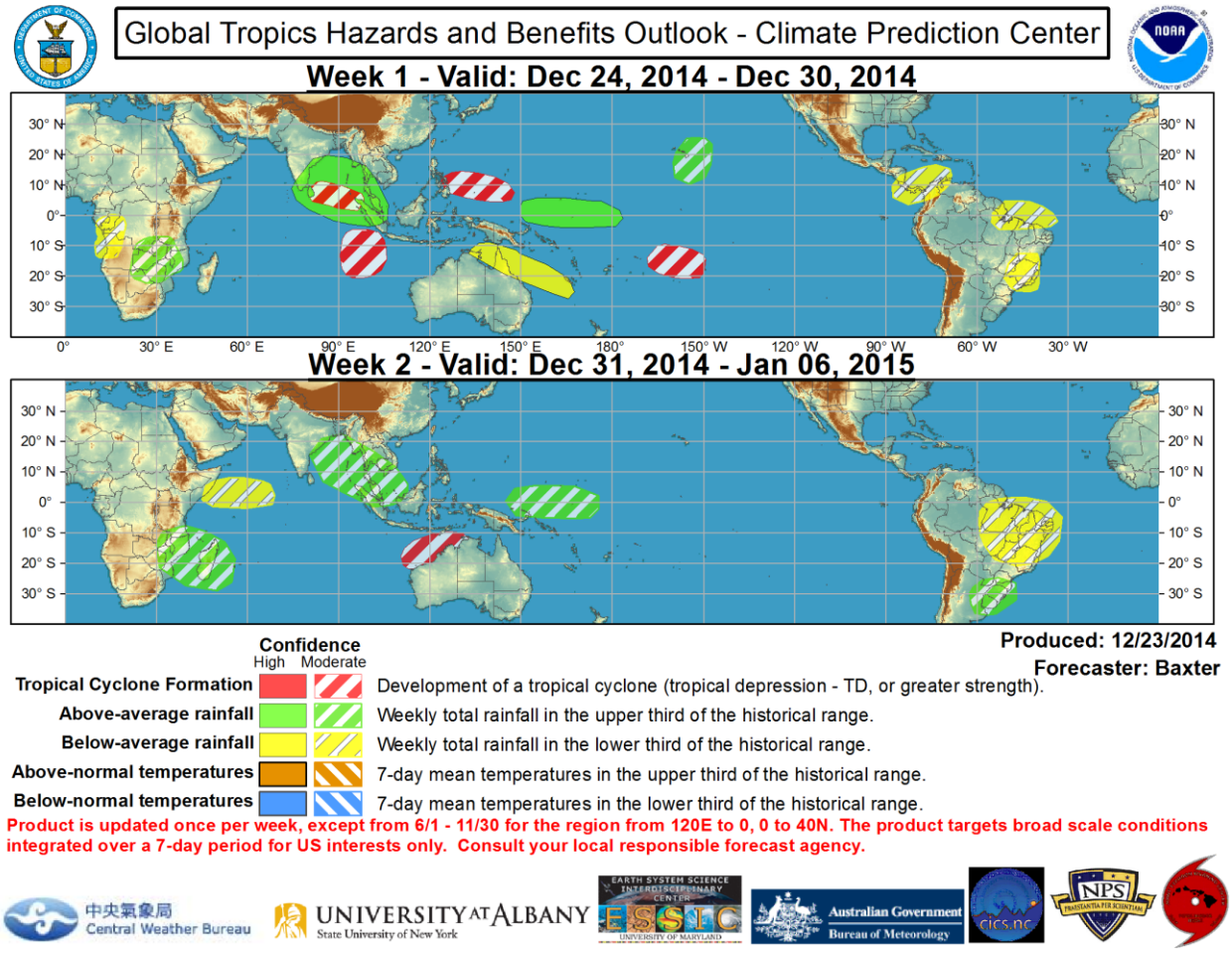

The latest observations indicate a strengthening of the MJO during the past week with the enhanced phase centered over the eastern Indian Ocean. The upper-level velocity potential signal is not very coherent, lacking a well-organized wave-1 structure. Therefore, the CPC index suggests lower MJO amplitude than the RMM index. Atmospheric Kelvin wave activity is currently playing a large role as the phase speed observed over the past week is likely too fast to be MJO. There could be some remnant Rossby wave activity supporting convection over the IO as well. We continue to see above average SSTs in the central and eastern Pacific consistent with El Nino like conditions.

During the past week, enhanced convection was strongest over the Indian Ocean, and weaker suppressed convection was observed, at least briefly, over the West Pacific, consistent with the current MJO signal. The tropics were quiet in terms of cyclogenesis over the past week.

Looking ahead, the majority of the dynamical model RMM forecasts of the MJO indicate a stationary signal early in Week-1, with eastward propagation across the Maritime Continent into the far western Pacific during Week-2. Agreement is good for this evolution, although the ECMWF retains the most

coherent signal during Week-2. The latest 32-day run of the ECMWF ensemble suggests that the MJO will propagate into the West Pacific before the signal becomes largely stationary. This is consistent with the model's forecast of low-frequency enhanced convection centered near 165E.

The outlook adheres to model consensus in terms of both the forecast MJO evolution and the direct precipitation signals output by the dynamical guidance. The outlooks for both weeks are weighted toward the ECMWF, but the models agree on many points. The shapes depicted on the map during Week-1 are consistent with ongoing subseasonal variability and the low-frequency state. Enhanced convection associated with the MJO is forecast across the far western Maritime Continent, the Bay of Bengal, and parts of India. Destructive interference with the low-frequency state favors near-average precipitation for the eastern Maritime Continent. Kelvin wave activity is currently exciting convection over the above-average SSTs in the West Pacific, where convection is forecast to continue for the next several weeks. Areas favored for below-average rainfall include parts of Central and South America and are largely consistent with both the MJO and the low-frequency state, especially later in the period.

During Week-2, the forecast evolution of the MJO is utilized in conjunction with the low-frequency state and model guidance. Below-average rainfall over parts of the western IO is associated with the suppressed phase of the MJO, while enhanced convection over the West Pacific is broadly supported by all factors at play, especially late in the period. The dipole depicted over South America is supported by MJO precipitation composites and model guidance.

Precipitation shapes over Africa for both weeks are made through coordination with CPC's Africa Desk, and are supported by dynamical model consensus.

Tropical cyclogenesis is possible in a few areas over the next week, most likely early in the period. These areas include the southeastern IO, the northwestern Pacific, the Bay of Bengal, and the Southeast Pacific. The risk of cyclone formation in all these cases is moderate. During Week-2, the only region highlighted is northwest of the Kimberley Coast, where the climatology starts to increase this time of year.