

Florida's Climate

THE COCORAHHS 'STATE CLIMATES' SERIES

Florida . . . The “Liquid” Sunshine State

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Climate is Florida's most important physical resource, a fact well recognized by its citizens, whose state government officially designated it the Sunshine State in 1970. Florida is mainly a long peninsula, and with the exception of the northwestern part of the state, no place is more than 80 miles from both the Gulf of Mexico and the Atlantic Ocean. This proximity to water has an impact on both temperatures and precipitation across the state.

The Atlantic Ocean and the Gulf of Mexico act as major modifiers of the state's temperature during all seasons, but particularly in the winter. During Florida's coldest month (January), average temperatures range from the lower 50s in the north to the upper 60s in the south. The mild temperatures give way to the “dog days of summer,” when average temperatures across the entire state are about the same (lower 80s). Florida's summer high temperatures can be extremely draining, even though Florida experiences far fewer days of 100°F days than most other states. This is because Florida is among the wettest states in the nation and its atmosphere is so humid that its summers are among the most uncomfortable.

Despite these typical temperature patterns, Florida has had its fair share of extremes. The state record for minimum temperature is -2°F set in Tallahassee, Florida, on February 13, 1899, while the hottest temperature recorded in the state was 109°F on June 29, 1931, in Monticello, Florida. Oddly enough, the two record-holding stations are only 25 miles apart.

On average, approximately 54 inches of precipitation falls on the state each year. The Panhandle (56-70 inches) and southeastern Florida (58-62 inches) are the wettest parts of the state, while the driest portions are the Florida Keys and the offshore bar of Cape Canaveral (less than 50 inches). The Panhandle has two different wet seasons, one in the winter, due to frontal passages, and one that it shares with the rest of the state--the summer. On average, at least 50% of the state's annual precipitation falls between May and August. These summer rains are generally in the form of local thunderstorms or thunderstorms that develop in long squall lines created when the hot humid air from the Atlantic Ocean converges with equally hot and humid air from the Gulf of Mexico. These thunderstorms are the reason Florida is known as the Lightning Capital of the United States. A surprisingly large share of Florida's precipitation falls during periods of torrential rain, defined as 3 inches or more within a 24-hour period. Rainfall amounts of 10-20 inches over a wide area are not unusual as tropical depressions, tropical storms, and hurricanes pass through the state. An estimated 38.70 inches of rain reportedly fell in a 24-hour period at Yankeetown, Florida, on September 5, 1950, during Hurricane Easy (Cedar Key Hurricane).

Even with all the potential for rain, Florida has experienced numerous dry periods and droughts. The extremely active 1998 wildfire season was brought on by an abnormally dry period; and during the drought in 2007, the water level in Lake Okeechobee fell to the historic low of 8.82 feet. The lake was recharged only after the unprecedented rains from Tropical Storm Fay in 2008.

Temperature and precipitation are just two aspects of the state's climate. For more information about the climate of Florida, please visit: http://coaps.fsu.edu/climate_center/specials/climateofflorida.pdf