

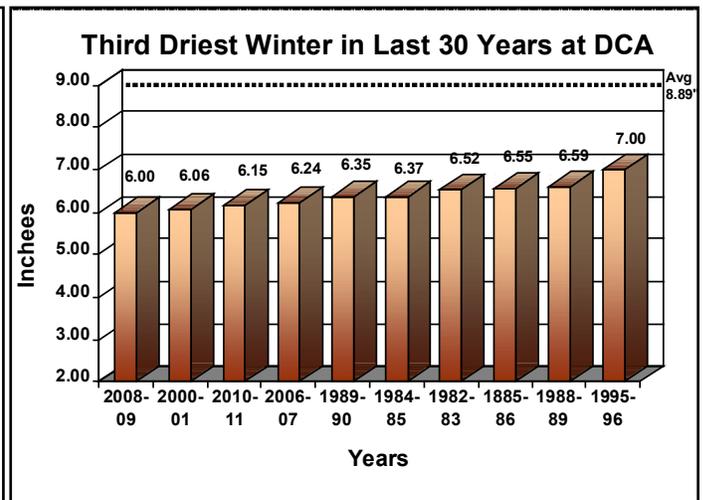
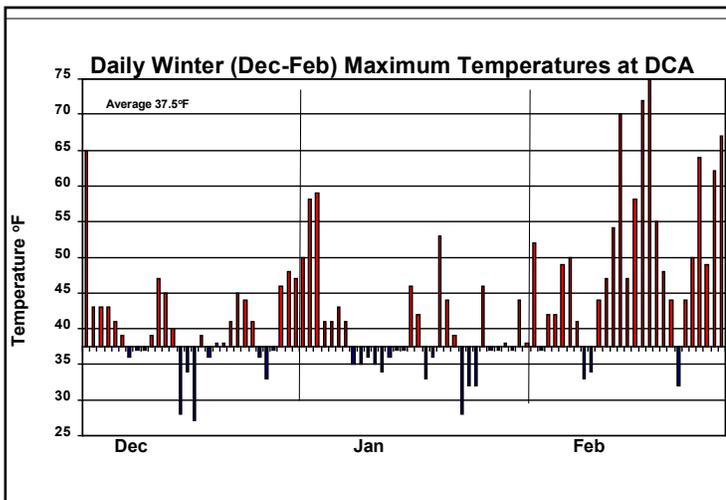


# PRESTO

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



## FEBRUARY 2011: Warmest Since 2002; WINTER: Dry, Long Cold Start, Warmer Finish



### February Highlights

- ✦ Above normal temperatures across the area: +3.6°F at DCA, +3.0°F at DCA and +3.3°F at IAD
- ✦ Warmest February since 2002 at the three major airports
- ✦ Record highs on the 18<sup>th</sup>, including 77°F at DCA and 75°F at IAD
- ✦ Four days with highs at or above 70°F at DCA, equals second greatest total on record
- ✦ Subnormal precipitation for 5 consecutive months at BWI and IAD; 4 at DCA
- ✦ Parts of northern Maryland measured 6"-7" of snowfall on the 22<sup>nd</sup>
- ✦ Immediate Washington area recorded less than in inch of snowfall for month
- ✦ Strong winds to 60 mph fanned wildfires on 19<sup>th</sup> as thick smoke shut down Interstate 95 in Laurel, MD, and caused the National Christmas tree to fall at the White House
- ✦ Strong winds on 25<sup>th</sup> with gusts to 68 mph in Baltimore, 60 mph at BWI, 59 mph at IAD and 58 mph at IAD; loss of power to 100,000 customers in area

### Winter Highlights

- ✦ Subnormal temperatures across area for winter season: -0.9 at DCA and BWI, -1.1 at IAD
- ✦ BWI observed 8 days when high did not climb above the freezing mark; IAD, 7; and DCA, 3
- ✦ Minimums at or below freezing on 30 days in December at BWI and IAD, 27 days at DCA; most since 2000
- ✦ Third driest winter in past 30 years: -2.74" at DCA, -1.99" at BWI and -4.34" at IAD (see graphic)
- ✦ EF-0 tornado (winds up to 80 mph) struck northern portion of Charles County on Dec. 1; caused thunderstorm wind damage and localized flooding
- ✦ First snowfall of season closed portions of I-270 in upper Montgomery County on Dec. 10 due to frozen, untreated road surfaces
- ✦ First 1 inch or greater snowfall of the winter season fell across area on Dec. 16
- ✦ Coldest temperatures of winter season on Jan. 22-24, with subfreezing highs and minimums in single digits including 6°F at IAD and 8°F at BWI on Jan. 24
- ✦ Minimums at or below freezing on 30 days in January at BWI and IAD; most January days since 1994
- ✦ High impact winter event on Jan. 26 with a rapid start of moderate to heavy sleet then wet snow with thunder and lightning in some areas. Accumulations from 5" to up to a foot in some areas beginning mid to late afternoon during rush hour resulted in transportation nightmares. Heavy wet snow resulted in tree damage and power loss to a reported 400,000 users across the area

## February 2011

**Temperatures:** In sharp contrast to December and January, February marked well above normal temperatures across the region with positive departures of +3.6°F at DCA, +3.0°F at BWI and +3.3°F at IAD. It was the warmest February since 2002 at the three major airports with several days of highs soaring into the 60s and 70s. Record highs were set across the area on the 18<sup>th</sup> including 77°F at DCA and 75°F at IAD. While not a record for the date, BWI observed 74°F. The 17<sup>th</sup>-18<sup>th</sup> were the first occurrences of 70°F or greater on consecutive February days since Feb. 24-25, 2000, at the three major airports. DCA recorded 4 February days of 70°F or greater, equaling the 2<sup>nd</sup> highest total in February on record. The month also marked record high minimum temperatures on the 18<sup>th</sup> with readings of 53°F at IAD, 52°F at DCA and 51°F at BWI. IAD and BWI recorded only 1 day with highs only reaching 32°F; DCA observed no such days. While minimums were frequently subfreezing, especially during the first half of the month, it was not bitterly cold. Temperatures remained above 10°F at most locations including the three major airports.

**Precipitation:** February continued the drier than normal winter trend. Precipitation totals ranged from 2"-3" in most areas: DCA, 2.12" (-0.51"); BWI, 2.69" (-0.33"); and IAD, 2.21" (-0.56"). Events at the beginning and end of the month resulted in most of the rainfall. Starting off the month on the 1<sup>st</sup> into the 2<sup>nd</sup> was an overnight rainfall that totaled about 0.75" across the area, with some locations in northern Maryland measuring more than an inch: 1.13" in Thurmont (Frederick County). The precipitation started as freezing rain in some areas well north of west of the metro area with light amounts of ice, generally 0.1" or less. Ending the month on the 28<sup>th</sup> was a second rain event that measured generally between 0.75" to 1".

In sharp contrast to the record snowfalls in February 2010, monthly snow totals were well below normal across the region with less than inch measured at IAD and DCA and 2.5" at BWI. The month's snowfall event of note occurred late evening and overnight on the 21<sup>st</sup> into the 22<sup>nd</sup> when rain changed to sleet and then wet snow. Amounts increased measurably outside the immediate metro areas, especially across northern Maryland. Totals included 7.0" near Manchester (Carroll County), 7.0" in Bel Air (Harford County), and 6.3" in Parkton (Baltimore County).

The month featured numerous high wind events. On the 19<sup>th</sup>, gusts to 60 mph throughout the area helped ignite wildfires in Laurel and Germantown MD, and Dale City, VA. Shenandoah National Forest lost about 150 acres to fire. Smoke was so thick in some areas, including Laurel, officials closed Interstate 95 for a number of hours. There were no serious injuries or fatalities. Strong winds also toppled the National Christmas Tree at the White House. Powerful winds on the 25<sup>th</sup> blew a roof off an apartment complex in Washington and caused up to 100,000 customers to lose power, according to press reports. Winds reached 68 mph in Baltimore, MD, and 67 mph near Westminister, VA, (Carroll County) and Reston, VA, (Fairfax County). At the airports, peak wind gusts were 60 mph at BWI, 59 mph at IAD and 58 mph at DCA.

### FEBRUARY 2011 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	Snow	Yr to Date
<b>National (DCA)</b>	51.2	32.2	41.7	38.1	+3.6	77/18	19/9	2.12	2.63	-0.51	0.5	4.37
<b>Baltimore (BWI)</b>	49.1	27.8	38.5	35.5	+3.0	74/18	11/1	2.69	3.02	-0.33	2.5	5.35
<b>Dulles (IAD)</b>	48.7	27.5	38.1	34.8	+3.3	75/18	11/11	2.21	2.77	-0.56	0.7	4.08

**Winter (December, January, February) Temperatures:** A persistently cold pattern in December, January and early February resulted in subnormal readings across the Washington/Baltimore areas. Negative departures were -0.9 at DCA and BWI and -1.1 at IAD. December started the season by breaking a string of 9 months with above normal temperatures. Cold continued nearly the entire month with 23 of 31 days recording subnormal readings. DCA recorded only 2 days with highs at or above 50°F, its fewest since 1942. The month's coldest conditions occurred on the 14<sup>th</sup>-16<sup>th</sup> when most locations recorded at or below freezing highs, including BWI and IAD. IAD's maximum readings of 25°F on the 14<sup>th</sup> and 24°F on the 16<sup>th</sup> tied records for those dates. January continued the colder than normal readings after a brief warm start with highs near 60°F on the 1<sup>st</sup> and 2<sup>nd</sup>. High temperatures topped 50°F only on Jan. 19. Maximum readings held in the 30s from the 6<sup>th</sup>-14<sup>th</sup> (7<sup>th</sup>-14<sup>th</sup> at DCA). This year marked the third January in a row with at least 8 consecutive days of highs at or below 40°F at all three major airports. The month's coldest readings occurred from the 22<sup>nd</sup>-24<sup>th</sup> when highs remained at or below freezing across the region. Minimum temperatures were also consistently cold; BWI and IAD recording all but 1 day at or below freezing, the most in January since 1994. February brought a return to above average temperatures (see monthly summary).

**Winter Precipitation:** Subnormal precipitation and snowfall were measured across the region. Precipitation totals were -2.74" at DCA, -1.99" at BWI and -4.34" at IAD. This was the driest December at the major airports since 2006. The month was not event free, however. On the 1<sup>st</sup> a powerful storm resulted in severe weather, flooding and heavy rainfall across the region. An EF0 (winds to 80 mph) tornado struck Mill Hill Estates in Charles County, MD. Flash flooding closed some major roads in D.C. and Virginia. A second major rainfall occurred on Dec. 11-12 with ¾" to about an inch at most locations. The first inch of snow for the season was measured on the 16<sup>th</sup>. The month featured numerous windy days. On Dec. 27<sup>th</sup>, a 66 mph gust was observed near Flint, MD (Frederick County) and 55 mph winds were measured at DCA. January continued relatively dry. The month's most significant storm and the majority of the snowfall occurred on the Jan. 26<sup>th</sup>, starting as sleet and changing to snow. Accumulations ranged from about 5" in Washington to a foot in some suburban areas. The rapid change from wet roads to roads covered by heavy sleet and then heavy wet snow during an early rush hour resulted in major transportation nightmares and power loss to nearly 400,000 users across the area with some customers without power for close to week, accordingly to press reports. February continued the drier than normal conditions with no major snowfalls (see monthly above).

### WINTER 2010-11 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	Snow	
<b>National (DCA)</b>	43.8	31.4	36.6	37.5	-0.9	77/2-18	17/1-22,1-24	6.15	8.89	-2.74	9.9	
<b>Baltimore (BWI)</b>	42.2	25.1	33.7	34.8	-0.9	74/18	8/1-24	7.31	9.30	-1.99	14.4	
<b>Dulles (IAD)</b>	41.6	24.3	33.0	34.1	-1.1	75/2-18	6/1-24	5.55	9.89	-4.34	12.5	

**Looking Ahead to March**—a month of extremes. Below is a list of some notable March statistics for Washington since 1871.

Temperature Extremes			Precipitation Extremes		
Coldest: 1885	Avg. Temp.: 34°F	Dep. Nml.: -12°F	Wettest: 1891	Tot. Prec.: 8.84"	Dep. Nml.: +5.24"
Warmest: 1921, 1945	Avg. Temp.: 55°F	Dep. Nml.: +9°F	Driest: 1910	Tot. Prec.: 0.57"	Dep. Nml.: -3.03"
Extreme Minimum: 4°F (March 4, 1873)			Snowiest: 1914	Tot. Snowfall: 19.3"	Dep. Nml.: +17.7"
Extreme Maximum: 93°F (March 23, 1907)			Most precipitation in one day (liquid): 2.79" (March 9, 1881)		
Most days with: lows < 32°F: 24 (1960); highs > 90°F: 3 (1907)			Most snowfall in one day: 11.3" (March 29, 1942)		