U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH REDMOND CHAMBER OF COMMERCE
CLIMATOGRAPHY OF THE UNITED STATES NO. 20 — 35

CLIMATOLOGICAL SUMMARY

LATITUDE 44° 17' N
LONGITUDE 121° 10' W
ELEV. (GROUND) 2,994 Ft.

STATION REDMOND, OREGON

MEANS AND EXTREMES FOR PERIOD 1931 - 1959

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	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	28	28	28	28		28		28	29	29		29	29		29		29	28	28	28	28	
Jan.	42.4	21.4	31.9	66	1934	-24	1950	1026	1.05	0.95	1951	6.6	36.0	1950	8.5	1950	3	0	5	26	2	Jan.
Feb.	47.3	25.0	36.2	72	1934+	-24	1933	806	0.74	0.83	1938	3.4	16.3	1938	7.5	1952+	2	0	1	24	*	Feb.
Mar.	53.9	27.3	40.6	82	1934	-1	1955	756	0.54	1.09	1940	1.3	7.1	1951	3.5	1953	2	0	*	24	*	Mar.
Apr.	62.4	31.1	46.8	86	1934	14	1953+	546	0.52	0.75	1935	0.7	6.2	1935	5.0	1935	2	0	0	17	0	Apr.
May	69.1	36.9	53.0	95	1931	17	1954	372	0.95	0.99	1932	T	0.5	1933	0.5	1933	3	*	0	9	0	May
June	74.7	42.1	58.4	100	1940	25	1955	216	1.07	1.57	1950	T	T	1952	T	1952	3	2	0	2	0	June
July	85.0	46.5	65.8	105	1939	31	1954+	47	0.33	1.64	1935	0.0	0.0		0.0		1	10	0	*	0	July
Aug.	82.8	44.5	63.7	98	1933	29	1942	78	0.25	0.75	1934	0.0	0.0		0.0		1	7	0	1	0	Aug.
Sep.	76.4	39.7	58.1	97	1944	21	1954	225	0.46	0.94	1948	0.0	0.0		0.0		1	2	0	5	0	Sep.
Oct.	65.3	33.8	49.6	93	1936	9	1935	477	0.69	1.12	1944	0.2	5.0	1935	3.5	1935	2	*	*	13	0	Oct.
Nov.	52.0	27.8	39.9	74	1936	-15	1955	753	0.85	1.02	1945	1.0	9.0	1955	6.0	1955	3	0	1	21	*	Nov.
Dec.	44.9	25.2	35.1	72	1939	-19	1932	927	1.05	1.35	1945	3.2	18.5	1952	7.5	1952	4	0	3	25	*	Dec.
Year	63.0	33.4	48.2	105	July 1939	-24	Jan. 1950	6229	8.50	1.64	July 1935	16.4	36.0	Jan. 1950	8.5	Jan. 1950	27	21	10	167	3	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.

CLIMATE OF REDMOND, OREGON

Redmond, located near the geographical center of the State, lies in Central Oregon's high plateau area on the southwestern border of the Columbia Basin and near the extreme northwestern edge of the Great Basin. Only a short distance to the west the Cascade Mountains, which extend the full north-south length of Oregon, begin their gradual ascent to a crest ridge largely between 5,000 and 6,000 feet above sea level. Occasional peaks tower several thousand feet higher. It is predominately modified marine air masses from the Pacific Ocean that cross this region. Most of their precipitable moisture was intercepted by their passage over the Coastal and Cascade ranges. As a result Redmond has a comparatively dry climate with mild temperatures. The few extremes that do occur are usually associated with a strong outbreak of polar continental air that occasionally pushes west of the Rocky Mountains.

Here, as in all of Oregon's high plateau area, nights are relatively cool. There is an average of at least one day with temperatures below freezing every month in the year but July and they occasionally occur then. However, those of 0° or lower occur on an average of only two days yearly. At the other extreme temperatures of 90° or more occur about 21 days annually, but those of 100° are recorded only about one year in four. Relative humidities during the warmer summer months are quite low - the afternoon average over a period of years during the months of July and August is between 20% and 30% - thus materially reducing the discomfort otherwise associated with the few abnormally high temperatures that do occur.

Redmond precipitation is predominately light rain. Occasionally this may reach moderate or heavy proportions very briefly during late spring and summer thunderstorms, a number of which occur each year. Only rarely, however, is either the rain or the occasional hail, that may accompany these storms, heavy enough to cause significant damage. A table of maximum rainfall intensities recorded for various time intervals is shown on the reverse. Snows that occur are generally very light. There is an average of six to seven days a year with snowfall of an inch or more, but only about two of these have as much as 2½ inches and only once in about every three years is a twenty-four hour fall of six inches or more observed. This usually melts in a day or two. Very few times in the station's history has a cover persisted for a week or longer.

Despite the relatively cool nights and low average annual rainfall extensive agriculture is carried on in the Redmond area. This is partially due to a large scale reclamation project completed in 1947 that brought many thousands of additional acres under cultivation. This is the center for the growing of the well-known Deschutes potatoes. Other important crops include alfalfa, grain, and clover and specialty grass seed. Livestock and livestock products are also major agricultural resources of the area. The climate is suited directly or indirectly to a large number of recreational interests within a radius of thirty to forty miles of the town. Heavy snow and rainfalls on the nearby Cascades support many lakes and hundreds of miles of streams comprising some of the State's best fishing. The year around snowfields in these mountains are excellent for winter sports. The abundance of higher elevation precipitation also support dense forests which offer limitless opportunity for hiking, picnicing and hunting. These forests are the source of timber for extensive lumber and paper making industries.

Gilbert L. Sternes, State Climatologist
Weather Bureau Office, Portland, Oregon

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	37.6	37.6	43.3	49.4	57.8	59.6	68.3	66.2	57.2	50.0	36.8	33.2	49.8
1932	33.6	36.2	43.5	47.7	53.0	61.9	63.4	63.4	59.0	51.3	44.6	27.8	48.8
1933	33.9	32.0	41.0	46.6	47.9	61.0	67.7	66.2	55.8	54.8	43.4	42.2	49.4
1934	41.2	42.0	49.9	54.8	58.2	58.9	66.3	67.8	58.0	52.4	43.3	34.9	52.3
1935	33.3	38.0	38.2	44.5	52.0	59.9	65.3	64.6	61.6	48.3	36.1	31.6	47.8
1936	34.6	28.2	40.8	50.6	56.4	61.6	66.5	66.0	57.9	52.6	38.6	36.8	49.2
1937	18.7	35.2	43.0	45.4	54.0	60.2	67.4	63.2	59.0	52.3	42.0	38.0	48.2
1938	34.7	33.8	39.8	47.6	53.2	61.9	69.2	62.4	61.6	48.1	34.4	33.9	48.4
1939	35.8	32.4	43.6	49.9	55.8	57.2	68.8	66.6	59.2	50.0	42.2	40.1	50.1
1941	34.4	39.0	43.0	47.6	52.6	57.5	66.9	63.4	53.6	47.0	43.4	34.0	48.5
1942	23.2	35.2	40.6	47.8	50.8	56.2	67.0	65.8	59.0	51.5	39.4	37.6	47.8
1943	28.2	38.0	39.4	48.4	49.3	55.0	65.8	62.0	62.8	49.9	39.5	32.2	47.5
1944	31.6	34.6	40.2	45.0	53.0	57.2	66.5	63.6	61.4	54.2	38.0	30.7	48.0
1945	34.8	37.0	38.4	44.2	52.8	57.2	66.2	65.2	56.6	51.2	40.7	35.8	48.3
1946	36.6	38.0	41.4	46.8	53.6	56.8	64.8	64.8	55.8	43.8	37.1	37.1	48.0
1947	31.6	40.6	44.2	47.7	57.2	56.8	64.2	61.7	59.4	51.0	39.8	37.4	49.3
1948	34.2	33.2	38.0	42.8	49.6	60.8	61.9	61.4	55.1	47.9	38.4	28.4	46.0
1949	19.3	34.4	39.0	49.2	55.8	58.1	63.2	61.8	58.0	45.5	45.1	34.1	47.0
1950	22.4	36.6	39.4	43.9	51.0	58.5	64.5	65.1	58.2	49.9	43.4	41.3	47.9
1951	31.5	37.6	37.6	46.7	51.8	59.3	66.3	62.8	59.1	47.3	39.3	29.8	47.4
1952	29.7	36.7	38.2	49.0	52.7	56.4	66.3	63.8	59.5	52.2	32.4	31.9	47.4
1953	41.3	37.2	40.5	43.9	48.9	52.9	64.3	62.3	59.7	48.7	43.9	36.9	48.4
1954	33.0	40.3	36.6	46.5	53.6	55.0	63.5	58.5	54.4	45.6	43.6	33.1	47.0
1955	31.9	33.1	35.7	40.7	48.9	58.8	62.0	62.2	56.6	49.2	36.4	32.6	45.7
1956	34.4	31.1	40.0	46.2	53.5	55.2	66.6	62.4	56.8	46.5	36.6	37.2	47.2
1957	19.8	36.2	41.0	46.0	54.2	60.7	62.8	59.9	59.0	45.3	37.2	38.6	46.8
1958	35.8	43.7	37.7	44.5	58.1	60.8	67.7	67.7	57.0	50.6	40.9	40.5	50.4
1959	36.2	34.6	41.6	46.5	48.4	60.2	67.5	61.9	55.4	50.0	40.1	33.6	48.0

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	0.06	0.25	0.77	0.59	0.13	1.82	0.00	0.09	0.38	0.48	0.56	0.70	5.83
1932	1.59	0.06	0.60	0.34	2.15	T	0.04	0.12	0.00	0.44	1.02	0.39	6.75
1933	0.57	0.57	0.30	0.14	0.68	1.01	0.63	T	0.30	0.30	0.09	0.37	4.96
1934	0.46	0.52	0.57	0.98	0.28	2.05	0.09	0.78	0.31	0.57	0.99	1.02	8.62
1935	1.32	0.36	0.30	1.40	0.54	0.64	1.86	0.00	0.11	0.85	0.41	1.35	9.14
1936	1.75	0.56	0.19	1.19	1.00	1.28	0.14	0.00	0.75	0.04	0.15	0.85	7.90
1937	1.21	0.77	1.24	1.03	0.44	1.87	0.18	0.26	0.85	1.15	1.63	1.37	12.00
1938	0.49	2.20	0.66	1.24	0.93	0.26	0.30	0.00	0.52	0.49	0.45	0.48	8.02
1939	0.97	0.40	0.88	0.30	0.72	0.57	0.28	0.00	0.53	0.40	0.00	1.00	6.05
1940	1.50	0.79	1.56	1.42	0.26	0.22	0.71	0.00	1.78	0.29	0.75	0.58	9.86
1941	0.96	0.83	0.33	0.60	0.88	0.80	0.76	0.71	0.62	0.96	1.78	1.27	10.50
1942	1.12	0.66	0.00	0.50	0.74	0.46	0.26	0.02	0.61	0.49	2.55	1.98	9.39
1943	2.07	0.23	0.58	0.94	0.10	1.07	0.17	0.66	0.00	1.48	0.70	0.28	8.28
1944	0.35	1.03	0.19	0.97	0.21	2.07	0.19	0.01	0.49	1.24	0.81	0.89	8.45
1945	1.03	0.44	0.09	0.02	2.15	0.13	0.05	0.26	0.43	0.75	1.63	2.14	9.12
1946	1.15	0.52	1.03	0.07	0.60	0.81	0.06	0.77	0.26	0.43	0.93	0.17	6.80
1947	0.48	0.67	0.50	0.35	0.63	1.14	1.15	0.26	0.17	1.64	1.00	0.36	8.35
1948	0.93	1.43	0.64	0.78	2.38	1.68	0.60	0.79	1.27	0.16	1.15	2.38	14.19
1949	0.44	0.44	1.31	0.18	0.63	0.02	0.00	T	0.18	0.08	0.71	0.40	4.39
1950	3.08	0.40	0.22	0.35	0.22	3.22	T	0.15	0.14	3.11	0.74	1.27	12.90
1951	1.27	1.18	0.92	0.24	1.56	0.04	0.24	0.14	0.04	1.18	1.26	1.65	9.72
1952	0.38	1.31	0.25	T	0.32	3.14	T	0.15	1.08	0.00	0.00	1.77	8.40
1953	1.34	1.73	0.73	0.22	1.68	1.11	0.00	1.39	T	0.29	1.62	1.28	11.39
1954	1.22	0.12	0.21	0.05	0.61	1.49	0.00	0.35	0.73	0.18	0.19	0.06	5.21
1955	0.26	0.06	0.02	0.56	0.23	0.10	0.13	0.00	0.06	0.35	1.38	2.69	5.84
1956	1.94	1.20	0.08	0.05	3.63	0.83	0.65	T	0.01	0.91	0.29	0.32	9.91
1957	0.55	0.17	1.07	0.07	1.60	0.30	0.05	0.05	1.00	1.18	0.18	1.96	8.18
1958	1.06	1.44	0.45	0.50	1.81	2.41	0.42	0.18	0.50	T	1.36	1.17	11.30
1959	1.02	1.00	T	T	0.35	0.65	0.50	0.00	0.20	0.58	0.30	0.19	4.79

STATION HISTORY

THE FIRST OFFICIAL WEATHER OBSERVATIONS WERE TAKEN FOR REDMOND BY MR. EARLE E. FOOTE ON APRIL 7, 1911, AT A FARM RESIDENCE ABOUT 1 MILE NORTH OF THE CITY, AT AN ELEVATION OF 2,990 FEET. MR. FOOTE CONTINUED THESE RECORDS FOR JUST A FEW DAYS OVER ONE YEAR, UNTIL APRIL 30, 1912, DURING THE NEXT FEW YEARS THE OBSERVING PROGRAM WAS CARRIED ON BY SEVERAL DIFFERENT INDIVIDUALS. THEIR PERIOD OF SERVICE TOGETHER WITH THE LOCATION OF THE STATION, WHEN KNOWN, IS SHOWN BELOW:

MR. JOHN TUCK, JUNE 17, 1912 AT THE DEMONSTRATION FARM 1 MILE NORTH OF REDMOND.

MR. T. G. STEVENS, NOVEMBER 1, 1912-MARCH 12, 1915, THOUGH MOST OF 1914 RECORDS WERE MISSING. ALSO AT DEMONSTRATION FARM.

MR. AUGUST A. ANDERSON, APRIL 1, 1915-JANUARY 31, 1917 AT A FARM RESIDENCE APPROXIMATELY 1 MILE SOUTHWEST OF REDMOND, ELEVATION STILL 2,990 FEET.

ONE OR TWO OTHER PERSONS HAD THE STATION BRIEFLY, BUT FAILED TO KEEP ANY RECORDS, AND IT WAS SHORTLY DISCONTINUED NOT TO BE REACTIVATED UNTIL AUGUST 1, 1930, WHEN MR. PERCY ARKLE BEGAN KEEPING THE OFFICIAL RECORDS AT HIS RESIDENCE IN THE CITY ABOUT 2.5 BLOCKS FROM THE POST OFFICE. THE EXACT ADDRESS IS NOT KNOWN, BUT THE ELEVATION IS GIVEN AS 2,983 FEET. AN OBSERVING PROGRAM IN THE REDMOND AREA HAS BEEN CONTINUOUS SINCE THAT TIME. IN PREPARING THIS SUMMARY, RECORDS PRIOR TO 1930 WERE NOT USED, BECAUSE OF THEIR INTERMITTENT NATURE. THE OBSERVERS OF THE LATER PERIOD (AFTER 1930) TOGETHER WITH THEIR PERIOD OF SERVICE AND LOCATION OF THEIR STATION ARE SHOWN BELOW:

MR. PERCY ARKLE, AUGUST 1, 1930-JUNE 14, 1938, AT HIS HOME 2.5 BLOCKS FROM REDMOND POST OFFICE, ELEVATION 2,983 FEET.

MR. L. E. GARRISON, JUNE 15, 1938-SEPTEMBER 6, 1942, AT HIS HOME ON THE SOUTHWEST EDGE OF TOWN ON THE MCKENZIE HIGHWAY, ELEVATION 2,983 FEET, BUT WITHIN CITY LIMITS. A THREE MONTHS BREAK IN THE RECORDS IN 1940 PREVENTED THE USE OF THAT YEAR IN THIS SUMMARY.

MRS. A. M. CHRISTENSON, SEPTEMBER 7, 1942-AUGUST 31, 1943, AT HER HOME ONE-HALF MILE NORTHWEST OF THE POST OFFICE, ELEVATION 2,983 FEET.

MR. J. M. SHIVELY, SEPTEMBER 5, 1943-AUGUST 11, 1944, AT HIS HOME 1 BLOCK NORTHWEST OF POST OFFICE, ELEVATION 2,982 FEET.

MR. C. W. JENSEN, AUGUST 12, 1944, TO PRESENT AT HIS HOME, 341 W. DOGWOOD AVENUE, 0.3 MILE NORTH-NORTHEAST OF THE REDMOND POST OFFICE, WITH AN ELEVATION OF 2,994 FEET. DURING THE TWELVE YEARS HE HAS MAINTAINED THIS STATION THERE HAS BEEN ONLY ONE SHORT INTERRUPTION OF A FEW MONTHS IN 1951. IN PREPARING THIS SUMMARY THE RECORDS FROM THE C.A.A. STATION AT THE REDMOND AIRPORT WERE USED FOR THAT PERIOD. THE AIRPORT IS LOCATED 1 MILE SOUTHEAST OF THE REDMOND POST OFFICE, AT AN ELEVATION OF 3,075 FEET.

AT THE TIME OF MRS. CHRISTENSON'S APPOINTMENT, SEPTEMBER 7, 1942, A RECORDING RAIN GAGE WAS ADDED TO THE STATION'S EQUIPMENT, AND RECORDS FROM THIS INSTRUMENT ARE ALSO AVAILABLE AFTER THAT DATE.

*MAXIMUM PRECIPITATION AMOUNTS RECORDED FOR 1, 2, 3, 6, AND 12 HOUR PERIODS

LENGTH OF PERIOD (IN HOURS)		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
1		0.11	0.17	0.10	0.15	0.48	0.56	0.34	0.46	0.24	0.55	0.18	0.15
	Year	1945	1953	1946+	1944	1956	1952	1948	1944	1942	1944	1942+	1957+
2		0.19	0.25	0.16	0.25	0.59	0.65	0.37	0.52	0.40	0.94	0.35	0.25
	Year	1945	1953	1943	1947	1956	1952	1956	1944	1942	1944	1942	1957+
3		0.25	0.33	0.20	0.26	0.59	0.67	0.39	0.55	0.46	0.94	0.45	0.35
	Year	1943+	1953	1957+	1947	1956	1952	1956	1944	1942	1944	1942	1948
6		0.43	0.47	0.30	0.27	0.63	0.72	0.41	0.55	0.60	0.94	0.63	0.56
	Year	1943	1944	1957	1944	1956	1950	1956+	1944	1942	1944	1942	1945
12		0.70	0.61	0.34	0.35	0.75	1.05	0.58	0.55	0.71	0.94	0.83	0.97
	Year	1943	1944	1957	1943	1945	1950	1947	1944	1948	1944	1953	1945

*The above are from Weather Bureau Technical Paper No. 15, "Maximum Station Precipitation for 1, 2, 3, 6, 12, and 24 Hours" Part XII, for the period 1942 through 1950 and from the published "Oregon Hourly Precipitation Data" for the period 1951 through 1959. Records were obtained from an 8-inch automatic, recording, weighing-type rain gage.

+ Also earlier years.