

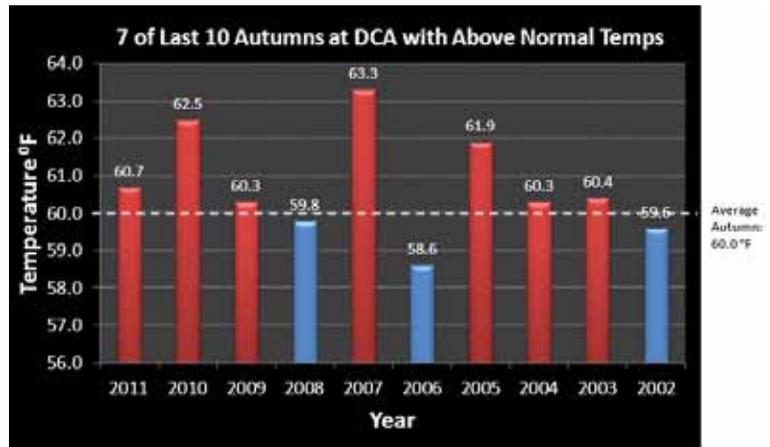
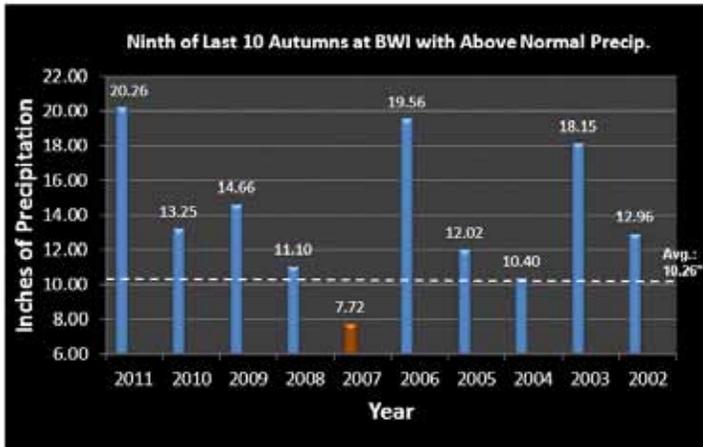


PRESTO

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



NOVEMBER 2011: Consistently Warm, Drier Than Normal AUTUMN: Above Normal Temperatures & Precipitation



November Highlights

- ✦ Above normal temperatures across the area: +2.8°F at DCA, +4.0°F at BWI and +2.7°F at IAD
- ✦ Average maximum temperature at BWI, 63.4°F; warmest since 2001; 5th warmest on record
- ✦ Record maximum of 70°F at IAD on 27th
- ✦ IAD recorded 19 days with highs at or above 60°F; 2nd greatest total and most since 2001
- ✦ Subnormal rainfall across the region: Airport totals: 1.94" at DCA; 2.45" at BWI and 2.18" at IAD
- ✦ Driest month since May at BWI and since June at DCA and IAD
- ✦ Soaking one inch rainfall on 22nd-23rd across metro area with much greater totals across northern Maryland including 3.43" near Libertytown (Frederick County) and 3.31" near Taneytown (Carroll County). resulting in numerous road closures from flooded roads

Autumn Highlights

- ✦ Above normal temperatures across the area: DCA, +0.7°F; BWI, +2.0°F; IAD, +1.2°F
- ✦ Seven of past 10 years with above normal autumn temperatures at all three airports
- ✦ Well above normal rainfall across the area: DCA, 14.26", (+4.40"); BWI, 20.26", (+9.60"); IAD, 14.59", (+4.01")
- ✦ Wettest autumn since 1955 at Baltimore; since 2006 at DCA and IAD
- ✦ Above normal precipitation at BWI for 9th of past 10 Autumn seasons; 8th out of past 10 autumns at DCA and IAD
- ✦ Wettest September and 3rd wettest month on record at BWI; wettest September since 1999 at DCA and IAD and 5th wettest month on record at both locations
- ✦ Torrential rainfall drenched area from Sep. 5-9, largely from remnants of Tropical Storm Lee: 5"-8" total rainfall across most of the metro area with some locations recording more than a foot, including parts of Fairfax, VA; in Maryland, Baltimore County, MD, had close to a foot; significant flash flooding from excessive rainfall on saturated soils led to flooded roads, homes and businesses; four fatalities in area from record rainfall; about 100 residents had to leave their mobile home park in Prince William County, VA, due to flooding; closed parts of I-66 and the Capital Beltway
- ✦ Five EF-0 tornadoes in N. Virginia on Oct. 13 resulted in tree and property damage; wind speeds up to 80 mph during the Aquia Harbor (Stafford County) tornado; 3" to more than 4" of rainfall across portions of N. Virginia
- ✦ Rare early winter storm on Oct. 29 with nearly a foot of snow across northern Maryland and across portions of the Shenandoah; over 5" in portions of Loudoun County (5.7" near Bluemont, VA) and Baltimore County (5.5" near Lineboro, MD); daily record 0.6" at IAD and trace at DCA, BWI, earliest in season at DCA, BWI and IAD since October 10, 1979

November 2011

Temperatures: The final month of meteorological autumn featured above normal temperatures. Positive departures were +2.8°F at DCA, +4.0°F at BWI, and +2.7°F at IAD. The month featured consistently above normal readings. DCA and BWI recorded 20 days with highs at or above 60°F, IAD, 19 such days. BWI observed 5 days with highs at or above 70°F, DCA and IAD, 3 such days. The 18th was the only day when maximum readings stayed in the 40s. Minimum readings also were relatively mild; on the 15th, DCA and BWI observed a balmy low of 57°F and IAD, 56°F. The minimum readings for the month were 26°F on the 19th at BWI and 27°F on the 6th and 18th at IAD. DCA's minimum temperature remained above freezing throughout the month.

Precipitation: Subnormal rainfall was observed throughout the region with amounts generally between 2"-3", except across Northern Maryland, which had greater totals. The major airports measured 1.94" (-1.23") at DCA, 2.45" (-0.85") at BWI and 2.18" (-1.23") at IAD. November was driest month since May at BWI and since June at DCA and IAD. The first half of the month featured little rainfall with only .06" recorded at DCA and BWI and .12" at IAD. Three storm systems impacted the area the remainder of the month. Rainfall on the 15th-16th brought about ½" to the local area; however, portions of Southern Maryland received much greater amounts, including 2.08" in Ridge (St. Mary's County). The month's most significant rainfall occurred on the 22nd-23rd when more than 3 inches fell across portions of Frederick and Carroll Counties, MD, while the majority of the I-95 corridor recorded at least an inch. Strong winds behind the storm gusted to 54 mph near Flint (Frederick County), MD, and to 49 mph in Reston (Fairfax County), VA. The final rainfall of the month occurred on the 29th when about another ½ inch of rain was recorded across the region. The area measured no snowfall in November.

November 2011 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (Inches)			
	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Norm	DepNml	Yr to Date
National (DCA)	61.5	43.3	52.4	49.6	+2.8	73/14	33/12	1.94	3.17	-1.23	41.99
Baltimore (BWI)	62.0	39.1	50.5	46.5	+4.0	74/14	26/19	2.45	3.30	-0.85	52.02
Dulles (IAD)	60.7	37.5	49.1	46.4	+2.7	73/14	27/6,18	2.18	3.41	-1.23	41.74

Autumn (September-November) Temperatures: Seven of past 10 years observed above normal autumn temperatures at all three airports. Positive departures were +0.7°F at DCA, +2.0°F at BWI, and +1.2°F at IAD. September started the season with slightly above normal temperatures. There were no periods of excessive heat keeping temperatures above 90°F across the area. October started cold with the first 3 days mainly in the 50s. Record low maximum readings were tied or broken on Oct 2-3 at the three major airports. The month then warmed up. On Oct. 9-10, many areas were at or above 80°F, including 85°F on the 10th at BWI. October ended as it began, cold. On Oct. 29, additional record low maximum readings were observed including 42°F at DCA and BWI, and 39°F at IAD. The season's first freeze occurred on the 30th at BWI (31°F) and at IAD (30°F). November observed above normal readings.

Autumn Precipitation: Well above normal seasonal totals were recorded across the region with about 15"-20" at the three major airports. It was the wettest autumn since 1955 at Baltimore, and since 2006 at DCA and IAD. The season's heaviest rainfall occurred during September. BWI observed its wettest September and its 3rd wettest month on record. It was the wettest September since 1999 at DCA and IAD and the 5th wettest month on record at both airports. September featured a 5-day stretch (5th-9th) of exceptionally heavy rainfall that included tropical downpours from the remnants of Tropical Storm Lee, resulting in extensive flooding in some areas. There were four fatalities and about 100 people were left homeless from rising waters in a mobile home park in Prince William County, VA. Portions of Ellicott City were evacuated due to rising waters. The event also included EF-0 tornadoes near Wicomico (Charles County) and Callaway in St. Mary's County. Peak winds reached 80 mph with tree and property damage reported. On Sep. 11-12, isolated severe weather occurred resulting in 1.0" hail at BWI and thunderstorm wind damage near Stanardsville, VA (Greene County). October rainfall was near normal with four significant storm systems impacted the region. On Oct. 13, Northern Virginia was impacted by five EF-0 tornadoes, causing tree and property damage. A significant winter storm impacted the area on Oct. 29. The storm began as a soaking rain then changed to wet snow, first in the northern and western suburbs in the morning, then across most of the area in the afternoon. The combination of above freezing temperatures and lighter snowfall during the afternoon resulted in a trace of snow across the immediate metro area, including DCA and BWI. It was the earliest snowfall at the three major airports since October 10, 1979. A daily record 0.6" was measured at IAD. Much greater totals occurred well north and west, including 11.5" in Sabillasville (Frederick County). The greatest totals in Virginia included 9.0" in Skyland (Madison County). November was dry.

Autumn 2011 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (Inches)			
	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Norm	DepNml	Snow
National (DCA)	68.5	52.8	60.7	60.0	+0.7	83/9-10	32/10-29	14.69	10.29	+4.40	T
Baltimore (BWI)	68.5	49.1	58.8	56.8	+2.0	88/9-14	26/11-19	20.26	10.66	+9.60	T
Dulles (IAD)	67.4	48.0	57.7	56.5	+1.2	88/9-4,14	27/11-6,18	14.59	10.58	+4.01	0.6

Looking Ahead to December: How much snow? Last year was slightly below normal based on the 1970-2000 data. Here is a look at the past 10 years of snowfall at DCA. Normal DCA December snowfall is 2.3".

Year	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
December Snowfall	2.1"	16.6"	Trace	2.6"	Trace	4.8"	0.1"	6.2"	7.1"	0.0"