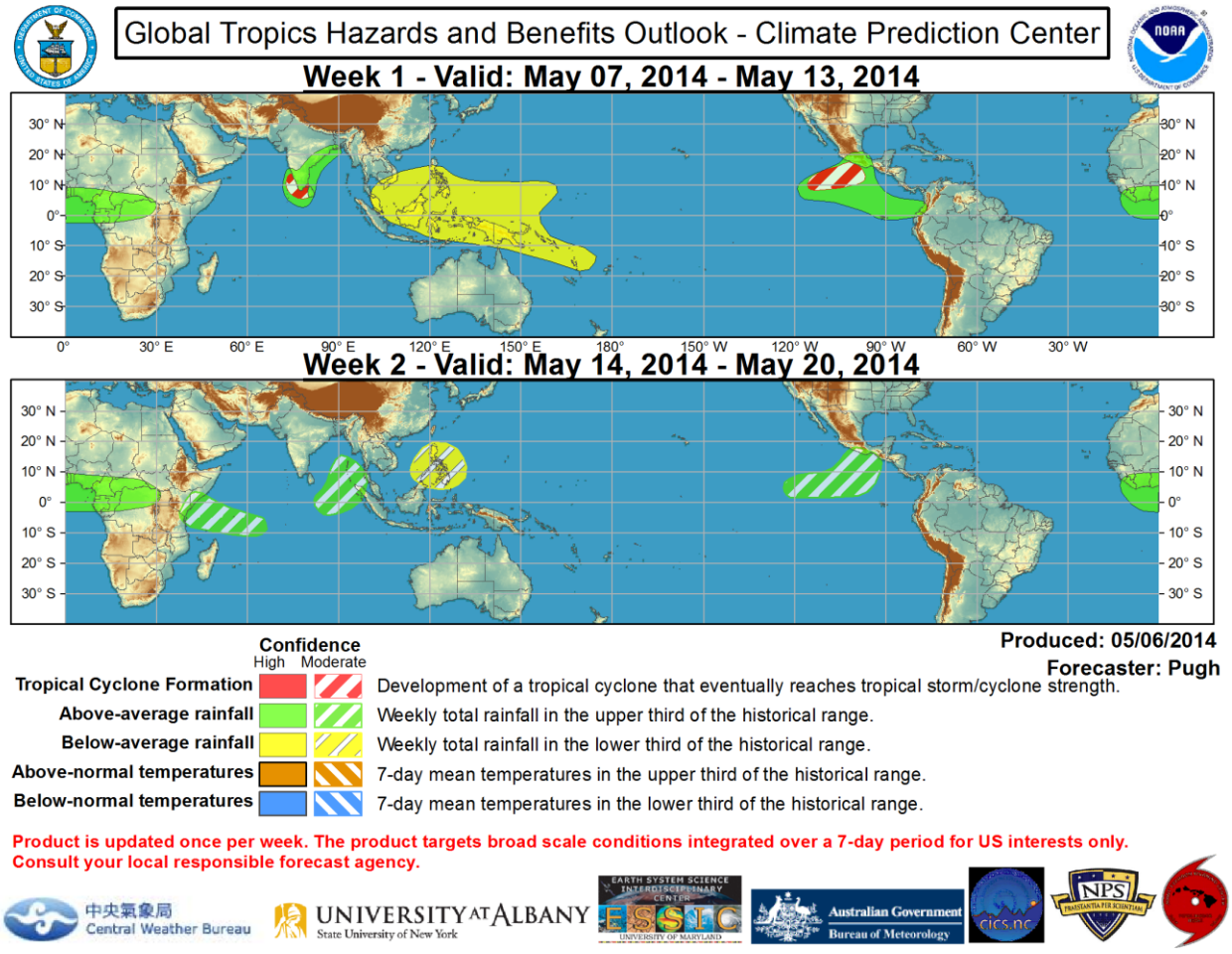

The MJO remains active, although the evolving background state associated with above-normal SSTs across the central and eastern equatorial Pacific is also a major contributor to anomalous convection throughout the global tropics. The enhanced convective phase of the MJO was over the Western Hemisphere at the beginning of May. The RMM index continues to indicate eastward propagation, with the MJO enhanced phase currently entering Phase 1, or across Africa. An atmospheric Kelvin wave is observed ahead of the MJO enhanced phase and is causing convection across the central Indian Ocean northward to southern India.

Dynamical model MJO index forecasts are in excellent agreement and indicate eastward propagation of a moderate MJO signal during the next two weeks. Spread among the GFS, ECMWF, and Canadian ensemble members is very small with the predicted MJO evolution. Statistical models generally agree with the dynamical model MJO index forecasts. Based on the latest observations and excellent agreement among the dynamical model forecasts, the MJO is forecast to remain active with the enhanced phase shifting from the Western Hemisphere to the Indian Ocean. The enhanced phase of the MJO is likely to result in above-average rainfall across the eastern Pacific Ocean, southern Mexico, and from the Gulf of Guinea inland to the northern Congo during Week-1. Meanwhile, below-average

rainfall is forecast for much of the Maritime Continent due to the base state and influence from the suppressed phase of the MJO early in Week-1.

As of May 6, a broad area of low pressure is centered at 10N/110W in the east Pacific. Due to the vigorous convection and diffluent flow aloft observed on satellite imagery, a moderate confidence area for tropical cyclone formation is posted across the east Pacific. Model guidance indicates a closed surface low moving northeast towards southwest Mexico early in Week-1. Elsewhere, another area of low pressure is located near Sri Lanka. If a tropical cyclone develops near the southern tip of India, its duration would likely be short-lived due to its proximity to land. The GFS model favors above-average rainfall from southern India north to Bangladesh.

During Week-2, the enhanced phase of the MJO along with model guidance favor above-average rainfall for much of equatorial Africa and parts of the Indian Ocean. Confidence for above-average rainfall across the Indian Ocean is reduced due to the offsetting factor of the evolving background state. Below-average rainfall for the Philippines is based on MJO precipitation composites for Phase 2 and the background state. Above-average rainfall is favored to persist across the eastern Pacific Ocean due to anomalously warm SSTs.