

TROPICAL UPDATE



8:00 AM EDT

Wednesday, October 7, 2020

Hurricane Delta

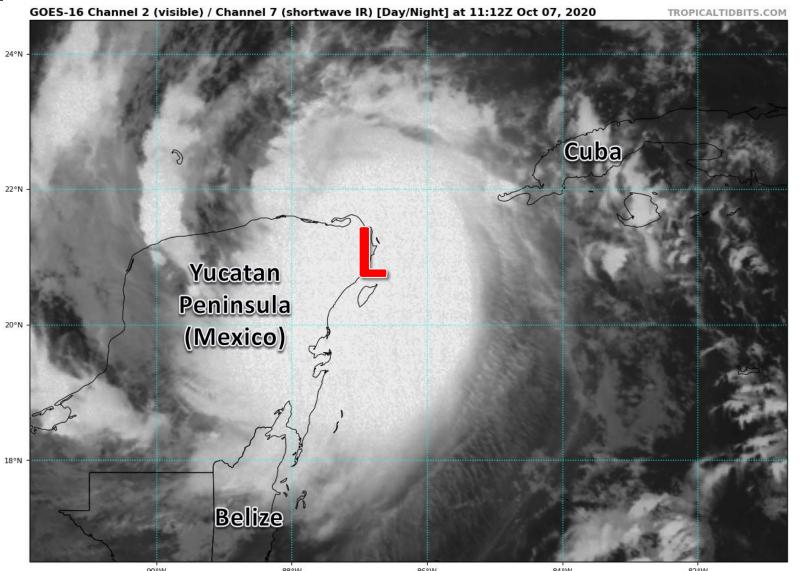
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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 Medium High Low United States KANS. TENN. OKLA. Dallas MISS. H TEXAS Jacksonville San Antonio COA. **Tropical Waves** Bahamas Wester Cuba Maurit Nouakchott Cape Verde Guadeloupe Senegal Martinique Barbados Trinidad Venezuela Paramaribo

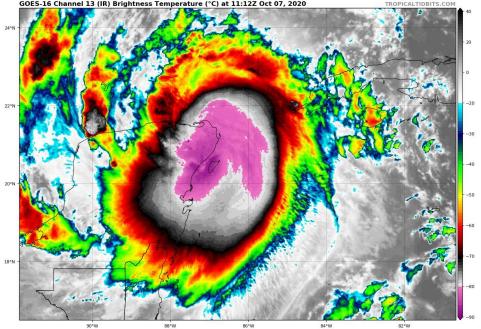


Satellite Imagery

Hurricane Delta – Western Caribbean



Delta continued rapidly strengthening last evening, with winds at one point of 145 mph. However, small circulations are fickle and more susceptible to rapid chances in intensity. Shear last night and now land interactions will allow for some weakening in the short term.





Official Forecast Track

From the National Hurricane Center – Hurricane Delta



- Delta's interaction with some wind shear and the Yucatan Peninsula has caused significant weakening. Winds are now down to 105 mph (Category 2)
- Delta is a small but powerful hurricane. Hurricane force winds only extend out 30 miles. However, the storm will likely grow in size once it reaches the Gulf of Mexico.
- The center of Delta is located about 35 miles west of Cancun, Mexico, and moving to the northwest at 17 mph.
- Delta is forecast to re-strengthen in the Gulf of Mexico into a Category 4 Hurricane and approach the Louisiana coastline Friday night. Only minor weakening is expected before landfall.

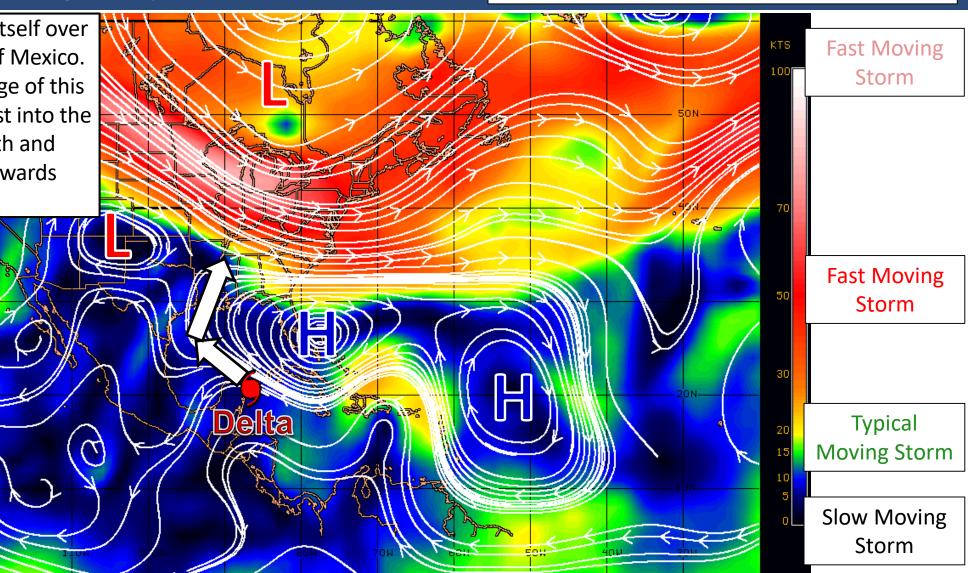


Steering Currents

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.

High pressure has established itself over Florida and the western Gulf of Mexico. Delta will move around the edge of this high pressure system: northwest into the Gulf of Mexico and the north and northeast later this week towards Louisiana.



Wind Shear

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.

Is the environment favorable for the systems?

Delta encountered some weak wind shear overnight. With small circulations, it does not take much wind shear to disrupt a **HIGH Shear** system. Conditions still appear favorable (Unfavorable) for intensification in the southern Gulf of Mexico before wind shear increases significantly near the Gulf Coast. **HIGH Shear** (Unfavorable) **MODERATE** Shear Delta (Neutral) **LOW Shear** (Favorable)

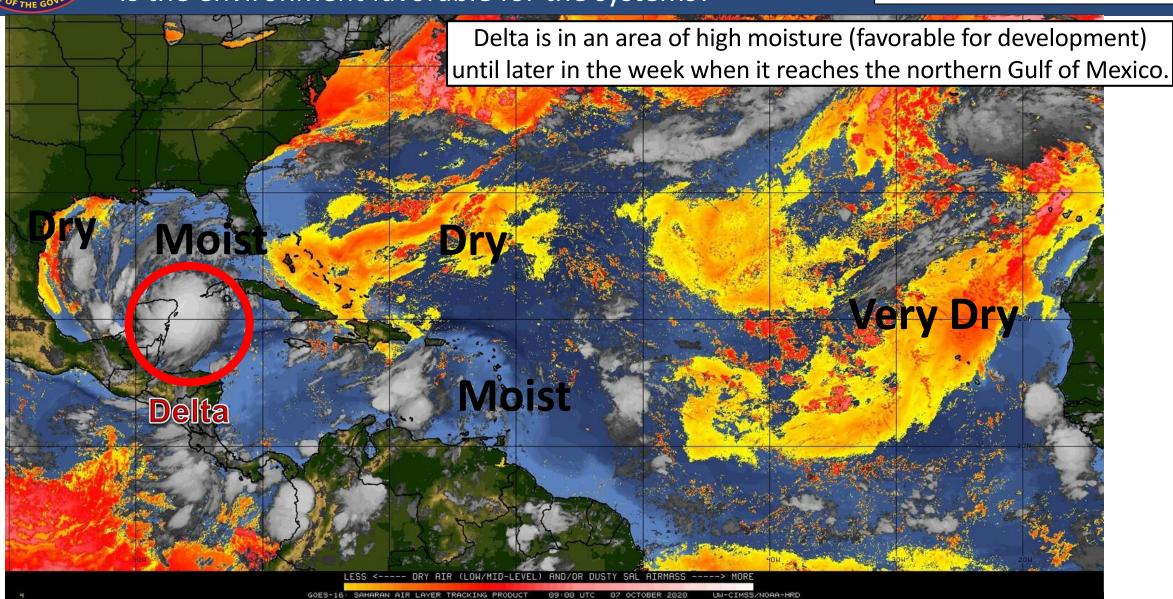
Increasing



Dry Air & Saharan Dust

Is the environment favorable for the systems?

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





Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

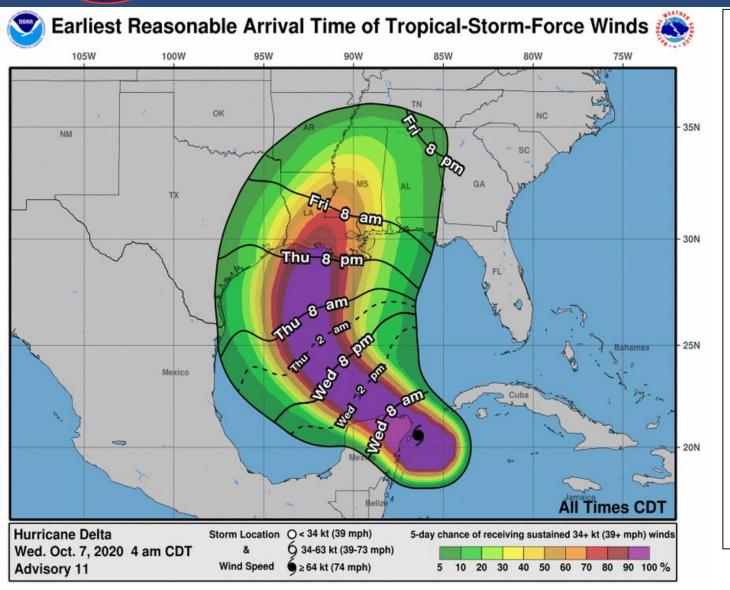
Below Norma

CDAS Sea Surface Temperature (°C) Water temperatures are supportive for Analysis Time: 00z Oct 07 2020 tropical development across the entire Caribbean, with very warm, deep water. 60N-The recent stretch of storms and cold fronts has cooled waters in the northern Gulf of Mexico, but they remain warm enough to support a hurricane. CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology) **Above Normal**



Time of Arrival & Wind Speed Probabilities

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



Apalachicola: 3% (-3)

Panama City: 6% (-3)

Destin: 11% (-2)

Pensacola: 17% (-3)

Pensacola NAS: 20% (-3)

Numbers in parentheses denote change in probability since the last briefing packet.

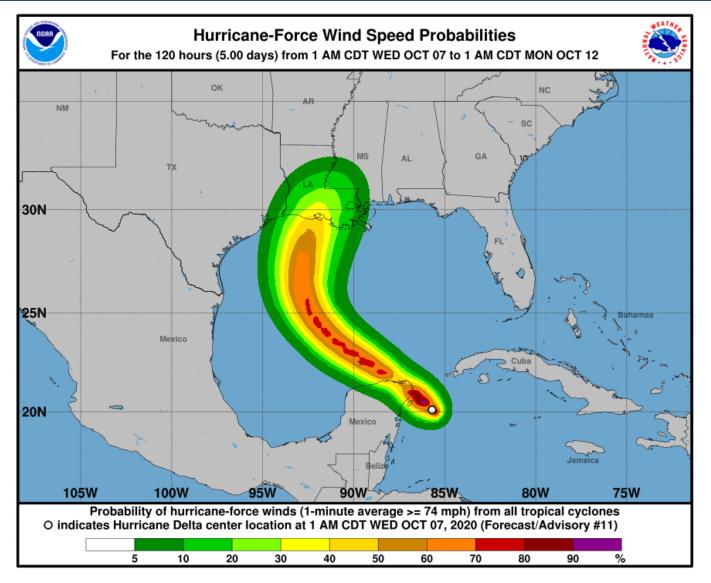
In the western Panhandle, if winds were to occur, they are most likely to start Friday afternoon. However, they could start as early as Friday morning.

Probabilities have decreased slightly with the continued westward shift.



Hurricane Wind Speed Probabilities

Probabilities of <u>Sustained</u> Hurricane Force Winds (>74 mph)



Pensacola NAS: 1% (-1)

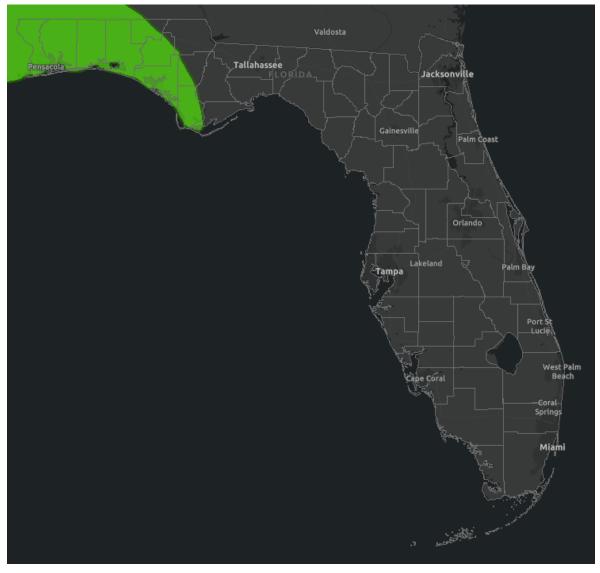
Numbers in parentheses denote change in probability since the last briefing packet.

The current odds of hurricane force winds in Florida are near 0 percent.



Flash Flood Outlook for Thursday

From the Weather Prediction Center (LINK)



Rain bands could begin impacting the western
Panhandle on Thursday. Some of the heavier rain could produce localized street and urban flooding.

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



7.00

5.00

4.00

3.00

2.50

2.00

1.50

1.25

1.00

0.75

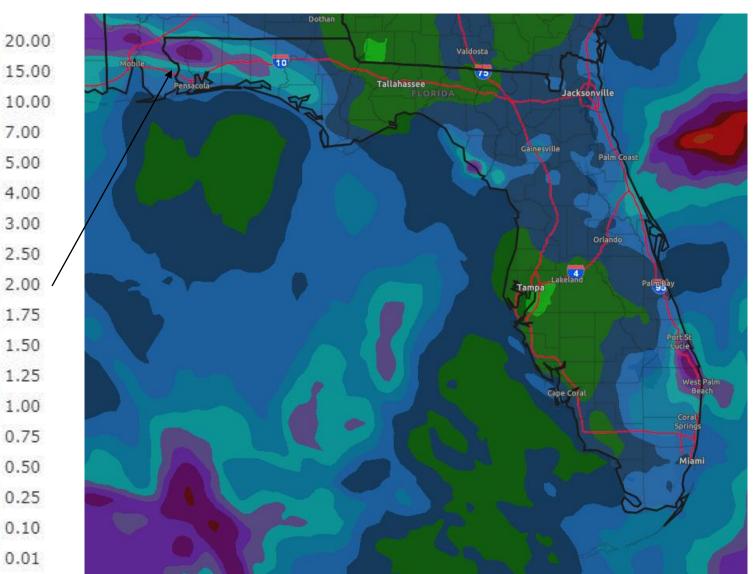
0.50

0.25

0.10

0.01

Rainfall Totals Next 7 Days



- Locally heavy rainfall in the Peninsula each afternoon.
- Heavy rainfall is possible Friday-Saturday in the western Florida Panhandle as Delta makes landfall and moves inland across Mississippi and Alabama (2-3").
- This would result in at least an isolated flash flood threat.



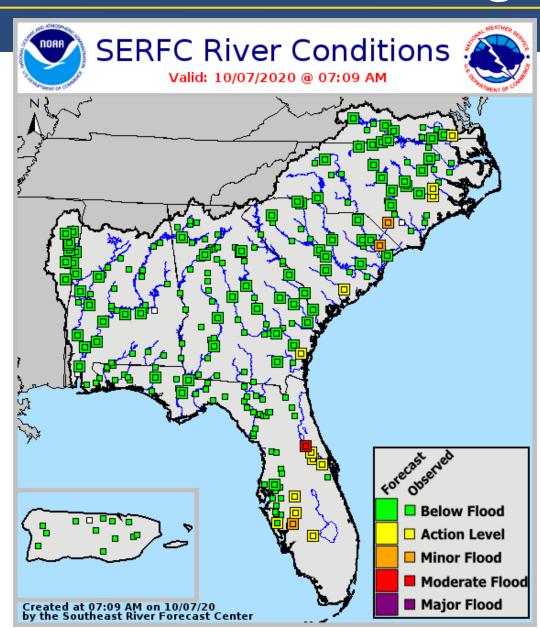
Current & Forecast River Flooding

Southeast River Forecast Center

Rivers Currently in or Forecast to Reach Flood Stage:

- St. Johns River at Astor- Moderate
- <u>Peace River at Arcadia</u>- <u>Minor</u>
- Minor coastal flooding at high tide in Northeast Florida, including the tidal St. Johns River and its tributaries.
- Additional river flooding is not forecast in the Peninsula from forecast rainfall totals.
- If heavier rainfall occurs, minor river flooding may occur in the western Panhandle.

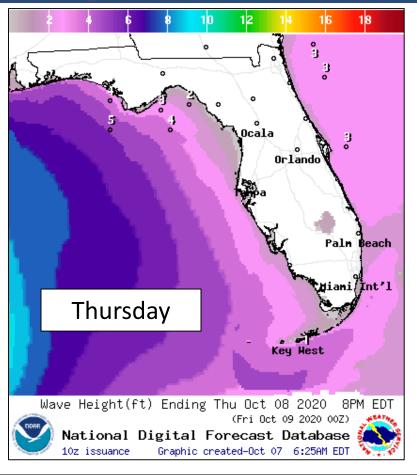
More details on river levels available at the Southeast River Forecast Center website.

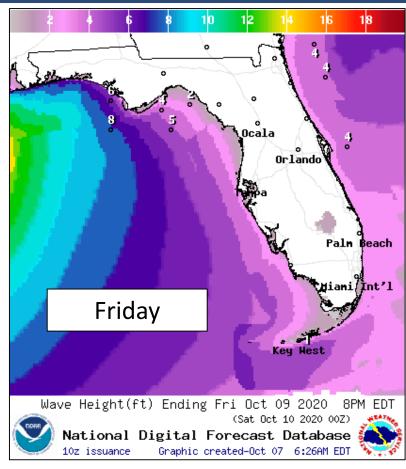


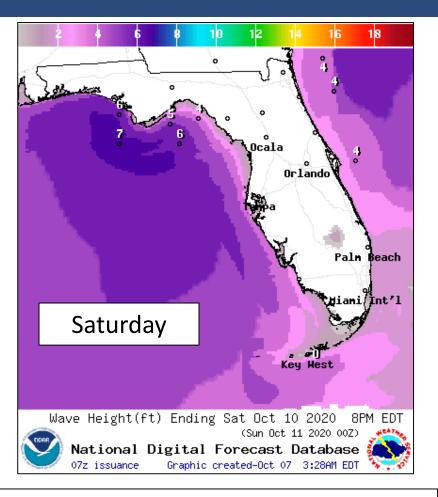


Forecast Wave Heights

Late Week – Hurricane Delta



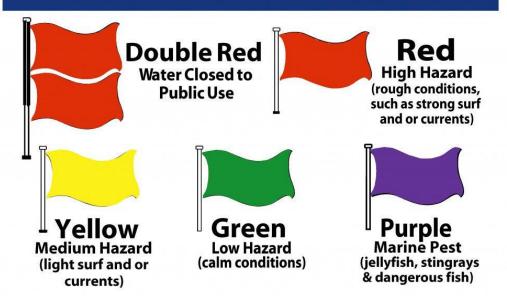




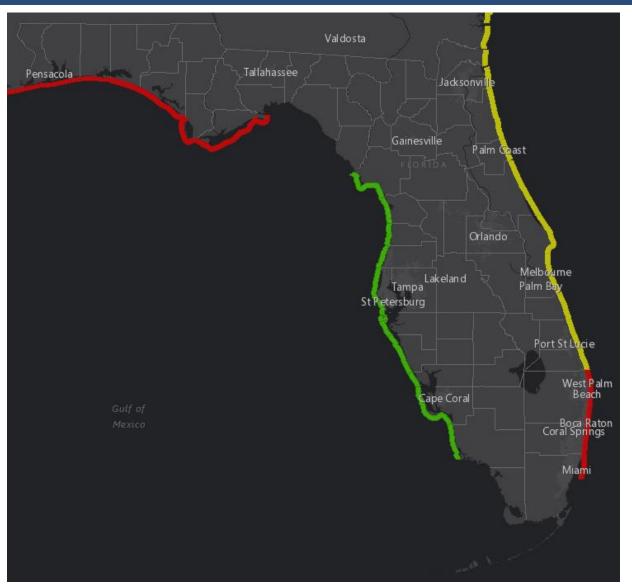
Wave heights will increase in the Gulf of Mexico starting on Thursday from Delta, reaching 6-10' in the Panhandle this weekend. High surf will create beach erosion and minor coastal flooding, particularly in locations that experienced significant beach/dune damage from Hurricane Sally a few weeks ago. Swells will also impact the West Coast this weekend.



BEACH FLAG WARNING SYSTEM



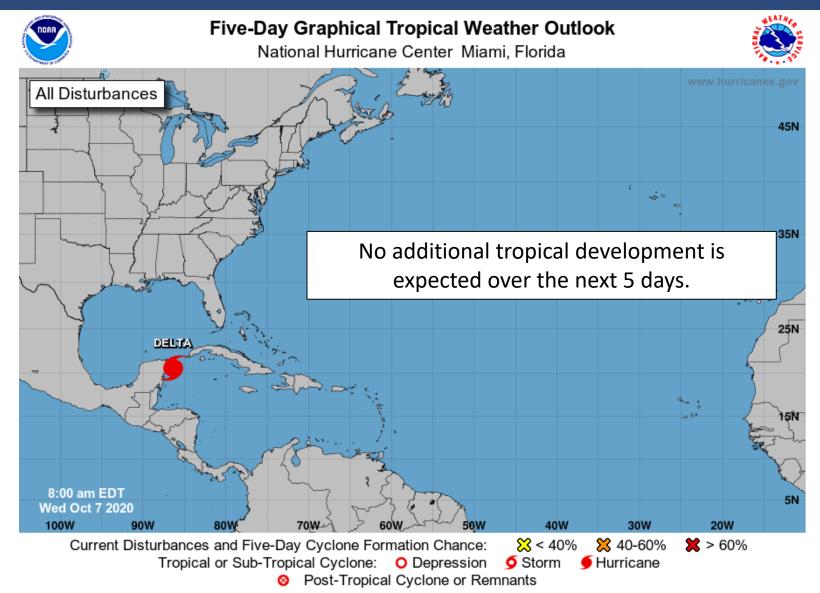
Swells from Delta along the Gulf Coast and breezy northeast winds along the East Coast will elevate the rip current risk this week.





Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days (LINK)





Florida Outlook

Florida Outlook:

- The track forecast remains centered on Louisiana. However, some direct impacts to the Florida Panhandle could still be possible later this week from Delta, and the forecast should continue to be monitored closely.
- While confidence is highest and there has been consistency on a Louisiana landfall, the average track error at Day 3 is ~110 miles and the forecast cone takes this into account.
- A landfall in southeastern Louisiana would be needed to bring more significant impacts to the Panhandle.
- Changes in the track forecast are possible over the next couple of days as Delta moves over the Yucatan, interacts with a cold front and wind shear, and experiences rapid changes in intensity.
- Swells from Delta will result in a high rip current risk at Gulf Coast beaches into this weekend.
- High surf of 6-10' in the Panhandle may result in significant beach erosion and some overwash in locations with damaged dune lines from recent Hurricane Sally.
- Direct impacts to the Florida Panhandle remain possible- including minor to isolated moderate storm surge, strong wind gusts, heavy rainfall, and isolated tornadoes. However, it is too early to determine the extent of these impacts. The further west the storm tracks, the less the impacts to Florida.
- If winds were to arrive in the Panhandle, it would not be until sometime Friday afternoon.

The next briefing packet will be issued this afternoon 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:

Cameron Young, Assistant State Meteorologist

Cameron.Young@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

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