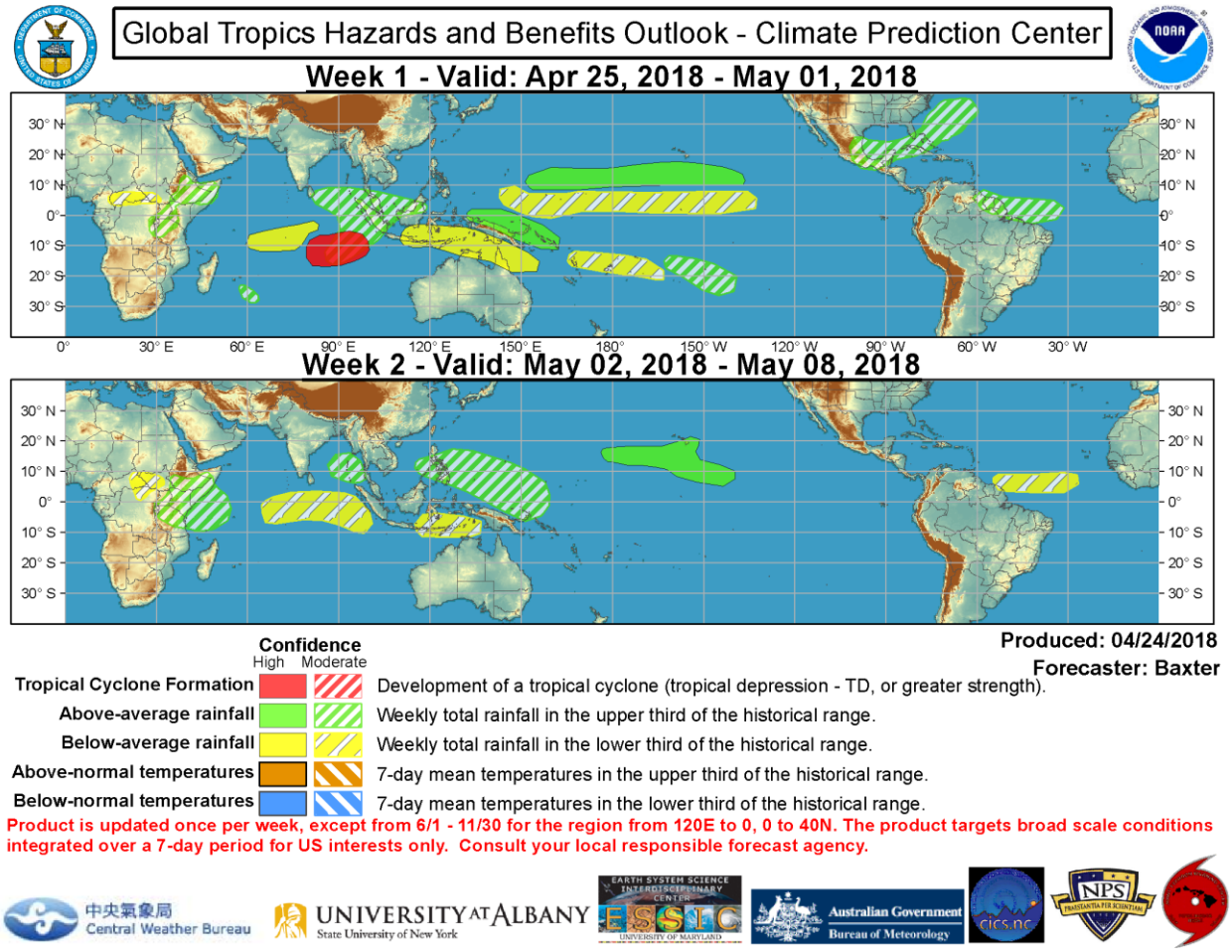

The MJO weakened as expected over the past several days, as westward-moving equatorial Rossby wave activity and fast-moving Kelvin wave activity interfered with the large-scale MJO signal. The CPC velocity potential index places the enhanced phase of a weakening MJO signal over the far western Maritime Continent. The latest IR satellite imagery places enhanced convection over the eastern Indian Ocean and western Maritime Continent, with a second area of enhancement over the western equatorial Pacific. The latter is likely due to the combined effects of a Rossby wave and an atmospheric Kelvin wave. The MJO is forecast to remain weak during this forecast period according to the consensus of the dynamical model guidance. Statistical guidance from the constructed analog model does maintain a higher-amplitude MJO signal as it crosses the Maritime Continent.

Tropical Cyclone Fakir developed over the southwestern Indian Ocean on 23 April, and is forecast to track southeastward while quickly diminishing in intensity. There is a high confidence of tropical cyclogenesis over the southeastern Indian Ocean in Week-1. There are two disturbances currently being monitored: one is over the northwestern portion of the depicted region and its odds of formation appear to be falling with time, while the other is tracking west-southwestward from the western Maritime Continent. This feature is more likely to develop into a tropical cyclone according to the latest

GEFS and ECMWF guidance. During Week-2, there is a low chance of formation (not depicted on map) near the Philippines and over the Bay of Bengal. Models are in poor agreement to this point, so it only warrants a text mention.

During Week-1, above-average rainfall is favored over much of the eastern Indian Ocean and western Maritime Continent associated with remnant MJO activity. Farther east along the equator, enhanced convection is likely near and just Northeast of Papua New Guinea associated with the weak background MJO and Rossby wave activity. Across much of the Pacific Basin, dynamical models favor a northward shifted ITCZ, consistent with the decaying ENSO state. A cold frontal intrusion over the western Atlantic westward to eastern Mexico enhances odds of above-average rainfall. Other small-scale regions favoring above- or below-normal rainfall are based on the consensus between the CFS and ECMWF ensemble systems.

Coverage and confidence decrease substantially during Week-2 given weak MJO activity and a weak ENSO base state. A convective dipole between the Indian Ocean and West Pacific is based largely on the potential for the background MJO to maintain a coherent convective footprint longer than dynamical models indicate, though there are varying levels of support for this feature between the ECMWF and CFS forecast precipitation fields. Model guidance has been consistent and in good agreement on enhanced rainfall near and south of Hawaii during Week-2, and so high confidence is depicted for that region.

Forecast areas favoring above- or below-average rainfall over Africa are drawn in consultation with CPC's Africa Desk and often depict mesoscale to synoptic scale variability.