



Climate Summary for Florida

July 2009

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Online at: http://coaps.fsu.edu/climate_center/summaries/flmonthly2009_07.shtml

Temperatures near normal for July. Most of Florida experienced near-normal summertime temperatures during the month of July. As a whole, north Florida ranged a few tenths to one degree cooler than normal while south Florida was one to two degrees above normal. In general, afternoon high temperatures ran in the upper 80's to low 90's, very typical of summer weather. Low temperatures ranged from the low 70's across north Florida to the high 70's or even 80 in south Florida. The month did begin with a hot spell on July 1-3, when temperatures across north Florida reached the upper 90's. North Florida also experienced a spell of unseasonably cool weather later in the month when overnight low temperatures dipped into the low 60's or even 59 over inland locations. Tallahassee recorded a morning low of 60 on July 21 and Crestview recorded record low July temperatures on the 20th and 21st of 60 and 58. Many daily records for low temperature were set across north Florida during the four day stretch of July 19 through 22.

Station	Average Temperature	Departure from Normal
Pensacola	82.1	0.6
Tallahassee	81.4	-1.0
Jacksonville	81.2	-0.4
Orlando	81.3	-0.4
Tampa	83.2	0.7
Miami	84.9	1.2
Key West	86.3	1.8

Table 1: July average temperatures and departures from normal for selected cities (degrees F.).

July rainfall below normal across north Florida, near normal for south Florida. Rainfall this month was fairly ordinary, characterized by the frequent afternoon thundershowers that are a normal component of Florida's summer climate. Rainfall totals for the month ranged from 4 to 5 inches across north Florida and the panhandle (a little below normal), to 5 to 7 inches across the southern portion of the state and over 10 inches in the Tampa area. Coverage was fairly widely distributed, given the spotty nature of the usual afternoon showers. One precipitation event of note did bring very heavy rain to the Tampa area on July 1st. On that day, Tampa set a new record rainfall for that day of 4.72 inches. Tarpon Spring recorded 7.45 inches on that day.



Station	Total Rainfall	Departure from Normal
Pensacola *	5.68	-0.86
Tallahassee	4.45	-3.59
Jacksonville	5.49	-0.48
Orlando	5.19	0.02
Tampa	10.25	3.76
Miami	6.17	0.38
Key West	2.16	-1.11

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

El Niño gains steam in the Pacific Ocean. Ocean temperatures in the past months have warmed rapidly in the eastern and central tropical Pacific Ocean and are now above the 0.5 C threshold that commonly designates El Niño conditions. This warming completes the transition from a weak La Niña in March of 2009 through several months of neutral conditions in April, May, and June, to El Niño for the remainder of 2009. El Niño refers to a periodic episode (every 2-7 years) of warming in the tropical Pacific Ocean along the equator from the coast of South America to the central Pacific. Modeling centers around the world that predict El Niño/La Niña agree that waters will continue to warm and result in a weak to moderate El Niño over the next 3-6 months. Although El Niño impacts on Florida's climate are weak during the summer, we may have begun to see some influence. The activity of the hurricane season in the Atlantic Basin is known to be suppressed by El Niño, and this year has been no exception. So far, there have been no named storms through the month of July, and tropical activity has not affected the state. El Niño can also bring slightly drier and warmer weather to the state in July.

Severe Weather. Florida experienced only isolated bouts of severe weather in the month of July, mainly damage from wind and small tornadoes. Hail and damaging downbusts were reported near downtown Tallahassee on the afternoon of July 2nd. Small tornadoes (EF0) were reported in Collier County on July 2nd and Orange County on July 15th, and a damaging tornado was reported in Volusia County on July 24th.

Agricultural and other impacts. On July 23rd the U.S. Army Corps of Engineers began making phased releases from Lake Okeechobee to the St. Lucie Inlet and Caloosahatchee River. Lake Okeechobee levels have risen to over 13 feet and the releases were necessary to prevent larger releases later in the summer. Fresh water released into these sensitive estuaries can greatly affect the ecosystems there. Agriculture has had no major disruptions due to weather this month. Timely rainfall has rangeland and pastures generally in good to excellent condition.