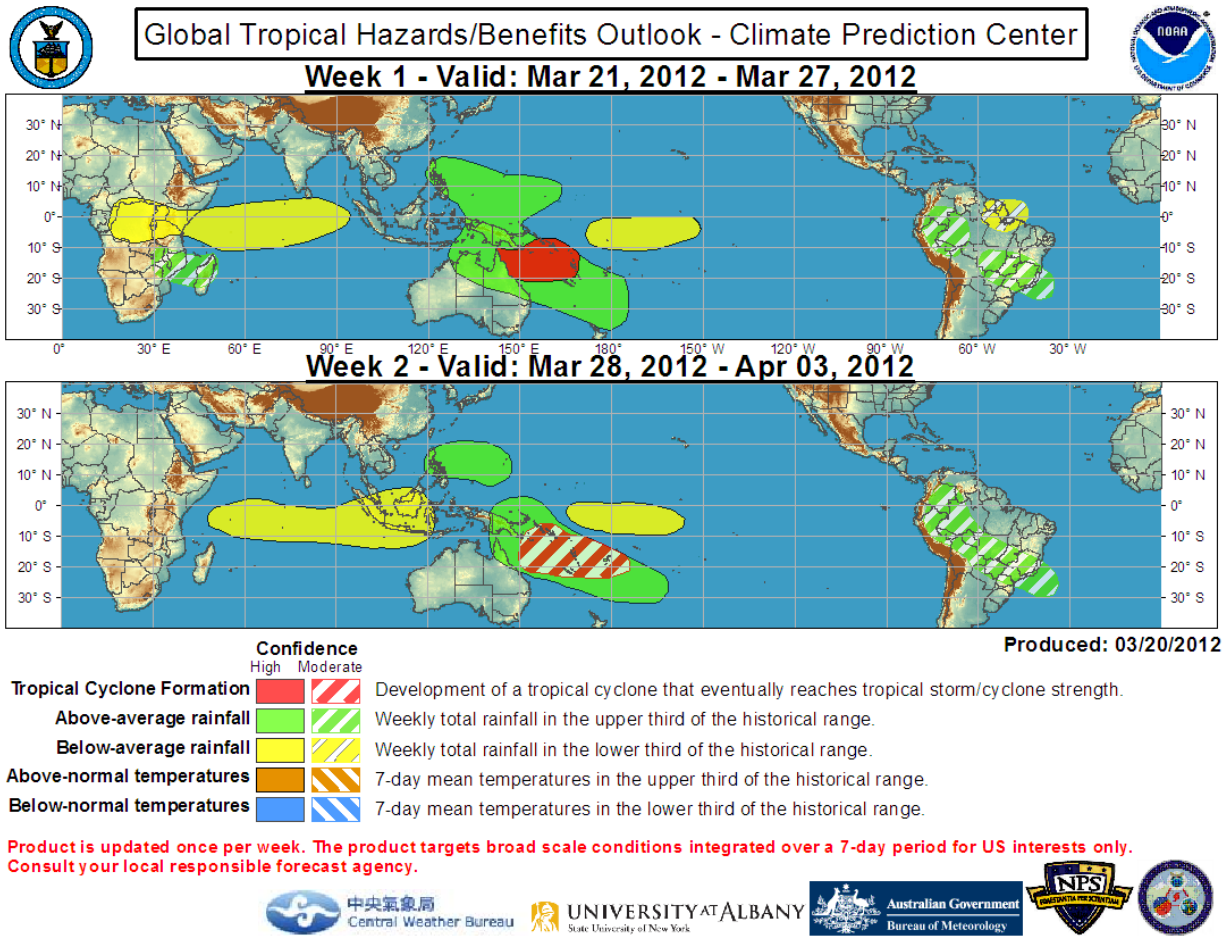

The MJO remained active during the past week with the enhanced convective phase entered the western Pacific. Convection remained above average over much of the Maritime Continent and Australia. Convection was below average over Africa, consistent with MJO activity and La Nina. Over northern South America, some areas of above-normal rainfall were observed away from the Atlantic Ocean, while dry conditions persisted across northeastern Brazil. An atmospheric Kelvin Wave is likely to have played a role in developing the mixed signal over northern South America.

No tropical cyclones formed during the past week, although Tropical Cyclone Lua brought significant rains to northwest Austalia.

The forecast for the upcoming week indicates enhanced rainfall for the eastern portions of the Maritime Continent, off-equatorial western Pacific, and northeast Australia. The chances of tropical cyclone formation northeast of Australia are forecast to be elevated during Week-1, consistent with the anticipated phase of the MJO (Phase 6). Composites of tropical cyclone formation, keyed to phase 6, indicate that historically tropical cyclone formation is also possible near the Philippines and north of

Australia. Current model guidance suggests that the most likely area for tropical cyclogenesis is northeast of Australia, near the Solomon Islands and New Caledonia. Drier than average conditions are likely across the central Pacific near the Date Line, in response to the ongoing, albeit weakening, La Nina. Additionally, dry conditions are forecast from Central Africa to the eastern Indian Ocean.

During Week-2, the unspecified interplay between La Nina and the MJO increases the uncertainty in the forecast. Currently, the forecast favors drier than average conditions across the Indian Ocean and western Maritime Continent (west of Borneo) and over the central Pacific (near the Date Line). Across the Philippines, northern Australia, the Coral Sea, and the Islands of the western South Pacific to near 170W, the forecast calls for enhanced odds for above-average rainfall . The chances of tropical cyclone formation over the western south Pacific remain elevated during Week-2, with the highest threat area slightly further east than Week-1.