

Climate Summary for Florida – December 2018

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Mean temperatures in December were above normal statewide. (Table 1 and Appendix 1). Although temperatures were above normal statewide, the greatest positive anomalies were observed in the Keys. Several high temperature records were tied or broken across the state (Appendix 2).

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

Station	Mean Temperature	Departure from Normal
Pensacola	56.6	+3.1
Tallahassee	56.2	+3.0
Jacksonville	58.0	+2.7
Orlando	64.3	+1.7
Tampa	65.4	+2.3
Miami	71.9	+1.4
Key West	75.4	+4.0

Rainfall totals in December were above normal statewide except in the southern part of the state, where totals were slightly below normal (Figure 1). Conditions were particularly wet on the Panhandle, where monthly record totals were shattered. Pensacola and Tallahassee both had the wettest December on record, and Tampa had the third-wettest December on record. Two daily rainfall records were broken for the month (Table 3).

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

Station	Total Rainfall	Departure from Normal	
Pensacola	16.55	+12.00	
Tallahassee	15.77	+11.87	
Jacksonville	4.96	+2.16	
Orlando	6.80	+4.22	
Tampa	8.69	+6.22	
Miami	1.58	-0.46	
Key West	1.90	-0.32	

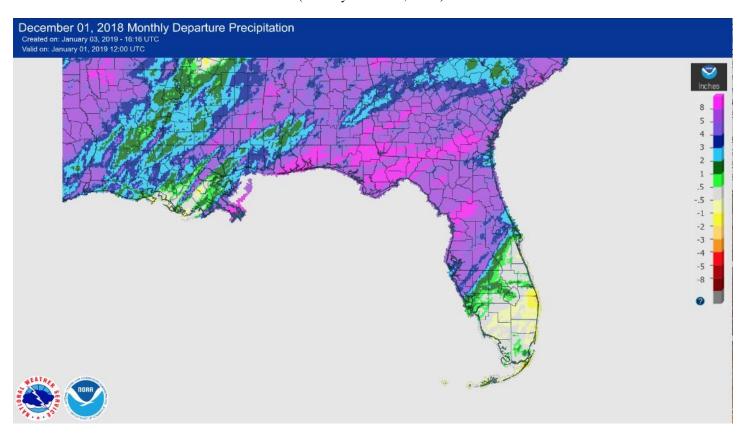




Table 3. Select daily rainfall records (inches) broken during December. (Compiled from NOAA, NWS)

Date	Location	Record	Last
20	Orlando	3.65	1.50 in 1911
20	Tampa	3.38	1.39 in 1915

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



ENSO-neutral conditions are present in the Pacific, with El Niño about to develop.

Based on current data and forecast models, forecasters with the Climate Prediction Center (CPC) continue with an El Niño Watch. ENSO-neutral conditions currently are present, with sea-surface temperatures (SST) above average across the equatorial Pacific Ocean. The chance of El Niño development during the climatological boreal winter (December-January-February) is 90% and, and the chance of it continuing during the spring (March-April-May) is 60%. The CPC seasonal outlook, covering January to March, favors above-normal precipitation over all of Florida, especially northern parts, and equal chances of below-, near-, and above-normal temperatures in the northern two-thirds of the state, with above-normal temperatures favored in the southern third.

According the Local Storm Reports (LSRs) issued by the local National Weather Service (NWS) offices serving Florida, the following instances of hazardous weather were reported across the state in December 2018.

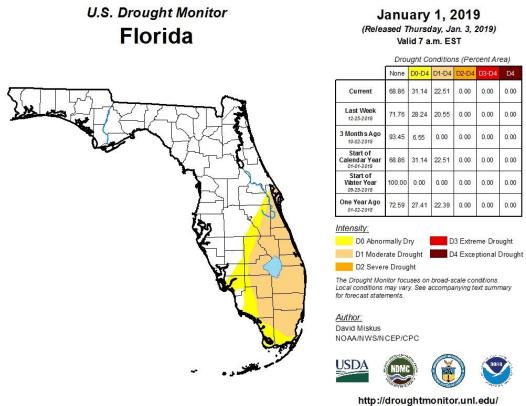
Table 4. Breakdown of storm reports submitted in Florida during the month of December. Note: Beginning with this summary, different categories will be used to better match the categories used by the National Weather Service. (Compiled from Iowa State University/Iowa Environmental Mesonet.)

Report Type	Number of Reports
Coastal Flood	1
Flash Flood	9
Flood	12
Hail	3
Heavy Rain	87
Marine Hail	1
Marine Thunderstorm Wind	35
Non-Thunderstorm Wind Damage	1
Non-Thunderstorm Wind Gust	62
Tornado	7
Thunderstorm Wind Damage	11
Thunderstorm Wind Gust	46
Waterspout	5

Drought-Related Impacts.

At the start of January 2019, according to the U.S. Drought Monitor, moderate drought (surrounded by abnormally dry conditions) affected the southeast quarter of the peninsula, owing the deficits that have mounted over the last. Rainfall deficits that had accumulated on the far western panhandle were eliminated by heavy rains from Tropical Storm Dennis at the beginning of the month.

As of 2 January, the Lake Okeechobee water level was at 12.66 ft. above sea level, which is below average for this time of the year.



Agriculture-Related Impacts.

Information for this section is derived from reports published by the United States Department of Agriculture. Because of a lapse in appropriations from the federal government, these USDA reports are not available at the time of publication of this summary.

Appendix 1
Additional December Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (°F)	Departure from Normal (°F)
Gainesville	8.68	+6.30	59.1	+3.0
Melbourne	1.63	-0.94	66.1	+3.0
Fort Lauderdale	1.77	-0.69	71.6	+0.6
Fort Myers	1.91	+0.20	68.2	+1.7

Appendix 2 Select daily maximum and minimum temperature records (° F) tied or broken during December. (Compiled from NOAA, NWS)

Date	Station	Type	Value	Broken/Tied	Last
2	Orlando	Max	87	Tied	87 in 1992
28	Orlando	High Min	70	Broken	69 in 2015
30	Orlando	High Min	69	Broken	67 in 2007
2	Tampa	High Min	72	Tied	72 in 2006
2	Miami	Max	86	Tied	86 in 1981
1	Key West	High Min	79*	Broken	76 in 2016
2	Key West	High Min	81**	Broken	77 in 2009
4	Key West	Max	86	Tied	86 in 1880
4	Key West	High Min	79	Broken	78 in 1978
9	Key West	High Min	77	Tied	77 in 2009
14	Key West	High Min	78	Broken	77 in 2001
20	Key West	Max	84	Tied	84 in 1986
30	Key West	Max	83	Tied	83 in 2015

^{*}This value ties the all-time highest minimum temperature ever recorded at Key West for the month of December (records back to 1872), last set in 2016.

^{**}This value ranks as all-time highest minimum temperature ever recorded at Key West for the month of December (records back to 1872), eclipsing the 79 degrees last recorded on 1 December 2018.