U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: DAYTON 1 WSW, WA **COOP ID: 452030**

Climate Division: WA10 **NWS Call Sign:** **Elevation: 1,557 Feet** **Lat: 46˚19N** **Lon: 118˚00W**

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	40.2	26.2	33.2	69	1968	21	41.0	1994	-22	1950	31	16.0	1979	986	0	.0	.0	7.1	7.5	21.8	1.5
Feb	45.9	29.4	37.7	74	1995	21	44.2	1991	-22+	1950	3	24.5	1989	766	0	.0	.0	11.5	3.1	17.5	.6
Mar	53.5	34.1	43.8	79	1964	31	48.1	1986	5	1989	3	38.6	1971	658	0	.0	.0	22.2	.3	12.0	.0
Apr	61.1	38.7	49.9	93+	1977	25	55.2	1987	17	1936	1	44.4	1975	453	0	.0	.1	28.2	.0	4.8	.0
May	69.1	44.7	56.9	101	1983	29	61.6	1993	23+	1954	2	52.8	1977	262	11	@	.8	30.8	.0	.4	.0
Jun	77.1	50.4	63.8	107	1961	18	69.1	1992	29	1951	1	57.8	1971	115	77	.2	3.8	30.0	.0	@	.0
Jul	86.6	55.2	70.9	109+	1975	10	76.6	1998	34	1952	6	64.6	1993	20	203	2.3	12.6	31.0	.0	.0	.0
Aug	86.5	55.0	70.8	114	1961	5	75.7	1971	34	1952	30	66.5	1995	25	204	2.7	12.2	31.0	.0	.0	.0
Sep	76.9	47.5	62.2	105	1953	11	67.5	1998	24	1954	30	56.0	1985	148	65	.1	3.4	30.0	.0	.6	.0
Oct	64.3	38.7	51.5	92	1943	1	57.9	1988	7	1935	31	47.7	1984	420	1	.0	.1	29.4	.0	6.3	.0
Nov	48.7	33.0	40.9	80	1965	2	46.7	1999	-10+	1985	24	28.1	1985	726	0	.0	.0	15.0	1.5	14.2	.1
Dec	40.5	27.0	33.8	69	1939	5	40.3	1973	-25	1968	30	20.1	1985	968	0	.0	.0	7.1	7.1	22.8	1.0
Ann	62.5	40.0	51.3	114	Aug 1961	5	76.6	Jul 1998	-25	Dec 1968	30	16.0	Jan 1979	5547	561	5.3	33.0	273.3	19.5	100.4	3.2

+ 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

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1931-2001

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: DAYTON 1 WSW, WA **COOP ID: 452030**

Climate Division: WA10 **NWS Call Sign:** **Elevation: 1,557 Feet** **Lat: 46˚19N** **Lon: 118˚00W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	2.31	2.15	1.46	1989	10	5.38	1980	.31	1977
Feb	1.87	1.68	1.41	1961	10	4.51	1996	.42	1977
Mar	2.02	2.04	2.08	1931	31	3.72	1989	.32	1992
Apr	1.67	1.42	1.30	1990	28	3.91	1996	.48	1977
May	1.62	1.31	1.92	2000	31	4.28	1991	.31	1992
Jun	1.20	1.09	1.51	1942	25	2.94	1971	.21	1973
Jul	.57	.45	1.42	1941	27	2.42	1978	.03	1996
Aug	.73	.54	1.22	1977	30	2.33	1977	.00+	2000
Sep	.89	.89	1.22	1971	2	2.27	1985	.00	1990
Oct	1.53	1.62	1.48	1955	9	3.05	1990	.00	1987
Nov	2.67	2.49	2.18	1994	1	5.83	1973	.66	1987
Dec	2.47	2.50	1.50	1958	6	6.31	1996	.28	1986
Ann	19.55	19.03	2.18	Nov 1994	1	6.31	Dec 1996	.00+	Aug 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	13.7	6.8	1.0	.1
Feb	12.5	5.8	.7	.0
Mar	13.5	6.6	.7	.0
Apr	11.0	5.0	.6	.1
May	10.4	4.6	.5	.1
Jun	8.2	3.7	.4	.1
Jul	4.2	1.8	.1	@
Aug	4.1	2.0	.3	.1
Sep	5.7	2.5	.4	.1
Oct	8.3	4.1	.9	.2
Nov	15.9	8.2	1.2	.1
Dec	14.4	7.5	.9	.1
Ann	121.9	58.6	7.7	1.0

Precipitation Probabilities (1)

Probability that the monthly/annual precipitation will be equal to or less than the indicated amount

Monthly/Annual Precipitation vs Probability Levels
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.55	.76	1.10	1.40	1.70	2.02	2.38	2.80	3.36	4.24	5.07
Feb	.68	.86	1.11	1.32	1.53	1.73	1.96	2.22	2.55	3.06	3.54
Mar	.75	.94	1.21	1.44	1.65	1.87	2.11	2.39	2.75	3.30	3.80
Apr	.52	.68	.91	1.11	1.31	1.51	1.73	1.99	2.33	2.85	3.34
May	.46	.61	.85	1.05	1.25	1.45	1.68	1.95	2.29	2.84	3.35
Jun	.30	.41	.59	.74	.89	1.05	1.23	1.44	1.72	2.16	2.57
Jul	.04	.07	.14	.22	.31	.41	.54	.69	.92	1.29	1.66
Aug	.00	.00	.07	.18	.31	.46	.65	.89	1.23	1.81	2.39
Sep	.01	.04	.14	.25	.39	.56	.78	1.06	1.46	2.17	2.88
Oct	.10	.25	.49	.71	.95	1.21	1.51	1.88	2.39	3.21	4.02
Nov	.93	1.19	1.55	1.86	2.16	2.46	2.79	3.18	3.67	4.43	5.13
Dec	.70	.94	1.29	1.60	1.90	2.21	2.56	2.97	3.50	4.34	5.11
Ann	14.28	15.31	16.62	17.61	18.49	19.34	20.21	21.17	22.34	24.02	25.47

\+ 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: 1931-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: DAYTON 1 WSW, WA **COOP ID: 452030**

Climate Division: WA10 **NWS Call Sign:** **Elevation: 1,557 Feet** **Lat: 46˚19N** **Lon: 118˚00W**

Snow (inches)

Snow Totals

Means/Medians (1)

Extremes (2)

Mean Number of Days (1)

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	6.1	2.0	1	1	11.0	1980	9	29.9	1996	18	1980	11	6	1979	3.4	2.2	.8	.3	@	5.0	3.7	2.2	.1
Feb	3.1	.2	1	#	8.1	1994	24	12.0	1985	9	1979	3	2	1996	1.7	1.0	.3	.1	.0	3.3	2.2	.7	.0
Mar	1.1	.1	#	#	5.1	1989	2	7.3	1989	5	1989	2	1	1989	.8	.5	.1	@	.0	1.0	.4	@	.0
Apr	.0	.0	#	0	1.0	1975	5	1.0	1975	1	1975	5	#+	1998	@	@	.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	.1	.0	#	0	1.0	1971	31	1.7	1991	1+	1991	31	#+	1991	.1	.1	.0	.0	.0	.1	.0	.0	.0
Nov	1.3	.0	#	0	6.0	1978	20	12.0	1985	9	1985	28	3	1985	1.2	.5	.1	.1	.0	1.5	.7	.6	.0
Dec	6.1	3.4	1	#	17.5	1996	25	24.1	1996	18	1996	25	2	1996	3.3	1.8	.6	.2	@	3.8	1.6	.5	.2
Ann	17.8	5.7	N/A	N/A	17.5	Dec 1996	25	29.9	Jan 1996	18+	Dec 1996	25	6	Jan 1979	10.5	6.1	1.9	.7	@	14.7	8.6	4.0	.3

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: DAYTON 1 WSW, WA **COOP ID: 452030**

Climate Division: WA10 **NWS Call Sign:** **Elevation: 1,557 Feet** **Lat: 46˚19N** **Lon: 118˚00W**

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	6/04	5/29	5/25	5/21	5/18	5/14	5/11	5/06	4/30
32	5/19	5/11	5/06	5/02	4/27	4/23	4/19	4/13	4/06
28	4/26	4/19	4/14	4/10	4/06	4/02	3/29	3/24	3/17
24	3/27	3/18	3/11	3/05	2/28	2/23	2/17	2/10	2/01
20	3/12	3/02	2/23	2/16	2/10	2/04	1/29	1/21	1/09
16	2/26	2/17	2/11	2/05	1/30	1/25	1/18	1/10	12/26

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	9/15	9/20	9/23	9/26	9/29	10/02	10/05	10/09	10/13
32	9/25	9/30	10/04	10/07	10/10	10/13	10/16	10/19	10/24
28	10/05	10/12	10/16	10/21	10/24	10/28	11/01	11/06	11/13
24	10/21	10/30	11/06	11/12	11/18	11/23	11/29	12/06	12/15
20	11/02	11/13	11/20	11/27	12/03	12/10	12/16	12/25	1/07
16	11/13	11/23	12/01	12/07	12/13	12/20	12/27	1/05	1/22

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	156	148	143	138	134	129	124	119	111
32	193	184	177	170	165	159	153	146	136
28	230	220	213	206	201	195	188	181	171
24	297	285	276	269	262	255	247	239	227
20	357	331	317	306	296	287	277	265	249
16	>365	354	337	326	317	308	300	289	276

***** 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/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: DAYTON 1 WSW, WA **COOP ID: 452030**

Climate Division: WA10 **NWS Call Sign:** **Elevation: 1,557 Feet** **Lat: 46˚19N** **Lon: 118˚00W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	986	766	658	453	262	115	20	25	148	420	726	968	5547
60	831	626	503	310	140	47	3	5	69	270	576	813	4193
57	745	543	410	230	86	23	1	2	38	189	493	720	3480
55	687	491	349	183	58	14	0	1	23	142	437	660	3045
50	544	361	207	89	15	2	0	0	5	56	306	516	2101
32	164	57	2	0	0	0	0	0	0	0	38	127	388

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	201	214	368	537	771	953	1206	1202	907	604	302	182	7447
55	11	5	1	30	116	276	493	489	240	33	11	2	1707
57	7	0	0	17	82	226	432	428	194	18	7	0	1411
60	0	0	0	7	43	160	341	339	136	6	0	0	1032
65	0	0	0	0	11	77	203	204	65	1	0	0	561
70	0	0	0	0	1	27	98	101	23	0	0	0	250

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	47	68	159	310	536	720	964	956	666	365	111	44	47	115	274	584	1120	1840	2804	3760	4426	4791	4902	4946
45	7	19	60	182	382	570	809	801	517	225	43	13	7	26	86	268	650	1220	2029	2830	3347	3572	3615	3628
50	1	1	21	88	240	420	654	646	373	112	11	0	1	2	23	111	351	771	1425	2071	2444	2556	2567	2567
55	0	0	0	32	128	279	500	491	235	45	0	0	0	0	0	32	160	439	939	1430	1665	1710	1710	1710
60	0	0	0	7	58	161	347	338	131	13	0	0	0	0	0	7	65	226	573	911	1042	1055	1055	1055
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	20	39	88	176	313	436	597	593	417	236	53	21	20	59	147	323	636	1072	1669	2262	2679	2915	2968	2989

(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.
Compete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normals/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 are 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.

a. Temperature/ Precipitation Tables
   1. 1971-2000 Monthly Normals
   2. Cooperative Summary of the Day
   3. National Weather Service station records
   4. 1971-2000 serially complete daily data

b. Degree Day Table
   1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals
   2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   1971-2000 serially complete daily data

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normals.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normals/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