

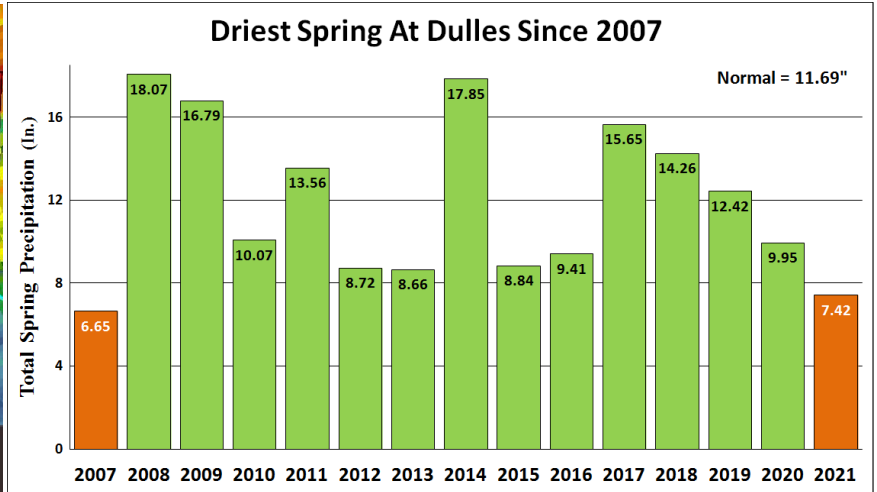
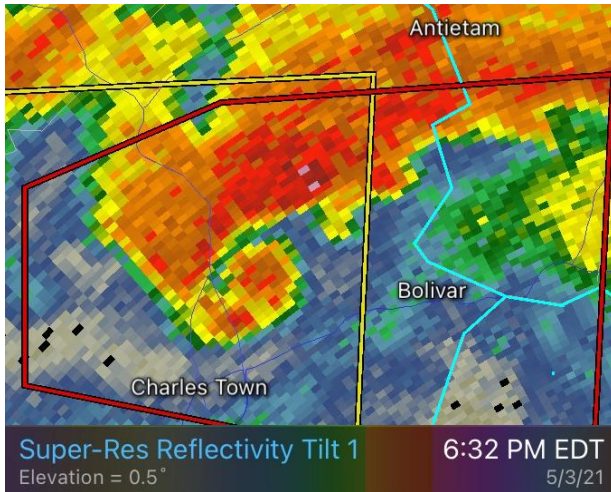


PRESTO

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



MAY 2021: 4 Tornadoes on 5/3, Otherwise Near Normal SPRING: Rather Warm, Dry South+West of Metro Areas



May Highlights

- ☁ Slightly below to near normal **temperatures**: DCA 66.1°F (-1.1); BWI 64.0°F (-0.4); IAD 62.7°F (-1.3)
- ☁ Late-month heat tied 3 records...on 23rd: DCA's max min (74°F), IAD's max (92°F) ... and on 26th: IAD max (92°F)
- ☁ A few days later several record min max's: BWI on the 29th (56°F), and 30th (57°F); IAD on the 30th (57°F)
- ☁ Near to below normal **precipitation**: DCA 3.77" (-0.17); BWI 3.63" (-0.22); IAD 2.87" (-1.85)
- ☁ 3rd: Two supercells produce four tornadoes: EF1 injures 1 in Ranson (Jefferson Co.), WV; EF1 near Mt. Pleasant; EF1 near Uniontown (both in Frederick Co.), MD; and an EF0 near New Windsor (Carroll Co.), MD
- ☁ 4th: Storms continue - large hail and flooding in mountains; extensive wind damage DC metro and south
- ☁ 26th: Thunderstorms bring widespread wind damage to the entire region and marginally-severe hail to MD
- ☁ 28th-30th: Potent Nor'Easter-type storm system's heavy rains total 2-3" over much of southern MD

Spring Seasonal Highlights

- ☁ Warm March led to slightly above normal **temperatures**: DCA 58.5°F (+0.8); BWI 56.4°F (+1.8); IAD 55.5°F (+1.1)
- ☁ Near to well below normal **precipitation**: DCA 9.77" (-0.88); BWI 9.60" (-1.65); IAD 7.42" (-4.27)
- ☁ The area basked in record warmth on March 11th: DCA, BWI and IAD each set daily record highs of 79°F
- ☁ Heavy rain fell March 24th across the metro areas and east. DCA and BWI hit daily rainfall records of 1.55" and 1.69", respectively; and also set daily record warm minimums of 54°F and 53°F, respectively
- ☁ DCA had 4 days in March with 50+ mph peak wind gusts, the most of any month in at least the last decade
- ☁ Late season snow reaches the MD Piedmont on April 1st, accumulating at higher elevations: 0.3" near both Damascus (Montgomery Co.) and Millers (Carroll Co.), with 0.1" of graupel at Pimlico (Baltimore City)
- ☁ Third driest April since 2010 at DCA and IAD, as both sites finished with slightly more rain than their 2012 and 2016 counterparts

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May & Spring Season 2021

May Temperatures: Several warm days during the 20th-27th helped to offset an otherwise generally cool month: DCA 66.1°F (-1.1); BWI 64.0°F (-0.4); IAD 62.7°F (-1.3). First 90° days were hit at DCA, BWI, and IAD on the 20th, 22nd, and 23rd, respectively. DCA's low of **74°F** on 5/23 tied a record high, while IAD's highs of **92°F** on 5/23, 5/26 were both records. Soon after, northeasterly flow brought anomalous chill, as BWI's high of **56°F** on 5/29, and the 5/30 highs of **57 °F** at both BWI and IAD were all record lows.

May Precipitation and Severe Weather: The 7-9 days of 0.01-0.49" rain at the 3 airports left totals short of normal for this often wettest month of the year: DCA 3.77" (-0.17), BWI 3.63" (-0.22), IAD 2.87" (-1.85). **Four tornadoes** were spawned the evening of the 3rd, an **1) EF-1** tornado in Ranson (Jefferson Co.), WV injured 1 when lumber warehouses were heavily damaged, with peak winds of 90 mph, length 1.8 miles, and a max width of 125 yards (see radar image of the parent supercell's hook echo on page 1). A second supercell then spawned three more tornadoes without any casualties: **2) Mt. Pleasant (Frederick Co.), MD EF-1** (90 mph, 0.8 miles, 200 yards), **3) Unionville, MD (Frederick Co.), MD EF-1** (90 mph, 0.7 miles, 150 yards), and **4) New Windsor (Carroll Co.), MD EF-0** (80 mph, 0.2 miles, 75 yards). All told ~180 trees were uprooted/snapped, several large sheds destroyed and a trailer pushed over. **3.41"** of rain was reported near Middletown (Frederick Co.), MD. The 4th featured more widespread storms, with several reports of large hail and flooding closing roads across the Virginia mountains, as well as dozens of downed trees around/south of the DC Metro, especially along the lower Potomac River, including a gust of **67 mph** near Tompkinsville (Charles Co.), MD. **2.50"** of rain was recorded near Amissville (Culpepper Co.), VA.

The middle two weeks of the month were dry, with the longest March streak without measurable rain on record at IAD (16 days, 2nd-17th), before the 26th when storms downed many trees and power lines, especially in Winchester, VA and Fort Washington (Prince George's Co.), MD where one person was injured when a tree fell on a home. Quarter-size (**1.00"**) hail also fell on Howard Co., MD and Prince William Co., VA; with rainfall reports of **1.63"** near Mantua (Fairfax Co.), VA and **1.43"** in Fort Washington, MD. Soaking rains on the 28th-30th from a slow-moving coastal system restored both monthly and seasonal precipitation totals to near normal levels for many locations, with **3.70"** at Mustoe (Highland Co.), VA; **3.13"** near Huntingtown (Calvert Co.), MD; **2.37"** at the SW Waterfront, DC; and **1.84"** and **1.60"** at DCA and BWI, respectively, which was their greatest storm total since 11/30/2020.

May 2021 Weather 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	Year To Date
National (DCA)	76.5	55.7	66.1	67.2	-1.1	94/23	44/8	3.77	3.94	-0.17	16.36
Baltimore (BWI)	76.7	51.2	64.0	64.4	-0.4	95/23	40/13	3.63	3.85	-0.22	16.60
Dulles (IAD)	75.5	50.0	62.7	64.0	-1.3	92/23,26	39/8,14,15	2.87	4.72	-1.85	13.58

Spring (Mar-May) Temperatures: A very mild March drove seasonal averages slightly above normal: DCA 58.5°F (+0.8); BWI 56.4°F (+1.8); IAD 55.5°F (+1.1). The 3 airports each had a record high of **79°F** on 3/11, and then reached the low-mid 80s on 3/26. IAD saw both late-season freezes on 4/22 and 4/23, and record highs tied on 4/28 (**88°F**) and 4/29 (a maxi-min of **65°F**).

Spring (Mar-May) Precipitation and Severe Weather: Despite substantial rains in late May, seasonal totals were below normal, reflecting the dry spring: DCA 9.77" (-0.88); BWI 9.60" (-1.65); IAD 7.42" (-4.27). March 2021 had no measurable rain at the 3 airports from the 2nd-17th, the longest such March period since 2006 at DCA and BWI, and since 1986 at IAD. It was only the fourth March since 1985 with no snow across most of the region. 3/24's heavy rain dropped **2.60"** in Pleasant Hills (Harford County), MD, while DCA and BWI had daily records. A widespread synoptic wind event hit on 4/29-30, with **58+ mph** wind gusts in 17 counties, including **66 mph** along Baltimore's Francis Scott Key Bridge. One fatality occurred near Rowley Springs (Rockingham Co.), VA when a large branch fell on a vehicle, and 3 were injured in North Bethesda (Montgomery Co.), MD when a tree fell on I-495.

Spring 2021 Weather 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	Snow
National (DCA)	68.7	48.2	58.5	57.7	+0.8	94/5-23	28/3-5,7	9.77	10.65	-0.88	0.0
Baltimore (BWI)	68.1	44.6	56.4	54.6	+1.8	95/5-23	22/3-7,8	9.60	11.25	-1.65	T
Dulles (IAD)	67.7	43.3	55.5	54.4	+1.1	92/5-23,26	18/3-7	7.42	11.69	-4.27	T

Looking Ahead: Will summer temperatures also trend warmer than normal? Here's a look back at the most recent 10 years when spring temperatures were above normal at DCA and corresponding summer average temperatures. (Summer normal = 78.9°F).

Year	1991	2000	2004	2010	2012	2015	2016	2017	2019	2021
Spring	60.0	58.4	59.3	60.4	62.2	59.3	58.1	58.8	60.1	58.5
Summer	79.4	74.8	75.9	81.3	80.4	79.6	80.5	78.8	79.5	??