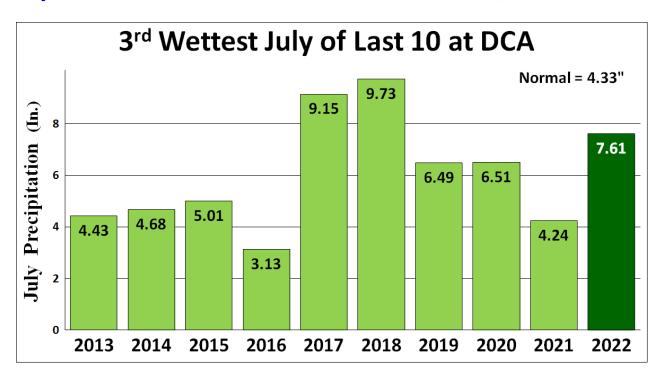






PREcipitation Summary and Temperature Observations For the Washington, DC and Baltimore, MD Area

JULY 2022: Hot Third Week, Otherwise Seasonable; Frequent Rains; Numerous Severe Events, 4 Tornadoes



July Highlights

- 🕏 Slightly above normal temperatures: DCA 81.1°F (+0.1°F); BWI 80.4°F (+2.1°F); IAD 78.1°F (+0.9°F)
- 🕏 9th IAD set record low maximum of 72°F ... all 3 airports had near-normal 90°F days, yet the fewest since 2018
- 🕏 Above normal **precipitation**: DCA 7.61" (+3.28"); BWI 6.25" (+1.77"); IAD 5.23" (+1.08")
- 2nd-3rd Thunderstorms brought scattered wind damage and reports of locally very heavy rainfall across MD: 5.71" in Hyattsville (Prince George's Co.), 3.95" near Town Pont (Cecil Co.), and 3.59" in Colesville (Montgomery Co.)
- 5th Isolated severe storms focused on central MD: a microburst with 60-70 mph winds hit South Laurel, while an EF1 tornado with 90 mph winds tracked for 1.0 mile with max width 125 yards through Bowie (Prince George's Co.), just before a weak tornado of unknown intensity (EFU) touched down briefly in Harwood (Anne Arundel Co.)
- 🕏 8th Torrential rains were led by 4.90" in Potomac (Mont. Co.), MD and 4.73" south of Warrenton (Fauguier Co.), VA
- 12th Widespread severe winds focused a 9-mile wide macroburst with 60-105 mph winds across 23 miles of far southern Hampshire County, WV, with 2 brief tornadoes along its northern edge Glebe 85 mph EFO, Delray 100 mph EF1; 80-90 mph straight line winds produced a downburst pattern in College Park (Prince George's Co.), MD; and 80-90 mph winds snapped many large trees from near Fallston to south of Darlington (Harford Co.), MD
- **25**th Storms brought heavy rain and several severe wind reports to DC metro and south, including **2.91"** in Ancient Oaks (St. Mary's Co.), and 1.30" in Charlottesville, VA

July 2022

July Temperatures: Hot days on the 1st-2nd and 18th-25th set the trend from an otherwise warm, yet near-normal month: DCA 81.1°F (+0.1°F); BWI 80.4°F (+2.1°F); IAD 78.1°F (+0.9°F). The **9**th featured July's mildest overnight, with the region's highest minimums including 79°F at both Quantico (Prince William Co.), VA and Patuxent River NAS (St. Mary's Co.), while DCA was held to 77°F. The month's coolest morning followed just two days later, as the **11**th brought many lows in the 50s outside of the metros, and even a **49°F** reading near Montebello (Nelson Co.), VA; Washington's 66°F tied with eight other years as the 4th-highest July minimum (behind 2011, 2012, 2020) on record.

July's three hottest days, **22**nd-**24**th, occurred towards the end of what was an 8-day heat wave for the metro areas. The **22**nd was Hagerstown (Washington Co.), MD's hottest day at 95°F. Most locations observed their highest temperature on the **23**rd, with mid-90s common through metro areas, while upper 90s were actually observed in mountain valleys, and **100°F** was reported at Cumberland (Allegany Co.), MD. 90°F-days for July were the lowest since 2018, yet near normal: DCA 14, BWI 17, and IAD 13.

July Precipitation and Severe Weather: (See above highlights for details on greatest severe episodes). The trend for more frequent strong to severe thunderstorms seen through early June returned for the first three weeks of July. Although high variability in rainfall accompanied the greater events, precipitation was overall frequent enough to yield near to above normal totals for most locations east of the mountains: DCA 7.61" (+3.28"), BWI 6.25" (+1.77"), IAD 5.23" (+1.08). Monthly totals ranged from 2-6" across mountain locales, while a pocket of 8-11" observed totals stretched from Bethesda (Montgomery Co.), MD and northernmost Washington, D.C., eastward into central Anne Arundel Co; 3-8" of rainfall was common for the many points in between. July total rainfall extremes ranged from 2.20" near Falling Waters (Berkeley Co.), WV to 11.02" near Boston (Rappahannock Co.), VA and 11.34" north of Leonardtown (St. Mary's Co.), MD.

The 1st brought widespread reports of severe winds north and west of the DC and Baltimore metros, with isolated heavier rainfall observations as great as 1.15" southeast of Martinsburg (Berkeley Co.), WV. The 5th's severe storms' motion was too fast to drop appreciable rains on most locations, yet reports included 1.70" at Dentsville (Charles Co.), MD and 1.42" west of Stafford (Stafford Co.), VA. The 6th saw locally torrential rainfall in strong storms, with observations led by **3.64**" northeast of Taneytown (Carroll Co.), MD, 2.51" in Staunton, VA, and 2.30" in Friendship Heights (Northwest), DC. Very heavy rains on the 8th (see Highlights above) also included reports of **4.58**" north of Leonardtown (St. Mary's Co.), MD, 3.79" in Alexandria, VA, and 3.00" southwest of Crozet (Albemarle Co.), VA. Rains, generally light, continued on the 9th, although heavier amounts were reported along the Chesapeake Bay, including 1.97" in Ancient Oaks (St. Mary's Co.). The 12th's potent thunderstorms were also able to drop **3.05"** of rain at Todd's Tavern (Spotsylvania Co.), VA and 1.24" in Norbeck (Montgomery Co.), MD.

July's second half continued to feature strong to severe storms and isolated to scattered heavy rains. Severe winds in the 16th's thunderstorms downed trees across VA and east of DC, while greatest rainfall reports included 2.80" north of Bowie and 1.81" in Alexandria, VA. The 17th saw storms produce more scattered wind damage, across the region's southern counties, with 1.10" measured at Wellington Beach (Charles Co.), MD. On the 18th, damaging winds were confined to isolated mountain reports, while greatest rain readings included 1.71" at Solomons (Calvert Co.) and 1.42" in Ashburn (Loudoun Co.), VA. The 21st brought scattered thunderstorms that produced isolated wind damage and 1.20" rain near Bryanstown (Charles Co.). More widespread storms on the 23rd downed trees across the WV and MD mountains, although precipitation reports were rather tame with 1.33" in Hancock (Washington Co.) the greatest report in MD. The Bowie area was bulls eyed again on the 28th with the day's greatest report, 1.19". The month ended with yet more moderate to heavy rainfall, with 2.02" observed at Verona (Augusta Co.), VA and 1.18" northeast of Taneytown, MD.

| July | July 2022 Weather Statistics for the Washington/Baltimore Area | | | | | | | | |
|------|--|-------------|------------------------|--|--|--|--|--|--|
| | Station Temperatures (°F) | Extreme/Day | Precipitation (inches) | | | | | | |

| | Station Temperatures (°F) | | | | | Extrem | ne/Day | Precipitation (inches) | | | |
|-----------------|---------------------------|--------|-------|-------|------|--------|--------|------------------------|-------|-------|--------------|
| Location | Av Max | Av Min | Avg T | Nml T | ΔNml | Max | Min | Total | Nml P | ΔNml | Year To Date |
| National (DCA) | 88.8 | 73.3 | 81.1 | 81.0 | +0.1 | 96/23 | 66/11 | 7.61 | 4.33 | +3.28 | 29.53 |
| Baltimore (BWI) | 90.2 | 70.5 | 80.4 | 78.3 | +2.1 | 98/23 | 61/11 | 6.25 | 4.48 | +1.77 | 28.22 |
| Dulles (IAD) | 88.3 | 67.9 | 78.1 | 77.2 | +0.9 | 96/24 | 60/11 | 5.23 | 4.15 | +1.08 | 25.20 |

Looking Ahead: Can Washington expect another wet August? Only five tandems of consecutive Augusts with 6.00"+ rainfall have occurred in the city's 151-year record, with the subsequent (third August) often observing near to slightly above normal rain.

| Consecutive Augusts With 6.00"+ Precipitation & Rainfall Observed in the Subsequent Year | | | | | | | | | | |
|--|------|-------|------|-------|------|--------|------|-------|------|-------|
| D | 1872 | 6.92" | 1878 | 8.89" | 1905 | 9.75" | 1914 | 6.00" | 2020 | 8.73" |
| С | 1873 | 6.83" | 1879 | 7.36" | 1906 | 14.36" | 1915 | 7.00" | 2021 | 9.07" |
| Α | 1874 | 1.51" | 1880 | 3.83" | 1907 | 4.34" | 1916 | 2.83" | 2022 | ??? |
| Washington 1991 - 2020 Normal August Precipitation: 3.25" | | | | | | | | | | |