

Climate Summary for Florida August 2010

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Online at: http://coaps.fsu.edu/climate_center/summaries/flmonthly2010_08.shtml

Average temperatures above normal for August. Continued high pressure at both the surface and aloft, high moisture in low levels, and above normal sea-surface temperatures led to above normal temperatures across all areas of the state (Table 1). The monthly mean temperature at Vero Beach (83.6°) was the warmest on record. Tallahassee (84.2° F) and Melbourne (83.8° F) tied the second warmest August on record. Nine daily maximum temperature records were tied or broken. The maximum temperature at Orlando (97° F) on the 1st tied a record in existence since 1961. Also, the maximum temperature at Miami (95° F) on the 24th broke a record in existence since 1958. In contrast, the maximum temperature of 82° F at Key West on the 10th broke the record (83° F in 1901) for lowest maximum temperature in August. There were 37 daily temperature records tied or broken during the month (Appendix). Much of the persistent overall warmth during August resulted from above normal minimum temperatures. Daytona Beach (76.1° F) and Melbourne (76.5° F) had record-warm monthly mean minimum temperatures.

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

Station	Average Temperature	Departure from Normal
Pensacola	83.8	1.6
Tallahassee	84.2	2.1
Jacksonville	84.0	3.2
Orlando	83.9	1.4
Tampa	84.3	1.6
Miami	85.1	1.5
Key West	85.1	0.7

August rainfall totals vary around the state. Monthly rainfall in August was above normal in most areas around the state. Pensacola (11.87 in) was more than five inches above normal (Table 2). In contrast, Vero Beach (2.89 in) was more than three inches below normal. Localized heavy rain produced isolated record daily amounts (Table 3).

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

Station	Total rainfall	Departure from Normal
Pensacola	11.87	5.02
Tallahassee	9.97	2.94
Jacksonville	7.74	0.87
Orlando	5.62	-0.63
Tampa	9.29	1.69
Miami	8.75	0.12
Key West	5.01	-0.39

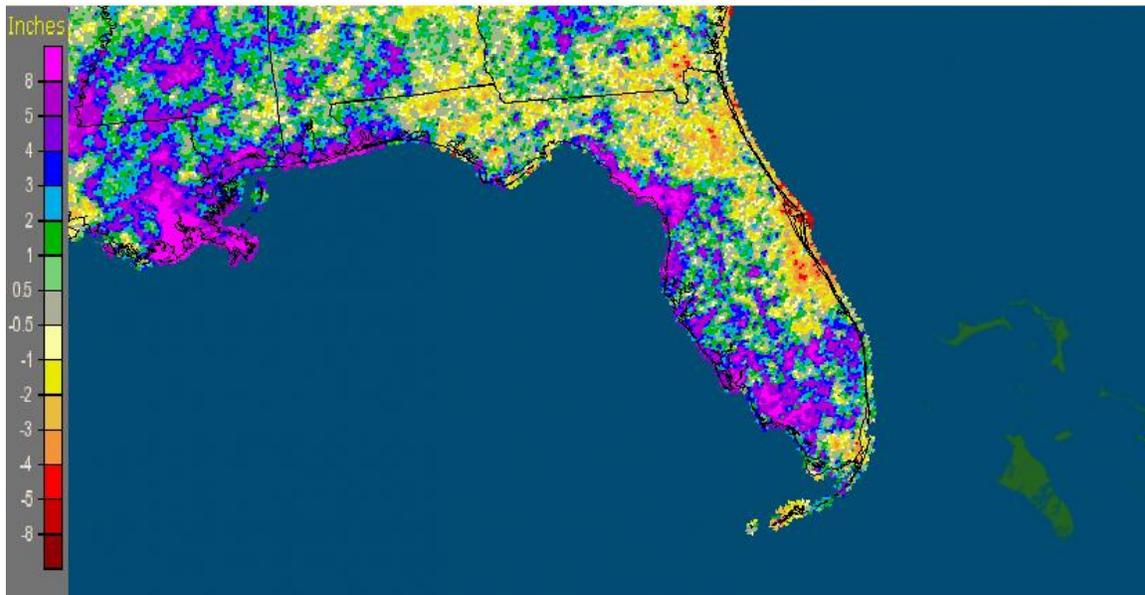
Table 3. Daily maximum rainfall records set in August.

Date	Station	Amount (in)	Previous Record
8	Melbourne	2.32	1.69 in 2004
8	Lakeland	2.65	2.31 in 1967
8	W. Palm Beach	2.39	1.99 in 1956
23	Sarasota	4.92	4.14 in 1977

Further, the overall areal distribution of departures from normal rainfall during August is depicted in Figure 1. Departures from normal monthly totals range from much above normal in several areas near the Gulf coast and inland sections of the south to well below normal along the central east coast. A monthly total exceeding 20 inches was observed in coastal Levy County.

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

Florida: August, 2010 Monthly Departure from Normal Precipitation
Valid at 9/1/2010 1200 UTC- Created 9/1/10 16:10 UTC



La Nina strengthens during August. Sea surface temperatures in the equatorial Pacific Ocean continued to cool during August and now clearly denote a cold phase of ENSO, or La Nina. The development of La Nina has little impact on climate in Florida during summer.

Hazardous weather. Thunderstorm winds produced only isolated reports of minor damage during August. Weak tornadoes caused minor damage near New Smyrna Beach and Boca Raton on the 7th and again at New Smyrna Beach on the 11th. Waterspouts caused minor damage when they moved ashore near Edgewater on the 11th and near Key Largo on the 30th. Tropical Depression 5 formed in the southeast Gulf of Mexico on the 10th. Rainfall along the Gulf coast was enhanced for the next two days as the depression drifted northwestward before dissipating.

Agricultural and other impacts. Hot, dry conditions early in the month stressed some field crops and pasture in the extreme northwest. Rainfall later in the month improved the condition of field crops in the northwest and forage in west-central areas. However, continued heavy rain in some areas of the northwest promoted white mold in some peanut fields toward the end of the month. Warm, humid conditions throughout the month provided excellent growing conditions for citrus and sugarcane in the south. Abnormally dry conditions persisted through the month near the borders with Alabama and southwest Georgia and along the east-central and northeast Atlantic coasts.

Appendix

Temperature Records (° F) Tied or Broken during August (compiled from NWS)

Date	Location	Record	Tied/Broken	Max/Min	Previous Record
1	Orlando	97	Tied	Max	97 in 1961
1	Vero Beach	97	Broken	Max	96 in 1999
1	Naples	80	Broken	Min	79 in 2002
2	Key West	84	Broken	Min	83 in 2006
3	Tampa	95	Tied	Max	95 in 1970
3	Orlando	77	Tied	Min	77 in 2004
3	Daytona Beach	77	Broken	Min	76 in 2005
4	Orlando	77	Broken	Min	76 in 2004
7	Orlando	78	Tied	Min	78 in 1987
10	Daytona Beach	78	Tied	Min	78 in 2007
10	Key West	82	Broken	Max	83 in 1901
13	Daytona Beach	77	Tied	Min	77 in 1941
13	Orlando	76	Tied	Min	76 in 2003
13	Melbourne	77	Tied	Min	77 in 1988
13	Vero Beach	77	Tied	Min	77 in 1959
14	Daytona Beach	95	Tied	Max	95 in 1997
14	Melbourne	97	Tied	Max	97 in 2003
14	Vero Beach	78	Broken	Min	77 in 1997
14	Miami	82	Tied	Min	82 in 2009
14	Naples	80	Broken	Min	79 in 2007
15	Daytona Beach	77	Tied	Min	77 in 1970
15	Naples	80	Tied	Min	80 in 2007
16	Daytona Beach	78	Broken	Min	77 in 2005
16	Orlando	78	Broken	Min	77 in 2005
17	Daytona Beach	78	Tied	Min	78 in 2009
17	West Palm Beach	80	Tied	Min	80 in 2009
17	Key West	84	Tied	Min	84 in 2006
19	Fort Myers	96	Tied	Max	96 in 2005
21	Fort Myers	96	Broken	Max	95 in 2005
21	Fort Lauderdale	83	Tied	Min	83 in 2005
22	Fort Lauderdale	83	Broken	Min	82 in 2009
24	Miami	95	Broken	Max	94 in 1958
25	Vero Beach	95	Broken	Max	93 in 1998
28	West Palm Beach	81	Tied	Min	81 in 2005
29	Key West	84	Broken	Min	83 in 2009
30	Melbourne	80	Broken	Min	78 in 1995
30	Vero Beach	79	Tied	Min	79 in 2005