

# Climate Summary for Florida – July 2025

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

### **Summary**

- Monthly average temperatures in July were near to above normal across Florida.
- Monthly precipitation totals in July were below normal in the Panhandle and mixed across the Peninsula.
- While drought conditions improved during July, moderate (D1) to extreme drought (D3) persisted in South Florida.
- ENSO-neutral conditions continued in the tropical Pacific Ocean and are expected to persist through the Northern Hemisphere summer and early fall (56% chance during August-October).

Monthly average temperatures in July were near to above normal in Florida. Average monthly temperature departures from normal ranged from -0.2 F in Key West to +2.7 F in Gainesville for the month (see Table 1 and Appendix 1 for select cities). The Jacksonville International Airport and the Gainesville Regional Airport both recorded their hottest July on record, with monthly mean temperatures of 84.8 F and 84.1 F, respectively (86 and 52 years, respectively). Many stations recorded one of their top 5 warmest Julys on record. Monthly mean temperatures in Crestview tied for 2nd-warmest on record, 3rd-warmest on record in Tampa, tied for 4th-warmest on record in both Tallahassee and Pensacola, 4th-warmest in Punta Gorda, and Venice had its 5th-warmest July on record. Summer-to-date mean temperatures are also running above normal, though not as warm as the past couple of years with most stations on track to observe one of their top 10 warmest summers on record. Major heat impacted the state during the second half of the month as an area of high pressure settled in which and suppressed rainfall and allowed temperatures to climb, leading to record high temperatures and heat index values. The Tampa International Airport (TPA) reached 100 F on July 27, which was an all-time record high temperature for that station (86 years). TPA also reached a maximum heat index value of 119°F on July 29, which was an all-time record heat index value for that station. The daily heat index at TPA reached or surpassed 115 F twice in July, which is more than in any month or year since at least 1973. Select daily high maximum temperature records tied or broken during the month are provided in Appendix 2.

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

Station	<b>Mean Temperature</b>	Departure from Normal	
Pensacola	84.8	+1.3	
Tallahassee	84.6	+2.1	
Jacksonville	84.8	+2.3	
Orlando	83.9	+1.3	





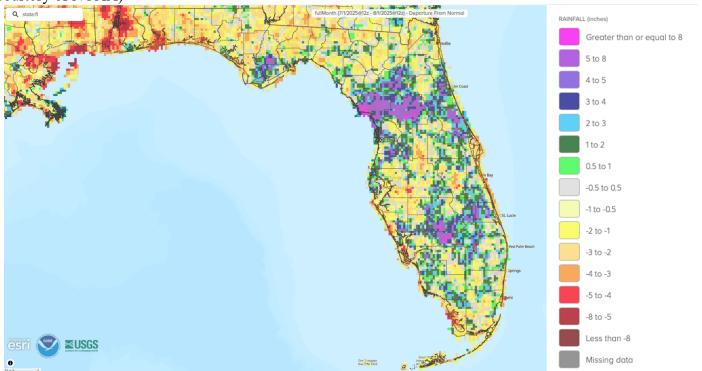
Tampa	85.6	+1.8
Miami	84.4	+0.3
Key West	85.2	-0.2

Monthly precipitation totals in July were below normal in the Panhandle and mixed in the Peninsula. The monthly precipitation departures from normal ranged from -4.96 inches in Pensacola to +4.66 inches in Gainesville (see Table 2 and Appendix 1 for select locations). The Panhandle was drier than normal in July, and the month ended with rainfall deficits ranging from 2-5 inches for the month. Tallahassee measured a total of 3.14 inches in July at the airport, which was the 3rd-driest July on record (86 years). The Pensacola Regional Airport measured only 2.93 inches for the month, which ranks as the 5th-driest July on record there (77 years). Severe storms brought heavy rainfall to the Plant City area on July 14, bringing as much as 12 inches in just a few hours, which registers as a 1-in-1000 year event that caused flash flooding. CoCoRaHS observers in this area measured 8-9 inches from this event. Since the beginning of the year, precipitation totals have been generally below normal across the state, with year-to-date rainfall running 2-9 inches below normal in the Panhandle and Central Florida and 10-18 inches below normal in Southeast Florida. Drought continues to affect South Florida (Figure 2).

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

Station	Total Rainfall	Departure from Normal	
Pensacola	2.93	-4.96	
Tallahassee	3.14	-4.00	
Jacksonville	7.01	+0.24	
Orlando	10.04	+2.58	
Tampa	7.60	-0.15	
Miami	8.92	+1.56	
<b>Key West</b>	3.16	-0.47	

**Figure 1.** A graphical depiction of the monthly rainfall departure from normal (in inches) for July 2025 (courtesy of NOAA)



#### **ENSO-Neutral Conditions Present in Pacific.**

ENSO-neutral conditions are currently present in the tropical equatorial Pacific Ocean. Over the past month, near-average sea surface temperatures continued across most of the equatorial Pacific Ocean, and the latest weekly Niño index values ranged from  $0.0\,^{\circ}$ C to  $+0.4\,^{\circ}$ C. ENSO-neutral conditions are most likely to persist through the end of the Northern Hemisphere summer and early fall (56% chance during August-October). Chances of La Niña conditions increase into the winter 2025-26, but there is high uncertainty as chances for La Niña are comparable to chances for ENSO-neutral through winter.

# Hazardous Weather Events in July.

According to the Local Storm Reports issued by the local National Weather Service offices serving Florida, there were 326 individual local reports of hazardous weather events recorded across the state during the month of July (see Table 3 for a breakdown by event type). July saw a typical active summer pattern, with hit-and-miss thunderstorms bringing heavy rainfall, lightning, and gusty winds. A lightning strike injured three people at St. Pete Beach on the July 4<sup>th</sup> holiday, and lightning injured three others at the St. Augustine Beach pier on the 12<sup>th</sup>. Plant City experienced flash flooding after 9-12 inches of rain fell within 24 hours on the 14<sup>th</sup>. Later in the month, a large area of high pressure led to below-normal rainfall and dangerous humid heat across the state with heat index values peaking to over 115 F in some places. Wildfires were reported in Southeast Florida in Palm Beach, Broward, and Miami-Dade Counties. The 13 Mile Fire in Palm Beach County has burned 13,000 acres, but no injuries or major impacts were reported.

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

Report Type	Number of Reports
Heavy Rain	48
Flash Flood	7
Flood	7
Hail	17
<b>Marine Thunderstorm Wind</b>	38
Non-Thunderstorm Wind Gust	15
Thunderstorm Wind Damage	33
<b>Thunderstorm Wind Gust</b>	133
Non-Thunderstorm Wind Damage	0
Tornado/Waterspout/Funnel Cloud	1 / 8 / 4
Lightning	10
Wildfire	5

# **Daily Record Events in July.**

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

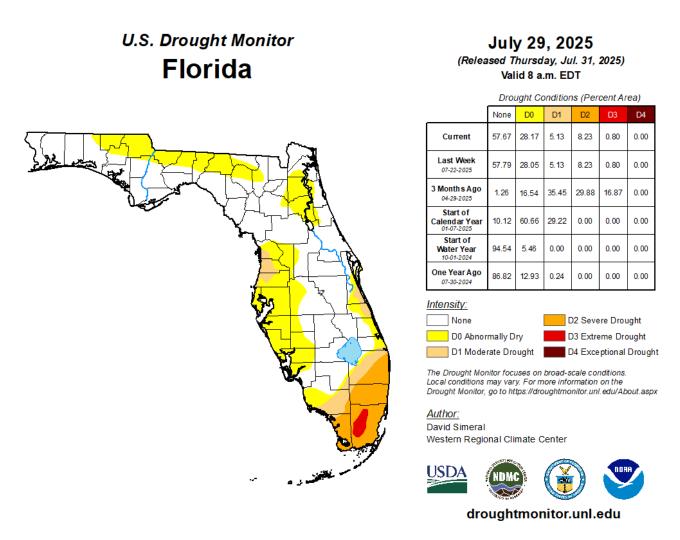
Category	Number of Records	
Highest daily max. temp.	55	
Highest daily min. temp.	45	
Lowest daily max. temp.	3	
Lowest daily min. temp.	1	
Highest daily precipitation	26	
Total	130	

#### **Drought-Related Impacts.**

Drought improved across Peninsular Florida over the past month, but drought continues to affect South Florida and some coastal regions. In mid-July, approximately 1% of the state was in extreme drought (D3), 8% was in severe drought (D2), 6% of the state was in moderate drought (D1), and 27% was abnormally dry (D0), according to the U.S. Drought Monitor. Not much changed during the second half of the month. By the end of July, approximately 1% of the state was in extreme drought (D3), 8% was in severe drought (D2), 5% was in moderate drought (D1), and 28% of the state was abnormally dry (D0) (Figure 2 below).

As of July 31, the Lake Okeechobee water level was 12.09 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 11.22 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-July, topsoil moisture conditions were adequate in 57% of the state, short in 18%, and very short in 4% of the state, while 21% of the state had surplus topsoil moisture conditions. By the end of July, topsoil moisture conditions remained adequate in 65% of the state, were short in 14% of the state, and very short in 1% of the state, while 20% of the state had surplus topsoil moisture conditions. For more information, consult the <a href="Crop Progress and Conditions report">Crop Progress and Conditions report</a>, which is published by the USDA's National Agricultural Statistics Service.

Appendix 1. Additional July 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	84.1	+2.7	11.34	+4.66
Sarasota	83.2	+0.1	6.21	-1.18
Melbourne	83.3	+1.6	7.09	+0.59
Fort Myers	84.7	+1.5	5.00	-4.38
Naples	84.8	+1.7	4.07	-3.70
West Palm Beach	84.4	+1.3	6.41	+0.78

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

Location	Date	Record (°F)	Broken/Tied	Last
Fort Lauderdale	1	94	Broken	93 in 2015
Ochopee	9	98	Tied	98 in 2016
Clermont	11	98	Tied	98 in 2016
Gainesville	14	97	Broken	96 in 1986
Marianna	15	99	Tied	99 in 2000
Bradenton	19	97	Broken	96 in 2024
Miles City	19	100	Broken	98 in 2019
Gainesville	19	98	Broken	97 in 2000
Lakeland	20	98	Broken	97 in 1993
Clermont	21	102	Broken	99 in 2024
Lake City	21	100	Broken	99 in 2000
Ochopee	21	98	Broken	97 in 2011
Lakeland	21	98	Broken	97 in 1993
Clermont	22	99	Broken	98 in 2024
Naples	22	96	Tied	96 in 2010
Niceville	23	99	Broken	98 in 1948
Lake City	24	100	Broken	99 in 1952
Jacksonville	26	99	Broken	98 in 1940
Bradenton	27	97	Broken	96 in 2023
Clermont	27	101	Broken	98 in 2024
Gainesville	27	100	Broken	98 in 2010
Tampa	27	100	Broken	97 in 1996
Jacksonville	27	100	Broken	99 in 2010
Clermont	28	103	Broken	98 in 2016
Lisbon	28	98	Broken	97 in 2010
Plant City	28	99	Broken	98 in 2017
<b>Usher Tower</b>	28	98	Broken	97 in 2010
Orlando	28	98	Broken	97 in 1992
Gainesville	28	100	Broken	97 in 2010
Fort Myers	28	98	Broken	97 in 1979
Jacksonville	28	101	Tied	101 in 2016
Clermont	29	105	Broken	98 in 2016

Ocala	29	101	Broken	99 in 2010
Plant City	29	100	Broken	98 in 2022
Gainesville	29	100	Broken	98 in 2010
Orlando	29	100	Broken	98 in 2010
Jacksonville	29	101	Broken	99 in 2016
Clermont	30	103	Broken	100 in 1961
Deland	30	101	Broken	98 in 2010
Jasper	30	102	Broken	100 in 1963
Kissimmee	30	98	Broken	96 in 2017
Wauchula	30	99	Broken	97 in 2009
Lisbon	31	101	Broken	96 in 2010