



## Climate Summary for Florida – January 2014

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

**Average temperatures were below normal in January.** The average temperatures for January 2014 were colder than normal across the entire state (Table 1 and Appendix 1). Departures from normal ranged from -0.2 °F in Key West to -5.4°F in Pensacola. The monthly average temperatures for January 2014 were the 5<sup>th</sup> coldest in Madison and Pensacola, 7<sup>th</sup> coldest in Lake City, 8<sup>th</sup> coldest in Clermont, and 9<sup>th</sup> coldest in Gainesville, Inverness, and Orlando. On the 7<sup>th</sup> of January, a bitterly cold air mass pushed through the state, and locations north of Avon Park, with the exception of a few coastal stations, did not reach the 50°F mark. Portions of the state, mainly in the Panhandle, did not get above 40°F on the 29<sup>th</sup>. While there were a number of low maximum and minimum temperatures tied and broken during the month (121), there were also multiple maximum and high minimum temperatures that were broken or tied (Appendix 2).

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

Station	Average Temperature	Departure from Normal
Pensacola	46.0	-5.4
Tallahassee	48.1	-3.1
Jacksonville	49.2	-3.9
Orlando	58.6	-1.6
Tampa	57.2	-3.6
Miami	67.9	-0.3
Key West	69.1	-0.2

**Rainfall totals varied across the state in January.** Portions of the Big Bend and Panhandle reported monthly rainfall totals below normal, while the rest of the state saw near to above average rainfall during January (Figure 1). Departures from normal roughly ranged from -1.18" to 4.64" (Table 2 and Appendix 1), though some areas of Florida saw rainfall totals that were as much as 4.00" below normal to over 8.00" above normal. There was a report of 22.20" of rainfall measured in Hypoluxo on January 9 – 10 from torrential downpours associated with a stalled front over portions of the east coast. Totals across the area ranged from 10 to 15". January 2014 was the wettest on record in Fort Pierce, 3<sup>rd</sup> wettest in Melbourne, 4<sup>th</sup> wettest in West Palm Beach, 6<sup>th</sup> wettest in Jacksonville and Key West, and 10<sup>th</sup> wettest in Gainesville and Miami. There was 1" of snow reported in Pensacola on the 28<sup>th</sup>. Numerous 24-hour precipitation records were 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	3.45	-1.18
Tallahassee	3.67	-0.67
Jacksonville	6.97	3.67
Orlando	2.92	0.57
Tampa	3.14	0.91
Miami	1.91	0.29
Key West	6.68	4.64

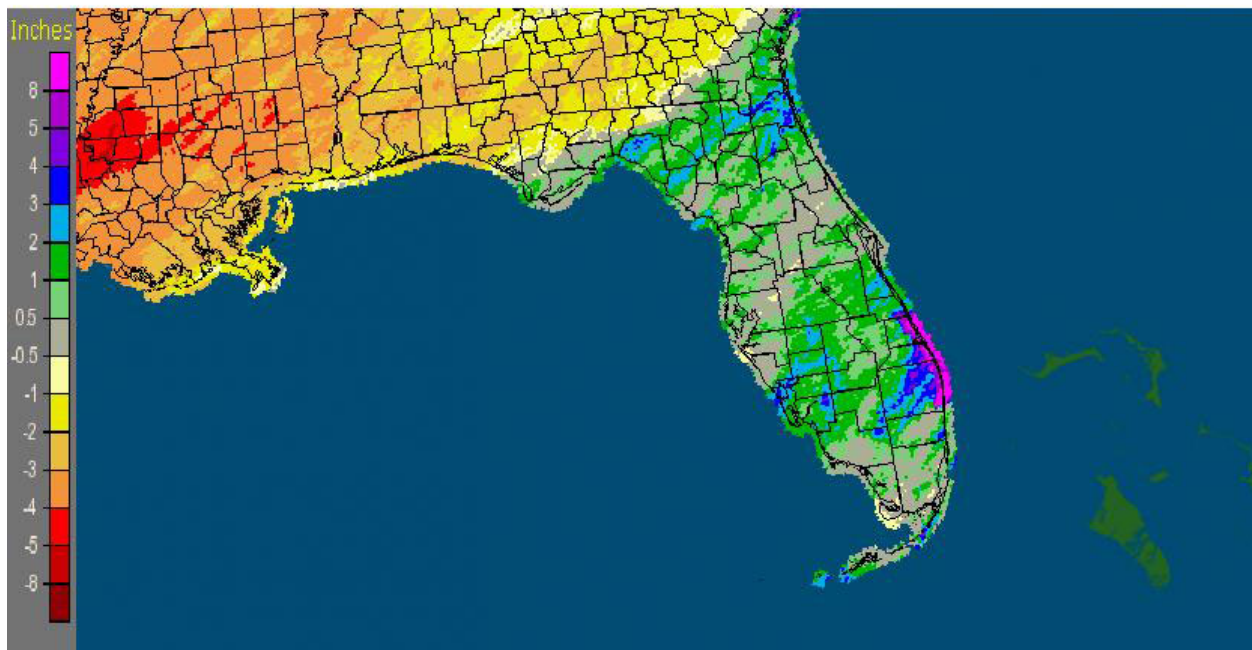


Table 3. Select daily rainfall records (inches) broken during January (Compiled from NOAA, NWS)

Date	Location	Record	Last
3	Jacksonville	1.87	1.71 in 2006
4	Key West	3.17	1.60 in 1991
5	Dry Tortugas	1.20	0.12 in 1964
10	Stuart	6.05	0.64 in 1988
10	Vero Beach	1.56	0.91 in 1993
30	Melbourne	1.84	0.70 in 1966
30	Vero Beach	0.55	0.45 in 2009
31	Melbourne	1.98	1.34 in 1999
31	Vero Beach	0.83	0.45 in 2009
31	Naples	1.53	1.44 in 2004
31	Fort Lauderdale	2.42	1.20 in 2004

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, 2014 Monthly Departure from Normal Precipitation  
Valid at 2/1/2014 1200 UTC- Created 2/3/14 15:35 UTC



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

Neutral ENSO conditions continue to be reported for the equatorial Pacific, with the equatorial sea surface temperatures (SSTs) near average across much of the equatorial Pacific and regions of below average SSTs in the east-central Pacific. ENSO-neutral conditions are favored to continue through the summer of 2014. NOAA’s Climate Prediction Center (CPC) predicts above normal temperatures and below normal precipitation for the entire state through April.

**Hazardous Weather Events in January**

209 severe weather reports were recorded in Florida for the month of January; 50 of those reports were for winter weather — something that does not happen often in the state. The month started off with dense fog reported on the southern shore of Lake Okeechobee, which reduced visibilities to less than ¼ mile. Also on the 2<sup>nd</sup>, heavy rain and high winds were seen along parts of the northeast coast. Reports of non-thunderstorm-based high winds came in along the Florida Keys from the 5<sup>th</sup> through the 7<sup>th</sup>. Localized flooding and heavy rain were reported from Boca Raton to Stuart, when a cold front ‘backed up’ and funneled tropical moisture over the area, producing heavy rain rates (~15.00” in 3 hours) on the 9<sup>th</sup> and 10<sup>th</sup>. On the 11<sup>th</sup>, multiple reports of storm damage and high winds were made as thunderstorms pushed through the Big Bend and north Florida. A storm on the 21<sup>st</sup> produced hail (pea to quarter sized) along its track from Normandy, FL, to Jacksonville. Widespread dense fog was reported on the mornings of both the 27<sup>th</sup> and 28<sup>th</sup> for areas south and southeast of Lake Okeechobee. The end of the month saw the first widespread winter weather events for the state in

over a decade, as reports of freezing rain, sleet, and snow were made across the entire northern part of the state. Accumulating freezing rain caused Interstate 10 to be closed from the Florida/Alabama line to just east of Tallahassee. Many school districts, businesses, and government offices closed for 'snow days' from the 28<sup>th</sup> through the 30<sup>th</sup> due to the icy conditions.

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

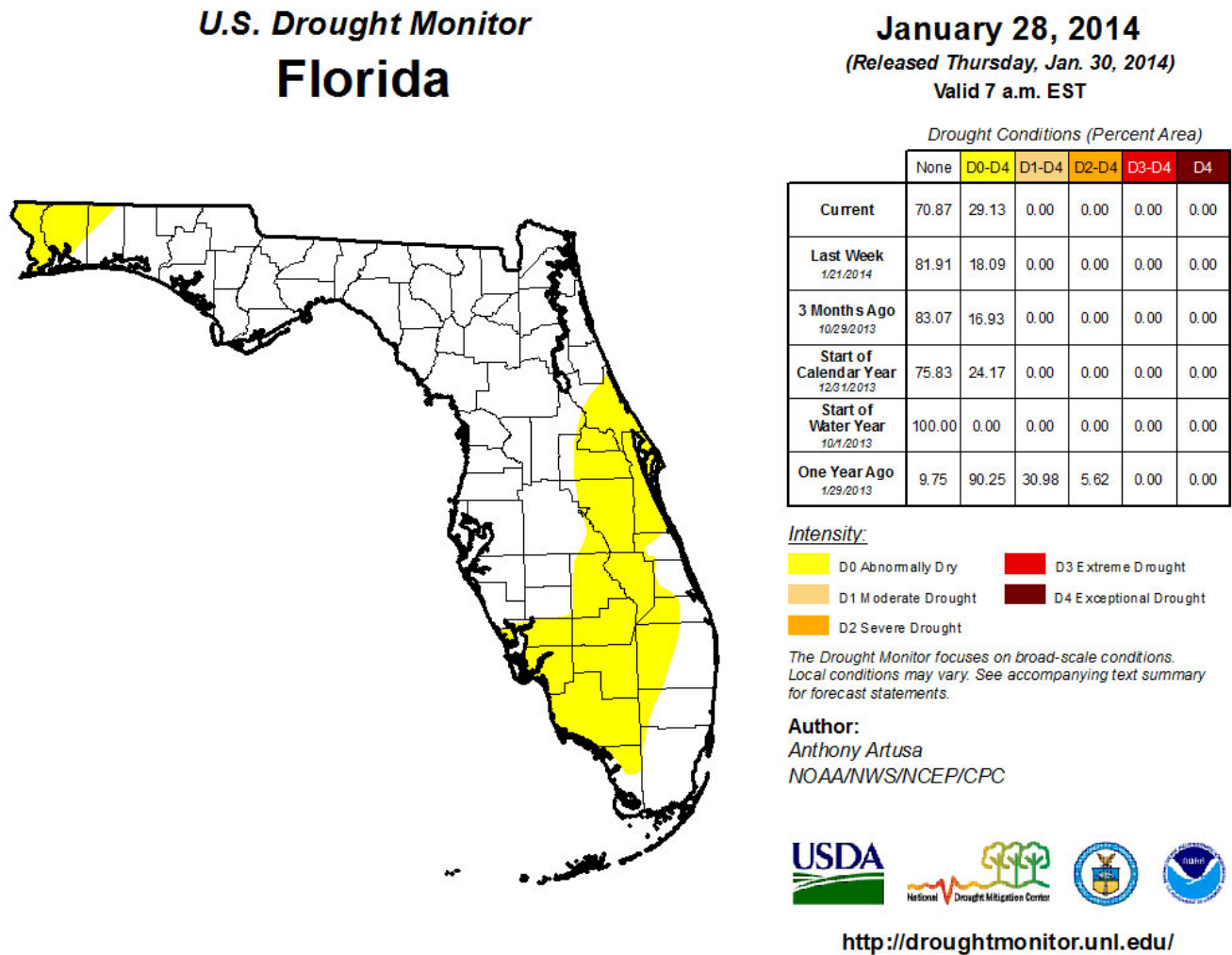
<b>Report Type</b>	<b>Number of Reports</b>
Heavy Rain and Flooding	38
High Winds	54
Storm Damage	34
Hail	13
Thunderstorm/Lightning	0
Tornadoes/Funnel Clouds/Waterspouts	1
Coastal Hazards	2
Dense Fog	17
Fire	0
Winter Weather	50

**Agricultural and other climate related impacts.**

Most of Florida reported rainfall and average temperatures at the beginning of January, which allowed for final harvesting of soybeans in the northern part of the state and the sugarcane to be processed without issue in Hendry, Palm Beach, and Glades counties. There was some frost and fungal damage to strawberries, collards, and turnips in Nassau County, and field workers were still reporting small sizes in all citrus varieties. The arctic air mass that impacted the state in early January did cause small damage to winter oats and contributed to pasture decline, while the winds associated with the cold front battered vegetable crops in Charlotte, Collier, Hendry, and Lee counties. Cold temperatures toward the end of the month caused some damage in cold-prone areas with frosted tops on plants, and there were losses in Bradford County due to frost and lower temperatures. Winter cover crops were being planted in the Panhandle. During the month, cattle and pasture conditions remained fair, though the prolonged dry conditions caused poor pasture conditions, and cattlemen used hay and supplements across the state to supplement forage.

The beginning of 2014 saw dry conditions reported in 25% of the state, with the main concentration of the dryness (D0) confined to portions of the Space Coast and through the area of the state known as the Florida Heartland (DeSoto, Glades, Hardee, Hendry, Highlands, and Okeechobee) to Collier County. The residual dry conditions that were in northern Santa Rosa County and along the Florida-Georgia line near Jacksonville were removed after rainfall early in the month. Conditions remained consistent through most of January, although, by the end of the month, the area of dryness along the east coast and peninsula had expanded to cover more of the interior of the state. D0 was reintroduced into portions of Escambia and Santa Rosa counties in the Panhandle on the 28<sup>th</sup>. The Climate Prediction Center is forecasting below normal precipitation for February, March, and April, which could limit the amount of rain received by northern parts of the state during a critical recharge season.

Figure 2: Drought conditions in Florida as of January 28, 2014 (courtesy of U.S. Drought Monitor).



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	5.20	1.89	50.6	-3.7
St Petersburg	2.83	0.26	59.1	-2.5
Fort Lauderdale	4.16	0.53	66.5	-2.5
Fort Myers	2.16	0.22	63.0	-1.2

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

<b>Date</b>	<b>Station</b>	<b>Type</b>	<b>Value</b>	<b>Broken/Tied</b>	<b>Last</b>
2	West Palm Beach	Max	86	Tied	86 in 1996
2	Hialeah	High Min	73	Broken	72 in 1979
6	Clermont	Max	83	Broken	82 in 1960
7	Niceville	Low Max	38	Broken	45 in 2006
7	Jacksonville	Low Max	39	Broken	45 in 1970
7	Gainesville	Low Max	41	Broken	43 in 1914
7	Daytona Beach	Low Max	42	Broken	51 in 1942
7	Orlando	Low Max	49	Broken	52 in 1924
7	Melbourne	Low Max	49	Broken	56 in 2006
7	Vero Beach	Low Max	54	Broken	57 in 1980
7	Tampa	Low Max	49	Broken	50 in 1892
7	Sarasota	Low Max	52	Broken	55 in 1980
7	Miami	Low Max	58	Broken	61 in 2006
7	Jacksonville Beach	Min	23	Broken	29 in 2010
7	Chipley	Min	17	Broken	20 in 2010
7	Federal Point	Min	27	Broken	28 in 1893
8	High Springs	Min	13	Broken	20 in 2010
8	Crescent City	Low Max	40	Broken	48 in 1942
8	Lake City	Low Max	37	Broken	43 in 1970
8	Niceville	Low Max	31	Broken	34 in 1970
8	Madison	Low Max	33	Broken	39 in 1970
10	Tarpon Springs	High Min	65	Tied	65 in 2013
11	Daytona Beach	Max	84	Tied	84 in 1991
11	Orlando	Max	86	Tied	86 in 1972
11	Vero Beach	Max	84	Tied	84 in 1972
11	West Palm Beach	Max	84	Broken	83 in 1993
11	Avon Park	High Min	69	Broken	65 in 1991
11	Titusville	High Min	66	Broken	65 in 1933
11	Moore Haven	High Min	67	Tied	67 in 1993
12	Clermont	Max	87	Broken	83 in 2013
12	West Palm Beach	Max	84	Broken	83 in 1993
16	Fort Lauderdale	Low Max	59	Broken	61 in 1992
17	Naples	Min	35	Broken	37 in 1983
23	High Springs	Min	22	Broken	24 in 2011
27	Vero Beach	Max	84	Broken	82 in 1996
28	Avon Park	Max	87	Broken	86 in 1972
29	Gainesville	Low Max	44	Broken	44 in 1961
30	Wewahitchka	Low Max	30	Broken	46 in 1973
30	Mayo	Low Max	35	Broken	47 in 1988
30	Ocala	Low Max	43	Broken	53 in 1978
30	Plant City	Low Max	49	Broken	57 in 1966
30	Madison	Low Max	34	Broken	40 in 1934