



# NOVEMBER 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 #: -

NOVEMBER 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	80*	61	71*	19	61	64	0	6	RA BR HZ				T	29.10	30.05	0.7	23	2.3	23	22	14	21	01	
02	77	60	69	17	63	65	0	4	RA BR				0.06	29.09	30.03	2.4	23	3.6	18	21	13	22	02	
03	67	64	66	14	62	63	0	1	RA BR				0.74	29.09	30.04	2.2	05	2.7	12	06	8	05	03	
04	67	53	60	9	51	56	5	0	RA FG BR				3.16	28.96	29.91	3.2	27	6.7	25	25	16	27	04	
05	63	39	51	0	32	43	14	0					0.00	29.18	30.16	3.4	35	4.5	24	34	17	34	05	
06	66	34	50	-1	35	42	15	0					0.00	29.12	30.11	1.3	21	2.2	15	19	10	21	06	
07	71	41	56	6	44	49	9	0					0.00	29.06	30.04	0.5	23	1.8	12	22	10	21	07	
08	62	44	53	3	29	43	12	0					0.00	29.30	30.28	5.4	04	6.2	23	04	17	05	08	
09	61	37	49	-1	30	40	16	0					0.00	29.45	30.45	3.1	04	3.5	15	05	12	06	09	
10	62	35	49	0	36	42	16	0					0.00	29.43	30.43	0.5	20	1.6	14	18	10	19	10	
11	62	43	53	4	44	49	12	0	RA BR				0.40	29.23	30.21	1.4	18	2.3	14	21	10	19	11	
12	60	48	54	5	51	53	11	0	RA BR				1.47	29.09	30.06	2.5	05	3.0	18	03	12	04	12	
13	60	47	54	6	39	45	11	0					0.00	29.39	30.39	6.7	04	8.2	23	05	17	06	13	
14	61	39	50	2	36	42	15	0					0.00	29.63	30.63	1.7	06	2.0	13	09	9	09	14	
15	62	33	48	0	35	40	17	0	FG+ BR				0.00	29.62	30.63	0.3	13	.3	7	11	6	07	15	
16	61	35	48	0	38	43	17	0	BR				0.00	29.49	30.49	0.1	15	.3	6	07	5	06	16	
17	64	45	55	8	43	49	10	0					0.00	29.39	30.38	0.2	02	.6	7	07	6	07	17	
18	67	45	56	9	49	52	9	0	RA BR				0.01	29.30	30.28	0.2	04	.5	9	03	7	03	18	
19	68	55	62	15	52	55	3	0	RA BR				0.01	29.14	30.11	1.7	24	3.1	21	21	14	19	19	
20	62	53	58	12	55	56	7	0	RA BR				0.11	29.15	30.12	0.8	24	1.6	15	25	10	25	20	
21	60	50	55	9	51	53	10	0	RA FG+ BR				T	29.28	30.26	0.4	06	.4	6	07	5	08	21	
22	61	49	55	9	52	53	10	0	RA FG+ BR				0.05	29.14	30.12	0.3	02	.5	6	33	6	01	22	
23	61	56	59	14	57	57	6	0	RA BR				0.74	28.95	29.92	0.3	06	.8	8	07	7	06	23	
24	65	55	60	15	56	58	5	0	RA BR				1.74	28.66	29.61	3.3	21	5.8	31*	29	21*	27	24	
25	55	31	43	-2	28	36	22	0	RA				0.01	28.96	29.95	4.5	28	5.8	29	27	18	26	25	
26	52	28*	40*	-4	29	34	25	0	FG+ FZFG BR				0.00	29.19	30.20	0.2	18	1.2	15	22	9	19	26	
27	52	32	42	-2	33	38	23	0	RA BR				0.33	28.99	29.99	1.9	22	2.9	15	23	10	21	27	
28	53	39	46	2	36	41	19	0	RA BR				T	29.13	30.12	0.2	31	3.4	16	26	9	25	28	
29	56	40	48	4	37	42	17	0					0.00	29.24	30.24	2.0	06	2.2	10	04	8	04	29	
30	51	46	49	6	45	46	16	0	RA BR				2.32	29.09	30.08	0.7	01	1.7	12	27	8	27	30	

62.3	44.6	53.5	■ ■	43.6	48.3	11.7	0.4	< MONTHLY AVERAGES	TOTALS-->	11.15	29.20	30.18	0.4	36	2.7	<-- MONTHLY AVERAGES
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3.3	8.2	5.8	■ ■	←-----DEPARTURE FROM NORMAL----->						6.29	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3					
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<b>DEGREE DAYS</b>				GREATEST 24-HR PRECIPITATION: 3.90 DATE :03-04				SEA LEVEL PRESSURE DATE TIME			
MONTHLY TOTAL DEPARTURE				SEASON TO DATE TOTAL DEPARTURE				GREATEST 24-HR SNOWFALL: DATE :			
HEATING: 352 -166				423 -355				MAXIMUM MINIMUM : 30.73 15 0853			
COOLING: 11 10				1532 231				DATE : 29.48 24 1553			
				NUMBER OF DAYS WITH →				PRECIPITATION ≥ 0.01 INCH : 14			
				MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 3			
				MAXIMUM TEMP ≤ 32: 0				MINIMUM TEMP ≤ 0: 0			
				THUNDERSTORMS : 0				HEAVY FOG : 4			
								PRECIPITATION ≥ 0.10 INCH : 9			
								SNOWFALL ≥ 1.0 INCH :			

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

# OAK RIDGE, TN

NOVEMBER 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			T										01												01		T	
02				T									02	T	0.03	0.01				0.02					02		0.06	
03			T	T									03		0.02	0.09					T				03		0.74	
04	0.52	T	0.06	1.01	0.42	0.63	0.28	0.24					04								T	T	0.12	0.49	04		3.16	
05													05												05		0.00	
06													06												06		0.00	
07													07												07		0.00	
08													08												08		0.00	
09													09												09		0.00	
10													10												10		0.00	
11													11							0.01	T	T	0.04	0.35	11		0.40	
12	0.26	0.17	0.28	0.23	0.13	0.14	0.05	0.05	0.12	0.03	0.01		12											12		1.47		
13													13												13		0.00	
14													14												14		0.00	
15													15												15		0.00	
16													16												16		0.00	
17													17												17		0.00	
18													18									0.01	T	T	18		0.01	
19				T									19		T	T			0.01	T	T	T		19		0.01		
20	T	0.01	0.01	0.06	0.01	0.01							20			0.01	T			T	T			20		0.11		
21													21												21		T	
22													22								0.01	0.01	0.01	0.02	22		0.05	
23	0.01	0.03	0.02	0.04	0.02	0.12	0.18	0.12	0.03	0.03	0.04	0.04	23	0.01										23		0.74		
24		0.01	0.20	0.30	0.41	0.11	0.04	0.25	0.10	0.19	0.13	T	24								T			24		1.74		
25		T	0.01					T	T	T	T		25											25		0.01		
26													26											26		0.00		
27													27			0.08	0.09	0.05	0.03	0.05	0.01	0.01	T	0.01	27		0.33	
28	T												28											28		T		
29													29											29		0.00		
30					T	0.01	0.10	0.10	0.05	0.02	T		30	0.10	0.25	0.15	0.03	0.18	0.16	0.14	0.18	0.16	0.12	0.20	0.34	30	2.29	2.32

## MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.28	.45	.61	.71	.81	.88	1.13	1.21	1.33	1.46	1.80	2.17
Ending Date	04	04	04	04	04	04	04	04	04	04	04	04
Ending Time (Hour/Min)	0317	0319	0321	0323	0335	0343	0359	0417	0441	0501	0535	0605

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 NOVEMBER 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							5.00	10.00	
02							1.75	10.00	
03							.75	10.00	
04							.50	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							10.00	10.00	
11							1.75	10.00	
12							1.25	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							<.25	10.00	
16							.75	10.00	
17							10.00	10.00	
18							6.00	10.00	
19							4.00	10.00	
20							.75	10.00	
21							<.25	10.00	
22							.25	10.00	
23							1.75	10.00	
24							1.00	10.00	
25							9.00	10.00	
26							.25	10.00	
27							2.50	10.00	
28							5.00	10.00	
29							10.00	10.00	
30							1.25	10.00	
<b>MONTHLY AVGS</b>							5.00	10.00	
<b>SUNSHINE (MINUTES)</b>									
Total:                      Possible:									
Percent Possible:									
<b>NUMBER OF DAYS WITH:</b>									
<b>SKY CONDITION</b>									
CLR   PTLY CLDY   CLOUDY   MISSING									
30									
<b>MINIMUM VISIBILITY (MILES)</b>									
<=0.25    <=3.0    >=7.0									
4            15           11									

# OBSERVATIONS AT 3-HOURLY INTERVALS

# OAK RIDGE, TN

NOVEMBER 2004

OQT

WBAN # 53868

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)					
	SKY COVER	CEILING 100'S OF FT			OBSERVATION TIME (LST)	EFF CLD AMT Oktas	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	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0660					NOV 01					SUNSET: 1741					SUNRISE: 0706					NOV 07					SUNSET: 1735				
01	BKN	060	7.00		62	60	61	93	0	00	29.10	30.05	01	CLR	NC	10.00		44	39	42	83	0	00	29.08	30.05				
04	BKN	023	8.00		63	60	61	90	0	00	29.09	30.04	04	CLR	NC	10.00		42	38	40	85	0	00	29.07	30.04				
07	OVC	028	6.00	BR	63	61	62	93	0	00	29.13	30.09	07	CLR	NC	10.00		41	38	40	89	0	00	29.08	30.06				
10	OVC	023	6.00	HZ	69	63	65	81	3	VR	29.16	30.11	10	CLR	NC	10.00		56	41	49	57	6	VR	29.09	30.07				
13	BKN	035	8.00		78	64	69	62	5	VR	29.09	30.03	13	CLR	NC	10.00		66	47	56	50	7	VR	29.03	30.00				
16	CLR	NC	9.00		80	61	68	52	5	VR	29.05	29.98	16	CLR	NC	10.00		71	47	58	42	5	VR	28.99	29.96				
19	CLR	NC	9.00		73	61	66	66	0	00	29.08	30.02	19	CLR	NC	10.00		60	50	55	70	3	20	29.06	30.03				
22	CLR	NC	6.00	BR	64	60	62	87	0	00	29.08	30.03	22	CLR	NC	10.00		54	49	51	83	0	00	29.10	30.08				
SUNRISE: 0701					NOV 02					SUNSET: 1740					SUNRISE: 0707					NOV 08					SUNSET: 1734				
01	CLR	NC	5.00	BR	62	59	60	90	0	00	29.08	30.02	01	CLR	NC	10.00		60	44	52	56	7	35	29.12	30.09				
04	SCT	NC	6.00	BR	62	59	60	90	0	00	29.07	30.01	04	CLR	NC	10.00		54	37	46	53	5	35	29.18	30.14				
07	CLR	NC	4.00	BR	62	60	61	93	5	21	29.08	30.02	07	CLR	NC	10.00		47	23	38	39	3	VR	29.25	30.23				
10	SCT	NC	10.00		73	64	67	74	8	24	29.10	30.05	10	CLR	NC	10.00		53	31	43	43	9	05	29.34	30.32				
13	OVC	039	10.00	-RA	75	62	67	64	10	24	29.08	30.03	13	CLR	NC	10.00		59	25	44	27	10	04	29.32	30.29				
16	OVC	012	6.00	BR	70	67	68	90	3	23	29.08	30.02	16	CLR	NC	10.00		60	24	45	25	8	04	29.32	30.30				
19	BKN	110	10.00		69	65	66	87	0	00	29.09	30.05	19	CLR	NC	10.00		50	24	39	36	3	03	29.37	30.36				
22	SCT	NC	10.00		67	65	66	93	0	00	29.09	30.04	22	CLR	NC	10.00		46	26	38	46	5	03	29.40	30.39				
SUNRISE: 0702					NOV 03					SUNSET: 1739					SUNRISE: 0708					NOV 09					SUNSET: 1734				
01	SCT	NC	4.00	BR	65	64	64	97	0	00	29.10	30.04	01	CLR	NC	10.00		43	26	36	51	0	00	29.42	30.41				
04	OVC	043	10.00		65	61	63	87	3	05	29.10	30.05	04	CLR	NC	10.00		40	29	36	65	5	04	29.44	30.42				
07	OVC	034	10.00		65	59	61	81	5	VR	29.12	30.07	07	CLR	NC	10.00		38	29	34	70	3	04	29.47	30.49				
10	OVC	035	10.00		65	59	61	81	6	05	29.15	30.11	10	CLR	NC	10.00		48	29	40	48	7	04	29.50	30.51				
13	FEW	NC	10.00		67	60	63	79	3	03	29.12	30.07	13	CLR	NC	10.00		57	30	45	36	6	VR	29.46	30.46				
16	OVC	020	4.00	-RA BR	64	62	63	93	6	08	29.08	30.04	16	CLR	NC	10.00		60	26	45	27	8	03	29.42	30.41				
19	OVC	010	8.00		65	63	64	93	0	00	29.06	30.01	19	CLR	NC	10.00		50	31	42	48	0	00	29.43	30.43				
22	OVC	060	5.00	-RA BR	65	63	64	93	0	00	29.05	29.99	22	CLR	NC	10.00		42	34	39	73	0	00	29.45	30.45				
SUNRISE: 0703					NOV 04					SUNSET: 1738					SUNRISE: 0709					NOV 10					SUNSET: 1733				
01	OVC	020	7.00		64	63	63	96	0	00	28.98	29.92	01	CLR	NC	10.00		38	35	37	89	0	00	29.45	30.45				
04	OVC	015	0.75	+RA BR	65	64	64	97	0	00	28.89	29.83	04	CLR	NC	10.00		37	33	35	86	0	00	29.45	30.44				
07	OVC	013	5.00	-RA BR	66	64	65	93	9	20	28.86	29.80	07	CLR	NC	10.00		35	32	34	89	0	00	29.47	30.48				
10	FEW	NC	10.00		63	51	56	65	10	26	28.93	29.88	10	CLR	NC	10.00		48	38	43	68	0	00	29.49	30.50				
13	OVC	047	10.00		63	47	54	56	9	29	28.93	29.88	13	CLR	NC	10.00		59	36	48	42	5	14	29.44	30.43				
16	FEW	NC	10.00		61	45	53	56	7	VR	28.95	29.90	16	CLR	NC	10.00		60	35	48	39	5	21	29.38	30.37				
19	OVC	055	10.00		58	44	51	60	5	VR	29.01	29.97	19	CLR	NC	10.00		52	40	46	64	0	00	29.39	30.39				
22	OVC	046	10.00		55	40	48	57	5	VR	29.09	30.06	22	CLR	NC	10.00		45	39	42	80	0	00	29.38	30.38				
SUNRISE: 0704					NOV 05					SUNSET: 1737					SUNRISE: 0710					NOV 11					SUNSET: 1732				
01	OVC	042	10.00		51	35	44	54	13	34	29.14	30.11	01	CLR	NC	10.00		44	37	41	76	0	00	29.37	30.35				
04	BKN	044	10.00		50	33	42	52	10	33	29.16	30.13	04	OVC	039	10.00		45	37	41	74	0	00	29.35	30.33				
07	CLR	NC	10.00		47	33	41	59	5	34	29.20	30.18	07	OVC	031	10.00		49	38	44	66	3	22	29.31	30.30				
10	CLR	NC	10.00		53	33	44	47	5	02	29.23	30.21	10	OVC	027	10.00		51	39	45	64	3	14	29.30	30.29				
13	CLR	NC	10.00		60	28	46	30	5	VR	29.17	30.14	13	CLR	NC	10.00		58	43	50	58	6	VR	29.23	30.22				
16	CLR	NC	10.00		62	24	46	23	6	34	29.14	30.11	16	CLR	NC	10.00		62	51	56	67	9	19	29.13	30.11				
19	CLR	NC	10.00		50	33	42	52	0	00	29.16	30.15	19	OVC	060	10.00		60	52	56	75	6	20	29.12	30.10				
22	CLR	NC	10.00		43	37	40	80	0	00	29.18	30.17	22	OVC	055	10.00		55	52	53	90	0	00	29.08	30.06				
SUNRISE: 0705					NOV 06					SUNSET: 1736					SUNRISE: 0711					NOV 12					SUNSET: 1731				
01	CLR	NC	10.00		38	35	37	89	0	00	29.18	30.16	01	OVC	011	1.75	+RA BR	53	52	52	96	5	11	29.06	30.03				
04	CLR	NC	10.00		36	34	35	93	0	00	29.19	30.17	04	OVC	003	2.50	RA BR	53	53	53	100	0	00	29.04	30.00				
07	CLR	NC	10.00		34	32	33	92	0	00	29.19	30.19	07	OVC	014	4.00	-RA BR	54	53	53	97	0	00	29.04	30.01				
10	CLR	NC	10.00		50	37	44	61	5	VR	29.19	30.18	10	OVC	011	9.00		56	54	55	93	0	00	29.07	30.03				
13	CLR	NC	10.00		61	32	47	34	0	00	29.11	30.09	13	OVC	017	2.50	BR	58	56	57	93	0	00	29.05	30.02				
16	CLR	NC	10.00		65	33	50	31	5	VR	29.05	30.03	16	OVC	032	10.00		58	53	55	84	6	04	29.06	30.02				
19	CLR	NC	10.00		53	39	46	59	0	00	29.07	30.06	19	OVC	043	10.00		52	47	49	83	6	06	29.13	30.11				
22	CLR	NC	10.00		46	39	43	77	0	00	29.07	30.05	22	OVC	060	10.00		49	44	47	83	8	04	29.20	30.18				

# OBSERVATIONS AT 3-HOURLY INTERVALS

# OAK RIDGE, TN

NOVEMBER 2004

OQT

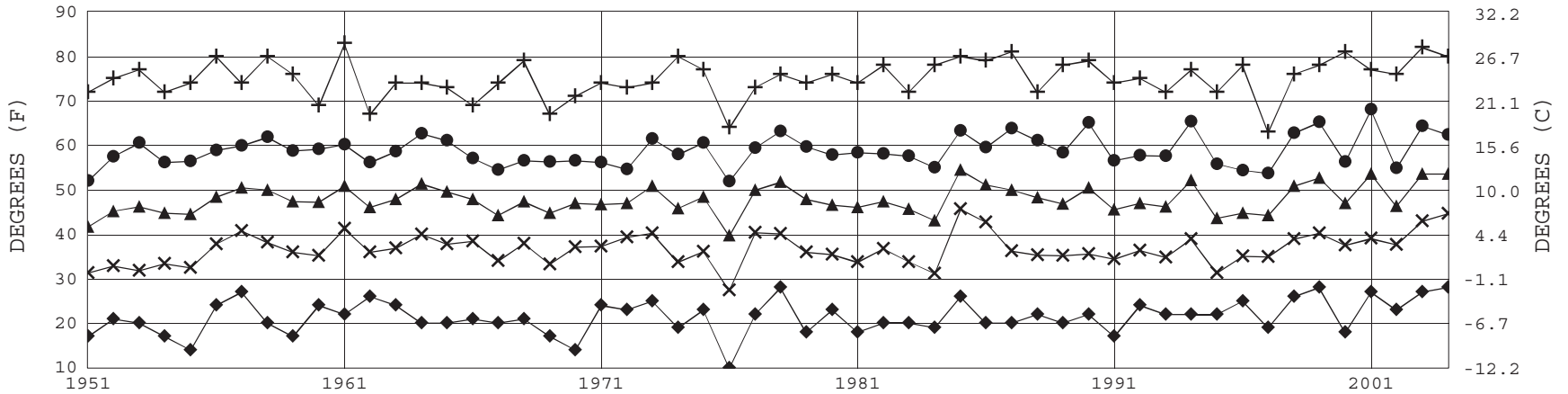
WBAN # 53868

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	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
SUNRISE: 0712				NOV 13				SUNSET: 1731				SUNRISE: 0718				NOV 19				SUNSET: 1727							
01	OVC	018		10.00	47	42	45	83	9	36	29.26	30.24	01	BKN	120		8.00	57	54	55	90	5	21	29.19	30.16		
04	OVC	018		10.00	47	41	44	80	8	03	29.29	30.27	04	OVC	055		7.00	56	54	55	93	0	00	29.18	30.15		
07	OVC	021		10.00	47	41	44	80	6	VR	29.34	30.33	07	OVC	055	BR	5.00	55	54	54	96	0	00	29.18	30.15		
10	OVC	032		10.00	51	40	46	66	14	04	29.41	30.40	10	SCT	NC		8.00	61	52	56	72	6	24	29.18	30.14		
13	CLR	NC		10.00	57	40	49	53	10	04	29.41	30.39	13	SCT	NC		10.00	65	44	54	47	8	22	29.12	30.08		
16	CLR	NC		10.00	59	35	48	41	10	05	29.40	30.39	16	OVC	045		10.00	62	47	54	58	6	27	29.08	30.05		
19	CLR	NC		10.00	50	37	44	61	3	04	29.45	30.45	19	OVC	031		10.00	58	53	55	84	5	VR	29.11	30.08		
22	CLR	NC		10.00	49	35	43	59	7	VR	29.50	30.50	22	OVC	031	BR	5.00	57	54	55	90	0	00	29.11	30.08		
SUNRISE: 0713				NOV 14				SUNSET: 1730				SUNRISE: 0719				NOV 20				SUNSET: 1726							
01	CLR	NC		10.00	46	36	42	68	7	04	29.53	30.53	01	OVC	027		7.00	57	54	55	90	0	00	29.09	30.06		
04	CLR	NC		10.00	42	35	39	76	3	08	29.59	30.59	04	OVC	005	-RA BR	2.00	56	55	55	97	0	00	29.09	30.06		
07	CLR	NC		10.00	40	34	37	79	0	00	29.63	30.65	07	OVC	004	BR	2.50	56	55	55	97	0	00	29.11	30.08		
10	CLR	NC		10.00	49	35	43	59	7	09	29.70	30.70	10	OVC	002	BR	2.00	57	57	57	100	3	VR	29.15	30.13		
13	CLR	NC		10.00	57	35	47	44	0	00	29.65	30.64	13	OVC	065		10.00	61	56	58	84	5	25	29.14	30.11		
16	CLR	NC		10.00	60	36	49	41	3	03	29.61	30.60	16	OVC	015	-RA BR	2.50	59	56	57	90	7	VR	29.15	30.12		
19	CLR	NC		10.00	47	40	44	77	0	00	29.61	30.63	19	CLR	NC		8.00	57	55	56	93	0	00	29.18	30.16		
22	CLR	NC		10.00	41	37	39	86	0	00	29.65	30.66	22	FEW	NC	BR	4.00	54	53	53	97	0	00	29.24	30.21		
SUNRISE: 0714				NOV 15				SUNSET: 1729				SUNRISE: 0720				NOV 21				SUNSET: 1726							
01	CLR	NC		9.00	37	35	36	93	0	00	29.65	30.66	01	BKN	028	BR	3.00	53	52	52	96	0	00	29.25	30.22		
04	BKN	001	FG	0.50	35	34	35	96	0	00	29.67	30.67	04	OVC	008	FG	0.25	50	49	49	96	0	00	29.27	30.24		
07	VV	001	FG	0.25	35	35	35	100	0	00	29.67	30.69	07	OVC	026	FG	0.50	50	50	50	100	0	00	29.30	30.29		
10	OVC	001	FG	0.25	41	40	41	96	0	00	29.70	30.72	10	SCT	NC		8.00	54	53	53	97	0	00	29.33	30.31		
13	CLR	NC		10.00	56	32	45	40	0	00	29.63	30.63	13	SCT	NC		10.00	59	50	54	72	3	08	29.29	30.27		
16	CLR	NC		10.00	60	32	47	35	3	12	29.56	30.56	16	BKN	100		10.00	59	51	55	75	0	00	29.26	30.24		
19	CLR	NC		10.00	49	37	43	64	0	00	29.56	30.57	19	OVC	100		7.00	55	53	54	93	0	00	29.27	30.26		
22	CLR	NC		10.00	42	36	39	79	0	00	29.56	30.57	22	OVC	055	BR	6.00	55	53	54	93	0	00	29.26	30.24		
SUNRISE: 0715				NOV 16				SUNSET: 1729				SUNRISE: 0721				NOV 22				SUNSET: 1725							
01	CLR	NC		10.00	38	35	37	89	0	00	29.52	30.53	01	SCT	NC	BR	5.00	54	52	53	93	0	00	29.23	30.20		
04	CLR	NC		9.00	36	34	35	93	0	00	29.51	30.52	04	BKN	049	BR	3.00	50	49	49	96	0	00	29.20	30.18		
07	CLR	NC		10.00	36	34	35	93	0	00	29.53	30.55	07	VV	001	FG	0.25	49	49	49	100	0	00	29.20	30.18		
10	OVC	095		7.00	42	39	41	89	0	00	29.55	30.57	10	OVC	021	BR	5.00	52	51	52	97	0	00	29.21	30.19		
13	OVC	085		10.00	54	38	46	55	0	00	29.48	30.48	13	OVC	015		10.00	60	52	56	75	0	00	29.13	30.11		
16	SCT	NC		10.00	60	38	49	44	3	07	29.44	30.43	16	OVC	041		10.00	59	53	56	81	0	00	29.08	30.06		
19	FEW	NC		10.00	53	42	48	66	0	00	29.44	30.44	19	BKN	040		10.00	58	53	55	84	0	00	29.08	30.06		
22	OVC	110		10.00	50	42	46	74	0	00	29.44	30.44	22	OVC	019	-RA BR	6.00	56	55	55	97	3	VR	29.07	30.03		
SUNRISE: 0716				NOV 17				SUNSET: 1728				SUNRISE: 0722				NOV 23				SUNSET: 1725							
01	BKN	100		10.00	49	44	47	83	0	00	29.42	30.40	01	OVC	013	-RA BR	5.00	56	55	55	97	0	00	29.03	29.99		
04	OVC	090		10.00	47	43	45	86	0	00	29.40	30.38	04	OVC	012	-RA BR	3.00	56	55	55	97	0	00	29.01	29.97		
07	OVC	090		10.00	47	43	45	86	3	34	29.42	30.40	07	OVC	002	RA BR	2.50	56	55	55	97	0	00	29.00	29.96		
10	FEW	NC		10.00	55	43	49	64	3	VR	29.44	30.42	10	OVC	006	-RA BR	4.00	57	56	56	96	3	VR	29.00	29.97		
13	OVC	070		10.00	62	39	51	43	0	00	29.39	30.37	13	OVC	013		10.00	60	57	58	90	5	VR	28.94	29.90		
16	OVC	044		10.00	64	42	53	45	0	00	29.37	30.34	16	OVC	010		10.00	61	57	59	87	0	00	28.91	29.86		
19	OVC	080		10.00	60	45	52	58	0	00	29.37	30.35	19	OVC	011		8.00	59	57	58	93	0	00	28.90	29.86		
22	CLR	NC		10.00	52	47	49	83	0	00	29.36	30.34	22	OVC	009	BR	5.00	59	58	58	96	0	00	28.91	29.87		
SUNRISE: 0717				NOV 18				SUNSET: 1727				SUNRISE: 0723				NOV 24				SUNSET: 1725							
01	CLR	NC		10.00	47	44	46	90	0	00	29.34	30.32	01	OVC	004	BR	4.00	59	58	58	96	0	00	28.87	29.82		
04	CLR	NC		10.00	46	43	45	89	0	00	29.32	30.30	04	OVC	034	+RA BR	2.50	58	58	58	100	3	35	28.80	29.75		
07	OVC	080		8.00	48	46	47	93	0	00	29.35	30.33	07	OVC	006	+RA BR	3.00	59	58	58	96	3	VR	28.75	29.70		
10	OVC	090		9.00	54	47	50	77	0	00	29.36	30.34	10	OVC	044	+RA BR	1.25	61	59	60	93	12	21	28.75	29.70		
13	BKN	039		10.00	61	49	54	65	0	00	29.29	30.27	13	CLR	NC		10.00	62	55	58	78	0	00	28.57	29.51		
16	CLR	NC		10.00	65	53	58	66	3	08	29.25	30.22	16	BKN	044		10.00	63	55	58	76	6	VR	28.53	29.48		
19	BKN	075		10.00	61	53	57	75	0	00	29.27	30.25	19	OVC	028		10.00	63	55	58	76	10	21	28.57	29.51		
22	OVC	055	-RA	10.00	58	54	56	87	0	00	29.25	30.23	22	BKN	095		10.00	61	55	58	81	6	22	28.56	29.50		





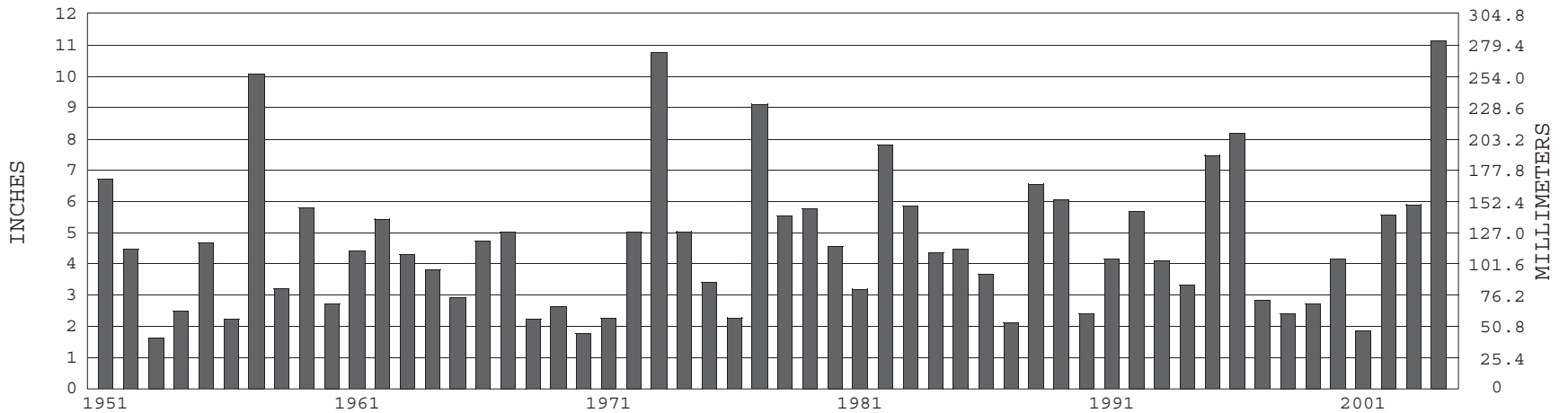
### OAK RIDGE, TN NOVEMBER TEMPERATURES



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

Long-Term (1951-2004) Mean: 47.8      1971-2000 Normal: 47.7

### OAK RIDGE, TN NOVEMBER PRECIPITATION



Long-Term (1951-2004) Mean Monthly Total: 4.65

1971-2000 Normal: 4.86



NOVEMBER 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.*

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