## November 2019 Review

## General Summary

After several months featuring warmer than normal temperatures, conditions turned cold during the month of November, particularly during the middle of the month when a strong cold front crossed the area and brought measureable snowfall to portions of the region on the $12^{\text {th }}$. This was followed by highs on the $13^{\text {th }}$ that were only in the 30 s to lower 40 s , leading to some locations setting record cold maximums for the date. Monthly average temperature departures primarily ranged from 3 to 5 degrees colder than the long term means. Daily temperatures were almost exclusively colder than normal for the first 3 weeks of November, with variable but generally near normal temperatures to end the month. Some locations across the north did not record a single day with a high temperature of 70 degrees or warmer, a rather unusual occurrence for November.

Precipitation was generally below normal over central and eastern Virginia, including the lower eastern shore, with near normal values over far southern Virginia and northeast North Carolina. Despite the relatively low precipitation amounts, drought conditions generally improved over the region due to the cooler temperatures. Measureable snowfall was recorded at Richmond on the $12^{\text {th }}$, something that had not occurred in November since 1991.

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

## Daily High Temperature Departures at Richmond \& Norfolk

November 2019: Richmond, VA




## Regional Temperature \& Precipitation Maps

November 2019 Temperature Data


November 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:

| November 2019 Temperature Summary Data |  |  |  |  |  |  |  |  | *also on other dates |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Site | Avg Max |  | Avg Min |  | Avg Temp |  | Warmest | $\begin{gathered} \hline \text { Coldest } \\ \hline\left({ }^{\circ} \mathrm{F}\right) \end{gathered}$ | Significance / Remarks <br> (if Top Ten List, etc.) |  |
|  | $\left({ }^{\circ} \mathrm{F}\right)$ |  | $\left({ }^{\circ} \mathrm{F}\right)$ |  | $\left({ }^{\circ} \mathrm{F}\right)$ |  | ( ${ }^{\circ} \mathrm{F}$ ) <br> Date |  |  |  |
|  | Actual | Dep | Actual | Dep | Actual | Dep |  |  |  |  |
| Richmond | 56.0 | -5.4 | 36.0 | -3.4 | 46.0 | -4.4 | 70 on 11th | 20 on 14th |  |  |
| Norfolk | 58.3 | -2.8 | 42.6 | -2.0 | 50.5 | -2.4 | 73 on 7th | 27 on 14th |  |  |
| Salisbury | 55.4 | -3.1 | 34.5 | -3.3 | 45.0 | -3.2 | 69 on 5th | 20 on 14th |  |  |
| Elizabeth City | 60.0 | -4.0 | 40.9 | -1.3 | 50.5 | -2.6 | 77 on 1st | 26 on 14th |  |  |
| Wakefield | 57.1 | -5.7 | 34.8 | -3.2 | 45.9 | -4.5 | 72 on 5th | 19 on 14th |  | (data period too short) |


| November 2019 Precipitation \& Snowfall Summary Data |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Site | Total Pre |  | \# Pre Days |  | Greatest |  | Total Snow |  | \# Snow Days |  | Significance / Remarks <br> (if Top Ten List, etc.) |
|  | (in.) |  | ( $\geq 0.01{ }^{\text {") }}$ |  | (in.) |  | (in.) |  | ( $\geq 0.1{ }^{\prime \prime}$ ) |  |  |
|  | Actual | Dep | Actual | Dep | Actual | Date | Act | Dep | Act | Dep |  |
| Richmond | 1.80 | -1.44 | 11 | 3 | 0.76 | 12th | 0.9 | 0.7 | 1 | 1 |  |
| Norfolk | 2.17 | -0.98 | 10 | 2 | 0.58 | 15th | T | 0.0 | 0 | 0 |  |
| Salisbury | 0.96 | -2.47 | 6 | -2 | 0.33 | 12th | 0.5 | 0.3 | 1 | 1 |  |
| Elizabeth City | 2.82 | -0.24 | 12 | 4 | 0.69 | 15th | T | 0.0 | 0 | 0 |  |
| Wakefield | 2.74 | -0.37 | 11 | 3 | 0.93 | 12th | 0.1 | 0.0 | 1 |  | N/A (data period too short) |

* "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: 40 (13 ${ }^{\text {th }}$ )
Record Lows: none set.
Record High Minimums: none set.
Daily Precipitation: none set.
Daily Snowfall: T (12 $\left.{ }^{\text {th }}\right), \mathrm{T}$ (*13 $\left.{ }^{\text {th }}\right)$

Richmond, VA Daily Records (Period of Record 123 yrs./1897-2019) *tie
Record Highs: none set.
Record Low Maximums: none set.
Record Lows: none set.
Record High Minimums: none set.
Daily Precipitation: none set.
Daily Snowfall: none set.

