



MAY 2002

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

MAY 2002
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	76	52	64	3	49	55	1	0				0.0	0.00	29.68	29.87	5.0	10	7.5	22	15	18	16	01				
02	86	59	73	12	65	67	0	8	TS TSRA RA BR			0.0	0.36	29.48	29.66	12.7	21	14.4	37	20	30	20	02				
03	68	52	60	-1	47	54	5	0				0.0	0.00	29.78	29.97	4.6	32	8.1	18	03	15	03	03				
04	61	45	53	-8	39	46	12	0	RA BR			0.0	0.25	30.09	30.28	5.5	06	7.2	20	12	15	11	04				
05	69	46	58	-3	50	52	7	0	RA BR			0.0	0.01	30.12	30.31	2.9	03	5.9	10	36	10	36	05				
06	74	45	60	-2	52	56	5	0	RA BR			0.0	T	30.09	30.28	6.4	19	7.1	18	21	15	21	06				
07	86	58	72	9	62	65	0	7	TSRA RA BR			0.0	0.34	29.86	30.05	6.4	23	8.3	39	29	32	29	07				
08	80	61	71	8	64	66	0	6	RA BCFG			0.0	T	29.90	30.08	4.9	08	7.6	17	10	15	03	08				
09	82	59	71	8	66	66	0	6	TS TSRA RA FG+ BR HZ SQ			0.0	1.38	29.82	30.01	3.7	14	6.4	36	30	30	33	09				
10	82	65	74	10	61	66	0	9	BR			0.0	0.00	29.97	30.15	5.4	30	8.0	20	01	15	02	10				
11	72	59	66	2	45	54	0	1				0.0	0.00	30.23	30.41	4.4	09	9.3	18	18	15	14	11				
12	85	59	72	8	62	66	0	7				0.0	0.00	29.98	30.16	12.6	21	13.1	29	24	23	22	12				
13	87	60	74	10	66	69	0	9	TSRA RA FG BR			0.0	0.65	29.57	29.75	13.4	23	15.1	44*	29	37*	28	13				
14	68	53	61	-4	40	50	4	0				0.0	0.00	29.66	29.85	14.2	29	15.0	38	29	31	28	14				
15	72	50	61	-4	43	52	4	0				0.0	0.00	29.97	30.16	7.6	27	9.9	24	31	20	30	15				
16	81	49	65	0	51	58	0	0				0.0	0.00	29.95	30.14	11.7	22	12.2	26	21	23	22	16				
17	85	64	75	10	60	65	0	10				0.0	0.00	29.71	29.90	12.6	21	13.6	28	18	22	19	17				
18	73	46	60	-6	53	57	5	0	RA BR			0.0	0.50	29.64	29.83	6.0	30	14.8	43	32	32	31	18				
19	61	42	52	-14	38	45	13	0				0.0	0.00	29.97	30.16	7.7	36	8.5	20	01	17	01	19				
20	62	41	52	-14	35	45	13	0				0.0	0.00	30.02	30.21	9.2	36	9.6	20	04	16	01	20				
21	61	43	52*	-15	37	45	13	0	RA			0.0	T	30.11	30.30	6.6	01	7.7	21	01	16	01	21				
22	67	38*	53	-14	37	46	12	0				0.0	0.00	30.17	30.36	2.6	03	5.8	20	05	15	06	22				
23	74	41	58	-10	42	51	7	0				0.0	0.00	30.01	30.20	1.9	21	3.3	13	34	10	20	23				
24	86	49	68	-1	51	59	0	3				0.0	0.00	29.81	30.00	4.4	22	5.9	20	23	17	23	24				
25	81	59	70	1	61	64	0	5				0.0	0.00	29.91	30.10	5.5	10	8.5	20	14	16	13	25				
26	88	60	74	5	63	67	0	9	FG BR HZ			0.0	0.00	29.92	30.10	4.7	16	5.9	18	20	16	19	26				
27	85	61	73	4	64	67	0	8				0.0	0.00	29.96	30.14	6.1	16	7.1	18	13	16	15	27				
28	84	59	72	3	63	67	0	7	BR			0.0	0.00	29.95	30.13	5.2	14	6.3	17	15	14	11	28				
29	83	61	72	2	63	66	0	7	FG+ BR			0.0	0.00	29.90	30.08	6.2	11	6.7	21	11	15	12	29				
30	85	60	73	3	64	67	0	8	FG+ BR			0.0	0.00	29.78	29.96	3.7	11	4.8	15	14	14	14	30				
31	90*	63	77*	7	66	70	0	12				0.0	0.00	29.63	29.81	8.5	22	8.8	24	23	21	24	31				
< MONTHLY AVERAGES										TOTALS-->														<- MONTHLY AVERAGES			
1.0										-1.1		0.0															
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.38 DATE :09				SEA LEVEL PRESSURE		DATE		TIME									
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: 0.0 DATE :				MAXIMUM		: 30.49		11 1054									
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH: DATE :				MINIMUM		: 29.54		13 1754									
HEATING: 101 40 3285 -678										NUMBER OF DAYS WITH		MAXIMUM TEMP ≥ 90: 1		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH: 7											
COOLING: 122 15 214 65												MAXIMUM TEMP ≤ 32: 0		MINIMUM TEMP ≤ 0: 0		PRECIPITATION ≥ 0.10 INCH: 6											
												THUNDERSTORMS: 4		HEAVY FOG: 3		SNOWFALL ≥ 1.0 INCH: 0											

SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

MAY 2002

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			T	T									02				0.15	T	0.04	0.06	0.04	T	0.04	0.03	02		0.36	
03													03												03		0.00	
04													04	T	T	T	0.05	0.02	0.03	0.01	T		0.02	0.05	0.06	04	0.24	0.25
05	0.01	T	T	T	T								05												05		0.01	
06													06												06		T	
07													07					T	0.30	0.01			T		07		0.34	
08	T												08											0.03	08		T	
09		T	T	0.44	0.04								09						0.70	0.19	0.01				09		1.38	
10													10												10		0.00	
11													11												11		0.00	
12													12												12		0.00	
13													13						0.52	0.12	0.01				13		0.65	
14													14												14		0.00	
15													15												15		0.00	
16													16												16		0.00	
17													17												17		0.00	
18					T	0.03	0.01	0.34	0.12	T			18												18		0.50	
19													19												19		0.00	
20													20												20		0.00	
21	T	T											21												21		T	
22													22												22		0.00	
23													23												23		0.00	
24													24												24		0.00	
25													25												25		0.00	
26													26												26		0.00	
27													27												27		0.00	
28													28												28		0.00	
29													29												29		0.00	
30													30												30		0.00	
31													31												31		0.00	

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.43	.60	.71	.71	.72	.83	.88	.90	.90	.90	.90	.90
Ending Date	09	09	09	09	09	09	09	09	09	09	09	09
Ending Time (Hour/Min)	1848	1852	1855	1902	1902	1926	1933	2002	2002	2002	2002	2002

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 MAY 2002

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							1.00	10.00	
03							10.00	10.00	
04							4.00	10.00	
05							3.00	10.00	
06							2.00	10.00	
07							.50	10.00	
08							8.00	10.00	
09							.25	10.00	
10							6.00	10.00	
11							10.00	10.00	
12							9.00	10.00	
13							.50	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							1.00	10.00	
19							10.00	10.00	
20							10.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							7.00	10.00	
26							.50	10.00	
27							10.00	10.00	
28							5.00	10.00	
29							.25	10.00	
30							.06	10.00	
31							9.00	10.00	
MONTHLY AVGS							6.71	9.97	
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 8 18									

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MAY 2002

RIC

WBAN # 13740

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)					
	SKY COVER	CEILING 100'S OF FT			OBSERVATION TIME (LST)	EFF CLD AMT Oktas	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	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0514					MAY 01					SUNSET: 1859					SUNRISE: 0508					MAY 07					SUNSET: 1904				
01	SCT	NC	10.00		54	48	51	80	5	18	29.66	29.85	01	OVC	120	10.00		66	55	60	68	12	20	29.92	30.11				
04	BKN	150	10.00		54	46	50	75	5	08	29.68	29.87	04	BKN	250	10.00		62	56	59	81	5	20	29.89	30.08				
07	OVC	200	10.00		56	48	52	75	6	05	29.71	29.90	07	BKN	250	10.00		65	57	60	76	9	22	29.89	30.08				
10	CLR	NC	10.00		66	48	56	52	8	06	29.72	29.91	10	OVC	200	10.00		75	62	67	64	10	24	29.89	30.09				
13	FEW	NC	10.00		73	50	60	44	8	36	29.69	29.88	13	FEW	NC	10.00		82	64	70	55	13	26	29.84	30.03				
16	BKN	250	10.00		75	50	61	42	9	13	29.64	29.83	16	OVC	200	10.00		84	64	71	51	9	24	29.78	29.97				
19	BKN	250	10.00		66	51	58	59	9	13	29.67	29.87	19	BKN	110	7.00		69	67	68	93	3	18	29.80	29.99				
22	BKN	250	10.00		61	49	55	65	9	14	29.65	29.84	22	OVC	120	4.00 BR		65	65	65	100	3	VR	29.84	30.02				
SUNRISE: 0513					MAY 02					SUNSET: 1900					SUNRISE: 0507					MAY 08					SUNSET: 1905				
01	OVC	070	10.00		60	55	57	84	12	13	29.63	29.82	01	OVC	065	8.00		68	67	67	96	7	35	29.84	30.03				
04	OVC	200	7.00		63	62	62	97	15	18	29.51	29.68	04	CLR	NC	10.00 BCFG		63	63	63	100	0	00	29.85	30.03				
07	OVC	140	5.00	BR	67	65	66	93	15	19	29.49	29.67	07	CLR	NC	10.00		67	64	65	91	8	36	29.90	30.09				
10	OVC	250	8.00		76	69	71	79	18	22	29.45	29.63	10	FEW	NC	10.00		75	66	69	74	6	VR	29.94	30.13				
13	OVC	250	9.00		85	69	74	59	21	23	29.40	29.58	13	SCT	NC	10.00		79	66	71	65	8	11	29.92	30.11				
16	OVC	070	10.00	-TSRA	67	65	66	93	9	17	29.41	29.58	16	BKN	250	8.00		77	65	69	66	9	10	29.88	30.07				
19	OVC	050	8.00	TSRA	66	65	65	96	12	25	29.53	29.71	19	OVC	200	10.00		70	60	64	71	10	12	29.90	30.09				
22	OVC	033	8.00	-RA	66	63	64	90	15	19	29.53	29.71	22	OVC	200	10.00		65	61	63	87	8	11	29.91	30.10				
SUNRISE: 0512					MAY 03					SUNSET: 1900					SUNRISE: 0506					MAY 09					SUNSET: 1905				
01	BKN	250	10.00		65	64	64	97	8	23	29.53	29.71	01	OVC	055	9.00		61	59	60	93	8	11	29.90	30.09				
04	OVC	070	10.00		65	63	64	93	8	28	29.60	29.79	04	OVC	004	0.75 +RA BR		59	59	59	100	9	07	29.84	30.03				
07	OVC	200	10.00		61	55	58	81	7	33	29.73	29.92	07	OVC	003	2.00 BR		61	61	61	100	5	11	29.87	30.06				
10	OVC	200	10.00		61	43	52	52	6	36	29.79	29.98	10	OVC	002	1.25 BR		63	63	63	100	6	15	29.86	30.05				
13	OVC	250	10.00		66	40	53	39	10	31	29.77	29.96	13	OVC	010	2.50 BR		71	68	69	90	5	20	29.81	30.00				
16	OVC	100	10.00		65	41	53	42	7	28	29.81	30.00	16	SCT	NC	4.00 HZ		81	73	75	77	14	17	29.71	29.90				
19	OVC	250	10.00		63	47	54	56	5	27	29.87	30.06	19	OVC	046	0.25 +TSRA FG		67	67	67	100	15	36	29.80	29.99				
22	OVC	180	10.00		57	33	46	41	8	03	29.99	30.18	22	OVC	150	4.00 BR		67	67	67	100	6	16	29.81	30.00				
SUNRISE: 0511					MAY 04					SUNSET: 1901					SUNRISE: 0505					MAY 10					SUNSET: 1906				
01	SCT	NC	10.00		51	34	43	52	6	04	30.04	30.23	01	SCT	NC	6.00 BR		65	65	65	100	6	23	29.83	30.01				
04	BKN	200	10.00		46	38	42	73	6	36	30.07	30.26	04	FEW	NC	10.00		66	65	65	96	7	26	29.86	30.04				
07	BKN	200	10.00		51	38	45	61	8	06	30.12	30.31	07	CLR	NC	10.00		69	65	66	87	8	28	29.93	30.12				
10	BKN	200	10.00		60	41	51	50	8	11	30.13	30.32	10	SCT	NC	10.00		79	62	68	56	8	32	29.98	30.17				
13	OVC	200	10.00		59	38	49	46	13	11	30.10	30.29	13	OVC	250	10.00		80	62	69	54	8	26	29.98	30.17				
16	OVC	070	10.00	-RA	54	45	49	72	3	14	30.07	30.26	16	OVC	250	10.00		79	62	68	56	8	28	29.97	30.16				
19	OVC	055	10.00		50	32	42	50	7	02	30.06	30.26	19	OVC	250	10.00		76	56	64	50	9	29	30.00	30.19				
22	OVC	030	6.00	-RA BR	47	47	47	100	9	04	30.07	30.26	22	BKN	250	10.00		67	58	62	73	13	02	30.08	30.27				
SUNRISE: 0510					MAY 05					SUNSET: 1902					SUNRISE: 0504					MAY 11					SUNSET: 1907				
01	OVC	030	5.00	-RA BR	47	47	47	100	7	02	30.04	30.23	01	OVC	150	10.00		64	40	52	41	14	01	30.13	30.32				
04	OVC	004	3.00	-RA BR	47	47	47	100	8	36	30.05	30.24	04	BKN	120	10.00		61	39	50	44	9	02	30.19	30.38				
07	OVC	006	6.00	BR	49	49	49	100	10	36	30.12	30.32	07	OVC	050	10.00		60	42	51	52	9	04	30.26	30.45				
10	BKN	012	7.00		55	51	53	87	8	36	30.16	30.36	10	BKN	200	10.00		66	43	54	43	7	VR	30.29	30.48				
13	BKN	025	10.00		61	51	56	70	5	12	30.14	30.34	13	FEW	NC	10.00		70	45	57	41	5	02	30.27	30.46				
16	SCT	NC	10.00		68	49	58	51	7	VR	30.11	30.30	16	SCT	NC	10.00		70	47	57	44	7	17	30.22	30.40				
19	CLR	NC	10.00		60	53	56	78	7	13	30.12	30.31	19	BKN	250	10.00		64	46	55	52	10	14	30.20	30.39				
22	CLR	NC	7.00		53	52	52	96	5	14	30.17	30.36	22	OVC	034	10.00		61	49	55	65	8	15	30.22	30.41				
SUNRISE: 0509					MAY 06					SUNSET: 1903					SUNRISE: 0503					MAY 12					SUNSET: 1908				
01	CLR	NC	6.00	BR	50	50	50	100	0	00	30.15	30.35	01	BKN	200	10.00		60	49	54	67	6	16	30.15	30.35				
04	SCT	NC	6.00	BR	49	49	49	100	3	14	30.15	30.35	04	OVC	045	10.00		59	48	53	67	8	19	30.11	30.30				
07	FEW	NC	3.00	BR	53	53	53	100	5	19	30.19	30.38	07	BKN	040	10.00		61	53	57	75	12	20	30.10	30.29				
10	OVC	250	10.00		65	55	59	70	7	23	30.19	30.38	10	BKN	021	9.00		73	65	68	76	16	22	30.04	30.23				
13	OVC	250	10.00		71	53	61	53	8	15	30.10	30.29	13	BKN	250	10.00		81	68	72	65	18	23	29.96	30.15				
16	OVC	200	10.00		72	52	61	50	12	20	30.03	30.22	16	SCT	NC	10.00		83	69	74	63	23	22	29.86	30.05				
19	OVC	200	10.00		68	52	59	57	8	16	30.00	30.19	19	OVC	250	10.00		80	68	72	67	15	21	29.85	30.04				
22	OVC	110	10.00	-RA	65	53	58	66	12	18	29.95	30.14	22	OVC	250	10.00		78	69	72	74	16	21	29.82	30.01				

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MAY 2002

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: 0502				MAY 13				SUNSET: 1909				SUNRISE: 0457				MAY 19				SUNSET: 1914									
01	OVC	250			10.00	75	67	70	76	12	22	29.77	29.96	01	FEW	NC			10.00	46	43	45	89	7	35	29.92	30.11		
04	BKN	200			10.00	70	66	67	87	9	20	29.72	29.91	04	CLR	NC			10.00	43	40	42	89	9	35	29.94	30.13		
07	OVC	250			8.00	71	67	68	87	13	21	29.69	29.88	07	BKN	200			10.00	45	40	43	83	14	01	30.00	30.19		
10	OVC	250			10.00	78	69	72	74	18	21	29.64	29.83	10	BKN	200			10.00	56	37	47	49	14	03	29.99	30.19		
13	OVC	250			10.00	83	69	74	63	22	21	29.53	29.70	13	BKN	220			10.00	58	35	47	42	5	VR	29.97	30.16		
16	OVC	065			10.00	82	66	71	58	13	27	29.43	29.61	16	BKN	250			10.00	60	35	48	39	7	02	29.95	30.14		
19	OVC	020			1.50	65	65	65	100	16	26	29.44	29.61	19	BKN	250			10.00	54	36	46	51	7	03	29.97	30.16		
22	CLR	NC			10.00	65	63	64	93	17	27	29.44	29.62	22	SCT	NC			10.00	47	40	44	77	8	36	30.00	30.19		
SUNRISE: 0501				MAY 14				SUNSET: 1910				SUNRISE: 0456				MAY 20				SUNSET: 1915									
01	CLR	NC			10.00	59	47	53	64	10	31	29.55	29.74	01	CLR	NC			10.00	45	36	41	71	9	36	30.01	30.20		
04	CLR	NC			10.00	54	42	48	64	10	30	29.57	29.76	04	CLR	NC			10.00	43	36	40	76	12	36	29.99	30.19		
07	CLR	NC			10.00	55	42	49	62	10	26	29.62	29.81	07	CLR	NC			10.00	47	37	42	69	10	35	30.03	30.22		
10	BKN	060			10.00	59	39	49	48	21	28	29.64	29.83	10	CLR	NC			10.00	57	35	47	44	8	36	30.05	30.24		
13	BKN	075			10.00	65	37	51	36	20	28	29.63	29.82	13	SCT	NC			10.00	62	34	49	35	9	33	30.00	30.19		
16	SCT	NC			10.00	67	38	52	35	17	27	29.63	29.82	16	SCT	NC			10.00	62	34	49	35	8	03	29.98	30.17		
19	SCT	NC			10.00	59	39	49	48	16	34	29.73	29.93	19	BKN	090			10.00	55	35	46	47	8	01	30.01	30.21		
22	FEW	NC			10.00	56	39	48	53	12	28	29.81	30.00	22	OVC	070			10.00	53	36	45	52	8	01	30.04	30.24		
SUNRISE: 0500				MAY 15				SUNSET: 1911				SUNRISE: 0456				MAY 21				SUNSET: 1916									
01	CLR	NC			10.00	53	40	47	61	10	29	29.85	30.04	01	OVC	095			10.00	51	37	45	59	8	35	30.06	30.25		
04	CLR	NC			10.00	51	41	46	69	8	26	29.90	30.09	04	SCT	NC			10.00	45	39	42	80	8	36	30.05	30.24		
07	CLR	NC			10.00	56	42	49	60	13	29	29.96	30.16	07	BKN	100			10.00	47	37	43	69	10	36	30.12	30.32		
10	CLR	NC			10.00	64	42	53	45	15	29	30.01	30.20	10	OVC	070			10.00	54	34	45	47	10	03	30.15	30.35		
13	CLR	NC			10.00	70	41	55	35	13	30	29.98	30.18	13	SCT	NC			10.00	59	35	48	41	6	VR	30.11	30.30		
16	FEW	NC			10.00	71	41	55	34	12	26	29.97	30.16	16	BKN	095			10.00	60	36	49	41	10	34	30.09	30.29		
19	FEW	NC			10.00	64	47	55	54	6	20	29.98	30.17	19	FEW	NC			10.00	54	37	46	53	8	01	30.12	30.31		
22	CLR	NC			10.00	56	47	51	72	3	16	30.01	30.20	22	CLR	NC			10.00	47	38	43	71	3	02	30.16	30.35		
SUNRISE: 0460				MAY 16				SUNSET: 1912				SUNRISE: 0455				MAY 22				SUNSET: 1917									
01	CLR	NC			10.00	54	46	50	75	3	18	30.01	30.20	01	CLR	NC			10.00	42	37	40	82	5	36	30.18	30.37		
04	CLR	NC			10.00	50	45	48	83	7	20	30.01	30.21	04	CLR	NC			10.00	39	33	37	79	6	36	30.17	30.36		
07	BKN	250			10.00	59	49	54	69	9	21	30.05	30.24	07	CLR	NC			10.00	47	36	42	66	10	01	30.21	30.40		
10	OVC	250			10.00	75	53	62	46	16	25	30.00	30.19	10	FEW	NC			10.00	59	33	47	38	7	VR	30.24	30.43		
13	OVC	250			10.00	79	53	64	41	16	21	29.94	30.13	13	FEW	NC			10.00	63	34	49	34	6	VR	30.18	30.38		
16	BKN	250			10.00	79	53	64	41	17	22	29.88	30.07	16	FEW	NC			10.00	66	39	53	37	5	VR	30.13	30.32		
19	OVC	250			10.00	74	55	63	52	13	20	29.86	30.05	19	CLR	NC			10.00	59	39	49	48	6	10	30.13	30.32		
22	OVC	250			10.00	69	56	61	63	13	21	29.85	30.04	22	CLR	NC			10.00	50	41	46	71	6	14	30.15	30.34		
SUNRISE: 0459				MAY 17				SUNSET: 1912				SUNRISE: 0454				MAY 23				SUNSET: 1917									
01	BKN	120			10.00	67	55	60	66	12	21	29.82	30.01	01	CLR	NC			10.00	47	42	45	83	0	00	30.11	30.30		
04	BKN	250			10.00	65	54	59	68	14	21	29.79	29.98	04	CLR	NC			10.00	43	40	42	89	0	00	30.09	30.28		
07	SCT	NC			10.00	67	58	62	73	15	22	29.80	29.99	07	CLR	NC			10.00	52	41	47	66	6	26	30.11	30.30		
10	BKN	250			10.00	77	62	68	60	16	23	29.76	29.95	10	CLR	NC			10.00	64	41	52	43	8	22	30.09	30.28		
13	SCT	NC			10.00	83	62	70	49	10	25	29.73	29.92	13	CLR	NC			10.00	70	42	55	37	3	VR	30.00	30.19		
16	SCT	NC			10.00	83	61	69	48	13	23	29.66	29.85	16	CLR	NC			10.00	73	39	55	29	7	23	29.92	30.12		
19	SCT	NC			10.00	75	63	67	66	9	19	29.61	29.80	19	FEW	NC			10.00	67	47	56	49	6	18	29.89	30.08		
22	SCT	NC			10.00	70	62	65	76	9	17	29.59	29.78	22	CLR	NC			10.00	57	48	52	72	3	17	29.89	30.09		
SUNRISE: 0458				MAY 18				SUNSET: 1913				SUNRISE: 0454				MAY 24				SUNSET: 1918									
01	OVC	070			10.00	73	64	67	74	20	19	29.51	29.69	01	CLR	NC			10.00	51	47	49	86	3	17	29.87	30.06		
04	OVC	025			9.00	72	67	69	84	22	20	29.43	29.61	04	CLR	NC			10.00	51	46	49	83	5	18	29.84	30.03		
07	OVC	042			9.00	71	70	70	96	15	21	29.38	29.55	07	CLR	NC			10.00	58	46	52	65	7	25	29.85	30.05		
10	BKN	150			10.00	57	52	54	83	21	35	29.59	29.79	10	CLR	NC			10.00	74	50	60	43	0	00	29.84	30.03		
13	OVC	035			10.00	62	51	56	67	13	34	29.65	29.84	13	CLR	NC			10.00	82	50	63	33	7	18	29.80	29.99		
16	OVC	046			10.00	58	44	51	60	17	34	29.74	29.93	16	FEW	NC			10.00	85	50	64	30	9	23	29.73	29.92		
19	OVC	200			10.00	55	42	49	62	10	35	29.81	30.00	19	BKN	250			10.00	75	57	64	54	6	21	29.75	29.93		
22	SCT	NC			10.00	48	44	46	86	7	35	29.87	30.07	22	BKN	250			10.00	70	56	62	61	5	15	29.79	29.98		

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MAY 2002

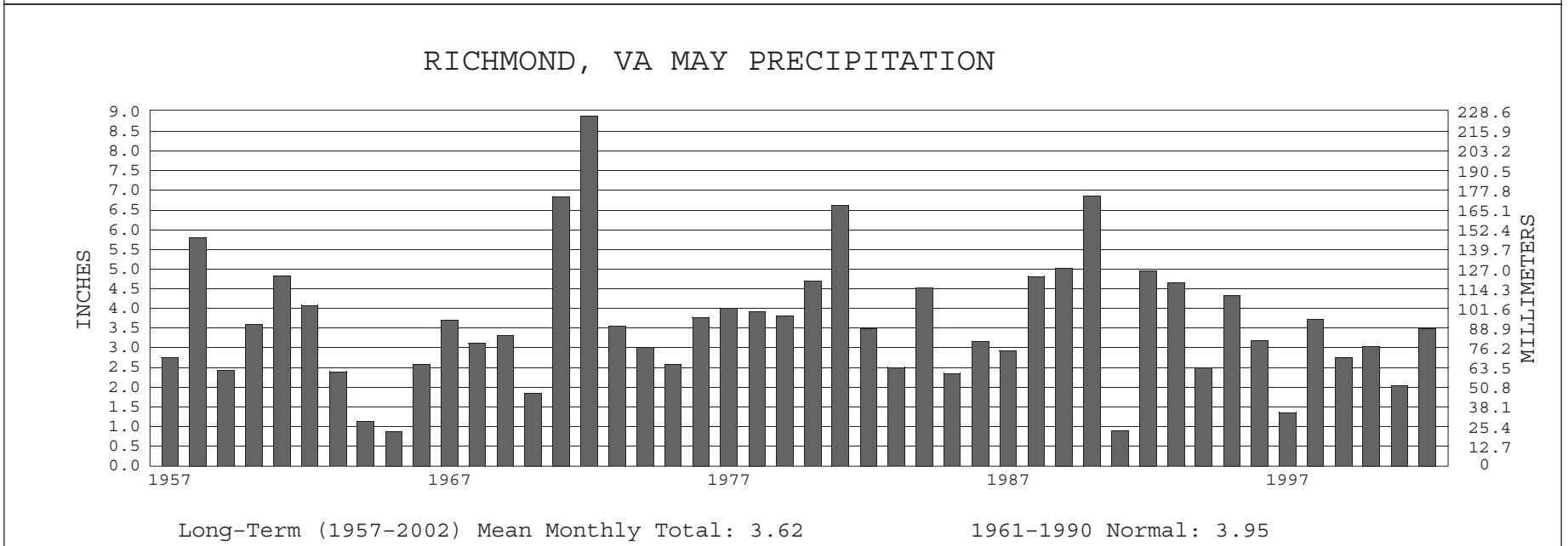
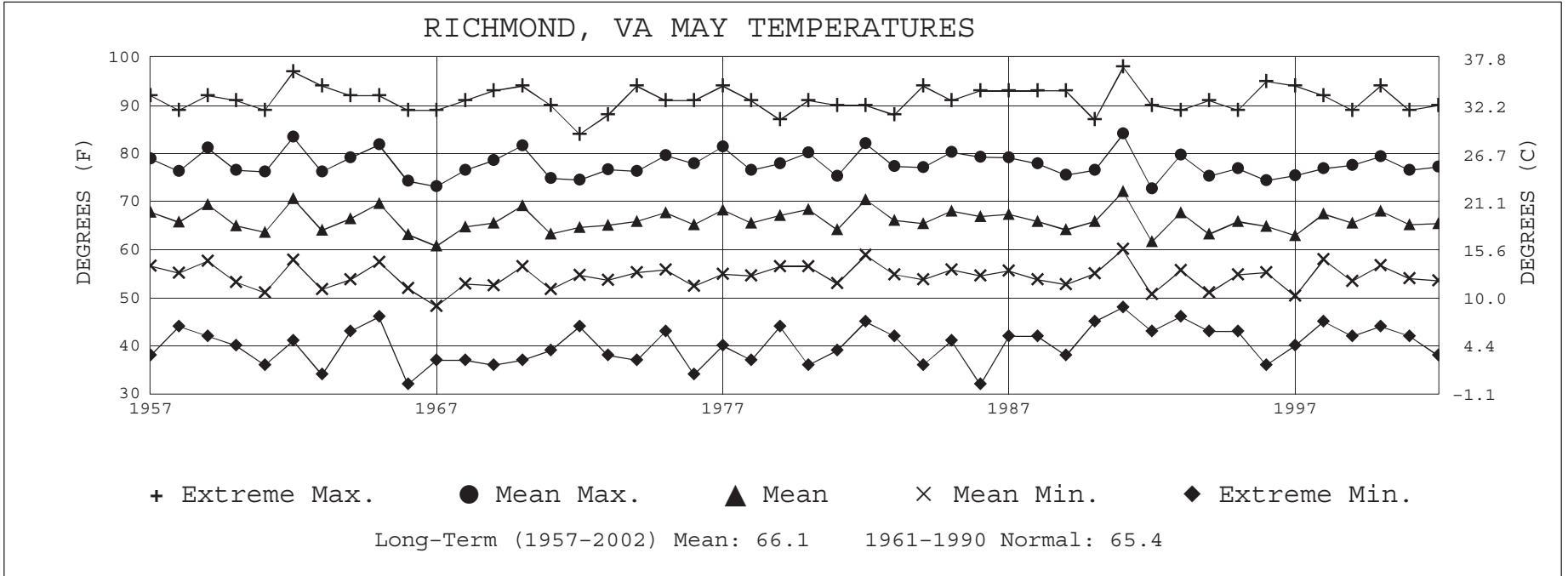
RIC

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)	
	SKY COVER	CEILING 100'S OF FT		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		SKY COVER	CEILING 100'S OF FT		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: 0453								MAY 25				SUNSET: 1919				SUNRISE: 0450								MAY 31				SUNSET: 1923			
01	BKN	200			10.00			68	59	63	73	12	01	29.81	30.00	01	CLR	NC			10.00			65	64	64	97	3	18	29.71	29.90
04	OVC	200			8.00			62	59	60	90	6	36	29.84	30.03	04	SCT	NC			10.00			64	64	64	100	3	19	29.70	29.89
07	CLR	NC			9.00			68	63	65	84	8	03	29.92	30.11	07	FEW	NC			10.00			70	68	69	93	6	21	29.70	29.89
10	FEW	NC			10.00			77	62	68	60	9	07	29.96	30.15	10	CLR	NC			10.00			82	67	72	60	9	22	29.67	29.86
13	BKN	048			10.00			79	62	68	56	5	09	29.93	30.12	13	SCT	NC			10.00			87	67	73	51	13	21	29.62	29.80
16	SCT	NC			10.00			78	62	68	58	13	13	29.91	30.09	16	SCT	NC			10.00			89	66	74	47	16	23	29.55	29.74
19	SCT	NC			10.00			69	61	64	76	12	13	29.91	30.10	19	BKN	200			10.00			85	67	73	55	13	21	29.54	29.72
22	BKN	250			10.00			62	58	60	86	8	13	29.95	30.14	22	FEW	NC			10.00			79	67	71	67	12	22	29.58	29.77
SUNRISE: 0453								MAY 26				SUNSET: 1920				<h3>3-HOURLY OBSERVATION NOTES</h3> <p>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.</p>															
01	OVC	005			5.00	BR		62	61	61	96	6	13	29.92	30.11																
04	OVC	002			1.00	BR		61	61	61	100	0	00	29.90	30.09																
07	BKN	007			3.00	BR		63	62	62	97	5	22	29.93	30.11																
10	BKN	250			7.00			73	64	67	74	3	VR	29.94	30.13																
13	BKN	250			10.00			84	66	72	55	7	VR	29.92	30.11																
16	BKN	250			10.00			86	63	71	46	12	17	29.88	30.07																
19	OVC	250			10.00			79	66	71	65	8	15	29.89	30.07																
22	OVC	250			10.00			70	62	65	76	7	14	29.93	30.12																
SUNRISE: 0452								MAY 27				SUNSET: 1920																			
01	SCT	NC			10.00			68	62	64	81	9	18	29.95	30.14																
04	SCT	NC			10.00			64	61	62	90	5	18	29.95	30.14																
07	SCT	NC			10.00			67	64	65	91	8	20	29.98	30.17																
10	BKN	250			10.00			77	66	70	69	8	18	29.98	30.17																
13	BKN	250			10.00			84	65	71	53	7	17	29.95	30.14																
16	SCT	NC			10.00			83	62	70	49	10	17	29.90	30.09																
19	BKN	250			10.00			75	65	69	71	10	10	29.92	30.11																
22	BKN	250			10.00			67	64	65	91	7	14	29.96	30.15																
SUNRISE: 0452								MAY 28				SUNSET: 1921																			
01	FEW	NC			10.00			64	63	63	96	3	19	29.96	30.14																
04	SCT	NC			10.00			62	61	61	96	3	16	29.96	30.15																
07	BKN	250			6.00	BR		67	65	66	93	7	18	29.99	30.18																
10	SCT	NC			10.00			77	63	68	62	3	VR	29.97	30.16																
13	BKN	250			10.00			83	62	70	49	10	16	29.95	30.14																
16	BKN	250			10.00			83	60	68	46	9	14	29.90	30.09																
19	FEW	NC			10.00			74	67	69	79	9	12	29.90	30.09																
22	FEW	NC			7.00			67	66	66	97	7	12	29.94	30.13																
SUNRISE: 0451								MAY 29				SUNSET: 1922																			
01	BKN	250			4.00	BR		64	64	64	100	3	13	29.91	30.10																
04	FEW	NC			2.50	BR		62	62	62	100	0	00	29.91	30.10																
07	BKN	002			0.75	BR		64	64	64	100	5	03	29.95	30.14																
10	SCT	NC			10.00			77	66	70	69	10	11	29.94	30.13																
13	SCT	NC			10.00			82	63	70	53	9	09	29.90	30.09																
16	FEW	NC			10.00			81	61	68	51	12	13	29.87	30.06																
19	SCT	NC			10.00			74	64	68	71	14	12	29.84	30.03																
22	FEW	NC			10.00			66	64	65	93	6	13	29.86	30.04																
SUNRISE: 0451								MAY 30				SUNSET: 1923																			
01	BKN	250			6.00	BR		63	63	63	100	0	00	29.83	30.02																
04	BKN	001			0.50	FG		61	61	61	100	0	00	29.81	30.00																
07	VV	001			0.25	FG		64	64	64	100	3	08	29.83	30.02																
10	BKN	017			10.00			74	68	70	82	3	13	29.82	30.01																
13	SCT	NC			10.00			85	63	71	48	8	13	29.78	29.97																
16	SCT	NC			10.00			81	66	71	61	12	10	29.72	29.91																
19	FEW	NC			10.00			76	66	70	72	8	12	29.70	29.89																
22	CLR	NC			10.00			67	64	65	91	6	13	29.73	29.92																

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			59	53	56	81	29.89	30.08	9.00	7	1	21
02			58	52	55	83	29.88	30.07	8.90	7	1	24
03			57	52	55	84	29.88	30.07	8.77	7	2	21
04			57	52	54	86	29.88	30.07	8.31	7	1	24
05			56	52	54	87	29.89	30.08	8.18	7	1	24
06			57	53	55	87	29.90	30.09	7.85	7	1	25
07			60	54	57	81	29.92	30.11	8.13	9	2	26
08			63	54	58	74	29.92	30.12	8.56	9	2	27
09			66	54	59	67	29.93	30.12	9.14	11	3	29
10			69	54	60	61	29.93	30.12	9.43	9	3	26
11			71	54	61	56	29.92	30.11	9.60	9	2	24
12			72	53	62	53	29.90	30.10	9.71	9	3	23
13			74	54	62	50	29.89	30.08	9.73	9	4	23
14			75	54	63	48	29.87	30.06	9.77	9	4	23
15			75	54	63	49	29.86	30.05	9.68	10	4	22
16			74	53	62	50	29.85	30.04	9.74	10	4	21
17			73	53	62	50	29.85	30.04	9.45	10	4	20
18			71	53	61	55	29.85	30.04	9.39	10	3	18
19			67	54	60	65	29.86	30.05	9.25	10	2	16
20			65	54	59	71	29.87	30.06	9.55	8	3	15
21			63	54	58	75	29.88	30.07	9.71	8	3	16
22			62	54	58	78	29.89	30.08	9.23	8	3	16
23			61	54	57	79	29.89	30.08	9.29	8	2	18
24			61	53	57	79	29.89	30.08	9.16	7	2	21





MAY 2002

RICHMOND, VA

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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