



TROPICAL UPDATE



11:00 AM EDT

Thursday, July 30, 2020

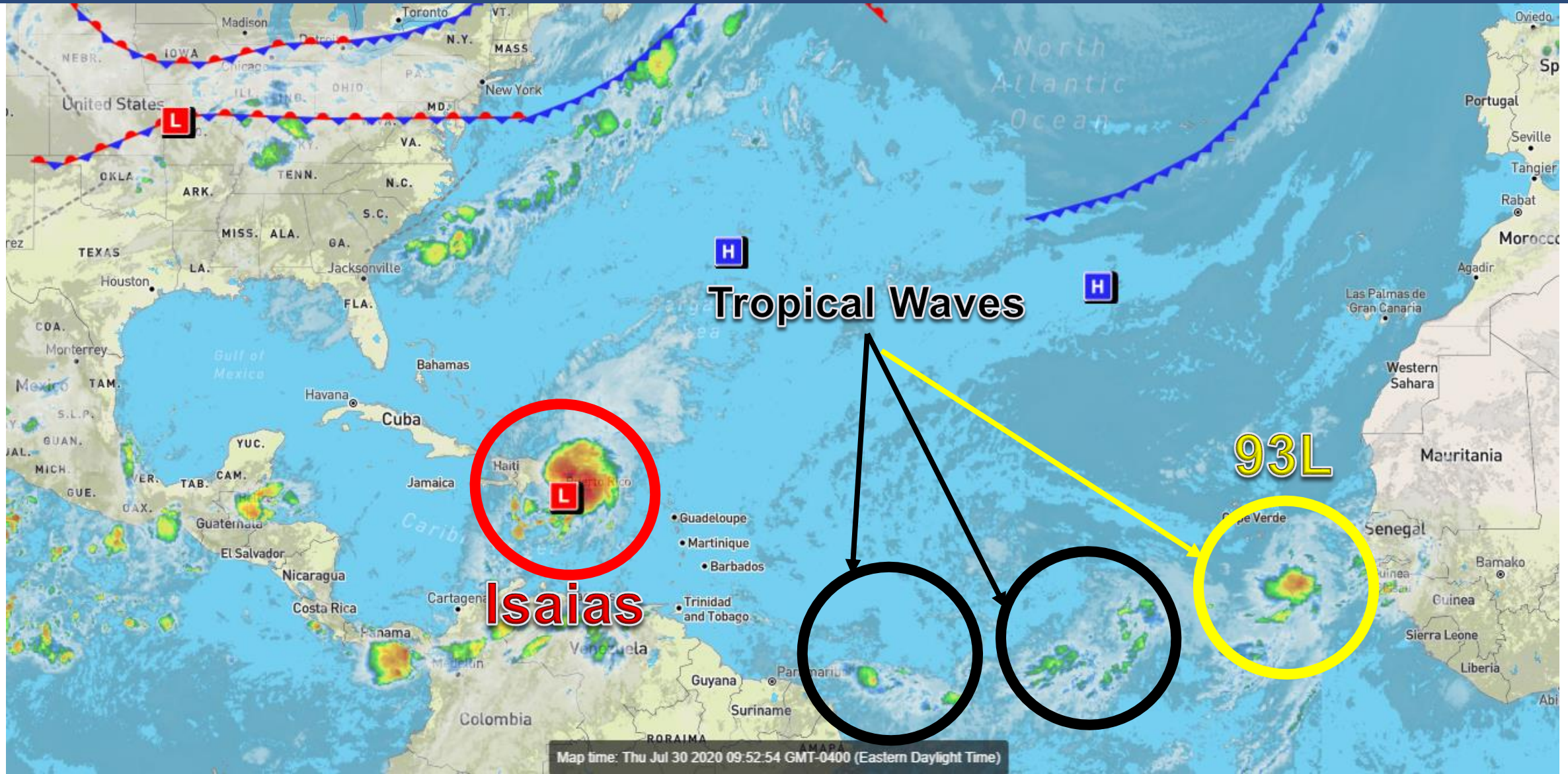
Tropical Storm Isaias, Invest 93L (20%)

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.



Atlantic Basin Satellite Image

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





Tropical Weather Outlook

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



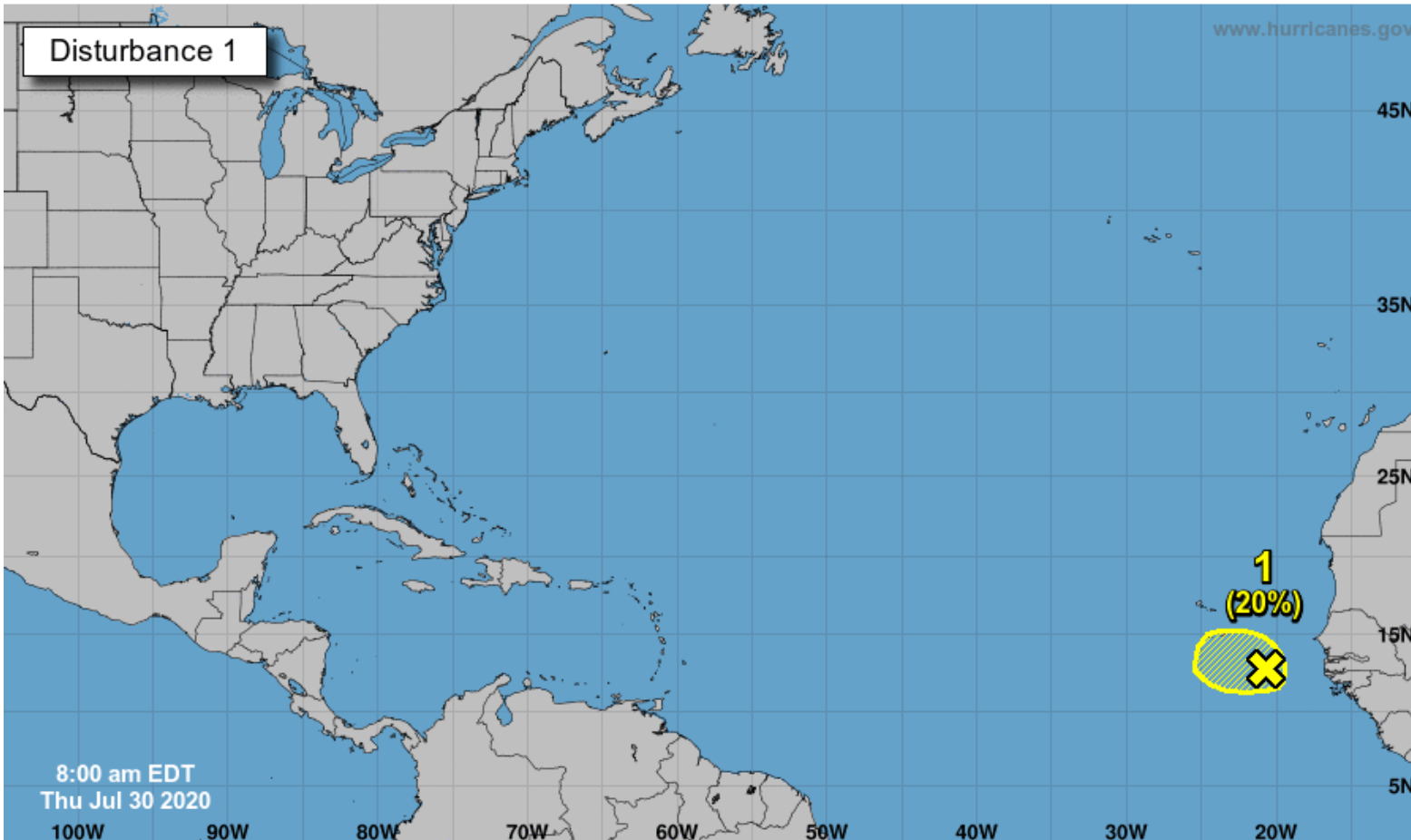
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 1



8:00 am EDT
Thu Jul 30 2020

Showers and thunderstorms associated with a broad area of low pressure, located a few hundred miles south-southeast of the Cabo Verde Islands, have become more concentrated this morning. Some development of this system is possible during the next day or two before environmental conditions become unfavorable.

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

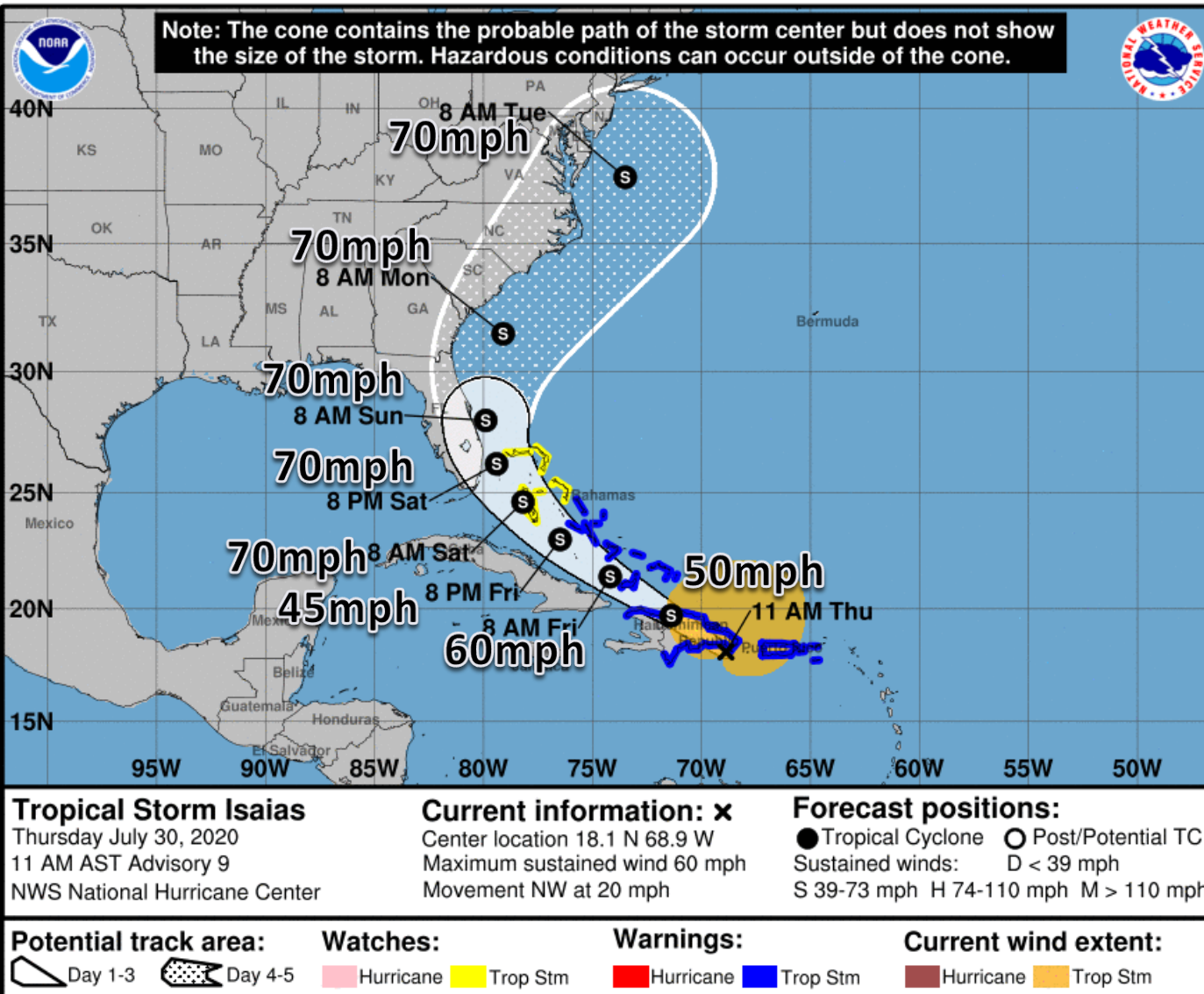
***Formation chance through 5 days...low...20%**

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



Official Forecast Track

From the National Hurricane Center – Tropical Storm Isaias



- The center of Tropical Storm Isaias is about 50 miles southwest 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 north-northeast
- The system will move over Hispaniola today, then approach the Florida East Coast Saturday then move away from Florida 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.
- Watches for Florida may be issued later today.

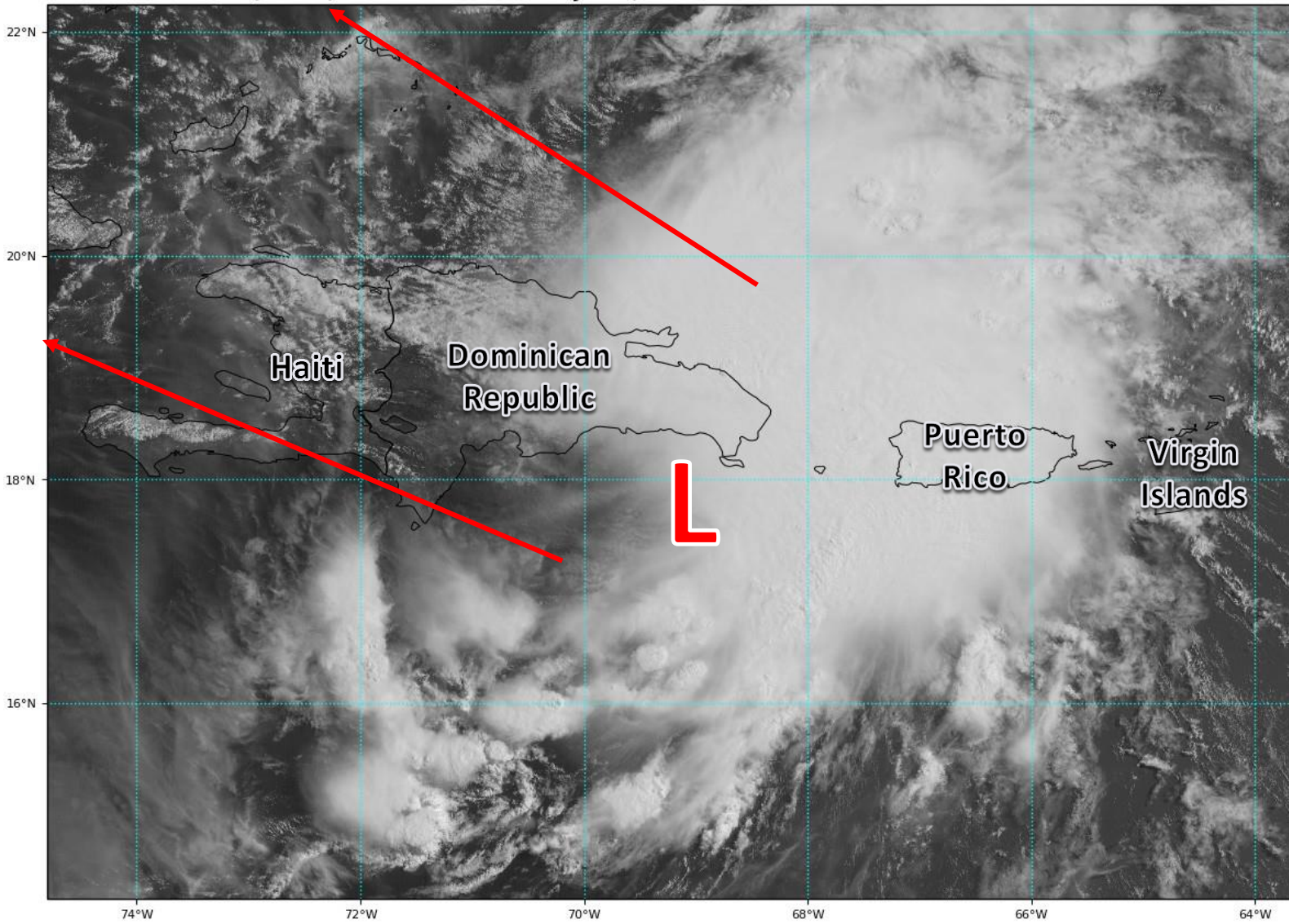


Satellite Imagery

Caribbean Sea – PTC #9

GOES-16 Channel 2 (visible) Reflectance at 13:45Z Jul 30, 2020

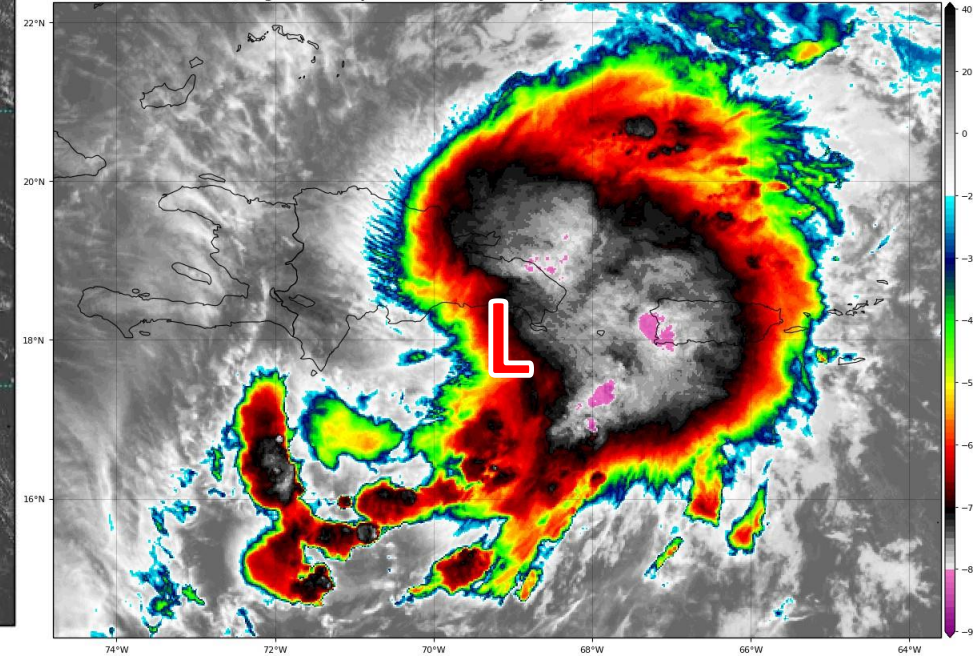
TROPICALTIDBITS.COM



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 13:55Z Jul 30, 2020

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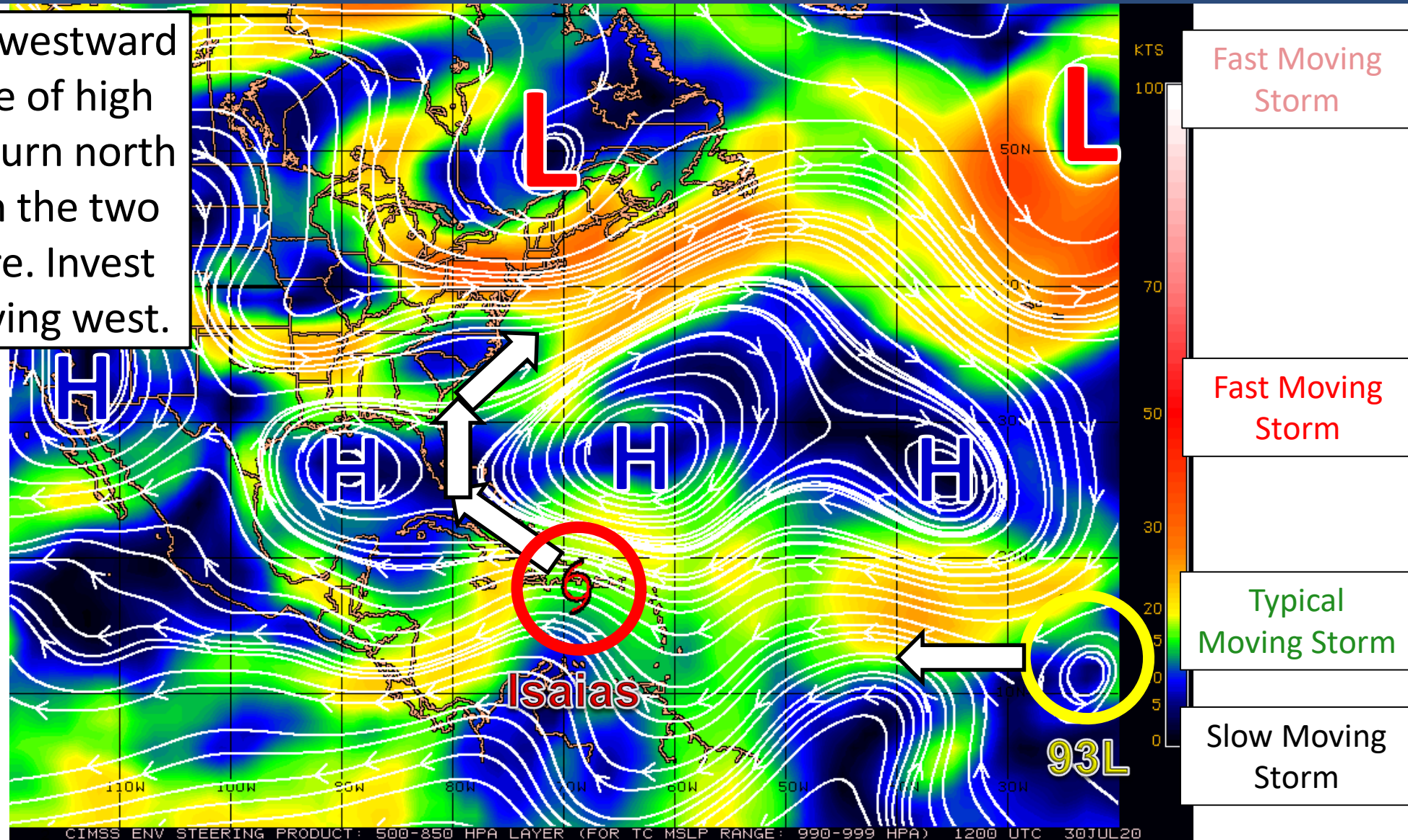


Steering Currents

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 continue moving west.





Model Forecast Tracks

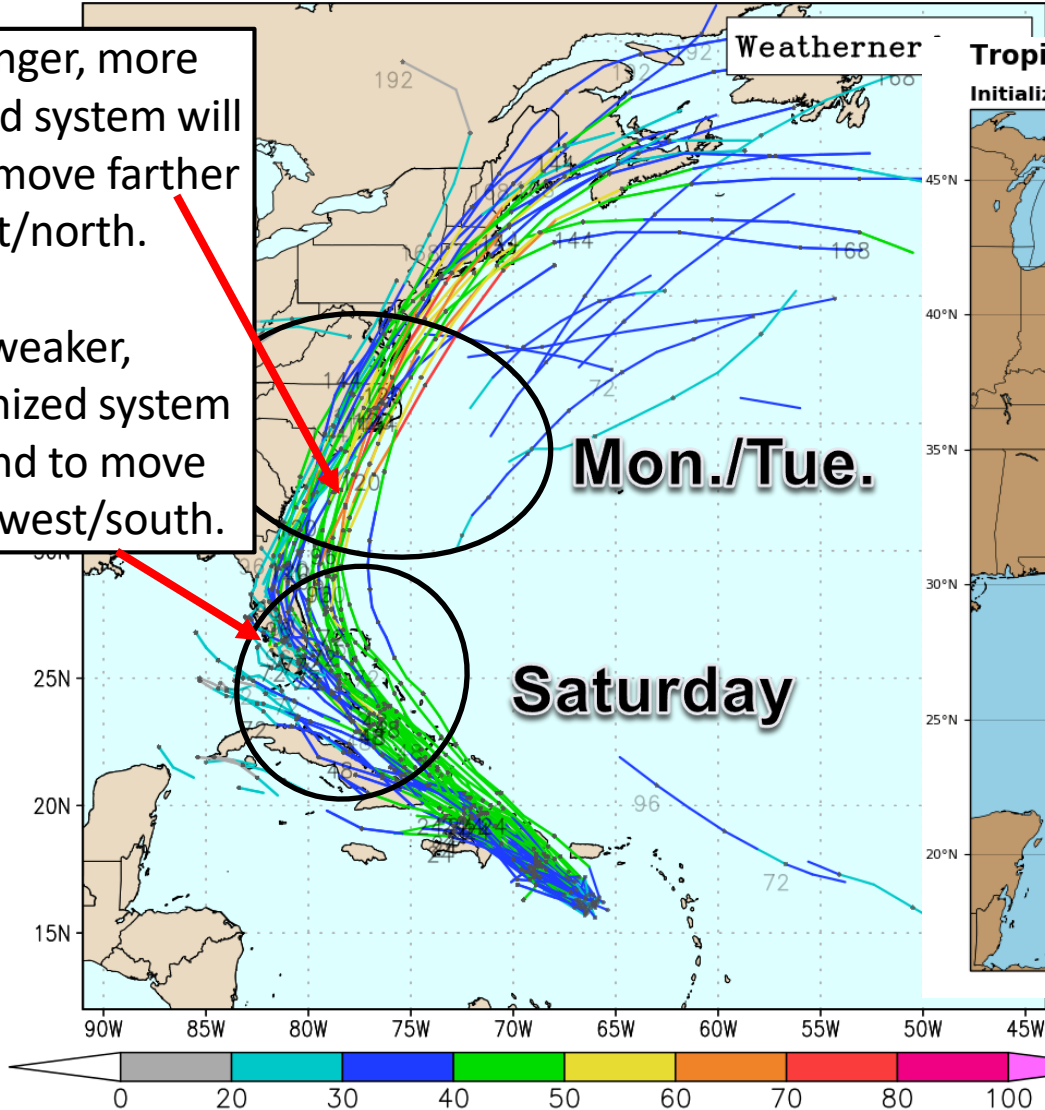
Ensembles, Dynamical, and Statistical Models

ECMWF Ensemble, init: 2020073000, AL09 Isaias

color = max wind (kt)

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

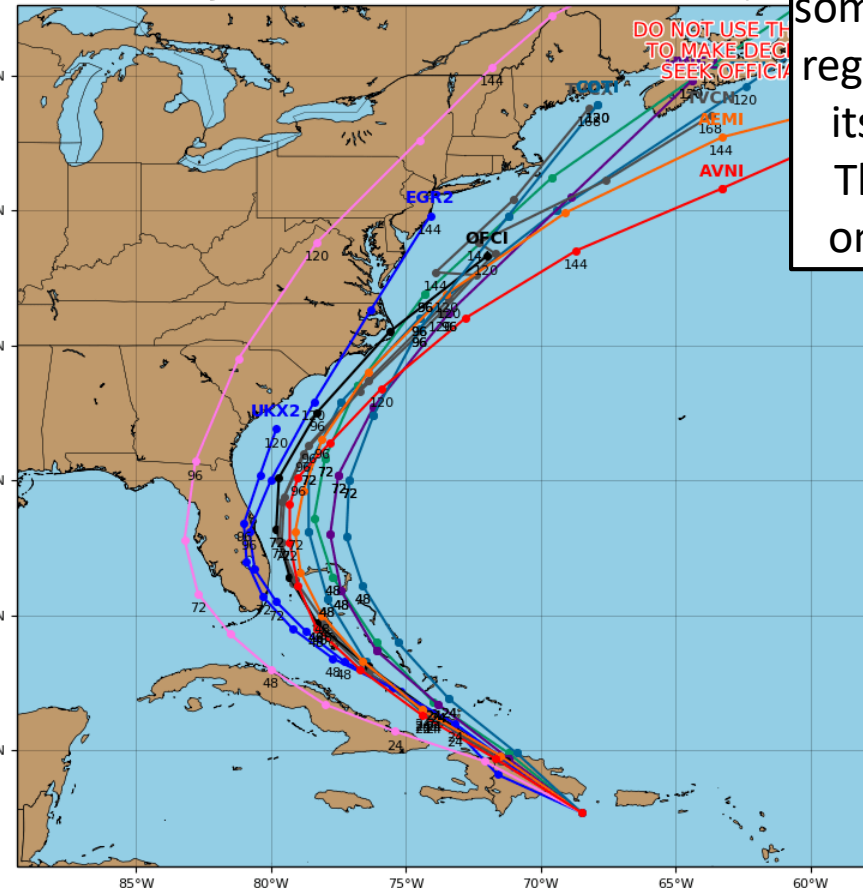
A weaker, disorganized system will tend to move farther west/south.



Tropical Storm ISAIAS Model Track Guidance

Initialized at 12z Jul 30 2020

Levi Cowan - tropical

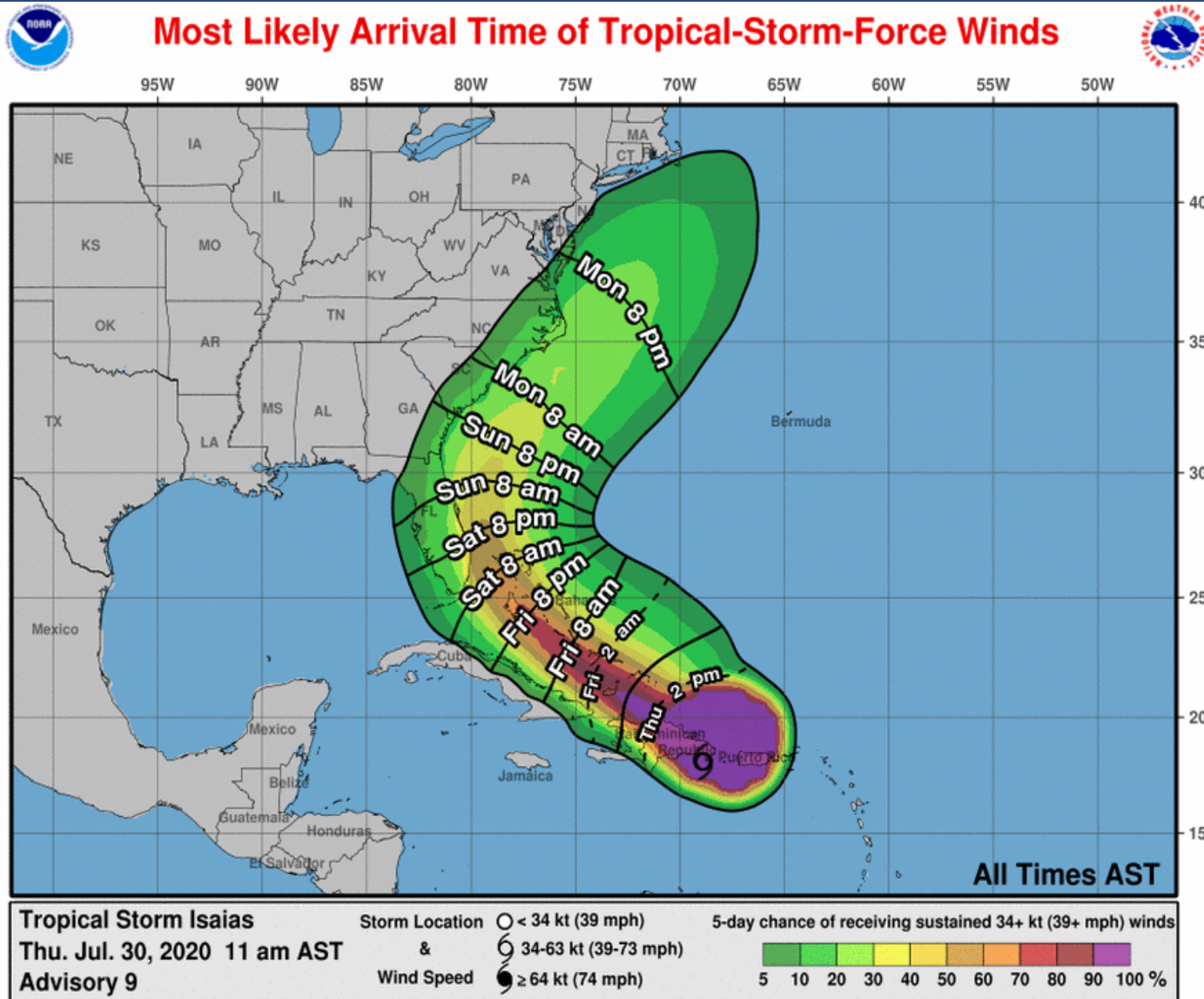


Tracks have shifted east since yesterday, but there still remain some uncertainty in the forecast regarding when Isaias will make its north and northeast turn. There will be more certainty once Isaias clears Hispaniola.



Time of Arrival & Wind Speed Probabilities

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



Key West: 8%
Miami: 29%
Naples: 14%
West Palm Beach: 46%
Ft. Lauderdale: 45%
Ft. Pierce: 43%
Daytona Beach: 19%
Orlando: 19%
Tampa: 12%
Jacksonville: 12%

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.

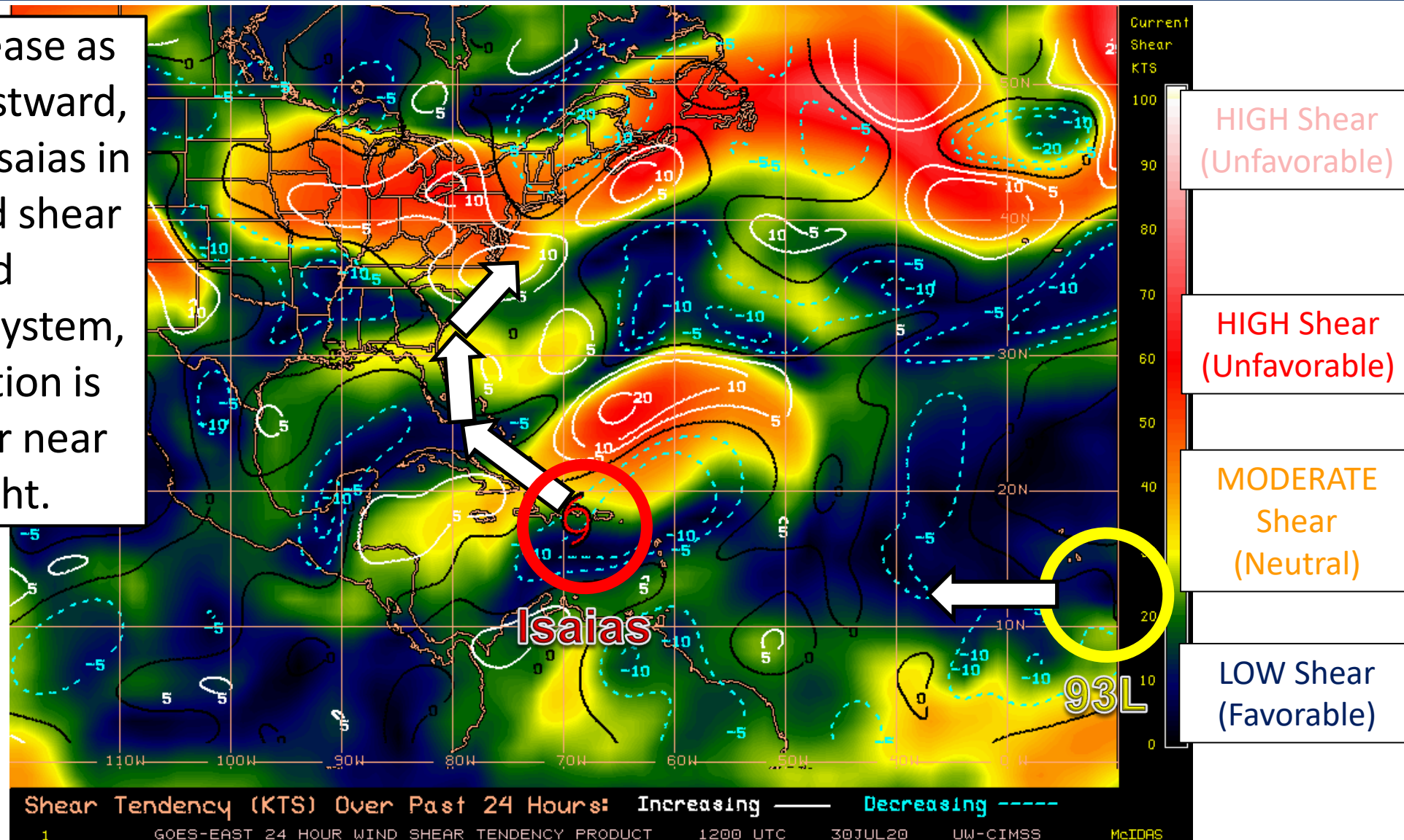


Wind Shear

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.

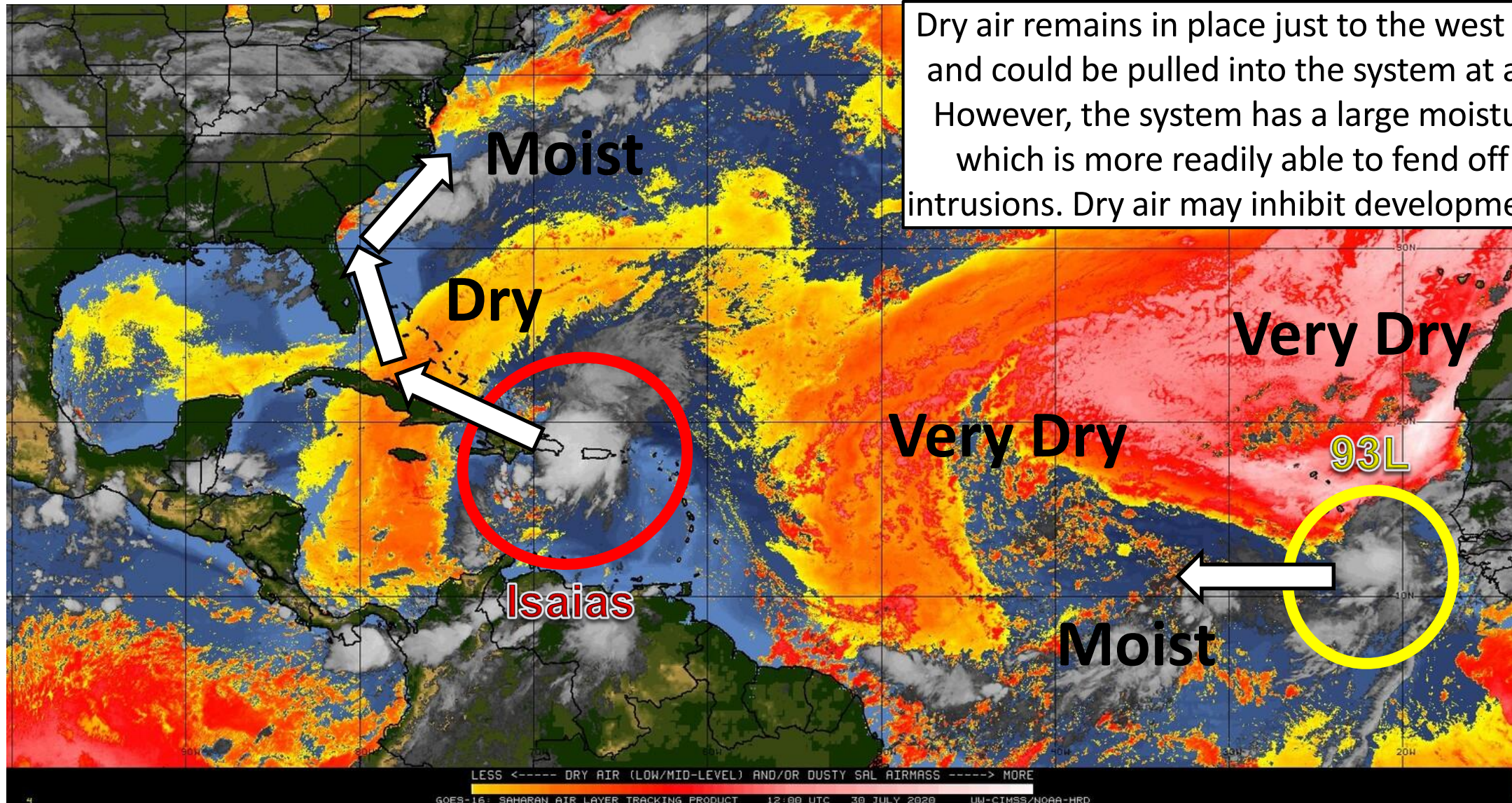




Dry Air & Saharan Dust

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.



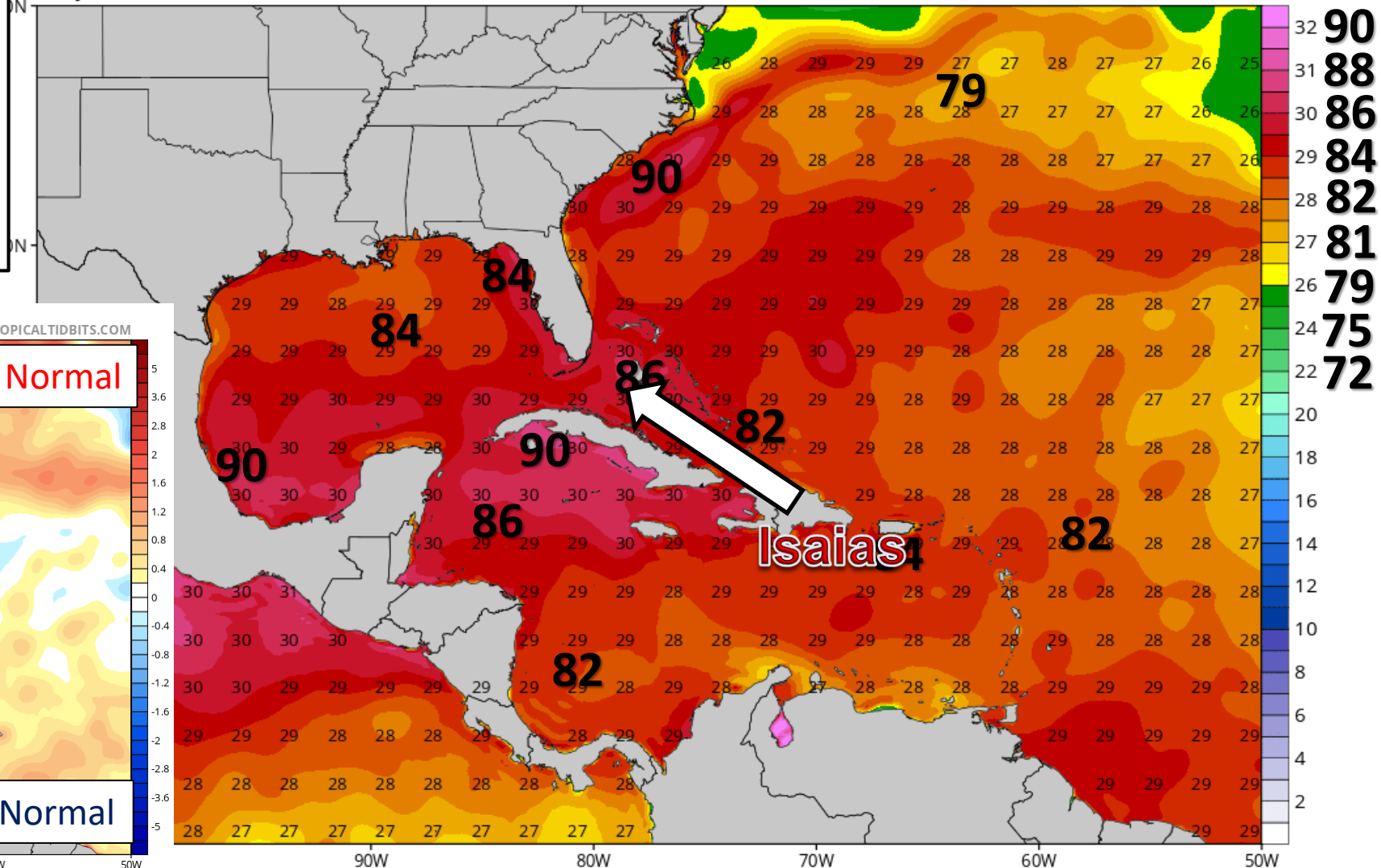
Sea Surface Temperatures & Anomalies

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.

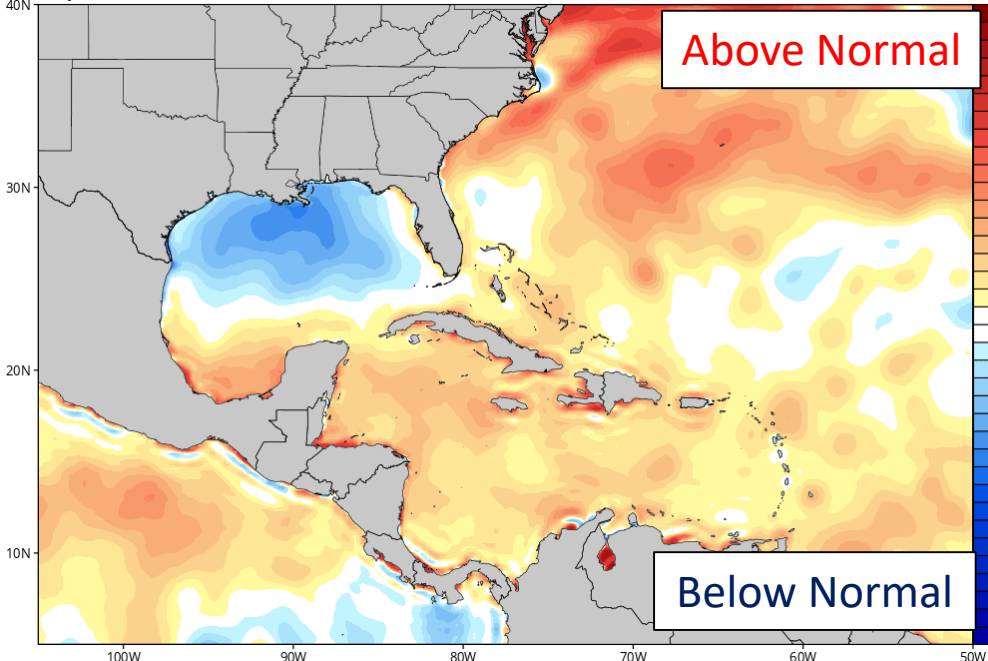
CDAS Sea Surface Temperature (°C)

Analysis Time: 06z Jul 30 2020



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

Analysis Time: 06z Jul 30 2020





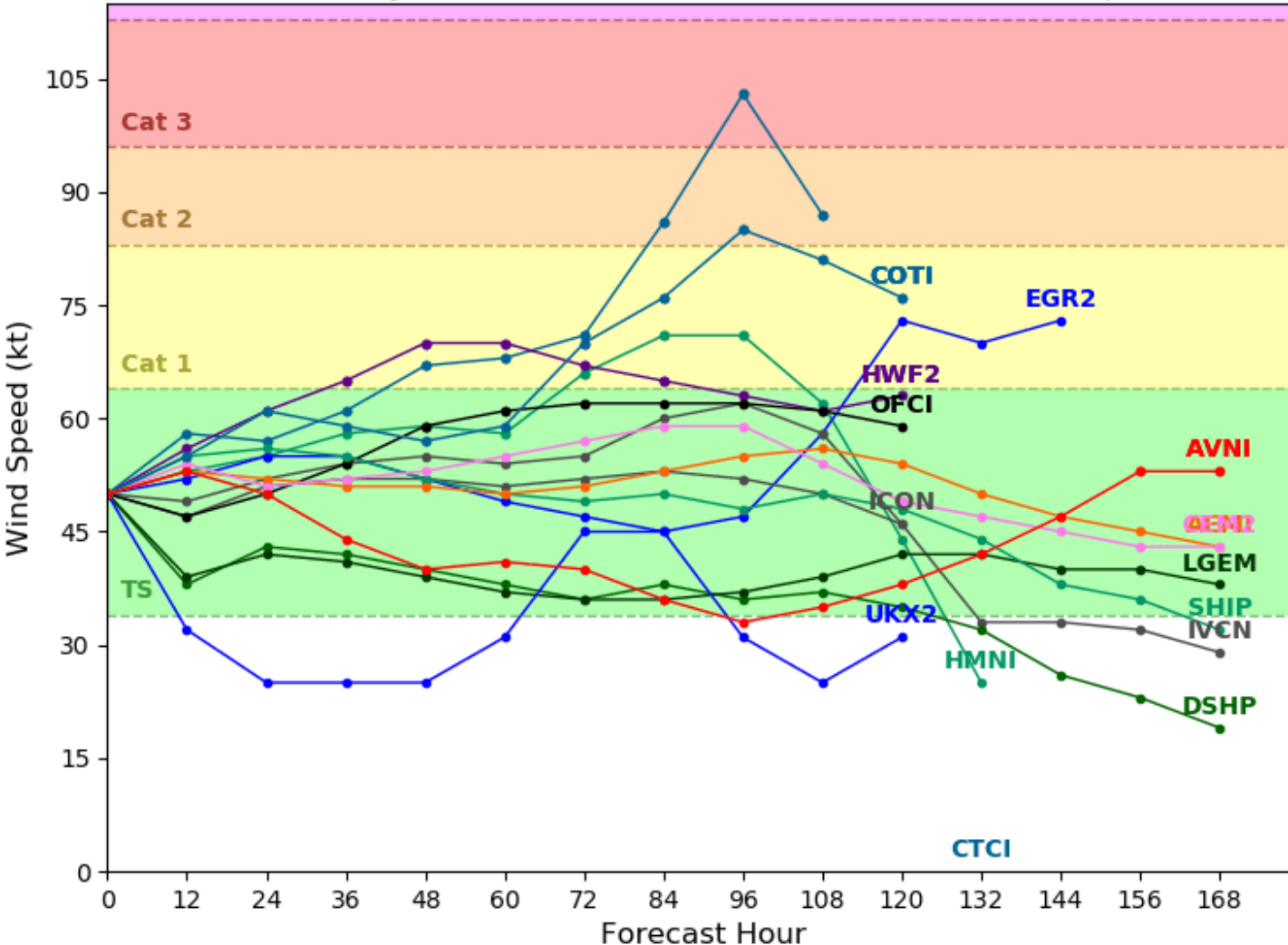
Model Forecast Intensity

Dynamical and Statistical Models – Tropical Storm Isaias

Tropical Storm ISAIAS Model Intensity Guidance

Initialized at 12z Jul 30 2020

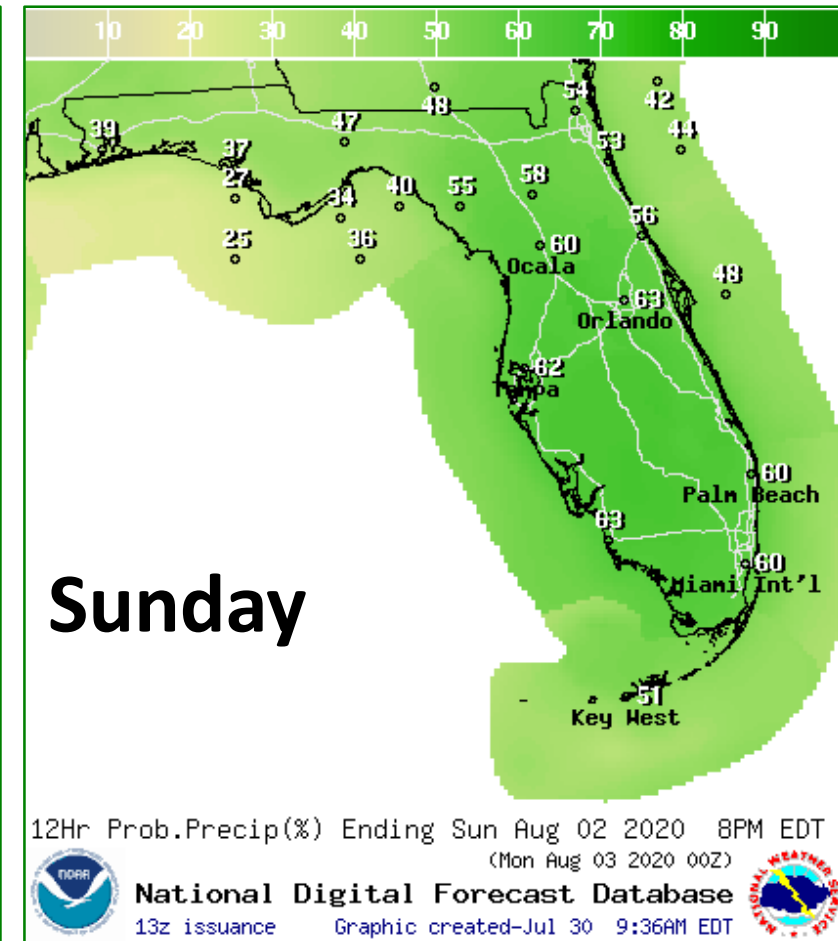
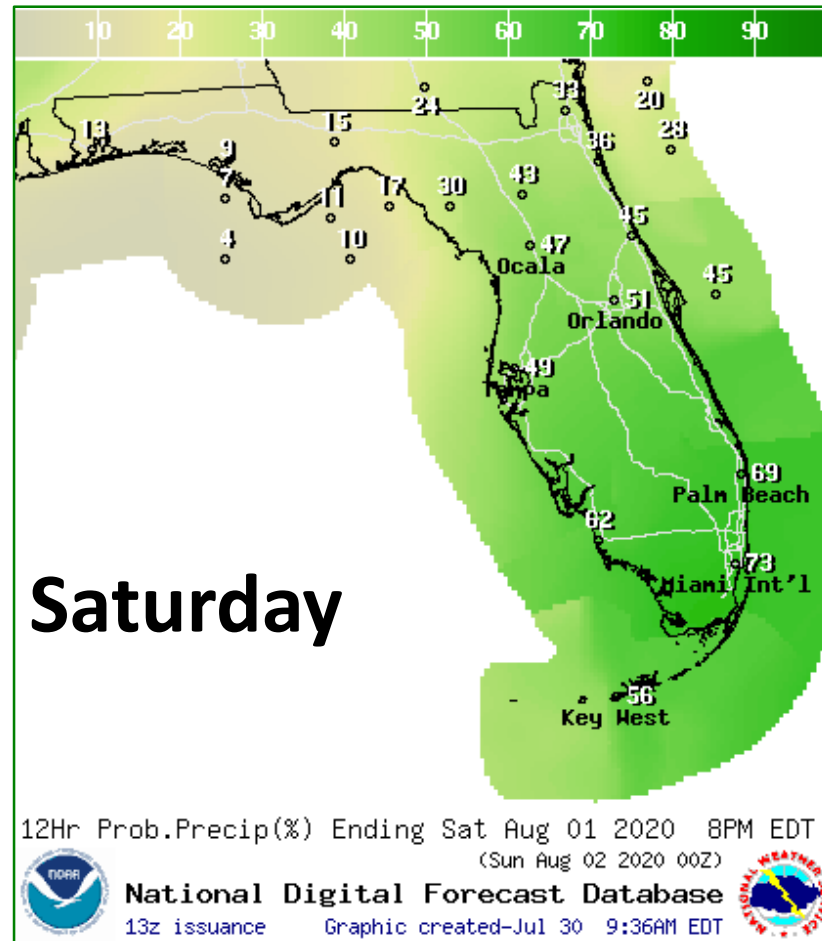
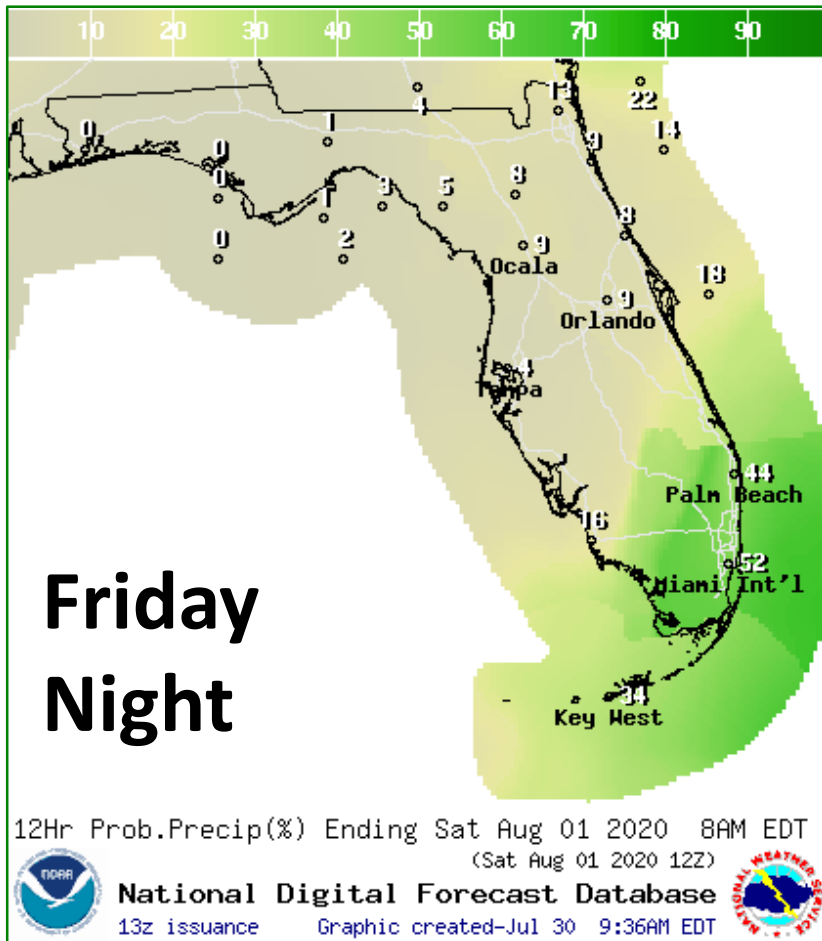
Levi Cowan - tropicaltidbits.com



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

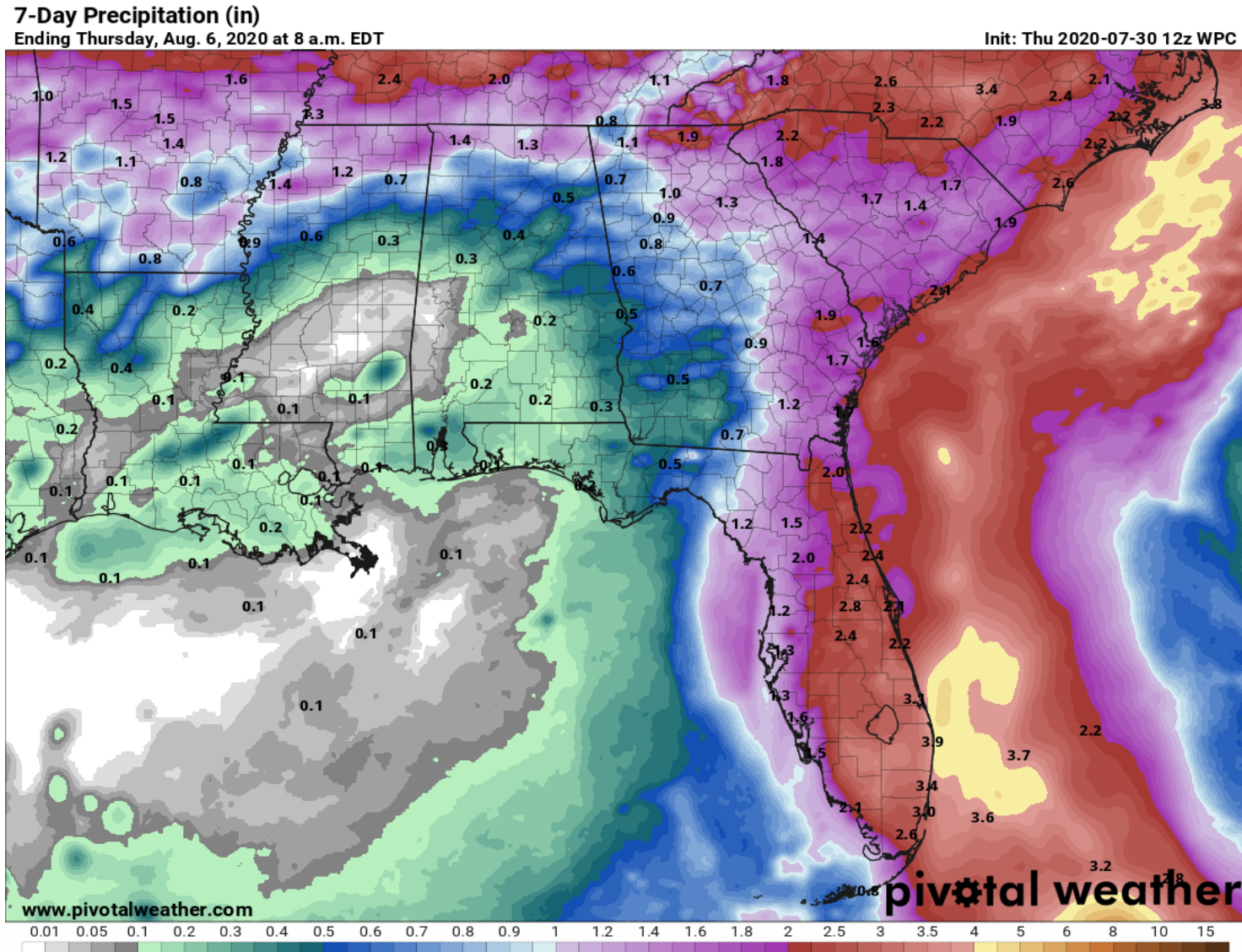


Rain chances in Southeast Florida will begin increasing Friday night, then across the Peninsula on Saturday, and into North Florida by Sunday.



Forecast Rainfall Totals Next 7 Days

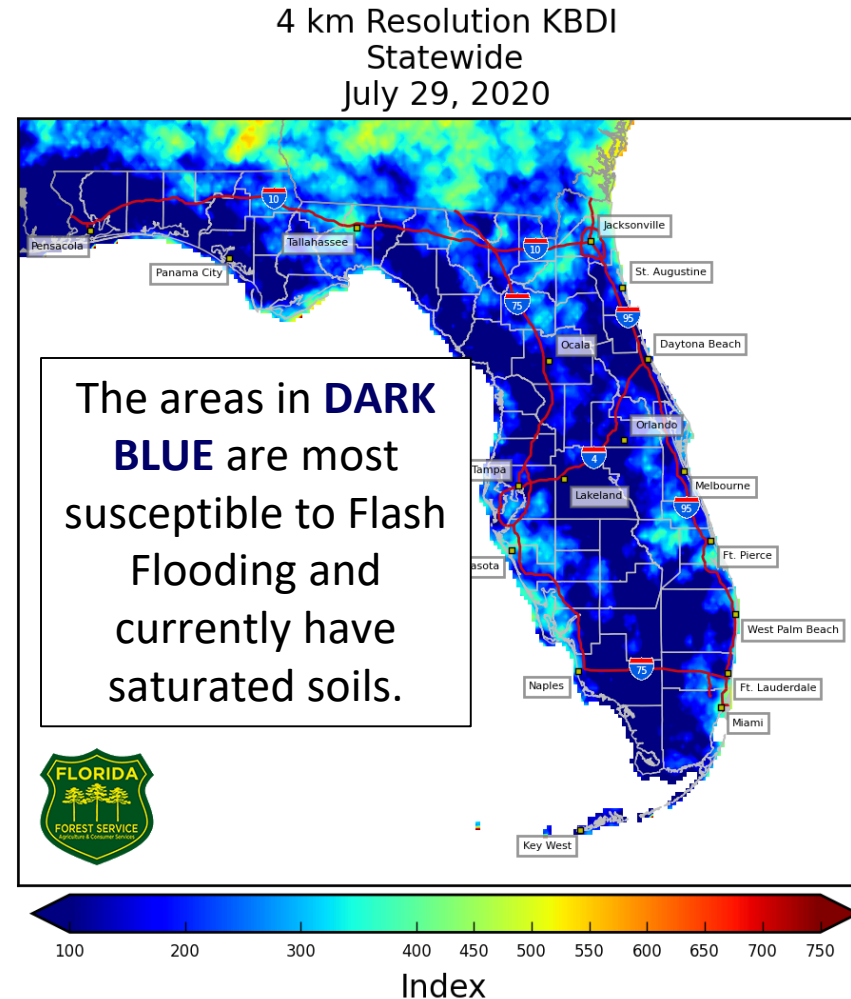
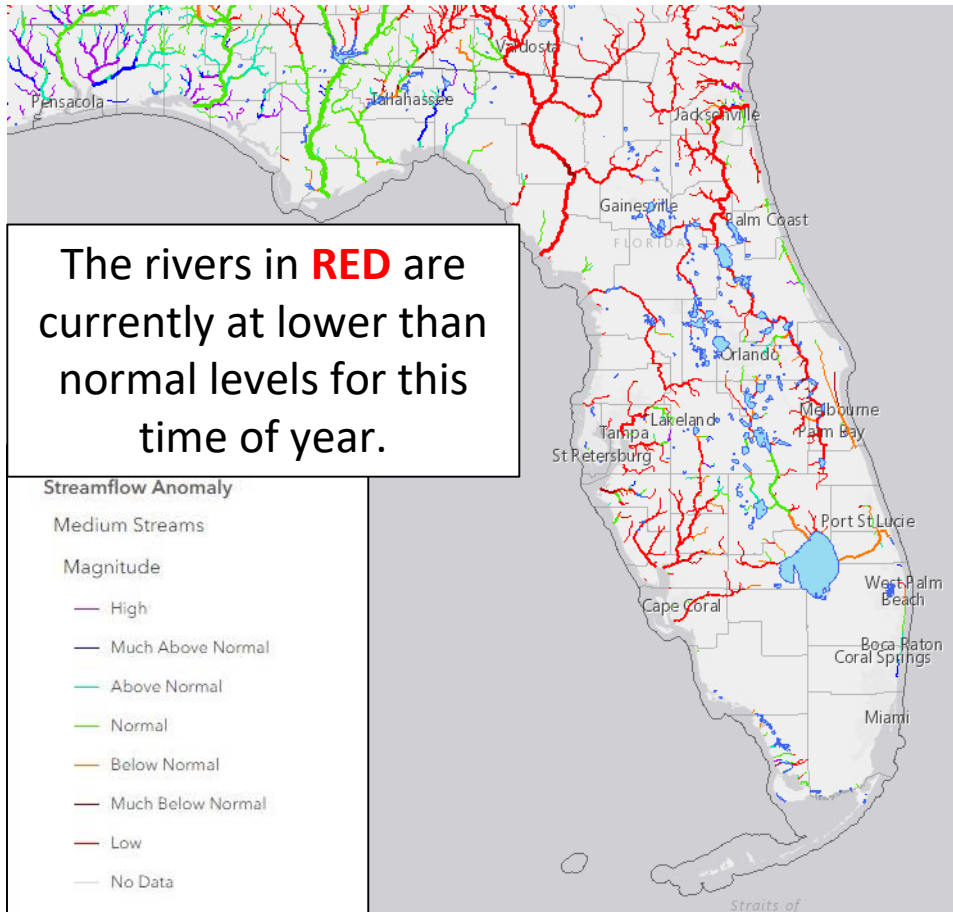
- About 2-4" of rain are possible along the East Coast and in South Florida
- Localized totals double these amounts will be possible.
- Rainfall totals and consequent flash flood threat will be dependent on track of Isaias
- A western track would lead to higher rainfall totals across the Peninsula
- 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.

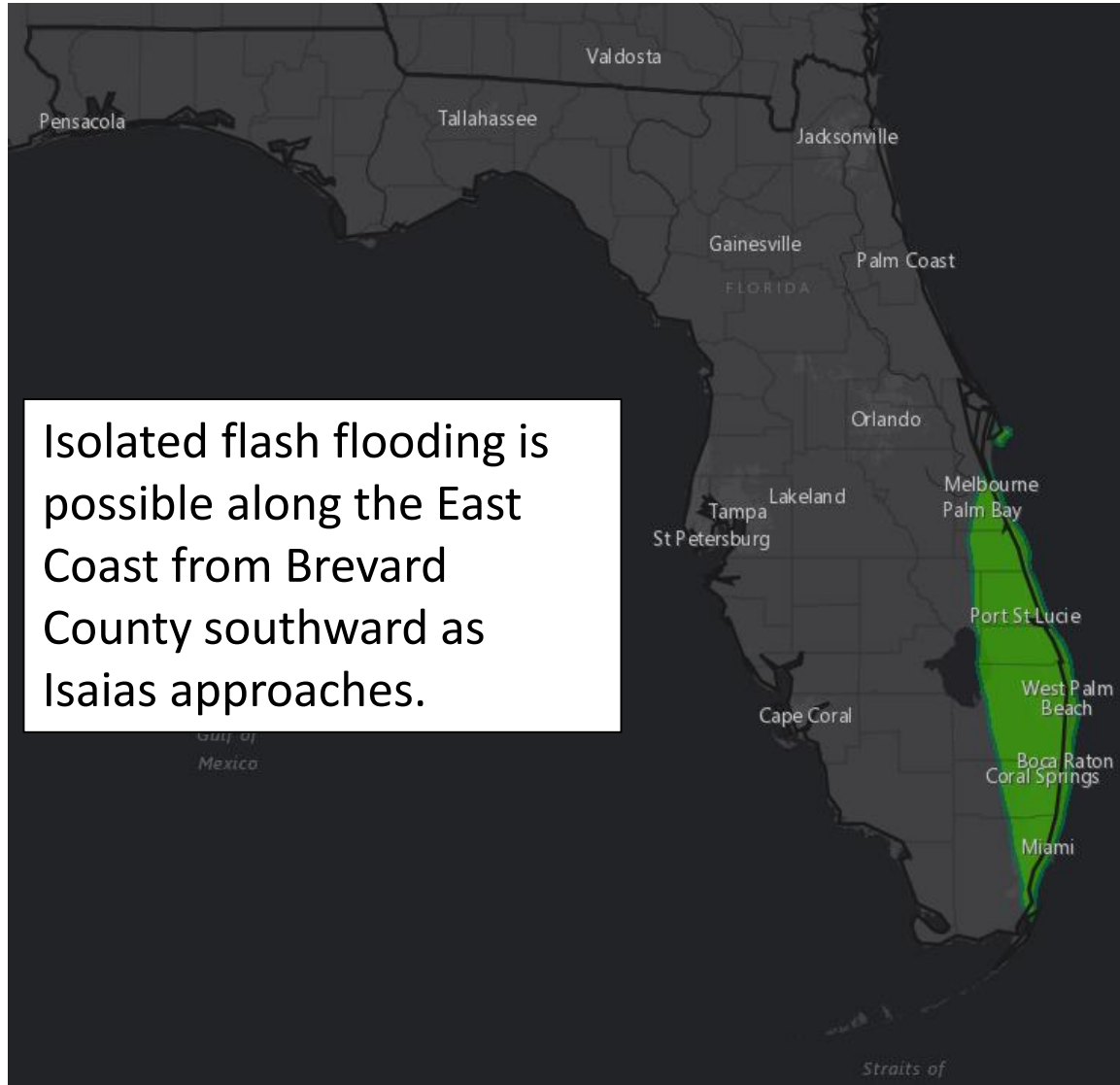
Most rivers are able to handle 3-5" of rainfall, but flooding concerns may rise if heavier rainfall occurs.









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
@NWSWPC	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

Potential Tropical Cyclone Nine

- PTC #9's circulation became better defined last night, and it has been upgraded to Tropical Storm Isaias.
- Isaias is nearing landfall on Hispaniola this morning, but the center has become ill-defined due to land interaction.
- Maximum sustained winds are near 60 mph. Some weakening is expected as Isaias moves over Hispaniola, but strengthening is forecast once it moves back over water.
- The track over Hispaniola as well as the presence of wind shear and dry air introduce uncertainty in the forecast intensity and track. Confidence in the forecast should grow once Isaias clears Hispaniola
- Models have shifted east overnight, but there is still about an equal chance of the system coming inland over the Florida Peninsula or remaining off the East Coast.
- Changes in the track and intensity forecast are still possible over the next few advisories. There is the possibility that Isaias may reach hurricane intensity if it remains offshore of the East Coast.



Overall Summary

Florida Outlook:

- **Isaias poses a direct threat to Florida starting as early as Friday night, but more likely beginning Saturday morning.**
- 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.
- There remains a threat for tropical storm force winds across the Peninsula, which will be dependent on the track.
- 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 and dangerous rip currents will be likely at most Atlantic beaches this weekend.
- Tropical Storm Watches may be issued later today for parts of the state, depending on the track of the storm.

The next briefing packet will be issued this evening with the 5 PM ET 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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