

Climate Summary for Florida – September 2019

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Mean temperatures in September were generally above normal, especially on the panhandle (Table 1 and Appendix 1). Several daily temperature records were tied or broken during the month (Appendix 2).

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

| Station | Mean Temperature | Departure from Normal | |
|--------------|------------------|-----------------------|--|
| Pensacola | 84.6 | +6.2 | |
| Tallahassee | 83.4 | +5.2 | |
| Jacksonville | 81.3 | +3.1 | |
| Orlando | 82.1 | +1.0 | |
| Tampa | 84.0 | +2.3 | |
| Miami | 85.2 | +2.3 | |
| Key West | 84.5 | +1.2 | |

Rainfall totals in September were below normal statewide but especially so on the panhandle and western coast (Figure 1). No rainfall records were broken at major stations (Table 3).

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

| Station | Total Rainfall | Departure from Normal | |
|--------------|----------------|-----------------------|--|
| Pensacola | T | -5.98 | |
| Tallahassee | T | -4.69 | |
| Jacksonville | 2.35 | -5.84 | |
| Orlando | 1.93 | -4.13 | |
| Tampa | 1.46 | -4.84 | |
| Miami | 3.25 | -6.61 | |
| Key West | 4.10 | -2.61 | |

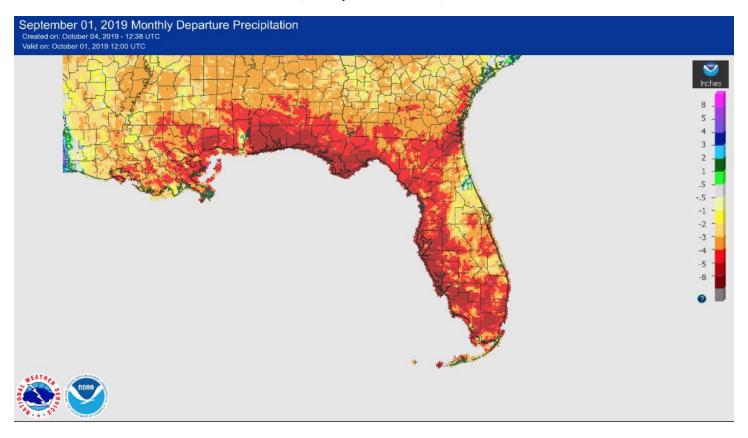
Table 3. Select daily rainfall records (inches) broken during September. (Compiled from NOAA, NWS)

(none)





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



ENSO is now neutral.

During September, the Climate Prediction Center issued a final El Niño Advisory, as ENSO is now in a neutral state and has slightly better than even odds (55-60% chance) of remaining so through the 2019-2020 boreal winter. The next most likely scenario is weak El Niño conditions.

Hazardous Weather Events in September.

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 September 2019.

Table 4. Breakdown of storm reports submitted in Florida during the month of September. (Compiled from Iowa State University/Iowa Environmental Mesonet.)

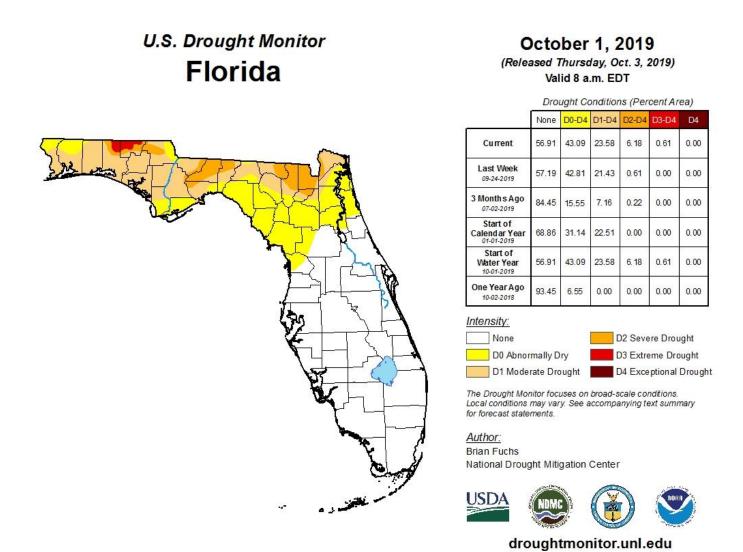
| Report Type | Number of Reports |
|---------------|-------------------|
| Coastal Flood | 29 |
| Dense Fog | 0 |
| Flash Flood | 0 |

| Flood | 0 |
|------------------------------|----|
| Hail | 0 |
| Heavy Rain | 1 |
| Marine Hail | 0 |
| Marine Thunderstorm Wind | 82 |
| Non-Thunderstorm Wind Damage | 0 |
| Non-Thunderstorm Wind Gust | 26 |
| Tornado | 0 |
| Thunderstorm Wind Damage | 9 |
| Thunderstorm Wind Gust | 38 |
| Waterspout | 6 |

Drought-Related Impacts.

At the very beginning of October, according to the U.S. Drought Monitor, much of north Florida had at least abnormally dry conditions with moderate to severe and even extreme drought in areas closest to the borders with Georgia and Alabama.

As of 3 October, the Lake Okeechobee water level was at 13.49 ft. above sea level, which is a near average for this time of the year.



Agriculture-Related Impacts.

At the end of September 2019, soil moisture was adequate in 50% of the state, short in 27%, very short in 21%, and at a surplus in 2%. For more information, consult the weekly <u>Crop Progress and Condition</u> reports published by the USDA's National Agricultural Statistics Service.

Appendix 1
Additional August Departures from Normal Data for Florida Locations

| Station | Total rainfall (in.) | Departure from Normal (in.) | Average Temperature (°F) | Departure from Normal (°F) |
|-----------------|----------------------|--------------------------------|-----------------------------|-------------------------------|
| Gainesville | 0.93 | -3.49 | 80.6 | +2.4 |
| Melbourne | 2.09 | -5.55 | 83.5 | +3.0 |
| Fort Lauderdale | 1.33 | -7.26 | 83.7 | +0.5 |
| Fort Myers | 2.86 | -5.45 | 83.6 | +1.2 |

 $\label{eq:Appendix 2} \mbox{Select daily maximum and minimum temperature records ($_{\scriptsize{0}}$ F) tied or broken during August.} \\ \mbox{(Compiled from NOAA, NWS)}$

| Date | Station | Type | Value | Broken/Tied | Last |
|------|--------------|-----------|-------|-------------|------------|
| 3 | Pensacola | Max. | 96 | Tied | 96 in 1997 |
| 4 | Pensacola | Max. | 96 | Tied | 98 in 1990 |
| 7 | Pensacola | Max. | 96 | Broken | 95 in 1990 |
| 8 | Pensacola | Max. | 97 | Tied | 97 in 1980 |
| 17 | Pensacola | Max. | 99 | Broken | 97 in 1991 |
| 18 | Pensacola | Max. | 102 | Broken | 96 in 2005 |
| 25 | Pensacola | Max. | 96 | Broken | 94 in 2016 |
| 26 | Pensacola | Max. | 96 | Broken | 94 in 1984 |
| 27 | Pensacola | Max. | 96 | Broken | 94 in 2017 |
| 7 | Tallahassee | Max. | 99 | Broken | 98 in 1990 |
| 8 | Tallahassee | Max. | 98 | Tied | 98 in 1990 |
| 17 | Tallahassee | Max. | 100 | Broken | 99 in 1933 |
| 18 | Tallahassee | Max. | 101 | Broken | 98 in 2005 |
| 24 | Tallahassee | Max. | 96 | Tied | 96 in 1933 |
| 25 | Tallahassee | Max. | 98 | Broken | 96 in 1931 |
| 27 | Tallahassee | Max. | 96 | Tied | 96 in 1972 |
| 30 | Tallahassee | Max. | 97 | Broken | 96 in 1934 |
| 7 | Jacksonville | Max. | 97 | Broken | 96 in 1951 |
| 17 | Jacksonville | Max. | 96 | Tied | 96 in 1896 |
| 24 | Jacksonville | Max. | 94 | Tied | 94 in 1925 |
| 25 | Jacksonville | Max. | 96 | Broken | 94 in 1961 |
| 26 | Jacksonville | Max. | 97 | Broken | 96 in 1961 |
| 2 | Orlando | High Min. | 77 | Tied | 77 in 2015 |
| 5 | Orlando | High Min. | 80 | Broken | 77 in 2018 |
| 6 | Orlando | High Min. | 78 | Broken | 77 in 1988 |
| 4 | Tampa | High Min. | 80 | Tied | 80 in 2018 |
| 5 | Tampa | High Min. | 84 | Broken | 80 in 1979 |
| 6 | Tampa | High Min. | 80 | Tied | 80 in 1996 |
| 10 | Tampa | Max. | 96 | Broken | 95 in 2016 |
| 12 | Tampa | Max. | 95 | Tied | 95 in 2018 |
| 5 | Miami | Max. | 93 | Tied | 93 in 2017 |

| 6 | Miami | Max. | 96 | Broken | 94 in 2011 |
|----|----------|-----------|----|--------|------------|
| 8 | Miami | Max. | 94 | Tied | 94 in 2017 |
| 9 | Miami | High Min. | 83 | Tied | 83 in 1983 |
| 12 | Miami | High Min. | 83 | Broken | 82 in 2008 |
| 16 | Miami | Max. | 94 | Broken | 93 in 2007 |
| 29 | Miami | High Min. | 81 | Tied | 81 in 1915 |
| 6 | Key West | High Min. | 83 | Tied | 82 in 2017 |
| 7 | Key West | High Min. | 83 | Tied | 83 in 2017 |
| 16 | Key West | High Min. | 83 | Tied | 83 in 2018 |
| 17 | Key West | Max. | 92 | Tied | 92 in 2018 |
| 28 | Key West | High Min. | 83 | Tied | 83 in 2018 |