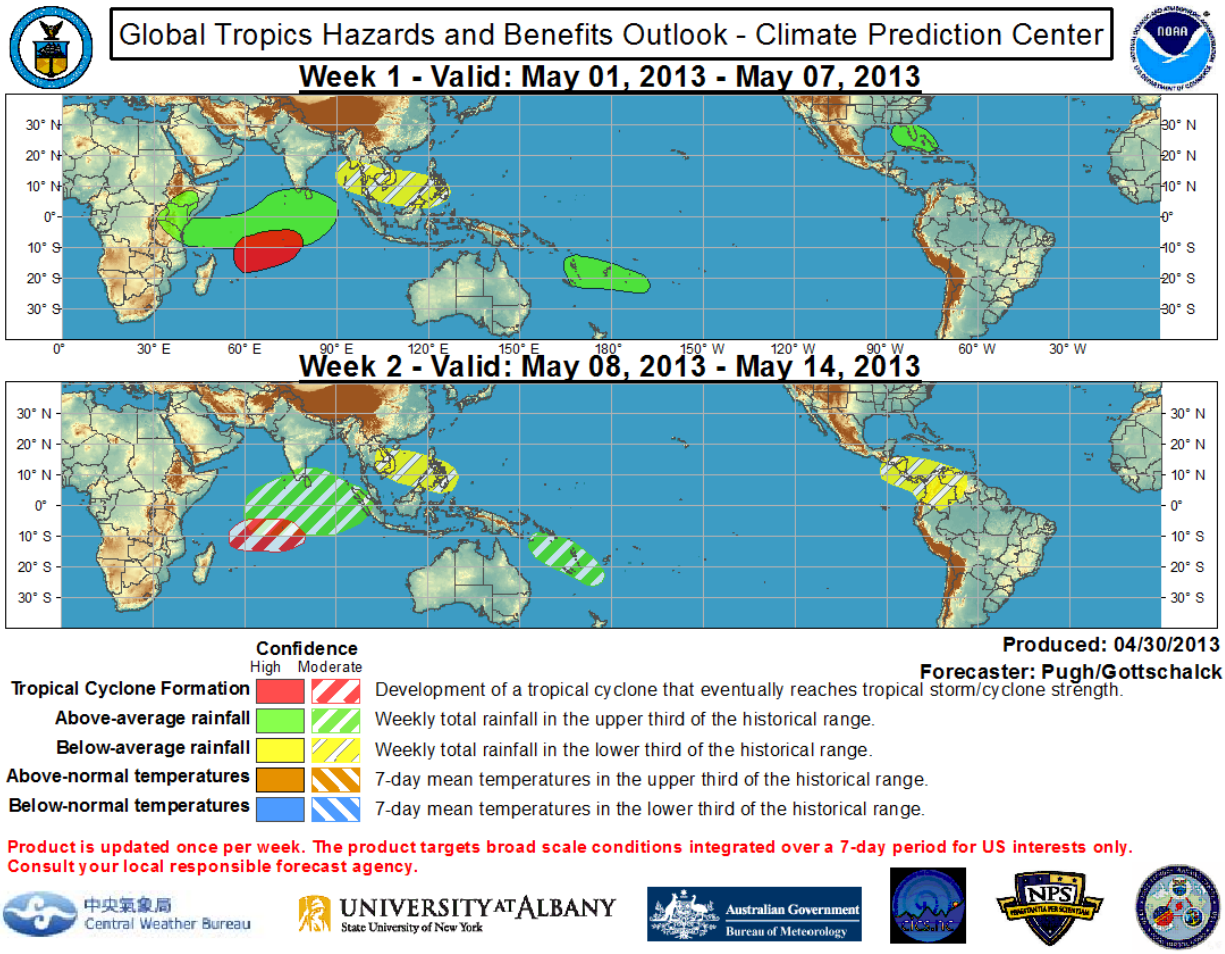

The MJO remained weak over the past several days, as many observational indicators are less coherent than during March and early April, with other modes of subseasonal tropical variability evident in the tropical circulation. Despite the current weak or less coherent nature of the tropical subseasonal circulation, dynamical model MJO index forecasts indicate a strengthening signal during Week-1, with eastward propagation of enhanced convection from Africa across the Indian Ocean during Week-2. Tropical Storm Zane formed off the northeast coast of Australia and likely will impact the extreme northern portions of Australia early in the period with strong winds and heavy rainfall.

The Week-1 outlook is based on where anomalous convection is currently ongoing and likely to persist, dynamical model forecasts and statistical forecasts based on the various subseasonal modes. The forecast emergence of a stronger MJO signal over the Indian Ocean is a factor in the outlook. Above-average rainfall is favored across parts of the eastern Maritime Continent and western Pacific. This is largely due to an atmospheric Kelvin wave currently observed near 140E, and relatively weak atmospheric Rossby wave activity. Much of this area has been active over the past few days and the numerical guidance supports continued activity into Week-1. Above-average rainfall is likely from eastern, equatorial Africa to the central Indian Ocean, including extreme southern India and Sri Lanka

associated with the MJO. Enhanced odds of drier than average conditions are indicated across much of Southeast Asia consistent with the suppressed phase of a strengthening MJO signal and CFS model guidance.

The Week-2 outlook is based on the evolution of the MJO from Phase 1 to Phase 2 and perhaps Phase 3 by the end of the period, modified by model guidance and taking into account uncertainty due to other subseasonal modes. Some uncertainty associated with the MJO preclude designation of high confidence areas during Week-2. Above-average rainfall is favored across parts of the central and eastern Indian Ocean, consistent with for anticipated placement of the convectively active phase of the MJO. This region could be enhanced by Kelvin wave activity as well. Other moderate confidence regions favoring above-average rainfall are located again across parts of the south-central Pacific with below-average rainfall favored across the Southeast Asia and the Philippines.

During the upcoming period, an enhanced threat of tropical cyclone formation is forecast across the southwest Indian Ocean, both Week-1 and Week-2, which is quite late in the season for potential development.