

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
In Cooperation with the UNM Bureau of Business Research

LATITUDE: 35° 57' N
LONGITUDE: 104° 12' W
ELEV. (GROUND): 5884 Ft.

CLIMATOLOGICAL SUMMARY

STATION: ROY
NEW MEXICO

MEANS AND EXTREMES FOR PERIOD OF RECORD: 1931 - 1960

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	32° and below	32° and below	0° and below	
(a)	12	12	12	12	--	12	--	12	30	30	--	30	30	--	30	--	30	12	12	12	12	(a)
Jan.	49.0	20.5	34.1	75	1950	-11	1959	960	0.42	0.90	1944	4.6	15.0	1948+	8.0	1948+	2	0	2	27	1	Jan.
Feb.	51.9	21.8	36.7	75	1957	-8	1956	790	0.43	1.10	1953	4.6	16.0	1938	12.0	1953	1	0	2	25	1	Feb.
Mar.	56.4	25.3	41.3	78	1956	2	1955	730	0.63	1.30	1941	4.6	23.5	1958	15.0	1948	2	0	1	24	0	Mar.
Apr.	64.9	34.0	49.6	86	1959	10	1952	460	0.91	1.68	1958	2.1	17.0	1958	16.0	1958	3	0	0	12	0	Apr.
May	73.8	43.8	59.0	92	1953	25	1953	200	2.50	3.30	1938	0.2	7.0	1935	5.0	1935	4	1	0	1	0	May
June	84.9	53.5	69.2	101	1957	35	1954	20	1.62	2.25	1949	0	0	--	0	--	3	10	0	0	0	June
July	86.2	57.6	71.8	101	1957	50	1952+	0	2.32	1.75	1950	0	0	--	0	--	5	9	0	0	0	July
Aug.	85.1	56.1	70.6	102	1952	45	1953	0	2.22	1.75	1951	0	0	--	0	--	5	7	0	0	0	Aug.
Sept.	79.9	49.1	64.5	96	1956	33	1959	80	1.71	4.33	1941	0.3	6.0	1936	6.0	1936	3	2	0	0	0	Sept.
Oct.	69.1	38.4	54.3	88	1954	16	1955+	330	1.40	2.83	1954	0.3	2.0	1959+	2.0	1959	3	0	0	5	0	Oct.
Nov.	57.3	26.4	42.0	78	1950	-4	1951	690	0.53	0.75	1953	2.6	33.5	1940	8.0	1946	1	0	1	21	*	Nov.
Dec.	49.7	20.9	35.2	74	1955	-1	1951+	920	0.50	1.35	1943	4.8	18.0	1943	14.0	1943	1	0	2	28	*	Dec.
Year	67.4	37.3	52.4	102	Aug. 1952	-11	Jan. 1959	5180	15.19	4.33	Sept. 1941	24.1	33.5	Nov. 1940	16.0	Apr. 1956	33	29	8	143	2	Year

* Less than one half.

** Base 65° F (estimated).

(a) Average length of record, years.

† Trace, an amount too small to measure.

+ Also on earlier dates, months, or years.

‡ Partial year's record considered.

CLIMATE OF ROY, NEW MEXICO

Roy is located in western Harding County in the Canadian river valley about eight miles east of the river in the northeastern-plains area of New Mexico. The surrounding country is a relatively high plateau, broken by numerous canyons and arroyos. The Canadian river flows almost north-to-south through this area, forming the western border of Harding County. Ranching is the principal agricultural activity. Some grains and feed crops are grown in the valleys. The Southern Pacific Railroad serves the city.

Precipitation records began in Roy in 1909 and have continued to the present. In this summary the precipitation records for the 30-year period 1931 through 1960 are used. Official temperature records did not begin until 1949, and the 12-year record 1949-1960 was used to obtain the temperature data in this report.

Roy has a semiarid continental climate. Summers are generally mild and produce most of the year's moisture. In an average year only 29 days have maximum temperatures reaching 90° or higher, but temperatures of 100° or higher have occurred in June, July, and August. Summer nights are usually cool, the temperature normally dropping below the 60° mark before morning. While winter temperatures average close to the freezing mark, many days are sunny and mild, with shade temperatures climbing to the mid-40s and low 50s in the afternoon. Winter nighttime temperatures fall below the freezing mark most of the time from early November through March; yet zero temperatures are experienced on only about two days.

The annual precipitation average is around 15 inches, with approximately 75 per cent of this yearly moisture falling during the summer months May-October and favoring summer farm crops and normally producing good forage on extensive range lands in the county. Most of this moisture falls during brief thundershowers, which usually occur during the late afternoon or early evening. Only

rarely does this area experience prolonged rainy spells. Hail may accompany the more severe summer thunderstorms, but only one tornado has been reported in Harding County during the period of record. Winter precipitation is generally light, with only one or two days a month when as much as one-tenth inch of moisture falls. Much of the winter precipitation comes as snow, and an occasional snowfall of one foot or more can be expected. Following these heavier falls, snow may lie on the ground for several days; and, occasionally, moderate-to-strong winds accompanying these storms result in blizzard conditions and heavy drifting.

Sunshine, relative-humidity, and wind records are not available for the Roy area; but in general relative humidity averages about 50 per cent for the year, ranging from about 70 per cent in the cooler morning hours in winter to less than 30 per cent during summer afternoons. The sun shines approximately 75 per cent of the possible hours, with winter months mostly clear and sunny. Winds in the area average about 12 miles per hour for the year, with the late winter and spring months the windiest, when average hourly velocities are close to 15 miles per hour. Occasionally, in late winter and spring moderate-to-strong winds persist for several hours, with velocities above 25 miles per hour resulting in some blowing dust. The growing season at Roy averages about 172 days a year: from April 29, the average date of the last freezing temperature in spring, to October 14, the average date of the first freezing temperature in fall.

G. F. VON ESCHEN
State Climatologist
Weather Bureau Airport Station
Albuquerque, New Mexico

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1949	26.0	35.1	44.1	49.6	59.6	66.4	72.0	69.9	64.8	52.7	49.2	32.8	51.8
1950	37.0	41.1	42.6	51.8	59.0	69.9	69.0	67.7	62.2	59.9	44.2	38.1	53.5
1951	31.5	38.2	41.5	48.6	59.1	65.8	74.2	72.1	64.7	53.4	39.3	34.1	51.9
1952	37.3	36.8	38.3	49.2	59.1	73.1	70.9	71.7	64.2	54.7	36.7	31.4	51.9
1953	39.9	33.2	45.6	48.4	55.9	73.1	71.9	69.8	64.9	54.0	43.4	30.4	52.5
1954	35.0	41.3	38.1	55.8	59.0	70.5	75.2	71.4	67.4	55.2	45.6	36.0	54.2
1955	32.6	31.7	41.6	50.6	57.9	65.2	71.4	71.2	64.7	54.5	42.1	39.5	51.9
1956	38.7	36.2	43.9	49.5	64.0	71.1	71.5	70.8	67.9	56.8	39.9	36.9	53.9
1957	34.8	45.1	42.3	45.9	55.4	69.0	75.1	71.4	61.0	52.5	37.0	38.9	52.4
1958	34.5	37.8	35.0	46.4	60.4	68.8	70.9	70.5	63.7	52.7	42.0	37.7	51.7
1959	31.3	34.2	40.8	48.0	59.0	68.2	70.4	70.0	63.2	51.9	40.9	36.6	51.2
1960	30.6	30.1	42.1	51.7	59.0	69.3	69.4	71.0	65.4	53.0	43.5	29.6	51.2

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	.04	.44	.94	1.94	1.77	.68	1.91	3.43	1.42	1.21	.06	.40	14.24
1932	.28	.14	.46	1.48	2.90	2.52	1.45	1.50	3.85	.35	T	0.70	15.63
1933	0	.16	T	.21	.50	2.95	.34	4.09	.67	1.01	.45	.57	10.95
1934	.60	.60	.10	T	1.44	.75	.44	.97	.98	.54	.81	0	7.23
1935	.75	.03	.04	.20	4.80	.90	1.23	2.31	3.19	.78	1.15	.33	15.71
1936	.54	0	0	0	2.15	1.00	1.20	1.20	3.30	T	0	.32	9.71
1937	T	1.02	.10	5.90	3.27	1.09	1.09	1.48	1.93	.65	T	.10	15.54
1938	.05	1.30	.05	0	3.30	.88	2.05	.75	5.39	3.01	.10	1.02	17.90
1939	.89	.47	.25	.72	1.82	2.20	.54	2.39	1.40	.68	.18	1.37	13.91
1940	.49	1.28	.80	.86	2.87	.36	1.05	2.65	.45	.10	3.00	.29	14.20
1941	.68	.67	2.94	1.93	6.05	4.11	2.83	.96	9.34	4.10	T	.25	33.86
1942	0	.68	.78	5.63	.46	.97	1.32	2.18	5.60	3.05	0	.85	21.52
1943	.35	.09	.20	.45	.65	.80	.95	2.20	.25	.10	.75	1.75	8.54
1944	1.05	.20	.25	.80	3.60	2.35	2.00	2.35	.75	1.80	.90	.15	16.20
1945	1.05	.90	T	.90	.25	1.55	3.30	1.80	1.00	.75	0	.10	11.05
1946	.10	.30	1.40	.85	.10	.10	1.20	4.45	.85	3.00	1.25	.05	13.65
1947	.20	T	.45	.25	3.90	1.10	1.60	.95	.55	1.30	.45	1.32	12.07
1948	1.15	1.70	1.95	.60	3.85	3.32	2.35	1.10	0	2.00	0	0	18.02
1949	.85	1.20	.25	1.15	1.55	4.75	3.05	1.15	.55	T	T	.95	14.85
1950	0	T	.05	.25	1.20	1.10	8.30	1.12	2.07	.13	T	.32	14.34
1951	.45	.25	.30	.90	3.98	1.45	4.05	4.66	.51	.55	.30	.20	17.60
1952	.25	.25	.24	1.35	1.60	1.35	3.40	3.15	.68	0	.53	1.05	13.85
1953	T	1.10	.42	.24	1.56	.87	3.77	3.00	.05	1.01	1.26	.60	13.88
1954	.32	.15	.16	.10	2.86	.13	1.03	.79	.75	3.55	0	.60	10.44
1955	.35	.55	T	.24	4.13	.34	1.72	2.21	1.59	0	.08	T	11.21
1956	.06	.18	.02	.33	.83	2.14	3.84	1.85	.10	.69	.93	.02	9.69
1957	.36	.05	1.02	3.06	2.88	0	3.56	2.54	.27	3.55	.03	0	18.32
1958	.78	.44	3.62	2.22	4.20	1.55	4.83	3.41	1.17	.92	.72	.20	24.06
1959	.41	.15	.08	.50	3.39	2.08	3.13	4.20	.33	2.44	T	1.59	18.50
1960	.48	.26	1.15	0	.14	2.88	2.45	1.80	2.16	4.69	0	1.67	17.68

STATION HISTORY

The original weather station was established near the depot in Roy in July 1909, and records were maintained by the railroad agent until July 1938. Some temperature records were made from railroad thermometers, but were not used in this summary. The station was relocated at a site five blocks southeast of the Post Office in August 1938, with rainfall records maintained until June 1940, at which time thermometers were added to the equipment. T. J. Strong kept the records until April 1954. The station has been moved several times within the last few years, all locations being within a few blocks of the Post Office. Observers have included Allen Floorsheim, April 1954 to May 1958; Howard W. Dikeman, June 1958 to August 1959; Milton O. Pate, September 1959 to March 1960; Jerry G. Porterfield, March 1960 to date. No differences in elevation existed among the several station locations.