



TROPICAL UPDATE



5:00 PM EDT

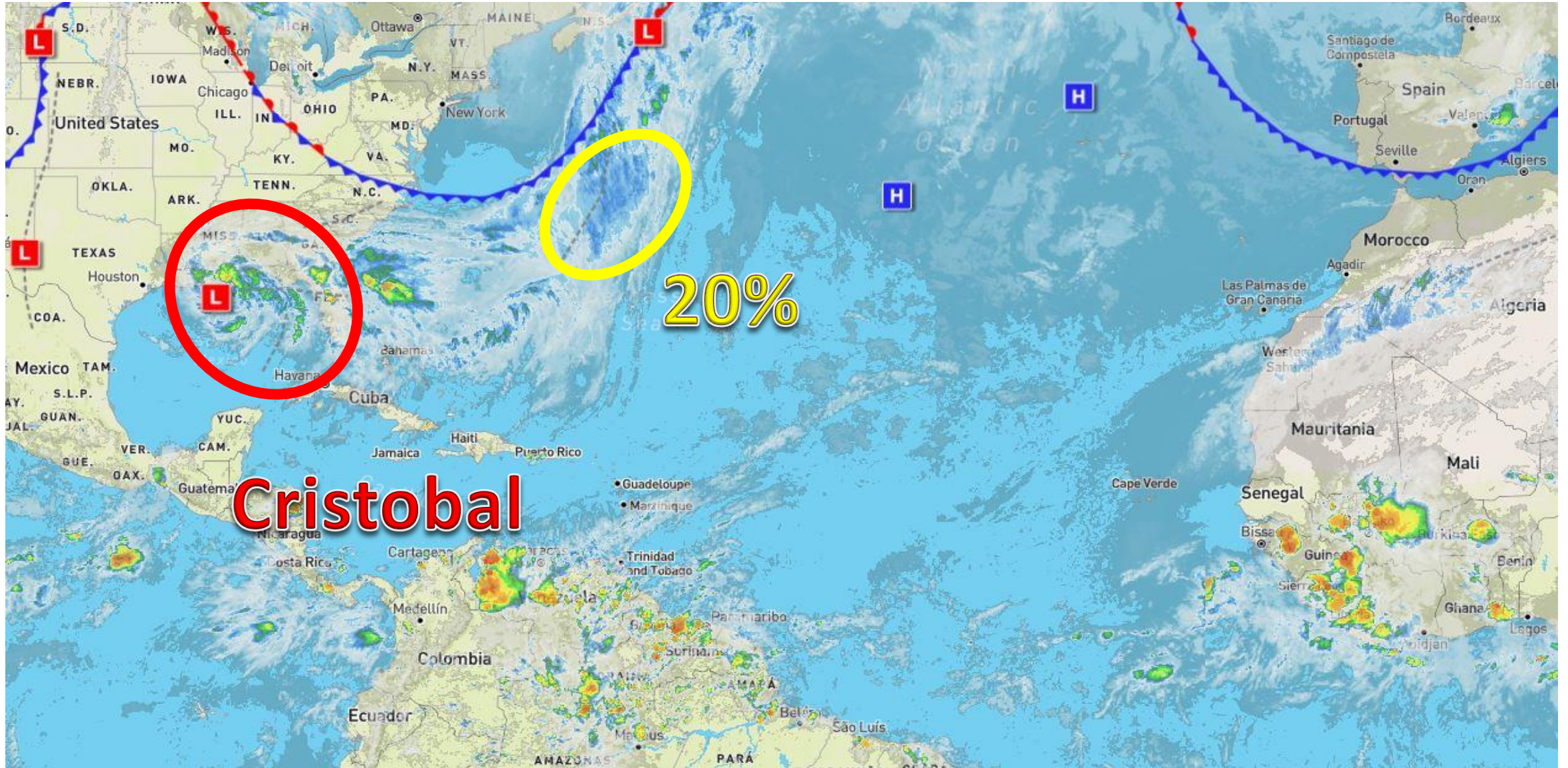
Sunday, June 7, 2020

Tropical Storm Cristobal
& Bermuda Low (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.


Atlantic Basin Satellite Image

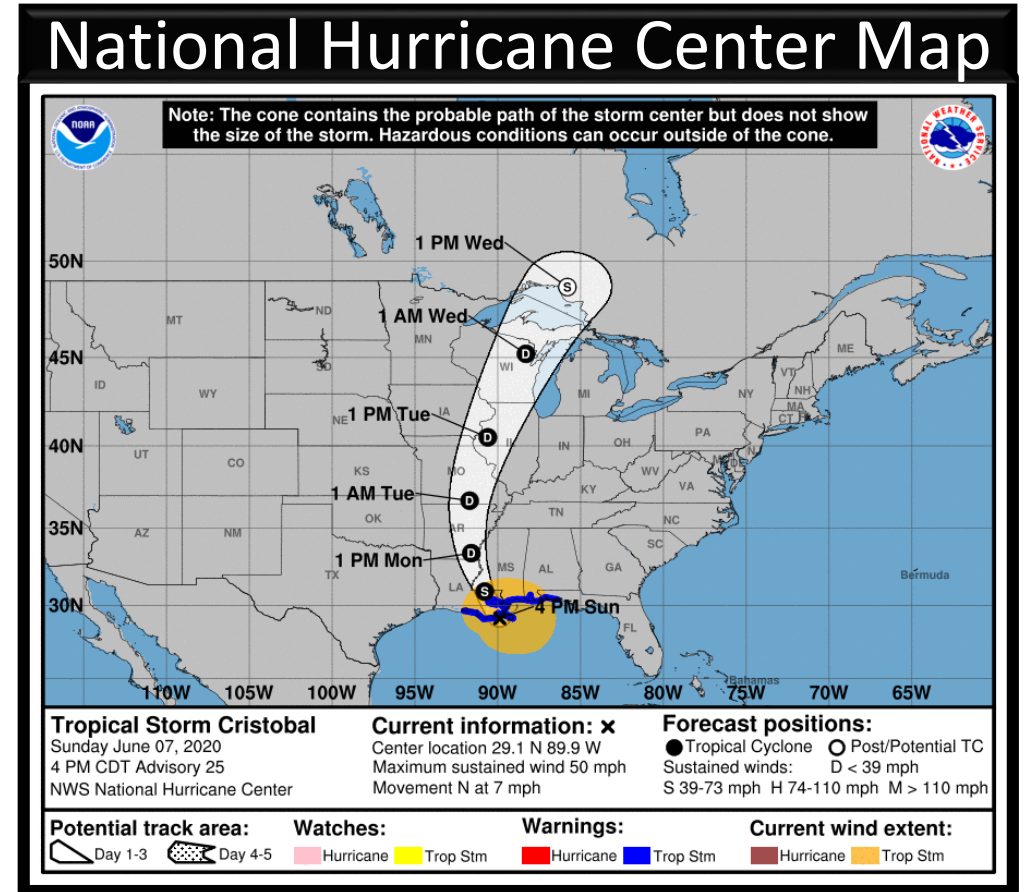
Chance of development: — None — Low — Medium — High



Tropical Storm Cristobal Sunday, June 7

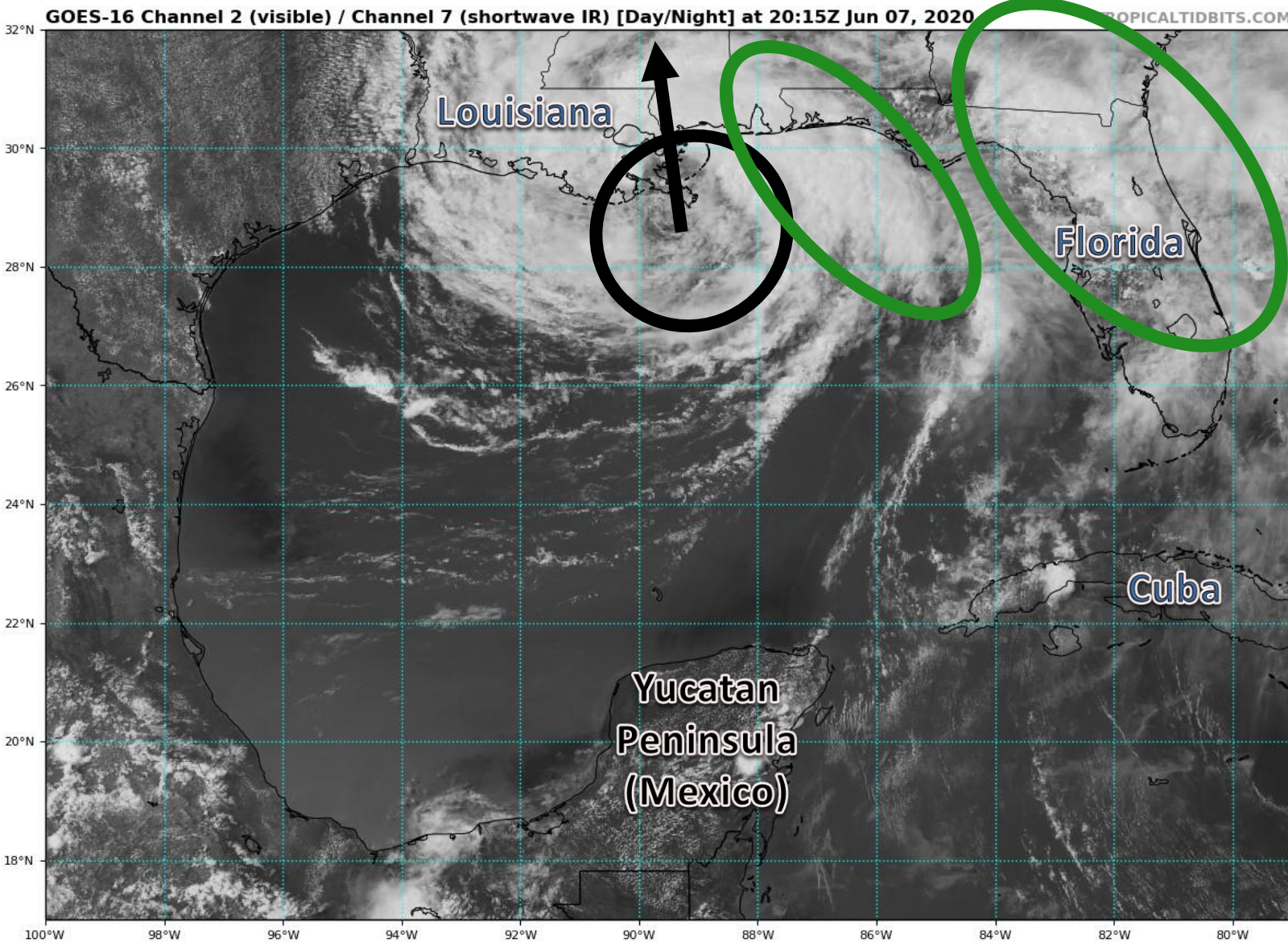
	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			



Tropical Weather Overview:

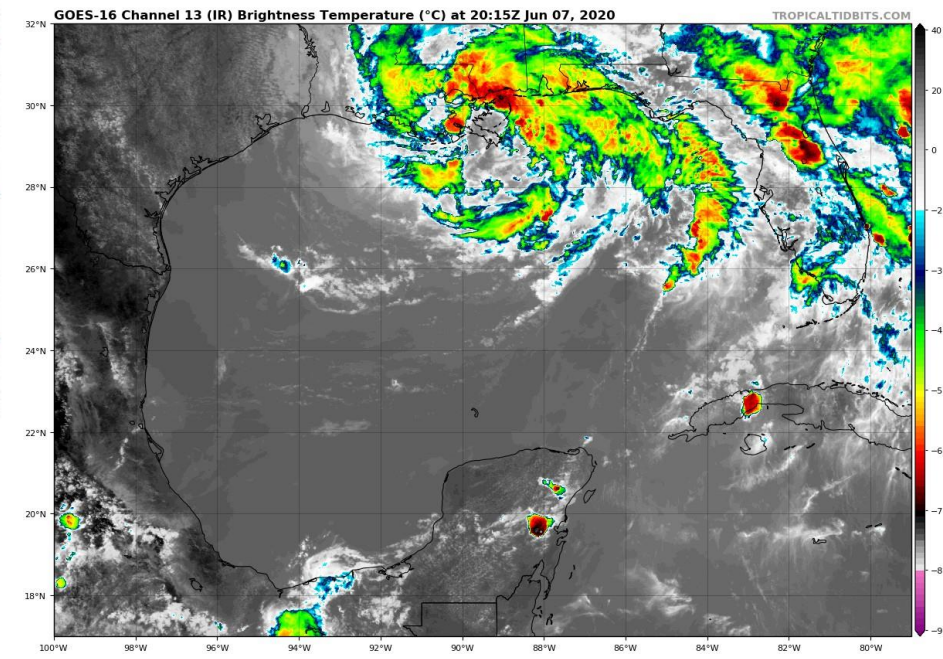
No significant changes today and the forecast remains on track. The main threat from Cristobal continues to be heavy rainfall. Flash Flood Watches continue for the Panhandle and Big Bend through this evening with the threat shifting to just the western Panhandle late tonight. Isolated tornadoes possible in the Panhandle.



Visible Satellite Imagery: Tropical Storm Cristobal

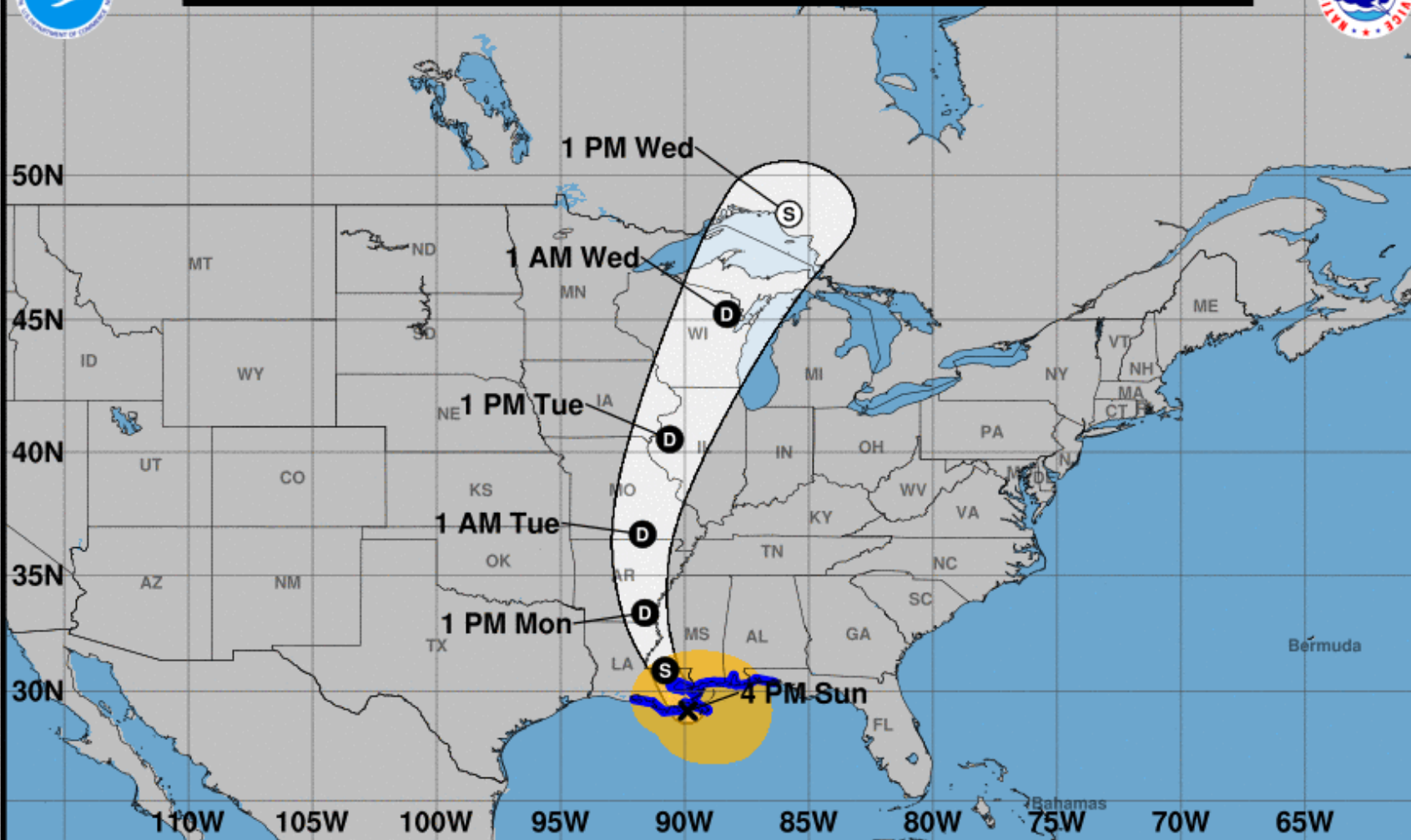
Cristobal is a large system with much of the thunderstorms (green circles) displaced well to the east of the center (black circle).

Cristobal is moving to the north and is making landfall in Louisiana.





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.



Tropical Storm Cristobal

Sunday June 07, 2020

4 PM CDT Advisory 25

NWS National Hurricane Center

Current information: X

Center location 29.1 N 89.9 W

Maximum sustained wind 50 mph

Movement N at 7 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:

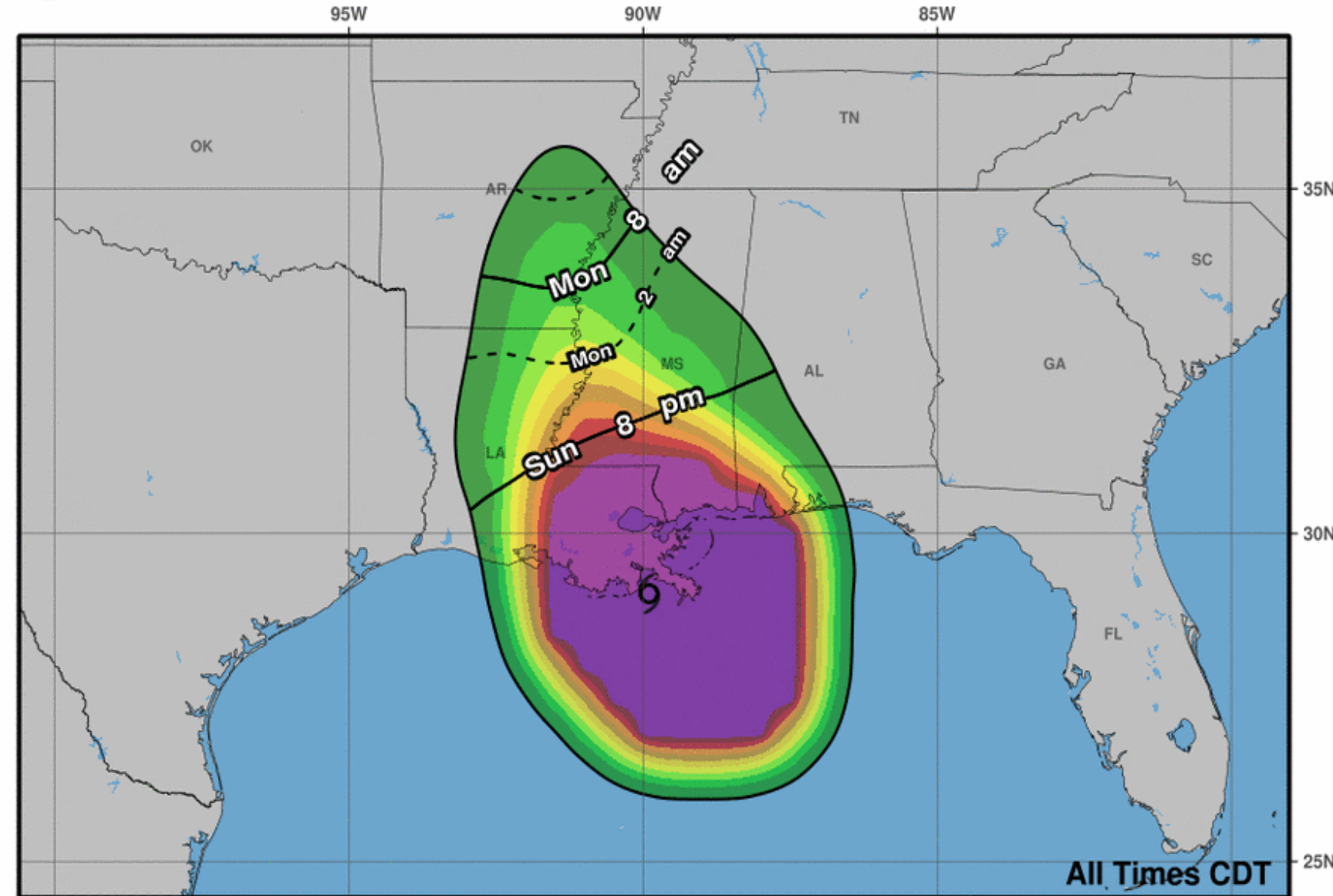
Hurricane Trop Stm

Projected Path: Tropical Storm Cristobal

- The center of Cristobal is making landfall over the mouth of the Mississippi River, about 150 miles west-southwest of Pensacola, Florida.
- Maximum sustained winds are at 50 mph.
- Cristobal is moving north at 7 mph, and this general motion will continue through landfall.
- Tropical Storm Warnings** are in effect for the western Panhandle.
- Flash Flood Watches** are in effect for the Panhandle and Big Bend.
- Coastal Flood Advisories** are in effect for the Gulf Coast.



Most Likely Arrival Time of Tropical-Storm-Force Winds



Tropical Storm Cristobal
Sun. Jun. 7, 2020 4 pm CDT
Advisory 25

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
5 10 20 30 40 50 60 70 80 90 100 %

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

Pensacola NAS: 6%
Milton: 4%

Tropical Storm Warning





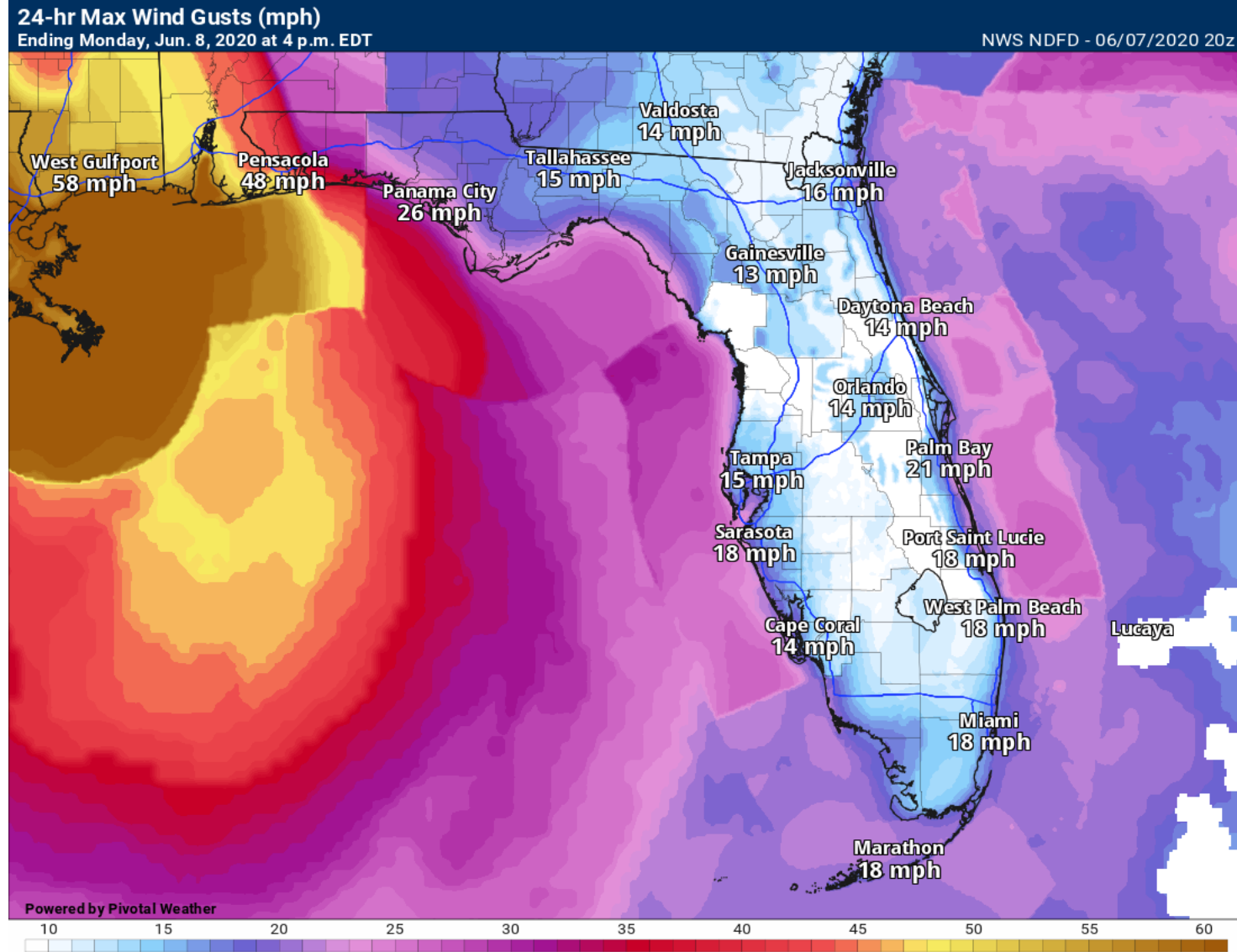
Wind Gusts

Next 24 Hours

Higher gusts are likely in any heavy thunderstorms statewide.

Winds have gusted to 45 mph in Pensacola so far this afternoon, and gusts to 50-55 mph can't be ruled out in any heavier rain bands this evening.

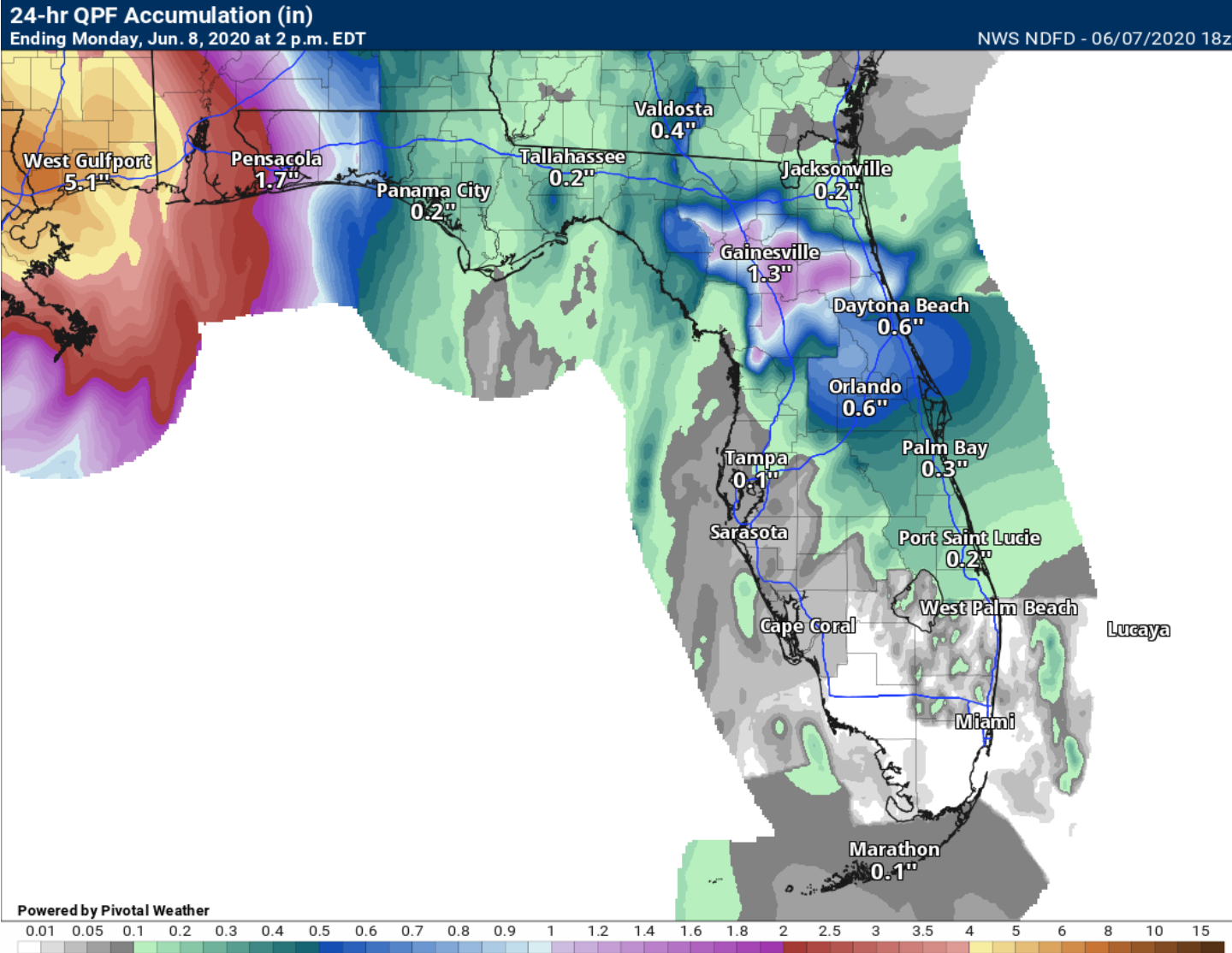
Tropical Storm Warnings are in effect for coastal Escambia, Santa Rosa, and Okaloosa County.





Rainfall Totals Next 24 Hours

Ending 2 PM ET Monday



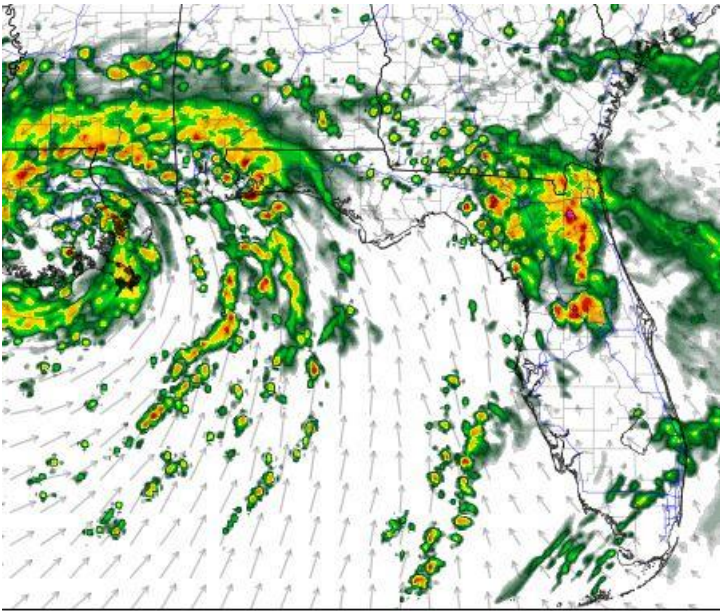
Through tonight, widespread rainfall totals of 1-3" are expected across interior Northeast Florida and the western Panhandle. **Locally higher totals of 4-6" are possible**, especially where heavier bands set up in the western Panhandle tonight and Monday morning, from Pensacola to Destin.

Several locations in the eastern Big Bend and interior Northeast Florida measured 6-12" of rain today!

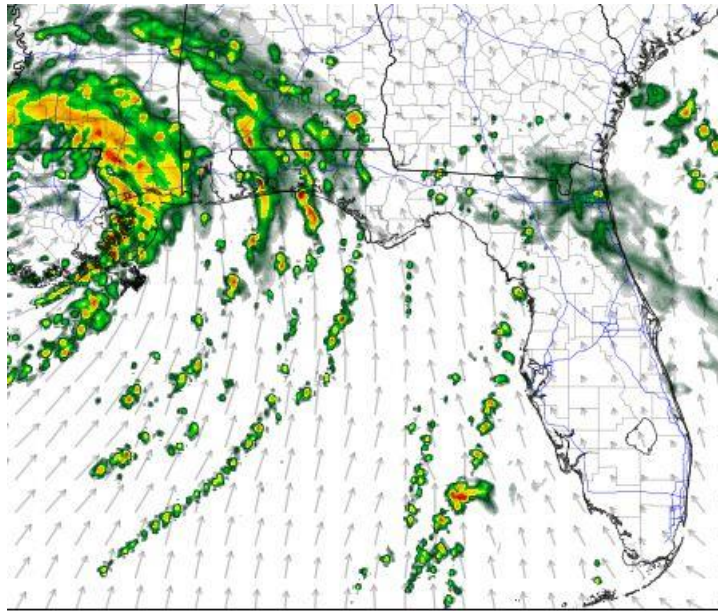


Model Forecast Radar

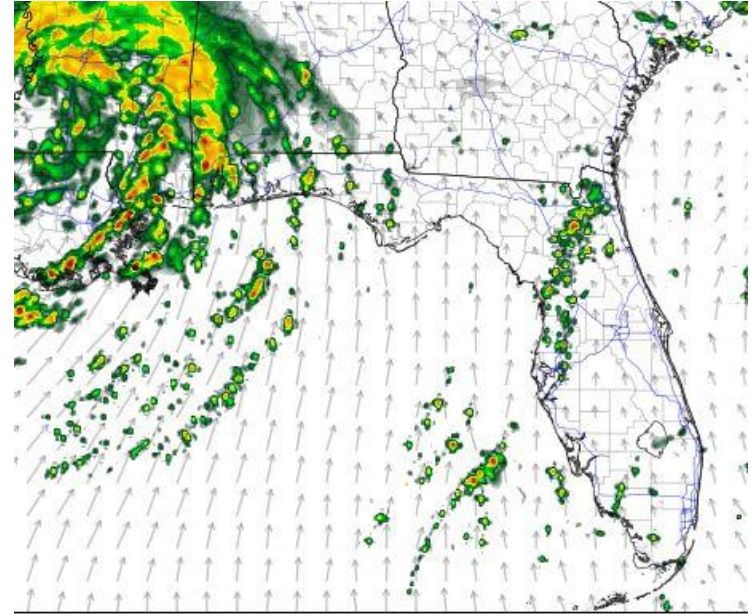
*****Only Model Guidance – Time & Position Will Vary*****



8 PM ET / 7 PM CT
Sunday



2 AM ET / 1 AM CT
Monday



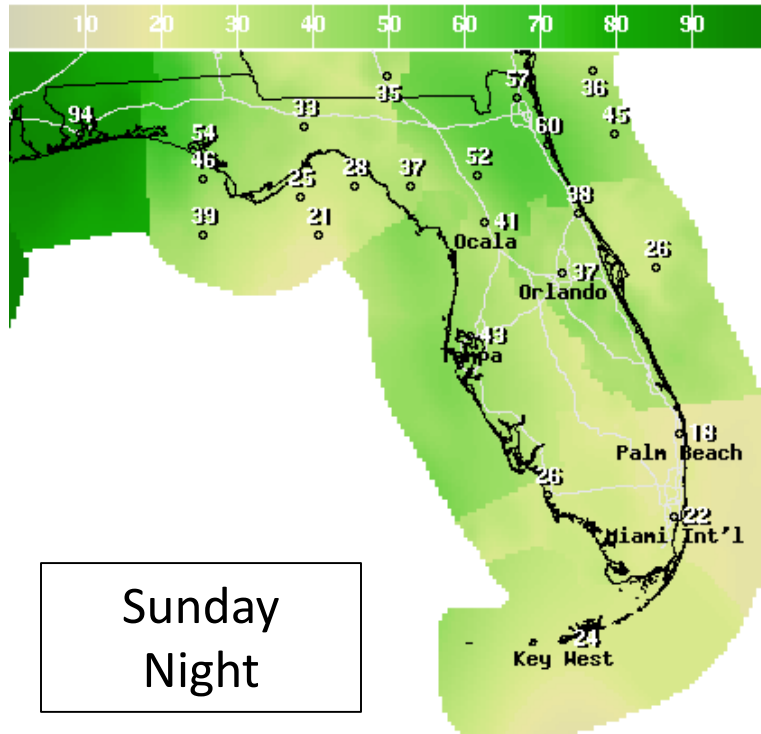
8 AM ET / 7 AM CT
Monday

Rainfall will continue in Northeast Florida through this evening, but begin to taper by midnight. Tonight, more focused rain banding may set up in in the western Panhandle. Isolated tornadoes and flash flooding will remain be possible there tonight.



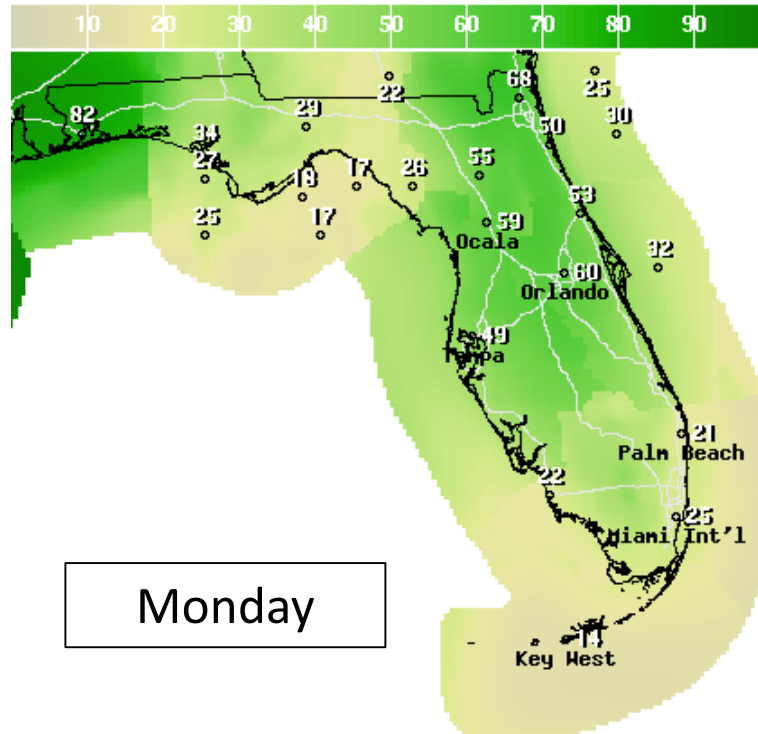
Sunday - Monday

Timing the Event – Cristobal Rainfall



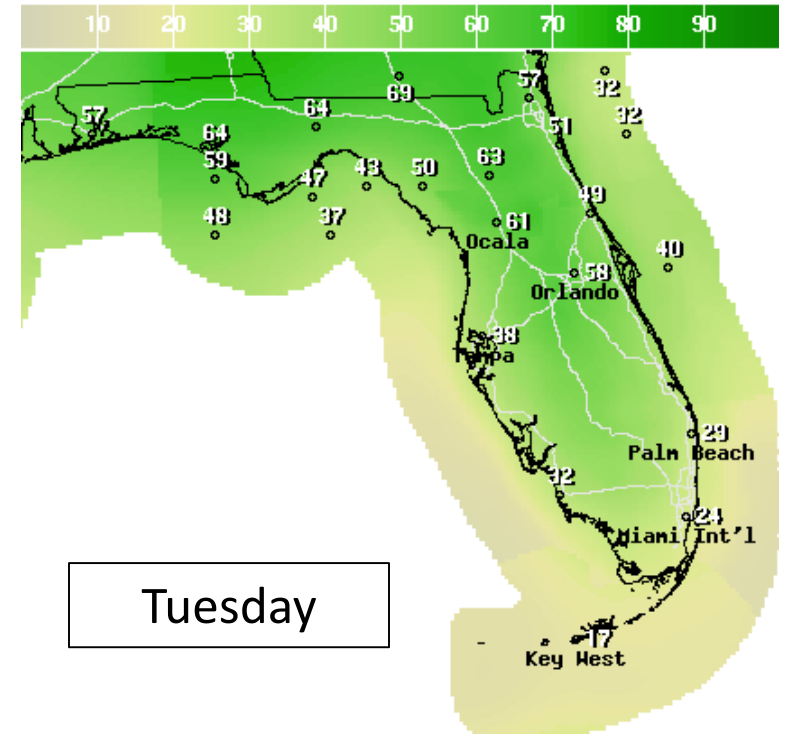
Sunday
Night

12Hr Prob.Precip(%) Ending Mon Jun 08 2020 8AM EDT
(Mon Jun 08 2020 12Z)
National Digital Forecast Database
20z issuance Graphic created-Jun 07 4:23PM EDT



Monday

12Hr Prob.Precip(%) Ending Mon Jun 08 2020 8PM EDT
(Tue Jun 09 2020 00Z)
National Digital Forecast Database
20z issuance Graphic created-Jun 07 4:23PM EDT



Tuesday

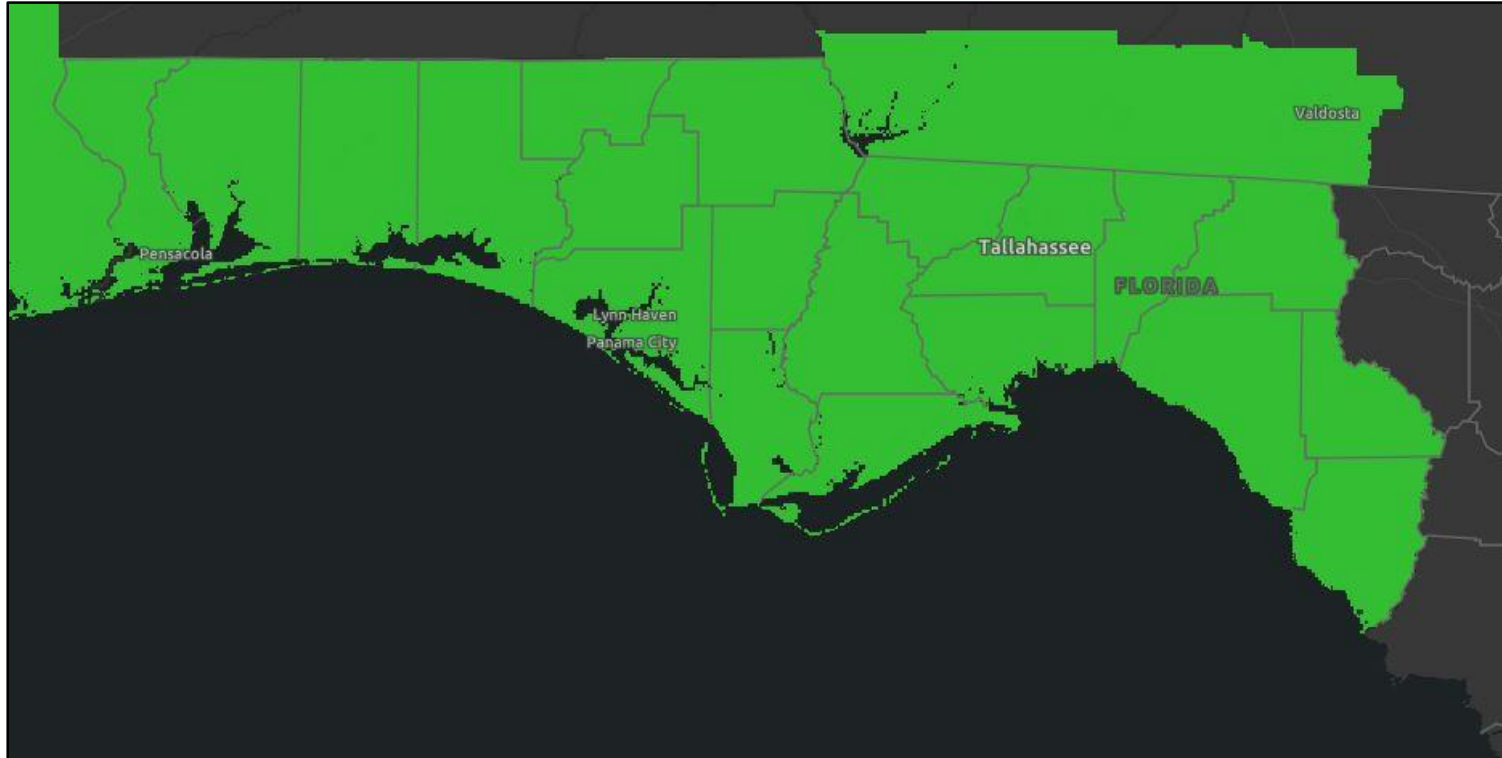
12Hr Prob.Precip(%) Ending Tue Jun 09 2020 8PM EDT
(Wed Jun 10 2020 00Z)
National Digital Forecast Database
20z issuance Graphic created-Jun 07 4:23PM EDT

Tonight, more focused rain banding may set up in the western Panhandle. Isolated tornadoes and flash flooding will remain possible there tonight and into the day on Monday. Across the rest of the state, typical afternoon thunderstorms develop statewide Monday/Tuesday.



Flash Flood Watches

Links: [NWS Mobile](#) | [NWS Tallahassee](#)



The Flash Flood Watch expires at 8 PM ET / 7 PM CT SUNDAY for the eastern Panhandle and Big Bend (NWS Tallahassee Area).

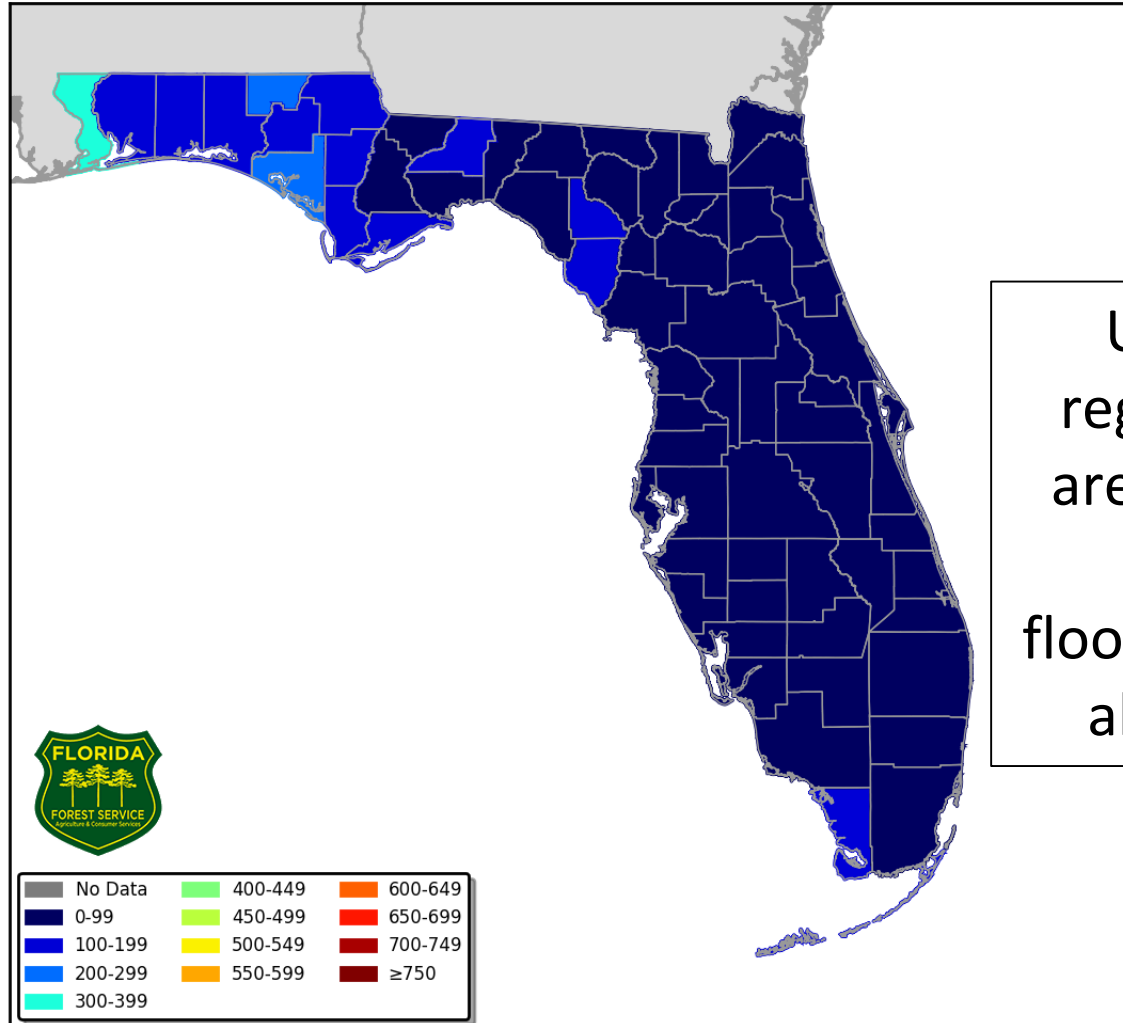
It expires at 7 PM CT MONDAY for the western Panhandle including Escambia, Santa Rosa, and Okaloosa County (NWS Mobile Area).



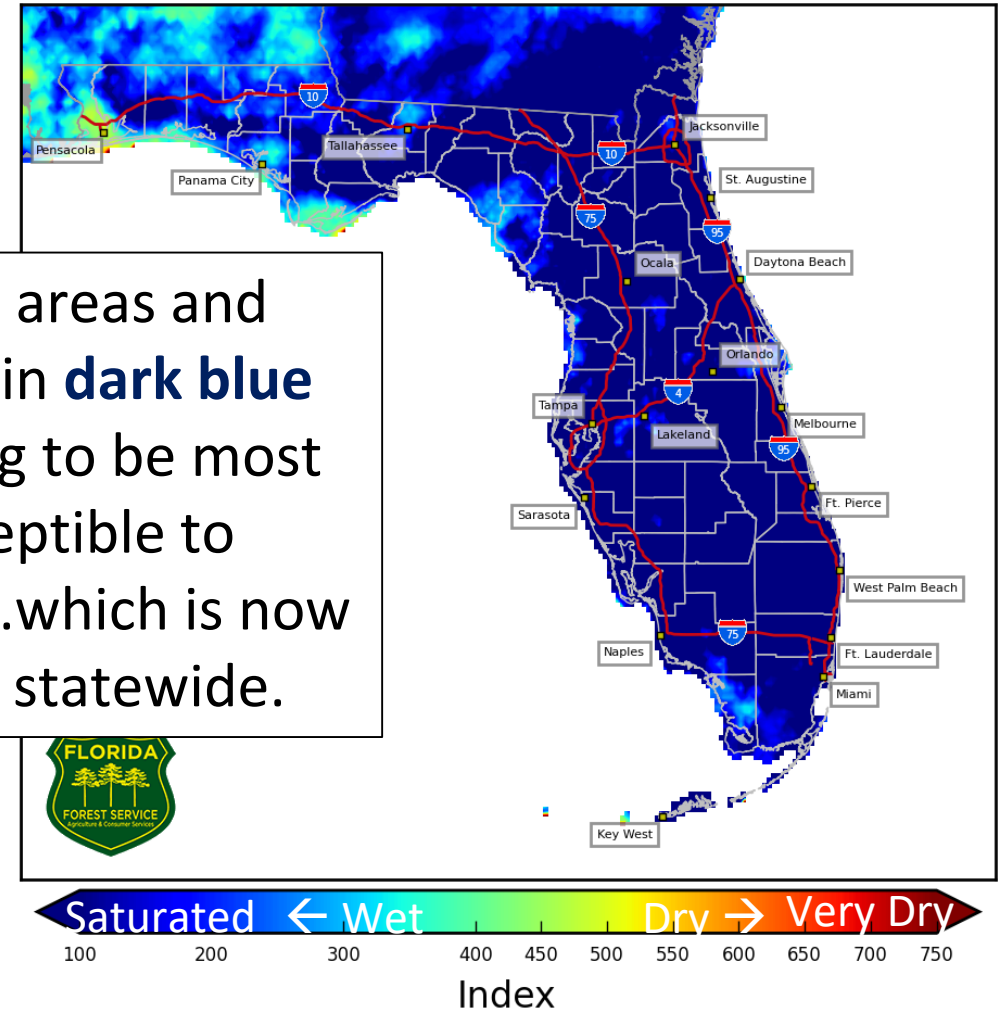
Drought Index – Soil Moisture

KBDI – Full Report from the Florida Forest Service

Keetch Byram Drought Index (KBDI)
County Averages for June 07, 2020



4 km Resolution KBDI
Statewide
June 07, 2020





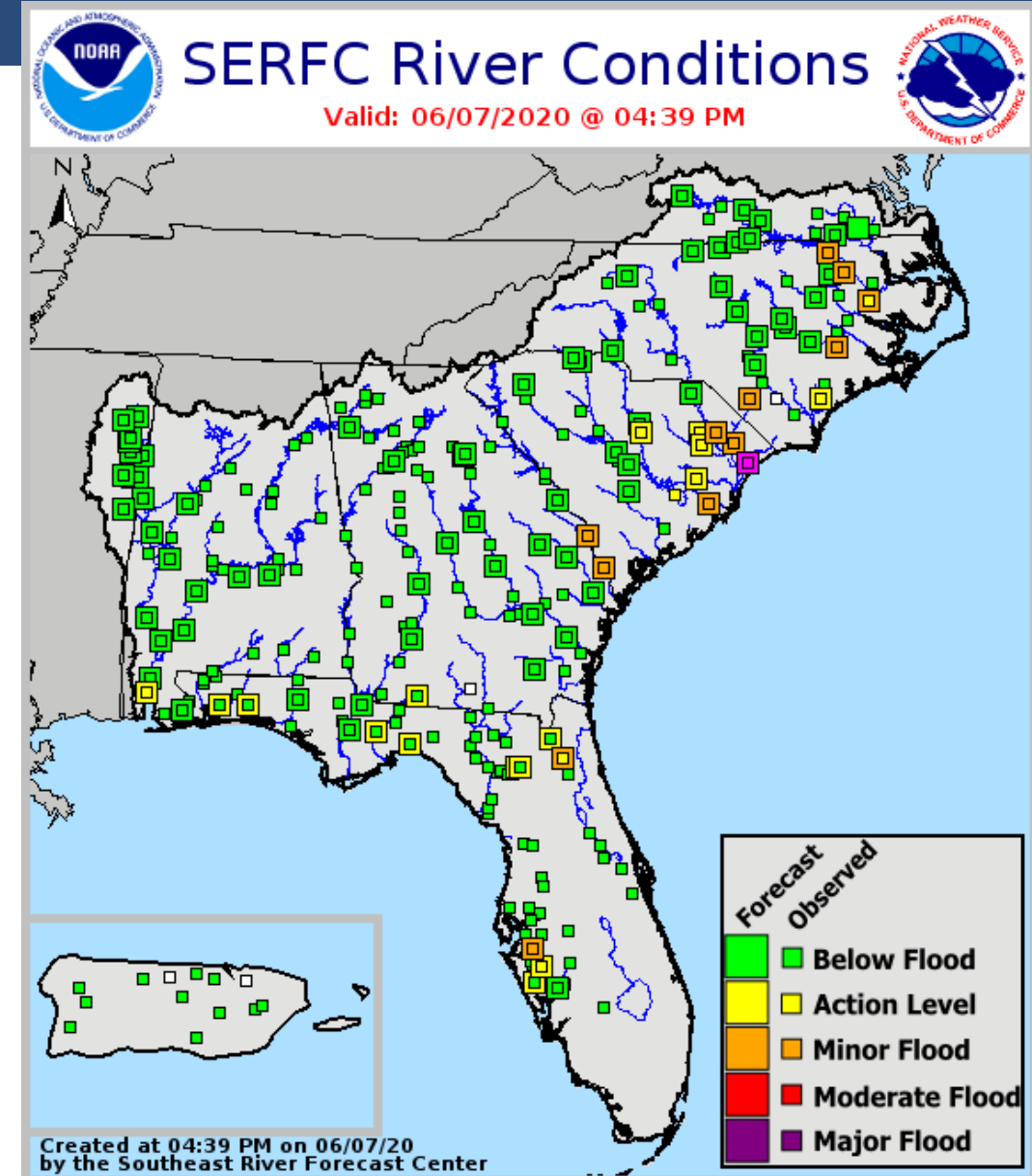
Possible River Flooding

The [Little Manatee River near Wimauma](#) is in minor flood stage. All other West Coast rivers have crested below flood stage.

The [North Fork of the Black Creek](#) in Clay County may crest into minor flood stage tonight and Monday morning.

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

More details on river levels available at the [Southeast River Forecast Center website](#).



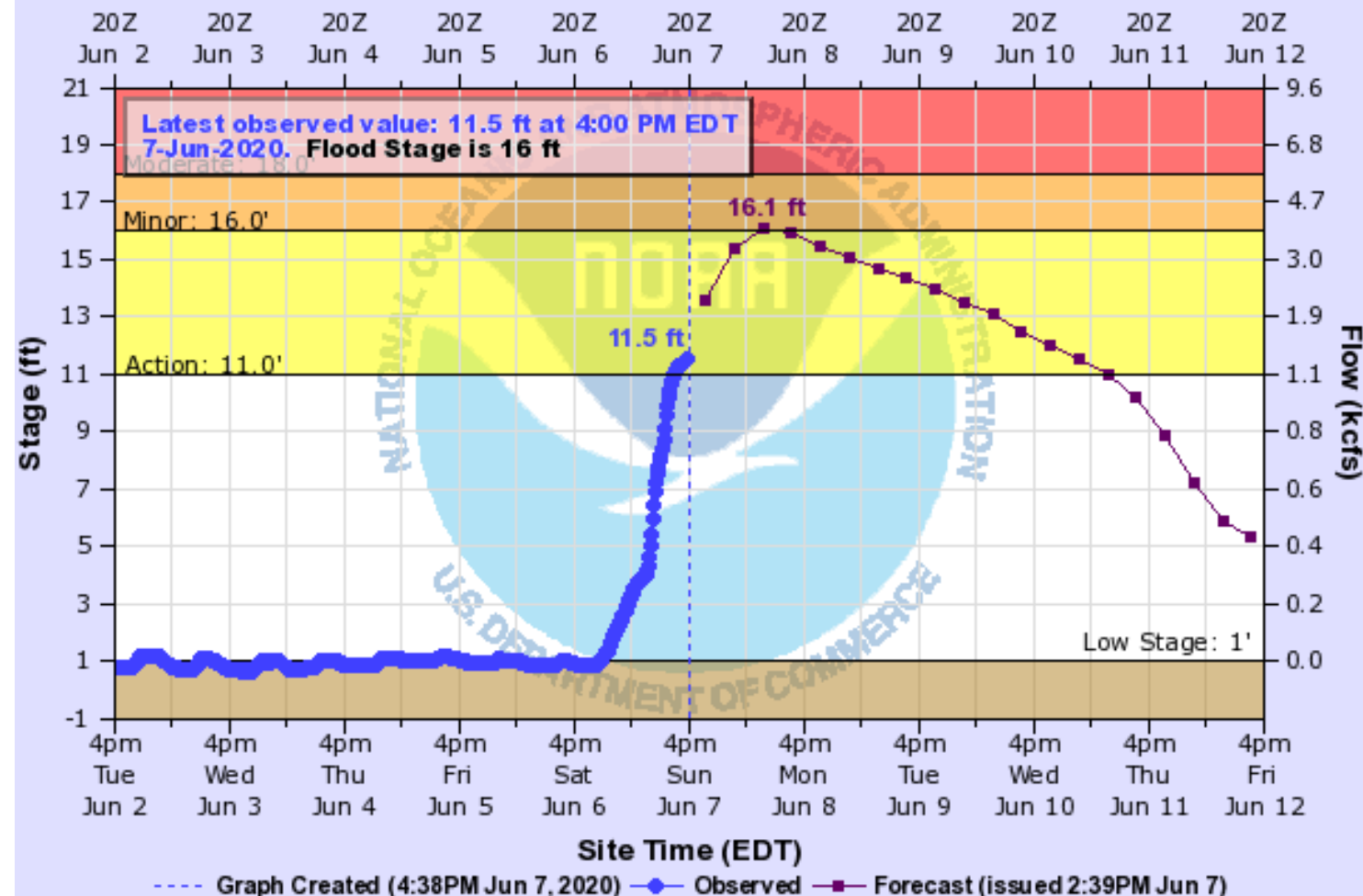


N. Fork Black Creek near Middleburg

[Hydrograph Link](#)

NORTH FORK BLACK CREEK NEAR MIDDLEBURG

Universal Time (UTC)



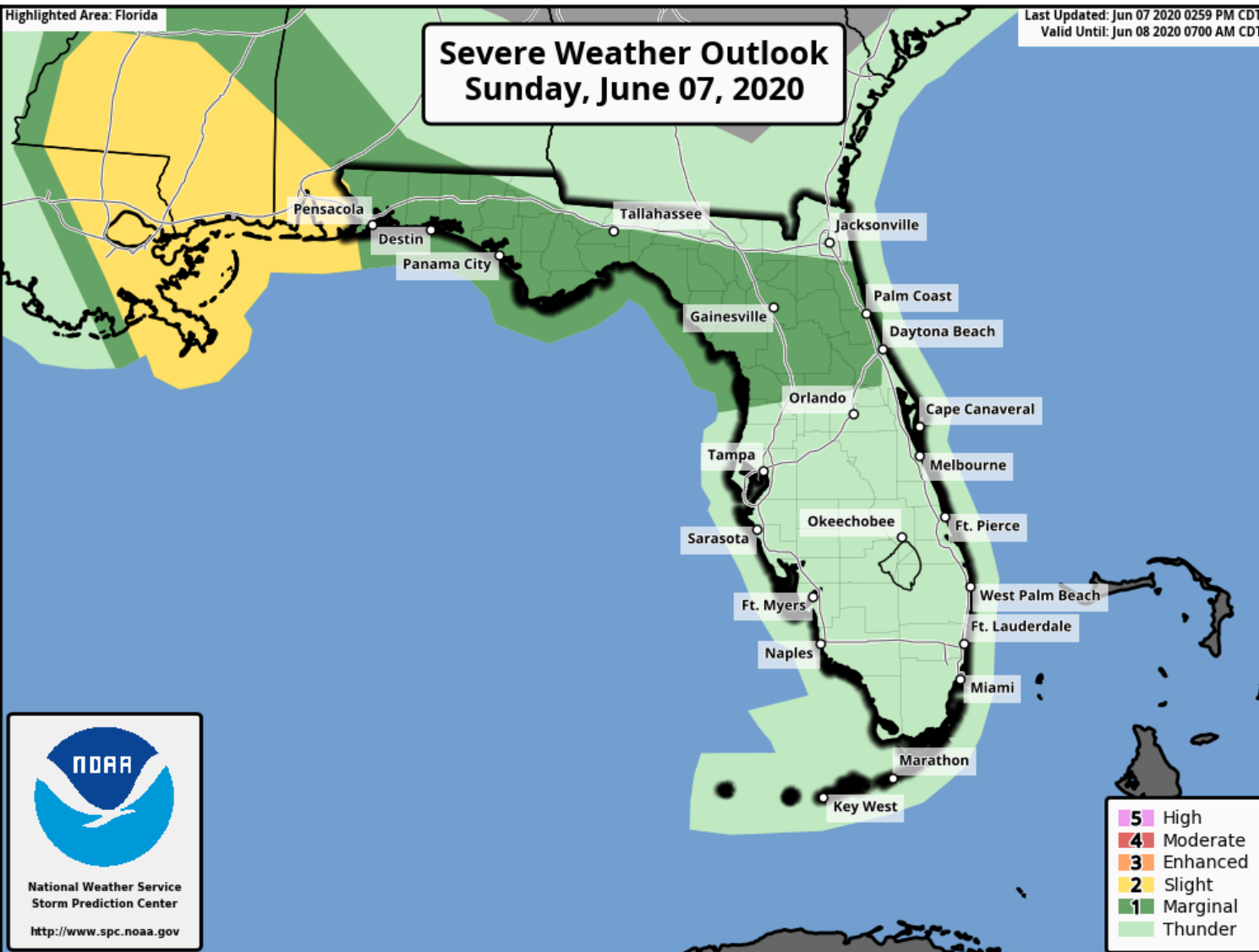
22 Significant flooding of homes occurs.

19 Water begins to move into homes.

16 Lazy Acre Road begins to flood.
Lowlands flood and boat docks are affected.



Tornado Risk



As the outer bands from Cristobal move along North Florida this evening, isolated tornadoes are possible. There is a **Marginal Risk** (level 1 of 5) of Severe Weather.







Tonight, the tornado threat will be confined to the western Panhandle.



Tornado Risk

Severe Weather Outlook Key

Understanding Severe Thunderstorm Risk Categories

THUNDERSTORMS (no label)	1 - MARGINAL (MRGL)	2 - SLIGHT (SLGT)	3 - ENHANCED (ENH)	4 - MODERATE (MDT)	5 - HIGH (HIGH)
No severe* thunderstorms expected	Isolated severe thunderstorms possible	Scattered severe storms possible	Numerous severe storms possible	Widespread severe storms likely	Widespread severe storms expected
Lightning/flooding threats exist with <u>all</u> thunderstorms	Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible	More persistent and/or widespread, a few intense	Long-lived, widespread and intense	Long-lived, very widespread and particularly intense
					

* NWS defines a severe thunderstorm as measured wind gusts to at least 58 mph, and/or hail to at least one inch in diameter, and/or a tornado. All thunderstorm categories imply lightning and the potential for flooding. Categories are also tied to the probability of a severe weather event within 25 miles of your location.



National Weather Service

www.spc.noaa.gov



Severe Thunderstorm Risk Categories

**Thunderstorms
(no label)** No severe* thunderstorms expected
Lightning/flooding threat exists with all thunderstorms
Winds to 40 mph and small hail possible



**1 Marginal Risk
(MRGL)** Isolated severe thunderstorms possible
Limited in duration and/or coverage and/or intensity
Wind to 40-60 mph, hail up to 1", and low tornado risk



**2 Slight Risk
(SLGT)** Scattered severe storms possible
Short-lived and/or not widespread, isolated
intense storms
One or two tornadoes
Reports of strong winds and wind damage
Hail -1", isolated 2"



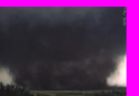
**3 Enhanced Risk
(ENH)** Numerous severe storms possible
More persistent and/or widespread, a few intense
A few tornadoes
Several wind damage reports
Damaging hail, 1"-2"



**4 Moderate Risk
(MDT)** Widespread severe storms likely
Long-lived, widespread and intense
Strong tornadoes
Widespread wind damage
Destructive hail, 2" or greater



**5 High Risk
(HIGH)** Widespread severe storms expected
Long-lived, very widespread and particularly intense
Tornado outbreak
Derecho



*NWS defines a severe thunderstorm as measured wind gusts to at least 58 mph, and/or hail to at least one inch in diameter, and/or a tornado. All thunderstorm categories imply lightning and the potential for flooding. Categories are also tied to the probability of a severe weather event within 25 miles of your location.



National Weather Service - www.weather.gov - www.spc.noaa.gov



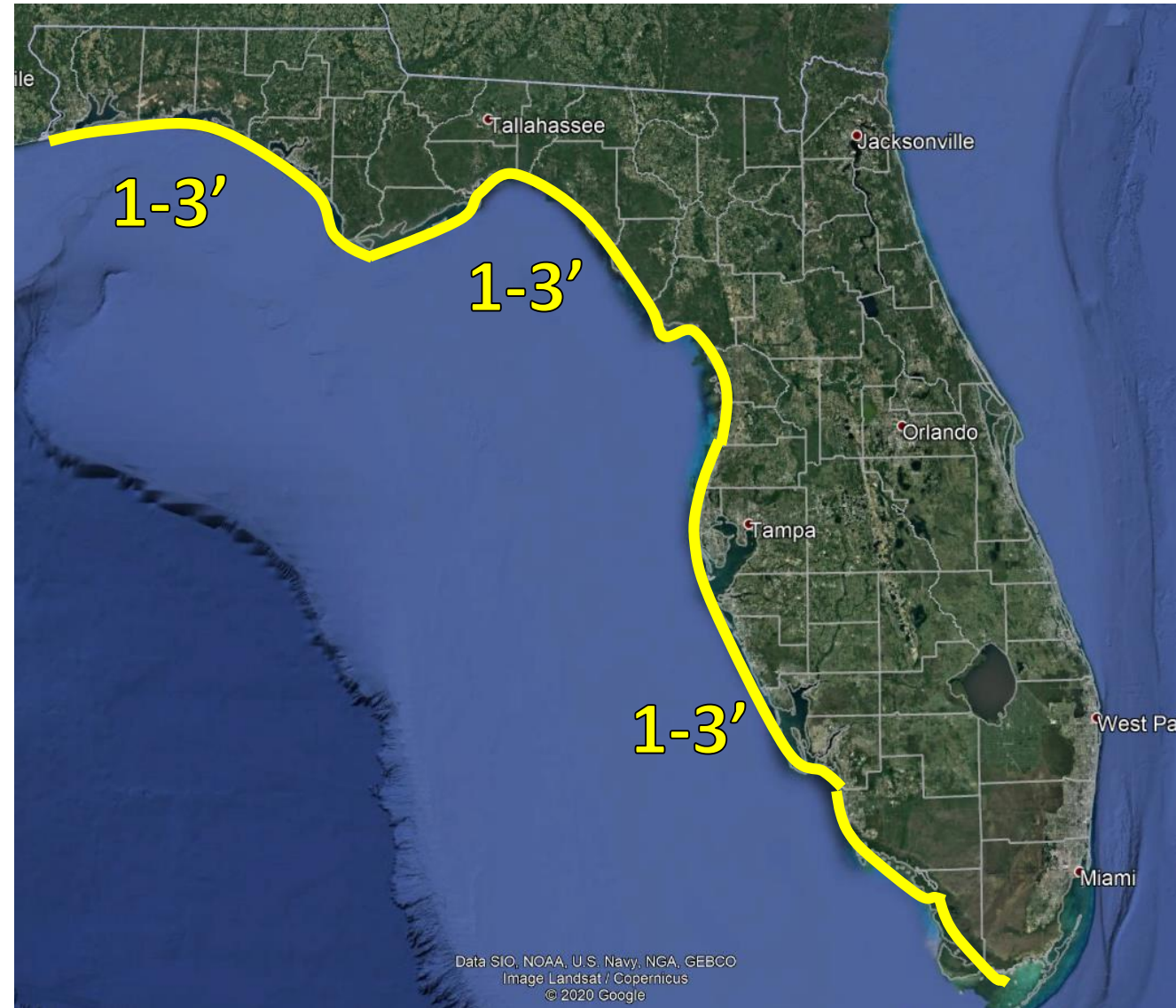
Storm Surge Flooding

This Weekend

Onshore winds associated with Cristobal will result in some minor coastal flooding along the Gulf Coast along with high surf. Tides are running 1-3' above normal along the entire Gulf Coast, and will continue into tonight.

Please see the numerous Coastal Flood Advisories and Coastal Flood Statements from the local NWS offices for details.

Includes Pensacola Bay and Tampa Bay

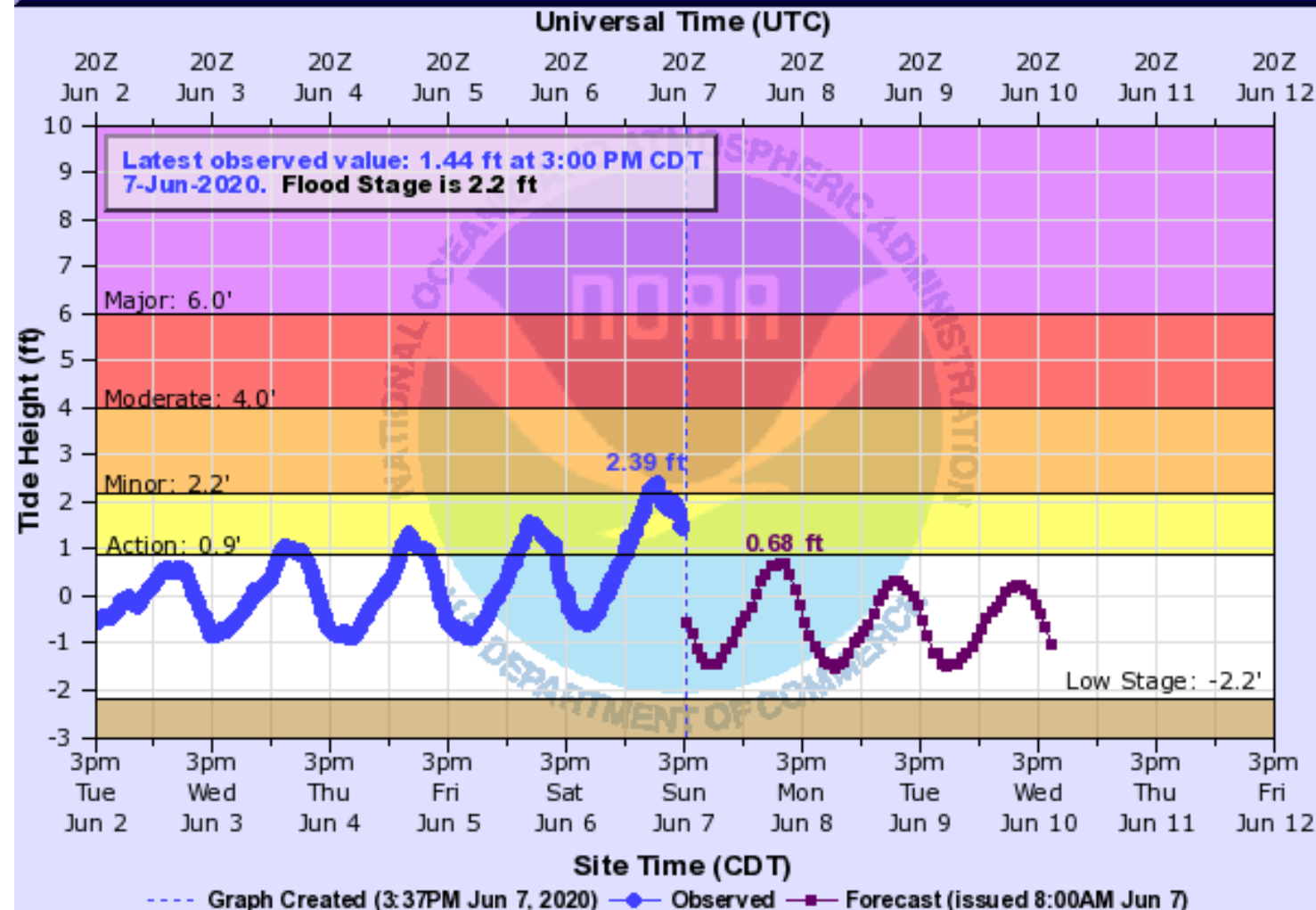




Gulf of Mexico at Panama City Beach

[Hydrograph Link](#)

GULF OF MEXICO TIDE GAUGE AT PANAMA CITY BEACH (IN MHHW)



3 Water begins to flood low lying areas in Camp Helen State Park and on south facing portions of Powell Lake in Bay County. Areas near beach access continue to flood. Erosion from wave action begins along the Bay County Beaches.

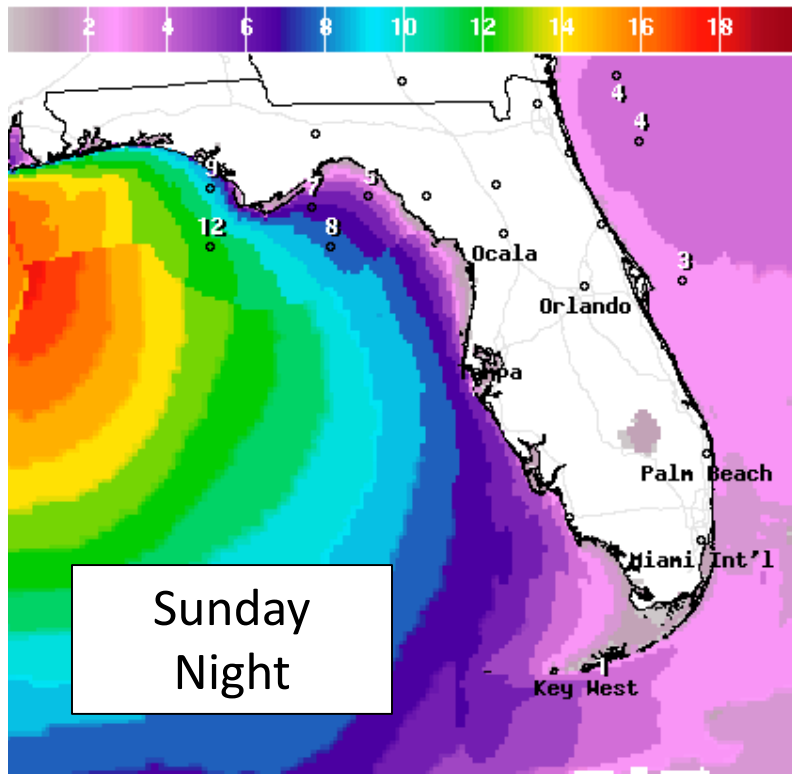
2.2 Where breaks in the dune line to beach access exist, water begins to flood access areas from Inlet Beach to St Andrews State Park in Panama City Beach.

1.7 Water reaches the dune line in several places along the Bay County Beaches.



Forecast Wave Heights

Early This Week



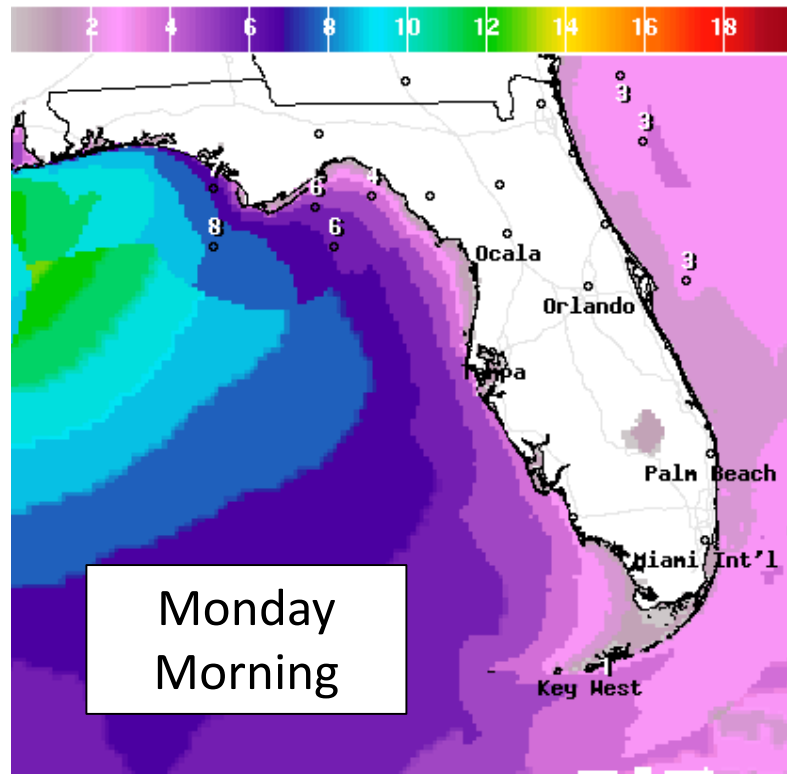
Sunday
Night

Wave Height(ft) Ending Sun Jun 07 2020 8PM EDT
(Mon Jun 08 2020 00Z)



National Digital Forecast Database

13z issuance Graphic created-Jun 07 9:28AM EDT



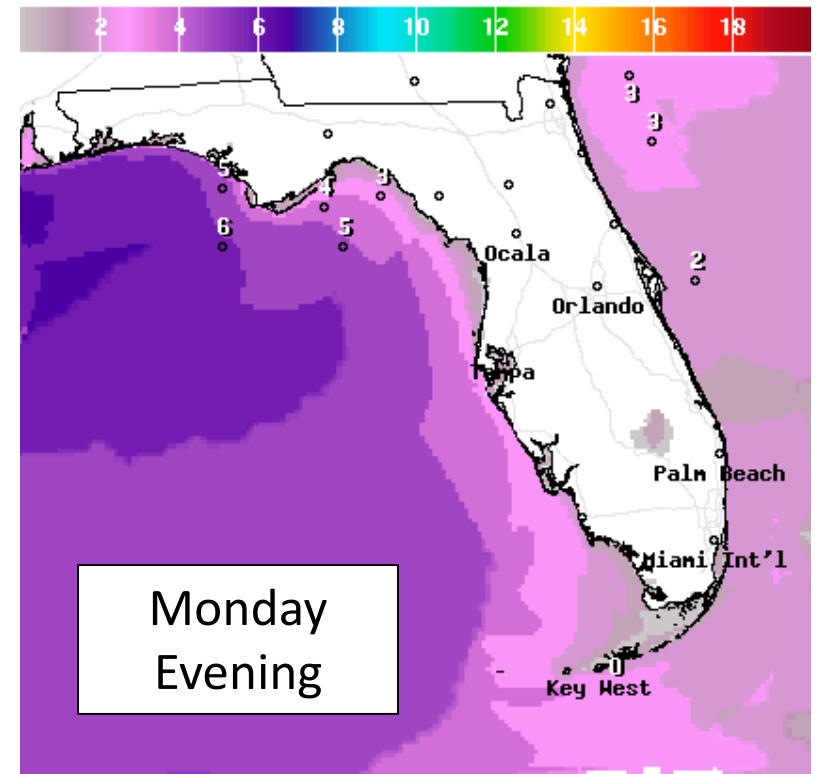
Monday
Morning

Wave Height(ft) Ending Mon Jun 08 2020 8AM EDT
(Mon Jun 08 2020 12Z)



National Digital Forecast Database

13z issuance Graphic created-Jun 07 9:28AM EDT



Monday
Evening

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



National Digital Forecast Database

13z issuance Graphic created-Jun 07 9:29AM EDT



High surf of 8-11 feet is expected at western Panhandle Beaches with 4-8 feet along the rest of the Gulf Coast. This will result in dangerous rip currents along all Gulf beaches. Minor beach erosion is also likely with a few spots of more significant erosion possible in the western Panhandle.



Tropical Weather Outlook

Development Areas Next 5 Days

Bermuda Low: A non-tropical area of low pressure is expected to form a few hundred miles east or northeast of Bermuda within a couple of days. This system could then acquire some subtropical characteristics by mid-to-late week while the low meanders over the western Atlantic. This system is not expected to pose a direct threat to the United States.

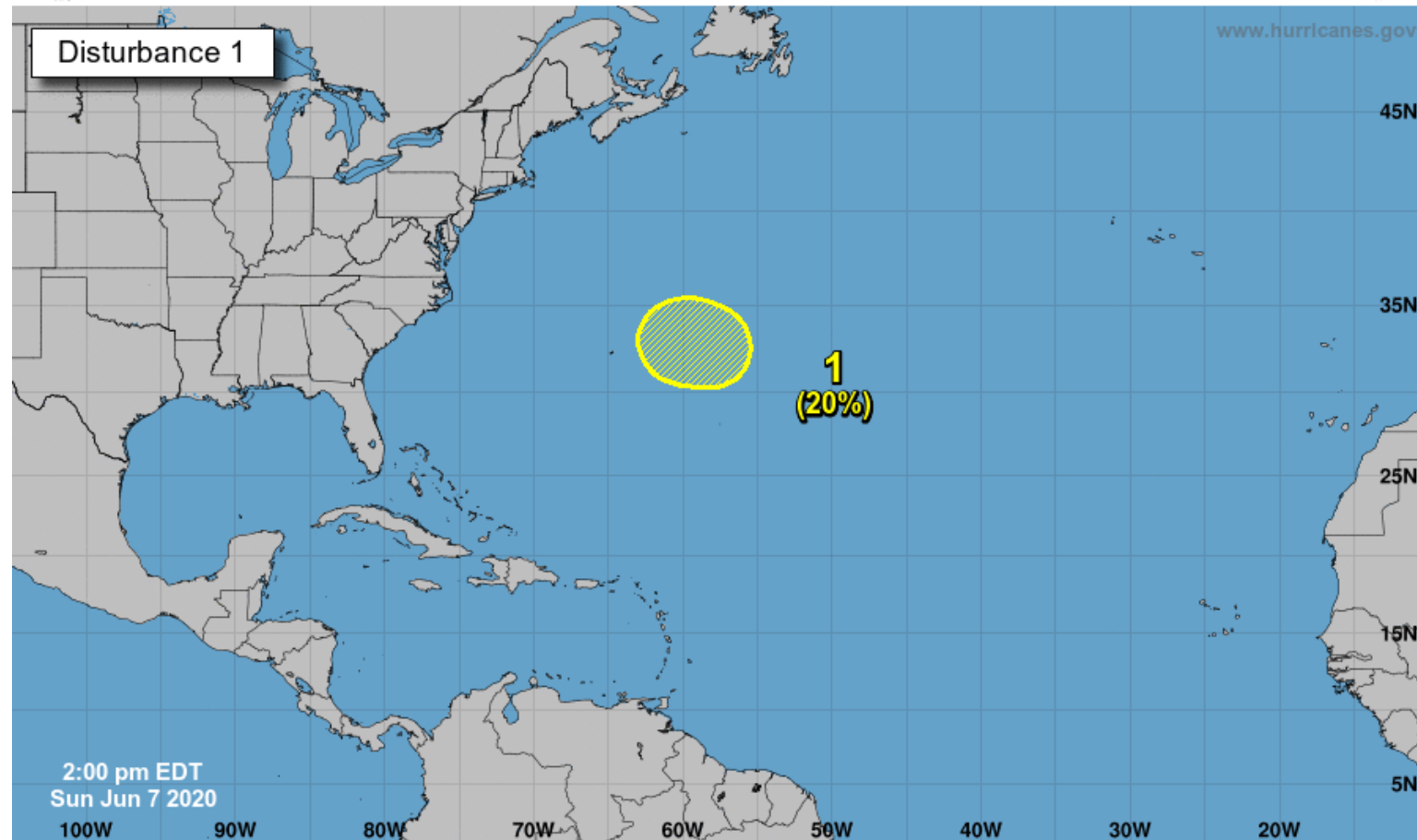
*Formation chance through 48 hours...low...near 0 percent.

*Formation chance through 5 days...low...20 percent.



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

Summary

Tropical Storm Cristobal

- As of 5 PM ET, the center of Cristobal was located near the mouth of the Mississippi River in Louisiana, or about 150 miles west-southwest of Pensacola, Florida.
- Cristobal is making landfall in southeastern Louisiana as it moves to the north at 7 mph. The system remains asymmetrical with much of the heavy rainfall to the east of the center.
- Maximum sustained winds are near 50 mph. No change in strength is expected before gradual weakening begins tomorrow.

Bermuda Low

- An area of low pressure is expected to develop along a cold front a few hundred miles east or northeast of Bermuda by the middle of next week.
- Some development of this system is possible while it meanders near Bermuda for the next several days.
- This system is not expected to pose a direct threat to the United States at this time.
- The odds of development over the next 48 hours is near 0%, but 20% (low chance) over the next 5 days.

Florida Outlook:

- A **Tropical Storm Warning** is in effect from the AL/FL border (Escambia County) to the Okaloosa/Walton County Line. While sustained tropical storm force winds are not expected elsewhere, gust up to 50 mph are possible in heavier showers/thunderstorms.
 - **Tropical Storm Warning:** Escambia, Santa Rosa, and Okaloosa Counties
- Tides are running 1-3' above normal along the Gulf Coast. Coastal Flood Advisories/Statements are in effect through tonight for the entire Gulf Coast.
- A **Flash Flood Watch** is in effect for the Panhandle and Big Bend.
 - **Flash Flood Watch:** Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Washington, Holmes, Calhoun, Jackson, Franklin, Calhoun, Gadsden, Leon, Wakulla, Jefferson, Taylor, Dixie, Lafayette, and Madison.
- Rain bands and training thunderstorms will result in locally heavy rainfall in Northeast Florida this evening and the western Panhandle tonight. Some locations have seen 8-12" of rain today and an addition 2-4" is possible as a reasonable worst case scenario.
- Minor river flooding is ongoing along the Little Manatee River and forecast for the North Fork of the Black Creek. Additional rivers are likely to see rises as well, but are forecast to remain below flood stage at this time.
- Isolated tornadoes will be possible in some of the outer bands, and the Storm Prediction Center has outlined North Florida in a Marginal Risk for severe weather (level 1 of 5) today, with the threat shifting to the western Panhandle tonight.
- Dangerous rip currents and beach erosion are expected at Gulf Coast beaches. Breaking waves of 8-11' are forecast in the western Panhandle and 4-8' across the rest of the Gulf Coast.

The next briefing packet will be sent out Monday 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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