



# SEPTEMBER 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	83	71	77	2	70	72	0	12	TSRA RA BR HZ	0		0.0	0.60	29.69	30.15	5.3	07	6.5	17	10	14	07	01	
02	81	65	73	-2	63	67	0	8	BR	0		0.0	0.00	29.72	30.19	5.9	06	6.4	21	09	16	08	02	
03	82	62	72	-2	64	67	0	7	BR	0		0.0	0.00	29.70	30.16	5.1	03	6.0	16	02	14	03	03	
04	84	67	76	2	68	70	0	11	BR HZ	0		0.0	0.00	29.66	30.13	4.8	04	6.0	15	09	12	03	04	
05	84	66	75	1	67	70	0	10	BR	0		0.0	0.00	29.66	30.12	8.1	04	8.3	20	05	16	04	05	
06	85	71	78	4	71	72	0	13	RA BR	0		0.0	0.06	29.61	30.07	6.3	07	7.5	30	10	25	09	06	
07	78	71	75	1	72	73	0	10	RA BR	0		0.0	0.61	29.51	29.97	8.7	10	9.0	22	10	17	10	07	
08	85	73	79*	6	73	74	0	14	RA BR	0		0.0	0.68	29.34	29.80	11.9	16	13.5	31	15	24	19	08	
09	85	68	77	4	68	71	0	12	RA BR	0		0.0	T	29.48	29.94	5.3	23	7.3	17	27	14	24	09	
10	83	63	73	0	64	67	0	8		0		0.0	0.00	29.69	30.15	2.8	05	3.7	16	08	13	09	10	
11	81	63	72	-1	64	67	0	7	BR	0		0.0	0.00	29.72	30.19	3.9	08	4.5	18	10	14	09	11	
12	82	62	72	-1	64	66	0	7	BR	0		0.0	0.00	29.72	30.19	3.6	05	3.8	18	05	13	04	12	
13	81	59	70	-2	63	66	0	5	MIFG BR HZ	0		0.0	0.00	29.72	30.19	1.7	08	2.8	16	05	12	10	13	
14	77	64	71	-1	64	65	0	6	RA BR	0		0.0	0.40	29.74	30.20	4.2	07	5.2	21	12	17	11	14	
15	76	63	70	-2	66	67	0	5	RA BR	0		0.0	0.09	29.69	30.16	2.9	02	3.7	13	03	10	03	15	
16	79	65	72	0	69	70	0	7	FG+ MIFG BR	0		0.0	0.00	29.62	30.08	3.4	09	4.8	15	09	12	09	16	
17	87*	67	77	5	72	73	0	12	TSRA RA FG+ BR SQ	0		0.0	0.96	29.26	29.72	11.7	17	13.4	79*	18	48*	20	17	
18	71	61	66	-5	60	62	0	1	RA BR	0		0.0	0.46	29.35	29.81	5.0	29	7.7	26	30	18	27	18	
19	72	53	63	-7	47	54	2	0		0		0.0	0.00	29.71	30.18	9.8	03	10.0	23	03	20	03	19	
20	71	50	61*	-9	50	54	4	0		0		0.0	0.00	29.83	30.31	6.8	05	7.3	21	08	17	09	20	
21	78	49*	64	-6	53	57	1	0	MIFG BR	0		0.0	0.00	29.82	30.29	1.4	03	2.3	13	05	10	05	21	
22	85	53	69	-1	56	61	0	4	BR	0		0.0	0.00	29.77	30.24	1.3	03	1.6	9	01	8	03	22	
23	84	57	71	2	59	64	0	6	MIFG BR	0		0.0	0.00	29.73	30.19	4.4	03	4.7	16	03	12	03	23	
24	80	60	70	1	60	63	0	5	MIFG BR	0		0.0	0.00	29.70	30.17	5.4	05	6.0	17	05	14	05	24	
25	79	55	67	-1	60	62	0	2		0		0.0	0.00	29.65	30.11	3.0	04	3.9	14	06	12	03	25	
26	80	58	69	1	61	64	0	4	BR	0		0.0	0.00	29.60	30.06	5.5	06	5.9	17	09	15	09	26	
27	76	67	72	5	69	70	0	7	RA DZ BR	0		0.0	0.05	29.50	29.96	7.6	07	8.4	18	12	14	12	27	
28	76	66	71	4	69	70	0	6	RA BR	0		0.0	0.58	29.23	29.69	6.4	19	10.4	26	24	21	19	28	
29	81	59	70	4	62	65	0	5	MIFG BR HZ	0		0.0	0.00	29.46	29.92	0.8	06	2.2	12	24	10	23	29	
30	79	63	71	5	65	67	0	6	FG+ BR HZ	0		0.0	0.00	29.58	30.04	2.9	06	3.8	12	04	9	05	30	
80.2 62.4 71.3 ■■ 63.8 66.3 0.2 6.7 < MONTHLY AVERAGES TOTALS->												0.0	4.49	29.62	30.08	2.1	08	6.2	<- MONTHLY AVERAGES					
-1.1 1.4 0.1 ■■ <-----DEPARTURE FROM NORMAL----->												0.23	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3											
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.41 DATE: 17-18					SEA LEVEL PRESSURE DATE TIME										
MONTHLY									GREATEST 24-HR SNOWFALL: 0.0 DATE:					MAXIMUM										
TOTAL DEPARTURE									GREATEST SNOW DEPTH: 0 DATE:					MINIMUM										
HEATING: 7 -13 7 -14									NUMBER OF DAYS WITH ➡					MAXIMUM TEMP ≥ 90: 0					PRECIPITATION ≥ 0.01 INCH : 10					
COOLING: 200 -6 1678 204														MAXIMUM TEMP ≤ 32 : 0					PRECIPITATION ≥ 0.10 INCH : 7					
														THUNDERSTORMS : 2					HEAVY FOG : 3					
																			SNOWFALL ≥ 1.0 INCH : 0					

SEPTEMBER 2004  
RALEIGH/DURHAM, NC

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RALEIGH/DURHAM, NC

SEPTEMBER 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	0.11	0.43	0.06	T									01												01			0.60	
02													02												02			0.00	
03													03												03			0.00	
04													04												04			0.00	
05													05												05			0.00	
06					0.01	T	T			0.01	T		06		T	0.04	T								06			0.06	
07							T						07	T	T	0.02	0.03	0.03	0.04	0.02	0.02	0.01	T	0.01	0.02	07			0.61
08	T	0.02	0.01	0.01	0.01	0.19	0.05	T					08	T	0.35	0.04	T					T			08			0.68	
09						T	T						09							T					09			T	
10													10												10			0.00	
11													11												11			0.00	
12													12												12			0.00	
13													13												13			0.00	
14					T	T	T	T	T				14			0.01	0.12	0.02	0.01	T		0.16	0.02	0.04	0.02	14			0.40
15	T	T	0.03	0.03	T	T	0.02	0.01					15												15			0.09	
16													16												16			0.00	
17													17	T	T	T	0.76	T	T	0.05	0.07	0.02	T	T	0.02	17			0.96
18													18												18			0.46	
19				0.01	0.05	0.08	0.07	0.08	0.06	0.07	0.03	0.01	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												24			0.00	
25													25												25			0.00	
26													26												26			0.00	
27						T	T	0.02	T	0.03	0.05	0.02	27			T	T		0.03	T				27			0.05		
28	T			0.20	0.01			0.01	0.22	0.03	0.05	0.02	28	0.01	0.01	T	0.02							28			0.58		
29													29												29			0.00	
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)	.20	.25	.32	.40	.57	.75	.76	.76	.76	.76	.76	.78
Ending Date	17	17	08	17	17	17	17	17	17	17	17	17
Ending Time (Hour/Min)	1502	1507	1326	1517	1527	1541	1547	1547	1547	1547	1547	1756

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  
SEPTEMBER 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							1.25	10.00	
02							2.00	10.00	
03							4.00	10.00	
04							.25	10.00	
05							2.50	10.00	
06							1.50	10.00	
07							1.00	10.00	
08							1.00	10.00	
09							5.00	10.00	
10							7.00	10.00	
11							4.00	10.00	
12							.50	10.00	
13							3.00	10.00	
14							3.00	10.00	
15							2.00	10.00	
16							.06	10.00	
17							.06	10.00	
18							1.75	10.00	
19							10.00	10.00	
20							10.00	10.00	
21							2.50	10.00	
22							5.00	10.00	
23							4.00	10.00	
24							2.50	10.00	
25							7.00	10.00	
26							5.00	10.00	
27							1.00	10.00	
28							1.25	10.00	
29							3.00	10.00	
30							.00	8.00	
<b>MONTHLY AVGS</b>							3.59	9.93	
<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">3                16             4</p>									

## OBSERVATIONS AT 3-HOURLY INTERVALS

RALEIGH/DURHAM, NC

SEPTEMBER 2004

RDU

WBAN # 13722

HOUR (LST)			SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)			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 <small>Okta</small>			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>Okta</small>			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0547						SEP 01	SUNSET: 1842						SUNRISE: 0552						SEP 07	SUNSET: 1833									
01	OVC	025			2.50	RA BR	73	72	72	96	6	04	29.67	30.13	01	OVC	003			7.00		72	71	71	97	8	08	29.57	30.03
04	OVC	080			3.00	BR	72	71	71	97	5	04	29.64	30.09	04	OVC	005			10.00		73	71	72	94	6	08	29.54	30.00
07	OVC	005			2.00	BR	72	71	71	97	8	04	29.69	30.15	07	OVC	007			10.00		73	71	72	94	8	09	29.55	30.01
10	OVC	010			6.00	HZ	76	71	73	85	7	06	29.73	30.19	10	OVC	015			3.00	RA BR	73	71	72	94	10	08	29.54	30.00
13	OVC	030			7.00		79	70	73	74	9	05	29.72	30.17	13	OVC	014			10.00		78	73	75	85	9	11	29.51	29.97
16	BKN	060			8.00		82	69	73	65	7	07	29.67	30.13	16	OVC	044			8.00	-RA	75	73	74	94	8	08	29.46	29.92
19	BKN	060			7.00		76	70	72	82	5	08	29.68	30.14	19	OVC	026			9.00	-RA	75	73	74	94	13	09	29.46	29.92
22	OVC	130			8.00		73	68	70	84	5	09	29.71	30.17	22	OVC	010			10.00		74	72	73	94	13	11	29.46	29.92
SUNRISE: 0548						SEP 02	SUNSET: 1841						SUNRISE: 0553						SEP 08	SUNSET: 1832									
01	SCT	NC			5.00	BR	69	68	68	96	0	00	29.71	30.17	01	OVC	015			10.00	-RA	74	72	73	94	12	10	29.42	29.88
04	SCT	NC			5.00	BR	67	66	66	97	3	02	29.71	30.17	04	OVC	015			10.00		75	74	74	96	13	12	29.37	29.83
07	BKN	150			6.00	BR	67	65	66	93	3	02	29.74	30.20	07	OVC	010			10.00	-RA	75	74	74	96	10	13	29.37	29.83
10	BKN	150			10.00		77	60	66	56	16	09	29.77	30.23	10	OVC	018			10.00		81	75	77	82	12	16	29.37	29.83
13	OVC	150			10.00		79	60	67	52	8	06	29.75	30.21	13	BKN	030			10.00		84	73	76	70	21	17	29.30	29.75
16	BKN	200			10.00		80	60	68	51	13	09	29.71	30.17	16	OVC	050			10.00		77	74	75	90	14	17	29.27	29.73
19	FEW	NC			9.00		72	64	67	76	3	03	29.68	30.14	19	BKN	050			10.00		76	72	73	88	12	20	29.30	29.75
22	CLR	NC			8.00		69	64	66	84	7	06	29.73	30.19	22	SCT	NC			10.00		74	71	72	91	9	20	29.34	29.79
SUNRISE: 0549						SEP 03	SUNSET: 1839						SUNRISE: 0553						SEP 09	SUNSET: 1830									
01	CLR	NC			7.00		64	62	63	93	0	00	29.72	30.19	01	SCT	NC			10.00		74	71	72	91	13	20	29.33	29.79
04	CLR	NC			6.00	BR	63	61	62	93	3	02	29.71	30.17	04	BKN	028			9.00		74	70	71	88	13	20	29.35	29.81
07	BKN	013			4.00	BR	65	63	64	93	5	VR	29.74	30.20	07	OVC	008			5.00	BR	72	70	71	94	9	23	29.42	29.88
10	BKN	016			10.00		75	67	70	76	8	03	29.74	30.20	10	BKN	060			10.00		78	71	73	79	12	23	29.48	29.94
13	BKN	045			10.00		80	61	68	52	7	09	29.71	30.17	13	BKN	055			10.00		81	67	72	62	8	27	29.48	29.94
16	BKN	250			10.00		82	64	70	55	8	01	29.67	30.14	16	SCT	NC			10.00		83	65	71	55	6	VR	29.50	29.96
19	SCT	NC			10.00		73	66	69	79	3	02	29.66	30.12	19	FEW	NC			10.00		75	67	70	76	0	00	29.55	30.01
22	CLR	NC			8.00		70	66	67	87	3	VR	29.67	30.14	22	CLR	NC			10.00		69	66	67	90	0	00	29.62	30.09
SUNRISE: 0550						SEP 04	SUNSET: 1838						SUNRISE: 0554						SEP 10	SUNSET: 1829									
01	BKN	120			5.00	BR	68	66	67	93	0	00	29.66	30.12	01	CLR	NC			10.00		66	64	65	93	0	00	29.64	30.10
04	OVC	003			1.50	BR	68	67	67	96	5	01	29.67	30.13	04	CLR	NC			10.00		65	62	63	90	0	00	29.65	30.11
07	OVC	005			1.50	BR	70	68	69	93	5	VR	29.68	30.14	07	FEW	NC			9.00		66	62	64	87	7	03	29.71	30.17
10	BKN	019			6.00	HZ	74	69	71	85	5	36	29.70	30.16	10	FEW	NC			10.00		77	63	68	62	10	09	29.74	30.20
13	BKN	100			10.00		82	68	73	63	5	VR	29.67	30.13	13	BKN	250			10.00		81	62	69	53	3	VR	29.70	30.16
16	BKN	100			10.00		84	68	73	59	8	06	29.64	30.10	16	BKN	060			10.00		80	65	70	60	5	VR	29.67	30.13
19	BKN	100			10.00		76	69	71	79	8	03	29.64	30.10	19	BKN	130			10.00		73	66	69	79	0	00	29.69	30.15
22	BKN	100			10.00		73	68	70	84	7	08	29.67	30.13	22	OVC	130			9.00		69	67	68	93	3	04	29.72	30.18
SUNRISE: 0550						SEP 05	SUNSET: 1836						SUNRISE: 0555						SEP 11	SUNSET: 1828									
01	CLR	NC			9.00		69	67	68	93	5	06	29.66	30.11	01	BKN	210			6.00	BR	67	65	66	93	0	00	29.70	30.16
04	FEW	NC			6.00	BR	67	66	66	97	3	04	29.65	30.10	04	BKN	120			5.00	BR	67	65	66	93	0	00	29.70	30.16
07	SCT	NC			6.00	BR	68	66	67	93	5	05	29.68	30.14	07	BKN	100			4.00	BR	67	65	66	93	0	00	29.74	30.20
10	SCT	NC			10.00		77	64	69	64	10	03	29.70	30.16	10	BKN	050			10.00		76	65	69	69	9	05	29.76	30.22
13	BKN	034			10.00		79	65	70	62	13	06	29.67	30.14	13	BKN	040			10.00		81	63	69	54	12	08	29.73	30.19
16	SCT	NC			10.00		83	67	72	59	13	05	29.63	30.09	16	BKN	090			10.00		81	62	69	53	8	06	29.70	30.16
19	SCT	NC			10.00		76	70	72	82	8	03	29.62	30.09	19	SCT	NC			10.00		73	64	67	74	3	12	29.71	30.16
22	BKN	019			10.00		75	70	72	84	9	06	29.67	30.12	22	CLR	NC			10.00		66	64	65	93	0	00	29.74	30.20
SUNRISE: 0551						SEP 06	SUNSET: 1835						SUNRISE: 0556						SEP 12	SUNSET: 1826									
01	BKN	015			10.00		73	70	71	90	7	06	29.65	30.10	01	CLR	NC			5.00	BR	63	62	62	97	0	00	29.72	30.18
04	OVC	008			10.00		73	70	71	90	7	05	29.62	30.07	04	CLR	NC			4.00	BR	63	61	62	93	0	00	29.71	30.17
07	BKN	008			5.00	BR	73	72	72	96	8	05	29.63	30.10	07	BKN	003			2.50	BR	64	64	64	100	5	04	29.76	30.22
10	OVC	014			10.00		77	73	74	88	9	10	29.65	30.11	10	SCT	NC			10.00		75	64	68	69	10	04	2	

## OBSERVATIONS AT 3-HOURLY INTERVALS

RALEIGH/DURHAM, NC

SEPTEMBER 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: 0556 SEP 13						SUNSET: 1825						SUNRISE: 0601 SEP 19						SUNSET: 1816											
01	SCT	NC			4.00	BR	63	62	62	97	0	00	29.73	30.19	01	FEW	NC			10.00	63	47	54	56	9	03	29.57	30.03	
04	SCT	NC			3.00	BR	62	60	61	93	0	00	29.72	30.18	04	CLR	NC			10.00	58	45	51	62	10	01	29.61	30.08	
07	OVC	250			4.00	BR	62	61	61	96	0	00	29.74	30.20	07	CLR	NC			10.00	56	45	50	67	10	02	29.70	30.16	
10	OVC	180			10.00		73	61	66	66	5	08	29.76	30.22	10	CLR	NC			10.00	64	47	55	54	12	02	29.76	30.22	
13	BKN	180			10.00		80	64	70	58	7	11	29.72	30.18	13	FEW	NC			10.00	69	45	56	42	10	01	29.73	30.19	
16	OVC	150			9.00		78	64	69	62	7	08	29.69	30.15	16	CLR	NC			10.00	70	46	57	42	14	04	29.70	30.17	
19	OVC	130			7.00		71	65	67	81	0	00	29.70	30.16	19	CLR	NC			10.00	61	49	55	65	6	04	29.73	30.19	
22	OVC	036			5.00	BR	69	66	67	90	0	00	29.73	30.19	22	CLR	NC			10.00	55	49	52	80	7	06	29.78	30.25	
SUNRISE: 0557 SEP 14						SUNSET: 1823						SUNRISE: 0602 SEP 20						SUNSET: 1814											
01	OVC	130			8.00		69	63	65	81	0	00	29.73	30.19	01	CLR	NC			10.00	53	48	50	83	3	02	29.78	30.25	
04	OVC	130			6.00	BR	67	64	65	91	0	00	29.72	30.18	04	CLR	NC			10.00	50	47	48	89	3	03	29.80	30.27	
07	OVC	100			4.00	BR	67	64	65	91	7	08	29.73	30.19	07	FEW	NC			10.00	53	48	50	83	6	02	29.84	30.31	
10	OVC	035			8.00		73	64	67	74	8	11	29.77	30.23	10	SCT	NC			10.00	66	51	58	59	13	04	29.89	30.37	
13	OVC	040			10.00		76	64	68	67	8	03	29.77	30.23	13	BKN	042			10.00	68	50	58	53	15	08	29.85	30.33	
16	OVC	021			3.00	RA BR	67	65	66	93	8	15	29.74	30.20	16	SCT	NC			10.00	68	52	59	57	10	03	29.82	30.29	
19	OVC	070			10.00		65	62	63	90	7	08	29.74	30.21	19	CLR	NC			10.00	60	53	56	78	5	02	29.83	30.29	
22	OVC	033			10.00		64	62	63	93	10	05	29.75	30.21	22	CLR	NC			10.00	56	52	54	87	6	05	29.85	30.33	
SUNRISE: 0558 SEP 15						SUNSET: 1822						SUNRISE: 0603 SEP 21						SUNSET: 1813											
01	OVC	015			6.00	BR	64	62	63	93	7	03	29.71	30.17	01	CLR	NC			10.00	53	51	52	93	3	02	29.85	30.31	
04	OVC	003			7.00	-RA	64	63	63	96	3	VR	29.69	30.16	04	CLR	NC			6.00	50	49	49	96	0	00	29.82	30.29	
07	OVC	003			2.00	-RA BR	64	63	63	96	5	01	29.72	30.18	07	FEW	NC			4.00	53	52	52	96	3	02	29.86	30.34	
10	OVC	004			2.00	BR	68	66	67	93	5	02	29.75	30.21	10	CLR	NC			10.00	66	53	59	63	6	VR	29.87	30.35	
13	OVC	011			10.00		73	67	69	81	6	VR	29.71	30.17	13	FEW	NC			10.00	74	52	61	46	6	VR	29.83	30.29	
16	OVC	026			10.00		75	67	70	76	3	01	29.67	30.14	16	FEW	NC			10.00	76	52	62	43	6	01	29.79	30.26	
19	BKN	030			9.00		71	68	69	90	0	00	29.68	30.14	19	FEW	NC			10.00	62	58	60	86	0	00	29.79	30.26	
22	SCT	NC			5.00	BR	69	67	68	93	5	02	29.67	30.13	22	CLR	NC			10.00	58	56	57	93	0	00	29.80	30.27	
SUNRISE: 0559 SEP 16						SUNSET: 1820						SUNRISE: 0603 SEP 22						SUNSET: 1811											
01	SCT	NC			3.00	BR MIFG	66	65	65	96	0	00	29.66	30.12	01	CLR	NC			6.00	56	55	55	97	0	00	29.80	30.27	
04	OVC	002			0.75	BR	66	66	66	100	3	VR	29.65	30.11	04	CLR	NC			6.00	54	53	53	97	0	00	29.79	30.26	
07	VV	001			0.06	FG	66	66	66	100	5	03	29.67	30.13	07	CLR	NC			10.00	55	54	54	96	0	00	29.81	30.28	
10	OVC	007			7.00		69	66	67	90	5	06	29.68	30.14	10	CLR	NC			10.00	75	56	64	52	5	05	29.82	30.28	
13	OVC	013			9.00		77	69	72	77	5	VR	29.65	30.11	13	FEW	NC			10.00	83	48	63	30	0	00	29.79	30.25	
16	OVC	018			10.00		78	71	73	79	7	08	29.57	30.03	16	FEW	NC			10.00	85	56	67	37	6	02	29.75	30.21	
19	BKN	070			10.00		75	71	72	88	8	07	29.55	30.01	19	FEW	NC			10.00	70	63	66	79	3	05	29.74	30.21	
22	BKN	048			10.00		75	71	72	88	9	10	29.54	30.00	22	CLR	NC			9.00	63	62	62	97	0	00	29.75	30.22	
SUNRISE: 0560 SEP 17						SUNSET: 1819						SUNRISE: 0604 SEP 23						SUNSET: 1810											
01	OVC	014			9.00		75	73	74	94	7	14	29.49	29.95	01	CLR	NC			9.00	61	60	60	97	0	00	29.72	30.18	
04	BKN	013			10.00		76	73	74	91	12	15	29.42	29.88	04	CLR	NC			6.00	58	57	57	97	0	00	29.72	30.18	
07	BKN	013			10.00		77	73	74	88	12	15	29.39	29.85	07	FEW	NC			6.00	61	60	60	97	0	00	29.75	30.21	
10	BKN	024			10.00		82	73	76	74	16	16	29.32	29.78	10	SCT	NC			10.00	77	60	66	56	6	35	29.78	30.24	
13	BKN	180			10.00		85	73	77	68	21	18	29.20	29.65	13	FEW	NC			10.00	83	58	67	43	8	03	29.75	30.21	
16	OVC	060			10.00	-TSRA	72	71	71	97	12	18	29.13	29.59	16	FEW	NC			10.00	83	57	67	41	10	03	29.70	30.16	
19	OVC	026			10.00		72	71	71	97	8	18	29.12	29.57	19	FEW	NC			10.00	73	60	65	64	3	03	29.69	30.15	
22	OVC	016			2.00	-RA BR	71	70	70	96	14	21	29.11	29.57	22	CLR	NC			10.00	67	61	63	81	7	06	29.73	30.19	
SUNRISE: 0600 SEP 18						SUNSET: 1817						SUNRISE: 0605 SEP 24						SUNSET: 1808											
01	OVC	038			10.00		66	64	65	93	9	24	29.13	29.59	01	FEW	NC			5.00	63	61	62	93	0	00	29.72	30.18	
04	OVC	017			3.00	-RA BR	63	62	62	97	10	28	29.16	29.62	04	SCT	NC			4.00	62	60	61	93	0	00	29.69	30.15	
07	OVC	007			2.00	-RA BR	62	61	61	96	10	28	29.25	29.71	07	BKN	200			2.50	62	61	61	96	6	36	29.72	30.19	
10	OVC	037			10.00	-RA	62	61	61	96	6	VR	29.32	29.79	10	BKN	250			10.00	74	62	67	67	8	03	29.74	30.20	
13	OVC	040			10.00		65	62	63	90	6	29	29.37	29.84	13	BKN	200			10.00	79	59	67	50	10	06	29.70	30.16	
16	OVC	044			10.00		71	61	65	71	5	VR	29.40	29.86	16	BKN	250			10.00	78	60	67	54	8	04	29.67	30.14	
19	OVC	060			10.00																								

## OBSERVATIONS AT 3-HOURLY INTERVALS

RALEIGH/DURHAM, NC

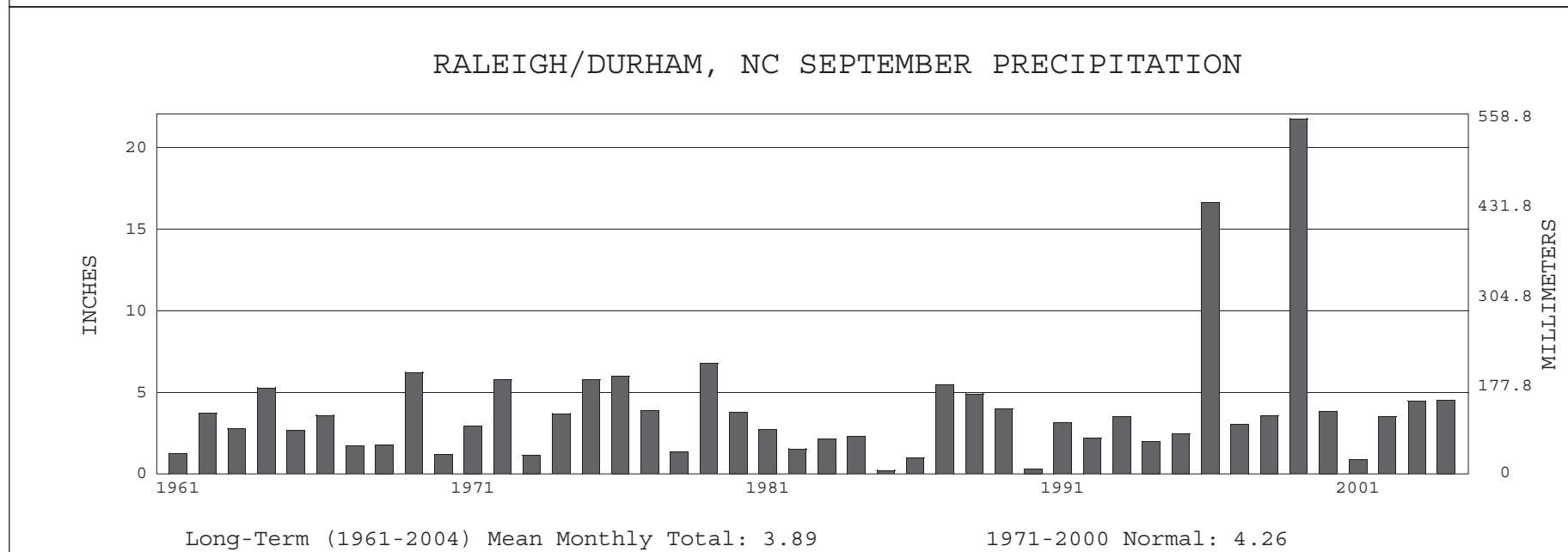
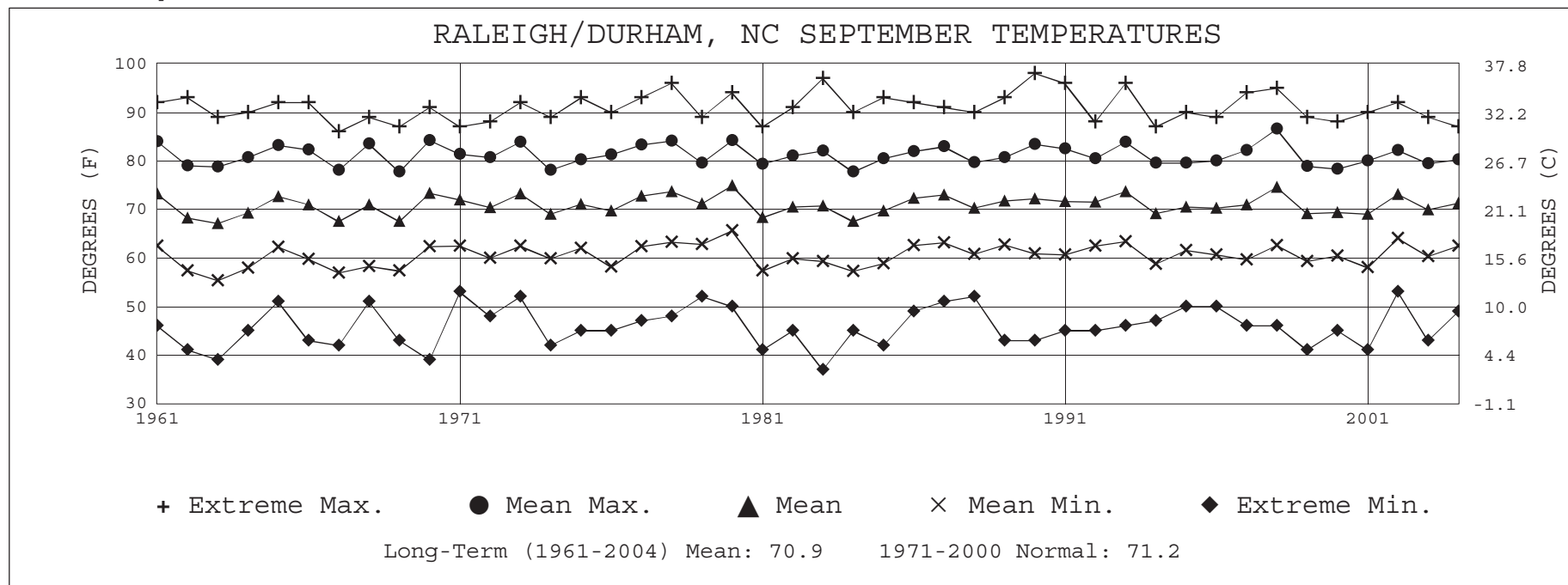
SEPTEMBER 2004

RDU

WBAN # 13722

HOUR (LST)	SKY COVER		CEILING 100'S OFF	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)		HOUR (LST)	SKY COVER		CEILING 100'S OFF	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
				OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL					OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
				SUNRISE: 0606 SEP 25 SUNSET: 1807																SUNRISE: SEP 31 SUNSET:											
01	CLR	NC				10.00		57	55	56	93	0	00	29.67	30.14																
04	CLR	NC				9.00		56	55	55	97	3	02	29.65	30.12																
07	BKN	019				8.00		58	57	57	97	5	03	29.68	30.15																
10	OVC	019				10.00		66	60	62	81	6	VR	29.70	30.17																
13	BKN	200				10.00		75	63	67	66	7	06	29.64	30.11																
16	BKN	035				10.00		79	62	68	56	6	04	29.60	30.06																
19	BKN	200				10.00		68	65	66	90	0	00	29.62	30.09																
22	CLR	NC				7.00		63	62	62	97	3	04	29.63	30.10																
SUNRISE: 0607 SEP 26 SUNSET: 1805																3-HOURLY OBSERVATION NOTES															
01	CLR	NC				10.00		61	59	60	93	6	06	29.61	30.07	Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8,															
04	BKN	032				5.00	BR	60	58	59	93	0	00	29.59	30.05	SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibilty = 8/8.															
07	FEW	NC				5.00	BR	61	60	60	97	0	00	29.61	30.08	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.															
10	BKN	200				10.00		73	61	66	66	9	05	29.63	30.09	NC= No ceiling detected.															
13	BKN	200				10.00		78	61	67	56	8	06	29.60	30.06	& = Original observation contained additional weather elements.															
16	BKN	200				10.00		79	60	67	52	8	05	29.56	30.02	See page 3 for additional notes.															
19	BKN	200				10.00		71	62	65	73	5	04	29.58	30.04																
22	BKN	085				10.00		71	62	65	73	8	07	29.59	30.05																
SUNRISE: 0607 SEP 27 SUNSET: 1804																SUMMARY BY HOUR															
01	OVC	070				10.00		67	63	64	87	7	05	29.60	30.06	HOUR (LST)	AVERAGES								RESULTANT WIND (MPH)		SPEED	DIRECTION			
04	OVC	015				10.00		68	64	66	87	10	05	29.55	30.01		CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES,HG)		VISIBILITY (MILES)	WIND SPEED (MPH)					
07	OVC	003				2.00	-RA BR	68	67	67	96	8	05	29.56	30.02																
10	OVC	004				1.25	BR	70	69	69	97	7	08	29.58	30.04																
13	OVC	004				2.00	BR	73	72	72	96	7	06	29.52	29.98																
16	OVC	026				8.00		75	72	73	90	9	03	29.46	29.92																
19	OVC	030				8.00	-RA	74	72	73	94	9	08	29.44	29.90																
22	BKN	014				10.00		75	72	73	90	12	12	29.41	29.87																
SUNRISE: 0608 SEP 28 SUNSET: 1803																															
01	OVC	012				9.00		75	73	74	94	13	12	29.34	29.80	01		66	63	64	92	29.62	30.08	7.68	4	2	8				
04	OVC	007				3.00	+RA BR	75	73	74	94	13	11	29.23	29.69	02		65	63	64	92	29.61	30.07	7.04	4	2	9				
07	OVC	020				10.00		75	71	72	88	15	15	29.19	29.65	03		65	63	63	93	29.60	30.06	6.64	5	2	7				
10	OVC	015				3.00	-RA BR	72	69	70	91	14	18	29.15	29.61	04		65	63	63	93	29.60	30.06	6.21	4	2	7				
13	OVC	008				2.50	-RA BR	71	70	70	96	15	21	29.13	29.59	05		64	63	63	94	29.61	30.07	5.48	4	2	5				
16	OVC	006				3.00	-RA BR	73	71	72	94	12	25	29.14	29.60	06		64	63	63	94	29.62	30.08	5.13	5	2	5				
19	OVC	055				10.00		72	68	69	87	5	25	29.27	29.73	07		65	63	64	94	29.63	30.10	5.25	5	2	6				
22	CLR	NC				10.00		69	63	65	81	5	VR	29.35	29.81	08		68	64	66	88	29.64	30.10	6.95	6	3	6				
SUNRISE: 0609 SEP 29 SUNSET: 1801																															
01	CLR	NC				9.00		64	63	63	96	0	00	29.38	29.84	09		71	64	67	81	29.65	30.11	7.88	7	4	5				
04	CLR	NC				4.00	BR MIFG	61	61	61	100	0	00	29.38	29.84	10		73	64	67	75	29.65	30.11	8.31	8	5	7				
07	SCT	NC				3.00	BR MIFG	61	60	60	97	0	00	29.45	29.92	11		75	64	68	70	29.65	30.11	9.07	8	5	8				
10	SCT	NC				10.00		72	61	65	69	6	06	29.49	29.95	12		77	64	68	66	29.63	30.10	9.30	7	4	9				
13	BKN	250				10.00		79	61	68	54	3	VR	29.47	29.93	13		78	63	69	63	29.62	30.08	9.25	8	4	8				
16	BKN	200				10.00		79	60	67	52	6	25	29.45	29.91	14		78	64	69	63	29.60	30.06	9.63	7	4	7				
19	BKN	130				7.00		68	65	66	90	0	00	29.47	29.94	15		78	64	69	63	29.59	30.05	8.90	8	4	7				
22	BKN	130				5.00	BR	65	63	64	93	3	03	29.52	29.98	16		77	64	69	65	29.59	30.05	9.20	7	4	6				
SUNRISE: 0610 SEP 30 SUNSET: 1760																															
01	SCT	NC				6.00	BR	66	64	65	93	7	09	29.52	29.98	17		76	64	69	67	29.59	30.05	9.60	8	4	6				
04	BKN	120				4.00	BR	64	63	63	96	3	08	29.52	29.98	18		74	65	68	75	29.59	30.05	9.20	6	3	6				
07	VV	001				0.00	FG	65	65	65	100	0	00	29.57	30.04	19		71	65	67	83	29.60	30.06	9.37	4	2	6				
10	OVC	005				3.00	BR	68	66	67	93	0	00	29.61	30.07	20		70	65	67	85	29.61	30.07	8.97	5	3	8				
13	BKN	060				7.00		76	66	69	72	3	VR	29.58	30.04	21		69	65	66	87	29.62	30.08	8.70	5	2	8				
16	SCT	NC				7.00		77	66	70	69	6	02	29.56	30.03	22		68	64	65	88	29.62	30.09	8.53	5	4	8				
19	CLR	NC				6.00	BR	69	66	67	90	5	05	29.59	30.05	23		67	64	65	88	29.63	30.09	8.40	5	3	8				
22	SCT	NC				5.00	BR	68	65	66	90	6	05	29.63	30.09	24		66	63	64	90	29.62	30.08	8.13	5	3	7				







SEPTEMBER 2004

RALEIGH/DURHAM, NC

# LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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