December 2004: Slightly above normal temperatures, near normal precipitation with minimal snowfall highlighted weather conditions across the Washington/Baltimore area. Temperatures averaged $0.5^{\circ} \mathrm{F}$ above normal at DCA, $0.8^{\circ} \mathrm{F}$ at BWI, and $1.8^{\circ} \mathrm{F}$ at IAD, marking the $7^{\text {th }}$ month in 2004 with above normal temperatures in Washington and 6th in Baltimore. Temperatures varied with well above normal readings on 10 of the first 11 days, including highs well into the $60^{\text {'s }}$ on the $7^{\text {th }}$ and $8^{\text {th }}$. On the one day with subnormal temperatures ( $\left.4^{\text {th }}\right)$, DCA recorded its first freezing day of the season with a minimum temperature of $30^{\circ} \mathrm{F}$. From the $19^{\text {h }}$ through the morning of the $21^{\text {st, }}$ bitterly cold conditions accompanied by gusty northwest winds ( 47 mph at DCA) chilled the area. Highs on the $20^{\text {th }}$ struggled to reach the low to mid $20^{\prime}$ 's at most locations; lows plummeted to $9{ }^{\circ} \mathrm{F}$ at BWI and $11{ }^{\circ} \mathrm{F}$ at DCA (the lowest December reading since 1989). Wind chill readings were as low as $-10^{\circ} \mathrm{F}$. Two days later, much warmer conditions returned with highs at or near $60^{\circ} \mathrm{F}$ at many locations. After another warm day on the $23^{\mathrm{rd}}$, a second blast of Arctic air enveloped the region from the $24^{\text {th }}-28^{\mathrm{th}}$ as highs stayed below freezing at IAD from the $24^{\text {th}}-27^{\text {th. }}$. The temperature roller coaster ride continued through month's end as highs rebounded to $60^{\circ} \mathrm{F}$ at both BWI and IAD on New Years Eve.

Monthly precipitation totals around 3" were common across the area. DCA's precipitation total of 3.05 " was exactly normal, while both BWI and IAD were slightly below normal with monthly precipitation departures of $-0.42^{\prime \prime}$ and -0.07 ", respectively. The month featured four significant periods of stormy conditions. The $1^{\text {st }}$ brought a half inch of rain to many areas ( 0.51 " at BWI), but the main impact of this storm system were the strong winds following the rain. Wind gusts to 56 mph were recorded at BWI, 52 mph at DCA, and 45 mph at IAD, producing power outages to more than 40,000 residents, according to press reports. A series of storms between the $7^{\text {th }}$ and $11^{\text {th }}$ produced more than an $1.50^{\prime \prime}$ of precipitation at some locations (1.71" DCA). Lightning and thunder was observed in some areas late on the $7^{\text {th }}$. The month's final storm brought soaking rains to the area on the $23^{\text {rd }}$ with more than an inch recorded in many areas, including a daily record of $1.30^{\prime \prime}$ at IAD. Winds gusted to 44 mph at DCA and downed a tree in Rock Creek Park in D.C., according to press reports. The local area escaped a significant snowfall that impacted southeast Virginia and Maryland's Eastern Shore on the 26th. On the $19^{\text {th }}$ a brief period of wet snow, accompanied in some areas by thunder and lightning, yielded up to $3^{\prime \prime}$ of snow in Anne Arundel County and across parts of southern Maryland with the arrival of an Arctic blast of air. Southern Prince George's County, MD. measured about an inch but most of the immediate Washington/Baltimore suburbs saw only a dusting or light coating ( $0.1^{\prime \prime}$ at DCA the first accumulation of season). The sharp drop in temperatures and light snow created slippery road conditions on the 19 th and $20^{\text {th }}$ in some areas. Nevertheless, snow amounts were minuscule compared to December 2002 and 2003.

## DECEMBER 2004 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

|  | Station Temperatures ( ${ }^{\circ} \mathrm{F}$ ) |  |  |  |  | Extreme/Day |  | Precipitation (In.) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Location | AvMx | AvMn | AvgT | NmIT | DepNml | MaxT | MinT | Total | Norm | DepNml | Snow |
| National (DCA) | 48.1 | 32.0 | 40.0 | 39.5 | +0.5 | $64 / 7$ | $11 / 20$ | 3.05 | 3.05 | 0.00 | 0.1 |
| Baltimore (BWI) | 46.8 | 28.1 | 37.5 | 36.7 | +0.8 | $62 / 7$ | $9 / 20$ | 2.93 | 3.35 | -0.42 | T |
| Dulles (IAD) | 47.5 | 28.0 | 37.8 | 36.0 | +1.8 | $65 / 8$ | $10 / 20$ | 3.00 | 3.07 | -0.07 | T |

Annual 2004: As in 2003, the effect of a tropical system stands out as the highlight of 2004. On September 17, a major tornado outbreak (26 tornadoes) spawned from the remnants of Hurricane Ivan struck the Baltimore-Washington area. The most intense twisters were in Remington, VA, (F3: winds up to 206 mph ) and an (F2: winds up to 157 mph ) in Chantilly, VA. The F3 storm in Fauquier County, near Remington, VA, produced damage along a path of 20 miles and a width of 200 yards. While annual precipitation totals were less than the near-record to record levels recorded in 2003, amounts were generally above normal, exceeding 40" at most locations. Annual precipitation totaled 42.49"at DCA (Dep. Nml.: +3.14"), 45.67" at BWI (Dep. Nml.: +3.73 ") and 38.70" at IAD (Dep. Nml.: -3.12"). Snowfall was well below normal with totals of less than 10" recorded across the local area, nearly all of that amount falling in January. March ushered in spring with drier than normal conditions, the driest March since 1987. April showers made it the first month of 2004 with above normal precipitation. May brought less rain but yielded to a warm, wet summer in most locations, DCA (Dep. Nml: +6.44), IAD (Dep. Nml: -0.17) and BWI (Dep. Nml: +4.5). Fall brought the remnants of Hurricanes Frances, Ivan and Jeanne, dumping more than 8" of rain in the nearby mountains. A drier than normal October yielded to a wet November and average December for overall rainfall slightly above normal.

Temperatures were slightly above normal at most locations with annual temperature departures between $+0.5^{\circ} \mathrm{F}$ and $+1.5^{\circ} \mathrm{F}$ at the three major airports. There were 204 days ( $56 \%$ ) with at or above normal temperatures at DCA, only 11 days with $90^{\circ} \mathrm{F}+$ readings (the fewest since 1905 in Washington) and 68 days with lows at or below freezing. January ushered in the year with slightly cooler than normal temperatures but warmed to near normal in February. March through May continued the balmy trend then eased into a cooler than normal summer with no prolonged heat waves and no days with highs above $95^{\circ} \mathrm{F}$. The year's high reached only $92^{\circ} \mathrm{F}$ at DCA and BWI, and $91^{\circ} \mathrm{F}$ at IAD. Fall retained the slightly cooler than normal days but warm nights kept overall temperatures near normal. Late October and early November featured numerous Indian summer days with temperatures as high as $70^{\circ} \mathrm{F}$.

## ANNUAL 2004 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

|  | Station Temperatures ( ${ }^{\circ}$ F) |  |  |  |  | Extreme/Day |  |  | Precipitation (In.) |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Location | AvMx | AvMn | AvgT | NmIT | DepNmI | MaxT | MinT | Total | Norm | Dep NmI | Snow |
| National (DCA) | 65.8 | 49.9 | 57.9 | 58.0 | +0.5 | $92 / 6-17^{1}$ | $8 / 1-10$ | 42.49 | 39.35 | +3.14 |  |
| Baltimore (BWI) | 64.6 | 46.0 | 55.3 | 55.4 | +0.8 | $92 / 7-5$ | $6 / 1-10$ | 45.67 | 41.94 | +3.73 | 8.5 |
| Dulles (IAD) | 65.3 | 45.4 | 55.4 | 54.2 | +1.2 | $91 / 6-17^{2}$ | $6 / 1-11$ | 38.68 | 41.80 | -3.12 | 6.0 |

## Other Occurrence: 7/5 ${ }^{1}$, $8-7^{2}, 8-20^{3}$

Looking Ahead to January: Looking Ahead: Little December Snow = Little January Snow
With most areas receiving little or no snowfall in December, what will January bring? Below are the 10 most recent Decembers with below average snowfall and the snowfall total for the following January. (DCA December average snowfall: 1.3"; DCA January Average Snowfall: 6.2" ; T=trace.)

| Year | $\mathbf{2 0 0 1 / 0 2}$ | $\mathbf{1 9 9 9 - 0 0}$ | $\mathbf{1 9 9 8 - 9 9}$ | $\mathbf{1 9 9 7 - 9 8}$ | $\mathbf{1 9 9 6 - 9 7}$ | $\mathbf{1 9 9 5 - 9 6}$ | $\mathbf{1 9 9 4 - 9 3}$ | $\mathbf{1 9 9 2 - 9 3}$ | $\mathbf{1 9 9 1 - 9 2}$ | $\mathbf{1 9 8 8 - 8 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December Snowfall (In) | 0.0 | T | 0.5 | 0.1 | 0.2 | 1.3 | 0.0 | 1.0 | 0.0 | 1.2 |
| January Snowfall (In) | 2.7 | 14.5 | 2.2 | T | 2.3 | 23.8 | 3.9 | T | 4.0 | 2.9 |

