

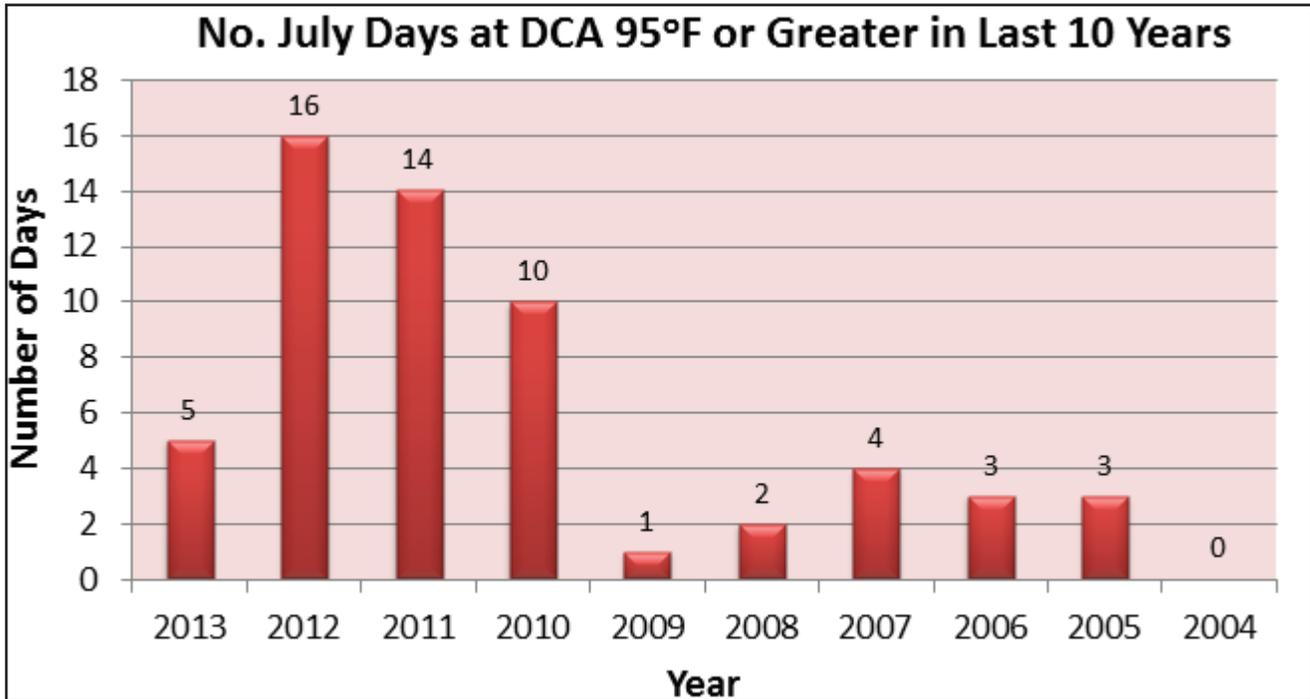


PRESTO

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



JULY 2013: Above Normal Temperatures But No Extreme Heat; One Major Flooding Event



July Highlights

- ☀ Above normal temperatures at the three major airports: + 1.4°F at DCA, +2.0°F at BWI and +1.6°F at IAD
- ☀ One major heat wave from 15th-21st with maximum readings at or above 90°F daily at DCA, BWI and IAD; DCA and BWI recorded 5 consecutive days with highs at or above 95°F (15th-19th)
- ☀ DCA recorded 5 consecutive days (16th-21st) with minimums at or above 80°F, longest period on record in Washington
- ☀ Second warmest average minimum temperature on record at IAD, 69.6°F; IAD set or tied seven daily high minimum temperature records
- ☀ From evening of 11th into 12th, torrential downpours from thunderstorms resulted in flash flooding, road closures, and water rescues. Northern and central Virginia were most impacted. Rainfall totals included 6.31" near Rixeyville (Culpeper County), 5.99" near Warrenton (Fauquier County), and 5.0" in West Springfield (Fairfax County). IAD recorded a 2-day total of 4.85", greatest July total on record; IAD set a daily record on 11th of 3.71". Maryland totals included 3.36" near Morningside (Prince Georges County), and 3.34" near Bethesda (Montgomery County); the District measured up to 3.13".
- ☀ Two EF-0 tornadoes struck Maryland: On the 1st, a tornado in Clinton (Prince George's County) slammed the area with estimated wind speeds to 60 mph, a maximum path width of 75 yards and path length of 2.3 miles. The tornado caused some tree and property damage. The second tornado struck just after midnight on the 23rd near Darlington (Harford County). The tornado caused some tree, property and crop damage. Wind speeds were estimated at 80 mph with a maximum path width of 100 yards and length of 0.8 miles.

July 2013

Temperatures: Positive departures for July 2013 were +1.4°F at DCA, +2.0°F at BWI and +1.6°F at IAD. While the three major airports recorded above normal readings, temperatures were significantly cooler than the previous three Julys: 2011 marked the warmest July on record, and 2012, the second warmest July at all three major airports. The month's major heat wave occurred from the 15th-21st, when maximum readings reached at or above 90°F daily. DCA and BWI recorded 5 consecutive days during this period with highs at or above 95°F (15th-19th). The heat was accompanied by high levels of humidity making conditions steamy.

Minimum temperature were unprecedentedly high: DCA recorded 5 consecutive days (16th-21st) with minimums at or above 80°F, the longest period on record in Washington. Minimum records were set or tied from the 17th-19th at DCA. The humidity resulted in higher nighttime readings throughout the month; IAD set or tied 7 daily high minimum temperature records. It was the 2nd warmest average minimum temp on record at IAD (69.6°F), 3rd warmest at DCA (74.2°F) and 5th warmest on record at BWI (70.5°F).

Precipitation: Monthly precipitation totals varied considerably across the area and at the three major airports due to scattered showers and thunderstorms. BWI recorded only 2.77" (-1.30"), while IAD measured 7.27" (+3.60"), it's 2nd wettest July on record (wettest July 2005: 7.85"); DCA's total of 4.43" was slightly above normal (+0.70"). The majority of the month's rainfall fell from the 11th-12th when thunderstorms were accompanied by torrential downpours across much of northern and central Virginia in the mid to late evening. The storms diminished some in intensity as they moved across the immediate metro area overnight. The rainfall resulted in flash flooding, road closures and some water rescues in parts of Nelson, Albemarle, Culpeper, Fairfax, Loudoun and Prince William Counties in Virginia, then later at night into the District and portions of Montgomery, Prince Georges and Ann Arundel Counties in Maryland. Virginia rainfall totals included 6.31" near Rixeyville (Culpeper County), 5.99" near Warrenton (Fauquier County), and 5.0" in West Springfield (Fairfax County). IAD recorded a 2-day total of 4.85", its greatest ever in July, and included a daily record on the 11th of 3.71". Maryland totals included 3.36" near Morningside (Prince Georges County), and 3.34" near Bethesda (Montgomery County); the District measured 3.13".

Severe weather also produced two EF-0 tornadoes in Maryland. On the 1st, a tornado struck Clinton (Prince George's County) with estimated wind speeds on 60 mph, maximum path width of 75 yards and path length, 2.3 miles. The tornado caused some tree and property damage. On the 23rd just after midnight, a tornado hit near Darlington (Harford County). The tornado caused some tree, property and crop damage. Wind speeds were estimated at 80 mph with a maximum path width of 100 yards and path length of 0.8 miles.

On the evening of the 28th, additional severe weather occurred in northern Maryland. Thunderstorm winds gusted to 63 mph near Westminster (Carroll County). Hail up to 0.88" struck near Whiteford (Harford County) and up to dime size (0.75") near Millers (Baltimore County).

July 2013 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (Inches)			
	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Nml	DepNml	YTD
National (DCA)	88.3	74.2	81.2	79.8	+1.4	97/17	65/25	4.43	3.70	+0.70	26.98
Baltimore (BWI)	87.6	70.5	79.0	77.0	+2.0	97/18	59/30	2.77	4.07	-1.30	24.44
Dulles (IAD)	86.9	69.6	78.3	76.7	+1.6	96/18	58/26	7.27	3.67	+3.60	25.90

Looking Ahead to August: In sharp contrast to 2010-2012, DCA recorded only 17 days with highs at or above 90°F in June and July. Will the trend continue in August? Below are the number of June, July and August days with maximum readings of 90°F or greater at DCA in the last 10 years.

Number of 90°F or Greater Days in June, July and August at DCA										
Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
June	6	11	10	18	2	8	7	5	7	3
July	11	22	25	21	7	14	14	14	13	4
August	?	15	12	13	12	7	15	15	12	1