Global Tropics Hazards And Benefits Outlook

May 12, 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

Week 1 - Valid: May 06, 2015 - May 12, 2015

Week 2 - Valid: May 06, 2015 - May 12, 2015

Cool shading
More clouds/rain

Warm shading
Less clouds/rain
Synopsis of Climate Modes

**ENSO:**
- Current: [El Niño Advisory](#)
- Outlook: There is an approximately 70% chance that El Niño will continue through Northern Hemisphere summer 2015, and a greater than 60% chance it will last through autumn.

**MJO and other subseasonal tropical variability:**
- The MJO was weak during the past 7 days, with the residual convective phase over the Western Pacific. The low-frequency background state is likely to dominate the pattern of tropical convection during the next 14 days, with some influence of Kelvin Waves over the Maritime Continent and potentially the Indian Ocean during Week-2.
- Most dynamical model MJO index forecasts depict weak MJO 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. Internal, mid-latitude variability it likely to drive much of the pattern of the CONUS through day 14.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: May 13, 2015 - May 19, 2015

Week 2 - Valid: May 20, 2015 - May 26, 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: 05/12/2015
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

Signal broken down in the last week.
Wheeler-Hendon based analyses of model forecasts indicate nothing consistent with MJO activity. Likely keying on tropical cyclone activity.

Some monthly models indicate little to no MJO activity for 30 days.
Some westward moving convection with South Asian Monsoon.

Low frequency is contributing, especially near Date Line.

KW and ENSO impacting.
May Tropical Storm Formation by MJO phase
No new tropical cyclones are expected during the next five days.
Connections to U.S. Impacts
AO: Observed & ENSM forecasts

1000mb Z (Obs: 13Jan2015 – 12May2015)  AO index

mean = 1.0956

1000mb Z (7day Forecast)  AO index

mean = 1.2287  cor(w/obs) = 0.8924

1000mb Z (10day Forecast)  AO index

mean = 1.1247  cor(w/obs) = 0.7574

1000mb Z (14day Forecast)  AO index

mean = 0.8020  cor(w/obs) = 0.5374
Week 2 – Temperature and Precipitation

8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 11 MAY 2015
VALID MAY 19 - 25, 2015

DASHED BLACK LINES ARE CLIMATOLOGY
VALUES ABOVE-TO OR BELOW NORMAL
UNSHADED AREAS ARE NEAR-NORMAL

8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 11 MAY 2015
VALID MAY 19 - 25, 2015

DASHED BLACK LINES ARE CLIMATOLOGY
INCHES OF RAIN PER DAY OR BELOW NORMAL
UNSHADED AREAS ARE NEAR-NORMAL