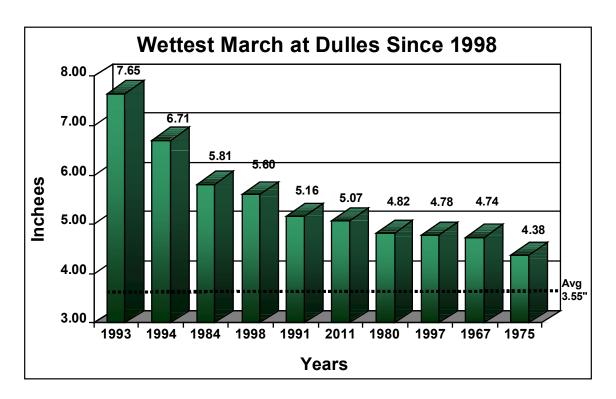






MARCH 2011: Wet with Significant Temperature Changes



March Highlights

- Slightly below normal temperatures at DCA (-0.9°F) but somewhat above normal at BWI (+0.6°F) and IAD (+0.8°F)
- Second month in 2011 with subnormal readings in Washington, only 2 such months in 2010
- Coldest period on record (23rd-31st) at BWI and IAD, tied with 1883 in Washington; 8 days with highs in 40s at BWI; 7 such days at DCA and IAD
- Record 81°F at IAD on 18th; normal maximum reading for early June
- Five consecutive subfreezing minimum temperatures at BWI from 25th-30th
- Well above normal rainfall across the area including the three major airports: DCA, 4.40" (+0.80"); BWI, 4.99" (+1.06") and IAD, 5.07" (+1.52")
- Two tornadoes struck Northern Virginia on 10th: EF1 (winds estimated at 90 mph) struck Bealeton in Fauquier County, EF0 (winds estimated at 65 mph) stuck Chantilly (Fairfax County); no fatalities or injuries but some property and tree damage occurred
- Soaking rainfall across area on 6th and 10th caused flooding and some road closures. On 6th, close to 3" fell in Fauquier and Nelson Counties in Virginia; IAD set a daily rainfall record of 2.30". On 10th, totals of over 4.5" were measured in parts of Baltimore and Harford Counties in Maryland, resulting in a daily record of 2.61" at BWI

March 2011

Temperatures: March featured near normal temperatures despite large fluctuations throughout the month. DCA readings were slightly below normal (-0.9°F), while BWI (+0.6°F) and IAD (+0.8°F) were somewhat above normal. The month's warmest readings occurred on the 18th when highs soared to about 80°F across the area, including a record 81°F at BWI. In sharp contrast, much below normal readings were observed from the 23rd through month's end, with highs in the 40s and low 50s. BWI reported 8 days during this period with maximum temperatures below 50°F, while DCA and IAD observed 7 such days. It was the first time since 1883 Washington recorded that many maximum March readings in the 40s and the first such occurrence at BWI and IAD during this time frame. In sharp contrast to March 2010, when zero subfreezing days were reported at DCA, 7 such days occurred in 2011, including 4 consecutive days from the 25th-28th.

Precipitation: Well above normal precipitation was measured through the area with the three major airports all recording above average totals: DCA, 4.40" (+0.80"); BWI, 4.99" (+1.06"); and IAD, 5.07" (+1.52"). It was the first month with above normal rainfall at DCA since October 2010 and at BWI and IAD since September 2010. The majority of the monthly rainfall occurred from two storm systems. The first system occurred on the 6th when a soaking rain produced well over an inch to nearly 3" across the region. The heavy rains led to some road closures in Washington as well as parts of Virginia, including Loudoun, Fauquier and Culpeper Counties. The greatest totals included 2.93" in Remington (Fauquier County) and 2.73" in Shipman (Nelson County), VA. IAD recorded a daily rainfall record of 2.30". In Maryland, Damascus measured 2.10" (Montgomery County). The storm ended as wet snow with 4.5" measured near Wilde Acres (Frederick County), MD, and 3.1" in Round Hill, (Loudoun County), VA.

The second event occurred began on the 9th and ended overnight on the 10th. This storm system featured severe weather with two confirmed tornadoes in Northern Virginia. An EF1 tornado (winds estimated at 90 mph) struck Bealeton in Fauquier County. The tornadoes maximum path width was 75 yards and the path length was 4 miles. The tornado caused tree damage and some property damage. In Chantilly (Fairfax County), an EF0 (winds estimated at 65 mph) was confirmed. The maximum path width was also 75 yards with a path length of 4.5 miles. Tree and property damage were also reported from the tornado. Flash flooding was prevalent throughout the region from the heavy rainfall, resulting in numerous road closures. Rainfall totals included 4.61" near Long Green (Baltimore County), 4.52" near Churchville (Harford County) and a daily record of 2.61" at BWI. In Virginia, rainfall totals included 2.82" near Rixeyville (Culpeper County), 2.55" in West Springfield (Fairfax County) and a daily record of 1.41" at IAD.

The remainder of the month featured more tranquil weather for most of the area with some location observing unsettled conditions at times. On the 16th, heavy rainfall occurred across Southern Maryland with more than an inch in some locations, including 1.09" in Leonardtown (St. Mary's County). A week later, thunderstorms produced 0.75" hail near Nethers, VA (Rappahannock County).

Station Temperatures (°F)					Extre	Extreme/Day			Precipitation (Inches)			
Location	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Norm	DepNml	Snow	Yr to Date
National (DCA)	54.0	37.2	45.6	46.5	-0.9	80/18	27/3	4.40	3.60	+0.80	0.2	8.77
Baltimore (BWI)	53.7	35.0	44.3	43.7	+0.6	81/18	25/3	4.99	3.93	+1.06	Т	10.34
Dulles (IAD)	54.0	34.4	44.2	43.4	+0.8	79/18	25/3,8	5.07	3.55	+1.52	0.1	9.15

Looking Ahead to April: Last Freeze at DCA and IAD. April is usually the last month before autumn when a 32°F or lower reading occurs in Washington. The city has never recorded a freezing reading in May, although suburban areas have. Below is a list of the last 32°F or lower readings at urban DCA and suburban IAD for the last 10 years.

At DCA					At IAD					
Year	Date of last 32°F or lower reading	Year	Date of last 32°F or lower reading	Year	Date of last 32°F or lower reading	Year	Date of last 32°F or lower reading			
2010	February 27 (31°F)*	2005	March 18 (31°F)	2010	April 18 (32°F)	2005	April 17 (31°F)			
2009	March 24 (28°F)	2004	April 5 (31°F)	2009	April 13 (32°F)	2004	April 16 (30°F)			
2008	March 9 (29°F)	2003	April 1 (32°F)	2008	April 16 (31°F)	2003	April 1 (27°F)			
2007	April 9 (31°F)	2002	April 7 (32°F)	2007	April 11 (28°F)	2002	April 1 (27°F)			
2006	March 23 (32°F)	2001	March 28 (28°F)	2006	April 10 (31°F)	2001	April 26 (32°F)			
*Earliest last freeze in DCA's recorded history.										