

December 2009

Temperatures: For the 8th month in 2009, temperatures were below normal in Washington. Negative temperature departures were -1.6°F at DCA, -1.9°F at BWI and -0.8°F at IAD, marking the coldest December since 2005 at the three major airports. The month's warmest day was the 3rd when highs reached at or above 60°F at most locations including DCA's 65°F. DCA finally recorded its first subfreezing temperature of the season on the 6th (30°F), its latest occurrence since 2001. DCA recorded its first subfreezing day of the season on the 19th; many areas including BWI and IAD also observed readings at or below 32°F on the 30th. The month's coldest readings occurred on the 24th in many areas, including at IAD and BWI with minimums of 13°F and 14°F, respectively, while DCA's monthly minimum was 23°F on the 30th.

Precipitation: The month was excessively wet with monthly totals of 8.06" at BWI (+4.71"), it wettest on record; 6.79" at DCA (+3.74"); and 5.98" at IAD (+2.91"). The monthly highlight was an unprecedented snowstorm for December on the 18th-19th. The snow commenced during the mid evening hours on the 18th and continued for about 24 hours with moderate to heavy snow during the daytime hours on the 19th, accompanied by gusty winds at times. Total accumulations included 16.4" at DCA, 21.1" at BWI and 18.0" at IAD. The storm was tied with February 2003 as Washington's 6th greatest snowstorm (see cover graphic) and was the greatest December snowstorm recorded throughout the area. All three airports measured their greatest snow depth ever observed in December on the 20th: 16" at DCA; 18" at BWI and IAD. Monthly record snowfall totals included 16.6" at DCA, 23.2" at BWI, and 21.4" at IAD, 2nd greatest ever and highest amount since 1966. A state of emergency was declared throughout the metro area because the storm significantly impacted transportation, making many roads impassable, closing DCA and BWI and limiting IAD to one open runway at the height of the storm. Additional Maryland storm totals included 24.0" in Bethesda (Montgomery County), 23.0" in Columbia (Howard County); and 22.5" in Glen Burnie (Ann Arundel County). Virginia totals included 23.0" in Centerville (Fairfax County), 22.0" in Lucketts (Loudoun County), 20.5" in Ballston (Arlington County). Washington recorded 16.0" on the National Mall.

The seasons first snowfall occurred on the 5th with greatest totals outside of the immediate Washington/Baltimore area including 7.5" in Eldersburg, MD (Carroll County) and 6.5" in Woolsey, VA (Prince William County). A soaking rain that began as some sleet and snow in the northern metro areas on the 8th-9th resulted in copious precipitation including 1.90" in Abington, MD, (Harford County) a daily record of 1.41" at BWI on the 9th and 1.66" in Vienna, VA (Fairfax County). On the 25th-26th, after the first White Christmas since 2002, another soaking rainfall melted all but traces of the Dec.18-19 snowfall and caused some flooded roads from melting snow and clogged drains. Totals included 1.75" at BWI and 1.44" at DCA. The month ended wet with additional snow, sleet and then rain. Snow and sleet totals were again greatest outside the immediate metro area including 3.0" in Wolfsville, MD (Frederick County). BWI measured 1.0".

DECEMBER 2009 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	Snow	Year to Date
National (DCA)	44.3	31.5	37.9	39.5	-1.6	65/3	23/30	6.79	3.05	+3.74	16.6	46.90
Baltimore (BWI)	42.5	27.1	34.8	36.7	-1.9	64/3	14/24	8.06	3.35	+4.71	23.2	55.57
Dulles (IAD)	42.9	27.5	35.2	36.0	-0.8	62/3	13/24	5.98	3.07	+2.91	21.4	48.62

ANNUAL Temperatures: This year marked the first with subnormal temperatures at DCA and BWI since 2003. Annual departures were -0.1°F at DCA, -0.8°F at BWI, and +1.1°F at IAD. DCA and BWI observed 8 months with subnormal temperatures, while IAD recorded just 3 subnormal months. January started 2009 with below normal temperatures for the first time since 2004. January 16 marked the coldest maximum reading in Washington since 1994. A quick warmup followed in early February when highs soared to 70°F or higher on Feb. 7th including a record 71°F at IAD. A cold snap on March 2 resulted in a record low of 10°F at BWI. Many suburban areas recorded their final freeze of the season on April 13th, including a low of 29°F at BWI and 32°F at IAD. April ended with the season's first heat wave April 25th-28th. IAD's high of 92°F for each of those days set a new record on the April 25th and equaled the record the following 2 days. BWI recorded minimum readings in the upper 30s on May 19th, including record low of 38°F. BWI's monthly maximum of 89°F marked its coolest June high since 1979. The two 90°F or greater highs in June at DCA and IAD were the fewest since 1992 at DCA and since 2004 at IAD. In July, all three major airports recorded the coolest reading for that month since 2001. The 90°F readings on July 12 were the latest observed in July since 1979 at BWI and since 1998 at DCA and IAD. There were no 90+°F September readings at the three major airports recorded; the first such occurrence since 2006. DCA set a record for the coolest maximum temperature for the day on October 16 (45°F) and 17th (47°F). BWI's maximum temperature of 50°F or colder from the 14th-17th was its lowest since 1872, while IAD recorded its lowest maximum readings for the 15th-17th since the airport opened in 1962. IAD recorded its warmest November minimum temperature on record, 29°F; BWI, 28°F. December ushered in winter with cold readings (see above).

ANNUAL Precipitation: Well above normal precipitation including snowfall occurred across the region with precipitation totals from about 45" to nearly 60" in the area. Annual totals included DCA, 46.90" (7.55"); BWI, 55.57 (+13.63); IAD, 48.62 (+6.82"). It was the wettest year at BWI since 2003 (see cover graphic). DCA and IAD marked 6 months with above normal precipitation, while BWI recorded 7 such months. Sudden heavy snow showers with up to 3" accumulation in northern and western suburbs on January 19th led to a 42-car pileup and two fatalities near Frederick, MD. The year's first measurable snowfall across much of the area occurred on the January 27, bring 1"-3" across the area plus up to 0.4" of ice in some localities. It was the driest February on record at DCA (0.35") and BWI (0.26"); second driest at IAD (0.36") with less than an inch of snow observed at the three major airports. On March 1-2, the area experienced a significant snowfall with up to 8" measured. After the 2nd driest February-March ever recorded in Washington, the area observed well above normal rainfall in the spring. May was the 6th wettest at Washington and 2nd wettest ever at BWI. From June 3-5, the area was deluged with 3"-5" of rain. Severe weather in June resulted in three fatalities and seven injuries. June also included two EF-0 tornados an EF-1 tornado and a waterspout. Washington's rainfall total in July was its 5th driest on record and driest since 1999. Severe weather in July included two EF-1 tornadoes and an EF-0 tornado as well as high winds and hail. On August 21st-22nd, the area recorded torrential downpours with 4"-6" totals in some areas, resulting in flash flooding. More heavy rain on August 28th-29th resulted in 7.25" recorded in Aberdeen, MD, (Harford County). Up to 10" fell in some areas during a wet October with 6 days of .50" or greater rainfall at BWI, most on record in October. The prolonged rain event on Nov.11th-14th brought 4"-7" across southern Maryland and 1"-2" across metro area. December observed record precipitation at BWI and an historic snowfall (see monthly summary above.)

ANNUAL 2009 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	Snow
National (DCA)	67.9	49.3	57.4	57.5	-0.1	97/8-10	8/1-17	46.90	39.35	+7.55	24.1
Baltimore (BWI)	64.2	45.4	54.8	55.6	-0.8	94/7-16, 8-10	2/1-17	55.57	41.94	+13.63	32.3
Dulles (IAD)	65.5	45.8	55.7	54.6	+1.1	98/8-18	0/1-17	48.62	41.80	+6.82	29.4

Looking Ahead: Does heavy December snowfall equal a snowy January and February? Below are a list of the snowiest 10 Decembers at DCA on record and corresponding totals for January and February.

Year	2009	1962	1966	1932	1904	1890	1957	1908	1935	1973
December Snowfall	16.6"	16.2	16.1	14.5	13.2	13.0	12.0	11.5	11.0	11.0
January Snowfall	?	2.1	1.3	T	13.5	6.1	0.3	3.7	2.3	1.5
February Snowfall	?	2.0	19.0	8.3	5.5	1.0	17.2	6.4	18.5	4.2