Global Tropics Hazards And Benefits Outlook
February 2, 2016

Brad Pugh

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](#)
- A strong El Niño is expected to gradually weaken through spring 2016, and to transition to ENSO-neutral during late spring or early summer.
- Next CPC update on Thursday, Feb 11

**MJO and other subseasonal tropical variability:**
- MJO was weak during late January due in part to destructive interference with the background state of El Niño.
  - The preferred dynamical model MJO index forecast depicts a strengthening MJO signal with eastward propagation across the Maritime Continent during the next two weeks.

**Extratropics:**
- The Week-2 temperature outlook is likely to be affected by an amplifying pattern featuring a ridge (trough) over western (eastern) North America.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Feb 03, 2016 - Feb 09, 2016

Week 2 - Valid: Feb 10, 2016 - Feb 16, 2016

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: 02/02/2016
Forecaster: Pugh

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.
A variable and incoherent pattern as the MJO weakens.
Wheeler-Hendon based analyses of model forecasts indicate a strengthening signal but differ on eastward propagation.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events, with all phases of ENSO.
0Z GFS: Mean Sea Level Pressure, Feb 8
February Tropical Storm Formation by MJO phase
Connections to U.S. Impacts
12Z GFS: D+11 500-hpa Height Anomalies and MSLP
Potential Damaging FL Freeze
Feb 10-12
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