

# Climatography of the United States No. 20

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

Station: COUPEVILLE 1 S, WA

1971-2000

COOP ID: 451783

Climate Division: WA 2

NWS Call Sign:

Elevation: 50 Feet

Lat: 48° 12N

Lon: 122° 42W

## 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	45.4	34.7	40.1	62	1960	31	45.2	1986	3+	1950	25	33.5	1979	774	0	.0	.0	6.8	.8	10.6	.0
Feb	48.6	35.6	42.1	69	1986	25	46.1	1991	5+	1989	4	34.4	1989	641	0	.0	.0	11.6	.3	8.7	.0
Mar	52.6	37.6	45.1	70	1995	28	48.0	1983	14	1989	3	41.2	1976	617	0	.0	.0	22.7	.0	5.6	.0
Apr	57.3	40.4	48.9	79	1976	30	51.2	1989	26	1951	20	45.8	1972	486	0	.0	.0	28.4	.0	1.4	.0
May	62.6	44.7	53.7	85+	1963	21	57.7	1993	28	1954	1	51.1	1996	351	0	.0	.0	31.0	.0	.0	.0
Jun	66.8	48.3	57.6	92	1958	17	60.5	1992	35+	1964	4	55.1	1976	223	0	.0	.0	30.0	.0	.0	.0
Jul	71.1	50.8	61.0	95	1958	27	65.3	1998	40+	1979	14	59.0	1986	132	6	.0	@	31.0	.0	.0	.0
Aug	72.1	51.0	61.6	98	1960	8	63.7	1977	38	1980	29	58.9	1976	115	7	.0	.1	31.0	.0	.0	.0
Sep	67.6	47.1	57.4	91	1967	15	59.9	1979	29	1972	27	54.3	1972	232	2	.0	@	30.0	.0	@	.0
Oct	58.3	42.2	50.3	79	1980	3	52.2	2000	20	1971	28	47.7	1972	456	0	.0	.0	29.7	.0	1.4	.0
Nov	49.9	38.2	44.1	67	1981	1	47.8	1995	6+	1985	23	34.2	1985	628	0	.0	.0	16.3	.3	5.8	.0
Dec	45.1	35.0	40.1	62	1952	13	45.3	1979	3+	1968	30	33.6	1983	774	0	.0	.0	6.6	1.1	10.0	.0
Ann	58.1	42.1	50.2	98	Aug 1960	8	65.3	Jul 1998	3+	Dec 1968	30	33.5	Jan 1979	5429	15	.0	.1	275.1	2.5	43.5	.0

+ 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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

025-A

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## No. 20

### 1971-2000

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Climate Division: WA 2

NWS Call Sign:

Elevation: 50 Feet

Lat: 48°12N

Lon: 122°42W

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	2.50	2.39	1.18	1967	4	7.01	1971	.34	1985	15.2	8.4	1.1	@	.76	1.00	1.35	1.66	1.95	2.26	2.60	2.99	3.50	4.30	5.04
Feb	1.83	1.92	1.07	1949	16	3.70	1999	.51	1993	13.4	6.6	.4	.0	.68	.85	1.10	1.30	1.50	1.70	1.91	2.16	2.48	2.97	3.41
Mar	1.91	1.86	1.17	1952	20	2.98+	1998	.54	1979	14.0	5.7	.5	.0	.90	1.06	1.29	1.48	1.65	1.82	2.00	2.21	2.47	2.87	3.23
Apr	1.66	1.56	1.27	1972	28	3.76	1972	.21	1995	12.1	5.3	.6	@	.61	.77	.99	1.18	1.36	1.54	1.74	1.97	2.26	2.72	3.13
May	1.76	1.65	1.60	1966	6	3.55	1984	.43	1992	11.4	4.8	.8	.2	.61	.78	1.02	1.22	1.42	1.62	1.84	2.09	2.42	2.92	3.39
Jun	1.31	1.25	1.19	1984	29	3.04	1980	.20	1987	10.3	4.4	.4	@	.30	.42	.61	.78	.96	1.14	1.34	1.59	1.91	2.42	2.90
Jul	.99	.95	1.30	1998	3	2.35	1974	.02	1984	5.8	2.8	.5	.2	.14	.22	.37	.50	.65	.81	.99	1.21	1.52	2.01	2.48
Aug	.92	.71	1.20	1975	18	2.67	1975	.00	1998	5.7	2.6	.4	.1	.05	.14	.29	.42	.56	.72	.90	1.13	1.44	1.94	2.43
Sep	1.26	1.12	2.25	1983	1	3.62	1983	.10	1999	7.9	3.8	.5	.1	.16	.26	.44	.62	.80	1.01	1.25	1.54	1.94	2.60	3.23
Oct	1.69	1.36	1.01	1995	12	4.17	1985	.08	1987	11.1	5.4	.6	@	.34	.50	.75	.97	1.20	1.45	1.73	2.06	2.50	3.21	3.88
Nov	2.89	2.94	1.78	1990	24	7.55	1995	.71	1976	16.5	8.9	1.1	.2	.83	1.10	1.51	1.87	2.23	2.59	3.00	3.48	4.10	5.07	5.98
Dec	2.67	2.45	1.96	1996	29	6.72	1971	.50	1985	16.3	8.9	1.0	.1	.82	1.07	1.45	1.77	2.09	2.41	2.77	3.19	3.74	4.59	5.37
Ann	21.39	20.51	2.25	Sep 1983	1	7.55	Nov 1995	.00	Aug 1998	139.7	67.6	7.9	.9	15.03	16.26	17.83	19.02	20.09	21.12	22.18	23.36	24.78	26.86	28.65

+ 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:  
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Station: COUPEVILLE 1 S, WA

COOP ID: 451783

Climate Division: WA 2

NWS Call Sign:

Elevation: 50 Feet

Lat: 48° 12N

Lon: 122° 42W

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	2.9	.0	#	0	12.0	1980	10	26.2	1980	7	1982	6	1	1982	.8	.7	.4	.2	.1	.4	.3	.2	.0
Feb	.7	.0	#	0	4.0	1990	17	5.0	1985	3	1990	17	#+	1990	.6	.5	@	.0	.0	.3	.0	.0	.0
Mar	.3	.0	#	0	6.0	1989	2	6.0	1989	4	1989	2	#	1989	.1	.1	@	@	.0	.1	@	.0	.0
Apr	#	.0	0	0	#	1976	15	#+	1976	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
May	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jun	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	#	.0	0	0	#	1984	31	#	1984	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	1.0	.0	#	0	7.0	1985	26	18.6	1985	16	1985	27	3	1985	.3	.2	.2	.1	.0	.5	.5	.3	.2
Dec	.9	.0	#	0	16.0	1996	29	16.0	1996	8	1985	1	1	1985	.6	.5	.1	@	@	.4	.1	.1	.0
Ann	5.8	.0	N/A	N/A	16.0	Dec 1996	29	26.2	Jan 1980	16	Nov 1985	27	3	Nov 1985	2.4	2.0	.7	.3	.1	1.7	.9	.6	.2

+ 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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**COOP ID: 451783**

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**NWS Call Sign:**

**Elevation: 50 Feet**

**Lat: 48° 12N**

**Lon: 122° 42W**

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	5/22	5/16	5/11	5/07	5/03	4/29	4/25	4/21	4/14
32	4/24	4/17	4/12	4/07	4/03	3/30	3/26	3/20	3/13
28	3/31	3/22	3/15	3/09	3/04	2/26	2/21	2/14	2/04
24	2/26	2/17	2/10	2/04	1/30	1/25	1/19	1/13	1/03
20	2/21	2/10	2/02	1/26	1/18	1/11	1/01	12/15	0/00
16	2/01	1/15	1/01	12/16	11/20	0/00	0/00	0/00	0/00
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	9/25	10/01	10/05	10/08	10/11	10/14	10/17	10/21	10/26
32	10/10	10/17	10/22	10/26	10/30	11/04	11/08	11/13	11/20
28	10/30	11/08	11/16	11/22	11/27	12/03	12/09	12/16	12/26
24	11/10	11/21	11/29	12/06	12/13	12/20	12/27	1/04	1/15
20	11/21	12/06	12/17	12/27	1/06	1/18	2/02	0/00	0/00
16	12/04	12/19	1/01	1/15	2/07	0/00	0/00	0/00	0/00
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	187	178	171	165	160	155	149	142	133
32	246	233	224	217	210	202	195	186	173
28	312	297	286	277	268	259	250	239	223
24	>365	346	334	324	315	307	298	287	273
20	>365	>365	>365	>365	358	341	327	313	295
16	>365	>365	>365	>365	>365	>365	>365	>365	333

\* 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:  
[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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**Climate Division: WA 2**

**NWS Call Sign:**

**Elevation: 50 Feet**

**Lat: 48°12N**

**Lon: 122°42W**

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	774	641	617	486	351	223	132	115	232	456	628	774	5429
60	619	501	462	336	199	90	31	22	103	301	478	619	3761
57	526	417	369	246	119	37	7	4	49	209	390	526	2899
55	464	361	307	187	76	16	2	1	25	150	334	464	2387
50	317	228	163	66	13	0	0	0	2	41	202	317	1349
32	15	3	0	0	0	0	0	0	0	0	5	14	37

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	265	286	406	505	672	767	897	916	760	567	367	263	6671
55	0	0	0	2	35	93	185	203	95	3	6	0	622
57	0	0	0	0	16	54	128	145	59	1	2	0	405
60	0	0	0	0	3	17	60	70	23	0	0	0	173
65	0	0	0	0	0	0	6	7	2	0	0	0	15
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	82	102	172	270	431	533	655	674	530	326	158	79	82	184	356	626	1057	1590	2245	2919	3449	3775	3933	4012
45	26	30	55	126	276	383	500	519	380	180	58	26	26	56	111	237	513	896	1396	1915	2295	2475	2533	2559
50	0	0	1	35	131	233	345	364	232	63	10	0	0	0	1	36	167	400	745	1109	1341	1404	1414	1414
55	0	0	0	2	31	93	190	209	98	7	0	0	0	0	0	2	33	126	316	525	623	630	630	630
60	0	0	0	0	1	16	61	74	17	0	0	0	0	0	0	0	1	17	78	152	169	169	169	169
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	8	30	61	116	204	267	360	381	282	143	35	4	8	38	99	215	419	686	1046	1427	1709	1852	1887	1891

(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](http://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](http://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"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
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## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)