Global Tropics Hazards And Benefits Outlook

10/31/2017

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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


24-Oct to 30-Oct
Synopsis of Climate Modes

**ENSO:**
- ENSO Alert System Status: La Niña Watch

- La Niña conditions are favored (~55-65%) during the Northern Hemisphere fall and winter 2017-18

**MJO and other subseasonal tropical variability:**
- An active and moderate amplitude MJO event is ongoing, with the enhanced phase now over the Americas.

- Dynamical model forecasts indicate a continuing signal to the western Indian Ocean, then weakening signal as other modes of variability begin to interfere.

- Tropical cyclone formation odds in the Bay of Bengal are enhanced.

**Extratropics:**
- The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by MJO activity.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

**Week 1 - Valid: Nov 01, 2017 - Nov 07, 2017**

**Week 2 - Valid: Nov 08, 2017 - Nov 14, 2017**

Confidence Levels:
- **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**:

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-1 with a strong MJO projection.

Wave-1 with a moderate/strong MJO projection.

Wave-1 (but a minor competing secondary) center with a moderate MJO projection.
Wheeler-Hendon based analyses of model forecasts indicate propagation to the east. Divergence in how the models handle interaction with westward moving modes.
Average Conditions when the MJO is present

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 = 2017031000
Connections to U.S. Impacts
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**Week 1 - Valid: Nov 01, 2017 - Nov 07, 2017**

**Week 2 - Valid: Nov 08, 2017 - Nov 14, 2017**

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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Forecaster: Rosencrans

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