FloridaClimateCenter
Office of the State Climatologist

Climate Summary for Florida – January 2013

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Average temperatures were above normal across the state in January.
Average temperatures were well above normal for January across the entire state (Table 1 and Appendix 1). Departures from normal ranged from 3.9˚F at Key West to 7.8˚F in Tallahassee. January 2013 was the 4th warmest on record in Miami and the 8th warmest on record for both Pensacola and Tampa. A review of the historical rankings of January average temperatures showed that January 1937 and January 1974 were the warmest Januarys on record at most locations. Multiple maximum temperature or high minimum temperature records were either tied or broken (Appendix 2); there were no record minimum or low maximum temperatures tied or broken in January.

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

Station	Average Temperature	Departure from Normal
Pensacola	58.4	6.4
Tallahassee	59.6	7.8
Jacksonville	60.2	7.1
Orlando	66.2	5.3
Tampa	67.1	5.8
Miami	73.2	5.1
Key West	74.2	3.9

Rainfall totals were below normal across the state in January. Rainfall totals across the state were below normal in January (Table 2), with the northern part of the state reporting 3 to 5 inches below normal rainfall, while portions of the peninsula and south Florida were 1 to 3 inches below normal precipitation (Figure 1). January 2013 was the 5th driest on record for Gainesville and the 8th driest on record for both Orlando and Tallahassee. Only a few precipitation records were broken in January (Table 3), and only one of those records was for a rainfall total over 0.50". The below normal rainfall has already raised concerns for the upcoming wildfire season and worsening drought conditions across the state.

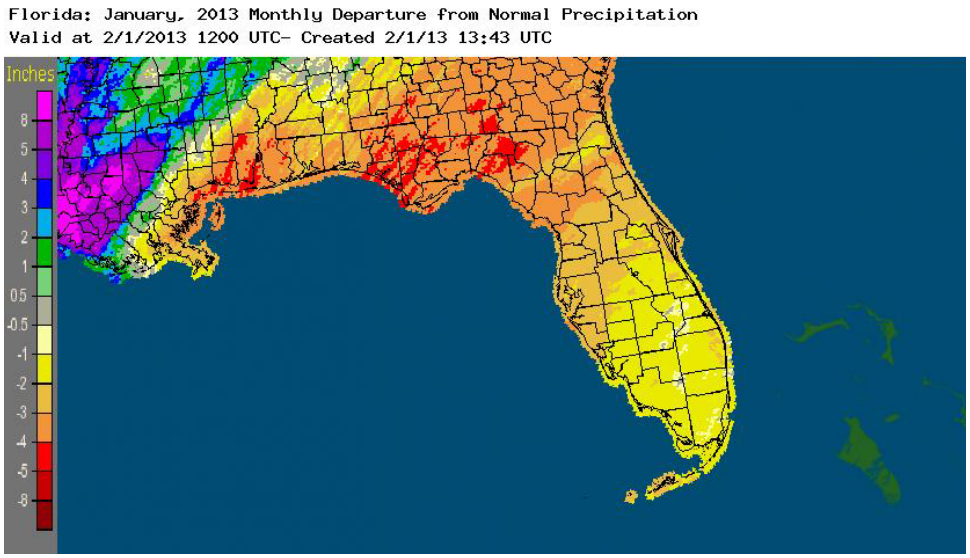
Table 2. January precipitation totals and departures from normal (inches) for selected cities.

Station	Total rainfall	Departure from Normal
Pensacola	2.36	-2.98
Tallahassee	0.85	-4.51
Jacksonville	1.02	-2.67
Orlando	0.24	-2.19
Tampa	0.63	-1.64
Miami	0.54	-1.34
Key West	0.29	-1.93

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

Date	Location	Record	Last
5	Ft. Pierce	0.57	0.09 in 2008
6	Ft. Lauderdale	0.07	0.06 in 2002
7	Ft. Lauderdale	0.17	0.01 in 2009
8	Ft. Pierce	0.11	0.00 in 2012
8	Miami	0.03	0.01 in 2001
9	Orlando	0.29	0.27 in 1961
16	Ft. Lauderdale	0.29	0.08 in 1999
18	Ft. Pierce	0.04	0.01 in 2011
19	Ft. Lauderdale	0.34	0.10 in 2011
19	Ft. Pierce	0.27	0.18 in 2006

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



ENSO-Neutral Conditions Continue in the Pacific.

As of January 29th, neutral ENSO conditions continue to be reported for the equatorial Pacific. Equatorial sea surface temperatures (SST) are near average to below average across the Pacific Ocean. ENSO-neutral conditions are expected to continue through the spring 2013. The Climate Prediction Center (CPC) predicts normal temperatures for the state, and they are also predicting below normal precipitation in the western Panhandle and north Florida through April.

Hazardous Weather Events in January.

January was a fairly quite month for severe weather across the state with only 46 severe weather reports. Areas south and southwest of Lake Okeechobee saw numerous days during the beginning of the month with dense fog, especially along portions of Alligator Alley, where visibilities were reduced to less than ¼ of a mile. On the 12th, a brush wildfire near Port Saint John in Brevard County burned over 1,000 acres and caused some road closures. Most of the severe weather reports for the month were made during the 29th and 30th as a vigorous cold front moved through the state. Multiple reports of storm damage (downed power lines and trees) came in from various locations along the Panhandle, such as Fort Walton Beach, Chipley, Quincy, and Dowling Park, just to name a few. A waterspout was also reported on the 30th just off the coast of Pensacola Beach, FL. High winds were recorded with the front as it pushed through the northern part of the state. Wind gusts ranged from 42mph reported at Fernandina Beach to 66mph recorded at Tyndall Air Force Base near Panama City Beach, FL.

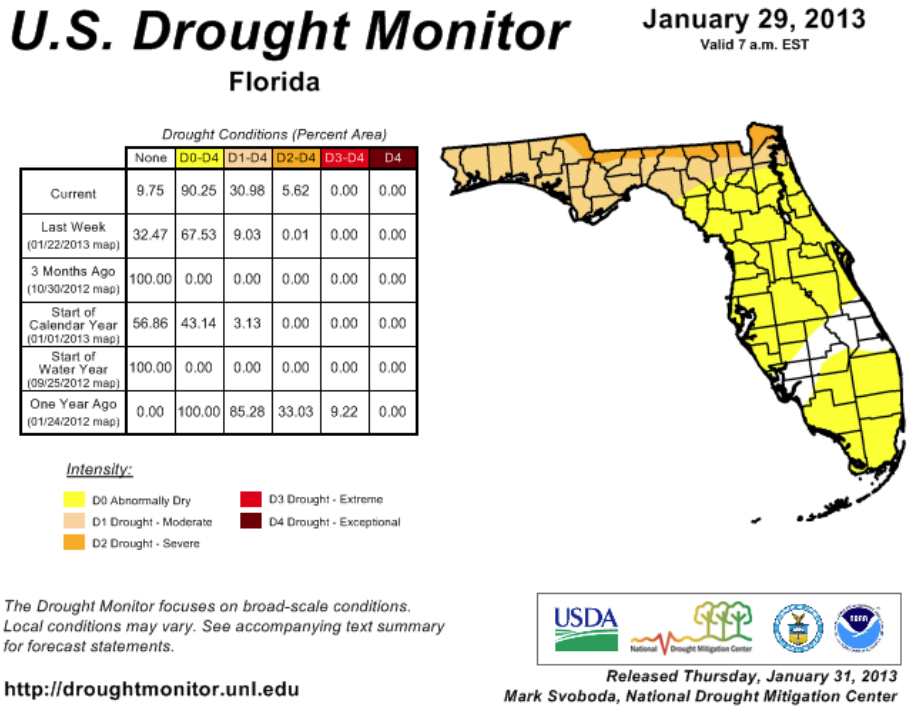
Table 4. Breakdown of storm reports submitted in Florida during the month of January. (Compiled from Southeast Regional Climate Center.)

Report Type	Number of Reports
Heavy Rain and Flooding	0
High Winds	10
Storm Damage	18
Hail	0
Thunderstorm/Lightning	0
Tornadoes/Funnel Clouds/Waterspouts	3
Coastal Hazards	0
Dense Fog	14
Fire	1

Agricultural and other climate related impacts.
Winter crops did well despite the slow start to the season due to lack of rain. Sugar cane harvesting continued through January, and areas of the state began preparations for spring planting. The warm weather at the beginning of the month caused some trees/plants to start budding early, such as mangoes, avocadoes, peaches, and pecans, while the strawberry crop thrived in the warm temperatures. Many fruit trees needed more chill hours to produce good yields. During the month, there were a few nights where lows were near/below freezing, but fruit and tree damage was either light or avoided. The sparse rainfall worsened conditions in citrus producing areas and limited the growth and production of winter forage.

Statewide rainfall totals were roughly 25% of normal over the last few weeks, causing negative effects on drought conditions in the state. Many rivers across the state are reporting below average stream flow levels. Winter is an important recharge season for portions of north Florida (Panhandle and the north part of the peninsula), while south Florida is typically dry during the season. Due to the below normal rainfall totals, the area of dry/drought coverage expanded from about 43% on December 25th to roughly 90% as of the January 29th release of the Drought Monitor. The biggest changes were seen in the Panhandle and especially along the state lines between Florida and Alabama/Georgia. Most of the area north of a line from the Steinhatchee Conservation Area to St. Augustine is listed as having moderate drought conditions (D1), while along the state line, conditions are worse with severe drought conditions (D2). The peninsula has not escaped the deteriorating conditions either. Only a few counties (Charlotte, Lee, Glades, Highlands, Okeechobee, Indian River, St. Lucie and Martin) still have areas that are not listed as experiencing dry conditions.

Figure 2. Drought conditions in Florida as of January 29, 2013 (courtesy of U.S. Drought Monitor).



Appendix 1: Additional January Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (˚F)	Departure from Normal (˚F)
Gainesville	0.33	-3.18	61.8	7.5
St Petersburg	0.59	-2.17	68.4	6.7
Fort Lauderdale	0.98	-2.65	73.0	4.0
Fort Myers	0.62	-1.61	69.9	5.0

Appendix 2: Select daily maximum and minimum temperature records (^{o}F) tied or broken during January. (Compiled from NOAA, NWS)

Date	Station	Type	Value	Broken/Tied	Last
4	Ft. Lauderdale	Max	83	Broken	82 in 1982
8	Tampa	Max	84	Tied	84 in 1991
8	Sarasota	Max	83	Broken	82 in 1997
9	Ft. Myers	Max	88	Broken	85 in 1974
9	Tampa	Max	85	Broken	82 in 1972
9	Orlando	Max	84	Tied	84 in 1997
9	St. Petersburg	Max	83	Broken	82 in 2005
9	Key West	High Min	77	Broken	76 in 1997
9	Ft. Lauderdale	High Min	75	Broken	72 in 1989
9	Miami	High Min	75	Broken	72 in 1974
9	West Palm Beach	High Min	74	Broken	72 in 1974
9	Ft. Myers	High Min	70	Broken	68 in 1997
9	Tampa	High Min	69	Broken	66 in 1974
9	Sarasota	High Min	68	Broken	64 in 1998
9	St. Petersburg	High Min	67	Broken	66 in 1975
9	Orlando	High Min	65	Broken	62 in 1993
9	Orlando	High Min	64	Tied	64 in 1980
9	Tallahassee	High Min	63	Tied	63 in 2005
10	Orlando	High Min	62.1	Broken	61 in 2000
10	Orlando	Max	82	Tied	82 in 2000
11	Orlando	Max	82	Tied	82 in 2008
12	Ft. Myers	Max	85	Tied	85 in 1993
12	Sarasota	Max	84	Broken	82 in 1993
12	St. Petersburg	Max	83	Broken	82 in 1989
12	Orlando	Max	83	Tied	83 in 1993
12	Tampa	Max	83	Broken	82 in 1989
12	Tallahassee	Max	79	Tied	79 in 1949
12	Crestview	Max	78	Broken	77 in 1950
12	Ft. Lauderdale	High Min	73	Tied	73 in 2007
12	West Palm Beach	High Min	73	Broken	72 in 1993
12	Crestview	High Min	66	Broken	63 in 1950
12	Pensacola	High Min	65	Broken	64 in 2005
13	Crestview	High Min	69	Broken	64 in 1950
14	Gainesville	Max	82	Broken	81 in 1999
14	Jacksonville	Max	81	Broken	80 in 1950
14	Tallahassee	Max	81	Broken	80 in 1971
14	Crestview	High Min	70	Broken	59 in 1998
14	Tampa	High Min	65	Broken	64 in 1972
15	Key West	High Min	74	Broken	73 in 1993
15	Crestview	High Min	68	Broken	64 in 1989
16	Key West	High Min	72	Tied	72 in 1950
16	Tallahassee	High Min	65	Broken	58 in 1987
16	Orlando	Max	84	Broken	83 in 2007
16	Jacksonville	Max	82	Tied	82 in 1950
16	St. Petersburg	Max	82	Broken	81 in 2007
16	Gainesville	Max	81	Tied	81 in 1989

17	Daytona Beach	Max	80	Tied	80 in 1985
28	Sarasota	Max	83	Broken	82 in 1999
29	Orlando	Max	85	Tied	85 in 2009
29	Sarasota	Max	84	Broken	82 in 2002
29	St. Petersburg	Max	83	Broken	82 in 2002
29	Gainesville	Max	82	Tied	82 in 1975
29	Crestview	Max	78	Tied	78 in 1950
29	West Palm Beach	High Min	72	Broken	71 in 1994
29	Daytona Beach	High Min	66	Broken	62 in 2002