



TROPICAL UPDATE



11:00 AM EDT

Monday, October 26, 2020

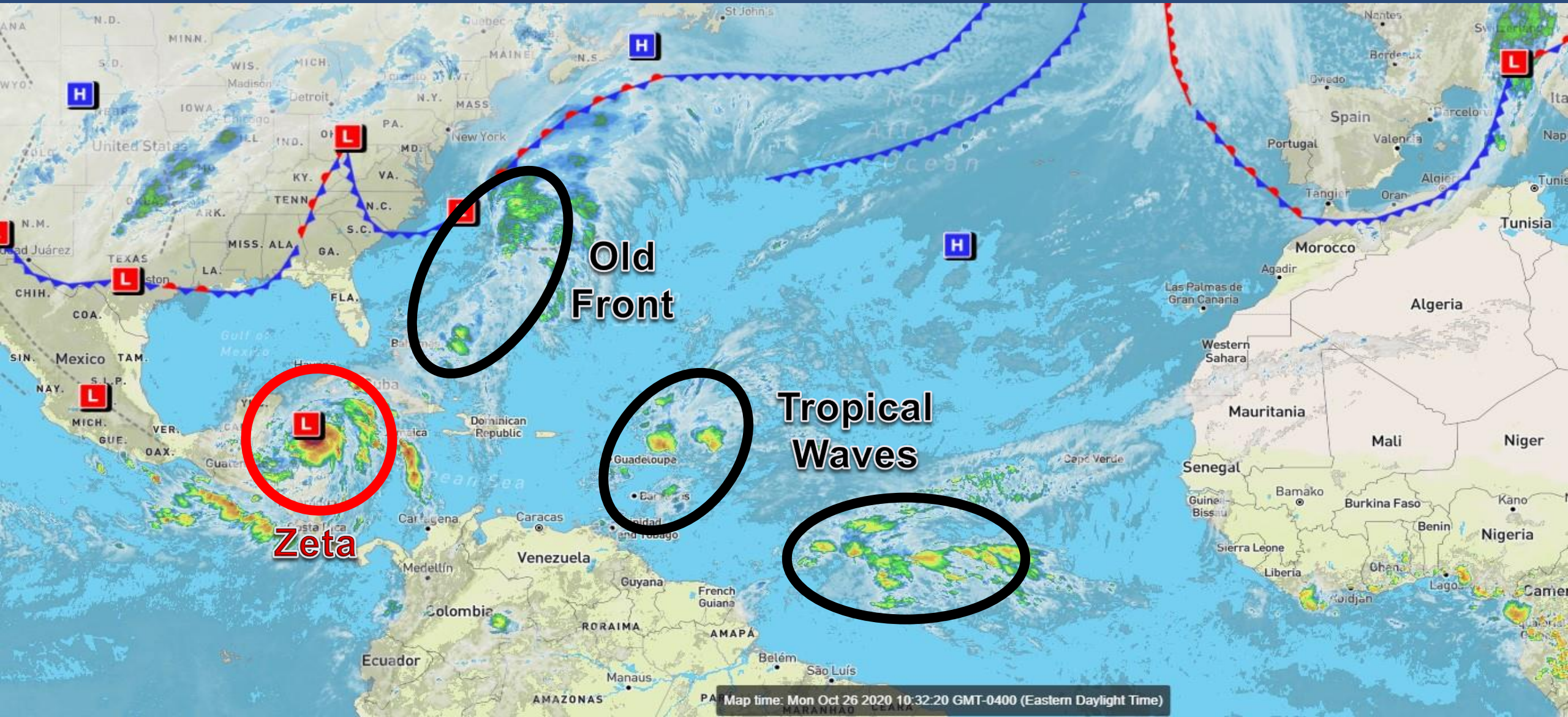
Tropical Storm Zeta

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

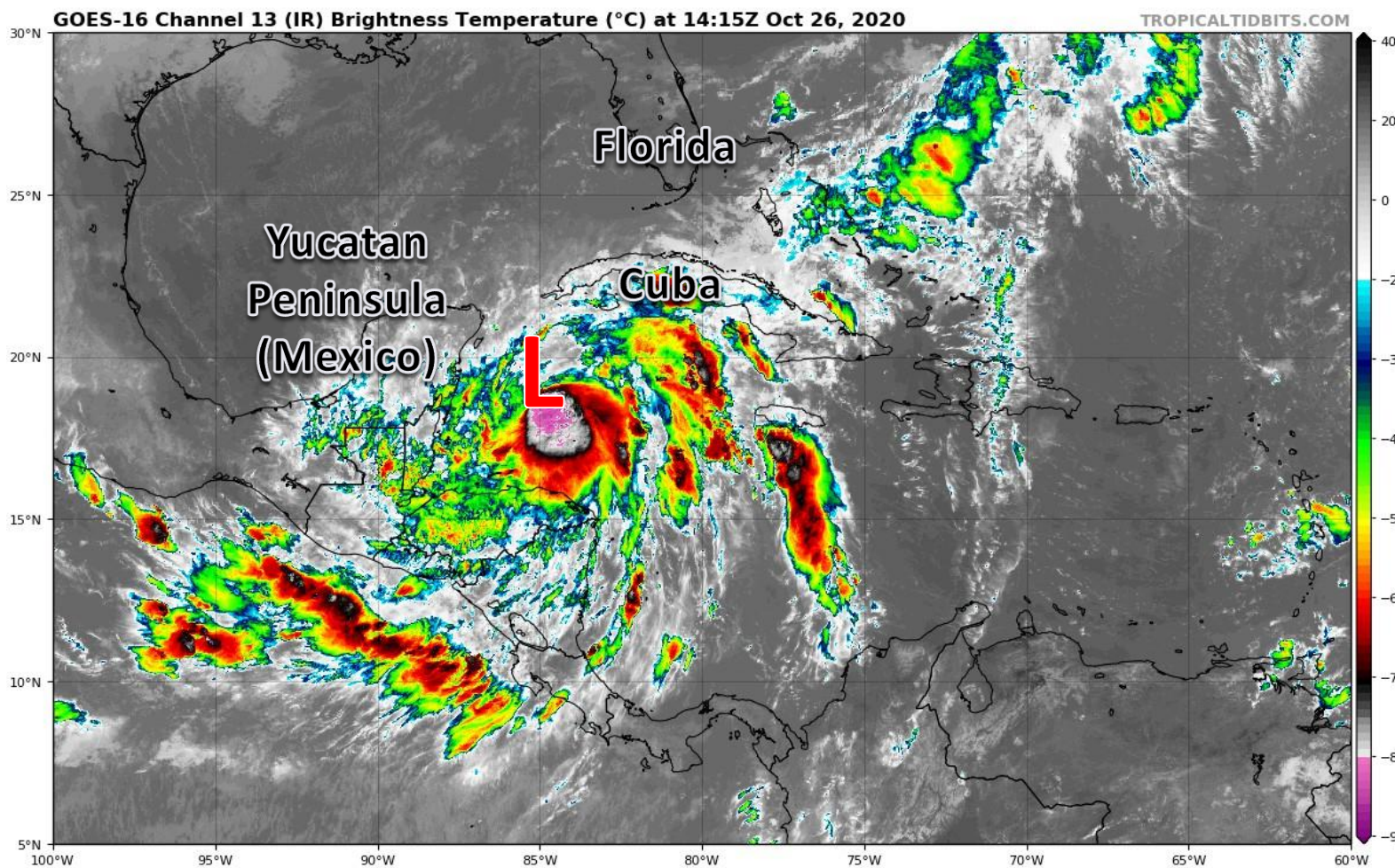
Chance of development: — None — Low — Medium — High



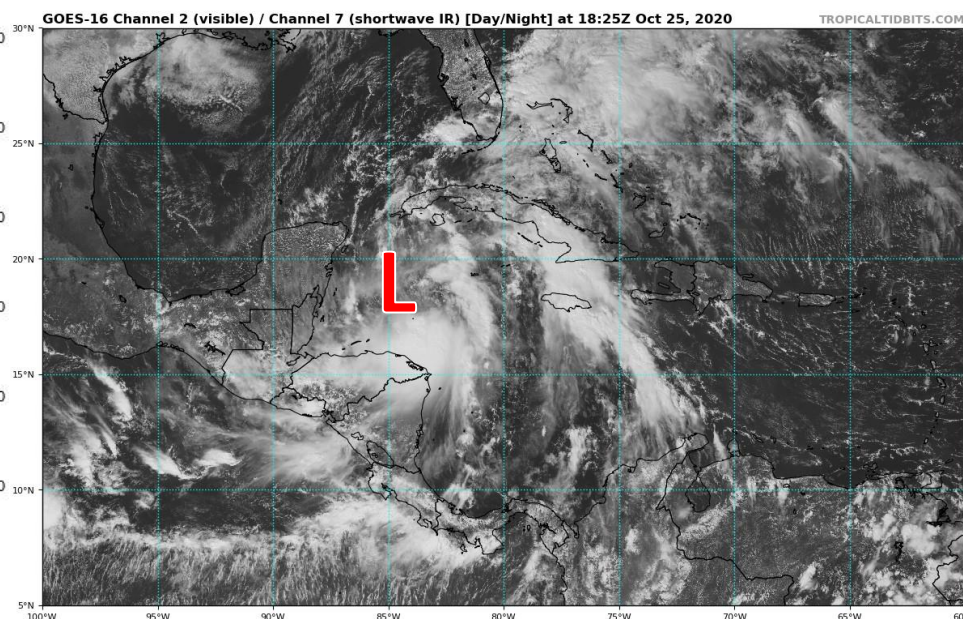


Satellite Imagery

Tropical Storm Zeta



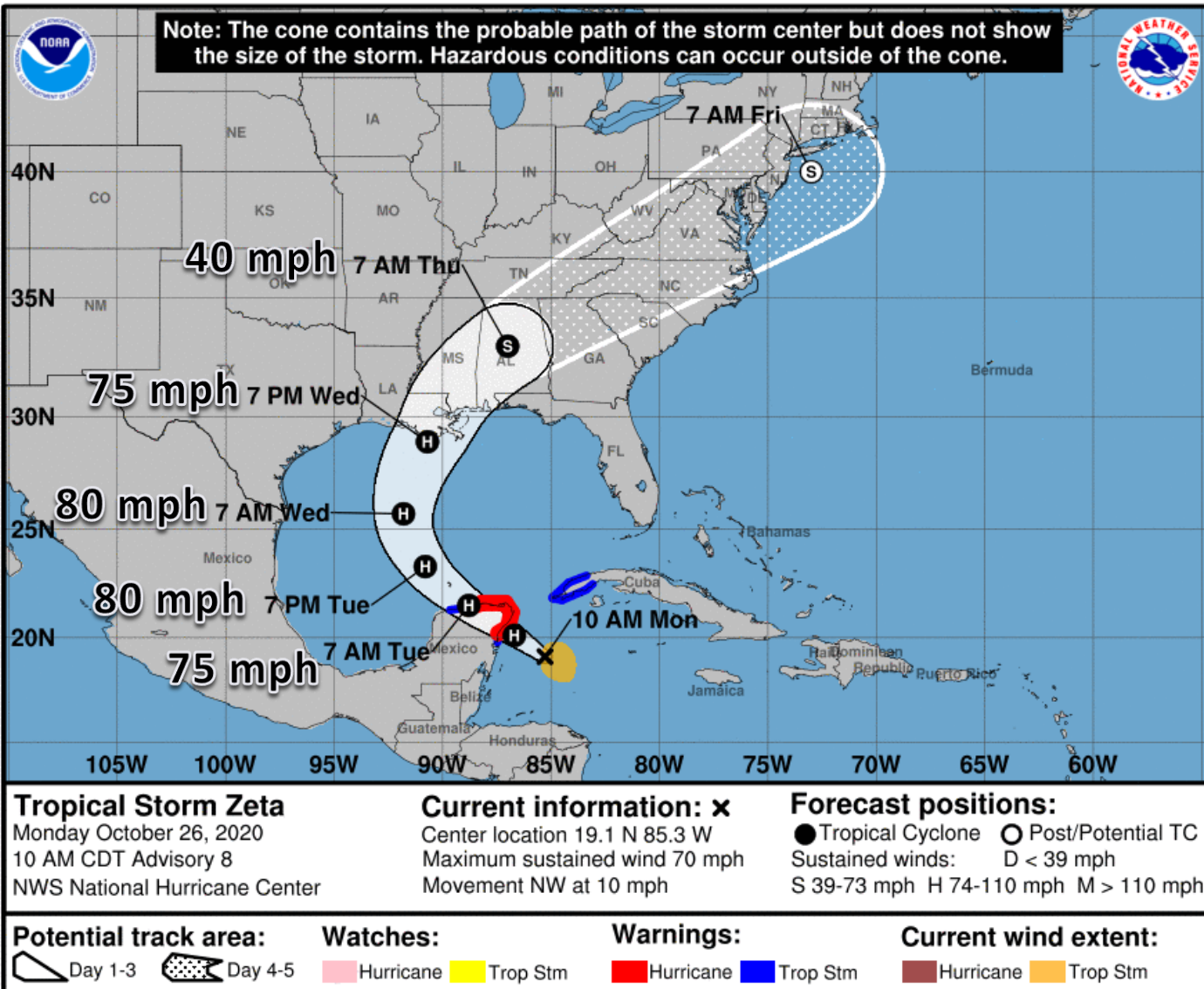
Intense thunderstorms denoted by the whites and pinks have been ongoing to the south of the center of Zeta overnight. The system strengthened overnight, but remains asymmetric. Additional strengthening today is likely to be slow to occur, if it does at all.





Official Forecast Track

From the National Hurricane Center – Tropical Storm Zeta



- Hurricane Hunters have found that Zeta remains disorganized, but is gradually getting stronger.
- The center is located about 140 miles southeast of Cozumel Mexico and moving to the northwest at 10 mph.
- Zeta has maximum sustained winds of 70 mph. Slow strengthening is forecast over the next 12 hours, and Zeta is forecast to be a hurricane tonight as it moves over the Yucatan.
- A turn towards the north and northeast is this forecast on Tuesday and Wednesday as the system weakens and approaches the central Gulf Coast.

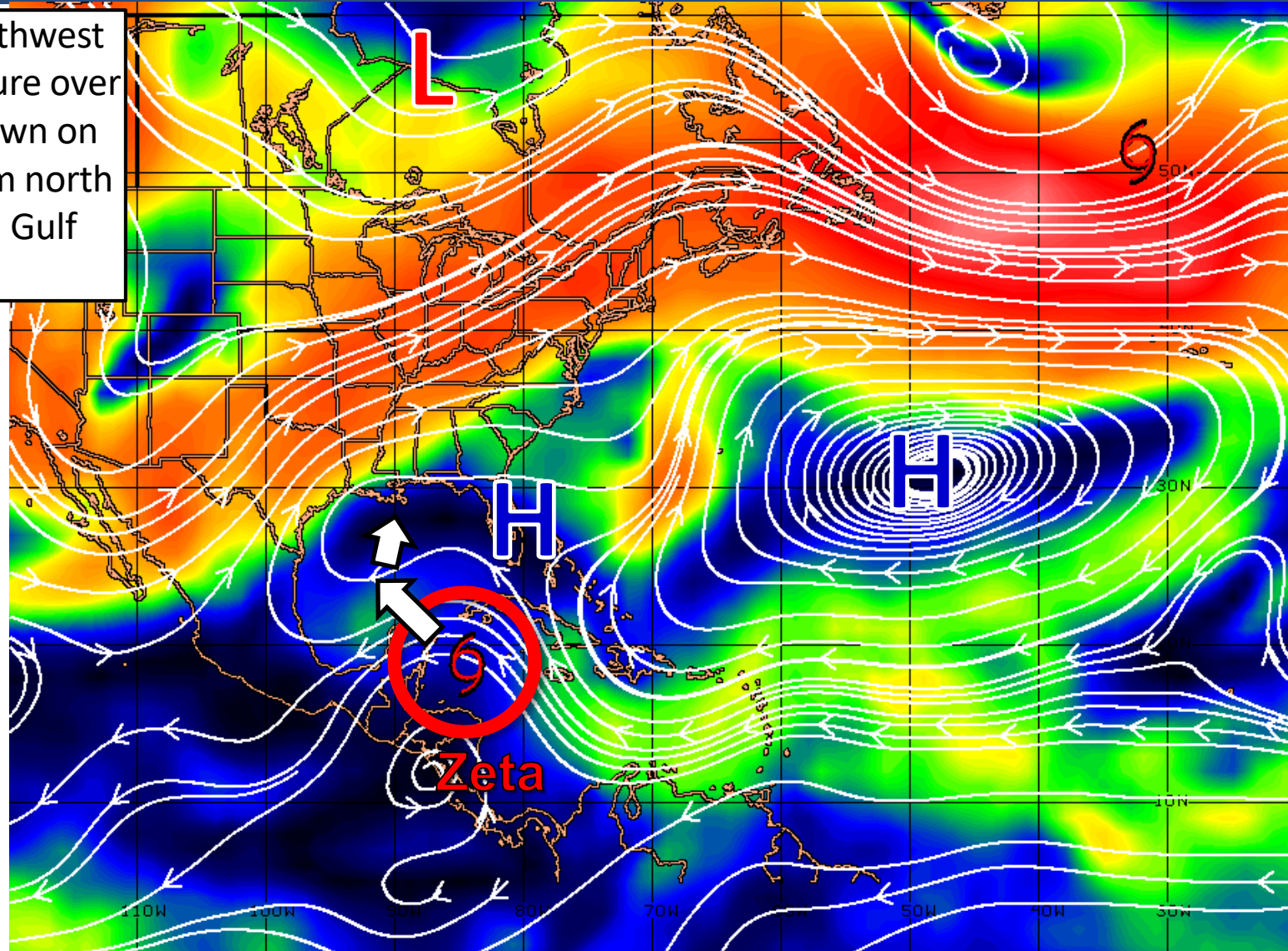


Steering Currents

What is Moving the Systems?

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

Zeta has begun to move northwest around an area of high pressure over Florida. A cold front not shown on this map will bring the system north and northeast towards the Gulf Coast on Wednesday.



KTS
100
70
50
30
20
15
10
5
0

Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

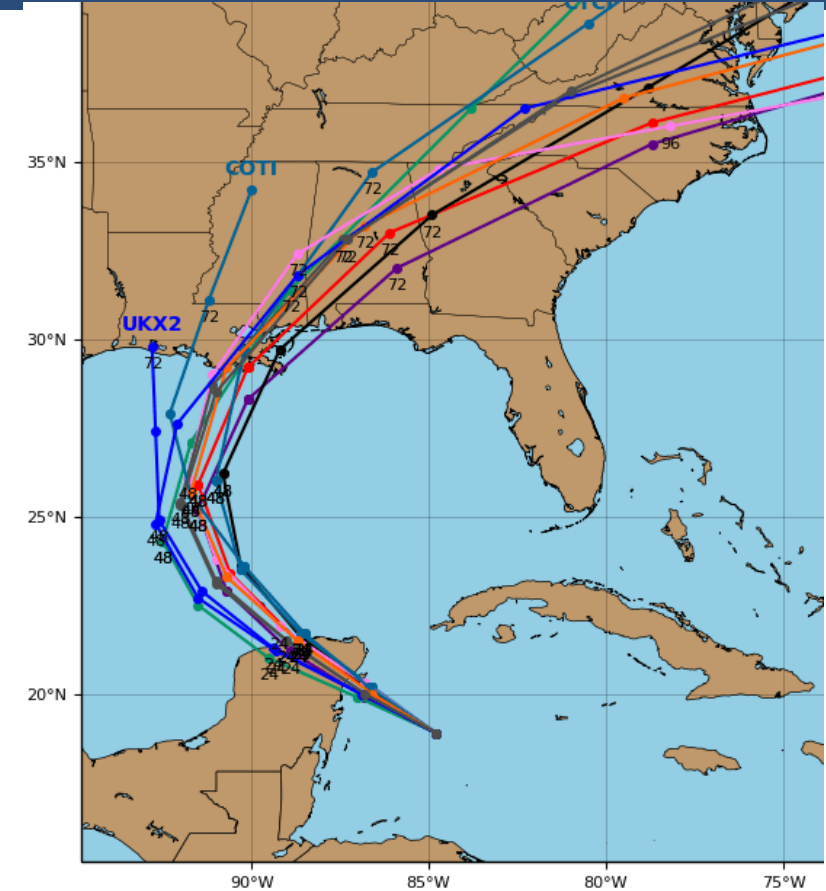
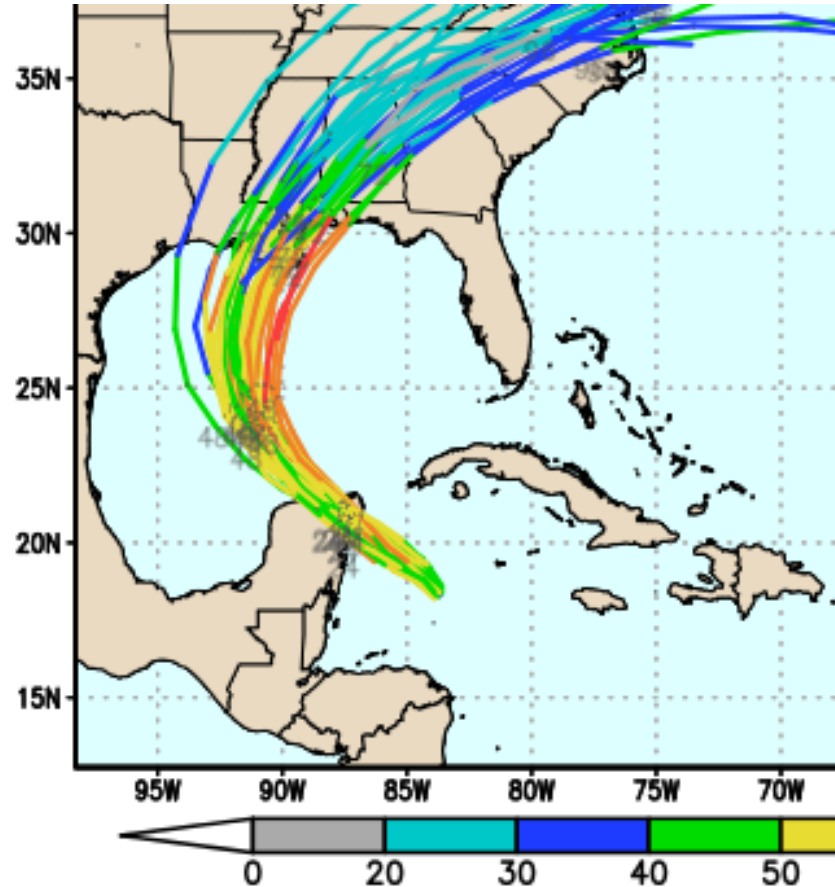
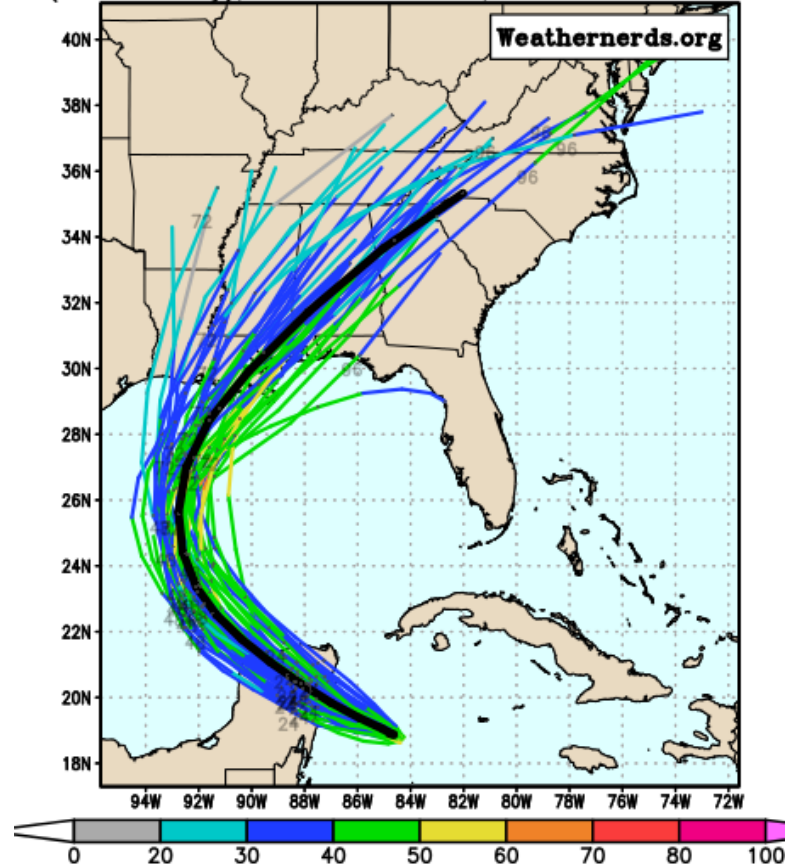
Slow Moving Storm



Model Forecast Tracks

Ensemble & Dynamical Models

s. (0–120h only), init: 2020102606, AL28 Zeta color



While confidence in the track continues to increase, 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. When and how sharp of a turn to the northeast that Zeta takes will determine how close to Florida it gets.

Track Changes Both Right/Left Towards/Away From the Florida Panhandle Remain Possible

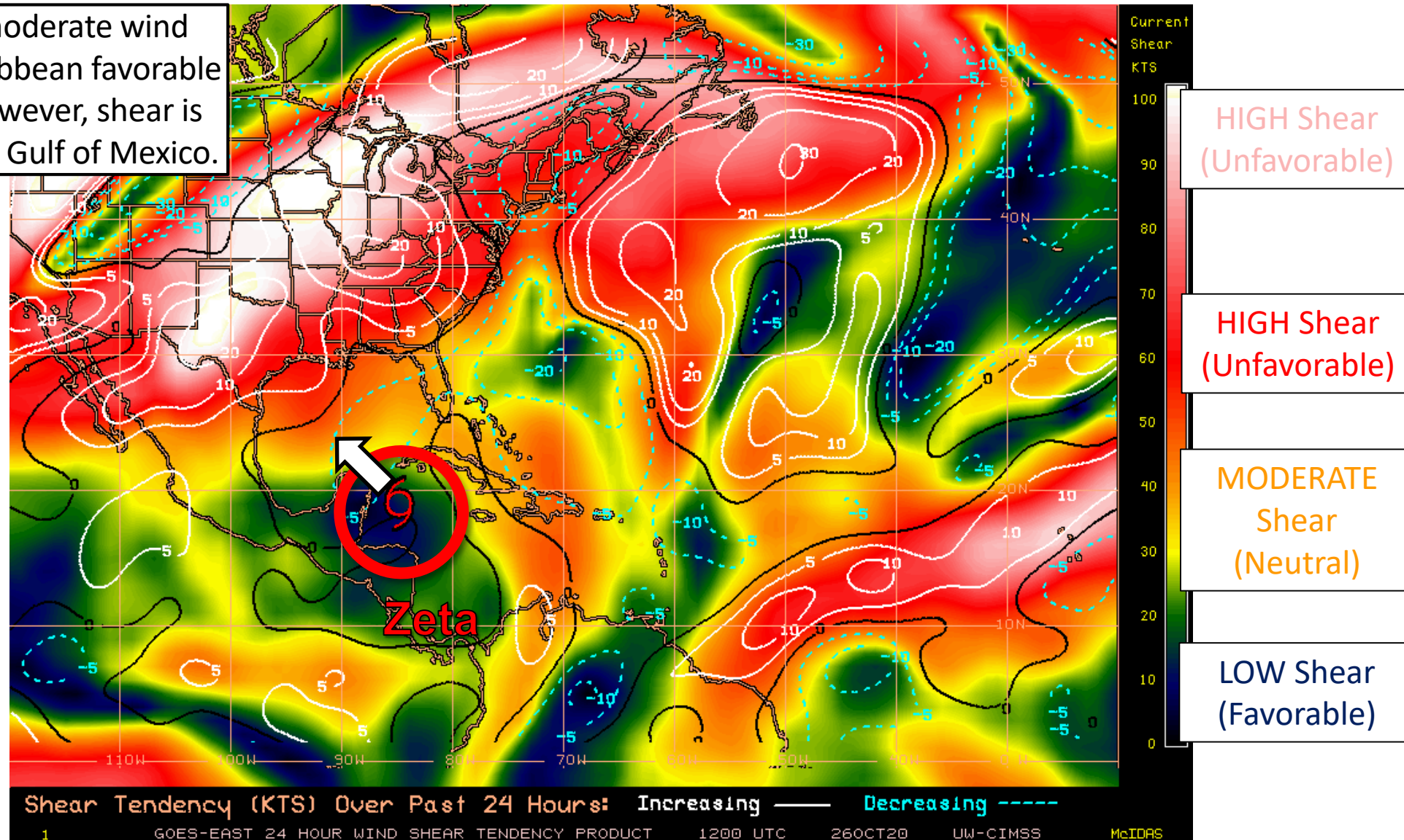


Wind Shear

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).

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

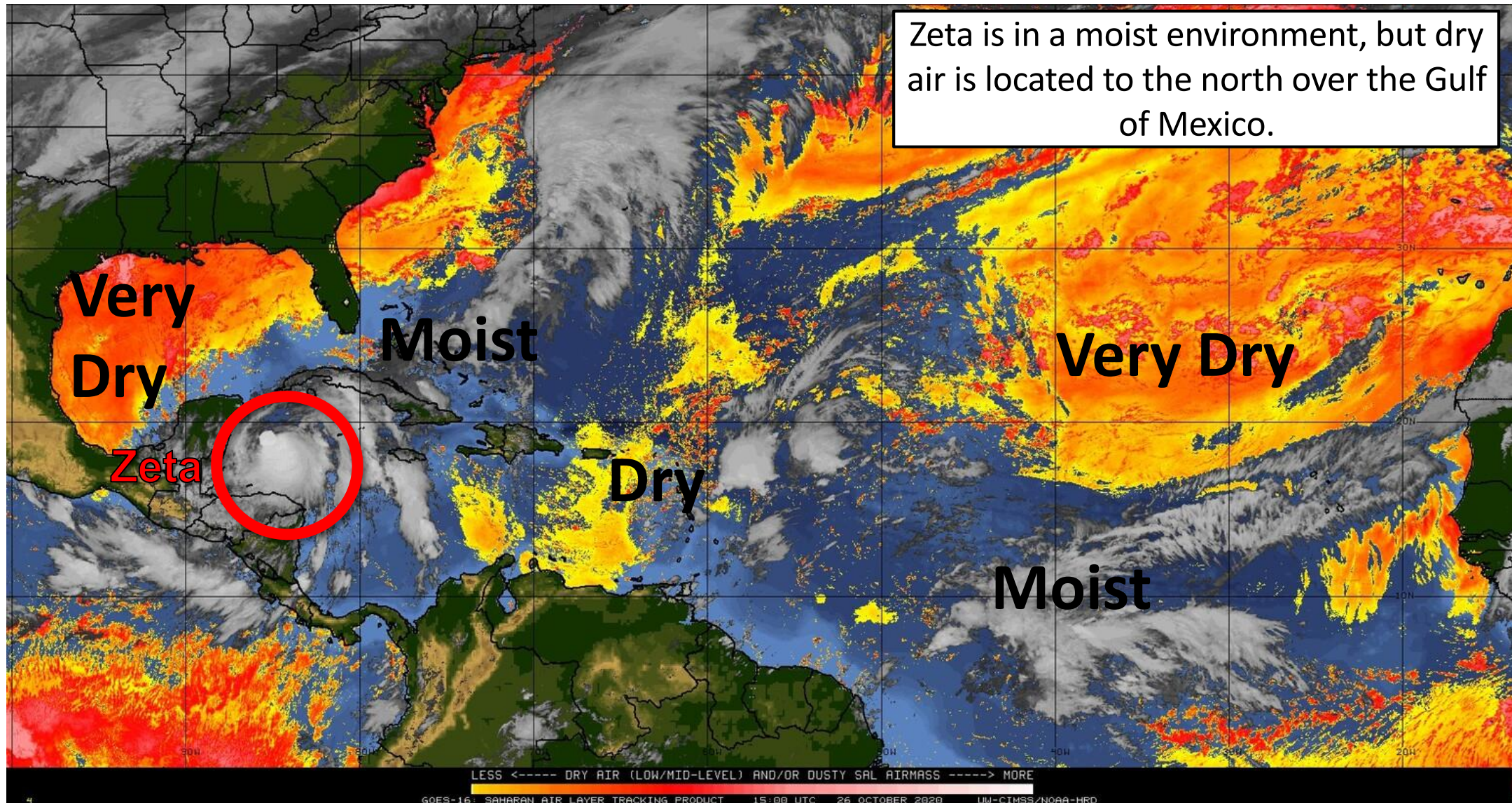




Dry Air & Saharan Dust

Is the environment favorable for the system?

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



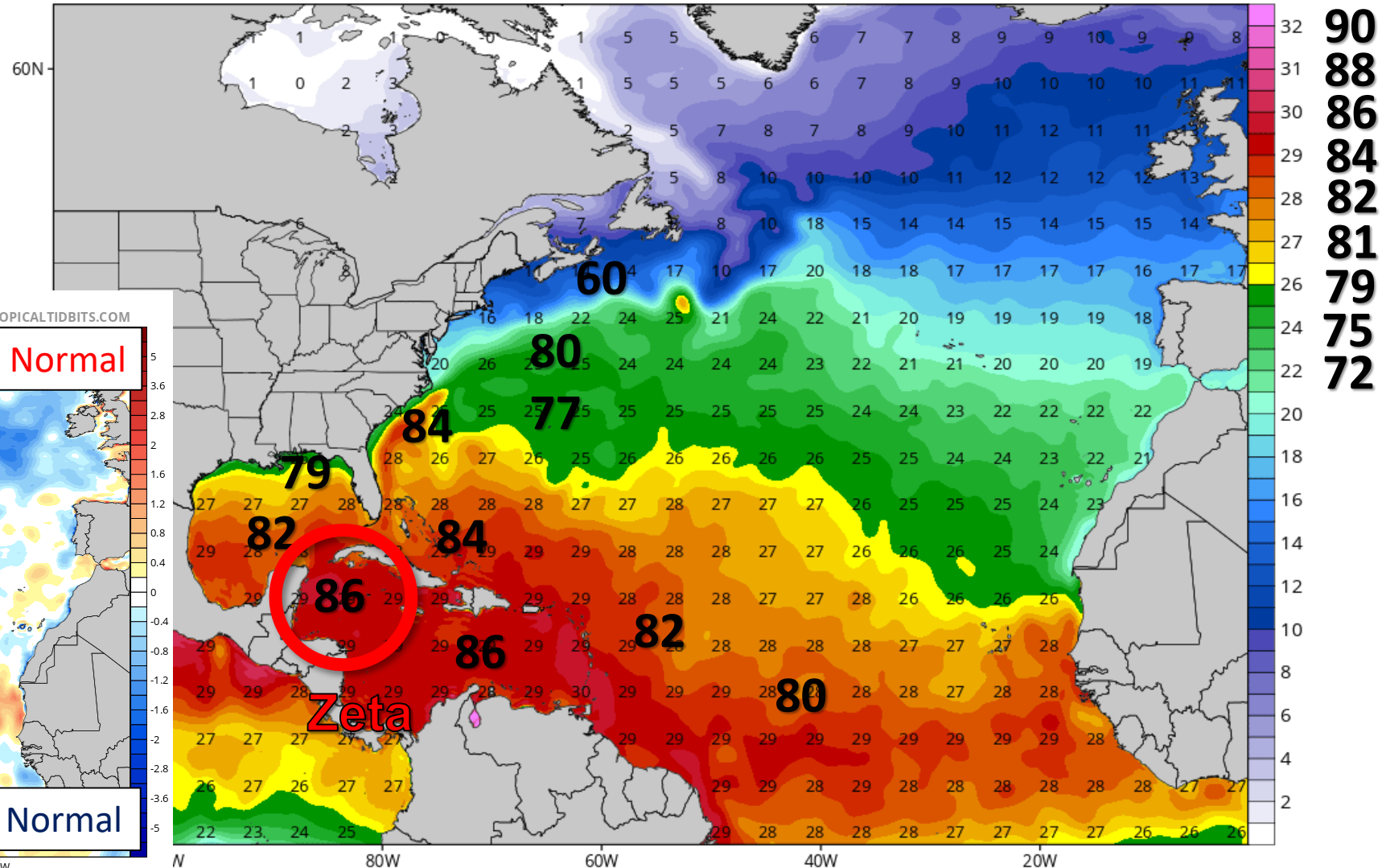


Sea Surface Temperatures & Anomalies

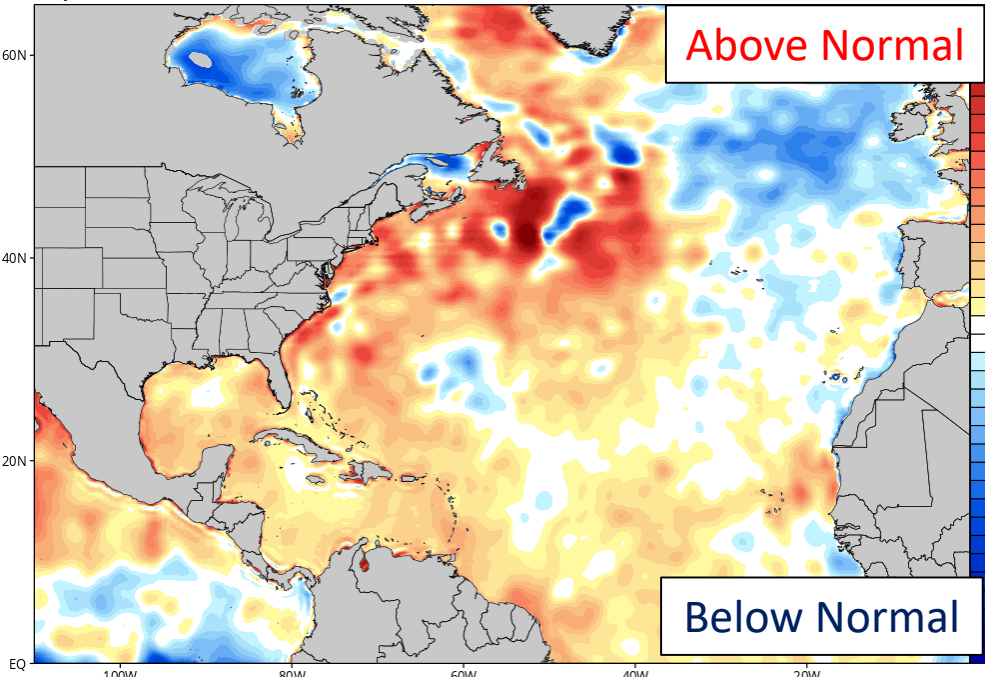
Is the ocean favorable for the system?

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

CDAS Sea Surface Temperature (°C)
Analysis Time: 06z Oct 26 2020



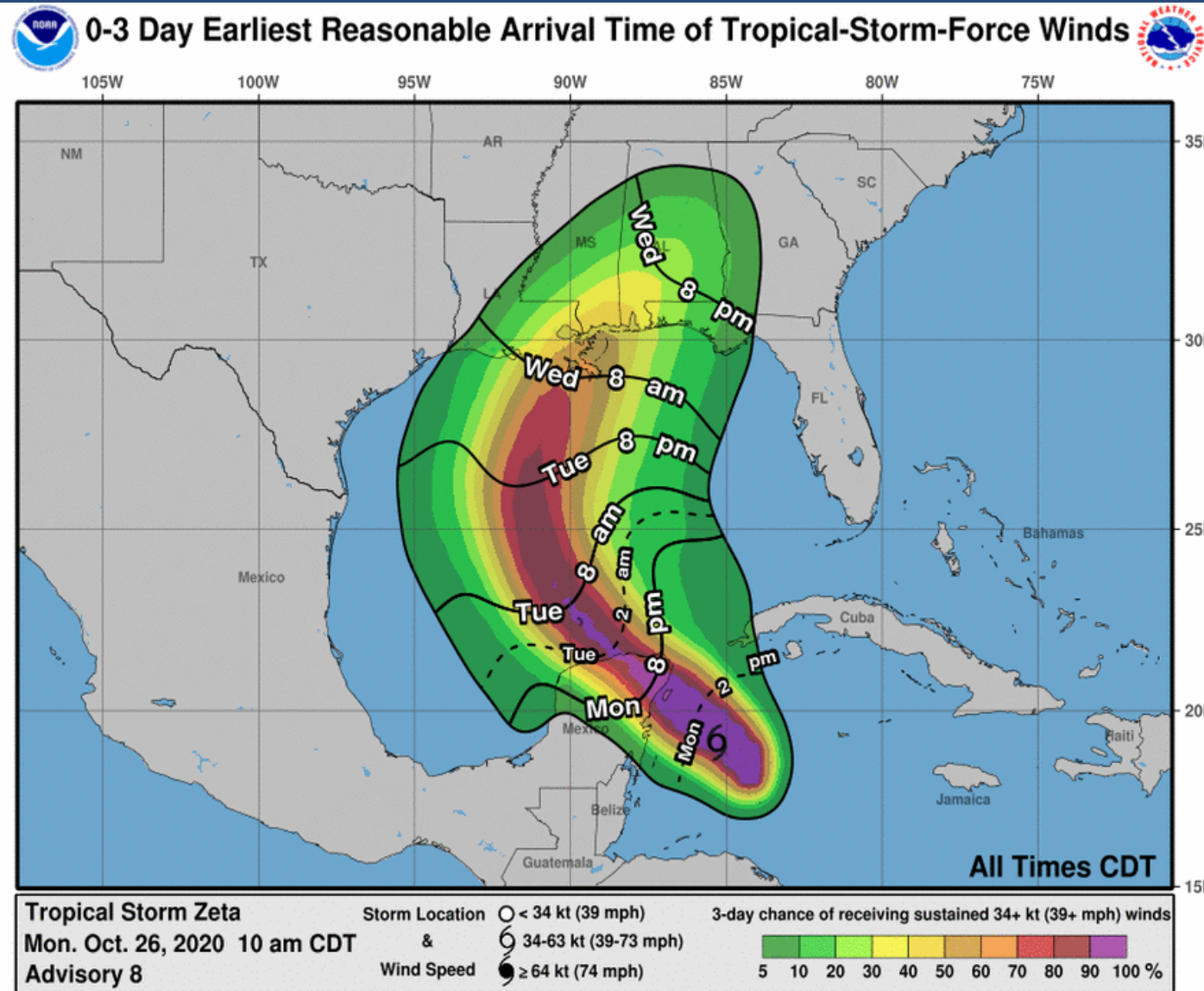
CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)
Analysis Time: 06z Oct 26 2020





Time of Arrival & Wind Speed Probabilities

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



Pensacola NAS: 29% (-4)

Pensacola: 27% (-4)

Milton: 25% (-5)

Destin: 20% (-4)

Panama City: 12% (-4)

Apalachicola: 9% (-2)

Tallahassee: 6% (-3)

Numbers in Parentheses are changes in probabilities since the last packet

Tropical storm force winds could begin Wednesday afternoon in the Panhandle, but would most likely begin overnight. The odds of tropical storm force winds remain similar to yesterday, near 1 in 4 in the western Panhandle.



Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Zeta

Advisory 8: 10:00 AM CDT Mon Oct 26, 2020



1. Hurricane conditions and dangerous storm surge are expected in portions of the northern Yucatan Peninsula of Mexico tonight and early Tuesday. Tropical storm conditions could occur over extreme western Cuba beginning later today.

2. Through Tuesday, heavy rainfall is expected from Zeta across the Yucatan Peninsula of Mexico, the Cayman Islands, and central to western Cuba. This rainfall may lead to flash flooding in urban areas. Between Tuesday night and Thursday, heavy rainfall is expected from portions of the central U.S. Gulf Coast into the southern Appalachians, and Mid-Atlantic States near and in advance of Zeta. This rainfall will lead to flash, urban, small stream, and minor river flooding.

3. Zeta is forecast to be at or near hurricane strength when it approaches the northern Gulf Coast on Wednesday, and there is an increasing risk of dangerous storm surge, wind, and rainfall impacts from Louisiana to the Florida Panhandle. Residents in these areas should monitor the progress of Zeta, as Hurricane and Storm Surge watches will likely be issued later today.



For more information go to hurricanes.gov



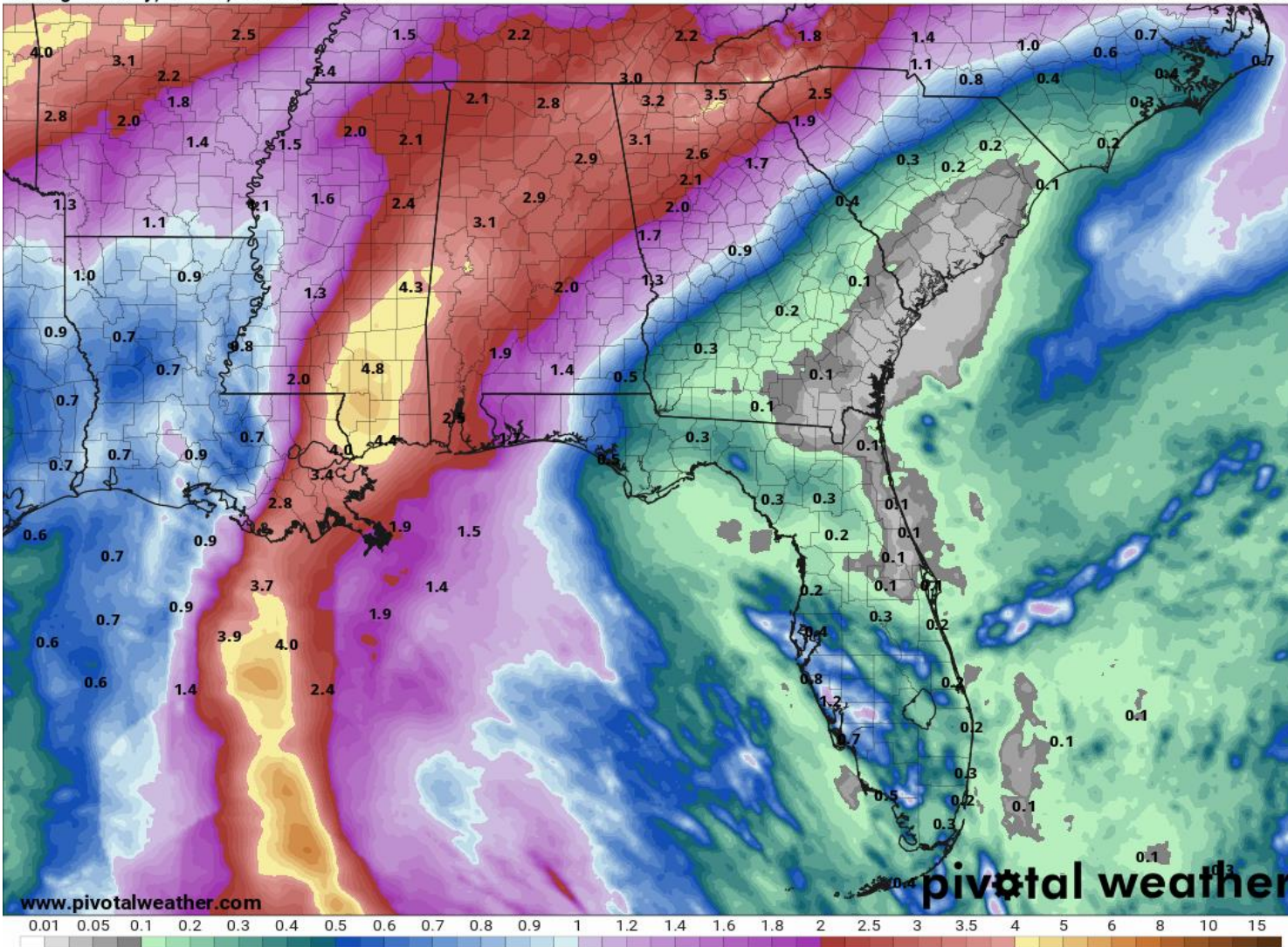
Rainfall Totals Next 5 Days

Ending 8 AM ET Saturday

120-Hour Precipitation (in)

Ending Saturday, Oct. 31, 2020 at 8 a.m. EDT

Init: Mon 2020-10-26 12z WPC



Rainfall totals of 1-2", locally higher, remain in the forecast today in South Florida.

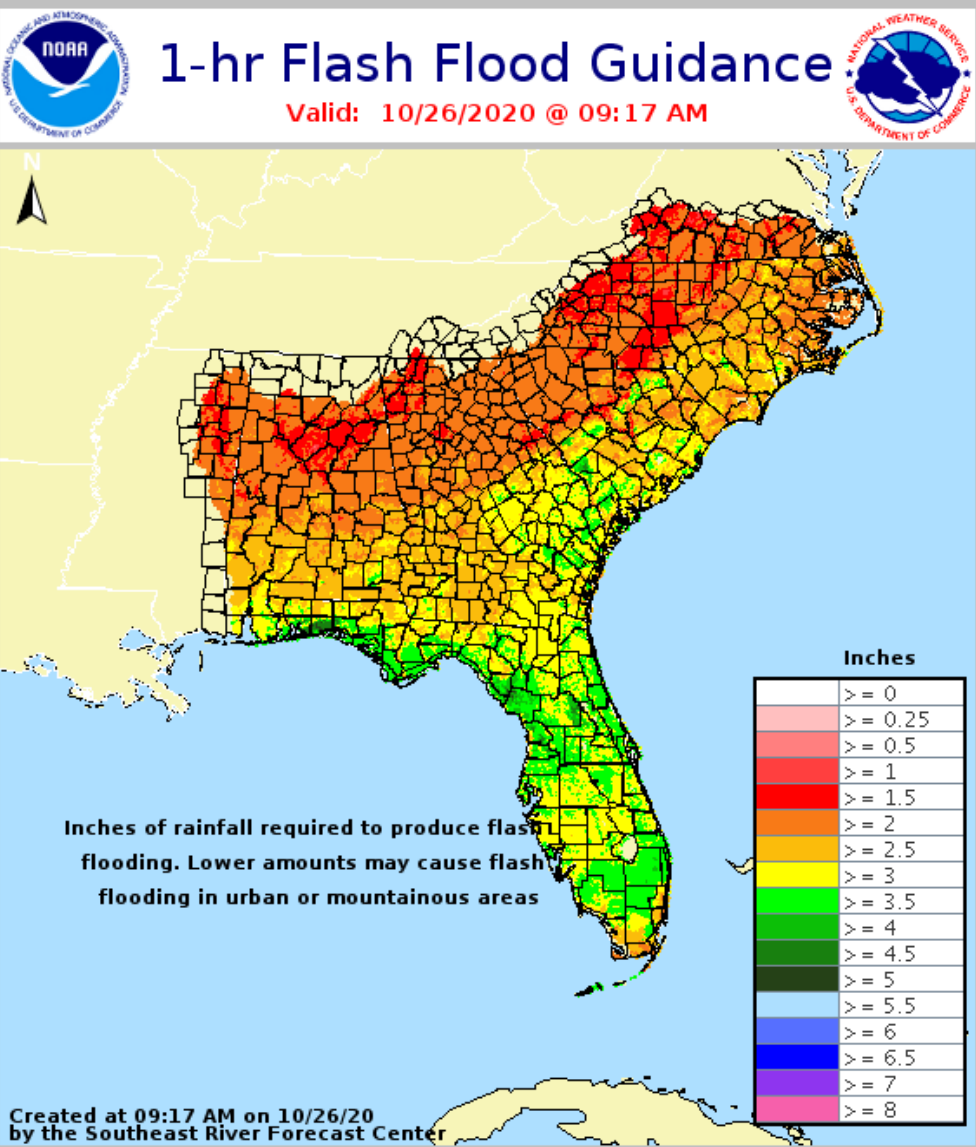
Most of the rain will be on Zeta's east side—meaning even a landfall west in Louisiana will bring heavy rainfall into the Panhandle.

However, Zeta will be moving quick. 1-3" of rain is currently expected across the Panhandle mid-week with locally higher amounts of 4-6".



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.

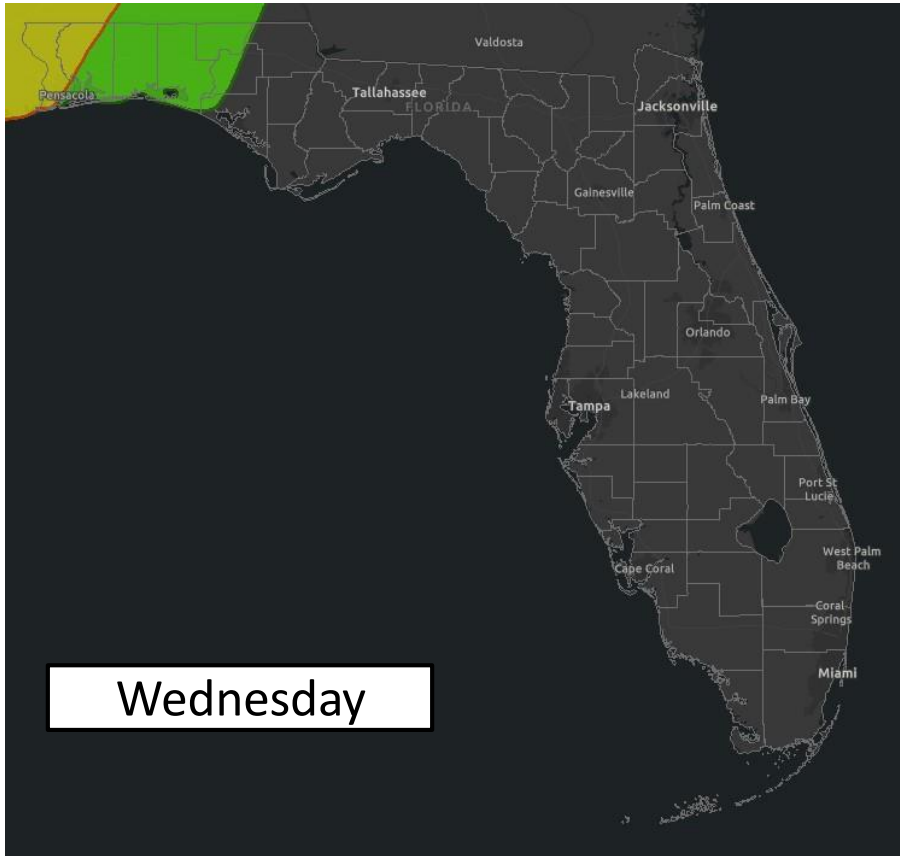
Soils remain super-saturated in these areas, and rainfall will more easily run off, causing flooding concerns.

Widespread rainfall totals over 4" would generally cause minor river flooding across the Panhandle.



Flash Flood Outlooks

From the Weather Prediction Center



Understanding WPC Excessive Rainfall Risk Categories				
No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
www.wpc.ncep.noaa.gov @NWSWPC	Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
Flash flooding near me?	Flash Flooding			
	NO Flash Flooding			
 WEATHER PREDICTION CENTER				

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

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

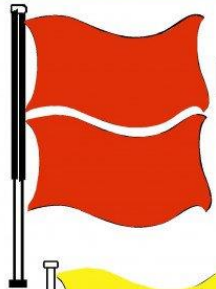
HIGH: > 50% **SLGT: 10%-20%**
MDT: 20%-50% **MRGL: 5%-10%**



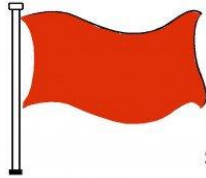
Rip Current Outlook

Today

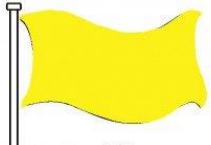
BEACH FLAG WARNING SYSTEM



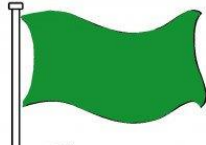
Double Red
Water Closed to
Public Use



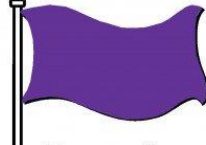
Red
High Hazard
(rough conditions,
such as strong surf
and or currents)



Yellow
Medium Hazard
(light surf and or
currents)

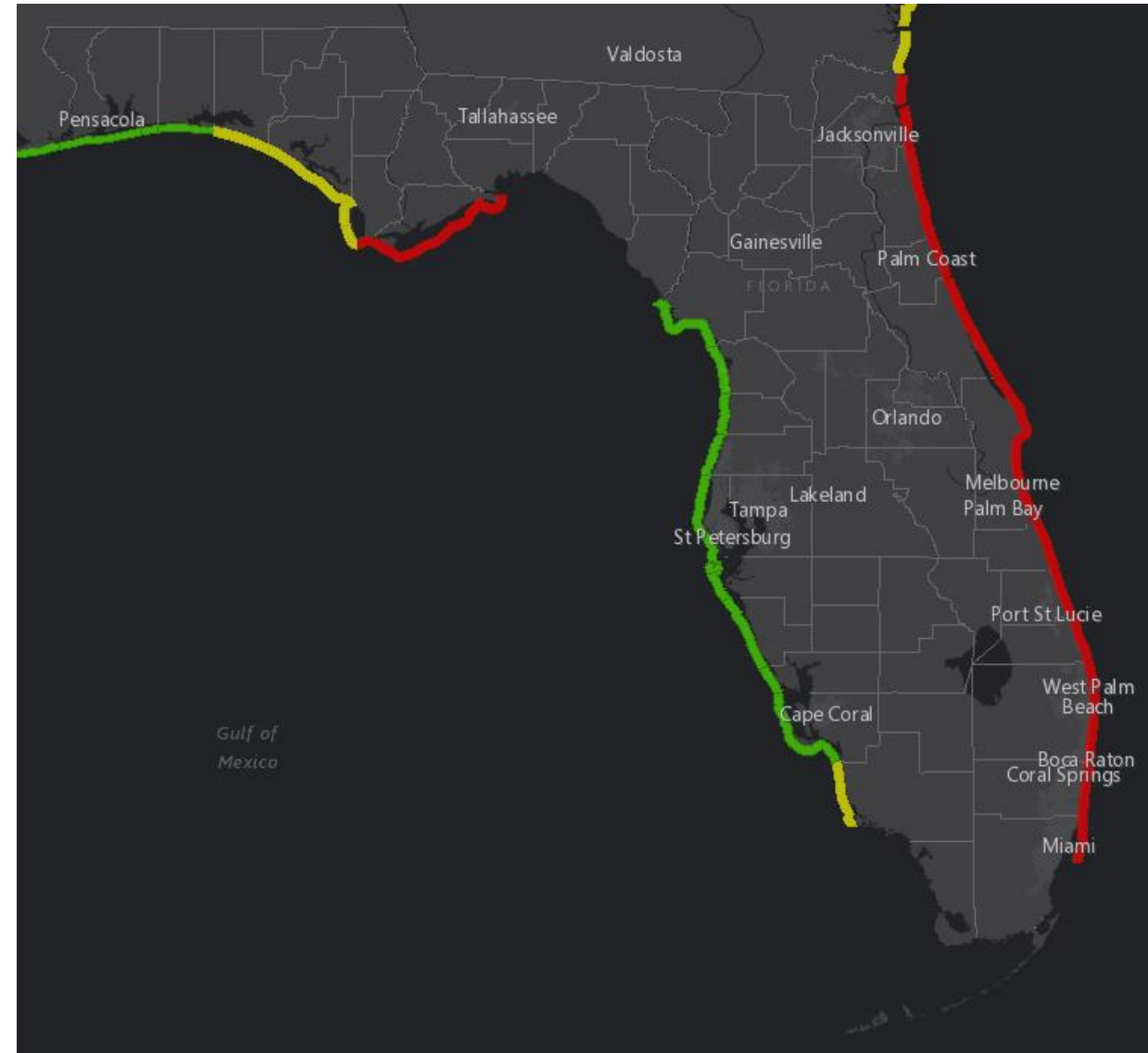


Green
Low Hazard
(calm conditions)



Purple
Marine Pest
(jellyfish, stingrays
& dangerous fish)

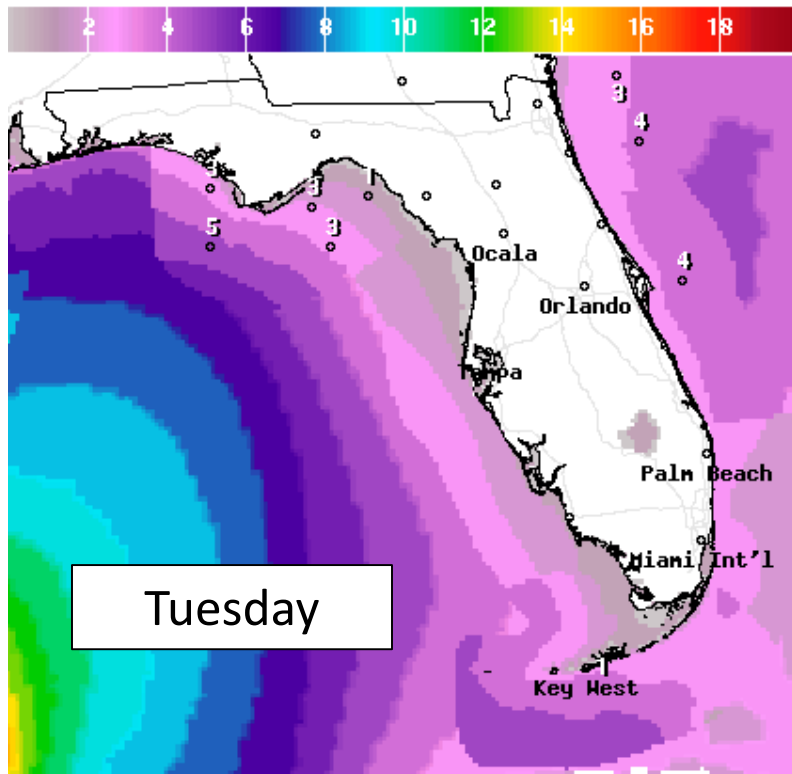
Long period swells from Epsilon will keep the rip current risk high at Atlantic beaches. The rip current risk along the Gulf Coast will increase by mid-week with breaking waves of 3-6' (possibly higher).





Forecast Wave Heights

Early This Week

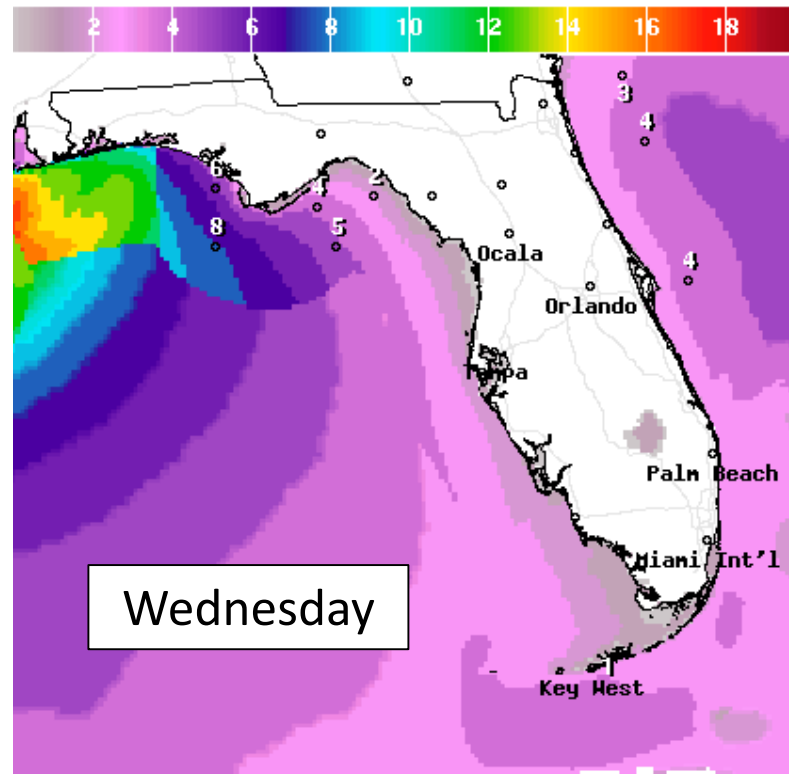


Wave Height(ft) Ending Tue Oct 27 2020 8PM EDT
(Wed Oct 28 2020 00Z)



National Digital Forecast Database

14z issuance Graphic created-Oct 26 10:47AM EDT

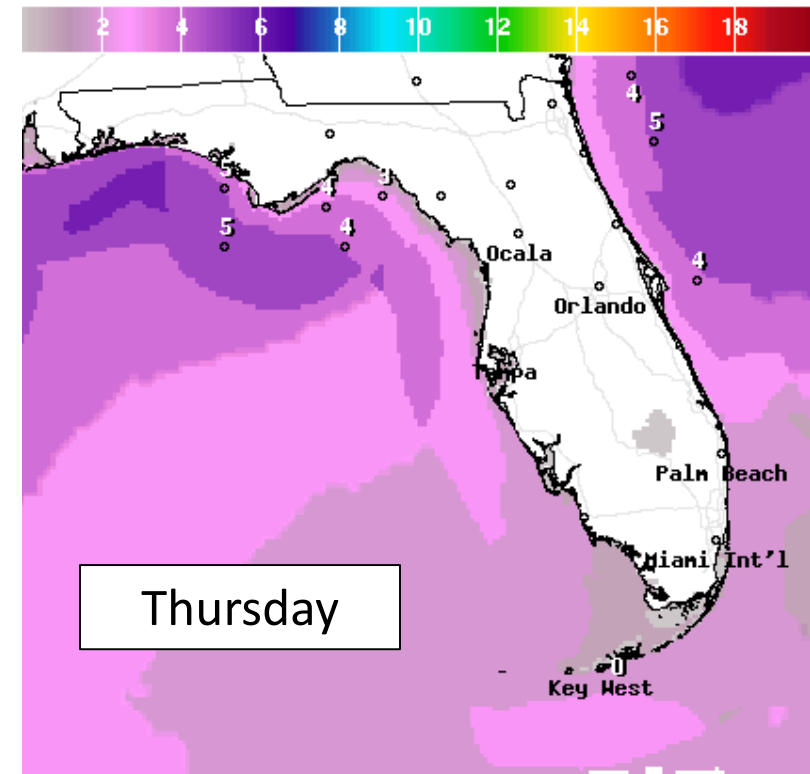


Wave Height(ft) Ending Wed Oct 28 2020 8PM EDT
(Thu Oct 29 2020 00Z)



National Digital Forecast Database

14z issuance Graphic created-Oct 26 10:48AM EDT



Wave Height(ft) Ending Thu Oct 29 2020 8PM EDT
(Fri Oct 30 2020 00Z)



National Digital Forecast Database

13z issuance Graphic created-Oct 26 9:54AM EDT



Wave heights will gradually build along the Panhandle with breaking waves of 3-6' by Tuesday and 4-8' on Wednesday. Wave heights could be over 10' in the western Panhandle. This will result in dangerous rip currents. Minor beach erosion is also likely with a few spots of more significant erosion possible in the western Panhandle.



Overall Summary

Tropical Storm Zeta

- Hurricane Hunters have found that Zeta remains disorganized, but is gradually getting stronger.
- The center is located about 140 miles southeast of Cozumel Mexico and moving to the northwest at 10 mph.
- Zeta has maximum sustained winds of 70 mph. Slow strengthening is forecast over the next 12 hours, and Zeta is forecast to be a hurricane tonight as it moves over the Yucatan.
- A turn towards the north and northeast is this forecast on Tuesday and Wednesday as the system weakens and approaches the central Gulf Coast.



Florida Outlook

Florida Outlook:

- The track has shifted slightly to the west since the last update.
- Tropical Storm Zeta poses a direct threat to the western Florida Panhandle mid-week, but the details are unclear.
- *Watches will likely be issued for parts of the Panhandle this afternoon.*
- Heavy rainfall is possible across the Panhandle and Tuesday Afternoon-Thursday. 1-3" of rain is likely, but locally higher amounts of 4-6" are possible. Flash flooding and minor river flooding are possible.
- Dangerous rip currents and building waves/beach erosion will be possible mid-week along Gulf Coast beaches.
- Minor storm surge, damaging winds, and isolated tornadoes are possible in the Florida Panhandle/Big Bend Wednesday; 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*. Zeta is forecast to be lopsided to the east at landfall.
- Anticipate changes in track and/or intensity over the next 24 hours!

The next briefing packet will be issued Monday 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



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State Meteorological Support Unit

Florida Division of Emergency Management

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