

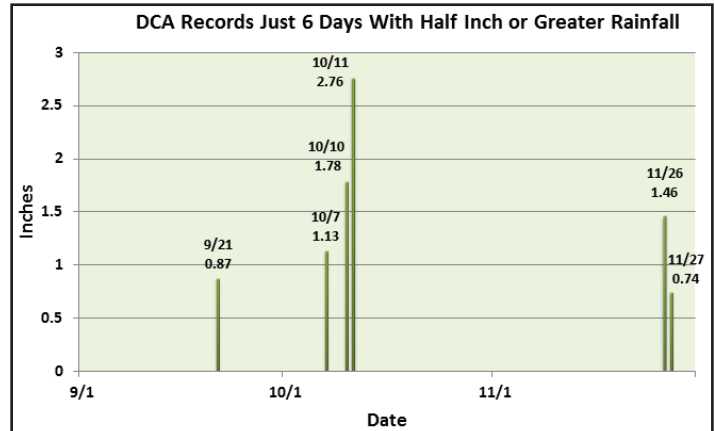
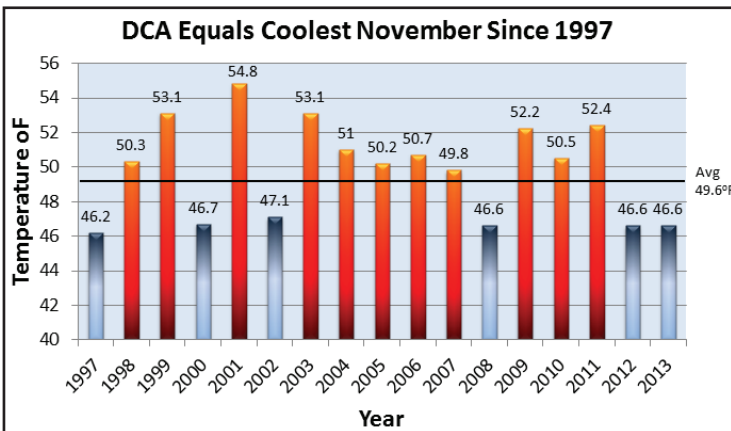


PRESTO

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



NOVEMBER 2013: Cold with One Major Rain Event AUTUMN: Near Normal Temperatures, Several Significant Storm Systems



November Highlights

- Well below normal average temperatures at the three major airports: DCA, -3.0°F; BWI, -2.9°F; IAD, -3.5°F
- Arctic chill on the 24th with first subfreezing highs of season at BWI and IAD (32°F), setting a new record at IAD and equalling the record at BWI
- DCA's first freeze of the season occurred on 13th (32°F)
- BWI and IAD reported 17 days with minimums at or below freezing; DCA observed 8 such days
- Major storm system 1-2 days before Thanksgiving started as freezing rain in the outer suburbs with as much as 0.3" ice accretion near Woolsey (Prince William County), 0.2" in Purcellville (Loudoun County), VA, and 0.1" near Long Green (Baltimore County) and in Damascus (Montgomery County), MD. The ice changed to a soaking rain eventually in these locations and elsewhere. In Virginia rainfall totals included 3.51" near Montebello (Nelson County), 2.80" in Jersey (King George County), and 2.39" near Merrifield, (Fairfax County). In Maryland, rainfall totals included 2.79" near Baden (Prince Georges County), and 2.45" near Severn (Ann Arundel County). DCA's total was 2.20"; IAD reported a daily record of 1.72" on the 26th.

Autumn Highlights

- Near normal temperatures were observed at all three major airports. Average seasonal temperatures were 60.1°F (+0.1°F) at DCA, 56.8°F (-0.3°F) at BWI, and 56.0°F (+0.5°F) at IAD
- Near normal to above normal seasonal rainfall: DCA, 10.39" (+0.10); BWI, 10.66" (+1.33"); IAD, 10.58" (+1.33")
- Summerlike heat on September 11: 95°F at BWI; 94°F and DCA and IAD
- DCA observed 6 of the first 12 days of September with highs above 90°F
- Strong to severe thunderstorms impact portions of the area on September 11 with winds knocking down trees near Taylorstown (Loudoun County), VA, and in Rockville (Montgomery County), MD; hail measuring up to 0.88" struck Reisterstown (Baltimore County), MD, and up to 0.75" in Potomac (Montgomery County), MD. Torrential downpours caused a tributary of Cabin John Creek to flood roads near Congressional Manor in Montgomery County. Greatest rainfall totals were 3.10" in Potomac, 2.05" in Dundalk (Baltimore County), MD, and 1.26" in Rixeyville (Culpeper County), VA
- Well above normal rainfall across the area in October with the three major airports recording between 6"-8": DCA, 6.25" (+2.85"); BWI, 7.62" (+4.29"); IAD, 7.51" (+4.26")
- A long duration storm occurred Oct 9-13, drenching the area with 4"-6" totals over the 5 days. Greatest totals in Maryland included 7.60" in Thurmont (Frederick County), 6.66" in Ellicott City (Howard County) and 6.36" in Millers (Carroll County). Highest totals in Virginia were 7.15" at the NWS Forecast Office in Sterling (Loudoun County), 6.68" in Herndon and 6.22" in Oakton (Fairfax County); Washington, DC, measured 5.10". Daily rainfall records were set on Oct 11 at all three major airports: 3.66" at BWI, 3.38" at IAD and 2.76" at DCA. The soaking rainfall resulted in numerous flooded roads with several water rescues throughout the region.

November 2013

Temperatures: For the second consecutive year, November featured well below normal temperatures: -3.0°F at DCA, -2.9°F at BWI and -3.5°F at IAD. The month featured several intrusions of cold Canadian air. On the 24th, maximum readings failed to break the freezing mark at both BWI and IAD, the first such reading of the season, setting a new record at IAD and equalling the record at BWI.

Minimum readings were especially chilly. BWI and IAD reported 17 days with minimums at or below freezing while DCA observed 8 such days. Following the coldest day of the season on the 24th, minimums on the 25th plummeted to the teens in suburban locations, including 16°F at IAD and 19°F at BWI. DCA's first freeze of the season occurred on the 13th, nearly 2 weeks earlier than in 2012 (26th). The month's warmest days were the first 2 days of the month and the 18th. Highs on each of these days reached the upper 60s and 70s; IAD recorded 77°F on the 1st.

Precipitation: The three major airports measured somewhat below normal precipitation. Monthly totals were 2.92" (-0.25") at DCA, 2.82" (-0.48") at BWI, and 2.79" (-0.62") at IAD. Despite near normal totals, the majority of the month was quite dry. A major storm system on the 26th-27th resulted in much of the monthly rainfall, drenching the area with more than 2 inches in many locations. The precipitation began as freezing rain in the outer suburbs with as much as 0.3" ice accretion near Woolsey (Prince William County), 0.2" in Purcellville (Loudoun County), VA, and 0.1" near Long Green (Baltimore County) and in Damascus (Montgomery County), MD. Other areas noted only a soaking rain. In Virginia, rainfall totals included 3.51" near Montebello (Nelson County), 2.80" in Jersey (King George County), and 2.39" near Merrifield, (Fairfax County). In Maryland, totals included 2.79" near Baden (Prince Georges County) and 2.45" near Severn (Ann Arundel County). DCA's total was 2.20"; IAD and BWI set new daily records: IAD, 1.72"; BWI, 1.61" on the 26th. The precipitation ended as sleet and then wet snow during the afternoon of the 27th with no measurable snow accumulations in most areas. The area marked two additional storms that resulted in isolated damage. On the 1st, wind gusts from showers and thunderstorms were observed across portions of northern Maryland about dawn. Trees and wires were downed in Eldersburg (Carroll County) and near Unionville (Frederick County). A similar event occurred around midnight from the 17th-18th. A large tree was knocked down by strong winds near Funkstown (Washington County), MD, and winds gusted to 59 mph near Wintergreen (Nelson County), VA.

November 2013 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)				
	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	DepNml	Snow	YTD
National (DCA)	54.8	38.5	46.6	49.6	-3.0	73/1	24/25	2.92	3.17	-0.25	T	38.71
Baltimore (BWI)	53.1	34.1	43.6	46.7	-2.9	73/1	19/25	2.82	3.20	-0.48	T	37.66
Dulles (IAD)	52.9	32.9	42.9	46.4	-3.5	77/1	16/25	2.79	3.41	-0.62	T	39.76

Autumn Temperatures (Sep-Nov): Near normal seasonal temperatures were observed at the three major airports: 60.0°F (+0.1°F) at DCA ; 57.2°F (-0.3°F) at BWI and 56.5°F (+0.5°F) at IAD. September started the season warm with summerlike heat the first 12 days of the month; DCA recorded 6 days above 90°F. On September 11, temperatures soared to 95°F at BWI and 94°F at DCA and IAD. In contrast, the three major airports average minimum temperatures were 61.7°F at DCA; 56.2°F at BWI; and 54.3°F at IAD. These minimums are the coolest September readings since 2006 at DCA and BWI (tied with 2006), and since 2001 at IAD. October also started warm with maximum readings above 80°F during the first 6 days throughout the area. Highs reached 90°F or greater on 2 days at DCA and IAD and on 1 day at BWI. IAD's high of 89°F on October 4 and 6 broke its record; on the October 5, IAD equaled its record high of 90°F. November was colder than normal (see monthly summary).

Autumn Precipitation: Slightly above normal seasonal precipitation was reported at all three major airports: 10.39" at DCA (+0.10), 12.09" at BWI (+1.43) and 11.91" at IAD (+1.33). September was significantly drier than normal throughout much of the area. The majority of the month's rainfall occurred on Sep. 12 and 21. The event on September 12 included strong to severe thunderstorms that resulted in wind damage, knocking down trees near Taylorstown (Loudoun County), VA, and in Rockville (Montgomery County), MD; and bringing hail to 0.88" in Reisterstown (Baltimore County), MD. Torrential downpours accompanied the thunderstorms causing a tributary of Cabin John Creek to overflow, flooding Bradley Blvd. in Montgomery County. One injury was reported at BWI when lightning struck an employee while he was shutting down a generator at the airport tower, according to press reports. On September 21, over an inch of rain soaked many locations. In October, two major rainfall events resulted in well above normal monthly totals across the area. Then on October 7, a frontal system brought rainfall totals in Virginia up to 2.13". In Maryland, highest totals include 2.03". Both DCA and IAD measured 1.13". Western Virginia reported isolated thunderstorm wind damage with downed trees. The second and greatest rainfall event occurred October 9-13, when a slow moving storm system drenched the area. Many locations reported more than 2 inches each day on October 10-11 with widespread 4"-6" totals for the 5-day period. The highest totals include included 7.60" in Thurmont (Frederick County), MD, 7.15" at the NWS Forecast Office in Sterling (Loudoun County), VA, and 6.68" in Herndon, VA. Washington, DC, measured 5.10". Daily rainfall records were set on the October 11 at all three major airports: 3.66" at BWI, 3.38" at IAD and 2.76" at DCA. The soaking rainfall resulted in numerous flooded roads with several water rescues throughout the region. November featured one major system (see monthly summary above).

Autumn 2013 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	Snow	DepNml
National (DCA)	68.7	51.5	60.1	60.0	+0.1	94/9-11	24/11-25	10.39	10.29	T	+0.10
Baltimore (BWI)	67.0	46.4	57.2	56.8	-0.3	95/9-11	19/11-25	12.09	10.66	T	+1.43
Dulles (IAD)	67.1	45.1	56.0	56.5	+0.5	94/9-11	16/11-25	11.91	10.58	T	+1.33

Looking Ahead to December: In 2012, DCA recorded subnormal snowfall: 0.2 inches. Will December 2013 bring more snow? Shown below are the most recent 10 years of December snowfall in Washington. Normal DCA December snowfall is 2.3".

Year	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
December Snowfall	0.2	Trace	2.1"	16.6"	Trace	2.6"	Trace	4.8"	0.1"	6.2"