



JANUARY 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

JANUARY 2005
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	72	42	57	20	50	53	8	0				0.0	0.00	30.20	30.39	1.1	22	3.7	12	27	9	26	01	
02	54	44	49	12	46	48	16	0				0.0	0.00	30.33	30.52	3.4	05	4.6	22	08	16	08	02	
03	71	43	57	20	52	54	8	0	MIFG BR			0.0	0.00	30.15	30.34	7.4	21	7.6	21	22	16	22	03	
04	76*	56	66	29	57	61	0	1	RA BR			0.0	0.14	29.99	30.18	6.6	24	8.8	20	21	16	23	04	
05	56	48	52	15	51	51	13	0	FG+ BR			0.0	0.00	29.87	30.06	4.6	08	5.8	15	09	13	13	05	
06	72	47	60	24	55	57	5	0	RA FG+ BR			0.0	0.03	29.68	29.87	8.0	22	9.9	37	24	29	22	06	
07	62	41	52	16	38	44	13	0				0.0	0.00	30.05	30.24	2.8	06	7.4	17	27	16	25	07	
08	62	43	53	17	45	47	12	0	RA DZ FG+ BR			0.0	0.14	30.01	30.21	0.8	27	8.1	22	28	18	02	08	
09	50	34	42	6	35	39	23	0				0.0	0.00	30.19	30.38	2.4	08	3.6	14	03	12	05	09	
10	64	35	50	14	40	44	15	0	BR			0.0	0.00	29.97		2.6	22	5.9	17	30	14	29	10	
11	57	38	48	12	42	44	17	0	BR			0.0	0.00	30.02		4.7	15	7.6	17	14	15	14	11	
12	71	43	57	21	53	55	8	0	BR HZ			0.0	0.00	29.95	30.14	7.4	19	7.7	20	22	16	23	12	
13	75	59	67*	31	61	64	0	2	RA BR			0.0	0.01	29.87	30.06	16.0	19	16.3	37	18	31	18	13	
14	72	37	55	19	45	49	10	0	RA BR			0.0	1.89	29.97	30.15	5.2	36	16.2	39*	01	31*	01	14	
15	41	31	36	0	19	29	29	0				0.0	0.00	30.47	30.66	9.8	02	10.2	22	02	17	03	15	
16	39	30	35	-1	26	31	30	0	SN BR			T	T	30.19	30.38	9.2	02	9.8	20	03	16	03	16	
17	35	18	27	-9	4	21	38	0	SN			T	T	30.23	30.43	13.9	33	14.5	32	35	24	31	17	
18	27	13	20	-16	-2	15	45	0				0.0	0.00	30.47	30.67	7.6	33	8.0	24	31	20	31	18	
19	25	13	19*	-17	12	19	46	0	SN FZFG BR			1.1	0.06	30.09	30.29	7.8	20	8.0	24	19	21	22	19	
20	35	19	27	-9	25	28	38	0	SN BR			0.7	0.07	29.82	30.02	0.4	13	1.9	13	05	10	05	20	
21	33	18	26	-10	16	25	39	0	SN BR			0.1	0.01	29.97	30.17	7.0	04	7.4	21	05	16	04	21	
22	32	18	25	-11	21	24	40	0	TS RA FZRA SN PL BR			0.2	0.45	29.74	29.93	0.8	01	5.7	16	33	14	33	22	
23	30	17	24	-12	9	19	41	0	SN BR			T	T	29.79	29.98	15.5	33	15.8	37	33	29	34	23	
24	34	8*	21	-15	11	21	44	0				0.0	0.00	29.96	30.15	4.1	23	6.6	17	22	14	21	24	
25	42	22	32	-4	21	29	33	0				0.0	0.00	29.76	29.96	3.1	15	4.9	14	16	12	16	25	
26	56	32	44	7	35	40	21	0	RA			0.0	0.03	29.54	29.73	1.6	18	7.0	22	01	16	02	26	
27	41	18	30	-7	12	24	35	0	RA PL BR			T	T	30.19	30.38	14.5	02	14.7	30	02	23	02	27	
28	31	15	23	-14	4	18	42	0				0.0	0.00	30.56	30.76	8.2	02	8.7	18	03	16	01	28	
29	37	16	27	-10	19	25	38	0	RA FZRA PL BR			T	0.06	30.30	30.50	1.0	18	2.5	15	19	13	20	29	
30	35	31	33	-4	32	33	32	0	RA FZRA SN BR			T	0.53	29.90	30.09	8.8	36	9.0	22	01	18	01	30	
31	40	27	34	-3	27	31	31	0				0.0	0.00	30.13	30.33	10.0	02	10.3	22	01	17	01	31	
49.3 30.8 40.1 ■■										31.0 36.8 24.8 0.1		< MONTHLY AVERAGES TOTALS->		2.1 3.42		30.04		1.4 35 8.3		<- MONTHLY AVERAGES				
4.0 3.2 3.7 ■■										<-----DEPARTURE FROM NORMAL----->		- .13		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.89 DATE :14				SEA LEVEL PRESSURE DATE TIME											
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 1.1 DATE :19				MAXIMUM : 30.82 28 1054											
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: DATE :				MINIMUM : 29.61 22 1954											
HEATING: 770			-103			2019 -325			NUMBER OF DAYS WITH =>		MAXIMUM TEMP ≥ 90: 0		MINIMUM TEMP ≤ 32 : 17		PRECIPITATION ≥ 0.01 INCH : 12									
COOLING: 3			3			3					MAXIMUM TEMP ≤ 32 : 5		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 5									
											THUNDERSTORMS : 1		HEAVY FOG : 3		SNOWFALL ≥ 1.0 INCH : 1									

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

JANUARY 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										0.13	0.01	04		0.14		
05													05												05		0.00		
06													06			T	0.02				0.01				06		0.03		
07													07												07		0.00		
08			T	0.06	0.04	0.02	0.01	T	T				08	0.01											08		0.14		
09													09												09		0.00		
10													10												10		0.00		
11													11												11		0.00		
12													12												12		0.00		
13													13												13		0.01		
14				T		0.03	0.97	0.22	0.01	0.23	0.27	0.16	0.01	14	T									T	T	14		1.89	
15													15												15		0.00		
16													16		T	T									16		T		
17	T	T											17												17		T		
18													18												18		0.00		
19													19	T	0.01	0.01	T								19	0.02	0.06		
20													20					T	T	T	0.03	0.02	0.01	0.01	T	20		0.07	
21	T	T	0.01	T	T						T	T	21												21		0.01		
22													22	0.02	0.01	0.05		0.09	0.16	T			T	0.01	T	22	0.36	0.45	
23	T	T											23												23		T		
24													24												24		0.00		
25													25												25		0.00		
26													26	0.02	T										26		0.03		
27	T	T	T	T									27												27		T		
28													28												28		0.00		
29													29						T	T	0.01	0.03	0.01	T	0.01	29		0.06	
30	0.01	0.12	0.03	0.07	0.11	0.14	0.03	0.02	T				30	T											30		0.53		
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)	.31	.45	.56	.64	.83	.96	1.02	1.09	1.17	1.24	1.35	1.50
Ending Date	14	14	14	14	14	14	14	14	14	14	14	14
Ending Time (Hour/Min)	0623	0628	0633	0638	0648	0659	0716	0732	0756	0812	0846	0917

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 JANUARY 2005

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							7.00	10.00	
02							9.00	10.00	
03							5.00	10.00	
04							3.00	10.00	
05							.13	5.00	
06							.13	10.00	
07							10.00	10.00	
08							.25	10.00	
09							9.00	10.00	
10							3.00	10.00	
11							4.00	10.00	
12							3.00	10.00	
13							2.00	10.00	
14							.75	10.00	
15							10.00	10.00	
16							4.00	10.00	
17							6.00	10.00	
18							10.00	10.00	
19							.50	10.00	
20							1.00	10.00	
21							1.50	10.00	
22							1.00	10.00	
23							2.00	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							8.00	10.00	
27							5.00	10.00	
28							10.00	10.00	
29							5.00	10.00	
30							1.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							5.23	9.77	
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 3 13 13									

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

JANUARY 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	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
SUNRISE: 0724				JAN 01				SUNSET: 1702				SUNRISE: 0724				JAN 07				SUNSET: 1707									
01	OVC	110		10.00	50	47	48	89	5	21	30.14	30.33	01	BKN	140		10.00	61	47	54	60	14	26	29.77	29.96				
04	CLR	NC		10.00	47	45	46	93	0	00	30.14	30.34	04	OVC	150		10.00	56	43	49	62	8	30	29.86	30.05				
07	OVC	110		10.00	47	47	47	100	6	19	30.17	30.37	07	OVC	150		10.00	47	41	44	80	13	05	29.99	30.19				
10	BKN	250		10.00	60	50	55	70	3	27	30.23	30.42	10	OVC	200		10.00	47	35	42	63	10	03	30.13	30.32				
13	BKN	250		10.00	71	54	61	55	3	VR	30.17	30.37	13	OVC	200		10.00	50	34	43	54	3	36	30.12	30.31				
16	BKN	250		10.00	71	54	61	55	5	VR	30.19	30.38	16	OVC	100		10.00	50	35	43	57	7	08	30.12	30.31				
19	SCT	NC		10.00	58	53	55	84	0	00	30.24	30.43	19	OVC	080		10.00	48	37	43	66	9	12	30.16	30.35				
22	SCT	NC		10.00	51	50	51	96	6	08	30.26	30.46	22	OVC	065		10.00	45	36	41	71	7	12	30.15	30.34				
SUNRISE: 0724				JAN 02				SUNSET: 1703				SUNRISE: 0724				JAN 08				SUNSET: 1708									
01	BKN	250		10.00	52	51	52	97	3	08	30.29	30.48	01	OVC	030		10.00	46	39	43	77	5	10	30.10	30.29				
04	SCT	NC		10.00	51	50	51	96	10	07	30.31	30.50	04	OVC	011		1.00	43	43	43	100	3	09	30.03	30.23				
07	OVC	050		10.00	47	42	45	83	6	06	30.37	30.57	07	OVC	002		0.50	44	44	44	100	6	12	29.96	30.16				
10	OVC	050		10.00	49	44	47	83	5	05	30.41	30.60	10	OVC	001		0.25	49	49	49	100	10	21	29.91	30.11				
13	OVC	070		10.00	50	46	48	86	5	03	30.36	30.55	13	OVC	007		9.00	54	54	54	100	14	26	29.90	30.09				
16	BKN	090		10.00	53	48	50	83	5	34	30.32	30.51	16	FEW	NC		10.00	62	51	56	67	10	27	29.94	30.14				
19	OVC	150		10.00	48	47	47	96	5	03	30.31	30.50	19	FEW	NC		10.00	55	44	50	67	14	02	30.07	30.26				
22	BKN	100		10.00	47	45	46	93	0	00	30.30	30.50	22	CLR	NC		10.00	45	36	41	71	8	01	30.16	30.35				
SUNRISE: 0724				JAN 03				SUNSET: 1704				SUNRISE: 0724				JAN 09				SUNSET: 1709									
01	OVC	110		10.00	45	45	45	100	0	00	30.25	30.44	01	CLR	NC		10.00	42	35	39	76	8	03	30.19	30.39				
04	BKN	110		7.00	46	46	46	100	0	00	30.23	30.42	04	CLR	NC		10.00	39	33	37	79	8	04	30.18	30.38				
07	BKN	110	BR	6.00	45	45	45	100	3	18	30.21	30.41	07	CLR	NC		10.00	35	32	34	89	0	00	30.23	30.43				
10	OVC	250		7.00	55	53	54	93	8	20	30.20	30.40	10	CLR	NC		10.00	42	35	39	76	7	07	30.28	30.47				
13	SCT	NC		10.00	69	55	61	61	13	24	30.14	30.33	13	BKN	060		10.00	47	36	42	66	0	00	30.20	30.40				
16	SCT	NC		10.00	68	56	61	66	16	20	30.08	30.27	16	CLR	NC		10.00	49	36	43	61	0	00	30.16	30.36				
19	BKN	250		10.00	58	55	56	90	8	20	30.08	30.27	19	FEW	NC		10.00	40	37	39	89	5	13	30.15	30.35				
22	OVC	130		10.00	63	56	59	78	10	21	30.06	30.25	22	CLR	NC		10.00	37	34	36	89	3	14	30.13	30.33				
SUNRISE: 0724				JAN 04				SUNSET: 1705				SUNRISE: 0724				JAN 10				SUNSET: 1710									
01	OVC	110		10.00	62	56	59	81	15	21	29.99	30.18	01	CLR	NC		6.00	36	36	36	100	5	17	30.07	30.27				
04	BKN	110		10.00	62	56	59	81	14	23	29.96	30.15	04	CLR	NC		4.00	38	38	38	100	8	18	30.00	30.19				
07	OVC	120		10.00	61	56	58	84	8	21	29.98	30.18	07	BKN	120		4.00	40	40	40	100	7	20	29.95	30.14				
10	OVC	200		10.00	67	57	61	71	10	25	30.02	30.21	10	FEW	NC		6.00	49	45	47	86	10	22	29.95	30.14				
13	BKN	250		10.00	74	58	64	57	10	26	29.97	30.16	13	SCT	NC		10.00	63	42	52	47	9	30	29.90	30.10				
16	BKN	250		10.00	75	58	65	55	8	26	29.96	30.15	16	OVC	250		10.00	61	42	51	50	6	36	29.92	30.11				
19	BKN	250		10.00	64	58	60	81	3	21	29.99	30.18	19																
22	OVC	050		10.00	61	56	58	84	5	05	30.00	30.19	22	BKN	200		10.00	46	39	43	77	0	00	29.99					
SUNRISE: 0724				JAN 05				SUNSET: 1706				SUNRISE: 0724				JAN 11				SUNSET: 1711									
01	OVC	003		3.00	53	53	53	100	8	12	29.94	30.13	01	FEW	NC		10.00	41	37	39	87	0	00	30.04					
04	OVC	003		3.00	51	51	51	100	5	03	29.89	30.09	04	SCT	NC		7.00	38	36	37	93	3	02	30.06					
07	VV	001		0.13	50	50	50	100	0	00	29.87	30.07	07	OVC	035		5.00	40	38	39	90	3	08	30.09					
10	OVC	001		0.50	51	51	51	100	0	00	29.90	30.09	10	OVC	200		7.00	47	41	44	79	6	15	30.09					
13	VV	001		0.13	52	52	52	100	5	01	29.86	30.05	13	OVC	200		10.00	55	43	49	64	10	15	30.00	30.19				
16	OVC	001		0.13	51	51	51	100	8	05	29.85	30.04	16	OVC	200		10.00	55	45	50	69	9	14	29.96	30.16				
19	OVC	001		0.13	49	49	49	100	8	08	29.87	30.06	19	BKN	200		10.00	49	44	47	83	7	15	29.96	30.16				
22	OVC	001		0.25	49	49	49	100	7	12	29.83	30.03	22	OVC	200		10.00	48	45	47	89	7	17	29.94	30.14				
SUNRISE: 0724				JAN 06				SUNSET: 1707				SUNRISE: 0723				JAN 12				SUNSET: 1712									
01	OVC	002		0.50	48	48	48	100	6	13	29.77	29.96	01	SCT	NC		6.00	43	43	43	100	7	19	29.92	30.11				
04	VV	001		0.13	48	48	48	100	6	14	29.71	29.91	04	OVC	110		5.00	48	48	48	100	0	00	29.92	30.11				
07	VV	001		0.13	49	49	49	100	3	19	29.70	29.89	07	BKN	090		5.00	49	48	48	97	6	17	29.94	30.13				
10	OVC	200		8.00	58	56	57	93	13	20	29.68	29.87	10	OVC	250		6.00	57	51	54	81	9	20	29.98	30.17				
13	OVC	200		10.00	72	59	64	64	24	23	29.58	29.77	13	OVC	250		9.00	65	56	60	73	8	20	29.93	30.12				
16	OVC	070		10.00	60	59	59	96	6	16	29.62	29.81	16	BKN	250		10.00	69	58	62	68	10	19	29.92	30.12				
19	OVC	120		10.00	64	60	62	87	10	22	29.64	29.83	19	SCT	NC		10.00	60	57	58	90	8	18	29.97	30.16				
22	BKN	110		10.00	64	60	62	87	13	22	29.69	29.88	22	CLR	NC		9.00	60	56	58	86	9	18	29.99	30.18				

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

JANUARY 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	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
SUNRISE: 0723				JAN 13				SUNSET: 1713				SUNRISE: 0721				JAN 19				SUNSET: 1719									
01	SCT	NC			8.00	60	57	58	90	9	18	29.97	30.16	01	FEW	NC			10.00	13	5	11	70	0	00	30.40	30.60		
04	OVC	075			10.00	60	58	59	93	9	19	29.97	30.16	04	SCT	NC			10.00	16	6	14	65	0	00	30.34	30.54		
07	OVC	049			10.00	63	61	62	93	17	18	29.96	30.16	07	BKN	200			10.00	19	8	16	62	6	17	30.25	30.45		
10	OVC	012			10.00	65	64	64	97	13	19	29.97	30.16	10	OVC	085			10.00	23	3	18	42	16	19	30.18	30.39		
13	OVC	250			10.00	73	61	66	66	21	20	29.86	30.05	13	VV	004	SN FZFG		10.00	21	19	20	92	13	20	30.04	30.24		
16	BKN	250			10.00	73	61	66	66	13	19	29.81	30.00	16	OVC	060			10.00	24	19	22	81	16	21	29.92	30.13		
19	OVC	065			10.00	72	62	66	71	21	19	29.78	29.97	19	FEW	NC			10.00	23	18	21	81	9	22	29.89	30.10		
22	OVC	033			10.00	70	64	66	82	20	17	29.73	29.92	22	OVC	055			10.00	23	18	21	81	6	20	29.87	30.07		
SUNRISE: 0723				JAN 14				SUNSET: 1714				SUNRISE: 0721				JAN 20				SUNSET: 1720									
01	BKN	037			10.00	72	65	68	79	24	18	29.67	29.86	01	BKN	050			10.00	21	15	19	78	6	21	29.82	30.03		
04	OVC	030			10.00	71	65	67	81	20	19	29.63	29.82	04	OVC	055			10.00	25	20	23	81	0	00	29.81	30.01		
07	OVC	012		+RA BR	1.50	59	58	58	96	15	33	29.67	29.86	07	BKN	060			10.00	29	22	27	75	0	00	29.83	30.03		
10	OVC	022		+RA BR	2.00	49	47	48	93	20	36	29.93	30.12	10	OVC	060			10.00	32	23	29	69	5	36	29.88	30.08		
13	OVC	150			10.00	45	37	41	74	17	36	30.00	30.19	13	OVC	150			10.00	34	25	31	70	3	09	29.80	30.00		
16	OVC	150			10.00	45	35	41	68	10	36	30.10	30.29	16	OVC	150			10.00	34	27	31	76	0	00	29.79	29.99		
19	OVC	200			10.00	43	33	39	68	14	36	30.22	30.41	19	OVC	014	1.50 -SN BR		10.00	31	31	31	100	0	00	29.81	30.01		
22	OVC	150			10.00	40	28	35	63	13	01	30.30	30.50	22	OVC	011	1.50 -SN BR		10.00	31	31	31	100	0	00	29.80	30.00		
SUNRISE: 0723				JAN 15				SUNSET: 1715				SUNRISE: 0720				JAN 21				SUNSET: 1722									
01	FEW	NC			10.00	36	27	33	70	7	01	30.35	30.55	01	OVC	095	1.50 -SN BR		10.00	30	30	30	100	3	04	29.79	29.99		
04	CLR	NC			10.00	34	23	30	64	12	01	30.41	30.61	04	OVC	007	2.00 -SN BR		10.00	30	29	30	96	10	05	29.80	30.00		
07	SCT	NC			10.00	32	19	28	59	12	01	30.48	30.67	07	OVC	035			10.00	29	25	28	85	8	01	29.87	30.06		
10	OVC	250			10.00	35	17	29	48	16	04	30.53	30.73	10	OVC	047	9.00 -SN		10.00	28	20	25	72	10	04	29.99	30.19		
13	OVC	200			10.00	38	13	30	36	13	04	30.50	30.70	13	SCT	NC			10.00	31	17	26	56	10	03	29.99	30.19		
16	OVC	200			10.00	38	15	30	39	12	04	30.48	30.68	16	FEW	NC			10.00	32	8	25	36	12	05	30.00	30.20		
19	BKN	200			10.00	33	18	28	54	5	05	30.48	30.68	19	FEW	NC			10.00	25	2	19	37	7	05	30.08	30.28		
22	BKN	200			10.00	32	20	28	61	8	02	30.47	30.67	22	CLR	NC			10.00	21	8	18	57	6	06	30.12	30.32		
SUNRISE: 0722				JAN 16				SUNSET: 1716				SUNRISE: 0719				JAN 22				SUNSET: 1723									
01	BKN	200			10.00	31	21	28	67	8	04	30.42	30.62	01	BKN	250			10.00	19	11	17	71	5	08	30.09	30.29		
04	OVC	200			10.00	31	21	28	67	12	01	30.36	30.56	04	OVC	200			10.00	19	11	17	71	6	08	30.05	30.25		
07	OVC	200			10.00	31	22	28	69	9	02	30.29	30.49	07	OVC	050			10.00	21	11	18	65	6	11	30.00	30.21		
10	OVC	100			10.00	33	24	30	70	13	02	30.27	30.47	10	OVC	039			10.00	23	15	21	72	0	00	29.89	30.09		
13	OVC	022			10.00	36	28	33	73	13	02	30.13	30.33	13	OVC	027	2.00 -FZRAPL BR		10.00	26	24	25	92	6	17	29.65	29.85		
16	BKN	022			10.00	38	30	35	73	12	04	30.04	30.24	16	OVC	008	1.00 PL BR		10.00	28	27	28	96	12	33	29.54	29.73		
19	OVC	020			10.00	36	31	34	82	6	04	30.04	30.24	19	OVC	006	1.00 BR		10.00	31	31	31	100	6	25	29.44	29.63		
22	OVC	025			10.00	36	30	34	79	6	36	30.05	30.25	22	OVC	008	2.00 -SN BR		10.00	31	30	31	96	8	33	29.44	29.63		
SUNRISE: 0722				JAN 17				SUNSET: 1717				SUNRISE: 0719				JAN 23				SUNSET: 1724									
01	OVC	020		-SN	6.00	33	28	31	82	18	33	30.08	30.27	01	OVC	006	2.00 -SN BR		10.00	29	29	29	100	6	34	29.48	29.67		
04	FEW	NC			10.00	30	13	25	49	12	33	30.12	30.32	04	FEW	NC			10.00	24	14	21	65	20	33	29.53	29.72		
07	FEW	NC			10.00	26	6	21	42	15	34	30.21	30.41	07	FEW	NC			10.00	17	5	14	59	10	32	29.64	29.84		
10	CLR	NC			10.00	28	4	22	35	14	34	30.27	30.47	10	FEW	NC			10.00	19	5	16	54	21	35	29.76	29.96		
13	CLR	NC			10.00	31	1	23	28	17	31	30.21	30.41	13	OVC	070			10.00	23	8	19	53	23	34	29.80	30.00		
16	CLR	NC			10.00	30	-3	22	24	15	33	30.19	30.39	16	CLR	NC			10.00	26	9	21	48	15	33	29.86	30.06		
19	CLR	NC			10.00	25	-4	19	28	12	33	30.28	30.48	19	CLR	NC			10.00	22	4	17	46	17	34	29.97	30.18		
22	CLR	NC			10.00	20	-2	15	38	9	36	30.35	30.55	22	CLR	NC			10.00	20	1	16	43	16	33	30.04	30.25		
SUNRISE: 0721				JAN 18				SUNSET: 1718				SUNRISE: 0718				JAN 24				SUNSET: 1725									
01	FEW	NC			10.00	19	-3	14	37	13	33	30.39	30.59	01	CLR	NC			10.00	18	1	14	47	9	36	30.06	30.27		
04	CLR	NC			10.00	16	-2	12	45	7	31	30.43	30.63	04	CLR	NC			10.00	16	1	13	51	3	30	30.09	30.29		
07	FEW	NC			10.00	15	0	12	51	7	32	30.48	30.68	07	SCT	NC			10.00	9	4	8	80	0	00	30.12	30.32		
10	CLR	NC			10.00	20	-4	15	34	14	33	30.55	30.75	10	BKN	250			10.00	21	5	17	50	5	VR	30.11	30.31		
13	CLR	NC			10.00	25	-4	19	28	14	35	30.49	30.69	13	OVC	250			10.00	30	14	25	51	14	21	29.96	30.16		
16	CLR	NC			10.00	27	-5	20	24	12	35	30.46	30.66	16	OVC	055			10.00	33	16	28	49	8	20	29.85	30.04		
19	CLR	NC			10.00	21	-1	16	38	6	04	30.46	30.66	19	OVC	085			10.00	33	16	27	49	12	21	29.77	29.97		
22	CLR	NC			10.00	18	1	14	47	0	00	30.47	30.67	22	OVC	060			10.00	34	16	28	48	8	23	29.74	29.94		

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

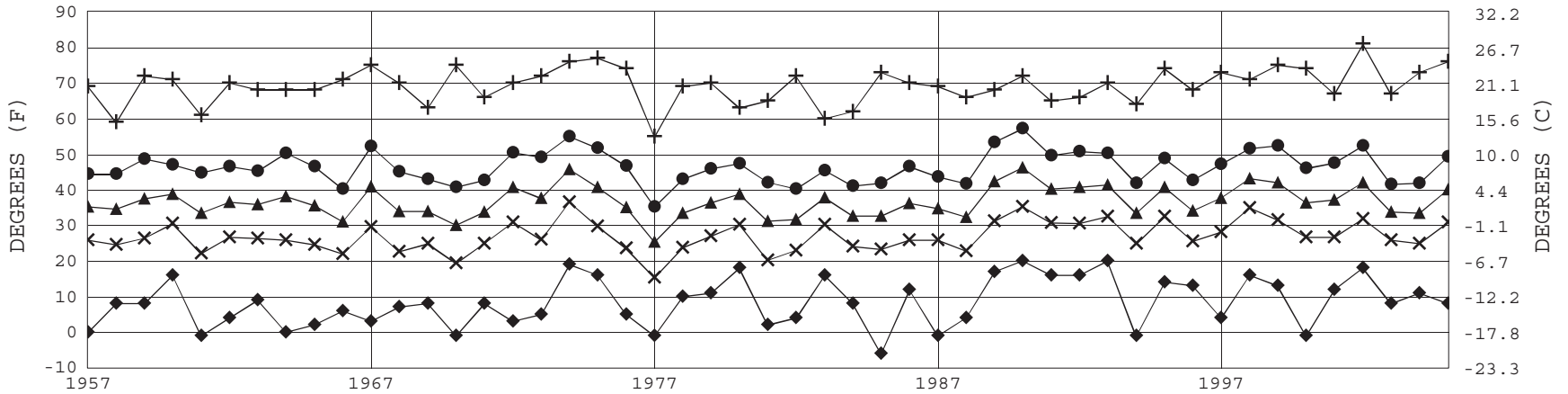
JANUARY 2005

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)																	
	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)			DIRECTION TENS OF DEG	STATION	SEA LEVEL		DRY BULB	DEW POINT	WET BULB	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL																											
SUNRISE: 0718								JAN 25								SUNSET: 1726								SUNRISE: 0713								JAN 31								SUNSET: 1732							
01	OVC	060				10.00		32	17	27	54	9	03	29.76	29.96	01	CLR	NC				10.00		31	25	29	79	12	01	29.97	30.16																
04	SCT	NC				10.00		29	14	24	54	0	00	29.79	29.99	04	CLR	NC				10.00		29	23	27	78	13	01	30.01	30.21																
07	FEW	NC				10.00		24	17	22	75	0	00	29.83	30.03	07	CLR	NC				10.00		27	22	25	81	14	01	30.09	30.29																
10	BKN	200				10.00		33	18	28	54	0	00	29.84	30.04	10	FEW	NC				10.00		32	25	29	75	12	04	30.17	30.37																
13	OVC	200				10.00		37	22	32	54	6	16	29.78	29.97	13	BKN	024				10.00		37	30	34	76	9	01	30.16	30.36																
16	BKN	150				10.00		41	25	35	53	3	18	29.72	29.92	16	OVC	030				10.00		38	30	35	73	8	02	30.16	30.36																
19	FEW	NC				10.00		39	24	33	55	6	15	29.70	29.90	19	OVC	038				10.00		35	32	34	89	6	03	30.18	30.37																
22	BKN	100				10.00		34	26	31	73	8	15	29.67	29.87	22	OVC	038				10.00		34	29	32	82	7	03	30.21	30.41																
SUNRISE: 0717								JAN 26								SUNSET: 1727								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	SCT	NC				10.00		32	27	30	82	8	18	29.58	29.78	01	CLR	NC				10.00		32	27	30	82	8	18	29.58	29.78																
04	BKN	100				10.00		35	30	33	82	13	20	29.52	29.71	04	CLR	NC				10.00		35	30	33	82	13	20	29.52	29.71																
07	OVC	100				10.00		37	31	35	79	12	20	29.49	29.68	07	CLR	NC				10.00		37	31	35	79	12	20	29.49	29.68																
10	OVC	100				10.00		42	32	38	68	5	20	29.49	29.67	10	CLR	NC				10.00		42	32	38	68	5	20	29.49	29.67																
13	OVC	043				8.00	-RA	47	40	44	77	0	00	29.45	29.64	13	CLR	NC				10.00		47	40	44	77	0	00	29.45	29.64																
16	SCT	NC				10.00		55	40	48	57	6	27	29.48	29.67	16	CLR	NC				10.00		55	40	48	57	6	27	29.48	29.67																
19	OVC	070				10.00		49	42	46	77	8	05	29.57	29.77	19	CLR	NC				10.00		49	42	46	77	8	05	29.57	29.77																
22	OVC	055				10.00		45	38	42	77	10	07	29.68	29.88	22	CLR	NC				10.00		45	38	42	77	10	07	29.68	29.88																
SUNRISE: 0716								JAN 27								SUNSET: 1728								SUMMARY BY HOUR																							
AVERAGES																																															
HOUR (LST)	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	RESULTANT WIND (MPH)																																				
							STATION	SEA LEVEL			SPEED	DIRECTION																																			
01			38	31	35	80	30.03	30.23	8.23	8	1	2																																			
02			37	31	35	79	30.03	30.23	8.28	8	1	1																																			
03			37	31	35	80	30.03	30.23	8.48	7	1	2																																			
04			37	30	34	78	30.03	30.23	8.13	8	2	36																																			
05			36	30	34	79	30.03	30.23	8.19	8	2	1																																			
06			36	29	34	79	30.04	30.23	8.06	7	1	36																																			
07			35	29	33	80	30.05	30.25	8.01	7	2	2																																			
08			35	29	33	79	30.07	30.26	8.02	6	2	36																																			
09			37	29	35	75	30.08	30.27	8.21	9	3	2																																			
10			39	30	36	70	30.09	30.28	8.41	9	2	36																																			
11			41	30	37	67	30.08	30.28	8.73	10	2	33																																			
12			43	31	39	65	30.06	30.25	8.81	9	2	31																																			
13			45	32	40	64	30.03	30.22	8.73	10	3	30																																			
14			46	32	40	62	30.01	30.21	9.04	10	3	30																																			
15			46	32	41	61	30.01	30.20	9.36	10	3	32																																			
16			46	32	40	62	30.01	30.21	9.39	9	2	34																																			
17			44	32	40	65	30.01	30.21	9.12	9	1	35																																			
18			42	32	39	70	30.02	30.22	9.10	8	1	2																																			
19			41	32	38	72	30.04	30.23	9.09	8	1	5																																			
20			40	32	37	74	30.04	30.24	9.12	8	1	3																																			
21			40	32	37	75	30.05	30.24	9.09	7	2	3																																			
22			39	31	37	75	30.05	30.25	9.06	7	1	5																																			
23			39	31	36	77	30.05	30.24	8.84	7	0	0																																			
24			38	31	36	79	30.05	30.24	8.59	7	1	36																																			

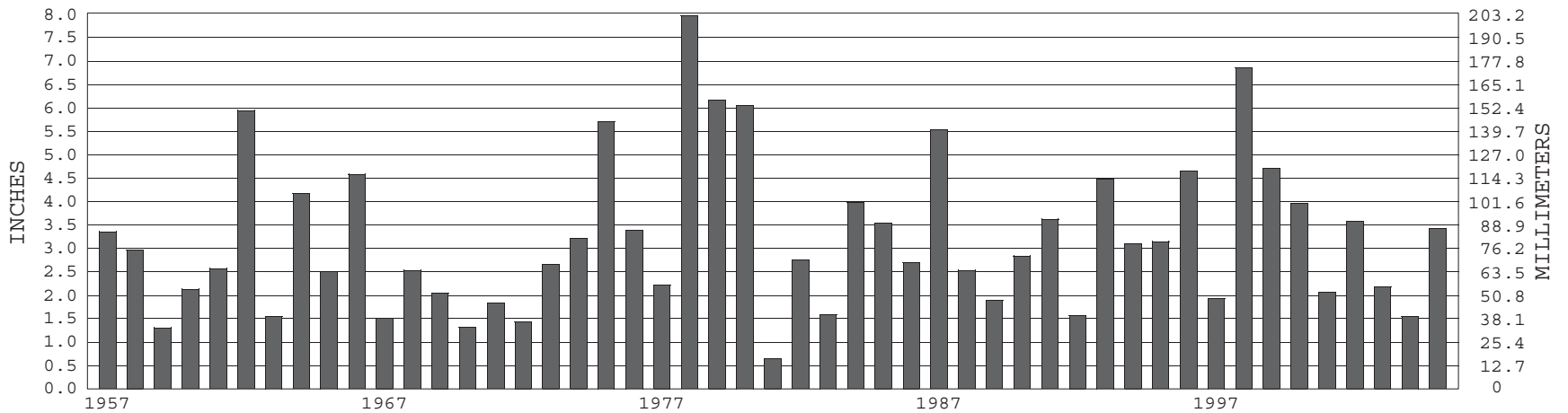
RICHMOND, VA JANUARY TEMPERATURES



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

Long-Term (1957-2005) Mean: 36.7 1971-2000 Normal: 36.4

RICHMOND, VA JANUARY PRECIPITATION



Long-Term (1957-2005) Mean Monthly Total: 3.22

1971-2000 Normal: 3.55



JANUARY 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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