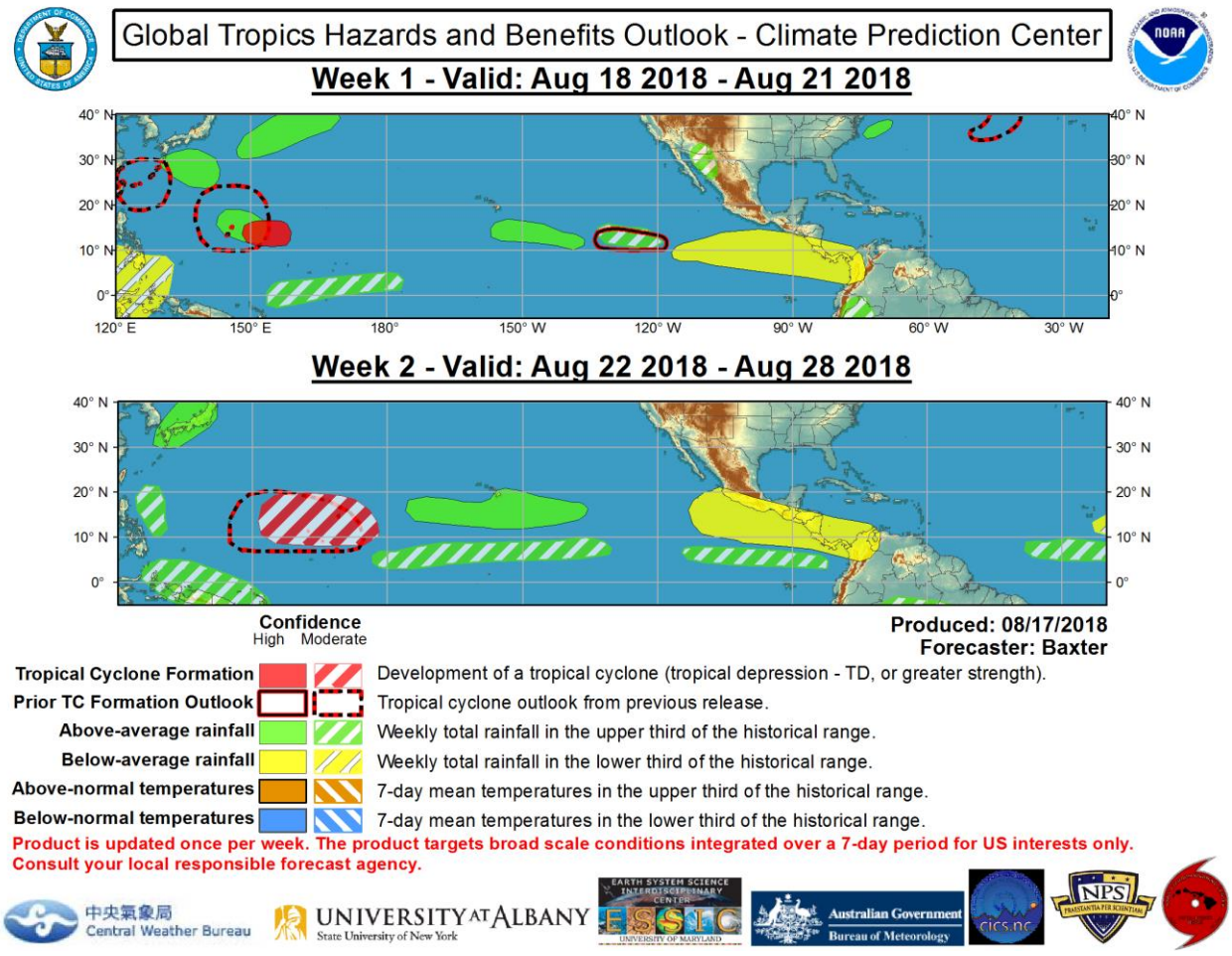

The MJO as monitored by both the RMM and CPC velocity potential index weakened over the past few days. This was expected as various convective signals are competing over the global tropics. The latest ensemble guidance suggests that a coherent enhanced phase may emerge over the Maritime Continent and propagate over the West Pacific by the end of Week-2. This is due to the fast eastward propagation of a Kelvin wave into the Eastern Hemisphere as well as the developing El Nino base state.

Tropical Storm Rumbia and Typhoon Soulik formed over the West Pacific as forecast during the past few days. Tropical Storm Rumbia made landfall late August 16 near Shanghai, while Typhoon Soulik is forecast to track northwestward while intensifying to the equivalent of a category 3 on the Saffir-Simpson scale. A landfall over southern Japan on August 21 is currently forecast by the Joint Typhoon Warning Center. Over the East Pacific Hurricane Lane formed as a depression at 00Z August 15. It is forecast to take a track similar to Hurricane Hector, tracking nearly due west near 15N, passing south of Hawaii by the middle of next week. Subtropical Storm Ernesto formed near 38N over the North Atlantic on August 15, and is rapidly moving northeastward, forecast to become post-tropical by later today.

Tropical cyclone (TC) formation is highly likely over the West Pacific in the next day or two, about 10 degrees east of where Typhoon Soulik formed. Over the East Pacific, there is a low risk of TC formation east of Hurricane Lane. Over the Atlantic basin TC formation remains unlikely over the next 10 days or so. During the modified Week-2 period, TC formation is still possible over the West Pacific based on the various ensemble guidance. Over the East Pacific, some lull appears likely in the wake of the recent burst in activity and as the enhanced convective signal shifts toward the Maritime Continent.

Areas favoring above- or below-average rainfall were adjusted based on the latest guidance from the ECMWF, GEFS, and CFS ensemble systems, as well as forecast TC tracks.

The previous discussion issued August 14 follows below:

The large-scale global tropical pattern remains fairly stationary this week, reflecting conditions similar to an intraseasonal event centered over the Pacific. Widespread convection continues across East and Southeast Asia and across the Pacific, and any propagation has been more northward than eastward. The RMM-based MJO index has been somewhat erratic, but has remained outside of the unit circle over the past two weeks in Phases 6 or 7. The CPC velocity potential based MJO index also indicates an enhanced (suppressed) convective phase over the Pacific (Africa and Indian Ocean), which is similar to the position of the MJO during mid-July. Analyses of low-level zonal wind anomalies reflect a persistent regime of weakened trade winds across the equatorial Pacific, part of which is due to tropical cyclone activity, but may also indicate a shifting atmospheric base state towards El Nino conditions. Additionally, a robust, convectively coupled Kelvin wave is currently crossing the eastern Pacific. Dynamical model MJO index forecasts generally depict a weakening MJO signal during Week-1 as convection shifts toward parts of the Indian Ocean for a brief time (due in part to an equatorial Rossby wave) and the aforementioned Kelvin wave tracks back in to the eastern Hemisphere. By Week-2, most dynamical models agree that an eastward-moving enhanced subseasonal signal is likely near the Maritime Continent.

The West Pacific basin has been extremely active during the past week. Hurricane Hector, now a weakening tropical storm, crossed the Date Line and is now in the West Pacific. All other tropical cyclones in the East Pacific have dissipated over the past week. Tropical Storms Leepi and Bebinca developed over the West Pacific and South China Sea, respectively. During Week-1 tropical cyclogenesis is most likely over the East Pacific, where NHC indicates a 90% chance of development over the next five days. Over the West Pacific, two areas are currently being monitored for development: one in the vicinity of Guam, the other northeast of Taiwan. Over the North Atlantic, NHC indicates a 40% chance of

subtropical storm development near 35-40N and 40-50W. During Week-2, the only area with notably enhanced odds of tropical cyclogenesis is near and east of Guam, where the low-frequency state remains very favorable.

The forecasts for above- and below-average rainfall were based primarily on a consensus between the CFS, GEFS, and ECMWF, as well as official guidance from the NHC and JTWC where precipitation is due to existing tropical cyclones. During Week-1, wet weather is favored to continue across parts of Southeast Asia, the South China Sea, the northern Philippines, and over much of Japan, while near- to below-average rainfall is anticipated across parts of the equatorial Maritime Continent. Areas of enhanced rainfall due to tropical cyclones and an enhanced ITCZ are forecast across parts of the central and eastern Pacific. Below-average rainfall is favored along Mexico's southern coast, Central America, and the far eastern Pacific due to subsidence in the wake of forecast tropical cyclogenesis and the atmospheric Kelvin wave.

During Week-2, uncertainty increases as expected, with some model divergence and an unclear picture of subseasonal variability. Above-average rainfall is more likely over parts of the eastern Indian Ocean extending northeastward toward Taiwan and the Philippines, and enhanced convection also becomes more prominent over the eastern Maritime Continent and parts of the Pacific. This is due to both the forecast evolution of the subseasonal variability (uncertain as it is) as well as the developing low-frequency state. Models are in fairly good agreement on continued below(above)-average rainfall over parts of the East Pacific, Central America, and northern South America (western Brazil).

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