



JULY 2003

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 #: -

JULY 2003
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	71	66	69*	-7	67	68	0	4	RA BR				1.01	29.11	30.05	2.0	05	3.5	17	06	12	06	01																															
02	80	65	73	-3	67	68	0	8	RA BR				0.82	28.92	29.85	1.9	04	3.6	16	01	12	36	02																															
03	87	65	76	0	69	71	0	11	FG+ BR HZ				0.00	29.00	29.93	0.6	15	1.2	9	05	8	06	03																															
04	90	67	79	3	70	72	0	14	FG+ BR HZ				0.00	29.09	30.01	0.2	21	1.3	13	23	8	22	04																															
05	87	72	80	3	70	73	0	15	BR HZ				0.00	29.13	30.06	2.4	26	5.0	15	24	10	21	05																															
06	86	73	80	3	71	73	0	15	RA BR HZ				T	29.13	30.05	3.3	21	5.6	15	27	12	20	06																															
07	86	73	80	3	72	74	0	15	RA BR HZ				0.02	29.17	30.10	3.3	22	5.0	14	20	10	22	07																															
08	91	73	82*	5	73	75	0	17	BR HZ				0.00	29.20	30.12	2.6	22	5.0	15	27	12	22	08																															
09	88	71	80	3	73	74	0	15	RA FG BR HZ				0.68	29.12	30.04	0.6	18	3.0	21	22	15	26	09																															
10	83	70	77	0	71	72	0	12	RA FG+ BR HZ				0.42	29.01	29.94	3.6	21	5.1	24	19	17	19	10																															
11	87	67	77	0	66	69	0	12	RA FG+ BR				0.53	29.04	29.96	2.3	25	4.8	21	27	13	27	11																															
12	88	64	76	-1	66	69	0	11	RA BR				0.03	29.10	30.03	2.7	23	3.7	23	24	16	25	12																															
13	84	65	75	-2	68	69	0	10	RA BR HZ				0.12	29.13	30.06	0.2	34	1.3	12	36	9	36	13																															
14	84	64	74	-3	67	69	0	9	BR HZ				0.00	29.15	30.09	0.5	24	2.1	12	25	8	28	14																															
15	87	68	78	1	70	72	0	13	BR HZ				0.00	29.14	30.07	1.8	25	2.8	21	29	14	28	15																															
16	86	74	80	3	73	75	0	15	FG+ BR HZ				0.00	29.14	30.06	1.2	21	2.5	16	23	12	20	16																															
17	89	68	79	2	68	71	0	14	FG+ BR HZ				0.00	29.18	30.10	0.4	06	1.5	13	09	9	06	17																															
18	88	67	78	0	69	72	0	13	BR HZ				0.00	29.12	30.05	0.6	20	2.3	14	21	9	26	18																															
19	88	70	79	1	69	72	0	14	BR HZ				0.00	29.07	29.99	0.3	11	2.0	10	22	8	06	19																															
20	91	67	79	1	68	72	0	14	BR HZ				0.00	29.07	29.99	0.3	17	1.6	12	21	8	22	20																															
21	89	69	79	1			0	14	RA BR HZ				T	28.97		1.7	22	4.2	21	19	15	21	21																															
22	77	68	73	-5			0	8	RA FG+ BR HZ				0.56	28.93		2.0	22	4.4	24	26	15	25	22																															
23	83	62	73	-5	62	65	0	8	RA BR				T	29.00	29.93	1.1	24	2.9	17	33	13	33	23																															
24	82	57*	70	-8	60	64	0	5	FG+ BR				0.00	29.16	30.11	1.5	05	2.2	14	06	10	06	24																															
25	87	61	74	-4	62	67	0	9	BR HZ				0.00	29.26	30.20	1.3	10	2.6	13	19	8	16	25																															
26	89	65	77	-1	67	70	0	12	FG+ BR HZ				0.00	29.30	30.23	0.5	14	1.6	10	21	9	22	26																															
27	90	70	80	2	69	72	0	15	BR HZ				0.00	29.21	30.13	2.3	22	3.1	14	21	12	21	27																															
28	92*	70	81	3	71	73	0	16	RA BR HZ				0.02	29.05	29.97	2.4	22	4.4	20	01	14	36	28																															
29	81	70	76	-2	70	72	0	11	RA BR HZ				0.02	29.01	29.93	1.2	24	2.7	10	22	9	21	29																															
30	89	69	79	1	71	73	0	14	FG+ BR HZ				0.00	29.07	30.00	0.4	14	1.5	10	15	8	16	30																															
31	83	72	78	1	72	73	0	13	RA FG+ BR				1.06	29.09	30.02	1.8	20	3.3	25*	30	17*	29	31																															
85.9											67.8	76.9	■ ■	0.0		12.1	< MONTHLY AVERAGES		TOTALS-->		5.29		29.10	0.3		25	3.1	<-- MONTHLY AVERAGES																										
-2.2											1.4	- .4	■ ■	←-----DEPARTURE FROM NORMAL----->											0.13		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																											
DEGREE DAYS											GREATEST 24-HR PRECIPITATION: 1.53 DATE :01-02											SEA LEVEL PRESSURE DATE TIME																																
MONTHLY TOTAL DEPARTURE											GREATEST 24-HR SNOWFALL: DATE :											MAXIMUM : 30.29 26 0853																																
SEASON TO DATE TOTAL DEPARTURE											GREATEST SNOW DEPTH: DATE :											MINIMUM : 29.81 02 0353																																
HEATING: 0 0 0 0											NUMBER OF DAYS WITH →											MAXIMUM TEMP ≥ 90: 5											MINIMUM TEMP ≤ 32: 0											PRECIPITATION ≥ 0.01 INCH : 12										
COOLING: 376 -4 725 -25																						MAXIMUM TEMP ≤ 32 : 0											MINIMUM TEMP ≤ 0 : 0											PRECIPITATION ≥ 0.10 INCH : 8										
																						THUNDERSTORMS : 0											HEAVY FOG : 11											SNOWFALL ≥ 1.0 INCH :										

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN

JULY 2003

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	T	0.01	0.01	0.04	0.03	0.05	0.03	0.03	0.02	0.02	01	0.01	0.01	0.06	0.04	0.03	0.04	0.09	0.19	0.10	0.03	0.03	0.14	01		1.01
02	0.07	0.15	0.12	0.09	0.05	0.03	0.10	0.01	T	0.01		T	02	T		0.08	0.11								02		0.82	
03													03													03		0.00
04													04													04		0.00
05													05													05		0.00
06													06					T	T	T						06		T
07		T			0.01	0.01	T					T	07													07		0.02
08												T	08													08		0.00
09												T	09	0.05	T	0.01	0.28	T		T		0.31	T		09		0.68	
10												0.03	10					T	0.06	0.05	0.01	0.02	0.04	0.01	10		0.42	
												0.02																
11						T	T	0.33	0.20				11													11		0.53
12													12					0.03	T						12		0.03	
13													13		T	T		0.01	0.11	T					13		0.12	
14													14													14		0.00
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		0.00
21													21			T		T	T	T	T				21		T	
22												.01	22	.38	.16	.01									22		0.56	
23				T	T								23												23		T	
24													24												24		0.00	
25													25												25		0.00	
26													26												26		0.00	
27													27												27		0.00	
28													28			T		0.01	0.01	T				28		0.02		
29				0.01	T	T	T			0.01	T		29											29		0.02		
30													30											30		0.00		
31					T	T	0.21	0.37	0.09	T			31	0.01	0.03	0.34	0.01							31		1.06		

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.18	.25	.29	.30	.38	.47	.50	.52	.58	.58	.67	.67
Ending Date	10	31	31	22	11	11	11	11	31	31	31	31
Ending Time (Hour/Min)	1105	1411	1411	1259	0807	0809	0814	0839	0728	0728	0825	0825

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 JULY 2003

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							1.75	8.00	
02							1.50	10.00	
03							<.25	10.00	
04							<.25	7.00	
05							2.50	8.00	
06							5.00	10.00	
07							2.50	9.00	
08							2.50	9.00	
09							.50	10.00	
10							.50	10.00	
11							.25	10.00	
12							1.75	10.00	
13							1.25	9.00	
14							1.00	7.00	
15							1.25	7.00	
16							.25	7.00	
17							<.25	9.00	
18							1.50	6.00	
19							1.25	5.00	
20							.75	6.00	
21							1.50	8.00	
22							.25	10.00	
23							6.00	10.00	
24							<.25	10.00	
25							2.50	10.00	
26							<.25	9.00	
27							3.00	10.00	
28							1.25	10.00	
29							2.50	10.00	
30							.25	6.00	
31							.25	10.00	
MONTHLY AVGS							1.88	8.68	
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 9 27 0									

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

JULY 2003

QQT

WBAN # 53868

Table with columns for Hour (LST), Sky Cover, Ceiling, Visibility, Weather, Temperature (F), Wind, Pressure (Inches, Hg), and Satellite. Rows are grouped by date and time interval (Sunrise/Sunset).

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

JULY 2003

QQT

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
SUNRISE: 0530 JUL 13 SUNSET: 1955																													
01	CLR	NC			9.00	69	67	68	93	0	00	29.12	30.05	01	CLR	NC			4.00	BR	75	71	72	88	0	00	29.08	29.99	
04	SCT	NC			5.00	66	65	65	96	0	00	29.11	30.04	04	CLR	NC			4.00	BR	73	70	71	90	0	00	29.07	29.98	
07	OVC	002			3.00	68	66	67	93	0	00	29.15	30.09	07	CLR	NC			1.50	BR	72	70	71	94	0	00	29.09	30.02	
10	OVC	008			4.00	71	68	69	90	0	00	29.17	30.12	10	CLR	NC			4.00	HZ	82	69	73	65	0	00	29.08	30.01	
13	FEW	NC			5.00	79	70	73	74	0	00	29.13	30.07	13	BKN	043			4.00	HZ	85	69	74	59	0	00	29.08	30.00	
16	SCT	NC			6.00	81	67	72	62	5	02	29.09	30.03	16	FKN	NC			4.00	HZ	87	69	75	55	5	VR	29.03	29.94	
19	SCT	NC			3.00	73	69	70	87	0	00	29.09	30.03	19	CLR	NC			4.00	HZ	84	69	74	61	5	01	29.04	29.96	
22	CLR	NC			4.00	68	67	67	96	0	00	29.12	30.07	22	CLR	NC			3.00	HZ	75	70	72	84	3	13	29.08	30.00	
SUNRISE: 0531 JUL 14 SUNSET: 1955																													
01	CLR	NC			3.00	66	65	65	96	3	25	29.13	30.06	01	CLR	NC			2.00	BR	71	69	70	94	0	00	29.08	30.00	
04	BKN	002			2.00	64	64	64	100	0	00	29.13	30.07	04	CLR	NC			1.75	BR	69	68	68	96	0	00	29.08	30.00	
07	BKN	029			3.00	67	65	66	93	0	00	29.15	30.10	07	CLR	NC			1.25	BR	70	68	69	93	0	00	29.10	30.03	
10	OVC	027			7.00	73	68	70	84	3	VR	29.19	30.13	10	CLR	NC			3.00	HZ	82	71	74	69	0	00	29.10	30.03	
13	OVC	029			6.00	78	68	71	71	5	VR	29.18	30.13	13	BKN	044			5.00	HZ	85	68	73	57	5	VR	29.08	30.00	
16	SCT	NC			6.00	83	69	74	63	6	VR	29.12	30.06	16	CLR	NC			5.00	HZ	89	64	72	43	6	VR	29.04	29.95	
19	CLR	NC			5.00	82	69	73	65	5	27	29.13	30.07	19	CLR	NC			4.00	HZ	86	67	73	53	3	18	29.03	29.95	
22	CLR	NC			4.00	72	69	70	91	0	00	29.16	30.10	22	CLR	NC			4.00	HZ	75	70	72	84	0	00	29.05	29.97	
SUNRISE: 0532 JUL 15 SUNSET: 1954																													
01	CLR	NC			2.50	70	68	69	93	0	00	29.16	30.10	01	CLR	NC			2.50	BR	72	69	70	91	0	00	29.04	29.95	
04	CLR	NC			2.50	68	67	67	96	0	00	29.16	30.09	04	CLR	NC			2.50	BR	71	69	70	94	0	00	29.00	29.91	
07	OVC	004			1.75	71	69	70	94	0	00	29.18	30.11	07	SCT	NC			1.75	BR	72	70	71	94	3	14	29.02	29.93	
10	SCT	NC			3.00	78	71	73	79	7	21	29.19	30.12	10	CLR	NC			3.00	HZ	81	72	75	74	8	25	29.00	29.92	
13	SCT	NC			3.00	85	71	75	63	8	27	29.16	30.09	13	SCT	NC			7.00	HZ	88	71	76	57	7	VR	28.97	29.88	
16	CLR	NC			7.00	82	67	72	60	5	VR	29.09	30.03	16	CLR	NC			8.00	HZ	81	68	72	65	0	00	28.98	29.90	
19	CLR	NC			6.00	82	73	76	74	0	00	29.07	29.99	19	OVC	036			3.00	-RA BR	72	69	70	91	7	VR	28.88	29.81	
22	CLR	NC			5.00	75	73	74	94	0	00	29.12	30.05	22	OVC	009			6.00	HZ					0	00	28.93		
SUNRISE: 0532 JUL 16 SUNSET: 1954																													
01	CLR	NC			4.00	75	73	74	94	0	00	29.10	30.03	01	FEW	NC			8.00	HZ					5	23	28.92		
04	SCT	NC			3.00	75	72	73	90	0	00	29.11	30.04	04	OVC	035			8.00	HZ					6	21	28.92		
07	BKN	033			2.00	75	72	73	90	0	00	29.15	30.08	07	BKN	024			7.00	HZ					6	VR	28.94		
10	BKN	047			5.00	80	73	75	79	7	VR	29.14	30.07	10	OVC	009			5.00	BR	71	68	69	90	3	VR	28.95		
13	BKN	065			7.00	84	74	77	72	5	VR	29.14	30.06	13	OVC	011			0.25	+RA FG	69	66	67	90	12	24	29.01		
16	BKN	085			7.00	81	71	74	72	0	00	29.12	30.06	16	BKN	011			10.00	HZ	74	70	71	88	7	20	28.90		
19	SCT	NC			6.00	81	73	75	77	0	00	29.13	30.06	19	FEW	NC			10.00	HZ	75	68	70	79	5	VR	28.91		
22	CLR	NC			5.00	76	73	74	91	0	00	29.16	30.09	22	BKN	015			10.00	HZ	71	68	69	90	0	00	28.96	29.89	
SUNRISE: 0533 JUL 17 SUNSET: 1953																													
01	VV	001			<.25	73	73	73	100	0	00	29.17	30.10	01	BKN	055			9.00	HZ	69	67	68	93	6	22	28.94	29.87	
04	VV	001			0.25	70	70	70	100	0	00	29.17	30.11	04	BKN	110			10.00	-RA	67	62	64	84	3	VR	28.96	29.89	
07	OVC	001			0.25	68	68	68	100	0	00	29.22	30.16	07	CLR	NC			8.00	HZ	66	62	64	87	0	00	28.98	29.91	
10	CLR	NC			6.00	81	69	73	67	0	00	29.21	30.13	10	FEW	NC			8.00	HZ	72	65	67	79	3	23	29.01	29.95	
13	CLR	NC			8.00	87	65	72	48	5	VR	29.19	30.12	13	FEW	NC			10.00	HZ	79	62	68	56	8	27	29.00	29.93	
16	CLR	NC			7.00	88	66	73	48	0	00	29.14	30.07	16	BKN	070			10.00	HZ	80	63	69	56	8	09	28.97	29.90	
19	FEW	NC			6.00	82	69	73	65	3	VR	29.13	30.06	19	CLR	NC			10.00	HZ	72	56	62	57	0	00	29.01	29.95	
22	CLR	NC			5.00	74	69	71	85	0	00	29.16	30.09	22	CLR	NC			10.00	HZ	67	58	62	73	0	00	29.07	30.01	
SUNRISE: 0534 JUL 18 SUNSET: 1953																													
01	CLR	NC			4.00	70	68	69	93	0	00	29.13	30.06	01	CLR	NC			8.00	HZ	61	59	60	93	0	00	29.10	30.04	
04	CLR	NC			3.00	68	67	67	96	0	00	29.14	30.07	04	CLR	NC			7.00	HZ	60	58	59	93	0	00	29.10	30.04	
07	CLR	NC			2.50	69	67	68	93	0	00	29.16	30.10	07	VV	001			0.25	FG	59	58	58	96	0	00	29.15	30.11	
10	CLR	NC			5.00	81	69	73	67	6	19	29.14	30.07	10	CLR	NC			10.00	HZ	71	60	64	68	0	00	29.19	30.14	
13	SCT	NC			5.00	86	68	74	55	7	VR	29.13	30.06	13	CLR	NC			10.00	HZ	78	59	66	52	3	VR	29.17	30.12	
16	CLR	NC			4.00	87	69	75	55	5	VR	29.09	30.02	16	CLR	NC			10.00	HZ	82	58	67	44	6	02	29.15	30.10	
19	CLR	NC			5.00	84	71	75	65	3	VR	29.06	29.98	19	CLR	NC			10.00	HZ	78	60	67	54	3	06	29.16	30.11	
22	CLR	NC			5.00	76	72	73	88	0	00	29.10	30.03	22	CLR	NC			8.00	HZ	67	63	64	87	0	00	29.20	30.15	

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

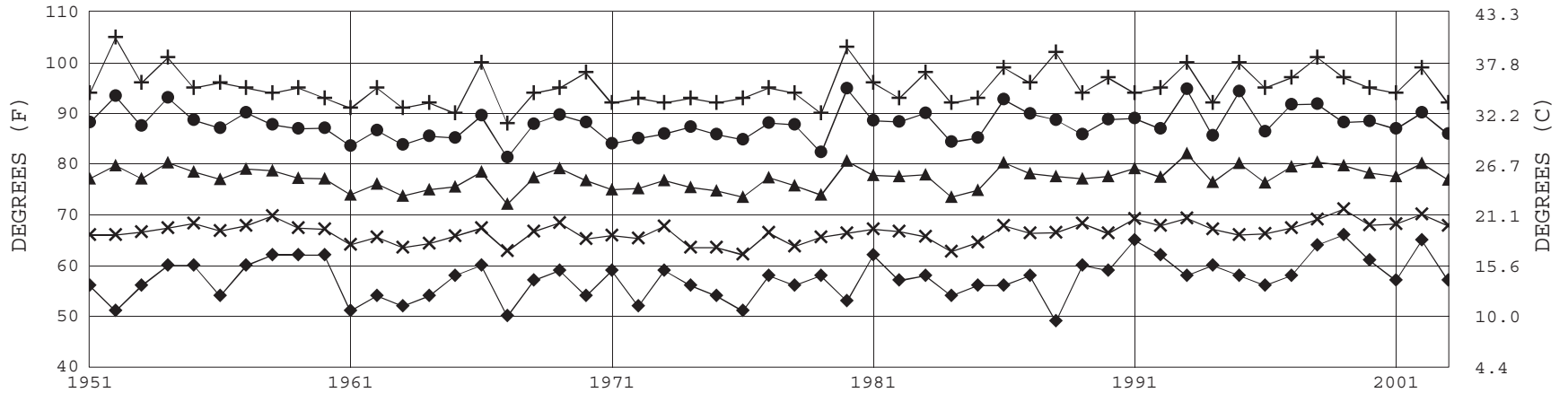
JULY 2003

OQT

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: 0539								JUL 25								SUNSET: 1948								SUNRISE: 0543								JUL 31								SUNSET: 1944																																																																																																																																							
01	CLR	NC				5.00	BR	64	62	63	93	0	00	29.20	30.14	01	CLR	NC				3.00	BR	73	71	72	94	0	00	29.09	30.02	04	BKN	100				3.00	BR	73	71	72	94	0	00	29.08	30.00	07	OVC	022				2.00	-RA BR	72	72	72	100	5	19	29.10	30.03	10	CLR	NC				9.00		76	62	67	62	3	VR	29.30	30.25	13	SCT	NC				10.00		84	63	70	49	5	VR	29.29	30.23	16	FEW	NC				10.00		87	59	69	39	5	10	29.24	30.18	19	CLR	NC				10.00		83	62	69	49	0	00	29.24	30.18	22	CLR	NC				7.00		72	66	68	82	0	00	29.29	30.23	22	BKN	085				9.00		76	72	73	88	3	21	29.07	30.00	22	BKN	033				6.00	BR	75	73	74	94	0	00	29.09	30.03
SUNRISE: 0539								JUL 26								SUNSET: 1948								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.																																																																																																																																																																															
01	CLR	NC				6.00	BR	70	66	67	87	0	00	29.29	30.23																																																																																																																																																																
04	CLR	NC				3.00	BR	66	64	65	93	0	00	29.30	30.23																																																																																																																																																																
07	VV	001				<.25	FG	66	65	65	96	0	00	29.34	30.28																																																																																																																																																																
10	CLR	NC				7.00		79	65	70	62	0	00	29.35	30.28																																																																																																																																																																
13	CLR	NC				8.00		86	67	73	53	8	21	29.32	30.25																																																																																																																																																																
16	SCT	NC				8.00		88	67	74	50	5	VR	29.27	30.21																																																																																																																																																																
19	CLR	NC				8.00		86	68	74	55	3	VR	29.24	30.17																																																																																																																																																																
22	CLR	NC				5.00	HZ	75	70	72	84	0	00	29.26	30.19																																																																																																																																																																
SUNRISE: 0540								JUL 27								SUNSET: 1947																																																																																																																																																															
01	CLR	NC				6.00	HZ	74	69	71	85	0	00	29.26	30.18																																																																																																																																																																
04	CLR	NC				5.00	BR	72	69	70	91	0	00	29.26	30.18																																																																																																																																																																
07	FEW	NC				4.00	BR	73	70	71	90	3	22	29.27	30.20																																																																																																																																																																
10	FEW	NC				10.00		81	71	74	72	6	VR	29.28	30.21																																																																																																																																																																
13	SCT	NC				7.00		86	71	76	61	9	21	29.21	30.14																																																																																																																																																																
16	BKN	044				6.00	HZ	88	71	76	57	8	24	29.14	30.06																																																																																																																																																																
19	CLR	NC				7.00		87	66	73	50	3	VR	29.13	30.05																																																																																																																																																																
22	CLR	NC				5.00	HZ	74	69	71	85	0	00	29.15	30.08																																																																																																																																																																
SUNRISE: 0541								JUL 28								SUNSET: 1946																																																																																																																																																															
01	CLR	NC				4.00	BR	72	69	70	91	0	00	29.11	30.04																																																																																																																																																																
04	FEW	NC				3.00	BR	70	69	69	97	0	00	29.09	30.02																																																																																																																																																																
07	OVC	004				2.00	BR	73	70	71	90	3	VR	29.10	30.03																																																																																																																																																																
10	CLR	NC				5.00	HZ	83	71	75	67	8	21	29.09	30.02																																																																																																																																																																
13	FEW	NC				7.00		88	72	77	59	6	22	29.05	29.96																																																																																																																																																																
16	FEW	NC				8.00		90	71	77	54	7	22	28.98	29.90																																																																																																																																																																
19	CLR	NC				7.00		77	72	74	85	5	21	28.98	29.90																																																																																																																																																																
22	FEW	NC				10.00		73	69	70	87	3	VR	29.00	29.92																																																																																																																																																																
SUNRISE: 0542								JUL 29								SUNSET: 1945																																																																																																																																																															
01	BKN	110				10.00		74	67	69	79	5	20	28.99	29.90																																																																																																																																																																
04	BKN	100				6.00	-RA BR	71	69	70	94	0	00	28.99	29.91																																																																																																																																																																
07	OVC	045				9.00		71	69	70	94	0	00	29.01	29.93																																																																																																																																																																
10	OVC	032				9.00		75	70	72	84	6	25	29.03	29.96																																																																																																																																																																
13	OVC	065				10.00		79	71	74	77	3	VR	29.03	29.95																																																																																																																																																																
16	BKN	090				8.00		77	71	73	82	5	VR	28.99	29.92																																																																																																																																																																
19	SCT	NC				5.00	HZ	79	72	74	79	0	00	29.00	29.93																																																																																																																																																																
22	FEW	NC				3.00	BR	73	71	72	94	0	00	29.04	29.97																																																																																																																																																																
SUNRISE: 0542								JUL 30								SUNSET: 1945																																																																																																																																																															
01	BKN	002				2.50	BR	71	70	70	96	0	00	29.04	29.97																																																																																																																																																																
04	OVC	001				0.25	FG	70	70	70	100	0	00	29.05	29.98																																																																																																																																																																
07	OVC	003				2.00	BR	71	70	70	96	0	00	29.08	30.01																																																																																																																																																																
10	OVC	021				6.00	HZ	76	70	72	82	0	00	29.11	30.05																																																																																																																																																																
13	CLR	NC				5.00	HZ	84	69	74	61	0	00	29.08	30.01																																																																																																																																																																
16	BKN	042				4.00	HZ	87	70	75	57	5	VR	29.05	29.97																																																																																																																																																																
19	CLR	NC				5.00	HZ	82	73	76	74	0	00	29.05	29.97																																																																																																																																																																
22	SCT	NC				5.00	HZ	77	72	74	85	0	00	29.08	30.01																																																																																																																																																																

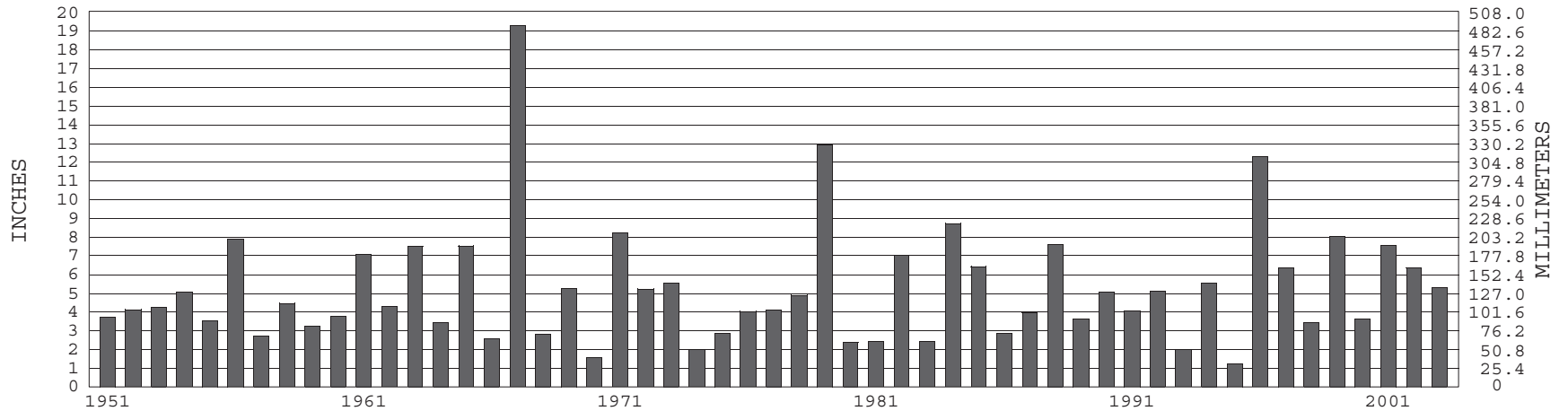
OAK RIDGE, TN JULY TEMPERATURES



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

Long-Term (1951-2003) Mean: 77.2 1961-1990 Normal: 77.3

OAK RIDGE, TN JULY PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 5.23

1961-1990 Normal: 5.16



JULY 2003

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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