



MARCH 2000

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

RICHMOND, VA

R.E.BYRD INTERNATIONAL AP. (RIC)
 Lat: 37°30' N Long: 77°19' W Elev (Ground): 165 Feet
 Time Zone: EASTERN WBAN: 13740 ISSN #:0198-537X

MARCH 2000
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						
																			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	70	34	52	9	41	48	13	0	RA				T	29.79	29.98	7.7	22	8.5	29	22	25	22	01				
02	59	41	50	7	37	45	15	0					0.00	29.70	29.89	8.4	32	9.8	29	31	24	30	02				
03	58	30	44	0	26	37	21	0					0.00	29.77	29.97	4.6	34	5.3	22	28	17	32	03				
04	59	27	43	-1	26	37	22	0					0.00	29.69	29.88	1.3	03	2.7	17	06	14	05	04				
05	69	36	53	9	35	45	12	0					0.00	29.72	29.91	7.5	30	8.7	26	27	21	30	05				
06	67	40	54	9	35	45	11	0					0.00	29.97	30.16	6.5	01	7.8	26	32	18	32	06				
07	72	35	54	9	40	47	11	0					0.00	30.03	30.22	5.3	21	5.5	20	21	17	20	07				
08	85*	49	67	22	50	58	0	2					0.00	29.81	30.00	6.0	25	7.6	24	32	16	29	08				
09	82	54	68*	22	50	59	0	3					0.00	29.65	29.83	12.1	23	12.5	26	22	22	22	09				
10	79	50	65	19	45	55	0	0					0.00	29.80	29.99	3.2	19	6.6	18	13	16	13	10				
11	81	47	64	18	54	57	1	0	TS TSRA RA BR HZ				0.68	29.68	29.87	6.2	20	10.6	31	22	26	21	11				
12	60	35	48	1	38	45	17	0	RA				0.04	29.68	29.87	9.7	30	14.5	30	31	25	32	12				
13	50	29	40	-7	24	34	25	0					0.00	30.15	30.35	2.1	04	6.0	21	01	14	02	13				
14	62	31	47	0	31	40	18	0					0.00	30.12	30.31	5.0	18	6.1	16	18	13	18	14				
15	71	39	55	7	35	46	10	0					0.00	30.07	30.27	8.2	19	8.5	23	17	18	18	15				
16	70	49	60	12	53	56	5	0	RA BR				0.72	29.86	30.05	8.5	19	9.4	32	20	26	20	16				
17	64	36	50	2	41	47	15	0	RA BR				0.34	29.83	30.03	10.9	35	15.4	36	36	28	36	17				
18	45	27*	36*	-13	18	30	29	0					0.00	30.36	30.56	7.0	07	9.8	21	05	17	03	18				
19	50	32	41	-8	35	39	24	0					0.00	30.24	30.43	7.3	07	9.0	17	11	15	10	19				
20	51	40	46	-3	41	43	19	0	RA BR				0.16	30.07	30.27	11.5	07	11.8	29	07	23	08	20				
21	50	40	45	-5	44	44	20	0	RA DZ BR				0.77	30.01	30.21	11.4	01	12.5	24	34	18	34	21				
22	46	40	43	-7	42	43	22	0	RA DZ BR				0.07	30.09	30.30	14.5	01	15.2	32	01	25	02	22				
23	61	43	52	2	44	47	13	0	DZ BR				T	30.12	30.32	7.2	02	7.5	22	06	16	05	23				
24	69	40	55	4	44	49	10	0	BR				0.00	30.00	30.19	0.7	13	4.9	15	11	14	11	24				
25	79	46	63	12	49	55	2	0	RA BR HZ				T	29.78	29.97	9.6	21	10.4	31	23	26	23	25				
26	71	47	59	8	35	50	6	0					0.00	29.62	29.80	8.5	30	10.4	30	28	24	31	26				
27	72	40	56	4	47	51	9	0	TS RA BR				0.85	29.36	29.55	7.5	17	8.8	33	19	29	19	27				
28	61	46	54	2	39	46	11	0	RA BR				0.04	29.23	29.42	8.9	28	11.5	40*	24	32*	24	28				
29	62	39	51	-1	30	42	14	0					0.00	29.64	29.83	8.9	26	10.1	24	31	18	25	29				
30	60	37	49	-4	39	45	16	0	RA				T	29.76	29.95	3.0	19	4.3	11	18	9	19	30				
31	63	41	52	-1	30	42	13	0					0.00	29.93	30.12	6.3	02	8.2	25	02	20	02	31				
< MONTHLY AVERAGES										TOTALS-->				<- MONTHLY AVERAGES													
5.0										3.1				4.0				<----- DEPARTURE FROM NORMAL ----->									
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.06 DATE: 16-17				SEA LEVEL PRESSURE				DATE TIME									
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL:				MAXIMUM				: 30.62 18 0954									
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH:				MINIMUM				: 29.32 28 0054									
HEATING: 404 -123										NUMBER OF DAYS WITH				MAXIMUM TEMP ≥ 90: 0				PRECIPITATION ≥ 0.01 INCH: 9									
COOLING: 5 5										MAXIMUM TEMP ≤ 32: 0				MINIMUM TEMP ≤ 32: 6				PRECIPITATION ≥ 0.10 INCH: 6									
										THUNDERSTORMS: 2				HEAVY FOG: 0				SNOWFALL ≥ 1.0 INCH: :									

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

MARCH 2000

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				T								01			T	
02													02												02			0.00	
03													03												03			0.00	
04													04												04			0.00	
05													05												05			0.00	
06													06												06			0.00	
07													07												07			0.00	
08													08												08			0.00	
09													09												09			0.00	
10													10												10			0.00	
11													11				T	0.06	T					0.12	0.30	0.18	11	0.67	0.68
12	0.04	0.01	T	T							0.01		12												12	0.05	0.04		
13													13												13			0.00	
14													14												14			0.00	
15													15												15			0.00	
16													16			T	T	T	0.16	0.05	0.01	0.28	0.09	0.09	0.03	16	0.71	0.72	
17	0.11	0.17	0.05	T	T	0.01	T	0.01					17												17	0.35	0.34		
18													18												18			0.00	
19													19												19			0.00	
20													20				0.01	0.06	T	T	0.01	0.03	0.03	0.01	0.01	20		0.16	
21	T	T	T	0.09	0.17	0.08	0.06	0.02	0.10	0.12	0.10	0.02	21				T			T	T	T	T	T	21	0.76	0.77		
22	T	T	T	T	T	T	T	T	0.01	0.01	0.02		22				0.01	0.01	T	0.01	T	T	T	T	22		0.07		
23	T	T	T	T									23												23			T	
24													24												24			0.00	
25													25									T	T		25			T	
26													26												26			0.00	
27													27				0.10	0.16	0.07	0.25	0.21	0.02	0.01	T	27		0.85		
28		T	0.02	T									28	T	0.01	T	T	T	0.01					28			0.04		
29													29												29			0.00	
30										T	T		30												30			T	
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)												
Ending Date												
Ending Time (Hour/Min)												

Date and time are not entered for TRACE amounts.

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

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 1961 – 1990

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 MARCH 2000

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							10.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							10.00	10.00	
07							9.00	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							2.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							1.00	10.00	
17							5.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							5.00	10.00	
21							.00	10.00	
22							1.00	10.00	
23							6.00	10.00	
24							4.00	10.00	
25							6.00	10.00	
26							10.00	10.00	
27							1.50	10.00	
28							5.00	10.00	
29							10.00	10.00	
30							10.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							7.76	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					
0		5		21					

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MARCH 2000

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 Okta		DRY BULB	DEW POINT			WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	OBSERVATION TIME (LST)	EFF CLD AMT Okta		DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)			SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	OBSERVATION TIME (LST)	EFF CLD AMT Okta	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0640								MAR 01	SUNSET: 1803								SUNRISE: 0631								MAR 07	SUNSET: 1809											
01	FEW	NC			10.00		39	30	35	70	0	00	29.98	30.17	01	CLR	NC			10.00			40	36	38	86	0	00	30.11	30.30							
04	CLR	NC			10.00		36	31	34	82	3	19	29.94	30.14	04	CLR	NC			10.00			35	34	35	96	0	00	30.11	30.30							
07	OVC	250			10.00		37	31	35	79	3	17	29.92	30.11	07	BKN	250			10.00			35	34	35	96	0	00	30.15	30.35							
10	OVC	250			10.00		60	39	50	46	13	23	29.86	30.05	10	FEW	NC			10.00			55	36	46	49	6	23	30.15	30.35							
13	OVC	250			10.00		69	43	55	39	20	23	29.74	29.93	13	CLR	NC			10.00			66	38	52	36	8	20	30.06	30.25							
16	BKN	085			10.00		66	50	57	56	12	23	29.67	29.87	16	FEW	NC			10.00			71	43	56	36	13	24	29.94	30.14							
19	BKN	070			10.00		61	50	55	67	7	20	29.66	29.85	19	FEW	NC			10.00			59	43	51	56	8	19	29.91	30.11							
22	FEW	NC			10.00		57	49	53	75	8	24	29.65	29.84	22	CLR	NC			10.00			55	44	50	67	8	20	29.88	30.08							
SUNRISE: 0639								MAR 02	SUNSET: 1804								SUNRISE: 0630								MAR 08	SUNSET: 1810											
01	CLR	NC			10.00		57	49	53	75	8	27	29.61	29.81	01	CLR	NC			10.00			55	45	50	69	3	20	29.85	30.04							
04	FEW	NC			10.00		52	47	49	83	3	31	29.62	29.81	04	CLR	NC			10.00			52	45	48	77	3	24	29.83	30.02							
07	OVC	250			10.00		47	42	45	83	6	01	29.68	29.88	07	BKN	250			10.00			56	45	50	67	6	26	29.87	30.06							
10	FEW	NC			10.00		55	38	47	53	13	30	29.71	29.91	10	CLR	NC			10.00			75	52	62	45	10	27	29.89	30.08							
13	BKN	070			10.00		57	33	46	41	12	29	29.69	29.88	13	CLR	NC			10.00			83	57	67	41	15	32	29.81	30.00							
16	SCT	NC			10.00		59	32	47	36	16	32	29.66	29.85	16	SCT	NC			10.00			84	56	67	38	7	28	29.75	29.94							
19	FEW	NC			10.00		50	29	41	44	12	35	29.73	29.92	19	FEW	NC			10.00			68	50	58	53	6	20	29.74	29.93							
22	CLR	NC			10.00		44	28	38	53	13	34	29.79	29.99	22	CLR	NC			10.00			70	44	56	39	12	22	29.75	29.94							
SUNRISE: 0637								MAR 03	SUNSET: 1805								SUNRISE: 0629								MAR 09	SUNSET: 1811											
01	CLR	NC			10.00		39	27	34	62	3	31	29.80	29.99	01	CLR	NC			10.00			60	55	57	84	13	24	29.73	29.91							
04	CLR	NC			10.00		34	26	31	73	3	03	29.80	30.00	04	SCT	NC			10.00			63	47	54	56	8	23	29.70	29.89							
07	FEW	NC			10.00		32	25	29	75	5	36	29.83	30.02	07	OVC	250			10.00			55	50	52	83	10	20	29.69	29.89							
10	OVC	250			10.00		45	28	38	52	12	30	29.85	30.05	10	OVC	250			10.00			72	54	61	53	12	23	29.67	29.86							
13	FEW	NC			10.00		53	26	42	35	12	35	29.76	29.96	13	OVC	250			10.00			80	55	65	42	21	26	29.64	29.83							
16	BKN	250			10.00		56	22	42	27	6	35	29.69	29.89	16	OVC	250			10.00			81	50	63	34	17	23	29.55	29.74							
19	BKN	200			10.00		48	27	39	44	0	00	29.70	29.90	19	OVC	250			10.00			75	48	60	39	15	21	29.57	29.76							
22	FEW	NC			10.00		40	27	35	60	3	VR	29.72	29.92	22	OVC	250			10.00			69	49	58	49	9	22	29.61	29.80							
SUNRISE: 0636								MAR 04	SUNSET: 1806								SUNRISE: 0627								MAR 10	SUNSET: 1812											
01	BKN	250			10.00		42	23	35	47	3	03	29.73	29.93	01	BKN	250			10.00			65	51	57	61	9	24	29.64	29.83							
04	SCT	NC			10.00		32	24	29	73	0	00	29.69	29.89	04	SCT	NC			10.00			62	50	56	65	6	26	29.70	29.88							
07	FEW	NC			10.00		28	23	26	81	0	00	29.73	29.92	07	FEW	NC			10.00			57	49	53	75	0	00	29.81	29.99							
10	FEW	NC			10.00		50	25	40	38	14	04	29.75	29.95	10	CLR	NC			10.00			67	42	54	41	0	00	29.87	30.06							
13	SCT	NC			10.00		56	24	43	29	5	31	29.68	29.87	13	SCT	NC			10.00			74	43	57	33	8	21	29.83	30.01							
16	BKN	250			10.00		59	26	45	28	0	00	29.61	29.80	16	SCT	NC			10.00			78	37	57	23	8	23	29.79	29.98							
19	BKN	250			10.00		50	28	41	43	0	00	29.63	29.82	19	BKN	250			10.00			64	47	55	54	14	13	29.84	30.03							
22	BKN	250			10.00		39	30	35	70	0	00	29.66	29.86	22	FEW	NC			10.00			55	47	51	74	7	12	29.84	30.03							
SUNRISE: 0634								MAR 05	SUNSET: 1807								SUNRISE: 0626								MAR 11	SUNSET: 1813											
01	SCT	NC			10.00		38	31	35	76	3	22	29.66	29.85	01	BKN	200			10.00			52	49	50	89	5	12	29.82	30.01							
04	BKN	250			10.00		42	30	37	62	5	29	29.66	29.85	04	BKN	200			7.00			48	47	47	96	6	02	29.81	30.00							
07	BKN	250			10.00		42	27	36	55	5	28	29.71	29.91	07	OVC	150			6.00	BR		48	47	47	96	0	00	29.80	30.00							
10	SCT	NC			10.00		59	32	47	36	13	27	29.74	29.93	10	BKN	250			6.00	BR		59	56	57	90	8	15	29.76	29.95							
13	FEW	NC			10.00		65	40	52	40	20	29	29.69	29.88	13	OVC	055			10.00			77	58	65	52	17	22	29.67	29.86							
16	FEW	NC			10.00		69	41	55	36	14	31	29.65	29.85	16	OVC	065			10.00	TS		76	56	64	50	15	20	29.58	29.78							
19	FEW	NC			10.00		59	40	50	49	7	35	29.73	29.92	19	BKN	250			10.00			70	56	62	61	10	19	29.55	29.74							
22	CLR	NC			10.00		55	36	46	49	6	32	29.79	29.98	22	OVC	050			5.00	TSRA BR		61	60	60	97	14	25	29.56	29.75							
SUNRISE: 0633								MAR 06	SUNSET: 1808								SUNRISE: 0624								MAR 12	SUNSET: 1814											
01	CLR	NC			10.00		48	36	43	63	7	36	29.84	30.03	01	OVC	090			10.00			59	59	59	100	13	18	29.50	29.68							
04	CLR	NC			10.00		47	31	40	54	9	01	29.88	30.07	04	OVC	011			10.00			59	59	59	100	12	19	29.44	29.63							
07	CLR	NC			10.00		41	29	36	62	6	03	29.96	30.15	07	BKN	029			10.00			55	50	52	83	15	33	29.49	29.68							
10	CLR	NC			10.00		56	35	46	46	9	35	30.00	30.19	10	OVC	060			10.00			52	36	45	55	15	30	29.57	29.76							
13	CLR	NC			10.00		64	38	51	38	12	35	29.96	30.15	13	OVC	050			10.00			52	33	44	49	18	30	29.63	29.82							
16	CLR	NC			10.00		67	38	52	35	10	34	29.95	30.14	16	SCT	NC			10.00			52	27	41	38	20	32	29.71	29.91							
19	CLR	NC			10.00		56	35	46	46	8	06	30.00	30.20	19	FEW	NC			10.00			43	25	36	49	13	35	29.87	30.06							
22	CLR	NC			10.00		48	36	43	63	7	09	30.08	30.27	22	CLR	NC			10.00			39	23	33	53	8	34	30.00	30.19							

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MARCH 2000

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: 0623				MAR 13				SUNSET: 1815				SUNRISE: 0614				MAR 19				SUNSET: 1821							
01	CLR	NC	10.00			35	22	30	59	0	00	30.06	30.25	01	OVC	020	10.00	32	27	30	82	0	00	30.35	30.55		
04	CLR	NC	10.00			30	23	28	75	7	35	30.09	30.29	04	OVC	015	10.00	33	30	32	89	7	01	30.28	30.47		
07	CLR	NC	10.00			32	22	29	66	8	36	30.17	30.37	07	OVC	038	10.00	35	31	33	85	10	01	30.30	30.50		
10	BKN	250	10.00			42	19	34	40	6	VR	30.22	30.41	10	OVC	034	10.00	40	34	37	79	8	06	30.28	30.48		
13	OVC	250	10.00			48	22	38	36	12	03	30.17	30.37	13	OVC	030	10.00	49	38	44	66	9	09	30.22	30.41		
16	BKN	250	10.00			49	21	38	33	6	14	30.12	30.32	16	OVC	032	10.00	49	37	44	64	13	10	30.17	30.37		
19	BKN	250	10.00			45	27	38	49	3	17	30.14	30.34	19	OVC	050	10.00	46	38	42	73	12	10	30.18	30.38		
22	BKN	250	10.00			40	30	36	68	7	13	30.18	30.37	22	OVC	200	10.00	43	38	41	82	8	09	30.18	30.38		
SUNRISE: 0621				MAR 14				SUNSET: 1816				SUNRISE: 0612				MAR 20				SUNSET: 1821							
01	FEW	NC	10.00			33	31	32	92	3	16	30.17	30.37	01	OVC	150	10.00	41	39	40	93	7	08	30.14	30.33		
04	CLR	NC	10.00			33	29	32	85	3	19	30.14	30.34	04	OVC	060	10.00	41	39	40	93	9	06	30.10	30.29		
07	CLR	NC	10.00			32	29	31	88	0	00	30.17	30.37	07	OVC	055	10.00	43	40	42	89	12	08	30.10	30.29		
10	CLR	NC	10.00			48	32	41	54	9	18	30.18	30.37	10	OVC	018	10.00	48	41	45	77	14	08	30.07	30.27		
13	FEW	NC	10.00			58	32	46	38	13	25	30.11	30.31	13	OVC	024	10.00	50	42	46	74	16	07	30.09	30.29		
16	FEW	NC	10.00			61	29	47	30	0	00	30.04	30.24	16	OVC	035	5.00	RA BR	47	43	45	86	16	08	30.02	30.22	
19	FEW	NC	10.00			53	32	44	45	9	14	30.05	30.24	19	OVC	018	10.00	45	43	44	93	9	07	30.05	30.24		
22	FEW	NC	10.00			49	35	43	59	12	16	30.09	30.28	22	OVC	008	10.00	43	42	43	97	15	06	30.05	30.24		
SUNRISE: 0620				MAR 15				SUNSET: 1817				SUNRISE: 0611				MAR 21				SUNSET: 1822							
01	BKN	250	10.00			46	34	41	63	8	20	30.11	30.31	01	OVC	005	6.00	DZ BR	43	43	43	100	13	07	30.02	30.22	
04	FEW	NC	10.00			42	34	39	73	3	17	30.09	30.28	04	OVC	005	3.00	RA BR	43	43	43	100	12	04	29.98	30.17	
07	BKN	250	10.00			42	35	39	76	0	00	30.14	30.33	07	OVC	004	2.50	RA BR	43	43	43	100	9	03	29.99	30.19	
10	SCT	NC	10.00			60	37	49	42	9	23	30.15	30.34	10	OVC	006	2.50	RA BR	46	46	46	100	10	01	30.00	30.20	
13	FEW	NC	10.00			68	35	52	30	14	20	30.09	30.28	13	OVC	005	2.50	BR	49	49	49	97	12	36			
16	BKN	250	10.00			70	32	52	25	18	19	30.00	30.19	16	OVC	009	3.00	DZ BR	48	46	47	93	13	01	30.00	30.19	
19	OVC	250	10.00			61	33	48	35	9	17	30.02	30.21	19	OVC	009	3.00	BR	43	41	42	93	17	35	30.02	30.22	
22	OVC	250	10.00			54	36	46	51	8	18	30.03	30.22	22	OVC	009	10.00		41	40	41	96	14	35	30.04	30.24	
SUNRISE: 0618				MAR 16				SUNSET: 1818				SUNRISE: 0609				MAR 22				SUNSET: 1823							
01	OVC	120	10.00			50	37	44	61	6	20	30.01	30.20	01	OVC	010	10.00	DZ	40	39	40	97	13	34	30.01		
04	OVC	130	10.00			52	43	48	72	8	20	29.98	30.17	04	OVC	006	3.00	DZ BR	41	40	41	96	16	34	30.00	30.20	
07	OVC	200	10.00			51	42	47	71	6	19	30.01	30.20	07	OVC	010	10.00		42	41	42	96	16	35	30.02	30.22	
10	OVC	200	10.00			59	49	54	69	10	21	29.99	30.19	10	OVC	008	3.00	-RA BR	43	42	43	97	18	02	30.08	30.27	
13	OVC	160	10.00			69	56	61	63	13	16	29.89	30.09	13	OVC	010	10.00		45	43	44	93	20	02	30.10	30.30	
16	OVC	090	10.00			64	61	62	90	5	18	29.79	29.98	16	OVC	010	2.00	DZ BR	44	43	44	96	14	36	30.12	30.31	
19	OVC	009	7.00	-RA		61	61	61	100	9	14	29.71	29.91	19	OVC	008	2.00	DZ BR	45	43	44	93	16	01	30.15	30.35	
22	OVC	011	10.00	-RA		63	63	63	100	15	19	29.62	29.81	22	OVC	010	10.00		45	43	44	93	12	01	30.17	30.37	
SUNRISE: 0617				MAR 17				SUNSET: 1819				SUNRISE: 0608				MAR 23				SUNSET: 1824							
01	OVC	015	5.00	RA BR		63	63	63	100	14	22	29.56	29.75	01	OVC	007	6.00	DZ BR	44	44	44	100	10	01	30.16	30.36	
04	OVC	020	10.00	-RA		62	62	62	100	9	21	29.49	29.68	04	OVC	010	9.00		44	43	44	96	8	02	30.15	30.35	
07	OVC	025	10.00	-RA		55	53	54	93	17	01	29.58	29.78	07	BKN	020	8.00		45	42	44	90	12	02	30.18	30.38	
10	BKN	030	10.00			56	48	52	75	18	35	29.71	29.91	10	OVC	250	10.00		51	43	47	74	12	04	30.19	30.39	
13	BKN	060	10.00			54	40	47	59	25	36	29.82	30.02	13	OVC	250	10.00		57	45	51	64	12	36	30.14	30.33	
16	SCT	NC	10.00			51	33	43	50	22	35	29.93	30.12	16	OVC	250	10.00		60	45	52	58	8	04	30.08	30.27	
19	CLR	NC	10.00			42	20	34	41	13	35	30.09	30.28	19	SCT	NC	10.00		55	44	50	67	0	00	30.06	30.26	
22	CLR	NC	10.00			38	18	31	44	13	36	30.22	30.42	22	SCT	NC	7.00		47	45	46	93	0	00	30.06	30.26	
SUNRISE: 0615				MAR 18				SUNSET: 1820				SUNRISE: 0606				MAR 24				SUNSET: 1825							
01	CLR	NC	10.00			35	18	29	50	12	02	30.29	30.48	01	CLR	NC	7.00		43	43	43	100	0	00	30.04	30.24	
04	CLR	NC	10.00			29	11	24	47	8	03	30.31	30.51	04	FEW	NC	6.00	BR	44	43	44	96	3	32	30.02	30.21	
07	CLR	NC	10.00			28	9	23	45	16	03	30.35	30.55	07	CLR	NC	5.00	BR	45	43	44	93	6	33	30.05	30.24	
10	CLR	NC	10.00			35	16	29	46	6	VR	30.42	30.62	10	CLR	NC	10.00		58	44	51	60	6	36	30.05	30.24	
13	SCT	NC	10.00			42	21	34	43	8	07	30.39	30.59	13	CLR	NC	10.00		65	42	53	44	3	VR	30.00	30.19	
16	SCT	NC	10.00			45	23	37	42	12	13	30.34	30.54	16	CLR	NC	10.00		69	45	56	42	6	23	29.94	30.13	
19	FEW	NC	10.00			37	24	32	60	12	11	30.35	30.55	19	FEW	NC	10.00		59	46	52	62	3	15	29.94	30.14	
22	CLR	NC	10.00			33	25	30	72	5	07	30.37	30.56	22	CLR	NC	9.00		51	46	49	83	6	14	29.97	30.16	

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MARCH 2000

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 Otktas	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 Otktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
<div style="display: flex; justify-content: space-between;"> MAR 25 SUNRISE: 0605 SUNSET: 1826 MAR 31 SUNRISE: 0556 SUNSET: 1831 </div>																													
01	FEW	NC			7.00		47	44	46	90	5	14	29.95	30.14	01	SCT	NC			10.00		47	44	46	90	7	33	29.80	29.99
04	BKN	250			6.00	BR	47	45	46	93	6	17	29.91	30.10	04	SCT	NC			10.00		45	34	40	66	10	03	29.85	30.04
07	BKN	250			6.00	BR	50	47	48	89	6	19	29.90	30.09	07	CLR	NC			10.00		44	32	39	63	9	02	29.92	30.11
10	BKN	250			10.00		64	49	56	58	13	22	29.85	30.04	10	CLR	NC			10.00		53	27	42	37	13	03	29.98	30.17
13	FEW	NC			10.00		75	50	61	42	14	22	29.76	29.95	13	CLR	NC			10.00		59	26	45	28	13	32	29.95	30.14
16	BKN	250			10.00		77	51	62	40	18	21	29.66	29.85	16	SCT	NC			10.00		63	24	46	23	9	03	29.90	30.09
19	OVC	250			10.00		69	51	59	53	12	21	29.65	29.84	19	BKN	250			10.00		54	25	42	33	5	04	29.94	30.14
22	OVC	150			10.00		64	52	57	65	10	21	29.66	29.85	22	SCT	NC			10.00		44	35	40	71	3	17	30.01	30.20
<div style="display: flex; justify-content: space-between;"> MAR 26 SUNRISE: 0603 SUNSET: 1827 MAR 27 SUNRISE: 0602 SUNSET: 1828 </div>																													
01	OVC	150			10.00		61	54	57	78	7	22	29.62	29.81	01	CLR	NC			10.00		47	34	41	61	0	00	29.58	29.78
04	OVC	140			10.00		61	54	57	78	8	29	29.62	29.81	04	BKN	250			10.00		43	36	40	76	3	11	29.54	29.73
07	BKN	150			10.00		61	32	48	34	15	33	29.67	29.86	07	OVC	250			10.00		45	43	44	93	6	16	29.49	29.68
10	CLR	NC			10.00		65	25	47	22	20	30	29.66	29.85	10	OVC	200			10.00		62	39	51	43	16	19	29.44	29.63
13	CLR	NC			10.00		68	28	50	22	15	30	29.61	29.80	13	OVC	250			10.00		71	52	60	51	22	19	29.33	29.52
16	CLR	NC			10.00		71	29	51	21	12	26	29.56	29.75	16	OVC	026			1.50	+RA BR	57	55	56	93	12	20	29.30	29.49
19	FEW	NC			10.00		65	29	48	26	3	33	29.58	29.77	19	OVC	010			1.50	+RA BR	59	56	57	90	12	18	29.21	29.40
22	CLR	NC			10.00		53	33	44	47	0	00	29.59	29.78	22	OVC	019			10.00	-RA	56	55	55	97	6	22	29.15	29.34
<div style="display: flex; justify-content: space-between;"> MAR 28 SUNRISE: 0600 SUNSET: 1829 MAR 29 SUNRISE: 0559 SUNSET: 1830 </div>																													
01	OVC	008			7.00		56	54	55	93	8	30	29.13	29.32	01	CLR	NC			10.00		44	28	38	53	7	25	29.45	29.64
04	OVC	075			10.00		49	44	47	83	8	32	29.16	29.35	04	CLR	NC			10.00		42	29	37	60	10	25	29.51	29.70
07	CLR	NC			10.00		48	44	46	86	8	26	29.23	29.43	07	CLR	NC			10.00		42	28	36	58	12	26	29.61	29.81
10	FEW	NC			10.00		56	34	46	44	10	23	29.23	29.43	10	CLR	NC			10.00		52	29	42	41	15	27	29.66	29.85
13	OVC	045			10.00	-RA	56	37	47	49	15	23	29.20	29.39	13	CLR	NC			10.00		58	31	46	36	9	27	29.66	29.85
16	OVC	080			10.00	-RA	60	38	49	44	14	22	29.13	29.32	16	SCT	NC			10.00		62	27	46	26	13	26	29.65	29.85
19	SCT	NC			10.00		49	39	44	69	7	31	29.27	29.47	19	SCT	NC			10.00		56	30	44	37	12	24	29.71	29.91
22	FEW	NC			10.00		49	29	40	46	20	29	29.36	29.56	22	BKN	250			10.00		49	33	42	55	6	19	29.72	29.92
<div style="display: flex; justify-content: space-between;"> MAR 30 SUNRISE: 0557 SUNSET: 1831 </div>																													
01	BKN	250			10.00		45	35	41	68	0	00	29.75	29.94	01	BKN	250			10.00		45	35	41	68	0	00	29.75	29.94
04	SCT	NC			10.00		40	35	38	83	0	00	29.75	29.95	04	SCT	NC			10.00		44	38	41	79	0	00	29.78	29.97
07	OVC	140			10.00		44	38	41	79	0	00	29.78	29.97	07	OVC	140			10.00	-RA	50	38	44	63	6	23	29.79	29.99
10	OVC	140			10.00		50	38	44	63	6	23	29.79	29.99	10	OVC	140			10.00		57	37	48	47	6	VR	29.75	29.94
13	BKN	150			10.00		57	37	48	47	6	VR	29.75	29.94	13	BKN	150			10.00		60	40	50	48	8	18	29.71	29.90
16	BKN	250			10.00		60	40	50	48	8	18	29.71	29.90	16	BKN	250			10.00		54	41	48	62	3	18	29.71	29.91
19	BKN	250			10.00		54	41	48	62	3	18	29.71	29.91	19	BKN	250			10.00		49	41	48	62	3	18	29.71	29.91
22	BKN	250			10.00		49	45	47	86	6	22	29.76	29.96	22	BKN	250			10.00		49	45	47	86	6	22	29.76	29.96

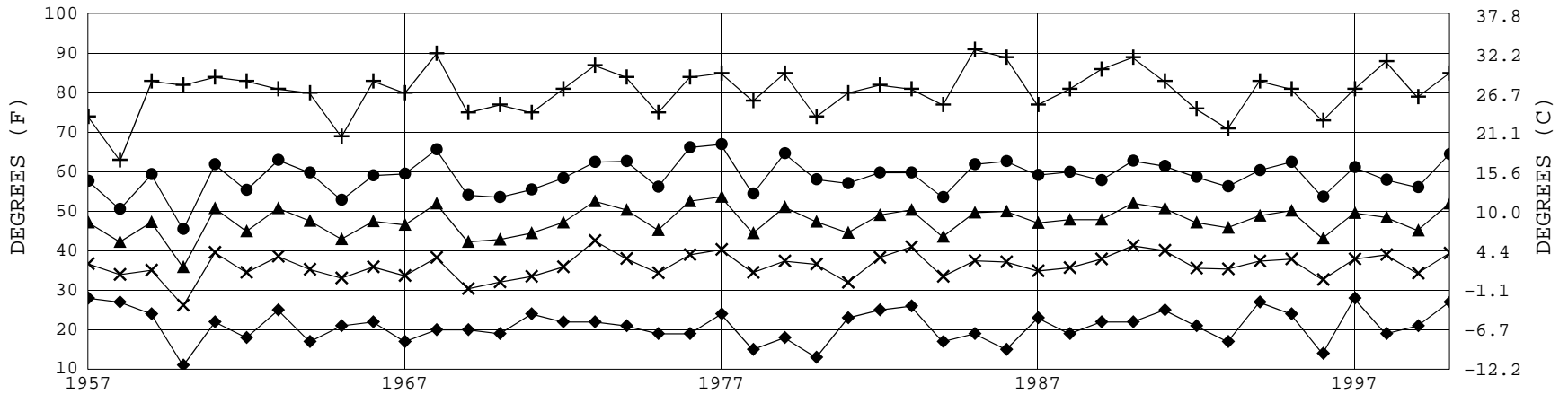
3-HOURLY OBSERVATION NOTES

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.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES												RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION		
							STATION	SEA LEVEL						
01			47	39	44	78	29.85	30.04	9.29	6	1	26		
02			46	39	43	77	29.85	30.04	9.23	7	1	29		
03			45	38	42	79	29.84	30.03	9.16	7	2	33		
04			45	38	42	80	29.84	30.04	9.16	6	2	33		
05			44	38	41	80	29.85	30.05	9.32	6	2	34		
06			44	38	41	80	29.87	30.06	9.35	6	2	33		
07			44	37	41	78	29.88	30.08	9.27	7	3	35		
08			47	38	43	72	29.89	30.09	9.34	8	3	35		
09			51	37	45	61	29.90	30.09	9.56	10	3	33		
10			55	38	47	56	29.90	30.09	9.40	11	3	29		
11			57	38	48	51	29.89	30.08	9.47	11	4	31		
12			59	39	49	49	29.87	30.07	9.73	12	4	27		
13			61	39	50	47	29.85	30.04	9.76	13	5	29		
14			62	39	50	46	29.83	30.02	9.90	11	3	27		
15			63	39	51	44	29.81	30.00	9.65	11	4	27		
16			62	39	51	46	29.81	30.00	9.08	11	3	26		
17			61	39	50	49	29.81	30.00	9.19	11	2	26		
18			58	39	49	53	29.82	30.01	9.15	10	1	29		
19			55	39	47	58	29.83	30.03	9.15	9	1	14		
20			52	39	46	64	29.84	30.04	9.45	8	2	12		
21			51	39	45	67	29.85	30.05	9.29	9	2	14		
22			50	39	45	69	29.86	30.05	9.71	8	1	23		
23			49	40	45	72	29.86	30.05	9.42	7	1	24		
24			48	39	44	73	29.86	30.05	9.39	7	1	25		

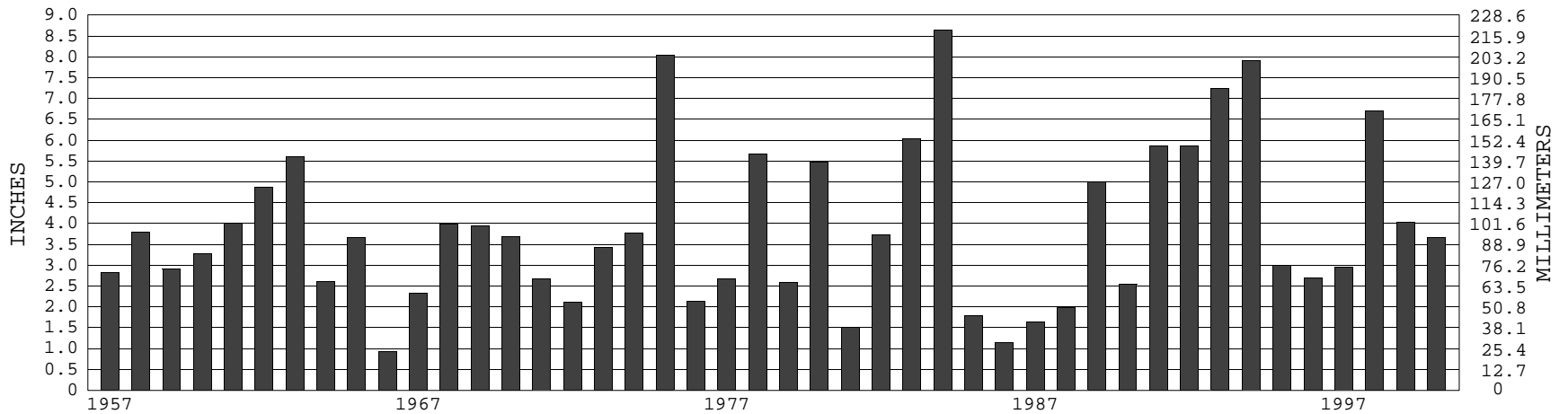
RICHMOND, VA MARCH TEMPERATURES



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

Long-Term (1957-2000) Mean: 47.6 1961-1990 Normal: 48.0

RICHMOND, VA MARCH PRECIPITATION



Long-Term (1957-2000) Mean Monthly Total: 3.89

1961-1990 Normal: 3.61



**MARCH 2000
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.

DIRECTOR

NOTICE

Effective July 1, 1996, the National Weather Service & Federal Aviation Administration began using the METAR format for Hourly Observations.

We welcome your questions or comments, please contact us at
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