

U. S. DEPARTMENT OF COMMERCE

CHARLES SAWYER, *Secretary*

WEATHER BUREAU

F. W. REICHELDERFER, *Chief*

# LOCAL CLIMATOLOGICAL SUMMARY

WITH COMPARATIVE DATA

1949

MEACHAM, OREGON

Compiled under the direction of

DOUGLAS H. PARROTT



SEATTLE 1950

# METEOROLOGICAL DATA FOR THE CURRENT YEAR

MEACHAM  
OREGON 1949

Month	Temperature								Precipitation								Relative humidity				Wind				Number of days																
	Averages				Extremes				Total	Greatest in 24 hrs.	Date	Snow, Sleet, Hail			Total	Greatest in 24 hrs.	Date	4:30 a. PST			10:30 p. PST			Average hourly speed	Prevailing direction	Fastest mile *		Percent of possible sunshine	Average sky cover sunrise to sunset	Sunrise to sunset				Precipitation .01 inch or more	Snow, Sleet, Hail .01 or more	Thunderstorms	Heavy fog	Max. temp. 90° and above	Min. temp. 32° and below	37° and below	Zero and below
	Daily maximum	Daily minimum	Monthly	Highest	Date	Lowest	Date	Total				Greatest in 24 hrs.	Date	4:30 a. PST				10:30 a. PST	4:30 p. PST	10:30 p. PST	Speed	Direction	Date			Percent of possible sunshine	Average sky cover sunrise to sunset			Clear	Partly cloudy	Cloudy									
J	20.5	4.3	12.4	31	17	-12	10	1631	1.48	0.28	1-2	24.5	5.4	1-2	83	80	80	83	6.4	SE	24	W	7	7	7.2	7	5	19	14	10	0	4	0	31	31	11					
F	20.7	2.7	17.5	54	28	-	3	1047	6.71	1.85	18-19	62.0	13.0	18-19	65	74	81	87	9.1	SE	32	W	27	27	8.3	4	1	23	20	13	0	4	0	13	28	2					
M	41.4	28.1	34.8	52	4	16	28	936	1.25	0.18	26	7.9	2.1	26	86	76	74	87	6.2	SE	25	W	27	27	8.1	2	7	22	15	4	0	0	0	12	0	0					
A	55.9	33.2	44.6	72	17	24	3	813	1.00	0.35	21	2.7	1.6	29	77	54	51	88	5.8	W	18	W	20	20	6.3	7	9	14	9	1	1	2	0	0	0	12	0	0			
M	62.7	41.1	51.9	81	25	27	4	409	1.96	0.59	1	T	T	2+	83	59	54	72	5.4	W	18	W	2	2	6.2	10	5	16	10	0	4	0	0	0	0	0	0				
J	68.5	41.8	55.0	84	6	31	17	306	0.78	0.41	16	T	T	16+	76	43	35	63	6.9	W	32	W	24	24	4.9	9	16	5	7	0	0	0	0	0	0	0	0				
J	76.8	47.5	62.2	93	31	39	6	150	0.22	0.10	23	0.0	0.0		64	36	29	53	6.1	W	19	W	26	26	3.4	18	8	5	4	0	0	0	0	0	0	0	0				
A	76.7	48.2	62.4	91	1	38	13	131	0.16	0.09	23	0.0	0.0		68	36	31	54	5.7	W	21	W	6	6	3.3	17	10	9	3	0	0	0	0	0	0	0	0				
S	69.9	44.8	57.4	87	1	30	12	240	2.01	0.96	9-10	T	T	9	67	42	44	62	5.7	W	21	W	16	16	5.2	10	10	10	8	0	2	0	0	0	0	0	0				
O	49.6	31.5	40.6	65	31	18	19	758	2.89	0.69	6-7	4.2	3.0	6-7	77	62	63	72	5.9	ESE	25	W	9	9	5.2	8	11	12	9	3	0	0	0	0	0	0	0				
N	52.6	36.1	44.4	68	1	26	21	619	5.31	1.76	22-23	4.9	2.4	9	71	63	67	73	6.3	ESE	27	W	27	27	5.4	8	8	16	11	2	0	0	0	0	0	0	0				
D	34.5	22.3	28.4	49	2+	8	20	1132	3.06	0.55	15-16	41.0	8.3	15-16	81	77	80	81	6.3	ESE	30	W	24	24	5.1	1	3	27	20	13	0	0	0	0	0	0	0	0			
Year	53.6	33.2	43.5	93	31	-12	10	7972	26.83	1.85	18-19	147.2	13.0	18-19	76	58	57	71	6.5	SE	32	W	2/14	6/24	6.2	101	91	173	130	46	18	26	4	62	164	13					
* Data entered in column headed Fastest Mile in this table is the fastest mile observed. This station is not equipped with automatic recording wind instruments.																																									

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## MEANS AND EXTREMES FOR PERIOD OF RECORD

Month	Temperature								Precipitation												Relative humidity				Wind				Mean number of days																																				
	Means				Extremes				Mean total	Maximum monthly	Year	Minimum monthly	Year	Maximum in 24 hr.	Year	Snow, Sleet, Hail				4:30 a. PST	10:30 a. PST	4:30 p. PST	10:30 p. PST	Mean hourly speed	Fastest mile		Per cent possible sunshine	Average sky cover sunrise to sunset	Sunrise to sunset				Precipitation .01 inch or more	Snow, Sleet, Hail .01 inch or more	Thunderstorms	Heavy fog	Max. temp.	Min. temp.																											
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean degree days								Mean total	Maximum monthly	Year	Minimum monthly						Year	Maximum in 24 hr.			Year	Mean total	Maximum monthly	Year							Maximum in 24 hr.	Year	4:30 a. PST	10:30 a. PST	4:30 p. PST	10:30 p. PST	Mean hourly speed	Prevailing direction	Fastest mile		Per cent possible sunshine	Average sky cover sunrise to sunset	Precipitation .01 inch or more	Snow, Sleet, Hail .01 inch or more	Thunderstorms	Heavy fog	Max. temp.	Min. temp.									
																																															Speed	Direction									Year	Per cent possible sunshine	Average sky cover sunrise to sunset	Precipitation .01 inch or more	Snow, Sleet, Hail .01 inch or more	Thunderstorms	Heavy fog	Max. temp.	Min. temp.
Year	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Mean degree days	Mean total	Maximum monthly	Year	Minimum monthly	Year	Maximum in 24 hr.	Year	Mean total	Maximum monthly	Year	Maximum in 24 hr.	Year	4:30 a. PST	10:30 a. PST	4:30 p. PST	10:30 p. PST	Mean hourly speed	Prevailing direction	Speed	Direction	Year	Per cent possible sunshine	Average sky cover sunrise to sunset	Precipitation .01 inch or more	Snow, Sleet, Hail .01 inch or more	Thunderstorms	Heavy fog	Max. temp.	Min. temp.																												
(a) J	5	5	5	5	1945	-12	1949	1254	4.08	6.75	1945	1.48	1949	2.37	1946	38.7	67.7	1946	22.9	1947	85	79	80	85	6.4	SE				7.8	4	5	5	5	5	5	5	5	5	5	5																								
F	31.7	17.4	24.6	50	1945	-12	1949	1254	4.08	6.75	1945	1.48	1949	2.37	1946	38.7	67.7	1946	22.9	1947	85	79	80	85	6.4	SE				7.8	4	5	5	5	5	5	5	5	5	5	5																								
M	36.8	22.5	29.7	51	1946	-	1949	995	4.78	6.71	1949	0.83	1947	2.34	1945	32.7	63.0	1949	14.2	1948	87	75	77	85	9.1	SE				8.5	2	3	23	17	8	0	0	0	0	0	0																								
A	41.6	26.5	34.1	66	1947	-	1945	956	3.08	5.54	1945	1.25	1949	1.19	1946	26.6	55.0	1945	10.8	1945	86	72	73	79	6.2	W				7.8	3	6	21	17	5	5	5	5	5	5	5																								
M	50.6	31.2	40.9	81	1948	19	1945	724	2.59	3.61	1945	1.00	1949	1.27	1945	16.8	34.9	1945	13.2	1945	84	62	62	79	5.8	W				7.6	3	6	21	17	5	5	5	5	5	5	5																								
J	60.5	39.5	49.9	87	1947	24	1948	468	2.97	4.36	1948	1.10	1947	1.51	1946	1.3	6.4	1948	3.6	1948	83	59	57	76	5.4	W				6.8	6	9	15	13	0	6	4	0	0	0	0																								
J	65.2	42.3	53.8	89	1948	31	1949	342	2.17	3.48	1947	0.78	1949	1.05	1947	0.1	0.7	1945	0.7	1945	83	57	52	73	6.9	W				6.2	7	10	12	12	0	4	2	0	0	0	0																								
J	76.5	48.4	62.5	93	1946	36	1945	133	1.01	1.36	1948	0.02	1945	0.96	1946	T	T	1947	T	1947	68	43	34	56	6.1	W				3.4	17	10	4	+	0	0	0	0	0	0	0																								
A	76.0	48.3	62.3	91	1949	36	1948	127	0.36	0.74	1948	0.13	1947	0.32	1945	0.0	0.0				69	41	35	56	5.7	W				3.2	16	10	7	6	+	0	0	0	0	0	0																								
S	66.6	42.9	54.8	89	1947	29	1947	321	2.14	2.86	1947	1.62	1948	0.96	1949	T	T	1945	7	1945	72	51	49	67	5.7	W				5.2	12	8	11	9	0	2	2	0	0	0	0																								
O	53.4	38.9	44.2	78	1945	18	1949	646	3.22	6.00	1946	1.01	1945	1.57	1946	4.6	14.9	1948	10.8	1948	80	64	65	76	5.9	SE				6.4	8	7	16	12	1	0	0	0	0	0	0																								
N	41.0	38.2	34.6	68	1949	11	1946	910	5.33	7.77	1945	3.77	1948	2.51	1945	25.8	41.9	1945	9.9	1947	84	77	81	84	6.3	SE				6.3	3	4	23	18	8	0	0	0	0	0	0																								
D	33.9	22.4	28.2	50	1946	0	1948	1141	5.25	7.48	1946	3.06	1949	3.00	1946	38.9	68.8	1948	13.1	1948	87	81	84	87	6.3	SE				6.5	1	6	24	18	12	0	0	0	0	0	0																								
Year	52.8	33.7	43.3	93	1946	-12	1949	8017	36.99	7.77	1945	0.02	1945	3.00	1946	185.5	68.8	1946	22.9	1947	81	63	62	76	6.5	SE				6.7	83	82	196	161	51	22	40	2	46	176	5																								

(a) Length of record, years.

\*\* This station was established in March, 1943. Records for that year are therefore incomplete. Station records for the year 1944 are also incomplete. Length of record therefore includes only the years 1945, 1946, 1947, 1948 and 1949.

## MONTHLY AND SEASONAL DEGREE DAYS

Season	July</
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## AVERAGE TEMPERATURE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	An'l.
1943	-	-	41.9	43.4	43.4	-	62.2	60.2	-	46.0	-	-	-
1944	-	-	31.8	-	-	-	-	58.0	54.0	32.6	28.0	-	-
1945	29.4	30.4	31.4	37.4	48.6	52.4	66.6	65.0	53.2	49.8	32.6	27.8	43.8
1946	28.3	30.0	34.2	42.2	49.6	52.4	62.6	63.8	53.3	38.4	32.0	32.4	43.3
1947	24.2	34.0	39.4	42.4	54.0	52.2	61.8	60.4	56.3	45.9	32.5	29.8	44.4
1948	28.5	26.5	30.6	37.8	45.4	57.0	59.2	59.5	53.8	46.1	31.7	22.4	41.5
1949	12.4	27.5	34.8	44.6	51.9	55.0	62.2	62.4	57.4	40.6	44.4	28.4	43.5

## TOTAL PRECIPITATION

MEACHAM  
OREGON 1949

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1943	-	-	1.15	3.35	2.74	-	0.89	1.39	-	3.58	-	-	-
1944	-	-	2.18	-	-	-	-	2.46	0.69	3.05	1.16	-	-
1945	6.75	6.58	5.54	3.61	4.07	1.46	0.02	0.53	2.37	1.01	7.77	6.51	46.22
1946	6.11	3.98	3.31	1.82	3.37	2.32	0.97	0.25	1.83	6.00	4.28	7.48	41.72
1947	3.75	0.83	3.01	3.09	1.10	3.48	0.50	0.13	2.86	4.06	5.52	3.80	32.13
1948	2.30	5.81	2.34	3.41	4.36	2.80	1.36	0.74	0.62	2.13	3.77	5.41	35.05
1949	1.48	6.71	1.25	1.00	1.96	0.78	0.22	0.16	2.01	2.89	5.31	3.06	26.83

## MONTHLY AND SEASONAL SNOWFALL

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1943-44	0	0	-	0.3	-	-	-	18.8	-	-	-	-	-
1944-45	-	0	0	0	19.1	9.9	41.8	26.4	55.0	34.9	T	0.7	-
1945-46	0	0	T	3.6	41.9	30.5	67.7	40.0	25.0	6.3	0	T	215.0
1946-47	0	0	0	14.9	22.2	23.1	49.7	1.9	19.9	9.6	0	T	141.3
1947-48	0	0	T	T	37.0	30.9	9.7	33.2	25.0	30.4	6.4	0	172.6
1948-49	0	0	T	0.4	23.2	68.8	24.5	62.0	7.9	2.7	T	T	189.5
1949	0	0	T	4.2	4.9	41.0	-	-	-	-	-	-	-

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total

## STATION HISTORY

The Weather Bureau Office at Meacham, Oregon, was established and put into operation on March 23, 1943. Its location of Latitude 45° 30' N. Longitude 118° 25' W. is in the Blue Mountains of Oregon. The station is located on the east side of the Meacham, Emergency Landing Strip. It is fairly open country to the west, but east of the station there are trees which obscure any landmarks in that direction. The farthest visibility marker is a hill five miles to the northwest.

The ground on which the instruments are set is bare and level. Most instruments are either in a shelter or on supports or towers. An anemometer and wind vane are located on a tower which is twelve feet above the roof or about twenty-eight feet above the ground. These were installed during March, 1943. The instrument shelter is located between the office building and the living quarters and is five and six tenths feet above the ground. It contains a dry and wet bulb thermometer and maximum and minimum thermometer. A psychrometer fan is used in determining wet bulb temperatures. This was set up in March, 1943. An

8-inch rain gage is located near the instrument shelter and was also set up in March, 1943. A weighing type rain gage is located between the office building and the living quarters and is mounted on a steel tower 8.9 feet above the ground and is of the single traverse type. It was located here in March, 1943. The station barometer was located here in March, 1943 and is 4056 feet above mean sea level and is mounted on a shielded barometer board in the office building. A 4-day barograph is located in the office building and was placed there in March, 1943. The ceiling light with a 500 watt bulb was installed in March, 1943 and has a 440 foot base line.

The observational program of this station consists of taking and recording hourly observations and three and six hourly additive data. These reports are transmitted over teletype circuit number 8011.

Normal station complement consists of five meteorological aids and station operations covers 24 hours daily, seven days a week. In the winter the station is accessible only by skis or snowshoes because of heavy snow.