U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH Zanesville Chamber of Commerce
CLIMATOGRAPHY OF THE UNITED STATES NO. 20 — 33

CLIMATOLOGICAL SUMMARY

LATITUDE 39° 52'
LONGITUDE 81° 54'
ELEV. (GROUND) 750 Ft.

STATION Zanesville, (Philo Sta.)
Ohio
Station No. 33-6590-9

MEANS AND EXTREMES FOR PERIOD 1926-1955

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	** Mean degree days	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet: Mean	Maximum monthly	Year	Greatest daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures Max.: 90° and above	32° and below	Min.: 32° and below	0° and below	Month
(a)	30	30	30	30		30		30	30	30		30	30		30		30	30	30	30	30	
Jan.	41.7	23.9	32.8	76	1950	-18	1936	998	3.13	2.30	1937	5.2	18.0	1948	6.6	1948	8	0	7	23	2	Jan.
Feb.	44.0	23.8	33.9	76	1954+	-19	1934	878	2.56	1.84	1945	5.7	18.7	1940	6.0	1948+	7	0	4	22	1	Feb.
Mar.	53.4	30.5	42.0	87	1929	- 6	1943	713	3.82	2.66	1945	4.3	10.1	1928	7.0	1954+	8	0	2	19	*	Mar.
Apr.	65.2	39.3	52.3	92	1942	17	1953	381	3.60	2.19	1948	0.9	7.6	1931	2.6	1938	8	*	0	8	0	Apr.
May	76.3	48.8	62.6	95	1953+	22	1954	136	3.96	2.94	1937	*	T	1952+	T	1952+	8	2	0	1	0	May
June	84.4	58.2	71.3	101	1934	35	1949+	30	4.44	4.05	1937	0	0		0		8	8	0	*	0	June
July	87.7	61.9	74.8	106	1936+	41	1930	0	4.34	2.42	1931	0	0		0		7	13	0	0	0	July
Aug.	85.9	60.1	73.0	107	1930	40	1934+	6	3.74	3.41	1954	0	0		0		6	9	0	0	0	Aug.
Sept.	80.6	53.3	67.0	107	1953	29	1942	69	2.89	3.00	1938	0	0		0		5	5	0	*	0	Sept.
Oct.	69.4	41.4	55.4	92	1939+	15	1930	313	2.36	2.90	1936	*	0.4	1926	0.4	1926	5	*	0	5	0	Oct.
Nov.	53.5	33.1	43.3	84	1950	0	1930+	651	2.72	2.31	1936	2.3	20.9	1950	10.3	1950	7	0	1	15	*	Nov.
Dec.	42.5	25.0	33.8	74	1934	-13	1932	967	2.73	1.62	1927	4.4	15.8	1935	8.9	1944	7	0	6	23	1	Dec.
Year	65.4	41.6	53.5	107	1953+	-19	1934	5142	40.29	4.05	1937	22.8	20.9	1950	10.3	1950	84	37	20	116	4	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

** Base 65°F

+ Also on earlier dates, months, or years.

* Less than one half.

NARRATIVE CLIMATOLOGICAL SUMMARY

Zanesville, a typical American city of 44,164 population is located near the center of Muskingum County in east-central Ohio at an elevation of about 700 ft. It is built around the confluence of the Muskingum and Licking Rivers at which point the former makes a right angle turn in its generally southward course. Here a unique "Y" bridge has been built to span both rivers at the same time. This is the only such bridge in the United States and has become a symbol for the city. The Muskingum River, which has been navigable to 10 miles upstream from Zanesville, drains about half of eastern Ohio and empties in the Ohio River at Marietta some 55 airline miles to the south.

This is an exceedingly picturesque section of the state with its rolling forested hills ranging in elevation to above 1000 ft. within a radius of five miles from Zanesville. These hills are a part of the western Appalachian foothills, which extend along the Ohio River westward to the Indiana border. Broad, low ridges extend in a general northsouth direction and are deeply eroded by the many tributaries of the Muskingum; and this feature of the topography has a direct bearing on the climate of Zanesville due to the fact that prevailing winds blow across these ridges. Some of the richest farm land in the state is to be found in the Muskingum Valley whose average width is about 500 feet and is flanked by hills which rise 200 to 300 feet above the valley floor.

As is true over all of Ohio, Zanesville's climate is "continental" in character in the sense that seasonal temperature fluctuations are moderately wide and annual precipitation attains a peak in early summer when thunderstorms become more common. If we may speak of a rainy season it would extend from May through August, while fall and winter are noticeably drier. Monthly precipitation averages nearly 4½ inches for both June and July compared with less than 3 inches per month during the winter. While humidity, wind, and cloudiness are not recorded in this immediate area the following data measured in Columbus is applicable to this entire section. Winds are strongest in early spring, the transition season, and ·age 12 MPH from a northwesterly direction, and are lightest ·ummer at 6 to 8 MPH from the south. As for humidity, Zanesville's climate occupies an intermediate position. Early afternoon readings, which normally occur at the time of highest daytime temperature, range close to 50% in summer and 70% in winter while night-time high values range from 80 to 85% throughout most of the year. On hotter summer days when humidity becomes a significant factor for comfort percentage values for humidity almost always fall into the 30s and 40s. The highest percentage of sunshine occurs in June, July, and August when approximately 70% of daylight hours are clear. The winter season, by contrast, is more cloudy with percentage of sunshine closer to 40.

Because of its location between low ridges to the east and the west, this part of the Muskingum Valley is about one degree warmer than at equivalent latitudes among the higher hills. The yearly average of 53.5 is also slightly over one degree above that for the state as a whole. This is due mainly to the latitudinal effect but it does not exempt this area from occasional invasions of truly cold Arctic air during the winter season. Neither does it mean that this area has any higher incidence of hot summer days. Due to its location in a valley, night-time temperatures are significantly lower during periods of hot weather than in the surrounding hills--a distinct advantage in summer. 100 degree readings are definitely uncommon in the summer having occurred in only 20 individual months during the last 30 years. At the opposite end of the thermometer, 1 out of 5 winters may be expected to pass without any zero weather, although zero readings ordinarily occur four times a year.

The growing season of 163 days extends on the average from May 2 through October 12, this being the season entirely free from freezing temperatures. There is, however, about a 10% risk of frost as late as May 15 in Spring and as early as September 30 in the fall. Temperatures as low as 20 may be expected to occur from November 16 to March 20 although in milder seasons it may not get this cold until after Christmas.

NOTE: Since long term official temperature records have not been maintained in Zanesville, these data are for the valley station in Philo a few miles downstream. The exposure of equipment at Philo is very similar to what it would be in the City of Zanesville, and consequently these data are considered entirely representative of the Zanesville area.

L. T. Pierce
State Climatologist
Weather Bureau Office
Columbus, Ohio

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1926	28.0	34.0	35.8	47.2	62.8	68.2	74.5	76.5	70.4	56.2	42.4	31.5	52.3
1927	30.8	39.2	44.6	52.8	62.7	64.8	73.0	67.6	68.2	58.4	47.8	32.8	53.6
1928	30.6	33.2	40.2	48.6	60.2	67.4	75.2	74.4	60.8	57.8	43.4	35.2	52.2
1929	28.3	27.4	47.0	54.8	60.6	68.9	73.6	68.2	66.6	53.2	41.0	34.4	52.0
1930	31.7	40.2	40.9	55.1	64.4	71.8	76.6	72.8	69.4	51.2	43.2	32.7	54.2
1931	33.6	36.4	37.9	51.4	60.8	71.4	78.0	73.2	71.2	57.6	51.4	41.0	55.3
1932	42.2	40.6	36.2	50.3	63.6	71.6	74.0	73.0	66.6	55.7	41.6	33.2	54.0
1933	39.4	33.4	40.8	53.6	65.5	74.8	74.4	73.0	70.6	53.8	40.5	36.5	54.7
1934	35.2	22.0	37.4	51.6	64.4	77.3	80.5	72.8	68.6	54.3	47.0	32.4	53.6
1935	32.2	34.0	49.4	49.4	58.6	69.1	77.6	74.0	65.1	55.0	44.6	26.8	53.0
1936	25.0	25.4	45.2	47.5	64.6	72.0	76.4	76.6	71.2	56.4	40.1	37.1	53.1
1937	39.7	34.3	37.4	51.8	60.6	72.1	73.7	75.6	64.2	54.4	40.6	29.9	52.9
1938	32.4	40.6	49.0	55.4	63.0	69.6	75.5	74.0	67.0	57.8	46.2	35.0	55.5
1939	36.8	36.1	45.0	49.7	65.6	74.1	74.5	74.2	71.9	59.0	41.3	37.4	55.5
1940	18.8	32.3	38.8	48.7	61.8	72.4	74.9	74.2	63.9	56.0	42.8	39.8	52.0
1941	32.3	29.7	35.1	57.7	64.6	72.5	76.2	72.6	69.9	60.5	45.3	39.2	54.6
1942	30.5	29.8	45.4	57.4	64.5	72.6	74.9	72.8	66.6	56.2	44.4	30.2	53.8
1943	33.4	34.2	39.4	47.0	63.6	75.6	75.1	73.0	64.5	52.8	40.7	31.1	52.6
1944	33.6	36.4	40.2	51.9	69.2	74.2	74.6	74.3	65.0	54.6	44.0	28.0	53.8
1945	25.3	34.0	51.7	55.4	58.4	69.4	73.1	72.8	69.2	53.7	44.4	28.2	53.0
1946	33.9	36.0	52.1	52.2	61.1	70.1	73.0	67.0	65.6	58.0	47.6	37.8	54.5
1947	37.8	25.0	34.6	54.3	59.5	69.8	69.7	77.9	66.9	61.7	40.7	32.5	52.5
1948	23.4	34.3	45.8	56.8	60.2	70.8	74.9	72.0	66.8	50.8	48.1	36.5	53.4
1949	38.9	38.1	42.4	50.6	63.6	73.7	77.9	74.1	61.5	59.4	43.2	36.8	55.0
1950	42.0	35.0	37.9	47.8	63.1	69.4	71.1	69.8	63.6	57.5	37.6	26.7	51.8
1951	33.4	32.9	41.8	50.5	62.9	69.9	73.7	70.6	63.6	56.6	37.5	33.5	52.2
1952	36.6	36.1	40.4	51.8	60.9	74.1	75.9	71.9	64.9	49.6	43.7	36.5	53.6
1953	37.3	36.2	43.0	49.3	65.7	73.2	74.9	72.5	66.2	55.9	43.3	35.1	54.4
1954	32.3	39.7	39.4	58.5	57.0	72.1	73.5	72.1	68.6	57.4	42.5	33.6	53.9
1955	30.1	33.9	43.3	58.0	64.4	66.9	78.1	77.5	68.7	57.0	41.1	30.7	54.1

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1926	2.38	3.78	2.64	2.59	3.12	3.65	5.66	6.81	6.24	5.14	2.53	2.14	46.68
1927	4.54	3.39	3.82	4.62	5.50	4.87	4.49	.76	1.16	1.75	5.02	5.15	45.07
1928	1.65	2.83	4.04	3.14	1.48	9.41	7.09	2.46	1.36	2.66	2.38	1.78	40.28
1929	3.52	2.09	2.44	5.29	5.68	3.89	2.57	5.98	2.84	3.87	5.40	3.50	47.07
1930	2.90	2.84	4.15	1.22	1.32	1.23	1.09	1.70	2.15	.46	1.40	1.47	21.93
1931	1.17	1.97	1.81	5.57	3.34	3.72	4.91	6.61	5.32	1.96	3.39	3.82	43.59
1932	5.12	1.04	3.68	1.65	1.67	5.33	4.60	3.66	2.07	1.64	4.57	3.51	38.54
1933	1.96	1.60	6.88	5.54	7.41	1.71	4.96	2.53	5.32	1.47	1.42	3.85	44.65
1934	1.72	1.12	2.37	1.86	1.32	3.36	3.01	4.89	4.00	.45	1.77	.88	26.75
1935	2.63	1.82	3.30	2.04	6.68	4.89	3.24	8.86	4.14	2.14	2.38	3.15	45.27
1936	1.72	2.44	3.94	2.87	2.33	1.35	5.33	4.47	1.25	7.61	3.85	2.62	39.78
1937	10.48	1.74	1.68	2.71	6.36	8.32	7.26	3.65	3.51	3.01	1.23	3.43	53.38
1938	2.13	2.66	6.46	3.20	8.06	3.20	5.14	4.66	4.28	.70	2.44	1.61	44.54
1939	2.15	4.88	4.48	5.34	.81	7.42	3.88	1.86	2.38	3.48	.81	1.88	39.37
1940	1.68	3.97	3.13	6.54	3.91	4.94	1.98	5.57	1.24	1.54	3.69	2.69	40.88
1941	2.32	.47	1.01	.95	2.63	6.52	5.78	4.24	1.45	3.76	2.46	2.07	33.66
1942	1.31	2.37	3.75	2.27	3.73	2.64	3.48	3.43	4.51	2.39	3.35	4.33	37.56
1943	2.44	2.00	5.08	3.52	5.09	4.05	3.70	3.39	.57	1.49	1.11	1.50	33.94
1944	1.24	2.62	6.12	3.40	3.62	4.05	1.38	4.99	1.65	2.03	1.39	4.17	36.66
1945	1.38	3.39	7.43	4.72	6.40	4.39	4.58	1.76	5.90	2.83	5.10	1.84	49.72
1946	.75	3.63	3.23	1.91	6.14	5.61	3.37	4.14	2.19	3.31	2.02	2.35	38.65
1947	5.18	.92	1.60	5.44	7.04	2.44	5.25	2.29	2.73	.81	2.68	1.89	38.27
1948	2.76	3.37	4.98	5.77	4.69	4.44	5.83	2.66	6.07	1.84	3.75	3.23	49.39
1949	5.01	2.86	4.17	3.35	2.56	5.42	6.01	1.98	2.76	1.42	1.92	2.13	39.59
1950	6.97	3.67	3.19	3.54	3.61	5.28	5.38	2.30	1.73	1.39	5.46	2.74	45.26
1951	5.33	3.67	4.93	3.60	3.42	8.01	3.55	.63	4.10	1.07	4.09	5.17	47.57
1952	5.30	2.55	3.38	4.31	3.07	4.32	4.81	2.93	1.83	1.14	1.54	3.10	38.28
1953	4.21	1.46	2.73	3.23	3.41	3.66	3.77	1.19	1.23	1.17	1.33	2.09	29.48
1954	2.80	1.37	3.00	4.54	2.42	2.92	4.57	7.52	1.31	6.05	1.89	3.68	42.07
1955	1.25	4.40	5.04	3.16	2.12	2.18	3.63	4.31	1.31	2.14	1.37	.14	31.05