

1997

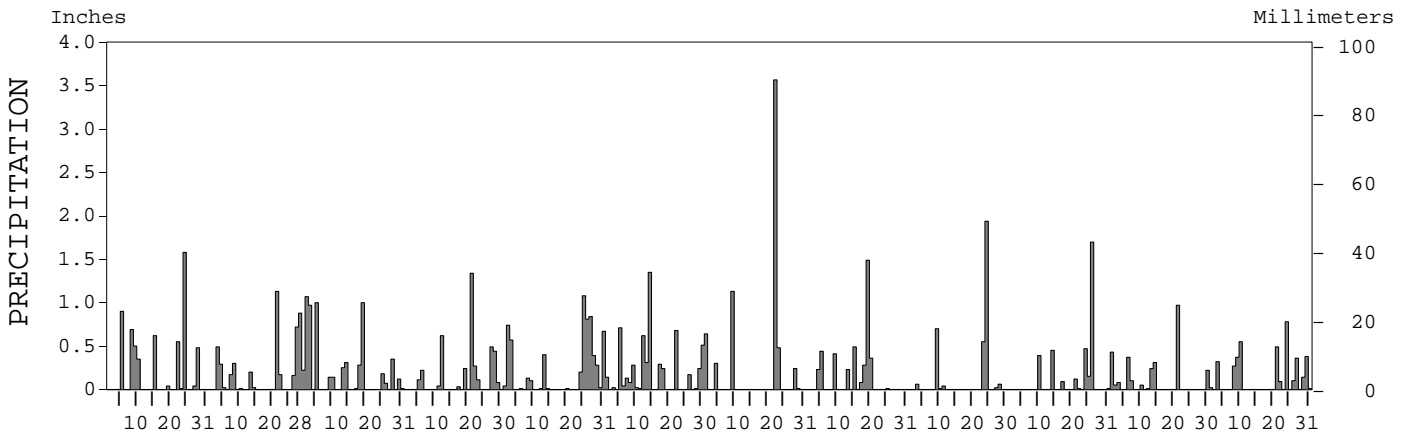
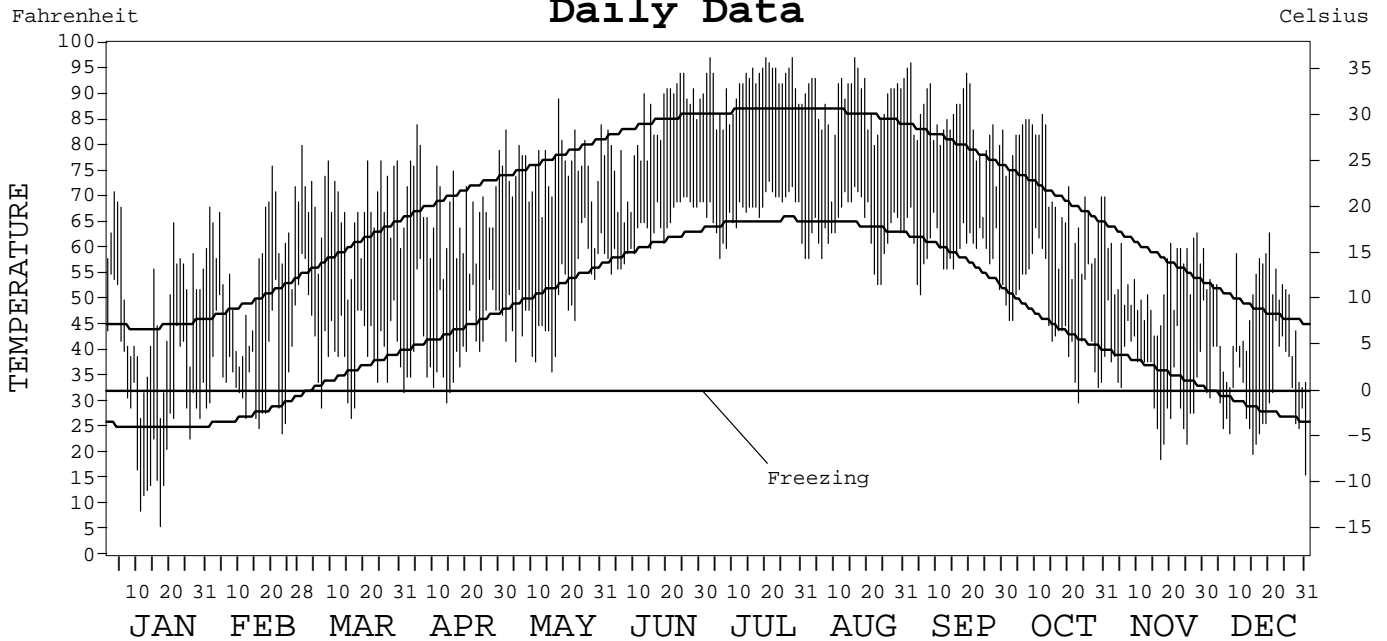
LOCAL CLIMATOLOGICAL DATA  
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-487X

OAK RIDGE,  
TENNESSEE (OAKT)

Daily Data



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# METEOROLOGICAL DATA FOR 1997

## OAK RIDGE, TN (OAKT)

LATITUDE: 36° 00' 0" N      LONGITUDE: 84° 15' 0" W      ELEVATION (FT): GRND: 880      BARO: 880      TIME ZONE: EASTERN (UTC+ 5)      WBAN: 03841

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	49.4	56.9	67.9	67.7	75.7	82.7	91.7	88.5	84.3	71.5	53.7	47.3	69.8	
	HIGHEST DAILY MAXIMUM	71	76	80	84	89	94	97	97	96	86	63	63	97	
	DATE OF OCCURRENCE	03	20	01	05	18	25+	28+	16	02	12	28	20	AUG 16	
	MEAN DAILY MINIMUM	29.4	36.5	41.7	41.9	49.3	63.4	67.3	63.6	59.7	47.0	34.9	31.1	47.1	
	LOWEST DAILY MINIMUM	6	24	27	30	36	55	58	53	51	30	19	16	6	
	DATE OF OCCURRENCE	17	23	16	14	16	03	06	24+	05	23	17	31	JAN 17	
	AVERAGE DRY BULB	39.4	46.7	54.8	54.8	62.5	73.1	79.5	76.1	72.0	59.3	44.3	39.2	58.5	
	MEAN WET BULB														
	MEAN DEW POINT														
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	9	23	18	7	0	0	0	0	57
	MAXIMUM ≤ 32°	4	0	0	0	0	0	0	0	0	0	0	0	0	4
	MINIMUM ≤ 32°	20	11	4	3	0	0	0	0	0	1	11	19	69	
	MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	786	506	316	309	112	9	0	0	1	226	615	792	3672	
	COOLING DEGREE DAYS	0	0	5	9	41	262	458	350	219	56	0	0	1400	
RH	MEAN (PERCENT)														
	HOUR 01 LST														
	HOUR 07 LST														
	HOUR 13 LST														
	HOUR 19 LST														
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH: HEAVY FOG (VISBY ≤ 1/4 MI) THUNDERSTORMS														
CLOUDINESS	AVG. SKY COVER (OKTAS)														
	SUNRISE - SUNSET														
	MIDNIGHT - MIDNIGHT														
PR	NUMBER OF DAYS WITH:														
	CLEAR														
	PARTLY CLOUDY														
PR	MEAN STATION PRESS. (IN.)														
	MEAN SEA-LEVEL PRESS. (IN.)														
WINDS	RESULTANT SPEED (MPH)														
	RES. DIR. (TENS OF DEGS.)														
	MEAN SPEED (MPH)	4.2	3.4	3.8	3.5	3.4	2.5	2.2	2.1	2.5	2.1	2.6	3.3	3.0	
	PREVAIL. DIR. (TENS OF DEGS.)														
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)														
	DIR. (TENS OF DEGS.)														
	DATE OF OCCURRENCE														
	PEAK GUST :														
	SPEED (MPH)	49	46	31	33	37	29	33	30	27	27	44	29	49	
DIR. (TENS OF DEGS.)	28	25	23	22	30	34	27	07	28	29	28	29	28		
DATE OF OCCURRENCE	05	21	02	05	13	13	28	04	30	27	02	10+	JAN 05		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	5.76	4.56	6.12	3.99	6.31	5.85	6.37	4.02	3.38	3.39	2.83	3.88	56.46	
	GREATEST 24-HOUR (IN.)	1.58	1.13	1.58	1.44	1.74	1.65	4.04	1.85	2.07	1.81	0.97	0.78	4.04	
	DATE OF OCCURRENCE	24	21	02-03	21-22	25-26	13-14	22-23	19-20	23-24	25-26	21	24	JUL 22-23	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	11	13	16	12	18	19	7	10	8	9	11	13	147	
	PRECIPITATION ≥ 0.10	8	10	13	9	12	13	6	8	3	6	7	10	105	
PRECIPITATION ≥ 1.00	1	1	3	1	1	1	2	1	1	1	0	0	13		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	3.2	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	8.7	
	GREATEST 24-HOUR (IN.)	2.9	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	3.8	
	DATE OF OCCURRENCE	10	13+										30	DEC 30	
	MAXIMUM SNOW DEPTH (IN.)	2	0	0	0	0	0	0	0	0	0	0	3	3	
	DATE OF OCCURRENCE	11											30	DEC 30	
	NUMBER OF DAYS WITH: SNOWFALL ≥ 1.0	1	0	0	0	0	0	0	0	0	0	0	2	3	

# NORMALS, MEANS, AND EXTREMES

## OAK RIDGE, TN (OAKT)

LATITUDE: 36° 00' 0" N      LONGITUDE: 84° 15' 0" W      ELEVATION (FT): GRND: 880      BARO: 880      TIME ZONE: EASTERN (UTC+ 5)      WBAN: 03841

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	44.8	49.8	60.1	69.9	77.4	84.2	86.7	86.0	80.1	69.9	58.4	48.3	68.0
	MEAN DAILY MAXIMUM	34	45.1	50.1	60.7	70.8	77.7	84.6	87.7	86.7	80.7	70.6	58.5	48.6	68.5
	HIGHEST DAILY MAXIMUM	50	75	79	85	92	93	101	105	103	102	90	83	78	105
	YEAR OF OCCURRENCE		1952	1977	1982	1986	1996	1988	1952	1983	1954	1954	1961	1982	JUL 1952
	MEAN OF EXTREME MAXS.	34	64.2	69.1	79.2	86.2	88.0	92.6	94.8	93.9	90.7	82.9	74.2	66.3	81.8
	NORMAL DAILY MINIMUM	30	25.1	27.7	35.7	43.5	52.2	60.5	64.9	64.3	58.0	44.8	36.2	28.7	45.1
	MEAN DAILY MINIMUM	34	26.4	28.4	36.5	44.5	53.1	61.6	65.9	65.1	58.6	45.7	36.5	29.7	46.0
	LOWEST DAILY MINIMUM	50	-1.7	-1.3	1	20	30	39	49	50	33	21	0	-7	-17
	YEAR OF OCCURRENCE		1985	1996	1980	1987	1976	1977	1988	1989	1967	1952	1950	1983	JAN 1985
	MEAN OF EXTREME MINS.	34	6.3	9.1	19.6	28.4	37.8	49.4	56.7	55.6	44.4	30.5	20.9	12.2	30.9
	NORMAL DRY BULB	30	35.0	38.8	47.9	56.8	64.9	72.4	75.8	75.2	69.1	57.4	47.3	38.6	56.6
	MEAN DRY BULB	34	35.8	39.2	48.6	57.6	65.4	73.1	76.8	75.8	69.7	58.2	47.4	39.1	57.2
	MEAN WET BULB														
	MEAN DEW POINT														
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.2	0.5	5.5	11.2	8.0	2.3	0.0	0.0	0.0	27.7	
MAXIMUM ≤ 32°	30	3.9	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	7.7	
MINIMUM ≤ 32°	30	23.1	19.0	12.3	3.0	0.1	0.0	0.0	0.0	0.0	2.6	10.9	20.2	91.2	
MINIMUM ≤ 0°	30	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	
H/C	NORMAL HEATING DEG. DAYS	30	930	734	530	252	96	0	0	0	32	260	531	818	4183
	NORMAL COOLING DEG. DAYS	30	0	0	0	6	93	226	335	316	155	25	0	0	1156
RH	NORMAL (PERCENT)														
	HOUR 01 LST														
	HOUR 07 LST														
	HOUR 13 LST														
	HOUR 19 LST														
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	15	1.3	1.1	0.8	0.9	1.5	1.4	3.1	4.2	3.8	7.6	5.7	2.2	33.6
	THUNDERSTORMS	17	0.7	1.7	2.6	4.2	7.4	8.0	10.8	9.1	3.4	1.4	1.2	0.8	51.3
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	40	5.4	5.2	5.2	4.7	4.7	4.4	4.6	4.7	4.5	3.9	4.8	5.2	4.8
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
CLEAR	42	7.2	7.6	7.9	9.7	9.2	9.4	8.2	9.3	9.9	13.7	9.2	8.1	109.4	
PARTLY CLOUDY	42	6.6	5.7	7.3	6.9	9.0	10.4	11.5	11.4	8.9	7.0	7.2	6.3	98.2	
CLOUDY	42	17.2	15.0	15.8	13.4	12.8	10.2	11.3	10.2	11.2	10.2	13.6	16.6	157.5	
PR	MEAN STATION PRESSURE (IN)														
	MEAN SEA-LEVEL PRES. (IN)														
WINDS	MEAN SPEED (MPH)	18	4.7	4.8	5.1	5.5	4.3	4.0	3.7	3.4	3.5	3.3	3.9	4.3	4.2
	PREVAIL. DIR (TENS OF DEGS)														
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	23	59	47	48	50	46	50	50	53	38	39	45	50	59
	YEAR OF OCCURRENCE		1959	1967	1962	1959	1973	1975	1961	1964	1959	1967	1968	1964	JAN 1959
PEAK GUST:															
SPEED (MPH)	13	49	46	34	50	37	31	33	35	39	41	51	39	51	
DIR. (TENS OF DEGS)		28	25	27	27	30	29	27	27	7	SW	W	24	W	
YEAR OF OCCURRENCE		1997	1997	1996	1996	1997	1996	1997	1995	1996	1995	1995	1996	NOV 1995	
PRECIPITATION	NORMAL (IN)	30	4.57	4.34	5.68	4.08	4.68	4.34	5.45	3.70	3.86	3.18	4.59	5.30	53.77
	MAXIMUM MONTHLY (IN)	50	13.27	10.47	12.24	9.81	10.70	11.14	19.27	10.46	9.10	6.95	12.22	12.64	19.27
	YEAR OF OCCURRENCE		1954	1956	1975	1994	1984	1989	1967	1960	1957	1972	1948	1990	JUL 1967
	MINIMUM MONTHLY (IN)	50	0.93	0.84	2.13	0.88	0.80	0.53	1.23	0.54	0.41	T	1.37	0.67	T
	YEAR OF OCCURRENCE		1981	1968	1957	1976	1970	1988	1995	1953	1961	1963	1949	1965	OCT 1963
	MAXIMUM IN 24 HOURS (IN)	50	4.25	3.66	4.74	6.24	4.41	3.70	4.91	7.48	3.76	2.66	5.29	5.12	7.48
	YEAR OF OCCURRENCE		1954	1994	1973	1977	1973	1969	1967	1960	1982	1976	1973	1969	AUG 1960
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	11.9	10.8	12.3	10.8	11.2	10.4	12.2	10.1	8.9	7.9	10.2	11.2	127.9	
PRECIPITATION ≥ 1.00	30	1.3	0.9	1.5	0.9	1.3	1.2	1.4	0.8	1.3	1.0	1.1	1.5	14.2	
SNOWFALL	NORMAL (IN)	30	4.0	3.8	0.8	0.2	0.0	0.0	0.0	0.0	T	0.1	2.2	11.1	
	MAXIMUM MONTHLY (IN)	50	9.6	17.2	21.0	5.9	T	0.0	T	T	0.0	T	6.5	14.8	21.0
	YEAR OF OCCURRENCE		1966	1979	1960	1987	1993		1993	1990		1993	1950	1963	MAR 1960
	MAXIMUM IN 24 HOURS (IN)	50	8.3	11.3	12.0	5.4	T	0.0	T	T	0.0	T	6.5	10.8	12.0
	YEAR OF OCCURRENCE		1962	1996	1960	1987	1993		1993	1990		1993	1950	1963	MAR 1960
	MAXIMUM SNOW DEPTH (IN)	32	8	6	3	3	0	0	0	0	0	0	1	10	10
	YEAR OF OCCURRENCE		1995	1969	1980	1987							1966	1963	DEC 1963
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	1.4	1.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	3.6	

PRECIPITATION (inches) 1997 OAK RIDGE, TN (OAKT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1968	4.47	0.84	5.26	5.21	4.01	3.56	2.80	1.25	3.47	2.23	2.24	4.28	39.62
1969	4.30	4.84	2.24	2.86	2.76	6.07	5.27	4.17	4.08	1.83	2.62	8.54	49.58
1970	2.96	3.74	4.06	9.24	0.80	5.90	1.55	9.10	2.54	6.07	1.78	4.47	52.21
1971	4.88	4.68	4.61	4.73	7.17	2.25	8.22	2.57	3.32	1.75	2.25	6.90	53.33
1972	7.32	4.83	5.99	2.94	5.81	5.56	5.22	1.77	4.28	6.95	5.02	9.20	64.89
1973	4.21	3.42	11.43	5.66	10.43	6.94	5.54	2.25	3.41	3.36	10.78	8.90	76.33
1974	9.62	4.72	7.22	3.78	7.98	2.00	1.99	4.31	4.18	1.78	5.04	4.96	57.58
1975	5.88	5.91	12.24	2.36	4.02	5.60	2.88	2.67	5.79	5.55	3.42	4.36	60.68
1976	5.47	2.60	6.00	0.88	7.24	4.80	4.03	4.89	4.56	5.91	2.27	4.68	53.33
1977	2.52	1.89	5.42	8.50	1.67	6.68	4.11	4.40	8.67	4.97	9.12	4.82	62.77
1978	5.99	1.13	4.69	3.21	4.50	3.97	4.89	5.75	1.70	0.39	5.54	6.65	48.41
1979	7.60	4.30	5.01	5.25	9.32	3.73	12.92	5.49	3.74	1.93	5.77	2.24	67.30
1980	6.24	1.51	9.20	3.89	3.01	0.85	2.39	2.07	3.31	1.08	4.55	2.02	40.12
1981	0.93	4.69	3.59	4.58	2.65	4.50	2.42	3.11	3.90	4.89	3.20	4.12	42.58
1982	6.70	5.42	6.20	2.79	2.88	2.15	7.01	4.61	5.31	1.95	7.81	7.22	60.05
1983	1.75	4.38	2.57	6.40	6.90	2.53	2.41	1.28	2.07	4.58	5.85	6.95	47.67
1984	2.62	3.92	4.81	4.16	10.70	4.70	8.72	1.87	1.87	6.19	4.37	2.59	56.52
1985	2.88	3.73	2.60	2.23	3.83	5.08	6.43	8.50	1.56	3.08	4.49	2.11	46.52
1986	1.16	5.15	2.70	1.73	2.74	1.45	2.84	2.84	4.70	4.51	3.67	5.34	38.83
1987	4.87	5.64	2.82	2.97	2.02	4.26	3.94	1.92	5.64	0.69	2.11	3.43	40.31
1988	5.44	3.43	3.80	3.42	2.65	0.53	7.60	2.39	5.63	1.97	6.56	5.53	48.95
1989	6.94	5.07	6.03	2.76	6.14	11.14	3.62	3.90	8.86	2.46	6.06	3.03	66.01
1990	5.29	8.01	5.09	2.57	6.59	1.53	5.06	5.09	1.44	4.07	2.40	12.64	59.78
1991	2.97	7.94	7.44	3.84	2.55	7.05	4.06	4.62	2.86	1.76	4.15	10.92	60.16
1992	3.37	3.25	3.79	1.64	2.27	4.00	5.10	3.38	3.11	2.62	5.67	5.79	43.99
1993	3.98	4.13	6.42	3.70	4.29	1.60	1.99	3.25	5.12	2.15	4.09	8.29	49.01
1994	6.12	9.79	9.47	9.81	3.03	7.15	5.53	3.85	2.14	2.56	3.32	2.80	65.57
1995	6.30	3.76	3.85	2.49	6.12	3.02	1.23	2.25	3.90	4.64	7.48	3.67	48.71
1996	7.67	3.60	5.53	3.95	5.08	6.35	12.29	3.35	3.70	1.55	8.18	5.32	66.57
1997	5.76	4.56	6.12	3.99	6.31	5.85	6.37	4.02	3.38	3.39	2.83	3.88	56.46
POR= 50 YRS	5.15	4.86	5.71	4.08	4.33	4.18	5.27	3.70	3.69	2.88	4.63	5.56	54.04

WBAN : 03841

AVERAGE TEMPERATURE (°F) 1997 OAK RIDGE, TN (OAKT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1968	36.8	32.7	48.9	58.2	65.2	73.9	77.3	78.3	68.1	58.7	47.3	36.4	56.8
1969	35.7	38.7	41.2	59.4	67.3	74.6	79.1	74.8	68.5	58.1	44.8	36.5	56.6
1970	29.8	38.0	47.0	60.3	67.7	72.1	76.7	76.5	73.9	61.2	46.9	42.5	57.7
1971	36.8	39.1	44.4	57.6	63.5	75.6	75.0	74.8	72.6	64.0	46.7	47.8	58.2
1972	40.6	37.4	46.5	58.0	63.9	69.8	75.2	75.5	72.1	57.3	47.0	44.2	57.3
1973	37.4	38.2	55.0	55.4	62.0	74.0	76.8	75.3	72.8	62.1	50.9	39.3	58.3
1974	47.1	41.6	53.6	57.7	65.9	67.7	75.4	74.2	65.6	54.1	45.8	39.6	57.4
1975	41.1	43.0	44.6	54.9	68.2	72.0	74.7	76.2	66.0	58.5	48.4	39.4	57.3
1976	32.6	45.7	49.9	56.2	60.5	70.9	73.5	72.3	65.0	52.3	39.7	34.6	54.4
1977	24.8	36.7	50.8	59.2	66.4	72.0	77.3	75.3	70.3	53.6	49.9	36.1	56.0
1978	27.3	31.1	46.1	57.2	64.1	72.5	75.7	75.6	72.8	55.7	51.7	39.7	55.8
1979	31.1	35.3	50.0	57.2	64.4	71.5	73.9	74.9	69.7	56.5	47.9	39.5	56.0
1980	38.8	34.3	44.5	55.4	65.7	72.8	80.6	78.9	73.7	55.4	46.6	38.3	57.1
1981	32.3	39.9	44.1	61.2	62.3	75.4	77.8	74.1	66.8	55.0	46.0	34.3	55.8
1982	31.6	41.2	50.7	52.6	69.3	71.6	77.5	73.8	66.8	57.6	47.4	43.0	56.9
1983	35.4	38.6	47.7	51.2	63.8	71.5	77.9	79.2	69.4	59.4	45.7	34.4	56.2
1984	33.2	41.3	44.9	54.7	60.7	74.0	73.5	75.1	66.5	65.5	43.1	45.8	56.5
1985	28.0	35.3	47.8	57.3	64.2	71.0	74.8	73.1	67.0	61.9	54.5	30.9	55.5
1986	35.2	43.2	48.4	58.3	66.7	75.7	80.3	75.6	72.1	59.9	51.1	37.7	58.7
1987	36.0	40.8	48.3	56.7	71.6	75.0	78.1	78.1	69.7	53.4	50.0	42.8	58.4
1988	32.9	38.5	49.5	58.3	66.5	74.1	77.6	78.7	70.9	51.8	48.2	38.9	57.2
1989	42.3	40.0	52.8	57.9	62.2	73.2	77.1	75.8	70.8	58.8	46.8	30.5	57.4
1990	42.8	47.7	52.8	56.2	64.6	75.0	77.6	77.6	71.8	59.1	50.4	43.1	59.9
1991	40.0	42.6	51.3	62.8	72.2	74.9	79.1	76.8	71.4	60.7	45.5	42.1	60.0
1992	39.3	44.8	47.5	58.5	63.7	71.5	77.4	73.3	70.9	57.4	47.0	38.9	57.5
1993	42.2	38.7	45.6	55.2	67.4	74.7	82.1	78.7	71.7	60.1	46.2	39.6	58.5
1994	31.6	42.5	47.6	59.7	61.7	74.9	76.4	75.0	67.2	59.9	52.2	44.4	57.8
1995	38.2	39.4	52.4	59.8	67.3	74.3	80.2	82.1	70.9	59.6	43.6	37.6	58.8
1996	36.2	38.4	44.9	55.1	70.2	75.3	76.3	76.9	69.3	60.2	44.8	42.2	57.5
1997	39.4	46.7	54.8	54.8	62.5	73.1	79.5	76.1	72.0	59.3	44.3	39.2	58.5
POR= 50 YRS	37.0	40.5	48.2	57.8	65.9	73.4	77.0	75.9	69.9	58.5	47.1	39.3	57.5

## HEATING DEGREE DAYS (base 65°F) 1997 OAK RIDGE, TN (OAKT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1968-69	0	0	11	219	523	878	902	731	728	181	48	7	4228
1969-70	0	0	22	227	602	876	1088	751	550	172	52	2	4342
1970-71	0	0	19	134	536	689	870	717	633	233	87	0	3918
1971-72	0	0	0	73	551	526	748	792	568	244	67	17	3586
1972-73	0	0	10	241	536	642	848	745	304	301	122	0	3749
1973-74	0	0	11	139	415	789	548	651	347	228	65	26	3219
1974-75	0	0	61	330	568	781	736	610	629	318	24	0	4057
1975-76	0	0	79	203	490	786	1000	556	459	262	148	5	3988
1976-77	1	0	45	389	752	936	1242	788	437	169	60	23	4842
1977-78	0	0	10	352	448	890	1161	946	577	232	110	2	4728
1978-79	0	0	0	281	393	780	1043	826	462	230	86	2	4103
1979-80	0	0	7	267	507	783	804	883	629	288	63	3	4234
1980-81	0	0	23	304	545	821	1009	695	643	145	120	0	4305
1981-82	0	0	68	307	562	944	1030	662	450	367	29	0	4419
1982-83	0	0	62	263	522	678	910	734	529	413	78	11	4200
1983-84	0	0	57	181	572	942	977	682	616	304	173	5	4509
1984-85	0	0	58	47	648	588	1140	824	525	239	84	20	4173
1985-86	0	0	61	123	311	1049	917	603	508	214	62	0	3848
1986-87	0	3	0	199	417	841	892	673	515	282	11	0	3833
1987-88	0	0	9	353	445	682	988	764	477	217	45	11	3991
1988-89	0	0	6	413	498	805	697	695	379	260	154	0	3907
1989-90	0	1	40	220	539	1066	682	481	384	282	83	0	3778
1990-91	0	0	26	200	436	675	770	624	426	96	14	0	3267
1991-92	0	0	48	167	580	705	794	583	538	236	121	7	3799
1992-93	0	0	14	230	536	803	701	729	595	292	37	3	3940
1993-94	0	0	26	182	559	781	1030	624	535	193	134	0	4064
1994-95	0	0	27	162	374	629	824	710	385	182	62	2	3357
1995-96	0	0	22	197	639	841	884	765	617	301	42	3	4311
1996-97	0	0	21	168	604	699	786	506	316	309	112	9	3530
1997-	0	0	1	226	615	792							

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## COOLING DEGREE DAYS (base 65°F) 1997 OAK RIDGE, TN (OAKT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	0	0	0	23	129	300	443	311	136	22	0	0	1364
1970	0	0	0	37	140	219	371	361	291	25	0	0	1444
1971	0	0	0	16	46	323	316	312	232	47	9	0	1301
1972	0	0	0	41	40	168	322	330	229	5	2	0	1137
1973	0	0	2	16	34	277	374	325	254	56	0	0	1338
1974	0	0	1	20	103	116	330	295	86	2	0	0	953
1975	0	0	0	23	133	216	306	353	114	11	0	0	1156
1976	0	1	0	6	17	187	273	234	53	0	0	0	771
1977	0	0	3	4	109	241	387	324	177	7	4	0	1256
1978	0	0	0	3	89	234	342	335	240	1	0	0	1244
1979	0	0	2	5	74	202	285	314	151	11	0	0	1044
1980	0	0	0	6	92	244	491	435	291	13	0	0	1572
1981	0	0	0	39	40	319	404	286	126	3	0	0	1217
1982	0	0	15	2	167	207	392	279	120	44	0	3	1229
1983	0	0	0	5	47	211	405	445	196	12	0	0	1321
1984	0	0	0	3	47	283	275	318	106	69	0	0	1101
1985	0	0	2	16	63	207	313	258	125	31	3	0	1018
1986	0	0	0	22	121	329	477	337	219	47	5	0	1557
1987	0	0	0	36	222	306	412	409	152	0	0	0	1537
1988	0	0	1	23	94	291	400	429	187	9	0	0	1434
1989	0	1	3	51	72	249	379	341	219	31	0	0	1346
1990	0	0	11	25	78	305	393	397	235	26	3	0	1473
1991	0	0	5	36	242	300	441	370	245	39	0	0	1678
1992	0	0	0	43	86	204	387	261	198	1	0	0	1180
1993	0	0	0	3	115	298	532	429	234	36	0	0	1647
1994	0	0	0	39	39	304	359	318	101	9	0	0	1169
1995	0	0	4	35	140	286	478	541	206	34	2	0	1726
1996	0	0	0	12	208	320	359	378	159	26	3	0	1465
1997	0	0	5	9	41	262	458	350	219	56	0	0	1400

SNOWFALL (inches) 1997 OAK RIDGE, TN (OAKT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1968-69	0.0	0.0	0.0	0.0	0.4	0.5	2.8	10.2	0.9	0.0	0.0	0.0	14.8
1969-70	0.0	0.0	0.0	0.0	T	8.1	8.6	4.6	0.3	0.0	0.0	0.0	21.6
1970-71	0.0	0.0	0.0	0.0	T	5.4	1.7	1.9	2.6	0.3	0.0	0.0	11.9
1971-72	0.0	0.0	0.0	0.0	0.2	0.7	0.4	5.0	4.0	0.0	0.0	0.0	10.3
1972-73	0.0	0.0	0.0	0.0	0.4	T	8.0	0.2	0.6	0.2	0.0	0.0	9.4
1973-74	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.3	0.4	0.0	0.0	0.0	1.3
1974-75	0.0	0.0	0.0	0.0	0.4	1.5	1.1	T	3.1	T	0.0	0.0	6.1
1975-76	0.0	0.0	0.0	0.0	0.1	T	2.2	3.9	0.0	0.0	0.0	0.0	6.2
1976-77	0.0	0.0	0.0	0.0	T	1.3	8.7	T	T	0.0	0.0	0.0	10.0
1977-78	0.0	0.0	0.0	0.0	T	1.0	8.6	6.2	3.4	T	0.0	0.0	19.2
1978-79	0.0	0.0	0.0	0.0	0.0	T	4.2	17.2	0.5	0.0	0.0	0.0	21.9
1979-80	0.0	0.0	0.0	0.0	T	T	1.0	7.9	3.2	T	0.0	0.0	12.1
1980-81	0.0	0.0	0.0	0.0	T	T	5.3	0.2	0.1	0.0	0.0	0.0	5.6
1981-82	0.0	0.0	0.0	0.0	T	0.9	4.4	0.5	1.8	T	0.0	0.0	7.6
1982-83	0.0	0.0	0.0	0.0	0.0	2.8	1.4	4.8	T	0.2	0.0	0.0	9.2
1983-84	0.0	0.0	0.0	0.0	T	0.3	4.6	5.1	0.2	0.0	0.0	0.0	10.2
1984-85	0.0	0.0	0.0	0.0	0.0	0.1	9.4	3.6	0.0	0.0	0.0	0.0	13.1
1985-86	0.0	0.0	0.0	0.0	0.0	T	2.5	5.0	T	0.0	0.0	0.0	7.5
1986-87	0.0	0.0	0.0	0.0	0.0	T	4.7	T	T	5.9	0.0	0.0	10.6
1987-88	0.0	0.0	0.0	0.0	T	T	6.9	0.1	T	0.0	0.0	0.0	7.0
1988-89	0.0	0.0	0.0	0.0	T	4.2	T	4.1	0.0	T	0.0	0.0	8.3
1989-90	0.0	0.0	0.0	T	T	9.5	T	T	T	0.0	T	0.0	9.5
1990-91	0.0	T	0.0	0.0	0.0	T	T	T	T	0.0	0.0	0.0	T
1991-92	T	0.0	0.0	0.0	T	T	T	0.0	1.0	T	0.0	0.0	1.0
1992-93	0.0	0.0	0.0	0.0	0.0	0.6	0.0	2.8	12.0	T	T	0.0	15.4
1993-94	T	0.0	0.0	T	0.0	0.5	0.9	0.1	T	0.0		0.0	
1994-95	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.4	2.2	0.0	0.0	0.0	6.4
1995-96	0.0	0.0	0.0	0.0	T	T	9.0	12.0	0.8	T	0.0	0.0	21.8
1996-97	0.0	0.0	0.0	0.0	0.5	T	3.2	T	0.0	0.0	0.0	0.0	3.7
1997-	0.0	0.0	0.0	0.0	0.0	5.5							
POR= 48 YRS	T	T	0.0	T	0.3	1.8	3.2	2.9	1.4	0.1	T	0.0	9.7

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REFERENCE NOTES:

<p>PAGE 1: THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3: H/C INDICATES HEATING AND COOLING DEGREE DAYS. RH INDICATES RELATIVE HUMIDITY W/O INDICATES WEATHER AND OBSTRUCTIONS S INDICATES SUNSHINE. PR INDICATES PRESSURE. CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. NORMALS ARE 30-YEAR AVERAGES (1961 - 1990). ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p>	<p>GENERAL CONTINUED: CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED. WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65° F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.</p> <p>ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1997  
OAK RIDGE,  
TENNESSEE (OAKT)

Oak Ridge is located in a broad valley between the Cumberland Mountains, which lie to the northwest of the area, and the Great Smoky Mountains, to the southeast. These mountain ranges are oriented northeast-southwest and the valley between is corrugated by broken ridges 300 to 500 feet high and oriented parallel to the main valley. During periods of light winds, daytime winds are usually southwesterly, nighttime winds northeasterly. Wind velocities are somewhat decreased by the ridges. Tornadoes rarely occur in the valley between the Cumberlands and the Great Smokies. In winter the Cumberland Mountains have a moderating influence on the local climate by retarding the flow of cold air from the north and west.

Temperatures of 100 degrees or more have occurred during less than one-half of the years of the period of record, and temperatures of zero or below are rare. Summer nights are seldom oppressively hot and humid.

Precipitation is more than adequate for agriculture and is normally well distributed through the year for agricultural purposes.

Occasionally there is sufficient dry weather in late summer or early fall to cause small damage to crops and pastures and to create conditions favorable for destructive forest fires. Winter and early spring are the seasons of heaviest precipitation. A few of the larger monthly precipitation amounts recorded have occurred in the normally drier fall months.

Light snow usually occurs in all of the months from November through March, but the total monthly snowfall is often only a trace. Snowfalls sufficiently heavy to interfere with traffic and outdoor activities occur infrequently.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 27 and the average last occurrence in the spring is April 11.

