



## Climate Summary for Florida - October 2012

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Online at: <http://climatecenter.fsu.edu>

### Average temperatures above normal across the state in October.

Average temperatures were normal to above normal for October across the entire state (Table 1 and Appendix 1). Departures from normal ranged from 0.0°F at Orlando to 1.3°F in Jacksonville and Tallahassee. The average monthly temperatures at the beginning of the month were warmer than normal, but the latter part of the month saw most of the state with colder than normal temperatures. From the 18<sup>th</sup>-31<sup>st</sup>, average temperatures ranged from -0.2°F to -2.6°F below normal, and for the last week in October (25<sup>th</sup>-31<sup>st</sup>) temperatures across many locations in the state were more than -2.0°F below normal, with average temperatures at Orlando for the week reported at -6.0°F below normal. Multiple temperature records were either tied or broken (Appendix 2).

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

Station	Average Temperature	Departure from Normal
Pensacola	70.0	0.5
Tallahassee	70.4	1.3
Jacksonville	70.7	1.3
Orlando	75.3	0.0
Tampa	76.4	0.6
Miami	79.5	0.6
Key West	80.4	0.2

**Rainfall totals were varied across the state in October.** Rainfall totals across the state were varied in October (Table 2), with the northern part of the state seeing below normal rainfall, while portions of the interior peninsula and southeastern and southwestern coastal areas seeing above normal precipitation (Figure 1). Only a few precipitation records were broken in October (Table 3). The year to date (01/01/12 to 10/31/12) rainfall total of 85.93" (+32.93") for Miami puts the 10-month period as the wettest on the 118-year record for the location, and 76.85" (+24.05") at West Palm Beach is the 3<sup>rd</sup> wettest 10-month period.

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

Station	Total rainfall	Departure from Normal
Pensacola	1.54	-1.59
Tallahassee	1.46	-1.79
Jacksonville	3.01	-0.85
Orlando	2.22	-0.51
Tampa	3.10	0.81
Miami	6.42	0.23
Key West	3.32	-1.02

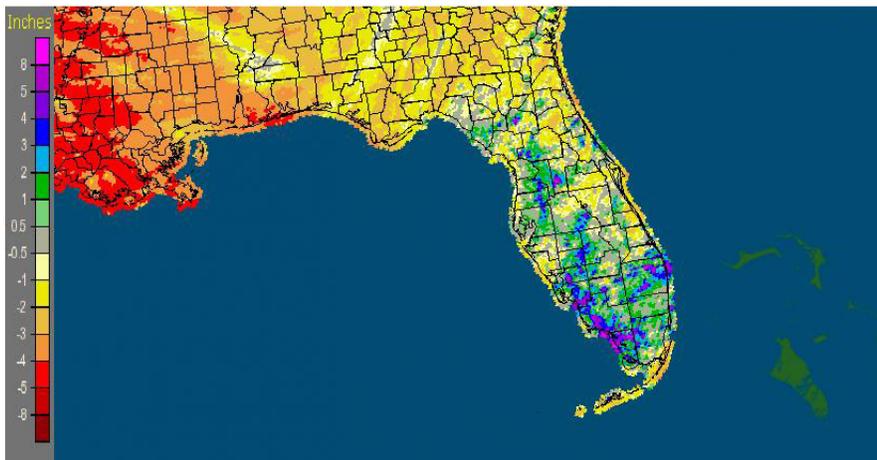


Table 3. Select daily rainfall records (inches) broken during October. (Compiled from NOAA, NWS)

Date	Location	Record	Last
1	Fort Lauderdale	2.14	1.36 in 2007
1	Orlando/Sanford	1.10	0.68 in 1953
3	Sarasota	2.15	0.07 in 2005
3	St. Petersburg	1.91	0.71 in 1993
5	Fort Pierce	1.60	0.65 in 2005
6	Fort Pierce	2.33	1.14 in 2008
8	Fort Lauderdale	2.72	0.80 in 2011
14	Fort Pierce	1.34	0.01 in 2005
25	Miami	2.08	0.45 in 2001
26	West Palm Beach	1.62	1.11 in 2007
26	Fort Pierce	1.08	0.34 in 2007

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

Florida: October, 2012 Monthly Departure from Normal Precipitation  
Valid at 11/1/2012 1200 UTC- Created 11/1/12 13:43 UTC



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

As of October 29<sup>th</sup>, neutral ENSO conditions continue to be reported for the equatorial Pacific. Equatorial sea surface temperatures (SST) are greater than 0.5 above average across the western and central Pacific Ocean. ENSO - neutral/weak El Nino conditions are expected to continue through the winter of 2012-2013. The Climate Prediction Center (CPC) predicts normal temperatures for the northern part of the state, and below normal temperatures for the peninsula; they are also predicting above normal precipitation in the western Panhandle and north Florida through January.

**Hazardous Weather Events in October.**

October was a fairly quiet month for severe weather across the state with only 273 severe weather reports. On October 1<sup>st</sup>, a man was injured after being struck by lightning in Villano Beach. Hail (0.50") was observed in Palatka, while winds up to 40 knots (46 mph) were reported in the Tampa area on October 4<sup>th</sup>. The following day, multiple reports of heavy rain were made in Jacksonville and a waterspout was seen offshore of St. Augustine. On October 6<sup>th</sup>, a waterspout was reported off Sugarloaf Key, and a funnel cloud was reported in Wellington. Heavy rains were observed on the 7<sup>th</sup> in Okeechobee and in the Jacksonville-Gainesville area (along with numerous reports of storm damage), with hail reported in Gainesville. Flooding and heavy rain was reported in the same areas on the 8<sup>th</sup>. Between October 14<sup>th</sup> and 15<sup>th</sup>, high winds (40 mph) were reported in southern portions of the Keys and high tides were observed on the 15<sup>th</sup> in southeast Florida. Heavy rain and high winds were reported along portions of the eastern coast from Boynton Beach to St. Augustine on the 17<sup>th</sup>. Of the 273 severe weather reports for the month of October, 224 of these reports were made from the 25<sup>th</sup>-31<sup>st</sup>, which coincides with when Hurricane Sandy, despite being well offshore of the East Coast of Florida, impacted the state. 141 of those reports were categorized as high wind, 15 were of coastal hazards and flooding, and the remaining 68 were thunderstorm hazards. Combined with high tides, waves from Hurricane Sandy battered portions of the East Coast of Florida. Below are some pictures taken by the National Weather Service in Miami of some of the coastal impacts on Fort Lauderdale and Deerfield Beach on October 28<sup>th</sup>.

Figure 2: Waves from Hurricane Sandy crashing against the pier in Deerfield Beach.



Figure 3: Taken on the morning of October 28<sup>th</sup>: coastal flooding during high-tide along A1A in Fort Lauderdale Beach.



Figure 4: Northbound lanes of A1A in Fort Lauderdale Beach, FL blocked by sand.



Figure 5: Example of extreme beach erosion caused by large waves from Hurricane Sandy in Fort Lauderdale Beach.



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

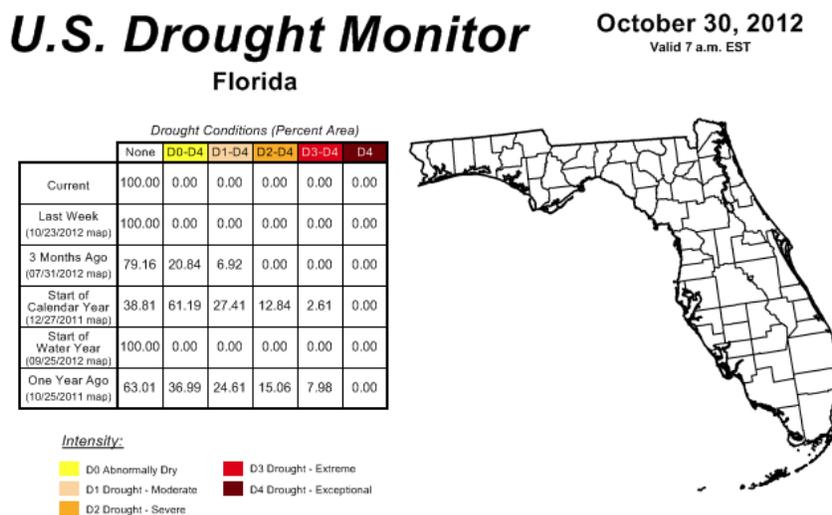
<u>Report Type</u>	<u>Number of Reports</u>
Heavy Rain and Flooding	25
High Winds	159
Storm Damage	4
Hail	2
Thunderstorm/Lightning	70
Tornadoes/Funnel Clouds/Waterspouts	8
Other Hazards (Coastal)	5

**Agricultural and other climate related impacts.**

Sugar cane harvesting began early in Hendry and Glades counties due to anticipated high yields, while wet conditions in Palm Beach County delayed harvesting and replanting. Fall vegetable harvest started in the early part of October and some growers in South Florida began planting winter crops. General grove maintenance continued in central and southern parts of the state. Cattle and pasture conditions ranged from poor to excellent, with most of the conditions being fair to good. By mid month, peanut, cotton, hay and corn harvesting began in Escambia, Gadsden, Jackson, Santa Rosa and Washington counties. Dry conditions at the end of the month aided in the continued harvesting of crops in the Panhandle. All of the hay had been cut in Columbia County, and most of the hay had been cut in Bradford, Highlands and Seminole counties, and Columbia and Suwannee counties began planting winter forage. Pasture conditions are beginning to decline seasonally and growth has slowed. Strawberry planting has begun and processing plants and packinghouses are now open.

October is typically a dry month for Florida and the observed rainfall varied from below normal to above normal across the state. This was the second month in a row that there was no drought designation in the state. Other areas of the Southeast U.S. saw an expansion of some of the dry conditions, especially in parts of Georgia and South Carolina. Normal rainfall is expected in Florida during the month of November but the recent dry weather has put the state under an increased fire risk for the next few weeks, as we will remain fairly dry over the next month. Despite the dry weather, Lake Okeechobee's level has risen to 15.87 ft, and most of the rivers in the state are reporting normal river levels.

Figure 6. Drought conditions in Florida as of October 30, 2012 (courtesy of U.S. Drought Monitor).



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>



Released Thursday, November 1, 2012  
Michael Brewer, National Climatic Data Center/NOAA

Appendix 1: Additional October Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	0.89	-1.61	72.0	1.9
St Petersburg	2.03	-0.61	77.5	1.0
Fort Lauderdale	8.37	1.55	79.0	-1.6
Fort Myers	4.93	2.34	78.4	0.8

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

Date	Station	Type	Value	Broken/Tied	Last
2	Tampa	High Min	77	Tied	77 in 1998
4	Orlando/Sanford	Max	92	Broken	91 in 1989
4	Gainesville	Max	90	Tied	90 in 2007
4	West Palm Beach	High Min	80	Tied	80 in 1990
5	West Palm Beach	High Min	82	Broken	80 in 1990
9	Miami	Max	91	Tied	91 in 2002
13	West Palm Beach	High Min	78	Tied	78 in 1999
14	West Palm Beach	High Min	80	Broken	78 in 1997
14	Daytona Beach	High Min	76	Tied	76 in 2008
18	Fort Lauderdale	Max	89	Tied	89 in 2007
19	Fort Myers	High Min	75	Tied	75 in 2007
20	Miami	Max	90	Tied	90 in 1980
24	Sarasota	Max	89	Tied	89 in 1985
25	Fort Myers	High Min	73	Tied	73 in 2001
29	West Palm Beach	Low Max	71	Broken	72 in 1968
29	Fort Lauderdale	Low Max	73	Broken	76 in 2008
29	Miami	Low Max	74	Tied	74 in 1971
30	Gainesville	Low Max	64	Broken	70 in 1986
30	St. Petersburg	Low Max	68	Broken	70 in 1973
30	Sarasota	Low Max	70	Broken	75 in 1989
30	Fort Lauderdale	Low Max	73	Broken	74 in 1973
30	Daytona Beach	Min	42	Broken	43 in 1973
30	Vero Beach	Min	45	Broken	46 in 2008
30	Fort Lauderdale	Min	56	Broken	59 in 1973