IN COOPERATION WITH LOS GATOS CHAMBER OF COMMERCE

CLIMATOGRAPHY OF THE UNITED STATES NO. 20 —

CLIMATOLOGICAL SUMMARY

LATITUDE 37° 13' N
LONGITUDE 121° 59' W
ELEV. (GROUND) 428 Feet

STATION LOS GATOS, CALIFORNIA

MEANS AND EXTREMES FOR PERIOD 1931 - 1960

Month	Temperature (°F)							**	Precipitation Totals (Inches)							Mean number of days					
	Means			Extremes								Snow, Sleet					Precip. .10 inch or more	Temperatures				
																		Max.		Min.		
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean degree days	Mean	Greatest daily	Year	Mean	Maximum monthly	Year	Greatest daily	Year		90° and above	32° and below	32° and below	0° and below	
(a)	(b)	(b)	(b)	30		30		10	30	30		30	30		30		30	30	30	30	30	(a)
Jan.	56.3	38.3	47.3	72	1959+	18	1949	504	5.83	6.85	1943	T	0.5	1932	0.5	1932	7	0	0	6	0	Jan.
Feb.	59.7	40.2	50.0	80	1954	23	1949	395	5.58	4.80	1945	0	0		0		7	0	0	2	0	Feb.
Mar.	64.9	41.7	53.3	88	1960	27	1953	350	3.89	2.97	1952	T	T	1942	T	1942	6	0	0	1	0	Mar.
Apr.	70.2	44.2	57.2	93	1960+	31	1952	222	2.08	3.13	1958	0	0		0		3	*	0	*	0	Apr.
May	75.5	47.7	61.6	100	1943	34	1952+	115	0.71	1.01	1941	0	0		0		2	2	0	0	0	May
June	81.3	50.7	66.0	109	1960	35	1933	40	0.11	0.41	1934	0	0		0		*	5	0	0	0	June
July	86.1	53.1	69.6	110	1959	42	1933+	4	T	0.06	1946	0	0		0		0	9	0	0	0	July
Aug.	85.1	52.4	68.8	107	1959	41	1957+	6	0.02	0.32	1935	0	0		0		*	8	0	0	0	Aug.
Sept.	83.5	52.0	67.8	109	1955	38	1948	15	0.21	3.61	1959	0	0		0		*	7	0	0	0	Sept.
Oct.	75.3	48.4	61.8	99	1933	32	1946	101	1.09	2.85	1945	0	0		0		2	1	0	*	0	Oct.
Nov.	65.7	42.7	54.2	87	1955	27	1931	302	2.34	4.09	1950	0	0		0		3	0	0	1	0	Nov.
Dec.	58.3	39.5	48.9	83	1958	21	1932	457	6.25	8.48	1955	T	1.3	1932	0.8	1932	6	0	0	3	0	Dec.
Year	71.8	45.9	58.9	110	July 1959	18	Jan. 1949	2511	28.11	8.48	Dec. 1955	T	1.3	Dec. 1932	0.8	Dec. 1932	36	32	0	13	0	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.

(b) Adjusted to climatological normal.

THE CLIMATE OF LOS GATOS

The City of Los Gatos, primarily residential in character, rests on the lower slopes of the Santa Cruz Mountains at the southwestern edge of the Santa Clara Valley. Elevation at the present observing point is 428 feet above sea level. The area north and northeast of the city is relatively flat, and the valley joins the San Francisco Bay about 20 miles north. Across the valley, at a distance of approximately 20 miles, is world famous Mt. Hamilton rising to a height of 4425 feet. Between Los Gatos and the Pacific Ocean, some 20 miles to the west, lie the Santa Cruz Mountains, a portion of the coast range heavily wooded with Madrone, Oak and Redwood. These mountains reach heights of 2000 to 3000 feet, providing an effective barrier against the marine air that dominates the coast line during much of the year.

The position of Los Gatos, with respect to the ocean, the bay, and the mountains, provides an intermediate type climate somewhat unique in this area. During the summer the San Francisco Bay Region, including the Santa Clara Valley, is filled most of the time with marine air moving into the area through the Golden Gate. However, the air is considerably modified by the time it reaches as far south as Los Gatos, and as a result the city normally receives more sunshine and experiences somewhat wider ranges of temperatures than most of the cities in the area.

Maximum readings on summer afternoons average in the middle 80's, while night readings drop to very comfortable values in the lower 50's. Like other cities in the area Los Gatos will experience an occasional brief hot spell carrying temperatures to as high as 110°, but these periods do not last long and are usually more tolerable because of the very low humidities associated with them. Winter temperatures range from typical daytime highs of 56° to nighttime lows of 38°. Readings of 32° or lower occur almost every year. The average date of the last 32° reading in the spring is February 20th, while the average date of the first freeze in the fall is December 8th. This provides a growing season of 291 days. Additional freeze information may be found in the accompanying table.

Rainfall is moderate. In one-half of the years the annual total can be expected to fall between 21.40 inches and 35.00 inches. In only one year in 20 is it likely to be less than 14.10 inches and with the same frequency it can be expected to exceed 47.60 inches. Precipitation is concentrated in the winter months, 92% of the seasonal total falling between November 1st and April 30th. This leaves the summer period with very little precipitation. Typically there are 36 days per year with 0.10 inch or more of rain, and only 4 of these fall in the period May through October. Rainfall amounting to 1 inch or more falls on about 9 days during an average year. Thunderstorms are rare. Only infrequently does snow fall, and it is always of short duration.

Studies of storm rainfall suggest that as often as once in every two years Los Gatos may receive precipitation at the rate of 0.80 inch per hour, 2.30 inches in 6 hours, and 3.90 inches in 24 hours. These intensities may increase as often as once in 100 years to 1.50 inches per hour, 5.00 inches in 6 hours, and 10.00 inches in 24 hours.

Winds are light and blow from a northerly quadrant most of the time, except for south winds associated with winter storms. Only infrequently do speeds reach damaging values. Studies suggest that as often as every other year wind speeds may reach 32 mph, while once in 50 years they may get up to 80 mph.

Relative humidity measurements are not available for Los Gatos, but a study of other available reports indicates that nighttime readings will average around 50% in summer and fall, increasing to 95% during the winter. During the day readings will range around 70% in winter, dropping to near 40% in midsummer. In periods of hot weather humidity may drop to less than 10%. A typical year will have 224 clear days, 67 partly cloudy days and 74 cloudy days.

C. Robert Elford
Weather Bureau State Climatologist

LOS GATOS, CALIFORNIA

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	49.8	52.8	55.6	59.2	65.9	65.6	72.3	70.4	65.4	60.0	51.0	46.5	59.5
1932	46.0	47.6	54.8	55.0	61.0	66.1	67.2	67.6	68.7	62.4	58.6	43.8	58.2
1933	43.0	46.4	51.9	55.1	55.4	61.7	69.4	68.3	64.0	64.5	56.2	48.5	57.0
1934	48.6	53.1	60.0	61.6	63.5	64.7	69.0	69.4	68.2	61.8	55.0	48.6	60.3
1935	46.8	50.8	49.7	56.6	61.7	68.5	69.6	69.8	66.2	59.8	51.2	48.8	58.3
1936	50.2	50.4	55.0	58.0	63.4	65.8	70.2	70.6	69.1	64.1	54.0	47.3	59.8
1937	39.8	47.6	53.2	55.5	61.9	66.5	70.4	69.3	67.6	62.8	55.4	50.3	58.4
1938	47.9	50.0	50.4	55.0	60.6	65.2	69.0	67.6	66.8	60.6	52.0	49.5	57.9
1939	47.0	46.8	51.8	59.0	61.2	65.2	68.4	68.0	70.4	62.3	55.6	51.3	58.9
1940	50.2	52.6	55.8	57.9	61.7	67.0	68.0	68.0	66.0	62.0	53.3	51.8	59.5
1941	50.4	51.8	56.2	55.8	63.6	65.8	71.0	67.8	66.6	60.0	55.4	49.6	59.5
1942	48.2	49.2	52.6	55.0	59.1	66.4	69.8	65.7	65.7	61.2	53.2	48.6	58.2
1943	48.3	52.0	55.2	57.7	63.2	64.0	68.8	67.6	69.4	60.7	55.2	49.6	59.3
1944	49.5	48.0	53.6	53.2	61.2	63.2	67.0	68.2	67.9	62.5	51.8	50.2	58.0
1945	46.6	50.9	50.0	57.6	59.4	68.2	70.8	68.0	68.4	62.6	53.6	49.8	58.8
1946	46.6	47.5	51.2	56.6	60.2	63.1	68.2	67.8	66.8	50.8	50.4	47.4	57.0
1947	42.5	50.8	54.6	59.3	63.8	67.8	65.8	67.7	67.8	60.8	49.8	46.2	58.1
1948	50.6	47.7	49.8	53.6	58.0	65.2	67.9	67.1	64.8	60.4	52.2	43.3	56.8
1949	39.0	45.8	51.2	58.6	60.7	66.8	67.6	65.3	67.8	58.3	57.2	45.7	57.0
1950	44.0	49.2	52.2	58.2	61.0	64.6	70.1	70.1	68.1	62.0	57.9	50.9	59.0
1951	47.4	49.2	52.3	55.9	62.0	64.6	67.3	68.3	66.6	60.6	54.2	46.3	57.9
1952	45.3	49.8	49.9	56.8	62.8	62.6	70.7	67.9	69.1	63.4	52.2	48.5	58.2
1953	51.5	50.1	51.9	55.2	57.9	62.4	70.2	66.2	68.8	61.0	54.8	49.8	58.3
1954	47.9	51.7	51.0	61.1	63.1	66.4	72.2	67.5	67.8	63.0	55.4	48.2	59.6
1955	45.2	49.4	54.1	53.1	62.5	65.9	68.5	70.4	69.1	63.5	53.7	51.2	58.9
1956	50.2	47.3	53.6	56.5	62.2	68.2	70.4	69.2	69.0	60.8	56.5	50.8	59.6
1957	45.9	53.2	54.8	59.1	61.3	69.3	70.8	68.9	69.3	62.0	54.1	49.3	59.8
1958	50.8	54.8	51.1	58.6	65.1	68.1	71.0	74.3	72.5	66.3	57.0	56.5	62.2
1959	52.3	51.0	59.2	63.2	63.5	69.8	73.8	72.1	67.1	66.7	57.7	51.6	62.3
1960	48.6	51.9	57.2	58.4	61.8	70.7	73.2	70.8	68.9	61.1	52.2	48.2	60.2

LOS GATOS, CALIFORNIA

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	6.31	1.01	1.23	0.48	1.19	0.28	0	0	0.01	0.68	2.55	15.51	29.25
1932	4.01	4.74	0.58	0.95	0.19	0	0	0	0	T	0.90	2.73	14.10
1933	8.16	0.88	3.04	0.07	1.09	T	0	0	0	1.88	0	11.04	26.16
1934	2.54	6.53	0.01	0.24	0.41	0.55	0	T	0.38	0.75	3.93	4.04	19.38
1935	8.17	0.45	5.60	4.58	T	0	0	0.40	0.03	0.48	0.43	2.10	22.24
1936	3.76	10.02	0.97	1.31	0.79	0.43	0	T	0	0.35	0.02	5.20	22.86
1937	4.38	7.44	7.24	0.41	T	0.37	T	0	0	0.77	3.24	9.05	32.90
1938	5.42	16.90	8.43	1.80	0.20	0	0	0	0.08	1.39	1.68	1.40	37.30
1939	3.71	2.26	3.82	0.68	0.51	T	T	0	0.21	0.71	0.43	2.16	14.49
1940	11.94	13.18	5.14	0.40	0.87	T	T	0	0.32	0.82	0.81	14.07	47.55
1941	8.89	9.73	8.76	5.95	1.56	0.08	0	T	0.01	0.72	0.98	11.42	48.10
1942	9.10	3.93	3.62	6.03	1.42	0	0	0	0.08	0.89	3.41	2.47	31.21
1943	13.47	2.26	3.65	1.15	0	0.05	0	0	0	0.57	0.78	1.81	23.74
1944	3.27	8.91	2.82	1.68	1.04	0.08	0	0	0	2.63	4.55	3.00	27.98
1945	0.99	9.33	4.27	0.39	1.04	T	T	T	T	5.81	2.16	10.53	34.52
1946	0.78	2.63	3.47	0.04	0.84	0	0.06	0	0.01	0.05	6.19	2.83	16.90
1947	1.23	2.97	3.75	0.13	0.42	0.44	0	0	0	3.86	0.76	2.01	15.57
1948	0.22	1.87	4.60	7.07	0.66	T	0	T	T	0.40	0.18	7.25	22.25
1949	1.81	4.65	10.43	T	0.58	0	T	0.14	0.04	0.18	2.08	2.71	22.62
1950	7.91	3.54	1.57	2.41	0.74	0	T	0	0.02	4.52	10.58	7.82	39.11
1951	3.90	2.65	1.77	1.04	1.47	0.01	0	T	T	1.32	4.14	11.37	27.67
1952	15.82	2.46	8.77	1.24	0.47	0.40	T	0	T	0.02	3.42	12.15	44.75
1953	4.50	T	3.76	2.28	0.71	0.03	0	0.03	T	0.24	3.85	0.39	15.79
1954	5.62	6.17	5.72	1.45	0.17	0.21	0	0.02	T	T	4.54	6.82	30.72
1955	5.93	2.91	0.37	3.45	0.54	0	0	T	0	0.01	2.31	26.56	42.08
1956	7.77	4.49	0.17	3.18	1.11	0	0.01	0	0.50	1.69	0.07	0.72	19.71
1957	5.09	7.31	1.46	2.26	2.42	0.07	0	0	0.62	1.61	0.47	5.91	27.22
1958	6.19	13.69	10.02	8.81	0.49	0.15	T	0	0.10	0.03	0.34	1.00	40.82
1959	7.86	9.70	0.36	0.98	0.02	0	0	0.02	3.75	0	0	0.97	23.66
1960	6.17	4.17	1.29	1.56	0.43	0	T	0	T	0.26	5.38	2.47	22.27

STATION HISTORY

The first Los Gatos weather records of which we have knowledge were made by Mr. F. H. McCullogh at his home about 0.8 miles west of the Post Office. His precipitation records started in 1885, and his temperature records began in 1887. On October 1, 1930, the station was moved about 0.5 mile north to the home of Dr. Herbert E. Smith. The elevation was reported at 550 feet, about 50 feet lower than the original location.

From November 1, 1933, to March 31, 1942, the record was maintained by Mr. H. K. Phelps at his home at 238 Almendra Avenue. This was about 0.5 mile northwest of the Post Office and at an elevation of about 450 feet. Bert Fresher was the observer from April, 1942 to January, 1946, and the equipment was at 242 Almendra Avenue.

It was February, 1946 when the equipment was moved to the Fire Station at 256 West Main Street, and the Fire Department assumed responsibility for the official observations.

Other weather records in the vicinity were made by the Southern Pacific Railroad from 1891 to 1918 and by Mr. William M. Moody near his residence 5 miles southwest of Los Gatos from 1940 to 1949. Beginning in 1957 a rainfall record was established near the home of Mr. Leon S. Miller, about 4 miles southwest of Los Gatos.

We are grateful to these cooperative observers, whose services have made it possible to summarize the data presented in this report.

Max R. McDonough
Assistant Climatologist

PROBABILITIES OF OBSERVING TEMPERATURES OF 28° OR COLDER AND 32° OR COLDER AFTER THE GIVEN DATES IN THE SPRING AND EARLIER THAN THE GIVEN DATES IN THE FALL

Season & Temperature		Percentage Probability 10	20	30	40	50	60	70	80	90
Spring	28°	2/14	2/1	1/24	1/14	1/5	#	#	#	#
	32°	4/2	3/19	3/8	2/28	2/20	2/12	2/2	1/19	#
Fall	32°	11/3	11/15	11/23	12/1	12/8	12/15	12/22	12/31	*
	28°	12/2	12/16	12/30	*	*	*	*	*	*

\# Earlier than 1/1.
* Later than 12/31.