

Climate Summary for Florida – June 2022

Prepared by the Florida Climate Center, The Florida State University, Tallahassee, Florida Online at: <u>http://climatecenter.fsu.edu/products-services/summaries</u>

Key Points

- Average temperatures in Florida were generally near to above normal in June; extreme heat with triple digit temperatures affected many locations during mid and late June.
- Rainfall totals for the month were variable, with south Florida receiving above normal rainfall.
- Tropical Storm Alex formed in the Atlantic Ocean on June 5 after passing over south Florida on June 4. The storm generated heavy rainfall and flash flooding, but luckily the storm moved quickly over Florida and eastward out over the Atlantic Ocean.
- La Niña conditions are still favored to continue into early fall, with a 60% chance in July-September 2022; the chances of La Niña increase into early winter to 62-66%.

Average temperatures in June were generally near to above normal. Based on average temperatures for the month, this June was the 7th-warmest June on record for Florida, with a statewide average temperature +2.4 F above normal for the month. Average temperature departures from normal ranged from -1.5 F in Key West to +2.9 F in Tallahassee for the month (see Table 1 and Appendix 1 for select cities). June was warm particularly across northern and central Florida. **Pensacola** observed its second warmest June on record based on average temperatures, just 2 F shy of the record warmest June which occurred in 1952, and it had its record warmest month based on average minimum temperatures. Many locations recorded triple digit temperatures mid to late June. Several daily high maximum and minimum temperature records were tied or broken throughout the month (see appendix 2 for select daily high maximum records).

Station	Mean Temperature	Departure from Normal	
Pensacola	84.4	+2.7	
Tallahassee	83.7	+2.9	
Jacksonville	80.7	+0.4	
Orlando	83.5	+2.3	
Tampa	85.2	+2.3	
Miami	82.4	-0.4	
Key West	82.6	-1.5	

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





Rainfall totals in June were generally below normal in northern Florida, while south Florida was wetter than normal. Overall, June 2022 was the 62nd wettest June on record for the state. The monthly precipitation departures from normal ranged from -6.43 inches in Jacksonville to +5.10 inches in Miami (Table 2 and Appendix 1). **Jacksonville** had its driest June on record (based on a 75-year record), and **Clermont** had its second-driest June on record. Above normal rainfall in south Florida, including from Tropical Storm Alex, helped to alleviate drought in that area. Two-day rainfall totals from TS Alex, which passed over South Florida on June 4th, were as much as 14.85 inches in **Hollywood**, and 14.79 inches near **Pompano Beach**; **Biscayne Park** recorded 12.72 inches and **Miami** had over 11 inches.

Station	Total Rainfall	Departure from Normal	
Pensacola	7.39	+0.07	
Tallahassee	9.50	+1.74	
Jacksonville	1.17	-6.43	
Orlando	4.61	-3.44	
Tampa	8.07	+0.70	
Miami	15.61	+5.10	
Key West	6.61	+2.38	

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

Figure 1. A graphical depiction of the monthly rainfall departure from normal (in inches) for June (courtesy of NOAA).



La Niña Advisory.

La Niña conditions in the equatorial Pacific Ocean continued in June. La Niña is now favored to continue into the late Northern Hemisphere summer (60% chance in July-September 2022), and it is expected to persist into the Northern Hemisphere winter 2022-23. The chances for La Niña to continue into the Northern Hemisphere fall and early winter have increased to a 62-66% chance. This will be the third year in a row with La Niña, which has only happened twice in the past ~70 years.

Hazardous Weather Events in June.

According to the Local Storm Reports issued by the local National Weather Service offices serving Florida, there were 483 individual local reports of hazardous weather events recorded across the state during the month of June (see Table 4 for a breakdown by event type). In early June, Tropical Storm Alex became the first named storm of the Atlantic hurricane season. The storm brought heavy rainfall and localized flash flooding to many parts of south Florida, including in Miami-Dade, Broward, Lee, and Collier counties. 2022 is expected to be the 7th year in a row with above normal hurricane activity in the Atlantic basin. The second named storm of the Atlantic Basin hurricane season occurs, on average, in mid-July.

Report Type	Number of Reports		
Flash Flood	18		
Heavy Rain	33		
Flood	30		
Hail	43		
Lightning	5		
Dense Fog	0		
Marine Thunderstorm Wind	49		
Non-Thunderstorm Wind Gust	5		
Non-Thunderstorm Wind Damage	0		
Tornado/Waterspout/Funnel Cloud	4 / 18 / 5		
Thunderstorm Wind Damage	95		
Thunderstorm Wind Gust	145		
Rip Currents	4		
Wildfire	1		
High Sustained Winds	1		
Tropical Storm	27		

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

Daily Record Events in June.

Table 5. Summary of daily records broken or set in Florida in June (source: NCEI Daily Weather Records).

Category	Number of Records
Highest daily max. temp.	40
Highest daily min. temp.	43
Lowest daily max. temp.	12
Lowest daily min. temp.	7
Highest daily precipitation	18
Total	120

Weather/Climate Highlight of the Month: Extreme Heat

The state saw its first triple digit temperatures of the season in June. **Clermont** recorded a maximum temperature of 101 °F on the 16th, followed by **Pensacola** with a temperature of 100 °F on the 18th. Record heat affected the Panhandle and central Florida again from the 22nd-25th. The highest maximum temperature observed during the month was 104 °F in **Crestview** and **Tallahassee** on the 23rd and 24th, respectively, setting new daily records at both locations.

Drought-Related Impacts.

At the beginning of June, approximately 18% of the state was experiencing abnormally dry conditions (D0), and nearly 1% of the state was in moderate drought (D1), according to the U.S. Drought Monitor. As of June 28, moderate drought conditions had improved but about 23% of the state was in abnormally dry conditions (Figure 2 below).

As of June 30, the Lake Okeechobee water level was 12.92 ft. above sea level (Feet-NGVD29), which is below average for this time of the year. The water level remained below average throughout the month, though it did increase through mid-month to just below average levels before declining again. At the first of the month, the water level was 12.57 ft. above sea level.

Figure 2. A graphical depiction of the current drought conditions in Florida according to the U.S. Drought Monitor (courtesy of the National Drought Mitigation Center, University of Nebraska-Lincoln).

droughtmonitor.unl.edu

Agriculture-Related Impacts.

During mid-June, topsoil moisture conditions were adequate in 85% of the state, short in 12%, and very short in 2% of the state, while just 1% of the state had surplus moisture conditions. Near the end of June, topsoil moisture had declined somewhat with levels adequate in 68% of the state, short in 20%, and very short in 4% of the state; 8% of the state was in surplus. For more information, consult the <u>Crop Progress and Conditions report</u>, which is published by the USDA's National Agricultural Statistics Service.

Station	Average Temperature (°F)	Departure from Normal (°F)	Total Rainfall (in.)	Departure from Normal (in.)
Gainesville	81.9	+2.0	3.29	-4.27
Sarasota	82.2	+0.4	8.10	+1.05
Melbourne	81.3	-0.6	5.66	-1.44
Fort Myers	82.8	+0.5	14.08	+4.42
West Palm Beach	82.1	+0.4	9.02	+0.54

Appendix 1. Additional June departures from normal data for select Florida locations (source: NWS).

Appendix 2. Select daily record high maximum temperatures broken or tied during June (compiled from NOAA).

Location	Date	Record (°F)	Broken/Tied	Last
Key West	6	92	Broken	91 in 2020
Orlando	7	96	Tied	96 in 1993
Clermont	8	97	Tied	97 in 1951
Jacksonville Beach	8	98	Broken	97 in 1948
Jacksonville Beach	9	99	Broken	98 in 1981
Key West	13	95	Broken	94 in 2013
Clermont	15	98	Tied	98 in 1981
Tampa	15	95	Tied	95 in 2015
Clermont	16	101	Tied	101 in 1981
Crestview	16	99	Broken	98 in 2009
Perry	17	99	Broken	98 in 2010
Tampa	17	97	Broken	96 in 2009
Pensacola	18	100	Broken	99 in 1953
Tampa	18	98	Broken	96 in 2009
Pensacola	18	100	Tied	100 in 1953
Clermont	20	98	Tied	98 in 2000
Key West	21	95	Broken	93 in 1969
Crestview	22	103	Broken	102 in 2009
Jacksonville Beach	23	102	Broken	95 in 2020
Marianna	23	102	Broken	100 in 2009
Mayport	23	103	Broken	97 in 1991
Orlando	23	99	Broken	97 in 2011

Cross City	23	101	Broken	98 in 1998
Daytona Beach	23	101	Broken	100 in 1944
Crestview	23	104	Broken	101 in 2015
Jacksonville	23	100	Broken	99 in 1998
Tallahassee	23	103	Tied	103 in 1944
Jacksonville	23	103	Broken	102 in 1998
Chipley	24	100	Tied	100 in 2006
Clermont	24	100	Broken	99 in 1977
Jacksonville Beach	24	102	Broken	96 in 1950
Plant City	24	100	Tied	100 in 2020
Quincy	24	99	Broken	96 in 2000
Marianna	24	100	Broken	99 in 2010
Orlando	24	99	Broken	97 in 1998
Gainesville	24	98	Broken	97 in 2018
Crestview	24	103	Broken	99 in 2006
Pensacola	24	98	Broken	97 in 1998
Tallahassee	24	104	Broken	103 in 1944
Chipley	25	101	Broken	98 in 2010
Clermont	25	100	Tied	100 in 2016
Lisbon	25	98	Tied	98 in 1991
Perry	25	101	Broken	98 in 1996
Wewahitchka	25	101	Broken	98 in 1998
Lisbon	26	98	Broken	96 in 2020
Key West	29	94	Broken	93 in 2020