

## Climate Summary for Florida – February 2021

Prepared by the Florida Climate Center, The Florida State University, Tallahassee, Florida

Online at: <http://climatecenter.fsu.edu/products-services/summaries>

**Average temperatures in February were on average 3 F warmer than historical averages across the state.** Average temperatures were at or near normal across northern Florida and the Panhandle and much above normal across the Florida Peninsula. Average temperatures for the month ranged from +5.8F in West Palm Beach to +0.2 F in Pensacola (see Table 1 and Appendix 1 for select cities). West Palm Beach experienced its third warmest February on record, and Fort Lauderdale had its fourth warmest February on record. Many daily high maximum and high minimum temperature records were set during the month (see Appendices 2 and 3).

**Table 1.** February average temperatures and departures from normal ( F) for selected cities.

Station	Mean Temperature	Departure from Normal
Pensacola	54.9	+0.2
Tallahassee	56.6	+1.9
Jacksonville	57.9	+1.5
Orlando	67.1	+4.1
Tampa	67.3	+3.9
Miami	74.5	+4.3
Key West	74.8	+3.8

**Rainfall totals in February were variable across the state with some locations receiving above normal rainfall and other locations with near or below normal rainfall.** Monthly departures from normal ranged from -1.3 inches in Tallahassee to +3.4 inches in Jacksonville (Table 2 and Appendix 1). Much of the northern Peninsula and parts of the Panhandle had above normal rainfall while southwestern Florida experienced below normal rainfall throughout the month (Figure 1). No monthly rainfall records were set during the month. Vero Beach had its third wettest February on record and Jacksonville had its fourth wettest February on record.

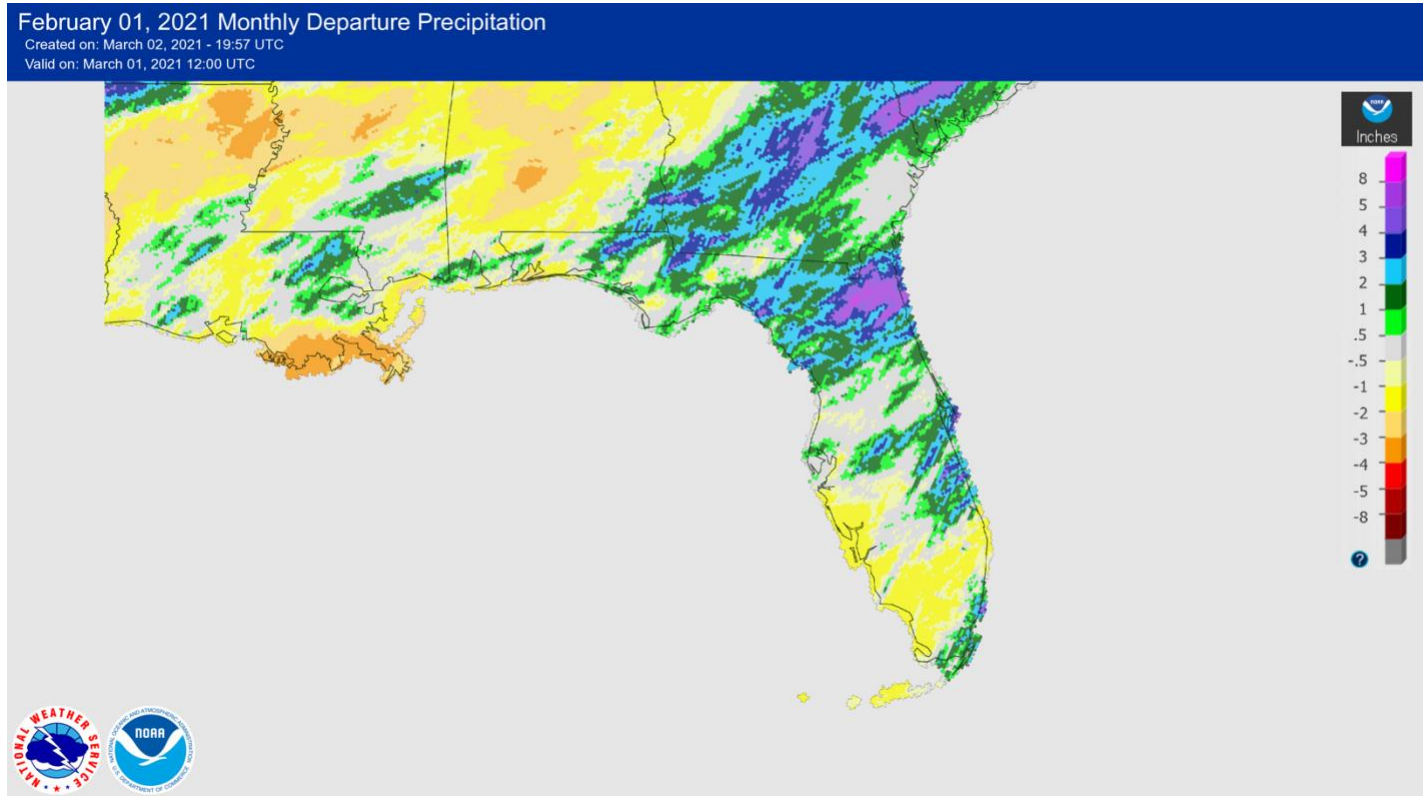
**Table 2.** February precipitation totals and departures from normal (inches) for selected cities.

Station	Total Rainfall	Departure from Normal
Pensacola	3.85	-1.21
Tallahassee	3.58	-1.27
Jacksonville	6.63	+3.44
Orlando	2.38	0.0



Tampa	3.74	+0.93
Miami	2.90	+0.65
Key West	0.69	-0.8

**Figure 1.** A graphical depiction of the monthly rainfall departure from normal (inches) for February (courtesy of NOAA).



### La Niña Conditions in the Pacific Persisted.

La Niña conditions continued during February, but forecasters estimate a shift to ENSO-neutral conditions this spring (~60% chance for April-June). ENSO-neutral conditions are then expected to continue at least through the Northern Hemisphere summer. Recent stratospheric warming and disruptions in the polar vortex, along with a negative phase in the Arctic Oscillation, have influenced weather patterns in the eastern U.S. this winter and overwhelmed typical weather patterns generally seen during La Niña. However, more typical La Niña conditions have returned with above-average temperatures and drier than average conditions across much of the southern tier of the U.S.

### Hazardous Weather Events in February.

According to the Local Storm Reports issued by the local National Weather Service offices serving Florida, there were 249 individual local reports of hazardous weather events recorded across the state during the month of February (see Table 4 for a breakdown by event type).

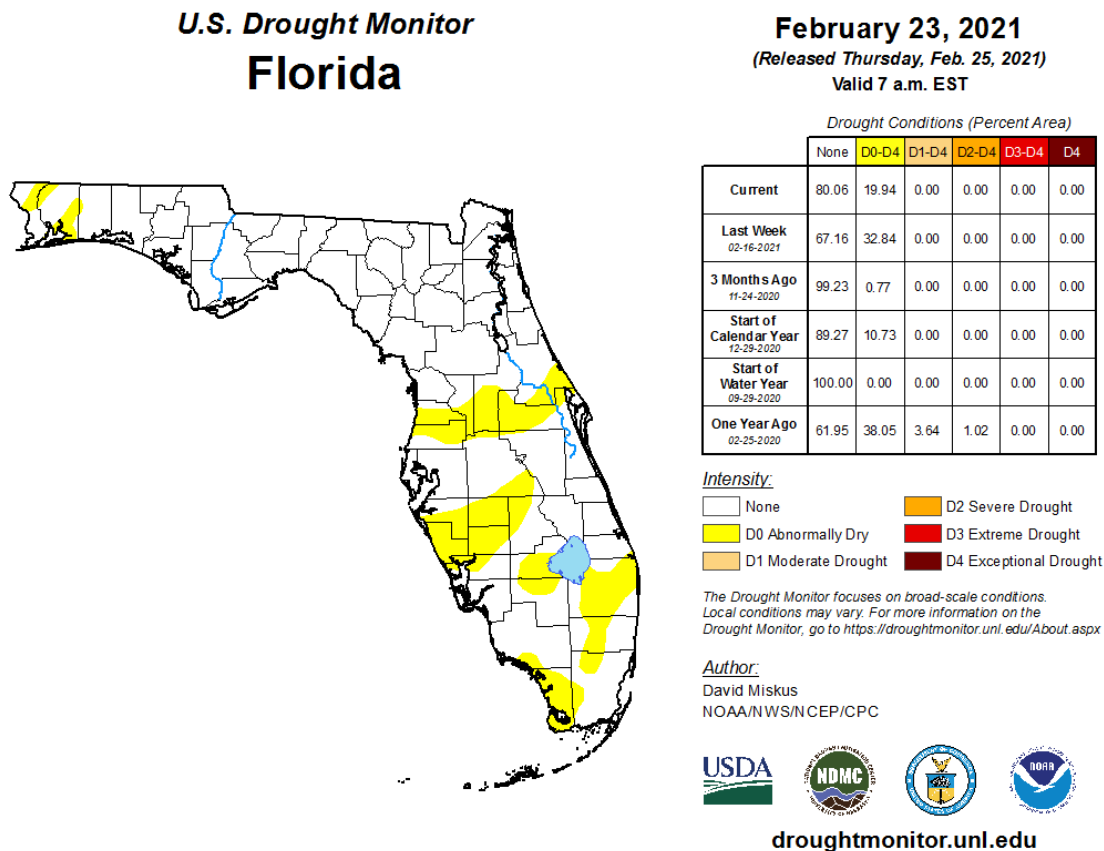
**Table 4.** Breakdown of storm reports submitted in Florida during the month of February (compiled from Iowa State University/Iowa Environmental Mesonet).

Report Type	Number of Reports
Marine Thunderstorm Wind	24
Non-Thunderstorm Wind Damage	1
Non-Thunderstorm Wind Gust	55
Tornado/Waterspout/Funnel Cloud	6/1/5
Thunderstorm Wind Damage	41
Thunderstorm Wind Gust	54
Lightning	3
Hail	31
Flood/Flash Flood	9/1
Heavy Rain	17
Rip Currents	1

**Drought-Related Impacts.**

Near the end of February 2021, abnormally dry conditions were found in parts of the Florida Peninsula and the extreme western panhandle region. According to the U.S. Drought Monitor, 33 percent of the state was in abnormally dry conditions (D0) at the end of the month. In early February, abnormally dry conditions emerged across much of the Florida Peninsula but by mid-February these conditions dissipated in some areas. Dry conditions are expected to continue, and the seasonal drought outlook indicates that drought development is likely through the spring across the Peninsula.

As of February 28, the Lake Okeechobee water level was at 15.33 ft. above sea level (Feet-NGVD29), which is above average for this time of the year. At the first of the month, the water level was 15.51 ft. above sea level.



## Agriculture-Related Impacts.

For the month of February, the [Crop Progress – State Stories](#), produced monthly December through March, for Florida indicates that pasture conditions declined at the beginning of February due to colder temperatures but improved throughout the month as temperatures rose. Cattle conditions remained mostly good during the month, while sugarcane had minimal damage from frost that was reported mid-month. Toward the end of the month, powdery mildew and worm pressure were reported in some crops. Many citrus fruits were harvested, and several vegetable crops came to market.

### Appendix 1. Additional February departures from normal data for select Florida locations (source: NWS).

Station	Average Temperature (°F)	Departure from Normal (°F)	Total Rainfall (in.)	Departure from Normal (in.)
Gainesville	60.5	+3.0	6.01	+2.81
Sarasota	67.6	+4.2	2.19	-0.51
Melbourne	68.1	+5.4	2.61	+0.08
Fort Myers	70.8	+4.2	2.98	+0.83
West Palm Beach	73.6	+5.8	2.62	-0.20

### Appendix 2. Select daily record high maximum temperatures tied or broken during February (compiled from NOAA).

Location	Date	Record (°F)	Broken/Tied	Last
Fort Lauderdale	8	84	Tied	84 in 2020
Punta Gorda	9	89	Broken	87 in 2017
Orlando	9	86	Broken	84 in 1994
West Palm Beach	9	85	Tied	85 in 2017
Clermont	10	87	Broken	85 in 2001
Tampa	10	86	Broken	85 in 2020
Orlando	10	86	Broken	85 in 2018
Clermont	11	88	Broken	87 in 2018
Miles City	12	90	Tied	90 in 2020
Vero Beach	13	88	Broken	87 in 2020
Lakeland	13	84	Tied	84 in 1959
Vero Beach	14	88	Broken	87 in 2009
Perrine	15	87	Broken	86 in 2020
Plant City	15	89	Broken	88 in 1959
Punta Gorda	15	88	Broken	87 in 2003
Tampa	15	86	Broken	85 in 1990
Ochopee	15	87	Tied	87 in 2003
Daytona Beach	15	86	Broken	85 in 1959
Miami	15	86	Broken	84 in 2017
Melbourne	16	88	Broken	87 in 1982
Sanford	16	87	Broken	85 in 2001
Punta Gorda	17	87	Tied	87 in 2020

Tarpon Springs	18	85	Tied	85 in 2020
Mayport	18	87	Broken	85 in 2019
Daytona Beach	18	88	Broken	87 in 1944
Lisbon	19	85	Broken	84 in 2019
Sanford	19	88	Broken	86 in 2019
Vero Beach	20	88	Broken	87 in 1975
Sanford	20	88	Broken	85 in 2019
Tampa	26	87	Broken	85 in 1997
Plant City	27	90	Broken	89 in 1962
Ochopee	27	88	Broken	87 in 2018
Pensacola	28	79	Broken	78 in 2018

**Appendix 3.** Select daily record high minimum temperatures tied or broken during February (compiled from NOAA).

<b>Location</b>	<b>Date</b>	<b>Record (°F)</b>	<b>Broken/Tied</b>	<b>Last</b>
Clermont	7	69	Broken	67 in 1955
Perrine	7	70	Broken	68 in 2018
Punta Gorda	7	71	Broken	65 in 1971
Lakeland	7	68	Broken	66 in 1955
Mountain Lake	8	70	Broken	68 in 2018
Vero Beach	8	67	Broken	65 in 2008
Fort Pierce	9	69	Tied	69 in 1939
Orlando	9	67	Broken	64 in 1965
Bradenton	10	66	Tied	66 in 1982
Miles City	10	67	Broken	66 in 2018
Orlando	10	67	Broken	65 in 2019
Bradenton	13	69	Tied	69 in 2018
Miles City	13	71	Broken	67 in 2020
Bradenton	14	70	Broken	68 in 2018
Perrine	14	71	Broken	69 in 1997
Miami	14	76	Broken	74 in 1997
Fort Lauderdale Beach	15	75	Broken	72 in 2018
Mountain Lake	15	78	Broken	69 in 2004
Tampa	15	66	Broken	64 in 2018
Stuart	16	75	Broken	73 in 2020
Fort Lauderdale	18	73	Broken	71 in 1995
Perrine	18	71	Broken	68 in 2008
Daytona Beach	19	70	Broken	66 in 2020
Hastings	19	67	Broken	64 in 1994
Titusville	19	70	Broken	68 in 2020
Mountain Lake	22	78	Broken	70 in 2014
Tampa	27	70	Broken	69 in 1997