



TROPICAL UPDATE



9 AM EDT

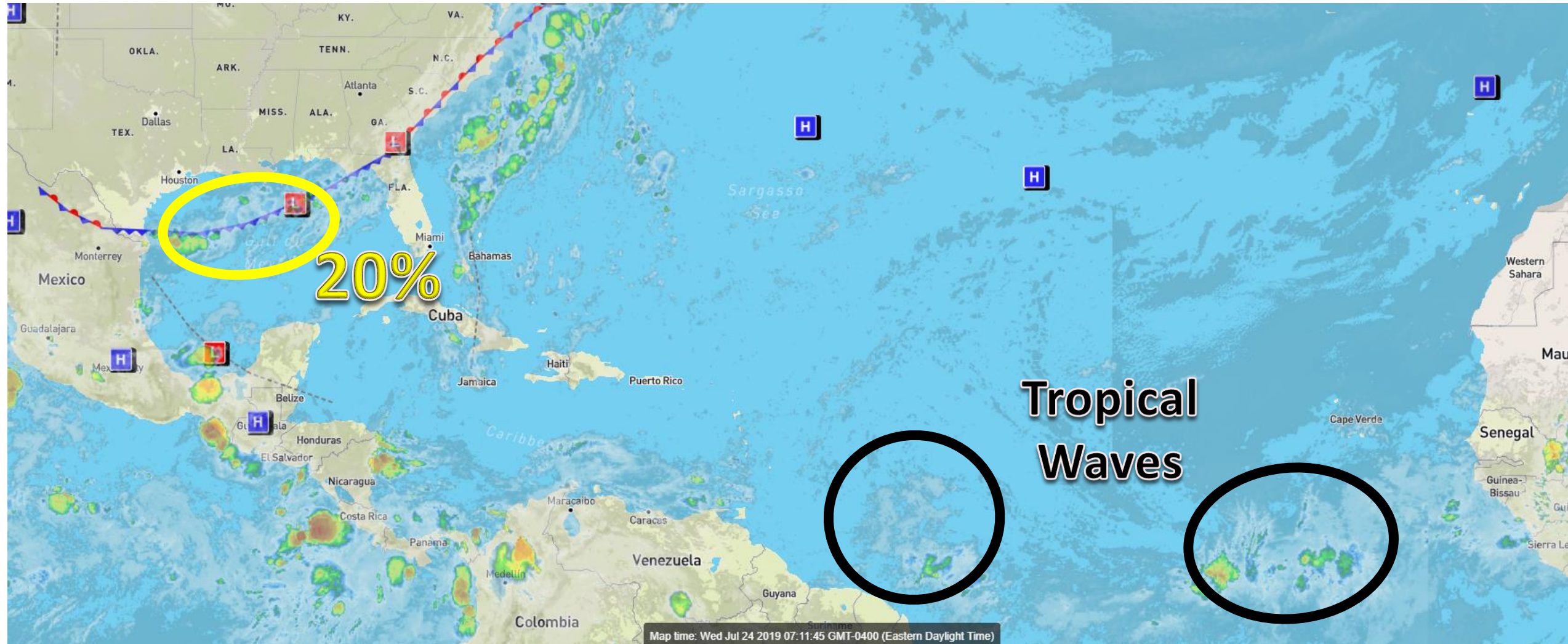
Wednesday, July 24, 2019

Gulf of Mexico Low (20%)

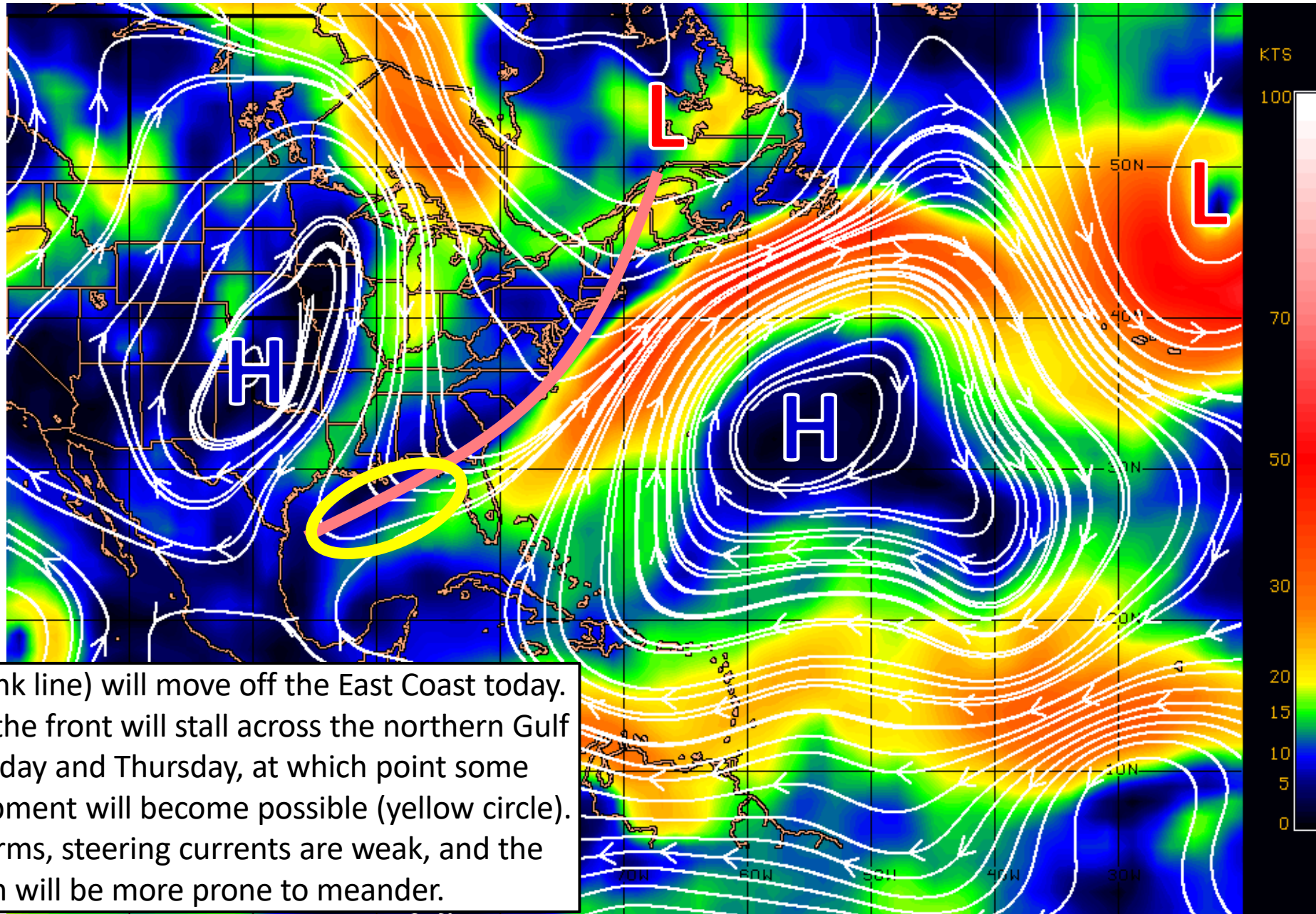
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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 www.hurricanes.gov.

Atlantic Basin Satellite Image

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

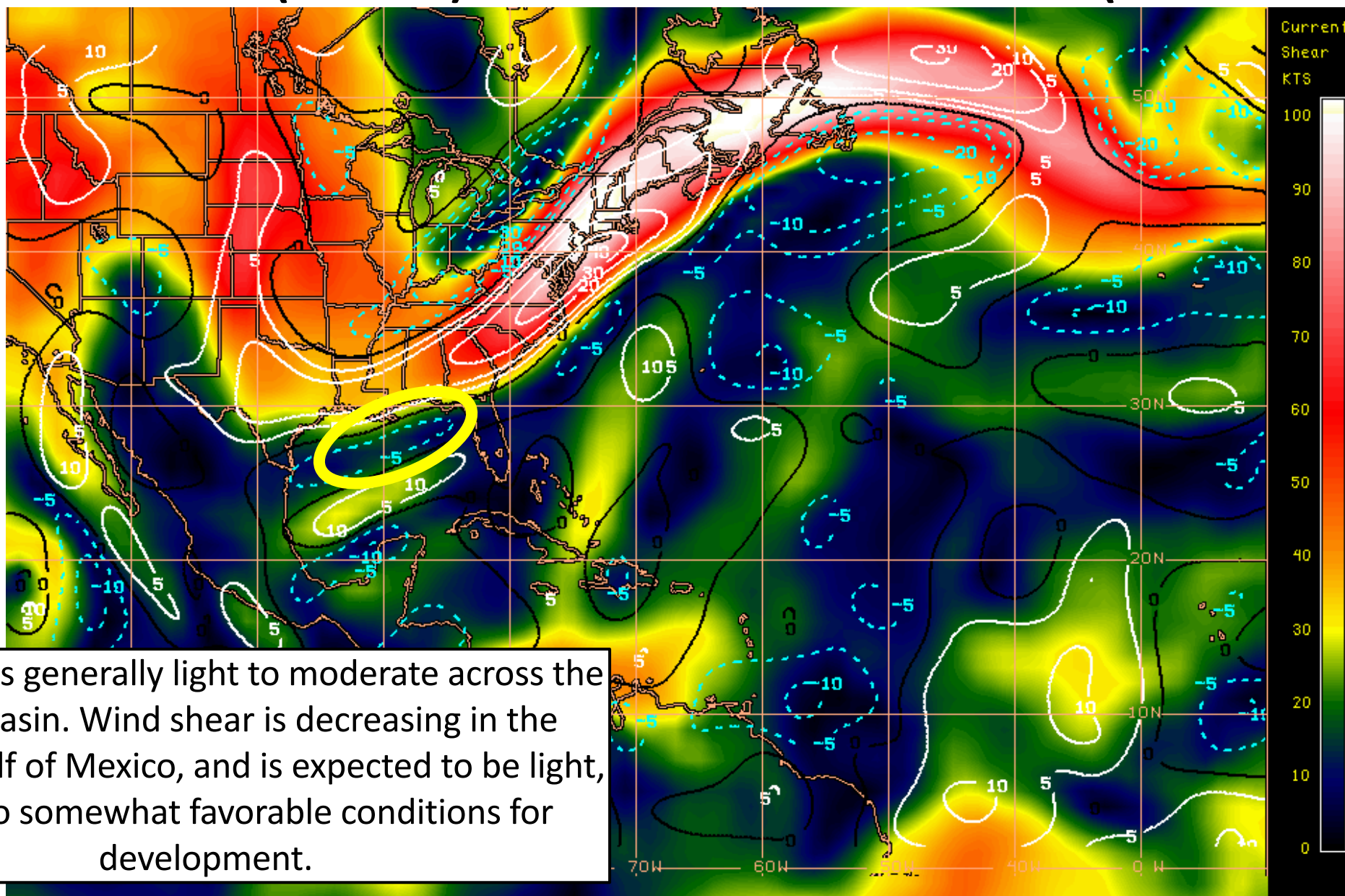


Steering Currents



A cold front (pink line) will move off the East Coast today. The tail end of the front will stall across the northern Gulf of Mexico today and Thursday, at which point some tropical development will become possible (yellow circle). If anything forms, steering currents are weak, and the system will be more prone to meander.

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



Wind shear is generally light to moderate across the Atlantic basin. Wind shear is decreasing in the northern Gulf of Mexico, and is expected to be light, leading to somewhat favorable conditions for development.

Shear Tendency (KTS) Over Past 24 Hours: Increasing — Decreasing ----

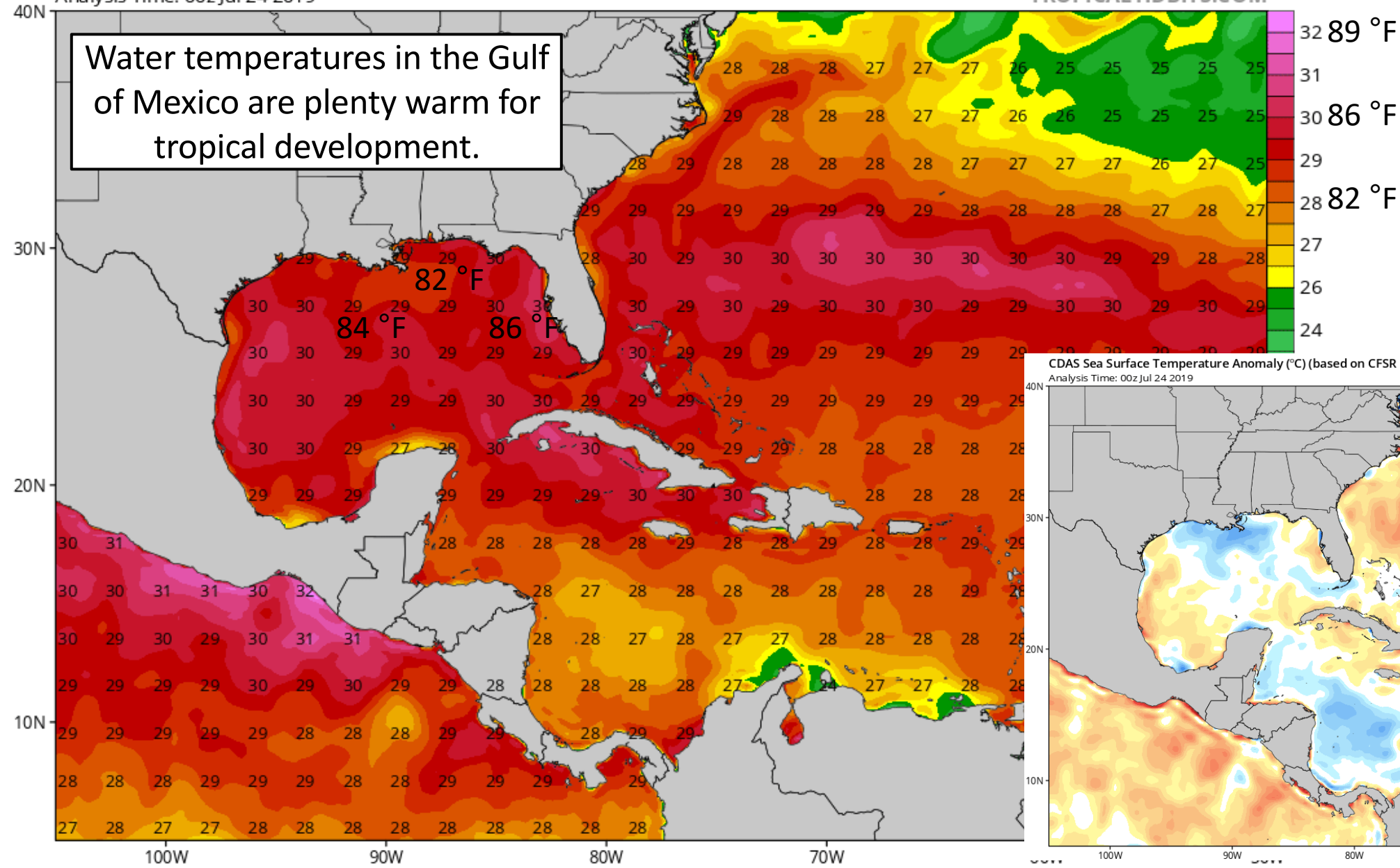
Current Sea Surface Temperatures

CDAS Sea Surface Temperature (°C)

Analysis Time: 00z Jul 24 2019

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Water temperatures in the Gulf of Mexico are plenty warm for tropical development.

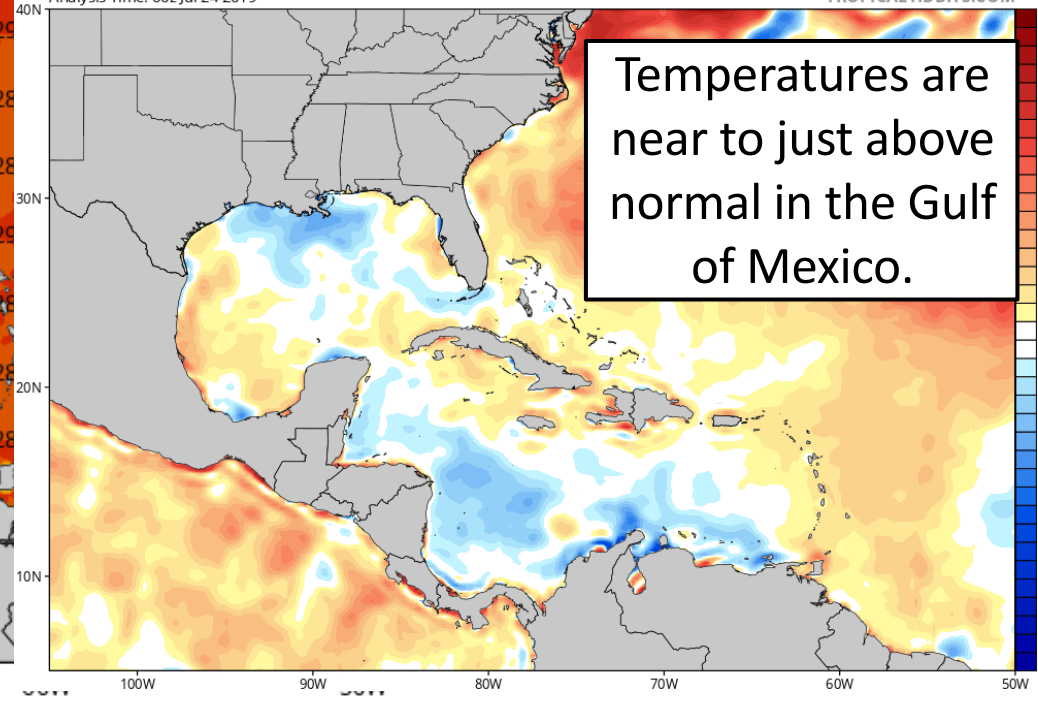


CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

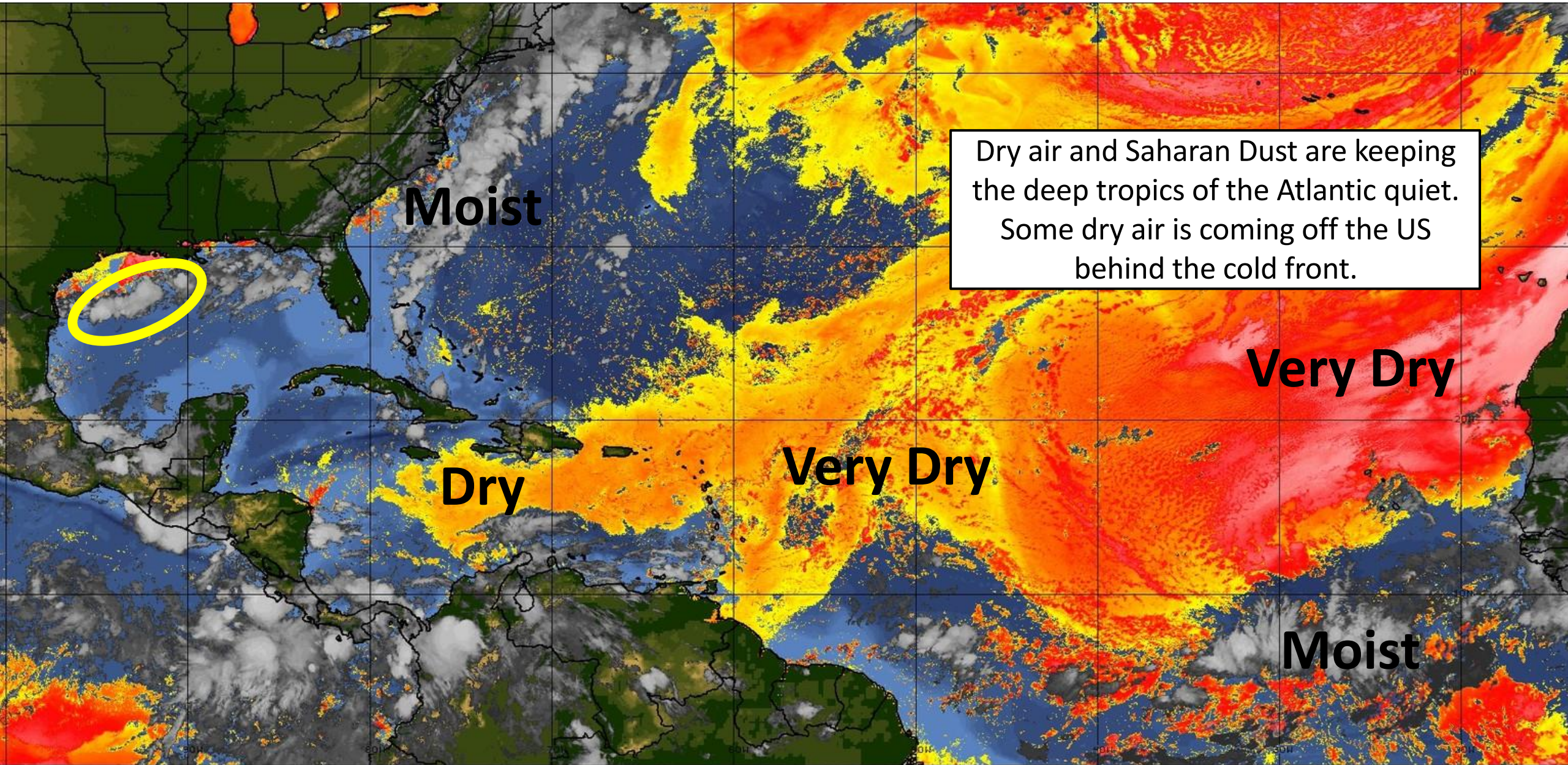
Analysis Time: 00z Jul 24 2019

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Temperatures are near to just above normal in the Gulf of Mexico.



Dry Air & Saharan Dust



LESS <----- DRY AIR (LOW/MID-LEVEL) AND/OR DUSTY SAL AIRMASS -----> MORE



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

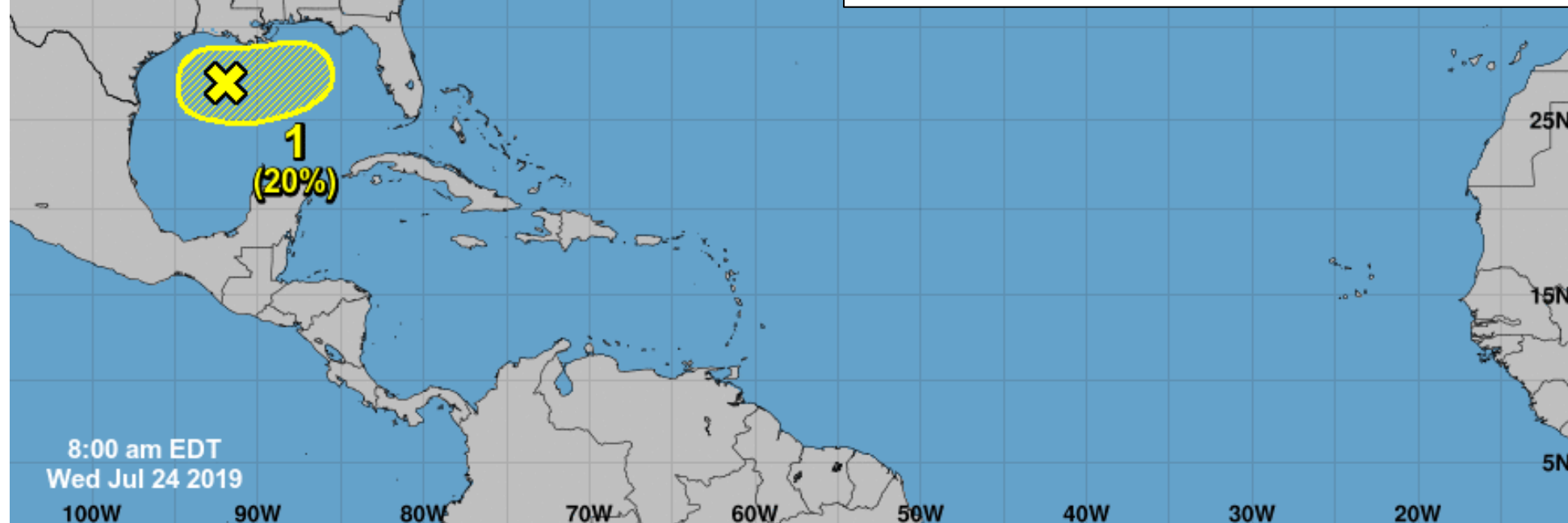


Disturbance 1

Disorganized cloudiness and showers located over the northwestern Gulf of Mexico are associated with a frontal boundary. A broad area of low pressure is expected to form along this boundary tonight, and environmental conditions could support some gradual development during the next couple of days while the disturbance meanders near the northwestern Gulf Coast.

*Formation chance through 48 hours...low...20 percent.

*Formation chance through 5 days...low...20 percent.

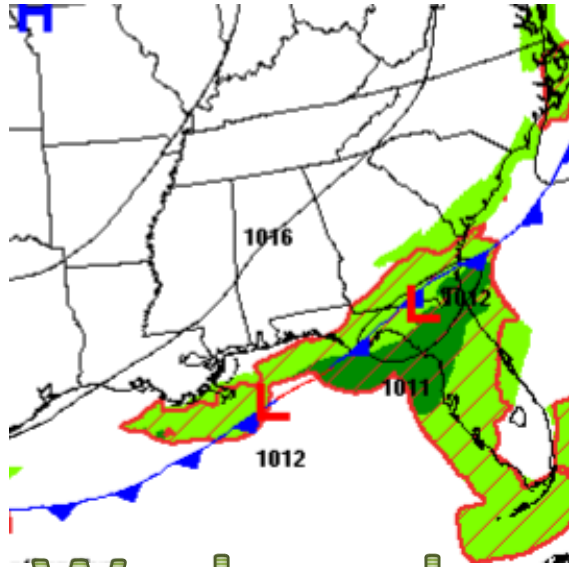


Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

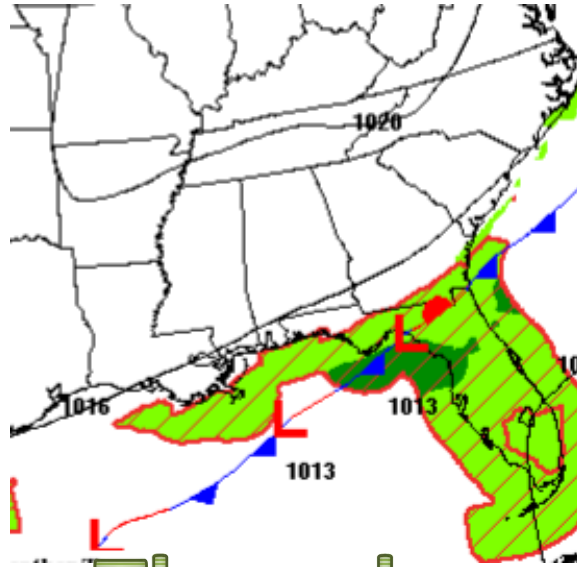
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants

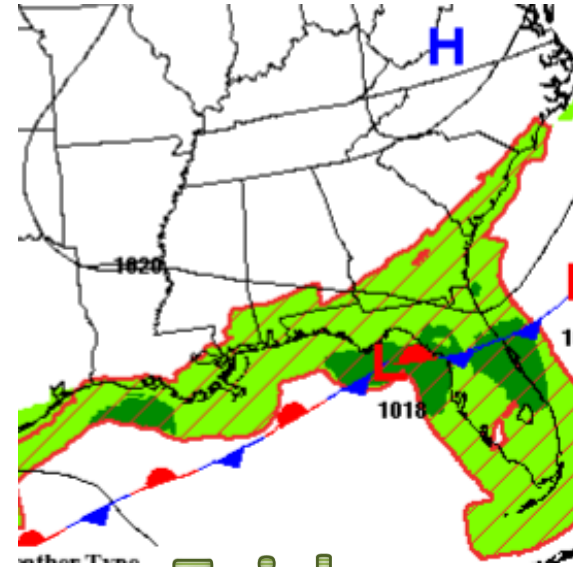
Forecast Weather Maps (fronts)



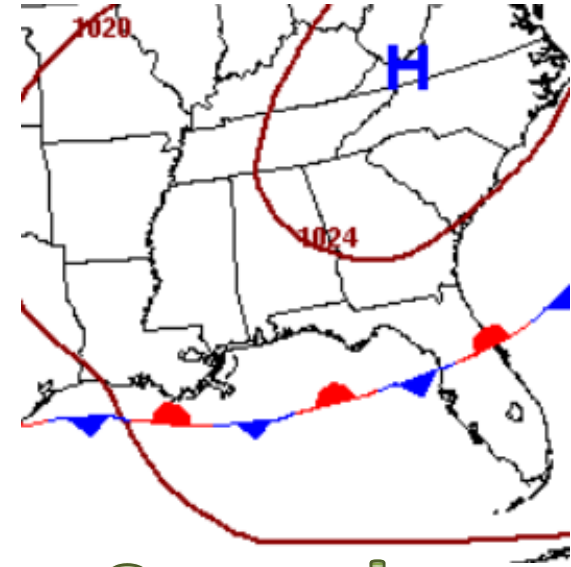
Wednesday



Thursday



Friday



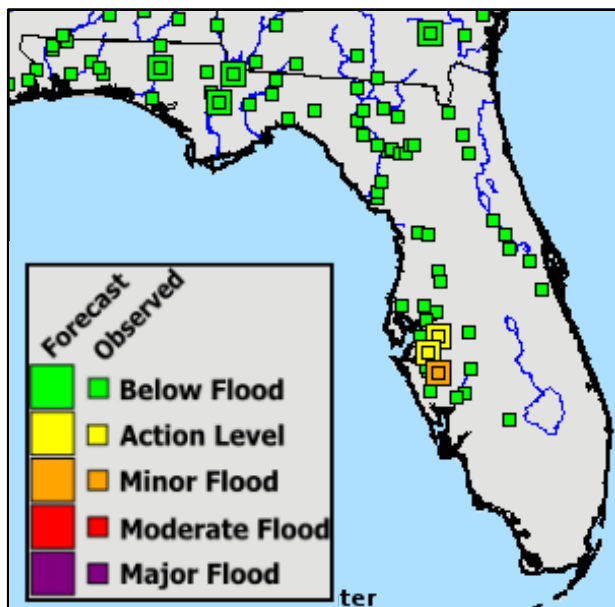
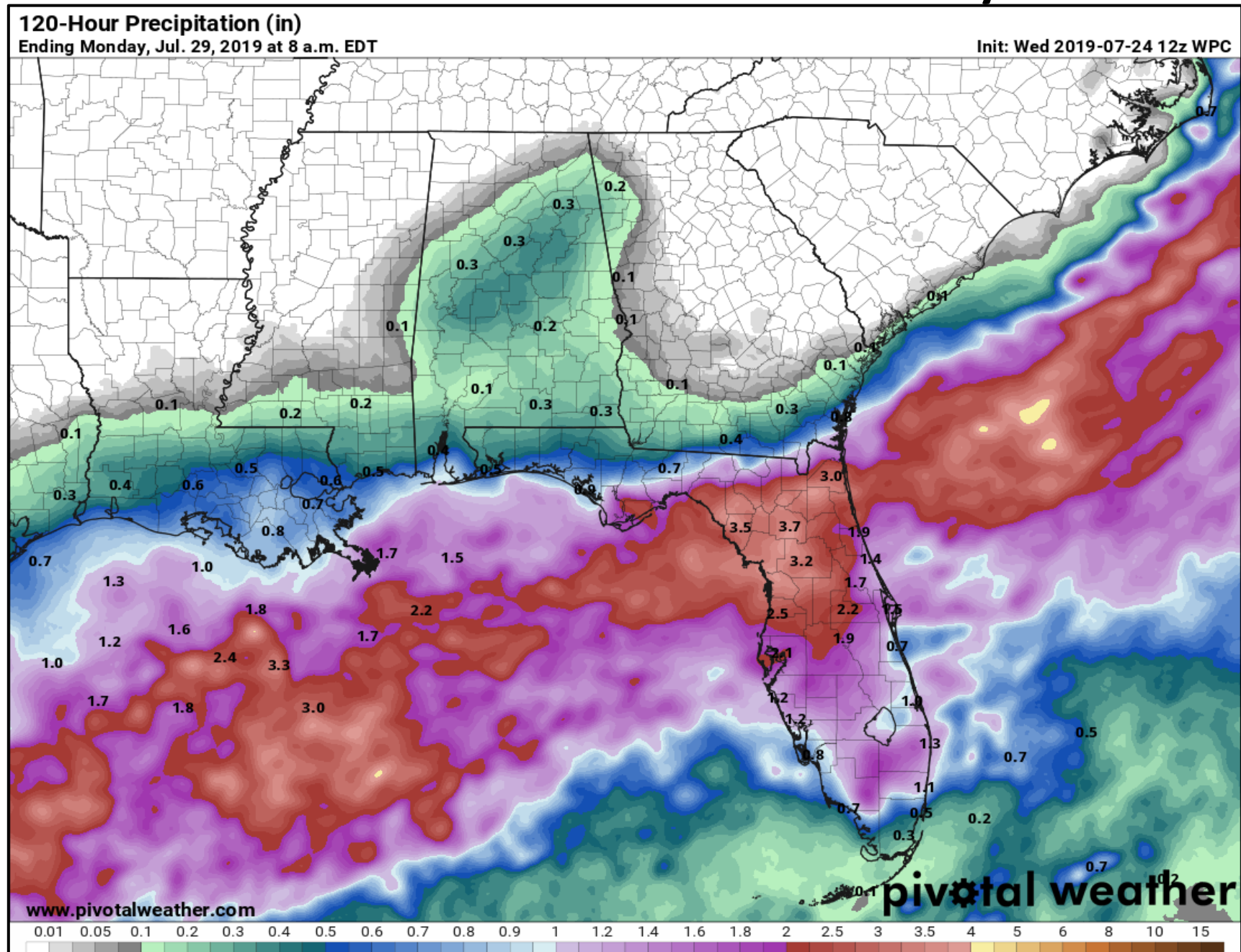
Saturday

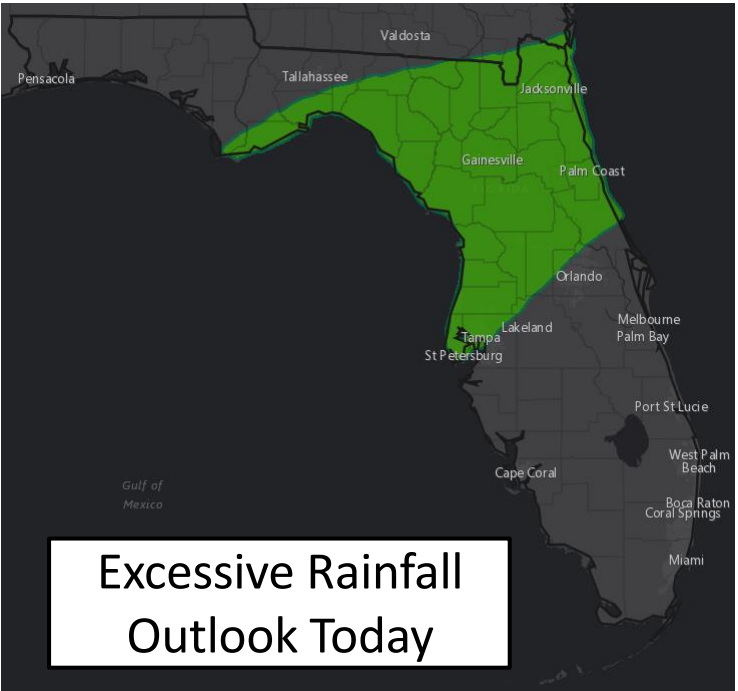
A cold front will stall out across the northern Gulf of Mexico. A couple weak transient lows may form along the front through this week. The front will then lift northward this weekend as it starts to weaken. It is possible that one of these lows could acquire some tropical or subtropical characteristics as water temperatures are warm and shear is relaxing. It remains uncertain which (if any) low develops, and that will also ultimately determine its future track. Regardless of development, numerous showers and thunderstorms are expected each day in the vicinity of the front. Locally heavy rainfall will be possible with some of the thunderstorms.

Cumulative 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.

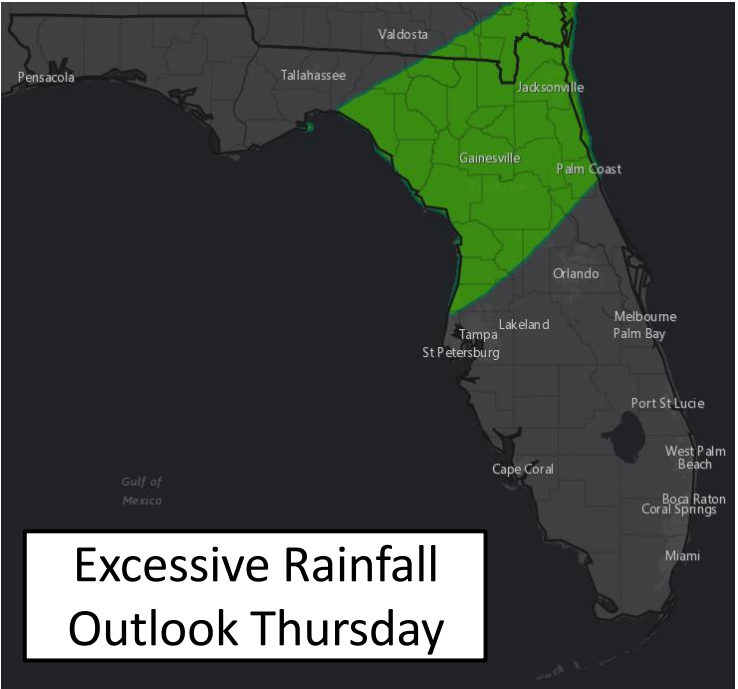
The Manatee River has crested in minor flood stage and is falling. No other river flooding is forecast at this time.

Cumulative Rainfall Totals Next 5 Days











Excessive Rainfall Outlook Today



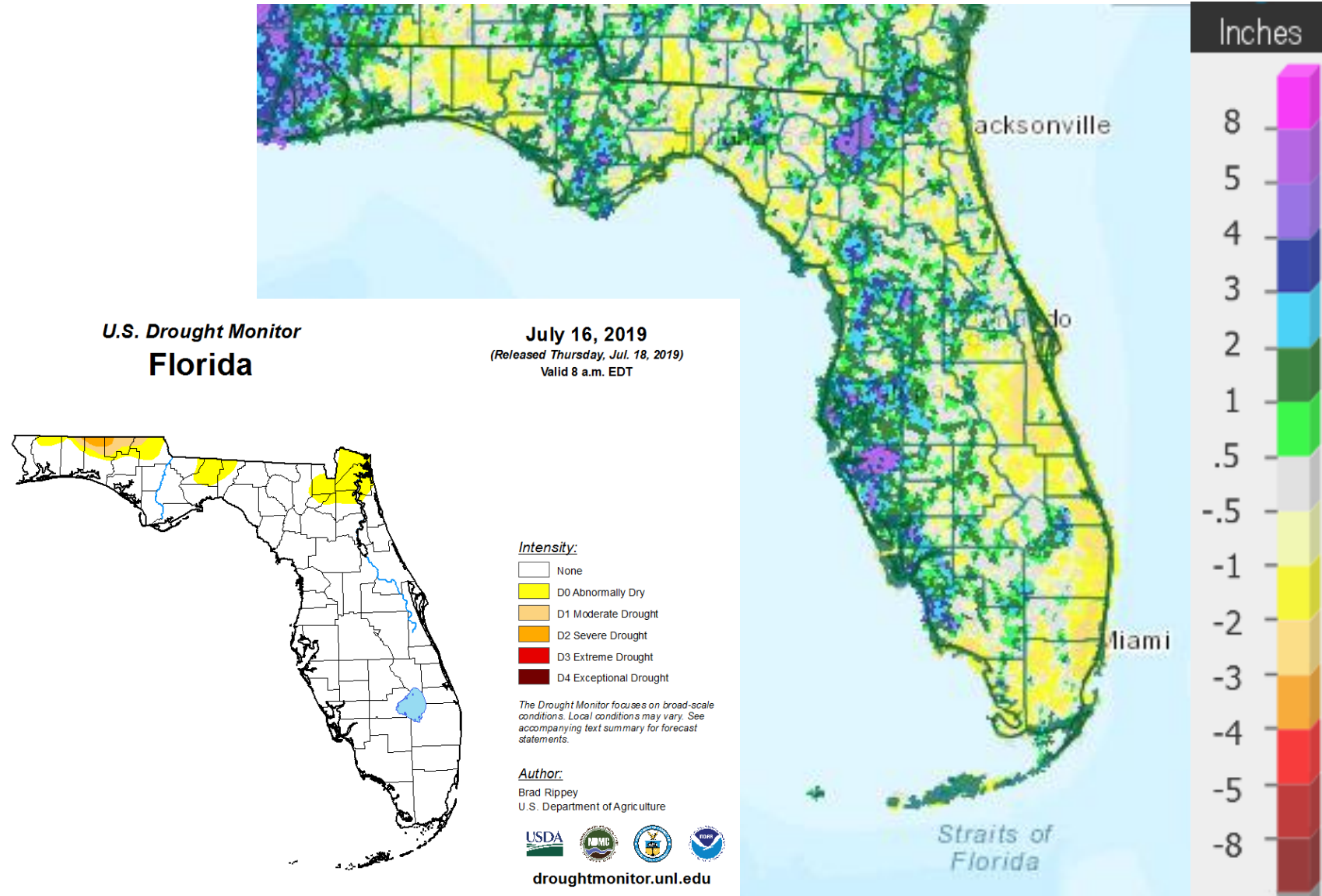
Excessive Rainfall Outlook Thursday

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				

- 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 today & Thursday.

Rainfall Departure from Normal for Past 2 Weeks

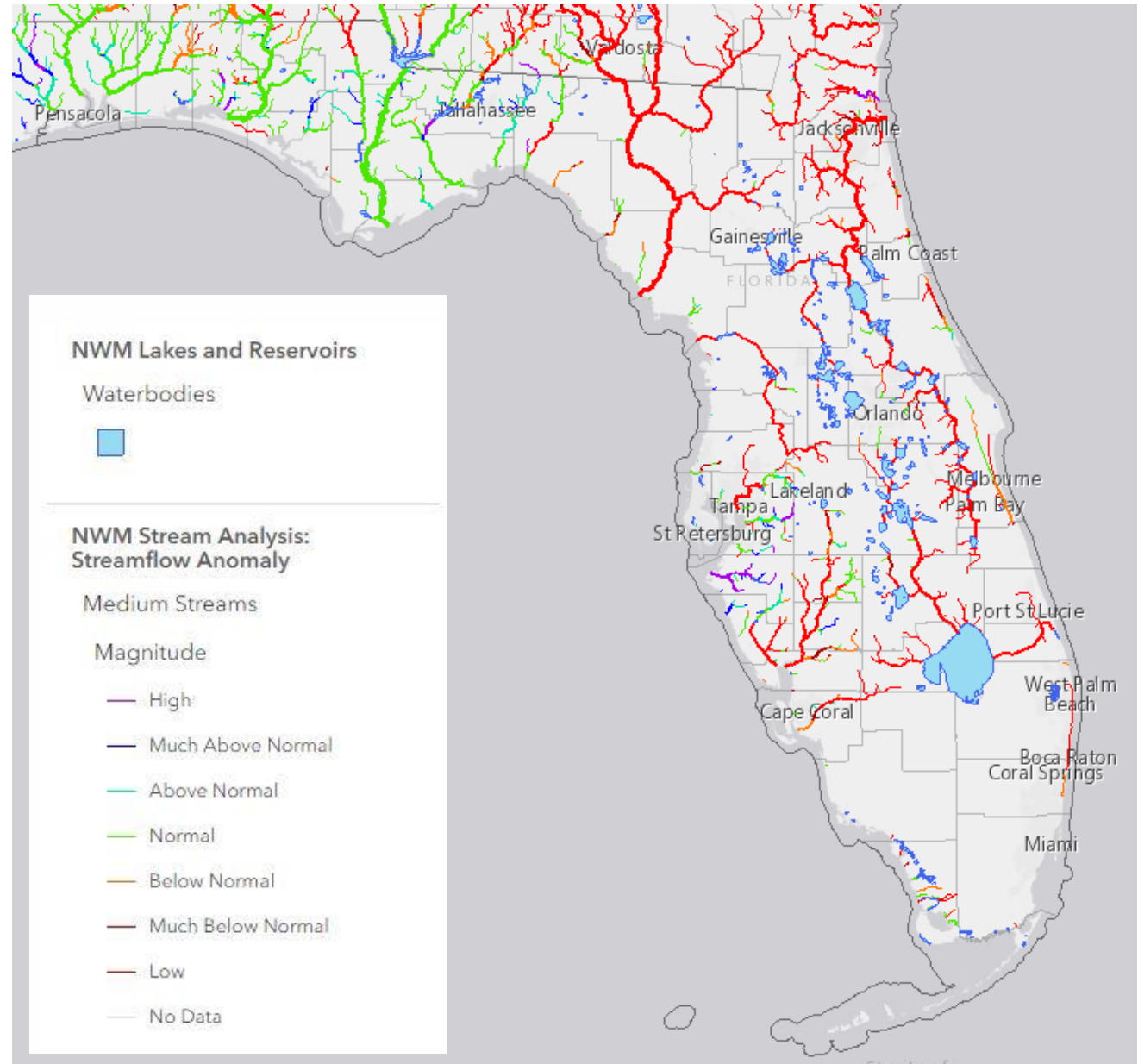
- Much of the Panhandle is in a rainfall deficit and capable of absorbing more rainfall.
- Drought conditions continue across inland areas of the Panhandle.
- Heavy rain over the I-75 corridor has saturated soils and made this region more susceptible to flooding



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.

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





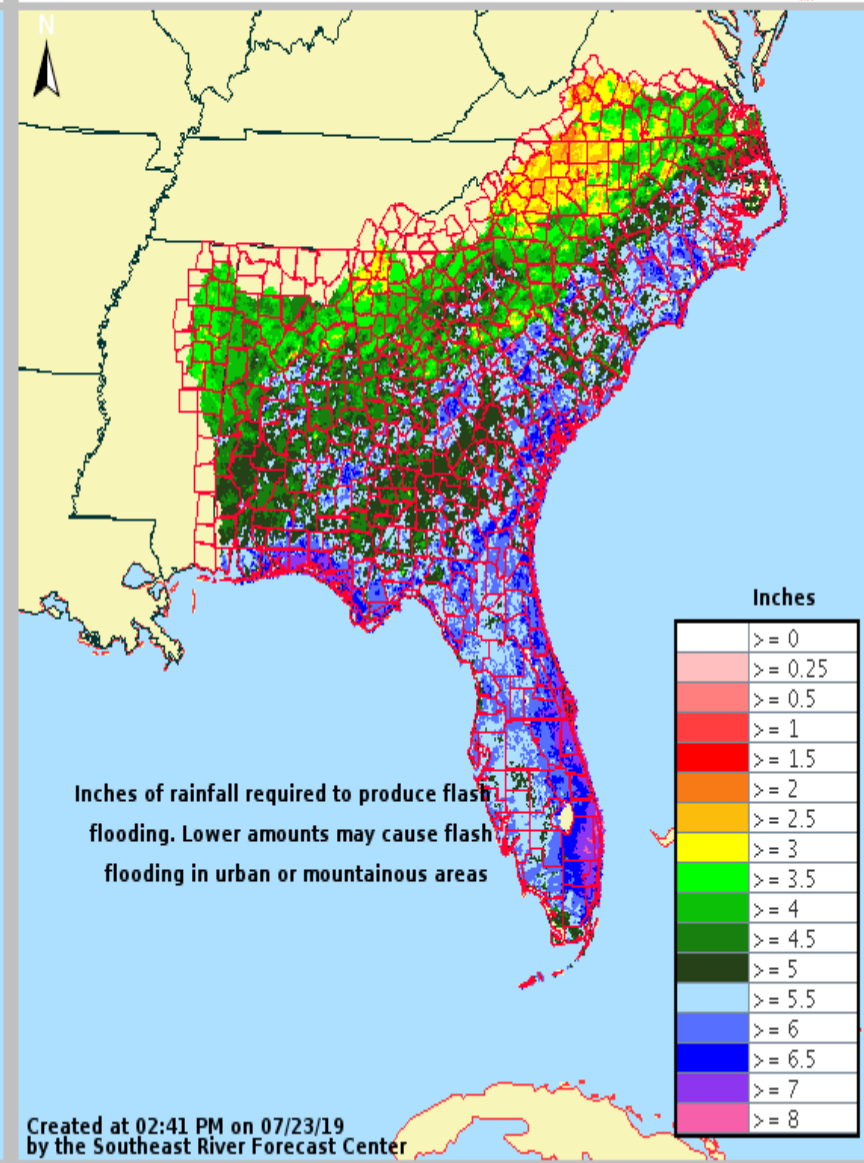
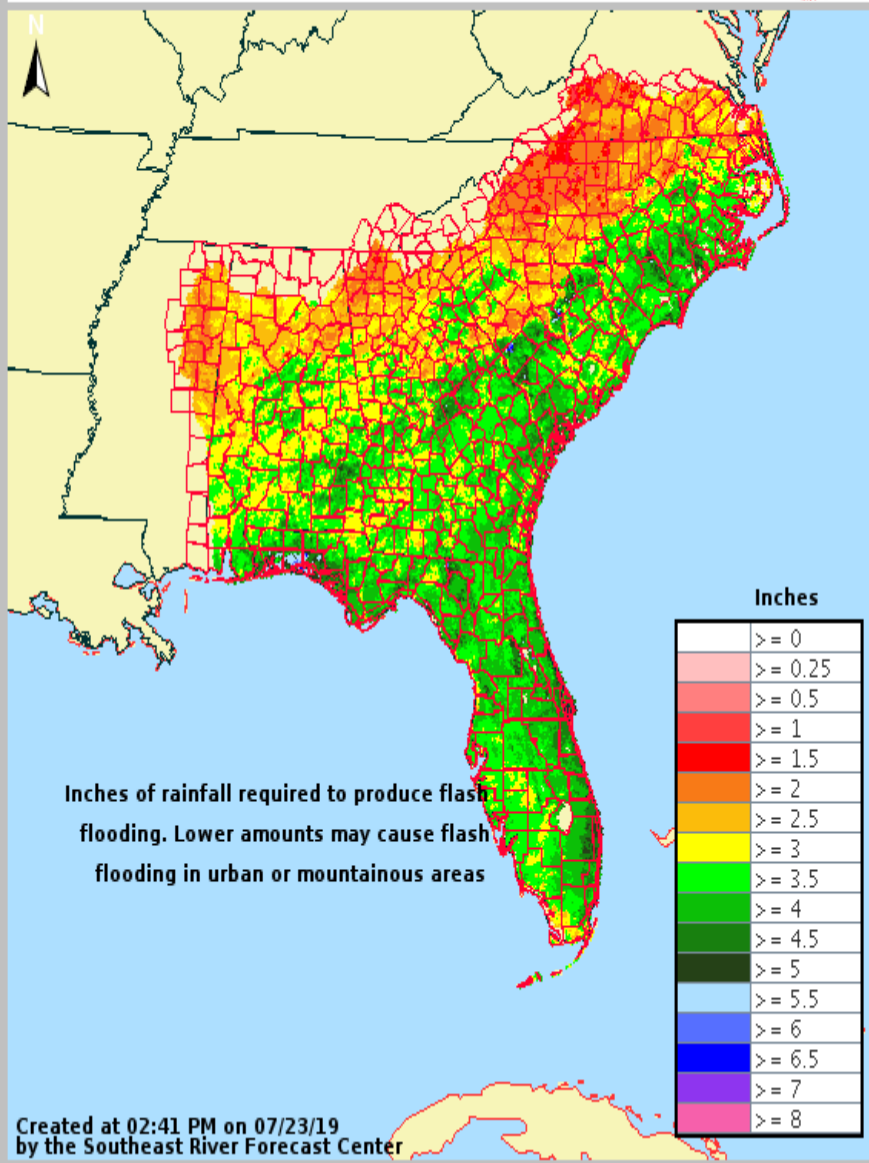
3-hr Flash Flood Guidance

Valid: 07/23/2019 @ 02:41 PM



12-hr Flash Flood Guidance

Valid: 07/23/2019 @ 02:41 PM



Flash Flood Potential Markers

- It will take about 3-6" of rainfall in a short period of time to cause flash flooding across much of the Big Bend, Northeast Florida, and West Coast.

Summary

- In the Northern Gulf of Mexico, an area of low-pressure may form along a stalled front later today or Thursday.
- Multiple lows may form along the front, and which low becomes dominant (if any) will determine the eventual track.
- There is a 20% chance of development in the next 48 hours and within 5 days.

Florida Outlook:

- With the stalled cold front over North and Central Florida this week, rain chances will remain elevated.
- An isolated risk of flash flooding is in the eastern Big Bend, Northeast Florida, and the Nature Coast today 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 3-4" 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.

Another briefing packet will be provided Thursday morning. 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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