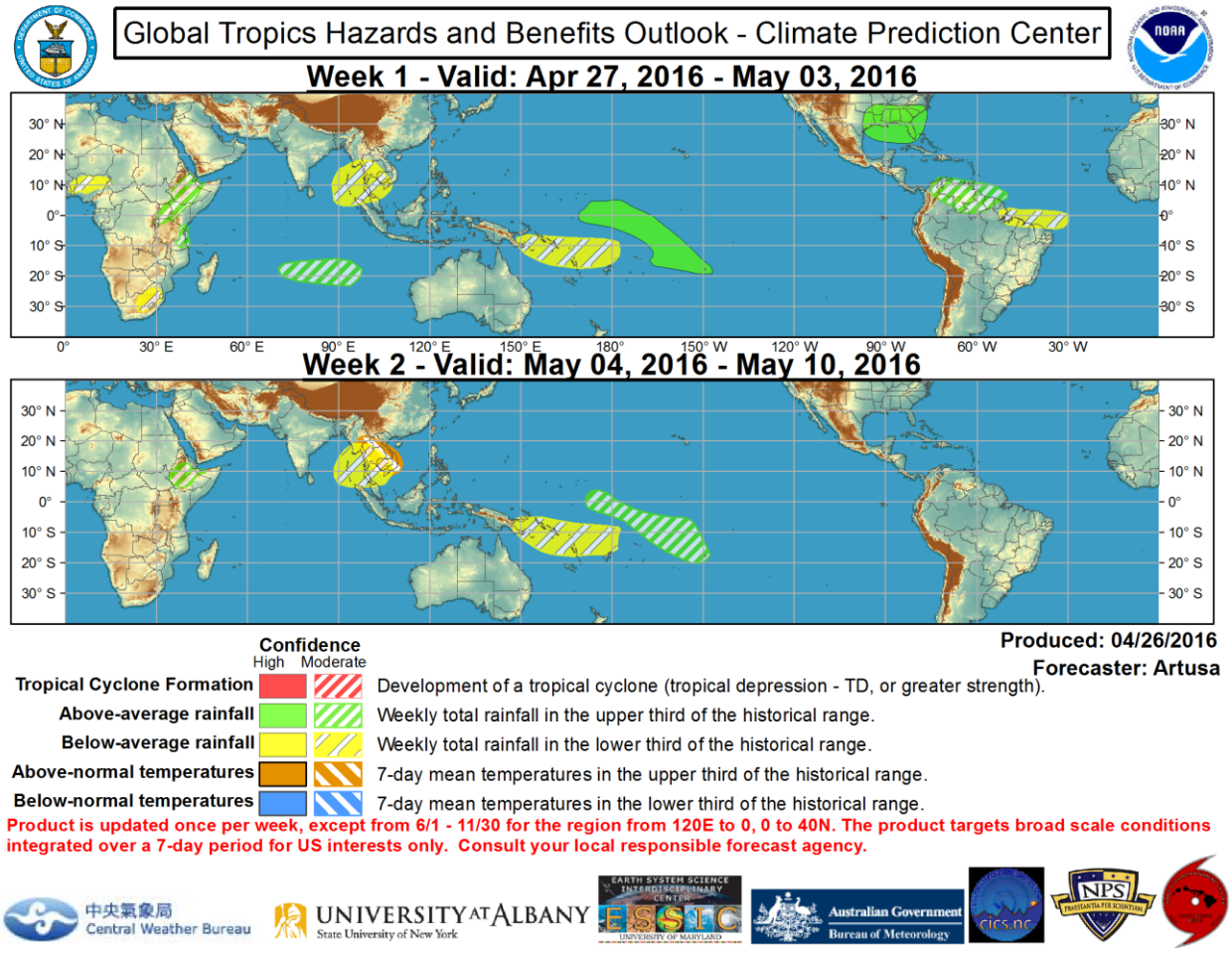

The MJO signal has been incoherent during the past week. Signatures of Kelvin waves and an Equatorial Rossby Wave (ERW) are evident in zonal wind anomaly fields, Outgoing Longwave Radiation (OLR), and Velocity Potential (VP). From an oceanic standpoint, the background El Nino is rapidly waning, but atmospheric effects may continue through boreal spring.

A majority of dynamical model forecasts of MJO activity indicate a weak, incoherent signal during the next two weeks. However, the European Center model predicts a weak to moderate strength MJO signal across the Indian Ocean and western Maritime Continent. The Australian model forecasts a wide range of possibilities spanning the Eastern Hemisphere, underscoring the uncertainty involved.

During the past two weeks, Tropical Cyclone Fantala developed over the central portion of the Southern Indian Ocean, and tracked westward with time, making a small, circular loop near northern Madagascar. At maximum intensity, its sustained winds reached 150 knots, though Fantala has since weakened and dissipated. In the South Pacific, Tropical Cyclone Amos formed northeast of Fiji. As Amos moved eastward, its center of circulation and its strongest winds (90 knots) passed just north of Samoa and

American Samoa. No specific tropical cyclone hazards are indicated for the upcoming two-week period. This is consistent with the climatological lull in tropical cyclone activity during May across much of the Indian Ocean and West Pacific basins.

During Week-1, moderate confidence for upper-tercile rainfall is predicted over the southern Indian Ocean, and across northern parts of South America. These areas are related to such factors as the low frequency base state and relatively warm sea surface temperatures. A high confidence area for upper-tercile rainfall is indicated along portions of the South Pacific Convergence Zone (SPCZ). Another high confidence area of upper-tercile rainfall is forecast over approximately the southeastern quarter of the contiguous U.S., associated with an energetic low pressure system. In contrast, three moderate confidence areas of lower-tercile rainfall are predicted over Southeast Asia, the Solomon Islands, and along the northern coast of Brazil. These areas denote locations where the CFS and ECMWF model precipitation forecasts are in fairly good agreement. The area of predicted suppressed convection across the Solomon Islands is also consistent with the idea of compensating subsidence associated with the SPCZ.

During Week-2, a moderate confidence area of upper-tercile rainfall is forecast in the vicinity of the SPCZ. Moderate confidence areas of lower-tercile rainfall are forecast across the Solomon Islands and Southeast Asia, where CFS and ECMWF model guidance is in relatively good agreement. The area over Southeast Asia is related to the ongoing, but weakening, El Nino. There is a moderate confidence area of above-normal temperatures depicted from Burma southeastward across Vietnam. This is also related to the current El Nino. Temperatures may reach or exceed 35-40 degrees C in this region.

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