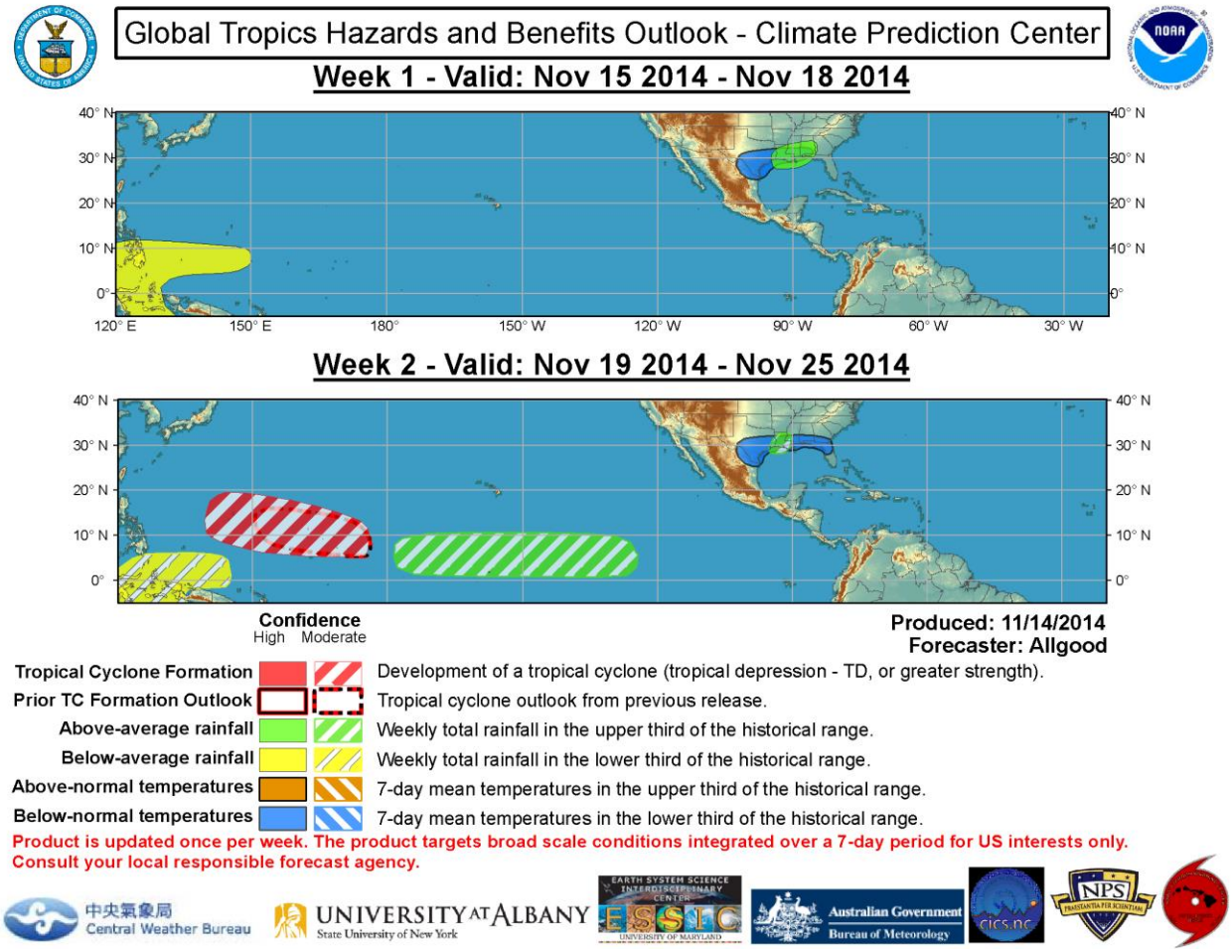

The global tropical convective anomaly pattern became increasingly consistent with MJO activity during the past several days. Both the RMM and CPC MJO indices indicated an enhanced phase propagating eastward over the Western Hemisphere, and the upper-level velocity potential spatial anomaly pattern reflects a robust Wave-1 structure. Considerable uncertainty remains regarding the future evolution of this subseasonal signal. The GFS ensembles, which previously depicted a robust MJO signal propagating across the Indian Ocean, have more recently depicted a weaker signal by Week-2. The ECMWF continues to rapidly weaken the MJO signal, although this forecasted weakening has not verified during the past several days. As the MJO convective envelope propagates to the Indian Ocean and Maritime Continent, destructive interference with the low frequency evolving ENSO state favoring suppressed (enhanced) convection over the Maritime Continent (west-central Pacific) will increase, making additional eastward propagation difficult to maintain. Based on recent observations and dynamical model forecasts, the MJO is anticipated to be a contributor to the global tropical convective pattern early in the period, with increasing uncertainty into late Week-2.

No late season tropical cyclone activity is anticipated during the remainder of Week-1 or Week-2 across the eastern Pacific and Atlantic basins. Over the western Pacific, tropical cyclogenesis is not anticipated

during the remainder of Week-1, but dynamical model guidance continues to indicate a moderate potential for development well east of the Philippines during Week-2. Areas of enhanced or suppressed rainfall depicted on this outlook have been updated to reflect the latest model guidance.

The original forecast discussion released on 11 October 2014 follows.

The amplitude of both the RMM and CPC velocity potential MJO indices increased during the past week, depicting any enhanced phase of a subseasonal signal over the Western Hemisphere. To date, there has been little established eastward propagation of this signal. Other modes of variability, including westward moving features, extratropical interactions, and a SST-driven low frequency signal favoring enhanced (suppressed) convection over the central Pacific (Maritime Continent) continue to influence the pattern. At this time, it is unclear whether the increasing Wave-1 coherence is arising from constructive interference among these other signals, or represents the evolution of a more robust MJO envelope. Due to interference from the base state, there has not been robust propagation of a coherent MJO signal across the tropics for several months.

Several dynamical models, including the GFS, UKMET, Canadian, and Japanese, depict an eastward propagation of the RMM Index from the Western Hemisphere to the Indian Ocean during the upcoming two-week period. The bias-corrected ECMWF model is an outlier, bringing the RMM Index signal back inside the unit circle by the end of Week-1. Despite the eastward propagating signals depicted by models such as the GFS and CFS, the forecast precipitation anomaly fields over the Indian Ocean are not impressive from an MJO perspective. During the previous 5 days, low-level (upper-level) easterly (westerly) anomalies were observed over equatorial Africa, which may be inhibiting sufficient recharge over the Indian Ocean to allow for a widespread convective event. Based on the recent observations and model forecasts, therefore, an evolving MJO signal may contribute to the pattern of global convection, but it is unclear whether this signal will become a long lived, more robust event.

Tropical Storm Five developed over the Bay of Bengal on 6 November, reaching a maximum intensity of 35 kts before weakening north of Sri Lanka. During Week-1, a disturbance over the southeastern Bay of Bengal has a moderate potential for development as it moves towards the west-northwest. A disturbance northwest of Madagascar has a low potential for development during the upcoming week, so no shape was depicted on the map. Over the eastern Pacific, increasing vertical shear makes early period development of a disturbance south of the Baja Peninsula increasingly unlikely. Based on the

potential evolution of the subseasonal signal, there is an increased potential for tropical cyclogenesis over the southwestern Indian Ocean during Week-2. Some models also indicate a low to moderate potential for tropical cyclogenesis over the west-central Pacific during Week-2.

Enhanced convection is favored over the equatorial western Indian Ocean, and near and east of New Guinea during Week-1, while suppressed convection is forecast for much of the remainder of the Maritime Continent, including northern Australia and the southern Philippines. Eastern Pacific tropical moisture entrained in a deep trough is forecast to bring enhanced rainfall to central Mexico and the northwestern Gulf of Mexico. Unseasonably cold temperatures are likely across the U.S. Gulf Coast in association with the deep trough. Over South America, enhanced (suppressed) convection is favored over eastern Brazil (southern Brazil, Uruguay, and northeastern Argentina).

During Week-2, enhanced convection is forecast to continue over the west-central Indian Ocean, although coverage is not anticipated to be as extensive as expected during a canonical Indian Ocean MJO event. Suppressed convection is forecast to persist over much of the Maritime Continent, while dynamical models favor the enhancement of the central Pacific ITCZ. Unseasonably cold air is anticipated to persist over the southeastern CONUS, although the CPC Hazards assessment does not extend the area of potentially hazardous below normal temperatures southward to the Gulf Coast during Week-2. The couplet of above (below) normal rainfall over northeastern Brazil (southern and southeastern Brazil, Uruguay, and northeastern Argentina) is anticipated to persist during Week-2 while shifting equatorward.