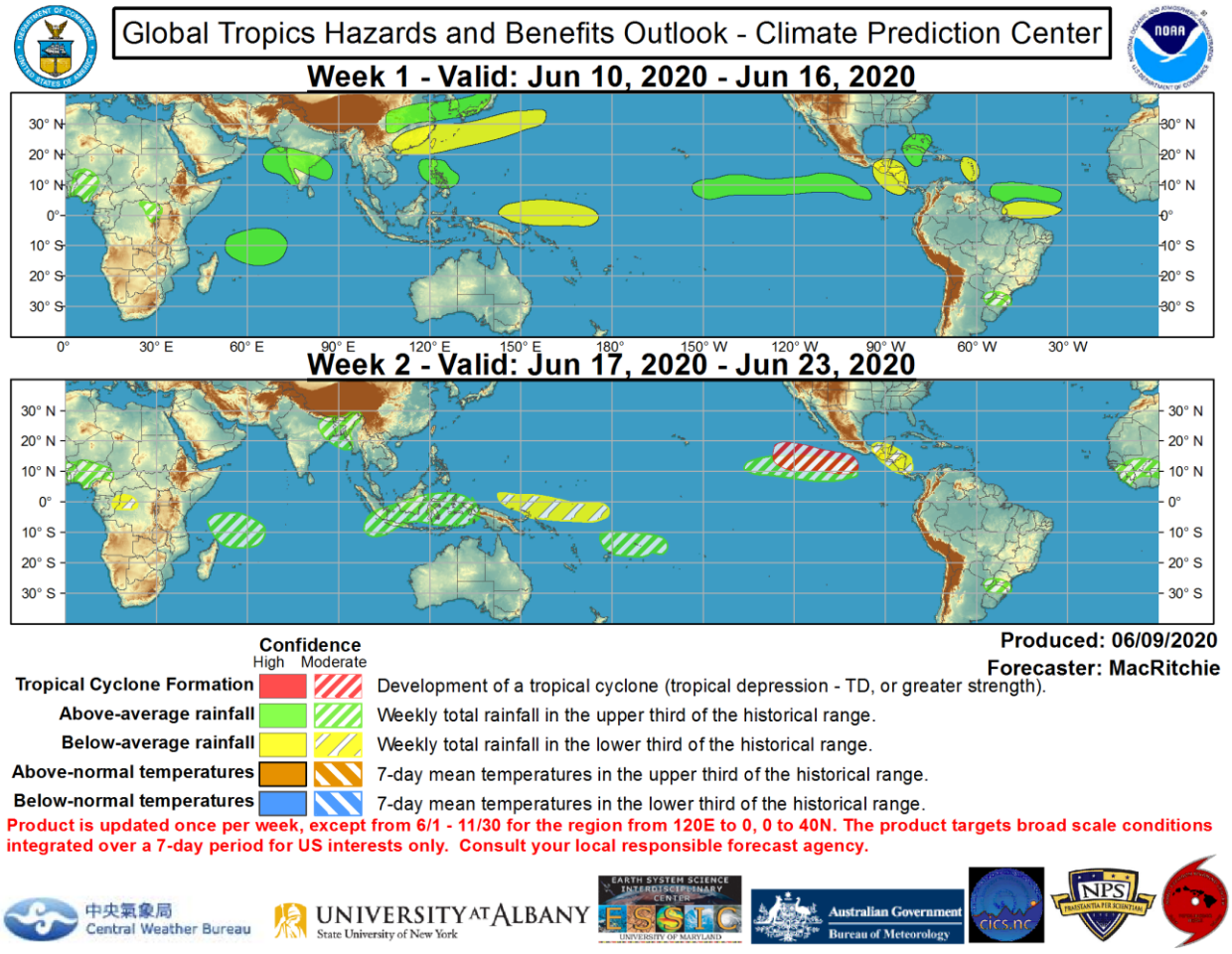

ï»¿Kelvin wave activity has been the dominant mode of subseasonal tropical variability over the past couple of weeks. A strong Kelvin wave propagated around the globe during mid-May to the beginning of June, likely contributing to the formation of several tropical cyclones. Unlike most Kelvin waves, this one has projected strongly on to the RMM index. The RMM index is currently in Phase 2, but most model forecasts expect the signal to collapse into the circle during the next two weeks, suggesting that the upper-level wind signal associated with the Kelvin wave will contract and no longer project onto the RMM index. Nevertheless, the CFS projects the Kelvin wave to continue propagating around the Tropics during the forecast period, reaching the Central Pacific during Week-1 and the East Pacific and Atlantic during Week-2. Such a situation could enhance the probability of tropical cyclogenesis in the East Pacific, leading to a broad moderate risk posted for Week-2.

Persistent anticyclonic wave breaking off the end of an anomalously zonally elongated jet over the North Pacific has led to significant injections of high potential vorticity (PV) air into the tropical East Pacific, near 10N. This has aided enhanced convection and anomalous rainfall over that area, and models suggest that the trend will continue throughout the forecast period. Anomalously cold sea surface

temperatures remain just south of this region, associated with weak trade winds and an upwelling oceanic Kelvin wave.

There is a low just east of the Philippines that the Joint Typhoon Warning Center (JTWC) is tracking as 98W. Although it is in a favorable environment for intensification, most of the model guidance does not forecast the low to strengthen into a tropical cyclone before crossing land and we have not posted a corresponding hazard. Likewise, there is a broad cyclonic circulation in the Bay of Bengal, which drives our forecast of above average rainfall in this region during the next two weeks. Most model guidance keeps the probability of this area developing into a tropical cyclone too low to include in our forecast, but there is a remote chance of development late in Week-1.

Other forecasts for above and below normal rainfall are based on dynamical model consensus and the forecast state of tropical waves. Forecasts over Africa are made in consultation with CPCâ€™s international desk, and can represent local-scale conditions in addition to global-scale variability.