

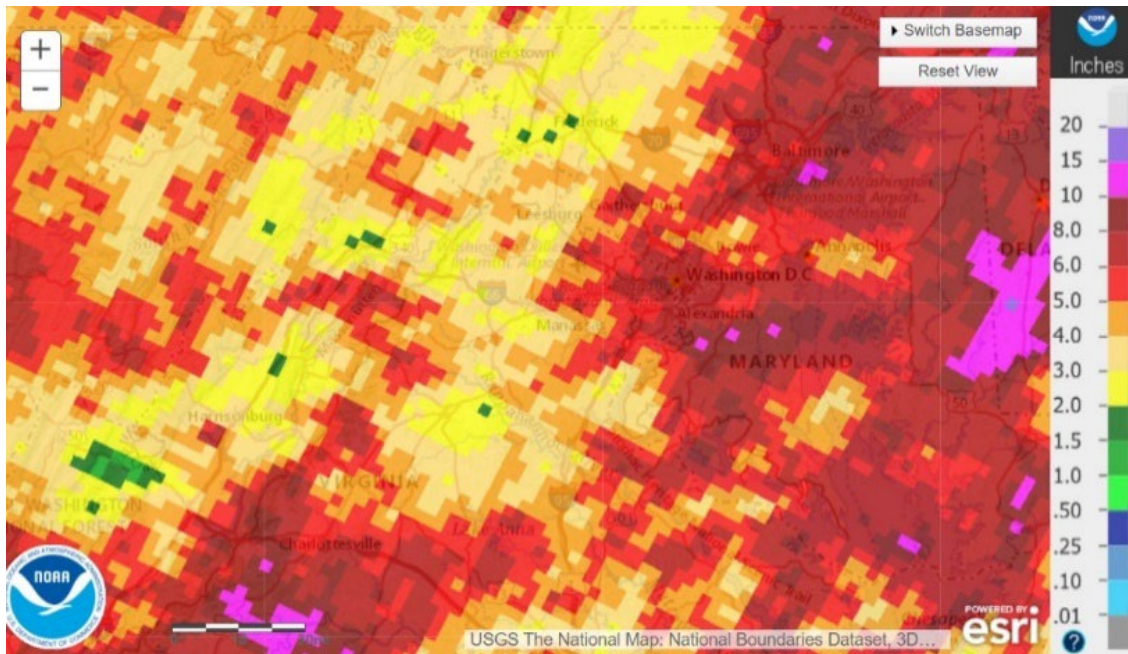


PRESTO



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

July: Wet Near the Metros, Dry to the West



Total Rainfall for July 2023 across the WFO Baltimore/Washington Forecast Area. Areas in and around the Washington and Baltimore metro areas observed over 5 inches of rainfall during the month (over 6 inches at DCA and BWI), and areas east of the metros observed over 10 inches (purple area). Areas west of the metros generally observed 2-4 inches for the month.

July Highlights

- ☁ **Month (temperature and precipitation)** – July was warmer than normal for most areas. Dulles had a positive monthly temperature anomaly of 2.9F, making it the 4th warmest July on record. BWI's anomaly was 2.3F, while DCA had a 0.6F anomaly. July was the first month in 2023 with widespread above normal precipitation around and east of the metro areas. Areas west of the metros were slightly below to near normal.
- ☁ **Month (air quality)** – Smoke and haze from Canadian forecast fires continued over the area for a few days, but the air quality was not as hazardous as in June.
- ☁ **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).
- ☁ **7th** – Widespread thunderstorm wind damage and flooding over central and eastern VA.
- ☁ **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.
- ☁ **16th and 21st** – Widespread thunderstorm wind damage, hail and flooding.
- ☁ **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.

- 27th – IAD tied a record high of 98F. Widespread thunderstorm wind damage and hail, including a 69 mph gust at the Winchester, VA regional airport and 0.75 inch hail Philomont (Loudoun County), VA.
- 29th - 30th – Widespread thunderstorm wind damage and hail, including 1.25 inch hail in Inwood, WV and Countryside, VA, a 70 mph wind gust 7 miles SE of Highland Beach, MD, and a 66 mph gust 3 miles east of Calvert Cliffs, MD (buoys over Chesapeake Bay) on the 29th. A 69 mph gust in Dameron, MD (St. Mary’s county) and a 60 mph gust at the Patuxent River Naval Air Station occurred on the 30th.

July Summary

Temperatures:

Temperatures for July reversed the cool readings of June. Most areas were above normal, with Dulles having a positive monthly temperature anomaly of 2.9F, making it the 4th warmest July on record. BWI’s anomaly was 2.3F, and DCA had a 0.6F anomaly. The only records for the month was a tie of the daily record high at IAD (98F) on the 27th.

Precipitation:

July had well above normal rainfall for most areas around the metro and to the east (See cover graphic). However, most areas to the west were near or slightly below normal in rainfall. DCA was 2.13 inches above normal, BWI was 2.36 inches above normal, and IAD was 0.94 inches above normal. However, Martinsburg and Hagerstown were 0.99 and 0.89 inches below normal, respectively.

The yearly rainfall anomalies (through the end of July) decreased near the metro areas due to the substantial rains; however, the deficits in Martinsburg and Hagerstown increased.

The yearly precipitation anomalies for sites across the area are:

Martinsburg	-9.66 inches
Hagerstown	-8.51 inches
IAD	-8.32 inches
DCA	-5.88 inches
BWI	-4.52 inches

As of July 25, 2023, moderate to severe [drought](#) has developed across small pockets of our area.

July Stats:

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	Av Max	Av Min	Avg T	Nml T	ΔNml	Max	Min	Total	Nml	Nml Dep	Yearly Precip
National (DCA)	90.1	73.1	81.6	81.0	0.6	97/29	69/21	6.46	4.33	2.13	18.78
Baltimore (BWI)	90.3	70.9	80.6	78.3	2.3	97/27-28	64/23	6.84	4.48	2.36	21.17
Dulles (IAD)	91.2	69.0	80.1	77.2	2.9	98*/27-28-29	61/23	5.09	4.15	0.94	17.37

* - Record on the 27th

Looking Ahead: Normals for August

Location	Station Temperatures (°F)			Extreme/Day		Precipitation (inches)		
	Max	Min	Monthly	Record Max/Date	Record Min/Date	Nml	Precip. Max/Year	Precip. Min/Year
National (DCA)	87.8	71.0	79.4	106/6/1918	49/31/1934*	3.25	14.41/1928	0.55/1962
Baltimore (BWI)	86.5	65.8	76.2	105/20/1983*	45/30/1986	4.09	18.35/1955	0.64/1877
Dulles (IAD)	86.3	65.2	75.7	104/20/1983	38/29/1982	3.53	10.71/1984	0.23/1962

* - Latest of more than one occurrence