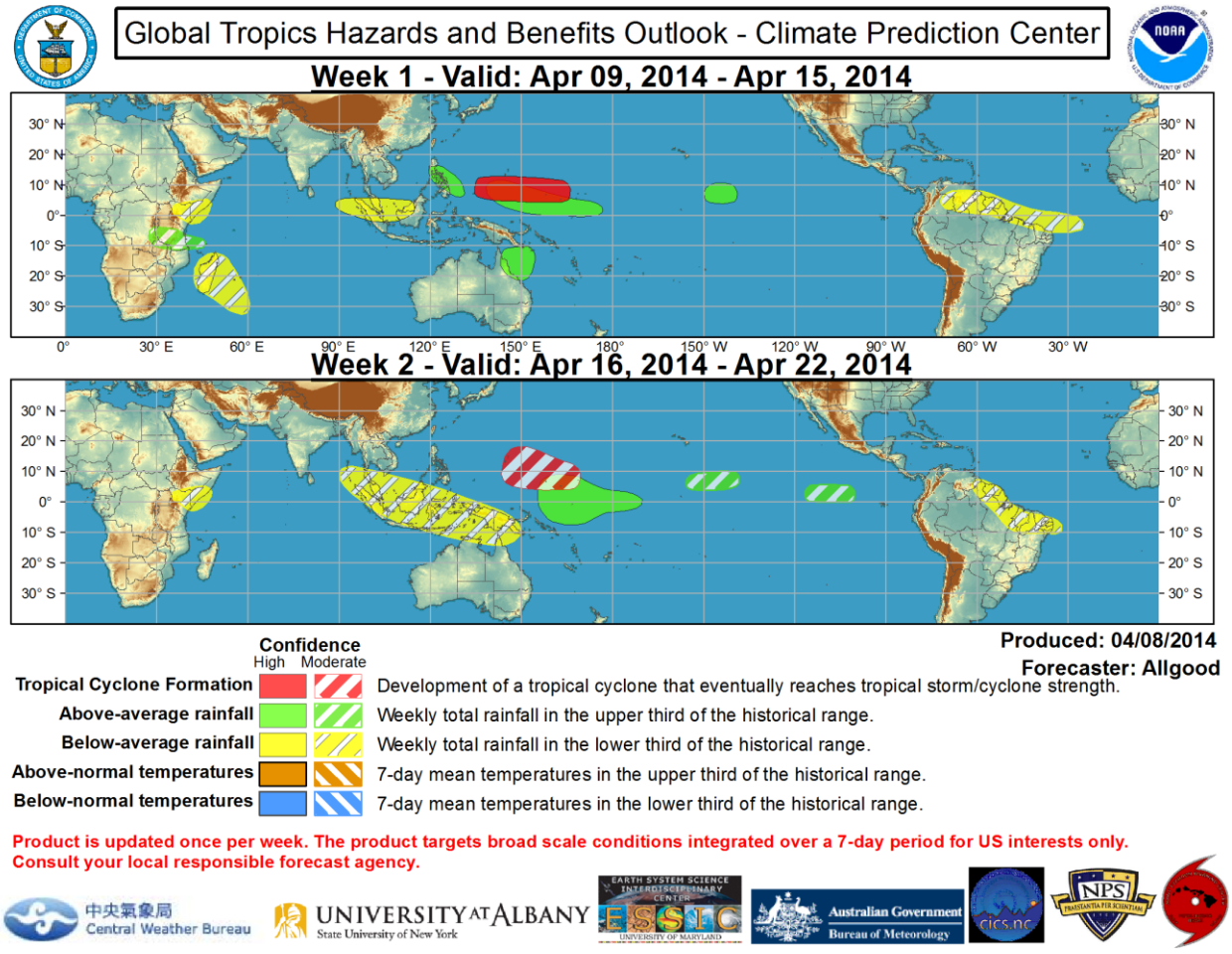

Recent observations of tropical convective anomalies have been more consistent with MJO activity. Both the RMM-based MJO index and the CPC velocity potential MJO index indicate an eastward propagating signal, with enhanced convection over the eastern Indian Ocean and western Maritime Continent. The spatial pattern of velocity potential anomalies is also increasingly suggestive of a coherent MJO, with a Wave-1 pattern supporting large scale upper-level divergence (convergence) over the eastern Indian Ocean, Maritime Continent, and West Pacific (Western Hemisphere and western Indian Ocean). Other modes of coherent tropical subseasonal variability continue to strongly influence the pattern. Time-longitude OLR observations are suggestive of continued Kelvin Wave (KW) activity over the Indian Ocean, and an Equatorial Rossby Wave (ERW) is apparent over the western Pacfic. These features are currently interfering constructively with the MJO signal. A slowly evolving base state favoring enhanced convection over anomalously warm sea surface temperatures (SSTs) in the central Pacific also remains a significant contributor to the global tropical convective pattern.

Dynamical model forecasts support a continued eastward propagation of the MJO over the Maritime Continent, but with differences in the strength and propagation speed of the signal as the models resolve interactions with the higher frequency modes and the low-frequency base state. The GFS

quickly propagates a signal into the Western Hemisphere, while the UKMet and ECMWF indicate a more incoherent signal emerging over the western Pacific by Week-2. Statistical models favor continued eastward propagation of a robust MJO.

Tropical Storm Peipah developed on 3 April north of New Guinea, and is forecast to approach the Philippines at tropical storm intensity. Cyclone Ita formed on 4 April over the Solomon Sea, and is forecast to strengthen as it moves west-southwestward over the Coral Sea towards Queensland's northeastern coast. Additional tropical cyclogenesis is possible over the northwestern Pacific basin during both Week-1 and Week-2, as constructive interference between KW activity emerging from the Maritime Continent and the low frequency base state favors large scale upper-level divergence. Dynamical guidance also suggests a low probability for tropical cyclogenesis over the southeastern Indian Ocean.

During Week-1, enhanced convection is likely near and east of the Philippines and over the northern Coral Sea due to ongoing tropical cyclone activity. Enhanced (suppressed) convection is favored over the western Pacific near and north of the equator (Madagascar and the adjacent southwest Indian Ocean, and the western Maritime Continent and eastern Indian Ocean just north of the equator). Suppressed convection is also possible over parts of northern South America and within the Atlantic ITCZ. During Week-2, enhanced convection is anticipated over much of the tropical Pacific, including near and west of the Date Line, southeast of Hawaii, and across parts of the eastern Pacific due to increasing influence from the low frequency base state. Suppressed convection is anticipated across much of the Maritime Continent and northern South America.

Forecasts for areas of enhanced or suppressed convection over Africa are based on dynamical guidance for regional scale features.