

AUGUST 2007

Temperature: The final month of meteorological summer featured above normal temperatures across the local area. DCA observed a monthly temperature departure of +2.3°F; BWI, +3.0°F. IAD departure of +4.3°F resulted in its hottest ever August. The first half of the month featured excessively hot conditions and occasional high humidity. Highs were at or above 90°F on 13 of the first 15 days at DCA and IAD, including highs above 100°F at all three major airports on the 8th. DCA's high of 102°F on the 8th was its highest temperature since July 6, 1999 (103°F); highs of 102°F at BWI and 101°F at IAD were their hottest since August 15, 1988. Readings frequently soared above 95°F between the 1st and 9th across the metro region. At IAD, there was only 1 day during this 9-day period when highs did not reach or exceed 95°F. Nighttime lows were equally oppressive from the 5th-10th with readings generally remaining above 70°F. On the 8th, the minimum temperature at DCA and BWI dropped to only 80°F and IAD, 79°F. The area finally got a significant break from the sultry readings the third week of August when highs at most locations dropped to the 60's and 70's. BWI's maximum of 68°F on the 21st and 69°F on the 22nd were its first occurrence of consecutive high temperatures below 70°F in August since 1992. While hot temperatures did return on the 25th (a record equaling 97°F at IAD), the oppressive conditions were brief. More moderate conditions prevailed the remainder of the month.

Precipitation: Near to well below normal rainfall was observed across most of the local area. DCA's slightly above normal monthly total of 3.47" was only the 2nd month of 2007 with wetter than normal conditions. BWI recorded 3.08" (-0.66") and IAD measured only 1.67" (-2.11"). IAD's 8-month precipitation deficit was more than 10" by month's end, resulting in their driest January-August period ever recorded (see cover). Many locations recorded their heaviest rainfall on the 20th-21st. DCA's total of 1.46" on the 21st was its first precipitation event with greater than 1 inch since April 15. Some areas received much higher amounts such as Leonardtown, MD (2.86" on the 20th).

The month brought several severe weather events to some locations. On the 3rd, 1.5" hail pelted Gainesville, VA. Winds gusted to 58 mph in Rosedale, MD, along with .5" hail in Baltimore County. On the 5th, thunderstorm winds knocked down trees and power lines in Largo, MD. On the 9th, thunderstorms caused damage in Frederick, Westminster, and Mechanicsville, MD, while hail (7/8" in diameter) pelted Fredericksburg, VA. A week later (16th), wind damage was reported in Frederick County, MD, and in Shenandoah, Page, Madison, Culpeper and Fauquier Counties, VA. The month's final major severe weather event was on the 25th when wind damage was reported across parts of the area. A number of noteworthy storms impacted Virginia. Winds gusted to 59 mph at Lovettsville, while .75" hail struck Haywood, and 1.95" of rain fell on Franconia, VA.

AUGUST 2007 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)	88.3	71.1	79.7	77.4	+2.3	102/8	63/22	3.47	3.66	+0.03	21.04
Baltimore (BWI)	87.6	67.3	77.5	74.5	+3.0	102/8	60/14	3.08	3.74	-0.66	23.22
Dulles (IAD)	89.4	68.0	74.3	78.7	+4.3	101/8	59/19	1.67	3.78	-2.11	17.74

Summer (June-August) Temperature: Above normal temperatures were prevalent across the region, including the hottest summer ever recorded at IAD (average monthly temperature: 76.8°F). Seasonal temperatures departures were +1.4°F at DCA, +1.7°F at BWI and +3.1°F at IAD. June started the summer pattern of hotter than normal temperatures across the area. DCA and BWI observed 7 days in June with highs or above 90°F while IAD noted 8 such days. Most areas endured the month's hottest temperatures on June 8th and 27th, including the first reading of the season at or above 95°F; highs reached 97°F at IAD and 95°F at BWI on the 8th. The months' coolest day was the 14th, when cloudiness and left over moisture held highs in the 60s. July was only slightly hotter than normal and exactly normal at DCA. There were three brief but hot periods with highs 90°F or greater at many locations, including DCA. The region experienced its hottest readings from the 8th-10th when DCA's highs soared to 98°F on the 9th-10th and BWI and IAD observed highs of 97°F on the 9th. July brought many uncomfortably warm nights; DCA recorded 17 days with lows of 70°F or greater, BWI, 9 and IAD, 5 such days. August started off with recorded setting heat but ended with more moderate temperatures overall (see above).

Summer Precipitation: Subnormal seasonal rainfall was recorded across the Washington/Baltimore area as drought conditions intensified across many locations. It was the 3rd driest summer on record at IAD with only 6.34" of rain (Dep. Nml.: -5.08"). DCA measured 7.25" (Dep. Nml.: -2.98") while BWI observed 8.59" (Dep. Nml.: -2.43"). Washington recorded its driest June since 1991. The only major rainfall of the month arrived on June 3, when the region averaged about an inch of rain from the remnants of Tropical Storm Barry. June also ushered in numerous strong to severe thunderstorms. Wind damage and hail were observed in Clinton and Greenbelt, MD, and Herndon, VA. Thunderstorm brought wind gusts over 60 mph to IAD and BWI. One storm resulted in lightning fatally striking a girl in Prince Georges County, MD, according to press reports. July brought more severe thunderstorms. For the second consecutive year, severe thunderstorms on July 4 forced NWS staff to evacuate the National Mall. The month, although basically dry, brought several bouts of severe weather, hail and high winds to selected areas. An EF1 tornado (wind speeds of 86-100 mph) was confirmed near Fallston, MD. Fortunately, there were no injuries and limited damage. July ended with a major thunderstorm that brought hail and up to 5" of torrential rainfall to parts of Frederick and Prince Georges Counties, and 3/4" hail in Leesburg, VA. By July 27, the overall lack of rain caused federal authorities to declare a drought disaster in areas such as southern Maryland and Culpeper County, VA, providing aid to farmers. Despite sporadic localized thunderstorms, August continued drought-like conditions, particularly in Northern Virginia (see above).

SUMMER 2007 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (In)		
	AvMx	AvMn	AvgT	NmlT	DepNml	Max	MinT	Total	Norm	DepNml
National (DCA)	87.3	69.3	78.3	76.9	+1.4	102/8-8	59/6-15,23	7.25	10.23	-2.98
Baltimore (BWI)	86.4	65.6	76.0	74.3	+1.7	102/8-8	50/6-23	8.59	11.02	-2.43
Dulles (IAD)	87.9	65.6	76.8	73.7	+3.1	101/8-8	53/6-23	6.34	11.42	-5.08

Looking Ahead to September: After a warmer and drier than normal 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 (Avg. Temperature: 52.9°F; Dep. Nml.: -6.5°F)
Warmest: 1973 and 1931 (Avg. 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 (Tot. Prec.: 21.78"; Dep. Nml.: +11.74")
Driest: 1930 (Tot. Prec.: 1.83"; Dep. Nml.: -8.21")
Snowiest: 1987 (Tot. Snowfall: 11.5")
Most 1 Day Precipitation: 5.16" (Sep. 2, 1922)
Most snowfall in one day: 11.5" (Nov. 11, 1987)