



TROPICAL UPDATE



11 AM EDT

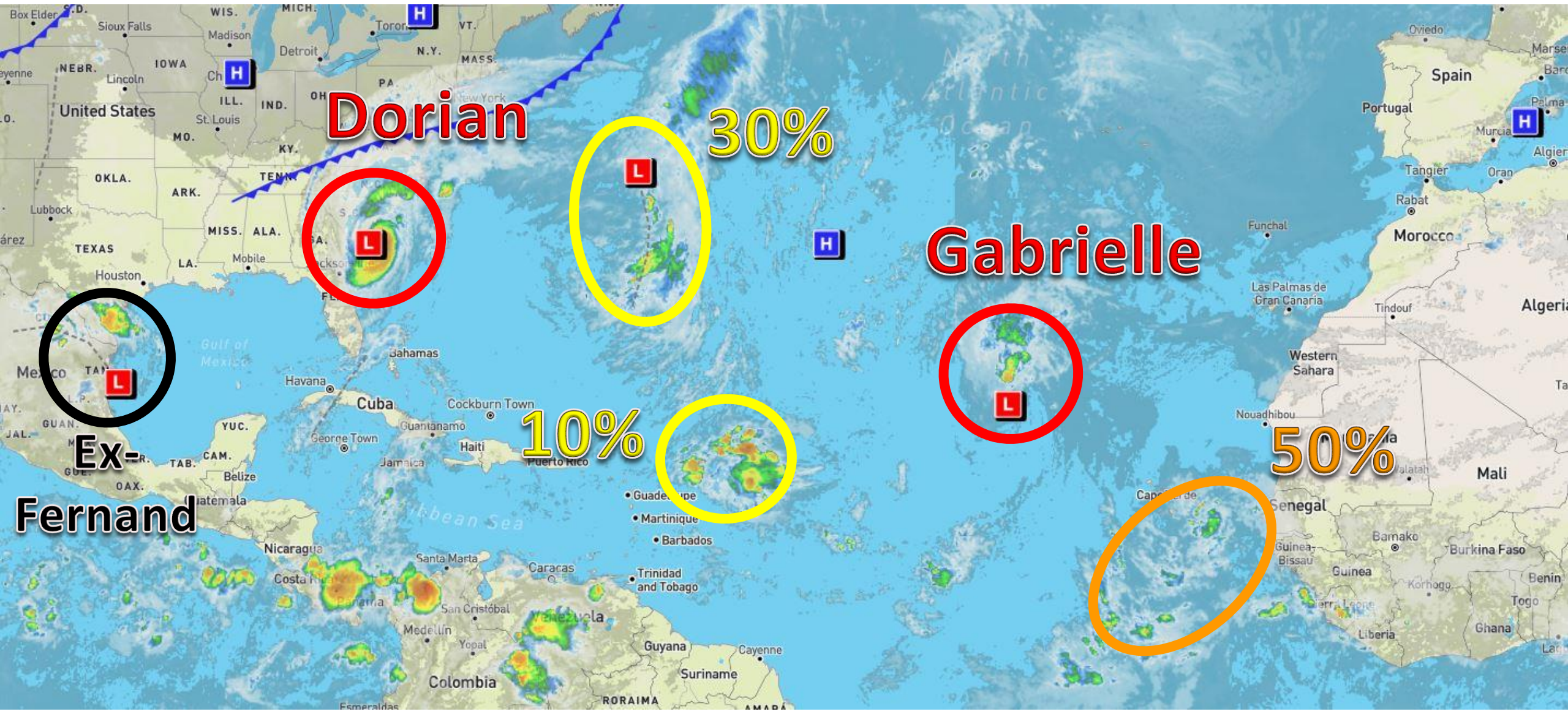
Thursday, September 5, 2019

Hurricane Dorian, Tropical Storm Gabrielle, Invest
92L (30%), Leeward Island Low (10%) & African
Tropical Wave (50%)

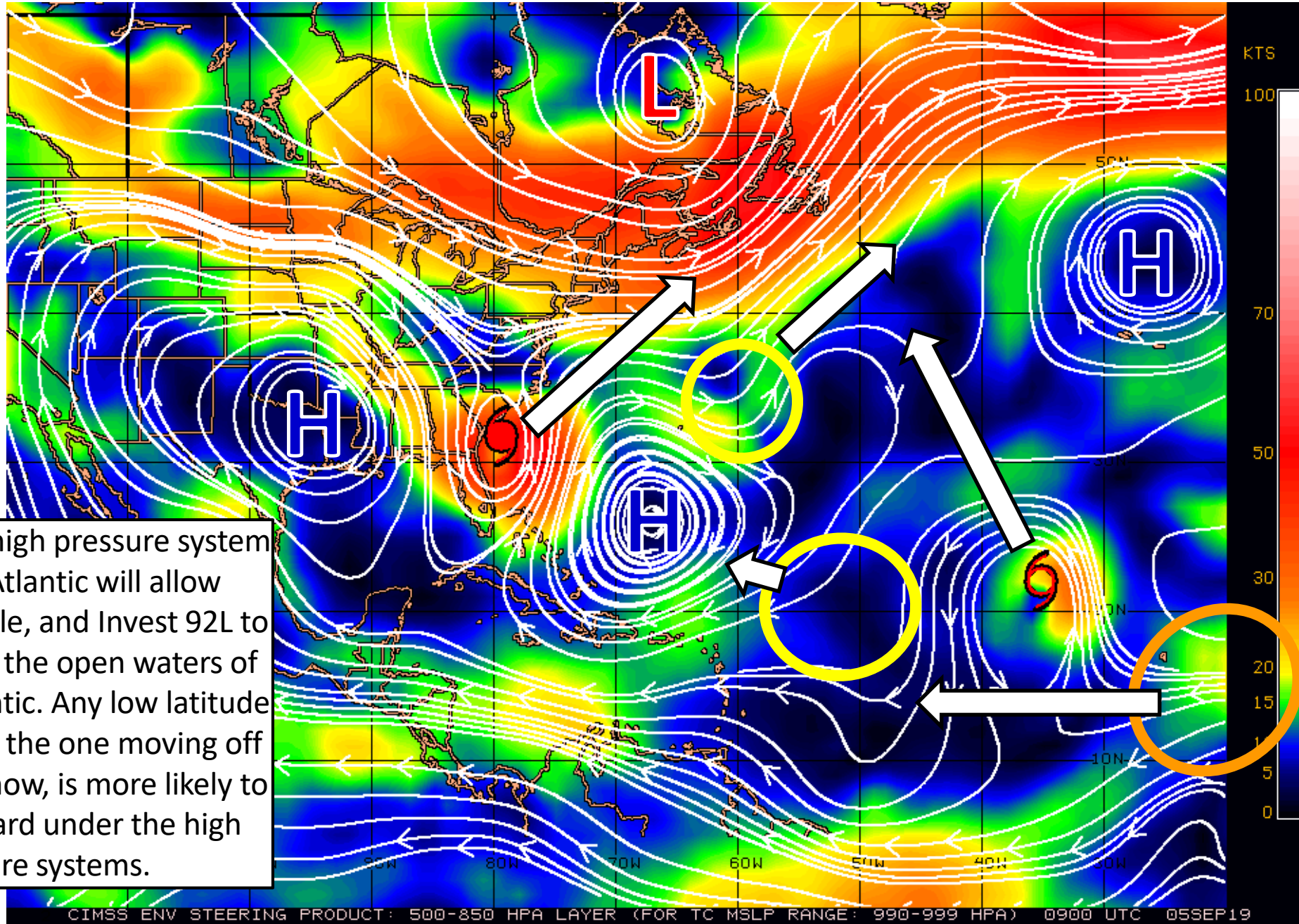
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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

Atlantic Basin Satellite Image

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

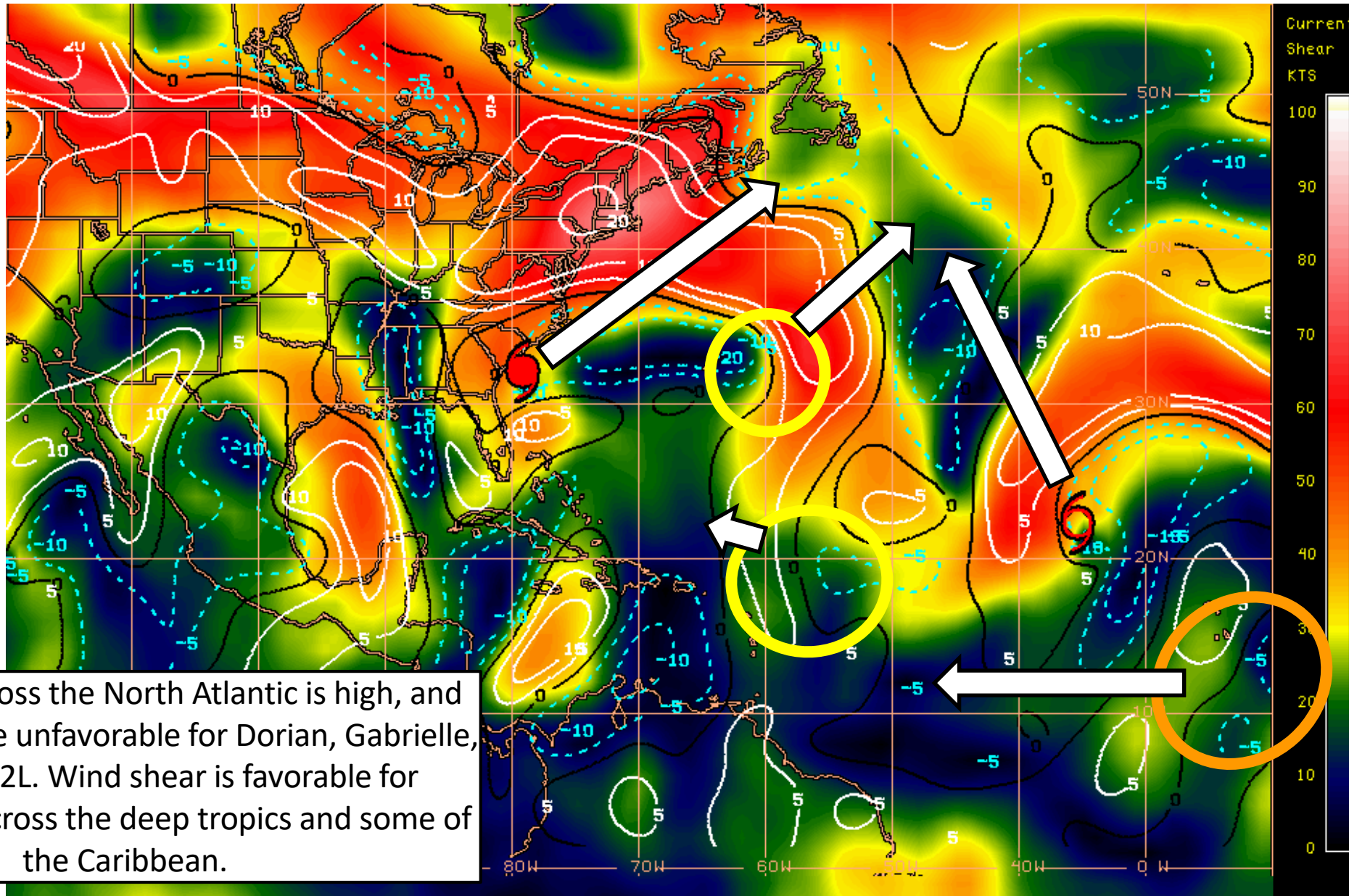


Steering Currents



A break in the high pressure system across the Atlantic will allow Dorian, Gabrielle, and Invest 92L to move towards the open waters of the North Atlantic. Any low latitude waves, such as the one moving off of Africa right now, is more likely to move westward under the high pressure systems.

Wind Shear (shaded) and Wind Shear Tendencies (contoured)



HIGH Shear
(Unfavorable)

HIGH Shear
(Unfavorable)

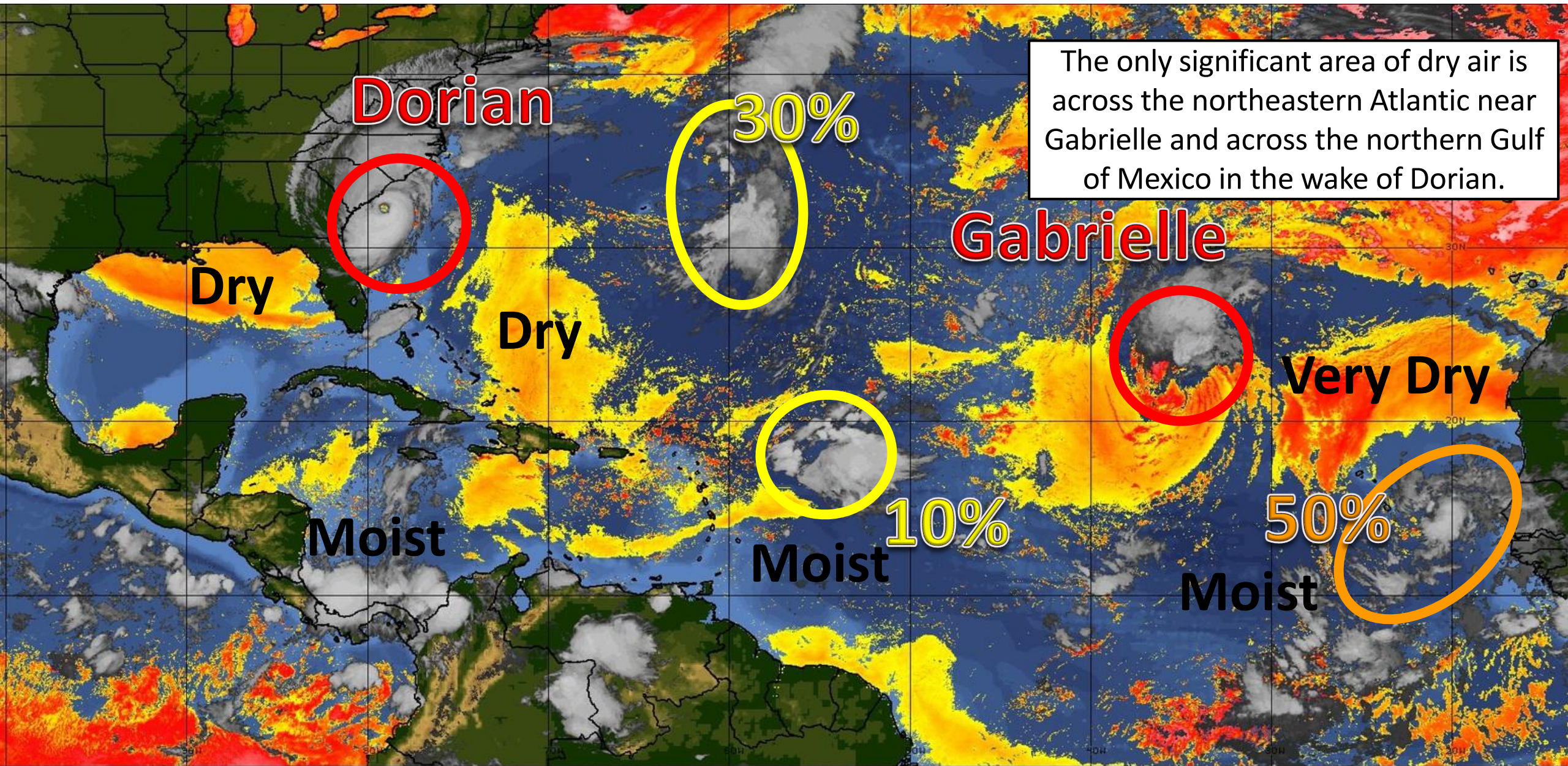
MODERATE
Shear
(Neutral)

LOW Shear
(Favorable)

Wind shear across the North Atlantic is high, and will thus become unfavorable for Dorian, Gabrielle, and Invest 92L. Wind shear is favorable for development across the deep tropics and some of the Caribbean.

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

Dry Air & Saharan Dust



The only significant area of dry air is across the northeastern Atlantic near Gabrielle and across the northern Gulf of Mexico in the wake of Dorian.

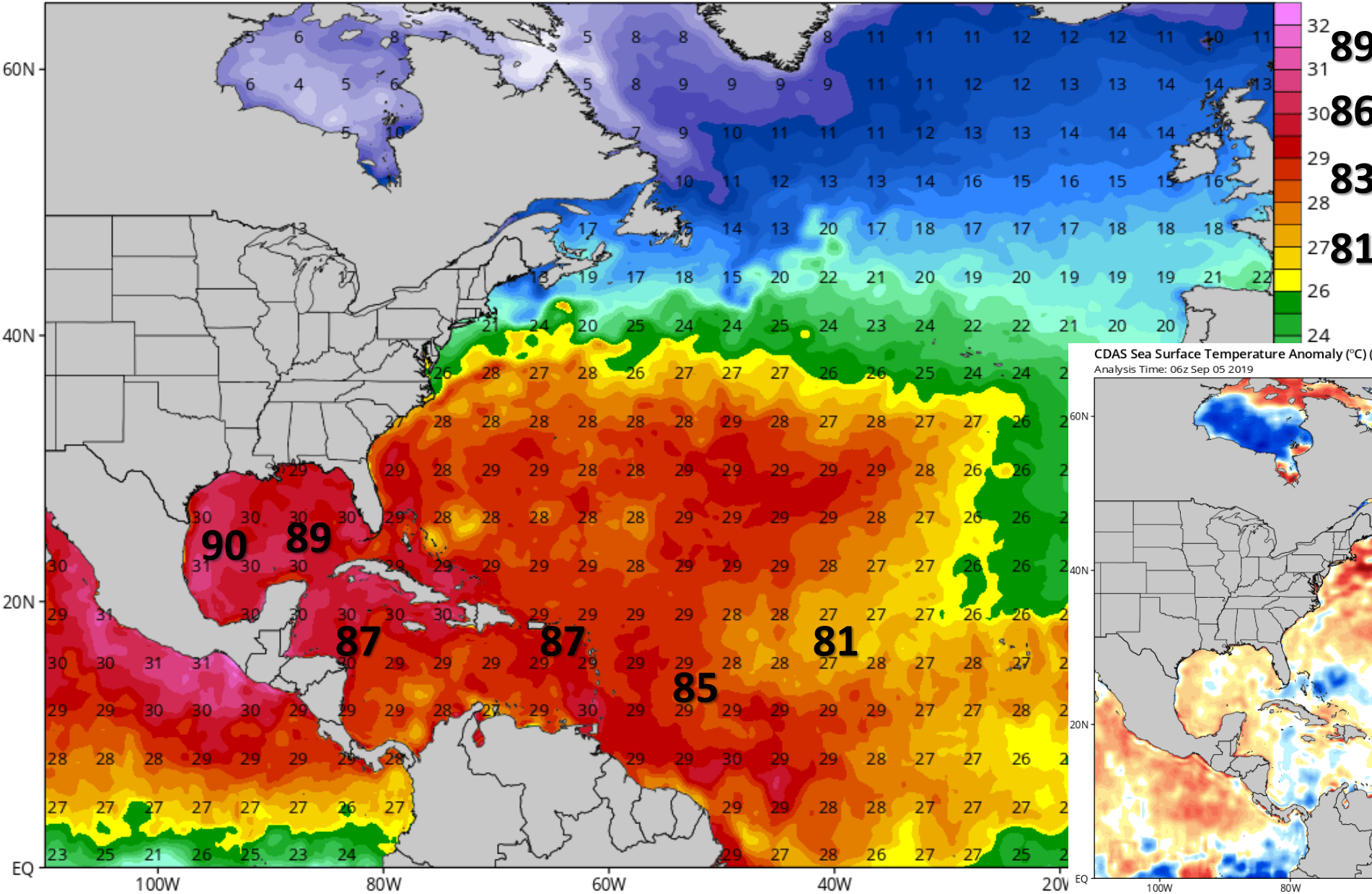
LESS <----- DRY AIR (LOW/MID-LEVEL) AND/OR DUSTY SAL AIRMASS -----> MORE

North Atlantic Sea Surface Temperatures and Anomalies

CDAS Sea Surface Temperature (°C)

Analysis Time: 06z Sep 05 2019

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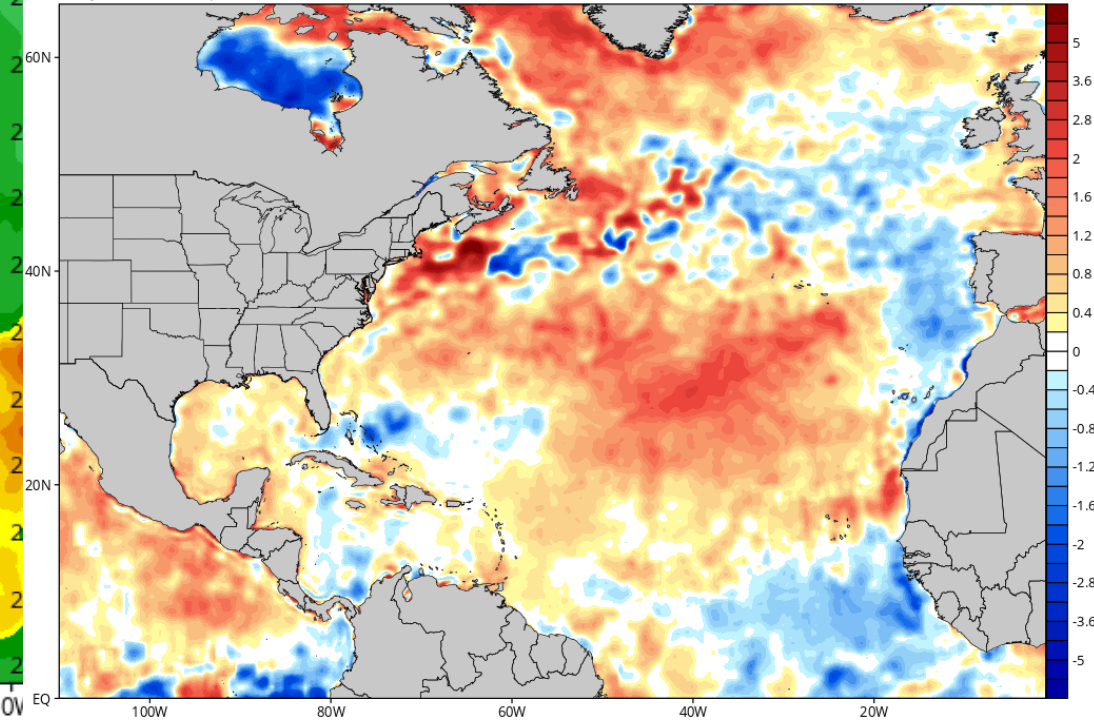
Water temperatures are warm enough to support tropical development, and are running a little above normal in many locations.

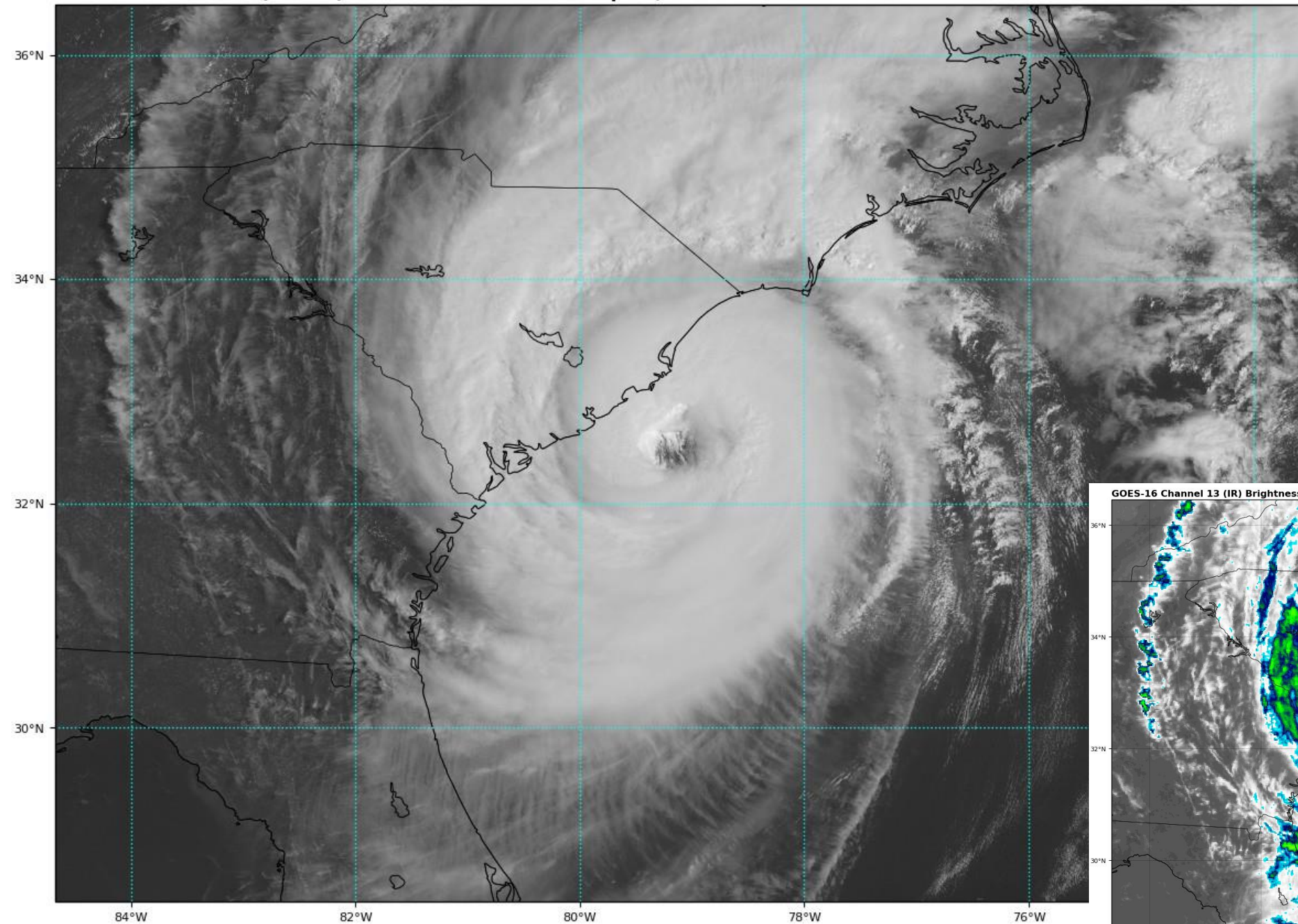
Dorian has cooled the water off near the Bahamas.

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

Analysis Time: 06z Sep 05 2019

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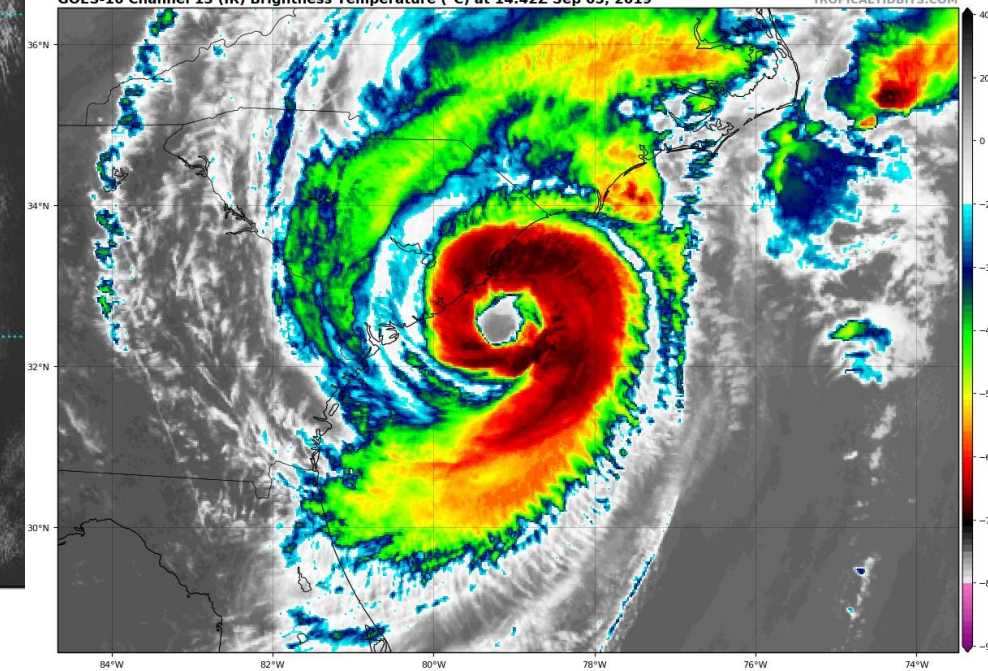


Hurricane Dorian Satellite Image

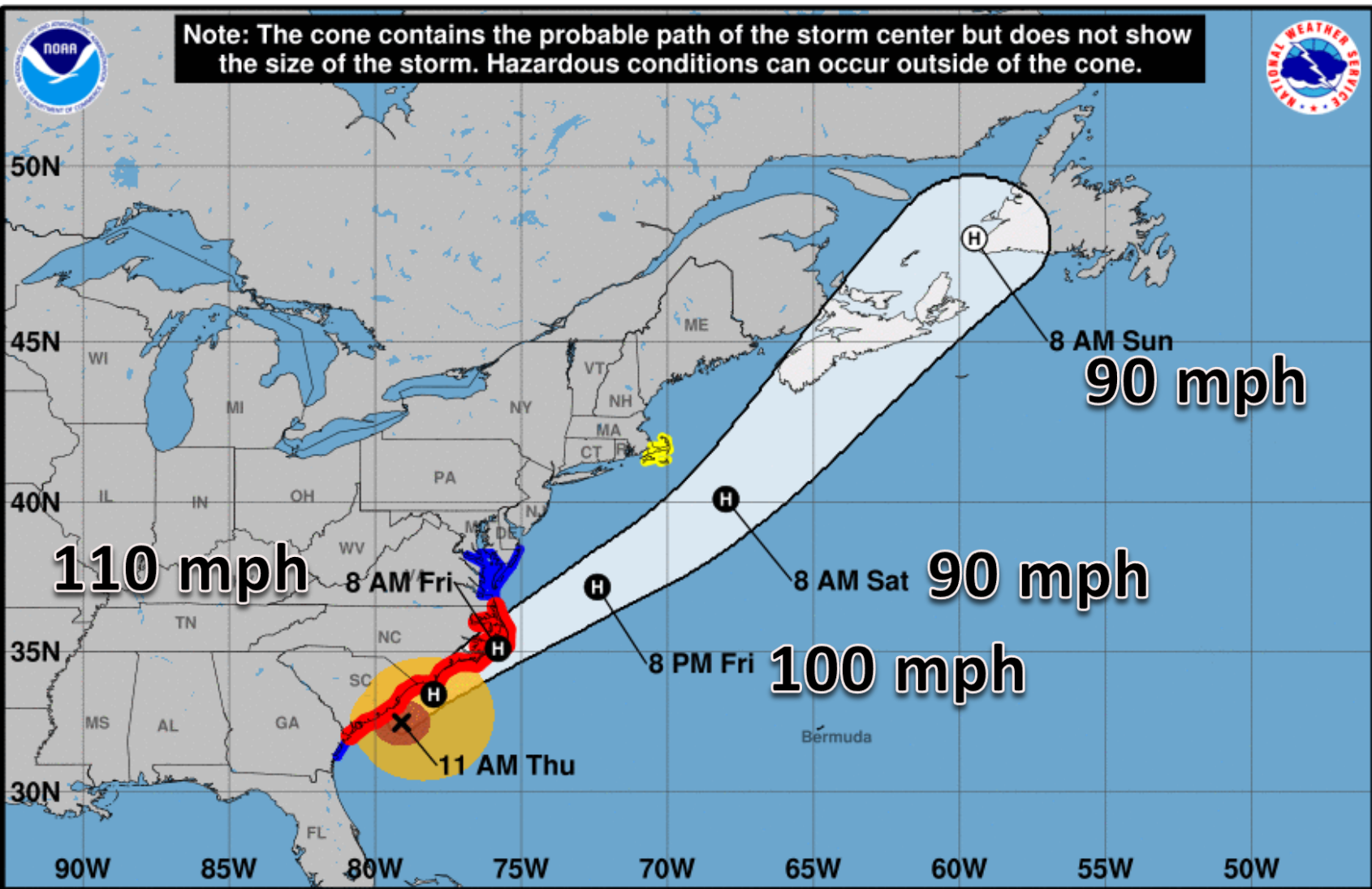
The eye of Dorian is
approaching northeast
South Carolina and
southwest North Carolina

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:42Z Sep 05, 2019

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Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Hurricane Dorian Forecast Track

Dorian is just offshore of South Carolina and is likely to make landfall in North Carolina late tonight or early on Friday.

Dorian will become non-tropical off the coast of New England this weekend.

All direct impacts, and watches and warnings, have ended for Florida.

Hurricane Dorian
Thursday September 05, 2019
11 AM EDT Advisory 49
NWS National Hurricane Center

Current information: x
Center location 32.5 N 79.1 W
Maximum sustained wind 110 mph
Movement NNE at 8 mph

Forecast positions:
● Tropical Cyclone ○ Post/Potential TC
Sustained winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:
Day 1-3 Day 4-5

Watches:
Hurricane Trop Stm

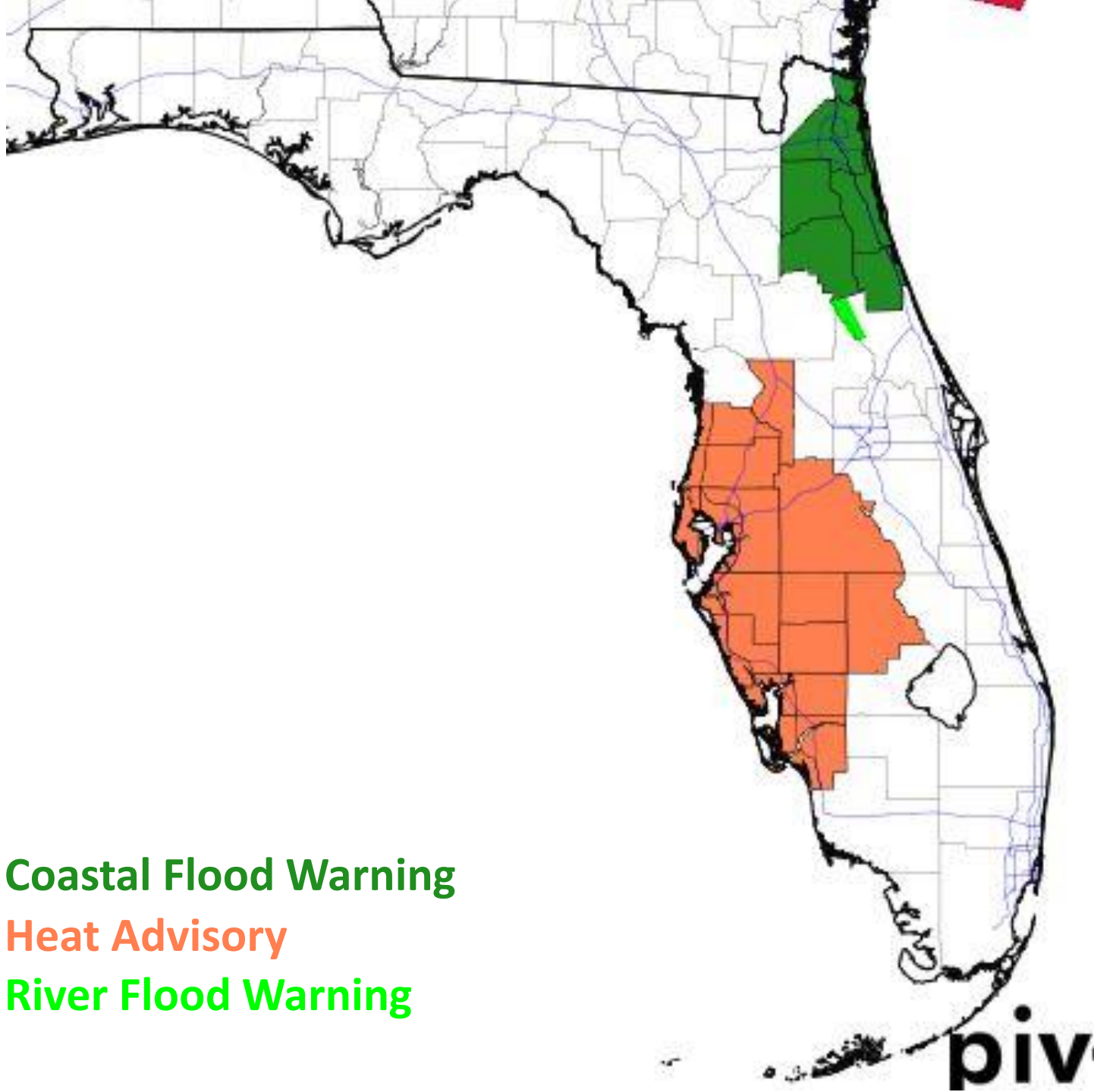
Warnings:
Hurricane Trop Stm

Current wind extent:
Hurricane Trop Stm

Current Watches and Warnings for Florida

- Minor flooding continues at high tide along the lower St. Johns (1-2' above normal).
- Moderate flooding St. Johns River at Astor
- Heat Index 103-110 degrees this afternoon statewide

Coastal Flood Warning
Heat Advisory
River Flood Warning



**Rip current risk
remains elevated at
many Florida beaches
into this weekend.**

Wave heights today at
Atlantic beaches will be
3-6', gradually
decreasing over the
next few days.

BEACH WARNING FLAGS
BANDERAS DE ADVERTENCIA EN LA PLAYA

-  **Water Closed to Public**
Agua Cerrada al Publico
-  **High Hazard**
High Surf and/or Strong Currents
Peligro Alto, Resaca Alta y/o Corrientes Fuertes
-  **Medium Hazard**
Moderate Surf and/or Currents
Peligro Medio, Resaca Moderada y/o Corrientes Fuertes
-  **Low Hazard**
Calm Conditions, Exercise Caution
Peligro Bajo, Condiciones Calmas, Tenga Cuidado
-  **Stinging Marine Life**
Man o' War, Jellyfish, Stingrays
Animal Marino que causa picaduras Fragata Portuguesa, Medusas, Rayas

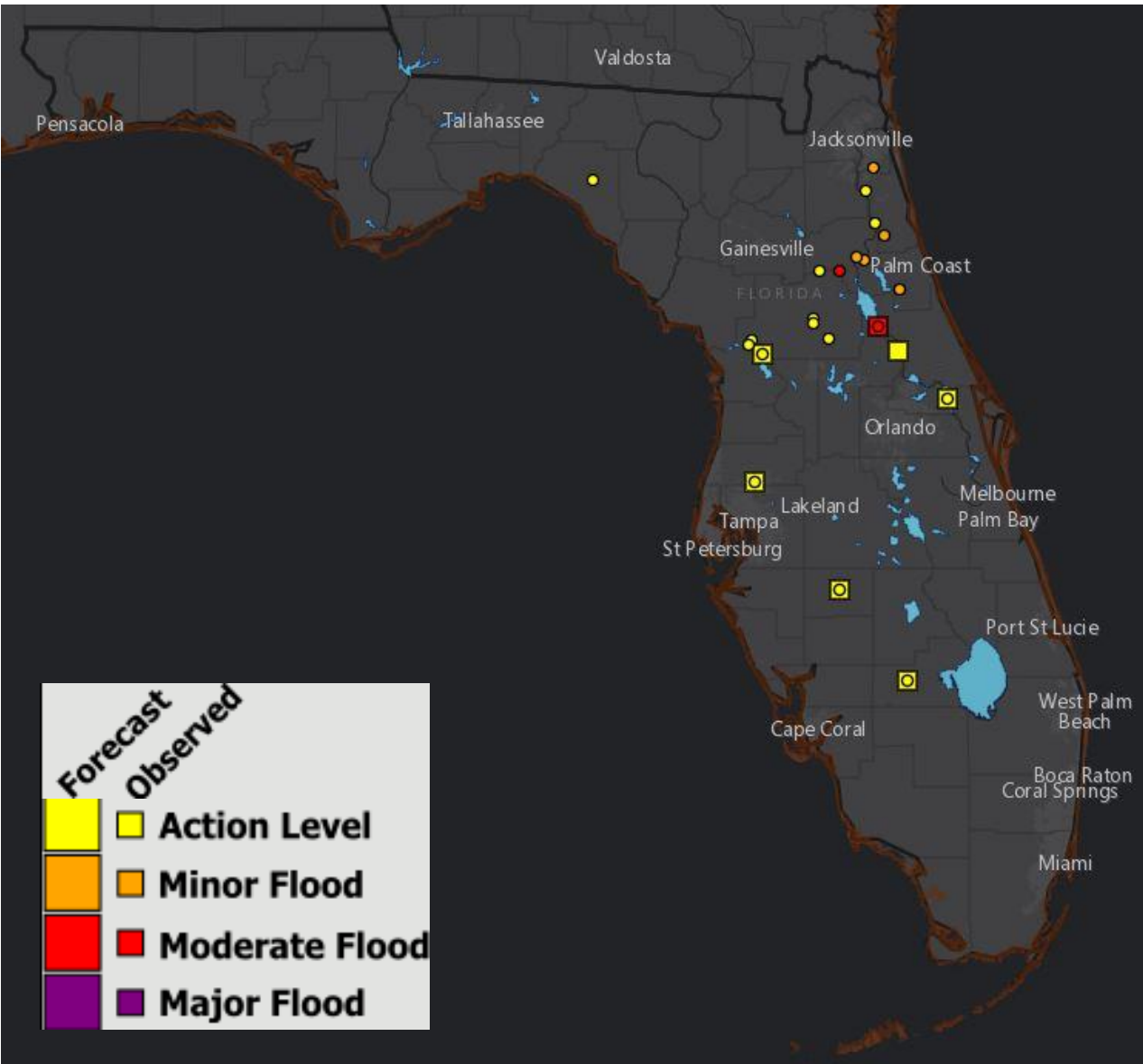
Absence of Flags Does Not Assure Safe Waters
La Ausencia de Banderas No Asegura Aguas Seguras



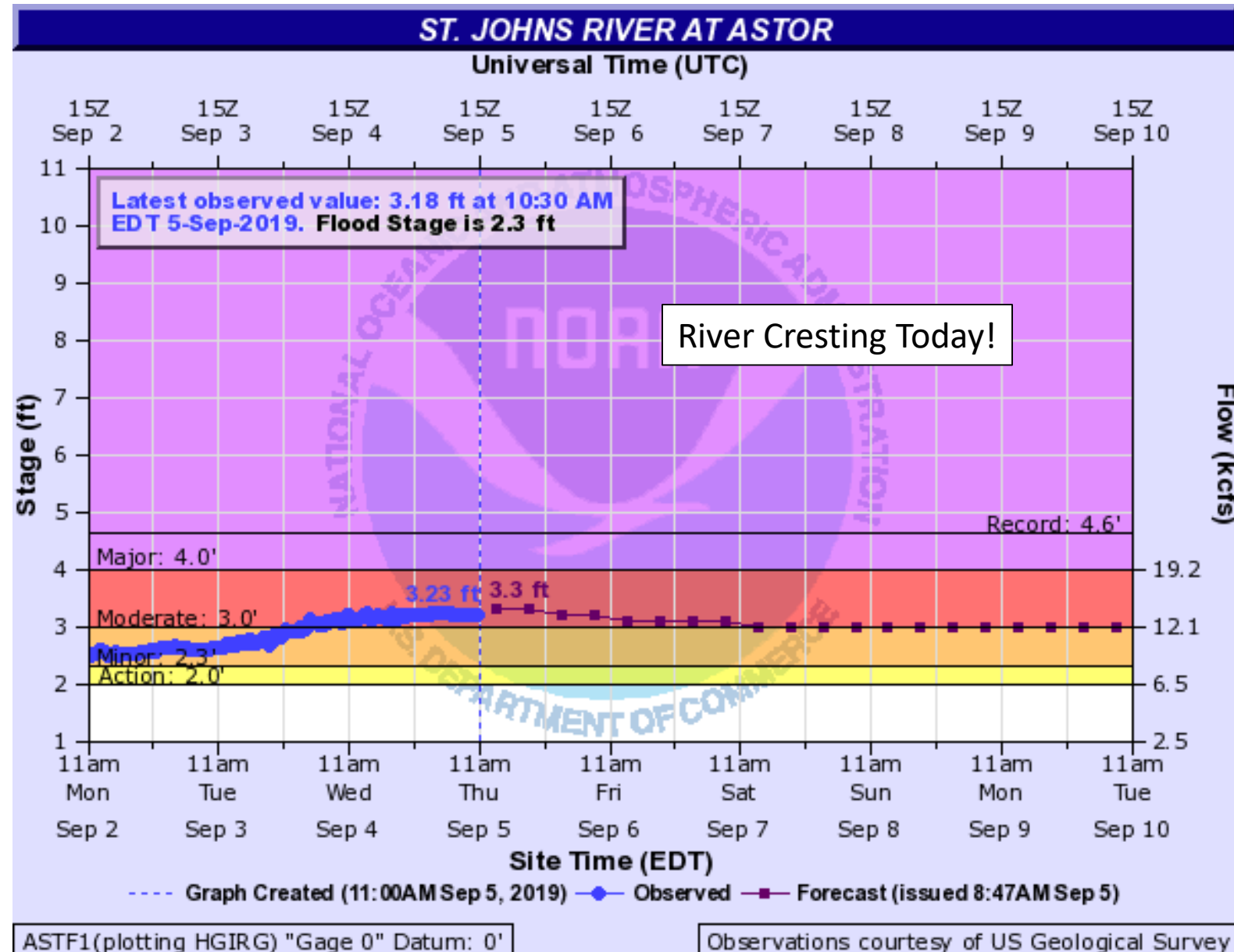
River Observations/Forecasts Across the Peninsula

Rivers Currently in or Forecast to Near Flood Stage:

- [Cypress Creek at Worthington Gardens](#)
- [St. Johns River above Lake Harney](#)
- [St. Johns River at Astor](#)
- [St. Johns River at Racy Point](#)
- [St. Johns River at Shands Bridge](#)
- [St. Johns River at Dames Point Bridge](#)
- [St. Johns River at Buffalo Bluff](#)
- [Ocklawaha River at Rodman Dam](#)
- [Dunns Creek near Satsuma](#)
- [Clapboard Creek near Sheffield Road](#)
- [Pottsburg Creek at Beach Blvd. \(US 90\)](#)
- [Deep Creek at Spuds](#)
- [Haw Creek above Russell Landing](#)
- [Julington Creek at Old St. Augustine Road](#)

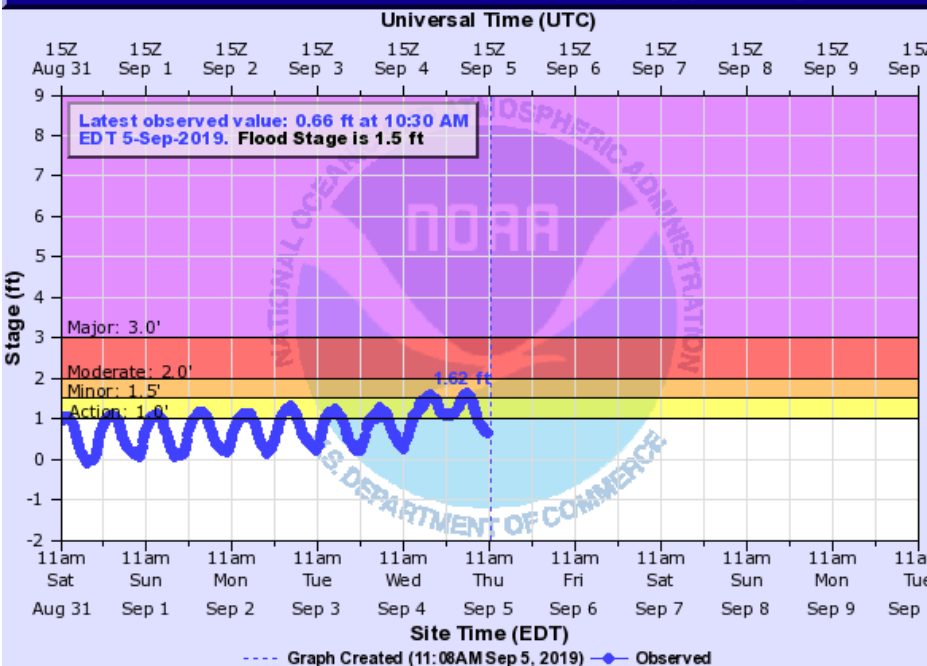


St. Johns River at Astor – Moderate Flooding

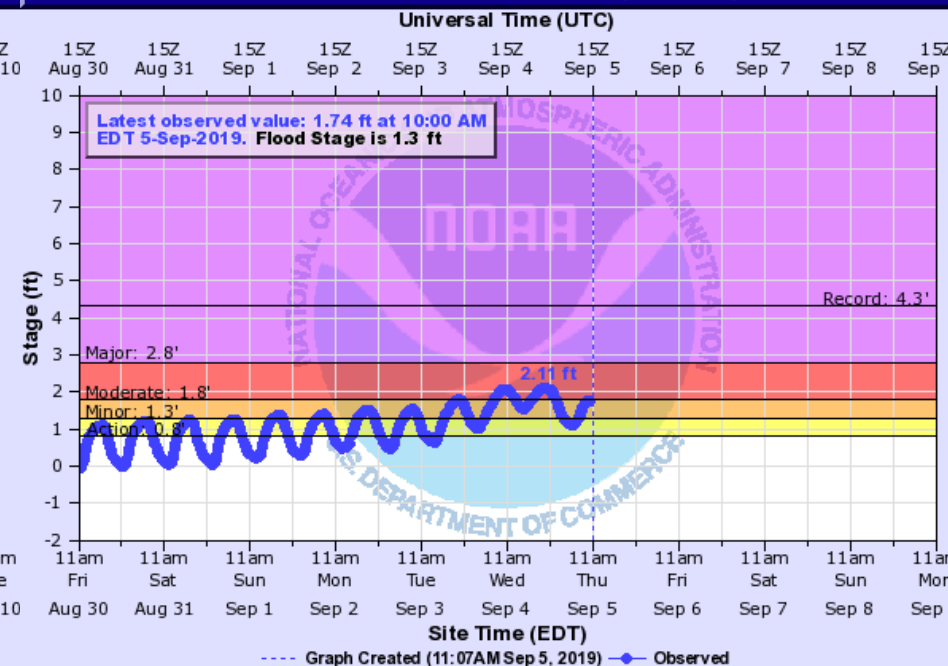


- **3.5 feet:** Many yards and streets along the river, and with canals flooded, water enters the first floor of low lying homes. Flooding to docks and yards at condominiums on Juno Trail and docks at Astor Bridge Marina. Roads flooded in South Moon Fish Camp and starting to move over the sea wall at Blair's Jungle Den.
- **3 feet:** Moderate flooding, with water covering yards and further encroaching on many low lying homes near the river. Flooding of many yards and low lying roads near the river.
- **2.8 feet:** Docks and boat ramps covered at South Moon Fish Camp and approaching sea wall at Blair's Jungle Den.
- **2.3 feet:** Minor flooding of low lying streets and yards north of Fox Road on Lake County side of Astor, and from River Road northward on Volusia side of river. Water begins to cover docks at South Moon Fish Camp.
- **2 feet:** Water begins to move into yards and cover boat ramps in low lying areas along the river.

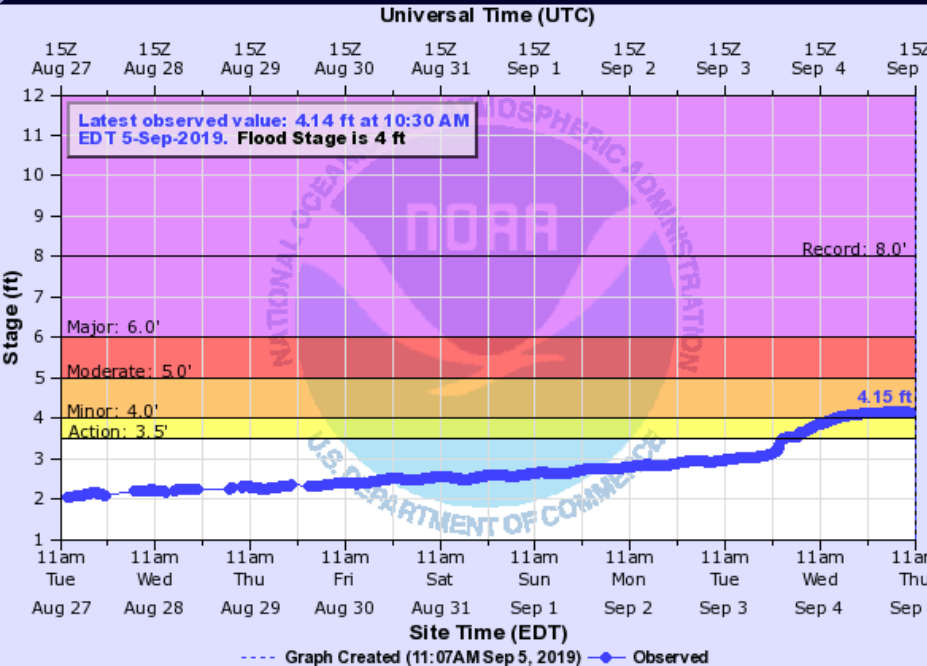
ST. JOHNS RIVER AT BUCKMAN BRIDGE (I-295) (IN MHHW)



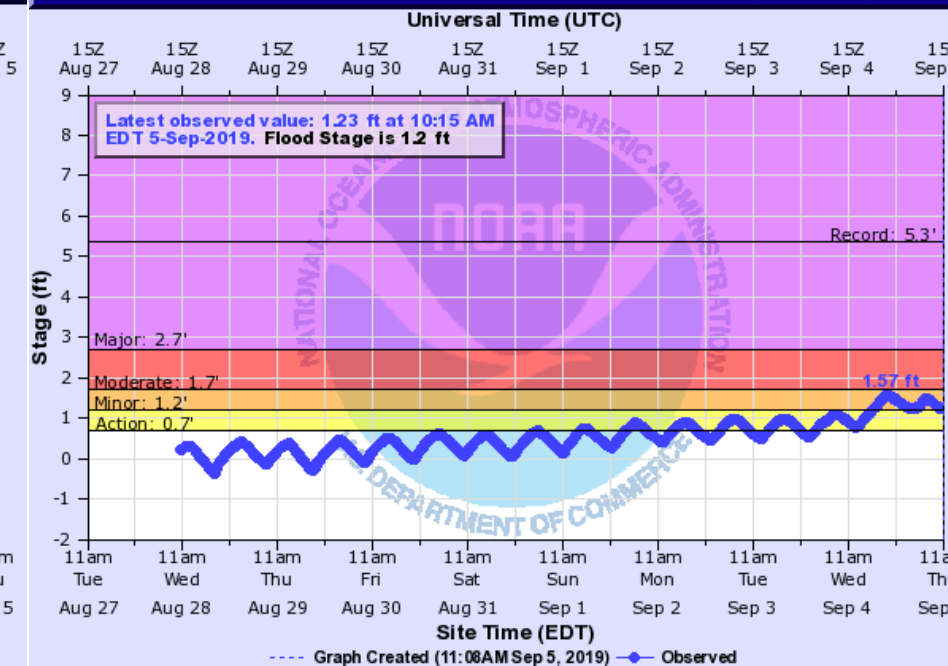
DUNNS CREEK NEAR SATSUMA (IN MHHW)



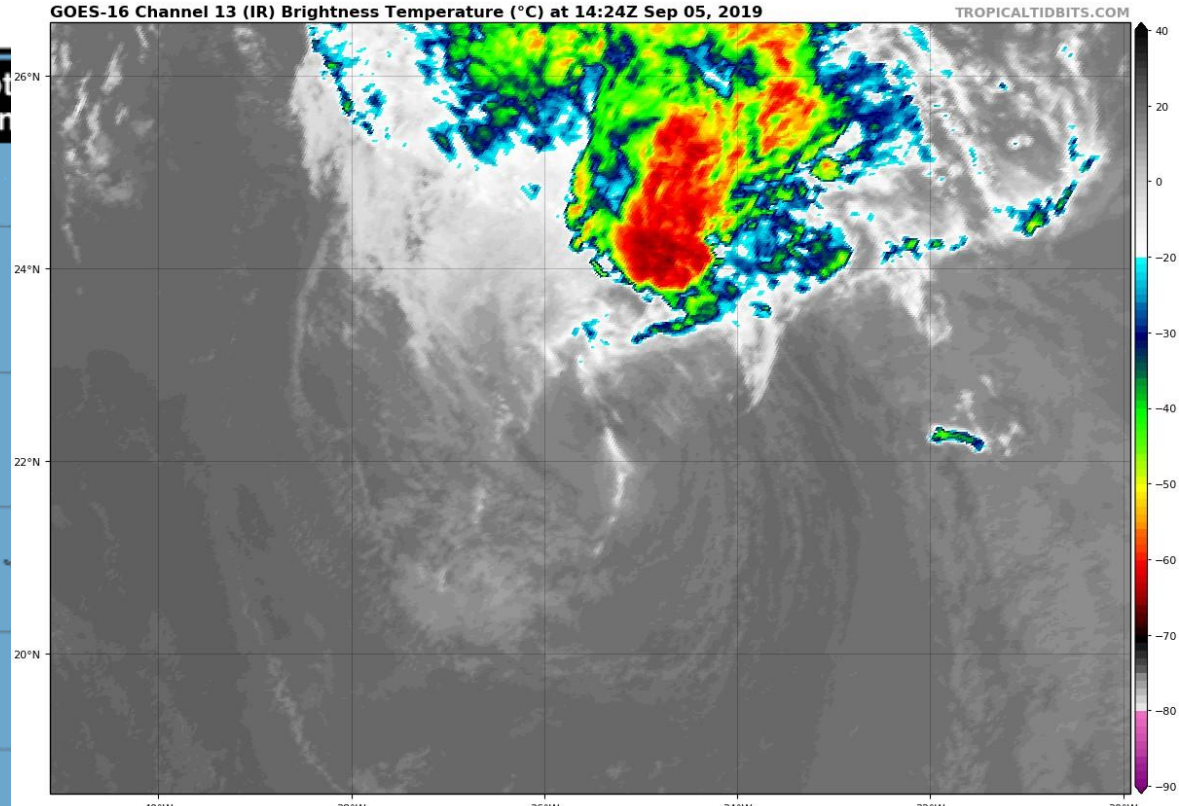
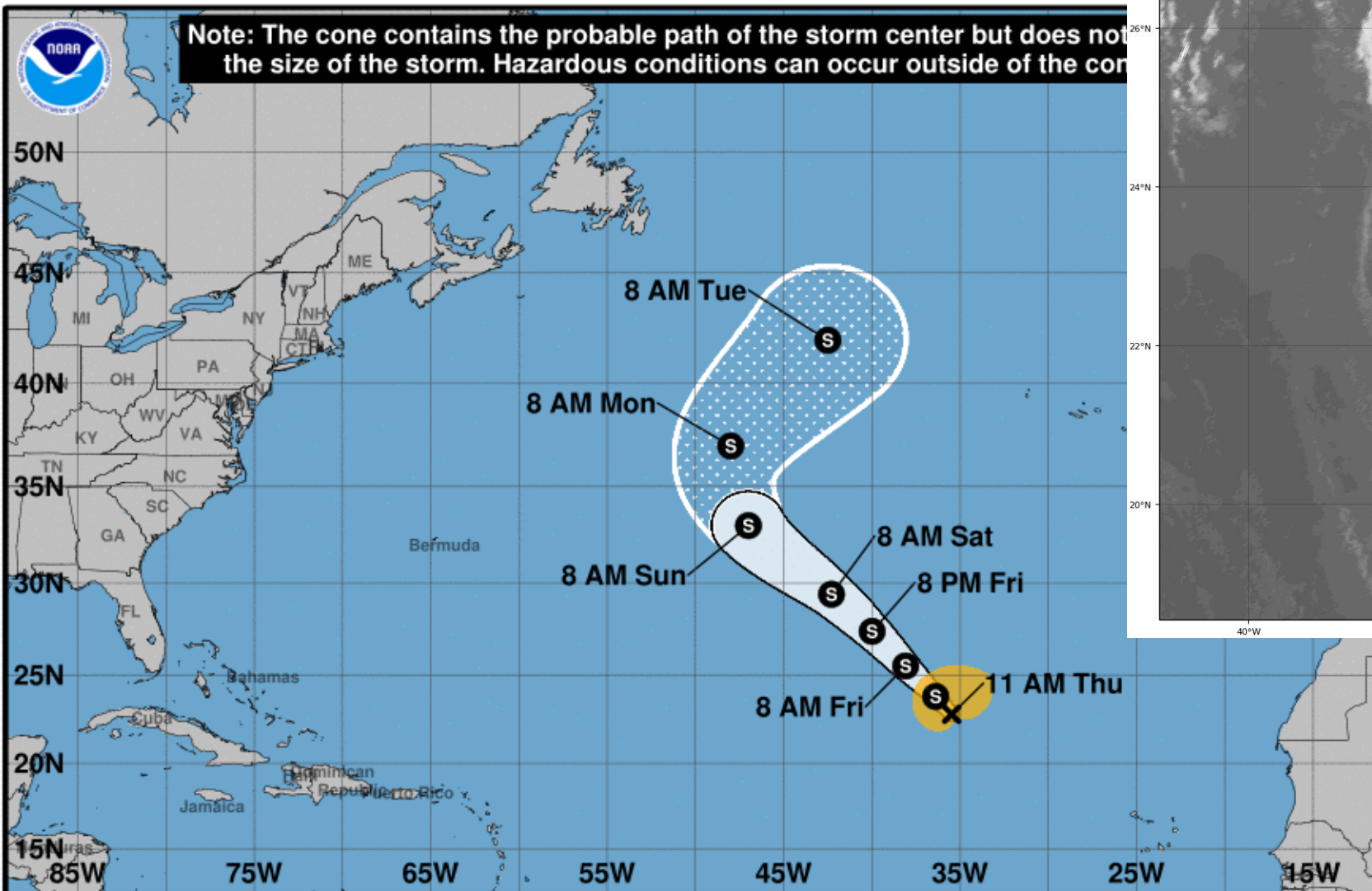
HAW CREEK ABOVE RUSSELL LANDING











JULINGTON CREEK AT OLD SAINT AUGUSTINE ROAD (IN MHHW)



Generally, minor flooding is still ongoing at high tide across the lower St. Johns River and it's tributaries. Water levels peaked at high tide yesterday afternoon.



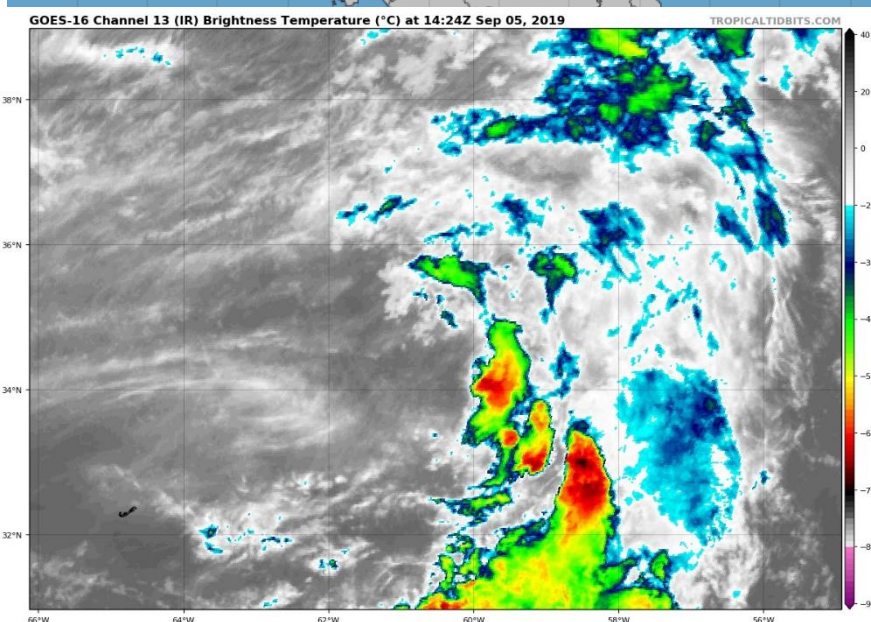
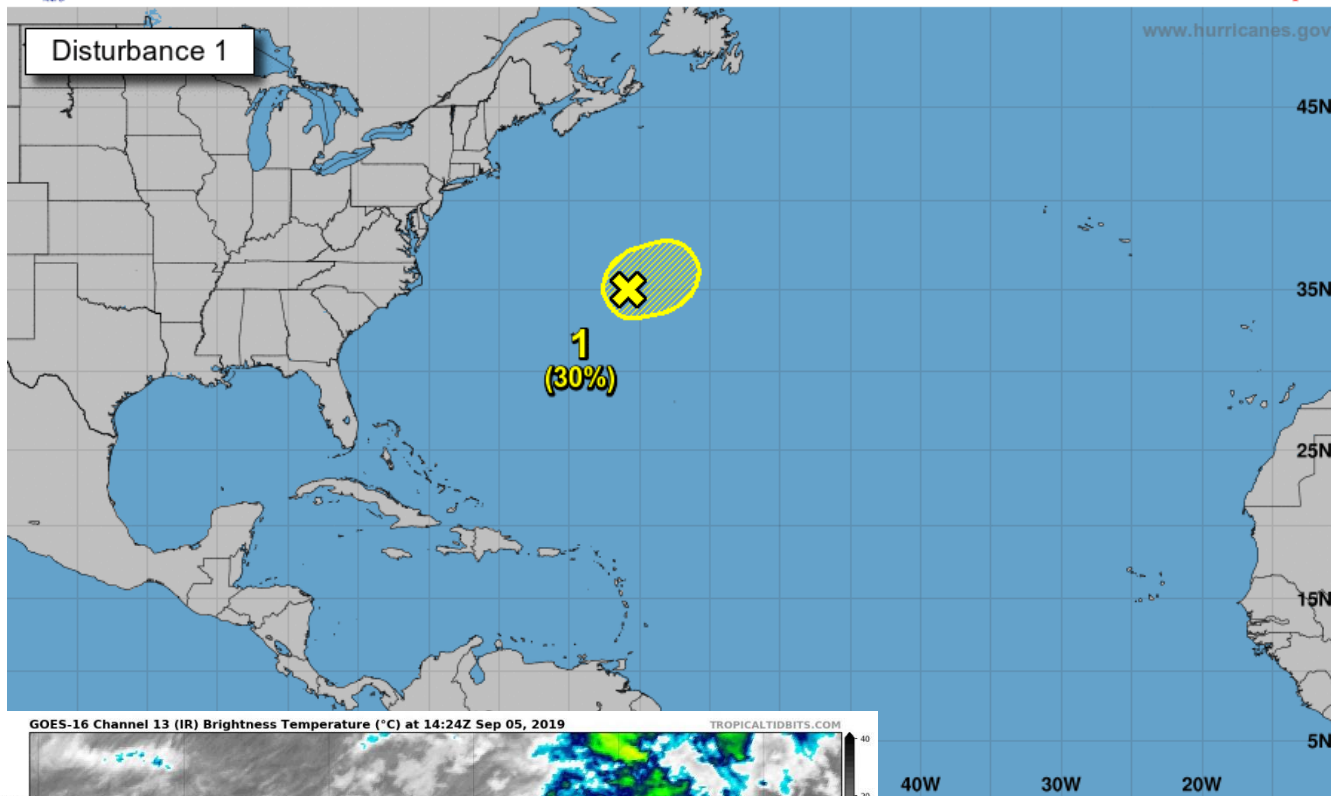
Tropical Storm Gabrielle is becoming more disorganized with limited storms near the center this morning. It will track northwest into open waters.

Tropical Storm Gabrielle Thursday September 05, 2019 11 AM AST Advisory 8 NWS National Hurricane Center		Current information: x Center location 22.8 N 35.5 W Maximum sustained wind 50 mph Movement NW at 10 mph		Forecast positions: ● Tropical Cyclone ○ Post/Potential TC Sustained winds: D < 39 mph S 39-73 mph H 74-110 mph M > 110 mph	
Potential track area:  Day 1-3  Day 4-5		Watches:  Hurricane  Trop Stm		Warnings:  Hurricane  Trop Stm	
				Current wind extent:  Hurricane  Trop Stm	



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



< 40% 40-60% > 60%
torm Hurricane

Invest 92L northeast of Bermuda remains disorganized. Significant development of this system is no longer expected as wind shear has increased due to nearby Hurricane Dorian. Development chances are likely to decrease.

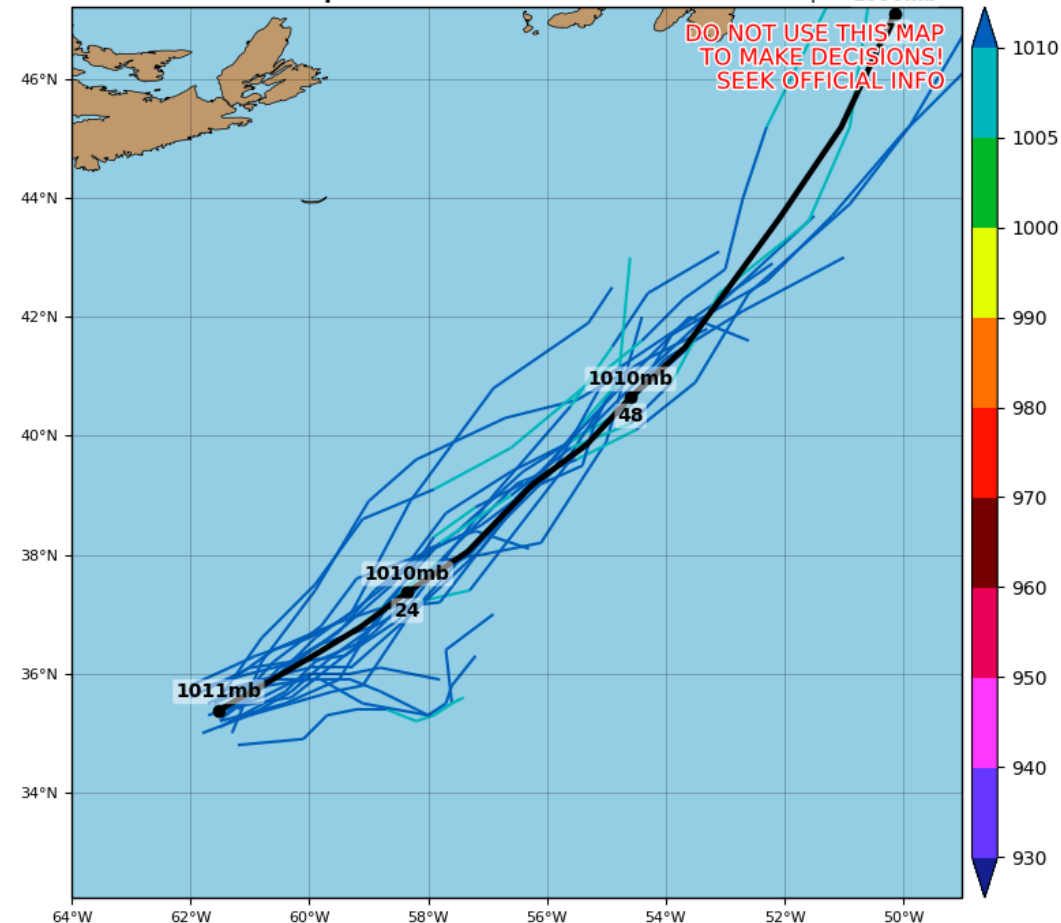
* Formation chance through 48 hours...low...30 percent.

* Formation chance through 5 days...low...30 percent.

Invest 92L GEFS Tracks & Min. MSLP (mb)

Initialized at 06z Sep 05 2019

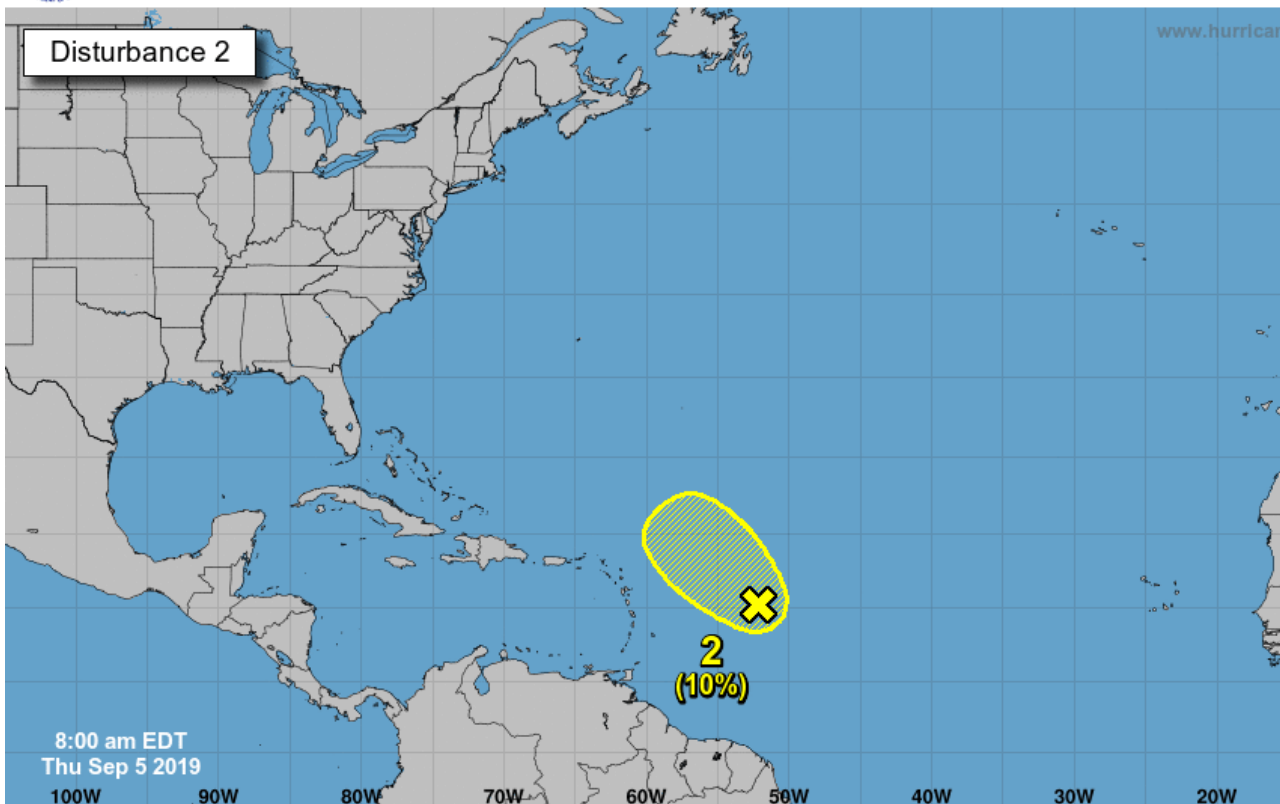
Levi Cowan - tropical



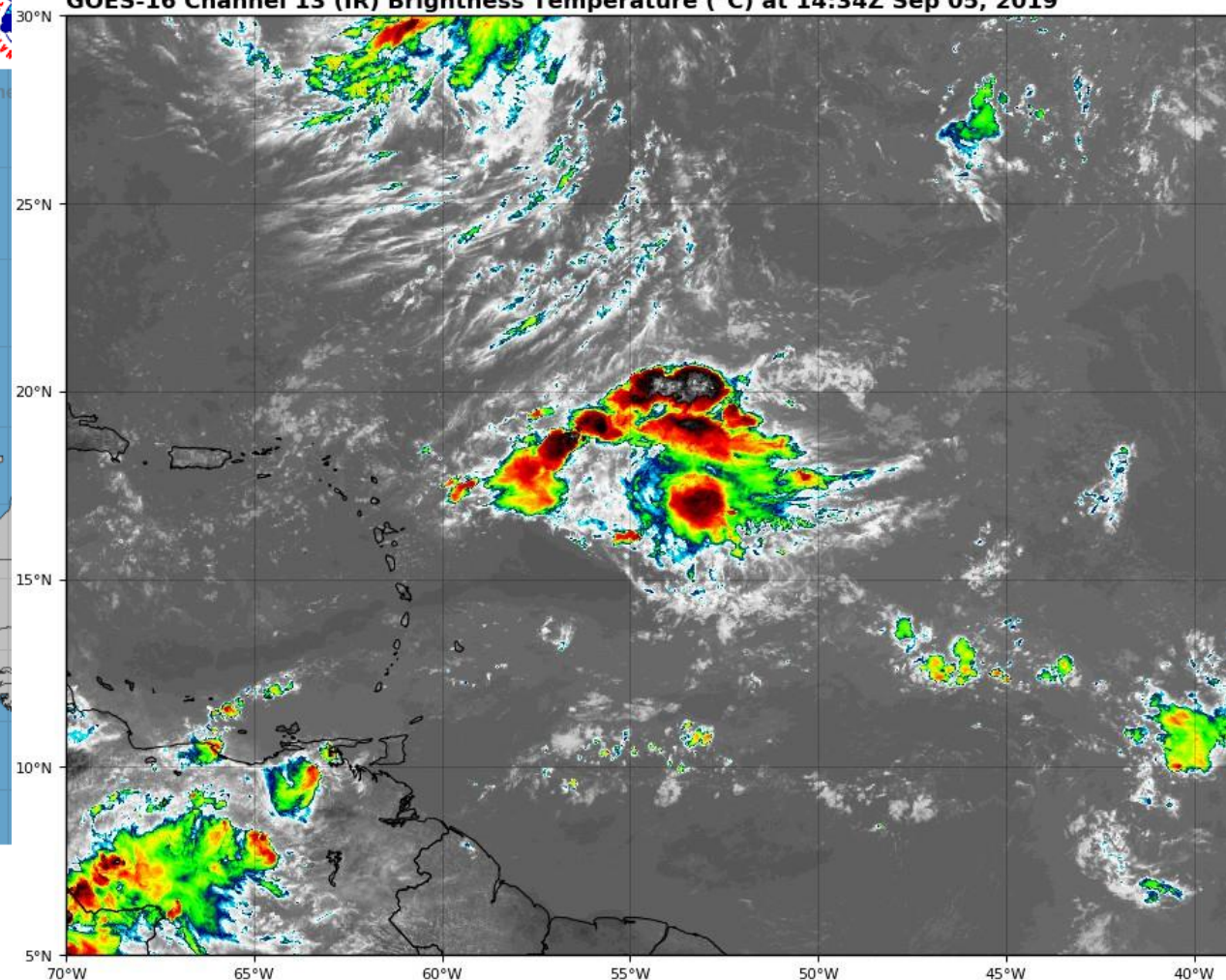


Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:34Z Sep 05, 2019



A trough of low pressure located about 500 miles east of the Leeward Islands is producing a large but disorganized area of showers and thunderstorms. Only slow development of this disturbance, if any, is expected during the next couple of days while it moves slowly northwestward.

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

* Formation chance through 5 days...low...10 percent.

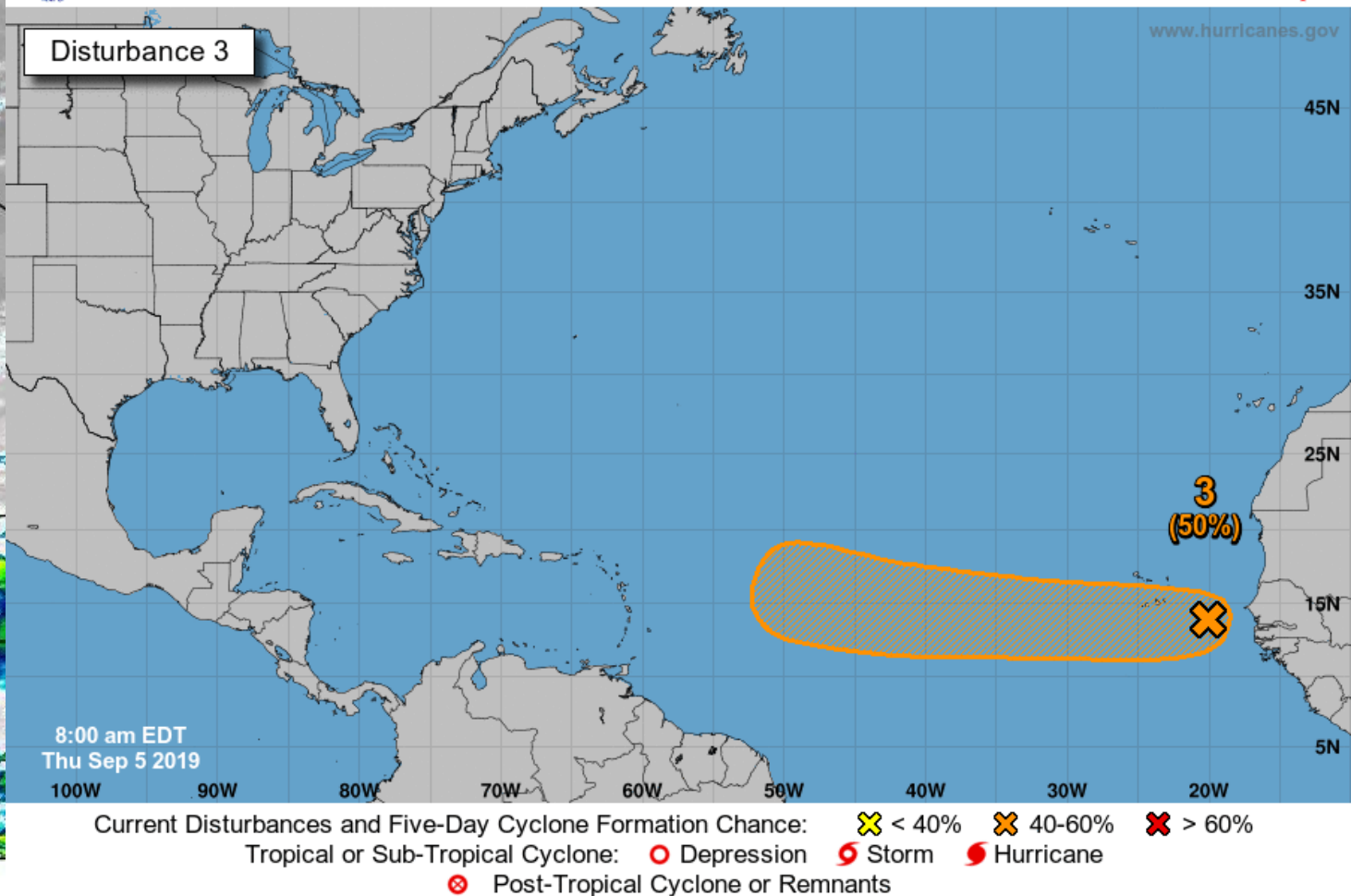
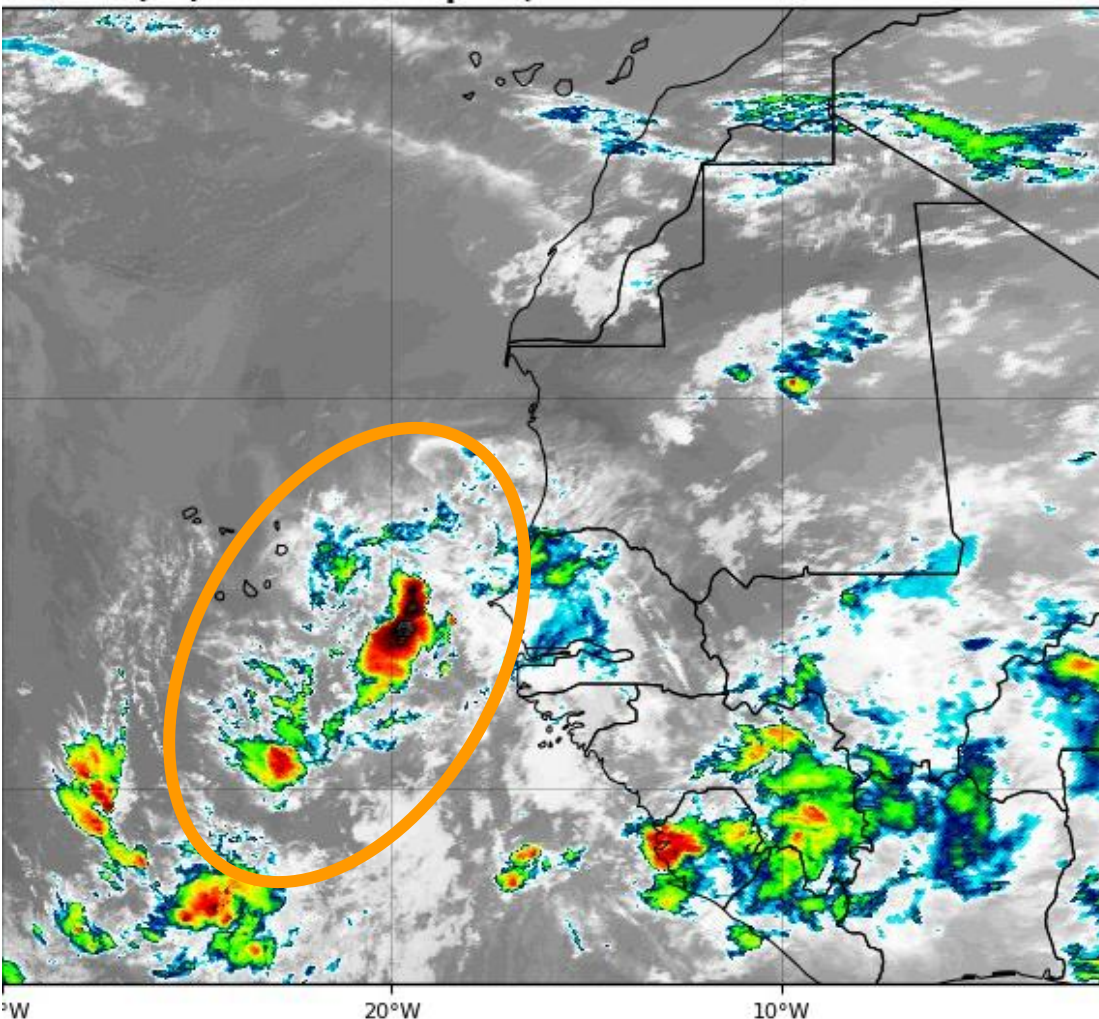
Temperature (°C) at 09:34Z Sep 05, 2019

TROP



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



West African Wave: A tropical wave is located between the Cabo Verde Islands and the west coast of Africa. Some slow development is possible over the next few days, and this system could become a tropical depression this weekend or early next week in the tropical Atlantic.

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

* Formation chance through 5 days...medium...50 percent.

Summary

Hurricane Dorian

- At 11 AM ET Thursday, the center of Hurricane Dorian was located about 50 miles east-southeast of Charleston South Carolina, moving to the north-northeast at 8 mph.
- Maximum sustained winds are near 110 mph, which is a Category 2 Hurricane. Dorian is forecast to maintain intensity through tomorrow.
- Dorian may make landfall in eastern North Carolina late tonight or early tomorrow morning and then begin a transition to a non-tropical system off the coast of New England this weekend.
- **Fernand** dissipated over the mountains of northeast Mexico overnight.
- **Tropical Storm Gabrielle**: Gabrielle is located several hundred miles northwest of the Cabo Verde Islands with maximum sustained winds of 50 mph. Gabrielle will begin to accelerate to the northwest into the North Atlantic, well away from land. Gabrielle is showing signs of weakening this morning.
- **Invest 92L**: An area of low pressure near Bermuda remains disorganized and environmental conditions are becoming more unfavorable for development. Chance of development has decreased to 30% (low) over the next 48 hours.
- **Leeward Island Low**: A trough of low pressure 500 miles east of the Leeward Islands is disorganized, and some slow development, if any, is possible over the next few days. Chance of development is 10% (low) over the next 5 days.
- **African Wave**: A tropical wave between west Africa and the Cabo Verde Islands is moving west into a favorable environment. Some gradual development is possible over the next few days and a tropical depression could form in the tropical Atlantic early next week. National Hurricane Center gives it a 50% (medium) chance of development.

Florida Outlook:

- All wind and storm surge watches/warnings have been cancelled for Florida as Dorian has moved away.
- A **Coastal Flood Warning** is in effect for inland Duval, Clay, Putnam, inland St. Johns, inland Flagler through this evening as water levels in the St. Johns are still causing minor flooding at high tide (water levels 1-2' above normal).
- A **River Flood Warning** is in effect for the St. Johns River at Astor, and moderate flooding is forecast for the next couple of days.
- A high risk of rip current continues for many Florida beaches. Wave heights along the Atlantic will be 3-6'.
- Little to no chance of rain is forecast for Florida for the next few days. Temperatures will reach the lower to middle 90s with a heat index of 103-110 degrees. A **Heat Advisory** is in effect today for the Tampa region.
- Gabrielle and Invest 92L pose no threat to Florida.
- The Leeward Island Low and the African Tropical Wave pose no threat to Florida for at least the next week, if any.
- The next names on the 2019 Atlantic storm name list are Humberto and Imelda.

The next tropics packet will be issued late Friday morning. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov. For the latest flood updates, see the latest products from your local National Weather Service, the [Southeast River Forecast Center](#), and the [Weather Prediction Center](#).



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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