Global Tropics Hazards And Benefits Outlook

1/31/2017

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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

- Cool shading: More clouds/rain
- Warm shading: Less clouds/rain

Week 1 - Valid: Jan 25, 2017 - Jan 31, 2017

Week 2 - Valid: Jan 25, 2017 - Jan 31, 2017

7-Day Average OLR Anomaly - 2017/01/23 - 2017/01/29
Synopsis of Climate Modes

ENSO:
- La Niña Advisory
- A transition to ENSO-neutral is expected to occur by February 2017, with ENSO-neutral then continuing through the first half of 2017.

MJO and other subseasonal tropical variability:
- Signal over the Maritime Continent
- Dynamical and statistical models indicate strengthening and eastward propagation through the 2 week period.
- Rossby waves and mid-latitudes influencing pattern.

Extratropics:
- The extended range temperature and precipitation forecasts for the U.S. are likely to have some reflection of tropical intraseasonal influence.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Feb 01, 2017 - Feb 07, 2017

Week 2 - Valid: Feb 08, 2017 - Feb 14, 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.

Produced: 01/31/2017
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-1 with enhanced phase from east Pacific to Atlantic.

Wave-1 with enhanced phase over Indian Ocean

Wave-1 with enhanced phase over Maritime Continent.
Wheeler-Hendon based analyses of model forecasts indicate a continued signal for Week-1, then a weakening signal during Week-2. Near the end of Week-2, model disagreement increases.
MJO and Rossby waves as the major influences.

Smaller influence from Kelvin wave.
Ensemble-based Probability (%) of TC genesis using these global ensembles: NCEP CMC ECMWF
For forecasts during the 00–120h period from initial time = 2017013100

Ensemble-based Probability (%) of TC genesis using these global ensembles: NCEP CMC ECMWF
For forecasts during the 120–240h period from initial time = 2017013100
Connections to U.S. Impacts
AO: Observed & ENSM forecasts

1000mb Z (Obs: 04Oct2016 - 31Jan2017)  AD index
- mean = 0.1104

1000mb Z (7day Forecast)  AD index
- mean = -0.0745
- cor(w/obs) = 0.9137

1000mb Z (10day Forecast)  AD index
- mean = -0.5133
- cor(w/obs) = 0.7755

1000mb Z (14day Forecast)  AD index
- mean = -0.9349
- cor(w/obs) = 0.4211
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