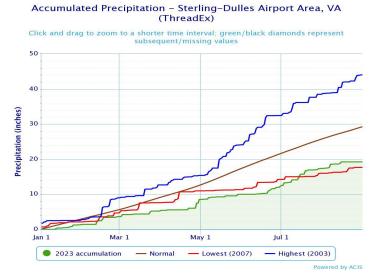
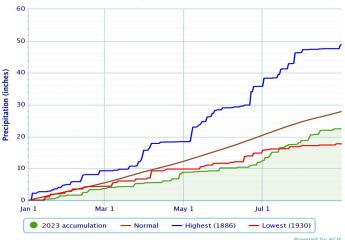


PREcipitation Summary and Temperature Observations for the Washington, DC and Baltimore, MD Area

Summer: Sub Normal Temperatures at DCA; First Time Since 2017 August: Near Normal Temperatures; Dry West of the Metros

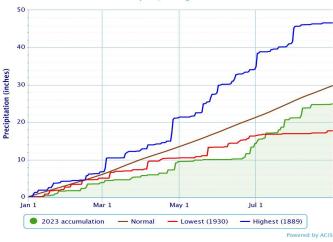


Accumulated Precipitation – Washington Area, DC (ThreadEx) Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Accumulated Precipitation - Baltimore Area, MD (ThreadEx)

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Accumulated precipitation for Sterling Dulles Airport Area during the calendar year 2023 through Aug. 31, 2023 (upper left), Washington Area (upper right), and Baltimore Area (lower left). All stations are below normal for 2023, with Dulles being the driest. The total for Dulles is just slightly greater than the lowest total on record (through Aug. 31, 2023), which occurred on 2007.

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August Highlights

- Month (temperature) Near normal temperatures occurred for most areas, with the metros being slightly above normal and west of the metros being slightly below normal in general. Anomalies were, IAD +1.5F, BWI +1.0F and DCA -0.7F.
- (Precipitation) DCA and BWI were close to normal for rainfall, but IAD and areas west and south were quite dry. Anomalies were IAD -1.68 inches, BWI -0.36 inches, and DCA +0.46 inches.
- 2nd Martinsburg ties a record low of 50F.
- 7th Widespread thunderstorm wind damage and large hail, including 2.5 inch hail in McDowell, VA (Highland county), Staunton ,VA,
- and Earlysville, VA (Albemarle County). An 80 mph gust in Middleburg, MD (Carroll County), 63 mph gust in Thurmont, MD, a 63 mph gust in Millers, MD (Carroll County), and a 61 mph gust in Petersburg, WV (Grant County).
- 8th Martinsburg, WV sets a daily rainfall record with 1.76 inches of rain.
- 14th Widespread thunderstorm wind damage and flooding, including a 58 mph gust at DCA.
- 15th Waterspout 22 miles northeast of Cove Point (Chesapeake Bay).
- 27th IAD ties a record high temperature of 97F.

Summer Highlights

June

- 2nd– BWI set a record high temperature of 97F, while IAD set a record high of 93F.
- 8th Poor air quality (code purple) for much of the local area. There were many days during June which had very poor air quality due to smoke from large wildfires in Canada being transported into the local area via a general northwest flow aloft for much of the month.
- 23rd IAD tied a record low maximum temperature of 66F.
- 26th and 27th Widespread strong winds, hail both days...1.5-inch hail fell in Montevideo, VA (Rockingham County) on the 26th. On the 26th, a 54 mph wind gust was observed 8 miles east of Smith Island, MD (over the Chesapeake), and a 52 mph wind gust was recorded 1 mile south of Baltimore. On the 27th, 1.25-inch hail fell in Odenton, MD, and there was a 52 mph wind gust 3 miles SE of Highland Beach.

July

- 1st 5th Widespread thunderstorm wind damage and flooding, mainly over the metro areas and east. A 59 mph wind gust occurred 10 miles northeast of Plum Point (marine buoy over the Chesapeake Bay).
- 14th Thunderstorm wind damage and hail over western, central, and eastern VA. 1.5-inch diameter hail was observed in Herndon, VA. A 66 mph wind gust was recorded in Reston, VA, and a 60 mph gust was recorded in DCA.
- 25th Thunderstorm wind damage, flooding, and hail across eastern WV, western MD, and western VA. One inch hail observed in Purcellville, Blue Mountain, and Round Hill (Loudon County), VA.

August Summary

Temperature:

Monthly temperatures were near normal temperatures for most areas, with the metros being slightly above normal and west of the metros being slightly below normal in general. The monthly temperature anomalies were IAD +1.5F, BWI +1.0F, and DCA -0.7F. Only two records were tied during the month. Dulles tied a record high of 97F on the 27th, while Martinsburg tied a record low of 50F on the 2nd.

Precipitation:

Areas around the DC and Baltimore metros were near normal in rainfall for the month but areas around Dulles and to the west and south were generally well below average for rainfall. However, the last two weeks of August (since the 16th) were very dry for all areas. From Aug. 16-31, IAD observed only 0.01 inches of rainfall, while BWI observed 0.17 inches, and DCA totaled 0.47 inches. The monthly rainfall anomalies were IAD -1.68 inches, BWI -0.36 inches and DCA +0.46 inches.

Summer Summary

Temperature:

June was a cool month overall. The coolest areas were west of the metros in eastern WV and western MD, where morning lows in the 40s were common during the first half of the month. Martinsburg's monthly average temperature was 5.3F below normal, while Hagerstown, MD was 3.7F below normal during June. Martinsburg had the lowest average monthly minimum temperature on record for June with 52.9F. The previous record was 53.2F in 1927. July monthly temperatures for July reversed the cool readings of June. Most areas were above normal.

August had near normal monthly temperatures for the most part. For the summer, the anomalies for average monthly temperatures were close to normal. IAD ended up 0.8F above normal for the summer, and BWI was 0.6F above normal. DCA ended up being 0.8 below normal for the summer.

Precipitation:

June continued the dry trend for 2023. Most locations were well below normal for rainfall; however, BWI had some rains late in the month which pushed the totals to slightly above average. July saw well above normal rainfall for most areas around the metro and to the east. However, most areas to the west were near or slightly below normal in rainfall.

August saw a return to the general dry conditions across most of the area. For the summer, the monthly rainfall anomalies varied quite a bit. BWI was the wettest, being 2.33 inches above normal, while IAD was the driest, being 2.74 inches below normal in rainfall. DCA was close to normal with a +0.49 inches rainfall anomaly.

Yearly precipitation deficits continue to grow in many places west and south of the metro areas. As of August 31, 2023, moderate to severe <u>drought conditions</u> have developed across parts of the area, mainly from central VA and MD westward to eastern WV.

The yearly precipitation anomalies (as of Aug. 31, 2023) for sites across the area are:

Charlottesville, VA	-11.26 inches
Martinsburg, WV	-10.27 inches
IAD	-10.00 inches
Hagerstown, MD	-7.65 inches
DCA	-5.42 inches
BWI	-4.88 inches

August Stats:

	9	Extreme/Day		Precipitation (inches)							
Location	Av Max	Av Min	Avg T	Nml T	ΔNml	Max	Min	Total	Nml Dep	Yearly Precip	Yearly Departure
National (DCA)	86.4	71.0	78.7	79.4	-0.7	94/23	63/25	3.71	0.46	22.49	-5.42
Baltimore (BWI)	86.9	67.5	77.2	76.2	+1.0	94/23	58/19, 23	3.73	-0.36	24.90	-4.88
Dulles (IAD)	88.1	66.4	77.2	75.7	+1.5	97/25	54/19	1.85	-1.68	19.22	-10.00

Summer Stats:

	Station Temperatures (°F)					Extreme	Precipitation			
Location	Av Max	Av Min	Avg T	Nml T	ΔNml	Max	Min	Total	Nml	Nml Dep
National (DCA)	86.7	69.5	78.1	78.9	-0.8	97/July 29	58/Jun 10	12.27	11.78	0.49
Baltimore (BWI)	87.0	66.2	76.6	76.0	0.6	97/Jun 2-Jul 27-28	51/Jun 10	14.88	12.55	2.33
Dulles (IAD)	87.4	64.6	76.0	75.2	0.8	98*/Jul 27-28- 29	50/Jun 9- 10	9.24	11.98	-2.74

* - Record on Jul 27

Looking Ahead: Normals for September

	Station Temperatures (°F)			Extrem	e/Day	Precipitation (inches)			
Location	Max	Min	Monthly	Record Max/Date	Record Min/Date	Nml	Precip. Max/Year	Precip. Min/Year	
National (DCA)	80.7	64.1	72.4	104/7/1888	36/23/1904	3.93	17.45/1834	0.11/2005	
Baltimore (BWI)	79.7	58.8	69.2	101/7/1881	35/25/1963	4.44	13.32/2011	0.09/1884	
Dulles (IAD)	79.3	57.9	68.6	99/11/1983*	30/24/1974	4.30	11.26/1975	0.15/2005	

* - Latest of more than one occurrence