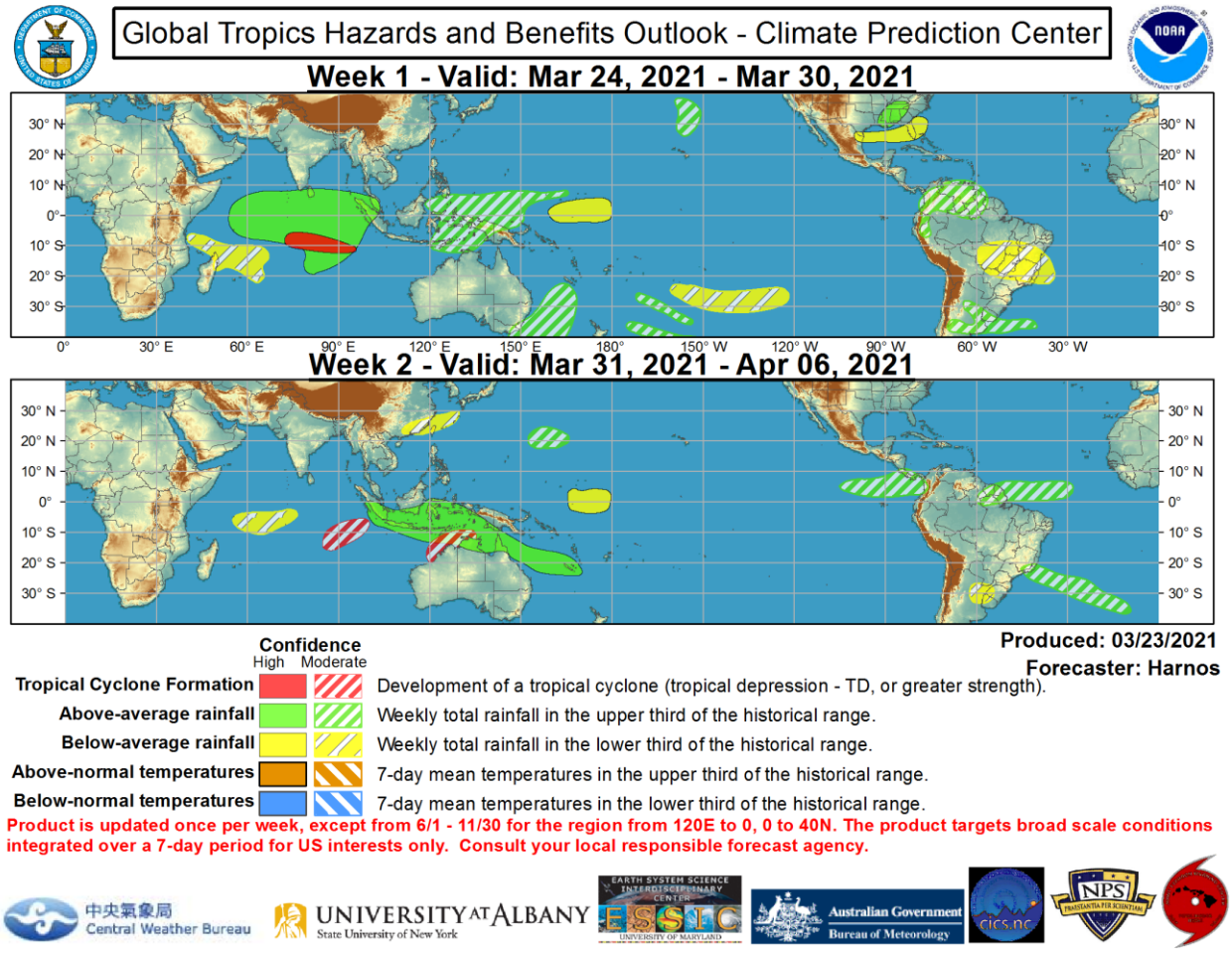

The Madden-Julian Oscillation (MJO) is currently active over the western Indian Ocean. This is supported by emergence of anomalous westerlies along the equator in the region, while the anomalous upper-level divergence in the vicinity can have its eastward progression traced back to the Maritime Continent in mid-February. Despite this, the RMM index has recently been back and forth with being inside the unit circle, likely due to destructive interference from other modes of variability (i.e. equatorial Rossby wave activity over the basin and the decaying La Nina event in the Pacific). Forecasts of the RMM index portray a continuation of this intraseasonal event with a phase speed near the boundary of Kelvin wave or MJO activity on the wavenumber-frequency diagram, with the GEFS leaning toward a slightly more progressive solution than other ensemble suites. Semantics aside, this appears to be a fairly robust event as evidenced by its persistence over the past month and the models being bullish on its propagation across the Maritime Continent despite typical difficulties in such transitions. The MJO is anticipated to remain active over the Indian Ocean during Week-1 while reaching the Maritime Continent early next week, before crossing the Maritime Continent and shifting over the West Pacific by late in Week-2.

No tropical cyclones (TCs) have formed globally over the past week. The Joint Typhoon Warning Center is currently monitoring a region of convection located near 13S/92E, with an associated forecast of a medium probability of tropical cyclogenesis occurring prior to the forecast period. In the event this system does not form prior to the outlook, high confidence exists for its development during Week-1. During Week-2 equatorial Rossby wave activity supports moderate confidence of TC formation over a similar portion of the southeastern Indian Ocean and also off the northern coast of Australia. Lower confidence exists for a "twin" of the latter possible TC developing over the eastern Bay of Bengal during Week-2, but is supported by some GEFS members and likely Rossby wave activity. All of the aforementioned regions are historically supported by an active MJO transiting from the Indian Ocean to West Pacific during the period.

Precipitation forecasts during the next two weeks have the highest confidence across regions influenced by the MJO, possible TC tracks, and the low-frequency suppression of convection east of New Guinea from La Nina. Remaining precipitation forecasts are largely a result of dynamical model consensus but do highlight some key impactful features. Heavy rains may continue during Week-1 for portions of New South Wales which have already seen historic flooding prior to the outlook period. A mid-latitude storm system is forecast to be displaced well south of the climatological storm track over North America and bring heavy rain to portions of the Mississippi River Valley and Southeast during Week-1, but these rains are forecast to miss much of Florida and South Texas where drought concerns already exist. Multiple mesoscale convective systems are forecast to initiate in the lee of the Andes and track toward the South Atlantic during Week-1.

For hazardous weather concerns during the next two weeks across the U.S., please refer to your local NWS Forecast Office, the Weather Prediction Center's Medium Range Hazards Forecast, and CPC's Week-2 Hazards Outlook. Forecasts over Africa are made in consultation with the International Desk at CPC and can represent local-scale conditions in addition to global-scale variability.