



DECEMBER 1999

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

OAK RIDGE, TN

OAK RIDGE (OQT)
 Lat: 36°01' N Long: 84°14' W Elev (Ground): 910 Feet
 Time Zone: EASTERN WBAN: 53868 ISSN #: -

DECEMBER 1999
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	47	24	36	-6			29	0					0.00	29.53	30.56	0.7	06	1.6	10	04	7	11	01									
02	56	25	41	-1			24	0					0.00	29.39	30.42	0.2	24	.8	9	26	7	26	02									
03	56	34	45	3	32	39	20	0	RA				T	29.29	30.29	1.3	23	2.4	14	24	10	26	03									
04	66	45	56	15	42	48	9	0					0.00	29.30	30.29	2.4	25	3.8	15	27	10	26	04									
05	70*	40	55	14	46	49	10	0	RA BR				0.36	29.09	30.06	3.6	23	4.4	30*	23	21*	22	05									
06	51	30	41	0	35	40	24	0	RA BR				0.02	29.15	30.14	1.9	34	3.8	17	36	13	36	06									
07	52	26	39	-2	28	33	26	0	FZFG BR				0.00	29.30	30.32	1.4	05	1.4	14	05	10	06	07									
08	56	30	43	3	33	38	22	0	FG+ FZFG BR				0.00	29.38	30.40	0.3	20	.6	9	21	7	22	08									
09	55	39	47	7	40	45	18	0	RA				T	29.31	30.30	0.2	23	.4	8	24	6	22	09									
10	57	44	51	11	46	49	14	0	RA BR				0.35	29.10	30.08	1.6	25	4.2	23	27	15	25	10									
11	57	37	47	7	34	40	18	0					0.00	29.21	30.21	4.2	05	4.5	18	07	15	06	11									
12	62	38	50	11	40	44	15	0	RA				T	29.05	30.04	0.5	07	1.1	8	12	6	06	12									
13	63	50	57*	18	55	56	8	0	RA BR				0.61	28.85	29.82	1.5	06	3.2	22	20	16	22	13									
14	58	37	48	9	41	44	17	0	RA BR				T	28.95	29.92	5.7	22	7.1	26	20	20	22	14									
15	56	34	45	6	33	39	20	0	BR				0.00	29.05	30.05	6.9	23	7.5	26	21	20	21	15									
16	50	30	40	2	20	33	25	0					0.00	29.23	30.24	2.8	24	4.6	20	29	14	28	16									
17	53	29	41	3	26	35	24	0					0.00	29.26	30.27	1.1	23	1.6	10	21	8	22	17									
18	57	29	43	5	28	37	22	0					0.00	29.20	30.20	1.8	06	2.1	10	06	8	06	18									
19	62	43	53	15	32	43	12	0	RA				T	29.07	30.05	2.0	05	2.3	12	07	9	06	19									
20	57	46	52	14	46	48	13	0	RA BR				0.01	29.12	30.10	1.7	24	4.0	14	26	9	21	20									
21	46	33	40	3	33	34	25	0	RA SN BR UP				0.19	29.20	30.21	4.8	05	5.4	16	06	13	07	21									
22	44	27	36	-1	24	30	29	0					0.00	29.36	30.38	2.5	08	1.9	9	06	7	09	22									
23	48	23	36	-1	23	30	29	0	BR				0.00	29.36	30.39	1.5	23	2.9	18	26	14	29	23									
24	37	24	31	-6	23	28	34	0	SN BR				0.03	29.27	30.29	2.2	32	4.3	18	33	13	35	24									
25	36	17*	27*	-10	10	21	38	0					0.00	29.45	30.50	0.5	04	2.6	12	07	9	07	25									
26	51	22	37	1	18	29	28	0					0.00	29.16	30.18	3.9	25	6.2	22	22	15	22	26									
27	45	23	34	-2	12	28	31	0					0.00	29.02	30.03	0.9	21	3.6	16	21	12	06	27									
28	40	29	35	-1	19	29	30	0					0.00	28.89	29.90	4.1	25	6.1	23	21	16	22	28									
29	51	29	40	4	28	35	25	0					0.00	29.01	30.02	1.8	22	2.5	14	19	9	20	29									
30	53	28	41	5	33	38	24	0					0.00	29.05	30.06	3.0	24	4.2	14	27	10	26	30									
31	63	36	50	14	40	44	15	0					0.00	29.12	30.11	0.3	14	1.3	10	01	9	05	31									
										53.4		32.3	42.9	■ ■			21.9	0.0	< MONTHLY AVERAGES		TOTALS-->		1.57	29.19	30.19	0.7	24	3.3	<- MONTHLY AVERAGES			
										5.1		3.6	4.3	■ ■	<----- DEPARTURE FROM NORMAL ----->														-3.73		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3	
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 0.61 DATE: 13										SEA LEVEL PRESSURE DATE TIME												
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: DATE: DATE:										MAXIMUM : 30.65 01 0653												
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH: DATE: DATE:										MINIMUM : 29.68 13 2253												
HEATING: 678 -140										NUMBER OF DAYS WITH =>										MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 17				PRECIPITATION ≥ 0.01 INCH : 7				
COOLING: 0 0																				MAXIMUM TEMP ≤ 32 : 0				MINIMUM TEMP ≤ 0 : 0				PRECIPITATION ≥ 0.10 INCH : 4				
																				THUNDERSTORMS : 0				HEAVY FOG : 1				SNOWFALL ≥ 1.0 INCH :				

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN

DECEMBER 1999 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		0.00		
03													03				T	T	T						03		T		
04													04												04		0.00		
05													05			0.04	0.02	0.09	0.11	0.06	0.03	0.01	T		05		0.36		
06													06												06		0.02		
07													07												07		0.00		
08													08												08		0.00		
09													09												09		T		
10													10												10		0.35		
11													11												11		0.00		
12													12												12		T		
13													13												13		0.61		
14													14												14		T		
15													15												15		0.00		
16													16												16		0.00		
17													17												17		0.00		
18													18												18		0.00		
19													19												19		T		
20													20												20		0.01		
21													21			0.04	0.01	0.01	0.01	0.01	0.01	0.02	T	0.01	T	T	T	0.19	
22													22												22		0.00		
23													23												23		0.00		
24													24												24		0.03		
25													25			T									25		0.00		
26													26												26		0.00		
27													27												27		0.00		
28													28												28		0.00		
29													29												29		0.00		
30													30												30		0.00		
31													31												31		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)	.05	.09	.12	.14	.18	.21	.24	.27	.30	.31	.32	.33
Ending Date	10	10	10	10	10	10	10	10	10	10	10	10
Ending Time (Hour/Min)	0539	0539	0543	0543	0551	0601	0555	0601	0601	0601	0601	0601

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 1961 – 1990

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	
PR Partial	RA Rain	PY Spray	SQ Squalls
SH Shower(s)	SG Snow Grains	SA Sand	SS Sandstorm
TS Thunderstorm	SN Snow	VA Volcanic Ash	GL Glaze
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):

'+' = Heavy ' ' = Moderate '- ' = Light

OAK RIDGE, TN DECEMBER 1999

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:

March 1999 is the first month ASOS data was processed.

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							10.00	10.00	
03							10.00	10.00	
04							9.00	10.00	
05							2.00	10.00	
06							6.00	10.00	
07							.25	10.00	
08							< .25	10.00	
09							10.00	10.00	
10							1.50	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							1.00	10.00	
14							6.00	10.00	
15							6.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							8.00	10.00	
19							10.00	10.00	
20							5.00	10.00	
21							1.50	10.00	
22							10.00	10.00	
23							2.50	10.00	
24							.75	10.00	
25							10.00	10.00	
26							10.00	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							10.00	10.00	
31							7.00	10.00	
MONTHLY AVGS							7.33	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			
2			7			20			

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

DECEMBER 1999

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	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING 100'S OF FT	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
	OBSERVATION TIME (LST)	EFF CLD AMT %	RELATIVE HUMIDITY (PCT)		RELATIVE HUMIDITY (PCT)	RELATIVE HUMIDITY (PCT)	RELATIVE HUMIDITY (PCT)	RELATIVE HUMIDITY (PCT)	RELATIVE HUMIDITY (PCT)															
SUNRISE: 0729 DEC 01 SUNSET: 1723																								
01	CLR	NC	10.00				0	00	29.59	30.63	01	CLR	NC	8.00			29	27	28	92	0	00	29.28	30.30
04	CLR	NC	10.00				0	00	29.58	30.62	04	VV	001	0.25	FZFG		27	26	27	96	0	00	29.29	30.32
07	CLR	NC	10.00				0	00	29.60	30.64	07	CLR	NC	9.00			27	25	26	92	0	00	29.32	30.34
10	CLR	NC	10.00				6	04	29.59	30.62	10	CLR	NC	10.00			36	29	33	76	8	05	29.34	30.36
13	CLR	NC	10.00				5	09	29.53	30.56	13	CLR	NC	10.00			47	27	39	46	0	00	29.39	30.30
16	CLR	NC	10.00				3	VR	29.46	30.49	16	CLR	NC	10.00			50	28	41	43	0	00	29.25	30.26
19	CLR	NC	10.00				0	00	29.46	30.50	19	CLR	NC	10.00			40	33	37	77	0	00	29.29	30.31
22	CLR	NC	10.00				0	00	29.46	30.50	22	CLR	NC	10.00			33	30	32	89	0	00	29.32	30.34
SUNRISE: 0730 DEC 02 SUNSET: 1723																								
01	CLR	NC	10.00				0	00	29.45	30.47	01	CLR	NC	10.00			32	30	31	92	0	00	29.33	30.35
04	CLR	NC	10.00				0	00	29.45	30.47	04	CLR	NC	9.00			32	31	32	96	0	00	29.38	30.39
07	CLR	NC	10.00				0	00	29.45	30.48	07	CLR	NC	6.00	BR		31	30	31	96	0	00	29.41	30.43
10	CLR	NC	10.00				0	00	29.46	30.50	10	VV	001	1.00	BR		36	35	36	97	0	00	29.45	30.47
13	CLR	NC	10.00				5	24	29.40	30.42	13	CLR	NC	10.00			53	32	44	45	3	VR	29.40	30.40
16	CLR	NC	10.00				5	20	29.40	30.42	16	CLR	NC	10.00			56	31	45	39	0	00	29.35	30.35
19	CLR	NC	10.00				4	25	29.38	30.35	19	CLR	NC	10.00			47	35	42	63	0	00	29.38	30.39
22	CLR	NC	10.00				3	28	29.34	30.35	22	CLR	NC	10.00			41	36	39	82	0	00	29.38	30.40
SUNRISE: 0731 DEC 03 SUNSET: 1723																								
01	CLR	NC	10.00				3	30	29.29	30.30	01	CLR	NC	10.00			40	37	39	89	0	00	29.37	30.37
04	CLR	NC	10.00				3	30	29.31	30.32	04	OVC	041	10.00			44	37	41	76	6	VR	29.39	30.38
07	CLR	NC	10.00				3	30	29.34	30.35	07	OVC	032	10.00			45	39	42	80	0	00	29.37	30.37
10	CLR	NC	10.00				0	00	29.32	30.33	10	OVC	029	10.00			48	39	44	71	0	00	29.39	30.39
13	FEW	NC	10.00				7	VR	29.27	30.27	13	OVC	027	10.00			52	38	45	59	0	00	29.34	30.34
16	SCT	NC	10.00				6	VR	29.23	30.23	16	OVC	025	10.00			54	40	47	59	0	00	29.27	30.26
19	BKN	055	10.00				3	22	29.25	30.26	19	OVC	026	10.00			53	42	48	66	0	00	29.24	30.23
22	CLR	NC	10.00				3	21	29.28	30.28	22	OVC	032	10.00			51	43	47	74	0	00	29.18	30.16
SUNRISE: 0731 DEC 04 SUNSET: 1723																								
01	OVC	090	10.00				5	22	29.29	30.28	01	OVC	036	10.00			51	44	48	77	0	00	29.08	30.05
04	OVC	065	10.00				3	25	29.32	30.30	04	OVC	041	7.00			48	47	47	96	0	00	28.98	29.96
07	OVC	075	10.00				5	VR	29.34	30.32	07	OVC	020	7.00	-RA		54	53	53	97	3	25	28.93	29.90
10	OVC	060	10.00				7	23	29.37	30.36	10	BKN	040	10.00			56	45	50	67	9	23	29.04	30.01
13	CLR	NC	10.00				5	27	29.32	30.30	13	OVC	026	10.00			54	45	49	72	8	25	29.11	30.09
16	CLR	NC	10.00				3	VR	29.27	30.24	16	OVC	032	10.00			55	46	50	72	3	VR	29.14	30.12
19	CLR	NC	10.00				0	00	29.26	30.24	19	OVC	039	10.00			53	47	50	80	0	00	29.21	30.19
22	CLR	NC	10.00				0	00	29.27	30.26	22	OVC	027	10.00			49	41	45	74	7	03	29.27	30.25
SUNRISE: 0732 DEC 05 SUNSET: 1723																								
01	CLR	NC	10.00				0	00	29.24	30.23	01	CLR	NC	10.00			43	35	40	74	6	04	29.26	30.25
04	CLR	NC	10.00				0	00	29.22	30.19	04	CLR	NC	10.00			39	34	37	82	6	05	29.26	30.26
07	CLR	NC	10.00				0	00	29.18	30.17	07	CLR	NC	10.00			38	33	36	83	7	06	29.25	30.24
10	CLR	NC	10.00				0	00	29.14	30.12	10	CLR	NC	10.00			43	32	38	65	12	06	29.28	30.27
13	BKN	075	10.00				16	20	29.02	29.98	13	CLR	NC	10.00			51	29	42	43	6	09	29.23	30.23
16	OVC	055	10.00	-RA			0	00	28.98	29.96	16	CLR	NC	10.00			57	30	45	36	5	04	29.17	30.16
19	OVC	039	10.00	-RA			5	VR	28.99	29.96	19	CLR	NC	10.00			48	37	43	66	0	00	29.15	30.15
22	OVC	038	10.00				8	24	29.00	29.96	22	CLR	NC	10.00			41	36	39	82	0	00	29.15	30.15
SUNRISE: 0733 DEC 06 SUNSET: 1723																								
01	BKN	048	10.00				5	22	29.02	29.97	01	CLR	NC	10.00			38	35	37	89	0	00	29.12	30.11
04	OVC	050	10.00				3	22	29.02	29.99	04	CLR	NC	10.00			39	36	38	89	0	00	29.09	30.08
07	OVC	050	10.00				6	VR	29.05	30.02	07	CLR	NC	10.00			39	36	38	89	0	00	29.13	30.13
10	OVC	029	10.00				3	VR	29.11	30.10	10	OVC	041	10.00			46	38	42	73	3	03	29.14	30.14
13	OVC	040	10.00				10	36	29.15	30.14	13	CLR	NC	10.00			56	35	46	46	3	VR	29.06	30.04
16	BKN	035	10.00				7	34	29.20	30.19	16	FEW	NC	10.00			61	40	50	46	0	00	28.98	29.96
19	CLR	NC	10.00				0	00	29.26	30.26	19	OVC	037	10.00			56	44	50	65	0	00	28.97	29.95
22	CLR	NC	10.00				0	00	29.28	30.29	22	OVC	065	10.00			52	46	49	80	0	00	28.95	29.93

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

DECEMBER 1999

QQT

WBAN # 53868

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)				
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL			
SUNRISE: 0745		DEC 25		SUNSET: 1729														
01	FEW	NC			10.00		23	12	20	63	3	05	29.45	30.49				
04	BKN	031			10.00		21	9	18	59	6	36	29.45	30.50				
07	CLR	NC			10.00		18	10	16	71	0	00	29.47	30.53				
10	FEW	NC			10.00		25	10	21	53	8	09	29.53	30.58				
13	CLR	NC			10.00		31	8	24	38	3	VR	29.50	30.55				
16	CLR	NC			10.00		36	7	27	30	0	00	29.42	30.46				
19	CLR	NC			10.00		29	10	23	45	0	00	29.42	30.47				
22	FEW	NC			10.00		25	13	21	60	5	23	29.39	30.43				
SUNRISE: 0746		DEC 26		SUNSET: 1729														
01	CLR	NC			10.00		24	13	21	62	3	VR	29.34	30.38				
04	CLR	NC			10.00		23	15	21	72	6	25	29.29	30.32				
07	CLR	NC			10.00		22	15	20	75	3	22	29.21	30.25				
10	CLR	NC			10.00		31	14	26	49	9	23	29.17	30.21				
13	CLR	NC			10.00		44	22	36	41	9	21	29.08	30.10				
16	CLR	NC			10.00		51	22	39	32	9	28	29.02	30.02				
19	CLR	NC			10.00		43	24	36	47	6	29	29.10	30.13				
22	CLR	NC			10.00		40	14	31	35	7	VR	29.12	30.14				
SUNRISE: 0746		DEC 27		SUNSET: 1730														
01	CLR	NC			10.00		34	7	26	32	0	00	29.10	30.11				
04	CLR	NC			10.00		29	9	23	43	0	00	29.08	30.08				
07	CLR	NC			10.00		24	15	21	68	0	00	29.08	30.09				
10	CLR	NC			10.00		33	13	27	43	3	VR	29.08	30.09				
13	CLR	NC			10.00		41	7	30	24	7	20	28.99	29.99				
16	CLR	NC			10.00		44	9	32	24	7	VR	28.94	29.95				
19	OVC	080			10.00		41	15	32	35	3	VR	28.97	29.98				
22	OVC	065			10.00		37	15	30	41	8	09	29.00	30.00				
SUNRISE: 0746		DEC 28		SUNSET: 1730														
01	OVC	055			10.00		34	14	27	44	3	05	29.00	30.01				
04	OVC	050			10.00		32	20	28	61	5	36	28.97	29.98				
07	OVC	034			10.00		32	20	28	61	5	28	28.98	29.99				
10	CLR	NC			10.00		31	19	27	61	7	26	28.95	29.96				
13	SCT	NC			10.00		36	19	30	50	10	25	28.84	29.85				
16	CLR	NC			10.00		39	18	31	43	8	23	28.71	29.72				
19	OVC	065			10.00		40	17	32	40	13	25	28.81	29.81				
22	OVC	048			10.00		39	18	32	43	3	VR	28.90	29.90				
SUNRISE: 0747		DEC 29		SUNSET: 1731														
01	OVC	040			10.00		39	24	33	55	3	18	28.91	29.91				
04	OVC	038			10.00		37	25	32	62	0	00	28.94	29.94				
07	BKN	035			10.00		30	25	28	82	0	00	29.00	30.01				
10	CLR	NC			10.00		40	28	35	63	0	00	29.06	30.06				
13	CLR	NC			10.00		46	28	39	50	0	00	29.05	30.04				
16	CLR	NC			10.00		51	29	42	43	7	21	29.01	30.00				
19	CLR	NC			10.00		42	30	37	62	0	00	29.04	30.05				
22	CLR	NC			10.00		34	29	32	82	0	00	29.06	30.06				
SUNRISE: 0747		DEC 30		SUNSET: 1732														
01	CLR	NC			10.00		34	28	32	79	6	23	29.06	30.05				
04	CLR	NC			10.00		32	28	31	85	0	00	29.05	30.05				
07	CLR	NC			10.00		29	27	28	92	0	00	29.07	30.08				
10	CLR	NC			10.00		40	34	37	79	5	VR	29.10	30.11				
13	CLR	NC			10.00		49	35	43	59	8	25	29.06	30.05				
16	CLR	NC			10.00		53	37	46	55	5	VR	29.02	30.01				
19	CLR	NC			10.00		45	38	42	77	0	00	29.04	30.04				
22	CLR	NC			10.00		43	37	40	80	6	22	29.05	30.04				

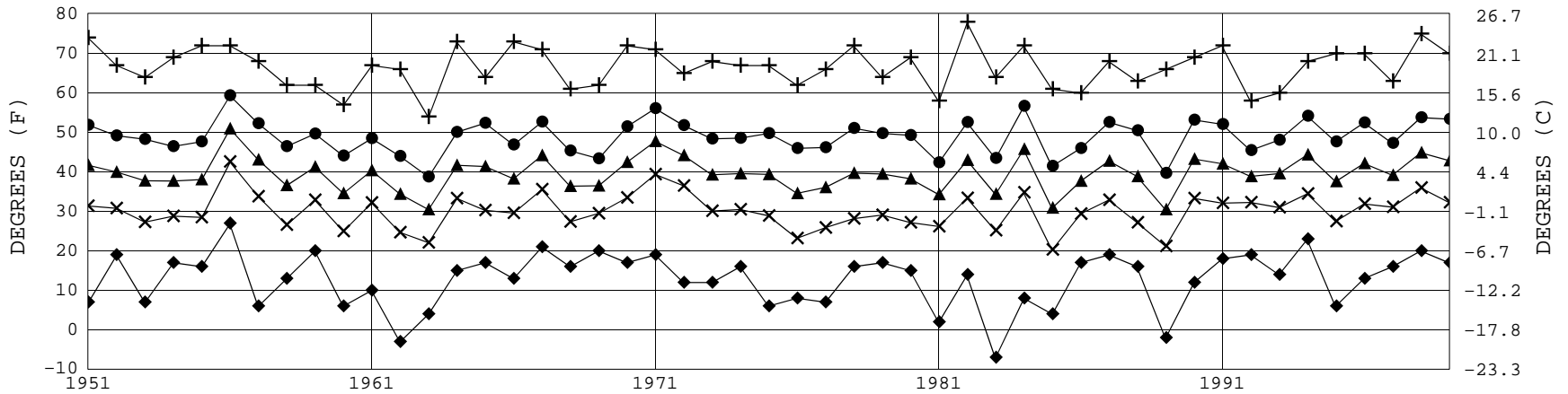
3-HOURLY OBSERVATION NOTES

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. Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No ceiling detected. & = Original observation contained additional weather elements. See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			39	31	36	75	29.19	30.19	9.81	2	1	23
02			38	31	35	76	29.19	30.19	9.55	1	0	0
03			38	30	35	76	29.19	30.19	9.33	2	0	0
04			37	30	35	78	29.19	30.19	9.30	2	1	25
05			37	30	34	80	29.19	30.19	9.26	2	0	0
06			36	30	34	82	29.19	30.20	8.96	3	1	20
07			36	31	34	84	29.20	30.21	9.29	2	0	0
08			36	31	34	83	29.21	30.22	8.94	1	0	0
09			38	32	36	79	29.21	30.22	9.03	2	0	0
10			41	32	37	70	29.22	30.23	9.15	4	0	0
11			44	32	39	63	29.22	30.22	9.50	3	1	25
12			47	31	41	57	29.21	30.21	9.52	4	2	22
13			49	31	42	52	29.18	30.18	9.71	4	2	23
14			51	31	42	49	29.16	30.15	9.84	4	2	25
15			51	31	43	49	29.15	30.14	9.77	4	2	24
16			52	31	43	48	29.14	30.14	9.84	3	2	26
17			50	32	42	52	29.15	30.15	9.47	3	1	27
18			47	33	41	59	29.16	30.16	9.87	3	1	26
19			46	33	40	63	29.17	30.18	9.74	1	1	24
20			44	33	39	68	29.18	30.19	9.77	2	1	25
21			42	33	38	70	29.18	30.19	9.84	2	1	27
22			41	32	37	72	29.18	30.19	9.71	2	0	0
23			40	32	37	74	29.19	30.19	9.90	2	1	25
24			39	31	36	75	29.18	30.18	9.77	2	1	25

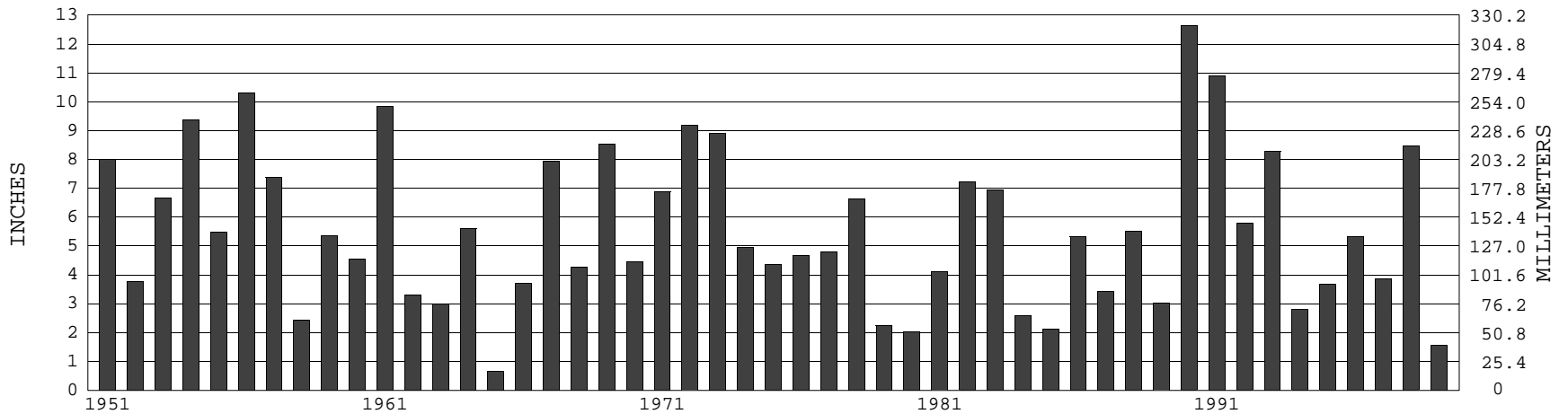
OAK RIDGE, TN DECEMBER TEMPERATURES



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

Long-Term (1951-1999) Mean: 39.6 1961-1990 Normal: 38.6

OAK RIDGE, TN DECEMBER PRECIPITATION



Long-Term (1951-1999) Mean Monthly Total: 5.58

1961-1990 Normal: 5.30



**DECEMBER 1999
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

NOTICE

Effective July 1, 1996, the National Weather Service & Federal Aviation Administration began using the METAR format for Hourly Observations.

We welcome your questions or comments, please contact us at
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