

U. S. DEPARTMENT OF COMMERCE

CHARLES SAWYER, Secretary

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LOCAL CLIMATOLOGICAL SUMMARY

WITH COMPARATIVE DATA

1950

RICHMOND, VIRGINIA

Compiled under the direction of

S. S. Schworm



CHATTANOOGA: 1951

AVERAGE TEMPERATURE

TOTAL PRECIPITATION

RICHMOND, VIRGINIA
1950

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	An'l
1900	39.4	37.6	43.8	57.3	67.0	74.6	81.2	82.9	75.6	64.6	52.1	40.3	59.7
1901	38.8	34.7	49.6	52.8	65.5	74.8	81.0	77.4	70.0	59.1	44.1	38.6	57.2
1902	36.2	34.6	50.0	55.8	67.8	74.3	79.0	75.0	68.6	61.6	54.8	40.1	58.2
1903	38.2	43.0	54.4	57.8	67.8	70.2	79.3	75.8	69.4	58.9	44.8	36.2	58.0
1904	35.4	34.2	47.5	54.7	67.2	74.4	77.7	75.6	70.9	57.7	46.2	35.8	56.2
1905	35.0	31.2	49.8	57.6	69.4	74.2	78.4	75.8	71.7	59.4	48.2	40.4	57.6
1906	43.1	38.6	42.0	59.1	67.0	75.0	76.6	78.2	73.6	57.8	50.0	41.4	58.5
1907	42.8	35.0	52.1	50.4	62.7	68.4	79.1	75.4	72.8	55.9	47.8	42.0	57.0
1908	38.1	36.6	52.2	60.0	67.2	72.9	78.9	74.0	68.4	60.4	50.4	41.2	58.4
1909	42.2	47.4	46.4	57.6	66.0	76.2	76.8	74.2	67.4	55.4	53.1	35.9	58.2
1910	39.0	39.4	53.9	58.4	63.8	70.3	77.8	74.6	71.8	61.0	42.5	34.1	57.2
1911	41.8	41.0	44.6	52.4	69.8	75.0	79.6	77.7	72.5	59.2	45.0	43.2	58.5
1912	48.9	35.0	44.9	59.6	67.0	72.2	77.8	76.4	73.0	60.2	48.2	43.2	57.2
1913	46.7	40.4	52.0	57.8	66.6	73.8	79.0	75.2	69.0	60.2	50.2	42.2	59.4
1914	41.8	35.0	41.8	56.0	68.8	75.8	76.9	77.6	68.2	61.8	48.0	35.7	57.3
1915	39.4	43.7	40.6	59.9	66.0	72.0	78.4	76.2	72.4	61.3	49.2	37.7	58.0
1916	44.0	38.8	43.4	55.8	69.7	71.7	77.6	76.1	68.2	60.2	48.5	38.8	57.7
1917	39.8	37.6	46.6	57.4	61.2	73.6	76.8	75.8	65.2	54.8	44.4	30.0	55.3
1918	28.0	41.2	51.7	54.7	70.4	71.0	73.8	78.3	65.6	62.2	47.8	43.2	57.3
1919	40.6	39.8	49.5	56.6	66.1	73.2	77.6	75.0	71.3	67.2	48.8	35.9	58.5
1920	34.2	35.5	48.2	55.2	60.8	72.4	75.4	75.2	71.0	62.0	47.2	41.0	56.5
1921	39.9	42.0	57.6	60.1	63.1	74.8	80.0	76.6	76.8	59.5	51.8	41.0	60.2
1922	35.0	41.9	49.4	58.6	67.2	75.0	77.6	73.3	70.6	60.8	49.0	42.3	58.4
1923	40.1	37.0	48.0	55.8	64.4	76.0	76.6	73.0	70.8	57.7	46.8	47.6	58.0
1924	38.0	38.2	45.6	54.0	62.8	72.8	75.2	76.4	65.8	58.6	48.8	40.5	56.4
1925	36.6	47.4	48.9	59.2	62.0	77.9	79.6	74.3	75.4	55.1	46.7	38.6	58.5
1926	37.8	41.8	43.0	54.5	65.7	71.4	77.6	78.0	71.2	60.2	46.4	37.8	57.1
1927	37.9	45.9	50.2	53.8	66.2	69.4	76.0	71.3	70.6	61.4	53.1	41.0	58.1
1928	38.9	40.4	47.4	54.2	64.1	72.8	78.4	78.0	65.8	61.4	50.4	41.0	57.7
1929	39.8	38.2	52.8	60.2	65.8	73.1	77.0	75.1	71.2	58.0	49.8	41.4	58.4
1930	39.6	45.3	46.4	55.8	68.8	74.2	79.8	76.1	76.8	57.2	48.1	36.8	58.7
1931	39.7	41.5	42.3	54.4	65.5	73.8	80.4	75.7	74.4	62.3	55.9	49.8	59.5
1932	49.8	46.2	43.9	55.0	65.1	74.1	79.1	78.8	72.2	60.4	46.8	42.4	59.5
1933	45.6	41.2	46.4	56.8	67.0	75.8	82.6	76.6	74.4	58.7	47.4	43.2	59.4
1934	42.4	29.0	43.4	56.8	70.0	78.1	80.2	76.0	72.3	58.0	51.1	39.6	57.9
1935	36.1	39.6	52.2	53.7	63.8	74.4	77.6	76.2	68.6	59.9	52.4	39.3	57.3
1936	33.0	34.6	52.4	64.0	68.6	74.4	79.9	79.0	73.6	61.8	47.6	41.4	58.3
1937	46.4	39.3	44.7	56.4	66.8	76.4	77.0	77.6	66.8	56.4	47.8	40.0	58.0
1938	38.2	44.8	53.2	59.7	65.6	72.0	77.1	79.0	69.0	59.2	52.0	40.8	59.2
1939	42.3	45.5	49.4	56.8	67.8	77.0	76.2	77.8	72.8	60.6	46.6	41.4	59.5
1940	27.3	39.9	44.6	53.6	66.0	75.4	76.8	74.4	67.9	57.8	49.5	44.4	56.4
1941	37.0	36.1	42.0	61.2	68.6	74.4	78.8	78.0	73.6	67.0	51.4	43.9	59.3
1942	36.8	36.8	49.2	60.2	70.7	75.8	80.0	75.4	72.0	61.2	50.8	37.7	58.9
1943	40.4	42.2	47.6	54.2	69.2	79.0	78.4	79.8	69.2	58.2	48.6	39.4	58.8
1944	39.8	41.2	45.5	56.7	61.8	76.9	76.4	75.7	71.8	58.8	48.9	37.0	58.5
1945	35.0	41.8	58.6	61.3	64.2	75.6	76.6	75.6	74.4	59.2	51.1	34.6	59.0
1946	39.0	42.7	54.9	58.2	66.5	73.3	75.8	73.4	71.0	62.2	54.2	44.7	59.7
1947	45.2	34.2	41.4	58.2	68.4	72.9	79.8	79.4	71.2	64.6	47.0	39.4	58.0
1948	32.2	40.9	51.4	58.3	66.7	75.1	78.6	76.2	69.6	57.8	54.5	43.6	58.7
1949	46.4	47.8	49.2	56.6	66.6	75.4	80.2	77.0	68.2	63.6	50.8	43.9	60.5
1950	50.7	41.8	45.3	55.3	65.6	74.0	76.2	75.3	68.4	62.1	48.0	37.4	58.3

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1900	2.71	4.42	2.89	3.62	2.20	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	6.08	42.05
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	3.36	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	2.54	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	1.22	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	3.73	6.71	8.72	4.37	10.40	2.74	2.81	1.25	4.72	52.78
1909	3.00	2.94	4.13	3.21	3.41	4.59	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	3.78	8.18	2.17	4.59	2.50	1.25	1.49	4.20	0.58	1.73	2.84	35.63
1913	2.53	1.61	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	3.00	3.77	2.42	7.34	1.99	3.27	0.63	1.93	36.46
1916	1.51	3.68	1.57	1.94	4.74	8.72	5.39	1.55	2.01	1.44	1.31	3.40	37.26
1917	2.98	2.28	5.97	2.56	4.59	5.31	6.28	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	6.54	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	8.69	1.87	50.83
1921	3.80	3.52	2.13	4.65	3.99	1.49	2.26	0.81	0.95	1.20	2.87	3.02	30.59
1922	4.58	3.81	7.01	2.01	3.27	6.42	8.48	7.78	6.66	3.68	0.86	3.14	37.70
1923	4.61	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
1929	1.53	5.19	3.96	3.50	4.00	3.02	2.16	2.41	1.41	6.99	3.34	2.70	41.21
1930	4.25	1.21	1.07	3.39	2.71	5.18	4.51	2.35	1.37	1.31	1.63	2.46	31.26
1931	1.88	2.60	2.94	3.97	5.64	2.98	4.47	11.42	1.92	1.15	2.24	2.52	41.73
1932	5.64	1.66	6.21	1.69	4.17	3.17	1.66	1.36	7.58	3.50	4.84	41.23	41.23
1933	3.85	2.73	2.15	4.02	4.84	1.63	4.59	8.84	1.05	0.72	1.17	3.14	38.73
1934	1.63	5.34	4.36	2.10	4.83	3.65	3.22	3.22	5.02	0.82	3.34	2.32	40.75
1935	4.41	2.13	4.00	4.40	3.81	6.22	5.64	3.68	9.23	1.73	3.19	2.12	50.56
1936	7.76	3.92	3.83	2.68	0.45	3.68	3.18	2.90	1.43	1.68	0.82	4.24	36.97
1937	10.08	2.42	1.62	1.66	6.02	1.64	6.02	6.00	9.85	2.61	6.34	2.44	55.98
1938	2.96	1.89	3.57	3.80	4.66	9.28	9.71	2.44	3.85	1.58	3.61	2.61	48.96
1939	2.64	3.87	4.38	3.00	1.80	4.99	4.33	5.84	1				

MONTHLY AND SEASONAL SNOWFALL

RICHMOND, VIRGINIA
1950

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1899-1900	0	0	0	0	0	2.1	0.3	6.2	5.8	T	0	0	14.4
1900-01	0	0	0	0	T	7.2	5.5	1.0	1.4	T	0	0	15.1
1901-02	0	0	0	0	0	1.0	5.0	9.8	0	T	0	0	15.8
1902-03	0	0	0	0	0	1.1	0.9	0.2	0	0	0	0	2.2
1903-04	0	0	0	0	0.4	0.9	10.7	8.4	T	0	0	0	20.4
1904-05	0	0	0	0	1.8	8.5	6.5	2.2	T	T	0	0	19.0
1905-06	0	0	0	0	T	1.3	0.7	7.0	6.4	0	0	0	15.4
1906-07	0	0	0	0	1.9	T	3.1	9.8	6.4	T	0	0	21.2
1907-08	0	0	0	0	T	T	3.2	7.8	2.8	0	0	0	13.8
1908-09	0	0	0	0	T	17.2	0.2	4.1	3.8	0	0	0	25.3
1909-10	0	0	0	0	T	3.3	1.0	0.7	5.9	0	0	0	11.7
1910-11	0	0	0	0	0	0.7	2.6	T	4.0	0	0	0	7.3
1911-12	0	0	0	0	0	T	8.9	1.7	11.0	0	0	0	21.6
1912-13	0	0	0	0	2.0	0.2	0.4	3.1	0	0	0	0	5.7
1913-14	0	0	0	0	T	T	10.8	15.8	0.2	0	0	0	26.8
1914-15	0	0	0	0	0	5.4	0.2	1.6	0.3	10.0	0	0	17.5
1915-16	0	0	0	0	0	0	2.6	1.9	4.4	0	0	0	9.5
1916-17	0	0	0	0	T	9.1	T	0.8	T	0	0	0	9.9
1917-18	0	0	0	0	T	15.3	14.4	1.3	0	2.7	0	0	33.7
1918-19	0	0	0	0	0	T	T	0	0	0	0	0	T
1919-20	0	0	0	0	0	6.0	T	3.6	T	0	0	0	9.6
1920-21	0	0	0	0	0	0	T	1.0	0	T	0	0	1.0
1921-22	0	0	0	0	0	T	22.1	5.3	0.1	0	0	0	27.5
1922-23	0	0	0	0	0	0.2	0.5	5.0	0	0	0	0	5.7
1923-24	0	0	0	0	0	1.0	T	T	3.7	T	0	0	4.7
1924-25	0	0	0	0	0.3	T	1.6	0	0	0	0	0	1.9
1925-26	0	0	0	T	T	T	5.6	1.4	5.0	0.3	0	0	12.3
1926-27	0	0	0	0	T	0	0.3	0.0	1.3	0	0	0	1.6
1927-28	0	0	0	0	0	T	4.6	1.8	T	0	0	0	6.4
1928-29	0	0	0	0	T	1.2	0.9	2.3	T	0	0	0	4.4

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1929-30	0	0	0	0	3.8	3.0	9.6	2.5	0	0	0	0	18.9
1930-31	0	0	0	0	0	T	6.0	1.5	T	T	0	0	7.5
1931-32	0	0	0	0	0	0	1.0	0.6	T	2.6	0	0	4.2
1932-33	0	0	0	0	0	0	7.5	1.7	5.7	T	0	0	14.9
1933-34	0	0	0	0	T	0.1	T	13.4	2.4	0	0	0	15.9
1934-35	0	0	0	0	T	3.9	5.8	0.1	T	0.2	0	0	10.0
1935-36	0	0	0	0	T	12.3	3.0	13.3	0	T	0	0	28.6
1936-37	0	0	0	0	0	0	0	3.5	1.6	0	0	0	5.1
1937-38	0	0	0	0	T	1.2	0.5	T	0	0	0	0	1.7
1938-39	0	0	0	0	3.2	T	1.2	0	0.3	0	0	0	10.7
1939-40	0	0	0	0	T	3.3	22.4	0.5	0.3	2.5	0	0	29.0
1940-41	0	0	0	0	0	T	0.3	3.3	5.9	0	0	0	9.5
1941-42	0	0	0	0	0	0	5.2	T	T	0	0	0	5.2
1942-43	0	0	0	0	0	0	7.3	0.1	T	6.0	T	0	13.4
1943-44	0	0	0	0	0.3	4.5	3.4	2.0	T	0	0	0	10.2
1944-45	0	0	0	0	0	T	0.5	T	0	0	0	0	0.5
1945-46	0	0	0	0	0	8.2	6.9	0.6	0	0	0	0	15.7
1946-47	0	0	0	0	0	0	1.4	0	4.1	11.8	0	0	17.3
1947-48	0	0	0	0	0.6	0.3	13.2	8.9	T	0	0	0	23.0
1948-49	0	0	0	0	0	0.9	1.3	T	0.4	T	0	0	2.6
1949-50	0	0	0	0	0	0	T	3.0	5.0	0	T	0	8.0
1950-51	0	0	0	0	0.2	2.6	0	0	0	0	0	0	2.8

CLIMATE OF RICHMOND, VIRGINIA

Several of the more noteworthy figures in the climate of Richmond were recorded prior to the opening of the first-order station in October 1897. The least monthly precipitation, 0.11, occurred in October 1874 and again in November 1890. The longest period without measurable precipitation, 39 days, was from September 13 to October 21, 1894. The wettest year of record was 1889 with a total of 72.02 inches. The warmest year was 1891 with an average temperature of 61.4°.

February 1899 was long remembered as the "cold February"; the temperature went to the all-time low of -3° on the 10th and -2° on the 11th and was below 10° during seven consecutive days. Snow storms on the 6-7 and 11-14 totalled 19.8 inches, although the greatest depth on the ground was 17.7 inches. Richmond's hottest August occurred in 1900 when there were fifteen consecutive days with the temperature reaching above 90° and a total of 23 days during the month with the temperature above 90°. A major flood occurred in the James River in December 1901 with a crest of 23.2 feet on the 31st. A glaze storm on December 15-17, 1905 caused great damage. Telephone, telegraph, and power lines were broken so that electricity had to be shut off until repairs could be made. One person was killed by a live wire. Hundreds of trees were damaged or destroyed. A killing frost on October 12, 1906 was the earliest of record for any autumn. The shortest growing season occurred in 1907 with 190 days (April 15 - October 22). A heavy wet snow on December 22-23, 1908 accumulated 17.2 inches in about 20 hours. The weight of this snow broke many telephone and telegraph lines and even a few poles, and did considerable damage to trees, especially evergreens. A ten inch snowfall on April 3, 1915, stands as the record for so late in the season. It disrupted train and trolley service and did considerable damage to power, telephone, and telegraph lines.

The record cold December of 1917 and the near record cold January of 1918 combined to make that the coldest winter. Heavy snow in each month totalled 29.3 inches, the most for any two-month period and made the season's snowfall the second greatest of record. The year 1917 had the lowest annual mean temperature. Richmond's highest temperature, 107°, was recorded on August 6, 1918. A killing frost which occurred on April 26, 1919 is the record for so late in the season. The deepest snow fell January 27-29, 1922 in a storm that produced a total of 19.1 inches. The greatest depth on the ground during this storm was 18.0 inches on January 28. The summer of 1922 produced excessive rainfall which on three occasions, July 13 and 28 and August 26, resulted in the overflow of Shockoe Creek over the entire Shockoe Valley and Main Street from 14th to 17th Streets. The worst of these floods was on July 13th when the water rose to a depth of more than five feet at the Main Street railroad station. Damages from the three freshets amounted to nearly a million dollars. A similar and greater flood in the same area occurred on July 30, 1923, when there was a torrential downpour of 6.33 inches in two hours and a 24-hour total of 7.26 inches. One life was lost, and again the damages amounted to more than half a million dollars. During the period 1925-34 when so much of the country was suffering from prolonged droughts, the Richmond area was fortunate with only two years, 1925 and 1930, that were much below normal in precipitation, and in both of these years there was sufficient moisture during the growing season for most crops. The growing season of 1929 was the longest of record, lasting from March 11 to November 22, a total of 256 days.

STATION HISTORY

The first office of the U. S. Weather Bureau in Richmond was established on September 23, 1895, in the State Library Building. Climatological work was carried on in cooperation with the Virginia State Department of Agriculture, but no meteorological observations were taken. The office was moved to the Chamber of Commerce Building, Ninth and Main Streets, on May 22, 1897. Observations were begun on October 5, 1897. Elevation of barometer, 144 feet above mean sea level. Height of instruments above ground: thermometers 98 feet, rain gage 89 feet, anemometer 105 feet, wind vane 107 feet.

On May 31, 1900, the office was moved to the Times Building, Tenth and Bank Streets. Elevation of barometer, 157 feet; other instruments above ground; thermometers 82 feet, rain gage 76 feet, anemometer 90 feet, wind vane 92 feet.

The office was moved to the Mutual Assurance Society Building at Ninth and Main Streets on June 30, 1905. Elevation of barometer 215 feet; other instruments above ground; thermometers 145 feet, rain gage 138 feet, anemometer 153 feet, wind vane 154 feet.

Occupancy of the present offices in the Weather Bureau Building in Chimborazo Park, on East Broad Street at 33rd, began January 30, 1910. Elevation of barometer 168 feet above mean sea-level; other instruments above ground; thermometers 11 feet, rain gage 3 feet, anemometer 52 feet, wind vane 53 feet.

Chimborazo Park is open with tree-lined drives and no buildings. The surrounding country is rolling with considerable flat land and no nearby hills as high as the Weather Bureau location. The ground elevation of the station is 162 feet. About 500 feet southwest of the station the ground falls away sharply to

A series of major floods in the James River began in 1935 and continued with a flood each year for two more years. On September 7, 1935 the crest at Richmond was 23.6 feet. On March 20, 1936 the river reached an all-time high of 26.5 feet. The second highest mark, 25.2 feet, was reached on April 27, 1937. One of the most sudden floods in the James River at Richmond occurred during the night of February 14, 1936, when the water rose about six feet in half an hour because of an ice jam just below the City. Quite cold weather in January had caused the river to freeze over and some jamming began as early as January 31, but no solid ice pack dammed up the water until February 14th. When the water reached about 20 feet, the jam was broken and part of the water receded so rapidly that two steamers, three barges, and two ice breakers were carried away and badly damaged, and a tug was sunk in the harbor. January 1940 was the coldest month of record. One of the heaviest snowfalls occurred on the 23-24, with 16.0 inches at the City Office and 21.6 at the Byrd Field Weather Bureau Airport Station. At the City Office there were no record breaking low temperatures, but at the Airport Station an extreme low of -12° was registered on the 29th, and the temperature went to below zero six consecutive days (25-30). The deep snow hindered traffic for several days, and snow removal was retarded by the cold weather. The passage of the remnants of a tropical storm through Virginia in August 1940 resulted in some torrential rainfall which produced another major flood of 23.2 feet at Richmond on the 23rd.

1941 was the driest year of record with only 26.82 inches of precipitation; however, the second half of the growing season had enough moisture to prevent a complete crop failure. October 1941 was notable for six days with maximum temperature above 90°; the highest was 99° on the 6th. The greatest number of consecutive days with measurable precipitation occurred in August 1942 when there was rain every day from the 3rd to the 14th, a total of 12.

One of the worst, if not the worst, glaze storm in Richmond's history occurred on January 27-28, 1943. The total thickness of the ice accumulation was nearly an inch. Telephone, telegraph, and power lines suffered great damage, and service to some sections of the Richmond area was not restored for two weeks or more. There was some damage to buildings and many thousands of trees were destroyed or badly broken. Another major flood occurred in the James River in September 1944. The crest at Richmond was 22.4 on the 21st. The wettest month of record was July 1945 with a total rainfall of 16.08 inches. Of this amount, 5.72 inches fell in a 24-hour period on the 17-18th. High water in Gillie Creek weakened a bridge on Government Road near the Weather Bureau Office so that it gave way under a loaded bus, and three lives were lost. During this period there were hundreds of complaints of flooded basements in the City. On July 14, 1948 a heavy downpour of rain on the 13-14th produced 3.18 inches, of which 1.79 inches fell in a 15-minute period, the heaviest rain of record for that length of time. Large amounts of dust in the air were brought down as mud in several showers on March 29, 1950. Smoke from Canadian forest fires carried southeastward at high levels all but completely obscured the sun and the moon during the period September 24-30, 1950.

the James River Valley. The James River is about one-half mile southwest of the office. The location is above the river fog and instrumental exposure is quite satisfactory.

A weather station with Weather Bureau personnel was opened at Byrd Field on July 15, 1928 and continued to May 27, 1935. Observations were made by the personnel of the Civil Aeronautics Communications Station from May 27, 1935 to July 14, 1938, when the Weather Bureau reopened its Airport Station. This station was closed on September 24, 1942, and observations were then made by the Army Base Weather Station until April 19, 1946 when the Weather Bureau Airport Station was again established. On June 1, 1950 the Weather Bureau Airport Station moved into the new Terminal Building for Byrd Field. It was supplied with the regular airport station instruments and equipment and, in addition, had a triple register installed so that it would have automatic wind, sunshine, and precipitation records. Hourly airway observations are taken, also the six-hourly observations and pilot balloon observations. The ground elevation of the present building is 167 feet, elevation of barometer 180 feet, anemometer 81 feet above the ground, and 9 feet above the tower roof. Thermometers are in a standard shelter and are 6 feet above the ground. Automatic records of wind, sunshine, and rainfall were discontinued at the City Office when they began at the Airport Station, and a weighing recording precipitation gage was put in use at the City Office.