

FEBRUARY 2003: The last month of the 2002-03 winter was marked by abundant snowfall, flooding rains, high winds and persistent cold. The wet month was in a dramatic contrast to a last year's abnormally dry and warm conditions. Some locations recorded their wettest February this year after observing their driest in 2002. The highlight of the month was the President's Day weekend snowstorm that resulted in a record four day snowfall total of 28.2" at BWI, 22.4" at IAD, and 16.7" at DCA. The most intense snowfall occurred on the 16th-17th when up to two feet of snow fell across the region. It was the fifth largest snowstorm in Washington, and the largest total since the January 5-6, 1996 blizzard. Four day snowfall totals exceeded three feet (37") in Berkley Springs, WV. The storm paralyzed the area Sunday through Tuesday, impacting holiday sales, closing airports, and limiting all but emergency travel. Governments and many businesses remained closed Tuesday and many school systems were shut the entire week. The local area also received 6"-7" of snow on the 6th-7th and another 3"-5" of snow between the 16th-28th. Measurable snowfall was observed on 10 days at both DCA and BWI and 9 days at IAD. The monthly snowfall totals (40.5" at BWI, 34.9" at IAD, 28.7" at DCA) were about twice the normal annual totals and the largest February totals ever recorded at BWI and IAD, and third largest at DCA. Less than a week later, another intense system brought torrential rains (more than 2") to the area on the 22nd, resulting in flooded roads and homes and contributed to the collapse of roofs, including a toy store in Lanham, MD. Fortunately, there were no fatalities or serious injuries, according to press reports. The Potomac river did not reach flood levels thanks to the storm's fast movement and the heaviest rains falling locally rather than on the mountains in sharp contrast to the floods following the 1996 blizzard and rainstorm that followed. Strong winds, with gusts to 50 mph, followed the heavy rains and resulted in numerous power outages across the area on the 23rd. Most locations reported 5"-8" of precipitation, producing the wettest month since July 2000 at DCA, September 1999 at BWI and May 2001 at IAD.

Unusually cold weather gripped the local area most of the month, producing monthly temperature departures of -4.5°F at both DCA and IAD and -5.3°F at BWI. In fact, it was the coldest February in Washington since 1979. There were 23 days with highs at or below normal including four days (16th, 17th, 26th, 27th) with at or below freezing highs and snow fall. DCA also recorded 21 days with at or below freezing lows. It was the first February with subnormal temperatures at DCA and IAD since 1996 and at BWI since 1995. The month was also noteworthy for the lack of any mild weather. The warmest day of the month occurred on the 4th when DCA reached a high of 54°F, IAD hit 51°F and BWI topped out at 50°F.

FEBRUARY 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)	39.7	27.6	33.6	38.1	-4.5	54/4	15/16	6.98	2.63	+2.82	28.7
Baltimore (BWI)	37.5	22.8	30.2	35.5	-5.3	50/4	9/9	6.70	3.02	+3.68	40.5
Dulles (IAD)	37.9	22.7	30.3	34.8	-4.5	51/4	7/9	6.27	2.77	+2.36	34.9
Andrews AFB (ADW)	38.9	24.5	31.7	N/A	N/A	52/4*	9/9	7.44	3.3	+4.1	30.7

Other Occurrences:* February 28th

WINTER (DECEMBER-FEBRUARY) 2002-2003: Abnormally cold, wet and snowy weather prevailed across the Washington/Baltimore area. In fact, it was the coldest winter in 25 or more years at many locations and the second snowiest in Washington (tied with 1995-96 and 1960-61) & at IAD, and the third snowiest at BWI. Seasonal temperature departures were between -4.5°F and 5.5°F at the three major airports. In addition, it was the first winter since 1995-96 with subnormal temperatures observed during each month at DCA. There were 65 days (72%) with at or below normal temperatures and 65 days with lows at or below freezing at DCA. The season began with subnormal temperatures in December, yielding monthly temperature departures between -2°F and -3°F at the three major airports and 19 days with at or below-normal temperatures at DCA. The coldest weather occurred from the 1st-11th with readings averaged more than 10°F below normal at DCA. During this period, highs remained in the 30s on 8 of the 11 days at DCA and a few daily record lows were observed. On the 6th and 7th both BWI (13°F and 6°F) and IAD (9°F and 1°F) recorded record lows and on the 8th IAD recorded another when the mercury plunged to 13°F. Temperatures moderated around mid-month as temperatures were at or above normal on 12 out the final 20 days. The mild weather during the latter half of December was not significant enough to offset the very cold conditions early in the month. Abnormally cold conditions were observed during January with monthly temperatures averaging between 3°F and 4°F below normal at most locations. In fact, it was the coldest January since 1994 at many locations. DCA recorded 24 days with at or below normal temperatures, 25 days with lows at or below freezing and 7 days when the mercury failed to top 32°F. On the 18th, lows plunged to the single digits at many locations, yielding the lowest readings since January 1997 at some locations including both BWI (5°F) and IAD (3°F). Cold weather continued throughout February, resulting in the coldest such month in more than 20 years. Monthly temperature departures between -4.5°F and -5.5°F were common across the Washington/Baltimore area.

With persistent cold throughout much of the winter, precipitation frequently fell as snow. Each of the three major airports observed seasonal snowfall totals exceeding 40 inches (see table below). In addition, DCA, BWI and IAD recorded seasonal precipitation surpluses between 2.5" and 4.5". The season started with a wet, snowy December. Monthly precipitation totals between 3" and 5" and snowfall totals between 4" and 7" were observed at the four local airports. In addition, it was the first December with above-normal snowfall in more than 10 years at many locations. The largest snowstorm since December 12, 1982, blanketed the area on the 5th, with most locations recording between 4" and 7" of snow. A couple of other storm systems (on the 11th and 24th-25th) produced a wintry mix of precipitation. The local area also experienced the first white Christmas in many years. The new year began with subnormal precipitation and snowfall across the local area. Monthly precipitation totals of less than 3" and snowfall totals between 4" and 6" were observed at the three major airports. Very snowy conditions prevailed during the final month of winter with many locations recording more than 2 feet of snow, including DCA, BWI and IAD. Both BWI and IAD reported their snowiest February on record.

WINTER 2002-2003 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)	40.4	27.5	34.0	37.5	-3.5	62/1-9	11/1-18	12.31	8.89	+3.42	40.3
Baltimore (BWI)	38.5	23.3	30.9	34.8	-3.9	59/1-9	5/1-18	14.25	9.84	+4.41	55.5
Dulles (IAD)	38.7	22.7	30.7	34.1	-3.4	60/1-9	1/12-7	11.43	8.89	+2.54	48.2
Andrews AFB (ADW)	39.6	24.4	32.1	N/A	N/A	61/1-9	7/12-7*	17.73	9.3	+8.4	40.5

Other Occurrences: * January 18th.

LOOKING AHEAD TO MARCH: The transitional month.

With the end of another winter our thoughts now turn to spring. Since March is the transitional month from winter to spring, it can be a month of extremes. Below is a list of some notable March climatological statistics for Washington since records began in 1871 (snowfall records began in 1888).

Temperature Extremes			Precipitation Extremes		
Coldest: 1885	Avg. Temp.: 34.5°F	Dep. Nml.: -12.7°F	Wettest: 1891	Tot. Prec.: 8.84"	Dep. Nml.: +5.67"
Warmest: 1921 & 1945	Avg. Temp.: 55.5°F	Dep. Nml.: +8.3°F	Driest: 1910	Tot. Prec.: 0.57"	Dep. Nml.: -2.60"
Extreme Minimum: 4°F (March 4, 1873)			Snowiest: 1914	Tot. Snowfall: 19.3"	Dep. Nml.: +17.7"
Extreme Maximum: 93°F (March 23, 1907)			Most precipitation in one day (liquid): 2.79" (March 9, 1881)		
Most days with: lows ≤ 32°F: 24 (1960) ; highs ≥ 90°F: 3 (1907)			Most snowfall in one day: 11.3" (March 29, 1942)		