

Climatology of the United States

No. 20

1971-2000

Station: MEDFORD EXPERIMENT STN, OR

COOP ID: 355424

Climate Division: OR 3

NWS Call Sign:

Elevation: 1,457 Feet Lat: 42° 18N

Lon: 122° 52W

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	46.8	30.6	38.7	70	1961	20	45.6	1995	-1	1962	21	34.3	1977	815	0	.0	.0	10.4	.2	19.4	.0
Feb	53.1	32.4	42.8	77+	1992	27	48.1	1992	-1	1950	2	36.5	1989	624	0	.0	.0	19.0	.3	15.1	@
Mar	57.9	34.6	46.3	81+	1966	31	51.1	1986	11	1950	12	42.8	1975	582	0	.0	.0	27.3	.0	12.9	.0
Apr	64.2	37.5	50.9	93	1987	27	55.8	1992	22	1945	2	44.5	1975	425	0	.0	@	29.2	.0	7.3	.0
May	71.9	42.1	57.0	98	2001	23	62.5	1992	25	1954	1	52.5	1977	257	9	.0	1.5	31.0	.0	2.2	.0
Jun	79.9	47.5	63.7	107+	1961	16	68.2	1986	27	1952	12	59.2	1980	97	57	.3	5.4	30.0	.0	.1	.0
Jul	87.9	51.4	69.7	109	1946	20	73.8	1996	35+	1973	1	63.0	1993	29	172	2.4	14.6	31.0	.0	.0	.0
Aug	87.0	50.7	68.9	109	1981	8	73.3	1986	37+	1993	26	64.6	1995	29	148	1.9	13.0	31.0	.0	.0	.0
Sep	79.8	44.4	62.1	106	1955	4	66.1	1991	26	1950	30	57.5	1978	128	40	.2	5.4	30.0	.0	.8	.0
Oct	67.0	37.3	52.2	95+	1980	2	56.6	1988	17	1971	29	49.3	1971	399	0	.0	.2	30.5	.0	7.7	.0
Nov	51.3	34.2	42.8	76	1966	1	48.1	1995	9+	1978	14	36.4	1985	668	0	.0	.0	19.0	.0	13.5	.0
Dec	45.1	30.7	37.9	68+	1979	17	43.1	1995	-8	1972	9	31.3	1990	841	0	.0	.0	8.3	1.0	18.8	.2
Ann	66.0	39.5	52.8	109+	Aug 1981	8	73.8	Jul 1996	-8	Dec 1972	9	31.3	Dec 1990	4894	426	4.8	40.1	296.7	1.5	97.8	.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: 1937-2001

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

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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: MEDFORD EXPERIMENT STN, OR

COOP ID: 355424

Climate Division: OR 3

NWS Call Sign:

Elevation: 1,457 Feet Lat: 42° 18N

Lon: 122° 52W

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	2.77	2.74	3.86	1997	2	5.81	1974	.25	1985	12.8	6.2	1.7	.6	.57	.82	1.22	1.59	1.97	2.37	2.82	3.36	4.08	5.23	6.32
Feb	2.32	2.09	2.22	1956	21	5.61	1983	.40	1973	11.9	5.7	1.4	.2	.61	.83	1.17	1.46	1.75	2.06	2.39	2.80	3.32	4.14	4.91
Mar	2.26	1.89	1.84	1975	18	4.50	1989	.75	1988	12.8	5.6	1.1	.2	.74	.96	1.27	1.54	1.80	2.06	2.36	2.70	3.13	3.81	4.44
Apr	1.61	1.50	1.87	2000	18	3.59	2000	.44	1985	10.6	4.8	.6	@	.52	.67	.90	1.09	1.28	1.47	1.68	1.93	2.25	2.75	3.20
May	1.41	1.29	1.40	1953	26	4.32	1998	.04	1982	8.0	4.0	.4	.1	.17	.28	.48	.68	.89	1.12	1.39	1.72	2.17	2.92	3.64
Jun	.77	.66	.92	1958	3	1.93	1980	.00	1999	5.2	2.3	.3	.0	.03	.09	.20	.31	.43	.57	.73	.94	1.23	1.71	2.18
Jul	.50	.25	1.30	1996	30	1.59+	1992	.00+	1999	2.5	1.1	.2	.1	.00	.00	.02	.08	.16	.26	.40	.58	.85	1.32	1.81
Aug	.57	.14	1.59	1952	4	3.57	1976	.00+	1998	2.9	1.6	.3	@	.00	.00	.00	.00	.06	.18	.36	.61	.99	1.68	2.40
Sep	.95	.65	3.66	1977	28	4.87	1977	.00+	1999	4.1	2.3	.5	.1	.00	.00	.10	.30	.48	.69	.92	1.21	1.60	2.23	2.87
Oct	1.51	1.38	2.94	1950	28	4.29	1979	.01	1987	6.7	3.7	.8	.1	.10	.20	.39	.60	.83	1.10	1.42	1.83	2.40	3.36	4.32
Nov	3.20	2.19	2.53	1946	19	8.29	1998	.42	1976	13.9	6.6	1.5	.4	.54	.82	1.29	1.73	2.18	2.67	3.23	3.91	4.81	6.28	7.68
Dec	3.27	2.57	3.33	1962	2	10.95	1996	.41	1976	13.8	6.7	1.5	.5	.47	.74	1.21	1.67	2.14	2.66	3.26	3.99	4.98	6.59	8.14
Ann	21.14	21.12	3.86	Jan 1997	2	10.95	Dec 1996	.00+	Sep 1999	105.2	50.6	10.3	2.3	13.20	14.66	16.57	18.05	19.38	20.68	22.04	23.56	25.42	28.16	30.56

+ 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: 1937-2001

(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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Climate Division: OR 3

NWS Call Sign:

Elevation: 1,457 Feet

Lat: 42° 18N

Lon: 122° 52W

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	1.6	.7	#	0	3.0	1975	9	7.5+	1975	4	1971	14	#+	1993	1.1	.6	.1	.0	.0	.4	.2	.0	.0
Feb	.5	.0	#	0	2.0	1974	28	2.3	1974	4	1989	3	#+	1989	.7	.1	.0	.0	.0	.1	.0	.0	.0
Mar	.3	.0	#	0	2.5	1971	16	2.5	1971	2	1971	16	#	1971	.3	.1	.0	.0	.0	@	.0	.0	.0
Apr	#	.0	#	0	#	1975	25	#+	1975	#	1972	28	#	1972	.0	.0	.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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.1	.0	#	0	1.0	1977	21	1.3	1977	#+	1993	23	#+	1993	.1	.1	.0	.0	.0	.0	.0	.0	.0
Dec	1.6	.0	#	0	5.0	1972	3	12.0	1972	7	1972	12	2+	1984	.8	.6	.2	.1	.0	.7	.5	.1	.0
Ann	4.1	.7	N/A	N/A	5.0	Dec 1972	3	12.0	Dec 1972	7	Dec 1972	12	2+	Dec 1984	3.0	1.5	.3	.1	.0	1.2	.7	.1	.0

+ 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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Elevation: 1,457 Feet

Lat: 42° 18N

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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	6/21	6/14	6/09	6/04	5/31	5/27	5/23	5/18	5/11
32	5/31	5/25	5/20	5/15	5/12	5/08	5/04	4/29	4/22
28	4/20	4/12	4/07	4/02	3/28	3/24	3/19	3/13	3/05
24	3/17	3/10	3/05	3/01	2/25	2/21	2/16	2/11	2/04
20	3/01	2/16	2/07	1/30	1/22	1/14	1/06	12/26	12/05
16	2/09	1/26	1/14	1/02	12/18	0/00	0/00	0/00	0/00
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	9/03	9/10	9/14	9/18	9/21	9/25	9/29	10/03	10/09
32	9/15	9/21	9/26	9/29	10/03	10/06	10/10	10/14	10/20
28	10/07	10/13	10/18	10/22	10/26	10/30	11/03	11/08	11/14
24	10/18	10/29	11/06	11/13	11/19	11/25	12/02	12/10	12/21
20	11/10	11/20	11/28	12/04	12/10	12/17	12/23	1/01	1/18
16	12/01	12/19	1/02	1/18	2/08	0/00	0/00	0/00	0/00
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	144	133	125	119	112	106	99	91	80
32	167	159	153	148	143	139	133	128	119
28	240	230	223	217	211	205	199	192	182
24	306	292	283	275	267	259	251	241	228
20	>365	>365	355	331	317	306	296	284	269
16	>365	>365	>365	>365	>365	>365	>365	343	317

* 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:

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Elevation: 1,457 Feet Lat: 42°18N Lon: 122°52W

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	815	624	582	425	257	97	29	29	128	399	668	841	4894
60	660	484	427	283	134	31	6	5	48	250	518	686	3532
57	567	400	337	205	81	12	1	1	21	172	428	593	2818
55	505	344	280	160	54	5	0	0	11	126	371	531	2387
50	357	215	152	74	13	0	0	0	1	47	237	383	1479
32	23	3	0	0	0	0	0	0	0	0	8	33	67

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	231	303	441	566	775	951	1166	1142	903	625	331	215	7649
55	0	0	8	35	115	266	453	429	223	38	4	0	1571
57	0	0	3	21	81	213	392	368	174	21	1	0	1274
60	0	0	0	9	41	142	305	280	110	6	0	0	893
65	0	0	0	0	9	57	172	148	40	0	0	0	426
70	0	0	0	0	0	15	80	60	9	0	0	0	164

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	59	124	214	336	536	721	934	914	687	399	125	55	59	183	397	733	1269	1990	2924	3838	4525	4924	5049	5104
45	21	43	99	197	381	571	779	759	537	254	48	18	21	64	163	360	741	1312	2091	2850	3387	3641	3689	3707
50	0	7	29	95	238	422	624	604	389	128	10	0	0	7	36	131	369	791	1415	2019	2408	2536	2546	2546
55	0	1	1	35	124	278	469	449	248	47	0	0	0	1	2	37	161	439	908	1357	1605	1652	1652	1652
60	0	0	0	5	50	152	318	297	130	12	0	0	0	0	0	5	55	207	525	822	952	964	964	964
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	27	79	144	228	346	455	575	567	453	284	63	25	27	106	250	478	824	1279	1854	2421	2874	3158	3221	3246

(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/normal/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