



APRIL 2004

# LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

## RALEIGH/DURHAM, NC

RALEIGH-DURHAM INTL ARPT (RDU)

Lat: 35° 52' N Long: 78° 47' W Elev (Ground): 427 Feet

Time Zone: EASTERN WBAN: 13722 ISSN #:0198-3784

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	60	42	51	-4	40	46	14	0	RA MIFG BR	0		0.0	0.23	29.17	29.64	9.2	28	10.1	30	27	23	27	01										
02	56	43	50	-6	36	44	15	0		0		0.0	0.00	29.23	29.70	4.5	29	6.9	25	28	17	28	02										
03	63	35	49	-7	38	44	16	0		0		0.0	0.00	29.28	29.75	4.3	28	5.6	25	34	16	31	03										
04	57	41	49	-7	29	41	16	0		0		0.0	0.00	29.28	29.75	8.7	31	9.5	31	29	21	30	04										
05	58	33	46*	-10	19	37	19	0		0		0.0	0.00	29.49	29.97	6.8	30	7.9	25	27	18	31	05										
06	67	28*	48	-9	26	40	17	0		0		0.0	0.00	29.57	30.04	2.9	26	5.4	18	24	15	23	06										
07	80	44	62	5	40	51	3	0		0		0.0	0.00	29.36	29.83	4.1	25	5.0	29	23	20	22	07										
08	79	53	66	9	49	56	0	1		0		0.0	0.00	29.19	29.65	6.6	23	7.3	18	23	17	23	08										
09	74	50	62	5	43	52	3	0		0		0.0	0.00	29.38	29.84	1.6	35	4.3	17	28	13	36	09										
10	73	49	61	3	51	55	4	0	BR HZ	0		0.0	0.00	29.48	29.95	5.4	09	6.5	18	10	16	10	10										
11	70	47	59	1	51	53	6	0	RA BR	0		0.0	T	29.48	29.95	6.6	03	7.6	20	04	16	03	11										
12	56	45	51	-7	49	49	14	0	RA FG BR	0		0.0	0.87	29.43	29.90	7.9	05	8.8	22	09	17	06	12										
13	68	49	59	1	54	56	6	0	RA FG+ BR	0		0.0	0.15	29.21	29.68	1.8	20	7.0	33*	22	29*	22	13										
14	55	45	50	-9	42	45	15	0	RA BR	0		0.0	0.08	29.29	29.76	7.1	26	8.8	25	24	21	23	14										
15	69	43	56	-3	29	44	9	0		0		0.0	0.00	29.62	30.10	3.6	35	6.2	25	01	21	01	15										
16	74	37	56	-3	32	46	9	0		0		0.0	0.00	29.82	30.29	1.9	18	3.0	14	20	10	19	16										
17	82	50	66	6	46	55	0	1		0		0.0	0.00	29.84	30.31	8.2	22	8.7	23	22	20	23	17										
18	84	54	69	9	55	61	0	4		0		0.0	0.00	29.87	30.33	8.5	22	8.9	18	22	16	24	18										
19	84	60	72	12	54	61	0	7		0		0.0	0.00	29.76	30.22	12.4	23	12.7	30	22	25	22	19										
20	85	57	71	11	56	62	0	6		0		0.0	0.00	29.57	30.03	4.3	23	5.7	16	25	13	22	20										
21	83	61	72	12	56	62	0	7		0		0.0	0.00	29.53	29.99	9.7	21	10.3	26	22	23	21	21										
22	83	61	72	12	57	63	0	7		0		0.0	0.00	29.62	30.08	11.6	22	12.2	24	22	21	22	22										
23	86*	63	75*	14	61	66	0	10		0		0.0	0.00	29.60	30.06	9.8	23	10.1	23	23	20	23	23										
24	78	59	69	7	61	65	0	4	RA BR	0		0.0	T	29.68	30.14	5.3	08	7.4	20	09	16	10	24										
25	82	61	72	10	60	64	0	7		0		0.0	0.00	29.70	30.16	8.0	18	9.1	22	23	20	24	25										
26	78	57	68	6	62	64	0	3	TSRA RA BR	0		0.0	0.36	29.51	29.97	6.8	22	9.2	25	23	21	22	26										
27	70	46	58	-4	44	52	7	0	RA BR	0		0.0	0.03	29.43	29.89	5.4	28	6.9	26	24	20	26	27										
28	69	35	52	-10	36	46	13	0		0		0.0	0.00	29.78	30.26	0.6	21	3.0	17	19	13	25	28										
29	77	45	61	-2	48	55	4	0		0		0.0	0.00	29.91	30.38	6.3	19	7.3	17	18	14	17	29										
30	78	53	66	3	57	61	0	1	RA	0		0.0	T	29.79	30.26	6.4	17	7.0	17	17	14	16	30										
72.6										48.2	60.4	■ ■	46.0	53.2	6.3	1.9	< MONTHLY AVERAGES		TOTALS-->			0.0	1.72	29.53	30.00	3.0	24	7.6	<-- MONTHLY AVERAGES				
0.8										1.8	1.3	■ ■	<-----DEPARTURE FROM NORMAL----->										-1.08	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.87 DATE: 12				SEA LEVEL PRESSURE				DATE				TIME												
MONTHLY									GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM				: 30.45				29 0851												
TOTAL DEPARTURE									SEASON TO DATE				MINIMUM				: 29.55				13 1351												
HEATING: 190 -24									NUMBER OF DAYS WITH ➡				MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 1				PRECIPITATION ≥ 0.01 INCH : 6												
COOLING: 58 20													MAXIMUM TEMP ≤ 32: 0				MINIMUM TEMP ≤ 0: 0				PRECIPITATION ≥ 0.10 INCH : 4												
													THUNDERSTORMS : 1				HEAVY FOG : 1				SNOWFALL ≥ 1.0 INCH : 0												

APRIL 2004  
RALEIGH/DURHAM, NC

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RALEIGH/DURHAM, NC

APRIL 2004

RDU

WBAN # 13722

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	0.04	0.14	0.04	0.01	T					01												01			0.23	
02													02												02			0.00	
03													03												03			0.00	
04													04												04			0.00	
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			T	T	T							11			T	
12	0.17	T		0.11	0.04	T	T	0.05	0.03	T	T		12	0.05	0.04	0.11	0.13	0.04	0.01	0.09				T	12			0.87	
13		T			T	0.01		T				0.06	13	0.06	0.02	T									13			0.15	
14		0.02	0.03	0.02									14		T	0.01		T	T	T					14			0.08	
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												21			0.00	
22													22												22			0.00	
23													23												23			0.00	
24	T	T											24												24			T	
25													25												25			0.00	
26													26		T	0.07			T		0.01	0.04	0.04	T	0.10	26	0.26		0.36
27	0.03												27			T									27			0.03	
28													28												28			0.00	
29													29												29			0.00	
30													30											T	30			T	

## MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

\* = 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

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

## WEATHER NOTATIONS

**RALEIGH/DURHAM, NC**  
**APRIL 2004**

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).

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.

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							3.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							10.00	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							5.00	10.00	
11							1.50	10.00	
12							.50	10.00	
13							.25	10.00	
14							6.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							8.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							7.00	10.00	
21							8.00	10.00	
22							10.00	10.00	
23							7.00	10.00	
24							4.00	10.00	
25							8.00	10.00	
26							2.00	10.00	
27							5.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							8.00	10.00	
<b>MONTHLY AVGS</b>							7.44	10.00	
<p align="center"><b>SUNSHINE (MINUTES)</b></p> <p>Total:                  Possible:</p> <p align="center">Percent Possible:</p>									
<p align="center"><b>NUMBER OF DAYS WITH:</b></p> <p align="center"><b>SKY CONDITION</b></p> <p align="center">CLR   PTLY CLDY   CLOUDY   MISSING</p> <p align="center">30</p> <p align="center"><b>MINIMUM VISIBILITY (MILES)</b></p> <p align="center">&lt;=0.25      &lt;=3.0      &gt;=7.0</p> <p align="center">1                5                21</p>									

## OBSERVATIONS AT 3-HOURLY INTERVALS

RALEIGH/DURHAM, NC

APRIL 2004

RDU

WBAN # 13722

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT <small>Oktas</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)		EFF CLD AMT <small>Oktas</small>	VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0601      APR 01      SUNSET: 1837						SUNRISE: 0553      APR 07      SUNSET: 1842																							
01	OVC	110			4.00	BR MIFG	42	42	42	100	7	23	29.18	29.65	01	CLR	NC			10.00	51	33	43	50	5	24	29.45	29.92	
04	OVC	011			6.00	RA BR	46	46	46	100	9	29	29.13	29.60	04	FEW	NC			10.00	46	31	40	56	5	24	29.42	29.89	
07	OVC	031			10.00	-RA	45	44	45	97	6	27	29.17	29.64	07	BKN	100			10.00	48	37	43	66	7	24	29.44	29.91	
10	BKN	060			10.00		52	41	47	66	7	VR	29.19	29.66	10	BKN	250			10.00	67	37	52	33	6	29	29.43	29.89	
13	BKN	045			10.00		59	41	50	51	15	26	29.16	29.63	13	OVC	250			10.00	76	43	58	31	6	VR	29.36	29.83	
16	BKN	055			10.00		57	37	47	47	8	27	29.14	29.61	16	BKN	250			10.00	79	45	60	30	9	27	29.29	29.75	
19	BKN	060			10.00		54	37	46	53	9	28	29.18	29.65	19	BKN	200			10.00	68	45	56	44	7	23	29.26	29.73	
22	BKN	120			10.00		50	35	43	57	8	28	29.21	29.68	22	FEW	NC			10.00	61	43	52	52	0	00	29.28	29.74	
SUNRISE: 0560      APR 02      SUNSET: 1838						SUNRISE: 0551      APR 08      SUNSET: 1843																							
01	OVC	080			10.00		50	34	43	54	12	27	29.20	29.67	01	SCT	NC			10.00	59	44	51	58	5	23	29.28	29.74	
04	BKN	050			10.00		48	34	42	58	9	29	29.18	29.65	04	BKN	200			10.00	56	44	50	65	6	23	29.24	29.70	
07	BKN	200			10.00		45	36	41	71	0	00	29.22	29.69	07	BKN	200			10.00	58	48	53	70	3	24	29.22	29.69	
10	OVC	040			10.00		51	36	44	56	6	VR	29.23	29.71	10	OVC	120			10.00	69	50	58	51	7	VR	29.22	29.68	
13	BKN	048			10.00		56	37	47	49	10	27	29.21	29.68	13	BKN	150			10.00	78	52	63	40	3	VR	29.16	29.62	
16	OVC	050			10.00		55	37	47	51	10	30	29.21	29.68	16	OVC	150			10.00	76	51	61	42	10	24	29.10	29.57	
19	OVC	050			10.00		51	38	45	61	6	VR	29.26	29.73	19	BKN	150			10.00	67	50	57	55	8	23	29.12	29.59	
22	CLR	NC			10.00		47	36	42	66	5	29	29.29	29.77	22	FEW	NC			10.00	60	50	55	70	7	23	29.17	29.64	
SUNRISE: 0558      APR 03      SUNSET: 1839						SUNRISE: 0550      APR 09      SUNSET: 1844																							
01	CLR	NC			10.00		43	35	40	74	5	31	29.30	29.77	01	CLR	NC			10.00	54	50	52	87	7	24	29.18	29.65	
04	CLR	NC			10.00		38	34	36	86	3	26	29.27	29.75	04	CLR	NC			10.00	59	48	53	67	0	00	29.25	29.71	
07	CLR	NC			10.00		38	36	37	93	5	24	29.31	29.79	07	CLR	NC			10.00	55	46	50	72	6	01	29.37	29.84	
10	SCT	NC			10.00		54	38	46	55	7	VR	29.31	29.78	10	CLR	NC			10.00	64	40	52	41	8	35	29.42	29.89	
13	BKN	050			10.00		58	39	49	50	10	30	29.29	29.76	13	CLR	NC			10.00	70	39	54	32	10	29	29.41	29.87	
16	BKN	050			10.00		63	42	52	47	8	26	29.23	29.70	16	FEW	NC			10.00	73	39	55	29	5	VR	29.39	29.85	
19	SCT	NC			10.00		55	39	47	55	5	26	29.25	29.72	19	FEW	NC			10.00	65	39	52	39	3	06	29.41	29.88	
22	FEW	NC			10.00		49	40	45	71	0	00	29.26	29.73	22	CLR	NC			10.00	52	42	47	69	0	00	29.46	29.93	
SUNRISE: 0557      APR 04      SUNSET: 1840						SUNRISE: 0548      APR 10      SUNSET: 1845																							
01	FEW	NC			10.00		47	40	44	77	0	00	29.22	29.69	01	CLR	NC			10.00	53	42	48	66	5	14	29.48	29.94	
04	OVC	085			10.00		48	42	45	80	7	23	29.16	29.63	04	FEW	NC			5.00	49	47	48	93	0	00	29.49	29.96	
07	FEW	NC			10.00		52	35	44	53	9	33	29.19	29.66	07	SCT	NC			5.00	52	47	49	83	8	10	29.54	30.00	
10	FEW	NC			10.00		52	25	41	35	15	32	29.26	29.73	10	BKN	030			9.00	62	46	54	56	8	14	29.52	29.99	
13	BKN	075			10.00		56	27	43	33	13	31	29.25	29.72	13	OVC	036			8.00	68	53	59	59	5	10	29.48	29.94	
16	BKN	080			10.00		55	25	42	31	16	30	29.27	29.75	16	BKN	045			9.00	72	55	62	55	5	04	29.41	29.88	
19	BKN	075			10.00		50	24	39	36	9	32	29.34	29.81	19	BKN	045			9.00	64	59	61	84	12	08	29.45	29.92	
22	CLR	NC			10.00		44	23	36	43	8	30	29.43	29.91	22	OVC	030			9.00	60	54	57	80	6	06	29.46	29.93	
SUNRISE: 0555      APR 05      SUNSET: 1841						SUNRISE: 0547      APR 11      SUNSET: 1846																							
01	CLR	NC			10.00		39	23	33	53	5	27	29.42	29.90	01	OVC	015			8.00	57	53	55	87	6	06	29.45	29.91	
04	FEW	NC			10.00		35	24	31	64	5	26	29.42	29.90	04	OVC	009			10.00	54	47	50	77	5	02	29.43	29.90	
07	FEW	NC			10.00		39	24	33	55	6	29	29.48	29.96	07	OVC	008			10.00	55	47	51	74	3	36	29.47	29.93	
10	FEW	NC			10.00		48	20	37	33	13	31	29.52	29.99	10	OVC	012			7.00	60	51	55	72	5	32	29.48	29.94	
13	CLR	NC			10.00		54	20	40	26	15	31	29.50	29.97	13	OVC	100			7.00	67	55	60	66	6	VR	29.45	29.91	
16	CLR	NC			10.00		57	17	41	21	13	33	29.46	29.94	16	OVC	090			6.00	60	53	56	78	12	02	29.46	29.93	
19	FEW	NC			10.00		54	14	39	20	6	33	29.50	29.97	19	OVC	013		-RA	10.00	54	50	52	87	9	03	29.52	29.99	
22	CLR	NC			10.00		48	15	36	27	3	VR	29.58	30.06	22	OVC	005		BR	3.00	49	49	49	100	10	03	29.57	30.03	
SUNRISE: 0554      APR 06      SUNSET: 1841						SUNRISE: 0546      APR 12      SUNSET: 1846																							
01	CLR	NC			10.00		37	22	32	54	3	28	29.60	30.08	01	OVC	002		1.50	-RA	47	46	46	97	9	02	29.55	30.02	
04	CLR	NC			10.00		33	22	29	64	5	12	29.63	30.11	04	OVC	007		4.00	-RA	45	45	45	100	10	03	29.52	29.99	
07	FEW	NC			10.00		36	24	32	62	0	00	29.68	30.16	07	OVC	007		8.00	-RA	45	45	45	100	13	07	29.51	29.98	
10	FEW	NC			10.00		54	17	40	23	8	31	29.67	30.14	10	OVC	002		0.50	-RA	47	47	47	100	14	06	29.46	29.93	
13	BKN	250			10.00		61	24	45	24	6	VR	29.59	30.07	13	OVC	003		1.00	-RA	50	50	50	100	8	10	29.41	29.88	
16	SCT	NC			10.00		67	32	50	27	12	24	29.50	29.97	16	OVC	002		1.00	RA	55	54	54	96	7	06	29.33	29.80	
19	SCT	NC			10.00		60	32	47	35	0	00	29.47	29.94	19	OVC	003		0.50	FG	54	54	54	100	6	35	29.36	29.83	
22	CLR	NC			10.00		51	34	43	52	7	23	29.47	29.94	22	OVC	003		0.50	FG									

## OBSERVATIONS AT 3-HOURLY INTERVALS

RALEIGH/DURHAM, NC

APRIL 2004

RDU

WBAN # 13722

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT <small>Oktas</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)		EFF CLD AMT <small>Oktas</small>	VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0544      APR 13      SUNSET: 1847						SUNRISE: 0537      APR 19      SUNSET: 1852																							
01	OVC	001			0.50 FG	50	50	50	100	6	02	29.37	29.84	01	CLR	NC				10.00	65	56	60	73	9	21	29.86	30.33	
04	OVC	001			0.50 FG	49	49	49	100	8	04	29.30	29.78	04	CLR	NC				10.00	62	53	57	73	10	21	29.83	30.29	
07	OVC	002			0.50 FG	50	50	50	100	7	05	29.27	29.75	07	BKN	200				10.00	62	49	55	62	10	22	29.85	30.32	
10	OVC	001			0.25 FG	57	57	57	100	5	11	29.22	29.69	10	BKN	250				10.00	73	53	61	50	12	24	29.85	30.31	
13	OVC	009			2.00 RA BR	67	65	66	93	9	17	29.09	29.55	13	BKN	250				10.00	83	55	66	38	23	22	29.77	30.24	
16	SCT	NC			10.00	67	58	62	73	12	25	29.13	29.60	16	SCT	NC				10.00	83	54	65	37	17	24	29.68	30.14	
19	FEW	NC			10.00	64	57	60	78	3	17	29.13	29.60	19	BKN	250				10.00	73	54	62	51	9	23	29.65	30.12	
22	FEW	NC			10.00	57	48	52	72	10	23	29.21	29.67	22	BKN	250				10.00	70	54	61	57	8	21	29.66	30.12	
SUNRISE: 0543      APR 14      SUNSET: 1848						SUNRISE: 0535      APR 20      SUNSET: 1853																							
01	CLR	NC			10.00	51	45	48	80	5	27	29.13	29.59	01	BKN	250				9.00	65	54	59	68	8	22	29.62	30.09	
04	OVC	013			8.00	49	48	48	97	8	23	29.17	29.64	04	BKN	250				10.00	60	53	56	78	5	24	29.60	30.06	
07	BKN	070			9.00	47	44	46	90	10	24	29.23	29.70	07	BKN	250				9.00	62	57	59	84	6	24	29.64	30.10	
10	OVC	018			10.00	48	43	46	83	13	23	29.24	29.71	10	BKN	250				10.00	75	56	64	52	0	00	29.64	30.10	
13	OVC	017			10.00	48	43	46	83	10	23	29.26	29.73	13	BKN	250				10.00	82	52	64	35	3	VR	29.58	30.03	
16	OVC	031			10.00	50	41	46	71	7	31	29.29	29.76	16	SCT	NC				10.00	84	56	67	38	12	24	29.51	29.97	
19	OVC	045			10.00	49	38	44	66	10	30	29.38	29.85	19	BKN	250				10.00	77	54	63	45	3	15	29.50	29.96	
22	OVC	065			10.00	49	34	42	57	6	31	29.45	29.93	22	BKN	250				10.00	70	59	63	68	7	23	29.53	29.99	
SUNRISE: 0542      APR 15      SUNSET: 1849						SUNRISE: 0534      APR 21      SUNSET: 1854																							
01	OVC	075			10.00	46	31	40	56	3	27	29.48	29.96	01	BKN	250				10.00	66	56	60	70	0	00	29.52	29.98	
04	CLR	NC			10.00	46	28	39	50	6	VR	29.53	30.00	04	BKN	250				10.00	63	56	59	78	5	17	29.50	29.96	
07	CLR	NC			10.00	46	30	39	54	7	32	29.62	30.09	07	OVC	250				8.00	65	58	61	78	6	VR	29.55	30.01	
10	CLR	NC			10.00	56	28	44	34	7	VR	29.67	30.14	10	BKN	180				10.00	75	58	65	55	8	22	29.57	30.03	
13	CLR	NC			10.00	64	27	47	25	12	31	29.64	30.11	13	OVC	150				10.00	81	57	66	44	14	23	29.52	29.98	
16	CLR	NC			10.00	68	29	50	23	10	33	29.61	30.08	16	OVC	250				10.00	80	54	64	41	21	22	29.49	29.95	
19	CLR	NC			10.00	63	31	48	30	0	00	29.65	30.11	19	BKN	200				10.00	76	55	63	48	12	20	29.50	29.96	
22	CLR	NC			10.00	49	31	41	50	0	00	29.72	30.19	22	BKN	250				10.00	72	54	61	53	12	19	29.56	30.02	
SUNRISE: 0540      APR 16      SUNSET: 1850						SUNRISE: 0533      APR 22      SUNSET: 1855																							
01	CLR	NC			10.00	46	32	40	58	0	00	29.76	30.23	01	BKN	250				10.00	67	53	59	61	10	20	29.59	30.05	
04	CLR	NC			10.00	40	32	37	73	0	00	29.79	30.26	04	SCT	NC				10.00	63	53	57	70	8	20	29.60	30.06	
07	FEW	NC			10.00	42	32	38	68	0	00	29.85	30.33	07	BKN	250				10.00	63	56	59	78	10	22	29.65	30.11	
10	FEW	NC			10.00	63	30	48	29	5	06	29.87	30.35	10	SCT	NC				10.00	73	61	66	66	10	23	29.67	30.13	
13	FEW	NC			10.00	70	30	51	23	3	24	29.84	30.32	13	BKN	200				10.00	79	59	67	50	15	24	29.64	30.10	
16	FEW	NC			10.00	72	28	51	20	0	00	29.79	30.26	16	SCT	NC				10.00	81	56	66	42	17	23	29.59	30.05	
19	FEW	NC			10.00	66	28	49	24	6	15	29.80	30.27	19	FEW	NC				10.00	76	55	63	48	8	19	29.59	30.05	
22	CLR	NC			10.00	59	41	50	51	6	15	29.84	30.30	22	CLR	NC				10.00	71	60	64	68	17	19	29.63	30.09	
SUNRISE: 0539      APR 17      SUNSET: 1851						SUNRISE: 0532      APR 23      SUNSET: 1856																							
01	CLR	NC			10.00	56	42	49	60	6	20	29.84	30.31	01	CLR	NC				10.00	66	62	64	87	10	20	29.63	30.09	
04	CLR	NC			10.00	52	42	47	69	3	17	29.83	30.30	04	SCT	NC				10.00	64	62	63	93	10	21	29.62	30.08	
07	CLR	NC			8.00	53	42	48	66	6	22	29.87	30.35	07	SCT	NC				7.00	64	63	63	96	10	22	29.66	30.12	
10	CLR	NC			10.00	68	43	55	40	9	21	29.89	30.37	10	SCT	NC				10.00	76	63	68	64	13	23	29.65	30.11	
13	FEW	NC			10.00	80	49	62	34	10	25	29.85	30.32	13	BKN	060				10.00	84	62	70	48	12	24	29.60	30.06	
16	BKN	200			10.00	81	46	61	29	15	25	29.80	30.27	16	SCT	NC				10.00	85	59	68	42	15	24	29.54	30.00	
19	BKN	250			10.00	71	46	57	41	6	24	29.81	30.27	19	FEW	NC				10.00	77	58	65	52	3	24	29.55	30.01	
22	CLR	NC			10.00	69	47	57	45	9	20	29.85	30.31	22	CLR	NC				10.00	73	61	66	66	8	21	29.57	30.03	
SUNRISE: 0538      APR 18      SUNSET: 1852						SUNRISE: 0530      APR 24      SUNSET: 1857																							
01	CLR	NC			10.00	63	53	57	70	8	22	29.87	30.34	01	OVC	070				10.00	69	61	64	76	0	00	29.60	30.05	
04	CLR	NC			10.00	59	52	55	78	10	22	29.85	30.32	04	FEW	NC				8.00	63	61	62	93	0	00	29.61	30.07	
07	FEW	NC			10.00	59	53	56	81	9	23	29.89	30.36	07	FEW	NC				5.00	66	63	64	90	0	00	29.68	30.14	
10	BKN	200			10.00	72	56	62	57	8	22	29.91	30.38	10	BKN	021				10.00	74	65	68	74	9	05	29.72	30.18	
13	BKN	200			10.00	81	58	67	46	3	VR	29.88	30.35	13	BKN	045				10.00	75	62	67	64	13	06	29.70	30.16	
16	BKN	200			10.00	83	58	67	43	10	24	29.82	30.28	16	BKN	045				10.00	78	60	67	54	13	07	29.67	30.13	
19	SCT	NC			10.00	78	55	64	45	8	19	29.83	30.29	19	BKN	250				8.00	73	61	66	66	8	12	29.69	30.15	

## OBSERVATIONS AT 3-HOURLY INTERVALS

## RALEIGH/DURHAM, NC

APRIL 2004

RDU

WBAN # 13722

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)			
				OBSERVATION TIME (LST)	EFF CLD AMT Okta		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: 0529 APR 25 SUNSET: 1857																
01	OVC	036			8.00		65	59	61	81	5	VR	29.76	30.22		
04	OVC	090			10.00		63	49	55	60	8	14	29.74	30.21		
07	OVC	012			10.00		62	53	57	73	6	18	29.77	30.23		
10	BKN	060			10.00		69	61	64	76	9	18	29.77	30.23		
13	BKN	035			10.00		76	63	68	64	10	18	29.71	30.17		
16	BKN	050			10.00		80	63	69	56	14	19	29.63	30.09		
19	BKN	250			9.00		76	64	68	67	7	18	29.62	30.08		
22	SCT	NC			10.00		72	65	68	79	12	17	29.64	30.11		
SUNRISE: 0528 APR 26 SUNSET: 1858																
01	SCT	NC			10.00		67	61	63	81	10	20	29.63	30.09		
04	SCT	NC			10.00		64	62	63	93	8	22	29.60	30.06		
07	OVC	010			10.00		66	64	65	93	12	22	29.59	30.05		
10	OVC	016			10.00		74	64	68	71	15	21	29.54	30.00		
13	OVC	034			10.00		77	65	69	66	16	24	29.46	29.92		
16	OVC	047			5.00	-RA BR	69	67	68	93	10	32	29.42	29.88		
19	OVC	050			10.00		61	60	60	97	5	25	29.44	29.90		
22	OVC	041			10.00	-RA	57	57	57	100	5	31	29.49	29.95		
SUNRISE: 0527 APR 27 SUNSET: 1859																
01	OVC	070			7.00		56	56	56	100	3	26	29.45	29.91		
04	BKN	150			8.00		55	54	54	96	5	27	29.41	29.87		
07	SCT	NC			9.00		53	51	52	93	3	VR	29.44	29.91		
10	SCT	NC			10.00		63	47	54	56	9	33	29.43	29.90		
13	BKN	075			10.00		66	38	52	36	12	30	29.38	29.85		
16	BKN	100			10.00		67	38	52	35	16	25	29.32	29.79		
19	BKN	095			10.00		63	34	49	34	14	34	29.40	29.87		
22	FEW	NC			10.00		54	37	46	53	3	VR	29.52	29.99		
SUNRISE: 0526 APR 28 SUNSET: 1860																
01	CLR	NC			10.00		42	38	40	85	0	00	29.60	30.06		
04	CLR	NC			10.00		41	33	38	74	0	00	29.68	30.15		
07	CLR	NC			10.00		44	38	41	79	0	00	29.77	30.24		
10	CLR	NC			10.00		56	28	44	34	3	26	29.82	30.29		
13	CLR	NC			10.00		65	32	49	29	7	36	29.81	30.28		
16	CLR	NC			10.00		67	35	51	31	0	00	29.78	30.25		
19	CLR	NC			10.00		61	41	51	48	0	00	29.83	30.30		
22	CLR	NC			10.00		57	39	48	51	6	17	29.88	30.36		
SUNRISE: 0525 APR 29 SUNSET: 1901																
01	CLR	NC			10.00		54	44	49	69	10	21	29.90	30.38		
04	FEW	NC			10.00		48	44	46	86	5	23	29.91	30.39		
07	BKN	250			10.00		54	46	50	75	3	17	29.95	30.43		
10	BKN	250			10.00		68	46	56	45	8	22	29.97	30.45		
13	BKN	180			10.00		74	45	58	36	13	18	29.93	30.40		
16	BKN	250			10.00		77	50	61	39	12	20	29.87	30.35		
19	BKN	250			10.00		70	47	57	44	5	16	29.85	30.32		
22	CLR	NC			10.00		64	57	60	78	8	17	29.87	30.34		
SUNRISE: 0524 APR 30 SUNSET: 1901																
01	CLR	NC			10.00		59	55	57	87	7	18	29.86	30.33		
04	FEW	NC			9.00		57	54	55	90	5	15	29.84	30.31		
07	BKN	250			8.00		59	57	58	93	0	00	29.85	30.32		
10	OVC	034			10.00		70	58	63	66	8	19	29.85	30.31		
13	BKN	200			10.00		74	54	62	50	9	16	29.80	30.26		
16	BKN	150			10.00		76	56	64	50	9	16	29.72	30.19		
19	BKN	150			10.00		72	57	63	60	6	15	29.71	30.17		
22	BKN	150			10.00		69	61	64	76	14	17	29.73	30.19		

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Okta	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)		
								DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: APR 31 SUNSET:																

**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 Visibilty = 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.

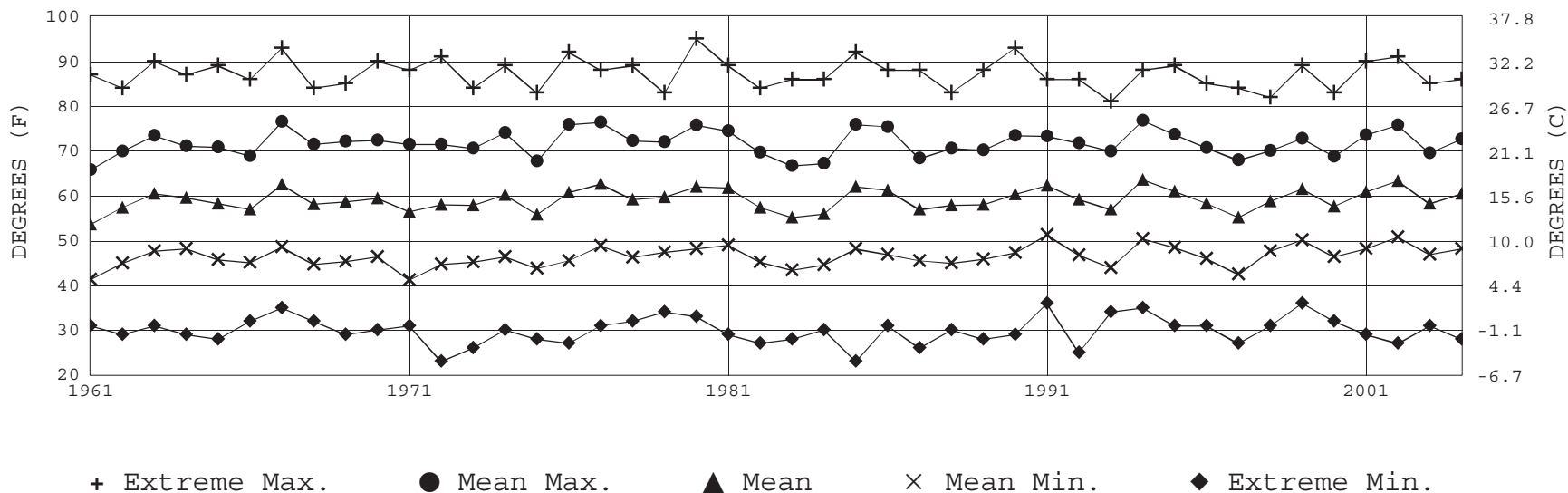
HOUR (LST)	AVERAGES										RESULTANT	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES,HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	WIND (MPH)	
							STATION	SEA LEVEL			SPEED	DIRECTION
01			54	46	50	74	29.53	29.99	8.93	5	3	23
02			54	46	50	76	29.52	29.98	8.92	6	4	22
03			53	45	49	77	29.52	29.98	9.18	5	3	23
04			52	45	48	79	29.52	29.99	8.95	5	3	23
05			51	45	48	81	29.53	29.99	9.02	5	2	22
06			50	45	48	83	29.54	30.01	8.75	5	3	22
07			53	46	49	78	29.56	30.03	8.88	5	2	24
08			57	45	51	68	29.57	30.03	9.21	7	4	24
09			60	45	53	62	29.56	30.03	9.24	8	3	27
10			63	45	54	56	29.57	30.03	9.22	7	3	25
11			66	46	56	53	29.56	30.03	9.27	8	2	25
12			68	46	57	49	29.54	30.01	9.38	9	4	25
13			69	47	57	48	29.52	29.99	9.27	9	5	25
14			70	47	58	47	29.51	29.97	9.52	9	5	25
15			70	47	58	47	29.49	29.96	9.28	9	5	25
16			71	46	58	46	29.48	29.95	9.37	11	6	26
17			70	47	57	47	29.48	29.95	9.52	10	5	24
18			68	46	56	49	29.49	29.96	9.55	9	4	25
19			65	46	55	54	29.50	29.97	9.55	6	2	23
20			62	47	54	59	29.52	29.99	9.45	6	2	20
21			61	46	53	61	29.54	30.00	9.50	7	2	19
22			59	46	53	65	29.54	30.01	9.35	7	4	20
23			58	46	52	65	29.54	30.01	9.30	7	4	20
24			57	45	51	67	29.55	30.01	9.10	6	4	20

## 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			54	46	50	74	29.53	29.99	8.93	5	3	23
02			54	46	50	76	29.52	29.98	8.92	6	4	22
03			53	45	49	77	29.52	29.98	9.18	5	3	23
04			52	45	48	79	29.52	29.99	8.95	5	3	23
05			51	45	48	81	29.53	29.99	9.02	5	2	22
06			50	45	48	83	29.54	30.01	8.75	5	3	22
07			53	46	49	78	29.56	30.03	8.88	5	2	24
08			57	45	51	68	29.57	30.03	9.21	7	4	24
09			60	45	53	62	29.56	30.03	9.24	8	3	27
10			63	45	54	56	29.57	30.03	9.22	7	3	25
11			66	46	56	53	29.56	30.03	9.27	8	2	25
12			68	46	57	49	29.54	30.01	9.38	9	4	25
13			69	47	57	48	29.52	29.99	9.27	9	5	25
14			70	47	58	47	29.51	29.97	9.52	9	5	25
15			70	47	58	47	29.49	29.96	9.28	9	5	25
16			71	46	58	46	29.48	29.95	9.37	11	6	26
17			70	47	57	47	29.48	29.95	9.52	10	5	24
18			68	46	56	49	29.49	29.96	9.55	9	4	25
19			65	46	55	54	29.50	29.97	9.55	6	2	23
20			62	47	54	59	29.52	29.99	9.45	6	2	20
21			61	46	53	61	29.54	30.00	9.50	7	2	19
22			59	46	53	65	29.54	30.01	9.35	7	4	20
23			58	46	52	65	29.54	30.01	9.30	7	4	20
24			57	45	51	67	29.55	30.01	9.10	6	4	20

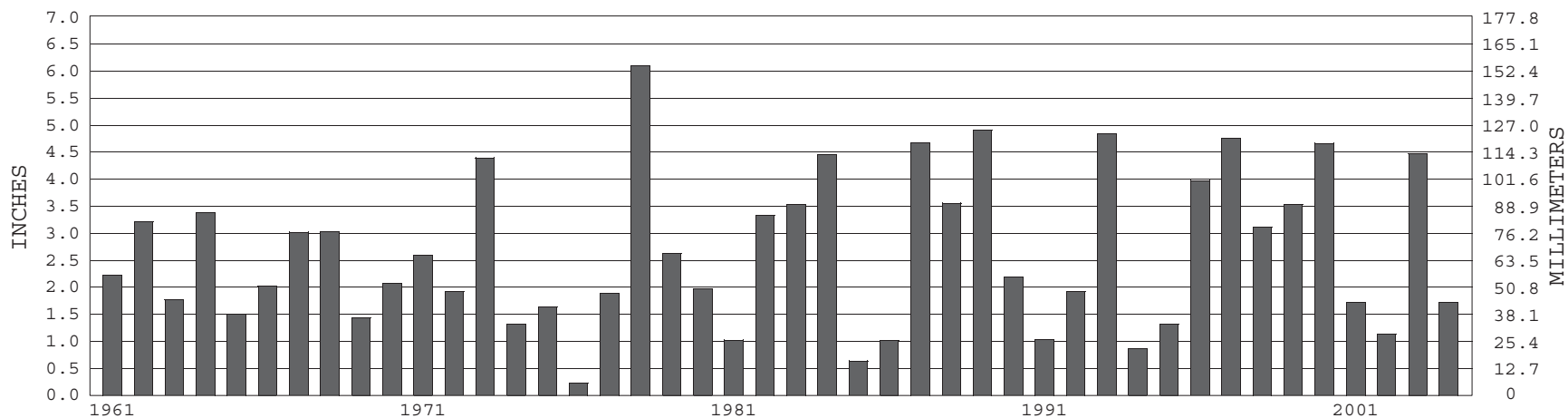


# RALEIGH/DURHAM, NC APRIL TEMPERATURES



Long-Term (1961-2004) Mean: 59.1    1971-2000 Normal: 59.1

# RALEIGH/DURHAM, NC APRIL PRECIPITATION



Long-Term (1961-2004) Mean Monthly Total: 2.65

1971-2000 Normal: 2.80



APRIL 2004

RALEIGH/DURHAM, NC

# 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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