Global Tropics Hazards And Benefits Outlook

6/14/2022

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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

A = Tropical Storm Blas (6/14)

* Pretty good consistency in forecasts during last 2 weeks

Cool shading
More clouds/rain

Warm shading
Less clouds/rain
ENSO: (Jun 9, 2022 Update)  

next update on Thursday, July 14th

- ENSO Alert System Status: La Niña Advisory

- Though La Niña is favored to continue, the odds for La Niña decrease into the Northern Hemisphere late summer (52% chance in JAS 2022) before slightly increasing through the Northern Hemisphere fall and early winter 2022 (58-59% chance)

**MJO and other subseasonal tropical variability:**

- Both velocity potential and RMM based MJO indices indicate a weakening of the intraseasonal signal during the last seven days.

- There is general agreement in the dynamical model RMM forecasts featuring an uptick in amplitude in short-term, followed by a re-weakening of the signal for the remainder of the outlook period. The renewed activity is likely tied to Rossby wave activity aiding the convective pattern over the western Hemisphere.

- Regardless of a disorganized MJO in the forecast, the interaction of tropical waves, and the persistence of anomalous lower-level westerlies over the tropical Americas is expected to increase chances for tropical cyclone formation over the eastern Pacific and Atlantic basins during the next two weeks.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Jun 15, 2022 - Jun 21, 2022

Week 2 - Valid: Jun 22, 2022 - Jun 28, 2022

Confidence

Tropical Cyclone Formation (High, Moderate)
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: 06/14/2022
Forecaster: Novella

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 quickly shifted from Asia and the Maritime Continent to the Pacific, indicative of a Kelvin Wave.

Enhanced convection is now observed across the Atlantic and extending into Africa, with suppressed convection over Asia and much of the Pacific.

Although envelopes of enhanced and suppressed convection continued to shift eastward, the wave-1 pattern has become less coherent.
There is good agreement in dynamical models depicting an increase of the signal in RMM space on the near-term, followed by a re-weakening with little eastward propagation for the remainder of the period.

This renewed signal is likely tied to other modes of tropical variability.

There are several ensemble members in the GEFS and ECMWF suggesting possible renewed MJO activity late in week-2.
Robust convectively coupled **Kelvin wave** activity was the dominant mode of activity during May and early June.

Constructive interference with predicted **Rossby Wave** activity results in favorable conditions for enhanced convection and potential TC activity over and near the Americas during the next two weeks.

More coherent **MJO activity** is coming through the filtering in the GEFS by late June and into the week-3 period.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
Tropical Storm Blas
Tuesday June 14, 2022
10 AM CDT Advisory 2
NWS National Hurricane Center

Current information: x
Center location 13.9 N 102.1 W
Maximum sustained wind 45 mph
Movement N at 2 mph

Forecast positions:
● Tropical Cyclone ○ Post/Potential TC
Sustained winds: D < 39 mph
S 39-73 mph H 74-110 mph M > 110 mph

Potential track area: Watches: Warnings: Current wind extent:

Day 1-3 Day 4-5 Hurricane Trop Stm Hurricane Trop Stm Hurricane Trop Stm
Connections to U.S. Impacts
Week 2 – Temperature and Precipitation

8-14 Day Temperature Outlook
Valid: June 21 - 27, 2022
Issued: June 13, 2022

8-14 Day Precipitation Outlook
Valid: June 21 - 27, 2022
Issued: June 13, 2022