



TROPICAL UPDATE



5:00 PM EDT


Friday, June 5, 2020

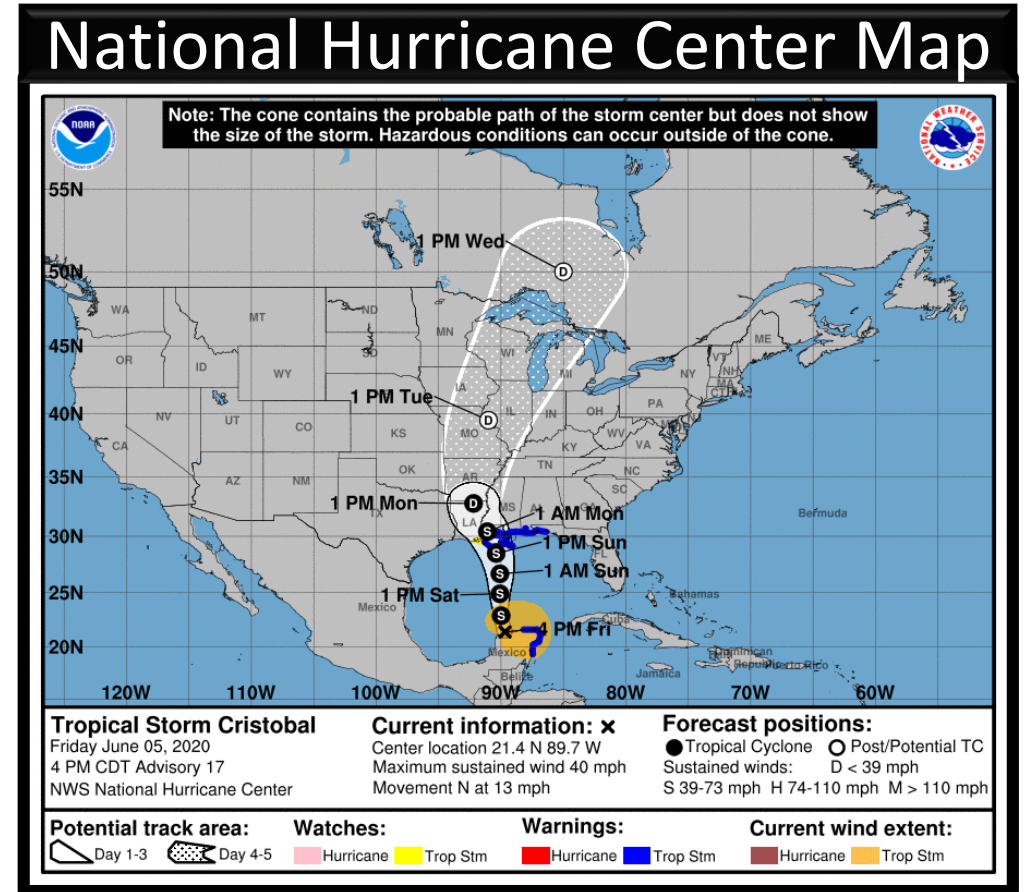
Tropical Storm Cristobal

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.

Tropical Storm Cristobal Friday, June 5

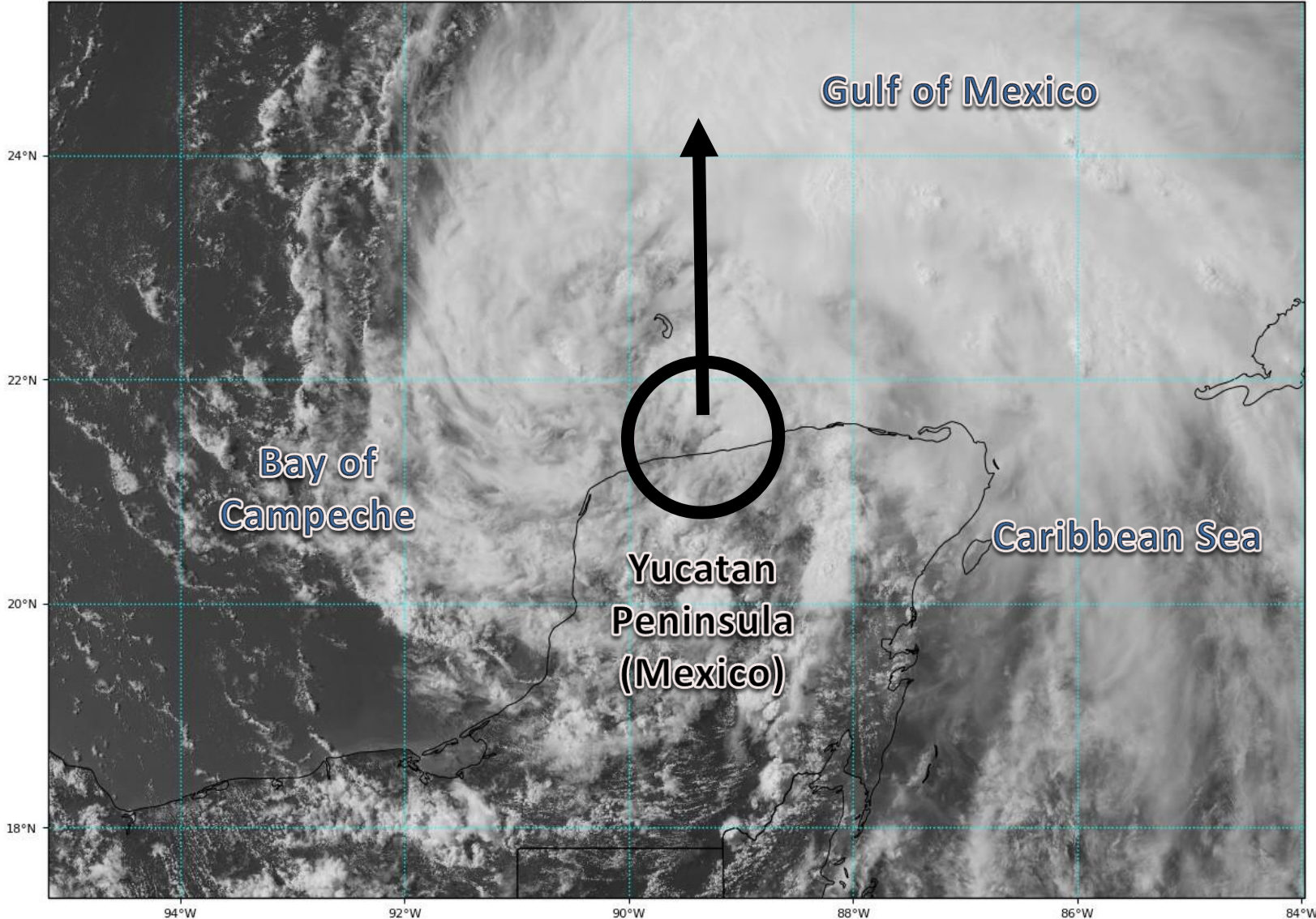
	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			



Tropical Weather Overview:

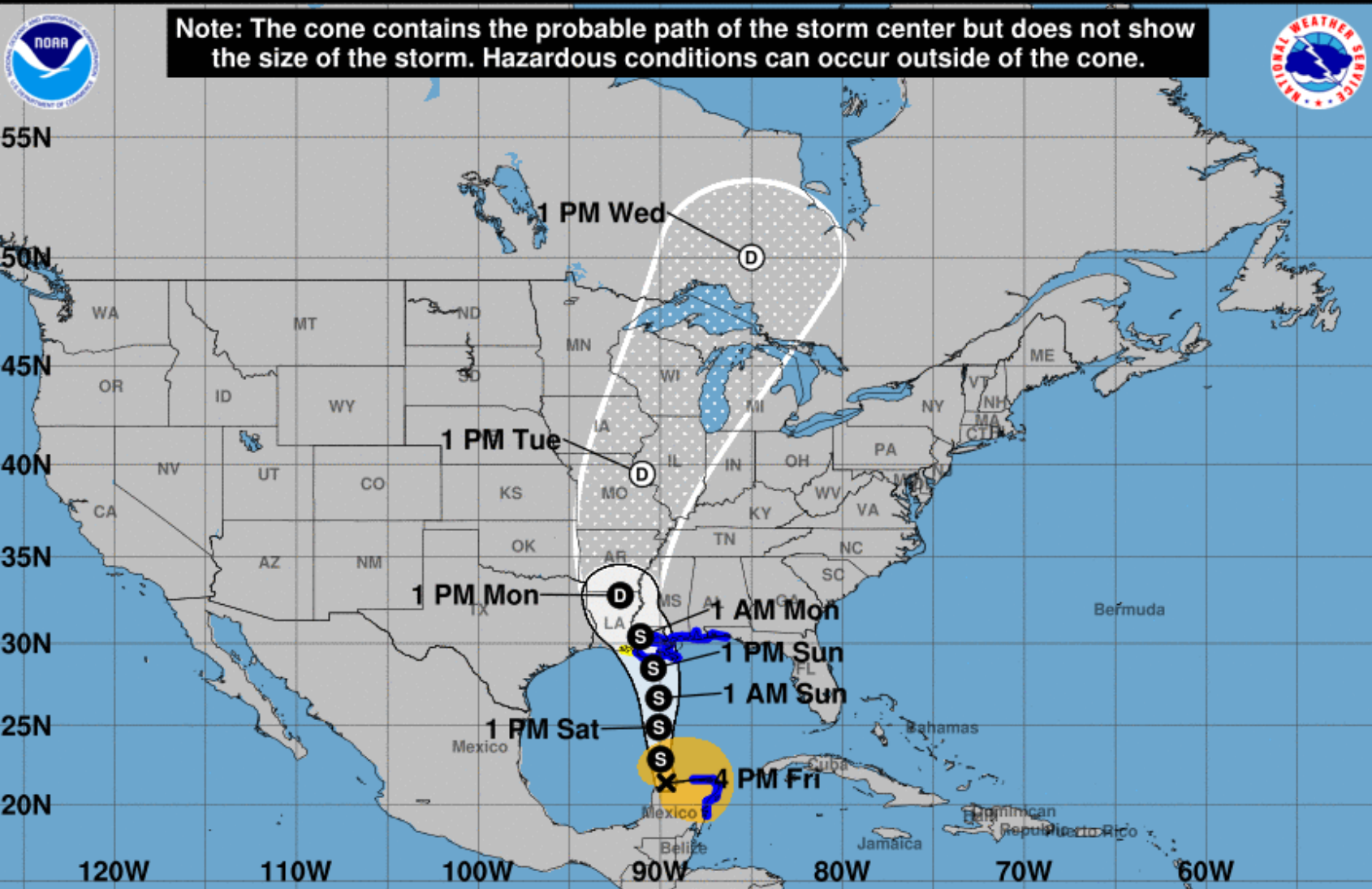
Tropical Storm Warnings are now in effect from the AL/FL border to the Okaloosa/Walton County Line. Storm Surge Watches are in effect from Indian Pass to Aripeka. Coastal Flood Statements are in effect from Pasco to Collier County. Flood Watches are in effect for much of the Peninsula with more possibly needed for parts of North Florida.



Visible Satellite Imagery: Tropical Storm Cristobal

Cristobal has emerged back into the Gulf of Mexico and is strengthening.

Most of the thunderstorms are on the northern and eastern side of the circulation. An expansion of the wind field to the east is expected as it re-organizes in the Gulf of Mexico. Most of the storms will continue to remain on the northern and eastern sides.



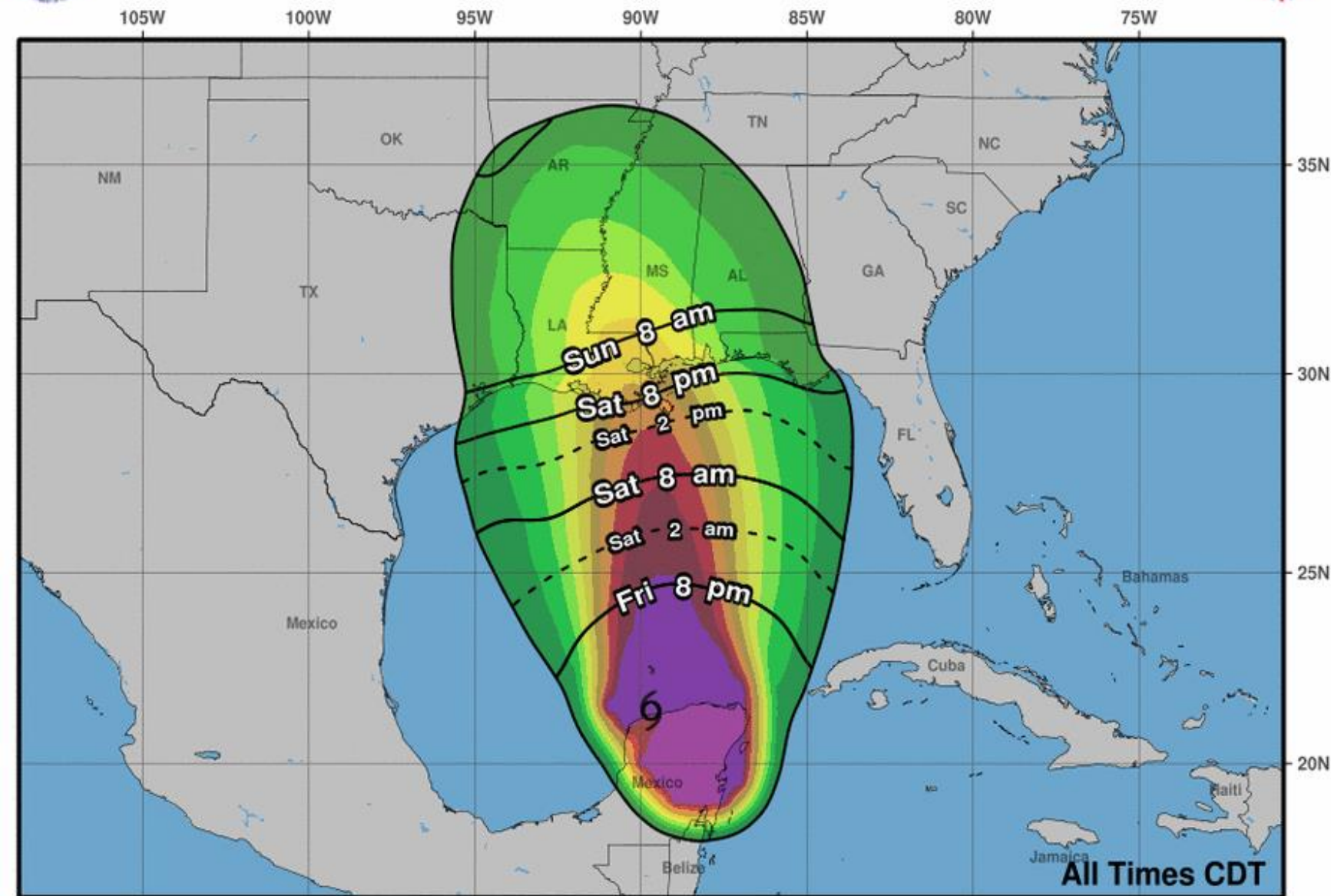
Projected Path: Tropical Storm Cristobal

- The center of Cristobal is located about 535 miles south of the mouth of the Mississippi River.
- Maximum sustained winds are at 40 mph.
- Cristobal is moving north at 13 mph, and this general motion will continue through landfall.
- Continued strengthening is possible until landfall
- Cristobal will likely make landfall along the Louisiana coast Sunday evening
- **Tropical Storm Warnings** are in effect from Morgan City, LA, to the Okaloosa-Walton County Line, FL
- **Storm Surge Watches** are in effect from Indian Pass, FL, to Aripeka, FL.

Tropical Storm Cristobal Friday June 05, 2020 4 PM CDT Advisory 17 NWS National Hurricane Center		Current information: x Center location 21.4 N 89.7 W Maximum sustained wind 40 mph Movement N at 13 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



Chances for Sustained Tropical Storm Force Winds (39+ mph)

Pensacola: 18%

Milton: 16%

Destin: 12%

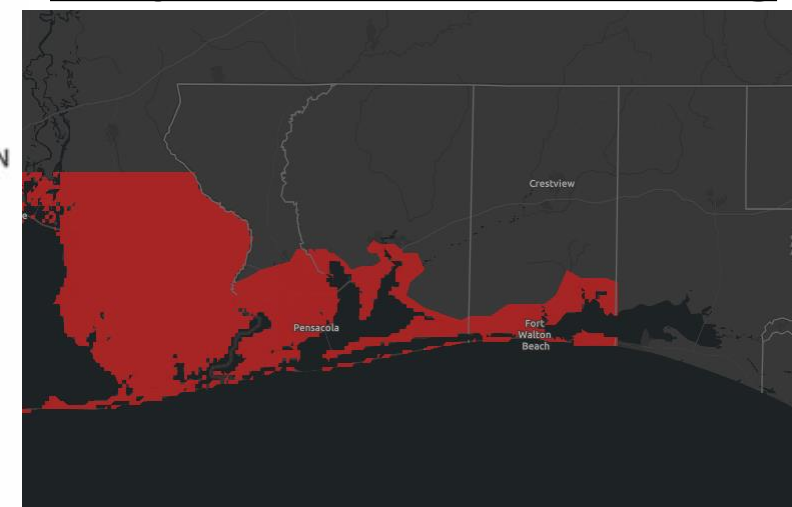
Panama City: 13%

Apalachicola: 10%

Tallahassee: 4%

Cedar Key: 4%

Tropical Storm Warning

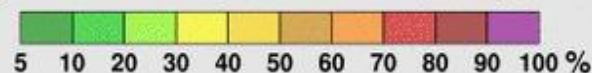


Tropical Storm Cristobal
Fri. Jun. 5, 2020 4 pm CDT
Advisory 17

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





Key Messages for Tropical Storm Cristobal

Advisory 17: 4:00 PM CDT Fri Jun 05, 2020



1. Damaging and deadly flooding was already occurring 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. Refer to products from your local weather office for more information.

2. There is a danger of life-threatening storm surge outside of the Hurricane and Storm Damage Risk Reduction System from the Mouth of the Mississippi River to Ocean Springs, Mississippi, and a Storm Surge Warning has been issued for those areas. Life-threatening storm surge remains possible along the Florida Big Bend and in other portions of southern and southeastern Louisiana where a Storm Surge Watch is in effect. Residents in these locations should follow advice given by local emergency officials.

3. Tropical storm force winds are expected by late Saturday night along the northern Gulf Coast from southeastern Louisiana to the western Florida Panhandle, including metropolitan New Orleans, and a Tropical Storm Warning has been issued for this area. These winds will arrive well in advance of and extend well east of Cristobal's center.

4. Heavy rainfall will spread into portions of the Gulf Coast, from east Texas to Florida this weekend into early next week, with areas of flash flooding. Significant flooding will be possible on smaller tributaries, especially where heavier rainfall occurs over portions of Louisiana and Mississippi.

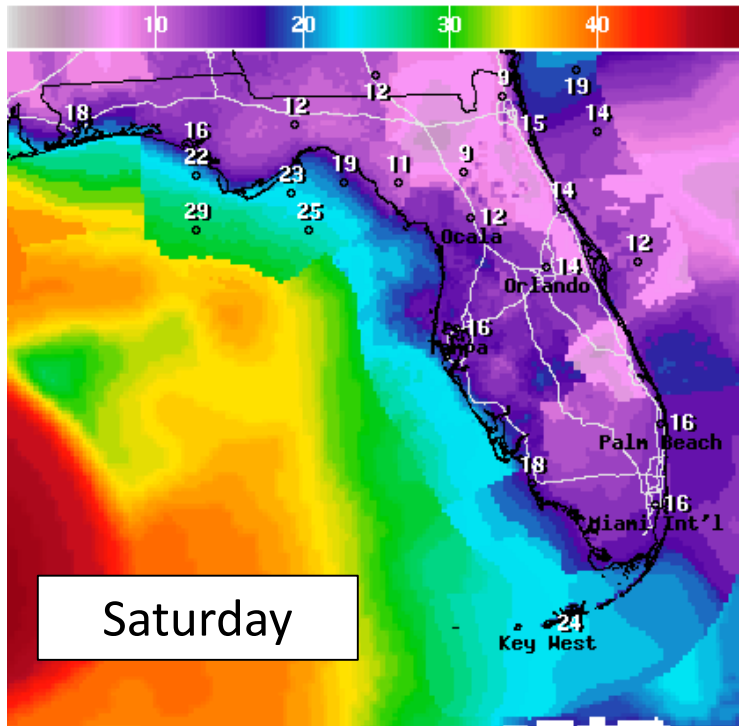


For more information go to hurricanes.gov



Model Forecast Wind Gusts

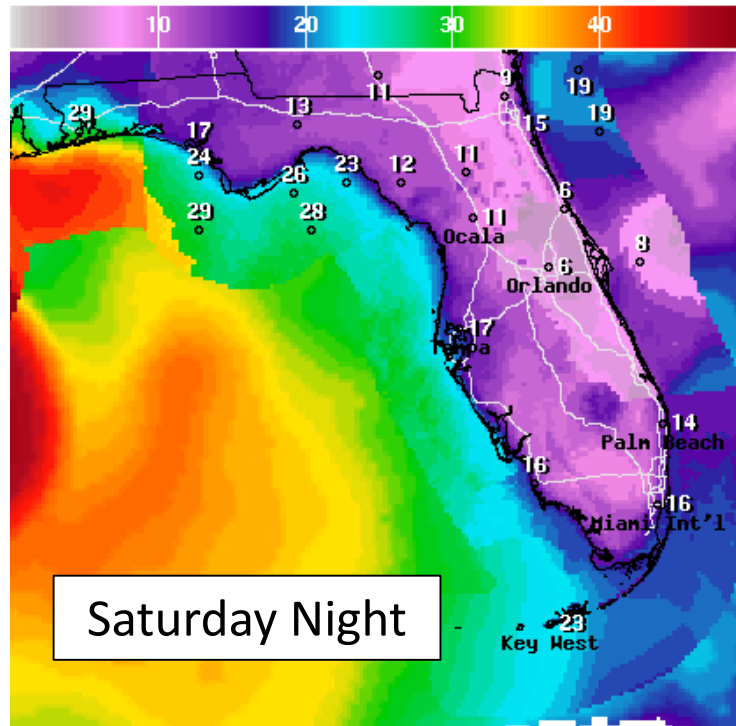
Exact wind gusts will vary in time, magnitude, and location.



Wind Gust(Kts) Sat Jun 06 2020 5PM EDT
(Sat Jun 06 2020 21Z)



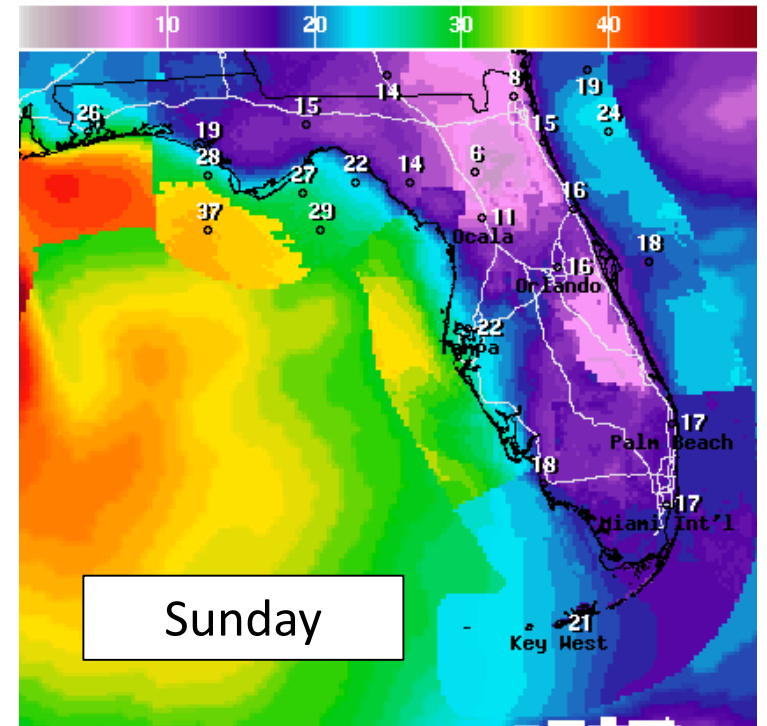
National Digital Forecast Database
20z issuance Graphic created-Jun 05 4:32PM EDT



Wind Gust(Kts) Sun Jun 07 2020 5AM EDT
(Sun Jun 07 2020 09Z)



National Digital Forecast Database
20z issuance Graphic created-Jun 05 4:32PM EDT



Wind Gust(Kts) Sun Jun 07 2020 11AM EDT
(Sun Jun 07 2020 15Z)



National Digital Forecast Database
20z issuance Graphic created-Jun 05 4:32PM EDT



Winds will begin increasing Saturday into Sunday as Cristobal approaches the northern Gulf Coast. The wind field is also expected to expand on the eastern side of Cristobal's center. This may result in some gusts to near tropical-storm-force, especially in rain bands.

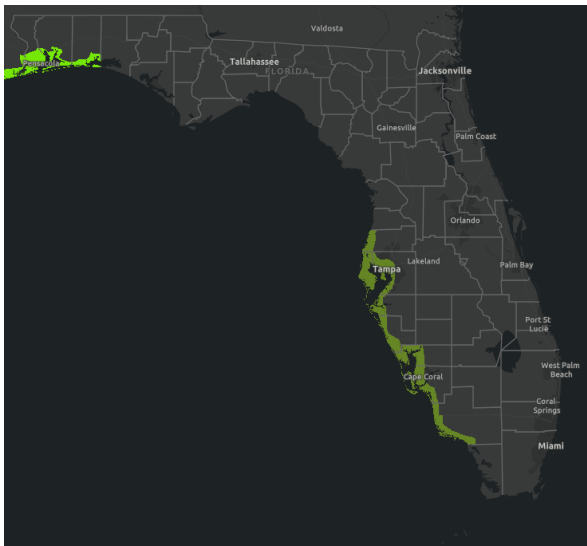


Storm Surge Flooding

This Weekend

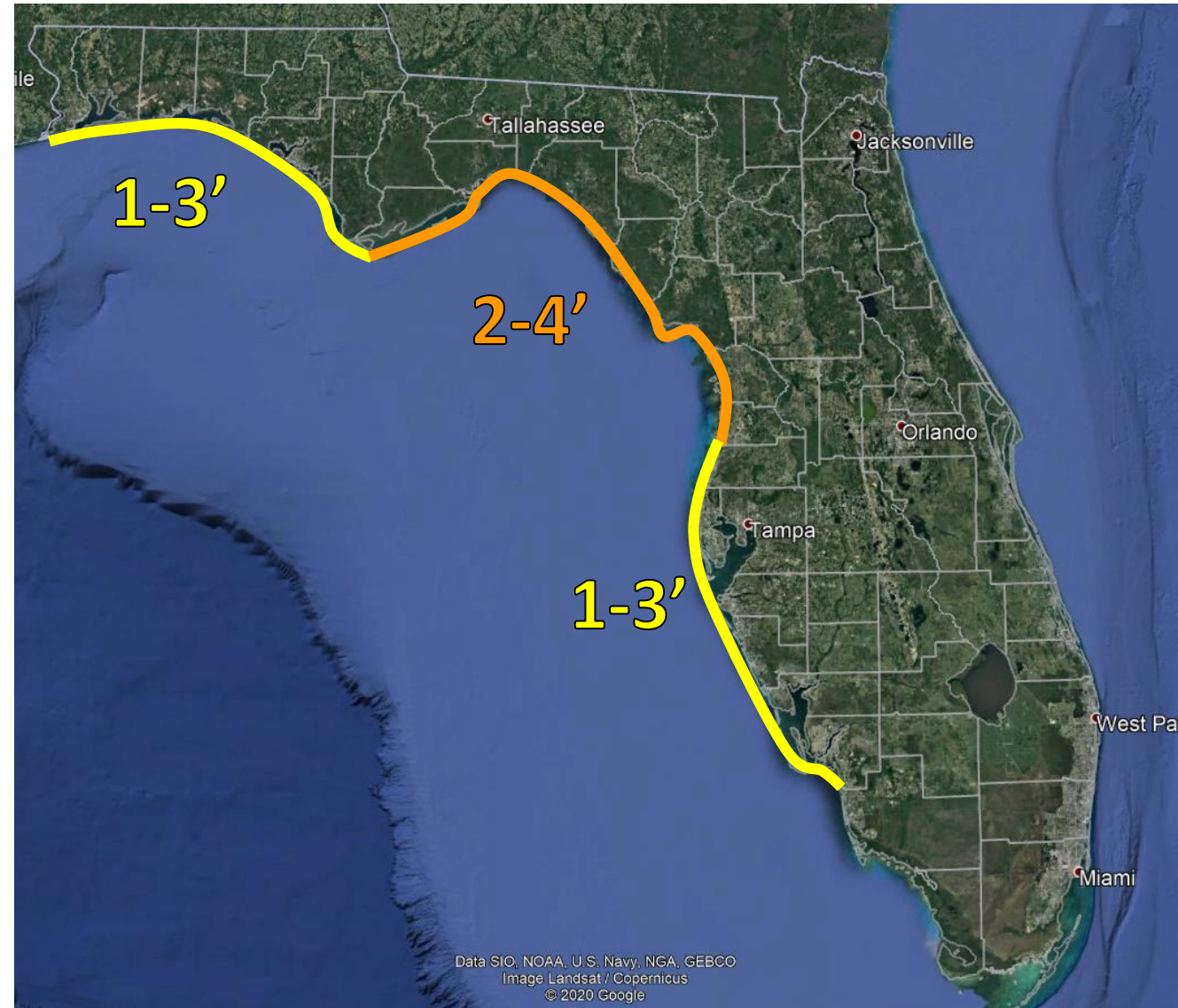
Strengthening, prolonged south to southeast winds well ahead of Cristobal will result in some storm surge along the Gulf Coast.

Storm Surge Watches (orange) are in effect from **Indian Pass to Aripeka**. A Storm Surge Watch means that life-threatening inundation is possible within the next 48 hours.



Coastal Flood Advisories
(bright green)

Coastal Flood Statements
(dark green)

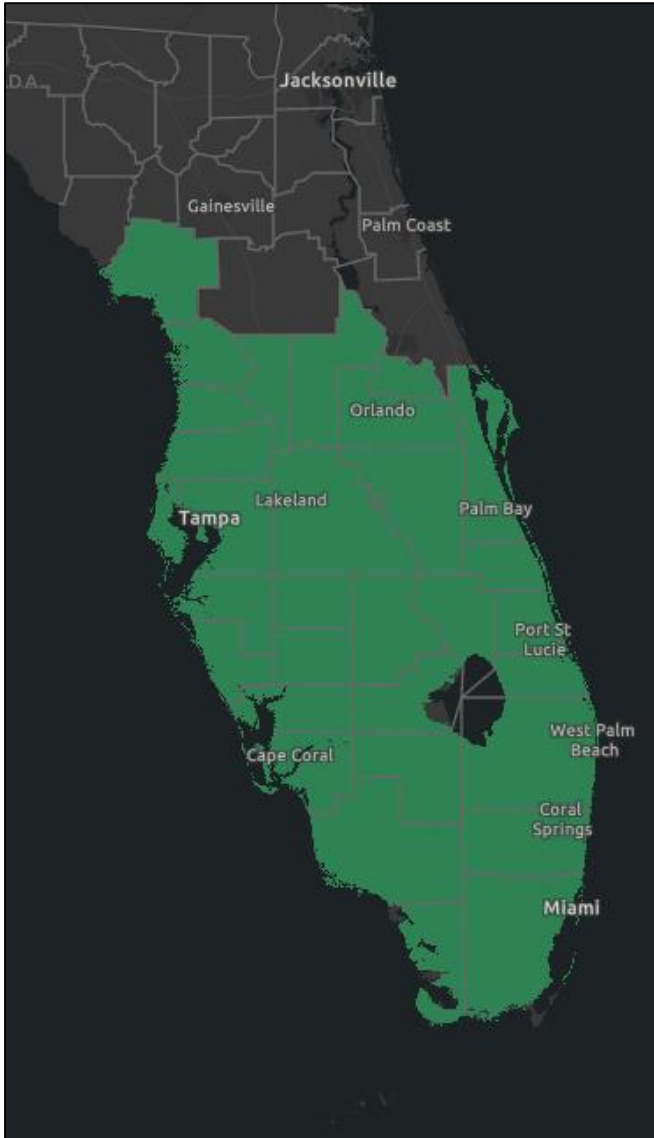




Flood Watches

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.

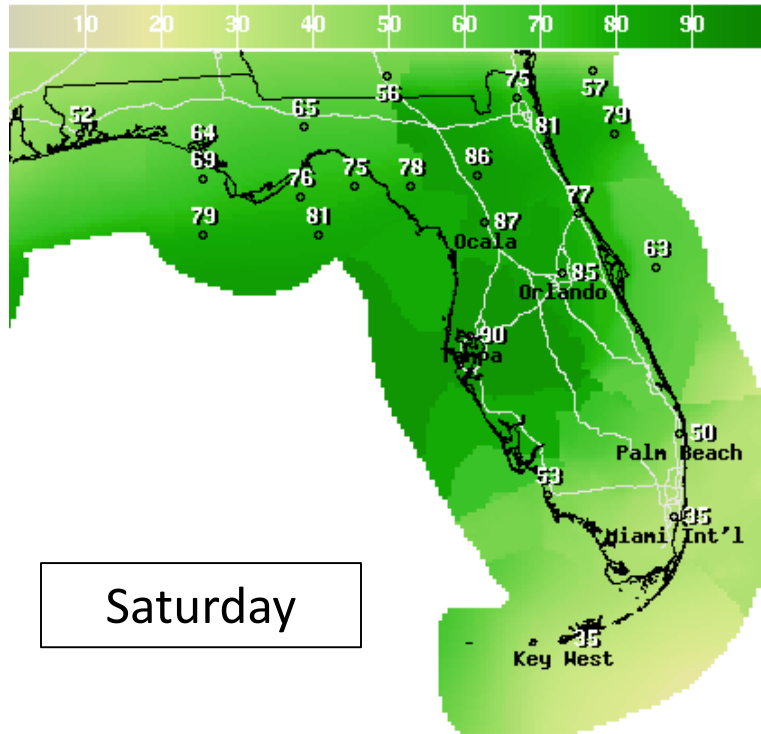
Some parts of the Peninsula have seen 2-5" of rain over the last few days, with 5-10+" locally. Additional rainfall could result in more flooding.

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



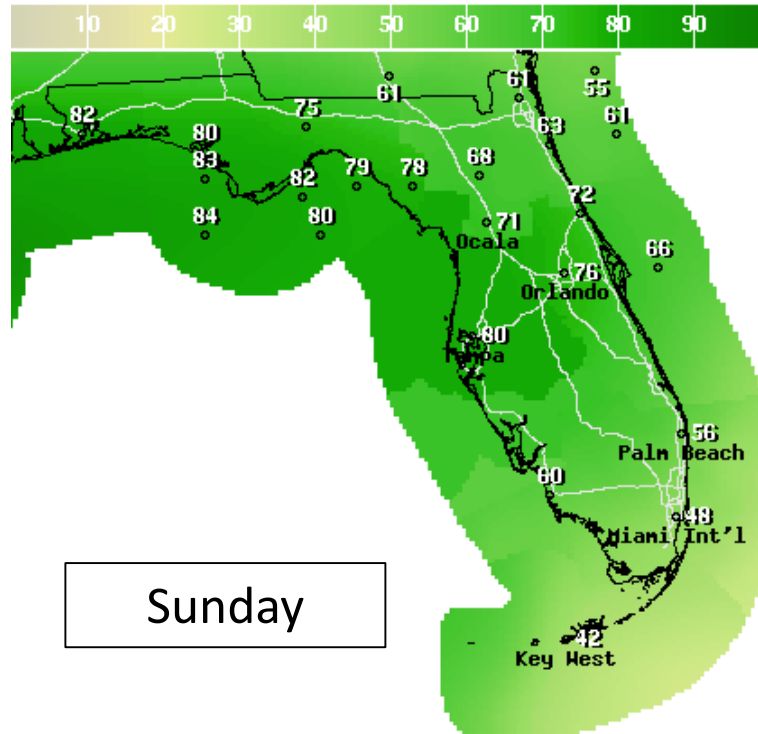
Saturday - Monday

Timing the Event – Cristobal Rainfall



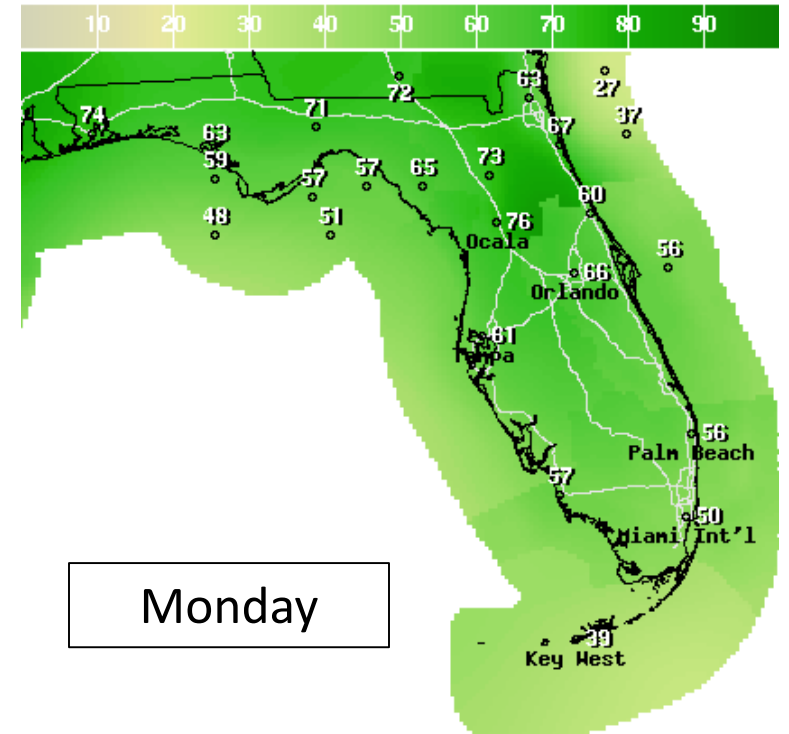
Saturday

12Hr Prob.Precip(%) Ending Sat Jun 06 2020 8PM EDT
(Sun Jun 07 2020 00Z)
National Digital Forecast Database
20z issuance Graphic created-Jun 05 4:24PM EDT



Sunday

12Hr Prob.Precip(%) Ending Sun Jun 07 2020 8PM EDT
(Mon Jun 08 2020 00Z)
National Digital Forecast Database
20z issuance Graphic created-Jun 05 4:24PM EDT



Monday

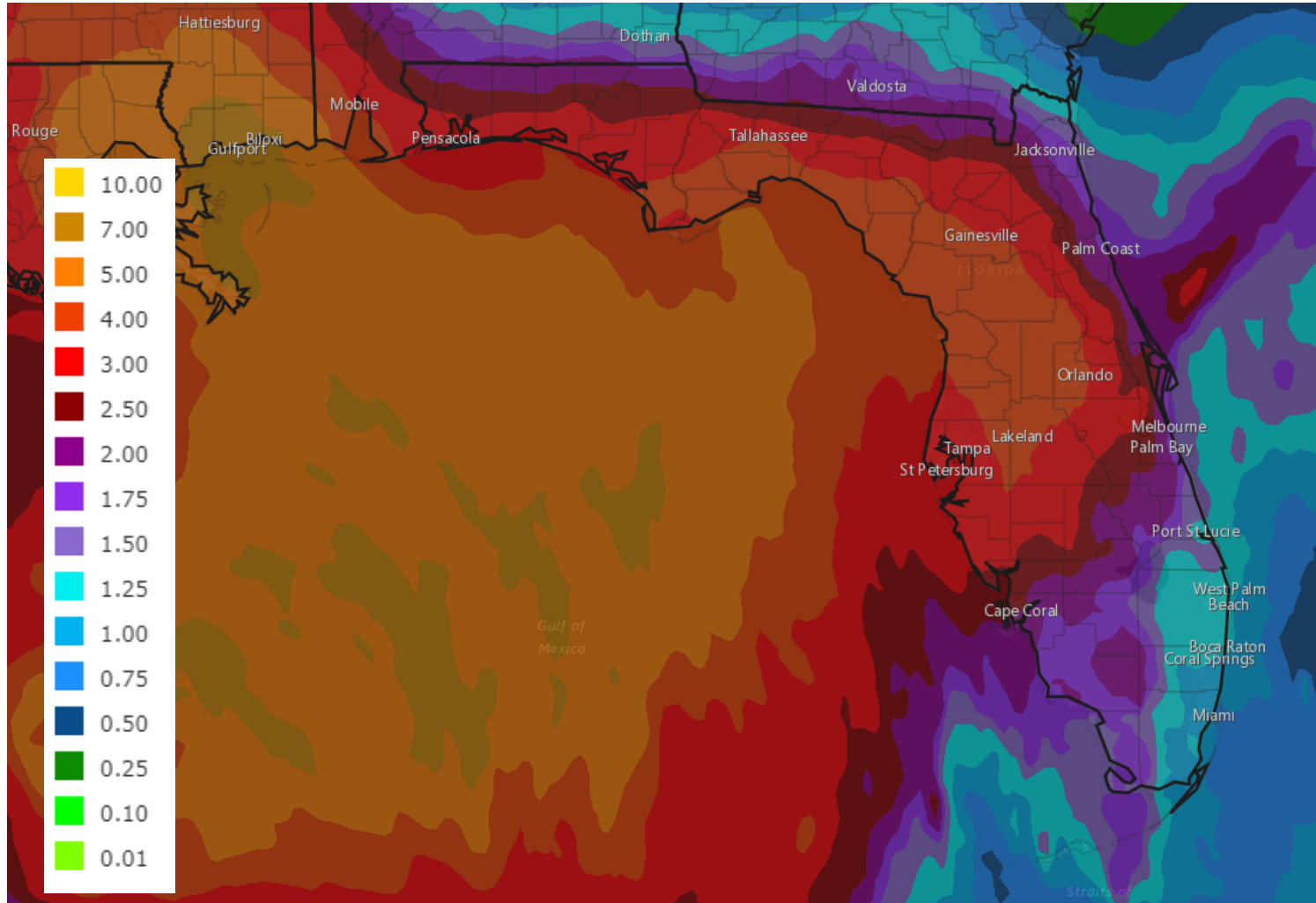
12Hr Prob.Precip(%) Ending Mon Jun 08 2020 8PM EDT
(Tue Jun 09 2020 00Z)
National Digital Forecast Database
18z issuance Graphic created-Jun 05 2:48PM EDT

Rain bands will be moving into the Keys as early as tonight, then across the state through the weekend. The heaviest rainfall will be wherever the rain bands set up and train. **The threat for flash flooding remains.** However, the forecast is very dependent on the track and evolution of Cristobal.



Rainfall Totals Through Tuesday

Timing the Event



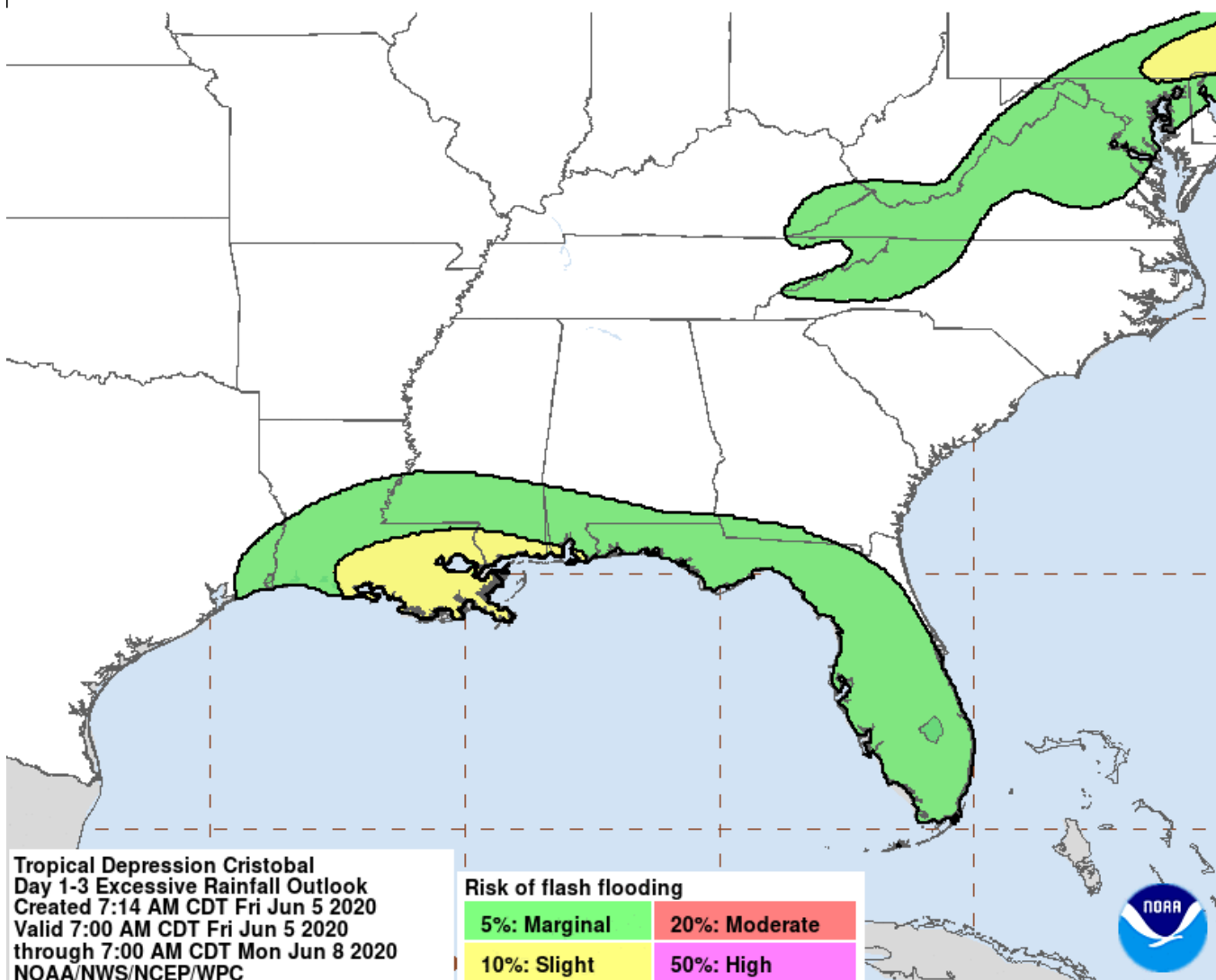
Through next Tuesday, widespread rainfall totals of 2-5" are expected across much of the state. Locally higher totals of 6-12" are possible, especially where heavier bands set up.

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.

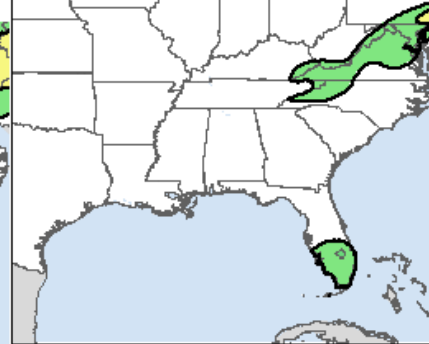


Weekend Flash Flood Threat

Greatest Flash Flood Risk Over the Next 3 Days



Day 1 Through Saturday morning



Day 2 Through Sunday morning

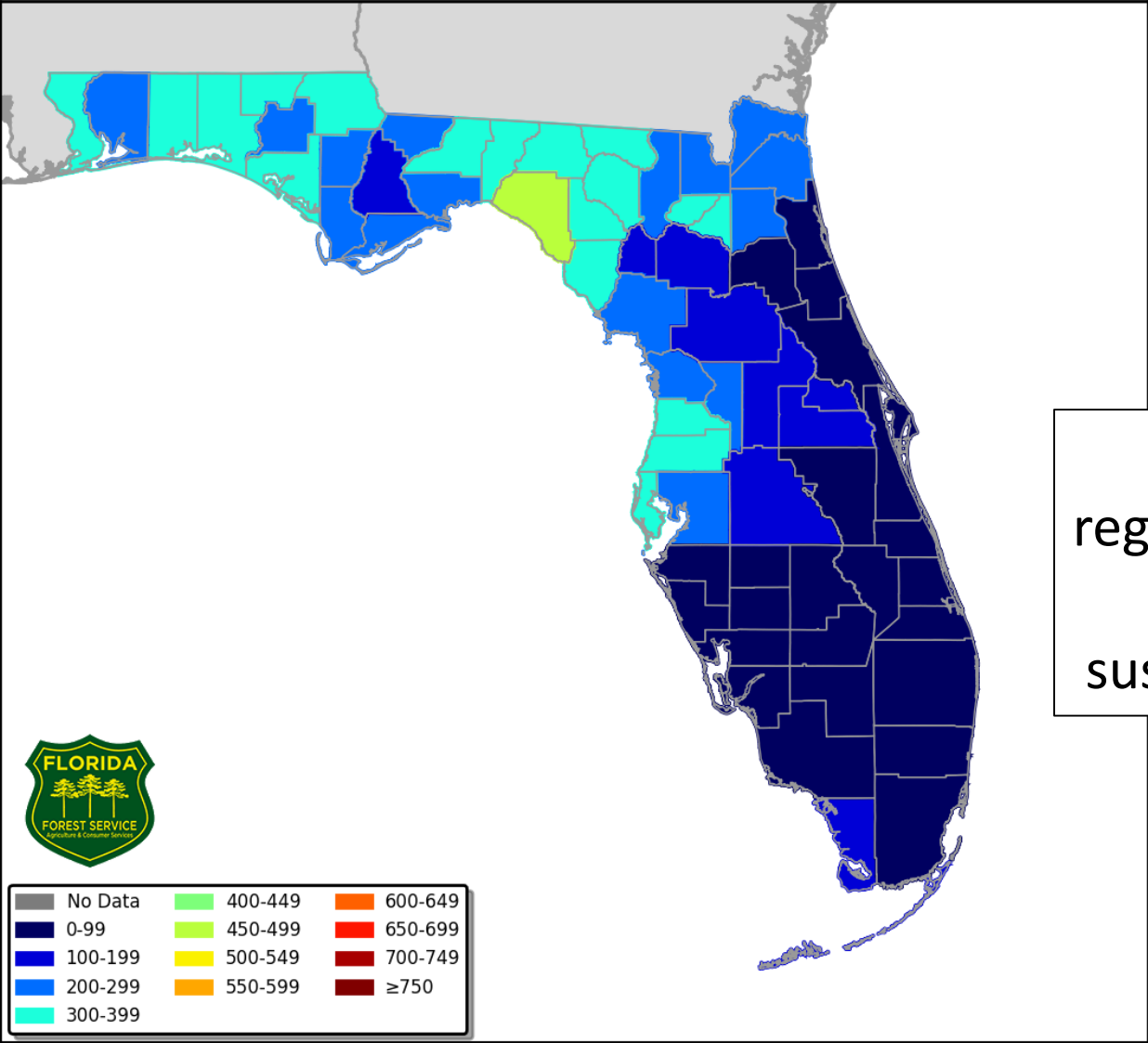


Day 3 Through Monday morning

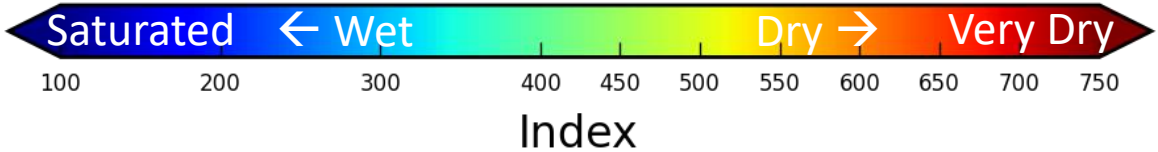
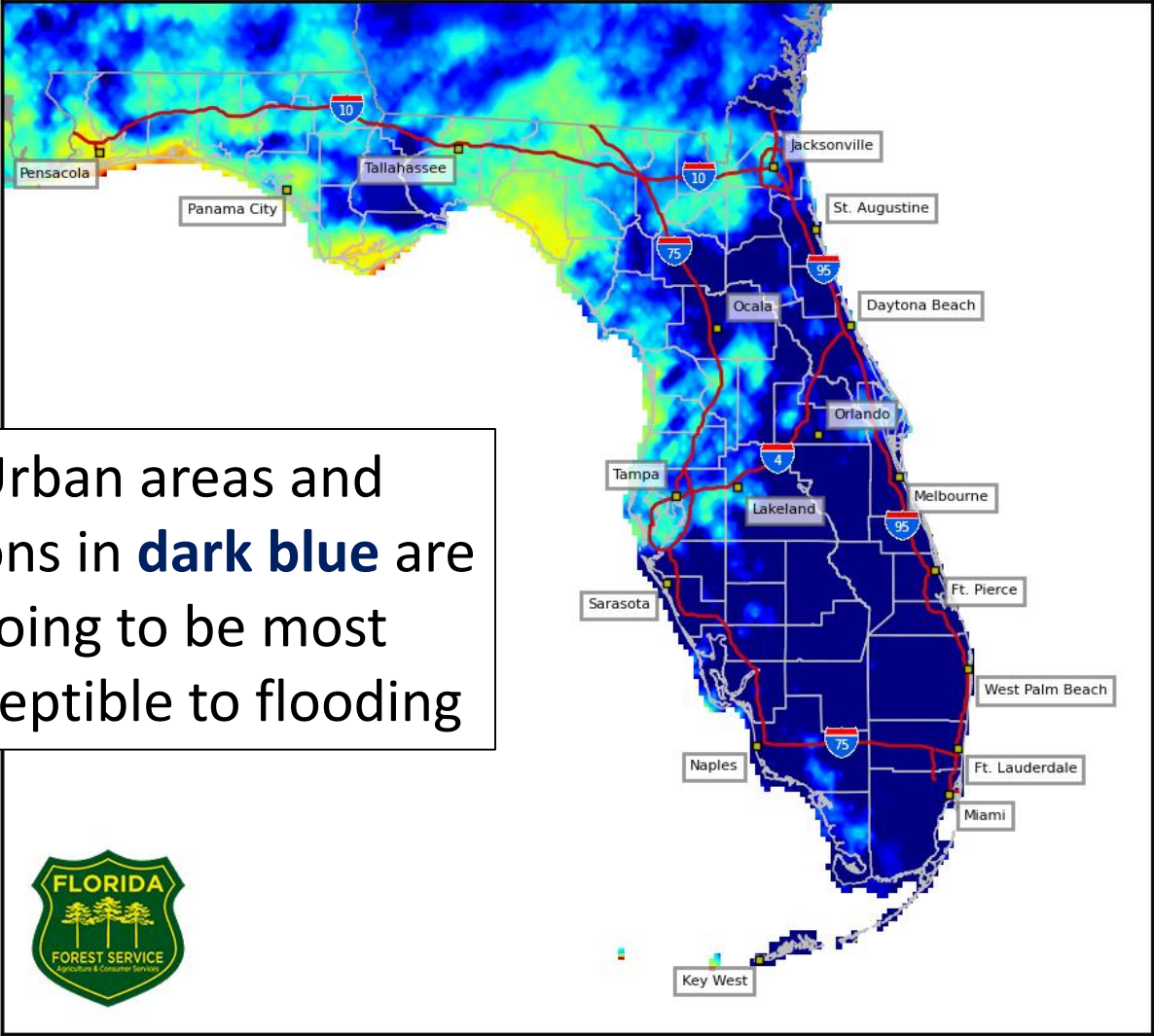


Parts of the state will be under a Marginal Risk for flash flooding each day through the weekend. However, should heavier rainfall materialize, the risk for flash flooding may increase.

Keetch Byram Drought Index (KBDI)
County Averages for June 05, 2020



4 km Resolution KBDI
Statewide
June 05, 2020

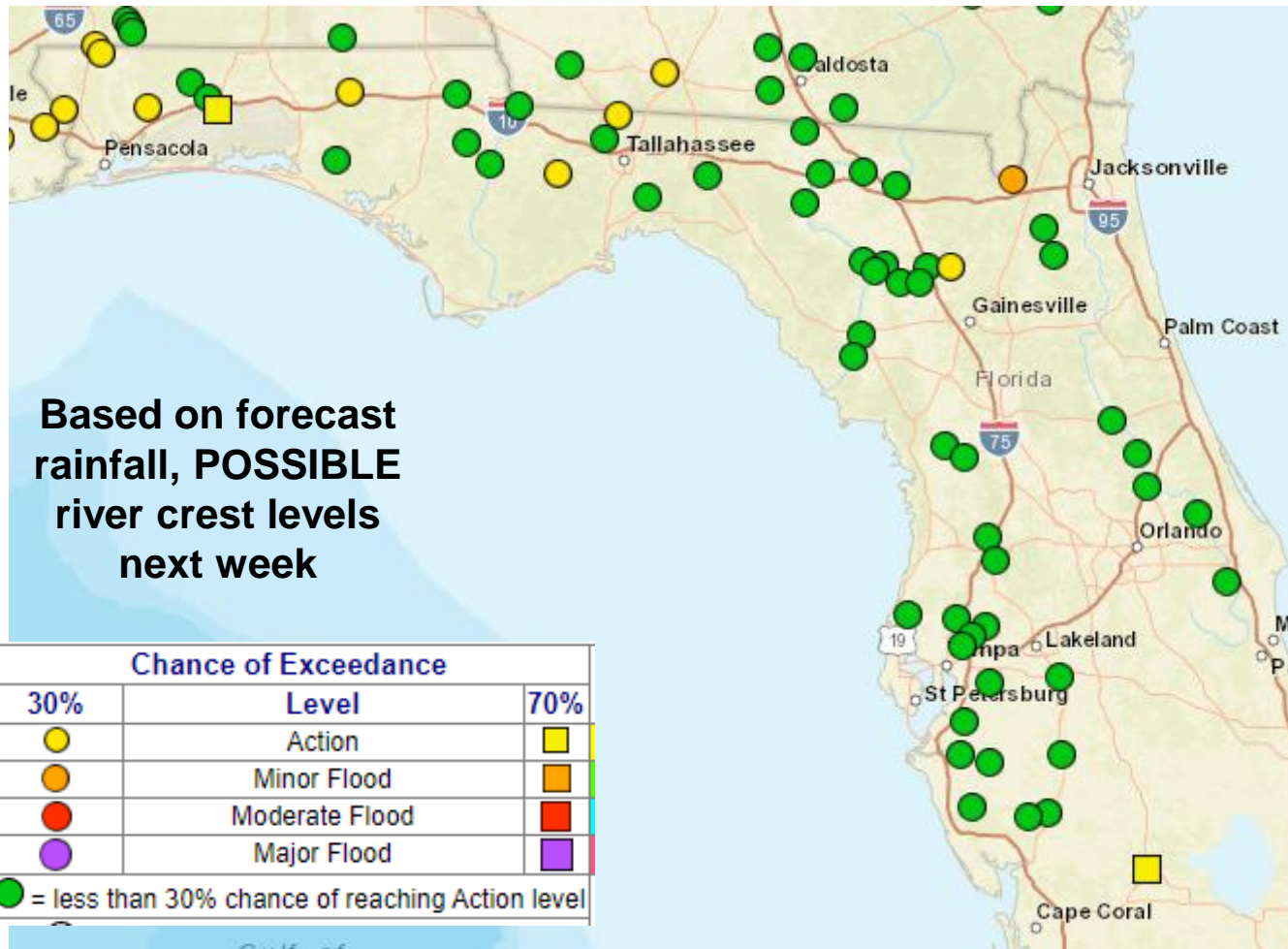


[KBDI – Full Report from the FFS](#)



Possible River Flooding

Starting Early Next Week

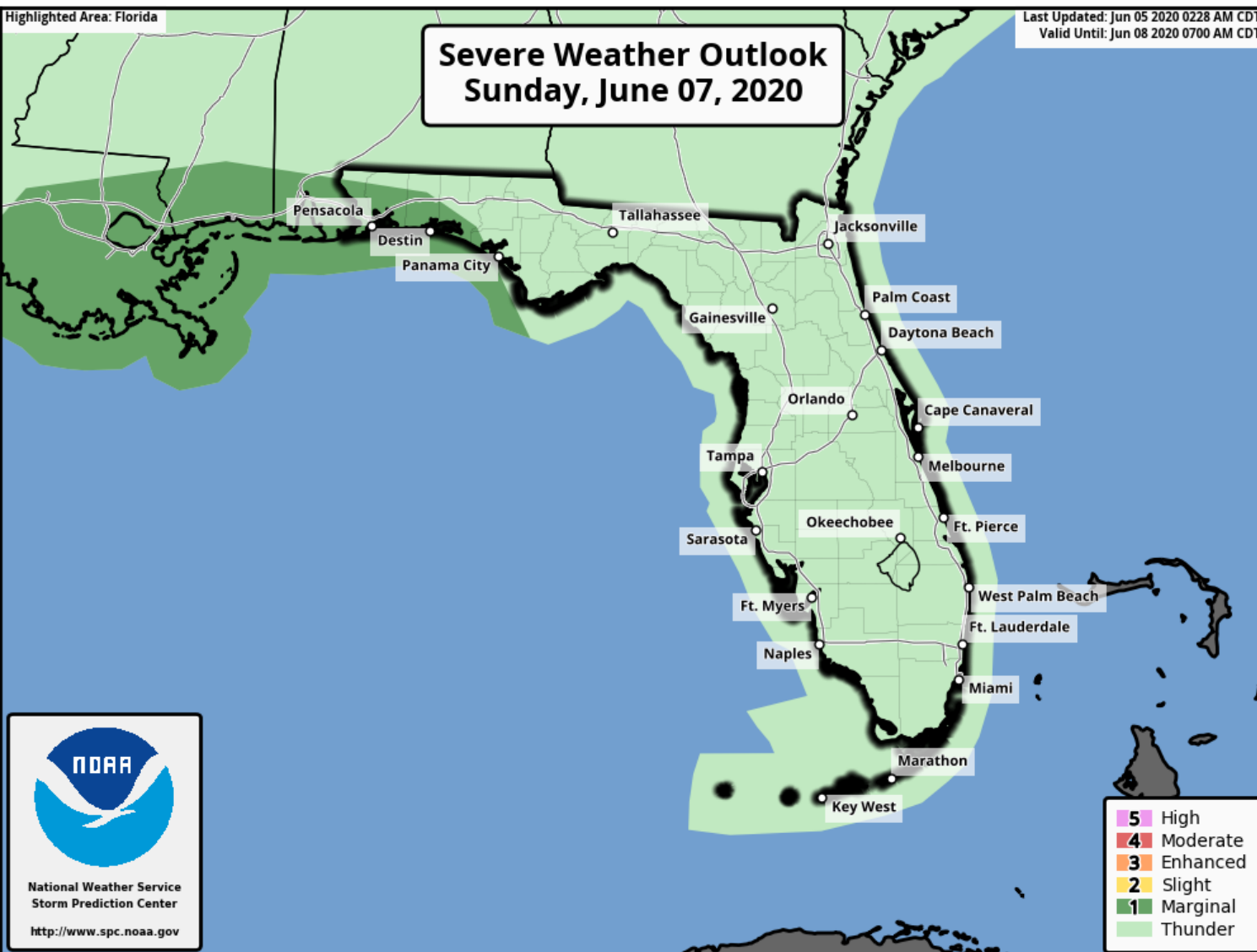


Some minor flooding is possible along some rivers, but the heaviest rainfall will likely be confined to the coastal locations (away from rivers).

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



Tornado Risk for Sunday

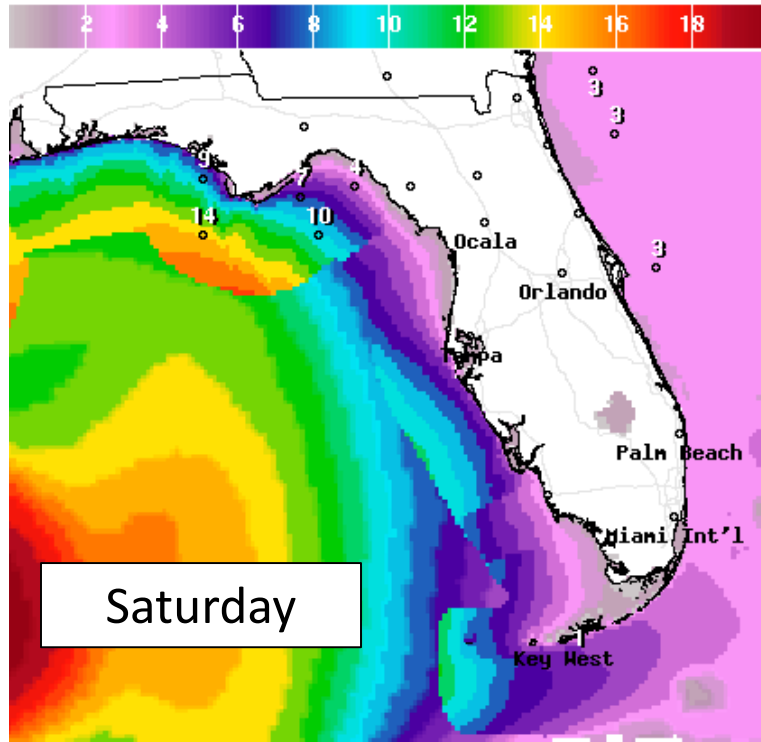


As the outer bands from Cristobal spiral into the Panhandle, some stronger thunderstorms will be embedded. Outside of the gusty winds from rain bands, some thunderstorms may produce isolated tornadoes. There is a **Marginal Risk** for tornadoes along coastal parts of the Panhandle on Sunday.



Forecast Wave Heights

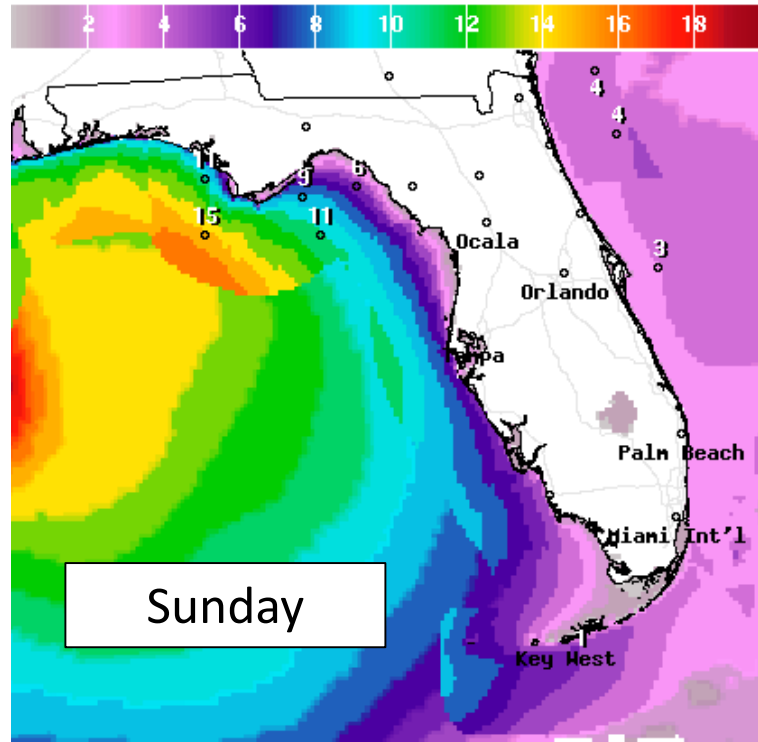
This Weekend



Wave Height(ft) Ending Sat Jun 06 2020 8PM EDT
(Sun Jun 07 2020 00Z)



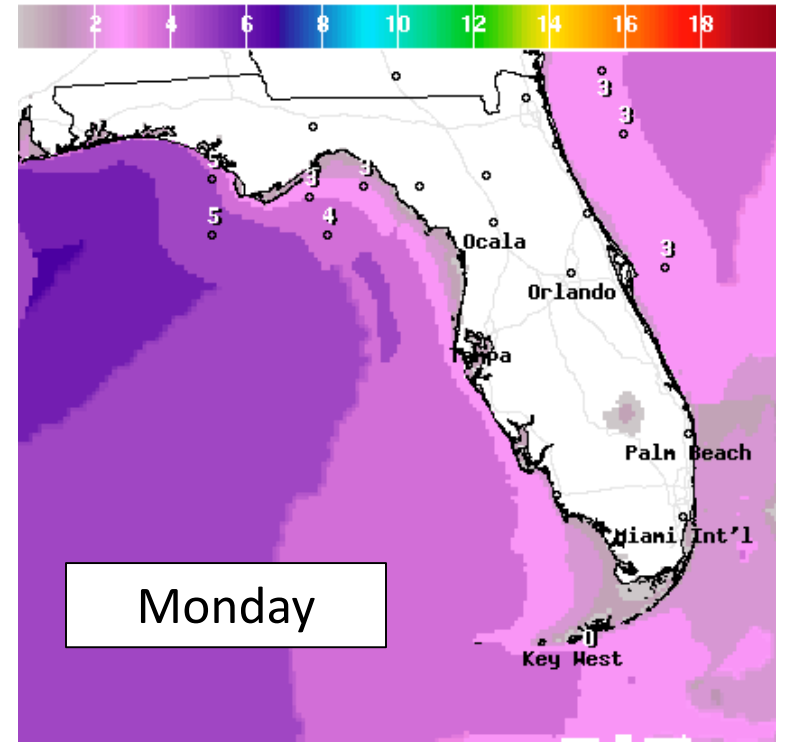
National Digital Forecast Database
20z issuance Graphic created-Jun 05 4:21PM EDT



Wave Height(ft) Ending Sun Jun 07 2020 2PM EDT
(Sun Jun 07 2020 18Z)



National Digital Forecast Database
18z issuance Graphic created-Jun 05 2:45PM EDT



Wave Height(ft) Ending Mon Jun 08 2020 8PM EDT
(Tue Jun 09 2020 00Z)



National Digital Forecast Database
18z issuance Graphic created-Jun 05 2:45PM EDT



Waves will build this weekend as Cristobal moves northward through the Gulf of Mexico. High surf of 6-12 feet will be possible at Panhandle Beaches with 4-8 feet along the West Coast. This will result in dangerous rip currents along all Gulf beaches. Minor beach erosion is also possible.

Summary

Tropical Storm Cristobal

- As of 5 PM ET, the center of Cristobal is located north of the Yucatan Peninsula about 535 miles south of the mouth of the Mississippi River, moving north at 12 mph.
- Maximum sustained winds are near 40 mph. Additional strengthening is possible through landfall.
- This weekend, the system will continue to move northward and will approach the northern Gulf Coast Sunday/Monday. Cristobal will also expand as it moves northward.

Florida Outlook:

- A **Tropical Storm Warning** is in effect from the AL/FL border (Escambia County) to the Okaloosa/Walton County Line.
 - **Tropical Storm Warning:** Escambia, Santa Rosa, and Okaloosa Counties
- A **Storm Surge Watch** is in effect from Indian Pass (Gulf/Franklin County Line) to Aripeka (Pasco/Hernando County Line). 2-4' of storm surge is possible in these areas within the next 48 hours. 1-3' of storm surge is possible outside of the watch area along the Gulf Coast, and Coastal Flood Advisories may be needed for these areas. A Coastal Flood Statement is in effect for Collier County.
 - **Storm Surge Watch:** Franklin, Wakulla, Jefferson, Taylor, Dixie, Levy, Citrus, and Hernando Counties
- A **Flood Watch** is in effect for much of the Peninsula.
 - **Flood Watch:** Levy, Citrus, Hernando, Pasco, Sumter, Seminole, Orange, Brevard, Osceola, Polk, Hillsborough, Pinellas, Manatee, Sarasota, Hardee, DeSoto, Highlands, Okeechobee, Indian River, St. Lucie, Martin, Palm Beach, Glades, Hendry, Charlotte, Lee, Collier, Broward, Miami-Dade, and Mainland Monroe
- A widespread 2-5" 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".
- Rain bands may train over the same areas across the state. This will create local maxima in rainfall totals and a flash flood threat.
- Gusty winds outside of the Tropical Storm Warning, perhaps to tropical storm force, will be possible in some of the rain bands.
- Isolated tornadoes may be possible in some of the outer bands, and the Storm Prediction Center has outlined coastal areas of the Panhandle in a Marginal Risk for severe weather (level 1 of 5) on Sunday.
- Dangerous rip currents and minor beach erosion are expected at Gulf Coast beaches.

The next briefing packet will be sent out Saturday 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.



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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