the region, and potential interaction with an ERW over the Americas.

A northward surge in the Southwest Monsoon and possible monsoon depression support an enhanced threat of heavy rains over Pakistan and Northern India, while drier than average conditions are likely over southern India and Southeast Asia. Predicted interactions between a Kelvin wave and an ERW result in small spatial scale anomalies over the Maritime Continent, though the available model tools

favor slightly enhanced rainfall. The recent active period in the West African Monsoon is likely to be begin to wane with some easterly waves enhancing precipitation over western Africa.

During Week-2, some enhanced rains are likely over central Africa. A relaxation of the Southwest Monsoon associated rains over India is likely to shift northward during Week-2, while convection starts to rebuild near Sumatra. The Kelvin wave over the Maritime continent during week-1 is likely to move eastward and increase rainfall and tropical cyclone potential over the eastern Pacific and western tropical Atlantic, near the Lesser Antilles.

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