## August 2019 Review <br> General Summary

August was generally warmer (hotter) than average across the local area, though slightly less so than July with most sites showing monthly temperature departures of 1 to $\mathbf{2}$ degrees warmer than the long term means. The month generally began seasonably warm, but turned more consistently hot by mid-month. A heat wave dominated the pattern from the $18^{\text {th }}$ through the $\mathbf{2 2}^{\text {nd }}$; most of the area experienced multiple days with highs in the mid/upper 90s to around 100F and heat indices as high as 105F to 110F.

Precipitation showed a lot of variability across the area for August 2019; this is typical during the summer months where locally heavy rainfall amounts occur from scattered hit or miss thunderstorms. Overall, there was a tendency towards a rainfall deficit along and west of the l-95 corridor and on the lower eastern shore (some areas were in fact very dry). The wettest region was generally located over far southeast VA and northeast NC where a few sites received in excess of 8 inches of rain for the month (even here there was still a significant amount of variation).

The series of pages that follow show various statistics for August 2019.

## Daily High Temperature Departures at Richmond \＆Norfolk

| Augl obseme | $t 20$ | $19: R$ $\mathrm{m} \text { Temper }$ | ichr <br> ature | nd， <br> rure | A |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $+2^{\circ}$ | －4． | +1 。 |
| +3 。 | －3． | 0 。 | $+{ }^{\circ}$ | ＋4 ${ }^{\text {c }}$ | ＋6 ${ }^{\circ}$ | －1。 |
| ＋2 ${ }^{\circ}$ | ＋4＊ | $+5^{\circ}$ | $+5^{\circ}$ | ＋1． | －2 | $+5^{\circ}$ |
| ＋6 ${ }^{\circ}$ | ＋12 ${ }^{\circ}$ | ＋10． | ＋3 ${ }^{\circ}$ | ＋9 ${ }^{\circ}$ | 0 。 | －6＊ |
| －6＊ | －8． | $-2^{\circ}$ | ${ }^{\circ}{ }^{\circ}$ | ${ }^{\circ}$ 。 | ＋6 ${ }^{\circ}$ | ＋ $7^{\circ}$ |



## Regional Temperature \& Precipitation Maps

## August 2019 Temperature Data



## August 2019 Precipitation Data



Departures from the 30-year normals (1981-2010) are shown for both average temperature and total precipitation. For temperature, the departures are shaded orange for 1 F or more warmer than average and blue for 1 F or more cooler than average (green shading indicates values within one degree of normal). Similarly, precipitation departures are shaded green for 1.00 " or more wetter than average and tan for 1.00 " or more drier than normal (near normal values are shaded the same color as the precipitation amount box).

## Tabular Summary of Data for Main Climate Sites:

| August 2019 Temperature Summary Data * |  |  |  |  |  |  |  |  | also on other dates |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Site | Avg Max |  | Avg Min |  | Avg Temp |  | Warmest | Coldest | Significance / Remarks |
|  | $\left({ }^{\circ} \mathrm{F}\right)$ |  | $\left({ }^{\circ} \mathrm{F}\right)$ |  | $\left({ }^{\circ} \mathrm{F}\right)$ |  | $\left({ }^{\circ} \mathrm{F}\right)$ | $\left({ }^{\circ} \mathrm{F}\right)$ | (if Top Ten List, etc.) |
|  | Actual | Dep | Actual | Dep | Actual | Dep | Date | Date |  |
| Richmond | 89.6 | 2.0 | 68.4 | 1.0 | 79.0 | 1.5 | 99 on 19th | 59 on 30th |  |
| Norfolk | 87.1 | 2.0 | 72.2 | 1.5 | 79.6 | 1.7 | 96 on 19th | 66 on 30th |  |
| Salisbury | 87.1 | 2.7 | 67.8 | 2.4 | 77.5 | 2.6 | 96 on 19th | 59 on *30th |  |
| Elizabeth City | 88.1 | 1.5 | 71.4 | 2.8 | 79.8 | 2.2 | 94 on 19th | 64 on *31st |  |
| Wakefield | 88.7 | 0.8 | 68.0 | 0.8 | 78.4 | 0.8 | 96 on 19th | 59 on 30th |  |


| August 2019 Precipitation \& Snowfall Summary Data |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Site | Total Pre |  | \# Pre Days |  | Greatest |  | Total Snow |  | \# Snow Days |  | Significance / Remarks <br> (if Top Ten List, etc.) |
|  | (in) |  | ( $\geq 0.0$ |  | (in) |  |  | .) |  | 1") |  |
|  | Actual | Dep | Actual | Dep | Actual | Date | Act | Dep | Act | Dep |  |
| Richmond | 2.29 | -2.37 | 13 | 4 | 0.59 | 2nd | 0.0 | 0.0 | 0 | 0 |  |
| Norfolk | 7.57 | 2.05 | 12 | 2 | 2.93 | 7th | 0.0 | 0.0 | 0 | 0 |  |
| Salisbury | 4.12 | -0.31 | 11 | 2 | 1.13 | 17th | 0.0 | 0.0 | 0 | 0 |  |
| Elizabeth City | 7.09 | 0.45 | 19 | 8 | 1.64 | $2 n d$ | 0.0 | 0.0 | 0 | 0 |  |
| Wakefield | 5.83 | 0.93 | 13 | 4 | 2.15 | 16th | 0.0 | 0.0 | 0 | 0 |  |

> * "Dep""= Departure from the 30-year normals (1981-2010). Temperature departures are shaded orange for 1 F or more warmer than average and blue for 1 F or more cooler than average. Similarly, precipitation departures are shaded green for 0.50 " or more wetter than average and tan for 0.50 " or more drier than average and snowfall departures are shaded purple for $0.5 "$ or more above average and tan for 0.5 " or more below average.

## Daily Records for Long Term Climate Sites:

Norfolk, VA Records (Period of Record 146 yrs./1874-2019)
Record Highs: none set.
Record Low Maximums: none set.
Record Lows: none set.
Record High Minimums: none set.
Daily Precipitation: 2.93" (7th).
Daily Snowfall: none set.

Richmond, VA Daily Records (Period of Record 123 yrs./1897-2019) *tie
Record Highs: 99 F (19 ${ }^{\text {th }}$ ).
Record Low Maximums: none set.
Record Lows: none set.
Record High Minimums: *74 (19th).
Daily Precipitation: none set.
Daily Snowfall: none set.

