

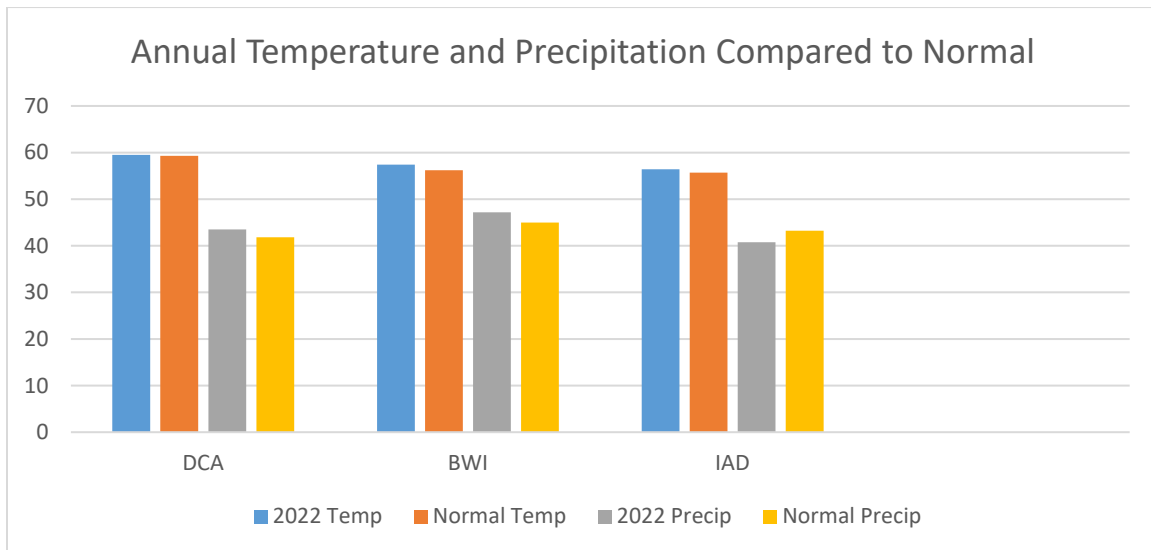


# PRESTO



PRECipitation Summary and Temperature Observations  
for the Washington, DC and Baltimore, MD Area

## Yearly Summary for 2022



### 2022 Yearly Highlights

- January 3** – Rain to heavy snow drops 5-12” on most of DC metro & points S&E; jackknifed trucks shut down I-95 in VA, stranding motorists for up to 27 hours; 15.0” in Spotsylvania Co., VA, 14.3” near Waldorf (Charles Co.), MD.
- January 16** – Strong Nor’Easter brings snow, ice, rain, and marginally severe winds. 4-8” snow across mountains, 1-4” common elsewhere, with 7.0” near Front Royal (Frederick Co.), VA and several 8.5” reports in/near Staunton and Waynesboro, VA; ice near 0.1-0.2” for many locations, with 0.25-0.30” across Frederick Co., MD; downed trees in Calvert County, MD, and gusts measured to 63 mph.
- February** - IAD observed the 9th warmest February on record (1963-2022).
- February 18-19** – Many areas recorded wind gusts >50 mph, including 65 mph at BWI (18th) and 56 mph at IAD (19th).
- March 6-7** – Record highs of 78°F at BWI, IAD, also record high minimum at IAD (50°F) (6<sup>th</sup>); record highs DCA (80°F), BWI (79°F), IAD (77°F) (7<sup>th</sup>).
- March 19** – IAD record high (77°F), DCA and IAD both set record high minimum of 57°F.
- March 31** – Two EF-0 tornadoes in Fairfax County, VA: Centreville and Tysons Corner.
- April 18-19** – IAD’s observed snow on 4/18 & 4/19 was the latest for consecutive days since records began in 1963.
- April 29** – Record low of 32°F at BWI marks the 3rd-latest freeze ever recorded for the Baltimore Area.
- May 16** – Over a dozen reports of large hail from the DC metro and eastward, with 2.25-3.00” hail in Calvert Co., MD.
- May 27** – Squall lines hit MD: 2 tornadoes – midday brief EF0 in Olney (Montgomery Co.) before evening EF1 tracked 4 miles through St. Mary’s and Charles Counties; wind damage from gusts up to 65 mph in Anne Arundel and Calvert Counties.
- June 8** – Widespread thunderstorm wind damage south of DC metro, MD Piedmont; 1.50” hail in Great Cacapon (Washington Co.), MD; EF0 tornado east of Mechanicsburg (St. Mary’s Co.), MD tracks 3.3 mi, with estimated 85 mph winds.

- ☁ **June 22** – Numerous severe storms, gusts to 62 mph in VA at both Quantico Marine Base (Prince William Co.) and Big Meadows (Madison Co.), VA; over 10 reports of roads submerged by flash flooding along the Shenandoah River.
  - ☁ **July 5** – Isolated severe storms include a 70mph microburst in South Laurel (Prince George’s Co.), MD, and an EF1 tornado with estimated 90 mph winds in Bowie, and a brief tornado of unknown winds (EFU) in Harwood (Anne Arundel Co.).
  - ☁ **July 12** – Hampshire County, WV sees 9-mile wide, 23-mile long macroburst with 105 mph winds, and two brief tornadoes (EF0, EF1); 90 mph damaging winds in both College Park (Prince George’s Co.) and Harford County, MD.
  - ☁ **August 4** – Thunderstorms produce nearly 50 reports of wind damage across VA and especially central MD. There were 65 downed trees blocking 18 roads in Bowie (Prince George’s Co.), MD; 58 mph gust at DCA; 3 killed, 1 injured by lightning near the White House; as much as 4.36” in Hamilton (Baltimore City), 2.72” in Calvert County, MD, and 2.20” in Ashburn (Loudoun County), VA.
  - ☁ **August 30** – Scattered severe storms mainly across VA. Numerous wooden power poles snapped east of Winchester (Frederick County), VA, while a tree was snapped in half and lofted 100 yards near Myersville (Frederick County), MD.
  - ☁ **September 25** – Severe thunderstorms with wind damage and hail occurred mainly in western MD, eastern WV, and western VA. 1.5-inch hail in McHenry, MD (Garret County). Marine thunderstorm winds as well along the Chesapeake. 51 mph gust 8 miles east of Smith Island MD and a 50 mph gust at Point Lookout.
- October 4** – Record low maximum temperatures were tied at DCA and IAD, with 55F as a high temperature. A record low max temperature of 54F was set at Martinsburg (MRB), WV.
- ☁ **October 21** – Most areas north and west of the metros had the first hard freeze, ending the growing season.
  - ☁ **November 5 and 7** – Record highs at IAD of 81F (5<sup>th</sup>) and 81F at DCA and BWI (7<sup>th</sup>).
  - ☁ **December 22** – IAD set a daily record with 2.14 inches of rainfall.
  - ☁ **December 23** – Strong wind gusts occurred with a 69 mph wind gust on Barton, MD (Garrett County) and a 63 mph wind gust at I-68 and US 219 in Garrett County, MD. Several wind gusts over 60 mph along the Chesapeake with a peak of 69 mph at 1 mi NNE of Bay Bridge and 2 mi ESE of Eastport.
  - ☁ **December 24** – Record low maximum temperatures at DCA, BWI and IAD of 22F, 20F, and 22F respectively.

## 2022 Yearly Summary

### Temperatures:

Average monthly temperatures were slightly above normal for the year, with BWI having the greatest anomaly at +1.2F. Extended periods of extreme temperatures were limited during the year, with only short periods of extreme cold or heat. DCA’s warmest temperature was 99F, which occurred on June 17<sup>th</sup>. Both BWI and IAD had their warmest temperature on August 4<sup>th</sup> with 99F and 97F respectively. The coldest temperatures for all three stations occurred on December 24<sup>th</sup>, with lows in the single digits and record low maximum temperatures.

February was especially warm compared to average, and Dulles had its 9<sup>th</sup> warmest February on record. March also saw record high temperatures on the 6<sup>th</sup>, 7<sup>th</sup> and 19<sup>th</sup>. Ironically, late April and early May had very cold temperatures. BWI had its 3<sup>rd</sup> latest freezing temperature on record, with a low of 32F on April 29<sup>th</sup>. High temperatures were in the 40s and low 50s from May 6-8. The first 90-degree temperatures did not occur until late May for most locations.

October was the coldest month relative to normal. Record low maximum temperatures (highs in the mid-50s) occurred on October 4<sup>th</sup> during a cold snap in early October. The growing season ended in late October for most locations with hard freezes; however, BWI and DCA did not have freezes until mid-November. Early November saw record warm high temperatures in the low 80s on the 5<sup>th</sup> and 7<sup>th</sup>. The year ended with consistently cold and record cold maximum temperatures on December 24.

### Precipitation:

Areas around the metro and eastward were slightly above normal in precipitation while areas west were near to slightly below normal. DCA and BWI had positive anomalies; BWI was 2.18 inches above normal. IAD on the other hand, was 2.48 inches below normal for the year.

There were some areas around the DC metro and in western VA that observed between 125 and 150% of their normal annual precipitation in 2022. Click on this [link](#) to see where those anomalies occurred.

May (especially early May) was easily the wettest month overall and relative to normal while February and October were quite dry. The first week of July saw heavy rains as DCA had its greatest single day rainfall for the year of 4.05 inches on July 9, and BWI had its

greatest for the year 2.46 inches on July 7. The remnants of Hurricane Ian produced heavy rains (generally 1.5 to 2 inch totals) October 1-3. Remnants of a late season Tropical Storm Nicole dropped heavy rains (1-2 inches in general) on November 11.

Snowfall for the year was a little below average (snowfall seasons are July 1 to July 1, spanning parts of two calendar years so a yearly total can't be compared to climatic normal). Snowfall amounts were generally 13-16 inches around the metro and 15-25 inches north and west of the metro (outside the mountains). Early to mid-January produced the most snowfall by far, with two significant events occurring. Outside of that period, very little snow fell, although there was late season snowfall accumulations on March 12<sup>th</sup> and April 18<sup>th</sup> north and west of the metros. The accumulating snowfall (2-4 inches north and west of metros) on April 18<sup>th</sup> was the latest for many locations since April 6-7, 1990.

### Severe Weather:

A wind gust of 65 mph was recorded at BWI on February 18<sup>th</sup>. On March 31, severe thunderstorms produced two EF-0 tornadoes in Fairfax County, VA (Centreville and Tysons Corner).

May and early June were the most active periods of severe weather outbreaks. On May 16, there were over a dozen reports of large hail from the DC metro and eastward, with 2.25-3.00" hail in Calvert County, MD. On May 27, squall lines moved through MD, producing two tornadoes. An EF tornado moved through Olney (Montgomery Co.), and an EF1 tornado tracked 4 miles through St. Mary's and Charles Counties. There was wind damage from gusts up to 65 mph in Anne Arundel and Calvert Counties. On June 8, Widespread thunderstorm wind damage occurred south of DC metro, MD Piedmont along with 1.50" hail in Great Cacapon (Washington County.), MD and an EF0 tornado east of Mechanicsburg (St. Mary's County.), MD. Severe weather continued in June with numerous severe storms producing wind gusts to 62 mph in VA at both Quantico Marine Base (Prince William County) and Big Meadows (Madison County).

In July, micro and macrobursts along with tornadoes were the highlights. On July 5, isolated severe storms produced a 70mph microburst in South Laurel (Prince George's County), MD, and an EF1 tornado in Bowie, and a brief tornado of unknown winds (EFU) in Harwood (Anne Arundel County). A 9-mile wide, 23-mile long macroburst with 105 mph winds and two brief tornadoes (EF0, EF1) occurred in Hampshire County WV. Storms produced 90 mph damaging winds in both College Park (Prince George's County) and Harford County, MD

One of the most significant outbreaks occurred on August 4, when thunderstorms produced nearly 50 reports of wind damage across VA and central MD. There were 65 downed trees blocking 18 roads in Bowie (Prince George's County), MD; a 58 mph gust at DCA; three people were killed and 1 injured by lightning near the White House. Finally, on Sep. 25, severe thunderstorms with wind damage and hail occurred in mainly in western MD, eastern WV, and western VA. Hail to the size of 1.5 inches in diameter fell in McHenry, MD (Garret County).

### 2022 Yearly Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	Av Max	Av Min	Avg T	Nml T	ΔNml	Max	Min	Total	Nml P	ΔNml	Greatest Day
National (DCA)	68.3	50.6	59.5	59.3	0.2	99/ Jun 17	9/Dec 24	43.51	41.82	1.69	4.05/ Jul 9
Baltimore (BWI)	67.9	47.0	57.4	56.2	1.2	99/ Aug 4	6 Dec 24	47.18	45.00	2.18	2.46/ Jul 7
Dulles (IAD)	67.4	45.5	56.4	55.7	0.7	97 Aug 4	7 Dec 24	40.76	43.24	-2.48	2.14/ Dec 22