



Climate Summary for Florida January 2010

Prepared by Preston Leftwich, David Zierden, and Melissa Grifin

Florida Climate Center
The Florida State University
Tallahassee, Florida

Online at: http://coaps.fsu.edu/climate_center/summaries/flmonthly2010_01.shtml

Average temperatures well below normal for January. Monthly average temperatures in January were well below normal across the entire state (Table 1). Primary reporting stations observed average temperatures for the month at least four degrees below normal. Average temperatures at Jacksonville (48.1° F) and Tampa (54.7° F) were both the sixth coldest recorded for January. The period January 2 – 14 was particularly cold, with numerous record low temperatures being observed. Coldest minimum temperatures were 14° F at Tallahassee and 17° F at Gainesville, both on the 11th. Also, Tallahassee’s average temperature of 36° F for the first two weeks of the year was the coldest on record. Tallahassee (14) and Gainesville (13) broke records for the most consecutive days with a freezing minimum temperature. A low temperature of 42° F recorded at Key West on the 11th was the second coldest temperature on record. The strength of the cold was evident as numerous record low maxima were recorded across the central and southern portions of the state. In contrast, later in the month daily record maxima were set at Melbourne (82° F on the 17th), Miami (86° F on the 22nd), and Tallahassee (76° F on the 23rd).

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

Station	Average Temperature	Departure from Normal
Pensacola	46.8	-5.2
Tallahassee	46.9	-4.9
Jacksonville	48.1	-5.0
Orlando	54.4	-6.5
Tampa	54.7	-6.6
Miami	64.1	-4.0
Key West	64.2	-6.1

January rainfall generally above normal in northern areas and below normal in central and southern areas.

Rainfall totals for January were somewhat above normal at northern stations, while totals were below normal across most of central and southern Florida (Table 2). Heaviest rainfall occurred as surface low pressure systems moved across the Southeast to the north of the state. Monthly rainfall at Tallahassee (8.09 inches) produced the tenth wettest January on record. Also, Tallahassee set daily records of 2.04 inches on the 16th and 4.66 inches on the 21st. Among other daily records were 1.71 inches at Jacksonville and 1.85 inches at Gainesville on the 21st, then 2.45 inches at Orlando on the 22nd.



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

Station	Total rainfall	Departure from Normal
Pensacola	6.07	0.73
Tallahassee	8.09	2.73
Jacksonville	3.96	0.27
Orlando	3.53	1.10
Tampa	3.42	1.15
Miami	0.89	-0.99
Key West	1.15	-1.07

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

Florida: January, 2010 Monthly Departure from Normal Precipitation
Valid at 2/1/2010 1200 UTC- Created 2/1/10 23:45 UTC



El Niño continues to impact Florida. Sea surface temperatures in the equatorial Pacific Ocean reached 1.2° C above normal, designating moderate El Niño conditions. An active storm track in the Southeast, associated with El Niño conditions, was just north of Florida during January. This led to the heaviest rainfall remaining in northern areas.

Hazardous weather. January 21 was an active day of severe storms across north Florida. On the 21st, hail up to golfball-size (1.75 inch diameter) was observed near Crawfordville and Green Cove Springs, a tornado occurred near Starke, and numerous reports of thunderstorm wind damage were received from the Panhandle eastward to the Atlantic coast. Wind damage was also reported near Ocala and Thonotosassa. As a cold front moved down the peninsula on the 22nd, a weak tornado toppled trees and caused minor structural damage as it traveled along a six-mile path in Brevard County.

Agricultural and other impacts. The U.S. Department of Agriculture declared nearly all Florida counties as natural disaster areas after record cold struck in early and mid-January. Growers and grower groups say the cold damaged a minimum of a third of the state's winter produce and up to 75% of south Florida vegetables. There were significant losses to sugarcane, beans, squash, tomatoes and strawberries. Citrus producers harvested as much fruit as possible while it was still marketable. Heavy rain and cold in north Florida adversely affected pastures and potato planting. Toward the end of the month, more seasonable temperatures allowed some pasture recovery. Use of irrigation to prevent freezing of crops in west central Florida greatly lowered the aquifer. Numerous sinkholes have opened, producing damage to structures and closing highways. Additionally, many private wells have gone dry.