Global Tropics Hazards And Benefits Outlook
5/29/2018

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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

Subtropical Storm Alberto formed in Gulf of Mexico

Cool shading
More clouds/rain

Warm shading
Less clouds/rain
Synopsis of Climate Modes

**ENSO:**
- ENSO-neutral is favored through Sep-Nov 2018, with chances of El Nino increasing to near 50 percent by Northern Hemisphere winter 2018-19.

**MJO and other subseasonal tropical variability:**
- The enhanced (suppressed) phase of the MJO is centered over the Indian (Pacific) Ocean.
- The MJO is likely to continue propagation eastward over the Maritime Continent during Week-1.
  - About half the model guidance suggests that that the MJO will weaken as it moves over the Central Pacific during Week-2. The other half suggest that it will continue around the globe.
- Watching the Bay of Bengal, South China Sea, and eastern Pacific Ocean for tropical cyclone activity.

**Extratropics:**
- Teleconnection responses across North America are weak during this time of year.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

**Week 1 - Valid: May 30, 2018 - Jun 05, 2018**

**Week 2 - Valid: Jun 06, 2018 - Jun 12, 2018**

Confidence

<table>
<thead>
<tr>
<th>High</th>
<th>Moderate</th>
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**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: 05/29/2018
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.
Enhanced convection over Africa and suppressed convection over the Indian Ocean and Maritime Continent, both consistent with the early stages of an MJO.

Mostly Wave-1 with a moderate MJO projection

Eastward propagation slowed recently due to interference from westward-moving Rossby Waves. Convection over the Indian Ocean enhanced by Kelvin waves.
MJO Observation/Forecast

[RMM1, RMM2] forecast for May-29-2018 to Jun-12

GEFS

MJO Index Forecast for 29May2018-12Jun2018

ECMWF

MJO Index Forecast for 24May2018-05Jul2018

BOMM
Average Conditions when the MJO is present

**Expectations**

Week-1: Phases 3/4

Week-2: Phase 5/6?

CAVEAT: These panels are representative of robust MJO events.
Enhanced phase of the **MJO** crossed the Prime Meridian two weeks ago.

**Kelvin Waves** have enhanced convection within the MJO envelope.
7-day OLR with CFS forecasts
June Tropical Storm Formation by MJO phase

Week 1

- Phase 1 (104 days): 14 storms
- Phase 4 (80 days): 6 storms
- Phase 7 (45 days): 16 storms

Week 2

- Phase 2 (92 days): 11 storms
- Phase 3 (57 days): 10 storms
- Phase 6 (92 days): 17 storms

Week 3

- Phase 5 (77 days): 12 storms
- Null (423 days): 71 storms
No new tropical cyclones are expected during the next five days.
Days 1-4

Day 5-8

Day 9-12

Day 13-15
Connections to U.S. Impacts
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