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: 422592

Station: ESCALANTE, UT

Climate Division: UT 4

NWS Call Sign:

Elevation: 5,810 Feet Lat: 37°46N Lon: 111°36W

									r	Гетр	eratui	re (°F)									
	Mea	n (1)						Extr	emes						Days (1) emp 65		Mean	Numb	er of I	Days (3)	
Month	Daily Max			Year	Day	Lowest Month(1) Mean	Year	Heating	Cooling	Max >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0						
Jan	41.9	15.5	28.7	68	1971	18	37.8	1999	-22	1937	22	18.4	1973	1127	0	.0	.0	6.1	4.3	30.2	1.9
Feb	47.6	21.4	34.5	84	1912	4	43.1	1995	-21	1933	10	25.6	1979	854	0	.0	.0	11.2	1.2	26.7	.5
Mar	56.0	27.4	41.7	80+	1910	6	48.3	1972	2+	1922	1	36.5	1973	723	0	.0	.0	23.3	.1	24.0	.0
Apr	64.6	33.0	48.8	88	2000	27	55.3	1992	10	1933	10	41.3	1983	489	2	.0	.0	27.9	.0	13.3	.0
May	74.5	40.4	57.5	96+	2000	23	63.9	2000	23	1967	2	52.5	1980	256	21	.0	.7	31.0	.0	2.7	.0
Jun	85.7	47.9	66.8	103	1994	24	72.1	1994	25	1932	14	62.8	1982	66	118	.5	9.6	30.0	.0	.1	.0
Jul	90.8	54.5	72.7	103+	1998	18	77.0	1996	38	1902	4	69.8	1987	3	240	1.2	19.6	31.0	.0	.0	.0
Aug	87.5	53.3	70.4	102+	2000	1	74.5+	2000	32+	1916	10	67.4	1979	14	181	.3	11.9	31.0	.0	.0	.0
Sep	79.3	45.4	62.4	96	1955	8	65.9	1990	16	1924	22	56.1	1986	122	42	.0	2.0	30.0	.0	.8	.0
Oct	67.4	35.4	51.4	88	2000	1	56.0	1988	10+	1924	29	45.7+	1984	426	3	.0	.0	29.7	.0	9.1	.0
Nov	52.6	24.7	38.7	78	1937	2	45.2	1995	-3	1931	25	33.7	1979	791	0	.0	.0	18.7	.2	25.9	.1
Dec	43.5	17.1	30.3	69+	1977	7	38.0	1980	-20	1924	18	22.1	1978	1075	0	.0	.0	7.2	3.0	30.1	.6
Ann	66.0	34.7	50.3	103+	Jul 1998	18	77.0	Jul 1996	-22	Jan 1937	22	18.4	Jan 1973	5946	607	2.0	43.8	277.1	8.8	162.9	3.1

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 034-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1901-2001
- (3) Derived from 1971-2000 serially complete daily data

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

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: 422592

Station: ESCALANTE, UT

Climate Division: UT 4 NWS Call Sign: Elevation: 5,810 Feet Lat: 37°46N Lon: 111°36W

										Pı	recipi	tation	(incl	nes)										
	Mea		P	recipi	itatio	on Total					ean N of D	ays (3)	Proba		Me	nonthly/ onthly/An	annual j indic	precipita ated am	vs Proba	ll be equ	els		in the
	Medi	ans(1)				Latt cines	,				uny 110	приши			Th	ese value	s were det	ermined	from the i	incomplet	te gamma	distributi	on	
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	.90	.54	2.26	1943	22	4.44	1993	.00+	1976	4.1	2.4	.4	.2	.00	.00	.09	.21	.36	.55	.78	1.08	1.51	2.27	3.04
Feb	.79	.54	1.82	1944	24	3.06	1993	.00+	1977	4.2	2.3	.4	.1	.00	.00	.22	.36	.49	.63	.80	1.00	1.26	1.68	2.09
Mar	.92	.70	1.65	1949	29	3.08	1992	.00+	1999	4.6	2.7	.4	.0	.00	.00	.20	.38	.55	.73	.93	1.18	1.51	2.03	2.54
Apr	.49	.26	1.47	1941	11	1.97	1988	.00+	1989	3.2	1.2	.2	.0	.00	.00	.02	.07	.15	.24	.38	.56	.83	1.31	1.80
May	.65	.45	2.11	1934	29	2.22	1992	.00+	1974	4.2	1.9	.3	.0	.00	.03	.12	.21	.32	.44	.59	.79	1.06	1.52	1.98
Jun	.37	.29	1.26	1918	22	2.09	1972	.00+	1980	3.0	1.2	.1	.0	.00	.00	.04	.11	.18	.25	.35	.47	.63	.90	1.18
Jul	.76	.64	3.24	1932	12	2.49	1999	.02	1979	5.9	2.5	.2	@	.05	.09	.19	.29	.41	.54	.71	.92	1.22	1.72	2.22
Aug	1.52	1.44	2.10	1955	12	3.66	1999	.07	1985	8.2	4.3	.9	.1	.26	.39	.61	.82	1.04	1.27	1.53	1.86	2.29	2.99	3.65
Sep	1.12	.90	3.20	1927	12	4.90	1997	.03	1993	5.5	2.9	.7	.1	.05	.11	.23	.38	.55	.76	1.01	1.34	1.81	2.61	3.41
Oct	1.16	.86	3.39	1916	6	4.42	1972	.00+	1999	4.6	3.0	.8	.1	.00	.00	.19	.37	.58	.81	1.09	1.44	1.92	2.74	3.56
Nov	.77	.46	1.60	1940	19	4.65	1978	.00+	1999	3.0	1.8	.5	.2	.00	.00	.06	.15	.27	.42	.63	.90	1.30	2.01	2.74
Dec	.54	.31	2.08	1932	1	1.97	1984	.00+	1998	3.0	1.7	.2	.1	.00	.00	.04	.12	.22	.33	.47	.66	.92	1.36	1.80
Ann	9.99	9.48	3.39	Oct 1916	6	4.90	Sep 1997	.00+	Nov 1999	53.5	27.9	5.1	.9	5.81	6.56	7.55	8.33	9.03	9.72	10.45	11.26	12.27	13.77	15.08

⁺ 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: 1901-2001

⁽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: 422592

Station: ESCALANTE, UT

Climate Division: UT 4 NWS Call Sign:

Elevation: 5,810 Feet Lat: 37°46N Lon: 111°36W

		Snow Snow Snow Depth Median Median Median Snow Fall																						
		Same Same															Mea	n Nu	mber	of Day	ys (1)			
	Snow Fall Snow Fall Mean Snow Depth Median Median Median Median Highest Daily Snow Fall Pall Snow Fall Mean Median Medi																ow Fa				Snow Depth >= Thresholds			
Month	Fall	Fall	Depth	Depth	Daily Snow	aily Year Day Monthly Year Daily Snow Fall Depth Daily								Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10	
Jan	9.7	7.5	3	1	17.0	1997	13	33.0	1993	22	1979	29	13	1979	3.3	2.9	1.4	.6	.1	13.1	10.2	7.4	2.2	
Feb	4.8	3.5	1	#	11.0	1990	19	21.5	1993	22	1993	9	15	1993	2.0	1.9	.6	.3	@	4.9	3.2	2.0	1.0	
Mar	4.0	2.0	#	0	11.0	1987	22	17.0+	1987	10	1979	1	1	1993	1.3	1.2	.7	.2	@	.9	.4	.2	.0	
Apr	1.7	.0	#	0	12.5	1999	4	17.5	1999	35	1978	9	2	1978	.4	.4	.2	.2	@	.1	.1	.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	.4	.0	#	0	4.0	1986	31	4.0	1986	1	1971	29	#	1971	.2	.2	.1	.0	.0	@	.0	.0	.0	
Nov	3.2	.5	#	0	12.0	1972	12	18.0	1972	9	1981	29	1	1994	.9	.9	.5	.3	@	1.5	.8	.4	.0	
Dec	4.5	1.5	1	#	11.0	1992	28	29.0	1984	18	1978	18	6	1978	1.6	1.5	.5	.3	.1	4.0	1.9	1.4	.2	
Ann	28.3	15.0	N/A	N/A	17.0	Jan 1997	13	33.0	Jan 1993	35	Apr 1978	9	15	Feb 1993	9.7	9.0	4.0	1.9	.2	24.5	16.6	11.4	3.4	

⁺ 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: 422592

Lon: 111°36W

Lat: 37°46N

Station: ESCALANTE, UT

Climate Division: UT 4 NWS Call Sign:

				Freez	ze Data				
			Spri	ng Freeze D	ates (Month/	Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) th	an indicated	(*)	
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/18	6/12	6/07	6/03	5/31	5/27	5/23	5/19	5/13
32	6/02	5/27	5/22	5/18	5/15	5/11	5/08	5/03	4/27
28	5/14	5/09	5/05	5/01	4/28	4/25	4/21	4/18	4/12
24	4/24	4/18	4/14	4/10	4/07	4/03	3/30	3/26	3/20
20	4/18	4/10	4/04	3/30	3/25	3/20	3/15	3/09	3/01
16	3/27	3/18	3/12	3/07	3/02	2/25	2/20	2/14	2/05
			Fal	l Freeze Da	tes (Month/D	ay)			
To (E)		Pro	bability of e	arlier date i	n fall (beginn	ing Aug 1)	than indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/09	9/13	9/17	9/20	9/22	9/25	9/27	10/01	10/05
32	9/20	9/25	9/29	10/02	10/05	10/07	10/11	10/14	10/19
28	9/29	10/05	10/10	10/14	10/17	10/21	10/24	10/29	11/04
24	10/12	10/18	10/21	10/25	10/28	10/31	11/03	11/07	11/12
20	10/26	10/30	11/02	11/05	11/07	11/10	11/12	11/15	11/20
16	11/02	11/07	11/11	11/14	11/17	11/20	11/23	11/27	12/02
				Freeze F	ree Period		•		
Tomp (F)			Probability	of longer th	an indicated	freeze free p	period (Days))	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	140	131	124	119	114	108	103	96	87
32	166	158	152	147	142	137	132	126	118
28	196	187	181	176	171	167	161	155	147
24	226	219	213	208	203	199	194	188	180
20	253	244	237	232	226	221	216	209	200
16	291	280	273	266	259	253	246	238	227

^{*} 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:

Elevation: 5,810 Feet

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: ESCALANTE, UT

COOP ID: 422592

Climate Division: UT 4 NWS Call Sign: Elevation: 5,810 Feet Lat: 37°46N Lon: 111°36W

				Deg	ree Days t	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	1127	854	723	489	256	66	3	14	122	426	791	1075	5946
60	972	714	569	350	145	22	0	1	47	284	641	920	4665
57	879	630	479	273	94	9	0	0	22	211	551	827	3975
55	817	574	422	227	68	5	0	0	12	168	492	765	3550
50	668	439	286	133	24	0	0	0	2	83	348	610	2593
32	219	78	21	3	0	0	0	0	0	0	28	152	501

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	116	148	321	506	788	1043	1261	1189	910	601	228	101	7212
55	0	0	9	40	143	357	548	476	231	56	1	0	1861
57	0	0	5	26	108	302	486	414	182	37	0	0	1560
60	0	0	1	13	65	224	393	323	117	17	0	0	1153
65	0	0	0	2	21	118	240	181	42	3	0	0	607
70	0	0	0	0	4	47	109	74	8	0	0	0	242

										Gro	wing]	Degre	e Uni	ts (2)										
Base	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov D 40 5 29 119 284 554 815 1025 951 679 371 79															Growi	ng Degre	ee Units (Accumu	lated Mo	onthly)			
													Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	5	29	119	284	554	815	1025	951	679	371	79	7	5	34	153	437	991	1806	2831	3782	4461	4832	4911	4918
45												0	0	4	52	214	613	1278	2148	2944	3473	3705	3728	3728
50												0	0	0	11	84	341	856	1571	2212	2592	2714	2715	2715
55	0	0	0	21	136	366	560	486	244	45	0	0	0	0	0	21	157	523	1083	1569	1813	1858	1858	1858
60	0	0	0	2	50	225	405	332	121	10	0	0	0	0	0	2	52	277	682	1014	1135	1145	1145	1145
Base	se Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	15	40	118	227	385	524	637	608	452	281	85	15	15	55	173	400	785	1309	1946	2554	3006	3287	3372	3387

(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