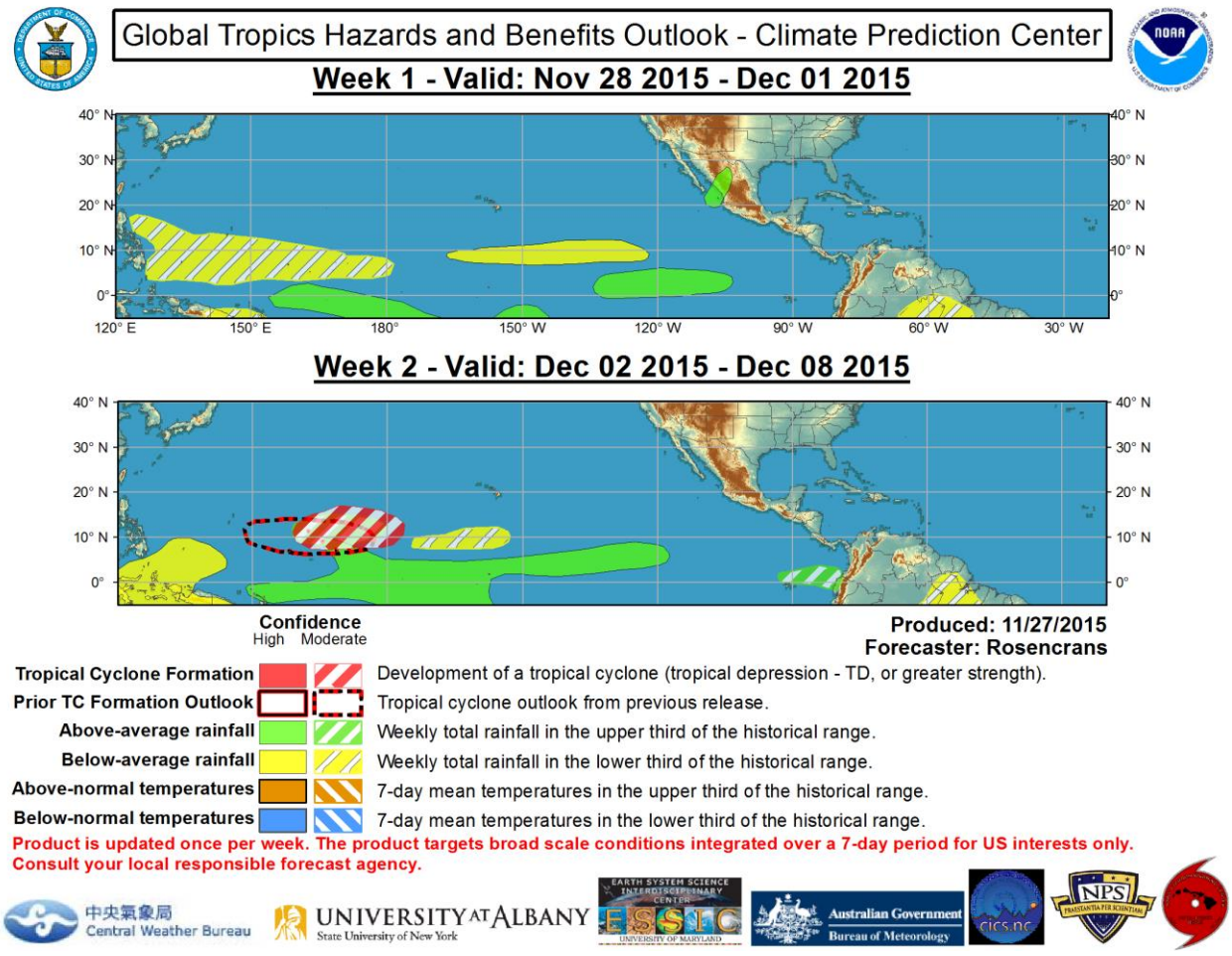

The MJO remains weak, although the RMM based index shows some amplitude over the Indian Ocean. Convection over that region is weaker than it was a couple of weeks ago, but the low-level winds are likely keeping that index anomalously elevated. El Nino is likely to be the dominant mode of variability in the tropical convective pattern, with some impact from an Equatorial Rossby Wave and Kelvin wave near the Date Line.

Given the interacting modes of variability near the Date Line, tropical cyclone formation is likely over the South Pacific, west of American Samoa. For days 5 through 10, tropical cyclone formation odds are slightly enhanced over the northern Pacific, near the Date Line, although signals there are weaker. The GEFS is indicating a low threat of tropical cyclone formation near the Philippines, late in the second week of the outlook.

El Nino is likely to dominate the patterns of anomalous tropical rainfall. The outlook shapes for above and below average precipitation have not changed much from the previous outlook.

---------- Previous discussion follows ----------

The MJO signal continued to be weak. The RMM based index continues to show amplitude greater than 1, but the CPC Velocity Potential based index shows no signal. The upper-level velocity potential pattern is becoming more aligned with the background El Nino, while showing weak signatures of Kelvin Wave and Eqautorial Rossby Wave (ERW) activity. Enhanaced convection during the past week was centered over the central Pacific, with a second center of action over the western Indian Ocean. Some of the convection near and east of the Date Line is associated with the ERW.

Model forecasts of the MJO latch onto the Kelvin waves and bring some convection eastward across the Indian Ocean, before reducing in amplitude, although others continue a signal across the Maritime Continent. Solutions that continue a signal across the Maritime Continent are not favored, as that would deststructively interfere with the ongoing El Nino. Models also have a difficult time with propagating ERWs, so that mode is accounted for in the final outlook by extending above average rainfall west of the Date Line in Week-1 and decreasing the covereage of below average rains over the Coral Sea region in Week-2.

Tropical Storm Rick and Tropical Storm Sandra developed over the East Pacific. Tropical storm Rick was short lived, while Tropical Storm Sandra is likely to make landfall in southern Mexico. Tropical Storm Annabelle developed over the Southern Indian Ocean, is forecast to mouth southward, and is not a threat to major land masses. During the next week, tropical cyclone formation odds are increased over the South Pacific and the Bay of Bengal, with the confidence of formation over the Bay of Bengal lower than the South Pacific. During Week-2, tropical cyclone formation odds remain enhanced over the South Pacific, and increase slightly over the northwest Pacific, although confidence in those two areas is moderate, at best.

Increased odds for above average rains spance the central Pacific and include some portions of the South Pacific, along the climatological South Pacific Convergence Zone. Below average rains are likely over the Western North Pacific, just south of Hawaii, and over central Brazil, all influenced by the ongoing El Nino. During Week-2, El Nino is likely to be the dominant climatological feature, with enhanced convection likely over the central Pacific and near the coasts of Ecuador and Colombia. Below average rains are likely over the Maritime Continent and Brazil.

Forecasts for Africa are done in collaboration with CPC's International Desk and based on model forecast guidance and regional scale anomaly features.