

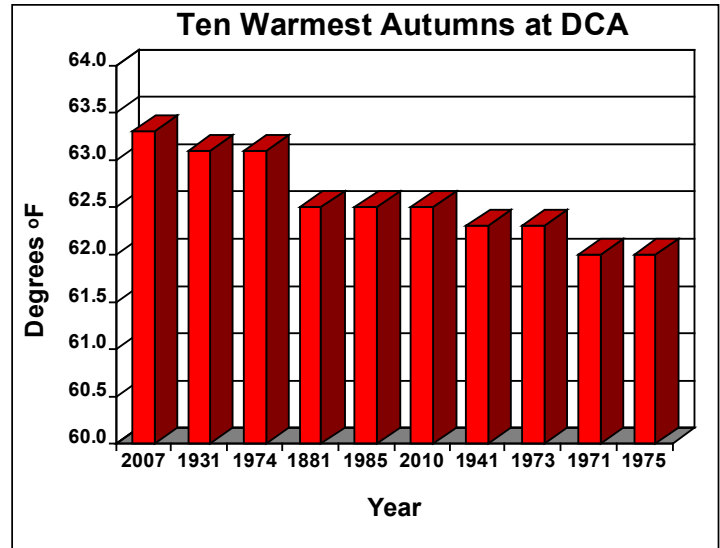
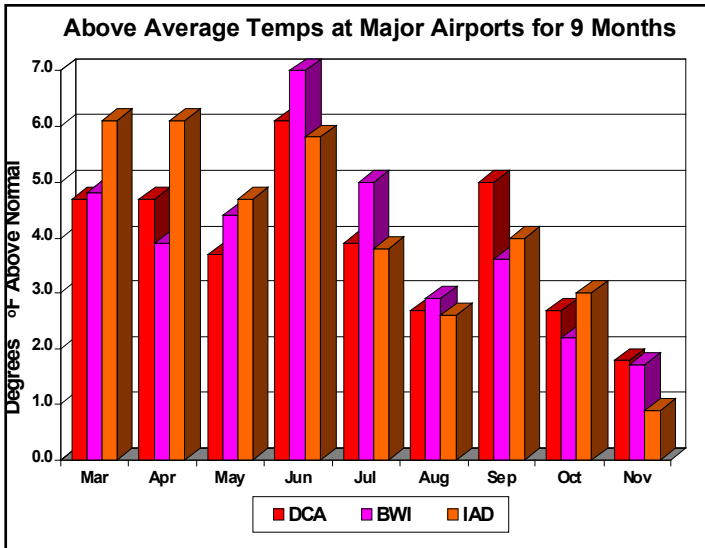


PRESTO



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

Autumn: Above Normal Temps; 4th Warmest in Washington November: Above Normal Temps; Severe Weather Event



November Highlights

- ✦ Above normal temperatures at DCA, 1.8°F; BWI, +1.7°F; and IAD, +0.9°F
- ✦ First freeze at IAD on 1st; BWI on 2nd and DCA on 29th
- ✦ DCA recorded 274 freeze free days (2/28-11/28); 1 day short of record set in 1980
- ✦ Seven of past eight Novembers observed above normal readings at all three major airports
- ✦ Below normal rainfall across area with most areas receiving 2"-3" totals
- ✦ Soaking rain on 4th with well over an inch in many locations, including 1.44" at DCA and 1.22" at BWI
- ✦ EF-1 tornado with winds to 100 mph struck Hamilton section of Baltimore and Parkville, Baltimore County, early morning on 17th, resulting in three injuries and property damage; straight-line wind damage from strong to severe thunderstorms across area with downed trees and wires, and loss of power in some locations

Autumn Highlights

- ✦ Above normal temperatures at DCA, 3.1°F; BWI, +2.5°F; and IAD, +2.3°F
- ✦ Tied for 3rd warmest on record at DCA and warmest autumn on record at IAD
- ✦ IAD recorded 9 out past 10 autumns with above normal temperatures; DCA and BWI, 8
- ✦ Above normal rainfall across area with positive departures of +1.60" at DCA, +2.99 at BWI, and 1.05" at IAD
- ✦ In September, DCA and IAD recorded 9 days and BWI 7 days with highs at or above 90°F, most since 1998 at DCA and BWI, since 2007 at IAD
- ✦ On Sept. 24, record 99°F at DCA and 97°F at IAD; hottest readings on record so late in a calendar year
- ✦ Record rainfall on Sept. 30: totals of 6.02" at BWI, 2nd greatest total of any calendar day; 4.66" at DCA and 4.74" at IAD, 3rd greatest in September at both locations. Rainfall totals over a foot across parts of southern Maryland and 4"-8" across most of metro area resulted in road closures
- ✦ On Sept. 30, EF-0 (winds to 80 mph) tornado near Lake Shore in Ann Arundel County with a maximum path of 200 yards, path length of 1 mile, snapped and uprooted trees, and caused some property damage
- ✦ Severe weather on the Sept. 22 with thunderstorm wind gusts up to 58 mph in Four Corners (Montgomery County), MD; hail up to 1.50" near Wintergreen (Nelson County), 1.0" in Purcellville (Loudoun County) VA, resulted in loss of power to 20,000 customers across the area, according to press reports
- ✦ Wettest September at BWI since 1999
- ✦ Three days in October with highs at or above 80°F including 88°F at DCA on 11th and record 86°F at IAD
- ✦ Hail to 0.88" and wind gusts to about 60 mph impact portions of Ann Arundel County on October 11

October 2010

Temperature: For the 9th consecutive month, temperatures averaged above normal at the three major airports. Positive departures were +1.8°F at DCA, +1.7°F at BWI and +0.9°F at IAD. For the first November since 1997, there were no 70°F or greater days, although maximum readings were in the 60s across the area on numerous dates. High temperatures held in the 40s at DCA on the 27th, at BWI on the 27th and 28th, and at IAD on the 4th and 27th-29th. Most locations that didn't experience a freeze in October did so on November 2, including BWI, which recorded 30°F. DCA did not record 32°F or less until the 29th, ending a streak of 274 days with above freezing readings.

Precipitation: Rainfall was slightly below normal across the Washington/Baltimore area. Totals included 2.22" (-0.81") at DCA, 2.04" at BWI (-1.08"), and 2.50" (-0.81") at IAD. Two major storm systems impacted the area. The first brought most of the month's rain to the area. A soaking rain developed during the evening of the 3rd and continued through the following day. Rainfall totals were over an inch in most locations, including 1.61" in Waldorf, MD (Charles County), 1.49" in Alexandria, VA (Fairfax County), and 1.44" at DCA.

The second major event occurred around midnight and during the early morning hours on the 17th when a severe weather event lashed the region. A line of fast moving thunderstorms caused wind damage knocking down trees and causing power outages across the area. Baltimore City and County were hit by an EF-1 tornado (winds up to 100 mph), which struck the Hamilton section of Baltimore and Parkville in Baltimore County. The tornado, which had a maximum path width of 250 yards and a length of 0.4 miles, resulted in three injuries and caused property damage to an apartment complex and a shopping center. The area was also impacted by straight line wind damage from the thunderstorms. In the Windsor Forest area of Stafford County, VA, a 20" diameter pine tree fell onto a home and car; power lines were downed in Beverly Forest (Fairfax County); roof damage occurred to a retail store in the Brentwood area of Washington, D.C.; and a small plane was damaged at an airport in South Down Shores, (Ann Arundel County), MD.

November also featured strong winds on the 17th, with gusts to 53 mph near Manahan Ranch, (Frederick County), MD. Finally, a few locations received the first brush of winter with sleet reported during the early morning hours of the 25th, including DCA.

NOVEMBER 2010 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)				Extreme/Day			Precipitation (Inches)			
	AvMx	AvMn	AvgT	NmlT	DepNml	Max	MinT	Total	Norm	DepNml	Yr to Date
National (DCA)	59.2	41.7	50.5	48.7	+1.8	69/23	32/29	2.22	3.03	-0.81	33.00
Baltimore (BWI)	57.5	36.9	47.2	45.5	+1.7	66/12,23	25/29	2.04	3.12	-1.08	41.51
Dulles (IAD)	57.1	35.2	45.2	46.1	+0.9	65/13,20	22/29	2.20	3.01	-0.81	37.33

Autumn (September-November) Temperatures: Above normal temperatures were recorded at the three major airports. Positive departures were 3.1°F at DCA, +2.5°F at BWI and +2.3°F at IAD. The season was tied for the 4th warmest on record at DCA (see cover) and 9th autumn since 2001 with above normal readings at IAD. September set numerous heat records. DCA and IAD recorded 9 days at or above 90°F, and BWI, 7 days, setting records for number of 90°F+ readings for the calendar year. Numerous other heat records were established: On the 8th, IAD tied a record high, 93°F. A 4-day heat wave, from the 22nd-25th, broke additional records at all three major airports. IAD tied another record when it reached 94°F on the 22nd and 93°F on the 23rd. DCA's maximum reading of 99°F and IAD 97°F were the hottest temperatures observed on record for those dates. On the final 90°F day of 2010, Sept. 25, IAD set yet another record with a high of 93°F and a record high minimum of 68°F; DCA's low also was a record high minimum: 74°F. October temperatures continued above normal. On 3 days (9th, 11th, 12th), highs soared above 80°F, including a summer-like 88°F at DCA on the 11th and a record high of 86°F at IAD. On the next day, IAD tied another record high, 83°F. A warm and humid air mass during the final week of the month resulted in record high minimum readings at the three major airports. On the 28th, the airports each set new record high minimums: DCA, 68°F; BWI, 67°F; IAD, 65°F. The previous day, record high minimums were equaled at DCA (63°F), BWI (62°F) and set at IAD (61°F). November continued warm, see monthly summary above.

Autumn Precipitation: Rainfall was above normal across the area, with between 11"-14" at the three major airports. Seasonal totals were 11.64 (+1.60") at DCA, 13.25" (+2.99) at BWI and 11.55" (1.05") at IAD. Most of September featured very dry conditions but the month ended with record rainfall, resulting in well above normal precipitation. The final days of the month featured a tropical moisture plume beginning on the 29th and ending on the 30th followed by more heavy rain from the remnants of Tropical Storm Nichole. September's major severe weather event occurred on the 22nd when severe thunderstorms rolled through many locations accompanied by damaging wind gusts up to 58 mph in Four Corners (Montgomery County), MD, resulting in reported power loss to about 20,000 users across the area and hail up to 1.50" near Wintergreen (Nelson County). October rainfall was near to below normal. The majority of the monthly precipitation occurred during three events, each resulting in more than inch of rain in some locations. The month's final significant rainfall on October 27 again brought some locations more than 1 inch of rain resulting in flash flooding near Ilda (Fairfax County), VA, and a water spout off Rock Point, MD. Severe weather in October occurred on the 11th with hail up to 0.88" in Gibson Island, (Anne Arundel County), and thunderstorm winds gusting to about 60 mph in Indian Village, MD. November observed subnormal rainfall, see monthly summary above.

AUTUMN 2010 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (Inches)		
	AvMx	AvMn	AvgT	NmlT	DepNml	Max	MinT	Total	Norm	DepNml
National (DCA)	71.6	53.3	62.5	59.4	+3.1	99/9-24	32/11-29	11.64	10.04	+1.60
Baltimore (BWI)	69.4	47.8	58.6	56.1	+2.5	95/9-1,9-24	25/11-29	13.25	10.26	+2.99
Dulles (IAD)	70.0	47.0	58.1	55.8	+2.3	97/9-24	22/11-29	11.55	10.50	+1.05

Looking Ahead to December: How much snow? Five of past eight Decembers have recorded above normal snowfall across the region with last year exceptional snowy. Here is a look at the past 10 years. Normal DCA December snowfall is 1.5".

Year	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
December Snowfall	16.6"	Trace	2.6"	Trace	4.8"	0.1"	6.2"	7.1"	0.0"	2.0"