Global Tropics Hazards And Benefits Outlook

9/10/2019

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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

Dorian (9/6: landfall at HAT)
Erin (E)
Fernand (F)
Gabrielle (G)

West Pac:
Faxai (Cat-3) Tokyo

Lingling

East Pac:
Hurr Juliette
TS Akoni

Cool shading
More clouds/rain

Warm shading
Less clouds/rain
**Synopsis of Climate Modes**

**ENSO: (Sept 9, 2019)**
- ENSO Alert System Status: ENSO-neutral
- ENSO-neutral is most likely to continue through NH winter 2019-20 (50-55% chance)

**MJO and other subseasonal tropical variability:**
- The MJO remained weak; enhanced convection over Maritime Continent/West Pac.
- ECMWF strengthens signal in Week-2 (West Pac/WH). GEFS weak throughout the 2-week period (mostly Maritime Continent/West Pac)

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

Week 1 - Valid: Sep 11, 2019 - Sep 17, 2019

Week 2 - Valid: Sep 18, 2019 - Sep 24, 2019

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: 09/10/2019
Forecaster: Artusa

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.
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence    Brown: Enhanced Convergence

Incoherent wave pattern over much of globe. Enhanced convection over Africa, Indian Ocean, Maritime Continent.

Better organized wave pattern. Enhanced convection over Maritime Continent and most of Pacific.

Wave-1 with enhanced convection over Pacific
Wheeler-Hendon based analyses of model forecasts indicate significant differences in RMM space. ECMWF farthest east solution & strengthening signal (week-2). JMA shows westward motion & strengthening signal in week-1. GEFS somewhere in-between the ECMWF and JMA.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
Five-Day Graphical Tropical Weather Outlook
Central Pacific Hurricane Center Honolulu, Hawaii

No disturbances are expected in the Eastern Pacific during the next five days.
Connections to U.S. Impacts
Week-2  500mb Fcst  
(GFS Superensemble)

Heights

Anomalies

Weakness
Week 2 – Temperature and Precipitation
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 11, 2019 - Sep 17, 2019

Week 2 - Valid: Sep 18, 2019 - Sep 24, 2019

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.
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