



MARCH 1999

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): 164 Feet
 Time Zone: EASTERN WBAN: 13740 ISSN #:0198-537X

MARCH 1999
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	11	12	13	14	15	16	17	18	19	20	21	22	23	24													
01	50	38	44	1	28	38	21	0	RA			T	29.38	29.58	11.9	27	12.6	31	29	25	27	01													
02	60	30	45	2	26	37	20	0				0.00	29.69	29.89	6.6	22	8.7	21	25	18	25	02													
03	72	37	55	11	43	48	10	0	TS TSRA RA BR			0.51	29.38	29.58	14.3	19	17.3	43	18	34	23	03													
04	48	35	42	-2	22	34	23	0	RA SN			0.01	29.64	29.85	15.8	27	17.5	43*	29	34*	29	04													
05	50	24	37	-7	22	32	28	0				0.00	30.15	30.36	4.1	14	5.4	17	15	15	15	05													
06	65	37	51	6	38	44	14	0	RA			0.03	29.84	30.04	7.7	22	12.4	38	24	30	23	06													
07	50	27	39	-6	11	28	26	0				0.00	30.13	30.33	17.6	34	18.0	36	34	29	34	07													
08	41	21*	31	-14	5	23	34	0				0.00	30.36	30.57	8.6	36	9.3	21	36	17	01	08													
09	31	26	29*	-17	23	27	36	0	RA FZRA SN PL FG+ FZFG BR			0.17	29.99	30.20	5.0	05	5.8	15	05	13	05	09													
10	38	29	34	-12	27	31	31	0	SN BR			0.02	29.72	29.92	8.2	34	8.6	22	33	18	33	10													
11	49	27	38	-8	17	31	27	0				0.00	29.75	29.96	11.2	33	11.9	26	32	22	31	11													
12	54	28	41	-6	16	32	24	0				0.00	29.81	30.01	11.3	33	11.8	32	32	25	32	12													
13	50	30	40	-7	22	33	25	0				0.00	29.96	30.17	6.4	36	7.9	22	01	20	01	13													
14	39	36	38	-9	35	36	27	0	RA BR			1.48	29.71	29.91	7.3	04	9.4	32	02	26	02	14													
15	45	33	39	-9	32	36	26	0	RA DZ SN BR			0.29	29.52	29.73	11.3	35	12.3	30	34	23	34	15													
16	59	26	43	-5	25	36	22	0				0.00	29.83	30.04	6.1	24	7.8	21	24	18	22	16													
17	78	38	58	10	32	47	7	0				0.00	29.76	29.96	8.9	23	9.4	22	26	20	26	17													
18	79*	48	64*	15	33	49	1	0				0.00	29.65	29.86	9.2	28	13.6	33	29	28	30	18													
19	60	36	48	-1	26	39	17	0				0.00	29.96	30.17	7.1	34	8.9	23	28	17	33	19													
20	56	32	44	-5	23	36	21	0				0.00	30.04	30.25	2.7	04	6.8	18	01	16	02	20													
21	57	39	48	-2	41	44	17	0	RA BR			1.47	29.68	29.89	3.1	10	9.1	24	01	20	34	21													
22	55	38	47	-3	26	38	18	0	RA			T	29.74	29.95	10.2	28	12.5	32	28	26	28	22													
23	58	29	44	-6	32	40	21	0				0.00	29.97	30.18	3.4	15	4.2	14	18	11	18	23													
24	68	39	54	3	44	49	11	0	RA			0.01	29.79	29.99	5.1	25	6.7	22	30	18	29	24													
25	59	44	52	1	33	43	13	0				0.00	29.85	30.06	8.5	02	9.2	21	01	17	01	25													
26	49	34	42	-9	25	35	23	0				0.00	29.97	30.18	10.8	02	11.1	23	01	20	01	26													
27	49	38	44	-8	28	37	21	0	RA BR			0.05	29.91	30.11	9.8	01	12.4	29	02	25	02	27													
28	62	39	51	-1	32	43	14	0				0.00	29.78	29.99	7.0	33	9.5	24	34	18	36	28													
29	71	43	57	5	31	46	8	0				0.00	29.87	30.07	6.7	31	7.7	24	30	17	33	29													
30	67	45	56	3	22	42	9	0				0.00	30.12	30.32	5.4	34	7.6	28	33	20	01	30													
31	70	38	54	1	32	46	11	0				0.00	30.08	30.29	9.4	20	9.7	26	19	22	19	31													
										56.1		34.3	45.2	■ ■	27.5	38.1	19.5	0.0	< MONTHLY AVERAGES		TOTALS-->		4.04	29.84	30.05	3.9	31	10.2	<- MONTHLY AVERAGES						
										-3.4		-2.0	-2.8	■ ■	<----- DEPARTURE FROM NORMAL ----->										0.43	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.66 DATE: 14-15										SEA LEVEL PRESSURE DATE TIME															
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: DATE: DATE:										MAXIMUM : 30.67 08 0856															
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH: DATE: DATE:										MINIMUM : 29.21 03 1745															
HEATING: 606 79 3239 -422										NUMBER OF DAYS WITH →										MAXIMUM TEMP ≥ 90: 0															
COOLING: 0 0 1 1																				MINIMUM TEMP ≤ 32: 12															
																				PRECIPITATION ≥ 0.01 INCH : 10															
																				PRECIPITATION ≥ 0.10 INCH : 5															
																				SNOWFALL ≥ 1.0 INCH :															

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

MARCH 1999

RIC

WBAN # 13740

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note 2)	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	T												01					T	T	T					01			T	
02													02												02			0.00	
03				T									03		0.01	0.18			0.07	0.25		T		03			0.51		
04	T	0.01	T	T									04											04			0.01		
05													05											05			0.00		
06											T		06	T								0.01		06			0.03		
07												0.02	07											07			0.00		
08													08											08			0.00		
09													09	T	T	T	T	T	T	0.02	0.04	0.02	0.02	0.01	T	09		0.17	
10	0.01	0.01	T	T	T	T	T	T	T	T	T	T	10											10			0.02		
11													11											11			0.00		
12													12											12			0.00		
13													13											13			0.00		
14				T	0.01	T	T	T	0.03	0.02	0.04	T	14	T	0.03	0.07	0.08	0.07	0.21	0.14	0.29	0.20	0.18	0.09	0.01	14	1.47	1.48	
15	0.01			T	0.01	T	T	0.03	0.08	0.06	0.03	0.04	15	0.04	T										15	0.30	0.29		
16													16												16			0.00	
17													17												17			0.00	
18													18												18			0.00	
19													19												19			0.00	
20													20												20			0.00	
21													21	0.25	0.38	0.01	0.01	T		T	0.01	0.24	0.14	0.02	0.06	21		1.47	
22	T	T											22												22			T	
23													23												23			0.00	
24													24			T	0.01	T	T		T				24			0.01	
25													25												25			0.00	
26													26												26			0.00	
27													27						T	T	T	T	0.01	0.04	T	27		0.05	
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)												
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.

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MARCH 1999

RIC

WBAN # 13740

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB
SUNRISE: 0641				MAR 01	SUNSET: 1803				SUNRISE: 0633				MAR 07	SUNSET: 1809											
01	OVC	080	10.00		46	35	41	66	9	28	29.28	29.48	01	CLR	NC	10.00		47	25	38	42	14	32	29.79	29.99
04	OVC	110	10.00		41	31	37	67	9	26	29.30	29.50	04	CLR	NC	10.00		35	18	29	50	20	34	29.92	30.12
07	BKN	250	10.00		39	29	35	67	10	25	29.32	29.53	07	CLR	NC	10.00		29	12	24	49	21	33	30.06	30.26
10	OVC	075	10.00		45	30	39	56	12	25	29.35	29.55	10	CLR	NC	10.00		33	11	26	40	21	35	30.14	30.34
13	OVC	050	10.00		48	30	40	50	18	26	29.34	29.55	13	CLR	NC	10.00		39	11	30	31	18	33	30.15	30.35
16	OVC	060	10.00		49	26	40	41	20	28	29.35	29.55	16	CLR	NC	10.00		40	6	30	24	20	35	30.17	30.37
19	OVC	050	10.00	-RA	45	29	38	54	12	31	29.45	29.66	19	CLR	NC	10.00		34	5	26	29	15	35	30.27	30.48
22	FEW	NC	10.00		42	21	34	43	5	27	29.52	29.72	22	CLR	NC	10.00		30	5	23	34	16	35	30.33	30.54
SUNRISE: 0640				MAR 02	SUNSET: 1804				SUNRISE: 0631				MAR 08	SUNSET: 1810											
01	CLR	NC	10.00		38	25	33	60	8	25	29.56	29.76	01	CLR	NC	10.00		26	5	21	40	12	36	30.36	30.57
04	CLR	NC	10.00		35	24	31	64	6	24	29.59	29.80	04	CLR	NC	10.00		23	6	19	48	9	35	30.38	30.59
07	CLR	NC	10.00		31	24	28	76	6	23	29.66	29.86	07	CLR	NC	10.00		21	4	17	47	9	36	30.41	30.61
10	CLR	NC	10.00		48	27	39	44	16	24	29.72	29.92	10	CLR	NC	10.00		28	3	22	34	14	01	30.45	30.66
13	BKN	250	10.00		56	25	43	30	17	23	29.72	29.92	13	FEW	NC	10.00		37	3	27	24	10	34	30.39	30.60
16	BKN	250	10.00		58	24	44	27	8	26	29.70	29.91	16	FEW	NC	10.00		41	1	30	18	8	33	30.32	30.53
19	FEW	NC	10.00		51	28	41	41	3	18	29.74	29.95	19	SCT	NC	10.00		35	3	26	26	5	01	30.31	30.52
22	FEW	NC	10.00		43	30	38	60	8	13	29.74	29.94	22	SCT	NC	10.00		31	7	24	36	3	02	30.30	30.51
SUNRISE: 0638				MAR 03	SUNSET: 1805				SUNRISE: 0630				MAR 09	SUNSET: 1811											
01	BKN	250	10.00		46	32	40	58	12	15	29.73	29.93	01	BKN	200	10.00		29	12	24	49	7	04	30.24	30.45
04	BKN	110	10.00		46	30	39	54	9	15	29.66	29.87	04	OVC	075	10.00		30	12	25	47	6	04	30.17	30.38
07	SCT	NC	10.00		47	38	43	71	13	15	29.55	29.76	07	OVC	070	10.00		30	14	25	51	6	36	30.17	30.38
10	OVC	250	10.00		62	49	55	62	18	17	29.50	29.70	10	OVC	008	1.00	-SN BR	27	25	26	92	6	11	30.10	30.31
13	OVC	250	10.00		71	48	58	44	23	18	29.34	29.54	13	OVC	010	9.00	-SN	30	26	29	85	0	00	29.99	30.20
16	OVC	200	10.00		63	53	57	70	20	16	29.16	29.36	16	OVC	012	9.00		31	27	29	85	5	07	29.88	30.09
19	BKN	200	10.00		54	48	51	80	23	25	29.10	29.30	19	OVC	008	2.00	-FZRA BR	30	30	30	100	7	03	29.81	30.02
22	OVC	020	10.00		42	36	39	79	22	23	29.17	29.38	22	OVC	006	2.00	-SN BR	30	29	30	96	7	01	29.75	29.96
SUNRISE: 0637				MAR 04	SUNSET: 1806				SUNRISE: 0628				MAR 10	SUNSET: 1811											
01	OVC	015	10.00	-RA	36	34	35	93	25	24	29.22	29.42	01	OVC	028	2.00	-SN BR	29	28	29	96	8	01	29.70	29.91
04	OVC	090	10.00		37	29	34	73	22	24	29.32	29.52	04	OVC	005	2.50	-SN BR	29	28	29	96	7	35	29.67	29.88
07	CLR	NC	10.00		38	25	33	60	18	24	29.45	29.66	07	OVC	007	2.50	BR	29	27	28	92	8	34	29.72	29.92
10	BKN	250	10.00		42	25	35	51	20	27	29.60	29.80	10	OVC	010	2.50	-SN BR	31	28	30	89	9	36	29.74	29.95
13	BKN	250	10.00		46	16	35	30	23	29	29.69	29.90	13	OVC	017	9.00		35	28	32	76	8	34	29.71	29.92
16	CLR	NC	10.00		48	18	37	30	21	31	29.75	29.96	16	OVC	080	10.00		38	27	34	65	12	32	29.69	29.90
19	CLR	NC	10.00		42	16	33	35	7	29	29.87	30.07	19	SCT	NC	10.00		34	25	31	70	8	32	29.73	29.93
22	CLR	NC	10.00		38	16	31	41	9	29	29.97	30.18	22	SCT	NC	10.00		33	25	30	72	7	32	29.75	29.96
SUNRISE: 0635				MAR 05	SUNSET: 1807				SUNRISE: 0627				MAR 11	SUNSET: 1812											
01	CLR	NC	10.00		34	18	29	52	5	31	30.04	30.25	01	CLR	NC	10.00		32	22	28	66	10	31	29.76	29.97
04	CLR	NC	10.00		29	19	26	66	0	00	30.09	30.30	04	CLR	NC	10.00		29	18	25	64	10	33	29.77	29.98
07	FEW	NC	10.00		25	20	23	81	0	00	30.17	30.38	07	CLR	NC	10.00		28	14	24	56	12	34	29.81	30.02
10	OVC	250	10.00		41	20	33	43	6	VR	30.23	30.43	10	CLR	NC	10.00		36	15	29	42	16	36	29.82	30.03
13	OVC	250	10.00		47	21	37	36	7	13	30.19	30.40	13	CLR	NC	10.00		46	19	36	34	14	30	29.75	29.96
16	OVC	250	10.00		49	23	39	36	9	18	30.14	30.35	16	FEW	NC	10.00		48	17	37	29	12	31	29.68	29.88
19	OVC	250	10.00		42	26	36	53	7	12	30.15	30.36	19	SCT	NC	10.00		41	18	33	39	7	35	29.70	29.91
22	BKN	250	10.00		39	26	34	60	9	14	30.15	30.36	22	FEW	NC	10.00		38	17	31	43	7	32	29.74	29.95
SUNRISE: 0634				MAR 06	SUNSET: 1808				SUNRISE: 0625				MAR 12	SUNSET: 1813											
01	OVC	110	10.00		38	27	34	65	8	16	30.11	30.32	01	CLR	NC	10.00		33	18	28	54	10	33	29.78	29.98
04	OVC	150	10.00		37	29	34	73	6	15	30.04	30.25	04	FEW	NC	10.00		30	19	26	64	7	36	29.78	29.98
07	BKN	250	10.00		39	32	36	76	9	16	29.95	30.16	07	CLR	NC	10.00		30	18	26	61	7	31	29.81	30.02
10	OVC	055	10.00		46	37	42	71	12	18	29.89	30.10	10	CLR	NC	10.00		41	15	32	35	21	33	29.81	30.02
13	SCT	NC	10.00		58	49	53	72	16	22	29.76	29.97	13	CLR	NC	10.00		51	13	37	22	21	32	29.77	29.97
16	OVC	060	10.00		64	45	54	50	17	26	29.70	29.90	16	CLR	NC	10.00		52	12	38	20	23	32	29.75	29.96
19	BKN	250	10.00		57	42	50	58	6	21	29.67	29.87	19	CLR	NC	10.00		44	14	34	30	10	35	29.81	30.01
22	BKN	110	10.00		57	43	50	60	18	33	29.70	29.90	22	CLR	NC	10.00		39	16	31	39	9	35	29.88	30.09

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MARCH 1999

RIC

WBAN # 13740

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB
SUNRISE: 0624				MAR 13				SUNSET: 1814				SUNRISE: 0615				MAR 19				SUNSET: 1820					
01	CLR	NC		10.00	37	15	30	41	14	34	29.94	30.15	01	CLR	NC		10.00	44	28	38	53	8	36	29.87	30.07
04	CLR	NC		10.00	33	18	28	54	9	34	29.96	30.16	04	CLR	NC		10.00	40	27	35	60	3	05	29.91	30.11
07	CLR	NC		10.00	31	19	27	61	8	34	30.00	30.21	07	CLR	NC		10.00	39	28	35	65	5	32	29.98	30.18
10	SCT	NC		10.00	39	20	32	46	10	35	30.01	30.22	10	CLR	NC		10.00	50	27	40	41	13	30	30.00	30.20
13	BKN	230		10.00	45	22	36	40	5	VR	29.98	30.19	13	CLR	NC		10.00	56	26	43	32	13	30	29.96	30.16
16	OVC	220		10.00	49	24	39	38	6	31	29.95	30.16	16	FEW	NC		10.00	58	23	43	26	10	28	29.93	30.14
19	OVC	220		10.00	43	25	36	49	5	06	29.93	30.13	19	SCT	NC		10.00	52	24	41	34	8	01	29.96	30.16
22	OVC	200		10.00	40	26	35	58	5	05	29.96	30.16	22	CLR	NC		10.00	44	26	37	49	8	04	30.03	30.24
SUNRISE: 0622				MAR 14				SUNSET: 1815				SUNRISE: 0613				MAR 20				SUNSET: 1821					
01	OVC	085		10.00	39	30	35	70	3	18	29.97	30.17	01	CLR	NC		10.00	38	25	33	60	7	01	30.07	30.28
04	OVC	024		10.00	38	31	35	76	3	18	29.91	30.11	04	CLR	NC		10.00	35	25	31	67	9	01	30.09	30.29
07	OVC	044		4.00	37	31	35	79	5	06	29.86	30.06	07	CLR	NC		10.00	35	22	30	59	9	01	30.12	30.32
10	OVC	026		3.00	38	37	37	95	5	06	29.86	30.06	10	SCT	NC		10.00	44	21	35	40	10	02	30.14	30.35
13	OVC	007		3.00	38	37	38	97	10	08	29.74	29.95	13	SCT	NC		10.00	52	19	39	27	5	VR	30.07	30.27
16	OVC	006		1.25	37	36	37	96	10	07	29.61	29.82	16	BKN	250		10.00	56	20	42	25	9	02	29.98	30.18
19	OVC	005		1.50	38	37	38	97	16	02	29.48	29.69	19	BKN	250		10.00	48	23	38	37	5	11	29.96	30.17
22	OVC	013		3.00	36	35	36	97	17	02	29.42	29.63	22	OVC	250		10.00	44	31	39	60	10	13	29.97	30.17
SUNRISE: 0621				MAR 15				SUNSET: 1816				SUNRISE: 0612				MAR 21				SUNSET: 1822					
01	OVC	009		10.00	39	37	38	93	15	01	29.35	29.55	01	OVC	080		10.00	43	34	39	71	10	16	29.94	30.14
04	OVC	005		10.00	37	36	37	96	15	01	29.30	29.50	04	OVC	150		10.00	40	32	37	73	3	12	29.88	30.09
07	OVC	007		4.00	36	34	35	93	17	01	29.37	29.57	07	OVC	085		10.00	41	32	37	70	3	12	29.84	30.05
10	OVC	008		2.00	33	32	33	96	10	35	29.46	29.67	10	OVC	034		10.00	50	38	44	63	10	15	29.77	29.98
13	OVC	004		2.00	34	33	34	97	9	32	29.54	29.74	13	OVC	019		10.00	50	32	42	50	9	14	29.67	29.87
16	BKN	038		10.00	44	32	39	63	21	32	29.58	29.78	16	OVC	003		10.00	53	51	52	93	6	10	29.54	29.74
19	CLR	NC		10.00	42	27	36	55	6	32	29.67	29.87	19	OVC	002		10.00	48	47	48	97	14	32	29.48	29.68
22	CLR	NC		10.00	38	25	33	60	6	32	29.76	29.97	22	OVC	050		10.00	44	44	44	99	16	35	29.48	29.68
SUNRISE: 0619				MAR 16				SUNSET: 1817				SUNRISE: 0610				MAR 22				SUNSET: 1823					
01	CLR	NC		10.00	33	23	30	67	6	34	29.82	30.03	01	OVC	065		10.00	43	41	42	93	14	36	29.53	29.74
04	CLR	NC		10.00	30	23	28	75	3	32	29.85	30.06	04	SCT	NC		10.00	41	30	37	65	12	29	29.59	29.79
07	CLR	NC		10.00	29	23	27	78	0	00	29.91	30.12	07	CLR	NC		10.00	38	26	33	62	15	26	29.67	29.87
10	CLR	NC		10.00	43	24	36	47	6	22	29.94	30.15	10	CLR	NC		10.00	45	23	36	42	14	30	29.73	29.93
13	SCT	NC		10.00	53	24	41	32	17	29	29.85	30.05	13	SCT	NC		10.00	52	24	41	34	18	28	29.74	29.95
16	CLR	NC		10.00	58	24	44	27	15	26	29.78	29.98	16	CLR	NC		10.00	54	20	41	26	18	25	29.77	29.97
19	CLR	NC		10.00	51	29	42	43	10	20	29.75	29.96	19	CLR	NC		10.00	51	18	39	27	5	25	29.83	30.03
22	CLR	NC		10.00	45	29	38	54	8	21	29.78	29.98	22	CLR	NC		10.00	39	27	34	62	5	05	29.93	30.13
SUNRISE: 0618				MAR 17				SUNSET: 1818				SUNRISE: 0609				MAR 23				SUNSET: 1824					
01	CLR	NC		10.00	41	30	37	65	9	21	29.78	29.98	01	CLR	NC		10.00	38	22	32	53	5	09	29.96	30.17
04	CLR	NC		10.00	43	30	38	60	7	24	29.77	29.98	04	CLR	NC		10.00	33	24	30	70	0	00	29.98	30.19
07	SCT	NC		10.00	41	31	37	67	3	23	29.82	30.03	07	OVC	150		10.00	34	26	31	73	3	14	30.03	30.24
10	CLR	NC		10.00	64	30	48	28	7	25	29.84	30.04	10	OVC	095		10.00	46	31	40	56	9	16	30.04	30.24
13	CLR	NC		10.00	74	31	53	21	13	22	29.77	29.98	13	OVC	070		10.00	54	33	45	45	9	18	29.98	30.19
16	SCT	NC		10.00	77	30	54	18	14	24	29.71	29.91	16	OVC	085		10.00	58	34	47	41	6	19	29.93	30.14
19	OVC	250		10.00	64	34	50	33	8	20	29.70	29.90	19	OVC	110		10.00	52	37	45	57	6	03	29.94	30.15
22	BKN	250		10.00	61	37	49	41	12	20	29.70	29.90	22	BKN	100		10.00	46	38	42	73	6	11	29.91	30.12
SUNRISE: 0616				MAR 18				SUNSET: 1819				SUNRISE: 0607				MAR 24				SUNSET: 1824					
01	BKN	250		10.00	63	34	49	34	16	22	29.66	29.86	01	SCT	NC		10.00	44	38	41	79	5	02	29.89	30.09
04	SCT	NC		10.00	51	34	43	52	7	21	29.64	29.84	04	SCT	NC		9.00	42	38	40	85	0	00	29.85	30.06
07	CLR	NC		10.00	56	34	46	44	7	24	29.65	29.85	07	OVC	250		8.00	48	45	47	89	8	18	29.85	30.05
10	CLR	NC		10.00	70	38	54	31	20	23	29.63	29.83	10	OVC	080		10.00	57	49	53	75	12	23	29.82	30.03
13	FEW	NC		10.00	76	42	58	30	16	27	29.56	29.76	13	OVC	250		10.00	66	45	55	47	6	23	29.75	29.96
16	FEW	NC		10.00	75	31	53	20	18	30	29.57	29.77	16	BKN	075		10.00	60	45	52	58	8	26	29.73	29.93
19	CLR	NC		10.00	65	22	47	19	10	32	29.67	29.87	19	OVC	090		10.00	60	44	52	56	8	26	29.72	29.92
22	CLR	NC		10.00	53	27	42	37	13	01	29.80	30.00	22	BKN	250		10.00	56	47	51	72	7	31	29.74	29.94

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

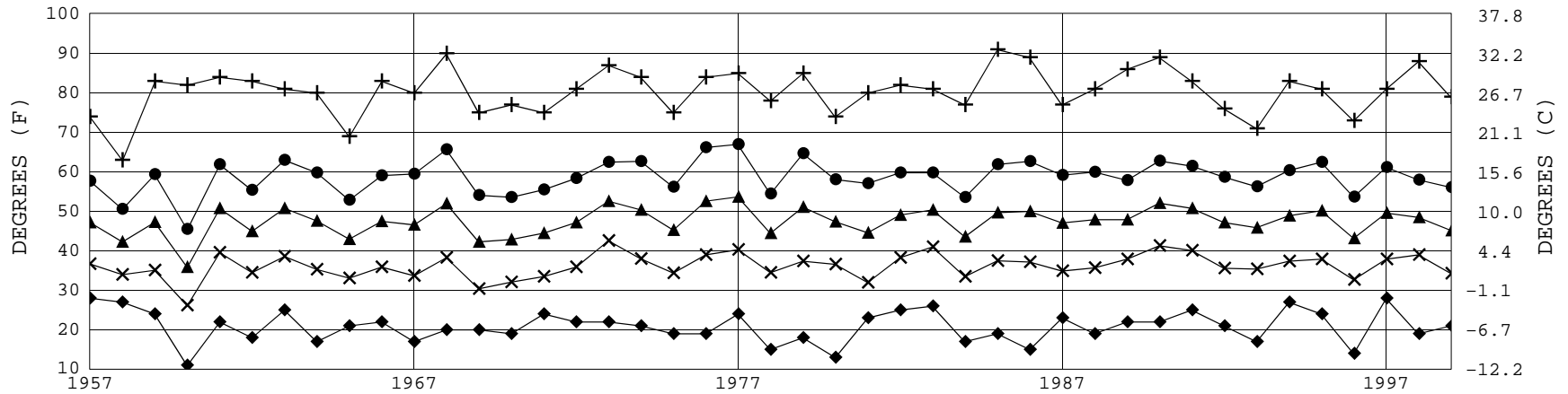
MARCH 1999

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: 0606 MAR 25 SUNSET: 1825												SUNRISE: 0557 MAR 31 SUNSET: 1831																								
01	OVC	090			52	47	49	83	7	02	29.77	29.98	01	CLR	NC			46	24	37	42	0	00	30.16	30.36											
04	BKN	043			47	44	46	90	5	01	29.78	29.98	04	CLR	NC			43	27	37	53	3	19	30.15	30.35											
07	OVC	100			45	35	41	68	13	01	29.85	30.05	07	FEW	NC			42	31	38	65	0	00	30.19	30.39											
10	BKN	080			51	34	43	52	10	01	29.88	30.08	10	BKN	250			62	33	49	34	8	21	30.18	30.38											
13	OVC	090			58	31	46	36	12	32	29.86	30.06	13	BKN	200			69	24	49	18	17	18	30.10	30.30											
16	OVC	200			56	30	45	37	12	36	29.83	30.03	16	OVC	200			69	33	52	26	9	21	30.00	30.20											
19	OVC	200			50	21	39	32	13	03	29.86	30.07	19	OVC	150			60	34	48	38	7	19	29.98	30.18											
22	OVC	065			47	28	39	48	8	07	29.93	30.14	22	BKN	150			62	44	53	53	14	20	29.98	30.18											
SUNRISE: 0604 MAR 26 SUNSET: 1826												3-HOURLY OBSERVATION NOTES																								
01	BKN	250			42	25	35	51	9	01	29.95	30.15	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	SCT	NC			36	24	32	62	9	01	29.94	30.15	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																							
07	FEW	NC			35	25	31	67	13	02	30.00	30.21	NC= No ceiling detected.																							
10	SCT	NC			44	25	37	47	15	03	30.03	30.23	& = Original observation contained additional weather elements.																							
13	OVC	140			48	24	39	39	13	36	29.99	30.19	See page 3 for additional notes.																							
16	BKN	150			48	23	38	37	14	03	29.94	30.14																								
19	BKN	250			43	26	36	51	8	02	29.94	30.15																								
22	OVC	095			41	27	36	57	5	36	29.97	30.18																								
SUNRISE: 0603 MAR 27 SUNSET: 1827																																				
01	OVC	070			41	28	36	60	6	06	29.96	30.17																								
04	OVC	085			40	28	35	63	12	01	29.91	30.11																								
07	OVC	070			40	26	35	58	7	03	29.93	30.14																								
10	OVC	034			42	30	37	62	15	01	29.97	30.18																								
13	OVC	080			46	25	38	44	15	36	29.93	30.13																								
16	OVC	095			47	24	38	41	15	02	29.87	30.08																								
19	OVC	049			44	28	38	53	13	28	29.87	30.07																								
22	OVC	031			38	36	37	93	8	34	29.90	30.11																								
SUNRISE: 0601 MAR 28 SUNSET: 1828																																				
01	OVC	065			40	37	39	89	10	26	29.79	30.00																								
04	BKN	085			42	33	38	71	9	30	29.76	29.97																								
07	BKN	250			42	32	38	68	3	31	29.79	30.00																								
10	OVC	075			52	28	42	40	12	33	29.79	30.00																								
13	BKN	065			57	30	45	36	8	33	29.78	29.98																								
16	BKN	065			60	30	47	32	14	34	29.75	29.96																								
19	OVC	070			57	33	46	41	6	01	29.79	29.99																								
22	OVC	090			53	35	45	51	5	21	29.82	30.02																								
SUNRISE: 0560 MAR 29 SUNSET: 1829																																				
01	CLR	NC			51	33	43	50	6	26	29.83	30.03																								
04	CLR	NC			45	31	39	58	5	30	29.83	30.03																								
07	CLR	NC			47	29	39	50	5	28	29.90	30.10																								
10	CLR	NC			64	27	47	25	8	32	29.88	30.08																								
13	SCT	NC			69	28	50	22	13	30	29.84	30.04																								
16	SCT	NC			70	31	51	24	14	32	29.82	30.02																								
19	FEW	NC			64	32	49	30	6	26	29.86	30.06																								
22	CLR	NC			56	34	46	44	6	36	29.95	30.15																								
SUNRISE: 0558 MAR 30 SUNSET: 1830																																				
01	CLR	NC			51	30	42	45	7	35	30.00	30.20																								
04	CLR	NC			50	25	40	38	9	33	30.04	30.24																								
07	CLR	NC			51	23	40	33	10	35	30.15	30.35																								
10	CLR	NC			60	19	44	20	14	01	30.19	30.39																								
13	FEW	NC			65	18	46	16	9	29	30.16	30.36																								
16	FEW	NC			67	16	46	14	13	28	30.09	30.29																								
19	SCT	NC			55	25	43	31	5	20	30.12	30.32																								
22	CLR	NC			50	21	39	32	6	20	30.14	30.35																								

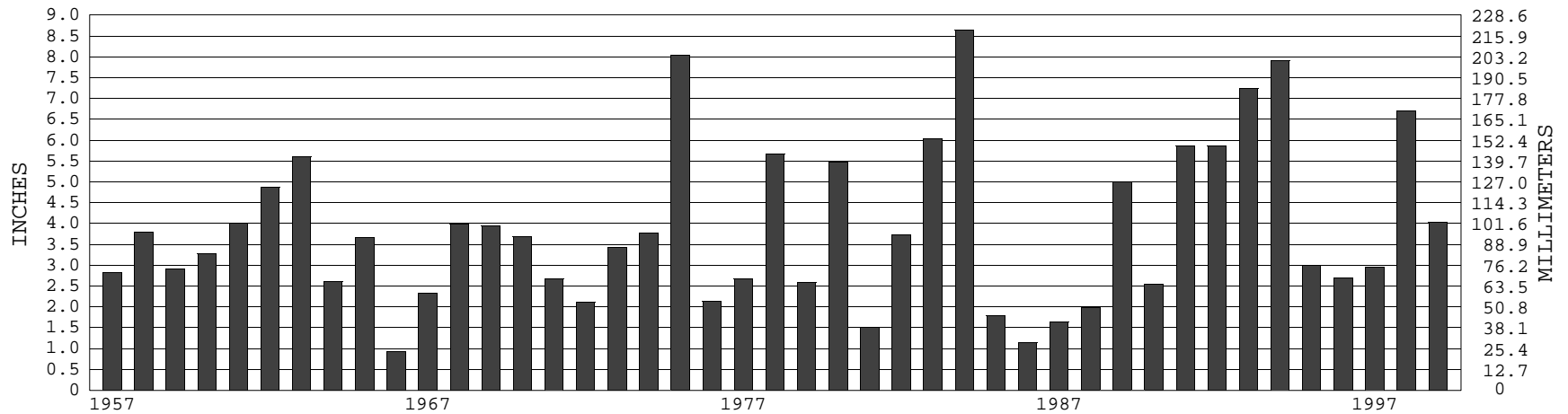
RICHMOND, VA MARCH TEMPERATURES



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

Long-Term (1957-1999) Mean: 47.5 1961-1990 Normal: 48.0

RICHMOND, VA MARCH PRECIPITATION



Long-Term (1957-1999) Mean Monthly Total: 3.90

1961-1990 Normal: 3.61



**MARCH 1999
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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