



# NOVEMBER 2000

## 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 #: -

NOVEMBER 2000  
OAK RIDGE, TN

DATE	TEMPERATURE °F							DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								DATE																													
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING	0700 LST		1300 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM																																			
																			5-SEC		2-MIN																																	
																			SPEED	DIR	SPEED	DIR																																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																															
01	77	45	61	9	40	49	4	0	BR HZ				0.00	29.19	30.16	0.6	09	.9	8	06	7	06	01																															
02	81*	47	64	13	51	56	1	0	BR HZ				0.00	29.19	30.15	0.8	17	.8	12	18	9	17	02																															
03	77	52	65	14	56	59	0	0	BR HZ				0.00	29.20	30.16	0.0	00	.1	6	06	5	09	03																															
04	66	53	60	9	53	56	5	0	RA BR HZ				T	29.11	30.07	3.3	04	3.5	14	36	12	36	04																															
05	66	42	54	3	39	46	11	0					0.00	29.06	30.03	3.0	04	3.5	17	05	13	06	05																															
06	61	40	51	1	43	47	14	0	RA				T	28.99	29.96	1.2	06	1.4	9	07	8	06	06																															
07	62	55	59	9	58	58	6	0	RA BR				0.15	29.02	29.98	0.8	06	.8	8	06	7	06	07																															
08	73	60	67*	17	64	64	0	2	RA BR				0.70	28.99	29.95	0.4	26	.6	10	26	7	26	08																															
09	69	49	59	10	59	60	6	0	RA FG+ BR				2.07	28.75	29.69	1.8	22	5.0	39*	23	28*	26	09																															
10	51	39	45	-4	37	41	20	0					0.00	29.09	30.07	2.3	33	6.1	21	27	14	27	10																															
11	58	39	49	0	34	41	16	0					0.00	29.18	30.17	7.0	06	7.6	24	07	17	06	11																															
12	62	33	48	0	39	43	17	0	BR				0.00	29.07	30.06	0.1	26	.7	12	22	9	22	12																															
13	57	42	50	2	46	47	15	0	RA BR				0.07	29.02	30.00	1.9	25	3.4	17	27	10	26	13																															
14	50	31	41	-7	31	37	24	0					0.00	29.11	30.11	1.9	24	3.1	18	27	13	22	14																															
15	49	28	39	-8	28	34	26	0					0.00	29.18	30.19	0.4	16	1.4	10	21	9	21	15																															
16	45	32	39	-8	38	39	26	0	RA BR				0.63	29.04	30.04	1.9	24	2.9	14	26	9	25	16																															
17	45	27	36	-11	32	37	29	0	RA BR				0.03	29.11	30.11	2.4	26	3.7	16	27	13	26	17																															
18	35	29	32	-15	23	29	33	0					0.00	29.28	30.31	0.7	36	1.9	9	05	7	06	18																															
19	46	33	40	-6	29	34	25	0					0.00	29.19	30.21	2.3	20	3.4	15	22	12	21	19																															
20	47	29	38	-8			27	0					0.00	29.22		6.4	25	8.5	26	27	18	26	20																															
21	37	24	31*	-15	9	24	34	0					0.00	29.38	30.41	3.5	25	5.1	17	25	14	26	21																															
22	46	18*	32	-13	17	26	33	0					0.00	29.36	30.40	0.6	24	1.8	14	22	10	22	22																															
23	52	28	40	-5	31	35	25	0					0.00	29.27	30.29	0.2	28	.6	9	26	7	27	23																															
24	51	37	44	-1	40	42	21	0	RA BR				0.33	29.19	30.18	2.8	05	2.8	13	06	10	07	24																															
25	58	45	52	8	48	49	13	0	RA				0.12	28.91	29.88	1.1	06	5.7	18	22	13	23	25																															
26	48	38	43	-1	42	44	22	0	RA BR				T	28.96	29.94	3.9	23	5.2	18	22	14	22	26																															
27	54	31	43	-1	34	37	22	0	FG+ BR				0.00	29.04	30.04	2.9	25	3.7	20	27	14	26	27																															
28	57	31	44	1	33	38	21	0					0.00	29.17	30.17	0.4	25	1.4	14	21	9	21	28																															
29	61	40	51	8	33	42	14	0	RA BR				0.05	29.15	30.14	3.9	26	5.2	28	27	20	27	29																															
30	47	29	38	-5	25	33	27	0					0.00	29.30	30.31	1.8	05	3.3	17	06	15	07	30																															
											56.3		37.5		46.9		■ ■		17.9		0.1		< MONTHLY AVERAGES				TOTALS-->				4.15		29.12		0.5		27		3.1		<-- MONTHLY AVERAGES													
											-2.1		1.3		-.4		■ ■		<----- DEPARTURE FROM NORMAL ----->														- .44				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																	
DEGREE DAYS											GREATEST 24-HR PRECIPITATION: 2.12 DATE: 08-09											SEA LEVEL PRESSURE DATE TIME																																
MONTHLY TOTAL DEPARTURE											GREATEST 24-HR SNOWFALL: DATE: DATE:											MAXIMUM : 30.48 22 0853																																
SEASON TO DATE TOTAL DEPARTURE											GREATEST SNOW DEPTH: DATE: DATE:											MINIMUM : 29.47 09 1553																																
HEATING: 537 6 716 -107											NUMBER OF DAYS WITH →											MAXIMUM TEMP ≥ 90: 0											MINIMUM TEMP ≤ 32: 12											PRECIPITATION ≥ 0.01 INCH : 9										
COOLING: 2 2 1551 395																						MAXIMUM TEMP ≤ 32 : 0											MINIMUM TEMP ≤ 0 : 0											PRECIPITATION ≥ 0.10 INCH : 6										
																						THUNDERSTORMS : 0											HEAVY FOG : 2											SNOWFALL ≥ 1.0 INCH :										

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

# OAK RIDGE, TN

NOVEMBER 2000 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												03			0.00	
04													04			T	T	T	T					T	04			T	
05													05												T	05			0.00
06													06			T	T								06			T	
07	T												07	T											07			0.15	
08		0.03	0.04	0.05	0.01	T			0.01	0.02	0.03	0.01	08	T											08	0.69		0.70	
09	0.11	0.04	0.16	0.27	0.22	0.04	0.02	T	0.10	0.11	0.01	0.02	09	0.05			0.46	0.02					0.01	0.03	09	2.08		2.07	
10													10												10			0.00	
11													11												11			0.00	
12													12				T	T	0.01	0.01	T			12			0.00		
13											T	0.05	13											13			0.00		
14													14											14			0.07		
15													15											15			0.00		
16													16	0.02	0.05		0.04	0.13	0.10	0.08	0.07	0.03	0.01	0.02	0.01	16	0.57		0.63
17	0.03	T							T	0.01	T		17												17			0.03	
18													18												18			0.00	
19													19												19			0.00	
20													20												20			0.00	
21													21												21			0.00	
22													22												22			0.00	
23													23												23			0.00	
24													24						T	0.02	0.05	0.09	0.08	0.04	0.05	24			0.33
25	0.02	0.02	0.03		0.01	T	0.03			T	T	T	25					0.01	T	T		T			25			0.12	
26													26	T	T										26			T	
27													27												27			0.00	
28													28												28			0.00	
29	T	0.01	0.01	0.03									29												29			0.05	
30													30												30			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)	.25	.35	.41	.43	.46	.48	.48	.48	.48	.49	.53	.55
Ending Date	09	09	09	09	09	09	09	09	09	08	08	08
Ending Time (Hour/Min)	1638	1643	1645	1645	1654	1658	1658	1658	1658	0500	0500	0538

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	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 2000

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							4.00	9.00	
02							2.50	8.00	
03							2.00	4.00	
04							1.00	10.00	
05							10.00	10.00	
06							10.00	10.00	
07							1.00	10.00	
08							1.00	9.00	
09							.25	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							6.00	10.00	
13							2.50	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							.00	10.00	
17							3.00	10.00	
18							10.00	10.00	
19							8.00	10.00	
20							.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							8.00	10.00	
24							4.00	10.00	
25							7.00	10.00	
26							4.00	10.00	
27							.25	10.00	
28							10.00	10.00	
29							2.00	10.00	
30							10.00	10.00	
<b>MONTHLY AVGS</b>							5.99	9.67	
<b>SUNSHINE (MINUTES)</b>									
Total:                      Possible: Percent Possible:									
<b>NUMBER OF DAYS WITH: SKY CONDITION</b>									
CLR   PTLY CLDY   CLOUDY   MISSING 30									
<b>MINIMUM VISIBILITY (MILES)</b>									
<=0.25      <=3.0      >=7.0 1                   10                   15									





# OBSERVATIONS AT 3-HOURLY INTERVALS

# OAK RIDGE, TN

NOVEMBER 2000

OQT

WBAN # 53868

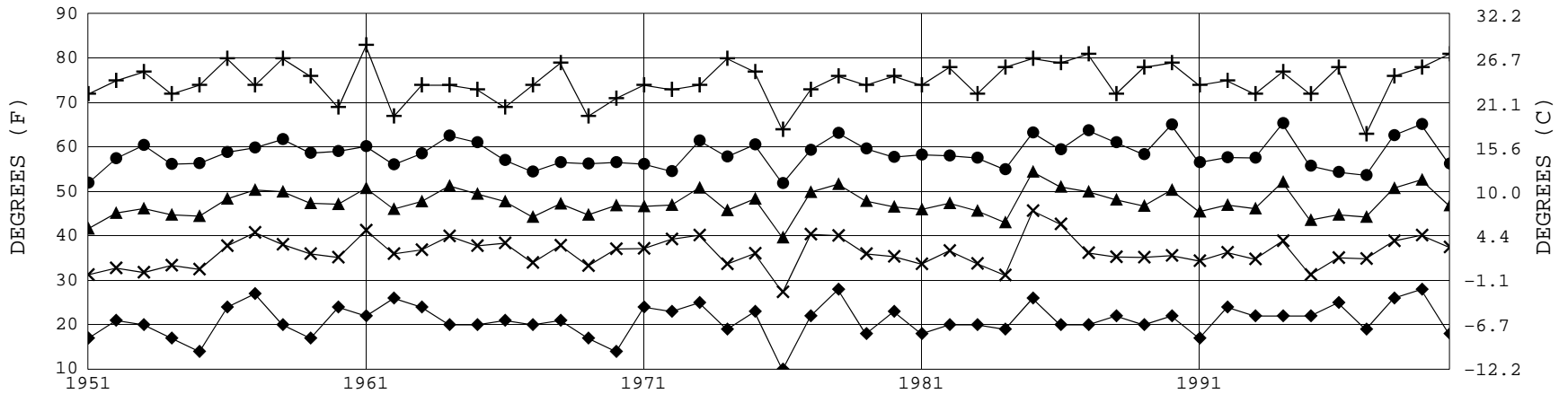
HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)					
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Okta	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	OBSERVATION TIME (LST)	EFF CLD AMT Okta	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
01	OVC	090			9.00	-RA	NOV 25	45	45	45	100	9	05	29.04	30.03												
04	BKN	060			8.00		NOV 25	45	45	45	100	3	06	28.96	29.94												
07	OVC	045			10.00		NOV 25	47	46	46	97	6	06	28.93	29.91												
10	OVC	043			10.00	-RA	NOV 25	50	48	49	93	5	04	28.91	29.89												
13	OVC	037			10.00		NOV 25	56	49	52	77	3	21	28.88	29.85												
16	OVC	055			10.00		NOV 25	57	51	54	81	3	23	28.83	29.80												
19	OVC	036			9.00	-RA	NOV 25	51	51	51	100	5	VR	28.88	29.85												
22	OVC	016			10.00		NOV 25	50	48	49	93	13	22	28.90	29.88												

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 Okta	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 Okta	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
01	OVC	038			10.00		NOV 26	48	46	47	93	6	24	28.91	29.89												
04	OVC	041			10.00		NOV 26	47	44	46	90	5	23	28.92	29.89												
07	OVC	018			10.00		NOV 26	47	42	45	83	7	VR	28.93	29.91												
10	OVC	026			10.00		NOV 26	47	43	45	86	8	22	28.96	29.93												
13	OVC	018			10.00	-RA	NOV 26	46	42	44	86	8	25	28.94	29.93												
16	OVC	035			10.00		NOV 26	46	42	44	86	7	20	28.96	29.95												
19	BKN	120			10.00		NOV 26	43	42	43	97	3	23	29.00	29.99												
22	BKN	110			6.00	BR	NOV 26	41	40	41	96	0	00	29.01	30.01												

**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.

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			43	38	41	83	29.12	30.11	8.30	2	0	0		
02			42	38	41	84	29.12	30.11	8.18	2	0	0		
03			42	38	40	86	29.12	30.11	8.14	1	0	0		
04			42	38	40	87	29.12	30.11	7.86	2	1	24		
05			41	38	40	87	29.12	30.11	7.86	1	0	0		
06			41	37	39	89	29.13	30.12	7.71	1	0	0		
07			41	37	39	88	29.14	30.13	7.64	2	0	0		
08			41	38	40	87	29.15	30.14	7.32	2	1	8		
09			44	38	41	82	29.16	30.16	7.24	3	0	0		
10			46	38	43	75	29.16	30.16	7.74	3	0	0		
11			49	38	44	69	29.16	30.15	8.18	3	1	5		
12			51	38	45	63	29.14	30.13	8.62	3	0	0		
13			53	38	46	60	29.11	30.10	8.63	5	1	26		
14			54	38	47	56	29.09	30.08	8.88	5	2	29		
15			56	38	47	54	29.09	30.06	8.84	5	2	26		
16			55	37	47	56	29.08	30.07	8.56	3	1	23		
17			53	37	46	59	29.09	30.07	8.13	4	1	26		
18			50	37	45	64	29.10	30.09	8.53	2	1	27		
19			48	38	44	70	29.11	30.10	8.50	1	1	27		
20			46	38	43	75	29.12	30.11	8.27	2	1	26		
21			45	38	42	78	29.12	30.11	8.30	2	1	28		
22			45	38	42	78	29.12	30.11	8.50	2	1	24		
23			44	37	41	80	29.13	30.12	8.57	2	1	36		
24			43	37	40	83	29.13	30.12	8.32	3	1	26		

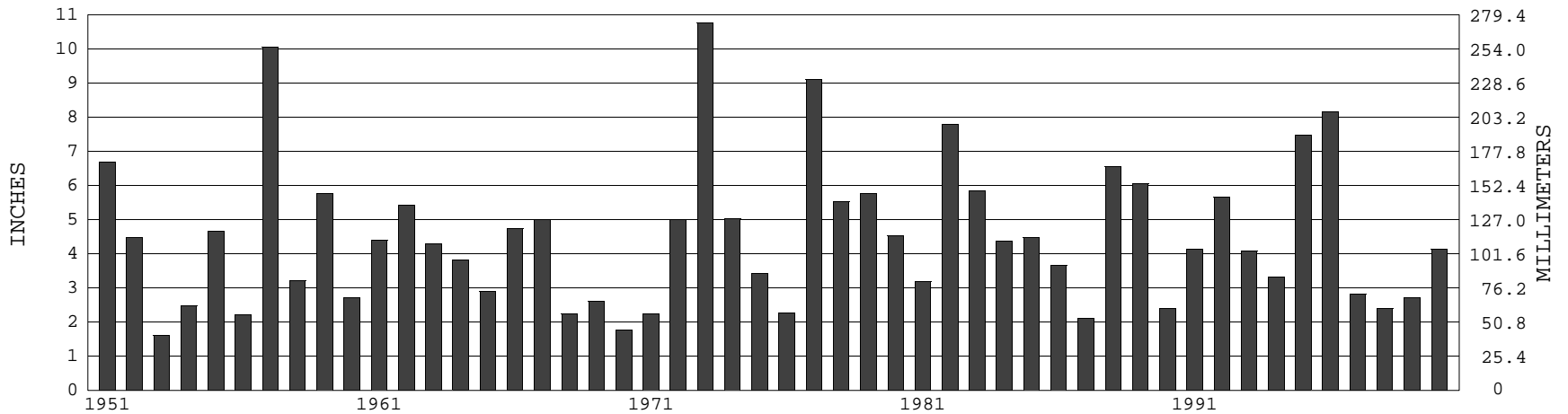
### OAK RIDGE, TN NOVEMBER TEMPERATURES



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

Long-Term (1951-2000) Mean: 47.5      1961-1990 Normal: 47.3

### OAK RIDGE, TN NOVEMBER PRECIPITATION



Long-Term (1951-2000) Mean Monthly Total: 4.53

1961-1990 Normal: 4.59



**NOVEMBER 2000  
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 \$24 for online delivery (including back issues) compared to \$32 for offline delivery.** To order this and other subscriptions online with your credit card, go to: [www.ncdc.noaa.gov/mpp.html](http://www.ncdc.noaa.gov/mpp.html) 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 : [info@ncdc.noaa.gov](mailto:info@ncdc.noaa.gov)  
Local Climatological Data is available at [www.ncdc.noaa.gov](http://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