



DECEMBER 2004

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

DECEMBER 2004
RICHMOND, VA

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	62	39	51	6	40	47	14	0	RA BR			0.0	0.21	29.73	29.92	10.1	24	15.5	43*	30	35*	27	01																		
02	57	30	44	0	29	37	21	0				0.0	0.00	29.89	30.08	4.6	18	4.7	18	18	15	18	02																		
03	56	38	47	3	28	39	18	0				0.0	0.00	29.79	29.98	5.5	28	7.5	23	30	18	29	03																		
04	55	32	44	1	31	38	21	0				0.0	0.00	29.90	30.10	4.2	21	5.8	16	21	14	22	04																		
05	63	35	49	6	35	42	16	0				0.0	0.00	30.00	30.19	2.0	24	3.2	13	29	10	30	05																		
06	58	45	52	9	45	48	13	0	RA BR			0.0	0.04	29.98	30.17	5.5	19	6.2	17	23	16	23	06																		
07	70*	51	61*	18	59	60	4	0	RA FG+ BR			0.0	0.25	29.72	29.91	10.5	20	11.1	29	20	24	21	07																		
08	68	45	57	15	43	51	8	0				0.0	0.00	29.87	30.06	5.2	29	6.3	21	27	17	23	08																		
09	55	42	49	7	48	49	16	0	RA DZ FG+ BR			0.0	0.36	29.83	30.02	3.3	06	4.5	13	06	10	12	09																		
10	63	50	57	15	55	55	8	0	TSRA RA FG+ BR			0.0	0.78	29.40	29.58	2.4	24	4.7	16	26	13	26	10																		
11	57	39	48	7	44	47	17	0	TSRA RA			0.0	0.09	29.36	29.54	7.4	25	8.5	29	24	22	24	11																		
12	52	37	45	4	33	40	20	0				0.0	0.00	29.60	29.79	9.0	23	9.7	23	21	21	22	12																		
13	54	38	46	5	28	40	19	0	RA			0.0	T	29.61	29.80	11.6	27	13.8	35	28	29	27	13																		
14	43	29	36	-5	19	30	29	0				0.0	0.00	30.01	30.20	8.3	32	10.0	25	31	18	36	14																		
15	39	24	32	-8	15	26	33	0				0.0	0.00	30.30	30.49	8.4	35	9.7	33	36	24	35	15																		
16	50	20	35	-5	21	29	30	0				0.0	0.00	30.24	30.44	6.7	19	6.9	18	20	15	19	16																		
17	55	29	42	2	24	35	23	0				0.0	0.00	30.07	30.26	2.3	24	5.3	17	21	13	22	17																		
18	54	29	42	2	34	37	23	0				0.0	0.00	29.90	30.09	2.0	02	2.7	10	01	8	02	18																		
19	47	23	35	-5	33	35	30	0	RA SN FG+ FZFG BR			1.3	0.11	29.60	29.79	2.9	32	7.2	37	36	30	01	19																		
20	25	13*	19*	-20	2	15	46	0	SN			T	T	29.90	30.10	10.5	33	13.1	36	01	30	33	20																		
21	49	17	33	-6	19	29	32	0				0.0	0.00	29.99	30.19	9.6	20	9.8	23	21	17	22	21																		
22	61	35	48	9	36	43	17	0				0.0	0.00	30.05	30.25	8.6	18	9.3	20	20	17	20	22																		
23	66	37	52	13	52	54	13	0	RA FG BR			0.0	0.53	29.72	29.91	5.1	16	13.9	39	21	31	21	23																		
24	37	28	33	-5	19	28	32	0				0.0	0.00	30.02	30.21	10.1	36	10.2	25	01	21	36	24																		
25	35	24	30	-8	16	24	35	0				0.0	0.00	30.08	30.28	7.3	02	7.5	15	01	13	03	25																		
26	34	26	30	-8	15	25	35	0				0.0	0.00	29.97	30.16	11.0	36	11.5	23	36	18	01	26																		
27	36	23	30	-8	9	24	35	0				0.0	0.00	30.30	30.49	11.2	36	11.8	37	36	31	36	27																		
28	40	20	30	-8	12	25	35	0				0.0	0.00	30.38	30.58	4.4	19	6.9	21	20	17	20	28																		
29	60	33	47	9	29	40	18	0				0.0	0.00	30.11	30.31	9.5	22	9.7	17	24	15	23	29																		
30	58	34	46	9	39	44	19	0				0.0	0.00	30.25	30.44	3.6	13	4.2	14	14	13	13	30																		
31	61	39	50	13	45	47	15	0	FG+ BR			0.0	0.00	30.21	30.41	5.7	19	6.3	21	22	18	22	31																		
< MONTHLY AVERAGES										TOTALS-->				<- MONTHLY AVERAGES																											
2.6										1.3				2.0				<-----DEPARTURE FROM NORMAL----->										- .75				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.14				DATE :09-10				SEA LEVEL PRESSURE				DATE TIME																			
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: 1.3				DATE :19				MAXIMUM : 30.70				28 0754																			
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH:				DATE :				MINIMUM : 29.46				11 0554																			
HEATING: 695										NUMBER OF DAYS WITH				MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 15				PRECIPITATION ≥ 0.01 INCH : 8																			
COOLING: 0										->				MAXIMUM TEMP ≤ 32 : 1				MINIMUM TEMP ≤ 0 : 0				PRECIPITATION ≥ 0.10 INCH : 6																			
-53										->				THUNDERSTORMS : 2				HEAVY FOG : 5				SNOWFALL ≥ 1.0 INCH : 1																			
-1										->				THUNDERSTORMS : 2				HEAVY FOG : 5				SNOWFALL ≥ 1.0 INCH : 1																			

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

DECEMBER 2004

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	0.02				T	T	T	0.07	T	0.12	T		01												01		0.21		
02													02												02		0.00		
03													03												03		0.00		
04													04												04		0.00		
05													05												05		0.00		
06					T						T		06			T							T	0.03	06	0.03	0.04		
07	0.03	0.08	T	0.07	0.06	0.01	T						07					T							07		0.25		
08													08												08		0.00		
09													09	0.13	0.09	0.02	0.05	0.06	T	T		0.01	T		09		0.36		
10		0.24	0.23	0.07	0.02	0.06	0.09	0.07			T		10		T										10		0.78		
11										T	0.06	T	11			0.03	T								11		0.09		
12													12												12		0.00		
13			T	T									13												13		T		
14													14												14		0.00		
15													15												15		0.00		
16													16												16		0.00		
17													17												17		0.00		
18													18		T	T									18		0.00		
19													19				T	T	0.01	0.08	0.02	T	T	T	19		0.11		
20	T	T	T	T									20												20		T		
21													21												21		0.00		
22													22												22		0.00		
23					0.03	0.04	T	T	0.01	0.01	T	0.02	23	T	T	0.39	0.01	T	0.01	0.01	T			23		0.53			
24													24												24		0.00		
25													25												25		0.00		
26													26												26		0.00		
27													27												27		0.00		
28													28												28		0.00		
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)	.12	.19	.24	.30	.37	.39	.39	.46	.50	.53	.54	.55
Ending Date	23	23	23	23	23	23	23	10	10	10	10	10
Ending Time (Hour/Min)	1440	1440	1445	1444	1445	1445	1445	0251	0305	0328	0341	0411

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 DECEMBER 2004

Ceilometer (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							.75	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							4.00	10.00	
07							< .25	10.00	
08							10.00	10.00	
09							.13	10.00	
10							< .25	10.00	
11							6.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							7.00	10.00	
19							.25	10.00	
20							9.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							.50	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							10.00	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							9.00	10.00	
31							.25	10.00	
MONTHLY AVGS							7.64	10.00	
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									
5 6 23									

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

DECEMBER 2004

RIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		
			OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL				OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
			SUNRISE: 0716			DEC 13	SUNSET: 1652									SUNRISE: 0719			DEC 19	SUNSET: 1654										
01	BKN	110			10.00		49	36	43	61	15	22	29.53	29.71	01	SCT	NC			10.00		31	31	31	100	3	15	29.71	29.91	
04	OVC	100			10.00		48	38	43	68	10	22	29.51	29.69	04	SCT	NC	BR		6.00		32	32	32	100	3	19	29.65	29.85	
07	SCT	NC			10.00		47	37	42	69	13	21	29.50	29.69	07	BKN	110			7.00		32	32	32	100	6	15	29.62	29.82	
10	SCT	NC			10.00		54	35	45	49	20	26	29.53	29.71	10	OVC	200			10.00		39	36	38	89	7	20	29.61	29.80	
13	FEW	NC			10.00		54	22	41	29	15	28	29.54	29.72	13	OVC	070			10.00		45	34	40	66	6	24	29.54	29.73	
16	BKN	090			10.00		49	18	37	29	14	28	29.63	29.82	16	OVC	070			10.00		44	41	43	89	0	00	29.50	29.68	
19	FEW	NC			10.00		44	20	35	38	10	31	29.74	29.93	19	OVC	030			10.00	-RA	41	40	41	96	6	26	29.51	29.70	
22	CLR	NC			10.00		41	20	33	43	13	30	29.81	30.00	22	OVC	060			5.00	-SN BR	26	24	25	92	18	35	29.62	29.82	
			SUNRISE: 0716			DEC 14	SUNSET: 1652									SUNRISE: 0720			DEC 20	SUNSET: 1655										
01	CLR	NC			10.00		37	19	31	48	10	28	29.86	30.05	01	OVC	075			9.00	-SN	21	10	18	62	24	01	29.68	29.88	
04	CLR	NC			10.00		34	19	29	54	7	27	29.90	30.09	04	BKN	070			9.00		16	2	13	54	23	34	29.75	29.94	
07	CLR	NC			10.00		32	19	28	59	9	27	29.94	30.14	07	FEW	NC			10.00		13	-3	10	49	14	34	29.85	30.05	
10	CLR	NC			10.00		39	20	32	46	10	32	30.00	30.19	10	CLR	NC			10.00		16	-2	12	45	18	33	29.92	30.12	
13	BKN	050			10.00		41	20	33	43	13	34	29.98	30.18	13	CLR	NC			10.00		22	1	17	40	15	34	29.89	30.09	
16	BKN	060			10.00		41	18	33	39	9	35	30.01	30.21	16	CLR	NC			10.00		25	0	19	33	9	30	29.93	30.13	
19	BKN	065			10.00		37	17	30	44	14	36	30.09	30.29	19	CLR	NC			10.00		20	6	16	55	0	00	30.00	30.20	
22	CLR	NC			10.00		31	16	26	54	8	34	30.16	30.36	22	CLR	NC			10.00		19	5	16	54	3	17	30.05	30.25	
			SUNRISE: 0717			DEC 15	SUNSET: 1653									SUNRISE: 0720			DEC 21	SUNSET: 1655										
01	FEW	NC			10.00		30	16	26	56	9	33	30.19	30.39	01	CLR	NC			10.00		18	6	15	60	5	18	30.04	30.24	
04	CLR	NC			10.00		28	11	23	49	14	36	30.23	30.43	04	CLR	NC			10.00		20	7	17	57	9	19	30.00	30.20	
07	CLR	NC			10.00		27	11	22	51	10	01	30.30	30.50	07	CLR	NC			10.00		23	9	19	55	15	20	29.98	30.18	
10	CLR	NC			10.00		32	12	26	43	17	01	30.36	30.56	10	CLR	NC			10.00		31	15	26	52	13	21	29.99	30.19	
13	CLR	NC			10.00		38	15	30	39	15	34	30.30	30.50	13	CLR	NC			10.00		44	25	37	47	12	22	29.93	30.13	
16	CLR	NC			10.00		38	15	30	39	9	36	30.29	30.49	16	CLR	NC			10.00		48	26	39	42	12	19	29.93	30.13	
19	CLR	NC			10.00		34	15	28	46	5	28	30.32	30.52	19	CLR	NC			10.00		38	26	33	62	8	20	29.99	30.19	
22	CLR	NC			10.00		27	18	24	69	3	20	30.33	30.53	22	OVC	050			10.00		45	28	38	52	3	19	30.05	30.25	
			SUNRISE: 0718			DEC 16	SUNSET: 1653									SUNRISE: 0721			DEC 22	SUNSET: 1656										
01	CLR	NC			10.00		25	18	23	75	0	00	30.31	30.51	01	FEW	NC			10.00		40	27	35	60	10	20	30.05	30.25	
04	CLR	NC			10.00		24	18	22	77	0	00	30.32	30.52	04	CLR	NC			10.00		37	25	33	62	8	18	30.07	30.26	
07	FEW	NC			10.00		21	18	20	88	3	17	30.33	30.53	07	FEW	NC			10.00		36	24	32	62	6	18	30.10	30.29	
10	CLR	NC			10.00		34	24	30	67	7	20	30.33	30.53	10	CLR	NC			10.00		49	29	41	46	10	20	30.13	30.32	
13	FEW	NC			10.00		47	22	37	37	12	19	30.24	30.44	13	CLR	NC			10.00		59	33	47	38	10	19	30.05	30.24	
16	BKN	250			10.00		49	22	38	35	10	19	30.16	30.36	16	SCT	NC			10.00		60	45	52	58	12	18	30.02	30.22	
19	SCT	NC			10.00		36	22	31	57	8	19	30.16	30.36	19	OVC	075			10.00		57	49	53	75	12	15	30.03	30.23	
22	SCT	NC			10.00		35	23	31	61	10	20	30.12	30.32	22	SCT	NC			10.00		52	47	49	83	9	15	30.01	30.20	
			SUNRISE: 0718			DEC 17	SUNSET: 1653									SUNRISE: 0721			DEC 23	SUNSET: 1656										
01	BKN	250			10.00		34	24	30	67	8	20	30.08	30.28	01	OVC	080			10.00		50	47	48	89	10	14	29.92	30.11	
04	SCT	NC			10.00		37	22	32	54	10	23	30.05	30.24	04	SCT	NC			10.00		55	52	53	90	15	15	29.82	30.01	
07	FEW	NC			10.00		30	22	27	72	8	21	30.07	30.27	07	OVC	008			10.00		56	56	56	100	15	15	29.75	29.95	
10	FEW	NC			10.00		44	22	36	41	7	26	30.12	30.31	10	OVC	085			10.00	-RA	60	59	59	96	14	16	29.66	29.85	
13	FEW	NC			10.00		54	21	41	28	7	VR	30.05	30.25	13	OVC	021			10.00		65	62	63	90	25	18	29.54	29.72	
16	FEW	NC			10.00		53	25	41	34	5	32	30.04	30.23	16	OVC	032			10.00	-RA	59	57	58	93	12	28	29.58	29.77	
19	CLR	NC			10.00		41	28	36	60	3	34	30.07	30.27	19	OVC	026			10.00	-RA	55	55	55	100	0	00	29.69	29.88	
22	CLR	NC			10.00		37	27	33	67	3	14	30.08	30.27	22	OVC	033			10.00		42	32	38	68	18	36	29.84	30.03	
			SUNRISE: 0719			DEC 18	SUNSET: 1654									SUNRISE: 0722			DEC 24	SUNSET: 1657										
01	CLR	NC			9.00		33	29	32	85	0	00	30.04	30.23	01	BKN	250			10.00		35	25	31	67	15	01	29.90	30.10	
04	FEW	NC			10.00		29	28	29	96	6	01	30.02	30.22	04	OVC	250			10.00		33	25	30	72	9	36	30.00	30.19	
07	FEW	NC			10.00		30	29	30	96	5	01	30.00	30.20	07	OVC	250			10.00		31	21	28	67	10	01	30.02	30.22	
10	BKN	250			9.00		39	36	38	89	6	04	29.97	30.17	10	OVC	250			10.00		32	17	27	54	16	36	30.09	30.28	
13	CLR	NC			10.00		52	41	47	66	3	VR	29.87	30.06	13	OVC	200			10.00		36	15	29	42	13	01	30.02	30.22	
16	CLR	NC			10.00		53	38	46	57	3	33	29.80	29.99	16	OVC	200			10.00		34	13	27	42	12	36	30.00	30.20	
19	CLR	NC			10.00		42	37	40	82	0	00	29.78	29.98	19	OVC	180			10.00		31	17	26	56	5	01	30.02	30.22	
22	CLR	NC			10.00		35	34	35	96	0	00	29.77	29.96	22	OVC	180			10.00		30	18	26	61	0	00	30.02	30.22	

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

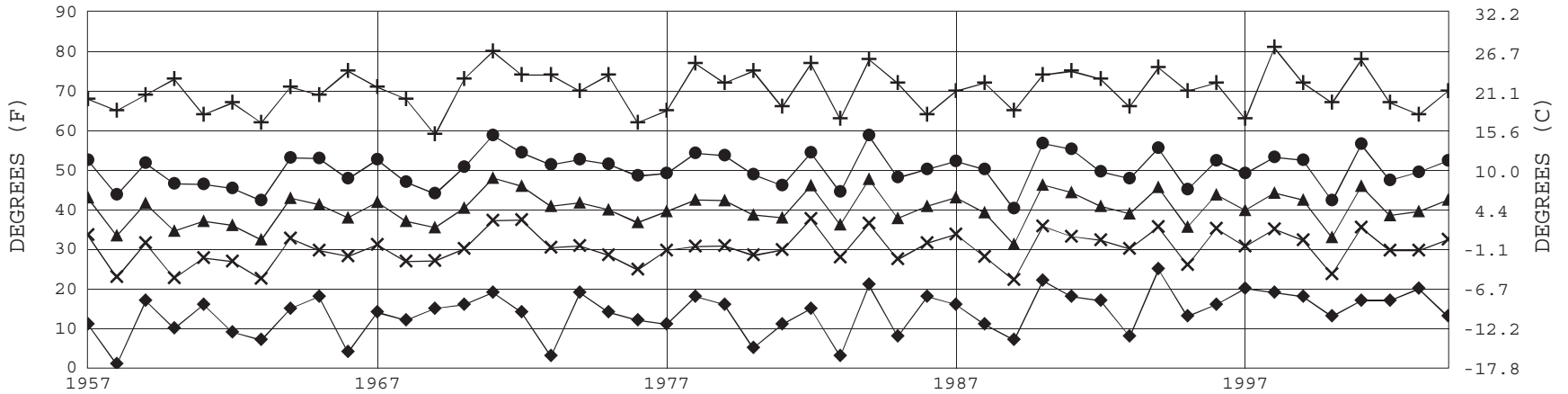
DECEMBER 2004

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: 0722 DEC 25								SUNSET: 1657								SUNRISE: 0724 DEC 31								SUNSET: 1701							
01	OVC	200			10.00			27	18	24	69	6	36	30.02	30.22	01	OVC	075			10.00			47	46	47	97	8	15	30.29	30.48
04	BKN	200			10.00			25	18	23	75	8	01	30.03	30.23	04	CLR	NC			5.00	BR		41	41	41	100	5	12	30.27	30.46
07	BKN	200			10.00			25	17	23	72	9	01	30.07	30.27	07	BKN	250			2.00	BR		40	40	40	100	5	14	30.26	30.46
10	BKN	200			10.00			27	17	24	66	10	02	30.14	30.34	10	OVC	002			1.00	BR		45	45	45	100	6	17	30.27	30.47
13	BKN	200			10.00			32	16	27	52	8	01	30.10	30.29	13	OVC	250			10.00			55	47	51	74	8	19	30.19	30.38
16	SCT	NC			10.00			33	12	27	42	8	03	30.08	30.27	16	OVC	250			10.00			60	49	54	67	0	00	30.14	30.34
19	BKN	200			10.00			28	15	24	58	6	03	30.08	30.28	19	BKN	250			10.00			52	46	49	80	9	19	30.15	30.35
22	BKN	200			10.00			26	17	23	69	5	03	30.11	30.31	22	SCT	NC			10.00			49	46	48	90	8	21	30.15	30.35
SUNRISE: 0722 DEC 26								SUNSET: 1658								3-HOURLY OBSERVATION NOTES															
Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibility = 8/8.																															
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																															
NC= No ceiling detected.																															
& = Original observation contained additional weather elements.																															
See page 3 for additional notes.																															
01	OVC	200			10.00			26	17	23	69	8	02	30.07	30.27																
04	OVC	150			10.00			27	16	24	63	9	01	30.03	30.23																
07	OVC	110			10.00			27	17	24	66	13	02	30.01	30.20																
10	OVC	150			10.00			28	16	24	61	13	36	29.97	30.16																
13	OVC	150			10.00			30	16	26	56	14	36	29.89	30.09																
16	OVC	180			10.00			33	18	28	54	12	36	29.87	30.07																
19	OVC	070			10.00			33	11	26	40	13	33	29.92	30.12																
22	OVC	060			10.00			33	12	27	42	13	34	29.97	30.17																
SUNRISE: 0723 DEC 27								SUNSET: 1659																							
01	FEW	NC			10.00			30	17	26	59	10	33	30.03	30.23																
04	OVC	060			10.00			31	19	27	61	9	33	30.11	30.31																
07	FEW	NC			10.00			28	16	24	61	9	34	30.21	30.40																
10	CLR	NC			10.00			31	3	24	30	20	35	30.32	30.52																
13	CLR	NC			10.00			34	3	25	27	20	36	30.31	30.51																
16	CLR	NC			10.00			35	3	26	26	14	35	30.34	30.53																
19	CLR	NC			10.00			29	5	23	36	6	02	30.40	30.60																
22	CLR	NC			10.00			25	5	20	42	7	01	30.45	30.65																
SUNRISE: 0723 DEC 28								SUNSET: 1659																							
01	CLR	NC			10.00			24	7	20	48	7	03	30.47	30.67																
04	CLR	NC			10.00			23	9	19	55	7	05	30.46	30.66																
07	FEW	NC			10.00			21	11	18	65	0	00	30.48	30.68																
10	FEW	NC			10.00			29	11	24	47	5	14	30.50	30.70																
13	SCT	NC			10.00			36	10	28	34	7	21	30.38	30.58																
16	OVC	250			10.00			39	12	30	33	12	18	30.29	30.49																
19	BKN	250			10.00			33	17	28	52	8	19	30.29	30.49																
22	OVC	200			10.00			33	16	28	49	12	20	30.23	30.43																
SUNRISE: 0723 DEC 29								SUNSET: 1660																							
01	OVC	200			10.00			34	19	29	54	10	20	30.17	30.37																
04	OVC	200			10.00			36	23	31	59	10	22	30.13	30.32																
07	OVC	140			10.00			39	24	33	55	10	23	30.11	30.31																
10	FEW	NC			10.00			47	24	38	41	9	25	30.14	30.34																
13	BKN	150			10.00			58	29	45	33	14	21	30.06	30.26																
16	BKN	150			10.00			58	35	47	42	13	21	30.05	30.25																
19	OVC	090			10.00			53	37	46	55	8	21	30.08	30.28																
22	OVC	065			10.00			53	37	46	55	9	23	30.13	30.32																
SUNRISE: 0724 DEC 30								SUNSET: 1701																							
01	SCT	NC			10.00			48	37	43	66	0	00	30.15	30.34																
04	CLR	NC			10.00			38	36	37	93	0	00	30.18	30.37																
07	FEW	NC			10.00			35	34	35	96	3	33	30.22	30.42																
10	OVC	070			10.00			48	38	43	68	0	00	30.27	30.46																
13	SCT	NC			10.00			58	40	49	51	0	00	30.24	30.43																
16	OVC	065			10.00			56	42	49	60	3	16	30.24	30.44																
19	OVC	065			10.00			52	39	46	61	12	13	30.29	30.48																
22	OVC	075			10.00			45	41	43	86	5	13	30.32	30.52																

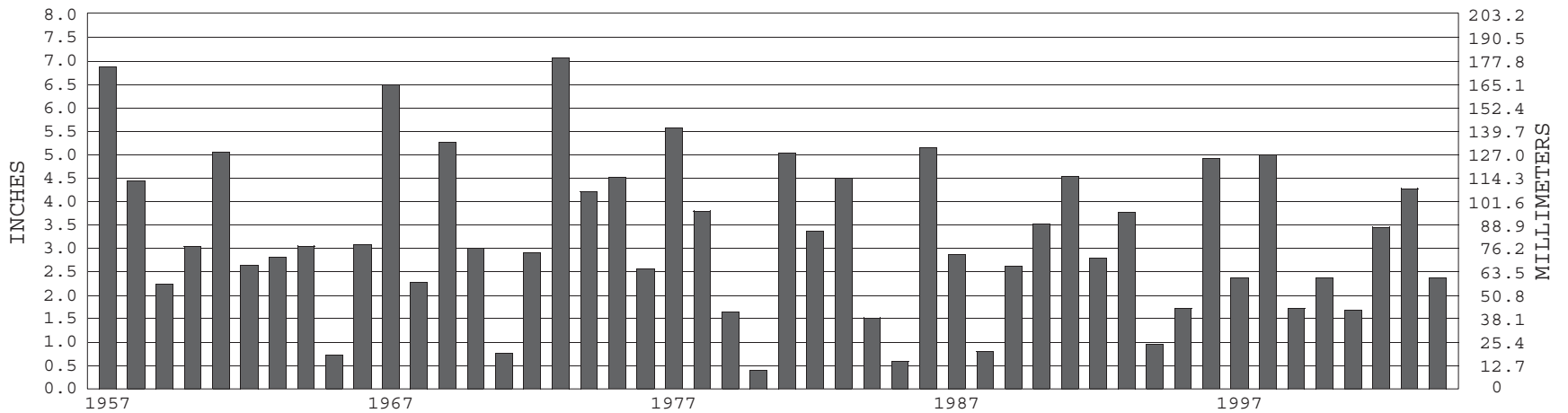
RICHMOND, VA DECEMBER TEMPERATURES



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

Long-Term (1957-2004) Mean: 40.3 1971-2000 Normal: 40.4

RICHMOND, VA DECEMBER PRECIPITATION



Long-Term (1957-2004) Mean Monthly Total: 3.25

1971-2000 Normal: 3.12



DECEMBER 2004

RICHMOND, VA

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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