



MAY 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 #: -

MAY 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							
																			SPEED	DIR	SPEED	DIR						
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	77	57	67	6	62	63	0	2	RA FG+ BR				T	29.02	29.97	0.9	20	1.3	14	27	10	26	01					
02	66	43	55	-7	54	55	10	0	RA BR				1.02	28.97	29.92	0.9	23	3.4	18	22	14	21	02					
03	57	39	48*	-14	40	43	17	0	RA FG+ BR				T	29.14	30.13	0.7	01	1.8	13	01	10	06	03					
04	67	36*	52	-10	40	46	13	0	FG+ BR				0.00	29.19	30.18	1.2	24	2.6	14	22	9	20	04					
05	80	49	65	2	54	58	0	0	RA BR				0.04	29.11	30.07	1.2	23	2.9	14	26	9	23	05					
06	85	53	69	6	57	62	0	4	FG+ BR				0.00	29.19	30.14	1.7	22	3.4	18	21	13	21	06					
07	88	54	71	8	56	62	0	6	BR				0.00	29.25	30.19	0.8	25	2.0	13	30	9	27	07					
08	88	55	72	9	56	62	0	7					0.00	29.23	30.17	0.5	18	1.2	13	03	10	18	08					
09	89	58	74	10	58	64	0	9	BR				0.00	29.19	30.13	1.6	15	2.8	16	20	13	20	09					
10	85	60	73	9	62	65	0	8	RA BR				0.06	29.20	30.15	0.8	20	2.3	22	19	17	18	10					
11	84	60	72	8	63	65	0	7	FG+ BR HZ				0.00	29.22	30.17	1.5	21	2.3	23	19	16	18	11					
12	84	60	72	7	63	66	0	7	RA BR HZ				0.01	29.21	30.15	0.7	21	1.7	21	19	16	20	12					
13	81	66	74	9	66	68	0	9	RA BR				0.14	29.20	30.14	0.4	19	2.3	22	13	18*	14	13					
14	80	62	71	6	64	66	0	6	RA FG+ BR				T	29.21	30.15	2.0	21	3.3	17	20	14	21	14					
15	82	62	72	7	63	66	0	7	BR				0.00	29.22	30.17	1.6	24	3.0	18	19	14	19	15					
16	83	63	73	7	63	66	0	8	BR				0.00	29.28	30.23	1.2	20	3.1	15	20	12	21	16					
17	84	62	73	7	63	67	0	8	RA BR				T	29.31	30.26	2.5	19	3.6	21	20	16	18	17					
18	86	63	75	9	58	64	0	10	RA FG BR				0.27	29.27	30.21	1.6	22	2.7	21	22	16	22	18					
19	86	66	76	10	32	54	0	11	RA BR HZ				0.02	29.21	30.15	1.6	24	3.6	15	23	10	27	19					
20	88	64	76	9	66	70	0	11	BR HZ				0.00	29.23	30.16	1.9	22	3.3	16	21	13	20	20					
21	90	66	78	11	66	70	0	13					0.00	29.19	30.11	1.2	23	2.8	13	28	10	19	21					
22	88	65	77	10	67	70	0	12	RA FG+ BR				0.33	29.08	30.01	1.1	22	2.3	15	19	12	19	22					
23	88	67	78	10	65	69	0	13	BR HZ				0.00	29.03	29.96	3.1	23	4.6	18	22	14	24	23					
24	89	64	77	9	64	69	0	12					0.00	29.03	29.96	2.9	22	4.3	21	20	14	21	24					
25	90*	68	79*	11	67	71	0	14	RA				T	29.00	29.92	3.7	22	5.2	20	20	14	21	25					
26	83	65	74	6	67	70	0	9	RA BR				0.58	28.95	29.87	3.4	22	5.9	21	36	14	35	26					
27	86	65	76	7	64	68	0	11					0.00	28.89	29.82	4.0	22	5.7	24	20	17	20	27					
28	77	67	72	3	66	68	0	7	RA BR				0.52	28.92	29.85	2.0	23	4.3	18	34	14	34	28					
29	84	68	76	7	65	69	0	11					0.00	29.01	29.94	0.8	20	3.0	13	27	9	17	29					
30	87	69	78	9	69	72	0	13	RA BR				0.24	28.92	29.85	3.5	22	4.7	24	23	14	21	30					
31	81	65	73	3	64	66	0	8	RA BR				0.67	28.83	29.76	2.6	23	5.4	26*	29	16	28	31					
< MONTHLY AVERAGES											TOTALS-->				3.90	29.12	30.06	1.4	22	3.3	<- MONTHLY AVERAGES							
4.9											6.6			5.8			<-----DEPARTURE FROM NORMAL----->				-1.24				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3			
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.02 DATE: 02				SEA LEVEL PRESSURE				DATE		TIME								
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL:				MAXIMUM				: 30.32		: 17 0853								
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH:				MINIMUM				: 29.69		: 31 0153								
HEATING:		40		-40		3516		-471		NUMBER OF DAYS WITH		MAXIMUM TEMP ≥ 90: 2		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH : 12												
COOLING:		243		148		286		170		MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 8														
										THUNDERSTORMS : 0		HEAVY FOG : 7		SNOWFALL ≥ 1.0 INCH :														

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN

MAY 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													01												01			T	
02													02												02				1.02
03		T	0.02	0.02	T	0.03	0.44	0.08	0.18	T	0.14	0.09	0.02	03	T	T	T	T						03			T		
04														04											04				0.00
05								0.03	0.01					05											05				0.04
06														06											06				0.00
07														07											07				0.00
08														08											08				0.00
09														09											09				0.00
10														10				0.01	0.02	0.03					10				0.06
11														11											11				0.00
12														12				0.01	T						12				0.01
13														13			0.11	0.03		T					13				0.14
14														14	T	T									14				T
15														15											15				0.00
16														16											16				0.00
17														17				T							17				T
18														18			0.25	0.02	T		T				18				0.27
19														19						T					19				0.02
20														20											20				0.00
21														21											21				0.00
22														22			0.10	0.23							22				0.33
23														23											23				0.00
24														24											24				0.00
25														25											25				T
26														26						T	.11	0.41	0.02	0.04	26				0.58
27														27											27				0.00
28						0.33	0.14	0.03	T	0.01	T	T		28			0.01								28				0.52
29														29											29				0.00
30							0.09	0.07						30											30				0.24
31			0.40	0.15	0.05	0.01	0.02	0.02	0.01	T		T		31	0.01		0.02								31			T	0.67

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 MAY 2004

Ceilometer (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							.25	10.00	
02							.75	10.00	
03							<.25	10.00	
04							<.25	10.00	
05							6.00	10.00	
06							<.25	10.00	
07							5.00	10.00	
08							7.00	10.00	
09							5.00	10.00	
10							2.00	10.00	
11							.25	10.00	
12							2.50	10.00	
13							2.50	10.00	
14							.25	10.00	
15							5.00	10.00	
16							3.00	10.00	
17							4.00	10.00	
18							.50	10.00	
19							5.00	10.00	
20							.00	10.00	
21							8.00	10.00	
22							.25	10.00	
23							4.00	10.00	
24							7.00	10.00	
25							7.00	10.00	
26							.75	10.00	
27							7.00	10.00	
28							1.75	10.00	
29							7.00	10.00	
30							.75	10.00	
31							1.00	10.00	
MONTHLY AVGS							3.63	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING									
31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0									
6 16 8									

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

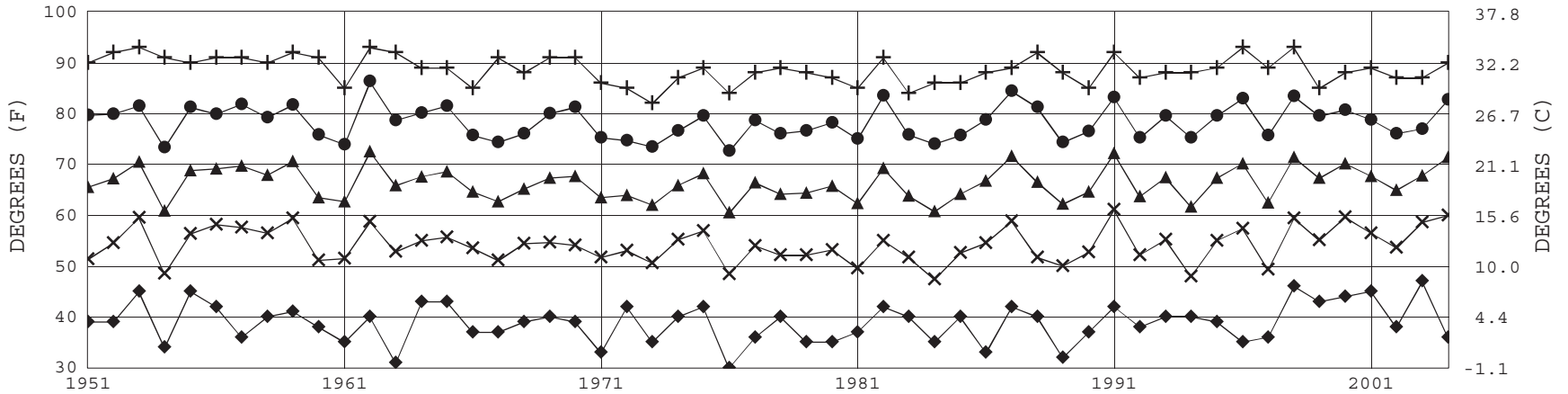
MAY 2004

QQT

WBAN # 53868

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		
	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)			SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)		SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL											
SUNRISE: 0524								MAY 25				SUNSET: 1943				SUNRISE: 0522								MAY 31				SUNSET: 1947				
01	CLR	NC				10.00		73	66	69	79	3	27	29.02	29.93	01	OVC	090					10.00		76	72	73	88	3	VR	28.80	29.72
04	SCT	NC				10.00		71	66	68	84	0	00	29.03	29.95	04	OVC	041				7.00	RA	66	64	65	93	3	08	28.83	29.75	
07	CLR	NC				7.00		72	67	69	84	5	21	29.08	30.00	07	OVC	024				5.00	-RA BR	66	65	65	96	5	VR	28.86	29.79	
10	BKN	032				8.00		78	69	72	74	8	22	29.05	29.98	10	OVC	009				10.00		68	66	67	93	7	VR	28.83	29.76	
13	FEW	NC				10.00		86	69	74	57	8	23	29.01	29.93	13	OVC	011				10.00		72	68	69	87	9	22	28.85	29.78	
16	CLR	NC				10.00		88	66	73	48	8	23	28.96	29.88	16	CLR	NC				10.00		80	65	70	60	7	VR	28.80	29.73	
19	CLR	NC				10.00		83	67	72	59	6	22	28.93	29.85	19	CLR	NC				10.00		77	57	65	50	5	VR	28.82	29.75	
22	FEW	NC				10.00		80	67	71	64	3	21	28.99	29.91	22	BKN	065				10.00		67	60	63	79	3	21	28.87	29.81	
SUNRISE: 0524								MAY 26				SUNSET: 1944				3-HOURLY OBSERVATION NOTES																
01	BKN	100				10.00		78	65	70	64	6	23	28.98	29.90	Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibility = 8/8.																
04	OVC	075				10.00		76	66	69	72	7	VR	28.95	29.87	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																
07	OVC	060				10.00		75	67	70	76	7	VR	28.99	29.90	NC= No ceiling detected.																
10	BKN	036				10.00		78	67	71	69	8	22	28.98	29.90	& = Original observation contained additional weather elements.																
13	SCT	NC				10.00		82	69	73	65	8	22	28.92	29.83	See page 3 for additional notes.																
16	SCT	NC				10.00		80	69	73	69	9	21	28.89	29.81																	
19	OVC	042				1.50	+RA BR	67	65	66	93	3	VR	28.97	29.90																	
22	OVC	007				10.00		66	64	65	93	3	VR	28.98	29.91																	
SUNRISE: 0523								MAY 27				SUNSET: 1945				SUMMARY BY HOUR																
01	SCT	NC				10.00		65	64	64	97	0	00	28.90	29.83	AVERAGES																
04	CLR	NC				10.00		66	64	65	93	0	00	28.93	29.85	RESULTANT WIND (MPH)																
07	BKN	039				10.00		65	62	63	90	0	00	28.97	29.91	HOUR (LST)																
10	BKN	015				10.00		73	65	68	76	0	00	28.94	29.88	CEILOMETER																
13	FEW	NC				10.00		83	66	72	57	10	25	28.89	29.82	EFF CLD AMT																
16	FEW	NC				10.00		85	63	70	48	14	22	28.84	29.76	DRY BULB																
19	SCT	NC				10.00		81	64	70	57	10	21	28.80	29.73	DEW POINT																
22	FEW	NC				10.00		76	63	68	64	5	VR	28.83	29.75	WET BULB																
SUNRISE: 0523								MAY 28				SUNSET: 1945				HOUR (LST)																
01	OVC	055				10.00		76	63	68	64	3	VR	28.86	29.78	CEILOMETER																
04	OVC	040				10.00		74	63	67	69	0	00	28.83	29.75	EFF CLD AMT																
07	OVC	031				7.00	-RA	67	66	66	97	6	22	28.91	29.84	DRY BULB																
10	OVC	043				9.00	-RA	69	67	68	93	5	21	28.94	29.87	DEW POINT																
13	BKN	036				10.00		73	67	69	81	6	VR	28.93	29.85	WET BULB																
16	CLR	NC				10.00		76	68	71	77	8	23	28.92	29.85	RELATIVE HUMIDITY																
19	BKN	048				10.00		75	67	70	76	5	VR	28.95	29.88	PRESSURE (INCHES, HG)																
22	OVC	024				10.00		71	67	68	87	3	22	29.00	29.93	STATION																
SUNRISE: 0523								MAY 29				SUNSET: 1946				STATION																
01	OVC	006				10.00		69	66	67	90	5	22	29.00	29.93	SEA LEVEL								VISIBILITY (MILES)								
04	OVC	004				8.00		68	66	67	93	0	00	28.99	29.92	WIND SPEED (MPH)								SPEED								
07	OVC	014				7.00		69	65	66	87	3	16	29.05	29.98	DIRECTION								DIRECTION								
10	BKN	028				10.00		75	64	68	69	0	00	29.05	29.98																	
13	FEW	NC				10.00		81	64	70	57	6	VR	29.03	29.96																	
16	SCT	NC				10.00		83	65	71	55	3	VR	28.99	29.92																	
19	CLR	NC				10.00		80	65	70	60	5	18	28.98	29.91																	
22	OVC	120				10.00		75	67	70	76	3	22	29.01	29.93																	
SUNRISE: 0522								MAY 30				SUNSET: 1947				HOUR (LST)																
01	OVC	022				8.00		73	67	69	81	3	22	29.00	29.93	CEILOMETER																
04	CLR	NC				8.00		70	67	68	90	3	VR	28.97	29.89	EFF CLD AMT																
07	OVC	016				3.00	-RA BR	70	68	69	93	3	18	29.00	29.93	DRY BULB																
10	OVC	018				10.00		74	68	70	82	6	VR	29.01	29.93	DEW POINT																
13	OVC	020				10.00		76	70	72	82	3	VR	28.95	29.88	WET BULB																
16	FEW	NC				10.00		85	73	77	68	7	21	28.86	29.78	RELATIVE HUMIDITY																
19	CLR	NC				10.00		84	70	74	63	6	21	28.82	29.74	PRESSURE (INCHES, HG)																
22	OVC	090				10.00		82	69	73	65	6	19	28.83	29.75	STATION																

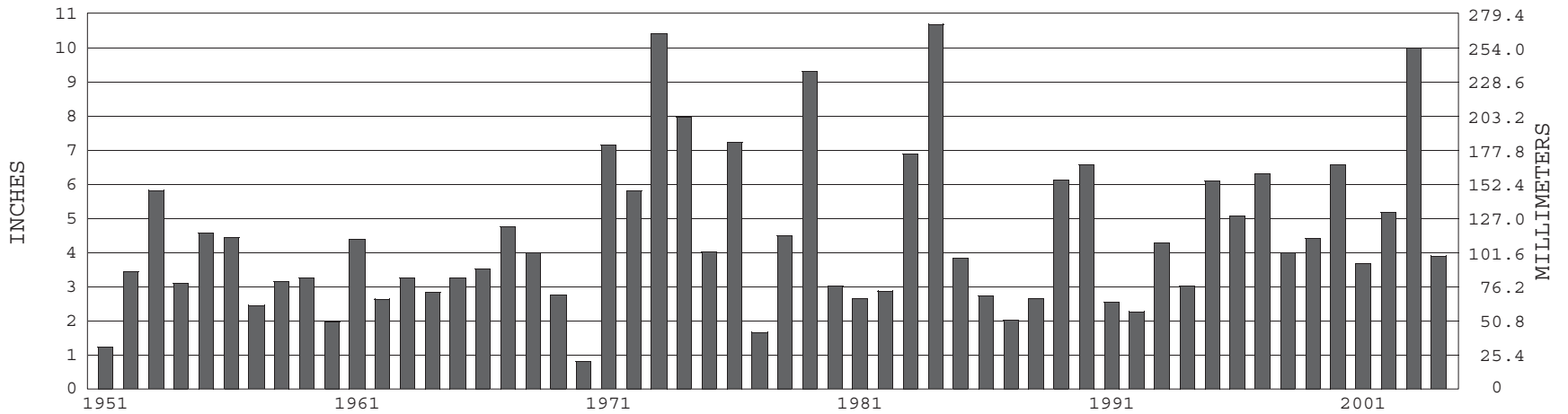
OAK RIDGE, TN MAY TEMPERATURES



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

Long-Term (1951-2004) Mean: 66.3 1971-2000 Normal: 65.6

OAK RIDGE, TN MAY PRECIPITATION



Long-Term (1951-2004) Mean Monthly Total: 4.47

1971-2000 Normal: 5.14



MAY 2004

OAK RIDGE, TN

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.

DIRECTOR

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