Global Tropics Hazards And Benefits Outlook
March 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
Synopsis of Climate Modes

**ENSO:**
- Current: El Niño Advisory
- Outlook: There is an approximately 50-60% chance that El Niño conditions will continue through Northern Hemisphere summer 2015.

**MJO and other subseasonal tropical variability:**
- The MJO remained active during the past week while other modes (ERW over the central Pacific and ENSO state) constructively interfered to maintain a broader scale enhanced convective envelope over the Pacific.
- Dynamical models favors a substantial weakening of the MJO signal as the background state becomes more dominant in Week-2. Statistical models favor a continued robust MJO event.

**Extratropics:**
- The strong divergent anomalies in the deep tropics could play a role in the evolution of the global extratropical pattern. Strong western and central Pacific convective events favor ridging over Alaska and troughing over the eastern CONUS at a lag of 10-25 days, mainly in wintertime.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Mar 18, 2015 - Mar 24, 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: 03/17/2015
Forecaster: Baxter

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.
Slow eastward propagation of the convective anomaly is observed, but the phase speed is unclear due to interference among various modes of variability.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
Low frequency is contributing, especially near 170E (Green box).

Kelvin Wave activity from the I.O. across the Maritime Continent (blue lines)

Equatorial Rossby Waves propagating across the central Pacific (red line).
Connections to U.S. Impacts
Lagged composites from MJO
5-day intervals

WHMJO Phase 7 z200 Lagged Composite (fma)

WHMJO Phase 7 t850 Lagged Composite (fma)

+5-day

+10-days

+15-days

+20-days
Stronger projection during the winter months, weaker during the Spring. March is transitional.
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