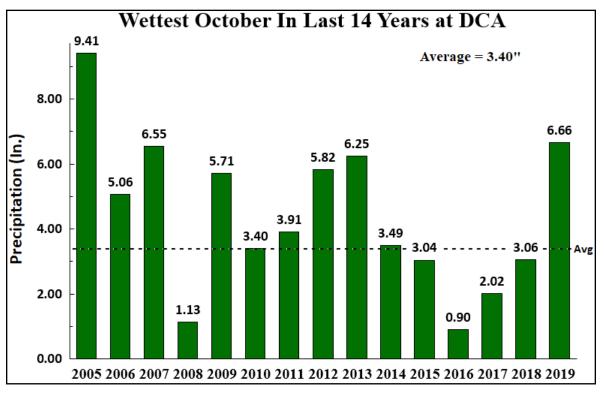


## OCTOBER 2019: Well Above Normal Temperatures; Return to Substantial Rains



## **October Highlights**

- Eleventh consecutive month with at or above temperatures at DCA and seventh at BWI and IAD: +4.6°F at DCA, +6.1°F at BWI and +4.5°F at IAD
- On the 2<sup>nd</sup>, temperature readings soared to all-time record highs not only for the calendar day but also for October:
  98°F at both DCA and BWI and 96°F at IAD
- Well above normal rainfall with nearly all precipitation occurring from the 16<sup>th</sup>-31<sup>st</sup> 6.66" (+3.26") at DCA, 6.21" (+2.88") at BWI and 5.97" (+2.92") at IAD
- More than an inch of rainfall reported at most locations including the three major airports on 16<sup>th</sup>, 20<sup>th</sup>, 27<sup>th</sup> and 30<sup>th</sup>-31<sup>st</sup>
- On the 17<sup>th</sup>, strong winds gusted to 57 mph near Shady Grove (Greene County), VA, and to 51 mph near Dayton (Howard County), MD. The strong winds in Bethesda (Montgomery County), MD, caused a large tree to fall onto a car, brought down power lines and snapped several power poles.
- On the 19<sup>th</sup>, many areas north and west of the metro had their first freeze of the season including 31°F in Martinsburg, WV
- The "Halloween" storm closed the month with more heavy rain. Highest totals were 3.32" in Poolesville (Montgomery County), 2.56" in Syria (Madison County), VA, and 1.61" in Washington. Widespread damaging winds accompanied this storm which resulted in one fatality when a tree fell onto an occupied car in Colesville (Montgomery County). A brief EF-O tornado struck Timberville (Rockingham County), VA with winds estimated at 75 mph. The path width was 25 yards and path length was 0.5 miles and resulted in tree and property damage.

## October 2019

**Temperatures:** For the 7<sup>th</sup> consecutive month, temperatures were above normal at the three major airports. It was the 7<sup>th</sup> warmest on record at Washington, 11<sup>th</sup> warmest on record and the warmest since 2007 at Baltimore: DCA, +4.6°F; BWI, +6.1°F; IAD, +4.5°F. The month will be remembered for unprecedented heat on the 2<sup>nd</sup> when readings soared to all-time records not only for the calendar day but also for October: 98°F at DCA and BWI and 96°F at IAD. Readings also soared to 90°F at BWI on the 1<sup>st</sup> and reached 80°F or greater in Washington on 5 additional days. Record warm minimum readings occurred on the 2<sup>nd</sup> and 3<sup>rd</sup> at DCA (73°F) and broke or tied calendar day records on four days at IAD: 1<sup>st</sup>-3<sup>rd</sup> and 30<sup>th</sup>. In sharp contrast, maximum readings held in the 50s on the 20<sup>th</sup> at DCA, BWI and IAD. Minimum readings dropped into the 30s on 5 days at IAD but remained above freezing.

**Precipitation:** The month featured a dramatic return to the copious rainfall prevalent earlier in 2019 and throughout most of 2018: DCA, 6.66" (+3.26"); BWI, 6.21" (+2.88"); and IAD, 5.97" (+2.72"). It was the 9<sup>th</sup> wettest October on record in Washington and wettest since 2005 and 11<sup>th</sup> wettest on record at Dulles prolonged dry spell which started August 24 finally broke on October 16<sup>th</sup>. Dry conditions had exacerbated to severe drought on October 15<sup>th</sup> with monthly rainfall about 1/4" or less at all three major airports. Promptly thereafter, a series of 4 significant storms resulted in topsoil conditions returning to normal by month's end.

On the 16<sup>th</sup>, over an inch of rain was reported across most locations including DCA, BWI and IAD. The greatest total in Maryland was 2.25" south of Towson (Baltimore City); In Virginia, 1.87" near Fredericksburg (Stafford County); and in DC, 1.34" at Catholic University. Strong winds followed the storm with gusts to 57 mph near Shady Grove (Greene County), VA, and to 51 mph near Dayton (Howard County), MD. The strong winds caused a large tree to fall onto a car, brought down power lines and snapped several power poles in Bethesda (Montgomery County), MD.

Then on the 20<sup>th</sup>, the remnants from Post-Tropical Storm Nestor soaked the area with another event during which totals again exceeded an inch at all three major airports and set a calendar day record of 1.44" at IAD. Much greater amounts occurred south of Washington including 2.97" near Ridge (St. Mary's County), MD, and 2.55" near Keswick (Albemarle County), VA. The third event occurred on the 27<sup>th</sup> bringing another inch of rainfall to the three airports with the greatest amounts in Catonsville, (Baltimore County), MD, 2.27", and in Culpeper, (Culpeper County) VA, at 1.75".

Finally, on 30<sup>th</sup>-31<sup>st</sup>, a long duration rainfall event ended with torrential showers during the mid-to-late evening on Halloween with highest amounts 3.32" in Poolesville (Montgomery County), 2.56" in Syria (Madison County), VA, and 1.61" in Washington and a calendar day record 1.35" at IAD. For the 4<sup>th</sup> time in 16 days, the three major airports recorded over an inch rainfall. Widespread damaging winds accompanied this storm, resulting in one fatality when a tree fell onto an occupied car in Colesville (Montgomery County). A brief EF-O tornado struck Timberville (Rockingham County), VA with winds estimated at 75 mph. The path width was 25 yards and path length was 0.5 miles and resulted in tree and property damage.

An unusual flooding event without rainfall occurred on the 11<sup>th</sup> along the Potomac River in Alexandria, VA and along portions of the Chesapeake Bay in Annapolis and St. Mary's County. An easterly on-shore wind flow around Tropical Storm Melissa well out in the Atlantic, combined with a full moon and high tide, resulting in localized flooding.

|                 | <b>v</b>                  |       |      |      |             |      |                        |       |      |        |            |
|-----------------|---------------------------|-------|------|------|-------------|------|------------------------|-------|------|--------|------------|
|                 | Station Temperatures (°F) |       |      |      | Extreme/Day |      | Precipitation (inches) |       |      |        |            |
| Location        | AvMx                      | AvMin | AvgT | NmlT | DepNml      | Max  | Min                    | Total | Nml  | DepNml | Yr to Date |
| National (DCA)  | 72.4                      | 55.9  | 64.1 | 59.5 | +4.6        | 98/2 | 44/19                  | 6.66  | 3.40 | +3.26  | 37.69      |
| Baltimore (BWI) | 72.0                      | 52.3  | 62.2 | 56.1 | +6.1        | 98/2 | 40/19, 24              | 6.21  | 3.33 | +2.88  | 33.46      |
| Dulles (IAD)    | 70.8                      | 50.3  | 60.5 | 56.0 | +4.5        | 96/2 | 33/19                  | 5.97  | 3.25 | +2.72  | 36.22      |

## October 2019 Weather Statistics for the Washington/Baltimore Area

**Looking Ahead to November:** The first inch or greater snowfall at DCA during the 2018-19 snow season fell very early: November 15 (1.5"). Below are the dates when DCA measured its first inch or more of snow in the last 10 years.

| First Inch of Snow at DCA for Last 10 years |             |           |               |  |  |  |  |  |
|---|-------------|-----------|---------------|--|--|--|--|--|
| 2018-2019                                   | November 15 | 2013-2014 | January 2     |  |  |  |  |  |
| 2017-2018                                   | December 9  | 2012-2013 | March 25      |  |  |  |  |  |
| 2016-2017                                   | January 30  | 2011-2012 | Did Not Occur |  |  |  |  |  |
| 2015-2016                                   | January 22  | 2010-2011 | December 16   |  |  |  |  |  |
| 2014-2015                                   | January 6   | 2009-2010 | December 18   |  |  |  |  |  |