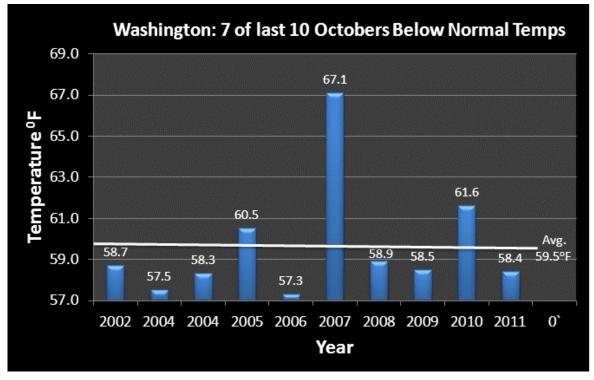






OCTOBER 2011: Subnormal Temperatures in Washington; Severe Weather in Northern Virginia; First Winter Storm Impacts Region



October Highlights

- First month with subnormal average monthyly temperature since March at DCA, since January at IAD
- Ninth consecutive month with above normal temperatures at BWI
- Anomalously cold first 3 days of month with highs mainly in the 50s across the area; DCA, 52°F on 2nd, 53°F on 3rd, equals coldest maximum readings on record; 51°F at BWI and 50°F at IAD on 2nd set new record low maximum temperatures
- Anomalously cold on 29th: Record low maximum temperatures: DCA and BWI, 42°F; IAD, 39°F
- Freezing temperatures: first 32°F or lower reading across many suburban locations occured last 2 days of month: 31°F at BWI and IAD on 30th
- Highs at or above 80°F on 10th at DCA; at BWI and IAD on both 9th and 10th
- Highs below 60°F on 6 days at DCA, 7 at BWI and 9 at IAD
- On the 29th, the 39°F maximum at IAD was earliest maximum temperature in season below 40°F
- More than 6" of precipitation at IAD; wettest October since 2005
- Five EF-0 tornadoes in Northern Virginia on 13th resulting in tree and property damage; wind speeds up to 80 mph during the Aquia Harbor (Stafford County) tornado; 3" to more than 4" of rainfall across portions of Northern Virginia
- Rare early winter storm on 29th with nearly a foot of snow across northern Maryland and across portions of the Shenandoah; over 5" in portions of Loudoun County (5.7" near Bluemont, VA) and Baltimore County (5.5" near Lineboro, MD); daily record 0.6" at IAD and trace at DCA, BWI, earliest in season at DCA, BWI and IAD since October 10, 1979

October 2011

Temperatures: Despite several anomalously cold days, October featured near normal readings. Temperatures departures were -1.1° F at DCA and -0.9° F at IAD; BWI was slightly above normal at $+0.5^{\circ}$ F. Unseasonably chilly conditions prevailed the first 3 days with maximum readings mainly in the 50s. Record low maximum readings were tied or broken on the 2^{nd} and 3^{rd} at the three major airports (see cover highlights).

More seasonable conditions prevailed the following 2 weeks including the warmest days of the month on the 9th and 10th when many areas were at or above 80°F, including 85°F on the 10th at BWI.

The area returned to cooler temperatures from the 20th through month's end; maximum readings were below 70°F at all three major airports. On the 29th, additional record low maximum readings were observed including 42°F at DCA and BWI, and 39°F at IAD. The season's first freeze occurred on the 30th at BWI (31°F) and at IAD (30°F).

Precipitation/Severe Weather: Near normal rainfall was observed at DCA 3.91" (+0.51") and BWI 3.31" (-0.02") while IAD recorded well above normal totals: 6.27" (+3.02"). Four significant storm systems impacted the region during the month.

On the 2nd, northern and western locations reported more than an inch of rain, including 1.52" in Poolesville, (Montgomery County) MD, and 1.28" in Leesburg, (Fairfax County), VA.

On the 13th, Northern Virginia was impacted by a severe weather outbreak that included five EF-0 tornadoes. No fatalities or injuries were reported but the tornadoes did result in tree and property damage according to press reports. The five tornadoes were reported near Nasons (Orange County); Bealeton (Fauquier County); Aquia Harbor (Stafford County); Triangle (Prince William County) and Clifton (Fairfax County). Maximum wind speeds ranged from 65 mph to 80 mph, with the strongest winds measured in the Aquia Harbor tornado. Rainfall was also heaviest across Northern Virginia, with 4.11" near Reston (Fairfax County), 3.17" in Manassas and a daily record of 1.92" at IAD.

The month's third storm system occurred on the 19th-20th. The greatest rainfall totals in Maryland included 1.58" at Perry Hall (Baltimore County) and 1.47" in Middletown (Frederick County). Northern Virginia totals included 1.43" in Broad Run (Fauquier County). Flash flooding closed a road on the Dulles Greenway near Belmont (Loudoun County), VA.

A significant winter storm impacted the area on the 29th. The storm began as a soaking rain then changed to wet snow, first in the northern and western suburbs in the morning, then across most of the area in the afternoon. The combination of above freezing temperatures and lighter snowfall during the afternoon resulted in a trace of snow across the immediate metro area, including DCA and BWI. It was the earliest snowfall at the three major airports since October 10, 1979. A daily record 0.6" was measured at IAD. Much greater totals occurred well north and west, including 11.5" in Sabillasville (Frederick County), and 7.8" near Manchester (Carroll County), MD. The greatest totals in Virginia included 9.0" in Skyland (Madison County) and 8.0" near Linden (Warren County). Most areas recorded over an inch of water equivalent from the storm, including a daily record 1.03" at IAD.

| | Station Temperatures (°F) | | | Extreme/Day | | | Precipitation (Inches) | | | | | |
|-----------------|---------------------------|------|------|-------------|--------|-------|------------------------|-------|------|--------|------|------------|
| Location | AvMx | AvMn | AvgT | NmIT | DepNml | Max | MinT | Total | Norm | DepNml | Snow | Yr to Date |
| National (DCA) | 66.5 | 50.2 | 58.4 | 59.5 | -1.1 | 83/10 | 34/29 | 3.91 | 3.40 | +0.51 | Т | 40.05 |
| Baltimore (BWI) | 66.3 | 47.0 | 56.6 | 56.1 | +0.5 | 85/10 | 30/31 | 3.31 | 3.33 | -0.02 | Т | 49.57 |
| Dulles (IAD) | 64.9 | 45.2 | 55.1 | 56.0 | -0.9 | 81/10 | 28/31 | 6.27 | 3.25 | +3.02 | 0.6 | 39.56 |

October 2011 Weather Statistics for the Washington/Baltimore Area

Looking Ahead to November: After the season's first winter storm, the immediate metro area is still waiting for its first inch. In the last 10 years, the first snow has fallen anywhere from early December to late January. The earliest snow (>1") in Washington, D.C., fell on October 30, 1925, (2.2") and October 20, 1940, (1.4"). The earliest measurable snow ever recorded at DCA fell on October 10, 1979, (0.3"). DCA recorded less than 1" of snow during the 1997-98 and 1972-73 seasons. The first inch has occurred at DCA on December 5th on four of the past nine years.

| Snow Season Fin Snowfall a | rst 1" (or greater) at DCA | Snow Season First 1" (or greater) Snowfall at DCA | | | | |
|-------------------------------|-------------------------------|--|--------------------------|--|--|--|
| 2010-2011 | December 16 | 2005-2006 | December 5 | | | |
| 2009-2010 | December 5 | 2004-2005 | January 19 | | | |
| 2008-2009 | January 27 | 2003-2004 | December 4 | | | |
| 2007-2008 2006-2007 | December 5 January 21 | 2002-2003 2001-2002 | December 5 January 19 | | | |