

Climatography of the United States

No. 20

1971-2000

Station: DUFUR, OR

COOP ID: 352440

Climate Division: OR 6

NWS Call Sign:

Elevation: 1,330 Feet Lat: 45° 27N

Lon: 121° 08W

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	40.7	26.3	33.5	70+	1955	12	40.2	1994	-26	1957	26	18.0	1979	978	0	.0	.0	5.9	6.0	25.5	1.2
Feb	46.8	29.3	38.1	73	1986	24	44.1	1991	-28	1950	2	28.0	1989	755	0	.0	.0	12.0	2.2	20.7	.5
Mar	55.6	32.4	44.0	80	1994	27	48.9	1986	5	1993	1	39.0	1975	651	0	.0	.0	25.7	.1	18.4	.0
Apr	63.0	35.5	49.3	90	1947	14	53.3	1994	17	1968	13	43.1	1975	473	0	.0	.0	29.6	.0	12.6	.0
May	71.2	40.3	55.8	103	1986	30	61.3	1997	21	1954	1	50.4	1977	297	12	.1	1.1	31.0	.0	5.9	.0
Jun	78.3	45.3	61.8	106	1961	17	67.2	1992	26	1976	2	56.9	1976	140	44	.3	3.9	30.0	.0	.6	.0
Jul	86.4	49.7	68.1	110+	1928	26	73.7	1985	33	1949	2	62.4	1993	50	144	2.2	12.3	31.0	.0	.0	.0
Aug	86.1	49.7	67.9	109	1961	4	72.6	1986	32	1969	23	62.8	1980	46	137	1.8	11.3	31.0	.0	.0	.0
Sep	78.2	44.5	61.4	103	1998	2	66.9	1998	24	1970	13	55.6	1971	160	49	.2	3.3	30.0	.0	1.3	.0
Oct	64.7	37.1	50.9	92	1945	2	56.6	1988	10	1935	30	47.4	1984	438	0	.0	.0	29.9	.0	10.5	.0
Nov	48.6	32.0	40.3	75+	1999	12	45.2	1995	-12	1985	24	28.8	1985	741	0	.0	.0	14.5	1.1	17.8	.2
Dec	40.3	27.1	33.7	67	1980	15	39.5	1973	-19	1990	29	22.2	1985	970	0	.0	.0	5.7	6.0	25.6	.8
Ann	63.3	37.4	50.4	110+	Jul 1928	26	73.7	Jul 1985	-28	Feb 1950	2	18.0	Jan 1979	5699	386	4.6	31.9	276.3	15.4	138.9	2.7

+ 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/normals/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1904-2001

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

037-A

Climatology 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: DUFUR, OR

COOP ID: 352440

Climate Division: OR 6

NWS Call Sign:

Elevation: 1,330 Feet Lat: 45°27N

Lon: 121°08W

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	2.07	2.25	1.31	1954	27	4.46	1995	.12	1985	13.2	6.1	.9	.1	.42	.61	.91	1.19	1.47	1.77	2.11	2.51	3.05	3.91	4.73
Feb	1.51	1.36	1.21	1996	7	3.51	1983	.17	1971	12.0	4.9	.4	.1	.25	.38	.60	.81	1.02	1.26	1.52	1.85	2.28	2.99	3.66
Mar	1.27	1.14	1.02	1928	26	3.14	1983	.12	1973	10.6	4.6	.2	.0	.36	.48	.66	.82	.98	1.14	1.32	1.53	1.81	2.24	2.65
Apr	.96	.96	1.23	1988	21	2.87	1995	.07	1973	8.1	2.9	.4	@	.13	.20	.34	.47	.61	.77	.95	1.18	1.48	1.97	2.45
May	.84	.73	1.20	1998	29	3.28	1998	.11	1976	7.1	2.6	.3	@	.13	.20	.32	.44	.56	.69	.84	1.03	1.28	1.68	2.07
Jun	.62	.52	1.11	1952	29	1.70	1988	.04	1973	5.0	2.2	.2	.0	.06	.11	.19	.28	.37	.48	.60	.76	.97	1.32	1.66
Jul	.33	.21	1.15	1995	9	1.43	1995	.00+	1984	2.9	.9	.1	@	.00	.01	.05	.09	.15	.21	.29	.39	.54	.80	1.05
Aug	.45	.27	.74	1983	29	1.37	1990	.00+	2000	3.0	1.4	.1	.0	.00	.00	.01	.06	.13	.22	.35	.52	.77	1.21	1.67
Sep	.54	.41	1.32	1982	20	2.11	1982	.00+	1999	3.9	1.5	.2	@	.00	.00	.06	.15	.25	.36	.50	.67	.92	1.33	1.73
Oct	.91	.77	1.25	1994	27	2.36	1979	.00+	1988	6.9	3.2	.3	.1	.00	.12	.30	.44	.59	.75	.93	1.14	1.43	1.90	2.35
Nov	1.83	1.45	1.95	1996	19	4.80	1973	.26	1976	13.7	5.2	.7	.1	.37	.54	.81	1.05	1.30	1.56	1.86	2.22	2.69	3.45	4.17
Dec	2.04	1.45	1.80	1964	21	6.98	1996	.25	1976	13.5	6.3	.9	.1	.26	.43	.72	1.00	1.30	1.63	2.02	2.49	3.13	4.19	5.21
Ann	13.37	12.79	1.95	Nov 1996	19	6.98	Dec 1996	.00+	Aug 2000	99.9	41.8	4.7	.5	8.43	9.35	10.54	11.46	12.29	13.10	13.95	14.89	16.05	17.75	19.25

+ 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: 1904-2001

(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: DUFUR, OR

COOP ID: 352440

Climate Division: OR 6

NWS Call Sign:

Elevation: 1,330 Feet

Lat: 45° 27N

Lon: 121° 08W

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	7.3	4.0	2	1	16.0	1998	11	28.5	1998	20	1998	12	9	1979	3.3	2.3	.9	.3	.1	7.8	4.5	2.9	1.1
Feb	4.0	1.0	1	#	11.5	1985	7	15.8	1975	12	1985	7	2	1996	1.9	1.2	.4	.2	@	2.9	1.7	1.2	.1
Mar	.9	.0	#	0	3.0	1989	5	5.8	1989	5	1993	3	1	1993	.5	.4	@	.0	.0	.4	.2	.1	.0
Apr	.1	.0	#	0	1.3	1998	13	1.3	1998	#+	1999	10	#+	1999	@	@	.0	.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	.2	.0	#	0	2.5	1991	29	4.0	1991	2	1991	29	#+	1999	.1	.1	.0	.0	.0	.1	.0	.0	.0
Nov	2.3	.0	#	#	11.0	1977	22	17.0	1977	15	1973	5	3	1985	1.2	.8	.3	.2	@	1.8	1.1	.6	.2
Dec	6.4	5.2	1	#	9.0	1983	6	27.4	1992	16	1985	2	6	1985	3.4	2.5	.7	.2	.0	6.1	3.4	1.8	.2
Ann	21.2	10.2	N/A	N/A	16.0	Jan 1998	11	28.5	Jan 1998	20	Jan 1998	12	9	Jan 1979	10.4	7.3	2.3	.9	.1	19.1	10.9	6.6	1.6

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

@ 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

Complete documentation available from:

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Lon: 121° 08W

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	7/06	6/29	6/23	6/19	6/15	6/11	6/06	6/01	5/25
32	6/15	6/08	6/02	5/29	5/25	5/21	5/16	5/11	5/04
28	5/24	5/17	5/11	5/07	5/02	4/28	4/23	4/18	4/11
24	4/29	4/20	4/13	4/07	4/02	3/27	3/21	3/15	3/05
20	4/05	3/23	3/13	3/05	2/25	2/18	2/09	1/31	1/17
16	3/01	2/18	2/10	2/03	1/27	1/21	1/14	1/06	12/26
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	8/29	9/04	9/08	9/12	9/15	9/18	9/22	9/26	10/02
32	9/18	9/23	9/27	9/30	10/02	10/05	10/08	10/11	10/16
28	9/28	10/03	10/07	10/11	10/14	10/17	10/20	10/24	10/29
24	10/12	10/20	10/26	11/01	11/06	11/10	11/16	11/22	11/30
20	10/25	11/04	11/11	11/17	11/23	11/28	12/04	12/11	12/21
16	11/05	11/16	11/25	12/02	12/09	12/16	12/23	1/01	1/13
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	122	111	104	97	91	85	79	71	61
32	152	144	139	134	130	125	120	115	107
28	192	182	175	169	163	158	152	145	135
24	256	243	233	225	217	209	201	192	178
20	326	304	290	278	268	257	246	233	215
16	>365	347	330	319	310	301	292	282	268

* 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	978	755	651	473	297	140	50	46	160	438	741	970	5699
60	823	615	496	327	173	60	14	12	75	286	591	815	4287
57	730	531	403	246	116	29	5	3	41	201	503	722	3530
55	672	475	342	196	84	17	2	1	25	152	447	660	3073
50	528	342	201	96	29	3	0	0	5	58	311	514	2087
32	138	34	1	0	0	0	0	0	0	0	32	113	318

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	183	203	373	517	737	895	1116	1113	879	585	281	166	7048
55	4	0	1	23	109	221	405	402	214	24	6	0	1409
57	0	0	0	13	78	174	346	342	170	12	1	0	1136
60	0	0	0	5	42	115	262	257	114	3	0	0	798
65	0	0	0	0	12	44	144	137	49	0	0	0	386
70	0	0	0	0	1	11	63	56	15	0	0	0	146

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	26	53	135	271	482	652	864	858	632	329	86	32	26	79	214	485	967	1619	2483	3341	3973	4302	4388	4420
45	2	14	47	147	329	502	709	703	482	192	29	3	2	16	63	210	539	1041	1750	2453	2935	3127	3156	3159
50	0	1	7	61	192	353	554	548	334	84	4	0	0	1	8	69	261	614	1168	1716	2050	2134	2138	2138
55	0	0	0	23	99	216	400	394	196	27	0	0	0	0	0	23	122	338	738	1132	1328	1355	1355	1355
60	0	0	0	2	40	109	255	244	97	5	0	0	0	0	0	2	42	151	406	650	747	752	752	752
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	13	33	108	204	339	426	539	538	420	237	47	15	13	46	154	358	697	1123	1662	2200	2620	2857	2904	2919

(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