

JULY 2002 Hot and humid conditions prevailed across the Washington/Baltimore region, a sharp contrast to the July's of 2000 and 2001. Monthly temperature departures between +1.5°F and +2.5°F were reported at the three major airports, yielding the hottest July since 1999. There were 19 days with 90°F+ highs, including eight days with readings at or above 95°F at DCA. There were no days with readings at or above 100°F at DCA, but BWI did hit the century mark on the 4th, tying a record daily high. The high of 97°F on the 4th at IAD also tied a daily record. The most prolonged period of heat occurred from the 15th-23rd with 90°F+ highs recorded each day at DCA. The intense heat was often accompanied by oppressive humidity, resulting in numerous days with excessive heat advisories or warnings as heat indices soared to 110°F. There were also several days with poor air quality. In sharp contrast, there were two brief breaks from the hot weather. The first occurred from the 11th-14th with daily temperatures averaging 4°F to 8°F below-normal at DCA. On the 12th, both BWI and IAD reported daily record lows when the mercury plunged to 53°F and 47°F, respectively. Another period of below-normal temperatures occurred from the 24th -27th as highs remained mostly in the low eighties. On the 26th, most locations struggled to top the 70°F, due in large part to clouds and showers. Between the 6th and 8th, a northwesterly flow of air out of Canada brought smoke from forest fires in Eastern Canada into the local area, obscuring the sky with a thick haze which dimmed sunlight and kept daily temperatures at or below-normal.

Subnormal precipitation was observed at most locations with monthly precipitation totals of just over 2 inches common across much of the local area. It was the fifth month of 2002 with below-normal precipitation at DCA. There were only 6 days with measurable precipitation (≥0.01") at DCA. Two precipitation events accounted for the bulk of the monthly precipitation totals. On the 13th and 14th, a soaking rain yielded more than an inch of rain at many locations. DCA reported 1.36" while to the west over two inches was observed in Herndon, VA. On the 26th, between 0.25" and 0.75" rain fell at most locations (0.69" at DCA). Intense heat following both events quickly evaporated much of the moisture from the ground. On the 23rd, evening thunderstorms produced up to 0.50" of rain (0.49" at BWI) in some areas and ushered in the cooler weather across the local area. The subnormal monthly rainfall was not enough to save much of Maryland's corn crop, with damage estimated at more than 50% on some Eastern Shore farms, according to press reports. Drought conditions worsened during the month as January-July 2002 precipitation deficits approached six inches in Washington and nearly five inches in Baltimore. Twelve-month (August 2001-July 2002) precipitation deficits of more than one foot exist at many locations across the local area, resulting in severe to extreme drought conditions for most of the area and water conservation and restrictions in some areas.

JULY 2002 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station Location	Temperatures (°F)					Extreme/Day			Precipitation (In)			
	AvMx	AvMn	AvgT	NmIT	DepNml	MaxT	MinT	Total	Norm	DepNml	Yr to Date	
National (DCA)	89.7	72.1	80.9	79.2	+1.7	99/4	60/12	2.20	3.66	-1.46	16.81	
Baltimore (BWI)	89.3	67.9	78.6	76.5	+2.1	100/4	53/12	2.26	3.85	-1.59	17.92	
Dulles (IAD)	87.8	66.7	77.2	75.7	+1.5	97/4	47/12	2.65	3.57	-0.92	19.63	
Andrews AFB (ADW)	88.7	67.5	78.1	N/A	N/A	100/4	52/12	1.65	4.3	-2.7	18.08	

LOOKING AHEAD TO AUGUST: 90°F+ Days in Washington.

During the first two months of meteorological summer (June and July), DCA has recorded 29 days with 90°F+ highs. Since records began in Washington (1871), there have only been ten June-July periods with more 90°F+ readings. Below is a list of these ten June-July periods (ranked highest to lowest) along with the corresponding August, meteorological summer (June-August) and calendar year total days with readings at or above 90°F.

Year	June-July (Total 90°F+ days)	August (Total 90°F+ days)	Summer (Total 90°F+ days)	Year (Total 90°F+ days)
1994	39	3	42	46
1988	35	20	55	59
1966	35	19	54	59
1993	33	14	47	51
1872	32	17	49	58
1991	31	14	45	59
1999	30	16	46	48
1980	30	22	52	67*
1969	30	4	34	39
1873	30	9	39	47
2002	29	?	?	?

* most ever recorded in a calendar year