Global Tropics Hazards And Benefits Outlook

September 29, 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

Week 1 - Valid: Sep 23, 2015 - Sep 29, 2015

Week 2 - Valid: Sep 23, 2015 - Sep 29, 2015

7-Day Average OLR Anomaly
2015/09/21 - 2015/09/27
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:**
- The MJO is weak and not likely to impact tropical variability during the next 2 weeks.
- Most dynamical model MJO index forecasts depict little to no MJO signal during Week-1 (GEFS_BC is outlier). Disagreement from GFS to CFS to EC for Week-2, related to handling of tropical cyclones. Most impact to tropical convection will likely come from El Nino and tropical cyclones, with some influence from a CCKW.

**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.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 30, 2015 - Oct 06, 2015


Confidence

Tropical Cyclone Formation
High: Development of a tropical cyclone (tropical depression - TD, or greater strength).
Moderate: Weekly total rainfall in the upper third of the historical range.

Above-average rainfall
Weekly total rainfall in the lower 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: 09/29/2015
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.

Weak evidence of Kelvin wave over Atlantic, along with AEW activity.
Wheeler-Hendon based analyses of model forecasts indicate little to no MJO related signal. Any amplitude here, outside the circle, is likely related to tropical cyclone activity.
Low frequency likely to dominate pattern more than MJO.

Kelvin Wave likely impacting East Pacific.
Connections to U.S. Impacts
Lagged composites from MJO
5-day intervals

WHMJO Phase 1 t850 Lagged Composite (jas)

+5-days

NOT APPLICABLE DURING
WEAK MJO EVENTS.

+10-days

+15-days

+20-days
Week 2 – Temperature and Precipitation

8-14 Day Outlook
Temperature Probability
Made 28 Sep 2015
Valid Oct 06 – 12, 2015

- Dashed black lines are climatology.
- Colored areas represent probabilities.
- Normal values are near-normal.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 30, 2015 - Oct 06, 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.

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