



## Climate Summary for Florida – August 2014

*Prepared by Melissa Griffin and David Zierden.*

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

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

**Average temperatures were above normal across the state in August.** The departures for average temperatures in August 2014 were above normal across the entire state and the departures ranged from 0.2°F in Pensacola to 2.8°F at Tallahassee. (Table 1 and Appendix 1). August 2014 was the 2<sup>nd</sup> in Fort Myers, the 3<sup>rd</sup> warmest on record in Tallahassee and Key West, the 6<sup>th</sup> warmest in Daytona Beach and Miami, the 7<sup>th</sup> warmest in Tampa and the 9<sup>th</sup> warmest in Orlando and West Palm Beach. Royal Palm Ranger Station reported 101°F on the 28<sup>th</sup>, the highest temperature in Florida for the month. Tallahassee reported a maximum temperature over 95°F for 19 days in August and 2 days over 100°F, and Apalachicola recorded a maximum temperature of 102°F on the 24<sup>th</sup>, one degree off from tying the all time record set in 1931. Despite the record warm temperatures and heat wave at the end of the month, there were some minimum temperatures records tied or broken when cold fronts impacting the state earlier in the month (Appendix 2).

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

Station	Average Temperature	Departure from Normal
Pensacola	82.0	0.2
Tallahassee	84.6	2.8
Jacksonville	82.2	0.4
Orlando	83.8	1.0
Tampa	84.2	1.0
Miami	84.9	0.7
Key West	86.4	1.9

**Rainfall totals varied across the state in August.** Interior portions of the southern Florida Peninsula reported monthly rainfall totals well above normal, while most of the rest of Florida saw below average rainfall during July (Figure 1). Departures from normal roughly ranged from -5.39” to 0.19” (Table 2 and Appendix 1), though localized parts of Florida saw rainfall totals that were as much as 8.00” below normal to over 8.00” above normal. August 2014 was the 2<sup>nd</sup> driest in Tallahassee (the driest was in 2011, with only 2.03” reported for the month), 2<sup>nd</sup> driest in Daytona Beach (the driest was in 1963, with only 2.01” reported for the month) and it was 4<sup>th</sup> driest on record in Pensacola. There were multiple 24-hour precipitation records broken for the month (Table 3). The summer (June-July) was the driest on record in Tallahassee (only 8.99”, which is -13.26” below normal) and the 2<sup>nd</sup> wettest on record in Miami (38.98”, which is 13.93” above normal).

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

Station	Total Rainfall	Departure from Normal
Pensacola	1.37	-5.39
Tallahassee	2.26	-5.09
Jacksonville	3.03	-3.77
Orlando	7.01	-0.12
Tampa	6.17	-1.60
Miami	9.07	0.19
Key West	4.05	-1.33

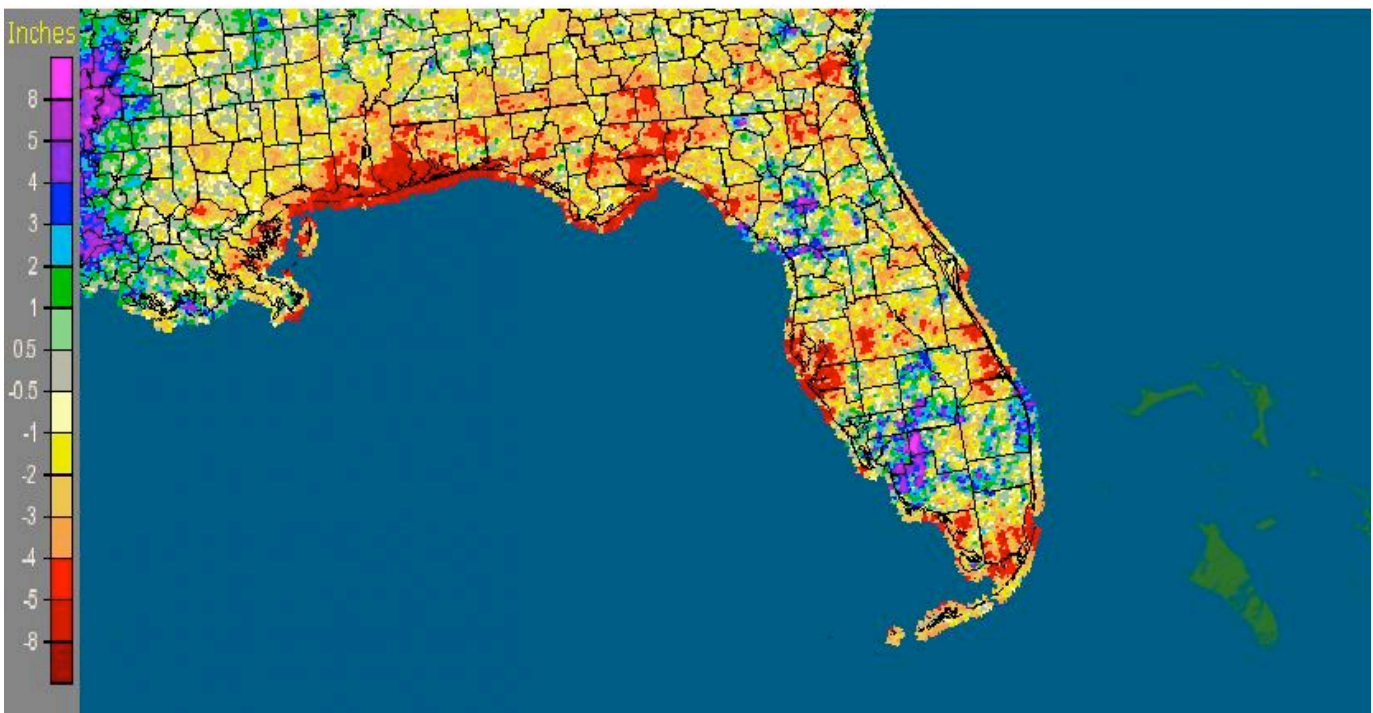


Table 3. Select daily rainfall records (inches) broken during August. (Compiled from NOAA, NWS)

Date	Location	Record	Last
3	Fort Green	3.91	2.76 in 2012
5	Naples	4.82	2.00 in 1989
16	Hialeah	3.05	2.20 in 2009
16	West Palm Beach	2.37	2.20 in 1888
16	Whiting Field	2.38	1.00 in 1947
23	Fort Green	2.23	1.80 in 2004

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).

Florida: August, 2014 Monthly Departure from Normal Precipitation  
Valid at 9/1/2014 1200 UTC- Created 9/1/14 13:55 UTC



**ENSO-Neutral Conditions Continue in the Pacific.**

Based on current data and forecast models, the Climate Prediction Center (CPC) continue to have an El Niño Watch in place. Though Neutral ENSO conditions continue to be reported, positive sea surface temperatures (SST) anomalies continue in the eastern Pacific Ocean and just west of the Date Line. The chances of an El Niño event have decreased to about 65% during the Northern Hemisphere fall and early winter. CPC predicts above normal temperatures across northeast portions of the state and above normal precipitation in the southern Peninsula through November 2014.

**Hazardous Weather Events in August.**

There were a total of 208 severe weather reports made in Florida during August. On the 3<sup>rd</sup>, lightning struck and injured a man in downtown St. Petersburg, FL. On the same day, a severe thunderstorm produced golf ball sized hail and high winds in Hosford, FL and a waterspout was spotted on Lake Okeechobee. Heavy rains, over 4 inches in less than a hour, in the Naples area caused urban flooding, with some roads under 2 feet of standing water. Multiple reports of a funnel cloud were made in New Port Richey on the morning of the 6<sup>th</sup>, though there was no confirmed touchdown. Thunderstorms on the 8<sup>th</sup> and 9<sup>th</sup> produced wind gusts of over 40 mph in the Titusville area, and storms on the 10<sup>th</sup> and 11<sup>th</sup> caused high winds, hail and minimal storm damage in portions of central Florida from Tampa to Daytona Beach. On the 12<sup>th</sup>, a person was injured in Milton, FL when a secondary lightning strike struck the vehicle he was leaning against. Two mature waterspouts were reported in Biscayne Bay on the 14<sup>th</sup>, along with 45 mph wind gusts in Vero

Beach, and funnel clouds were seen over Palm Beach Gardens and Pompano Beach Airpark. Also on the 14<sup>th</sup>, thunderstorms dumped heavy rainfall in parts of south Jacksonville, causing some streets to flood. A USPS worker sustained serious burns when lightning struck near his truck and traveled through the vehicle as he was touching it in Lauderdale by the Sea on the 15<sup>th</sup>. At the same time, an estimated EF0 tornado touched down near the intersection of Indrio Road and US 1 north of Fort Pierce, FL. Another EF0 tornado was spotted on the 16<sup>th</sup>, this time in Boca West, near Clint Moore Road and the Florida Turnpike. Back to back evenings of thunderstorms on the 18<sup>th</sup> and 19<sup>th</sup>, caused pea-sized hail, high winds and localized storm damage in parts of northeast Florida, especially around the Jacksonville area. A strong storm on the 20<sup>th</sup> caused power outages in Wellington and there were reports of hail in the same area. Thunderstorms in Orlando, Palatka and Tallahassee caused downed trees and power lines, with storm damage different structures and some dime sized hail reported from those locations on the 21<sup>st</sup>. Winds up to 60 mph were reported with an intense line of thunderstorms that moved through Levy county on the 22<sup>nd</sup>. On the 24<sup>th</sup>, a waterspout was reported offshore in Crystal River, FL and sea breeze thunderstorms produced high winds along portions of Pinellas, Manatee, Sarasota, Charlotte and Lee counties. Heavy rain and dangerous lightning were reported in Gainesville on the 30<sup>th</sup> and on the 31<sup>st</sup> a woman was struck and injured by lightning in Chiefland, FL.

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

<u>Report Type</u>	<u>Number of Reports</u>
Heavy Rain and Flooding	14
High Winds	125
Storm Damage	30
Hail	10
Thunderstorm/Lightning	7
Tornadoes/Funnel Clouds/Waterspouts	21
Coastal Hazards	1
Dense Fog	0
Fire	0

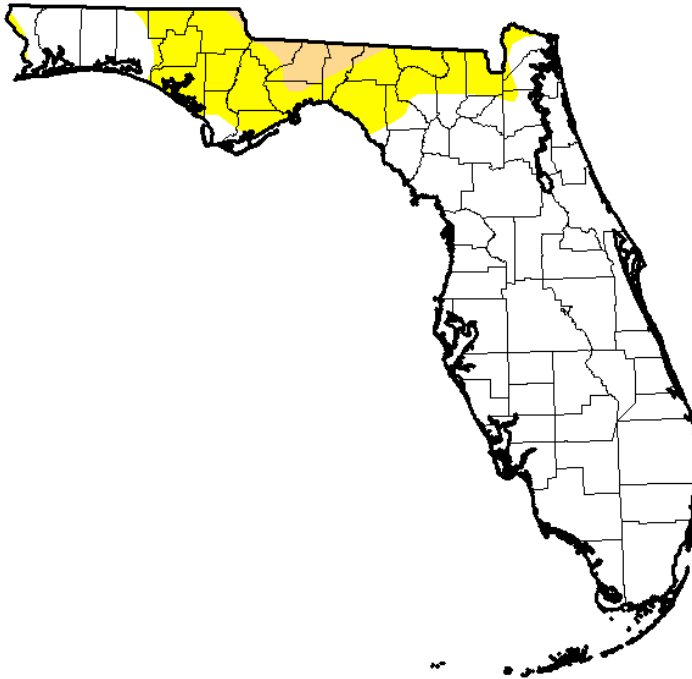
**Agricultural and other climate related impacts.**

At the beginning of August, topsoil and subsoil moisture levels across the state were running more than 75% adequate and about 10% at surplus. Hay continued to be cut in the Panhandle, north and central Florida; although, army worms were reported found in hay, pasture, soybeans and peanuts. Peanut pegging was reported at 95% and farmers in southwest Florida continued land preparation for fall planting. Corn and corn silage harvesting continued in portions of the state and water levels beginning to rise in ponds and wetlands in parts of south Florida. Drier conditions through the month led to a decrease in surface and sub-surface soil moisture levels. Polk County began preparations for strawberries mid-month, while land preparation and setting down plastic for fall planting continued in many southwest Florida counties. Extreme heat at the end of the month made for unsuitable working conditions across the state, stressed cattle and contributed in decreased topsoil and subsoil moisture levels.

The state started the month of August with abnormally dry conditions (D0) shown for most of the Big Bend and Panhandle counties after 3-months of below normal precipitation had been observed. Tallahassee reported its driest summer on record (back to 1893) with more than 12.00” below normal rainfall for the June, July and August, and Jacksonville reported its 7<sup>th</sup> driest summer on record (more than 8.00” below normal). The lack of rainfall in the northern part of the state led to deteriorating conditions in portions of Gadsden, Jefferson, Leon and Wakulla counties where moderate (D1) drought conditions were introduced. The area of D0 in Panhandle and Big Bend expanded east, to portions of the Suwannee River watershed. In the Peninsula, the summer rains, while less than normal, inhibited any southward expansion of dryness during the month and Miami area reported its second wettest summer on record (over 14.00” above normal). The water levels in Lake Okeechobee were currently at 14.53 ft., which is up from the end of June, but below the lake level at this time last year (2013).

**U.S. Drought Monitor**  
**Florida**

**August 26, 2014**  
(Released Thursday, Aug. 28, 2014)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	78.57	21.43	2.88	0.00	0.00	0.00
<b>Last Week</b> 8/19/2014	78.79	21.21	2.80	0.00	0.00	0.00
<b>3 Months Ago</b> 5/27/2014	87.38	12.62	3.98	0.00	0.00	0.00
<b>Start of Calendar Year</b> 12/31/2013	75.83	24.17	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> 10/1/2013	100.00	0.00	0.00	0.00	0.00	0.00
<b>One Year Ago</b> 8/27/2013	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.*

**Author:**

David Simeral  
Western Regional Climate Center



<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	5.21	-1.18	81.7	0.8
Melbourne	4.35	-3.33	83.6	1.8
St Petersburg	5.60	-2.78	85.3	1.4
Fort Lauderdale	5.71	-1.73	85.6	1.0
Fort Myers	6.78	-3.36	84.4	1.0

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>
1	Apalachicola	Min	65	Broken	69 in 2002
1	Jasper	Min	63	Broken	65 in 1956
1	Niceville	Min	61	Broken	66 in 1997
1	St. Petersburg	High Min	82	Tied	82 in 1999
1	Jacksonville NAS	High Min	78	Broken	77 in 1955
2	Apalachicola	Min	66	Broken	70 in 1933
2	Glen St. Mary	Min	65	Tied	65 in 1966
2	Avon Park	High Min	76	Tied	76 in 1924
2	Daytona Beach	High Min	80	Broken	79 in 2010
3	Clermont	Max	97	Tied	97 in 1970
3	Orlando	Max	96	Tied	96 in 2010
3	Apalachicola	Min	69	Broken	71 in 1969
3	Key West	Min	74	Tied	74 in 1984
3	Melbourne	High Min	78	Tied	78 in 1984
3	Clermont	High Min	78	Broken	76 in 2011
3	Pensacola	Min	63	Broken	67 in 1936
5	Tallahassee	Max	99	Tied	99 in 2011
5	La Belle	Low Max	84	Broken	87 in 1939
5	Naples	Low Max	86	Broken	87 in 1969
8	Punta Gorda	Max	97	Tied	96 in 2012
8	Tallahassee	Max	99	Broken	98 in 2007
8	Vero Beach	Min	70	Tied	70 in 2002
9	Daytona Beach	Max	95	Tied	95 in 2007
13	Moore Haven	High Min	78	Broken	78 in 1955
14	Key West	High Min	86	Broken	84 in 2005
15	Venice	Low Max	84	Broken	86 in 1971
16	Fort Lauderdale Beach	Max	93	Tied	93 in 2010
16	Wauchula	Low Max	86	Tied	86 in 1961
17	Key West	High Min	86	Broken	85 in 2011
18	Vero Beach	Low Max	82	Broken	85 in 1999
19	Miami Beach	High Min	83	Tied	83 in 1999
20	Inverness	Max	99	Broken	98 in 1902
22	Inverness	Max	100	Broken	96 in 2011
22	Jacksonville	Max	99	Broken	98 in 1939
22	St. Petersburg	High Min	82	Broken	81 in 1931
23	Moore Haven	Max	97	Broken	96 in 1931
23	Sarasota	Max	100	Broken	96 in 1981
24	Apalachicola	Max	102	Broken	97 in 1986
24	Tallahassee	Max	101	Broken	99 in 1968
24	Fort Myers	Max	97	Tied	97 in 1942
25	Daytona Beach	Max	99	Broken	96 in 1938
26	Moore Haven	Max	97	Broken	95 in 2000
29	Clermont	Max	97	Tied	97 in 1951
29	Plant City	High Min	76	Tied	76 in 2011
30	Fort Lauderdale Beach	High Min	83	Tied	81 in 2005