Global Tropics Hazards And Benefits Outlook

11/10/2020

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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

Week 1 - Valid: Nov 04, 2020 - Nov 10, 2020

Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Week 2 - Valid: Nov 04, 2020 - Nov 10, 2020

7-Day Average OLR Anomaly
2020/11/02 - 2020/11/08

NOAA/PSL
Base Period: 1981-2010
Synopsis of Climate Modes

**ENSO:** (October 8, 2020 Update)

- ENSO Alert System Status: [La Niña Advisory](#)

- La Niña is likely to continue through the Northern Hemisphere winter 2020-21 (~85% chance) and into spring 2021 (~60% chance during February-April).

**MJO and other subseasonal tropical variability:**

- The MJO was weak, as a remnant enhanced phase crossed the Western Hemisphere.

- The La Niña signal continues to dominate the pattern, with persistent convection over the eastern Maritime Continent/far West Pacific resulting in a Wave-2 asymmetry in the upper-level VP anomaly field.

- Dynamical models favor continued propagation of the MJO, and the initiation of a new Indian Ocean event is possible.

- The base state and MJO favor continued western Atlantic TC activity, with increasing chances for an IO TC. In the midlatitudes, the pattern favors troughing (ridging) over western (eastern) North America during late Week-2 and into Weeks 3-4.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Nov 11, 2020 - Nov 17, 2020

Week 2 - Valid: Nov 18, 2020 - Nov 24, 2020

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: 11/10/2020
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.
The MJO began to cross the Pacific and interfere with La Niña. Strong TC activity near the Philippines.

Rapid propagation to the Western Hemisphere, Wave-2 asymmetry apparent.

The pattern remains disorganized, with possible KW activity over the Pacific.
GEFS and ECWMF in good agreement supporting renewed eastward propagation.

Uncertainty increases once the signal reaches the Indian Ocean, but numerous ensemble members show a robust MJO event developing.
Average Conditions when the MJO is present

CAVEAT: These panels are representative of robust MJO events.
**MJO** activity strongly favored by the CFS.

**Low frequency** contours depict ENSO cold conditions.
CFS Precipitation Anomalies (mm) Issued 09Nov2020
Week–1 Forecast Ending 17Nov2020

CFS Precipitation Anomalies (mm) Issued 09Nov2020
Week–2 Forecast Ending 24Nov2020
November Tropical Storm Formation by MJO phase
No new tropical cyclones are expected during the next five days.
Connections to U.S. Impacts
PNA: Observed & ENSM forecasts

500mb Z (Obs: 14Jul2020 - 10Nov2020) PNA index

mean=0.3400

500mb Z (7day Forecast) PNA index
mean=0.2501 cor(w/obs)=0.8277

500mb Z (10day Forecast) PNA index
mean=0.2358 cor(w/obs)=0.4581

500mb Z (14day Forecast) PNA index
mean=0.1571 cor(w/obs)=0.0317
AO: Observed & ENSM forecasts

1000mb Z (Obs: 14Jul2020 - 10Nov2020)  AD index
mean=0.1220

1000mb Z (7day Forecast)  AD index
mean=-0.2638  cor(w/obs)=0.8893

1000mb Z (10day Forecast)  AD index
mean=-0.3627  cor(w/obs)=0.7601

1000mb Z (14day Forecast)  AD index
mean=-0.4308  cor(w/obs)=0.4289
Since we are in an amplified, stable pattern today’s outlooks are likely to be similar.
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