



NPS

2023 Weather in Review: Petersburg National Battlefield

In all, 2023 was much warmer than average but had precipitation that was near normal. The year ended as the 6th warmest and 57th wettest year recorded in the park's three counties since 1895.

Data indicate that over the long term, annual average temperature and annual total precipitation have both increased in the counties surrounding the park (+0.1°F per decade and +0.41 inches per decade, respectively).

This brief provides county-scale weather data averaged from all of the counties surrounding the park, including data from 1895–2023 (i.e., period of record). These counties include Dinwiddie, Hopewell, and Prince George counties, VA. Data and analyses herein are courtesy of the [National Oceanic and Atmospheric Administration's](https://www.noaa.gov/) (NOAA) [Climate at a Glance Program](https://www.noaa.gov/climate-at-a-glance/).

Temperature

In total, 2023 was the 6th warmest year at the park since 1895, and the winter was the 2nd warmest recorded (Figure 1). Nine months had higher than normal temperatures with January and February both being more than 7°F above long-term averages (Table 1).

Table 1. Average monthly, average annual, and departures from long-term average temperatures. Departures from average are based on a comparison of 2023 average temperatures to relevant averages from 1895–2022. Data are available at <https://www.ncdc.noaa.gov/cag/county/time-series>.

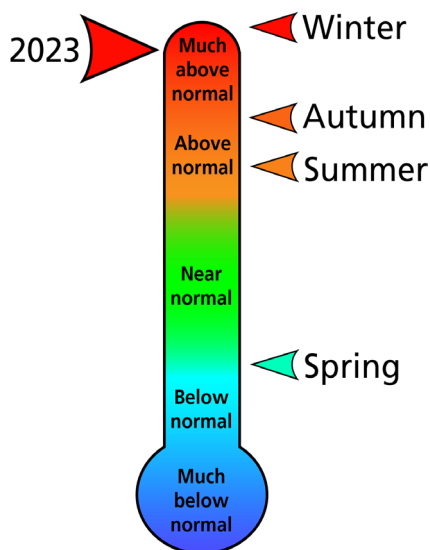


Figure 1. Seasonal and annual temperature rankings. An arrow at the top of the figure would represent the warmest year/season on record (since 1895); at the bottom, the coldest year/season on record. Winter = Jan–Mar, Spring = Apr–June, Summer = July–Sept, Autumn = Oct–Dec. Data are available at <https://www.ncdc.noaa.gov/cag/county/rankings>.

Month/ Year	Average temperature (°F)	Departure from average (°F)
January	45.5	+7.3
February	48.8	+8.7
March	50.2	+2.1
April	60.6	+3.4
May	64.0	–2.4
June	71.2	–3.2
July	79.9	+1.8
August	77.4	+0.8
September	70.6	+0.1
October	61.1	+1.9
November	48.2	–0.8
December	45.1	+4.6
2023	60.2	+2.1

Precipitation

Total park precipitation for 2023 was near normal, though the winter was particularly dry (Figure 2). In all, 45.5 inches of precipitation fell, about 1 inch more than the long-term average (Table 2). It was the 57th wettest year on record.

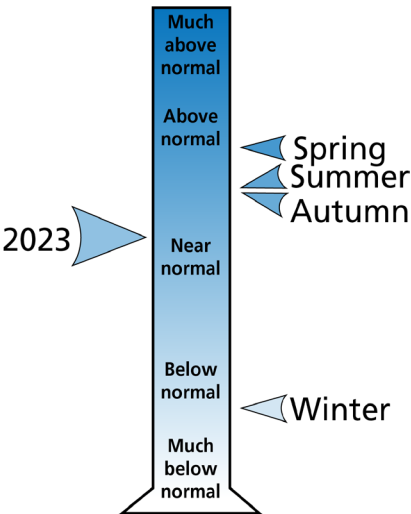


Figure 2. Seasonal and annual precipitation rankings. An arrow at the top of the figure would represent the wettest year/season on record (since 1895); at the bottom, the driest year/season on record. Winter = Jan–Mar, Spring = Apr–June, Summer = July–Sept, Autumn = Oct–Dec. Data are available at <https://www.ncdc.noaa.gov/cag/county/rankings>.

Table 2. Monthly and annual total precipitation and departure from long-term averages. Departures from average are based on a comparison of 2023 precipitation to relevant averages from 1895–2022. Data are available at <https://www.ncdc.noaa.gov/cag/county/time-series>.

Month/Year	Total precipitation (in.)	Departure from average (in.)
January	3.25	–0.12
February	2.50	–0.58
March	1.81	–1.97
April	5.58	+2.23
May	3.14	–0.82
June	4.58	+0.42
July	5.33	+0.36
August	3.78	–0.86
September	5.76	+1.92
October	1.21	–1.96
November	2.13	–0.66
December	6.42	+3.15
2023	45.49	+1.11

Temperature and Precipitation (1895–2023)

Data for counties surrounding the park indicate that annual average temperature has increased approximately +0.1°F per decade and annual total precipitation has increased approximately +0.41 inches per decade since 1895 (Figure 3).

National Park Service scientists have forecast future changes in climate too. Models estimate that by 2100, annual average temperature at the park will increase by 2.7–8.3°F (from a best-case to worst-case scenario, respectively). Annual total precipitation is expected to increase by 8–13% (see [Gonzalez et al., 2018](#) for details).

Data in this brief are preliminary and were retrieved from NOAA on 01/10/24.

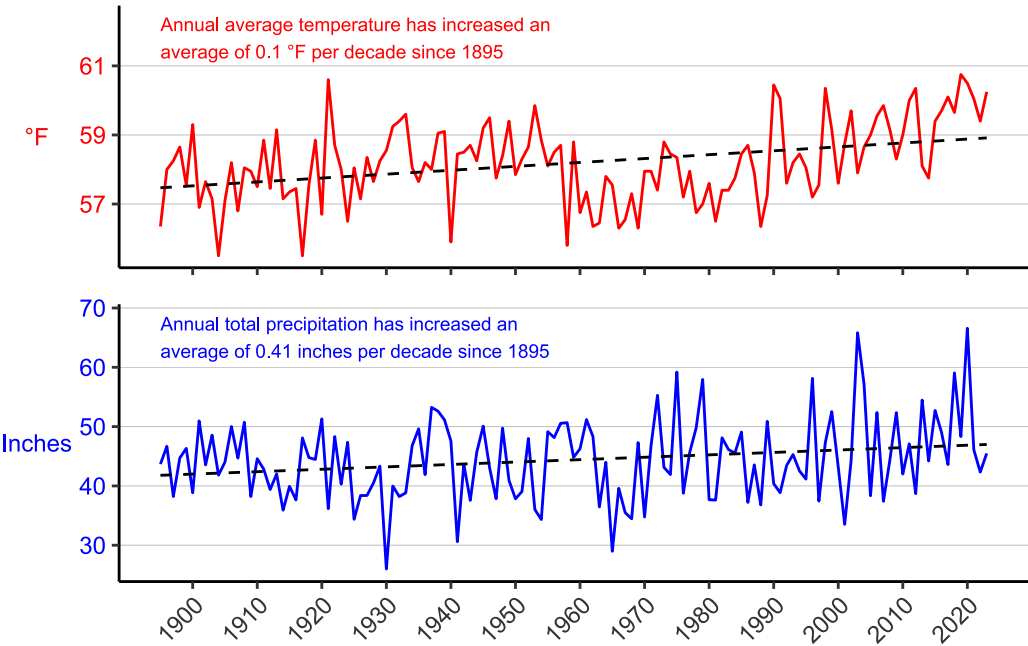


Figure 3. Annual average temperature (°F) and annual total precipitation (in.) from 1895–2023 for counties surrounding the park. Dashed lines represent linear estimates of change. Data are available at <https://www.ncdc.noaa.gov/cag/county/time-series>.