Global Tropics Hazards And Benefits Outlook

9/26/2017

Matthew Rosencrans

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:**
- Increasing chance (~55-60%) of La Nina during the Northern Hemisphere fall and winter 2017-18.
- Forecasters favor latest dynamical models due to recent cooling of sea surface and subsurface temperatures across equatorial central Pacific.

**MJO and other subseasonal tropical variability:**
- The MJO remained of weak, with a weak signal over the West Pacific. An equatorial Rossby Wave is indicated over the Maritime Continent, with a couple of Kelvin Waves moving east also in some analyses.

**Extratropics:**
- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by MJO activity (lagged impacts from Phase 7, during this time of year, are minimal over North America in the 5-15 day time period). The predicted pattern is consistent with even the small signals from a Phase 7 MJO.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 27, 2017 - Oct 03, 2017


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
7-day mean temperatures in the upper third of the historical range.

Above-normal temperatures
7-day mean temperatures in the lower third of the historical range.

Below-normal temperatures

Produced: 09/26/2017
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.
Wave-2 not projecting onto MJO. Enhanced convection over Indian Ocean and East Pacific/Americas.

Wave-1 with an MJO projection. Enhanced convection over from Indian Ocean to the West Pacific.

Wave-2 with weak MJO projection. Convection over the West Pacific/Maritime Continent and the Americas.
Wheeler-Hendon based analyses of model forecasts indicate propagation to the east. Divergence in how the models handle interaction with westward moving modes.
CAVEAT: These panels are representative of robust MJO events.
MJO, Rossby wave and Kelvin wave having an influence

Low-frequency pattern less of an influence
No new tropical cyclones are expected during the next five days.
Ensemble-based Probability (%) of TC genesis using these global ensembles: NCEP CMC ECMWF.

For forecasts during the 00–120h period from initial time = 2017092600.

Ensemble-based Probability (%) of TC genesis using these global ensembles: NCEP CMC ECMWF.

For forecasts during the 120–240h period from initial time = 2017092600.
Connections to U.S. Impacts
Week 2 – Temperature and Precipitation

8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 25 SEP 2017
VALID OCT 03 - 09, 2017

8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 25 SEP 2017
VALID OCT 03 - 09, 2017
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 27, 2017 - Oct 03, 2017


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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