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: 264527

Station: LEONARD CREEK RANCH, NV

Climate Division: NV 1 NWS Call Sign: Elevation: 4,224 Feet Lat: 41°31N Lon: 118°43W

									r												
	Mea	n (1)						Extr	emes					Degree Base To	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	39.9	20.5	30.2	63	1995	31	37.2	1998	-18	1962	22	20.5	1984	1079	0	.0	.0	3.4	5.9	28.1	1.0
Feb	47.3	25.9	36.6	71	1995	23	44.7	1995	-14+	1989	5	27.6	1989	795	0	.0	.0	10.4	1.4	22.4	.3
Mar	55.1	30.5	42.8	81	1966	31	48.3	1992	5	1971	1	37.0	1985	689	0	.0	.0	22.2	.1	18.8	.0
Apr	63.8	34.9	49.4	90	1987	26	56.4	1990	15+	1972	18	40.7	1975	475	5	.0	@	27.9	.0	11.1	.0
May	73.1	42.3	57.7	97	1986	29	66.5	1992	20	1988	2	51.3	1977	262	34	.0	1.7	30.7	.0	3.0	.0
Jun	82.8	49.3	66.1	104	1961	22	71.2	1977	30+	1966	4	60.7	1980	86	117	.3	7.7	30.0	.0	.2	.0
Jul	92.0	55.7	73.9	108+	1959	22	77.5	1994	37+	1966	3	66.8	1993	10	285	3.4	21.2	31.0	.0	.0	.0
Aug	90.0	54.6	72.3	107	1990	7	76.4	1971	35+	1960	23	65.9	1976	13	239	2.0	18.1	31.0	.0	.0	.0
Sep	80.5	47.2	63.9	104	1955	2	68.1	1990	22	1965	17	56.8	1986	116	82	.1	5.2	29.9	.0	1.1	.0
Oct	67.1	37.7	52.4	92	1958	6	60.6	1988	9	1971	28	45.5	1984	398	7	.0	@	29.3	@	7.8	.0
Nov	50.5	28.1	39.3	75	1983	6	47.3	1995	0+	1985	15	29.5	1985	771	0	.0	.0	16.2	.6	20.8	.1
Dec	40.5	20.7	30.6	63	1995	1	38.4	1981	-19	1972	9	21.7	1990	1066	0	.0	.0	3.8	4.3	27.7	.8
Ann	65.2	37.3	51.3	108+	Jul 1959	22	77.5	Jul 1994	-19	Dec 1972	9	20.5	Jan 1984	5760	769	5.8	53.9	265.8	12.3	141.0	2.2

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 031-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: 1954-2001

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

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Climate Division: NV 1 NWS Call Sign: Elevation: 4,224 Feet Lat: 41°31N Lon: 118°43W

										Pı	recipit	tation	(incl	nes)												
		ans/	P	recipi	itatio	on Total Extremes					ean N of D	ays (3)	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	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	1.18	.98	.90	1963	30	3.07	1993	.07	1992	8.0	4.1	.3	.0	.15	.25	.41	.58	.75	.94	1.17	1.44	1.82	2.43	3.02		
Feb	1.04	.84	.93	1986	17	3.28	2000	.07	1995	8.2	3.4	.3	.0	.12	.20	.35	.49	.65	.82	1.02	1.26	1.60	2.15	2.69		
Mar	1.05	.95	1.14	1978	22	2.64	1983	.04	1972	7.8	3.4	.4	@	.18	.27	.43	.57	.72	.87	1.06	1.28	1.57	2.05	2.50		
Apr	.77	.68	1.09	1995	29	2.10	1978	.04	1985	6.2	2.5	.3	@	.13	.20	.31	.42	.52	.64	.78	.94	1.16	1.51	1.85		
May	.83	.64	.98	1989	10	2.77	1998	.00+	1992	6.2	2.6	.3	.0	.00	.03	.14	.26	.40	.56	.76	1.01	1.37	1.98	2.58		
Jun	.77	.68	1.26	1971	26	2.19	1996	.00+	1994	4.8	2.2	.3	.1	.00	.04	.15	.27	.39	.54	.72	.94	1.26	1.79	2.31		
Jul	.34	.23	.85	1996	16	1.18	1974	.00+	2000	2.5	1.0	.2	.0	.00	.00	.03	.08	.14	.22	.30	.42	.58	.85	1.13		
Aug	.41	.18	1.64	1979	29	2.72	1979	.00+	1996	2.4	1.1	.2	.1	.00	.00	.01	.05	.12	.20	.32	.47	.70	1.10	1.52		
Sep	.51	.30	.76	1957	30	1.59	1998	.00+	1987	3.4	1.5	.3	.0	.00	.01	.07	.14	.22	.32	.44	.61	.84	1.24	1.65		
Oct	.57	.40	1.06	1962	13	2.00	1992	.00+	1995	4.0	1.8	.1	.0	.00	.00	.09	.22	.33	.45	.58	.74	.94	1.26	1.59		
Nov	.94	.86	.74	1998	11	2.30	1981	.02	1975	6.6	3.1	.3	.0	.07	.13	.25	.37	.52	.69	.89	1.14	1.50	2.10	2.69		
Dec	1.06	.67	1.13	1974	14	4.13	1983	.00	1976	7.6	3.5	.2	@	.03	.11	.26	.41	.58	.77	1.01	1.30	1.71	2.40	3.08		
Ann	9.47	8.71	1.64	Aug 1979	29	4.13	Dec 1983	.00+	Jul 2000	67.7	30.2	3.2	.2	5.81	6.48	7.35	8.03	8.65	9.25	9.88	10.58	11.45	12.72	13.84		

⁺ 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: 1954-2001

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Climate Division: NV 1 NWS Call Sign: Elevation: 4,224 Feet Lat: 41°31N Lon: 118°43W

										Snov	w (incl	hes)											
			Snow Snow Depth Median Median														Mea	n Nu	mber	of Day	VS (1)		
	Snow Fall Median Snow Depth Median Snow Depth Median Median Median Snow Fall Snow Depth Median Median																ow Fa					Depth esholo	
Month	Fall	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Highest Monthly Mean Snow Depth	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	6.2	6.5	3	2	11.0	1997	25	16.6	1973	20	1993	18	14	1993	2.2	1.9	.8	.2	.1	12.3	8.2	2.7	.0
Feb	1.8	1.0	1	0	7.0	1985	1	7.0	1985	13	1993	1	7	1993	1.4	1.0	.4	.1	.0	2.1	.7	.2	.0
Mar	1.2	.0	#	0	7.0	1979	1	9.5	1979	10	1976	2	1	1979	.5	.4	.1	@	.0	.3	.2	.2	.0
Apr	.5	.0	#	0	3.0	1971	25	3.5	1975	2	1974	18	#+	1979	.3	.2	@	.0	.0	.1	.0	.0	.0
May	.2	.0	0	0	3.0	1977	7	5.0	1977	0	0	0	0	0	.1	.1	@	.0	.0	.0	.0	.0	.0
Jun	.1	.0	0	0	3.0	1975	25	3.0	1975	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	.7	.0	#	0	6.0	1971	17	12.0	1971	2	1971	30	#	1971	.2	.2	.1	@	.0	.2	.0	.0	.0
Nov	1.5	.0	#	0	5.5	1985	24	5.5+	1985	8	1998	11	1+	1998	.7	.5	.2	.1	.0	.6	.4	.0	.0
Dec	6.7	2.5	1	#	13.5	1974	14	29.5	1971	14	1971	29	6	1971	2.0	1.7	.6	.3	.1	8.1	6.0	2.7	.7
Ann	18.9	10.0	N/A	N/A	13.5	Dec 1974	14	29.5	Dec 1971	20	Jan 1993	18	14	Jan 1993	7.4	6.0	2.2	.7	.2	23.7	15.5	5.8	.7

⁺ 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: 264527

Lon: 118°43W

Lat: 41°31N

Station: LEONARD CREEK RANCH, NV

Climate Division: NV 1

NWS Call Sign:

				Freez	e Data								
			Spri	ng Freeze D	ates (Month/	Day)							
Probability of late date in spring (thru Jul 31) than indicated Sp													
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	6/18	6/13	6/10	6/07	6/04	6/01	5/29	5/26	5/21				
32	6/07	5/31	5/27	5/23	5/19	5/15	5/11	5/06	4/30				
28	5/17	5/11	5/07	5/03	4/30	4/27	4/23	4/19	4/13				
24	5/09	4/29	4/22	4/16	4/10	4/04	3/29	3/22	3/12				
20	4/23	4/13	4/05	3/30	3/24	3/18	3/11	3/04	2/21				
16	3/29	3/17	3/08	2/28	2/21	2/14	2/06	1/29	1/16				
-		•	Fal	l Freeze Da	tes (Month/D	ay)	•	1	u.				
T (E)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)					
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	9/05	9/11	9/15	9/19	9/22	9/26	9/29	10/04	10/10				
32	9/15	9/20	9/24	9/28	10/01	10/04	10/08	10/12	10/18				
28	9/26	10/02	10/07	10/12	10/16	10/20	10/24	10/29	11/05				
24	10/09	10/15	10/20	10/24	10/28	11/01	11/05	11/10	11/16				
20	10/21	10/28	11/01	11/05	11/09	11/12	11/16	11/21	11/27				
16	10/30	11/08	11/14	11/19	11/24	11/29	12/04	12/10	12/18				
-		•		Freeze F	ree Period		1	1	ı				
Tomp (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)						
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	134	126	120	115	110	105	99	93	85				
32	159	151	145	140	135	130	124	118	110				
28	197	187	180	174	168	162	156	149	139				
24	232	221	213	206	200	194	187	179	169				
20	267	254	245	237	229	221	213	204	190				
16	320	304	293	284	275	266	256	245	230				

^{*} 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:

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				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree 1	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1079	795	689	475	262	86	10	13	116	398	771	1066	5760
60	924	655	534	337	158	34	1	2	50	265	622	911	4493
57	831	571	444	262	109	16	0	0	26	196	535	818	3808
55	769	515	387	218	82	10	0	0	16	156	478	756	3387
50	622	385	252	127	33	2	0	0	3	79	343	602	2448
32	190	59	12	2	0	0	0	0	0	1	44	158	466

Base	133 188 347 522 796 1021 1297 1249 956 632 263 115 7519														
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
32	133	188	347	522	796	1021	1297	1249	956	632	263	115	7519		
55	0	0	9	48	164	341	584	536	282	75	6	0	2045		
57	0	0	4	33	130	288	522	474	232	53	3	0	1739		
60	0	0	1	18	86	215	430	382	166	28	1	0	1327		
65	0	0	0	5	34	117	285	239	82	7	0	0	769		
70	0	0	0	0	11	50	159	123	30	1	0	0	374		

	Growing Degree Units (Monthly)																							
Base					Growin	g Degree	Units (M	Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec														Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	7	50	146	299	558	790	1054	1009	715	401	92	13	7	57	203	502	1060	1850	2904	3913	4628	5029	5121	5134
45													0	10	70	252	657	1297	2196	3050	3615	3877	3908	3908
50	0 0 16 92 269 492 744 699 419 150 5											0	0	0	16	108	377	869	1613	2312	2731	2881	2886	2886
55	0	0	0	39	157	349	589	545	284	67	0	0	0	0	0	39	196	545	1134	1679	1963	2030	2030	2030
60	0	0	0	9	78	218	435	390	166	21	0	0	0	0	0	9	87	305	740	1130	1296	1317	1317	1317
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	/ 86 2 40 110 220 368 501 646 627 467 277 67												2	42	152	372	740	1241	1887	2514	2981	3258	3325	3333

(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