



TROPICAL UPDATE



8 AM EDT




Monday, September 2, 2019

Major Hurricane Dorian, Invest 91L (80%), Invest 92L (50%), Gulf Low (50%), & African Wave (20%)

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.

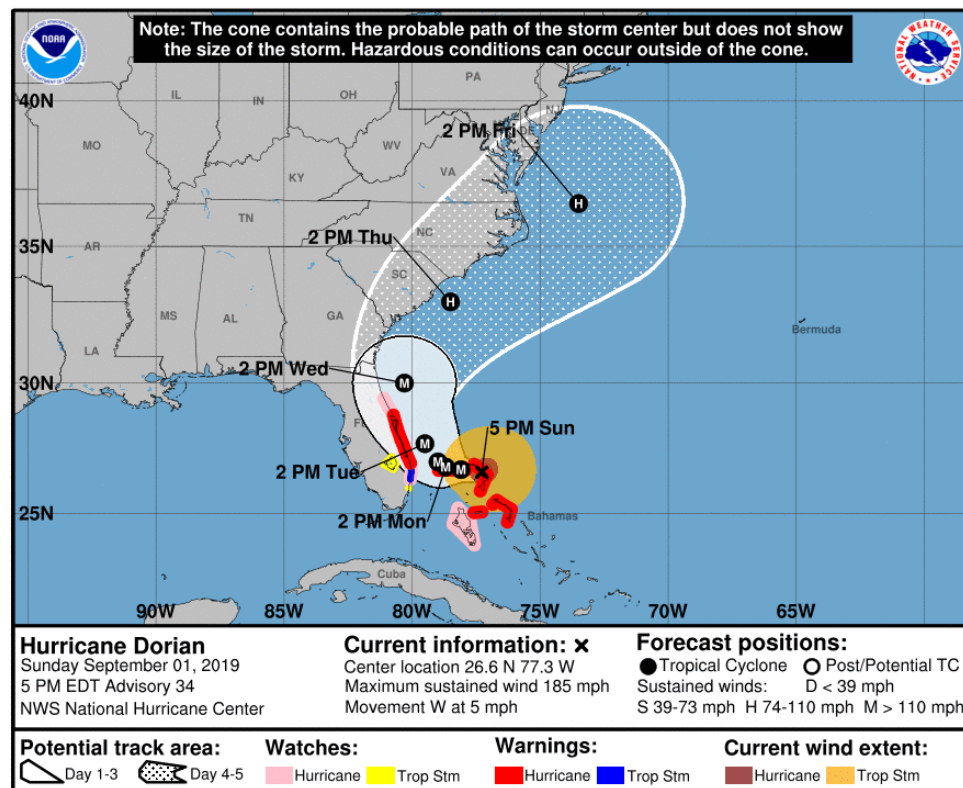
Major Hurricane Dorian

Sunday, September 1, 5 PM ET

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLOODING					
 TORNADOES					

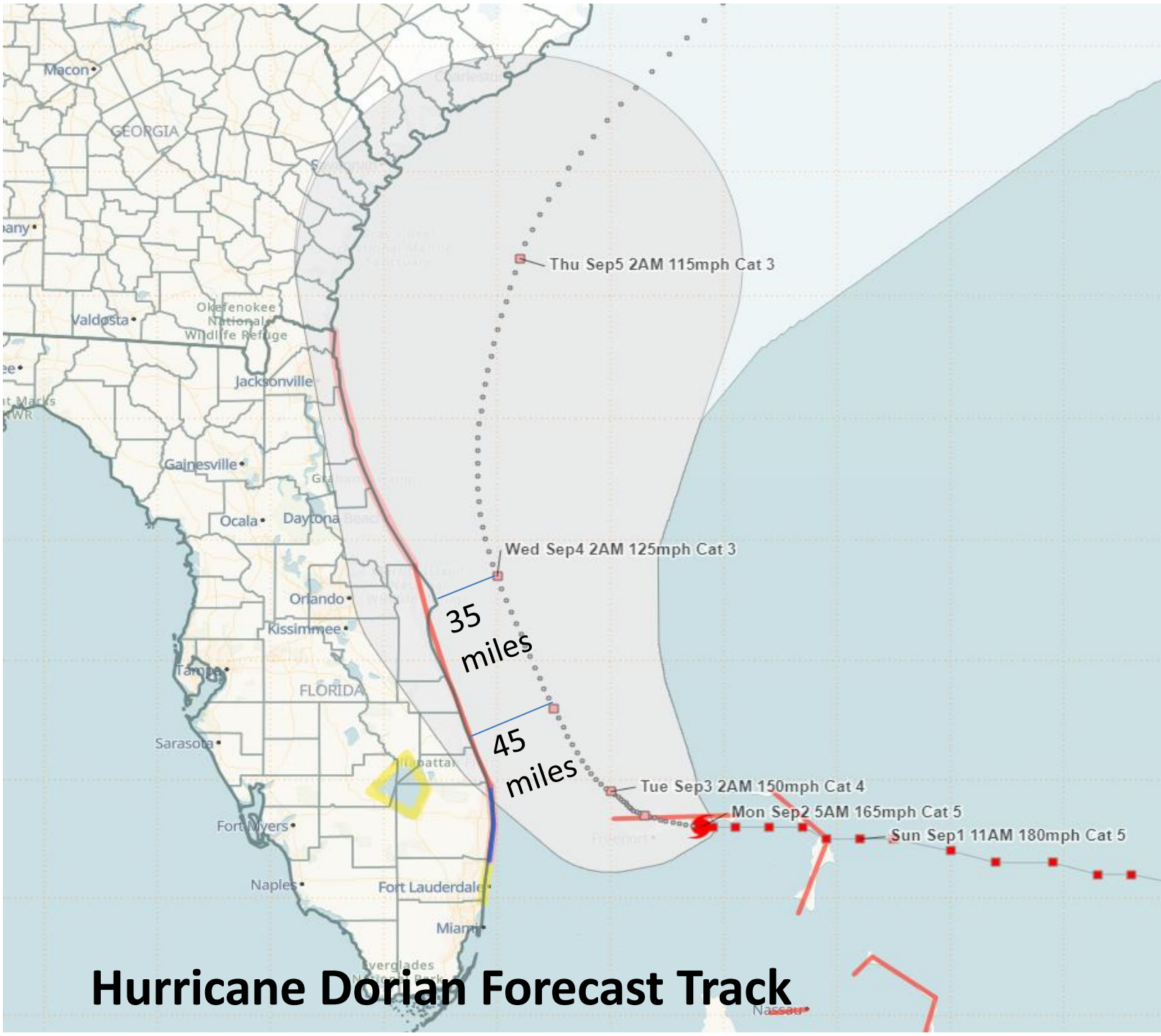
	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



Changes This Afternoon:

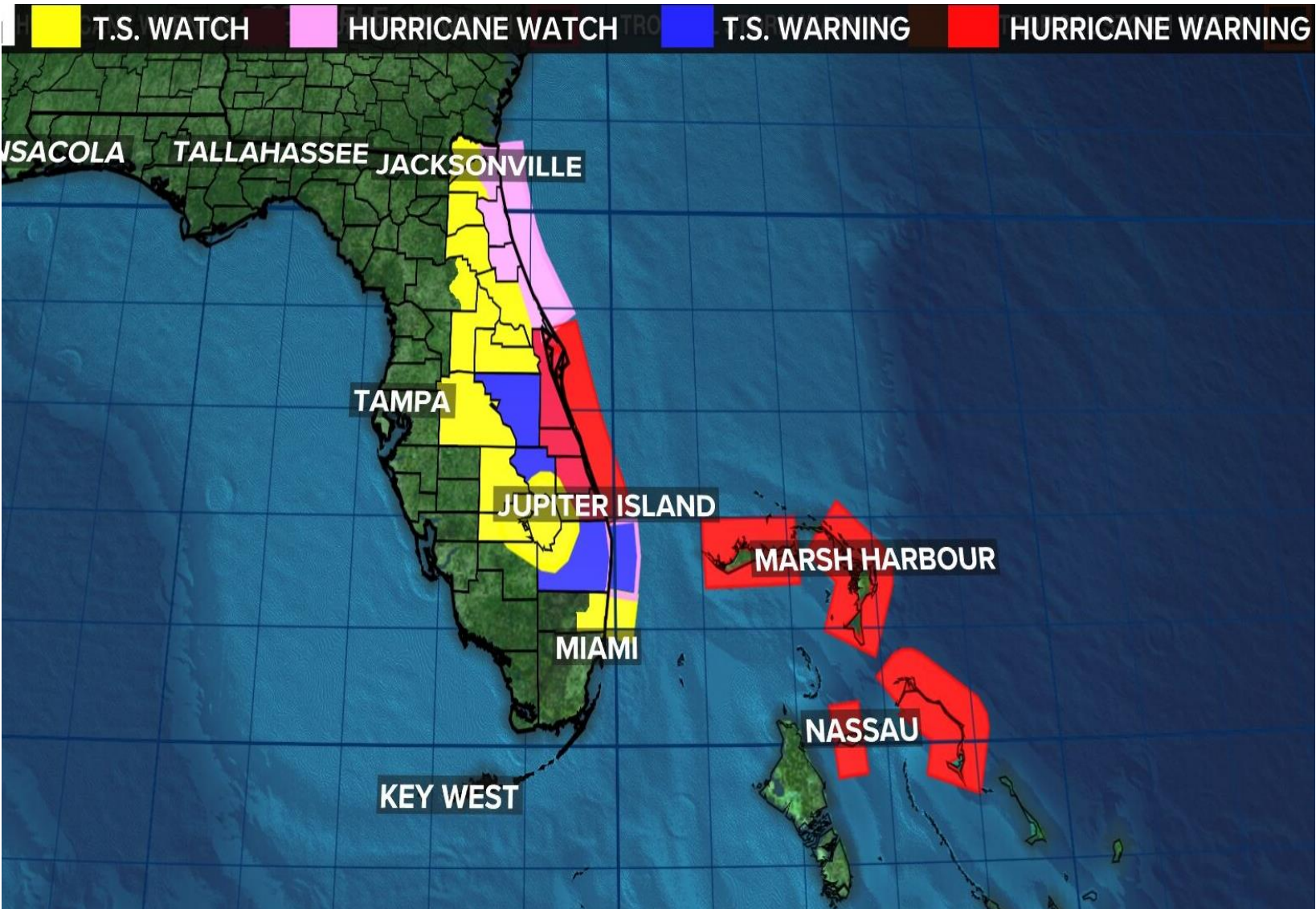
- Dorian has continued to strengthen, and is now a Category 5 with max sustained winds of **185 mph**.
- Still uncertainty in northward turn, but no change in the forecast cone with this advisory.
- Hurricane Warnings and Storm Surge Warnings have been issued for the Treasure and Space Coast.



Hurricane Dorian is located 120 miles east of West Palm Beach. It slowed down overnight and is now nearly stationary, drifting west at 1 mph. Maximum sustained winds have decreased to 165 mph (Category 5).

The very slow west to northwest drift will continue today, followed by a faster northwest movement on Tuesday, paralleling the Florida East Coast. A northward turn should occur by Wednesday morning. However, coastal Florida counties are still within the cone of error, meaning a landfall in Florida cannot be ruled out.

Hurricane force winds extend 45 miles from the center and tropical storm force winds extend up to 140 miles.



Hurricane Warning in effect for Martin, St. Lucie, Indian River and Brevard Counties.

Hurricane Watch for coastal Volusia, coastal Palm Beach, Flagler, St. Johns, eastern Duval and eastern Nassau Counties.

Tropical Storm Warning for Palm Beach, Okeechobee and Osceola Counties.

Tropical Storm Watch for eastern Broward, Lake Okeechobee, Highlands, Glades, Polk, Seminole, Orange, Lake, inland Volusia, eastern Marion, Clay, Putnam, western Duval and western Nassau Counties.

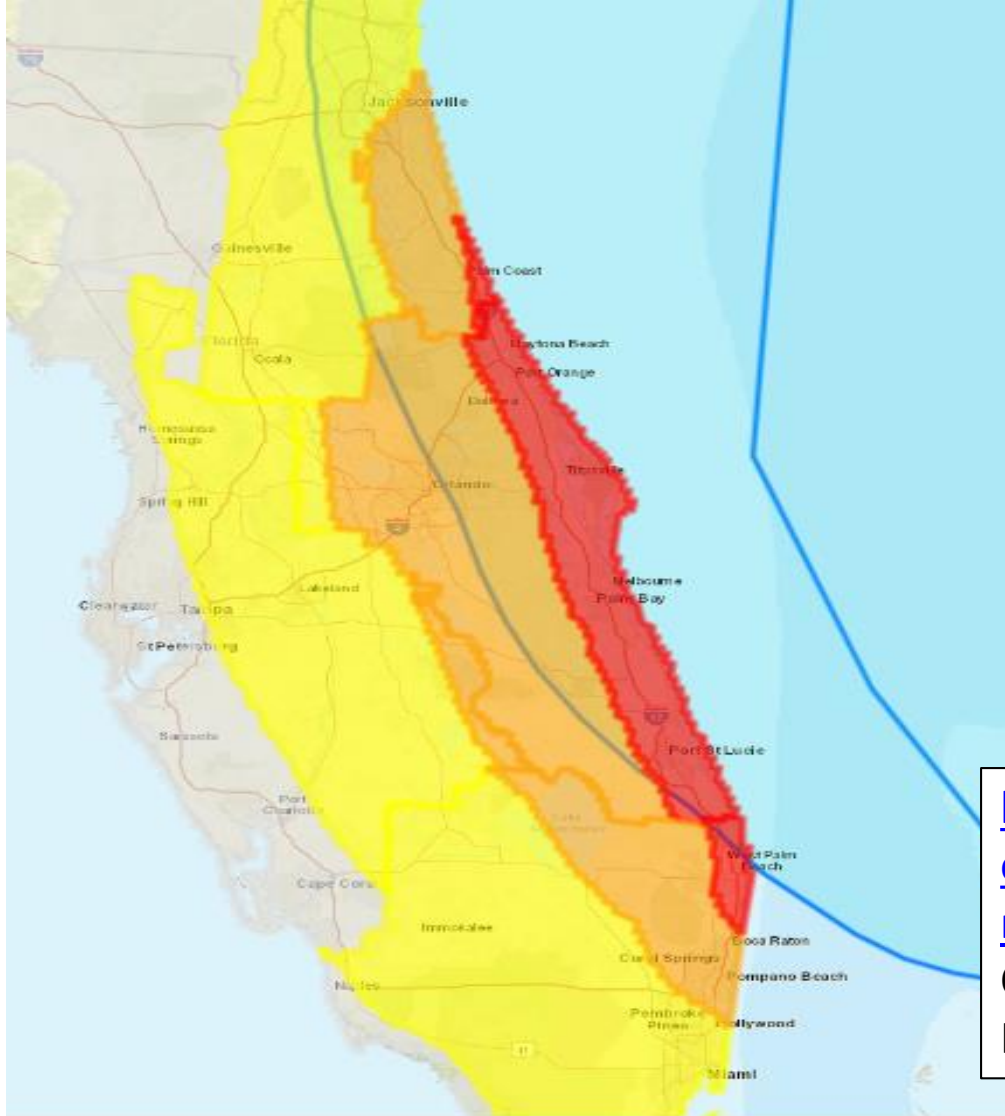
Storm Surge Forecasts Watches/Warnings

- Storm Surge Warning
 - Brevard, Indian River, St. Lucie, Martin, N. Palm Beach
- Storm Surge Watch
 - S. Palm Beach, Volusia, Flagler, St. Johns, Duval, Nassau



https://www.nhc.noaa.gov/refresh/graphics_at5+shtml/155815.shtml?inundation#contents

Interactive P-Surge Inundation Map



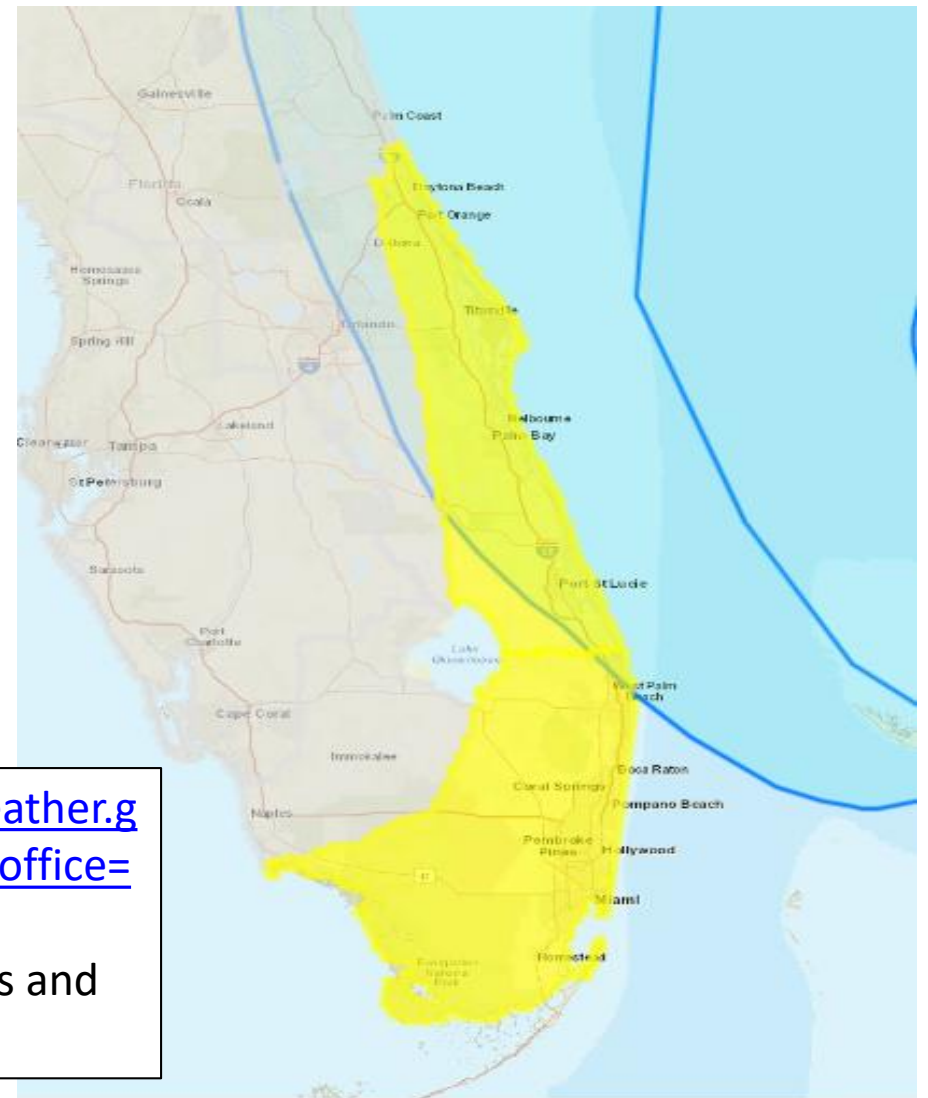
[Download KML]

[Download Image]

Wind Threat
Potential for wind greater than 110 mph
Potential for wind 74 to 110 mph
Potential for wind 58 to 73 mph
Potential for wind 39 to 57 mph
Wind less than 39 mph

<https://www.weather.gov/srh/tropical?office=mfl>

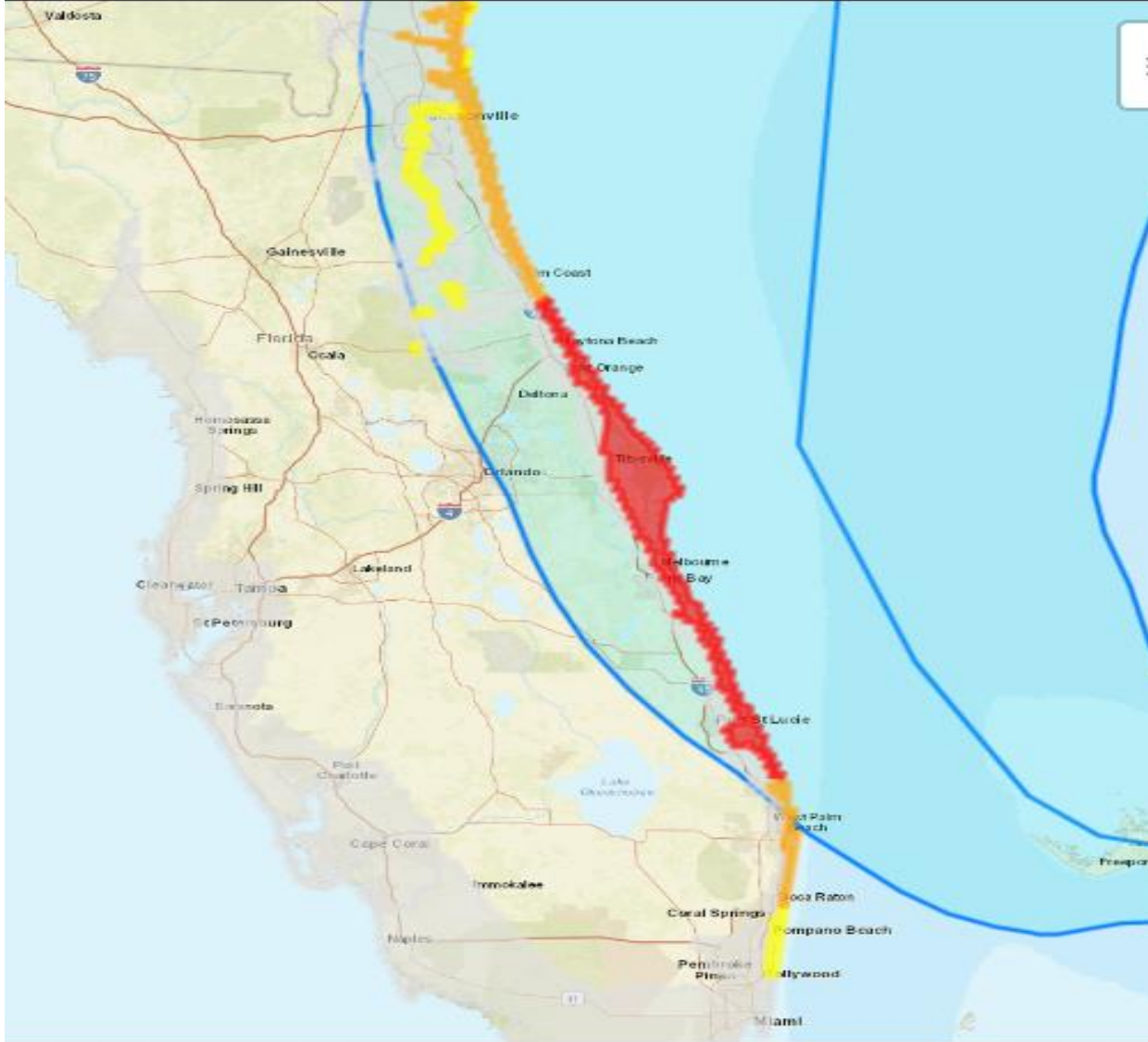
Click on “Threats and Impacts” Tab



[Download KML]

[Download Image]

Tornado Threat
Potential for outbreak of tornadoes
Potential for many tornadoes
Potential for several tornadoes
Potential for a few tornadoes
Tornadoes not expected



[Download KML]

[Download Image]

Storm Surge Threat

- Potential for storm surge flooding greater than 9 ft above ground
- Potential for storm surge flooding greater than 6 ft above ground
- Potential for storm surge flooding greater than 3 ft above ground
- Potential for storm surge flooding greater than 1 ft above ground
- Little to no storm surge flooding



<https://www.weather.gov/srh/tropical?office=mfl>

Click on “Threats and Impacts” Tab

Flooding Rain Threat

- Potential for extreme flooding rain
- Potential for major flooding rain
- Potential for moderate flooding rain
- Potential for localized flooding rain
- Little to no potential for flooding rain



Key Messages for Hurricane Dorian

Advisory 36: 5:00 AM EDT Mon Sep 02, 2019

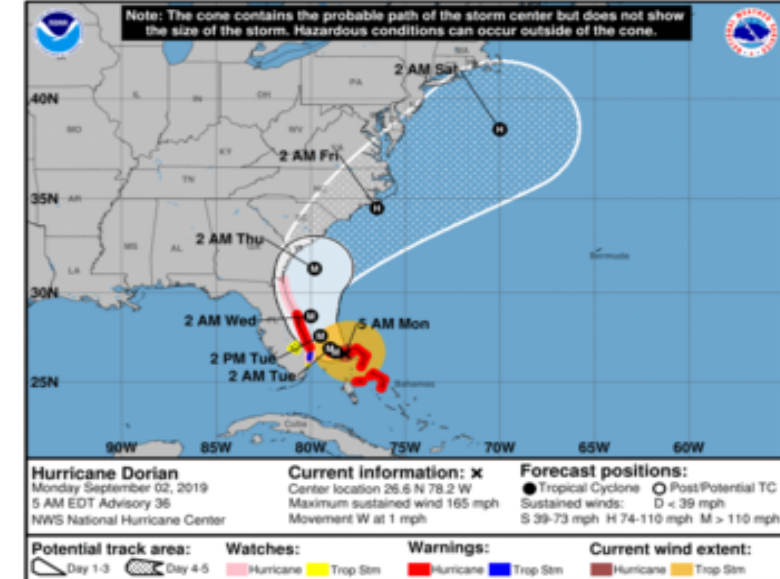


1. A prolonged period of catastrophic winds and storm surge will continue to affect Grand Bahama Island through today and tonight. Everyone there should remain in shelter and not venture into the eye.

2. Life-threatening storm surges and dangerous hurricane-force winds are expected along portions of the Florida east coast through mid-week, and storm surge and hurricane warnings are in effect. Only a slight deviation to the left of the official forecast would bring the core of Dorian near or over the Florida east coast. Residents should listen to advice given by local emergency officials.

3. There is an increasing likelihood of strong winds and dangerous storm surge along the coasts of Georgia, South Carolina, and North Carolina later this week. Residents in these areas should continue to monitor the progress of Dorian and listen to advice given by local emergency officials.

4. Heavy rains, capable of producing life-threatening flash floods, are expected over northern portions of the Bahamas and coastal sections of the Southeast and lower Mid-Atlantic regions of the United States into Friday.



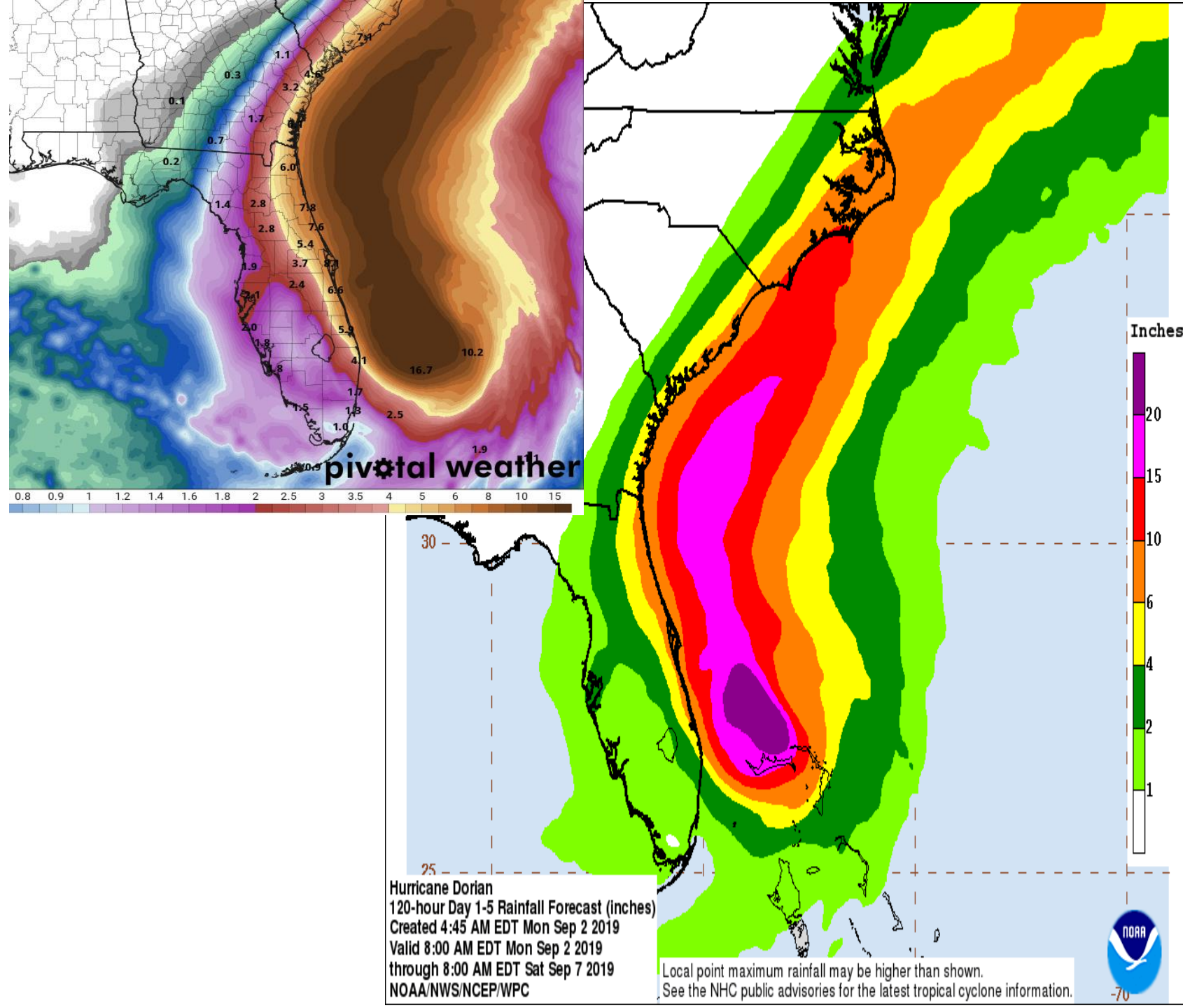
For more information go to hurricanes.gov

Rainfall Forecast Next 5 Days

Dorian is forecast to bring 4-8" of rain to the Florida East Coast through the next 5 days.

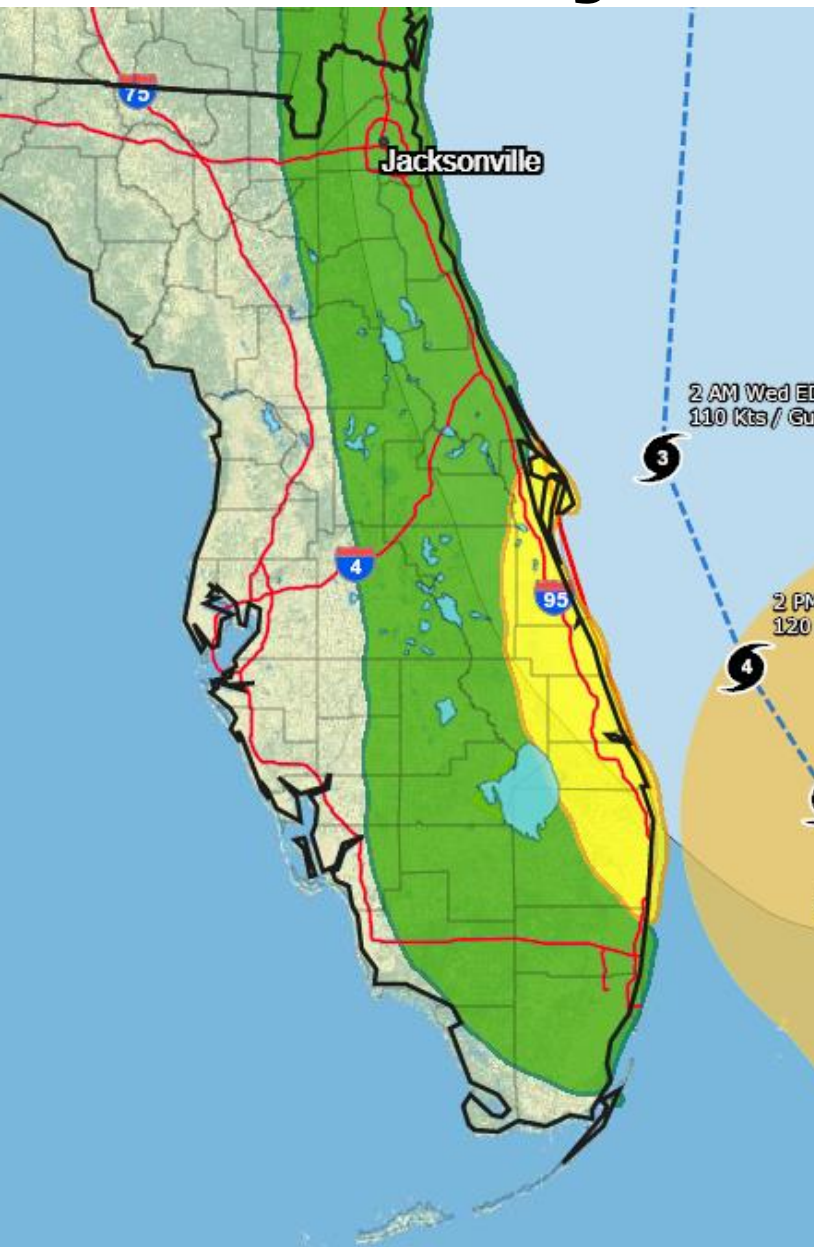
Given the recent stretch of wet weather, these rainfall amounts could still create urban and minor river flooding along the East Coast.

The highest rainfall totals will be near the coast, and likely in Northeast Florida.

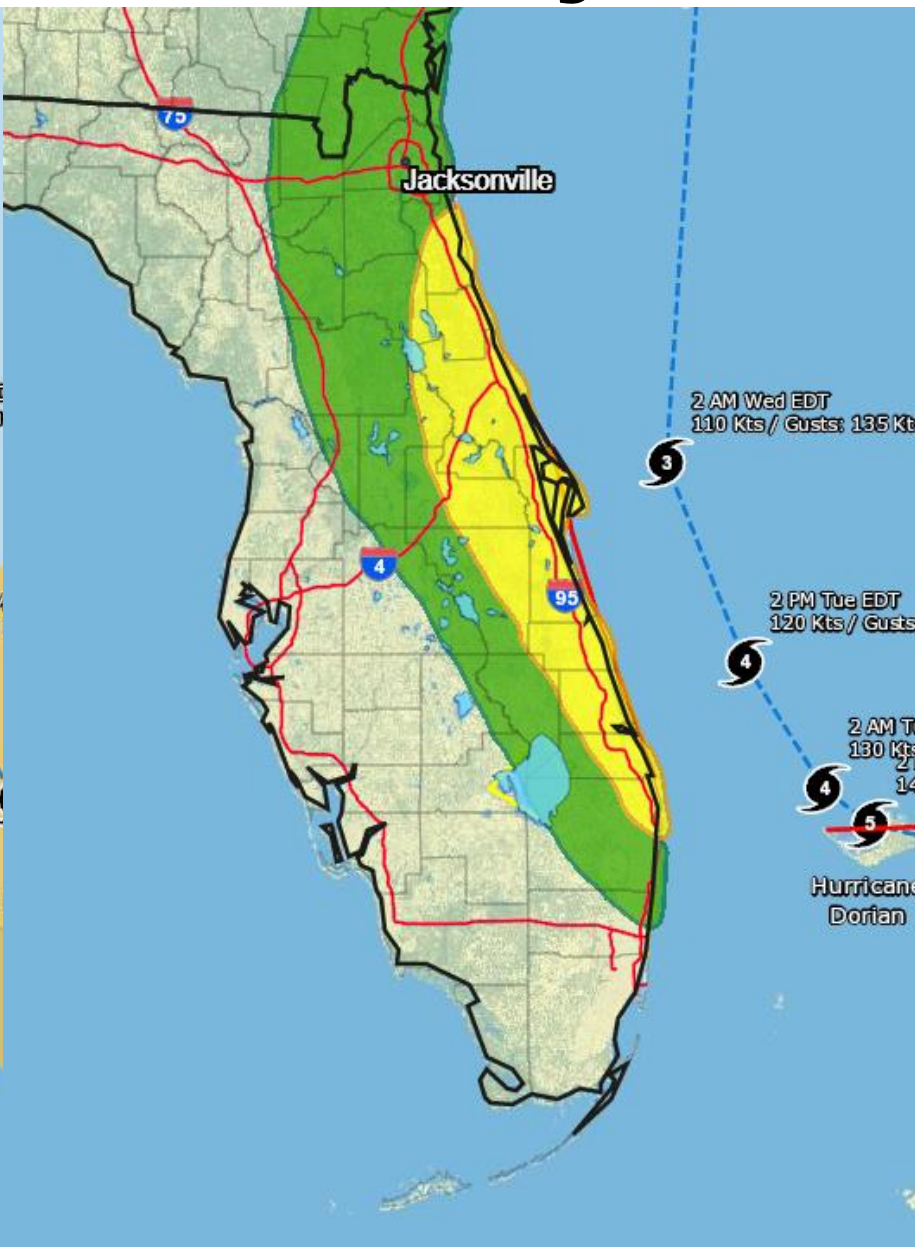


Flash Flood Outlooks

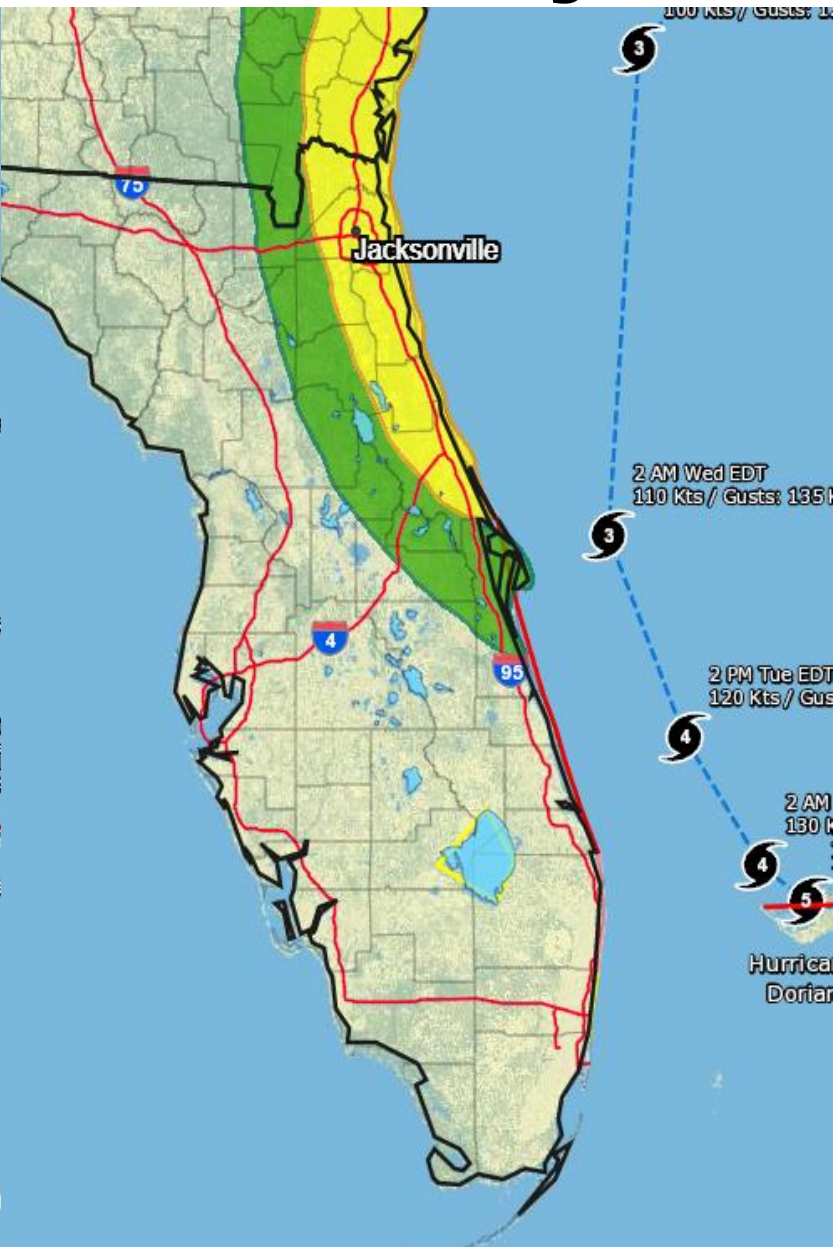
Monday













Tuesday



Wednesday



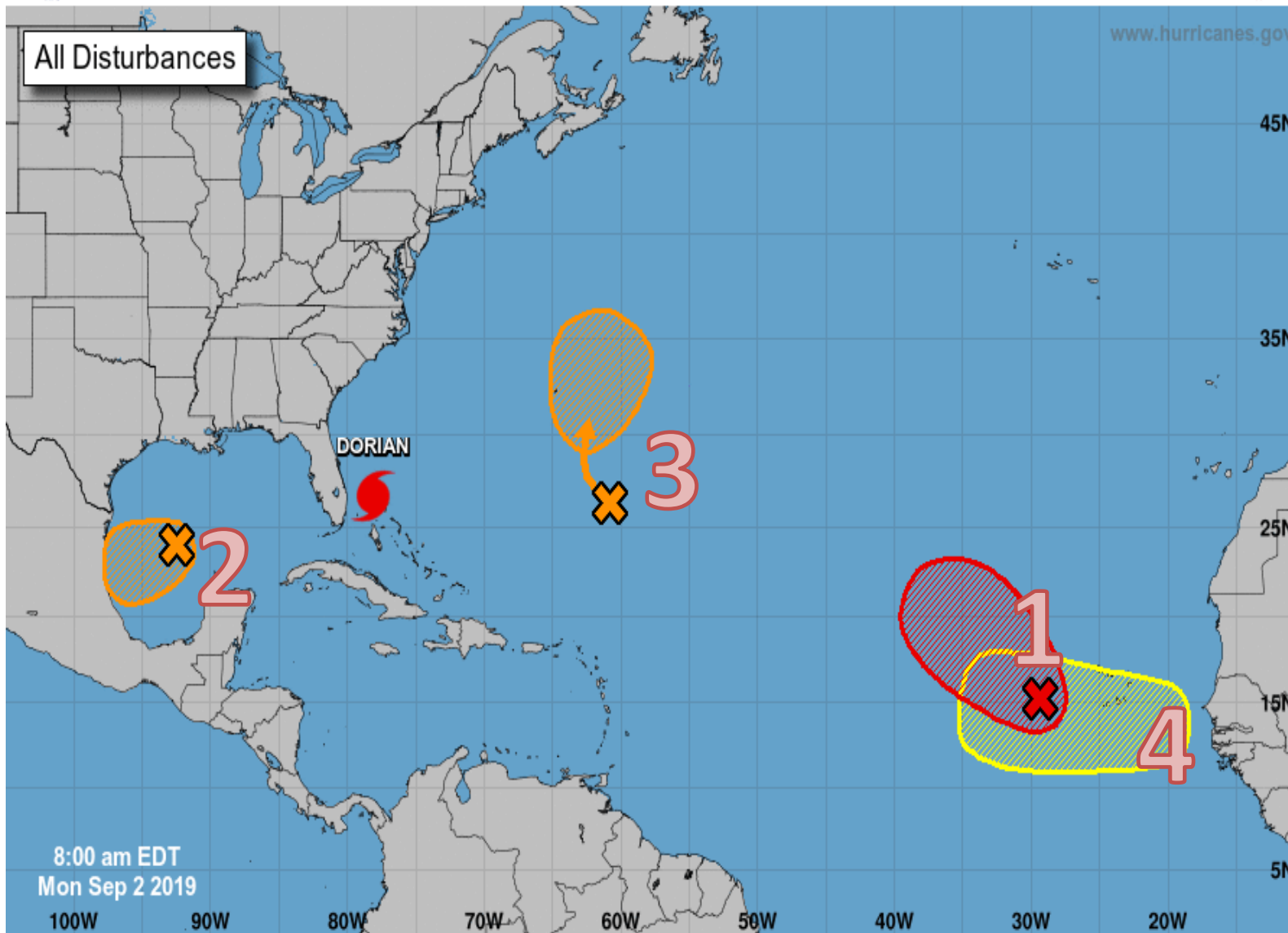
Understanding WPC Excessive Rainfall Risk Categories

<div>No Area/Label</div> <div>Flash floods are generally not expected.</div> <div>www.wpc.ncep.noaa.gov @NWSWPC</div>	<div>MARGINAL (MRGL)</div> <div>Isolated flash floods possible</div> <div>Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.</div>	<div>SLIGHT (SLGT)</div> <div>Scattered flash floods possible</div> <div>Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.</div>	<div>MODERATE (MDT)</div> <div>Numerous flash floods likely</div> <div>Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.</div>	<div>HIGH (HIGH)</div> <div>Widespread flash floods expected</div> <div>Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.</div>
<div>Flash flooding near me?</div> <div>Flash Flooding</div> <div>NO Flash Flooding</div>				
<div><div>WEATHER PREDICTION CENTER</div></div>				



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



1. Shower and thunderstorm activity associated with a low pressure system located about 300 miles west of the Cabo Verde Islands continues to show signs of organization. A tropical depression is expected to form during the next day or so while the system moves generally northwestward across the eastern tropical Atlantic Ocean.
* Formation chance through 48 hours...**high**...80 percent.
* Formation chance through 5 days...**high**...90 percent.

2. A broad area of low pressure located over the south-central Gulf of Mexico is producing a wide area of showers and thunderstorms. This system has become better organized since yesterday, and a tropical depression could form during the next few days while the low moves slowly westward across the south-central and southwestern Gulf of Mexico toward the coast of Mexico.
* Formation chance through 48 hours...**medium**...40 percent.
* Formation chance through 5 days...**medium**...50 percent.

3. A trough of low pressure is located several hundred miles south-southeast of Bermuda. Although the associated showers and thunderstorms continue to show signs of organization, the system does not have a well-defined surface center. Gradual development of this system is possible during the next few days while the disturbance moves slowly northward or north-northwestward.
* Formation chance through 48 hours...**low**...30 percent.
* Formation chance through 5 days...**medium**...50 percent.

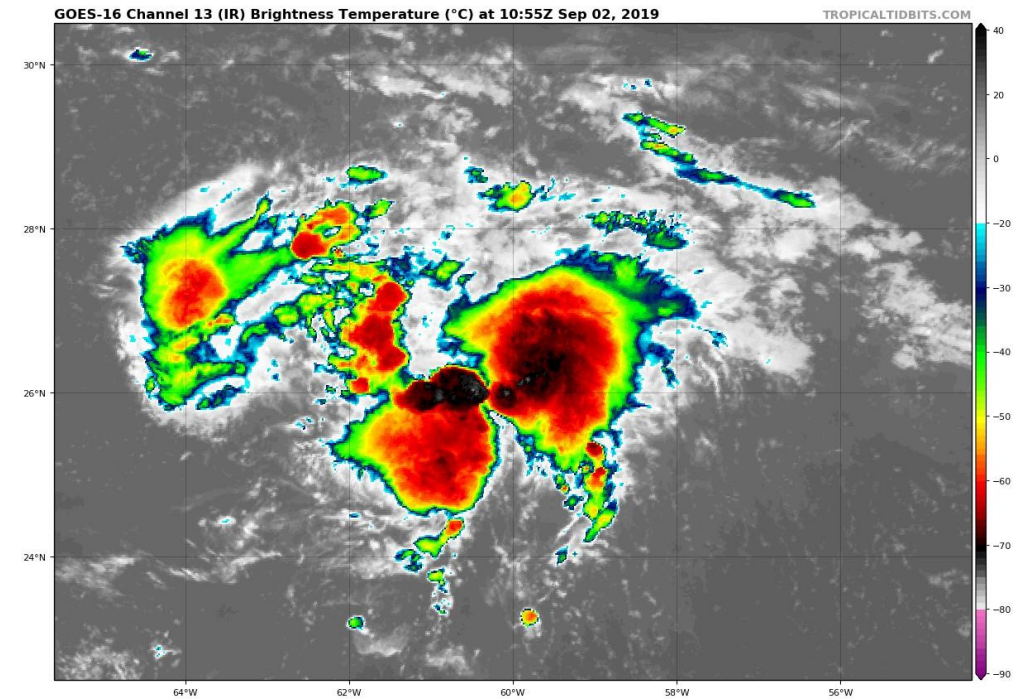
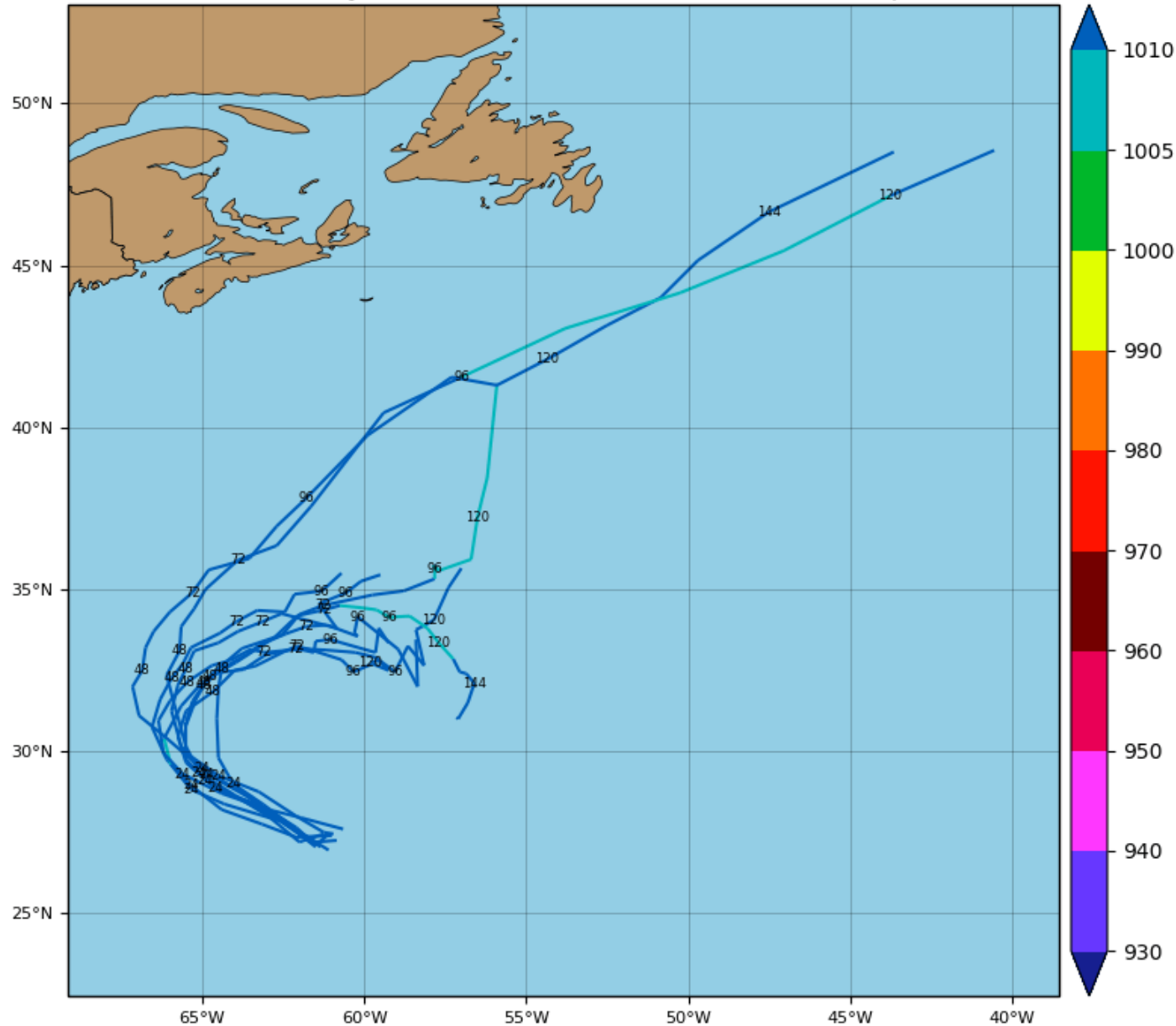
4. A tropical wave is forecast to emerge over the far eastern tropical Atlantic between Africa and the Cabo Verde Islands in a few days. Some gradual development of this disturbance will be possible late this week or over the weekend while it moves westward to west-northwestward.
* Formation chance through 48 hours...**low**...near 0 percent.
* Formation chance through 5 days...**low**...30 percent.

Current Disturbances and Five-Day Cyclone Formation Chance: X < 40% X 40-60% X > 60%
Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane
⊗ Post-Tropical Cyclone or Remnants

92L INVEST - GEFS Tracks and Min. MSLP (hPa)

Initialized at 00z Sep 02 2019

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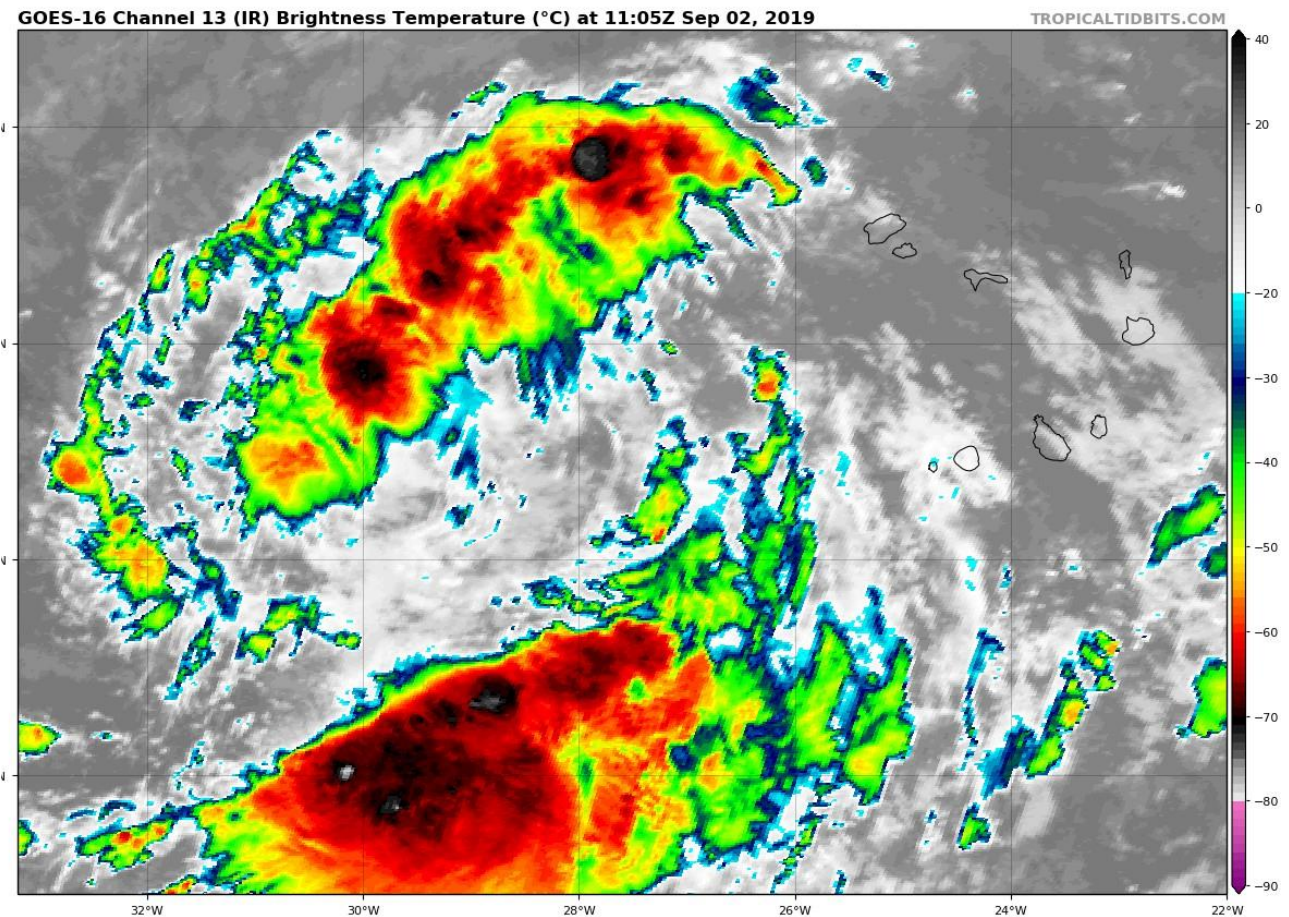
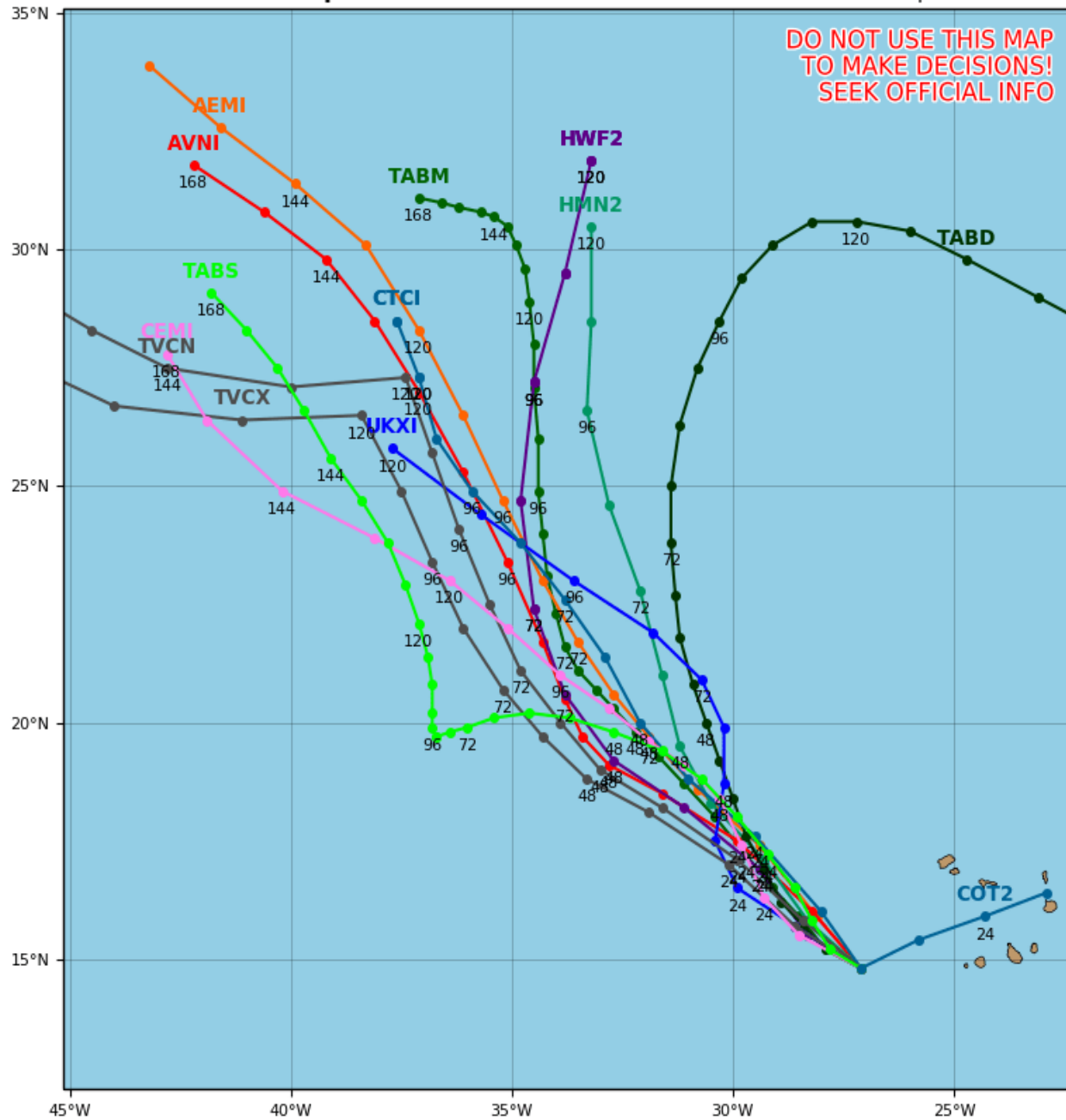
- Invest 92L in the central Atlantic is currently disorganized, but favorable conditions could support tropical depression or tropical storm development as it moves northwest and north over the next 2 days near Bermuda. A gradual eastward movement is expected by Wednesday.

Invest 91L Model Track Guidance

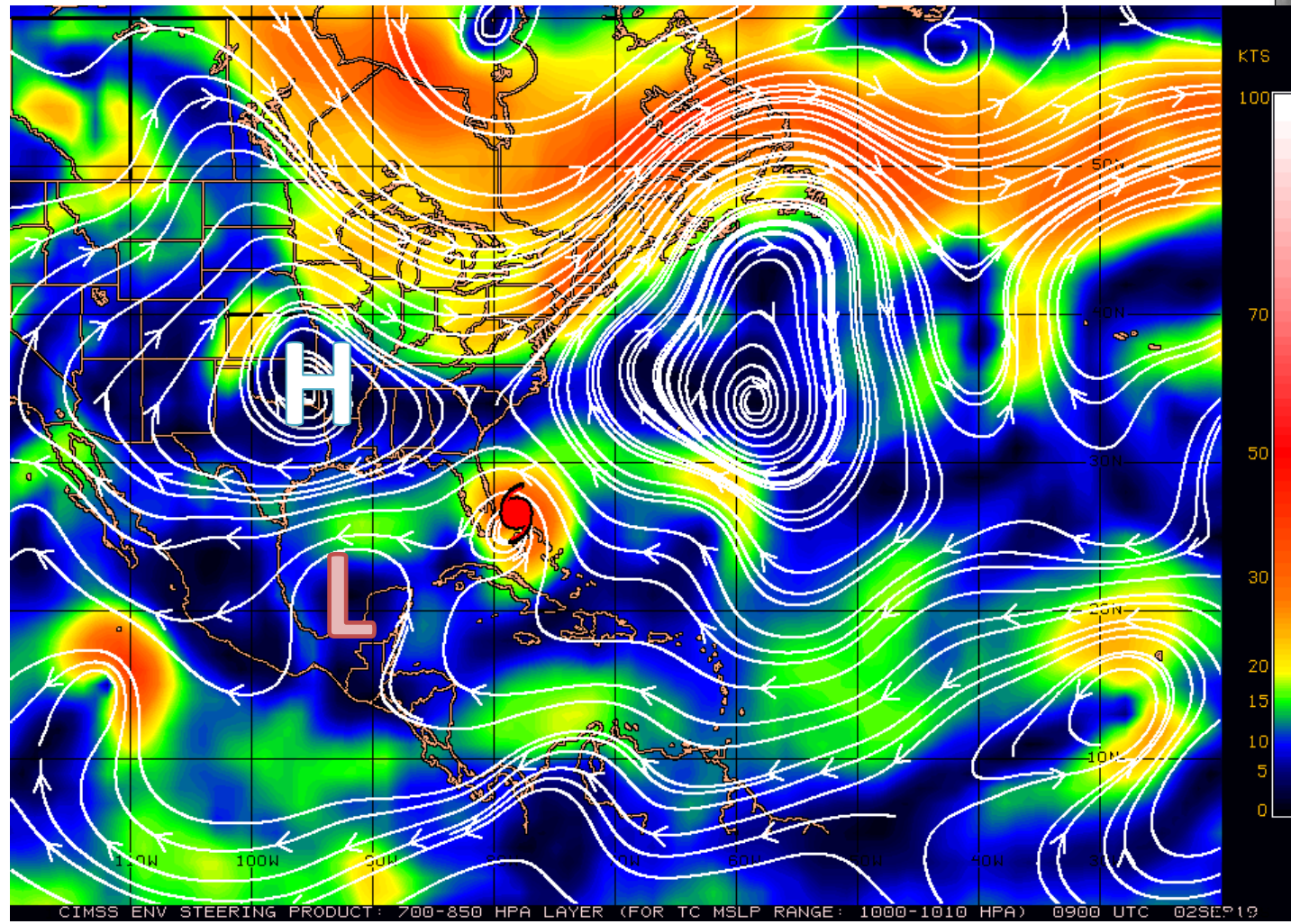
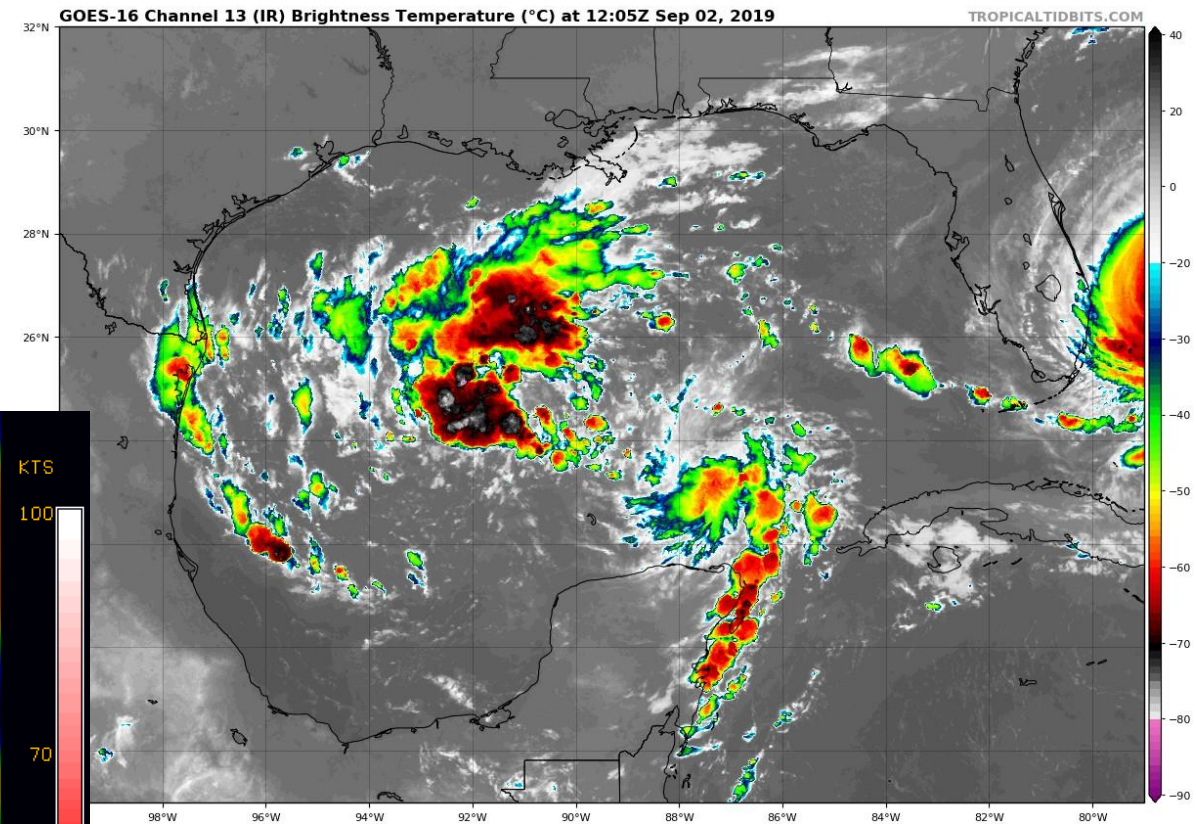
Initialized at 06z Sep 02 2019

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DO NOT USE THIS MAP
TO MAKE DECISIONS!
SEEK OFFICIAL INFO



- Invest 91L in the far eastern Atlantic is becoming better organized and should become a tropical depression today and tropical storm tomorrow. A northwest motion is forecast.



- The Gulf low will move gradually westward around high pressure over Texas. Conditions are favorable for development and a tropical depression could form by tomorrow.

Summary

Major Hurricane Dorian

- At 8 AM ET Sunday, Hurricane Dorian was located 120 miles east of West Palm Beach. Dorian slowed down overnight and is now nearly stationary, drifting to the west at 1 mph.
- Maximum sustained winds have decreased to 165 mph, but Dorian remains a very strong Category 5 Major Hurricane. Dorian is forecast to maintain Category 4 or 5 strength through Tuesday.
- Dorian will continue a slow west to northwest drift today and tonight. A faster northwest motion is forecast to resume on Tuesday and Wednesday as it parallels the Florida East Coast.
- Dorian is forecast to also parallel the Georgia and South Carolina coasts on Thursday.
- Elsewhere, a tropical wave has moved off the west coast of Africa and there is a 90% (high) chance of becoming a tropical storm within the next few days as it moves northwest in the eastern Atlantic.
- In the Gulf of Mexico, a broad area of low pressure has a 50% (medium) chance of becoming a tropical depression within the next 2-3 days before moving into Mexico.
- In the central Atlantic, a tropical wave also has a 50% (medium) chance of development during the next few days as it passes east of Bermuda.
- A tropical wave still should emerge off the coast of Africa in a few days. After it moves into the eastern Atlantic Ocean, there is a 30% chance of development.

Florida Outlook:

- The Treasure Coast, Space Coast and First Coast remain in the 3-day forecast cone. Damaging winds, storm surge, flash flooding, and isolated tornadoes are all still possible with Dorian, but the severity of the impacts will be dependent on how close to the coast the storm tracks.
- **Hurricane Warning** in effect for Martin, St. Lucie, Indian River and Brevard Counties.
- **Hurricane Watch** for coastal Volusia, coastal Palm Beach, Flagler, St. Johns, eastern Duval and eastern Nassau Counties.
- **Tropical Storm Warning** for Palm Beach, Okeechobee and Osceola Counties.
- **Tropical Storm Watch** for eastern Broward, Lake Okeechobee, Highlands, Glades, Polk, Seminole, Orange, Lake, inland Volusia, eastern Marion, Clay, Putnam, western Duval and western Nassau Counties.
- Some of these watches could be upgraded to warnings later today.
- Tropical storm force winds could arrive for Treasure Coast areas as early as this afternoon and will spread northward and inland tonight through Wednesday.
- Storm Surge values north of Lantana are forecast to be 4-7', with 2-4' forecast between Deerfield Beach and Lantana.
- Rainfall amounts of 4-8" are expected along the East Coast, with locally higher amounts of 9". This may cause minor flooding issues along with post-landfall river/creek flooding.
- The rip current risk will be dangerously high for the holiday weekend at all Atlantic beaches, along with large battering waves in excess of 10' causing severe erosion.

- At this time, none of the 4 systems being monitored for development pose a threat to Florida.

The next tropics packet will be issued Monday evening. 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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