

...Active Weather Pattern Will Continue Through the Forecast Period...Squall Line Brings Multi-Hazard Severe Weather Event to Northeast & Central Florida Through Today...Additional Severe Weather Threat Possible Later This Week & Weekend...





### Tuesday:

A well-organized squall line containing strong to severe thunderstorms will continue to advance eastward across North Florida, reaching the West-Central Florida coastline early this afternoon. There is an **Enhanced Risk for Severe Weather (level 3 of 5)** residing over the Suwannee River Valley, Nature Coast, and Northeast Florida as the squall line will be capable of producing widespread damaging straight-line wind gusts in excess of 70 mph, but tornadoes still remain possible along the leading edge especially over North Florida. An isolated stronger tornado cannot be ruled out. This line will progress southeast of the I-4 corridor during the later afternoon and evening hours, with a **Slight Risk for Severe Thunderstorms (level 2 of 5)** extending to near Lake Okeechobee posing the risk for damaging wind gusts and isolated tornadoes. It will then become increasingly disorganized over the southern Florida Peninsula this evening and overnight; however, an isolated strong to severe thunderstorm will be possible through South Florida (**Marginal Risk – level 1 of 5**). Rain chances will remain elevated between 55-75% chance of rain; however, drier and cooler air will filter in the wake of the strong frontal boundary. A **Tornado Watch** remains in effect for the Suwannee River Valley and Northeast Florida coastline through 1800 EST this evening, with a new **Tornado Watch** issued through



temperatures in the upper 60s.

## Wednesday & Thursday:

the central Florida Peninsula until 2100 EST tonight. Outside of thunderstorms, strong winds will accompany this weather system – both ahead and behind the line of strong to severe thunderstorms. Wind gusts of 40-50 mph can generally be expected as **Wind Advisories** remain in effect nearly statewide through the late evening to Wednesday morning hours.

High temperatures will reach into the upper 60s to low 70s across the Panhandle and Big Bend, middle to upper 70s and low 80s from Northeast Florida and throughout the Peninsula. Low temperatures overnight will fall into the middle to upper 30s across and low 40s across North Florida, middle to upper 40s and low 50s throughout Central Florida towards Lake Okeechobee and upper 50s to middle 60s across South Florida. The Florida anticipate low Keys can

A brief break in between the passing system on Tuesday and the next system approach later in the week can be expected on Wednesday and Thursday. A weak area of high pressure will develop and push eastward towards the Florida Peninsula before settling in place through Thursday. Mostly dry conditions can be expected on Wednesday with the help of drier and cooler conditions in the wake of the passing cold front (near 0-5% chance of rain). While mostly dry conditions can be expected on Thursday, isolated showers will return across the Peninsula later in the day as the previous frontal boundary lingers south of the Peninsula (25-35% chance of rain). The lingering frontal boundary south of the Peninsula and along a portion of the Keys will help to push moisture northward into the Peninsula and bring isolated to scattered showers moving from south to north. Portions of the Peninsula could see an isolated thunderstorm or two later in the evening and overnight hours, but severe weather conditions are not expected. Regardless of rain chances, rain, partly to mostly cloudy conditions can be expected





statewide. With light southerly to southwesterly winds along the Gulf Coast, **areas of patchy fog and low clouds** may develop during the overnight hours on Wednesday and into early Thursday morning.

High temperatures in the middle to upper 50s and low 60s can be expected across North Florida, middle to upper 60s across Central Florida and low 70s across South Florida and the Keys on Wednesday. By Thursday, temperatures will warm up into the middle to upper 60s across North Florida and southward towards the I-4 corridor and low to middle 70s south of the I-4 corridor and through South Florida. Low temperatures overnight Wednesday will fall into the upper 30s to low 40s across North Florida and into the northern Peninsula, upper 40s to low 50s across Central Florida, upper 50s to middle 60s across South Florida. Low temperatures overnight Thursday will warm up into the upper 50s to middle 60s across North Florida and Central Florida and upper 60s to middle 70s across South Florida and the Keys.

### Friday & Saturday:

The next weather system arrives on Friday as another strong area of low pressure develops over the Central Plains and moves across the southern U.S early Friday morning. The system's warm front will move northward from the Gulf of Mexico as the low pressure system shifts eastward, bringing moisture across the I-10 corridor allowing for widespread showers and scattered thunderstorms (70-95% chance of rain). Atmospheric conditions will be favorable for an additional round of severe weather across North Florida on Friday, and the Storm Prediction Center (SPC) is currently outlooking a **15% chance for severe thunderstorms** (which is equivalent to a **Slight Risk – level 2 of 5**). As this system continues to push eastward and up the U.S. East Coast, a strong cold front will move along the I-10 corridor during the afternoon and evening and then throughout the Peninsula during the overnight hours. **Isolated strong to severe thunderstorms** will be likely along portions of the northern Peninsula and towards the I-4 corridor. Like the previous system, the quick-moving nature of this system will lead to all hazards of severe weather possible including damaging wind gusts (45-60 mph), isolated tornadoes,

hail and heavy downpours. <u>Computer</u> <u>models are in decent agreement with</u> <u>this system, but trends and timing will</u> <u>continue to be monitored throughout the</u> <u>week</u>. The strong cold front will bring another round of much cooler and drier air behind it as it moves offshore on Saturday. Mostly dry conditions can be expected mostly statewide, with isolated showers possible along the southern Peninsula (25-35% chance of rain). Wind gusts of 20-25 mph will be possible across the Panhandle and North Florida Saturday morning and into the afternoon behind the strong cold front.

High temperatures on Friday will be in the middle to upper 70s and low 80s across the state as the warm front pushes northward. Behind the cold front,



high temperatures will fall into the low to middle 50s across North Florida, middle 50s to middle 60s across Central Florida and middle 70s to low 80s across South Florida. Overnight Friday low temperatures will fall into the **30s** and low 40s across North Florida, upper 40s to upper 50s across Central Florida, and middle 60s to low 70s across South Florida. There is a chance for **patchy frost** to develop overnight and early Saturday morning along portions of the interior Panhandle and Suwannee River Valley. Overnight temperatures on Saturday will fall into the **10w to middle 30s** across North





Florida through Nature Coast, upper 30s to middle 40s across Central Florida, and 50s and low 60s across South Florida and the Keys. There may be a chance for **patchy frost and a light freeze** will be possible overnight Saturday and into Sunday morning depending on the extent of some cloud cover and light winds.

# Hydrology & Flooding:

There is a **Marginal Risk for Flash Flooding (level 1 of 4)** across the Florida Panhandle and Big Bend today; however, this risk will quickly diminish from west to east as the squall line exits the region. While the fast-moving nature of this system will limit the extent of flash flooding, **localized flooding and ponding of water** will be possible over already saturated soils/grounds and low-lying/poor drainage areas. There is no additional organized risk for flooding; however, today's rainfall will set the stage for a quicker localized flooding threat to develop later this week and weekend with the next frontal system. Widespread rainfall totals of 1-3" can be expected along and north of I-4 over the next 5 days, with locally higher totals possible especially over the Nature Coast. Localized totals of 2-4" can be expected, with a few pockets of heavier rainfall possible. Rainfall totals become increasingly scattered in nature south of Lake Okeechobee, but strong to severe thunderstorms could pose the risk for a quick 1-2" of rainfall in a short period of time this evening and tonight. For the latest Flash Flood Outlooks, please visit the Weather Prediction Center.

North Florida rivers. creeks/streams. and waterwavs will respond to the rainfall associated with the Early January Severe Weather Event. Many North Florida rivers are forecast to rise into Action Stage (bank-full), with several reaching minor flood stage through the forecast period. A River Flood Warning has issued for the Aucilla River at Lamont as water levels approach minor flood stage this afternoon. Additional River Flood Warnings could be issued for portions of the Apalachicola River basin, the Shoal River basin, and potentiall the Santa Fe River basin as water levels rise through the week toward minor flood stage. Further south along the Florida West Coast, a more tidally-driven River Flood Warning has been issued along the



Alafia River at Riverview for **minor flooding** forecast to occur at times of high tide this afternoon as the squall line approaches. We will continue to monitor trends in the forecast models regarding the additonal threat for North Florida riverine flooding with our next weather system Friday and Saturday. For more details, please visit the <u>River Forecast Center</u>.

Lake Okeechobee's average elevation is 15.99', which is within the operational band and 1.26' <u>above</u> normal.

## **Drought & Fire Weather:**

Minimal changes were made to this week's drought monitor update. The most noticeable differences are the expansion of Abnormally Dry (*emerging drought*) conditions in the Panhandle and the addition of **moderate drought** conditions along the far Northwestern tip of the Panhandle due to little precipitation and decreasing stremflows. Ongoing **severe to extreme drought conditions** continue for West-Central Florida where year-to-date rainfall deficits are 20-22" below normal. The





Ruskin, Sarasota-Bradenton and Venice areas continue to experience their **driest year-to-date** on record. The Climate Prediction Center (CPC) is outlooking above normal chances for rainfall during the month of January across the Peninsula, which should help to slowly ease drought conditions.

The <u>Keetch-Byram Drought Index</u> average for Florida is **57** on a scale from 0 (very wet) to 800 (very dry). There are <u>zero</u> Florida counties with an average KBDI over 500 (drought/increased fire danger).

The wildfire threat to Florida will remain very low through the forecast period. According to the <u>Florida Forest Service fire dashboard</u>, there are 6 active wildfires across the state burning approximately 115 acres (as of 11:30 AM EST).

### **Rip Currents & Marine Hazards:**

A high risk of rip currents can be expected along all Florida beaches for most of the forecast period. Rip currents could subside to moderate risk along portions of the Florida East Coast Thursday; however, dangerous beach conditions quickly return by the weekend. For the latest Rip Current Outlook, visit www.weather.gov/beach.

**Dangerous beach and boating conditions** can be expected to persist along Florida beaches through the forecast period. High Surf Advisories and Warnings remain in effect for Florida Panhandle beaches today as wave heights reach 8-13' in the surf zone, courtesy of strong and persistent onshore winds. Wave heights of 4-6' can be expected along the Atlantic Coast. Wave heights will gradually subside through Wednesday and Thursday. Wave heights in the surf zone will return along the Gulf Coast Friday ahead of our next frontal system, with breakers reaching 5-8' along the Panhandle with isolated wave heights reaching 9' at times. By Saturday, wave heights of 4-7' can be expected along the Gulf, with 3-5' in the Atlantic.

Red Tide has not been observed above background levels over the past week.

A coastal flood event will take shape today along the Florida Gulf Coast as strong onshore flow persists in tandem with the squall line. Coastal Flood Advisories are in effect for the western Florida Panhandle where minor coastal flooding could take at or near times of high tide. The magnitude and duration of the winds combined with attendant winds from the squall line set up a scenario where moderate coastal flooding is likely at or times of high tide. Apalachee Bay, especially east of Carabelle. Above normal water levels can be expected at or near times of high tide, with a Coastal Flood Warning in effect through 1:00 AM EST Wednesday morning along coastal Franklin, Jefferson, and Wakulla Counties. Water levels will quickly rise this afternoon reaching 3-4' above normally dry ground, with localized levels of 5' possible. The timing plays a larger role in the coastal flood threat along the Florida Big Bend and Nature Coast, with the squall line arriving at times of high tide this afternoon. Further south along the Florida Gulf Coast, a Coastal Flood Warning remains in effect through 7:00 AM EST Wednesday along the West-Central Florida Coast, as water levels could reach 2-4' above normally dry ground. The coastal flood threat will subside later Wednesday; however, we will have to monitor the next weather system arriving in the state Friday and Saturday. Minor coastal flooding cannot be ruled out as southerly onshore flow builds over the Gulf.

<u>Blue-Green Algae</u> has been observed via satellite imagery at low to moderate bloom potential on 5-10% of the lake, primarily in nearshore waters along the western shoreline. Satellite imagery shows lightly scattered low bloom potential on Lake George and the mainstem of the river downstream to just south of Doctors Lake. There is also scattered low to moderate bloom potential in both the upper and lower reaches of the Caloosahatchee Estuary.

NWS Mobile Daily Hazards	NWS Tallahassee Daily Graphical Hazards
NWS Jacksonville Daily Hazards	NWS Melbourne Daily Graphical Hazards
NWS Tampa Daily Graphical Hazards	NWS Miami Daily Graphical Hazards
NWS Key West Daily Hazards	
For the official National Weather Service forecast, please click on the following cities:	
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Please stay safe! Caitlyn Gillespie, Deputy State Meteorologist Kennedy Tartt, Assistant State Meteorologist Florida Division of Emergency Management <u>www.FloridaDisaster.org/Weather</u>



