Global Tropics Hazards And Benefits Outlook
8/1/2017

Anthony Artusa

Outline

1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts
Outlook Review

Cool shading
More clouds/rain
Warm shading
Less clouds/rain
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Aug 02, 2017 - Aug 08, 2017

Week 2 - Valid: Aug 09, 2017 - Aug 15, 2017

Confidence
High Moderate

Tropical Cyclone Formation
Development of a tropical cyclone (tropical depression - TD, or greater strength).

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.

Produced: 08/01/2017
Forecaster: Artusa

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.
Synopsis of Climate Modes

**ENSO:**
- ENSO-neutral is favored (~50 to 55% chance) into the Northern Hemisphere winter 2017-18.

**MJO and other subseasonal tropical variability:**
- The MJO remained active, and remains over the Maritime Continent and western Pacific Ocean. A Kelvin wave is moving through phases 7,8… expected to continue into Atlantic during Week-1.

- Dynamical models predict the MJO signal will be affected by westward-moving modes of variability (ERWs), kelvin wave activity, and the low-frequency signal during the next 2 weeks. TC activity is forecast to be enhanced across portions of the western Pacific, the eastern Pacific, and the central Atlantic basins during Week-1. Week-2 impacts are very uncertain.

**Extratropics:**
- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by MJO activity.
Wheeler-Hendon based analyses of model forecasts indicate westward-moving modes of variability during Week-1, with possible re-emergence of a signal in the Indian Ocean during Week-2.
MJO, Rossby waves, Kelvin waves, Low-frequency signal all having an impact
Days 1-4

Related to Monsoon Gyre

Days 5-8

Related to Kelvin wave (& robust AEWs)

Days 9-12

Days 13-15
Connections to U.S. Impacts
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Aug 02, 2017 - Aug 08, 2017

Week 2 - Valid: Aug 09, 2017 - Aug 15, 2017

Confidence
High Moderate
Tropical Cyclone Formation: Development of a tropical cyclone (tropical depression - TD, or greater strength).
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.

Produced: 08/01/2017
Forecaster: Artusa

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.