

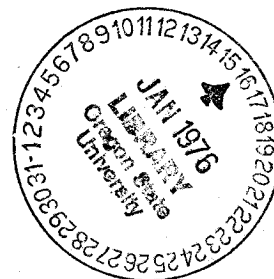
DUPLICATE
no. 277

Local Climatological Data for Oregon State University 1973

With Normals, Means, and Extremes

(Special Report) 277

Revised November 1974



Agricultural Experiment Station
Oregon State University, Corvallis

in cooperation with the

United States Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service

PREFACE

Miscellaneous Paper 105, Agricultural Experiment Station, Oregon State University, entitled "A Summary of Climate and Weather for Corvallis, Oregon 1899 through 1960" by Wheeler Calhoun was published in March 1961. The United States Department of Commerce National Weather Service, working with the Crop Science Department at Oregon State University, has instrumented the Hyslop Field Lab Weather Station to measure additional elements important to agricultural scientists. There will be a continuing need for a publication to make these data readily available to researchers. It is planned that local climatological data from the Hyslop Field Lab Weather Station will be published annually.

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National Weather Service - Hyslop Field Laboratory, Corvallis, Oregon

Average Daily Radiation in Langleys
Seven Year Average

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	76	108	180	209	379	534	610	482	405	334	146	71
2	67	127	188	334	482	506	685	534	457	329	190	84
3	115	116	167	387	426	493	683	528	462	309	130	94
4	92	89	170	335	395	590	565	420	450	271	126	75
5	78	79	200	330	353	568	596	501	358	283	147	62
6	88	112	212	326	315	451	520	488	368	257	161	96
7	84	158	257	339	412	533	538	506	391	267	120	73
8	79	152	276	286	302	433	543	528	425	278	86	64
9	93	132	203	248	372	419	506	528	442	228	117	70
10	100	148	176	376	478	494	530	581	374	205	121	95
11	73	158	216	367	489	463	586	550	431	160	138	102
12	86	121	219	302	494	600	657	464	394	198	102	78
13	69	153	232	353	558	559	582	488	375	204	112	61
14	84	122	225	339	539	478	620	502	345	258	105	57
15	63	133	247	391	456	500	666	482	336	256	101	44
16	77	131	263	322	564	559	578	433	383	257	122	43
17	97	112	331	320	506	525	659	503	374	199	74	88
18	103	148	287	270	553	622	650	463	295	219	76	41
19	111	136	254	340	563	619	621	490	305	141	75	39
20	132	189	311	273	416	559	549	468	243	135	76	41
21	131	173	230	348	570	551	604	429	271	120	71	72
22	129	165	215	402	419	542	567	474	285	112	65	54
23	102	179	253	331	496	500	591	426	346	143	40	60
24	116	181	228	336	474	442	590	363	354	168	68	68
25	129	211	254	417	484	553	550	480	346	169	75	100
26	116	206	207	332	493	570	572	468	349	158	71	80
27	125	198	271	257	549	517	541	444	406	127	101	82
28	143	128	272	406	585	533	613	474	295	184	109	54
29	111	128	321	324	541	522	560	488	304	207	115	70
30	95		310	362	519	589	566	361	344	164	73	54
31	114		292		556		504	349		118		83

Latitude 44° 38'
 Longitude 123° 12'
 Elevation (ground) 225 Ft.

METEOROLOGICAL DATA FOR THE CURRENT YEAR

HYSLOP FIELD LAB, CORVALLIS, OREGON 1973

Month	Temperature							Degree days	Precipitation					Relative humidity				Wind			Evaporation in Inches	Average sky cover sunrise to sunset	Number of days													
	Averages			Extremes					Total	Greatest in 24 hrs.	Date	Snow, Sleet			4 A.M.	10 A.M.	4 P.M.	10 P.M.	Average hourly speed	Prevailing direction			Fastest mile			8 A.M.			Precipitation .01 inch or more	Snow, Sleet, I.O or more	Thunderstorms	Heavy fog	Max. temp.		Min. temp.	
	Daily maximum	Daily minimum	Monthly	Highest	Date	Lowest	Date					Total	Greatest in 24 hrs.	Date									Speed	Direction	Date	Clear	Partly cloudy	Cloudy					90° and above	32° and below	32° and below	Zero and below
J	44.8	31.3	38.1	56	15	20	7	5.56	1.60	13	0			85	76	76	84	4.3	S					8	0	23	21				0	1	19	0		
F	52.6	36.8	44.7	63	22	27	19	1.65	.70	25	0			83	72	61	78	4.4	N					8	1	19	12				0	0	8	0		
M	53.3	36.3	44.8	62	16	31	14	3.63	.80	19	0			96	67	63	92	3.5	S					10	6	15	19				0	0	5	0		
A	60.9	39.1	50.0	73	12	29	2	1.75	.49	17	0			92	50	43	77	3.9	N			4.41		17	3	10	9				0	0	4	0		
M	70.1	43.5	56.8	88	14	34	26	.85	.29	24	0			91	51	35	71	4.2	N			6.10		20	3	8	11				0	0	0	0		
J	73.4	49.6	61.5	92	22	33	1	1.38	.58	25	0			91	55	37	68	4.2	N			6.50		13	5	12	8				1	0	0	0		
J	82.9	51.0	67.0	99	15	43	24	.02	.02	21	0			90	44	24	61	4.5	N			9.48		22	1	8	1				10	0	0	0		
A	78.9	48.6	63.8	88	13	37	22	.70	.35	25	0			93	58	32	65	4.3	N			6.88		23	1	7	3				0	0	0	0		
S	75.1	50.5	62.8	97	5	41	1	2.52	.45	23	0			84	73	40	71	4.8	N			4.79		18	3	9	9				2	0	0	0		
O	62.0	43.6	52.8	72	16	34	2	2.70	.47	21	0			96	90	58	91	3.2	S			2.09		4	6	21	18				0	0	0	0		
N	49.3	38.3	43.8	62	10	27	3	18.28	2.22	16	0			96	91	88	94	5.3	S					5	1	24	28				0	0	7	0		
D	48.9	38.5	43.7	36	25	30	9	12.40	2.17	21	0			96	92	91	95	4.5	S					1	3	27	29				0	0	4	0		
Year	62.7	43.0	52.5	99	JUN 19	20	JAN 7	51.44	2.22	NOV 16	0.2			91	68	54	79	4.3	N			40.25		149	33	183	168				13	1	47	0		

∅ Also on earlier dates

NORMALS, MEANS, AND EXTREMES

Month	Temperature							Normal degree days	Precipitation							Relative humidity				Wind			Mean Daily Radiation in Langley's	Pct. of poss. sunshine	Mean Monthly Evaporation in Inches	Mean number of days														
	Normal			Extremes					Normal total	Maximum monthly	Year	Minimum monthly	Year	Maximum in 24 hrs.	Year	Snow, Sleet			4 A.M.	10 A.M.	4 P.M.	10 P.M.				Mean hourly speed	Prevailing direction	Fastest		8 A.M. Observation			Precipitation .01 inch or more	Snow, Sleet, I.O or more	Thunderstorms	Heavy fog	Max. temp.		Min. temp.	
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year									Mean total	Maximum monthly	Year										Maximum in 24 hrs.	Year	Speed	Direction	Clear					Partly cloudy	Cloudy	90°	32°
(a)	30 e	30 e	30+	80			80	30+	80		80		66		34	80		7	7	7	7					6		17	34	34	34	34	34	34	34	34				
J	44.4	32.1	38.8	64	1940	-1	1950	7.08	15.57	1970	1.99	1920	4.28	1965	4.8	51.9	1950	91	85	82	91					102			3	9	19	19	0	1	13	#				
F	49.5	34.7	43.1	69	1916	-5	1899	4.63	15.23	1904	.12	1920	2.76	1961	0.8	9.5	1923	91	82	67	87					143			5	10	13	17	0	#	7	0				
M	54.0	36.8	45.5	78	1947	13	1891	4.20	11.70	1904	.43	1926	1.89	1916	0.6	6.5	1891	90	72	60	84					247			7	12	12	19	0	0	7	0				
A	61.0	40.5	50.1	91	1926	24	1968	2.05	7.99	1937	.22	1939	2.06	1937	T	1.5	1911	90	64	51	79					333	2.48		9	12	9	13	0	0	9	0				
M	67.7	45.5	55.7	99	1922	28	1915	1.77	5.71	1896	.16	1947	2.23	1941	0	0	-	93	54	42	80					481	4.17		10	13	8	11	0	0	#	0				
J	72.9	49.2	61.0	102	1925	32	1929	1.15	3.48	1952	0	1918	2.14	1952	0	0	-	92	54	41	79					544	5.41		10	12	8	8	1	0	#	0				
J	81.2	51.6	65.9	107	1946	36	1921	0.33	2.72	1947	0	1967	1.75	1947	0	0	-	91	44	32	75					586	7.72		17	11	3	2	4	0	0	0				
A	81.1	51.2	65.8	105	1972	35	1910	0.55	5.24	1968	0	1955	1.35	1968	0	0	-	91	47	31	71					477	6.81		16	10	5	3	3	0	0	0				
S	75.8	48.3	62.0	103	1944	26	1919	1.31	5.40	1920	T	1942	2.18	1969	0	0	-	86	58	41	74					370	4.58		14	11	5	6	2	0	#	0				
O	64.2	43.0	53.2	90	1936	13	1919	3.78	9.70	1950	T	*	2.26	1924	0.2	5.0	1936	93	80	56	78					210	1.81		8	12	11	13	0	0	1	0				
N	52.2	37.2	45.3	73	1890	10	1896	6.04	18.28	1973	.22	1890	3.16	1921	0.3	9.5	1955	93	85	82	91					106			4	10	16	17	0	#	6	0				
D	46.8	35.1	41.0	66	1950	-14	1919	6.83	14.47	1968	2.33	1930	3.58	1941	0.8	20.5	1919	93	88	85	92					72			3	8	20	20	0	#	9	#				
Yr.	62.6	42.1	52.3	107	1946	-14	1919	39.70	18.28	1973	0		4.28	1965	7.5	51.9	1950	92	68	56	82					32.98			106	130	129	146	10	1	52	#				

(a) Length of record, years.

∅ Also earlier dates
 e 1931 - 1960 (adjusted to present location)
 # Less than 1
 T Trace
 * Missing Data
 + 1941-1970 Normals

PROBABILITY DATES OF
FIRST FALL OCCURRENCE OF VARIOUS FREEZING
TEMPERATURES

Ten Per Cent Chance Of:

	32°	28°	24°
Albany	October 13	October 31	November 9
Corvallis	October 11	October 25	November 12
Eugene	October 9	October 25	November 7
Forest Grove	September 25	October 19	November 4
Portland	November 3	December 2	December 9
Salem	October 9	October 22	November 7

Twenty Per Cent Chance Of:

	32°	28°	24°
Albany	October 20	November 6	November 20
Corvallis	October 18	November 1	November 23
Eugene	October 16	November 1	November 18
Forest Grove	October 3	October 26	November 15
Portland	November 10	December 9	December 20
Salem	October 16	October 29	November 18

Fifty Per Cent Chance Of:

	32°	28°	24°
Albany	November 3	November 22	December 14
Corvallis	November 1	November 17	December 17
Eugene	October 30	November 17	December 12
Forest Grove	October 17	November 11	December 9
Portland	November 24	December 25	January 13
Salem	October 30	November 14	December 12

Data for these tables extracted from Experiment Station Bulletin No. 581

PROBABILITY DATES OF
LAST SPRING TEMPERATURE OCCURRENCE OF VARIOUS FREEZING
TEMPERATURES

WILLIAMETTE VALLEY

Fifty Per Cent Chance Of:

	24°	28°	32°
Albany	January 21	February 20	April 2
Corvallis	January 28	February 27	April 15
Eugene	January 21	March 6	April 8
Forest Grove	February 10	March 29	April 26
Portland	January 15	January 24	February 28
Salem	February 1	March 9	April 19

Twenty Per Cent Chance Of:

	24°	28°	32°
Albany	February 13	March 12	April 17
Corvallis	February 20	March 19	April 30
Eugene	February 13	March 28	April 23
Forest Grove	March 5	April 18	May 11
Portland	February 7	February 13	March 15
Salem	February 24	March 28	May 4

Ten Per Cent Chance Of:

	24°	28°	32°
Albany	February 25	March 21	April 26
Corvallis	March 4	March 28	May 9
Eugene	February 25	April 6	May 2
Forest Grove	March 17	April 27	May 20
Portland	February 19	February 22	March 24
Salem	March 8	April 7	May 13

Data for these tables extracted from Experiment Station Bulletin No. 581