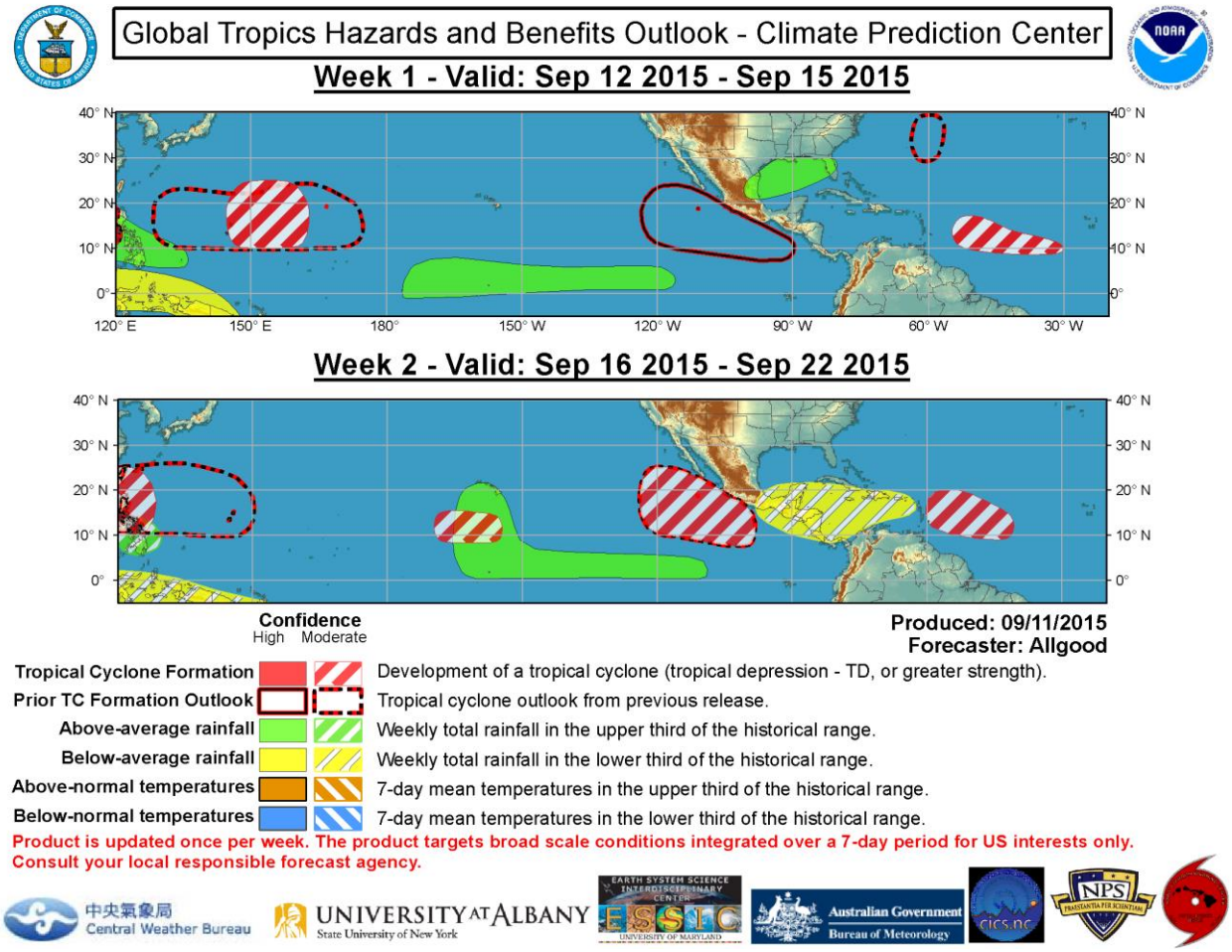

The MJO remains weak, although several dynamical models, including the ECMWF, Canadian, and Taiwan, depict a fast moving intraseasonal signal propagating over the Maritime Continent during the next two weeks. Most models bring this signal rapidly to the Pacific. The GFS maintains a weak MJO index, while the UKMET depicts an amplified signal over the eastern Pacific with no eastward propagation. Based on the considerable spread among the dynamical models, MJO impacts are not anticipated to play a significant role during the outlook period.

Environmental conditions are anticipated to be less (more) conducive for tropical cyclogenesis over the East Pacific (central Atlantic) during the remainder of Week-1 than was forecast several days ago. Therefore, there is moderate confidence that a tropical wave over the eastern Atlantic will develop into a tropical cyclone during the early to mid part of next week, and there is low confidence for tropical cyclone formation during the remainder of Week-1 over the East Pacific. The moderate confidence shape was maintained over the East Pacific for Week-2, due largely to the El Nino background state.

Several GFS ensemble members develop a tropical cyclone south of Hawaii next week; therefore, a moderate confidence TC shape was added for the Week-2 period in this update. Overall confidence for TC development over the West Pacific basin is reduced, however, moderate confidence for TC development remains across a region north of 10N between 140E and 160E during the next 4 days.

Although these regions are not included on the updated GTH outlook, there is currently high confidence for tropical cyclogenesis over the South China Sea, and several dynamical models depict a very early season TC developing over the Bay of Bengal. The Joint Typhoon Warning Center is currently monitoring both areas.

NOTE: Due to a technical glitch, the Week-2 wet shape over the central and eastern Pacific discussed below did not appear on the final outlook released on 8 September. The shape can be seen in the associated Webinar presentation.

The original discussion released on 8 September follows.

Ongoing, strong El Nino conditions continue to drive the large scale tropical convective anomalies. A weak, eastward propagating signal over the Pacific was discernible in the OLR field and the CPC velocity potential MJO index, with enhanced convection now favoring the far eastern Pacific. No eastward propagation was evident, however, in the RMM MJO index or the low level wind field, and it is unlikely that this signal will continue propagating across the Western Hemisphere to the Indian Ocean. The primary impact of this signal may be enhanced favorability for tropical cyclogenesis over the far eastern Pacific due to increased convection and anomalous large scale upper-level divergence.

There is considerable spread among the dynamical model MJO index forecasts, with several models, including the GFS, Canadian, Taiwan, and the non-bias corrected ECMWF favoring increasing signal over the Maritime Continent by Week-2, and others such as the bias-corrected ECMWF, UKMET, and Australia BOM favoring amplification over the western or central Pacific. Due to the large degree of model uncertainty, impacts from any intraseasonal signal did not play a large role in this outlook; however, there does seem to be a consensus among the dynamical models for increased convection across parts of Southeast Asia and the South China Sea.

Tropical Storm Grace developed on 5 September over the eastern Atlantic, and is currently forecast to degenerate into a remnant low before approaching the Lesser Antilles. Hurricane Linda formed well south of the Baja California peninsula on 6 September and rapidly intensified to a major hurricane while moving north-northwestward. Over the West Pacific, Tropical Storm Etau developed south of Japan on 7 September, and is currently forecast to make landfall over the south-central part of Japan's Honshu Island. During the outlook period, additional tropical cyclogenesis is favored over the eastern Pacific, with the highest potential over the eastern part of the basin, south of Mexico. One or two additional tropical cyclone formations are possible over the West Pacific, with ensemble GFS members favoring a region just west of the Date Line and another region closer to the Philippines. Later in the Week-1 period or during Week-2, dynamical models indicate potential tropical cyclone development over the South China Sea, east of Vietnam. Environmental conditions are anticipated to become increasingly unfavorable for additional tropical cyclogenesis over the Atlantic; however, a high-latitude disturbance east of Bermuda has a moderate potential for development during the next several days.

During Week-1, ongoing El Nino conditions favor enhanced (suppressed) convection across the central and eastern Pacific (Maritime Continent). Enhanced convection is favored to develop over the South China Sea, central Philippines, and the adjacent northwestern Pacific.

During Week-2, broader coverage of enhanced convection extending from the Bay of Bengal to the South China Sea is possible due to fluctuations in the Monsoon, but with increased uncertainty. Enhanced (suppressed) convection is anticipated to continue over the east-central and eastern Pacific (Maritime Continent), but there is increased uncertainty about the extent of enhanced convection near the Date Line. Dynamical models favor a return to more suppressed convection over the Caribbean basin, which is consistent with the ENSO background state.

Forecasts for suppressed convection over South Sudan are provided in collaboration with CPC's Africa Desk and are based on model forecast guidance and regional scale anomaly features.