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

COOP ID: 353402

Station: GOVERNMENT CAMP, OR

Climate Division: OR 4 NWS Call Sign: Elevation: 3,980 Feet Lat: 45°18N Lon: 121°44W

									r	Гетр	eratur	re (°F)									
	Mea	n (1)						Extr	emes					Degree Base To	•		Mean	Numb	er of I	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	35.5	24.2	29.9	65	1968	24	36.0	1994	-8	1963	12	19.8	1979	1091	0	.0	.0	1.5	10.6	27.2	.6
Feb	38.0	25.4	31.7	69	1962	1	39.7	1991	-13+	1989	4	22.4	1989	939	0	.0	.0	3.0	7.0	24.5	.3
Mar	41.0	27.6	34.3	70	1966	30	42.0	1992	1	1971	1	28.5	1971	937	0	.0	.0	5.1	4.8	24.6	.0
Apr	45.4	30.4	37.9	80+	1987	29	43.7	1987	12	1968	13	32.1	1975	814	0	.0	.0	9.6	1.7	20.4	.0
May	52.3	35.2	43.8	93	1986	31	51.6	1992	18	1954	1	38.4	1977	659	0	.0	@	16.9	.2	12.1	.0
Jun	59.3	40.7	50.0	92	1961	17	55.5	1992	23	1963	3	45.2	1991	451	1	.0	@	23.0	.0	1.7	.0
Jul	67.5	46.3	56.9	99	1956	20	62.7	1985	29	1962	2	49.2	1993	269	18	.0	.2	29.3	.0	.1	.0
Aug	68.4	46.8	57.6	105	1977	18	62.5	1986	32+	1980	29	52.2	1975	245	15	@	.5	30.3	.0	@	.0
Sep	62.7	42.6	52.7	94	1988	4	57.7	1994	23	1972	27	46.6	1985	382	12	.0	.1	25.6	.0	1.6	.0
Oct	53.3	36.2	44.8	83+	1991	12	53.9	1988	10+	1971	29	39.9	1984	629	0	.0	.0	18.4	.3	9.0	.0
Nov	40.0	29.1	34.6	70	1981	3	40.1	1976	-4	1955	15	24.7	1985	913	0	.0	.0	3.9	4.9	21.5	.1
Dec	35.7	24.8	30.3	73	1963	14	36.4	1980	-14	1964	17	22.6	1990	1078	0	.0	.0	1.5	9.8	27.1	.7
Ann	49.9	34.1	42.0	105	Aug 1977	18	62.7	Jul 1985	-14	Dec 1964	17	19.8	Jan 1979	8407	46	@	.8	168.1	39.3	169.8	1.7

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 049-A

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

⁽¹⁾ From the 1971-2000 Monthly Normals

⁽²⁾ Derived from station's available digital record: 1951-2001

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

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

COOP ID: 353402

Station: GOVERNMENT CAMP, OR

Climate Division: OR 4 NWS Call Sign: Elevation: 3,980 Feet Lat: 45°18N Lon: 121°44W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	on Total						ays (3)	Proba	ability th		nonthly/	annual j indic	precipita ated am		ll be equ		less tha	in the
	Medi	ans(1)				Extremes	\$			P	aily Pre	стриацо	n		Th	ese value	s were det	ermined	from the i	incomplet	te gamma	distribut	ion	
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	12.86	12.68	4.30	1972	21	24.10	1975	.56	1985	19.8	16.5	9.2	4.7	3.06	4.27	6.15	7.82	9.49	11.25	13.23	15.58	18.66	23.54	28.14
Feb	10.23	10.53	5.00	1996	7	17.68	1996	1.90	1993	18.3	15.2	7.3	3.3	3.89	4.85	6.21	7.34	8.42	9.52	10.71	12.08	13.84	16.53	19.00
Mar	8.50	7.63	3.00	1955	1	14.87	1977	2.60	1978	20.1	16.3	6.8	1.8	3.49	4.27	5.36	6.27	7.11	7.98	8.90	9.97	11.33	13.39	15.27
Apr	7.54	7.98	3.15	1990	28	12.72	1979	3.90	1983	18.9	14.2	5.6	1.6	3.74	4.38	5.25	5.95	6.59	7.23	7.91	8.68	9.65	11.11	12.41
May	5.20	4.88	2.37	1998	30	9.30	1998	1.73	1992	15.7	12.1	3.8	.6	2.34	2.80	3.44	3.96	4.45	4.93	5.46	6.06	6.81	7.96	8.99
Jun	3.80	3.61	2.33	1981	8	9.09	1981	.99	1986	11.2	8.1	2.5	.6	1.11	1.47	2.02	2.49	2.94	3.42	3.95	4.57	5.37	6.63	7.80
Jul	1.36	.98	1.72	1966	3	4.18	1983	.00	1984	6.1	3.6	.8	.1	.09	.23	.45	.65	.86	1.09	1.36	1.68	2.12	2.84	3.53
Aug	1.61	1.48	2.00	1956	26	4.76	1976	.01	1988	5.7	3.6	1.0	.4	.07	.15	.33	.55	.79	1.09	1.45	1.92	2.59	3.74	4.90
Sep	3.60	3.72	3.24	1961	1	8.08	1986	.04	1993	8.6	6.2	2.8	1.0	.18	.37	.79	1.27	1.83	2.49	3.29	4.33	5.80	8.32	10.83
Oct	6.51	5.84	4.81	1994	27	14.38	1997	.10	1987	12.7	10.4	4.9	1.8	.82	1.33	2.26	3.16	4.12	5.19	6.43	7.95	10.02	13.42	16.72
Nov	13.13	13.77	5.69	1994	1	26.51	1995	3.13	1976	20.5	17.0	10.3	4.1	4.55	5.79	7.60	9.12	10.58	12.08	13.71	15.62	18.06	21.84	25.31
Dec	14.38	13.53	4.85	1998	28	32.54	1996	4.30	1976	20.2	17.0	9.9	5.4	4.59	5.96	7.97	9.70	11.36	13.08	14.97	17.19	20.04	24.48	28.58
Ann	88.72	90.61	5.69	Nov 1994	1	32.54	Dec 1996	.00	Jul 1984	177.8	140.2	64.9	25.4	60.54	65.90	72.83	78.12	82.84	87.42	92.17	97.44	103.85	113.19	121.30

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

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

[#] 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: 1951-2001

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

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

COOP ID: 353402

Station: GOVERNMENT CAMP, OR

Climate Division: OR 4 NWS Call Sign: Elevation: 3,980 Feet Lat: 45°18N Lon: 121°44W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Da	ys (1)		
	Mean	s/Medi	ans (1)						Extre	mes (2)							ow Fa			Snow Depth >= Thresholds			
Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median	Highest Daily Snow Fall	Daily Snow Year Day Monthly Snow Year Daily Snow Daily Snow Year D								Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	52.7	51.0	38	36	35.0	1980	9	110.0	1982	118	1972	14	91	1972	11.1	11.0	6.4	4.3	1.8	28.0	27.8	27.2	24.0
Feb	40.6	32.0	42	34	25.0	1994	24	112.0	1990	139	1985	11	104	1985	9.6	9.6	5.7	3.4	1.1	24.3	24.0	23.3	21.9
Mar	37.9	32.0	37	30	18.0	1974	6	109.0	1977	150	1974	6	120	1974	9.7	9.6	5.1	2.9	.6	26.0	24.1	23.0	21.4
Apr	26.0	22.0	23	13	17.0	1981	12	55.0	1972	118	1974	3	96	1974	6.7	6.7	3.7	1.8	.5	18.3	17.0	15.5	12.8
May	7.9	6.0	4	#	13.0	2000	11	32.0	1974	72	1974	2	45	1974	2.9	2.9	1.1	.3	@	5.9	4.1	3.3	2.5
Jun	.5	.0	#	0	6.0	1995	5	11.0	1995	6	1995	5	1	1995	.3	.3	.1	.1	.0	.3	.1	.1	.0
Jul	#	.0	#	0	#	1981	7	#	1981	#	1981	7	#	1981	.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	.3	.0	#	0	3.0	1984	23	4.0	1972	4	1972	24	#+	1988	.1	.1	@	.0	.0	.2	.1	.0	.0
Oct	5.2	2.0	1	#	10.0	1971	27	25.0	1991	36	1984	31	6	1984	1.8	1.8	.8	.2	.1	2.5	1.6	1.0	.5
Nov	35.0	28.0	9	5	20.0	1996	19	125.0	1973	70	1973	26	38	1994	8.2	8.0	5.0	3.1	.8	14.5	12.6	11.2	7.6
Dec	47.7	47.0	24	15	20.0	1971	10	122.0	1971	114	1984	31	71	1984	10.9	10.8	6.5	3.8	.9	27.8	26.5	24.9	19.3
Ann	253.8	220.0	N/A	N/A	35.0	Jan 1980	9	125.0	Nov 1973	150	Mar 1974	6	120	Mar 1974	61.3	60.8	34.4	19.9	5.8	147.8	137.9	129.5	110.0

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

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

[@] 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

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

COOP ID: 353402

Station: GOVERNMENT CAMP, OR

Climate Division: OR 4 NWS Call Sign:

Lat: 45°18N Elevation: 3,980 Feet Lon: 121°44W

				Freez	ze Data										
			Spri	ng Freeze D	ates (Month/	(Day)									
Tomn (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) Probability of earlier date in spring (thru Jul 31) than indicated(*) 10														
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	7/20	7/14	7/09	7/05	7/01	6/27	6/23	6/18	6/11						
32	6/27	6/20	6/16	6/12	6/09	6/05	6/01	5/28	5/22						
28	5/26	5/20	5/15	5/12	5/08	5/05	5/01	4/27	4/20						
24	5/09	5/02	4/26	4/22	4/17	4/13	4/09	4/03	3/27						
20	4/26	4/13	4/04	3/27	3/20	3/13	3/05	2/24	2/11						
16	4/01	3/18	3/08	2/27	2/18	2/10	2/01	1/21	1/03						
	1		Fal	ll Freeze Da	tes (Month/D	ay)	•	•							
Torrer (E)		Pro	bability of e	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	ed(*)							
1emp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	8/14	8/21	8/25	8/29	9/02	9/06	9/10	9/14	9/21						
32	9/06	9/12	9/17	9/21	9/24	9/27	10/01	10/06	10/12						
28	9/30	10/06	10/10	10/14	10/18	10/21	10/25	10/30	11/05						
24	10/19	10/27	11/02	11/07	11/12	11/17	11/22	11/28	12/06						
20	11/03	11/12	11/18	11/24	11/29	12/04	12/09	12/16	12/24						
16	11/04	11/15	11/23	12/01	12/07	12/14	12/21	12/30	1/13						
			•	Freeze I	ree Period	•		•							
Tomm (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days))							
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	91	81	74	68	63	57	51	44	34						
32	131	123	117	112	107	102	97	90	82						
28	190	180	173	167	162	156	151	144	134						
24	239	228	221	214	208	201	195	187	176						
20	299	283	272	262	253	244	234	223	208						
16	>365	326	310	299	289	280	270	258	243						

^{*} 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.

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

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

COOP ID: 353402

Station: GOVERNMENT CAMP, OR

Climate Division: OR 4 NWS Call Sign: Elevation: 3,980 Feet Lat: 45°18N Lon: 121°44W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1091	939	937	814	659	451	269	245	382	629	913	1078	8407
60	936	792	798	664	504	308	154	131	254	478	763	923	6705
57	843	708	705	574	415	230	103	82	191	391	673	830	5745
55	781	652	643	514	357	184	74	54	155	336	613	768	5131
50	626	512	488	367	224	92	25	15	81	213	465	613	3721
32	154	106	70	26	7	0	0	0	0	8	76	145	592

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	87	98	140	202	371	541	772	793	619	402	153	90	4268
55	0	0	0	0	8	34	132	134	84	17	0	0	409
57	0	0	0	0	4	21	100	100	60	10	0	0	295
60	0	0	0	0	0	9	58	56	34	4	0	0	161
65	0	0	0	0	0	1	18	15	12	0	0	0	46
70	0	0	0	0	0	0	4	1	1	0	0	0	6

										Gro	wing]	Degre	e Uni	ts (2)											
Base					Growin	g Degree	Units (N	(Ionthly)					Growing Degree Units (Accumulated Monthly)												
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
40	2	14	32	72	177	315	537	557	397	200	31	5	2	16	48	120	297	612	1149	1706	2103	2303	2334	2339	
45	0 0 1 33 97 194 383 404 261 108 8												0	0	1	34	131	325	708	1112	1373	1481	1489	1489	
50	0	0	0	5	44	105	247	262	157	52	0	0	0	0	0	5	49	154	401	663	820	872	872	872	
55	0	0	0	0	15	46	139	147	82	15	0	0	0	0	0	0	15	61	200	347	429	444	444	444	
60	0	0	0	0	3	15	67	69	35	4	0	0	0	0	0	0	3	18	85	154	189	193	193	193	
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)	•		
50/86	1/86 0 5 15 43 100 167 298 312 213 105 11												0	5	20	63	163	330	628	940	1153	1258	1269	1269	

(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

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

- c. Snow Tables
 - 1. Snow Climatology
 - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

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