

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
 IN COOPERATION WITH STATESVILLE CHAMBER OF COMMERCE
 CLIMATOGRAPHY OF THE UNITED STATES NO. 20 - 31

LATITUDE 35° 49' N.
 LONGITUDE 80° 53' W.
 ELEV. (GROUND) 950 Ft.

CLIMATOLOGICAL SUMMARY

STATION STATESVILLE, N. C.

MEANS AND EXTREMES FOR PERIOD 1930 - 1959

Month	Temperature (°F)								** Mean degree days	Precipitation Totals (Inches)						Mean number of days						Month	
	Means			Extremes						Mean	Greatest daily	Year	Snow, Sleet				Precip. .10 inch or more	Temperatures					
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean					Maximum monthly	Year	Greatest daily	Year		90° and above	Max.		Min.		
																			32° and below	32° and below	0° and below		0° and below
(a)	30	30	30	30		30		30	30	30		30	30		30	30	30	30	30				
Jan.	52.8	32.0	42.4	81	1944	-2	1940	701	3.97	2.79	1936	2.9	11.0	1930	10.0	1930	7	0	1	17	*	Jan.	
Feb.	55.5	33.0	44.3	81	1948	-7	1958	580	3.68	2.65	1934	1.9	11.2	1936	9.0	1937	7	0	*	14	*	Feb.	
Mar.	62.2	38.2	50.2	89	1945	11	1943	474	4.59	2.38	1936	2.0	12.0	1942	12.0	1942	8	0	*	10	0	Mar.	
Apr.	72.1	47.2	59.7	92	1930+	24	1936	177	3.65	2.80	1934	T	T	--	T	--	7	*	0	1	0	Apr.	
May	80.3	56.3	68.3	99	1941	35	1956	34	3.51	3.66	1950	0	0	0	0	0	7	3	0	0	0	May	
June	87.3	64.5	75.9	105	1954	43	1956	0	3.58	3.88	1928	0	0	0	0	0	7	12	0	0	0	June	
July	88.5	67.6	78.1	105	1954	51	1959	0	5.07	6.50	1945	0	0	0	0	0	8	14	0	0	0	July	
Aug.	86.7	66.7	76.7	103	1943	49	1957	0	4.75	5.78	1928	0	0	0	0	0	8	12	0	0	0	Aug.	
Sep.	82.6	61.0	71.8	104	1939	39	1942	21	3.65	4.94	1956	0	0	0	0	0	5	6	0	0	0	Sep.	
Oct.	74.1	48.8	61.5	96	1954+	25	1957	149	3.16	5.21	1929	0	0	0	0	0	5	1	0	1	0	Oct.	
Nov.	62.2	38.8	50.5	85	1946	9	1959	435	3.14	2.45	1944+	T	1.0	1939	1.0	1939	5	0	0	9	0	Nov.	
Dec.	52.6	32.0	42.3	80	1931	4	1958	704	3.91	4.53	1958	2.3	14.0	1945	13.2	1930	7	0	1	18	0	Dec.	
Year	71.4	48.8	60.1	105	1954	-7	1958	3275	46.66	6.50	1945	9.1	14.0	1945	13.2	1930	81	48	2	70	*	Year	

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

T Trace, an amount too small to measure.

* Less than one half.

** Base 65°F

CLIMATE OF STATESVILLE, NORTH CAROLINA

STATESVILLE is centrally located in the roughly oblong area of Iredell County, of which it is the county seat. The county is in the western portion of Piedmont North Carolina, about 225 miles from the Atlantic Ocean at its nearest point on the southeast. Statesville lies between Third and Fourth Creeks, which drain eastward into the Yadkin River. The city is built on rolling red clay hills, typical of the topography of most of the county. Elevations in Statesville range generally between 900 and 950 feet, and Iredell County lies mostly between 500 and 1500 feet above mean sea level. About fifteen miles to the northwest of Statesville the Brushy Mountains form a northeast-southwest barrier with peaks rising to 2500 feet; another 40 miles beyond, the Blue Ridge is similarly aligned, and a thousand to fifteen hundred feet higher.

These two mountain barriers, separated by the Yadkin River valley, tend to hold back the flow of cold air from winter outbreaks which move southward over the Plains States from central Canada. The weaker outbreaks are thus often prevented from reaching the Statesville area, and the stronger are modified in passing over the mountains. While the temperature drops below freezing on more than half the days in winter, a temperature as low as zero happens less than once in twenty years on an average, and there are only one or two days in a typical winter when the mercury fails to rise above freezing in the afternoon. In mild years, entire winter months have passed with only three or four occurrences of a freezing temperature.

The average length of freeze-free growing season at Statesville is 212 days. The average date of last occurrence in spring of a temperature as low as 32 degrees is April 7; of 28 degrees, March 21; of 20 degrees, January 16. The average date of first occurrence in autumn of 32 degrees is November 5; of 28 degrees, November 19; of 20 degrees, December 9.

Summer days are warm in Statesville, but nights cool rapidly, so that early morning temperatures average below 68 degrees at the hottest time of the year. Daytime heat is less persistent than in lower lying areas of the southern and eastern states; ninety degree weather occurs only about three-fourths as often as in eastern North Carolina. While 100 degree temperatures have been recorded in four different months of the year, such temperatures are rare; several years may pass without the occurrence of any 100 degree weather.

Precipitation is usually plentiful and well-distributed throughout the year at Statesville. No calendar month averages less than three inches of rain, and no month as much as six inches. The heaviest rainfall occurs, on the average, during July and August, at the time of year when plant growth requires the most moisture, and when man, animal and industry consume the most water. The driest months are October and November, the time when fair weather favors the harvesting of farm crops. The winter months each average less than four inches of rain or melted snow.

The average annual snowfall at Statesville is less than ten inches, a little more than most places in eastern North Carolina; individual snows, however, are generally small, and the greatest fall of record is only a little over half that of some stations in the northeastern section of the State. No single month averages more than three inches of snow and sleet combined.

Most winter precipitation comes as a result of moving low pressure storms, while summer rainfall is mainly the result of thundershowers. Occasionally these thunderstorms produce strong winds and hail, but neither is likely to cover more than a few square miles, and the likelihood of a given point in Iredell County being struck by hail is very small. Autumn rainfall is sometimes increased by the movement of a tropical storm through the eastern part of the State or the offshore waters, but the passage of such a storm near enough to Statesville to cause damaging winds is almost unknown.

Prevailing winds in Statesville blow out of the southwest at all seasons of the year, with northeasterlies running a close second in the fall. The average surface wind speed is about eight miles per hour. Northwesterly winds bringing cold air in winter are considerably diminished by the two mountain ranges lying just northwest of Statesville.

The sun shines about sixty percent of the daylight hours in the Statesville area, ranging from about half the time in December and January to more than two thirds of the time in May and June. The early autumn months are also quite sunny. Relative humidity averages about seventy percent around the year, with the highest humidities occurring in the late summer and the lowest in the spring.

Charles B. Carney
 Meteorologist in Charge

Albert V. Hardy
 State Climatologist

Weather Bureau Airport Station
 Raleigh-Durham Airport
 North Carolina

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	42.1	47.4	47.8	59.4	69.0	72.6	79.7	74.1	75.4	58.8	46.9	36.0	59.1
1931	39.7	45.4	45.1	57.4	65.2	74.4	78.8	75.8	75.6	64.1	58.0	49.4	60.7
1932	49.2	49.9	47.8	59.0	66.6	75.6	80.8	77.0	72.0	60.8	46.8	44.6	60.8
1933	47.6	43.0	43.0	55.6	58.5	71.6	78.2	76.8	75.9	61.4	49.9	46.6	61.4
1934	43.9	36.4	46.7	59.0	67.7	77.4	80.0	77.2	72.7	60.7	51.6	41.6	59.6
1935	40.8	42.8	54.5	58.0	66.5	76.2	76.6	75.4	70.0	60.2	52.0	33.3	58.9
1936	35.2	37.2	51.6	55.2	70.4	74.7	78.6	76.6	71.4	48.8	43.6	43.6	58.7
1937	48.2	42.6	48.9	57.3	67.3	76.6	77.7	77.1	68.2	56.2	47.0	40.4	59.0
1938	40.4	47.1	55.6	59.6	68.6	72.5	77.1	79.2	72.7	62.5	54.1	42.2	61.0
1939	44.0	47.5	53.7	59.0	67.9	78.9	77.8	77.0	75.2	64.0	47.4	42.4	61.2
1940	30.4	42.2	47.0	58.2	67.0	76.6	77.3	75.7	70.4	62.6	50.7	46.0	58.7
1941	41.4	39.0	45.0	62.2	71.0	75.4	77.9	78.3	75.6	68.2	51.8	46.2	61.0
1942	39.5	39.2	51.8	62.5	68.4	76.4	78.8	75.9	71.2	61.8	52.0	40.0	59.8
1943	42.6	45.0	47.0	57.5	68.8	79.9	77.2	79.6	68.8	59.4	49.8	42.6	60.0
1944	41.8	46.6	49.5	58.4	71.0	78.4	76.3	75.8	72.1	61.4	50.2	38.0	60.0
1945	41.0	44.4	60.0	63.2	65.6	77.2	77.3	76.5	74.6	60.1	52.0	36.4	60.6
1946	42.4	46.0	56.6	61.8	65.8	75.1	77.0	75.1	71.8	61.8	55.2	47.0	61.3
1947	45.8	37.4	43.6	62.6	68.4	74.3	75.4	77.8	72.4	64.8	48.2	42.2	59.4
1948	35.6	43.9	54.8	62.8	68.4	75.8	79.6	75.8	70.3	59.2	55.3	47.0	60.7
1949	50.5	49.9	52.1	58.4	68.1	76.9	79.0	76.3	69.0	64.7	50.2	44.9	61.6
1950	52.1	47.0	48.4	58.6	69.2	75.2	75.6	74.4	69.6	64.5	48.4	38.3	60.1
1951	42.6	45.7	51.4	58.7	67.8	75.3	78.6	77.8	72.8	65.9	46.7	43.9	60.6
1952	48.0	46.3	50.9	60.1	68.8	80.7	80.1	75.6	69.8	57.9	52.0	43.4	61.1
1953	46.5	48.5	53.1	61.1	73.3	76.5	79.0	77.3	70.5	64.2	52.2	42.8	62.1
1954	43.2	49.1	50.3	63.7	73.4	76.5	80.0	79.2	75.5	63.9	47.8	41.6	61.2
1955	42.0	45.2	54.6	63.3	70.1	71.4	79.4	78.5	72.7	61.1	50.6	39.7	60.7
1956	40.6	47.3	47.0	55.5	67.0	73.9	77.1	77.1	67.9	60.9	48.3	49.5	59.3
1957	42.2	47.9	49.0	62.2	69.0	75.6	77.0	74.4	61.5	54.8	50.2	42.2	59.7
1958	33.7	34.1	44.6	57.3	67.2	74.6	78.3	76.7	71.7	57.8	51.5	36.1	56.8
1959	38.4	43.5	46.3	59.5	69.7	72.8	76.8	77.9	69.5	60.9	47.9	40.8	58.7

STATION HISTORY

Existing records of temperature and rainfall observations taken at Statesville begin with the year 1866. Records are incomplete for several years, with breaks of from one to several months. A long break occurred from 1890 through 1900; since January 1901, records have been continuous, except for minor breaks when changing observers.

The exact locations of weather instrument exposures prior to 1923 are not known; all elevations, however, were published as 950 feet. Beginning with 1923, the weather station was located at the North Carolina Experiment Farm and Research Station, about two miles west of the Post Office.

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1930	3.68	1.60	2.88	1.63	2.63	4.06	2.38	6.06	1.54	1.09	4.02	4.71	36.28
1931	1.78	1.24	3.53	4.56	5.10	2.49	6.31	6.45	1.42	1.16	.31	7.24	41.59
1932	6.74	2.94	5.70	4.71	3.38	7.45	4.73	4.73	1.63	10.41	6.42	7.18	61.25
1933	2.25	3.94	2.20	3.15	3.96	1.82	6.92	4.09	2.37	1.86	1.51	2.84	36.91
1934	2.62	5.34	6.50	4.21	5.92	2.37	7.36	4.72	5.62	3.73	4.07	3.27	55.73
1935	3.88	3.20	7.55	4.33	2.72	.69	6.06	2.07	4.23	1.69	3.75	1.98	42.15
1936	10.06	5.24	7.40	6.15	.34	6.34	7.19	7.52	5.41	5.41	1.18	6.76	69.00
1937	2.91	3.03	1.56	4.71	2.46	2.68	2.29	9.68	1.94	8.48	2.29	2.16	50.41
1938	9.13	1.45	3.61	2.27	3.76	5.04	8.19	2.82	1.08	1.08	6.84	3.69	42.47
1939	2.31	9.05	3.08	2.44	2.06	4.49	4.55	5.36	.92	2.35	1.27	3.55	41.43
1940	2.85	2.91	3.54	2.96	2.51	2.99	3.82	7.24	2.44	1.56	4.96	2.95	40.73
1941	2.39	1.09	3.09	2.53	.53	8.10	7.79	2.31	1.04	.85	1.56	3.59	34.87
1942	2.97	4.33	4.77	1.27	3.77	4.32	5.26	7.10	5.42	3.00	1.71	5.71	49.63
1943	5.88	2.29	5.27	3.53	2.52	4.09	6.21	3.25	2.59	1.23	1.30	3.54	41.70
1944	4.20	6.04	9.20	5.22	3.11	1.81	6.92	2.43	10.24	5.80	4.01	3.18	62.16
1945	2.16	4.53	2.99	3.45	3.08	.97	10.03	1.95	11.63	2.42	3.87	6.98	54.06
1946	5.32	4.33	3.06	2.40	5.47	1.34	3.01	1.60	2.13	4.35	2.60	2.67	38.48
1947	5.99	3.19	3.48	3.48	4.84	1.97	2.13	5.47	4.32	5.44	6.54	1.82	45.69
1948	4.55	3.76	6.92	2.39	4.41	2.93	2.46	5.34	2.13	1.89	7.48	4.78	49.04
1949	3.11	3.47	3.22	5.48	4.10	.98	9.23	7.17	1.85	5.71	1.63	1.74	47.69
1950	2.54	2.60	6.01	2.41	13.10	5.37	7.06	4.04	3.30	2.85	1.50	2.99	53.77
1951	1.76	2.21	4.20	4.88	.78	3.77	5.18	3.21	2.51	.55	3.39	5.11	37.55
1952	4.74	3.42	10.78	3.78	3.78	2.17	3.17	10.31	1.05	.66	2.01	3.39	48.26
1953	3.47	4.94	5.12	2.45	1.95	4.87	4.17	2.82	4.37	.34	1.01	5.99	41.50
1954	7.12	3.15	6.79	1.64	2.99	2.02	4.17	4.17	.51	2.35	3.83	3.26	40.61
1955	2.15	3.70	2.26	4.92	3.05	3.77	2.90	4.13	1.92	3.54	1.92	.69	34.95
1956	1.23	6.24	2.49	5.36	2.63	1.85	6.56	3.17	8.35	2.57	1.74	4.25	46.44
1957	4.46	6.85	2.43	3.47	1.88	7.86	1.69	3.13	8.96	2.90	7.94	3.07	54.64
1958	3.58	5.82	3.99	7.55	5.61	4.93	2.91	3.73	1.20	2.49	1.93	5.52	47.26
1959	3.16	3.16	4.43	5.01	2.89	3.65	4.64	6.42	7.26	7.01	1.50	2.75	51.88

STATION HISTORY

This location, known as Statesville 2 W, was continued until the end of 1955, when the Farm was sold and the activities of the Research Station moved elsewhere. All the records tabulated in this publication are from observations taken at the Research Station.

Since early in 1956, weather observations have been taken at the City Filter Plant, located nearly two miles north-northeast of the Post Office, and known as Statesville 2 NNE. James F. Ellis, Chief Operator, is Observer.