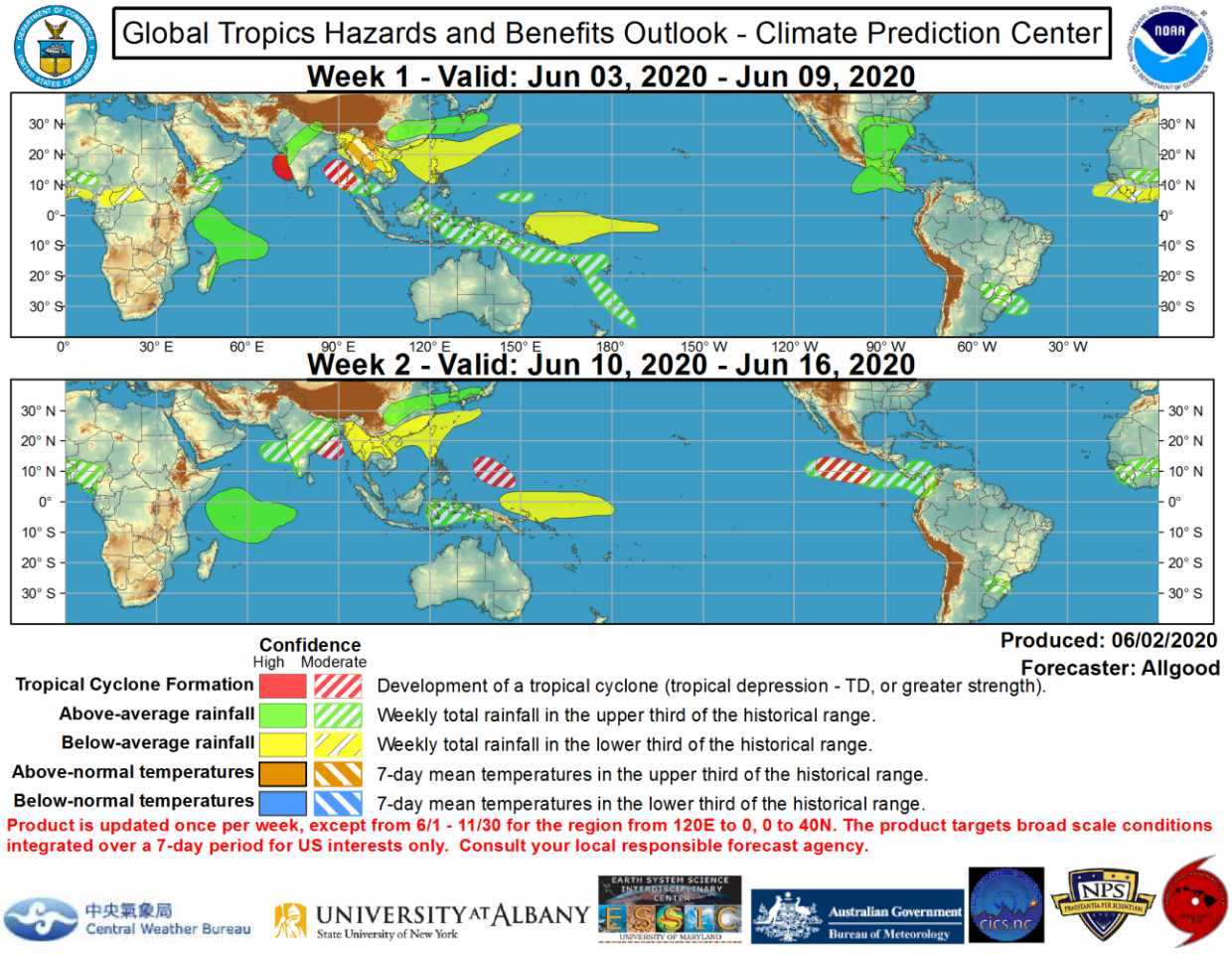

ï»¿The dominant feature in the tropical convective pattern remained the convectively coupled Kelvin wave (CCKW) that crossed the eastern Pacific last week and is now over Africa. The Kelvin wave activity projects strongly as a fast-moving signal on both the CPC velocity potential based MJO index and the RMM-based MJO index. Despite the strength of the signal, the CCKW did not substantially weaken the Pacific trade winds near the equator; most of the convective response was centered near 10N. Behind the Kelvin wave, a large-scale suppressed convective regime has overspread the West Pacific basin. Dynamical model MJO index forecasts depict a much slower evolution over the next two weeks, with the enhanced phase moving from the Western Hemisphere to the western Indian Ocean. While it is possible for a new MJO event to initiate over the Indian Ocean, the forecast signal is likely due to a superposition of the Kelvin wave and a low frequency signal favoring enhanced (suppressed) convection over the western Indian Ocean (West Pacific).

Two tropical cyclones developed in association with the Kelvin wave and a newly formed Central American Gyre feature. Tropical Storm Amanda developed over the far East Pacific and made landfall over southeastern Guatemala. The remnants of this system caused substantial flood damage and numerous fatalities in El Salvador before re-emerging over the Bay of Campeche and re-forming as

Tropical Storm Cristobal. TS Cristobal is forecast to meander within the Bay of Campeche over the next several days, bringing additional heavy rainfall to southern Mexico and northwestern Central America. By next weekend, forecasts from the National Hurricane Center show a northward turn, and the tropical cyclone may bring wind and heavy rainfall impacts to parts of the U.S. Gulf Coast. Elsewhere, Tropical Storm Bertha briefly formed from a disturbance along the U.S. Southeast coast just prior to landfall over South Carolina near Charleston. The system brought widespread heavy rainfall and flash flooding extending from Florida through the Carolinas.

Over the next day or so, a disturbance over the Arabian Sea near the western coast of India has a high potential for tropical cyclogenesis prior to landfall, and may bring wind and heavy rainfall to parts of northwestern India, including Mumbai, as it moves northeastward. Dynamical models show a second disturbance entering the Bay of Bengal later in Week-1, and there is a moderate potential for the formation of a tropical cyclone as it moves northwestward towards eastern India or Bangladesh. Increasing vertical shear, however, may provide a limiting factor for substantial development of this system. Elsewhere, a Rossby wave over the West Pacific may provide a chance for tropical cyclogenesis over the West Pacific south of Guam during Week-2. Additional Kelvin wave activity in combination with a persistent gyre over Central America favors a potential for new East Pacific tropical cyclogenesis, though fewer GEFS ensemble members today depict a closed low compared to yesterday's run.

Forecasts for above- and below-normal rainfall are based on dynamical model consensus and the forecast tracks of ongoing and potential tropical cyclones. Ongoing heavy rainfall over southern Mexico and Central America presents a substantial flooding threat, and the potential for heavy rainfall shifts northward to the northern U.S. Gulf Coast later in Week-1. Enhanced rainfall is forecast for India in association with tropical cyclone activity (or a monsoon low) in both Week-1 and Week-2, while suppressed convection and periods of heat are favored across Southeast Asia and China's southeastern coast. Enhanced (suppressed) rainfall over the western Indian Ocean, east-central China, southern Japan, and southern Brazil (the Equatorial West Pacific, and parts of the northwestern Pacific basin south of Japan) are also favored to persist during the two-week forecast period.

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