

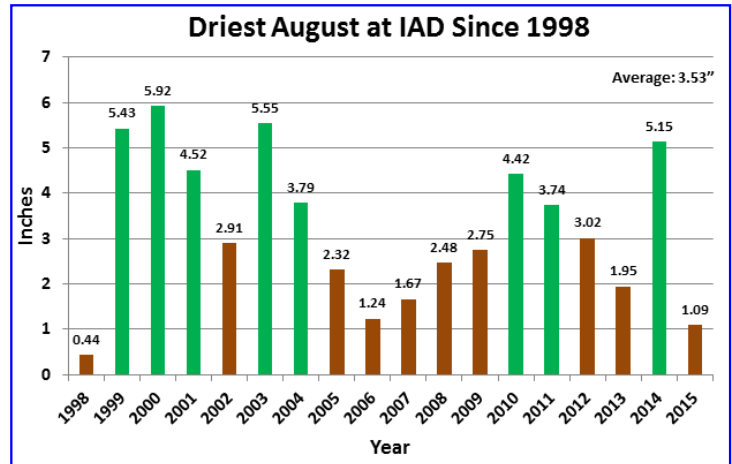
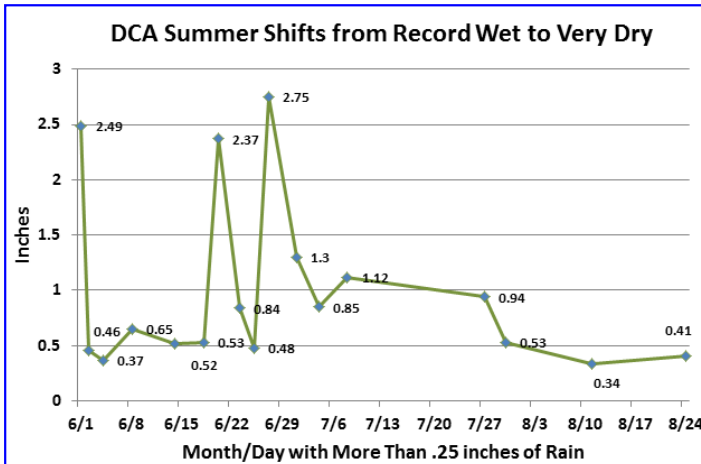


PRESTO

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



AUGUST: Very Dry with Near Normal Temperatures SUMMER: Fifth Warmest in Washington; Excessively Wet First Half, Dry Second Half



August Highlights

- Near normal temperatures across the area: DCA above normal (+1.2°F), BWI exactly normal and IAD slightly below normal (-0.8°F)
- BWI and IAD recorded only 4 days with maximum readings at or above 90°F
- Minimum temperatures dropped into the 50s on 7 days at IAD including 53°F on the 14th and 5 days at BWI including 56°F on the 28th
- Driest at IAD since 1998 (1.09") and 5th driest on record; driest at DCA since 2006 (1.16")
- On the 4th, numerous strong to severe thunderstorms struck the area, one causing a large tree to fall on a telephone pole and powerlines resulting in a transformer fire in Great Falls (Fairfax County), VA; 1.5" hail struck near Elma (Nelson County), VA, 1.0" hail near Catlett (Fauquier County), VA, while in Maryland, 1.25" hail was measured near Elkridge (Howard County) and 1.0" hail near Columbia (Howard County). Some areas received heavy rain including 1.27" in Ridge (St. Mary's County), MD, and 1.15" in Nokesville (Prince William County), VA
- On the 20th, heavy rain deluged Bel Air (Harford County), MD, with 6.25", resulting in flash flooding. Numerous roads were washed out. A similar but less intense flash flooding event occurred in Fauquier, VA, where 2.12" fell in Warrenton, causing flash flooding near Orlean and a 5-foot drop off in the road

Summer Highlights

- Seasonal temperatures were above normal at DCA, +1.9°F and BWI, +1.7°F, and slightly below normal at IAD, -0.5°F
- DCA observed 38 days with highs at or above 90°F, BWI, 18; IAD, 13
- Season's longest heat wave at DCA: July 24-Aug 5 (13 days at or above 90°F)
- Season's first heat wave: June 11-16 when highs were at or above 90°F at DCA, including monthly maximum of 96°F on the 16th
- Tropical Storm Bill remnants impacted the region on the evening of the June 20 with isolated tornadoes, damaging thunderstorm winds and flooding rainfall. One fatality was reported in Poolesville (Montgomery County), MD, when a car struck a fallen tree bringing down electrical wires onto a vehicle. Two EF-0 tornadoes were confirmed. The first tornado occurred in Bristow (Prince William County), and Manassas City, VA, with estimated wind speeds of 85 mph, maximum path width of 100 yards, and path length of 2.1 miles; most of the damage occurred at the Broad Run Golf Training Center. A second tornado was confirmed in Tuscarora (Frederick County), MD, with estimated wind speeds of 65 mph, path length of 1.5 miles and a maximum path width of 75 yards, mainly causing tree damage. No injuries or fatalities were reported from either tornado.
- On June 27, two EF-1 tornadoes were confirmed in Southern Maryland. The first tornado occurred in Morgantown (Charles County) with wind speeds of 90 mph, path length of 2.1 miles, and maximum path width of 100 yards. The second tornado had a long 16.1 miles track with a maximum path width of 800 yards running from Swan Point to Oakville, MD; wind speeds again were up to 90 mph. No injuries or fatalities reported but the tornadoes caused considerable tree and property damage. In the metro area, heavy rainfall resulted in flooded roads and rising waters on area streams and rivers. Rainfall totals were generally 2"-4" with the greatest totals 3.84" near Kingsville (Harford County), MD, and 3.87" near Lorton (Fairfax County), VA. BWI and DCA set daily records: BWI, 3.11", DCA, 2.75" while IAD tied its record at 1.47"
- July's most intense heat occurred on the 19th-20th with highs of 98°F and 97°F at DCA, 97°F and 95°F at BWI, and 94°F and 92°F at IAD
- After midnight on July 1, an intense line of damaging thunderstorm winds knocked down trees through a wide swath of Fairfax and Arlington counties in Virginia; and Washington, Prince Georges and Baltimore counties in Maryland. Rainfall totals included 2.35" near Bowie (Prince Georges County), MD; and 2.06" near Lorton (Fairfax County), VA; DCA recorded 1.30", along with a wind gust to 51 mph

Author: Andrew Horvitz, Editor: Melody Magnus, NWS Office of Climate, Water & Weather Services

Contact: Andy.Horvitz@noaa.gov, Melody.Magnus@noaa.gov; PRESTO online at: <http://www.weather.gov/os/presto/>

August 2015

Temperatures: Monthly readings were variable with DCA above normal (+1.2°F), BWI exactly normal and IAD slightly below normal (-0.8°F). DCA recorded 12 days with highs at or above 90°F, including the 1st-5th and the 15th-19th; however, no excessive heat was encountered. The monthly maximum was 96°F on the 4th and 17th. There were 4 days with minimum readings at or above 75°F with the highest reading, a sultry 77°F on the 19th. In sharp contrast, both BWI and IAD recorded only 4 days with maximum readings at or above 90°F. Minimums were much more tolerable at BWI with only 4 days at or above 70°F and 3 such days at IAD. Minimums dropped into the 50s on 7 days at IAD, including 53°F on the 14th, and on 5 days at BWI, dropping to 56°F on the 28th.

Precipitation: The major airports recorded well below normal rainfall: DCA, 1.16" (-1.77"), BWI 2.46" (-0.83") and IAD, 1.09" (-2.44"). It was the driest August at IAD since 1998 (see cover) and 5th driest on record while at DCA it was the driest since 2006. Despite the lack of rain, the month did feature severe weather on several days. On the 4th, numerous strong to severe thunderstorms impacted the area. Damaging thunderstorm winds caused a large tree to fall on a telephone pole and powerlines resulting in a transformer fire in Great Falls (Fairfax County), VA; 1.5" hail struck near Elma (Nelson County) and 1.0" hail near Catlett (Fauquier County) while in Maryland 1.25" hail was measured near Elkridge (Howard County) and 1.0" hail near Columbia. Some areas received heavy rain including 1.27" in Ridge (St. Mary's County), MD, and 1.15" in Nokesville (Prince William County), VA. Early on the 7th, flash flooding was reported in St. Mary's County near Dameron with 1.98" measured in Great Mills. On the 11th, thunderstorm wind damage snapped a 10" diameter tree limb in Upper Marlboro (Prince Georges County), MD, while White Marsh recorded 1" of rain (Baltimore County). On the 19th, isolated areas recorded heavy rain, including 1.44" in Reisterstown (Baltimore County), MD, and 1.18" in Rixeyville (Culpeper County), VA. On the following day, Harford County, MD, was deluged with 6.25" in Bel Air resulting in flash flooding. Numerous roads were washed out. A similar but less intense flash flooding event occurred in Fauquier, VA, where 2.12" was measured in Warrenton; flash flooding near Orlean caused a 5-foot drop off in the road. The month's final significant event occurred on the 24th with isolated strong storms in Baltimore, damaging winds that caused a tree to fall onto a car near Butler, MD, and strand a car in high water near Nottingham, MD; Hamilton, MD, measured 2.34" of rain.

August 2015 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	Yr. to Date
National (DCA)	88.0	70.5	79.3	78.1	+1.2	96/4,17	63/27	1.16	2.93	-1.77	32.89
Baltimore (BWI)	86.0	64.3	75.1	75.1	0.0	95/17	56/28	2.46	3.29	-0.83	36.24
Dulles (IAD)	85.4	63.8	74.6	75.4	-0.8	94/17	53/14	1.09	3.53	-2.44	27.28

Summer (June-August) Temperatures: Seasonal temperatures were above normal at DCA, +1.9°F and BWI, +1.7°F, and slightly below normal at IAD, -0.5°F. The season's first heat wave occurred June 11-16, with highs at or above 90°F at DCA, including a monthly maximum of 96°F on June 16. Minimum readings were uncomfortably warm. IAD set a record high minimum of 71°F on the 21st. DCA reported 18 days with minimums at or above 70°F, including a record 77°F on the 12th, a record equalling 75°F on the 13th and a record 78°F on the 14th. July marked the 7th out of the past 10 years with above normal readings at DCA. The month's most intense heat occurred on the 19th-20th when highs reached 98°F and 97°F at DCA, 97°F and 95°F at BWI and 94°F and 92°F at IAD. On the 20th, DCA's minimum of 82°F set a new record maximum minimum for the date; IAD's low temperature of 75°F equaled its warmest minimum. August temperature varied (see monthly summary).

Summer Precipitation: Seasonal totals were well above normal at the three major airports due to an excessively wet June that evaporated into an increasingly dry July and August: DCA, 18.11" (+7.67"); BWI, 19.04" (+8.22"); IAD, 13.42" (+2.24"). BWI recorded its wettest June on record and 4th wettest month of all-time. It was the 2nd wettest June on record at DCA, wettest June since 2006 at DCA and IAD, 5th wettest June at IAD; DCA measured greater than 2" of rain on a record 3 days. The month featured frequent severe weather including large hail, flooding and tornadoes. On June 20, remnants of Tropical Storm Bill brought tornadoes, damaging thunderstorm winds and flooding rainfall. One fatality was reported in Poolesville (Montgomery County), MD. Two EF-0 tornadoes were confirmed. The first tornado ran from Bristow (Prince William County), VA, to Manassas City, with estimated wind speeds of 85 mph, a maximum path width of 100 yards and a path length of 2.1 miles; most of the damage occurred at the Broad Run Golf Training Center. A second tornado struck Tuscarora (Frederick County), MD, with estimated wind speeds of 65 mph, a path length of 1.5 miles and a maximum path width of 75 yards, causing mainly tree damage. No injuries or fatalities were reported from either event. Hail to 0.88" struck near Georgetown in D.C. A funnel cloud was observed near Chancelorsville in Spotsylvania County, VA. A vehicle was stranded in high water in Pumphrey (Anne Arundel County), MD. On the 23rd, near record size hail was measured in central Baltimore County near Timonium, MD, 4.0" (grapefruit size) and was within 0.5" of the greatest hail observed in the state. On the 27th, two EF-1 tornadoes were confirmed. The first struck Morgantown (Charles County), MD, with wind speeds of 90 mph, path length of 2.1 miles and maximum path width of 100 yards. The second tornado had a long track of 16.1 miles with a maximum path width of 800 yards and ran from Swan Point in Charles County to Oakville in St. Mary's County, with wind speeds also 90 mph. No injuries or fatalities reported but the tornadoes caused considerable tree and property damage. DCA observed its 2nd wettest July in the past 10 years, 5.01" (+1.78"). IAD also was above normal, 4.89" (+1.22"), while BWI reported subnormal rainfall, 3.49" (-0.58"). July also featured more severe weather, including hail and torrential rain. On the 13th, a funnel cloud was reported and possible waterspout photographed near Crisfield, MD. August turned distinctly drier (see monthly summary).

Summer 2015 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
National (DCA)	87.7	69.4	78.1	76.9	+1.9	98/7-19	59/6-3,4	18.11	10.44	7.67
Baltimore (BWI)	84.8	65.8	75.3	73.8	+1.7	97/7-19	55/6-3,5	19.04	10.82	8.22
Dulles (IAD)	84.4	64.9	74.4	74.9	-0.5	94/7-19, 8-17	54/6-29	13.42	11.18	2.24

Does a Dry September Follow a Dry August? After the driest August since 1998 at IAD and since 2006 at DCA, listed below are the most recent subnormal August months with less than 2" of rainfall and the corresponding September total in Washington.

	1978	1980	1989	1995	1998	2002	2006	2008	2013	2015
August	1.01	1.90	1.15	0.88	0.59	1.63	1.03	1.23	1.34	1.16
September	1.16	2.59	6.68	3.73	1.83	2.10	6.31	6.41	1.22	?