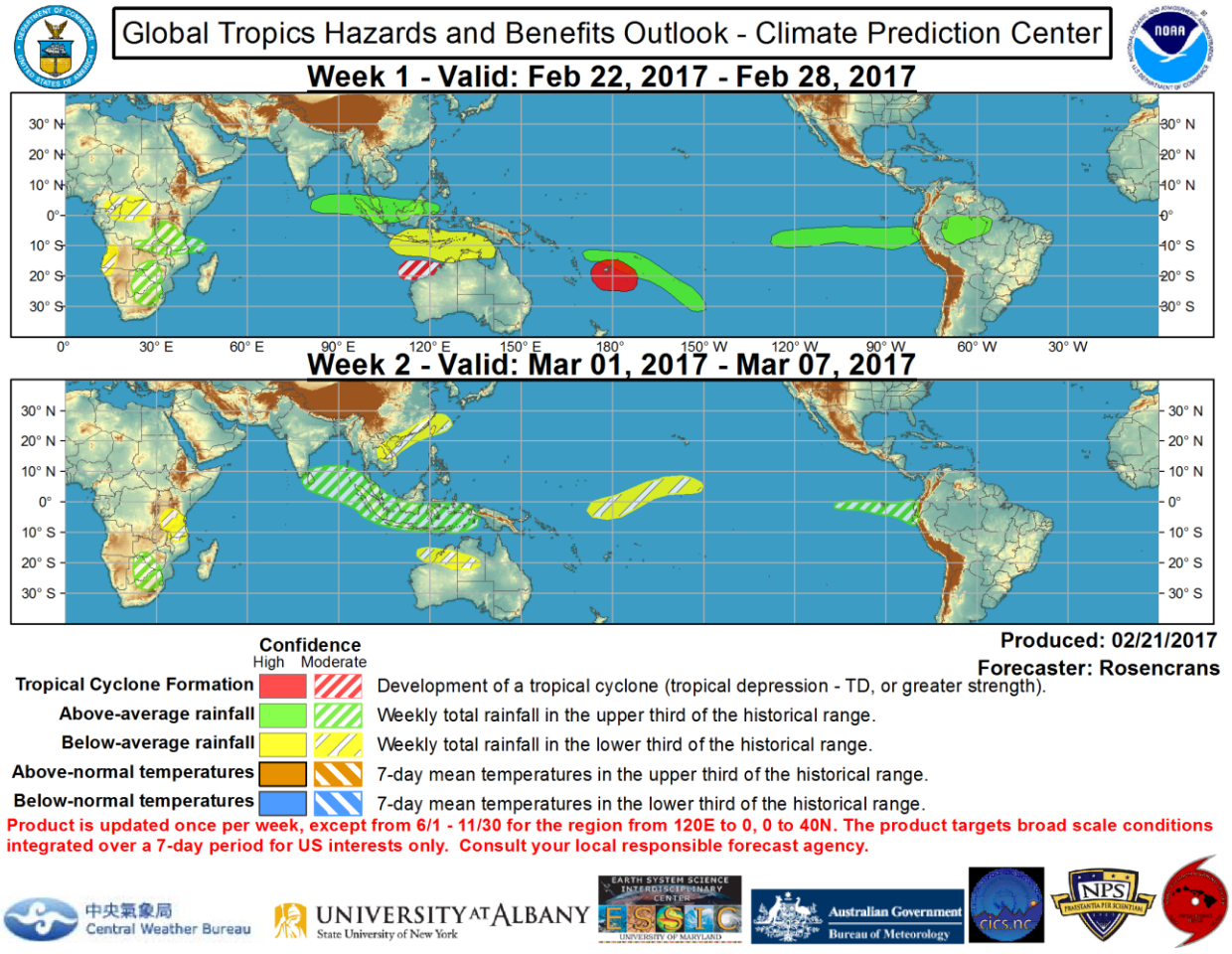

The MJO remained active during the past week, with the RMM-based index and the CPC velocity potential index both indicating a robust signal over Africa. Anomalous divergence, associated with the MJO, is now stretching from the Americas to the Indian Ocean. There is some noise in the pattern associated with mid-latitude influences (over the eastern Pacific) and equatorial Rossby Waves (over the western Pacific). Enhanced convection has been measured over Africa and South America, with suppressed convection over the Indian Ocean. The signals over the Indian Ocean and both the western and central Pacific are likely related to low-frequency variability, which is now competing with the MJO variability.

The MJO signal is forecast to continue moving eastward across the Indian Ocean during Week-1, after which, the dynamical and statistical models diverge on the continuance of a signal. Interference with the IOD mode and a potential MJO in Phase 3 increases uncertainty in Week-2.

Tropical Cyclones Alfred and Bart developed during the past week, with Tropical Storm Alfred moving on-shore in northern Australia, while Tropical Storm Bart is over the South Pacific. During the next week,

tropical cyclone formation is likely over the South Pacific, along the SPCZ, with some additional model signals near the Kimberly Coast, over the Timor Sea. During Week-2, signals for tropical cyclone formation wane, with only small signals over the Mozambique Channel.

Areas favoring above- or below-average rainfall are depicted in Week-1 based on the consensus of model guidance, which is broadly consistent with MJO phase 1/2 tropical precipitation composites. Parts of South America are expected to be fairly active, as well as a small region of the far eastern Pacific where SSTs remain well above-average. Suppressed convection is favored for much of the southern Maritime Continent and northern Australia. Above-average rainfall is more likely over parts of the eastern Indian Ocean and northern Maritime Continent, based on model guidance, the low-frequency state, and the enhanced phase of an equatorial Rossby wave. Enhanced convection is expected to continue over parts of the South Pacific.

The forecast for Week-2 is more uncertain, with the state of the MJO amidst the evolving background expected to become less clear. Enhanced convection is likely over the eastern Indian Ocean, but more so later in the period a signal is likely to emerge, centered over the Maritime Continent, where any potential remaining MJO signal would constructively interfere with the IOD mode. Model guidance diverges on the wet signal over western South America near Ecuador and Peru, though the signal is retained in the outlook with lower confidence.

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