

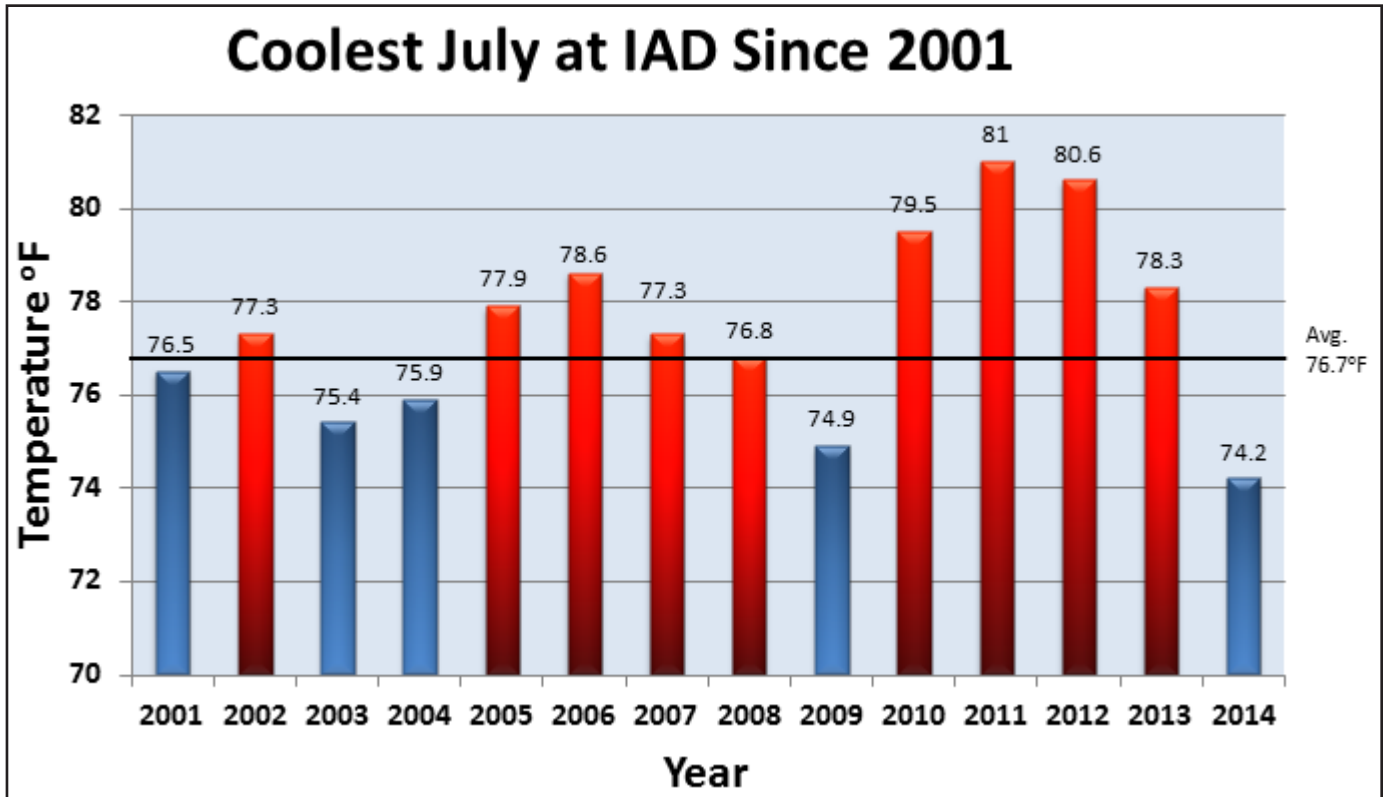


PRESTO

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



July 2014: Subnormal Temperatures; Numerous Severe Weather Events



July Highlights

- ✦ Subnormal temperatures at all three major airports: -0.4°F at DCA, -1.4°F at BWI and -2.5°F at IAD
- ✦ Only 9 days at DCA with highs at or above 90°F, 6 at BWI, 5 at IAD, down from 11 in 2013 at DCA, 9 at BWI and IAD
- ✦ Five daily record low temperatures were tied or broken at BWI and three at IAD
- ✦ Coolest July since 2001 at IAD (see graphic) and since 2009 at DCA and BWI
- ✦ On the 3rd, thunderstorm winds tore a roof off an apartment building in College Park, MD, and caused a tree to fall on a house near American University in D.C.; wind gusts measured 70 mph; 2.0" hail was measured near Armel, (Frederick County), VA; and 1.75" near Mount Airy, (Carroll County), MD. One woman was injured by lightning in Montgomery County, MD, and a second person hurt in Toms Brook, (Shenandoah County), VA, when high winds caused a tree to fall on a vehicle. A reported 80,000 homes and businesses across the area lost power
- ✦ On the 8th, one child was killed and eight were injured by falling tree branches from damaging thunderstorm winds at a youth campsite near Lineboro, (Carroll County), MD. Winds gusted to 63 mph near Millers (Carroll County), MD, and to 61 mph at Martin Airport in Baltimore County, MD. A reported 90,000 homes and businesses across the area lost power during the event
- ✦ On the 13th, an EF-0 tornado touched down near Glengary, (Berkeley County), WV. Tree damage was reported with estimated winds 65-75 mph. The path length was 130 yards and path width 50 yards
- ✦ On the 15th, thunderstorms resulted in 4.30" of rain in Prince Frederick, (Calvert County), MD, and 3.74" near Herndon, (Fairfax County), VA.

July 2014

Temperatures: Subnormal temperatures highlighted the middle month of summer: -0.4°F at DCA, -1.4°F at BWI and -2.5°F at IAD. It was the coolest July since 2001 at IAD (see graphic) and since 2009 at DCA and BWI. Numerous strong frontal passages during the month prevented extended periods of heat and humidity. DCA recorded only 9 days with highs at or above 90°F, 6 at BWI and 5 at IAD, down from 11 at DCA in 2013, 9 at BWI and IAD. There were numerous dates on which record minimums were set or equaled at BWI and IAD. Five daily record low temperatures were either tied or broken at BWI: on the 5th, the mercury equaled a low of 55°F; on the 18th and 25th, 57°F set a new record. On the 29th, 59°F equaled the current record and on the 30th, BWI reported a record of 55°F. At IAD, three record minimums were set or tied: 55°F on the 17th tied a record; low minimum records were beaten on the 29th and 30th when minimum temperatures dropped to 52°F and 48°F, respectively; the 30th was the coolest July day since 2002.

Despite the cooler than normal readings, IAD set or equaled two daily high minimum records: 71°F on the 1st was a new record; 72°F on the 13th tied a record.

Precipitation: Monthly rainfall totals were highly variable due to localized showers and thunderstorms. DCA's total of 4.68" was above normal (+0.95") while BWI's total of 2.80" (-1.27") and IAD's total of 2.09" (-1.58") were subnormal. Severe weather events were numerous throughout the month. On the 2nd, thunderstorm wind gusts of 68 mph were measured near the Patuxent River Naval Air Station in St. Mary's County, MD, and 1.0" hail struck Sperryville, (Rappahannock County) VA. The next day, a more widespread event impacted the metro area. Damaging thunderstorm winds tore a roof off an apartment building in College Park, MD, and knocked a tree onto a house near American University in D.C. Wind gusts measured at 70 mph; hail to 2.0" was measured near Armel, (Frederick County), VA, and to 1.75" near Mount Airy, (Carroll County), MD. One woman was injured by lightning in Montgomery County, MD, and a second injury occurred in Toms Brook, (Shenandoah County), VA, when a tree smashed a vehicle. A reported 80,000 homes and businesses across the area lost power during the event.

On the 8th, one child was killed and eight were injured when thunderstorm winds knocked tree onto a youth campsite near Lineboro, (Carroll County), MD. Winds gusted to 63 mph near Millers (Carroll County), MD, and 61 mph at Martin Airport in Baltimore County, MD. A reported 90,000 homes and businesses across the area lost power during the event. The next day, 1.0" hail was measured in New Windsor, (Carroll County), MD. Winds gusted to 59 mph near Montclair, (Prince William County), VA. On the 10th, 1.0" hail hit Fullerton, (Baltimore County), MD. Winds gusted to 49 mph at DCA with rainfall totaling 1.31".

Three days later on the 13th, an EF-0 tornado touched down near Glengary, (Berkeley County), WV. The tornado caused tree damage and had estimated winds to 75 mph, a path length of 130 yards and width of 50 yards. On the 14th, winds gusted to 59 mph near Cape St. Claire, (Ann Arundel County), MD, and 49 mph near Havre De Grace, MD, while 3.33" deluged Kingsville, (Harford County), MD, and 1.93" fell at Round Hill (Loudoun County), VA. On the 15th, 1.0" hail pelted near South Gate (Ann Arundel County), MD, while funnel clouds were observed near Port Tobacco, (King George County) VA, and near Towson (Baltimore County), MD. Rainfall was widespread and excessive in some areas. Totals included 4.30" in Prince Frederick (Calvert County), MD, and 3.74" near Herndon, (Fairfax County), VA.

The final two severe weather of the month occurred on the 23rd when 1.0" hail measured near Alonzaville (Shenandoah County) VA and in Cascade, (Washington County), MD, and on the 27th when 1.75" (golf ball size) hail fell near Harmony, (Shenandoah County), VA, and 0.88" striking near Millers (Baltimore County), MD.

July 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)	88.0	70.8	79.4	79.8	-0.4	99/2	60/30	4.68	3.73	+0.95	30.28
Baltimore (BWI)	85.7	65.5	75.6	77.0	-1.4	94/23	55/5,30	2.80	4.07	-1.27	30.37
Dulles (IAD)	84.5	63.8	74.2	76.7	-2.5	95/2	48/30	2.09	3.67	-1.58	31.06

Looking Ahead to August: After experiencing the coolest July since 2009 in Washington, what will August temperatures bring? Below are the list of the most recent 10 subnormal July temperatures in Washington and the corresponding August values. Average August temperature at DCA: 78.1°F

Most Recent 10 Subnormal Julys at DCA and Subsequent August Average Temperature										
Year	2014	2009	2007	2004	2003	2001	2000	1996	1992	1990
July	79.4	76.9	79.3	78.6	77.8	75.3	74.7	77.6	79.5	79.4
August	?	79.9	79.7	75.9	78.8	78.9	75.1	77.6	74.0	76.5