

Climate Summary for Florida – May 2019

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

Mean temperatures in May were well above normal, especially in the interior northern part of the state. (Table 1 and Appendix 1). It was the warmest May on record at Gainesville and Melbourne, and Sarasota/Bradenton; second warmest at Miami, Tallahassee, and Tampa; fourth warmest at Key West; and fifth warmest at Jacksonville. Several daily temperature records were tied or broken during the month (Appendix 2).

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

Station	Mean Temperature	Departure from Normal
Pensacola	77.8	+3.2
Tallahassee	78.8	+4.5
Jacksonville	78.4	+4.3
Orlando	79.8	+2.5
Tampa	81.6	+3.2
Miami	82.2	+2.2
Key West	82.5	+2.1

Rainfall totals in May were mostly below normal, although some swaths of the peninsula had above-normal rainfall (Figure 1). In the areas that were driest, the second half of the month was the drier half. One rainfall record was broken at a major station (Table 3).

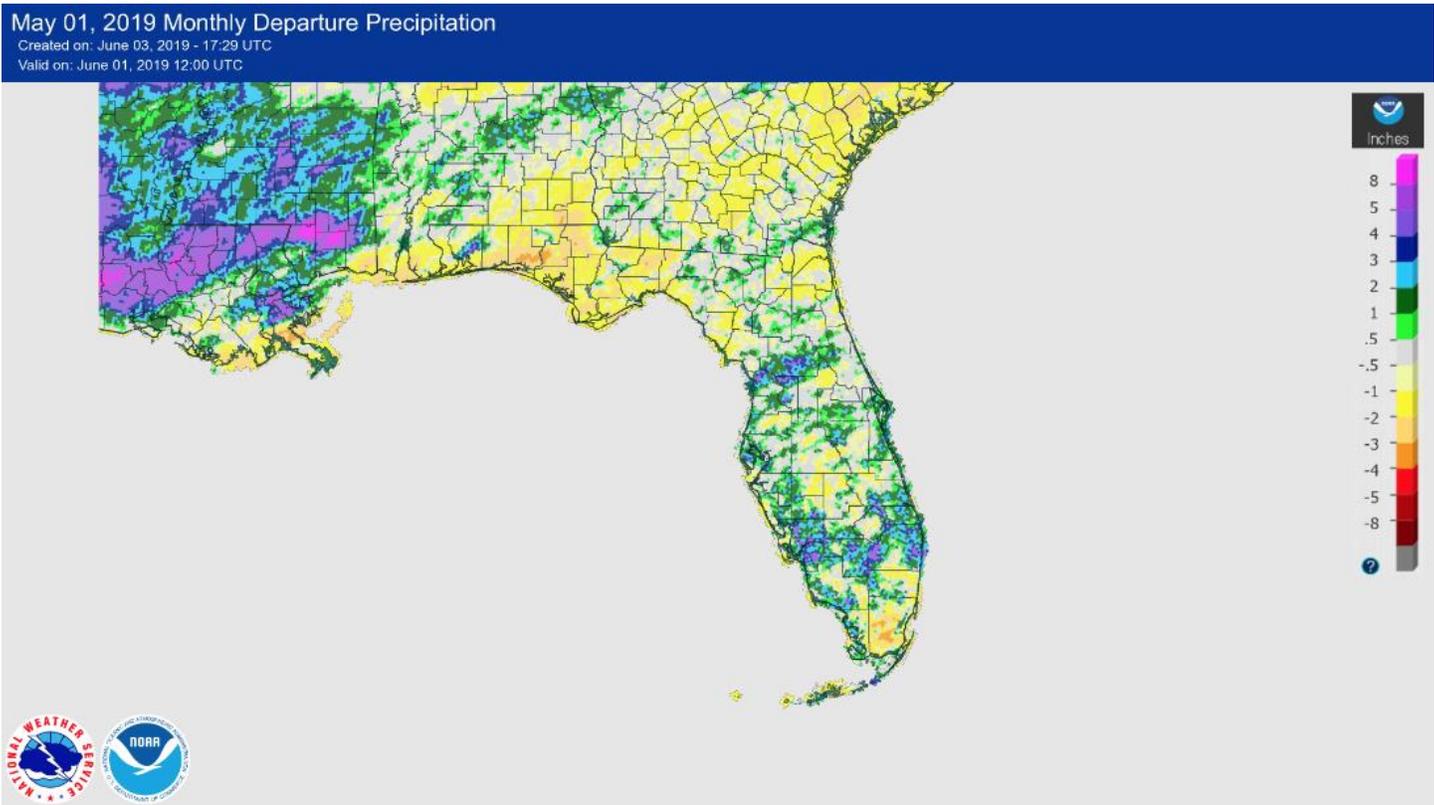
Table 2. May precipitation totals and departures from normal (inches) for selected cities.

Station	Total Rainfall	Departure from Normal
Pensacola	2.81	-1.37
Tallahassee	1.48	-1.99
Jacksonville	1.74	-0.74
Orlando	4.34	+0.89
Tampa	4.78	+2.68
Miami	4.61	-0.73
Key West	3.51	+0.51

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

Date	Location	Record	Last
5	Jacksonville	1.00	0.95 in 1907

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



El Niño continues.

Based on current data and forecast models, forecasters with the Climate Prediction Center (CPC) continue with an El Niño Advisory. Sea-surface temperatures show positive anomalies over most of the equatorial Pacific Ocean, and these anomalies grew during May across most of that basin. This El Niño event still is considered weak and is expected to remain, at 70% probability, through the 2019 boreal summer (JJA), with a 55 to 60% chance of it remaining in place during the 2019 boreal autumn (SON).

Hazardous Weather Events in May.

According 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 May 2019.

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

<u>Report Type</u>	<u>Number of Reports</u>
Coastal Flood	1
Dense Fog	0
Flash Flood	5

Flood	1
Hail	25
Heavy Rain	8
Marine Hail	0
Marine Thunderstorm Wind	28
Non-Thunderstorm Wind Damage	0
Non-Thunderstorm Wind Gust	1
Tornado	1
Thunderstorm Wind Damage	62
Thunderstorm Wind Gust	106
Waterspout	19

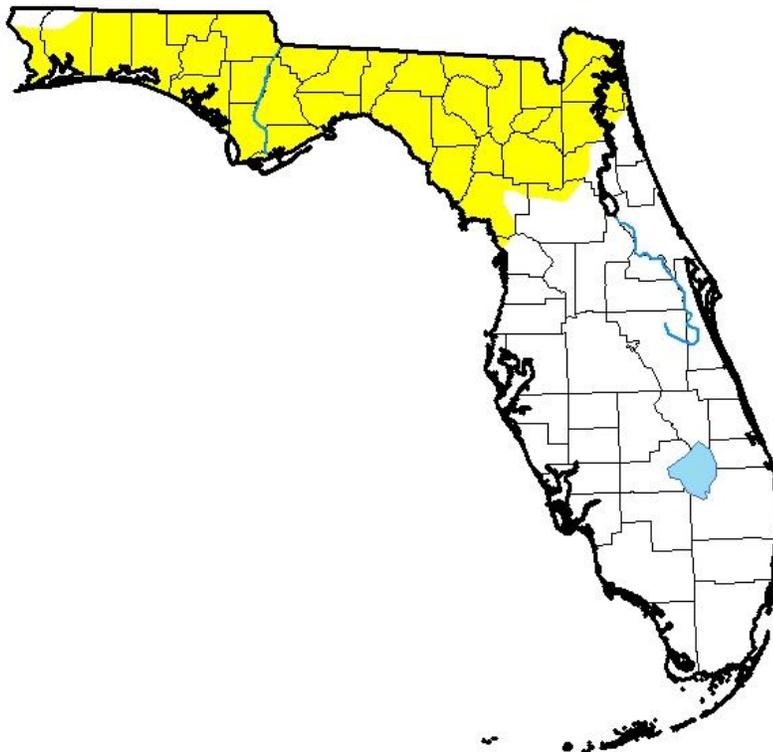
Drought-Related Impacts.

Near the end of May 2019, according to the U.S. Drought Monitor, a swath of abnormally dry conditions stretched across the panhandle, through the Big Bend and into the northern quarter of the peninsula. In most of that area, rainfall was scant during the second half of the month, even as temperatures soared well above normal values.

As of 3 June, the Lake Okeechobee water level was at 10.83 ft. above sea level, which is below average for this time of the year.

**U.S. Drought Monitor
Florida**

May 28, 2019
(Released Thursday, May. 30, 2019)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	60.57	39.43	0.00	0.00	0.00	0.00
Last Week <i>05-21-2019</i>	80.25	19.75	0.00	0.00	0.00	0.00
3 Months Ago <i>02-26-2019</i>	92.26	7.74	0.00	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>05-29-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- 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.

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<http://droughtmonitor.unl.edu/>

Agriculture-Related Impacts.

At the very start of June, soil moisture was adequate in 38% of the state, short in 31%, very short in 26%, and at a surplus in 5%. As of the end of May, agricultural activities were being impacted by dry conditions in much of the state. These impacts included a need for irrigation for many crops (including citrus), delays in planting of field crops in the north, and depletion of cattle pastures.

Appendix 1
Additional May Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	2.65	+0.17	80.7	+6.1
Melbourne	5.74	+2.45	79.4	+3.1
Fort Lauderdale	3.97	-0.68	81.0	+0.8
Fort Myers	5.57	+2.92	80.5	+1.5

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

Date	Station	Type	Value	Broken/Tied	Last
25	Pensacola	Max.	95	Broken	94 in 2012
28	Tallahassee	Max.	100	Tied	100 in 2000
27	Jacksonville	Max.	100*	Broken	98 in 1989
29	Jacksonville	Max.	99	Broken	97 in 1967
30	Jacksonville	Max.	98	Broken	97 in 1945
5	Miami	Max.	91	Tied	91 in 2006
13	Miami	Max.	94	Broken	93 in 2017
14	Miami	Max.	95	Broken	94 in 1985
4	Key West	High Min.	80	Tied	80 in 2007
14	Key West	Max.	94**	Broken	90 in 1878

*Ties the May monthly record-high temperature for Jacksonville, last set (99 degrees) on 13 May 1967.

**Breaks the May monthly record-high temperature for Key West, last set (93 degrees) on 31 May 1881.