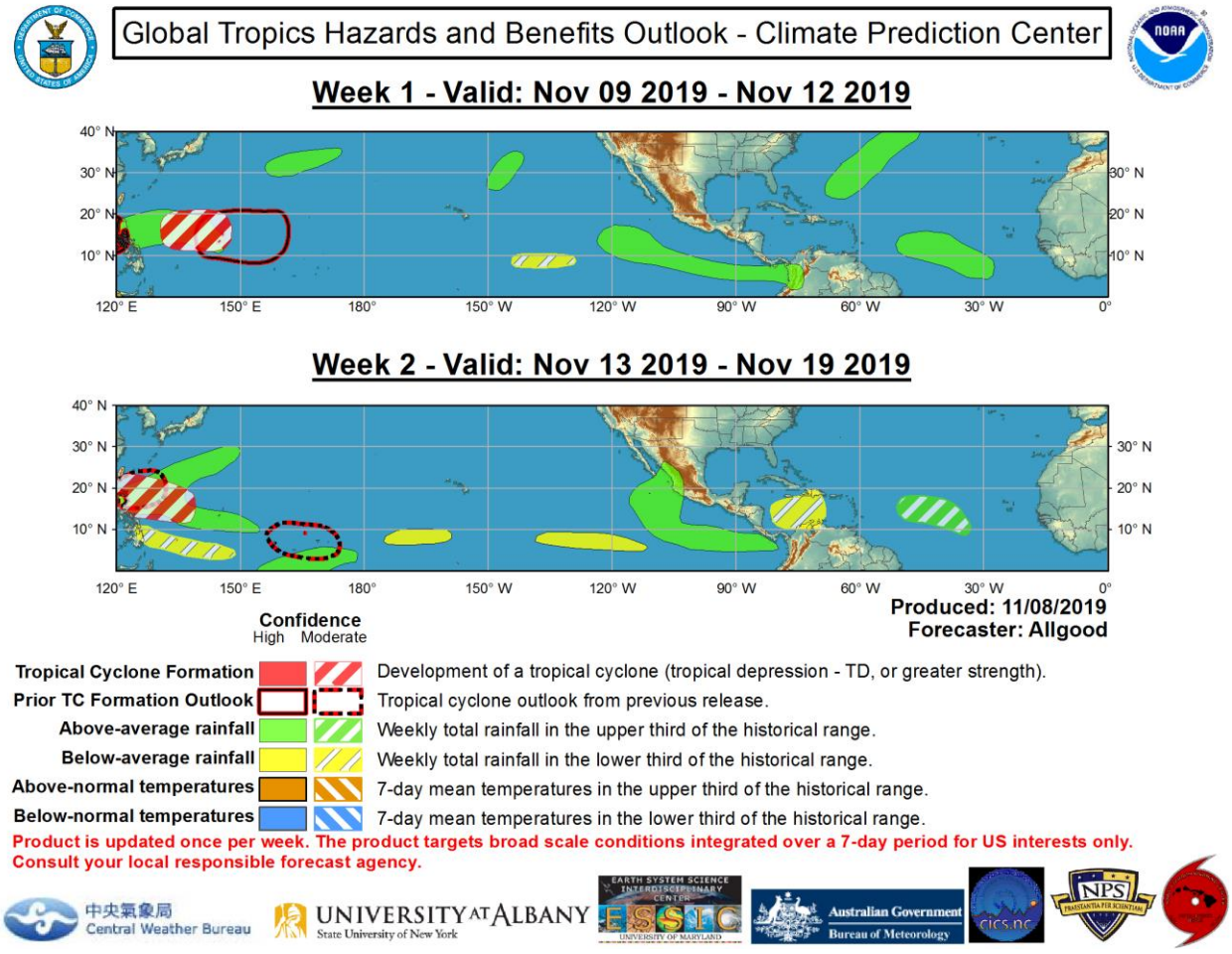

The MJO remains active, with the enhanced convective envelope over the eastern Maritime Continent. Dynamical models continue to favor robust MJO activity during the next two weeks, although the forecast propagation speed over the Pacific is faster than typical MJO events. The ECMWF and GEFS both slow the signal when it returns to Africa and the western Indian Ocean, likely due to constructive interference with the positive IOD state.

The remnants of TD 23 over the Bay of Bengal and Invest 90W over the South China Sea developed into Cyclone Matmo and Typhoon Nakri respectively. Cyclone Matmo is expected to make landfall over northeastern India or Bangladesh in the next few days, while Typhoon Nakri is favored to weaken before approaching Vietnam. A disturbance east of the Philippines may still develop into a tropical cyclone as it moves westward towards or just north of the Philippines, while dynamical models indicate reduced favorability for development further east in the Northwest Pacific. No new late season tropical cyclone formations are anticipated for the East Pacific basin, though given the Pacific MJO event, the region should continue to be monitored. Tropical cyclogenesis is not anticipated in the Atlantic basin during the remainder of the outlook period.

Precipitation forecasts were updated to reflect the latest dynamical model guidance.

The original discussion released on 5 November 2019 follows.

The next two weeks are shaping up to be tropically active with important MJO, equatorial Rossby (ER) wave, and tropical cyclone activity stretching from the Indian Ocean to the Dateline. The MJO is in RMM phase 5, with the active convective part of its envelope over the Maritime Continent. Most dynamical models forecast the MJO to propagate over the Western Pacific during the next two weeks. The ECMWF weakens the MJO more than the CFS during this time, but the ensemble means from both models keep the MJO outside of the circle throughout most of the two week forecast period.

Like most strong MJO events, this one has a strong upper-level velocity potential signal. Its OLR signal is also fairly strong, especially when separated from the lower-frequency Indian Ocean Dipole (IOD). The current position of the MJO leads to enhanced ascending motion from the Maritime Continent to the central Pacific. An ER wave is forecast to move through this region during Week-1 and the superposition of these two waves is expected to lead to three distinct areas of enhanced probabilities of tropical cyclogenesis in the Bay of Bengal (currently remnants of TD 23), South China Sea (currently invest 90W), and Philippine Sea during Week-1 and areas just west of the Date Line and north of the Philippines during Week-2.

There are two active TCs in the Eastern Hemisphere. The JTWC forecasts Tropical Cyclone Maha, in the Arabian Sea, to track eastward into northwestern India. Some above normal rain and wind is possible and interested parties are encouraged to consult their local meteorological agency. Typhoon Halong in the west Pacific is forecast to interact with the jet stream and recurve over the North Pacific.

Above normal rainfall is expected in the western Indian Ocean during Weeks 1 and 2 due to the ongoing IOD event. Further east, below normal rainfall is expected over the eastern Indian Ocean due to the MJO and IOD. There are also several areas of above normal rainfall forecast throughout the western Pacific associated with the aforementioned TC activity and variability of the ITCZ. Some above normal rainfall is

possible over the western Atlantic as mid-latitude frontal activity moves off the East Coast, but this is omitted from the forecast map because it isn't tropical in nature.

Forecasts of suppressed and enhanced rainfall were made based on a consensus of dynamical model guidance, tropical cyclone forecast tracks, and the anticipated state of the low frequency tropical atmosphere. Forecasts over Africa were made in consultation with the CPC International Desks and may reflect local and regional weather impacts.