Station: LIVE OAK, FL

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: 085099

Climate Division: FL 2 NWS Call Sign: Elevation: 120 Feet Lat: 30°17N Lon: 82°58W

									ŗ	Tempe	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)	Mean Year Day Monun(1) Year Daily(2) Year I							Lowest Month(1) Mean	Year	Heating	Cooling	Max >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	67.4	42.7	55.1	86	1989	14	69.5	1974	6	1985	21	45.5	1977	352	30	.0	.0	29.8	@	7.7	.0
Feb	70.8	44.7	57.8	88	1971	26	64.1	1990	16	1996	5	48.5	1978	229	26	.0	.0	27.7	.1	5.1	.0
Mar	76.9	50.2	63.6	91+	1974	11	68.7	1997	19	1980	3	58.3	1971	118	72	.0	.1	30.9	.0	1.7	.0
Apr	82.3	54.9	68.6	96	1975	26	72.9	1991	31	1987	1	63.0	1987	29	137	.0	2.2	30.0	.0	@	.0
May	88.4	62.6	75.5	102	1953	26	80.2	1998	40	1971	4	72.3	1988	1	328	.1	12.5	31.0	.0	.0	.0
Jun	92.0	69.1	80.6	106	1985	6	86.0	1998	47	1984	1	77.3	1997	0	466	1.2	22.8	30.0	.0	.0	.0
Jul	93.3	71.6	82.5	104+	1986	20	85.6	1998	60	1975	3	79.8	1975	0	541	1.3	26.6	31.0	.0	.0	.0
Aug	92.5	71.3	81.9	103	1995	15	83.7	1998	59	1957	25	80.2	1976	0	524	.4	26.1	31.0	.0	.0	.0
Sep	89.8	68.5	79.2	99+	1997	21	81.3	1977	43	1967	30	77.0	1983	0	424	.0	18.3	30.0	.0	.0	.0
Oct	83.0	58.7	70.9	95+	1990	4	77.1	1985	27	1952	30	63.8	1987	31	213	.0	4.0	31.0	.0	.1	.0
Nov	75.8	51.2	63.5	90	1961	1	70.8	1985	15	1970	25	55.8	1976	131	86	.0	.0	29.9	.0	2.3	.0
Dec	68.8	44.6	56.7	86+	1998	7	64.7	1971	6	1962	13	48.4	1989	286	29	.0	.0	29.9	@	6.4	.0
Ann	81.8	57.5	69.7	106	Jun 1985	6	86.0	Jun 1998	6+	Jan 1985	21	45.5	Jan 1977	1177	2876	3.0	112.6	362.2	.1	23.3	.0

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 043-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1952-2001
- (3) Derived from 1971-2000 serially complete daily data

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

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Station: LIVE OAK, FL COOP ID: 085099

Climate Division: FL 2 NWS Call Sign: Elevation: 120 Feet Lat: 30°17N Lon: 82°58W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	on Total						ays (3	5)	Proba	ability th		nonthly/	annual j	precipita ated an	ount	ies (1)		less tha	in the
	Medi	ans(1)				Extremes	•			ս	aily Pre	стриацю	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	4.99	4.63	5.61	1963	12	15.43	1991	.61	1989	8.5	6.6	3.3	1.8	1.20	1.67	2.40	3.05	3.69	4.37	5.14	6.05	7.24	9.13	10.90
Feb	4.01	3.43	6.00	1998	16	14.88	1998	1.10	1997	6.4	5.1	2.7	1.1	.88	1.25	1.84	2.37	2.90	3.47	4.10	4.86	5.87	7.46	8.97
Mar	5.33	5.10	4.70	1991	2	11.72	1980	.79	1979	7.1	5.9	3.2	1.9	1.34	1.84	2.62	3.31	3.99	4.70	5.50	6.45	7.69	9.65	11.48
Apr	3.29	2.53	4.25	1958	10	13.17	1973	.42+	1993	5.2	3.8	2.0	1.2	.33	.57	1.01	1.47	1.97	2.53	3.19	4.01	5.14	7.01	8.85
May	3.23	2.96	4.10	1965	26	9.25	1976	.02	2000	6.7	5.1	2.4	.9	.41	.66	1.12	1.57	2.05	2.57	3.19	3.94	4.97	6.66	8.29
Jun	6.06	5.62	6.75	1957	9	17.35	1994	1.84	1988	11.0	8.6	4.1	2.0	2.02	2.59	3.43	4.15	4.84	5.55	6.32	7.23	8.39	10.20	11.87
Jul	6.35	5.58	5.63	1980	25	12.14	1984	1.74	1995	12.3	9.0	4.0	1.9	2.09	2.69	3.58	4.33	5.05	5.80	6.62	7.57	8.80	10.70	12.46
Aug	6.13	5.38	3.38	1961	26	12.74	1992	1.71	1984	12.3	8.9	4.3	2.0	2.37	2.94	3.75	4.43	5.06	5.72	6.42	7.24	8.28	9.87	11.33
Sep	4.64	3.54	12.95	1964	12	19.94	1998	.40	1990	8.2	6.1	2.5	1.4	.59	.96	1.62	2.27	2.95	3.70	4.58	5.67	7.14	9.55	11.89
Oct	3.26	1.94	5.25	1997	31	14.35	1997	.00	1987	4.5	3.2	1.8	.9	.03	.15	.47	.89	1.40	2.02	2.81	3.86	5.38	8.02	10.72
Nov	2.43	2.43	3.32	1957	30	5.06	1986	.05+	1996	5.4	3.8	1.8	.7	.23	.41	.74	1.07	1.44	1.86	2.35	2.96	3.80	5.20	6.57
Dec	3.11	2.89	3.38	1967	11	7.60	1977	.31	1991	6.3	4.7	2.1	1.0	.38	.62	1.06	1.49	1.95	2.46	3.06	3.80	4.80	6.44	8.04
Ann	52.83	51.83	12.95	Sep 1964	12	19.94	Sep 1998	.00	Oct 1987	93.9	70.8	34.2	16.8	36.64	39.74	43.73	46.78	49.49	52.11	54.83	57.84	61.50	66.83	71.44

⁺ 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: 1952-2001

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

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COOP ID: 085099

Station: LIVE OAK, FL

Climate Division: FL 2 NWS Call Sign:

Elevation: 120 Feet Lat: 30°17N Lon: 82°58W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1))					Extre	mes (2)							ow Fa					Depth esholo	
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	#	.0	0	0	#	1982	12	#+	1982	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	#	.0	0	0	#	1989	23	#+	1989	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	#	.0	#	0	#	1975	4	#	1975	#	1980	2	#	1980	.0	.0	.0	.0	.0	.0	.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	.1	.0	#	0	3.0	1989	23	3.0	1989	2	1989	23	#	1989	@	@	@	.0	.0	@	.0	.0	.0
Ann	.1	.0	N/A	N/A	3.0	Dec 1989	23	3.0	Dec 1989	2	Dec 1989	23	#+	Dec 1989	@	@	@	.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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COOP ID: 085099

Station: LIVE OAK, FL

Climate Division: FL 2 NWS Call Sign:

Elevation: 120 Feet Lat: 30°17N Lon: 82°58W

				Freez	ze Data								
			Spri	ng Freeze D	ates (Month	/Day)							
Probability of later date in spring (thru Jul 31) than indicated(*) 10 20 30 40 50 60 70 80 90 32 3329 3322 3417 3413 3409 3404 228 223 2216 28 3415 3406 227 222 2417 2411 2406 1430 1421 4 4225 2416 2409 2403 1429 1423 1416 1407 0400 5 4714 4708 4704 4708 4704 4708 4704 4708 4704 28 3415 3406 227 222 2417 2411 2406 1430 1421 4 225 2416 2409 2403 1429 1423 1416 1407 0400 5 2413 242 1425 1417 1408 1223 0400 0400 0400 6 1420 1405 0400 0400 0400 0400 0400 0400 0400 7 4 4 4 4 4 4 8 4 4 4 4 4 8 4 4 4 4 4 8 4 4 4 4 4 9 4 4 4 4 4 10 20 30 40 50 60 70 80 90 9 1424 1414 1410 1414 1414 1414 1414 1414 1414 24 14 4 4 4 4 4 4 25 4 4 4 4 4 4 4 26 4 4 4 4 4 4 27 4 4 4 4 4 28 14 4 4 4 29 4 4 4 20 4 4 4 20 5 4 20 1221 1231 1409 1416 1426 1242 1248 1224 1231 1410 20 1221 1231 1409 1416 1426 2411 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 0400 16 1403 1418 0400 0400 0400 0400 0400 0400 0400 04													
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	4/14	4/08	4/04	3/31	3/27	3/24	3/20	3/15	3/09				
32	3/29	3/22	3/17	3/13	3/09	3/04	2/28	2/23	2/16				
28	3/15	3/06	2/27	2/22	2/17	2/11	2/06	1/30	1/21				
24	2/25	2/16	2/09	2/03	1/29	1/23	1/16	1/07	0/00				
20	2/13	2/02	1/25	1/17	1/08	12/23	0/00	0/00	0/00				
16	1/20	1/05	0/00	0/00	0/00	0/00	0/00	0/00	0/00				
			Fal	ll Freeze Da	tes (Month/I	Day)							
Tomp (F)		Pro	bability of ea	arlier date i	n fall (beginr	ning Aug 1) t	han indicate	ed(*)					
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	10/19	10/27	11/01	11/06	11/10	11/15	11/19	11/25	12/02				
32	10/28	11/04	11/10	11/15	11/19	11/24	11/29	12/04	12/12				
28	11/13	11/23	11/30	12/06	12/12	12/18	12/24	12/31	1/10				
24	11/24	12/05	12/13	12/21	12/28	1/04	1/12	1/23	0/00				
20	12/21	12/31	1/09	1/16	1/26	2/11	0/00	0/00	0/00				
16	1/03	1/18	0/00	0/00	0/00	0/00	0/00	0/00	0/00				
				Freeze F	ree Period	•							
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days))					
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	252	243	237	232	227	222	217	211	203				
32	285	275	267	261	255	249	243	235	225				
28	327	313	305	299	293	288	282	276	267				
24	>365	>365	>365	338	324	315	306	297	285				
20	>365	>365	>365	>365	>365	>365	>365	339	324				
16	>365	>365	>365	>365	>365	>365	>365	>365	>365				

^{*} 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.

Complete documentation available from:

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COOP ID: 085099

Lon: 82°58W

Lat: 30°17N

Station: LIVE OAK, FL

95

3

26

0

2

0

Climate Division: FL 2

50

32

Elevation: 120 Feet

0

0

0

0

6

0

42

0

171

3

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)						
Base															
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	352	229	118	29	1	0	0	0	0	31	131	286	1177		
60	250	135	48	5	0	0	0	0	0	9	61	178	686		
57	198	92	23	1	0	0	0	0	0	4	34	127	479		
55	165	67	14	0	0	0	0	0	0	2	22	97	367		

0

0

0

0

0

0

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	718	721	978	1098	1350	1456	1564	1547	1414	1205	945	765	13761
55	167	144	278	408	637	766	851	834	724	493	276	150	5728
57	138	112	226	349	575	706	789	772	664	433	228	118	5110
60	97	72	157	263	482	616	696	679	574	345	166	75	4222
65	30	26	72	137	328	466	541	524	424	213	86	29	2876
70	23	8	22	52	184	316	386	369	275	109	33	10	1787

										Gro	wing [Degre	e Uni	ts (2)										
Base													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	477	517	736	859	1104	1217	1317	1304	1174	960	708	527	477	994	1730	2589	3693	4910	6227	7531	8705	9665	10373	10900
45	337 385 581 709 949 1067 1162 1149 1024 805 559												337	722	1303	2012	2961	4028	5190	6339	7363	8168	8727	9110
50	219	263	430	559	794	917	1007	994	874	650	415	255	219	482	912	1471	2265	3182	4189	5183	6057	6707	7122	7377
55	128	157	291	410	639	767	852	839	724	497	282	155	128	285	576	986	1625	2392	3244	4083	4807	5304	5586	5741
60	64	80	170	269	484	617	697	684	574	347	169	84	64	144	314	583	1067	1684	2381	3065	3639	3986	4155	4239
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)			
50/86)/86 317 344 490 577 744 822 897 892 812 651 474 3											343	317	661	1151	1728	2472	3294	4191	5083	5895	6546	7020	7363

(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

NWS Call Sign:

0

0

0

0

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