

Climate Summary for Florida – November 2014

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

Average temperatures were below normal across the state in November. The departures for average temperatures in November 2014 varied across the entire state, though most of the reporting stations saw average temperatures near normal. The departures ranged from -2.3°F in Miami to -6.0°F at Pensacola. (Table 1 and Appendix 1). Most stations in the Panhandle, Big Bend and North Florida recorded at least one day with a minimum temperature below freezing (32°F) during the month. Only one station in the state, Oasis Ranger Station, reported a maximum temperature over 90°F. November 2014 was the 2nd coldest on record in Gainesville, and the 3rd coldest on record in Jacksonville, Pensacola and Tallahassee. Multiple temperature records were tied or broken across the state in November (Appendix 2).

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

Station	Average Temperature	Departure from Normal
Pensacola	54.7	-6.0
Tallahassee	54.3	-5.9
Jacksonville	57.1	-5.1
Orlando	65.3	-3.2
Tampa	64.4	-4.7
Miami	72.6	-2.3
Key West	73.3	-2.5

Rainfall totals varied across the state in November. Portions of the Florida Peninsula and Big Bend reported monthly rainfall totals well above normal, while the Panhandle and southeast Florida saw below average rainfall during November (Figure 1). Departures from normal roughly ranged from -3.53” to 3.71” (Table 2 and Appendix 1), though localized parts of Florida saw rainfall totals that were as much as 5.00” below normal to over 8.00” above normal (Figure 1). November 2014 was the 3rd wettest in Ocala, the 4th wettest in Tampa and Daytona Beach, the 5th wettest at Fort Myers and the 10th wettest in Orlando. Daytona Beach reported its 2nd wettest day in November since records started in 1923 on the 26th when 6.45” of rainfall was recorded. There were multiple 24-hour precipitation records broken for the month (Table 3).

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

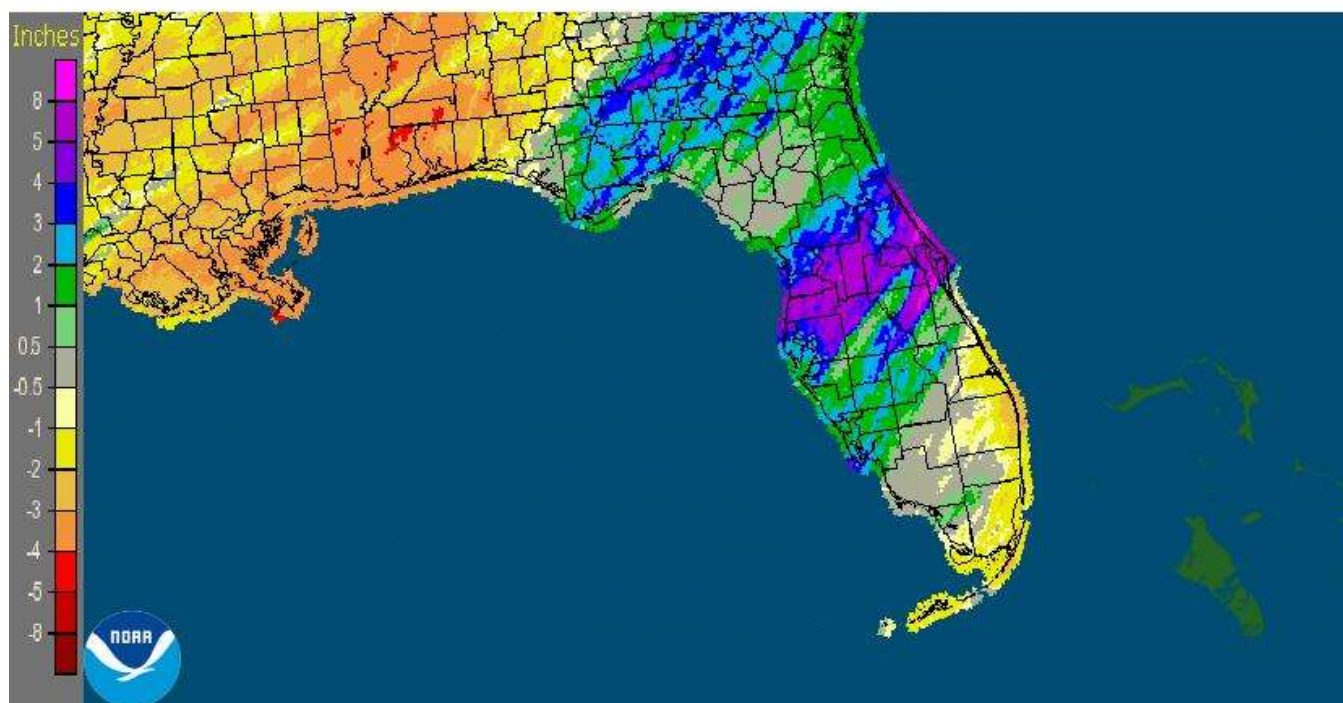
Station	Total Rainfall	Departure from Normal
Pensacola	1.20	-3.53
Tallahassee	6.92	3.42
Jacksonville	3.96	1.85
Orlando	4.83	2.66
Tampa	5.26	3.71
Miami	2.66	-0.61
Key West	0.84	-1.46

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

Date	Location	Record	Last
11	Daytona Beach	3.68	2.12 in 1963
22	Tallahassee	1.79	1.18 in 1965
25	Orlando	4.07	1.12 in 1953
25	Weeki Wachee	5.23	1.04 in 1980
25	Tampa	3.63	1.65 in 2000
25	Ocala	3.45	2.00 in 1972
26	Daytona Beach	6.45	3.65 in 1937
26	Lisbon	6.10	3.40 in 1972
26	Plant City	3.73	1.47 in 1937
26	Fort Myers	2.85	0.71 in 1921

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

Florida: November, 2014 Monthly Departure from Normal Precipitation
Valid at 12/1/2014 1200 UTC- Created 12/1/14 14:26 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 have been recorded across most of the Pacific Ocean. An El Niño event is favored to develop during the Northern Hemisphere winter. CPC predicts below normal temperatures and above normal precipitation across the state through February 2015.

Hazardous Weather Events in November.

There were a total of 122 severe weather reports made in Florida during November. On the 1st, coastal portions along Duval, Brevard and St. Johns counties reported wind gusts up to 50 mph. The next severe weather day was on the 17th, when a very strong cold front pushed through the state. Storm damage, downed trees and power lines, along with wind gusts up to 60 mph were reported in various locations, such as Panama City Beach, Marianna, Lake City, Jacksonville, Tampa, Cocoa Beach, and Palm Coast. A funnel cloud was witnessed over a community near the University of North Florida in Duval County. Multiple tornadoes were also reported on the 17th. One tornado was spotted by a debris signature via dual-pol radar near Laird, FL (Bay County), and another was reported in Grand Ridge, where mobile homes were blown over. A short track EF0 tornado uprooted trees and destroyed a shed in Sanderson, FL

(Baker County). The strongest tornado reported on the 17th was an EF2 that touched down south of Blountstown, FL (Calhoun County). The tornado tracked on the ground for 22-miles and was 400 yards long at its widest point. The Calhoun Correction Institute was one of the hardest hit areas with broken fence lines, flipped cars and damage to concrete buildings. Two people were injured at the facility as they waited in their cars for the storm to pass. As the tornado moved northeast, it destroyed some floating homes, sweeping debris into the Apalachicola River. The tornado finally dissipated near Sycamore, FL (Gadsden County) after being on the ground for nearly 30-minutes. On the afternoon of the 23rd, a strong line of thunderstorms pushed through the Florida Panhandle, causing storm damage in Walton, Washington, Calhoun, Liberty, and Gadsden counties. Heavy rains on the 25th and 26th were reported in numerous locations in Sumter, Volusia, Orange, Brevard, and Marion counties. Parts of Daytona Beach reported flooding over area roads from the intense rainfall.

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

Report Type	Number of Reports
Heavy Rain and Flooding	21
High Winds	50
Storm Damage	43
Hail	0
Thunderstorm/Lightning	0
Tornadoes/Funnel Clouds/Waterspouts	8
Coastal Hazards	0
Dense Fog	0
Fire	0

Agricultural and other climate related impacts.

At the beginning of November, topsoil and subsoil moisture levels across the state were running more than 66% adequate and about 6% at surplus. The month started out cooler and drier across the state, allowing for the remaining peanuts to be harvested in the Panhandle and north Florida. In Holmes, Jackson and Walton counties, cotton and soybean harvesting and winter planting of rye grass and oats continued. Sugarcane harvesting progressed in Hendry, Glades and Palm Beach counties, along with a variety of vegetables in Southwest Florida. By mid-month, about 94% of the peanut harvest was completed and cotton and soybean yields were reported to be good to excellent. Cattle conditions were mainly good (74%) to excellent (6%), though there were also reports of fair (19%) conditions. Pasture conditions were fair (33%) to good (56%) as pastures across the state continued the seasonal decline, especially after an early season frost, dry conditions and mole crickets were reported in Duval County. Peanut, cotton and soybean harvests were nearly completed by the end of November. The strawberry harvest began in Hillsborough County, and the vegetable harvest in southwest Florida increased. The heavy rains at the end of the month lead to the further decline of pasture conditions across the state. A strong cold front pushed through the state, and overnight temperatures dropped to the mid 30s and lower 40s in the citrus growing areas. Typical grove activity, including irrigating, mowing, spraying and fertilizing took place in during November. In southern portions of the citrus growing region, old non-productive groves were being pushed and replaced with new plantings.

At the end of October, moderate drought (D1) conditions had been removed from eastern Big Bend counties (Madison and Taylor counties) but introduced in Franklin, Jackson and Liberty counties and much needed rainfall caused the removal of the dry conditions from the west coast and central Florida. November started off very dry for the state, with the first observed rainfall (less than 0.50”) coming on the 6th of the month in Miami-Dade County. Because of the continued lack of rainfall in the Panhandle, D1 conditions were added to coastal portions of Escambia, Santa Rosa and Okaloosa counties. Widespread rain along central and south Florida at during the middle of the month, helped keep drought conditions in check. Near the end of the month, heavy rains across portions of the Panhandle and Big Bend reduced the D1 conditions to abnormally dry (D0) in Gadsden, Leon, Jefferson and Wakulla counties. As of December 1st, Lake Okeechobee was at 15.57 ft., and a few river levels are elevated from the rains during the week of Thanksgiving.

**U.S. Drought Monitor
Florida**

November 25, 2014
(Released Wednesday, Nov. 26, 2014)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	88.61	10.39	2.26	0.00	0.00	0.00
Last Week 11/19/2014	83.05	16.95	6.62	0.00	0.00	0.00
3 Months Ago 9/25/2014	78.57	21.43	2.88	0.00	0.00	0.00
Start of Calendar Year 1/1/2014	75.83	24.17	0.00	0.00	0.00	0.00
Start of Water Year 3/1/2014	77.22	22.78	6.61	0.00	0.00	0.00
One Year Ago 11/25/2013	77.26	22.74	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/>

Appendix 1
Additional November Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	2.47	0.41	57.6	-5.2
Melbourne	3.08	0.20	66.6	-2.4
St Petersburg	3.93	2.03	65.8	-4.3
Fort Lauderdale	2.92	-0.32	72.9	-2.6
Fort Myers	4.47	2.51	68.0	-3.7

Appendix 2

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

Date	Station	Type	Value	Broken/Tied	Last
2	Daytona Beach	Min	41	Broken	43 in 1993
2	Federal Point	Low Max	56	Broken	68 in 1897
2	Daytona Beach	Low Max	65	Broken	67 in 1963
2	Orlando	Min	44	Broken	46 in 1993
2	Orlando	Max	87	Broken	86 in 1992
2	Melbourne	Min	44	Broken	45 in 1993
2	Melbourne	Low Max	67	Broken	70 in 2008
2	Vero Beach	Min	41	Broken	47 in 1993
2	Vero Beach	Low Max	65	Broken	69 in 1963
2	Lakeland	Low Max	66	Broken	69 in 1963
2	Fort Myers	Min	47	Broken	49 in 1993
2	Fort Myers	Low Max	70	Broken	71 in 1964
2	Miami	Low Max	71	Broken	73 in 1949
2	Miami	Min	52	Broken	54 in 1993
2	West Palm Beach	Low Max	69	Broken	72 in 1964
2	West Palm Beach	Min	49	Broken	51 in 1991
2	Key West	Min	61	Broken	62 in 1957
2	Key West	Low Max	70	Broken	72 in 1887
9	Vero Beach	Low Max	65	Tied	65 in 1991
9	West Palm Beach	Low Max	69	Tied	69 in 1991
17	Melbourne	Max	89	Broken	88 in 1948
17	Vero Beach	Max	86	Tied	86 in 2011
17	Miami	Max	87	Tied	87 in 2000
17	West Palm Beach	Max	89	Broken	87 in 2011
18	Stuart	Max	89	Broken	88 in 1938
18	Gainesville	Low Max	53	Broken	59 in 1989
19	Live Oak	Low Max	56	Broken	59 in 1914
19	Pensacola	Min	25	Broken	28 in 1903
19	Tallahassee	Min	22	Tied	25 in 2008
19	Lake City	Low Max	49	Broken	54 in 1926
19	Apalachicola	Min	31	Broken	33 in 2008
19	Jacksonville	Min	27	Broken	28 in 2008
19	Miami	Low Max	65	Broken	67 in 1951
19	Fort Lauderdale	Low Max	66	Broken	70 in 1927
20	Gainesville	Min	24	Broken	29 in 2008
20	Jacksonville	Min	24	Broken	30 in 1873
23	Melbourne	Max	86	Broken	86 in 1992
23	Fort Lauderdale	High Min	78	Broken	75 in 1998
23	West Palm Beach	High Min	75	Tied	75 in 1906
24	Gainesville	High Min	71	Broken	68 in 1957
24	Jacksonville	Max	86	Broken	85 in 1967
24	Jacksonville	High Min	70	Broken	67 in 1992
24	Moore Haven	High Min	72	Tied	72 in 1921
24	Daytona Beach	Max	87	Broken	85 in 1992
24	Melbourne	Max	88	Tied	88 in 1979
24	Melbourne	High Min	74	Broken	72 in 1992
24	Vero Beach	Max	86	Tied	86 in 1948
24	Miami	Max	88	Broken	86 in 1986
24	Fort Lauderdale	High Min	79	Broken	76 in 1986
25	Melbourne	High Min	73	Tied	73 in 1986
25	Miami	High Min	78	Broken	77 in 1992
25	Fort Lauderdale	High Min	79	Broken	75 in 2007