

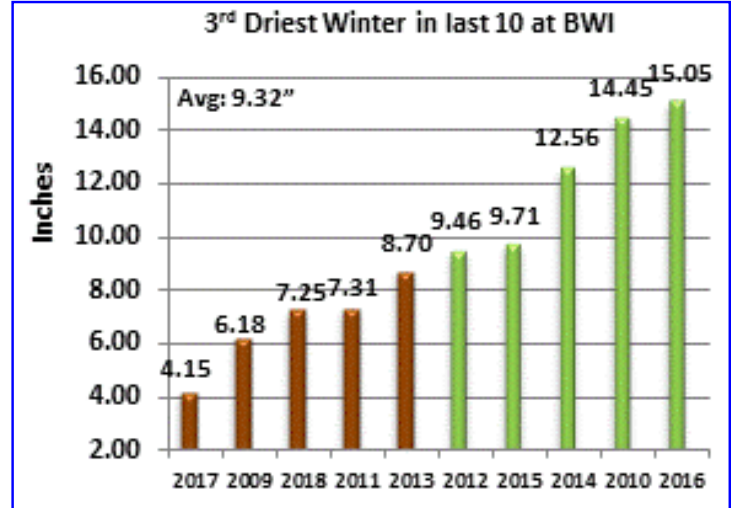
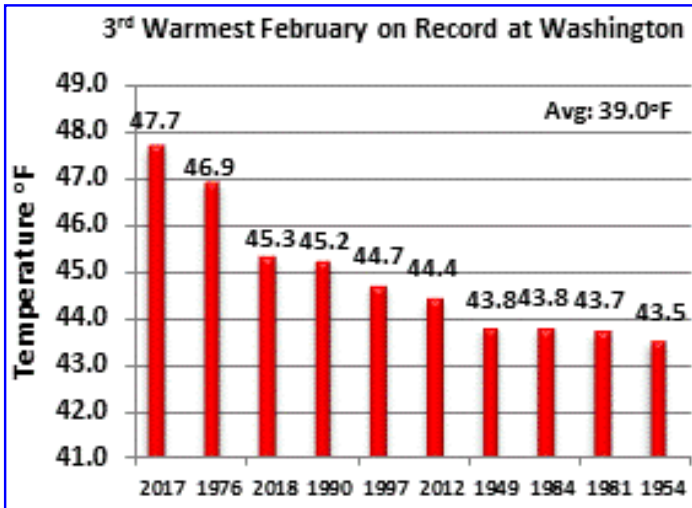


# PRESTO

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



## FEBRUARY 2018: Warm and Wet with Little Snow WINTER: One Intense Cold Wave, No Major Snowstorms



### February Highlights

- Well above normal temperatures: +6.3°F at DCA (3<sup>rd</sup> warmest on record), +6.0°F at BWI (12<sup>th</sup> warmest) and +6.2°F at IAD (2<sup>nd</sup> warmest)
- Early June-like temperatures on 20<sup>th</sup> and 21<sup>st</sup>: on the 20<sup>th</sup>, DCA's 78°F and IAD 77°F set daily records while BWI's 76°F equaled record for the date; on the 21<sup>st</sup>, DCA soared to a record 82°F, just 2°F shy of equaling its highest February temperature and earliest 80°F or greater on record; IAD's maximum of 80°F set an all-time February high temperature and was its earliest 80°F or greater on record; BWI's daily maximum of 79°F set a daily record
- IAD's minimum of 59°F on 21<sup>st</sup> was its all-time warmest minimum reading in February
- Precipitation was well above normal across the area: DCA, 4.79" (+2.17"), wettest since 2003; BWI, 5.30" (+2.40") and IAD, 4.60" (+1.86"), wettest since 2010
- On the 10<sup>th</sup>-11<sup>th</sup>, the area was drenched with torrential rainfall in some locations: 3.95" in Spotsylvania, VA, and 3.14" in Fredericksburg, VA, flooding roads in Ripley (Charles County) and near Crownsville (Anne Arundel County), MD, and in Stafford, VA; DCA recorded 2.11" for the event and a daily record 1.06" on the 10<sup>th</sup>, BWI's measured 2.09"

### Winter Seasonal Highlights

- Above normal seasonal temperatures for the 3<sup>rd</sup> consecutive year: DCA, +1.9°F; BWI, +1.9°F; and IAD, +1.3°F
- Subnormal seasonal snowfall at all three major airport: DCA, -9.3", BWI, -9.1" and IAD, -11.8"
- Subnormal seasonal precipitation at all three major airport: DCA, -2.25", BWI, -2.07" and IAD, 1.22"
- Extended cold wave from December 27 through month's end and into 2018 with near to subfreezing temperatures; on the 28<sup>th</sup>; BWI's maximum of 24°F and minimum of 10°F equaled the daily record; IAD 23°F maximum set a daily record low maximum reading
- Very dry December with monthly totals of 0.50" at DCA; 0.95" at BWI and 0.77" at IAD; 5<sup>th</sup> driest in Washington and driest since 1965; 8<sup>th</sup> driest at BWI and driest since 1985; 3<sup>rd</sup> driest at IAD and driest since 1980
- Brutally cold first week of January with the average temperature at BWI a record 15.2°F, breaking the previous record by more than 3°F; Washington's average temperature was its 4<sup>th</sup> coldest on record at 19.0°F and coldest since 1918; IAD recorded a record cold first week at 15.3°F
- DCA and IAD reported 8 days in January with highs 60°F or greater, including a calendar day record 63°F at IAD on the 21<sup>st</sup>; BWI recorded 6 such days
- Very dry conditions in January with an inch or less of liquid of precipitation at DCA and BWI, resulting in the 4<sup>th</sup> driest January on record in Washington and 6<sup>th</sup> driest in Baltimore
- On January 4, Southern Maryland was impacted by a coastal snowstorm with highest totals 6.3" near Callaway (St. Mary's County) and 5.0" near Prince Frederick (Calvert County); strong winds followed the storm with gusts to 57 mph near Clarksburg (Montgomery County), MD, and 51 mph near Bull Run (Prince William County), VA

## February 2018

**Temperature:** In a repeat of 2017, February featured well above normal temperatures. Positive departures were +6.3°F at DCA, +6.0°F at BWI and +6.2°F at IAD. While 2017 broke records, 2018 was the 3<sup>rd</sup> warmest in Washington, 12<sup>th</sup> warmest in Baltimore and second warmest at IAD. All three airports recorded 8 days with highs at or above 60 °F. Most notable were the record high temperatures on the 20<sup>th</sup> and 21<sup>st</sup>, more typical of early June than February. On the 20<sup>th</sup>, DCA's 78°F and IAD 77°F set daily records, while BWI's 76°F equaled a record for the date. Even warmer readings occurred the following day when DCA soared to a record 82°F, just 2°F shy of equaling its highest February temperature and earliest 80°F or greater on record. IAD's maximum of 80°F set an all-time February high temperature and the airport's earliest 80°F or greater on record; BWI's daily maximum of 79°F set a daily record. Minimum readings at all three airports also set daily records on the 21<sup>st</sup>: IAD's 59°F was its warmest minimum on record in February, DCA's minimum was 56°F, BWI 52°F. Earlier in the month on the 15<sup>th</sup>, highs reached 74°F and IAD set a daily record at 76°F.

Despite the exceptionally warm temperatures, the first third of the month featured subnormal readings. DCA recorded 4 days with highs in the 30s BWI and IAD, 5 such days. Minimum temperatures plummeted into the teens at DCA and BWI on the 2<sup>nd</sup> and 3<sup>rd</sup> and as low as 9°F at IAD on the 3<sup>rd</sup>.

**Precipitation:** For the first month since August 2017, precipitation was above normal across the area alleviating the severe drought conditions declared at the beginning of the month. Monthly totals were well above normal: DCA 4.79" (+2.17"); BWI 5.30" (+2.40") and IAD 4.60" (+1.86"). It was the wettest February at DCA since 2003 and at IAD since 2010. Despite numerous days with measurable rainfall, 17 at IAD and 15 at DCA and BWI, only two storm systems produced precipitation totals greater than one inch of liquid precipitation. The first event occurred on the 4<sup>th</sup>, starting briefly as wet snow before changing to rain. Greatest amounts included 1.42" in Warrenton, (Fauquier County), VA, and Long Green (Baltimore County), MD. Airport totals were 1.19" at BWI, 1.13" at IAD and 1.12" at DCA. This was the first event with greater than 1 inch of precipitation since November 7 at DCA and BWI and since October 29 at IAD. The exception was across far northern Maryland where snow transitioned to an extended period of freezing rain totaling 0.4" in Thurmont (Frederick County), MD. Just 3 days later, Thurmont measured an additional 0.5" of ice from another storm system.

The second significant rainfall occurred on the 10<sup>th</sup>-11<sup>th</sup> when torrential rainfall drenched some locations including 3.95" in Spotsylvania, VA, and 3.14" in Fredericksburg, VA. Roads were flooded in Ripley (Charles County) and near Crownsville (Anne Arundel County), MD, and in Stafford, VA. DCA recorded a storm total of 2.11" and a daily record of 1.06" on the 10<sup>th</sup>, BWI's event total was 2.09". Although snowfall totals were below normal, a storm system on the 17<sup>th</sup> provided the majority of the month's total with 4.1" in Damascus (Montgomery County), MD, and 3.1" in Bluemont, (Loudoun County), VA. Interestingly, this was the first occurrence of measurable snowfall in Washington (0.2") sandwiched between 2 days with maximum temperatures above 70° F (15<sup>th</sup> and 20<sup>th</sup>) since March 20, 1990 according to reports.

### February 2018 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)				
	AvMx	AvMin	AvgT	NmIT	DepNml	Max	Min	Total	Nml	DepNml	Snow	Year to Date
National (DCA)	53.6	37.0	45.3	39.0	+6.3	82/21	17/3	4.79	2.62	+2.17	0.2	5.73
Baltimore (BWI)	51.2	32.5	41.8	35.8	+6.0	79/21	12/3	5.30	2.90	+2.40	2.2	7.70
Dulles (IAD)	51.9	32.9	42.4	36.2	+6.2	80/21	9/3	4.60	2.74	+1.86	1.6	6.46

**Winter (Dec-Feb) Temperatures:** Despite an intense cold wave from December 27-January 7, the season featured above normal temperatures, due to well above normal February readings: DCA, +1.9°F; BWI, +1.9°F; and IAD, +1.3°F. It was the 3<sup>rd</sup> consecutive winter season at DCA, BWI and IAD with above normal temperatures. December started the season cold. The last week of the month was particularly frigid. An Arctic blast pushed maximum readings near or below freezing with readings in the 20s, setting numerous records. The Arctic blast continued into the first week of January resulting in BWI's average temperature for the week a record low 15.2°F, breaking the previous record by more than 3 degrees. Washington's average temperature was its coldest since 1918. Wind chill values reached -9°F near Midland (Fauquier County), VA, on the 1<sup>st</sup>; -19°F near Sabillasville (Frederick County), MD, on the 2<sup>nd</sup> and -17°F near Germantown (Montgomery County), MD, on the 5<sup>th</sup>. In a pattern shift, on January 12, IAD soared to a record tying 70°F and a calendar day record 63°F on the 21<sup>st</sup>. February was warm. (See monthly summary above.)

**Winter Precipitation:** After very dry conditions in December and January, February turned wet, relieving severe drought conditions. Seasonal precipitation recovered but still was below normal: DCA, 8.48" (-2.25"), BWI, 7.25" (-2.07"), IAD, 7.16" (-1.22"). Snowfall was below normal at all three major airports: DCA, 4.3" (-9.3"), BWI, 8.7" (-9.1) and IAD, 6.6" (-11.8"). December started the season dry. The season's first snow event occurred on December 9 when 2"-3" fell in the D.C. suburbs with higher amounts across northern Maryland: 6.5" in Westminster (Carroll County) and across southern Maryland in Ridge (St. Mary's County); 6.0" in Bentley Springs and in Dunkirk (Calvert County). Wind gusts clocked 48 mph in Upper Marlboro, (Prince Georges County), MD, on December 23 and 55 mph in Lovettsville (Loudoun County), VA, on the 25<sup>th</sup>. January also was dry with two significant events. On January 12-13, 2.66" fell near Front Royal, (Warren County), VA; 2.15" near Thurmont (Frederick County), MD, and 1.46" at IAD. On the 28<sup>th</sup>-29<sup>th</sup>, Front Royal received another good soaking, 1.60". Heavy rain was also observed across southern Maryland with 1.21" near Park Hall (St. Mary's County). The metro area saw little winter weather in January but Southern Maryland was hit by a coastal storm on the 4<sup>th</sup> bringing 6.3" near Callaway (St. Mary's County) and 5.0" near Prince Frederick (Calvert County). Wind gusts to 57 mph were measured near Clarksburg (Montgomery County), MD, and 51 mph near Bull Run (Prince William County), VA. February was wet (see monthly summary above).

### Winter 2018 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	AvMx	AvMin	AvgT	NmIT	DepNml	Max	Min	Total	Nml	DepNml	Snow
National (DCA)	48.2	31.9	40.1	38.2	+1.9	82/2-21	8/1-7	6.23	8.48	-2.25	4.3
Baltimore (BWI)	45.9	27.0	36.4	35.1	+1.3	79/2-21	1/1-7	7.25	9.32	-2.07	8.7
Dulles (IAD)	46.5	26.6	36.6	35.3	+1.3	80/2-21	-1/1-7	7.16	8.38	-1.22	6.6

**Looking Ahead to March**—a month of extremes. Below is a list of some notable March statistics for Washington since 1871.

Temperature Extremes			Precipitation Extremes		
Coldest: 1885	Avg. Temp.: 34°F	Dep. Nml.: -12°F	Wettest: 1891	Tot. Prec.: 8.84"	Dep. Nml.: +5.36"
Warmest: 2012	Avg. Temp.: 56.8°F	Dep. Nml.: +9°F	Driest: 2006	Tot. Prec.: 0.05"	Dep. Nml.: -3.43"
Extreme Minimum: 4°F (March 4, 1873)			Snowiest: 1914	Tot. Snowfall: 19.3"	Dep. Nml.: +18.0"
Extreme Maximum: 93°F (March 23, 1907)			Most precipitation in one day (liquid): 2.79" (March 9, 1881)		
Most days with: lows < 32°F: 24 (1960); highs > 90°F: 3 (1907)			Most snowfall in one day: 11.3" (March 29, 1942)		