

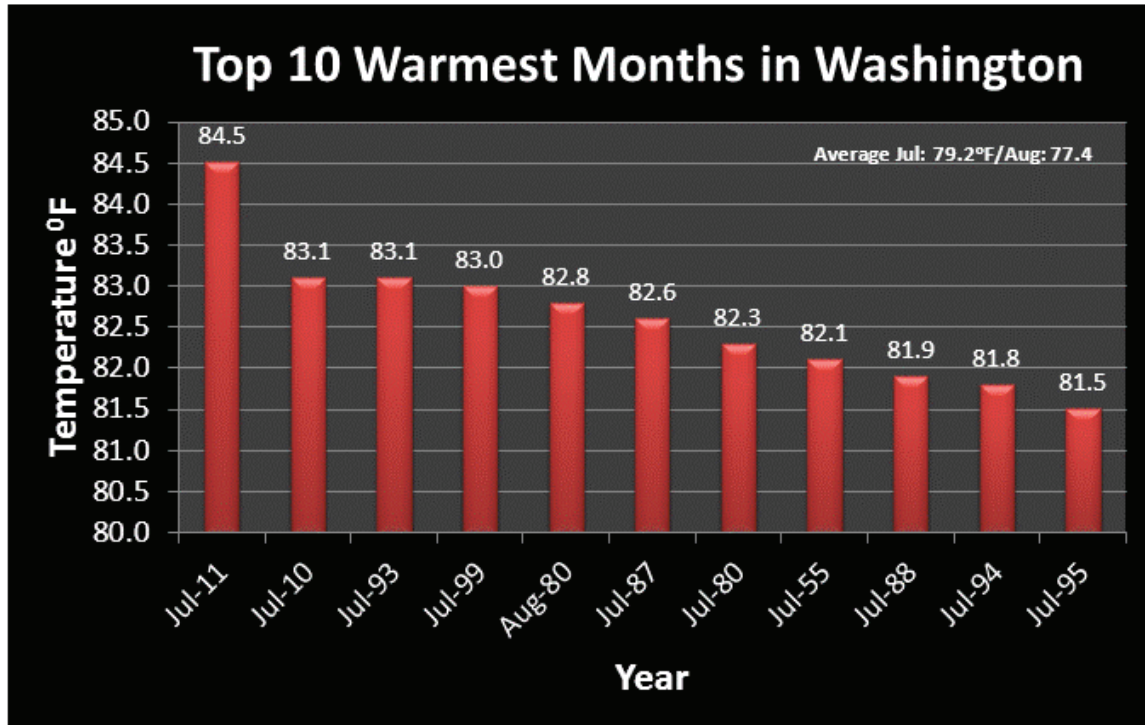


# PRESTO

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



## JULY 2011: Hottest Month On Record at DCA, BWI, IAD; Deadly Severe Weather



### July Highlights

- ☛ Hottest average monthly temperatures on record at all three major airports: 84.5°F at DCA (+5.3°F); 81.7°F at BWI (+5.2°F); and 81.0°F (+5.3°F) at IAD
- ☛ On 22<sup>nd</sup>, BWI's high of 106°F was second highest temperature on record; IAD's record maximum of 105°F was hottest temperature on record; DCA's 104°F on 30<sup>th</sup> tied for the 5<sup>th</sup> highest reading in Washington; Heat Index values reached 121°F at DCA, 118°F at BWI and 117°F at IAD due to oppressive humidity
- ☛ DCA recorded 7 days with minimums at or above 80°F, including a record 4 consecutive days from 21<sup>st</sup>-25<sup>th</sup>
- ☛ BWI observed 4 days with highs at or above 100°F; 3 such occurrences at DCA and IAD
- ☛ DCA reported 25 days with highs at or above 90°F; BWI and IAD, 24; setting records at all three locations
- ☛ Below normal rainfall at three major airports: DCA, 3.03" (-0.63"); BWI, 2.77" (-1.08"); IAD, 2.58" (-0.99")
- ☛ On the 3<sup>rd</sup>, a cyclist was killed near Bluemont, VA (Loudoun County) when high winds blew down a tree; 63 mph wind gusts measured near Sterling Park; hail to 1.50" near Delaplane, VA (Fauquier County); and winds gusts to 58 mph in Washington, D.C., resulting in downed trees on the Capitol's West Lawn
- ☛ On the 7<sup>th</sup>, the Baltimore area was impacted by strong thunderstorms: 1.0" hail struck near Dundalk, 63 mph winds recorded near Sparrows Point, 3.58" of rain deluged Jacksonville (Baltimore County)
- ☛ On the 8<sup>th</sup>, more localized drenching rains: Severna Park, MD, 3.68" (Anne Arundel County); Bowie, MD, 2.64" (Prince Georges County); Mt. Vernon, VA: 1.62" (Fairfax County)
- ☛ On the 13<sup>th</sup>, flooding closed Route 123 under the Capital Beltway; Vienna, VA, reported 3.23" (Fairfax County); an 18 wheeler blew over on the Nice Bridge (Route 301) near Newburg in Charles County, MD

## July 2011

**Temperatures:** Unprecedented heat impacted the area in July resulting in the hottest month on record at all three major airports. Monthly average temperatures at DCA were 84.5°F (+5.3°F); BWI, 81.7°F (+5.2°F); and IAD, 81.0°F (+5.3°F). DCA recorded 25 days with highs at or above 90°F, while BWI and IAD observed 24 such days, a new record at all three locations. Numerous record maximum and minimum temperature records were set including DCA's 102°F on the 23<sup>rd</sup> and 104°F on the 30<sup>th</sup>; which tied for its 5<sup>th</sup> highest reading. BWI soared to 106°F on the 22<sup>nd</sup>, its 2<sup>nd</sup> highest temperature on record, reached 101°F on the 29<sup>th</sup>, and equaled a record at 102°F on the 23<sup>rd</sup>. IAD's record maximum of 105°F on the 22<sup>nd</sup> was its hottest temperature on record. IAD also reached a record 103°F on the 29<sup>th</sup> and tied a record high of 99°F on the 23<sup>rd</sup>. Numerous additional records were set at the three major airports including the hottest monthly average maximum temperatures: 93.6°F at DCA; 92.9°F at BWI and 92.8°F at IAD.

Nighttime temperatures often brought little relief. DCA's average monthly minimum temperature of 75.4°F set a new record; minimum temperatures remained at or above 80°F from the 21<sup>st</sup>-25<sup>th</sup>. Additionally, DCA's minimum of 84°F on the 23<sup>rd</sup>-24<sup>th</sup> equaled its warmest minimum on record. BWI set a record minimum of 81°F on the 22<sup>nd</sup>. IAD monthly average minimum of 69.1°F was its second warmest on record.

**Precipitation/Severe Weather:** Rainfall was below normal at the three major airports but some areas recorded well above normal totals due to localized showers and thunderstorms. Monthly totals at DCA were 3.03" (-0.63"); BWI, 2.77" (-1.08"); and IAD, 2.58" (-0.99"). The month observed numerous severe weather events.

On the 3<sup>rd</sup>, a cyclist was killed near Bluemont, VA (Loudoun County) when a tree was blown down; 63 mph wind gusts were measured near Sterling Heights, hail to 1.50" near Delaplane, VA (Fauquier County), and wind gusts to 58 mph were measured in Washington, D.C., where trees fell on the Capitol grounds. The event brought heavy rain to some areas with 2.15" in Frederick, MD; 1.77" in Rockville, MD (Montgomery County) and 1.23" in Washington.

Parts of the Baltimore area observed strong thunderstorms on the 7<sup>th</sup> along with torrential rainfall: 1.0" hail struck near Dundalk, 63 mph winds were recorded near Sparrows Point, while in Baltimore County, 4" to 6" of water flowed across Mace Ave and Eastern Blvd near Essex, and 3.58" deluged Jacksonville.

On the 8<sup>th</sup>, Severna Park, MD, (Anne Arundel County) measured 3.68" of drenching rain; and Bowie, MD, (Prince Georges County) 2.64"; while Mt. Vernon, VA, recorded 1.62" (Fairfax County).

Thunderstorm wind damage was observed across the area on the of the 11<sup>th</sup>. Power poles snapped and a barn collapsed near Harney, MD (Carroll County), while at least seven large trees about a foot in diameter or greater fell near the Fairfax County Parkway and West Ox Road close to Reston, VA (Fairfax County).

The 13<sup>th</sup> saw more strong thunderstorms resulting in wind gusts and heavy rainfall especially across Northern Virginia and Southern Maryland. Vienna, VA, reported 3.23", resulting in flooding and closure of Route 123 under the Capital Beltway. An 18 wheeler was blown over on the Nice Bridge (Route 301) near Newburg in Charles County, MD.

The month's final significant event occurred on the 25<sup>th</sup> when thunderstorms caused damaging winds and torrential rainfall near Wintergreen, VA (Nelson County) and forced road closures from flash flooding near Randallstown, MD, (Baltimore County) and near Laurel, MD (Prince Georges County). Rainfall totals included 3.49" in Eldersburg (Carroll County); 3.21" in Woodbine, MD (Howard County) and 1.81" in Stafford, VA.

### July 2011 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (Inches)			
	AvMx	AvMn	AvgT	NmIT	DepNml	Max	MinT	Total	Norm	DepNml	Yr to Date
<b>National (DCA)</b>	93.6	75.4	84.5	79.2	+5.3	104/29	67/16	3.03	3.66	-0.63	18.38
<b>Baltimore (BWI)</b>	92.9	70.4	81.7	76.5	+5.2	106/22	58/2	2.77	3.85	-1.08	22.56
<b>Dulles (IAD)</b>	92.8	69.1	81.0	75.7	+5.3	105/22	56/2	2.58	3.57	-0.99	21.62

**Looking Ahead to August:** After experiencing the third hottest June on record, tied with 1943, and the hottest July on record, attention turns to summer's final month. Below are the hottest 10 summers in Washington as well as 2011 numbers after June and July. Will the area record its hottest summer ever?

Hottest Summer Temperatures at DCA: June, July, August										
Year	2011	2010	1980	1991	2002	1993	1987	1983	1995	1999
<b>Temperature</b>	81.7*	81.2	80.0°F	79.4°F	79.4°F	79.3°F	79.2°F	79.1°F	79.1°F	79.2°F

\*Average temperature for June and July 2011