

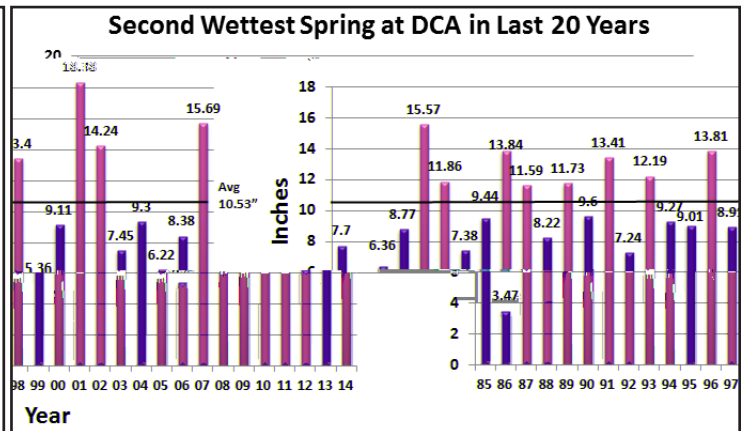
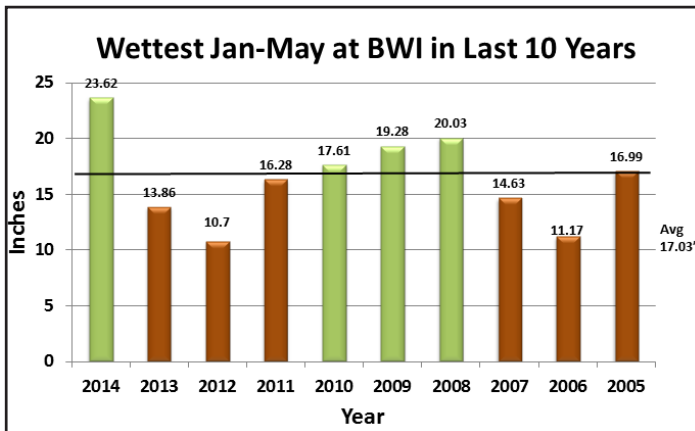


# PRESTO

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



## May 2014: Two Major Storms Spring: Below Normal Temperatures, Excessively Wet



### May Highlights

- ✦ Above normal temperatures at the three major airports: +2.5°F at DCA, +2.0°F at BWI and +1.0°F at IAD
- ✦ First month in 2014 with above normal readings at BWI and IAD
- ✦ Sixth consecutive May with above normal temperatures at BWI and IAD and 5<sup>th</sup> consecutive May at DCA
- ✦ First 90°F or greater of the season on 13<sup>th</sup> at DCA with 92°F and 90°F at IAD; BWI reached 90°F on 27<sup>th</sup>
- ✦ Wettest May since 2009 at DCA (4.96") and IAD (6.34") while in sharp contrast, BWI reported its 5<sup>th</sup> consecutive May with subnormal precipitation
- ✦ On the 16<sup>th</sup>, torrential rainfall across the region resulted in flooded roads, pushing creeks and streams briefly out of their banks, and led to numerous water rescues; most of the region measured between 2"-5" of rain. In Virginia, greatest amounts included 5.22" near Charlottesville and 4.50" near Sterling Park (Loudoun County), while in Maryland totals included 4.65" near Myersville and 4.40" near Potomac (Montgomery County). Daily rainfall records were set at DCA (2.25") and at IAD (1.97"). Some severe weather also occurred. An EF-0 tornado was confirmed near Middleburg, VA (Loudoun County) in the early am hours with estimated wind speeds of 65 mph causing tree damage
- ✦ On the 23<sup>rd</sup>, a downburst with straight line winds was confirmed in Weedonville, VA (King George County) where winds were estimated at 80 mph. There were no injuries or fatalities but the downburst did caused tree and property damage when uprooted trees fell into a house. In Maryland, hail measured 1.75" near Highland (Howard County) and in Solomons (Calvert County).

### Seasonal Highlights

- ✦ Coldest March on record at IAD with an average temperature of 37.4°F
- ✦ On March 4<sup>th</sup>, minimums bottomed out at 14°F at DCA, equaling its coldest March temperature since 1945; 4°F at BWI, coldest temperature on record for March and -1°F at IAD, equaling Mar 15, 1993, for its coldest March reading
- ✦ Well above normal snowfall in March: 12.7" at DCA, most since 1960; 12.1" at BWI, most since 1993; and 19.8" at IAD most on record, breaking the previous record in 1993; IAD seasonal snowfall total 52.8" was its third greatest on record
- ✦ Major snowstorm March 16<sup>th</sup>-17<sup>th</sup> with totals generally ranging 7"-10" across the area: greatest amounts in Virginia included 13.7" in Haywood (Madison County) and 11.1" at IAD; in Maryland, highest amounts were 11.0" in Hillandale (Montgomery County) and 9.9" near Simpsonville (Howard County); in DC, 8.0" near Anacostia
- ✦ Major storm impacted area on April 29<sup>th</sup> and 30<sup>th</sup> with record rainfall on month's final day: 4"-8" storm total. The 30<sup>th</sup> featured torrential downpours, thunderstorms, widespread flash flooding, numerous roads closures and water rescues. The heavy rain caused a landslide in Baltimore when a portion of a city street collapsed on train tracks, which destroyed several cars and weakened a retaining wall when the ground beneath crumbled. Rainfall totals in Maryland included 7.48" in Highland (Howard County), 7.43" near Silver Spring (Montgomery County). In Virginia, totals included 6.58" near Vienna (Fairfax County) and 6.17" in Opal (Fauquier County). In D.C., 4.74" was reported at the Dalecarlia Reservoir. DCA's 2.70" on the 30<sup>th</sup> was its wettest April day since April 14, 1970. BWI's 3.06" was Baltimore's wettest April day since April 26, 1937, while IAD 3.99" was its wettest April day on record. Storm totals at the airports were 5.48" at IAD, 4.74" at BWI and 4.18" at DCA. The totals included light rain on May 1 when the event ended.

## May 2014

**Temperatures:** Above normal temperatures were recorded at the three major airports: +2.5°F at DCA, +2.0°F at BWI and +1.0°F at IAD. It was the first month in 2014 with above normal readings at BWI and IAD. In addition, it was the 6<sup>th</sup> consecutive May with above normal temperatures at BWI and IAD and 5<sup>th</sup> consecutive May at DCA. All three airports recorded their first 90°F or greater reading of the season. DCA recorded 92°F and IAD 90°F on the 13<sup>th</sup> while BWI reached 90°F on the 27<sup>th</sup>. DCA soared to 80°F or greater on 14 days, BWI on 11 days and IAD on 9 days.

In sharp contrast, there were some chilly days. DCA reported 6 days with max readings in the 60s while BWI and IAD max readings held in the 50s on the 29<sup>th</sup>, including a record low max of 57°F at BWI. IAD also dropped to a chilly 39°F on the 19<sup>th</sup>.

**Precipitation:** Rainfall totals varied widely across the area mainly due to scattered showers and thunderstorms. Totals at DCA and IAD were well above normal: 4.96" (+0.97") and IAD 6.34" (+1.79") while BWI's total of 3.35" was subnormal (-0.64"). It was the wettest May since 2009 at DCA and IAD while in sharp contrast, BWI reported its 5<sup>th</sup> consecutive May with subnormal precipitation. As is common by mid-spring, severe weather events became more frequent. On the 12<sup>th</sup>, thunderstorm wind damage knocked a tree into a house near Port Tobacco Village in Charles County MD. The following evening, 1.0" hail struck Brunswick, (Frederick County) MD. Then on the 16<sup>th</sup>, torrential rainfall across the region resulted in flooded roads, pushing creeks and streams briefly out of their banks, leading to numerous water rescues; most of the region measured between 2"-5" of rain. In Virginia, greatest amounts included 5.22" near Charlottesville and 4.50" near Sterling Park (Loudoun County), while in Maryland totals included 4.65" near Myersville and 4.40" near Potomac (Montgomery County). Daily rainfall records were set at DCA (2.25") and at IAD (1.97"). Some severe weather also occurred. An EF-0 tornado was confirmed near Middleburg, VA (Loudoun County) in the early morning hours with estimated wind speeds of 65 mph, causing tree damage.

The next significant event impacted the area a week later. Two lines of strong to severe thunderstorms raced thru the area, first in the early morning hours and then a more widespread event late in the afternoon. In the morning event, 0.75" hail pelted Near Glenn Dale (Prince Georges County), MD, while in the afternoon, a downburst with straight line winds was confirmed in Weedonville (King George County), VA, with winds estimated at 80 mph. There were no injuries or fatalities but the downburst did cause tree and property damage when uprooted trees fell into a house. In Maryland, hail measured 1.75" near Highland (Howard County) and in Solomons (Calvert County).

The month's last widespread thunderstorm outbreak occurred on the 27<sup>th</sup>; the storm resulted in 1.0" hail in Potomac (Montgomery County), MD, and thunderstorm winds knocked down a tree in McLean (Fairfax County), VA. According to press reports, 53,000 homes and business lost power across the area during the height of the storm.

### May 2014 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	DepNml	YTD
National (DCA)	78.0	58.9	68.5	66.0	+2.5	92/13,27	49/19	4.96	3.99	+0.97	22.29
Baltimore (BWI)	75.6	54.1	64.9	62.9	+2.0	90/27	43/4,5	3.35	3.99	-0.64	23.62
Dulles (IAD)	75.4	53.0	64.2	63.2	+1.0	90/13	39/19	6.34	4.55	+1.79	24.35

**Spring (March-May) Temperatures:** Spring readings averaged below normal: DCA, 56.2°F (-0.3°F), BWI 52.1(-1.7°F) and IAD 51.3 (-1.2°F) primarily due to a frigid March. The first month of meteorological spring felt more like winter. IAD marked it coldest March on record with an average temperature of 37.4°F and a record low maximum of 39°F on March 24. BWI's maximum of 36°F on March 26<sup>th</sup> was a record low maximum. Bitterly cold temperatures occurred through the month. Highs on March 4 reached just 29°F at BWI and IAD, a record for the date and minimums on that date bottomed out at 14°F at DCA, equaling DCA's coldest March temperature since 1945; 4°F at BWI, its coldest temperature on record for March, and -1°F at IAD, equaling March 15, 1993, for IAD's lowest March reading. IAD low dipped to -1°F on the 3<sup>rd</sup>; BWI marked a frigid 5°F on the 3<sup>rd</sup>, a record for date. April temperatures averaged near normal. The area recorded June-like warmth occurred on April 13 when the airports marked their warmest monthly readings: 85°F at DCA and 83°F at BWI and IAD. IAD's 30°F reading on the 18<sup>th</sup> was a record minimum for the date and its last freeze of the season. May was warmer than normal (see monthly summary above).

**Spring Precipitation:** Precipitation was well above normal across the area. Seasonal totals were 15.69" at DCA (+5.16" ), 23.62" at BWI (+6.59), and 17.85" at IAD (+6.45"). March started the season wet and snowy. Snowfall also was well above normal: DCA, 12.7"; BWI, 12.1"; and IAD a record breaking 19.8" (most since 1993). The month's largest snowstorm occurred on the 16<sup>th</sup>-17<sup>th</sup> when snowfall totals ranging from 7"-10". On March 12 wind gusts were measured at 61 mph at IAD and 54 mph near Baileys Crossroads in Alexandria, VA, and near Germantown, (Montgomery County) MD. April recorded well above normal to record rainfall due largely to a major spring storm the last 2 days of April. It was the second wettest April on record in Baltimore (wettest since 1889) and the wettest ever recorded at IAD. The main event was a slow moving storm system that brought 4"-8" of rainfall to the region on the 29<sup>th</sup> and 30<sup>th</sup>. The 30<sup>th</sup> featured torrential downpours, thunderstorms, widespread flash flooding, numerous roads closures and water rescues. The heavy rain caused a landslide in Baltimore when a portion of a city street collapsed on train tracks, which destroyed several cars and weakened a retaining wall when the ground beneath crumbled. May continued wet. (see monthly summary).

### Spring 2014 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	AvMx	AvMin	AvgT	NmlT	DepNml	Max	Min	Total	Nml	DepNml	Snow
National (DCA)	65.8	49.8	56.2	56.5	-0.3	92/6-3,6-27	14/3-4	15.69	10.53	5.16	12.7
Baltimore (BWI)	62.8	41.4	52.1	53.8	-1.7	90/6-27	4/3-4	23.62	17.03	6.59	12.1
Dulles (IAD)	62.6	40.0	51.3	52.5	-1.2	90/6-13	-1/3-4	17.85	11.40	6.45	19.8

**Looking Ahead to June:** Does a wet spring herald a wet summer? Here's a look back at the most recent 10 springs at DCA with above normal precipitation and their subsequent summer rainfall amounts. Normal summer rainfall at DCA: 10.44"

Average Spring Precipitation at DCA and Subsequent Average Summer Rainfall											
Year	2014	2009	2008	2003	2000	1998	1996	1994	1993	1990	1989
Spring	15.69	14.24	18.38	13.81	12.19	13.41	11.73	11.59	13.84	11.86	15.57
Summer	?	9.39	9.63	18.28	14.21	6.80	11.37	9.55	6.96	13.66	12.83