Global Tropics Hazards And Benefits Outlook 9/3/2019

Christina Maurin

<u>Outline</u>

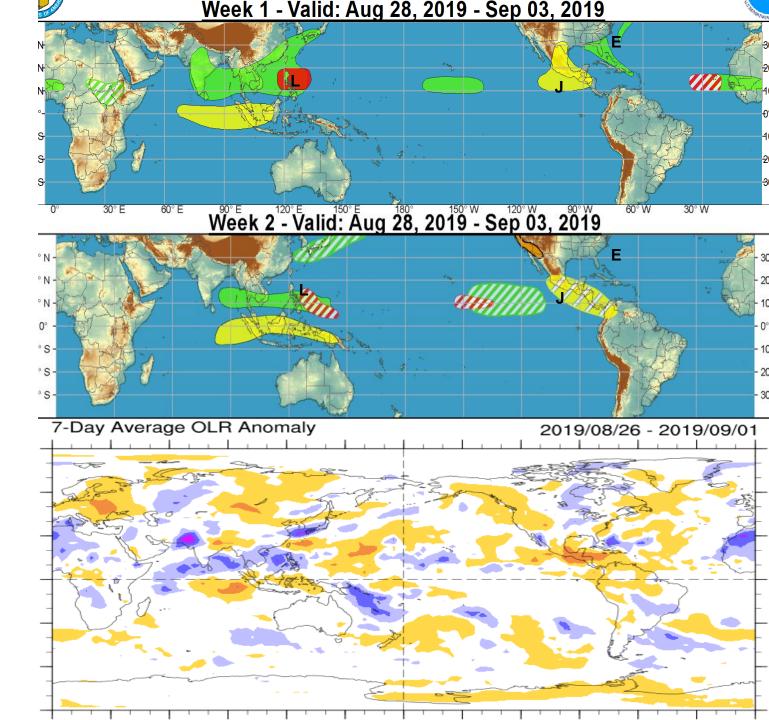
- 1. Review of Recent Conditions
- 2. Synopsis of Climate Modes
- 3. GTH Outlook and Forecast Discussion
- 4. Connections to U.S. Impacts

<u>Outlook</u> <u>Review</u>

TS Erin 8/28 H Juliette 9/1 TYP Lingling 9/1

Cool shading More clouds/rain

Warm shading Less clouds/rain



Synopsis of Climate Modes

ENSO: (as of September 3rd, 2019– next update on Thursday, September 12th)

- ENSO Alert System Status: Final El Niño Advisory
- ENSO-neutral conditions are present, and is most likely to continue through Northern Hemisphere Winter 2019-2020 (50-55% chance).

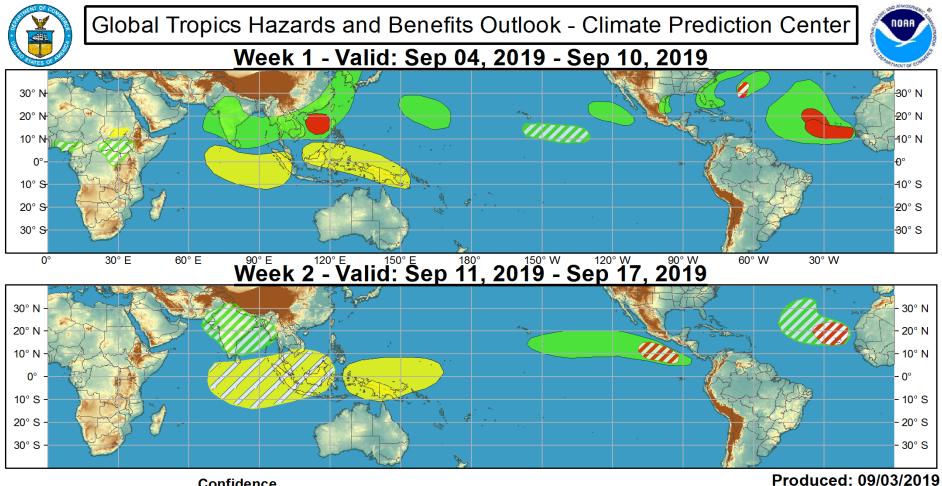
MJO and other subseasonal tropical variability:

• The MJO remains weak and incoherent. Any signal seen is over the Maritime Continent.

• Dynamical models are not in good agreement over the forecast for MJO, indicating low confidence. There could be some eastward propagation, bringing the surpressed envelope over the Maritime Continent in week-2.

Tropical cyclone development:

- The Atlantic saw an uptick of activity over the past few days, with several systems currently of interest for tropical development. Low wind shear is likely to keep the tropical Atlantic active through the next two weeks.
- Conditions for cyclogenesis in the eastern Pacific look more conducive in week-2.



Confidence High Moderate

Tropical Cyclone Formation

Above-average rainfall

Below-average rainfall

Development of a tropical cyclone (tropical depression - TD, or greater strength).

Weekly total rainfall in the upper third of the historical range.

Weekly total rainfall in the lower third of the historical range.

Above-normal temperatures

Below-normal temperatures

7-day mean temperatures in the upper third of the historical range.

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

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.











Forecaster: Maurin

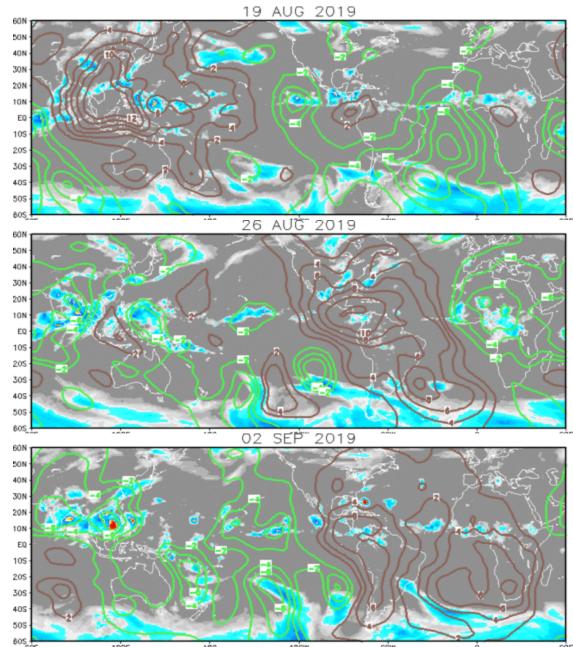
IR Satellite & 200-hpa Velocity Potential Anomalies

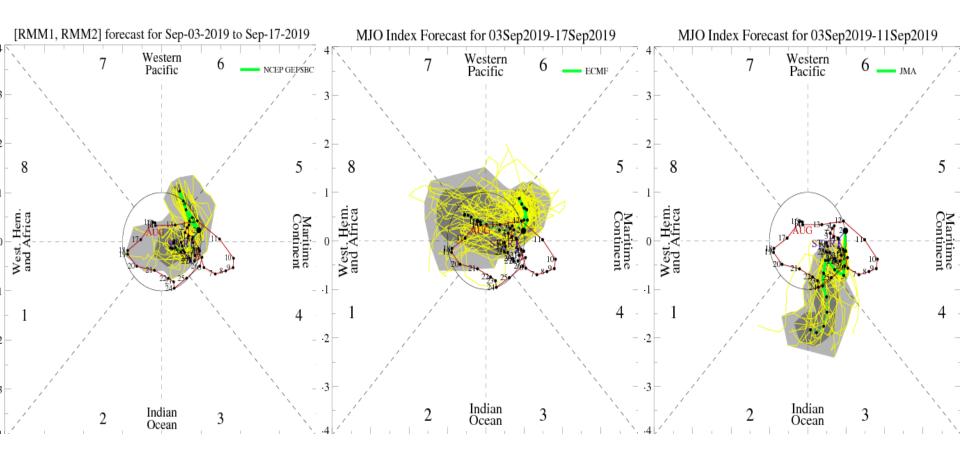
Green: Enhanced Divergence Brown: Enhanced Convergence

Incoherent pattern with more regional anomalies.

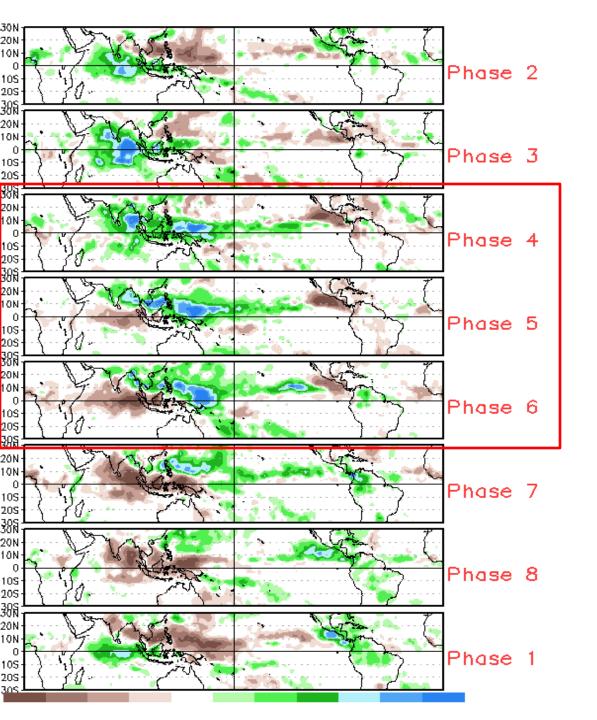
More Wave-1 pattern developed but fast eastward propagation (Kelvin wave).

Upper-level convergence has shifted eastward toward Africa, with enhanced divergence becoming more established over the Maritime Continent.





 GFS and ECMWF indicate a continued weak MJO, with some evidence of limited eastward propagation toward the western Pacific. Spread among the members, particularly the ECMWF, remains large.

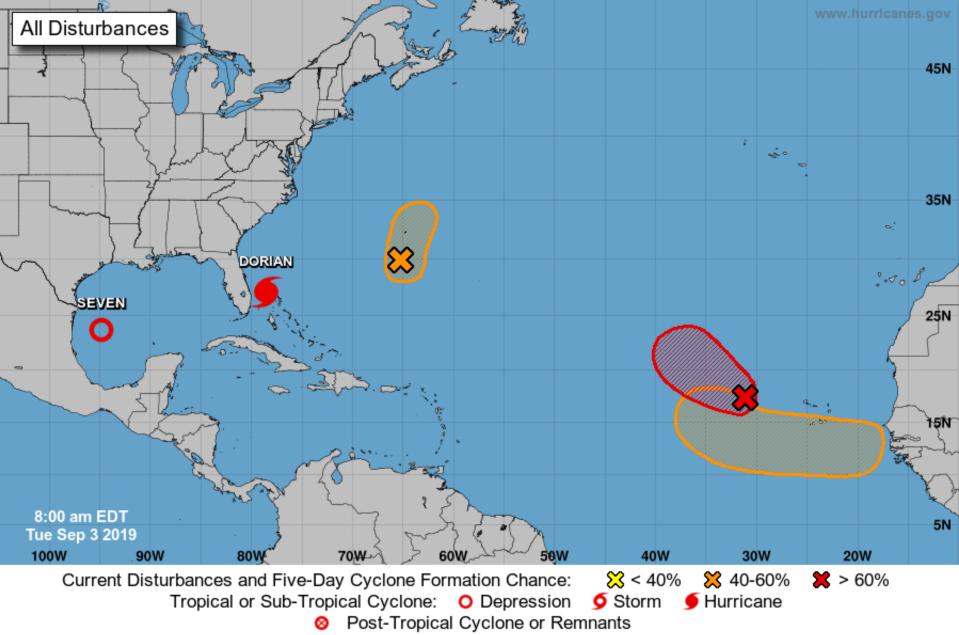




Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

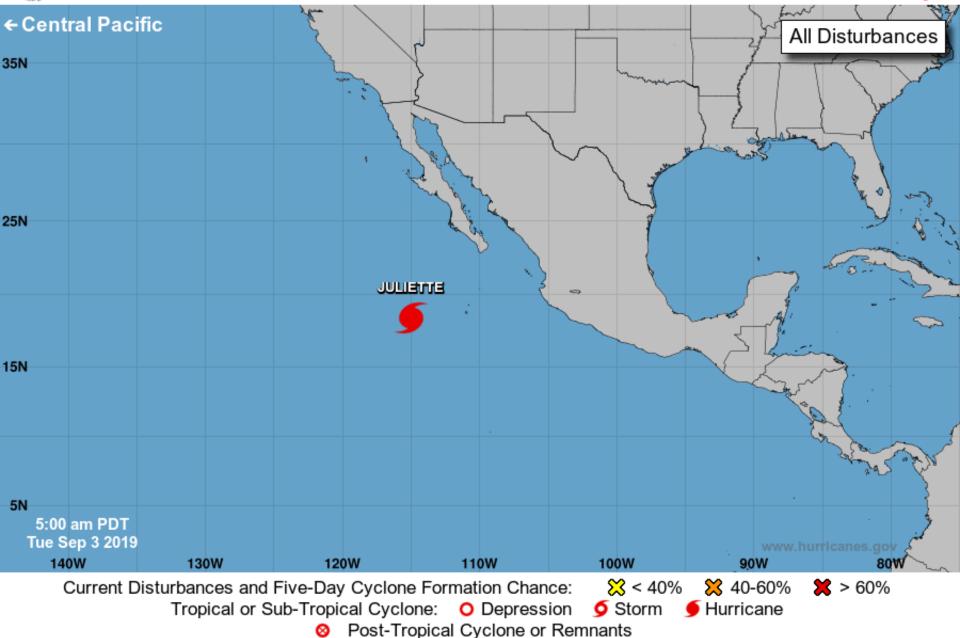






Five-Day Graphical Tropical Weather Outlook

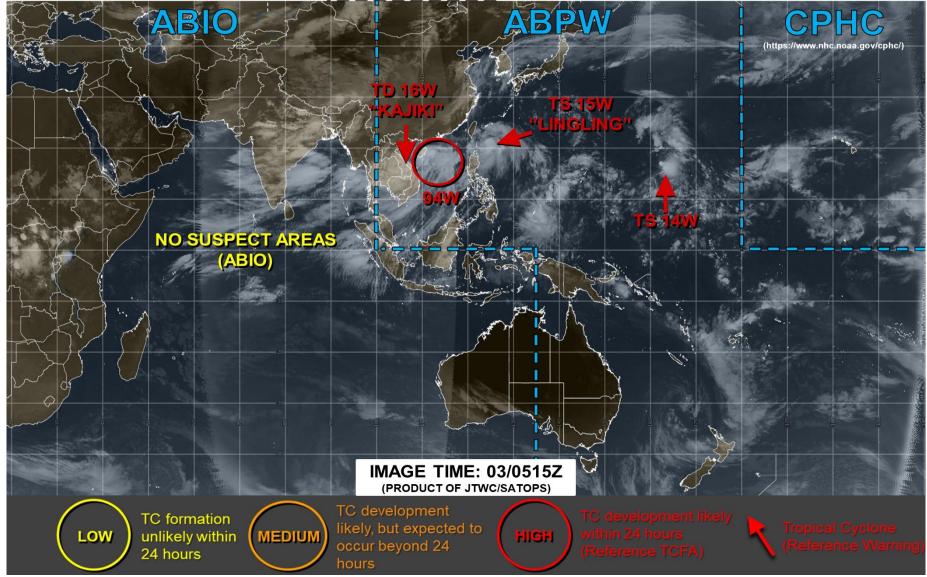
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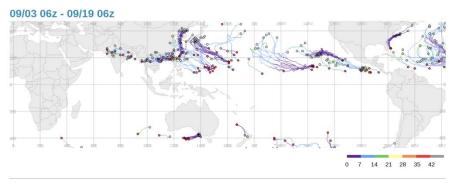


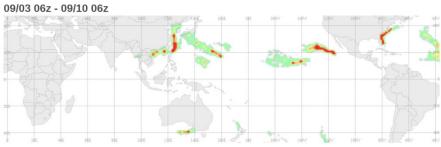


JOINT TYPHOON WARNING CENTER





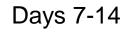




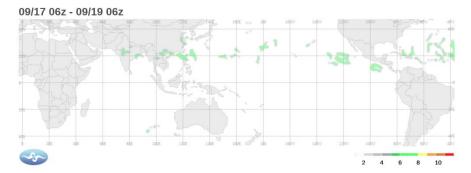


09/10 06z - 09/17 06z

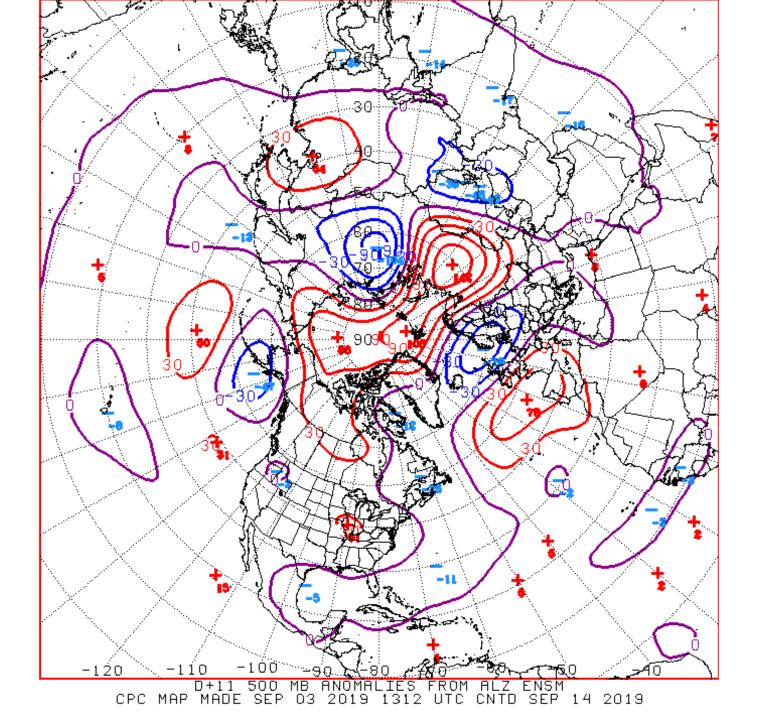




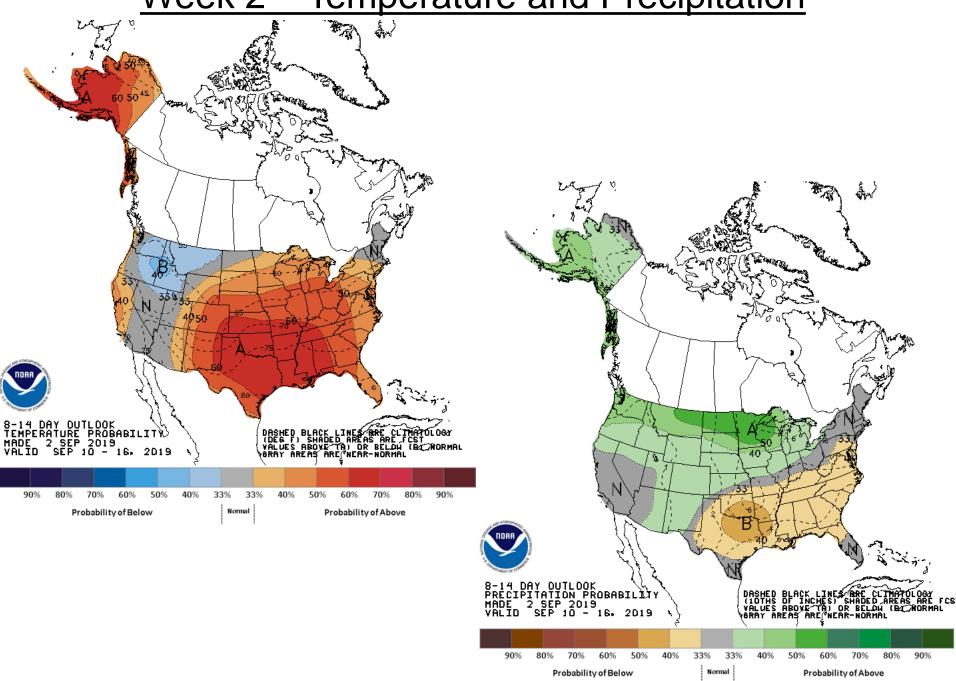
Days 14-16

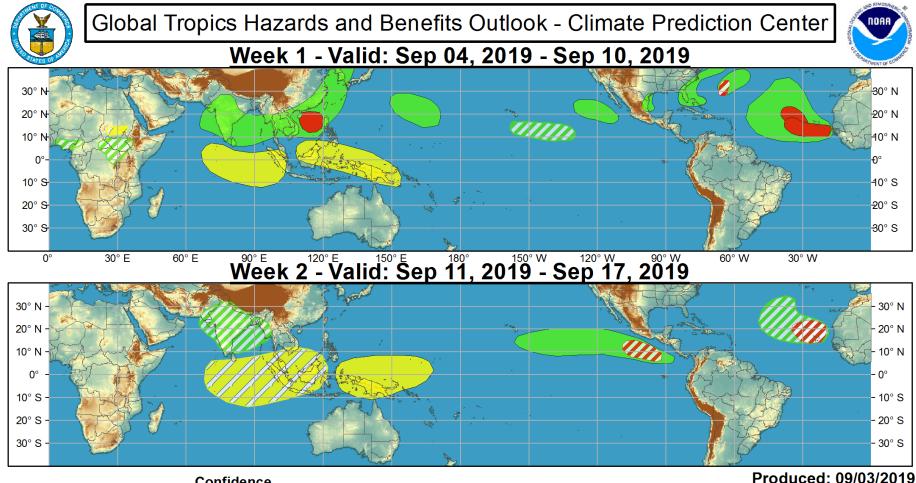


Connections to U.S. Impacts



Week 2 – Temperature and Precipitation





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Below-average rainfall

Above-normal temperatures

Below-normal temperatures

Moderate

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