Global Tropics Hazards And Benefits Outlook

October 8, 2013

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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:**
- ENSO-neutral is favored through the Northern Hemisphere winter 2013-14.

**MJO and other subseasonal tropical variability:**
- The MJO remained active over the past week, although some observational indicators are less coherent than in previous weeks as other subseasonal variability are playing a large role in the pattern of anomalous tropical convection. The MJO enhanced phase is centered over the western Pacific
  - Dynamical model MJO index forecasts generally support continued eastward propagation, though at the slower end of the spectrum. The statistical tools also support continued MJO activity, although those reflect a weaker signal and faster propagation.

**Extratropics:**
- The extended range forecast for temperatures aligns somewhat with the projected phases of the MJO. Connections to precipitation patterns are less robust during this time of year.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center


Preliminary

Confidence
High    Moderate

Tropical Cyclone Formation
Development of a tropical cyclone that eventually reaches tropical storm/cyclone 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: 10/08/2013
Forecaster: Rosencrans

Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.
Nearly vertical arrows = Slow propagation.

Evidence of other modes
MJO Observation/Forecast

MJO Index Forecast for 08Oct2013-22Oct2013

GFS

ECMWF

UKMET
Average Conditions when the MJO is present (May-Sep)

CAVEAT:
Active phase of the MJO forecast to impact western North Pacific.

Indications of other modes of variability, including mid-latitude influence near the Date Line.
Graphical Tropical Weather Outlook
National Hurricane Center  Miami, Florida

Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

- Yellow (Low <30%)
- Orange (Medium 30-50%)
- Red (High >50%)

800 AM EDT TUE OCT 8 2013
Satellite Image: 0652 AM EDT

500 AM PDT TUE OCT 8 2013
Satellite Image: 0652 AM PDT
October Tropical Storm Formation by MJO phase
**North Indian**
1891 - 1989

Average number of days per season with tropical cyclone winds:
- > 34 knots: 16
- > 64 knots: 3

**Southwest Indian**
1947 - 1988

Average number of days per season with tropical cyclone winds:
- > 34 knots: 66
- > 64 knots: 21

**Australia/SE Indian**
1958 - 1988

Average number of days per season with tropical cyclone winds:
- > 34 knots: 36
- > 64 knots: 11
Connections to U.S. Impacts
Indicated warmer conditions shifting across the CONUS, to the southeast and potentially cooler across northern Great Plains.

Precipitation signal is less robust, although some indications for week 3 for wetness into the PacNorWest.
Week 2 – Temperature and Precipitation
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center


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