

DECEMBER 2002: The 2002-03 winter season began in earnest as the month featured subnormal temperatures, including a few daily record lows, above normal snowfall, and an ice storm that coated parts of the local area with up to ½ an inch of ice. Monthly temperature departures averaged between -2°F and -3°F at the three major airports and included 19 days with at or below-normal temperatures at DCA. The coldest weather occurred from the 1st-11th as readings averaged more than 10°F below normal at DCA. During this period, highs remained in the thirties on 8 of the 11 days at DCA. In addition, the first high of 32°F or lower since Dec 30, 2001 occurred on the 4th (32°F) and again on the 5th (30°F) at DCA. The cold air outbreak also produced a few daily record lows at many locations. 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 of the final 20 days. From the 19th-23rd and again on the 31st, all three major airports recorded readings at or above 50°F. In fact, DCA recorded a high of 61°F on both the 20th & 31st. The mild weather during the latter half of the month was not significant enough to offset the very cold conditions early in the month, thus the local area experienced a third consecutive month of subnormal temperatures.

Four significant storm systems, including three with wintry precipitation, provided the majority of the month's precipitation across the local area. Almost 5 inches of precipitation fell on the Washington/Baltimore area, yielding the first wetter than normal December since 1997 at most locations. The largest snowstorm since December 12, 1982 blanketed the area on the 5th, with most locations recording between 4" and 7" of snow. The storm closed schools, created hazardous driving conditions, and delayed or canceled flights at the major airports. On the 11th, another storm system produced a wintry mixture of precipitation across the Washington/Baltimore area. More than an inch of precipitation (liquid equivalent) was observed at BWI (1.61"), DCA (1.36") and IAD (1.09"). The precipitation began as freezing rain across most of the area, creating dangerous driving conditions, especially north and west of Washington and Baltimore. Temperatures eventually rose above freezing in the immediate suburbs, but to the north and west readings at or below freezing allowed the freezing rain to accumulate on trees and power lines, creating up to half an inch of ice in some areas. At the height of the storm, ice laden trees and power lines snapped cutting power to nearly 90,000 customers from the Blue Ridge to the Washington suburbs in Virginia and up to 50,000 customers in Maryland, according to press reports. The third storm of the month generated more than one-half inch of rain across the area on the 13th and also melted any remaining snow on the ground at most locations. DCA & BWI both observed their longest period (prior to December 15th) of snow depth (8 and 7 days, respectively) since 1910. The last significant precipitation event of the month started as wet snow during the day on Christmas Eve, then changed to rain overnight at most locations, and back to snow before ending on Christmas morning. Total snowfall for the storm averaged about two inches with a water equivalent of over an inch at some locations, including BWI (1.32"). It also marked the first white Christmas across the region in many years. This marked the third consecutive month with above normal precipitation, the first such period since July-September 2001 at many locations and according to press reports, ended long-term drought conditions that have plagued the local area since Autumn 2001. In addition, it was the first December with above-normal snowfall in more than ten years at many locations.

DECEMBER 2002 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station Location	Temperatures (°F)					Extreme/Day			Precipitation (In)		
	AvMx	AvMn	AvgT	NmIT	DepNmI	MaxT	MinT	Total	Norm	DepNmI	Snow
National (DCA)	44.2	30.2	37.2	39.5	-2.3	61/20*	18/7	4.45	3.05	+1.40	7.1
Baltimore (BWI)	42.6	25.9	34.3	36.7	-2.4	58/20	6/7	4.96	3.35	+1.61	9.7
Dulles (IAD)	42.4	24.4	33.4	36.0	-2.6	58/31	1/7	3.61	3.07	+0.54	8.2
Andrews AFB (ADW)	43.6	26.0	34.8	N/A	N/A	63/20	7/7	4.71	3.40	+1.30	4.2

Other Occurrences: * December 31st.

ANNUAL 2002: While above-normal temperatures and subnormal precipitation and snowfall prevailed across the Washington/Baltimore area, the year's most noteworthy weather-related events were the long-term drought conditions that plagued the local area most of the year and the deadly tornado (F4; 207-260 mph winds) that struck La Plata, Maryland in late April. It was an abnormally warm year in the Washington/Baltimore area. In fact, it was the 7th warmest year on record in Washington, the 6th at BWI and the 4th at IAD, with annual temperature departures of nearly +2°F observed at three major airports. The year commenced with a period of cold weather during first week of January as highs in the thirties prevailed. After this, periods of cold weather were infrequent and brief, usually lasting only a couple of days at a time throughout January and February. The result was monthly temperature departures exceeding +6°F in January and more than +3.5°F in February at the three major airports. In fact, it was one of the warmest (7th overall) January-February periods on record in Washington. Spring was highlighted by above-normal temperatures. Seasonal temperature departures between +1°F and +2°F were common at most locations. March produced monthly temperature departures between +1°F and +2°F at the three major airports. In April, temperatures averaged more than 3°F above normal across the Washington/Baltimore area. The warmer than normal April conditions were largely the result of a four-day heat wave, as daily readings soared to summerlike levels from the 16th-19th. Daily record highs were established at all three airports on the 16th and 17th as highs topped 90°F. The high of 95°F on April 17th tied the all-time highest reading ever observed in April and was also the earliest 95°F+ reading ever recorded at DCA. Slightly cooler than normal weather prevailed during May. During summer, exceptionally hot and dry conditions dominated and Washington recorded its second hottest (tied with 1991) summer (fifth at both BWI and IAD) on record. Seasonal temperature departures of more than +2°F were reported at the three major airports. There were 48 summer days with readings at or above 90°F at DCA, the most such summer days since 1988 and the fifth largest summer total ever recorded in Washington. Highs hit the century mark at BWI on July 4th and twice in August at DCA. Slightly above-normal temperatures prevailed across the Washington/Baltimore area during Autumn. The season commenced with above-normal temperatures in September, yielding monthly temperature departures of about +2°F above-normal at most locations. October temperatures averaged near-normal at most locations despite summerlike weather from the 1st-5th. On October 5th, DCA recorded a high of 90°F, the first such October reading and the latest such reading since 1997. It marked the 56th and final day of 2002 with a 90°F+ high (most such readings in a calendar year since 1991) at DCA. Cooler than normal conditions prevailed during November and December with monthly departures between -1°F and -2°F in November and more than 2°F below-normal in December.

Unusually dry conditions that commenced during the latter half of 2001 continued throughout much of 2002. The 2001-2002 winter was the second driest winter ever recorded in Washington (3rd at BWI and driest ever at IAD). Seasonal precipitation deficits topped 5 inches at the three major airports. In addition, subnormal seasonal snowfall was observed across the local area once again. Subnormal precipitation was observed across the region during the first month of 2002 with monthly totals generally less than two inches. It was the driest January since 1981 at both DCA & IAD. February featured the driest weather of the Winter as less than 0.50" of precipitation was observed at most locations. Slightly drier than normal conditions prevailed during March despite frequent periods of rainfall. Monthly precipitation totals between 3 and 4 inches were common at many locations. April was highlighted by a devastating bout of severe weather and the first wetter than normal month since last summer. One of the strongest tornadoes (F4 -207-260 mph winds) ever observed in the local area left a path of destruction across parts of southern Maryland on the 28th. Damage was so severe in parts of Charles, Calvert and Dorchester counties that they were declared federal disaster areas. April precipitation totals between 3.50" and 4.00" were common at many locations. May precipitation totals varied considerably during the final month of Spring, due in large part to thunderstorms. Both DCA and BWI recorded monthly deficits while IAD recorded a monthly surplus of about half an inch. Summer rainfall was below-normal across much of the local area. At DCA, only 7.64 inches of rain was recorded (about 75% of normal). The subnormal rainfall led to a worsening of long-term drought conditions across much of the Washington/Baltimore area. June precipitation totals between 2" and 4" were common at most locations. Subnormal precipitation was observed at most locations during July with monthly precipitation totals of just over 2 inches common. The subnormal monthly rainfall contributed to the loss of more than 50% of Maryland's corn crop, according to press reports. August precipitation was also below-normal at the three major airports and for most of the local area. Very little rain fell during the first 27 days, but beneficial, soaking rains fell across the local area on August 28th and 29th, with many locations recording more than 2 inches of rain. Wetter than normal conditions prevailed across the Washington/Baltimore area during Autumn. Seasonal precipitation totals were between 11 and 13 inches, yielding seasonal precipitation surpluses of 1 to 3 inches at the three major airports. In September, precipitation totals between 2.00" and 3.25" were reported at the three major airports. In sharp contrast to the previous four October's, much above-normal rainfall prevailed with monthly precipitation totals between five and seven inches common throughout the Washington/Baltimore area. Above-normal precipitation continued throughout most of November and again in December with monthly totals between 3 and 5 inches reported during each month.

ANNUAL 2002 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station Location	Temperatures (°F)					Extreme/Month-Day			Precipitation (In)		
	AvMx	AvMn	AvgT	NmIT	DepNmI	MaxT	MinT	Total	Norm	DepNmI	Snow
National (DCA)	68.1	50.4	59.2	57.5	+1.7	100/8-2*	18/12-7	34.33	38.35	-5.02	10.3
Baltimore (BWI)	66.9	64.0	56.4	54.6	+1.8	100/7-4	6/12-7	39.30	41.94	-2.64	12.0
Dulles (IAD)	66.8	45.1	55.9	54.2	+1.7	99/8-2#	1/12-7	38.18	41.8	-3.60	10.8
Andrews AFB (ADW)	67.2	46.8	57.0	N/A	N/A	100/7-4	7/12-7	39.06	42.5	-3.40	6.2

Other Occurrences: August 13th; # August 4th.

LOOKING AHEAD TO JANUARY: A seventh consecutive warmer than normal January?

For the last 6 years, the local area has recorded warmer than normal weather in January. The question arises whether the string of warmer than normal Januaries will continue. Below is a list of the January average temperatures and corresponding monthly departure for the last six years at DCA. [Normal January Average Temperature at DCA:34.9°F]

Year	Average Temperature (°F)	Departure from Normal (°F)	Year	Average Temperature (°F)	Departure from Normal (°F)
2002	41.6	+6.7	1999	38.2	+3.3
2001	35.5	+0.6	1998	43.0	+8.1
2000	35.9	+1.0	1997	37.0	+2.1