



# TROPICAL UPDATE



5:00 PM EDT

Wednesday, June 3, 2020

Tropical Storm Cristobal

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](http://www.hurricanes.gov).

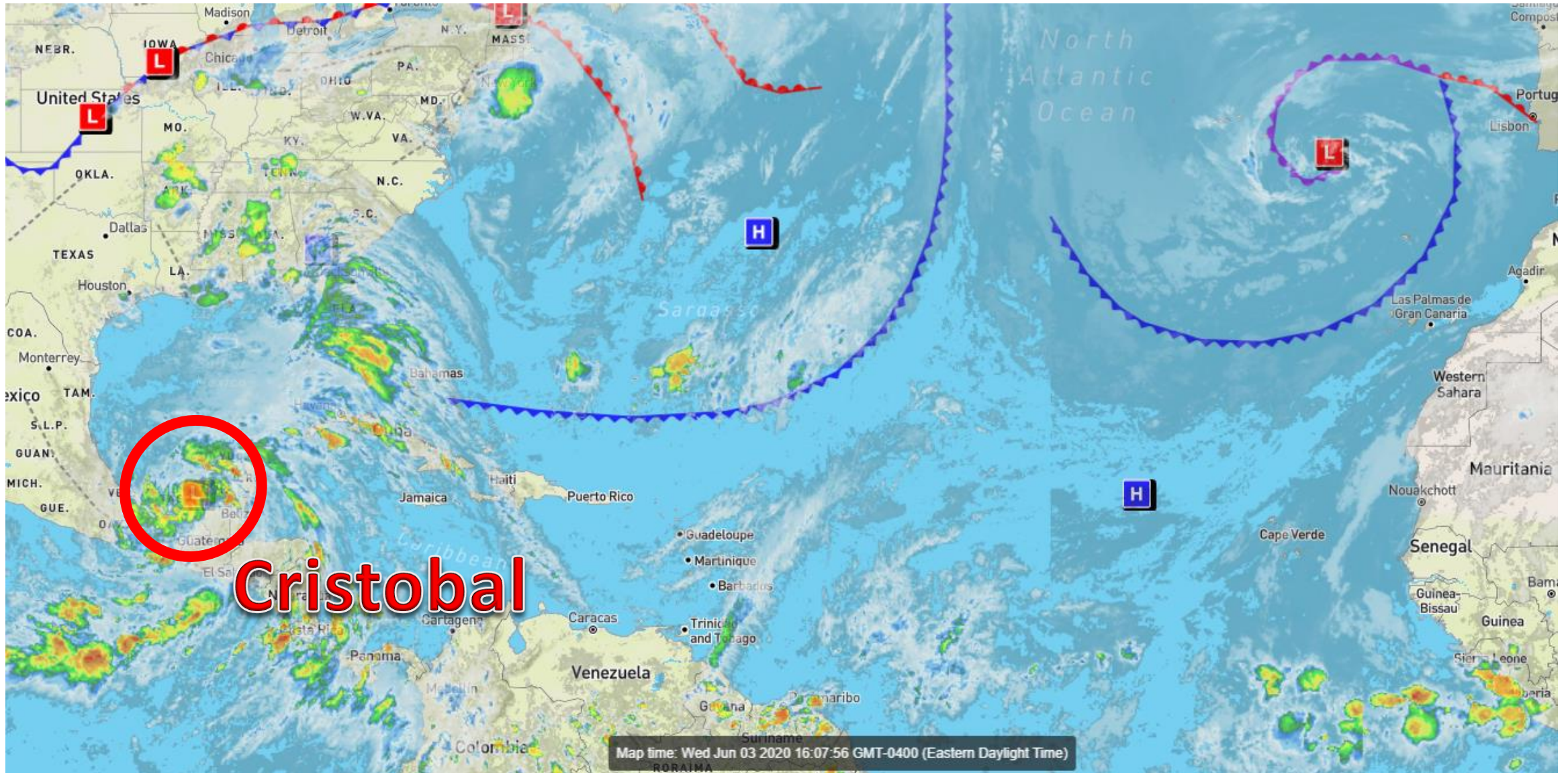


# Take Home Messages

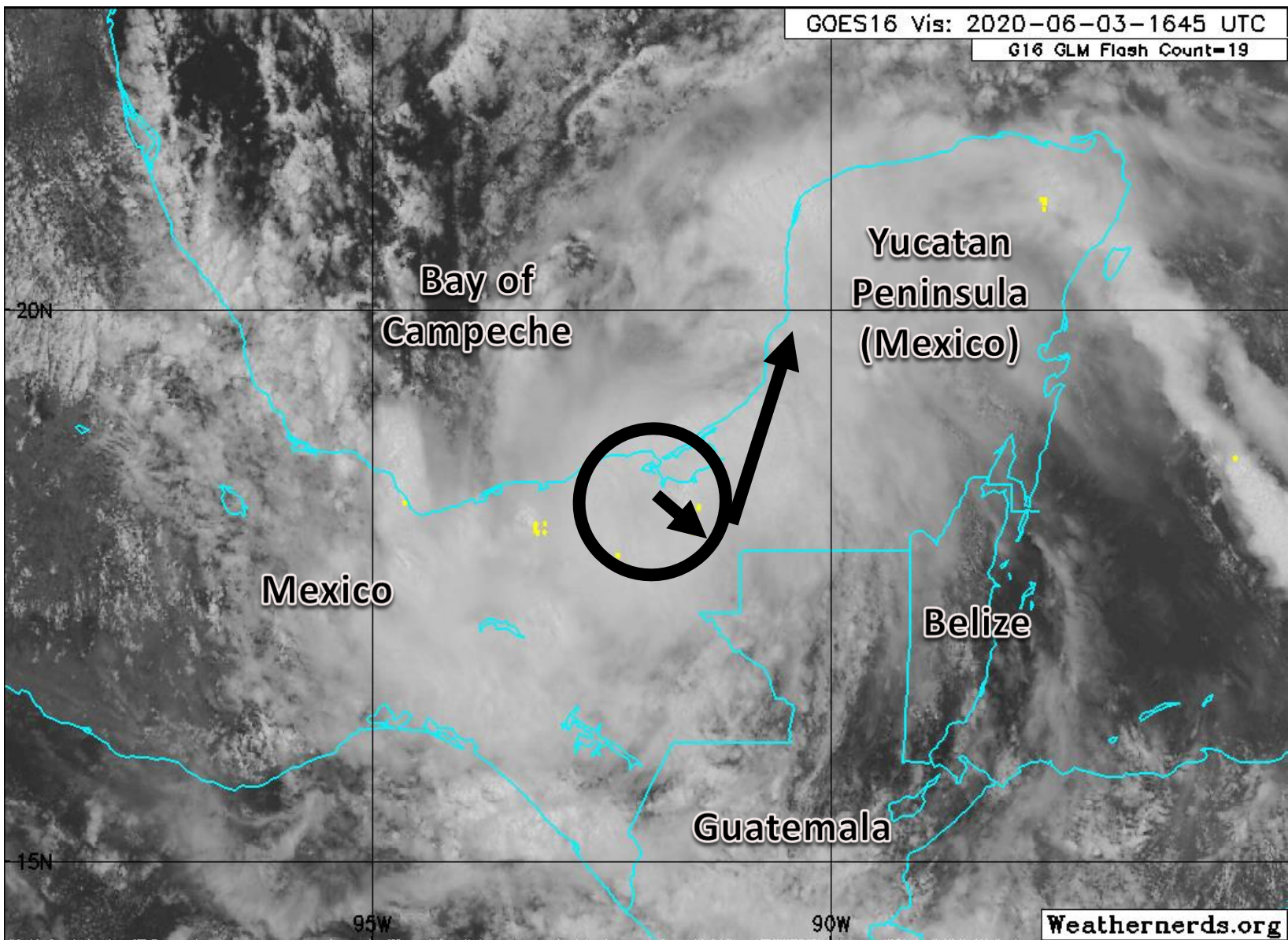
- Heavy showers and thunderstorms will be possible **at any time** statewide through early next week with disruptions to field operations.
- Thunderstorms may track over the same areas resulting in isolated flash flooding in urban areas anywhere across the state through Saturday
- More focused flood threat develops from the Panhandle to the Nature Coast Saturday Night-Monday as a result of Tropical Storm Cristobal
- Other impacts from Cristobal are unknown at this time, but minor coastal flooding, minor beach erosion, isolated tornadoes, and minor to moderate river flooding seem increasingly likely late this weekend in the Panhandle

# Atlantic Basin Satellite Image

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







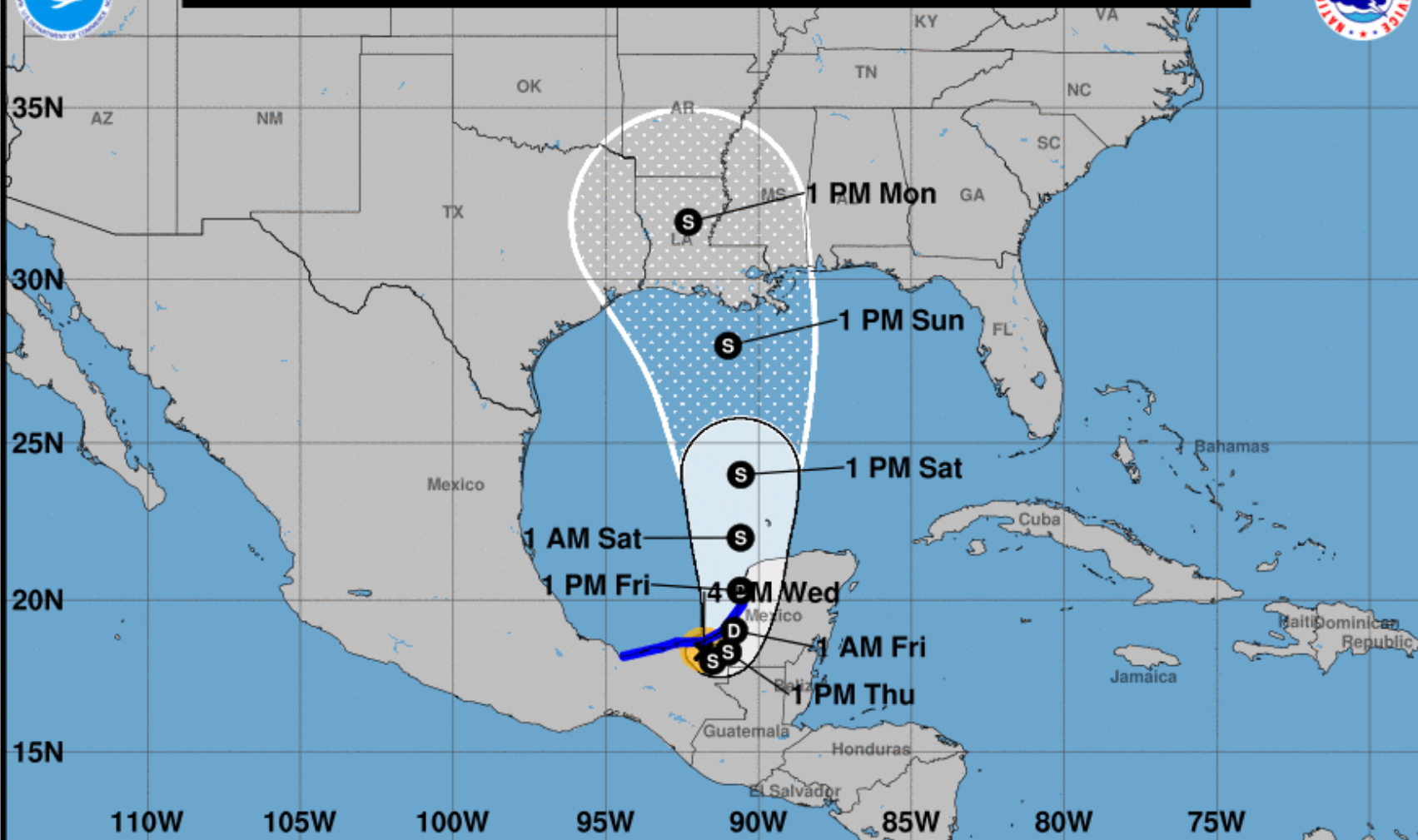
## Visible Satellite Imagery: Tropical Storm Cristobal

The center of Cristobal (black circle) moved inland this morning and continues to move further inland this afternoon. Much of the land in the area is rather flat and marshy, and this will lead to a gradual weakening. Cristobal will approach the northern Gulf Coast on Sunday or Monday.

Cristobal will likely weaken to a tropical depression as it remains over land, but should restrengthen once it moves back over water.



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.



## Projected Path: Tropical Storm Cristobal

- The center of Cristobal is located about 20 miles south of Ciudad del Carmen, Mexico, or about 785 miles southwest of Key West, FL.
- Maximum sustained winds are at 50 mph.
- The system will meander just inland over Mexico for the next couple of day before turning northward late Thursday or Friday.
- On Sunday, the system is likely to be approaching the northern Gulf Coast.

### Tropical Storm Cristobal

Wednesday June 03, 2020

4 PM CDT Advisory 9

NWS National Hurricane Center

### Current information: x

Center location 18.3 N 91.8 W

Maximum sustained wind 50 mph

Movement SE at 3 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





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

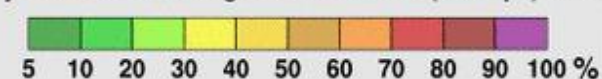


**Tropical Storm Cristobal**  
**Wed. Jun. 3, 2020 4 pm CDT**  
**Advisory 9**

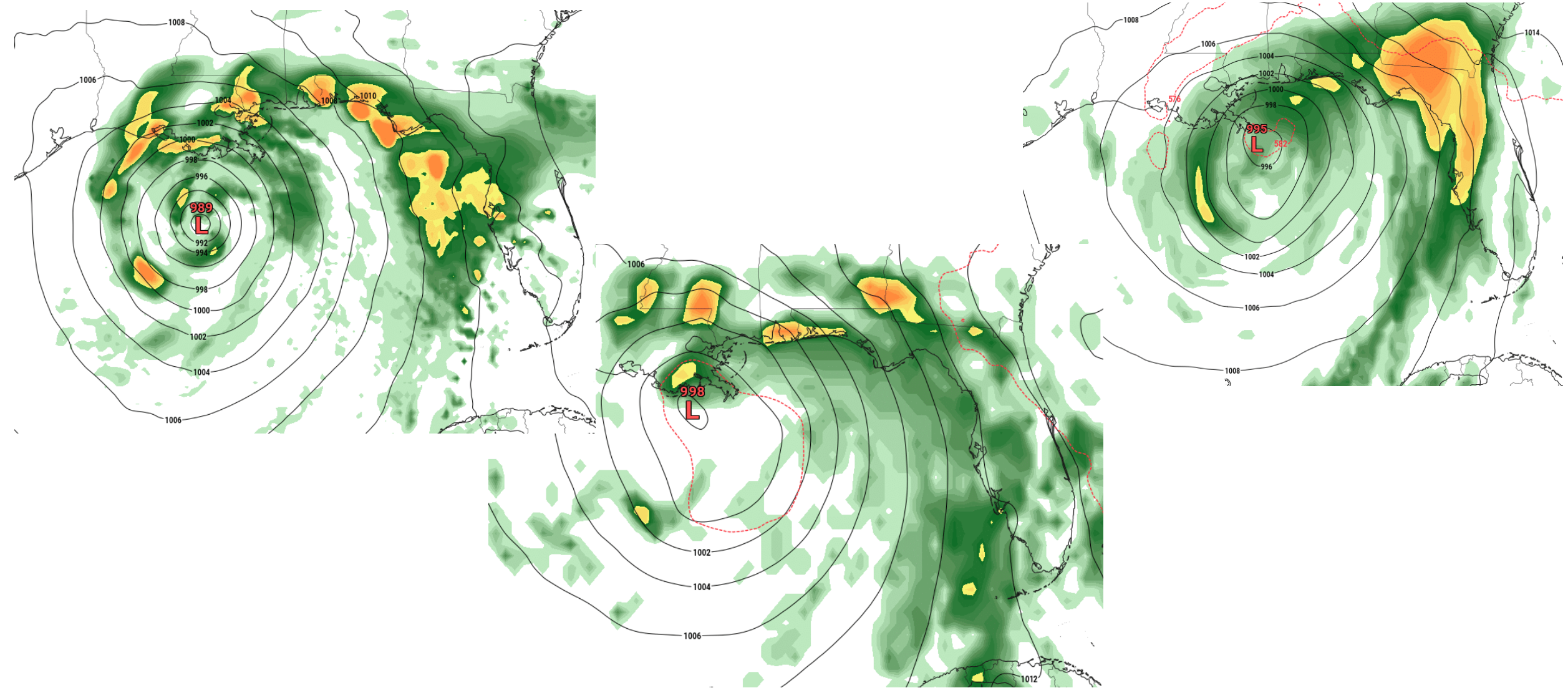
Storm Location & Wind Speed

- < 34 kt (39 mph)
- 34-63 kt (39-73 mph)
- ≥ 64 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds



**\*\*Even with landfall well west in Louisiana,**  
**there is consensus on heavy rainfall in the**  
**Panhandle Saturday Night-Monday\*\***







# Key Messages for Tropical Storm Cristobal

Advisory 9: 4:00 PM CDT Wed Jun 03, 2020



1. Damaging and deadly flooding has already occurred in portions of Mexico and Central America. Cristobal is expected to produce additional extreme rainfall amounts through the end of the week. The heaviest additional rainfall is expected over far southern Mexico and portions of the Yucatan Peninsula, while also extending along the Pacific coast from Chiapas to Guatemala and El Salvador. This rainfall could cause widespread life-threatening flash floods and mudslides.

2. Even though Cristobal has made landfall, tropical storm conditions will continue along and near the coast of Mexico through Thursday, especially over western Campeche, eastern Tabasco, and northern Chiapas states.

3. Cristobal is forecast to re-emerge over the southern Gulf of Mexico Friday or Friday night and move northward over the central and northern Gulf of Mexico over the weekend. There is a risk of storm surge, heavy rainfall, and wind impacts beginning over the weekend along portions of the U.S. Gulf Coast from Texas to the Florida Panhandle. While it is too soon to determine the exact location, timing, and magnitude of these impacts, interests in these areas should monitor the progress of Cristobal and ensure they have their hurricane plan in place.



For more information go to [hurricanes.gov](https://hurricanes.gov)





# Flood Watches

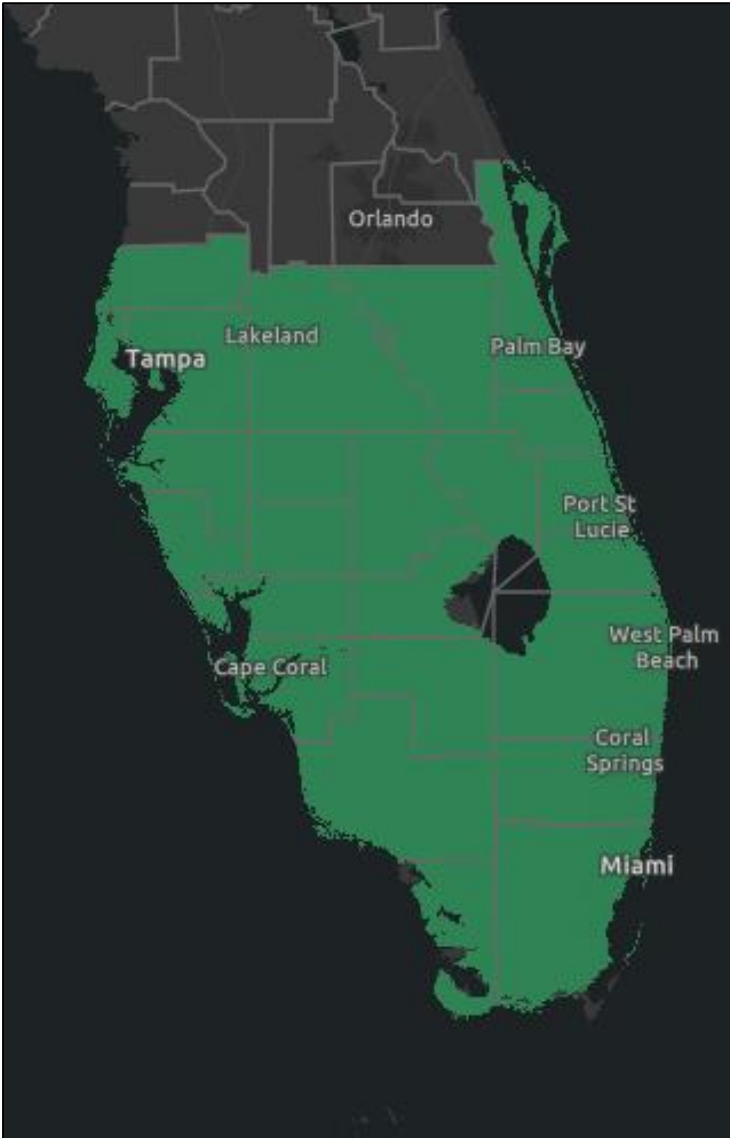
Through 4 PM EDT Saturday

Links: [NWS Tampa Bay](#) | [NWS Melbourne](#) | [NWS Miami](#)

Torrential downpours and wet to saturated soils will lead to some flooding, especially of urban, low-lying or poor drainage areas. Average rainfall of 2-4" is expected across the Peninsula with localized amounts of 6-8" possible.

Some parts of the Treasure Coast, particularly in Martin County, have seen 5-10" of rainfall today, and additional rainfall will likely lead to flooding in these areas.

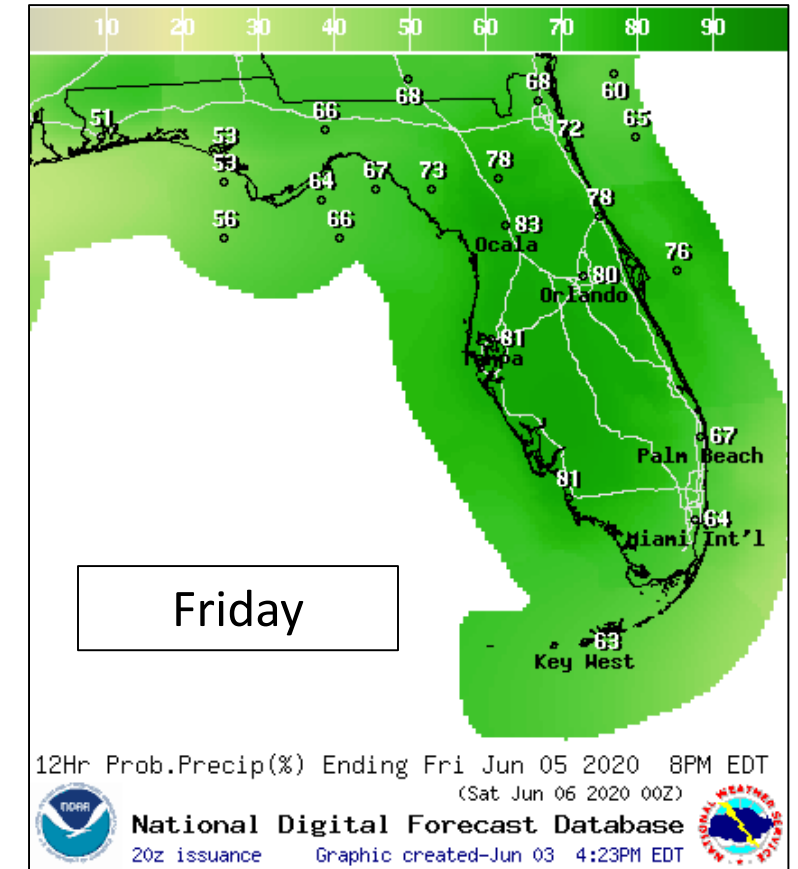
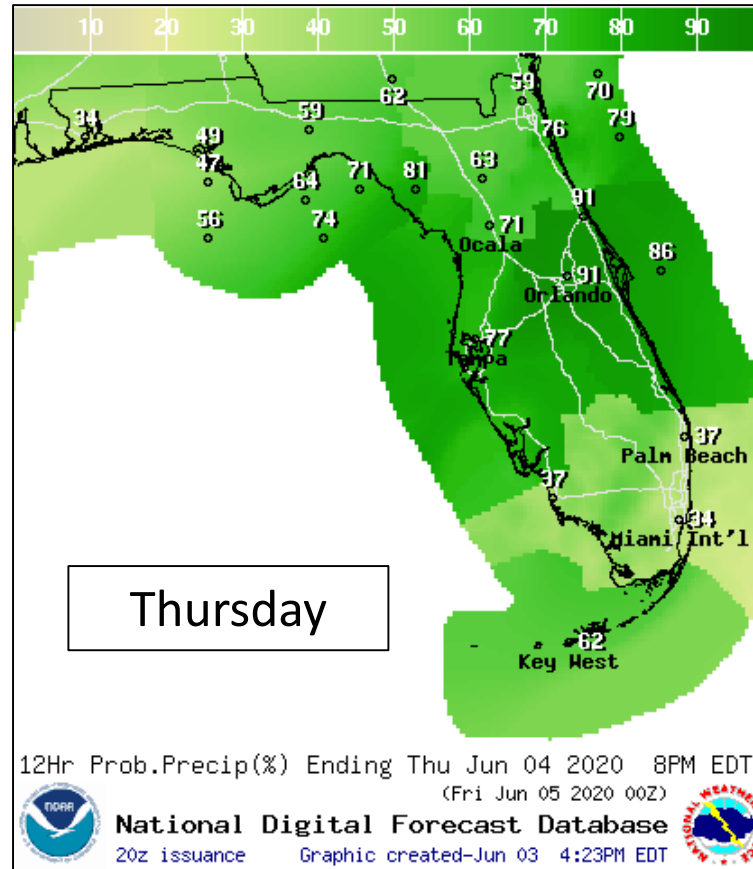
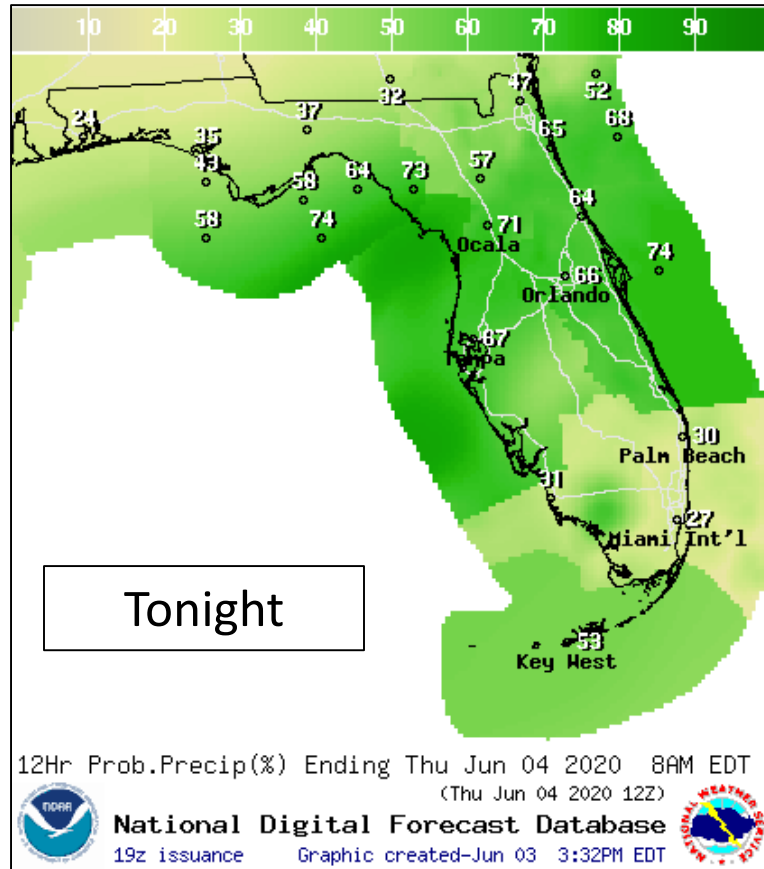
Additional Flood/Flash Flood Watches may be needed elsewhere across the state later this week into the weekend.





# Tonight - Friday

## Timing the Event – Not Cristobal Rainfall



Scattered showers and thunderstorms develop during the afternoon and evening, with the best chance of strong thunderstorms across the Panhandle and West Coast of the Peninsula. However, rain will overspread much of the Peninsula tonight and the entire state through the end of the week as tropical moisture spreads in.

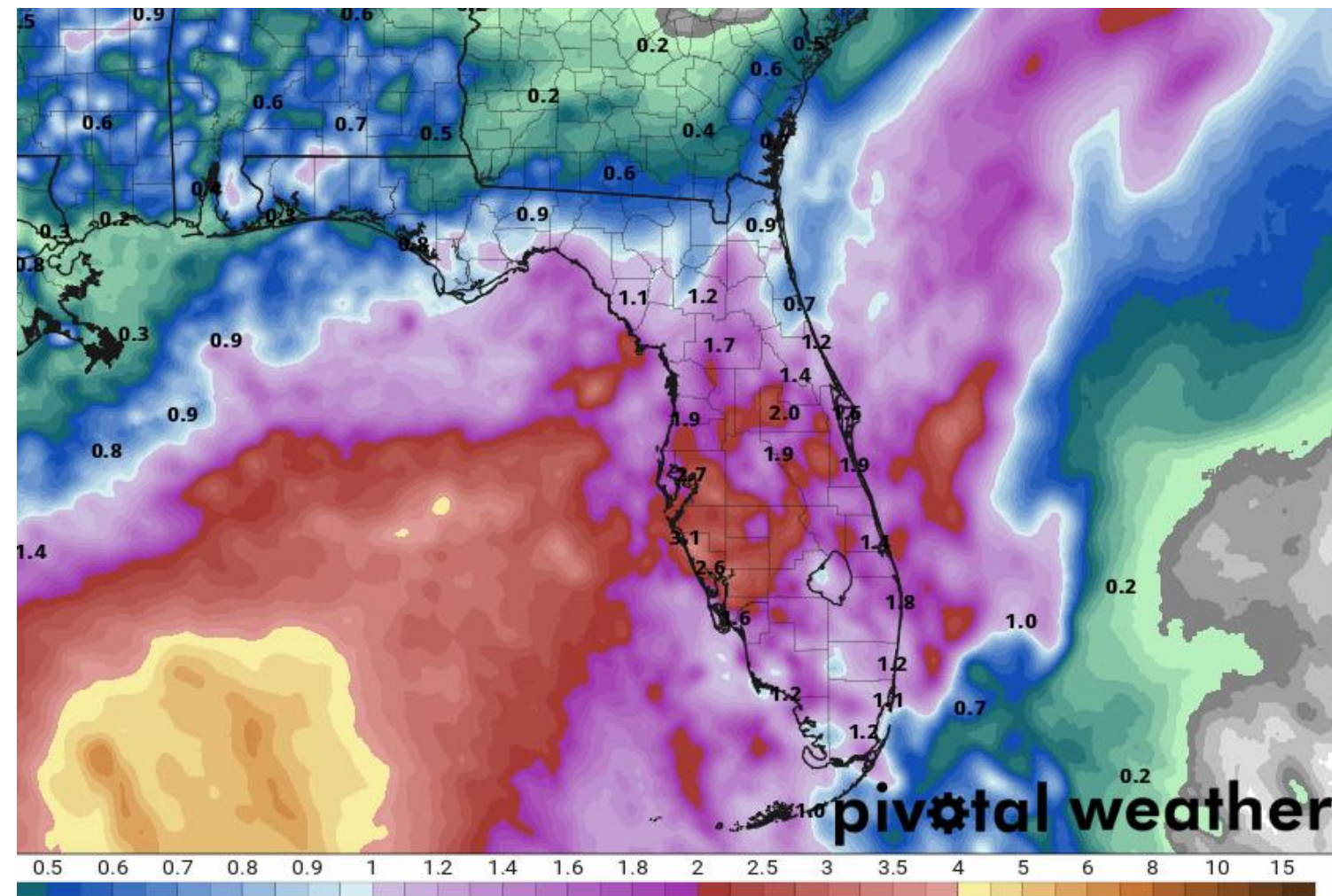
**\*\*Localized flooding will be possible each day where heavier storms set up.\*\***





# Rainfall Totals Through Friday

## Timing the Event

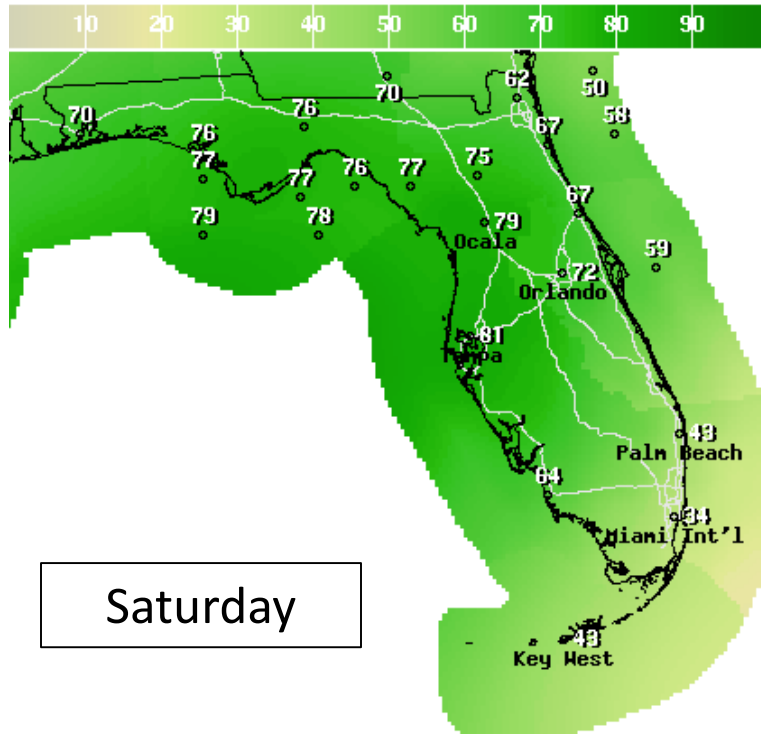


Without any direct rain bands from Cristobal, much of the state will receive 1-3" of rain, with localized areas getting 4-6" through Friday evening. This could result in some isolated flash flooding, especially in urban areas.



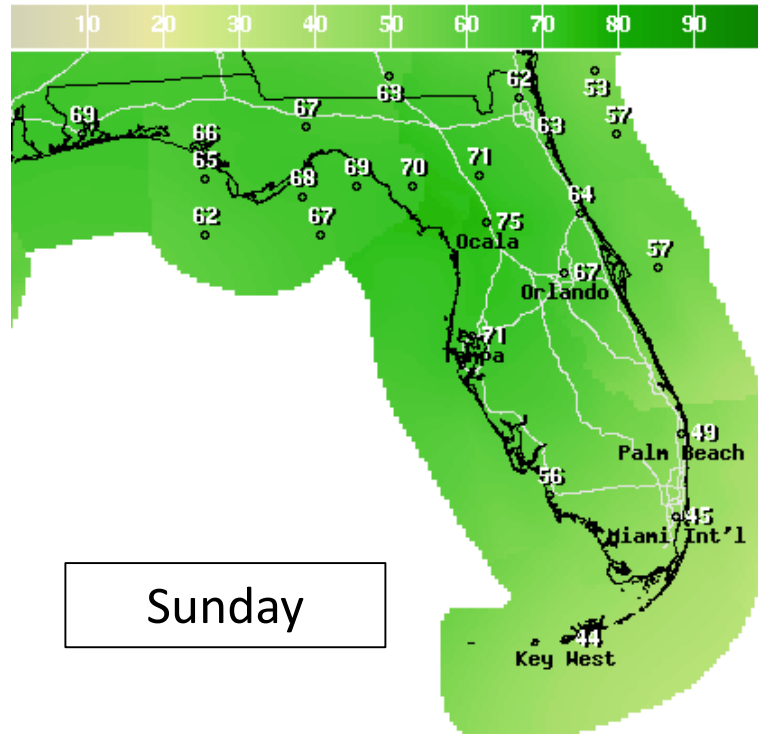
# Saturday - Monday

## Timing the Event – Cristobal Rainfall



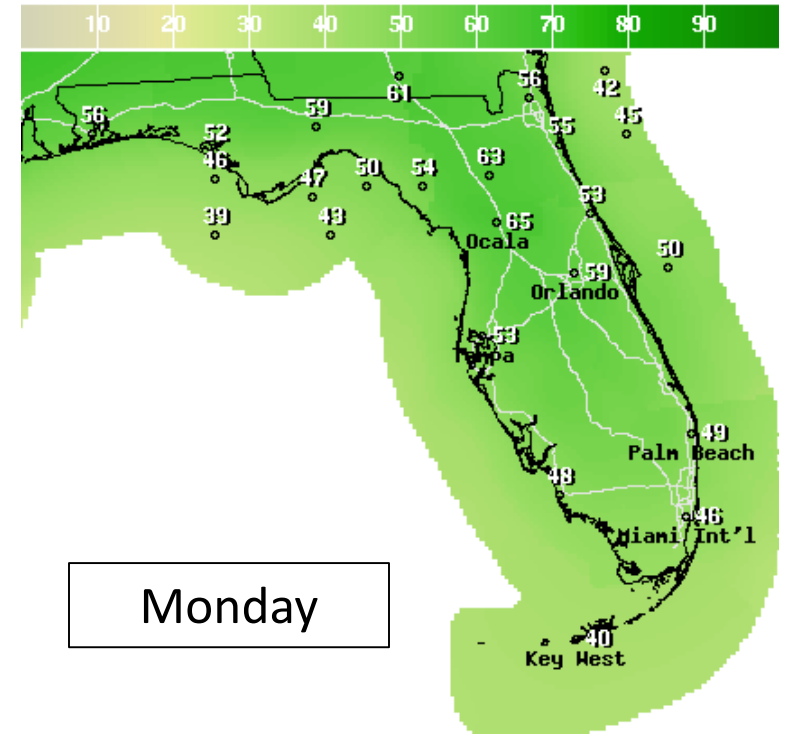
Saturday

12Hr Prob.Precip(%) Ending Sat Jun 06 2020 8PM EDT  
(Sun Jun 07 2020 00Z)  
National Digital Forecast Database  
19z issuance Graphic created-Jun 03 3:33PM EDT



Sunday

12Hr Prob.Precip(%) Ending Sun Jun 07 2020 8PM EDT  
(Mon Jun 08 2020 00Z)  
National Digital Forecast Database  
19z issuance Graphic created-Jun 03 3:33PM EDT



Monday

12Hr Prob.Precip(%) Ending Mon Jun 08 2020 8PM EDT  
(Tue Jun 09 2020 00Z)  
National Digital Forecast Database  
19z issuance Graphic created-Jun 03 3:33PM EDT

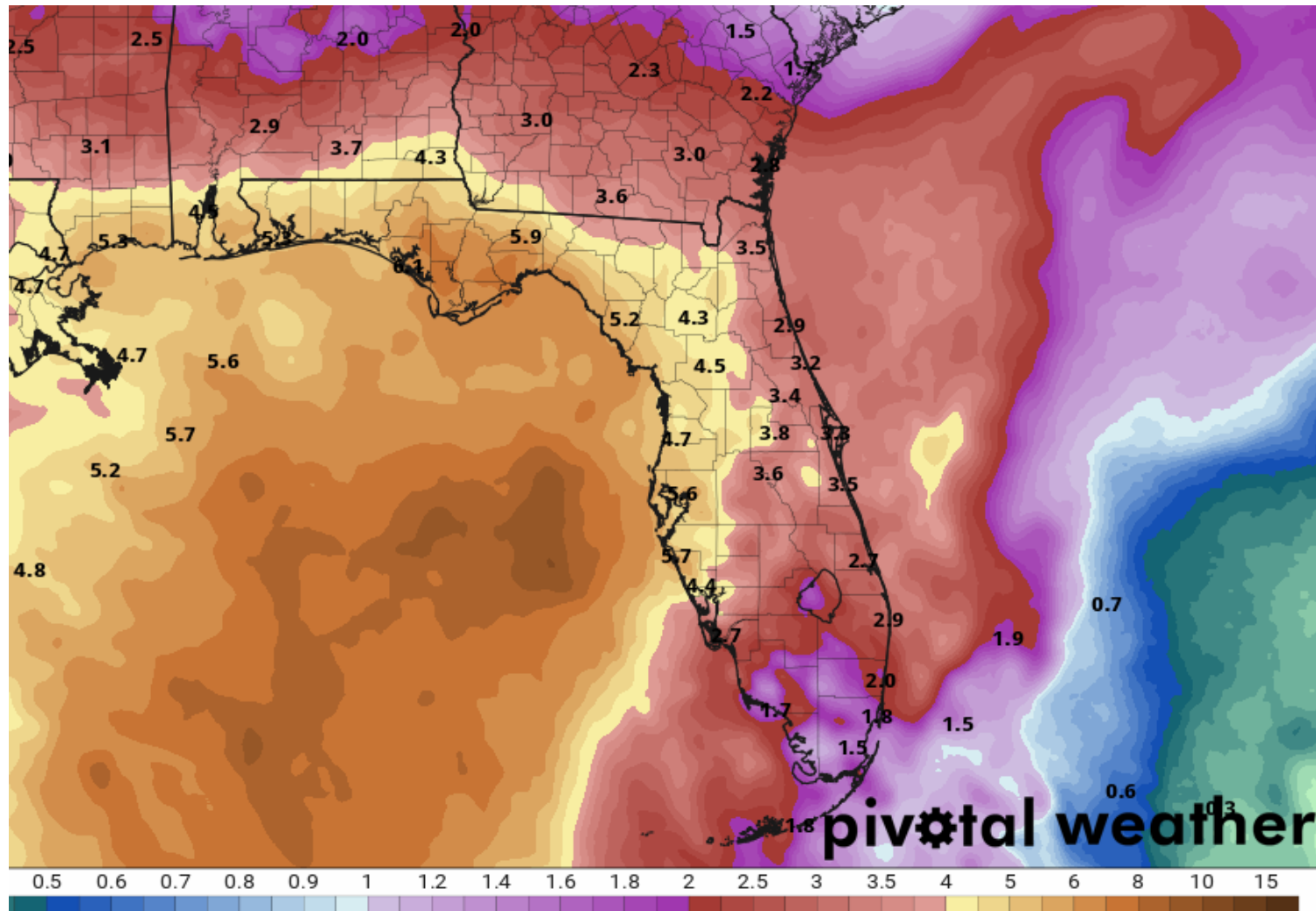
Rounds of rain and with isolated thunderstorms are possible through the weekend as Cristobal approaches and makes landfall along the northern Gulf Coast. Heavier bands of rain may also set up across parts of the state, which will cause very heavy rain in localized locations. **The threat for flash flooding is increasing.** However, the forecast is very dependent on the track and evolution of Cristobal.





# Rainfall Totals Through Tuesday

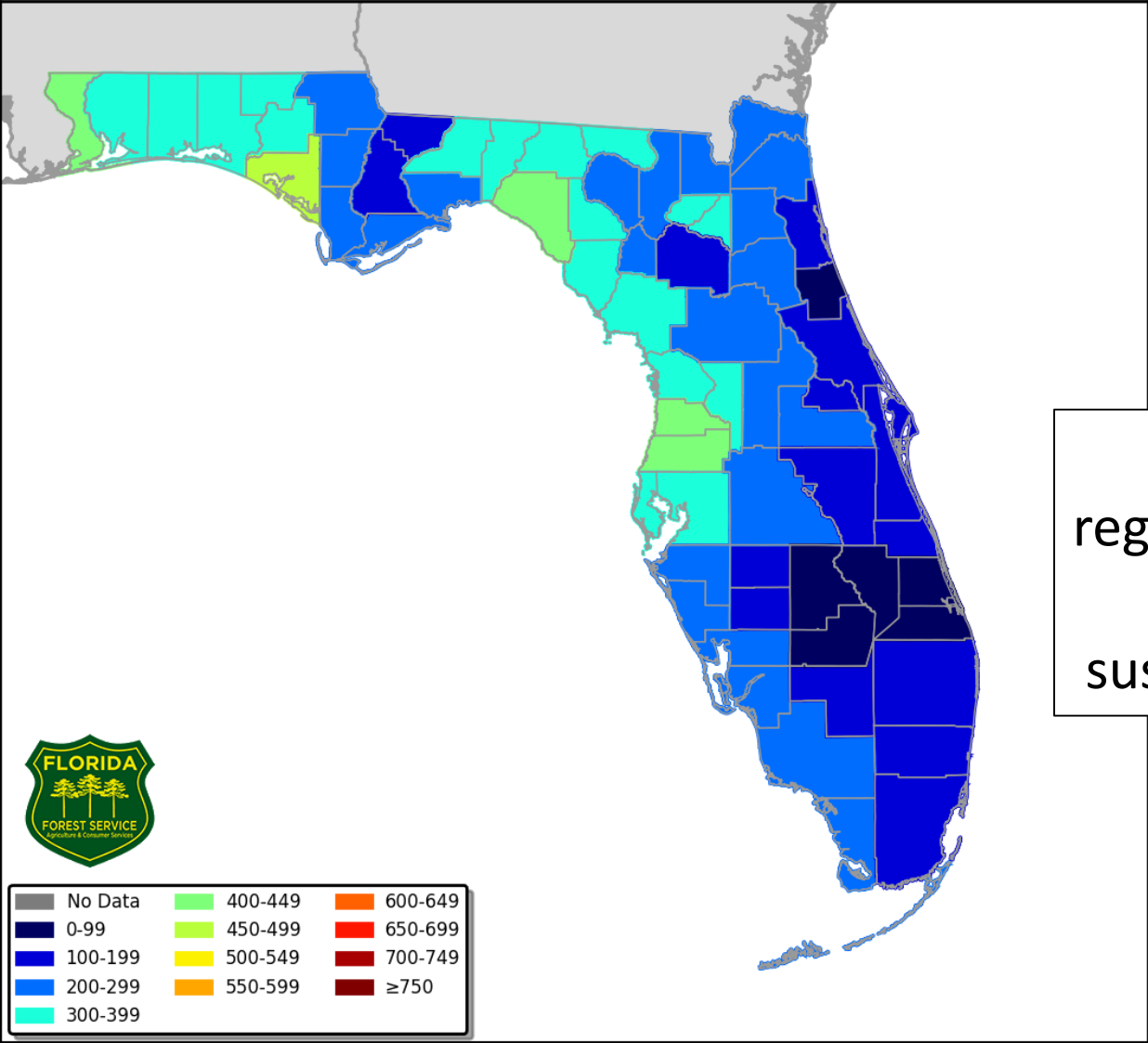
## Timing the Event



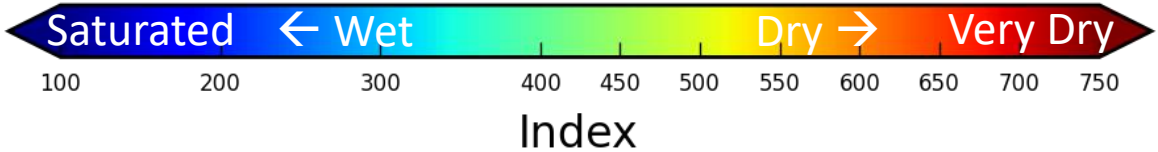
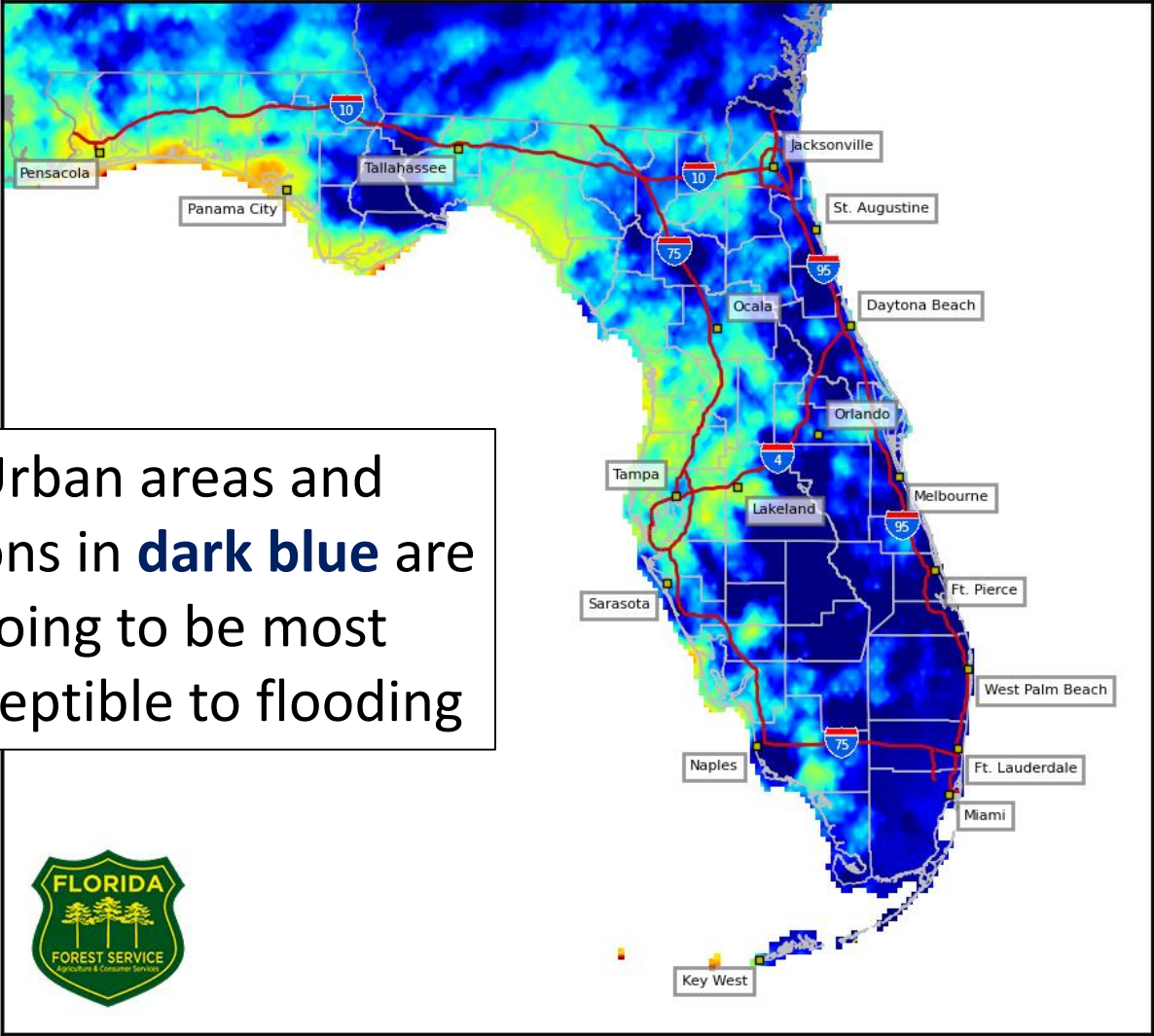
Through next Tuesday, widespread rainfall totals of 3-6" are expected across much of the state with 5-7" possible in the Panhandle and Big Bend. Locally higher totals are possible.

This could result in flash flooding, especially in urban areas. Training rain bands will also increase the risk of flooding. River flooding will also be possible across North Florida this weekend into next week.

Keetch Byram Drought Index (KBDI)  
County Averages for June 02, 2020



4 km Resolution KBDI  
Statewide  
June 02, 2020



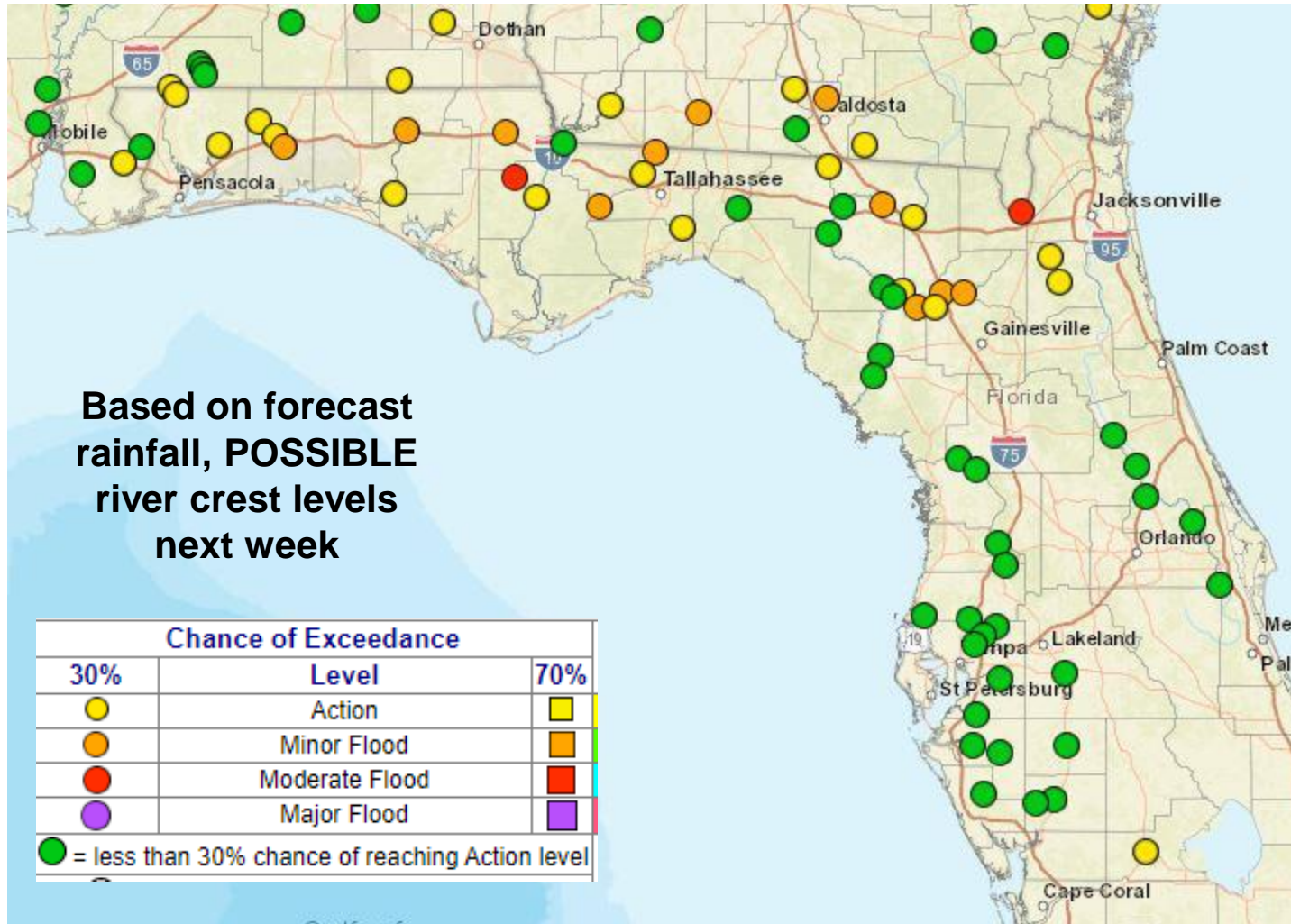
[KBDI – Full Report from the FFS](#)





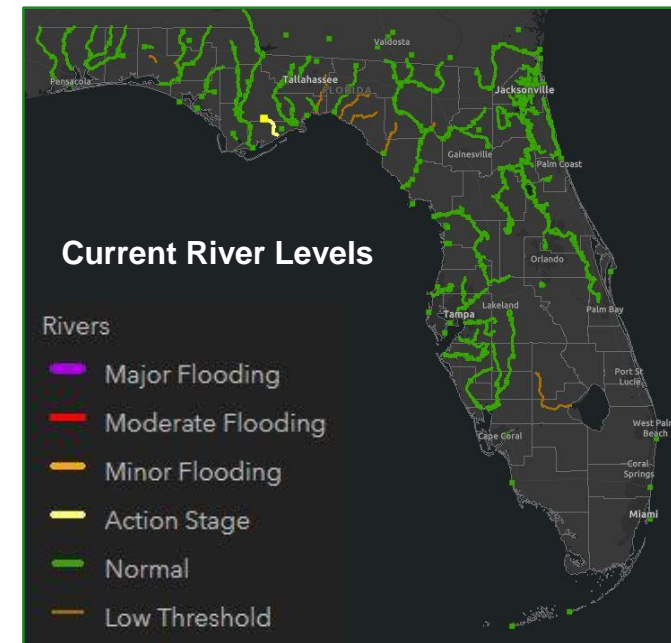
# Possible River Flooding

## Starting Early Next Week



Widespread minor and isolated moderate river flooding seems likely starting early next week due to the forecasted rainfall totals.

Current low river levels across the state will help to minimize river impacts.



# Summary

## Tropical Storm Cristobal

- As of 5 PM ET, the center of Cristobal is located just inland over the Yucatan Peninsula about 20 miles south of Ciudad del Carmen, Mexico, or about 785 miles southwest of Key West, FL, moving south-southeast at 3 mph.
- Maximum sustained winds have decreased to 50 mph and gradual weakening is forecast now that the center is over land. Cristobal is expected to become a tropical depression by Thursday evening.
- Cristobal will meander near the coast of the Yucatan Peninsula over the next couple of days before eventually lifting northward by late Thursday or Friday.
- This weekend, the system will continue to move northward and will approach the northern Gulf Coast Sunday/Monday. DETAILS ARE UNKNOWN.
- Indirectly related to the system, tropical moisture will increase across the Gulf Coast through the end of the week, raising daily rain chances.

## Florida Outlook:

- Cristobal will have no direct impacts to Florida through Friday, but widespread rainfall is likely by this weekend.
- Tropical moisture returns to the state indirectly associated with Cristobal starting Wednesday night and lasting into the weekend. This could lead to localized flooding each day.
- The rip current risk and wave heights will begin to increase along the Gulf Coast later this week- particularly in the western Panhandle.
- Confidence is increasing in the threat of flash flooding or river flooding this weekend.
- A widespread 3-6" of rain is forecast to fall across the state over the next week. This will come from multiple rounds of rainfall over multiple days. Rain bands and training thunderstorms will result locally higher amounts, perhaps up to 6-12".

The next briefing packet will be sent out Thursday morning with the 11 AM ET advisory. 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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State Meteorological Support Unit

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