Global Tropics Hazards And Benefits Outlook
09/04/2018

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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: Aug 29, 2018 - Sep 04, 2018

Week 2 - Valid: Aug 29, 2018 - Sep 04, 2018

7-Day Average OLR Anomaly
2018/08/20 - 2018/08/26
Synopsis of Climate Modes

**ENSO: (August 9, 2018 Update)**
- ENSO Alert System Status: [El Niño Watch](#)

- There is ~60% chance of El Niño in the Northern Hemisphere fall 2018 (September-November), increasing to ~70% during winter 2018-19.

**MJO and other subseasonal tropical variability:**
- The MJO is still weak. Model forecasts are bearish about MJO development during forecast period.

  - Weak Equatorial Rossby wave activity and a transition to an El Niño base state are the primary drivers.

**Extratropics:**
- The MJO is not likely to play a substantial role in the extratropical pattern over the next several weeks. The primary tropical/extratropical impacts will come from tropical cyclones or disturbances. TS Jebi may become an intense recurving West Pacific tropical cyclone.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 05, 2018 - Sep 11, 2018

Week 2 - Valid: Sep 12, 2018 - Sep 18, 2018

Confidence

Tropical Cyclone Formation
High
Moderate

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: 09/04/2018
Forecaster: MacRitchie

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.
Fairly coherent Wave-1 structure, but no eastward propagation.

The active convection over the West Pacific lifts slightly north, the rest of the pattern remains mostly unchanged.
RMM index forecasts remain bearish and it appears that MJO re-emergence is unlikely over the next couple of weeks.

Other modes, such as model-forecasted TC activity, could be influencing the signal.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
The MJO signal is quite weak but is some evidence of ER activity around the Dateline. The low-frequency (mostly ENSO) base state appears to be evolving towards El Niño.
CFS Precipitation Anomalies (mm) Issued 03Sep2018
Week−1 Forecast Ending 11Sep2018

CFS Precipitation Anomalies (mm) Issued 03Sep2018
Week−2 Forecast Ending 18Sep2018
September Tropical Storm Formation by MJO phase

Phase 1 (81 days) 31 storms

Phase 2 (122 days) 56 storms

Phase 3 (51 days) 16 storms

Phase 4 (70 days) 30 storms

Phase 5 (106 days) 48 storms

Phase 6 (61 days) 27 storms

Phase 7 (30 days) 22 storms

Phase 8 (67 days) 29 storms

Null (393 days) 169 storms
Connections to U.S. Impacts
AO: Observed & ENSM forecasts

1000mb Z (Obs: 08May2018 – 04Sep2018)  AD index
mean=0.5648

1000mb Z (7day Forecast)  AD index
mean=0.4262  cor(w/obs)=0.7696

1000mb Z (10day Forecast)  AD index
mean=0.2711  cor(w/obs)=0.5496

1000mb Z (14day Forecast)  AD index
mean=0.0496  cor(w/obs)=0.1796
Week 2 – Temperature and Precipitation
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Sep 05, 2018 - Sep 11, 2018

Week 2 - Valid: Sep 12, 2018 - Sep 18, 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.

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