

February 2023 Climate Review

Overview

February 2023 Temperature Highlights:

- Avg. Temperature 5 to 8 degrees above normal, ranking among the 5 warmest Februarys at all long-term climate stations. The February warmth followed a very warm January, and allowed the 2022-2023 winter season (Dec-Feb) to also rank among the top 10 warmest at all long-term climate stations.

February Avg. Temperature (with departure and ranking)

- Richmond, VA: 48.8° (+7.8°/ 3rd warmest)
- Norfolk, VA: 50.8° (+6.6°/ 4th warmest)
- Salisbury, MD: 45.2° (+7.7°/ 5th warmest)
- Elizabeth City: 52.2° (+7.2°/ 2nd warmest)

Winter (Dec-Feb) Avg. Temperature (with departure and ranking)

- Richmond, VA: 45.2° (+4.8°/ 3rd warmest)
- Norfolk, VA: 47.5° (+3.3°/ 8th warmest)
- Salisbury, MD: 43.3° (+4.6°/ 2nd warmest)
- Elizabeth City: 48.5° (+3.9°/ 5th warmest)

- Days at or above 70°:

- Richmond: 8 days (*most is 10 in 2017, 1976*).
- Norfolk: 9 days (*most is 10 in 2017, 1890*).
- Salisbury: 4 days (*most is 6 in 2017, 1976, 1930*).
- Elizabeth City: 11 days (*most on record for February*).

- Richmond's high of 83° on the 23rd ties the all-time record high for the month (*also set in 1932 and 1930*).
- Elizabeth City's high of 85° on the 23rd sets a new all-time record high for the month (*eclipsing the old record of 82 set in 2017, 1997, 1989, 1962*).

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February 2023 Precipitation & Snowfall Highlights:

- **Monthly Precipitation was generally below average (though not among the top 10 driest). Most of the region received between 2.00 and 3.00”, with lower amounts (1.00” to 2.00”) across much of the northern Neck and eastern shore.**
- **Most sites did not have a single date with 1.00” or more of daily precipitation.**
- **Snowfall was virtually nonexistent across the area; light amounts of around 0.5” to up to 1.0” of snow fell on the morning of the 2nd across northern and western sections of metro Richmond.**
- **Seasonal Snowfall is not always limited to Dec-Feb, with snowfall still possible across the area into early April, however as of this writing, all 4 main climate stations have a trace or less of snowfall. Reliable long-term snowfall data for seasons with minimal snowfall is only available for Richmond and Norfolk (Salisbury and Elizabeth City have lots of missing data). If no measurable snowfall is recorded through April, this will be among the least snowy seasons on record. Seasons with no measurable snow:**
 - **Richmond: Trace (1 time, 1918-1919).**
 - **Norfolk: Trace (7 times, most recently 1998-99).**

The following table on page 3 shows detailed temperature and precipitation statistics for February 2023 at many locations within the Wakefield CWA. On page 4, daily high temperature departures are shown at Richmond and Norfolk, followed by monthly precipitation maps (page 5), with daily records set during the month at our 4 main climate sites on the last page.

Tabular Summary of Data for Selected Climate Sites (February):

February 2023 Temperature Summary Data																		* also on other dates			All Normals are 1991-2020		
Site	Avg Max		Avg Min		Avg Temp		Daily Highs					Daily Mins					Remarks						
	(°F)		(°F)		(°F)		Warmest (°F)			Coldest (°F)		Warmest (°F)			Coldest (°F)								
	Actual	Dep	Actual	Dep	Actual	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual	Date	Dep	Actual		Date	Dep				
Richmond	60.2	8.6	37.4	7.0	48.8	7.8	83	23rd	10	36	4th	3	54	16th	6	16	4th	0	3rd warmest on record				
Norfolk	59.7	6.3	42.0	6.9	50.8	6.6	81	23rd	7	34	4th	0	65	23rd	14	22	4th	0	4th warmest on record				
Salisbury	56.5	8.3	34.8	5.6	46.4	7.7	79	23rd	10	32	4th	2	47	*16th	1	16	4th	4	5th warmest on record				
Wallops Island	53.9	5.4	35.1	4.0	44.5	4.7	77	23rd	9	30	4th	-1	48	16th	3	15	4th	-2					
Elizabeth City	62.3	7.3	42.1	7.1	52.2	7.2	85	23rd	11	34	4th	-3	64	23rd	12	22	4th	2	2nd warmest on record				
Ashland, VA	58.7	7.6	36.5	7.5	47.6	7.6	80	23rd	8	34	4th	2	53	*16th	6	15	4th	2					
Corbin, VA	56.7	8.2	34.7	6.3	45.7	7.3	80	23rd	9	33	4th	3	49	16th	2	13	4th	1					
Louisa, VA	57.8	8.4	34.6	7.6	46.2	8.0	80	23rd	10	34	4th	2	52	*24th	7	10	4th	1					
Painter, VA	57.5	6.7	39.1	7.7	48.3	7.2	80	23rd	12	33	4th	0	58	10th	9	21	4th	3					
Wakefield, VA	61.1	8.1	37.4	7.3	49.3	7.8	82	23rd	9	38	4th	4	63	23rd	14	16	4th	1					
Williamsburg, VA	58.8	6.5	37.5	5.5	48.1	5.9	83	23rd	10	35	4th	1	55	16th	6	19	4th	2					
Edenton, NC	62.7	6.7	43.3	7.5	53.0	7.1	82	23rd	9	39	2nd	1	60	23rd	9	22	4th	2					

February 2023 Precipitation & Snowfall Summary Data															* also on other dates			All Normals are 1991-2020		
Site	Total Pre		# Pre Days		# Pre Days		Greatest		Total Snow		# Snow Days		# Snow Days		Greatest		Remarks			
	(in.)		(≥0.01")		(≥0.10")		(in.)		(in.)		(≥0.1")		(≥1.0")		(in.)					
	Actual	Dep	Actual	Dep	Actual	Dep	Act	Date	Act	Dep	Act	Dep	Act	Dep	Daily	Date		Storm	Date	
Richmond	2.10	-0.51	7	-2	5	-1	1.00	12th	T	-2.2	0	-2	0	-1	T	2nd	T	2nd		
Norfolk	2.51	-0.39	8	-1	5	-1	0.88	12th	T	-1.5	0	-1	0	0	T	2nd	T	2nd		
Salisbury	1.52	-1.73	6	-4	4	-2	0.50	27th	T	-3.4	0	-2	0	-1	T	1st	T	1st		
Wallops Island	2.53	-0.28	10	0	7	1	0.41	12th	T	-2.3	0	-1	0	-1	T	25th	T	25th		
Elizabeth City	2.67	-0.20	12	2	9	3	1.21	12th	0.0	-0.7	0	-1	0	0						
Ashland, VA	2.32	-0.50	7	-2	5	-1	1.13	12th	0.6	-3.4	1	-1	0	-1	0.6	2nd	0.6	2nd		
Corbin, VA	1.45	-1.44	7	-1	4	-2	0.38	16th	0.0	-5.0	0	-2	0	-1						
Louisa, VA	2.81	0.07	8	0	5	0	1.26	12th	0.0	-6.1	0	-2	0	-2						
Painter, VA	2.42	-0.65	9	0	7	1	0.55	17th	0.0	-1.5	0	-1	0	-1						
Wakefield, VA	2.47	-0.33	8	-1	7	1	0.96	12th	T	-1.4	0	-1	0	-1	T	2nd	T	2nd		
Williamsburg, VA	2.21	-0.84	9	-1	4	-2	0.92	12th	0.0	-1.6	0	-1	0	-1						
Edenton, NC	2.70	-0.54	10	2	7	1	0.93	12th	0.0	-0.6	0	-1	0	-1						

* **“Dep”= Departure** from the 30-year normals (1991-2020). Temperature departures are shaded orange for 1 F or more warmer than average (dark red for 4 F or greater anomalies) and blue for 1 F or more cooler than average (dark blue for 4 F or more below normal). Similarly, precipitation departures are shaded green for 0.50” or more wetter than average (dark green for 2.00” or more) and tan for 0.50” or more drier than average (dark brown for 2.00” or more drier). Snowfall departures are shaded purple for 1” or more above average and tan for 1” or more below average.

Daily High Temperature Departures at Richmond & Norfolk, VA

February 2023: Richmond, VA

Observed Maximum Temperature Departure from Normal (°F)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 43° -6° 49°	2 41° -8° 49°	3 43° -6° 49°	4 36° -13° 49°
5 59° +10° 49°	6 59° +9° 50°	7 58° +8° 50°	8 73° +23° 50°	9 74° +24° 50°	10 71° +20° 51°	11 54° +3° 51°
12 42° -9° 51°	13 62° +11° 51°	14 63° +12° 51°	15 72° +20° 52°	16 77° +25° 52°	17 67° +15° 52°	18 49° -3° 52°
19 64° +12° 52°	20 61° +8° 53°	21 73° +20° 53°	22 67° +14° 53°	23 83° +30° 53°	24 70° +16° 54°	25 45° -9° 54°
26 54° 0° 54°	27 57° +2° 55°	28 68° +13° 55°				

NWS Wakefield - Richmond

February 2023: Norfolk, VA

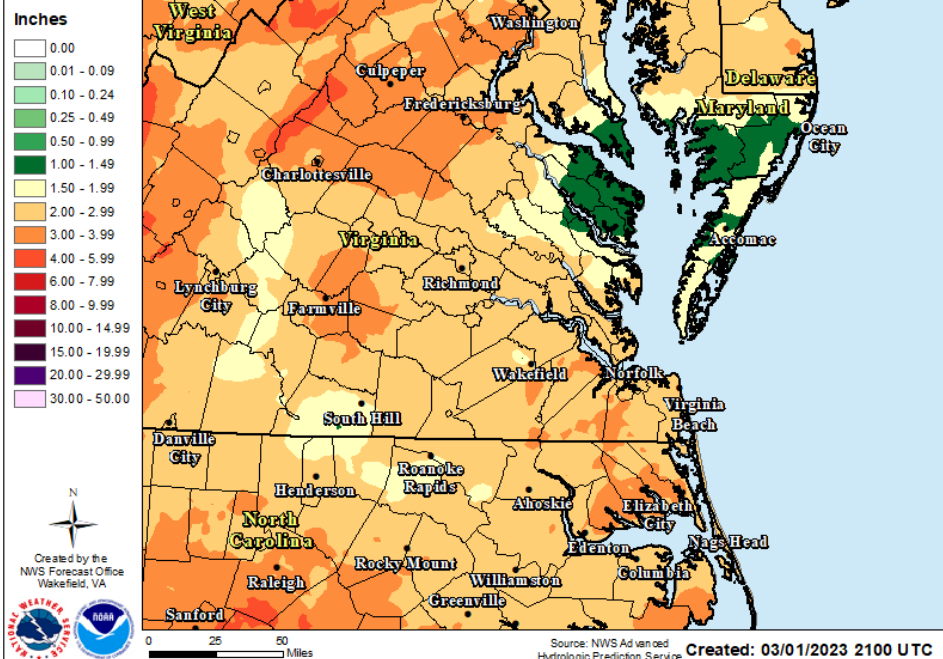
Observed Maximum Temperature Departure from Normal (°F)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 42° -9° 51°	2 40° -11° 51°	3 44° -7° 51°	4 34° -18° 52°
5 57° +5° 52°	6 56° +4° 52°	7 58° +6° 52°	8 62° +10° 52°	9 72° +20° 52°	10 74° +22° 52°	11 49° -4° 53°
12 51° -2° 53°	13 60° +7° 53°	14 56° +3° 53°	15 75° +22° 53°	16 76° +22° 54°	17 70° +16° 54°	18 45° -9° 54°
19 63° +9° 54°	20 62° +8° 54°	21 72° +17° 55°	22 75° +20° 55°	23 81° +26° 55°	24 71° +16° 55°	25 49° -6° 55°
26 54° -2° 56°	27 61° +5° 56°	28 62° +6° 56°				

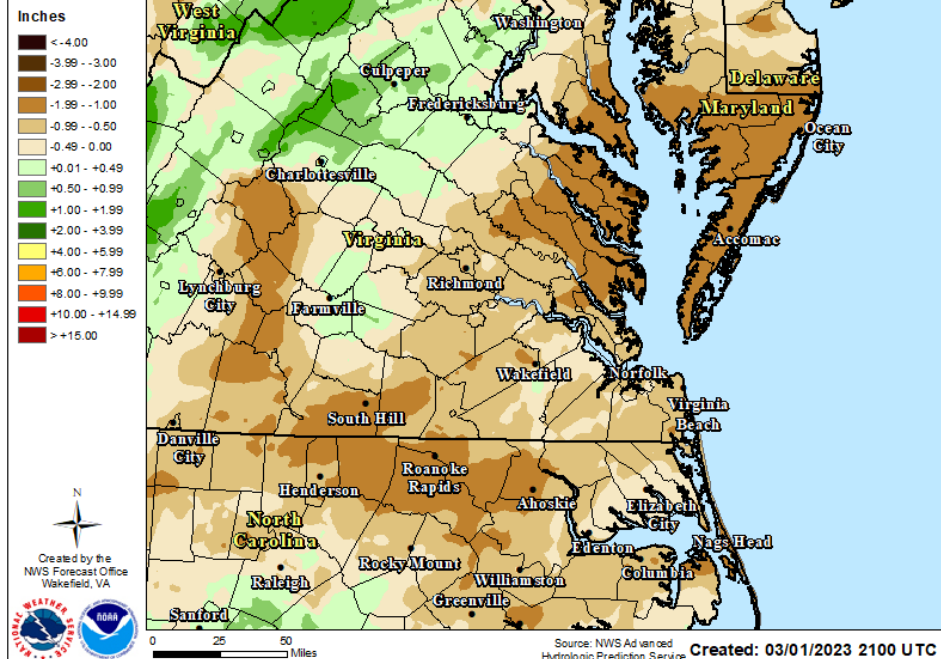
NWS Wakefield - Norfolk

Regional Precipitation Maps

Total Monthly Precipitation - February 2023



Total Monthly Precipitation Departure From Normal - February 2023



Total Precipitation for the month is shown in the map on the left. **Departures** from the 30-year normals (1991-2020) are shown on the map on the right.

Daily Records for Long Term Climate Sites (February):

Norfolk, VA Records (Period of Record 150 yrs./1874-2023)

**tie*

Record Highs: 81 (23rd).

Record Low Maximums: none set.

Record Lows: none set.

Record High Minimums: 65 (23rd).

Daily Precipitation: none set.

Richmond, VA Daily Records (Period of Record 127 yrs./1897-2023)

**tie*

Record Highs: 83 (23rd), 74 (9th). ****83 ties all time record high for February****

Record Low Maximums: none set.

Record Lows: none set.

Record High Minimums: none set.

Daily Precipitation: none set.

Salisbury, MD Daily Records (Period of Record 117 yrs./1907-2023)

**tie*

Record Highs: 79 (23rd).

Record Low Maximums: none set.

Record Lows: none set.

Record High Minimums: none set.

Daily Precipitation: none set.

Elizabeth City, NC Daily Records (Period of Record 90 yrs./1934-2023)

**tie*

Record Highs: 85 (23rd). ****85 sets new all time record high for February****

Record Low Maximums: none set.

Record Lows: none set.

Record High Minimums: 64 (23rd).

Daily Precipitation: 1.21" (12th).