



# TROPICAL UPDATE



10 AM EDT

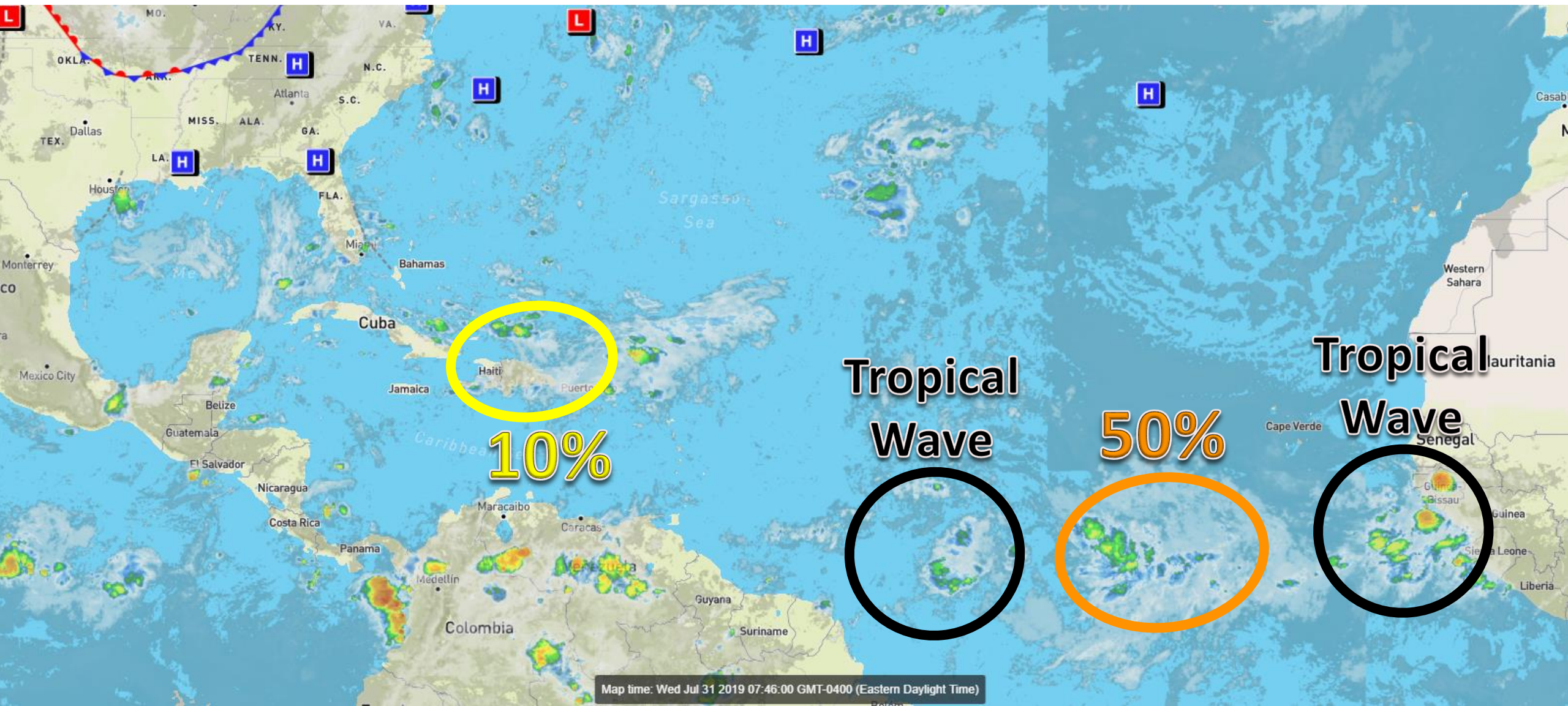
Wednesday, July 31, 2019

Invest 95L (10%), Cabo Verde Wave (50%)

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](http://www.hurricanes.gov).

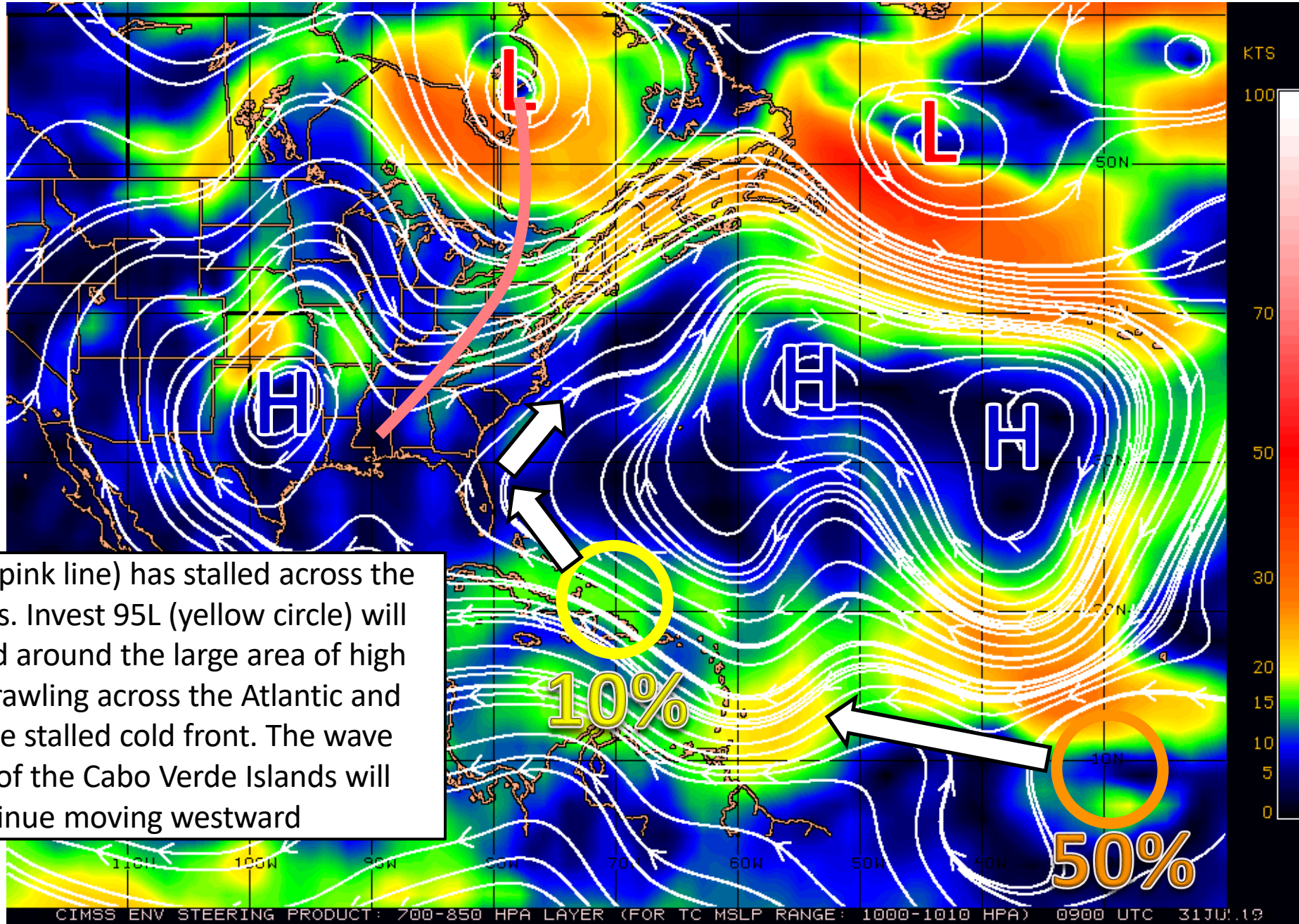
# Atlantic Basin Satellite Image

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

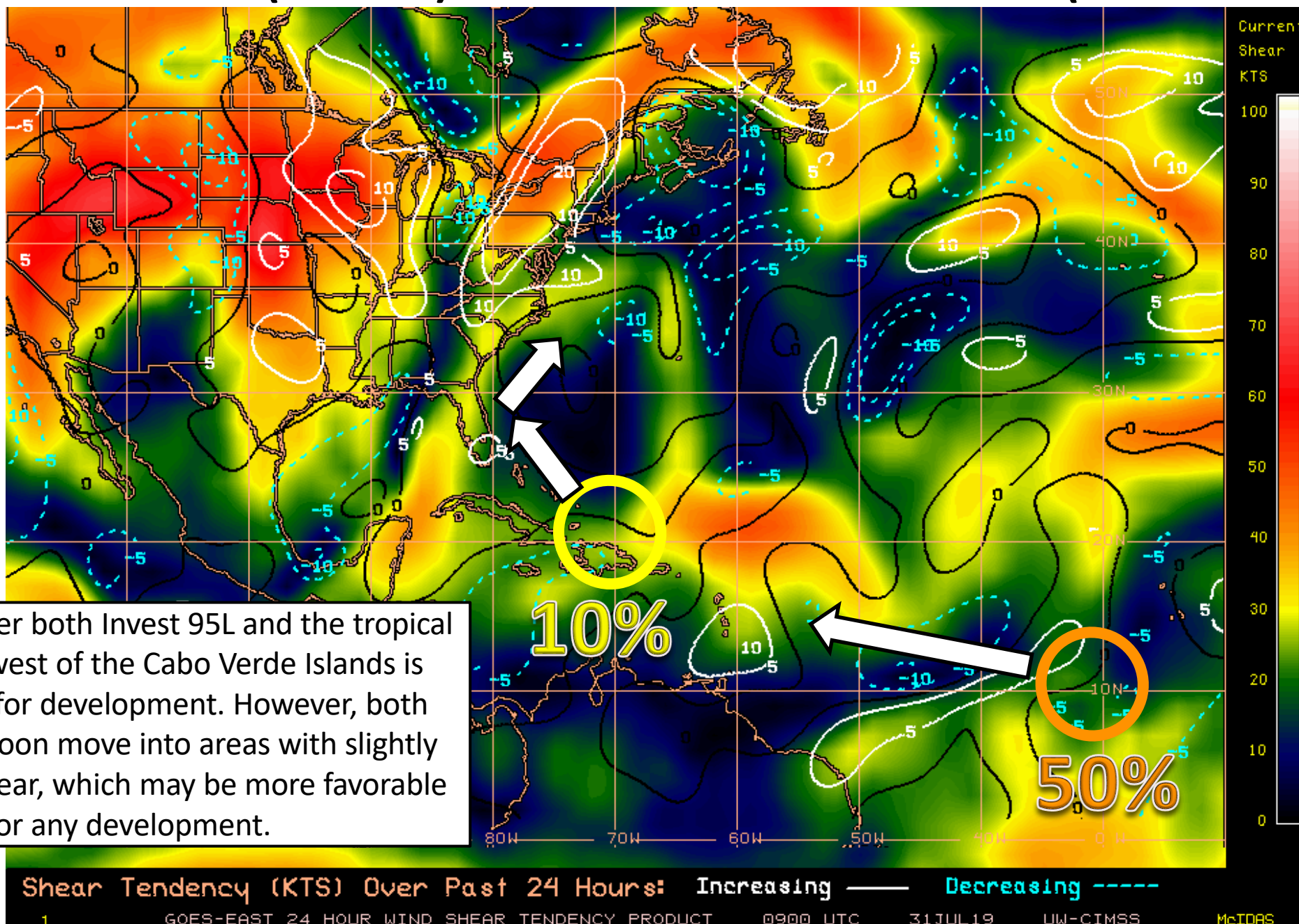




# Steering Currents



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



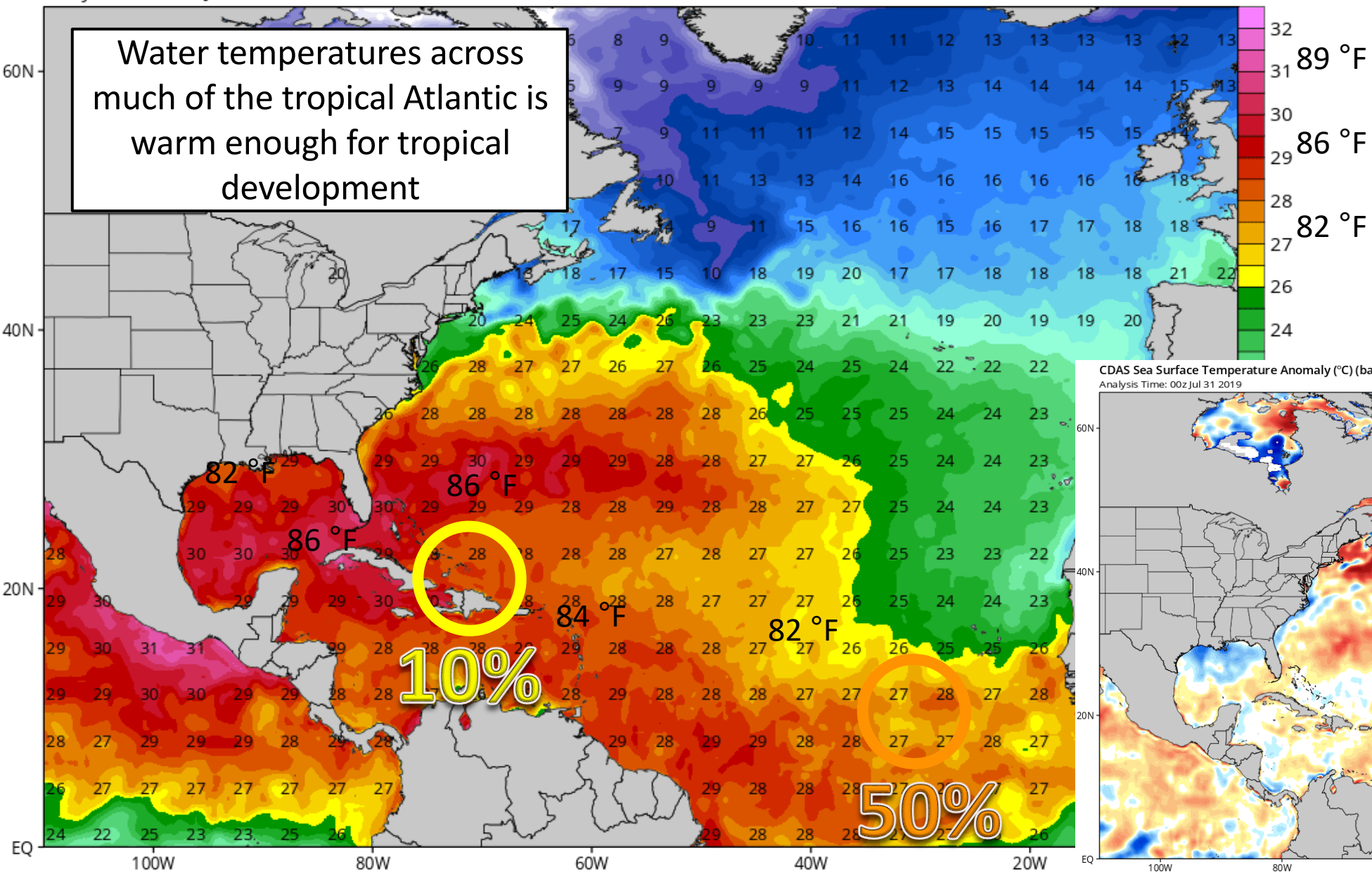


# Current Sea Surface Temperatures

CDAS Sea Surface Temperature (°C)

Analysis Time: 00z Jul 31 2019

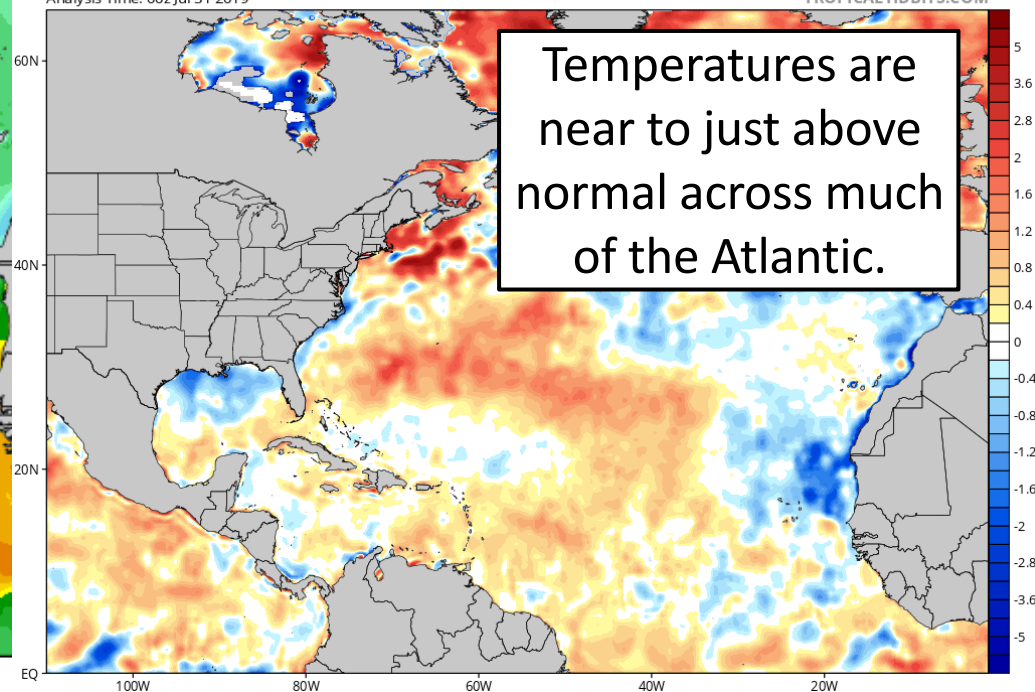
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CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

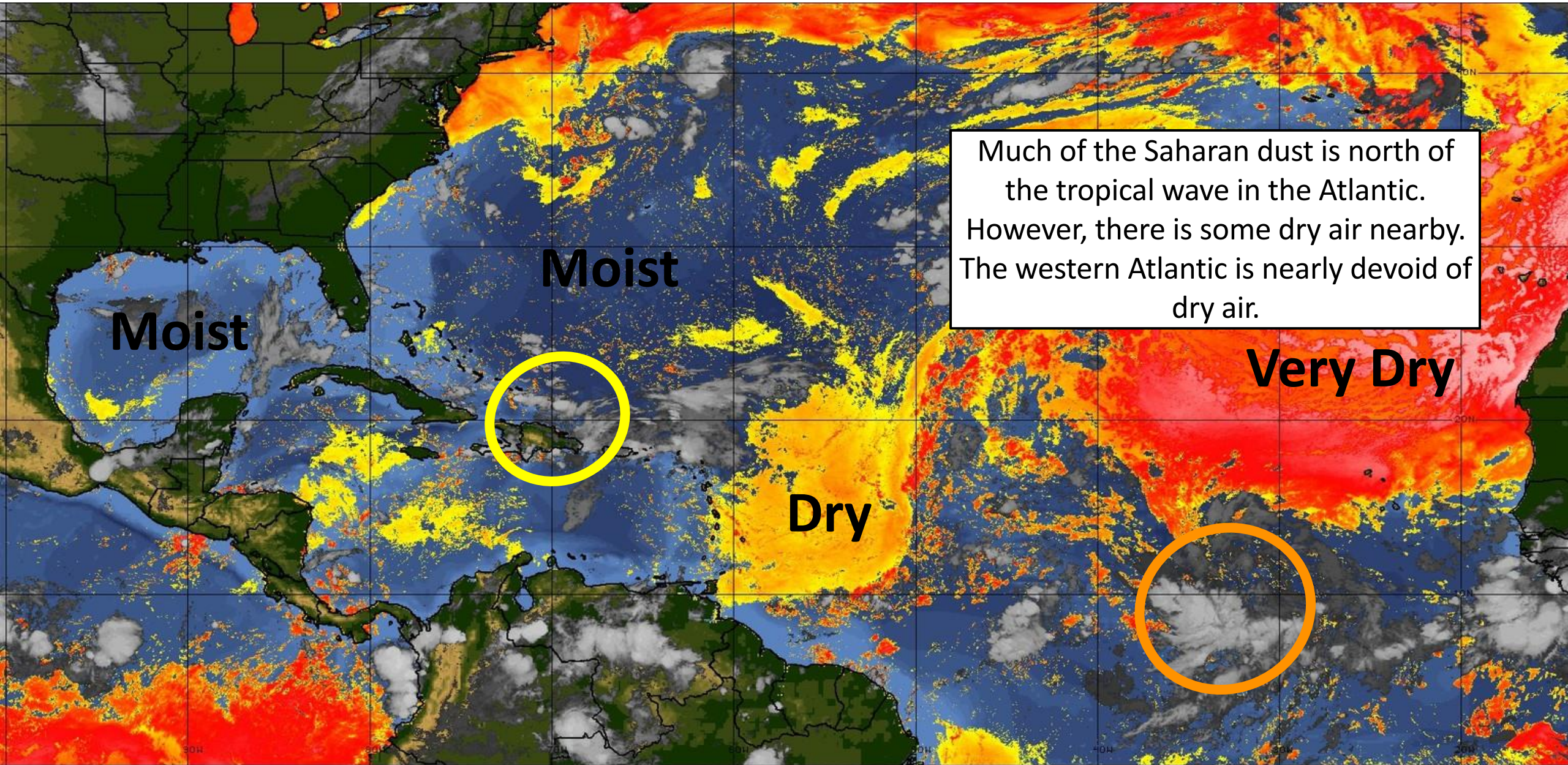
Analysis Time: 00z Jul 31 2019

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# Dry Air & Saharan Dust



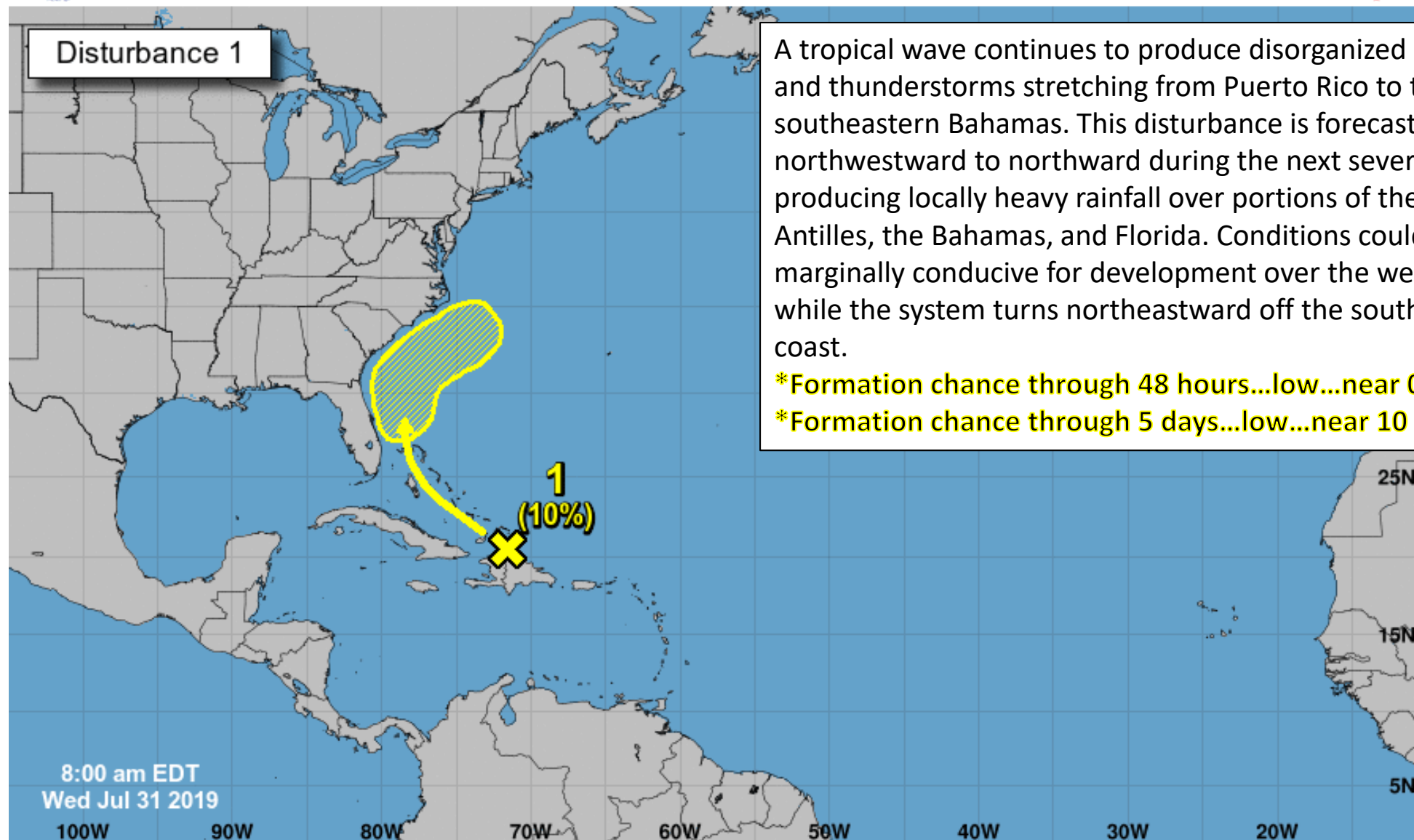
LESS <----- DRY AIR (LOW/MID-LEVEL) AND/OR DUSTY SAL AIRMASS -----> MORE





# Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

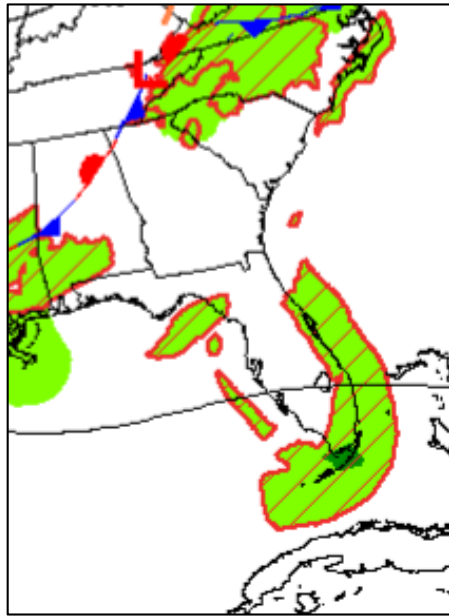


Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

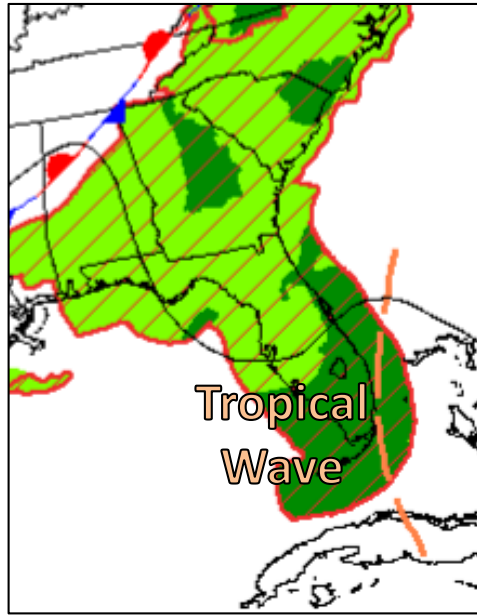
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants

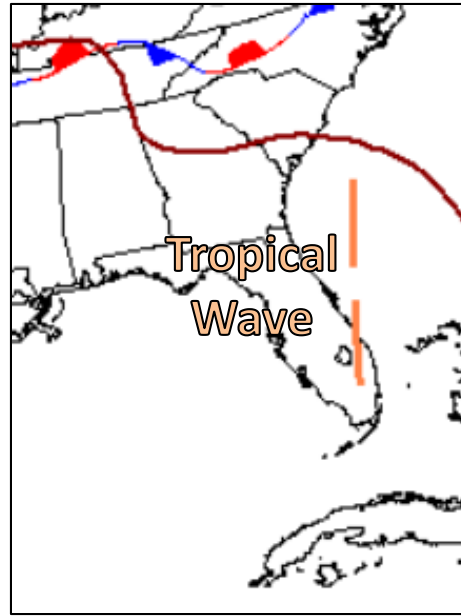
# Forecast Weather Maps (fronts)



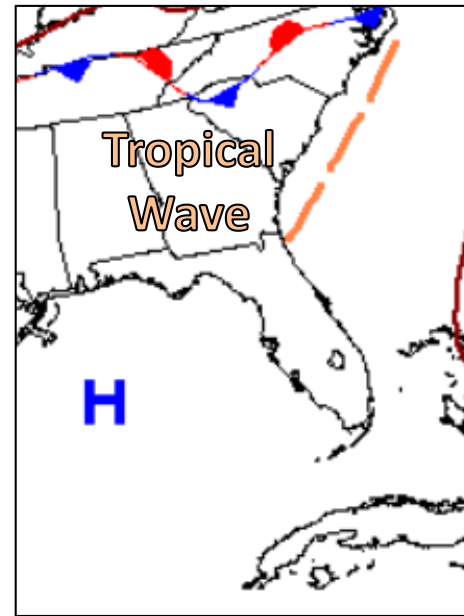
Thursday



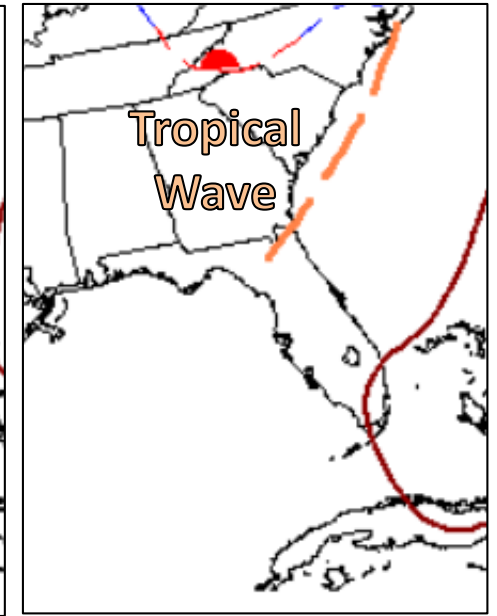
Friday



Saturday



Sunday

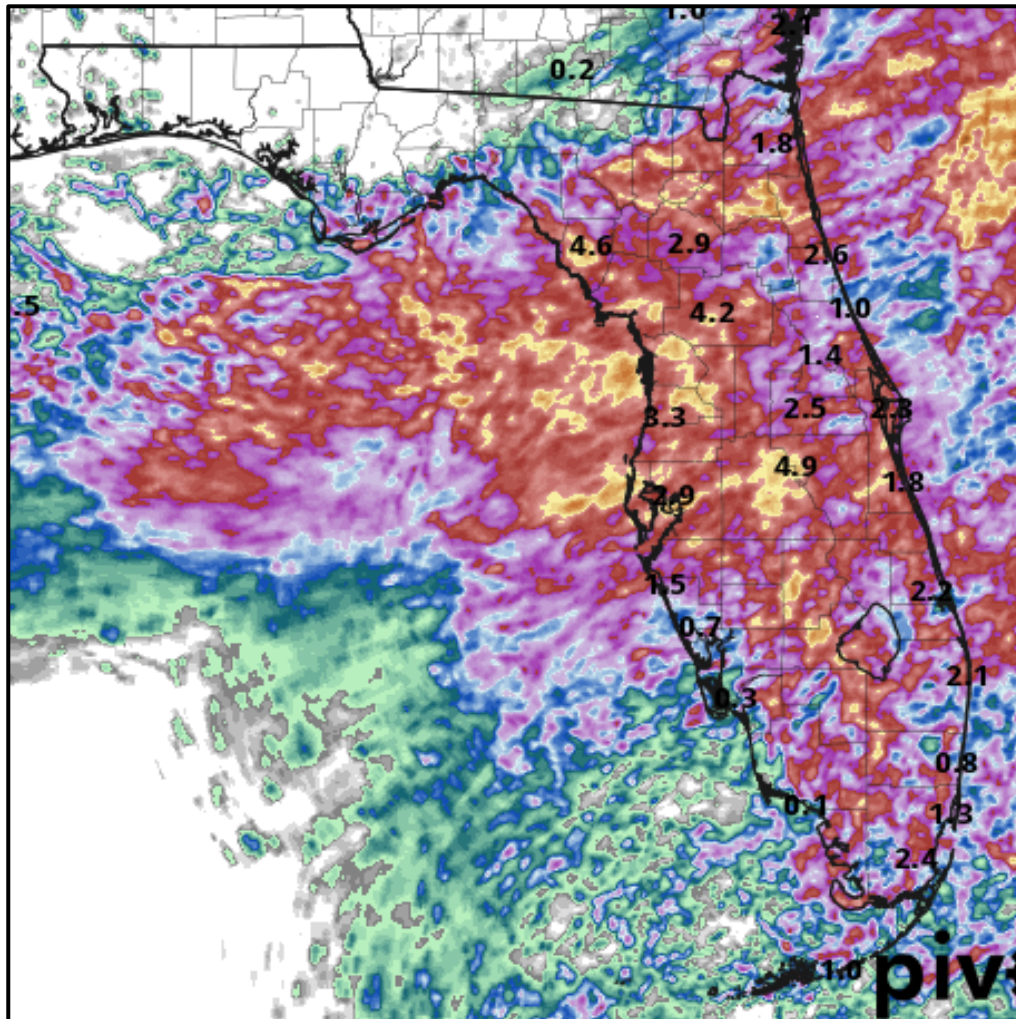


Monday

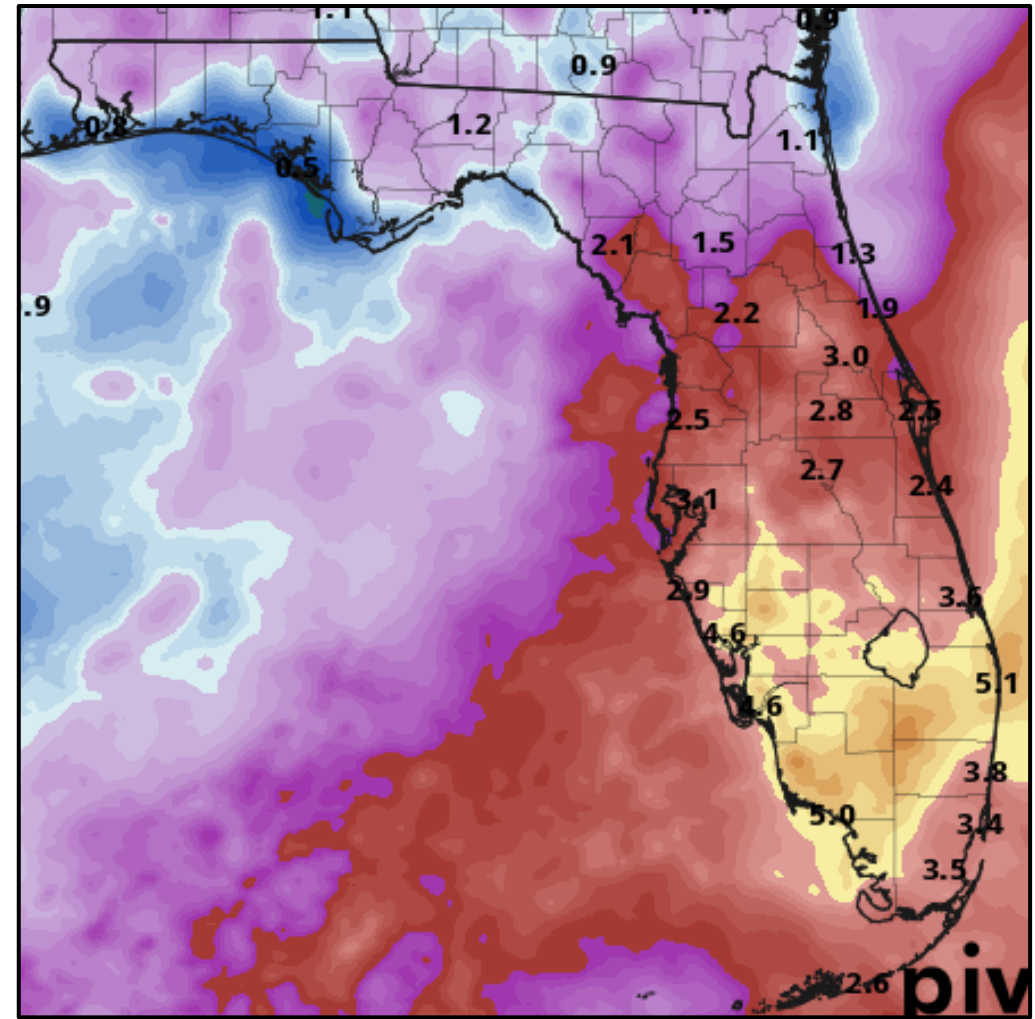
Invest 95L (likely a weak tropical wave) will move toward the Florida East Coast later this week then slowly lift northward through the weekend. Early next week, it will merge with a cold front and move out to sea. This wave will bring increased chances of showers and thunderstorms through the weekend. Locally heavy rainfall is possible with the storms, which could result in some flooding along rivers in the Peninsula and isolated cases of flash flooding.



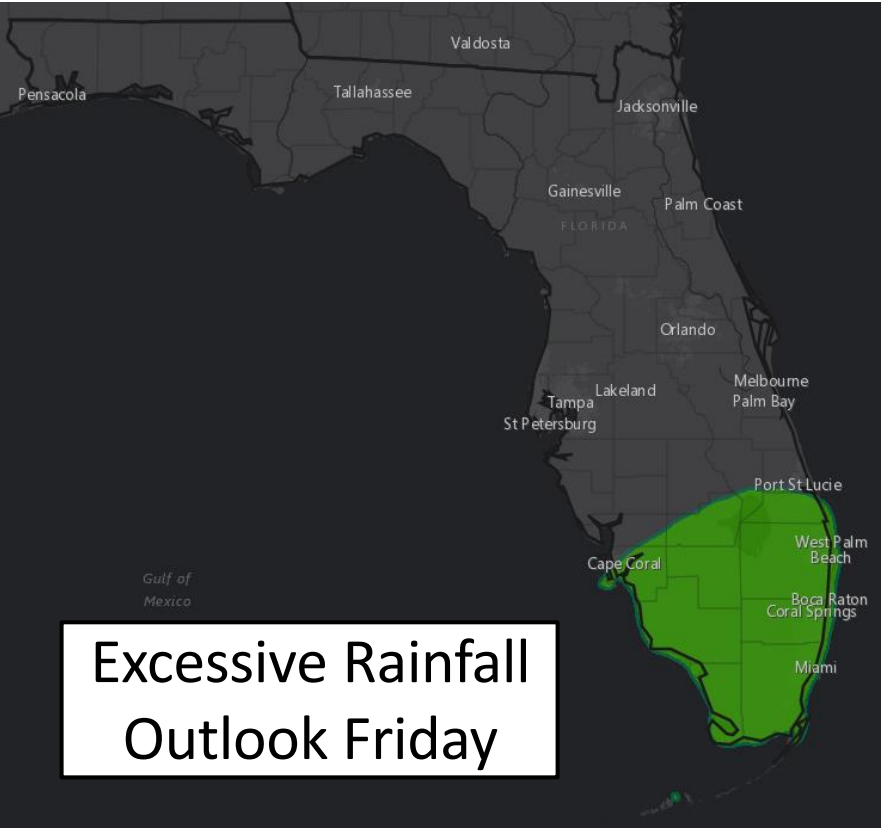
## Estimated Rainfall Totals Last 7 Days


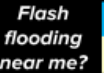












## Cumulative Rainfall Totals Next 7 Days



About 2-4" of rain has fallen across much of the Peninsula over the last week or so with localized totals up to 6". Over the next 7 days, another 1-3" of rain in the northern Peninsula and 3-5" in South Florida is expected. Localized totals of 5-7" are possible in some spots.

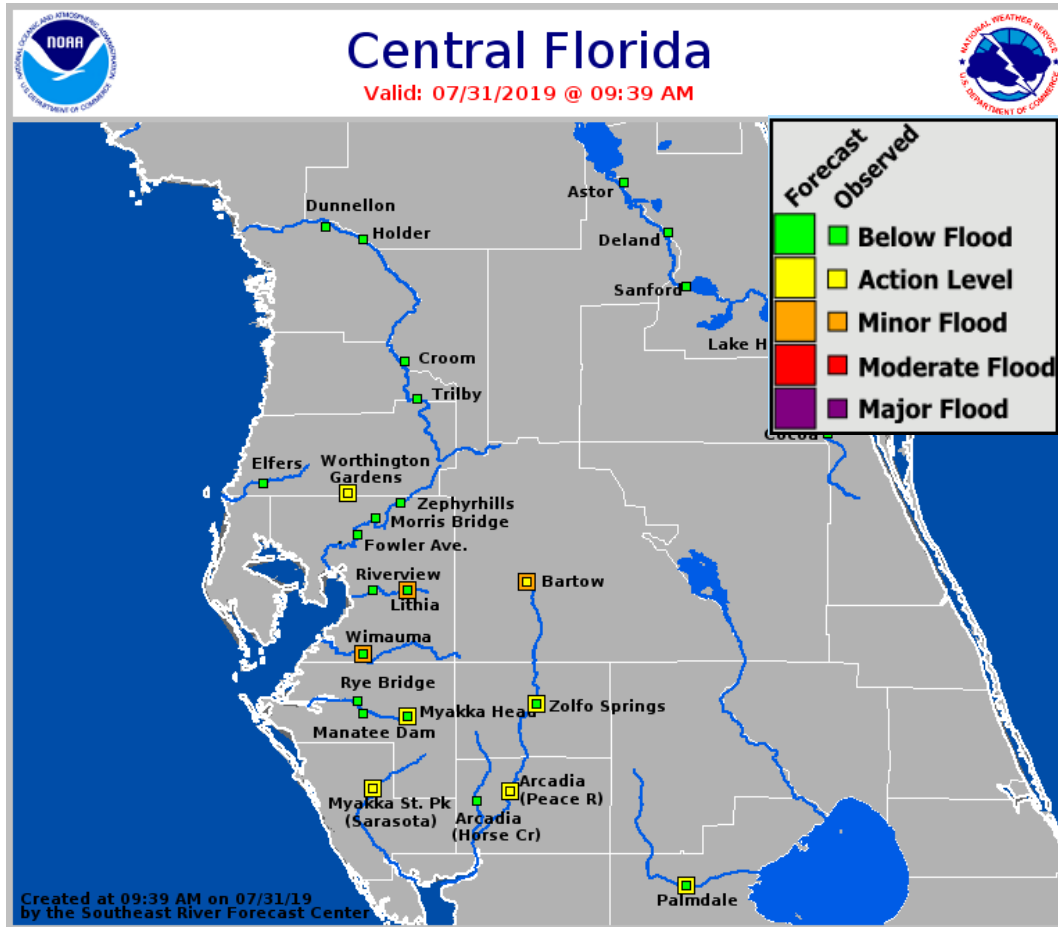


Understanding WPC Excessive Rainfall Risk Categories				
No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
<a href="http://www.wpc.ncep.noaa.gov">www.wpc.ncep.noaa.gov</a> @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.
<div>Flash flooding near me?</div> <div></div>				
  WEATHER PREDICTION CENTER				

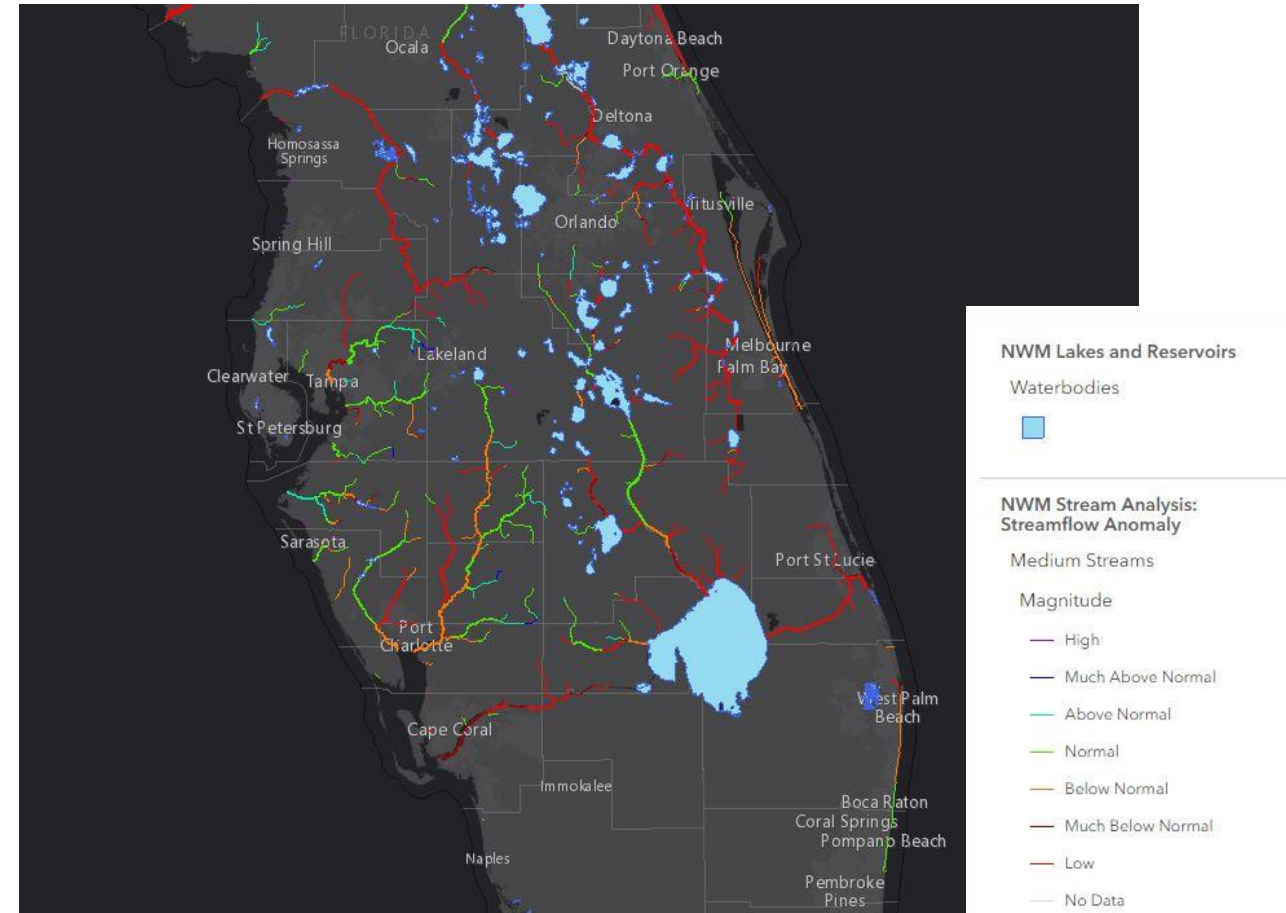
There is a marginal risk of excessive rainfall that could lead to some isolated, minor flooding in South Florida on Friday. It is possible that more Excessive Rainfall Outlooks may be issued into the weekend, especially if the heavy rainfall and flash flood threat materializes.



# Current/Forecast River Stages



# Current Streamflow Anomalies



**River Flood Warnings** are in effect for the Peace River at Bartow, Alafia River at Bartow, and Little Manatee River at Wimauma as they rise into minor flood stage. Several other rivers across the Peninsula are in action stage.

With the heavy rainfall last week, streamflows in West Central Florida are running near normal. It will take about 2-3" to cause additional river flooding for many West Coast rivers.



# Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

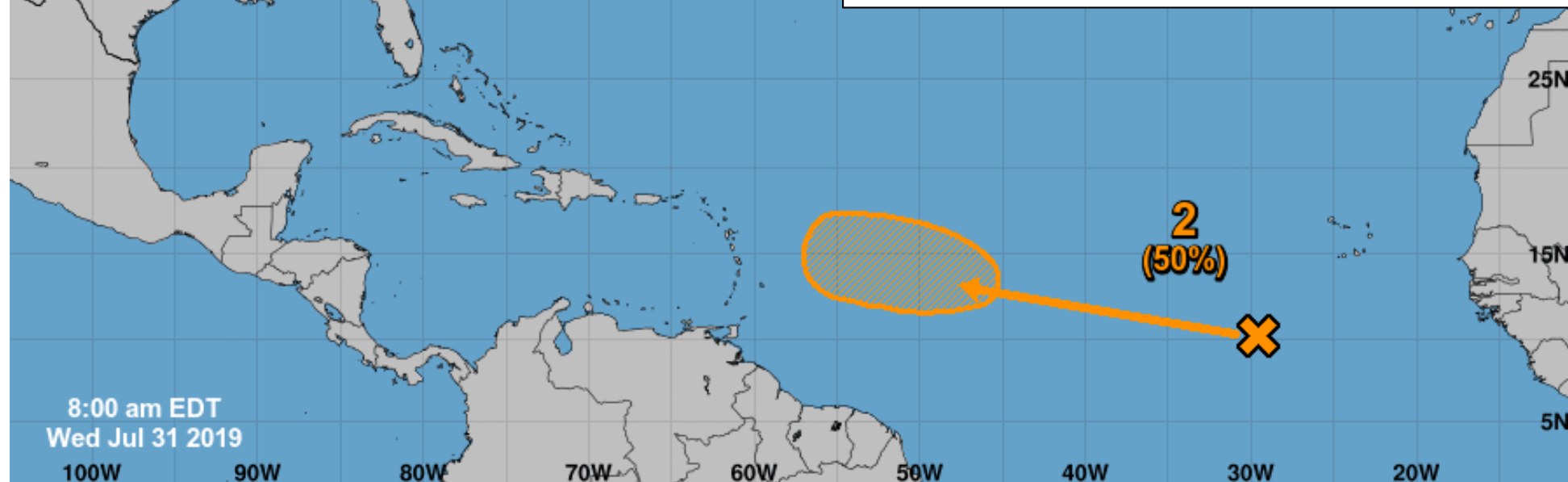


Disturbance 2

A tropical wave located several hundred miles southwest of the Cabo Verde Islands in producing widespread cloudiness and shows over the eastern tropical Atlantic Ocean. No significant development of this system is expected for the next few days while it moves westward at about 15 mph. Thereafter, upper-level winds are forecast to gradually become more conducive, and a tropical depression could form by early next week several hundred miles east of the Lesser Antilles.

**\*Formation chance through 48 hours...low...near 0 percent.**

**\*Formation chance through 5 days...medium...near 50 percent.**

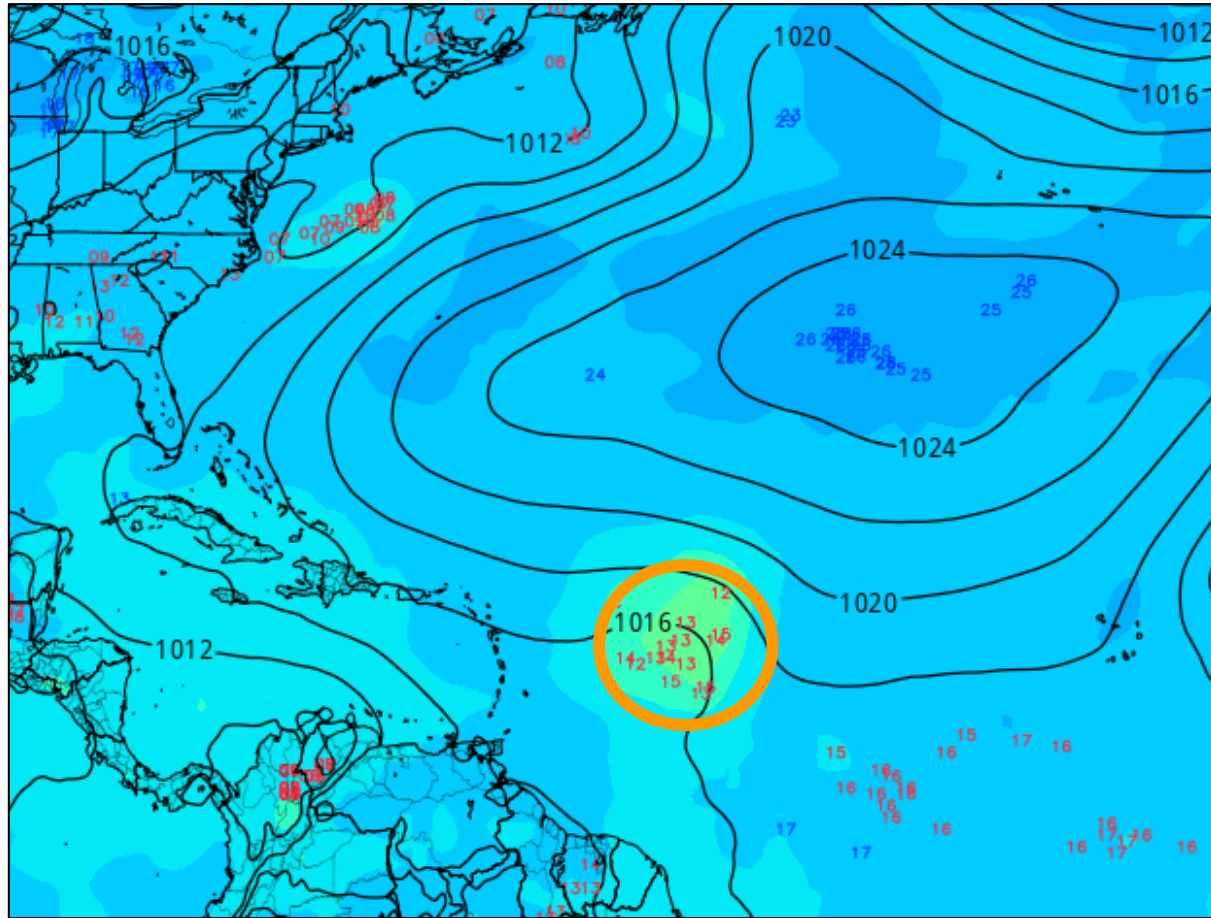


8:00 am EDT  
Wed Jul 31 2019

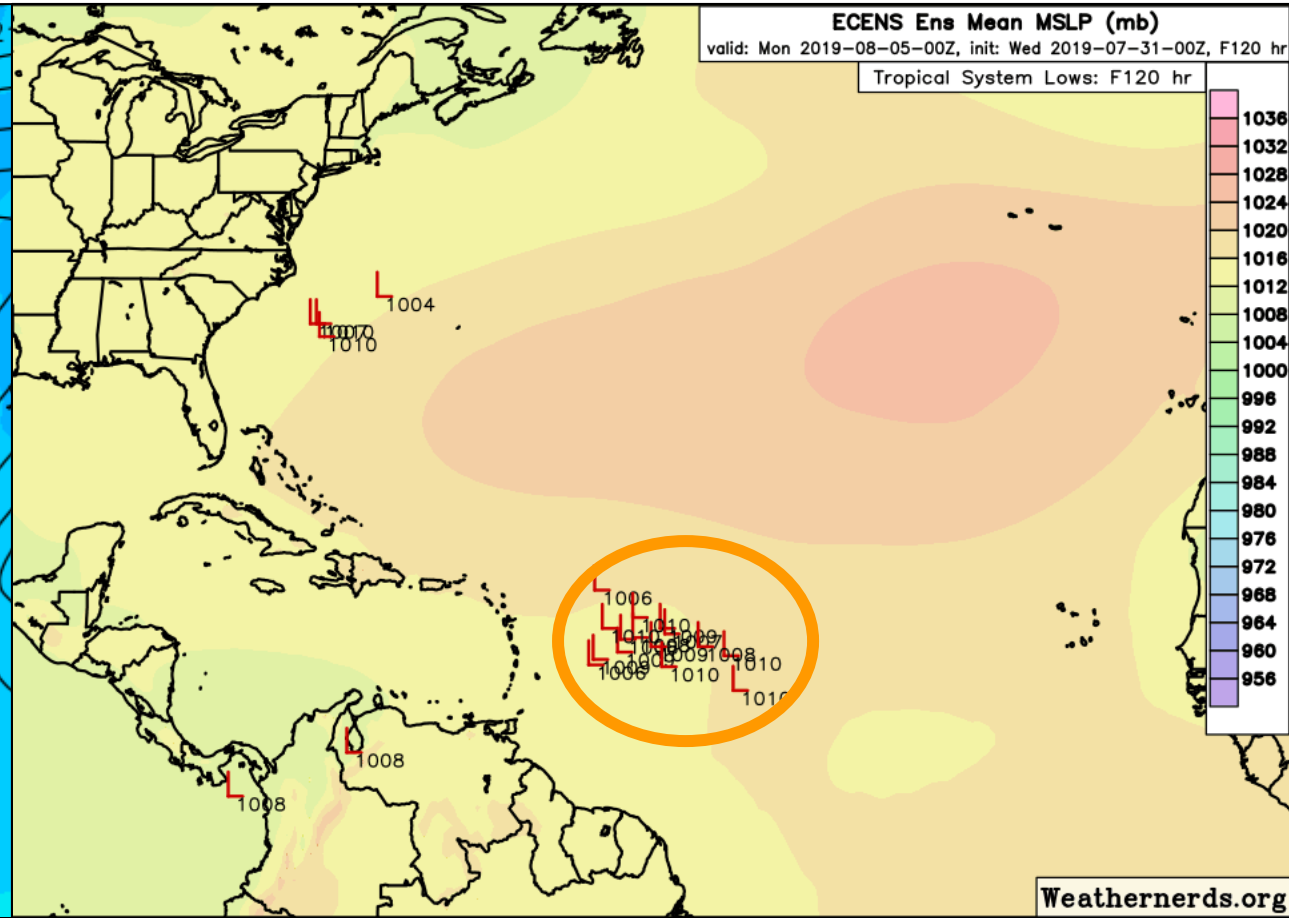
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Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane  
 Post-Tropical Cyclone or Remnants



## GFS Ensemble Runs – 5 Days Out



## Euro Ensemble Runs – 5 Days Out



Development of the system remains unlikely over the next couple days as upper level winds remain unfavorable. However, as the wave approaches the Lesser Antilles early next week, conditions are expected to become more supportive for tropical development. While still 5 days out, models generally agree on the system being east of the Lesser Antilles in about 5 days.

# Summary

## **Invest 95L/Bahamas Tropical Wave**

- Land interaction and unfavorable upper-level winds will prevent development of this system.
- The National Hurricane Center gives it a 0% chance of development in the next 48 hours and a 10% (low) chance over 5 days.
- The area of tropical moisture will reach the Florida Peninsula Friday and Saturday increasing rain chances.
- Early next week, the system merges with a cold front and accelerates to the northeast, away from the United States.

## **Cabo Verde Tropical Wave**

- A tropical wave recently moved off the coast of Africa and is now located a few hundred miles southwest of the Cabo Verde Islands in the eastern Atlantic.
- Unfavorable upper-level winds and nearby dry air will limit any development of this system over the next few days.
- By this weekend, as the system approaches the Lesser Antilles, conditions for development will become more favorable.
- The National Hurricane Center gives this system a 0% chance of development in the next 48 hours but a 50% (medium) chance days 3-5.
- Development odds will continue to increase over the next few days.
- Next Tuesday and Wednesday (Aug 5 & 6), the system will be near Puerto Rico. Details thereafter are uncertain.

## **Florida Outlook:**

- Rain chances increase later this week, with the most widespread rainfall expected Friday and Saturday in Central and South Florida.
- Widespread cumulative rainfall totals of 2-4" are forecast over the next 5 days, with localized totals of 6+"
- An isolated risk of flash flooding is expected Friday and Saturday in South Florida, with impacts mainly confined to minor flooding of roadways in urban and low-lying areas.
- Due to the New Moon, tides are running 0.5'-1.5' above normal. Should a heavy rainfall event occur at high tide near the coast, the risk for minor flooding will be increased. Water will have difficulty draining until high tide begins to recede.
- Due to recent rainfall, some West-Central Florida rivers are in minor flood stage. Additional rainfall totals over 2-3" will result in additional minor river flooding.
- The Cabo Verde tropical wave poses no threat to Florida for at least the next 7 days, but should continue to be monitored.

The next briefing packet will be issued Thursday morning. For the latest information on the tropics, please visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).





# TROPICAL UPDATE



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Florida Division of Emergency Management

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