

## Repeat of Record Heat

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The big climate news has been a return of record heat this summer and implementation of new 30-year climate normals.

After one of the warmest springs and summers on record last year (2010), many were hoping 2011 would bring cooler spring and summertime temperatures. That was not the case as the anomalous heat returned again for 2011. Spring 2011 (March-May) featured above normal temperatures, but didn't rank in the top 10 warmest springs. However, like last year, July 2011 was hot and one for the record books. All three climate stations (Washington DC, Baltimore and Dulles) set all-time records for the hottest month (July 2011); with some of those records set just last year.

*Note: The records below are preliminary until they are quality controlled and certified by NOAA's National Climatic Data Center. Official weather records date back 140 years to 1871 for Washington DC, 141 years to 1870 for Baltimore and 49 years to 1962 for Dulles.*

Through the end of July 2011, the Mid-Atlantic had experienced several bouts of multi-day above normal heat. The heat began right after Memorial Day 2011 and continued into early June 2011. After a brief respite from the heat in mid-June through early July, the latter half of July 2011 saw record-breaking heat.

July 2011 temperatures ended up setting numerous records. Dulles Airport (IAD) set a new all-time high temperature record on July 22<sup>nd</sup> when the thermometer hit 105F. BWI Airport set an all-time high of 106F on July 22<sup>nd</sup> for the airport measuring site; only one degree shy of Baltimore's all-time record high of 107F set back on July 10, 1936 (when temperatures were recorded downtown). Numerous daily max and high min temperatures were set during the March through July period of 2011. Here's a brief highlight of some of the records set.

### *Washington D.C.*

July 2011 was both the hottest July ever, and the hottest month on record. The monthly average temperature of 84.5F smashed the previous hottest monthly average of 83.1F set during Julys of 2010 and 1993. July's high temperature averaged 93.6F, which set a new record for the warmest maximum monthly temperature.

The high of 104F on July 29<sup>th</sup> was tied for the 5<sup>th</sup> all-time highest temperature, two degrees shy of the all-time hottest temperature (106F) in Washington DC set on July 20, 1930 and again on August 6, 1918. Through early August 2011, there have been 5 days of 100F or better; the most since the summer of 1997 (the summer of 1930 had 11 days of 100F or more!). July 2011 set the record for most number of days of 90F or higher in any month: 25 days. Washington had daytime highs of 90F or better during a consecutive 16-day period (July 18<sup>th</sup> through August 2<sup>nd</sup>) that tied for fifth longest.

There wasn't much relief at night. The July min temperature averaged 75.4F, which set a new record for the warmest minimum monthly temperature. Records were also set for most number of consecutive days (4) where the temperatures did not drop below 80F (July 21<sup>st</sup> through the 25<sup>th</sup>) and the most number of days for any month where daily temperatures stayed at or above 80F (7 days).

### *Baltimore, Maryland*

Baltimore sweltered through another hot July. Like DC, July 2011 was not only the hottest July ever, but the hottest month on record. The monthly average temperatures of 81.7F edged the previous hottest monthly average of 81.5F set during Julys of 2010, 1995 and 1872. July's monthly-averaged high temperature of 92.9F set a new record for warmest maximum monthly temperature. There were four days of highs reaching 100F this July, one less than last July 2010. July 2011 also set the record for most number of days of 90F or higher for any month: 22 days. Baltimore had daytime highs of 90F or better during a consecutive 17-day period (July 17<sup>th</sup> through August 2<sup>nd</sup>) that now ranks as third longest.