Climate Summary for Florida – June 2015
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Online at: http://climatecenter.fsu.edu/products-services/summaries

Average temperatures were above normal across most of the state in June. The departures from average temperatures in June 2015 were near normal to above normal across the entire state, ranging from 0.2˚F in Fort Myers to 2.0˚F in Tallahassee (Table 1 and Appendix 1). Most locations across the state reported at least one day with a maximum temperature at or above 90˚F. Crestview recorded 10 consecutive days with maximum temperatures of 95˚F. Orlando recorded its first 100˚F temperature in 17 years on the 19th. June 2015 was the 3rd warmest in Vero Beach, 6th warmest in West Palm Beach, and 7th warmest in Orlando and Miami, and the 10th warmest in Daytona Beach and Tallahassee. Multiple maximum and high minimum temperature records were tied or broken across the state in June (Appendix 2).

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

Station	Average Temperature	Departure from Normal
Pensacola	80.8	0.3
Tallahassee	82.2	2.0
Jacksonville	80.7	0.8
Orlando	83.0	1.6
Tampa	82.8	0.6
Miami	83.6	0.9
Key West	83.8	0.4

Rainfall totals were varied across the state in June. With the exception of some interior portions of the Peninsula, especially around Polk County and counties east of Lake Okeechobee, the majority of the state had rainfall totals below normal (Figure 1). Departures from normal roughly ranged from -9.07" to -0.13" (Table 2 and Appendix 1), though localized parts of the state saw rainfall totals that were as much as 8.00" below normal to 8.00" above normal (Figure 1). There were multiple 24-hour precipitation records broken for the month (Table 3).

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

| Station	Total Rainfall	Departure from Normal
Pensacola	4.10	-2.50
Tallahassee	6.54	-1.19
Jacksonville	6.32	-0.13
Orlando	6.79	-0.79
Tampa	6.23	-0.45
Miami	3.60	-6.07
Key West	2.64	-1.47

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

Date	Location	Record	Last
5	Niceville	3.90	2.52 in 1957
10	Melbourne	1.50	1.35 in 1975
10	Tampa	2.45	1.88 in 1950
10	Vero Beach	3.12	1.75 in 1997
11	Titusville	4.30	2.33 in 1949
11	Vero Beach	2.84	1.08 in 2000
23	Live Oak	2.78	1.73 in 2014
25	Orlando	2.54	2.42 in 1999

Figure 1. A graphical depiction of the monthly rainfall departure from normal (inches) for June is given in the figure below (courtesy of NOAA, NWS).
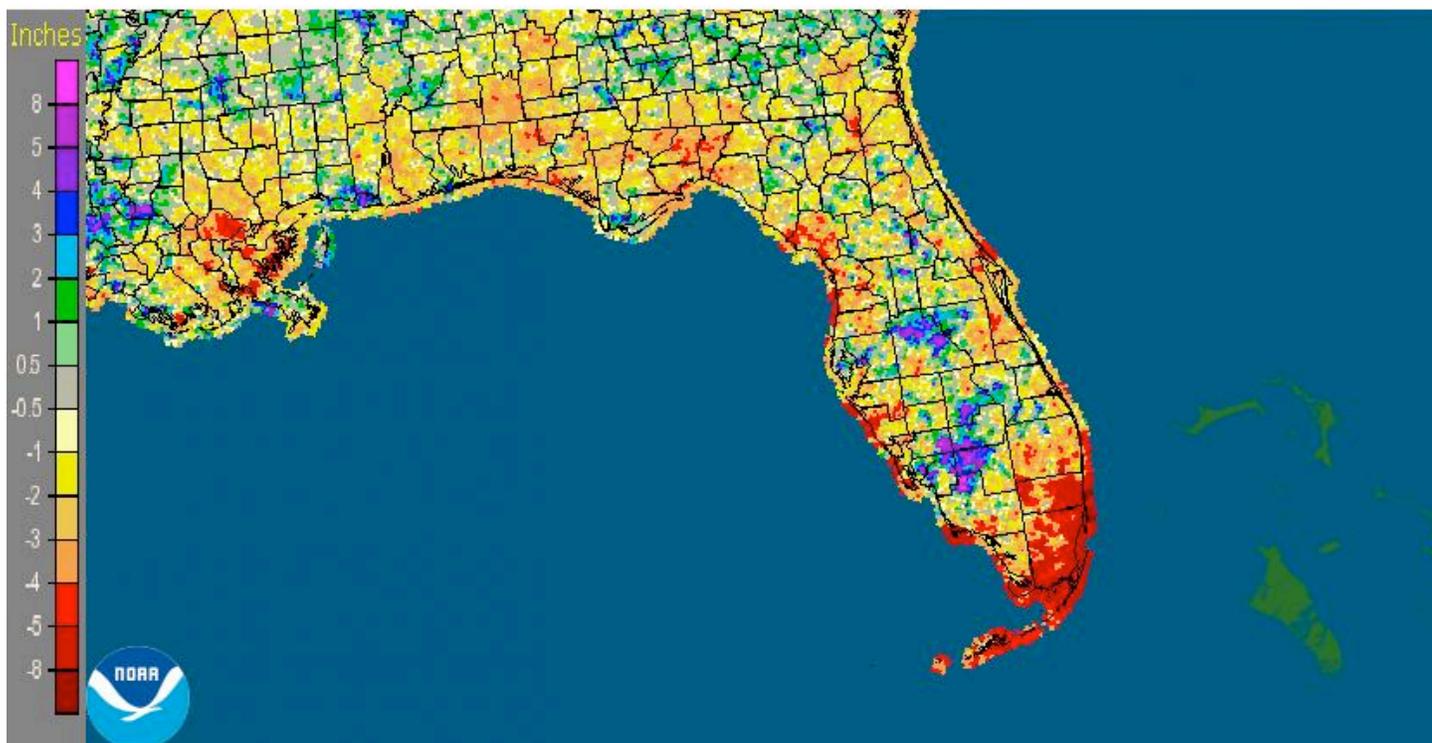
ENSO-Neutral Conditions Continue in the Pacific.
Based on current data and forecast models, the Climate Prediction Center (CPC) decided to continue the El Niño Advisory. El Niño conditions are present, and positive equatorial sea surface temperatures (SST) anomalies continue across most of the Pacific Ocean. There is approximately a 90% chance that El Niño conditions will continue through fall 2015, and a greater than 80% chance it will last through the remainder of 2015. CPC predicts above normal temperatures and below precipitation across the state through September 2015.

Hazardous Weather Events in June.
There were a total of 490 severe weather reports made in Florida during June. On June 4th, a 10-acre wildfire was reported near the vicinity of Pomona Park in Putnam County. An 11-year old boy was injured after being struck by lightning while fishing in waist deep ocean waters off the coast of Daytona Beach Shores on the 9th. St. Johns County Emergency Management reported a tornado in Elkton, FL on June 10th. The tornado was rated EF-0 and destroyed a potato field, a shed and damaged a metal structure. On the same day, heavy rains (around 3.50") caused multiple reports of flooding in downtown Tampa. A tornadic circulation caused damage in the

Tequesta, FL (Palm Beach County) area also on the 10th. On the 19th, an 81-year old man was struck and killed by lightning as he was walking around in his front yard in Clearwater, FL (Pinellas County). Lightning caused a structure fire on the 21st in Duval County, near the campus of the University of North Florida. Two structural fires were caused by lightning on the 22nd, the first fire destroyed a mobile home in Lake City, FL (Columbia County) and the second in Naples, FL (Collier County) did $2 million in damages and a firefighter was injured when the second floor of the building collapsed. A tractor-trailer was struck by lightning on the 23rd, while traveling along Interstate 75 near Reddick, FL (Marion County). On the 24th, lightning started an early morning house fire in Gulf Breeze, FL (Escambia County) and a structural fire later that afternoon in Lowell, FL (Marion County). Lightning may be responsible for the death of a 25-year old man, who was working on the roof of a home in Port Orange, FL (Volusia County) on the 26th. A swimmer was indirectly struck by lightning on the 27th while standing in ankle deep water in Crescent Beach, FL (St. Johns County). Various convective and sea breeze thunderstorms caused hail, high winds, storm damage and heavy rains across the state during the entire month of June.

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

| Report Type	Number of Reports
Heavy Rain and Flooding	21
High Winds	140
Storm Damage	232
Hail	47
Thunderstorm/Lightning	13
Tornadoes/Funnel Clouds/Waterspouts	36
Coastal Hazards	0
Dense Fog	0
Fire	1

Agriculture Related Impacts.
At the beginning of June, topsoil moisture levels were at mainly short to adequate across the state. Heavy rains at the start of the month slowed planting of peanuts, cotton and soybeans in the Panhandle. Wheat was harvested in Jackson County, while areas of the Big Bend and counties around Orlando started haying in the drier conditions. Peanut conditions were mainly fair to good, which was a decrease in conditions from last year's crop. In southwest Florida, the growing season for fruits and vegetables was over. Due to the continued dry conditions and warm temperature, heavy use of irrigation was seen across Florida throughout the month, especially in the citrus areas. The lack of rains as the month progressed aided in planting of crops in the Panhandle, but deteriorated pasture conditions in North Florida. Warm temperatures during the middle of the month caused added stress on livestock. Sugarcane and rice were developing in south Florida counties, though localized fields needed excess water to be pumped due to heavy rain at the end of the month. Late season orange harvesting had come to an end and all of the packinghouses were closed, as growers began focusing on next season's crop.

Drought Related Impacts.
At the end of May, nearly 13% of the state was experiencing abnormally dry (D0) conditions, mainly concentrated in portions of northeastern and southern Florida. As June progressed, the lack of rain and warm temperatures did little to ease drought conditions. The area of D0 along with portions of the moderate drought (D1) in South Florida expanded and severe drought (D2) was introduced into Dade County. By the middle of June, the area of D0 expanded from the northeastern portions of the state (near Jacksonville) into the Big Bend, and with the continued below normal precipitation in that area, D1 was introduced. The June 23rd release of the Drought Monitor introduced D2 in part of the Lower St. Johns and Nassau/St. Mary's river basins. In addition, the eastern coast of the state, from Nassau County to the Keys, has now been classified as experiencing at least D0 drought conditions. The area of D2 conditions in the southern part of the state expanded outside of Dade County and is now being observed in Broward County. Based on census data, roughly 6 million Florida citizens are currently being impacted by drought conditions reported in nearly 41% of the state. At the end of the month, the water level in Lake Okeechobee had dropped to just over 12 ft., mainly due to lack of rainfall across the basin.

U.S. Drought Monitor
Florida

June 23, 2015
(Released Thursday, Jun. 25, 2015)
Valid 8 a.m. EDT
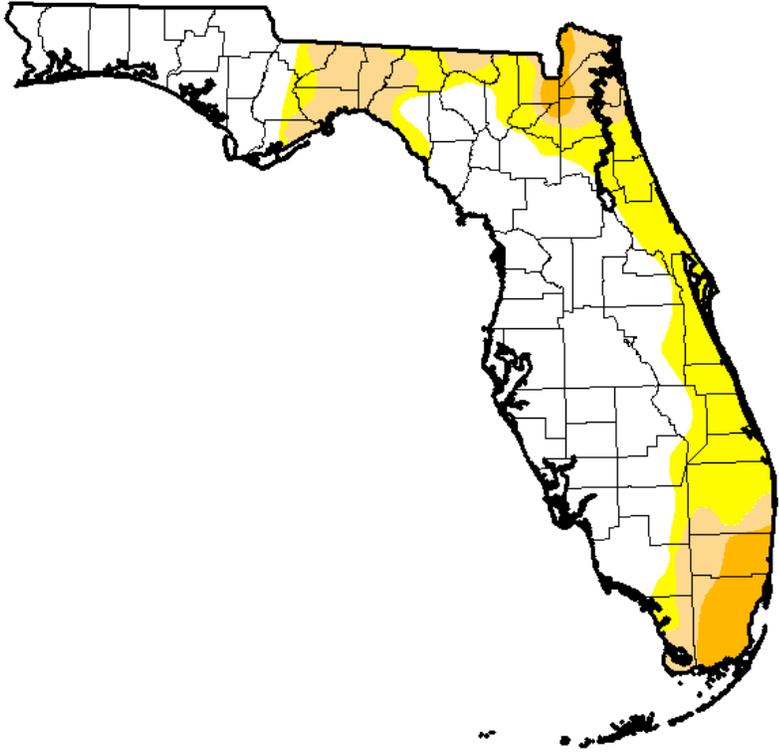
Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	59.47	40.53	18.29	5.55	0.00	0.00
Last Week 6/16/2015	70.40	29.60	12.87	1.25	0.00	0.00
3 Months Ago 3/24/2015	68.37	31.63	9.86	1.08	0.00	0.00
Start of Calendar Year 12/30/2014	94.33	5.67	0.99	0.00	0.00	0.00
Start of Water Year 9/30/2014	77.22	22.78	6.61	0.00	0.00	0.00
One Year Ago 6/24/2014	100.00	0.00	0.00	0.00	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.

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http://droughtmonitor.unl.edu/

Appendix 1
Additional June Departures from Normal Data for Florida Locations

Station	Total rainfall (in.)	Departure from Normal (in.)	Average Temperature (˚F)	Departure from Normal (˚F)
Gainesville	3.61	-3.51	81.0	1.3
Melbourne	6.25	-0.46	81.0	0.6
St Petersburg	3.78	-2.60	83.5	0.8
Fort Lauderdale	1.09	-9.07	83.4	0.3
Fort Myers	8.60	-1.49	82.7	0.2

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

Date	Station	Type	Value	Broken/Tied	Last
2	Bradenton	Low Max	77	Broken	81 in 2007
12	Fort Lauderdale	High Min	82	Broken	82 in 2008
12	Wewahitchka	Low Max	76	Broken	79 in 2001
12	Miami	High Min	81	Tied	81 in 2006
13	Vero Beach	High Min	80	Broken	78 in 2006
13	Melbourne	High Min	80	Broken	78 in 2005
13	Miami	High Min	82	Tied	82 in 2010
13	West Palm Beach	High Min	81	Broken	80 in 1939
14	Vero Beach	High Min	79	Broken	77 in 1958
14	Fort Lauderdale	High Min	81	Tied	81 in 2010
14	Melbourne	High Min	80	Broken	77 in 2010
15	Tampa	Max	95	Tied	95 in 2011
15	Melbourne	High Min	79	Broken	78 in 2009
15	Fort Lauderdale	High Min	80	Tied	80 in 2014
16	Gainesville	Max	100	Broken	98 in 1998
16	Jacksonville	High Min	82	Broken	79 in 1998
18	Miami	High Min	82	Tied	82 in 1998
18	Fort Lauderdale	High Min	82	Broken	81 in 2013
18	West Palm Beach	High Min	80	Tied	80 in 1987
19	Orlando	Max	100	Tied	100 in 1998
22	Live Oak	High Min	77	Broken	74 in 2011
22	Miami	High Min	81	Tied	81 in 2011
22	Daytona Beach	Max	96	Tied	96 in 2009
23	Miami	High Min	82	Tied	82 in 2011
23	West Palm Beach	High Min	82	Tied	82 in 1998
24	Miami	High Min	82	Tied	82 in 2010
28	Vero Beach	Max	97	Tied	97 in 1950
29	Vero Beach	Max	96	Broken	94 in 1997
30	Vero Beach	Max	95	Tied	95 in 2000
30	Miami	Max	95	Tied	95 in 1993
30	Key West	Max	94	Tied	94 in 1881