

AUGUST 1998: The final month of the meteorological summer was highlighted by exceptional dryness across the Washington/Baltimore area. Less than one inch of rain was observed at all three major airports, yielding the third driest August in Washington (driest since 1962), the second driest at BWI and the driest on record at IAD. In addition, both DCA and IAD recorded the driest month since April 1985. Days with measurable precipitation were scarce, with only 3 days at both DCA and BWI and 5 at IAD. There were no days with more than 0.50" of precipitation at DCA and IAD, and only one such day at BWI (10th), even though August is climatologically the wettest month of the year at both DCA and BWI. In fact, no measurable precipitation was observed during the first 9 days and again during the final two weeks of the month at both DCA and BWI. Showers and thunderstorms affected most of the local area on the 10th, yielding between 0.25" and 0.60" at the three major airports. About a week later, another round of showers and thunderstorms produced 0.34" of rain at DCA on the 16th-17th and 0.32" at BWI on the 17th, the last measurable rain event at both locations during August. The second consecutive month of dryness stressed crops and browned lawns across the local region. Farther south, up to a foot of rain fell on eastern North Carolina as Hurricane Bonnie made landfall. The storm generated winds to 115 mph and caused extensive damage along coastal sections of North Carolina and southeastern Virginia before moving out to sea.

The month began with cooler than normal conditions across the local region. In fact, at or below normal temperatures prevailed the first 8 days at DCA and lows often dipped into the fifties across many suburban locations. A prolonged period of heat and humidity arrived during the final 10 days of the month with 9 days marked by highs at or above 90°F at DCA. Temperatures during this period averaged nearly 7°F above normal at DCA, and three consecutive daily record highs were observed at IAD with readings of 96°F, 97°F & 97°F on the 23rd, 24th and 25th, respectively. In sharp contrast, IAD tied a daily record low on the 20th when the mercury plunged to 47°F.

AUGUST 1998 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station Location	Temperatures (°F)					Extreme/Day		Precipitation (In)			
	AvMx	AvMn	AvgT	NmlT	DepNml	MaxT	MinT	Total	Norm	DepNml	Yr to Date
National (DCA)	89.0	69.8	79.4	78.5	+0.9	97/25	57/20	0.59	3.91	-3.32	30.86
Baltimore (BWI)	87.2	64.1	75.7	75.6	+0.1	96/25	49/20	0.91	3.92	-3.01	29.66
Dulles (IAD)	89.2	63.2	76.2	74.2	+2.0	97/24*	47/20	0.45	3.94	-3.45	31.93
Ft. Belvoir (DAA)	93.9	69.3	81.6	N/A	N/A	102/23	57/19*	1.09	4.4	-3.3	37.61
Andrews AFB (ADW)	88.1	68.5	78.3	N/A	N/A	99/25	57/19*	1.34	4.4	-3.1	34.10

Other Occurrences: * August 25th; August 20th.

SUMMER (JUNE-AUGUST) 1998: Near normal temperatures and abnormally dry conditions prevailed across the Washington/Baltimore area. Seasonal temperature departures ranged from -1°F at DCA to +0.3°F at BWI. Prolonged heat and humidity was relatively absent for most of the summer across the region. There were 54 days with at or below normal temperatures at DCA and only 23 days with 90°F+ highs (9 below the summer average). The season began with cool but pleasant conditions in June. In fact, the first 90°F+ reading of the month didn't occur until the 25th at DCA and there were a few mornings (7th, 8th, & 9th) when lows dipped into the forties in the suburbs. There were only 3 June days with 90°F+ highs (the fewest in 5 years) and 20 days with at or below normal temperatures at DCA. Cooler than normal conditions highlighted the first half of July. Temperatures averaged more than 3°F below normal between the 1st and 15th at DCA and there were no days with highs at or above 90°F during this period. In contrast, conditions more typical of July prevailed during the last half of the month as readings soared above 90°F on 9 of the last 16 days at DCA. The hottest conditions occurred during what is climatologically the warmest period of the year (the third week of July) in the Washington/Baltimore area. Highs exceeded 90°F on four consecutive days at DCA (20th-23rd) and topped 95°F on the latter three days. During this period, the heat combined with high humidity, to produce apparent temperatures between 105°F and 110°F across parts of the local area. On the 22nd, the mercury soared to 104°F at DAA while IAD observed a daily record high of 98°F. Like June and July, cooler than normal conditions started off the final month of the meteorological summer. Temperatures averaged 3°F below normal during the first 8 August days and the first 90°F reading of the month didn't occur until the 11th at DCA. The most prolonged period of summer heat enveloped the Washington/Baltimore area from the 22nd-31st. Highs topped 90°F on 9 days during this period, and both high humidity and poor air quality were observed frequently.

Seasonal precipitation totals fell well short of normal, with deficits between 3.5" and 6" quite common across the area. In fact, DCA observed its driest summer since 1980 while BWI reported the third driest summer on record. There were several periods of extended dryness especially during July and August. Less than 2.5" of rain fell during the final two months of summer at both DCA (2.38": 30% of normal) and BWI (2.33": 31% of normal) and less than 2 inches at IAD (1.77": 24% of normal), producing the driest July-August period on record at both BWI & IAD and third at DCA. The season began with wetter than normal conditions in June. In fact, it was the first wetter than normal June at DCA (4.42") in nearly ten years. Measurable precipitation fell on 18 June days at DCA while IAD reported 19 such days and BWI observed 20. The most notable event of the month occurred on June 4th when severe thunderstorms spawned the strongest tornado ever observed in the state of Maryland (F4 - winds in excess of 200 mph). The twister touched down in Frostburg and generated significant property damage. Fortunately, no fatalities were reported due in large part to early warning by the National Weather Service Forecast Office in Sterling, VA. Abnormally dry conditions developed across the local area in July. All three major airports recorded less than 2 inches of rain and monthly deficits of about 2 inches. IAD reported its third driest July (1.32") on record while BWI reported the eighth driest (1.42") such month. Measurable precipitation (≥0.01") fell on only 4 July days at BWI, 5 at IAD and 7 at DCA. In addition, BWI observed 21 consecutive July days (9th-29th) without measurable precipitation. Very dry conditions prevailed during August. Many locations reported near-record or record August dryness, including the three major airports. IAD reported the driest such month on record while BWI observed its second driest and DCA reported the driest August since 1962 (3rd overall in Washington). Measurable precipitation fell on a mere 3 days at both DCA and BWI and on 5 days at IAD, producing monthly totals of 0.59", 0.91" and 0.45", respectively. In addition, there were extended periods when no measurable precipitation was observed, including the first 9 days of the month at DCA, BWI and IAD and again during the final two weeks at both DCA and BWI. In the last two months, year-to-date precipitation surpluses have fallen by more than 50% across the local area. During the first six months of 1998, DCA recorded a precipitation surplus of 10.18" (7.30" at BWI; 10.43 at IAD), but for the January-August period that fell to 4.79" (2.02" at BWI; 4.77 at IAD).

SUMMER 1998 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station Location	Temperatures (°F)					Extreme/Month-Day		Precipitation (In)		
	AvMx	AvMn	AvgT	NmlT	DepNml	MaxT	MinT	Total	Norm	DepNml
National (DCA)	86.0	68.2	77.1	78.1	-1.0	97/7-22*	52/6-7	6.80	11.09	-4.29
Baltimore (BWI)	85.7	63.5	74.7	75.1	-0.4	99/7-22	46/6-9	5.56	11.28	-5.72
Dulles (IAD)	85.5	62.4	74.0	73.7	+0.3	98/7-22	44/6-9	7.65	11.35	-3.70
Ft. Belvoir (DAA)	90.5	67.4	78.9	N/A	N/A	104/7-22	50/6-7	10.06	11.9	-1.8
Andrews AFB (ADW)	85.5	66.6	76.1	N/A	N/A	99/7-22*	46/6-9	8.26	12.4	-4.1

Other Occurrences: * August 25th.

LOOKING AHEAD TO SEPTEMBER: A Ninth Consecutive Cooler Than Normal September?

After a slightly cooler than normal summer at DCA, our attention now turns toward Autumn. There hasn't been a September with above normal temperatures at DCA since 1990. The question arises whether this will be the ninth consecutive cooler than normal September. Below is a list of the September average temperatures since 1990 along with the associated departure from normal. [Normal September Average Temperature at DCA: 71.3°F].

Year	Avg. Temp. (°F)	Dep. Nml. (°F)	Year	Avg. Temp. (°F)	Dep. Nml. (°F)
1997	70.5	-0.8	1993	71.0	-0.3
1996	70.6	-0.7	1992	69.2	-2.1
1995	71.0	-0.3	1991	71.0	-0.3
1994	70.2	-1.1	1990	69.6	-1.7