



# APRIL 2001

## 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

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	48	41	45	-8	43	43	20	0	RA BR			0.0	0.27	29.55	29.74	2.7	03	5.1	14	32	10	30	01				
02	60	39	50	-3	32	41	15	0				0.0	0.00	29.83	30.02	3.6	28	5.6	25	28	20	27	02				
03	53	39	46	-8	44	45	19	0	RA BR			0.0	0.02	29.90	30.09	3.1	13	4.3	12	07	9	18	03				
04	59	42	51	-3	41	46	14	0	BR			0.0	0.00	30.09	30.28	5.0	03	6.7	18	01	16	01	04				
05	64	33	49	-5	38	45	16	0	BR			0.0	0.00	30.14	30.33	3.8	17	5.6	17	16	15	15	05				
06	78	46	62	7	51	56	3	0	RA			0.0	T	29.88	30.07	12.4	21	13.1	30	22	25	23	06				
07	84	52	68	13	58	61	0	3	BR			0.0	0.00	29.91	30.09	3.1	14	9.9	28	13	23	13	07				
08	85	48	67	12	55	58	0	2	FG BR			0.0	0.00	29.85	30.04	0.9	20	6.4	16	22	12	25	08				
09	92*	56	74*	19	57	64	0	9	RA BR SQ			0.0	T	29.68	29.86	3.9	26	6.9	43*	02	35	02	09				
10	80	51	66	10	57	61	0	1	TSRA RA BR			0.0	0.79	29.81	30.00	4.8	09	7.9	28	15	24	14	10				
11	61	39	50	-6	55	55	15	0	TSRA RA DZ BR			0.0	0.05	29.95	30.14	4.0	06	4.9	15	15	13	13	11				
12	84	56	70	14	60	64	0	5	FG+ BR HZ			0.0	0.00	29.82	30.01	8.2	20	9.0	26	23	22	22	12				
13	76	59	68	11	57	62	0	3	RA BR			0.0	0.19	29.75	29.94	4.9	26	7.2	18	25	14	26	13				
14	76	48	62	5	42	52	3	0				0.0	0.00	29.81	29.99	2.1	32	5.5	24	28	18	31	14				
15	77	50	64	7	50	56	1	0	RA			0.0	0.02	29.56	29.74	4.8	21	7.6	29	21	23	22	15				
16	61	45	53	-4	45	49	12	0	FG+ BR			0.0	0.00	29.60	29.78	6.7	36	9.5	31	32	24	32	16				
17	51	38	45	-13	30	38	20	0	RA BR			0.0	0.17	29.69	29.88	5.2	34	8.4	35	36	28	01	17				
18	53	36	45*	-13	22	35	20	0				0.0	0.00	29.84	30.04	11.3	31	11.9	30	31	24	32	18				
19	63	29*	46	-12	27	40	19	0				0.0	0.00	30.07	30.26	3.8	25	6.3	23	31	18	30	19				
20	72	42	57	-1	35	47	8	0	RA			0.0	T	30.13	30.32	9.6	19	9.8	26	19	23	22	20				
21	79	54	67	8	51	58	0	2	RA			0.0	T	30.15	30.34	12.8	21	13.1	26	22	21	20	21				
22	85	59	72	13	56	62	0	7				0.0	0.00	30.12	30.31	8.2	21	8.8	18	21	15	23	22				
23	86	58	72	12	57	63	0	7				0.0	0.00	29.97	30.16	10.1	20	10.3	22	21	20	21	23				
24	86	56	71	11	57	62	0	6	TSRA RA BR			0.0	0.49	29.83	30.01	6.6	23	13.2	40	31	35*	31	24				
25	56	40	48	-12	41	45	17	0	RA			0.0	0.14	30.02	30.21	6.1	04	6.8	17	03	15	04	25				
26	66	37	52	-9	34	44	13	0				0.0	0.00	30.02	30.21	8.1	02	8.6	26	02	22	04	26				
27	78	40	59	-2	42	51	6	0				0.0	0.00	29.91	30.10	6.4	24	7.2	20	22	16	23	27				
28	72	47	60	-1	42	52	5	0				0.0	0.00	30.04	30.23	8.3	02	9.0	26	36	21	01	28				
29	68	40	54	-7	37	46	11	0				0.0	0.00	30.32	30.51	2.2	08	4.7	15	15	12	15	29				
30	76	40	58	-3	43	51	7	0				0.0	0.00	30.18	30.37	4.8	19	5.7	18	22	16	22	30				
< MONTHLY AVERAGES										TOTALS-->														<-- MONTHLY AVERAGES			
1.0										0.7		0.9															
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 0.84 DATE: 10-11				SEA LEVEL PRESSURE		DATE		TIME									
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM		: 30.60		29 0954									
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH:				MINIMUM		: 29.55		15 2254									
HEATING: 244 3 4133 231										NUMBER OF DAYS WITH		MAXIMUM TEMP ≥ 90: 1		MINIMUM TEMP ≤ 32: 1		PRECIPITATION ≥ 0.01 INCH: 9											
COOLING: 45 35 45 35										→		MAXIMUM TEMP ≤ 32: 0		MINIMUM TEMP ≤ 0: 0		PRECIPITATION ≥ 0.10 INCH: 6											
												THUNDERSTORMS: 3		HEAVY FOG: 2		SNOWFALL ≥ 1.0 INCH: 0											

APRIL 2001  
RICHMOND, VA

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

## RICHMOND, VA

APRIL 2001

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	0.03	T	T								T	0.01	01	T	0.08	0.09	0.01	0.03	0.01	0.01						01		0.27	
02													02														02		0.00
03												0.01	03	0.01	T												03		0.02
04													04														04		0.00
05													05														05		0.00
06													06				T	T	T							06		T	
07													07													07		0.00	
08													08													08		0.00	
09													09													09		T	
10	T				T	T							10	T						T	0.54		0.25		10		0.79		
11	T	T	0.04	T						T	0.01	T	11	T	T	T	T								11		0.05		
12													12													12		0.00	
13													13													13		0.19	
14													14													14		0.00	
15													15			T	T	T	T	0.02	T				15		0.02		
16													16													16		0.00	
17		0.04	0.06	0.02	0.04	T							17	T			T	0.01							17		0.17		
18													18												18		0.00		
19													19												19		0.00		
20													20								T	T	T		20		T		
21													21				T								21		T		
22													22												22		0.00		
23													23												23		0.00		
24													24					T	0.24	0.17	0.01	0.04	0.03	T	T	24		0.49	
25	0.02	T	0.02	0.01	0.02	0.03	T	0.04	T	T			25												25		0.14		
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		

### MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.19	.29	.34	.36	.49	.60	.72	.77	.79	.79	.79	.79
Ending Date	10	10	10	10	10	10	10	10	10	10	10	10
Ending Time (Hour/Min)	2244	2245	2248	2252	2305	2307	2311	2329	2335	2335	2335	2335

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 APRIL 2001

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							2.00	9.00	
02							10.00	10.00	
03							2.00	10.00	
04							3.00	10.00	
05							4.00	10.00	
06							10.00	10.00	
07							5.00	10.00	
08							.50	10.00	
09							5.00	10.00	
10							1.00	10.00	
11							.75	10.00	
12							.25	10.00	
13							2.00	10.00	
14							10.00	10.00	
15							2.50	10.00	
16							.13	10.00	
17							4.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							8.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							9.00	10.00	
24							2.00	10.00	
25							10.00	10.00	
26							7.00	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							10.00	10.00	
<b>MONTHLY AVGS</b>							6.10	9.97	
<b>SUNSHINE (MINUTES)</b>									
Total:                      Possible:                      Percent Possible:									
<b>NUMBER OF DAYS WITH:</b>									
<b>SKY CONDITION</b>									
CLR   PTLY CLDY   CLOUDY   MISSING									
30									
<b>MINIMUM VISIBILITY (MILES)</b>									
<=0.25    <=3.0    >=7.0									
2            10            15									

# OBSERVATIONS AT 3-HOURLY INTERVALS

## RICHMOND, VA

APRIL 2001

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
<b>SUNRISE: 0555</b>				<b>APR 01</b>				<b>SUNSET: 1832</b>				<b>SUNRISE: 0546</b>				<b>APR 07</b>				<b>SUNSET: 1838</b>							
01	OVC	050		5.00	-RA	BR	44	43	44	96	3	05	29.60	29.79	01	OVC	120		8.00	68	59	63	73	10	24	29.80	29.99
04	OVC	050		2.00	BR		42	42	42	100	3	01	29.55	29.74	04	OVC	200		9.00	66	60	62	81	6	26	29.80	29.99
07	OVC	055		5.00	BR		43	43	43	100	0	00	29.55	29.73	07	BKN	250		7.00	67	60	63	79	7	25	29.87	30.06
10	OVC	015		7.00			46	44	45	93	6	11	29.52	29.71	10	OVC	220		9.00	77	63	68	62	6	25	29.91	30.10
13	OVC	030		8.00	-RA		47	43	45	86	6	08	29.48	29.66	13	OVC	220		10.00	82	62	69	51	5	25	29.89	30.08
16	OVC	033		9.00	-RA		43	42	43	97	6	07	29.49	29.68	16	OVC	250		10.00	69	56	61	63	17	09	29.91	30.10
19	OVC	110		6.00	BR		43	43	43	100	8	34	29.57	29.76	19	OVC	017		9.00	55	51	53	87	15	12	29.98	30.17
22	OVC	055		5.00	BR		43	43	43	100	6	30	29.64	29.83	22	OVC	012		5.00	53	50	51	89	13	13	29.99	30.17
<b>SUNRISE: 0553</b>				<b>APR 02</b>				<b>SUNSET: 1833</b>				<b>SUNRISE: 0544</b>				<b>APR 08</b>				<b>SUNSET: 1838</b>							
01	OVC	047		10.00			44	41	43	89	7	32	29.69	29.88	01	OVC	010		5.00	52	50	51	93	7	03	29.98	30.17
04	OVC	060		10.00			43	40	42	89	6	26	29.73	29.93	04	OVC	002		0.50	49	49	49	100	6	03	29.94	30.13
07	OVC	050		10.00			42	37	40	82	6	23	29.82	30.01	07	OVC	002		0.75	49	49	49	100	3	34	29.93	30.12
10	SCT	NC		10.00			49	31	41	50	3	VR	29.86	30.05	10	SCT	NC		10.00	59	52	55	78	8	29	29.92	30.12
13	SCT	NC		10.00			54	33	45	45	12	26	29.85	30.04	13	SCT	NC		10.00	74	57	64	56	3	VR	29.84	30.03
16	FEW	NC		10.00			59	26	45	28	10	31	29.83	30.02	16	SCT	NC		10.00	84	59	68	43	9	24	29.76	29.95
19	CLR	NC		10.00			54	19	40	25	0	00	29.87	30.06	19	FEW	NC		10.00	76	58	65	54	8	17	29.75	29.94
22	CLR	NC		10.00			43	30	38	60	0	00	29.90	30.10	22	CLR	NC		10.00	68	59	63	73	7	15	29.76	29.95
<b>SUNRISE: 0552</b>				<b>APR 03</b>				<b>SUNSET: 1834</b>				<b>SUNRISE: 0543</b>				<b>APR 09</b>				<b>SUNSET: 1839</b>							
01	BKN	250		10.00			41	34	38	76	7	08	29.91	30.11	01	CLR	NC		9.00	63	57	60	81	3	19	29.71	29.90
04	OVC	110		10.00			42	36	39	79	3	11	29.92	30.11	04	CLR	NC		8.00	57	55	56	93	0	00	29.71	29.90
07	OVC	085		10.00			42	39	41	89	3	15	29.93	30.12	07	SCT	NC		6.00	60	57	58	90	6	36	29.76	29.95
10	OVC	065		7.00			48	43	46	83	5	19	29.93	30.12	10	CLR	NC		10.00	78	60	67	54	0	00	29.75	29.94
13	OVC	028		2.00	-RA	BR	48	48	48	100	8	17	29.88	30.07	13	CLR	NC		10.00	88	58	69	36	7	26	29.67	29.86
16	OVC	055		7.00			51	48	50	89	5	15	29.83	30.03	16	SCT	NC		10.00	92	58	70	32	15	25	29.59	29.78
19	SCT	NC		10.00			50	48	49	93	5	11	29.86	30.05	19	FEW	NC		10.00	83	58	67	43	8	23	29.55	29.74
22	OVC	003		3.00	BR		47	47	47	100	5	07	29.90	30.10	22	SCT	NC		10.00	78	59	66	52	9	24	29.62	29.80
<b>SUNRISE: 0550</b>				<b>APR 04</b>				<b>SUNSET: 1835</b>				<b>SUNRISE: 0541</b>				<b>APR 10</b>				<b>SUNSET: 1840</b>							
01	OVC	004		3.00	BR		47	47	47	100	9	02	29.95	30.14	01	OVC	120		10.00	63	57	60	81	7	18	29.65	29.84
04	OVC	013		5.00	BR		47	47	47	100	13	01	29.99	30.18	04	OVC	250		10.00	63	57	60	81	3	33	29.69	29.88
07	BKN	013		8.00			45	41	43	86	13	02	30.09	30.28	07	OVC	120		10.00	66	59	62	78	5	02	29.79	29.98
10	BKN	065		8.00			50	42	46	74	9	01	30.14	30.33	10	BKN	200		10.00	73	60	65	64	6	VR	29.82	30.01
13	BKN	040		10.00			55	40	48	57	7	VR	30.11	30.30	13	BKN	200		10.00	78	62	68	58	15	12	29.74	29.93
16	BKN	055		10.00			57	36	47	45	0	00	30.08	30.27	16	BKN	250		10.00	72	59	64	64	13	10	29.79	29.98
19	OVC	250		10.00			51	38	45	61	5	18	30.11	30.30	19	OVC	200		10.00	59	52	55	78	14	09	29.85	30.05
22	SCT	NC		10.00			44	39	42	83	5	12	30.16	30.36	22	OVC	025		10.00	56	51	53	84	13	34	30.01	30.19
<b>SUNRISE: 0549</b>				<b>APR 05</b>				<b>SUNSET: 1836</b>				<b>SUNRISE: 0540</b>				<b>APR 11</b>				<b>SUNSET: 1841</b>							
01	CLR	NC		9.00			38	36	37	93	3	18	30.18	30.37	01	OVC	120		10.00	52	52	52	100	12	13	29.89	30.08
04	CLR	NC		5.00	BR		35	35	35	100	0	00	30.17	30.37	04	OVC	032		9.00	54	54	54	100	3	36	29.92	30.11
07	CLR	NC		5.00	BR		38	37	38	97	0	00	30.20	30.40	07	OVC	005		4.00	53	53	53	100	7	07	29.95	30.14
10	CLR	NC		9.00			55	40	48	57	5	VR	30.22	30.42	10	OVC	003		0.75	56	56	56	100	5	11	29.97	30.16
13	SCT	NC		10.00			62	37	50	40	0	00	30.16	30.35	13	OVC	004		1.25	61	58	59	90	7	04	29.97	30.16
16	BKN	250		10.00			64	38	51	38	7	15	30.07	30.27	16	OVC	002		1.25	57	56	56	96	6	08	29.95	30.14
19	BKN	250		10.00			58	38	48	48	9	14	30.07	30.27	19	OVC	004		2.50	58	56	57	93	0	00	29.93	30.13
22	SCT	NC		10.00			50	40	45	68	8	15	30.07	30.27	22	OVC	004		3.00	57	56	56	96	5	02	29.95	30.14
<b>SUNRISE: 0547</b>				<b>APR 06</b>				<b>SUNSET: 1837</b>				<b>SUNRISE: 0539</b>				<b>APR 12</b>				<b>SUNSET: 1842</b>							
01	SCT	NC		10.00			48	39	44	71	10	18	30.05	30.24	01	OVC	003		3.00	56	55	56	97	3	04	29.92	30.11
04	SCT	NC		10.00			47	39	43	74	13	19	29.99	30.19	04	OVC	001		0.25	56	56	56	99	3	34	29.91	30.10
07	FEW	NC		10.00			49	41	45	74	14	20	29.98	30.17	07	OVC	001		0.50	56	56	56	100	3	16	29.91	30.10
10	OVC	250		10.00			65	49	56	56	18	21	29.91	30.10	10	OVC	070		6.00	66	61	63	84	9	20	29.89	30.08
13	BKN	250		10.00			73	55	62	53	18	21	29.83	30.02	13	OVC	250		10.00	77	63	68	62	14	20	29.81	30.00
16	OVC	200		10.00	-RA		75	58	65	55	20	25	29.78	29.97	16	OVC	250		10.00	82	66	71	58	17	22	29.75	29.93
19	OVC	200		10.00			68	59	63	73	8	22	29.78	29.97	19	OVC	080		10.00	77	61	67	58	9	21	29.72	29.91
22	OVC	200		10.00			68	58	62	70	9	23	29.80	29.99	22	OVC	250		10.00	74	60	65	62	10	20	29.73	29.92

# OBSERVATIONS AT 3-HOURLY INTERVALS

## RICHMOND, VA

APRIL 2001

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
<b>SUNRISE: 0537</b>				<b>APR 13</b>				<b>SUNSET: 1843</b>				<b>SUNRISE: 0529</b>				<b>APR 19</b>				<b>SUNSET: 1848</b>									
01	OVC	250		10.00	75	56	64	52	9	24	29.73	29.92	01	SCT	NC		10.00	35	29	33	78	0	00	29.99	30.19				
04	OVC	250		10.00	72	56	62	57	8	27	29.72	29.91	04	FEW	NC		10.00	32	28	31	85	0	00	30.03	30.22				
07	OVC	080		10.00	68	59	63	73	3	24	29.75	29.94	07	FEW	NC		10.00	40	28	35	63	3	26	30.10	30.29				
10	OVC	150		10.00	63	62	62	97	8	20	29.81	30.00	10	CLR	NC		10.00	54	23	41	30	10	26	30.11	30.31				
13	OVC	100		10.00	68	63	65	84	7	24	29.75	29.94	13	SCT	NC		10.00	61	26	46	26	13	27	30.08	30.27				
16	SCT	NC		10.00	75	57	64	54	12	27	29.71	29.90	16	SCT	NC		10.00	62	25	46	24	5	25	30.03	30.22				
19	SCT	NC		10.00	70	56	62	61	6	22	29.72	29.91	19	CLR	NC		10.00	55	28	43	36	6	19	30.06	30.25				
22	FEW	NC		10.00	60	51	55	72	9	36	29.78	29.97	22	CLR	NC		10.00	46	31	40	56	7	18	30.10	30.30				
<b>SUNRISE: 0536</b>				<b>APR 14</b>				<b>SUNSET: 1844</b>				<b>SUNRISE: 0528</b>				<b>APR 20</b>				<b>SUNSET: 1849</b>									
01	FEW	NC		10.00	59	42	51	54	3	35	29.80	29.99	01	CLR	NC		10.00	43	30	38	60	7	18	30.12	30.31				
04	CLR	NC		10.00	50	42	46	74	0	00	29.82	30.01	04	CLR	NC		10.00	44	31	39	60	5	19	30.14	30.33				
07	FEW	NC		10.00	55	42	49	62	5	34	29.89	30.08	07	CLR	NC		10.00	47	32	41	56	6	18	30.18	30.37				
10	FEW	NC		10.00	65	41	53	42	7	VR	29.88	30.07	10	SCT	NC		9.00	62	31	48	31	9	18	30.18	30.37				
13	BKN	250		10.00	71	40	55	32	6	VR	29.81	30.00	13	OVC	250		10.00	69	37	53	30	16	20	30.12	30.31				
16	BKN	250		10.00	75	40	57	28	10	29	29.75	29.95	16	OVC	250		10.00	67	34	51	30	16	20	30.08	30.27				
19	OVC	250		10.00	64	47	55	54	6	18	29.75	29.94	19	OVC	250		10.00	63	39	51	41	7	18	30.08	30.27				
22	BKN	250		10.00	57	45	51	64	3	12	29.75	29.94	22	SCT	NC		10.00	57	40	49	53	9	19	30.10	30.29				
<b>SUNRISE: 0534</b>				<b>APR 15</b>				<b>SUNSET: 1845</b>				<b>SUNRISE: 0526</b>				<b>APR 21</b>				<b>SUNSET: 1850</b>									
01	BKN	250		10.00	53	47	50	80	0	00	29.71	29.90	01	CLR	NC		10.00	58	46	52	65	14	19	30.12	30.31				
04	BKN	250		10.00	52	48	50	86	5	16	29.69	29.88	04	SCT	NC		10.00	55	48	51	77	10	20	30.13	30.32				
07	OVC	250		10.00	54	49	51	83	0	00	29.69	29.88	07	BKN	250		10.00	58	49	53	72	14	21	30.17	30.37				
10	FEW	NC		10.00	70	46	57	42	8	10	29.65	29.84	10	OVC	140		10.00	69	51	59	53	14	23	30.20	30.39				
13	BKN	250		10.00	76	46	59	35	6	15	29.55	29.73	13	OVC	250		10.00	78	52	63	40	16	22	30.16	30.35				
16	OVC	085		10.00	73	45	58	37	16	24	29.44	29.62	16	OVC	250		10.00	77	54	63	45	9	18	30.10	30.29				
19	OVC	035		10.00	60	58	59	93	7	20	29.42	29.60	19	BKN	250		10.00	72	53	61	52	13	20	30.11	30.30				
22	BKN	250		10.00	62	56	59	81	12	25	29.39	29.57	22	BKN	250		10.00	68	53	60	59	12	20	30.15	30.34				
<b>SUNRISE: 0533</b>				<b>APR 16</b>				<b>SUNSET: 1846</b>				<b>SUNRISE: 0525</b>				<b>APR 22</b>				<b>SUNSET: 1851</b>									
01	FEW	NC		9.00	56	53	54	90	9	02	29.38	29.56	01	SCT	NC		10.00	64	54	58	70	14	20	30.16	30.35				
04	BKN	009		8.00	52	51	52	97	9	33	29.46	29.64	04	BKN	250		10.00	60	54	57	80	10	20	30.14	30.33				
07	SCT	NC		8.00	54	50	52	87	8	34	29.54	29.72	07	SCT	NC		10.00	62	55	58	78	9	21	30.18	30.37				
10	BKN	045		10.00	57	40	49	53	23	32	29.61	29.80	10	SCT	NC		10.00	72	56	63	57	8	21	30.18	30.37				
13	OVC	025		10.00	54	45	49	72	16	01	29.67	29.86	13	BKN	250		10.00	81	57	66	44	8	19	30.13	30.32				
16	SCT	NC		10.00	57	43	50	60	9	04	29.65	29.84	16	BKN	250		10.00	83	57	67	41	7	24	30.06	30.25				
19	FEW	NC		10.00	53	42	48	66	5	08	29.68	29.87	19	OVC	250		10.00	73	58	64	59	9	20	30.05	30.24				
22	CLR	NC		10.00	48	42	45	80	8	14	29.66	29.85	22	BKN	250		10.00	68	57	62	68	8	19	30.07	30.26				
<b>SUNRISE: 0532</b>				<b>APR 17</b>				<b>SUNSET: 1847</b>				<b>SUNRISE: 0524</b>				<b>APR 23</b>				<b>SUNSET: 1852</b>									
01	OVC	070		7.00	49	46	47	90	0	00	29.66	29.85	01	BKN	250		10.00	65	57	60	76	6	19	30.06	30.25				
04	OVC	020		8.00	40	38	39	93	9	03	29.72	29.91	04	SCT	NC		10.00	61	55	58	81	6	21	30.04	30.23				
07	BKN	100		10.00	38	36	37	93	5	12	29.73	29.92	07	OVC	250		10.00	65	58	61	78	9	21	30.06	30.25				
10	BKN	090		10.00	46	33	40	61	7	02	29.69	29.88	10	FEW	NC		10.00	75	59	65	58	8	19	30.04	30.23				
13	OVC	070		10.00	48	30	40	50	9	29	29.63	29.82	13	CLR	NC		10.00	84	58	68	41	14	19	29.97	30.16				
16	OVC	065		10.00	46	25	38	44	6	VR	29.61	29.80	16	BKN	250		10.00	85	58	68	40	12	21	29.90	30.09				
19	OVC	095		10.00	45	20	36	37	12	35	29.66	29.85	19	BKN	250		10.00	76	57	64	52	12	20	29.89	30.08				
22	BKN	080		10.00	42	21	34	43	14	30	29.72	29.91	22	BKN	250		10.00	72	56	62	57	10	20	29.88	30.07				
<b>SUNRISE: 0530</b>				<b>APR 18</b>				<b>SUNSET: 1848</b>				<b>SUNRISE: 0522</b>				<b>APR 24</b>				<b>SUNSET: 1853</b>									
01	SCT	NC		10.00	40	21	33	47	15	30	29.70	29.90	01	BKN	250		10.00	68	55	60	63	12	21	29.85	30.04				
04	CLR	NC		10.00	38	25	33	60	12	30	29.70	29.90	04	SCT	NC		10.00	64	57	60	78	10	20	29.83	30.02				
07	CLR	NC		10.00	41	26	35	55	12	30	29.78	29.97	07	SCT	NC		10.00	66	58	61	75	13	22	29.84	30.03				
10	SCT	NC		10.00	48	22	38	36	18	33	29.84	30.03	10	BKN	250		10.00	76	60	66	58	15	21	29.81	30.00				
13	SCT	NC		10.00	50	20	38	31	16	28	29.85	30.04	13	SCT	NC		10.00	84	58	68	41	14	23	29.76	29.95				
16	OVC	085		10.00	49	16	37	27	10	33	29.86	30.06	16	SCT	NC		10.00	85	57	68	39	15	22	29.70	29.89				
19	SCT	NC		10.00	46	18	36	33	8	32	29.92	30.11	19	OVC	006		10.00	62	61	61	96	14	05	29.83	30.02				
22	BKN	090		10.00	39	24	33	55	0	00	29.97	30.16	22	OVC	110		10.00	56	52	54	87	8	04	29.90	30.09				

# OBSERVATIONS AT 3-HOURLY INTERVALS

# RICHMOND, VA

APRIL 2001

RIC

WBAN # 13740

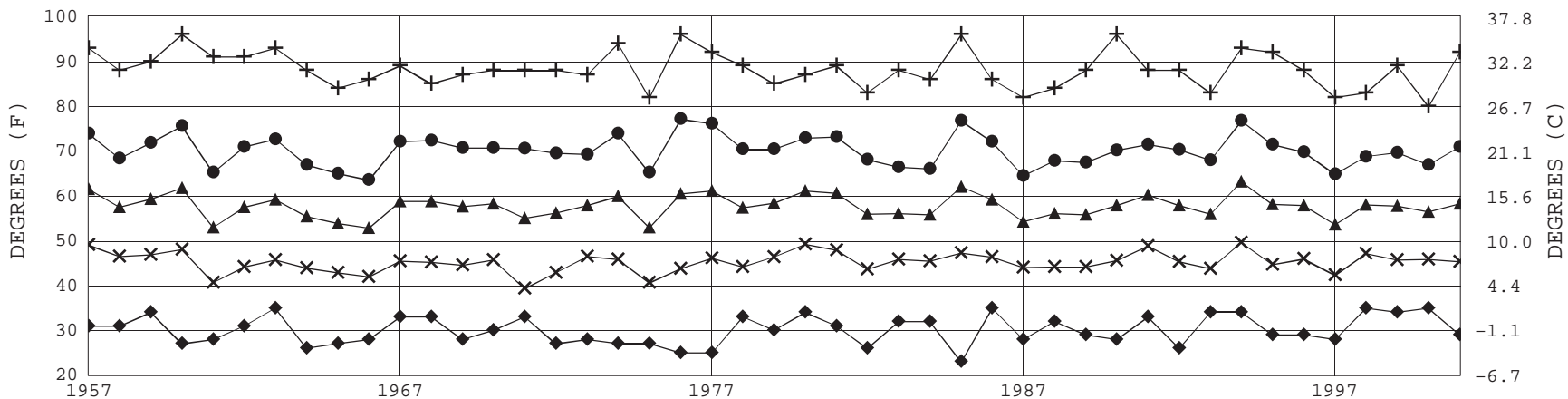
HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (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
SUNRISE: 0521				APR 25				SUNSET: 1854				SUNRISE: APR 31				SUNSET:									
01	OVC	085		10.00	-RA	53	48	50	83	6	36	29.95	30.14												
04	OVC	095		10.00	-RA	49	44	47	83	9	02	29.95	30.14												
07	OVC	065		10.00		48	44	46	86	0	00	30.04	30.23												
10	OVC	120		10.00		50	44	47	80	7	01	30.03	30.22												
13	OVC	150		10.00		53	38	46	57	12	03	30.03	30.22												
16	OVC	150		10.00		53	37	46	55	10	07	30.01	30.21												
19	BKN	180		10.00		49	38	44	66	6	05	30.04	30.23												
22	FEW	NC		10.00		42	39	41	89	6	01	30.06	30.25												
SUNRISE: 0520				APR 26				SUNSET: 1855																	
01	CLR	NC		10.00		39	37	38	93	5	35	30.04	30.23	3-HOURLY OBSERVATION NOTES											
04	CLR	NC		10.00		39	30	35	70	8	01	30.03	30.22	Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8,											
07	FEW	NC		9.00		42	37	40	83	10	01	30.05	30.25	SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibility = 8/8.											
10	CLR	NC		10.00		57	35	47	43	14	03	30.07	30.27	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.											
13	CLR	NC		10.00		64	35	50	34	16	01	30.04	30.24	NC= No ceiling detected.											
16	CLR	NC		10.00		65	31	49	28	12	01	30.00	30.19	& = Original observation contained additional weather elements.											
19	CLR	NC		10.00		57	34	46	42	3	05	29.96	30.16	See page 3 for additional notes.											
22	CLR	NC		10.00		48	37	43	66	0	00	29.98	30.17												
SUNRISE: 0519				APR 27				SUNSET: 1856																	
01	CLR	NC		10.00		42	37	40	82	0	00	29.99	30.18												
04	CLR	NC		10.00		41	36	39	82	5	23	29.96	30.15												
07	CLR	NC		10.00		50	37	44	61	9	25	29.97	30.16												
10	CLR	NC		10.00		67	39	53	36	9	27	29.96	30.15												
13	CLR	NC		10.00		74	41	57	31	6	VR	29.89	30.09												
16	CLR	NC		10.00		77	46	60	33	9	22	29.82	30.01												
19	FEW	NC		10.00		66	49	57	54	7	18	29.81	30.01												
22	FEW	NC		10.00		64	47	55	54	6	22	29.86	30.05												
SUNRISE: 0518				APR 28				SUNSET: 1857																	
01	SCT	NC		10.00		58	48	53	70	0	00	29.86	30.05												
04	CLR	NC		10.00		56	47	51	72	3	30	29.90	30.09												
07	FEW	NC		10.00		61	44	52	54	20	01	29.98	30.18												
10	FEW	NC		10.00		67	45	55	45	12	02	30.05	30.24												
13	FEW	NC		10.00		71	43	56	36	13	03	30.04	30.23												
16	CLR	NC		10.00		71	38	54	30	16	01	30.06	30.25												
19	CLR	NC		10.00		61	36	49	39	6	03	30.12	30.31												
22	CLR	NC		10.00		52	38	45	59	5	07	30.19	30.39												
SUNRISE: 0516				APR 29				SUNSET: 1858																	
01	CLR	NC		10.00		45	39	42	80	0	00	30.23	30.42												
04	CLR	NC		10.00		43	38	41	82	3	36	30.28	30.47												
07	CLR	NC		10.00		47	38	43	71	8	05	30.36	30.55												
10	CLR	NC		10.00		60	35	48	39	7	VR	30.40	30.59												
13	CLR	NC		10.00		65	37	51	36	5	VR	30.35	30.54												
16	CLR	NC		10.00		66	34	51	31	0	00	30.29	30.48												
19	CLR	NC		10.00		60	41	51	50	6	17	30.27	30.47												
22	CLR	NC		10.00		50	39	45	66	5	15	30.30	30.49												
SUNRISE: 0515				APR 30				SUNSET: 1858																	
01	CLR	NC		10.00		46	40	43	79	5	13	30.29	30.48												
04	CLR	NC		10.00		43	39	41	86	0	00	30.27	30.46												
07	CLR	NC		10.00		48	43	46	83	5	19	30.29	30.48												
10	CLR	NC		10.00		64	40	52	41	9	18	30.26	30.45												
13	CLR	NC		10.00		72	46	58	40	8	22	30.17	30.36												
16	CLR	NC		10.00		74	48	59	40	6	20	30.08	30.28												
19	CLR	NC		10.00		72	46	58	40	5	15	30.06	30.25												
22	CLR	NC		10.00		61	46	53	57	6	17	30.07	30.26												

## 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			52	45	49	79	29.90	30.09	8.93	6	1	20	
02			51	45	48	79	29.90	30.09	8.50	5	1	24	
03			50	45	48	82	29.90	30.09	8.43	6	1	28	
04			50	45	47	83	29.90	30.10	8.49	6	1	29	
05			49	45	47	86	29.91	30.10	8.37	6	1	28	
06			49	45	47	85	29.93	30.12	8.27	6	1	30	
07			52	45	49	80	29.95	30.14	8.44	7	1	27	
08			55	45	50	71	29.95	30.15	8.68	8	2	29	
09			58	45	52	64	29.96	30.15	8.70	9	2	27	
10			61	45	53	59	29.95	30.15	9.19	8	2	25	
11			64	45	54	54	29.94	30.14	9.43	9	3	25	
12			66	46	55	52	29.93	30.12	9.32	9	3	25	
13			67	46	56	50	29.91	30.10	9.38	9	3	23	
14			68	46	56	47	29.89	30.08	9.28	10	4	25	
15			69	46	56	47	29.88	30.07	9.31	10	3	23	
16			68	45	56	46	29.87	30.06	9.57	10	3	23	
17			67	45	56	49	29.87	30.06	9.58	10	3	23	
18			65	45	55	52	29.87	30.06	9.07	9	2	20	
19			61	45	53	59	29.88	30.07	9.58	7	3	16	
20			59	46	52	65	29.90	30.09	9.33	7	3	16	
21			57	46	51	67	29.91	30.10	9.40	7	3	17	
22			56	46	51	70	29.92	30.11	9.20	7	2	19	
23			55	45	50	72	29.92	30.11	8.95	7	1	18	
24			54	45	50	74	29.92	30.11	9.23	6	2	21	



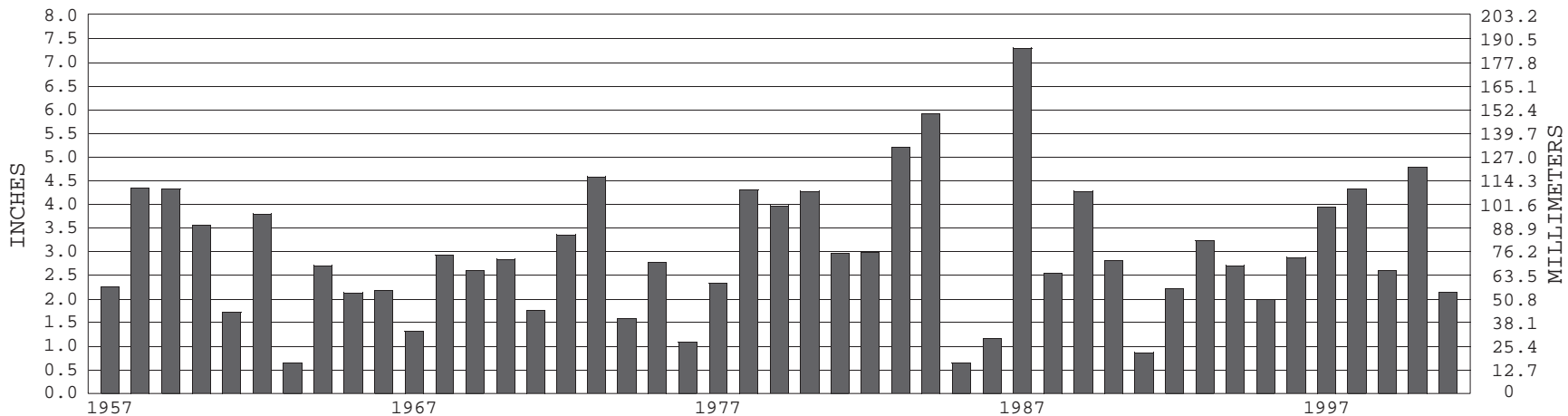
### RICHMOND, VA APRIL TEMPERATURES



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

Long-Term (1957-2001) Mean: 57.7      1961-1990 Normal: 57.3

### RICHMOND, VA APRIL PRECIPITATION



Long-Term (1957-2001) Mean Monthly Total: 3.00

1961-1990 Normal: 2.96



APRIL 2001  
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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