

Climatography of the United States

No. 20

1971-2000

Station: NORFOLK AP, NE

COOP ID: 255995

Climate Division: NE 3

NWS Call Sign: OFK

Elevation: 1,550 Feet Lat: 41° 59N

Lon: 97° 26W

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	31.2	9.6	20.4	71	1981	24	32.3	1992	-27	1974	12	6.0	1979	1388	0	.0	.0	2.9	16.1	30.6	8.1
Feb	37.3	15.5	26.4	74+	1995	25	36.0	1987	-26+	1981	11	11.4	1979	1096	0	.0	.0	6.0	11.2	26.3	4.2
Mar	48.5	25.4	37.0	88	1986	29	42.8	2000	-20	1960	4	28.5	1984	872	0	.0	.0	13.5	4.3	23.0	.6
Apr	61.3	36.8	49.1	95+	1992	30	57.2	1981	2	1975	3	42.7	1983	478	11	.0	.7	24.3	.3	9.0	.0
May	72.3	48.3	60.3	103	1967	25	66.9	1977	24	1976	3	55.2	1995	180	48	.0	1.1	30.6	.0	.7	.0
Jun	82.3	58.0	70.1	106	1988	21	75.6	1988	38+	1990	4	64.5	1982	28	197	.4	6.7	30.0	.0	.0	.0
Jul	86.5	63.0	74.8	113	1954	11	80.7	1974	42	1971	30	67.9	1992	4	322	1.2	11.3	31.0	.0	.0	.0
Aug	84.4	61.0	72.7	107	1983	16	79.9	1983	40+	1986	28	67.1	1992	11	261	.4	8.5	31.0	.0	.0	.0
Sep	76.4	50.4	63.4	101+	1971	7	69.3	1998	26+	1995	22	58.9	1993	130	93	.1	3.5	29.6	.0	.7	.0
Oct	64.0	38.0	51.0	95+	1990	5	54.8	1975	11	1993	31	45.7	1976	432	7	.0	.3	27.5	.2	7.4	.0
Nov	45.5	24.7	35.1	82	1999	13	45.1	1999	-15	1964	30	24.2	1985	881	0	.0	.0	11.4	4.5	23.5	.7
Dec	33.6	13.7	23.7	71	1962	16	31.0	1979	-30	1989	22	6.4	1983	1266	0	.0	.0	3.5	14.0	30.3	4.5
Ann	60.3	37.0	48.7	113	Jul 1954	11	80.7	Jul 1974	-30	Dec 1989	22	6.0	Jan 1979	6766	939	2.1	32.1	241.3	50.6	151.5	18.1

+ 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: 1948-2001

(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: NORFOLK AP, NE

COOP ID: 255995

Climate Division: NE 3

NWS Call Sign: OFK

Elevation: 1,550 Feet Lat: 41°59N

Lon: 97°26W

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	.57	.39	1.30	1982	22	1.63	1982	.06	1986	6.2	1.5	.2	@	.08	.12	.21	.29	.37	.46	.57	.70	.88	1.17	1.45
Feb	.76	.55	2.36	1971	18	3.18	1971	.05	1996	6.1	1.9	.3	.1	.09	.15	.26	.36	.48	.60	.75	.93	1.17	1.58	1.97
Mar	1.97	1.57	2.41	1981	28	7.27	1987	.04	1994	8.4	4.2	1.3	.3	.17	.31	.57	.85	1.15	1.49	1.89	2.40	3.11	4.28	5.43
Apr	2.59	2.12	2.11	1999	14	7.47	1984	.36	1981	9.5	5.7	1.6	.6	.45	.68	1.06	1.41	1.77	2.17	2.61	3.16	3.88	5.05	6.16
May	3.92	3.36	3.41	1973	26	8.61	1977	1.10	1994	11.3	7.5	2.4	.8	1.37	1.74	2.28	2.73	3.16	3.61	4.09	4.66	5.38	6.50	7.52
Jun	4.25	4.11	5.42	1991	4	7.64	1990	.54	1987	9.5	6.2	2.8	1.1	1.05	1.45	2.07	2.62	3.16	3.74	4.38	5.14	6.14	7.73	9.21
Jul	3.74	3.84	3.26	1993	8	9.01	1994	.84	1974	9.5	6.1	2.4	1.2	1.09	1.45	1.98	2.44	2.89	3.36	3.88	4.49	5.28	6.51	7.65
Aug	2.80	2.72	5.06	1995	22	6.16	1998	.53	1971	8.3	5.2	1.6	.7	.77	1.04	1.44	1.79	2.14	2.50	2.90	3.38	4.00	4.97	5.87
Sep	2.25	1.82	3.88	1970	2	5.47	1988	.36	1999	7.5	4.7	1.5	.5	.36	.56	.89	1.20	1.52	1.87	2.27	2.75	3.40	4.46	5.47
Oct	1.72	1.50	2.12	1968	16	4.30	1984	.03	1988	6.2	3.6	1.1	.3	.14	.26	.48	.72	.98	1.28	1.64	2.09	2.71	3.75	4.77
Nov	1.44	1.28	2.03	2000	5	3.97	1983	.03	1980	6.2	2.8	.9	.3	.08	.17	.34	.54	.76	1.02	1.33	1.73	2.30	3.26	4.21
Dec	.65	.61	1.08	1982	24	2.25	1982	.13	1998	6.0	1.9	.2	@	.14	.20	.30	.38	.47	.56	.66	.78	.94	1.20	1.44
Ann	26.66	27.21	5.42	Jun 1991	4	9.01	Jul 1994	.03+	Oct 1988	94.7	51.3	16.3	5.9	17.78	19.45	21.63	23.29	24.78	26.22	27.73	29.40	31.43	34.41	37.00

+ 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: 1948-2001

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

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Station: NORFOLK AP, NE

COOP ID: 255995

Climate Division: NE 3

NWS Call Sign: OFK

Elevation: 1,550 Feet

Lat: 41°59N

Lon: 97°26W

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	5.9	4.3	2	1	12.8	1982	22	16.4	1982	15+	1982	25	8	1979	5.8	1.7	.5	.1	@	16.4	9.4	5.4	.5
Feb	5.5	4.2	2	2	19.0	1984	18	22.8	1984	18	1984	19	9	1979	4.5	1.9	.3	.1	@	12.2	7.8	4.6	1.0
Mar	5.6	5.1	1	1	9.8	1995	6	16.2	1984	15+	1979	5	4+	1984	4.3	1.8	.5	.2	.0	6.6	3.5	2.3	.3
Apr	2.7	1.5	#	0	9.7	1984	29	13.2	1984	9	1997	12	1	1997	1.5	.8	.3	.1	.0	1.2	.4	.2	.0
May	#	.0	#	0	#	1989	5	#	1989	#	1984	1	#	2000	.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	1.0	1985	29	1.1	1985	0	0	0	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.7	.0	#	0	5.5	1991	31	6.5	1991	3	1997	26	#	1997	.6	.2	.1	@	.0	.2	@	.0	.0
Nov	4.9	3.9	1	0	14.4	1983	27	22.6	1983	17	1983	29	3+	1991	3.5	1.7	.3	.1	@	4.5	1.7	1.1	.3
Dec	5.9	5.0	2	1	9.2	1978	2	15.1	1978	14	1978	3	10	1983	4.7	1.9	.5	.2	.0	14.7	7.2	3.1	.8
Ann	31.2	24.0	N/A	N/A	19.0	Feb 1984	18	22.8	Feb 1984	18	Feb 1984	19	10	Dec 1983	25.0	10.0	2.5	.8	@	55.8	30.0	16.7	2.9

+ 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

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NWS Call Sign: OFK

Elevation: 1,550 Feet

Lat: 41° 59N

Lon: 97° 26W

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	5/21	5/16	5/12	5/09	5/06	5/03	4/30	4/26	4/21
32	5/12	5/07	5/03	4/30	4/27	4/24	4/21	4/18	4/13
28	5/02	4/27	4/23	4/20	4/17	4/13	4/10	4/06	4/01
24	4/19	4/14	4/11	4/08	4/06	4/03	3/31	3/28	3/24
20	4/12	4/06	4/03	3/30	3/27	3/24	3/21	3/17	3/12
16	4/01	3/27	3/23	3/20	3/17	3/14	3/11	3/08	3/03
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	9/14	9/17	9/20	9/22	9/25	9/27	9/29	10/02	10/06
32	9/19	9/24	9/27	9/30	10/03	10/06	10/09	10/13	10/18
28	9/27	10/02	10/06	10/09	10/12	10/15	10/19	10/22	10/28
24	10/09	10/14	10/18	10/21	10/24	10/27	10/30	11/03	11/08
20	10/16	10/22	10/26	10/30	11/02	11/06	11/09	11/14	11/19
16	10/23	10/30	11/04	11/08	11/12	11/16	11/20	11/25	12/02
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	145	141	137	133	128	122
32	177	171	166	162	159	155	151	146	140
28	198	191	186	182	178	174	170	165	158
24	221	214	209	205	201	197	192	187	180
20	244	236	229	224	219	214	209	203	194
16	267	257	250	245	239	234	228	221	211

* 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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Climate Division: NE 3 NWS Call Sign: OFK Elevation: 1,550 Feet Lat: 41°59N Lon: 97°26W

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	1388	1096	872	478	180	28	4	11	130	432	881	1266	6766
60	1227	941	714	344	109	6	0	4	47	289	747	1127	5555
57	1134	859	622	270	70	2	0	1	23	212	657	1034	4884
55	1072	809	563	225	50	1	0	0	12	167	600	972	4471
50	922	678	421	131	18	0	0	0	1	81	461	820	3533
32	435	284	80	3	0	0	0	0	0	1	106	342	1251

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	34	80	234	529	894	1162	1343	1276	955	604	187	44	7342
55	0	0	7	59	216	473	630	563	290	65	2	0	2305
57	0	0	5	43	171	415	568	502	243	45	1	0	1993
60	0	0	2	27	114	330	476	410	178	24	0	0	1561
65	0	0	0	11	48	197	322	261	93	7	0	0	939
70	0	0	0	4	15	99	186	139	42	2	0	0	487

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	3	23	102	319	655	934	1105	1039	724	380	75	6	3	26	128	447	1102	2036	3141	4180	4904	5284	5359	5365
45	0	5	54	202	500	784	950	884	577	252	33	0	0	5	59	261	761	1545	2495	3379	3956	4208	4241	4241
50	0	0	23	118	356	634	795	729	433	146	11	0	0	0	23	141	497	1131	1926	2655	3088	3234	3245	3245
55	0	0	7	62	221	484	640	574	295	67	2	0	0	0	7	69	290	774	1414	1988	2283	2350	2352	2352
60	0	0	1	29	117	338	485	420	185	25	0	0	0	0	1	30	147	485	970	1390	1575	1600	1600	1600
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	5	28	79	202	397	606	746	693	457	246	59	9	5	33	112	314	711	1317	2063	2756	3213	3459	3518	3527

(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