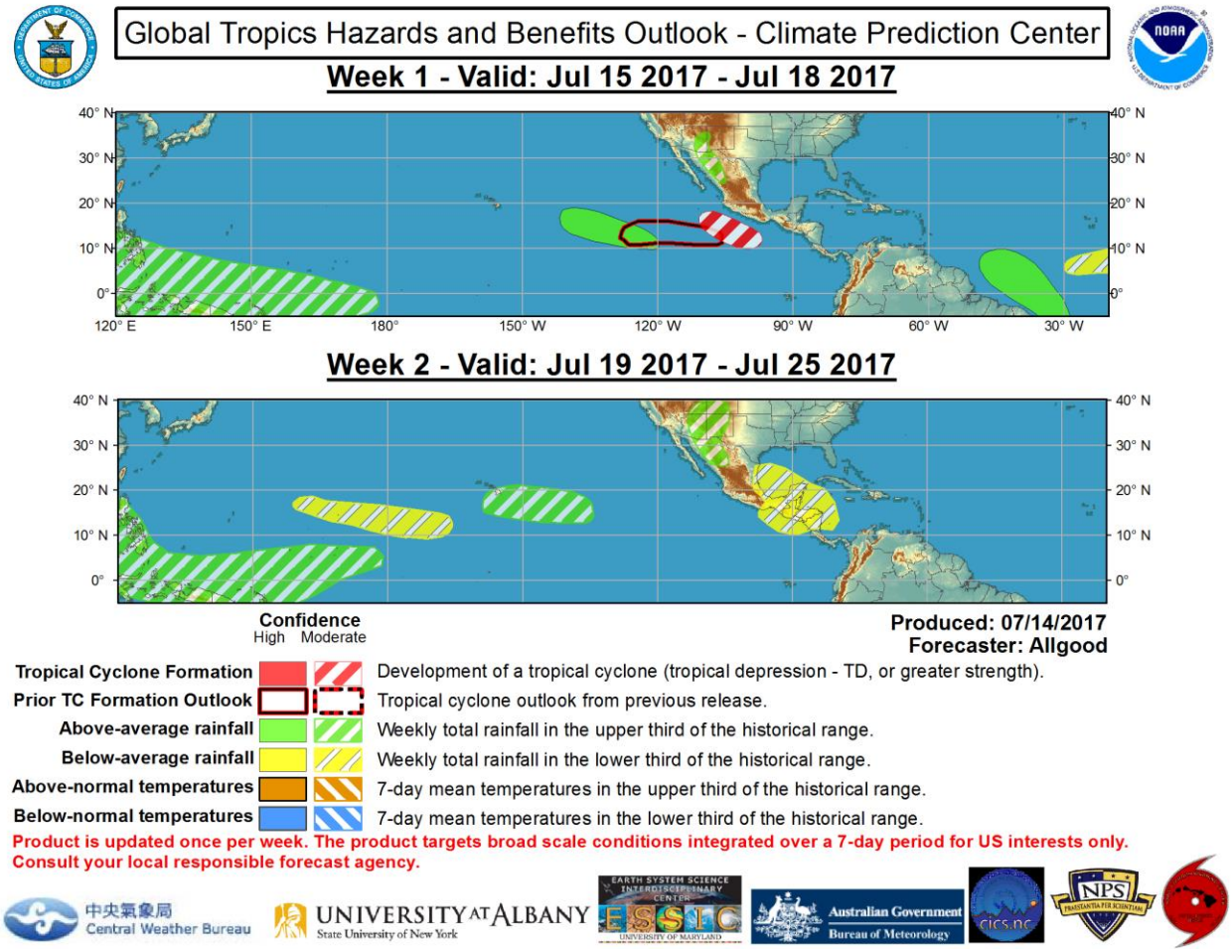

There has been little change in the overall assessment of the global tropical convective pattern. The intraseaonal signal remains weak as depicted on the RMM-based MJO index, while the CPC velocity potential based index suggests a slower mode favoring enhanced convection over the eastern Indian Ocean. The latter projection may be more related to the gradual breakdown of a low frequency signal that favored suppressed convection over the Indian Ocean, as well as westward moving features originating from an envelope of enhanced convection centered over the Maritime Continent. Dynamical models continue to depict weak MJO evolution, except for the ECMWF, which continues to show robust propagation from the eastern Indian Ocean to the West Pacific over the next two weeks. Based on recent conditions and the ECMWF guidance, the MJO may play a role in the evolution of the global tropical convective pattern, and this influence is reflected in the somewhat large regions of enhanced convection depicted on the outlook over the equatorial Maritime Continent and West Pacific.

There are currently no tropical cyclones over the Atlantic basin, and none are anticipated to form during the remainder of the outlook period. Over the East Pacific, Hurricane Fernanda developed well south of the Baja Peninsula and is currently moving westward at major hurricane intensity. High confidence enhanced precipitation shapes were added to this updated outlook reflecting the forecast track of

Fernanda. Towards the end of the outlook period, Fernanda may bring precipitation, wind, and wave impacts to Hawaii. To the east of Hurricane Fernanda, the NHC is monitoring a pair of weak disturbances south of Mexico. The easternmost disturbance, currently near the Gulf of Tehuantepec, has a 50 percent chance of becoming a tropical depression over the next 5 days, according to the National Hurricane Center. Tropical cyclogenesis is not anticipated over the West Pacific basin during the remainder of this outlook period, continuing a recent pattern of suppressed activity.

Forecasts for above and below average rainfall were updated to reflect the latest dynamical model consensus forecasts.

The original discussion released on 11 July follows.

The Madden-Julian Oscillation (MJO) remained generally weak during the past seven days, though some organization is evident in recent days. The recent 850-hPa zonal wind, 200-hPa velocity potential, and outgoing longwave radiation (OLR) data suggest possible development of an MJO event over the eastern Indian Ocean. This is against a noisy background state that includes prominent westward-moving variability as well as low-frequency enhanced convection over the Maritime Continent. The ECMWF ensemble system continues to depict coherent MJO evolution over the next two weeks, with the enhanced phase propagating across the Maritime Continent to the West Pacific. The latest GEFS has trended slightly in that direction but generally forecasts weak MJO activity during the period. Because of its higher levels of historical skill, the ECMWF forecast is weighted more heavily both in terms of expected MJO evolution and the precipitation forecasts.

Tropical Depression Four developed over the Atlantic Basin near 13N/39W at 00Z on 6 July before dissipating less than two days later. Hurricane Eugene formed over the East Pacific Basin near 12N/111W has tracked northwestward with time, reaching a peak strength with 115 mph winds and a minimum central pressure of 965 hPa on 9 July. The system is forecast to dissipate rapidly over the coming one to two days as it continues a northwest track. A tropical wave that was being monitored by NHC over the Main Development Region of the Atlantic Basin is not expected to become a tropical cyclone, as thermodynamic conditions are not conducive for development. The GFS was the lone model depicting TC formation, and it has backed off in recent runs. NHC is currently monitoring a tropical disturbance over the East Pacific for development early in the period. This system is forecast to track

generally westward, possibly passing south of Hawaii during Week-2. The West Pacific is forecast to remain unusually quiet, with only a low chance of TC formation near the Philippines in Week-1.

Above-average rainfall is most likely during Week-1 for parts of South Asia, the Maritime Continent, and West Pacific, albeit at moderate confidence. This is consistent with both the forecast MJO evolution from the ECMWF, as well as dynamical model forecasts. This area extends westward to southern Pakistan where enhanced rainfall is expected to continue associated with anomalous southwesterly flow. Below-average rainfall is favored over the Indian Ocean, again consistent with forecast MJO evolution and dynamical model guidance. Elsewhere, shapes are based largely on the model consensus between the ECMWF, the GEFS, and the CFS.

During Week-2, some eastward propagation is noted based on forecast MJO activity, but all shapes are depicted with moderate confidence given large uncertainty. Enhanced rainfall is more likely southeast of Hawaii associated with potentially ongoing TC activity. Below-average rainfall is more likely over Central America based on forecast MJO evolution and the ECMWF dynamical model forecast.

Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.