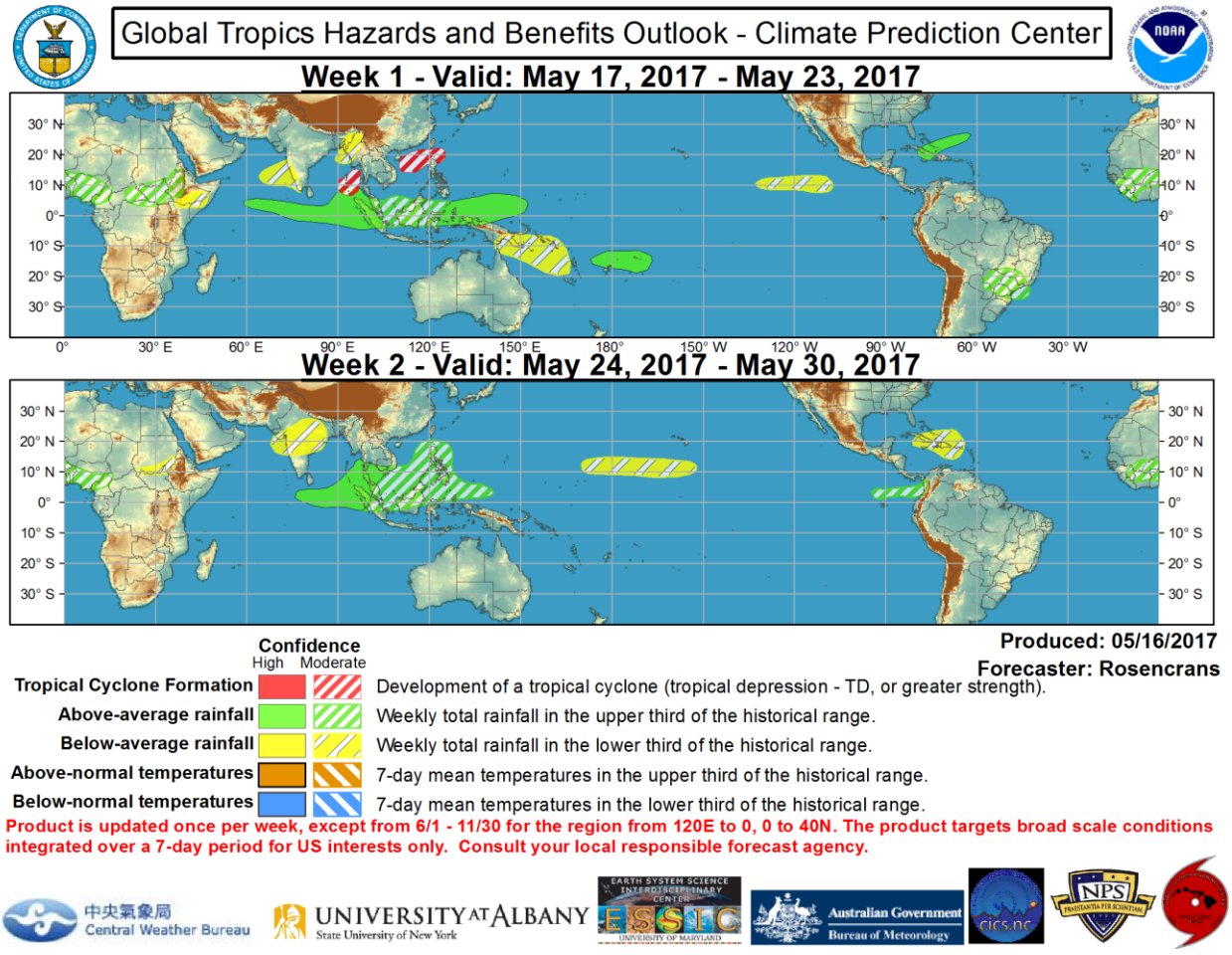

During the past week, both the CPC velocity potential anomaly based index and the RMM based index indicate eastward propagation of a signal for enhanced convection over the Indian Ocean. Other modes of variability are also influencing the pattern, with Kelvin waves and Rossby waves currently interacting over the Maritime Continent. Low-level wind anomalies through May 14 indicate a slight lag with strong westerly anomalies over the East Pacific, though that portion of the pattern is likely to weaken. OLR patterns are reflecting the propagating signal by showing convection building over the Indian Ocean and Maritime Continent, while convective anomalies over the Pacific are largely related to recent tropical cyclone activity.

Dynamical models depict generally eastward propagation of the signal during the next 2 weeks. Models diverge on the amplitude of the signal, with the GFS based solutions decaying the signal dramatically more than the European center, UKMET, or JMA models. All of those models depict a signal over the Eastern Indian Ocean and Maritime Continent longitudes during Week-2, so it's likely the GFS is over playing the impact of the subsiding phase of the Rossby wave. The uncertainty in the model solutions over the Maritime Continent, in Week-1, is depicted in the outlook.

During the past week, Tropical Storm Adrian became the earliest named storm in the East Pacific basin, with winds reaching 40 knots. Cyclones Donna and Ella impacted the South Pacific, with winds in Donna reaching 115 knots. During the next week, some models and the intraseasonal signals favor tropical cyclone formation over the Bay of Bengal and the South China Sea, though those signals are relatively weak. There are weak signals for a sub-tropical type system near the Bahamas in Week-1, but confidence is low. GEFS based solutions continue to show some signal stretching from the Arabian Sea to the South China sea during Week-2, but the uncertainty in separating tropical cyclone development from circulations in the monsoonal circulation preclude the depiction of a hazard area.

Above average precipitation is likely over portions of western and central Africa, associated with the recent MJO activity. Above average rains are likely from the Indian Ocean to the Maritime Continent, thought certainty is lower where multiple modes of variability are likely to interact. North of the monsoon onset region, below average rains are likely over portions of India and Southeast Asia. Mid-latitude, upper-level trough activity is likely to produce above average rains near the Bahamas. During Week-2, statistical and dynamical models all indicate enhanced convection over the Maritime Continent, with an extension to the western Pacific. Subsidence would likely set in over the Central Pacific at this time, with a weakening signal over most of the Americas. Localized heavy rains are possible in Colombia and Panama with small spatial scale, enhanced westerlies, above average SSTs and potential impact from Kelvin waves early in Week-2.

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