



FEBRUARY 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 #: -

FEBRUARY 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	53	24*	39	1	16	29	26	0					0.00	29.22	30.25	2.5	06	3.4	14	06	10	10	01								
02	44	32	38	0	29	35	27	0	RA BR				0.61	29.19	30.20	1.3	04	2.4	10	26	9	07	02								
03	44	34	39	1	30	35	26	0	RA HZ				0.06	29.17	30.18	3.8	27	5.8	21	27	15	28	03								
04	46	32	39	1	26	32	26	0					0.00	29.37	30.39	5.5	04	6.0	17	06	14	06	04								
05	43	32	38	0	31	35	27	0	RA HZ				0.41	29.20	30.21	4.2	05	4.5	18	06	14	05	05								
06	52	38	45	6	31	41	20	0	RA HZ				2.84	28.95	29.93	3.2	27	4.6	23	29	16	27	06								
07	38	30	34	-5	23	30	31	0	RA SN				0.01	29.15	30.17	5.8	27	7.4	22	27	15	29	07								
08	43	28	36	-3	20	28	29	0					0.00	29.49	30.53	2.4	02	4.2	14	31	10	06	08								
09	49	29	39	0	24	34	26	0	RA				T	29.39	30.40	1.8	25	3.9	18	25	12	26	09								
10	51	33	42	3	29	37	23	0	RA				T	29.23	30.23	2.7	26	3.3	17	28	13	28	10								
11	34	31	33*	-7	26	34	32	0					0.00	29.24		0.3	24	.5	6	05	5	06	11								
12	45	33	39	-1	34	37	26	0	RA SN BR				0.21	29.23	30.24	2.5	06	3.2	13	07	12	08	12								
13	51	28	40	0	29	36	25	0	FG+ FZFG BR				0.00	29.28	30.30	0.7	18	1.3	10	22	8	21	13								
14	53	33	43	3	28	36	22	0					0.00	29.08	30.09	1.2	06	1.6	7	05	6	04	14								
15	46	33	40	-1	30	35	25	0	RA SN BR				0.83	28.99	29.99	7.0	05	7.2	24	07	17	05	15								
16	42	30	36	-5	29	33	29	0	RA				0.01	29.37	30.39	2.9	04	3.6	13	07	10	06	16								
17	40	33	37	-4	35	37	28	0	RA BR				0.03	29.42	30.44	0.5	25	1.7	10	26	8	27	17								
18	51	28	40	-1	27	33	25	0	FG+ FZFG BR				0.00	29.39	30.41	0.2	26	1.6	13	22	9	17	18								
19	61	27	44	2	29	37	21	0					0.00	29.14	30.15	1.9	23	2.9	13	19	9	19	19								
20	56	37	47	5	41	45	18	0	RA BR				0.04	28.86	29.84	4.3	24	6.0	29*	22	18*	22	20								
21	54	34	44	2	32	40	21	0					0.00	29.03	30.01	4.0	27	6.6	25	27	16	29	21								
22	55	27	41	-1	29	35	24	0	BR				0.00	29.21	30.22	1.8	06	2.4	15	06	13	07	22								
23	55	33	44	1	32	39	21	0					0.00	29.15	30.15	0.6	08	1.7	10	27	7	26	23								
24	54	43	49*	6	40	44	16	0	RA BR				0.09	29.03	30.01	2.8	06	3.2	15	07	13	09	24								
25	52	36	44	1	26	37	21	0					0.00	29.07	30.06	9.9	04	10.0	23	02	17	06	25								
26	46	33	40	-3	30	34	25	0	RA SN FG+ BR UP				0.57	29.13	30.13	6.4	05	6.8	17	08	14	07	26								
27	50	31	41	-3	31	36	24	0					0.00	29.28	30.30	2.2	05	2.9	15	08	12	07	27								
28	62	26	44	0	28	36	21	0					0.00	29.42	30.43	0.5	04	1.2	10	09	8	05	28								
29	64*	30	47	3	29	39	18	0					0.00	29.35	30.35	1.1	24	1.7	10	26	8	26	29								
< MONTHLY AVERAGES										TOTALS-->				<- MONTHLY AVERAGES																	
-2.2										2.2				0.0																	
29.1										35.8				24.2										0.0							
49.4										31.7				40.6										29.1							
703										-14				2912										-252							
0										0				1										1							
HEATING:										703				-14										2912				-252			
COOLING:										0				0										1				1			
GREATEST 24-HR PRECIPITATION:										3.03				DATE :05-06																	
GREATEST 24-HR SNOWFALL:										DATE :				DATE :																	
GREATEST SNOW DEPTH:										DATE :				DATE :																	
NUMBER OF DAYS WITH										MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 16																	
HEAVY FOG										MAXIMUM TEMP ≤ 32 : 0				MINIMUM TEMP ≤ 0 : 0																	
THUNDERSTORMS										: 0				HEAVY FOG : 3																	
PRECIPITATION ≥ 0.01 INCH :										12				PRECIPITATION ≥ 0.10 INCH :										6							
SNOWFALL ≥ 1.0 INCH :										:				SNOWFALL ≥ 1.0 INCH :										:							

SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3

SEA LEVEL PRESSURE DATE TIME
 MAXIMUM : 30.64 08 1053
 MINIMUM : 29.72 20 2153

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN

FEBRUARY 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			0.00	
02													02												02			0.61	
03	T	0.02	T		0.01		T	T	0.01		T	T	03			0.03	0.07	0.16	0.09	0.03	0.05	0.05	0.07	0.02	0.04	03		0.06	
04													04												04			0.00	
05						0.01	T	0.01	0.04	0.02	0.06	0.08	05	0.11	0.01	T	T	T		T	T	0.02	0.02	T	0.03	05		0.41	
06	0.10	0.35	0.35	0.43	0.52	0.32	0.30	0.17	0.11	0.04	0.05	0.10	06	T											06		2.84		
07	T		T	T	T	0.01		T	T	T			07				T	T	T	T	T				07		0.01		
08													08												08		0.00		
09													09												09	T	T		
10	T	T					T	T	T				10												10		T		
11													11												11		0.00		
12		T	0.02	0.06	0.02	T	0.01	0.03	0.05	0.02		T	12	T	T									12		0.21			
13													13												13		0.00		
14													14												14		0.00		
15							0.01	0.03	T	T	0.02	T	15	0.06	0.20	0.11	0.15	0.11	0.05	0.03	0.03	0.01	0.01	0.01	15		0.83		
16													16												16		0.01		
17	T					T				0.01	0.01	T	0.01	17	T									17		0.03			
18													18												18		0.00		
19													19												19		0.00		
20													20			T	0.01	T	T				0.03	T	20		0.04		
21													21												21		0.00		
22													22												22		0.00		
23													23												23		0.00		
24										0.01	0.05		24	0.03	T										24		0.09		
25													25												25		0.00		
26					T	T	0.04	0.01	0.01	0.02	0.02	0.04	26	0.08	0.07	0.06	0.06	0.05	0.04	0.02	0.01	0.01	0.01	0.01	26		0.57		
27													27												27		0.00		
28													28												28		0.00		
29													29												29		0.00		

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 FEBRUARY 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							10.00	10.00	
02							1.75	10.00	
03							2.50	10.00	
04							8.00	10.00	
05							2.50	10.00	
06							1.00	10.00	
07							2.50	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							1.50	10.00	
13							<.25	10.00	
14							10.00	10.00	
15							.75	10.00	
16							9.00	10.00	
17							1.75	9.00	
18							<.25	10.00	
19							9.00	10.00	
20							4.00	10.00	
21							10.00	10.00	
22							5.00	10.00	
23							9.00	10.00	
24							5.00	10.00	
25							9.00	10.00	
26							.25	10.00	
27							10.00	10.00	
28							8.00	10.00	
29							10.00	10.00	
MONTHLY AVGS							6.12	9.97	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING									
29									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0									
3 10 16									

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

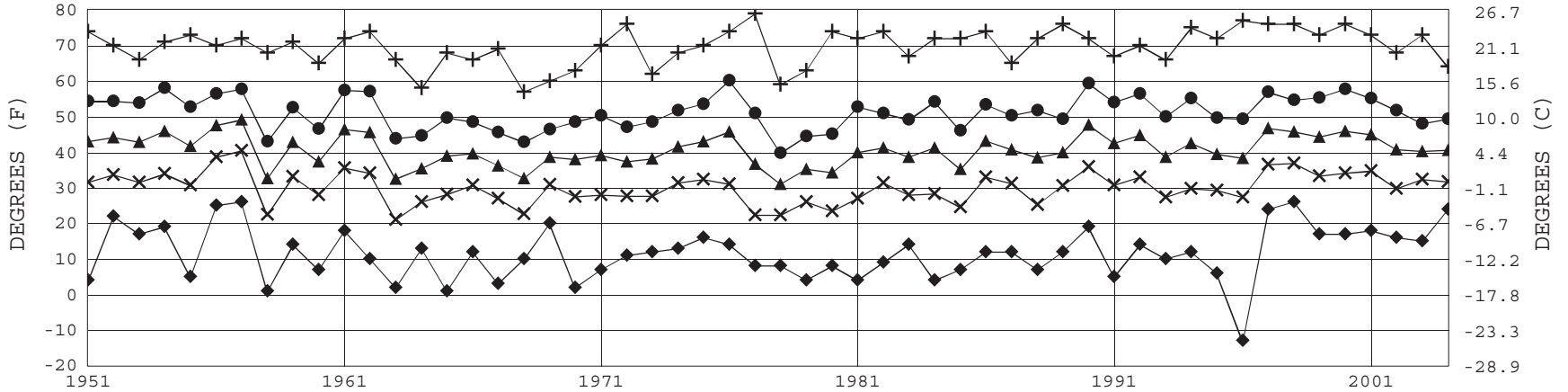
FEBRUARY 2004

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 Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
01	CLR	NC			10.00		26	14	22	60	5	05	29.21	30.25	01	OVC	031		10.00	37	31	35	79	5	VR	29.02	30.01		
04	CLR	NC			10.00		24	15	21	68	3	03	29.21	30.24	04	OVC	034		10.00	35	29	33	78	8	23	29.05	30.03		
07	CLR	NC			10.00		25	14	22	63	5	04	29.21	30.24	07	OVC	029		10.00	34	24	30	67	5	27	29.08	30.08		
10	CLR	NC			10.00		37	11	29	34	8	05	29.26	30.28	10	OVC	046		10.00	33	25	30	72	8	27	29.11	30.12		
13	CLR	NC			10.00		46	14	35	27	5	15	29.24	30.26	13	OVC	060		10.00	36	20	30	52	15	28	29.13	30.14		
16	CLR	NC			10.00		53	15	39	22	5	VR	29.19	30.20	16	OVC	042		10.00	33	19	28	56	12	26	29.16	30.18		
19	CLR	NC			10.00		42	17	33	36	0	00	29.21	30.23	19	OVC	055		10.00	30	25	28	82	3	VR	29.24	30.27		
22	CLR	NC			10.00		36	22	31	57	0	00	29.24	30.25	22	OVC	037		10.00	30	19	26	64	3	28	29.33	30.36		
SUNRISE: 0737 FEB 02 SUNSET: 1804						SUNRISE: 0732 FEB 08 SUNSET: 1811																							
01	CLR	NC			10.00		33	24	30	70	0	00	29.24	30.25	01	OVC	033		10.00	30	18	26	61	6	34	29.41	30.44		
04	FEW	NC			10.00		34	25	31	70	3	07	29.24	30.24	04	OVC	029		10.00	29	19	26	66	7	34	29.46	30.50		
07	OVC	050			10.00		37	24	32	60	3	04	29.24	30.25	07	OVC	031		10.00	28	19	25	69	6	04	29.54	30.59		
10	OVC	060			10.00		41	20	33	43	6	09	29.26	30.27	10	OVC	029		10.00	30	19	26	64	6	05	29.57	30.62		
13	OVC	043			10.00		43	22	35	43	3	VR	29.21	30.22	13	CLR	NC		10.00	38	20	32	48	5	10	29.57	30.61		
16	OVC	037			8.00	-RA	40	36	38	86	3	27	29.14	30.16	16	CLR	NC		10.00	42	18	33	38	5	VR	29.47	30.50		
19	OVC	015			5.00	-RA BR	39	38	39	96	3	07	29.12	30.13	19	CLR	NC		10.00	36	22	31	57	0	00	29.45	30.48		
22	OVC	013			3.00	-RA BR	39	38	39	96	0	00	29.10	30.11	22	CLR	NC		10.00	30	23	28	75	0	00	29.44	30.47		
SUNRISE: 0736 FEB 03 SUNSET: 1805						SUNRISE: 0731 FEB 09 SUNSET: 1812																							
01	OVC	007			7.00	-RA	38	32	35	79	5	VR	29.07	30.07	01	CLR	NC		10.00	33	22	29	64	7	23	29.45	30.48		
04	OVC	003			5.00	HZ	38	32	35	79	5	24	29.04	30.04	04	CLR	NC		10.00	34	22	30	61	5	VR	29.46	30.48		
07	OVC	003			3.00	-RA	39	32	36	76	3	VR	29.05	30.05	07	BKN	044		10.00	30	23	28	75	0	00	29.44	30.47		
10	OVC	021			10.00		41	31	37	67	8	23	29.12	30.13	10	FEW	NC		10.00	39	22	33	50	7	VR	29.45	30.47		
13	OVC	035			10.00		41	30	37	65	10	28	29.17	30.19	13	CLR	NC		10.00	45	24	37	44	7	VR	29.40	30.41		
16	OVC	030			10.00		38	28	34	68	8	26	29.22	30.23	16	OVC	095		10.00	48	24	38	39	7	28	29.33	30.34		
19	OVC	028			10.00		35	26	32	70	6	VR	29.29	30.31	19	OVC	110		10.00	45	25	37	46	0	00	29.31	30.32		
22	OVC	024			10.00		34	27	31	76	3	28	29.34	30.36	22	OVC	041		10.00	42	28	36	58	0	00	29.31	30.31		
SUNRISE: 0735 FEB 04 SUNSET: 1806						SUNRISE: 0730 FEB 10 SUNSET: 1813																							
01	OVC	024			10.00		33	26	30	75	3	02	29.33	30.35	01	OVC	047		10.00	42	32	38	68	0	00	29.29	30.29		
04	OVC	026			10.00		33	24	30	70	3	05	29.37	30.39	04	OVC	049		10.00	42	32	38	68	0	00	29.25	30.25		
07	OVC	022			10.00		32	24	29	73	7	01	29.39	30.41	07	OVC	037		10.00	41	32	37	70	3	22	29.24	30.24		
10	OVC	024			9.00		34	25	31	70	10	04	29.41	30.44	10	OVC	023		10.00	42	31	37	65	3	22	29.25	30.26		
13	CLR	NC			10.00		41	27	35	57	9	05	29.39	30.41	13	OVC	065		10.00	48	31	41	52	8	26	29.21	30.21		
16	CLR	NC			10.00		45	25	37	46	7	02	29.37	30.39	16	CLR	NC		10.00	51	28	41	41	10	29	29.16	30.15		
19	CLR	NC			10.00		40	26	35	58	5	04	29.36	30.38	19	CLR	NC		10.00	46	21	36	37	6	27	29.19	30.19		
22	CLR	NC			10.00		35	27	32	72	3	VR	29.33	30.35	22	CLR	NC		10.00	38	24	33	57	0	00	29.21	30.22		
SUNRISE: 0735 FEB 05 SUNSET: 1807						SUNRISE: 0729 FEB 11 SUNSET: 1814																							
01	CLR	NC			10.00		33	26	30	75	5	06	29.30	30.31	01	CLR	NC		10.00	34	26	31	73	0	00	29.23	30.24		
04	CLR	NC			10.00		33	28	31	82	3	06	29.25	30.27	04	CLR	NC		10.00	33	29	31	85	0	00	29.23	30.23		
07	OVC	090			9.00	-RA	36	31	34	82	3	04	29.32	30.33	07	CLR	NC		10.00	31	28	30	89	0	00	29.24	30.26		
10	OVC	055			6.00	RA	37	31	35	79	8	05	29.29	30.31	10														
13	OVC	044			3.00	-RA	38	32	36	79	10	05	29.19	30.21	13	CLR	NC		10.00	44	23	36	43	5	VR	29.26			
16	OVC	038			7.00	-RA	42	32	38	68	6	06	29.16	30.17	16	CLR	NC		10.00	47	23	38	39	0	00	29.22			
19	OVC	034			7.00		42	32	38	68	0	00	29.13	30.14	19	CLR	NC		10.00	44	23	36	43	0	00	29.23			
22	OVC	055			4.00	-RA	42	31	37	65	0	00	29.08	30.09	22	OVC	100		10.00	41	27	35	57	0	00	29.22			
SUNRISE: 0734 FEB 06 SUNSET: 1808						SUNRISE: 0728 FEB 12 SUNSET: 1815																							
01	OVC	035			1.50	+RA	43	32	38	65	5	VR	29.07	30.06	01	OVC	038		10.00	41	27	35	57	0	00	29.20	30.20		
04	OVC	006			1.75	+RA	49	31	41	50	8	27	29.00	29.98	04	OVC	007		7.00	35	34	35	96	3	07	29.22	30.22		
07	OVC	042			2.50	+RA	50	31	42	48	0	00	29.00	29.98	07	OVC	080		9.00	34	33	34	97	5	05	29.17	30.18		
10	OVC	006			9.00	-RA	50	31	42	48	0	00	28.97	29.96	10	OVC	034		10.00	38	35	37	89	6	07	29.21	30.22		
13	OVC	007			10.00		51	31	42	46	3	34	28.92	29.90	13	OVC	019		10.00	42	36	39	79	5	05	29.24	30.24		
16	OVC	005			9.00		52	31	43	45	5	27	28.84	29.82	16	OVC	028		10.00	44	34	40	68	6	VR	29.23	30.24		
19	OVC	023			10.00		49	30	41	48	9	27	28.87	29.85	19	CLR	NC		10.00	41	35	38	79	0	00	29.25	30.26		
22	OVC	022			10.00		43	31	38	63	10	27	28.95	29.93	22	OVC	038		10.00	38	36	37	93	0	00	29.28	30.30		

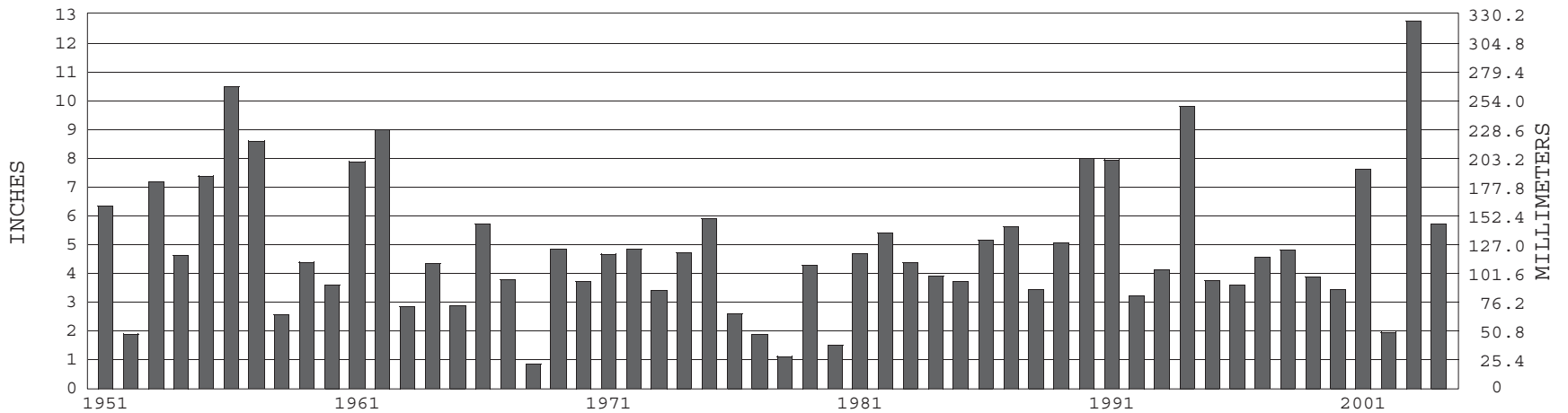
OAK RIDGE, TN FEBRUARY TEMPERATURES



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

Long-Term (1951-2004) Mean: 40.7 1971-2000 Normal: 40.6

OAK RIDGE, TN FEBRUARY PRECIPITATION



Long-Term (1951-2004) Mean Monthly Total: 4.90

1971-2000 Normal: 4.50



FEBRUARY 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

NCDC now offers an annual online subscription for the **Edited Local Climatological Data Publication**. When you purchase this subscription service, you will have **immediate online access** to all previous publications back to July 1996 and all publications thereafter until the expiration of the subscription. Your subscription is valid for one year after purchase. **The total cost is \$29 for online delivery (including back issues) compared to \$34 for offline delivery.** To order this and other subscriptions online with your credit card, go to: www.ncdc.noaa.gov and choose subscriptions.

We welcome your questions or comments, please contact us at
Toll Free Number (866) 742–3322 (voice)
Fax Number :(304) 726–4409
TDD : 828–271–4010
or Email : ncdc.info@noaa.gov
Local Climatological Data is available at www.ncdc.noaa.gov

For address correction, please return a photocopy of this page to Subscription Services indicating changes

NCDC Subscription Services Center
310 State Route 956 Building 300
Rocket Center, WV 26726

OFFICIAL BUSINESS. PENALTY FOR PRIVATE USE \$300

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G-19