

TROPICAL UPDATE



5:00 PM EDT Tuesday, October 6, 2020 Major 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.



Satellite Imagery Hurricane Delta – Central Caribbean

GOES-16 Channel 2 (visible) Reflectance at 18:55Z Oct 06, 2020

FDEM



Delta continued to rapidly strengthen today and has a small but well-defined core. It has a tiny, 4 mile wide eye that is not visible in satellite imagery. The small size of the system makes it easier to intensify and periods of rapid intensification may continue tonight.



Official Forecast Track

From the National Hurricane Center – Hurricane Delta



- Delta continued to rapidly strengthen today into a Major Hurricane. Delta is now a Category 4 Hurricane with maximum sustained winds near 145 mph.
- 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 200 miles east-southeast of Cozumel, Mexico, and moving to the west-northwest at 17 mph.
- Additional strengthening is possible up until landfall tonight in the Yucatan Peninsula.
- 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 developed east of Florida and in the southwest Atlantic. 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

Is the environment favorable for the systems?

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.

Delta is experiencing minimal wind shear and is in a very favorable environment. This favorable environment will continue until the system reaches the northern Gulf of Mexico later in the week where wind shear will increase.



Dry Air & Saharan Dust

Is the environment favorable for the systems?

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

Delta is in an area of high moisture (favorable for development) until later in the week when it reaches the northern Gulf of Mexico.



Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Caribbean, with very warm, deep water. 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.

Analysis Time: 12z Oct 06 2020



Time of Arrival & Wind Speed Probabilities

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



Tallahassee: 4% (-6) Apalachicola: 6% (-8) Panama City: 9% (-11) Destin: 13% (-15) Pensacola: 20% (-16) Pensacola NAS: 23% (-16)

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 night or early Saturday morning. However, they could start as early as Friday afternoon along the coast. Probabilities have decreased with the westward shift.



Hurricane Wind Speed Probabilities

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



Pensacola NAS: 2% (-5)

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

The current odds of hurricane force winds in Florida are very low (less than 5%).



Hazard Outlook

From the Weather Prediction Center



Heavy rainfall will be possible late week in the Panhandle associated with moisture from Hurricane Delta.

FDEM CRITICE OF THE GOVERNOR

Current & Forecast River Flooding

Southeast River Forecast Center

Rivers Currently in or Forecast to Reach Flood Stage:

- <u>St. Johns River at Astor</u>- Moderate
- <u>Peace River at Bartow</u>- Minor
- <u>Peace River at Arcadia</u>- Minor
- 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.
- Minor river flooding is possible early next week in the Panhandle.

More details on river levels available at the <u>Southeast River Forecast Center website.</u>





Rainfall Totals Next 7 Days

ill Change Based on Track Shifts – Based on Perfect Forecast into LA – Locally Higher Totals*



- 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.

Forecast Wave Heights

Late Week – Hurricane Delta



Wave heights will increase in the Gulf of Mexico starting on Thursday from Delta, reaching 6-12' 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.



Rip Current Outlook



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)

FDE





Florida Outlook

Florida Outlook:

- The track forecast has shifted west and remains centered on Louisiana. However, some direct impacts to the Florida Panhandle are 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 4 is ~150
 miles and the forecast cone takes this into account.
- A landfall near or east of New Orleans 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 interacts with the remnants of Gamma, interacts with an approaching cold front, makes landfall on the Yucatan Peninsula, 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 6-12' 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 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 or Friday night.

The next briefing packet will be issued Wednesday morning with the 8AM advisory. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>.



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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