



NOVEMBER 1997

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	68*	57	63*	9	59	60	2	0	RA DZ BR				0.27	29.42	29.62	3.1	18	9.6	26	25	21	24	01	
02	66	44	55	2	44	51	10	0	RA BR HZ				0.23	29.39	29.59	7.5	22	10.4	29	26	22	27	02	
03	67	40	54	1	36	45	11	0	RA				T	29.69	29.90	8.9	19	9.7	32	21	26*	22	03	
04	59	37	48	-5	36	43	17	0					0.00	29.90	30.11	4.5	30	6.5	18	32	15	31	04	
05	55	32	44	-9	32	38	21	0					0.00	30.23	30.44	3.8	03	5.0	16	04	14	04	05	
06	58	35	47	-5	44	46	18	0	DZ BR				T	30.02	30.23	9.4	03	9.8	24	06	18	05	06	
07	53	46	50	-2	48	48	15	0	RA DZ BR				1.99	29.62	29.82	11.3	35	12.7	31	34	24	36	07	
08	50	47	49	-3	48	48	16	0	RA DZ BR				0.28	29.46	29.67	9.8	33	10.0	18	36	14	33	08	
09	56	45	51	-1	45	48	14	0	RA BR				0.52	29.49	29.69	8.2	31	9.0	25	33	18	33	09	
10	59	36	48	-3	40	44	17	0	BR				0.00	29.68	29.89	1.9	05	3.2	20	03	16	03	10	
11	56	45	51	0	37	44	14	0					0.00	29.82	30.03	2.5	29	4.7	16	36	13	01	11	
12	56	39	48	-3	35	42	17	0					0.00	29.85	30.05	2.3	29	5.9	20	03	17	02	12	
13	43	38	41	-10	34	38	24	0	RA DZ BR				0.31	29.78	29.98	10.3	03	10.6	20	02	16	03	13	
14	43	39	41	-9	40	40	24	0	RA DZ BR				0.26	29.40	29.60	7.1	33	7.9	22	01	20	01	14	
15	52	38	45	-5	36	41	20	0	BR				0.00	29.69	29.89	4.3	27	5.6	15	32	13	32	15	
16	47	33	40	-10	19	32	25	0					0.00	29.90	30.10	11.4	29	12.0	31	27	25	27	16	
17	48	24	36	-13	20	29	29	0					0.00	30.14	30.35	3.1	25	4.2	16	26	14	28	17	
18	51	22*	37	-12	23	31	28	0					0.00	30.10	30.31	2.1	18	3.0	15	22	11	24	18	
19	55	25	40	-9	25	33	25	0	BR				0.00	29.95	30.16	0.6	32	2.9	13	27	10	25	19	
20	61	28	45	-3	31	38	20	0					0.00	29.95	30.15	3.4	24	4.5	17	26	14	26	20	
21	53	38	46	-2	40	43	19	0	RA BR				0.48	29.87	30.07	0.7	14	3.9	14	32	11	31	21	
22	65	47	56	8	48	50	9	0	RA BR				0.60	29.67	29.88	3.7	25	6.5	16	23	14	23	22	
23	53	41	47	0	46	47	18	0	RA BR				T	29.81	30.01	4.5	02	5.1	14	36	11	01	23	
24	46	32	39	-8	20	33	26	0					0.00	30.04	30.25	10.9	31	11.5	33*	32	25	32	24	
25	48	23	36*	-11	21	30	29	0					0.00	30.11	30.32	5.3	20	5.7	17	21	14	21	25	
26	60	30	45	-1	31	40	20	0	RA				T	29.73	29.93	10.7	22	11.3	23	22	18	24	26	
27	59	33	46	0	25	39	19	0					0.00	29.90	30.11	7.4	28	8.8	31	29	22	29	27	
28	66	32	49	3	30	41	16	0					0.00	29.88	30.09	8.6	22	9.2	31	22	24	23	28	
29	64	44	54	9	42	48	11	0					0.00	29.81	30.01	4.1	11	6.1	15	10	13	12	29	
30	54	49	52	7	50	50	13	0	RA DZ BR				0.39	29.42	29.62	4.4	01	6.0	17	01	14	36	30	

55.7	37.3	46.5	■ ■	36.2	42.0	18.2	0.0	< MONTHLY AVERAGES	TOTALS-->	5.33	29.79	30.00	2.5	30	7.4	<-- MONTHLY AVERAGES							
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-5.6	- .6	-3.1	■ ■	<----- DEPARTURE FROM NORMAL ----->										2.16	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
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DEGREE DAYS								GREATEST 24-HR PRECIPITATION: 2.09 DATE: 07-08				SEA LEVEL PRESSURE DATE TIME			
MONTHLY TOTAL DEPARTURE				SEASON TO DATE TOTAL DEPARTURE				GREATEST 24-HR SNOWFALL: DATE: DATE:				MAXIMUM : 30.50 05 1043			
HEATING: 547 85				813 95				GREATEST SNOW DEPTH: DATE: DATE:				MINIMUM : 29.42 30 2359			
COOLING: 0 0				1303 -45				NUMBER OF DAYS WITH →		MAXIMUM TEMP ≥ 90: 0		MINIMUM TEMP ≤ 32: 9		PRECIPITATION ≥ 0.01 INCH : 10	
								MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 10			
								THUNDERSTORMS : 0		HEAVY FOG : 0		SNOWFALL ≥ 1.0 INCH : 0			

NOVEMBER 1997
RICHMOND, VA

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA

NOVEMBER 1997

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	0.02	0.04	0.05	0.02	0.04	0.04	0.05	0.01					01	T											01		0.27		
02				0.02	0.05	0.07	0.01		T		0.02	0.06	T	02											02		0.23		
03														03						T	T				03		T		
04														04											04		0.00		
05														05											05		0.00		
06														06											06		T		
07	0.01	0.02	0.05	0.08	0.22	0.30	0.27	0.25	0.08	0.15	0.28	0.03	07	0.11	T	T		0.06	0.04	0.01	T			07	0.27	1.99			
08	0.10	0.01	T	T	0.01	T	0.01	0.03	T	T	T	T	08	T	T	T		T	T	T	T	0.02	0.01	08	0.53	0.28			
09	0.07	0.10	0.10	0.09	0.10	0.05	0.01	0.01					09				0.01	T	T	T	T	0.03	0.07	09		0.52			
10													10												10		0.00		
11													11												11		0.00		
12													12												12		0.00		
13									T	T	T	T	13	T	0.01	0.04	0.01	0.06	0.02	0.05	0.04	0.03	0.02	0.02	0.01	13	0.20	0.31	
14	T	0.01	0.08	0.07		0.01			T				14		0.01	T		T	0.01	T	T	T			14		0.26		
15													15												15		0.00		
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		T	0.01	0.03	0.12	0.13	0.06	0.03	0.07	T	0.01	21		0.48		
22	0.28	0.24	0.04	0.01	0.02	T							22										0.02	0.01	22		0.60		
23						T		T					23									T	T		23		T		
24													24												24		0.00		
25													25												25		0.00		
26													26					T	T						26		T		
27													27												27		0.00		
28													28												28		0.00		
29													29												29		0.00		
30								T	0.01	0.01	0.07	0.06	0.03	30	0.04	0.02	0.09	0.04	0.02	T			T	30		0.39			

MAXIMUM SHORT DURATION PRECIPITATION (See Note 1)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.11	.17	.22	.26	.32	.37	.40	.49	.53	.59	.73	.83
Ending Date	22	22	22	22	22	22	22	22	07	07	07	07
Ending Time (Hour/Min)	0047	0053	0053	0055	0101	0111	0127	0147	0645	0641	0741	0746

Date and time are not entered for TRACE amounts.

Note 1: NCDC derives these data from one-minute ASOS values. The table is not printed when inconsistent with ASOS hourly totals.

Note 2: 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	PE 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 NOVEMBER 1997

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 at constant pressure by evaporation of moisture into it, to 100% relative humidity.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							1.50	10.00	
02							2.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							4.00	10.00	
07							1.50	10.00	
08							2.00	10.00	
09							6.00	10.00	
10							6.00	10.00	
11							10.00	10.00	
12							7.00	10.00	
13							1.00	10.00	
14							1.00	10.00	
15							1.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							9.00	10.00	
19							6.00	10.00	
20							10.00	10.00	
21							1.50	10.00	
22							1.50	10.00	
23							2.50	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							10.00	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							9.00	10.00	
30							1.00	10.00	
MONTHLY AVGS							6.12	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 30									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 0 11 15									

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

NOVEMBER 1997

RIC

WBAN # 13740

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
	SKY COVER	CEILING 100'S OF FT			OBSERVATION TIME (LST)	EFF CLD AMT Oktas	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	DRY BULB	DEW POINT	WET BULB
SUNRISE: 0634					NOV 01	SUNSET: 1711					SUNRISE: 0641					NOV 07	SUNSET: 1705								
01	OVC	019	4.00	-RA BR	58	57	57	97	7	04	29.68	29.88	01	OVC	006	2.00	DZ BR	52	51	52	97	13	06	29.76	29.96
04	OVC	004	9.00	-RA	60	60	60	100	9	07	29.57	29.77	04	OVC	004	2.00	DZ BR	52	51	52	97	14	34	29.69	29.89
07	OVC	016	1.50	-RA BR	61	60	60	97	13	05	29.47	29.68	07	OVC	011	2.00	+RA BR	48	47	47	96	15	33	29.70	29.91
10	OVC	002	1.50	BR	62	62	62	100	3	05	29.38	29.58	10	OVC	009	2.00	+RA BR	46	45	46	96	16	32	29.69	29.90
13	OVC	016	10.00		66	63	64	90	10	22	29.30	29.50	13	OVC	007	10.00	-RA	46	45	46	96	15	34	29.60	29.81
16	BKN	020	10.00		64	58	60	81	12	24	29.31	29.51	16	OVC	005	10.00		48	47	47	96	12	36	29.54	29.74
19	CLR	NC	10.00		57	56	56	96	6	19	29.33	29.53	19	OVC	005	2.00	-RA BR	49	48	48	97	8	34	29.52	29.72
22	CLR	NC	10.00		58	56	57	93	12	20	29.37	29.57	22	OVC	005	2.00	-RA BR	50	49	49	96	8	35	29.51	29.72
SUNRISE: 0635					NOV 02	SUNSET: 1710					SUNRISE: 0642					NOV 08	SUNSET: 1704								
01	CLR	NC	10.00		57	55	56	93	8	20	29.37	29.57	01	OVC	008	2.00	+RA BR	48	48	48	100	9	33	29.49	29.69
04	OVC	055	6.00	-RA BR	58	57	57	97	9	17	29.32	29.52	04	OVC	005	5.00	DZ BR	47	47	47	100	9	33	29.47	29.67
07	SCT	NC	2.00	HZ	58	48	53	70	13	16	29.27	29.47	07	OVC	005	4.00	DZ BR	47	46	46	97	8	33	29.48	29.68
10	OVC	016	6.00	BR	61	59	60	93	16	20	29.27	29.47	10	OVC	005	4.00	DZ BR	48	47	47	96	9	34	29.48	29.68
13	BKN	035	10.00		65	44	54	47	13	27	29.31	29.51	13	OVC	003	3.00	DZ BR	49	48	48	97	9	34	29.45	29.65
16	SCT	NC	10.00		63	36	50	37	14	25	29.38	29.58	16	OVC	005	2.50	DZ BR	49	49	49	100	9	33	29.43	29.64
19	FEW	NC	10.00		55	30	44	39	7	24	29.51	29.71	19	OVC	003	2.00	DZ BR	48	48	48	100	14	34	29.46	29.67
22	CLR	NC	10.00		45	26	37	48	5	18	29.57	29.77	22	OVC	009	2.00	DZ BR	48	47	47	96	10	33	29.46	29.66
SUNRISE: 0636					NOV 03	SUNSET: 1709					SUNRISE: 0643					NOV 09	SUNSET: 1703								
01	FEW	NC	10.00		45	36	41	71	6	20	29.60	29.80	01	OVC	010	9.00	RA	48	47	47	96	12	33	29.44	29.64
04	CLR	NC	10.00		41	32	37	70	5	14	29.63	29.83	04	OVC	035	6.00	RA BR	47	46	46	97	12	30	29.41	29.61
07	CLR	NC	10.00		42	32	38	68	3	15	29.69	29.89	07	OVC	033	10.00	-RA	47	46	46	97	12	28	29.42	29.63
10	CLR	NC	10.00		56	30	44	37	15	18	29.72	29.93	10	BKN	045	10.00		51	46	49	83	12	31	29.47	29.67
13	SCT	NC	10.00		64	38	51	38	22	22	29.68	29.88	13	OVC	028	10.00		54	45	49	72	12	32	29.46	29.66
16	SCT	NC	10.00		64	35	50	34	16	21	29.69	29.89	16	OVC	040	10.00		55	44	50	67	12	33	29.48	29.68
19	SCT	NC	10.00		50	40	45	68	7	15	29.73	29.93	19	OVC	038	10.00		52	47	49	83	5	31	29.54	29.75
22	SCT	NC	10.00		52	40	46	64	5	20	29.74	29.95	22	FEW	NC	10.00		45	43	44	93	0	00	29.59	29.80
SUNRISE: 0638					NOV 04	SUNSET: 1708					SUNRISE: 0644					NOV 10	SUNSET: 1703								
01	OVC	100	10.00		51	41	46	69	7	22	29.75	29.96	01	FEW	NC	10.00		43	41	42	93	0	00	29.61	29.81
04	CLR	NC	10.00		45	40	43	83	3	20	29.75	29.95	04	CLR	NC	10.00		40	39	40	97	0	00	29.64	29.84
07	BKN	085	10.00		45	40	43	83	3	28	29.80	30.01	07	BKN	250	7.00		37	36	37	96	0	00	29.68	29.89
10	OVC	085	10.00		52	39	46	61	5	27	29.85	30.06	10	BKN	250	10.00		50	40	45	68	0	00	29.72	29.93
13	SCT	NC	10.00		56	37	47	49	9	31	29.88	30.08	13	BKN	250	10.00		58	40	49	51	8	13	29.66	29.86
16	SCT	NC	10.00		57	33	46	41	12	31	29.92	30.12	16	BKN	250	10.00		58	43	50	58	0	00	29.65	29.85
19	BKN	060	10.00		50	32	42	50	10	32	30.03	30.23	19	OVC	045	10.00		53	46	50	77	0	00	29.69	29.90
22	CLR	NC	10.00		41	31	37	67	8	01	30.12	30.33	22	OVC	039	10.00		49	36	43	61	12	03	29.75	29.96
SUNRISE: 0639					NOV 05	SUNSET: 1707					SUNRISE: 0645					NOV 11	SUNSET: 1702								
01	CLR	NC	10.00		39	32	36	76	3	36	30.18	30.38	01	OVC	035	10.00		47	33	41	59	8	03	29.76	29.97
04	CLR	NC	10.00		32	30	31	92	5	35	30.21	30.42	04	OVC	041	10.00		45	36	41	71	6	36	29.79	30.00
07	FEW	NC	10.00		34	30	32	85	5	36	30.26	30.47	07	OVC	043	10.00		45	37	41	74	0	00	29.83	30.03
10	BKN	250	10.00		47	32	41	56	8	04	30.29	30.49	10	OVC	047	10.00		50	36	44	59	0	00	29.87	30.07
13	OVC	250	10.00		52	32	43	47	3	VR	30.24	30.45	13	BKN	043	10.00		54	37	46	53	3	VR	29.82	30.02
16	SCT	NC	10.00		54	33	45	45	7	03	30.22	30.42	16	OVC	049	10.00		54	38	46	55	3	28	29.80	30.01
19	CLR	NC	10.00		44	34	40	68	6	06	30.22	30.43	19	OVC	055	10.00		50	42	46	74	5	20	29.83	30.04
22	CLR	NC	10.00		38	34	36	86	3	03	30.22	30.43	22	SCT	NC	10.00		50	37	44	61	10	30	29.85	30.05
SUNRISE: 0640					NOV 06	SUNSET: 1706					SUNRISE: 0646					NOV 12	SUNSET: 1701								
01	CLR	NC	10.00		37	34	36	89	5	36	30.19	30.39	01	SCT	NC	10.00		44	37	41	76	0	00	29.85	30.05
04	CLR	NC	10.00		36	35	36	97	6	01	30.14	30.35	04	BKN	055	8.00		39	38	39	96	0	00	29.83	30.03
07	SCT	NC	7.00		37	36	37	96	8	01	30.13	30.34	07	OVC	055	9.00		42	38	40	85	3	18	29.85	30.06
10	BKN	055	10.00		49	41	45	74	10	03	30.10	30.31	10	OVC	060	9.00		49	38	44	66	7	24	29.86	30.06
13	OVC	021	10.00		56	47	51	72	9	01	30.03	30.24	13	OVC	060	10.00		54	32	44	44	8	30	29.81	
16	OVC	018	10.00		55	49	52	80	8	02	29.98	30.18	16	OVC	200	10.00		52	32	43	47	7	28	29.78	29.99
19	OVC	012	10.00		54	50	52	87	10	04	29.92	30.12	19	OVC	090	10.00		50	31	42	48	6	29	29.86	30.06
22	OVC	011	10.00		54	51	52	90	14	05	29.84	30.04	22	OVC	075	10.00		45	32	39	61	10	04	29.89	30.10

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

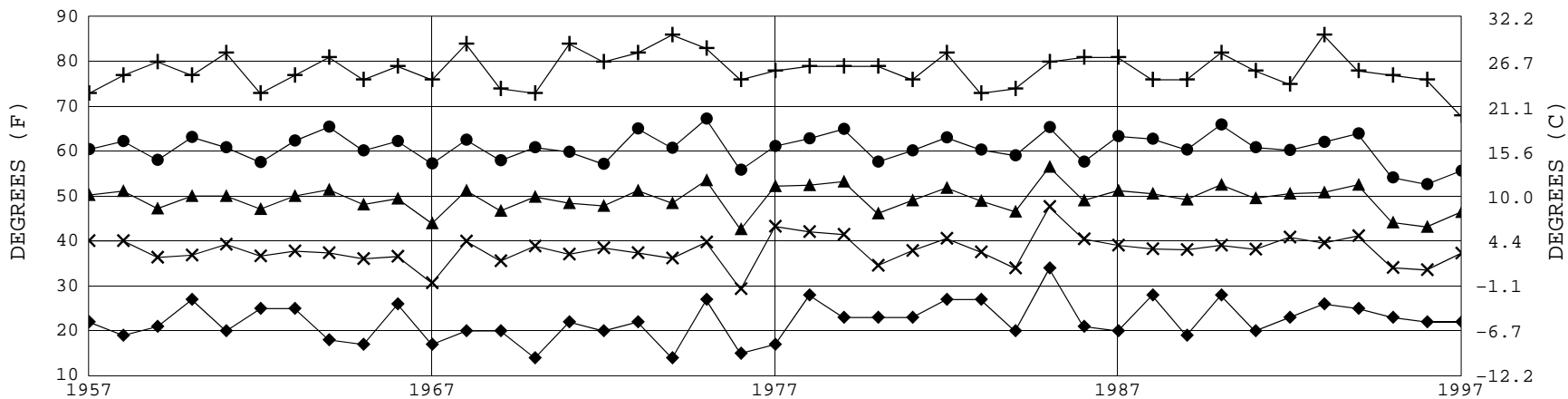
NOVEMBER 1997

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: 0647				NOV 13				SUNSET: 1700				SUNRISE: 0653				NOV 19				SUNSET: 1656					
01	OVC	050		10.00	42	26	36	53	12	06	29.91	30.11	01	CLR	NC		10.00	28	24	27	85	0	00	30.02	30.23
04	OVC	035		10.00	40	23	34	51	8	03	29.90	30.11	04	CLR	NC		10.00	26	23	25	88	3	13	30.01	30.22
07	OVC	038		10.00	38	28	34	68	9	04	29.91	30.11	07	FEW	NC		6.00	25	23	24	92	5	36	30.00	30.21
10	OVC	028		8.00	39	33	37	79	12	04	29.90	30.10	10	FEW	NC		10.00	44	27	37	51	5	02	29.99	30.19
13	OVC	008		3.00	39	38	39	96	10	03	29.81	30.01	13	CLR	NC		10.00	53	18	40	25	5	VR	29.90	30.11
16	OVC	003		1.00	40	39	40	97	12	02	29.73	29.94	16	CLR	NC		10.00	54	21	41	28	7	27	29.89	30.10
19	OVC	005		2.00	40	40	40	100	9	01	29.67	29.88	19	CLR	NC		10.00	40	28	35	63	0	00	29.92	30.13
22	OVC	005		2.50	42	41	42	96	12	02	29.59	29.79	22	CLR	NC		10.00	35	27	32	72	0	00	29.91	30.11
SUNRISE: 0648				NOV 14				SUNSET: 1659				SUNRISE: 0654				NOV 20				SUNSET: 1656					
01	OVC	003		2.00	42	42	42	100	12	36	29.46	29.66	01	CLR	NC		10.00	32	27	30	82	5	20	29.90	30.10
04	OVC	003		2.00	41	41	41	100	13	33	29.40	29.61	04	CLR	NC		10.00	30	26	29	85	5	22	29.91	30.11
07	OVC	005		4.00	40	39	40	97	13	33	29.37	29.57	07	SCT	NC		10.00	33	27	31	78	3	VR	29.95	30.16
10	OVC	005		7.00	40	38	39	93	10	35	29.37	29.57	10	OVC	250		10.00	46	31	40	56	8	25	29.98	30.19
13	OVC	005		8.00	41	39	40	93	8	35	29.34	29.54	13	CLR	NC		10.00	59	33	47	38	7	VR	29.94	30.14
16	OVC	005		7.00	41	39	40	93	8	32	29.35	29.55	16	FEW	NC		10.00	59	31	46	35	8	25	29.93	30.14
19	OVC	009		10.00	41	40	41	96	5	28	29.42	29.62	19	OVC	250		10.00	45	33	40	63	0	00	29.97	30.18
22	OVC	003		4.00	42	41	42	96	3	35	29.48	29.69	22	BKN	250		10.00	42	32	38	68	0	00	29.98	30.19
SUNRISE: 0649				NOV 15				SUNSET: 1659				SUNRISE: 0655				NOV 21				SUNSET: 1655					
01	BKN	010		1.00	41	40	41	96	5	36	29.52	29.73	01	BKN	250		10.00	41	34	38	76	3	15	29.98	30.19
04	FEW	NC		2.00	41	40	41	96	6	30	29.61	29.81	04	SCT	NC		10.00	39	33	37	79	3	17	29.96	30.17
07	SCT	NC		6.00	39	37	38	93	7	27	29.70	29.91	07	OVC	150		10.00	40	34	37	79	0	00	29.96	30.16
10	CLR	NC		10.00	48	35	42	61	5	33	29.72	29.93	10	OVC	140		10.00	47	36	42	66	7	19	29.96	30.16
13	BKN	045		10.00	49	32	42	52	0	00	29.71	29.92	13	OVC	140		10.00	52	41	47	66	6	17	29.87	30.08
16	BKN	130		10.00	51	34	43	52	7	21	29.70	29.91	16	OVC	036		3.00	49	46	47	90	5	04	29.81	30.02
19	OVC	055		10.00	49	35	43	59	9	25	29.72	29.92	19	OVC	050		1.50	47	46	46	97	5	36	29.79	29.99
22	OVC	060		10.00	45	35	41	68	5	22	29.71	29.92	22	OVC	003		1.50	47	47	47	100	0	00	29.72	29.92
SUNRISE: 0650				NOV 16				SUNSET: 1658				SUNRISE: 0656				NOV 22				SUNSET: 1655					
01	OVC	085		10.00	44	29	38	55	22	29	29.71	29.92	01	OVC	010		1.50	48	47	47	96	9	32	29.67	29.87
04	CLR	NC		10.00	39	19	32	45	13	30	29.76	29.97	04	OVC	070		1.50	49	49	49	100	3	24	29.58	29.78
07	CLR	NC		10.00	34	15	28	46	9	29	29.85	30.06	07	OVC	005		9.00	48	47	47	96	8	26	29.62	29.83
10	CLR	NC		10.00	40	18	32	41	13	29	29.91	30.12	10	OVC	004		8.00	50	49	49	96	8	23	29.68	29.89
13	FEW	NC		10.00	46	20	36	35	15	28	29.87	30.08	13	SCT	NC		10.00	61	52	56	72	7	21	29.65	29.85
16	SCT	NC		10.00	45	17	35	33	15	27	29.90	30.11	16	FEW	NC		10.00	63	49	55	60	7	24	29.68	29.88
19	FEW	NC		10.00	39	18	32	43	9	33	29.98	30.18	19	CLR	NC		10.00	54	48	51	80	3	25	29.73	29.93
22	CLR	NC		10.00	36	18	30	48	10	33	30.06	30.26	22	CLR	NC		6.00	49	48	48	97	5	03	29.77	29.97
SUNRISE: 0651				NOV 17				SUNSET: 1657				SUNRISE: 0657				NOV 23				SUNSET: 1654					
01	CLR	NC		10.00	30	19	26	64	6	36	30.10	30.31	01	BKN	060		4.00	47	47	47	100	6	03	29.77	29.98
04	CLR	NC		10.00	26	20	24	78	0	00	30.11	30.32	04	OVC	003		3.00	48	48	48	100	6	05	29.78	29.98
07	CLR	NC		10.00	25	20	23	81	5	20	30.15	30.36	07	OVC	005		3.00	48	47	47	96	6	01	29.81	30.01
10	CLR	NC		10.00	39	19	32	45	9	27	30.19	30.40	10	OVC	004		2.50	49	48	48	97	6	02	29.84	30.04
13	CLR	NC		10.00	45	18	35	34	8	26	30.13	30.34	13	OVC	042		7.00	51	47	49	86	7	01	29.79	30.00
16	CLR	NC		10.00	47	18	36	31	7	27	30.13	30.34	16	OVC	038		10.00	52	44	48	75	6	02	29.79	29.99
19	CLR	NC		10.00	34	24	30	67	0	00	30.15	30.36	19	SCT	NC		9.00	45	43	44	93	0	00	29.82	30.03
22	CLR	NC		10.00	31	22	28	69	5	18	30.15	30.36	22	OVC	031		6.00	45	43	44	93	8	36	29.84	30.04
SUNRISE: 0652				NOV 18				SUNSET: 1657				SUNRISE: 0658				NOV 24				SUNSET: 1654					
01	SCT	NC		10.00	29	22	27	75	0	00	30.15	30.35	01	CLR	NC		10.00	40	35	38	83	7	30	29.85	30.06
04	CLR	NC		10.00	25	21	24	85	3	15	30.16	30.37	04	CLR	NC		10.00	39	30	35	70	12	27	29.87	30.07
07	SCT	NC		10.00	24	20	23	84	0	00	30.16	30.37	07	CLR	NC		10.00	37	18	30	46	17	30	29.97	30.18
10	CLR	NC		10.00	39	27	34	62	3	VR	30.16	30.37	10	CLR	NC		10.00	40	14	31	35	17	30	30.06	30.26
13	CLR	NC		10.00	48	20	37	33	7	VR	30.08	30.29	13	CLR	NC		10.00	44	17	34	34	17	33	30.04	30.24
16	FEW	NC		10.00	50	21	39	32	6	20	30.05	30.25	16	CLR	NC		10.00	45	16	35	31	13	30	30.07	30.28
19	CLR	NC		10.00	37	23	32	57	0	00	30.05	30.26	19	CLR	NC		10.00	39	18	32	43	8	32	30.14	30.35
22	CLR	NC		10.00	31	24	29	76	0	00	30.05	30.25	22	CLR	NC		10.00	34	18	29	52	8	33	30.19	30.40

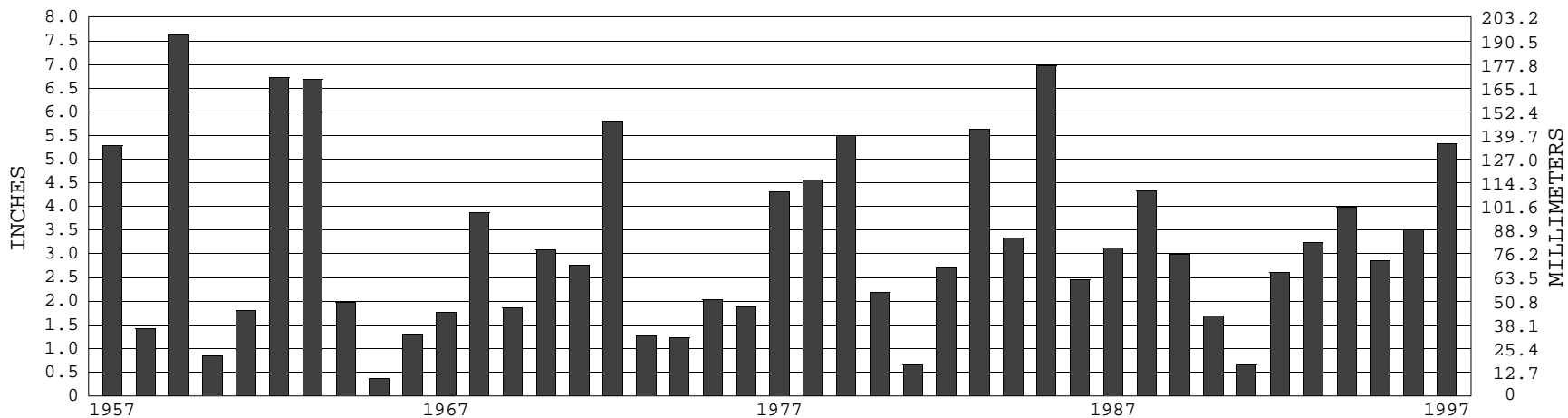
RICHMOND, VA NOVEMBER TEMPERATURES



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

Long-Term (1957-1997) Mean: 49.5 1961-1990 Normal: 49.6

RICHMOND, VA NOVEMBER PRECIPITATION



Long-Term (1957-1997) Mean Monthly Total: 3.23

1961-1990 Normal: 3.17



**NOVEMBER 1997
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.

ACTING DIRECTOR

NOTICE

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

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