



## Climate Summary for Florida September 2010

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Online at: [http://coaps.fsu.edu/climate\\_center/summaries/flmonthly2010\\_09.shtml](http://coaps.fsu.edu/climate_center/summaries/flmonthly2010_09.shtml)

**Average temperatures above normal for September.** Persistent subtropical high pressure during the first three weeks of the month led to average temperatures remaining above normal for September (Table 1). The monthly mean of 84.1° F at West Palm Beach broke the record of 83.3° F recorded in 1951. Several maximum temperature records were tied or broken (Appendix). On the 11<sup>th</sup>, Apalachicola (92° F) and Tallahassee (98° F) tied daily maximum records in existence since 1954. For four consecutive days, the 18<sup>th</sup> through the 21<sup>st</sup>, West Palm Beach tied or broke daily records for highest minimum temperature, with 82° F on the 18<sup>th</sup> breaking a record in existence since 1930. The minimum temperature (80° F) at Melbourne on the 21<sup>st</sup> broke a record in existence since 1951.

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

Station	Average Temperature	Departure from Normal
Pensacola	80.8	2.1
Tallahassee	80.9	2.0
Jacksonville	79.1	1.3
Orlando	81.8	0.8
Tampa	83.2	1.6
Miami	83.5	1.1
Key West	83.5	0.1

**September rainfall totals vary around the state.** Monthly rainfall in September was below normal in most areas except the south. Pensacola (0.62 in) and Tampa (1.13 in) were more than five inches below normal (Table 2). In contrast, Miami (15.89 in) was more than seven inches above normal. Localized heavy rain produced isolated record daily amounts (Table 3). Figure 1 provides an aerial depiction of both the well-below normal rainfall in northwest and north-central areas and the well-above normal rainfall in the extreme southeast.



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

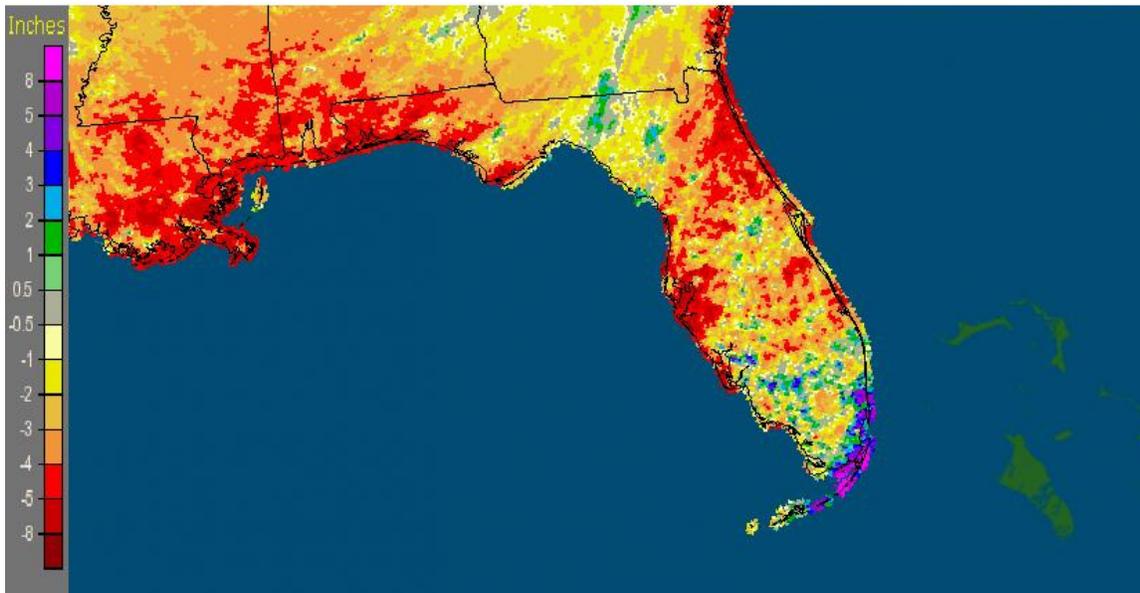
Station	Total rainfall	Departure from Normal
Pensacola	0.62	-5.13
Tallahassee	1.93	-3.08
Jacksonville	5.11	-2.79
Orlando	5.67	-0.09
Tampa	1.13	-5.41
Miami	15.89	7.51
Key West	8.92	3.47

Table 3. Daily maximum rainfall records set in September.

Date	Station	Amount (in)	Previous Record
6	Melbourne	1.93	1.01 in 1943
6	Ft. Lauderdale	5.10	3.10 in 1995
9	Naples	1.99	1.70 in 1989
14	Ft. Lauderdale	1.35	1.29 in 1992
28	Orlando	2.66	1.18 in 1949

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

Florida: September, 2010 Monthly Departure from Normal Precipitation  
Valid at 10/1/2010 1200 UTC- Created 10/3/10 21:42 UTC



**La Nina continues to strengthen during September.** Sea surface temperatures in the equatorial Pacific Ocean continued below normal during September, clearly denoting a cold phase of ENSO, or La Nina. Increased tropical cyclone activity in the Atlantic basin, as seen during September, is associated with La Nina conditions. Also, the warm, dry conditions across most of the state are also associated with La Nina.

**Hazardous weather.** No tornadoes were observed during September. Thunderstorm winds produced only isolated damage in northern and central areas. On the 5<sup>th</sup>, thunderstorms produced wind gusts up to 69 mph near Cape Canaveral. As the remnants of Tropical Storm Nicole passed near southeastern coastal areas on the 29<sup>th</sup>, heavy rain was observed from Miami to Marathon.

**Agricultural and other impacts.** Dry conditions in western areas of the Panhandle have hindered peanut digging, stressed cotton and soybeans, and lowered hay yields. By the end of the month, areas in the western Panhandle along the border with Alabama reached severe drought conditions. Other areas in the northwest and along the northeast Atlantic coast have moderate drought conditions. Most northern areas have become abnormally dry. In contrast, growing conditions remained good in citrus areas throughout the month.

**Appendix  
Temperature Records (° F) Tied or Broken during September (compiled from NWS)**

<b>Date</b>	<b>Location</b>	<b>Record</b>	<b>Tied/Broken</b>	<b>Max/Min</b>	<b>Previous Record</b>
2	Lakeland	69	Tied	Min	69 in 1982
2	Miami	93	Tied	Max	93 in 2007
3	Melbourne	97	Broken	Max	95 in 1999
4	Miami	95	Broken	Max	94 in 2007
11	Tallahassee	98	Tied	Max	98 in 1954
11	Apalachicola	92	Tied	Max	92 in 1954
11	Key West	83	Tied	Min	83 in 2000
12	Pensacola	96	Tied	Max	96 in 1991
12	Daytona Beach	93	Tied	Max	93 in 1986
12	Lakeland	95	Tied	Max	95 in 1991
12	Ft. Myers	94	Tied	Max	94 in 1992
13	Sarasota	95	Tied	Max	95 in 1963
13	Naples	94	Tied	Max	94 in 1995
18	Melbourne	79	Tied	Min	79 in 1970
18	Vero Beach	79	Broken	Min	77 in 1979
18	West Palm Beach	82	Broken	Min	81 in 1930
19	West Palm Beach	82	Broken	Min	81 in 1906
20	West Palm Beach	80	Tied	Min	80 in 2003
21	West Palm Beach	81	Tied	Min	81 in 2000
21	Melbourne	80	Broken	Min	79 in 1951
21	Vero Beach	79	Tied	Min	79 in 2002
23	Tampa	93	Tied	Max	93 in 1990
25	Melbourne	80	Broken	Min	79 in 2005