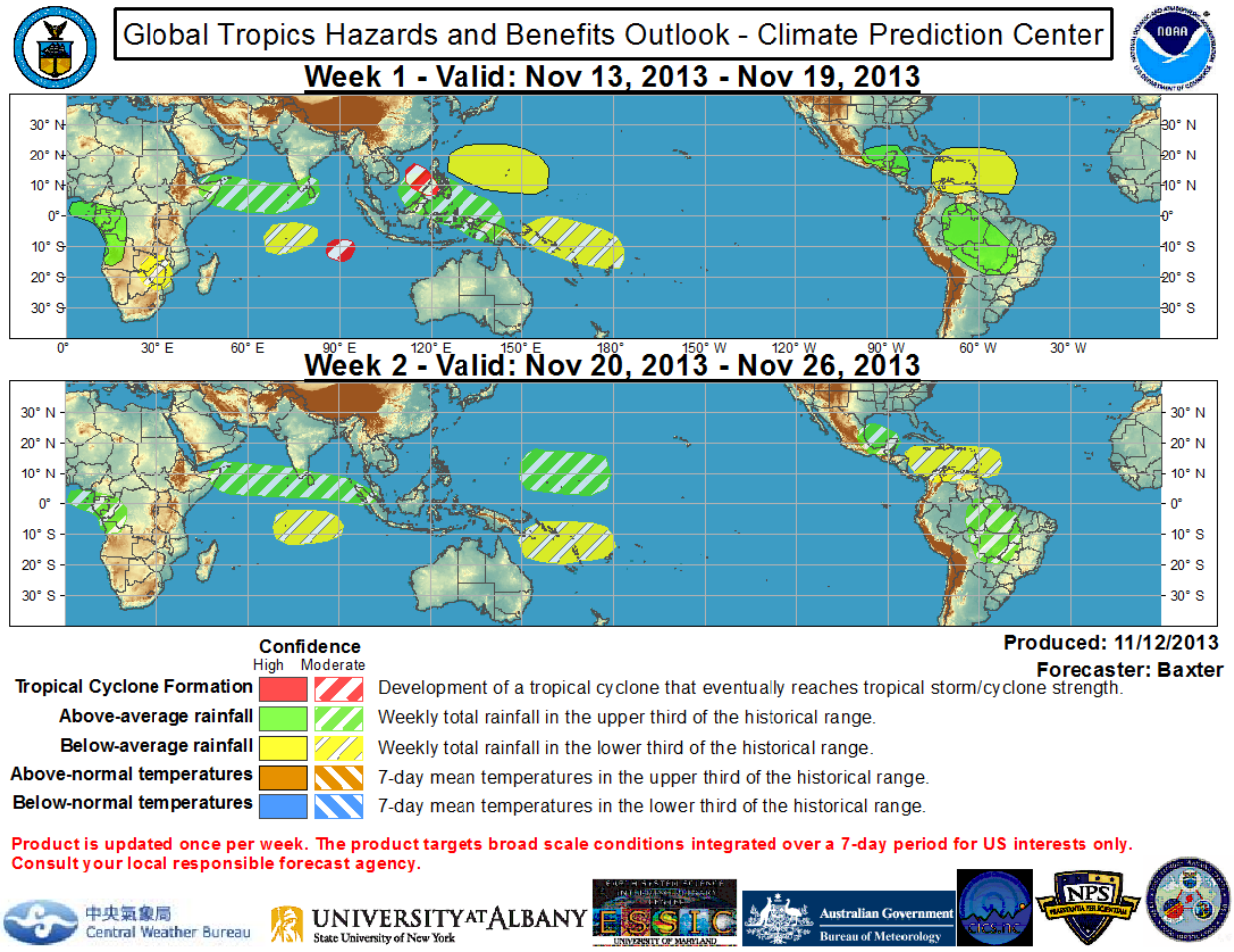

The MJO remained active over the past week while moving eastward into the Indian Ocean. The amplitude decreased as observed by the RMM index, but remained fairly constant in the CPC velocity potential index. The period of the observed eastward-moving velocity potential signal is somewhere between 25 and 30 days, clearly on the fast side for an MJO event or on the slowest side of atmospheric Kelvin wave phase speeds. There continues to be a large amount of uncertainty regarding the MJO forecast over the next two weeks. Dynamical models differ in their various solutions, with the UKMET forecast being closest to a continuous MJO event, the ECMWF suggesting little coherent signal, and the GFS is somewhere in between. The scenario currently favored at this time suggests a fast eastward-moving mode moving into the West Pacific by Week-2 with a more slowly evolving signal holding back across the western Indian Ocean. Superimposed on this variability are likely to be more traditional fast-moving Kelvin waves and westward-moving equatorial Rossby waves (ERW).

A weak tropical cyclone formed in the northwestern Indian Ocean during the past week, making landfall in Somalia. Previously formed Super Typhoon Haiyan made landfall in the Philippines before making a second landfall in Southeast Asia as a much weaker system. A tropical disturbance moving westward across the southern Philippines is forecast to become a tropical storm in the South China Sea during the

next couple of days. Additionally, a low-level circulation could become a tropical storm across the Southeast Indian Ocean early in Week-1.

The precipitation outlooks for Weeks 1 and 2 are based largely on robust signals from the model guidance, modulated by the currently limited assessment of organized modes of tropical convection. The westward moving tropical disturbance near the Philippines combined with the aforementioned fast-moving (~period 20-30 days) eastward propagating mode and an ERW enhance chances for above-average rainfall from parts of the South China Sea to Papua New Guinea during Week-1. Also during Week-1, the more slowly evolving convection across the western Indian Ocean and an ERW enhance odds for above-average rainfall across the Northwest Indian Ocean. Subsidence in the wake of tropical disturbances and the downwelling phase of an ERW are expected to contribute to below-average rainfall across parts of the Northwest Pacific and Southwest Pacific, respectively. Enhanced convection is forecast to continue across parts of South America and Central America; the latter is due to another frontal intrusion. Convection in South America could be aided by atmospheric Kelvin waves. Compensating subsidence is forecast across parts of far northern South America and the western Atlantic/eastern Caribbean region.

During Week-2, there is some eastward shift of enhanced odds for above-average rainfall across the northern Indian Ocean, though above-average rainfall is still forecast to extend westward to far eastern Africa due to the slowly evolving mode in that region. A more pronounced eastward shift in probabilities for above-average rainfall is forecast across the West Pacific region, due to model consensus, the faster eastward-moving mode, and some extratropical influence. The Week-2 outlook in the Americas is largely unchanged from Week-1, with Kelvin waves likely to play a role in enhancing convection, combined with the risk of another frontal intrusion farther north.

While extratropical impacts of the MJO are not expected to be strong over the next two weeks, the potential evolution of this event could have substantial ramifications for early winter climate across the CONUS. More about these potential impacts will be discussed over the coming weeks as the evolution of the MJO becomes clearer.