

Climate Summary for Florida – July 2019

Prepared by Daniel J. Brouillette

Florida Climate Center, The Florida State University, Tallahassee, Florida

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

Mean temperatures in July were generally above normal, with the greatest positive anomalies occurring on the western panhandle (Table 1 and Appendix 1). Several daily temperature records were tied or broken during the month (Appendix 2).

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

Station	Mean Temperature	Departure from Normal
Pensacola	84.1	+1.9
Tallahassee	82.9	+0.8
Jacksonville	82.5	+0.2
Orlando	83.5	+0.8
Tampa	83.1	+0.1
Miami	85.1	+1.0
Key West	85.4	+0.8

Rainfall totals in July were above normal over much of the peninsula, especially in the west-central part in the Tampa Bay region, and below normal in portions of the eastern coast and panhandle (Figure 1). Two daily rainfall records were broken at major stations (Table 3).

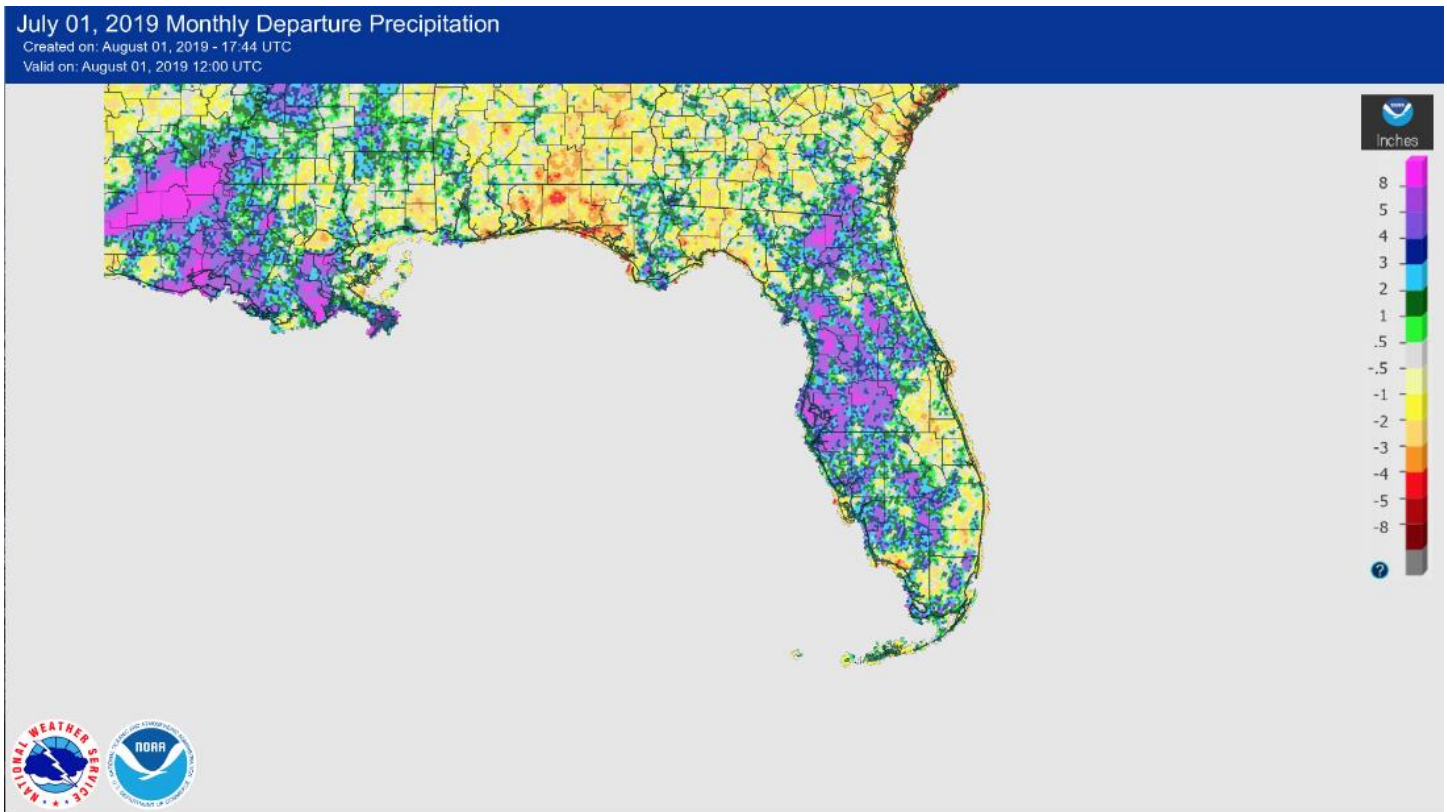
Table 2. July precipitation totals and departures from normal (inches) for selected cities.

Station	Total Rainfall	Departure from Normal
Pensacola	4.73	-2.68
Tallahassee	8.29	+1.12
Jacksonville	5.29	-1.26
Orlando	6.00	-1.27
Tampa	11.01	+3.94
Miami	10.26	+3.76
Key West	2.84	-0.71

Table 3. Select daily rainfall records (inches) broken during July. (Compiled from NOAA, NWS)

Date	Location	Record	Last
19	Tallahassee	2.67	2.40 in 1944
9	Tampa	3.66	2.13 in 1943

Figure 1. A graphical depiction of the monthly rainfall departure from normal (inches) for July is given in the figure below (courtesy of NOAA, NWS).



El Niño continues, but positive SST anomalies continue to show weakening.

Based on current data and forecast models, forecasters with the Climate Prediction Center (CPC) continue with an El Niño Advisory. Above-average sea-surface temperatures (SSTs) continue to be present in most of the equatorial Pacific Ocean. However, positive anomalies have weakened in the last several weeks, and anomalies have become negative in the Niño 1+2 area in the eastern part of the basin. The El Niño event is expected to transition to ENSO-neutral in the next couple of months, likely continuing into the boreal fall and winter.

Hazardous Weather Events in July.

According to the Local Storm Reports (LSRs) issued by the local National Weather Service (NWS) offices serving Florida, the following instances of hazardous weather were reported across the state in July 2019.

Table 4. 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
Coastal Flood	2
Dense Fog	0
Flash Flood	0
Flood	3

Hail	25
Heavy Rain	80
Marine Hail	1
Marine Thunderstorm Wind	34
Non-Thunderstorm Wind Damage	0
Non-Thunderstorm Wind Gust	2
Tornado	1
Thunderstorm Wind Damage	40
Thunderstorm Wind Gust	145
Waterspout	18

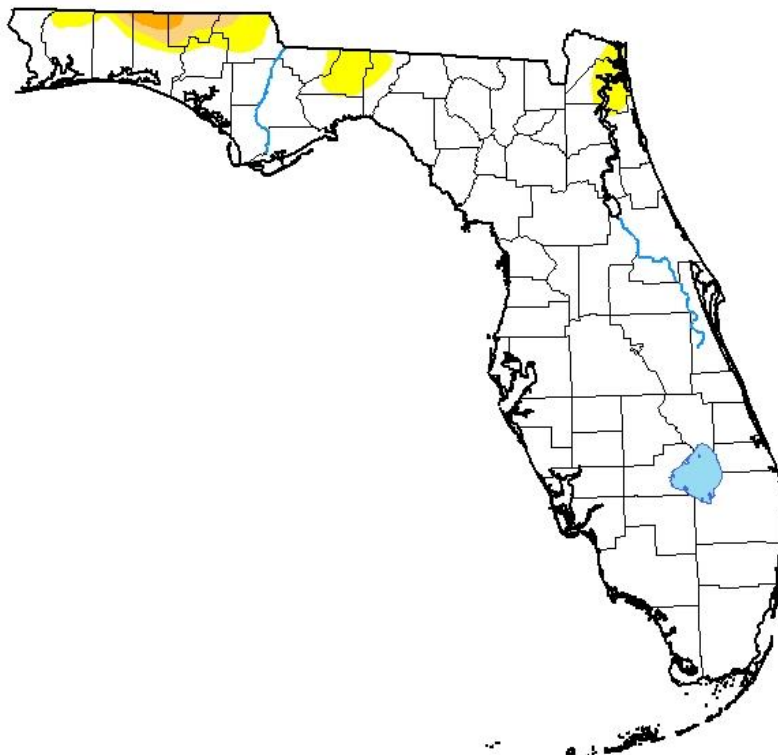
Drought-Related Impacts.

Near the end of July 2019, according to the U.S. Drought Monitor, drought was present on a portion of the inland panhandle. Abnormally dry conditions were present in the vicinity of Jacksonville and Tallahassee.

As of 1 August, the Lake Okeechobee water level was at 11.72 ft. above sea level, which is a bit below average for this time of the year.

**U.S. Drought Monitor
Florida**

July 30, 2019
(Released Thursday, Aug. 1, 2019)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	93.43	6.57	1.51	0.44	0.00	0.00
Last Week <i>07-23-2019</i>	91.42	8.58	1.51	0.44	0.00	0.00
3 Months Ago <i>04-30-2019</i>	72.38	27.62	4.51	0.00	0.00	0.00
Start of Calendar Year <i>01-01-2019</i>	68.86	31.14	22.51	0.00	0.00	0.00
Start of Water Year <i>09-25-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago <i>07-31-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

Agriculture-Related Impacts.

At the end of July 2019, soil moisture was adequate in 81% of the state, short in 9%, very short in 1%, and at a surplus in 9%. For more information, consult the weekly [Crop Progress and Condition](#) reports published by the USDA’s National Agricultural Statistics Service.

Appendix 1
Additional July Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	4.27	-1.80	81.1	-0.1
Melbourne	4.95	-1.01	83.8	+2.1
Fort Lauderdale	3.04	-2.94	84.7	+0.4
Fort Myers	10.48	+1.44	83.2	0.0

Appendix 2
Select daily maximum and minimum temperature records (°F) tied or broken during July.
(Compiled from NOAA, NWS)

Date	Station	Type	Value	Broken/Tied	Last
4	Pensacola	Max.	97	Tied	97 in 1992
5	Pensacola	Max.	101	Broken	99 in 1998
6	Pensacola	Max.	102	Broken	99 in 1998
7	Pensacola	Max.	100	Tied	100 in 2000
8	Pensacola	Max.	98	Tied	98 in 1980
30	Jacksonville	Min.	68	Tied	68 in 1894
5	Orlando	High Min.	78	Tied	78 in 2016
14	Orlando	High Min.	77	Tied	77 in 2015
2	Miami	Max.	98	Broken	95 in 1998
2	Miami	High Min.	81	Tied	81 in 2017
5	Miami	High Min.	83	Broken	82 in 2015
13	Miami	High Min.	82	Broken	81 in 2003
14	Miami	High Min.	84	Broken	83 in 2017
16	Miami	High Min.	82	Tied	82 in 1992
18	Miami	High Min.	83	Broken	82 in 1971
2	Key West	High Min.	84	Tied	84 in 2015