



TROPICAL UPDATE



8:00 AM EDT

Sunday, October 25, 2020

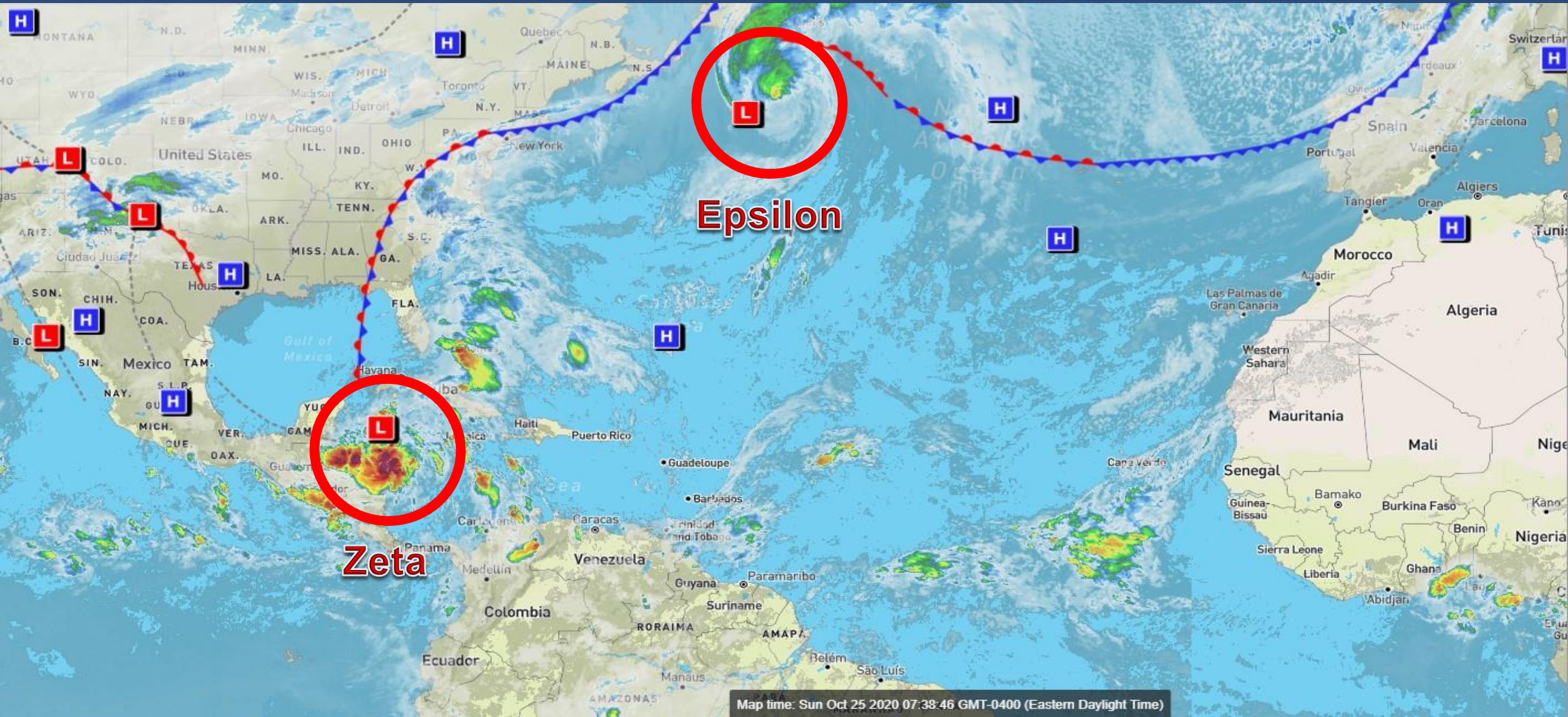
Hurricane Epsilon
& Tropical Storm Zeta

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at www.hurricanes.gov.



Atlantic Basin Satellite Image

Chance of development: — None — Low — Medium — High





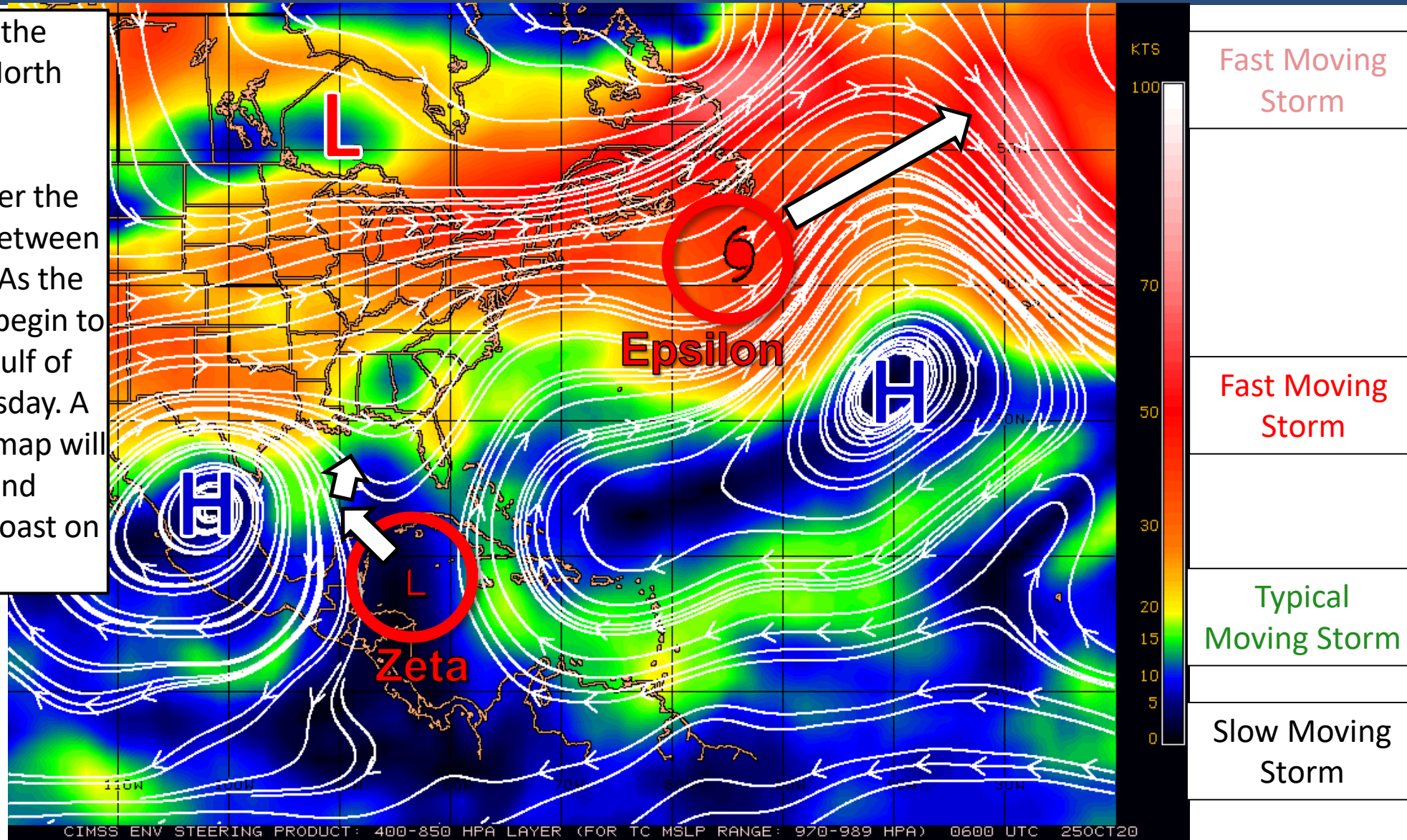
Steering Currents

What is Moving the Systems?

Epsilon will accelerate to the northeast over the open North Atlantic.

Zeta will move very little over the next 24 hours as it remains between two areas of high pressure. As the western one weakens, it will begin to move northwest into the Gulf of Mexico on Monday and Tuesday. A cold front not shown on this map will bring the system north and northeast towards the Gulf Coast on Wednesday.

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.





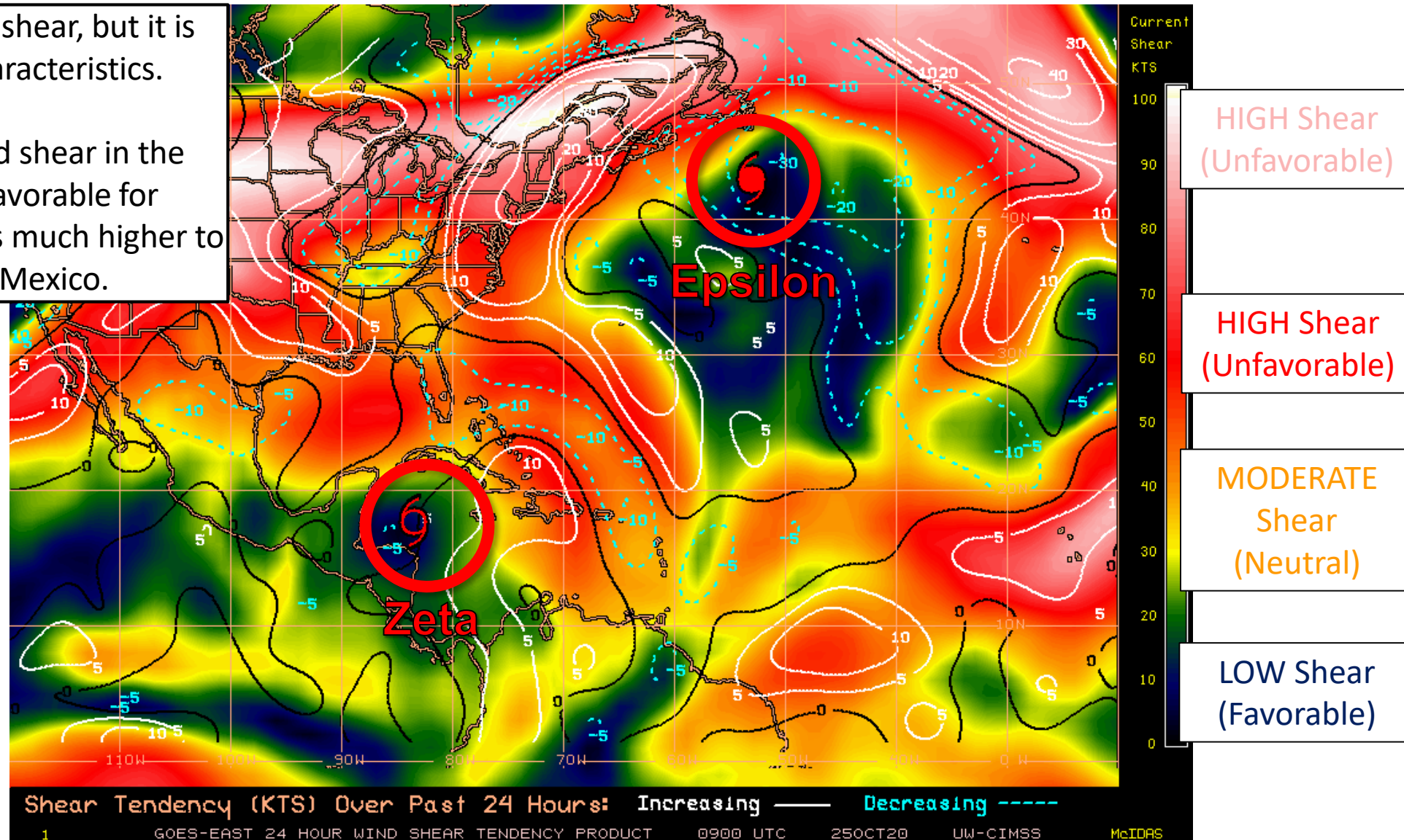
Wind Shear

Is the environment favorable for the system?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing).

Epsilon is still fending off the shear, but it is starting to lose tropical characteristics.

Zeta is in an area of low wind shear in the northwestern Caribbean favorable for strengthening. However, shear is much higher to its north in the Gulf of Mexico.

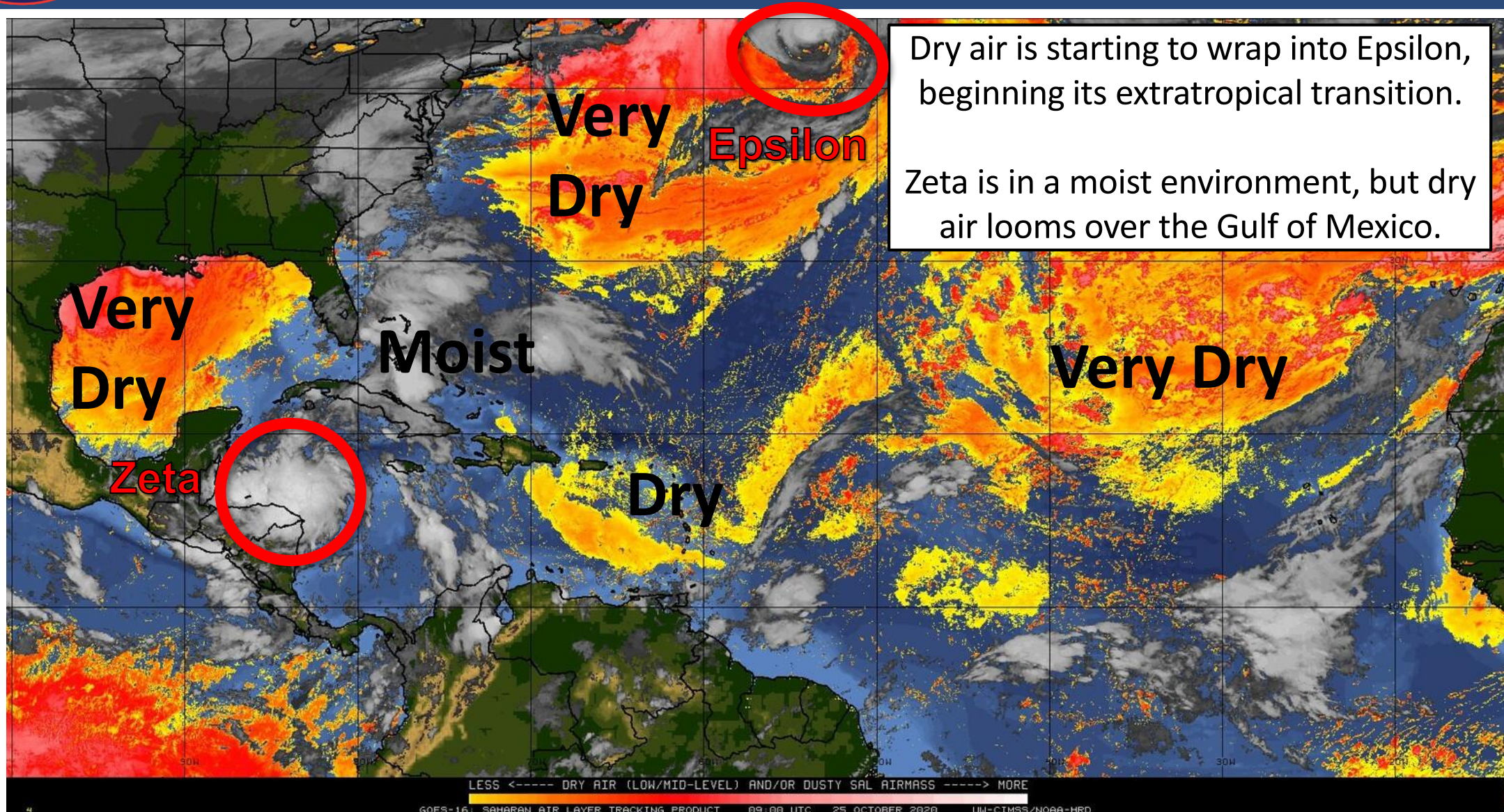




Dry Air & Saharan Dust

Is the environment favorable for the system?

Color denotes concentration of Saharan Dust or dry, stable air.



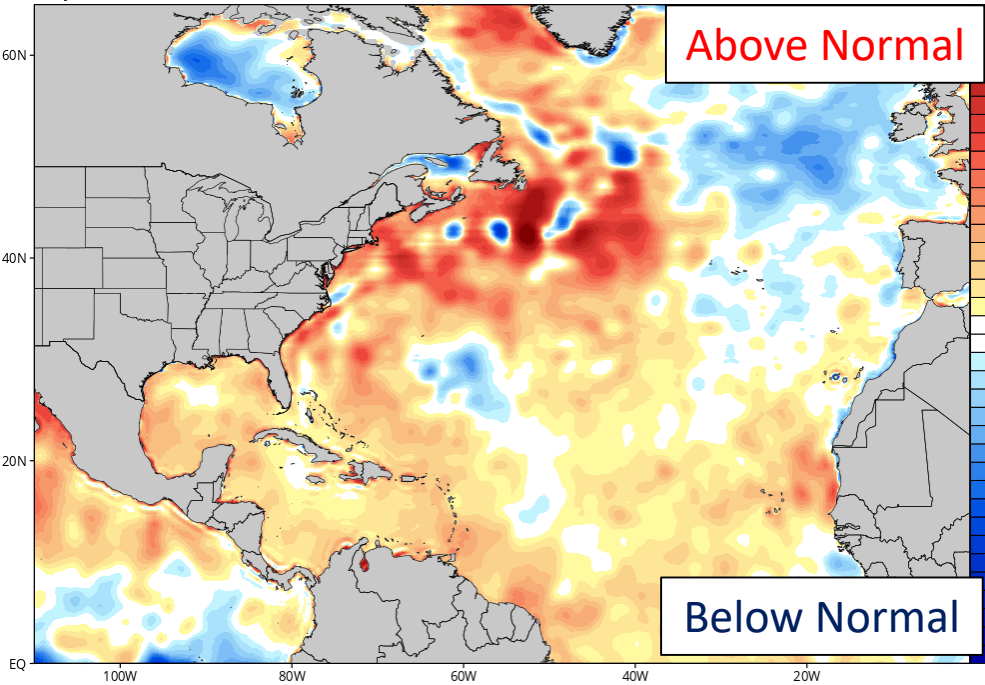


Sea Surface Temperatures & Anomalies

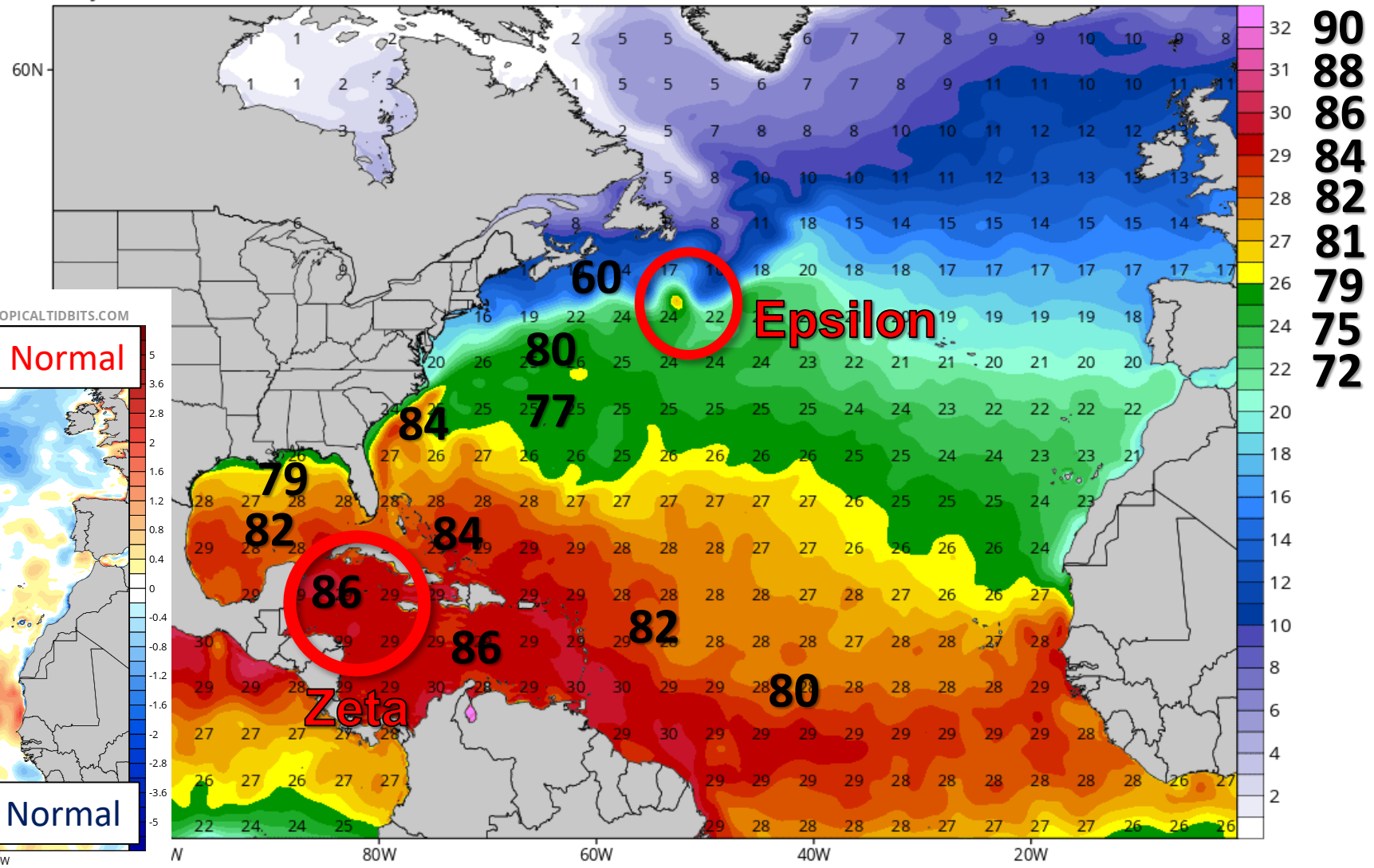
Is the ocean favorable for the system?

Much colder water lies ahead of Epsilon. The Caribbean has warm, deep water to support strong tropical systems. In the Gulf, while temperatures cool as a system moves north, they remain warm enough to support a hurricane.

CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)
Analysis Time: 00z Oct 25 2020



CDAS Sea Surface Temperature (°C)
Analysis Time: 00z Oct 25 2020



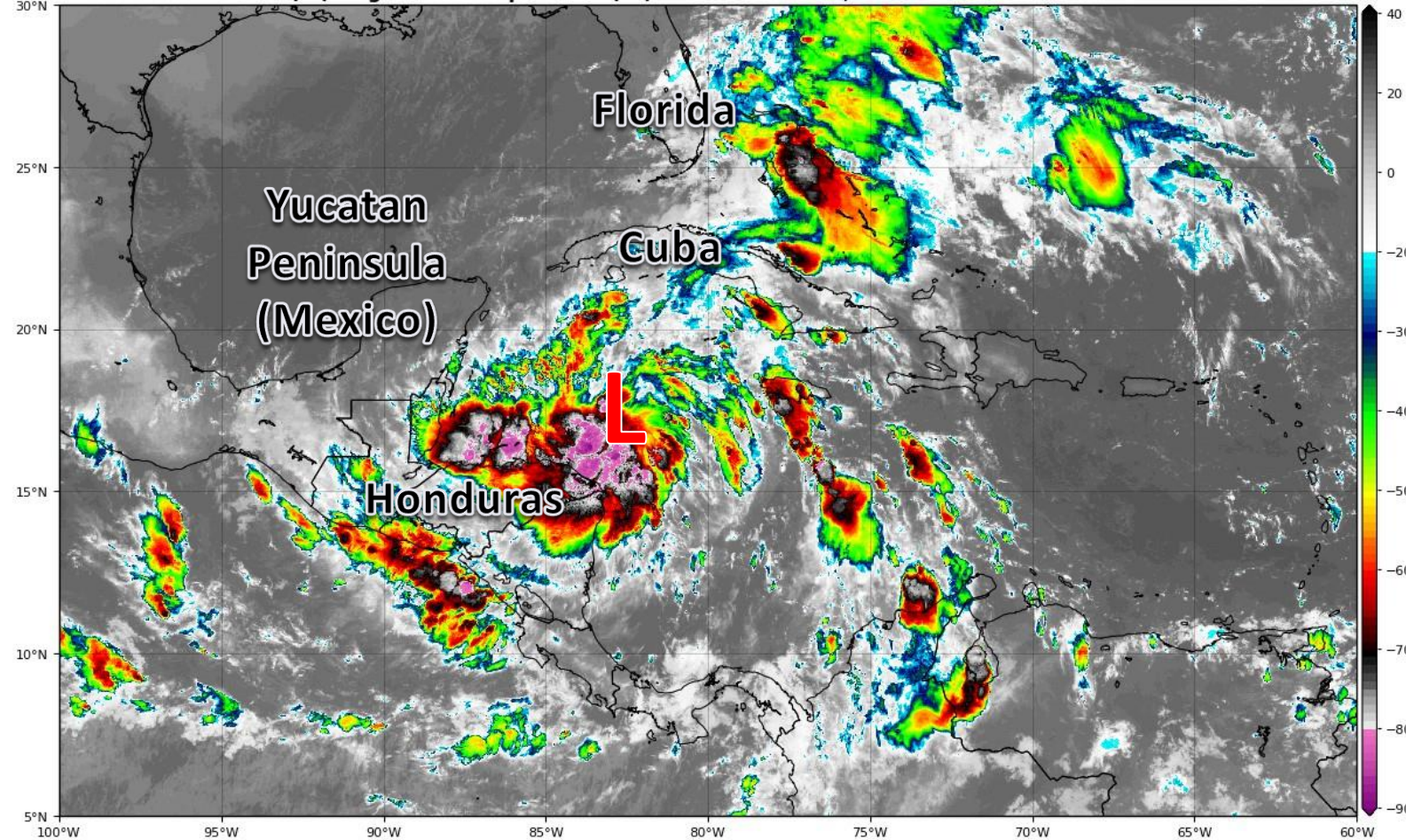


Satellite Imagery

Tropical Storm Zeta

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:45Z Oct 25, 2020

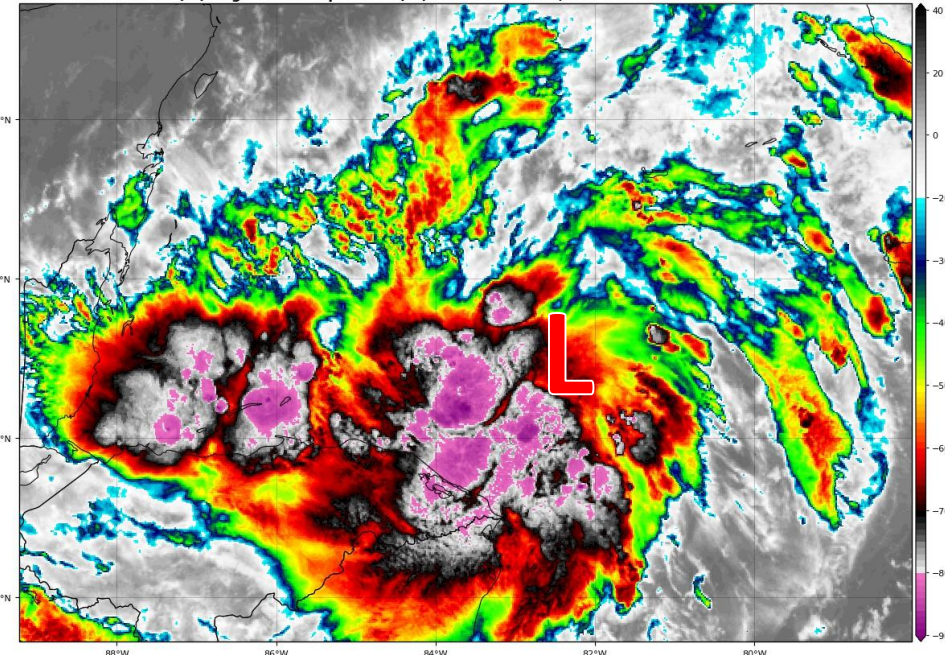
TROPICALTIDBITS.COM



Intense thunderstorms denoted by the whites and pinks have been ongoing near and to the west of the center of Zeta throughout the night. The system continues to organize, but currently lacks any symmetry as thunderstorms north and east of the center have been minimal.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:45Z Oct 25, 2020

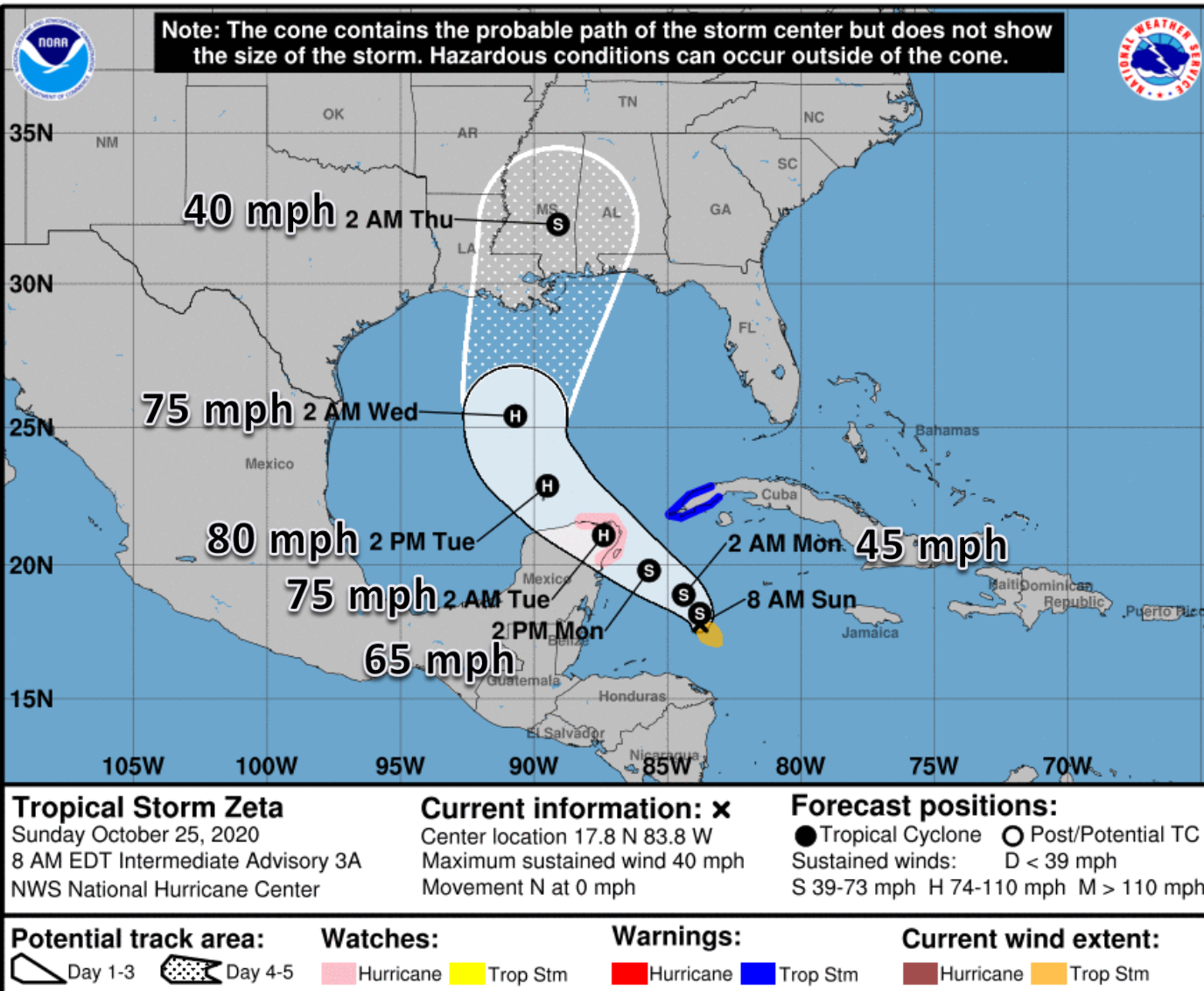
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Official Forecast Track

From the National Hurricane Center – Tropical Storm Zeta

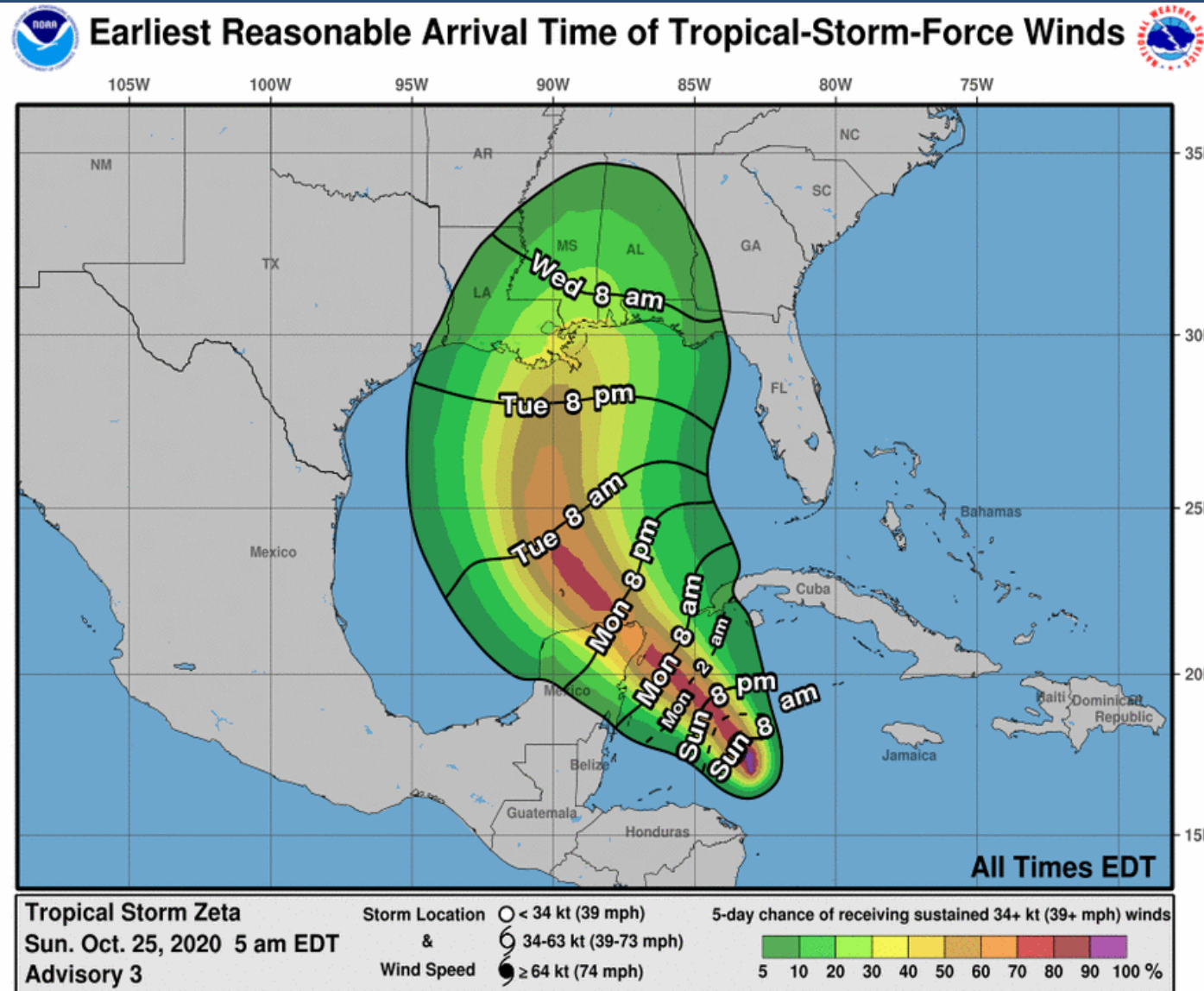


- Hurricane Hunters found that Tropical Depression #28 strengthened overnight into Tropical Storm Zeta.
- The center is located about 300 miles south of the western tip of Cuba and is currently stationary.
- Zeta has maximum sustained winds of 40 mph. Slow strengthening is forecast over the next 72 hours, and is forecast to be a hurricane on Tuesday as it moves into the Gulf of Mexico.
- There is higher uncertainty than usual in the track forecast, and the system is forecast to make landfall as a strong Tropical storm on Wednesday anywhere from the Florida Panhandle to Louisiana.



Time of Arrival & Wind Speed Probabilities

EARLIEST REASONABLE Time of Arrival of Tropical Storm Force Winds (>39 mph)



Pensacola NAS: 24% (+3)

Pensacola: 18% (-2)

Milton: 16% (-3)

Destin: 14% (-1)

Panama City: 13% (+1)

Apalachicola: 9% (+0)

Tallahassee: 4% (-4)

Key West: <5%

Numbers in Parentheses are changes in probabilities since the last packet

Tropical storm force winds could begin as early as Wednesday morning in the Panhandle, but would most likely begin Wednesday afternoon. The odds of tropical storm force winds remain generally unchanged since yesterday.



Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Zeta

Advisory 3: 5:00 AM EDT Sun Oct 25, 2020



1. Zeta is expected to produce tropical storm conditions over extreme western Cuba on Monday. Tropical storm conditions are possible in the northern Yucatan Peninsula of Mexico Monday night and early Tuesday.

2. Through Wednesday, heavy rainfall is expected from Tropical Storm Zeta across portions of central and western Cuba, the Cayman Islands, Jamaica, the northeast Yucatan peninsula of Mexico, Southern Florida and the Keys. This rainfall may lead to flash flooding in urban areas.

3. Zeta is forecast to approach the northern Gulf Coast as a tropical storm Tuesday night and Wednesday, and could bring storm surge, rainfall, and wind impacts to areas from Louisiana to the Florida Panhandle. Residents in these areas should monitor the progress of Zeta and updates to the forecast.



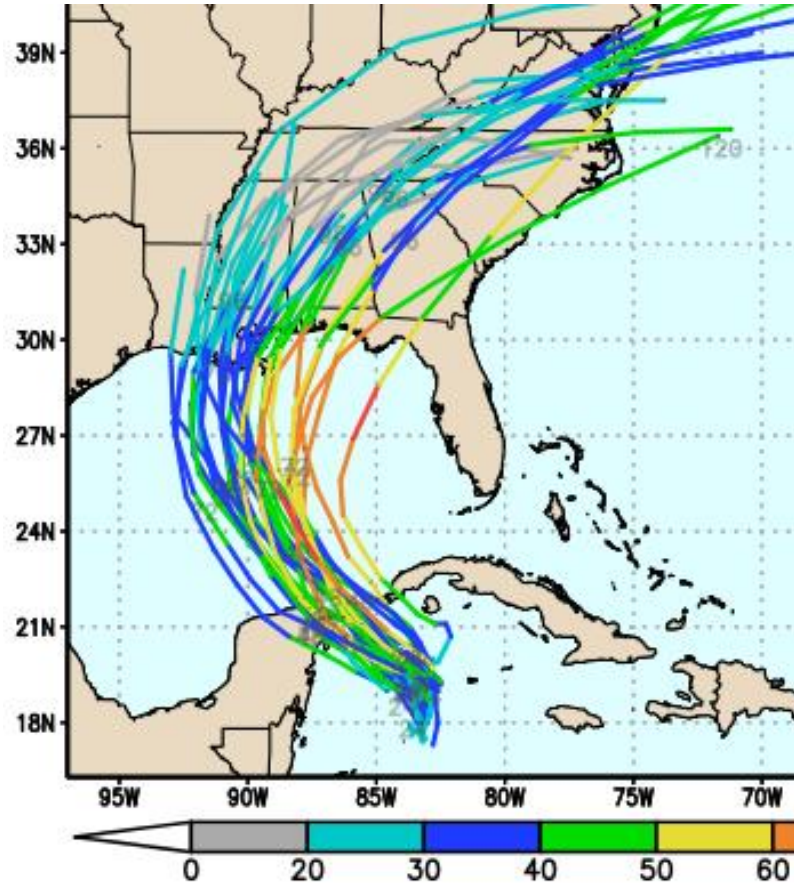
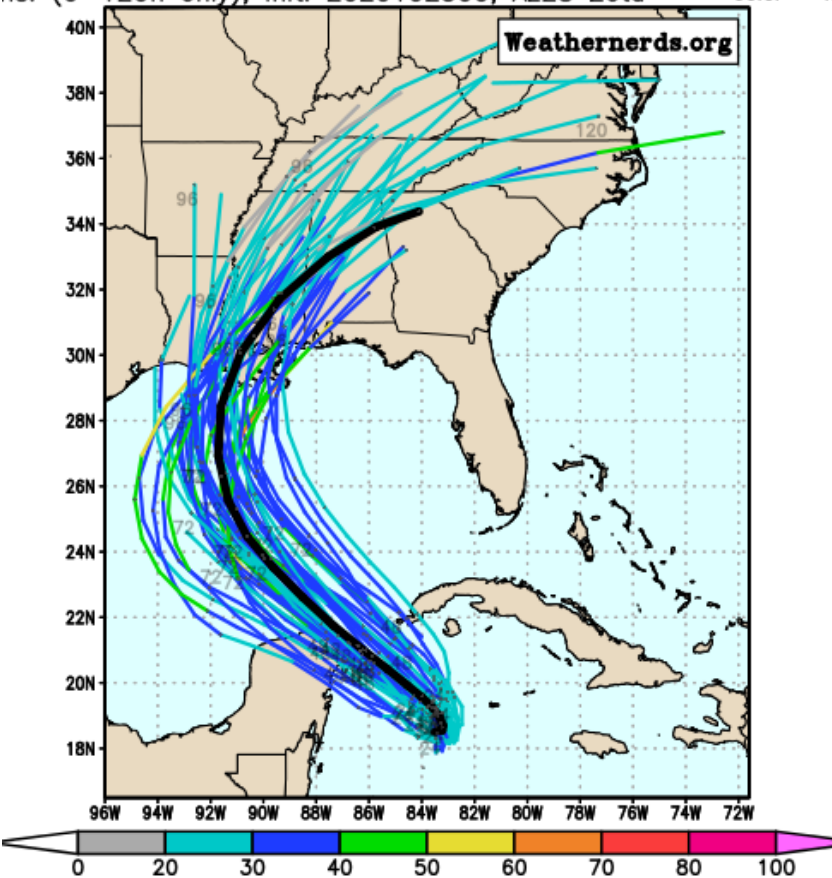
For more information go to hurricanes.gov



Model Forecast Tracks

Ensemble & Dynamical Models

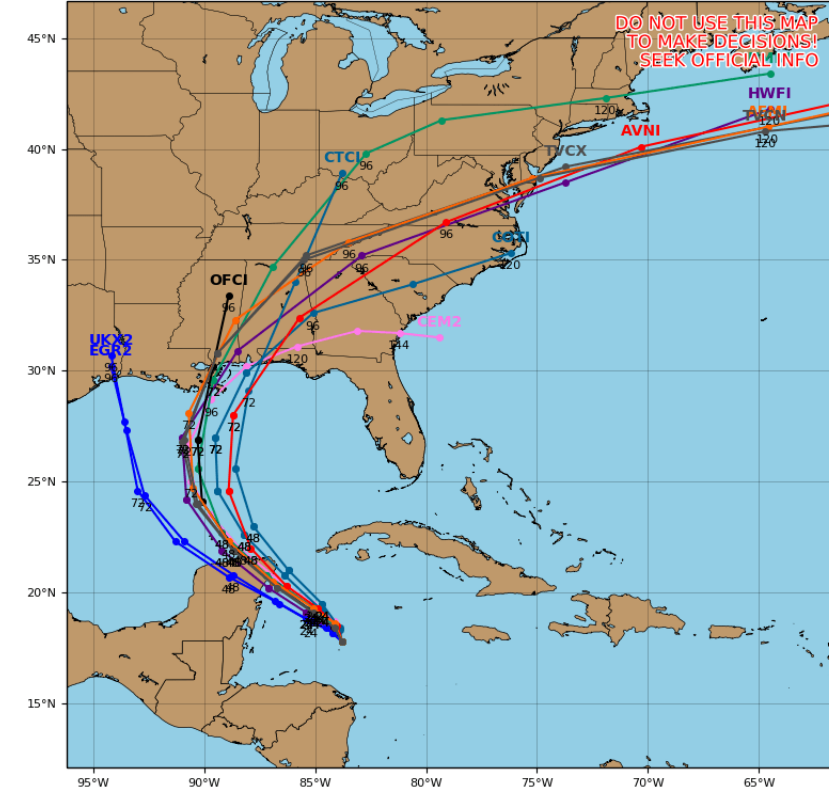
ns. (0-120h only), init: 2020102500, AL28 Zeta color = n



Tropical Storm ZETA Model Track Guidance

Initialized at 12z Oct 25 2020

Levi Cowan - tropicaltidbits.com



It's important to note that there is still a good amount of spread in the forecast models, showing that there remains uncertainty in the track forecast. The currently slow motion of Zeta as well as timing of the cold front forecast to approach from the west mid-week will have implications on where Zeta will eventually end up. In addition, center reformations/relocations could still occur and may change forecasts. **Track Changes Right Towards the Florida Panhandle Remain Possible**



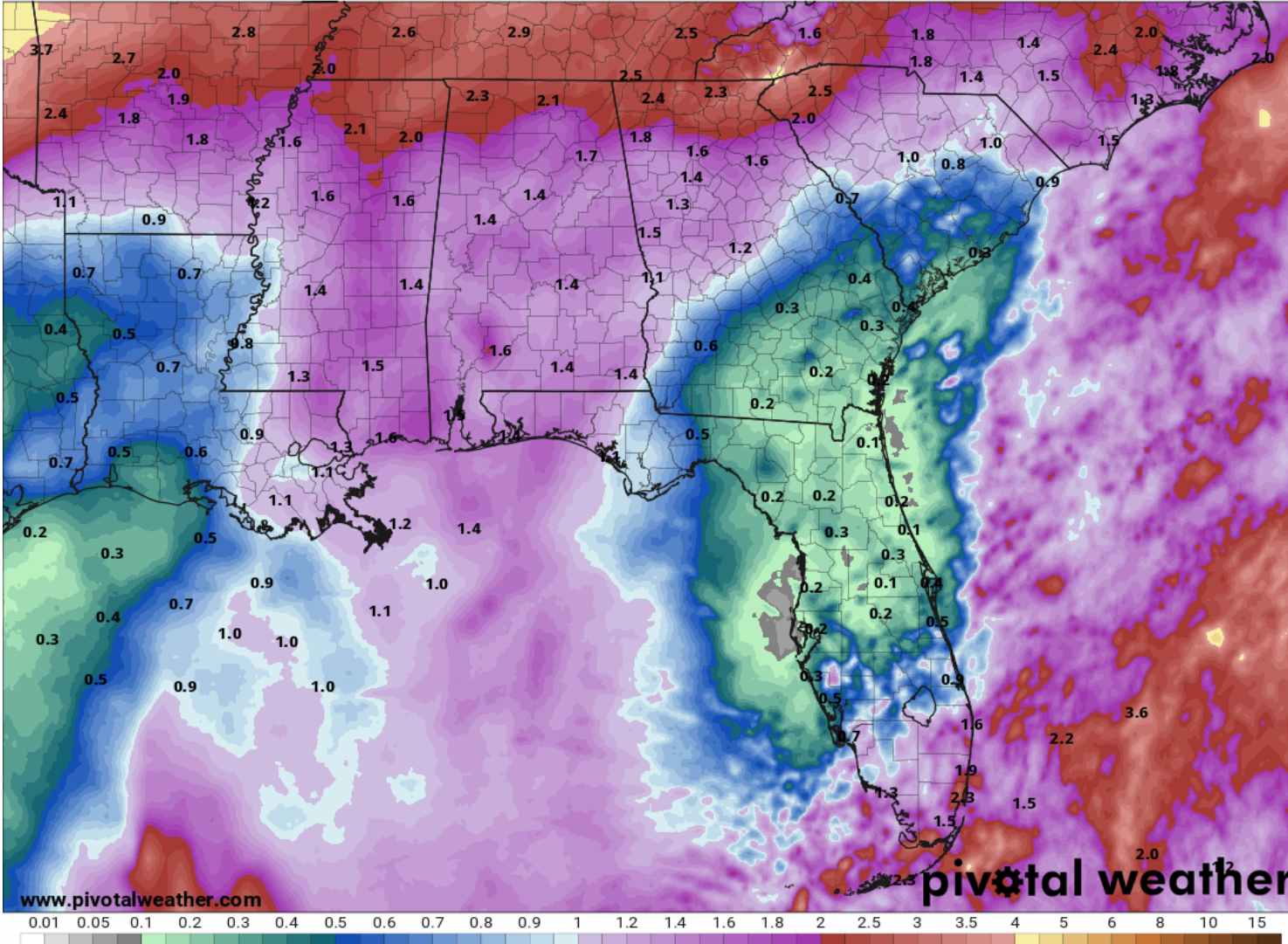
Rainfall Totals Next 7 Days

Ending 8 AM ET Saturday

7-Day Precipitation (in)

Ending Sunday, Nov. 1, 2020 at 7 a.m. EST

Init: Sun 2020-10-25 12z WPC



Rainfall totals of 2-4", locally higher, are expected across Southeast Florida and the Keys AGAIN today.

Most of metro Southeast Florida and the Keys have seen 6-12" of rain in the last 7 days.

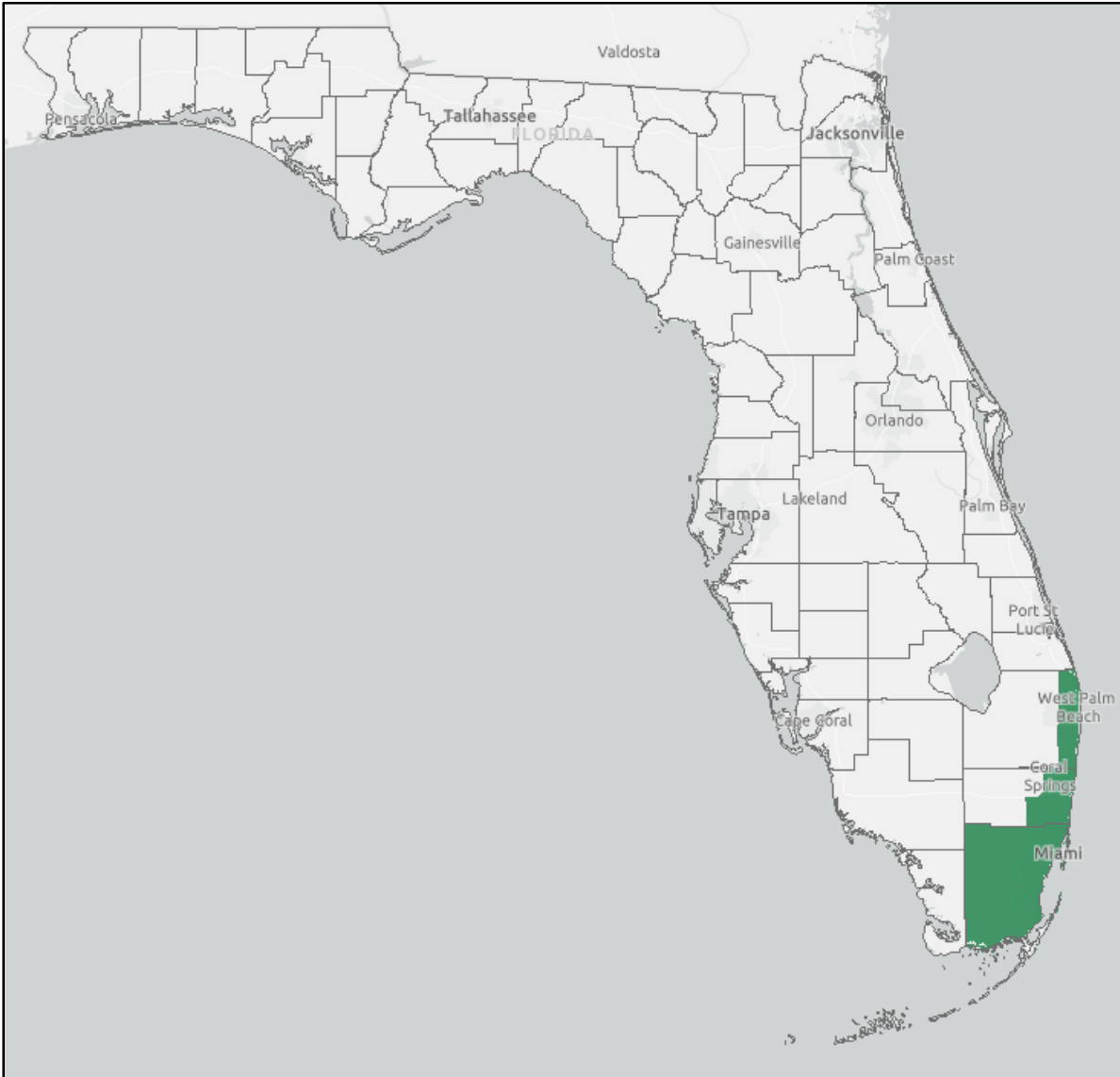
Most of the rain will be on Zeta's east side—meaning even a landfall west in Louisiana will bring heavy rainfall into the Panhandle.

With Zeta being a quick mover, 1-3" of rain is currently expected across the Panhandle mid-week with locally higher amounts.



Flood Watches

Links: [NWS Miami](#)



A Flood Watch remains in effect for parts of Southeast Florida.

***WHEN:** Until 8 PM this evening

***WHERE:** coastal & metro Palm Beach, coastal & metro Broward, and all of Miami-Dade Counties

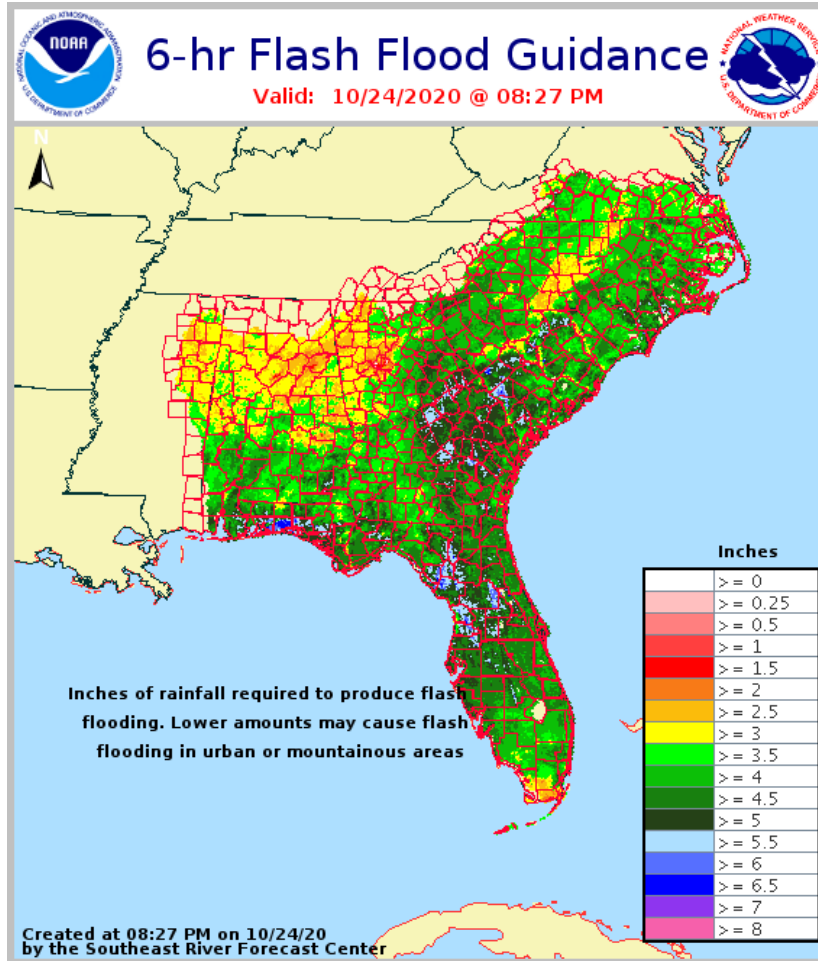
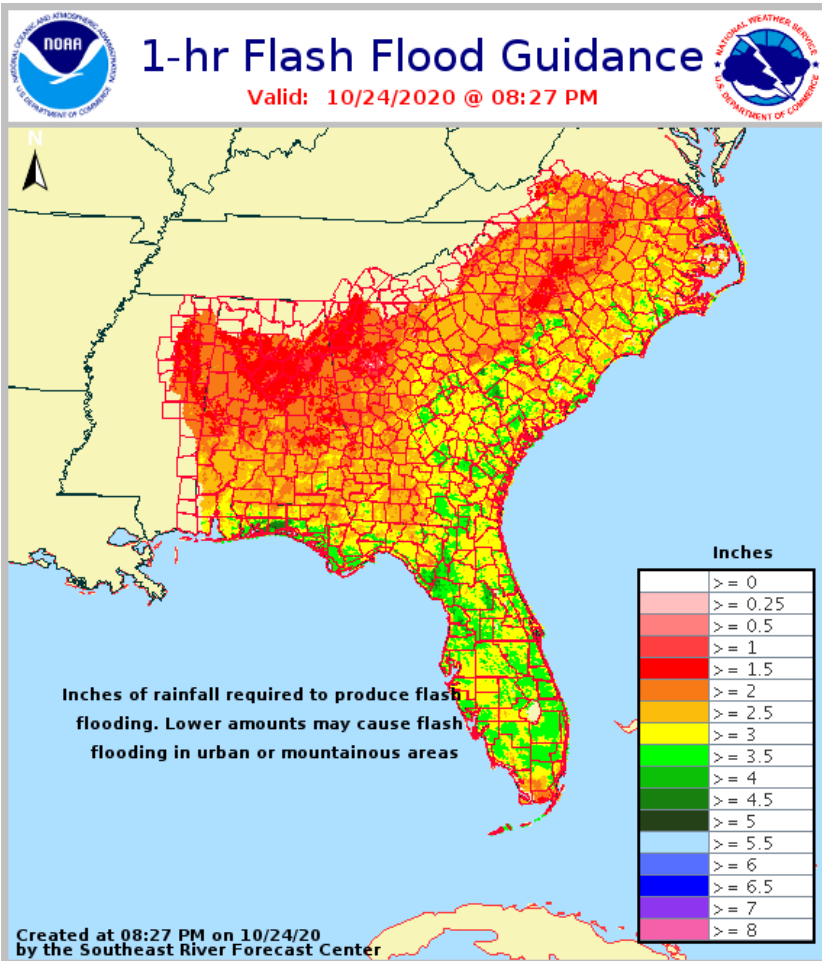
Periods of heavy rainfall are possible through the weekend. Additional rain accumulations of 3 to 6 inches, with isolated higher amounts possible.

Heavy rainfall may produce flooding and/or flash flooding in urban locations as well as small creeks, streams, and canals. This is especially true for areas that recently received heavy rainfall, and for areas near the coast due to the combination of heavy rain and astronomically high tides.



Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?



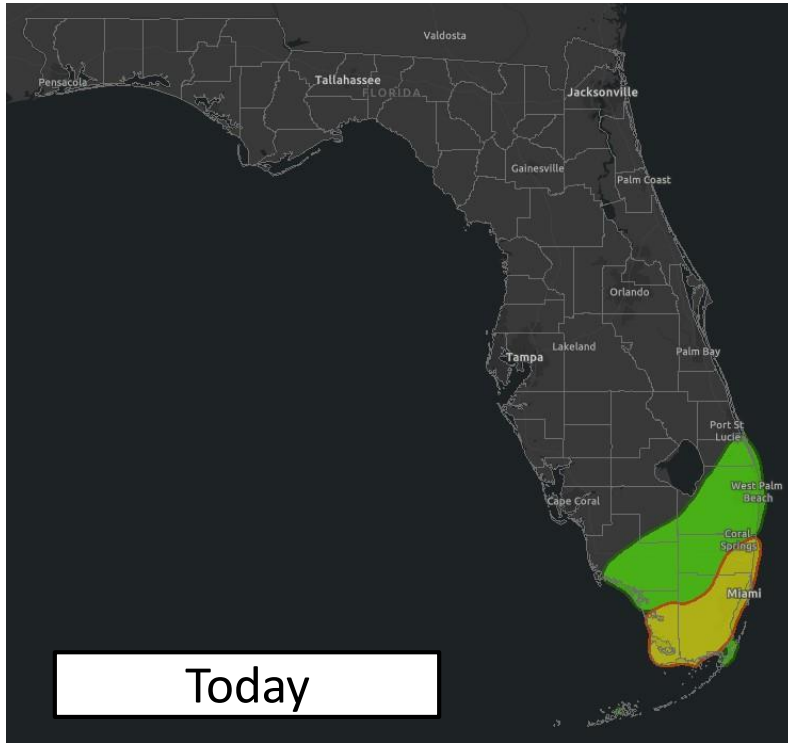
With heavy rainfall across the Panhandle and South Florida yesterday, only 1-3" of rain within 1 hour or about 2-4" within 6 hours is needed to cause flash flooding.

Soils remain super-saturated in these areas, and rainfall will more easily run off, causing flooding concerns.



Flash Flood Outlooks

From the Weather Prediction Center



Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line

HIGH: > 50%

SLGT: 10%-20%

MDT: 20%-50%

MRGL: 5%-10%

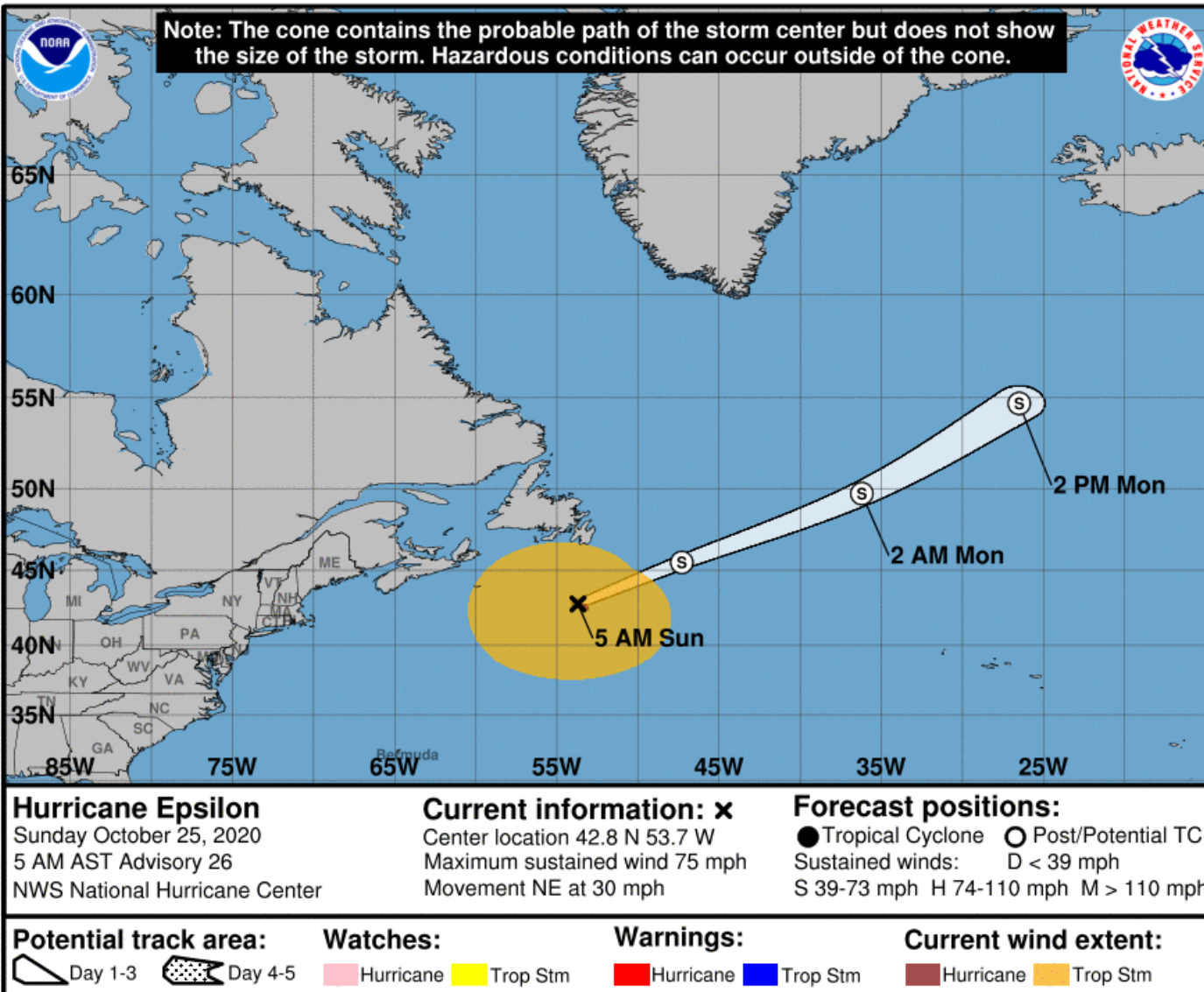
Because of the recent heavy rainfall, an isolated case of flash flooding is possible across parts of Southeast Florida through this evening.

A flash flood threat of some extent is expected in the Florida Panhandle on Wednesday/Thursday as Zeta makes landfall.



Official Forecast Track

From the National Hurricane Center – Hurricane Epsilon



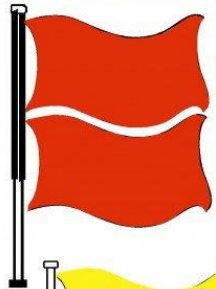
- Epsilon is close to becoming a post-tropical low as it moves over the cold waters of the North Atlantic.
- The center is located about 270 miles south of Cape Race, Newfoundland, Canada
- Epsilon remains a Category 1 hurricane with maximum sustained winds of 75 mph, with the center moving to the northeast at a quick 30 mph.
- Swells from the system will continue to impact the East Coast for a few more days, however.



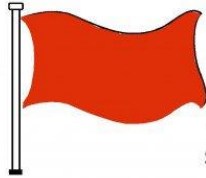
Rip Current Outlook

Today

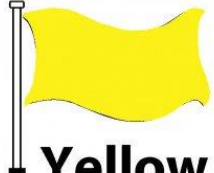
BEACH FLAG WARNING SYSTEM



Double Red
Water Closed to
Public Use



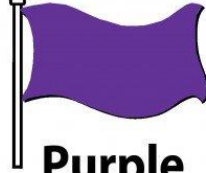
Red
High Hazard
(rough conditions,
such as strong surf
and or currents)



Yellow
Medium Hazard
(light surf and or
currents)

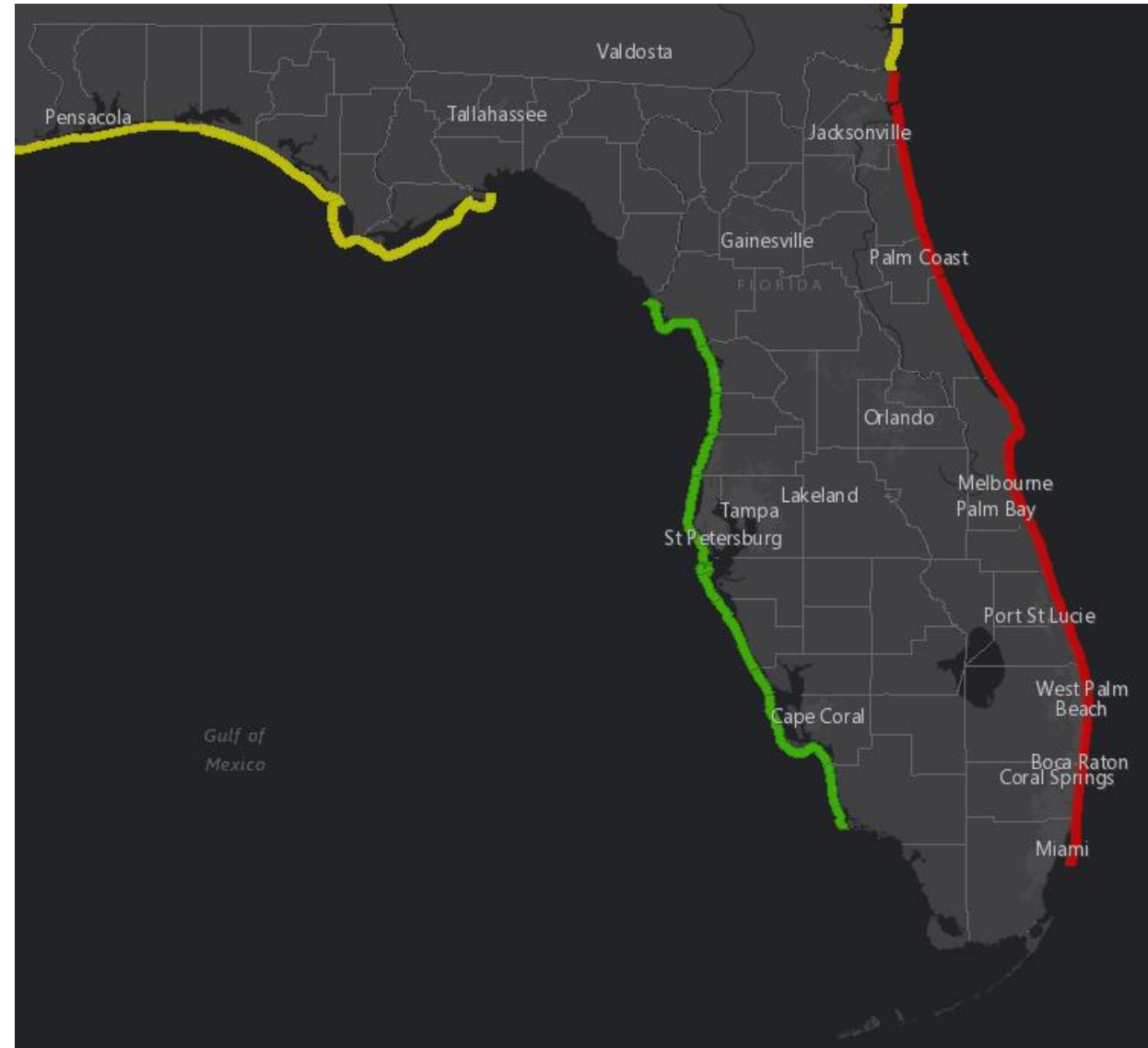


Green
Low Hazard
(calm conditions)



Purple
Marine Pest
(jellyfish, stingrays
& dangerous fish)

Long period swells from distant Hurricane Epsilon will keep the rip current risk high at Atlantic beaches. The rip current risk along the Gulf Coast will increase by mid-week.





Overall Summary

Tropical Storm Zeta (Formerly Tropical Depression #28)

- Hurricane Hunters found that Tropical Depression #28 strengthened overnight into Tropical Storm Zeta.
- The center is located about 300 miles south of the western tip of Cuba and is currently stationary.
- Zeta has maximum sustained winds of 40 mph. Slow strengthening is forecast over the next 72 hours, and is forecast to be a hurricane on Tuesday as it moves into the Gulf of Mexico.
- There is higher uncertainty than usual in the track forecast, and the system is forecast to make landfall as a strong Tropical storm on Wednesday anywhere from the Florida Panhandle to Louisiana.

Hurricane Epsilon

- Epsilon is close to becoming a post-tropical low as it moves over the cold waters of the North Atlantic.
- The center is located about 270 miles south of Cape Race, Newfoundland, Canada
- Epsilon remains a Category 1 hurricane with maximum sustained winds of 75 mph, with the center moving to the northeast at a quick 30 mph.
- Swells from the system will continue to impact the East Coast for a few more days, however.



Florida Outlook

Florida Outlook:

- Epsilon poses no threat to Florida. Swells from Epsilon will impact the East Coast through mid-week, resulting in a high rip current risk.
- Moisture from Tropical Storm Zeta will continue to bring the threat of heavy rainfall to South Florida and the Keys. Flood Watches remain in effect for coastal Southeast Florida until this evening.
- No significant wind impacts are expected in the Florida Keys. Gusty winds could still accompany any stronger showers or storms.
- Heavy rainfall is possible across the Panhandle and Big Bend Wednesday/Thursday. 1-3" of rain is likely, but locally higher amounts are expected. These totals could change based on the exact track speed of Zeta.
- Dangerous rip currents and building waves will be possible this week along Gulf Coast beaches.
- Storm surge, damaging winds, and tornadoes are possible in the Florida Panhandle/Big Bend mid-week; however, **it remains too early to determine the extent of these threats.**
- It's important to not focus on the center of the cone as impacts will extend well outside of the cone, *particularly to the east of where the systems makes landfall.*
- **The forecast remains low confidence. Anticipate changes in track and/or intensity over the next 48 hours!**

The next briefing packet will be issued this evening with the 5pm advisory. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



Created by:

Michael Spagnolo, Deputy State Meteorologist

Michael.Spagnolo@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

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