



# **TROPICAL UPDATE**

**10 AM EDT**

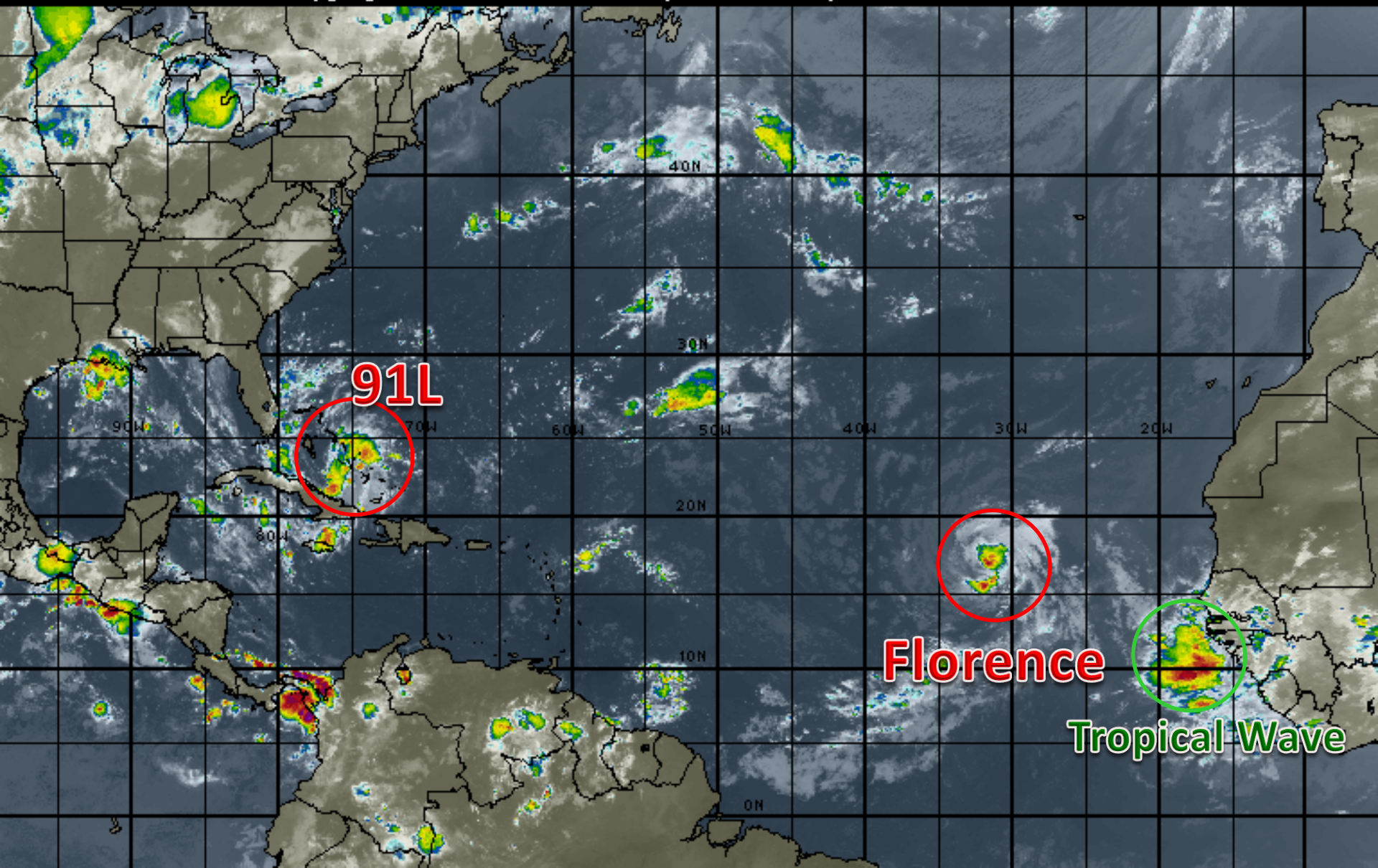
**Sunday, September 2, 2018**

**Tropical Storm Florence, Invest 91L (80%)**

**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.nhc.noaa.gov](http://www.nhc.noaa.gov).**

# Atlantic Basin Satellite Image

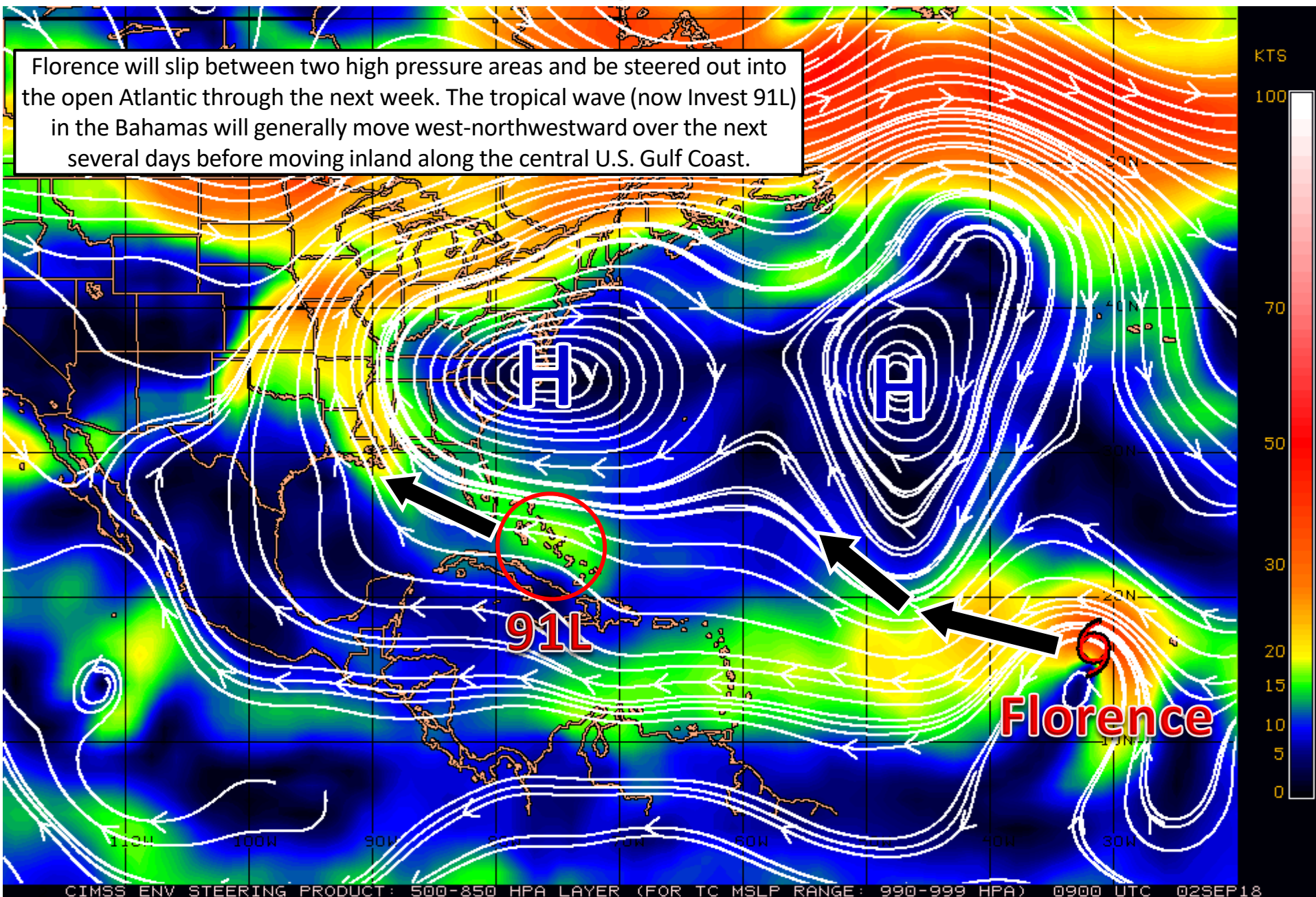
12:00 02-SEP-2018 GMT Copyright © 1998-2018 WSI Corporation <http://www.wsi.com>





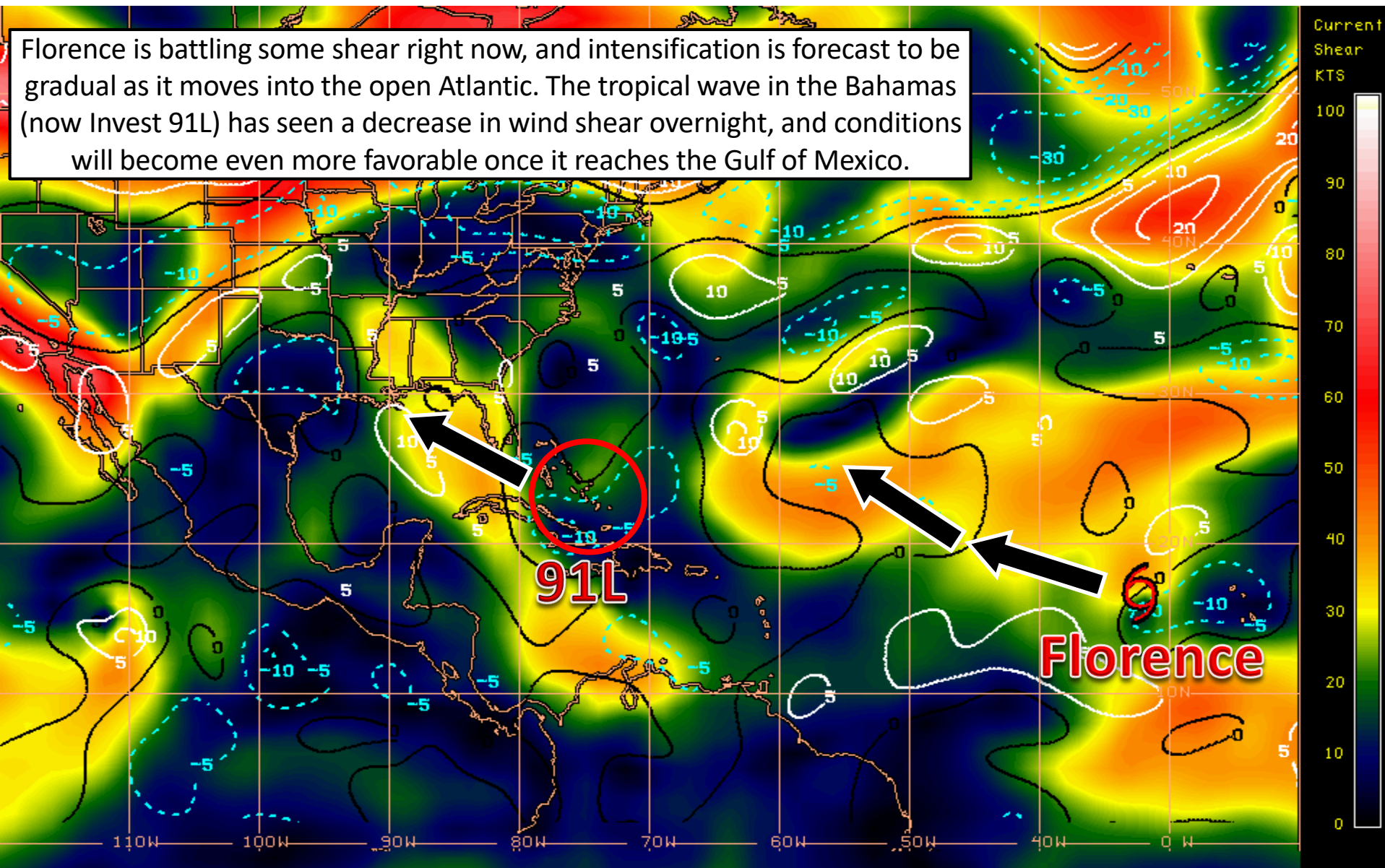
# Steering Currents

Florence will slip between two high pressure areas and be steered out into the open Atlantic through the next week. The tropical wave (now Invest 91L) in the Bahamas will generally move west-northwestward over the next several days before moving inland along the central U.S. Gulf Coast.



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

Florence is battling some shear right now, and intensification is forecast to be gradual as it moves into the open Atlantic. The tropical wave in the Bahamas (now Invest 91L) has seen a decrease in wind shear overnight, and conditions will become even more favorable once it reaches the Gulf of Mexico.



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

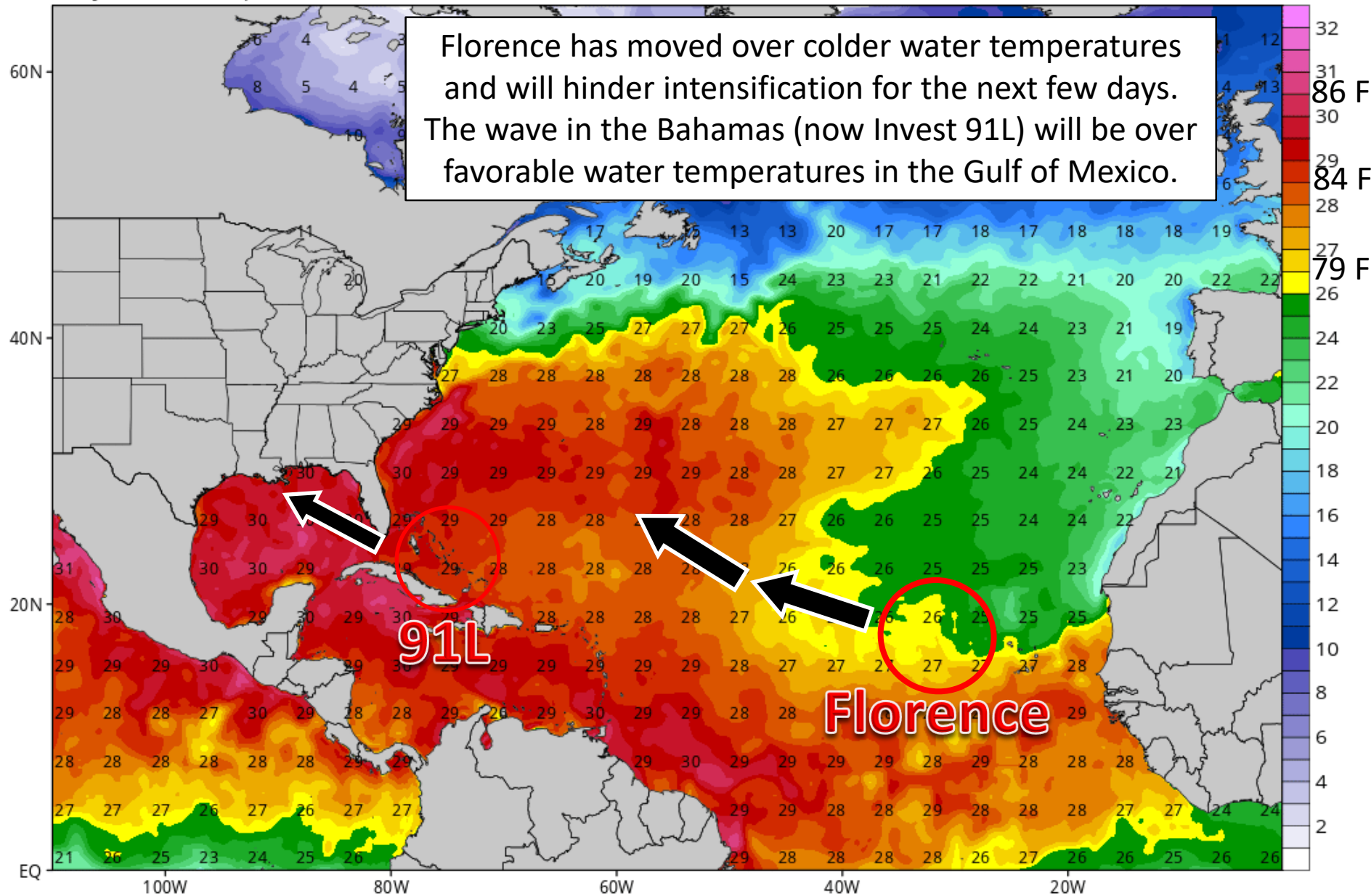


# Water Temperatures

CDAS Sea Surface Temperature (°C)

Analysis Time: 06z Sep 02 2018

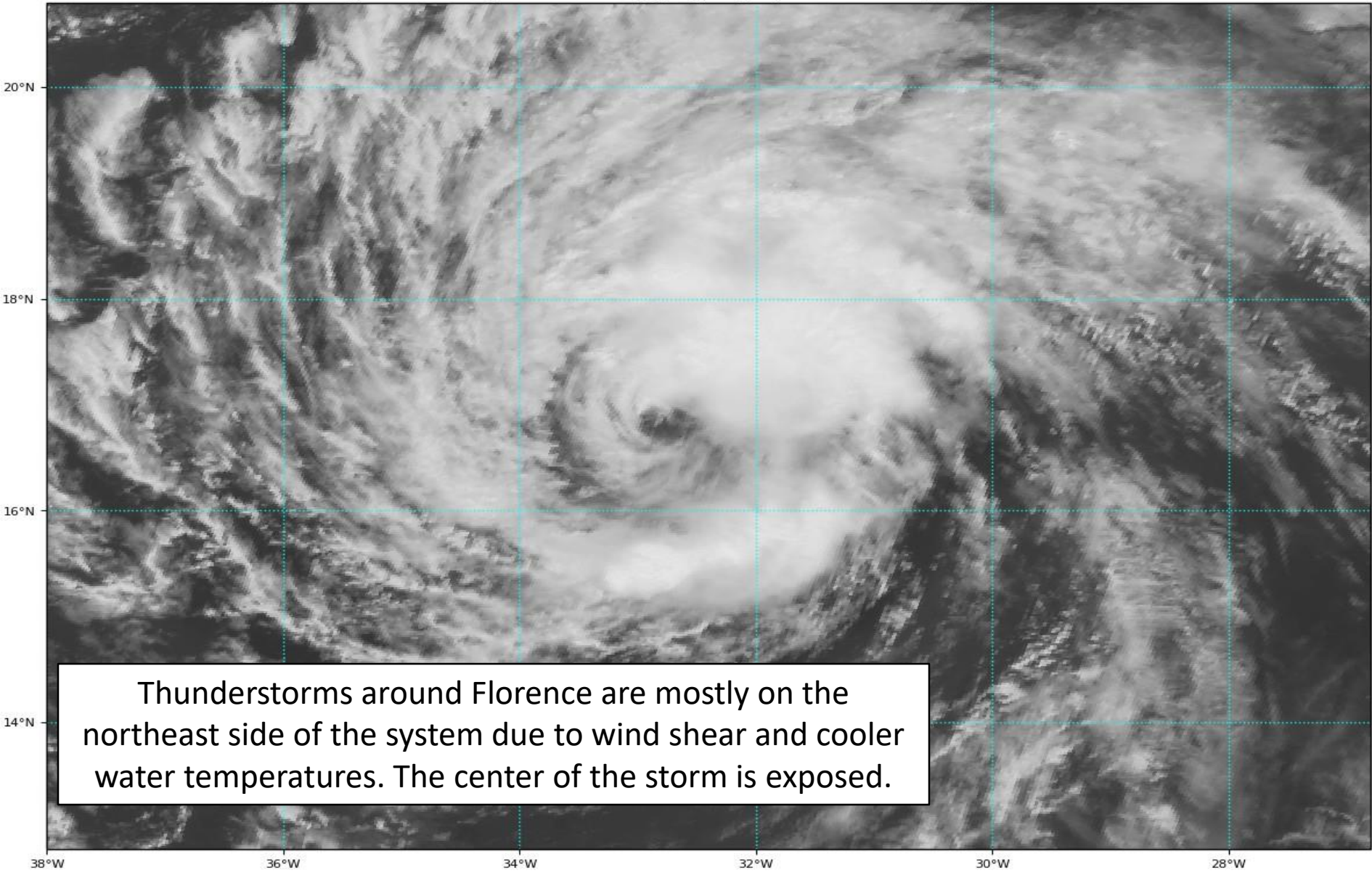
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# Tropical Storm Florence Satellite Image

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 13:50Z Sep 02, 2018

TROPICALTIDBITS.COM



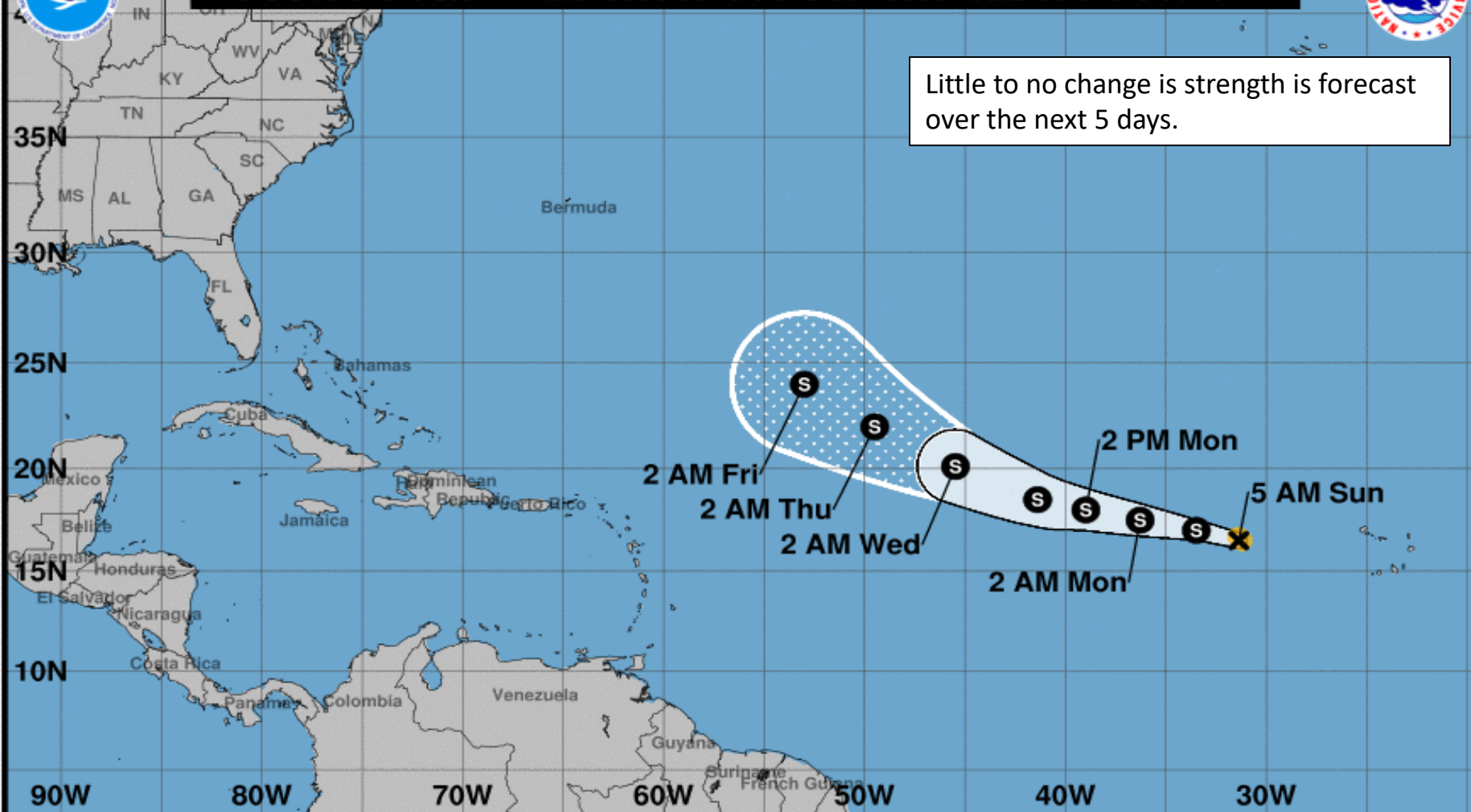
Thunderstorms around Florence are mostly on the northeast side of the system due to wind shear and cooler water temperatures. The center of the storm is exposed.



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.



Little to no change in strength is forecast over the next 5 days.



### Tropical Storm Florence

Sunday September 02, 2018

5 AM AST Advisory 12

NWS National Hurricane Center

### Current information: X

Center location 16.5 N 31.4 W

Maximum sustained wind 60 mph

Movement WNW at 15 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

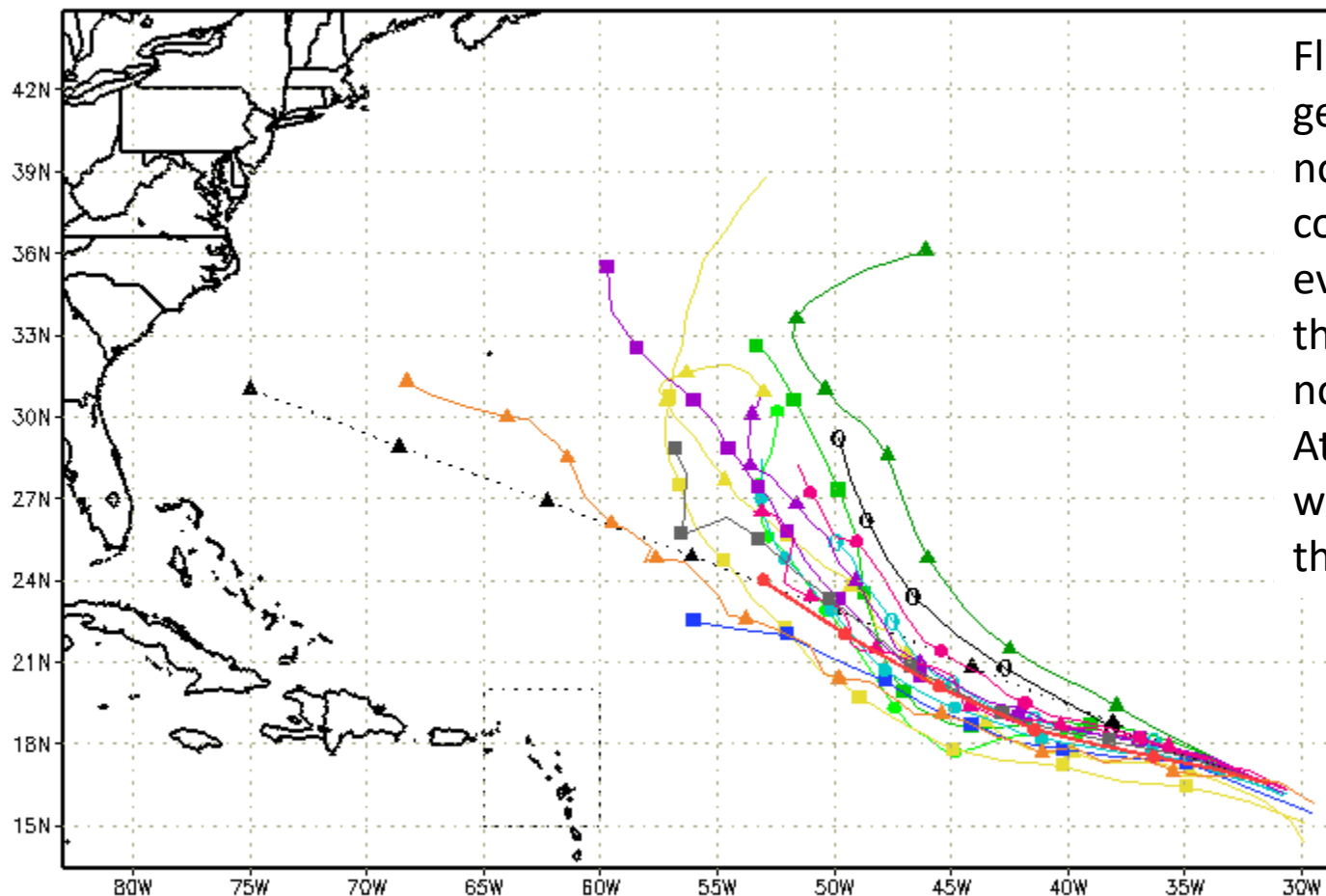
### Current wind extent:

Hurricane Trop Stm



# Track Models (Florence)

--▲-- XTRP 02/1200Z    ▲ TABD 02/1200Z    ▲ HMON 02/0600Z    ▲ AVNO 02/0600Z    ▲ ECMF 02/0000Z  
 --○-- CLP5 02/1200Z    ■ TABM 02/1200Z    ● HWRF 02/0600Z    ■ AEMN 02/0600Z    ■ EEMN 02/0000Z  
 --■-- TVCN 02/1200Z    ● TABS 02/1200Z    ● NVGM 02/0600Z    --- APxx 02/0600Z    --- EExx 02/0000Z  
 --●-- NHC 02/0900Z    ■ UKM 02/0000Z    ● COTC 02/0600Z    ▲ CMC 02/0000Z    ■ GEMN 02/0000Z



Florence will move generally west-northwest over the coming days. It will eventually curve to the northwest and north in the central Atlantic, remaining well to the north of the Caribbean islands.



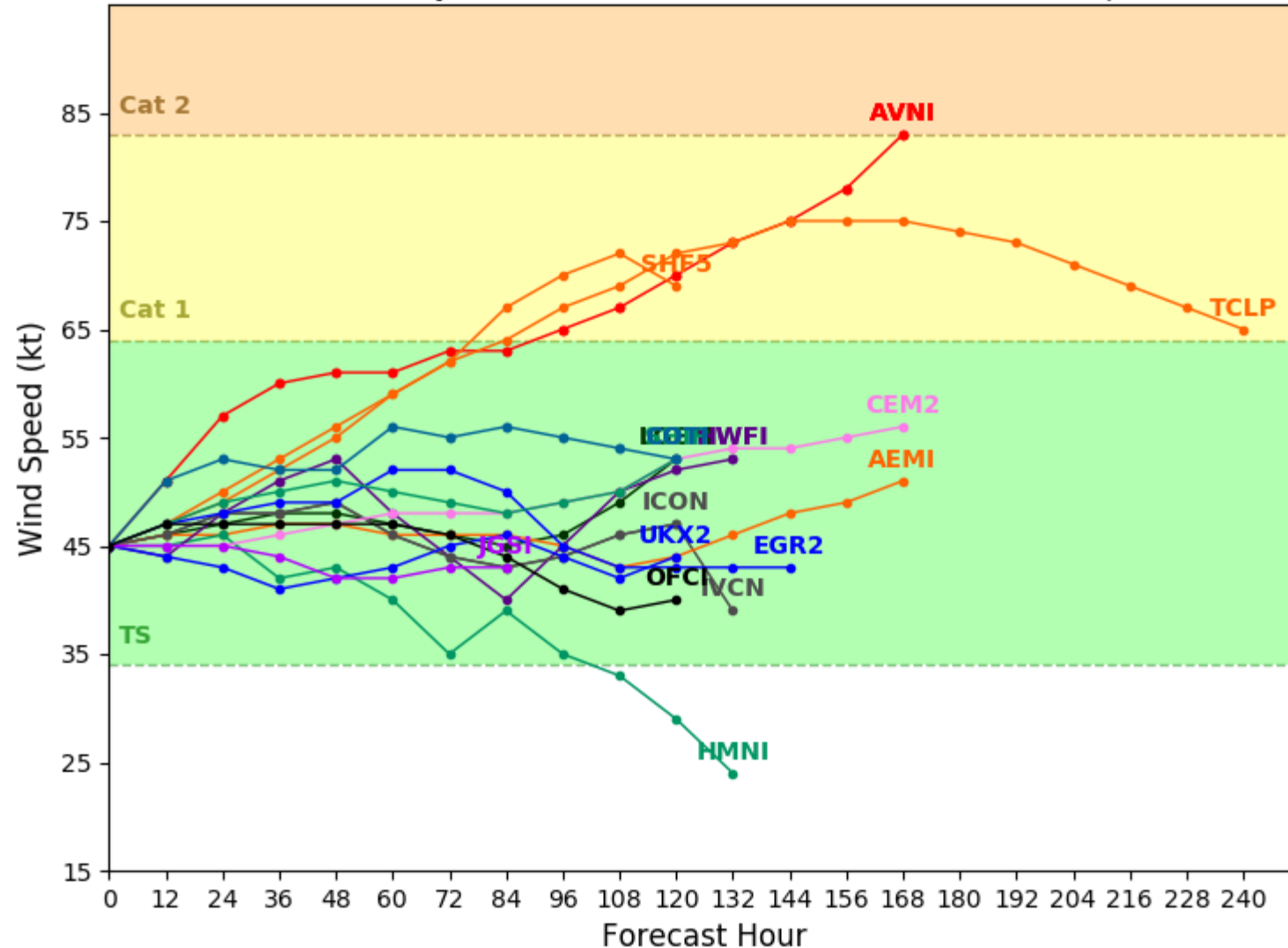


# Intensity Models (Florence)

## Tropical Storm FLORENCE Model Intensity Guidance

Initialized at 12z Sep 02 2018

Levi Cowan - tropicaltidbits.com



Little to no change in strength is expected due to ongoing wind shear and cooler water temperatures.



# Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 1

This weather system is expected to move west-northwestward across the remainder of the Bahamas, southern Florida, and the Florida Keys during the next day or so and little, if any, development is expected during that time due to strong upper-level winds. However, the current unfavorable upper-level wind pattern is expected to gradually change and become more conducive for a tropical depression to form over the eastern and central Gulf of Mexico by Tuesday or Wednesday.

\*Formation chance through 48 hours: **medium, 50%**

\*Formation chance through 5 days: **high, 80%**

8:00 am EDT  
Sun Sep 2 2018

100W 90W 80W 70W 60W 50W 40W 30W 20W

Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

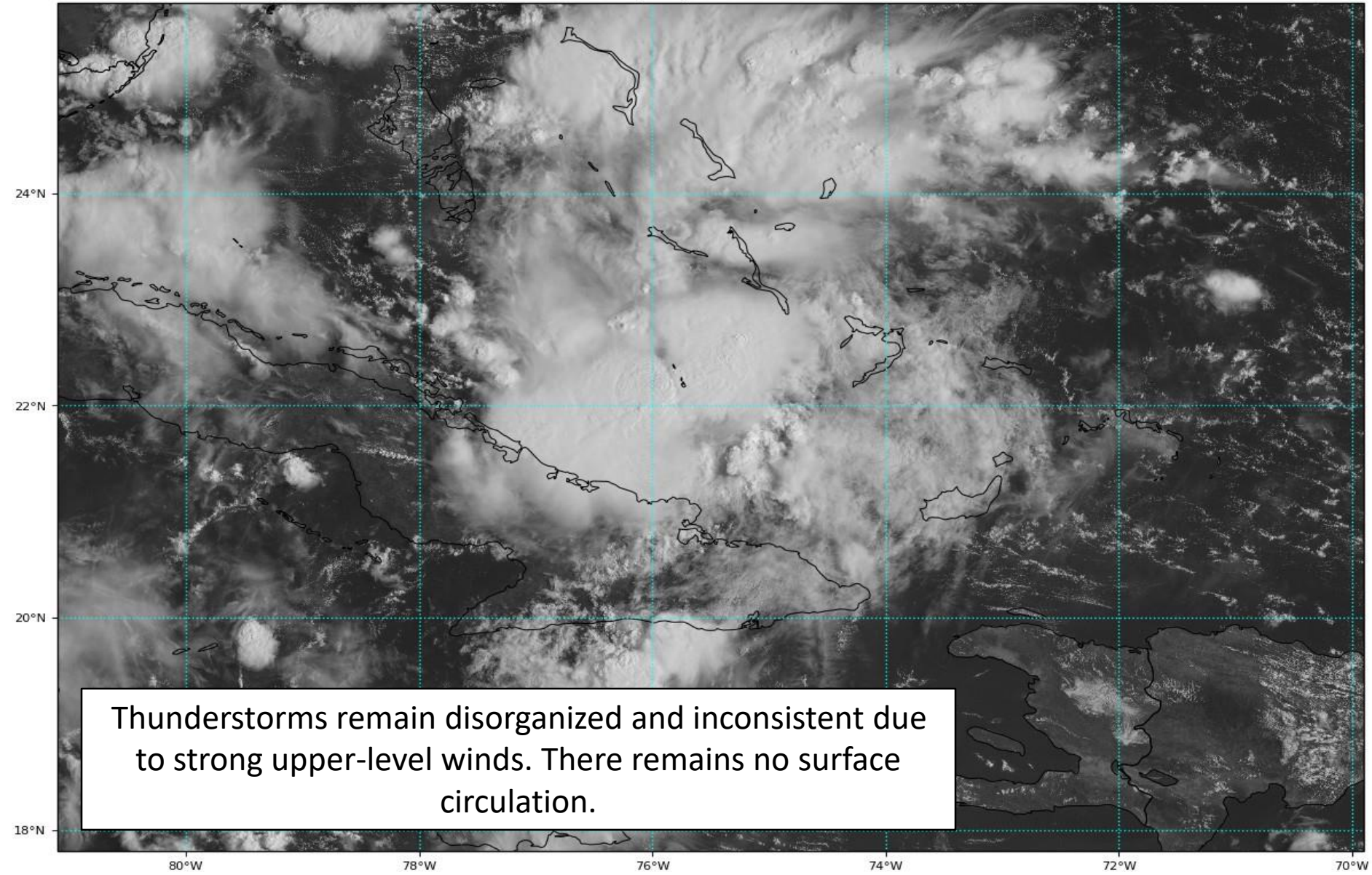
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants

# Invest 91L Satellite Image

GOES-16 Channel 2 (visible) Reflectance at 13:50Z Sep 02, 2018

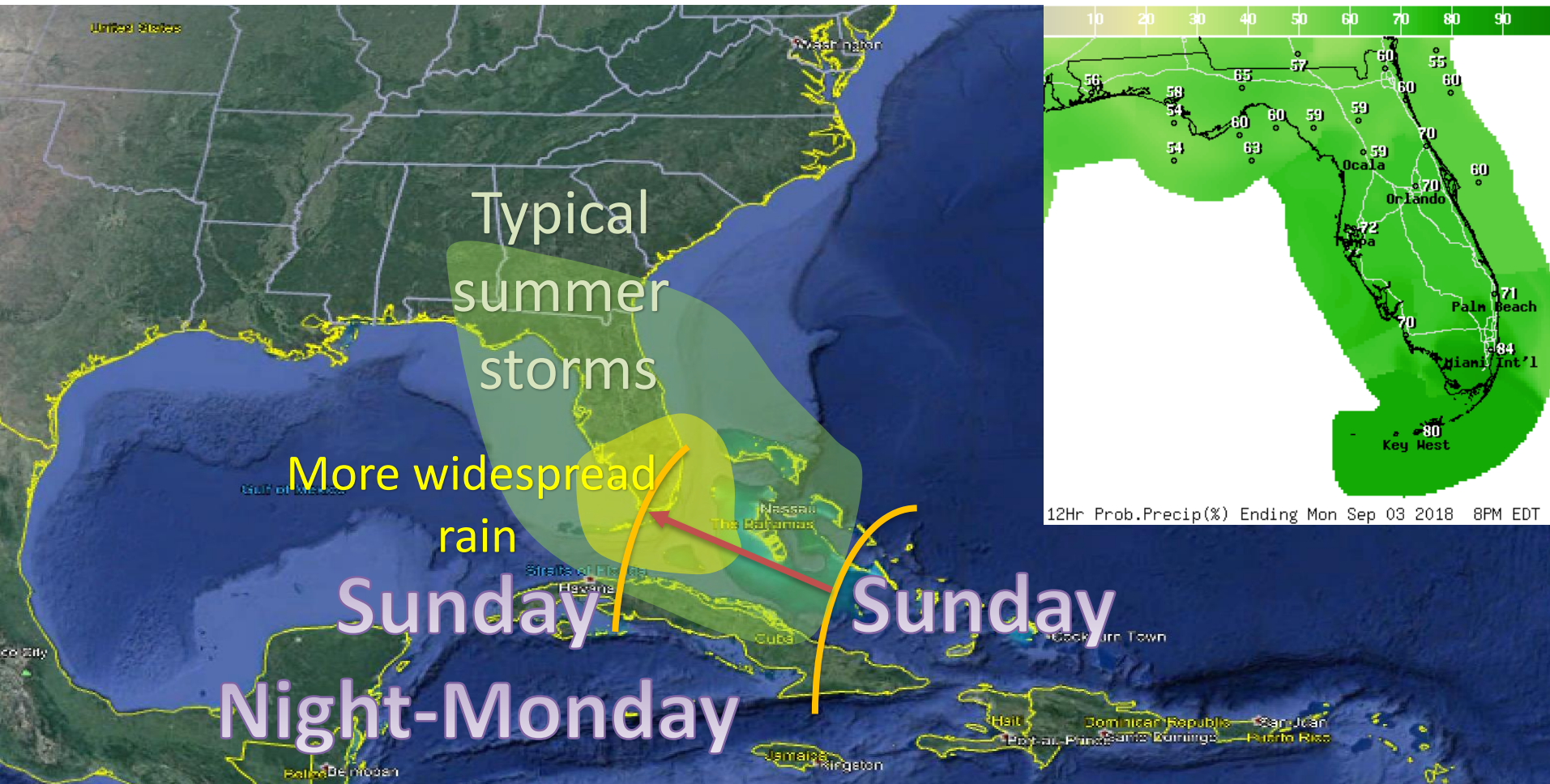
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Thunderstorms remain disorganized and inconsistent due to strong upper-level winds. There remains no surface circulation.

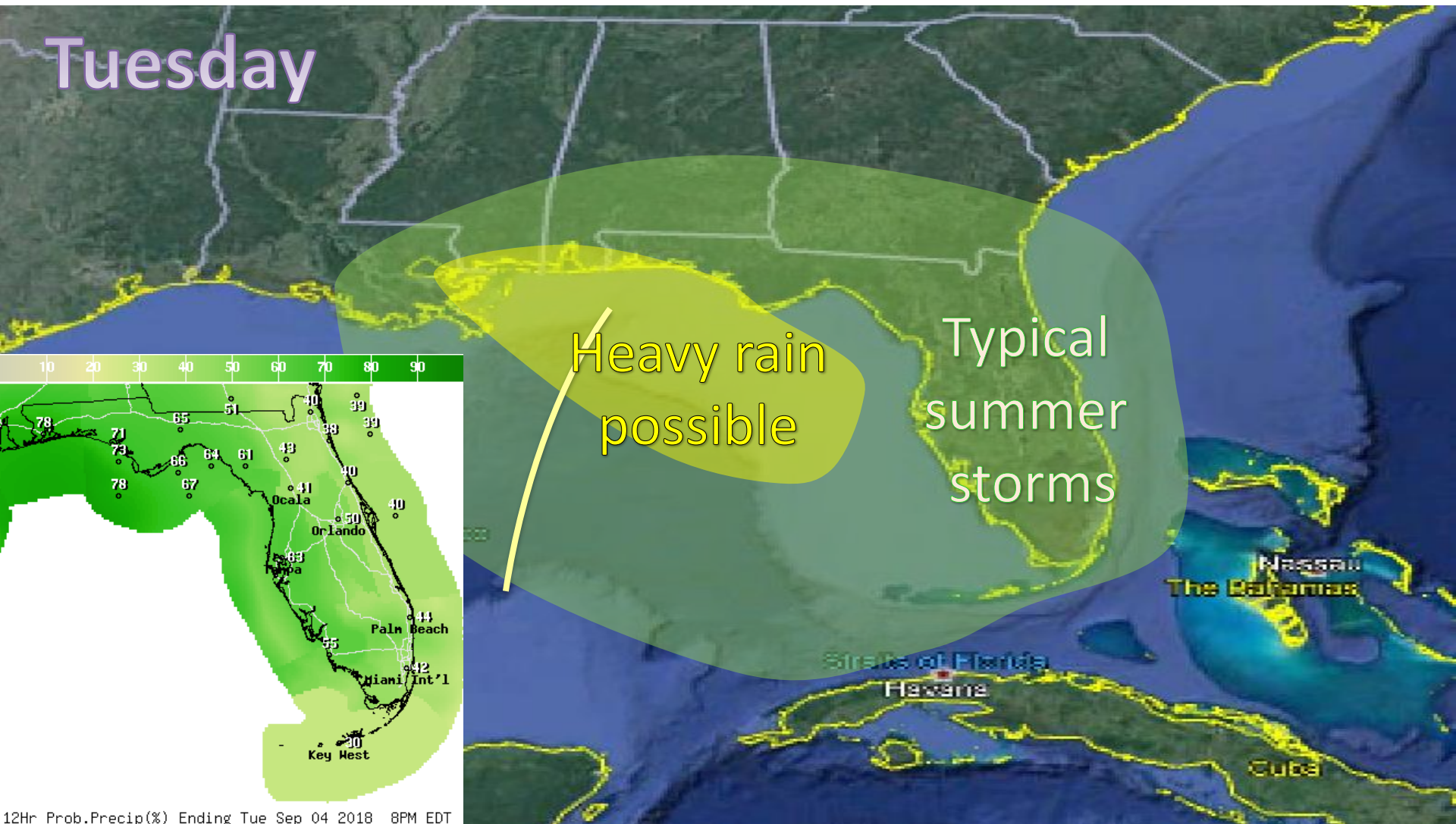


# Timing and Potential Impacts



Increased rain chances and the potential for heavy rain across South Florida will begin tonight and will last through Labor Day. Typical summertime storms, some of which could produce brief heavy rain, are expected across North and Central Florida. An isolated strong to severe thunderstorm with gusty winds of 45 mph and a brief, weak tornado will be possible in South Florida during this time.

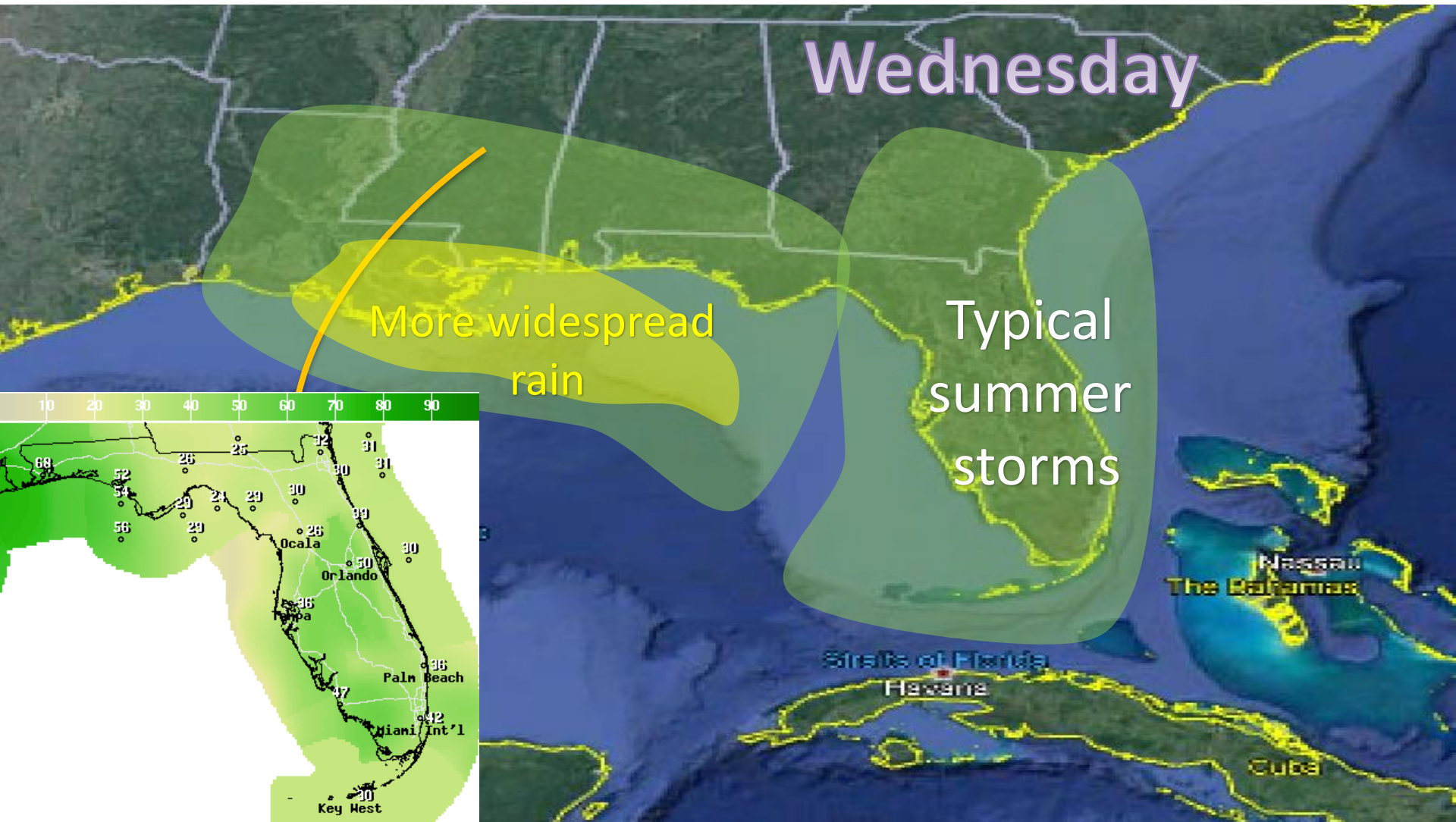
# Timing and Potential Impacts



The tropical wave will pass south of the Panhandle tomorrow as it moves through the northeastern Gulf of Mexico. The heaviest rainfall will likely remain offshore, though some locally heavy rainfall could reach the coast of the Panhandle. In the Peninsula, a return to typical summertime thunderstorms is expected on Tuesday.



# Timing and Potential Impacts



The wave will continue west-northwestward into central Louisiana through the day Wednesday. The widespread heavy rainfall threat will taper on Wednesday near the Panhandle coast, and a return to a typical summertime pattern is expected.

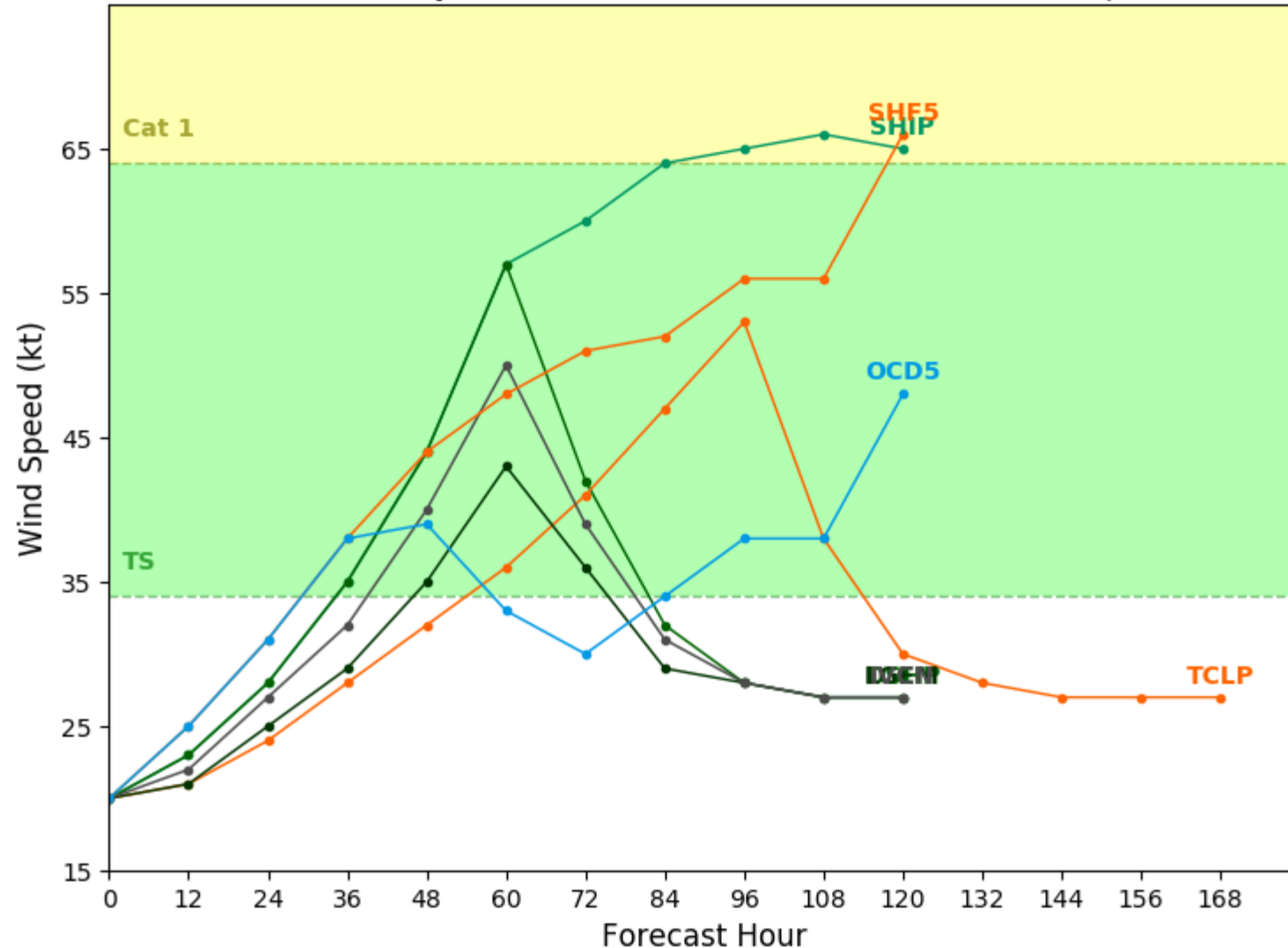


# Intensity Models (Invest 91L)

## Invest 91L Model Intensity Guidance

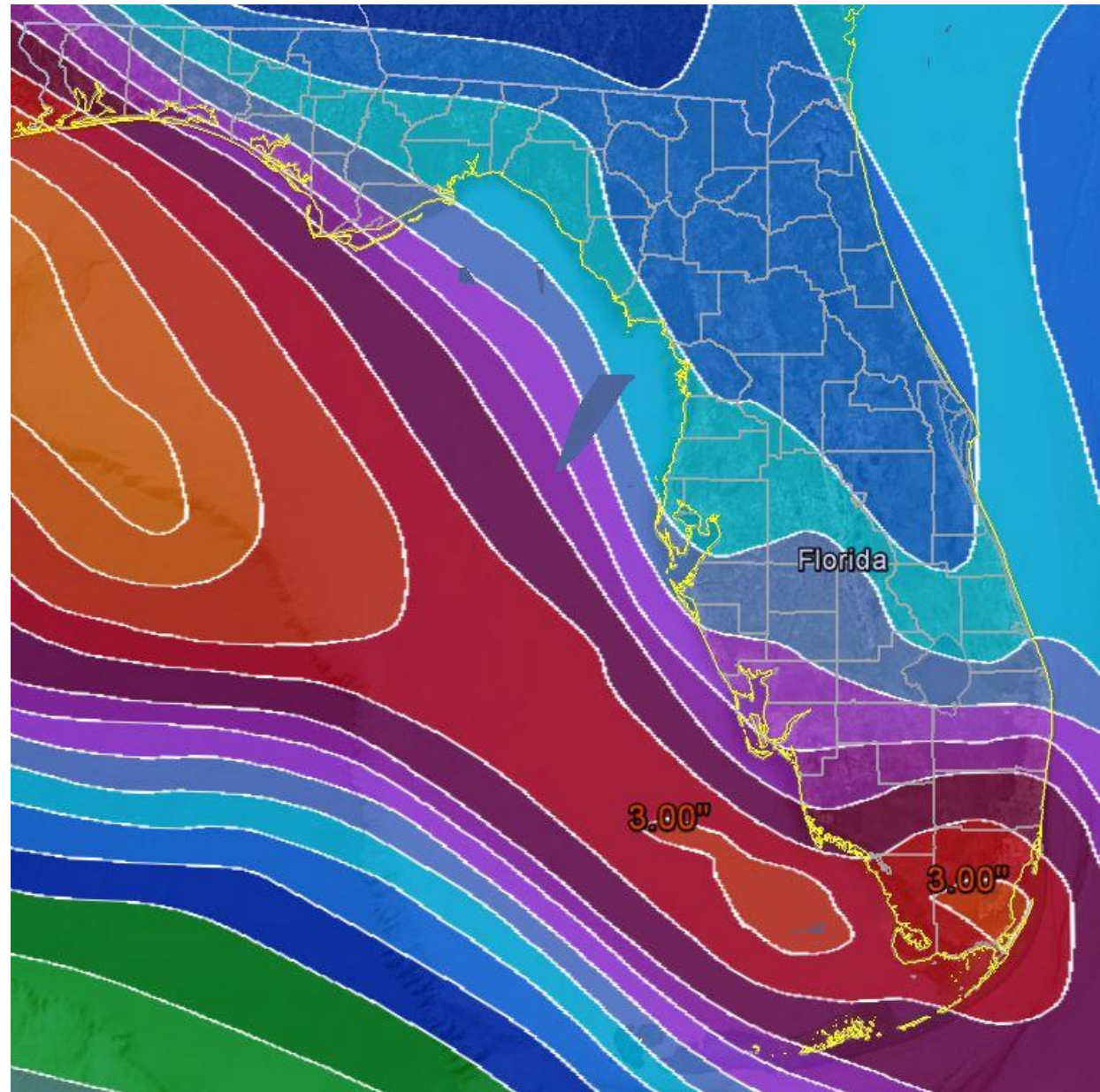
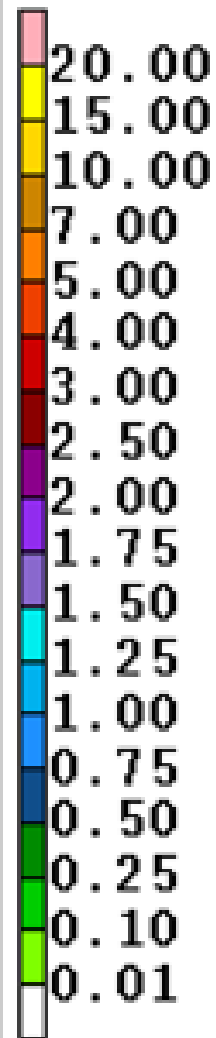
Initialized at 12z Sep 02 2018

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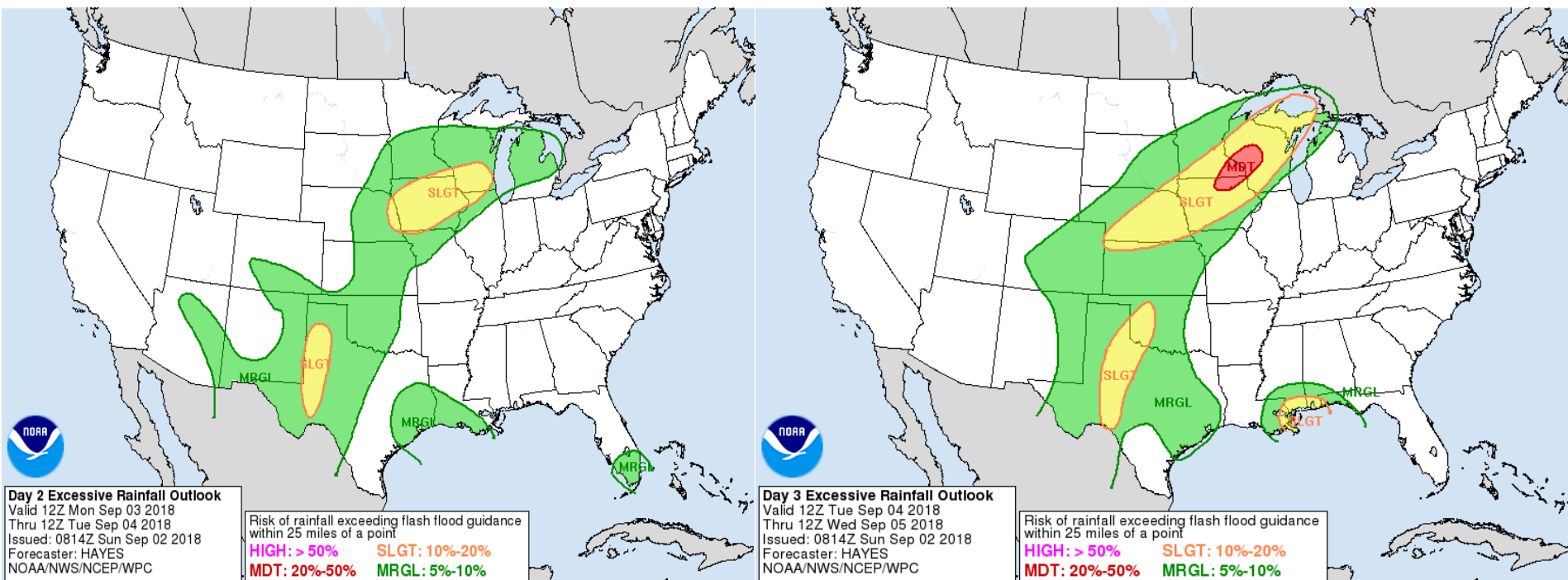
Models suggest gradual strengthening to a Tropical Storm in the eastern and central Gulf of Mexico.

# Rainfall Totals Next 5 Days



Most areas should expect 1-3" of rain over the next 5 days, but there is the potential for some areas of SE FL, the Florida Keys, and the western Panhandle to receive as much as 4-6" of rain.

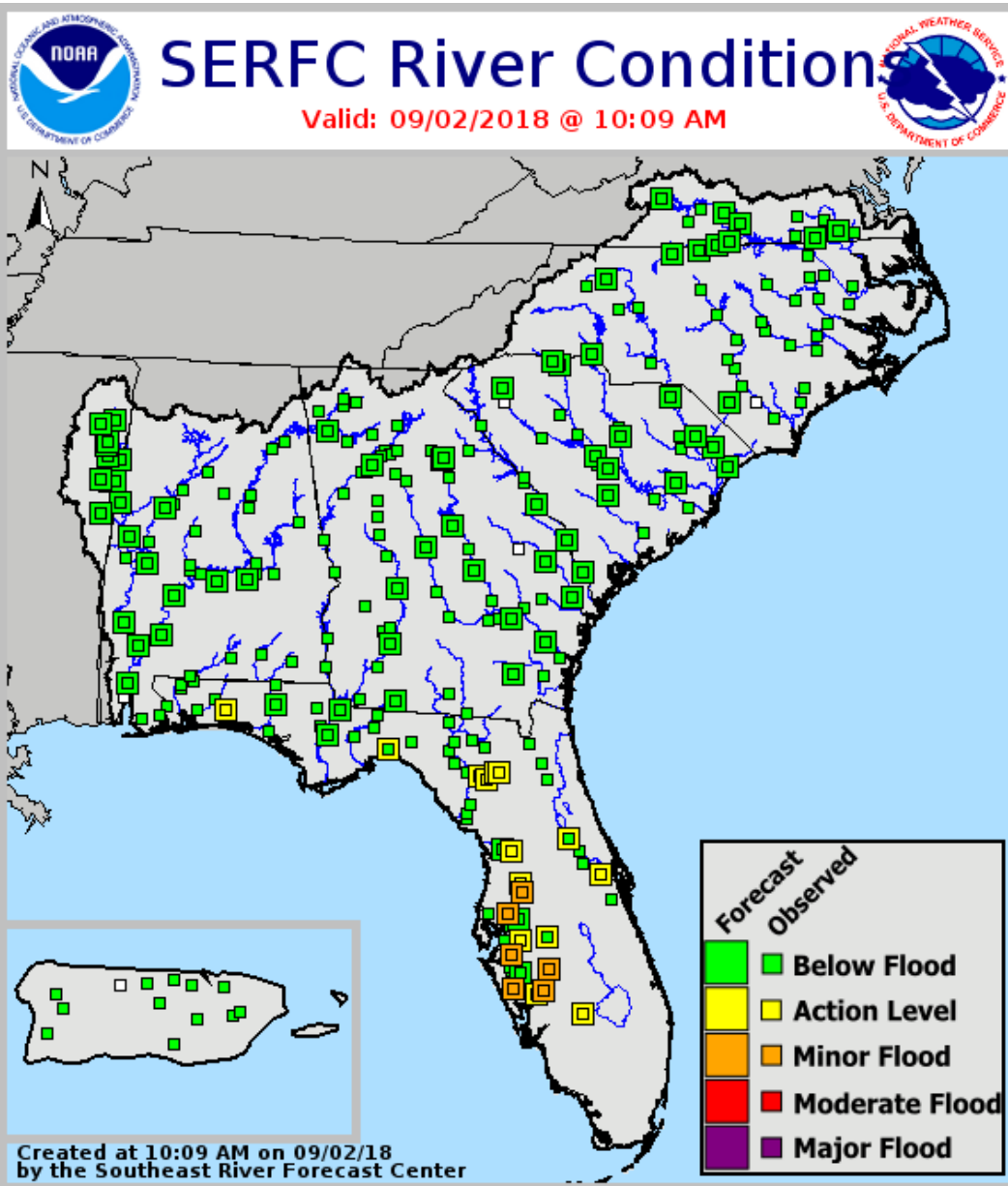
# Flash Flood Threat Tonight/Monday and Tuesday



An isolated case of Flash Flooding will remain possible tonight and tomorrow in South Florida. However, the threat is not widespread enough to warrant Flood Watches. In the western Panhandle on Tuesday and Wednesday, Flash Flood Watches may be needed depending on the eventual track and intensity of the system.



# Current and Forecast River Conditions



Several rivers in Central and Southwest Florida remain in minor flood stage. Forecasted rainfall amounts do not bring any rivers into moderate flood stage. For more specifics on individual river levels, please visit the Southeast River Forecast Center at

<https://www.weather.gov/serfc/>

# Summary

- Tropical Storm Florence remains in the open waters of the Tropical Atlantic, several hundred miles from land.
- Maximum sustained winds are near 60 mph, but little change in strength is expected through the next several days.
- This system is expected to have no impact on land at this time as it eventually recurves north in the open Atlantic.
- A tropical wave in the Bahamas (now designated Invest 91L) continues to produce disorganized showers and thunderstorms.
- This tropical wave will move west-northwest towards South Florida tonight and Monday and will emerge into the eastern Gulf of Mexico Tuesday and Wednesday.
- Development is not expected to occur over the Bahamas due to strong upper-level winds, but environmental conditions will become more favorable for development in the eastern or central Gulf of Mexico.
- The National Hurricane Center has a 50% (medium) chance of formation over the next 48 hours and an 80% (high) chance of formation over the next five days.
- The next name on the list is Gordon. Should the system first get a Potential Tropical Cyclone or Tropical Depression designation, it will be number seven.
- No additional tropical cyclone development is expected in the Atlantic basin through the next five days, but additional tropical waves are forecast to emerge off the west African coast in the 6-10 day timeframe.

## Florida Outlook:

- The tropical wave in the Bahamas will bring increased rain chances to South Florida tonight and tomorrow and the western Panhandle Tuesday and Wednesday. Regardless of development, locally heavy rainfall will be the main impact from this system.
- Rainfall totals for most areas will be 1-3" over the next 5 days with isolated higher amounts of 4-6" possible in Southeast Florida, the Florida Keys, and the western Panhandle.
- 6 West-Central Florida rivers remain in minor flood stage, and many rivers across the state are elevated due to recent rainfall, but significant river flooding is not currently expected.
- This wave, along with potential rain amounts and impacts, will continue to be monitored.
- There will be a high risk of rip currents for Panhandle and East Coast beaches through the next several days.
- Even if this wave develops, the current track consensus would keep any wind impacts offshore away from Florida and into LA/MS.

Another briefing packet will be sent out Monday morning. For the latest information on the tropics, please visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).



# TROPICAL UPDATE

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Florida Division of Emergency  
Management

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