



# TROPICAL UPDATE



11:00 AM EDT

Saturday, July 25, 2020

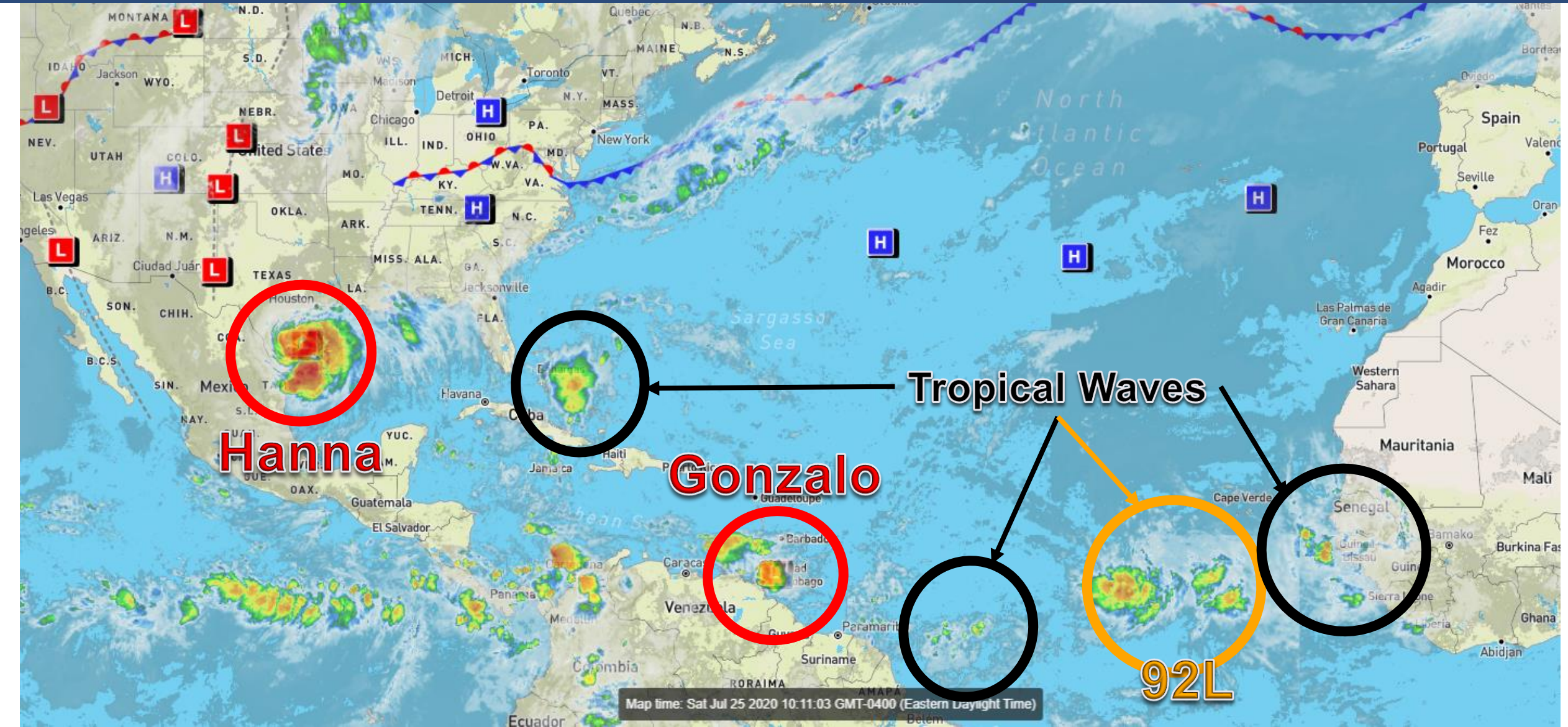
Hurricane Hanna, Tropical Storm Gonzalo &  
Invest 92L (60%)

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





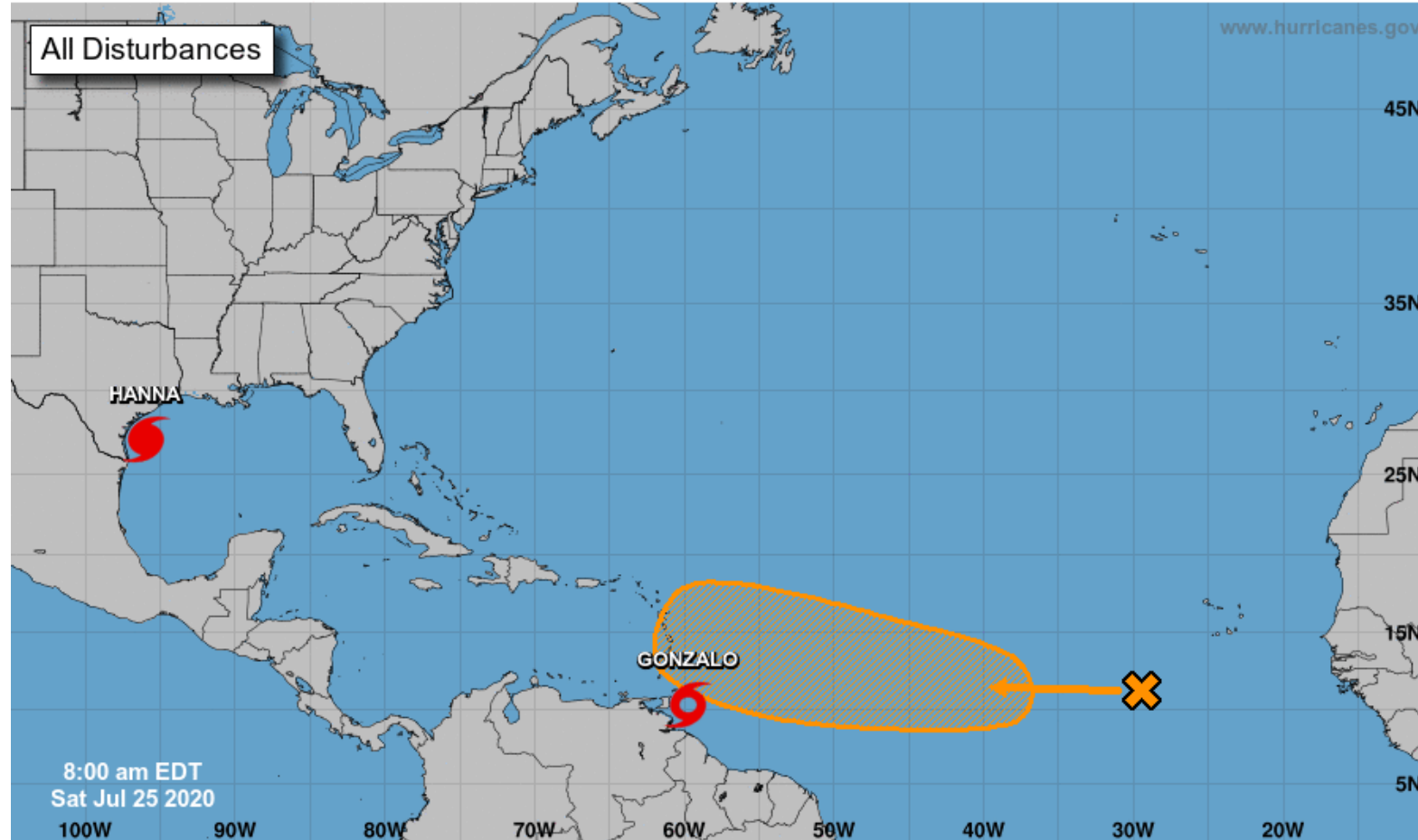


# Tropical Weather Outlook

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

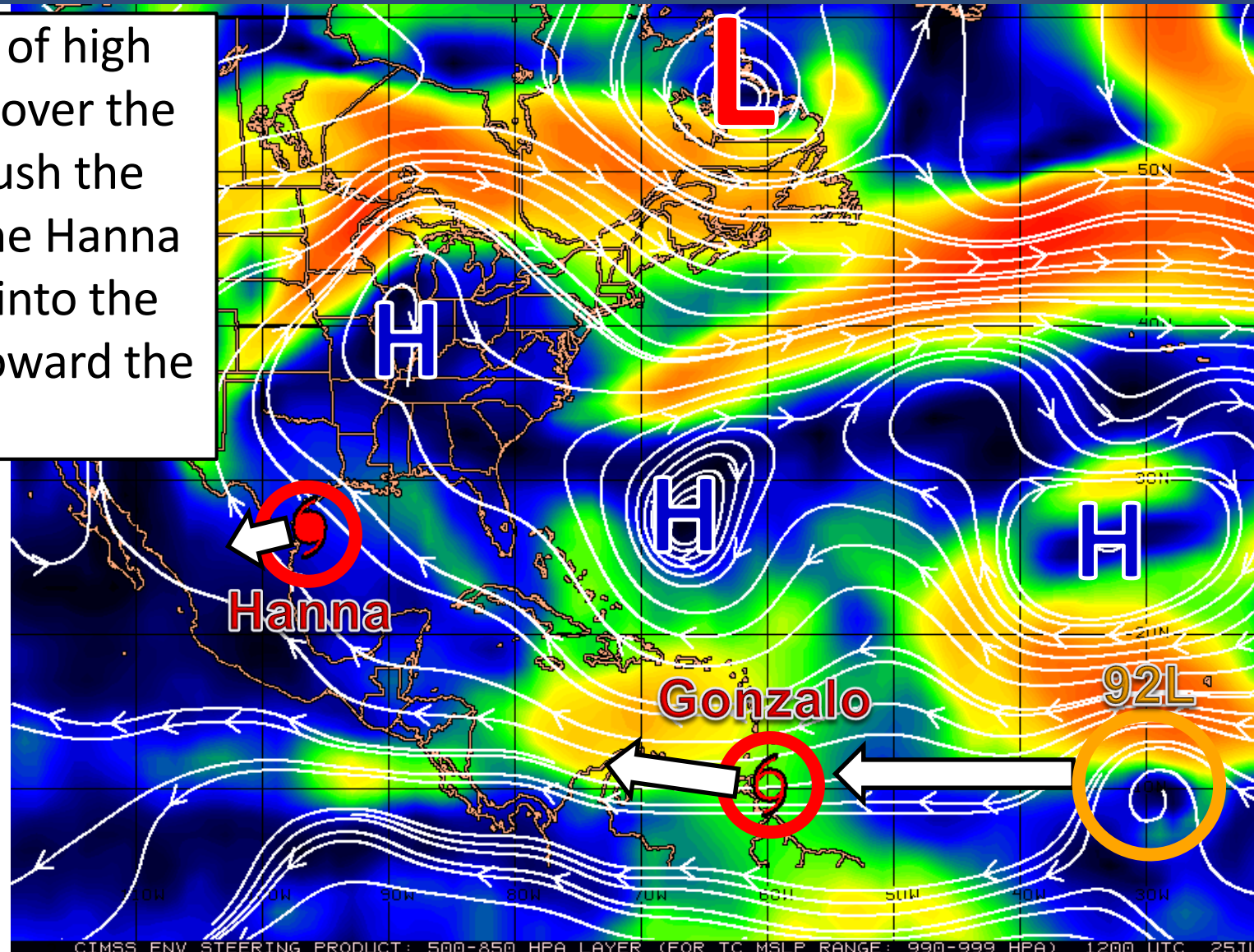


# Steering Currents

What is moving the system?

A large, strong area of high pressure is centered over the Atlantic. This will push the tropical systems to the Hanna into Texas, Gonzalo into the Caribbean, and 92L toward the Caribbean.

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



KTS

100

70

50

30

20

15

10

5

0

Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm





# Wind Shear

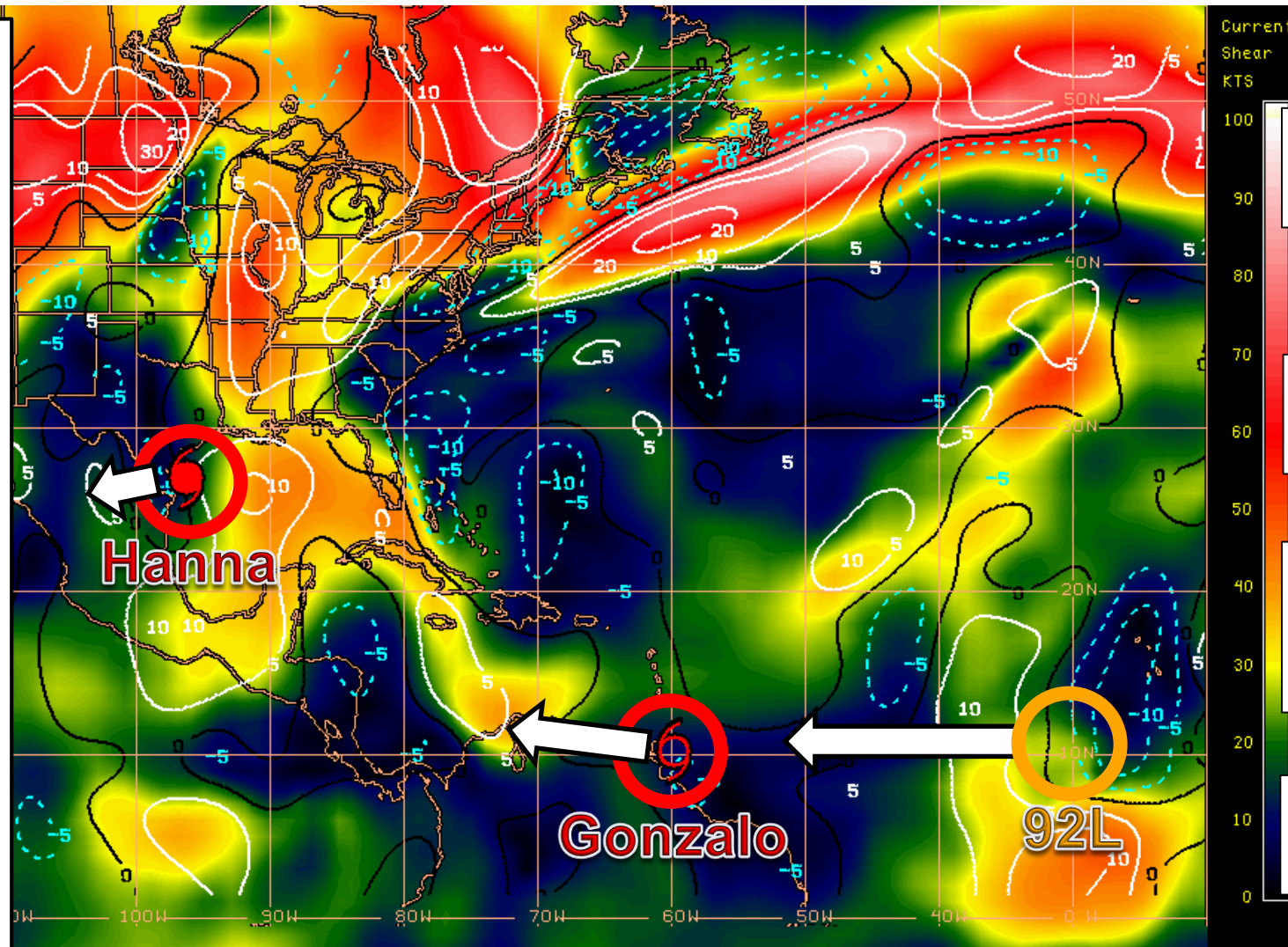
Is the environment favorable for the system?

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 around Hanna remains somewhat low, but it's running out of water to strengthen.

Wind shear remains light around Gonzalo, but is increasing as it moves into the Caribbean.

Wind shear over the eastern Atlantic is high, but should lessen as the wave moves westward.



HIGH Shear  
(Unfavorable)

HIGH Shear  
(Unfavorable)

MODERATE  
Shear  
(Neutral)

LOW Shear  
(Favorable)

Shear tendency (KTS) Over Past 24 Hours: Increasing — Decreasing - - - -

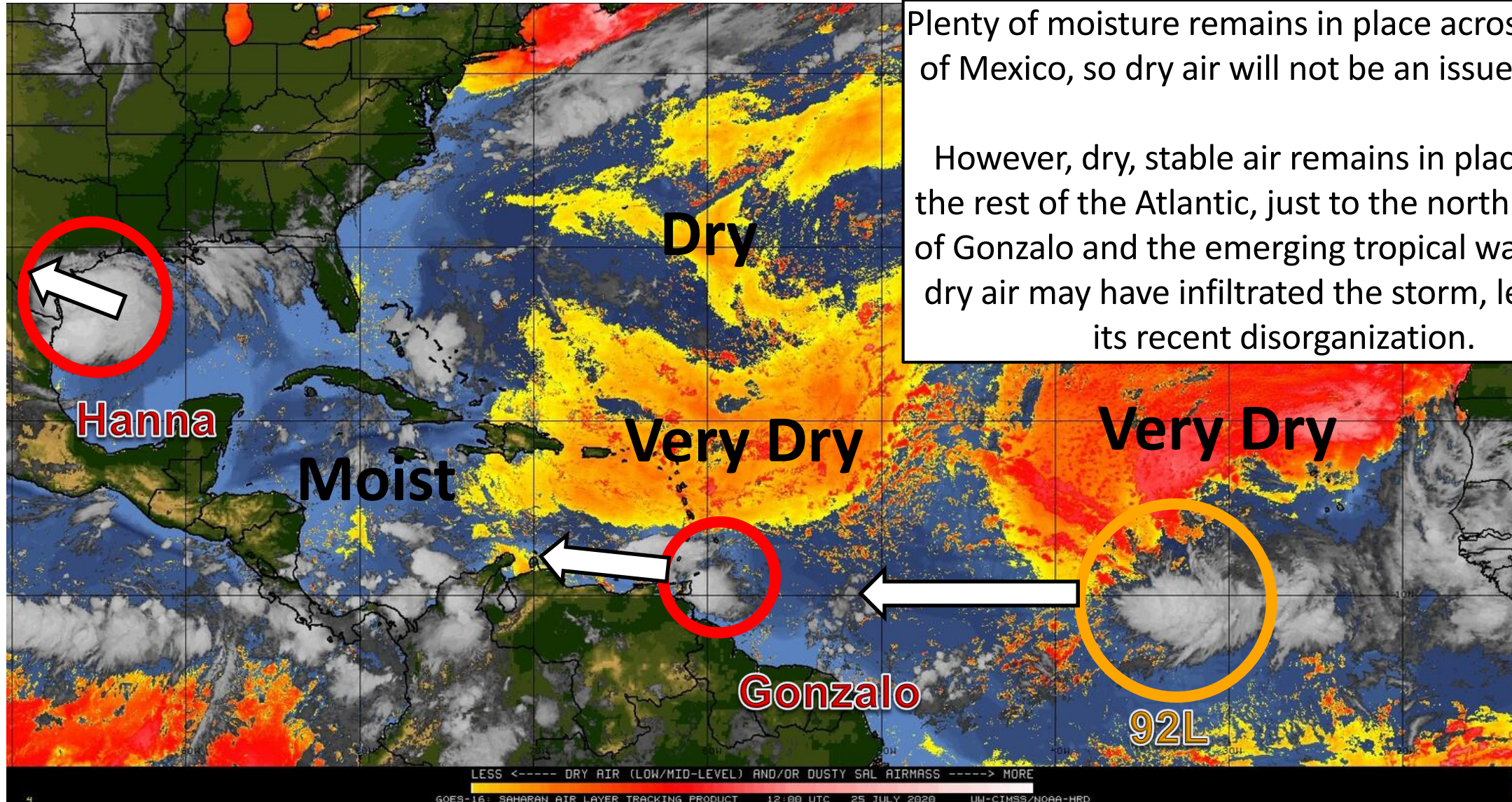




# Dry Air & Saharan Dust

Is the environment favorable for the system?

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



Plenty of moisture remains in place across the Gulf of Mexico, so dry air will not be an issue for TD 8.

However, dry, stable air remains in place across the rest of the Atlantic, just to the north and west of Gonzalo and the emerging tropical wave. Some dry air may have infiltrated the storm, leading to its recent disorganization.





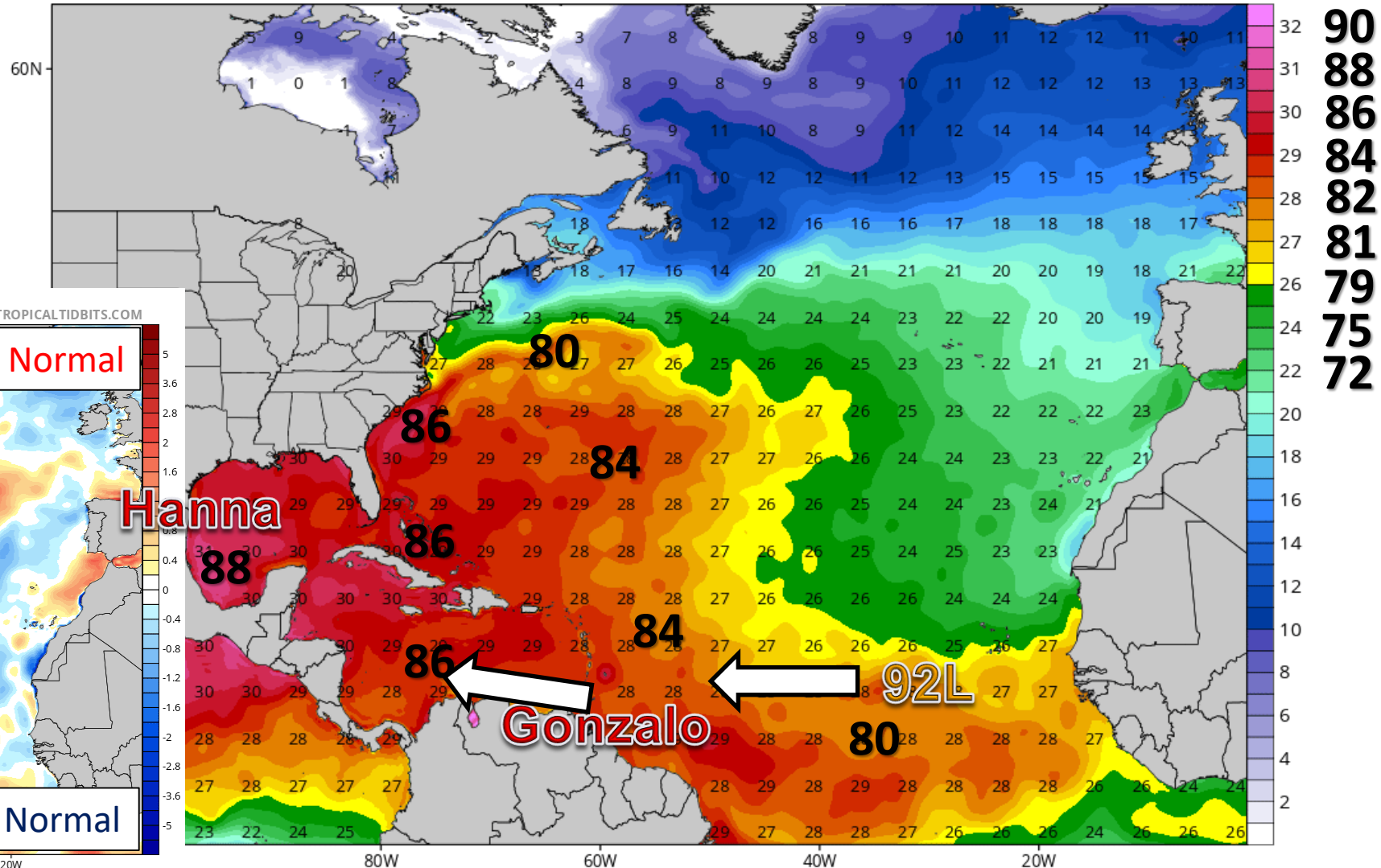
# Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Atlantic basin.

CDAS Sea Surface Temperature (°C)

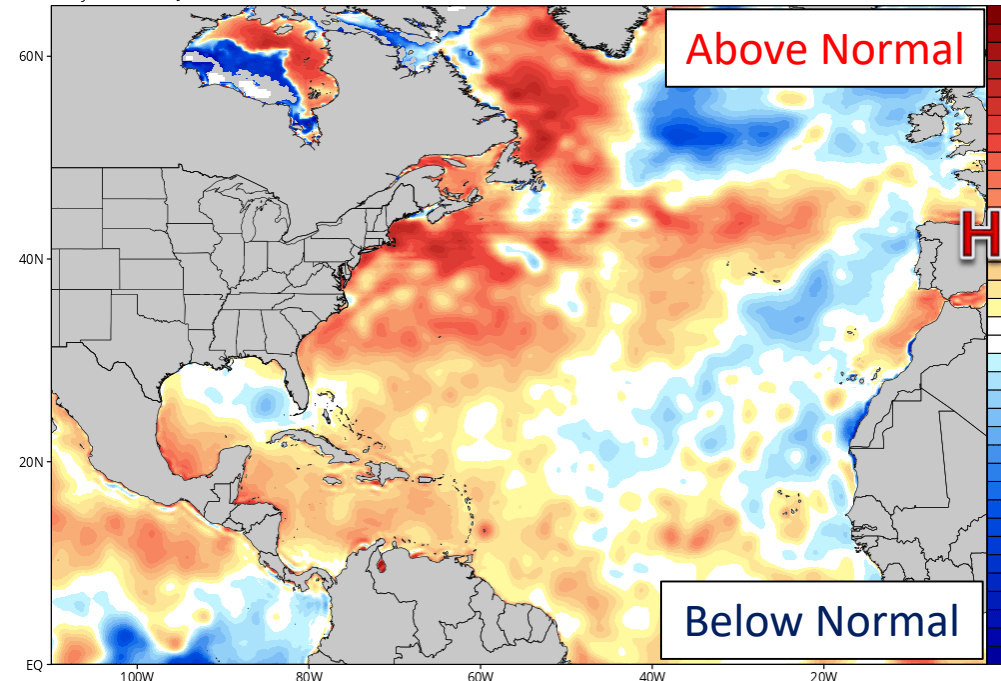
Analysis Time: 06z Jul 25 2020



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

Analysis Time: 06z Jul 25 2020

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Above Normal

Below Normal

Hanna

Gonzalo

92L

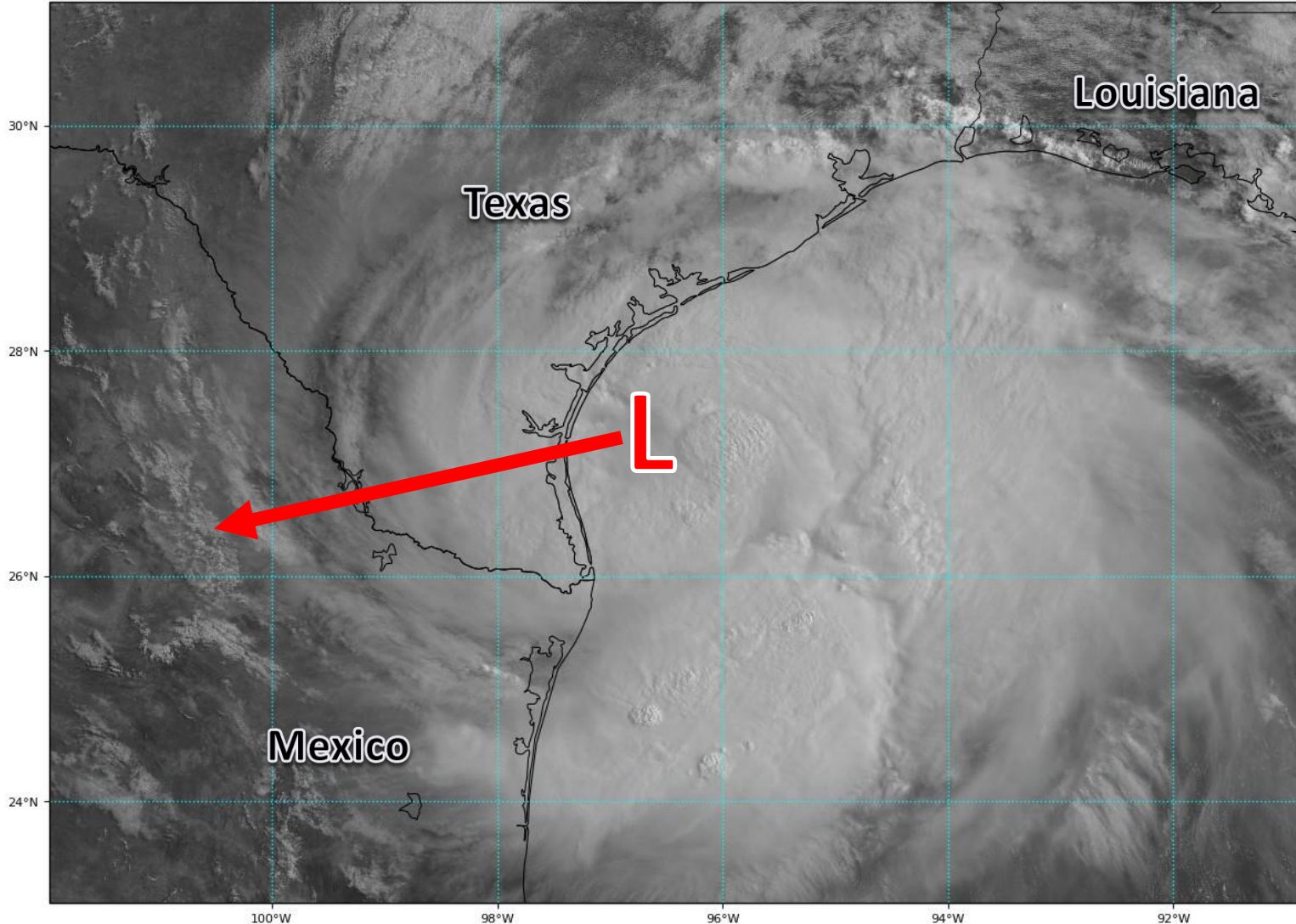


# Satellite Imagery

## Gulf of Mexico – Hurricane Hanna

GOES-16 Channel 2 (visible) Reflectance at 14:17Z Jul 25, 2020

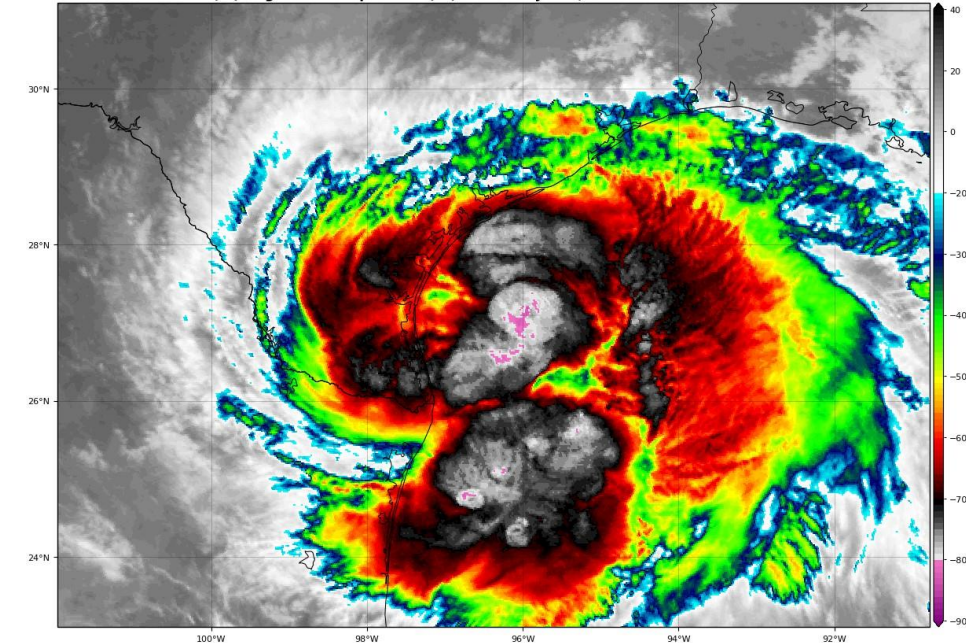
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Hanna has become much more organized over the last couple days. Hurricane Hunters found that winds have strengthened enough to classify Hanna as a hurricane, making Hanna the first hurricane of the 2020 Atlantic Hurricane Season.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:22Z Jul 25, 2020

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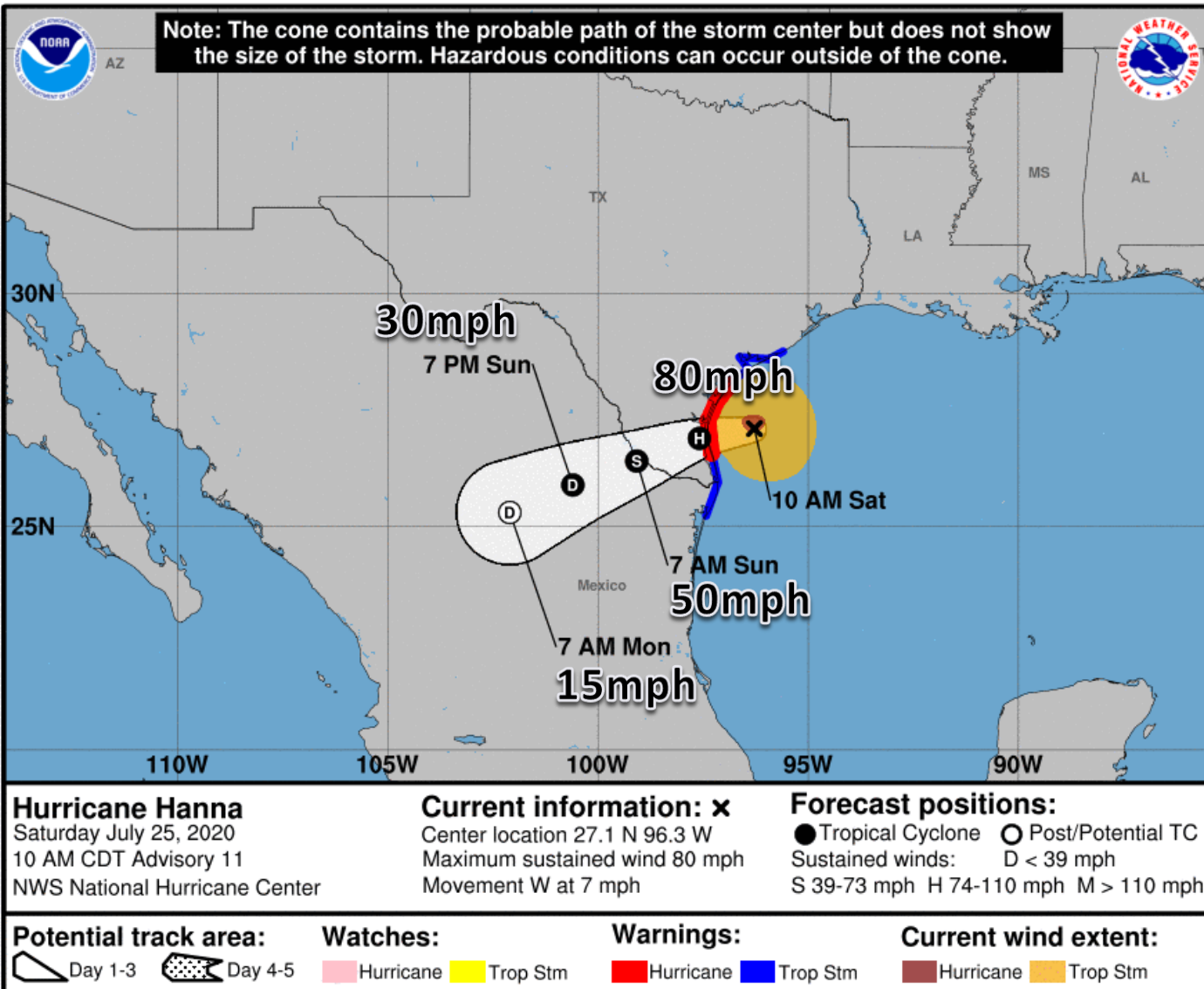






# Official Forecast Track

From the National Hurricane Center – Hurricane Hanna

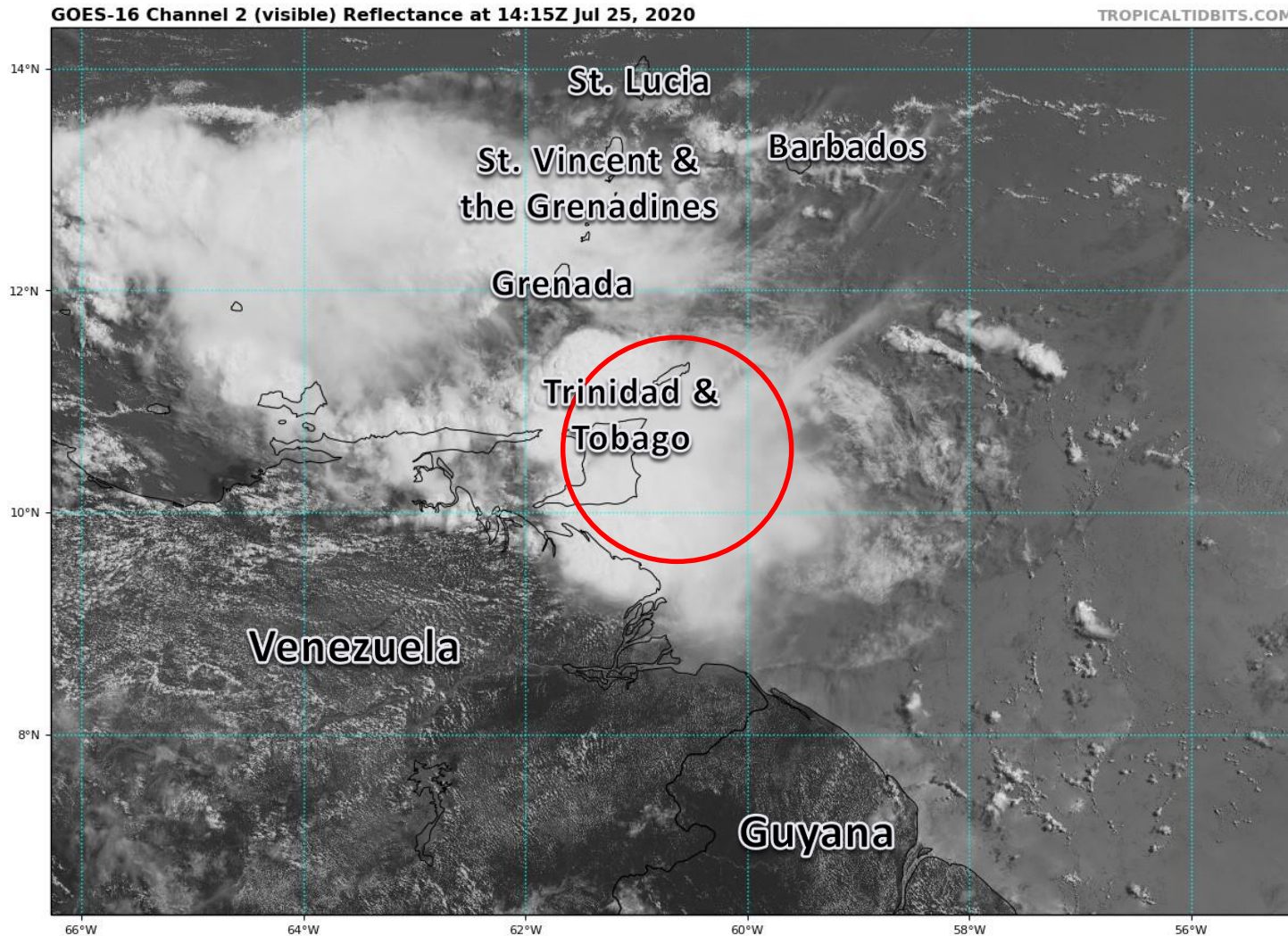


- Hurricane Hunters found that Hanna has strengthened into the first hurricane of the 2020 Atlantic Hurricane Season.
- The center of Hanna is located about 75 miles ENE of Port Mansfield, TX, moving W at 7 mph.
- Maximum sustained winds are near 80 mph, and additional strengthening is possible before Hanna makes landfall.
- Dangerous storm surge and very heavy rainfall are expected across far southern Texas.
- Hanna should make landfall in Texas this afternoon or evening.

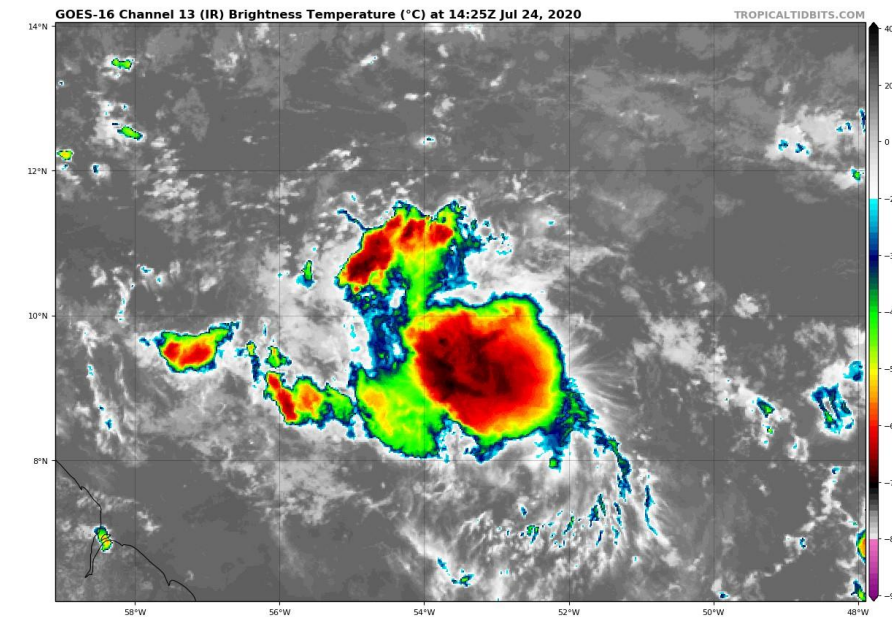


# Satellite Imagery

## Western Atlantic – Tropical Storm Gonzalo



Gonzalo may not have a defined low-level center any more, and the intensity is being held at an uncertain 40 mph. Gonzalo will continue westward and could scrape the northern coast of Venezuela. Dissipation is now forecast in about 24-36 hours.

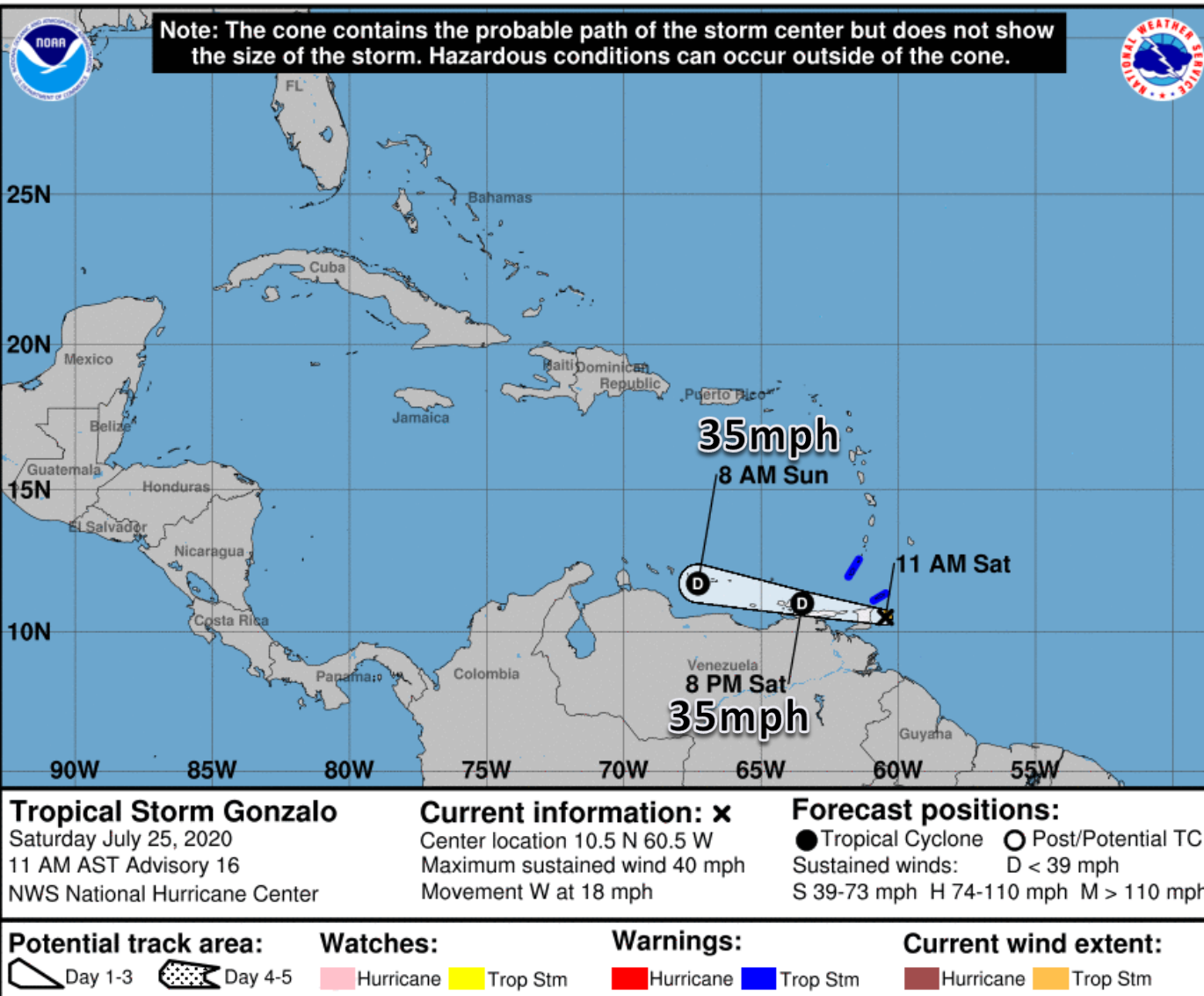






# Official Forecast Track

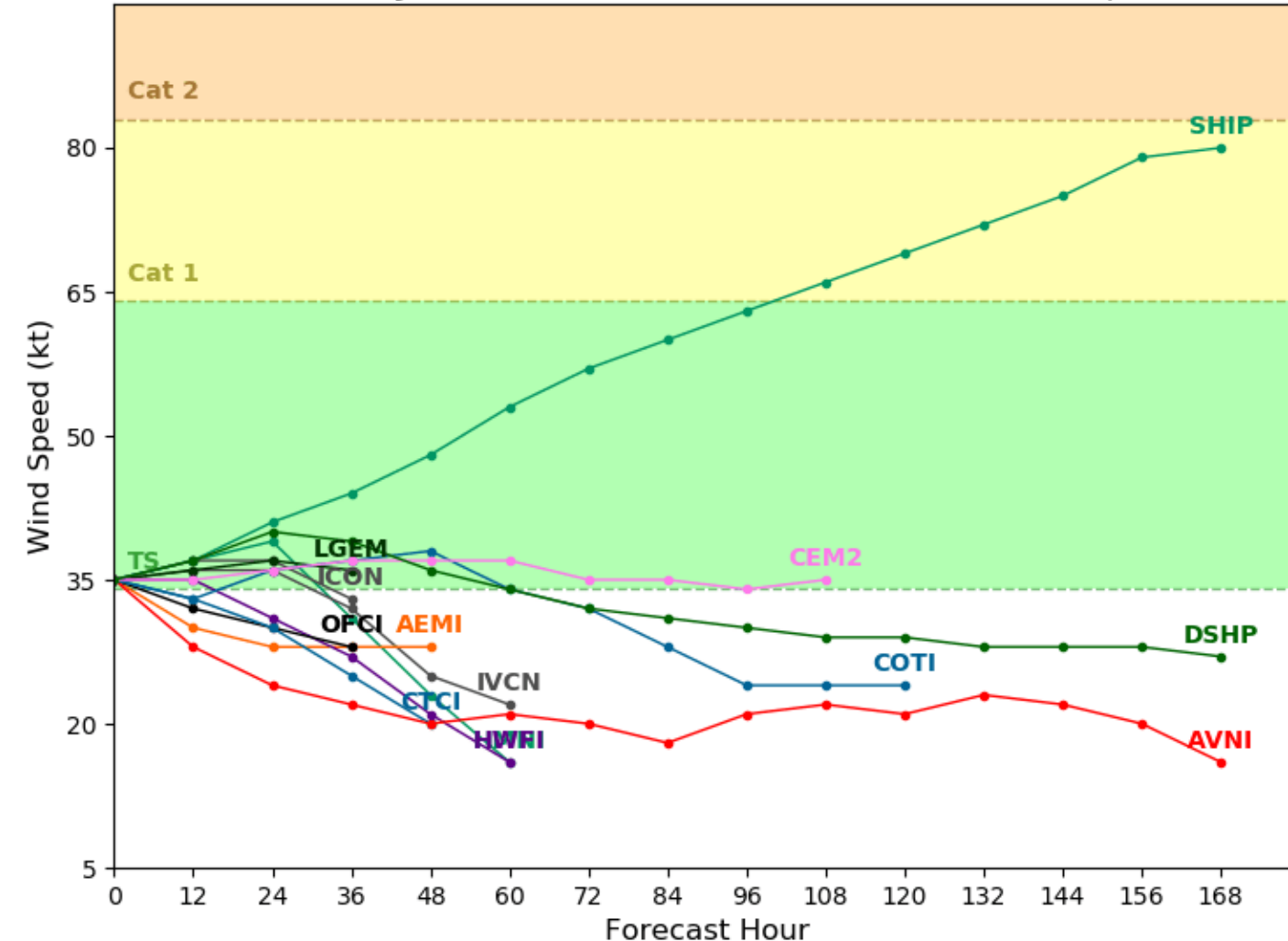
From the National Hurricane Center – Tropical Storm Gonzalo



- The center of Tropical Storm Gonzalo is about 55 miles east of Trinidad.
- Maximum sustained winds are 40 mph, but there is uncertainty in this. These winds may only be occurring in squalls not associated with the storm.
- Gonzalo is moving to the west at 18 mph, and a west-northwest movement is expected over the next few days
- Gonzalo is forecast to dissipate in about 24-36 hours.



Levi Cowan - [tropicaltidbits.com](http://tropicaltidbits.com)



Most models call for dissipation within the next 36-60 hours. Only the statistical model (which doesn't account for the state of the atmosphere) shows strengthening.

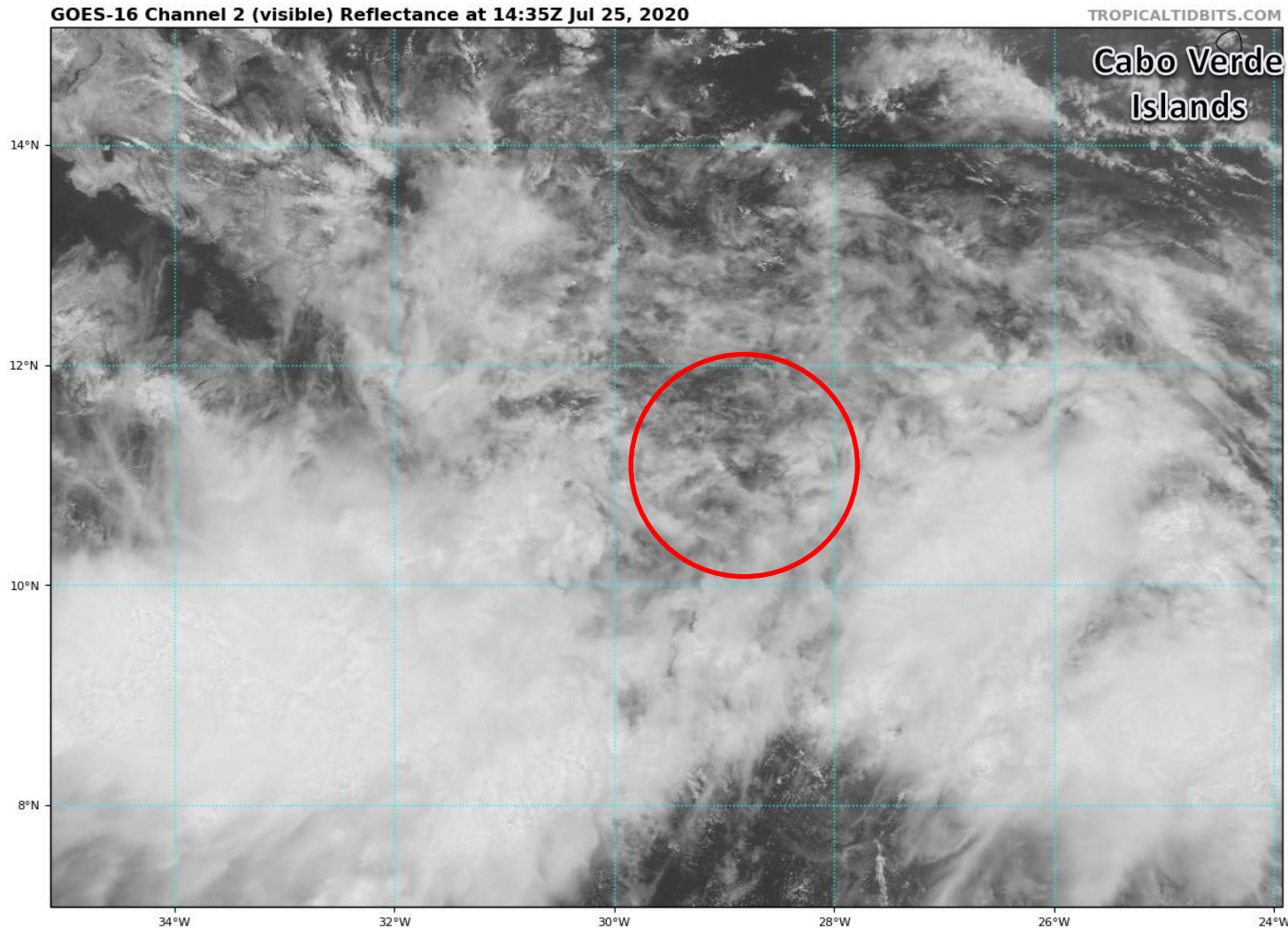
Its remnants will continue westward through the Caribbean into early next week.



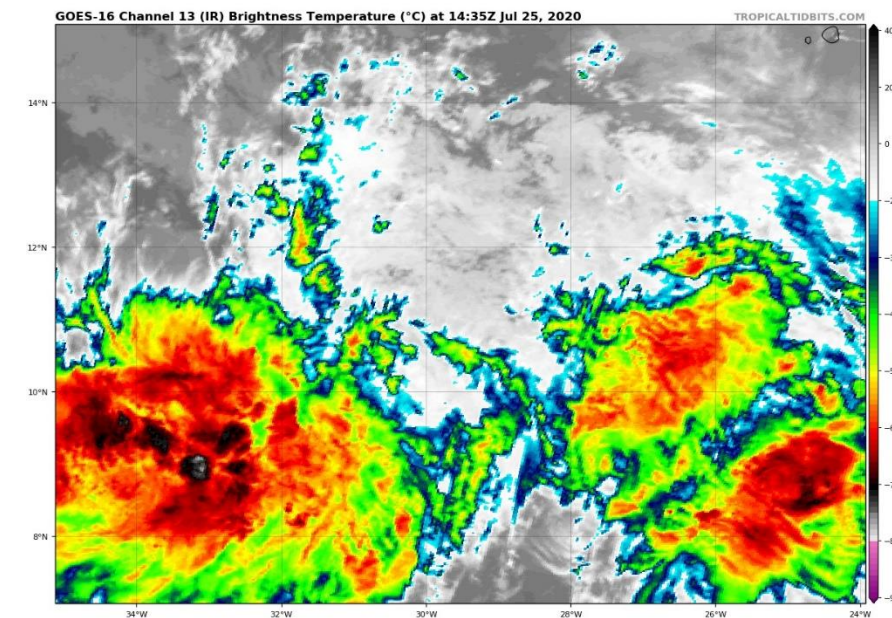


# Satellite Imagery

## Eastern Atlantic – Invest 92L



92L remains rather disorganized due to wind shear and dry near nearby. Conditions are expected to become more favorable as the system moves westward over the tropical Atlantic.





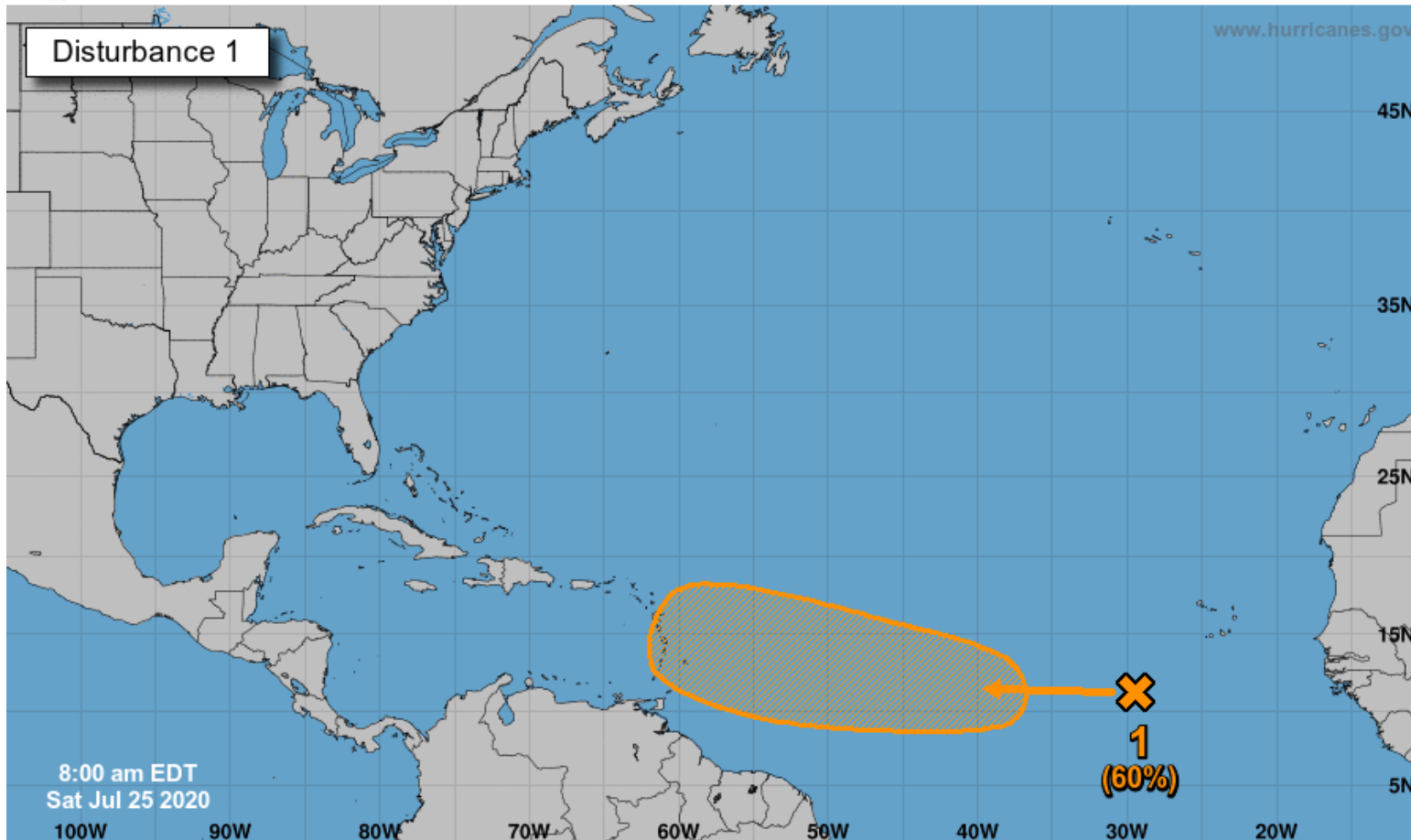
# Tropical Weather Outlook

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



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A tropical wave is producing an area of disorganized showers and thunderstorms a few hundred miles southwest of the Cabo Verde Islands. The wave is expected to move westward at about 15 mph during the next several days, and a tropical depression could form by early next week when the system reaches the western tropical Atlantic.

**\*Formation chance through 48 hours...low...10 percent.**

**\*Formation chance through 5 days...medium...60 percent.**

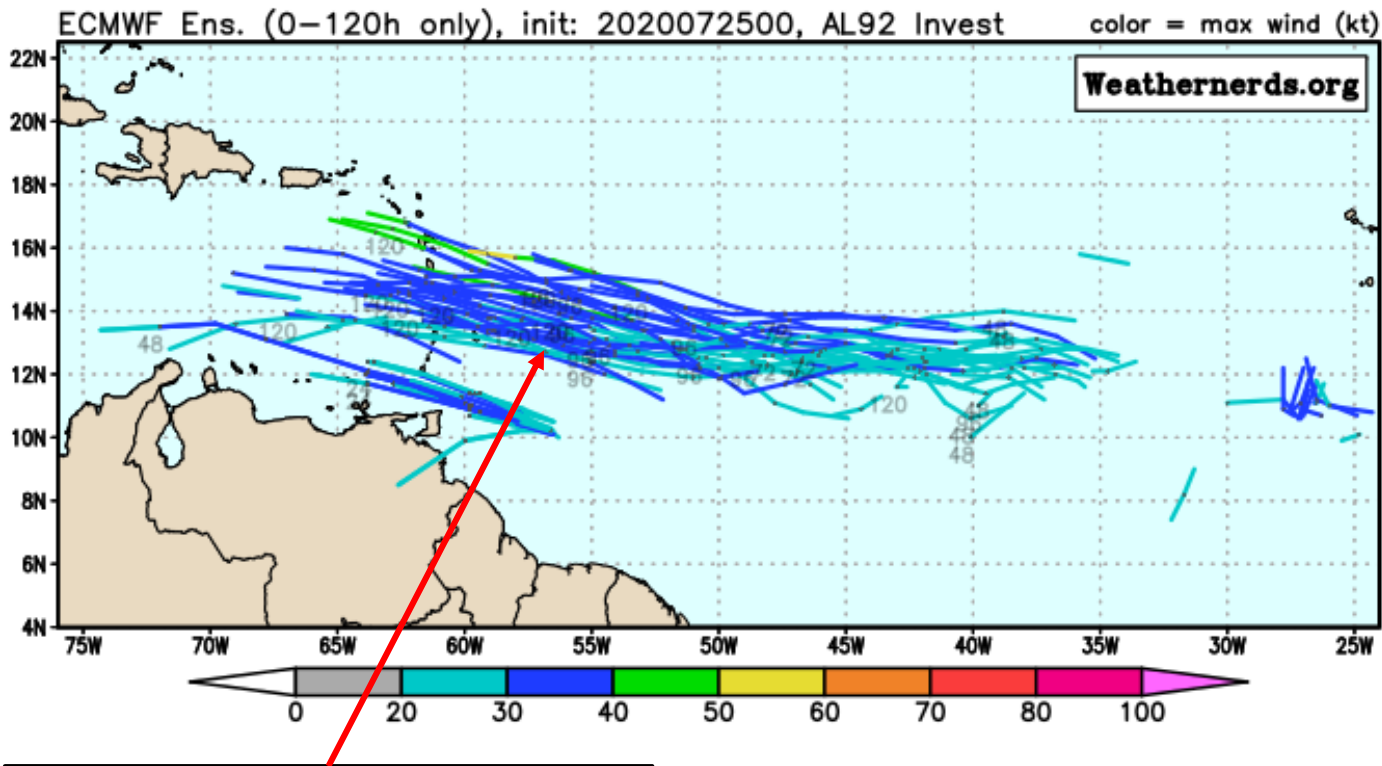
Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%  
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane  
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# Model Forecast Tracks

## Ensembles, Dynamical, and Statistical Models

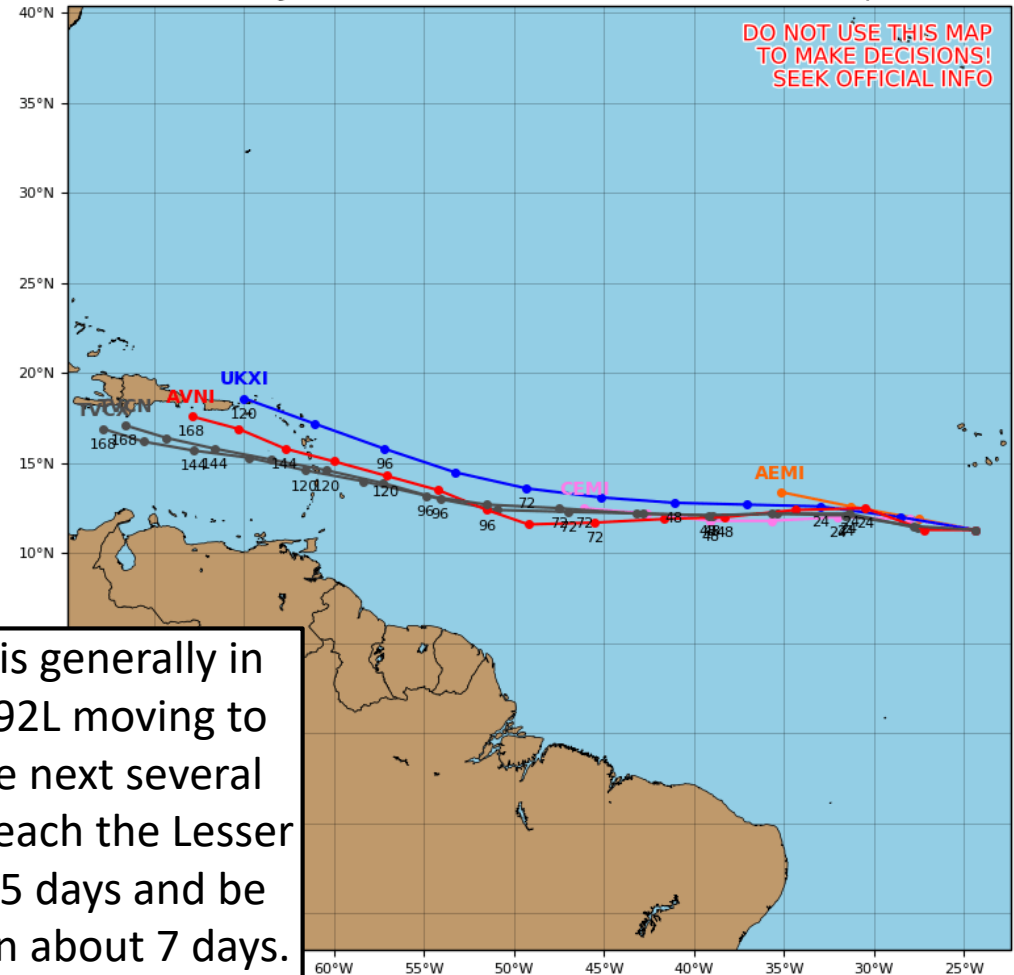


The system should reach the Caribbean in about 5 days. A stronger system will tend to be on the northern side of the guidance.

### Invest 92L Model Track Guidance

Initialized at 06z Jul 25 2020

Levi Cowan - tropicaltidbits.com



Model guidance is generally in agreement with 92L moving to the west over the next several days. 96L should reach the Lesser Antilles in about 5 days and be near Puerto Rico in about 7 days.



# Overall Summary

## **Hurricane Hanna**

- As of the 11 AM ET advisory, the center of Hanna is located about 75 miles ENE of Port Mansfield, TX, moving west at 7 mph.
- Maximum sustained winds are near 80 mph (Category 1), and additional strengthening is forecast until landfall on Saturday along the Texas Gulf Coast.
- Dangerous storm surge and very heavy rainfall will be possible across far south Texas.

## **Tropical Storm Gonzalo**

- As of the 11 AM ET advisory, the center of Gonzalo is located about 55 miles east of Trinidad, moving to the west at 18 mph.
- Maximum sustained winds have decreased to near 40 mph, and Gonzalo is forecast to dissipate in the next 24-36 hours..
- Its remnants will move across the Caribbean over the next few days.

## **Invest 92L (Eastern Atlantic Tropical Wave)**

- A tropical wave about a few hundred miles southwest of the Cabo Verde Islands will continue to move westward over the tropical Atlantic through the next 5 days.
- This system has a 10% (low) chance of formation during the 48 hours, but a 60% (medium) chance during days 3-5.
- This system is forecast to move into the Caribbean in about 5 days. This system will continue to be monitored over the coming days.





# Overall Summary

## Florida Outlook:

- **None of the systems pose an immediate threat to Florida.**

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- Typical summertime weather continues across the state with scattered afternoon showers and thunderstorms.
- Some thunderstorms will be strong, with gusty winds around 45 mph, frequent lightning, waterspouts, and heavy rainfall.
- An isolated case of flash flooding can't be ruled out, with street flooding in urban areas. **Significant impacts are not expected.**
- An elevated rip current risk is ongoing at all Panhandle and Atlantic beaches through the weekend.

The next briefing packet will be issued late Sunday morning. For the latest information on the tropics, please visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov). Daily Weather Packets are published each day in WebEOC Info Message #3518.



# TROPICAL UPDATE



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State Meteorological Support Unit

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