Global Tropics Hazards And Benefits Outlook
6/18/2019

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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

No TC formations within last week

Cool shading
More clouds/rain

Warm shading
Less clouds/rain
Synopsis of Climate Modes

**ENSO: (June 13, 2019 Update)**
- ENSO Alert System Status: **El Niño Advisory**

- El Niño is predicted to persist through the Northern Hemisphere summer 2019 (66% chance), with lower odds of continuing through the fall and winter (50-5% chance).

**MJO and other subseasonal tropical variability:**
- The MJO remained of moderate strength, and propagated to the Maritime Continent, where the convective envelope destructively interfered with the ENSO state.
- Dynamical models show variability in the evolution of the MJO over the new two weeks – most favor some weakening and continued eastward propagation into the Pacific (Phases 6/7).

**Impacts:**
- The western Pacific basin is forecast to be more active during the next two weeks, coinciding with MJO-enhanced convection.
- Conditions over the Indian subcontinent look more conducive to monsoon onset for southern Indian in Week-1; however, moving into Week-2, model forecasts are varied and the progression of the monsoon may be limited.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Jun 19, 2019 - Jun 25, 2019

Week 2 - Valid: Jun 26, 2019 - Jul 02, 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.

Below-normal temperatures
7-day mean temperatures in the lower third of the historical range.

Produced: 06/18/2019
Forecaster: Maurin

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 with convection over the Indian Ocean.

Wave-1 pattern remains, with some noise. Convection is amplified, stalling over the Indian Ocean.

Wave-1 becomes more coherent, convection has shifted over the Maritime Continent.
All models favor eastward propagation in Week-1, with varying amounts of decay to the signal. ECMWF brings the signal back inside the circle in Week-1, where GEFS and CFS keep the signal propagating into Week-2. Phases 6&7 are favored for Week 1-2.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
MJO signal has continued to be strong in the OLR field from early to mid May and is moving toward western Pacific. Kelvin wave activity is apparent over the Indian Ocean and Maritime Continent, constructively interfering with MJO, while a westward moving Rossby wave slows the MJO signal.

Low-frequency ENSO state signal remains near the Date Line, with some interference from the other modes of variability.
No new tropical cyclones are expected during the next five days.
Ensemble-based Probability (%) of TC genesis using these global ensembles: NCEP FNMOC
For forecasts during the 00–120h period from initial time = 2019061800

Ensemble-based Probability (%) of TC genesis using these global ensembles: NCEP FNMOC
forecasts during the 120–240h period from initial time = 2019061800
Connections to U.S. Impacts
Week 2 – Temperature and Precipitation

8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 17 JUN 2019
VALID JUN 25 - JUL 01, 2019

DASHED BLACK LINES ARE CLIMATOLOGY
VALUES ABOVE 80% OR BELOW 20% ARE ACTUAL
GRAY AREAS ARE NEAR-NORMAL

8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 17 JUN 2019
VALID JUN 25 - JUL 01, 2019

DASHED BLACK LINES ARE CLIMATOLOGY
VALUES ABOVE 90% OR BELOW 10% ARE ACTUAL
GRAY AREAS ARE NEAR-NORMAL
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

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