

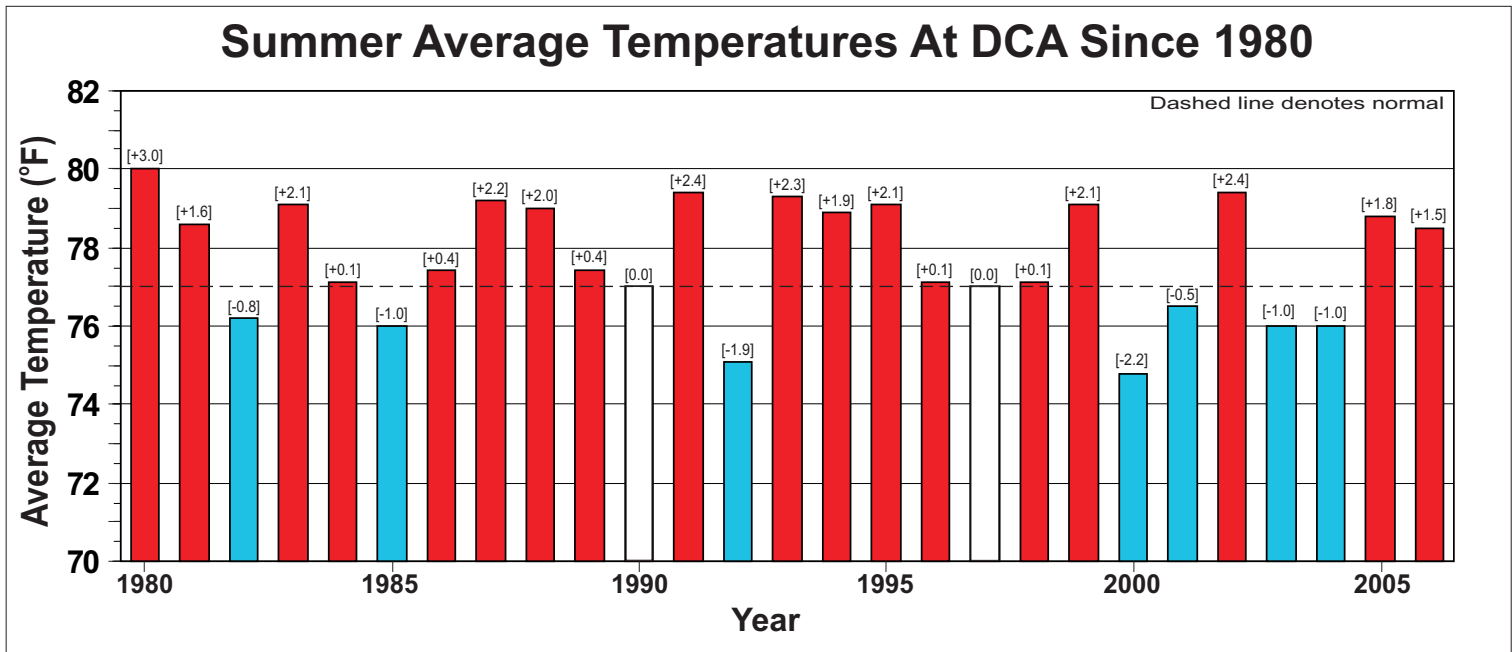


# PRESTO

PRECipitation Summary and Temperature Observations  
For the Washington, DC & Baltimore, MD Area



## AUGUST 2006: Hot and Dry SUMMER: Above Normal Rainfall at Most Locations and Above Normal Temperatures



### August Highlights

- Much above normal temperatures and well below normal rainfall across the area
- Intense heat wave first 4 days as readings soared into the upper 90's at most locations from the 1<sup>st</sup>-3<sup>rd</sup>, including a high of 100°F at BWI on the 1<sup>st</sup> and record daily highs on the 3<sup>rd</sup> of 101°F at DCA and 100°F at BWI
- Three heat-related fatalities in local area, according to press reports.
- Heat results in record power demand, including power outages and delays on mass transit, according to press reports
- Monthly temperature departures of +3.1°F at DCA, +3.9°F at BWI, and +3.6°F at IAD
- DCA observed 15 days with highs at or above 90°F; 13 such days at BWI and 16 at IAD
- Lows at or above 70°F on 10 days at DCA
- Less than 2" of rain at most locations, including the three major airports; 9<sup>th</sup> driest August on record at DCA; 5<sup>th</sup> at BWI and IAD
- Less than 1" of rain reported at some locations in Montgomery County, MD

### Summer Highlights

- Seasonal temperature departures of +1.5F at DCA, +2.8F at BWI, & +2.7F at IAD
- Highs at or above normal on 64 days, above 90°F on 34 days at DCA (most since 2002), including at high of 101°F on August 3
- Lows at or above 70°F at DCA on 53 days
- Record June rainfall in Washington with monthly totals of 10"-15" in many locations
- Greatest 2 day (June 25-26) rainfall in Washington: 9.41"; greatest weekly rainfall record in Washington: 11.20"
- Record June rainfall results in five fatalities in Frederick County, MD, numerous swift water rescues, road closures and power outages. Dozens of buildings, including IRS Headquarters, and homes damaged from flooding according to press reports
- Strong to severe thunderstorms on July 2 knocked out power to more than 100,000 homes with strongest storms observed in portions of Fairfax County, VA, and Montgomery County, MD, including rainfall of nearly 3" in western Fairfax County
- NWS Washington/Baltimore office leads successful evacuation of 80,000 people gathered on National Mall on 4<sup>th</sup> as strong to severe thunderstorms rapidly descended on Washington D.C. Peak winds of 47 mph were observed

**AUGUST 2006 Temperatures:** August featured excessive heat across the local region. Temperature departures of +3.1°F at DCA, +3.9°F at BWI and +3.6°F at IAD yielded the 7<sup>th</sup> warmest August on record at DCA, the warmest August since 1995 at BWI (tied with 2002), and the second warmest ever at IAD (tied with 2002 and 1993). Highs topped the 100 mark at DCA (101°F) on the 3<sup>rd</sup> and reached 100°F at BWI on the 1<sup>st</sup> and 3<sup>rd</sup>. Daily record highs were tied or set at all 3 local airports on the 3<sup>rd</sup> and broken at BWI on the 1<sup>st</sup>. The combination of highs above 95°F and humidity resulted in an Excessive Heat Warning issued by NWS Sterling, VA. According to press reports, the impacts from the heat wave caused three fatalities in the Washington area. Excessive demand for energy led to loss of power for as many as 55,000 customers. Heat restrictions slowed commuter trains and resulted in more than 7,400 auto rescues. High temperatures and humidity continued throughout August with 15 days recording highs at or above 90°F (one day above 100°F) at DCA, 13 at BWI (two at 100°F) and 16 at IAD. Humid conditions and warm temperatures also brought many uncomfortable nights. DCA recorded 20 days with lows at or above 70°F, including oppressive lows of 81°F on the 3<sup>rd</sup> and 80°F on the 2<sup>nd</sup>. Relatively cool days were few. The 10<sup>th</sup> and 31<sup>st</sup> were the only days with highs below 80°F at most locations.

**Precipitation:** The dry conditions which started the second week of July continued throughout August. Most locations recorded less than 2" of rain, with some areas, including portions of Montgomery County, MD, observing less than 0.50" of rain for the month (see table below). All three major airports recorded their driest August since 1998. Many locations recorded their greatest rainfall on the 7<sup>th</sup> when heavy showers and thunderstorms moved through parts of the area. A few storms were severe with wind damage reported in Centreville, VA, and Hillcrest Heights, MD. Rainfall totals of 0.97" were observed at IAD and 0.79" at DCA. Thunderstorms also struck portions of Anne Arundel and Baltimore counties, MD, with BWI recording 0.95" of rain. On the 20<sup>th</sup>, a fast moving line of evening thunderstorms brought heavy rains and gusty winds to Howard and Anne Arundel Counties. Columbia, MD, received 0.81" of rain while BWI recorded 0.47". Strong to severe storms impacted areas outside the metro area late in the month. Some locations in Shenandoah, Frederick and Clarke Counties, VA, and Jefferson and Berkeley Counties, WV, observed wind damage and heavy rain on the 26<sup>th</sup> and portions of Charles County, MD, reported wind damage on the 29<sup>th</sup>. By month's end, much of the area was impacted by moderate drought conditions. Monthly precipitation totals from the 8<sup>th</sup> through month's end included only 0.27" at IAD and 0.24" at DCA.

### AUGUST 2006 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (In.)			
	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Norm	DepNml	Yr. to Date
National (DCA)	89.2	71.9	80.5	77.4	+3.1	101/3	61/13	1.03	3.47	-2.41	29.68
Baltimore (BWI)	88.7	68.1	78.4	74.5	+3.9	100/3	53/13	1.45	3.74	-2.29	21.80
Dulles (IAD)	89.1	67.0	78.0	74.4	+3.6	99/3	53/13	1.24	3.78	-2.54	26.89
Andrews (ADW)											

**Summer (June to August) Temperature:** Above normal temperatures and an intense heat from late July into early August resulted in the warmest summer since 1995 at BWI and the 3<sup>rd</sup> warmest summer on record at IAD, tied with 2005. DCA's seasonal average temperature of 78.5°F was 2.5°F above normal, BWI was 2.8°F above normal and IAD, 2.7°F. This resulted in 2006 being the 18<sup>th</sup> summer since 1980 with above normal temperatures (see cover). DCA recorded 34 days with highs at or above 90°F (most since 2002) and 53 days with lows at or above 70°F. June readings ranged from normal at slightly above normal. June marked the 6<sup>th</sup> consecutive month with above normal readings at BWI and IAD. July continued the hotter than normal trend with above-normal temperatures across the area. Monthly temperature departures between 1.0°F and 3.5°F were observed at the three major airports. BWI and IAD logged their 7<sup>th</sup> consecutive month with above-normal temperatures (see cover). Highs at or above 90°F were common; BWI recorded 18 such scorching days, IAD 16 and DCA 14. Above normal temperatures continued through August.

**Summer Precipitation:** Despite long periods with scant precipitation during most of the summer months, unprecedented rainfall in late June resulted in above normal seasonal precipitation at many locations, including at DCA and IAD. Summer rainfall totals included 18.61" at DCA (Dep. Nml.: +8.38") and 15.48" at IAD (Dep. Nml.: +4.06"). Portions of central Maryland, including BWI with 10.63" of precipitation (Dep. Nml.: -0.39") missed the extreme June rainfall and recorded significantly lower summer totals. The summer's most significant rainfall arrived when a tropical air mass interacting with a stationary frontal system ignited intense tropical downpours from June 25-27, resulting in record monthly rainfall totals across most of the area. Washington recorded 7.09" on June 25, the second greatest daily total ever recorded and only 0.10" less than the amount recorded on June 21, 1972, from Tropical Storm Agnes. IAD recorded its second wettest month with 11.79" (+7.72" above normal). Only June 1972 recorded greater rainfall. Daily records were established at IAD on the 25<sup>th</sup> when 5.94" was recorded. While BWI's total of 7.32" was less than most locations, a daily record of 2.75" was established on June 25. The rainfall resulted in five fatalities in Frederick County, MD, numerous swift water rescues, road closures and power outages, in addition to dozens of buildings (including several federal buildings in Washington) and homes damaged from flooding, according to press reports. Lake Needwood dam in Montgomery County rose 23 feet above flood stage, resulting in the evacuation of more than 2,000 residents at risk if the dam failed. Flood levels decreased and residents returned to their homes but officials estimated storm damage in the tens of millions of dollars throughout the region. In the District, officials declared a State of Emergency. July brought much drier weather with well below normal rainfall at many locations. Near normal totals were observed in the District of Columbia and above normal amounts were recorded in parts of upper Montgomery County, MD. The majority of the month's rainfall occurred during the first 5 days of the month as the excessively wet pattern from late June continued. August brought very dry conditions to most of the area.

### SUMMER 2006 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (In.)			
	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Norm	DepNml	
National (DCA)	87.1	69.8	78.5	76.0	+2.5	101/8-3	53/8-13	18.61	10.23	+8.38	
Baltimore (BWI)	87.5	66.6	77.1	74.3	+2.8	100/8-3	49/6-11	10.63	11.02	-0.39	
Dulles (IAD)	87.0	65.7	76.4	73.7	+2.7	99/8-3	49/6-11	15.48	11.42	+4.06	
Andrews (ADW)											

**Looking Ahead to September:** After a warmer and wetter than normal summer behind us, what does meteorological Autumn hold in store? The season often produces some of the finest weather in this area. 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. Temperature: 52.9°F; Dep. Nml.: -6.5°F)  
**Warmest:** 1973 & 1931 (Avg. Temperature: 63.1°F; Dep. Nml.: +3.7°F)  
**Extreme Minimum Temperature:** 11°F (Nov. 30, 1929)  
**Extreme Maximum Temperature:** 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.: +11.74)  
**Driest:** 1930 (Tot. Prec.: 1.83; Dep. Nml.: -8.21)  
**Snowiest:** 1987 (Tot. Snowfall: 11.5")  
**Most one day precipitation (liquid):** 5.16" (Sep. 2, 1922)  
**Most snowfall in one day:** 11.5" (Nov. 11, 1987)