

Climatology of the United States

No. 20

1971-2000

Station: CHEMULT, OR

COOP ID: 351546

Climate Division: OR 5

NWS Call Sign:

Elevation: 4,760 Feet Lat: 43° 17N

Lon: 121° 47W

Temperature (°F)

Mean (1)				Extremes										Degree Days (1) Base Temp 65		Mean Number of Days (3)					
Month	Daily Max	Daily Min	Mean	Highest Daily(2)	Year	Day	Highest Month(1) Mean	Year	Lowest Daily(2)	Year	Day	Lowest Month(1) Mean	Year	Heating	Cooling	Max >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	38.0	16.0	27.0	58	1962	31	33.2	1981	-28+	1950	3	19.1	1979	1178	0	.0	.0	1.5	5.8	29.6	3.4
Feb	41.9	19.6	30.8	65+	1996	15	36.3	1995	-27	1989	6	21.8	1989	958	0	.0	.0	3.9	2.6	26.3	1.8
Mar	47.6	24.2	35.9	75	1994	28	41.0	1986	-15	1971	1	31.1	1971	903	0	.0	.0	10.6	.5	28.4	.3
Apr	54.7	27.0	40.9	83	1987	27	50.5	1987	3	1963	20	35.0	1975	724	0	.0	.0	19.2	@	26.4	.0
May	64.8	31.8	48.3	94	1986	30	55.8	1992	11	1954	1	43.0	1998	519	0	.0	.1	27.9	.0	21.4	.0
Jun	73.6	35.9	54.8	98	1961	24	59.7	1986	17+	2001	4	50.6	1994	313	7	.0	.8	29.8	.0	11.8	.0
Jul	83.0	39.4	61.2	99+	1988	21	65.6	1985	20+	1988	7	53.2	1993	155	37	.0	5.9	31.0	.0	5.1	.0
Aug	82.4	38.1	60.3	102	1951	20	64.5	1986	22+	1989	31	55.8	1976	166	20	.1	5.4	31.0	.0	6.6	.0
Sep	75.3	32.4	53.9	100+	1988	5	59.0	1991	9+	1970	14	49.0	1986	339	5	.1	1.2	29.5	.0	16.9	.0
Oct	63.7	26.3	45.0	90	1987	1	52.5	1988	0	1972	30	41.6	1984	621	0	.0	@	26.0	@	26.4	@
Nov	44.0	22.6	33.3	75	1949	1	39.8	1995	-26	1955	15	25.9	1994	952	0	.0	.0	7.5	2.4	26.9	1.1
Dec	37.2	15.6	26.4	63	1972	1	31.0	1975	-30	1972	9	19.0	1990	1197	0	.0	.0	1.6	7.1	29.6	3.3
Ann	58.9	27.4	43.2	102	Aug 1951	20	65.6	Jul 1985	-30	Dec 1972	9	19.0	Dec 1990	8025	69	.2	13.4	219.5	18.4	255.4	9.9

+ Also occurred on an earlier date(s)

@ Denotes mean number of days greater than 0 but less than .05

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

(3) Derived from 1971-2000 serially complete daily data

020-A

Climatography of the United States

No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: CHEMULT, OR

COOP ID: 351546

Climate Division: OR 5

NWS Call Sign:

Elevation: 4,760 Feet Lat: 43°17N

Lon: 121°47W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels These values were determined from the incomplete gamma distribution										
Month	Mean	Med-ian	Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year	>= 0.01	>= 0.10	>= 0.50	>= 1.00	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	4.16	3.93	2.48	1975	5	9.81	1995	.49	1985	11.7	8.0	2.7	1.0	.89	1.28	1.89	2.44	3.00	3.59	4.25	5.05	6.11	7.79	9.38
Feb	3.04	2.86	3.32	1982	15	6.95	1999	.13	1992	11.8	7.9	1.8	.4	.52	.78	1.22	1.64	2.07	2.53	3.06	3.70	4.56	5.95	7.28
Mar	2.56	2.08	1.53	1974	28	7.02	1989	.42	1999	11.0	6.2	1.2	.2	.43	.65	1.02	1.37	1.73	2.12	2.57	3.12	3.85	5.02	6.15
Apr	1.26	1.44	1.11	1974	1	2.36	2000	.14	1973	8.4	4.1	.5	.1	.15	.25	.43	.61	.79	1.00	1.24	1.53	1.94	2.60	3.24
May	1.14	.68	1.20	1979	8	5.03	1998	.08	1992	7.6	3.4	.5	.1	.09	.17	.32	.47	.65	.85	1.09	1.39	1.80	2.50	3.19
Jun	.82	.78	2.27	1950	11	2.07	1984	.06	1973	5.4	2.4	.4	.1	.07	.13	.24	.35	.47	.62	.78	1.00	1.29	1.78	2.26
Jul	.59	.32	1.31	1987	22	2.93	1987	.00+	1994	3.5	1.5	.4	.1	.00	.01	.07	.15	.24	.36	.50	.70	.98	1.46	1.96
Aug	.67	.34	1.34	1999	6	3.60	1999	.00+	1995	3.8	1.9	.3	@	.00	.00	.00	.05	.20	.37	.57	.82	1.18	1.78	2.38
Sep	.83	.63	2.00	1957	27	2.90	1986	.00+	2000	4.6	2.3	.5	@	.00	.00	.00	.19	.36	.55	.77	1.05	1.43	2.07	2.70
Oct	1.32	1.14	2.00	1950	28	4.18	1979	.00+	1990	6.0	3.5	.9	.2	.00	.00	.21	.45	.69	.97	1.28	1.67	2.21	3.07	3.93
Nov	3.80	2.96	2.98	1953	22	11.94	1973	.00	1993	12.1	7.7	2.2	.7	.16	.48	1.03	1.59	2.19	2.87	3.67	4.67	6.05	8.34	10.58
Dec	4.17	3.59	3.10	1996	7	15.25	1996	.23	1976	11.4	8.3	2.7	.8	.43	.73	1.31	1.89	2.51	3.22	4.05	5.09	6.51	8.86	11.16
Ann	24.36	23.61	3.32	Feb 1982	15	15.25	Dec 1996	.00+	Sep 2000	97.3	57.2	14.1	3.7	12.93	14.90	17.55	19.65	21.57	23.48	25.50	27.79	30.63	34.88	38.66

+ Also occurred on an earlier date(s)

Denotes amounts of a trace

@ Denotes mean number of days greater than 0 but less than .05

** Statistics not computed because less than six years out of thirty had measurable precipitation

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

(3) Derived from 1971-2000 serially complete daily data

Complete documentation available from:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

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Station: CHEMULT, OR

COOP ID: 351546

Climate Division: OR 5

NWS Call Sign:

Elevation: 4,760 Feet

Lat: 43° 17N

Lon: 121° 47W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										Snow Fall >= Thresholds					Snow Depth >= Thresholds			
Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	23.2	23.4	19	18	14.0	1972	22	41.5	1998	61	1993	27	54	1993	6.9	5.5	3.0	1.5	.3	-9.9	-9.9	-9.9	-9.9
Feb	21.9	22.0	22	23	19.0	1999	6	54.3	1975	66	1993	24	57	1993	6.8	5.6	3.0	1.5	.2	-9.9	-9.9	-9.9	-9.9
Mar	13.1	7.4	14	13	16.0	1975	18	60.5	1975	63	1975	25	43	1975	4.4	3.4	1.1	.5	.3	16.9	15.0	13.2	11.4
Apr	3.4	.5	5	#	9.4	1972	12	14.1	1972	48	1975	7	40	1975	1.6	1.2	.2	@	.0	1.8	1.2	.8	.2
May	.5	.0	#	0	2.0	1977	7	2.5	1977	22	1975	1	5	1975	.6	.2	.0	.0	.0	.3	.2	.2	.1
Jun	.1	.0	0	0	1.5	1971	1	1.5+	1999	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
Jul	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Aug	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.1	.0	0	0	.5	1971	29	.7	1971	0	0	0	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Oct	1.1	.0	#	0	6.5	1996	24	8.0	1996	7	1996	24	#+	1996	.4	.3	.2	.1	.0	.5	.3	.0	.0
Nov	15.0	7.2	3	#	20.5	1977	21	59.1	1977	33	1994	27	24	1994	5.0	3.6	2.0	1.2	.2	7.6	6.2	3.9	1.8
Dec	20.5	19.5	12	8	11.0	1971	12	59.1	1971	42	1982	27	31	1994	7.5	5.8	3.3	1.8	.2	-9.9	-9.9	-9.9	-9.9
Ann	98.9	80.0	N/A	N/A	20.5	Nov 1977	21	60.5	Mar 1975	66	Feb 1993	24	57	Feb 1993	33.4	25.7	12.8	6.6	1.2	-9.9	-9.9	-9.9	-9.9

+ Also occurred on an earlier date(s) #Denotes trace amounts

@ Denotes mean number of days greater than 0 but less than .05

-9/-9.9 represents missing values

Annual statistics for Mean/Median snow depths are not appropriate

(1) Derived from Snow Climatology and 1971-2000 daily data

(2) Derived from 1971-2000 daily data

Complete documentation available from:

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Elevation: 4,760 Feet

Lat: 43° 17N

Lon: 121° 47W

Freeze Data									
Spring Freeze Dates (Month/Day)									
Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	8/04	8/01	7/29	7/27	7/25	7/22	7/20	7/17	7/14
32	8/03	7/28	7/24	7/20	7/17	7/14	7/10	7/06	6/30
28	7/28	7/20	7/14	7/09	7/05	6/30	6/26	6/20	6/12
24	7/08	6/30	6/23	6/18	6/13	6/08	6/03	5/28	5/19
20	6/16	6/06	5/30	5/23	5/17	5/12	5/05	4/28	4/18
16	5/16	5/07	4/30	4/24	4/18	4/13	4/07	3/31	3/22
Fall Freeze Dates (Month/Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	7/31	8/01	8/02	8/03	8/04	8/05	8/06	8/07	8/09
32	7/30	8/02	8/05	8/07	8/09	8/12	8/14	8/17	8/21
28	8/03	8/10	8/14	8/18	8/22	8/26	8/30	9/04	9/10
24	8/21	8/29	9/04	9/09	9/13	9/18	9/23	9/29	10/07
20	9/09	9/17	9/22	9/27	10/01	10/05	10/10	10/15	10/23
16	9/25	10/03	10/09	10/14	10/18	10/23	10/28	11/03	11/11
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	22	18	15	12	10	7	4	1	0
32	44	37	32	27	23	19	14	9	1
28	77	67	60	53	47	41	35	28	17
24	126	114	106	98	91	85	77	69	57
20	173	160	151	143	136	128	120	111	98
16	216	205	196	189	182	175	168	160	148

* Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

Derived from 1971-2000 serially complete daily data

Complete documentation available from:

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Degree Days to Selected Base Temperatures (°F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1178	958	903	724	519	313	155	166	339	621	952	1197	8025
60	1023	818	748	574	370	186	69	70	208	467	802	1042	6377
57	930	734	655	486	286	126	34	32	144	376	712	949	5464
55	868	678	593	428	234	93	20	17	108	318	652	887	4896
50	713	538	439	292	129	33	3	2	43	189	505	732	3618
32	206	113	41	18	1	0	0	0	0	4	102	216	701

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	51	78	161	284	505	683	905	876	656	406	140	42	4787
55	0	0	0	4	25	86	211	181	75	7	0	0	589
57	0	0	0	2	15	59	164	134	50	3	0	0	427
60	0	0	0	0	6	29	106	78	24	1	0	0	244
65	0	0	0	0	0	7	37	20	5	0	0	0	69
70	0	0	0	0	0	0	8	2	0	0	0	0	10

Growing Degree Units (2)																								
Base	Growing Degree Units (Monthly)												Growing Degree Units (Accumulated Monthly)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	0	3	20	82	242	425	656	618	405	186	15	0	0	3	23	105	347	772	1428	2046	2451	2637	2652	2652
45	0	0	0	29	129	284	501	463	265	86	2	0	0	0	0	29	158	442	943	1406	1671	1757	1759	1759
50	0	0	0	5	58	159	349	311	147	24	0	0	0	0	0	5	63	222	571	882	1029	1053	1053	1053
55	0	0	0	0	20	75	210	178	59	4	0	0	0	0	0	0	20	95	305	483	542	546	546	546
60	0	0	0	0	2	21	100	77	13	0	0	0	0	0	0	0	2	23	123	200	213	213	213	213
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	10	37	104	231	347	484	474	367	219	20	0	0	10	47	151	382	729	1213	1687	2054	2273	2293	2293

(1) Derived from the 1971-2000 Monthly Normals

(2) Derived from 1971-2000 serially complete daily data

Note: For corn, temperatures below 50 are set to 50, and temperatures above 86 are set to 86

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Notes

- a. The monthly means are simple arithmetic averages computed by summing the monthly values for the period 1971-2000 and dividing by thirty. Prior to averaging, the data are adjusted if necessary to compensate for data quality issues, station moves or changes in station reporting practices. Missing months are replaced by estimates based on neighboring stations.
- b. The median is defined as the middle value in an ordered set of values. The median is being provided for the snow and precipitation elements because the mean can be a misleading value for precipitation normals.
- c. Only observed validated values were used to select the extreme daily values.
- d. Extreme monthly temperature/precipitation means were selected from the monthly normals data.
Monthly snow extremes were calculated from daily values quality controlled to be consistent with the Snow Climatology.
- e. Degree Days were derived using the same techniques as the 1971-2000 normals.
Complete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normal/usnormals.html
- f. Mean "number of days statistics" for temperature and precipitation were calculated from a serially complete daily data set.
Documentation of the serially complete data set is available from the link below:
- g. Snowfall and snow depth statistics were derived from the Snow Climatology.
Documentation for the Snow Climatology project is available from the link under references.

Data Sources for Tables

Several different data sources were used to create the Clim20 climate summaries. In some cases the daily extremes appear inconsistent with the monthly extremes and or the mean number of days statistics. For example, a high daily extreme value may not be reflected in the highest monthly value or the mean number of days threshold that is less than and equal to the extreme value. Some of these difference are caused by different periods of record. Daily extremes are derived from the station's entire period of record while the serial data and normals data were for the 1971-2000 period. Therefore extremes observed before 1971 would not be included in the 1971-2000 normals or the 1971-2000 serial daily data set. Inconsistencies can also occur when monthly values are adjusted to reflect the current observing conditions or were replaced during the 1971-2000 Monthly Normals processing and are not reconciled with the Summary of the Day data.

- | | |
|---|---|
| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html
Snow Climatology Project Description, www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html
Eischeid, J. K., P. Pasteris, H. F. Diaz, M. Plantico, and N. Lott, 2000: Creating a serially complete, national daily time series of temperature and precipitation for the Western United States. J. Appl. Meteorol., 39, 1580-1591,
www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf