FloridaClimateCenter
Office of the State Climatologist

Climate Summary for Florida – April 2014

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Online at: http://climatecenter.fsu.edu/products-services/summaries

Average temperatures varied across the state in April. The departures for average temperatures in April 2014 varied across the entire state, though most of the reporting stations saw average temperatures above normal. The departures ranged from -0.5˚F in Pensacola to 2.4˚F in Orlando (Table 1 and Appendix 1). Most stations across the state reported at least 5 days above 80˚F, with some stations in South Florida reporting maximum temperatures about 80˚F for the month. Some stations in the interior Peninsula reported their first value above 90˚F for the year. There were multiple maximum and high minimum temperatures that were broken or tied (Appendix 2).

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

Station	Average Temperature	Departure from Normal
Pensacola	65.9	-0.5
Tallahassee	67.9	1.8
Jacksonville	68.6	1.6
Orlando	73.6	2.4
Tampa	72.6	0.6
Miami	77.5	1.7
Key West	77.8	1.4

Rainfall totals were varied across the state in April. Portions of the Big Bend, northeast Florida, and the Panhandle reported monthly rainfall totals well above normal, while the rest of the state saw near to slightly below average rainfall during April (Figure 1). Departures from normal roughly ranged from -1.96” to 17.61” (Table 2 and Appendix 1), though localized parts of Florida saw rainfall totals that were as much as 2.00” below normal to over 20.00” above normal. April 2014 was the wettest on record at Pensacola and 3rd wettest in Tallahassee. There were multiple 24-hour precipitation records broken for the month (Table 3).

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

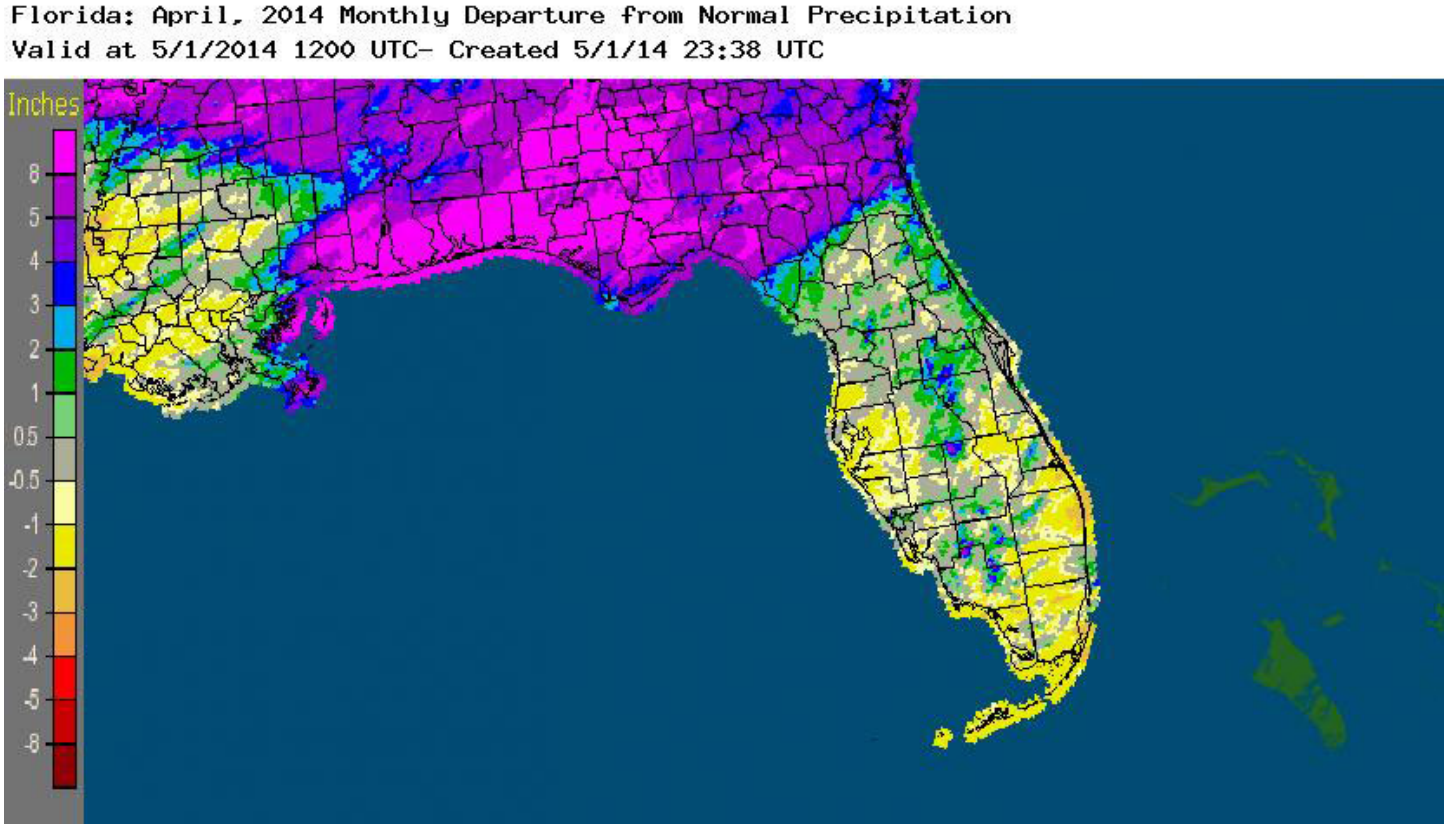
Station	Total Rainfall	Departure from Normal
Pensacola	22.40*	17.61*
Tallahassee	12.46	9.40
Jacksonville	5.99	3.35
Orlando	4.20	1.52
Tampa	0.89	-1.14
Miami	1.18	-1.96
Key West	0.56	-1.49

*Values are estimated due to system failure during the flood event on April 29-30, 2014.

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

Date	Location	Record	Last
8	Lake City	3.10	1.79 in 1978
8	Live Oak	4.90	1.74 in 1982
8	Perry	5.30	3.10 in 1940
15	Orlando	1.38	1.20 in 1902
15	Tallahassee	3.86	2.09 in 1958
15	Niceville	6.00	4.70 in 1996
19	Melbourne	1.23	0.96 in 1943
19	Jasper	3.17	1.80 in 1959
29	Pensacola	15.55	3.06 in 1918
30	Tallahassee	2.28	2.12 in 2004
30	Daytona Beach	2.06	1.30 in 2013

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



ENSO-Neutral Conditions Continue in the Pacific.

Based on current data and forecast models, the Climate Prediction Center (CPC) continues to have an El Niño Watch in place. Though Neutral ENSO conditions continue to be reported, the equatorial sea surface temperatures (SST) were above average near the International Data Line and across much of the eastern Pacific. ENSO-neutral conditions are favored to continue through the remainder of spring, and there is a greater than 50% chance of an El Niño forming by summer. CPC predicts above normal temperatures across the entire state and normal precipitation through July 2014.

Hazardous Weather Events in April.

There were a total of 295 severe weather reports made in Florida during April. On the 5th, a severe thunderstorm produced hail in parts of the Panhandle, with reports of nickel to quarter sized hail from Pensacola, Crestview, and DeFuniak Springs. Storm damage from wind accompanied the hail reports. A line of strong thunderstorms, ahead of an approaching cold front, moved through the Panhandle and Big Bend on the 7th, with wind gusts up to 60 mph causing

multiple reports of trees down across the region. The line of storms produced a short lived and weak tornado southeast of Tallahassee on the same day. More reports of high wind (gusts up to 55 mph) were recorded along the east coast of the state from Daytona Beach to the Florida Keys as the front pushed through the state on the 8th. Things remained fairly quiet in the Sunshine State until another vigorous cold front made its way through the region on the 14th and15th. Lightning was responsible for damage and an injury in the Pensacola area in the late evening hours on the 14th. Heavy rains, with rain rates over 3" per hour, were recorded at multiple weather stations in the Panhandle and Big Bend. The intense rain, over a short duration, caused flooding problems for the same areas. As the front raced through the Peninsula, storm damage, high winds, heavy rain, and flooding were reported in Lakeland, Kissimmee, Ocala, Orlando, The Villages, and Titusville. On the 18th, an area of low pressure moved along the northern Gulf of Mexico before crossing the north portion of the Peninsula and moving up the Eastern Seaboard late on the 19th. Along its track, flooding and high winds were reported in Okaloosa, Jackson, Washington, Holmes, and Walton Counties, while funnel clouds were reported with strong wind gusts in the greater Tampa area and around Gainesville. A male tourist drowned off the coast of Cocoa Beach on the 19th due to high surf and rip currents, and the following day a 9-year old was rescued from high surf near Crescent Beach.

April 29-30,2014, Panhandle Flood

The Panhandle experienced a devastating flood from the evening of April 29th into the early morning hours of April 30th. The official NWS station at the Pensacola Airport failed due to a power issue after 9:53 pm on the 29th. At the time the instruments failed, the station was reporting a rain rate of 5.68" of rain per hour. An estimated 24-hour rainfall value of 15.55" was determined based on radar data and the CoCoRaHS stations nearby and agreed upon by personnel at the NWS Office in Mobile, the NWS Southern Region Headquarters in Fort Worth, TX, and the Florida Climate Center. This event was historic and, even with the estimated value (which could very well be an underestimate), Pensacola now has an all-time new 24-hour rainfall record, replacing the one that has stood since 10/05/1934 of 15.29."

An EF1 tornado touched down just south of Graceville, FL (Jackson County), on April 30, causing extensive tree damage and destroying and damaging several homes along Highway 77. A second EF1 tornado occurred that day east of Cambellton (also in Jackson County), damaging trees.

Additionally, on the same dates, multiple reports of hail (pea to quarter sized) came in from areas near Jacksonville, Gainesville, Bartow, Spring Hill, and Orlando on the 30th, along with additional reports of high winds, storm damage, and flooding from various parts of north central Florida. 118 of the 295 storm reports occurred on the 29th and 30th of April.

For more information on the flood, please see the event report written by the National Weather Service Office in Mobile, AL: http://www.srh.noaa.gov/mob/?n=flashflood_04292014

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

Report Type	Number of Reports
Heavy Rain and Flooding	127
High Winds	87
Storm Damage	37
Hail	23
Thunderstorm/Lightning	6
Tornadoes/Funnel Clouds/Waterspouts	13
Coastal Hazards	2
Dense Fog	0
Fire	0

Agricultural and other climate-related impacts.

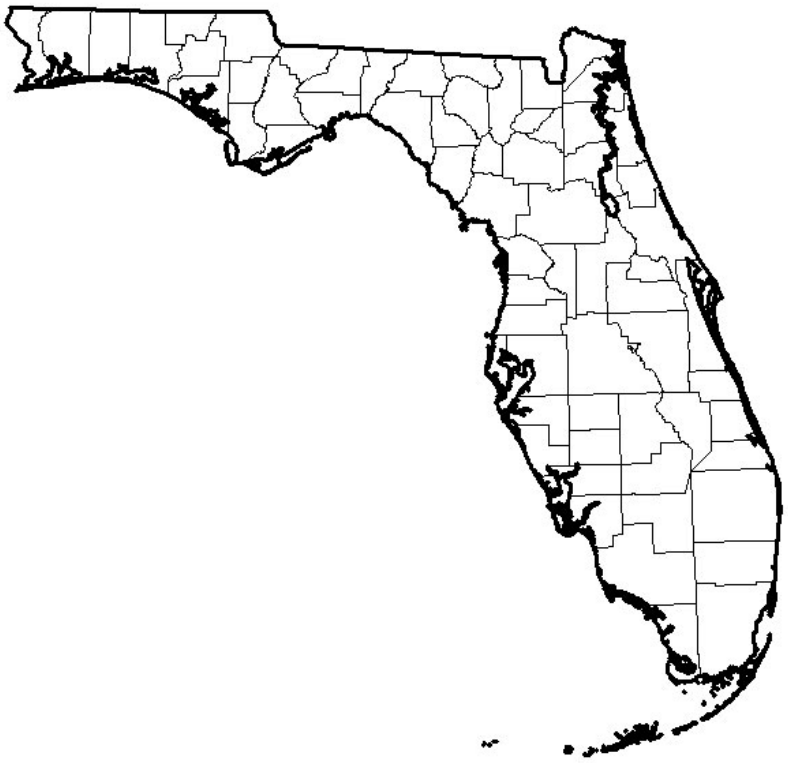
At the beginning of April, both topsoil and subsoil moisture were adequate across the state, though there were areas in the Panhandle that were too wet for fieldwork. Peanuts, corn, and cotton planting were delayed and vegetables and watermelons had to be replanted because of saturated fields. South Florida remained dry and warm, with many counties harvesting and planting varieties of fruits and vegetables. Mid month saw the sugarcane harvest coming to a completion, and rain was reported at all of the monitored stations in the citrus growing area. Heat, greening, and chemical spraying have caused defoliation in southern citrus counties. Bloom is over and small pea-sized fruit is apparent. The Panhandle received more rainfall, and most of the soil was saturated. Some counties were still able to harvest (wheat and oats in Gulf) and plant (corn and peanuts in Madison), but conditions in parts of North Florida brought fieldwork to a standstill. Blueberry and watermelon harvests were in high gear in Charlotte, Collier, Glades, and Hendry counties, while vegetables

and fruits were marketed from other counties. At month's end, pasture and cattle conditions across the state were mainly fair to excellent, though pastures in the Panhandle remained wet. Packinghouse had finished for the season, though some transitioned to gift fruit packing only.

Portions of the Panhandle and Big Bend reported April rainfall totals more than 5" above normal during a typically dry month, while slightly below normal (~1-3") precipitation was reported for the Peninsula. The residual dry conditions in portions of Northern Escambia and Santa Rosa Counties from the beginning of the month were removed on the April 8th release of the National Drought Monitor. Since then, the state has not had any dry conditions reported.

U.S. Drought Monitor

Florida



April 29, 2014

(Released Thursday, May. 1, 2014)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 4/22/2014	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 1/28/2014	70.87	29.13	0.00	0.00	0.00	0.00
Start of Calendar Year 12/31/2013	75.83	24.17	0.00	0.00	0.00	0.00
Start of Water Year 10/1/2013	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 4/30/2013	49.80	50.20	29.41	9.11	0.00	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Richard Heim
NCDC/NOAA

http://droughtmonitor.unl.edu/

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

Station	Total Rainfall (in.)	Departure from Normal (in.)	Average Temperature (˚F)	Departure from Normal (˚F)
Gainesville	2.63	-0.04	68.8	1.2
St Petersburg	1.08	-1.19	73.9	1.0
Fort Lauderdale	4.22	1.33	77.9	1.7
Fort Myers	0.93	-1.25	74.9	1.1

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

Date	Station	Type	Value	Broken/Tied	Last
7	Daytona Beach	High Min	72	Tied	72 in 1956
7	Tallahassee	High Min	69	Tied	69 in 1964
7	Key West	High Min	77	Tied	77 in 1883
8	Inverness	Max	93	Tied	93 in 1908
8	Miami	Max	90	Tied	90 in 1953
8	Vero Beach	Max	88	Broken	87 in 1956
8	Melbourne	Max	91	Broken	90 in 1964
8	Kissimmee	Max	92	Broken	90 in 1967
8	Fort Lauderdale	Max	92	Broken	91 in 1953
15	Daytona Beach	High Min	74	Broken	69 in 1927
15	Melbourne	High Min	73	Broken	72 in 2007
16	Whiting Field NAS	Min	38	Tied	38 in 1962
16	Pensacola	Min	42	Tied	42 in 1962
17	Federal Point	Low Max	66	Broken	67 in 1905
17	Madison	Low Max	65	Tied	65 in 1905
18	Vero Beach	High Min	73	Broken	70 in 1994
18	Pensacola	Low Max	63	Broken	68 in 2001
19	Chipley	Low Max	57	Broken	66 in 1939
20	Jacksonville	Low Max	62	Tied	62 in 2013
20	Lake City	Low Max	64	Tied	64 in 1901