

AUGUST 2001: Warm and wet weather highlighted the final month of meteorological summer across most of the Washington/Baltimore. In fact, excessively wet conditions were observed at some locations as monthly precipitation totals topped 6 inches. In Anne Arundel County, MD monthly rainfall exceeded 8 inches with most of the monthly total occurring during the last 2 days of the month. Numerous strong thunderstorms struck the area throughout the month, accompanied by torrential downpours, frequent lightning and strong wind gusts which resulted in occasional flash flooding and power outages. Strong, localized thunderstorms on the 11th dumped up to six inches of rain on Washington D.C., but only 0.92" at National Airport. The storms generated torrential rains that flooded numerous homes & businesses, knocked out power and caused up to \$13 million in property damage in the city, according to press reports. The Federal Emergency Management Agency (FEMA) declared the city a disaster area throughout many of the affected areas. A day earlier, strong thunderstorms produced nearly 3 inches of rain in Oxon Hill, MD, while to the southwest storms snapped two power poles and toppled trees onto secondary and rural roadways in eastern Fauquier County, Virginia. On the 23rd, thunderstorms soaked portions of Fairfax and Loudoun counties in Virginia with up to 1.63" recorded at IAD. The month ended on a wet note, especially in Anne Arundel County. On the 30th, a storm dumped more than 4" of rain on Riviera Beach during the afternoon. Later that day another thunderstorm knocked out power to the main radar at BWI, delaying or canceling numerous flights, and producing 3.23" at the airport.

Temperatures were above normal at the three major airports with monthly departures of +0.4°F, +1.4°F and +2.3°F at DCA, BWI and IAD, respectively. The only significant heat wave of the summer season prevailed from the 6th through the 10th. During this 5-day period highs soared at or above 95°F on four days at most locations and near 100°F at BWI (98°F) on the 9th and 10th. The heat was accompanied by oppressive humidity, producing heat indices (dangerous) above 105°F at some locations while poor air quality caused distress to those with respiratory problems. In addition, local energy companies reported a record demand for power, but fortunately the heat wave ended before rolling blackouts were necessary. There were 17 days with at or above normal temperatures at DCA, including 6 days with 90°F+ highs. Unlike conditions earlier in the summer, when cool and dry air masses from Canada were frequent, humid conditions prevailed most of the month. DCA recorded 21 days with minimum temperatures of 70°F or higher, including a low of 79°F on the 9th.

AUGUST 2001 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

| Station Location | Temperatures (°F) | | | | | Extreme/Day | | Precipitation (In) | | | |
|---------------------|-------------------|------|------|------|--------|-------------|-------|--------------------|------|--------|------------|
| | AvMx | AvMn | AvgT | NmIT | DepNml | MaxT | MinT | Total | Norm | DepNml | Yr to Date |
| National (DCA) | 86.7 | 71.1 | 78.9 | 78.5 | +0.4 | 97/8* | 63/2 | 2.98 | 3.91 | -0.93 | 25.81 |
| Baltimore (BWI) | 87.0 | 67.0 | 77.0 | 75.6 | +1.4 | 98/9# | 58/26 | 5.74 | 3.92 | +1.82 | 29.69 |
| Dulles (IAD) | 86.7 | 66.3 | 76.5 | 74.2 | +2.3 | 97/9 | 58/22 | 4.55 | 3.94 | +0.61 | 29.75 |
| Ft. Belvoir (DAA) | M | M | M | N/A | N/A | M | M | M | 4.4 | M | M |
| Andrews AFB (ADW) | 83.7 | 65.6 | 74.7 | N/A | N/A | 95/10 | 57/2 | 4.15 | 4.4 | -0.3 | 32.30 |

Other Occurrences: * August 9th; # August 10th.

SUMMER (JUNE-AUGUST) 2001: For the second consecutive summer, abnormally cool and wet weather prevailed across most of the Washington/Baltimore area. In fact, the summers of 2000 and 2001 were the coolest back-to-back summers since the early 1960's (see cover graph). There were 61 (66%) summer days with at or below normal temperatures at DCA and only 18 days with 90°F+ highs. The season commenced with near-normal temperatures in June. Monthly temperature departures were between -0.4°F and +1.5°F at the three major airports. There were 18 days with at or below normal temperatures at DCA, marking the fifth consecutive cooler than normal June at the airport. DCA recorded its first 90°F+ reading of the year on June 13th, the last of the three major airports to reach this mark. A brief period of hot and humid weather prevailed from June 27th-30th, with DCA, BWI and IAD all recording highs at or above 90°F each day. A persistent pattern of cool weather prevailed across the local area during July, yielding the fifth coolest back-to-back Julys (2000 and 2001) ever recorded in Washington and the second coolest July on record at BWI (July 2000 was coolest). Monthly temperatures averaged more than 4°F below normal at both DCA and BWI. In addition, there were 26 days with at or below normal temperatures at DCA. There were no prolonged periods of heat and/or humidity during July. In fact, there were only 7 July days when the mercury exceeded 90°F at both DCA and BWI (5 at IAD) and no days with readings at or above 95°F at the three major airports. August featured the warmest weather of the summer and the longest period of heat and humidity of the season. On the 6-10th, highs soared well into the nineties across the local area and combined with high levels of humidity produced uncomfortable conditions and occasionally heat indices above 105°F.

Summer rainfall was frequent and often heavy across the local area with all three major airports recording over 1 foot of precipitation and seasonal surpluses between 1 and 3 inches. The summer began with more than four inches of rain in June at many locations, including portions of Loudoun County, VA and Montgomery County, MD where monthly rainfall totals topped 5 inches. IAD recorded its wettest June since 1996. Four rain events (1st, 6th-7th, 15th-16th and 22nd-23rd) accounted for most of the monthly precipitation totals across the Washington/Baltimore area. On June 1st, between 0.50" and 0.75" of rain fell at most locations. On the June 6th-7th, a storm system generated a soaking rain across the local area, producing precipitation totals between 1 and 2 inches (DCA 1.09" and 1.87" at BWI) at most locations. On June 15th-16th, the remnants of Tropical Storm Allison generated showers and thunderstorms across the region and nearly 2 inches of rain at DCA (1.84") and about an inch at IAD (0.96"). The most intense thunderstorms occurred during the evening hours of the 22nd and early morning hours of the 23rd. Severe thunderstorms lashed much of the area with copious rainfall and damaging winds. Torrential downpours produced as much as five inches of rain, resulting in flash flooding across portions of Prince William, Loudoun and Fairfax counties in Virginia and Montgomery, Howard, and Carroll counties in Maryland. Up to four inches of rain was recorded in Leesburg, VA while 3.70" fell at the Baltimore/Washington National Weather Service Office in Sterling, VA. At IAD, a record daily rainfall total of 2.06" was observed on the 22nd. Above normal July rainfall was reported at 4 of the 5 local airports (DCA, BWI, IAD and ADW) with monthly precipitation totals exceeding four inches across most of the area. Precipitation totals topping six inches were reported across portions of southern Maryland and at ADW (6.18"). Once again, wetter than normal conditions prevailed across most of the local area during August, with monthly precipitation above 4 inches common at many locations.

SUMMER 2001 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

| Station Location | Temperatures (°F) | | | | | Extreme/Month-Day | | Precipitation (In) | | |
|---------------------|-------------------|------|------|------|--------|-------------------|--------|--------------------|-------|--------|
| | AvMx | AvMn | AvgT | NmIT | DepNml | MaxT | MinT | Total | Norm | DepNml |
| National (DCA) | 84.6 | 68.2 | 76.4 | 78.1 | -1.7 | 97/8-8* | 54/6-1 | 12.46 | 11.09 | +1.37 |
| Baltimore (BWI) | 85.0 | 64.3 | 74.7 | 75.1 | -0.7 | 98/8-9# | 45/6-1 | 13.12 | 11.28 | +1.84 |
| Dulles (IAD) | 84.3 | 63.2 | 73.7 | 73.7 | 0.0 | 97/8-9 | 48/6-1 | 13.52 | 11.35 | +2.17 |
| Ft. Belvoir (DAA) | M | M | M | N/A | N/A | M | M | M | 11.9 | M |
| Andrews AFB (ADW) | 81.6 | 62.2 | 72.0 | N/A | N/A | 95/6-10 | 48/6-1 | 14.62 | 12.4 | +2.2 |

Other Occurrences: * August 9th; # August 10th.

LOOKING AHEAD TO AUTUMN: Some noteworthy seasonal statistics.

With a cool, wet summer behind us, we now look ahead to meteorological Autumn (September-November) the season that often produces some of the finest weather in Washington. Below is a list of some of the autumn extremes that have occurred in Washington since records began in 1871.

Temperature Extremes

- Coldest:** 1917 (Avg. Temp: 52.9°F; Dep. Nml.: -7.4)
- Warmest:** 1973 & 1931 (Avg. Temp: 63.1°F; Dep. Nml.: +2.8)
- Extreme Minimum Temp.:** 11°F (Nov. 30, 1929)
- Extreme Maximum Temp.:** 104°F (Sep. 7, 1881)
- Most days with:** lows ≤ 32°F: 19 (1901); highs ≥ 90°F: 14 (1980)

Precipitation Extremes

- Wettest:** 1934 (Tot. Prec.: 21.78; Dep. Nml.: +12.33)
- Driest:** 1930 (Tot. Prec.: 1.83; Dep. Nml.: -7.62)
- Snowiest:** 1987 (Tot. Snowfall: 11.5")
- Most precipitation in one day (liquid):** 5.16" (Sep. 2, 1922)
- Most snowfall in one day:** 11.5" (Nov. 11, 1987)

