



# TROPICAL UPDATE



5:00 PM EDT

Thursday, July 30, 2020

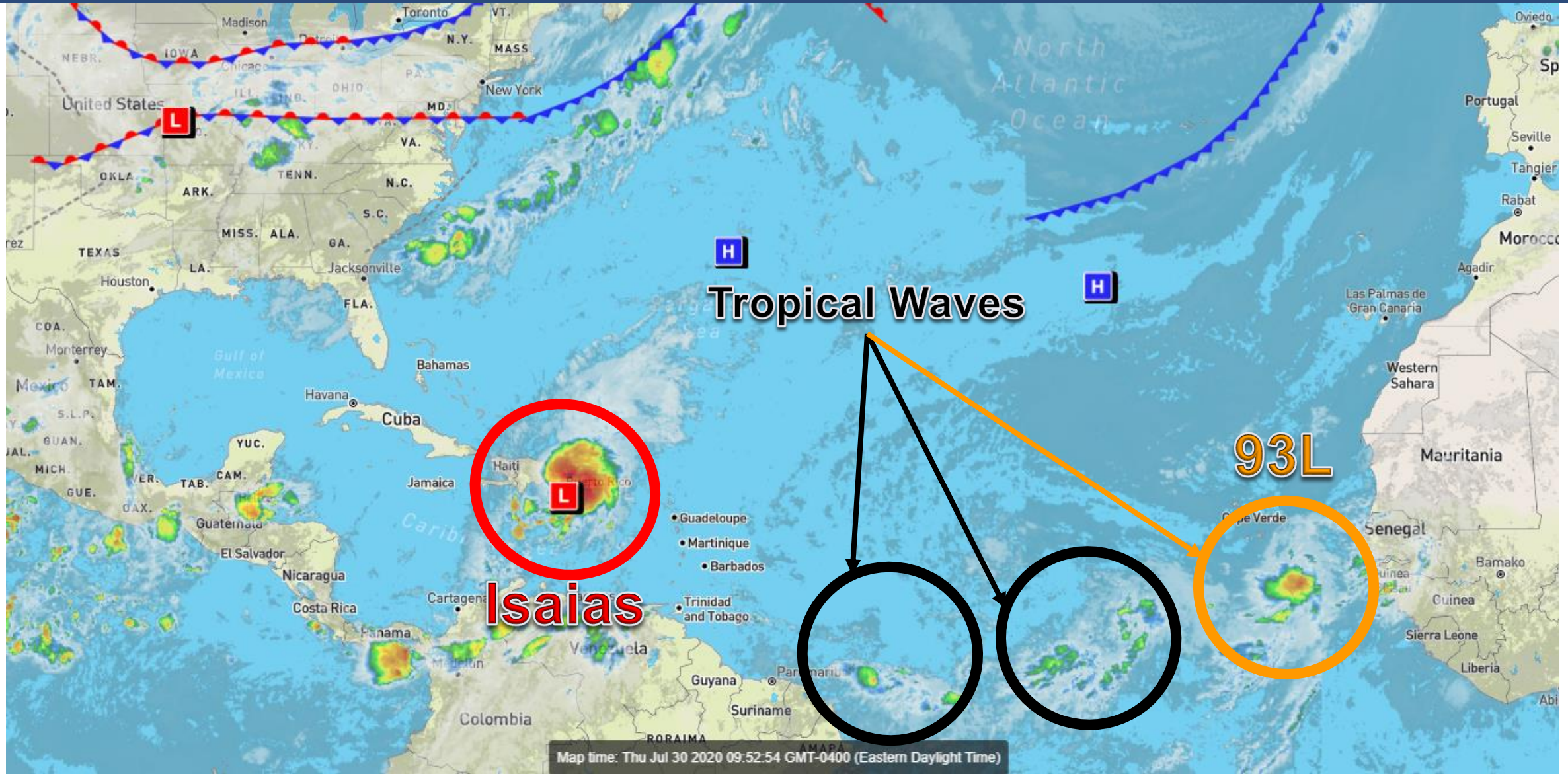
Tropical Storm Isaias, Invest 93L (50%)

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).



# Atlantic Basin Satellite Image

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







# Tropical Weather Outlook

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



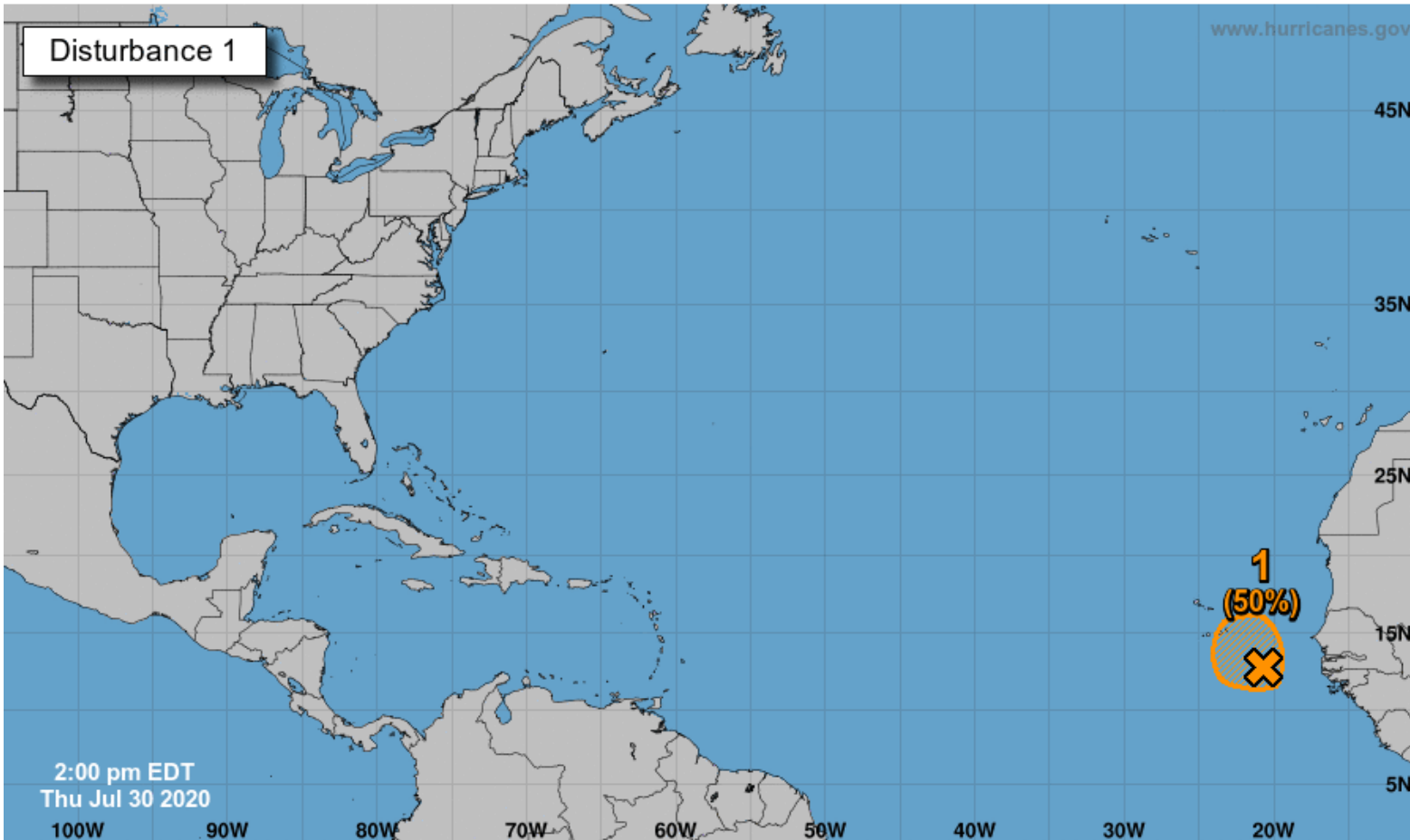
## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 1



Showers and thunderstorms associated with a small area of low pressure, located a few hundred miles south-southeast of the Cabo Verde Islands, have increased and become better organized during the day. Environmental conditions appear conducive for further development, and this system could become a tropical depression during the next day or so while it drifts generally north-northwestward. After that time, environmental conditions are forecast to become less favorable for development.

The next name on the list is Josephine.

**This system does not pose a threat to Florida.**

**\*Formation chance through 48 hours...medium...50%**

**\*Formation chance through 5 days...medium...50%**

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

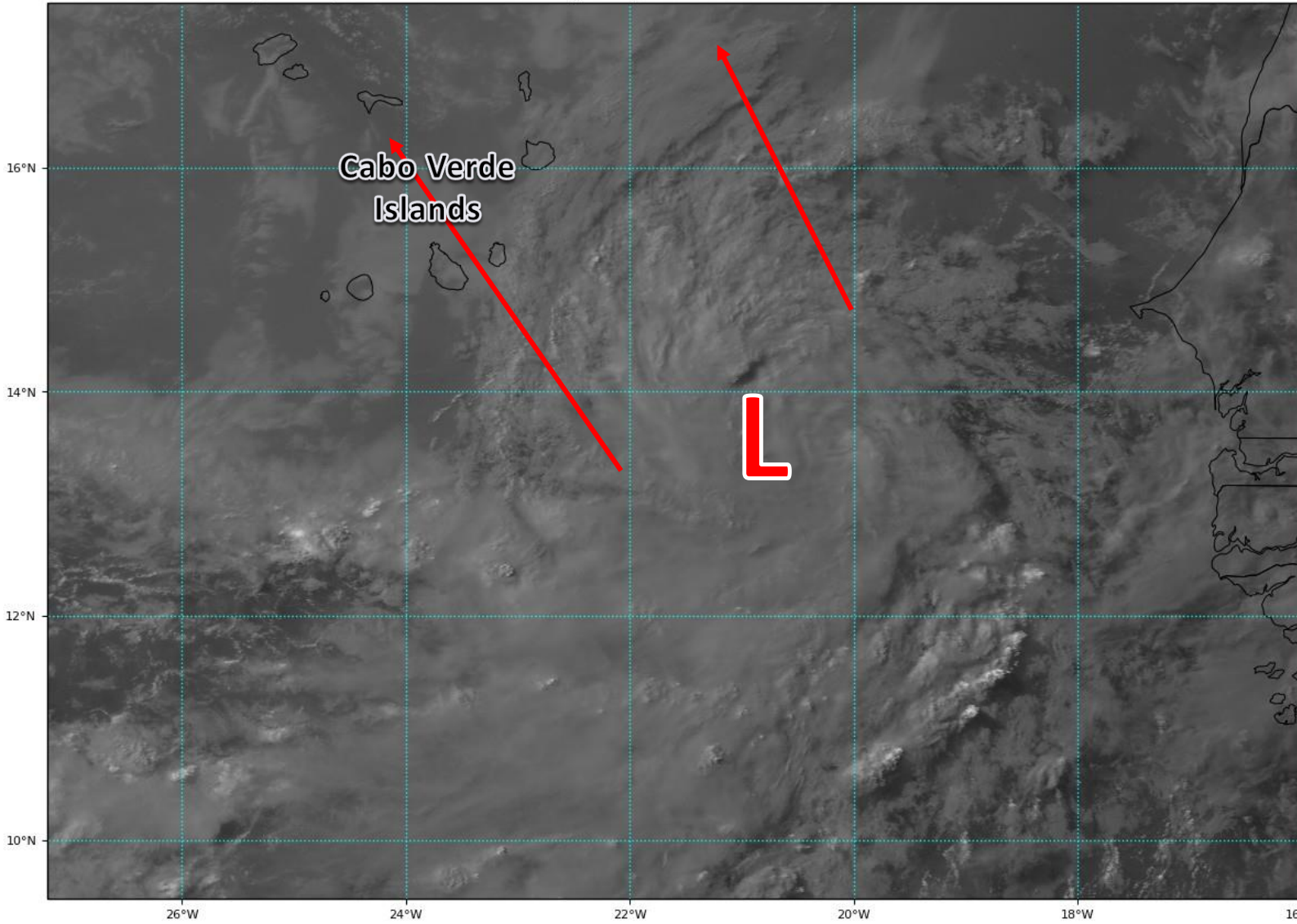


# Satellite Imagery

## Eastern Atlantic – Invest 93L (50%)

GOES-16 Channel 2 (visible) Reflectance at 18:55Z Jul 30, 2020

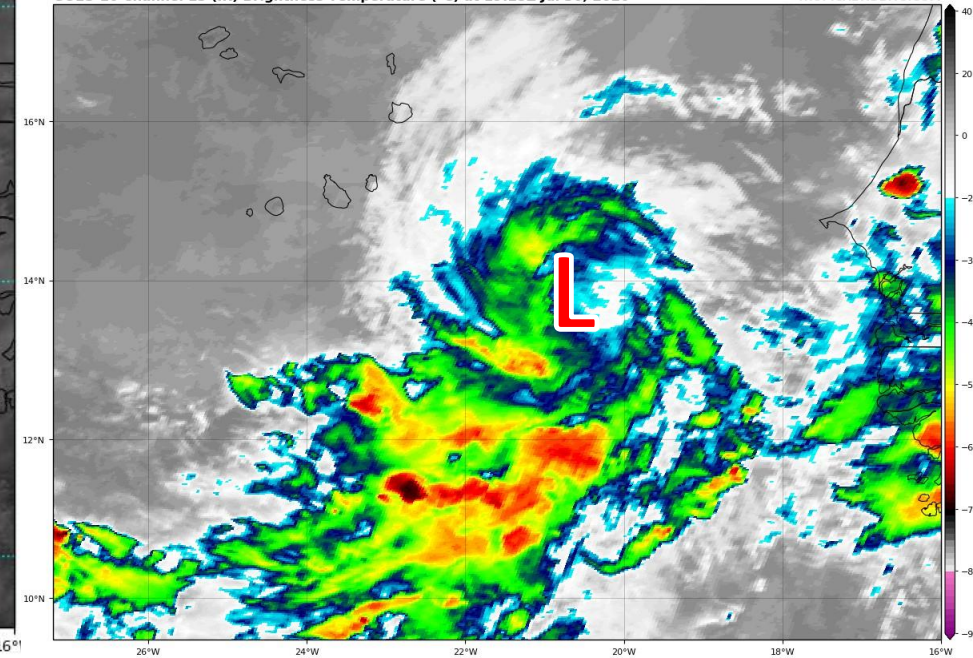
TROPICALTIDBITS.COM



Invest 93L is quite well defined this afternoon. If the system becomes more organized, a tropical depression could form over the next couple of days as it drifts north-northwestward toward the Cabo Verde Islands.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:25Z Jul 30, 2020

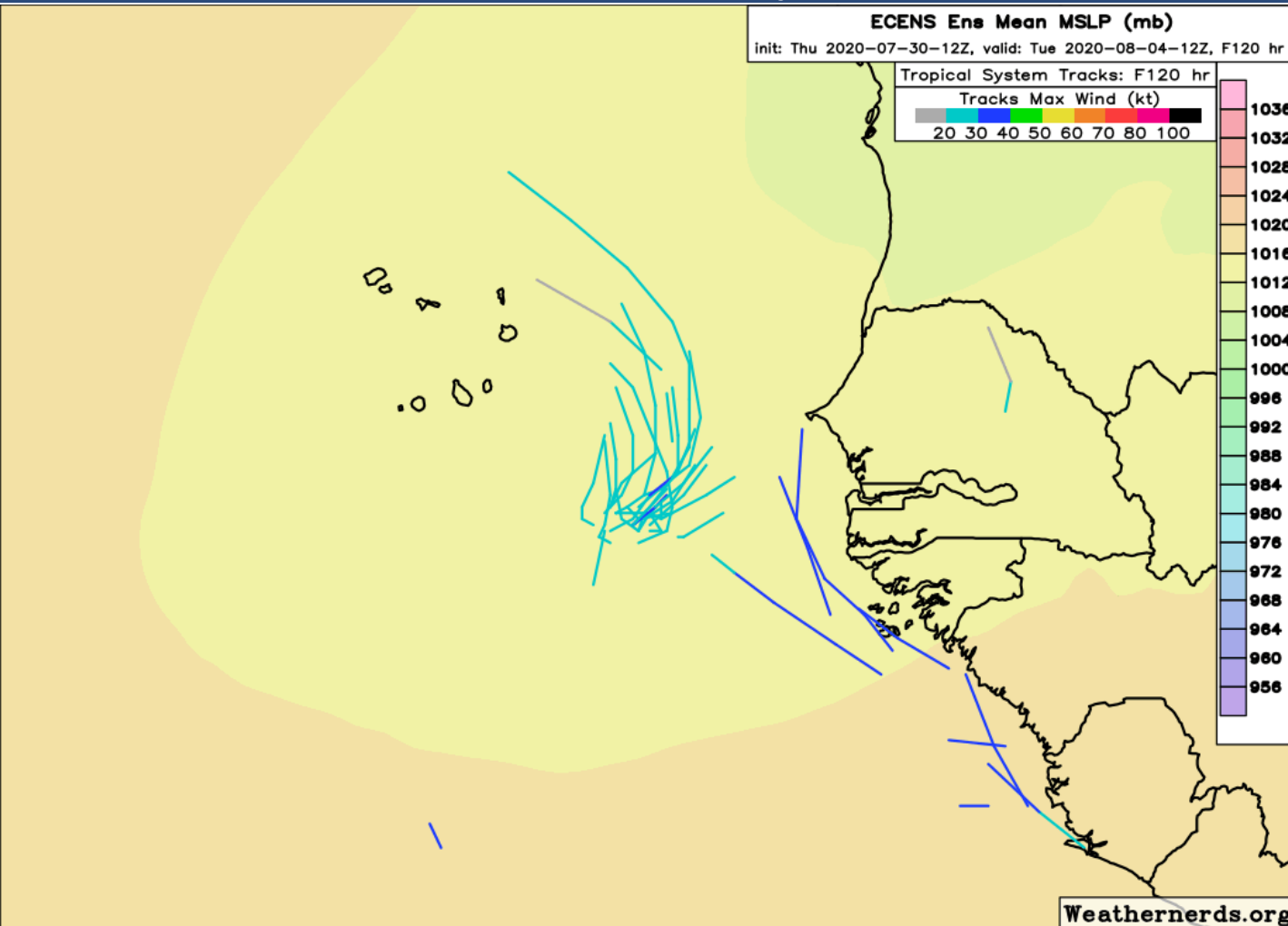
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# Model Forecast Tracks

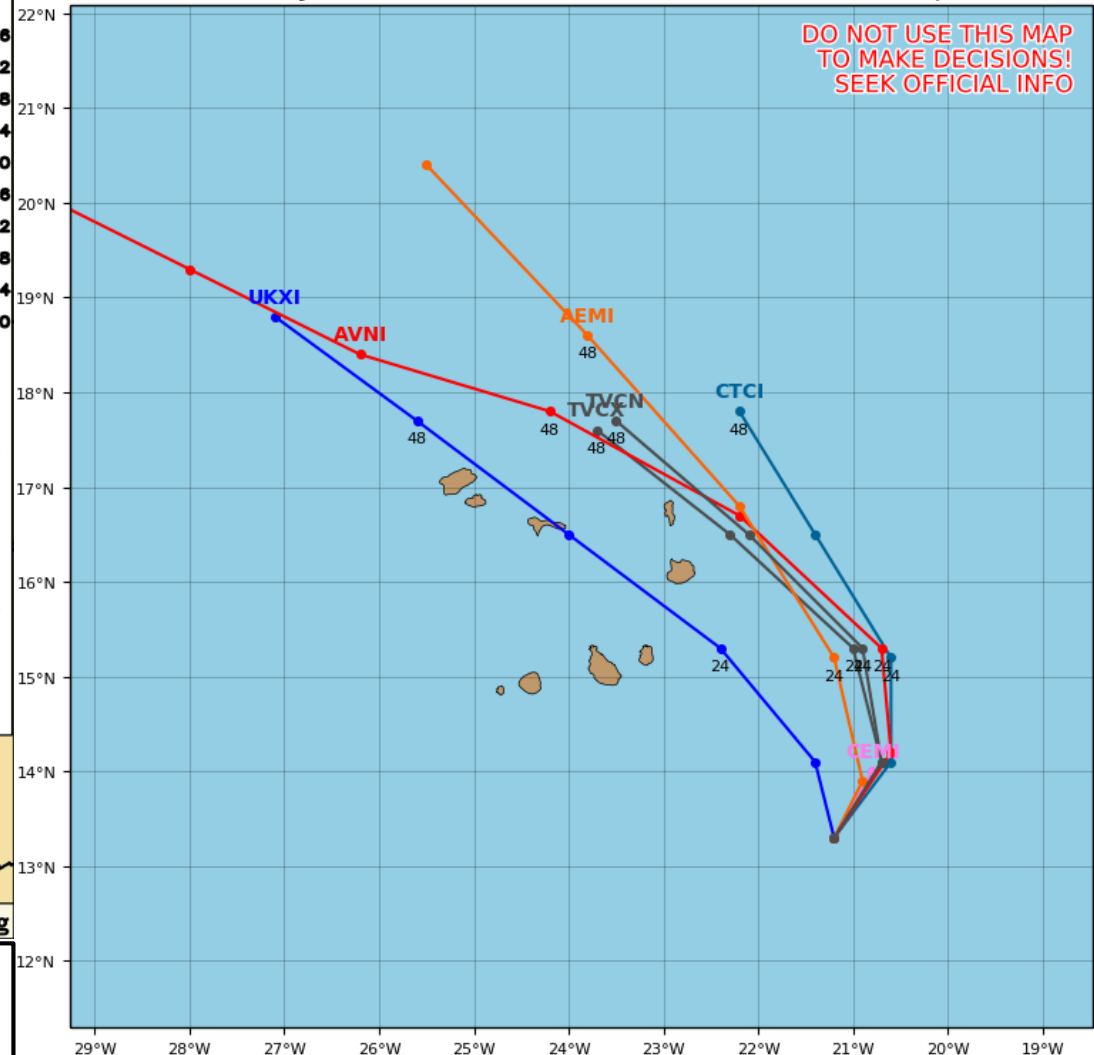
## Ensembles, Dynamical, and Statistical Models



### Invest 93L Model Track Guidance

Initialized at 18z Jul 30 2020

Levi Cowan - tropicaltidbits.com



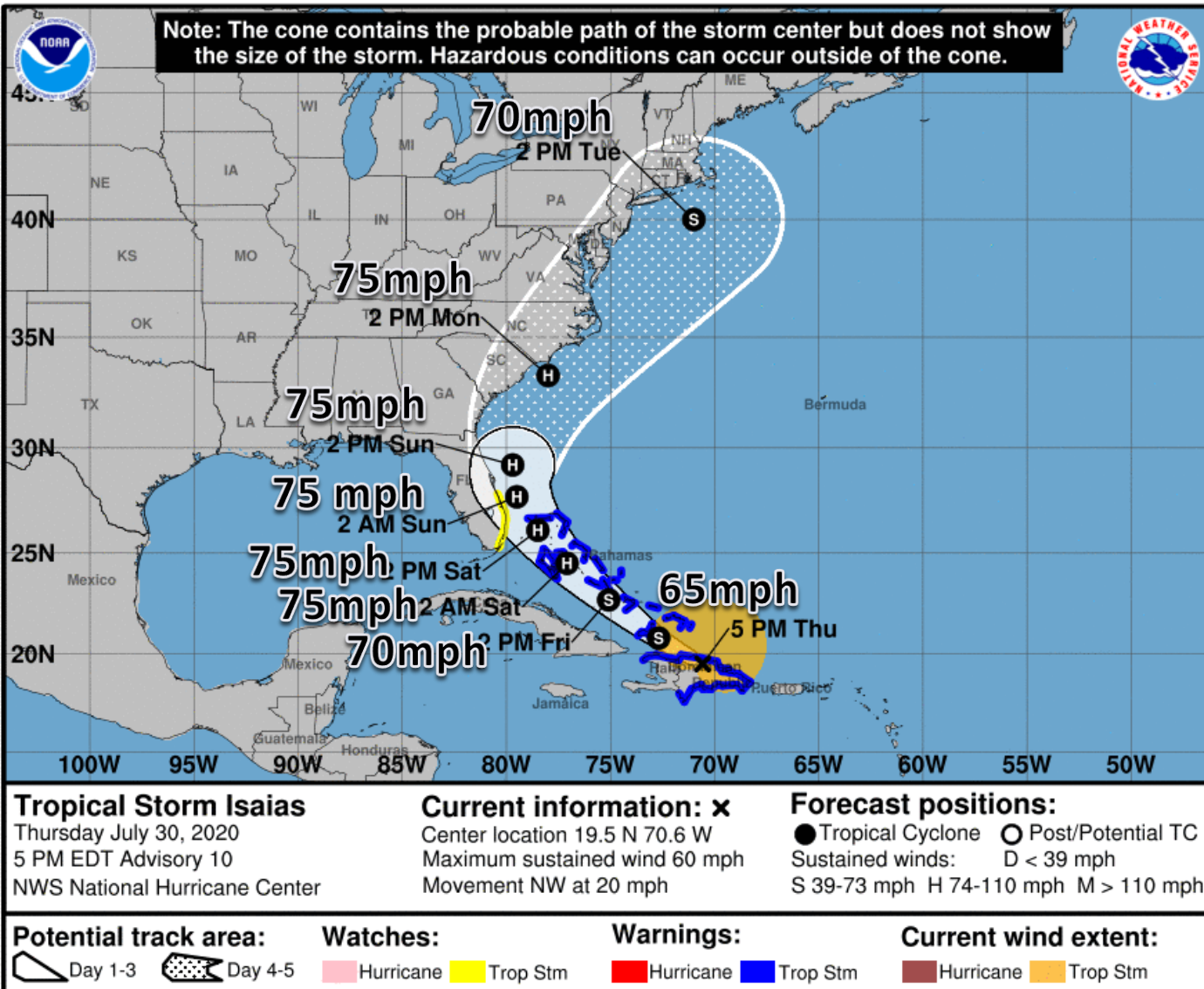
Invest 93L will hook around the Cabo Verde Islands before dissipating in about 48 hours.





# Official Forecast Track

## From the National Hurricane Center – Tropical Storm Isaias



- The center of Tropical Storm Isaias is about 155 miles west-northwest of Punta Cana, Dominican Republic.
- Maximum sustained winds are around 60 mph.
- Isaias is racing to the northwest at 20 mph, and a northwest movement is expected through Saturday before turning north and northeast.
- The system will move through the Bahamas on Friday, then 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. Adjustments to the track and intensity forecast are still possible.
- If Isaias remains offshore, there is the possibility that it may reach hurricane strength.
- Tropical Storm Watches are in effect from Sebastian Inlet to Ocean Reef

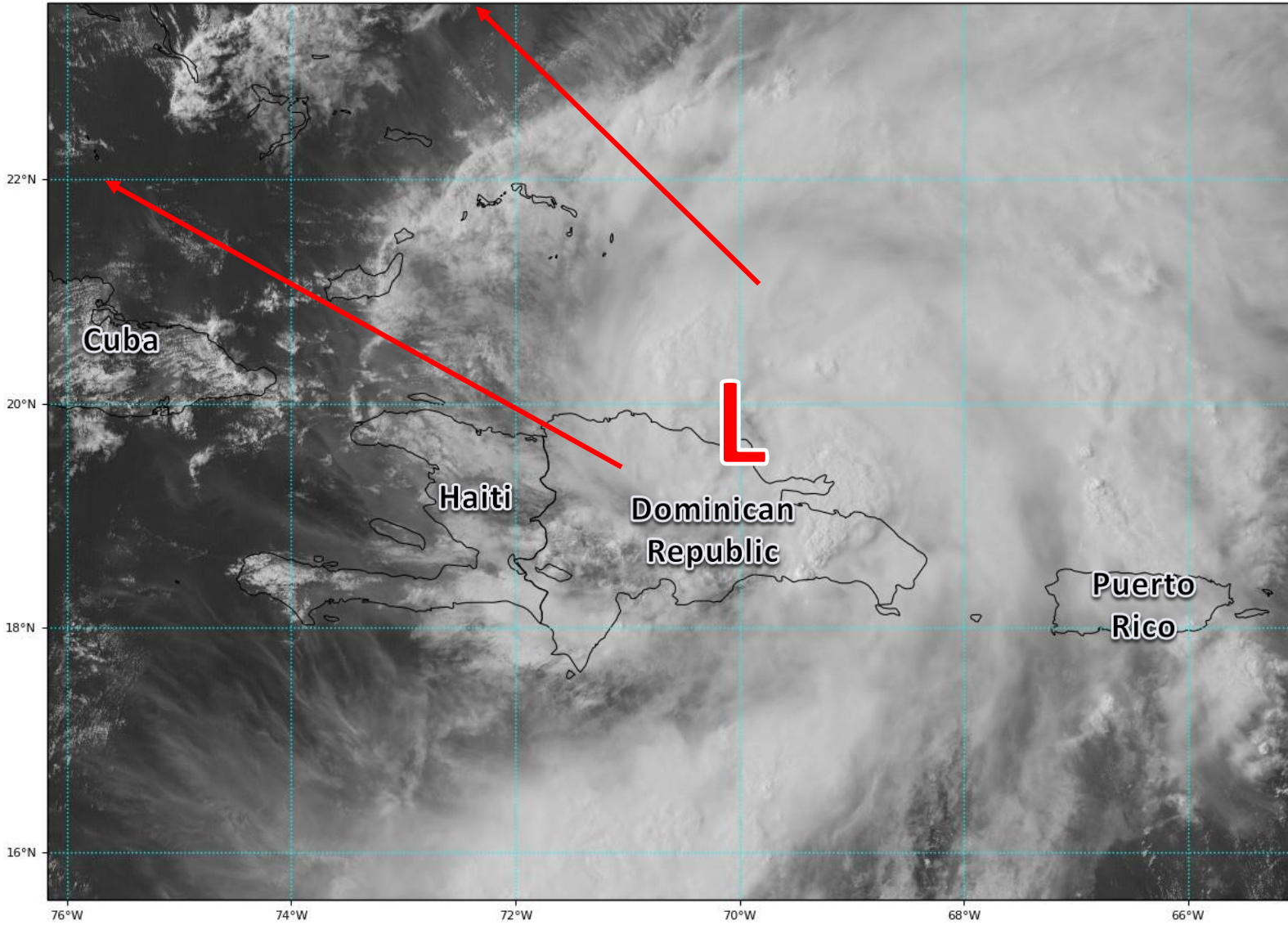


# Satellite Imagery

## Caribbean Sea – Tropical Storm Isaias

GOES-16 Channel 2 (visible) Reflectance at 20:05Z Jul 30, 2020

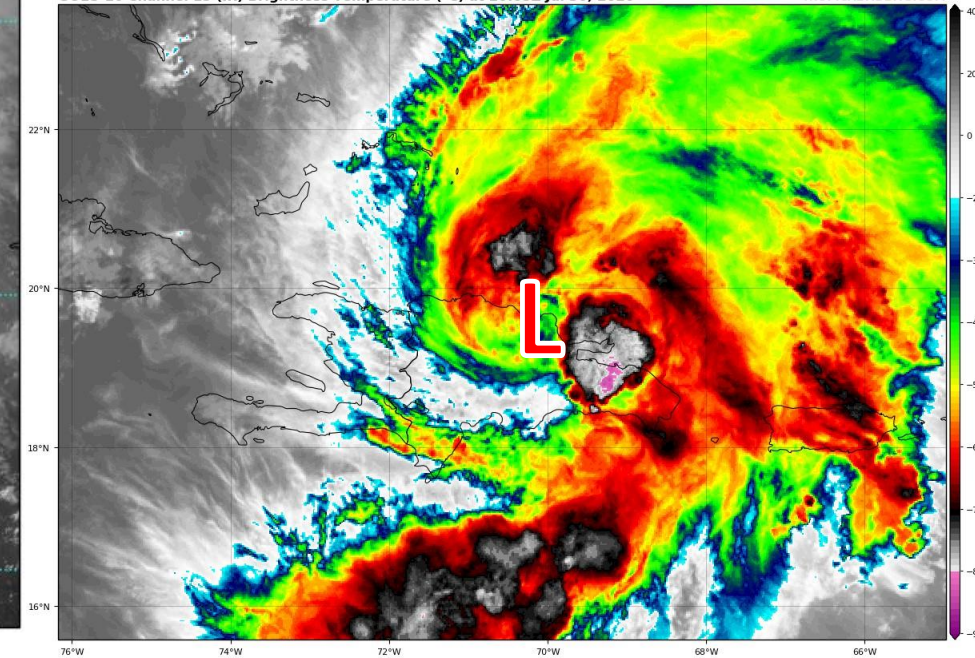
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The center of circulation became better defined last night, and PTC #9 was officially upgraded to Tropical Storm Isaias. However, the center has become less defined again this morning. Center reformations are possible on the north side of the island, which continues to plague the forecast with uncertainty.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 20:05Z Jul 30, 2020

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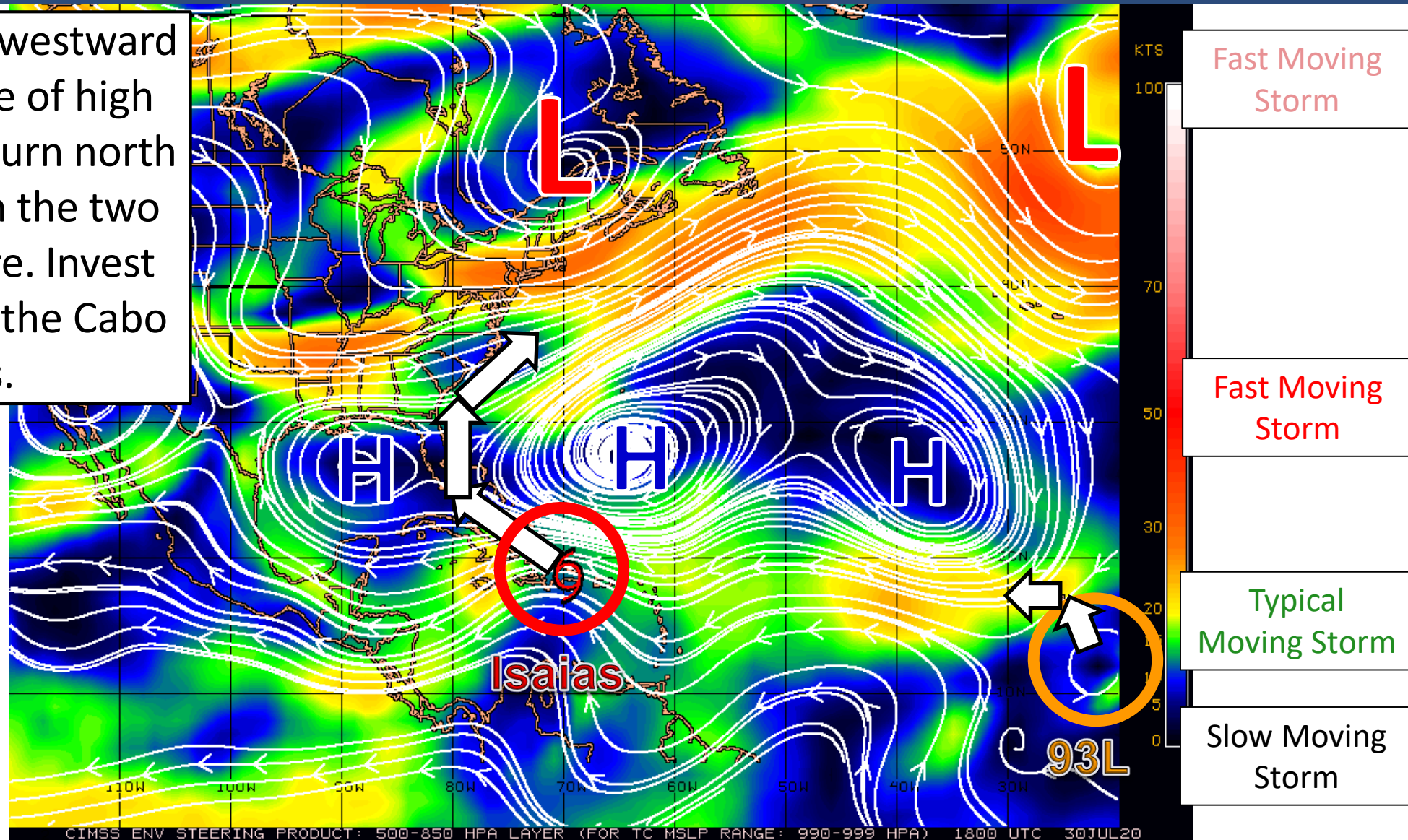


# Steering Currents

What is moving the system?

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.

Isaias will move northwestward on the southern edge of high pressure, then try to turn north in the break between the two areas of high pressure. Invest 93L will hook around the Cabo Verde Islands.







# Model Forecast Tracks

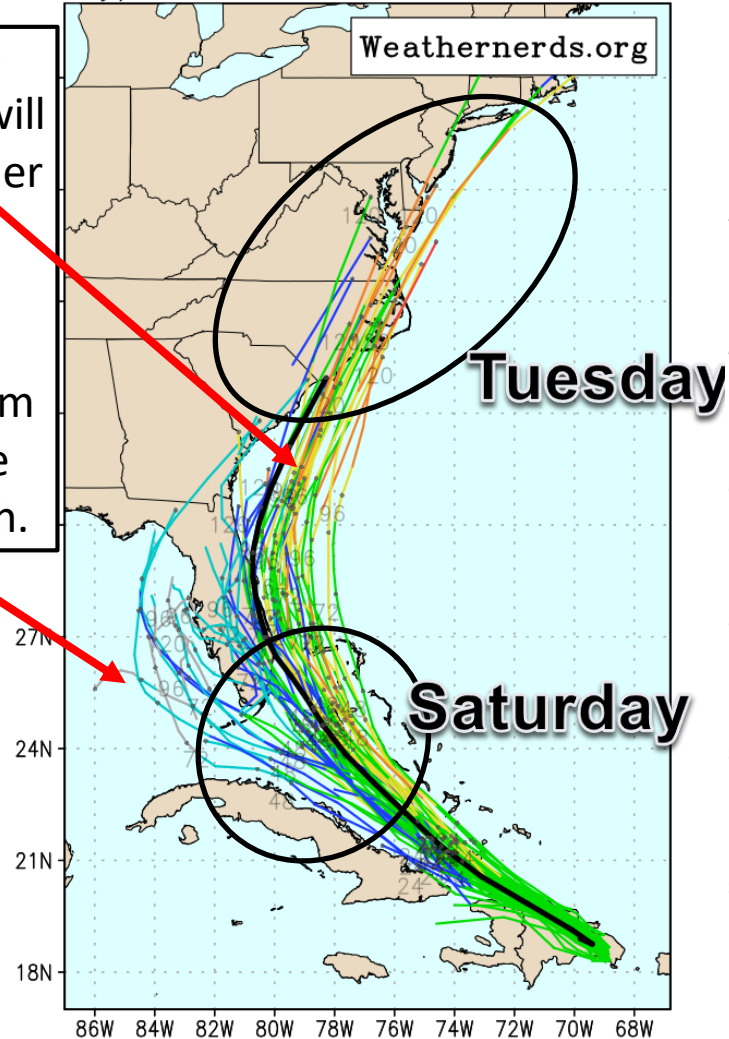
## Ensembles, Dynamical, and Statistical Models

ECMWF Ens. (0-120h only), init: 2020073012, AL09 Isaias

color = max wind (kt)

A stronger, more organized system will tend to move farther east/north.

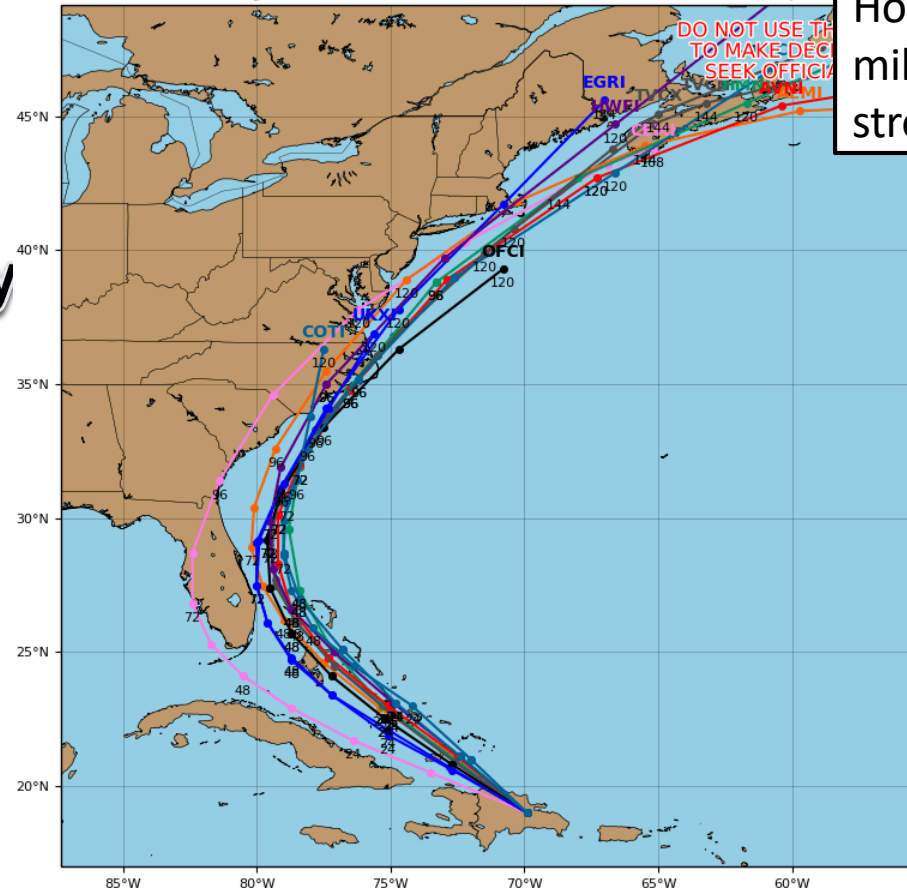
A weaker, disorganized system will tend to move farther west/south.



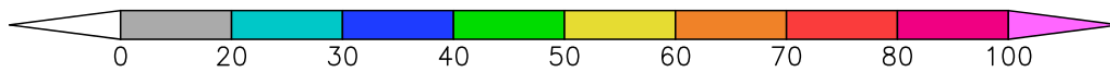
### Tropical Storm ISAIAS Model Track Guidance

Initialized at 18z Jul 30 2020

Levi Cowan - tropical



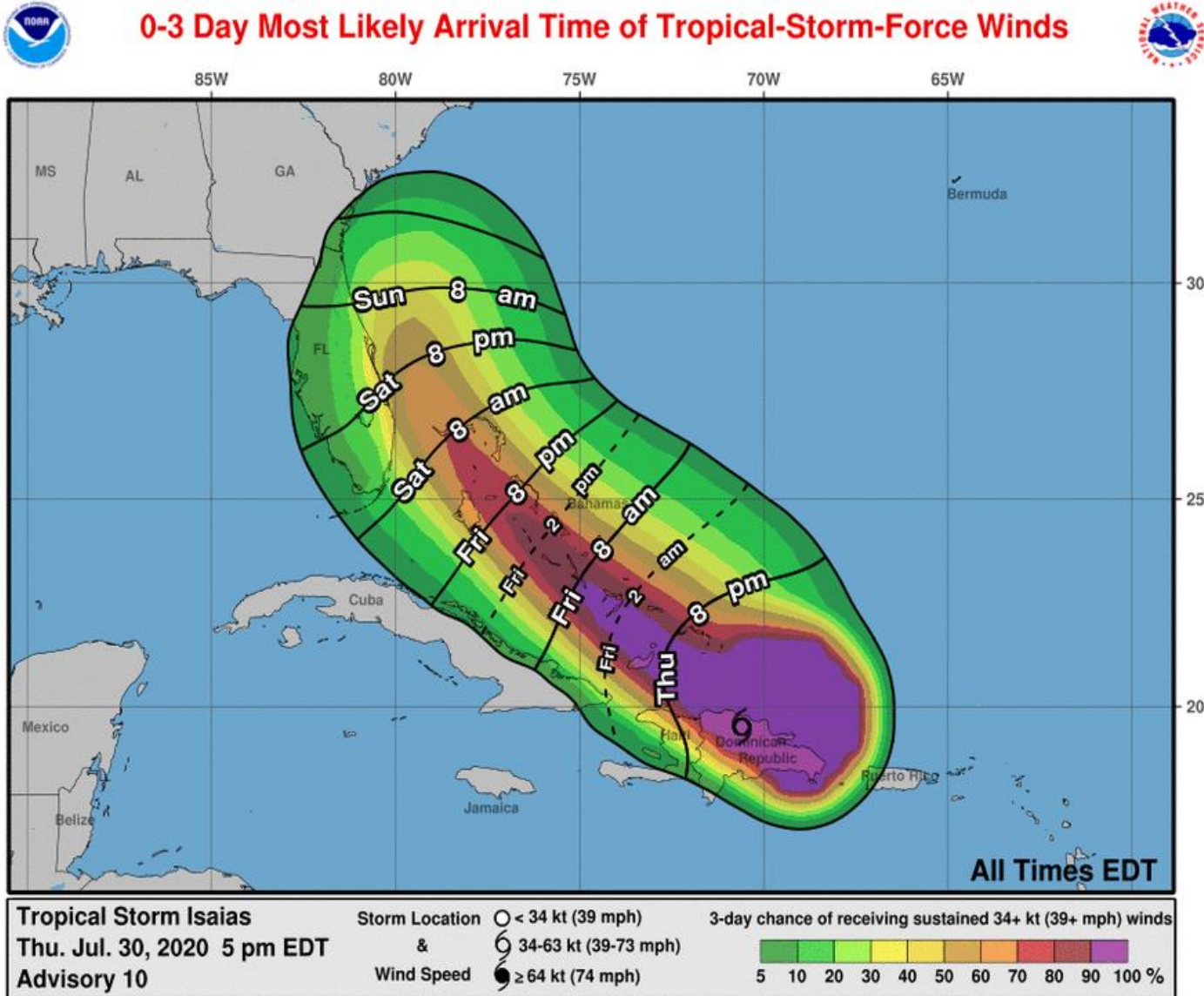
Model tracks mostly are along and offshore of the East Coast. However, it will only take a few miles to make the difference in stronger winds onshore or not.





# Time of Arrival & Wind Speed Probabilities

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



**Key West: 3%**  
**Miami: 18%**  
**Naples: 10%**  
**West Palm Beach: 44%**  
**Ft. Lauderdale: 35%**  
**Ft. Pierce: 46%**  
**Daytona Beach: 23%**  
**Orlando: 18%**  
**Tampa: 9%**  
**Jacksonville: 13%**

The most likely chance of tropical storm force winds starting will be Saturday Night in Southeast Florida, but could arrive AS EARLY AS Friday night if the track speeds up.



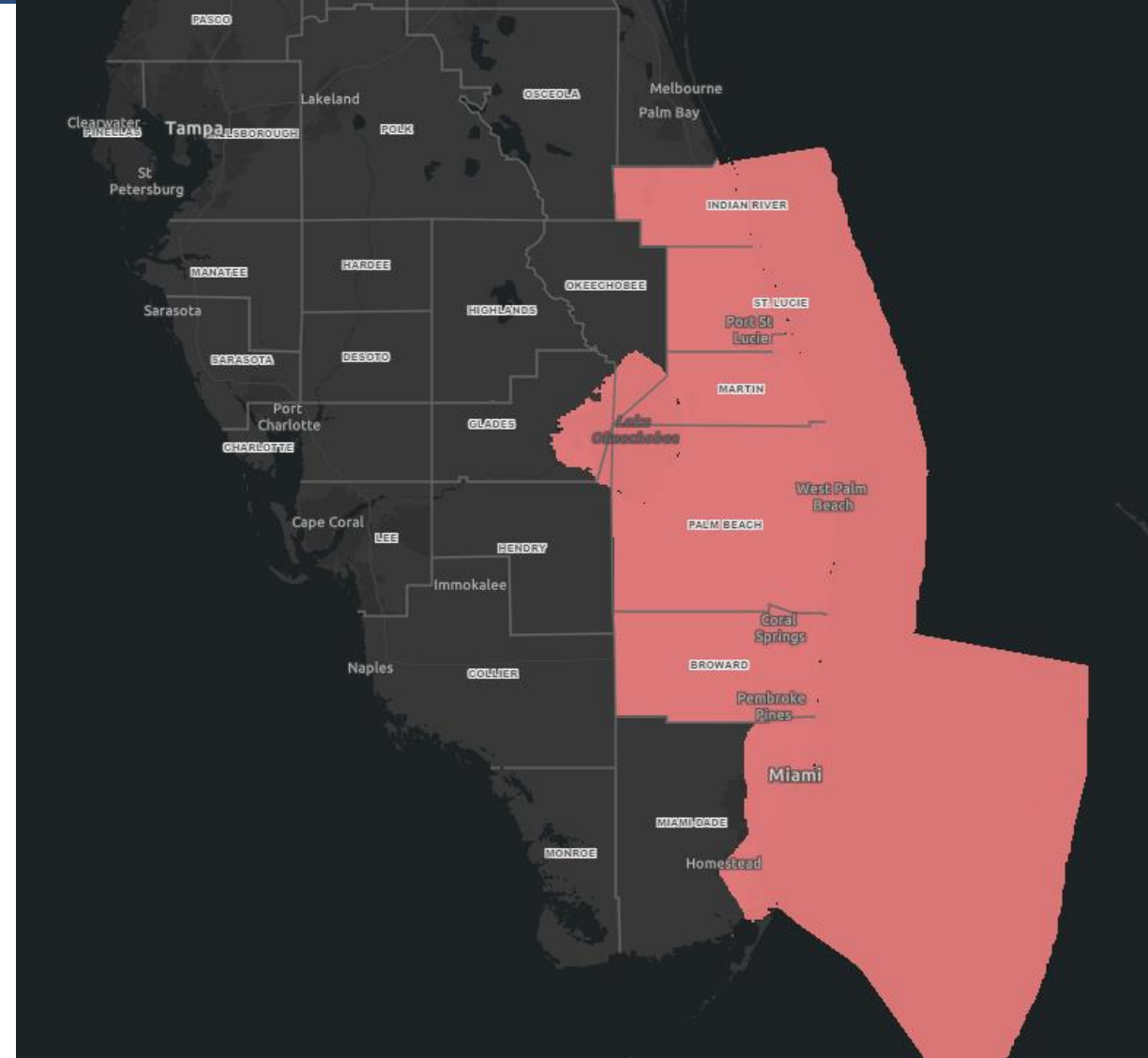


# Wind Watches and Warnings

In Effect Until Further Notice

**Tropical Storm Watches are in effect from  
Sebastian Inlet to Ocean Reef**

**Counties: Indian River, St. Lucie, Martin,  
Palm Beach, Broward, coastal and metro  
Miami-Dade**





# 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)



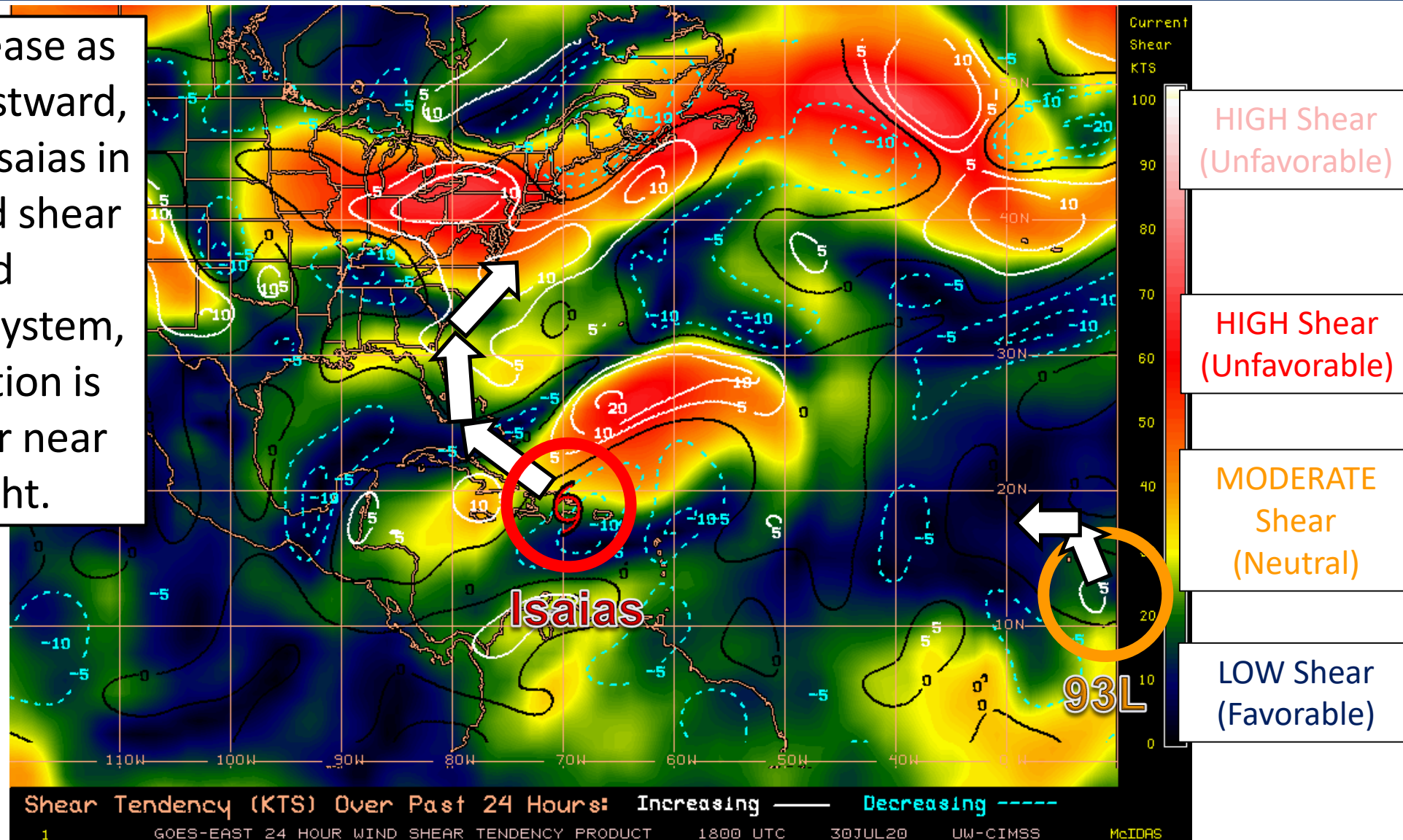


# Wind Shear

Is the environment favorable for the system?

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).

Wind shear may increase as Isaias moves northwestward, which may help keep Isaias in check. Moderate wind shear may inhibit rapid intensification of the system, but some intensification is expected. Wind shear near 93L is relatively light.



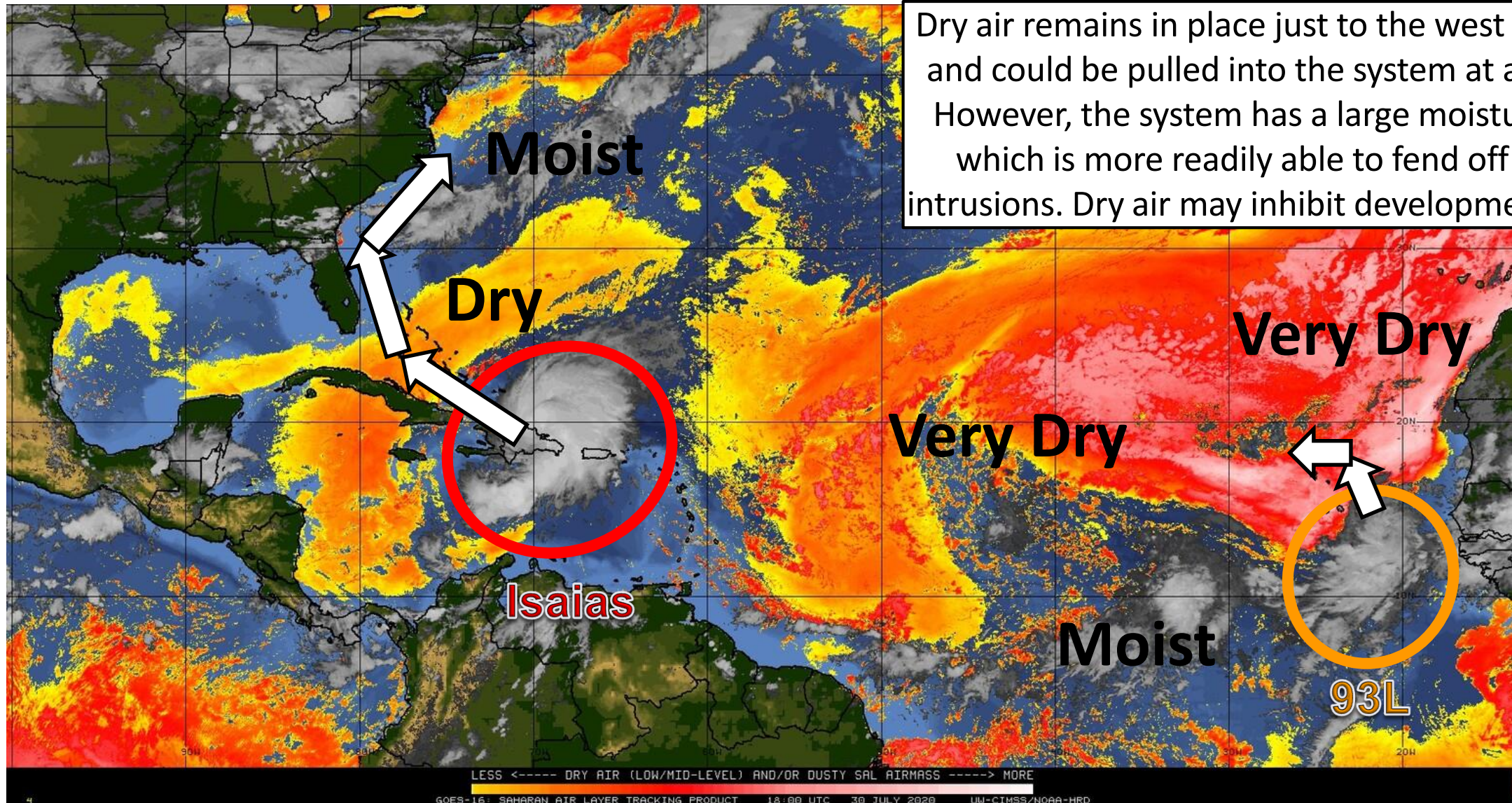




# Dry Air & Saharan Dust

Is the environment favorable for the system?

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



Dry air remains in place just to the west of PTC #9 and could be pulled into the system at any time. However, the system has a large moisture field, which is more readily able to fend off dry air intrusions. Dry air may inhibit development of 93L.





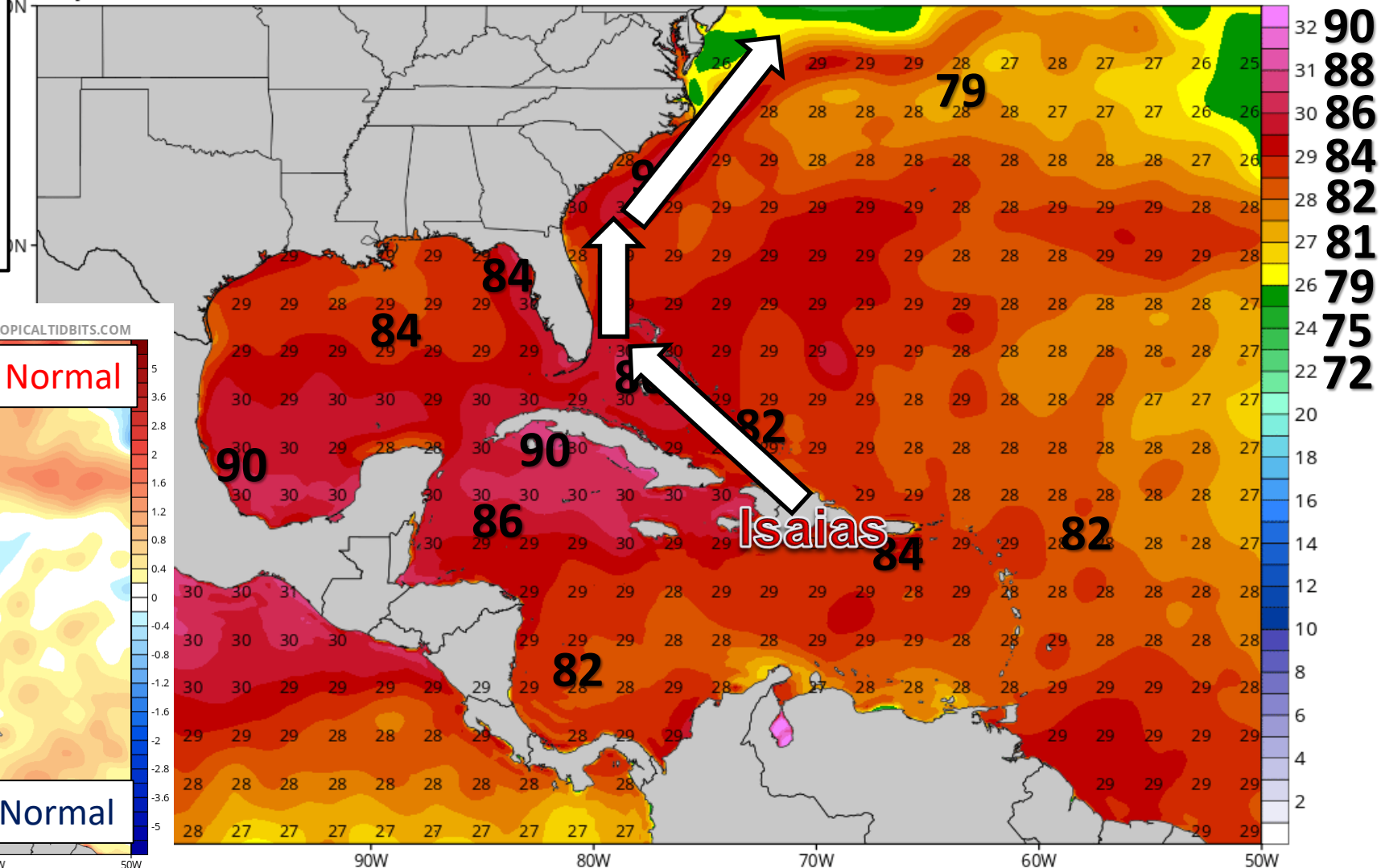
# Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Atlantic basin, and will continue to warm as Isaias moves west. Water temperatures are above normal across much of the Atlantic.

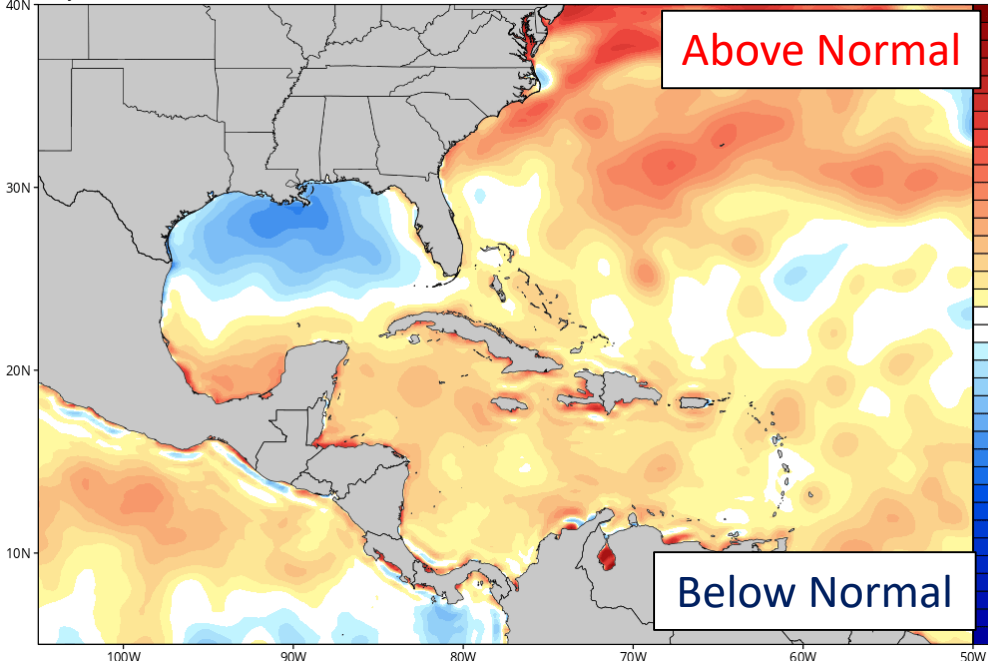
CDAS Sea Surface Temperature (°C)

Analysis Time: 12z Jul 30 2020



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

Analysis Time: 12z Jul 30 2020





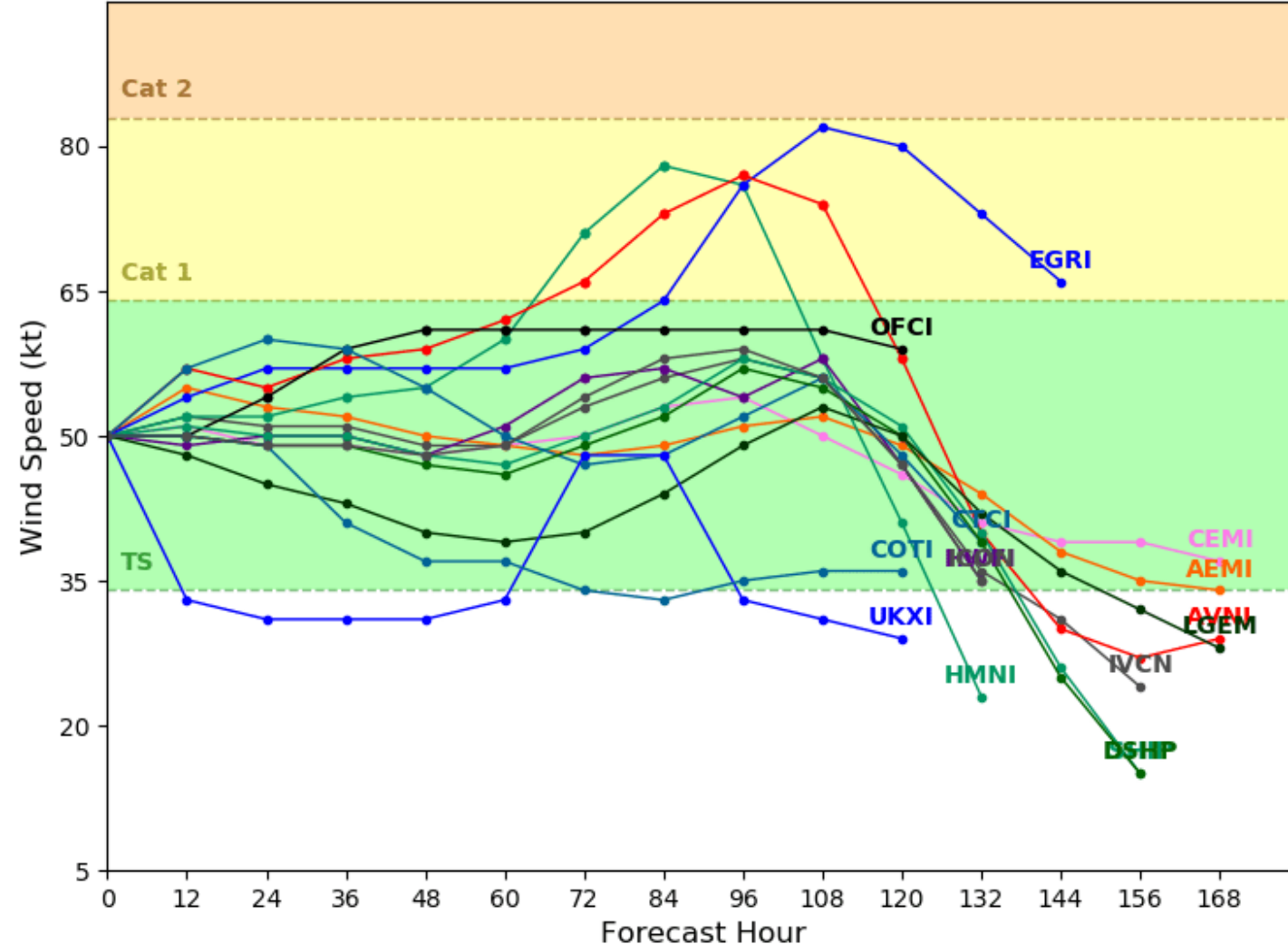
# Model Forecast Intensity

## Dynamical and Statistical Models – Tropical Storm Isaias

### Tropical Storm ISAIAS Model Intensity Guidance

Initialized at 18z Jul 30 2020

Levi Cowan - tropicaltidbits.com

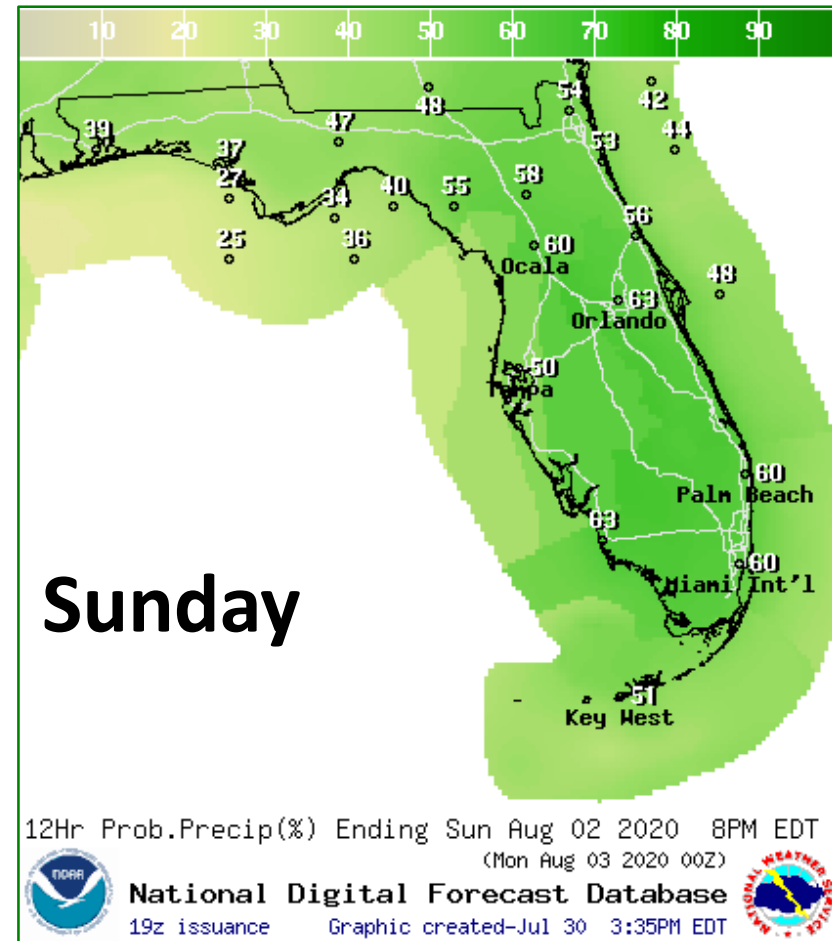
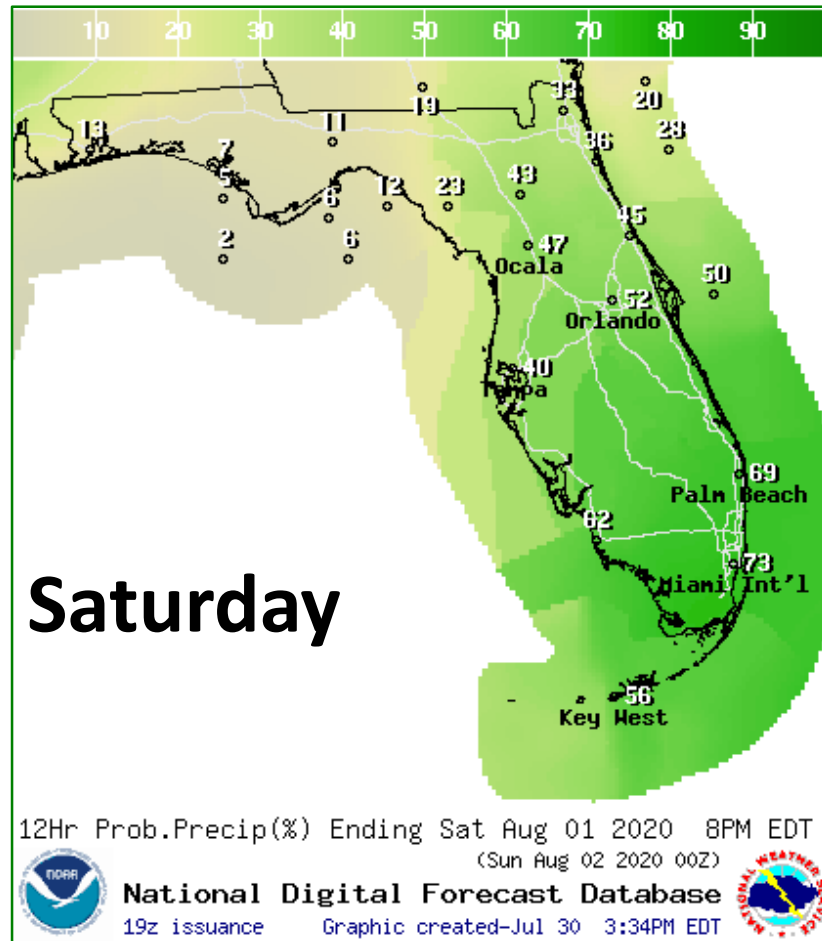
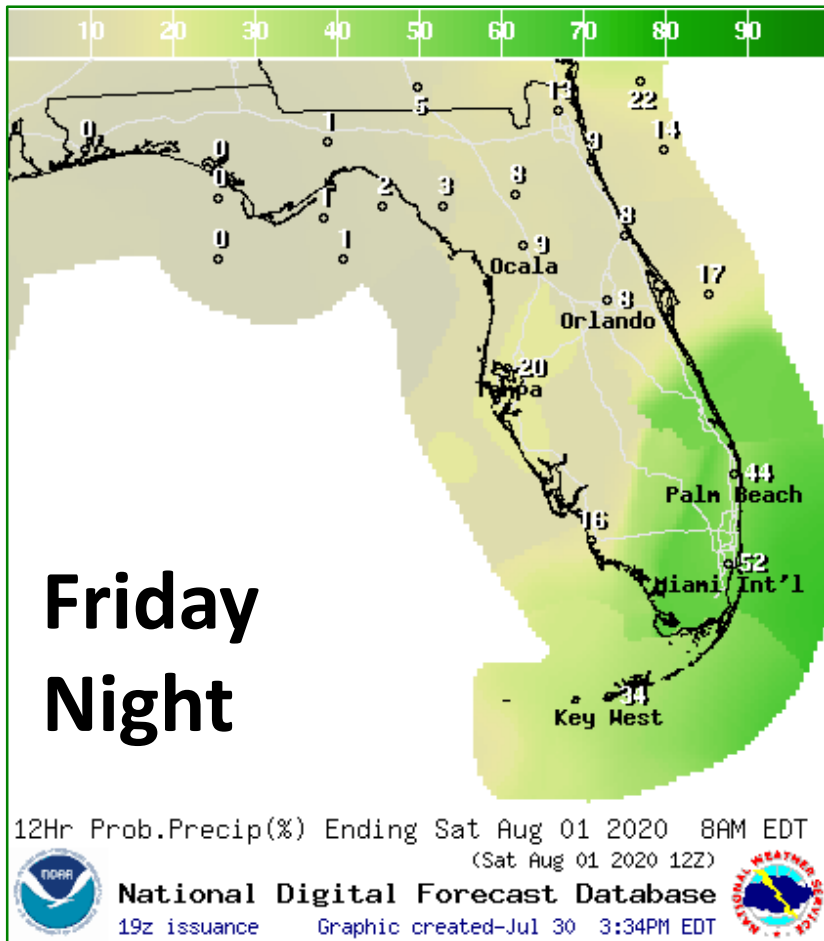


Most models keep Isaias at tropical storm intensity. However, this forecast is highly dependent upon land interaction with Hispaniola and Cuba and future wind shear or dry air interactions. There is the possibility if Isaias stays farther offshore of the East Coast that Isaias may reach hurricane intensity.





# Rain Chances Next 3 Days

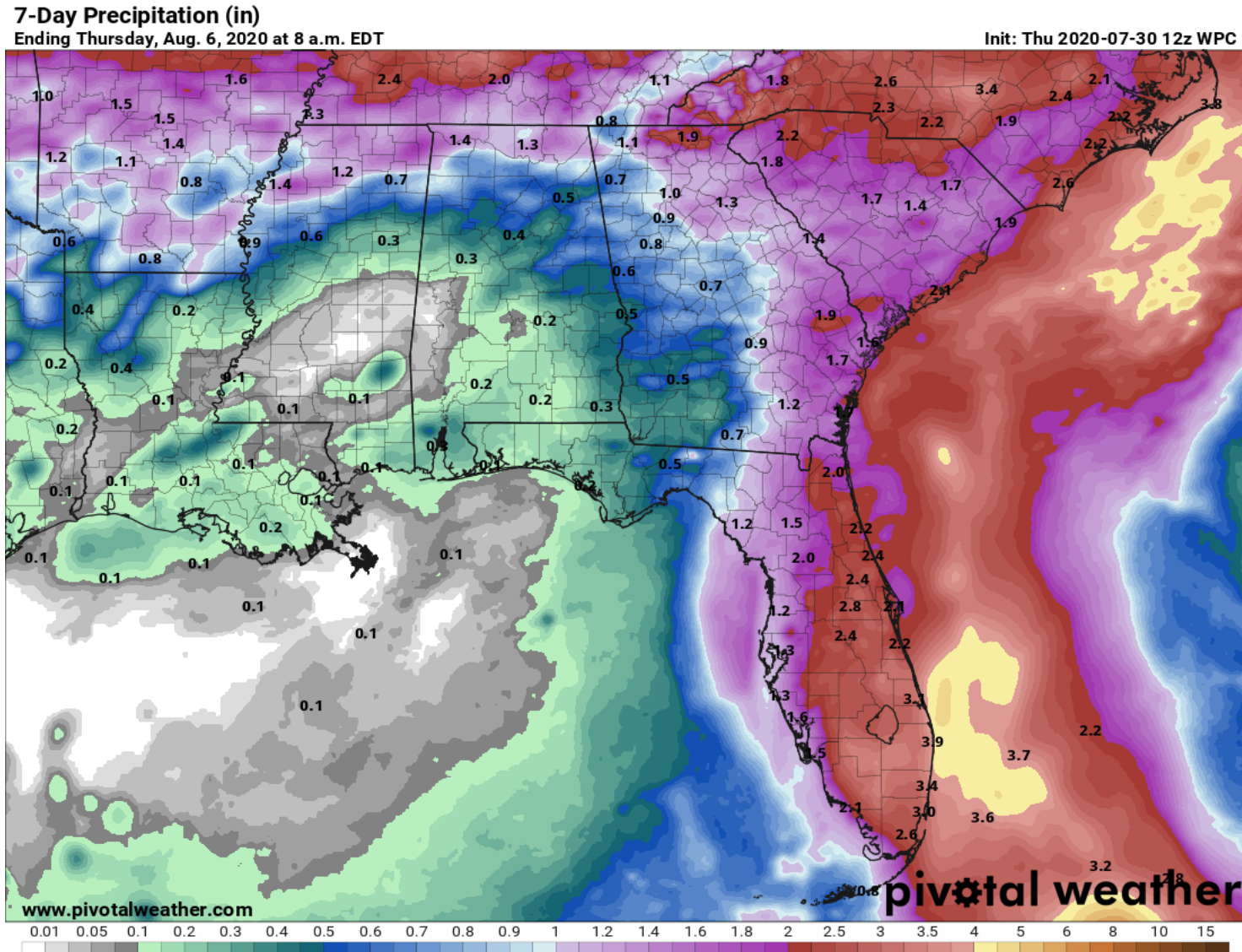


Rain chances in Southeast Florida will begin increasing Friday night, then across the Peninsula on Saturday, and into North Florida by Sunday.



# Forecast Rainfall Totals Next 7 Days

- About 2-4" of rain are possible along the East Coast and in South Florida
- Localized totals double these amounts will be possible.
- Rainfall totals and consequent flash flood threat will be dependent on track of Isaias
- 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.

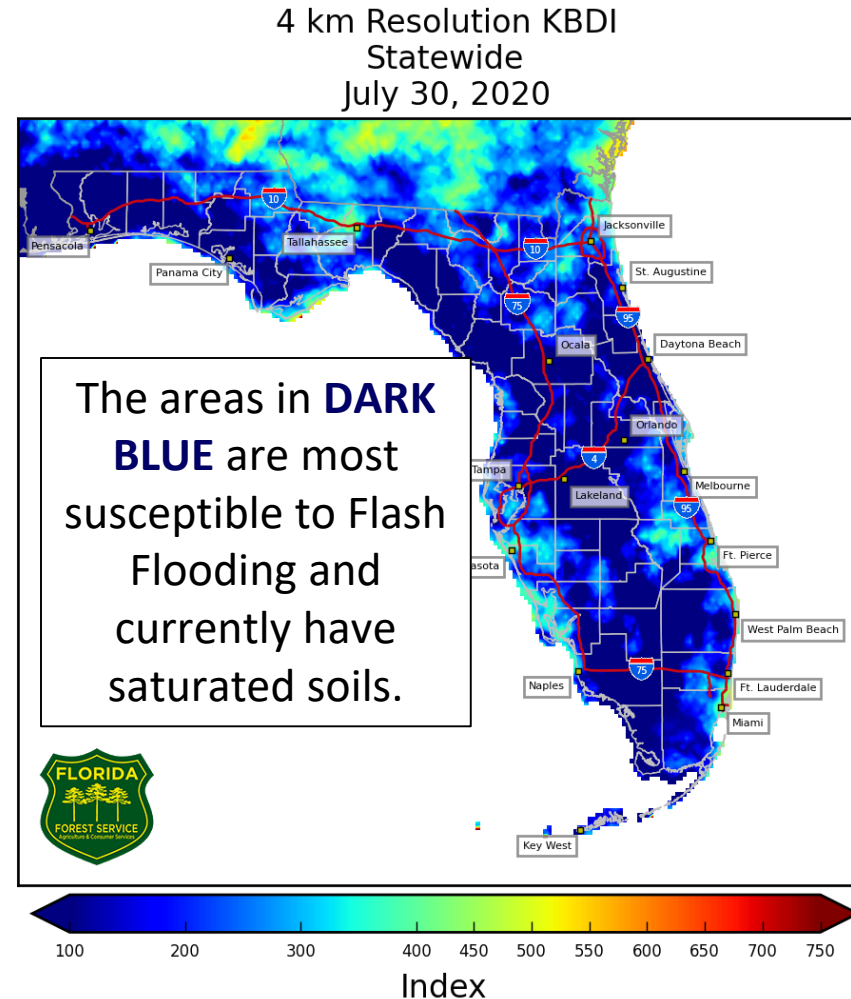
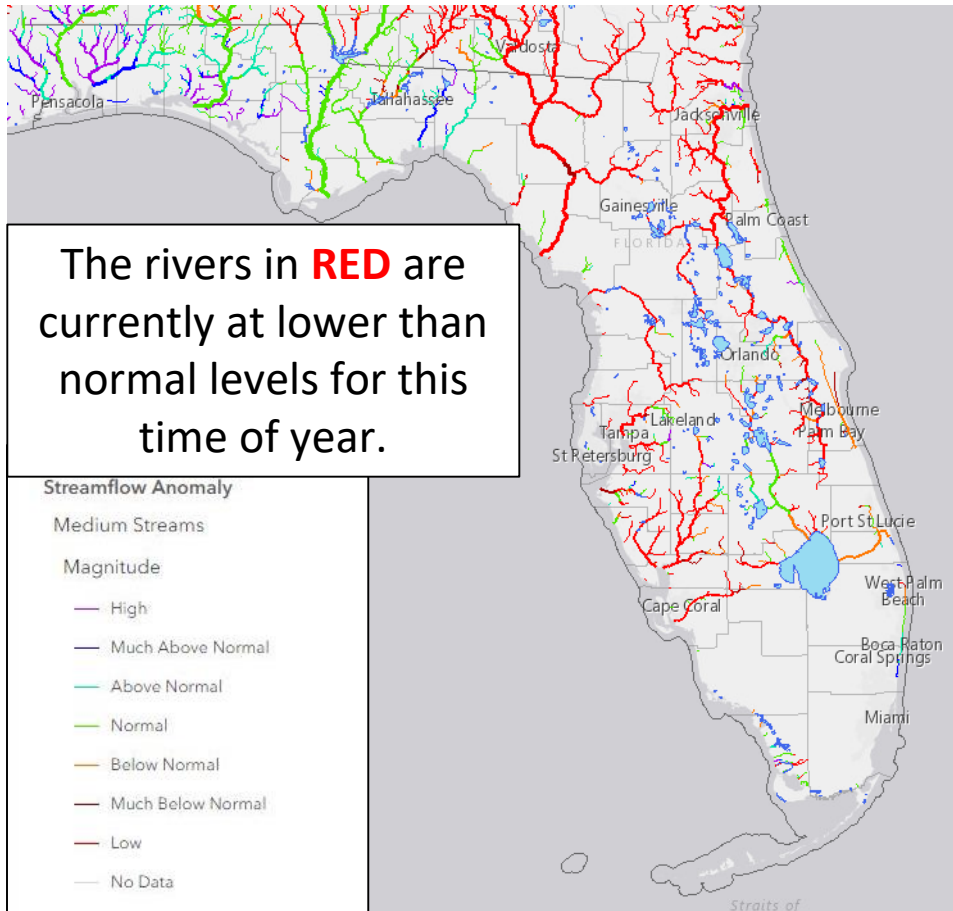






# Streamflow Anomaly – Soil Moisture

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



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

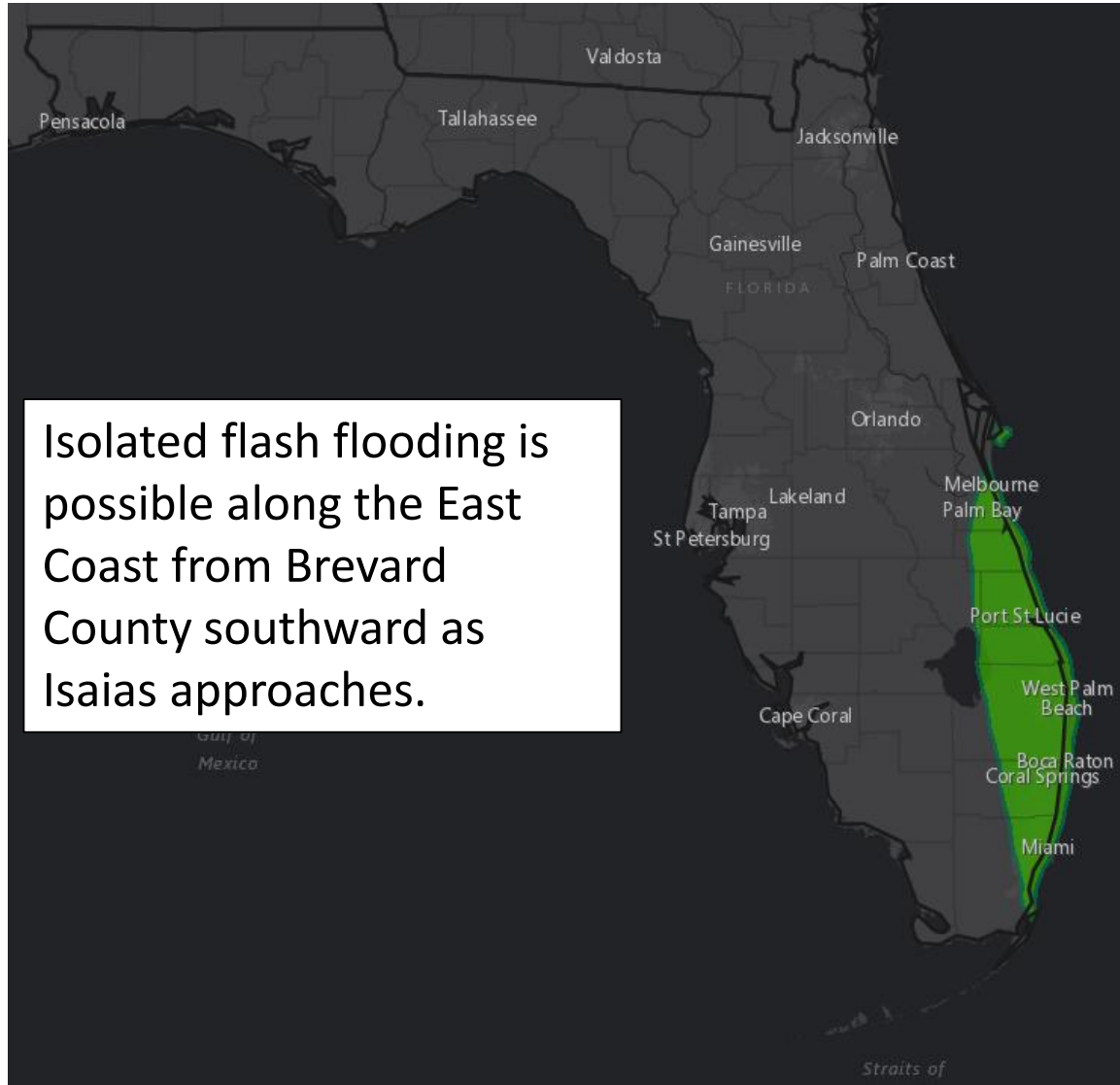
Most rivers are able to handle 3-5" of rainfall, but flooding concerns may rise if heavier rainfall occurs.









# Flash Flood Outlook - Saturday

From the Weather Prediction Center ([LINK](#))

Isolated flash flooding is possible along the East Coast from Brevard County southward as Isaias approaches.



## Understanding WPC Excessive Rainfall Risk Categories

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
<a href="http://www.wpc.ncep.noaa.gov">@NWSWPC</a>	Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
NO Flash Flooding				
  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%**





# Overall Summary

## **Tropical Storm Isaias**

- Isaias's center has reformed along the northern coast of Hispaniola and is now located 155 miles WNW of Punta Cana, Dominican Republic, moving northwest at 20 mph.
- Maximum sustained winds are near 60 mph. Strengthening is forecast, and Isaias is forecast to become a hurricane in the next 36 hours.
- The northwest motion is expected to continue until Saturday before turning more northward then north-northeastward over the weekend.
- Isaias will move through the southern Bahamas on Friday, approach and parallel the Florida East Coast this weekend, then parallel the US East Coast through early next week.

## **Invest 93L (Cabo Verde Islands)**

- A tropical wave near the Cabo Verde Islands is showing some signs of organization. Environmental conditions are currently favorable for development.
- Environmental conditions will become unfavorable for tropical formation over the weekend.
- This system has a 50% chance of formation during the next 5 days. If it were to attain a name, the next name is Josephine.



# Overall Summary

## Florida Outlook:

- **Isaias poses a direct threat to Florida starting as early as Friday night, but more likely beginning Saturday morning.**
- **Tropical Storm Watch:** Indian River, St. Lucie, Martin, Palm Beach, Broward, coastal and metro Miami-Dade
- Heavy rainfall of 2-4" with localized totals possibly double that will be possible across Central & South Florida. 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 issues along the rivers in the Peninsula.
- Isolated tornadoes may be possible, especially if the center moves over the state.
- It remains too early to get specific about storm surge impacts to the state, but the potential exists for some storm surge impacts along the East Coast.
- Elevated surf, dangerous rip currents, and beach erosion will be likely at most Atlantic beaches this weekend.

The next briefing packet will be issued Friday morning by 8 AM ET. 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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