

# TROPICAL UPDATE 8:00 AM EDT Friday, June 3, 2022

Potential Tropical Cyclone One

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 <u>www.hurricanes.gov</u>.



# Potential Tropical Cyclone One

8 AM EDT Friday: Florida Threats & Changes Since Last Packet



**Overview/Recent Changes:** Hurricane Hunters have found that PTC #1 is now producing tropical storm-force winds, with maximum sustained winds of 40 mph. Forecasts indicate that PTC #1 will become Tropical Storm Alex later today before moving across the southern Florida Peninsula on Saturday. Heavy rainfall leading to flash flooding continues to be the main concern, but gusty winds and isolated tornadoes are also possible. Minor coastal flooding and a high rip current risk is possible across Peninsula beaches. **Tropical Storm Warnings** are in effect along Peninsula coastlines and the Florida Keys.



GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 10:45Z Jun 03, 2022 24°N

PTC #1 remains broad and disorganized with most of the thunderstorm activity displaced on the eastern side due to wind shear. A developing center if the system is located near the northeastern tip of the Yucatan Peninsula, and is expected to become more organized and well-defined today.





### **Tropical Storm Warnings**

#### Potential Tropical Cyclone One



- Along the Florida West Coast from Longboat Key (Sarasota/Manatee border) southward through the entire Florida Keys.
- Along the Florida East Coast south of the Brevard/Volusia County line.
- Inland Tropical Storm Watches are also in effect for much of Central & South Florida.

## Steering Currents

What is Moving the System?

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



SLP RANGE: 940-949 HPA) 0600

M HPA LAYER (FOR

The system will move to the northeast around areas of high pressure and ahead of an approaching cold front, **bringing it across the southern Peninsula.** 

FDEM



### 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.



0900 UTC

03JUN22

UW-CIMSS

Wind shear will be high across the Gulf of Mexico over the next couple of days (as denoted by the red colors) which will **prevent significant** development of this system.



### Rainfall Totals Next 24 Hours

#### Ending 8 AM ET Saturday

24-Hour Precipitation (in) Ending Saturday, Jun. 4, 2022 at 8 a.m. EDT



- Will continue to spread across South Florida today and continue through Saturday.
- Through tonight, a widespread 3-6" of rain is forecast across South Florida and, with higher isolated totals possible. 1-3" is possible across southern Central Florida and the Treasure Coast.



### Rainfall Totals Next 5 Days

#### Ending 8 AM ET Wednesday

120-Hour Precipitation (in) Ending Wednesday, Jun. 8, 2022 at 8 a.m. EDT Init: Fri 2022-06-03 12z WPC Tallahassee East Pensacola Heights Jacksonville 0.2" MAD. Panama City Gainesville 0.3" Daytona Beach 1 0" Orlando 2.2" Palm Bay Tampa Sarasota Port Saint Lucie 2.6" West Palm Beach Lucaya 7.7" Miami pivotalweathe 0.01 0.05 0.1 0.2 0.3 0.5 0.4 0.6

• A widespread 4-8" is currently being forecast for this weekend through Sunday, with localized areas of 12+".

 Heavy rainfall totals could spread northward into
Central Florida depending on the track and
organization of the system!!

# Flash Flood Outlooks

From the Weather Prediction Center (LINK)





### Flood Watch

#### From the National Weather Service



Flood Watch in effect until Saturday Night or Sunday Morning

Excessive runoff may result in flooding of rivers, creeks, streams, and other lowlying and flood-prone locations. Creeks and streams may rise out of their banks. Flooding may occur in poor drainage and urban areas.



Winds will begin increasing Friday into Saturday as PTC One approaches South Florida. Tropical storm-force wind gusts will be possible (50-60 mph) over the Florida Keys and the southern Peninsula Friday night or Saturday morning. Locally higher wind gusts cannot be ruled out within embedded tropical thunderstorms.

### Time of Arrival of Winds

#### From the National Hurricane Center (NHC)

FDE



### Severe Weather Outlooks

From the Storm Prediction Center (SPC)





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	THUNDERSTORMS	1 - MARGINAL	2 - SLIGHT	3 - ENHANCED	4 - MODERATE	5 - HIGH
	(no label)	(MRGL)	(SLGT)	(ENH)	(MDT)	(HIGH)
	No severe*	Isolated severe	Scattered	Numerous	Widespread	Widespread
	thunderstorms	thunderstorms	severe storms	severe storms	severe storms	severe storms
	expected	possible	possible	possible	likely	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



As PTC One approaches the southern Peninsula today, isolated tornadoes cannot be ruled out along the Florida Keys Friday night, and over South Florida Saturday. The **Marginal Risk (level 1 of 5)** has been expanded into additional portions of Central & South Florida.

# Storm Surge Potential

#### From the National Hurricane Center (NHC)



- The combination of storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground somewhere in the indicated areas if the peak surge occurs at the time of high tide:
  - Marco Island, FL to Card Sound Bridge...1-3 ft
  - Middle of Longboat Key, FL to Marco Island, Florida...1-2 ft
  - Charlotte Harbor...1-2 ft
  - Florida Keys and Dry Tortugas...1-2 ft
- Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.



#### Key Messages for Potential Tropical Cyclone One Advisory 3: 4:00 AM CDT Fri Jun 03, 2022

1. Heavy rain associated with the system is expected across western Cuba, where life-threatening flash flooding and mudslides are possible.

2. Heavy rain will affect portions of Central Florida, South Florida, and the Florida Keys today and continue through Saturday. Considerable flash and urban flooding is possible across South Florida and in the Keys. Flash and urban flooding is also possible across the northwestern Bahamas.

3. Tropical storm conditions are expected in the warning area in western Cuba today and tonight, in Florida tonight and on Saturday, and in the northwestern Bahamas on Saturday. Tropical storm conditions are also possible in the watch area in western Cuba today and tonight.







### **Overall Summary**

#### **Potential Tropical Cyclone One:**

- At 5:00 AM EDT, Potential Tropical Cyclone #1 (PTC #1) was located approximately 420 miles southwest of Fort Myers, Florida.
- The system is moving toward the northeast near 6 mph, and this motion is expected to continue. An increase in forward speed is expected to begin later today and continue this weekend. On the forecast track, PTC#1 is forecast to move across the southeastern Gulf of Mexico through tonight, across the central and southern Peninsula Saturday, and then into the southwestern Atlantic Sunday.
- Maximum sustained winds are near 40 mph, with higher gusts. PTC #1 is expected to develop a well-defined center and become Tropical Storm Alex later today.
- Some slight strengthening is possible as it approaches the Florida coastline, however significant intensification is not anticipated.
- A Tropical Storm Warning has been issued from Longboat Key (Sarasota/Manatee border) southward along the Florida West Coast, the entire Florida Keys, and along the Florida East Coast south of the Brevard/Volusia County line. Inland Tropical Storm Watches are also in effect for much of Central & South Florida.

#### Florida Outlook:

- Scattered showers and thunderstorms ahead of PTC#1 will continue to affect South Florida through the morning.
- By this evening, more intense bands of showers and storms could move onshore and will continue to affect portions of South Florida (mainly south of Lake Okeechobee) overnight through Saturday afternoon.
- By Saturday morning, widespread rain could begin to affect Central Florida areas near and north of Lake Okeechobee and should continue through Saturday evening.
- Although Tropical Storm Warnings are in effect and wind gusts could reach 50-60 mph, heavy rainfall will be the main threat.
- A widespread 4-8" of rain is forecast for South Florida and the Florida Keys Friday and Saturday with locally higher amounts up to 12" possible.
- A Flood Watch is in effect for much of Central and South Florida. Recent above normal rainfall across South Florida may lead to a quicker onset of flash flooding.
- Isolated waterspouts/tornadoes are also possible across South Florida tonight, reaching the I-4 corridor Saturday morning.
- Minor coastal flooding around high tide is possible along the Florida Keys and Southwest Florida.
- The next briefing packet will be provided <u>this afternoon</u>. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>.



### TROPICAL UPDATE



### Created by:

Caitlyn Gillespie, Assistant State Meteorologist <u>Caitlyn.Gillespie@em.myflorida.com</u> State Meteorological Support Unit Florida Division of Emergency Management

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