TROPICAL UPDATE

9:00 AM EDT

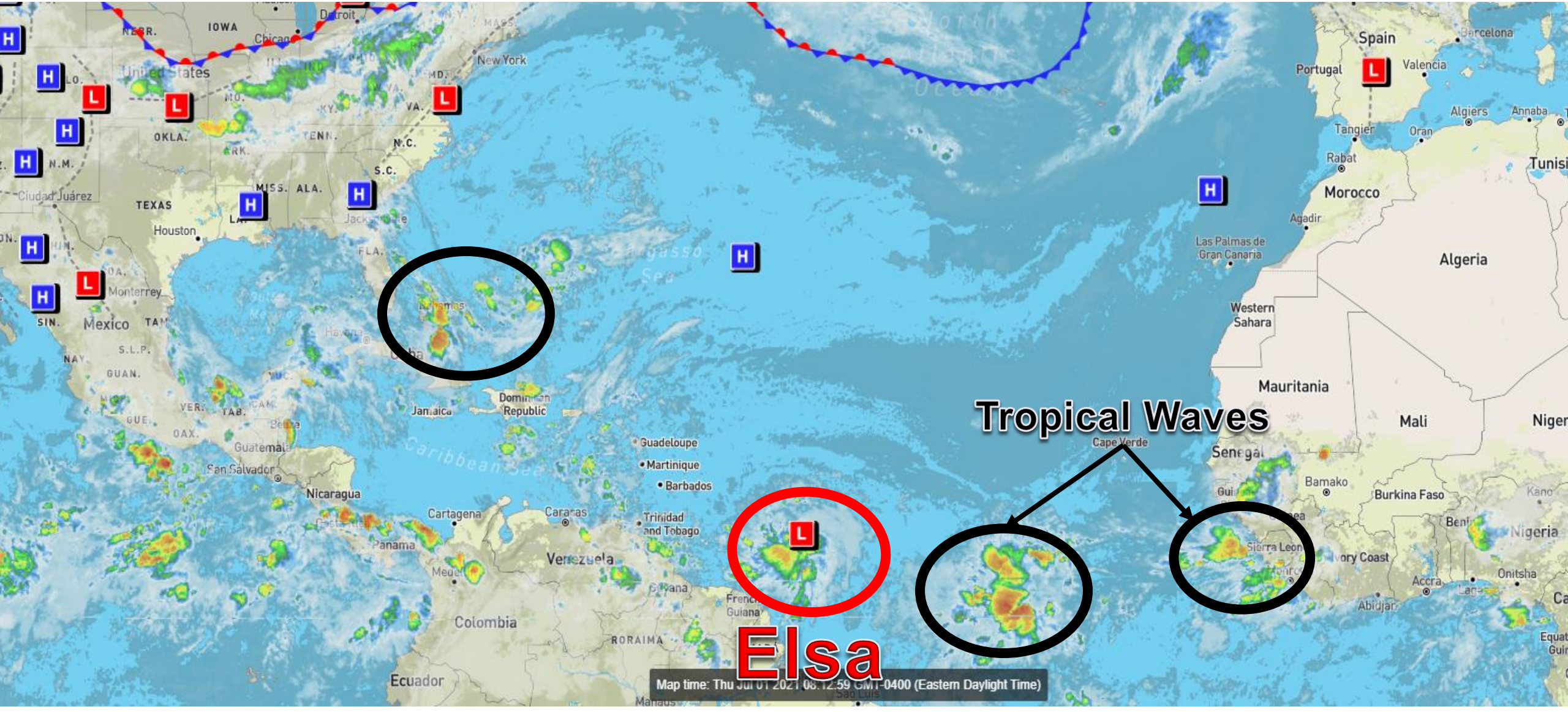
Thursday, July 1, 2021

Tropical Storm Elsa

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.

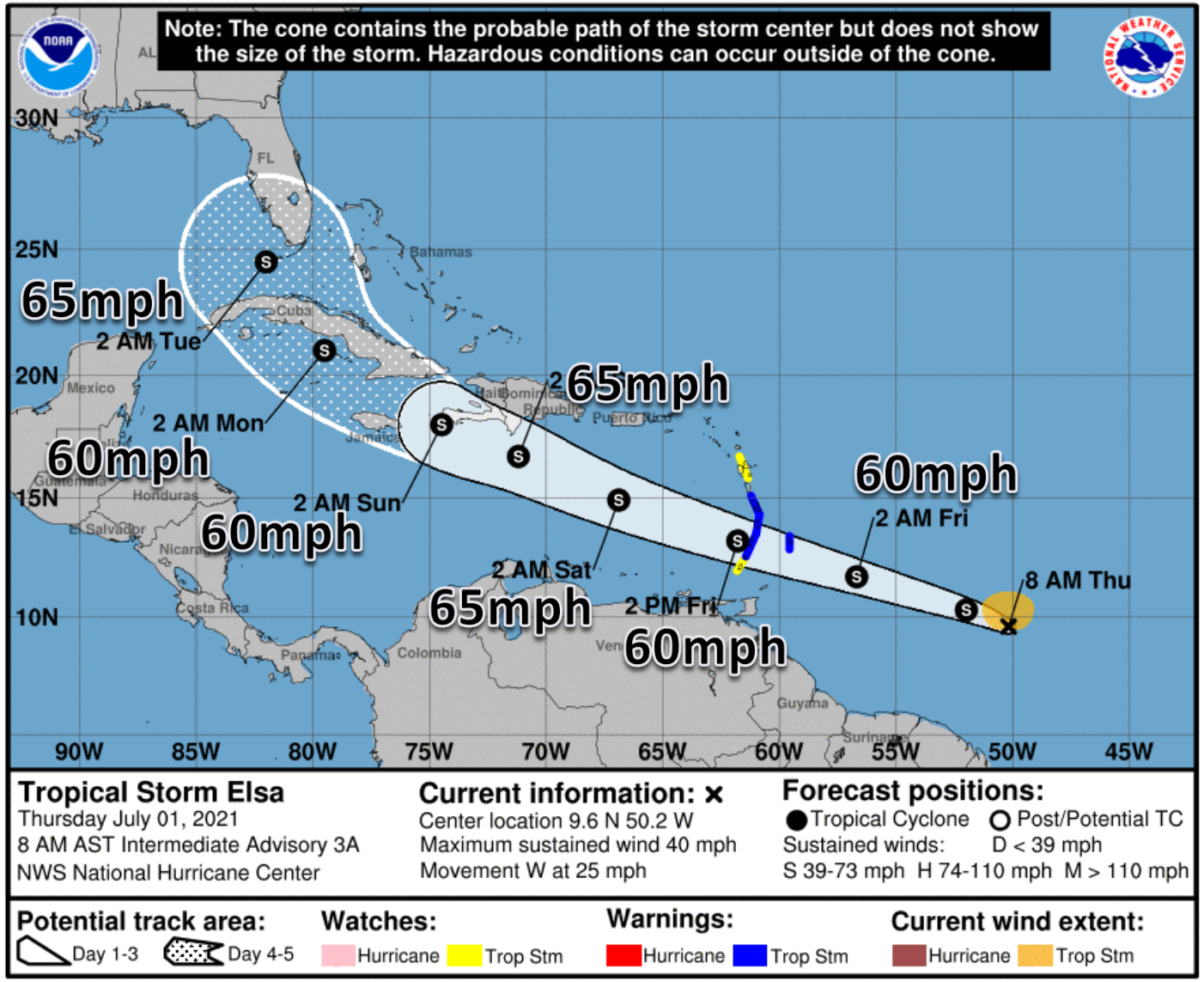
Atlantic Basin Satellite Image

Chance of development: None Low Medium High



Official Forecast Track – TS Elsa

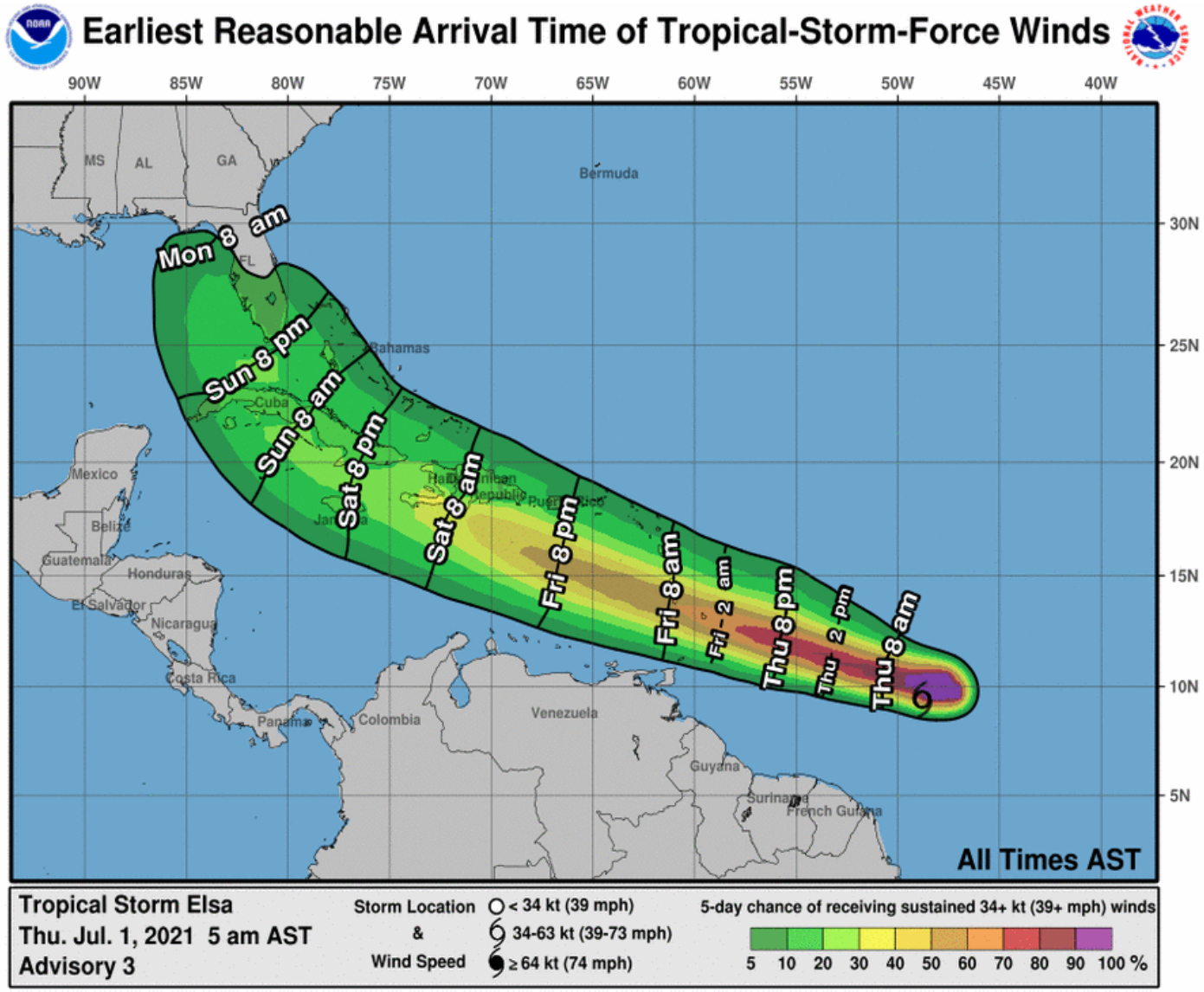
From the National Hurricane Center – (LINK)



- PTC #5 has become better organized overnight and has now been designated Tropical Storm Elsa
- The center of Elsa is located about 780 miles ESE of the Windward Islands, or about 2,250 miles southeast of Miami, FL.
- Elsa is moving to the west at 25 mph, and a turn toward the west-northwest is expected over the next several days. An eventual northward turn is expected late this weekend into early next week.
- Maximum sustained winds are near 40 mph and gradual strengthening is forecast. The system could be near hurricane strength in the Caribbean, especially if it remains south of Hispaniola and Cuba.
- There is **SIGNIFICANT** uncertainty in the track forecast beyond 3 days. Models split considerably by the time Elsa makes it to Hispaniola. However, this system should continue to be closely monitored for impacts to Florida..

Time of Arrival & Wind Speed Probabilities

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



City	Chance for TS Winds	Changes Since Last Packet
Key West	23%	+10%
Marathon	21%	+8%
Naples	15%	+8%
Miami	8%	+2%
Ft. Lauderdale	12%	+8%
West Palm Beach	10%	+6%
Ft. Myers	8%	N/A
Tampa	8%	N/A

There is uncertainty in the forward speed, so as the system gets closer to Florida, the “Earliest Reasonable Time of Arrival” graphic should be used for planning into the holiday weekend.

Key Messages

From the National Hurricane Center

Key Messages for Tropical Storm Elsa

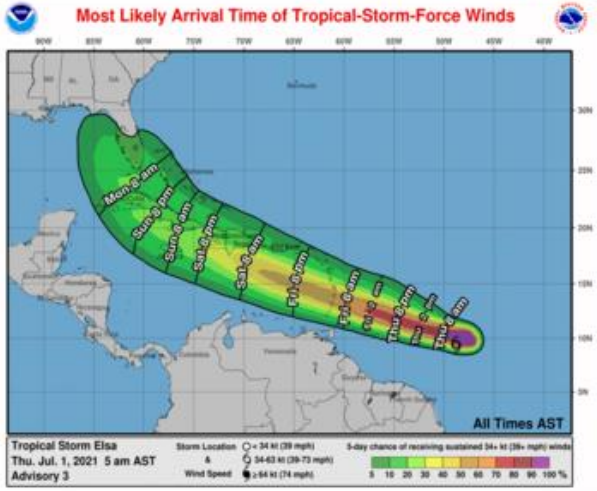
Advisory 3: 5:00 AM AST Thu Jul 01, 2021

1. Tropical storm conditions are expected beginning early Friday in portions of the Windward and southern Leeward Islands.

2. Heavy rainfall from the system will move quickly across the Windward and southern Leeward Islands, including Barbados, on Friday. Isolated flash flooding and mudslides are possible.

3. There is a risk of wind and rainfall impacts in portions of the Virgin Islands, Puerto Rico, Hispaniola, Cuba, the Turks and Caicos and the southeastern Bahamas through early next week. Interests in these areas should monitor the system's progress and updates to the forecast.

4. Interests in Florida should monitor updates to the forecast for this system, but it is too soon to determine what if any impacts could occur there next week given the uncertainty in the long-range forecast.

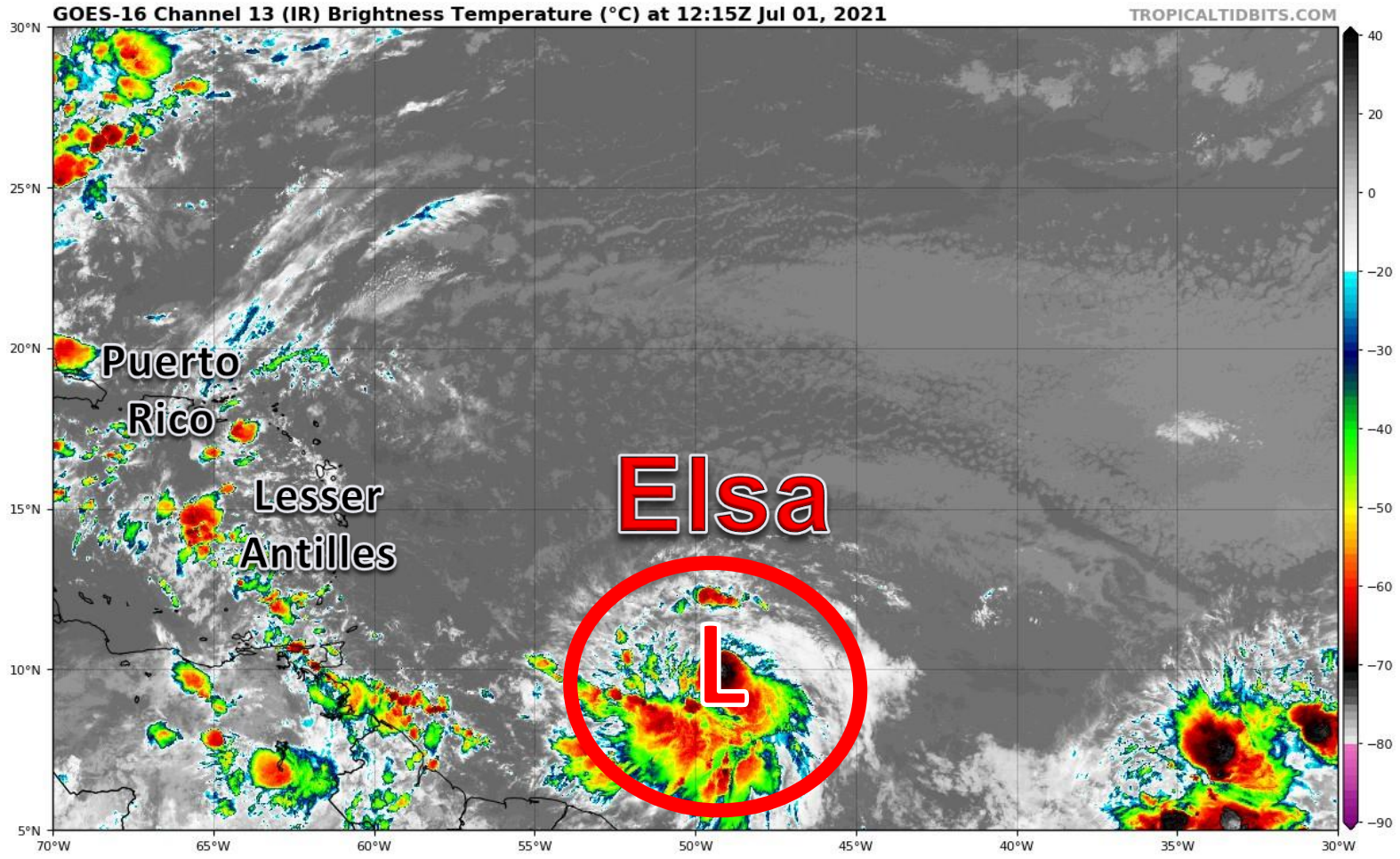


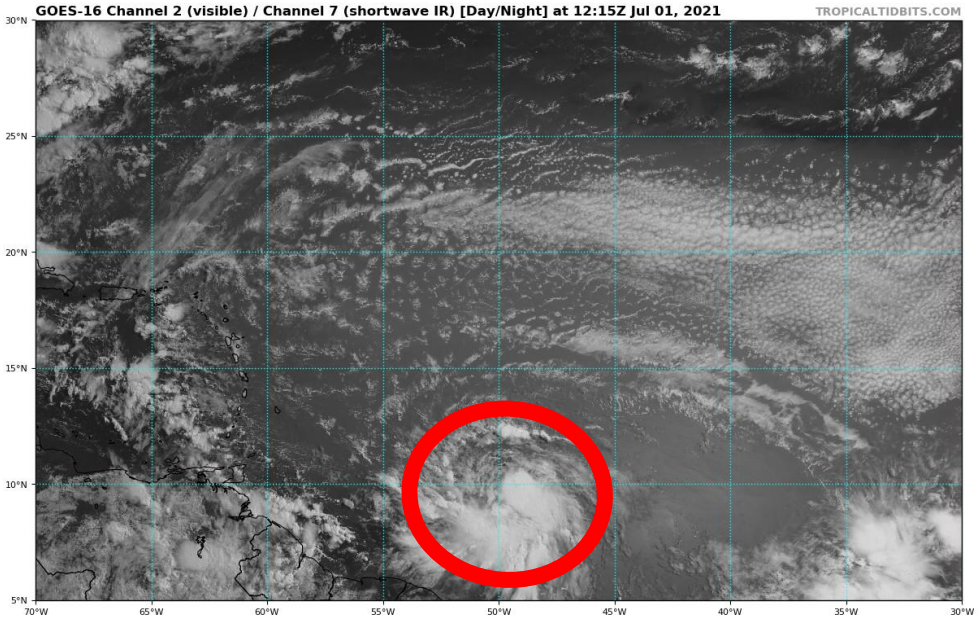
For more information go to hurricanes.gov

Satellite Imagery

Central Atlantic – Tropical Storm Elsa

PTC #5 overnight became better organized and strengthened. Now that it has a well-defined circulation, NHC has designated it a tropical storm. It continues to move to the west or west-northwest as it becomes better organized.



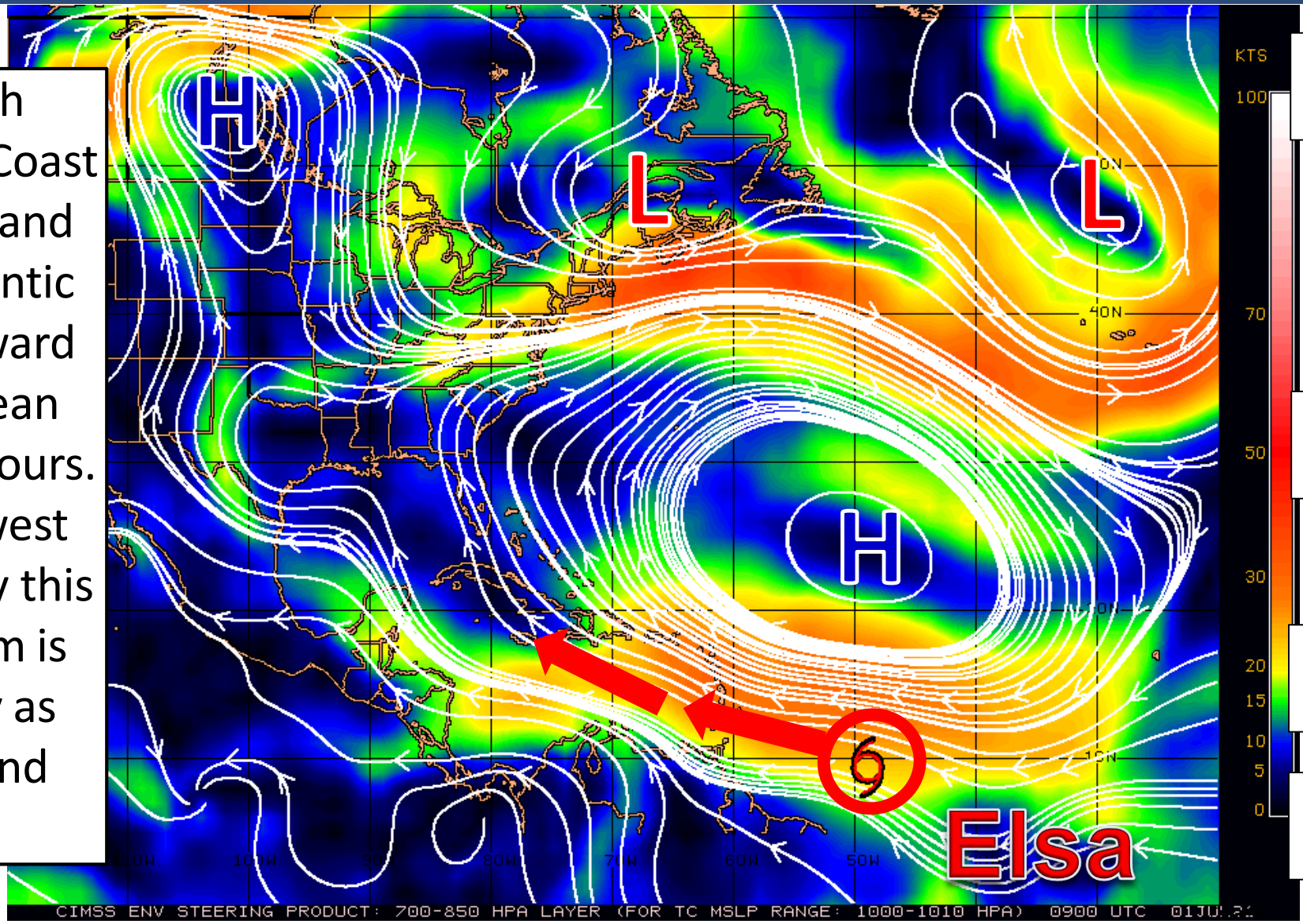


Steering Currents

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.

A large area of high pressure off the East Coast of the United States and over the Central Atlantic will move Elsa westward towards the Caribbean over the next 24-48 hours. A more west-northwest motion is expected by this weekend. The system is moving very quickly as shown by the red and orange shading.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

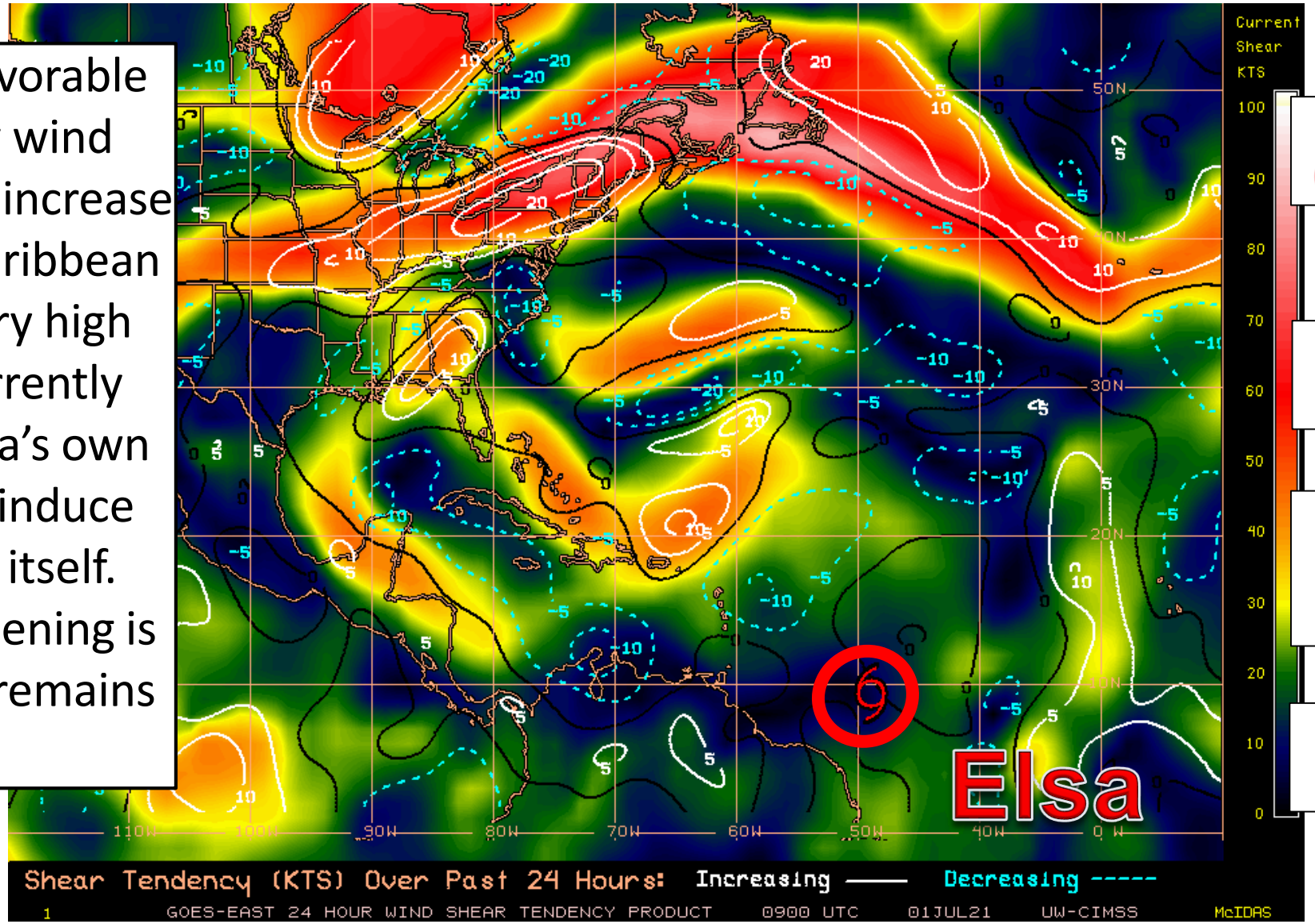
Slow Moving Storm

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.

The environment is favorable around Elsawith low wind shear. Wind shear may increase as it moves into the Caribbean this weekend, but very high wind shear is not currently forecast. However, Elsa's own forward speed could induce some wind shear on itself. Thus, gradual strengthening is forecast if the system remains over water.



HIGH Shear (Unfavorable)

HIGH Shear (Unfavorable)

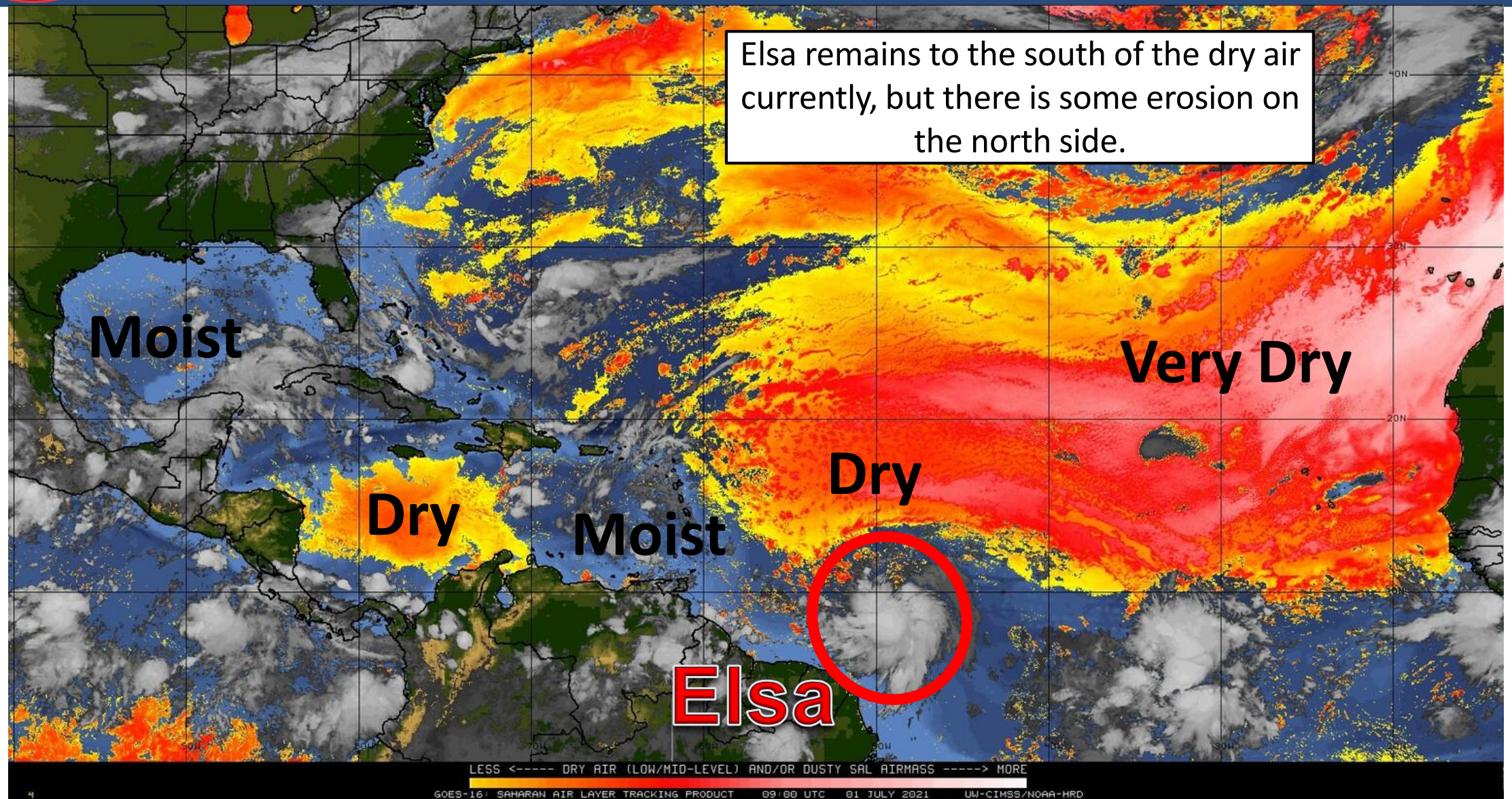
MODERATE Shear (Neutral)

LOW Shear (Favorable)

Dry Air & Saharan Dust

Is the environment favorable for the system?

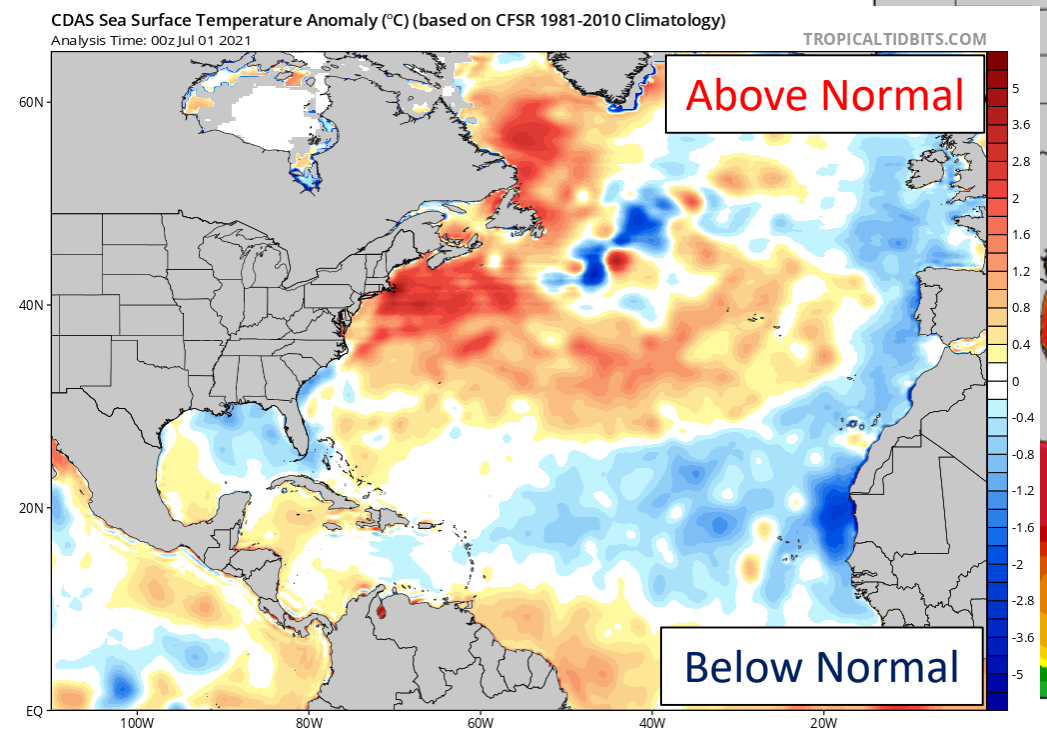
Color denotes concentration of Saharan Dust or dry, stable air.

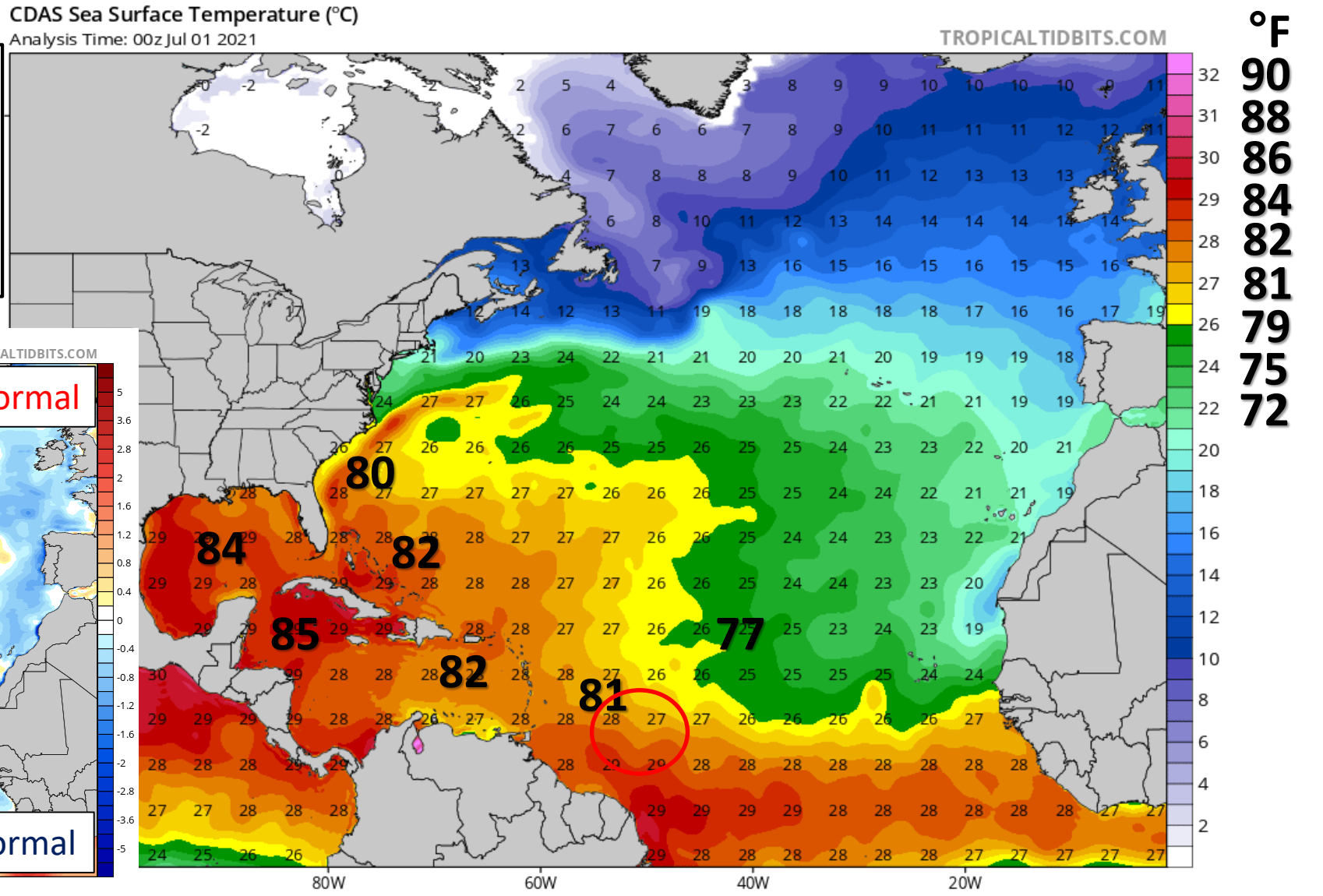


Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

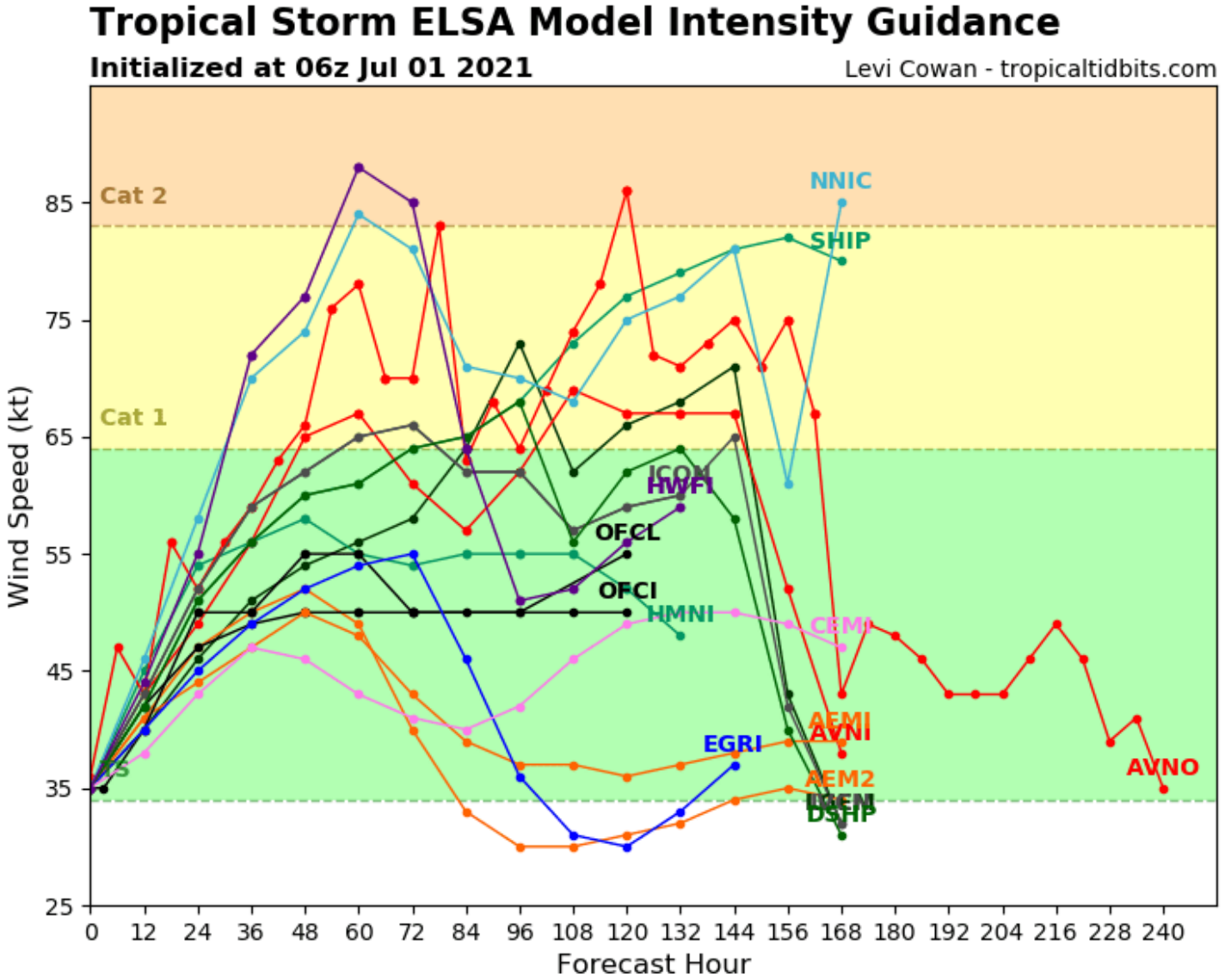
Water temperatures will gradually warm and become more favorable for development as the system moves west. Water temperatures would support a hurricane.





Model Forecast Intensity

Dynamical and Statistical Models – Tropical Storm Elsa



There is wide variability among the intensity guidance. This is due to uncertain interactions with any lingering dry air, wind shear, or land.

Overall Summary

Tropical Storm Elsa (formerly PTC #5)

- PTC #5 has become better organized overnight and has now been designated Tropical Storm Elsa.
- The center of Elsa is located about 780 miles east-southeast of the Windward Islands, or about 2,250 miles southeast of Miami, FL.
- Elsa is moving to the west-northwest at 25 mph, and this quick forward speed will continue over the next few days. A northward turn is expected at some point early next week, but it remains too uncertain where this turn will occur.
- Maximum sustained winds are near 40 mph and gradual strengthening is forecast. The system could be near hurricane strength in the Caribbean if it remains south of Hispaniola and Cuba.

Florida Outlook:

- No impacts to Florida are expected through Saturday evening. However, the Florida Keys and the southern half of the Peninsula are included in the day 5 forecast error cone.
- It is too early to determine exact impacts to Florida, but the system will be near the state early next week. If tropical storm force winds occur, the earliest they would occur is Sunday night.
- *By Day 4 (early Monday morning), the system will be starting a turn towards the north. The details on when this turn will occur will determine some of the impacts to Florida, and remains unclear at this time.*
- The largest factor in intensity of the system early next week will depend on the track and interaction with the mountainous terrain of Hispaniola and Cuba. However, this system needs to be closely monitored.

The next briefing packet will be issued this afternoon. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.

TROPICAL UPDATE

Created by:

Cameron Young, Assistant State Meteorologist

Cameron.Young@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at:
https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics.
Other reports available for subscription are available at:
https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true