

## Climate Summary for Florida – August 2018

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

**Mean temperatures in August were mainly near to slightly above normal across the state, except in a portion of the north-central part of the peninsula, where they were considerably above normal.** The anomalies in monthly mean temperature were mix of positive and negative across the state but near to slightly above normal, overall, ranging from as positive as +2.6°F at Gainesville and Melbourne in the north-central part of the state to as negative as -0.7°F at Fort Myers and Miami in the coastal southern sections (Table 1 and Appendix 1). Continuing a long-term trend, anomalies in monthly mean minimum temperature were more positive than anomalies in monthly mean maximum temperatures. August 2018 was the second warmest at Melbourne, sixth warmest at Gainesville, and seventh warmest at Orlando. Several high temperature records and one low temperature record were tied or broken across the state (Appendix 2).

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

Station	Mean Temperature	Departure from Normal
Pensacola	82.1	+0.3
Tallahassee	81.9	+0.1
Jacksonville	82.4	+0.6
Orlando	82.8	0.0
Tampa	83.9	+0.7
Miami	83.5	-0.7
Key West	85.7	+1.2

**Rainfall totals in August were much above normal over most of the panhandle, near to above normal in the western one-third of the peninsula, and below normal in many areas of the eastern peninsula and Keys, with considerable local variability characteristic of the summer months in Florida (Figure 1).** Station anomalies ranged from -5.51” at Melbourne to +6.83” at Tampa (Table 2 and Appendix 1) (Figure 1). A few 24-hour precipitation records broken for the month (Table 3).

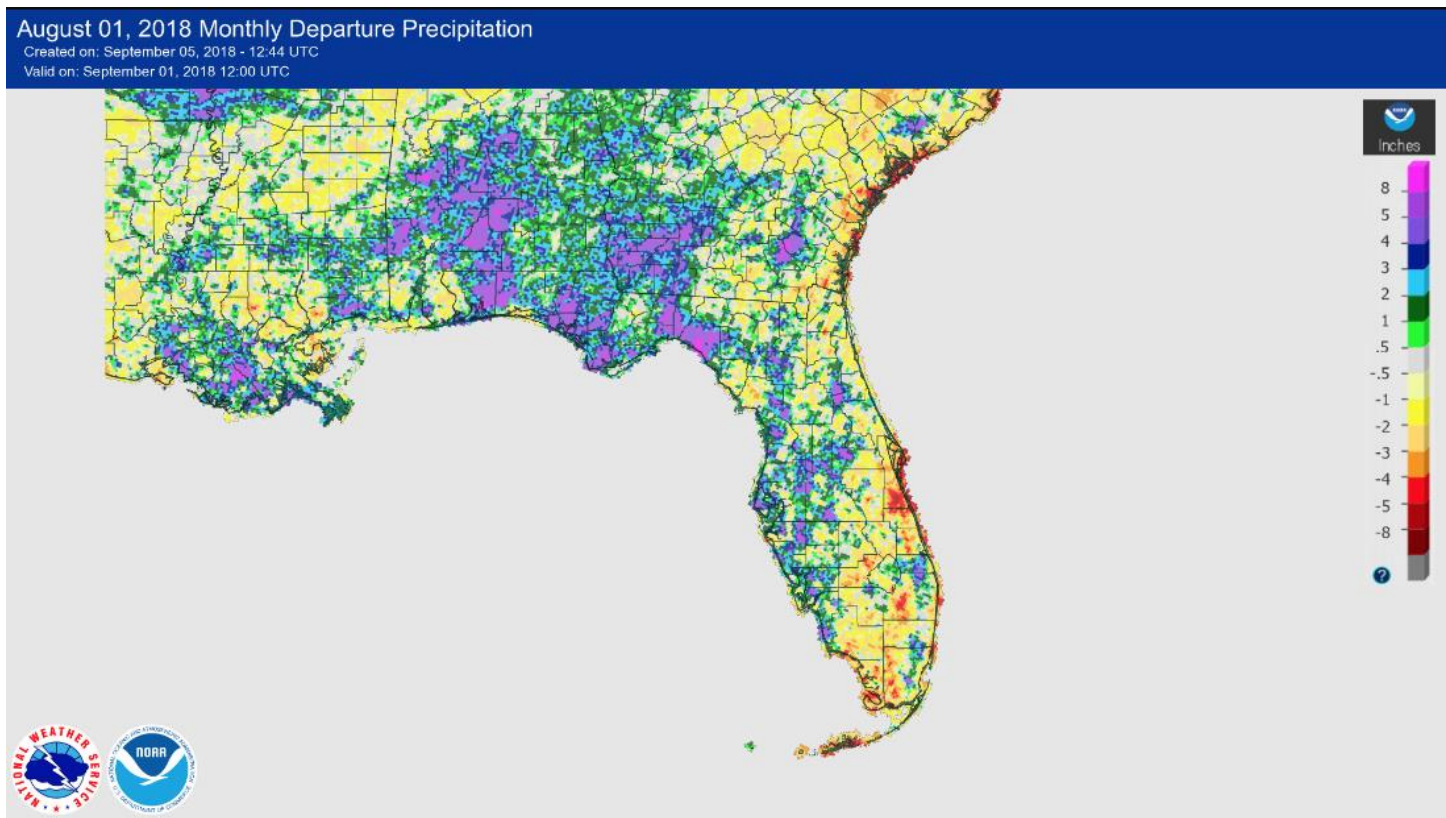
Table 2. August precipitation totals and departures from normal (inches) for selected cities.

Station	Total Rainfall	Departure from Normal
Pensacola	7.54	+0.78
Tallahassee	11.48	+4.13
Jacksonville	7.68	+0.88
Orlando	6.72	-0.41
Tampa	14.60	+6.83
Miami	9.58	+0.70
Key West	1.89	-3.49

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

Date	Location	Record	Last
25	Tallahassee	2.68	2.11 in 2008
23	Gainesville	3.73	3.45 in 1993
25	Tampa	2.45	2.17 in 1939

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).



**ENSO-neutral conditions are present in the Pacific, with El Niño favored to develop.**

Based on current data and forecast models, forecasters with the Climate Prediction Center (CPC) have issued an El Niño Watch. ENSO-neutral conditions currently are present, with sea-surface temperatures (SST) near to above average across the equatorial Pacific Ocean. The chance of El Niño development during the climatological boreal autumn (from now through the end of November) is rated at near 60% and near 70% during the climatological boreal winter (December-January-February). The CPC seasonal outlook favors above-normal temperatures and above-normal precipitation through September 2018. For the climatological autumn as a whole (through the end of November), there is equal probability of below-, near-, and above-normal temperatures and above-normal rainfall in Florida.

**Hazardous Weather Events in August.**

According the Local Storm Reports (LSRs) issued by the local National Weather Service (NWS) offices serving Florida, 208 instances of hazardous weather were reported across the state in August 2018.

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

<u>Report Type</u>	<u>Number of Reports</u>
Storm Damage	47
High Winds	95
Dense Fog	0
Hail	12
Tornadoes/Funnel Clouds/Waterspouts	6
Heavy Rain	29
Fire	0
Flooding	7
Lightning	7
Heat	0
Coastal Hazards/Rip Currents	5

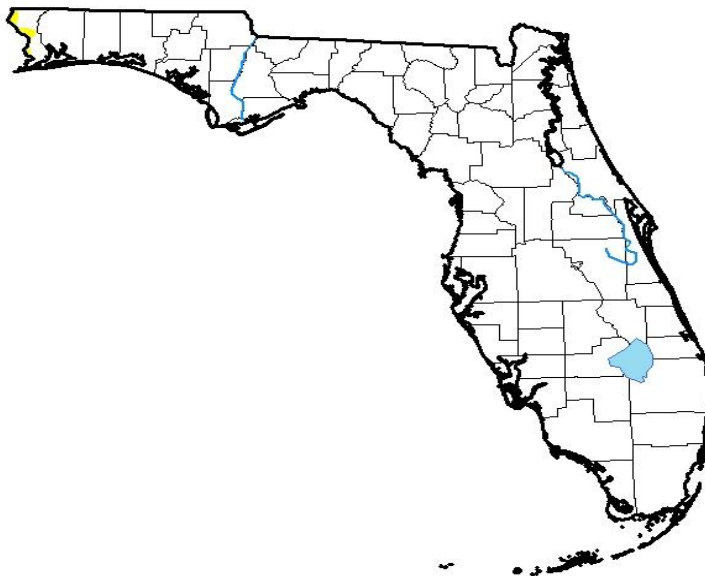
**Drought-Related Impacts.**

At the end of August, according to the U.S. Drought Monitor, all of Florida was drought free, continuing conditions that have been present since the late spring. Western Escambia County, accounting for 0.26% of the state’s land area, had abnormally dry conditions in the second half of the month, owing to rainfall deficits over the last 30 to 60 days.

As of 5 September, the Lake Okeechobee water level was at 14.65 ft. above sea level, which is above average for this time of the year.

**U.S. Drought Monitor  
Florida**

**August 28, 2018**  
(Released Thursday, Aug. 30, 2018)  
Valid 8 a.m. EDT



*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	99.74	0.26	0.00	0.00	0.00	0.00
<b>Last Week</b> <i>08-21-2018</i>	99.37	0.63	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> <i>05-29-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>01-02-2018</i>	72.59	27.41	22.39	0.00	0.00	0.00
<b>Start of Water Year</b> <i>09-26-2017</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>One Year Ago</b> <i>08-29-2017</i>	99.43	0.57	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 beginning of September, topsoil-moisture levels were at mainly adequate although about one-quarter of the state had surplus topsoil-moisture levels, mainly on the panhandle, and about two percent was short on topsoil moisture.

A major theme through the month has been the continuation of very wet soil conditions on the panhandle, which has hindered the cutting of hay and the harvest of peanuts at times. Flooded low-lying areas in the St. Johns River valley negatively impacted cattle pasture lands. Summer crops, including avocado, bitter melon, boniato, malanga, mango, and okra, were harvested; good conditions generally persisted for citrus, allowing spray schedules to be followed and grove maintenance performed. The preparation of land for fall vegetable cultivation was managed as conditions allowed and planting started.

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	8.69	+2.30	83.5	+2.6
Melbourne	2.17	-5.51	84.4	+2.6
Fort Lauderdale	5.27	-2.17	84.0	-0.6
Fort Myers	11.06	+0.92	82.7	-0.7

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
2	Tallahassee	Low Max	78	Tied	78 in 1974
1	Melbourne	High Min	78	Tied	78 in 1983
2	Melbourne	High Min	78	Tied	78 in 1988
3	Melbourne	High Min	81	Broken	80 in 2014
4	Melbourne	High Min	82	Tied	82 in 1963
5	Melbourne	High Min	82	Broken	80 in 2017
6	Melbourne	High Min	81	Broken	79 in 2017
31	Melbourne	High Min	83*	Broken	81 in 2003
22	Tampa	High Min	82	Broken	80 in 2016
27	Tampa	Max	95	Tied	95 in 1947
8	Fort Lauderdale	High Min	82	Tied	82 in 2012
15	Fort Lauderdale	High Min	82	Tied	82 in 2004
17	Fort Lauderdale	High Min	83	Tied	83 in 2013
2	Key West	High Min	85	Broken	84 in 2010
25	Key West	High Min	85	Broken	84 in 2015
26	Key West	High Min	85	Tied	85 in 2009

\*This value ties the all-time highest minimum temperature ever recorded at Melbourne (records back to 1937), last set on 14 July 2017.