

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU

ANNUAL
METEOROLOGICAL
SUMMARY

WITH COMPARATIVE DATA

—1928—

BEST AVAILABLE RECORD

RICHMOND, VIRGINIA

Compiled by
EDWARD A. EVANS
Associate Meteorologist

LOCAL OFFICE, U. S. WEATHER BUREAU
RICHMOND, Va., FEBRUARY 24, 1929.

AVERAGES AND OTHER COMPARATIVE DATA.

Month	Temperature						Relative humidity (per cent)	Precipitation				Sunshine		Wind			Number of days																			
	Maximum	Minimum	Mean	Normals	Highest mean	Lowest mean		Daily range	3 a. m.	8 p. m.	Monthly	Normals	Greatest monthly	Least monthly	Snowfall	Number of hours of possible	Average per cent	Average hourly velocity	Prevailing direction	Highest Velocity	Direction	Wind (40 miles per hour or more)	Clear	Partly cloudy	Cloudy	With precipitation (0.01 inch or more)	Snow (0.1 inch or more, unmelted)	Thunderstorms	Heavy fog	82° or below	92° or above	82° or below	Zero or below			
January	47	27	37	37	48	27	77	64	3	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
February	48	28	38	38	49	29	78	65	3	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
March	50	30	40	40	51	31	80	67	4	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
April	52	32	42	42	53	33	82	69	5	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
May	54	34	44	44	55	35	84	71	6	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
June	56	36	46	46	57	37	86	73	7	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
July	58	38	48	48	59	39	88	75	8	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
August	59	39	49	49	60	40	89	77	9	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
September	57	37	47	47	58	38	87	75	8	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
October	54	34	44	44	55	35	84	73	7	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
November	51	31	41	41	52	32	81	71	6	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
December	49	29	39	39	50	30	79	69	5	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Year	57.6	48.2	57.9	57.9	65.8	51.2	78	64	41.65	43.36	14.01	0.11	14.6	4451.5	60	7.3	FW	50	FW	Av 9	137	112	116	127	6	37	12	7	29	72	3					

*3-cup anemometer equivalent.

BEST AVAILABLE RECORD

RICHMOND, VIRGINIA.

1928

Monthly and Annual Precipitation.

YEAR.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
1871.....	.....	2.85	8.61	2.10	4.61	4.30	.....	.....	.....	.....	.....	.....	.....
1872.....	1.82	3.23	4.55	2.22	1.77	2.01	1.63	4.95	2.42	5.14	2.22	2.76	34.77
1873.....	4.50	8.92	2.05	2.45	8.98	2.21	3.00	9.22	2.59	4.86	3.45	1.05	53.22
1874.....	3.33	1.11	3.16	7.02	2.20	2.90	4.40	2.34	2.90	0.11	1.28	2.76	33.51
1875.....	2.63	3.70	5.60	3.11	2.67	3.25	2.66	9.50	1.58	1.39	3.76	1.69	41.48
1876.....	0.55	0.59	3.74	1.81	3.04	3.75	2.50	2.75	4.42	1.00	2.50	1.00	27.65
1877.....	2.45	0.66	3.17	3.33	2.04	1.29	5.22	1.97	2.35	4.27	3.55	1.41	31.71
1878.....	3.14	1.25	2.06	3.47	5.42	2.31	1.66	3.65	0.96	5.08	1.91	4.34	35.25
1879.....	4.11	1.49	2.28	3.25	1.70	2.20	3.39	7.33	1.29	1.06	0.70	5.01	33.81
1880.....	0.68	1.71	5.42	1.66	1.35	2.40	3.62	8.95	3.53	2.14	2.95	3.61	37.45
1881.....	2.30	2.32	3.74	3.04	1.15	5.32	3.28	1.78	2.42	3.15	3.55	5.84	37.89
1882.....	5.22	2.76	2.51	1.95	4.11	1.66	2.52	4.44	6.50	2.01	0.21	2.80	36.66
1883.....	3.38	2.24	2.01	6.45	1.60	2.64	1.78	1.79	6.03	5.13	1.30	1.48	35.83
1884.....	2.65	4.87	5.53	1.94	1.54	2.99	4.02	1.49	0.15	0.52	1.64	4.65	31.99
1885.....	3.97	2.00	2.19	1.63	5.17	2.86	3.07	1.69	1.20	3.49	2.86	4.39	34.54
1886.....	4.45	3.02	4.87	2.57	8.67	5.82	10.64	4.20	3.07	1.45	3.22	2.18	54.16
1887.....	1.85	4.40	2.38	2.63	3.56	4.45	6.58	8.27	1.10	4.94	2.49	4.04	46.81
1888.....	2.79	2.39	5.25	2.55	5.70	4.89	1.40	4.19	10.41	3.24	3.15	3.52	49.48
1889.....	4.77	3.71	3.68	8.89	9.13	7.93	14.01	3.99	5.60	5.15	4.59	0.57	72.02
1890.....	1.53	3.35	3.34	2.79	4.69	2.21	4.56	5.51	5.50	8.51	0.11	4.48	46.60
1891.....	4.79	5.68	8.78	1.96	5.18	4.12	4.69	4.80	1.24	2.12	1.88	2.13	47.37
1892.....	3.96	3.36	3.19	6.77	2.32	3.47	5.11	3.32	3.15	0.83	4.58	1.64	41.70
1893.....	3.37	4.98	2.44	3.82	5.15	2.02	3.24	3.43	0.86	5.72	3.22	2.39	47.24
1894.....	3.35	4.51	1.21	3.29	6.74	2.77	4.59	5.12	6.48	4.06	1.68	2.66	46.46
1895.....	5.25	1.47	4.23	8.31	4.24	2.39	5.01	2.68	0.42	1.69	3.05	2.40	41.14
1896.....	2.40	4.35	3.70	1.69	3.03	5.58	8.02	0.45	6.20	0.62	3.16	0.89	40.09
1897.....	1.86	6.40	5.11	2.75	2.48	2.31	4.18	1.83	1.03	6.54	3.07	2.63	40.20
1898.....	1.05	1.05	3.78	4.83	5.28	2.98	4.15	6.31	2.33	4.59	2.22	3.68	41.65
1899.....	2.94	4.72	5.56	2.04	2.14	2.51	4.12	5.61	6.21	4.03	1.19	2.33	43.40
1900.....	2.71	4.42	2.89	3.62	2.10	3.08	3.13	3.66	4.03	2.55	2.87	2.60	37.76
1901.....	2.80	0.55	3.79	5.29	3.80	2.32	5.06	6.99	3.21	0.79	1.37	6.06	42.07
1902.....	3.26	4.84	1.89	3.12	3.42	4.81	6.21	3.10	4.91	4.81	4.83	4.12	49.32
1903.....	3.61	5.02	8.14	4.46	3.56	5.73	5.17	3.21	1.60	3.44	1.40	2.28	47.42
1904.....	2.34	2.71	3.52	1.57	1.45	4.11	6.25	3.83	3.00	2.80	2.55	3.71	37.84
1905.....	2.47	4.14	2.18	3.06	4.09	3.72	3.25	4.01	2.61	1.24	0.51	7.10	38.38
1906.....	2.51	2.57	4.78	2.16	3.37	5.14	6.75	8.68	0.35	7.47	0.87	2.12	46.80
1907.....	1.12	2.30	2.91	4.87	5.78	6.21	2.99	5.31	6.51	2.30	4.64	3.44	48.48
1908.....	4.39	3.92	2.96	2.73	6.71	5.74	4.37	10.40	2.74	2.87	1.25	4.72	52.78
1909.....	3.00	2.94	4.13	3.21	3.11	1.59	1.25	4.01	2.89	0.77	0.62	3.39	34.21
1910.....	3.38	2.38	1.42	8.74	2.67	5.67	6.40	2.90	1.07	5.03	0.98	2.50	43.14
1911.....	3.65	2.20	2.15	4.00	0.60	2.83	0.57	7.26	1.85	3.61	4.33	3.95	37.00
1912.....	2.34	3.76	8.18	2.17	4.51	2.50	1.25	1.49	4.20	0.58	1.73	2.84	35.63
1913.....	2.53	1.51	3.53	2.54	4.80	3.78	3.65	4.59	3.20	3.95	1.49	2.17	37.74
1914.....	3.65	3.27	3.66	1.28	2.50	2.76	3.00	2.42	1.47	1.67	2.20	4.95	32.83
1915.....	5.41	3.92	1.10	1.68	3.06	3.77	2.42	7.34	1.99	3.27	0.63	1.93	36.46
1916.....	1.51	3.68	1.57	1.91	4.74	8.72	5.30	1.55	2.01	1.44	1.31	3.40	37.26
1917.....	2.98	2.28	5.97	2.50	4.59	5.31	6.25	2.74	4.62	3.78	0.44	1.72	43.27
1918.....	5.81	0.91	3.98	8.02	3.30	5.36	1.05	2.76	3.55	0.59	1.26	4.79	41.38
1919.....	3.64	2.22	3.51	3.25	5.19	3.90	9.92	2.62	0.54	1.71	1.31	2.30	40.11
1920.....	2.02	6.67	3.11	2.96	3.06	6.34	6.05	8.69	2.71	0.66	6.69	1.87	50.83
1921.....	3.80	3.52	2.13	4.65	3.89	1.49	2.36	0.61	0.95	1.20	2.97	3.02	30.59
1922.....	4.58	3.81	7.01	2.01	3.27	6.42	8.48	7.78	0.66	3.68	0.86	3.14	51.70
1923.....	4.01	3.09	5.88	3.96	1.16	2.09	10.87	6.41	4.25	2.16	2.20	2.28	48.96
1924.....	2.98	2.34	4.00	5.11	7.36	4.85	2.33	3.05	9.58	0.78	1.61	3.40	47.39
1925.....	5.42	0.90	2.47	2.33	2.15	2.24	2.32	2.55	0.93	4.67	1.55	3.89	31.42
1926.....	3.30	3.60	1.96	2.01	1.59	2.19	7.17	5.24	1.46	0.81	3.63	4.56	37.52
1927.....	0.70	2.87	1.95	3.47	3.30	3.12	9.10	7.19	4.01	2.02	1.61	5.02	44.36
1928.....	2.23	1.84	2.71	6.86	1.99	7.19	1.95	8.05	7.01	0.40	1.20	1.46	42.89
.....
Normal	3.02	3.10	3.72	3.45	3.85	3.52	4.42	4.41	3.43	3.32	2.39	3.00	41.63
Means.	3.13	3.15	3.76	3.44	3.78	3.80	4.59	4.50	3.19	2.91	2.28	3.12	41.61

Bold-faced figures indicate greatest and least amounts

BEST AVAILABLE RECORD

RICHMOND, VIRGINIA.

1928

Daily Mean Maximum Temperatures. (October 5, 1897, to December 31, 1923.)

Day of month	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year
1	48.1	45.2	52.9	59.7	74.1	81.2	84.3	84.0	83.7	70.5	64.6	53.6	66.8
2	46.2	43.1	53.4	61.2	75.6	81.8	86.3	84.7	84.4	71.9	63.3	51.0	67.3
3	47.1	46.1	53.2	60.7	75.1	80.8	86.3	84.5	83.7	73.8	66.7	51.0	67.0
4	44.4	48.1	52.8	62.1	73.3	80.2	85.4	84.2	82.7	73.8	67.0	45.9	66.2
5	45.4	43.7	52.2	61.8	72.6	80.1	84.6	84.2	83.4	77.0	61.8	49.8	66.4
6	48.5	45.3	52.3	65.2	75.8	80.7	84.9	86.2	83.6	75.3	61.4	50.4	67.3
7	49.7	46.4	54.5	65.7	74.3	81.7	84.9	87.4	84.6	73.2	60.3	51.8	67.3
8	47.7	44.5	55.1	64.3	73.7	82.1	85.5	86.1	83.4	71.1	62.0	53.8	67.1
9	46.8	44.7	55.0	61.2	74.9	81.5	85.0	85.2	82.2	72.2	60.5	49.7	66.5
10	45.9	45.4	56.5	61.0	74.3	81.4	86.4	86.2	81.8	71.5	60.0	48.7	66.6
11	48.2	45.9	55.9	64.7	76.1	81.8	86.4	85.5	81.7	73.8	60.4	49.1	67.5
12	47.0	47.6	58.1	67.5	74.6	83.9	85.5	83.7	82.5	72.1	59.7	49.8	67.7
13	43.2	47.9	60.1	66.0	76.5	81.6	84.9	83.7	81.7	69.3	57.6	52.7	67.1
14	45.4	51.4	58.0	65.4	72.1	82.8	86.5	83.7	82.7	68.5	56.9	49.5	66.6
15	48.5	49.4	56.5	65.4	76.0	83.0	86.5	82.6	78.7	72.3	59.1	45.9	67.1
16	47.1	47.3	56.9	66.6	77.4	81.5	87.1	83.1	79.7	73.9	58.5	44.7	67.0
17	46.1	45.0	57.2	68.6	77.4	81.7	86.6	83.7	78.9	72.2	57.2	47.3	67.1
18	47.8	47.9	59.5	69.2	78.4	82.4	86.4	82.9	79.5	71.2	58.8	47.0	67.5
19	49.7	47.2	61.8	69.2	79.2	82.6	85.5	83.4	79.5	71.6	58.4	44.6	67.5
20	51.4	49.5	61.6	69.6	78.4	85.3	85.1	84.1	78.9	68.7	58.7	45.3	68.1
21	54.7	48.2	57.3	68.9	78.8	86.7	86.6	83.5	79.2	65.2	59.1	47.3	68.0
22	54.4	51.3	61.3	71.5	79.2	84.7	84.8	83.1	77.7	67.6	58.8	45.7	68.1
23	50.2	52.0	62.1	70.2	79.5	85.6	86.4	82.9	78.1	67.6	57.1	49.3	68.1
24	46.7	50.2	62.7	70.4	78.7	86.2	85.6	84.0	78.3	65.2	54.1	47.3	67.1
25	46.3	48.6	64.2	71.0	77.4	86.1	85.4	83.8	77.4	68.4	53.6	46.2	67.1
26	45.7	49.9	66.7	71.7	77.5	85.5	84.7	82.7	76.3	66.8	54.9	41.0	67.1
27	45.4	50.7	66.0	70.2	78.4	84.7	84.4	80.5	76.1	67.7	55.1	48.0	67.3
28	44.8	52.4	63.1	68.4	73.8	86.2	85.5	80.5	75.7	66.1	50.6	46.7	66.1
29	44.0	63.0	71.8	80.0	87.3	86.1	82.0	82.0	76.6	65.1	52.5	47.8	66.1
30	46.6	60.3	75.2	80.6	85.8	86.2	82.1	82.1	75.1	63.3	53.6	46.7	68.1
31	45.1	62.0	79.7			85.3	83.1		63.9		48.1		66.7
Means....	47.3	48.0	58.5	66.8	76.7	83.3	85.7	83.1	80.1	70.0	58.4	48.3	67.2

Seasonal Snowfall 1893-1928.

Season.	November.	December.	January.	February.	March.	April.	Season.	Greatest 24-hour Snowfall.	Greatest Depth on Ground at 8 p.m.
	1897-1898	0.0	0.0	3.0	T.	T.	2.0	5.0	3.0	T
1898-1899	0.8	T.	8.0	20.2	5.0	T.	34.0	7.5	17.7
1899-1900	0.0	2.1	0.3	6.2	5.8	T.	14.4	4.8	4.5
1900-1901	T.	7.2	5.5	1.0	1.4	T.	15.1	7.2	4.2
1901-1902	0.0	1.0	5.0	9.8	0.0	T.	15.8	6.0	3.6
1902-1903	0.0	1.1	0.9	0.2	0.0	0.0	2.2	1.1	0.3
1903-1904	0.4	0.9	10.7	8.4	T.	0.0	20.4	5.2	8.2
1904-1905	1.8	8.5	6.5	2.2	T.	T.	19.0	3.8	5.0
1905-1906	T.	1.3	0.7	7.0	6.4	0.0	15.4	4.3	4.3
1906-1907	1.9	T.	3.1	9.8	6.4	T.	21.5	3.4	3.2
1907-1908	T.	T.	3.2	7.8	2.3	0.0	13.8	3.2	2.4
1908-1909	T.	17.2	0.2	4.1	3.8	0.0	25.3	17.2	10.8
1909-1910	T.	3.3	1.8	0.7	5.9	0.0	11.7	4.0	1.0
1910-1911	0.0	0.7	2.6	T.	4.0	0.0	7.3	2.2	2.4
1911-1912	0.0	T.	8.9	1.7	11.3	0.0	21.9	7.0	5.0
1912-1913	0.0	0.2	0.4	3.1	0.0	0.0	5.7	2.7	2.4
1913-1914	0.0	T.	10.8	15.8	0.2	26.8		7.8	5.0
1914-1915	0.0	5.4	0.2	1.6	0.3	10.0	17.5	10.0	7.1
1915-1916	0.0	0.6	2.6	1.9	4.4	T.	9.5	3.6	3.6
1916-1917	T.	9.1	T.	0.8	T.	T.	9.9	5.3	6.2
1917-1918	T.	15.3	14.4	1.3	0.0	2.7	33.7	9.4	9.4
1918-1919	0.0	T.	0.0	0.0	0.0	0.0	T.	T.	T.
1919-1920	0.0	6.0	T.	3.6	T.	0.0	9.6	6.0	6.0
1920-1921	0.0	0.0	T.	1.0	0.0	T.	1.0	1.0	T.
1921-1922	0.0	T.	22.1	5.3	0.1	0.0	27.5	10.3	18.0
1922-1923	0.0	0.2	0.5	5.0	0.0	0.0	5.7	5.0	5.0
1923-1924	0.0	1.0	T.	T.	3.7	T.	4.7	2.4	1.3
1924-1925	0.3	T.	1.6	0.0	0.0	0.0	1.9	0.9	0.0
1925-1926	T.	T.	5.6	1.4	5.0	T.	12.0	5.0	5.0
1926-1927	T.	T.	0.2	0.0	1.3	0.0	1.6	1.3	1.3
1927-1928	0.0	T.	4.6	1.8	T.	0.0	6.4	3.7	5.7
Means.....	0.3	2.1	3.7	4.0	2.8	0.5	14.1	17.2	15.0

T Indicates a trace.

BEST AVAILABLE RECORD

RICHMOND, VIRGINIA.

1928

Miscellaneous Averages And Extremes.

MONTH	Temperature 188c-1928.				Precipitation, 1871-1928.				Average percent of Sunshine, 1903-1928.
	Warmest Month.		Coldest Month.		Wettest Month.		Driest Month.		
	Mean	Year.	Mean.	Year.	Amount.	Year.	Amounts	Year.	
January.....	48.5	1830	28.0	1918	5.81	1918	0.55	1876	50
February.....	49.9	1830	31.2	1905	8.32	1873	0.55	1901	55
March.....	57.6	1921	39.5	1815	8.78	1871	1.10	1915	59
April.....	63.3	1831	50.4	1927	8.89	1839	1.06	1880	62
May.....	74.6	1836	60.0	1920	9.13	1839	0.60	1911	68
June.....	78.8	1851	68.4	1907	8.72	1916	1.29	1877	64
July.....	82.3	1837	72.8	1836	14.01	1839	0.57	1911	66
August.....	82.9	1900	71.3	1927	10.40	1908	0.45	1896	63
September.....	78.8	1831	65.2	1917	10.41	1888	0.15	1834	65
October.....	67.2	1919	52.7	1880	8.51	1830	0.11	1874	65
November.....	54.8	1902	42.2	1830	6.69	1920	0.11	1830	59
December.....	51.1	1839	30.0	1917	7.10	1905	0.57	1839	48
Year.....	82.9	Aug. 1900	28.0	Jan. 1918	14.01	July. 1839	0.11	Oct. 1874 Nov. 1830	60

Extremes of Temperature.

MONTH.	TEMPERATURE					
	Max.	Year.	Day.	Min.	Year.	Day.
January.....	78	1907	7	- 1	1912 †	14
February.....	76	1918	28	- 3	1899	12
March.....	94	1907	29	14	1925	3
April.....	96	1925	25	19	1923	1
May.....	96	1925	23	35	1923	10
June.....	100	1914	12	46	1913	10
July.....	100	1926	7	54	1918	3
August.....	107	1918	6	49	1923	22
September.....	100	1899	16	41	1914	29
October.....	94	1919	20	28	1917	31
November.....	82	1900 ††	13	19	1901	29
December.....	77	1927	13	- 2	1917	30
Annual.....	107	1918	Aug. 6	- 3	1899	Feb. 10

Extremes of Precipitation and Wind.

Month.	PRECIPITATION (24 hours.).			WIND (Velocity).*			
	Max.	Year.	Day.	Max.	Dir.	Year.	Day.
January.....	2.66	1921	9-10	50	SW	1913	3
February.....	3.30	1920	3-4	50	SW	1909	10
March.....	3.59	1903	21-22	44	S	1913	27
April.....	5.33	1910	17-18	43	NW	1909	3
May.....	2.39	1907	6- 7	44	S	1909	1
June.....	3.26	1918	25-26	49	NW	1917	24
July.....	7.25	1923	30-31	37	S	1906	22
August.....	4.00	1923	11-12	45	NW	1915	1
September.....	3.98	1924	29-30	37	NW	1911	12
October.....	2.95	1906	21-22	43	NW	1917	5
November.....	2.77	1902	13	38	S	1905*	29
December.....	2.52	1907	12-13	44	S	1907	23
Annual.	7.26	1923	July 30-31	50	SW	1909	Feb. 10

*Also 1897. † Also 1913, 4th. *Also sw. 1916, 23rd; 1918, 18th. †† Also 1919, 1st
 * In three cup anemometer equivalents,

BEST AVAILABLE RECORD

RICHMOND, VIRGINIA

1928

James River at Richmond.

1928.

Average height of water during the year, with departure from the normal.

	Average height.	Dep. from normal.		Average height.	Dep. from normal.
1928.			1928.		
Jan.	1.4	0.0	July	0.8	+0.8
Feb.	1.8	0.0	Aug.	3.1	+2.9
Mar.	1.5	-0.5	Sept.	2.8	+3.1
Apr.	2.3	+1.9	Oct.	0.9	-0.4
May	1.8	+0.4	Nov.	0.3	-0.1
June	1.0	+0.2	Dec.	0.9	0.0

Highest and Lowest Stages of Water Recorded in each month of the year 1928.

	High-est.	Low-est.		High-est.	Low-est.
1928			1928.		
Jan.	2.3	0.3	July	1.9	0.0
Feb.	2.7	1.3	Aug.	17.0	-0.5
Mar.	2.2	0.9	Sept.	11.8	1.4
Apr.	2.3	1.4	Oct.	1.5	0.4
May	4.0	0.9	Nov.	0.8	0.0
June	1.7	0.4	Dec.	1.7	0.1

All data recorded to feet and tenths.

1893-1928.

Highest and Lowest Stages of Water Recorded at Richmond, Va. By months and years—Weather Bureau record only.

	Highest.	Year.	Lowest.	Year.
Jan.	20.5	1902.	-2.0	1900
Feb.	22.0	1899.	-1.7	1904
Mar.	20.5	1899.	-0.8	1901-3
Apr.	14.0	1901.	-1.3	1900
May	20.1	1924.	-1.2	1900
June	14.7	1903-7.	-1.3	1902
July	12.1	1910.	-1.2	1900-1
Aug.	17.0	1928.	-1.2	1900
Sept.	12.5	1893.	-2.8	1899
Oct.	19.4	1924.	-1.4	1904
Nov.	11.2	1900.	-2.8	1899
Dec.	23.2	1901.	-2.8	1899

All data recorded to feet and tenths.

Notable Floods Occurring at Richmond, Va.

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October, 1870, 27.0 feet; November, 1877, 28.6 feet; April, 1886, 24.3 feet; July, 1886, 17.2 feet; August, 1899, 22.5 feet; June, 1889, 25.2 feet; January, 1895, 18.2; February, 1899, 22.0; March, 1899, 20.5; May 1901, 19.3; December 1901, 23.2; March 1902, 19.0; October 1906, 18.7; March 1912, 17.8; May 1912, 17.3; March 1913, 17.5; January 1919, 17.2; May 1924, 20.1; Oct. 1924, 19.4.

MISCELLANEOUS DATA FOR 1928.

Barometric pressure, reduced to sea-level: Mean, 30.05 inches; highest, 30.65 inches, Feb. 6; lowest, 29.25 inches, Jan. 21.

Temperature.—Greatest daily range, 38, May 4; least daily range, 4, Sept. 6; greatest monthly range, 67 in Jan.; least monthly range, 37 in July.

Precipitation.—Longest period without precipitation, 12 days, Feb. 20 to Mar. 8, inclusive.

Greatest consecutive number of days with precipitation, trace or more, 6 days, Apr. 20 to 25, May 25 to 30, inclusive.

Snow.—Greatest snowfall in 24 hours, 3.7 inches Jan. 28; greatest depth of snow on ground measured at 8 p. m., 3.5 inches Jan. 28; last snow of winter occurred on Mar. 11; first snow of winter occurred on Nov. 25.

Frost.—Last killing frost in spring, Mar. 6, 30 days earlier than the average date; first killing frost in autumn, Nov. 12, 13 days later than the average date.

Thunderstorms.—First, Jan. 24; last, Oct. 9.

Hail—none.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

ANNUAL METEOROLOGICAL SUMMARY FOR 1928

Station: Richmond

Latitude: _____° _____'; Longitude: _____° _____'; Altitude: _____ feet.

County: Henrico

Observer: _____

Month.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.			Number of days—				Prevailing direction of the wind.	Miscellaneous.†
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Total.	Departure from the normal.	Snowfall.	With precipitation.	Clear.	Partly cloudy.	Cloudy.		
January	38.9	+1.0	75	15	8	29	2.23	- .98	4.6	7	13	8	10	W	
February	40.4	+0.8	66	4	21	26	1.84	-1.73	1.8	10	13	5	11	SW	
March	47.4	+0.2	81	30	24	6	2.71	- .97	T	7	15	9	7	SW	
April	54.2	-2.4	82	4	51	16	6.86	+5.87	0	14	12	6	12	SW	
May	64.1	-2.4	91	5	43	14	1.99	-1.50	0	10	12	10	9	SW	
June	72.8	-6.3	91	14	51	1	7.19	+3.29	0	16	9	11	10	SW	
July	78.4	-0.1	96	20	59	31	1.95	-2.78	0	7	17	11	13	SW	
August	78.0	+1.5	97	4	58	12	8.05	+3.63	0	15	9	15	7	SW	
September	65.8	-4.7	88	13	42	25	7.01	+3.76	0	11	13	4	13	NE	
October	61.4	+1.8	84	17	32	30	0.40	-2.48	0	4	15	5	11	SW	
November	50.4	+2.1	80	18	24	26	1.20	-1.01	T	9	12	8	10	SW	12
December	41.0	+1.2	63	17	18	10	1.46	-1.83	1.7	8	13	5	13	NE	
Sums	692.8		*	*	*	*	42.89	+ .87	7.6	11.8	15.3	97	116	*	
Means or extremes	57.7	-0.2	97	sup. 4	8	low 39	42.02	*	*	*	*	*	*	SW	

*No data required. †Date of last killing frost in spring and first in autumn should always be given when possible; in absence of such data, the date of last minimum temperature as low as 32° in spring, and first in autumn, should appear, with proper explanatory note.