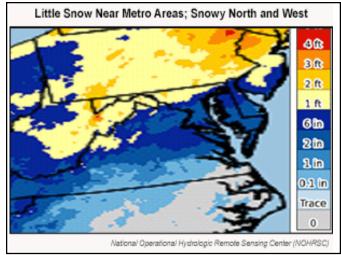
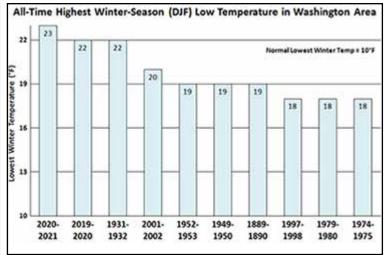


# FEBRUARY 2021: Cold with Frequent Winter Weather WINTER: Mild Start, Chilly Finish, Large Snow Gradient





# February Highlights

- Below or at normal average monthly temperatures: DCA, 37.8°F (-1.2°F), BWI, 35.8°F (0.0°F), IAD, 35.4°F (-0.8°F).
- From Jan. 31–Feb. 2, heavy snow impacted the area; highest totals were 20.5" in Sabillasville (Frederick County), MD, 10.6" in Berryville (Clarke
- County), WV, and 17.1" in Romney (Hampshire County), VA. DCA reported 3.2", BWI, 4.1", and IAD, 5.7". IAD set a daily record on the 1<sup>st</sup> with 2.5".
  On the 10<sup>th</sup>-11<sup>th</sup>, the metro areas and counties south and west reported light snow and freezing rain while the higher elevations of eastern West Virginia and western Maryland measured up to 9 inches of snow. Ice accumulations were generally less than 0.10".
- On the 12<sup>th</sup>, snow up to 6" fell in areas south and west of the metro. DCA ended a streak of 731 consecutive days of at above 32°F.
- The next day, sleet and freezing rain fell across much of the area. Ice amounts were generally 0.10" to 0.25"; 0.6" was reported in Fairfax County, VA. DCA had its second consecutive day with a high temperature at 32°F or below for the first time since Jan. 4-7, 2018.
- The area observed significant ice accumulations on the 15<sup>th</sup>-16<sup>th</sup> with up to 0.25"; IAD set a daily precipitation record on the 15<sup>th</sup> with 0.57".
- On the 18<sup>th</sup>, snow, sleet and freezing rain fell across the area. Freezing rain fell from the metro areas, south and east with ice accumulations up to 0.31" in St. Mary's County, MD. The metro areas reported 1"–2" of sleet. Areas north and west reported snow totals ranging from 4"–7".
- On the 20<sup>th</sup>, up to 5" of snow reported with wind chills as low as -10°F across the higher terrain of western Maryland and eastern West Virginia.
  Light to moderate snow recorded on the 22<sup>nd</sup> over much of the area. The highest totals were 4.5" in Frederick County, MD, 5" in Highland
- County, VA, and 6" in Pendleton County, WV.
- On the 28<sup>th</sup>, rainfall over 1" was common across the area, with more than 2" reported in Garrett County, MD.

## Winter Seasonal Highlights

- The area marked its 6<sup>th</sup> consecutive winter with above normal temperatures: DCA, 39.3°F (+1.1°F); BWI, 37.3°F (+2.2°F); and IAD, 36.6 (+1.3°F).
- Seasonal precipitation was well above normal: DCA, 11.55" (+3.07"); BWI, 11.58" (+2.26"); IAD, 11.97" (+3.59").
- Over 2" inches of rain occurred in some areas on Dec. 4<sup>th</sup>-5<sup>th</sup>, causing minor flooding in eastern Maryland and central Virginia.
- IAD set daily precipitation records on Dec. 14<sup>th</sup>, 1.24<sup>"</sup>, and Dec. 16<sup>th</sup>, 1.30<sup>"</sup>.
- On Dec. 16<sup>th</sup>, 8"–12" of snow and sleet fell north and west of the metro areas. Maximum totals were 12.1" in Sabillasville, (Frederick County), MD. In the metro area, 1"–4" of snow, sleet and freezing rain was measured; Opal, VA, reported 0.50" of ice.
- On Dec. 24<sup>th</sup>-25<sup>th</sup>, heavy rain caused flooding around the metro areas and in parts of central Virginia. Light snow occurred on the 25<sup>th</sup> for many locations with accumulations generally less than an inch but up to 3" in higher terrain.
- On Jan. 16<sup>th</sup> and 19<sup>th</sup>-20<sup>th</sup>, western Maryland and eastern West Virginia had significant snowfall. High totals include 7.5" in McHenry, (Garrett County) MD, on the 20<sup>th</sup> and 5.0" on the 17<sup>th</sup> Cherry Grove, (Pendleton County), WV.
- Then, on Jan. 25, most of the area reported light snow and ice accumulation. Pimlico (Baltimore City), MD, had 1.4" of snow and Wintergreen, (Augusta County), VA, reported 0.50" of ice. Washington ended a 372-day streak without measurable snow with 0.3", its 3<sup>rd</sup> longest such streak on record. Baltimore ended its record for the most days without measurable snowfall in December 2020, 343 days (Jan. 8 Dec. 15).

#### February 2021

**Temperature:** February readings were at or below normal: DCA, 37.8°F (-1.2°F), BWI, 35.8°F (0.0°F), IAD, 35.4°F (-0.8°F). February was the first month with below normal temperatures since September 2020 at DCA and since May 2020 at BWI and IAD. Minimum temperatures were above normal while maximums averaged well below normal most days, creating the negative anomalies for the monthly average temperatures. It was the coldest February since 2015 at all three major airports.

**Precipitation:** The last month of winter featured well average precipitation with frequent winter weather: DCA, 4.66" (+2.04"), BWI, 4.85" (+1.95) and IAD, 4.28" (+1.54"). With cold air in place during most of the month, frozen and freezing precipitation occurred frequently and was well above normal for most of the area; however, the three primary stations were all below normal for monthly snowfall. It was the 9<sup>th</sup> wettest February on record at IAD. See the cover graphic for February snowfall totals across the area.

	Station Temperatures (°F)					Extrem	ne/Day	Precipitation (inches)					
Location	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	DepNml	Snow	Year to Date	
National (DCA)	44.0	31.5	37.8	39.0	-1.2	60/23,24	25/8,21	4.66	2.62	+2.04	2.8	6.59	
Baltimore (BWI)	42.7	28.9	35.8	35.8	0.0	63/24	19/21	4.85	2.90	+1.95	5.0	7.00	
Dulles (IAD)	42.6	28.3	35.4	36.2	-0.8	66/24	16/21	4.28	2.74	+1.54	6.4	6.16	

## February 2021 Weather Statistics for the Washington/Baltimore Area

Winter (Dec-Feb) Temperatures: Despite a cool February, for the 6<sup>th</sup> consecutive winter season, the three major airports reported above normal readings: DCA, +1.1°F; BWI, +2.2°F; and IAD, +1.3°F. There were no exceptionally warm periods in December and January, just consistent above normal readings. The colder than normal readings for February were due to well below average maximums; minimums generally were above normal. The three primary observing stations did not record any single digit minimums during the winter. Even areas north and west of the metro reported only a few mornings with single digits. In January, The range between the highest and lowest temperature at DCA was 34°F (58°F/24°F), tied for the smallest such January range on record. DCA did not have a maximum temperature of 32°F or lower until February 12, ending a streak of 742 days. The last at or below freezing maximum temperature recorded at DCA occurred on February 1, 2019.

Winter Precipitation: The season was wetter than normal: DCA, 11.55" (+3.07"); BWI, 11.58" (+2.26"); IAD, 11.97" (+3.59"). Snowfall was well below the seasonal normal: DCA, 5.4" (-8.2"); BWI, 10.9" (-6.9"), and IAD, 12.0" (-6.4"). Areas north and west of these stations had above normal snowfall for the winter. There was a large north-south snowfall gradient across the area. Areas in northern and western Maryland and eastern West Virginia had more than 3' of snow and sleet for the winter. (See

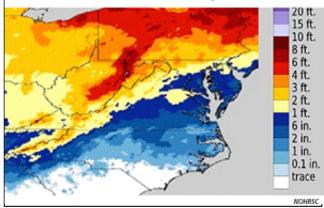
the snowfall analysis map at right).

December and February were well above normal in precipitation while January was on the dry side but there were no exceptionally wet or dry periods. IAD had its 4<sup>th</sup> wettest December on record and set a daily record on Dec. 16<sup>th</sup> with 1.30". IAD set another daily record on Feb. 15 with 0.57".

The first winter weather event of the season was on Dec. 16, when snow and sleet fell north and west of the metro areas, resulting in 8"-12" totals. The metro areas reported minor to moderate amounts of snow, sleet, and freezing rain with 1"-4" of snow for most locations; 0.50" of ice was measured in central Virginia.

Winter weather was sparse from that date until Jan. 31, when the area saw accumulating snow, including 2.3" at DCA; this total ended a streak of 710 days without at least 0.5" of daily snow accumulation, the longest streak on record for DCA. Jan. 31 also ended a streak of 710 days without at least 1" of snow at DCA, the 2<sup>nd</sup> longest streak on record. February featured several wintry events, see the February highlights for detail.

Baltimore/DC Area Seasonal Snowfall Analysis for Winter 2020-21.



### Winter 2020-21 Weather Statistics for the Washington/Baltimore Area

	Station Temperatures (°F)					Extrer	ne/Day	Precipitation (inches)				
Location	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	DepNml	Snow	
National (DCA)	46.0	32.5	39.3	38.2	+1.1	66/12-13	23/12-26	11.55	8.48	+3.07	5.4	
Baltimore (BWI)	45.3	29.4	37.3	35.1	+2.2	66/12-13	19/1-30,2-21	11.58	9.32	+2.26	10.9	
Dulles (IAD)	44.6	28.7	36.6	35.3	+1.3	66/2-24	16/2-21	11.97	8.38	+3.59	12.0	

Looking Ahead to March—Although March typically brings warming spring temperatures, there have been many significant winter weather events during that month. Will March 2021 produce significant winter weather? March 2018 was the last March with 4 or more inches of snowfall for the three primary major airports. Here are some historic winter weather events in the local area during this variable month.

- March 1780: A regiment of the Virginia Infantry marched across the Rappahannock River, which had been frozen since November.
- March 11-13, 1888: The blizzard of '88, also known as the White Hurricane, dropped several inches of snow and strong winds knocked out power for several weeks.
- **\*** March 29, 1921: Late hard freezes caused widespread damage to crops.
- March 29-30, 1942: Late season snowfall dumped 22" in Baltimore and 12" in D.C. Baltimore's record daily snowfall in March, 21.9", and D.C.'s record daily snowfall for March, 11.5", occurred during this event. Hagerstown, MD, received 22" of snow in 24 hours.
- March 13-14, 1993: The Superstorm of 1993 had significant impacts on many locations along the east coast. Up to a foot and a half of snow fell across areas west of the metro. Mountain locations in the Appalachians received over 3' of snow.