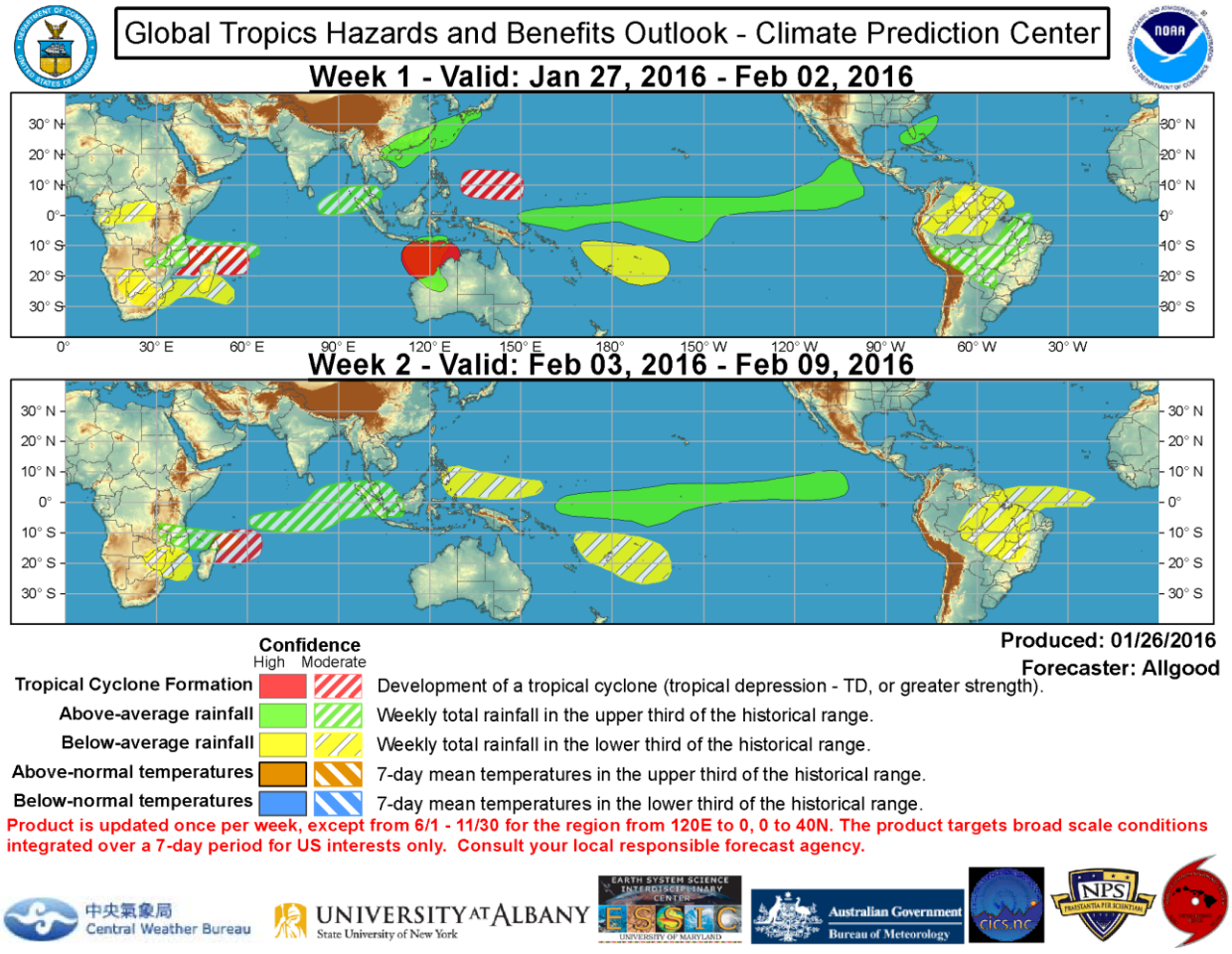

The MJO was incoherent during the past week, as the intraseasonal signal that was active since December encountered destructive interference from the ongoing strong El Nino. The CPC velocity potential based MJO index began to return towards the ENSO base state, while the RMM based index depicted no coherent MJO signal. While the slower propagating MJO enhanced phase has broken down, other modes continue to influence the global tropical convective pattern. A Kelvin Wave is currently propagating across the eastern Indian Ocean and Maritime Continent, interfering with the ENSO suppressed signal. A second Kelvin Wave is also propagating across the central Pacific. Over the next two weeks, dynamical model MJO index forecasts favor an amplifying signal over the Maritime Continent. While this amplification may be associated in part with potential tropical cyclone activity over the southeastern Indian Ocean or Timor Sea, the longer range ECMWF monthly forecasts depict an eventual eastward propagation of the signal to the Pacific. Additionally, dynamical model precipitation forecasts favor enhanced convection over the eastern Pacific and western Maritime Continent, which would be consistent with an emerging intraseasonal signal. Therefore, influence from the MJO is anticipated to be weak during Week-1, but may play a more substantial role in the global tropical convective pattern during Week-2.

Cyclone Corentin developed over the south-central Indian Ocean on 21 January, reaching Category-1 intensity on the Saffir-Simpson scale before dissipating as it moved generally southeastward. Elsewhere, no new tropical cyclone development was observed during the past week. During the upcoming week, enhanced convection and a favorable environment in the wake of Kelvin Wave activity supports the potential for tropical cyclone formation north of Australia over the southeastern Indian Ocean or Timor Sea. Tropical cylone development in this region is also robustly depicted in the dynamical model guidance; therefore, high confidence is depicted in this outlook. Dynamical model forecasts also indicate the potential for tropical cyclogenesis over the Mozambique Channel during Week-1, with the favored area shifting east of Madagascar during late Week-1 and Week-2. Additionally, the Joint Typhoon Warning Center is monitoring a region east of the Philippines over the northwestern Pacific for tropical cyclone development during Week-1.

During Week-1, enhanced convection is favored over the northeastern Indian Ocean and far western Maritime Continent. Frontal activity is expected to provide a focus for potentially heavy rainfall across parts of East Asia, as well as central and southern Florida. Enhanced convection is strongly favored to persist over the Pacific ENSO region, with a westward extension of the enhanced rainfall possible west of the Date Line due to constructive interference with Kelvin Waves. Suppressed convection is favored to continue over northern South America, with dynamical models depicting a region of enhanced rainfall to the south. A shifted SPCZ also favors suppressed convection over the South Pacific near the Date Line.

During Week-2, enhanced convection, possibly associated with an emerging intraseasonal signal destructively interfering with the ENSO base state, is depicted by dynamical model guidance over the central and eastern Indian Ocean and the western Maritime Continent. Suppressed convection is favored across the southern Philippines, extending eastward over the West Pacific north of New Guinea, as well as across the South Pacific near the Date Line. Strongly enhanced convection over the central and eastern Pacific is anticipated to continue, while suppressed rainfall across central and north-central Brazil is forecast to return. Additional cold air outbreaks are possible over southeastern Asia during Week-2, but no shape is depicted on this outlook due to uncertainty regarding the southern extent of the cold airmass.

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