Global Tropics Hazards And Benefits Outlook

November 24, 2015

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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
Synopsis of Climate Modes

**ENSO:**
- **Current:** [El Niño Advisory](#)
- **Outlook:** There is an approximately 95% chance that El Niño will continue through Northern Hemisphere winter 2015-16, gradually weakening through spring 2016.

**MJO and other subseasonal tropical variability:**
- Some MJO indices are indicating a signal over the western Indian Ocean, but the signal is not strong nor fully consistent with all variables (lower-level winds and upper-level winds).
- Most dynamical model MJO index forecasts depict some eastward movement and a weakening signal through Week-2, although some maintain a strong signal through at least Week-1.

**Extratropics:**
- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by the MJO, but more likely impacted by the ongoing El Nino and tropical cyclone activity.
IR Satellite & 200-hpa Velocity Potential Anomalies
Green: Enhanced Divergence   Brown: Enhanced Convergence

Base state evident.

Eastward shift in base state.
MJO Observation/Forecast

Wheeler-Hendon based analyses of model forecasts indicate an signal over the Indian Ocean. Most models depict weakening, although 2 depict a continuing signal to over the Maritime Continent.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events, with all phases of ENSO. Phase 2/3 are difficult to maintain given a strong El Nino.
Low frequency likely to dominate pattern.

Equatorial Rossby Wave and Kelvin wave likely to impact central Pacific and Indian Ocean.
No new tropical cyclones are expected during the next five days.
Days 1-4

Day 5-8

Day 9-12

Day 13-15
Connections to U.S. Impacts
Week 2 – Temperature and Precipitation
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Nov 25, 2015 - Dec 01, 2015

Week 2 - Valid: Dec 02, 2015 - Dec 08, 2015

Produced: 11/24/2015
Forecaster: Rosencrans

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.

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.