

## Climate Summary for Florida – March 2011

*Prepared by Preston Leftwich, David Zierden, and Melissa Griffin*  
Florida Climate Center, The Florida State University, Tallahassee, Florida

Online at: [http://coaps.fsu.edu/climate\\_center/summaries/flmonthly2011\\_03.shtml](http://coaps.fsu.edu/climate_center/summaries/flmonthly2011_03.shtml)

**Average temperatures above normal in March.** Average temperatures were above normal throughout the state in March (Table 1). At least 14 daily maximum temperature records were tied or broken (Table 2). The maximum of 87° F at Ft. Lauderdale on the 1st tied a record in existence since 1929. On the 31st, the maximum temperature reached 95° F at West Palm Beach. The minimum temperature at Jacksonville on the 12th reached 32° F, setting a record for the date.

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

Station	Average Temperature	Departure from Normal
Pensacola	63.5	2.5
Tallahassee	63.3	2.2
Jacksonville	63.5	1.9
Orlando	69.0	1.6
Tampa	69.3	1.9
Miami	74.0	1.6
Key West	74.0	0.2

**Table 2.** Daily temperature records (° F) tied or broken during March. (Compiled from NOAA, NWS)

Date	Location	Record	Broken/Tied	Type	Last
1	Miami	88	Broken	Max	87 in 2003
1	Ft Lauderdale	87	Tied	Max	87 in 1929
1	W. Palm Beach	88	Broken	Max	87 in 2003
12	Jacksonville	32	Broken	Min	33 in 1998
12	Orlando	40	Tied	Min	40 in 1989
16	Apalachicola	79	Tied	Max	79 in 2008
19	Apalachicola	81	Broken	Max	80 in 1987
20	Tallahassee	87	Tied	Max	87 in 1982
26	Pensacola	81	Tied	Max	81 in 1988
27	Daytona Beach	91	Tied	Max	91 in 1994
27	Melbourne	92	Broken	Max	91 in 1994
27	Vero Beach	92	Broken	Max	89 in 2005
27	Tampa	72	Tied	High Min	72 in 1994
27	Miami	89	Tied	Max	89 in 1984
31	Miami	91	Tied	Max	91 in 2000
31	Ft Lauderdale	92	Tied	Max	92 in 2000
31	W. Palm Beach	95	Broken	Max	92 in 1989
31	Naples	73	Tied	High Min	73 in 1980



**Rainfall totals below normal in the north and south, but above normal in central areas.** Rainfall totals for March varied across the state. Below normal totals were observed in the north and south, while above normal totals were observed in central areas (Table 3). Tallahassee recorded a total more than three inches below normal. The monthly total at Tampa (9.79 in) was nearly seven inches above normal. At Tampa, 8.19 inches fell during the last four days of the month. Several daily records were set (Table 4). A total of 3.12 inches on the 31st at St. Petersburg broke a daily record in existence since 1931. Figure 1 graphically depicts the departure from normal of March rainfall totals across the state.

**Table 3.** March precipitation totals and departures from normal (inches) for selected cities.

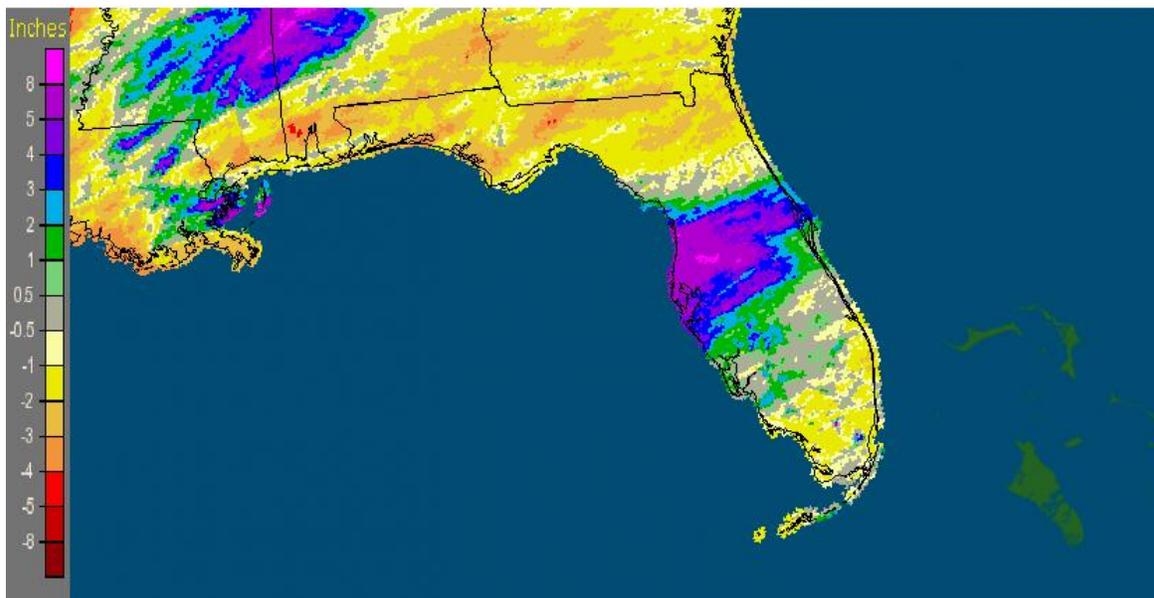
Station	Total rainfall	Departure from Normal
Pensacola	6.80	0.40
Tallahassee	3.14	-3.33
Jacksonville	2.43	-1.50
Orlando	5.24	1.70
Tampa	9.79	6.95
Miami	1.13	-1.43
Key West	0.27	-1.59

**Table 4.** Daily rainfall records (inches) tied or broken during March. (Compiled from NOAA, NWS)

Date	Location	Record	Broken/Tied	Last
10	Tampa	1.06	Broken	0.92 in 1934
10	Lakeland	1.31	Broken	1.07 in 1988
10	Sarasota	1.45	Broken	0.90 in 1988
29	Sarasota	3.50	Broken	2.79 in 1982
30	Apalachicola	2.48	Broken	2.13 in 1990
31	Lakeland	2.63	Broken	0.78 in 1987
31	St. Petersburg	3.12	Broken	2.20 in 1931
31	Sarasota	2.55	Broken	2.01 in 1972

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

Florida: March, 2011 Monthly Departure from Normal Precipitation  
Valid at 4/1/2011 1200 UTC- Created 4/1/11 15:50 UTC



**La Niña continues during March.** Although sea surface temperatures in the equatorial Pacific Ocean warmed slightly during March, they continued below normal, denoting a weak cold phase of ENSO, or La Niña. As the impact of cold temperatures in the Arctic lessened, weather conditions returned to those expected during a La Niña Spring.

**Hazardous weather.** March was a very active month for severe weather in the state. Most of the events were concentrated on the last two days of the month. On the 10th, weak tornadoes touched down briefly near Ft. Lauderdale and Miami, causing minor damage. Additionally, wind gusts of 70 mph were observed near Ft. Lauderdale. On the 30th, thunderstorm winds caused widespread damage across north-central and central areas. A tornado was observed near Lake Panasoffkee and two-inch-diameter hail was observed at Malamar. Wind gusts up to 88mph on the Sunshine Skyway, 85 mph at the Kennedy Space Center, 74 mph near Azalea Park and 73 mph at Winter Haven were observed. One injury occurred when a tree was blown onto a house at Orange City. Strong winds caused moderate to severe damage to 11 homes at Winter Springs. The month ended with many severe storm events in west-central areas on the 31st. Tornadoes occurred at Indian Rocks Beach, Bartow, Mulberry, and near Lutz and Kathleen. There were numerous reports of downed trees and power lines and damage to structures. Near Lakeland, seven people were injured and 50 light aircraft were damaged or destroyed by 70-75 mph thunderstorm winds and a brief tornado at Lakeland Airport during an ongoing air show.

**Agricultural and other impacts.** Cold temperatures early in the month slowed growth of pasture. Later in the month warm windy conditions dried out soil and pasture. However, growth of natural grasses was aided by warming temperatures during the month. Although field preparation progressed, planting of some vegetables was delayed due to dry soil. By the end of the month severe to extreme drought conditions existed in southern areas and along the upper east coast. On March 26 a water shortage was declared in south Florida and water use restrictions were implemented.