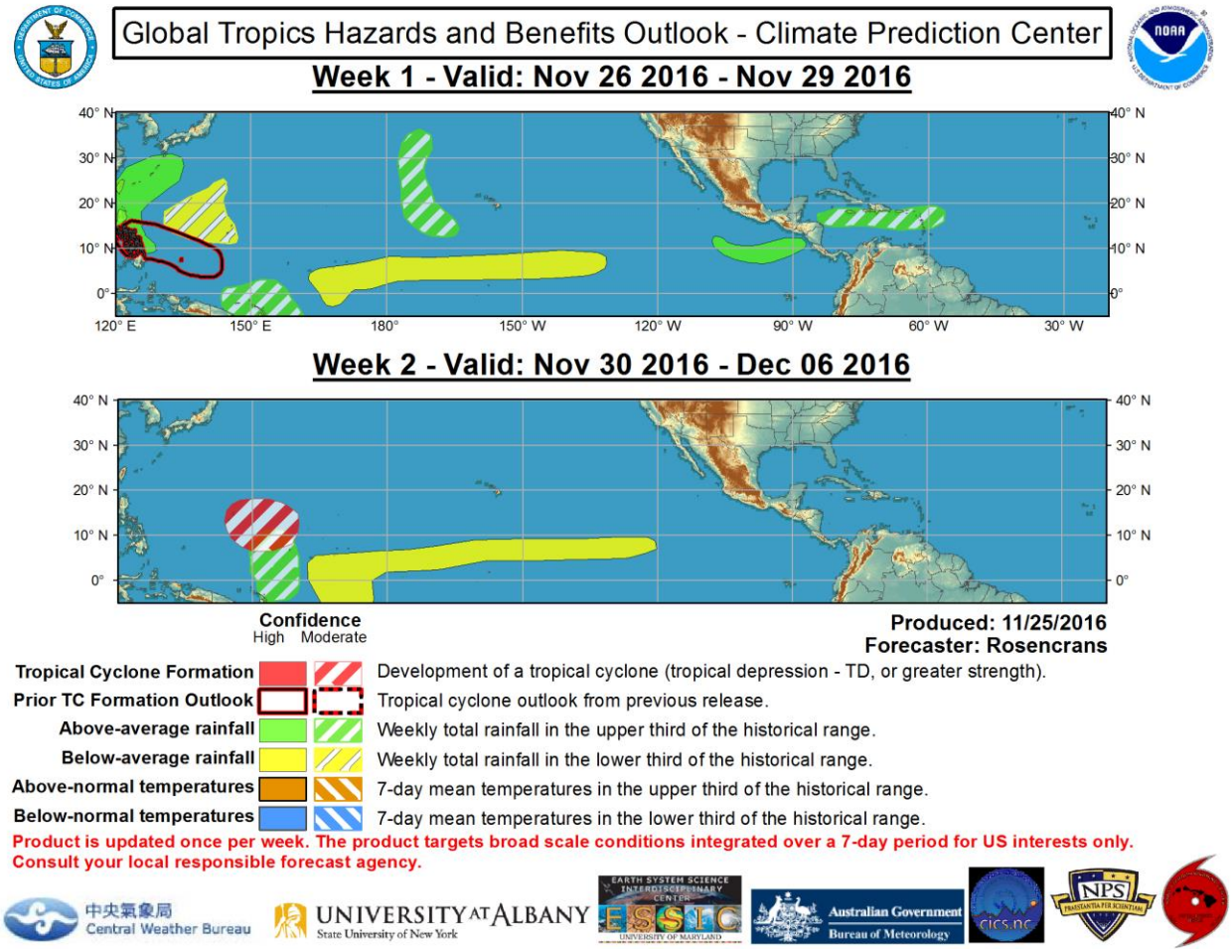

The MJO weakened over the Indian Ocean during the past couple of days, as interference with the background interseasonal forcings are destructively interfering with the intraseasonal signals. The remaining signal appears to be a Kelvin Wave over the Maritime Continent, which will continue to interfere with the ongoing La Nina. The available models are nearly unanimous in predicting little to no signal for the next week, with large disagreement after that. Some models predict a signal returning to the central Pacific, while others keep a weak signal over the Maritime Continent.

Tropical Storm Tokage developed just east of the Philippines, and crossed the central portions of that nation earlier this week. TS Tokage is forecast to move northward, just west of the Philippines, then dissipate over the South China Sea. Tropical Storm Otto is forecast to move westward over the East Pacific and eventually dissipate over the eastern Pacific before impacting land for a second time. No new tropical cyclone formations are likely during the next 5 days. Toward the end of the period, 8-10 days from now, tropical cyclone formation odds are enhanced over the western Pacific. Though outside the area for the Friday update, models continue to indicate a slight increase in odds for formation of a tropical cyclone over the Bay of Bengal from days 5-10.

The above/below average precipitation shapes were adjusted to be consistent with recent model output, and reflect a weakening MJO with the interseasonal signal becoming more dominant.

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

The MJO remains active, with the CPC velocity potential anomaly based index and the Wheeler Hendon RMM based index indicating a signal over the western Indian Ocean. OLR measurements also indicate enhanced convection over the Maritime Continent and western Pacific, so there are some competing signals in the climate system. Dynamical guidance from a few models indicate a weakening signal during the next week, with increased uncertainty after that as different models latch on to different signals.

During the past week, Tropical Storm Otto formed over the western Caribbean, and is forecast to track westward across Central America before emerging over the Pacific. No other tropical cyclones of at least depression strength developed. During the next two weeks, tropical cyclone formation is likely over the western North Pacific, with potential impacts to the Philippines. Tropical cyclone formation odds are also increased over the southeast Indian Ocean later in Week-1 and into Week-2. Some models hint at a slight increase in formation odds over the Bay of Bengal later in Week-2.

The ongoing MJO event and other intraseasonal activity support enhanced convection over the Indian Ocean and eastern Africa. While the ongoing La Nina favors below-normal convection over the central Pacific. Intraseasonal signals interfering with the low-frequency (La Nina) signals result in lower coverage and less confidence for enhanced rainfall over the Maritime Continent, and a likely eastward shift from what has been measured in the last two months. Later in Week-1, there are increased odds for below normal temperatures across northern Mexico, but temperatures are not expected to go below freezing, except for some of the highest elevations near the U.S.-Mexico border, so no large-scale threat area is depicted.

The ongoing La Nina supports enhanced convection over the Maritime Continent, but uncertainty is increased due to the competing influences and uncertainty about the re-emerging MJO signal over the eastern Maritime Continent near the end of Week-2. Both of those signals would result below-normal

convection over the central Pacific, although if the MJO signal remains diminished and a lower amplitude Kelvin Wave signal moves eastward, the subsidence associated with La Nina would be slightly interrupted. In addition to these precipitation anomalies, some model outputs suggest temperatures are likely to be well below normal for Southeast Asia, but the odds of being below 40 F (4.4 C) are low, so no hazard is depicted.

Forecast shapes over Africa are made in consultation with the Africa Desk at CPC, and often reflect more regional scale variability in addition to large-scale climate factors.