Global Tropics Hazards And Benefits Outlook
February 17, 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: ENSO-neutral (El Nino Watch)
• Outlook: There is an approximately 50-60% chance of El Niño within the late Northern Hemisphere winter and early spring, with ENSO-neutral slightly favored thereafter.

MJO and other subseasonal tropical variability:
• The MJO was weak during the past week. Equatorial Rossby waves and the low-frequency background state are also contributing.
• Most dynamical model MJO index forecasts depict little to no signal during the next 2 weeks.

Extratropics:
• The extended range forecast for the U.S. is not likely to be largely impacted directly by the MJO. As convection over the West Pacific interacts with the East Asian Jet, some changes to the pattern over the U.S. could materialize in March. Internal, mid-latitude variability it likely to drive much of the pattern of the CONUS through day 10.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Feb 18, 2015 - Feb 24, 2015

Week 2 - Valid: Feb 25, 2015 - Mar 03, 2015

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: 02/17/2015
Forecaster: Rosencrans

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.
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence  Brown: Enhanced Convergence

Base state and transient features evident.

Inconsistent with robust MJO activity.
Wheeler-Hendon based analyses of model forecasts are inconsistent with robust MJO activity.

Only signal is slight, short-lived uptick in convection over West Pacific in Week-1.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
Kelvin Wave to impact Africa and Indian Ocean.

Equatorial Rossby Waves to impact the West Pacific and Maritime Continent.
CFS: Anom. PREC Week: 1: 18-Feb-2015 to 24-Feb-2015 (mm/week)

CFS: Anom. PREC Week: 2: 25-Feb-2015 to 03-Mar-2015 (mm/week)
February Tropical Storm Formation by MJO phase
Connections to U.S. Impacts
Lagged composites from MJO
5-day intervals

WHMJO Phase 6 t850 Lagged Composite (jfm)

+5-day

+10-day

+15-day

+20-day
Week 2 – Temperature and Precipitation
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