

## August 2009

**Temperatures:** After a relatively cool June and July, August turned up the heat. Departures were +2.4°F at DCA, +2.1°F at BWI and 3.9°F at IAD. DCA's average monthly temperature was 2.9°F warmer than July, the 8th such occurrence since 1998. DCA and IAD recorded 12 days with highs at or above 90°F and 4 days with high readings at or above 95°F while BWI recorded 6 days with highs at or above 90°F. IAD set two record highs: 98°F on the 18<sup>th</sup>, and 97°F; the 94°F high on the 21<sup>st</sup> equaled a record set in 2005. The month's longest heat wave ran from the 15<sup>th</sup>-21<sup>st</sup> at IAD, where recorded daily readings stayed at or above 90°F. High level of humidity were prevalent during the month resulting in uncomfortable conditions. DCA reported only 6 days with minimum readings less than 70°F.

**Precipitation:** Rainfall totals in the area varied widely as a result of intense localized showers and thunderstorms. Subnormal amounts were recorded at DCA 2.46" (-0.98") and IAD 2.75" (-1.03") while BWI's measured 4.76" (+1.02"). Scattered localities received heavy rainfall in Southern Maryland including 1.97" in Charlotte Hall (St. Mary's County) on the 1<sup>st</sup> and 1.74" in Chesapeake Beach (Calvert County) on the 5<sup>th</sup>. Some eastern counties recorded heavy rainfall including 1.08" in Severn, MD, (Anne Arundel County) on the 10<sup>th</sup> and 1.25" in Bowie, MD, (Prince Georges County) on the 12<sup>th</sup>.

The second half of August featured severe weather. On the 18<sup>th</sup>, thunderstorm wind damage occurred across many areas of Baltimore and Harford Counties, MD. The following day ping pong to baseball size (2.75") hail struck Compton, MD, (St. Mary's County). Excessive rainfall on the 22<sup>nd</sup> resulted in flash flooding across portions of Ann Arundel, Calvert and Charles Counties. Storm totals from the 21<sup>th</sup>-22<sup>th</sup> included 6.35" in North Beach, MD, (Calvert County), 5.25" in Annapolis (Ann Arundel County) and 4.42" in Reston, VA, (Fairfax County); 2.14" at IAD, including a daily rainfall record of 0.94" on the 22<sup>nd</sup>, 1.70" at BWI and 1.39" at DCA. Finally, on the 28<sup>th</sup> and 29<sup>th</sup>, strong thunderstorms resulted in torrential downpours and flash flooding in some locations. Storm totals included 7.25" in Aberdeen, MD, (Harford County) where three people were rescued and two cars pulled from the water. There was also flash flooding in parts of Carroll County and Baltimore Counties, MD: storm totals included 4.87" in Westminster (Carroll County), 4.50" in Hybla Valley (Fairfax County) and 1.53" at BWI, marking the 4<sup>th</sup> month out of the past five with above normal rainfall.

### AUGUST 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	Year to Date
National (DCA)	88.4	71.3	79.8	77.4	+2.4	97/10	62/31	2.46	3.44	-0.98	26.66
Baltimore (BWI)	85.8	67.4	76.6	74.5	+2.1	94/10	55/31	4.76	3.74	+1.02	32.85
Dulles (IAD)	88.6	68.1	78.3	74.4	+3.9	98/18	59/31	2.75	3.78	-1.03	31.40

**Summer (June-August) Temperature:** For the first summer in 5 years, seasonal temperatures were near or below normal at DCA and BWI; IAD was above average. Departures were +0.1°F at DCA, -0.8°F at BWI and +1.7°F at Dulles. In sharp contrast to June 2008, the season started with mild temperatures. June's highs reached only 91°F at DCA and IAD. BWI's monthly maximum of 89°F was its coolest June high since 1979. The two 90°F or greater highs at DCA and IAD were the fewest since 1992 at DCA and since 2004 at IAD. Minimum June readings also were comfortably cool. July continued the moderate readings. Temperatures were comfortable across the Washington/Baltimore area with no intense heat and humidity. It was the coolest July at all three major airports since 2001. DCA observed only 7 days with highs at or above 90°F, the fewest since 2004; BWI and IAD, just 4 days, the fewest since 2004 at BWI and since 2000 at IAD. The 90°F readings on the 12<sup>th</sup> were the latest observed in July since 1979 at BWI and since 1998 at DCA and IAD. In a turnaround, August brought warmer than normal temperatures (see monthly summary above).

**Summer Precipitation:** Seasonal rainfall varied significantly around the area. Departures were -0.84" at DCA; +2.55" at BWI and +0.20" at IAD. June started the season with well above normal rainfall at all three major airports and numerous severe weather events. On June 3, Lightning resulted in one death and one serious injury on a baseball field in Fredericksburg, VA. Heavy rainfall in many areas on June 5 caused 3-day totals (3<sup>rd</sup>-5<sup>th</sup>) to exceed normal *monthly* totals in some locations. On June 9, an EF-0 tornado hit Dundalk, MD, with peak winds of 70 mph. Hail to 1.75" pelted Chrome Hill and resulted in winds gusts to 65 mph in Crownsville, MD. On June 20, EF-1 and EF-0 tornadoes were reported in Maryland with peak winds of 90 mph, resulting in vehicle and tree damage. The storm later developed a waterspout as it moved over the Chesapeake Bay. The month's final significant storm on June 26 resulted in two fatalities and six injuries when a large tree fell onto a van in Chevy Chase, MD. The event brought wind gusts to 60 mph in Bethesda, MD, and baseball size hail (2.75") at Holly Corner, VA. A pattern change in July resulted in subnormal rainfall across the region. Washington's total was its 5th driest July on record and driest since 1999 and the 4th consecutive July with subnormal rainfall at DCA and IAD. The first 22 days of the month were arid, with less than ½ inch rainfall across most locations. IAD reported only .09" between July 1-22, the driest ever recorded for that period. Severe weather included a microburst on July 25 with maximum winds of 70 mph in New Market, VA, resulting in tree and property damage. On July 26, hail up to 1.75" struck near Fallston, MD; 1 inch hail pelted the ground near Waterford, VA. On the 29<sup>th</sup>, an EF-1 tornado struck Oldtown causing tree and property damage. Severe weather on the 31<sup>st</sup> resulted in two EF-1 tornadoes near Ijamsville, MD, and an EF-0 tornado struck Gamber, MD. One person was injured from this storm. August precipitation varied widely by area due to localized heavy showers and thunderstorms (see monthly summary above).

### SUMMER 2009 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (Inches)		
	AvMx	AvMn	AvgT	NmlT	DepNml	MaxT	MinT	Total	Norm	DepNml
National (DCA)	85.2	68.4	76.8	76.9	+0.1	97/8-10	55/6-1	9.39	10.23	-0.84
Baltimore (BWI)	83.9	64.5	74.2	75.4	-0.8	94/7-16, 8-10	46/6-1	13.57	11.02	+2.55
Dulles (IAD)	85.6	68.5	75.4	73.7	+1.7	98/8-18	48/6-1	11.62	11.42	+0.20

**Looking Ahead to September:** After a cool start and a hot finish to summer, what does meteorological autumn hold in store? The season often produces some of the finest weather in this area. Below is a list of autumn extremes in Washington since the U.S. began keeping records in 1871.

#### Temperature Extremes

**Coldest:** 1917 (Average Temperature: 52.9°F; Dep. Nml.: -6.5°F)  
**Warmest:** 1973 and 1931 (Average Temperature: 63.1°F; Dep. Nml.: +3.7°F)  
**Extreme Minimum Temperature:** 11°F (Nov. 30, 1929)  
**Extreme Maximum Temperature:** 104°F (Sep. 7, 1881)  
**Most Days With Lows < 32°F:** 19 (1901); **Highs > 90°F:** 14 (1980)

#### Precipitation Extremes

**Wettest:** 1934 (Total Precipitation: 21.78"; Dep. Nml.: +11.74")  
**Driest:** 1930 (Total Precipitation: 1.83"; Dep. Nml.: -8.21")  
**Snowiest:** 1987 (Total Snowfall: 11.5")  
**Most 1 Day Precipitation:** 5.16" (Sep. 2, 1922)  
**Most Snowfall in 1 Day:** 11.5" (Nov. 11, 1987)