



# TROPICAL UPDATE



5:00 PM EDT

Friday, July 31, 2020

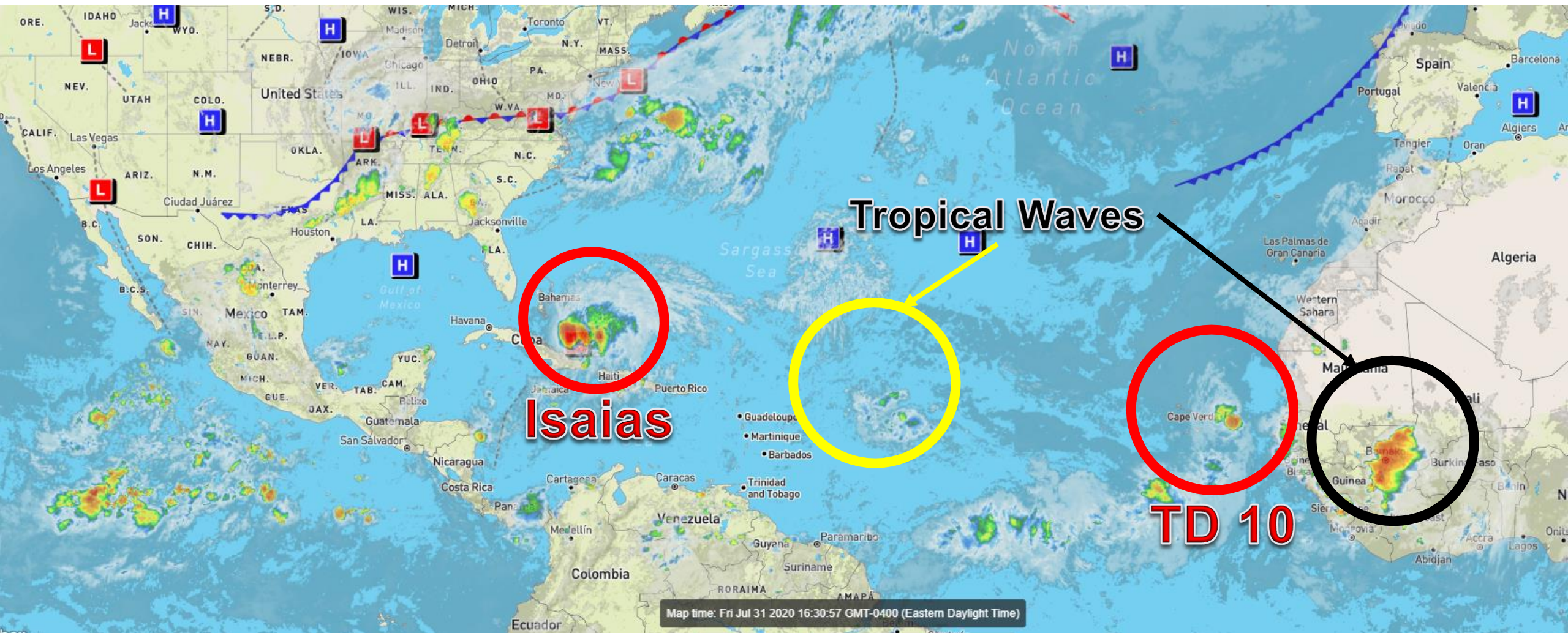
Hurricane Isaias, Tropical Depression #10,  
& Central Atlantic Tropical Wave (30%)

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





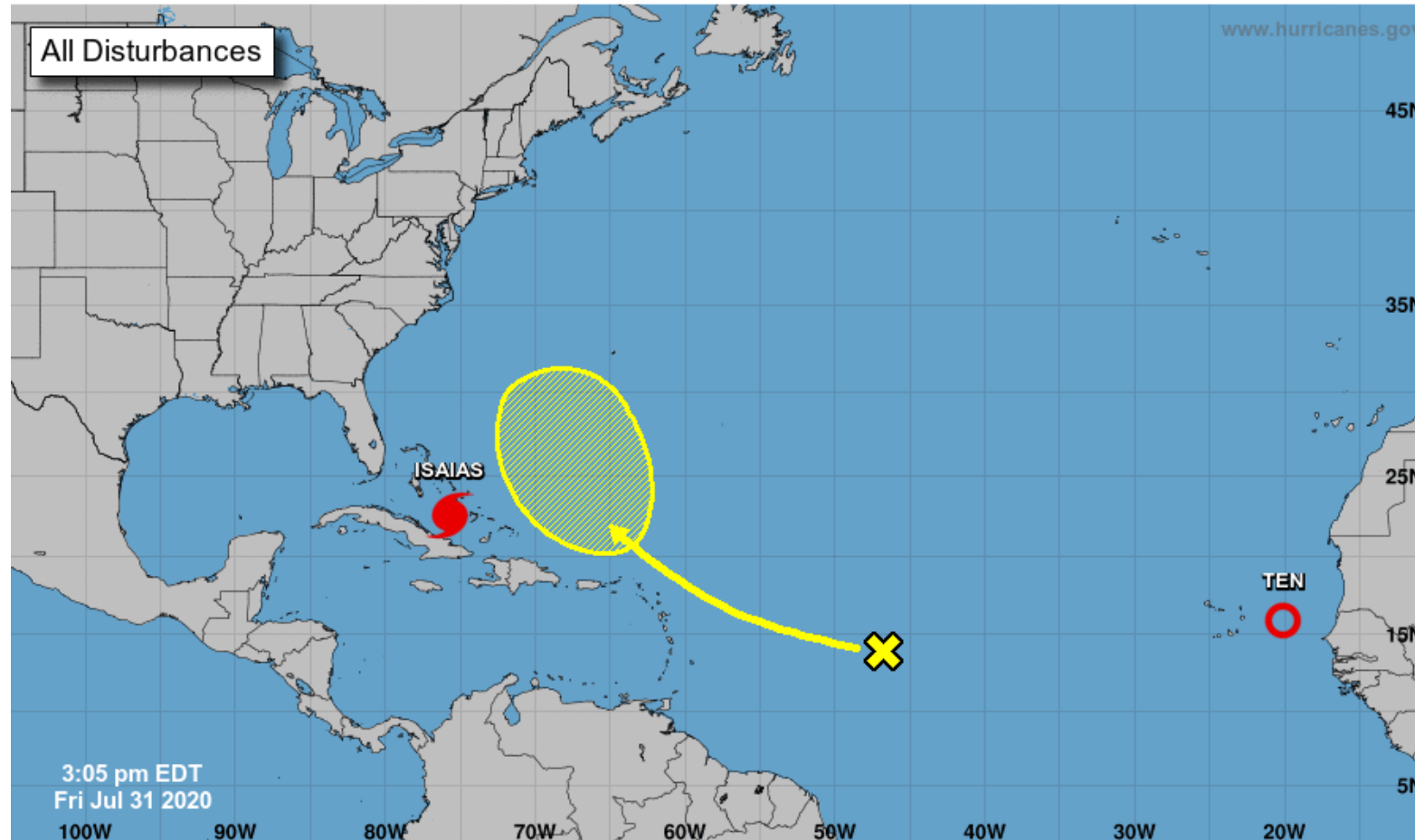
# Tropical Weather Outlook

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

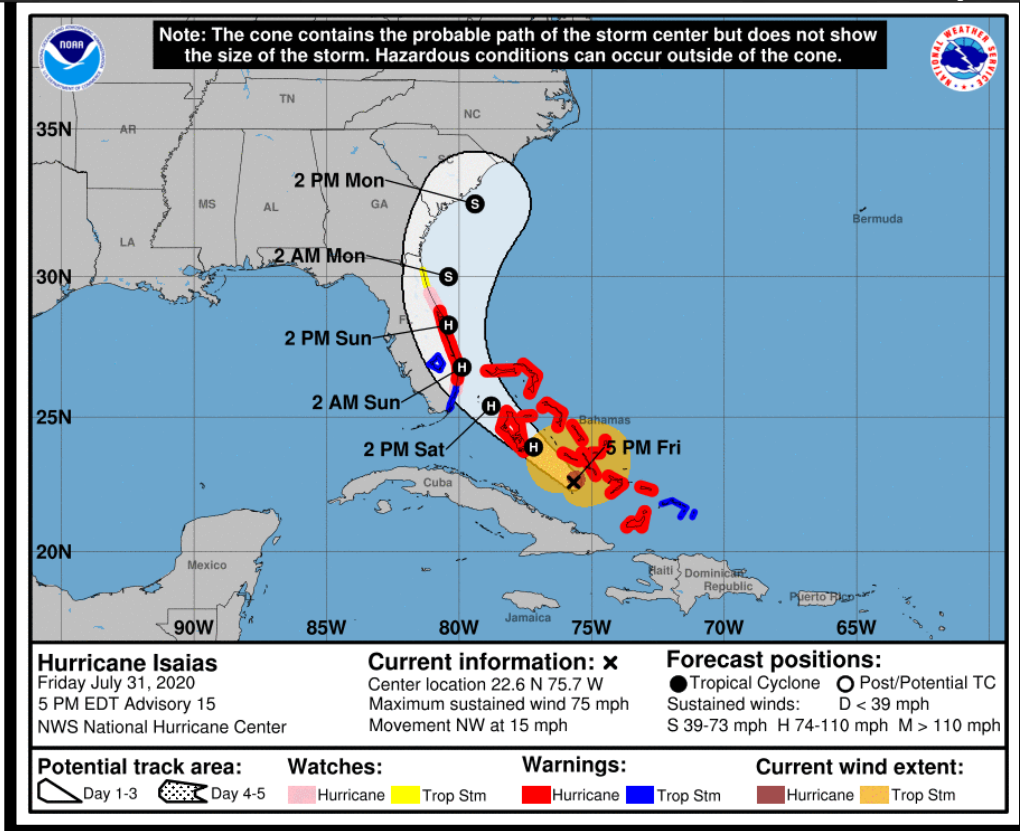
Post-Tropical Cyclone or Remnants

# Hurricane Isaias Friday, July 31

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

## National Hurricane Center Map



## Overview/Recent Changes:

Isaias is maintaining strength as a Category 1 hurricane and moving to the northwest. Additional strengthening is forecast over the next 48 hours as Isaias nears the East Coast of Florida. Hurricane Warnings and Storm Surge Watches have now been issued with new Tropical Storm Watches farther north.

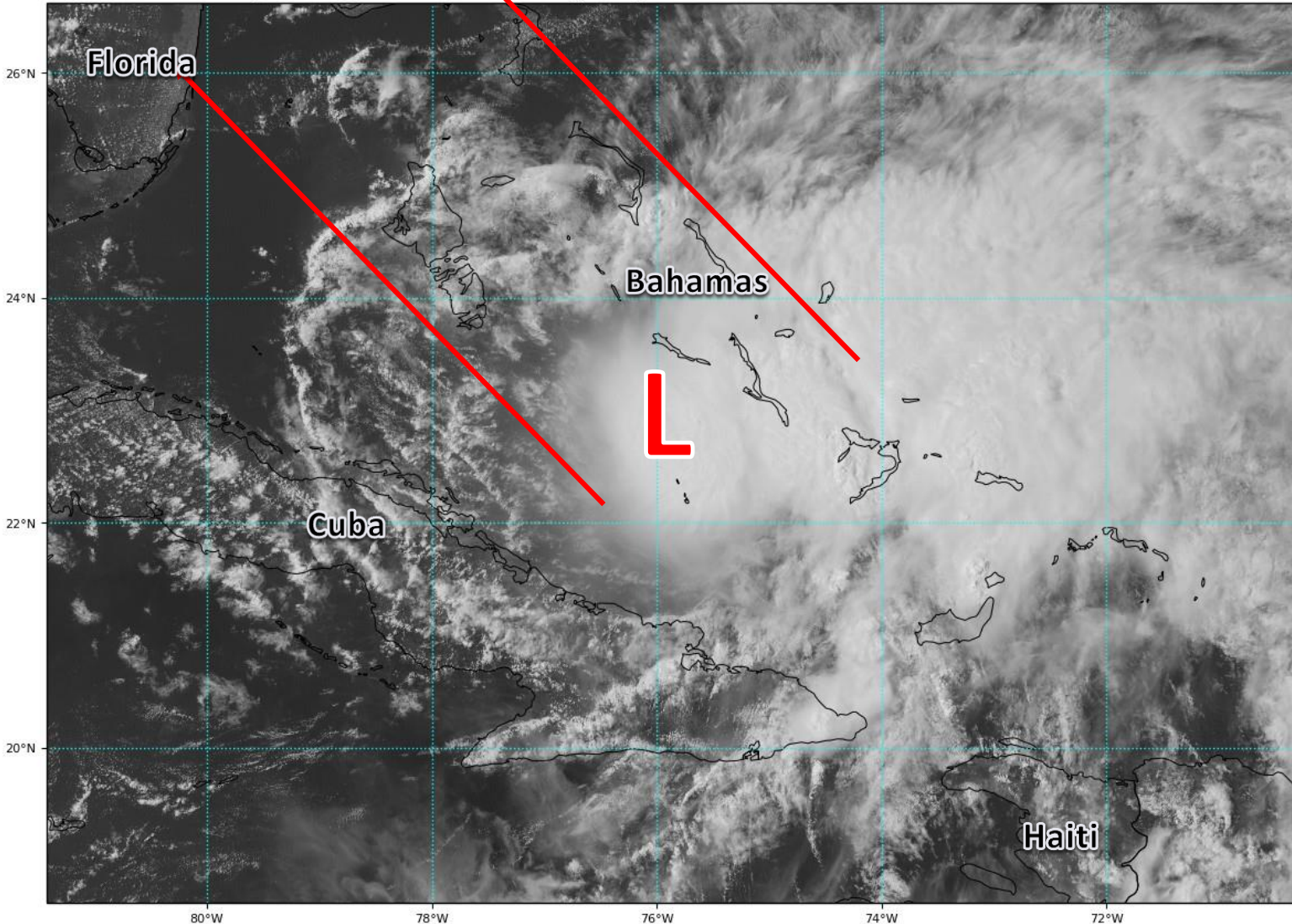


# Satellite Imagery

## Southwest Atlantic – Hurricane Isaias

GOES-16 Channel 2 (visible) Reflectance at 19:47Z Jul 31, 2020

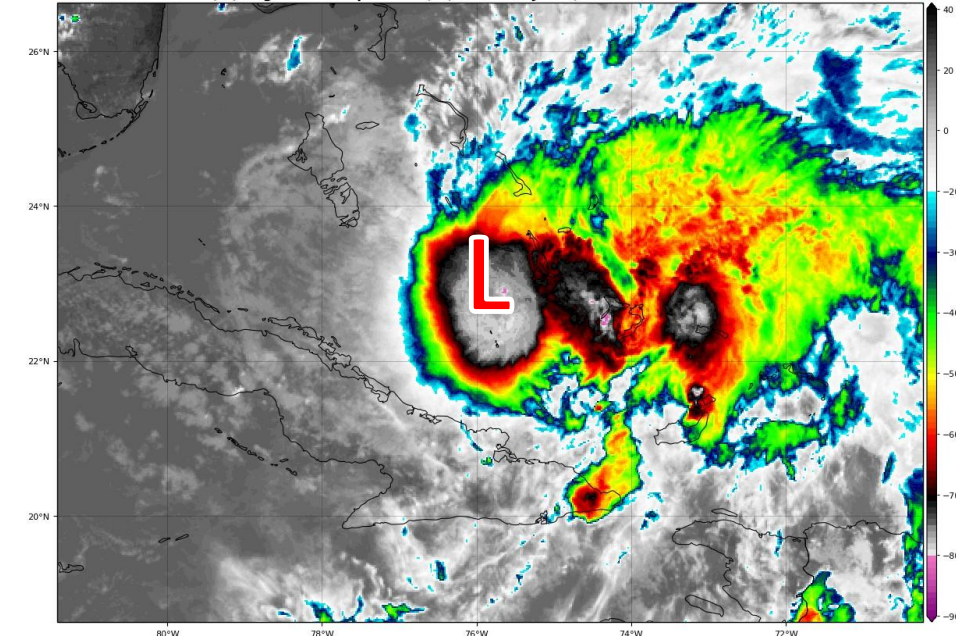
TROPICALTIDBITS.COM



Isaias's showers and thunderstorms remain displaced generally on the north and east side of the circulation due to the presence of some wind shear. This has kept the strength of Isaias in check today.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:47Z Jul 31, 2020

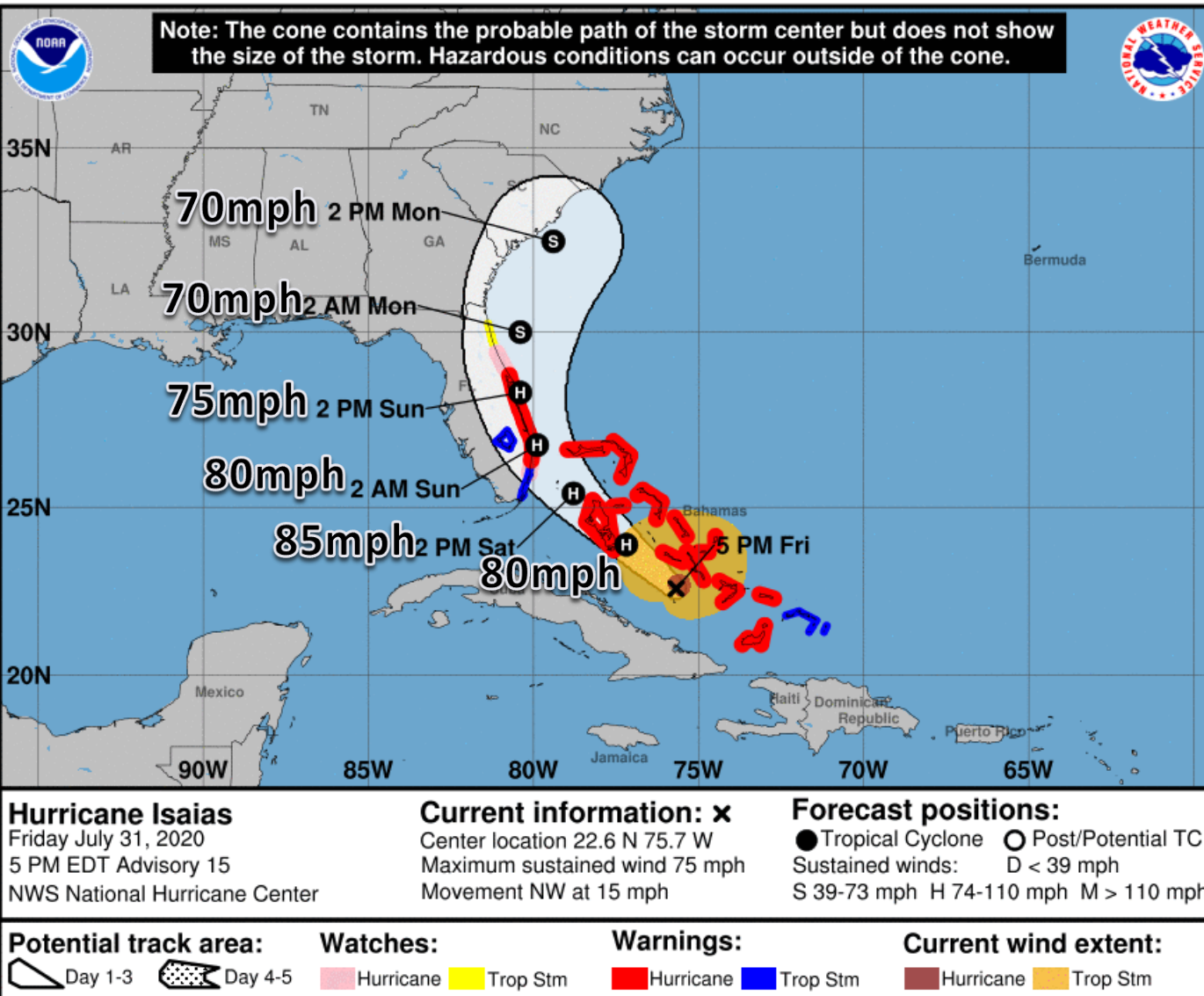
TROPICALTIDBITS.COM





# Official Forecast Track

## From the National Hurricane Center – Hurricane Isaias



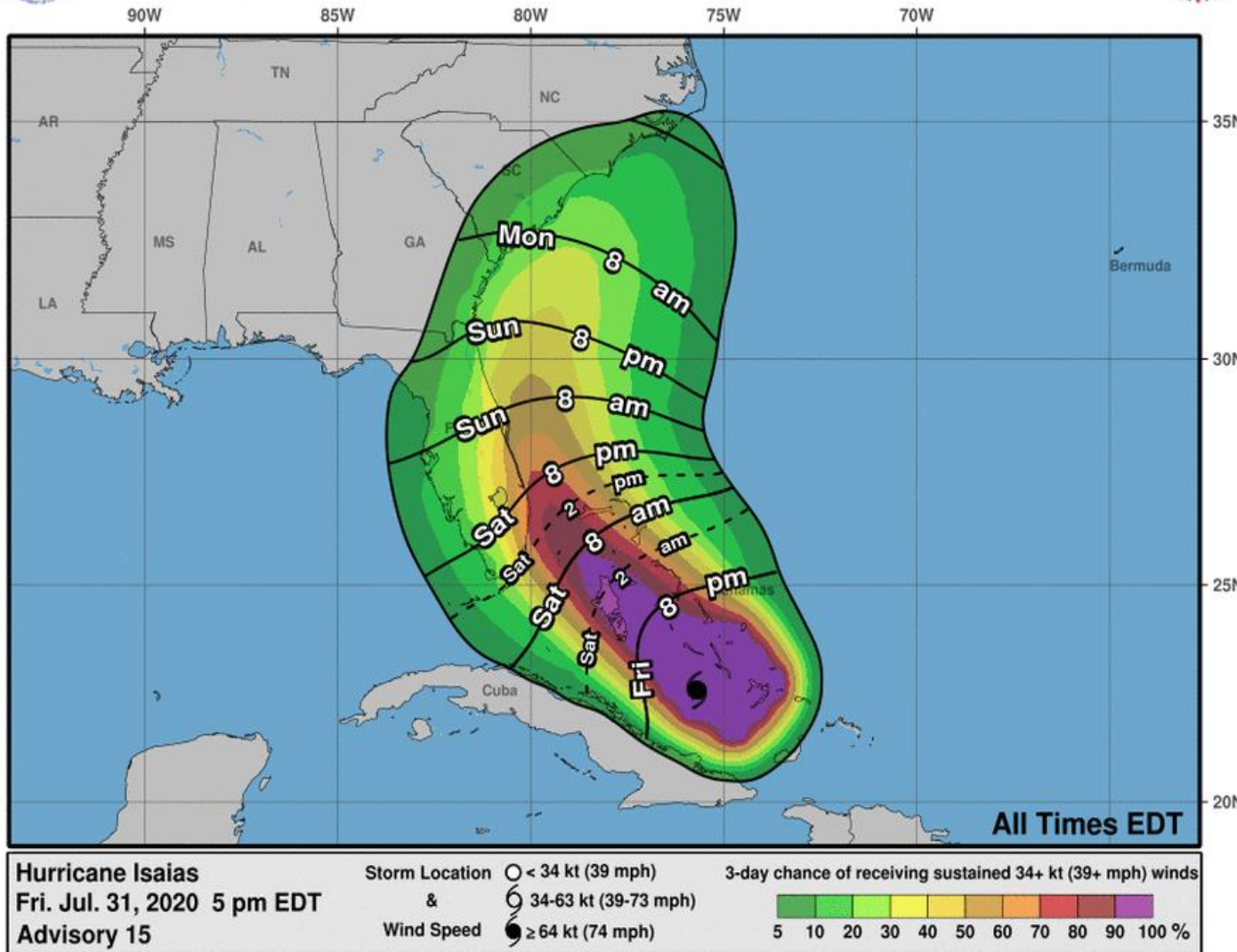
- The center of Hurricane Isaias is about 375 miles southeast of Miami, Florida, moving to the NW at 15 mph.
- Maximum sustained winds are around 75 mph, making it a category 1 hurricane.
- Some strengthening is forecast over the next 24 hours as the system moves over the very warm water in the Bahamas. Slow weakening is forecast thereafter.
- The system will approach the Florida East Coast Saturday then move away from Florida late Sunday and Monday.
- There is still some uncertainty in whether the system comes onshore in Florida or if it remains offshore, and thus hurricane watches have been issued.
- Hurricane Watches/Warnings, Tropical Storm Watches/Warnings, and Storm Surge Watches are now in effect for parts of the state.



# Time of Arrival & Wind Speed Probabilities

**MOST LIKELY** Time of Arrival of Tropical Storm Force Winds (>39 mph)

## 0-3 Day Most Likely Arrival Time of Tropical-Storm-Force Winds



**Key West: 8% (+4)**  
**Miami: 39% (+9)**  
**Naples: 16% (+5)**  
**Ft. Lauderdale: 70% (+14)**  
**West Palm Beach: 77% (+10)**  
**Ft. Pierce: 72% (+9)**  
**Daytona Beach: 33% (+4)**  
**Orlando: 32% (+9)**  
**Tampa: 13% (+6)**  
**Jacksonville: 14% (+1)**

The most likely chance of tropical storm force winds starting will be Saturday afternoon in Southeast Florida, but could arrive AS EARLY AS late tonight.



# Damaging Wind Threat Overview

## Hurricane Isaias

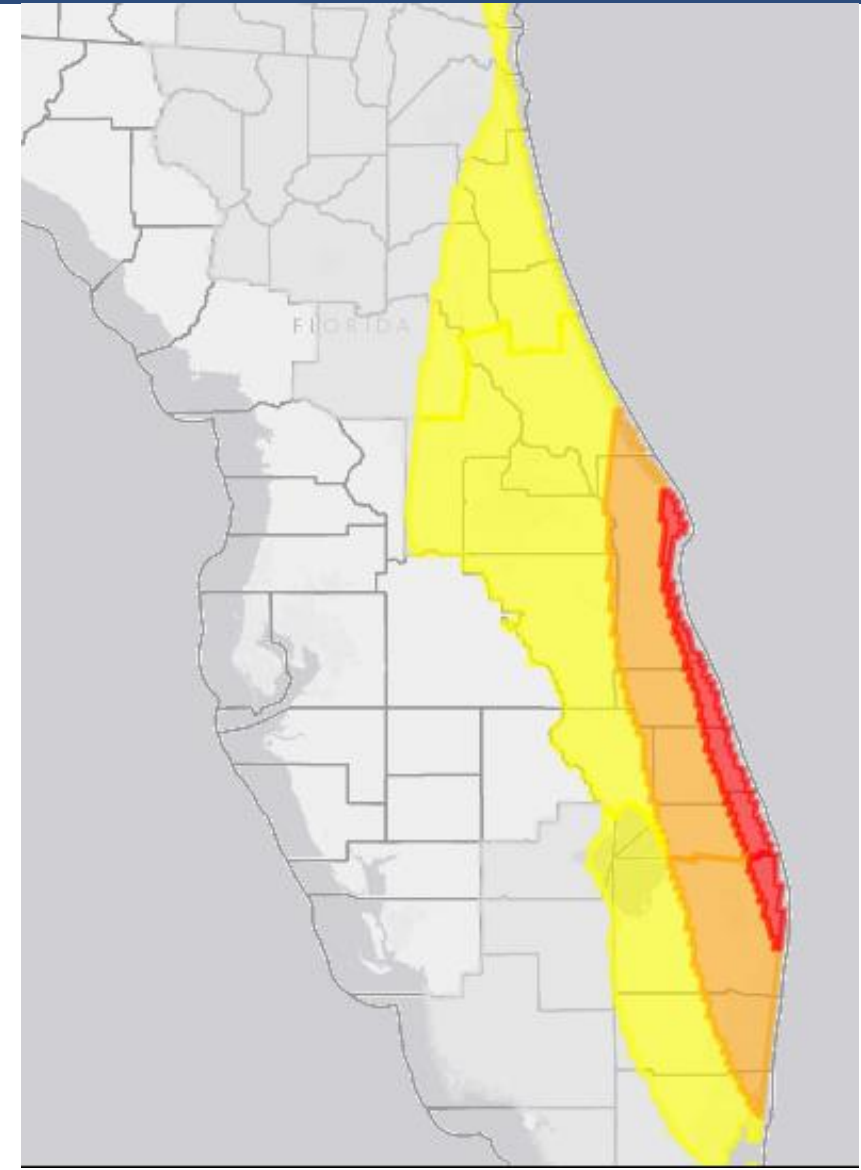
The greatest wind threat is along the immediate coast (Treasure Coast) of Southeast Florida, mainly along and east of I-95.

Higher gusts to 75 mph may be possible Saturday and Sunday as Isaias makes its closest approach.

<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



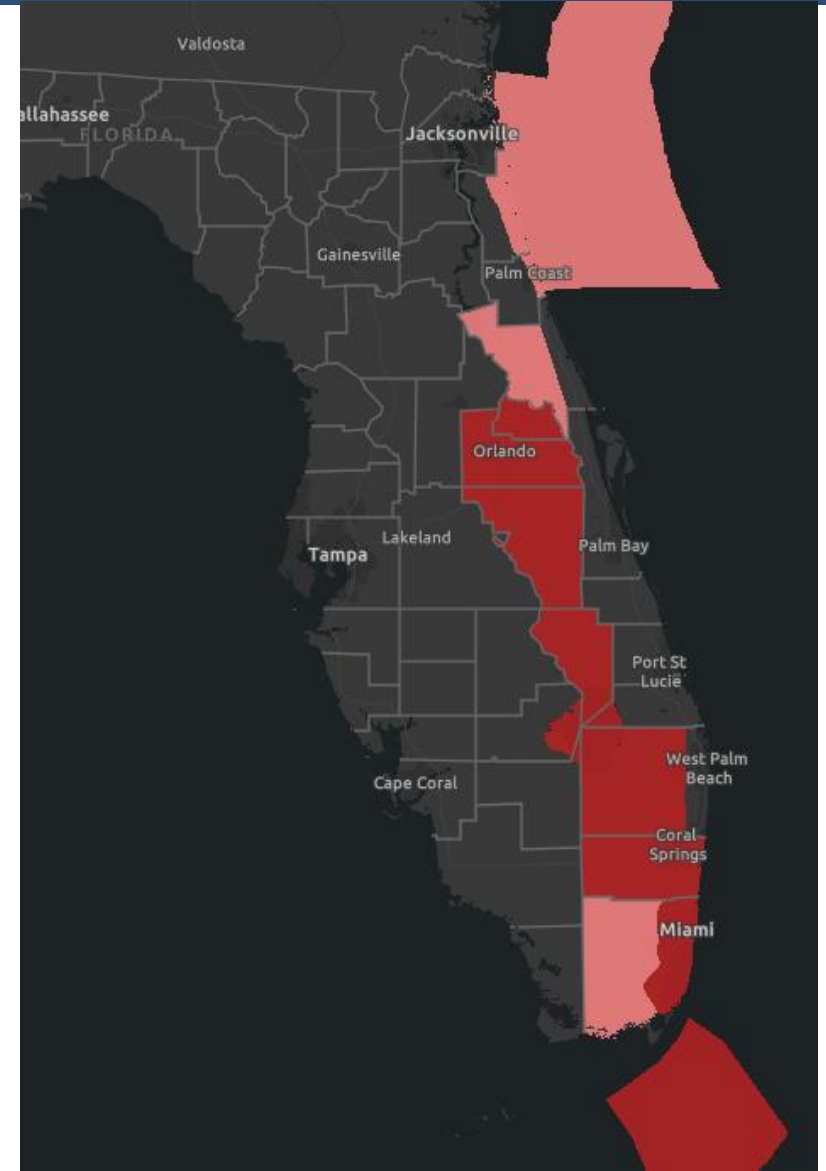


# Wind Watches and Warnings

In Effect Until Further Notice

**Tropical Storm Warnings** are in effect for: Seminole, Orange, Osceola, Okeechobee, Inland Palm Beach, Broward, coastal/metro Miami-Dade

**Tropical Storm Watches** are in effect for: coastal St. Johns, coastal Flagler, inland Volusia, inland and far south Miami-Dade



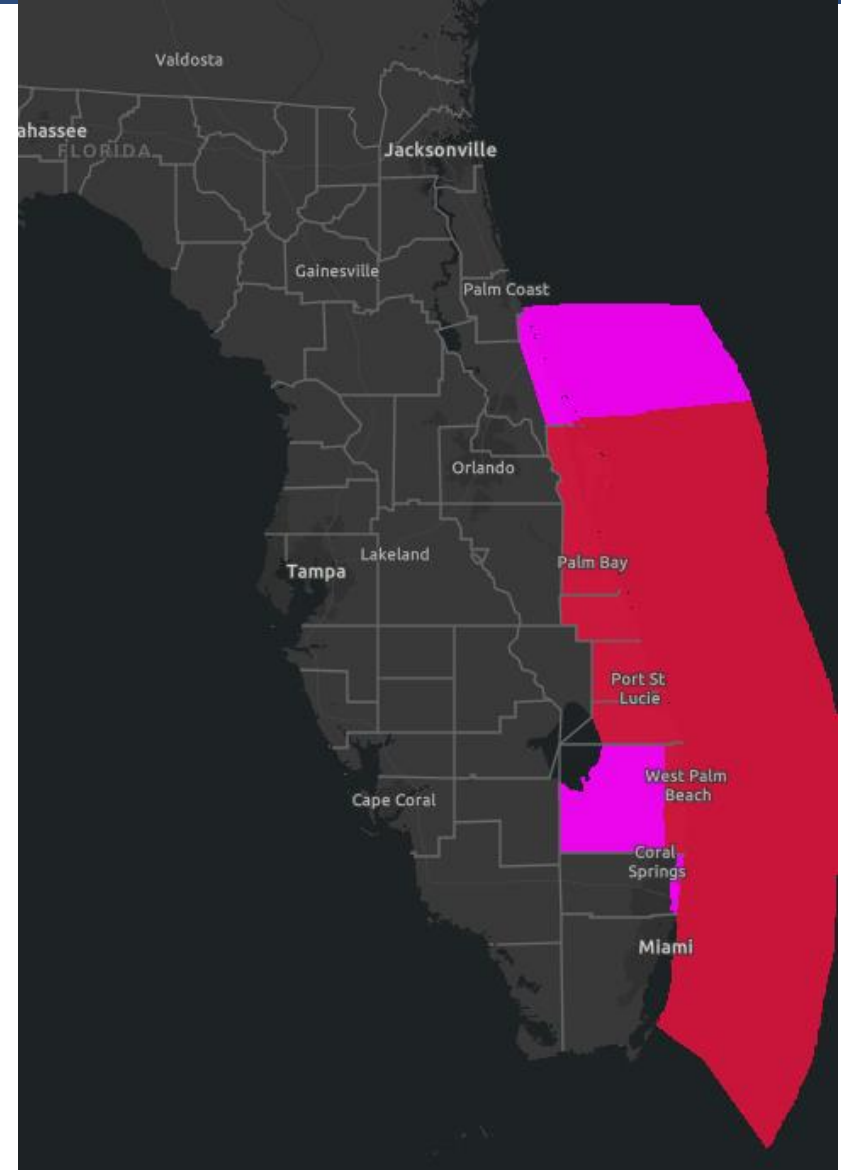


# Wind Watches and Warnings

In Effect Until Further Notice

**Hurricane Warnings** are in effect for: Brevard, Indian River, Martin, St. Lucie, coastal/metro Palm Beach

**Hurricane Watches** are in effect for: coastal Volusia, inland Palm Beach, and coastal Broward.





# 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

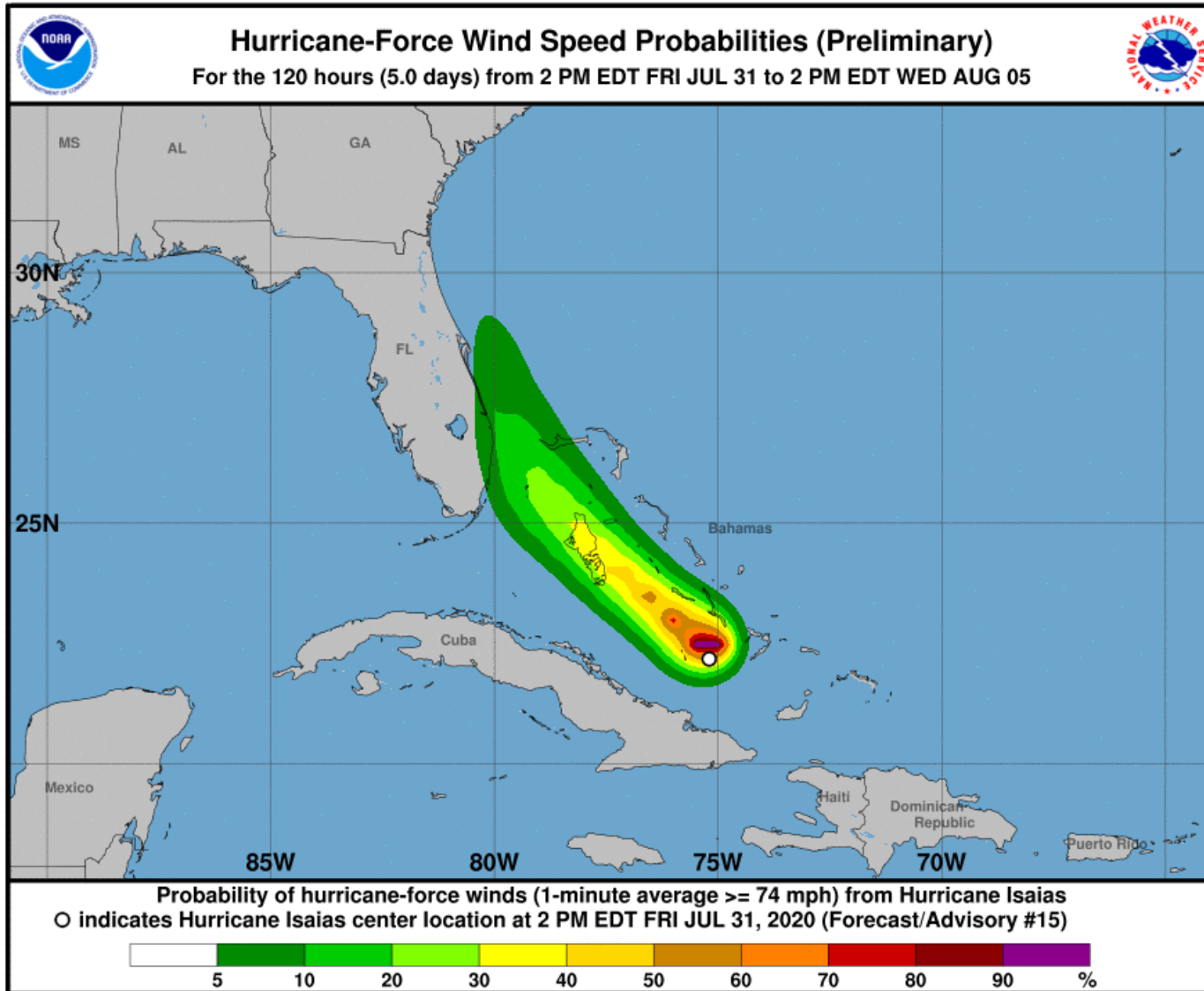


[weather.gov/mob](https://weather.gov/mob)



# Hurricane Wind Speed Probabilities

Probabilities of Sustained Hurricane Force Winds (>74 mph)



**5-10% along the Treasure Coast.**

**Higher chance of seeing gusts to near hurricane force.**



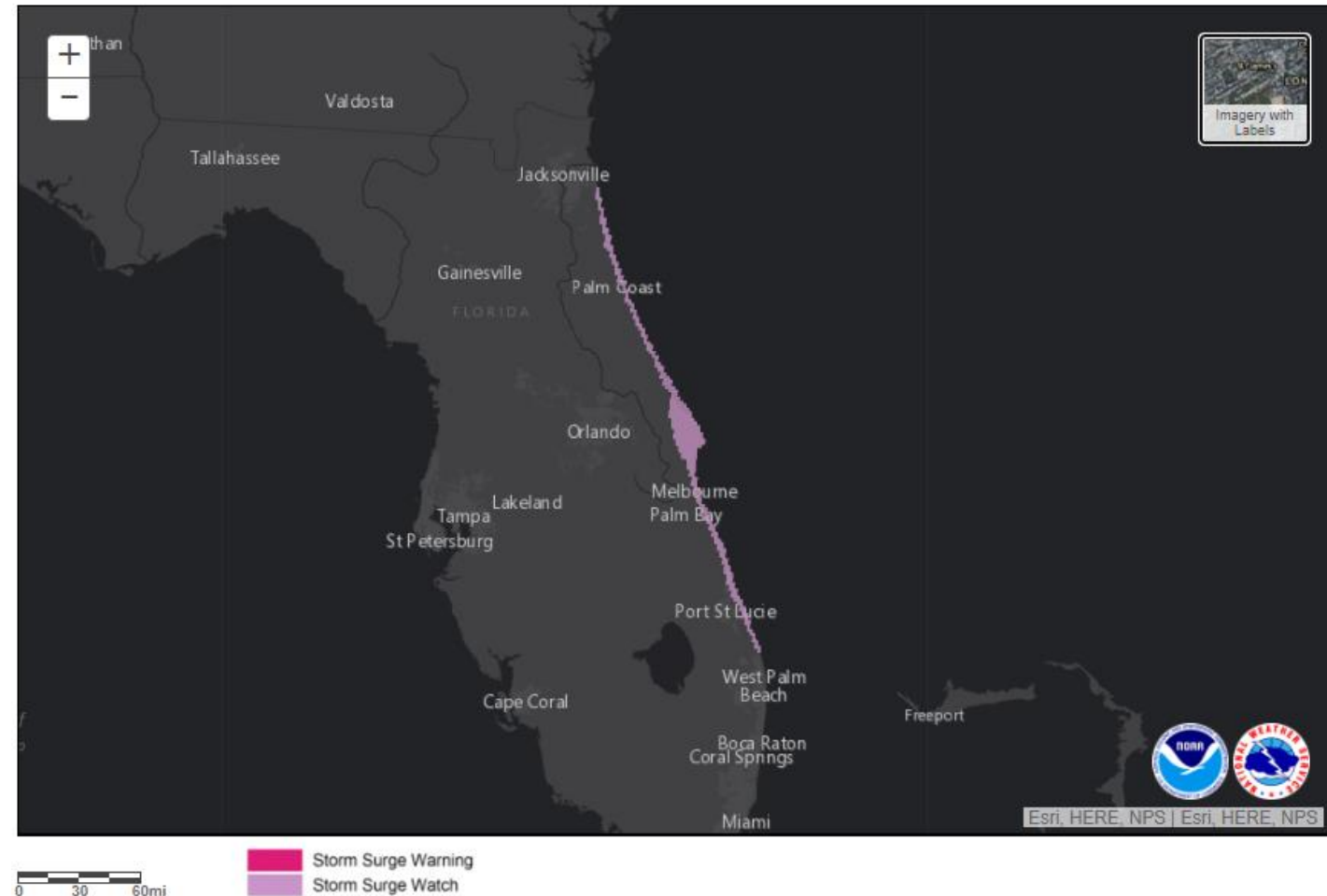
# Surge Watches and Warnings

In Effect Until Further Notice

**Storm Surge Watches are  
in effect from Jupiter  
Inlet to Ponte Vedra  
Beach.**

<https://www.nhc.noaa.gov/>  
Interactive Watch/Warning Map

Hurricane Isaias  
Advisory 015 Issued: 5:00 PM EDT Fri Jul 31



# Storm Surge Warning

There is a **danger of life-threatening inundation** from rising water moving inland from the shoreline generally **within 36 hours**.

Promptly follow evacuation and other instructions from local officials.

# Storm Surge Watch

There is a **possibility of life-threatening inundation** from rising water moving inland from the shoreline generally **within 48 hours**.

Promptly follow evacuation and other instructions from local officials.

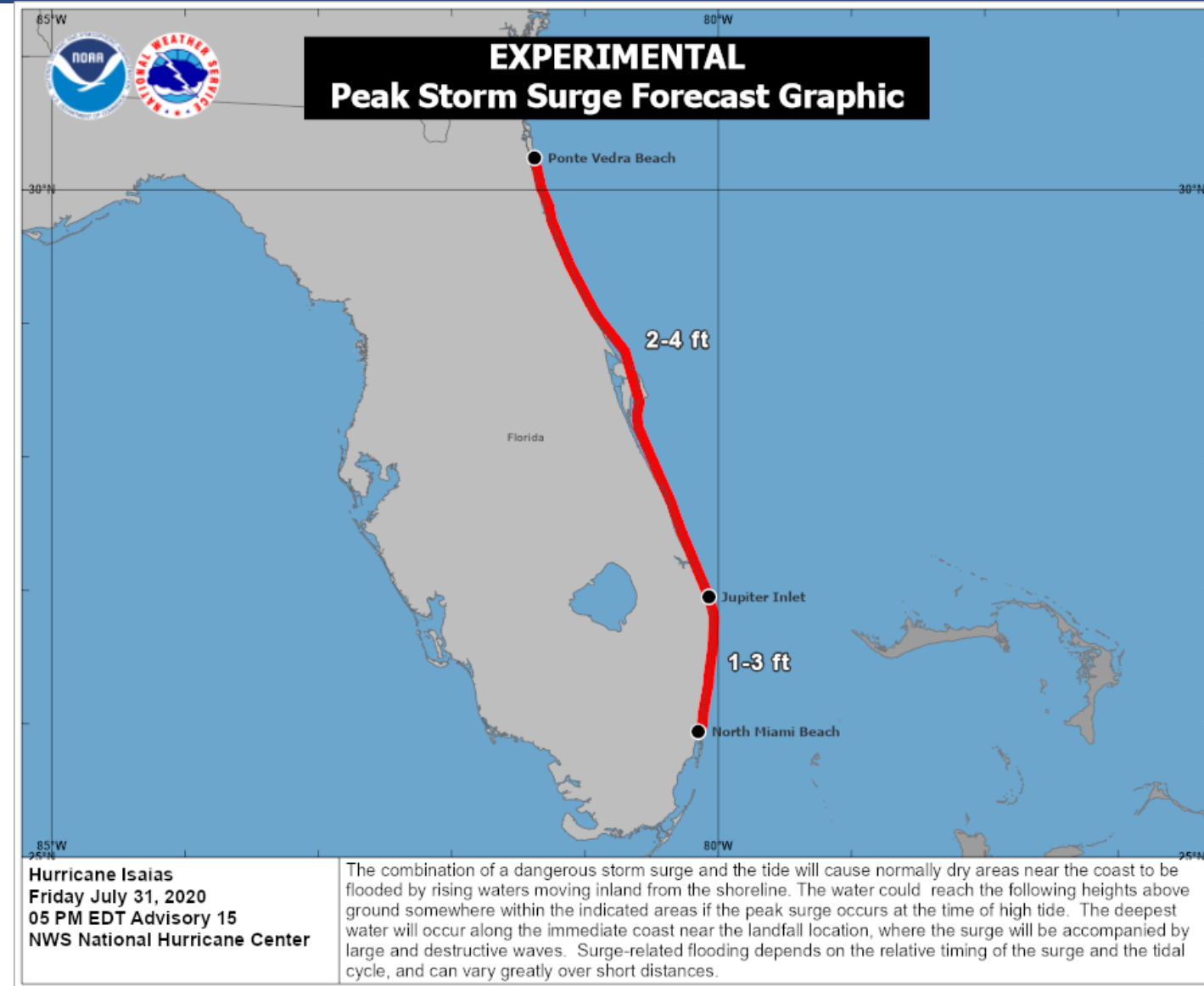




# Storm Surge/Coastal Flooding

## This Weekend

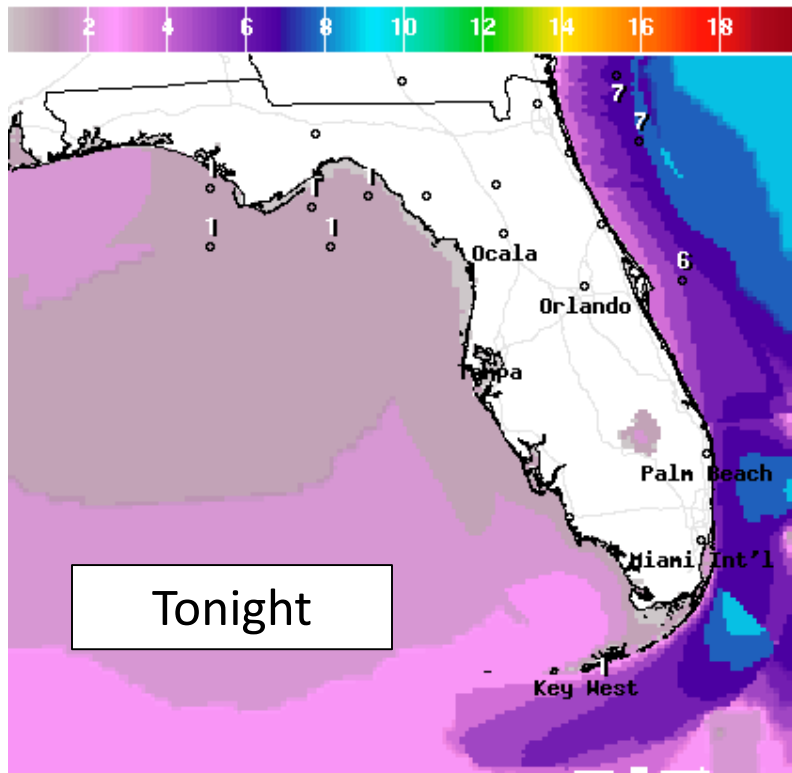
Onshore winds associated with Isaias will result in some minor coastal flooding along the Gulf Coast along with high surf. 2-4' of storm surge is expected along much of the East Coast of Florida with 1-3' in far Northeast Florida and Southeast Florida.





# Forecast Wave Heights

## This Weekend

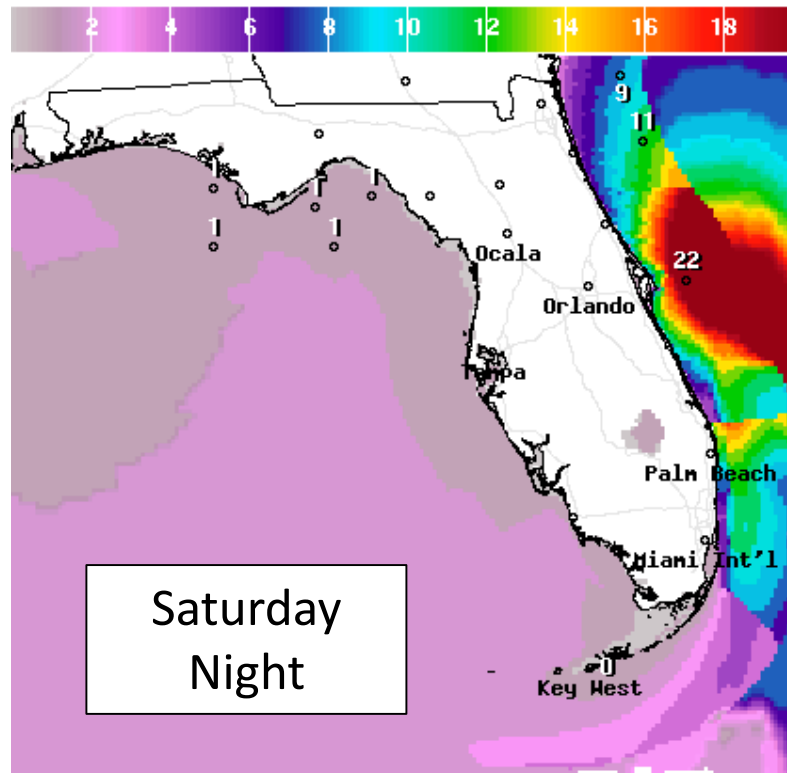


Wave Height(ft) Ending Sat Aug 01 2020 8AM EDT  
(Sat Aug 01 2020 12Z)



National Digital Forecast Database

20z issuance Graphic created-Jul 31 4:22PM EDT

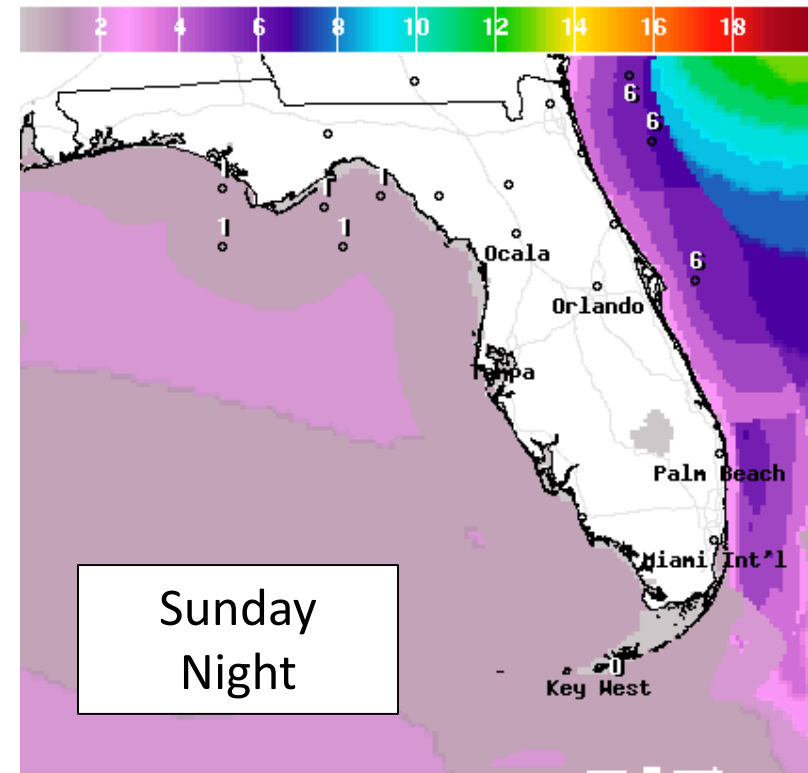


Wave Height(ft) Ending Sun Aug 02 2020 8AM EDT  
(Sun Aug 02 2020 12Z)



National Digital Forecast Database

20z issuance Graphic created-Jul 31 4:23PM EDT



Wave Height(ft) Ending Mon Aug 03 2020 8AM EDT  
(Mon Aug 03 2020 12Z)



National Digital Forecast Database

18z issuance Graphic created-Jul 31 2:45PM EDT



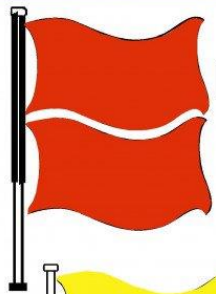
High surf of 8-12 feet is expected along East Coast beaches this weekend. This will result in dangerous rip currents. Minor to pockets of significant beach erosion is expected.



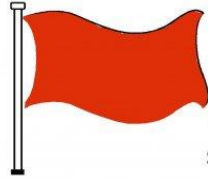
# Rip Current Outlook

Today

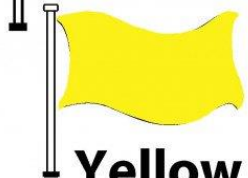
## BEACH FLAG WARNING SYSTEM



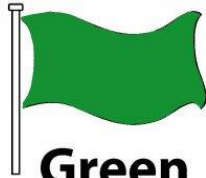
**Double Red**  
Water Closed to  
Public Use



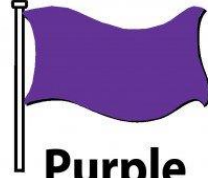
**Red**  
High Hazard  
(rough conditions,  
such as strong surf  
and or currents)



**Yellow**  
Medium Hazard  
(light surf and or  
currents)

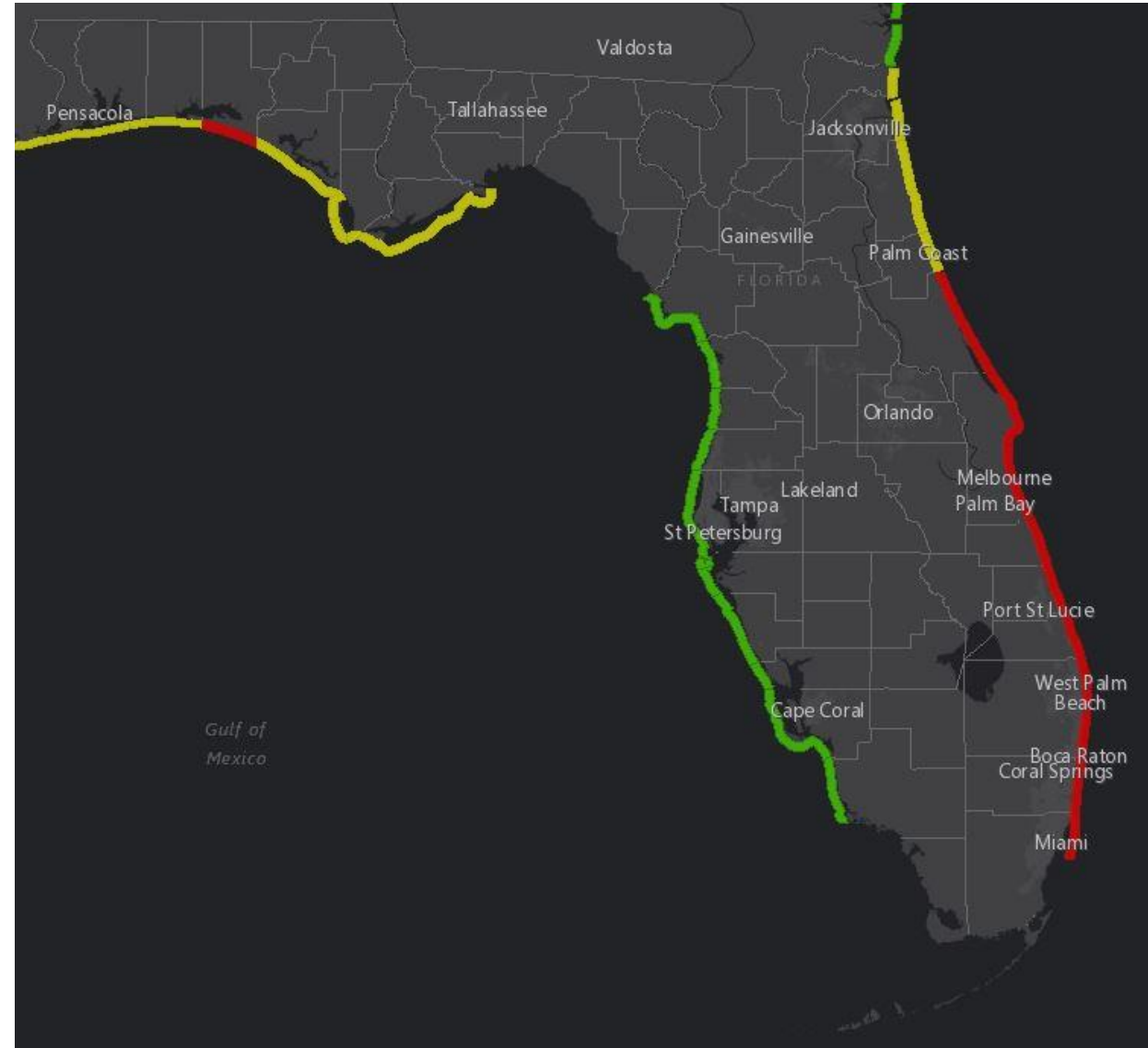


**Green**  
Low Hazard  
(calm conditions)



**Purple**  
Marine Pest  
(jellyfish, stingrays  
& dangerous fish)

Rough surf and high water levels will keep the rip current risk high at Atlantic beaches through the weekeknd.





# Flash Flood Outlooks

From the Weather Prediction Center

Today/Tonight

Saturday

Sunday

**MARGINAL  
(MRGL)**

**Isolated flash  
floods possible**

Localized and  
primarily affecting  
places that can  
experience rapid  
runoff with heavy  
rainfall.

**SLIGHT  
(SLGT)**

**Scattered flash  
floods possible**

Mainly localized. Most  
vulnerable are urban  
areas, roads, small  
streams and washes.  
Isolated significant  
flash floods possible.

Risk of rainfall exceeding flash flood guidance  
within 25 miles of a point to the right of a line

**HIGH: > 50%**

**SLGT: 10%-20%**

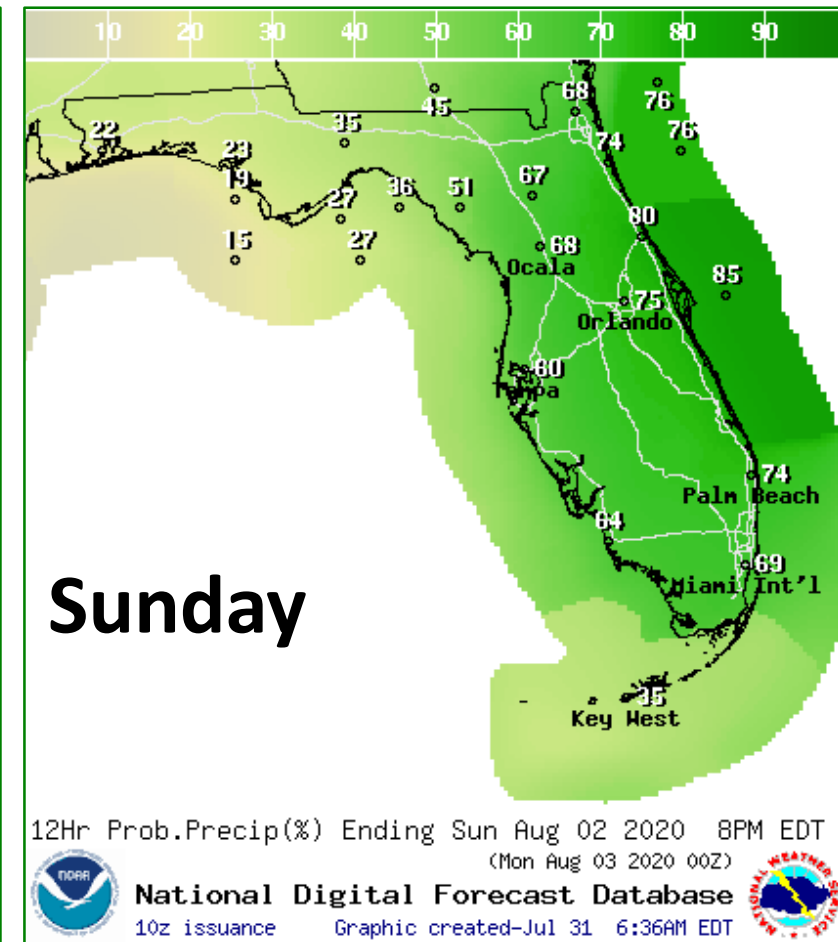
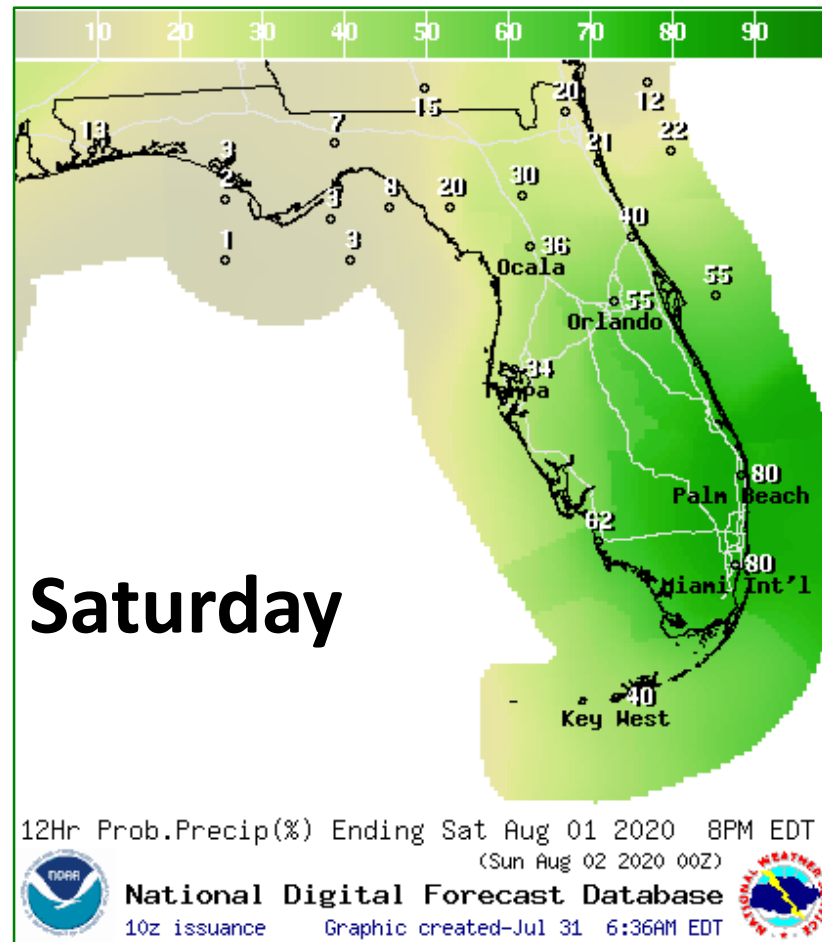
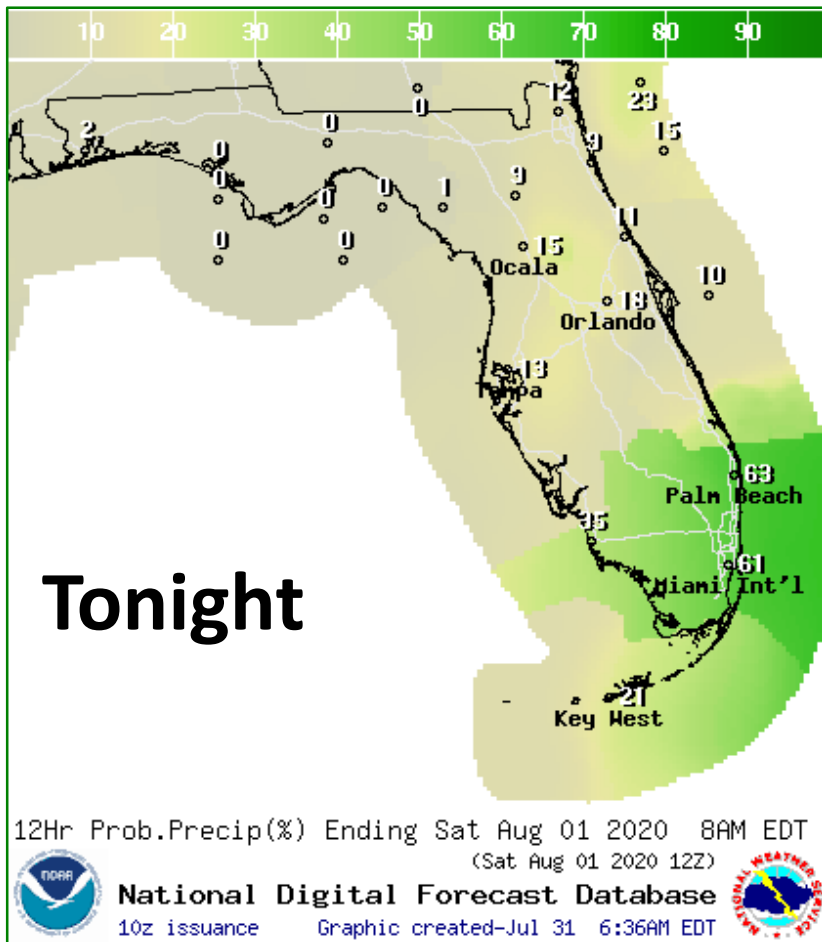
**MDT: 20%-50%**

**MRGL: 5%-10%**

An isolated case of  
flash flooding is  
possible this weekend  
in the urban areas of  
the East Coast.



# Rain Chances Next 3 Days

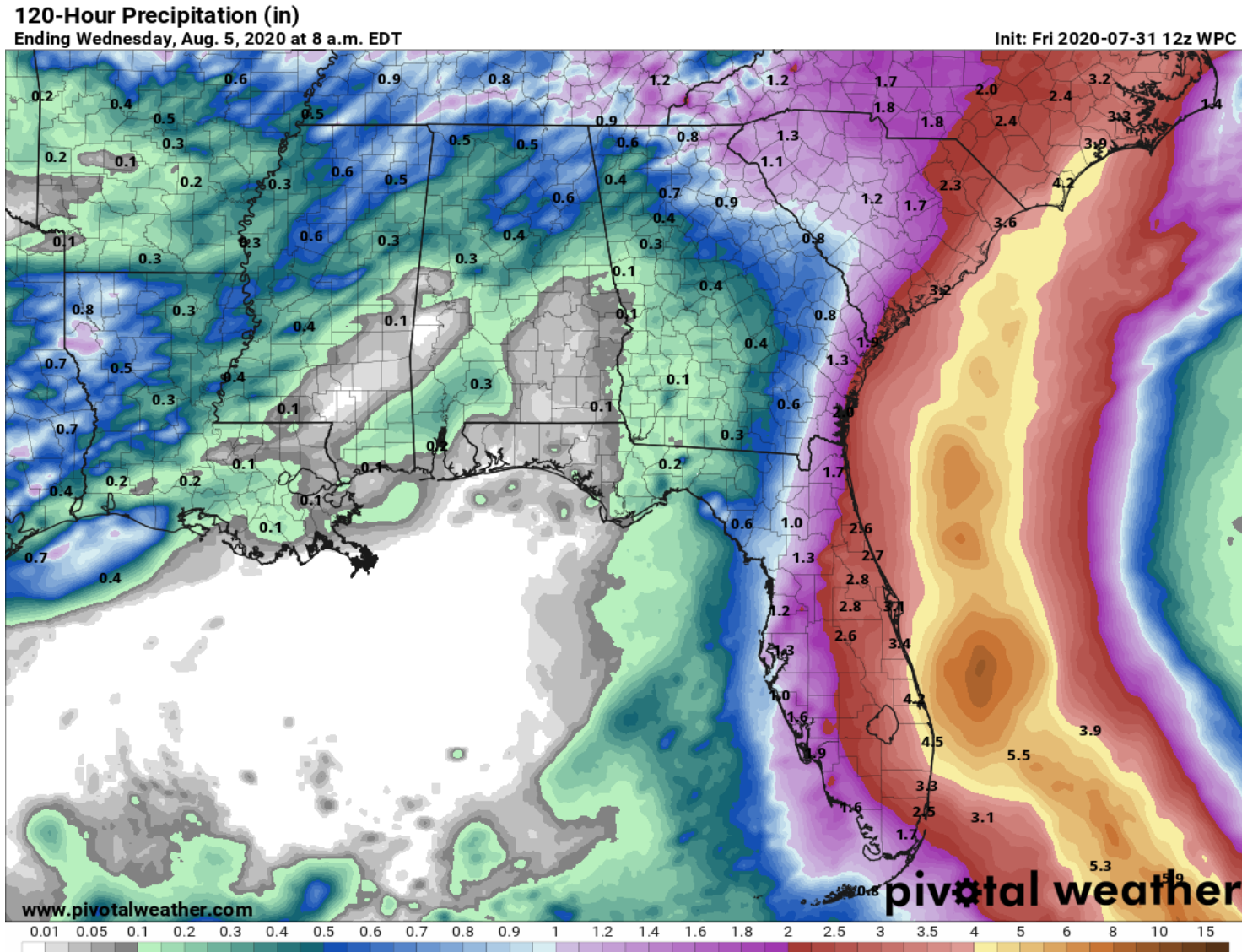


**Rain chances in Southeast Florida will begin tonight, then across the Peninsula on Saturday, and into Northeast Florida by Sunday.**



# Forecast Rainfall Totals Next 5 Days

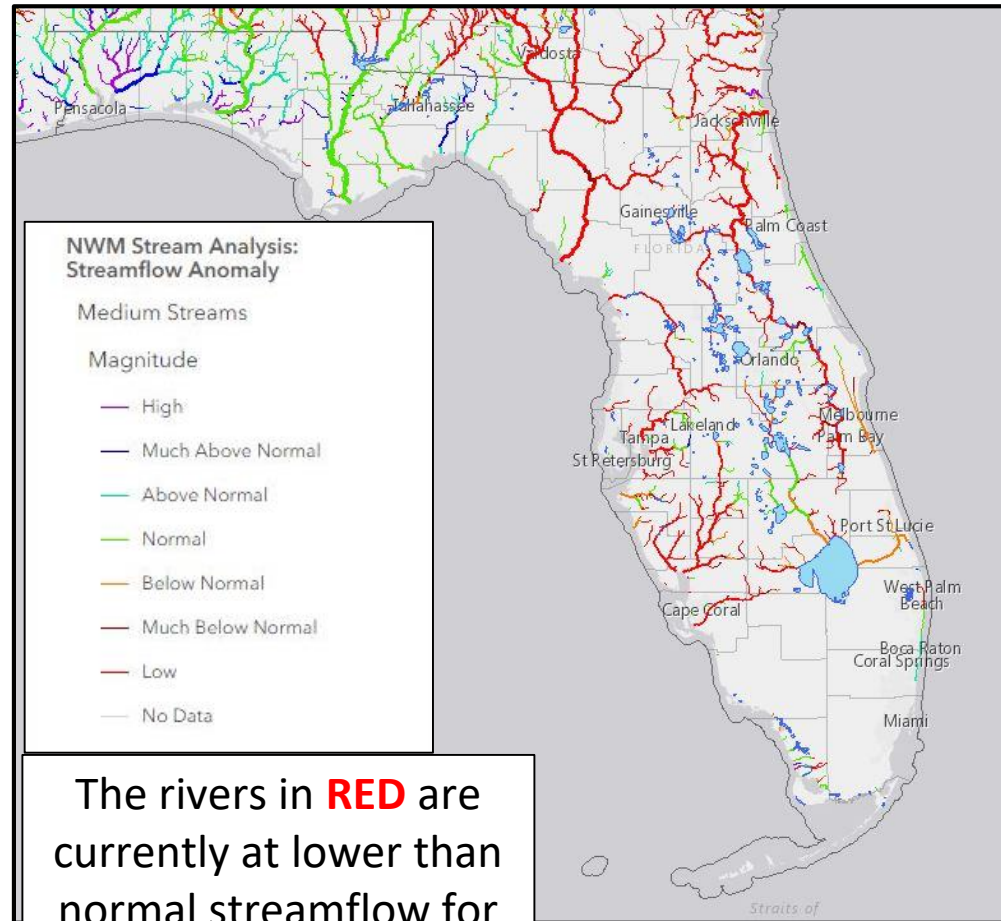
- About 2-4" of rain are possible along the East Coast, 1-2" inland
- Localized totals double these amounts will be possible (6-8").
- Isolated flash flooding possible, especially in the urban areas along the I-95 corridor.
- A western track would lead to higher rainfall totals across the Peninsula
- An eastern track would lower rain totals and keep most of the rain offshore.





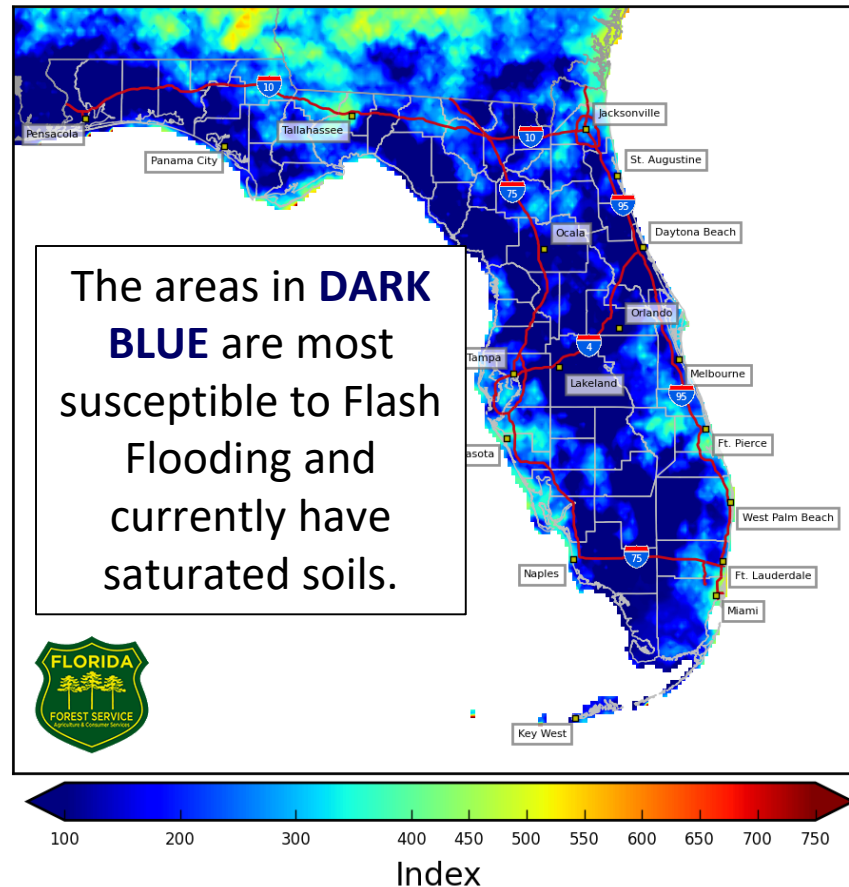
# Streamflow Anomaly – Soil Moisture

KB Drought Index – [Full Report from the Florida Forest Service](#)



The rivers in **RED** are currently at lower than normal streamflow for this time of year.

4 km Resolution KBDI  
Statewide  
July 31, 2020



Streamflows are near to below normal across the entire Peninsula, but soils remain quite saturated. If heavier rainfall occurs, then flash flooding will be a concern.

Most rivers are able to handle 3-5" of rainfall, but flooding concerns may rise if heavier rainfall occurs.



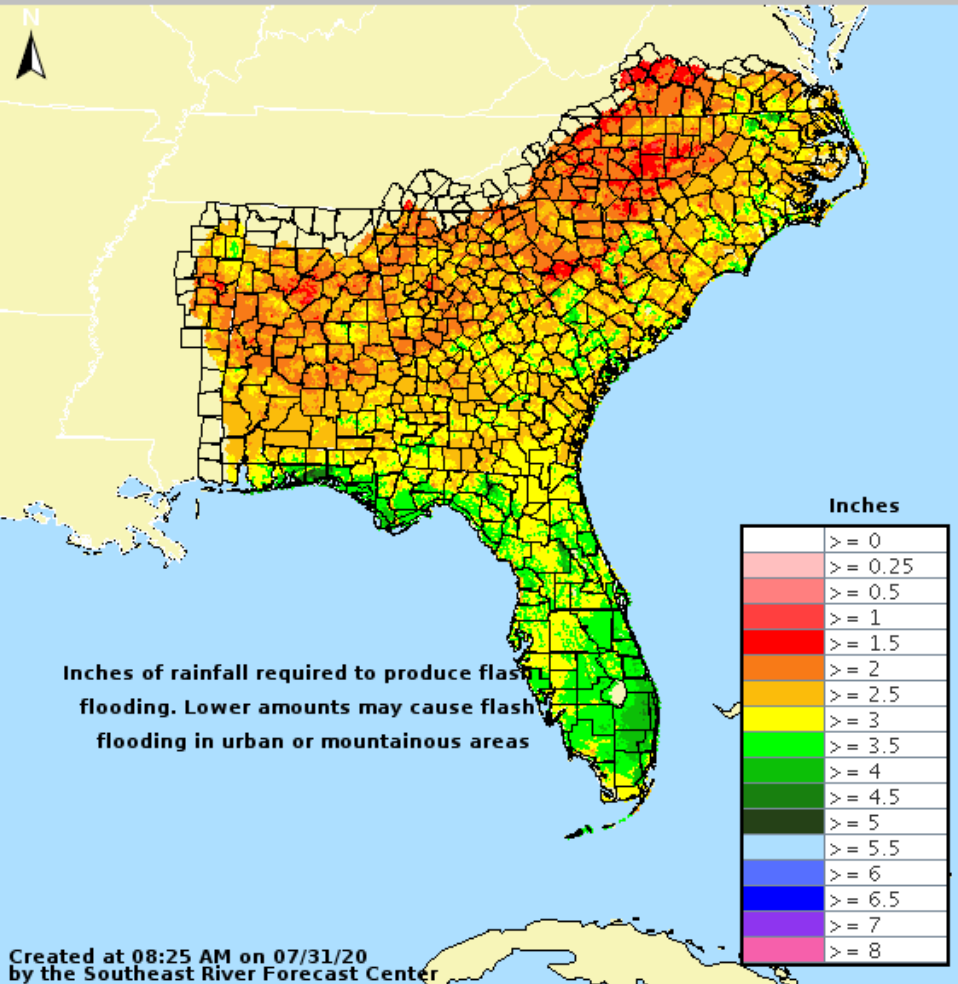
# Flash Flood Guidance

## How Much Rain is Needed to Create Flash Flooding?



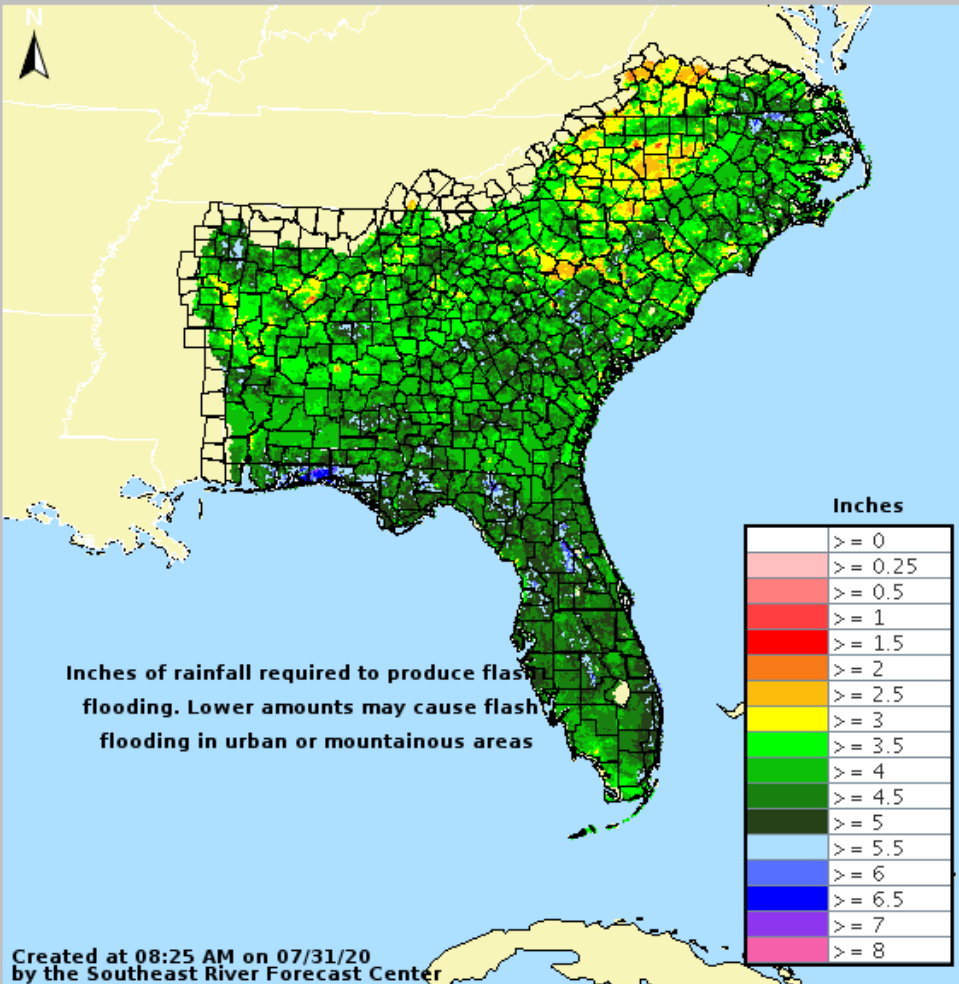
### 1-hr Flash Flood Guidance

Valid: 07/31/2020 @ 08:25 AM



### 6-hr Flash Flood Guidance

Valid: 07/31/2020 @ 08:25 AM



In general, more than 3 or 4" of rain in a few hours will result in flash flooding.



# Key Messages

## From the National Hurricane Center



### Key Messages for Hurricane Isaias Advisory 14: 11:00 AM EDT Fri Jul 31, 2020

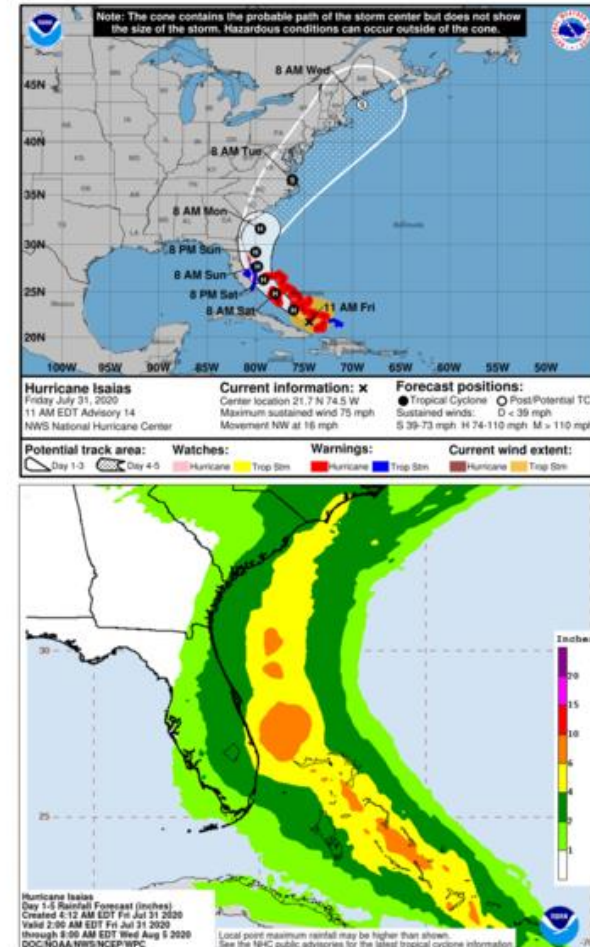


1. Isaias will produce heavy rains and potentially life-threatening flash flooding and mudslides across the Dominican Republic, northern Haiti, Turks and Caicos, and the Bahamas. Heavy rains associated with Isaias may begin to affect south and east-central Florida late Friday night, and the eastern Carolinas by early next week, potentially resulting in isolated flash and urban flooding, especially in low-lying and poorly drained areas. Isolated minor river flooding is possible in the Carolinas early next week.

2. Hurricane conditions and dangerous storm surge are expected in portions of the Bahamas today and Saturday, and Hurricane Warnings are in effect. Preparations to protect life and property should be rushed to completion.

3. Tropical storm conditions are expected with hurricane conditions possible along portions of the Florida east coast beginning Saturday, and a Tropical Storm Warning and Hurricane Watch are in effect. Storm surge watches or warnings could be needed for part of this area this afternoon.

4. There is a risk of impacts from winds, heavy rainfall, and storm surge beginning late this weekend along the northeastern Florida coast and spreading northward along the remainder of the U.S. east coast through early next week. Interests along the entire U.S. east coast should monitor the progress of Isaias and updates to the forecast.



For more information go to [hurricanes.gov](https://hurricanes.gov)

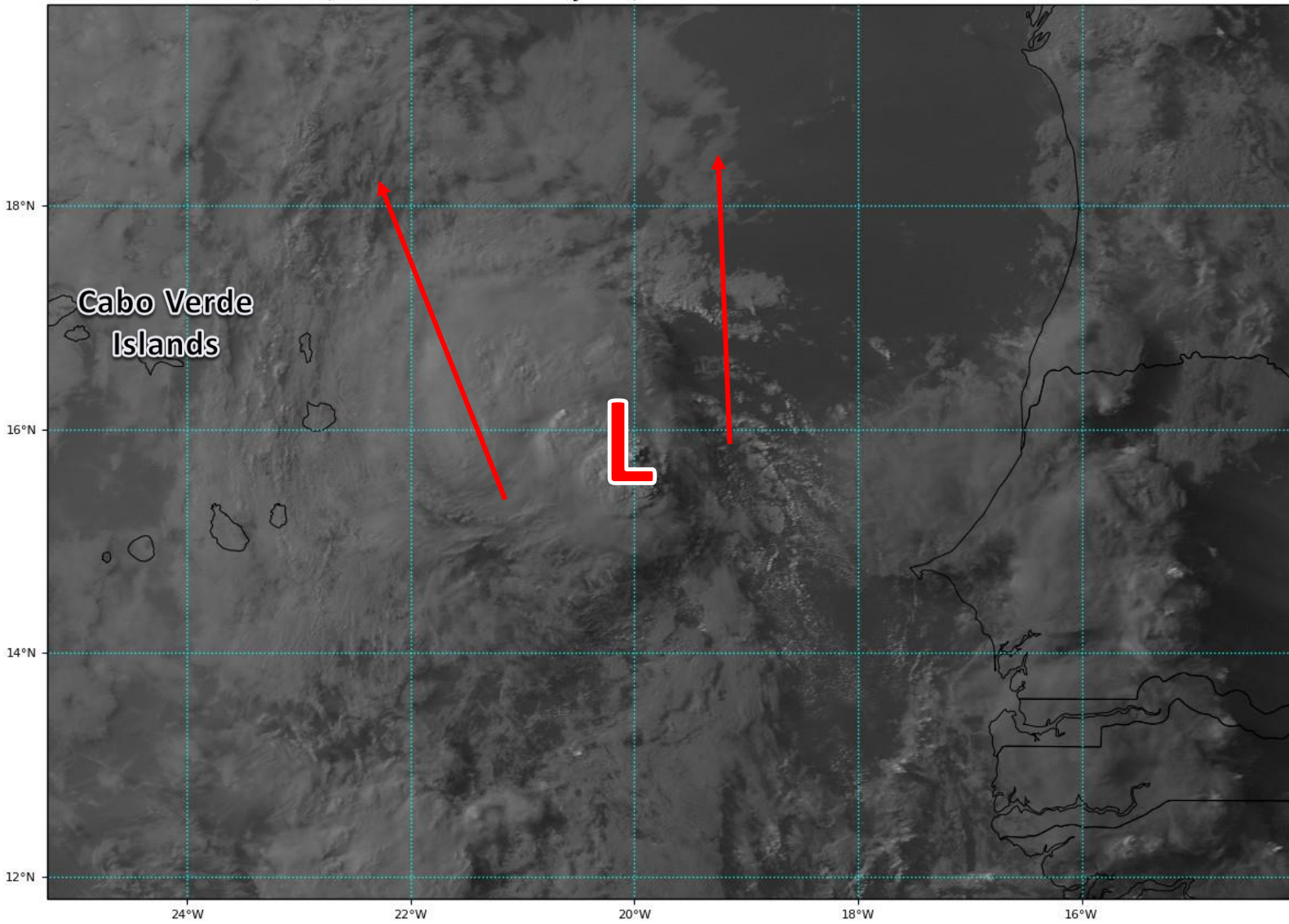


# Satellite Imagery

## Eastern Atlantic – Tropical Depression #10

GOES-16 Channel 2 (visible) Reflectance at 19:05Z Jul 31, 2020

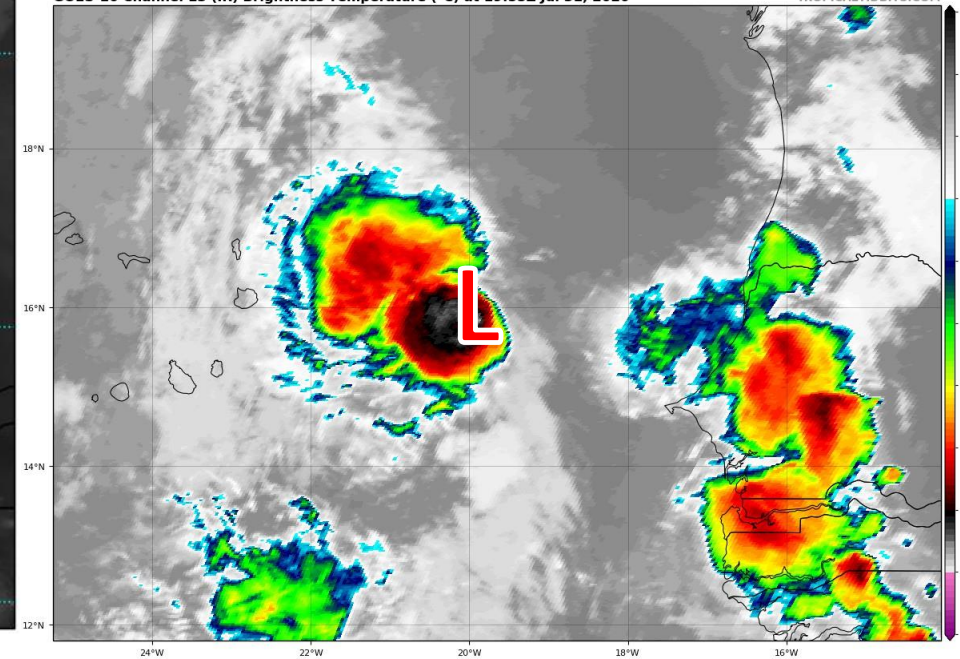
TROPICALTIDBITS.COM



The tropical wave off Africa became sufficiently defined this afternoon with thunderstorms near the center. Thus, it has now been designated Tropical Depression #10.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:55Z Jul 31, 2020

TROPICALTIDBITS.COM





# Official Forecast Track

## From the National Hurricane Center – Tropical Depression #10

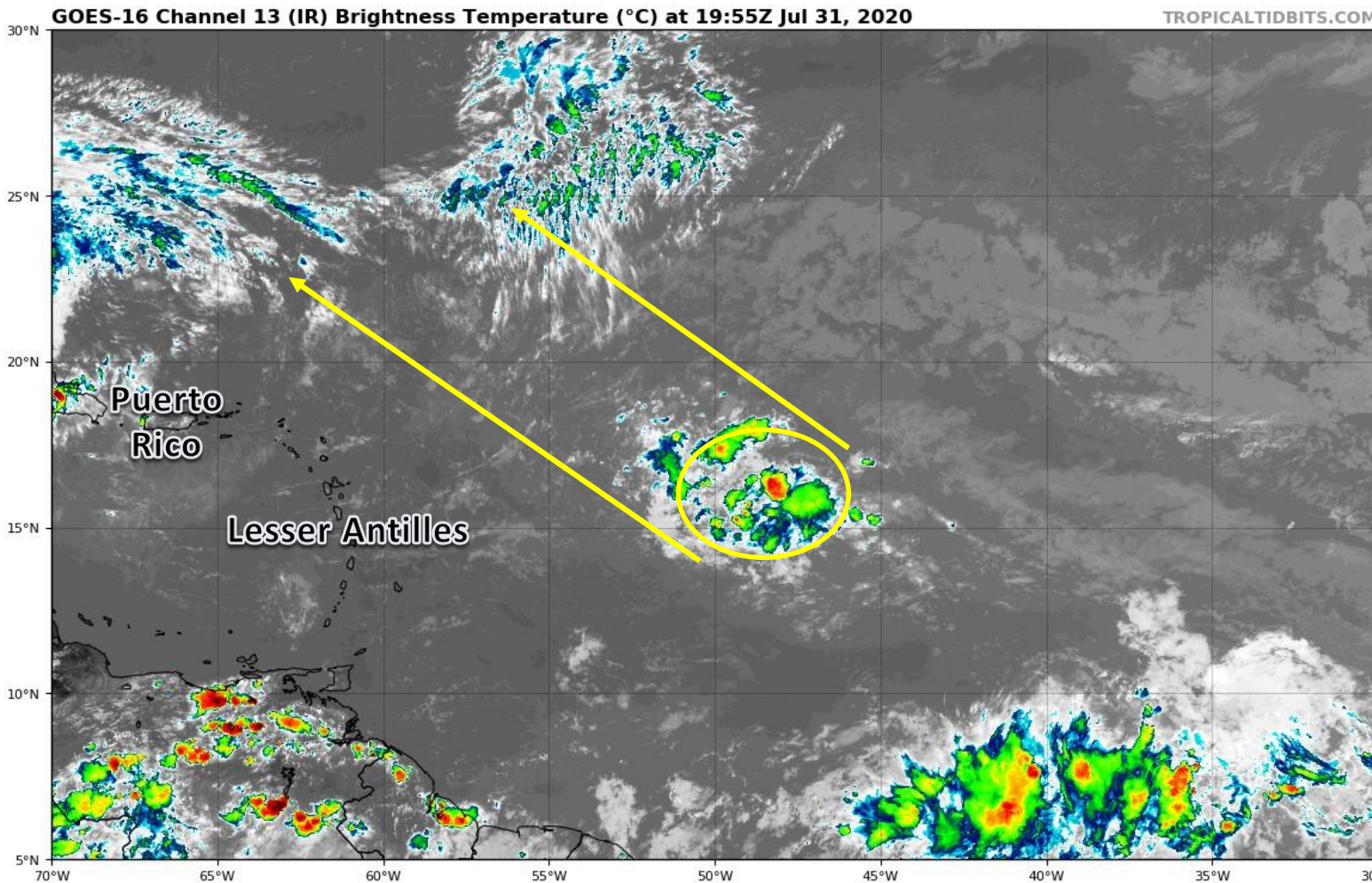


- The center of newly-formed Tropical Depression #10 is located about 265 miles east of the Cabo Verde Islands, moving north at 9 mph.
- Maximum sustained winds are around 35 mph.
- Some strengthening is possible tonight, and TD #10 may become a tropical storm later tonight. Weakening is forecast on Saturday, and TD #10 will become a remnant low Saturday night.
- The next name on the list is Josephine

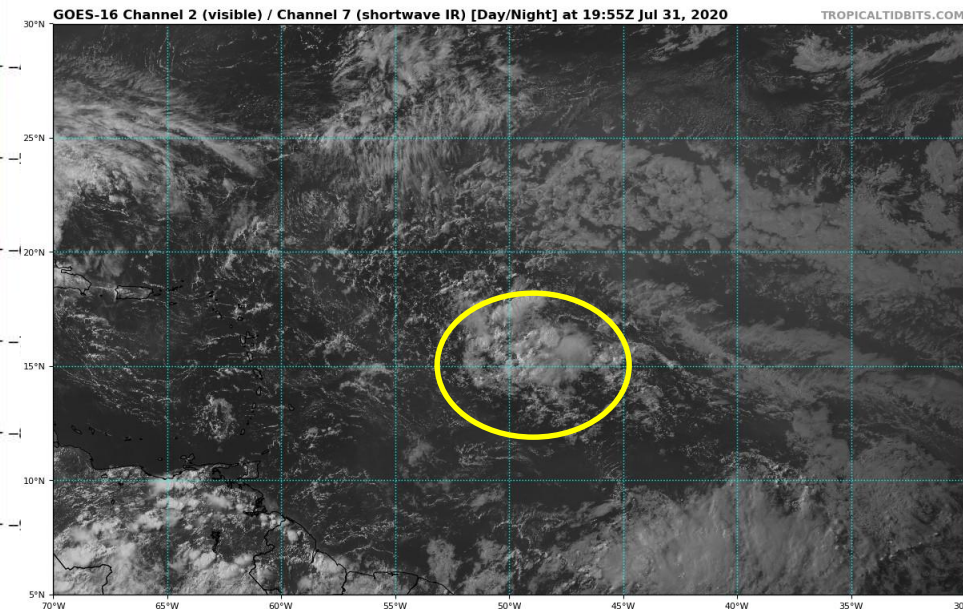


# Satellite Imagery

## Central Atlantic – Tropical Wave (20%)



A small tropical wave is located about 950 miles east of the Caribbean. It is moving to the northwest and will take time to organize. Dry air will be the main limiting factor for development.

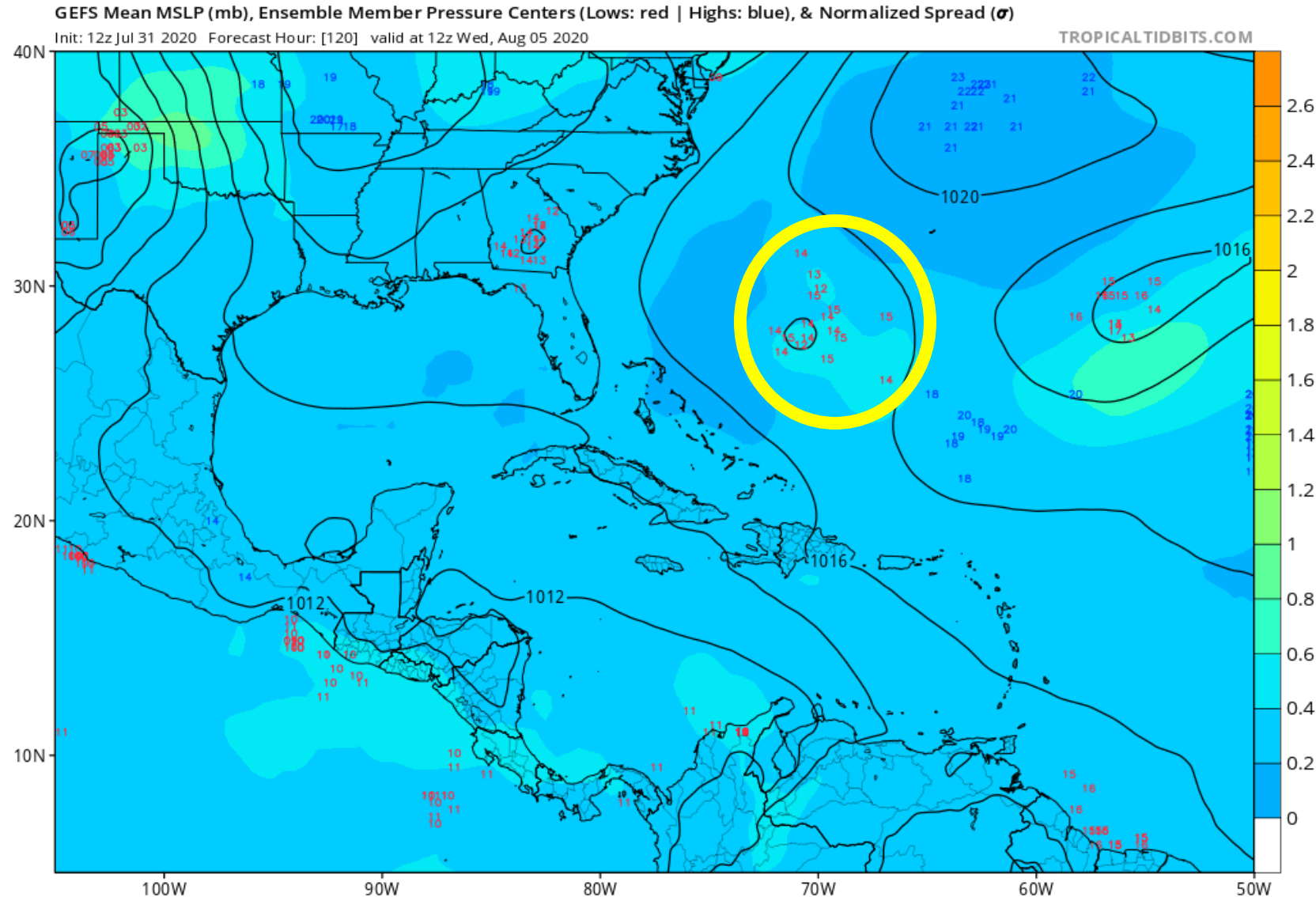




# Model Forecast Tracks

## Ensembles Models

The next tropical wave will follow behind Isaias for a bit, and be located between Bermuda and Florida during the middle of next week.





# Overall Summary

## **Hurricane Isaias**

- Isaias continues to organize, with the center located about 375 miles southeast of Miami, FL, moving northwest at 16 mph.
- Maximum sustained winds are near 75 mph (Category 1 Hurricane). Some strengthening is forecast as Isaias approaches Florida.
- Hurricane winds extend out up to 35 miles from the center, and tropical storm force winds up to 175 miles.
- Thereafter, some weakening may occur as the system turns north up the Florida East Coast.
- A north to northeast motion is expected early next week with the system paralleling the East Coast of the United States as it continues to weaken.

## **Tropical Depression #10**

- A tropical wave near the Cabo Verde Islands near the coast of Africa has become better defined this afternoon, and it has become Tropical Depression #10.
- This system could become a tropical storm tonight (next name: Josephine). This system is forecast to become a remnant low Saturday night.
- This system poses no threat to Florida.

## **Central Atlantic Tropical Wave**

- A tropical wave about halfway between the Caribbean and Africa is producing limited shower activity as it moves west.
- Some slow development of this system is possible next week while it turns northwest over the western Atlantic.
- This system is not forecast to be a direct threat to Florida, but may prolong the rip current risk into next week.
- This system has a 30% (low) chance of formation over the next 5 days.
- This system poses no threat to Florida.



# Overall Summary

## Florida Outlook:

- **Isaias poses a direct threat to Florida starting as early as tonight, but more likely beginning Saturday morning.**
- **Storm Surge Watch:** St. Johns, Flagler, Brevard, Indian River, St. Lucie, Martin, Palm Beach
- **Hurricane Warning:** Brevard, Indian River, St. Lucie, Martin, coastal/metro Palm Beach
- **Hurricane Watch:** coastal Volusia, coastal Broward, inland Palm Beach
- **Tropical Storm Warning:** Seminole, Orange, Osceola, Okeechobee, inland Palm Beach, Broward, coastal/metro Miami-Dade
- **Tropical Storm Watch:** coastal St. Johns, coastal Flagler, inland Volusia, inland/far south Miami-Dade.
- Wind gusts from 40-65 mph are generally forecast in the warnings area, with gusts to 75 mph possible.
- Heavy rainfall of 3-4" with localized totals possibly double that will be possible across the East Coast. Rainfall will be dependent on the track of Isaias.
- Soils remain saturated from the fairly active wet season across much of the Peninsula, which could lead to an elevated flash flood threat this weekend.
- Streamflows in the Peninsula are running near to below normal, and it may take more than 3-5" of rain to cause flooding issues along the rivers in the Peninsula.
- Isolated tornadoes may be possible, especially if the center moves over the state.
- 2-4' of storm surge is expected from Ponte Vedra Beach to Jupiter Inlet, and 1-3' of storm surge is expected from Jupiter Inlet to North Miami Beach
- Elevated surf, dangerous rip currents, and beach erosion will be likely at all Atlantic beaches this weekend.

The next briefing packet will be issued early tomorrow morning with the 5 AM ET advisory. 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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State Meteorological Support Unit

Florida Division of Emergency Management

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