

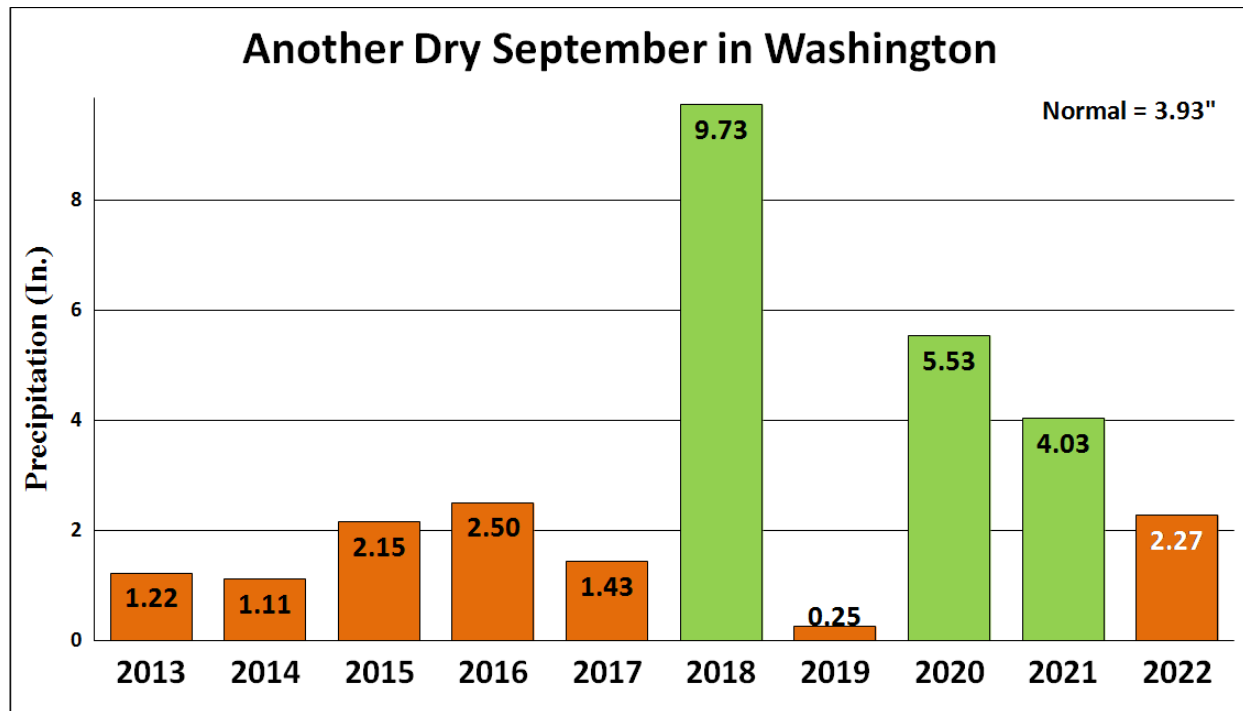


PRESTO

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



SEPTEMBER 2022: Hot First Week, Chilly Late Month; Adequate Rains 5th-13th, Then Quite Dry



September Highlights

- ☁ Slightly above normal **temperatures** continued: DCA 72.7°F (+0.3°F); BWI 70.6°F (+1.4°F); IAD 69.4°F (+0.8°F)
- ☁ DCA's 10 mornings at/below 60°F (including last 9 days of the month) tied 2020 for most in September since 2013
- ☁ Below normal **precipitation**: DCA 2.27" (-1.66"); BWI 3.35" (-1.09"); IAD 3.28" (-0.66")
- ☁ 5th – Appreciable rains both north of metros and across mountains, with **1.69"** in Bayard (Grant Co.), WV
- ☁ 6th – Intense, mainly pre-dawn rainfall focused on Piedmont, with 1-day totals as great as **3.83"** in Mt. Airy (Carroll Co.), MD and **3.70"** east of Leesburg (Loudoun Co.), VA
- ☁ 7th – Heavy rains continue west of the metros, with **2.49"** in Maugansville (Washington Co.), MD and **2.34"** in northeastern Madison Co. (VA); flash flooding observed near both Hagerstown, MD and Stephens City, VA
- ☁ 13th – Afternoon thunderstorms bring **2.24"** near Solomons (Calvert Co.), MD and **2.10"** north of Madison (Madison Co.), VA; a few reports of wind damage, including numerous trees down near Alanthus (Culpepper Co.), VA
- ☁ 25th – Lone noteworthy severe event: morning large hail in western MD with **1.50" hail** near McHenry (Garrett Co.), and reports of scattered downed trees through midday in both Frederick Co., VA and the WV panhandle
- ☁ 30th – Post-Tropical Cyclone Ian brings moderate to substantial rains south of metros by late evening with **1.53"** at Patuxent River NAS (St. Mary's Co.), MD, and in VA up to **~1.50"** in portions of Albemarle and Stafford Counties

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September 2022

September Temperatures: The near to slightly above normal trend that had prevailed since late spring continued, although throughout September, this included an overall pattern change from very warm to persistently chilly: DCA 72.7°F (+0.3°F); BWI 70.6°F (+1.4°F); IAD 69.4°F (+0.8°F). The upper 80s were common through the 6th, with the 3 airports all reaching the low 90s on the 4th; minimum temperatures were in the low 70s at the 3 airports through the 5th-6th. Excepting more muggy overnights leading a brief warmer spell over the 11th-12th, seasonal conditions prevailed through the 18th under strong high pressure that promoted diurnal spreads nearing 30-degrees. The mid- to upper 80s on the 19th were the first of three warmer days before September then closed with nine autumnal mornings amid northwesterly Canadian flow. Highs in the upper 60s were common during the 23rd-24th, with most locations also recording their first morning in the 40s on the 24th. Much of the region was in the 40s again on the 28th. At least 6 of the month's final 8 days dropped to 50°F or lower at both Hagerstown and Martinsburg.

Frequency of 90°F days for the month were slightly below normal: DCA, BWI, and IAD totaled 2, 2, and 1, respectively. 2022 totals included 38 at DCA (normal = 40), 48 at BWI (normal = 34), and 39 at IAD (normal = 33). Temperature extremes across the region for September ranged from 92°F on the 4th near both Keyser (Mineral Co.), WV and Reisterstown (Baltimore Co.), MD, to observations in Highland County, VA on the 28th - Mustoe 1 SW's 30°F and Mill Gap's 31°F. Meanwhile, essentially all other reporting stations did not fall below the upper 30s.

September Precipitation and Severe Weather: (See above highlights for most intense rainfall and severe reports). Precipitation totals were led by a rainy period through the 5th-12th as well as the first portion of Hurricane Ian's remnants that fell just before the month ended; otherwise rainfall was generally meager, with most locations not measuring rain over an 8-day period (14th-21st): DCA 2.27" (-1.66"); BWI 3.35" (-1.09"); IAD 3.28" (-0.66"). The very heavy pre-dawn rains on the 6th brought widespread 1-3" reports and readings in DC as great as **1.67"** in Friendship Heights (NW). Three-day totals over the 5th-7th ranged from less than an inch along the Coastal Plain to mainly 2-4" reports north and west of the metros, with **5.14"** east of Stephens City (Frederick Co.), VA, **4.87"** in Ijamsville (Frederick Co.), MD, and **3.00"** near Martinsburg (Berkeley Co.), WV.

Moderate rainfall on the 10th-11th included several heavier bands that were mainly focused over MD counties, with greatest reports including **2.52"** in Leonardtown (St. Mary's Co.), MD, **2.04"** at Rig (Hardy Co.), WV, **1.26"** in Chesterbrook (Fairfax Co.), VA, and **1.79"** in Friendship Heights (Northwest), DC. Further appreciable rains on the 12th again focused east of the mountains, where widespread additional 1-3" reports were found; several roads were closed due to flooding in Baltimore County, MD, while strong winds along the Chesapeake Bay included a 45-mph gust at Calvert Cliffs (Calvert Co.), MD. The 13th's thunderstorms (see Highlights) also included a **2.10"** rainfall report near White's Ferry (Montgomery Co.), MD. Four-day rainfall totals during the 10th-13th included **3.73"** in Reisterstown (Baltimore Co.), MD and **2.42"** in Manassas, VA. The 25th's fast-moving storms dropped locally upwards of 0.70" both near Martinsburg, WV and far northeastern MD, while marine thunderstorm winds gusted as high as 51 mph east of Smith Island, MD and 50 mph at Point Lookout (St. Mary's Co.), MD.

Monthly rainfall totals displayed a north to south gradient, with the 3 airports just south and east of noticeably rainier areas; an arc from north of Harrisonburg, VA, through Culpepper, VA, and then northeastward through the DC Metro to northeastern Anne Arundel County, MD divided generally 3-6" totals to the north from 1.75-3" observations to the south. Extremes ranged from a few reports near 1.15" across the Fredericksburg, VA area, to several isolated 7-8" reports near both Stephens City, VA and White's Ferry, MD, with just over 8" in Reisterstown, MD.

September 2022 Weather Statistics for the Washington/Baltimore Area

Location	Station Temperatures (°F)					Extreme/Day		Precipitation (inches)			
	Av Max	Av Min	Avg T	Nml T	ΔNml	Max	Min	Total	Nml P	ΔNml	Year To Date
National (DCA)	81.6	63.8	72.7	72.4	+0.3	91/1,4	51/24,28	2.27	3.93	-1.66	34.22
Baltimore (BWI)	80.8	60.4	70.6	69.2	+1.4	91/4	47/24,28	3.35	4.44	-1.09	35.28
Dulles (IAD)	80.2	58.5	69.4	68.6	+0.8	90/4	41/28	3.28	3.94	-0.66	30.78

Looking Ahead: How have recent first freeze dates varied across the region in the last 12 years? While November is often a favored month east of the mountains for a first 32°F or lower reading, Martinsburg, WV will often record their first freeze in October.

First 32°F (or lower) reading at DCA, BWI, IAD, Martinsburg, Hagerstown, and Charlottesville (2010-2021)													
YEAR	DCA	BWI	IAD	MRB	HGR	CHO	YEAR	DCA	BWI	IAD	MRB	HGR	CHO
2021	Nov 23	Nov 4	Nov 3	Nov 2	Nov 3	Nov 5	2015	Oct 18	Oct 19	Oct 18	Oct 18	Oct 18	Oct 19
2020	Nov 19	Nov 18	Oct 31	Sep 20	Nov 18	Nov 18	2014	Nov 8	Nov 8	Nov 8	Nov 8	Nov 8	Nov 8
2019	Nov 9	Nov 2	Oct 22	Oct 19	Nov 2	Nov 2	2013	Oct 25	Oct 26	Oct 25	Oct 25	Oct 26	Oct 25
2018	Nov 11	Oct 22	Oct 22	Oct 19	Nov 10	Oct 22	2012	Oct 13	Nov 5	Oct 13	Oct 12	Oct 13	Nov 5
2017	Nov 10	Nov 10	Oct 26	Oct 27	Nov 10	Nov 10	2011	Oct 30	Oct 30	Oct 30	Oct 30	Oct 29	Oct 30
2016	Nov 23	Oct 26	Oct 18	Oct 26	Nov 12	Nov 13	2010	Nov 1	Nov 2	Nov 1	Nov 1	Nov 2	Nov 2