

JULY 2007

Temperature: The Washington-Baltimore area recorded normal to above normal temperatures in July. A monthly temperature departure of +0.4°F was observed at BWI, +1.6°F at IAD and exactly normal at DCA. Three brief but hot periods (6th-10th; 15th-19th and 26th-28th) were observed when highs soared to 90°F or greater at many locations, including DCA. The region experienced its hottest readings from the 8th-10th when DCA's highs soared to 98°F on the 9th-10th and BWI and IAD observed highs of 97°F on the 9th. For the month, DCA recorded 14 days with 90°F+ highs and 4 days with readings at or above 95°F.

Additionally, there were many uncomfortably warm nights when lows remained above 70°F; DCA recorded 17 days with lows of 70°F or greater, BWI 9 and IAD 5 such days. The warmest minimum temperature occurred on the 18th when overnight lows held in the mid 70's, including a minimum of 76°F at DCA.

Precipitation: While rainfall was below normal across much of the metro areas, numerous thunderstorms brought greater amounts to some areas, including portions of southern Maryland. Monthly rainfall totals at the three major airports were 2.40" at DCA (Dep. Nml: -1.26"), 3.31" at BWI (Dep. Nml: -0.54") and 1.75" at IAD (Dep. Nml: -1.82"). July marked the 6th month in 2007 with subnormal precipitation at DCA and IAD, 5th such month at BWI. July also marked the driest January-July at IAD since 1986 and the second driest period of all time (see graphic). The abnormally dry conditions have resulted in moderate to severe long-term drought conditions across the region. By the 27th, the governors of Maryland and Virginia had asked federal authorities to declare a drought disaster in some areas, including parts of southern Maryland and Culpeper County, VA, to provide aid to farmers, according to press reports.

Strong to severe thunderstorms were numerous during the month. For the second consecutive year, severe thunderstorms on July 4 impacted portions of the metro area with wind damage across portions of Montgomery County, MD, and Prince William, Fauquier, and Fairfax Counties in Northern Virginia and the National Mall was evacuated when severe weather approached Washington, DC. On the 10th, the next round of severe weather caused wind damage in D.C. with a peak gust to 41 mph at DCA. The storm pelted Baltimore with 1/2" hail and deluged BWI with a record daily rainfall of 1.84".

The next significant round of storms arrived on the 16th with numerous reports of wind damage across the metro area. An EF1 tornado (wind speeds of 86-100 mph) was confirmed near Fallston in Harford County, MD. The tornado measured a maximum width of 150 yards and a length of approximately 4 miles. Fortunately, damage was limited to trees and limbs falling onto structures. There were no injuries attributed to the tornado. Three days later, on the 19th, a bow echo (damaging wind gusts at the leading edge of thunderstorms) developed across north central Virginia and southern Maryland bringing wind gusts of 65 mph; Doppler radar measured gusts to 80 mph as the storm moved across southern Charles County, St. Mary's County and lower southern Maryland. Chesapeake Beach in Calvert County, MD, recorded 1.48" of rain from this storm. The month's last major thunderstorm outbreak occurred on the 29th. Localized impacts included up to 5" of torrential rainfall in portions of Frederick County, MD, 2.01" of rain in Forest Heights, in Prince Georges County, MD, and 3/4" hail in Leesburg, VA.

JULY 2007 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (Inches)			
	AvMx	AvMn	AvgT	NmlT	DepNml	Max	MinT	Total	Norm	DepNml	Yr to Date
National (DCA)	88.8	69.7	79.2	79.2	0.0	98/10	62/2	2.40	3.66	-1.26	17.57
Baltimore (BWI)	87.5	66.3	76.9	76.5	+0.4	97/9	54/3	3.31	3.85	-0.54	20.14
Dulles (IAD)	88.8	65.7	77.3	75.7	+1.6	97/9	55/3	1.75	3.57	-1.82	16.07

Looking Ahead to August: Will the dry conditions continue through August? The first two months of summer have produced only 3.78" of rain at DCA. If less than 0.84" of rain falls at DCA in August, it will mark the driest summer ever recorded in Washington. Listed below are the 10 driest summers in Washington.

Top Ten Driest Summers In Washington											
Year	1962	1966	1943	1964	1894	1873	1954	1930	1957	1932	
Total Summer Precipitation (in.)	4.62	4.62	4.66	5.06	5.38	5.57	6.09	6.11	6.51	6.63	