

### 11 AM EDT

# Tuesday, July 23, 2019 Remnants of Tropical Depression #3 & Gulf of Mexico Low (20%)

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 <u>www.hurricanes.gov</u>.

## **Atlantic Basin Satellite Image**

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



### **Steering Currents**

KTS High pressure over the central and western Atlantic has been steering TD #3 to the west and northwest. As a cold front approaches Florida (pink line) and the system gets to the western edge of the high pressure system, it will turn northward and merge with the cold front tomorrow. The cold front will stall across the Gulf of Mexico late week.

CIMSS ENV STEERING PRODUCT: 700-850 HPA LAYER (FOR TO MSLP RANGE: 1000-1010 HPA) 0600 UTC 23JU.19



GOES-EAST 24 HOUR WIND SHEAR TENDENCY PRODUCT

0900 UTC

UW-CIMSS

23JUL19

MeIDAS

#### Wind Shear (shaded) and Wind Shear Tendencies (contoured)

### **Current Sea Surface Temperatures**



#### **Dry Air & Saharan Dust**



GOES-16 Channel 2 (visible) Reflectance at 14:02Z Jul 23, 2019



### Ex-TD #3 Satellite Image

The remnants of Tropical Depression #3 are small with most of the showers and thunderstorms (green circle) displaced to the east of what was the center (red circle). Skies are mostly sunny across the Florida Peninsula.

26°N

32°N

30°N

28°N

84°W

82°W

80°W

78°W

76°W



### Florida Radar (As of 10:05 AM EDT)

Showers and thunderstorms associated with a cold front are developing across the Florida Panhandle. Typical summertime thunderstorms will develop across the Florida Peninsula later today. All bands of showers and thunderstorms associated with remnants of TD #3 remain offshore.







#### Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





### Forecast Weather Maps (fronts)



A cold front and an associated area of low pressure will stall out across the northern Gulf of Mexico late Wednesday and Thursday. As the system meanders over water it will may gradually acquire tropical characteristics. This system will eventually drift northeast along the front late this week. The main impact from this system, regardless of development, is heavy rainfall. Heavy rainfall begins today in the Panhandle and spreads into Northeast Florida mid-week. Significant development is not forecast at this time.

More details will become available later this week.

<u>Cumulative</u> rainfall totals over the next 5 days will be 2-4" in the eastern Big Bend, Northeast Florida, and along the Nature Coast. Locally higher totals over 6" can be expected. Lesser amounts are forecast elsewhere.

The Manatee River will crest back in minor flood stage on Wednesday. No other river flooding is forecast at this time.



### **Cumulative Rainfall Totals Next 5 Days**







#### 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 flooding near me? NO Flash Flooding	2 + 2 + 3	(M, G, f)	CENTRA AND	$235.5$ $\odot$
WEATHER PREDICTION CENTER				



- There is a slight risk of excessive rainfall in the Panhandle that could result in localized flash flooding, mainly in urban areas
- There is a marginal risk of excessive rainfall that could lead to some isolated, minor flooding in the eastern Big Bend, Northeast Florida, and the Nature Coast Wednesday & Thursday

## Rainfall Departure from Normal for Past 2 Weeks

- Much of the Panhandle is in a rainfall deficit and capable of absorbing more rainfall.
- Drought conditions continue across inland areas of the Panhandle.
- Heavy rain over the I-75 corridor has saturated soils and made this region more susceptible to flooding



### National Water Model Stream Flow Anomalies



With the exception of the Alafia River and Manatee River in West-Central Florida, all other Florida river systems are generally near or below normal for streamflow this time of year.

A handful of river gauges in the Panhandle are in lowwater stage.

In general, widespread rainfall totals will need to be over 3-4" to cause river flooding.





### Flash Flood Potential Markers

- In general, flash flooding could occur in the Panhandle today if heavy rain in excess of 4-6" occurs in a short amount of time or 6-8" within a 24 hour period.
- The I-75 corridor is more vulnerable to flash flooding at this time and could take as little as 3-5" to produce issues.

### Summary

- At 11AM EDT, Tropical Depression 3 dissipated, with the remnants located about 100 miles east of Cape Canaveral, FL.
- The remnants are moving north at 17 mph and will turn northeast later today as it merges with a cold front.
- In the Northern Gulf of Mexico, an area of low-pressure may form along a stalled front late Wednesday or early Thursday.
- There is a 0% chance of development in the next 48 hours, but a 20% chance of development from days 3-5.

#### Florida Outlook:

- No impacts are expected from the remnants of Tropical Depression #3
- With the stalled cold front over North and Central Florida this week, rain chances will remain elevated.
- And isolated risk of flash flooding is forecast in the Panhandle today and in the eastern Big Bend, Northeast Florida, and the Nature Coast Wednesday and Thursday. Main impacts will be to urban and low-lying areas.
- Widespread rainfall amounts across the eastern Big Bend, Northeast Florida, and the Nature Coast of 2-4" over the next 5 days (locally higher amounts)
- River flooding is not forecast at this time, but rainfall amounts over 4" will need to be monitored.
- Like most summer afternoons, a few thunderstorms each day could be strong to severe with gusty winds, frequent lightning, and heavy rainfall.
- More details on the potential for tropical development in the Gulf of Mexico will become available in the coming days. Significant development is not expected.

Another briefing packet will be provided Wednesday morning. 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 <u>Michael.Spagnolo@em.myflorida.com</u> State Meteorological Support Unit Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at <u>https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic\_id=SERT\_Met\_Tropics</u>. Other reports available for subscription are available at <u>https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true</u>