



Climate Summary for Florida – December 2013

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

Average temperatures above normal across the state in December. December 2013 was a fairly warm month across Florida (Table 1 and Appendix 1). Departures from normal ranged from 0.6 °F in Pensacola to 5.8°F in Tallahassee. Average temperatures for December 2013 were the 2nd warmest in Miami and Fort Lauderdale, 3rd warmest on record in Orlando and Daytona Beach, 5th warmest in Key West and Tampa, and 10th warmest in Tallahassee. There were a number of maximum and high minimum temperatures tied and broken during the month (Appendix 2). The all-time record high maximum temperature for December in Jacksonville was tied on the 9th with a recorded temperature of 84°F.

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

Station	Average Temperature	Departure from Normal
Pensacola	53.0	0.6
Tallahassee	59.0	5.8
Jacksonville	59.9	4.7
Orlando	68.0	5.4
Tampa	68.5	5.4
Miami	75.1	4.6
Key West	75.7	4.3

Rainfall totals were varied across the state in December. Portions of the Big Bend, Panhandle, north-central Florida, and areas around Miami reported monthly rainfall totals above normal, while the majority of the Peninsula saw below normal totals (Figure 1). Departures from normal roughly ranged from -2.31" to 2.63" (Table 2 and Appendix 1), though some areas of Florida saw rainfall totals that were as much as 3.00" below normal or nearly 8.00" above normal. December 2013 was the 6th wettest December on record in Miami, while it was the 6th driest in Orlando. Numerous 24-hour precipitation records were broken for the month (Table 3).

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

Station	Total Rainfall	Departure from Normal
Pensacola	7.37	2.31
Tallahassee	4.89	0.99
Jacksonville	0.86	-1.94
Orlando	0.27	-2.31
Tampa	0.81	-1.66
Miami	4.67	2.63
Key West	1.09	-1.13

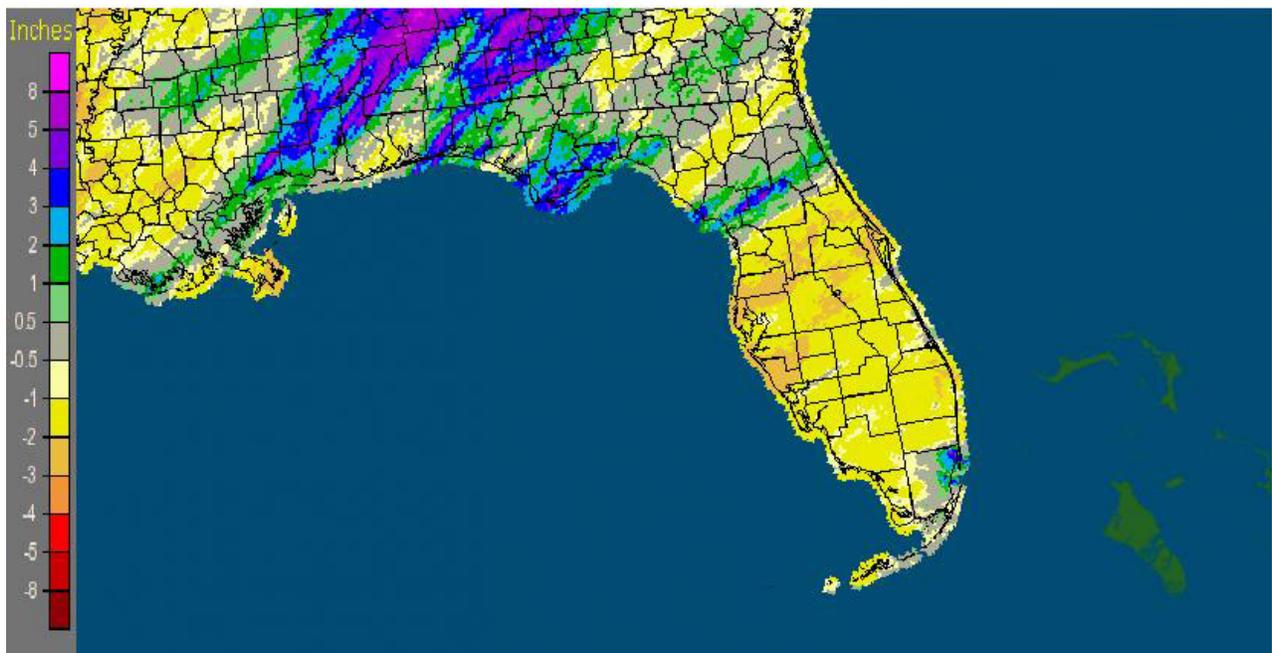


Table 3. Select daily rainfall records (inches) broken during December (Compiled from NOAA, NWS)

Date	Location	Record	Last
1	West Palm Beach	2.70	2.32 in 1895
2	Vero Beach	1.22	1.20 in 1984
15	Hastings	3.82	1.08 in 1997
15	Federal Point	3.77	3.25 in 1976
15	Usher Tower	3.10	1.70 in 1987
15	Ocala	2.75	1.68 in 1945
15	Crescent City	2.00	1.56 in 1936
15	Cross City	1.30	0.78 in 1976
15	Dowling Park	1.02	0.62 in 1949
16	Quincy	1.26	1.20 in 1973
23	Niceville	4.35	3.62 in 2004
23	Woodruff Dam	1.00	0.82 in 1968
24	Jasper	1.80	0.95 in 1986
26	Perrine	4.21	0.69 in 2006
26	Miami	3.75	0.60 in 1914
26	Hialeah	1.64	1.12 in 1992
27	Hialeah	2.44	1.06 in 1998
28	Hialeah	1.78	1.58 in 1949
29	Niceville	2.85	2.30 in 1942
29	Apalachicola Airport	1.86	1.13 in 1982
29	Madison	1.40	1.32 in 1983
30	Dry Tortugas	1.70	1.34 in 1950
30	Dowling Park	1.50	0.05 in 1948
30	Melbourne	1.05	0.44 in 1983

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

Florida: December, 2013 Monthly Departure from Normal Precipitation
 Valid at 1/1/2014 1200 UTC- Created 1/2/14 13:41 UTC



ENSO-Neutral Conditions Continue in the Pacific.

Neutral ENSO conditions continue to be reported for the equatorial Pacific, with equatorial sea surface temperatures (SST) near average across much of the equatorial Pacific. ENSO-neutral conditions are favored to continue through the summer of 2014. The Climate Prediction Center (CPC) predicts above normal temperatures in the Panhandle, normal temperatures for the rest of the state, and below normal precipitation for the entire state through March.

Hazardous Weather Events in December

Only 20 severe weather reports were made across the state in December. Heavy rain was reported in and around the Vero Beach area on the 1st, with 5.46" of rain reported in almost 4 hours. Dense fog was reported in Tallahassee on the 6th with visibility less than 1/8 of a mile, and widespread dense fog was observed on the west side of Lake Okeechobee in La Belle, Clewiston, and Immokalee on the 7th. Straight-line winds, estimated at 100 mph and associated with a thunderstorm north of Ocala, caused damage in Anthony, FL, where a barn was moved off its concrete foundation on the 14th. On the same day, an EF1 tornado moved through Palm Coast, (Flagler County, FL), uprooting trees and damaging power lines along its path. The day after Christmas, heavy rain was reported in between Homestead and Miami; early in the morning on the 29th, high winds from a thunderstorm were reported at Mexico Beach, FL.

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

<u>Report Type</u>	<u>Number of Reports</u>
Heavy Rain and Flooding	7
High Winds	1
Storm Damage	5
Hail	0
Thunderstorm/Lightning	0
Tornadoes/Funnel Clouds/Waterspouts	2
Coastal Hazards	0
Dense Fog	5
Fire	0

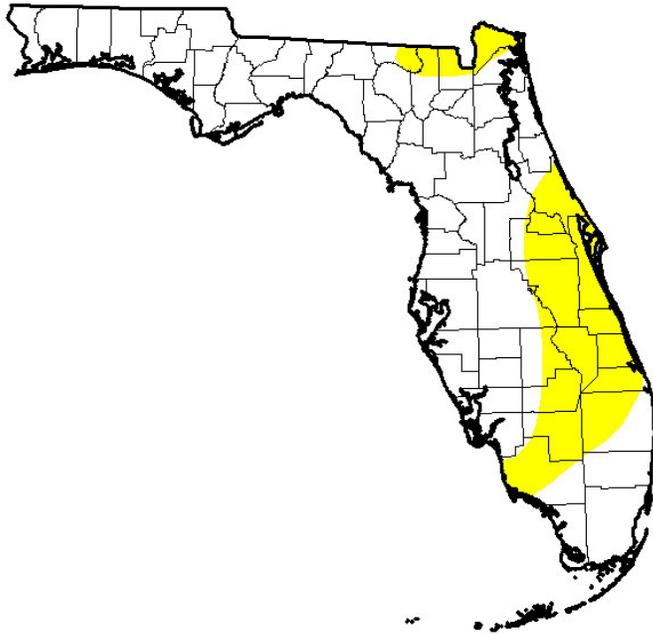
Agricultural and other climate-related impacts.

In December, rain was limited across the state, and farmers in the northern part of the state were finishing up harvest of cotton, soybeans and continued planting oats, wheat, and rye. Light frost during the month ended the warm season perennial pastures in the Panhandle. Cattlemen were feeding hay and supplements to stock as pasture conditions ranged from poor to good condition and winter grazing was stressed due to drought. Irrigation in the citrus region continued as dry conditions persisted, and workers were reporting small-sized fruits in all varieties. The warmer-than-normal temperatures led to accelerated vegetable growth in many south Florida counties, and sugarcane harvesting proceeded on schedule.

Early in December, there was an expansion of dry conditions (D0) in south Florida to include portions of Collier and Lee counties. The lack of rain in the beginning of December caused the introduction of D0 into the northwest Panhandle (Escambia, Santa Rosa and Okaloosa counties) and in part of central Florida (Orange, Osceola, Seminole and Volusia counties). However, rain in the northeastern portion of the state alleviated some of the dryness around the areas of Jacksonville, St. Augustine, Ocala and Gainesville. Some residual dryness remained in Nassau, Baker, Columbia and Hamilton counties by the end of the month, with D0 conditions still present along portions of the east coast and citrus growing region. The CPC forecast for the next three months (January, February, and March) is predicting below normal rainfall, so the chance of seeing more dry conditions, and potentially drought, introduced into the state remains high.

**U.S. Drought Monitor
Florida**

December 31, 2013
(Released Thursday, Jan. 2, 2014)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	75.83	24.17	0.00	0.00	0.00	0.00
Last Week <i>12/24/2013</i>	72.82	27.18	0.00	0.00	0.00	0.00
3 Months Ago <i>10/1/2013</i>	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year <i>1/1/2013</i>	56.86	43.14	3.13	0.00	0.00	0.00
Start of Water Year <i>10/1/2013</i>	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago <i>1/1/2013</i>	56.86	43.14	3.13	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 December Departures from Normal Data for Florida Locations

Station	Total Rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	3.79	1.31	61.0	4.9
St Petersburg	0.86	-1.89	69.4	5.3
Fort Lauderdale	1.20	-1.26	74.0	3.0
Fort Myers	0.50	-1.21	71.5	5.0

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

Date	Station	Type	Value	Broken/Tied	Last
4	Orlando	Max	82	Tied	82 in 2002
5	Key West	Max	87	Broken	86 in 1994
5	Daytona Beach	Max	84	Broken	83 in 1964
5	Clermont	Max	83	Tied	83 in 1994
5	Jacksonville	Max	83	Broken	82 in 1994
6	Orlando Sanford	Max	85	Broken	83 in 1951
6	Clermont	Max	85	Broken	83 in 2002
6	Inverness	Max	85	Broken	84 in 1977
6	Glen St Mary	Max	84	Tied	84 in 1942
6	Kissimmee	Max	84	Tied	84 in 1998
6	Chipley	Max	83	Tied	83 in 1951
6	High Springs	Max	83	Tied	83 in 1998
6	St Augustine Lighthouse	Max	83	Broken	82 in 1983
6	Fernandina Beach	Max	82	Tied	82 in 1961
6	Wewahitchka	Max	81	Tied	81 in 1998
6	Jacksonville	Max	83	Broken	82 in 1942
6	Gainesville	Max	84	Broken	83 in 1942
6	Lakeland	Max	85	Broken	84 in 1982
7	Clermont	Max	88	Broken	85 in 1987
7	Inverness	Max	85	Tied	85 in 1929
7	Glen St Mary	Max	84	Broken	83 in 1924
7	Dry Tortugas	Max	84	Tied	84 in 1955
7	Jacksonville Beach	Max	83	Broken	81 in 1948
7	St Augustine Beach	Max	82	Broken	80 in 1994
7	Jacksonville	Max	83	Broken	82 in 1978
8	Orlando	Max	84	Tied	84 in 2004
8	Tallahassee	Max	81	Tied	81 in 1998
9	Apalachicola	Max	78	Tied	78 in 1978
9	Jacksonville	Max	84	Tied	84 in 2004
10	Orlando	Max	85	Broken	84 in 1961
10	Apalachicola	Max	78	Tied	78 in 1980
10	Miami	High Min	75	Tied	75 in 2009
21	Apalachicola	Max	76	Tied	76 in 1931
21	Jacksonville	Max	83	Broken	81 in 1951
21	Lakeland	Max	85	Broken	82 in 1998
21	Sarasota	Max	87	Broken	86 in 1998
21	Miami	High Min	75	Tied	75 in 1925
21	West Palm Beach	High Min	76	Broken	73 in 2006
22	Orlando	Max	85	Broken	83 in 2011
22	Orlando	High Min	64	Tied	64 in 1967
22	Gainesville	High Min	65	Broken	64 in 1914
22	Gainesville	Max	83	Broken	82 in 2011
22	Miami	High Min	76	Broken	75 in 1911
22	Fort Lauderdale	High Min	77	Broken	75 in 2006
22	West Palm Beach	High Min	77	Broken	74 in 1929
23	Orlando	Max	85	Tied	85 in 2011
23	Daytona Beach	Max	85	Broken	84 in 1990
23	Melbourne	Max	86	Broken	84 in 1981
23	Vero Beach	High Min	69	Broken	68 in 2006
27	West Palm Beach	High Min	74	Tied	74 in 1920
28	Orlando	High Min	64	Tied	64 in 1955
29	Orlando	High Min	66	Broken	66 in 2007
29	Fort Lauderdale	High Min	74	Broken	73 in 1988