

Climate Summary for Florida – June 2025

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Summary

- Monthly average temperatures in June were near to above normal across Florida.
- Monthly precipitation totals in June were generally below normal across eastern Florida and above normal in southwest Florida and much of the Panhandle.
- While drought conditions improved during the month, extreme drought (D3) was reintroduced in Palm Beach County by the end of June.
- ENSO-neutral conditions continued in the tropical Pacific Ocean and are expected to persist through the Northern Hemisphere summer (82% chance during June-August).

Monthly average temperatures in June were near to above normal in Florida. Average monthly temperature departures from normal ranged from -0.5 F in Sarasota to +2.4 F in Gainesville for the month (see Table 1 and Appendix 1 for select cities). While the monthly average maximum temperatures were tempered by ample rainfall throughout the month, monthly average minimum temperatures were above normal. Average minimum temperature for June ranked 2nd-warmest on record in West Palm Beach (84 years), 4th-warmest on record in Orlando (71 years) and Gainesville (52 years), tied for 5th-warmest on record in Key West (151 years), and were in the top 10 warmest on record for the month of June across much of the state. Select daily high minimum temperature records tied or broken during the month are provided in Appendix 2.

| Station | Mean Temperature | Departure from Normal |
|--------------|------------------|-----------------------|
| Pensacola | 81.4 | -0.3 |
| Tallahassee | 81.9 | +1.1 |
| Jacksonville | 82.1 | +1.8 |
| Orlando | 82.8 | +1.6 |
| Tampa | 83.4 | +0.5 |
| Miami | 83.2 | +0.4 |
| Key West | 84.2 | +0.1 |

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





Monthly precipitation totals in June were generally below normal across eastern Florida and above normal in the southwest and Panhandle. The monthly precipitation departures from normal ranged from -3.68 inches in Jacksonville to +7.98 inches in Naples (see Table 2 and Appendix 1 for select locations). This month saw predominantly easterly flow over the Peninsula which suppressed sea breeze convection along the eastern part of the state, keeping this region much drier, with other areas saw above normal rainfall. The wettest areas included southwest Florida and northern Escambia and Santa Rosa Counties in the Panhandle. Naples received a total of 15.39 inches of rainfall for the month, which was well above normal with a surplus of +7.98 inches, while just north in Fort Myers the monthly rainfall total was 7.15 inches which was -2.51 inches below normal. Year-to-date rainfall departures from normal are currently running 45%-55% of normal in South Florida and continue to remain below normal across the Peninsula despite the start to the rainy season.

| Station | Total Rainfall | Departure from Normal |
|--------------|----------------|-----------------------|
| Pensacola | 5.10 | -2.22 |
| Tallahassee | 10.37 | +2.61 |
| Jacksonville | 3.92 | -3.68 |
| Orlando | 4.71 | -3.34 |
| Tampa | 6.21 | -1.16 |
| Miami | 8.41 | -2.10 |
| Key West | 4.57 | +0.34 |

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 2025 (courtesy of NOAA)



ENSO-Neutral Conditions Present in Pacific.

ENSO-neutral conditions are currently present in the tropical equatorial Pacific Ocean. Over the past month, near-average sea surface temperatures covered most of the equatorial Pacific Ocean, and the latest weekly Niño index values ranged from -0.1 °C to +0.4 °C. ENSO-neutral conditions are favored to persist through the Northern Hemisphere summer (82% chance during June-August) and may persist into winter 2025-26, though uncertainty is higher with a 48% chance of ENSO-neutral and 41% chance of La Niña in November-January.

Hazardous Weather Events in June.

According to the Local Storm Reports issued by the local National Weather Service offices serving Florida, there were 335 individual local reports of hazardous weather events recorded across the state during the month of June (see Table 3 for a breakdown by event type). It has been an active weather season in Florida and across the Southeast. There were several reports of quarter to ping pong sized hail during the month, and multiple incidents due to strong winds. On the 4th, strong wind gusts of between 45 and 55 mph were responsible for a crane collapse in Brevard County that resulted in two fatalities. Strong wind gusts also led to the capsizing of boats offshore, leading to multiple injuries. On the 28th, multiple vessels capsized and grounded off the coast in Saint Joseph Sound due to hazardous winds and seas, leading to 15 water rescues and one injury. Lightning strikes led to one hospitalization and one fatality during the month. Another fatality due to drowning as a result of rip currents was reported in Cape San Blas.

Table 3. Breakdown of storm reports submitted in Florida during the month of June (compiled from Iowa State University/Iowa Environmental Mesonet).

| Report Type | Number of Reports |
|--|-------------------|
| Heavy Rain | 6 |
| Flash Flood | 9 |
| Flood | 3 |
| Hail | 34 |
| Marine Thunderstorm Wind | 67 |
| Non-Thunderstorm Wind Gust | 0 |
| Thunderstorm Wind Damage | 69 |
| Thunderstorm Wind Gust | 128 |
| Non-Thunderstorm Wind Damage | 0 |
| Tornado/Waterspout/Funnel Cloud | 3 / 8 / 1 |
| Rip Currents | 2 |
| Lightning | 5 |

Daily Record Events in June.

Table 4. Summary of daily records broken in Florida in June (source: NCEI Daily Weather Records).

| Category | Number of Records |
|-----------------------------|-------------------|
| Highest daily max. temp. | 8 |
| Highest daily min. temp. | 25 |
| Lowest daily max. temp. | 9 |
| Lowest daily min. temp. | 1 |
| Highest daily precipitation | 12 |
| Total | 55 |

Drought-Related Impacts.

Drought has improved over the past month, with long-term rainfall deficits and drought impacts lingering in the Peninsula. In mid-June, approximately 20% of the state was in severe drought (D2), 20% of the state was in moderate drought (D1), and 19% was abnormally dry (D0), according to the U.S. Drought Monitor. By the end of the month, extreme drought (D3) was reintroduced in Palm Beach County, where rainfall deficits have been increasing. By the end of the month, approximately 1% of the state was in extreme drought (D3), 10% was in severe drought (D2), 29% was in moderate drought (D1), and 19% of the state was abnormally dry (D0) (Figure 2 below).

As of June 30, the Lake Okeechobee water level was 11.17 ft. above sea level (Feet-NGVD29), which is below average for this time of year and right at the water shortage management level. At the first of the month, the water level was 10.97 ft. above sea level. Lake Okeechobee levels have been slow to respond to summer rainfall, and on June 27 the Martin County Department of Health <u>issued a water advisory due to toxic algae</u> in the lake.

Figure 3. A graphical depiction of the latest drought conditions in Florida according to the U.S. Drought Monitor (courtesy of the National Drought Mitigation Center, University of Nebraska-Lincoln).

U.S. Drought Monitor Florida





| | Drought Conditions (Percent Area) | | | | | |
|---|-----------------------------------|-------|-------|--------------------|------|------|
| | None | D0 | D1 | D2 | D3 | D4 |
| Current | 41.72 | 18.88 | 29.00 | <mark>9.6</mark> 3 | 0.77 | 0.00 |
| Last Week 06-17-2025 | 40.78 | 18.87 | 20.31 | 20.04 | 0.00 | 0.00 |
| 3 Month s Ago 03-25-2025 | 41.69 | 15.78 | 27.81 | 14.73 | 0.00 | 0.00 |
| Start of Calendar Year 01-07-2025 | 10.12 | 60.66 | 29.22 | 0.00 | 0.00 | 0.00 |
| Start of Water Year 10-01-2024 | 94.54 | 5.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| One Year Ago 06-25-2024 | 34.04 | 40.83 | 25.13 | 0.00 | 0.00 | 0.00 |
| ntensity: | | | | | | |

 None
 D2

 D0 Abnormally Dry
 D3

 D1 Moderate Drought
 D4

D2 Severe Drought D3 Extreme Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

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Agriculture-Related Impacts.

In mid-June, topsoil moisture conditions were adequate in 67% of the state, short in 18%, and very short in 6% of the state, while 9% of the state had surplus topsoil moisture conditions. By the end of June, topsoil moisture conditions remained adequate in 67% of the state, were short in 17% of the state, and very short in 2% of the state, while 14% of the state had surplus topsoil moisture conditions. For more information, consult the <u>Crop</u> <u>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 | 82.3 | +2.4 | 6.22 | -1.34 |
| Sarasota | 81.3 | -0.5 | 13.53 | +6.48 |
| Melbourne | 81.5 | +0.9 | 3.53 | -3.57 |
| Fort Myers | 83.4 | +1.1 | 7.15 | -2.51 |
| Naples | 81.7 | -0.4 | 15.39 | +7.98 |
| West Palm Beach | 83.4 | +1.7 | 4.90 | -3.58 |

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

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

| Location | Date | Record (°F) | Broken/Tied | Last |
|-----------------------|------|-------------|--------------------|------------|
| Key West | 5 | 85 | Broken | 83 in 2024 |
| Fort Lauderdale | 6 | 81 | Tied | 81 in 2016 |
| Marianna | 7 | 77 | Broken | 75 in 2024 |
| Jacksonville | 7 | 77 | Broken | 76 in 1985 |
| Tallahassee | 7 | 76 | Broken | 75 in 1995 |
| Pensacola | 8 | 81 | Broken | 80 in 1953 |
| Jacksonville | 8 | 78 | Broken | 76 in 1981 |
| Apalachicola | 9 | 81 | Broken | 79 in 1981 |
| Miami | 10 | 80 | Tied | 80 in 2021 |
| Fort Pierce | 12 | 78 | Broken | 77 in 1969 |
| West Palm Beach | 13 | 82 | Broken | 81 in 2015 |
| Sanford | 15 | 79 | Broken | 77 in 2024 |
| Hastings | 18 | 74 | Broken | 73 in 2016 |
| Key West | 18 | 85 | Broken | 84 in 1964 |
| Fort Lauderdale Beach | 19 | 82 | Broken | 81 in 2021 |