

July 2005

Temperature: After two cooler than normal Julys, sweltering heat returned to the Washington/Baltimore area. Temperature departures of +1.3°F, +1.4°F and +2.2°F were observed at DCA, BWI and IAD, respectively, marking the warmest July in 3 years. Although no daily temperature records were set, the area was consistently hot and humid. DCA recorded 13 days with highs at or above 90°F; BWI, 12; IAD, 9. From the 25th-27th, the mercury soared to 95°F or higher at DCA; BWI and IAD topped 95°F on the 27th. From the 16th-22nd and 25th-27th hot, humid weather prevailed across the area, creating uncomfortable conditions and prompted numerous NWS heat warnings and advisories.

Beginning at midmonth, after the remnants of Hurricane Dennis passed, the tropical system left behind excessive levels of humidities as dewpoints soared into the mid 70's. Combined with highs near or above 90°F, conditions were oppressive with heat index values near or above 100°F. The second heat wave was shorter, but just as sultry. Highs peaked in the mid 90's as most areas recorded their hottest reading of the season to date on the 27th, with highs in the mid to upper 90's at the three major airports. The 97°F readings at DCA on the 26th and 27th were the hottest days in Washington since August 2002. Making matters worse, the area endured frequent abnormally warm nights. Lows averaged more than 3°F above normal at all three major airports as humid conditions kept minimum temperatures at or above 70°F on 27 days at DCA (matching July 1994). The month included 8 days with lows at or above 75°F. DCA recorded only one day (29th) when highs failed to reach 80°F.

Precipitation: For the third consecutive year, July was excessively wet with monthly precipitation totals between 6"-9" recorded at many locations, including the three major airports. BWI's monthly total of 8.77" was its largest July total on record and nearly 5" above its normal of 3.85". IAD also recorded its wettest July on record, 7.89", an excess of 4.32" for the month. DCA's monthly rainfall was 6.06", a monthly surplus of +2.40". The remnants from Tropical Storm Cindy and Hurricane Dennis as well as frequent thunderstorms contributed to the high monthly rainfall. The remnants of Cindy soaked the area on the 7th-8th with 2"-4" at many locations, including 3.54" at IAD. The storm system brought heavy rain, overflowing the banks of the Monocacy River in Frederick, created a large sinkhole along the Baltimore-Washington Parkway, flooded numerous roads, and left many areas without power, according to press reports. Areas west of Washington and across Northern Virginia received even greater amounts of rain, including 7.5" in Massies Corner in Rappahannock County, VA, and 5" in Haymarket, VA. The remnants of Dennis followed less than a week later, producing drenching thunderstorms from the 14th-16th. BWI recorded a daily record rainfall of 2.79" on the 16th on top of 1.04" of rain the previous day. DCA also recorded 1.18" on the 15th.

Numerous thunderstorms plagued the region during the month. The most notable occurred on the 27th when 150,000 customers lost power across the area, according to press reports. In addition, there were four injuries in Loudoun County, VA, from lightning strikes. Many storms became severe as wind damage knocked down trees and power lines. Golf ball size hail was reported in Laytonsville, MD. In the early morning hours of the 23rd, intense and fast moving thunderstorms with frequent cloud-to-ground lightning, struck parts of Montgomery and Prince Georges, MD, and parts of D.C., causing power outages to as many as 18,000 customers, according to press reports. Additional power outages were endured in some areas on the 1st and 5th after thunderstorms battered the region. The University of Virginia in Charlottesville, VA, was especially hard hit on the 5th as winds gusted to 70 mph, knocking down large hardwood trees on the campus and surrounding neighborhood, and producing significant damage to a dozen vehicles and buildings, according to press reports.

JULY 2005 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (In.)			
	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Norm	DepNml	Yr to Date
National (DCA)	88.3	72.6	80.5	79.2	+1.3	97/27 ¹	66/8 ²	6.06	3.66	+2.40	27.27
Baltimore (BWI)	86.9	69.0	77.9	76.5	+1.4	96/27	60/24	8.77	3.85	+4.92	29.50
Dulles (IAD)	86.9	68.8	77.9	75.7	+2.2	96/27	61/24	7.89	3.57	+4.32	27.49
Andrews (ADW)	87.0	70.0	78.5	N/A	N/A	99/27	63/8	4.35	4.30	+0.05	N/A

Other Occurrences: ¹26, ²24

Looking Ahead to August: Wet July=Dry August?

Will three consecutive wetter than normal Julys across the area bring a dryer than normal August? Below is a list of the 10 most recent wet Julys at DCA and the corresponding August precipitation totals. Normal July Precipitation at DCA: 3.66"; Normal August Precipitation at DCA: 3.44". **Blue Text** is below normal precipitation. **Red text** is above normal precipitation.

Year	1989	1990	1991	1992	1995	1996	2000	2001	2003	2004	2005
July Precipitation (in)	5.66	3.78	3.76	5.34	4.03	5.60	5.51	4.78	5.76	6.98	6.06
August Precipitation (in)	1.15	6.74	2.03	2.48	0.88	2.63	3.77	2.98	4.65	5.09	?