

Global Tropics Hazards And Benefits Outlook

10/27/2020

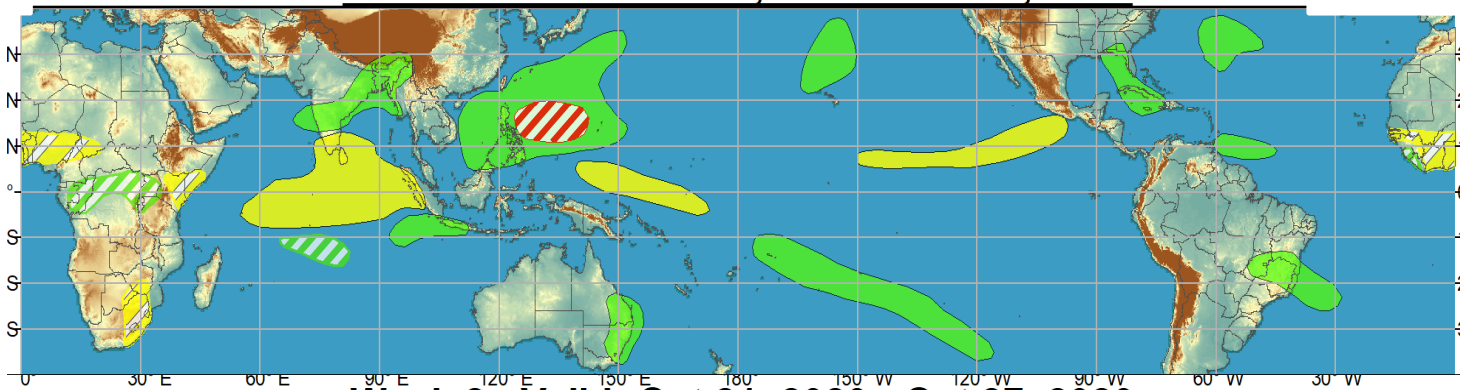
Adam Allgood

Outline

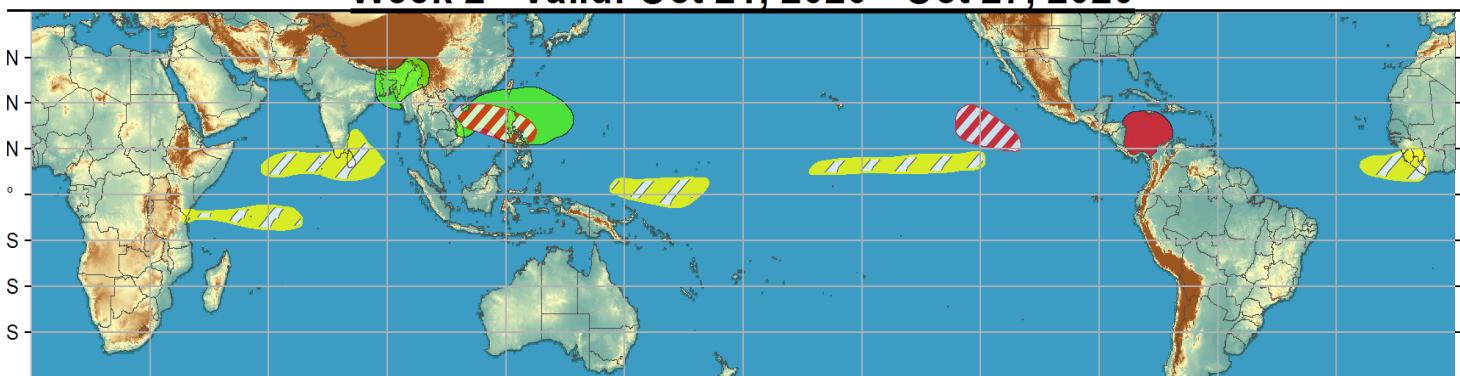
1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts

Outlook Review

Week 1 - Valid: Oct 21, 2020 - Oct 27, 2020

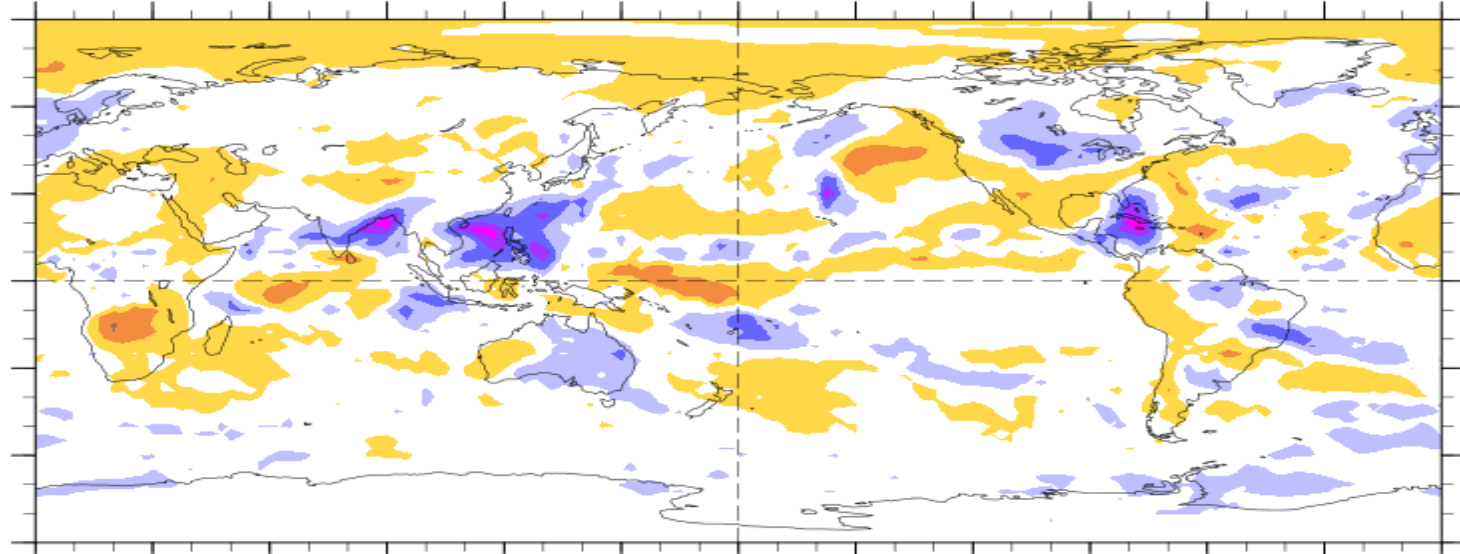


Week 2 - Valid: Oct 21, 2020 - Oct 27, 2020



7-Day Average OLR Anomaly

2020/10/19 - 2020/10/25



Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Synopsis of Climate Modes

ENSO: (8 October, 2020 Update)

next update on 12th of Nov.!

- 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).

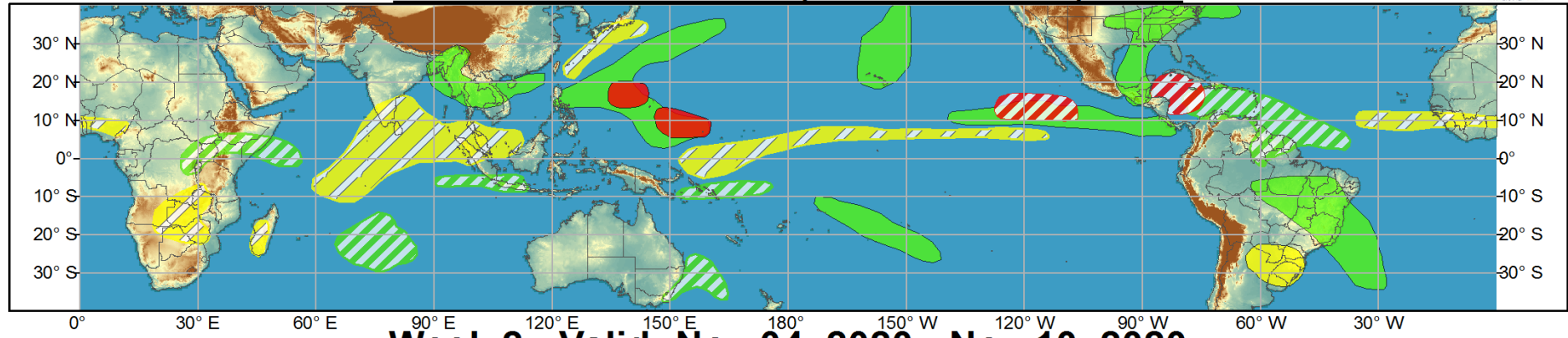
MJO and other subseasonal tropical variability:

- The MJO signal remained pronounced in the wind field and upper-level velocity potential anomalies, but there has been little eastward propagation of the signal.
- Rossby wave and La Niña interference are likely playing a role in the blocked eastward progression.
- Dynamical models generally favor a fast propagation across the Pacific, with the MJO reaching the Western Hemisphere during Week-2
- The MJO may play a role in promoting additional tropical cyclogenesis over the western Caribbean and East Pacific.

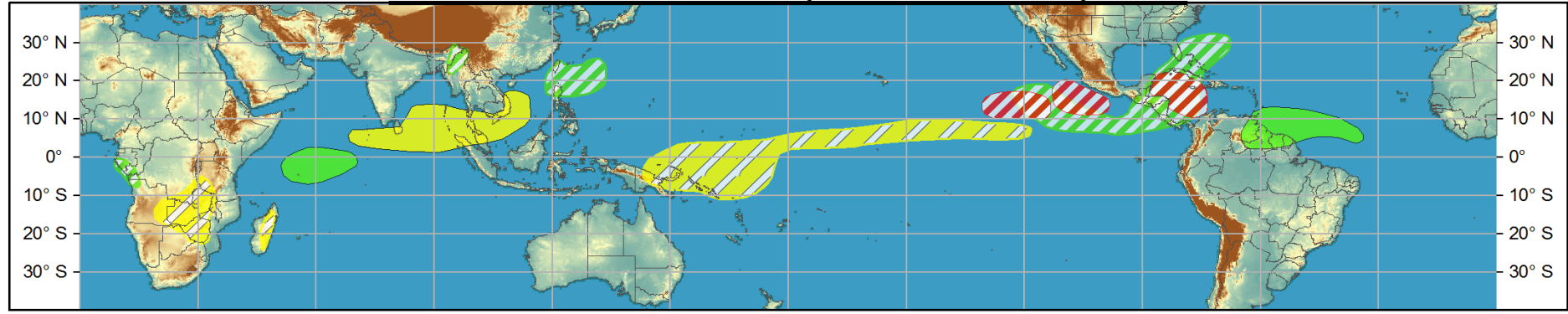


Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Oct 28, 2020 - Nov 03, 2020



Week 2 - Valid: Nov 04, 2020 - Nov 10, 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.
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- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
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Produced: 10/27/2020
Forecaster: Allgood

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IR Satellite & 200-hpa Velocity Potential Anomalies

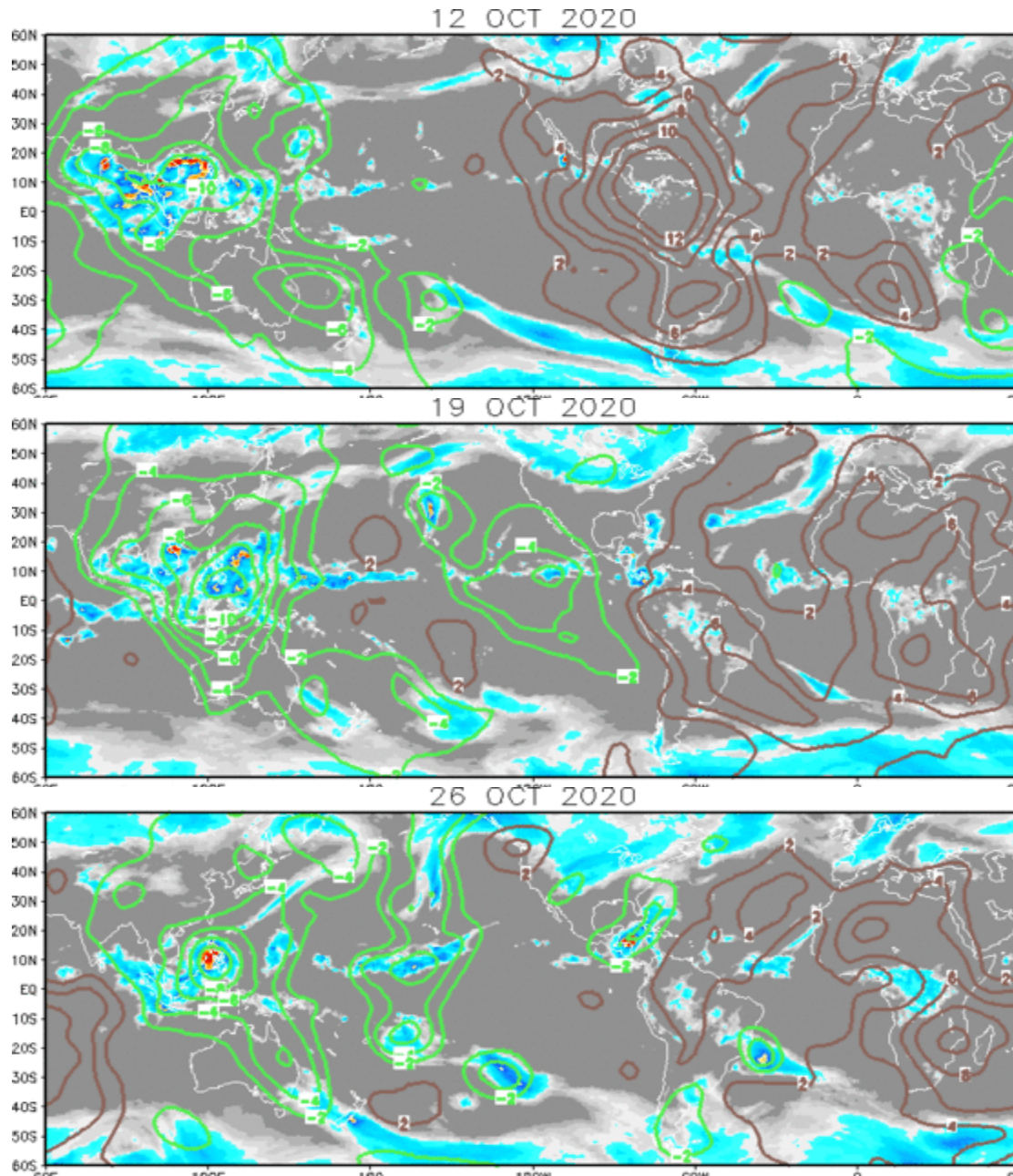
Green: Enhanced Divergence

Brown: Enhanced Convergence

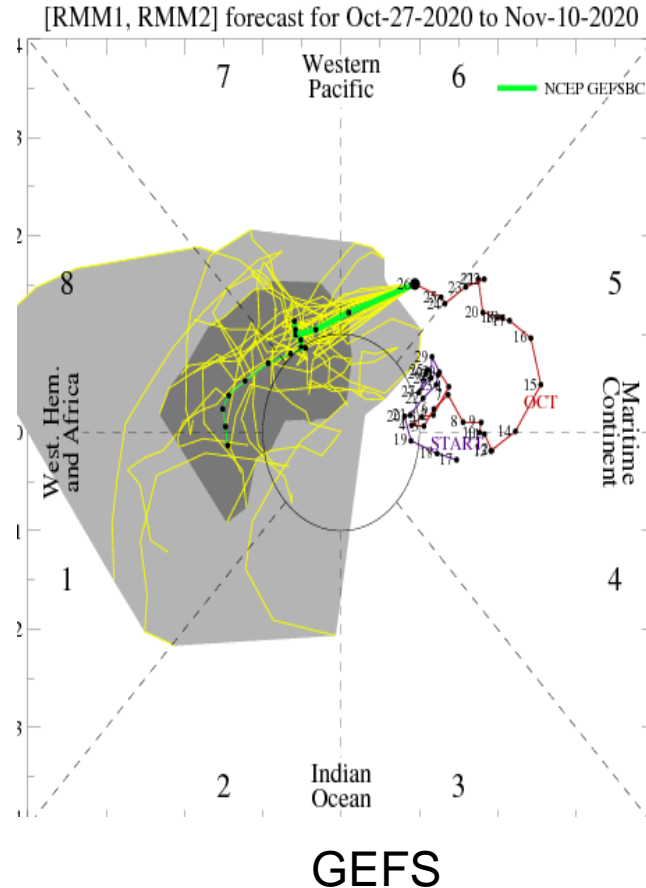
Fairly coherent MJO-like pattern, with the enhanced phase over the Indian Ocean.

Possible KW influence ahead of the MJO over the Pacific as the main signal crossed the Maritime Continent.

The strongest anomalies remain over the Maritime Continent (and in association with Typhoon Molave). Less eastward propagation.



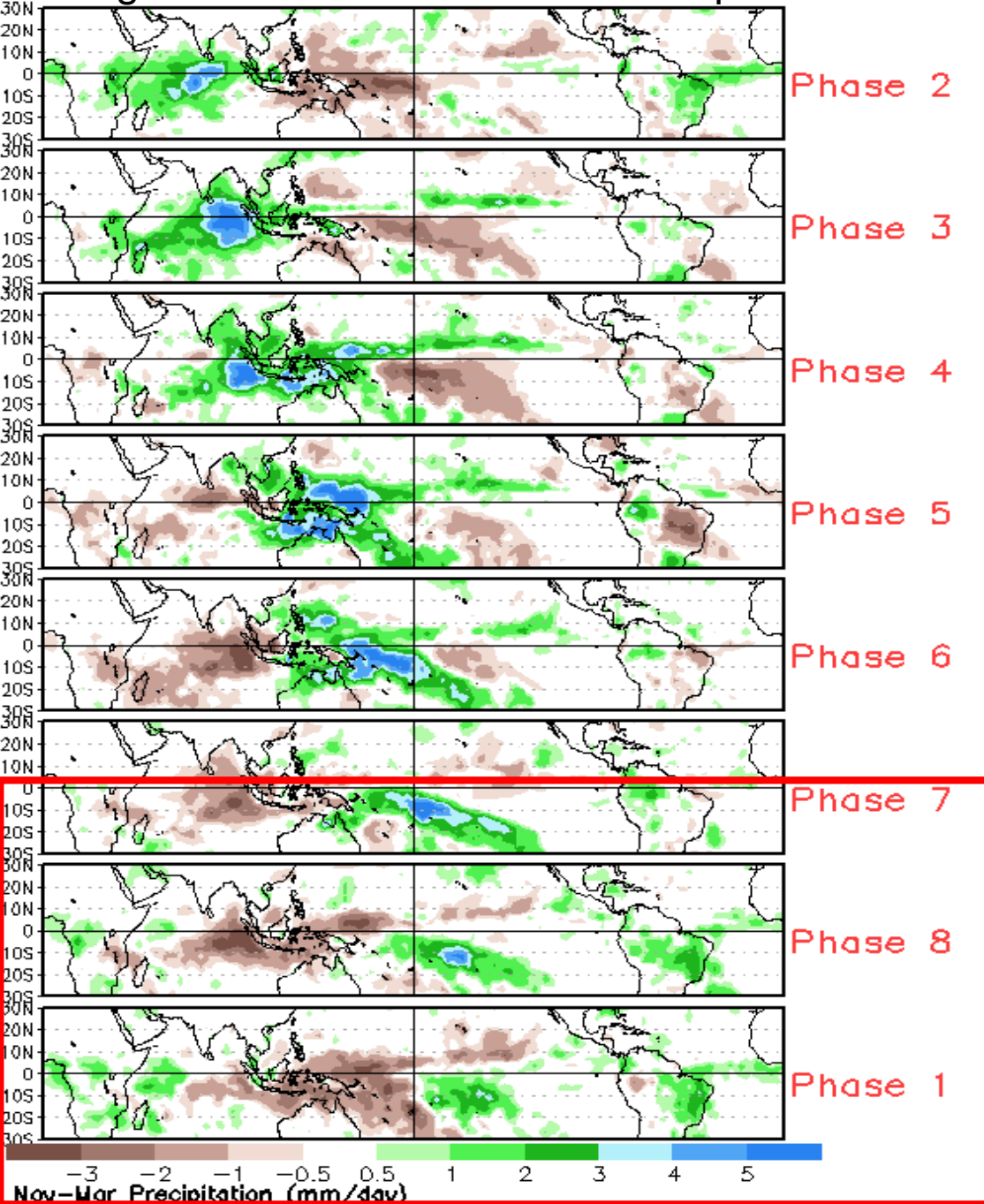
MJO Observation/Forecast



The GEFS depicts fast propagation across the Pacific, with the signal emerging over the Western Hemisphere during Week-2.

IT problems preventing other model diagrams from running, but model forecast fields from the ECMWF and Canadian also resemble a transition towards a Western Hemisphere MJO pattern.

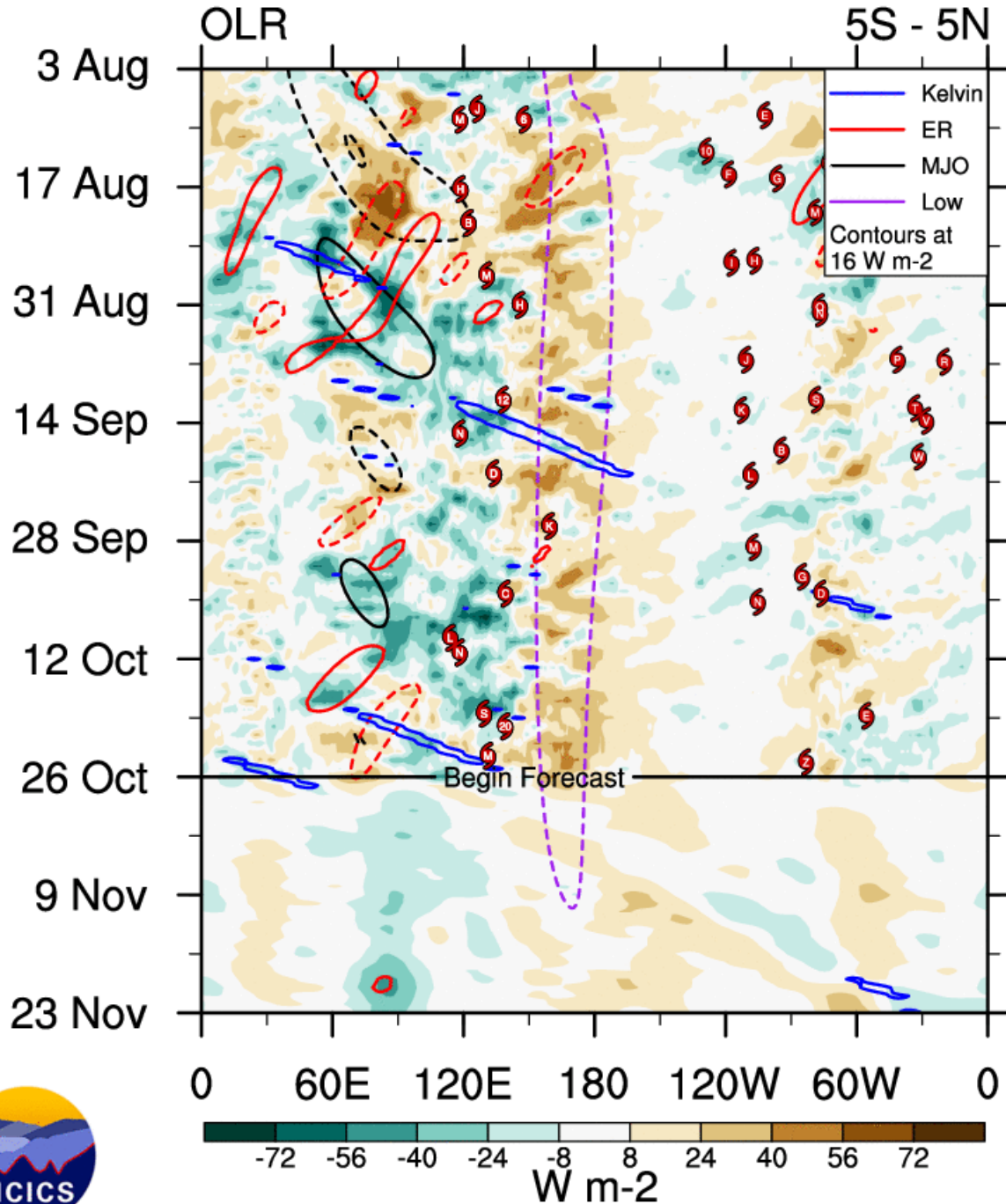
Average Conditions when the MJO is present



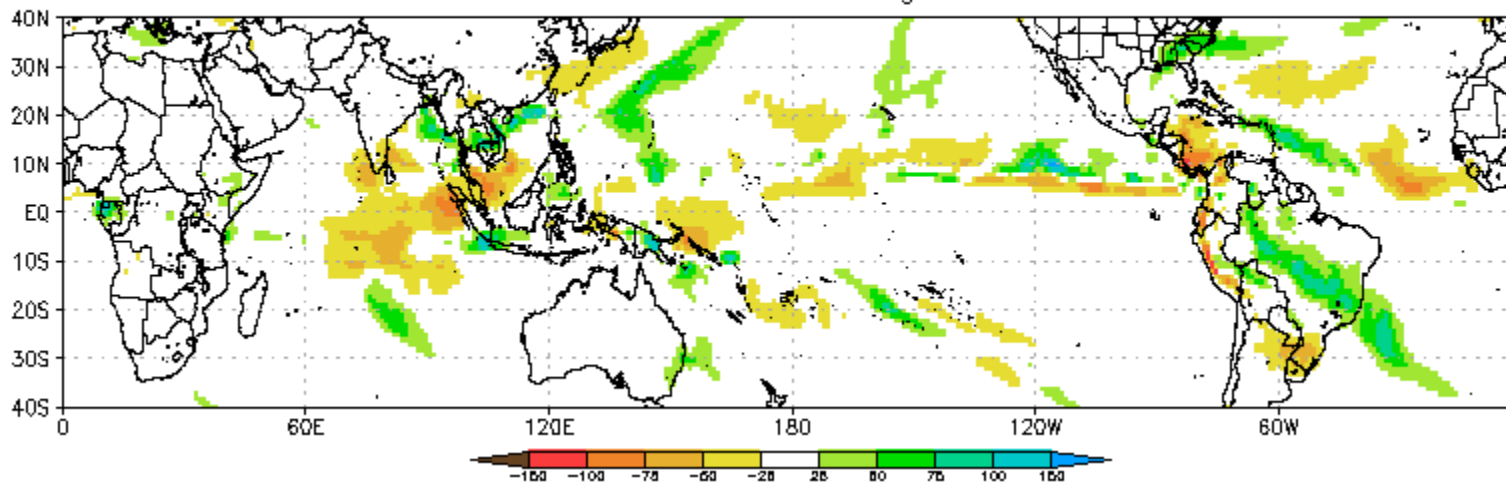
CAVEAT: These panels are representative of robust MJO events.

MJO activity is not coming through the filtering, but eastward propagation is visually evident.

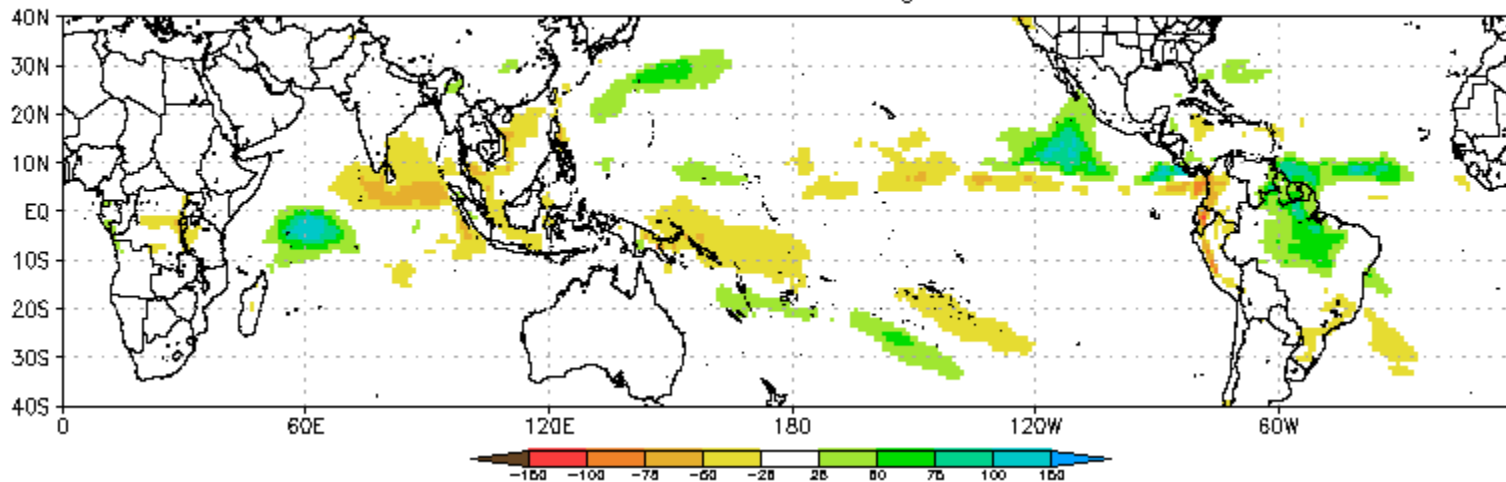
Low frequency contours depict ENSO cold conditions.



CFS Precipitation Anomalies (mm) Issued 26Oct2020
Week-1 Forecast Ending 03Nov2020

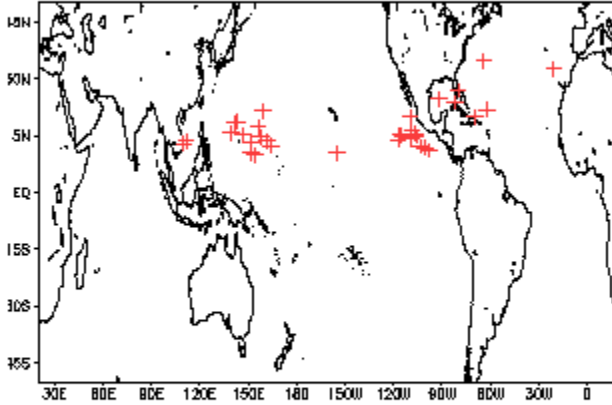


CFS Precipitation Anomalies (mm) Issued 26Oct2020
Week-2 Forecast Ending 10Nov2020

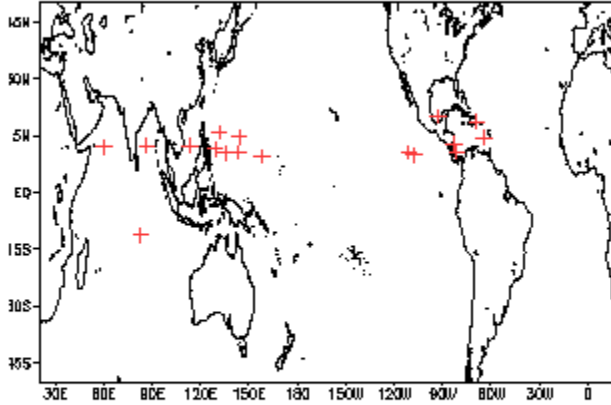


October Tropical Storm Formation by MJO phase

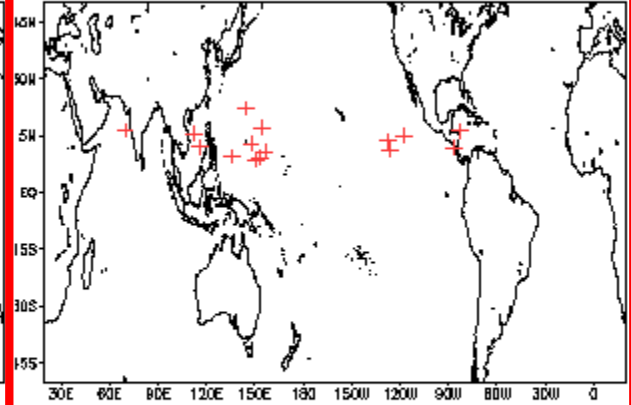
Phase 1 (94 days) 34 storms



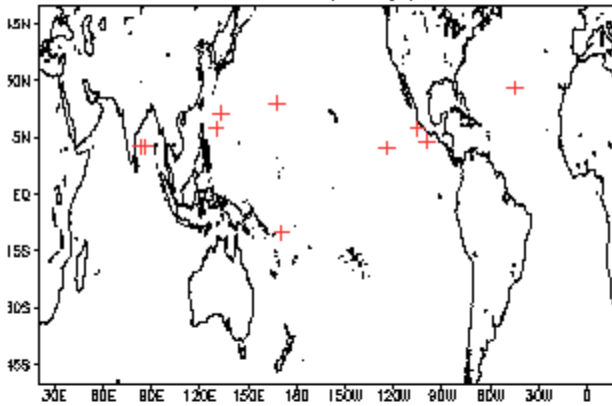
Phase 4 (85 days) 18 storms



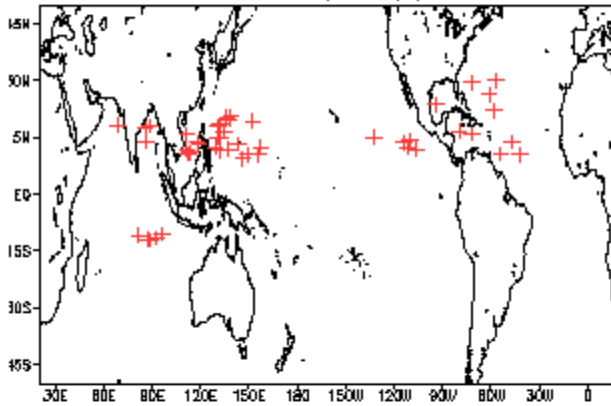
Phase 7 (48 days) 16 storms



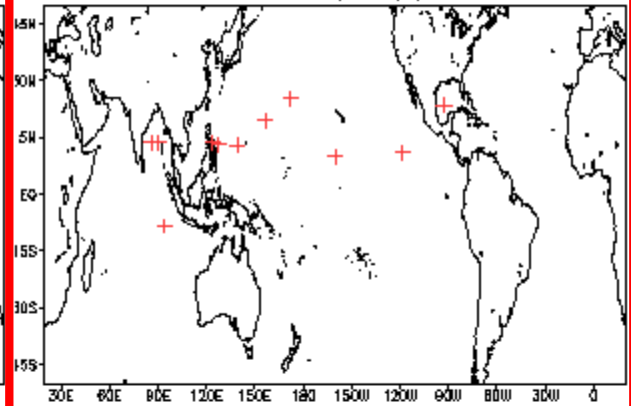
Phase 2 (75 days) 11 storms



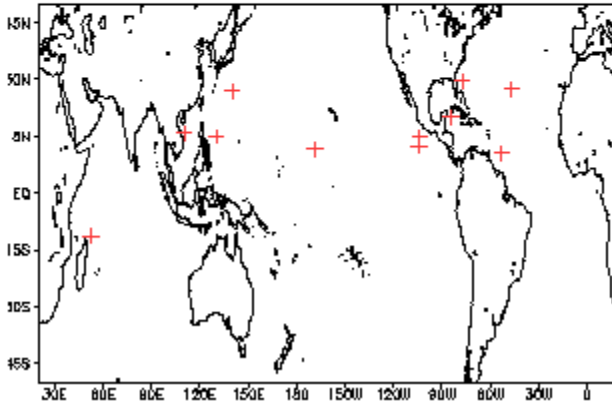
Phase 5 (133 days) 48 storms



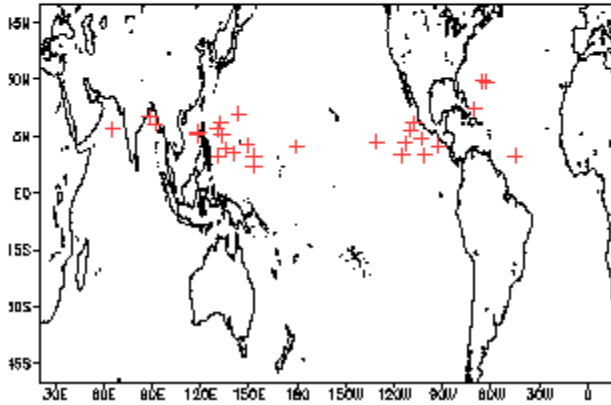
Phase 8 (66 days) 12 storms



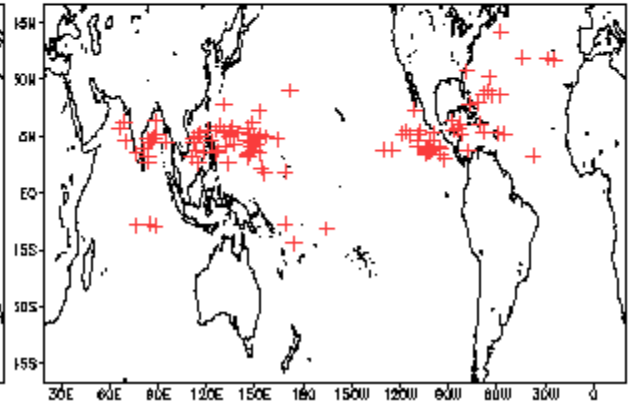
Phase 3 (41 days) 12 storms



Phase 6 (78 days) 30 storms



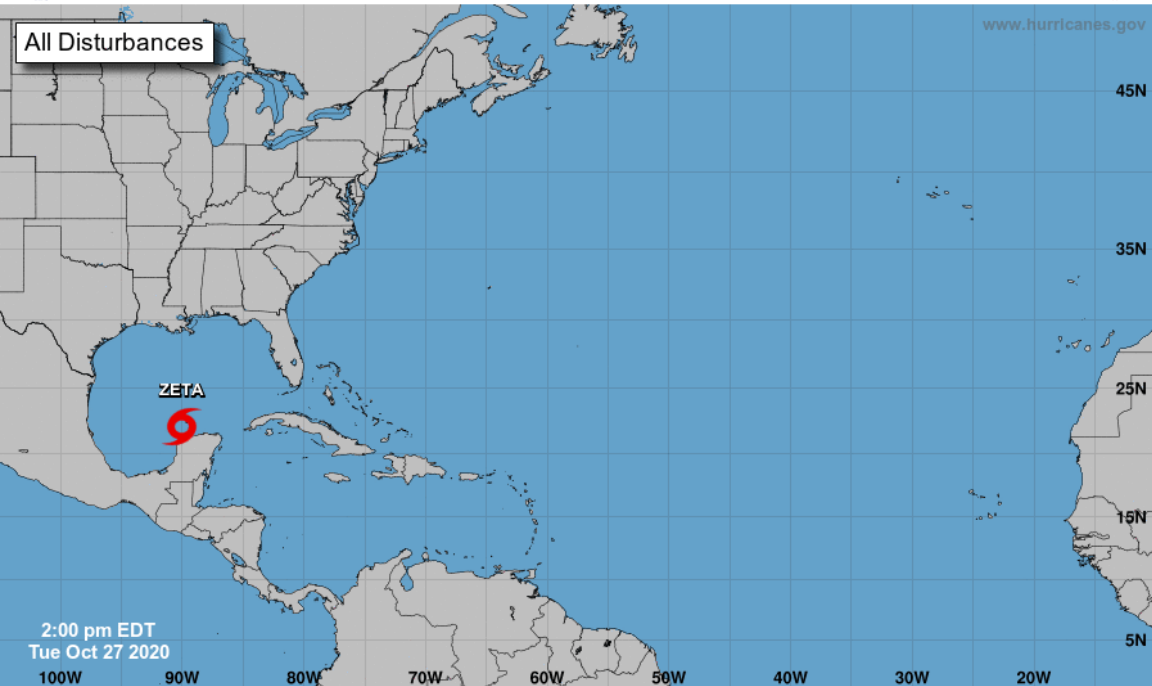
Null (42 days) 118 storms





Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



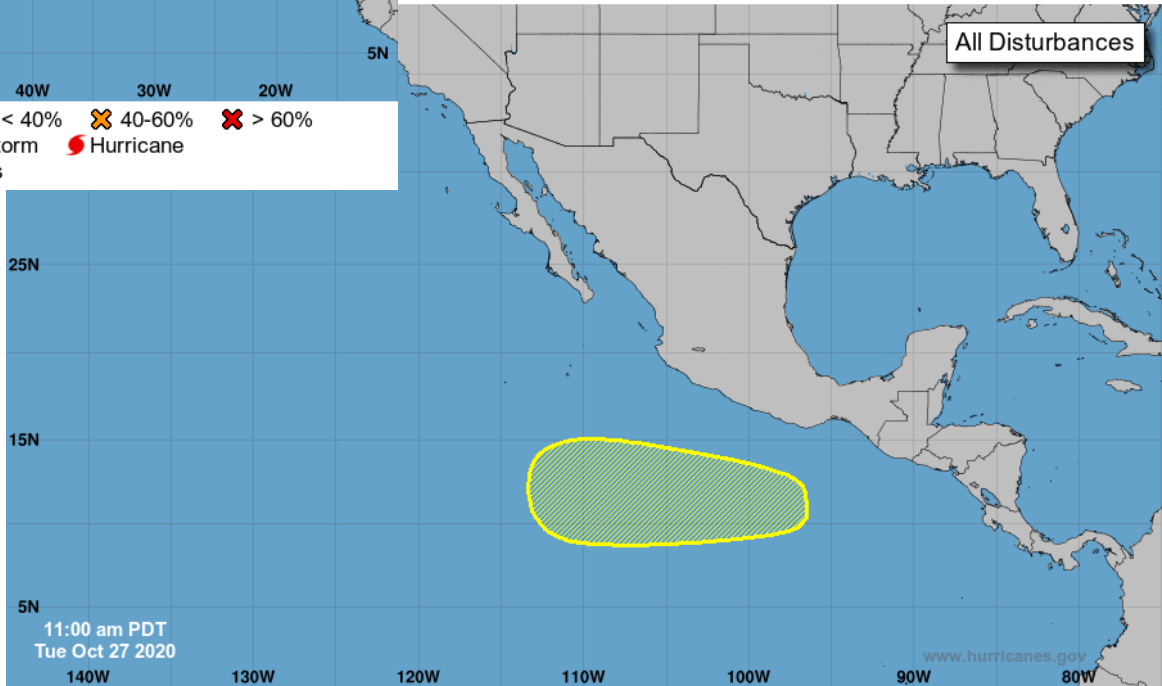
Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants

Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



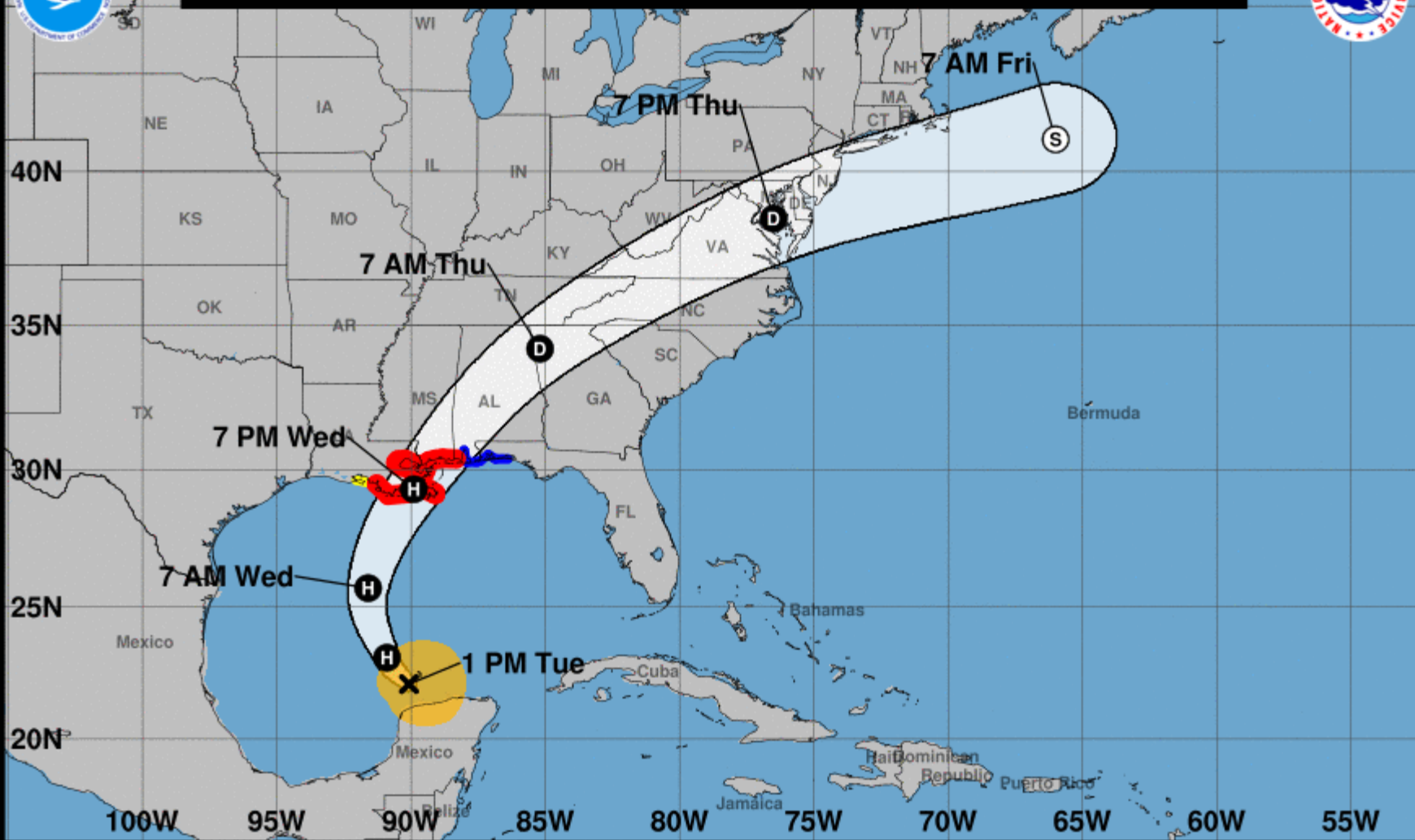
Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

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 Zeta
 Tuesday October 27, 2020
 1 PM CDT Intermediate Advisory 12A
 NWS National Hurricane Center

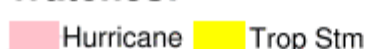
Current information: x
 Center location 22.1 N 90.1 W
 Maximum sustained wind 65 mph
 Movement NW at 14 mph

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:





JOINT TYPHOON WARNING CENTER



ABIO

ABPW

CPHC

(<https://www.nhc.noaa.gov/cphc/>)

NO SUSPECT AREAS
(ABIO)

TY 21W
"MOLAVE"

99W

IMAGE TIME: 27/1100Z
(PRODUCT OF JTWC/SATOPS)



TC development unlikely within 24 hours



TC development likely, but expected to occur beyond 24 hours



TC development likely within 24 hours (Reference TCFA)

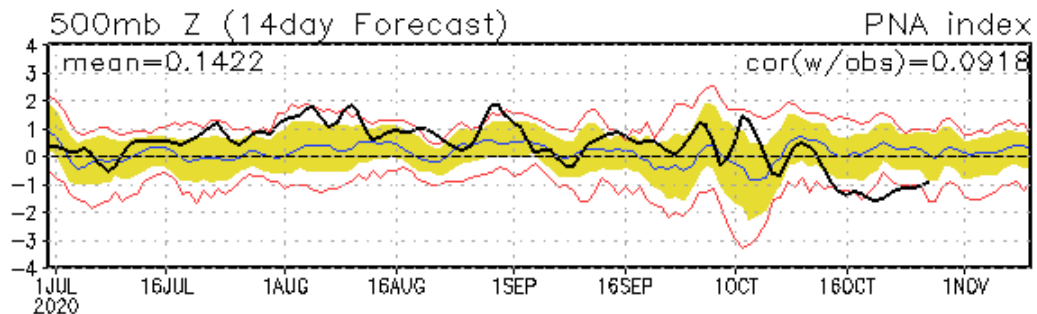
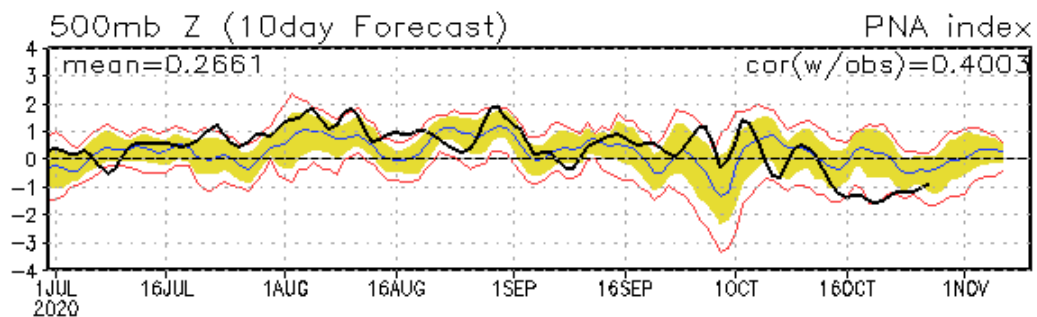
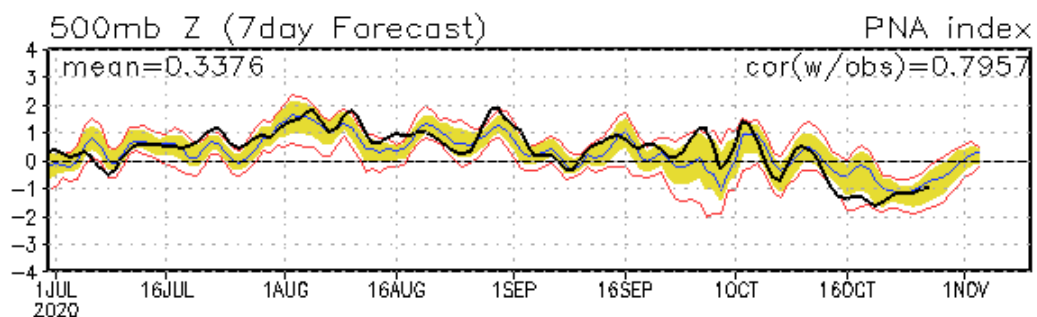
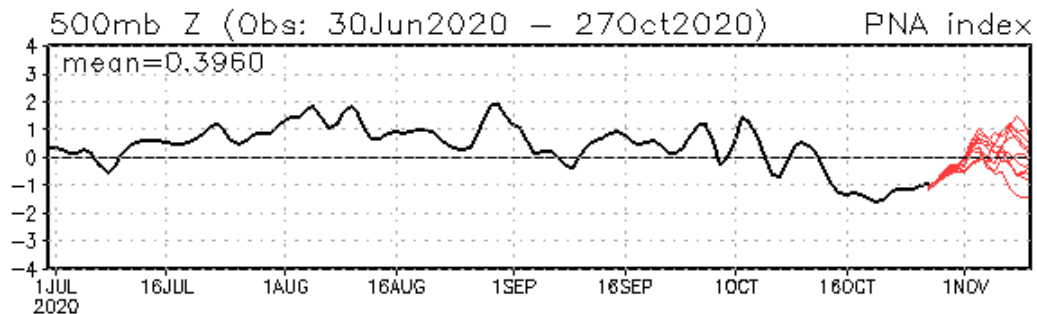


Monitoring for potential transition to TC. Invest color denotes tropical transition probability

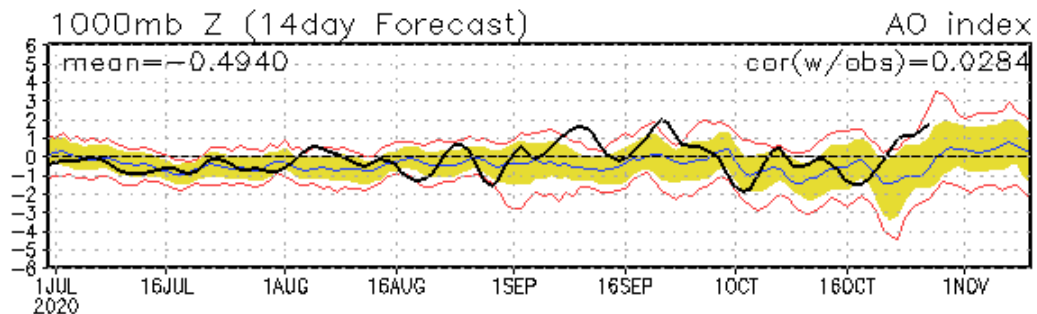
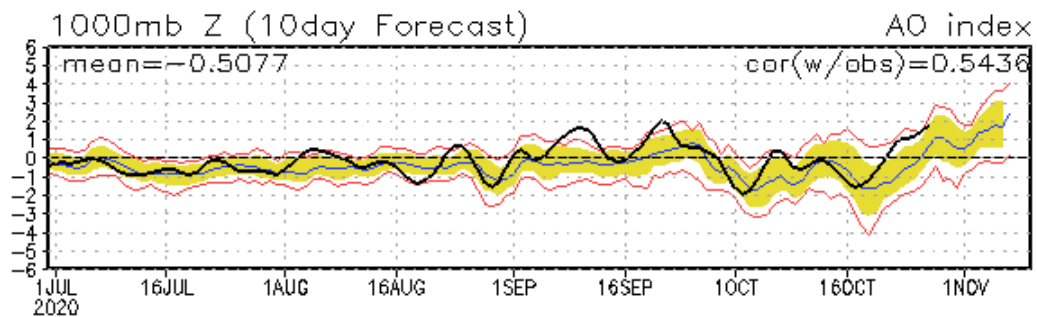
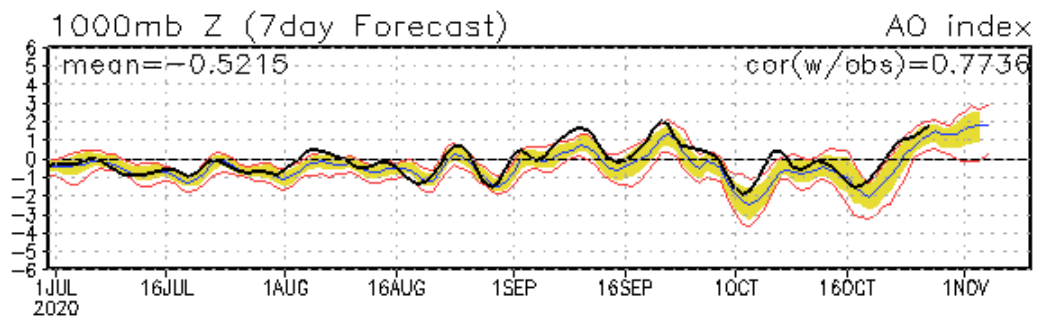
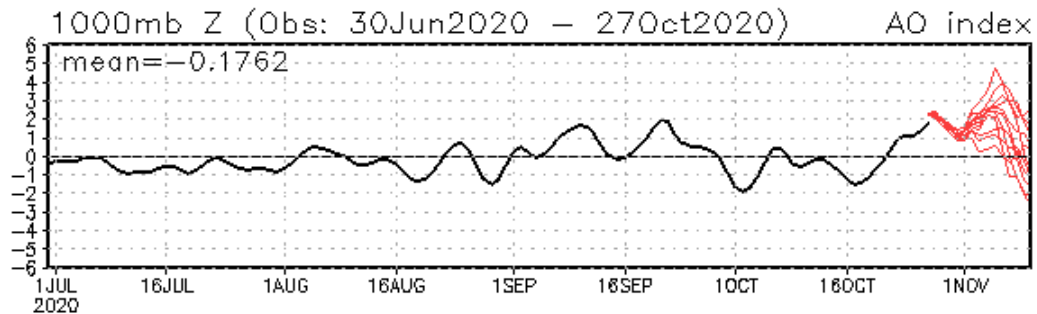
 Tropical Cyclone (Reference Warning)

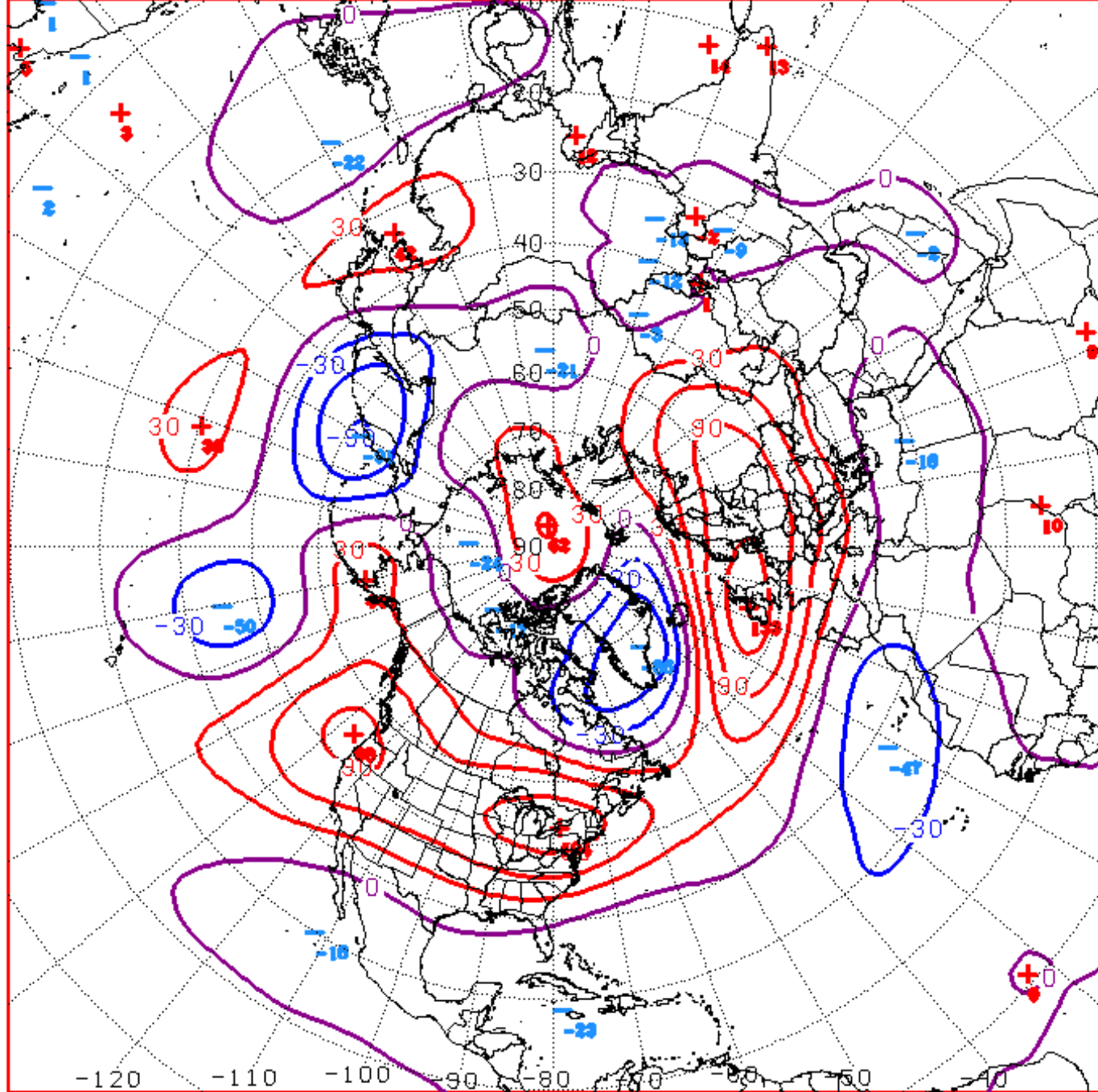
Connections to U.S. Impacts

PNA: Observed & ENSM forecasts



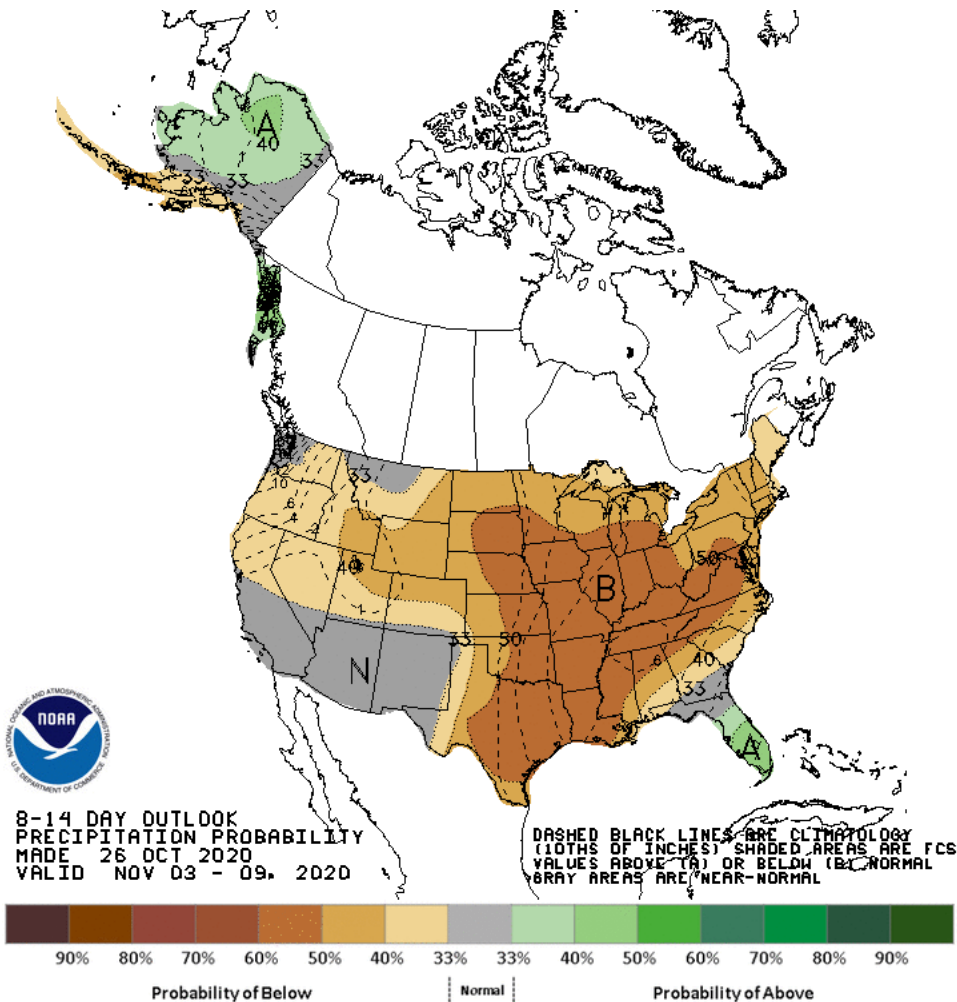
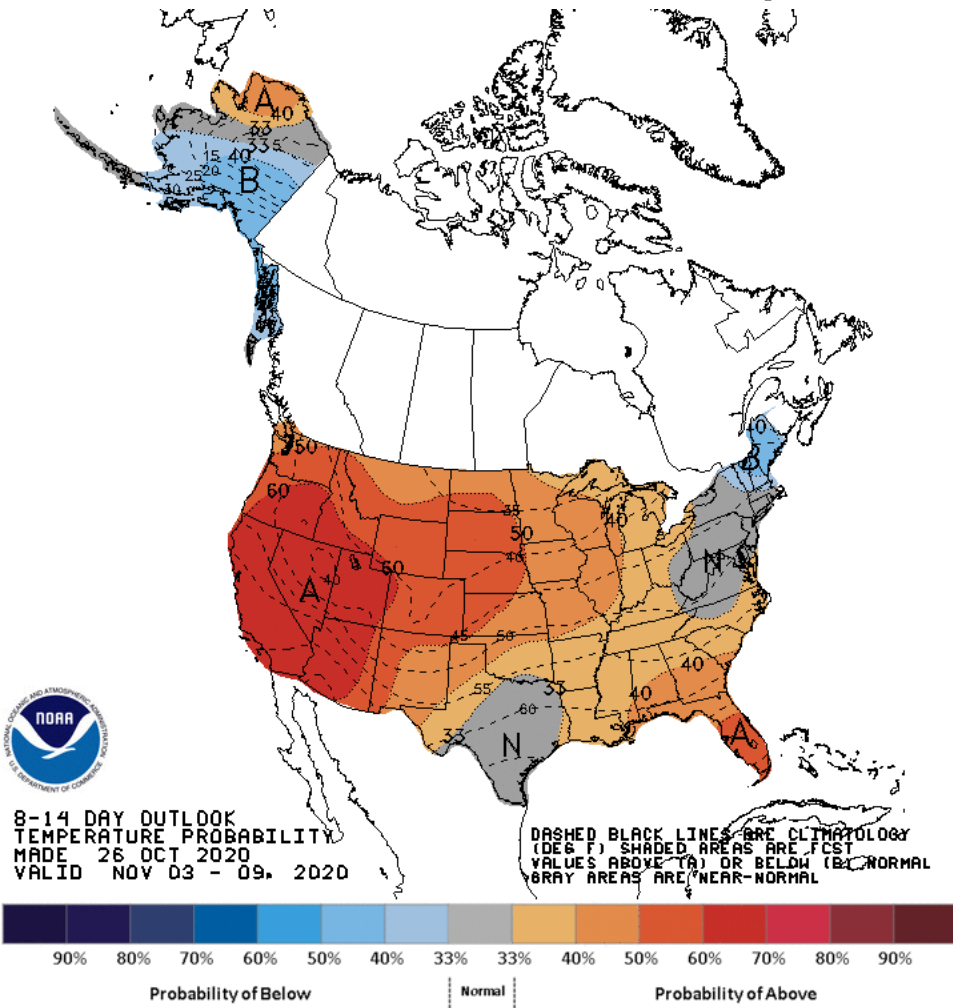
AO: Observed & ENSM forecasts





D+11 500 MB ANOMALIES FROM ALZ ENSM
CPC MAP MADE OCT 27 2020 1449 UTC CNTD NOV 07 2020

Week 2 – Temperature and Precipitation

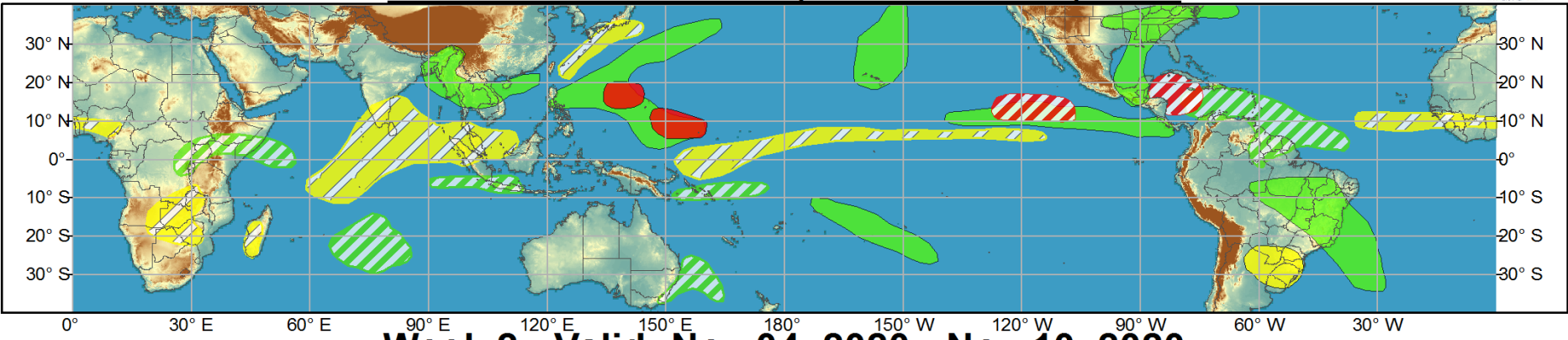


Since we are in an amplified, stable pattern today's outlooks are likely to be similar.

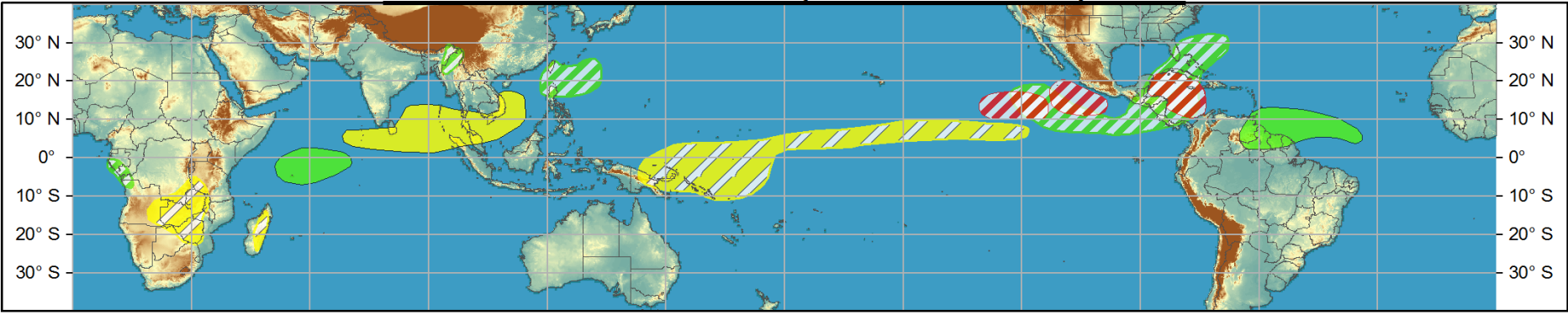


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