

**DECEMBER 2003:** Above normal precipitation and slightly below-normal temperatures highlighted weather conditions across the Washington and Baltimore area. December marked the 8th consecutive month with above normal precipitation with monthly totals in excess of 4" at all three major airports. As in 2002, the first snowfall of the season occurred the first week of the month. The Washington, DC, area was on the rain-snow line throughout the storm's duration (4th-6th), resulting in significantly more snow north and west of the city. The storm began as snow in most areas the evening of the 4<sup>th</sup>. By the 5<sup>th</sup>, as much as 9" had fallen in Damascus, MD and Leesburg, VA before changing to rain at most locations. By contrast, areas south and east of Washington, including ADW, received less than one inch of snow. The storm ended as snow on the 6<sup>th</sup> as cold air filtered into the region. Between 2" and 5" of additional snowfall were reported at most locations, with the larger amounts north of Washington. Less than a week later (11<sup>th</sup>), heavy rains, coupled with readings near 50°F, caused rapid snow melt, resulting in numerous roads closures, according to press reports. The final snowfall of the month occurred on the 14<sup>th</sup> when 3"-4" fell before the precipitation changed to rain. This storm produced the largest snowfall of the month at DCA (3.6"). Two rain events on the 17<sup>th</sup> and 24<sup>th</sup> pushed monthly precipitation totals to more than 1" above normal at the three major airports, resulting in the 10th month of 2003 with above-normal precipitation.

Temperatures averaged near or slightly below normal across the area. DCA's monthly temperature departure of -0.4°F marked the 9th month in 2003 with subnormal readings. Temperatures averaged more than 3°F below normal the first three weeks of the month at DCA with subnormal temperatures on 16 of the first 21 days; however, there was no bitterly cold Arctic air. In fact, DCA's lowest reading for December was a relatively mild 25°F, while the colder suburbs dropped to the upper teens only once during the month (19°F at both BWI & IAD on the 8th). The temperature pattern changed dramatically the final week to 10 days of the year as much milder air enveloped the region; temperatures averaged about 7°F above normal with at or above-normal temperatures the last 10 days of the year and 2 days (23<sup>rd</sup> and 29<sup>th</sup>) with 60°F+ highs at DCA and IAD.

### DECEMBER 2003 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	Snow
National (DCA)	46.5	31.8	39.1	39.5	-0.4	62/23	25/21	4.32	3.05	+1.27	6.2
Baltimore (BWI)	45.5	27.2	36.4	36.7	-0.3	62/23	19/8	4.71	3.35	+1.36	9.6
Dulles (IAD)	45.2	26.8	36.0	36.0	0.0	62/23	19/8	4.57	3.07	+1.50	11.4
Andrews AFB (ADW)	45.3	28.6	36.9	N/A	N/A	61/23	19/21	4.33	3.40	+0.90	5.8

**ANNUAL 2003:** Extremely wet and cool conditions prevailed across the Washington/Baltimore area in 2003, resulting in the wettest year recorded at most locations and the coolest year in Washington since 1963. Annual precipitation exceeded 60" at most locations, with a few places recording nearly 80". The annual precipitation totals at the three major airports were more than 150% of normal and were more typical of areas along the Gulf Coast and coastal Pacific Northwest. DCA's total of 60.83" was the largest annual precipitation total in Washington since 1889 and only half an inch short of tying the all-time annual precipitation record (61.33" in 1889). The year was also noteworthy for significant snowfall, including the President's Day Storm (Feb 15-18th) and resulted in the snowiest calendar year since 1996 (BWI 58.1", IAD 53.3", DCA 39.5") throughout the region. The local area was also hit hard by Tropical Storm Isabel, which lashed the area on September 18<sup>th</sup>, causing millions of dollars in property damage and widespread power outages that lasted for several days in some areas, according to press reports. Additionally, numerous heavy thunderstorms knocked out power across the area and frequent storms brought flash flooding as the saturated ground often could not retain the heavy moisture. The year began with very cold and snowy conditions during the final two months (January and February) of meteorological Winter. In fact, it was the snowiest February on record at BWI (40.5") and IAD (34.9"), and third snowiest at DCA (28.7"). February precipitation surpluses of more than 2" were common across the area. Spring started with above normal March precipitation and slightly below-normal rainfall in April. May was very wet with monthly precipitation totals exceeding 6" at most locations. The summer months yielded well above-normal precipitation across the local region. In fact, it was the wettest summer since 1969 at DCA (18.28") and second wettest on record at IAD (19.98"). Wet conditions continued through Autumn with seasonal precipitation departures above 5" common across the area. A wetter than normal December capped the second wettest year on record in Washington (wettest on record at both BWI and IAD) and marked the 10<sup>th</sup> month during the year with above-normal precipitation at the three major airports.

Abnormally cool weather yielded the coolest year since 1963 at DCA with an annual temperature deficit of -1.1°F. In fact, there were only 3 months with at or above normal temperatures at most locations. The year began with a cold January and February. Monthly temperatures averaged more than 3°F below normal in January and more than 4°F below normal in February. It was the first colder than normal January since 1996 at DCA and the coldest February since 1979 at all three major airports. Spring brought cooler than normal conditions across the local area particularly in May, which averaged between 2.5°F and 4°F below normal, yielding the coolest May in more than 35 years at DCA. Summer was highlighted by the coolest June since 1972 at DCA, a slightly cooler than normal July, but a warm August. Summer temperature departures were about 1°F to 2°F below normal at most locations. Warmer than normal conditions prevailed in Autumn due to unusual warmth in November. Both September and October recorded near-normal temperatures. In November, temperatures averaged between 4°F and 6°F above normal at the three major airports and featured 2 days with 80°F+ highs and 22 days with at or above-normal temperatures at DCA. The final month of 2003 was highlighted by near-normal temperatures at most locations.

### ANNUAL 2003 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	Snow
National (DCA)	64.1	47.8	56.4	57.5	-1.1	94/7-5*	11/1-18	60.83	39.35	+21.48	39.5
Baltimore (BWI)	62.9	44.8	53.9	54.6	-0.7	93/6-26	5/1-18	62.66	41.94	+20.72	58.1
Dulles (IAD)	63.2	44.1	53.6	54.2	-0.6	93/7-5	3/1-18	66.77	41.80	+24.97	53.3
Andrews AFB (ADW)	63.7	45.8	54.8	N/A	N/A	93/7-5#	7/1-18	63.48	42.50	+21.98	42.1

Other Occurrences: August 22<sup>nd</sup>; # July 6<sup>th</sup> and August 22<sup>nd</sup>.

### LOOKING AHEAD TO JANUARY: A ninth consecutive month with above-normal precipitation?

After the second wettest year on record (2003) in the Washington area and the eighth consecutive month with above-normal precipitation our attention now turns to 2004. Will the wetter than normal conditions so prevalent during the last several months continue into the new year? Below is a list of the total precipitation and corresponding monthly departure from normal for the last eight months at DCA.

Month & Year	Observed Precipitation (in.)	Departure from Normal (in.)	Month	Observed Precipitation (in.)	Departure from Normal (in.)
December 2003	4.32	+1.27	August 2003	4.65	+1.21
November 2003	4.24	+1.21	July 2003	5.76	+2.10
October 2003	3.93	+0.71	June 2003	7.87	+4.74
September 2003	6.87	+3.08	May 2003	7.06	+3.24