



TROPICAL UPDATE





11:00 AM EDT

Monday, August 24, 2020

Tropical Storm Laura &
Tropical Storm Marco

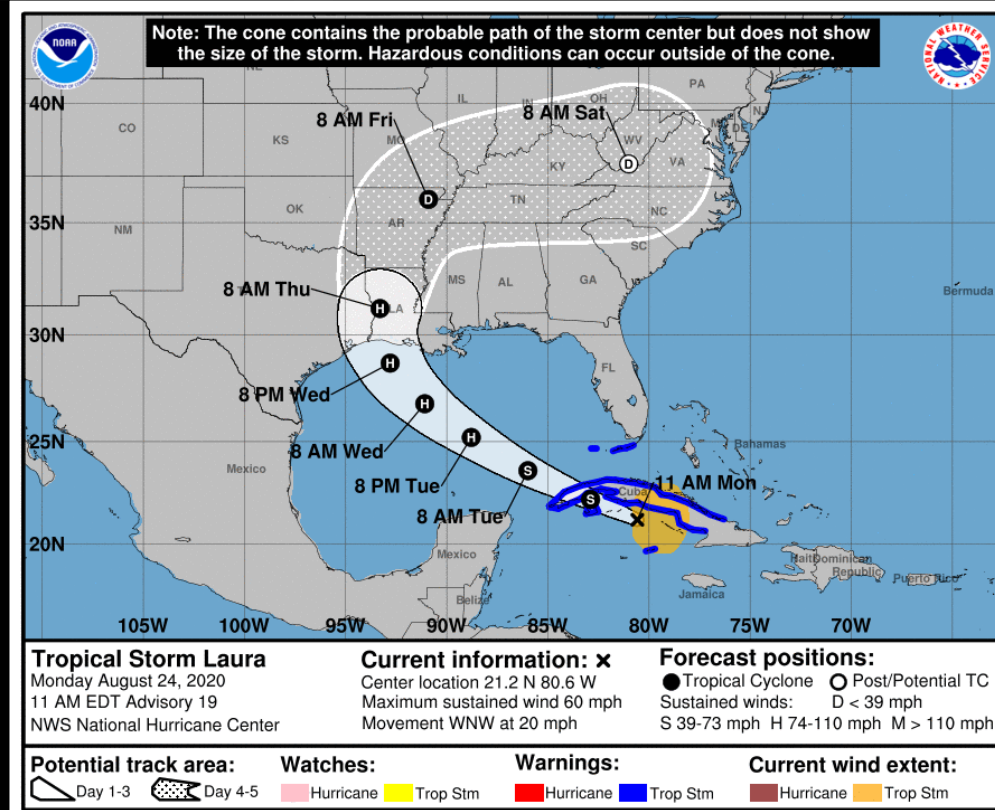
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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 Storm Laura Monday, August 24

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



Overview/Recent Changes:

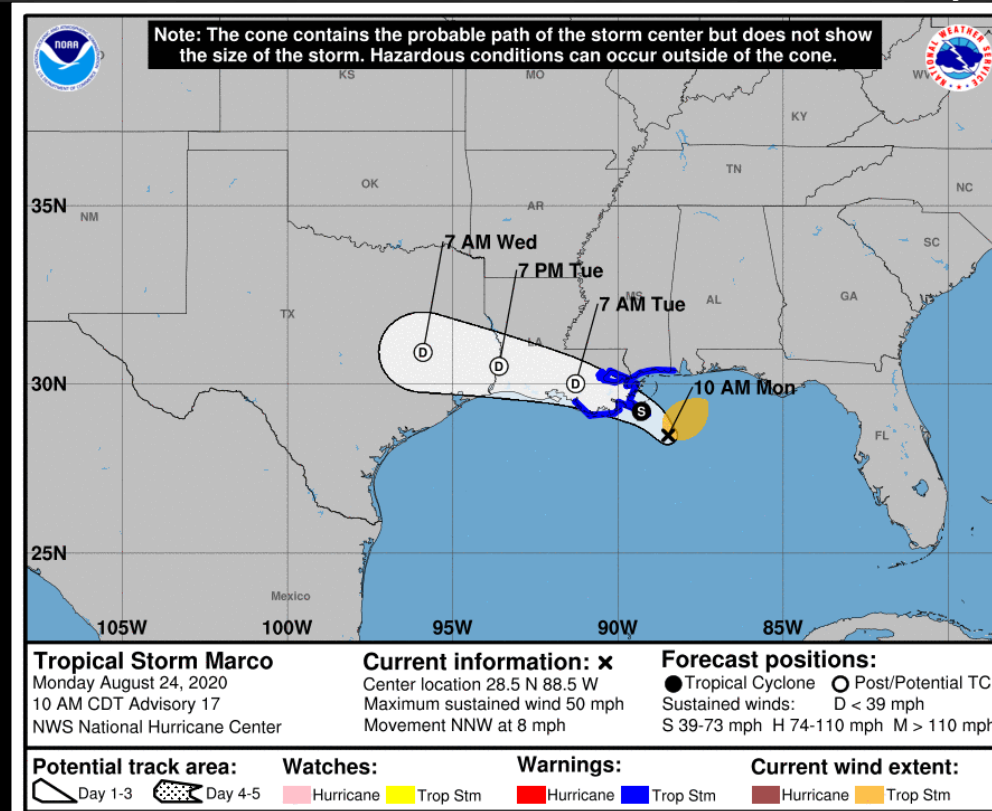
Tropical Storm Warning issued for the Lower and Middle Keys. Squalls continue across the Florida Keys with gusts 45-55 mph. Isolated tornado risk across the Keys with minor coastal flooding at high tide. Quick moving squalls pose little flash flood risk. Conditions improve across the Keys tomorrow morning.

Tropical Storm Marco Monday, August 24

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



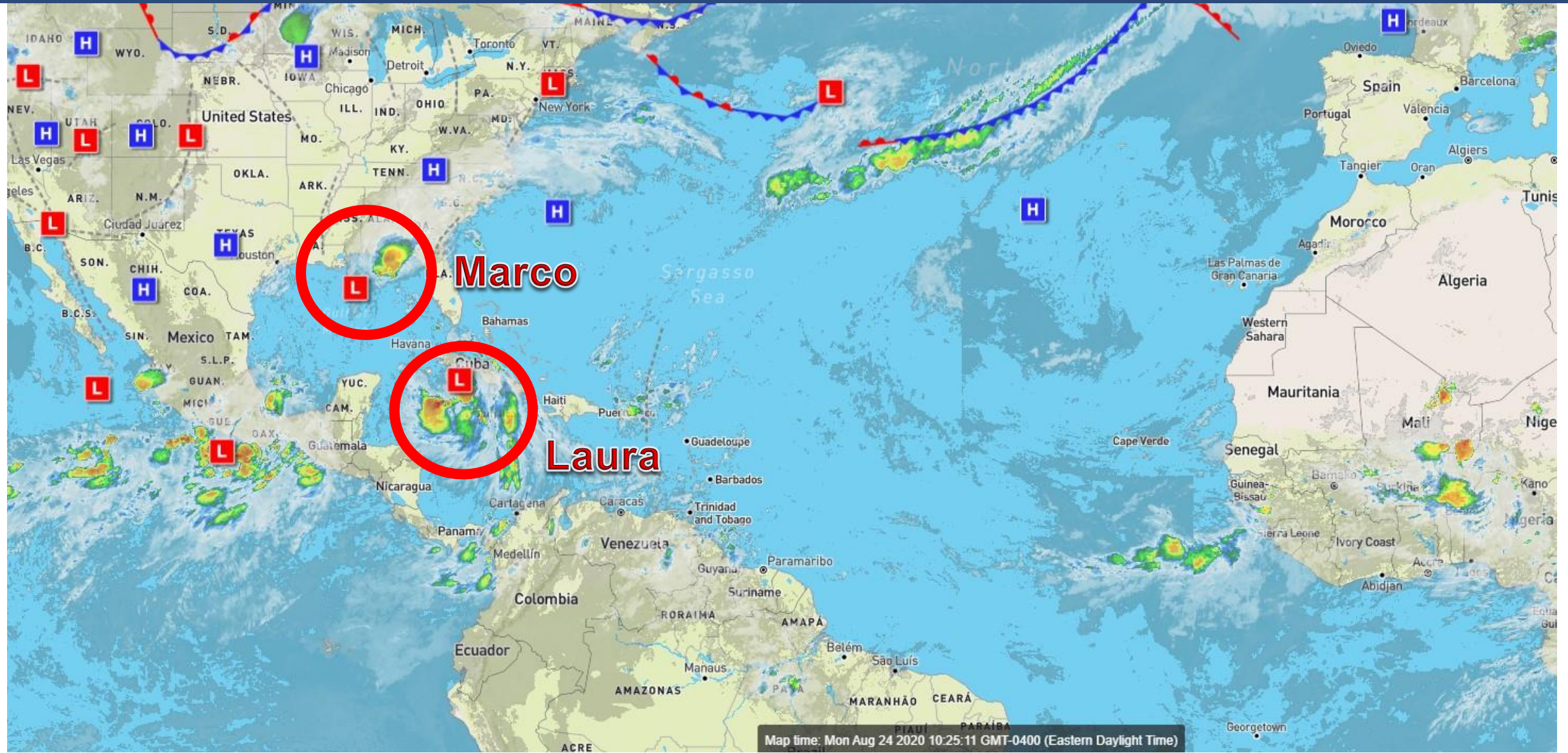
Overview/Recent Changes:

Marco rapidly weakened overnight. While the low-level, weak center is moving towards Louisiana, most of the heavy rain bands are well to the northeast of the center currently impacting the Panhandle. A Flash Flood Watch is in effect for a few Panhandle counties. An isolated tornado is also possible.



Atlantic Basin Satellite Image

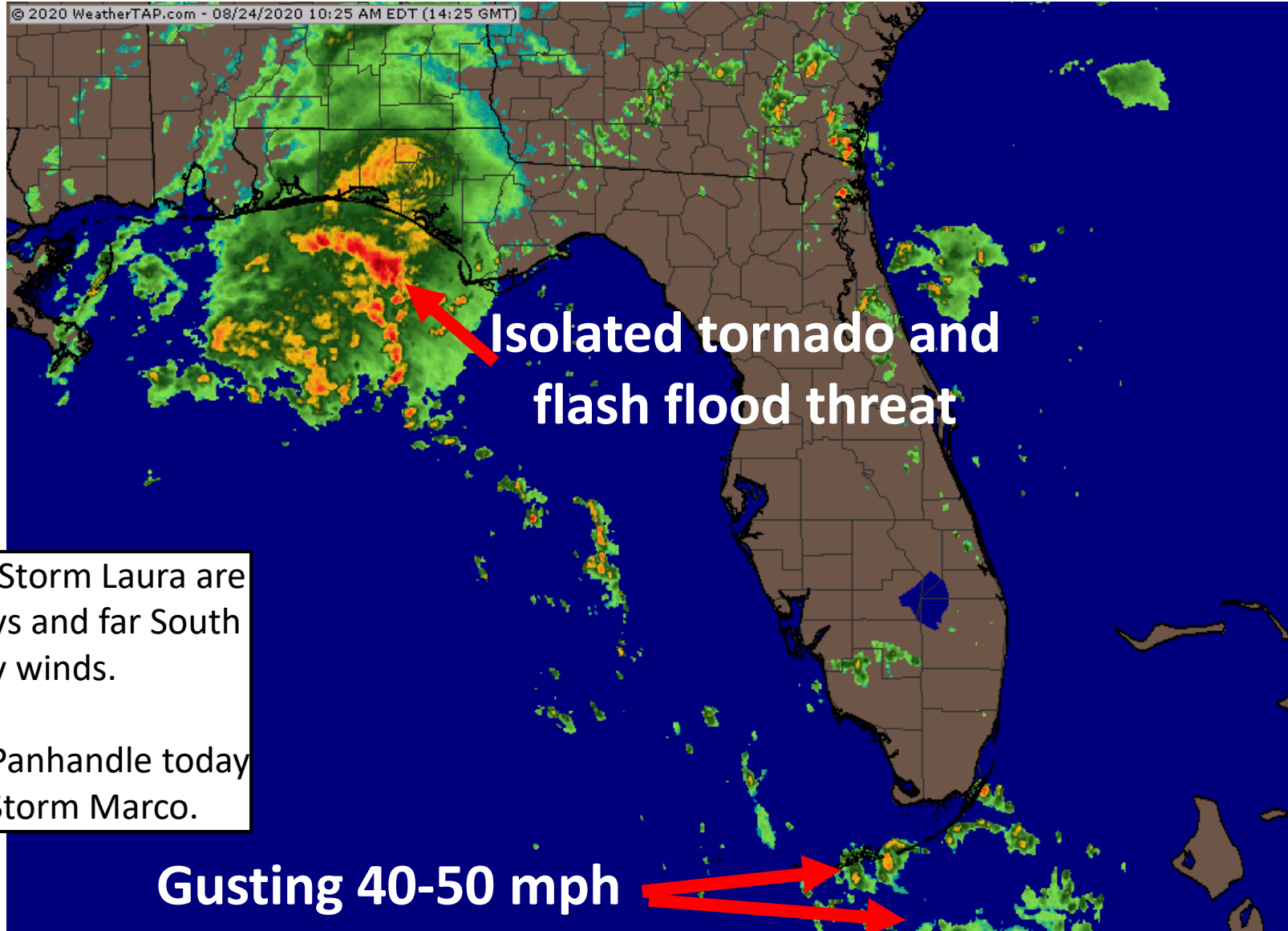
Chance of development: — None — Low — Medium — High





Current Florida Radar

As of 10:30 AM ET / 9:30 AM CT



Outer rain bands from Tropical Storm Laura are moving through the Florida Keys and far South Florida producing gusty winds.

Widespread rainfall across the Panhandle today on the outskirts of Tropical Storm Marco.

Gusting 40-50 mph

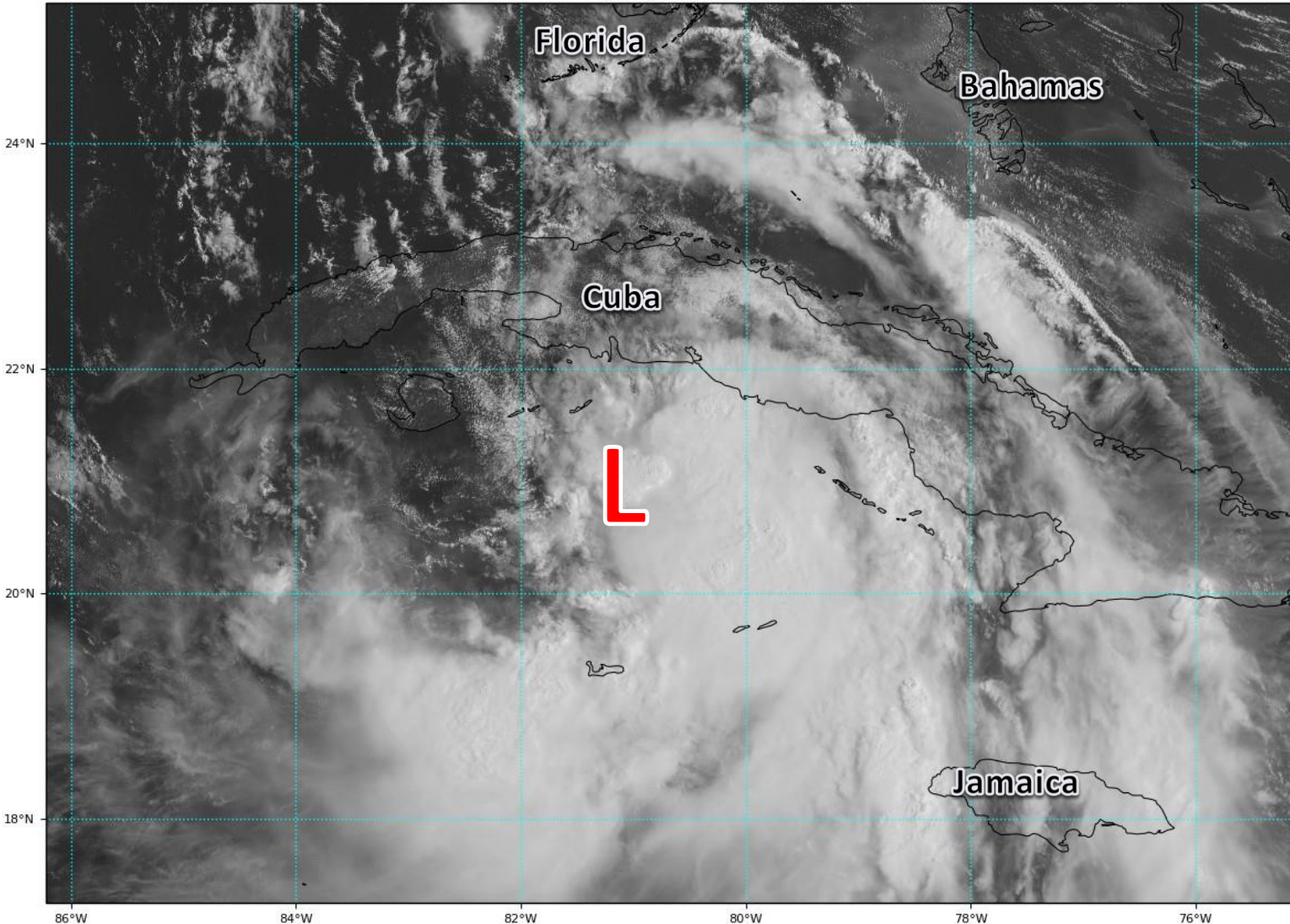


Satellite Imagery

Northwest Caribbean – Tropical Storm Laura

GOES-16 Channel 2 (visible) Reflectance at 14:27Z Aug 24, 2020

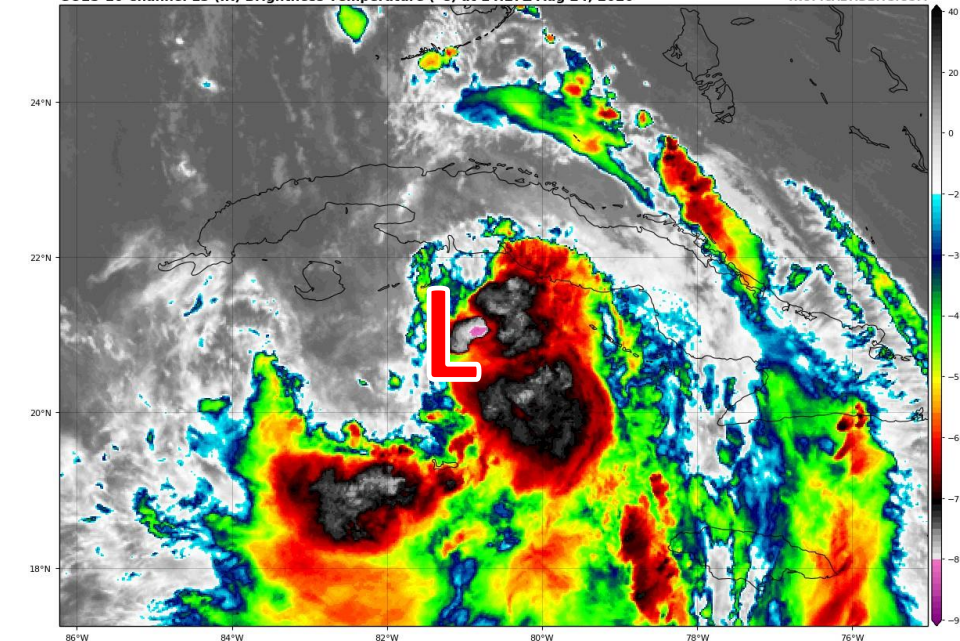
TROPICALTIDBITS.COM



Tropical Storm Laura continues to track further south than anticipated, with the center south of Cuba. The system is in the process of reorganizing as it moves west.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:27Z Aug 24, 2020

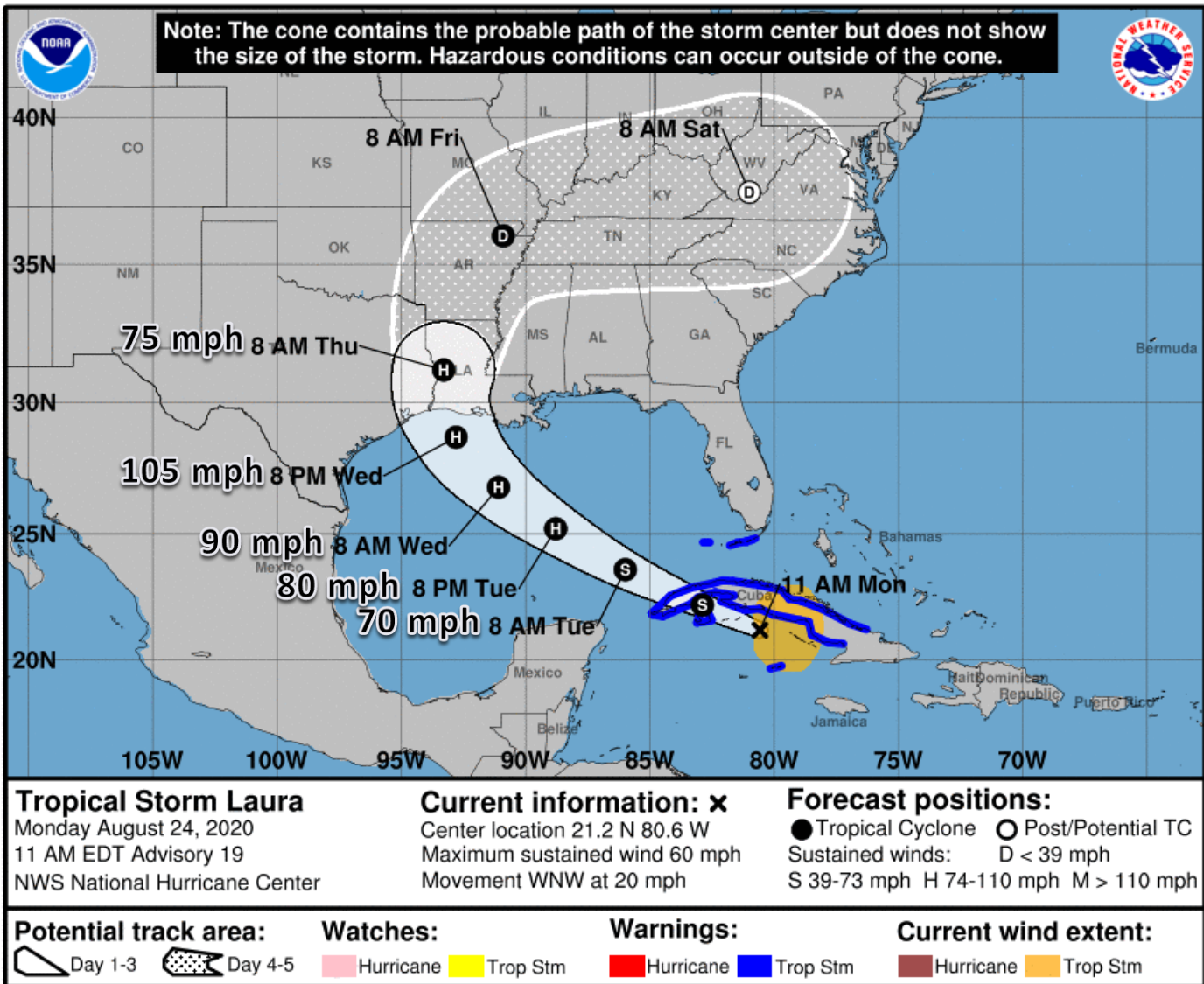
TROPICALTIDBITS.COM





Official Forecast Track

From the National Hurricane Center – Tropical Storm Laura



- The center of Tropical Storm Laura is located just south of Central Cuba, or about 250 miles southeast of Key West, Florida.
- Maximum sustained winds remain at 60mph. Laura's strength should remain nearly steady as it passes near or over Cuba followed by significant strengthening over the Gulf of Mexico.
- Laura is moving toward the west-northwest at 20 mph, and a northwestward motion should continue for the next few days.
- Laura will likely make its closest approach to the lower Florida Keys on this evening. A Tropical Storm Warning is in effect for the Lower and Middle Keys.
- Once in the Gulf of Mexico, a strengthening hurricane is forecast to turn north towards Texas and Louisiana.



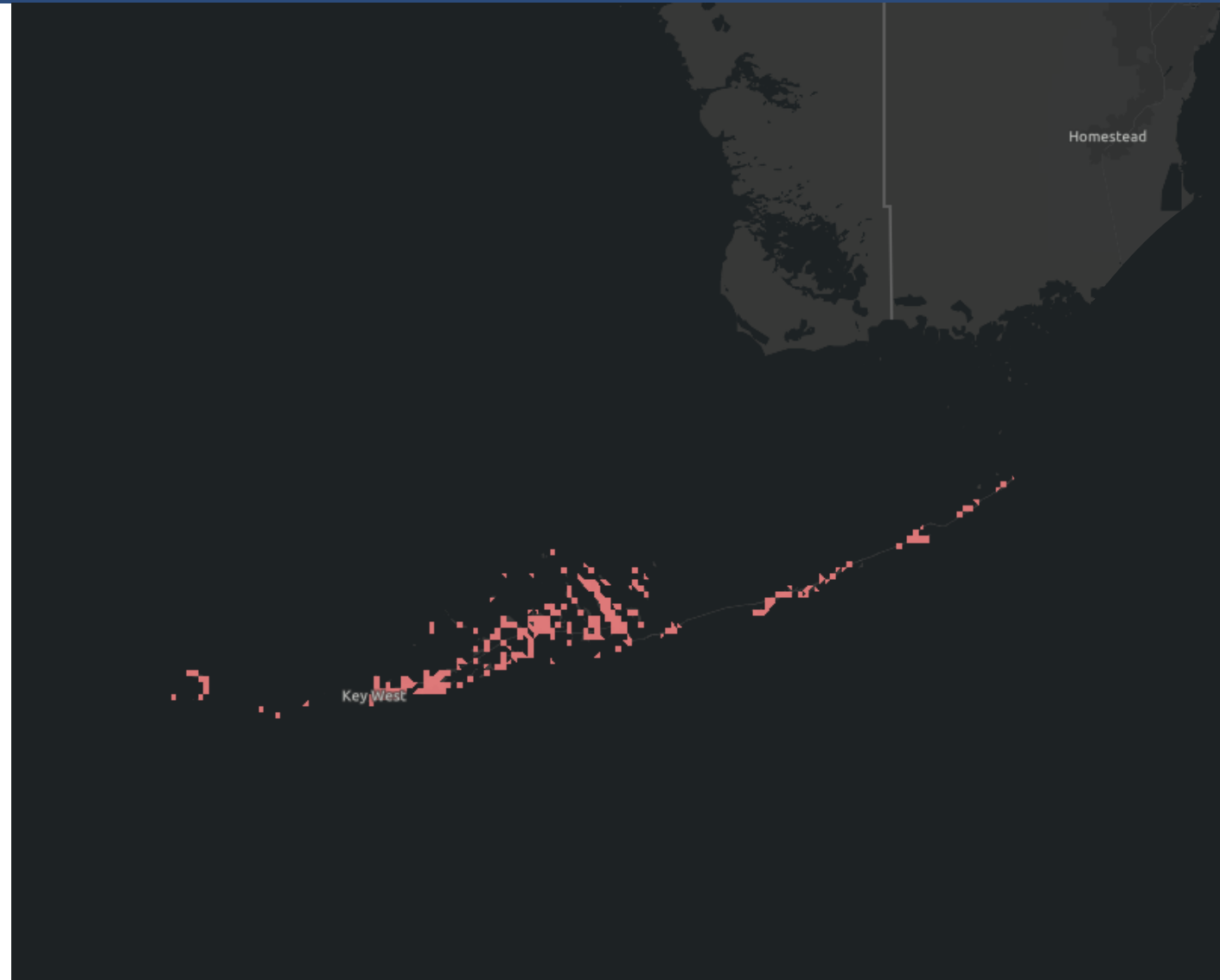
Wind Watches and Warnings

In Effect Until Further Notice

The Tropical Storm Watch has been upgraded to a Warning.

Tropical Storm Warnings are in effect for the Lower and Middle Florida Keys – including– The Dry Tortugas, Key West, and Marathon.

Gusts 45-55 mph in squalls.



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

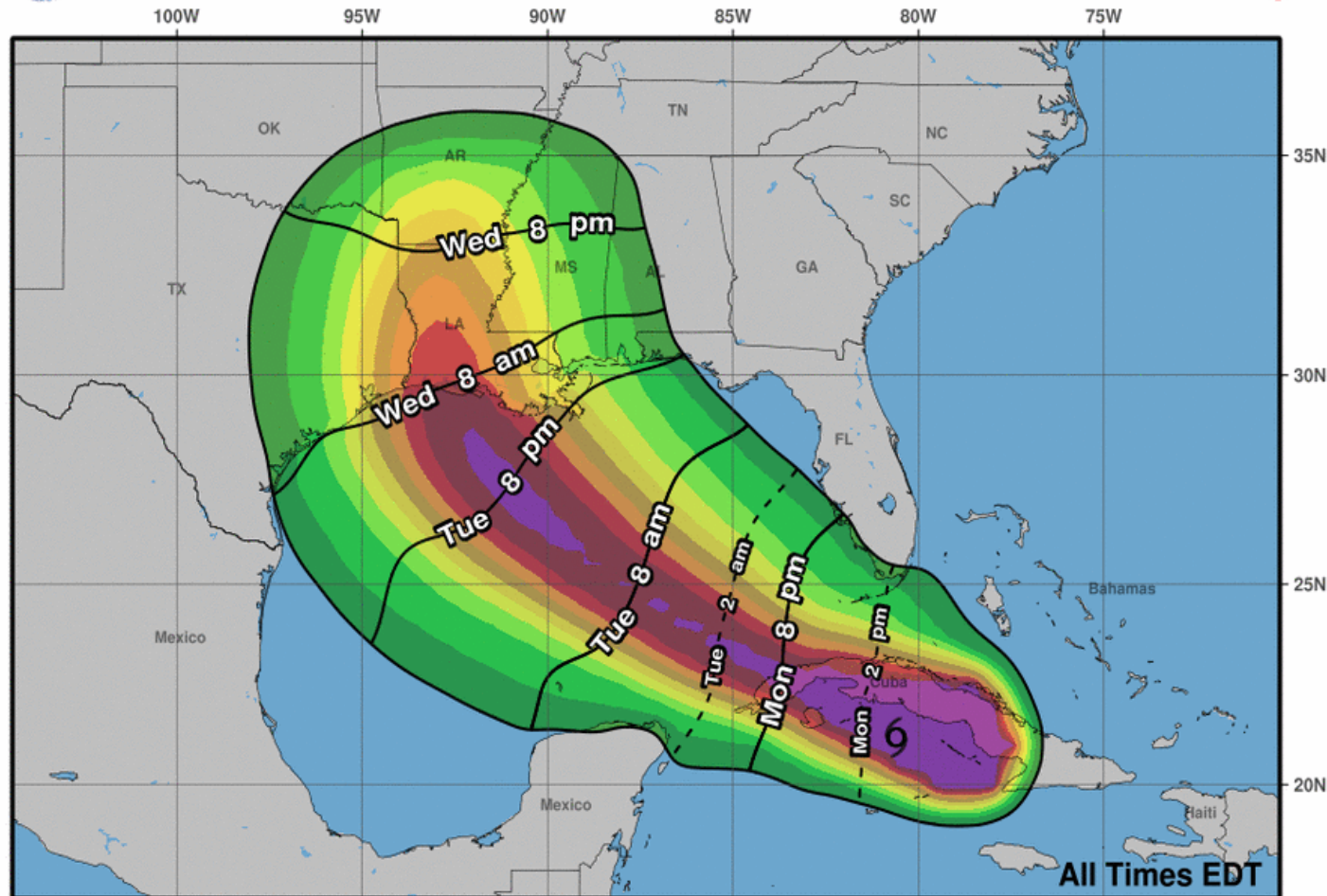


TS Laura: Time of Arrival & Wind Speed Probabilities

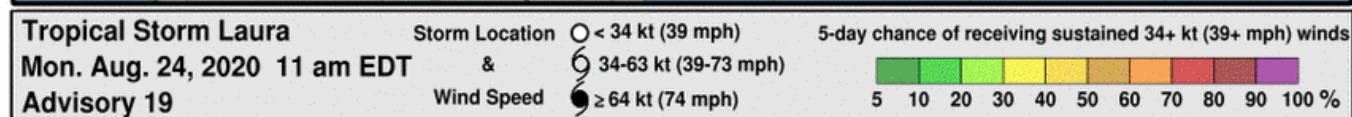
EARLIEST REASONABLE Time of Arrival of Tropical Storm Force Winds (>39 mph)



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Tropical storm force gust are ongoing in squalls across the Keys, and will increase in frequency later today.





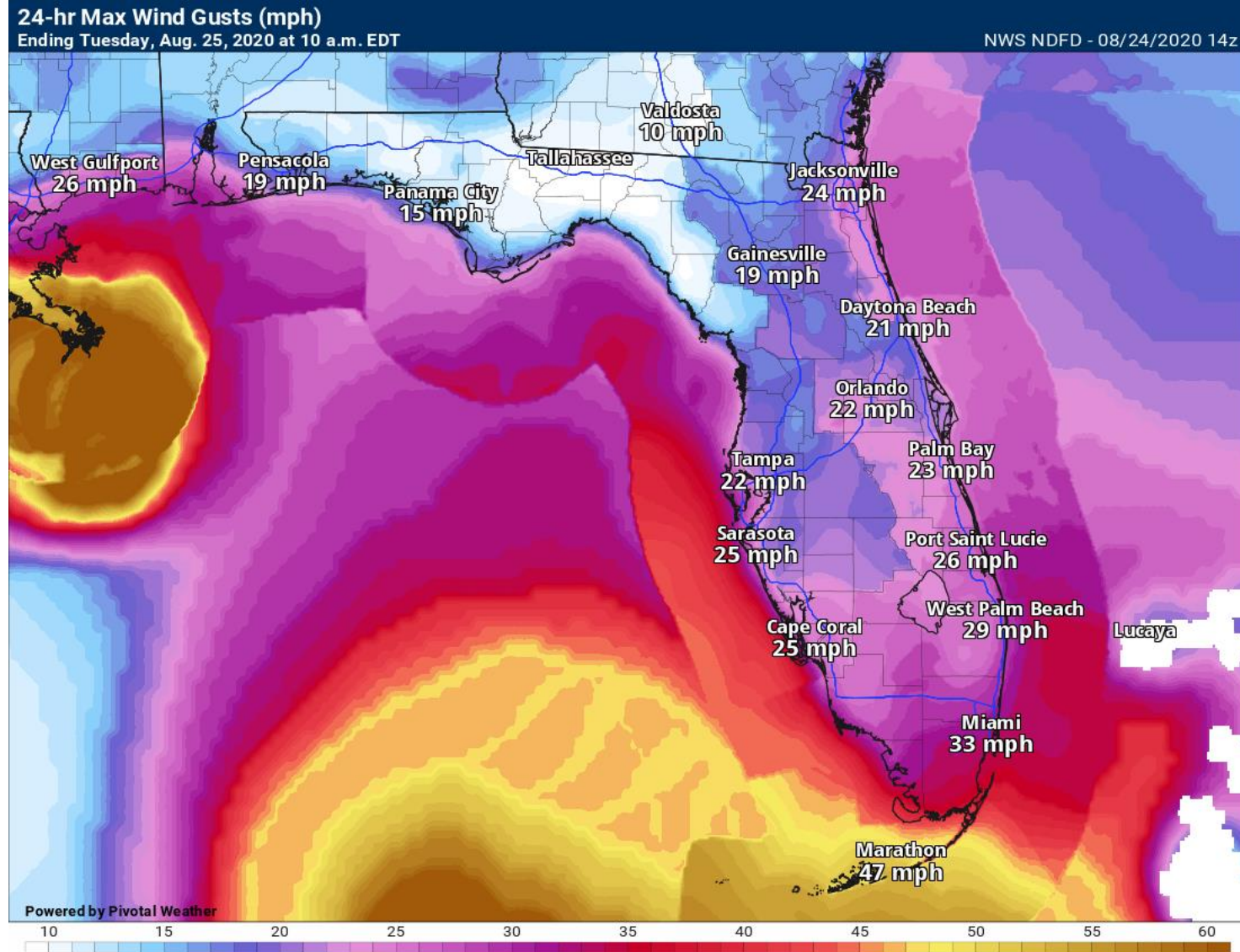
Maximum Wind Gusts

Next 24 Hours

Wind gusts to 55 mph are possible across the Florida Keys today and tonight as Laura makes its closest approach to the south.

Gusts to 30 mph are possible across the rest of the Peninsula, possibly 45 mph in any thunderstorms.

In the western Panhandle, gusts to 15-25 mph are likely along the coast.





Storm Surge Threat Overview

Tropical Storm Laura

...[COASTAL FLOOD WATCH](#) IN EFFECT...

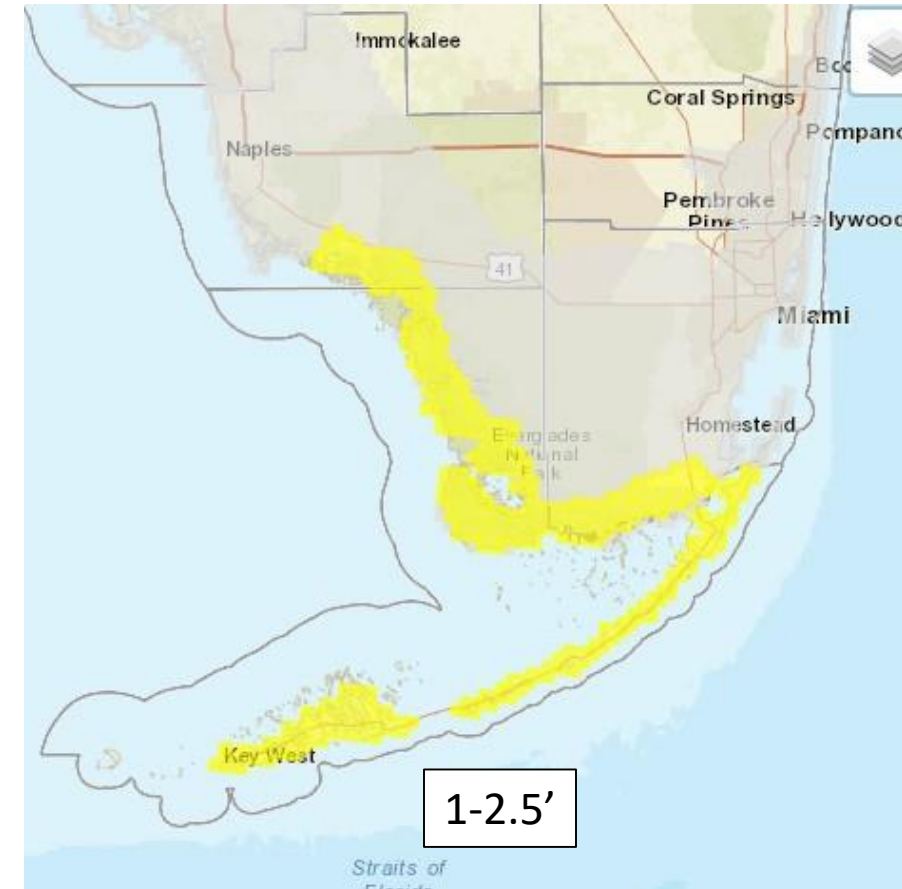
* **WHAT...**The passage of Tropical Storm Laura to our west Monday and Monday night will result in strong southeast breezes across the Florida Keys. Tidal anomalies are running about three quarters of a foot above normal, and Laura could result in one to two additional feet of saltwater flooding, especially along south facing shorelines and canals.

* **WHERE...**Upper Florida Keys, Middle Florida Keys and Lower Florida Keys.

* **WHEN...**From this evening through late Monday night, especially at the times of high tide. High tides are twice a day over the next two days, with the highest tide occurring a few hours after midnight.

* **IMPACTS...**Some roads may be closed. Low-lying property including homes, businesses, docks, seawalls and some critical infrastructure may be inundated. Some shoreline erosion may occur.

It is too early to determine the surge threat, if any, in Northwest Florida due to Laura.



[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

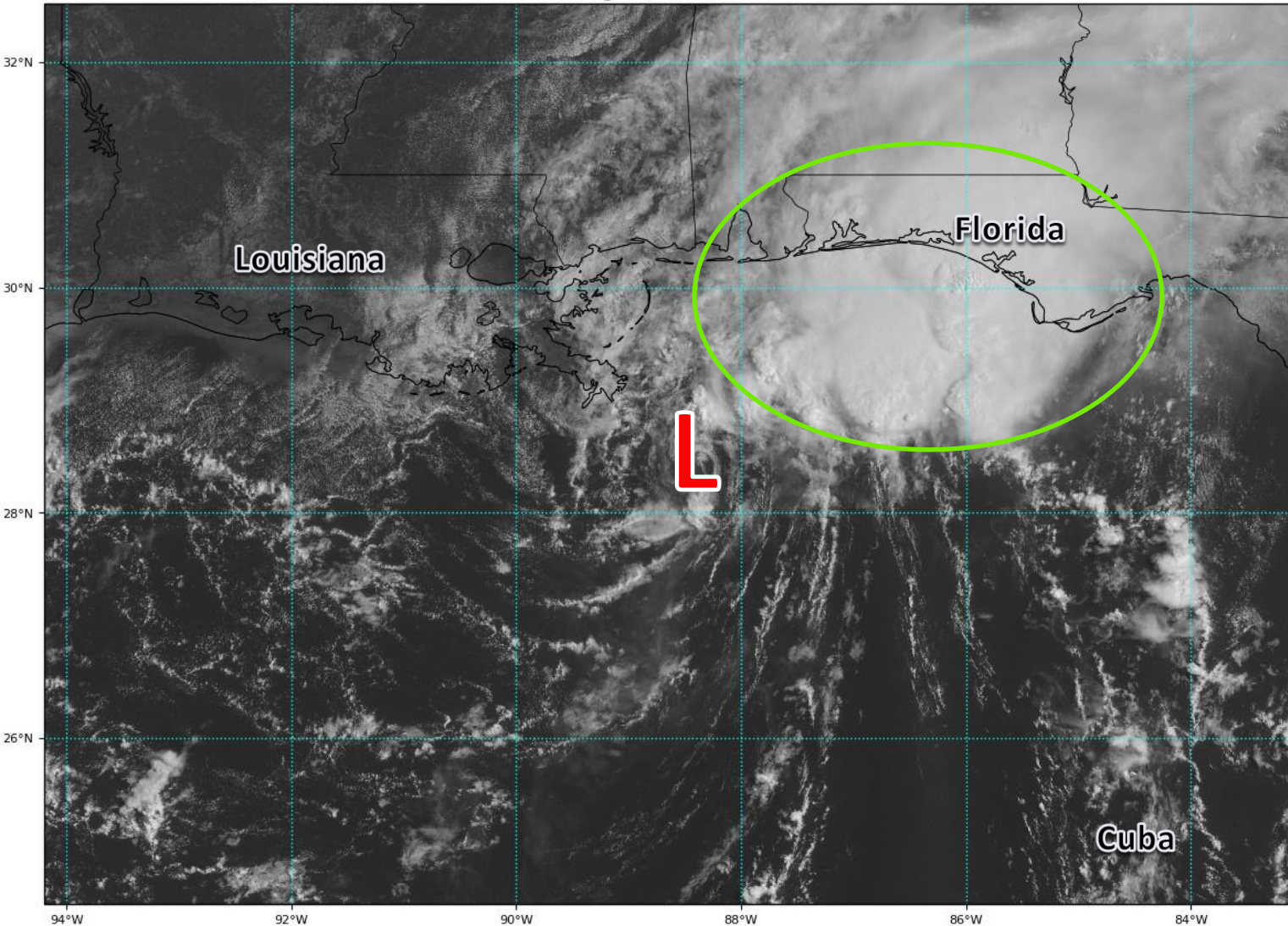


Satellite Imagery

Northern Gulf of Mexico – Tropical Storm Marco

GOES-16 Channel 2 (visible) Reflectance at 14:47Z Aug 24, 2020

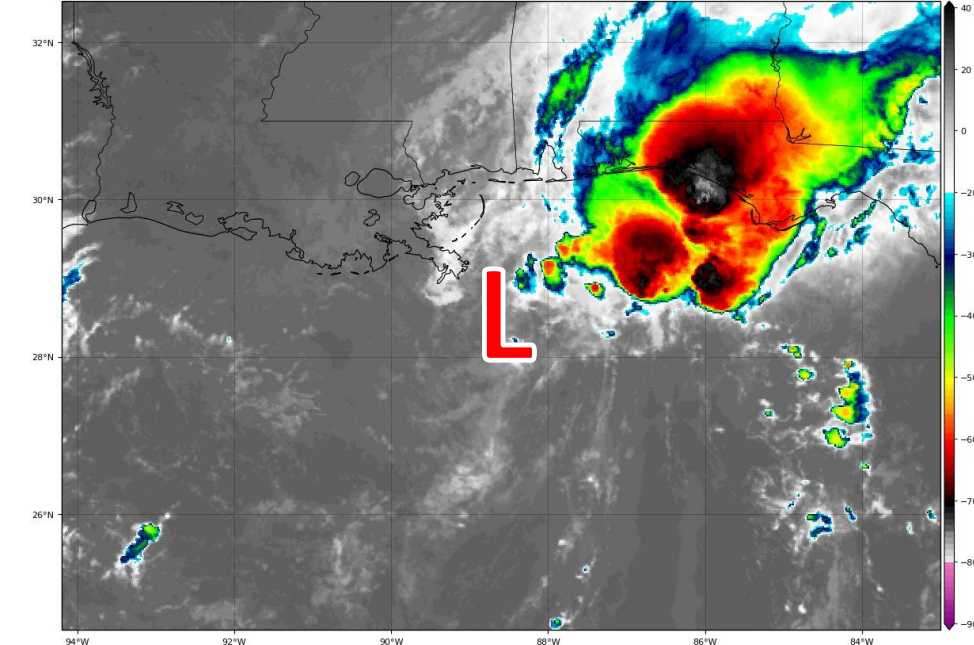
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Marco is void of thunderstorms near the center. All of the showers and thunderstorms are to the northeast of the center near the Florida Panhandle. Marco is quickly weakening.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:47Z Aug 24, 2020

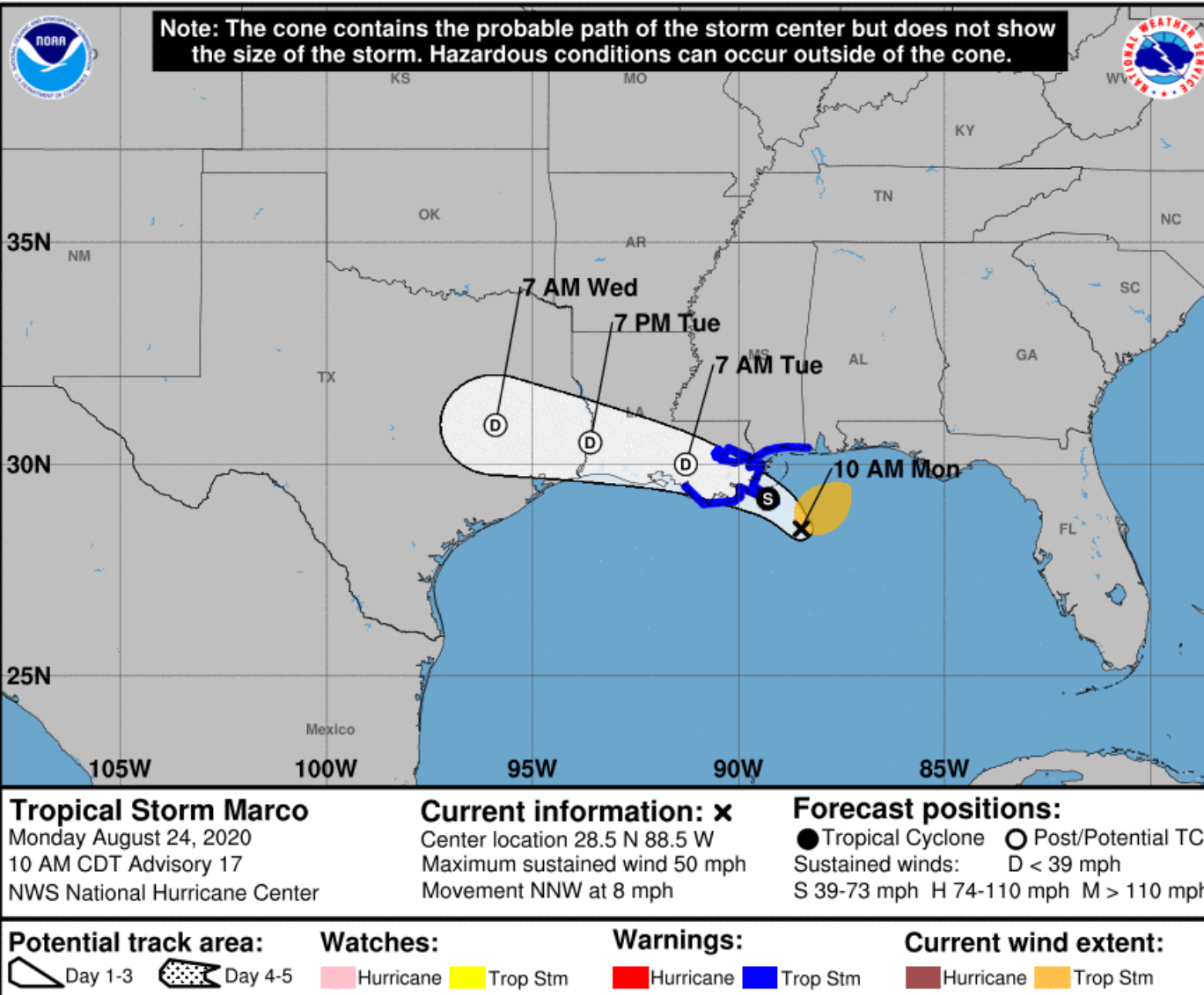
TROPICALTIDBITS.COM





Official Forecast Track

From the National Hurricane Center – Tropical Storm Marco



- The center of Marco is located about 150 miles southwest of Pensacola, Florida.
- Marco has weakened to a Tropical Storm with winds around 50 mph.
- Marco is moving toward the NNW at 8 mph.
- **Wind shear is keeping most of the showers and thunderstorms northeast of the center. Even as the storm turns west, numerous rain bands are expected in the Panhandle today**



Flood Threat Overview

Tropical Storm Marco

The greatest flood threat is across the coastal Panhandle and in the urban areas of Pensacola. Outer rain bands may train over the same area on Monday and poses a flash flood threat.

A widespread 2-4" of rain is expected with localized areas picking up 6-8".

Flash Flood Watch for southern Escambia, Santa Rosa, and Okaloosa County through Tuesday morning, and Bay, Gulf, Franklin, Liberty, Walton and Wakulla until tonight.



<https://www.weather.gov/srh/tropical?office=mob>

Click on "Threats and Impacts" Tab

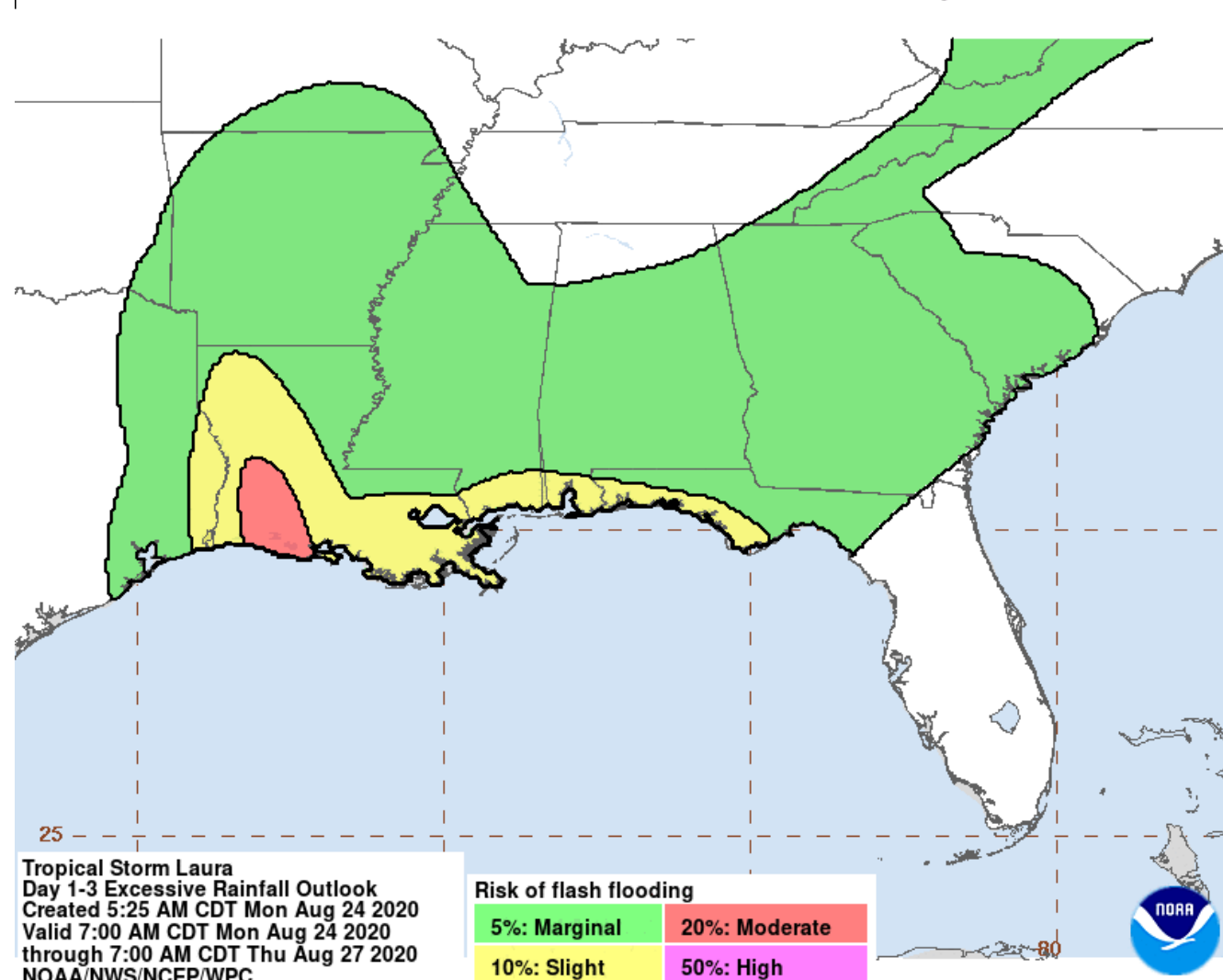
Flooding Rain Threat	
Potential for extreme flooding rain	
Potential for major flooding rain	
Potential for moderate flooding rain	
Potential for localized flooding rain	
Little to no potential for flooding rain	



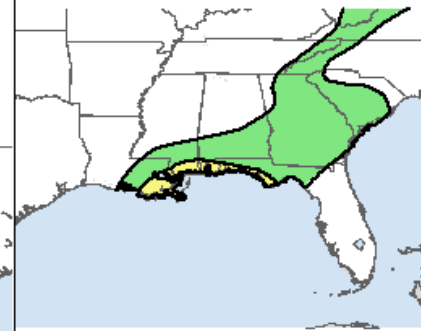
Flash Flood Outlooks

From the Weather Prediction Center – Tropical Storm Marco

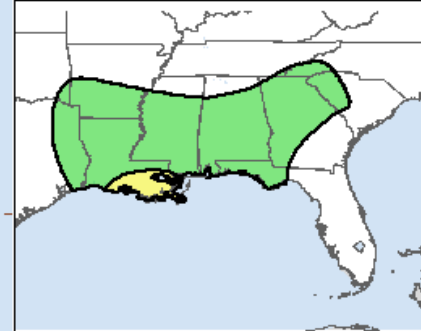
Greatest Flash Flood Risk Over the Next 3 Days



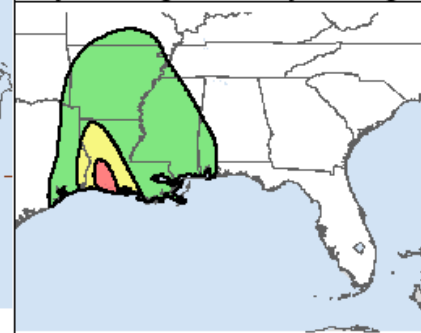
Day 1 Through Tuesday morning



Day 2 Through Wednesday morning



Day 3 Through Thursday morning



An isolated case of flash flooding is possible across the Florida Panhandle today and continuing through Tuesday, particularly in the western Panhandle.

Understanding WPC Excessive Rain

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible
	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.
@NWSWPC		
Flash flooding near me?	Flash Flooding	Flash Flooding
WEATHER PREDICTION CENTER		

Tropical Storm Laura
Day 1-3 Excessive Rainfall Outlook
Created 5:25 AM CDT Mon Aug 24 2020
Valid 7:00 AM CDT Mon Aug 24 2020
through 7:00 AM CDT Thu Aug 27 2020
NOAA/NWS/NCEP/WPC

Risk of flash flooding

5%: Marginal	20%: Moderate
10%: Slight	50%: High








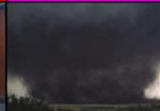


Tornado Threat Overview

From the Storm Prediction Center – Marco & Laura

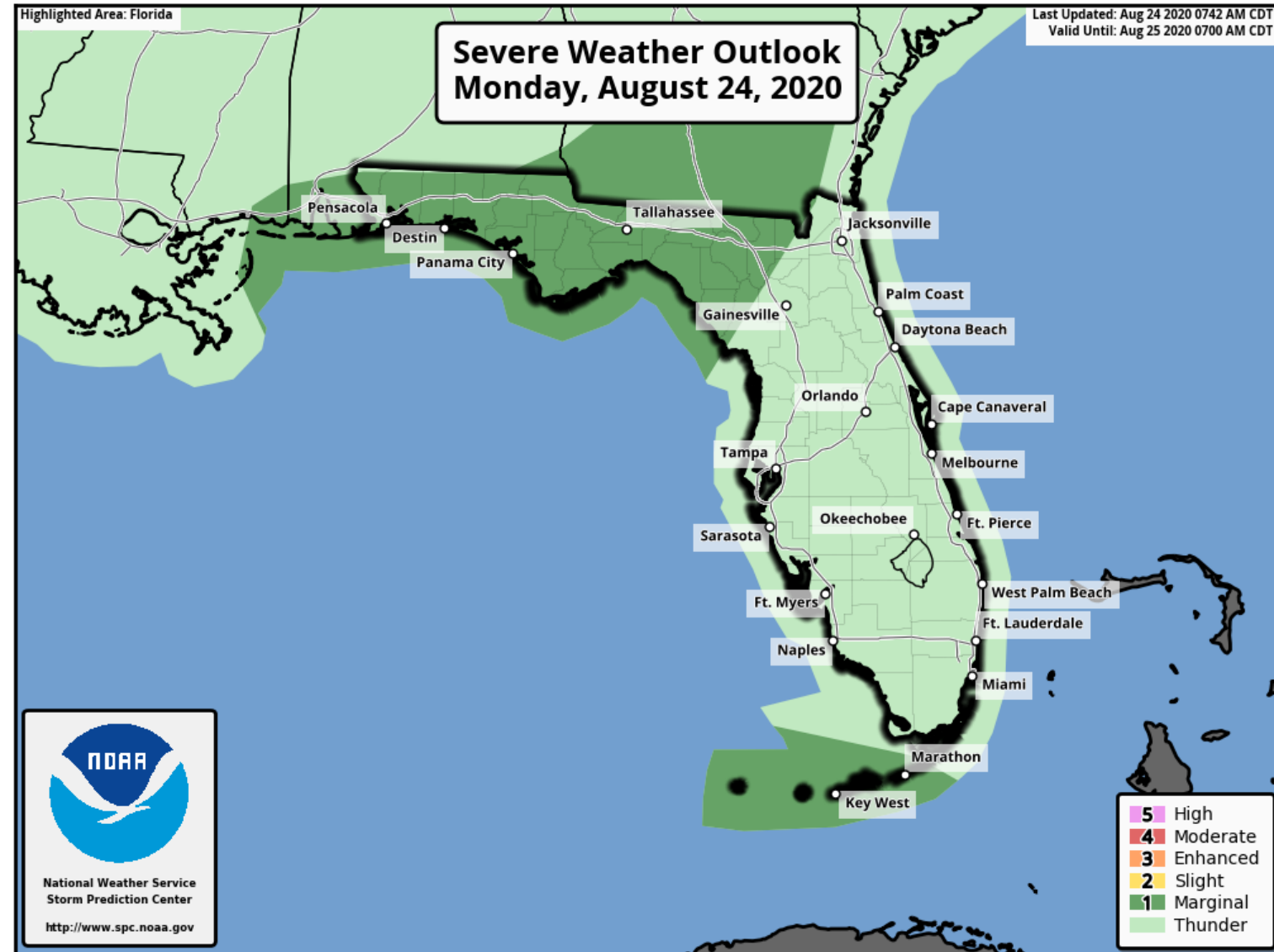
Isolated tornadoes are possible in the outer bands of Marco across the Panhandle and Big Bend, and from the outer bands of Laura across the Keys.

Understanding Severe Thunderstorm Risk Categories

THUNDERSTORMS (no label)	1 - MARGINAL (MRGL)	2 - SLIGHT (SLGT)	3 - ENHANCED (ENH)	4 - MODERATE (MDT)	5 - HIGH (HIGH)
No severe* thunderstorms expected	Isolated severe thunderstorms possible	Scattered severe storms possible	Numerous severe storms possible	Widespread severe storms likely	Widespread severe storms expected
Lightning/flooding threats exist with all thunderstorms	Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible	More persistent and/or widespread, a few intense	Long-lived, widespread and intense	Long-lived, very widespread and particularly intense
					

* NWS defines a severe thunderstorm as measured wind gusts to at least 58 mph, and/or hail to at least one inch in diameter, and/or a tornado. All thunderstorm categories imply lightning and the potential for flooding. Categories are also tied to the probability of a severe weather event within 25 miles of your location.

National Weather Service
www.spc.noaa.gov



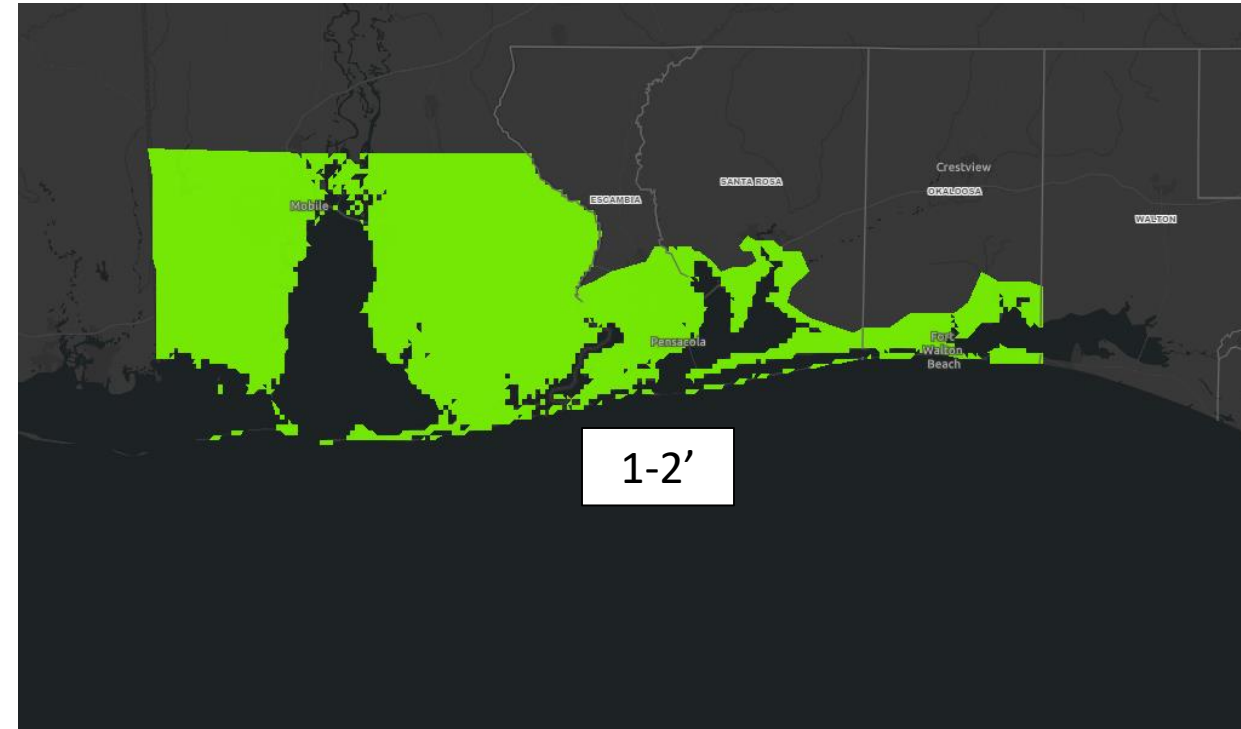


Storm Surge Threat Overview

Tropical Storm Marco

...[COASTAL FLOOD ADVISORY](#) IN EFFECT...

- * WHAT...Minor coastal flooding.
- * WHERE...In Florida, Escambia Coastal, Santa Rosa Coastal and Okaloosa Coastal Counties.
- * WHEN...until 7 PM CDT Wednesday.
- * IMPACTS...Minor flooding of lots, parks, and roads with only isolated road closures expected. Dangerous swimming and surfing conditions and localized beach erosion.
- * ADDITIONAL DETAILS...For coastal flooding, water levels along the Alabama and the western Florida panhandle coasts are expected to range from 1 to 3 feet above normally dry ground, especially around the time that Hurricane Marco makes landfall to the west of our area on Monday afternoon and then again around the times of astronomical high tides on Tuesday and Wednesday as Hurricane Laura moves northwest across the Gulf. This will produce minor coastal flooding at the normally flood prone areas along the coast.

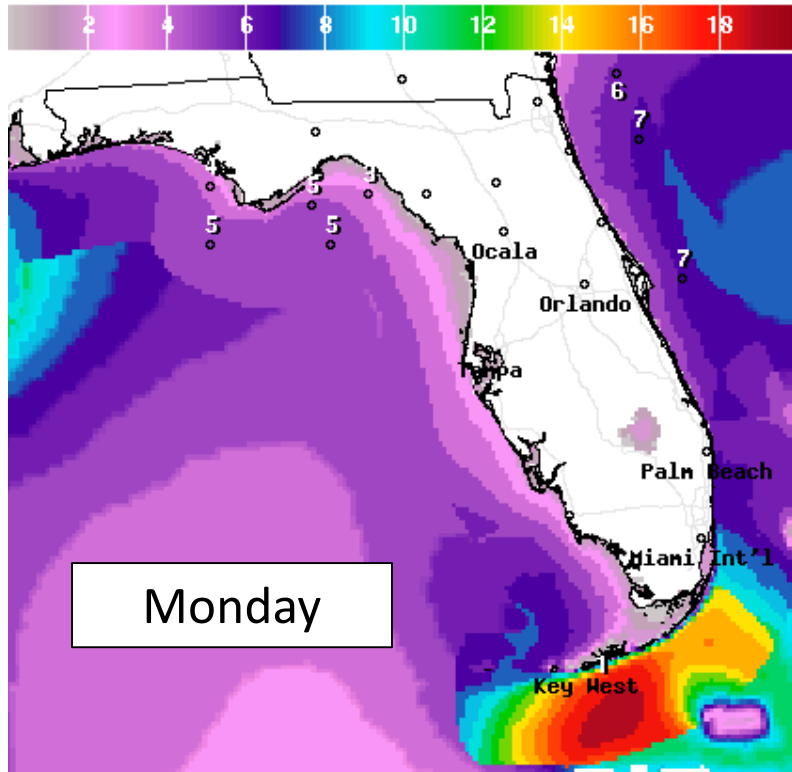


1' the rest of the
Panhandle and
Apalachee Bay



Forecast Wave Heights

Early This Week



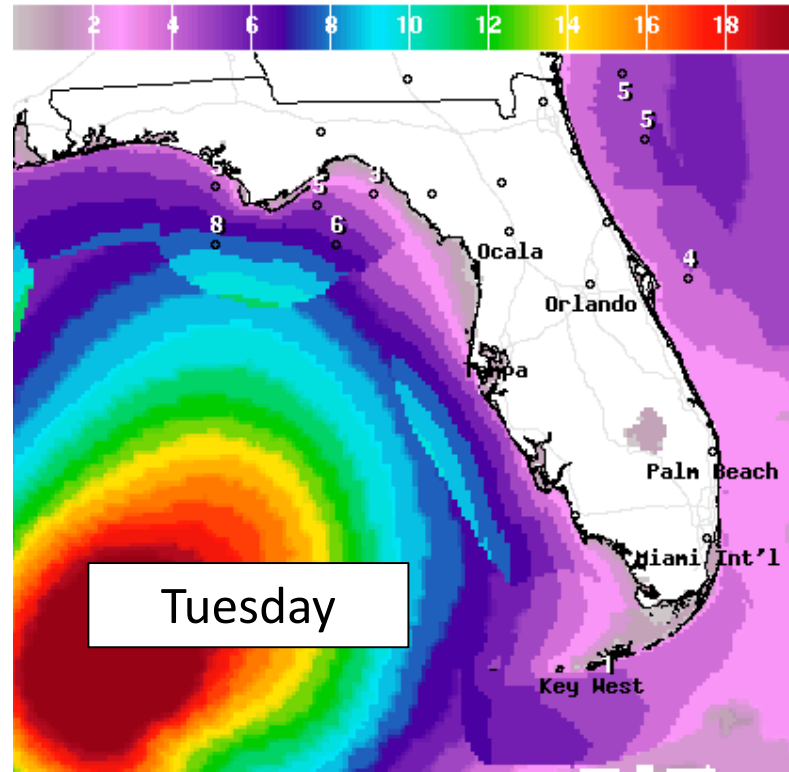
Wave Height(ft) Ending Mon Aug 24 2020 2PM EDT
(Mon Aug 24 2020 18Z)



National Digital Forecast Database

14z issuance

Graphic created-Aug 24 10:15AM EDT



Wave Height(ft) Ending Tue Aug 25 2020 2PM EDT
(Tue Aug 25 2020 18Z)



National Digital Forecast Database

14z issuance

Graphic created-Aug 24 10:16AM EDT



High Surf Advisory from
midnight tonight to midnight
Tuesday.

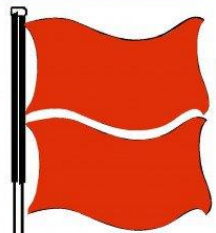
High surf of 4-8 feet is expected at Panhandle Beaches with 3-6 feet along the Atlantic. High wave heights will continue through mid-week as Marco departs and Laura moves into the Gulf. Minor beach erosion is likely with a few spots of more significant erosion possible in the western Panhandle.



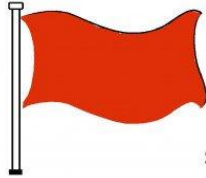
Rip Current Outlook

Today

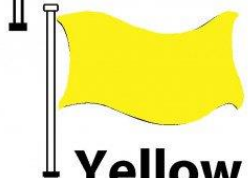
BEACH FLAG WARNING SYSTEM



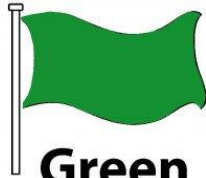
Double Red
Water Closed to
Public Use



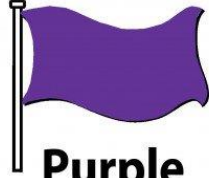
Red
High Hazard
(rough conditions,
such as strong surf
and or currents)



Yellow
Medium Hazard
(light surf and or
currents)

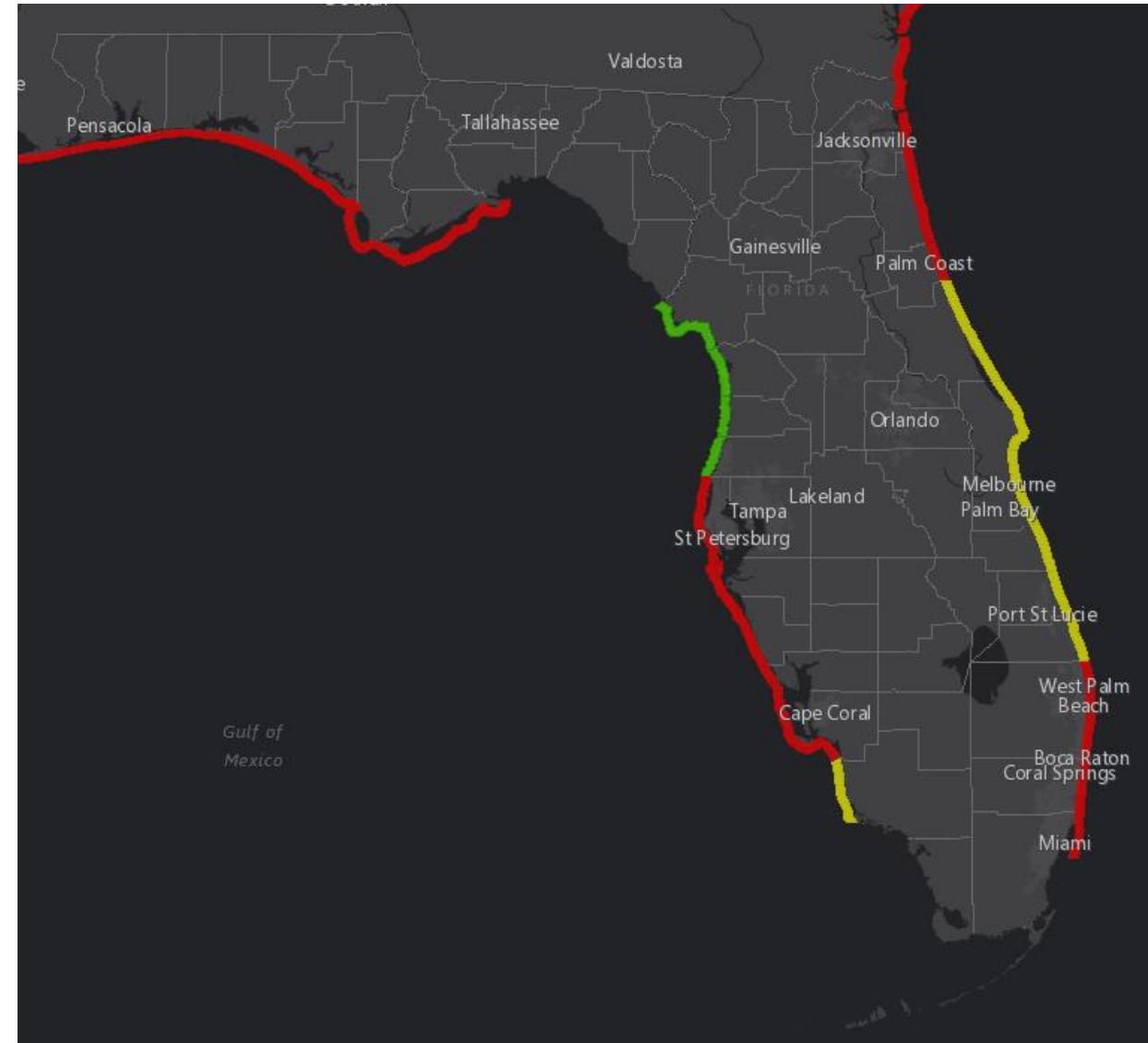


Green
Low Hazard
(calm conditions)



Purple
Marine Pest
(jellyfish, stingrays
& dangerous fish)

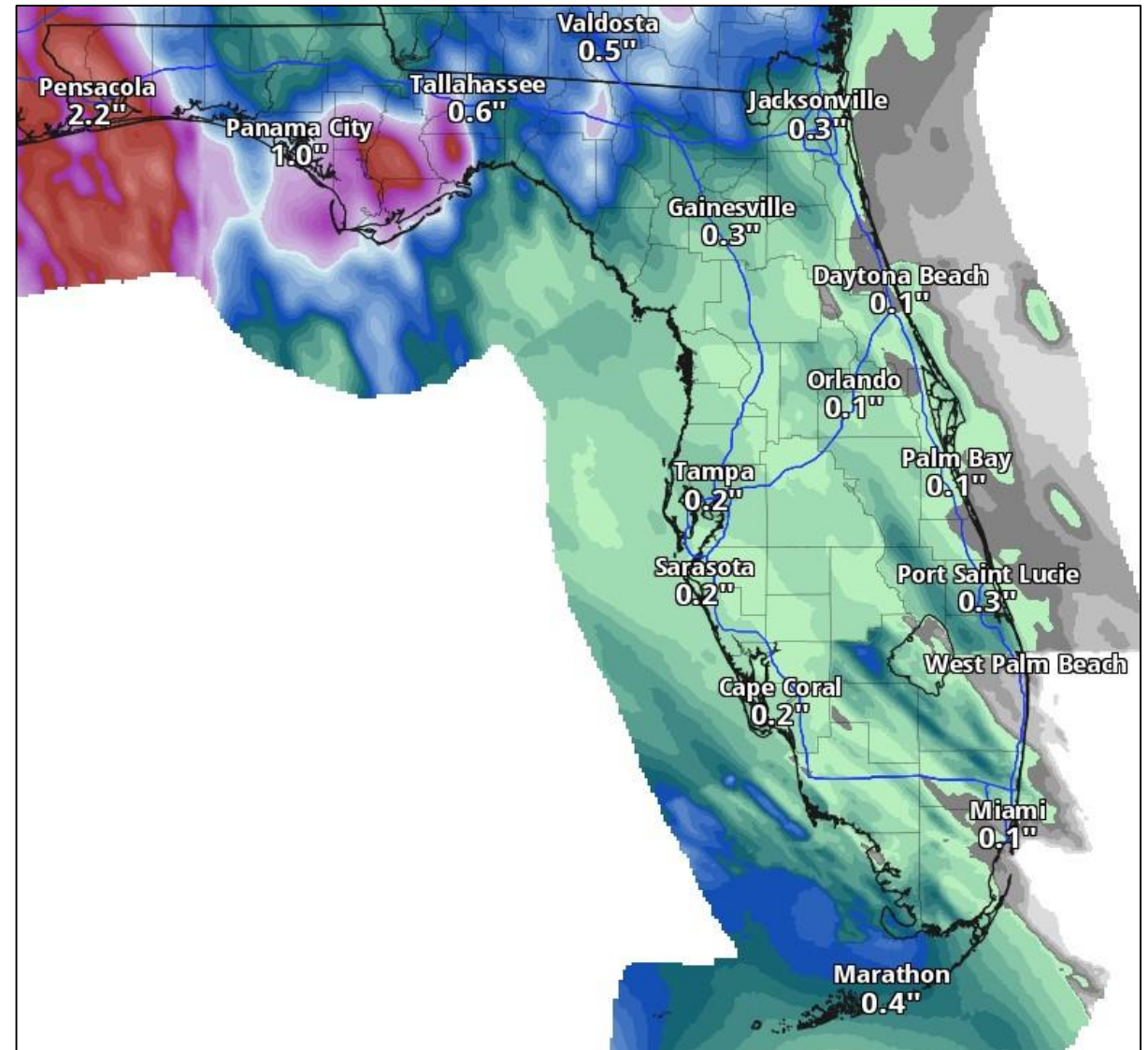
Elevated rip current risk statewide, with the greatest threat in the Panhandle and Southeast Florida.





Forecast Rainfall Totals Next 24 Hrs

- A widespread 2-4" expected in the Panhandle with 1" elsewhere.
- Locally 6-8" in the western Panhandle.
- Storms will be very efficient rainfall producers, and could produce 2-4" of rain within an hour.





Overall Summary

Tropical Storm Laura – Near Cuba

- The center of Tropical Storm Laura is located just south of Central Cuba, or about 250 miles southeast of Key West, Florida.
- Maximum sustained winds remain at 60mph. Laura's strength should remain nearly steady as it passes near or over Cuba followed by significant strengthening over the Gulf of Mexico.
- Laura is moving toward the west-northwest at 20 mph, and a northwestward motion should continue for the next few days.
- Laura will likely make its closest approach to the lower Florida Keys on this evening. A Tropical Storm Warning is in effect for the Lower and Middle Keys.
- Once in the Gulf of Mexico, a strengthening hurricane is forecast to turn north towards Texas and Louisiana.

Tropical Storm Marco – Northern Gulf of Mexico

- The center of Marco is located about 150 miles southwest of Pensacola, Florida.
- Marco has weakened to a Tropical Storm with winds around 50 mph and it is forecast to dissipate over the next 24 hours.
- Marco is moving toward the NNW at 8 mph.
- Wind shear is keeping most of the showers and thunderstorms northeast of the center. Even as the storm turns west, numerous rain bands are expected in the Panhandle today.



Florida Summary

Florida Outlook:

- **Tropical Storm Laura:**
 - A Tropical Storm Warning is in effect for the Lower and Middle Florida Keys. It has been upgraded from a watch.
 - Tropical storm force winds are ongoing in squalls the Florida Keys: 35-55 mph
 - Storm surge in the Keys will remain 2' or less at high tide. If combined with heavy rainfall, then some flooding may occur.
 - Isolated tornadoes are possible in any outer bands across South Florida and the Keys Monday.
 - Quick moving squalls will limit the flash flood threat.
 - Dangerous rip currents and high surf are expected at all Florida beaches from Laura and Marco. Minor to locally significant beach erosion is expected. Wave heights 3-6' along Atlantic beaches.
- **Tropical Storm Marco:**
 - Even with the center going west of Florida, rainfall extends well east of the center and will impact the Panhandle today/tonight.
 - Flash Flood Watch until tonight for much of the Panhandle and western Big Bend.
 - Locally heavy rainfall may lead to isolated flash flooding, especially where outer bands train over the same areas in the western Panhandle. 2-4" of rain are forecast, with localized totals of 6-8+".
 - Depending on how much rain falls, minor river flooding is possible over the next few days.
 - Storm surge of 1-2' is expected currently in the Panhandle/Big Bend, which should result in only minor coastal flooding at high tides.
 - Isolated tornadoes are possible in any other bands across the Florida Panhandle and Big Bend throughout Monday, especially along the immediate coast.
 - Dangerous rip currents and high surf are expected at all Florida beaches from Laura and Marco. Minor to locally significant beach erosion is expected. Wave heights 4-8' in the Panhandle on Monday.

The next briefing packet will be issued Monday 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



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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