

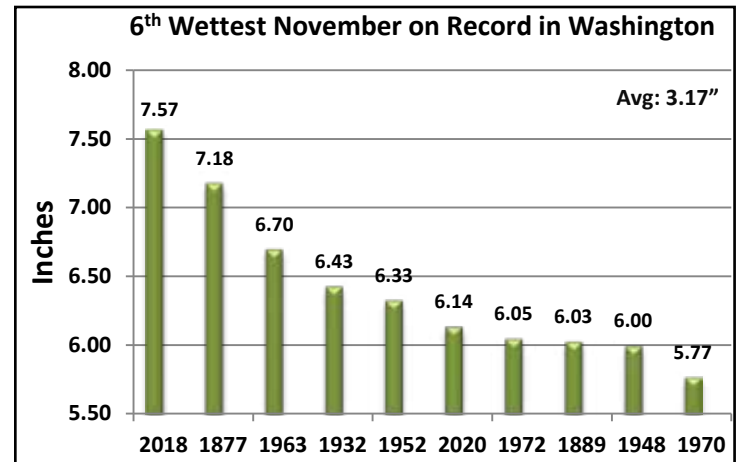
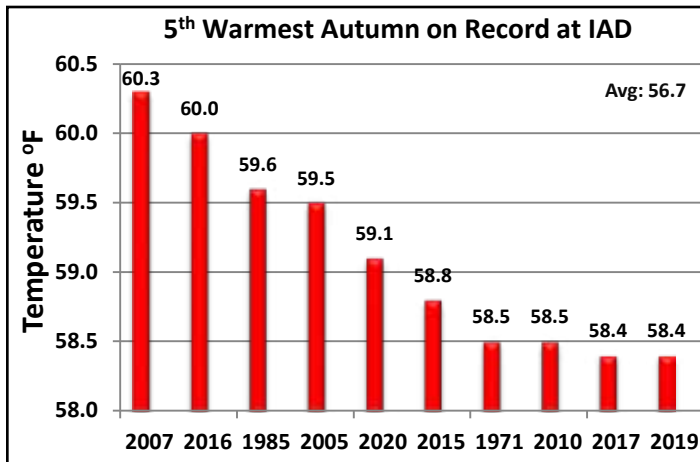


PRESTO

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



NOVEMBER 2020: Warm and Wet with One Tornado Autumn: Warm with Tropical Weather



November Highlights

- All three airports recorded well above normal temperatures: DCA, 54.3°F (+4.7°F); BWI, 52.4°F (+5.8°F); and IAD, 51.5°F (+5.1°F).
- The three major airports reported above normal precipitation: DCA, 6.14" (+2.97"); BWI, 6.35" (+3.05"); and IAD, 3.61" (+0.20").
- On the 1st-2nd, strong winds caused widespread damage across the area. Peak gusts include 60 mph in Shady Grove, (Greene County), VA, 59 mph in Petersburg, (Grant County), WV, and 57 mph in Emmitsburg, (Frederick County), MD. Up to an inch of snow fell in the higher terrain of all three states.
- On the 7th, BWI and IAD tied daily record highs with 77°F and 76°F, respectively; on the 8th, IAD set a record high of 77°F and on the 10th, all three airports set records highs: BWI, 78°F, IAD, 77°F and DCA, 76°F.
- On the 11th, the metro areas and east were deluged with heavy rains leading to widespread flooding. The highest totals were in St. Marys County, MD: Sotterly, 7.50", Leonardtown, 6.75", and California, 6.46". In Virginia, Stuarts Draft, (Albemarle County), VA, recorded 6.00". Heavy rain resulted in daily record rainfall records at the major airports: DCA, 2.02", BWI, 1.91" and IAD, 1.21".
- On the 15th, strong thunderstorms caused widespread wind damage to the west, including a 68 mph gust in Grantsville, (Garrett County), MD.
- on the 17th, Petersburg, WV, measured a 56 mph gust and up to 3 inches of snow fell in Garrett County, MD, and Pendleton County, WV.
- BWI's first freezing temperature of the season occurred on the 18th, 27°F; DCA followed on the 19th, with 32°F.
- The month ended with an EF-1 tornado on Nov. 30 at Port Deposit, (Cecil County), MD. The system also brought in heavy rain. DCA, BWI and IAD set daily record rainfall records with 2.39", 2.74" and 1.38", respectively.

Autumn Highlights

- Despite a cool September, the area observed above normal seasonal temperatures: DCA, 62.1°F (+2.1°F); BWI, 60.3°F (+3.5°F); and IAD, 59.1°F (+2.4°F).
- Autumn featured well above normal rainfall at DCA, 16.53" (+6.24") and BWI, 15.19" (+4.53") and below normal rainfall at IAD, 9.43" (-1.15").
- On Sep. 3, an EF-1 tornado struck near Edgewater (Anne Arundel County), MD, with a maximum wind of 100 mph, a maximum width of 100 yards and path of 6 miles, causing minor tree and property damage but no reported injuries. Other storms in Maryland that day resulted in a water rescue and car sinking in Montgomery and Baltimore counties, respectively
- On Sep 10, two rounds of slow-moving heavy rains resulted in extreme rainfall totals of 4.87" in Hyattsville Hills (Prince George's County), MD, 4.69" in Kensington (Montgomery County), MD, 4.09", at Michigan Park in D.C., and 3.37" in Alexandria, (Alexandria County), VA. DCA set a daily record rainfall of 2.88". Rain was heaviest to the east of the D.C. metro area. A reported 20 vehicles were stranded by flood waters.
- On Sep. 20, BWI and IAD tied a record low at 42°F. The area recorded widespread frost with some freezing temperatures to the north and west; the lowest readings included 28°F in Bayard, (Grant County), WV, 30°F in Fort Valley, (Shenandoah County), VA, and several 32°F readings in Frederick and Allegany counties, MD. More frost occurred on Sep. 22 in much the same areas with many sites noting their coldest September morning in more than 30 years.
- The remnants of Hurricane Delta struck the area on Oct 11-12, resulting in widespread 1"-2" rainfall totals. The highest total was 2.25" in Culpepper (Culpepper County), VA; the major airports totals were DCA, 1.54", BWI, 1.39" and IAD, 1.17".
- On Oct. 17-19, the growing season ended for many areas west of D.C. and Baltimore in Maryland, West Virginia and Northern Virginia, when the area observed widespread sub-freezing temperatures.
- Finally, on Oct. 29, heavy rain from Hurricane Zeta's remnants caused widespread flooding across central Virginia, the metro areas and east. High totals include 3.80" near Keswick, (Albemarle County) VA; 3.65" at Afton (Albemarle County), VA, and 2.55" at the National Arboretum in D.C.; DCA measured 2.26", BWI, 2.21" and IAD, 1.68". Multiple road closures were reported throughout the area.

November 2020

Temperatures: November was exceptionally mild for the last month of autumn with above normal temperatures at all three airports: DCA, 54.3°F (+4.7°F); BWI, 52.4°F (+5.8°F); and IAD, 51.5°F (+5.1°F). DCA and BWI both tied for their 4th warmest November and warmest since 1985. IAD had its 2nd warmest November on record, behind only November 2005. The warmest stretch was the 5th through the 11th, when most locations observed high temperatures of 70°F or greater and set record high temperatures on the 7th, 8th and 10th. DCA marked its only freeze of the season on the 19th (32°F). BWI marked its first of three freezes for the season on the 18th (27°F).

Precipitation/Severe Weather: November continued the uneven rainfall pattern of previous months. DCA and BWI were well above normal and IAD was only slightly above normal: DCA, 6.14" (+2.97"); BWI, 6.35" (+3.05"); and IAD, 3.61" (+0.20"). DCA marked its 6th wettest November on record and BWI, its 10th. Daily records were set on the 11th and 30th. November saw its fair share of windy autumn days with damaging wind events on the 1st, 2nd, 15th and 17th. Some of the peak winds were more than 60 mph. Areas to the west also had some measurable snow, particularly Garrett County, which along with Cecil County to the east, joined the Sterling, VA, forecast area in November. On November 30, an EF-1 tornado was confirmed in Port Deposit, (Cecil County) MD. The tornado was on the ground for 6 minutes with estimated winds of 95 mph, path length was 5.5 miles with a maximum width of 75 yards. There were no injuries or fatalities but the tornado damaged several homes, took down power lines and resulted in heavy tree damage.

November 2020 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)				
	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	DepNml	Snow	Year to Date
National (DCA)	63.2	45.4	54.3	49.6	+4.7	76/10	32/19	6.14	3.17	+2.97	0.0	52.38
Baltimore (BWI)	63.7	41.0	52.4	46.5	+5.8	78/8,10	25/19	6.35	3.30	+3.05	0.0	52.80
Dulles (IAD)	63.4	39.5	51.5	46.4	+5.1	77/9,10	24/19	3.61	3.41	+0.20	0.0	43.65

Autumn (Sep-Nov) Temperatures: Despite a near to slightly below normal September, autumn featured above normal temperatures at the major airports: DCA, 62.1°F (+2.1°F); BWI, 60.3°F (+3.5°F); and IAD, 59.1°F (+2.4°F). The first week of September was summer-like with two 90-degree days, at DCA, and 1 at IAD and BWI. IAD tied and beat record high minimums on Sep. 2 (72°F) and 10th (74°F), respectively. After the first week, the month was consistently cool. Many locations in western Maryland, eastern West Virginia and Northern Virginia had early frosts and freezes on Sep. 19-20, 3 weeks ahead of their normal first frost or freeze date of the season for these areas.

October was comfortable with above normal temperatures and no excessively warm or cool days. Although the month included above average temperatures, it was the coolest October since 2015. Halloween was the coolest day of the month in the area; DCA dropped to 41°F, BWI, 37°F, and IAD had its first freeze with a 32°F reading. November continued warm (see monthly summary).

Autumn Precipitation/Severe Weather: The season featured significant rainfall variation from east to north and west from September through the end of October, followed by a wet November through most of the region: DCA, 16.53" (+6.24"), BWI, 15.19" (+4.53") and IAD, 9.43" (-1.15"). On Sep. 10, two rounds of slow-moving heavy rain resulted in rainfall totals of 4.87" in Hyattsville Hills (Prince George's County), MD, 4.69" in Kensington (Montgomery County), MD, 4.09" at Michigan Park in D.C., and 3.37" in Alexandria, VA. DCA set a daily record rainfall of 2.88". Rain from this event started in central Maryland pre-dawn and then returned midday over most of Maryland, most heavily to the east of the D.C. metro area. A reported 20 vehicles were stranded by flood waters. September ended with heavy rain on the 30th in the northern and western areas: 2.78" at Pleasant Hills (Harford County), MD, 2.51" at Upper Tract (Pendleton County), WV, and 2.10" at Mustoe and Mill Gap (Highland County), VA. September also featured one notable severe weather event. On the 3rd, an EF-1 tornado struck near Edgewater, MD, with maximum winds of 100 mph, maximum width, 100 yards, and tracked for 6 miles, causing tree and minor property damage, but no reported injuries. Rainfall from other storm resulted in a water rescue and car sinking.

October rainfall was due mostly to the remnants of Hurricanes Delta and Zeta, which both made landfall on the Gulf Coast. Delta and Zeta were part of the most active hurricane season in recorded history. On October 11-12, the remnants of Hurricane Delta resulted in 1"-2" rain in much of area. Then on October 29, heavy rain from Hurricane Zeta's remnants caused widespread flooding across central Virginia, the metro areas and east. High totals include 3.80" near Keswick, (Albemarle County) VA; 3.65" at Afton (Albemarle County), VA, and 2.55" at the National Arboretum in D.C.; DCA measured 2.26", BWI, 2.21" and IAD, 1.68". The press reported multiple road closures throughout the area. November was very wet in most of the area (see monthly summary).

Autumn 2020 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	DepNml	Snow
National (DCA)	70.3	53.9	62.1	60.0	+2.1	91/9-3, 9-4	32/11-19	16.53	10.29	+6.24	0.0
Baltimore (BWI)	70.5	50.1	60.3	56.8	+3.5	90/9-2	25/11-19	15.18	10.65	+4.53	0.0
Dulles (IAD)	70.0	48.2	59.1	56.7	+2.4	91/9-3	24/11-19	9.43	10.58	-1.15	0.0

Looking Ahead to December: After such a warm November, can we expect a warm December? Over the last decade, 8 out of the last 10 Decembers have been above normal in temperature with only December 2017 below normal. What about snow? For the 10th consecutive year, in 2019, DCA recorded subnormal snowfall in December. Will December 2020 bring more snow? Shown below are the most recent 10 years of December snowfall in Washington. Normal DCA December temperature is 39.7°F; normal snowfall is 2.3".

DCA December Average Temperature and Snowfall for Last 10 Years											
Year	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	
December Temps.	42.1°F	43.5°F	39.2°F	41.8°F	51.2°F	43.7°F	42.3°F	45.4°F	45.0°F	34.6°F	
December Snowfall	0.4"	0.0"	1.9"	Trace	0.0"	Trace	1.5"	0.2"	Trace	2.1"	