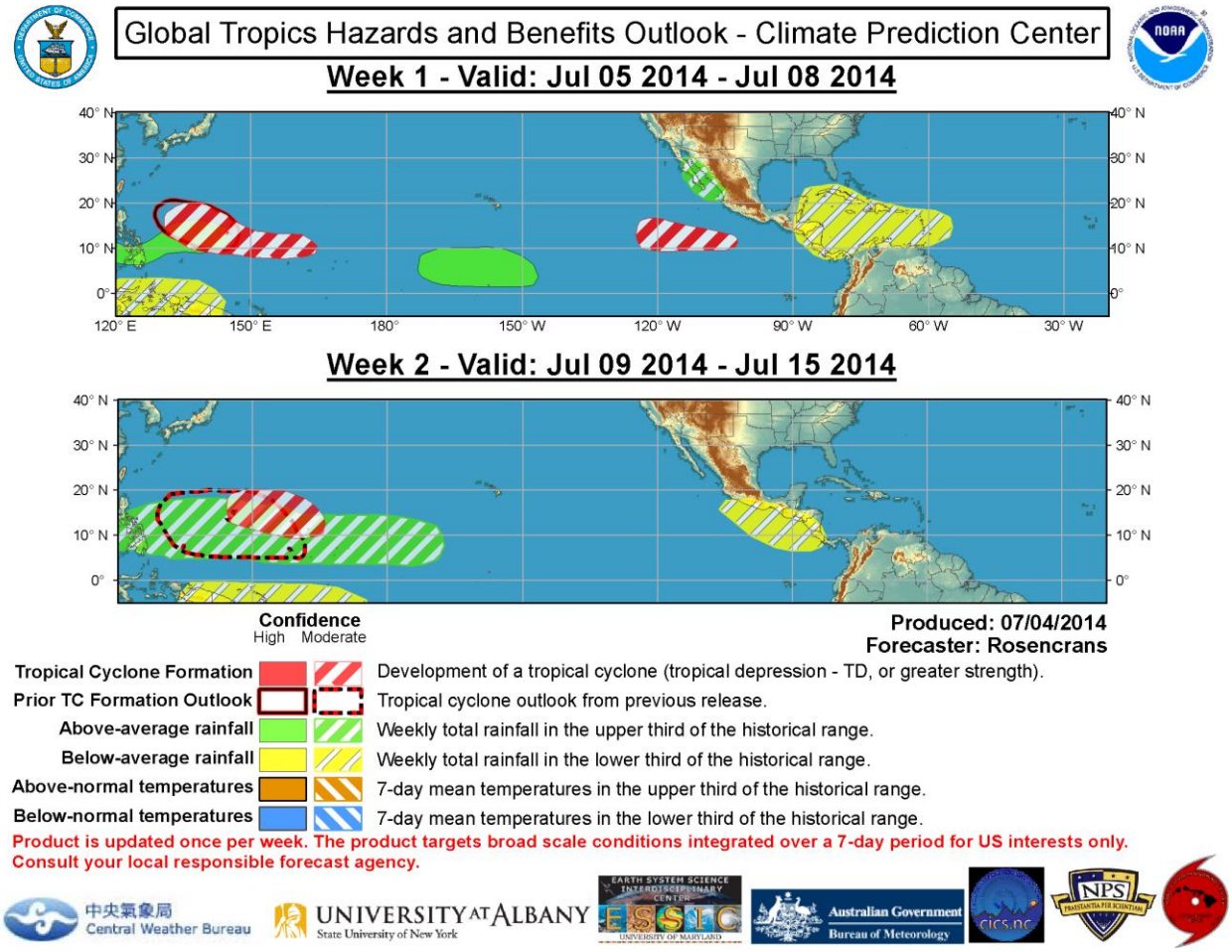

The MJO continued to be weak with the upper-level velocity potential pattern exhibiting a wave-3 structure, not consistent with an active MJO. Model forecasts indicate a reorganization of the signal over the Maritime Continent during next week, and the updated GTH reflects that. Tropical Cyclone formation potential over the East Pacific and Atlantic is low during the next 2 weeks, with a 20% chance of formation over the East Pacific. No formations are expected over the Atlantic during the next 4 days. Some models indicate low chances for formation of a tropical cyclone over the deep tropics in the Atlantic during 9 July - 15 July. That area will be monitored, but as of 4 July, the odds are too low to indicate a hazard area on the map.

The areas of forecasted above or below-average rainfall have been adjusted to align with model output, the reorganizing MJO, and background ENSO conditions. Above-average rainfall area is favored across the Philippines and West Pacific in Week-2, likely driven by Kelvin Wave activity and an increase in the Southeast Asia monsoon circulation.

Previous Discussion Follows:

The Wheeler-Hendon RMM and CPC MJO indices both indicated a weakened MJO compared to a week ago. The CPC Index indicates a slightly strong signal as the upper-level circulation field is more coherent. Convection over India remained weaker than normal, while enhanced convection was measured over the western Pacific, and the eastern Pacific. Model forecasts predict a weak MJO for Week-1, followed by a strengthening signal over the Maritime Continent during Week-2. The rapid progression is indicative of Kelvin Wave activity defining the pattern, along with contributions from the evolving background state and potentially an Equatorial Rossby Wave.

Three tropical cyclones formed during the period. Tropical Storm Arthur formed near the east coast of Florida, while Tropical Storm Douglas and Tropical Storm Elida formed over the East Pacific, not far south of Mexico. Tropical cyclone formation is not likely over the East Pacific during the next 2 weeks. Tropical cyclone formation potential is elevated just east of the Philippines for later in Week-1 and potentially into Week-2.

During Week-1, above-average rainfall is likely across the eastern Pacific and for much of western Mexico, as well as over the Central Pacific. Below-average rains are likely over the Caribbean, likely from increased shear and subsidence. The South Asian Monsoon is likely to remain below average during Week-1 over India. Enhanced convection is likely near the Philippines, especially later in Week-1, in association with an Equatorial Rossby Wave. Precipitation patterns over Africa a related to regional scale circulation patterns, with slight modulation from Kelvin Waves during Week-1.

Forecasts for Week-2 indicate enhanced convection over the Maritime Continent and Western North Pacific. Suppressed rainfall is likely over eastern Maritime Continent and portions of the South Pacific, related to the suppressed portion of an Equatorial Rossby Wave. The background ENSO state is likely to contribute to suppressed convection over the Caribbean.