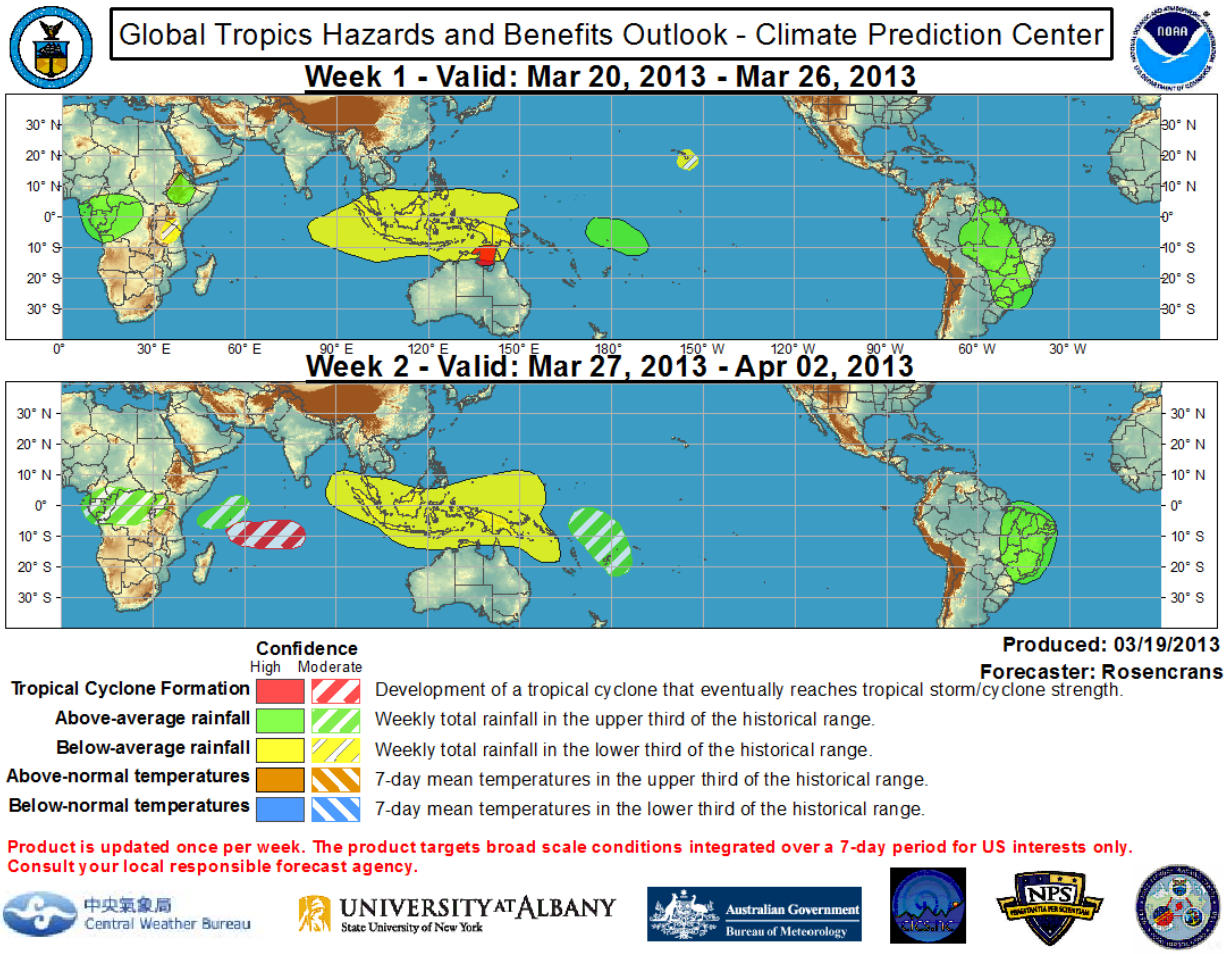

The MJO remained active over the past week with the enhanced convective phase centered over the central Pacific, with the subsident phase of the MJO and an equatorial Rossby Wave aligned over the eastern Indian Ocean. This resulted in below average rainfall for most of the Indian Ocean and Maritime Continent. Above average precipitation was measured over near the Date Line/Equator intersection, and across much of South America, with the exception of extreme northeastern Brazil, where dry conditions persisted.

Tropical Storm Tim formed on 13 March over the Coral Sea. The tropical cyclone existed for 4 days, with peak winds reaching 55 knots.

The dynamical models are in good agreement about the forecast state of the MJO during the next two weeks. The models indicate a continued propagation of an active MJO signal, with the convectively active region moving across the Americas and Africa during the two week outlook period. Some models indicated a strengthening over the Indian Ocean later in week-2.

The Week-1 outlook is based primarily on the forecast phase of the MJO and the interaction with the equatorial Rossby Wave (subsident phase now over the western Maritime Continent). The convectively enhanced phase of the MJO is likely to over the Americas and Africa for most of the period, so a few areas of above average precipitation are indicated. Additionally, a residual pocket of above average rains are likely near the Date Line, as Sea Surface Temperatures and winds can sometimes be coupled over this region, and reinforce stagnation in the pattern, despite the MJO propagating away. The subsident phase of the MJO and equatorial Rossby wave are likely to constructively interfere and bring dry conditions to much of the Maritime Continent and eastern Indian Ocean. Dry conditions would also be likely near Hawaii, as a mid-latitude trough is likely to fill.

During the second week of the outlook period, the MJO is forecast to be centered over Africa, with some potential to excite convection over the western Indian Ocean. Some above average convection is likely across South America as well. The potential emergence of the MJO over the Indian Ocean also supports a slightly increased risk of tropical cyclogenesis, late in Week-2, although this is highly uncertain at this time. Dry conditions are likely to persist over the Maritime Continent, with some extension to the western North Pacific.