

Climatology of the United States

No. 20

1971-2000

Station: FISH SPRINGS REFUGE, UT

COOP ID: 422852

Climate Division: UT 1

NWS Call Sign:

Elevation: 4,335 Feet Lat: 39° 50N

Lon: 113° 24W

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	38.6	16.9	27.8	69+	1969	8	36.8	1999	-19	1984	19	15.4	1984	1156	0	.0	.0	5.9	9.2	28.8	2.2
Feb	45.4	22.5	34.0	74	1972	28	41.2	1995	-18+	1989	6	17.4	1984	869	0	.0	.0	11.1	3.5	24.3	1.0
Mar	55.5	31.0	43.3	80+	1986	30	48.8	1986	6	1971	1	36.9	1976	673	0	.0	.0	22.9	.3	17.0	.0
Apr	63.5	37.6	50.6	90	2000	28	58.1	1992	14	1982	2	42.8	1975	440	7	.0	@	27.1	.0	8.0	.0
May	73.6	47.0	60.3	98	2000	30	65.1	1992	26	1961	5	55.4	1977	189	43	.0	1.4	30.7	.0	.8	.0
Jun	85.5	56.7	71.1	105	1961	21	76.3	1974	28	2001	12	64.8	1995	35	217	1.8	13.0	30.0	.0	@	.0
Jul	94.1	63.9	79.0	109+	1973	6	82.7	2000	44+	1983	10	73.6	1993	0	435	6.2	25.8	31.0	.0	.0	.0
Aug	92.3	62.0	77.2	107	2001	10	81.6	2000	40+	1960	23	73.7	1976	1	377	2.9	23.5	31.0	.0	.0	.0
Sep	81.1	50.9	66.0	101+	1990	13	70.4	1990	29+	1970	26	60.5	1986	73	101	.2	6.8	30.0	.0	.5	.0
Oct	66.6	37.8	52.2	92	1996	11	58.6	1988	9	1971	30	47.4	1982	399	3	.0	.1	28.9	.1	7.9	.0
Nov	50.7	27.0	38.9	78+	1980	6	45.1	1995	1+	1961	19	32.1	1979	785	0	.0	.0	16.8	1.0	23.0	.0
Dec	40.3	18.2	29.3	74	1995	1	38.1	1977	-18	1972	10	19.9	1990	1109	0	.0	.0	6.2	6.1	28.6	1.0
Ann	65.6	39.3	52.5	109+	Jul 1973	6	82.7	Jul 2000	-19	Jan 1984	19	15.4	Jan 1984	5729	1183	11.1	70.6	271.6	20.2	138.9	4.2

+ 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/normal/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1960-2001

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

040-A

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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: FISH SPRINGS REFUGE, UT

COOP ID: 422852

Climate Division: UT 1

NWS Call Sign:

Elevation: 4,335 Feet Lat: 39°50N

Lon: 113°24W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				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	.47	.42	.62	1987	5	1.04	1980	.11	1972	4.9	1.7	.1	.0	.14	.19	.26	.31	.37	.43	.49	.57	.67	.82	.96
Feb	.55	.44	.90	1986	5	1.60	1986	.00	1988	4.9	2.1	.1	.0	.02	.06	.13	.21	.30	.40	.52	.67	.89	1.24	1.60
Mar	.84	.76	1.10	1998	28	2.42	1975	.00	1997	6.6	2.6	.3	@	.05	.13	.26	.38	.51	.66	.83	1.04	1.32	1.79	2.25
Apr	.98	.84	1.87	1969	15	2.60	1995	.05	1992	6.5	3.0	.3	@	.05	.10	.21	.34	.49	.67	.89	1.18	1.58	2.27	2.96
May	1.09	.84	1.62	1977	16	3.82	1977	.00	1972	6.4	2.8	.4	.1	.10	.22	.40	.56	.72	.89	1.10	1.34	1.67	2.20	2.70
Jun	.56	.31	1.06	1994	1	2.24	1997	.00+	2000	3.7	1.5	.2	@	.00	.00	.03	.12	.22	.35	.50	.69	.96	1.42	1.89
Jul	.49	.38	1.40	1965	31	1.35	1984	.00	1978	3.6	1.7	.1	.0	.02	.06	.13	.21	.28	.37	.47	.60	.78	1.07	1.36
Aug	.64	.35	1.77	1986	21	3.16	1983	.01+	1996	4.4	1.6	.3	.1	.02	.04	.11	.19	.28	.40	.56	.76	1.05	1.55	2.07
Sep	.76	.62	1.00	1982	27	3.14	1982	.00+	1979	3.9	2.1	.4	@	.00	.09	.23	.36	.48	.61	.77	.95	1.20	1.60	1.99
Oct	.88	.87	1.51	1969	20	3.47	1981	.00+	1999	5.1	2.6	.4	@	.00	.08	.24	.38	.52	.68	.87	1.09	1.40	1.91	2.41
Nov	.58	.50	.67	1993	12	1.52	1973	.02	1977	5.0	1.8	.2	.0	.05	.09	.17	.25	.34	.43	.55	.70	.91	1.25	1.58
Dec	.32	.21	1.18	1982	1	1.23	1982	.00+	1993	3.8	1.0	@	@	.00	.00	.05	.10	.15	.22	.29	.39	.53	.76	.98
Ann	8.16	8.13	1.87	Apr 1969	15	3.82	May 1977	.00+	Jun 2000	58.8	24.5	2.8	.2	4.46	5.11	5.97	6.65	7.27	7.89	8.54	9.27	10.18	11.54	12.74

+ 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: 1960-2001

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

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

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Station: FISH SPRINGS REFUGE, UT

COOP ID: 422852

Climate Division: UT 1

NWS Call Sign:

Elevation: 4,335 Feet

Lat: 39° 50N

Lon: 113° 24W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										Snow Fall >= Thresholds					Snow Depth >= Thresholds			
Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	3.0	2.5	1	#	6.0	1971	13	9.0	1996	9	1993	8	6	1993	2.3	1.3	.5	.1	.0	7.7	4.9	1.6	.0
Feb	2.0	.8	#	#	4.5	1984	17	11.0	1996	7	1980	1	4	1984	1.7	.9	.2	.0	.0	2.9	1.8	.7	.0
Mar	2.7	.0	#	0	6.0	1990	11	11.6	1973	6	1990	11	#+	1997	1.2	.9	.4	.1	.0	.5	.2	.1	.0
Apr	1.2	.0	#	0	7.0	1998	15	7.0	1998	3	1984	27	1	1984	.5	.3	.2	@	.0	.1	@	.0	.0
May	.4	.0	#	0	5.6	1975	4	9.6	1975	2	1975	20	#	1975	.1	.1	@	@	.0	.1	.0	.0	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	#	1995	7	#	1995	.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	.1	.0	#	0	2.0	1971	30	2.0	1971	1	1971	30	#	1971	@	@	.0	.0	.0	@	.0	.0	.0
Oct	.2	.0	#	0	2.0	1971	28	4.0	1971	4	1971	31	#+	1996	.1	.1	.0	.0	.0	.2	@	.0	.0
Nov	2.1	.2	#	0	11.0	1973	3	16.9	1973	4	1973	3	2	1983	.9	.6	.2	.1	@	.5	@	.0	.0
Dec	2.5	1.3	#	#	5.0	1988	26	11.0	1972	7	1972	7	2	1983	1.5	1.1	.2	@	.0	2.3	1.1	.5	.0
Ann	14.2	4.8	N/A	N/A	11.0	Nov 1973	3	16.9	Nov 1973	9	Jan 1993	8	6	Jan 1993	8.3	5.3	1.7	.3	@	14.3	8.0	2.9	.0

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

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-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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NWS Call Sign:

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Lat: 39° 50N

Lon: 113° 24W

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	5/28	5/23	5/19	5/16	5/13	5/10	5/07	5/04	4/29
32	5/19	5/13	5/09	5/06	5/02	4/29	4/25	4/21	4/16
28	5/07	4/30	4/25	4/21	4/17	4/12	4/08	4/03	3/27
24	4/20	4/12	4/06	4/01	3/28	3/23	3/19	3/13	3/05
20	4/06	3/29	3/22	3/17	3/12	3/07	3/01	2/23	2/14
16	3/25	3/14	3/07	2/28	2/22	2/17	2/10	2/03	1/23
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	9/20	9/24	9/27	9/29	10/01	10/04	10/06	10/09	10/13
32	9/24	9/30	10/04	10/08	10/11	10/15	10/18	10/23	10/28
28	10/05	10/11	10/15	10/18	10/21	10/24	10/28	10/31	11/06
24	10/18	10/22	10/26	10/29	11/01	11/04	11/07	11/10	11/15
20	10/29	11/03	11/06	11/09	11/12	11/15	11/18	11/21	11/26
16	11/06	11/11	11/15	11/18	11/21	11/24	11/27	12/01	12/06
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	161	154	149	144	140	136	132	127	120
32	186	177	171	166	161	156	151	145	136
28	212	203	197	192	187	182	176	170	161
24	246	236	229	223	217	212	205	198	188
20	274	264	256	250	244	239	232	225	215
16	308	295	286	278	271	264	256	247	234

* 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

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Degree Days to Selected Base Temperatures (° F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1156	869	673	440	189	35	0	1	73	399	785	1109	5729
60	1001	729	520	307	97	10	0	0	24	258	635	954	4535
57	908	645	431	236	58	4	0	0	10	186	546	861	3885
55	850	590	375	195	39	2	0	0	5	144	488	799	3487
50	706	462	244	111	11	0	0	0	0	66	349	645	2594
32	268	115	14	2	0	0	0	0	0	0	40	187	626

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	135	170	364	558	877	1172	1457	1399	1019	626	245	101	8123
55	4	0	12	62	204	484	744	686	334	57	3	0	2590
57	0	0	6	43	161	426	682	624	279	37	1	0	2259
60	0	0	2	24	106	342	589	531	203	17	0	0	1814
65	0	0	0	7	43	217	435	377	101	3	0	0	1183
70	0	0	0	0	13	119	283	230	39	0	0	0	684

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	20	54	183	351	651	949	1223	1161	796	406	99	24	20	74	257	608	1259	2208	3431	4592	5388	5794	5893	5917
45	2	15	90	224	498	799	1068	1006	647	264	41	4	2	17	107	331	829	1628	2696	3702	4349	4613	4654	4658
50	0	3	33	126	353	649	913	851	498	152	11	1	0	3	36	162	515	1164	2077	2928	3426	3578	3589	3590
55	0	0	8	57	227	502	758	696	358	76	1	0	0	0	8	65	292	794	1552	2248	2606	2682	2683	2683
60	0	0	0	21	125	362	603	541	230	27	0	0	0	0	0	21	146	508	1111	1652	1882	1909	1909	1909
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	15	47	132	232	410	602	772	741	514	284	80	20	15	62	194	426	836	1438	2210	2951	3465	3749	3829	3849

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normal/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 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.

- | | |
|---|---|
| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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