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: ABERDEEN, WA **COOP ID: 450008**

Climate Division: WA 1 **NWS Call Sign:** **Elevation: 10 Feet** **Lat: 46˚58N** **Lon: 123˚50W**

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	46.6	36.1	41.4	66	1940	30	45.6	1994	6	1950	14	35.7	1979	733	0	.0	.0	10.4	.4	10.0	.0
Feb	49.8	36.8	43.3	73	1992	27	48.3	1991	8	1933	8	36.0	1989	608	0	.0	.0	14.3	.3	8.1	.0
Mar	53.3	38.2	45.8	79+	1994	28	51.0	1992	21	1935	20	41.2	1971	597	0	.0	.0	23.8	.0	5.0	.0
Apr	56.6	41.0	48.8	85+	1998	30	51.8	1989	25	1936	3	44.0	1975	487	0	.0	.0	27.8	.0	1.3	.0
May	60.9	45.9	53.4	96	1963	21	58.0	1993	29	1954	1	49.6	1974	361	0	.0	.1	30.9	.0	.0	.0
Jun	64.2	50.3	57.3	101	1942	30	60.6	1978	34	1944	5	53.9	1971	232	1	.0	.1	30.0	.0	.0	.0
Jul	68.0	53.4	60.7	104	1942	1	63.6	1995	37	1932	5	58.3	1986	141	7	.0	.4	31.0	.0	.0	.0
Aug	69.1	53.8	61.5	105	1981	10	64.8	1997	39	1945	19	57.2	1973	123	12	.1	.5	31.0	.0	.0	.0
Sep	68.7	50.2	59.5	100	1988	3	63.5	1995	33	1948	24	55.6	1972	180	14	@	.2	30.0	.0	.0	.0
Oct	61.1	44.2	52.7	86	1987	1	55.9	1988	19	1935	31	49.1	1984	384	0	.0	.0	30.4	.0	.4	.0
Nov	51.7	39.4	45.6	70+	1970	4	49.5	1995	11+	1955	15	37.9	1985	584	0	.0	.0	21.7	.2	4.5	.0
Dec	46.6	36.3	41.5	62+	1980	15	45.1	1980	10+	1983	23	36.0	1990	731	0	.0	.0	10.3	.9	9.8	.0
Ann	58.1	43.8	51.0	105	Aug 1981	10	64.8	Aug 1997	6	Jan 1950	14	35.7	Jan 1979	5161	34	.1	1.3	291.6	1.8	39.1	.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/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

Issue Date: February 2004

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: ABERDEEN, WA **COOP ID: 450008**

Climate Division: WA 1 **NWS Call Sign:** **Elevation: 10 Feet** **Lat: 46˚58N** **Lon: 123˚50W**

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	12.53	12.95	5.25	1935	21	19.98	1998	.58	1985
Feb	10.57	10.62	4.60	1990	10	26.57	1999	.62	1993
Mar	9.08	8.72	4.59	1997	19	21.85	1997	1.36	1992
Apr	6.18	5.52	3.80	1981	28	12.23	1981	2.28	1977
May	3.74	3.47	2.36	1941	16	7.77	1984	.41	1992
Jun	2.62	2.27	2.97	2000	12	5.04	1981	.64	1987
Jul	1.48	1.14	1.82	1932	2	5.07	1983	.12	1984
Aug	1.70	1.24	2.33	1991	29	7.10	1991	.00	1998
Sep	3.12	3.05	2.98	1972	21	9.02	1978	.01	1990
Oct	6.98	5.86	4.87	1942	31	17.84	1975	.52	1987
Nov	12.64	12.60	7.03	1990	24	24.02	1990	3.33	1976
Dec	13.07	13.26	5.46	1977	2	24.19	1998	3.21	1985
Ann	83.71	85.12	7.03	Nov 1990	24	26.57	Feb 1999	.00	Aug 1998

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	21.4	16.5	8.4	4.3
Feb	19.1	15.2	7.1	3.2
Mar	21.1	15.2	6.3	2.5
Apr	18.6	12.6	4.1	1.2
May	15.4	9.4	2.2	.4
Jun	12.0	6.6	1.5	.2
Jul	8.0	3.3	.8	.2
Aug	7.3	3.7	1.1	.3
Sep	10.1	6.2	2.0	.7
Oct	16.0	10.6	5.3	2.1
Nov	21.8	17.8	8.9	3.7
Dec	22.3	17.3	8.8	4.1
Ann	193.1	134.4	56.5	22.9

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	3.32	4.51	6.32	7.91	9.48	11.12	12.95	15.11	17.94	22.37	26.52
Feb	2.97	3.98	5.50	6.82	8.11	9.46	10.96	12.72	15.01	18.60	21.95
Mar	3.28	4.13	5.36	6.39	7.38	8.39	9.49	10.76	12.39	14.91	17.22
Apr	2.36	2.94	3.76	4.44	5.09	5.75	6.47	7.30	8.35	9.97	11.45
May	.97	1.33	1.87	2.35	2.82	3.31	3.86	4.52	5.37	6.71	7.97
Jun	.88	1.13	1.49	1.80	2.09	2.40	2.73	3.12	3.61	4.38	5.09
Jul	.14	.25	.45	.66	.88	1.13	1.43	1.80	2.31	3.15	3.98
Aug	.08	.23	.48	.73	1.00	1.30	1.65	2.09	2.70	3.69	4.67
Sep	.07	.18	.47	.85	1.31	1.90	2.65	3.65	5.10	7.67	10.30
Oct	1.32	1.94	2.97	3.91	4.87	5.91	7.08	8.50	10.38	13.41	16.29
Nov	4.23	5.43	7.18	8.67	10.10	11.57	13.18	15.06	17.48	21.23	24.68
Dec	5.22	6.42	8.13	9.54	10.88	12.23	13.70	15.39	17.53	20.81	23.80
Ann	59.04	63.79	69.90	74.53	78.66	82.65	86.77	91.33	96.86	104.90	111.85

\+ 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: ABERDEEN, WA **COOP ID: 450008**

Climate Division: WA 1 **NWS Call Sign:** **Elevation: 10 Feet** **Lat: 46˚58N** **Lon: 123˚50W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	1.8	.0	#	0
Feb	.6	.0	#	0
Mar	.2	.0	#	0
Apr	.0	.0	0	0
May	.0	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.0	.0	0	0
Nov	#	.0	#	0
Dec	.5	.0	#	0
Ann	3.1	.0	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	6.0	1972	25	9.8	1971	9	1971	14	1	1993
Feb	4.0	1980	15	4.0	1980	6	1989	2	1	1989
Mar	1.0	1971	2	2.0	1971	1+	1989	2	#+	1989
Apr	.0	0	0	.0	0	0	0	0	0	0
May	.0	0	0	.0	0	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	.0	0	0	.0	0	0	0	0	0	0
Nov	#	1978	19	#+	1978	4	1985	22	#+	1996
Dec	2.5	1971	29	4.5	1971	4	1996	29	#+	1998
Ann	6.0	Jan 1972	25	9.8	Jan 1971	9	Jan 1971	14	1+	Jan 1993

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	1.0	.8	.2	.1	.0
Feb	.4	.1	.1	.0	.0
Mar	.2	.2	.0	.0	.0
Apr	.0	.0	.0	.0	.0
May	.0	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.0	.0	.0	.0	.0
Nov	.0	.0	.0	.0	.0
Dec	.2	.2	.0	.0	.0
Ann	1.8	1.3	.3	.1	.0

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.8	.5	.2	.0
Feb	.3	.1	.0	.0
Mar	.1	.0	.0	.0
Apr	.0	.0	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	.0	.0	.0	.0
Dec	@	.0	.0	.0
Ann	1.2	.6	.2	.0

+ 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: ABERDEEN, WA **COOP ID: 450008**

Climate Division: WA 1 **NWS Call Sign:** **Elevation: 10 Feet** **Lat: 46˚58N** **Lon: 123˚50W**

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	5/18	5/11	5/05	5/01	4/27	4/23	4/18	4/13	4/06
32	4/25	4/17	4/11	4/06	4/01	3/28	3/23	3/17	3/09
28	3/16	3/04	2/24	2/17	2/10	2/03	1/27	1/19	1/07
24	2/19	2/05	1/26	1/17	1/06	12/21	0/00	0/00	0/00
20	1/21	1/07	12/25	0/00	0/00	0/00	0/00	0/00	0/00
16	1/10	12/06	0/00	0/00	0/00	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	10/07	10/13	10/17	10/21	10/24	10/27	10/31	11/04	11/10
32	10/26	11/03	11/08	11/13	11/18	11/22	11/27	12/02	12/10
28	11/08	11/20	11/29	12/07	12/14	12/21	12/29	1/07	1/20
24	12/02	12/17	12/28	1/08	1/21	2/13	0/00	0/00	0/00
20	12/12	12/29	1/14	0/00	0/00	0/00	0/00	0/00	0/00
16	12/27	2/01	0/00	0/00	0/00	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	210	199	192	186	180	173	167	160	149
32	265	253	244	237	230	223	215	207	195
28	357	337	324	314	304	295	284	273	256
24	>365	>365	>365	>365	>365	>365	345	326	308
20	>365	>365	>365	>365	>365	>365	>365	>365	>365
16	>365	>365	>365	>365	>365	>365	>365	>365	>365

***** 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: ABERDEEN, WA **COOP ID: 450008**

Climate Division: WA 1 **NWS Call Sign:** **Elevation: 10 Feet** **Lat: 46˚58N** **Lon: 123˚50W**

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	733	608	597	487	361	232	141	123	180	384	584	731	5161
60	578	468	442	337	212	100	39	32	78	232	434	576	3528
57	485	384	349	249	135	47	10	8	37	151	347	483	2685
55	423	329	293	194	93	24	3	2	19	104	291	422	2197
50	278	201	160	83	25	2	0	0	2	29	166	276	1222
32	8	2	0	0	0	0	0	0	0	0	2	7	19

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	297	318	426	503	662	759	889	912	824	639	408	299	6936
55	0	1	6	8	42	92	179	201	153	31	7	0	720
57	0	0	0	2	22	56	124	145	111	15	3	0	478
60	0	0	0	0	6	19	60	75	61	3	0	0	224
65	0	0	0	0	0	1	7	12	14	0	0	0	34
70	0	0	0	0	0	0	0	0	1	0	0	0	1

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	99	127	188	271	422	528	655	677	594	398	185	99	99	226	414	685	1107	1635	2290	2967	3561	3959	4144	4243
45	28	41	73	135	267	378	500	522	444	246	76	31	28	69	142	277	544	922	1422	1944	2388	2634	2710	2741
50	0	4	16	51	128	229	345	367	294	114	14	0	0	4	20	71	199	428	773	1140	1434	1548	1562	1562
55	0	0	0	15	43	91	190	212	153	32	0	0	0	0	0	15	58	149	339	551	704	736	736	736
60	0	0	0	1	14	24	59	73	52	5	0	0	0	0	0	1	15	39	98	171	223	228	228	228
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	12	36	69	113	189	249	348	368	322	192	53	16	12	48	117	230	419	668	1016	1384	1706	1898	1951	1967

(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