## JUNE 2011: Hot Again; Dry in Many Locations

## Top 10 Warmest Junes in Washington



## June Highlights

〒 Well above normal temperatures across region: $+4.2^{\circ} \mathrm{F}$ at DCA, $+3.9^{\circ} \mathrm{F}$ at BWI and $+4.0^{\circ} \mathrm{F}$ at BWI

* Tied for third hottest June on record in Washington and third hottest at IAD
* Fifth consecutive month with above normal temperatures at BWI and IAD
* Record highs on $1^{\text {st: }}$ : DCA and BWI at $98^{\circ} \mathrm{F}$ and IAD at $95^{\circ} \mathrm{F}$; $8^{\text {th }}$ : DCA and BWI at $99^{\circ} \mathrm{F}$ and $9^{\text {th }}$ : BWI $100^{\circ} \mathrm{F}$ and IAD $97^{\circ} \mathrm{F}$; DCA's $102^{\circ} \mathrm{F}$ on $9^{\text {th }}$ equals hottest June temperature on record; $2^{\text {nd }}$ earliest $100^{\circ} \mathrm{F}$ or greater reading in calendar year in Washington and Baltimore
* Highs at or above $90^{\circ} \mathrm{F}$ on 10 days at DCA and 4 days with highs at or above $95^{\circ} \mathrm{F}$
* Driest June since 2007 at DCA
* Second consecutive June with less than 2 inches of rainfall at DCA and IAD
* On the $14^{\text {th }}$, two EF-O tornadoes were confirmed in Harford County, MD, at Belcamp, winds to 80 mph , and Street, winds to 70 mph , resulting in tree damage; widespread tree damage across area from powerful thunderstorms
* Numerous severe weather episodes across area throughout month as strong thunderstorms caused large hail, strong winds and localized heavy downpours.

Temperatures: Similarly to June 2010, the area observed well above normal temperatures this month. Positive departures were $+4.2^{\circ} \mathrm{F}$ at DCA, $+3.9^{\circ} \mathrm{F}$ at BWI and $+4.0^{\circ} \mathrm{F}$ at BWI. The month began with record heat on the $1^{\text {st }}:$ DCA and BWI measured $98^{\circ} \mathrm{F}, \mathrm{IAD}, 95^{\circ} \mathrm{F}$. The season's first major heat wave ran from the $7^{\text {th }}$ to the $12^{\text {th }}$ with DCA recording temperatures at or above $90^{\circ} \mathrm{F}$ throughout the period, including a sizzling $102^{\circ} \mathrm{F}$ on the $9^{\text {th }}$, equaling Washington's hottest recorded June maximum. Record highs were also set the same day at BWI, $100^{\circ} \mathrm{F}$ and IAD, $97^{\circ} \mathrm{F}$. Additional records were established, including $99^{\circ} \mathrm{F}$ at DCA and BWI on the $8^{\text {th }}$. For the month, DCA recorded 10 days with highs at or above $90^{\circ} \mathrm{F}$, while both BWI and IAD observed 7 such days.

Record high minimum readings occurred on several days. On the $1^{\text {st }}$, DCA recorded a record high minimum of $76^{\circ} \mathrm{F}$ and IAD, $72^{\circ} \mathrm{F}$. On the $9^{\text {th }}$, DCA's record minimum was $79^{\circ} \mathrm{F}$ and IAD, $71^{\circ} \mathrm{F}$. IAD observed two record minimums later in the month: $71^{\circ} \mathrm{F}$ on the $22^{\text {nd }}$ and $73^{\circ} \mathrm{F}$ on the $23^{\text {rd }}$.

Subnormal daily readings were rare. DCA's high of $78^{\circ} \mathrm{F}$ on the $14^{\text {th }}$ was its only daily maximum temperature below $80^{\circ} \mathrm{F}$. The month's coolest minimum readings occurred on the $3^{\text {rd }}-4^{\text {th }}$, with a low of $48^{\circ} \mathrm{F}$ at IAD on the $4^{\text {th }}$.

Precipitation/Severe Weather: Rainfall varied across the region with dry conditions at DCA $1.68^{\prime \prime}$ ( -1.45 ") and IAD 1.40 " ( -2.67 ") but slightly above normal rainfall at BWI 3.51" (+0.08"). It was the driest June at DCA since 2007. Since May 1, the rainfall deficit in Washington totals -3.57" through June 30. BWI's above average total was due in large part to a daily record rainfall of $1.96^{\prime \prime}$ on the $16^{\text {th }}$.

Severe weather impacted the region throughout the month. On the $1^{\text {st }}$, large hail struck some areas south and east of Washington including hail to $1.75^{\prime \prime}$ near Partlow, VA (Spotsylvania County); $1.25^{\prime \prime}$ near Woodmore, MD (Prince Georges County); and $0.75^{\prime \prime}$ hail at the World Weather Building in Camp Springs, MD. A hail storm lasted 8 minutes, 1 mile south of DCA. On the $9^{\text {th }}$, scattered severe activity occurred with $1.25^{\prime \prime}$ hail near Middleburg, VA (Loudoun County); a wind gust to 62 mph was measured near South River, and 1.73" rainfall was observed in Deale, MD (Ann Arundel County). Two days later, golf ball size hail, $1.75^{\prime \prime}$, pelted Tyro, VA (Nelson County), with winds gusting to 60 mph near Markham, VA (Fauquier County), while $1.46^{\prime \prime}$ of rain soaked Havre De Grace, MD (Harford County).

On the $14^{\text {th }}$, two EF-O tornadoes were confirmed in Harford County, MD, at Belcamp (winds to 80 mph ) and Street (winds to 70 mph ), resulting in tree damage. Many locations reported strong winds from thunderstorms causing downed trees and loss of power. Jarrettsville, MD (Harford County), was deluged with 2.51 " of rain. Heavy rain and severe weather once again struck some locations on the $16^{\text {th }}$ when $1.0^{\text {" }}$ hail was measured near Linden, VA (Fauquier County), while $2.55^{\prime \prime}$ of rain was measured at Leonardtown, MD (St. Mary's County), and $2.20^{\prime \prime}$ in Mantua, VA (Fairfax County). The following day, golf ball size hail struck portions of Virginia, including near Reva (Culpeper County) and near Syria (Madison County). Heavy showers soaked southern Maryland on the $19^{\text {th }}$ and $20^{\text {th }}$. In St. Mary's County, Tall Timbers measured $2.80^{\prime \prime}$ on the $19^{\text {th }}$ and Park Hall recorded $1.37^{\prime \prime}$ on the $20^{\text {th }}$. The month's final severe weather event occurred in Virginia on the $28^{\text {th }}$ when $1.0^{\text {" }}$ hail struck near Jeffersonton in Culpeper County and near Advance Mills in Albemarle County.

June 2011 Weather Statistics for the Washington/Baltimore Area

|  | Station Temperatures ( ${ }^{\circ} \mathrm{F}$ ) |  |  | Extreme/Day |  |  | Precipitation (Inches) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Location | AvMx | AvMn | AvgT | NmIT | DepNmI | Max | MinT | Total | Norm | DepNmI |
| Yr to Date |  |  |  |  |  |  |  |  |  |  |
| National (DCA) | 87.9 | 69.6 | 78.8 | 76.6 | +4.2 | $102 / 9$ | $59 / 15$ | 1.68 | 3.13 | -1.45 |
| Baltimore (BWI) | 86.5 | 64.9 | 75.7 | 71.8 | +3.9 | $100 / 9$ | $50 / 3,4$ | 3.51 | 3.43 | +0.08 |
| Dulles (IAD) | 85.8 | 64.0 | 74.9 | 70.9 | +4.0 | $97 / 9$ | $48 / 4$ | 1.40 | 4.07 | -2.67 |

Looking Ahead to July: With a steamy June behind us, what does July hold? Below are some noteworthy statistics for Washington at DCA: Normal Average Temperature: $79.2^{\circ} \mathrm{F}$; Normal Monthly Precipitation: 3.66".

## DCA July Temperature

Hottest: 2010, 1993 (Average Temperature: $83.1^{\circ} \mathrm{F}$ )
Coolest: 1891 (Average Temperature: $72.0^{\circ} \mathrm{F}$ )
Most $\mathbf{9 0}^{\circ} \mathbf{F}+$ days: 24 (1987 and 1993)
Fewest $\mathbf{9 0}^{\circ} \mathbf{F}+$ days: 0 (1891)
Most $\mathbf{1 0 0}^{\boldsymbol{\circ}} \mathbf{F}+$ days: 6 (1930)
Longest consecutive period of $\mathbf{9 0}^{\mathbf{}} \mathbf{F}$ days: 16 (July 3-18, 1993)
Longest consecutive period of $\mathbf{1 0 0}^{\mathbf{o}} \mathbf{F}+$ days: 4 (July 19-22, 1930)
Record monthly high: $106^{\circ} \mathrm{F}$ (July 20, 1930, and August 6, 1918)
Record monthly low: $52^{\circ} \mathrm{F}$ (July 4, 1919 and July 31, 1895)

## DCA July Precipitation

Wettest: 1945 (Precipitation Total: 11.06")
Driest: 1872 (Precipitation Total: 0.82")
Record daily rainfall: 4.69" (July 9, 1970)

