



APRIL 2004

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

OAK RIDGE, TN

OAK RIDGE (OQT)
 Lat: 36°01' N Long: 84°14' W Elev (Ground): 913 Feet
 Time Zone: EASTERN WBAN: 53868 ISSN #: -

APRIL 2004
 OAK RIDGE, TN

DATE	TEMPERATURE °F						DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								DATE																	
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING		0700 LST	1300 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM																						
																			5-SEC		2-MIN																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																		
01	57	43	50	-3	33	42	15	0	RA BR				0.01	28.94	29.92	4.7	31	6.3	24	01	16	36	01																		
02	49	38	44*	-10	36	41	21	0	RA				T	28.96	29.95	1.4	28	3.9	15	34	10	29	02																		
03	69	41	55	1	37	47	10	0					0.00	28.92	29.89	2.8	26	4.3	17	28	13	29	03																		
04	57	39	48	-6	24	39	17	0					0.00	29.02	29.99	6.4	36	7.7	26	02	20	01	04																		
05	62	33*	48	-6	19	37	17	0					0.00	29.16	30.15	2.2	05	2.9	14	09	10	30	05																		
06	72	36	54	-1	26	42	11	0					0.00	29.10	30.08	0.6	17	3.2	14	22	10	21	06																		
07	78	40	59	4	38	50	6	0	RA				T	28.90	29.86	1.2	21	2.6	17	27	12	28	07																		
08	78	53	66	11	45	55	0	1	RA				T	28.76	29.70	2.7	29	4.6	18	36	14	28	08																		
09	73	44	59	4	6	6	0	0					0.00	28.97	29.95	2.4	14	34	10	05	09	09	09																		
10	63	47	55	-1	41	48	10	0	RA				T	28.98	29.95	1.1	05	1.7	10	06	9	06	10																		
11	54	51	53	-3	49	50	12	0	RA BR				0.70	28.96	29.93	2.8	05	3.4	13	06	10	06	11																		
12	55	49	52	-4	50	52	13	0	RA BR				0.74	28.78	29.74	5.7	05	5.9	16	05	14	06	12																		
13	53	37	45	-11	43	45	20	0	RA BR				0.81	28.71	29.68	2.0	27	6.2	20	27	14	06	13																		
14	60	36	48	-9	32	40	17	0	RA				0.03	29.05	30.04	4.3	34	5.8	23	01	17	01	14																		
15	71	34	53	-4	37	46	12	0					0.00	29.24	30.23	0.6	09	1.5	15	05	12	06	15																		
16	78	41	60	3	42	51	5	0					0.00	29.27	30.24	2.7	22	3.6	18	20	15	20	16																		
17	82	47	65	7	48	56	0	0					0.00	29.33	30.29	3.5	23	4.3	21	21	15	22	17																		
18	85*	51	68	10	50	58	0	3					0.00	29.38	30.33	1.8	22	3.6	18	18	13	18	18																		
19	83	53	68	10	48	57	0	3					0.00	29.30	30.25	4.0	22	4.9	21	20	16	21	19																		
20	77	56	67	9	52	58	0	2	RA				T	29.11	30.06	1.1	19	2.3	12	21	9	21	20																		
21	77	54	66	7	53	59	0	1	RA				0.03	28.99	29.94	5.6	22	6.2	29	22	20	23	21																		
22	77	61	69	10	57	62	0	4	RA BR				0.11	29.07	30.02	3.4	23	4.6	22	19	17	22	22																		
23	81	59	70	11	62	64	0	5	RA BR				0.45	29.12	30.07	0.6	25	2.8	25	29	20	28	23																		
24	84	59	72	12	62	66	0	7	FG BR				0.00	29.14	30.08	1.4	08	3.2	13	05	9	17	24																		
25	82	62	72*	12	61	64	0	7	RA BR				0.12	29.10	30.04	2.5	22	3.8	26	26	18	25	25																		
26	68	49	59	-1	53	56	6	0	RA BR				0.30	29.07	30.02	0.7	10	2.9	13	33	9	34	26																		
27	68	46	57	-3	34	46	8	0					0.00	29.06	30.03	4.9	28	6.2	33*	27	21*	27	27																		
28	75	37	56	-5	38	47	9	0					0.00	29.25	30.22	0.3	19	2.0	10	19	8	17	28																		
29	78	46	62	1	49	55	3	0	HZ				0.00	29.30	30.26	3.0	21	4.3	17	21	13	18	29																		
30	71	59	65	4	60	62	0	0	RA BR				0.03	29.18	30.14	0.2	05	.3	6	09	5	09	30																		
										70.6		46.7		58.7		■ ■		7.3		1.1		< MONTHLY AVERAGES				TOTALS-->		3.33		29.07		3.9		<-- MONTHLY AVERAGES							
										0.1		2.9		1.5		■ ■		<-----DEPARTURE FROM NORMAL----->										-		.99		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.46 DATE: 12-13										SEA LEVEL PRESSURE DATE TIME																					
MONTHLY TOTAL DEPARTURE										SEASON TO DATE TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: DATE: DATE:										MAXIMUM MINIMUM : 30.41 18 0953 : 29.55 13 0553											
HEATING: 218 -36 3476 -431										NUMBER OF DAYS WITH →										MAXIMUM TEMP ≥ 90: 0 MINIMUM TEMP ≤ 32: 0										PRECIPITATION ≥ 0.01 INCH : 11											
COOLING: 33 14 43 22																				MAXIMUM TEMP ≤ 32 : 0 MINIMUM TEMP ≤ 0 : 0										PRECIPITATION ≥ 0.10 INCH : 7											
																				THUNDERSTORMS : 0 HEAVY FOG : 0										SNOWFALL ≥ 1.0 INCH :											

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN

APRIL 2004 OQT WBAN # 53868

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST	
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water	Equiv.
01					0.01	T							01												01		0.01		
02													02												02		T		
03													03												03		0.00		
04													04												04		0.00		
05													05												05		0.00		
06													06												06		0.00		
07													07												07	T	T		
08													08												08	T	T		
09													09												09		0.00		
10													10												10		T		
11													11												11		0.70		
12													12												12		0.74		
13													13												13		0.81		
14													14												14		0.03		
15													15												15		0.00		
16													16												16		0.00		
17													17												17		0.00		
18													18												18		0.00		
19													19												19		0.00		
20													20												20		T		
21													21												21		0.03		
22													22												22		0.11		
23													23												23		0.45		
24													24												24		0.00		
25													25												25		0.12		
26													26												26		0.30		
27													27												27		0.00		
28													28												28		0.00		
29													29												29		0.00		
30													30												30		0.03		

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurrence if more than one)

T = Trace precipitation amount

+ = also occurs on earlier date

FG+ = Heavy fog, visibility .25 miles or less

BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1971–2000

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy ' ' = Moderate '- ' = Light

OAK RIDGE, TN APRIL 2004

Ceilorometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR–SS), or midnight to midnight (MN–MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0–2 oktas, Partly Cloudy = 3–6 oktas, Cloudy = 7–8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR–SS		MN–MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							6.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							10.00	10.00	
07							10.00	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							9.00	10.00	
11							1.75	10.00	
12							1.50	10.00	
13							2.50	10.00	
14							10.00	10.00	
15							9.00	10.00	
16							9.00	10.00	
17							10.00	10.00	
18							9.00	10.00	
19							8.00	10.00	
20							10.00	10.00	
21							7.00	10.00	
22							2.50	10.00	
23							.75	10.00	
24							.50	10.00	
25							1.75	10.00	
26							6.00	10.00	
27							7.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							1.75	10.00	
MONTHLY AVGS							7.35	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 30									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 0 6 20									

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

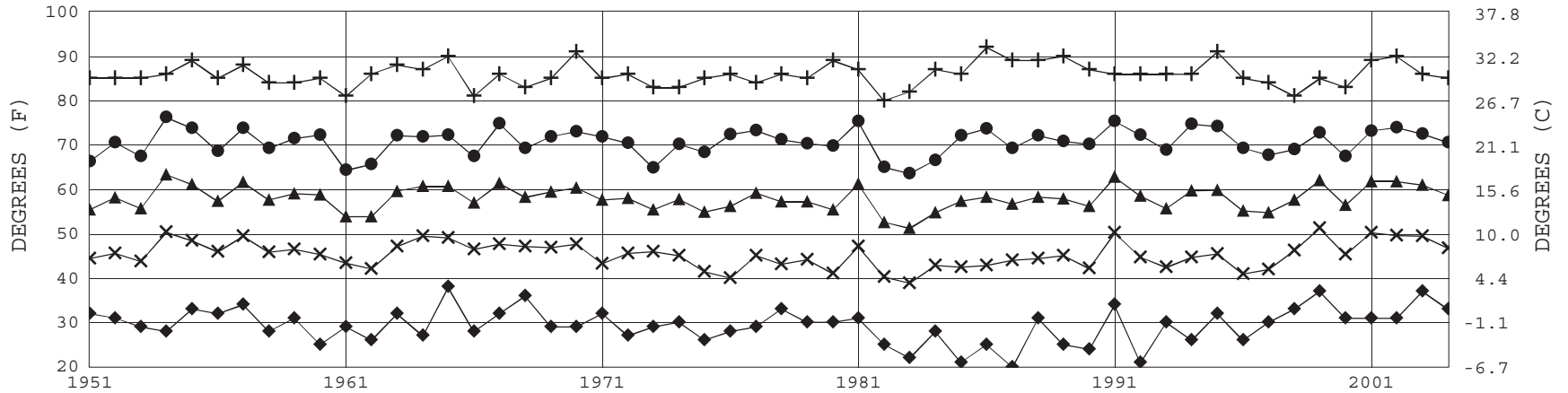
APRIL 2004

OQT

WBAN # 53868

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)	
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT	RELATIVE HUMIDITY (PCT)	DRY BULB	DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL		OBSERVATION TIME (LST)	EFF CLD AMT	RELATIVE HUMIDITY (PCT)	DRY BULB	DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG
SUNRISE: 0623				APR 01				SUNSET: 1859				SUNRISE: 0614				APR 07				SUNSET: 1903			
01	OVC	026	10.00	45	35	41	68	5	VR	28.94	29.92	01	CLR	NC	10.00	48	36	43	63	0	00	28.98	29.94
04	OVC	029	10.00	44	38	41	79	3	26	28.90	29.88	04	CLR	NC	10.00	44	37	41	76	0	00	28.97	29.93
07	OVC	027	10.00	44	35	40	71	3	VR	28.95	29.93	07	CLR	NC	10.00	43	37	40	80	0	00	29.00	29.96
10	OVC	042	10.00	49	33	42	55	7	23	28.99	29.97	10	CLR	NC	10.00	63	39	51	41	3	VR	28.99	29.94
13	BKN	065	10.00	54	28	43	37	12	33	28.94	29.91	13	CLR	NC	10.00	74	34	54	23	3	VR	28.91	29.87
16	BKN	080	10.00	54	30	43	40	9	32	28.91	29.89	16	CLR	NC	10.00	78	31	55	18	7	22	28.81	29.77
19	BKN	060	10.00	51	32	43	48	5	35	28.94	29.92	19	SCT	NC	10.00	73	38	55	28	3	20	28.79	29.75
22	CLR	NC	10.00	48	31	41	52	8	31	28.95	29.93	22	OVC	070	10.00	67	43	54	42	6	VR	28.81	29.75
SUNRISE: 0621				APR 02				SUNSET: 1900				SUNRISE: 0613				APR 08				SUNSET: 1904			
01	OVC	046	10.00	43	32	38	65	3	22	28.95	29.93	01	OVC	085	10.00	62	47	54	58	0	00	28.78	29.72
04	BKN	055	10.00	41	32	37	70	6	24	28.91	29.89	04	OVC	085	10.00	58	49	53	72	0	00	28.75	29.69
07	BKN	095	10.00	41	32	37	70	0	00	28.93	29.91	07	CLR	NC	10.00	54	49	51	83	0	00	28.75	29.70
10	OVC	040	10.00	46	33	40	61	5	29	28.97	29.95	10	OVC	090	10.00	64	48	55	56	0	00	28.76	29.70
13	OVC	036	10.00	48	36	43	63	7	36	28.97	29.96	13	BKN	090	10.00	72	45	57	38	8	25	28.73	29.67
16	OVC	027	10.00	47	37	42	69	5	34	28.97	29.96	16	SCT	NC	10.00	76	45	59	33	9	27	28.70	29.62
19	OVC	044	10.00	47	38	43	71	3	14	29.00	29.99	19	FEW	NC	10.00	74	43	57	33	8	30	28.73	29.67
22	OVC	050	10.00	46	39	43	77	0	00	29.01	29.99	22	CLR	NC	10.00	67	32	50	27	9	32	28.83	29.78
SUNRISE: 0620				APR 03				SUNSET: 1900				SUNRISE: 0611				APR 09				SUNSET: 1905			
01	OVC	060	10.00	46	39	43	77	0	00	28.98	29.97	01	CLR	NC	10.00	59	35	48	41	5	VR	28.90	29.84
04	OVC	055	10.00	46	40	43	79	3	22	28.94	29.92	04	CLR	NC	10.00	47	37	42	69	0	00	28.94	29.90
07	CLR	NC	10.00	42	39	41	89	0	00	28.96	29.95	07	CLR	NC	10.00	47	39	43	74	3	VR	28.99	29.95
10	CLR	NC	10.00	56	39	48	53	5	VR	28.97	29.95	10			10.00							29.03	
13	OVC	060	10.00	64	38	51	38	7	VR	28.92	29.89	13	CLR	NC	10.00	68	39	53	35	7	10	28.99	29.94
16	OVC	070	10.00	68	38	53	33	10	27	28.85	29.81	16	CLR	NC	10.00	73	34	53	24	5	35	28.94	29.90
19	CLR	NC	10.00	62	35	49	37	7	28	28.86	29.84	19	CLR	NC	10.00	67	31	50	26	7	05	28.95	29.91
22	CLR	NC	10.00	56	34	46	44	5	VR	28.91	29.88	22	CLR	NC	10.00	55	37	46	51	0	00	29.00	
SUNRISE: 0618				APR 04				SUNSET: 1901				SUNRISE: 0610				APR 10				SUNSET: 1906			
01	CLR	NC	10.00	50	33	42	52	3	VR	28.89	29.85	01	CLR	NC	10.00	53	36	45	52	3	03	29.00	29.95
04	SCT	NC	10.00	49	27	40	43	12	01	28.94	29.90	04	CLR	NC	10.00	48	37	43	66	0	00	28.98	29.94
07	CLR	NC	10.00	43	19	34	38	7	36	29.00	29.97	07	CLR	NC	9.00	49	39	44	69	0	00	29.02	29.98
10	CLR	NC	10.00	47	24	38	41	7	VR	29.05	30.02	10	BKN	090	10.00	56	40	48	55	5	04	29.02	29.98
13	CLR	NC	10.00	54	24	42	31	6	VR	29.04	30.01	13	OVC	085	10.00	60	39	50	46	5	05	29.00	29.97
16	CLR	NC	10.00	56	23	42	28	12	01	29.00	29.97	16	OVC	065	10.00	61	41	51	48	0	00	28.97	29.94
19	CLR	NC	10.00	50	21	39	32	12	35	29.04	30.03	19	OVC	070	10.00	60	43	51	53	0	00	28.95	29.91
22	CLR	NC	10.00	46	21	36	37	7	36	29.11	30.10	22	OVC	085	10.00	57	46	51	67	0	00	28.97	29.93
SUNRISE: 0617				APR 05				SUNSET: 1902				SUNRISE: 0609				APR 11				SUNSET: 1907			
01	CLR	NC	10.00	37	27	33	67	0	00	29.12	30.11	01	OVC	075	9.00	53	46	49	77	0	00	28.94	29.90
04	CLR	NC	10.00	34	28	32	79	0	00	29.13	30.13	04	OVC	080	8.00	51	46	49	83	0	00	28.93	29.89
07	CLR	NC	10.00	38	23	32	55	0	00	29.17	30.17	07	OVC	035	2.50	51	49	50	92	0	00	28.96	29.93
10	CLR	NC	10.00	47	15	35	28	9	08	29.20	30.19	10	OVC	027	4.00	53	50	51	89	5	01	28.97	29.94
13	CLR	NC	10.00	56	17	41	22	0	00	29.18	30.17	13	OVC	022	2.50	52	50	51	93	5	07	28.97	29.94
16	CLR	NC	10.00	61	17	43	18	7	08	29.12	30.11	16	OVC	032	5.00	52	50	51	93	6	06	28.98	29.95
19	CLR	NC	10.00	56	12	40	17	5	36	29.13	30.13	19	OVC	030	4.00	52	50	51	93	3	04	28.98	29.95
22	CLR	NC	10.00	47	23	37	39	0	00	29.16	30.16	22	OVC	032	10.00	52	48	50	86	6	05	28.96	29.93
SUNRISE: 0616				APR 06				SUNSET: 1903				SUNRISE: 0607				APR 12				SUNSET: 1908			
01	CLR	NC	10.00	46	19	36	34	5	06	29.16	30.15	01	OVC	019	10.00	52	48	50	86	6	04	28.92	29.90
04	CLR	NC	10.00	38	24	33	57	3	05	29.17	30.16	04	OVC	015	10.00	53	48	50	83	8	05	28.84	29.80
07	CLR	NC	10.00	37	27	33	67	0	00	29.19	30.19	07	OVC	080	9.00	53	49	51	86	10	04	28.76	29.73
10	CLR	NC	10.00	54	20	40	26	6	13	29.18	30.16	10	OVC	018	1.50					5	04	28.76	29.73
13	CLR	NC	10.00	65	20	46	18	5	VR	29.11	30.08	13	OVC	024	9.00	55	52	53	90	6	03	28.73	29.70
16	CLR	NC	10.00	72	27	51	19	9	21	29.02	29.99	16	OVC	006	10.00	55	53	54	93	3	06	28.73	29.69
19	CLR	NC	10.00	68	29	50	23	6	21	28.98	29.95	19	OVC	006	9.00	54	53	53	97	3	02	28.76	29.73
22	CLR	NC	10.00	55	32	45	42	0	00	29.02	29.99	22	OVC	014	9.00	50	49	49	96	8	05	28.76	29.73

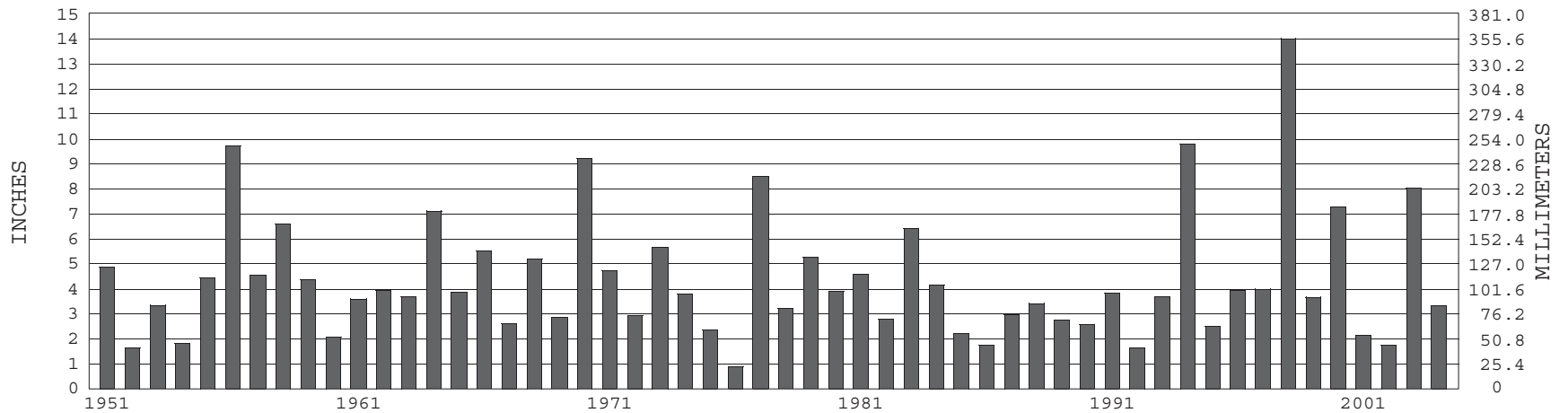
OAK RIDGE, TN APRIL TEMPERATURES



+ Extreme Max. ● Mean Max. ▲ Mean × Mean Min. ◆ Extreme Min.

Long-Term (1951-2004) Mean: 58.0 1971-2000 Normal: 57.2

OAK RIDGE, TN APRIL PRECIPITATION



Long-Term (1951-2004) Mean Monthly Total: 4.36

1971-2000 Normal: 4.32



APRIL 2004

OAK RIDGE, TN

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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