



TROPICAL UPDATE



8:00 AM EDT

Sunday, August 23, 2020


Tropical Storm Laura – Near Hispaniola

Tropical Storm Marco – Central Gulf of Mexico

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 Sunday, August 23

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



Overview/Recent Changes:

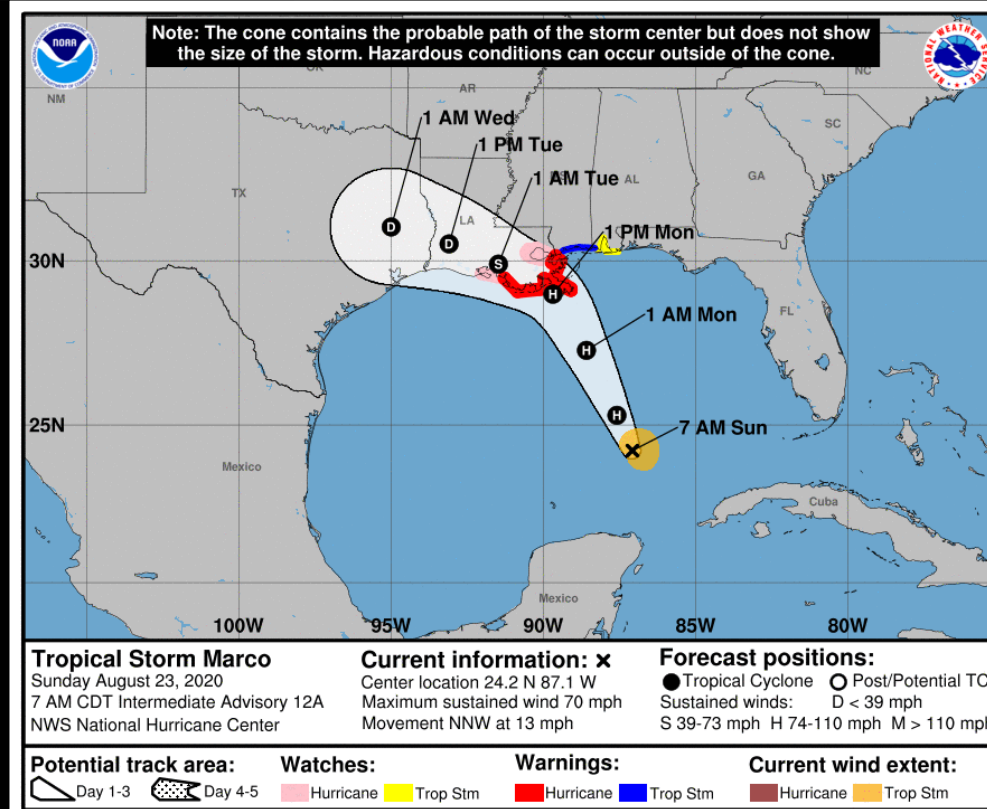
Overnight, the track shifted slightly to the left. Additional changes in the track are likely later today depending on how far south the system is when it re-emerges off of Hispaniola. Threats continue to remain the same for South Florida and the Keys—gusty winds to tropical storm force, locally heavy rainfall, and isolated tornadoes. Storm surge is expected to remain less than 3'. Impacts, if any, to Northwest Florida remain uncertain.

Tropical Storm Marco Sunday, August 23

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



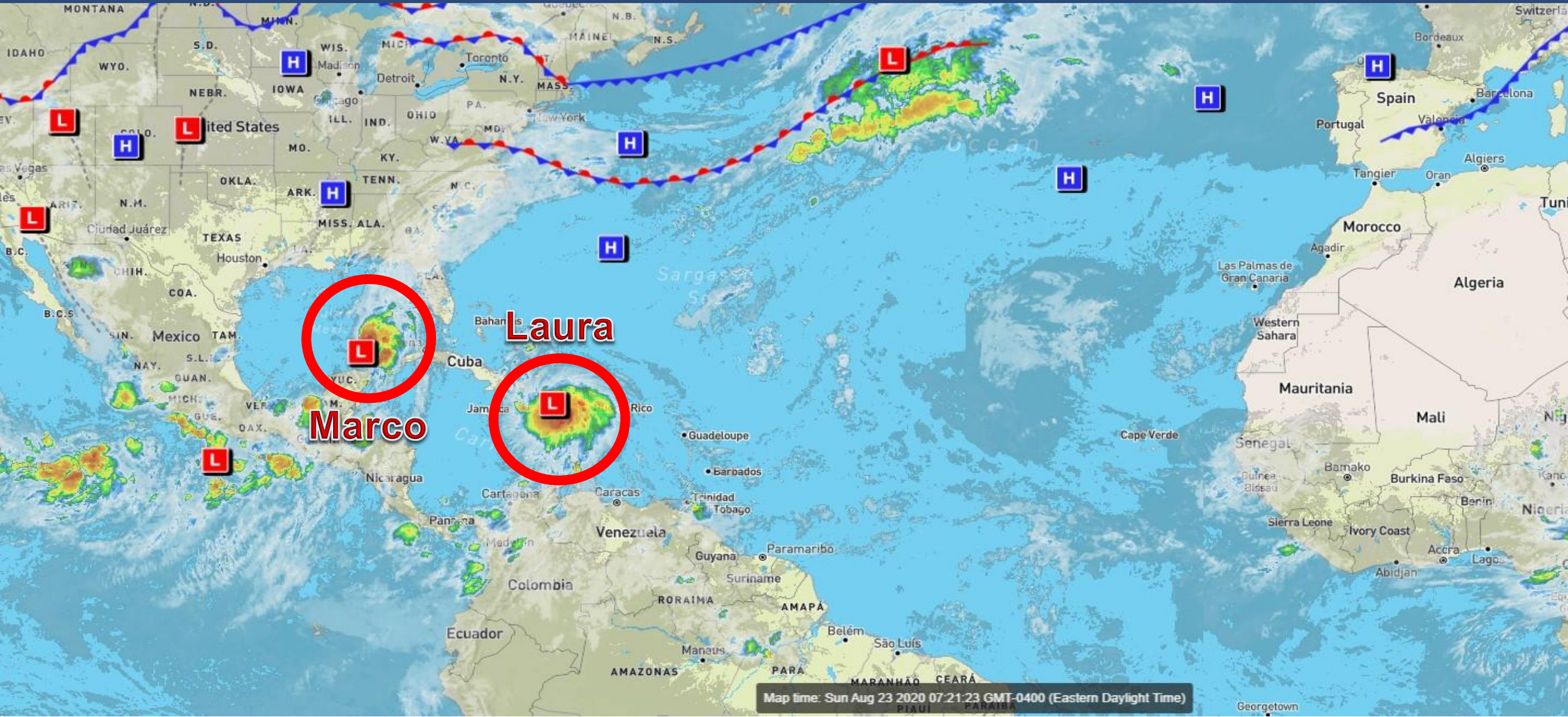
Overview/Recent Changes:

Little change in track or intensity forecast overnight. Marco remains just below hurricane strength. While no watches or warnings are currently in effect for Marco in Florida, gusty winds, isolated tornadoes, and heavy rainfall will be possible in the western Panhandle from the outer rain bands.



Atlantic Basin Satellite Image

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



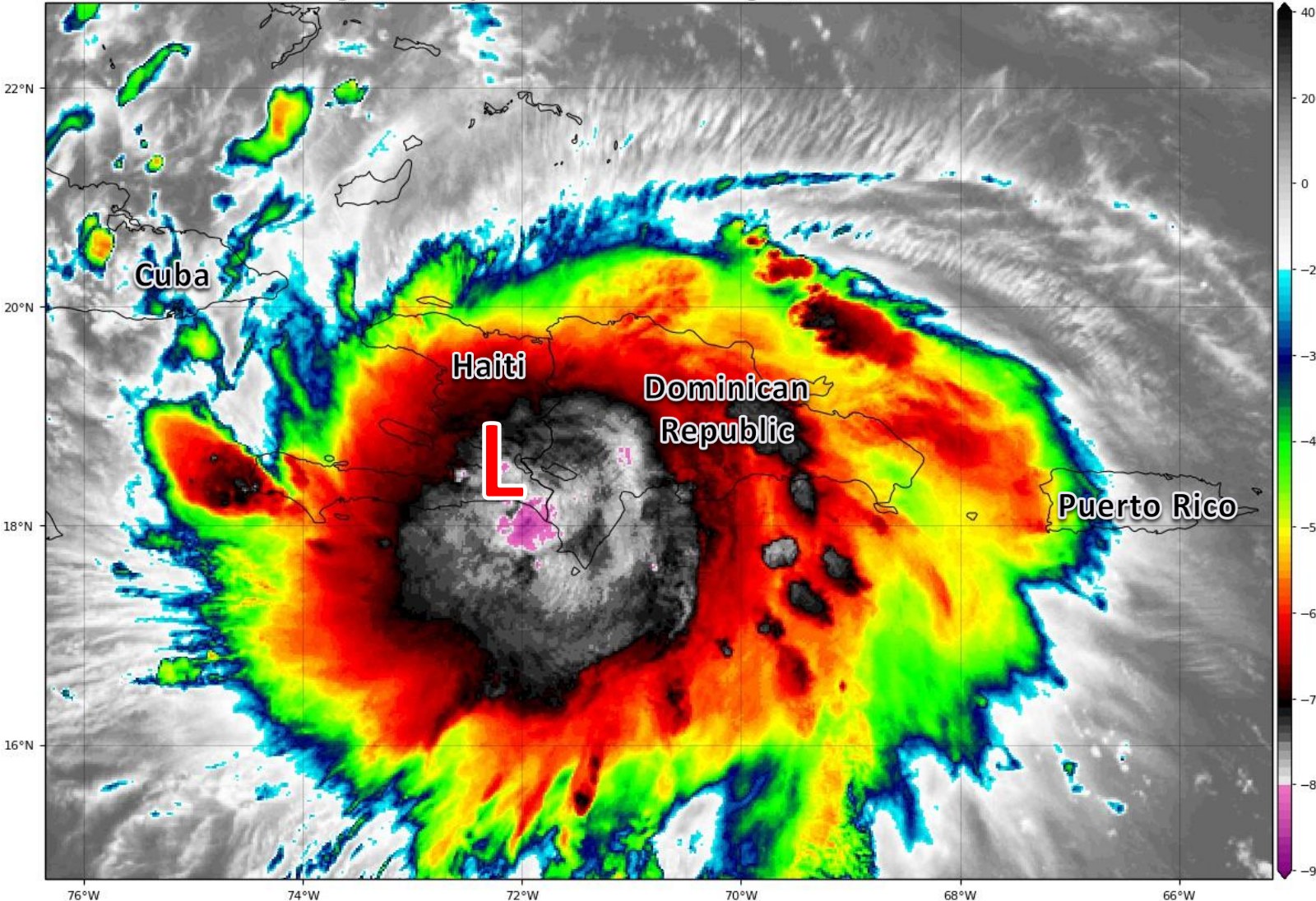


Satellite Imagery

Near Hispaniola – Tropical Storm Laura

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:05Z Aug 23, 2020

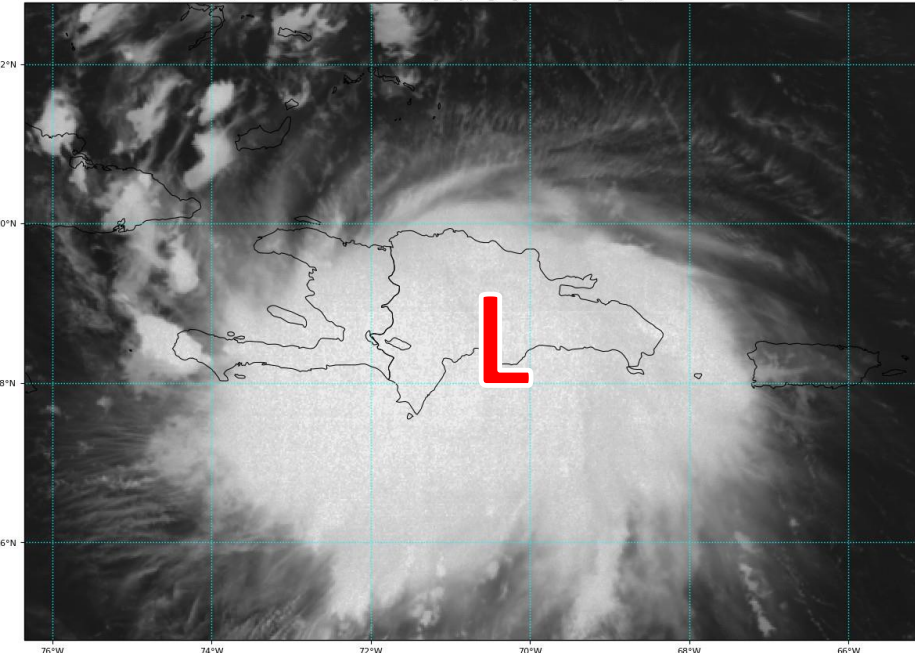
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Tropical Storm Laura continues to produce robust thunderstorms across the Dominican Republic and Haiti. Wind speeds have not increased due to the land interaction.

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 09:55Z Aug 23, 2020

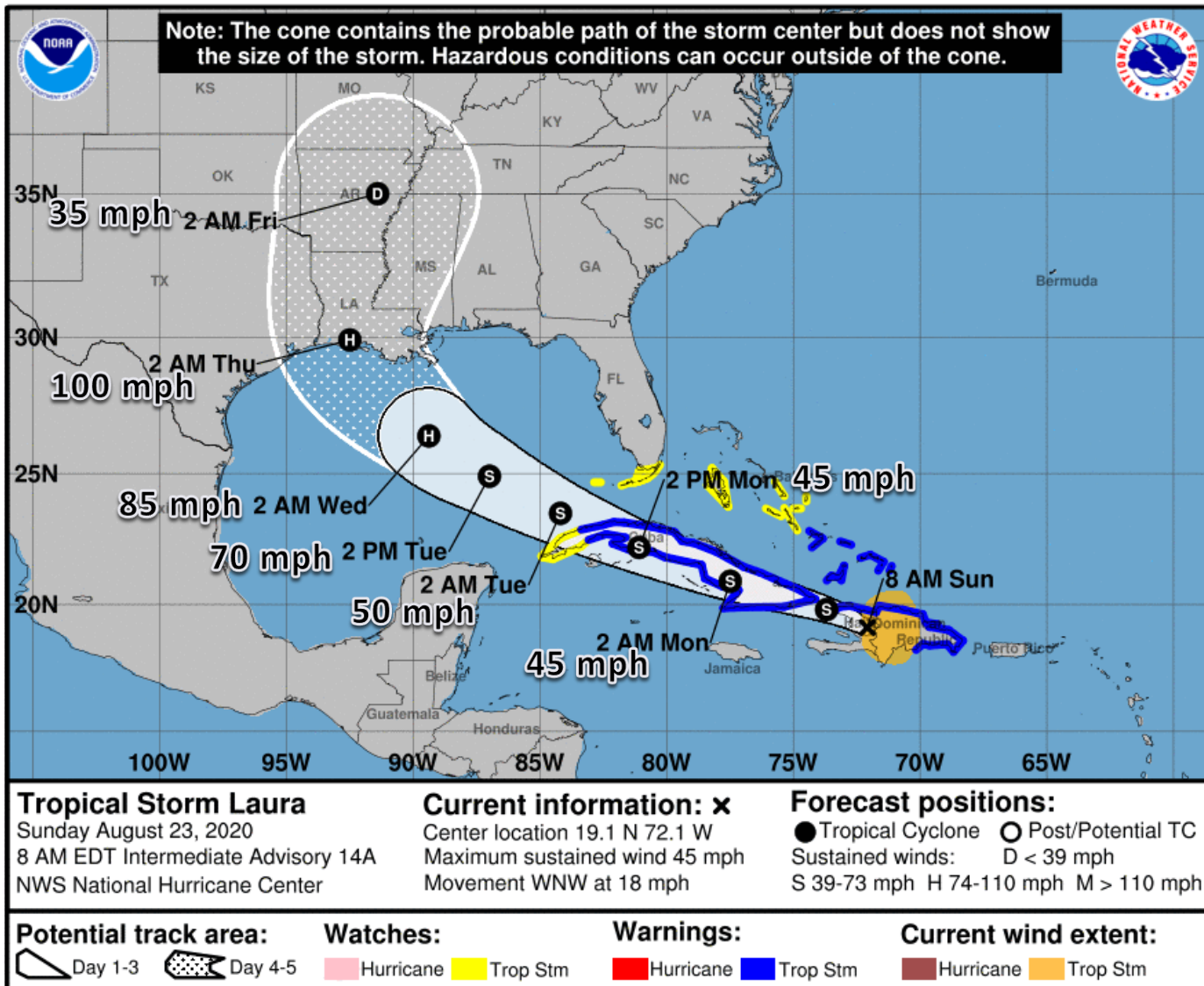
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Official Forecast Track

From the National Hurricane Center – Tropical Storm Laura



- The center of Tropical Storm Laura is located about 40 miles NNE of Port Au Prince, Haiti, or about 750 miles southeast of Key West, Florida.
- Maximum sustained winds have decreased to 45 mph. Laura's strength should remain nearly steady as it passes near or over Haiti and Cuba.
- Laura is moving toward the west-northwest at 18 mph, and a west-northwestward motion should continue for the next few days.
- Laura will likely make its closest approach to the lower Florida Keys on Monday evening. A Tropical Storm Watch is in effect for the Keys.
- Once in the Gulf of Mexico, there is uncertainty regarding where Laura will track and how much Marco could influence that track. Changes to the track are possible. For now a strengthening hurricane is forecast to turn north towards Texas and Louisiana.



Damaging Wind Threat Overview

Tropical Storm Laura

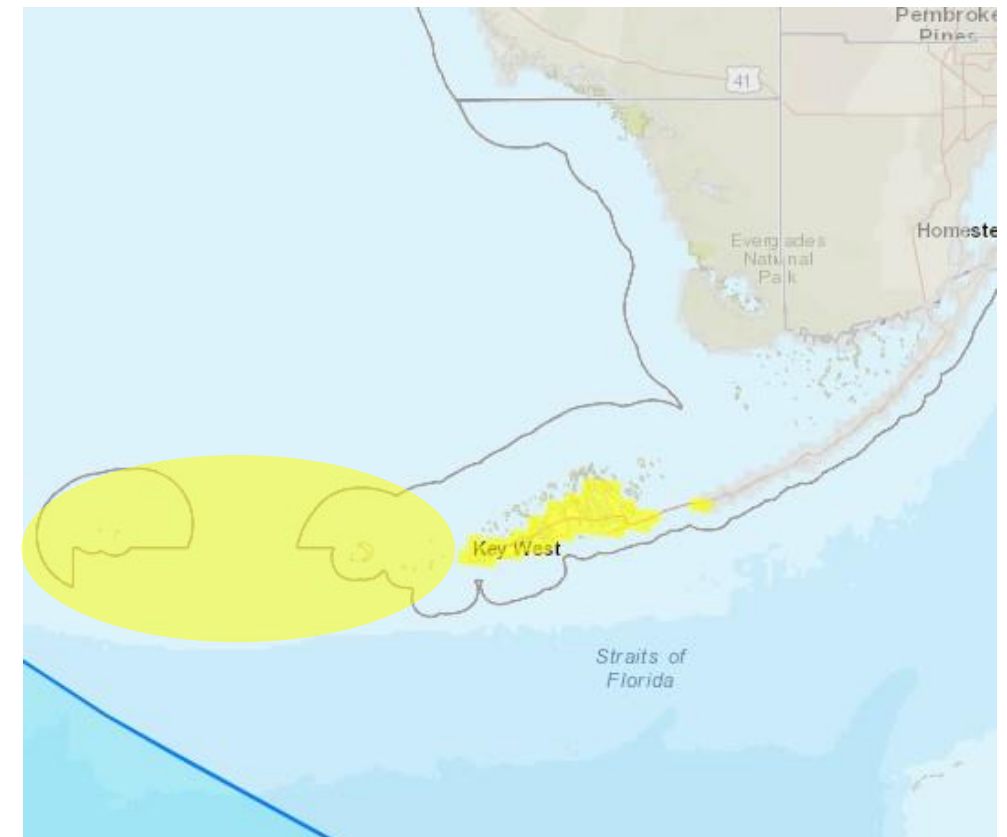
The greatest wind threat is across the lower Florida Keys, where sustained winds of 40-55 mph. Only gusts to tropical storm force are currently forecast across the rest of the Florida Keys.

It is too early to determine the wind threat to Northwest Florida due to Laura, if there is any at all.

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

Click on “Threats and Impacts” Tab

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

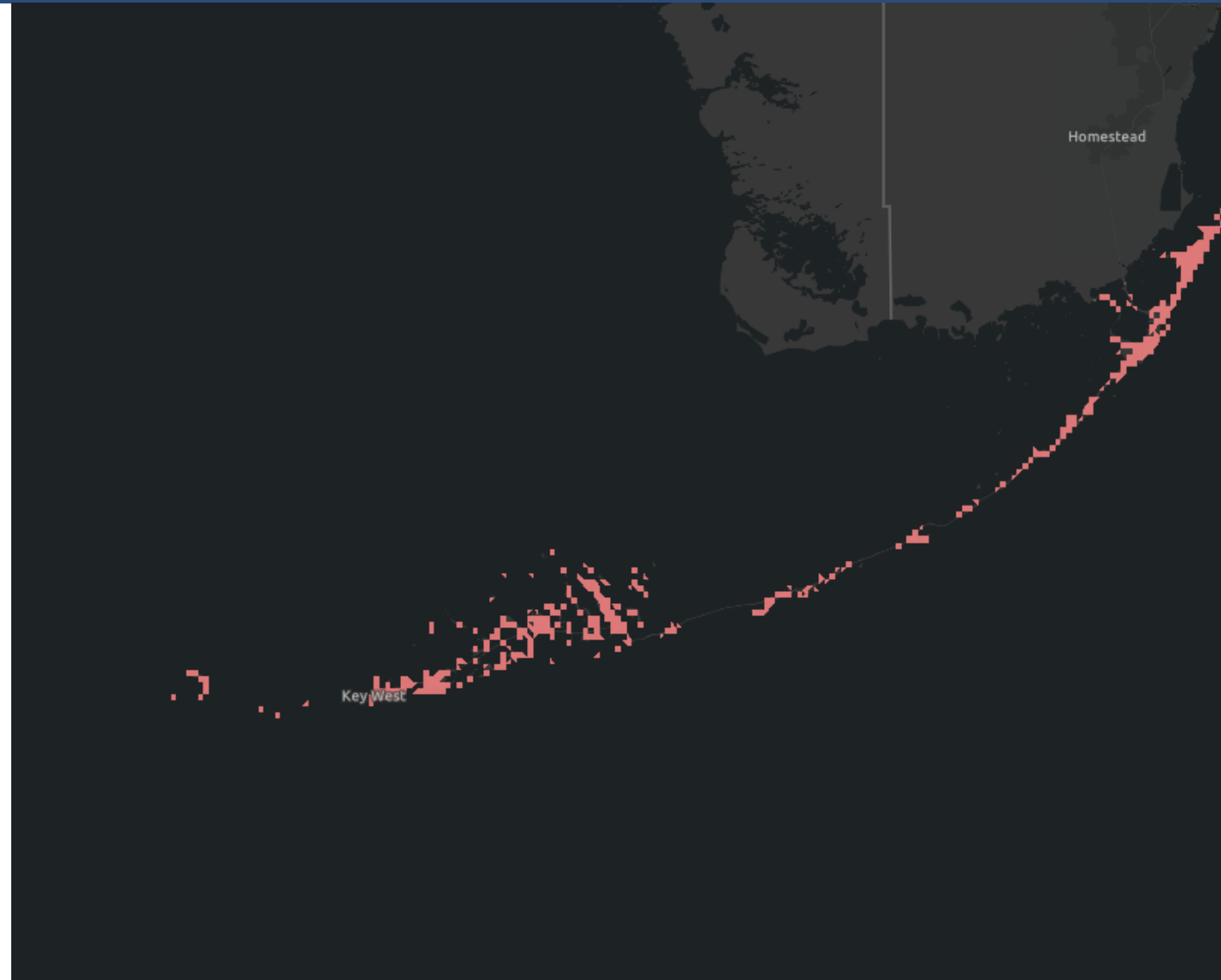




Wind Watches and Warnings

In Effect Until Further Notice

Tropical Storm Watches are in effect for all of the Florida Keys – including but not limited to – The Dry Tortugas, Key West, Marathon, and Key Largo.



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

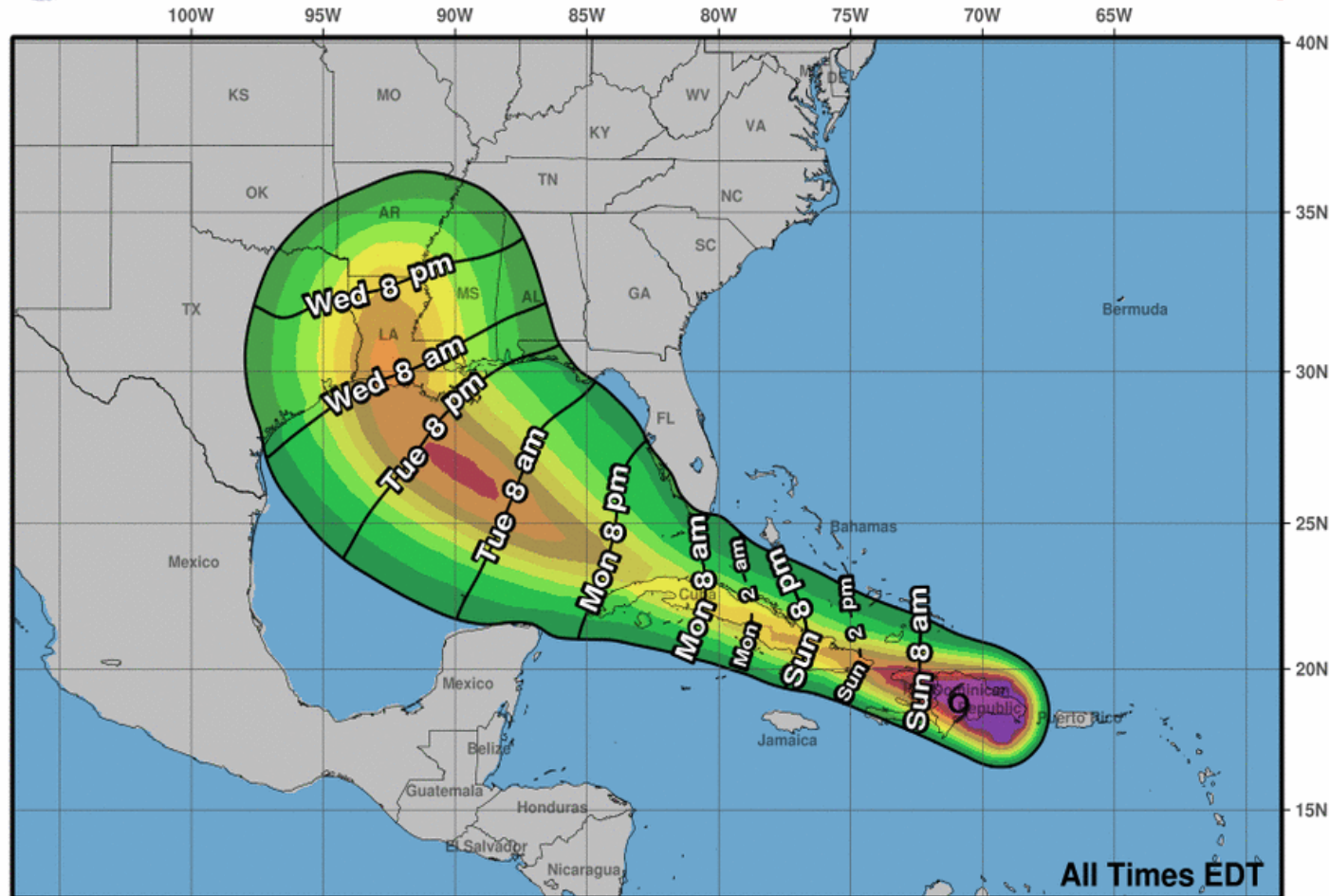


TS Laura: Time of Arrival & Wind Speed Probabilities

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



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



All Times EDT

Key West: 19% (-22)

Marathon: 11% (-18)

Miami: 3% (-2)

Naples: 9% (-9)

Fort Myers: 3% (-3)

Apalachicola: 9% (-4)

Panama City: 11% (-3)

Destin: 9% (-2)

Pensacola: 11% (-3)

Tropical storm force winds may begin on Monday morning in the Florida Keys, but most likely later in the day. If tropical storm force winds occur in the western Panhandle, it may be as early as Tuesday evening, but most likely Wednesday morning.

Chances for Tropical Storm Force winds have decreased overnight.

Tropical Storm Laura
Sun. Aug. 23, 2020 5 am EDT
Advisory 14

Storm Location ○ < 34 kt (39 mph)
& ○ 34-63 kt (39-73 mph)
Wind Speed ● ≥ 64 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds

5 10 20 30 40 50 60 70 80 90 100 %



Flood Threat Overview

Tropical Storm Laura

The greatest flood threat is across far South Florida and the Florida Keys, where a localized flash flood is possible as some outer rain bands move through the area on Monday.

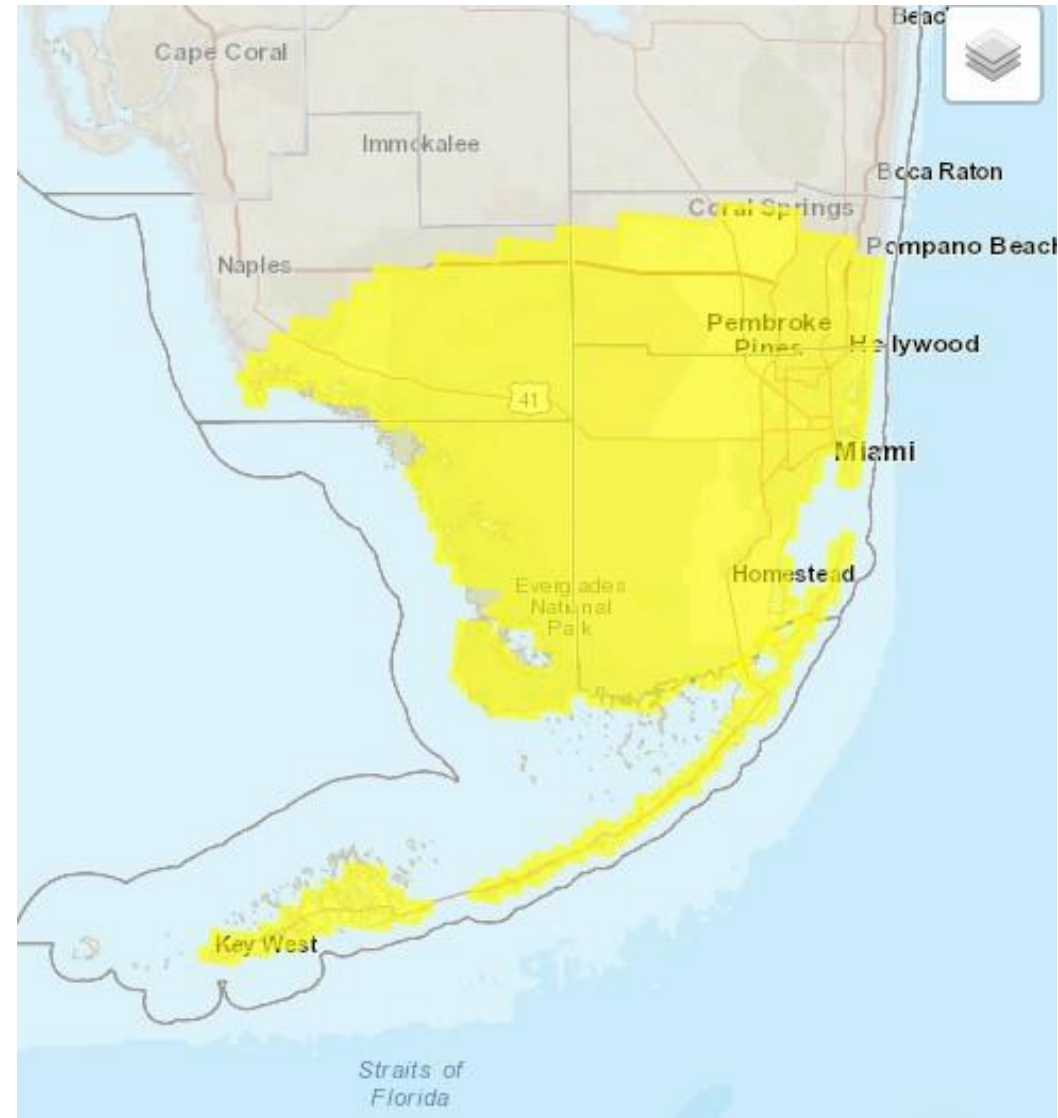
A widespread 1-2" of rain is expected with localized areas picking up 3-4"

It is too early to determine the flood threat in Northwest Florida, if there is any at all.

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

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



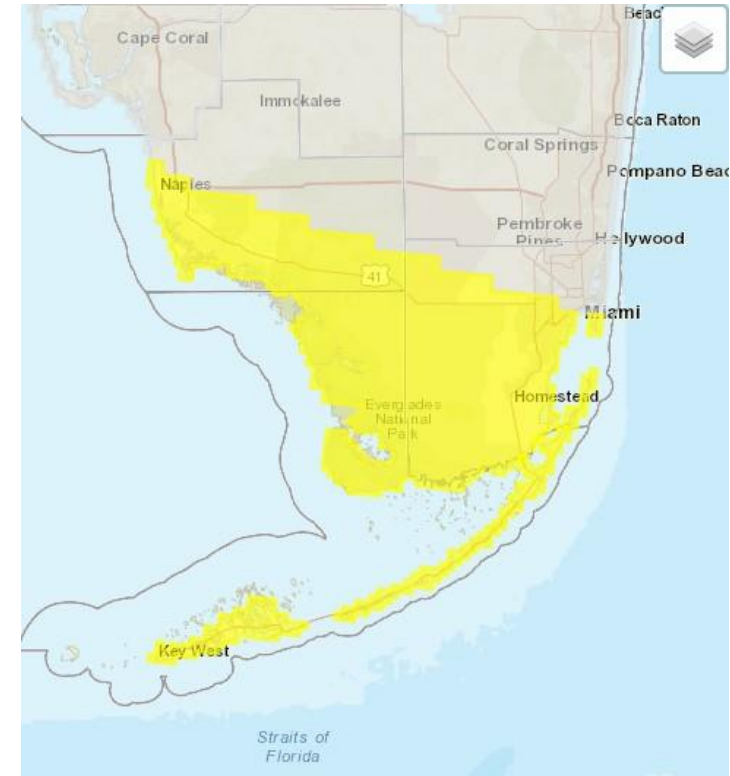
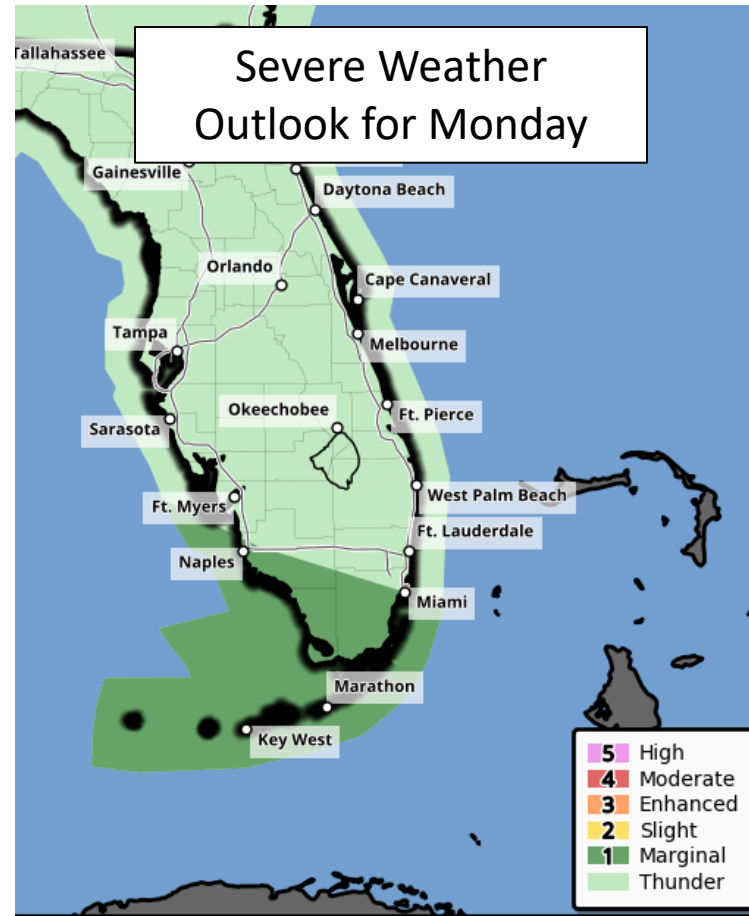


Tornado Threat Overview

Tropical Storm Laura

Isolated tornadoes are possible in the outer bands of Laura across far South Florida and the Florida Keys on Monday.

It is too early to determine the tornado threat in Northwest Florida from Laura, if any at all.



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>

Click on "Threats and Impacts" Tab



Storm Surge Threat Overview

Tropical Storm Laura

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

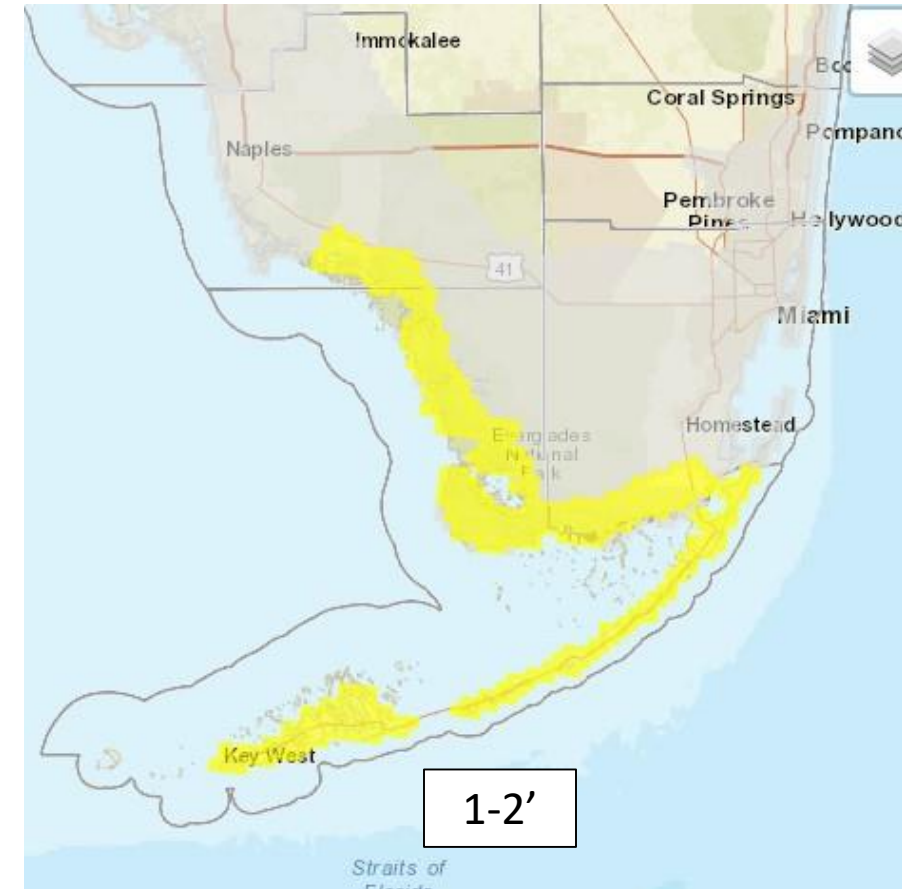
* **WHAT...**The passage of Tropical Storm Laura to our west Monday and Monday night will result in strong southeast breezes across the Florida Keys. Tidal anomalies are running about three quarters of a foot above normal, and Laura could result in one to two additional feet of saltwater flooding, especially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



TS Laura Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Laura

Advisory 14: 5:00 AM EDT Sun Aug 23, 2020



1. Tropical storm conditions are expected across portions of the Dominican Republic and Haiti, the Turks and Caicos, the southeastern Bahamas, and Cuba through Monday. Heavy rainfall is likely across these areas and could cause mudslides and flash and urban flooding.

2. Tropical storm conditions are possible the central Bahamas and Andros Island tonight and Monday, and in the Florida Keys on Monday.

3. The details of the long-range track and intensity forecasts remain uncertain since Laura is forecast to move near or over portions of the Greater Antilles through Monday. However, Laura is forecast to strengthen over the Gulf of Mexico and could bring storm surge, rainfall, and wind impacts to portions of the U.S. Gulf Coast by the middle of next week. This could result in a prolonged period of hazardous weather for areas that are likely to be affected by Tropical Storm Marco earlier in the week. Interests there should monitor the progress of Laura and Marco and updates to the forecast during the next few days.



For more information go to hurricanes.gov

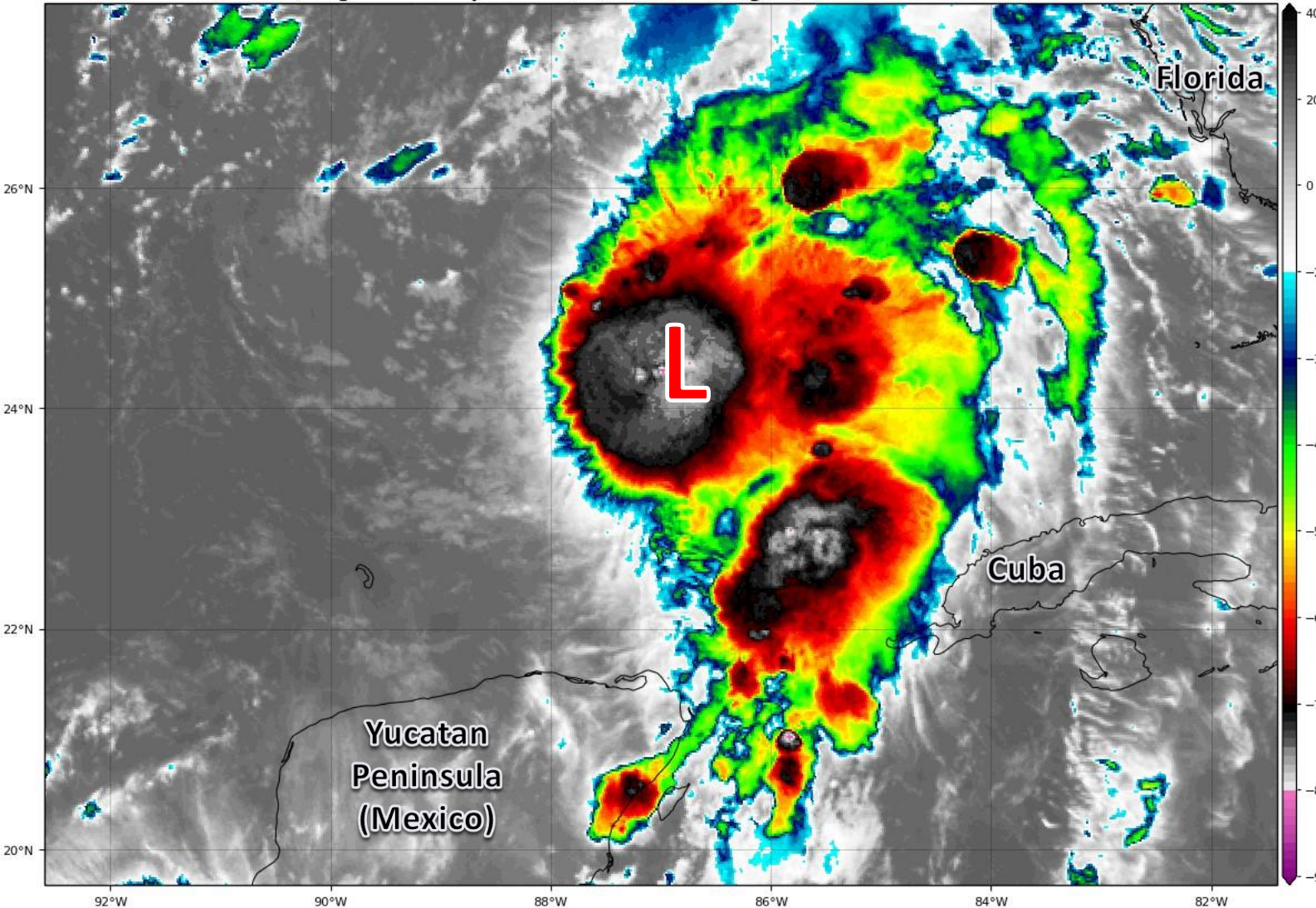


Satellite Imagery

Central Gulf of Mexico – Tropical Storm Marco

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:17Z Aug 23, 2020

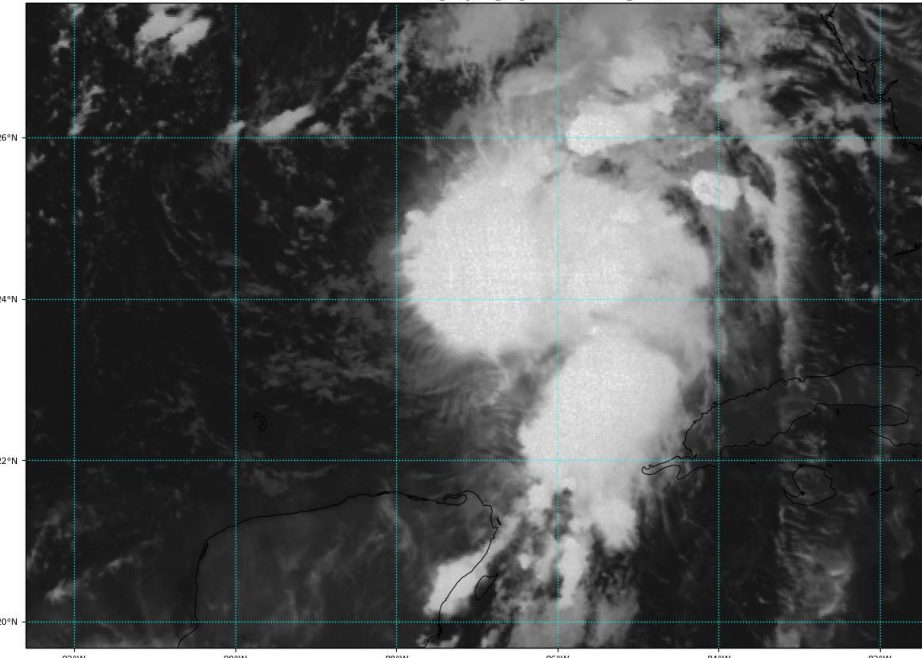
TROPICALTIDBITS.COM



Tropical Storm Marco continues to have a small but well-defined center. It has had little change in strength overnight, and remains just below hurricane strength. More showers and thunderstorms are located on the eastern side of the system than on the west.

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 11:12Z Aug 23, 2020

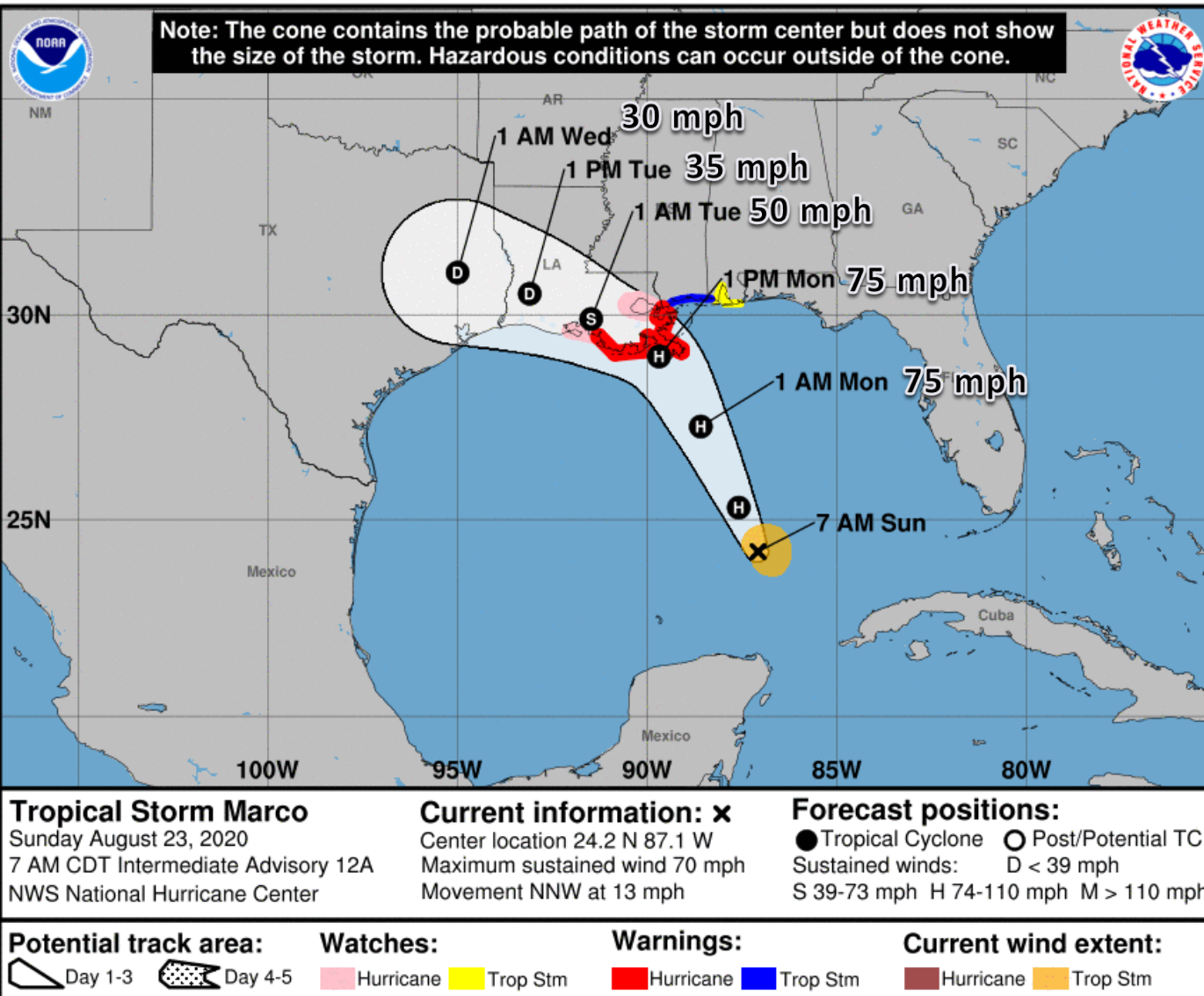
TROPICALTIDBITS.COM





Official Forecast Track

From the National Hurricane Center – Tropical Storm Marco



- The center of Marco is located about 375 miles south of Pensacola, Florida.
- Maximum sustained winds are near 70 mph, and Marco is forecast to become a hurricane later today.
- Marco is moving toward the NNW at 13 mph. A turn toward the northwest is expected on Monday as it makes landfall.
- Landfall along the along the Louisiana coast is expected.
- Wind shear is keeping most of the showers and thunderstorms east of the center, hence the tropical storm watches and warnings for Mississippi and Alabama.

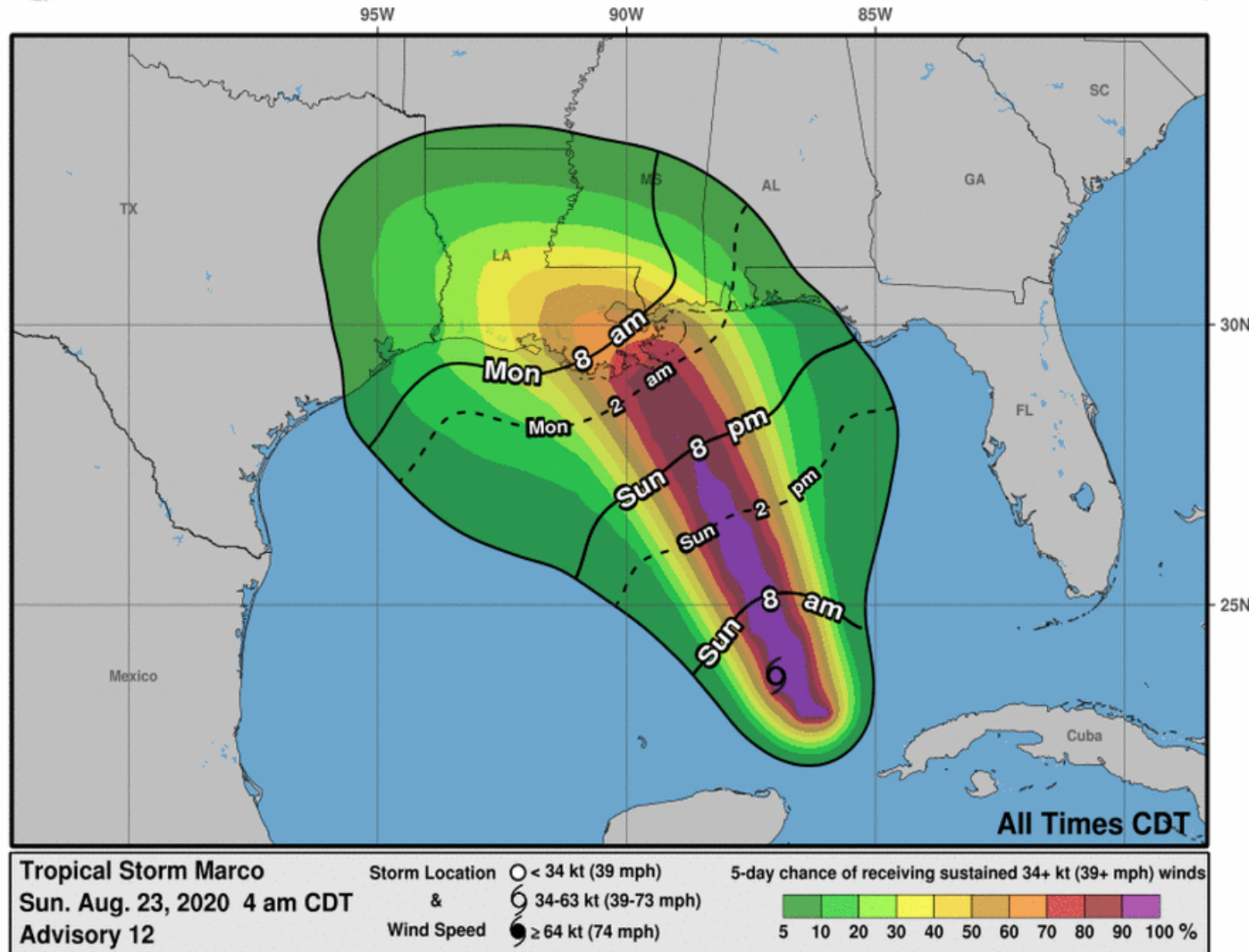


TS Marco: Time of Arrival & Wind Speed Probabilities

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



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Pensacola: 8% (-17)

Destin: 5% (-9)

Panama City: 6% (-11)

Apalachicola: 5% (-8)

Chances for tropical storm force winds from Tropical Storm Marco have decreased across the western Panhandle..



Flood Threat Overview

Tropical Storm Marco

The greatest flood threat is across the far western Panhandle- 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".

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

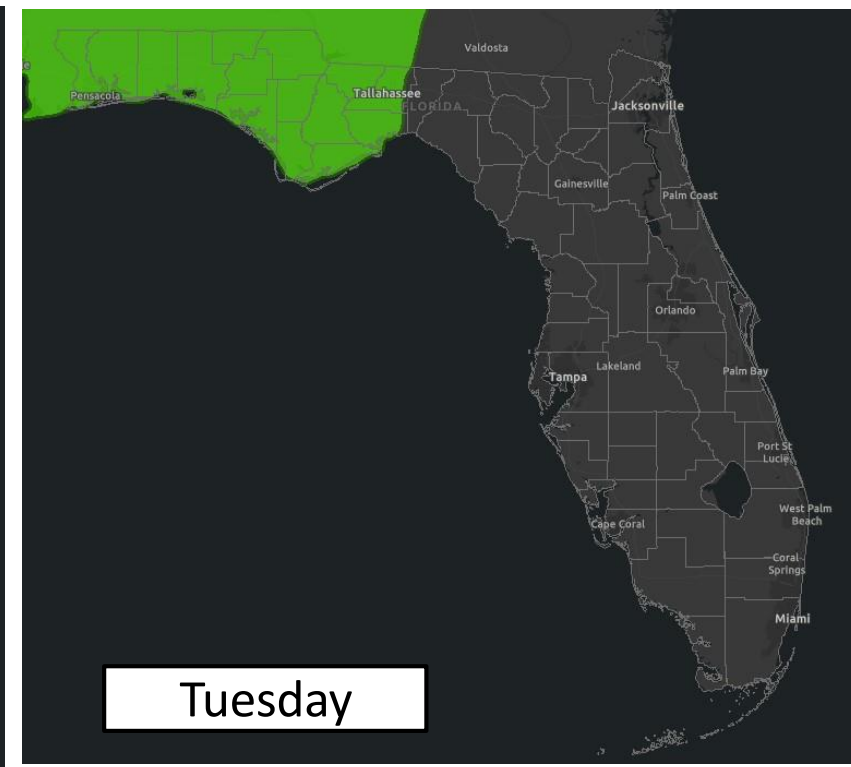
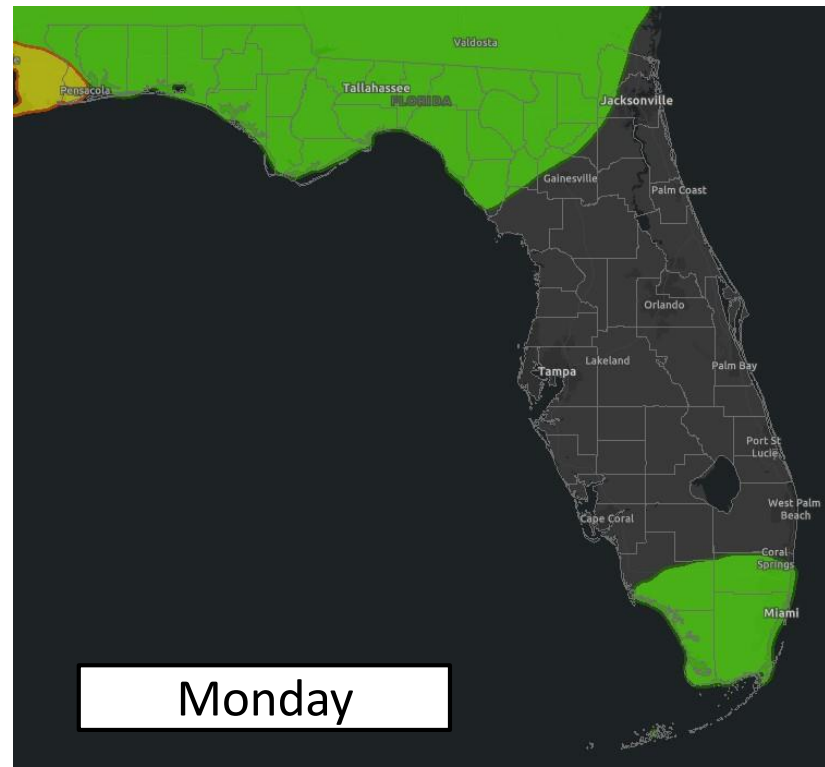
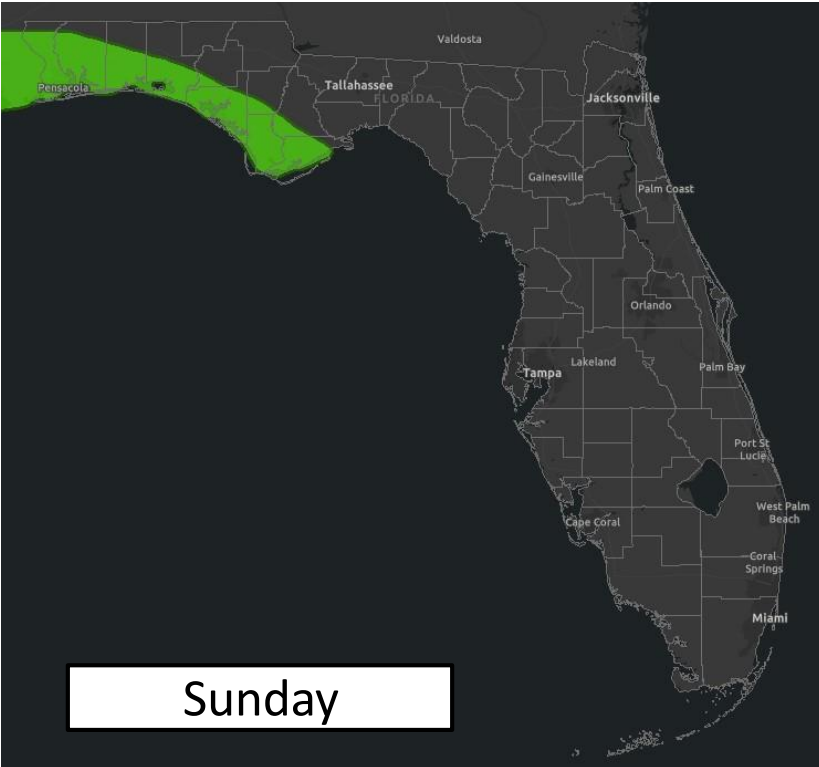
Click on "Threats and Impacts" Tab





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%



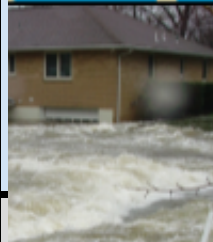
An isolated case of flash flooding is possible across the Florida Panhandle starting later today and continuing through Tuesday. A more focused flash flood threat is expected in Pensacola on Monday as Marco makes landfall to the west.



Flash Flood Risk Categories

Understanding the Weather Prediction Center Risk Scale

Understanding WPC Excessive Rainfall Risk Categories

<div>No Area/Label</div> <div>Flash floods are generally not expected.</div> <div>www.wpc.ncep.noaa.gov @NWSWPC</div>	<div>MARGINAL (MRGL)</div> <div>Isolated flash floods possible</div> <div>Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.</div>	<div>SLIGHT (SLGT)</div> <div>Scattered flash floods possible</div> <div>Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.</div>	<div>MODERATE (MDT)</div> <div>Numerous flash floods likely</div> <div>Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.</div>	<div>HIGH (HIGH)</div> <div>Widespread flash floods expected</div> <div>Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.</div>	
<div>Flash flooding near me?</div> <div>Flash Flooding</div> <div>NO Flash Flooding</div>					
<div> WEATHER PREDICTION CENTER</div>		<div>Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line</div> <div>HIGH: > 50%SLGT: 10%-20%</div> <div>MDT: 20%-50%MRGL: 5%-10%</div>			



TS Marco Key Messages

From the National Hurricane Center



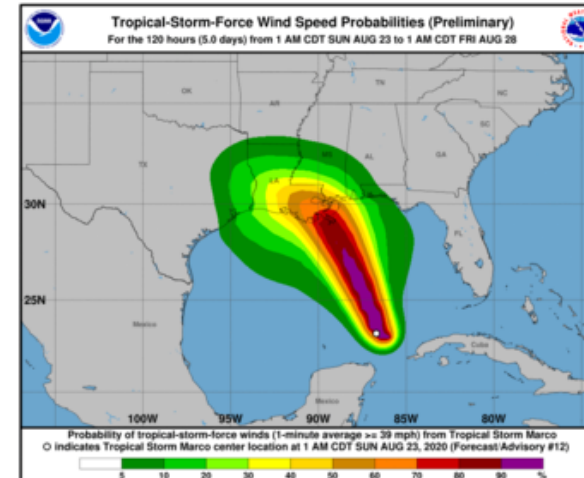
Key Messages for Tropical Storm Marco

Advisory 12: 4:00 AM CDT Sun Aug 23, 2020



1. Hurricane conditions, life-threatening storm surge, and heavy rainfall are expected from Marco along portions of the Gulf Coast beginning on Monday, and Hurricane and Storm Surge Warnings have been issued. Interests in these areas should follow any advice given by local government officials.

2. Tropical Storm Laura could bring additional storm surge, rainfall, and wind impacts to portions of the U.S. Gulf Coast by the middle of next week. This could result in a prolonged period of hazardous weather for areas that may also be affected by Marco. Interests there should monitor the progress of Marco and Laura and updates to the forecast during the next few days.

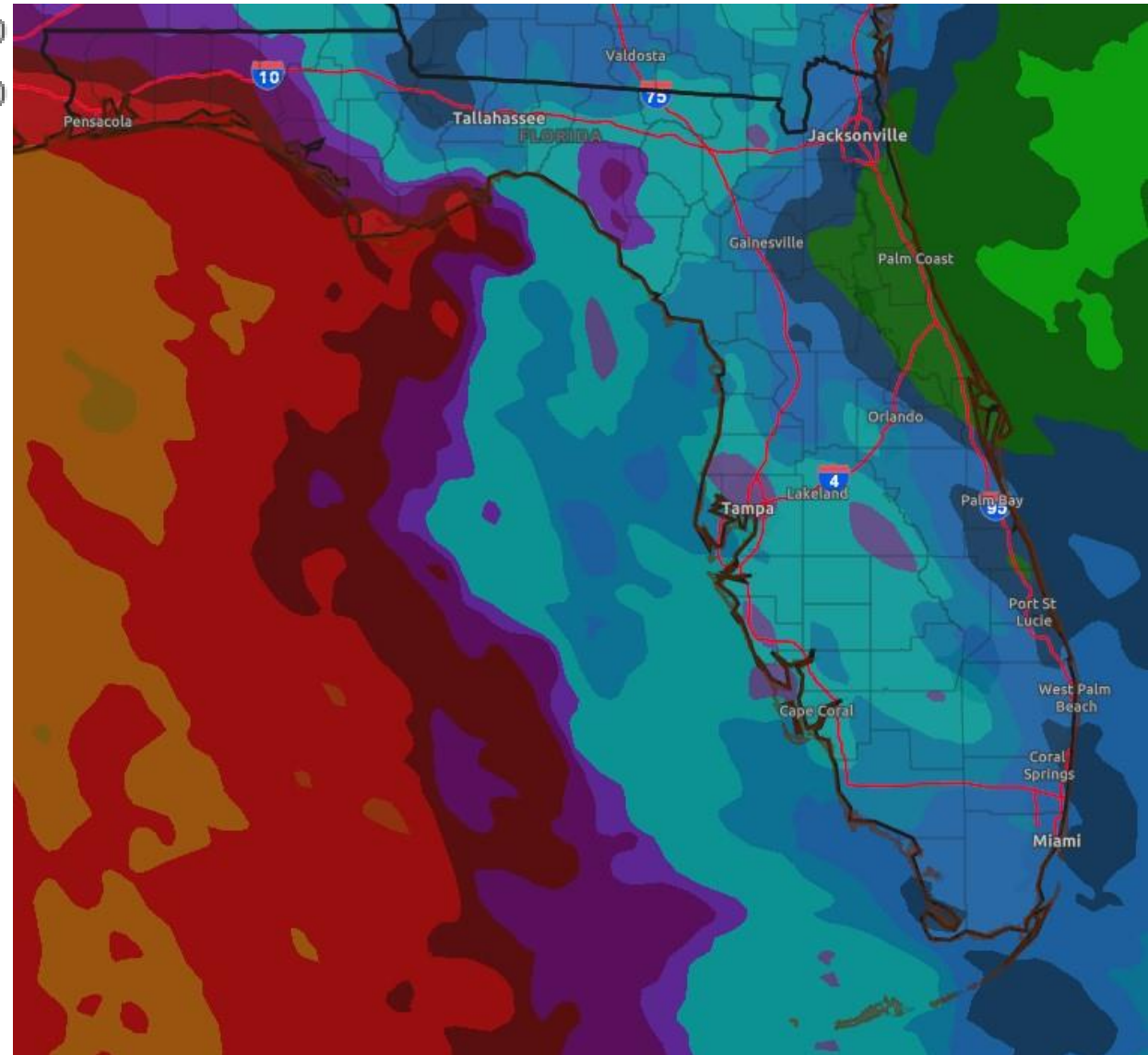
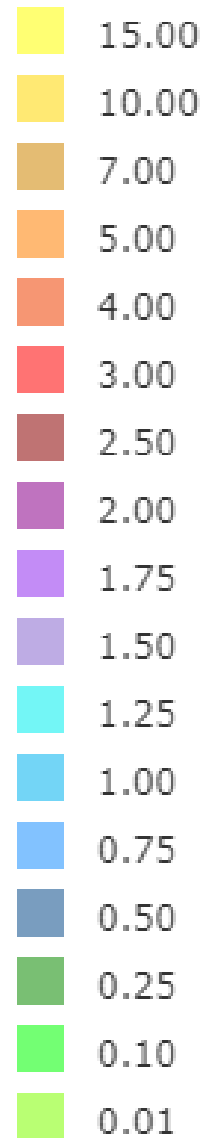


For more information go to hurricanes.gov



Forecast Rainfall Totals Next 5 Days

- A widespread 2-4" expected in the Panhandle with 1-2" elsewhere.
- Locally 6" in the western Panhandle.
- Storms will be very efficient rainfall producers, and could produce 2-4" of rain within an hour.
- The highest rainfall totals could shift or change, depending on the track and intensity of Laura and Marco.





Overall Summary

Tropical Storm Laura – Near Haiti

- The center of Tropical Storm Laura is located about 40 miles NNE of Port Au Prince, Haiti, or about 750 miles southeast of Key West, Florida.
- Maximum sustained winds have decreased to 45 mph. Laura's strength should remain nearly steady as it passes near or over Haiti and Cuba.
- Laura is moving toward the west-northwest at 18 mph, and a west-northwestward motion should continue for the next few days.
- Laura will likely make its closest approach to the lower Florida Keys on Monday evening. A Tropical Storm Watch is in effect for the Keys.
- Once in the Gulf of Mexico, there is uncertainty regarding where Laura will track and how much Marco could influence that track. Changes to the track are possible. For now a strengthening hurricane is forecast to turn north towards Texas and Louisiana in a few days.

Tropical Storm Marco – Central Gulf of Mexico

- The center of Marco is located about 375 miles south of Pensacola, Florida, moving to the north-northwest at 13 mph.
- A turn towards the northwest is expected on Monday as it makes landfall in southeastern Louisiana.
- Maximum sustained winds are near 70 mph, and Marco is forecast to become a hurricane later today.
- Wind shear is keeping most of the showers and thunderstorms east of the center, hence the tropical storm watches and warnings for Mississippi and Alabama, with hurricane warnings in Louisiana.



Florida Summary

Florida Outlook:

- **Tropical Storm Laura:**
 - A Tropical Storm Watch is in effect for the Florida Keys.
 - Tropical storm force winds could begin on Monday in the Florida Keys, with gusts general 35-55 mph in squalls.
 - Storm surge in the Keys will likely remain 2' or less. 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.
 - Locally heavy rainfall may lead to isolated flash flooding in urban areas of far South Florida and the Keys.
 - Dangerous rip currents and high surf are expected at all beaches from Laura and Marco. Minor beach erosion is possible.
- **Tropical Storm Marco:**
 - No watches or warnings are currently in effect for the Panhandle.
 - Storm surge of 1-3' is expected currently in the Panhandle, which should result in only minor coastal flooding.
 - Isolated tornadoes are possible in any other bands across the Florida Panhandle late Sunday into Monday.
 - 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".
 - Dangerous rip currents and high surf are expected at all beaches from Laura and Marco. Minor beach erosion is possible.
- The forecast is very prone to changes across the state due to the uncertainties from both Marco and Laura. Stay tuned to the latest forecasts. Exact details remain unclear and will likely change over the next day or so.

The next briefing packet will be issued Sunday afternoon. 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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