

## TROPICAL UPDATE

**5 AM EDT** 

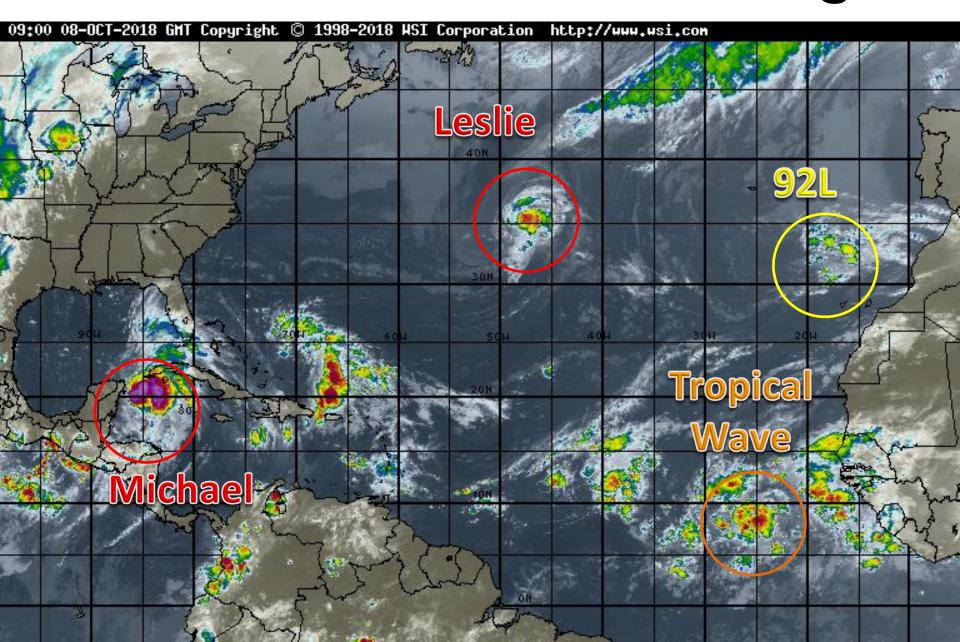
Monday, October 8, 2018

Tropical Storm Michael, Tropical Storm Leslie,

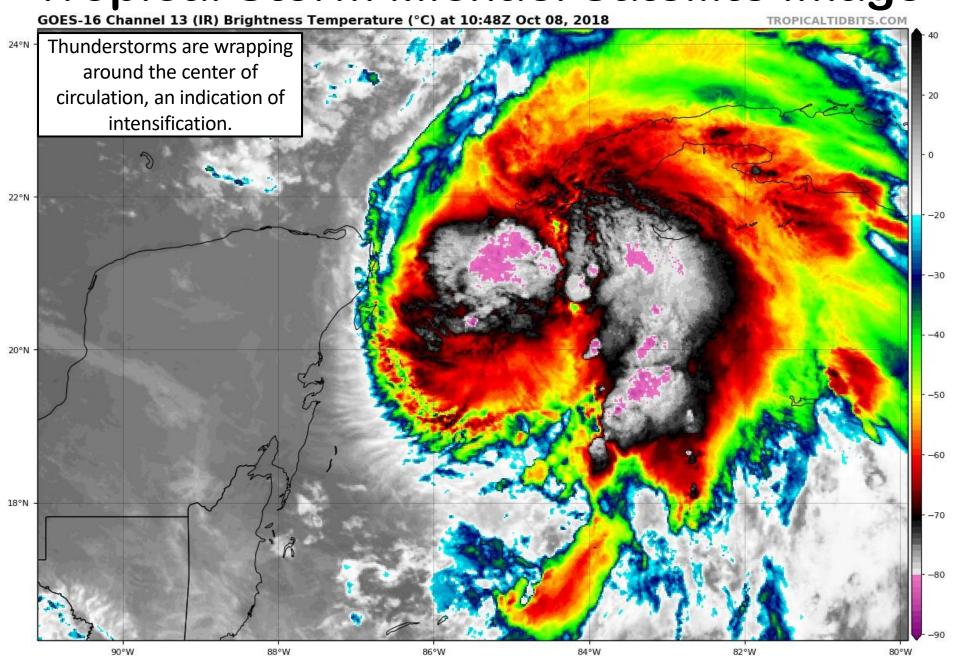
Invest 92L (10%) & African Tropical Wave (50%)

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.nhc.noaa.gov.

## Atlantic Basin Satellite Image

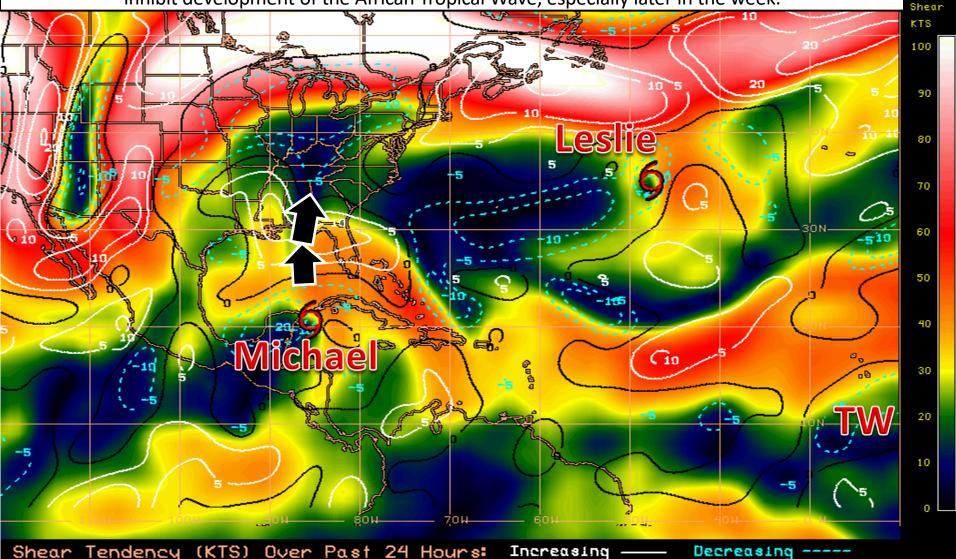


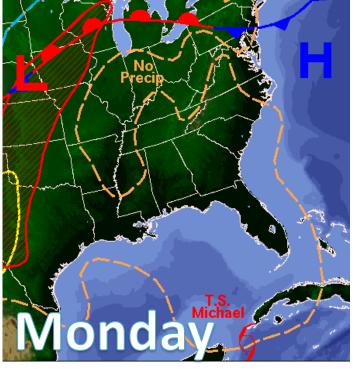
## **Tropical Storm Michael Satellite Image**

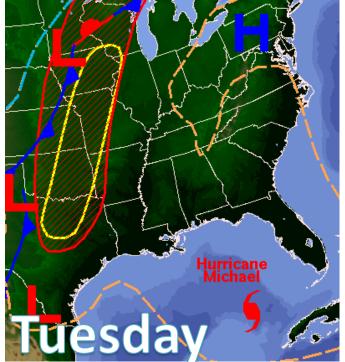


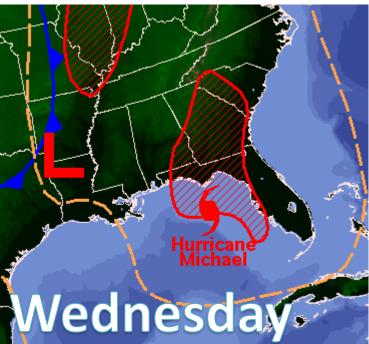
## Wind Shear (shaded) and Wind Shear Tendencies (contoured)

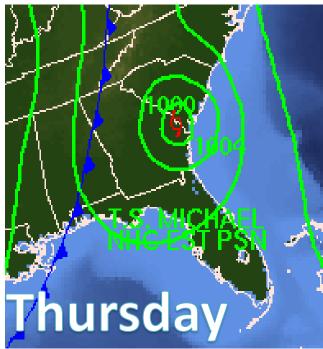
Moderate wind shear is exists near Michael but is forecast to relax which will allow strengthening of Michael into a hurricane once it moves into the Gulf of Mexico. Wind shear in the eastern Atlantic may inhibit development of the African Tropical Wave, especially later in the week.





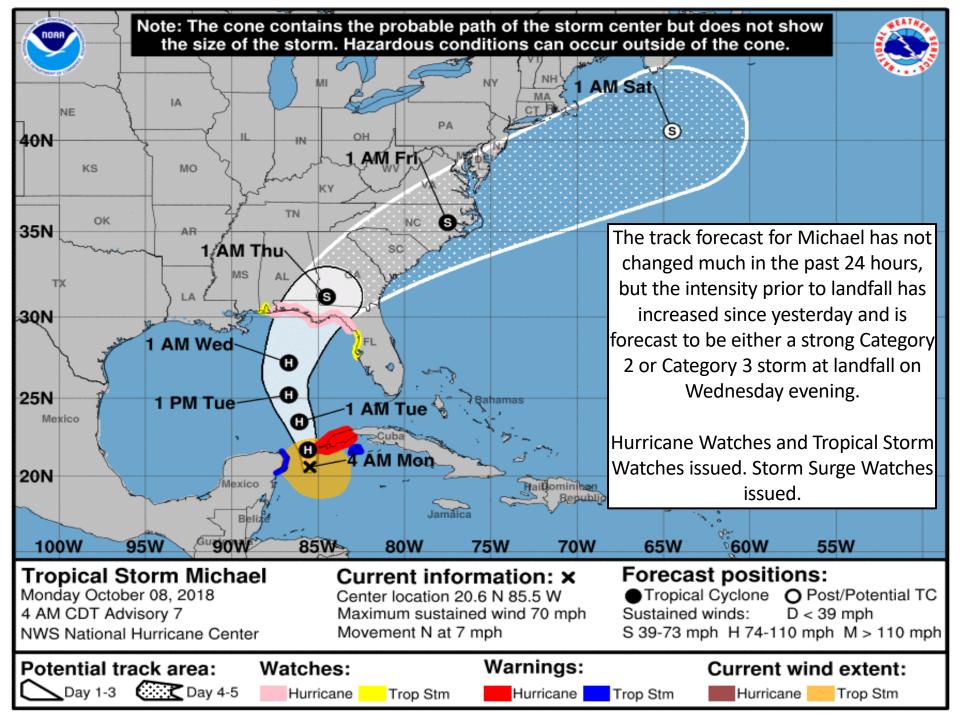


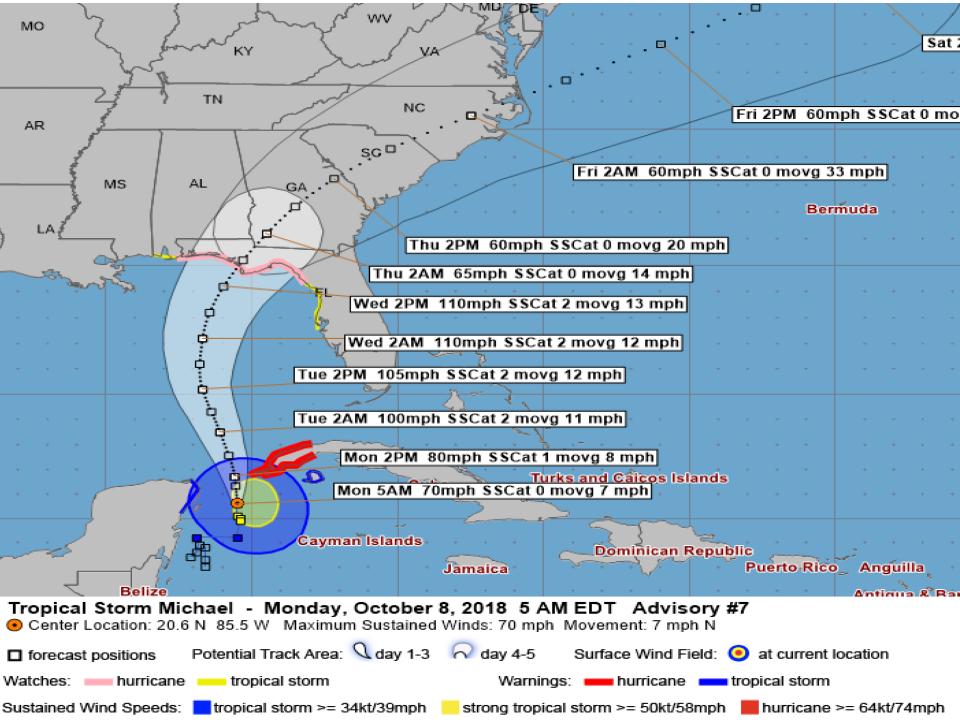


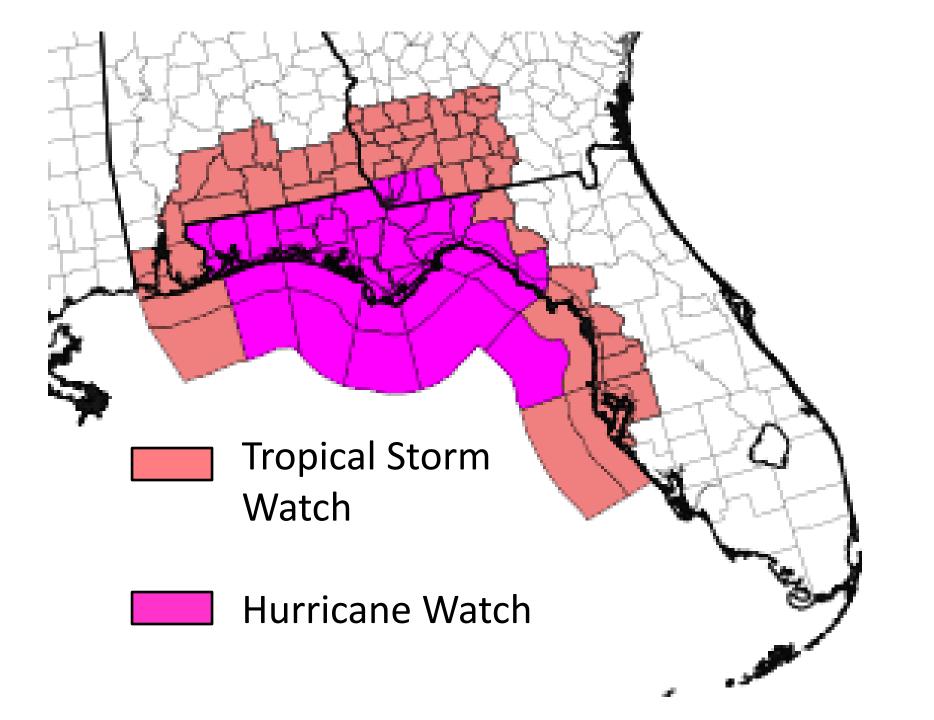


# Forecast Weather Maps

Michael will initially be steered northward between high pressure to the northeast and a cold front to the northwest. A turn to the northwest will occur by Wednesday as Michael is primarily steered by the cold front.



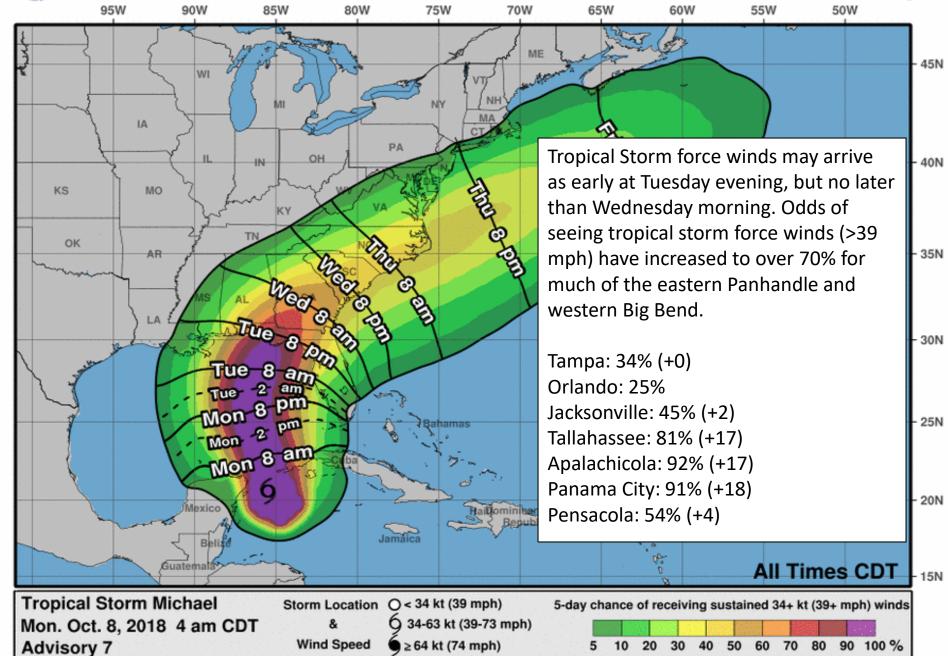




## ROAR

#### Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



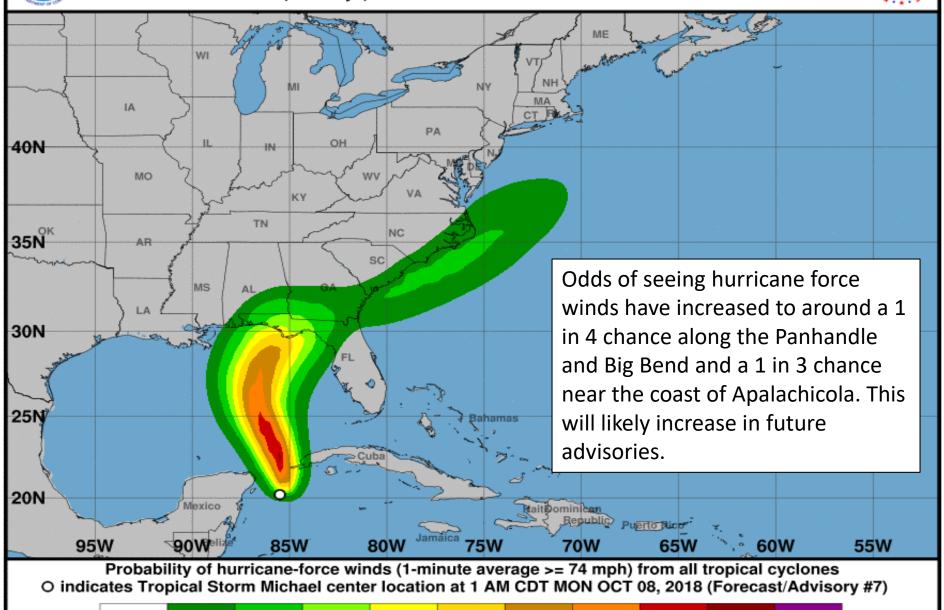


# NORR

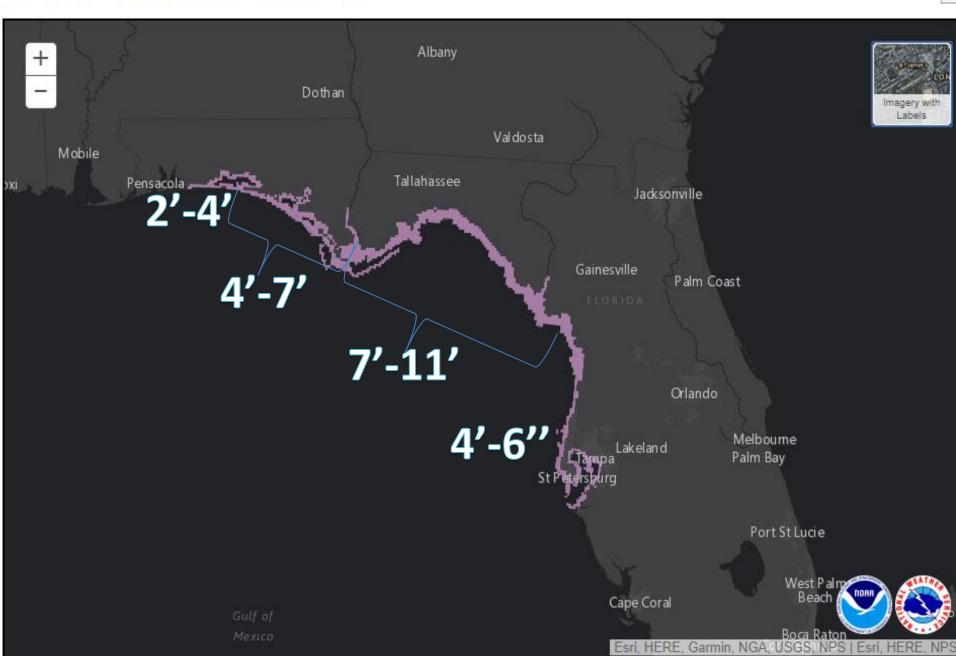
#### **Hurricane-Force Wind Speed Probabilities**



For the 120 hours (5.00 days) from 1 AM CDT MON OCT 08 to 1 AM CDT SAT OCT 13







Tropical Storm MICHAEL (2018) Advisory 07 From 05 AM EDT Monday October 08 to 11 AM EDT Thursday October 11 Imagery with Storm surge could inundate areas several miles inland

# Intertidal Zone/Estuarine Wetland Greater than 1 foot above ground Greater than 3 feet above ground Greater than 6 feet above ground Greater than 9 feet above ground

Potential Storm Surge Flooding\*

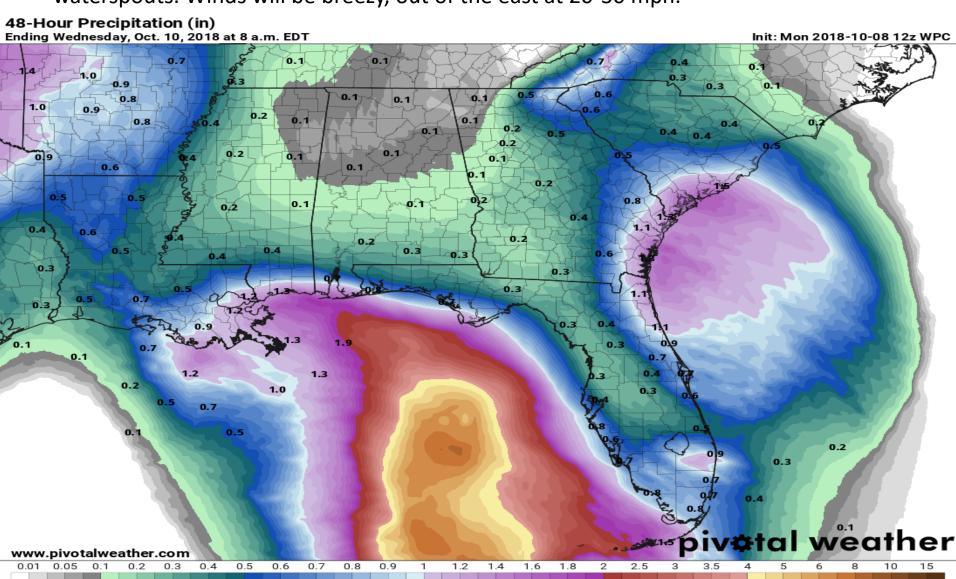
NHC Potential Storm Surge Flooding Map



Esri, HERE, Garmin, NGA, USGS, NPS | Esri,

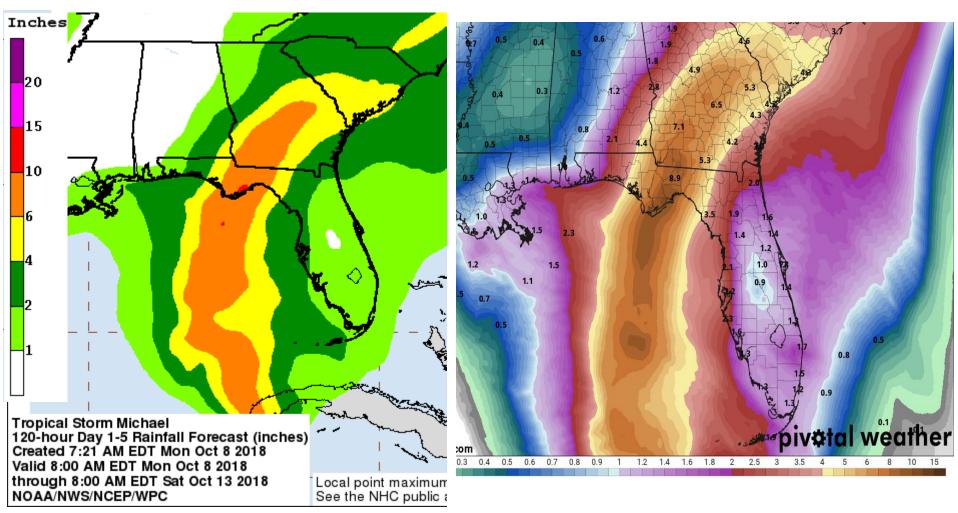
## Forecast Cumulative Rain Totals – Next 48 Hours

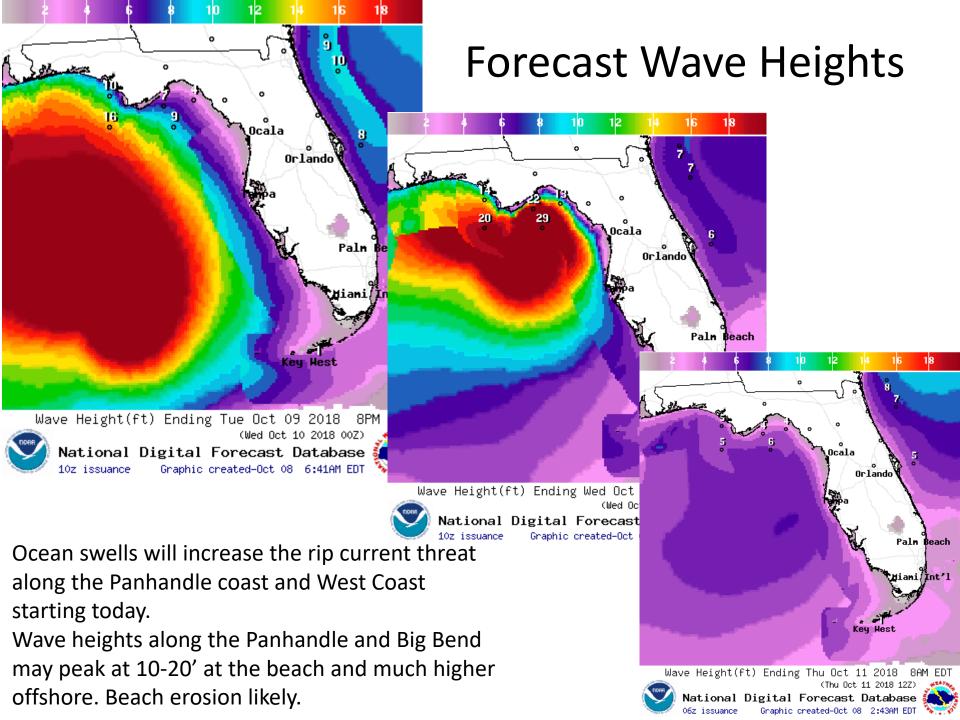
Rain bands from Tropical Storm Michael will begin to impact the Florida Keys today. Localized rainfall amounts of 1-3" will be possible along with an increased threat of waterspouts. Winds will be breezy, out of the east at 20-30 mph.

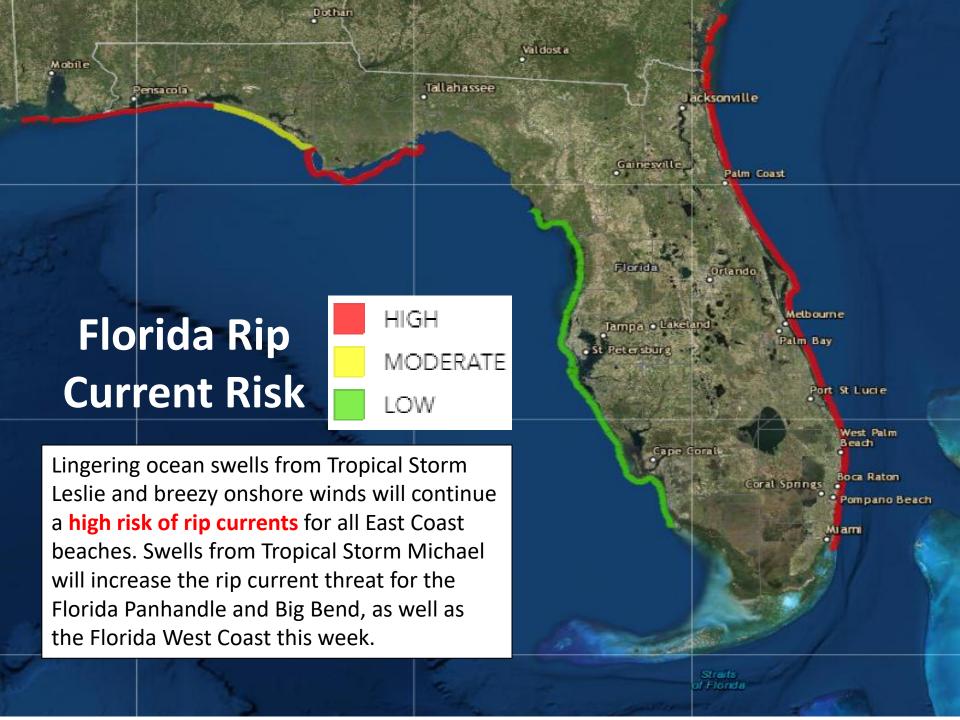


## Forecast Cumulative Rain Totals – Next 5 Days

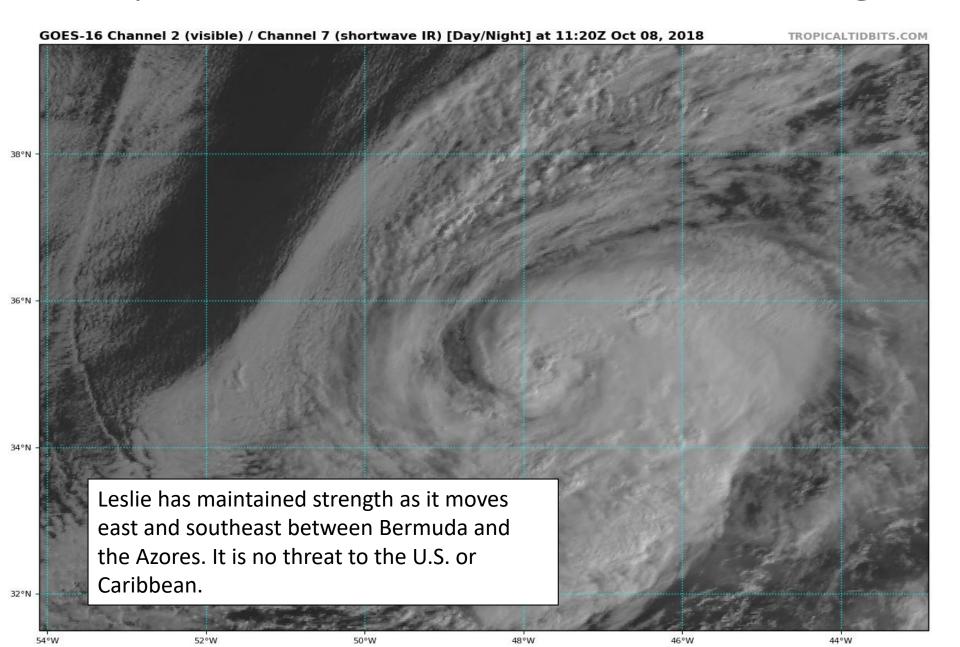
Actual rain totals will be dependent on the strength and track of Michael and this graphic does not account for isolated higher totals. However, a general 4-8" can be expected across the Panhandle and Big Bend Tuesday night-Thursday morning. Localized totals of 8-12+" possible.

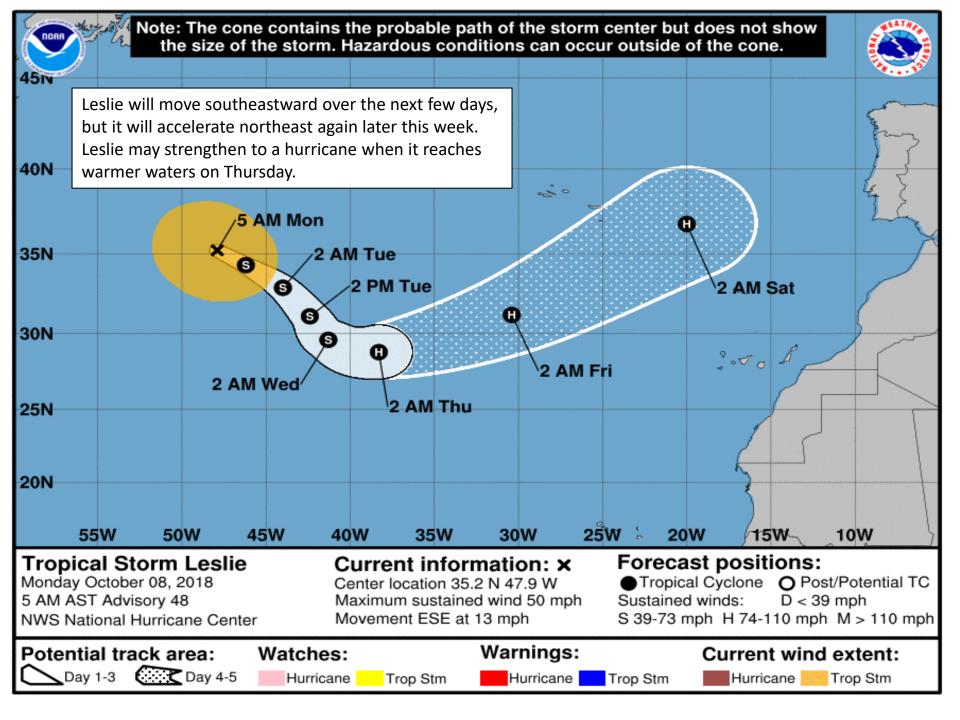






## **Tropical Storm Leslie Satellite Image**





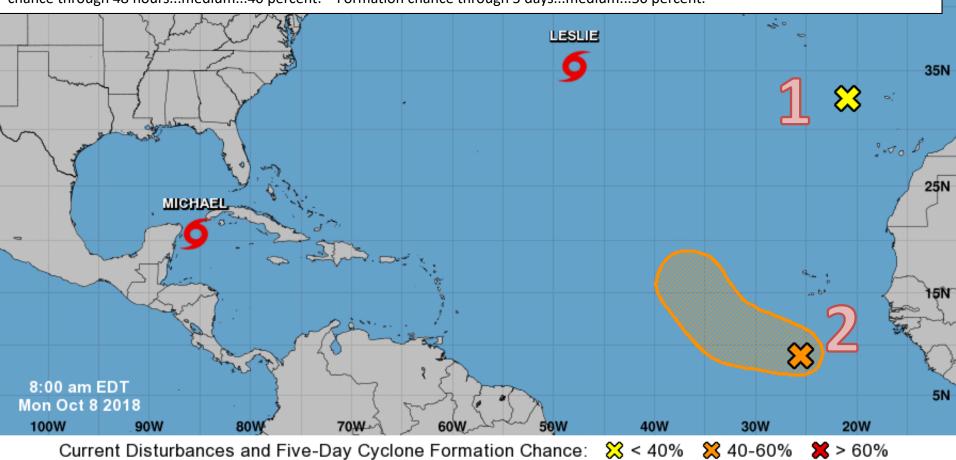


#### Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



- 1. A broad non-tropical low pressure system located southeast of the Azores has not become any better organized and tropical or subtropical development is not anticipated. \* Formation chance through 5 days...low...near 0 percent.
- 2. An area of low pressure, associated with a tropical wave, is located several hundred miles south of the Cabo Verde Islands. Shower and thunderstorm activity has become more concentrated since last night, and a tropical depression could form during next few days while it moves west-northwestward. By late this week, however, upper-level winds are expected to become unfavorable for development. \* Formation chance through 48 hours...medium...40 percent. \* Formation chance through 5 days...medium...50 percent.



Tropical or Sub-Tropical Cyclone: O Depression Storm Hurricane

8 Post-Tropical Cyclone or Remnants

## Summary

#### **Tropical Storm Leslie:**

- At 5 AM EDT Monday, Tropical Storm Leslie was located about 990 miles east-northeast of Bermuda.
- Maximum sustained winds remain near 50 mph, and small fluctuations in intensity are expected over the next couple of days before strengthening is expected back to a hurricane later this week.
- Leslie is moving east-southeast at 13 mph. Leslie will continue east-southeast or turn southeast and accelerate through the middle of next week in the open waters of the north-central Atlantic before a turn Northeast toward the Azores and Portugal.

#### Invest 92L

• This system is no longer expected to develop. Odds have been dropped to 0% and it will be removed from future outlooks.

#### **African Tropical Wave**

- A tropical wave several hundred miles south of the Cabo Verde Islands has become better organized overnight. A tropical depression may form during the next few days as it moves west-northwestward.
- This system poses no threat to land over the next 5-7 days and is currently forecast to remain over the open Atlantic where it will eventually
  dissipate.
- The National Hurricane Center gives this system a 40% (medium) chance of development over the next 48 hours and a 50% (medium) over the next 5 days.

#### **Tropical Storm Michael**

- As of 8 AM EDT Monday, Tropical Storm Michael was located about 120 miles east of Cozumel, Mexico, or about 630 miles south of Panama City, FL, in the Yucatan Channel.
- Maximum sustained winds are near 70 mph and Michael is moving north at 7 mph.
- Michael is expected to become a hurricane later this morning and is forecast to continue strengthening up until landfall. Landfall is currently forecast as a Category 2 with 110 mph, but a Category 3 is possible given the recent rapid intensification.
- Michael will continue to accelerate northward over the next 48 hours before making a turn towards the north-northeast or northeast as it makes landfall.
- Landfall is expected in the Panhandle or Big Bend sometime on Wednesday, and there remains some discrepancy in forward speed. A faster storm will make landfall on the western side of the forecast cone, where a slower storm will make more of a northeast turn into the Big Bend.
- Hurricane hunters will be investigating the system later this morning and again this evening.

#### Florida Outlook:

- Much of the Florida Panhandle and Big Bend remain within the cone of error for landfall potential.
- An increase in swells and rip current risks from Michael are already present and wave heights will
  continue to increase through Thursday morning.
- Tropical storm conditions may arrive in the Panhandle as soon as Tuesday morning but no later than
  late Wednesday morning. If the track shifts eastward or expands in size, the Florida West Coast could
  experience tropical storm force winds tonight or early tomorrow morning. Hurricane conditions could
  arrive in the Panhandle Wednesday afternoon or evening.
- **Tropical Storm Wind Watches** are in effect for 7 counties along the Florida West Coast and 2 counties in the far eastern Big Bend. **Hurricane Watches** are in effect for 18 Panhandle and Big Bend counties between Pensacola and Cross City. These may be upgraded to warnings later today.
- Storm surge will be one of the greatest impacts from this storm and may affect a large portion of the Florida Gulf Coast. **Storm Surge Watches** have been issued between Navarre (Okaloosa County) and Anna Maria Island (Manatee County) for possible surge inundation of 2-4' for the Tampa Bay region and western Panhandle, 4-7' for the eastern Panhandle coast, and 7-11' for Apalachee Bay and Nature Coast.
- Widespread rainfall totals of 4-8" with locally higher amounts of 8-10+" can be expected across the Panhandle and Big Bend, with most of it occurring on Wednesday.
- Isolated tornadoes will be possible Tuesday-Thursday, but risk and where will depend on eventual track and intensity of the system (northeast quadrant relative to forward motion).
- Ocean swells from Tropical Storm Leslie and breezy onshore winds from high pressure to the north of Florida will continue producing a moderate to high risk of rip currents along all Atlantic beaches.

Another briefing packet will be issued later this afternoon. For the latest information on the tropics, please visit the National Hurricane Center website at <a href="https://www.hurricanes.gov">www.hurricanes.gov</a>.



## TROPICAL UPDATE

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## State Meteorological Support Unit

## Florida Division of Emergency Management

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