

SEPTEMBER 2004: The major weather events for September were the remnants of Hurricanes Frances, Ivan and Jeanne. The effects of each storm were different in aerial coverage and severity, despite relatively similar tracks to the west of Washington and Baltimore. Frances' path through the Appalachians on the 8th placed the local area on the east side of the storm, which yielded less rainfall but increased severe weather. Tornado producing thunderstorms struck in Ripley, MD, (Charles County) and in King George and Caroline counties in Virginia, causing scattered property damage, but no injuries. In Bowling Green, VA, a tornado damaged 67 homes, resulting in over \$2 million in property damage, according to press reports. IAD recorded 1.17" of rain from the remnants of the storm but further west in the Virginia mountains up to 8" of rain fell, producing flash flooding that closed numerous roads.

The remnants of Hurricane Ivan battered the region on the 18th. The storm system again moved west of Washington, producing a large scale tornado outbreak across the local area. There were 17 confirmed tornadoes in Virginia and four in Maryland. 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. A pickup truck was lifted and carried airborne more than 75 yards over trees and power lines southeast of Remington, according to press reports. An F2 tornado in eastern Loudoun County passed within a half mile of the Forecast Office in Sterling, VA, and in the vicinity of IAD, forcing the airport to close and evacuate air traffic control staff. In northern Virginia, over 1,900 homes and 27 businesses suffered damage, 15 homes were destroyed, and up to 66,000 customers lost power, according to press reports. In Maryland, an elderly couple was killed when strong winds toppled a large tree onto their home in Cecil County, according to press reports. F1 tornadoes (winds up to 112 mph) were sited in Poolesville, in northern Montgomery County, and Frederick County, MD. The majority of the excessive rainfall associated with Ivan fell well west of the local area, but IAD measured 2.39" and BWI, 1.09".

The remnants of Jeanne doused the area with heavy rainfall on the 28th. Between 2"-5" of rain soaked most of the region with higher totals again west of the area, resulting in flooded roads, rivers and streams. In Frederick County, MD, 45 roads were closed from flooding and power outages curtailed services on Baltimore's light rail system, according to press reports. Jeanne did not spawn much severe weather, but a waterspout came ashore as a small tornado near Solomon Island in southern Maryland. Rainfall totals included 5.6" in Remington, VA, 4.09" in Towson, MD, and a daily record 2.46" at DCA. Precipitation totals were near normal for the month in the immediate area but nearly 6" of rain fell just west of Washington (5.98" at IAD) and more than a foot well west of the local area (see front graphic).

Temperatures averaged above normal for the month at most locations. DCA reported a monthly temperature departure of +1.1°F, BWI, +2.0°F; and IAD +1.4°F. It was the first warmer than normal month since May at DCA and BWI. Consistent with previous months, there were no periods of excessive heat or humidity and no days with 90°F+ highs at the three major airports. The month's warmest days were the 13th, 22nd and 23rd when highs reached the mid 80's. The month featured no significant cool periods either as daily highs stayed in the 70's and 80's with the exception of the 15th when highs held mainly in the 60's. Minimum temperatures were mild, contributing to the slightly above normal monthly readings. September's lowest temperatures occurred from the 19th-21st when readings dipped into the mid 40's at many suburban locations.

SEPTEMBER 2004 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (In.)			
	AvMx	AvMn	AvgT	NmIT	DepNml	MaxT	MinT	Total	Norm	Dep Nml	Yr to Date
National (DCA)	79.1	64.1	71.6	70.5	1.1	87/23	51/19	3.99	3.79	-0.20	33.20
Baltimore BWI)	78.8	59.9	69.4	67.4	2.0	86/23	45/19	3.94	3.98	-0.04	36.28
Dulles (IAD)	78.8	58.7	68.8	67.3	1.5	86/23	46/21	5.80	3.82	+1.98	32.03
Andrews (ADW)	77.0	60.0	68.5	N/A	N/A	84/22	46/19	4.20	3.60	+0.80	32.99

LOOKING AHEAD TO OCTOBER: *The first freeze!*

October is usually the month when we think about the first frost or freeze in the Washington/Baltimore area, especially away from the cities. Below is a list of the dates of the first 32°F or lower reading during the last ten years at DCA and IAD, along with the earliest and latest freezes on record in Washington.

Year	First 32°F (or lower) reading		Year	First 32°F (or lower) reading	
	DCA	IAD		DCA	IAD
2003	November 10	October 3	1998	November 5	October 2
2002	November 27	October 18	1997	November 16	October 2
2001	December 22*	October 9	1996	November 12	October 12
2000	November 16	October 8	1995	November 5	October 17
1999	November 18	October 28	1994	November 24	October 11

*Latest date for first frost ever recorded.