Global Tropics Hazards And Benefits Outlook
5/1/2018

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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: Apr 25, 2018 - May 01, 2018

Week 2 - Valid: Apr 25, 2018 - May 01, 2018
Tropical Storm Flamboyan
Synopsis of Climate Modes

**ENSO:**

- ENSO Alert System Status: [La Niña Advisory](#)
- La Niña is expected to transition to ENSO-neutral during April-May, with ENSO-neutral then likely (greater than 50% chance) to continue through the Northern Hemisphere summer 2018

**MJO and other subseasonal tropical variability:**

- The MJO remains weak, with any remnant enhanced phase now over the Pacific.
- The tropical convective anomaly pattern is noisy and low-amplitude as various modes interact with each other.
- Dynamical model MJO index forecasts generally favor a strengthening signal over the Western Hemisphere, emerging over the far western Indian Ocean by late Week-2.
- Increased forecast uncertainty due to weak incipient pattern.

**Extratropics:**

- Given both the time of year and the weak signal to start with, the MJO is not anticipated to substantially impact the midlatitude pattern.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: May 02, 2018 - May 08, 2018

Week 2 - Valid: May 09, 2018 - May 15, 2018

Confidence

<table>
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<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: 05/01/2018
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.
Robust Wave-1 asymmetry indicative of a healthy Indian Ocean event.

The anomaly field becomes much weaker during late April.

By the end of April, the field is weak and noisy, with the highest amplitude signal over the West Pacific.
Broad dynamical model agreement depicting an emerging MJO signal over the Western Hemisphere during the period, approaching the far western Indian Ocean by the end of Week-2.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
Robust April MJO event has been pulverized in the West Pacific, with slower-moving convection north of New Guinea (interaction with Rossby waves?) and faster moving Kelvin waves.
Days 1-4

Days 5-8

Days 9-12

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

1000mb Z (Obs: 02Jan2018 - 01May2018) AD index

- mean = -0.1612

1000mb Z (7day Forecast) AD index

- mean = -0.4301
- cor(w/obs) = 0.8226

1000mb Z (10day Forecast) AD index

- mean = -0.6483
- cor(w/obs) = 0.5628

1000mb Z (14day Forecast) AD index

- mean = -0.8589
- cor(w/obs) = 0.3788
Week 2 – Temperature and Precipitation
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