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: 454679

Station: LIND 3 NE, WA

Climate Division: WA 8

NWS Call Sign:

Elevation: 1,630 Feet Lat: 47°00N Lon: 118°34W

									r	Гетр	eratu	re (°F)									
	Mea	n (1)						Extr	emes						Days (1) emp 65		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	36.0	23.4	29.7	62	1971	30	37.8	1994	-26	1957	26	12.4	1979	1094	0	.0	.0	2.2	10.4	25.6	1.5
Feb	43.5	28.0	35.8	67+	1995	21	41.9	1991	-25	1950	1	24.7	1989	819	0	.0	.0	7.5	3.8	20.4	.9
Mar	53.6	32.0	42.8	76	1960	25	47.8	1992	1	1989	3	38.2	1971	688	0	.0	.0	22.4	.2	18.1	.0
Apr	62.7	36.0	49.4	92+	1977	25	54.1	1987	11	1936	1	45.4	1982	469	0	.0	.1	29.5	.0	10.6	.0
May	71.6	42.4	57.0	100	1934	28	62.4	1993	23+	1965	6	51.6	1996	262	14	.0	1.1	31.0	.0	3.2	.0
Jun	79.5	48.4	64.0	105	1961	17	69.4	1992	29	1952	13	59.4	1991	106	74	.2	4.4	30.0	.0	.3	.0
Jul	87.9	53.7	70.8	111	1939	27	77.9	1985	32	1971	7	64.0	1993	28	208	2.3	14.2	31.0	.0	@	.0
Aug	87.4	53.4	70.4	113	1961	4	75.7	1971	32	1992	23	65.4	1995	29	196	2.1	13.1	31.0	.0	@	.0
Sep	77.7	45.6	61.7	102+	1988	3	67.2	1990	22	1958	24	56.9	1971	159	60	.1	2.7	30.0	.0	1.3	.0
Oct	63.4	36.4	49.9	91+	1943	1	56.8	1988	6	1935	31	46.8	1995	469	0	.0	.0	29.3	@	10.7	.0
Nov	45.2	30.4	37.8	72	1975	4	43.8	1999	-16	1985	23	24.3	1985	816	0	.0	.0	9.9	2.5	17.7	.4
Dec	35.7	23.8	29.8	60+	1980	26	36.5	1973	-20	1964	17	17.8	1985	1094	0	.0	.0	2.1	10.8	26.2	1.2
Ann	62.0	37.8	49.9	113	Aug 1961	4	77.9	Jul 1985	-26	Jan 1957	26	12.4	Jan 1979	6033	552	4.7	35.6	255.9	27.7	134.1	4.0

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 051-A

- (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

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

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COOP ID: 454679

Station: LIND 3 NE, WA

Climate Division: WA 8

NWS Call Sign: Elevation: 1,630 Feet Lat: 47°00N Lon: 118°34W

										Pı	ecipi	ation	(incl	nes)										
	Mea	ans/	P	recipi	itatio	on Total						ays (3)	Proba	ability th		nonthly/	annual j	precipita ated am	ount			less tha	ın the
	Medi	ians(1)				Extreme	5			D	aily Pre	cipitatio	n		Th	ese values	were det	termined	from the i	incomplet	e gamma	distributi	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	1.06	.99	1.00	1999	24	2.02	1997	.21	1977	9.4	4.2	.1	@	.30	.40	.55	.69	.82	.95	1.10	1.28	1.51	1.87	2.21
Feb	.85	.84	1.40	1949	10	1.81	1983	.01	1988	8.4	3.3	@	.0	.12	.19	.31	.43	.55	.69	.84	1.04	1.29	1.71	2.12
Mar	1.03	1.02	.76	1981	26	2.21	1995	.20	1994	8.8	3.7	.2	.0	.27	.36	.51	.64	.77	.91	1.06	1.24	1.47	1.84	2.19
Apr	.82	.69	.87	1979	23	1.72	1993	.08	1977	7.3	2.7	.1	.0	.14	.21	.33	.45	.56	.69	.83	1.00	1.23	1.60	1.96
May	.86	.75	1.61	1948	19	2.68	1980	.15	1992	6.7	2.5	.3	.0	.22	.30	.43	.54	.65	.76	.89	1.04	1.23	1.54	1.83
Jun	.58	.57	1.43	1938	18	1.67	1995	.07	1989	5.0	2.0	.1	.0	.11	.16	.24	.32	.40	.49	.59	.71	.87	1.12	1.37
Jul	.44	.30	1.35	1993	23	2.07	1993	.00	1985	3.2	1.2	.1	@	.01	.02	.07	.13	.20	.28	.39	.52	.72	1.05	1.39
Aug	.39	.25	1.31	1990	21	2.14	1990	.00+	2000	2.9	1.2	.2	@	.00	.00	.00	.05	.12	.21	.32	.47	.68	1.05	1.42
Sep	.52	.47	.88	1980	13	1.60	1977	.00+	1999	4.1	1.9	@	.0	.00	.00	.02	.11	.20	.32	.46	.64	.89	1.32	1.77
Oct	.77	.62	.89	1982	29	2.24	1996	.00	1987	5.8	2.4	.2	.0	.02	.08	.18	.29	.41	.55	.72	.94	1.24	1.74	2.24
Nov	1.32	1.14	.79	1996	19	3.35	1973	.14	1976	11.8	4.9	.1	.0	.29	.41	.61	.78	.96	1.14	1.35	1.60	1.94	2.46	2.96
Dec	1.32	1.19	2.00	1996	4	3.88	1996	.30	1976	10.2	5.0	.2	@	.30	.42	.62	.79	.96	1.15	1.35	1.60	1.92	2.44	2.92
Ann	9.96	9.38	2.00	Dec 1996	4	3.88	Dec 1996	.00+	Aug 2000	83.6	35.0	1.6	.0	6.62	7.25	8.06	8.69	9.25	9.79	10.35	10.98	11.74	12.86	13.83

⁺ 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: 1931-2001

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

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COOP ID: 454679

Station: LIND 3 NE, WA

Climate Division: WA 8 NWS Call Sign:

Elevation: 1,630 Feet Lat: 47°00N Lon: 118°34W

										Snov	w (incl	hes)											
		Median Median Snow Fall Snow Depth Snow Depth															Mea	n Nu	mber	of Day	yS (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa					Depth esholo	
Month	Mean Median Mean Medi				Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	4.6	4.0	2	1	12.0	1987	14	16.0	1987	16	1996	31	8	1993	2.5	2.2	.8	.1	@	7.4	5.2	3.4	.7
Feb	1.7	.1	1	#	6.0	1993	19	9.5	1985	18	1996	4	5	1989	1.0	.9	.2	.1	.0	2.1	1.2	.8	.0
Mar	.5	.0	#	0	5.0	1977	13	5.0	1977	4	1993	3	#+	1999	.2	.2	.1	@	.0	.3	.3	.0	.0
Apr	.2	.0	#	0	1.5	1982	6	1.5+	1999	1	1976	1	#+	1999	.1	.1	.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	2.0	1971	31	2.0	1971	#+	1996	19	#+	1996	@	@	.0	.0	.0	.0	.0	.0	.0
Nov	1.8	.0	#	#	5.0	1973	4	13.0	1973	13	1985	29	4	1985	1.3	.9	.2	.1	.0	1.2	.7	.2	.0
Dec	5.0	5.2	1	1	6.0	1990	30	13.5	1971	17	1985	3	6	1985	2.7	2.0	.7	.1	.0	6.3	3.5	1.5	.1
Ann	13.9	9.3	N/A	N/A	12.0	Jan 1987	14	16.0	Jan 1987	18	Feb 1996	4	8	Jan 1993	7.8	6.3	2.0	.4	@	17.3	10.9	5.9	.8

⁺ 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

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COOP ID: 454679

Station: LIND 3 NE, WA Climate Division: WA 8

NWS Call Sign:

Elevation: 1,630 Feet

Lat: 47°00N Lon: 118°34W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month	/Day)			
Temp (F)		P	robability of	later date i	n spring (thr	ru Jul 31) tha	n indicated((*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/26	6/18	6/13	6/09	6/05	5/31	5/27	5/22	5/15
32	6/12	6/04	5/29	5/24	5/20	5/15	5/10	5/04	4/26
28	5/18	5/11	5/06	5/02	4/29	4/25	4/21	4/16	4/10
24	4/30	4/22	4/17	4/12	4/07	4/02	3/28	3/22	3/14
20	4/06	3/23	3/13	3/04	2/24	2/16	2/07	1/28	1/14
16	3/07	2/23	2/15	2/08	2/02	1/26	1/19	1/11	12/31
			Fal	ll Freeze Da	tes (Month/I	Day)			
To (E)		Pro	bability of e	arlier date i	n fall (beginr	ning Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	8/28	9/03	9/08	9/11	9/15	9/18	9/22	9/26	10/03
32	9/10	9/16	9/19	9/23	9/26	9/29	10/02	10/06	10/11
28	9/27	10/02	10/05	10/08	10/11	10/14	10/16	10/20	10/25
24	10/07	10/13	10/17	10/20	10/24	10/27	10/30	11/03	11/09
20	10/16	10/24	10/30	11/04	11/09	11/13	11/18	11/24	12/02
16	10/25	11/06	11/15	11/22	11/29	12/05	12/13	12/21	1/02
				Freeze F	ree Period			1	•
Torrer (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	131	121	114	107	102	96	89	82	72
32	159	148	141	134	128	122	116	108	98
28	192	183	176	170	164	159	153	146	137
24	230	219	212	205	199	193	186	179	168
20	304	288	276	266	257	248	238	226	210
16	348	329	317	307	298	288	279	268	252

^{*} 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.

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				Deg	ree Days to	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1094	819	688	469	262	106	28	29	159	469	816	1094	6033
60	939	679	533	323	144	40	7	7	77	317	666	939	4671
57	846	595	440	241	91	18	1	2	43	231	579	846	3933
55	789	539	379	191	63	10	0	1	27	180	522	784	3485
50	644	409	233	91	18	1	0	0	6	79	386	633	2500
32	223	75	4	0	0	0	0	0	0	0	68	190	560

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	152	181	339	522	774	959	1204	1190	891	554	242	119	7127
55	5	0	0	22	124	279	491	478	228	21	7	0	1655
57	0	0	0	12	90	227	430	417	184	10	3	0	1373
60	0	0	0	4	50	159	343	329	127	3	0	0	1015
65	0	0	0	0	14	74	208	196	60	0	0	0	552
70	0	0	0	0	2	24	109	98	21	0	0	0	254

										Gro	wing 1	Degre	e Uni	ts (2)										
Base	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 40 12 44 126 285 525 711 950 936 648 313 67 12															Growi	ng Degre	ee Units (Accumu	lated Mo	nthly)			
													Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	12	44	126	285	525	711	950	936	648	313	67	12	12	56	182	467	992	1703	2653	3589	4237	4550	4617	4629
45												0	1	10	52	216	586	1147	1942	2723	3221	3406	3430	3430
50												0	0	0	7	83	312	724	1364	1990	2342	2430	2434	2434
55	0	0	0	27	121	268	485	471	222	32	0	0	0	0	0	27	148	416	901	1372	1594	1626	1626	1626
60	0	0	0	7	53	147	334	319	118	10	0	0	0	0	0	7	60	207	541	860	978	988	988	988
Base	se Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	50/86 1 21 81 201 346 455 587 581 425 219 23											0	1	22	103	304	650	1105	1692	2273	2698	2917	2940	2940

(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

- 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