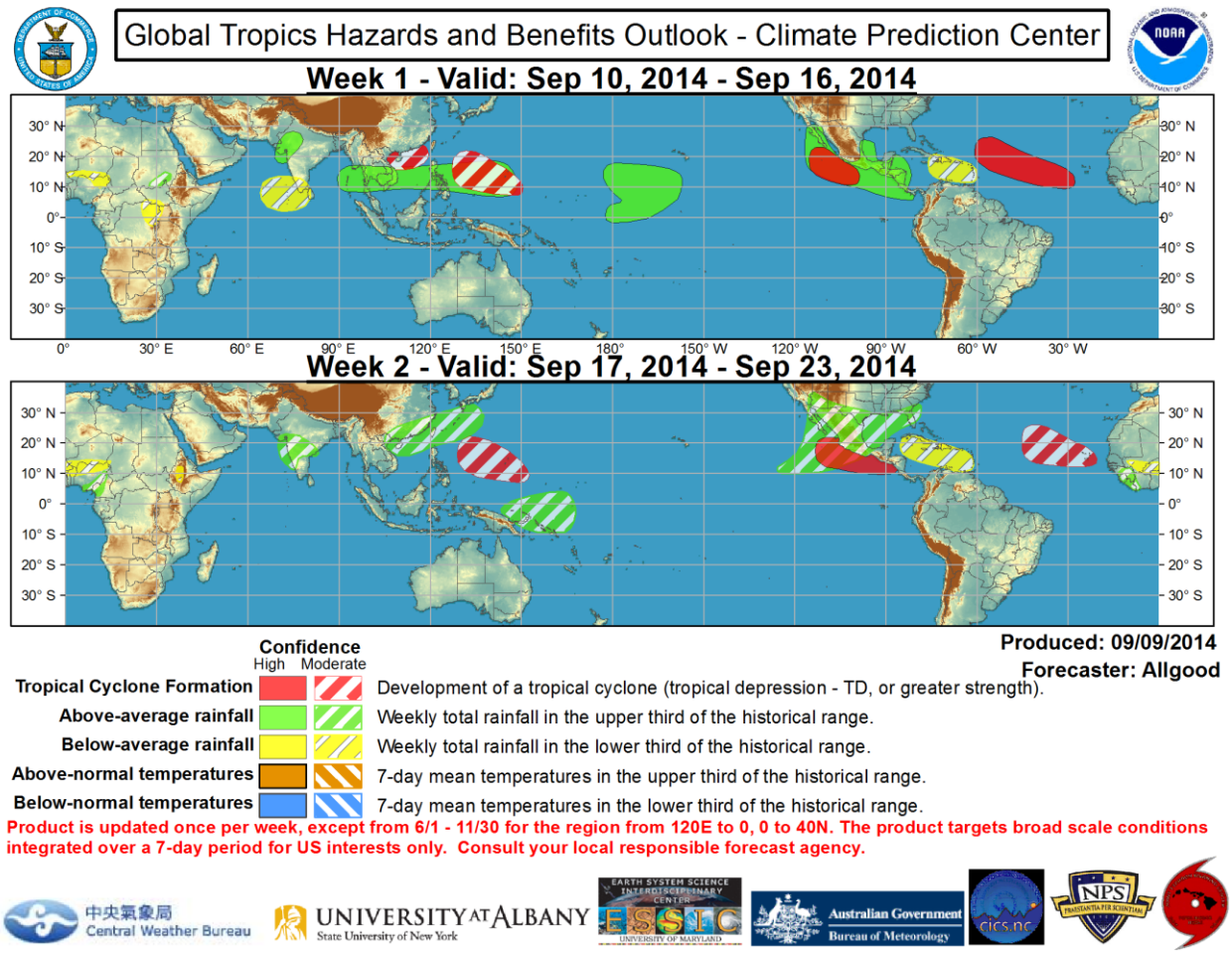

The MJO became more coherent during the past several weeks, although other modes continue to strongly influence the overall pattern. Both the RMM and CPC velocity potential based MJO indices depicted an enhanced convective intraseasonal signal propagating from the Indian Ocean to the Maritime Continent. During the past several days, however, the amplitude of the RMM Index has decreased substantially as influence from other modes, such as tropical cyclone activity over the eastern Pacific and a Kelvin Wave over the Indian Ocean destructively interfered with the pattern. Destructive interference between the suppressed phase of the MJO, Kelvin Wave activity, and a SST-based lower frequency signal favoring enhanced convection over the central and eastern Pacific is also apparent.

There is considerable spread among dynamical model MJO index forecasts, but most solutions do not favor a continuation of the recently observed MJO signal over the Maritime Continent. The GFS and ECMWF forecasts both pull the index towards Phase-8 and 1, corresponding to enhanced convection over the Western Hemisphere, with renewed eastward propagation of enhanced convection towards the Indian Ocean. It is possible that a combination of forecasted tropical cyclone activity over the eastern Pacific and Atlantic, the low frequency signal, and model depictions favoring the evolution of Kelvin Wave activity over the Indian Ocean into a more robust intraseasonal signal are contributing to

this forecasted evolution of the RMM Index. Based on recent observations, a continued eastward propagation of enhanced convection from the Maritime Continent to the western Pacific is anticipated, but there is considerable uncertainty regarding the future evolution of any remaining intraseasonal signal.

Tropical Depression Fourteen formed on September 7th just east of Hainan Island before making landfall over mainland China. Tropical Storm Fengshen developed on the same day south of Japan, and is forecast to recurve rapidly towards the northeast. Tropical cyclogenesis is favored during Week-1 over the central Atlantic as a broad area of enhanced convection moves west-northwestward. With a developing trough over the eastern CONUS, dynamical models favor a recurving track over open water for any potential tropical cyclone developing in this region. Additional tropical cyclone development over the central or eastern Atlantic is also possible during Week-2, with dynamical models continuing to favor recurving tracks with no direct U.S. impacts. Over the eastern Pacific, additional tropical cyclogenesis in the wake of Hurricane Norbert is favored during Week-1, with track forecasts bringing the potential tropical cyclone close to the Baja Peninsula. This track would favor additional Gulf moisture surges over northwestern Mexico and the southwestern U.S. There is a lower potential for a second tropical cyclone to form southwest of this region during Week-1. Dynamical models favor a continued active pattern over the eastern Pacific during Week-2, with additional tropical cyclogenesis possible. Most GFS ensemble members indicate development close to Mexico's southern coastline. Tropical cyclogenesis is possible during both Week-1 and Week-2 over the western Pacific east of the Philippines. Dynamical models also favor the potential for tropical cyclone development near land over the South China Sea during Week-1.

Enhanced convection is favored to persist over parts of northwestern India during the upcoming week. A swath of enhanced convection is forecast to extend eastward from southeastern Asia through the northwestern Pacific during Week-1, which is consistent with the recently observed MJO state. Dynamical models including the GFS, CFS, and ECMWF favor suppressed convection over the north-central Indian Ocean and far southern India. A southern suppressed ITCZ east of the Date Line and a broad area of low pressure favor enhanced convection over the central Pacific, with some models favoring tropical cyclone development in this area. Enhanced convection is forecast for the eastern Pacific, parts of Mexico, Central America, and the adjacent Gulf of Mexico and western Caribbean during Week-1, while suppressed convection is anticipated across the eastern Caribbean basin.

During Week-2, the GFS and ECMWF favor continued enhanced monsoonal activity over western and central India. There was considerable spread among the dynamical model depictions of convective anomalies across the Maritime Continent and western Pacific, but solutions generally favor enhanced convection over southeastern China, the South China Sea, and the West Pacific just south of Japan. The ECMWF and CFS both favor enhanced convection near and south of the equator east of New Guinea.

Over the Western Hemisphere, widespread enhanced convection is anticipated, with tropical moisture contributing to an enhancement of the North American Monsoon and precipitation along a frontal boundary over the Gulf Coast States.

Forecasts for enhanced or suppressed convection over Africa are based on model forecasts of regional scale features and provided through coordination with the CPC Africa Desk.