Global Tropics Hazards And Benefits Outlook

September 27, 2016

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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
Typhoon Megi (Cat-4): Formed 23 September 2016
Tropical Storm Roslyn: Formed 25 September 2016
Tropical Storm Ulika: Formed 26 September 2016
Synopsis of Climate Modes

**ENSO:**
• ENSO-Neutral conditions are slightly favored (between 55-60%) during the upcoming Northern Hemisphere fall and winter 2016-17.

**MJO and other subseasonal tropical variability:**
• The MJO weakened during the past week, although some indicators continue to show an enhanced convective envelope over the Maritime Continent.

• Convection over the far eastern Indian Ocean and Maritime Continent is partly due to the negative IOD phase. The low frequency state also favors suppressed convection near the equatorial Pacific.

• Kelvin waves activity originating from the Maritime Continent may affect East Pacific TC development. Some dynamical models depict a more coherent subseasonal signal emerging over the East Pacific during Week-2

**Extratropics:**
• MJO influence does not appear to be a significant factor in the mid-latitude flow across North America. The primary tropical-extratropical impacts during the next two weeks will likely result from tropical cyclones.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 28, 2016 - Oct 04, 2016


Confidence

Tropical Cyclone Formation
- High
- Moderate

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: 09/27/2016
Forecaster: Allgood

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.
Wave-2 pattern, with strongest divergence (convergence) anomalies over the Indian Ocean (East Pacific)

A more coherent Wave-1 pattern emerged, enhanced phase over the Maritime Continent.

The pattern is slightly less coherent, with the strongest divergence anomalies persisting over the eastern I.O./Maritime Continent.
CFS and ECMWF are in pretty good agreement, depicting a weak signal during Week-1, with possible emergence of a signal over the East Pacific by the end of Week-2.
Low frequency signal apparent over eastern IO/Maritime Continent.

Kelvin Wave activity crossing the Pacific, briefly interrupting the low frequency suppressed signal.
Typhoon Megi
Tropical Storm Ulika

- Current Information:
  - Center Location: 12.4 N, 140.0 W
  - Max Sustained Wind: 50 mph
  - Movement: NE at 5 mph

- Forecast Positions:
  - Tropical Cyclone
  - Post-Tropical Hurricane Center

Potential Track Area:
- Watches: Day 1-3, Day 4-5
- Warnings: Hurricane, Trop. Storm

Tropical Storm Roslyn

- Current Information:
  - Center Location: 18.3 N, 117.3 W
  - Max Sustained Wind: 45 mph
  - Movement: NE at 7 mph

- Forecast Positions:
  - Tropical Cyclone
  - Post-Tropical Hurricane Center

Potential Track Area:
- Watches: Day 1-3, Day 4-5
- Warnings: Hurricane, Trop. Storm
NCEP Ensemble-based Probability (%) of TC genesis for forecasts during the 00–120h period from initial time = 2016092706

● = position at 00 or 12 UTC  
Forecast hour shown at beginning of each track is first lead time the storm was detected in model
Connections to U.S. Impacts
Week 2 – Temperature and Precipitation
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Week 1 - Valid: Sep 28, 2016 - Oct 04, 2016


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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