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: 014502

Lon: 85°26W

Station: LAFAYETTE 2 W, AL

Climate Division: AL 5 NWS Call Sign:

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 54.6 30.4 42.5 84 1949 12 54.7 1974 -7 1985 21 31.6 1977 704 0 .0 .0 22.5 .5 16.1 .1 Jan 59.8 32.7 46.3 86 1949 26 51.9 1990 3 1996 5 38.0 1978 524 0 .0 .0 23.3 .3 10.7 0. Feb Mar 67.8 39.7 53.8 89 1974 10 60.1 1997 8 1980 3 47.2 1981 358 10 .0 .0 30.1 .0 5.6 0. 27 57.0 1983 Apr 75.1 46.6 60.9 93 1986 65.3 1999 26 +2000 10 152 28 .0. .2 30.0 .0 1.2 .0 May 81.8 55.4 68.6 98+ 1962 19 72.6 2000 35 1997 5 63.7 1981 42 153 .0 3.5 31.0 .0 .0 .0 1985 79.2 42 3 72.1 14.0 Jun 88.0 63.1 75.6 103+ 6 1998 1956 1997 1 318 .2 30.0 .0 .0 .0 Jul 90.7 67.1 78.9 107 +1952 24 81.3 53 1970 6 76.6 1994 431 .9 19.7 31.0 0. 1986 0 .0 .0 89.9 66.4 78.2 103 1954 17 81.5 1990 50 1968 30 73.8 1981 0 407 .3 17.3 31.0 .0 .0 .0 Aug 9 Sep 85.4 60.6 73.0 100 1954 19 77.1 1973 37+ 2001 26 69.2 2000 250 .0 8.4 30.0 .0 .0 .0 75.9 48.3 23 1987 157 Oct 62.1 99 1954 5 69.5 1984 2001 29 56.3 66 .0 .2 31.0 .0 .9 .0 39.8 53.0 85+ 3 61.8 1985 6 1950 25 46.2 1976 370 10 .0 29.1 .0 6.3 .0 Nov 66.2 1961 .0 Dec 57.3 32.5 44.9 81 +1971 15 55.4 1971 -1 1962 13 35.6 1989 625 2 .0 .0 24.7 .2 14.0 **(**a) Jul Aug Jan Jan 74.4 48.6 61.5 107 +1952 24 81.5 1990 -7 1985 21 1977 2942 1675 1.4 63.3 343.7 1.0 54.8 31.6 .1 Ann

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

Issue Date: February 2004 041-A

(1) From the 1971-2000 Monthly Normals

Elevation: 740 Feet Lat: 32°54N

- (2) Derived from station's available digital record: 1948-2001
- (3) Derived from 1971-2000 serially complete daily data

⁺ Also occurred on an earlier date(s)

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

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Station: LAFAYETTE 2 W, AL COOP ID: 014502

Climate Division: AL 5 NWS Call Sign: Elevation: 740 Feet Lat: 32°54N Lon: 85°26W

										Pı	ecipi	tation	(incl	nes)										
	Mea Medi		P	recipi	tatio	n Total					of D	Number (3)	Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount 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	5.88	6.39	5.65	1965	22	11.34	2000	1.16	1981	11.2	8.2	3.7	1.6	2.20	2.75	3.54	4.20	4.82	5.46	6.16	6.96	7.99	9.57	11.01
Feb	5.48	4.98	5.75	1961	24	10.36	1971	1.64	1999	8.2	6.3	3.6	1.9	1.93	2.45	3.20	3.83	4.43	5.05	5.72	6.51	7.51	9.06	10.48
Mar	6.60	5.95	5.70	1990	17	15.36	1980	2.21	1982	9.8	7.9	4.3	2.1	2.31	2.93	3.84	4.60	5.33	6.08	6.89	7.85	9.06	10.95	12.68
Apr	4.84	3.68	7.38	1979	13	16.40	1979	.66	1986	7.9	6.1	3.2	1.4	.86	1.29	1.99	2.65	3.33	4.06	4.89	5.90	7.24	9.41	11.48
May	4.36	3.40	4.02	1991	14	12.88	1991	.47	1977	8.8	6.5	2.9	1.0	.85	1.25	1.89	2.47	3.07	3.71	4.43	5.31	6.46	8.32	10.08
Jun	4.16	3.42	5.25	1972	18	14.83	1989	.78	1988	8.7	6.6	2.5	1.1	.78	1.15	1.76	2.33	2.90	3.52	4.22	5.07	6.20	8.01	9.74
Jul	5.31	5.39	3.41	1977	29	11.68	1985	2.03	1983	10.4	8.1	3.7	1.5	1.87	2.37	3.10	3.71	4.30	4.90	5.55	6.31	7.29	8.79	10.17
Aug	3.82	3.47	2.15	1963	13	8.74	1974	1.33	1989	7.7	5.8	2.6	.8	1.42	1.78	2.29	2.72	3.13	3.54	4.00	4.52	5.19	6.22	7.16
Sep	3.89	3.94	7.11	1956	26	10.81	1988	.39	1984	7.4	5.3	2.4	1.1	.66	1.00	1.56	2.10	2.64	3.24	3.92	4.75	5.85	7.63	9.34
Oct	2.70	2.72	4.00	1970	29	7.05	1995	.00+	2000	5.9	4.1	1.5	.9	.00	.60	1.16	1.58	1.98	2.40	2.85	3.36	4.06	5.15	6.18
Nov	4.32	3.91	4.00	1962	21	9.90	1992	1.56	1981	8.9	6.5	2.8	1.3	1.58	1.99	2.57	3.06	3.52	4.00	4.52	5.12	5.89	7.07	8.15
Dec	5.09	4.84	4.93	1961	10	11.82	1983	1.43	1979	8.9	6.6	3.1	1.4	1.81	2.29	2.99	3.57	4.12	4.69	5.31	6.04	6.96	8.39	9.70
Ann	56.45	58.02	7.38	Apr 1979	13	16.40	Apr 1979	.00+	Oct 2000	103.8	78.0	36.3	16.1	41.54	44.47	48.19	51.00	53.49	55.89	58.36	61.08	64.37	69.13	73.22

⁺ 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: 1948-2001

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

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COOP ID: 014502

Station: LAFAYETTE 2 W, AL

Climate Division: AL 5 NWS Call Sign: Elevation: 740 Feet Lat: 32°54N Lon: 85°26W

										Snov	w (incl	hes)												
						Sno	ow To	tals							Mean Number of Days (1)									
	Mean	s/Medi	ians (1)	ı		Extremes (2)												Snow Fall >= 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	.2	.0	#	0	2.5	1977	31	2.8	1977	3	1977	31	#+	1998	.2	.1	.0	.0	.0	@	@	.0	.0	
Feb	.1	.0	#	0	2.0	1973	9	2.0	1973	2	1973	9	#+	1996	.1	.1	.0	.0	.0	.0	.0	.0	.0	
Mar	.1	.0	#	0	1.5	1980	2	1.5	1980	5	1983	24	#	1983	.1	.1	.0	.0	.0	.0	.0	.0	.0	
Apr	.0	.0	0	0	1.0	1987	3	1.0	1987	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	#	1975	23	#	1975	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
Dec	.0	.0	#	0	.5	1973	21	.5	1973	1	1973	21	#	1973	.1	.0	.0	.0	.0	@	.0	.0	.0	
Ann	.4	.0	N/A	N/A	2.5	Jan 1977	31	2.8	Jan 1977	5	Mar 1983	24	#+	Jan 1998	.5	.3	.0	.0	.0	@	@	.0	.0	

⁺ 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: 740 Feet

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Climate Division: AL 5 NWS Call Sign:

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				Freez	e Data					
			Spri	ng Freeze D	ates (Month/	/Day)				
Tomn (F)		P	robability of	later date i	n spring (thr	ru Jul 31) tha	n indicated	(*)		
Temp (F) - 36 32 28 24 20 16 Temp (F) - 36 32 28 24 20 16 Temp (F) - 36 32 28 24 20 20 20 20 20 20 20 20 20	.10	.20	.30	.40	.50	.60	.70	.80	.90	
36	4/26	4/22	4/19	4/16	4/14	4/12	4/09	4/06	4/02	
32	4/15	4/10	4/07	4/03	4/01	3/29	3/26	3/22	3/17	
28	4/06	3/29	3/23	3/18	3/14	3/09	3/04	2/27	2/19	
24	3/14	3/07	3/02	2/26	2/22	2/18	2/13	2/08	2/01	
20	3/04	2/25	2/19	2/15	2/10	2/06	2/01	1/27	1/19	
16	2/26	2/17	2/09	2/03	1/28	1/21	1/13	12/29	0/00	
			Fal	l Freeze Da	tes (Month/D	Day)				
Probability of earlier date in fall (beginning Aug 1) than indicated(*)										
16 Temp (F) 36 32 28	.10	.20	.30	.40	.50	.60	.70	.80	.90	
36	10/06	10/11	10/14	10/17	10/20	10/23	10/26	10/29	11/03	
32	10/15	10/21	10/24	10/28	10/31	11/03	11/06	11/10	11/16	
28	11/02	11/06	11/10	11/12	11/15	11/17	11/20	11/23	11/28	
24	11/07	11/17	11/24	11/30	12/06	12/12	12/18	12/25	1/04	
20	11/24	12/04	12/11	12/17	12/23	12/29	1/04	1/11	1/21	
16	12/07	12/18	12/25	1/01	1/07	1/14	1/22	2/03	0/00	
				Freeze F	ree Period					
Tomn (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days))		
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90	
36	206	200	196	192	188	185	181	176	170	
32	234	226	221	217	213	208	204	199	192	
28	274	264	257	251	245	240	234	227	217	
							1	<u> </u>	1	
24	314	303	295	289	284	279	273	266	257	

^{*} Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

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0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

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Derived from 1971-2000 serially complete daily data

Complete do

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	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	704	524	358	152	42	1	0	0	9	157	370	625	2942		
60	559	387	227	65	10	0	0	0	1	78	242	482	2051		
57	475	310	164	32	3	0	0	0	0	46	178	399	1607		
55	422	260	128	18	1	0	0	0	0	30	142	347	1348		
50	304	154	58	3	0	0	0	0	0	9	71	235	834		
32	48	4	0	0	0	0	0	0	0	0	0	23	75		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	373	403	675	865	1134	1307	1454	1430	1230	933	630	423	10857
55	35	15	90	193	422	617	741	717	540	250	82	34	3736
57	26	9	64	147	362	557	679	655	481	204	58	24	3266
60	16	3	34	90	276	467	586	562	392	143	32	14	2615
65	0	0	10	28	153	318	431	407	250	66	10	2	1675
70	0	0	0	4	67	178	276	254	129	23	1	0	932

	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	207	284	508	675	934	1103	1234	1199	1012	722	443	250	207	491	999	1674	2608	3711	4945	6144	7156	7878	8321	8571
45	116	177	365	526	779	953	1079	1044	862	567	308	150	116	293	658	1184	1963	2916	3995	5039	5901	6468	6776	6926
50	55	98	234	377	624	803	924	889	712	417	189	82	55	153	387	764	1388	2191	3115	4004	4716	5133	5322	5404
55	26	43	129	246	470	653	769	734	562	275	106	39	26	69	198	444	914	1567	2336	3070	3632	3907	4013	4052
60	3	14	54	133	318	503	614	579	413	156	44	11	3	17	71	204	522	1025	1639	2218	2631	2787	2831	2842
Base			•	Gro	wing De	gree Unit	s for Co	rn (Mont	thly)	•	•				Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	132	188	331	441	623	748	844	826	686	476	284	162	132	320	651	1092	1715	2463	3307	4133	4819	5295	5579	5741

(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