

U. S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

LOCAL CLIMATOLOGICAL DATA

WITH COMPARATIVE DATA

1955

RICHMOND, VIRGINIA



NARRATIVE CLIMATOLOGICAL SUMMARY

In its location in east-central Virginia, Richmond enjoys the climatic variety of more northerly cities without the penalty of too much severity. In a record exceeding three-fourths of a century's length, the city's lowest temperature, on February 10, 1899, was -3° , and the highest, on August 6, 1918, 107° F. Fifty years of record show an average wintertime minimum a degree or two below freezing and summer maxima in the upper 80's. The greatest number of consecutive days with minima 10° or below was 7 (February 9-15, 1899), while the longest period of maxima 90° or above was 15 days (August 6-20, 1900).

Precipitation averages for the same period indicate normal falls of three inches or more in every month except October and November, with maxima approaching five inches in the thunderstorm months of July and August. The greatest number of consecutive days with measurable precipitation was 12 (August 3-14, 1942), and the greatest number of days without measurable precipitation was 39 (September 12 to October 21, 1884).

A notable feature of Richmond's climate is the characteristic of its occasional spectacular snowstorms, which, about every seven years, fill the city with wet, heavy falls ranging upward from ten inches to near two feet, causing much difficulty with transportation. Falls of four inches or more occur on an average of once a year. Snow-lying days range from one to a maximum of ten (January 19 to February 7, 1918). The months of December through April have all had maximum monthly snowfall totals of ten inches or more.

The average duration of the growing season is 216 days. The shortest season was in 1907 (190 days) and the longest in 1929 (256 days). The latest date of the last killing frost in Spring was April 26, 1919 and the earli-

est in Autumn was October 12, 1908.

The James River reaches tidewater at Richmond, where flooding has occurred in every month of the year, most frequently in March (28 times in 60 years) and least frequently in July (twice in 60 years). Spring thaws, along with moderate to heavy rains in its upper reaches and tributaries, have on four occasions caused major floods (exceeding 20 feet at Richmond). The other major floods occurred in the Fall months and resulted from torrential rains accompanying disturbances, tropical or other, which moved northward over the Piedmont Plateau.

Richmond has had its fair share of noteworthy damaging storms. While some glaze forms during each Winter, it is as a rule slight and without damaging effects. However, there have been two spectacular glaze storms. The first, on December 15-17, 1905, caused great damage to hundreds of trees and to transmission lines of all kinds. One person was killed by a live wire. The second storm (January 27-28, 1943), in which the ice accumulation was nearly one inch in thickness, was probably the worst in the city's history. Telephone, telegraph, and power lines were out of service in some sections for two weeks or more and many thousands of trees were destroyed or badly broken. There have been several damaging rain-storms that caused disastrous local flooding. The summer of 1922 produced excessive rainfall on three occasions, July 13 and 28 and August 26, resulting each time in the overflow of Shockoe Creek. The worst of these was on July 13 when the water rose to a depth of five feet at the Main Street railroad station. Damages from the three storms amounted to nearly a million dollars. A similar and greater flood occurred on July 30, 1923 when a torrential downpour of 6.33 inches in two hours was recorded. One life was lost.

STATION LOCATION

RICHMOND, VIRGINIA
BYRD FIELD
1955

Location	Occupied from	Occupied to	Airline distance and direction from previous location	Latitude	Longitude	Elevation above								REMARKS		
						Sea level		Ground								
						Ground	Actual barometer elevation (H ₂)	Wind instruments	Extreme thermometer	Psychrometer	Telepsychrometer	Tipping bucket rain gage	Weighing rain gage		8" rain gage	
CITY OFFICE																
High elevation in East Richmond	1-1880	2-1893				Est 150										W. H. Pleasants, Exact address unknown.
Near Southern RR Bridge	3-1893	3-1895	?			Est 35										A. J. Duesberry, River Observer, Observed Temperatures.
Westbrook Farms	4-1895	10-1897	4 mi. N	27° 36' N	77° 24' W	196										Capt. J.C. Shafer, Temperatures only.
State Library Building Capitol Square	9-18-85	5-22-97	4 mi. S	37° 32' N	77° 27' W	142										Section Center, No Observations.
Chamber of Commerce Bldg Ninth & Main Streets	5-22-97	10- 4-97	3/8 mi. SW	37° 32' N	77° 27' W	104										Section Center, No Observations.
Chamber of Commerce Bldg. Ninth & Main Sts.	10- 5-97	5-31-00				143.70	107	98	98		89		89			Observational Program begun 10-5-97.
Times Bldg., 10th & Bank Streets	5-31-00	6-30-05	1/8 mi. NE	37° 32' N	77° 27' W	115	156.90	92	82	82	76		76			
Mutual Assurance Bldg. 9th & Main Streets	6-30-05	1-30-10	1/8 mi. SW			104	214.82	154	145	145	138		138			
Weather Bureau Building Chimborazo Park, 3301 E Broad Street	1-30-10	7- 1-39	1-1/2 mi. E	37° 32' N	77° 25' W	162	169.59	53	11	11	3		3			
Weather Bureau Building Chimborazo Park, 3301 E Broad Street	7- 1-39	9-24-42														Observational program at Airport
Weather Bureau Building Chimborazo Park, 3301 E Broad Street	9-24-42	4-19-46									4					Observations, including Pibal, returned to WBO. Byrd Field occupied by AAF.
Weather Bureau Building Chimborazo Park, 3301 E Broad Street	4-19-46	6- 1-50														
Observational and Pibal Program returned to WBAS, Byrd Field. Climatological Observations only at WBO. Triple register and associated instruments moved to WBAS. Weighing gage returned to WBO. Climatological observations.																
Weather Bureau Building Chimborazo Park, 3301 E Broad Street	6- 1-50	7- 1-53		37° 32' N	77° 25' W	162		# 53	11				4	3		# Wind instruments for display. WBO consolidated with WBAS 7-1-53.
AIRPORT STATION																
Old WB/CAA Bldg. location	7-15-25	8- 3-30	None	37° 30' N	77° 20' W	*158	163.96	-	-	-	-	-	-	-		Branch service of City Office and CAA cooperating.
WB-CAA Building	8- 3-30	5-26-35	None	37° 30' N	77° 20' W	158	163.96	40	5	5	-	-	-	3		Full WBAS established; closed 1935.
WB-CAA Building	5-27-35	7-14-38	None	37° 30' N	77° 20' W	158	163.96	* 40	5	5	-	-	-	3		Observations by CAA during period WB closed.
WB-CAA Building	7-14-38	9-24-42	None	37° 30' N	77° 20' W	158	163.96	* 50	5	5	-	-	-	3		Reopened same location; closed 1942 because AP had AP.
Army Hangar (Operations Annex)	9-24-42	4-19-46	1/2 mi. NNW	37° 30' N	77° 20' W	156	159.72	55	5	5	-	-	-	3		Army base closed after World War II.
Old Airport Administration Building	4-19-46	6- 1-50	1/3 mi. SSE	37° 30' N	77° 20' W	156	166.85	46	5	5	-	-	-	4		WBAS re-opened in airport terminal building (old).
Byrd Field, New Terminal Building	6- 1-50	Present	4/5 mi. N	37° 30' N	77° 20' W	162	180.24	67	6	6	-	3	-	3		All Airport operations consolidated in new Terminal Building.
* Data doubtful.																