



# TROPICAL UPDATE



5:00 PM EDT

Tuesday, July 21, 2020

Tropical Depression Seven  
& Tropical Wave in Gulf (40%)

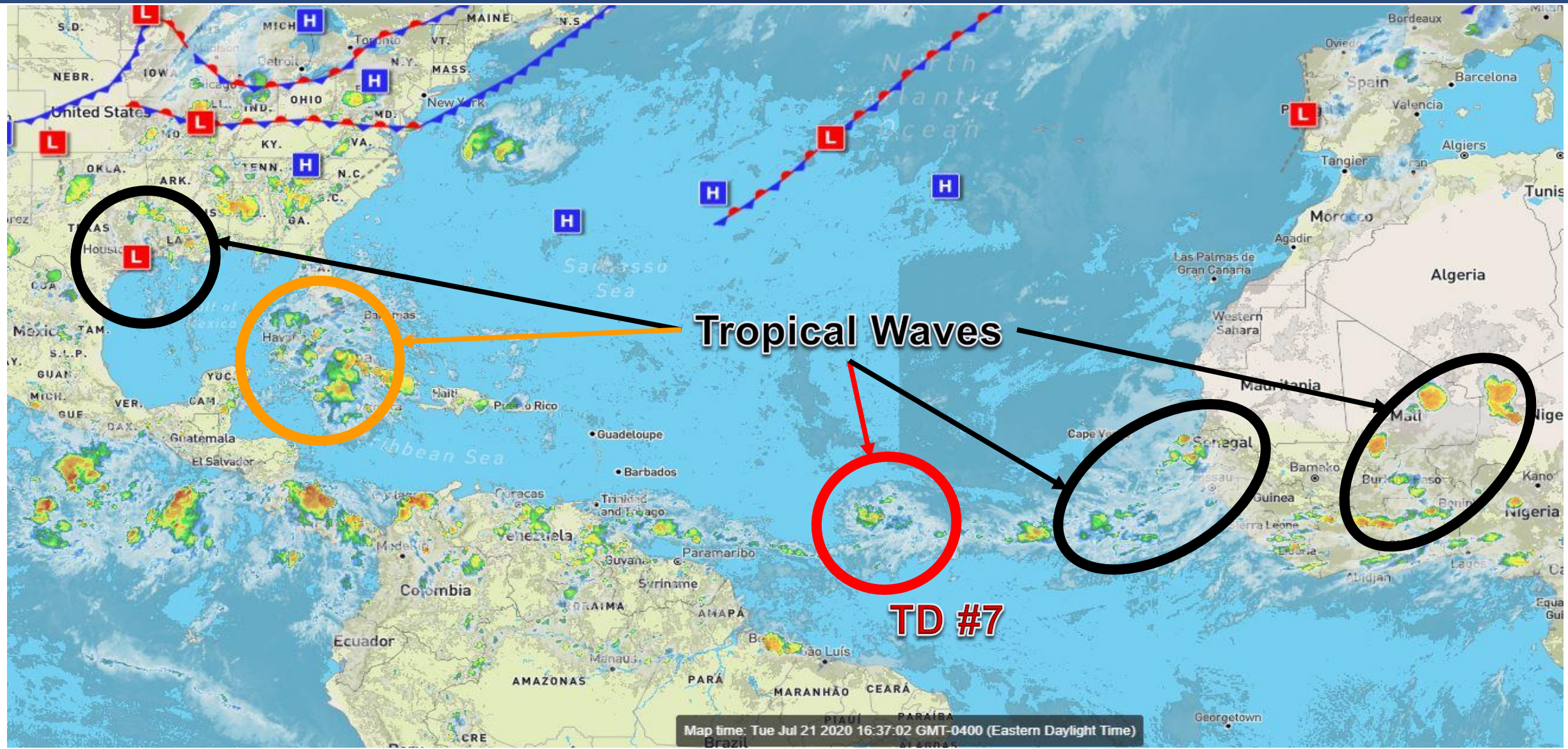
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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





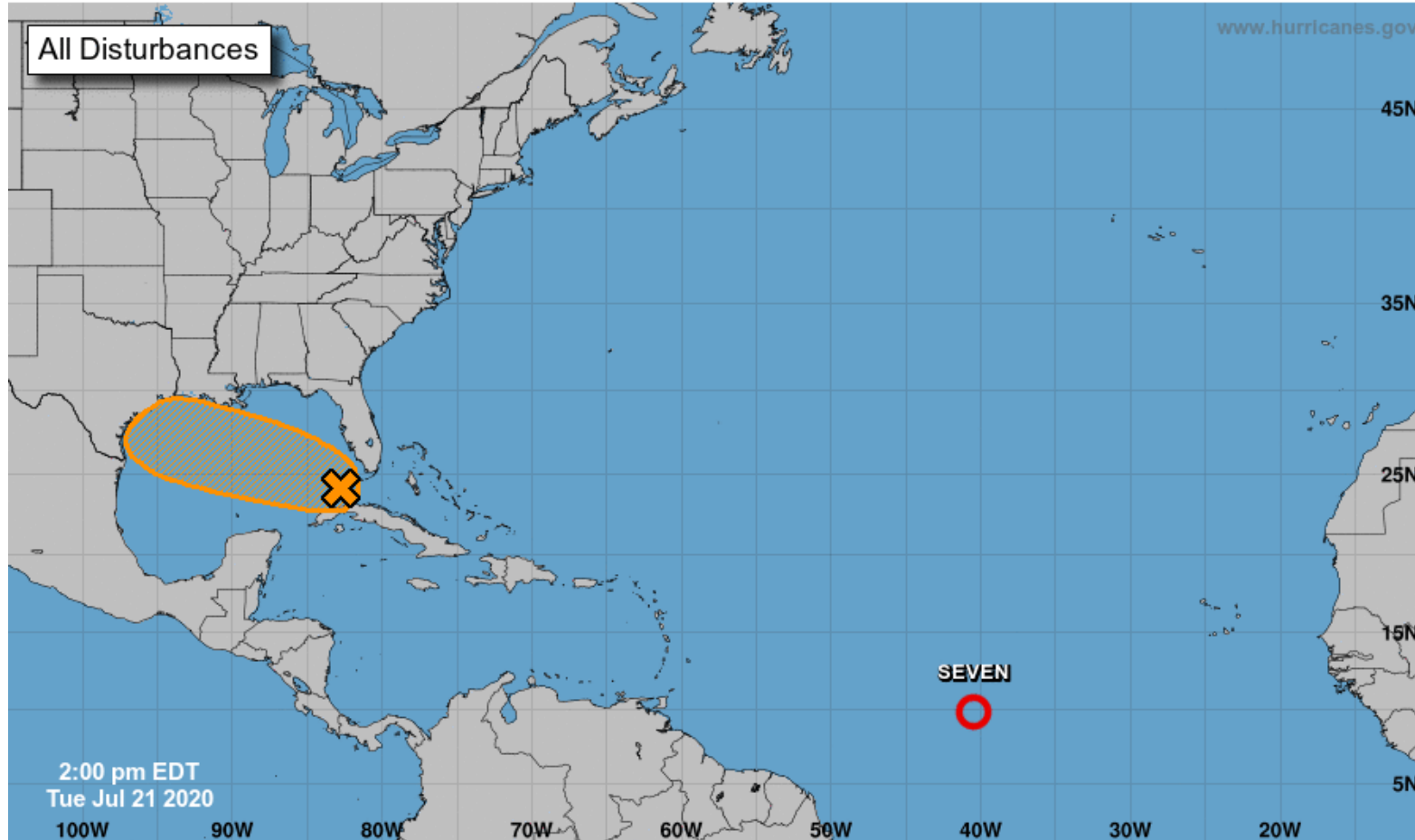


# Tropical Weather Outlook

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

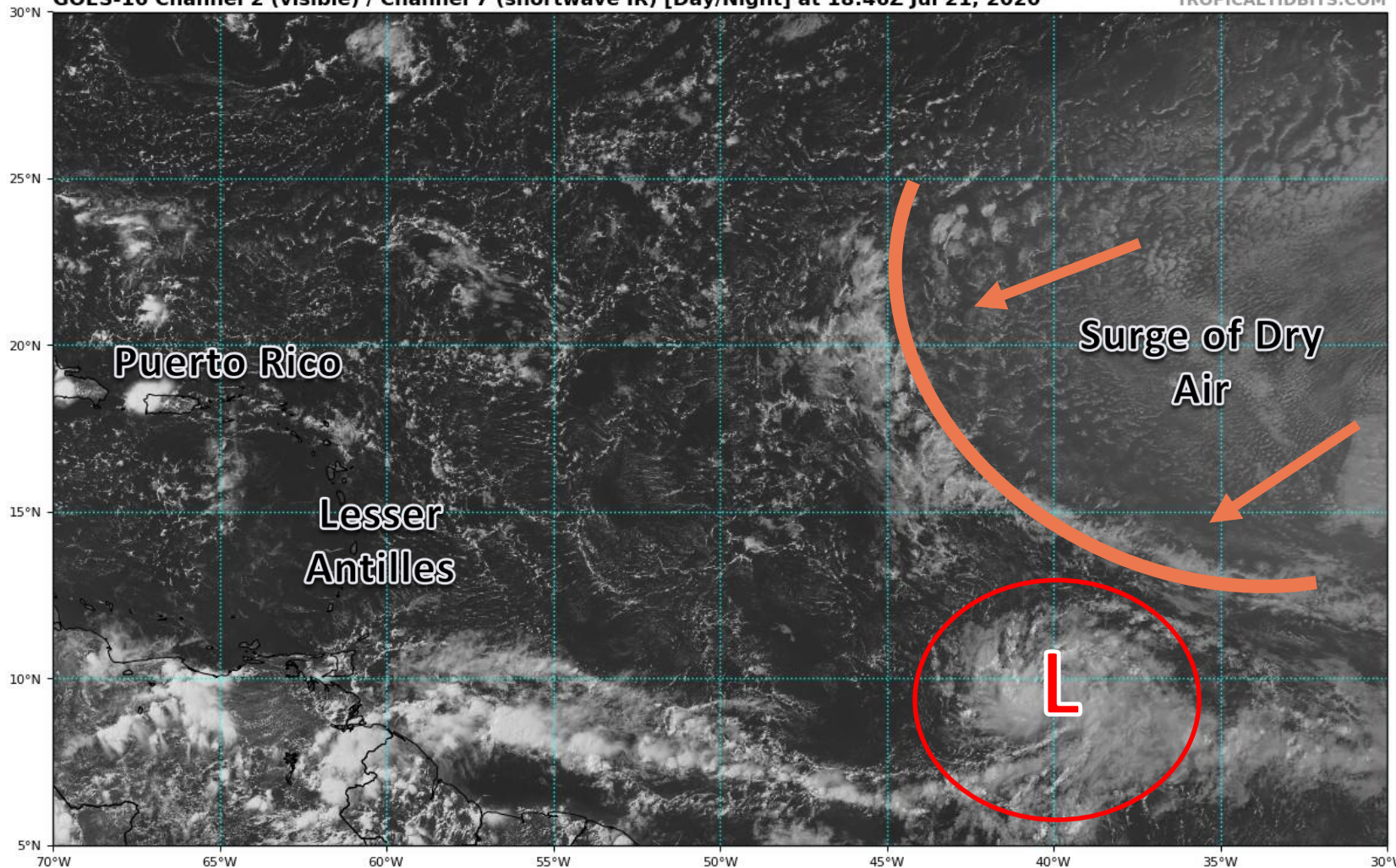


# Satellite Imagery

## Central Atlantic – Tropical Depression Seven

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 18:46Z Jul 21, 2020

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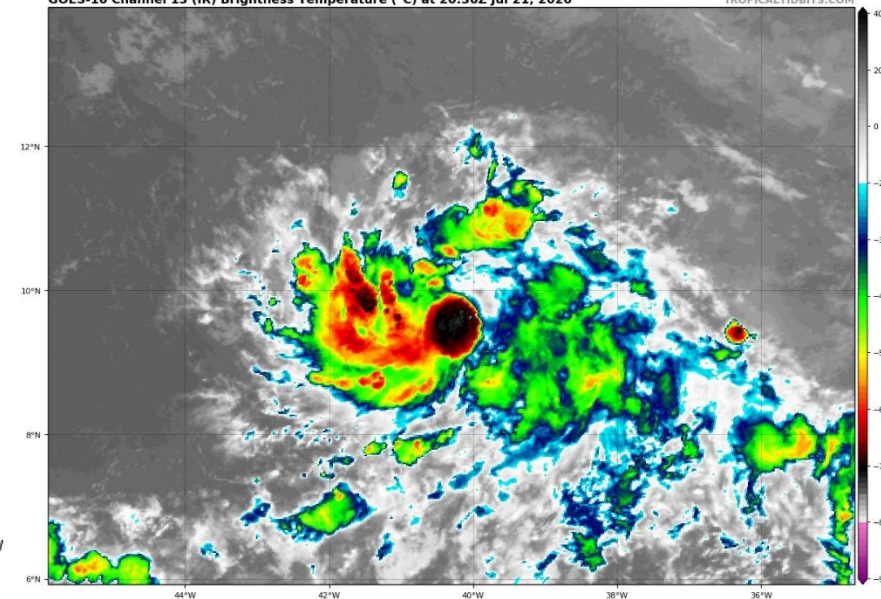


Tropical Depression Seven has continued to organize today and has had persistent thunderstorms near the center.

Dry air remains to the north of the system for now, but is trying to catch up. For now, the system remains well insulated from the dry air mass.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 20:36Z Jul 21, 2020

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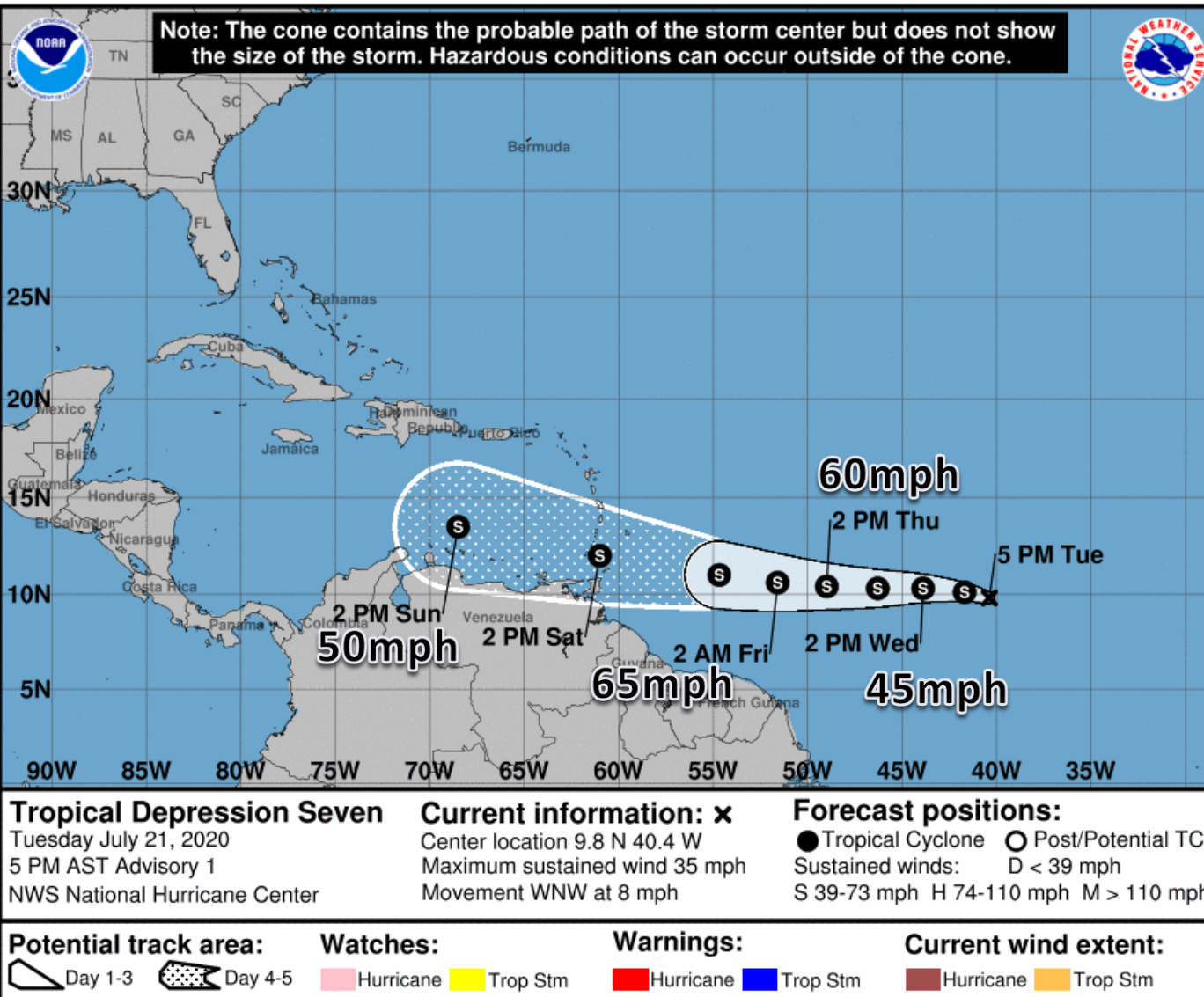






# Official Forecast Track – TD #7

From the National Hurricane Center



- The center of Tropical Depression Seven is about 1,400 miles east-southeast of Barbados in the southern Windward Islands.
- Maximum sustained winds are at 35 mph and gradual strengthening is forecast over the next few days.
- TD #7 is moving to the west at 8 mph, and a gradual increase in forward speed is expected
- TD #7 will approach the Caribbean this weekend where some weakening is forecast.



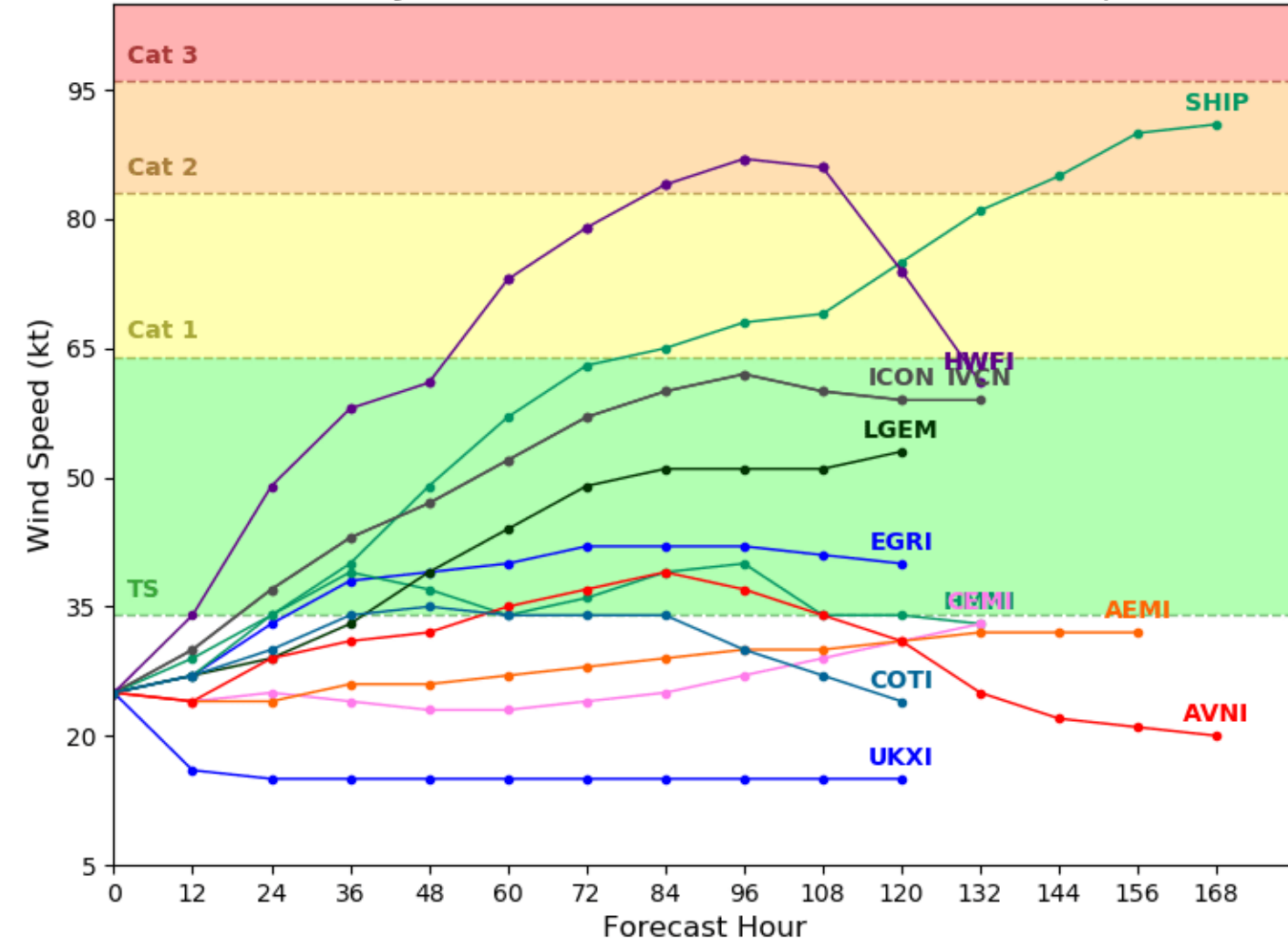
# Model Forecast Intensity

## Dynamical and Statistical Models

### Invest 99L Model Intensity Guidance

Initialized at 18z Jul 21 2020

Levi Cowan - tropicaltidbits.com



There is a **SIGNIFICANT SPREAD** in the intensity forecast of this system.

The National Hurricane Center is forecasting a tropical storm, but as the system reaches the Caribbean, the possibilities range from a hurricane to a weak, remnant low.

Small systems in this part of the Atlantic are difficult to forecast! Stay tuned to the forecast.



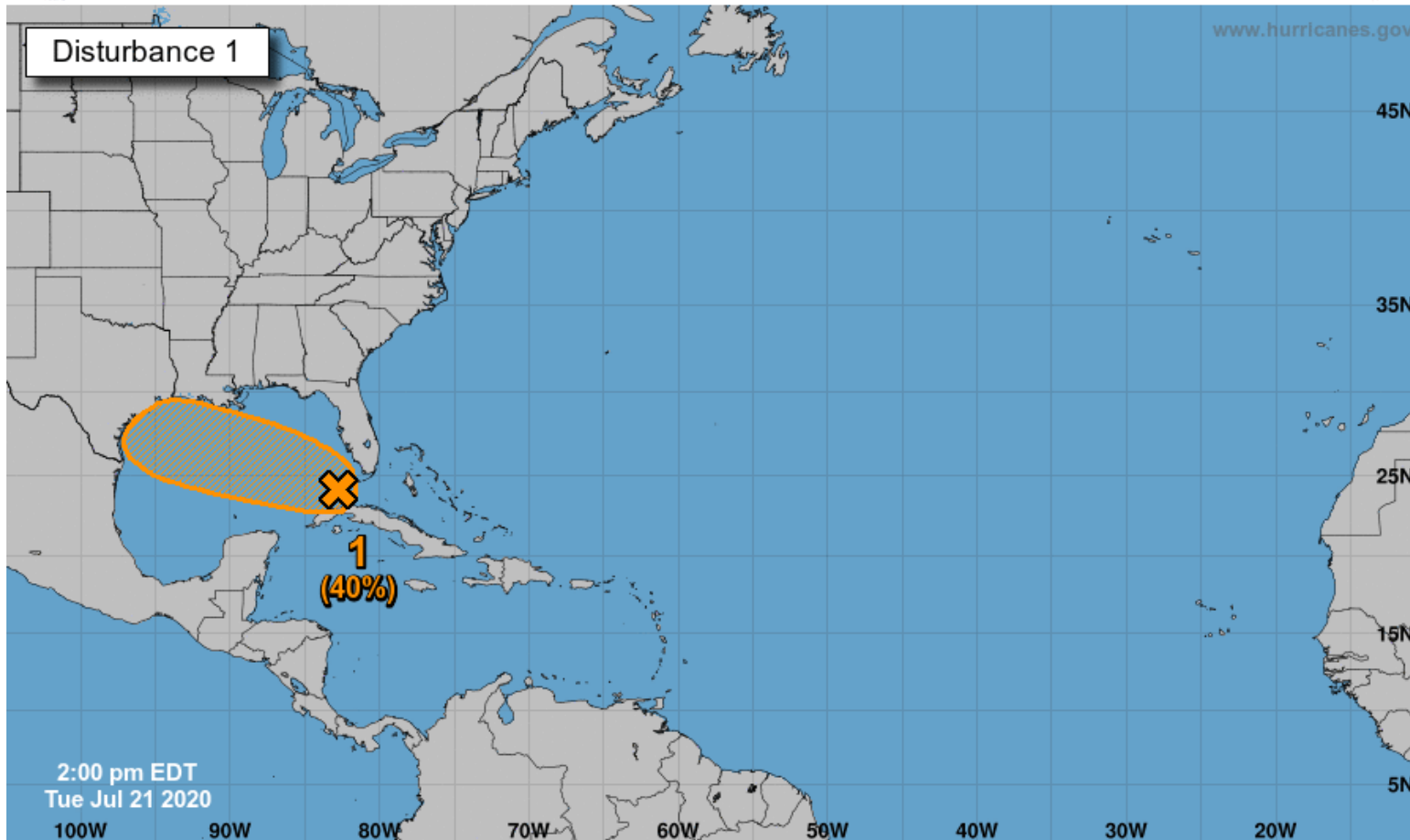
# Tropical Weather Outlook

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



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A tropical wave is producing a large area of disorganized showers and thunderstorms over western Cuba, the northwestern Bahamas, southern Florida, and the adjacent waters of the Atlantic, Caribbean Sea, and the Gulf of Mexico.

Gradual development of this system is possible while it moves west-northwestward during the next few days. This system is expected to cross the southeastern Gulf of Mexico this afternoon and tonight, move over the central Gulf on Wednesday, and reach the northwestern Gulf on Thursday and Friday.

An Air Force Reserve Hurricane Hunter aircraft is scheduled to investigate the system on Wednesday, if necessary.

**\*Formation chance through 48 hours...low...30%**

**\*Formation chance through 5 days...medium...40%**

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





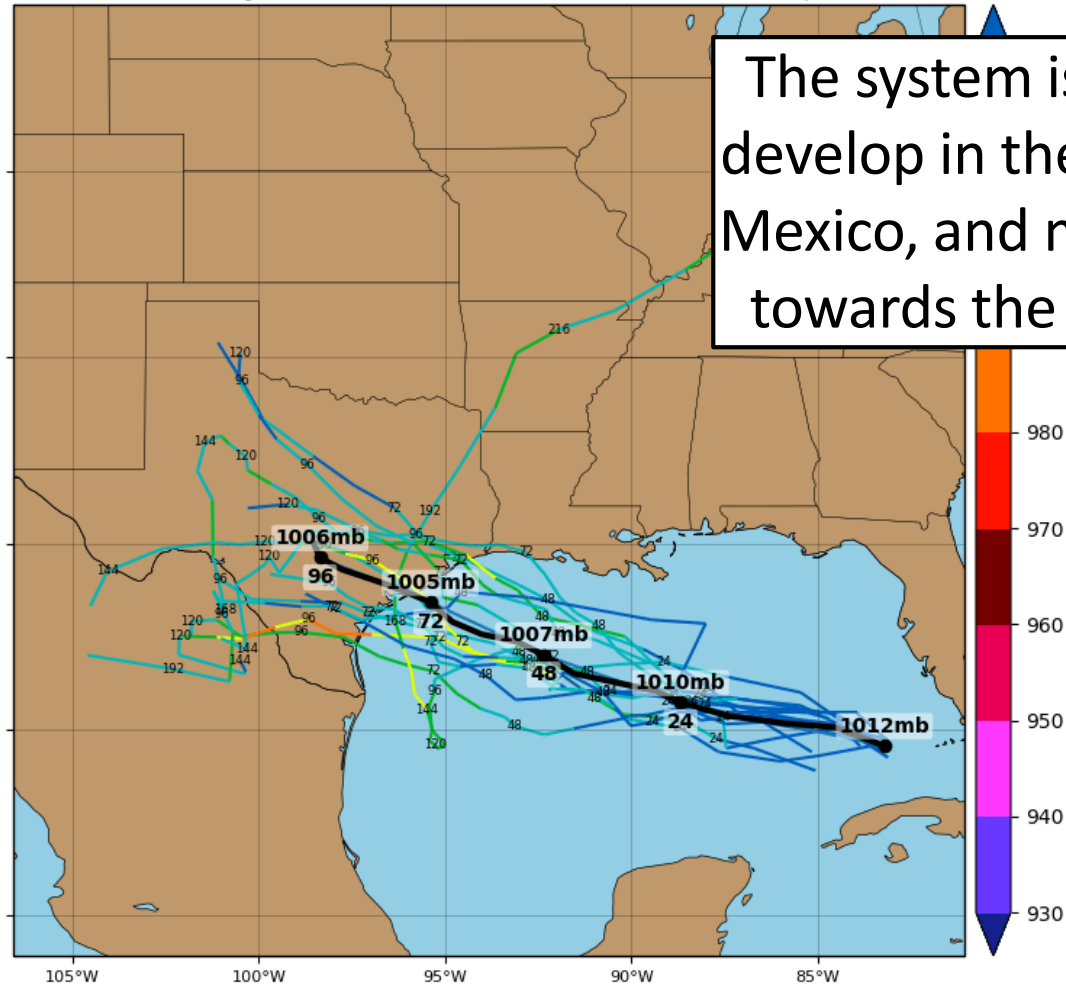
# Model Forecast Tracks

## Ensembles, Dynamical, and Statistical Models

### 91L INVEST - GEPS Tracks and Min. MSLP (hPa)

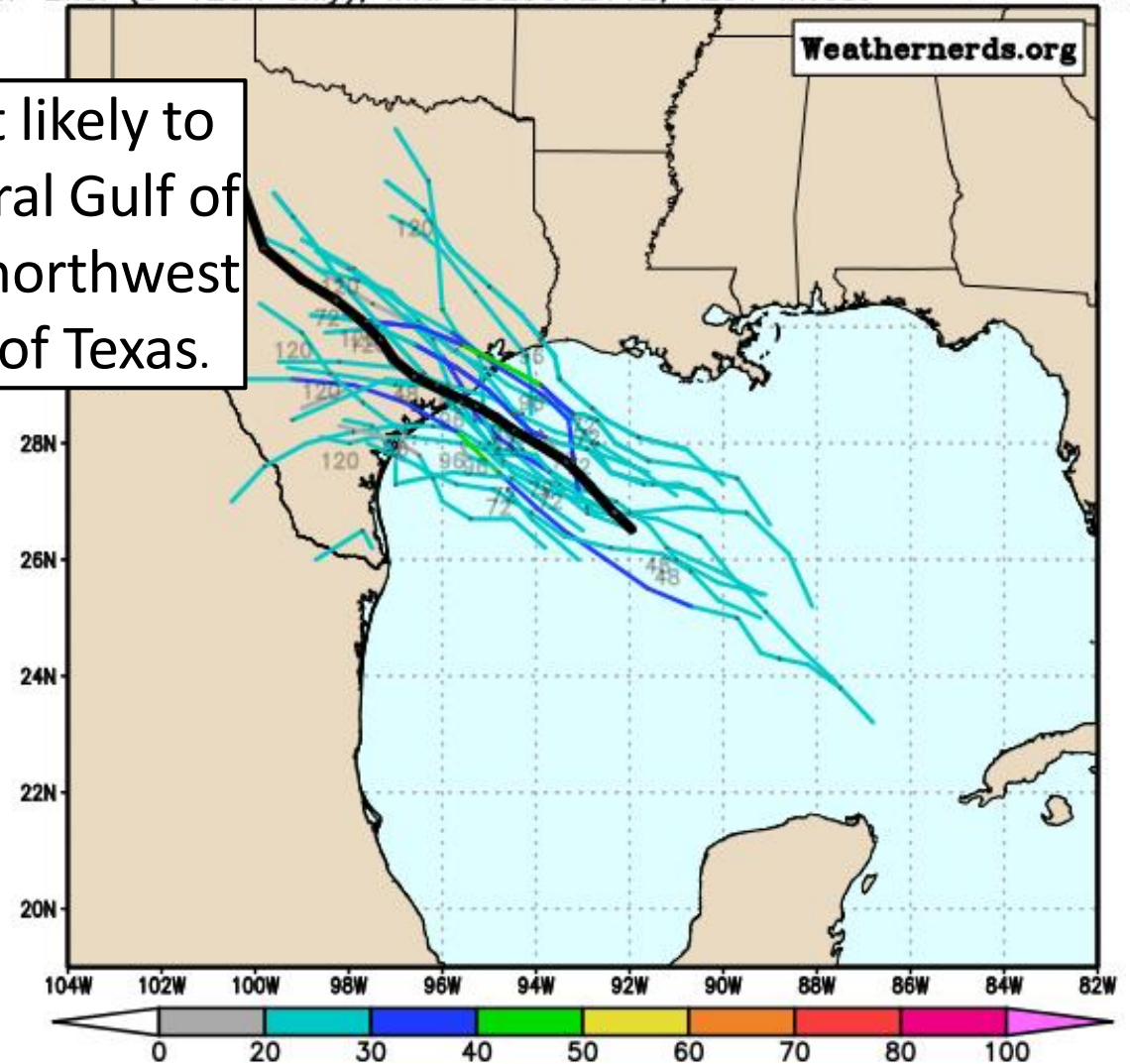
Initialized at 12z Jul 21 2020

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ECMWF Ens. (0-120h only), init: 2020072112, AL91 Invest

color = max wind (kt)





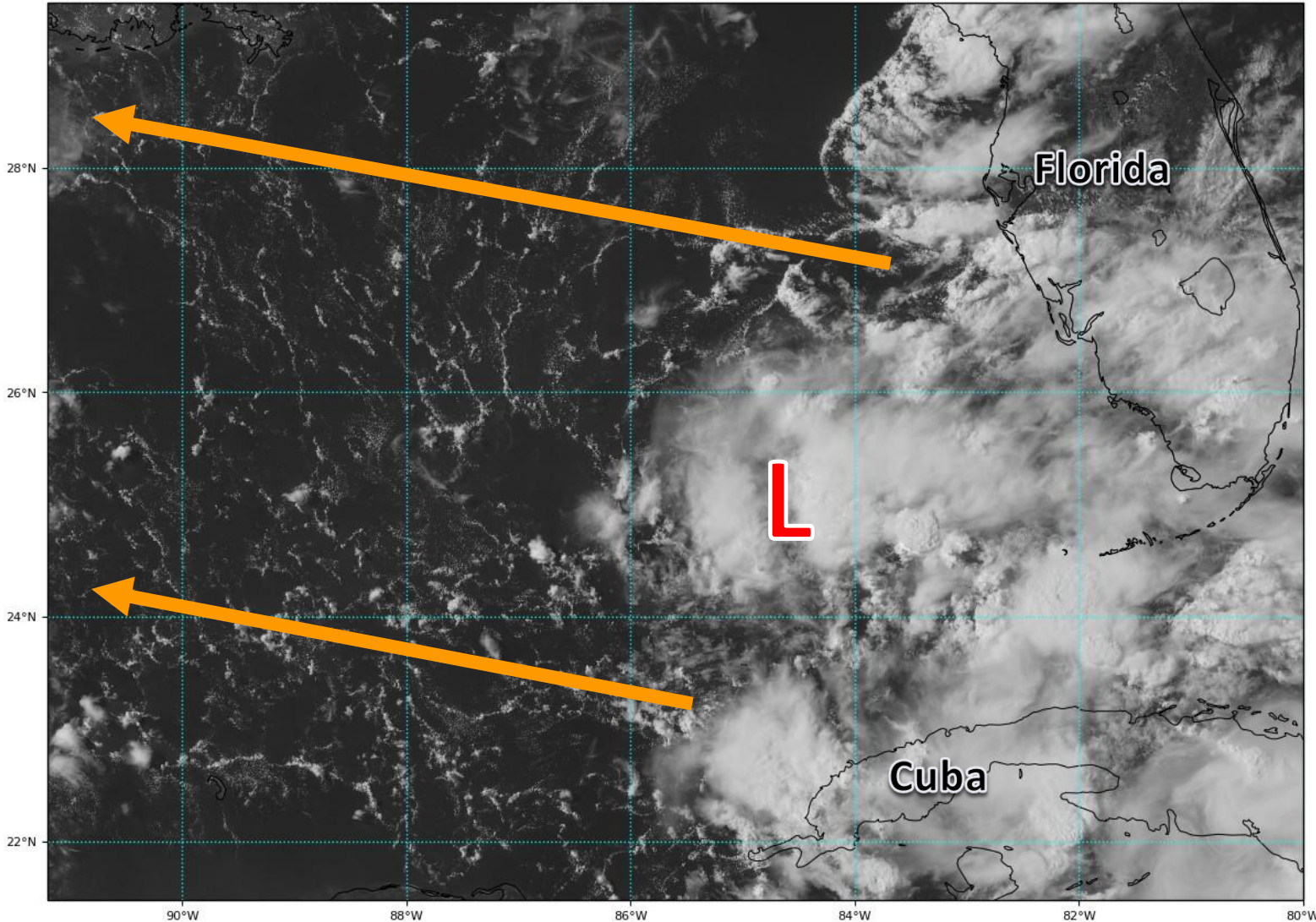


# Satellite Imagery

## Tropical Wave in the Gulf (40%)

GOES-16 Channel 2 (visible) Reflectance at 20:52Z Jul 21, 2020

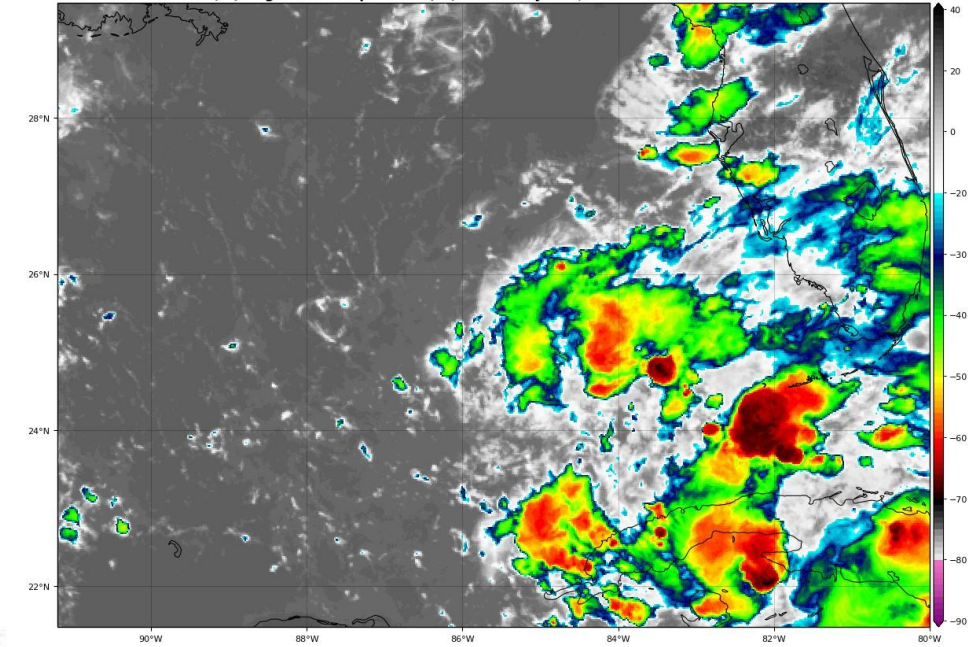
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A small area of low pressure is located a couple of hundred miles west of Key West, but most of the showers and thunderstorms are well to the east of the center over Florida due to wind shear. More favorable conditions are expected later this week as the system moves west across the Gulf of Mexico.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 20:52Z Jul 21, 2020

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# Overall Summary

## **Tropical Wave Entering the Gulf of Mexico**

- A tropical wave located near Key West, FL is producing disorganized showers and thunderstorms across Cuba and the Florida Peninsula.
- Conditions are not favorable for development over the next 24 hours, but it will continue to move west-northwest into better conditions in the Gulf of Mexico.
- Air Force Reserve Hurricane Hunter aircraft are scheduled to investigate the system tomorrow afternoon.
- A tropical system may develop late this week as it nears Texas and Louisiana.
- The chance of development is 30% (low) over the next 48 hours, but 40% (medium) over the next 5 days.

## **Tropical Depression Seven (Formerly Invest 99L)**

- The area of low pressure about halfway between the Caribbean and Africa has continued to develop today, and at 5 PM ET, the National Hurricane Center began issuing advisories on Tropical Depression Seven.
- The center of TD #7 is located about 1400 miles east-southeast of Barbados and moving to the west-northwest at 8 mph.
- Maximum sustained winds are near 35 mph.
- There is a surge of dry air to the north of the system that may interfere with development later this week, but for the next 48 hours or so, the environment remains favorable and strengthening into a tropical storm is forecast.
- The system will reach the Caribbean this weekend and the strength of the system is more uncertain.
- The next name on the list is Gonzalo (gohn-SAH-loh).





# Overall Summary

## Florida Outlook:

- **Tropical Depression Seven poses no threat to Florida through early next week, but it should continue to be monitored.**
- For the tropical wave near Key West today: Increased rain chances are expected across the Peninsula over the next 36 hours, particularly in Southwest Florida and Keys.
- Rain chances will continue tonight along the East Coast and the Keys.
- 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.**
- Rainfall totals in Southwest Florida and the Keys from this system will be 1-2" widespread, and locally 3-4".
- An elevated rip current risk is ongoing at all Panhandle and Atlantic beaches through mid-week, with tides running about 1" above normal along the Gulf Coast.
- Outside of thunderstorms, winds will be breezy from the southeast at 10-20 mph, gusting to 30 mph statewide.

The next briefing packet will be issued late Wednesday 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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