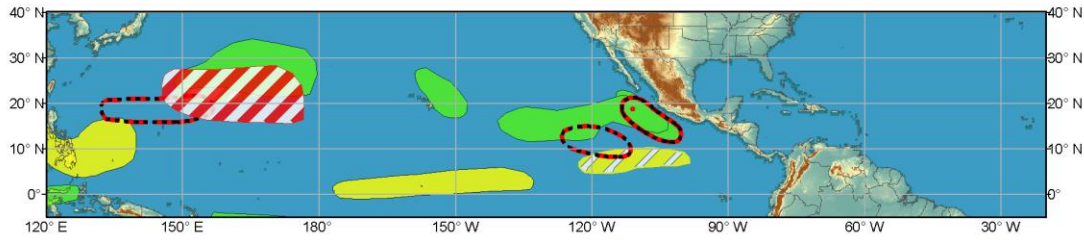




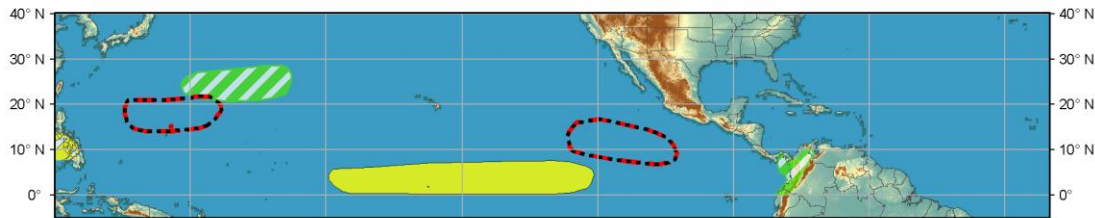
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 23 2016 - Jul 26 2016



Week 2 - Valid: Jul 27 2016 - Aug 02 2016



Confidence
High Moderate

Produced: 07/22/2016
Forecaster: Rosencrans

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Prior TC Formation Outlook** Tropical cyclone outlook from previous release.
- Above-average rainfall** Weekly total rainfall in the upper third of the historical range.
- Below-average rainfall** Weekly total rainfall in the lower third of the historical range.
- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
- Below-normal temperatures** 7-day mean temperatures in the lower third of the historical range.

Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



A few factors are pointing toward an MJO event organizing over the Indian Ocean (Phase 2 of the RMM index phase space). Most model solutions have a signal continuing into Phase 3, with some continuing a signal into Phase 4. The disagreement on the eastward propagation leads to increased uncertainty for days 5 through 11 (the remainder of Week-2).

During the past couple of days, Tropical Storms Frank and Georgette formed over the eastern Pacific, while Tropical Storm Estelle transitioned to a post-tropical storm. Odds for further tropical cyclone formation over the central or eastern Pacific are not elevated during the next 11 days. Tropical cyclone formation odds increase over the western North Pacific, north of 15N during the next week. The MJO, in Phase 3, would not favor tropical cyclone activity further south over the western North Pacific. This area will be monitored for any increasing threat, further out in time, should a robust MJO signal continue into Phase 5.

Modifications to the areas indicated for above average rainfall were made to reflect the latest tropical cyclone track forecasts. Model forecasts also helped shape the areas where tropical cyclones are not expected to go during the next 11 days.

----- Previous discussion follows -----

Some measures have the MJO strengthening during the past week, but other measures do not. The signal that the RMM index and the CPC velocity potential index are indicating as strengthening are potentially an emerging MJO, though without consistent propagation, the current event cannot yet be labeled as a full instance of an active MJO. Model forecasts indicate a slight strengthening over Africa, followed by some eastward propagation to the Indian Ocean/western Maritime Continent. The signal then weakens the end of Week-2. Model agreement on that forecast scenario is good, so uncertainty is lower than last week.

During the last week, Tropical Storm Estelle developed over the eastern Pacific, continuing an active season there. Currently, the accumulated cyclone energy in the eastern and central Pacific is 231 percent of normal, while the western North Pacific is 42 percent of normal. Tropical cyclone 01S (Abela) developed over the southern Indian Ocean and moved toward Madagascar. The cyclone is forecast to weaken to less than tropical cyclone strength by July 20, at 6Z. During the next two weeks, tropical cyclone formation odds are increased relative to normal over the East Pacific, with that signal peaking during Week-1 and lessening during Week-2. Tropical cyclone formation chances are also increased over the western North Pacific during Week-2. Some models are indicating slight increase in the chances for tropical cyclone formation over the eastern tropical Atlantic Ocean during the middle of Week-2, though confidence is low in that occurring.

Tropical cyclones are expected to contribute to above average rainfall over the eastern Pacific, with some slightly enhanced odds of heavy rains impacting Hawaii during Week-1. An emerging MJO is likely to contribute to enhanced rains over eastern Africa and eventually the Indian Ocean and Maritime Continent. The South Asian Monsoon is likely to continue with a break in the rainfall during Week-1, with some recharge hinted at in Week-2. Below (above) average SST values are likely to support suppressed (enhanced) rainfall over the equatorial central Pacific (South Pacific).

During Week-2, some recharge in the South Asian Monsoon is likely, with below average rains pushing northward toward northern Thailand and northwest India. Enhanced rainfall is likely to continue near

Hawaii, and over the South Pacific, while below average SST values are likely to support suppressed rainfall over the equatorial central Pacific.

Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.