

Climate Summary for Florida – April 2025

Prepared by Emily Powell of the Florida Climate Center, The Florida State University, Tallahassee, Florida Online at: http://climatecenter.fsu.edu/products-services/summaries

Summary

- Average monthly temperatures in April were above normal across Florida.
- Monthly precipitation totals in April were below normal.
- By the end of April, approximately 17% of the state was in extreme drought (D3), 30% of the state was in severe drought (D2), 35% was in moderate drought (D1), and 17% was abnormally dry (D0), according to the U.S. Drought Monitor.
- ENSO-neutral conditions currently exist in the tropical Pacific Ocean and are expected to persist through the Northern Hemisphere summer, with a greater than 50% chance of persisting into fall (August-October 2025).

Average monthly temperatures in April were above normal in Florida. Average monthly temperature departures from normal ranged from +0.3 F in Key West to +3.9 F in Gainesville for the month (see Table 1 and Appendix 1 for select cities). An upper-level ridge of high pressure set up over the state mid-month, inhibiting rainfall and allowing temperatures to climb to above normal. While mean temperatures averaged out to be above normal for the month across the state, north-central Florida the warmest region. Many stations recorded one of their top 10 warmest Aprils on record, including Jacksonville Beach (2nd-warmest), Tallahassee (8th-warmest), Gainesville (3rd-warmest), Orlando (6th-warmest), Tampa (2nd-warmest), Sarasota (4th-warmest), and West Palm Beach (7th-warmest). The spring first bloom index showed that first blooms occurred earlier than usual in the Panhandle and North Florida but behind usual in the Peninsula. Select daily high maximum temperature records tied or broken during the month are provided in Appendix 2.

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

Station	Mean Temperature	Departure from Normal	
Pensacola	70.4	+2.1	
Tallahassee	70.8	+3.5	
Jacksonville	71.7	+3.6	
Orlando	74.9	+2.7	
Tampa	77.4	+3.5	
Miami	77.6	+0.9	
Key West	78.2	+0.3	





Monthly precipitation totals in April were below normal in Florida. The monthly precipitation departures from normal ranged from -4.32 inches in Pensacola to -0.77 inches in Key West (see Table 2 and Appendix 1 for select locations). Many locations in the Peninsula saw one of their top 5 driest Aprils on record, including Gainesville (3rd-driest), Daytona Beach (2nd-driest), Titusville (2nd-driest), Melbourne (2nd-driest), Venice (2nd-driest), Vero Beach (4th-driest), Naples (3rd-driest), and West Palm Beach (4th-driest). Many locations in the Peninsula have only seen a couple of inches of rain since February 1st, such as Daytona Beach and Lisbon. With below-normal rainfall and above-normal temperatures, water levels have been dropping, wildfire activity increased, the Panhandle saw increasing dryness, and severe and extreme drought expanded across the Peninsula during the month (Figure 2 below).

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

Station	Total Rainfall	ll Departure from Normal	
Pensacola	1.20	-4.32	
Tallahassee	2.48	-1.05	
Jacksonville	1.10	-1.83	
Orlando	0.37	-2.21	
Tampa	0.63	-1.92	
Miami	1.03	-2.33	
Key West	1.30	-0.77	

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



ENSO-Neutral Conditions Present in Pacific.

NOAA issued its final La Niña Advisory on April 10, and ENSO-neutral conditions are currently present in the tropical equatorial Pacific Ocean. Over the past month, below-average sea surface temperatures weakened in the central and east-central equatorial Pacific Ocean, and the coupled ocean-atmosphere system reflected ENSO-neutral conditions. ENSO-neutral conditions are favored to continue through the Northern Hemisphere summer, with a 68% chance June-August 2025. There is a greater than 50% chance it will continue through the fall, August-October 2025.

Hazardous Weather Events in April.

According to the Local Storm Reports issued by the local National Weather Service offices serving Florida, there were 97 individual local reports of hazardous weather events recorded across the state during the month of April (see Table 3 for a breakdown by event type). Wildfires were reported in Broward and Pasco Counties, and one injury was reported as a result of the Key Vista Wildfire. The largest wildfire reported in the state was in extreme Southeast Miami-Dade County, the "344 Fire," which burned a total of 26,719 acres and has been fully contained. Rip currents led to injuries and one fatality during the month. Numerous reports of pea-sized hail occurred during the month, and golf ball-sized hail was reported in Alachua County on the 11th.

Table 3. Breakdown of storm reports submitted in Florida during the month of April (compiled from Iowa State University/Iowa Environmental Mesonet).

Report Type	Number of Reports
Heavy Rain	1
Flash Flood	2
Flood	1
Hail	40
Marine Thunderstorm Wind	1
Non-Thunderstorm Wind Gust	3
Thunderstorm Wind Damage	4
Thunderstorm Wind Gust	29
Non-Thunderstorm Wind Damage	0
Tornado/Waterspout/Funnel Cloud	1 / 1 / 1
Rip Currents	7
Wildfire	6

Daily Record Events in April.

Table 4. Summary of daily records broken in Florida in April (source: NCEI Daily Weather Records).

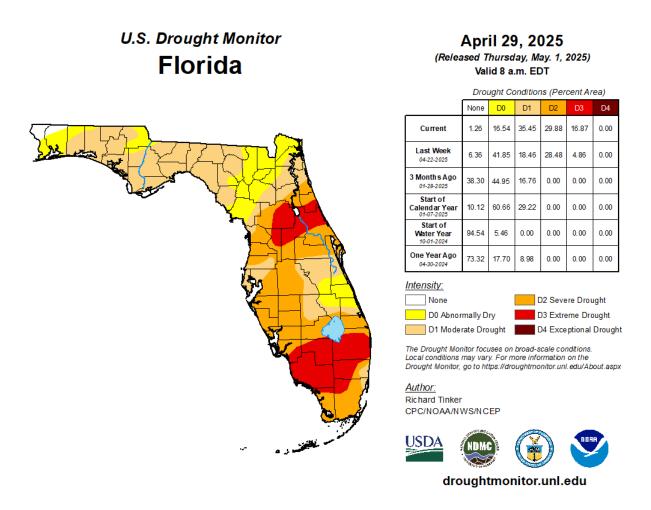
Category	Number of Records	
Highest daily max. temp.	61	
Highest daily min. temp.	88	
Lowest daily max. temp.	0	
Lowest daily min. temp.	1	
Highest daily precipitation	4	
Total	154	

Drought-Related Impacts.

Drought worsened in April with below-normal rainfall, decreasing water levels, and above-normal temperatures. In mid-April, roughly 2% of the state was in extreme drought (D3), 17% was in severe drought (D2), 22% of the state was in moderate drought (D1), and 18% was abnormally dry (D0), according to the U.S. Drought Monitor. By month's end, approximately 17% of the state was in extreme drought (D3), 30% was in severe drought (D2), 35% was in moderate drought (D1), and 17% of the state was abnormally dry (D0) (Figure 2 below). Virtually all the state was in drought or pre-drought conditions by the end of the month.

As of April 30, the Lake Okeechobee water level was 11.29 ft. above sea level (Feet-NGVD29), which is below average for this time of year. At the first of the month, the water level was 12.56 ft. above sea level.

Figure 3. A graphical depiction of the latest drought conditions in Florida according to the U.S. Drought Monitor (courtesy of the National Drought Mitigation Center, University of Nebraska-Lincoln).



Agriculture-Related Impacts.

In mid-April, topsoil moisture conditions were adequate in 64% of the state, short in 29%, and very short in 5% of the state, while 2% of the state had surplus topsoil moisture conditions. By the end of April, topsoil moisture conditions were adequate in 41% of the state, short in 36%, and very short in 23% of the state; no portion of the state had surplus topsoil conditions. The entire 100cm soil profile has been drier than average across the Peninsula. For more information, consult the <u>Crop Progress and Conditions report</u>, which is published by the USDA's National Agricultural Statistics Service.

Appendix 1. Additional April 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	72.4	+3.9	0.57	-2.17
Sarasota	75.4	+2.8	1.16	-1.30
Melbourne	73.8	+2.0	0.34	-1.95
Fort Myers	76.9	+2.1	0.76	-1.68
West Palm Beach	77.1	+2.2	0.21	-3.47

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

Location	Date	Record (°F)	Broken/Tied	Last
Bradenton	1	90	Broken	88 in 2023
Clermont	1	93	Tied	93 in 2021
Plant City	1	94	Broken	93 in 2021
Miles City	1	94	Broken	92 in 2006
Ochopee	1	93	Broken	89 in 2012
Lakeland	1	93	Broken	91 in 2021
Clermont	2	93	Broken	92 in 2017
Fort Lauderdale	2	89	Broken	87 in 2017
Venice	2	91	Broken	88 in 2000
Gainesville	2	92	Tied	92 in 2017
Tampa	2	94	Broken	89 in 2017
Tarpon Springs	3	92	Broken	91 in 2017
Tampa	3	92	Broken	91 in 2017
Lakeland	3	92	Tied	92 in 2017
Bradenton	4	91	Broken	89 in 2023
Clermont	4	94	Tied	94 in 2017
Marianna	4	89	Broken	87 in 2011
Tampa	4	93	Broken	88 in 2023
Key West	4	89	Broken	88 in 2022
Chipley	5	90	Broken	88 in 2023
Pensacola	6	81	Broken	79 in 1986
Jacksonville	6	90	Broken	89 in 1947
Deland	7	91	Broken	90 in 1938
Lisbon	7	91	Broken	89 in 2022
Vero Beach	7	91	Broken	90 in 2018
Fort Lauderdale Beach	8	88	Broken	87 in 2016
Fort Pierce	8	92	Broken	91 in 1939
St. Augustine	8	90	Broken	89 in 1999
Tampa	17	90	Broken	89 in 2013
Lake City	26	97	Broken	92 in 1958
Crestview	27	91	Broken	90 in 1996
Tallahassee	27	94	Broken	93 in 1989
Chipley	28	94	Broken	91 in 1989
Tallahassee	28	94	Broken	92 in 1948
Chipley	29	93	Broken	91 in 2017