Global Tropics Hazards And Benefits Outlook
8/7/2018
Adam Allgood

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

Week 1 - Valid: Aug 01, 2018 - Aug 07, 2018

Week 2 - Valid: Aug 01, 2018 - Aug 07, 2018

Cool shading
More clouds/rain

Warm shading
Less clouds/rain

7-Day Average OLR Anomaly
2018/07/30 - 2018/08/05
Synopsis of Climate Modes

**ENSO: (July 12, 2018 Update)**
- ENSO Alert System Status: [El Niño Watch](#)

- ENSO-neutral is favored through Northern Hemisphere summer 2018, with the chance for El Niño increasing to about 65% during fall, and to about 70% during winter 2018-19.

**MJO and other subseasonal tropical variability:**
- The convective pattern broadly resembles a West Pacific MJO event, but there has been little eastward propagation of the signal.

- Dynamical models generally depict weak MJO evolution. The GEFS tracks a robust Kelvin Wave to the Indian Ocean and strengthens the signal, while the ECMWF maintains a weak signal (monthly ECMWF brings depicts renewed West Pacific signal in late August)

**Extratropics:**
- A recurving Typhoon Shanshan may help feed into troughing near Alaska, resulting in wet conditions and below-average temperatures.

- Weak MJO and the potential for continued West Pacific activity does not favor an uptick in Atlantic TC activity during late August.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Aug 08, 2018 - Aug 14, 2018

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: 08/07/2018
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-1 pattern, enhanced convection over the Pacific.

Slightly less organized pattern, note enhanced signal remains stationary over the Pacific.

Convectively coupled Kelvin wave reaches the Maritime Continent. East Pacific enhancement (split signals?)
GEFS – weak signal crosses the Western Hemisphere, intensification over the Indian Ocean (tracking Kelvin wave?)
ECMWF – Weak signal
JMA – weak signal, hint of Kelvin wave?
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
Kelvin wave emerging over the West Pacific is the strongest signal
August Tropical Storm Formation by MJO phase

- Phase 1 (101 days) 38 storms
- Phase 2 (79 days) 31 storms
- Phase 3 (51 days) 27 storms
- Phase 4 (40 days) 12 storms
- Phase 5 (117 days) 40 storms
- Phase 6 (101 days) 50 storms
- Phase 7 (43 days) 17 storms
- Phase 8 (26 days) 17 storms
- Null (466 days) 189 storms
Days 1-4

Day 5-8

Day 9-12

Day 13-15
Connections to U.S. Impacts
AO: Observed & ENSM forecasts

1000mb Z (Obs: 10Apr2018 - 07Aug2018)  AD index

mean=0.6995

1000mb Z (7day Forecast)  AD index

mean=0.4511  cor(w/obs)=0.7628

1000mb Z (10day Forecast)  AD index

mean=0.2762  cor(w/obs)=0.4978

1000mb Z (14day Forecast)  AD index

mean=0.0588  cor(w/obs)=0.1342
Week 2 – Temperature and Precipitation

8-14 DAY OUTLOOK TEMPERATURE PROBABILIT
MADE 6 AUG 2018
VALID AUG 14 – 20, 2018

DASHED Black LInes ARE CLIMATOLOGY
VALUES ABOVE 75° OR BELOW 50° NORMAL
GRAY AREAS ARE NEAR-NORMAL

Probability of Below | Normal | Probability of Above
--- | --- | ---
90% | 80% | 70% | 60% | 50% | 40% | 33% | 33% | 40% | 50% | 60% | 70% | 80% | 90%

8-14 DAY OUTLOOK PRECIPITATION PROBABILIT
MADE 6 AUG 2018
VALID AUG 14 – 20, 2018

DASHED Black LInes ARE CLIMATOLOGY
VALUES ABOVE 1″ OR BELOW 1″ NORMAL
GRAY AREAS ARE NEAR-NORMAL

Probability of Below | Normal | Probability of Above
--- | --- | ---
90% | 80% | 70% | 60% | 50% | 40% | 33% | 33% | 40% | 50% | 60% | 70% | 80% | 90%
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Aug 08, 2018 - Aug 14, 2018

Week 2 - Valid: Aug 15, 2018 - Aug 21, 2018

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
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