



AUGUST 2005

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

RICHMOND, VA

RICHMOND INTL AIRPORT (RIC)
 Lat: 37°30' N Long: 77°19' W Elev (Ground): 164 Feet
 Time Zone: EASTERN WBAN: 13740 ISSN #:0198-537X

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	88	69	79	1	69	72	0	14	FG+ BR			0.0	0.00	29.94	30.13	3.6	04	4.0	15	02	13	03	01	
02	93	70	82	4	70	74	0	17	BR HZ			0.0	0.00	29.86	30.05	0.7	03	3.5	14	02	13	03	02	
03	94	75	85	7	71	75	0	20	BR HZ			0.0	0.00	29.82	30.01	4.9	02	5.3	21	03	15	02	03	
04	95	72	84	7	70	74	0	19	BR HZ			0.0	0.00	29.89	30.07	2.2	13	3.1	13	13	9	13	04	
05	96	74	85	8	72	76	0	20	BR HZ			0.0	0.00	29.91	30.10	4.1	18	4.9	17	15	13	18	05	
06	92	71	82	5	71	73	0	17	TSRA BR HZ			0.0	0.03	29.94	30.12	1.4	03	3.5	40*	34	29	35	06	
07	89	70	80	3	69	72	0	15	BR HZ			0.0	0.00	29.96	30.15	2.4	21	3.1	18	19	16	20	07	
08	89	72	81	4	71	73	0	16	RA FG BR			0.0	0.23	29.97	30.15	2.1	12	3.0	37	14	29*	14	08	
09	82	73	78	1	72	73	0	13	RA BR			0.0	0.12	29.91	30.09	2.4	03	3.5	15	02	12	05	09	
10	89	71	80	3	71	74	0	15	BCFG BR			0.0	0.00	29.83	30.01	0.5	01	1.2	9	28	8	36	10	
11	96	72	84	7	71	75	0	19	BR HZ			0.0	0.00	29.82	30.00	0.7	20	1.9	12	33	9	33	11	
12	98*	74	86	9	71	76	0	21	BR HZ			0.0	0.00	29.82	30.00	2.6	18	3.3	15	16	13	15	12	
13	97	75	86	10	73	77	0	21	BR HZ			0.0	0.00	29.78	29.96	4.5	18	5.0	20	21	12	21	13	
14	96	71	84	8	74	77	0	19	BR HZ			0.0	0.00	29.77	29.95	4.6	19	4.8	21	17	17	17	14	
15	97	75	86*	10	73	76	0	21	TS TSRA RA BR HZ			0.0	1.01	29.86	30.04	4.5	03	6.3	29	33	21	33	15	
16	91	74	83	7	75	77	0	18	TSRA RA FG+ BR HZ			0.0	0.09	29.85	30.04	1.0	13	2.5	13	08	12	08	16	
17	87	71	79	3	68	71	0	14	BR			0.0	0.00	29.83	30.02	5.6	02	6.2	17	07	14	02	17	
18	87	67	77	1	66	70	0	12	RA BCFG			0.0	T	29.87	30.06	3.7	17	4.7	16	17	12	17	18	
19	82	73	78	2	73	74	0	13	RA FG+ BR HZ			0.0	0.99	29.84	30.03	3.1	14	4.3	14	16	12	14	19	
20	92	74	83	7	76	78	0	18	FG+ BR HZ			0.0	0.00	29.82	30.01	2.3	18	2.6	10	14	9	14	20	
21	95	74	85	9	76	78	0	20	RA BR HZ			0.0	T	29.73	29.91	1.0	13	4.4	22	01	17	01	21	
22	91	70	81	5	64	70	0	16	BR			0.0	0.00	29.73	29.91	2.5	33	3.7	17	26	12	28	22	
23	82	71	77	1	67	70	0	12	RA BR			0.0	0.01	29.80	29.99	2.5	02	2.8	13	02	12	02	23	
24	85	67	76	0	66	69	0	11	FG+ BR			0.0	0.00	29.92	30.11	5.5	05	6.0	18	05	13	02	24	
25	83	62	73	-3	59	65	0	8				0.0	0.00	30.04	30.22	3.3	06	4.4	15	08	13	05	25	
26	81	61*	71*	-5	61	65	0	6				0.0	0.00	29.93	30.12	2.9	12	3.5	13	13	10	13	26	
27	80	67	74	-1	68	70	0	9	RA			0.0	0.05	29.81	30.00	3.3	12	4.1	14	14	12	14	27	
28	88	73	81	6	71	74	0	16	RA BR			0.0	0.03	29.78	29.96	2.3	08	3.5	15	08	12	08	28	
29	90	69	80	5	71	74	0	15	BR			0.0	0.00	29.78	29.96	4.1	12	4.4	13	13	10	12	29	
30	90	75	83	8	71	75	0	18	BR HZ			0.0	0.00	29.65	29.83	8.9	15	9.3	25	18	21	18	30	
31	91	76	84	9	70	74	0	19				0.0	0.00	29.51	29.69	12.4	23	14.4	32	24	28	24	31	

89.9	71.2	80.6	■ ■	70.0	73.3	0.0	15.9	< MONTHLY AVERAGES	TOTALS-->	0.0	2.56	29.84	30.02	0.5	14	4.4	<-- MONTHLY AVERAGES					
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4.2	4.4	4.3	■ ■	-----DEPARTURE FROM NORMAL----->						-1.62	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3													
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DEGREE DAYS								GREATEST 24-HR PRECIPITATION: 1.03 DATE: 15-16				SEA LEVEL PRESSURE DATE TIME			
MONTHLY TOTAL DEPARTURE				SEASON TO DATE TOTAL DEPARTURE				GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM MINIMUM : 30.27 25 1054 : 29.63 31 1454			
HEATING: 0		-1		0		-1		NUMBER OF DAYS WITH =>		MAXIMUM TEMP ≥ 90: 17		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH: 9	
COOLING: 492		125		1443		235				MAXIMUM TEMP ≤ 32: 0		MINIMUM TEMP ≤ 0: 0		PRECIPITATION ≥ 0.10 INCH: 4	
										THUNDERSTORMS: 3		HEAVY FOG: 5		SNOWFALL ≥ 1.0 INCH: 0	

AUGUST 2005 RICHMOND, VA

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

AUGUST 2005

RIC

WBAN # 13740

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												04		0.00		
05													05												05		0.00		
06													06					0.02	0.01						06		0.03		
07													07												07		0.00		
08													08			0.12	0.11								08	T	0.23		
09						0.01	T	T	T	T	0.10	0.01	09												09		0.12		
10													10												10		0.00		
11													11												11		0.00		
12													12												12		0.00		
13													13												13		0.00		
14													14												14		0.00		
15													15						0.47	T	0.44	0.09	0.01	15		1.01			
16													16												16		0.09		
17													17					0.02	0.07		T	T		17		0.00			
18													18												18	T	0.00		
19	T							0.12	0.52	0.22	0.13	19												19		0.99			
20													20												20		0.00		
21													21			T	T							21		T			
22													22											22		0.00			
23													23	T										23		0.01			
24													24											24		0.00			
25													25											25		0.00			
26													26											26		0.00			
27					T	0.01	0.01	T	0.02	0.01		27												27		0.05			
28							0.01	0.02	T			28												28		0.03			
29												29												29		0.00			
30												30												30		0.00			
31												31												31		0.00			

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.27	.38	.42	.46	.47	.47	.56	.65	.73	.80	.99	.99
Ending Date	15	15	15	15	15	15	19	19	19	19	19	19
Ending Time (Hour/Min)	1925	1929	1930	1930	1934	1934	0848	0906	0925	0942	1009	1009

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

RICHMOND, VA AUGUST 2005

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							.25	10.00	
02							5.00	10.00	
03							4.00	10.00	
04							4.00	10.00	
05							2.50	7.00	
06							3.00	7.00	
07							3.00	10.00	
08							.50	10.00	
09							2.50	10.00	
10							4.00	10.00	
11							2.50	10.00	
12							2.50	7.00	
13							2.50	8.00	
14							3.00	6.00	
15							4.00	10.00	
16							.25	7.00	
17							3.00	10.00	
18							7.00	10.00	
19							.50	10.00	
20							.25	8.00	
21							1.00	10.00	
22							6.00	10.00	
23							4.00	10.00	
24							.25	10.00	
25							7.00	10.00	
26							10.00	10.00	
27							9.00	10.00	
28							3.00	10.00	
29							1.00	10.00	
30							2.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							3.47	9.35	
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 4 19 5									

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

AUGUST 2005

RIC

WBAN # 13740

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	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: 0513				AUG 01				SUNSET: 1918				SUNRISE: 0519				AUG 07				SUNSET: 1912							
01	SCT	NC		6.00	BR	71	70	70	96	0	00	29.95	30.14	01	BKN	150		5.00	BR	71	68	69	90	0	00	29.94	30.12
04	SCT	NC		4.00	BR	69	68	68	96	5	36	29.95	30.14	04	BKN	250		4.00	BR	71	69	70	94	0	00	29.95	30.13
07	VV	002		0.25	FG	71	71	71	100	7	02	29.97	30.16	07	OVC	250		3.00	BR	73	71	72	94	5	36	29.98	30.17
10	BKN	031		10.00		79	71	74	77	9	05	29.99	30.18	10	OVC	250		6.00	HZ	80	71	74	74	0	00	30.01	30.19
13	SCT	NC		10.00		86	69	74	57	8	05	29.95	30.14	13	OVC	250		10.00		87	69	75	55	7	22	29.97	30.16
16	FEW	NC		10.00		88	66	73	48	7	05	29.91	30.10	16	BKN	250		10.00		88	68	74	52	3	18	29.94	30.12
19	CLR	NC		10.00		82	68	73	63	0	00	29.90	30.09	19	BKN	150		10.00		83	69	74	63	13	19	29.94	30.13
22	CLR	NC		10.00		75	70	72	84	3	16	29.92	30.11	22	BKN	150		10.00		77	68	71	74	5	17	29.97	30.15
SUNRISE: 0514				AUG 02				SUNSET: 1917				SUNRISE: 0519				AUG 08				SUNSET: 1911							
01	CLR	NC		8.00		73	70	71	90	0	00	29.90	30.09	01	BKN	150		10.00		75	70	72	84	0	00	29.96	30.15
04	FEW	NC		7.00		71	68	69	90	0	00	29.88	30.06	04	BKN	150		8.00		74	70	71	88	0	00	29.97	30.15
07	SCT	NC		6.00	BR	74	70	71	88	3	23	29.92	30.11	07	OVC	150		6.00	BR	75	71	72	88	0	00	29.98	30.17
10	SCT	NC		7.00		85	70	75	61	3	VR	29.91	30.10	10	OVC	150		10.00		83	71	75	67	5	19	30.00	30.19
13	SCT	NC		9.00		91	69	76	49	9	02	29.86	30.05	13	OVC	150		10.00		86	70	75	59	7	07	29.97	30.16
16	FEW	NC		9.00		92	70	77	49	6	08	29.82	30.00	16	OVC	027		0.50	+RA FG	73	70	71	90	16	14	29.96	30.15
19	CLR	NC		7.00		85	74	77	70	3	VR	29.80	29.99	19	OVC	095		10.00		75	71	72	88	0	00	29.94	30.13
22	CLR	NC		5.00	HZ	79	73	75	82	0	00	29.83	30.01	22	BKN	100		7.00		74	72	73	94	3	12	29.95	30.14
SUNRISE: 0515				AUG 03				SUNSET: 1916				SUNRISE: 0520				AUG 09				SUNSET: 1910							
01	CLR	NC		5.00	HZ	77	72	74	85	0	00	29.82	30.00	01	OVC	075		10.00		74	72	73	94	3	13	29.94	30.13
04	CLR	NC		4.00	HZ	77	72	74	85	0	00	29.80	29.98	04	BKN	075		10.00		74	71	72	91	0	00	29.92	30.11
07	CLR	NC		6.00	HZ	79	70	73	74	9	36	29.82	30.01	07	OVC	060		8.00	-RA	75	73	74	94	0	00	29.94	30.12
10	CLR	NC		10.00		87	71	76	59	10	01	29.85	30.03	10	OVC	013		7.00	-RA	77	73	74	88	7	30	29.94	30.13
13	FEW	NC		10.00		92	69	76	47	12	36	29.82	30.01	13	OVC	009		10.00		78	73	75	85	7	02	29.91	30.10
16	FEW	NC		10.00		93	70	77	47	10	03	29.79	29.97	16	BKN	150		10.00		80	73	75	79	7	05	29.88	30.07
19	CLR	NC		7.00		87	73	77	63	0	00	29.80	29.99	19	BKN	120		10.00		78	72	74	82	3	08	29.86	30.05
22	CLR	NC		6.00	HZ	79	74	75	85	5	12	29.84	30.02	22	SCT	NC		10.00		74	71	72	91	0	00	29.86	30.05
SUNRISE: 0516				AUG 04				SUNSET: 1915				SUNRISE: 0521				AUG 10				SUNSET: 1908							
01	CLR	NC		6.00	BR	77	73	74	88	0	00	29.84	30.03	01	OVC	005		10.00		73	72	72	96	5	35	29.86	30.05
04	CLR	NC		4.00	BR	75	72	73	90	0	00	29.86	30.04	04	CLR	NC		8.00		72	70	71	94	0	00	29.84	30.03
07	CLR	NC		5.00	HZ	78	73	75	85	3	04	29.90	30.09	07	BKN	250		8.00	BCFG	75	71	72	88	0	00	29.86	30.05
10	FEW	NC		7.00		89	70	76	53	0	00	29.92	30.11	10	BKN	250		10.00		83	70	74	65	3	06	29.85	30.04
13	FEW	NC		10.00		92	65	74	41	5	VR	29.90	30.09	13	OVC	037		10.00		85	70	75	61	0	00	29.83	30.01
16	SCT	NC		10.00		94	61	72	33	7	12	29.87	30.05	16	SCT	NC		10.00		89	71	77	55	0	00	29.78	29.96
19	SCT	NC		9.00		86	69	74	57	8	14	29.87	30.05	19	SCT	NC		10.00		84	72	76	67	0	00	29.78	29.97
22	CLR	NC		7.00		77	71	73	82	6	13	29.91	30.09	22	FEW	NC		9.00		78	73	75	85	0	00	29.82	30.01
SUNRISE: 0517				AUG 05				SUNSET: 1914				SUNRISE: 0522				AUG 11				SUNSET: 1907							
01	CLR	NC		6.00	BR	76	72	73	88	0	00	29.92	30.10	01	CLR	NC		8.00		75	72	73	90	0	00	29.79	29.98
04	CLR	NC		4.00	BR	75	72	73	90	0	00	29.92	30.11	04	CLR	NC		7.00		73	71	72	94	5	18	29.79	29.98
07	CLR	NC		3.00	BR	77	74	75	90	5	19	29.94	30.13	07	CLR	NC		2.50	BR	77	73	74	88	0	00	29.83	30.02
10	CLR	NC		4.00	HZ	89	74	78	61	8	22	29.95	30.13	10	CLR	NC		6.00	HZ	87	75	78	67	6	VR	29.85	30.03
13	FEW	NC		7.00		94	70	77	46	6	14	29.91	30.09	13	SCT	NC		9.00		93	68	76	44	7	23	29.81	29.99
16	SCT	NC		6.00	HZ	94	69	77	44	10	17	29.85	30.04	16	SCT	NC		7.00		95	67	76	40	5	36	29.79	29.98
19	SCT	NC		5.00	HZ	85	71	75	63	6	17	29.86	30.05	19	SCT	NC		7.00		85	73	77	68	3	17	29.80	29.98
22	FEW	NC		5.00	HZ	81	73	75	77	6	20	29.93	30.11	22	SCT	NC		7.00		79	73	75	82	0	00	29.84	30.02
SUNRISE: 0518				AUG 06				SUNSET: 1913				SUNRISE: 0523				AUG 12				SUNSET: 1906							
01	OVC	150		6.00	HZ	79	71	74	77	0	00	29.92	30.10	01	CLR	NC		5.00	BR	77	73	74	88	0	00	29.84	30.03
04	CLR	NC		5.00	HZ	75	69	71	82	0	00	29.92	30.10	04	FEW	NC		4.00	BR	76	72	73	88	0	00	29.83	30.01
07	CLR	NC		5.00	HZ	76	71	73	85	0	00	29.95	30.14	07	FEW	NC		3.00	BR	77	74	75	90	0	00	29.85	30.04
10	CLR	NC		6.00	HZ	85	72	76	65	0	00	29.95	30.14	10	CLR	NC		6.00	HZ	91	70	76	50	5	21	29.86	30.05
13	SCT	NC		5.00	HZ	90	73	78	58	5	VR	29.93	30.11	13	SCT	NC		6.00	HZ	96	66	75	37	0	00	29.82	30.01
16	BKN	150		4.00	HZ	87	73	77	63	7	12	29.89	30.07	16	FEW	NC		6.00	HZ	96	67	76	39	6	16	29.78	29.96
19	OVC	150		7.00		72	68	69	87	0	00	29.92	30.11	19	FEW	NC		5.00	HZ	89	72	77	57	3	17	29.77	29.96
22	BKN	150		6.00	BR	71	68	69	90	6	32	29.97	30.15	22	CLR	NC		5.00	HZ	81	74	76	79	6	13	29.82	30.00

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

AUGUST 2005

RIC

WBAN # 13740

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)	
	OBSERVATION TIME (LST)	EFF CLD AMT Ok/as		OBSERVATION TIME (LST)	EFF CLD AMT Ok/as			DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		OBSERVATION TIME (LST)	EFF CLD AMT Ok/as		OBSERVATION TIME (LST)	EFF CLD AMT Ok/as			DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0524								AUG 13				SUNSET: 1905				SUNRISE: 0529								AUG 19				SUNSET: 1856			
01	CLR	NC			5.00	HZ		79	74	75	85	5	18	29.81	29.99	01	OVC	070			10.00			76	68	71	77	7	15	29.85	30.03
04	CLR	NC			4.00	BR		77	73	74	88	6	20	29.78	29.97	04	OVC	050			10.00			74	69	71	85	5	13	29.84	30.03
07	CLR	NC			2.50	BR		78	74	75	87	5	20	29.80	29.98	07	OVC	045			10.00			75	70	72	84	6	13	29.85	30.04
10	CLR	NC			4.00	HZ		89	75	79	63	6	20	29.82	30.00	10	OVC	009			0.75	+RA BR		74	72	73	94	8	21	29.87	30.06
13	SCT	NC			6.00	HZ		96	68	77	40	5	22	29.77	29.96	13	OVC	013			3.00	BR		77	74	75	90	5	18	29.85	30.03
16	BKN	250			5.00	HZ		95	71	78	46	5	12	29.72	29.90	16	OVC	150			4.00	HZ		81	75	77	82	3	08	29.80	29.98
19	BKN	250			7.00			89	72	77	57	8	16	29.72	29.91	19	BKN	150			5.00	BR		78	75	76	90	3	06	29.82	30.01
22	SCT	NC			8.00			82	73	76	74	6	18	29.78	29.96	22	OVC	020			2.50	BR		76	75	75	97	0	00	29.84	30.03
SUNRISE: 0524								AUG 14				SUNSET: 1904				SUNRISE: 0530								AUG 20				SUNSET: 1855			
01	SCT	NC			6.00	HZ		78	73	75	85	6	19	29.76	29.94	01	VV	001			0.25	FG		75	74	74	96	0	00	29.83	30.02
04	BKN	250			5.00	BR		76	72	73	88	0	00	29.76	29.95	04	OVC	001			0.50	FG		74	73	73	97	0	00	29.82	30.01
07	SCT	NC			3.00	BR		78	75	76	90	5	19	29.79	29.98	07	FEW	NC			2.00	BR		77	75	76	94	0	00	29.85	30.04
10	FEW	NC			5.00	HZ		90	77	81	65	8	19	29.79	29.98	10	BKN	025			6.00	HZ		85	77	79	77	0	00	29.87	30.06
13	SCT	NC			5.00	HZ		95	74	80	51	6	22	29.76	29.94	13	SCT	NC			8.00			90	74	79	59	5	22	29.83	30.02
16	SCT	NC			6.00	HZ		94	72	79	50	8	15	29.74	29.92	16	SCT	NC			5.00	HZ		92	75	80	58	3	VR	29.78	29.97
19	OVC	200			4.00	HZ		84	73	76	70	7	19	29.76	29.94	19	SCT	NC			6.00	HZ		85	77	79	77	6	20	29.77	29.96
22	BKN	250			5.00	HZ		82	73	76	75	0	00	29.78	29.96	22	BKN	250			4.00	HZ		82	77	78	85	8	14	29.79	29.97
SUNRISE: 0525								AUG 15				SUNSET: 1903				SUNRISE: 0530								AUG 21				SUNSET: 1853			
01	CLR	NC			5.00	HZ		79	74	75	85	0	00	29.79	29.97	01	FEW	NC			3.00	BR		79	77	78	94	5	20	29.76	29.94
04	CLR	NC			5.00	HZ		78	73	75	85	0	00	29.81	30.00	04	BKN	003			1.50	BR		78	77	77	97	5	20	29.72	29.90
07	CLR	NC			8.00			80	71	74	74	12	01	29.85	30.03	07	FEW	NC			3.00	BR		80	76	77	87	5	23	29.73	29.92
10	CLR	NC			10.00			90	72	77	56	10	05	29.89	30.07	10	FEW	NC			9.00			91	77	81	64	7	01	29.75	29.94
13	FEW	NC			10.00			94	72	78	49	6	VR	29.87	30.05	13	BKN	045			10.00			94	74	80	52	0	00	29.73	29.91
16	FEW	NC			10.00			95	72	79	47	8	05	29.83	30.02	16	SCT	NC			10.00			92	76	80	60	5	09	29.69	29.87
19	SCT	NC			10.00			88	73	77	61	10	06	29.85	30.04	19	SCT	NC			8.00			83	76	78	79	3	16	29.71	29.89
22	OVC	016			4.00	TSRA BR		76	74	75	94	8	18	29.93	30.12	22	FEW	NC			7.00			79	74	75	85	0	00	29.71	29.89
SUNRISE: 0526								AUG 16				SUNSET: 1860				SUNRISE: 0531								AUG 22				SUNSET: 1852			
01	BKN	150			5.00	BR		76	74	75	94	0	00	29.89	30.08	01	CLR	NC			6.00	BR		75	73	74	94	0	00	29.71	29.90
04	OVC	005			4.00	BR		75	74	74	96	0	00	29.88	30.07	04	CLR	NC			10.00			73	67	69	81	6	32	29.71	29.90
07	OVC	002			0.50	FG		75	75	75	100	0	00	29.90	30.09	07	SCT	NC			10.00			75	67	70	76	0	00	29.72	29.91
10	BKN	030			7.00			81	74	76	79	5	16	29.90	30.09	10	SCT	NC			10.00			86	63	71	46	8	03	29.75	29.93
13	BKN	250			4.00	HZ		87	76	79	70	7	19	29.85	30.04	13	BKN	250			10.00			89	60	70	38	0	00	29.74	29.92
16	BKN	055			5.00	HZ		89	76	80	65	8	03	29.77	29.95	16	BKN	250			10.00			89	59	70	36	6	26	29.69	29.88
19	OVC	013			2.00	TSRA HZ		82	77	78	85	6	35	29.81	29.99	19	BKN	250			10.00			82	61	69	49	0	00	29.69	29.88
22	OVC	150			5.00	-RA BR		77	75	76	94	0	00	29.82	30.01	22	OVC	150			10.00			78	65	70	64	0	00	29.72	29.91
SUNRISE: 0527								AUG 17				SUNSET: 1859				SUNRISE: 0532								AUG 23				SUNSET: 1851			
01	OVC	004			3.00	BR		76	75	75	97	0	00	29.81	30.00	01	OVC	150			10.00			75	66	69	74	8	02	29.76	29.95
04	OVC	060			9.00			72	69	70	91	9	01	29.80	29.98	04	SCT	NC			10.00			71	63	66	76	0	00	29.76	29.95
07	OVC	007			6.00	BR		72	69	70	91	8	02	29.83	30.02	07	OVC	150			10.00	-RA		72	63	66	73	8	02	29.79	29.98
10	BKN	018			10.00			78	70	73	76	8	04	29.85	30.04	10	OVC	150			10.00			72	66	68	82	7	36	29.83	30.02
13	SCT	NC			10.00			84	67	73	57	7	35	29.84	30.02	13	OVC	150			10.00			74	68	70	82	0	00	29.82	30.01
16	SCT	NC			10.00			87	64	72	46	9	01	29.80	29.99	16	OVC	250			10.00			80	69	73	69	0	00	29.79	29.98
19	FEW	NC			10.00			81	65	71	58	0	00	29.83	30.01	19	BKN	150			9.00			77	71	73	82	0	00	29.79	29.98
22	CLR	NC			10.00			74	67	69	79	0	00	29.86	30.05	22	BKN	150			6.00	BR		75	71	72	88	0	00	29.82	30.01
SUNRISE: 0528								AUG 18				SUNSET: 1857				SUNRISE: 0533								AUG 24				SUNSET: 1849			
01	CLR	NC			10.00			70	66	67	87	0	00	29.86	30.05	01	FEW	NC			4.00	BR		72	70	71	94	6	02	29.83	30.02
04	CLR	NC			8.00			70	66	67	87	0	00	29.86	30.04	04	CLR	NC			2.50	BR		69	68	68	96	5	02	29.83	30.02
07	FEW	NC			9.00	BCFG		73	67	69	81	6	26	29.89	30.08	07	BKN	250			1.50	BR		70	69	69	97	8	03	29.88	30.06
10	SCT	NC			10.00			82	66	71	58	5	15	29.90	30.09	10	SCT	NC			10.00			80	65	70	60	6	06	29.92	30.11
13	BKN	200			10.00			85	64	71	50	12	17	29.88	30.07	13	BKN	250			10.00			84	64	71	51	9	07	29.91	30.10
16	BKN	150			10.00			84	65	71	53	7	18	29.85	30.03	16	SCT	NC			10.00			83	64	71	53	9	03	29.91	30.10
19	OVC	090			10.00			80	67	71	64	8	12	29.84	30.03	19	FEW	NC			10.00			76	64	68	67	7	09	29.96	30.15
22	OVC	070			10.00			77	67	70	71	6	15	29.87	30.06	22	CLR	NC			10.00			70	63	66	79	6	06	30.01	30.20

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

AUGUST 2005

RIC

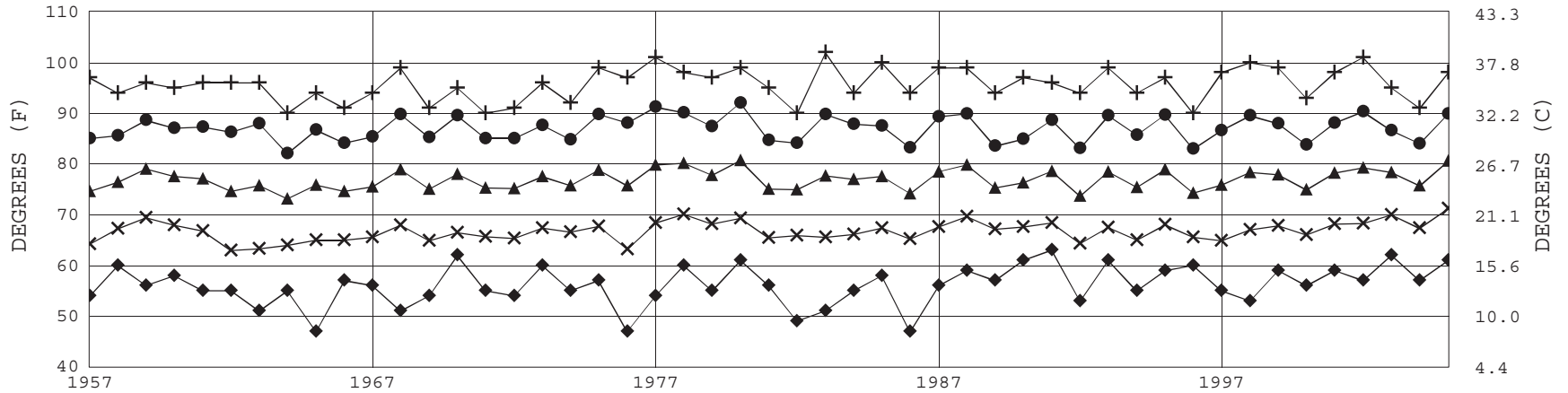
WBAN # 13740

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: 0534								AUG 25								SUNSET: 1848								SUNRISE: 0539								AUG 31								SUNSET: 1839							
01	CLR	NC				10.00		66	61	63	84	7	03	30.02	30.21	01	BKN	021					10.00		81	77	78	88	16	18	29.51	29.68															
04	CLR	NC				10.00		65	60	62	84	6	34	30.03	30.22	04	FEW	NC					10.00		80	75	77	85	14	18	29.48	29.66															
07	FEW	NC				8.00		68	62	64	81	0	00	30.06	30.25	07	SCT	NC					10.00		81	74	76	79	17	20	29.49	29.67															
10	SCT	NC				10.00		79	58	66	49	9	05	30.08	30.27	10	SCT	NC					10.00		87	70	75	57	21	23	29.48	29.65															
13	BKN	250				10.00		80	56	65	44	7	10	30.06	30.25	13	BKN	060					10.00		90	67	74	47	21	24	29.47	29.65															
16	BKN	250				10.00		82	56	66	41	8	11	30.01	30.20	16	OVC	070					10.00		90	67	74	47	21	25	29.47	29.65															
19	BKN	250				10.00		74	60	65	62	6	11	29.99	30.18	19	SCT	NC					10.00		85	66	72	53	8	28	29.55	29.72															
22	SCT	NC				10.00		68	60	63	76	0	00	30.02	30.21	22	FEW	NC					10.00		80	67	71	64	0	00	29.63	29.82															
SUNRISE: 0535								AUG 26								SUNSET: 1847								3-HOURLY OBSERVATION NOTES																							
01	FEW	NC				10.00		64	59	61	84	0	00	30.00	30.19	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.																															
04	BKN	150				10.00		63	58	60	84	0	00	29.98	30.17	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																															
07	BKN	250				10.00		67	61	63	81	0	00	29.98	30.17	NC= No ceiling detected.																															
10	OVC	150				10.00		77	63	68	62	3	17	29.96	30.15	& = Original observation contained additional weather elements.																															
13	OVC	250				10.00		80	61	68	52	5	10	29.93	30.12	See page 3 for additional notes.																															
16	OVC	130				10.00		77	63	68	62	5	11	29.88	30.07																																
19	OVC	130				10.00		73	62	66	69	8	10	29.87	30.06																																
22	BKN	120				10.00		70	63	66	79	0	00	29.87	30.06																																
SUNRISE: 0535								AUG 27								SUNSET: 1845																															
01	BKN	140				10.00		67	64	65	91	0	00	29.83	30.02																																
04	OVC	110				10.00		69	64	66	84	0	00	29.81	30.00																																
07	OVC	100				9.00		69	67	68	93	0	00	29.84	30.03																																
10	OVC	080				10.00		71	67	68	87	5	08	29.85	30.03																																
13	OVC	090				10.00		78	67	71	69	8	12	29.82	30.01																																
16	OVC	085				10.00		79	69	72	72	7	12	29.78	29.97																																
19	OVC	070				10.00		77	71	73	82	10	14	29.76	29.95																																
22	OVC	110				10.00		75	71	72	88	0	00	29.78	29.97																																
SUNRISE: 0536								AUG 28								SUNSET: 1844																															
01	BKN	100				10.00		74	71	72	91	5	14	29.76	29.95																																
04	BKN	075				10.00		73	71	72	94	0	00	29.74	29.93																																
07	OVC	031				3.00	RA BR	74	72	73	94	0	00	29.79	29.98																																
10	BKN	150				10.00		80	73	75	79	3	36	29.80	29.99																																
13	BKN	250				10.00		86	71	76	61	5	VR	29.78	29.96																																
16	BKN	250				10.00		87	71	76	59	7	05	29.74	29.93																																
19	SCT	NC				10.00		80	72	75	76	7	11	29.76	29.94																																
22	CLR	NC				10.00		76	71	73	85	0	00	29.79	29.98																																
SUNRISE: 0537								AUG 29								SUNSET: 1842																															
01	CLR	NC				10.00		73	70	71	90	0	00	29.79	29.98																																
04	CLR	NC				9.00		70	69	69	97	0	00	29.78	29.97																																
07	BKN	250				1.00	BR	72	71	71	97	0	00	29.81	29.99																																
10	BKN	250				10.00		84	70	74	63	5	09	29.81	30.00																																
13	BKN	250				10.00		87	68	74	53	7	11	29.78	29.97																																
16	SCT	NC				10.00		89	71	77	55	7	12	29.74	29.92																																
19	BKN	250				10.00		81	72	75	74	8	13	29.75	29.94																																
22	OVC	070				10.00		79	74	75	85	5	13	29.77	29.95																																
SUNRISE: 0538								AUG 30								SUNSET: 1841																															
01	OVC	150				10.00		77	74	75	90	6	14	29.74	29.93																																
04	OVC	150				10.00		75	56	64	52	5	14	29.71	29.90																																
07	OVC	004				2.00	BR	77	75	76	94	3	18	29.73	29.92																																
10	OVC	150				10.00		84	75	78	74	8	14	29.72	29.91																																
13	OVC	200				10.00		87	74	78	65	9	15	29.67	29.86																																
16	OVC	200				10.00		89	74	79	62	12	14	29.59	29.77																																
19	BKN	200				10.00		84	77	79	80	9	12	29.56	29.74																																
22	BKN	250				10.00		82	76	78	82	13	17	29.55	29.74																																

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)	DIRECTION	SPEED	DIRECTION
							STATION	SEA LEVEL					
01			75	71	72	89	29.84	30.02	7.17	2	1	14	
02			74	70	71	87	29.83	30.02	6.80	2	0	0	
03			73	69	71	88	29.83	30.01	6.70	2	1	18	
04			73	69	70	88	29.83	30.02	6.69	2	0	0	
05			73	69	70	89	29.84	30.02	6.19	2	0	0	
06			73	69	70	89	29.85	30.04	5.48	3	1	6	
07			75	71	72	88	29.86	30.04	5.30	4	0	0	
08			78	71	73	81	29.86	30.05	6.69	5	0	0	
09			81	71	74	74	29.87	30.05	8.02	5	1	3	
10			83	71	74	67	29.87	30.06	8.09	6	1	9	
11			85	70	75	62	29.86	30.05	8.11	6	0	0	
12			86	69	75	58	29.85	30.04	8.58	6	1	16	
13			87	69	75	55	29.84	30.03	8.77	6	1	14	
14			88	68	75	54	29.82	30.01	8.74	6	2	11	
15			88	69	75	53	29.81	30.00	8.61	6	2	9	
16			88	69	75	55	29.80	29.99	8.31	7	3	11	
17			87	69	75	57	29.80	29.98	8.52	6	2	13	
18			84	70	75	64	29.80	29.99	8.55	6	3	12	
19			82	70	74	70	29.81	29.99	8.32	5	3	14	
20			79	71	73	76	29.82	30.00	8.35	5	2	13	
21			78	71	73	79	29.83	30.02	8.13	4	2	15	
22			77	71	73	82	29.84	30.02	7.69	3	2	15	
23			76	71	72	85	29.84	30.02	7.47	3	2	15	
24			76	71	72	86	29.84	30.02	7.37	3	1	17	

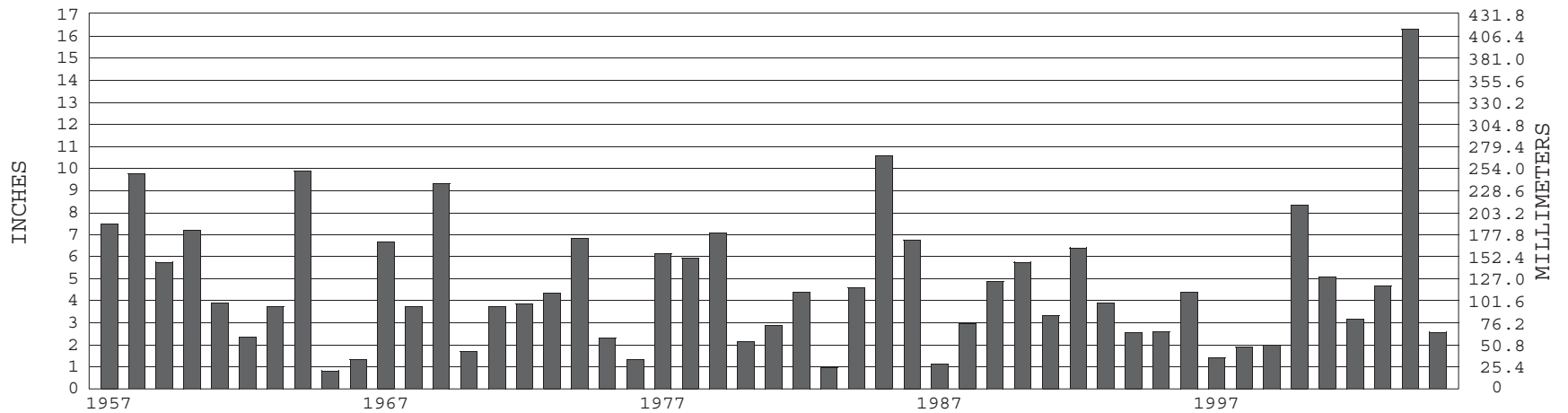
RICHMOND, VA AUGUST TEMPERATURES



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

Long-Term (1957-2005) Mean: 76.9 1971-2000 Normal: 76.3

RICHMOND, VA AUGUST PRECIPITATION



Long-Term (1957-2005) Mean Monthly Total: 4.71

1971-2000 Normal: 4.18



AUGUST 2005

RICHMOND, VA

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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