

Global Tropics Hazards And Benefits Outlook

9/08/2020

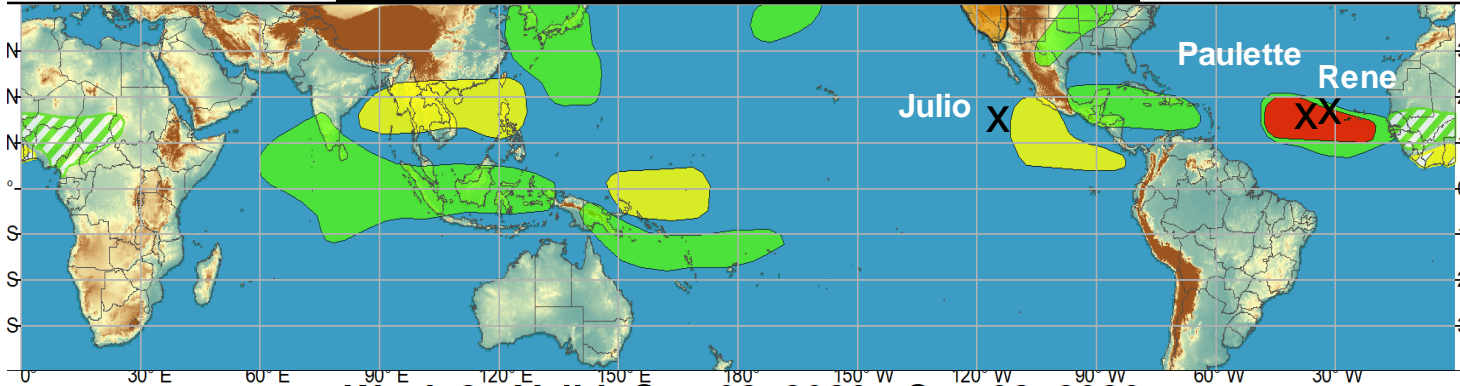
Brad Pugh

Outline

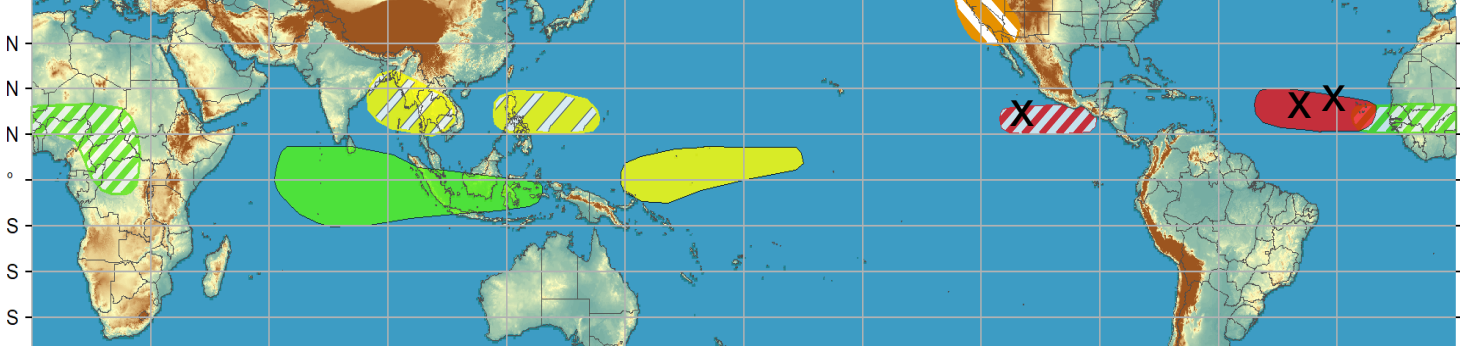
1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts

Outlook Review

Week 1 - Valid: Sep 02, 2020 - Sep 08, 2020



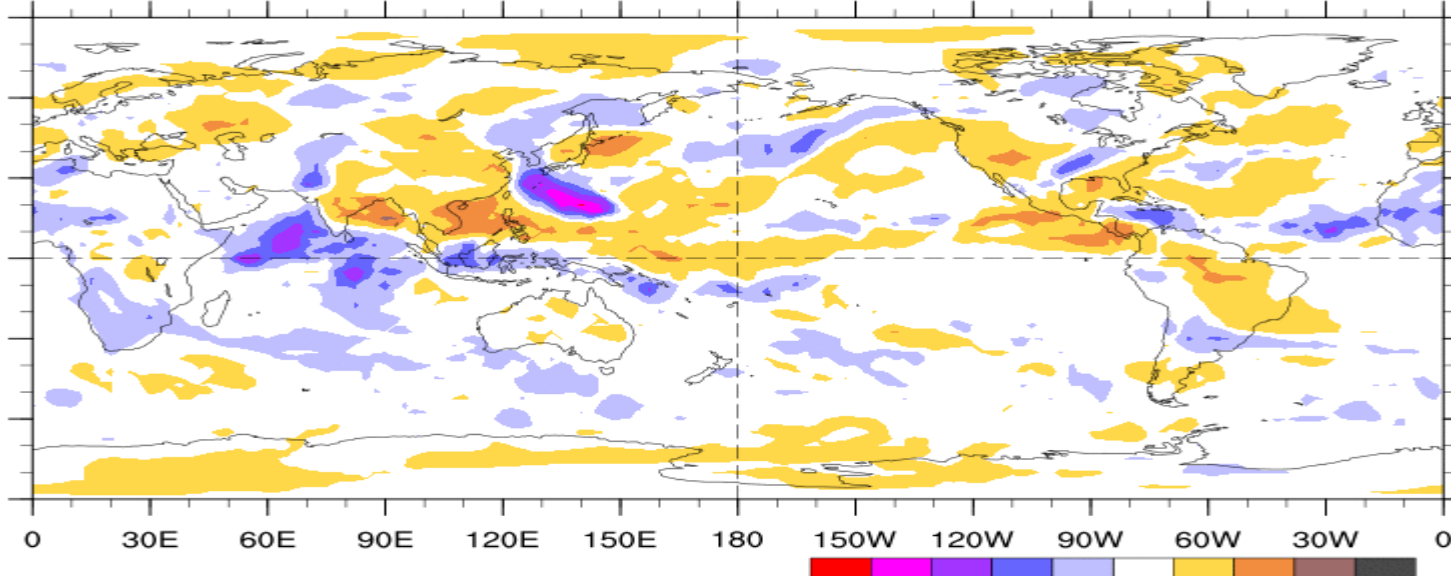
Week 2 - Valid: Sep 02, 2020 - Sep 08, 2020



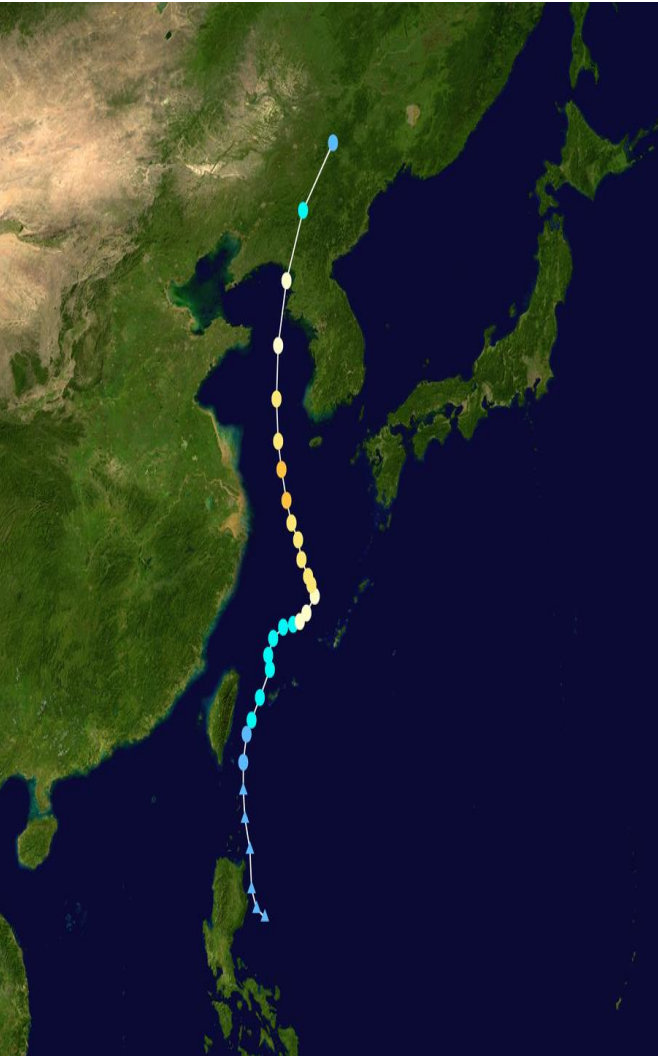
7-Day Average OLR Anomaly 2020/08/31 - 2020/09/06

Cool shading
More clouds/rain

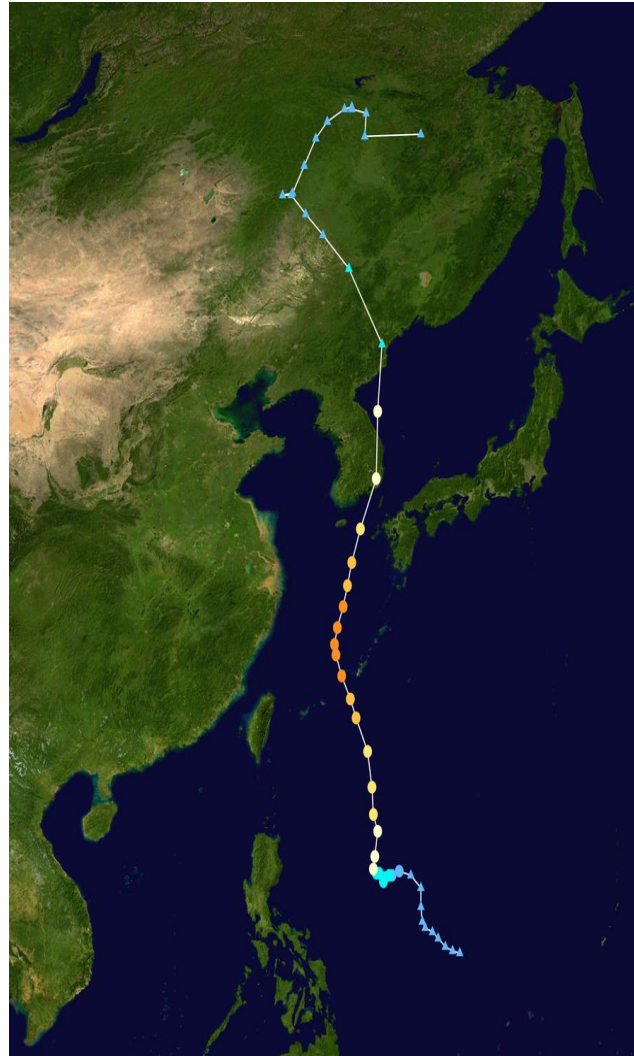
Warm shading
Less clouds/rain



Typhoon Bavi
(Aug 21-27)



Typhoon Maysak
(Aug 27-Sep 3)



Typhoon Haishen
(Aug 31-Sep 7)



Synopsis of Climate Modes

ENSO: (August 13, 2020 Update)

- ENSO Alert System Status: [La Niña Watch](#) *(next update September 10)*
- There is a ~60% chance of La Niña development during Northern Hemisphere fall 2020 and continuing through winter 2020-21 (~55% chance).

MJO and other subseasonal tropical variability:

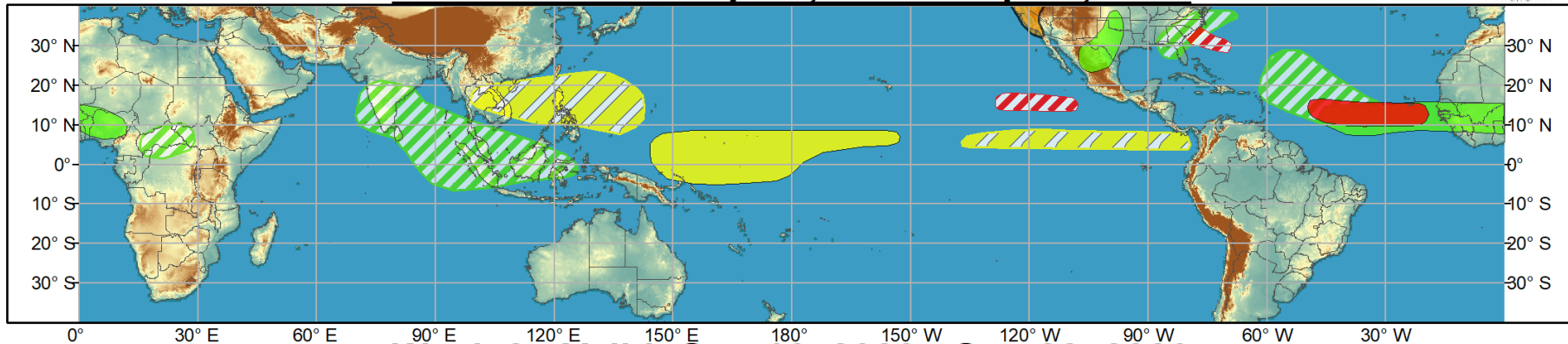
- The MJO weakened during the first week of September.
- Dynamical models depict that the MJO remains weaker compared to August.
- Enhanced waves emerging from Africa, the low-frequency base state, and climatology support an active Atlantic basin into the latter half of September.



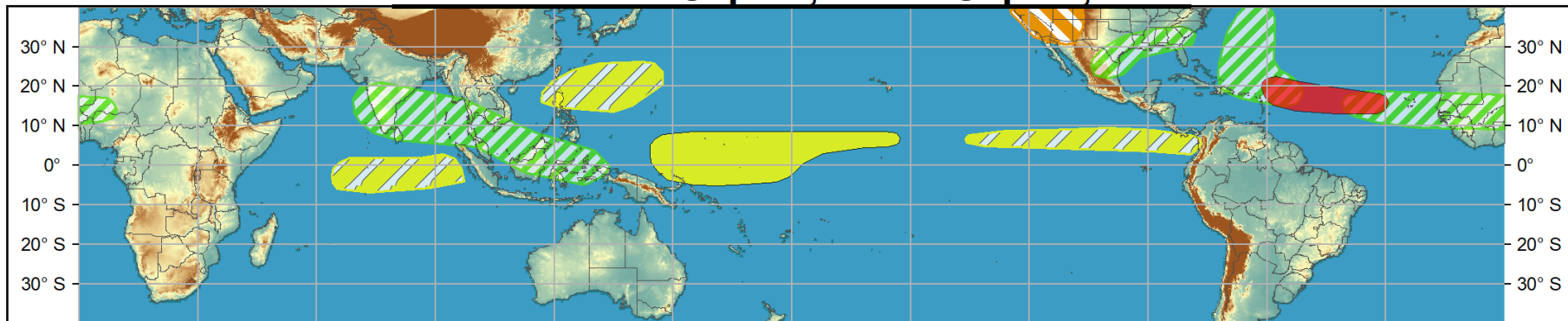
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Sep 09, 2020 - Sep 15, 2020



Week 2 - Valid: Sep 16, 2020 - Sep 22, 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: 09/08/2020

Forecaster: Pugh

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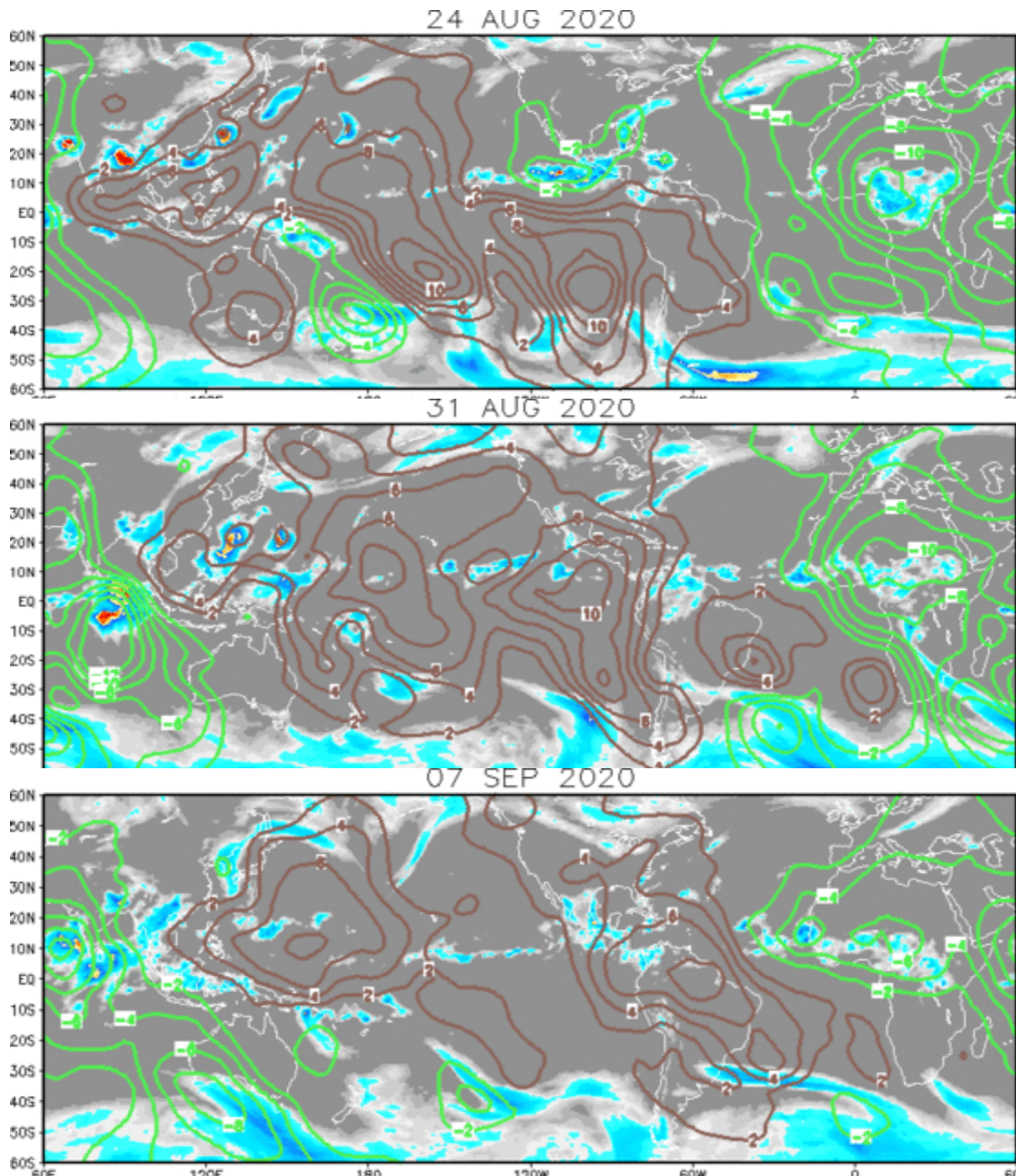
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence

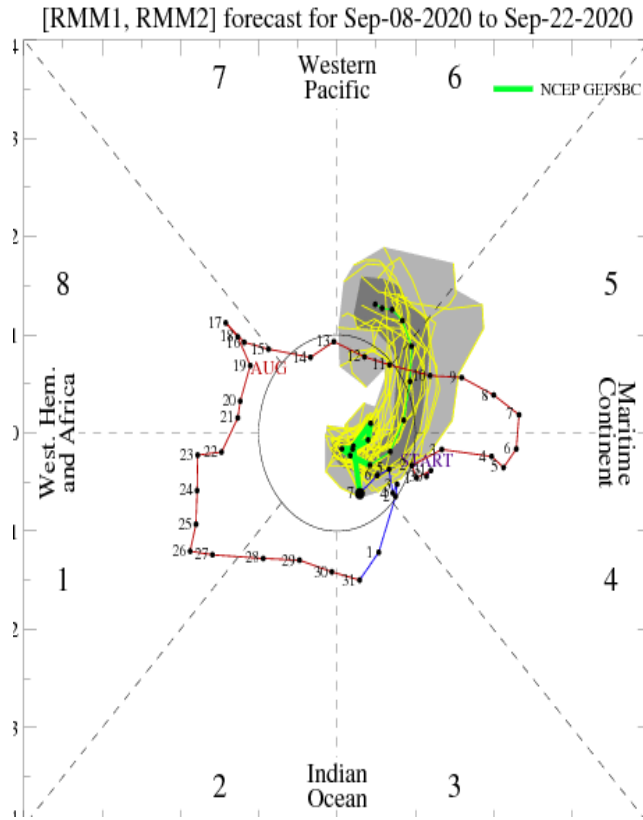
Brown: Enhanced Convergence

Coherent Wave-1 spatial pattern

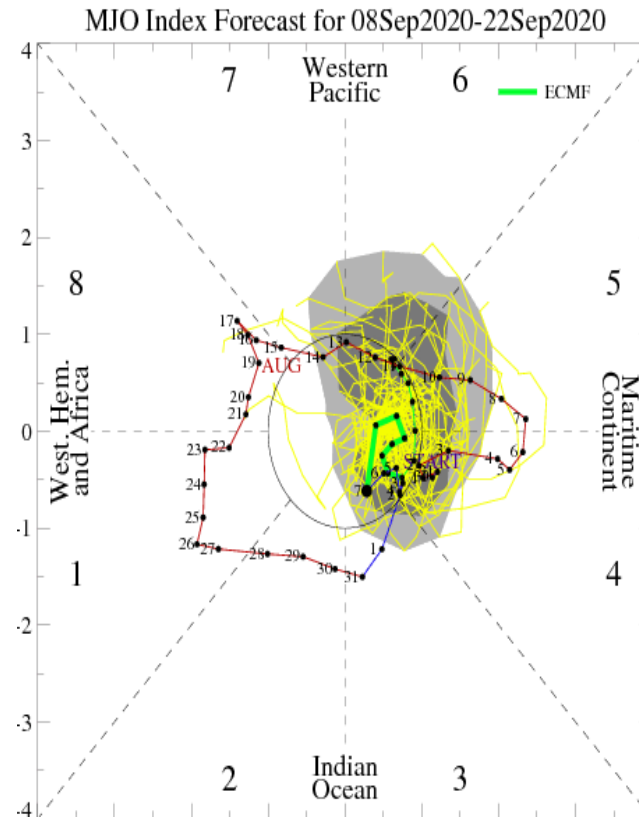
More stationary pattern as the MJO weakens



MJO Observation/Forecast



GEFS

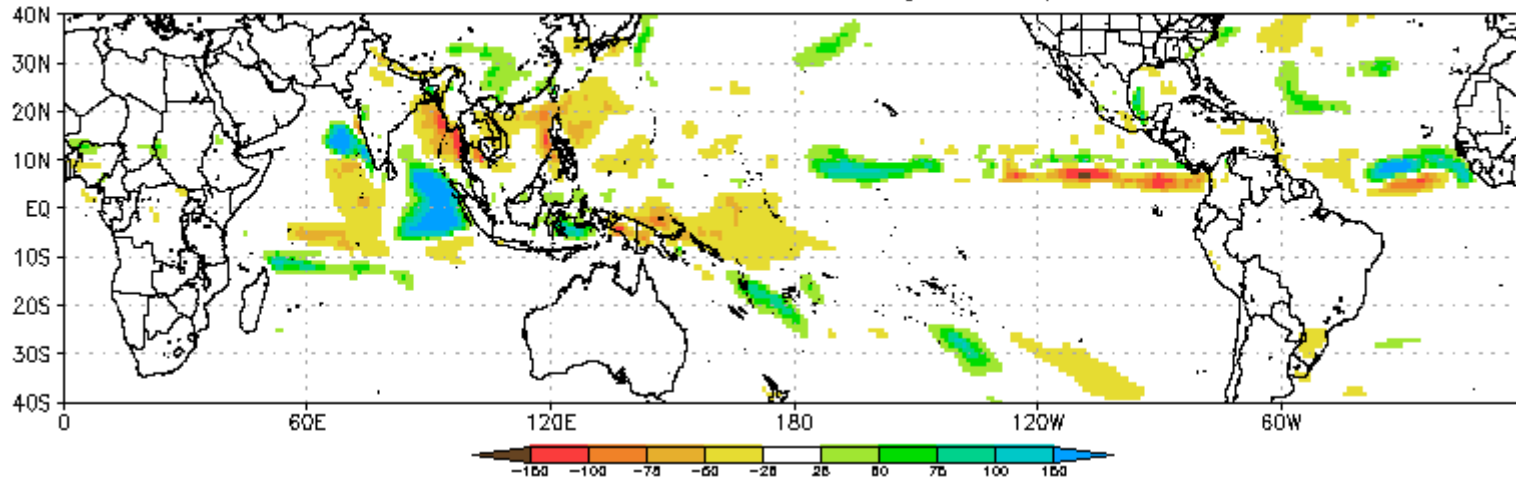


ECMWF

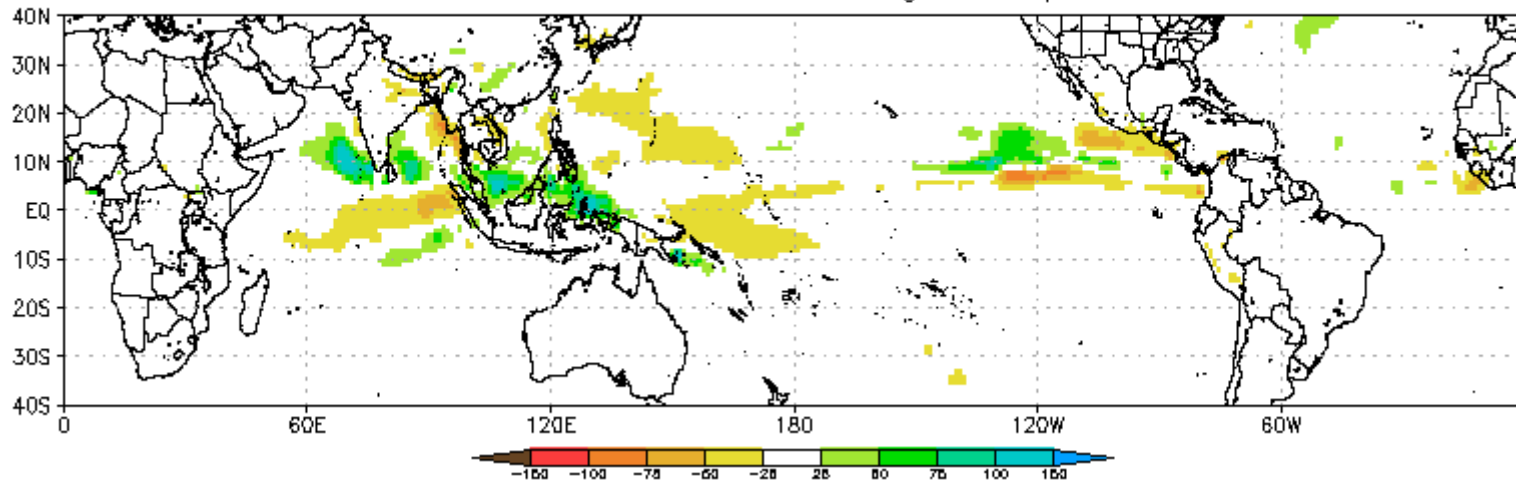
Note the amplitude of the index outside the unit circle during August

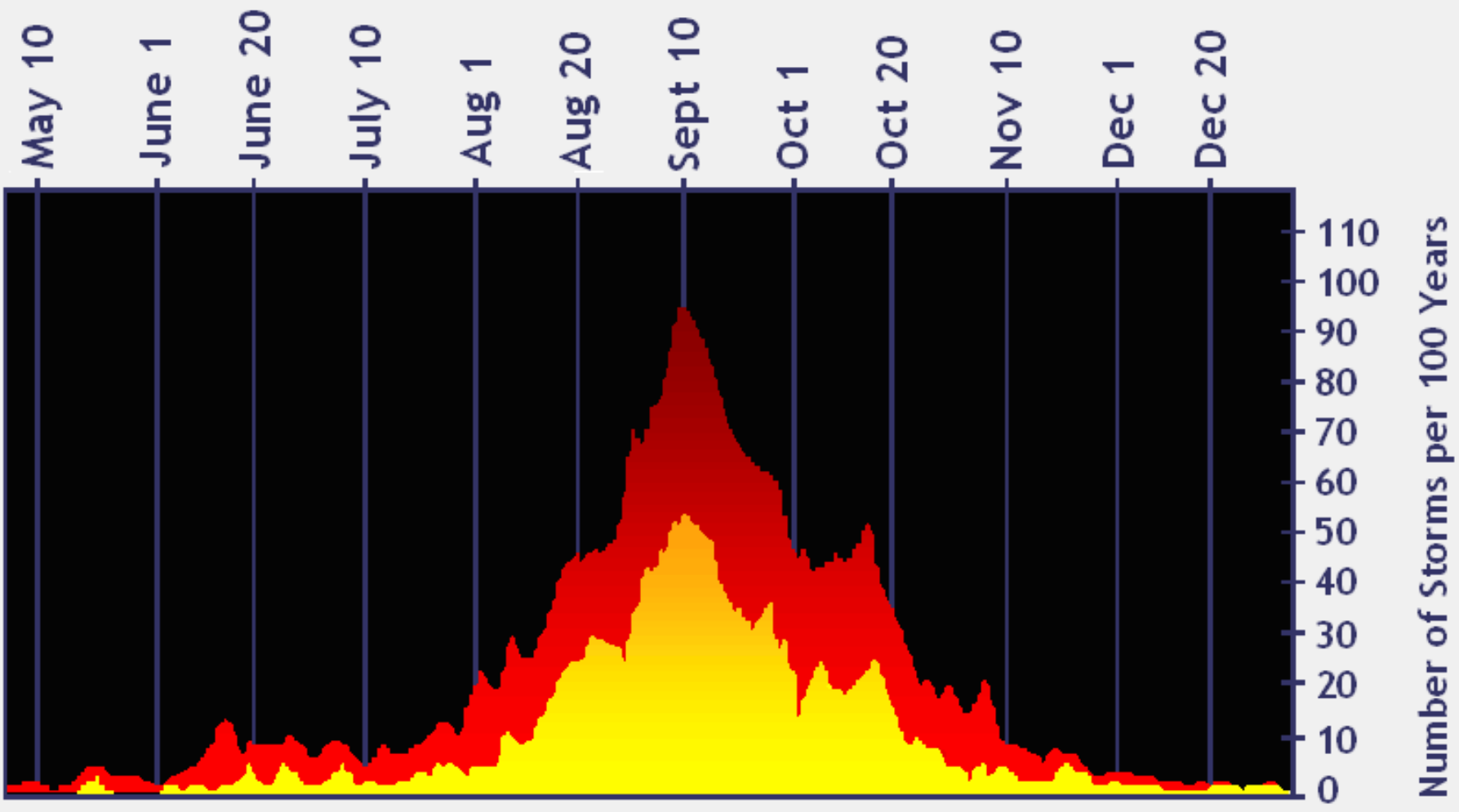
Relatively weak signal during week-1

CFS Precipitation Anomalies (mm) Issued 07Sep2020
Week-1 Forecast Ending 15Sep2020



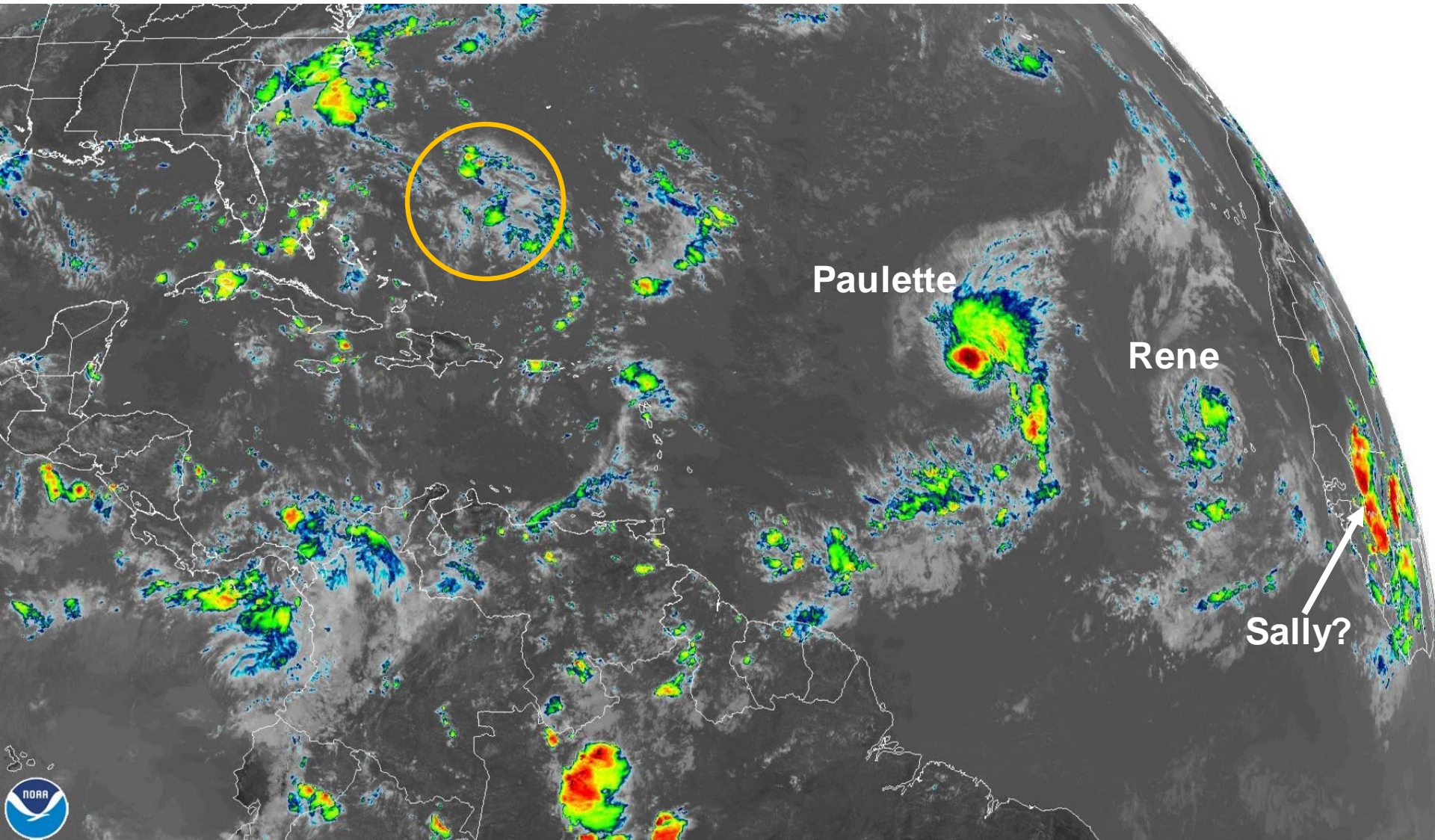
CFS Precipitation Anomalies (mm) Issued 07Sep2020
Week-2 Forecast Ending 22Sep2020





■ Hurricanes and Tropical Storms
■ Hurricanes

NOAA



Paulette

Rene

Sally?



08 Sep 2020 17:30Z NOAA/NESDIS/STAR GOES-East Band 13



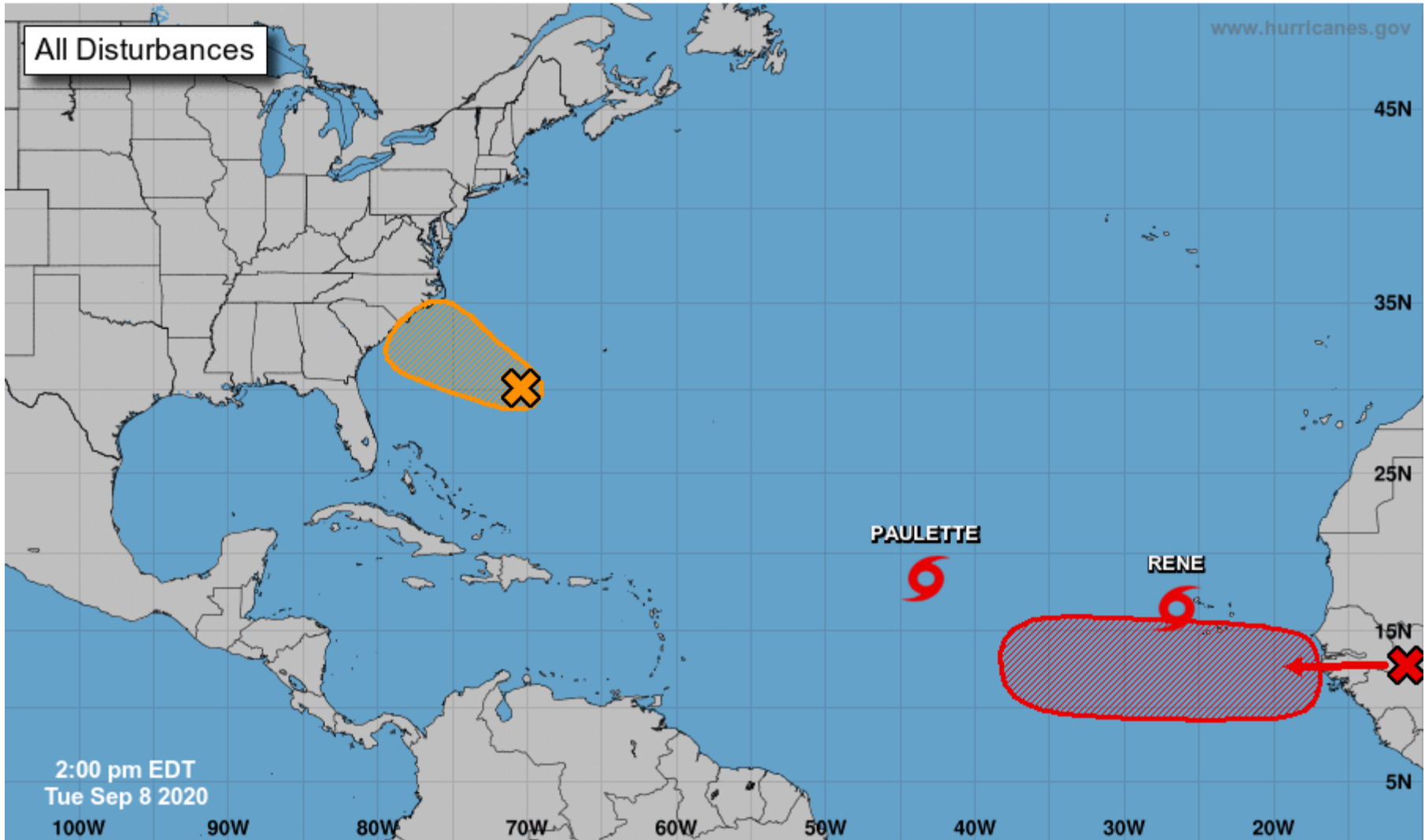
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances



2:00 pm EDT
Tue Sep 8 2020

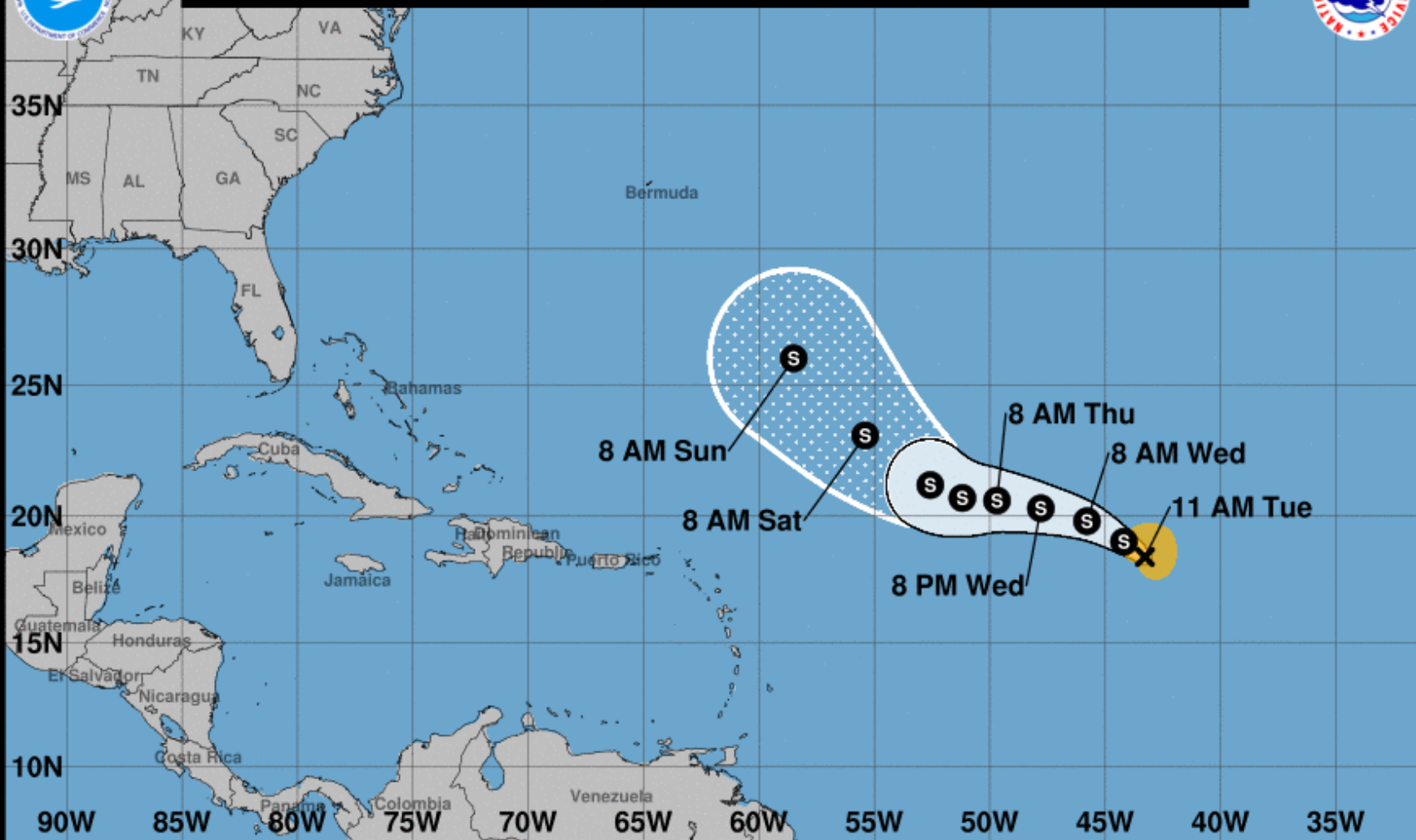
Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Tropical Storm Paulette

Tuesday September 08, 2020

11 AM AST Advisory 7

NWS National Hurricane Center

Current information: x

Center location 18.4 N 43.3 W
 Maximum sustained wind 65 mph
 Movement NW at 6 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:

Day 1-3 Day 4-5

Watches:

Hurricane Trop Stm

Warnings:

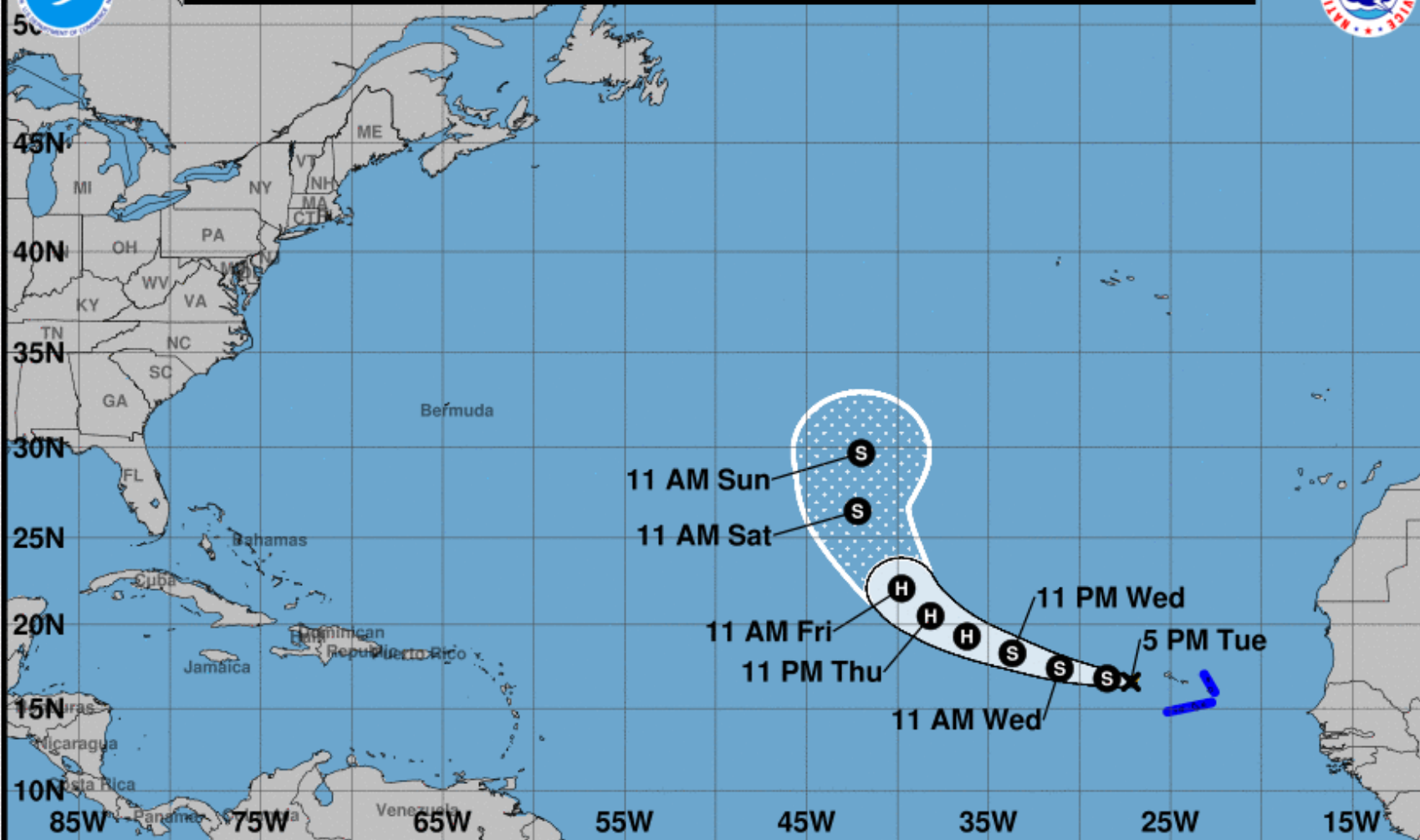
Hurricane Trop Stm

Current wind extent:

Hurricane Trop Stm



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Tropical Storm Rene

Tuesday September 08, 2020
 5 PM CVT Intermediate Advisory 6A
 NWS National Hurricane Center

Current information: x

Center location 16.6 N 27.2 W
 Maximum sustained wind 40 mph
 Movement W at 16 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:

Day 1-3 Day 4-5

Watches:

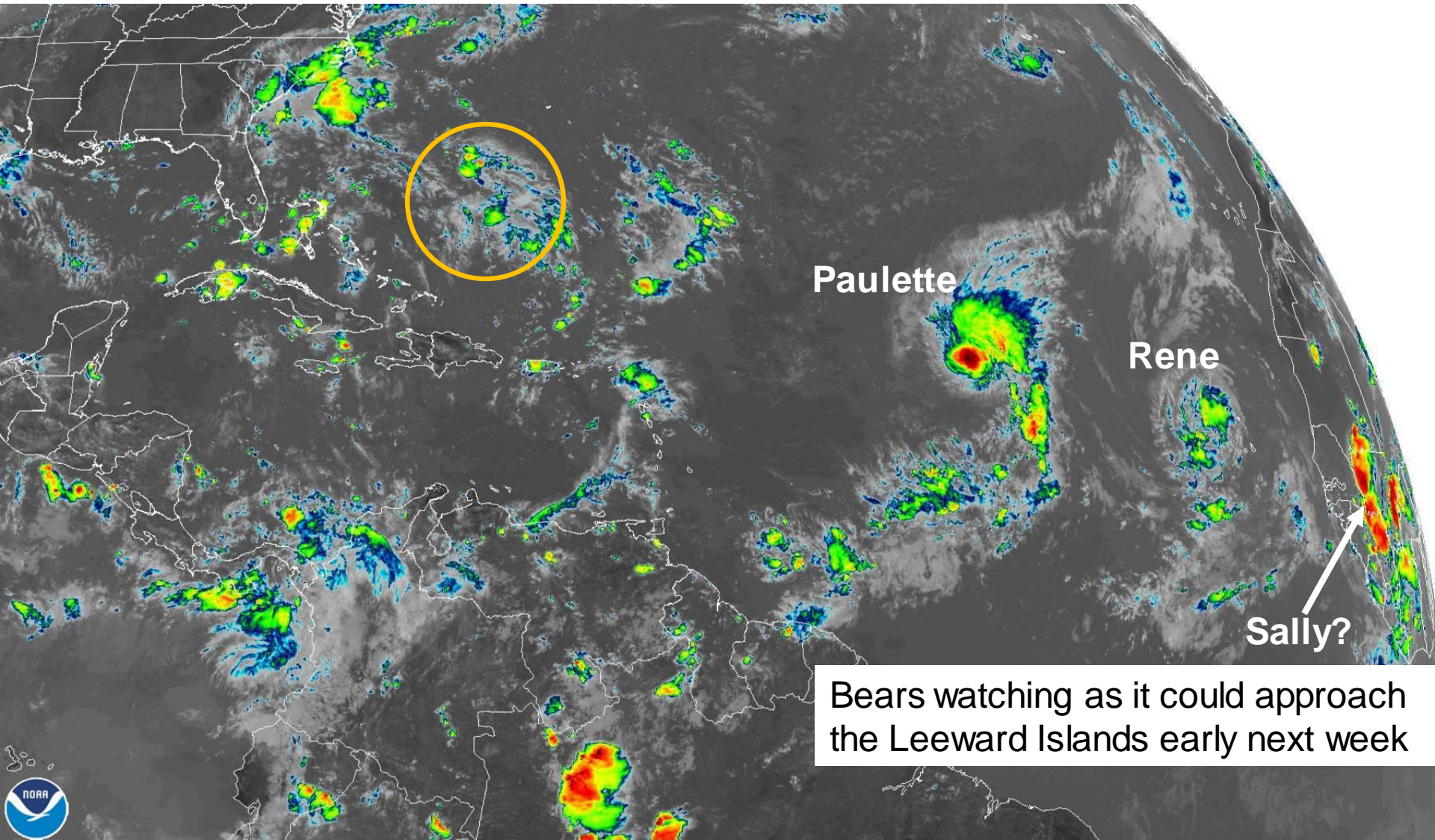
Hurricane Trop Stm

Warnings:

Hurricane Trop Stm

Current wind extent:

Hurricane Trop Stm



Paulette

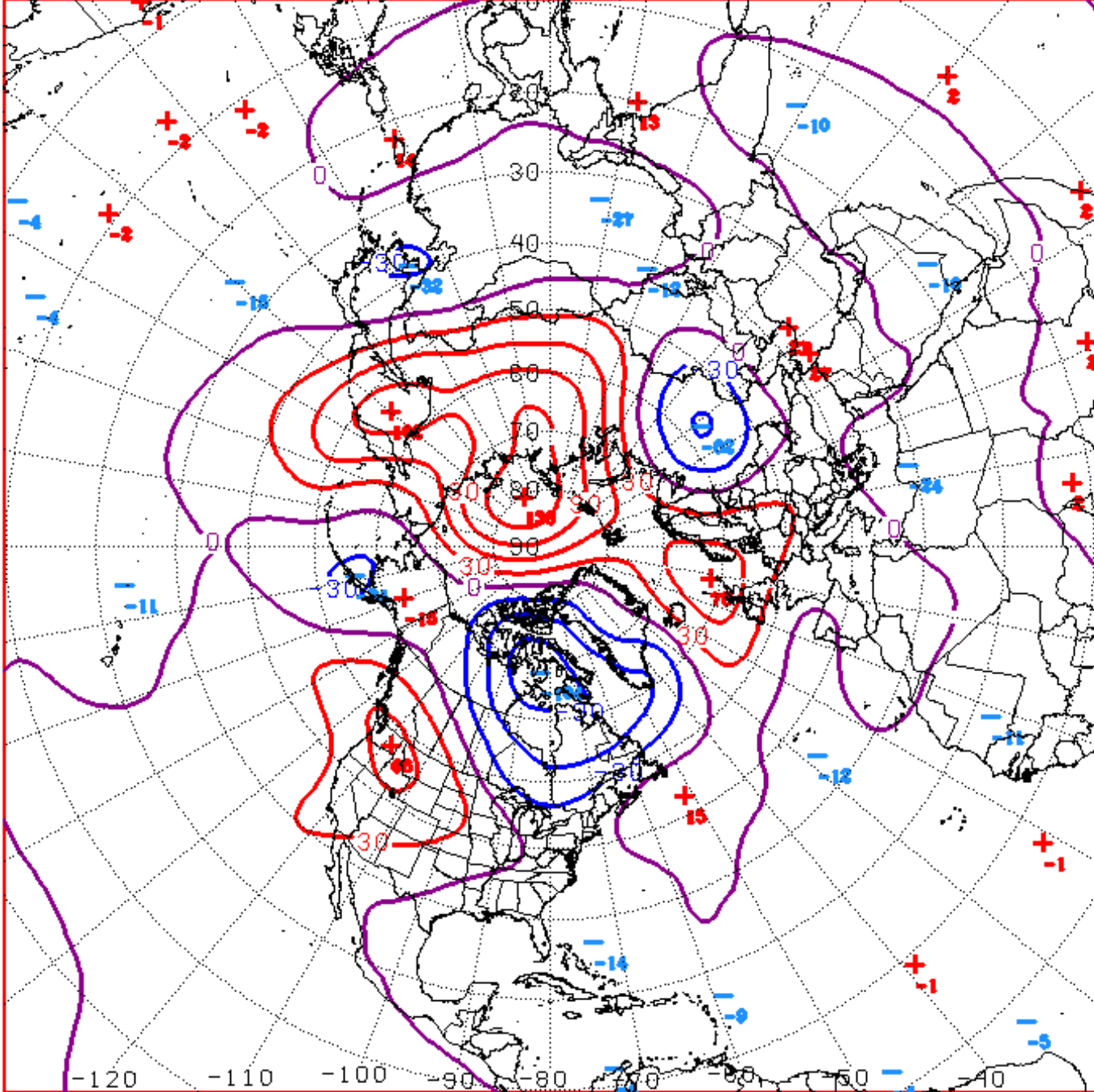
Rene

Sally?

Bears watching as it could approach the Leeward Islands early next week

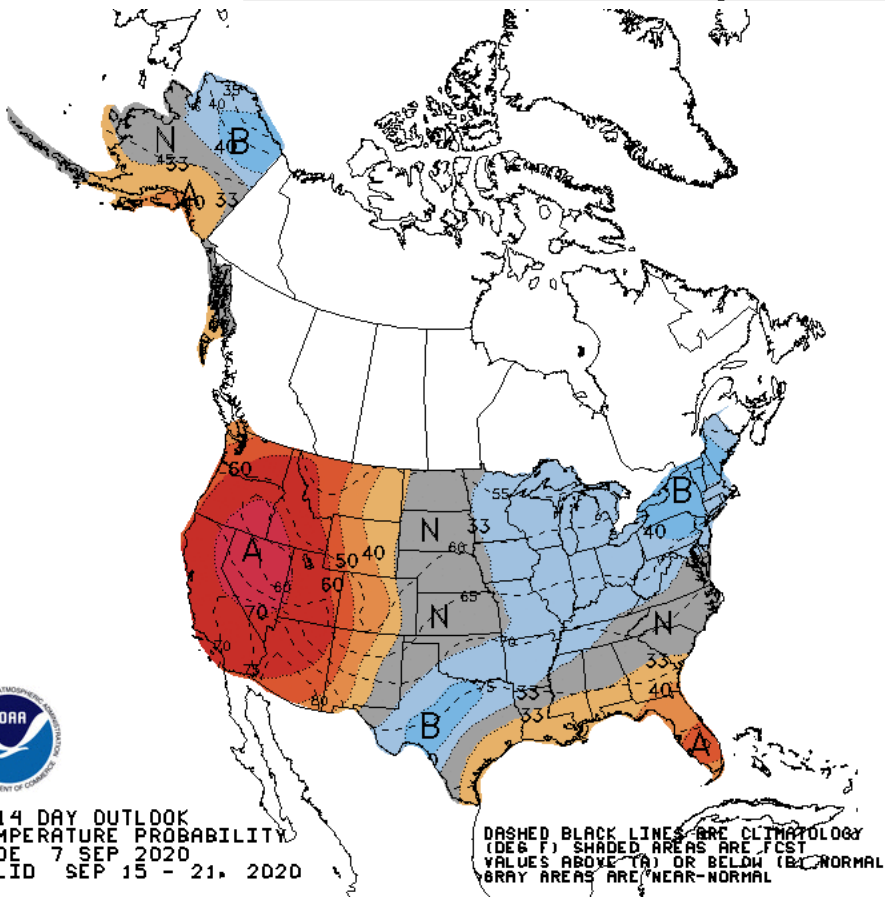


Connections to U.S. Impacts

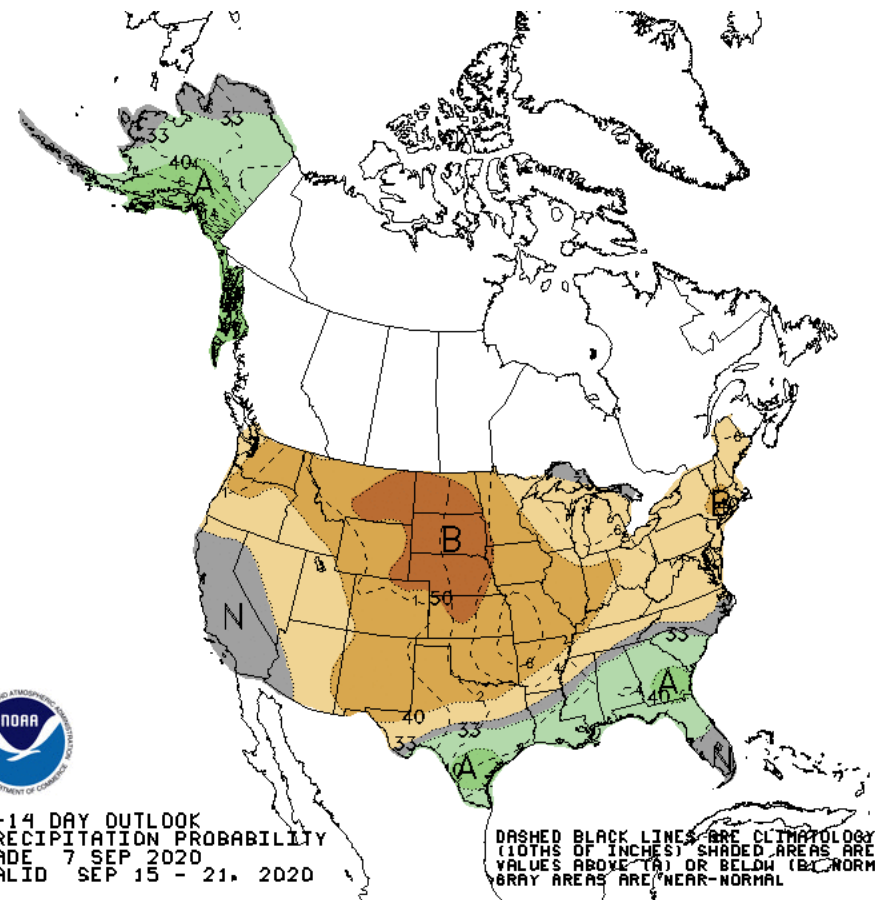
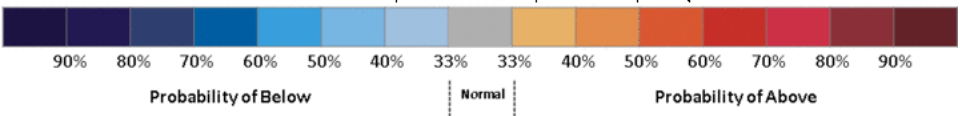


D+11 500 MB ANOMALIES FROM ALZ ENSM
 CPC MAP MADE SEP 08 2020 1242 UTC CNTD SEP 19 2020

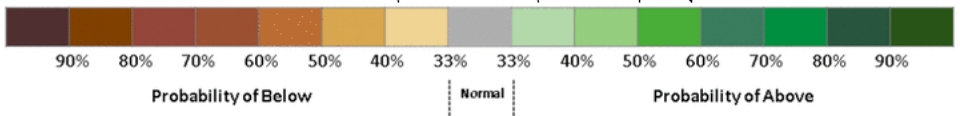
Week 2 – Temperature and Precipitation



8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 7 SEP 2020
VALID SEP 15 - 21, 2020



8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 7 SEP 2020
VALID SEP 15 - 21, 2020

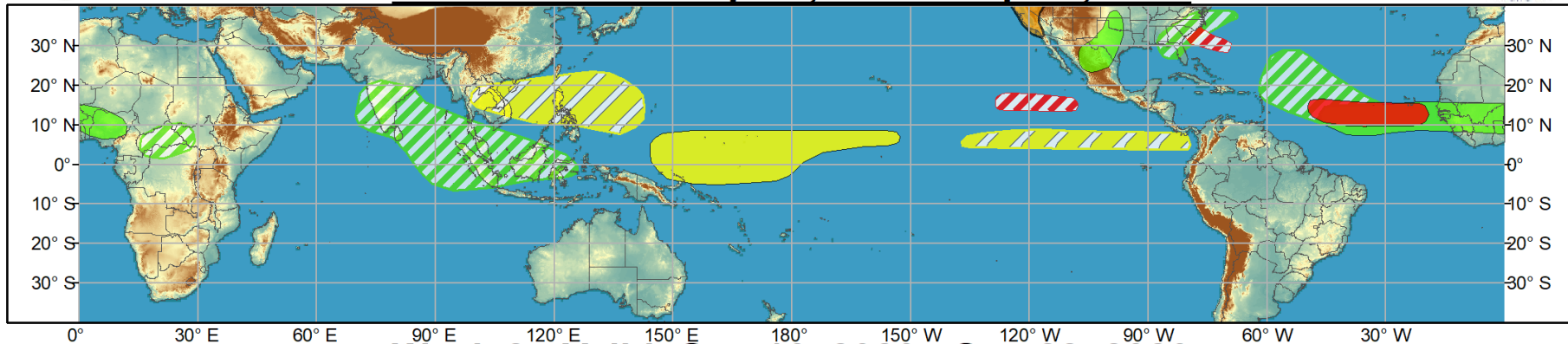




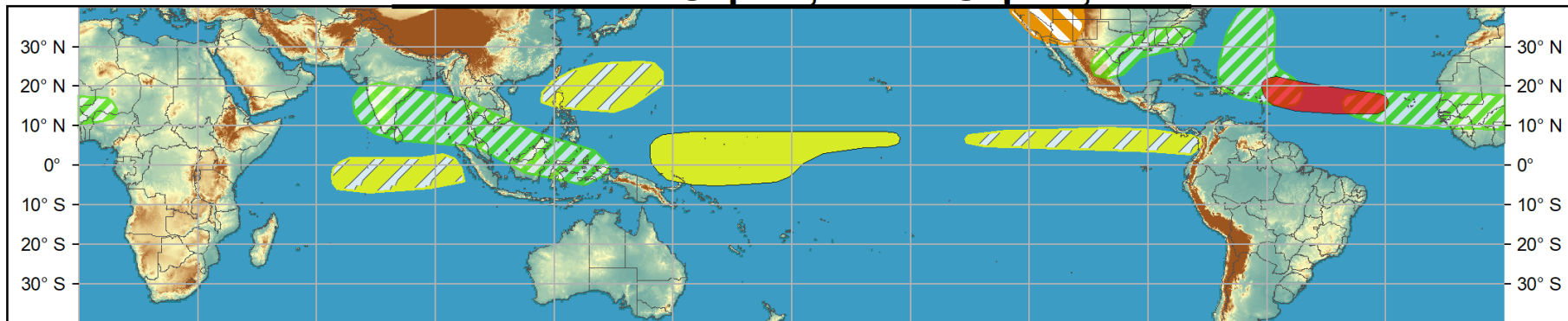
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