

# Climate Summary for Florida – January 2015

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Average temperatures were varied cross the state in January. The departures for average temperatures in January 2015 varied across the entire state, though most of the reporting stations saw average temperatures above normal. The departures ranged from  $2.9^{\circ}$ F in Key West to  $-1.9^{\circ}$ 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 ( $32^{\circ}$ F) during the January. Despite most of the above normal temperatures, none of reporting stations had values that were ranked with in the top 10 for the month. Multiple temperature records were tied or broken across the state in January (Appendix 2).

Station	Average Temperature	Departure from Normal		
Pensacola	48.5	-1.9		
Tallahassee	52.8	1.6		
Jacksonville	53.4	0.3		
Orlando	62.0	1.8		
Tampa	62.4	1.6		
Miami	70.9	2.7		
Key West	72.2	2.9		

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

**Rainfall totals were below normal across most of the state in January.** With the exception of a small portion of the Big Bend, and areas in north Central Florida and the interior Peninsula, most of Florida saw below average rainfall during January (Figure 1). Departures from normal roughly ranged from -1.76" to 1.17" (Table 2 and Appendix 1), though localized parts of state saw rainfall totals that were as much as 4.00" below normal to over 3.00" above normal (Figure 1). The last three months (November – January) have been the 4<sup>th</sup> wettest on record in Ocala, the 6<sup>th</sup> wettest for both Daytona Beach and Tallahassee and the 12<sup>th</sup> wettest in Orlando. A trace of snow was reported in Jacksonville on the 8<sup>th</sup>. There were multiple 24-hour precipitation records broken for the month (Table 3).

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

Station	Total Rainfall	Departure from Normal
Pensacola	3.89	-1.76
Tallahassee	4.76	0.42
Jacksonville	3.08	-0.22
Orlando	3.52	1.17
Tampa	1.75	-0.48
Miami	0.95	-0.67
Key West	1.03	-1.01





Date	Location	Record	Last
4	Pensacola	2.76	2.18 in 1881
4	Tallahassee	1.62	1.12 in 1987
12	Daytona Beach	1.50	1.00 in 1925
12	Orlando	3.47	2.83 in 1964
13	Sanford	3.10	0.94 in 1979
23	Apalachicola	3.14	1.99 in 1992
23	Pensacola	2.59	2.12 in 1885
23	Tallahassee	2.77	2.24 in 1999
24	Jasper	3.55	2.25 in 1999
24	Madison	4.82	4.15 in 1914

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

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

Florida: January, 2015 Monthly Departure from Normal Precipitation Valid at 2/1/2015 1200 UTC- Created 2/1/15 13:58 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. Positive sea surface temperatures (SST) anomalies have been recorded across most of the Pacific Ocean and there is a 50% chance of an El Niño event developing within the next two months. After the Northern Hemisphere winter, a return to ENSO-Neutral conditions is favored. CPC predicts normal temperatures and precipitation across the state through April 2015.

#### Hazardous Weather Events in January.

There were a total of 61 severe weather reports made in Florida during January. It was a quiet month, in terms of severe weather, and only a few events caused hazardous weather across the state. Strong winds up to 50 mph were reported in various locations on the East Coast on the 8<sup>th</sup>, ahead of a cold front that moved through the state. On the same day, snow was spotted around the Jacksonville area, including at the Jacksonville International Airport. A waterspout was reported off the coast near Juno Beach on the 9<sup>th</sup> and was photographed by a number of the public. A CoCoRaHS observer recorded 3.57" of rain in 13 hours in St. Augustine in 12<sup>th</sup>. Most of the severe weather reports came from a vigorous low-pressure system that moved through the state on the  $23^{rd} - 24^{th}$ . Heavy rains were reported in most of the Big Bend, including Bay, Liberty, Franklin, Wakulla, Leon, Jefferson and Madison counties. The heavy rains caused local rivers to rapidly rise and promoted flood warnings in some local areas. On the  $24^{th}$ , the Florida State Watch in Myakka State Forest reported damage to a ranger station and residence that was associated with a tornado near Englewood (Sarasota County). Many locations in north Florida, such as St George Island, Apalachicola, Jacksonville and St. Augustine, saw wind gusts up

to 50 mph as the front associated with the system pushed through the area. On the 26<sup>th</sup>, high winds up to 45 mph were recorded in Naples, Boca Raton, Miami and Key Largo.

Report Type	Number of Reports
Heavy Rain and Flooding	27
High Winds	27
Storm Damage	2
Hail	0
Thunderstorm/Lightning	0
Tornadoes/Funnel Clouds/Waterspouts	3
Coastal Hazards	0
Dense Fog	0
Fire	0
Winter Weather	2

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

### Agricultural and other climate related impacts.

At the beginning of January, soil moisture in the Panhandle was very high, but was seen short in other areas of the state. Pasture conditions in the northern part of the state improved due to the warmer weather and some of the rainfall. The sugarcane harvest continued in Glades and Hendry counties, and farmers started harvesting cabbage and cold weather crops in Flagler, Bradford and Putnam counties. Growers in southwest Florida began planting watermelons and spring vegetables and south Florida crops had to be irrigated. Some foggy mornings caused disease problems with vegetables in southwest Florida around mid-month, and heavy rains in the Panhandle and Big Bend caused problems with pasture conditions and field preparation. All of the citrus processing plants were up and running at full capacity. Totals were slightly less than last season, due to the small-size fruit and lagging maturity levels. Greening was a constant struggle for citrus growers across the state. The warmer weather did increase yields in some of the vegetable crops. Cotton harvest wrapped up in Gadsden County at the end of January. Due to the heavy rains, fieldwork and soil preparation for the spring planting were done on a limited basis. The cattle conditions across the state for the month were mostly good, while the winter forage and pasture conditions were fair to good. Citrus grove activities included running irrigation, fertilizing, spraying and combating greening and some fields noticed patchy pin head bloom on orange trees. The navel orange, colored and white grapefruit harvests came to an end for the season.

The beginning of the year started off with portions of the Florida Panhandle recovering from above average rainfall, while the rest of the state was below normal. As January progressed, widespread rain moved through the northern part of the state from the  $4^{th} - 5^{th}$ , with the majority of the rainfall north of the Gainesville area. With the exception of some very localized light rain, the state remained dry until  $12^{th}$ , when a low-pressure system moved through, dropping over an inch of rainfall in central Florida. Drought conditions remained consistent in the Northwest Panhandle with abnormally dry (D0) conditions in Escambia, Santa Rosa, Okaloosa and Walton. However, the lack of rain in South Florida over the last 3 months lead to the introduction of D0 in Dade and Monroe counties by the middle of January. Two more rain events impacted the state- one of the  $16^{th}$ , which brought rain only to the Panhandle, and heavy rain was reported with the second event as it pushed through North Florida and parts of the Peninsula on the  $23^{rd}$  and  $24^{th}$ . However, the region surrounding Lake Okeechobee remained rain-free through the end of the month, promoting the expansion of D0 into Collier and Palm Beach counties.

# U.S. Drought Monitor Florida

# January 27, 2015

(Released Thursday, Jan. 29, 2015) Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	85.79	14.21	0.63	0.00	0.00	0.00
Last Week 1/20/2015	89.47	10.53	0.63	0.00	0.00	0.00
3 Month s Ago 10/2 8/2 014	85.50	14.50	4.46	0.00	0.00	0.00
Start of Calendar Year 12/3/02/014	94.33	5.67	0.99	0.00	0.00	0.00
Start of Water Year 930/2014	77.22	22.78	6.61	0.00	0.00	0.00
One Year Ago 1/28/2014	70.87	29.13	0.00	0.00	0.00	0.00

Intensity:

D0 Abnormally Dry D1 Moderate Drought D3ExtremeDrought

D4 Exceptional Drought

D2 Severe 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 January Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	3.24	-0.07	54.4	0.1
Melbourne	2.48	0.21	62.9	2.6
St Petersburg	1.59	-0.98	63.3	1.7
Fort Lauderdale	3.39	-0.24	69.3	0.3
Fort Myers	0.57	-1.37	66.2	2.0

Date	Station	Туре	Value	<b>Broken/Tied</b>	Last
1	Naples	High Min	68	Tied	68 in 1947
3	Gainesville	Max	83	Broken	80 in 2000
3	Jacksonville	Max	81	Broken	80 in 1982
3	Mayport	Max	79	Broken	77 in 1989
3	Bradenton	High Min	70	Broken	65 in 1989
3	Tarpon Springs	High Min	70	Broken	67 in 1967
3	Orlando	High Min	67	Broken	66 in 1993
3	Vero Beach	Max	83	Tied	83 in 2006
3	Daytona Beach	Max	83	Tied	83 in 1947
3	Tampa	Max	83	Tied	83 in 1973
3	West Palm Beach	High Min	76	Broken	73 in 2007
3	Key West	High Min	77	Broken	76 in 1985
4	Clermont	Max	86	Broken	82 in 1993
4	Inverness	Max	86	Broken	84 in 2004
4	Orlando	Max	85	Broken	83 in 1968
4	Jacksonville	High Min	65	Broken	63 in 1950
4	Stuart	High Min	73	Broken	70 in 1942
4	Daytona Beach	High Min	69	Broken	66 in 1993
4	Melbourne	Max	85	Tied	85 in 1972
4	Vero Beach	Max	86	Broken	84 in 1997
4	Lakeland	Max	84	Broken	83 in 2000
5	Clermont	Max	86	Broken	82 in 2004
5	Daytona Beach	Max	85	Broken	81 in 2004
5	Ft. Lauderdale	Max	84	Broken	81 in 2013
5	Kissimmee	Max	86	Broken	85 in 1972
8	Pensacola	Min	19	Broken	21 in 1970
8	Jacksonville	Low Max	40	Tied	40 in 1958
9	Crescent City	Low Max	48	Tied	48 in 2010
12	Fort Pierce	High Min	71	Tied	71 in 1914
12	Miami	High Min	75	Broken	74 in 1993
16	Jasper	Low Max	44	Tied	44 in 1978
16	Madison	Low Max	45	Broken	46 in 1963
24	Vero Beach	High Min	69	Broken	65 in 1993
27	Crestview	Max	82	Broken	80 in 1950

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