



TROPICAL UPDATE



11:00 AM EDT

Friday, October 23, 2020

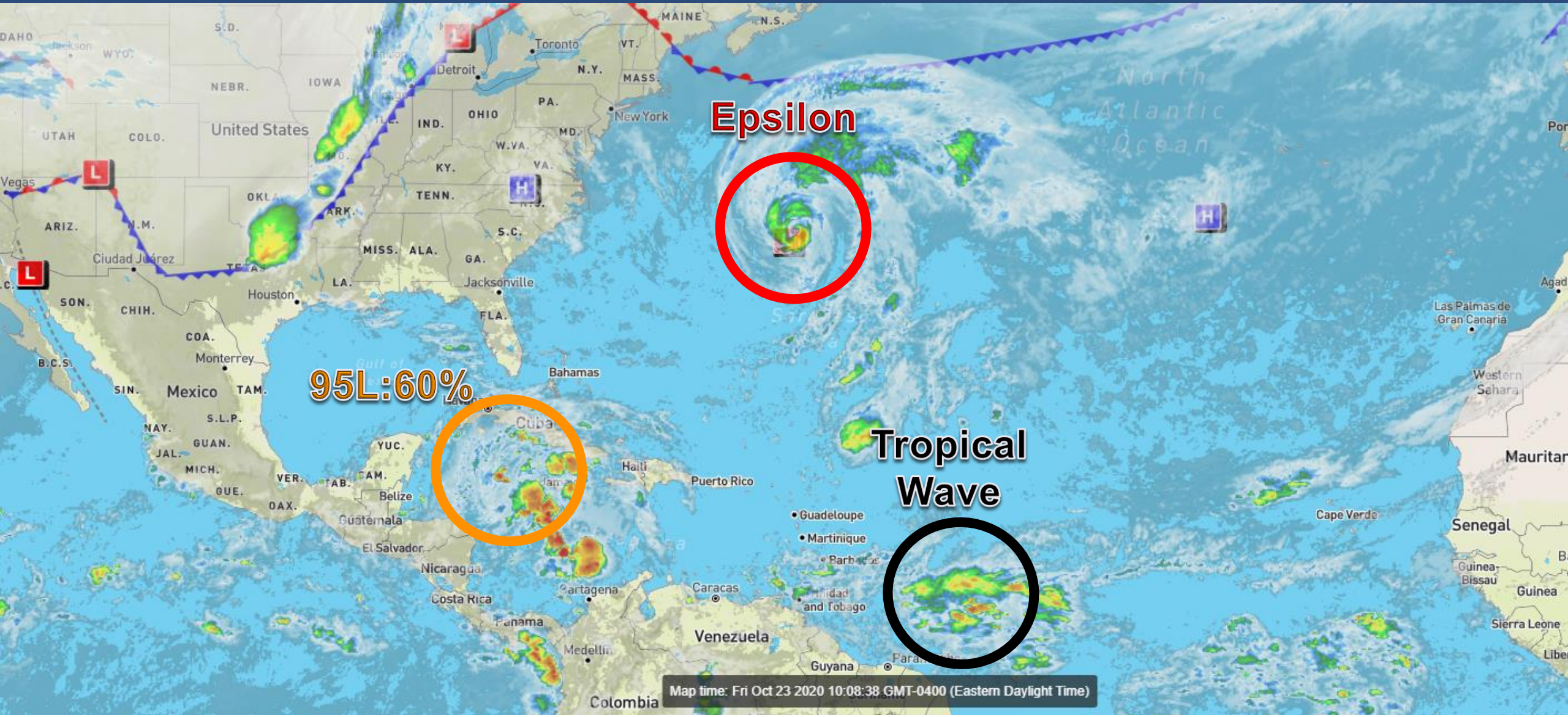
Hurricane Epsilon & Invest 95L (60%)

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



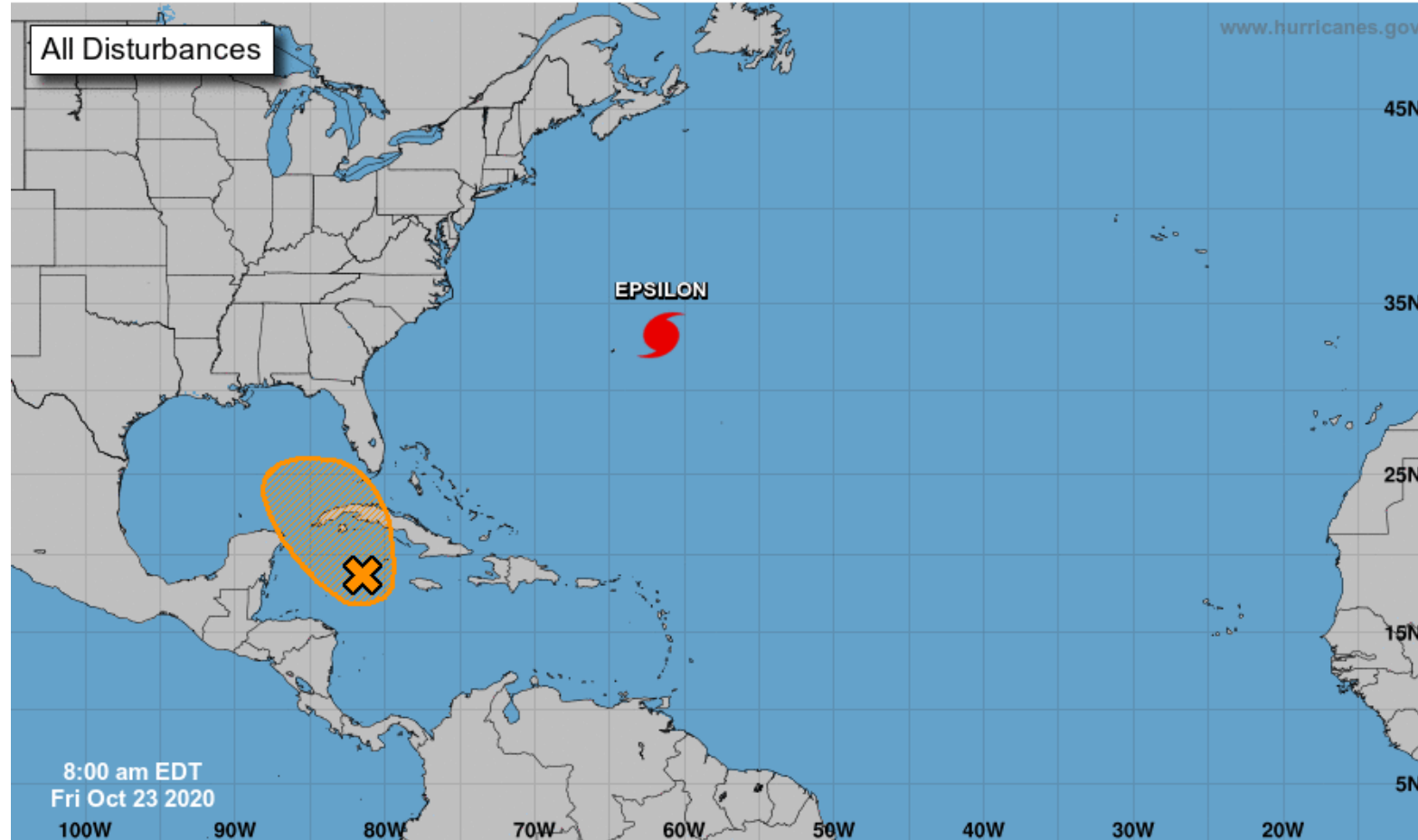


Tropical Weather Outlook

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



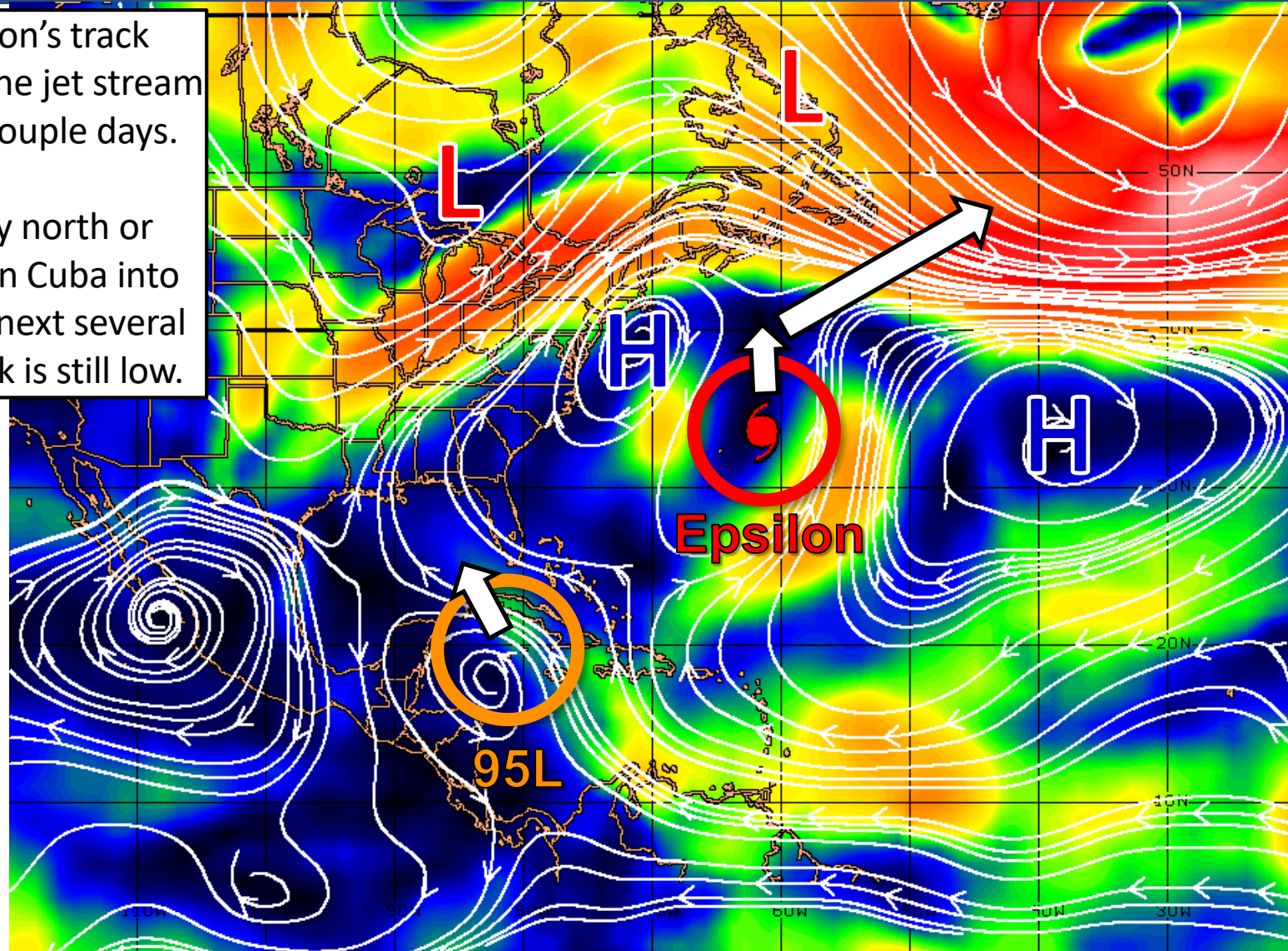
Steering Currents

What is Moving the Systems?

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.

Confidence is high in Epsilon's track forecast as it gets caught by the jet stream to the north over the next couple days.

Invest 95L will move slowly north or northwestward over western Cuba into the Gulf of Mexico over the next several days. Confidence in this track is still low.



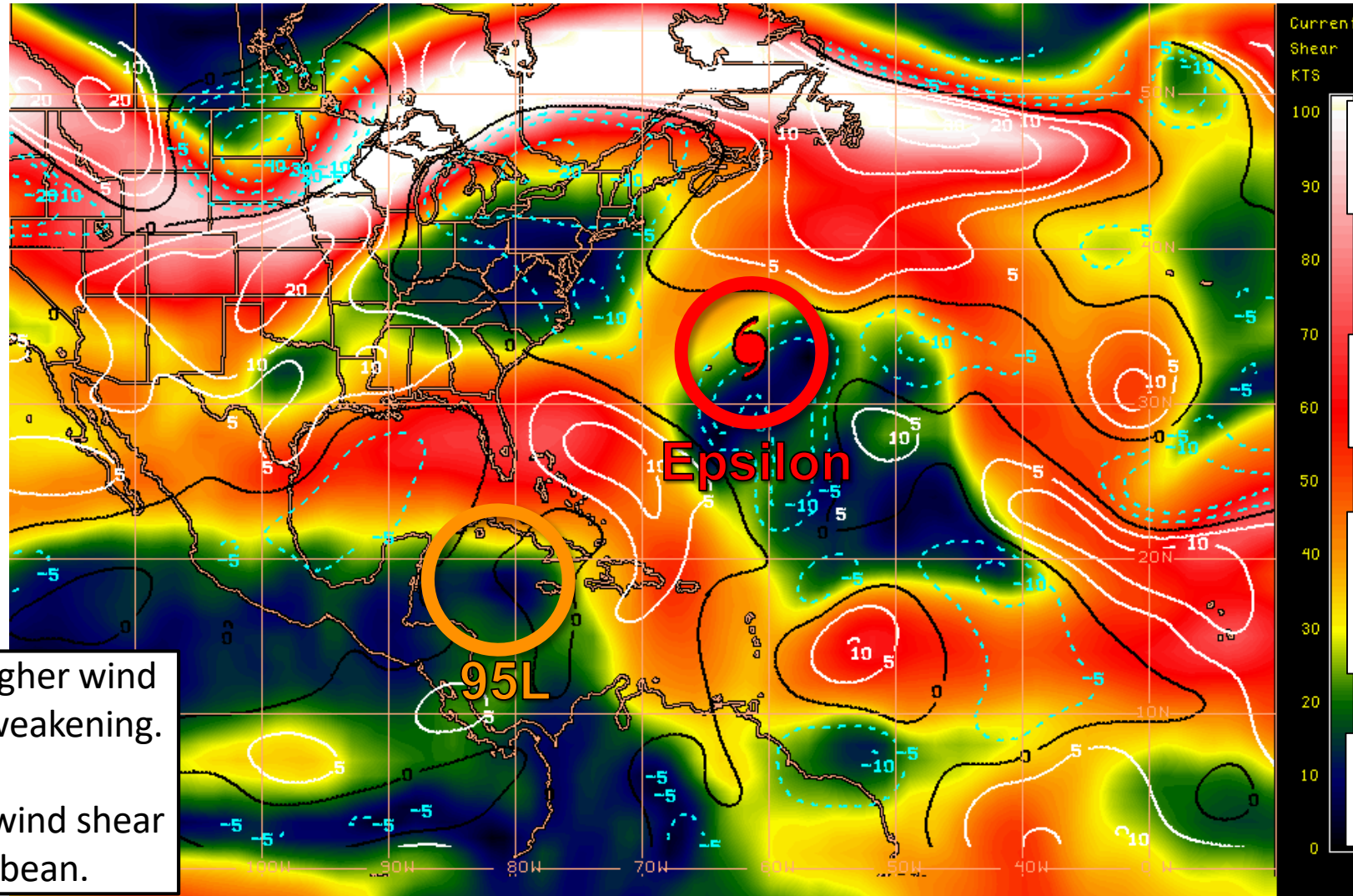
CIMSS ENV STEERING PRODUCT: 700-850 HPA LAYER (FOR TC MSLP RANGE: 1000-1010 HPA) 1200 UTC 23OCT20



Wind Shear

Is the environment favorable for the system?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing).



HIGH Shear
(Unfavorable)

HIGH Shear
(Unfavorable)

MODERATE
Shear
(Neutral)

LOW Shear
(Favorable)

Epsilon will soon encounter higher wind shear, which will cause some weakening.

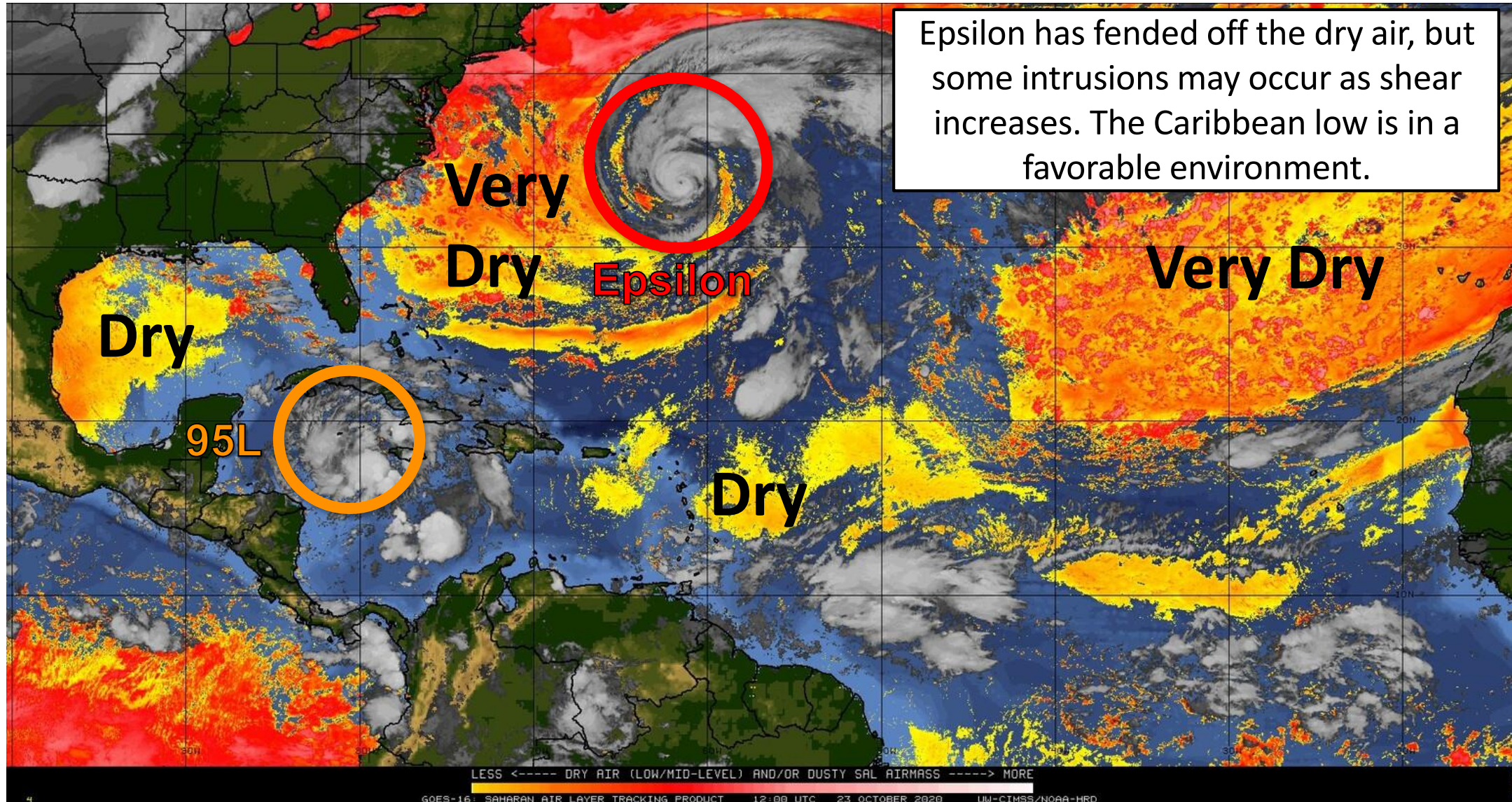
Invest 95L is in an area of low wind shear in the northwestern Caribbean.



Dry Air & Saharan Dust

Is the environment favorable for the system?

Color denotes concentration of Saharan Dust or dry, stable air.





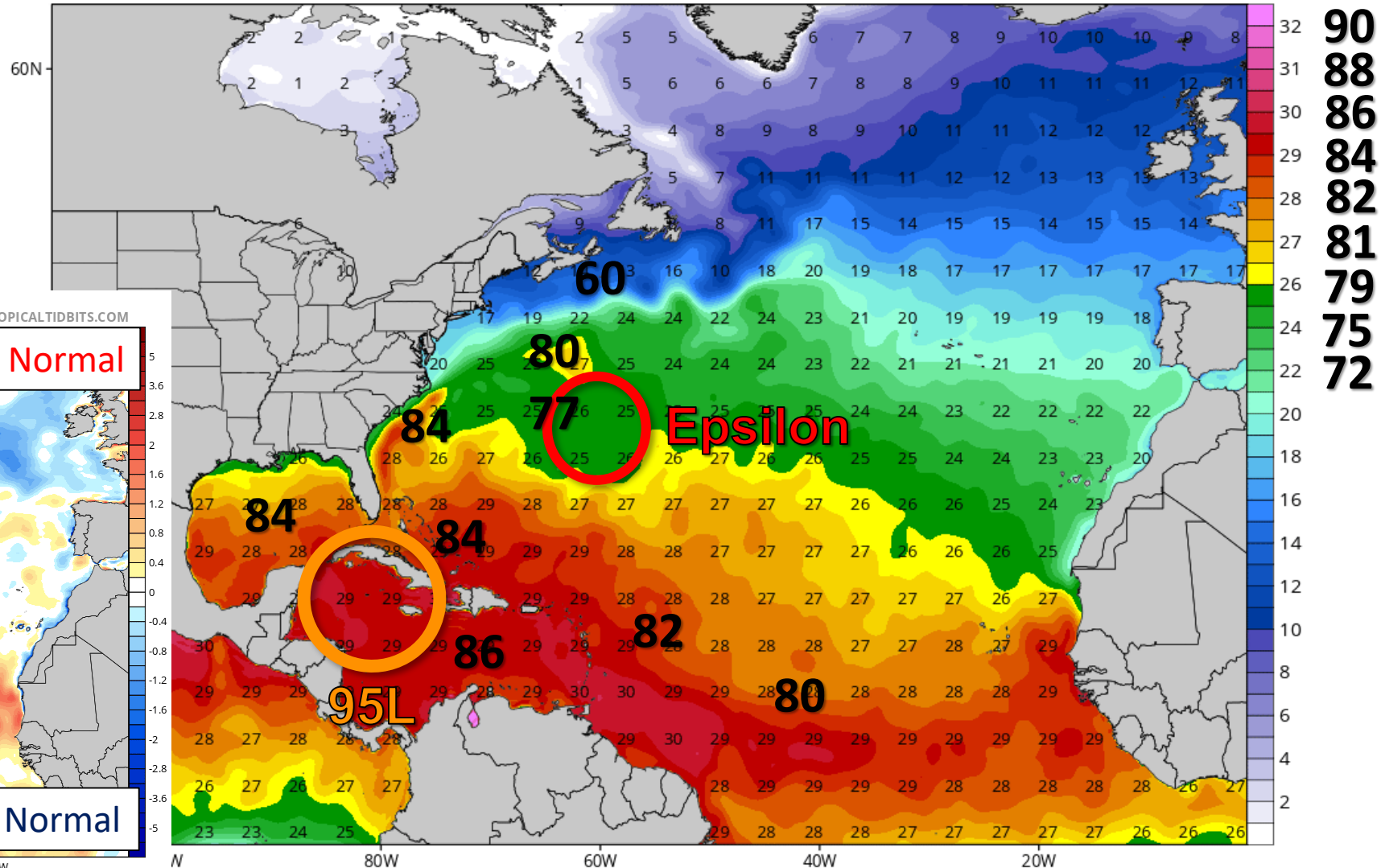
Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Waters become cooler ahead of Epsilon, but a cooler atmosphere overall may help it maintain its strength. The Caribbean remains well warm enough to support tropical systems.

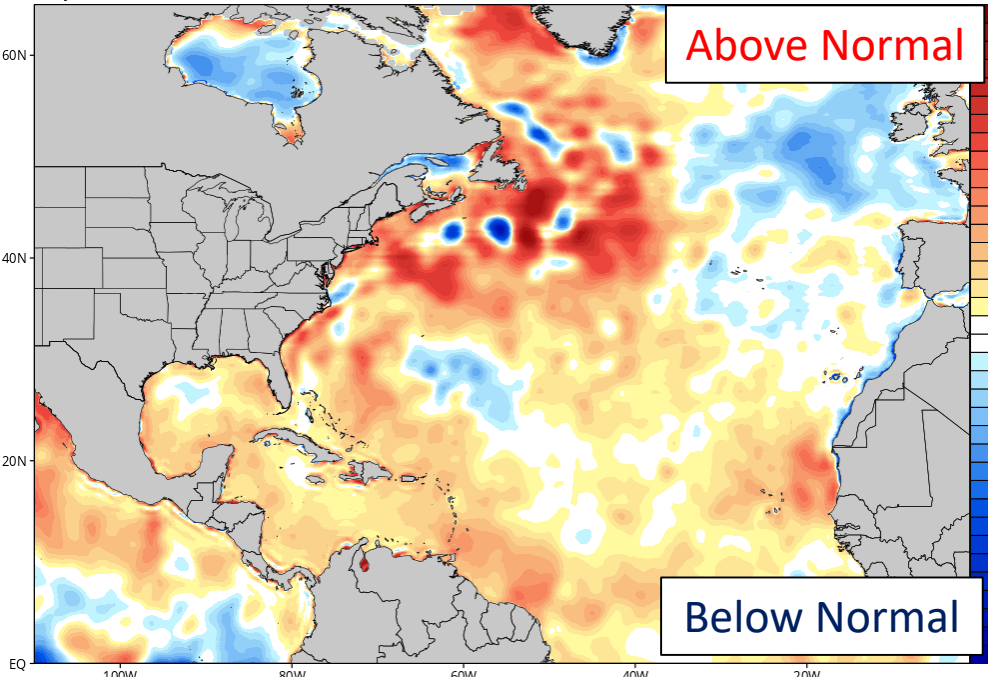
CDAS Sea Surface Temperature (°C)

Analysis Time: 06z Oct 23 2020



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

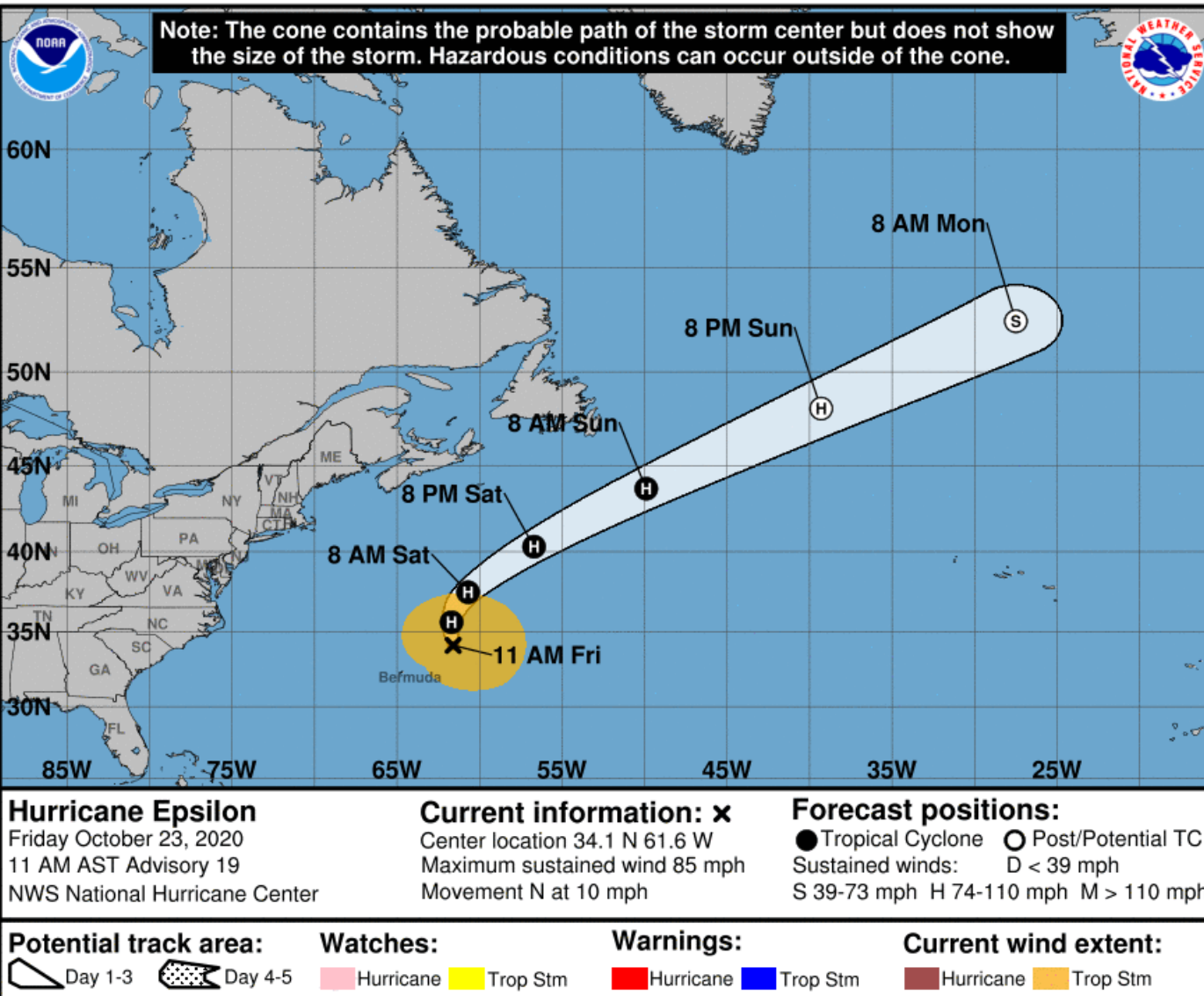
Analysis Time: 06z Oct 23 2020





Official Forecast Track

From the National Hurricane Center – Hurricane Epsilon



- The center of Hurricane Epsilon is located about 225 miles northeast of Bermuda.
- Epsilon has maximum sustained winds of 85 mph (Category 1).
- Epsilon is moving to the north at 10 mph, and a turn toward the northeast is expected this weekend.
- Swells from Epsilon will impact the East Coast through this weekend, increasing the rip current risk and resulting in some beach erosion for the upcoming weekend.

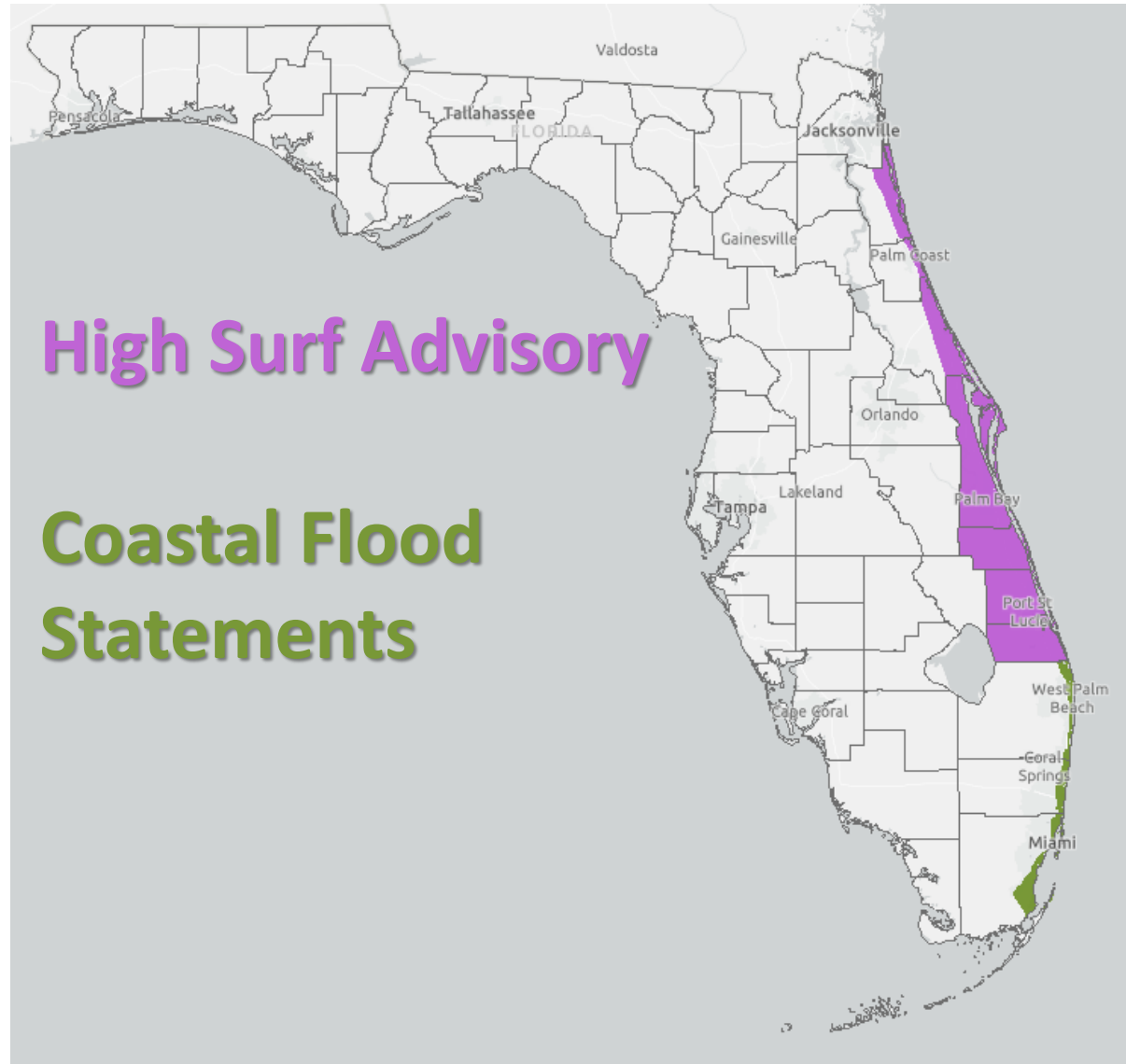


Coastal Flood Threat

Through this Evening

Swells from Hurricane Epsilon, the King Tides, and the persistent easterly winds will result in minor coastal flooding along parts of Southeast Florida.

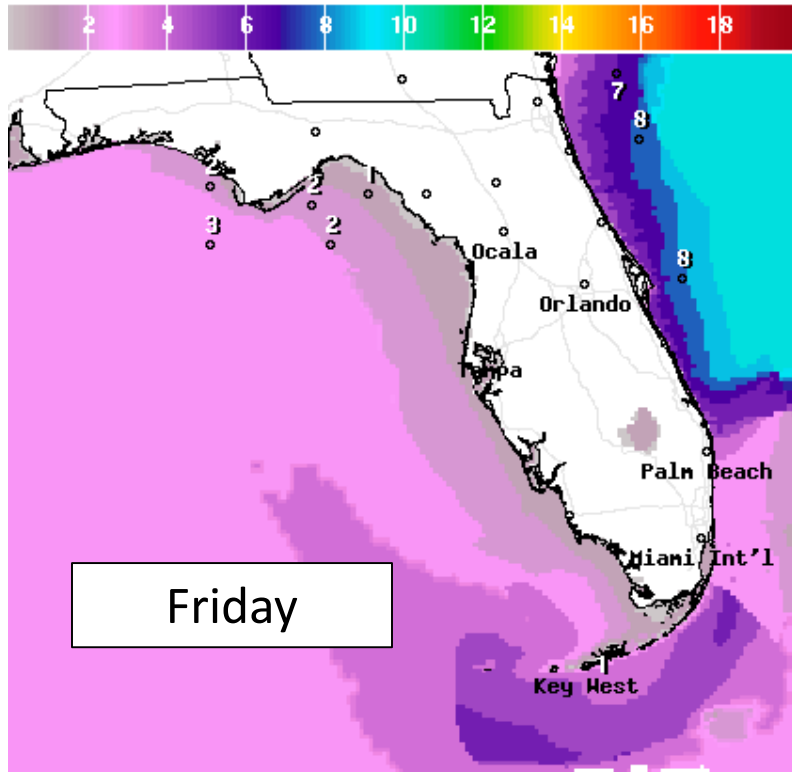
Flooding along the coast will be exacerbated by any heavy rainfall at high tide.





Forecast Wave Heights

Next 3 Days



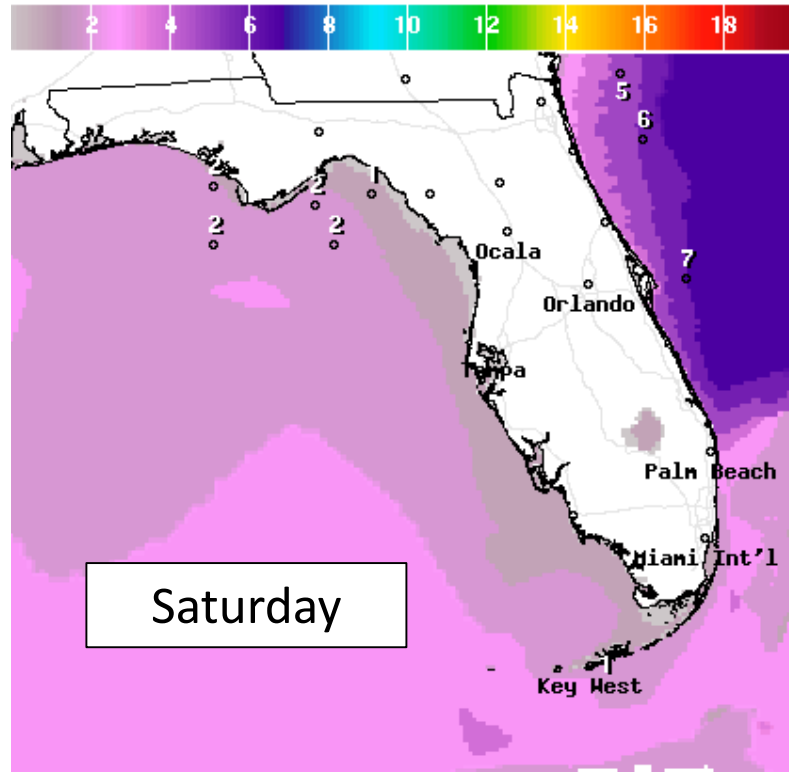
Wave Height(ft) Ending Fri Oct 23 2020 8PM EDT
(Sat Oct 24 2020 00Z)



National Digital Forecast Database

14z issuance

Graphic created-Oct 23 10:49AM EDT



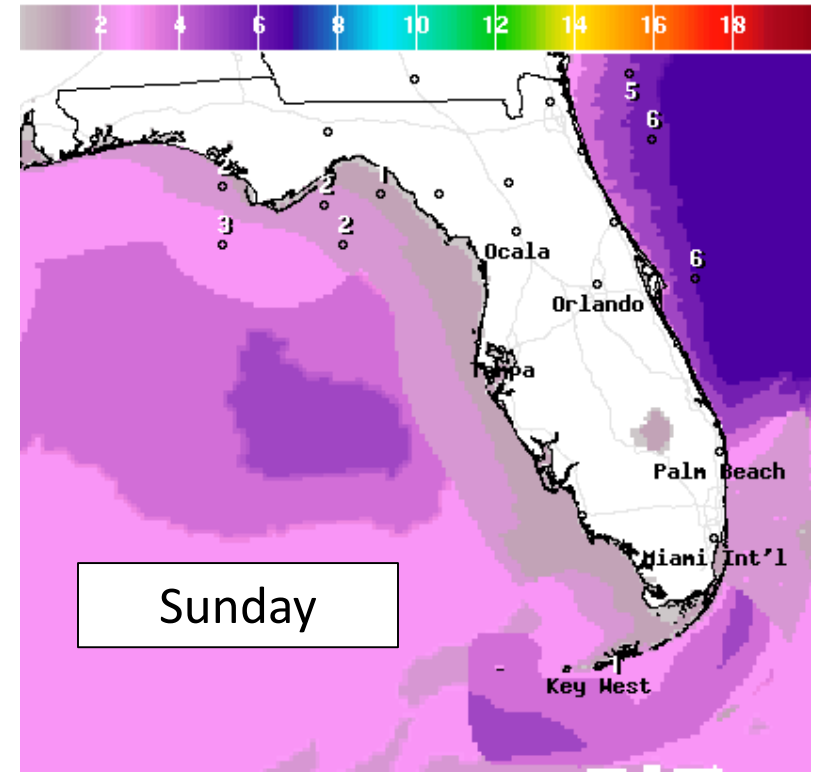
Wave Height(ft) Ending Sat Oct 24 2020 8PM EDT
(Sun Oct 25 2020 00Z)



National Digital Forecast Database

14z issuance

Graphic created-Oct 23 10:50AM EDT



Wave Height(ft) Ending Sat Oct 24 2020 8PM EDT
(Sun Oct 25 2020 00Z)



National Digital Forecast Database

16z issuance

Graphic created-Oct 22 1:00PM EDT



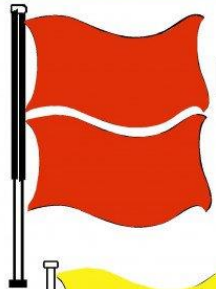
High surf of 4-8' is expected along many East Coast beaches through this weekend as winds remain breezy and swells from Hurricane Epsilon arrive. This could result in some beach erosion over the weekend. Dangerous rip currents are expected. The breezy winds will also result in possibly dangerous rip currents along the Panhandle.



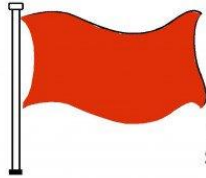
Rip Current Outlook

Today

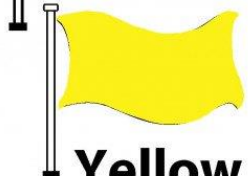
BEACH FLAG WARNING SYSTEM



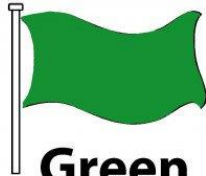
Double Red
Water Closed to
Public Use



Red
High Hazard
(rough conditions,
such as strong surf
and or currents)



Yellow
Medium Hazard
(light surf and or
currents)

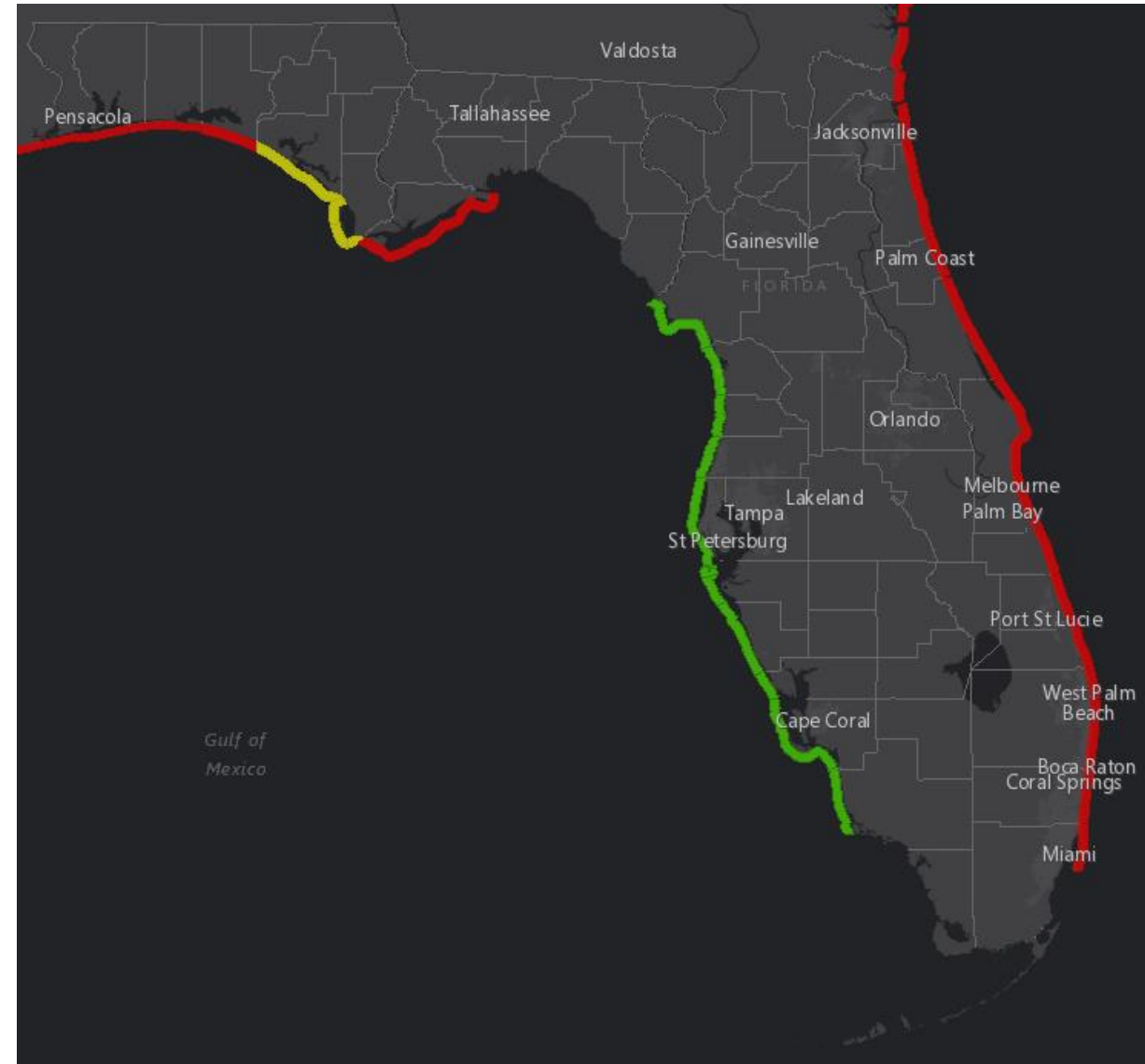


Green
Low Hazard
(calm conditions)



Purple
Marine Pest
(jellyfish, stingrays
& dangerous fish)

Long period swells from distant Hurricane Epsilon will keep the rip current risk high at Atlantic beaches. Breezy easterly winds will create dangerous rip currents at Panhandle beaches.





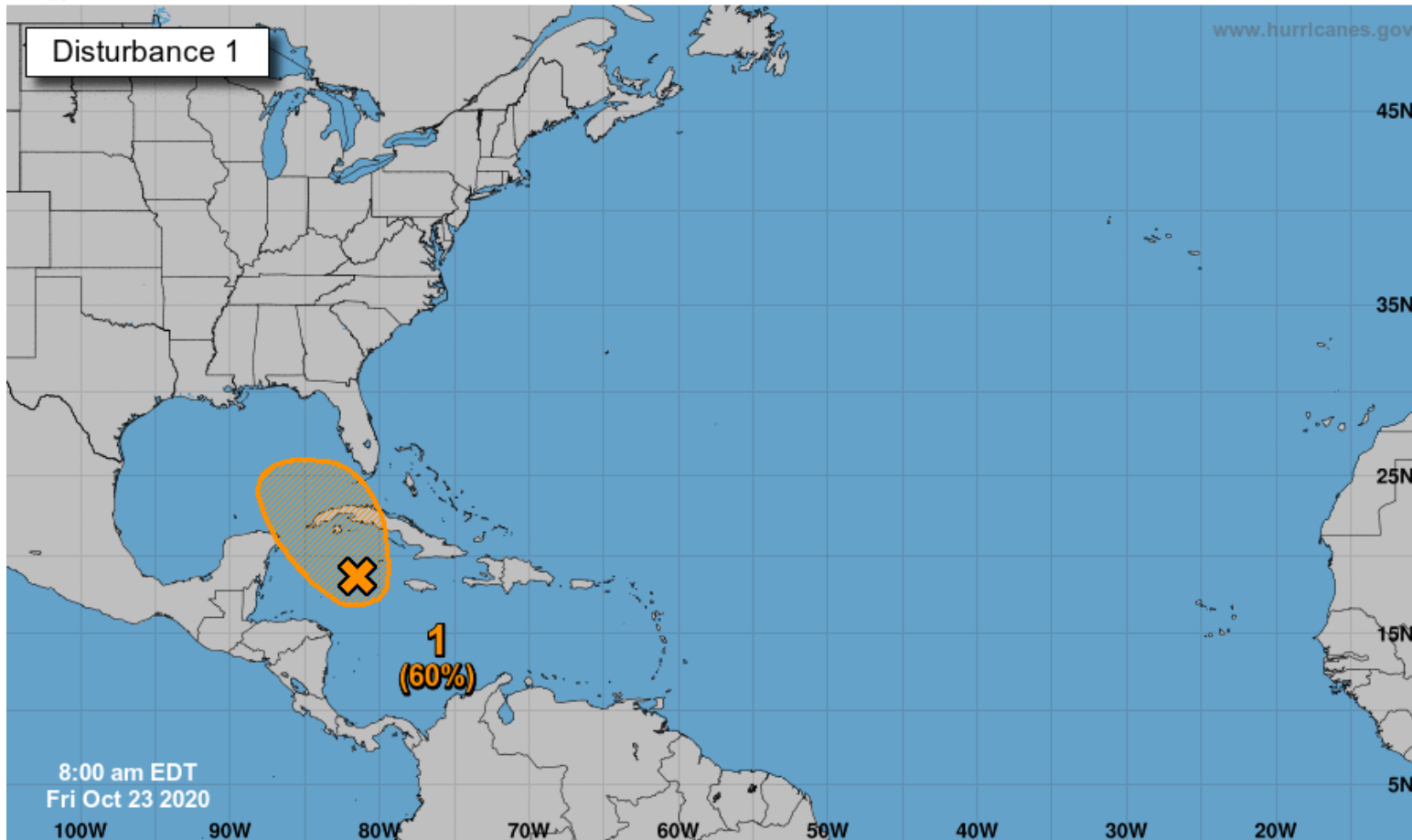
Tropical Weather Outlook

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:
 Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane
 ⊗ Post-Tropical Cyclone or Remnants

✕ < 40% ✕ 40-60% ✕ > 60%

A broad area of low pressure located near Grand Cayman Island is producing a large area of showers and thunderstorms mainly east of the center.

This system has become much better organized since yesterday, and a tropical depression could form during the next couple of days while the low moves slowly toward the northwest.

This system is now anticipated to move near western Cuba this weekend and move slowly across the southeastern Gulf of Mexico by early next week.

Regardless of development, locally heavy rainfall will be possible over portions of South Florida and the Keys through the weekend.

This system needs to be monitored for any additional potential impacts.

***Formation chance through 48 hours...medium...50%**

***Formation chance through 5 days...medium...60%**

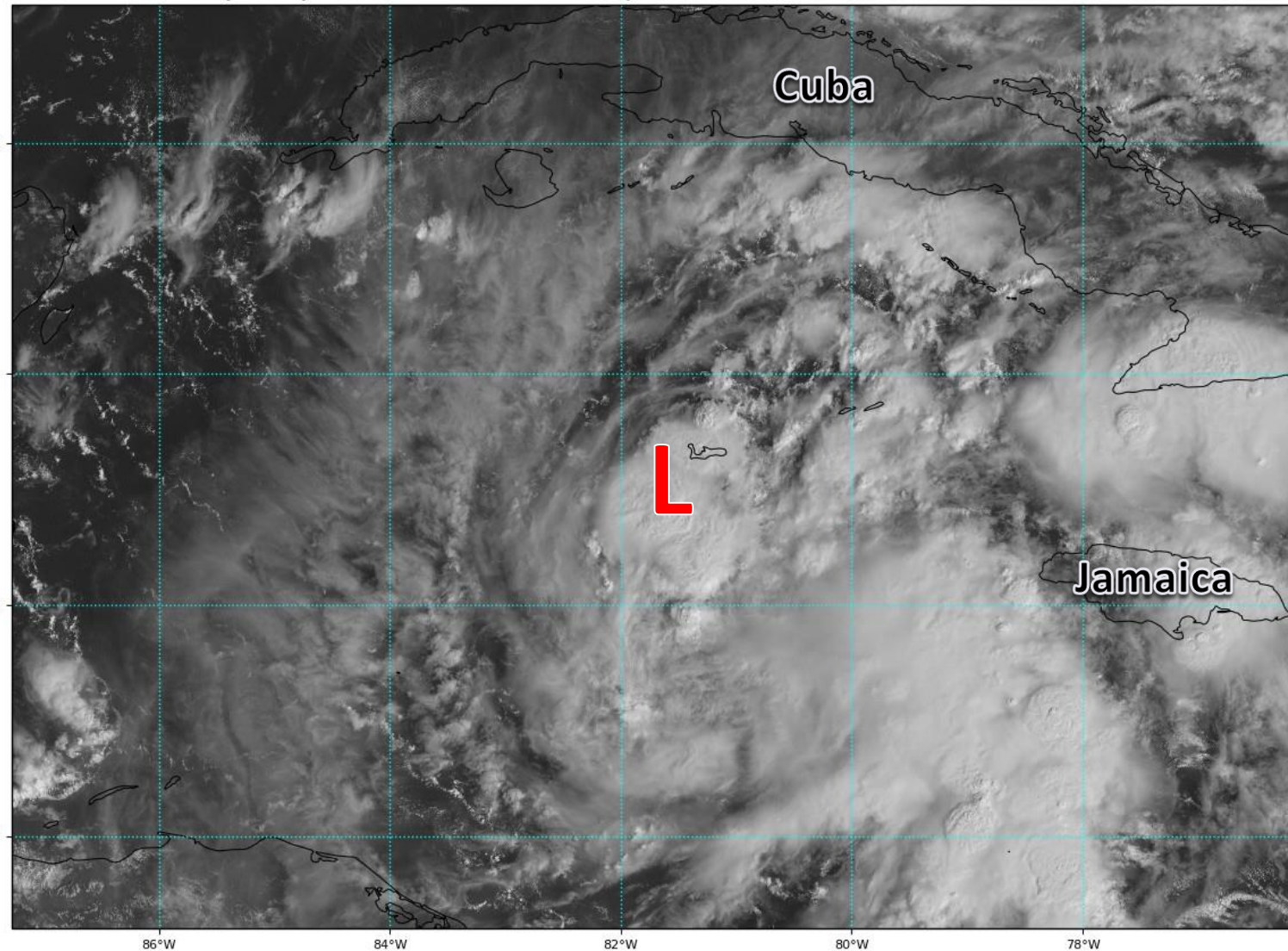


Satellite Imagery

Invest 95L

GOES-16 Channel 2 (visible) Reflectance at 14:15Z Oct 23, 2020

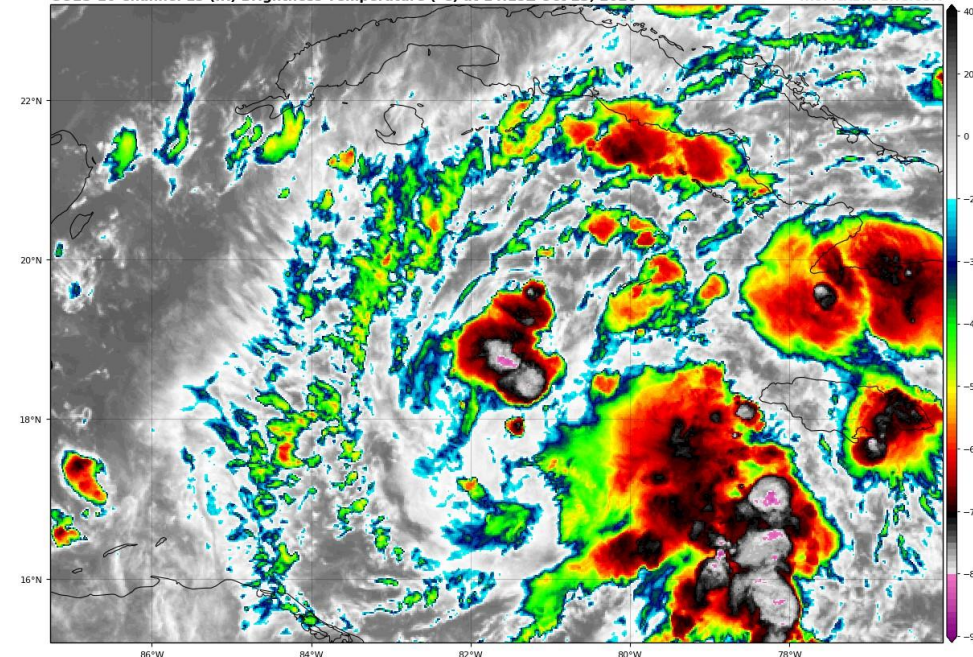
TROPICALTIDBITS.COM



Invest 95L has become significantly better organized since yesterday as it's taking advantage of warm waters and low wind shear. However, the circulation still remains rather broad with disorganized showers and storms. However, further organization is expected.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:15Z Oct 23, 2020

TROPICALTIDBITS.COM

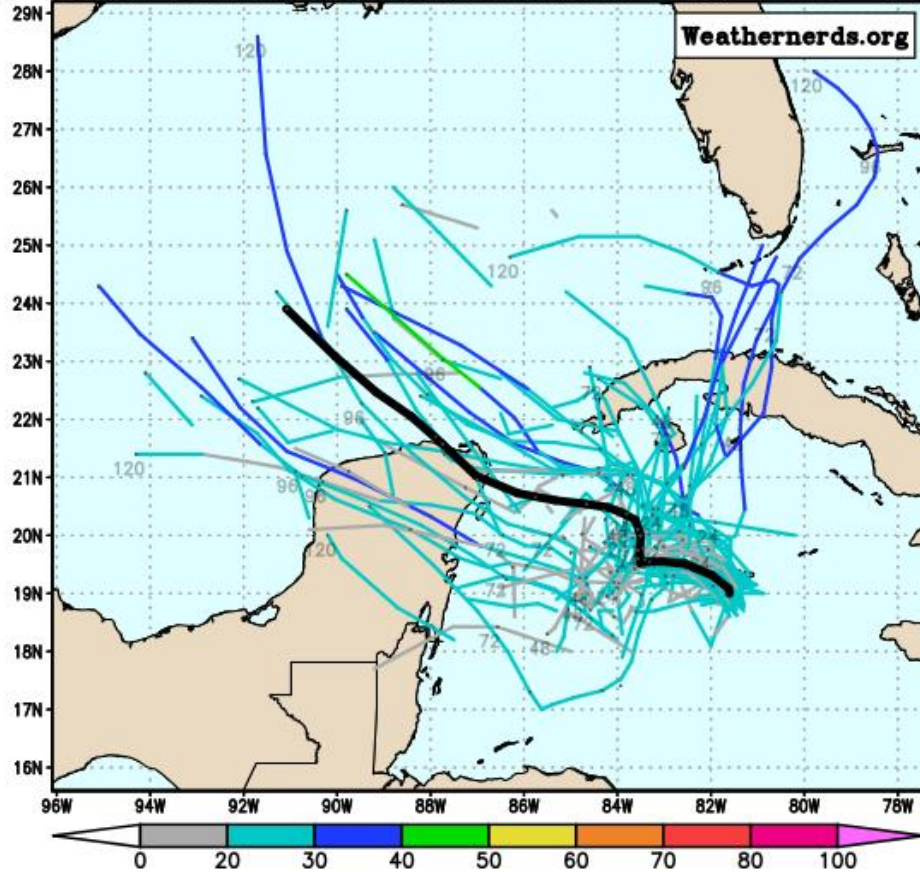




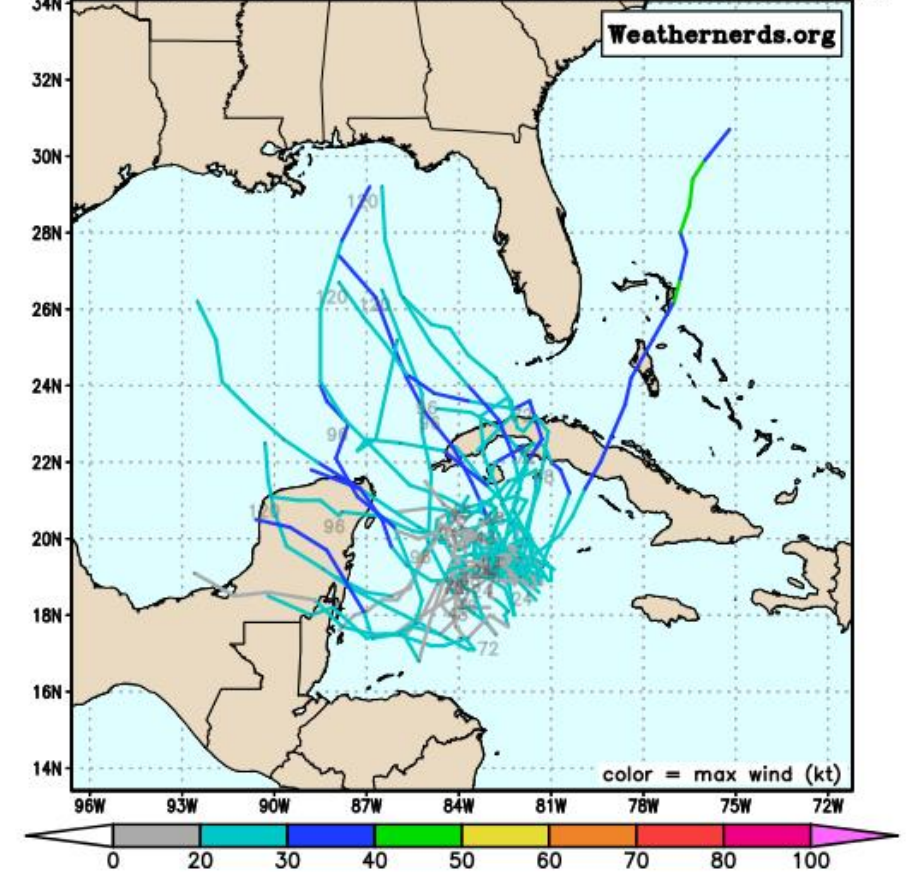
Model Forecast Tracks

Ensemble Models

ECMWF Ens. (0–120h only), init: 2020102306, AL95 Invest color = max wind (kt)



GEFS Ensemble (0–120 h only) , init: 2020102306, AL95 Invest



There is significant spread in the computer models about Invest 95L's potential track. This makes for a very low confidence forecast. In general, a system that organizes faster and becomes stronger will be farther north and east. A weaker system will only very slowly move north and northwest into the Gulf of Mexico. Beyond that, uncertainty grows even more.



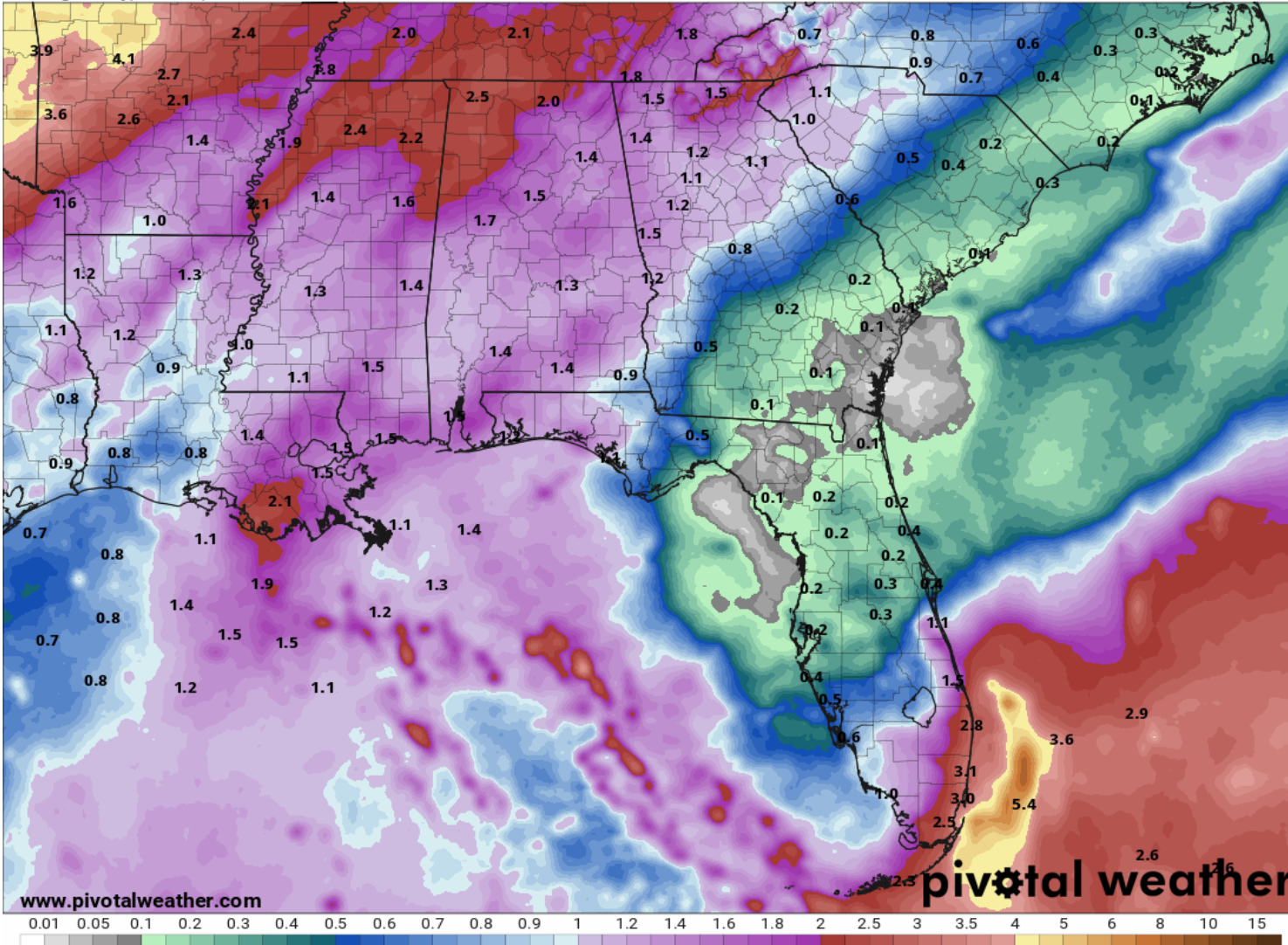
Rainfall Totals Next 7 Days

Ending 8 AM ET Friday

7-Day Precipitation (in)

Ending Friday, Oct. 30, 2020 at 8 a.m. EDT

Init: Fri 2020-10-23 12z WPC



Rainfall totals of 2-4"+, locally higher, are expected across Southeast Florida with generally 1-2" elsewhere across South Florida.

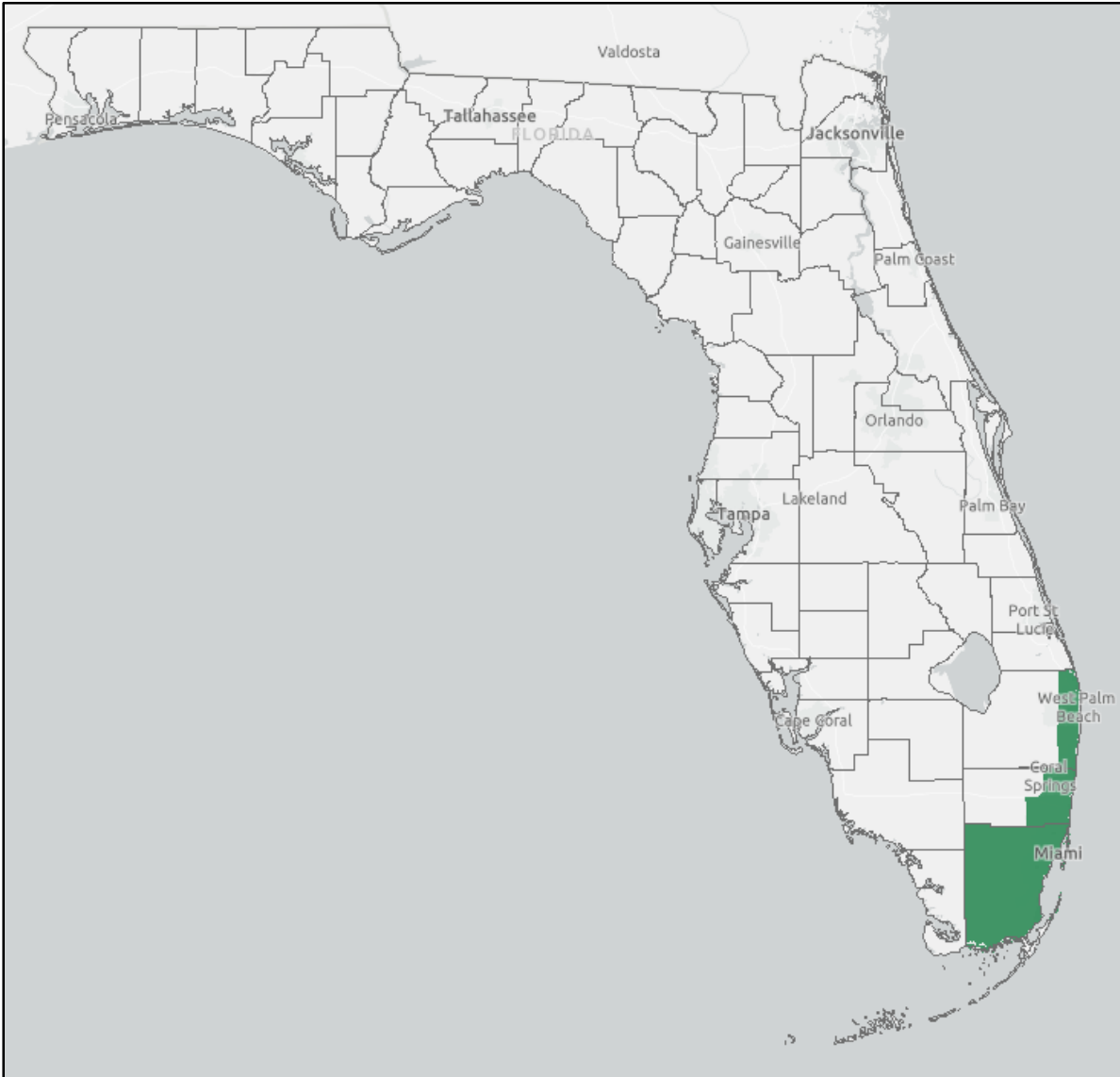
Some parts of metro Southeast Florida and the Keys have seen 6-10" of rain in the last 5 days.

A cold front next week could produce better rain chances across the Panhandle. This cold front may siphon some moisture from Invest 95L if it ends up in the Gulf of Mexico.



Flood Watches

Links: [NWS Miami](#)



A Flood Watch remains in effect for parts of Southeast Florida.

***WHEN:** Through Sunday evening

***WHERE:** coastal & metro Palm Beach, coastal & metro Broward, and all of Miami-Dade Counties

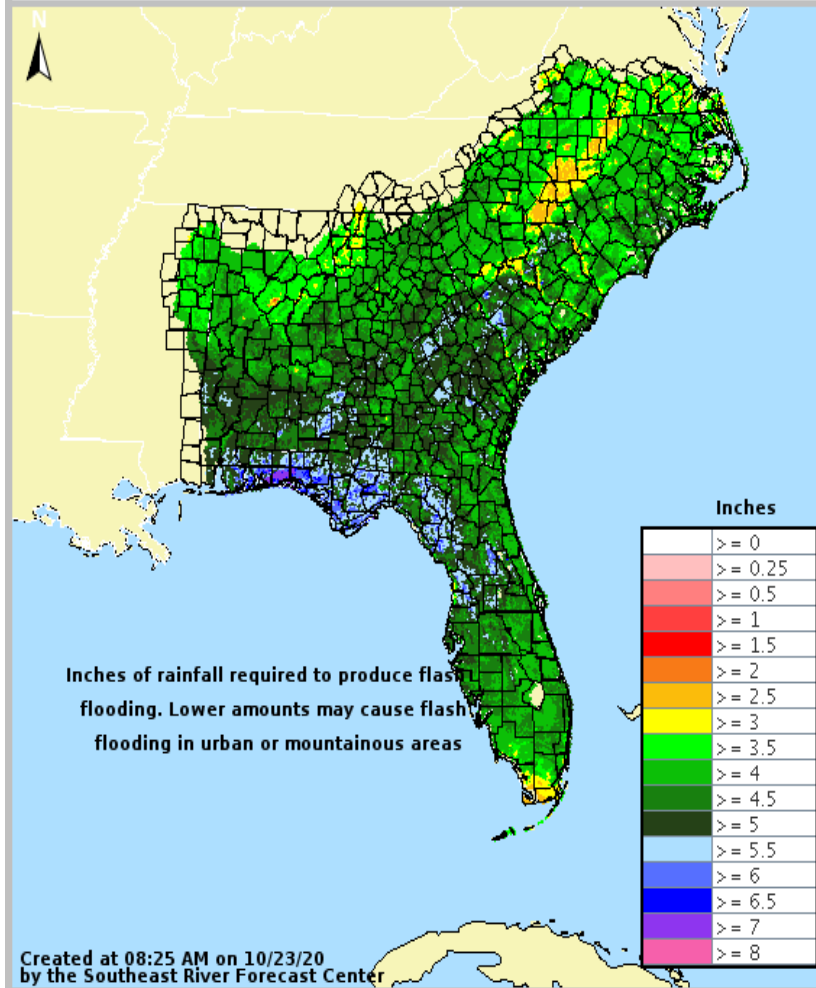
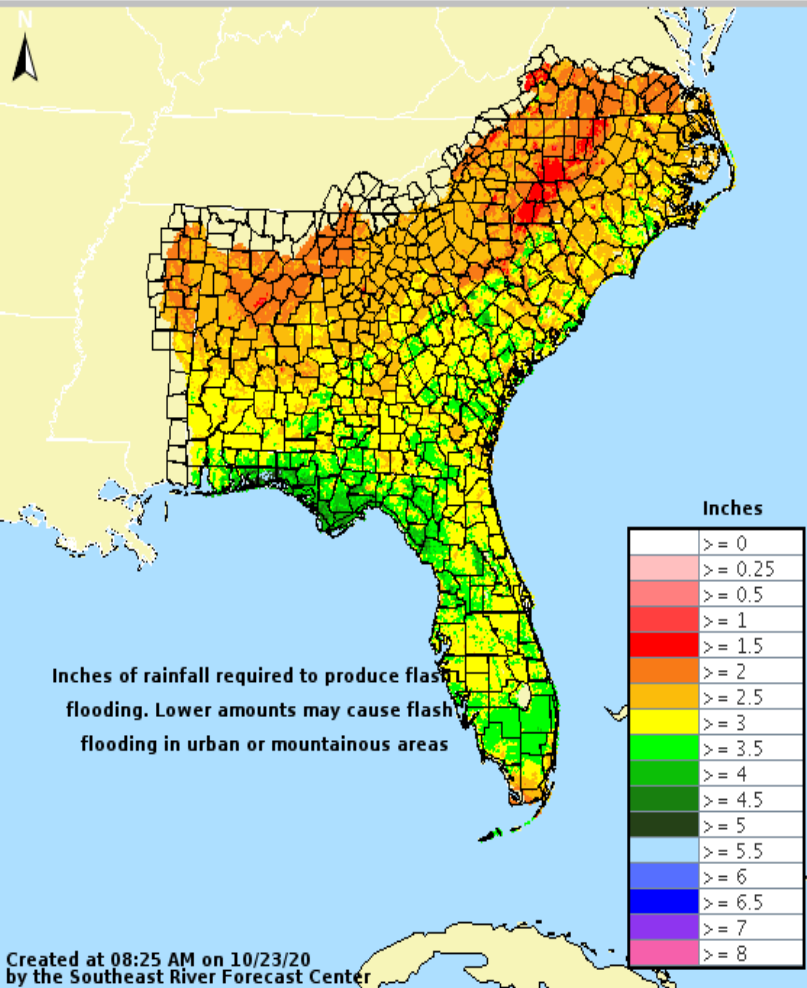
Periods of heavy rainfall are possible through the weekend. Additional rain accumulations of 3 to 6 inches, with isolated higher amounts possible.

Heavy rainfall may produce flooding and/or flash flooding in urban locations as well as small creeks, streams, and canals. This is especially true for areas that recently received heavy rainfall, and for areas near the coast due to the combination of heavy rain and astronomically high tides.



Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?



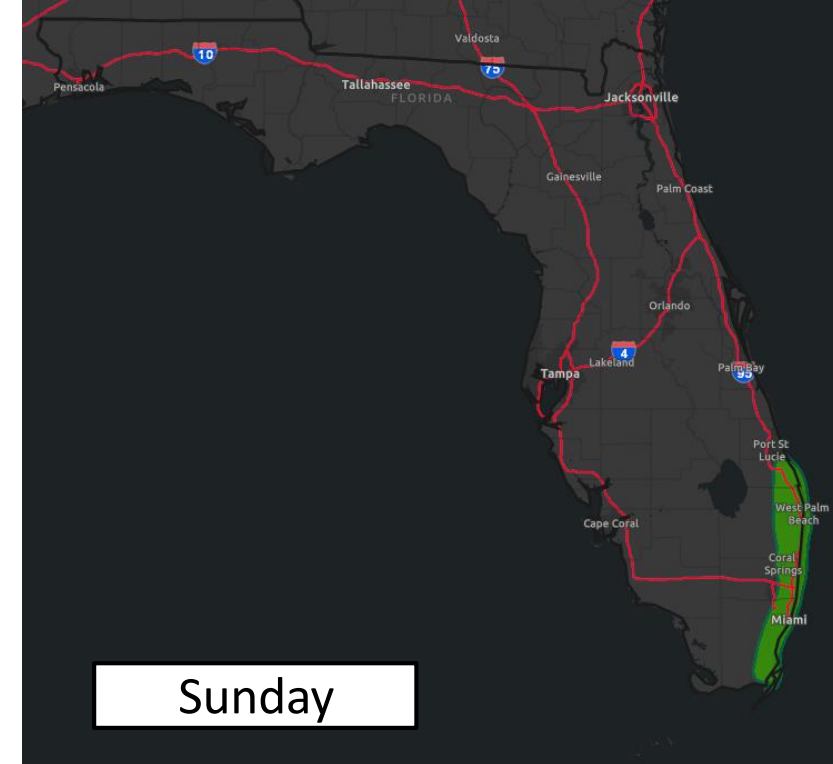
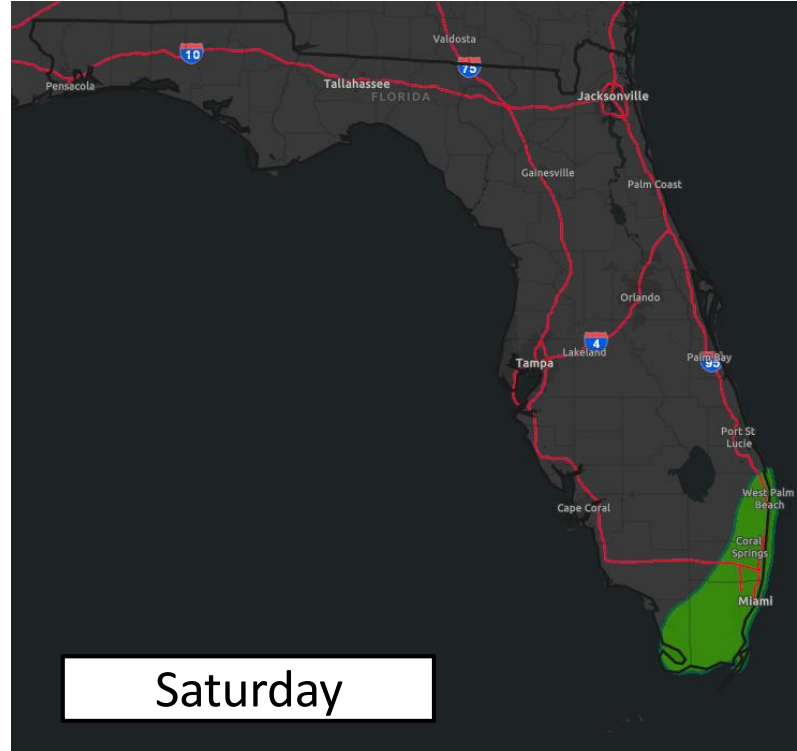
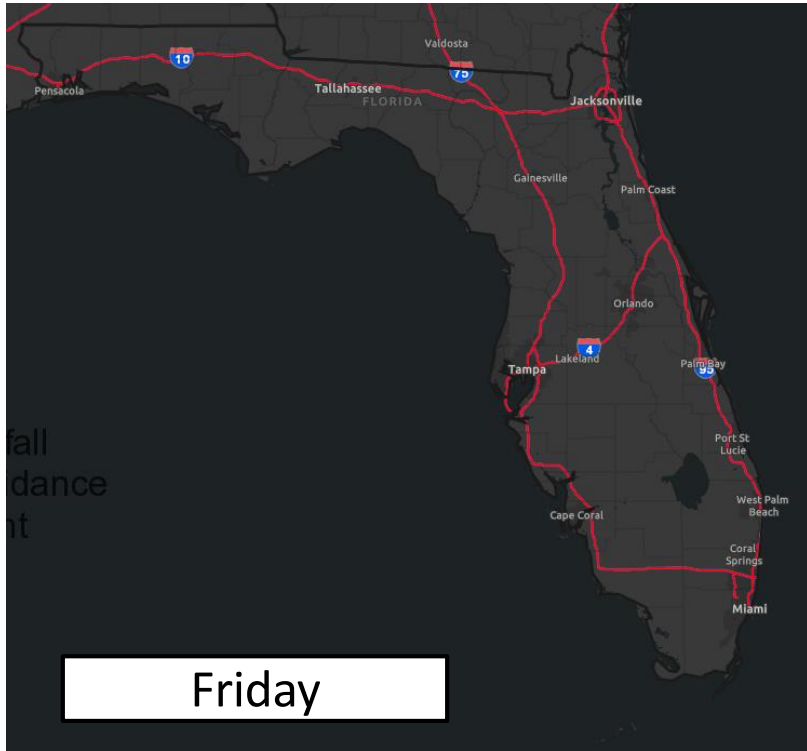
Across Southeast Florida, it will only take about 1.5-3" within 1 hour or about 2-4" within 6 hours to cause flash flooding.

Soils remain super-saturated in this area, and rainfall will more easily run off, causing flooding concerns.



Flash Flood Outlooks

From the Weather Prediction Center



Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line

HIGH: > 50%

SLGT: 10%-20%

MDT: 20%-50%

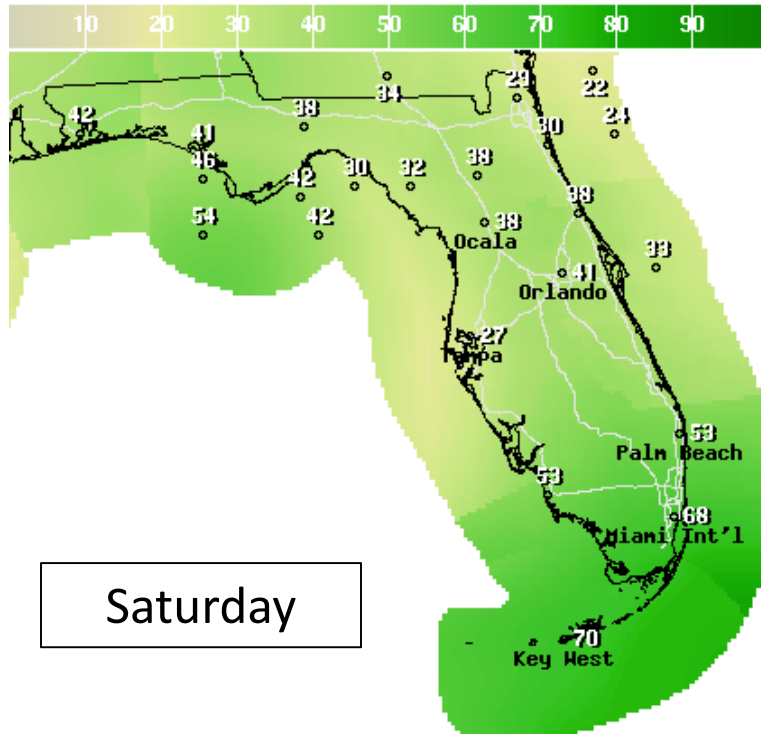
MRGL: 5%-10%

Because of the recent heavy rainfall, an isolated case of flash flooding is possible across parts of Southeast Florida into this weekend.

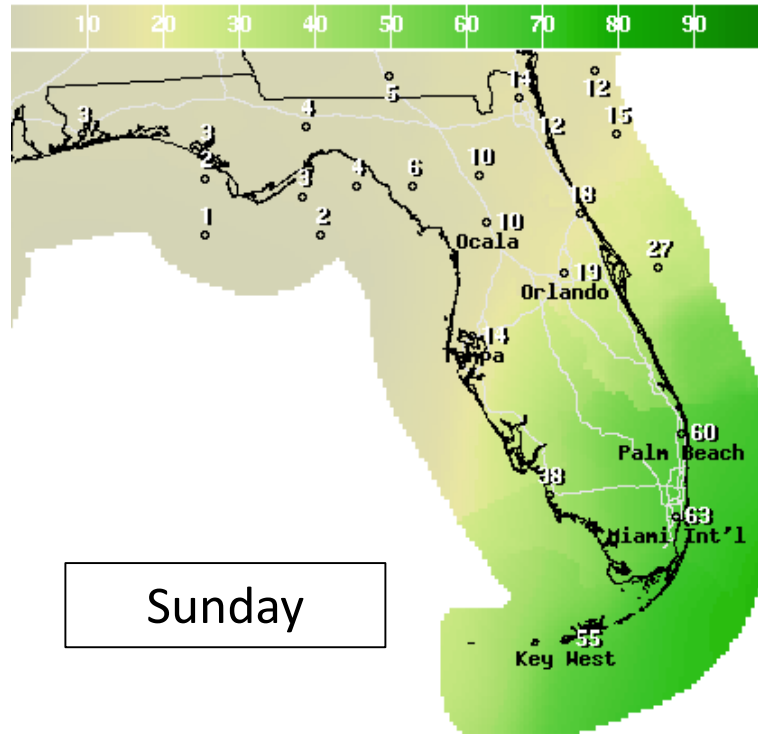


Forecast Rain Chances

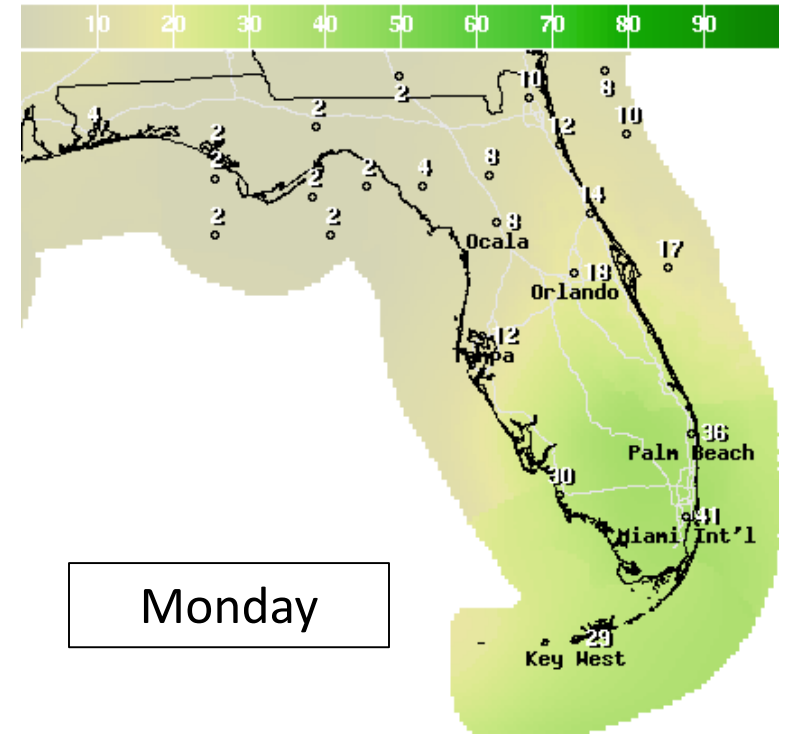
Next 3 Days



12Hr Prob.Precip(%) Ending Sat Oct 24 2020 8PM EDT
(Sun Oct 25 2020 00Z)
National Digital Forecast Database
13z issuance Graphic created-Oct 23 10:04AM EDT



12Hr Prob.Precip(%) Ending Sun Oct 25 2020 8PM EDT
(Mon Oct 26 2020 00Z)
National Digital Forecast Database
13z issuance Graphic created-Oct 23 10:04AM EDT



12Hr Prob.Precip(%) Ending Mon Oct 26 2020 8PM EDT
(Tue Oct 27 2020 00Z)
National Digital Forecast Database
13z issuance Graphic created-Oct 23 10:04AM EDT

Numerous showers and storms will remain possible across South Florida through this weekend as the Caribbean system moves into the Bahamas. A weakening cold front clears the north and central parts of the state this weekend. If 95L is slower and/or moves into the Gulf of Mexico, rain chances could increase across South Florida early next week.



Overall Summary

Invest 95L – Western Caribbean

- An area of low pressure over the western Caribbean near the Cayman Islands has become much more organized over the last 24 hours.
- The circulation remains broad, however, and showers and thunderstorms are not very well organized.
- Further organization is possible, and this system could become a tropical depression over the next few days.
- This system has a 50% (medium) chance for development over the next 48 hours and a 60% (medium) chance over the next 5 days.
- The next name on the list is Zeta.
- This system needs to be monitored for potential impacts to Florida through the next several days.

Hurricane Epsilon

- The center of Epsilon is located about 225 miles northeast of Bermuda.
- Epsilon remains a Category 1 hurricane with maximum sustained winds near 85 mph.
- Epsilon is moving to the north at 10 mph, and a turn to the northeast is expected over the weekend.
- Little change in strength is forecast over the next day or so, followed by a slow weakening as it becomes post-tropical Sunday into next week.

Florida Outlook:

- Epsilon poses no threat to Florida. Swells from Epsilon will impact the East Coast through the upcoming weekend, increasing the rip current risk and causing possible beach erosion.
- Invest 95L will continue to bring the threat of heavy rainfall to South Florida and the Keys. Flood Watches remain in effect for coastal Southeast Florida.
- Tides remain above normal across Southeast Florida and the Keys. Coastal Flood Advisories and Statements remain in effect.
- It remains too early to determine if there will be additional impacts to South Florida and the Keys or any impacts to the rest of the state.
- The forecast remains low confidence and is subject to change.

The next briefing packet will be issued this afternoon. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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