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: 315177

Station: LUMBERTON, NC

Climate Division: NC 6

NWS Call Sign:

Elevation: 112 Feet Lat: 34°38N Lon: 79°01W

									r	Гетр	eratui	re (°F)									
	Mea	n (1)						Extr	emes						Days (1) emp 65		Mean	Numb	er of I	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	53.6	30.5	42.1	82	1909	26	53.6	1974	-1+	1985	22	32.1	1977	712	0	.0	.0	19.5	.7	18.7	.1
Feb	57.6	32.3	45.0	84	1997	28	51.7	1990	3	1973	12	36.7	1980	562	0	.0	.0	20.1	.5	15.2	.0
Mar	65.5	39.3	52.4	96	1907	24	58.7	1997	9	1980	3	46.9	1980	396	6	.0	.0	28.5	.1	8.0	.0
Apr	74.3	46.6	60.5	96	1925	24	64.7	1977	23	1985	10	54.3	1983	166	30	.0	.7	29.7	.0	1.9	.0
May	81.4	55.3	68.4	101+	1926	26	72.9	2000	29	1989	8	64.7	1989	37	141	.0	3.4	31.0	.0	.1	.0
Jun	87.3	63.8	75.6	104+	1954	27	80.1	1998	38	1908	9	71.5	1972	2	317	.2	11.0	30.0	.0	.0	.0
Jul	90.2	68.1	79.2	108	1926	21	83.7	1993	50+	1988	5	76.8	1984	0	439	.9	17.1	31.0	.0	.0	.0
Aug	88.7	66.5	77.6	104+	1983	24	81.2	1999	44	1965	30	74.5	1989	0	391	.3	13.9	31.0	.0	.0	.0
Sep	83.9	60.3	72.1	104	1925	4	76.7	1980	35	1983	23	68.5	1984	13	225	.0	5.8	30.0	.0	.0	.0
Oct	75.0	46.9	61.0	99	1954	5	67.0	1971	20	1962	27	53.4	1987	187	60	.0	.3	30.9	.0	2.3	.0
Nov	66.4	39.2	52.8	87	1974	3	61.7	1985	12	1950	26	46.2	1976	375	8	.0	.0	28.3	.0	8.8	.0
Dec	56.8	32.5	44.7	81+	1998	9	53.6	1971	-2	1989	28	35.2	1989	631	0	.0	.0	22.5	.3	16.9	@
Ann	73.4	48.4	61.0	108	Jul 1926	21	83.7	Jul 1993	-2	Dec 1989	28	32.1	Jan 1977	3081	1617	1.4	52.2	332.5	1.6	71.9	.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 060-A

- (2) Derived from station's available digital record: 1903-2001
- (3) Derived from 1971-2000 serially complete daily data

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

⁽¹⁾ From the 1971-2000 Monthly Normals

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Station: LUMBERTON, NC COOP ID: 315177

Climate Division: NC 6 NWS Call Sign: Elevation: 112 Feet Lat: 34°38N Lon: 79°01W

										Pı	ecipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	on Total						ays (3	5)	Proba	ability th		nonthly/	annual j	precipita ated an	nount	ies (1)		less tha	ın the
	Medi	ans(1)				Extremes	3			D	aily Pre	cipitatio	n		Th	ese value	s were det	ermined	from the	incomplet	e 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	4.29	4.08	2.47	1993	8	7.19	1987	.86	1981	11.7	7.8	3.1	1.0	1.60	2.00	2.57	3.06	3.51	3.98	4.49	5.08	5.83	6.99	8.05
Feb	3.37	3.07	3.00+	1939	26	7.04	1998	.71	1978	9.4	5.8	2.3	.8	.94	1.26	1.74	2.16	2.58	3.01	3.49	4.06	4.79	5.95	7.02
Mar	4.31	3.58	4.50	1941	7	9.37	1971	.85	1985	9.9	6.9	3.1	1.2	1.24	1.65	2.26	2.80	3.32	3.86	4.47	5.18	6.09	7.53	8.87
Apr	2.83	2.41	5.65	1918	20	6.74	1973	.11	1976	8.2	5.2	2.1	.7	.50	.74	1.16	1.54	1.94	2.37	2.86	3.45	4.24	5.52	6.73
May	3.97	3.81	5.40	1977	25	8.51	1977	.92	1987	10.4	6.5	2.4	1.0	1.43	1.80	2.34	2.80	3.23	3.67	4.15	4.71	5.42	6.52	7.53
Jun	4.56	4.30	4.65	1945	26	11.90	1994	1.20	1990	10.5	6.8	2.9	1.3	1.73	2.15	2.76	3.27	3.75	4.24	4.77	5.39	6.18	7.39	8.49
Jul	5.61	5.52	5.00	1916	15	11.18	1997	1.25	1977	11.8	8.5	4.0	1.7	2.04	2.57	3.33	3.97	4.57	5.19	5.87	6.66	7.66	9.20	10.62
Aug	5.16	4.80	4.19	1955	23	11.08	1992	1.37	1980	10.8	7.5	3.3	1.4	1.70	2.18	2.90	3.51	4.10	4.71	5.37	6.15	7.15	8.70	10.14
Sep	4.61	3.75	8.87	1999	16	16.92	1999	.26	1985	8.7	5.5	2.7	1.2	.68	1.07	1.73	2.37	3.03	3.76	4.60	5.63	7.01	9.26	11.42
Oct	3.36	2.94	5.74	1954	15	8.93	1971	.00	2000	7.2	4.8	2.1	.8	.28	.65	1.20	1.69	2.20	2.75	3.38	4.15	5.18	6.86	8.47
Nov	2.69	2.35	3.15	1963	6	5.92	1992	.66	1984	8.4	4.7	2.2	.6	.72	.98	1.36	1.70	2.04	2.39	2.78	3.24	3.84	4.79	5.67
Dec	3.22	3.07	3.30	1943	26	6.83	1983	.14	1988	10.3	6.1	2.3	.7	.67	.97	1.44	1.87	2.30	2.77	3.29	3.91	4.74	6.06	7.31
Ann	47.98	47.50	8.87	Sep 1999	16	16.92	Sep 1999	.00	Oct 2000	117.3	76.1	32.5	12.4	36.97	39.17	41.95	44.03	45.86	47.62	49.42	51.40	53.78	57.21	60.14

⁺ 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: 1903-2001

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

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COOP ID: 315177

Station: LUMBERTON, NC

Climate Division: NC 6 NWS Call Sign: Elevation: 112 Feet Lat: 34°38N Lon: 79°01W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nui	nber (of Day	yS (1)		
	Mean	s/Medi	ians (1)	•					Extre	mes (2)							ow Fa				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	.4	.0	#	0	4.5	1973	8	5.0	1973	5	1973	10	1	1973	.2	.1	.1	.0	.0	.4	.3	.1	.0
Feb	1.5	.0	#	0	6.0	1973	10	10.2	1973	10	1973	12	1	1973	.4	.4	.2	.1	.0	.3	.3	.2	.1
Mar	1.4	.0	#	0	10.8	1980	3	13.0	1980	1	1971	26	#	1971	.2	.2	.1	.1	.1	@	.0	.0	.0
Apr	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.3	.0	#	0	2.8	1971	4	2.8	1971	1+	1993	23	#+	1993	.1	.1	.0	.0	.0	@	.0	.0	.0
Ann	3.6	.0	N/A	N/A	10.8	Mar 1980	3	13.0	Mar 1980	10	Feb 1973	12	1+	Feb 1973	.9	.8	.4	.2	.1	.7	.6	.3	.1

⁺ 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

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Elevation: 112 Feet

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COOP ID: 315177

Lon: 79°01W

Lat: 34°38N

Station: LUMBERTON, NC

Climate Division: NC 6 NWS Call Sign:

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated	(*)	
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/12	5/05	4/29	4/25	4/21	4/16	4/12	4/06	3/30
32	4/28	4/20	4/15	4/10	4/06	4/02	3/28	3/23	3/15
28	4/15	4/07	4/01	3/27	3/22	3/18	3/13	3/07	2/27
24	3/28	3/18	3/11	3/05	2/27	2/21	2/15	2/08	1/29
20	3/11	3/02	2/23	2/17	2/12	2/06	1/31	1/23	1/12
16	2/25	2/16	2/09	2/03	1/28	1/21	1/10	0/00	0/00
<u>'</u>		1	Fal	l Freeze Da	tes (Month/D	ay)	1	II.	•
To (E)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/01	10/07	10/12	10/16	10/20	10/24	10/27	11/01	11/08
32	10/09	10/16	10/21	10/25	10/29	11/02	11/06	11/11	11/18
28	10/14	10/22	10/28	11/02	11/06	11/11	11/16	11/21	11/29
24	10/24	11/04	11/11	11/18	11/24	11/30	12/07	12/15	12/26
20	11/16	11/26	12/04	12/10	12/16	12/23	12/29	1/07	1/19
16	12/07	12/16	12/24	12/30	1/06	1/15	1/30	0/00	0/00
<u> </u>		1	1	Freeze F	ree Period			II.	
Tomp (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days))	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	217	205	196	188	182	175	167	158	146
32	238	227	219	212	205	199	192	184	172
28	266	253	244	236	228	221	213	203	190
24	317	299	287	277	268	259	249	238	223
20	>365	335	317	307	299	292	284	276	265
		1	1			1	321	1	+

^{*} 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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				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	712	562	396	166	37	2	0	0	13	187	375	631	3081
60	569	427	260	77	7	0	0	0	2	101	245	484	2172
57	483	348	190	42	2	0	0	0	1	64	180	398	1708
55	429	298	151	25	1	0	0	0	0	45	143	344	1436
50	305	189	74	5	0	0	0	0	0	15	69	226	883
32	43	10	0	0	0	0	0	0	0	0	0	16	69

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	354	372	633	854	1127	1306	1462	1414	1203	896	623	409	10653
55	27	17	70	189	415	616	749	701	513	228	75	24	3624
57	19	11	48	145	354	556	687	639	453	185	53	16	3166
60	12	5	24	91	266	466	594	546	365	130	28	9	2536
65	0	0	6	30	141	317	439	391	225	60	8	0	1617
70	0	0	0	6	55	180	284	237	109	21	1	0	893

										Gro	wing]	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (N	(Ionthly)					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	154	211	403	616	885	1070	1218	1171	972	655	396	205	154	365	768	1384	2269	3339	4557	5728	6700	7355	7751	7956
45	83 124 273 470 730 920 1063 1016 822 501 271											119	83	207	480	950	1680	2600	3663	4679	5501	6002	6273	6392
50	40 67 165 332 576 770 908 861 672 353 164											61	40	107	272	604	1180	1950	2858	3719	4391	4744	4908	4969
55	18	27	86	208	423	620	753	706	522	226	86	29	18	45	131	339	762	1382	2135	2841	3363	3589	3675	3704
60	0 1 10 39 115 279 471 598 551 374 124 41										7	1	11	50	165	444	915	1513	2064	2438	2562	2603	2610	
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86)/86 106 149 267 402 581 731 836 807 653 432 268											140	106	255	522	924	1505	2236	3072	3879	4532	4964	5232	5372

(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

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