



## Climate Summary for Florida – August 2016

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

**Average temperatures for August in Florida were mostly above normal.** The average temperatures in August 2016 were above normal for most of the state, although some below-normal average monthly temperatures were also recorded. Average temperatures departure from normal ranged from -2.0°F in St. Petersburg to +2.9°F in Tallahassee (Table 1 and Appendix 1). August 2016 was the warmest on record in West Palm Beach, 2<sup>nd</sup> warmest for Daytona Beach, 3<sup>rd</sup> warmest in Tallahassee, 5<sup>th</sup> warmest for Vero Beach, 10<sup>th</sup> warmest for Tampa, yet also 10<sup>th</sup> coldest for St. Petersburg. Multiple maximum and minimum temperature records were tied or broken across the state in August (Appendix 2).

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

Station	Average Temperature	Departure from Normal
Pensacola	83.3	+1.5
Tallahassee	84.7	+2.9
Jacksonville	82.9	+1.1
Orlando	83.6	+0.8
Tampa	83.8	+0.6
Miami	83.8	-0.4
Key West	84.5	0.0

**Rainfall totals in August were varied.** Rainfall totals were above normal along much of the Gulf Coast and parts of Central and South Florida, and below normal for most of the northeastern portion of the state (Figure 1). Major reporting stations registered departures from normal ranging from -4.15” in Jacksonville to +7.11” in St Petersburg (Table 2 and Appendix 1), although localized parts of the state saw rainfall totals that were as much as 5” below normal to over 8” above normal (Figure 1). August 2016 was the wettest on record in Tampa and Ocala, and 3<sup>rd</sup> wettest in St Petersburg. Several 24-hour precipitation records were broken for the month (Table 3), some stemming from precipitation associated with the approach of the tropical system that eventually became Hurricane Hermine at the end of the month

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

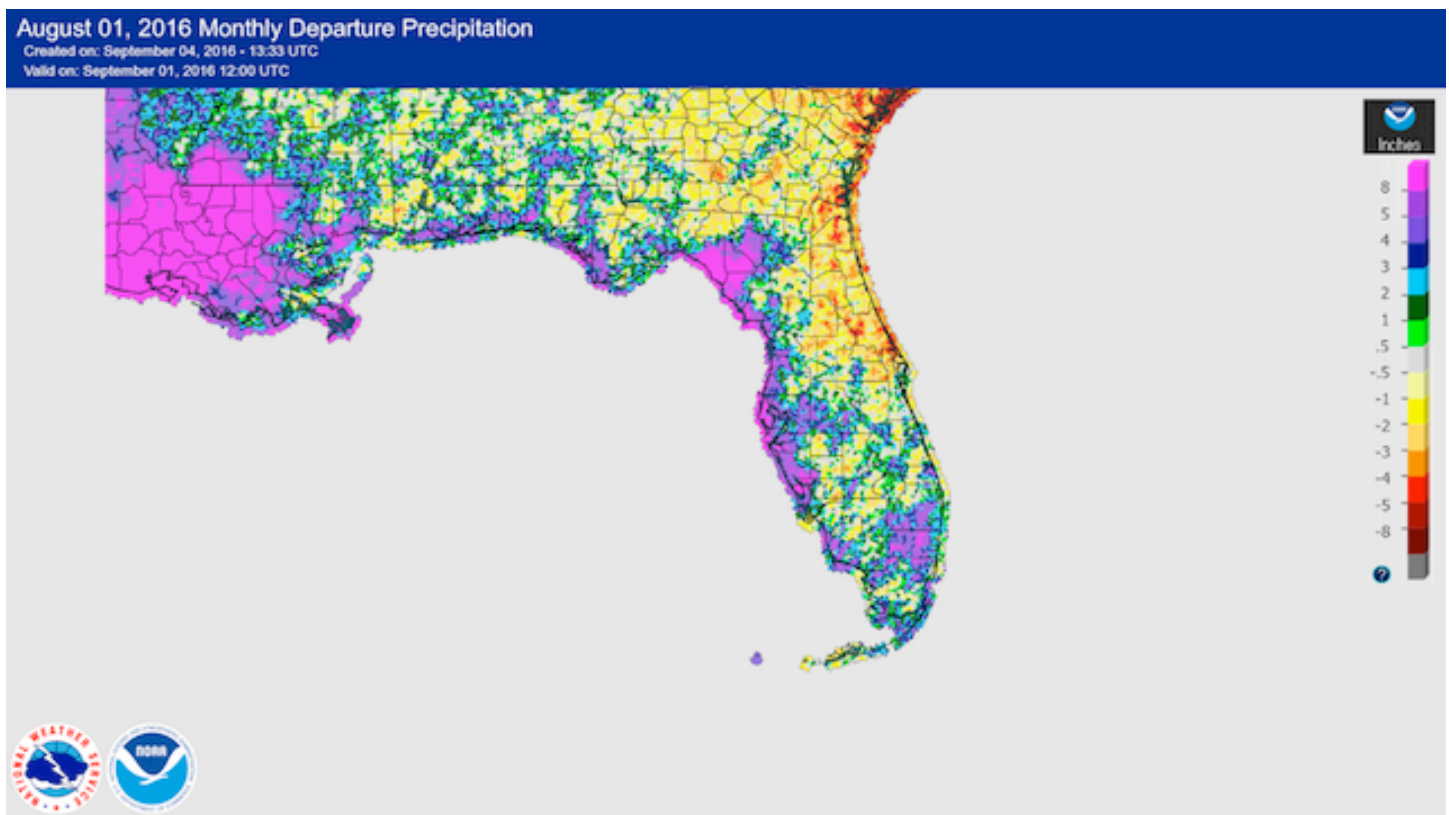
Station	Total Rainfall	Departure from Normal
Pensacola	12.04	+5.28
Tallahassee	7.60	+0.25
Jacksonville	2.65	-4.15
Orlando	9.90	+2.77
Tampa	12.71	+4.94
Miami	13.77	+4.89
Key West	8.81	+3.43



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

Date	Location	Record	Last
2	Key West	2.56	2.49 in 1999
3	Miami	3.79	2.22 in 1957
16	Orlando	2.62	2.07 in 1898
31	Melbourne	2.02	1.14 in 1944
31	St Petersburg	5.01	1.79 in 1932
31	Tampa	4.04	3.02 in 1960

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



**ENSO-neutral conditions are currently present in the Pacific Ocean.**

Based on current data and forecast models, the Climate Prediction Center (CPC) ENSO Alert System status is set to La Niña Watch. Equatorial sea surface temperatures (SST) anomalies in the east-central and eastern Pacific Ocean are near or below average. There is approximately a 55-60% chance for La Niña conditions during the fall and winter 2016-2017. CPC’s outlook suggests an increased likelihood of warmer than normal temperatures for Florida for September through November 2016.

**Hazardous Weather Events in August.**

A total of 225 hazardous weather events were logged for August in Florida by the Southeast Regional Climate Center (see Table 4 for a breakdown by event type). The majority of reports were related to high winds. Of these, about half were related to the tropical

system that eventually became hurricane Hermine by August 31. Localized thunderstorms and some instances of storm damage were reported at various locations throughout the month. Heavy rains and tidal flooding were an issue for residents from Sarasota to St. Petersburg on the 30<sup>th</sup>-31<sup>st</sup>. Earlier in the month, on the 4<sup>th</sup>, an EF-1 tornado with winds up to 100mph touched down in Nassau County on the 4<sup>th</sup>, causing damage to trees, power lines and homes, and overturning several vehicles. Multiple waterspouts were reported throughout the Florida Keys. Several lightning injuries were reported throughout the state on various dates, including two in Broward County on the 4<sup>th</sup>, one in Daytona Beach on the 14<sup>th</sup>, and in Orlando on the 16<sup>th</sup>; there were also two fatalities resulting from lightning strikes, in Okaloosa Island on the 5<sup>th</sup> and Sarasota on the 26<sup>th</sup>.

Table 4. Breakdown of hazardous weather reports submitted in Florida during the month of August. (Compiled from Southeast Regional Climate Center.)

<b>Report Type</b>	<b>Number of Reports</b>
High Winds	135
Flooding	25
Tornadoes/Funnel Clouds/Waterspouts	21
Storm Damage	19
Lightning	11
Heavy Rain	10
Hail	3
Coastal Hazards	1

**Agriculture Related Impacts.**

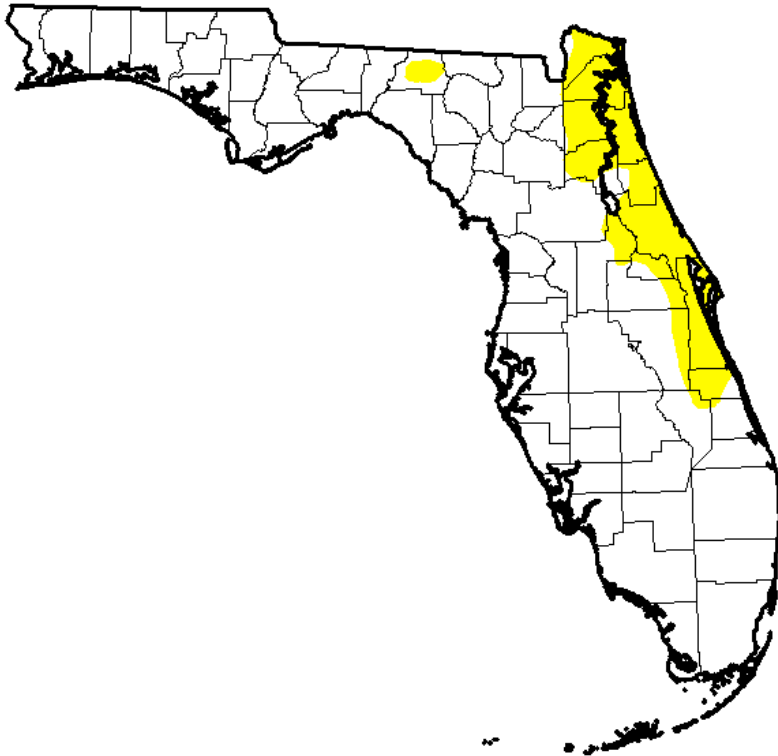
Soil moisture conditions throughout the state have been mostly reported as adequate throughout the month, although some portions of the state (about 15-20%) are reporting short and a similar percentage are reporting surplus values. For most of the month the citrus growing counties were experiencing above normal temperatures and below normal rainfall, with some parts affected by abnormally dry conditions as defined by the US Drought Monitor. Most groves have required daily irrigation, and growers have been spraying against greening disease. Land preparation for fall fruit and vegetable planting is ongoing. Pastures and cattle have been in mostly good conditions, although pasture quality is beginning to seasonally decline as grasses mature. Some areas that have received large amounts of rainfall report standing water in pastures. Corn harvesting has been ongoing in the Panhandle. Cotton and soybeans were mostly in good condition although some farmers were reporting problems with fungus and insects. Peanut harvesting has begun in Lafayette and Gilchrist Counties, and anticipated to begin soon in Dixie, Levy, and Suwannee Counties. Sugarcane in Glades, Hendry, Lee and Palm Beach Counties is in good condition.

**Drought Related Impacts.**

At the beginning of August, most (83%) of the state was drought-free, while roughly 17% of the state (mainly northeastern Panhandle counties and along the Atlantic Coast) was experiencing abnormally dry (D0) conditions. Rainfall by the second week of the month lifted D0 conditions from Dade to St. Lucie Counties and most of the Panhandle. As the month progressed, new D0 conditions started creeping into the northeastern corner of the state (Clay, Duval, Flagler, Nassau, Putnam, and St. Johns Counties). As of the latest US Drought Monitor update (August 30<sup>th</sup>), approximately 86% of Florida was drought free, and 14% was affected by D0 conditions. Lake Okeechobee water levels at the end of the month were at 14.73 feet, which is above average for this time of the year.

# U.S. Drought Monitor Florida

**August 30, 2016**  
(Released Thursday, Sep. 1, 2016)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	86.23	13.77	0.00	0.00	0.00	0.00
<b>Last Week</b> 8/23/2016	86.32	13.68	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> 5/31/2016	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> 1/22/2015	87.96	12.04	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> 9/29/2015	82.72	17.28	4.00	0.00	0.00	0.00
<b>One Year Ago</b> 8/1/2015	67.17	32.83	20.82	6.75	2.92	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/>

### Appendix 1 Additional August Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	3.30	-3.09	82.7	+1.8
Melbourne	6.38	-1.30	83.9	+2.1
St Petersburg	15.49	+7.11	81.9	-2.0
Fort Lauderdale	7.17	-0.27	83.8	-0.8
Fort Myers	11.01	+0.87	83.9	+0.5

Appendix 2

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

<b>Date</b>	<b>Station</b>	<b>Type</b>	<b>Value</b>	<b>Broken/Tied</b>	<b>Last</b>
2	Orlando	High Min	77	Tied	77 in 1970
6	Key West	High Min	84	Tied	84 in 2015
7	Key West	High Min	85	Tied	85 in 2011
14	Melbourne	High Min	82	Broken	79 in 1956
14	Orlando	High Min	77	Tied	77 in 1952
15	Melbourne	High Min	81	Broken	79 in 1954
16	Melbourne	High Min	82	Broken	80 in 2002
17	Melbourne	High Min	81	Tied	81 in 2009
22	Ft Lauderdale	High Min	83	Tied	83 in 2007
23	Ft Lauderdale	High Min	82	Tied	82 in 2013
23	Ft Myers	Max	96	Tied	96 in 2014
23	Miami	High Min	83	Broken	82 in 2000
23	Tampa	Max	95	Tied	95 in 1989
24	Melbourne	High Min	80	Tied	80 in 2000
25	Melbourne	High Min	80	Tied	80 in 2014
25	Miami	Max	94	Tied	94 in 1998
26	Melbourne	High Min	80	Tied	80 in 2014
26	Tampa	Max	95	Tied	95 in 1941
27	Tampa	Max	95	Tied	95 in 1975
28	Melbourne	High Min	79	Tied	80 in 1976
28	Orlando	High Min	79	Tied	79 in 2005
30	Ft Lauderdale	Low Max	83	Tied	83 in 1932
31	St Petersburg	Low Max	79	Broken	80 in 1939
31	Tampa	Low Max	78	Broken	81 in 1985