



TROPICAL UPDATE



11:00 AM EDT

Saturday, September 12, 2020

Tropical Depression #19, Tropical Storm Paulette, Tropical Depression Rene, Gulf of Mexico Low (30%), Invest 95L in the Eastern Atlantic (90%), Wave Near Cabo Verde Islands (60%)

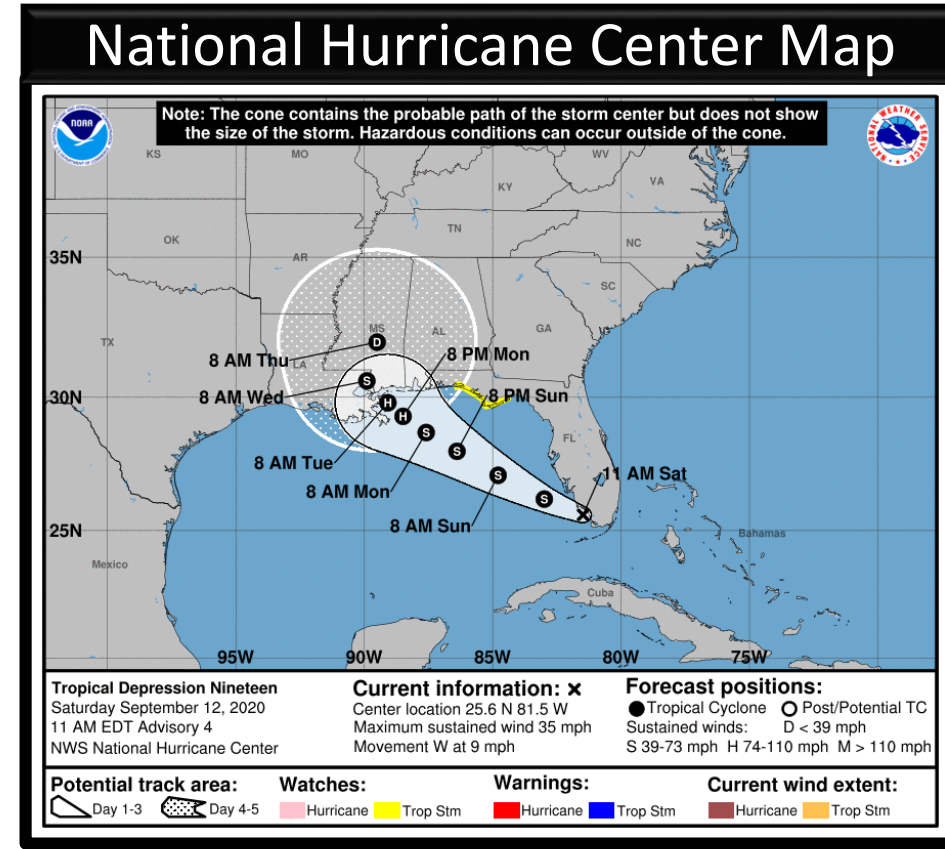
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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



Tropical Depression #19

11 AM ET Saturday: Florida Threats & Changes Since Last Packet

	MINIMAL	Low	MODERATE	HIGH	EXTREME
WINDS					
STORM SURGE					
FLASH FLOODING					
TORNADOES					
	Low	MODERATE		HIGH	
RIP CURRENTS					



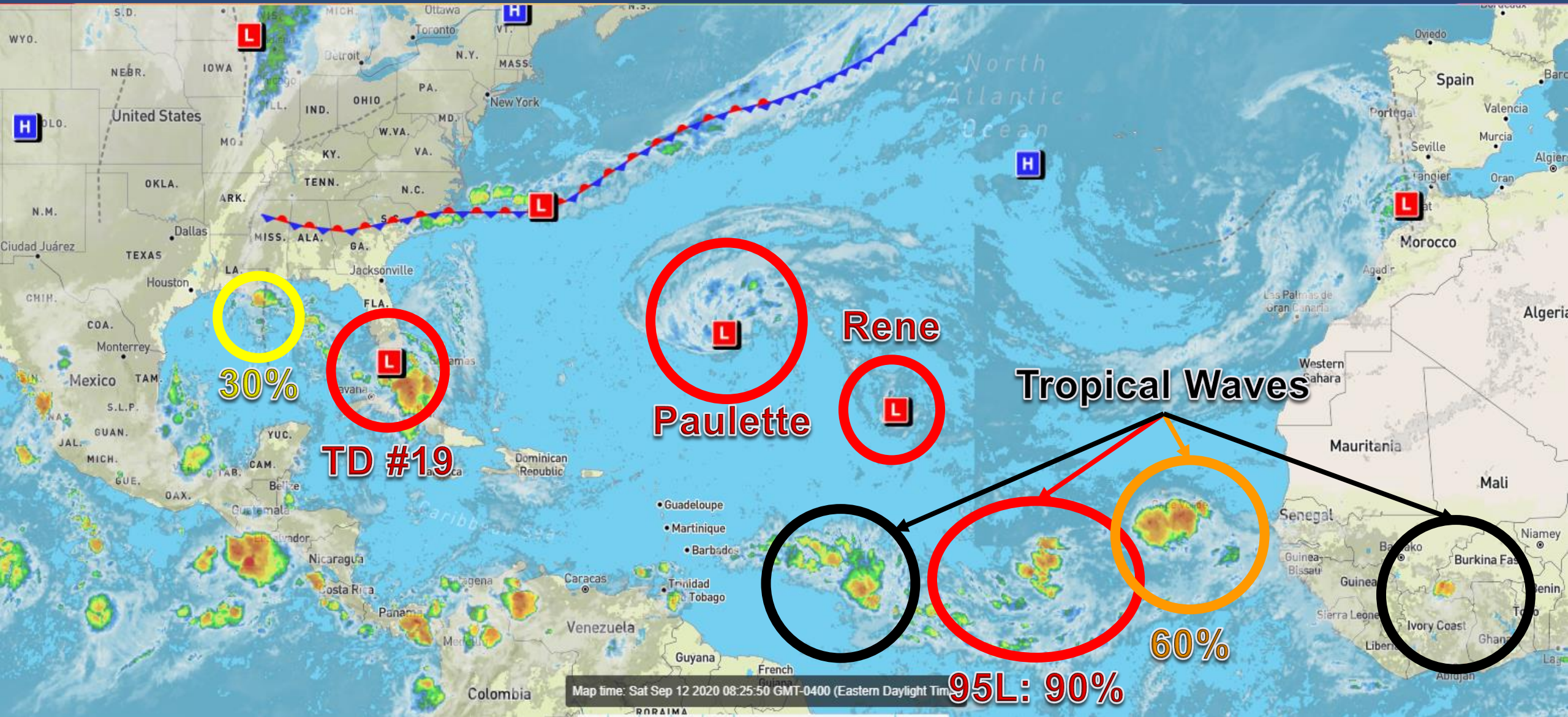
Overview/Recent Changes:

Tropical Depression #19 is located near the Southwest Florida coast and will move west-northwestward over the eastern Gulf of Mexico. Tropical Storm Watches are in effect from Walton to Franklin County. TD 19 is forecast to become a hurricane before landfall early next week. Very heavy rainfall is possible across much of the state. Isolated tornadoes and minor storm surge flooding is also possible. Additional watches and/or warnings may be needed later today.



Atlantic Basin Satellite Image

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





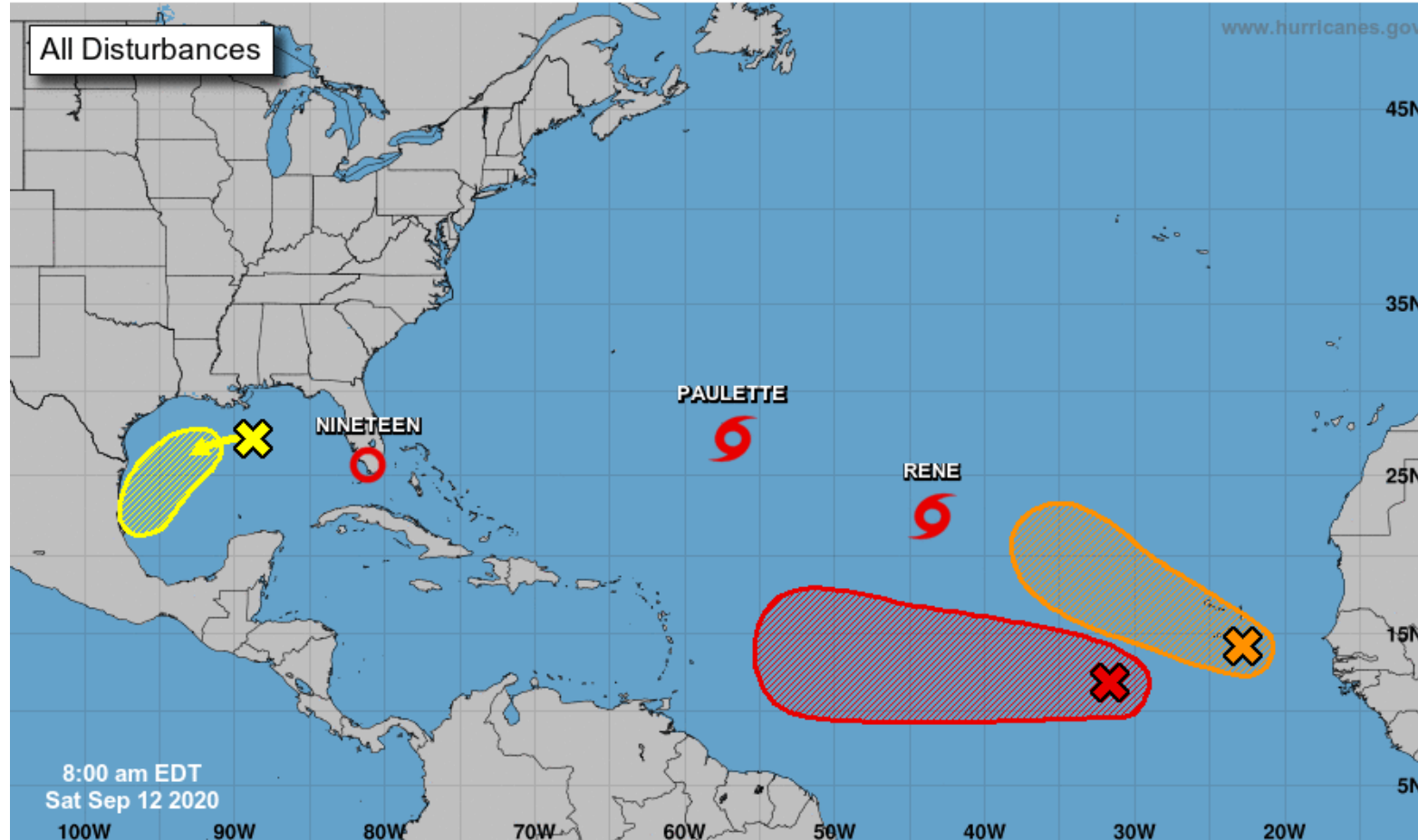
Tropical Weather Outlook

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



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



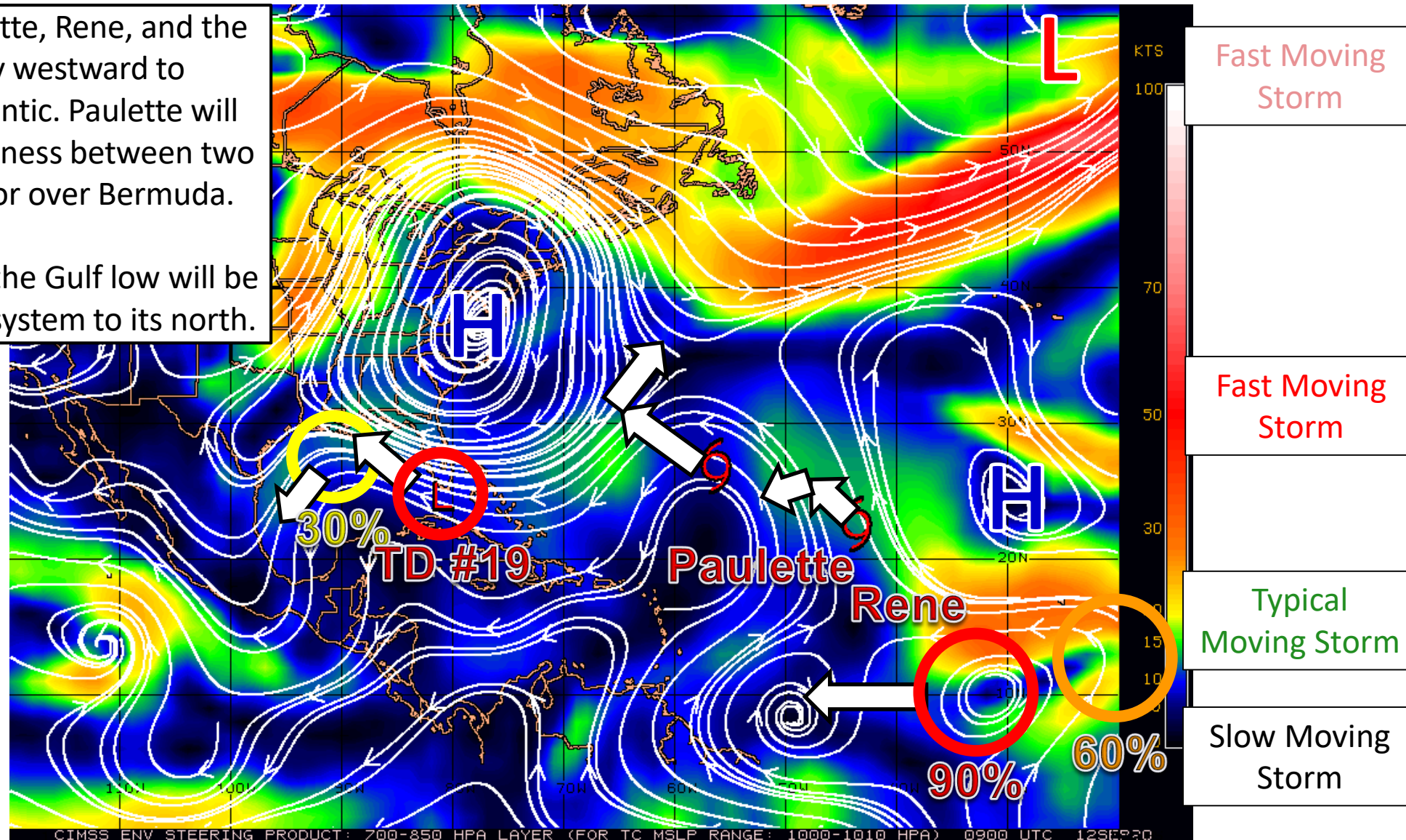
Steering Currents

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 will steer Paulette, Rene, and the next two waves generally westward to northwestward over the Atlantic. Paulette will turn northward into the weakness between two areas of high pressure near or over Bermuda.

Near Florida, the TD #19 and the Gulf low will be steered by the high pressure system to its north.





Wind Shear

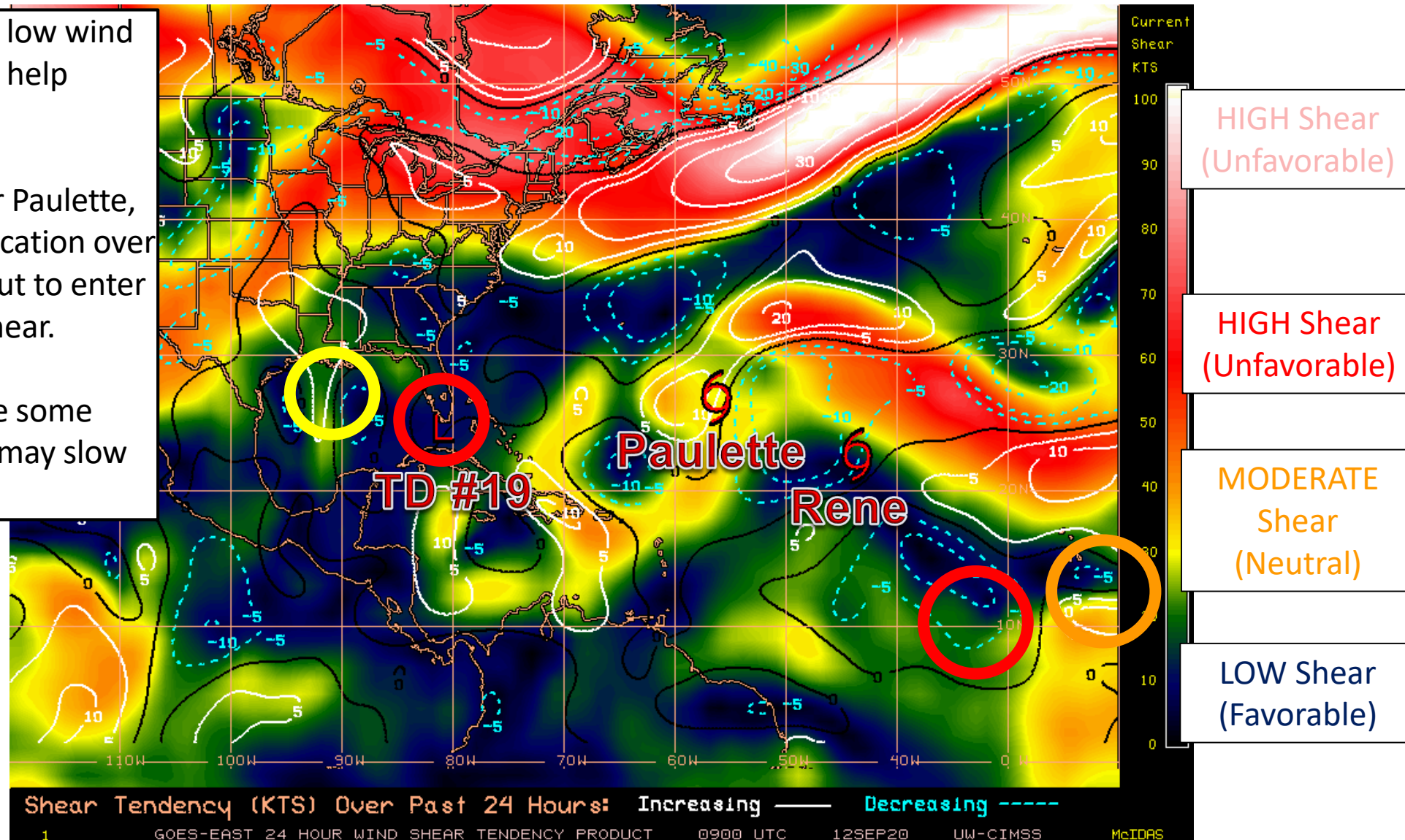
Is the environment favorable for the systems?

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).

TD #19 and the Gulf low have low wind shear nearby, which may help development.

Wind shear will decrease over Paulette, which should allow for intensification over the next few days. Rene is about to enter a zone of strong wind shear.

The waves near Africa have some moderate wind shear, which may slow down development.

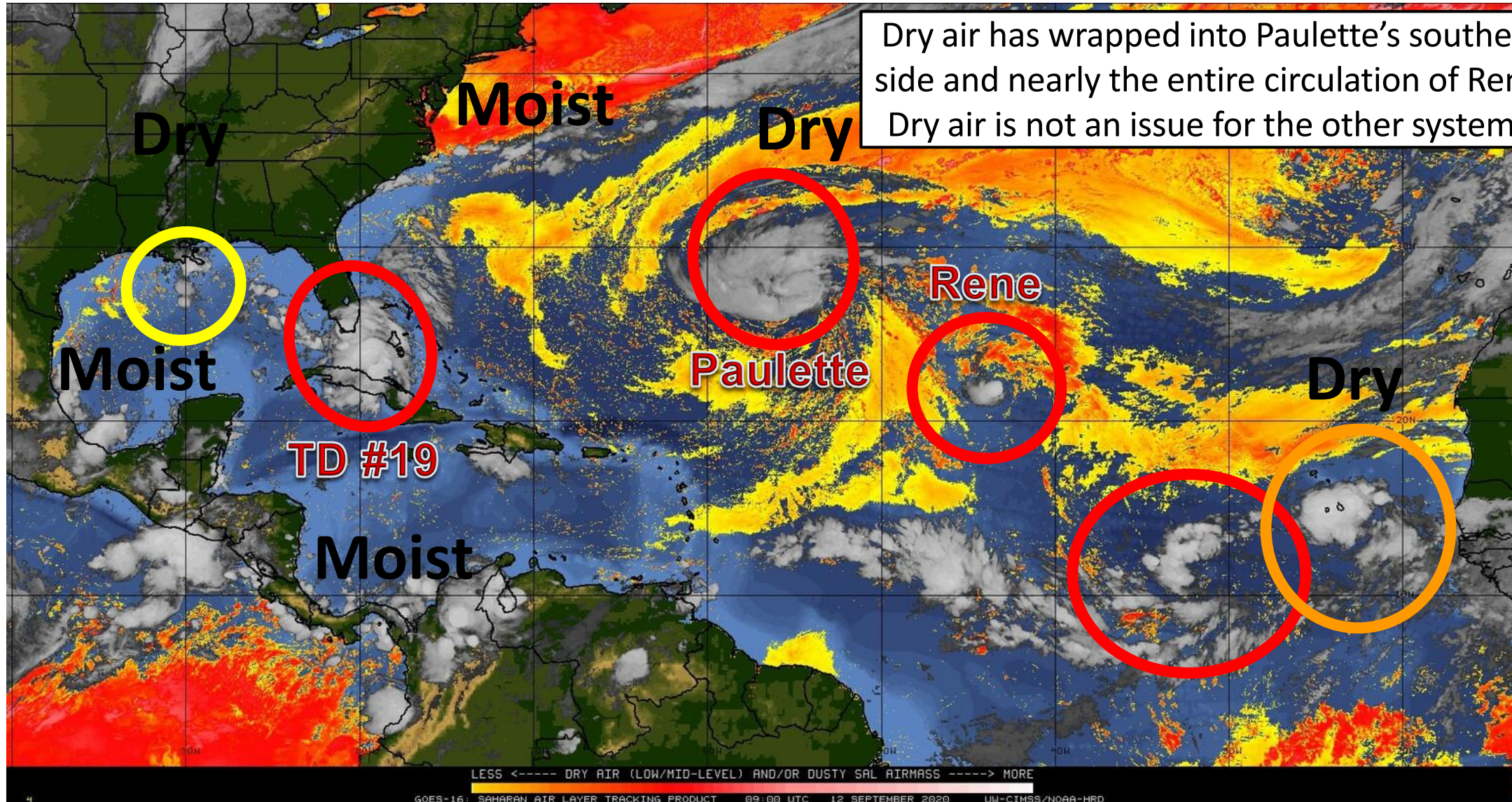




Dry Air & Saharan Dust

Is the environment favorable for the systems?

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





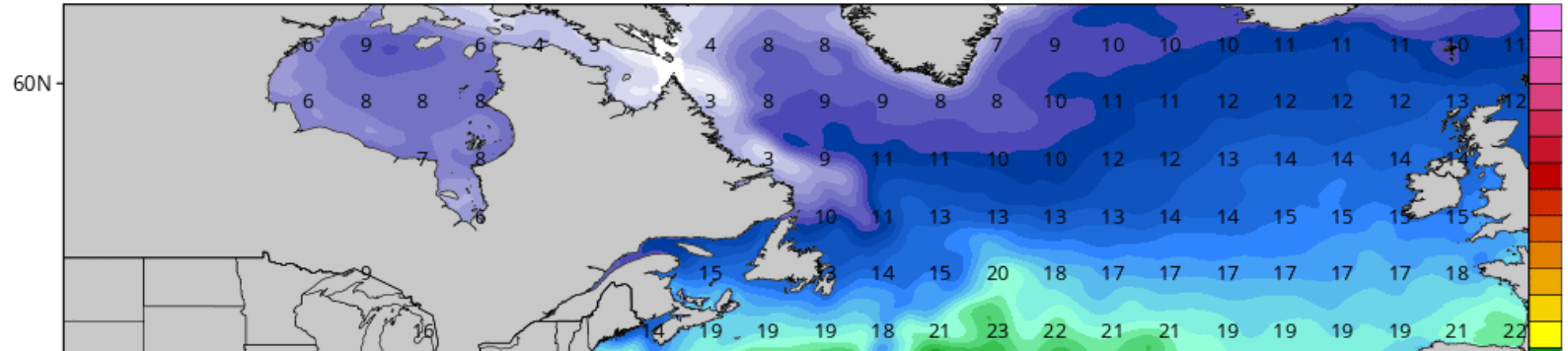
Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Atlantic basin and above normal for this time of year.

CDAS Sea Surface Temperature (°C)

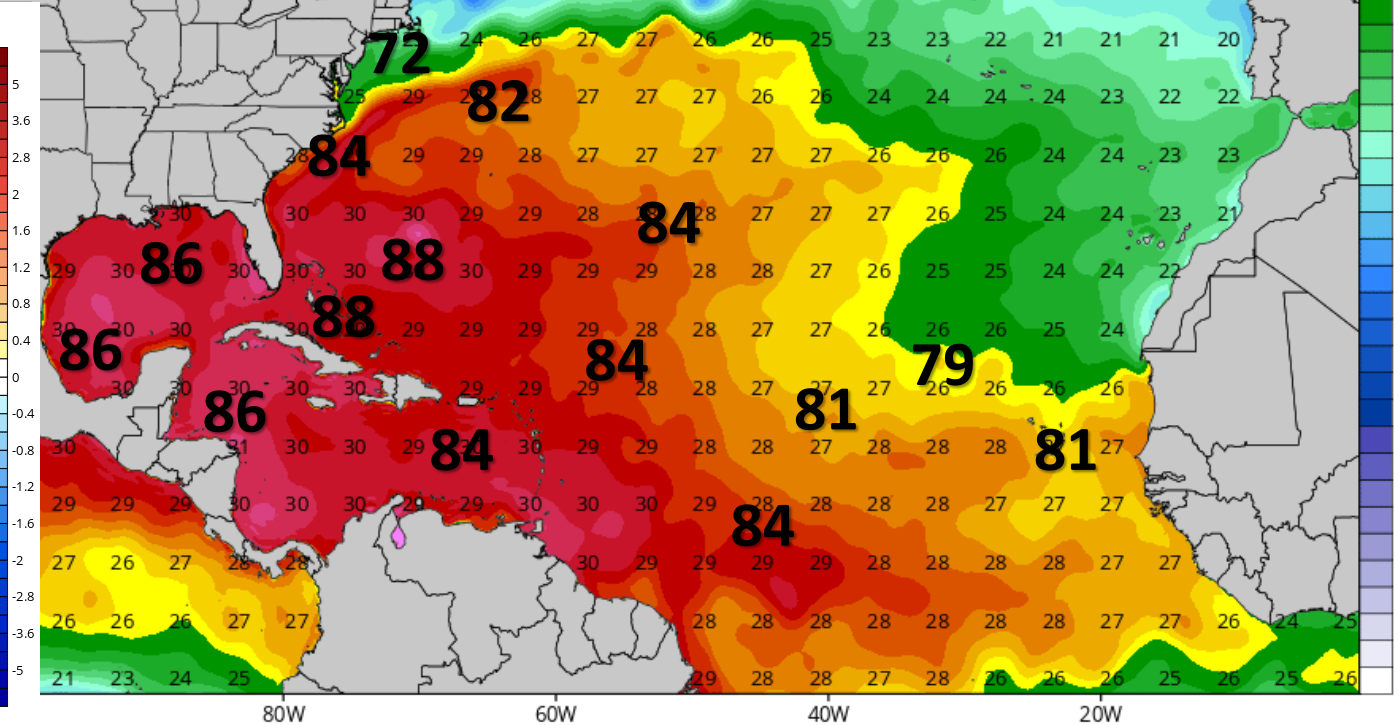
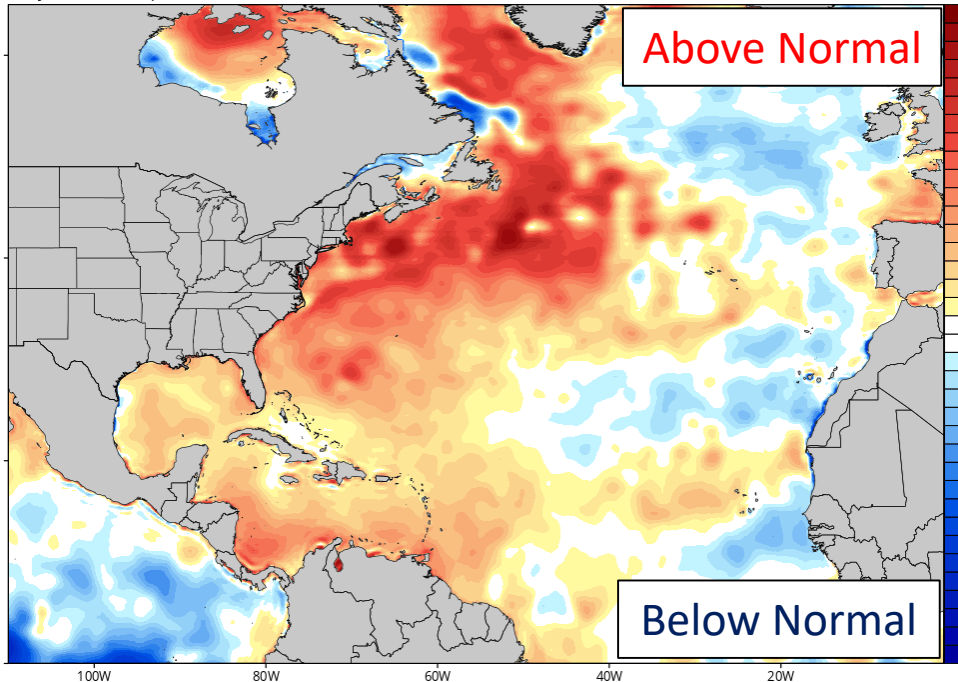
Analysis Time: 00z Sep 12 2020



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

Analysis Time: 00z Sep 12 2020

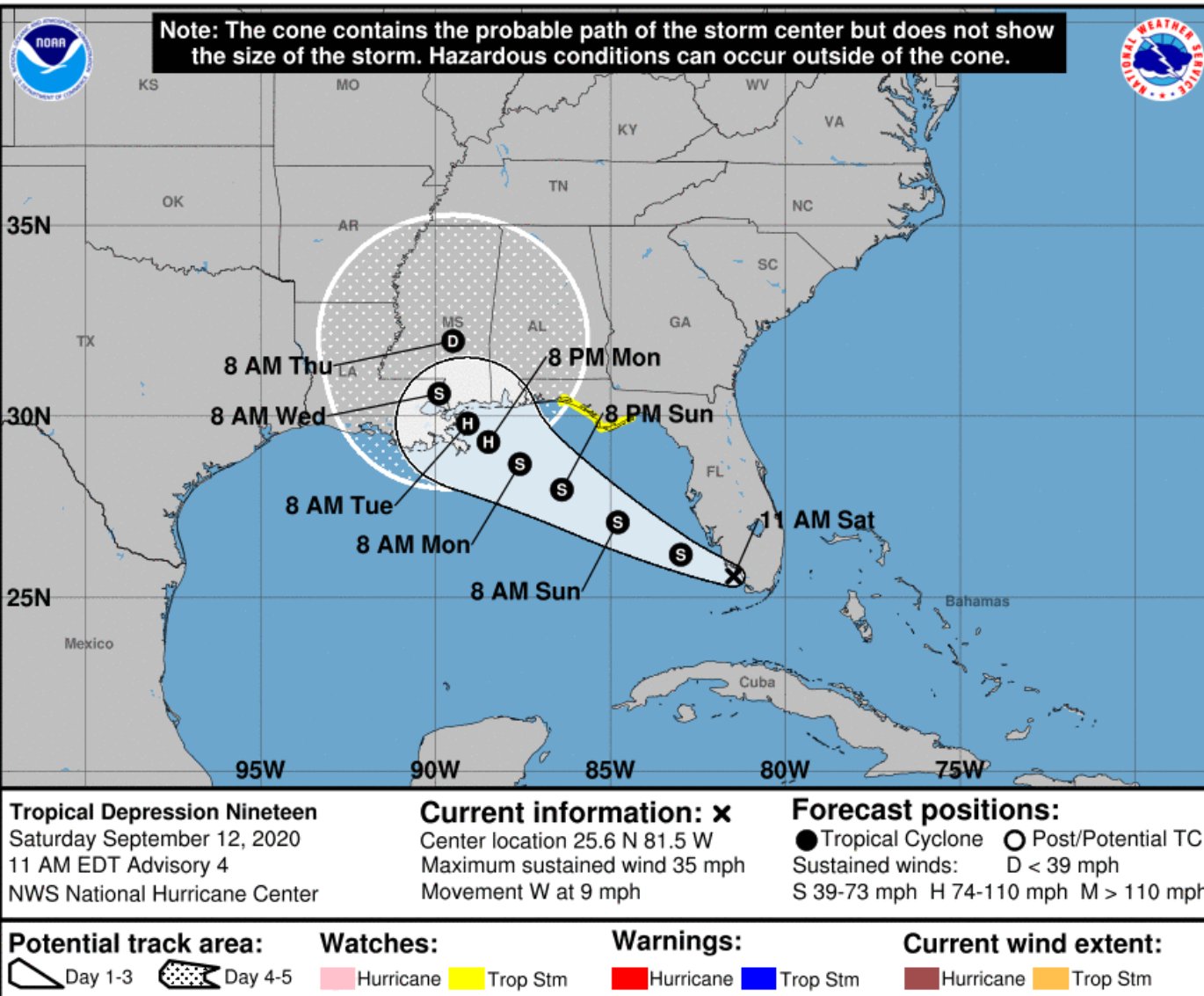
TROPICALTIDBITS.COM





Official Forecast Track

From the National Hurricane Center: Tropical Depression Nineteen



- The center of Tropical Depression #19 is located about 40 miles south-southeast of Naples
- Maximum sustained winds are 35 mph, and TD #19 is moving to the west at 8 mph.
- Gradual strengthening is forecast, and TD #19 will likely become a tropical storm today.
- Additional strengthening is expected, and TD #19 will be near hurricane strength on Monday.

TD #19 will bring heavy rainfall, gusty winds, and isolated tornadoes to parts of South Florida, the West Coast, and the Panhandle/Big Bend.



Tropical Weather Outlook

Possible Area of Development During the Next 5 Days ([LINK](#))



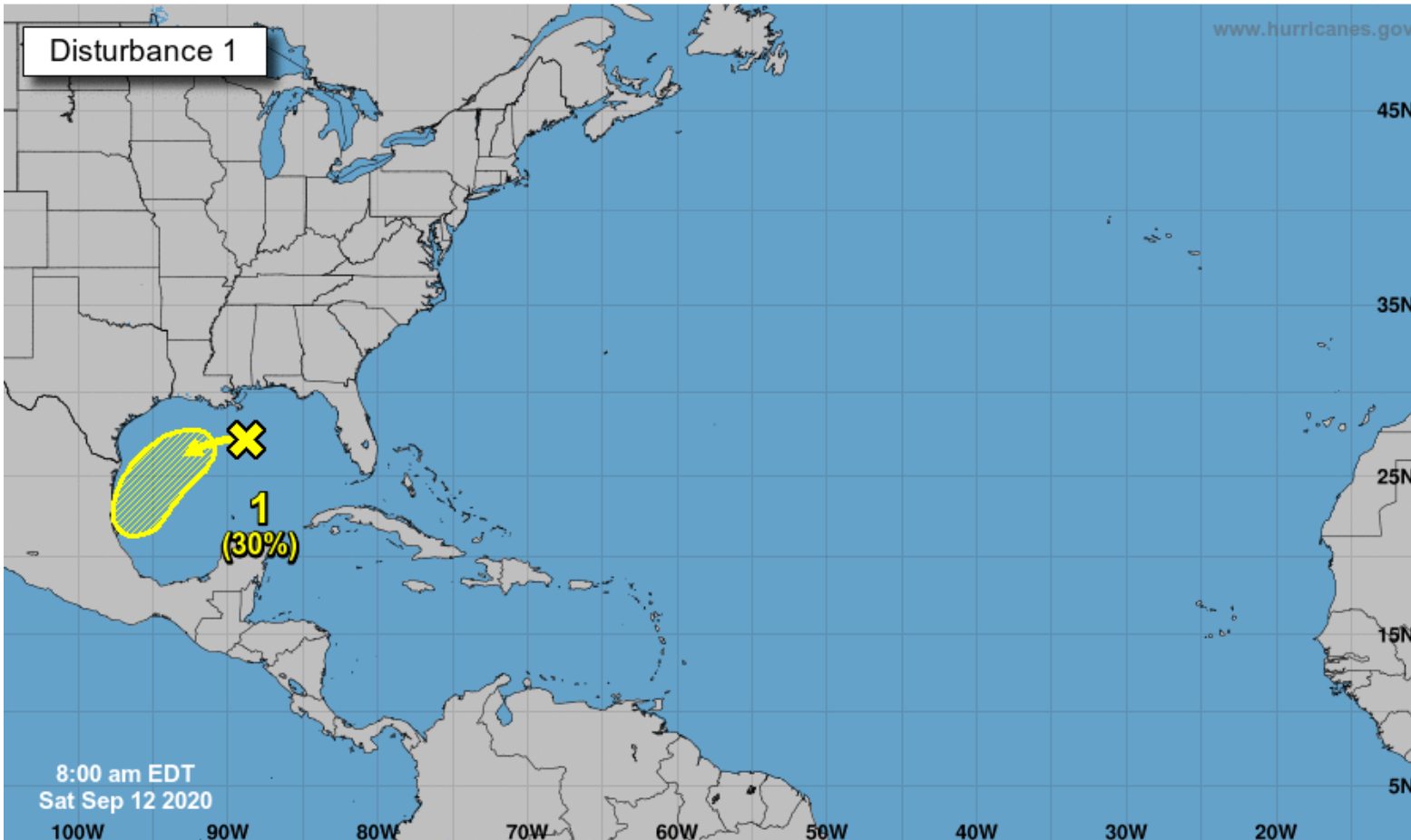
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 1



8:00 am EDT
Sat Sep 12 2020

Current Disturbances and Five-Day Cyclone Formation Chance:
 Tropical or Sub-Tropical Cyclone:
 < 40% 40-60% > 60%
 Depression Storm Hurricane
 Post-Tropical Cyclone or Remnants

A surface trough over the north-central Gulf of Mexico is producing disorganized showers and a few thunderstorms.

Some slow development of this system is possible while it moves westward and then southwestward over the northern and western Gulf of Mexico through the middle of next week.

No direct impacts to Florida are expected.

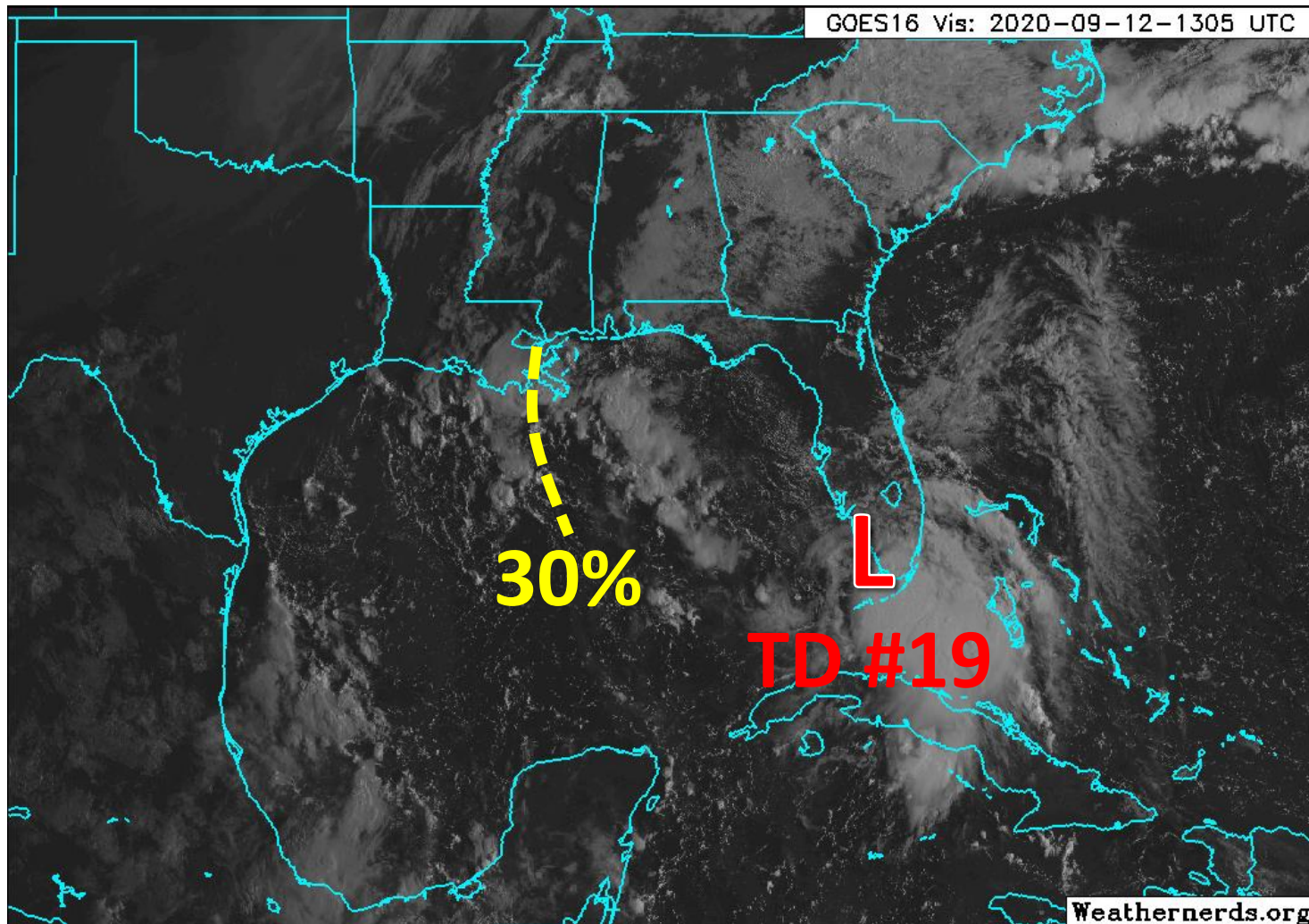
***Formation chance through 48 hrs...low...20%**

***Formation chance through 5 days...low...30%**

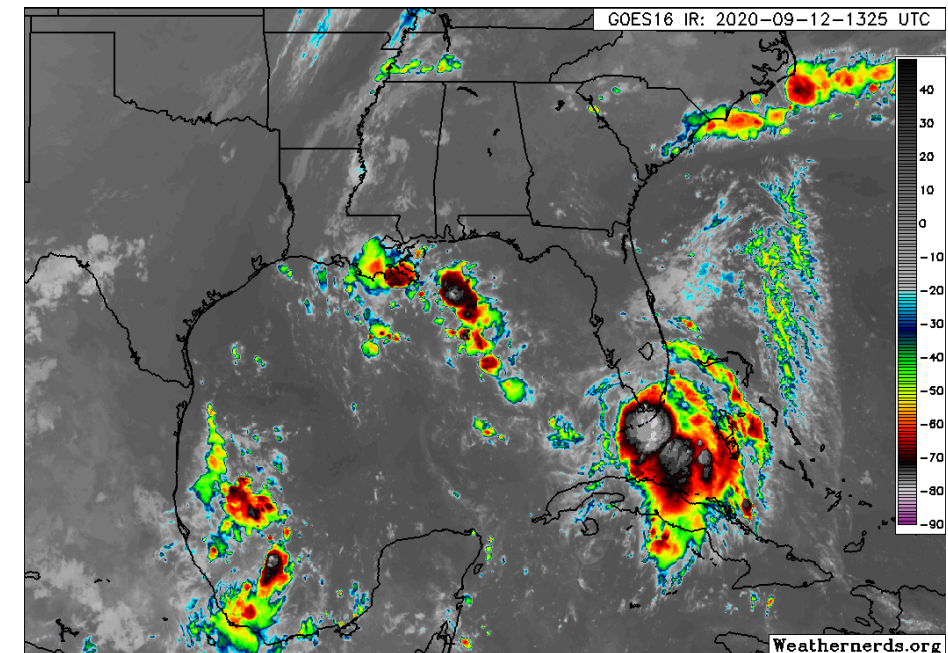


Satellite Imagery

Western Atlantic – Gulf of Mexico & Southwestern Atlantic



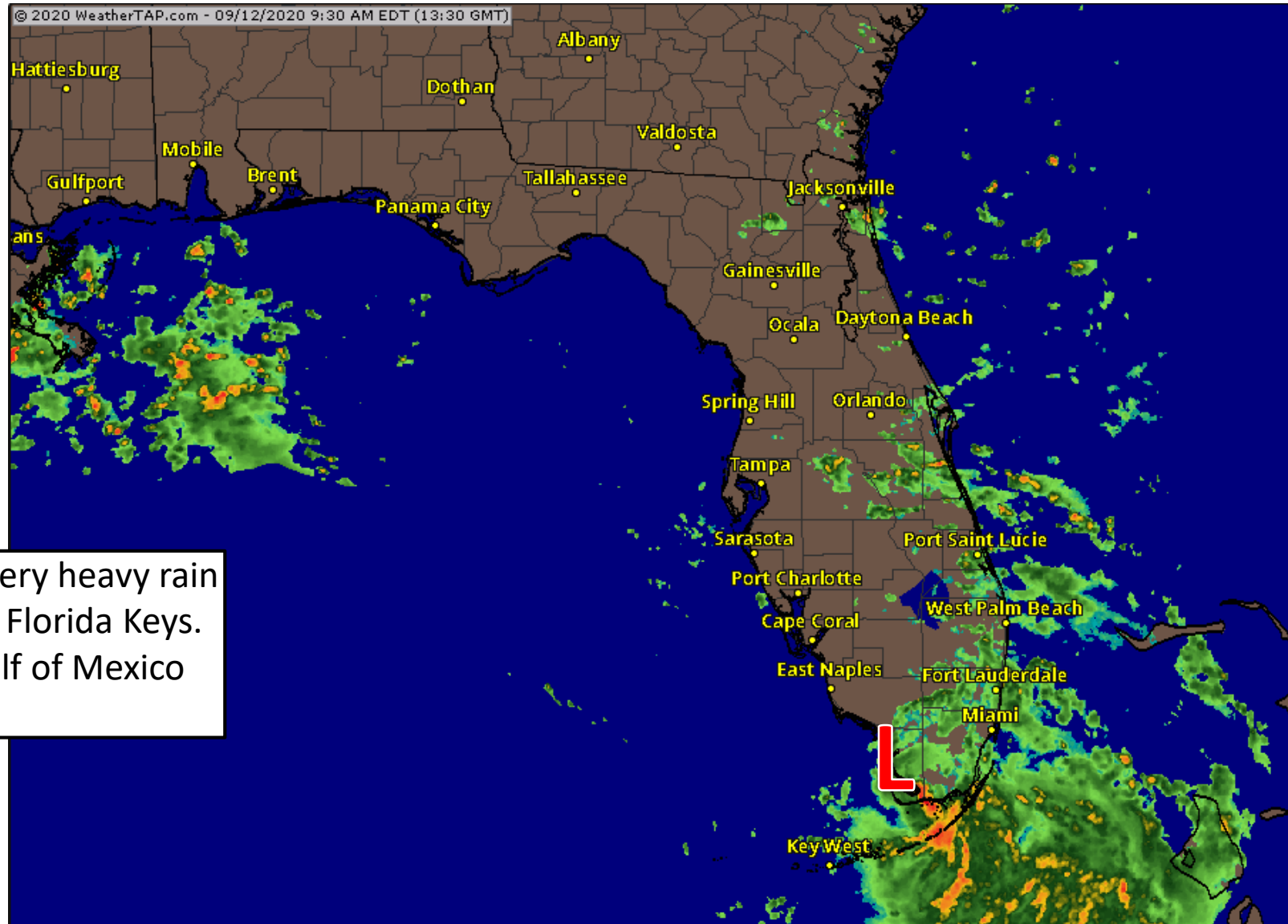
Tropical Depression #19 near southwest Florida will move into the Gulf over the next few hours. However, some northerly shear has kept thunderstorms on the south side of the system. But the shear is expected to decrease, and better organization and strengthening is forecast





Current Florida Radar

As of 9:30 AM ET



TD #19 is currently producing very heavy rain over far South Florida and the Florida Keys. TD #19 will move into the Gulf of Mexico shortly.



Damaging Wind Threat Overview

Tropical Depression #19

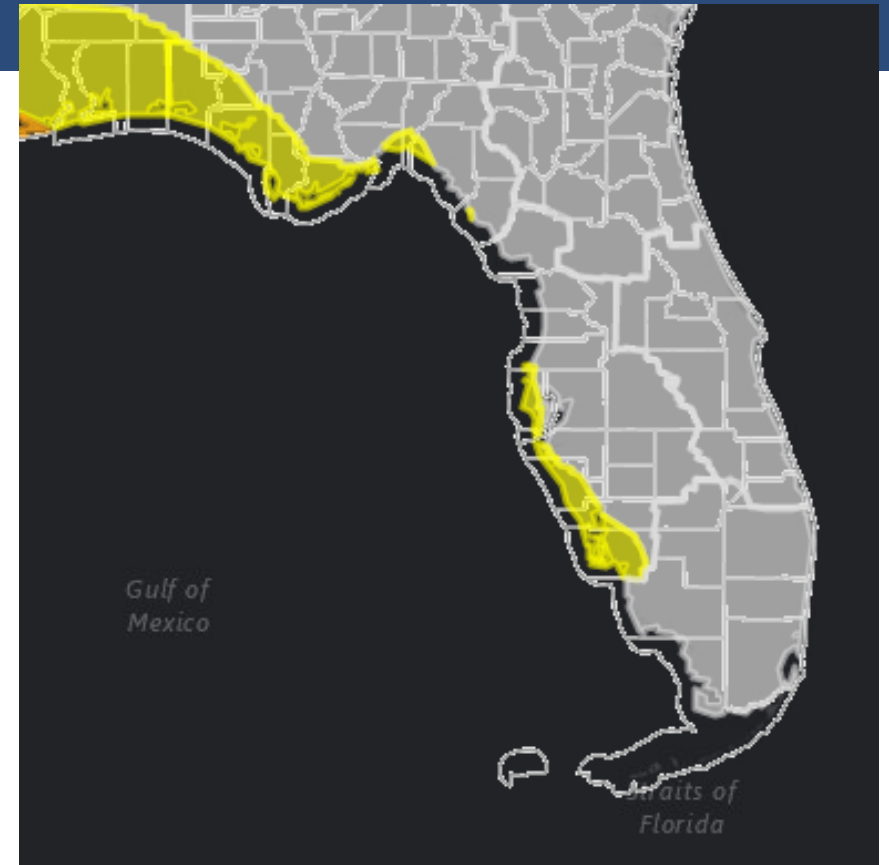
There is the possibility for tropical storm force winds along parts of the West Coast over the next day or so, primarily in gusts.

Sustained tropical storm force winds are possible beginning Sunday night in the Big Bend and eastern Panhandle, then spreading into the rest of the Panhandle Monday and Tuesday.

These risks may increase in the Panhandle depending on the track and intensity of TD #19.

[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on “Threats and Impacts” Tab



[\[Download KML\]](#)

[\[Download Image\]](#)

Wind Threat
Potential for wind greater than 110 mph
Potential for wind 74 to 110 mph
Potential for wind 58 to 73 mph
Potential for wind 39 to 57 mph
Wind less than 39 mph

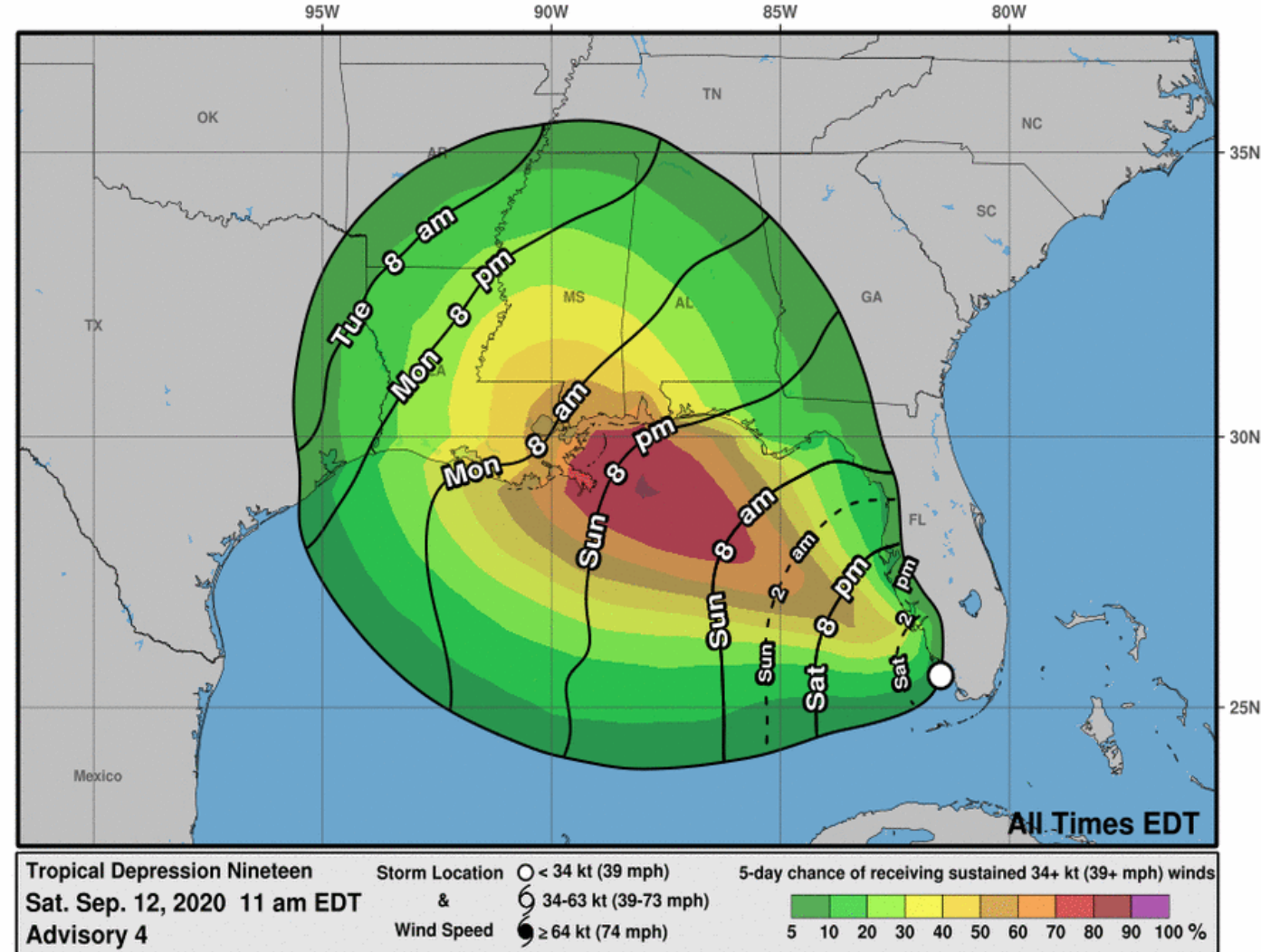


Time of Arrival & Wind Speed Probabilities

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



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Naples: 25% (+8)

Venice: 23% (-2)

Tampa: 14% (-3)

Cedar Key: 16% (+/-0)

Tallahassee: 11% (+2)

Apalachicola: 40% (+2)

Panama City: 47% (+4)

Destin: 30% (+3)

Milton: 33% (+6)

Pensacola: 37% (+6)

Tropical storm force wind gusts are possible along the West Coast through today. Sustained tropical storm force winds could begin in the Big Bend and Panhandle as early as Sunday morning and afternoon.

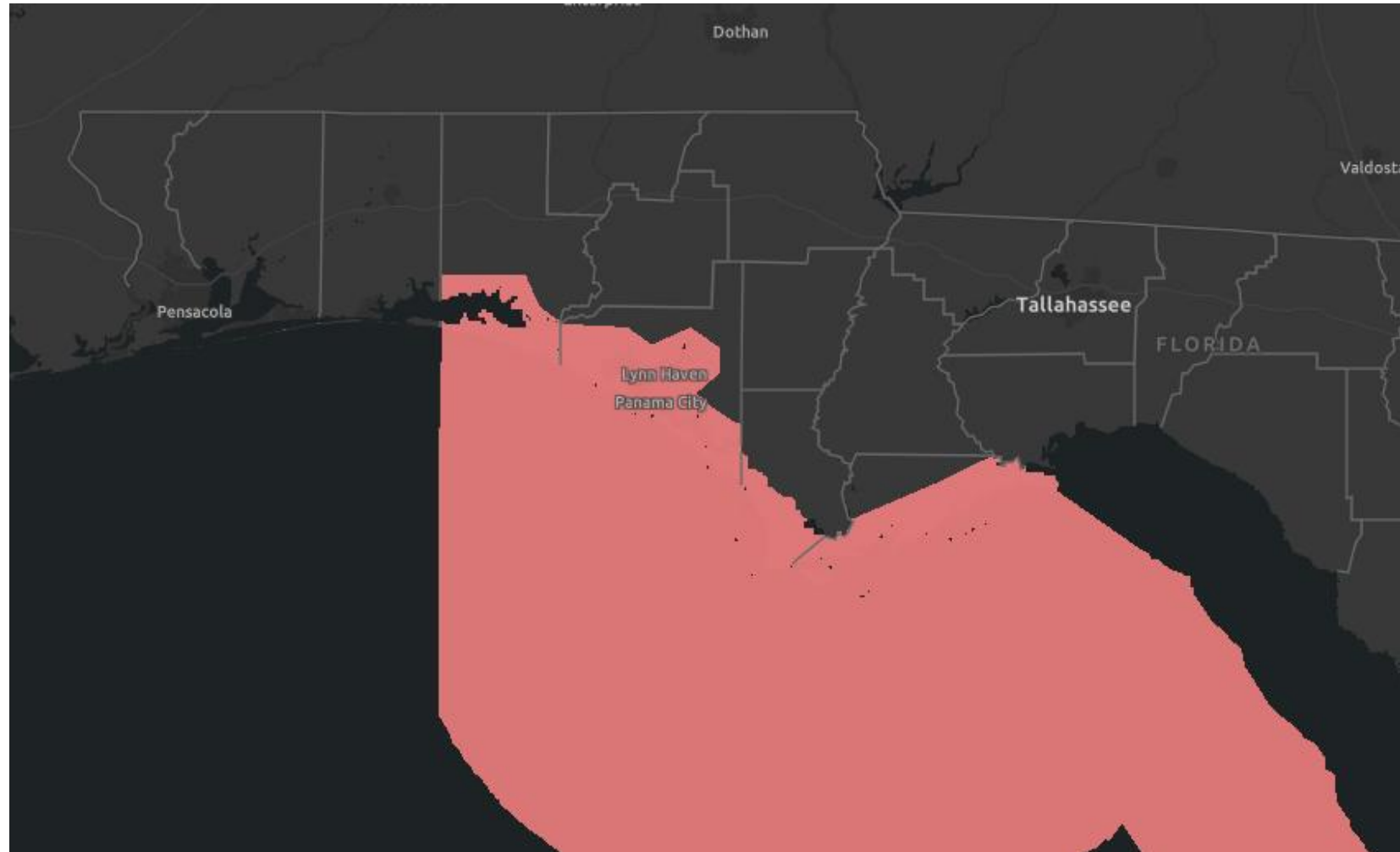


Wind Watches and Warnings

In Effect Until Further Notice

**Tropical Storm Watches:
South Walton, coastal Bay,
coastal Gulf, coastal Franklin**

**Additional watches/warnings
could be needed later today.**





Tropical Storm & Hurricanes

Watches Versus Warnings

WATCH

Tropical storm and/or hurricane conditions are **POSSIBLE** in Watch area

Issued up to 48 hours in advance of tropical storm force winds

WARNING

Tropical storm and/or hurricane conditions are **EXPECTED** in Warning area

Issued up to 36 hours in advance of onset of tropical storm force winds

Hurricane preparedness activities become difficult once winds reach tropical storm force. **Watches & Warnings are issued in advance of onset of tropical storm force winds, 39-73mph**



NWSMobile



weather.gov/mob



Flood Threat Overview

Tropical Depression #19

The greatest flood threat is across coastal southwest Florida, the western Big Bend, and the Panhandle. However, flooding is possible nearly anywhere in the state due to TD #19.

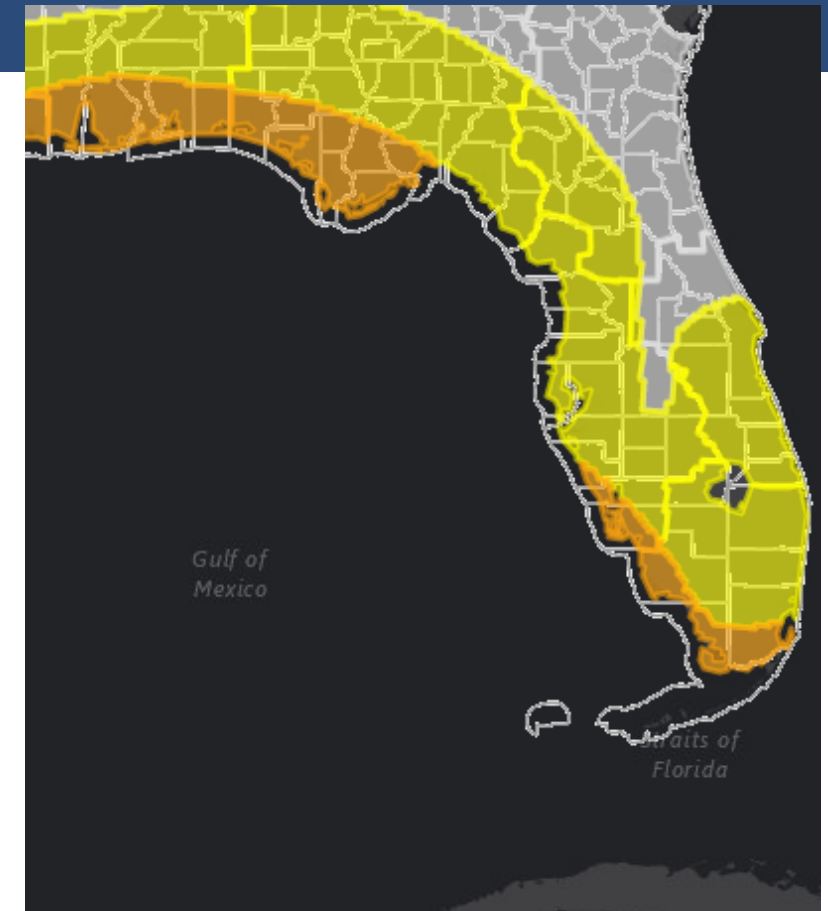
7 Day Rainfall Totals:

- **West Coast, South Florida, Keys:** 3-6", locally 6-9"
- **Big Bend:** 4-8", locally 10"+
- **Panhandle:** 6-12", locally 15"+

Flood Watches are in effect for much of the Peninsula.
More Flood Watches are expected in North Florida.

[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on "Threats and Impacts" Tab



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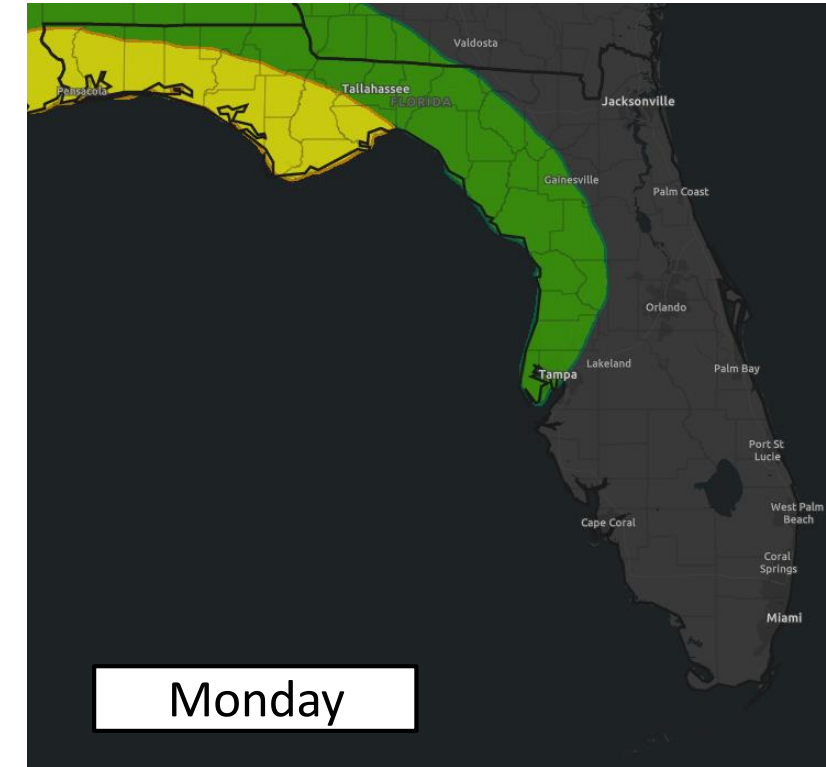
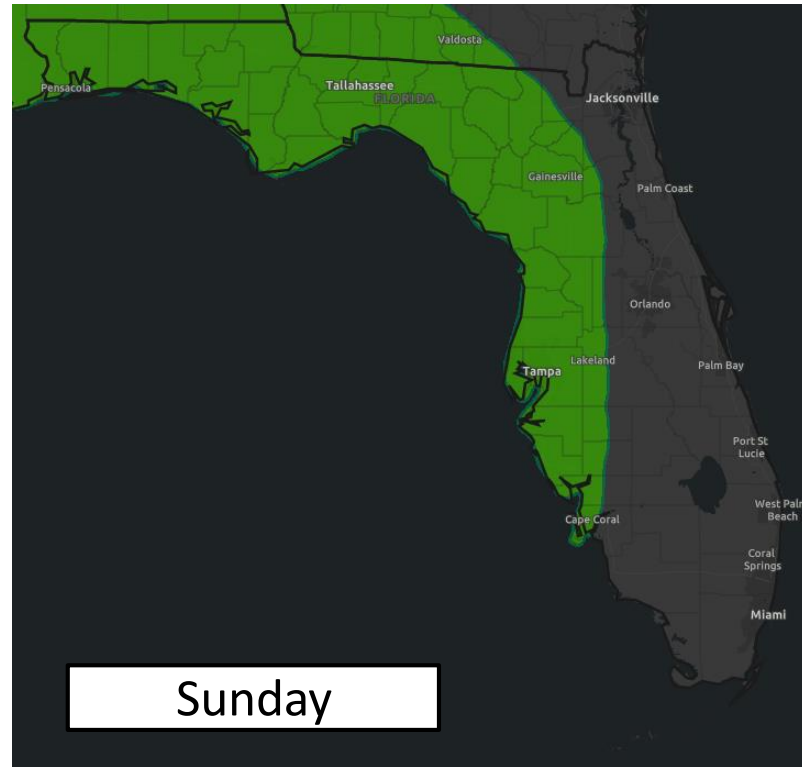
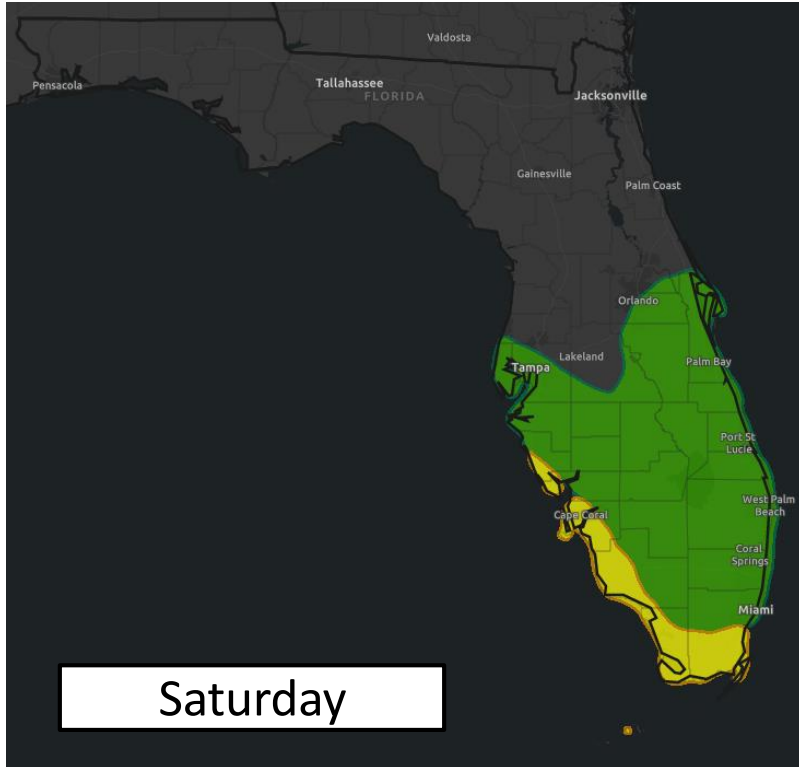
[\[Download Image\]](#)

Flooding Rain Threat
Potential for extreme flooding rain
Potential for major flooding rain
Potential for moderate flooding rain
Potential for localized flooding rain
Little to no potential for flooding rain



Flash Flood Outlooks

From the 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%

Heavy rainfall will lead to a threat of flash flooding across much of the state. If the track shifts a little farther north or east, then the flash flood threat will likely increase further across the Panhandle and Big Bend.

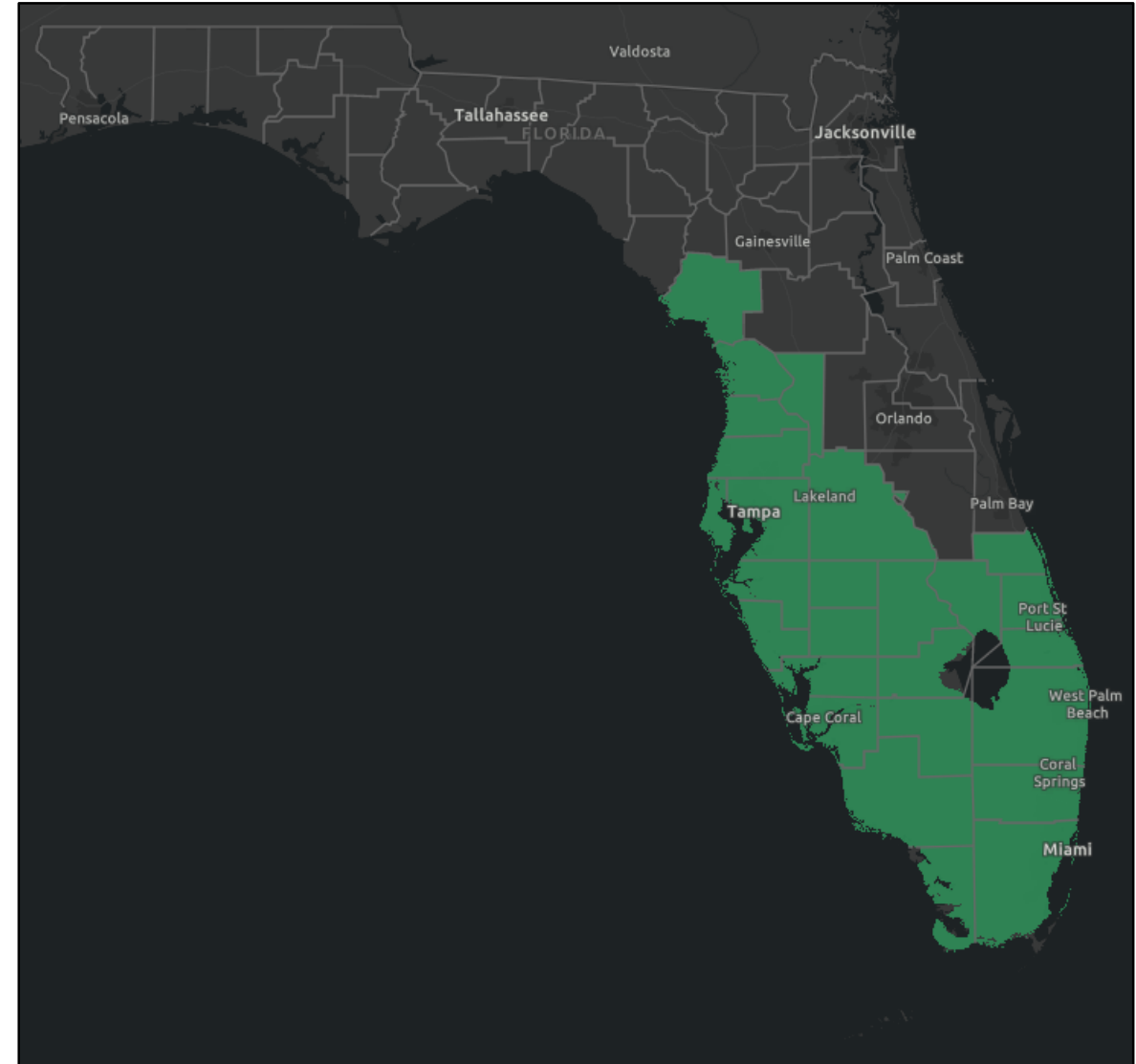


Flood Watches

Links: [NWS Tampa Bay](#) | [NWS Miami](#)

Tropical Depression #19 will produce heavy rainfall over already saturated soils across the Peninsula this weekend. Flood Watches are in effect for much of the Peninsula.

Additional Flood Watches will likely be needed for the Panhandle and Big Bend.





Flash Flood Guidance

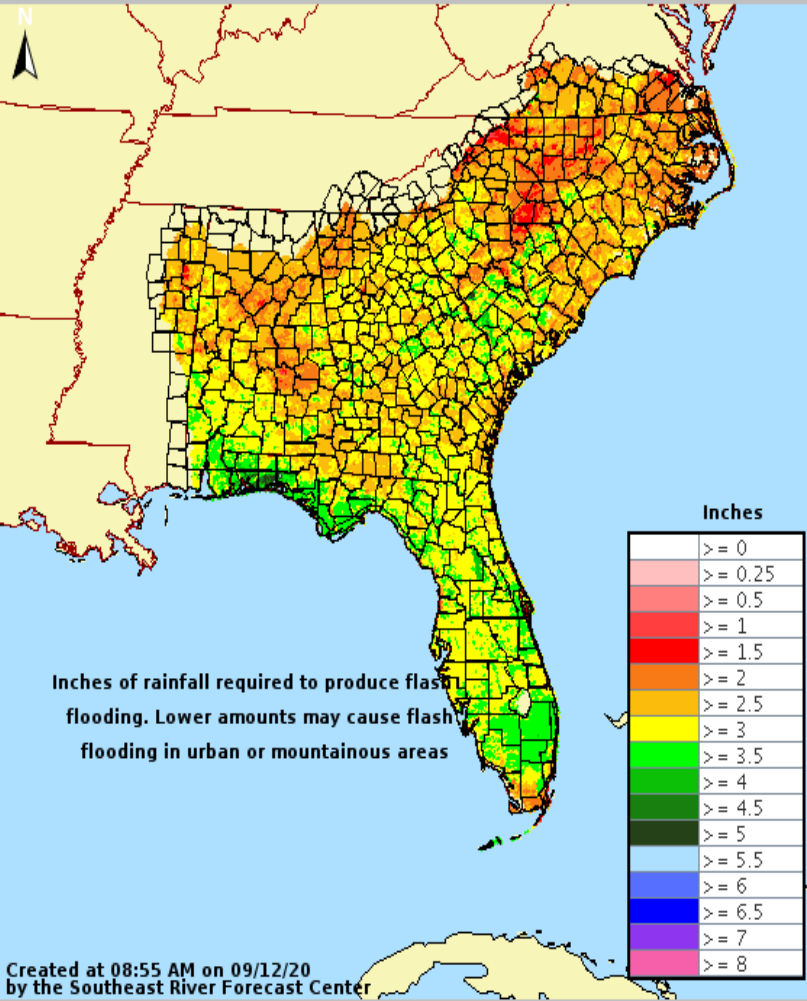
How Much Rain is Needed to Create Flash Flooding?



1-hr Flash Flood Guidance

Valid: 09/12/2020 @ 08:55 AM



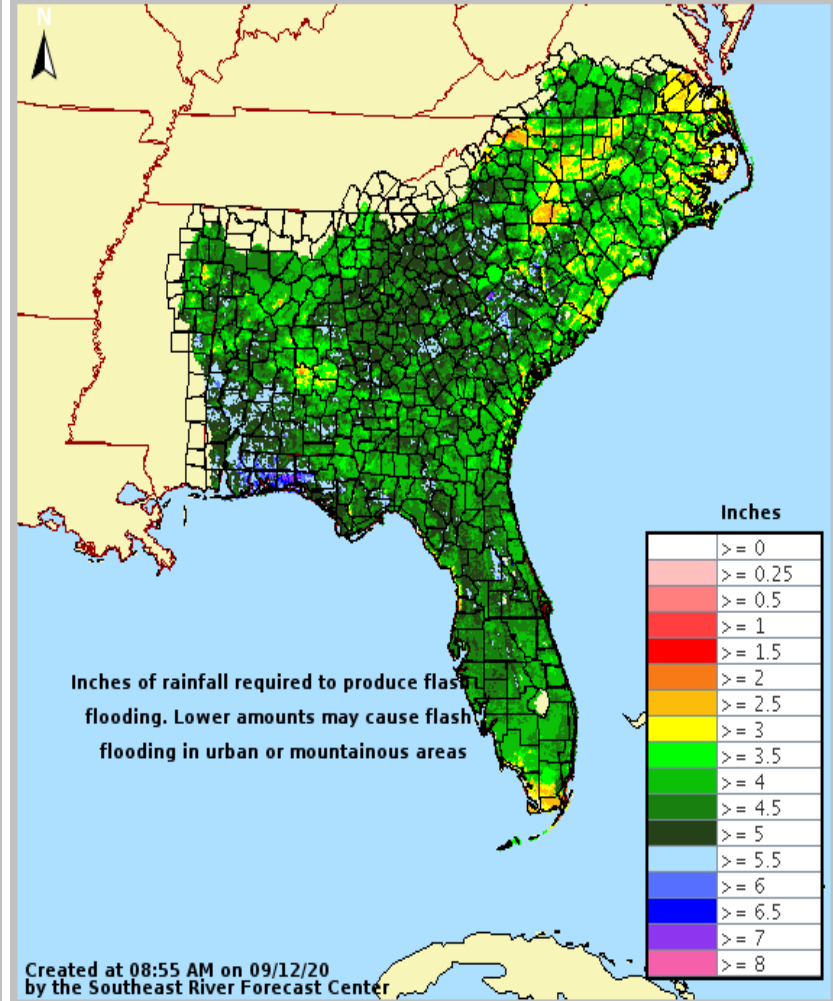




6-hr Flash Flood Guidance

Valid: 09/12/2020 @ 08:55 AM





Along the West Coast, it will only take about 1.5-3" of rain within 1 hour or 3-5" within 6 hours to cause flash flooding due to recent heavy rainfall.

Elsewhere in the state, it will take about 3-4" in 1 hour or 5+" within 6 hours to cause flash flooding.



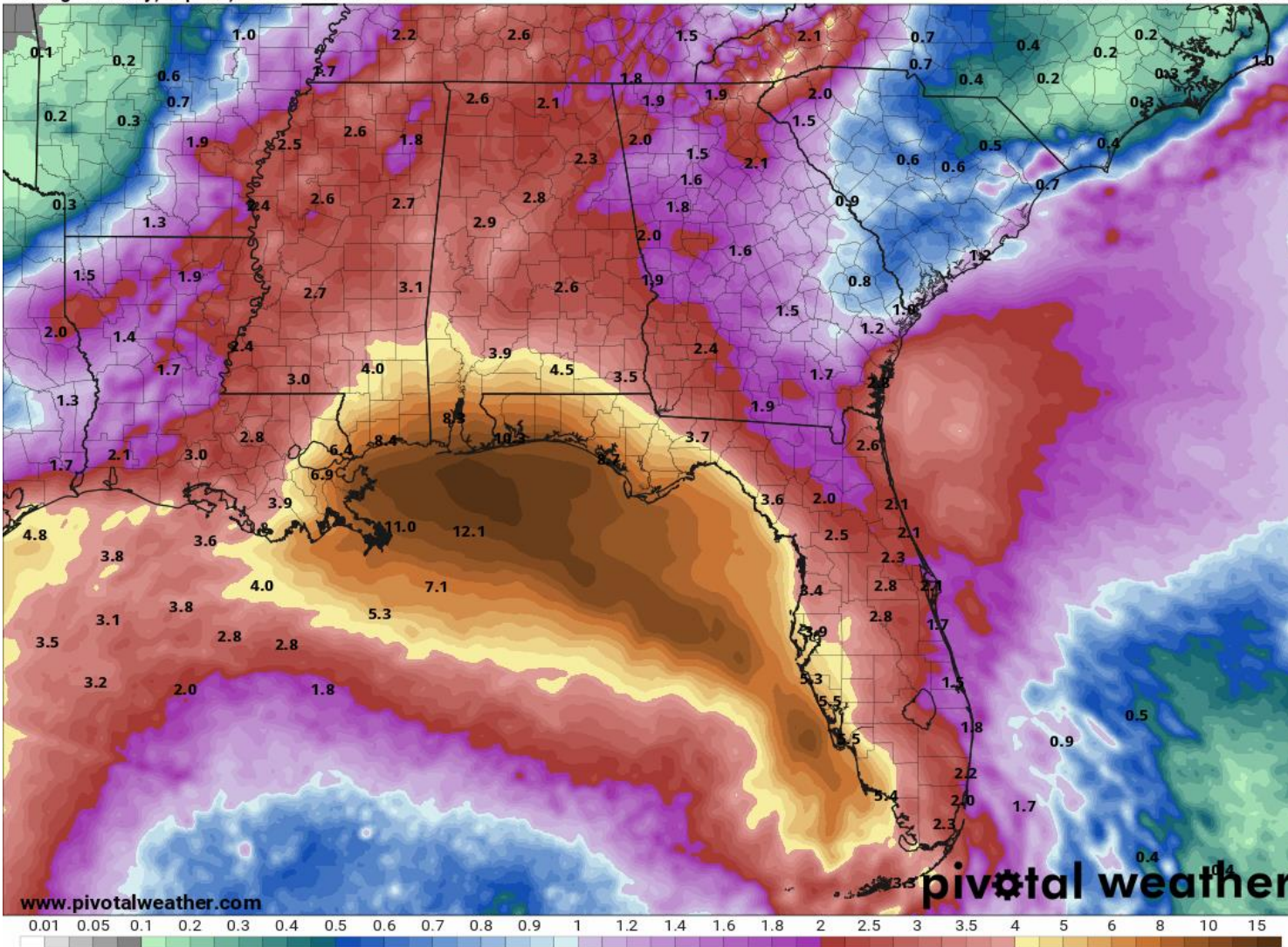
Rainfall Totals Next 7 Days

Ending 8 AM ET Friday 9/18 – Gulf of Mexico Systems

7-Day Precipitation (in)

Ending Saturday, Sep. 19, 2020 at 8 a.m. EDT

Init: Sat 2020-09-12 12z WPC



Rainfall totals of 3-6" are expected over the next 7 days along the West Coast and in South Florida, localized totals of 6-9" possible.

Rainfall totals of 4-8" are expected over the next 7 days in the Big Bend and 6-10" in the Panhandle. Localized totals of 10-15+" are possible.

Exact rainfall totals will depend on the track of TD #19. Regardless, rainfall impacts may extend well away from the center.

These rainfall totals may also increase in North Florida if the track were to shift northward or eastward.



Current & Forecast River Flooding

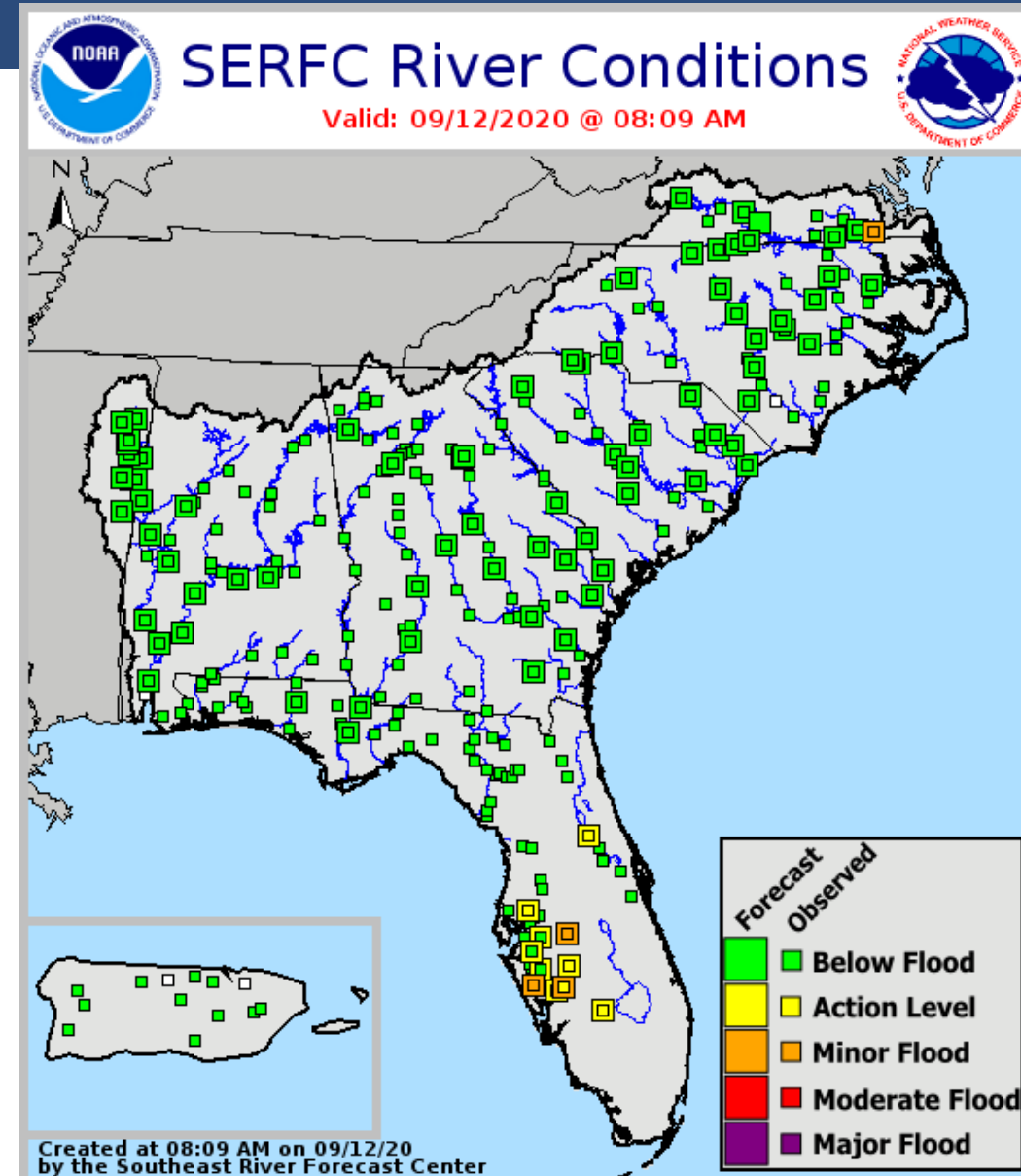
Southeast River Forecast Center

Rivers Currently in or Forecast to Reach Flood Stage:

- [Peace River at Bartow](#) – STEADY
- [Peace River at Arcadia](#) – RISING
- [Myakka River at Myakka River State Park](#) – RISING
- [Ocklawaha River at Rodman Dam](#) – STEADY

With more heavy rainfall expected across the state, additional river rises may occur over the next several days.

More details on river levels available at the [Southeast River Forecast Center website](#).





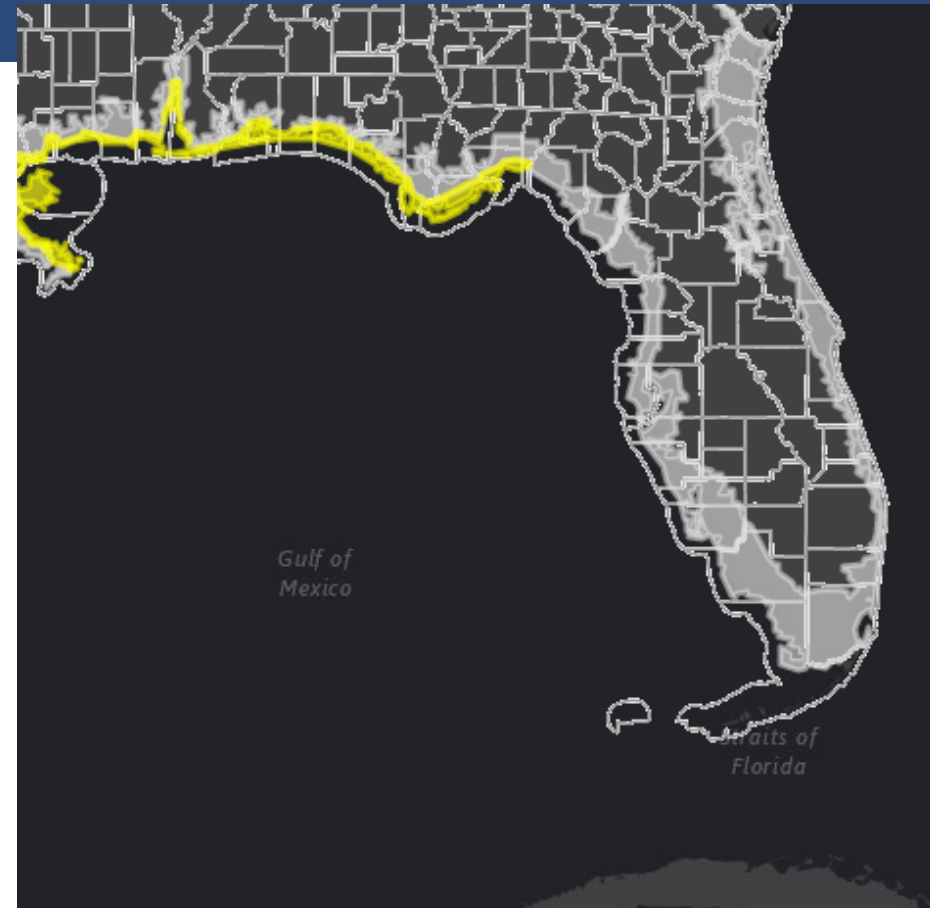
Storm Surge Threat Overview

Tropical Depression #19

While it remains too early to give specific details on storm surge values, minor coastal flooding is possible along the Panhandle and western Big Bend through early next week.

Tides are already running about 1' above normal along the Gulf Coast at high tide, which could result in some nuisance flooding of normally flood-prone areas

Storm Surge Watches could be issued later today if the threat increases.



[\[Download KML\]](#)

[\[Download Image\]](#)

[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on "Threats and Impacts" Tab

Storm Surge Threat
Potential for storm surge flooding greater than 9 ft above ground
Potential for storm surge flooding greater than 6 ft above ground
Potential for storm surge flooding greater than 3 ft above ground
Potential for storm surge flooding greater than 1 ft above ground
Little to no storm surge flooding

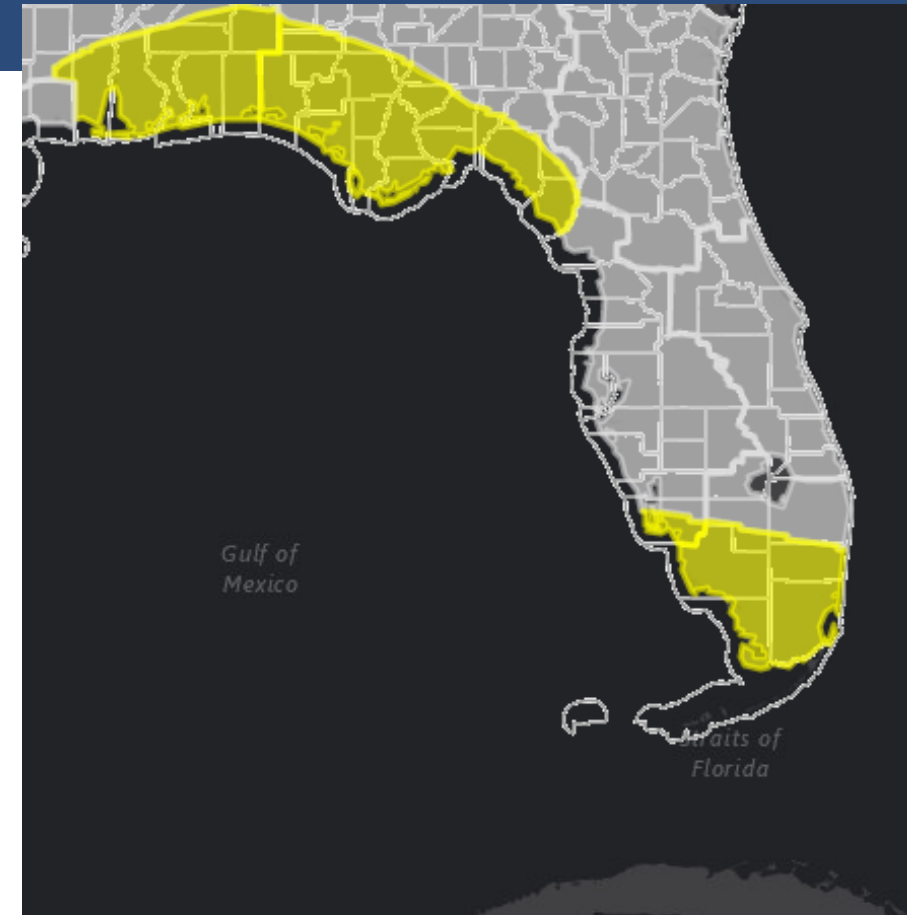


Tornado Threat Overview

Tropical Depression #19

Isolated tornadoes are possible in South Florida this afternoon and tonight.

The threat for isolated tornadoes will increase in the Panhandle and Big Bend late Sunday through early next week.



[\[Download KML\]](#)

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Tornado Threat	
Potential for outbreak of tornadoes	
Potential for many tornadoes	
Potential for several tornadoes	
Potential for a few tornadoes	
Tornadoes not expected	

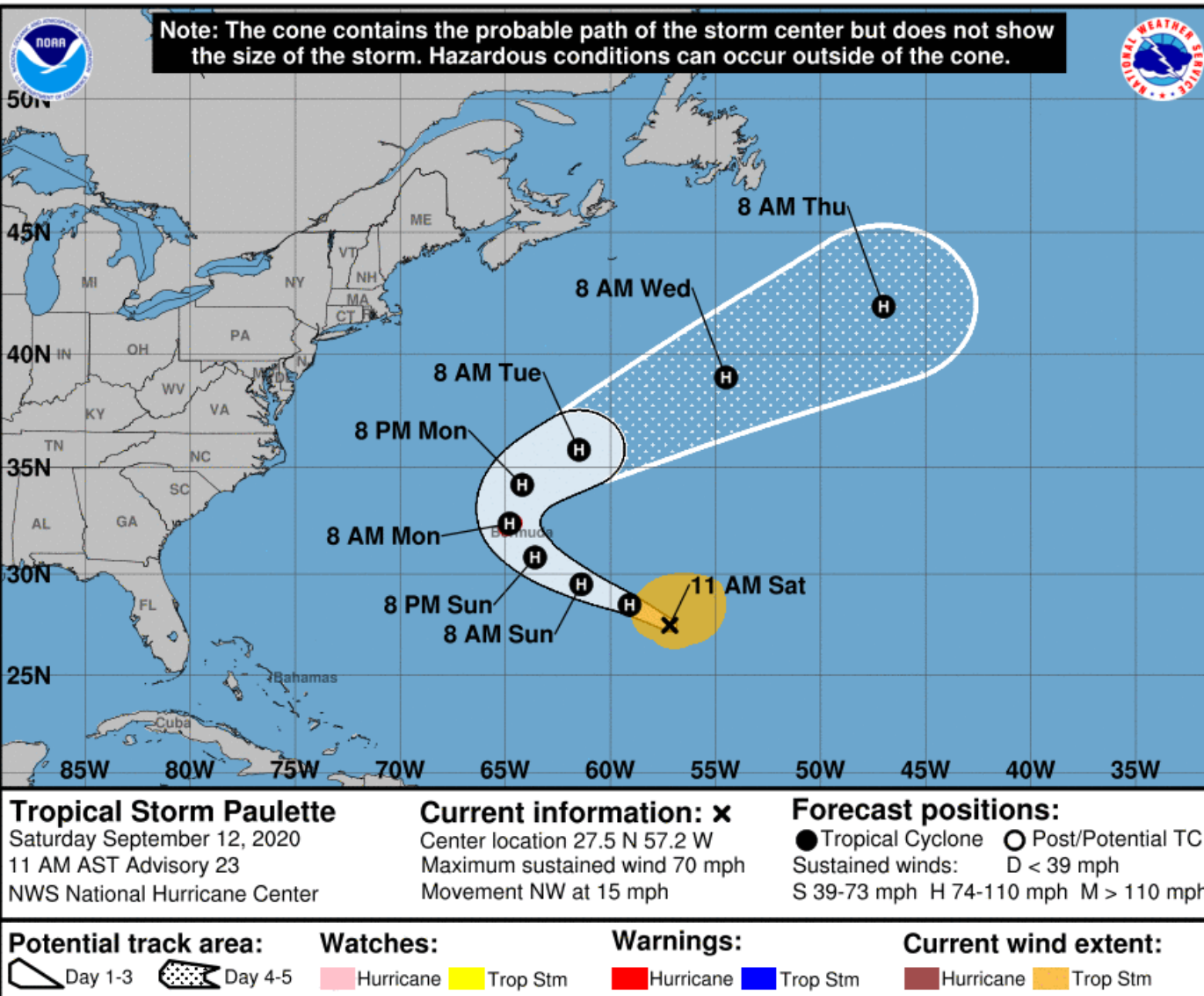
[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on “Threats and Impacts” Tab



Official Forecast Track

From the National Hurricane Center – Tropical Storm Paulette



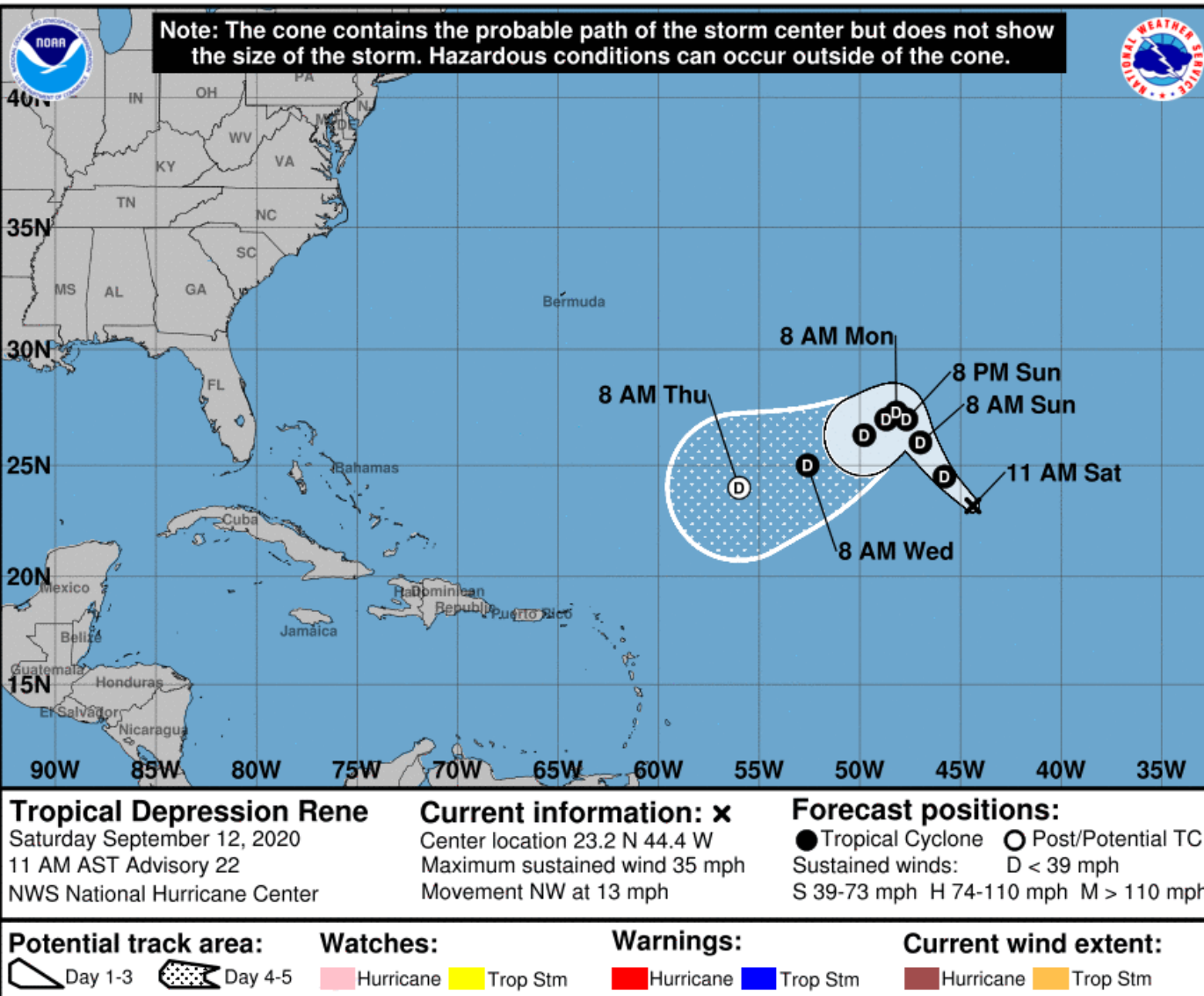
- The center of Paulette is located about 565 miles southeast of Bermuda
- Maximum sustained winds are 70 mph, and Paulette is moving to the northwest at 15 mph.
- Strengthening is forecast, and Paulette is expected to become a hurricane today.
- Paulette will move near or over Bermuda Monday morning.
- Paulette could briefly become a major hurricane as it turns northeastward next week.

Direct impacts from Paulette are not expected, but swells may impact the East Coast, increasing the risk for rip currents.



Official Forecast Track

From the National Hurricane Center – Tropical Depression Rene



- The center of Tropical Depression Rene is located 1,415 miles west-northwest of the Cabo Verde Islands
- Maximum sustained winds have decreased to 35 mph, and the system is moving to the northwest at 13 mph.
- Rene is likely to remain a tropical depression as it meanders over the open Atlantic. It could degenerate into an open wave over the next few days.

This system is not a threat to Florida, or the U.S.



Tropical Weather Outlook

Possible Area of Development During the Next 5 Days ([LINK](#))



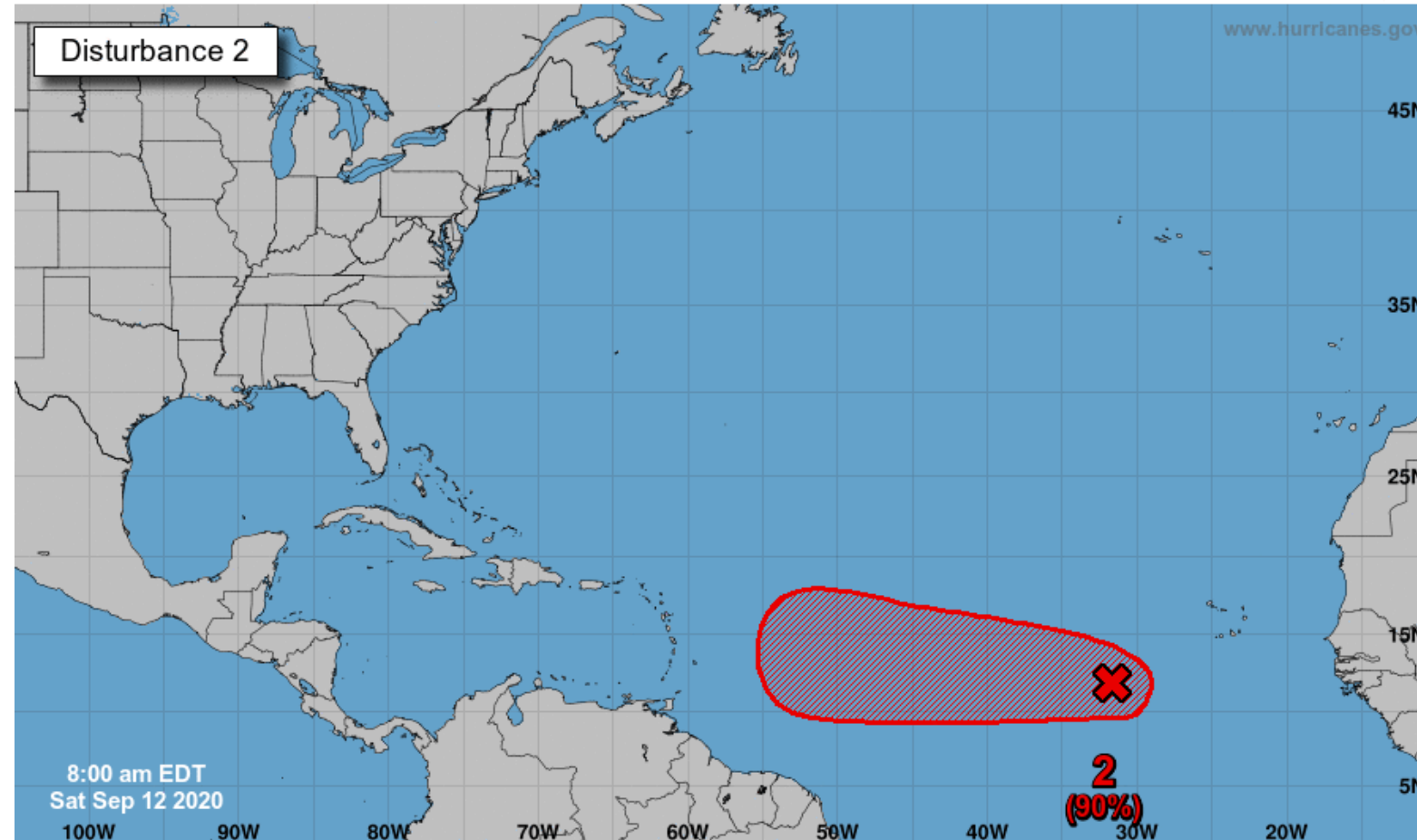
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 2



A broad area of low pressure located several hundred miles southwest of the Cabo Verde Islands is producing a large area of disorganized showers and thunderstorms. Development of this system is forecast, and a tropical depression is expected to form within the next couple of days while the system moves generally westward at 15 to 20 mph across the eastern and central Atlantic.

This system is about 5 days from the Lesser Antilles. This system may need to be monitored heading into next week.

***Formation chance through 48 hrs...high...80%**

***Formation chance through 5 days...high...90%**

Current Disturbances and Five-Day Cyclone Formation Chance:
 Tropical or Sub-Tropical Cyclone:
 X < 40% X 40-60% X > 60%
 ○ Depression S Storm H Hurricane
 ⊗ Post-Tropical Cyclone or Remnants



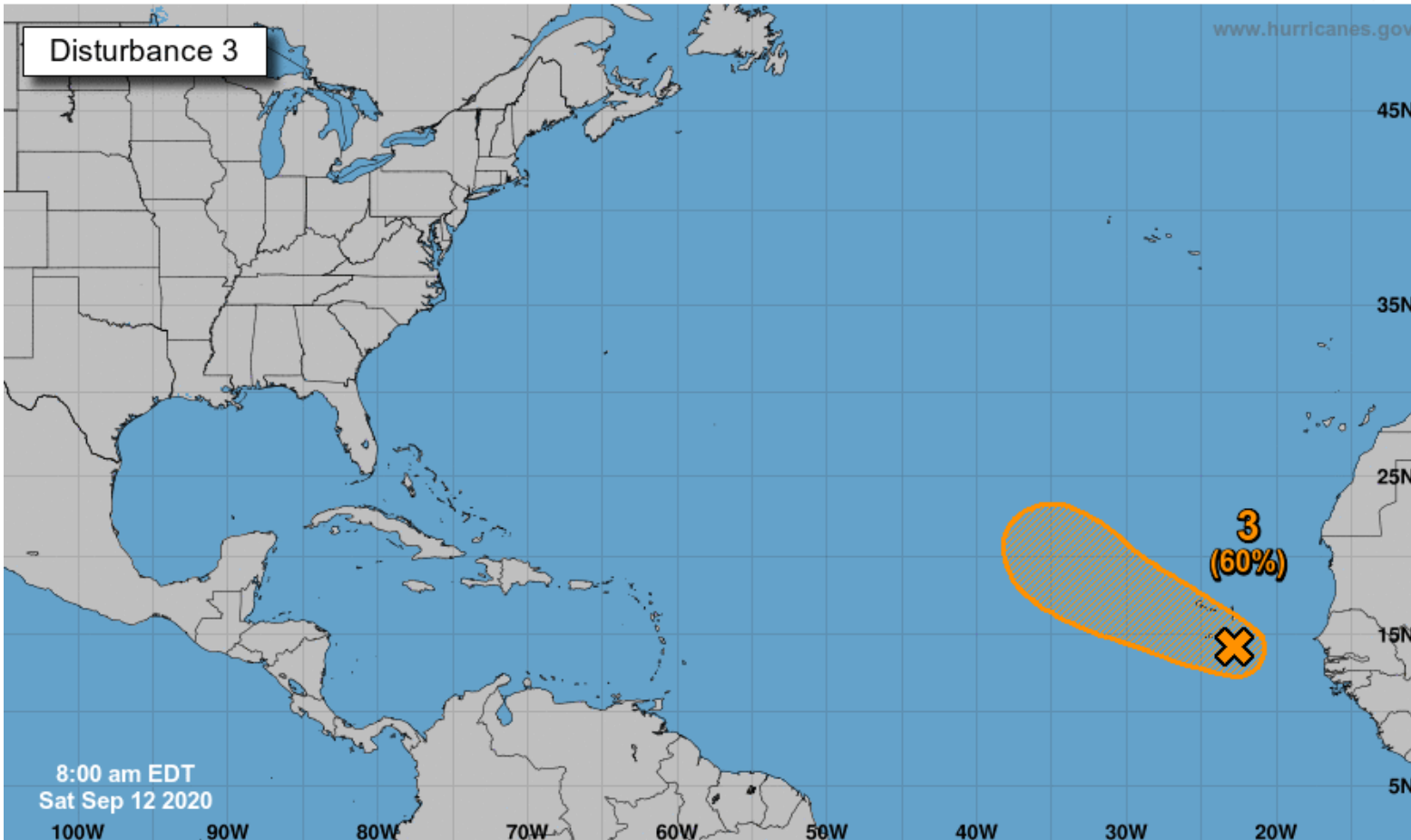
Tropical Weather Outlook

Possible Area of Development During the Next 5 Days ([LINK](#))



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Another area of disturbed weather, associated with a tropical wave, is located near the Cabo Verde Islands. Environmental conditions support some development during the next few days, and a tropical depression could form over the far eastern tropical Atlantic early next week while the system moves slowly westward. By mid-week, upper-level winds could become less conducive for development.

This system does not need to be monitored at this time.

***Formation chance through 48 hrs...low...30%**

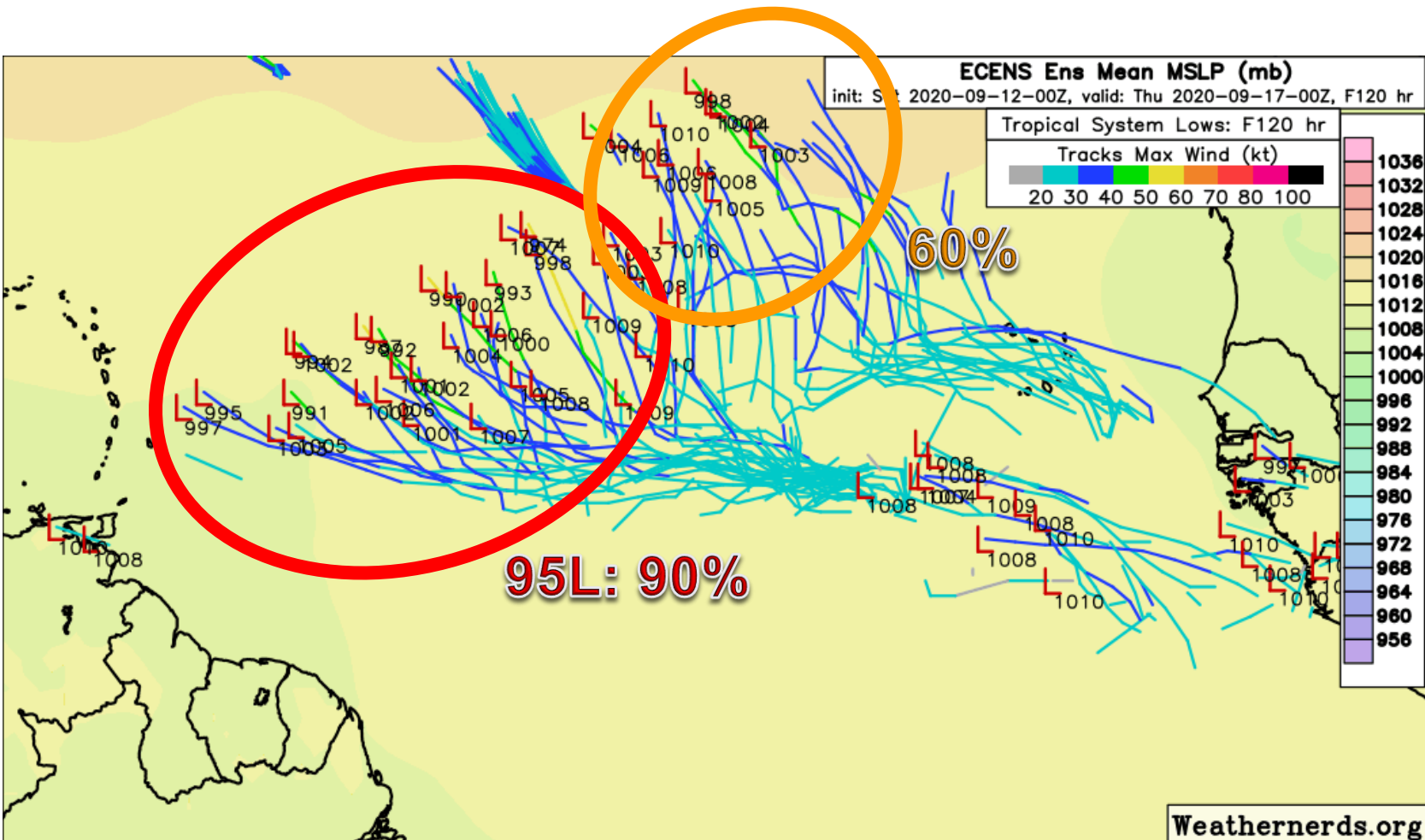
***Formation chance through 5 days...medium...60%**

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



Model Forecasts

Ensemble Models – Next Week – Tuesday Morning (Sept. 15)



Invest 95L's models have changed from run to run, leading to low confidence in the 4-5 day forecast. If this system takes longer to develop or is faster, it may make it farther west. However, if it develops quickly or moves slowly, it may turn northwestward before the Caribbean.

The next wave coming off Africa (60%) will more likely head northwestward over the eastern Atlantic.



Overall Summary

Tropical Depression #19

- The center of Tropical Depression #19 is located about 40 miles south-southeast of Naples.
- Maximum sustained winds are near 35 mph, and TD #19 could become a tropical storm at any time today.
- Gradual strengthening is forecast over the Gulf of Mexico, and TD #19 is forecast to be a hurricane on Monday or Tuesday as it approaches the northern Gulf Coast.
- TD #19 is moving toward the west at 9 mph, and a general west-northwest motion is expected over the Gulf until landfall.
- On the forecast track, TD #19 could approach the northern Gulf Coast early next week. The system will slow down and turn toward the north near or after landfall.
- This system will bring heavy rainfall, gusty winds, minor coastal flooding, and isolated tornadoes to parts of Florida and the northern Gulf Coast over the next several days.

Gulf of Mexico Low

- A trough of low pressure over the northeastern Gulf of Mexico will move westward over the northern Gulf of Mexico during the next day or so before turning southwestward early next week over the western Gulf.
- This system has a 20% (low) chance of formation during the next 48 hours and a 30% (low) chance of formation during the next 5 days.

Tropical Storm Paulette

- The center of Paulette is about 565 miles southeast of Bermuda.
- Maximum sustained winds are near 70 mph, and Paulette is moving northwest at 15 mph.
- Paulette is forecast to become a hurricane today, and possibly affect Bermuda by Monday morning.
- Swells from Paulette could cause dangerous rip currents along the East Coast.



Overall Summary

Tropical Depression Rene

- The center of Rene is located about 1,415 miles west-northwest of the Cabo Verde Islands.
- Maximum sustained winds are at 35 mph, and Rene is moving northwest at 13 mph.
- Rene will likely remain a tropical depression for the remainder of its life. It may dissipate within the next 5 days.

Invest 95L (Eastern Atlantic)

- A tropical wave southwest of the Cabo Verde Islands is gradually becoming better organized.
- Conditions are favorable for gradual development over the next few days, and a tropical depression is expected to form this weekend or early next week.
- This system has an 80% (high) chance of formation over the next 48 hours, and a 90% (high) chance over the next 5 days.

Wave near Cabo Verde Islands

- A tropical wave emerging near the Cabo Verde Islands will move northwestward over the open far eastern Atlantic where conditions are somewhat favorable for development.
- This system has a 30% (low) chance of formation over the next 48 hours, but a 60% (medium) chance over the next 5 days.



Florida Outlook

Florida Outlook:

- **Impacts will extend well outside of the cone! It is important to not focus on the center of the forecast track.**
- Tropical Depression #19 will likely produce heavy rainfall and gusty winds across much of the state, particularly near the West Coast, Panhandle, and Big Bend.
- Tropical Storm Watches: south Walton, coastal Bay, coastal Gulf, and coastal Franklin
- Additional watches and/or warnings may be needed later today.
- Tropical storm force winds could begin along the Panhandle and Big Bend as early as Sunday morning or afternoon, but more likely Sunday night into Monday morning
- 3-5" of rainfall is expected along the West Coast over the next 7 days. Localized totals of 6-10" are possible.
- 5-10" of rainfall is expected along the Panhandle and Big Bend with localized totals of 10-15" possible.
- Rises on rivers are expected along the West Coast and in North Florida over the next several days.
- Flood Watches are now in effect for much of the Peninsula, additional Flood Watches are likely for North Florida.
- Isolated tornadoes are possible in South Florida today, then in North Florida early next week.
- Minor storm surge flooding is possible early next week in the Panhandle and western Big Bend.
- Building waves from TD #19 are possible, and a high rip current risk is expected for Gulf beaches for the next several days.
- Paulette could generate swells that reach the Atlantic beaches, possibly elevating the rip current risk next week.
- Direct impacts from any other systems in the tropics are not expected over the next several days.
- Invest 95L may need to be monitored next week.

The next briefing packet will be issued this afternoon with the 5 PM advisory. 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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