



MAY 2011 LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

RICHMOND, VA
RICHMOND INTERNATIONAL AIRPORT (KRIC)
 Lat:37° 30'N Long: 77° 19'W Elev (Ground) 163 Feet
 Time Zone : EASTERN WBAN: 13740 ISSN#: 0198-537X



Date 1	Temperature °F						Deg Days BASE 65°		WEATHER 10	SNOW/ICE ON GND(IN)		PRECIPITATION ON GND(IN)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								Date 24
	MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEP FROM NORMAL 5	AVERAGE DEW PT 6	AVERAGE WET BULB 7	HEATING 8	COOLING 9		0700 LST	1300 LST	2400 LST	2400 LST	AVERAGE STATION 15	AVERAGE SEA LEVEL 16	RESULTANT SPEED 17	RES DIR 18	AVERAGE SPEED 19	MAXIMUM					
																			3-SEC		2-MIN			
2	3	4	5	6	7	8	9	11	12	13	14	15	16	17	18	19	20	21	22	23				
01	69	46	58	-3	46	52	7	0	RA	0		0.0	T	30.09	30.28	3.9	14	4.8	16	20	13	20	01	
02	83	55	69	8	55	60	0	4		0		0.0	0.00	30.01	30.19	9.1	20	9.7	29	21	21	22	02	
03	84	62	73	12	60	65	0	8		0		0.0	0.00	29.86	30.04	11.7	20	12.7	33	21	24	23	03	
04	71	48	60	-1	46	51	5	0	TS TSRA RA BR	0		0.0	1.22	29.88	30.10	9.6	34	10.5	28	33	22	32	04	
05	69	46	58	-3	36	47	7	0		0		0.0	0.00	29.99	30.17	7.2	28	9.2	24	24	20	24	05	
06	72	43*	58*	-4	45	51	7	0	RA BR	0		0.0	0.03	29.82	29.99	7.5	21	7.9	32	22	23	23	06	
07	76	48	62	-1	47	54	3	0	RA BR	0		0.0	0.05	29.75	29.94	1.8	28	5.0	24	36	18	36	07	
08	73	56	65	2	54	58	0	0	RA BR	0		0.0	T	29.73	29.93	1.0	03	3.3	16	35	12	02	08	
09	77	53	65	2	47	55	0	0		0		0.0	0.00	29.78	29.97	4.6	33	5.1	26	34	22	34	09	
10	77	50	64	0	46	55	1	0		0		0.0	0.00	29.81	30.00	3.0	03	4.8	15	02	12	01	10	
11	76	51	64	0	51	56	1	0		0		0.0	0.00	29.84	30.05	4.6	13	5.3	16	13	13	12	11	
12	73	50	62	-2	54	58	3	0		0		0.0	0.00	29.86	30.05	3.7	17	4.2	15	15	12	15	12	
13	66	61	64	0	60	61	1	0	RA DZ BR HZ	0		0.0	0.06	29.72	29.89	6.5	13	7.0	17	13	14	13	13	
14	78	61	70	5	63	64	0	5	TS TSRA RA BR HZ SQ	0		0.0	1.74	29.56	29.73	2.1	12	4.9	43	16	32	16	14	
15	79	63	71	6	62	64	0	6	TS TSRA RA BR	0		0.0	0.18	29.41	29.58	5.6	21	7.2	29	26	22	29	15	
16	79	59	69	4	61	64	0	4	RA FG+ FG BR	0		0.0	T	29.43	29.63	3.3	09	4.3	17	13	13	13	16	
17	76	62	69	4	61	63	0	4	RA BR	0		0.0	0.65	29.48	29.66	7.6	12	8.9	44	18	33	20	17	
18	78	58	68	2	58	61	0	3	TS TSRA RA BR	0		0.0	0.38	29.62	29.81	3.9	16	5.4	24	12	20	11	18	
19	76	54	65	-1	54	59	0	0	BR	0		0.0	0.00	29.78	29.98	5.8	22	6.1	22	23	17	24	19	
20	76	56	66	0	55	60	0	1	RA	0		0.0	T	29.83	30.02	3.6	28	4.2	17	30	13	28	20	
21	82	58	70	3	58	63	0	5	BR	0		0.0	0.00	29.82	30.01	3.1	36	3.7	18	01	14	36	21	
22	84	60	72	5	61	65	0	7	BR	0		0.0	0.00	29.85	30.04	5.7	16	6.3	18	13	15	15	22	
23	86	68	77	9	67	70	0	12	RA BR	0		0.0	T	29.78	29.95	7.8	20	8.9	28	21	20	21	23	
24	92	68	80	11	67	71	0	15	TS TSRA RA BR HZ	0		0.0	0.04	29.70	29.88	8.0	23	9.1	52*	22	39*	22	24	
25	87	63	75	6	64	69	0	10		0		0.0	0.00	29.73	29.92	3.9	16	5.2	15	15	12	15	25	
26	93	70	82	13	65	71	0	17	BR HZ	0		0.0	0.00	29.69	29.89	9.7	20	10.2	28	20	22	22	26	
27	86	65	76	7	64	68	0	11		0		0.0	0.00	29.78	29.97	7.8	19	8.2	37	23	26	25	27	
28	84	62	73	4	65	68	0	8	RA	0		0.0	T	29.82	30.02	4.5	16	5.1	33	19	24	21	28	
29	85	67	76	6	69	71	0	11	DZ BR	0		0.0	T	29.92	30.11	5.5	19	5.6	16	19	14	19	29	
30	96	70	83	13	70	74	0	18	BR HZ	0		0.0	0.00	29.95	30.14	1.9	20	3.4	14	22	10	22	30	
31	98*	72	85*	15	70	75	0	20	BR HZ	0		0.0	0.00	29.98	30.16	3.6	01	5.4	21	14	13	04	31	

MAY 2011
RICHMOND, VA

80.0	58.2	69.1	☼	57.5	62.0	1.1	5.5	< MONTHLY AVERAGES TOTALS >				0.0	4.35	29.78	29.97	2.7	19	6.5	< MONTHLY AVERAGES				
3.8	3.6	3.7		-----DEPARTURE FROM NORMAL ----->								0.39	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS								GREATEST 24-HR PRECIPITATION : 1.74 DATE : 14				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY								GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.33				01 0954							
TOTAL DEPARTURE								GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.52				15 1654							
SEASON TO DATE								NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 4				MINIMUM TEMP <= 32 : 0				PRECIPITATION >= 0.01 INCH : 9			
HEATING : 35 -45 3783 -128								MAXIMUM TEMP <= 32 : 0				MINIMUM TEMP <= 0 : 0				PRECIPITATION >= 0.10 INCH : 5							
COOLING : 169 -62 252 103								THUNDERSTORMS : 5				HEAVY FOG : 1				SNOWFALL >= 1.0 INCH : 0							

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA (KRIC)
MAY 2011

WBAN # 13740

Date	FOR HOUR (LST) ENDING AT												Date	FOR HOUR (LST) ENDING AT												Date	Sum of Hourly Data	2400 LST Water Equiv.
	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													01												01	T	T	
02													02												02	0.00	0.00	
03													03												03	0.00	0.00	
04		T	0.28	0.23	0.14	0.32	0.08	0.03	0.03	0.10	0.01		04											04	1.22	1.22		
05													05											05	0.00	0.00		
06													06				T	0.03						06	0.03	0.03		
07													07						T	0.04	T	0.01	T	07	0.05	0.05		
08													08											08	T	T		
09													09											09	0.00	0.00		
10													10											10	0.00	0.00		
11													11											11	0.00	0.00		
12													12											12	0.00	0.00		
13													13	T	0.02	0.01	0.03							13	0.06	0.06		
14	0.08	T											14					0.80	0.20	0.46	0.13	0.07		14	1.74	1.74		
15													15						T	0.17		T	0.01	15	0.18	0.18		
16													16				T							16	T	T		
17					0.03	T	0.40	0.17					17	0.04	T	T		T	0.01					17	0.65	0.65		
18													18				0.10	0.19						18	0.38	0.38		
19													19					T	0.09					19	0.00	0.00		
20													20											20	T	T		
21													21											21	0.00	0.00		
22													22											22	0.00	0.00		
23	T	T	T	T									23											23	T	T		
24													24			0.04						T	T	24	0.04	0.04		
25													25											25	0.00	0.00		
26													26											26	0.00	0.00		
27													27											27	0.00	0.00		
28													28		T	T	T							28	T	T		
29													29											29	T	T		
30													30											30	0.00	0.00		
31													31											31	0.00	0.00		

* Indicates sum of Hourly and Daily disagree.

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	0.42	0.61	0.69	0.77	0.88	0.94	0.98	0.98	1.30	1.38	1.47	1.55
Ending Date	14	14	14	14	14	14	14	14	14	14	14	14
Ending Time (Hr/Min)	1751	1756	1800	1759	1807	1821	1832	1832	1916	1934	2004	2037

Note : The hourly and daily precipitation totals are printed in the last 2 columns and hi-lighted in red when they disagree. 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.

Date and time are not entered for TRACE amounts.

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		
DESCRIPTOR	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	
PR Partial	RA Rain	PY Spray	SQ Squalls
SH Shower(s)	SG Snow Grains	SA Sand	SS Sandstorm
TS Thunderstorm	SN Snow	VA Volcanic Ash	GL Glaze
VC In the Vicinity	UP Unkown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy '' = Moderate '-' = Light

RICHMOND, VA MAY 2011

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:

Station Augmentation-SANDSTON COOP
Lat/Lon:37.54417/-77.27583 Elevation:165
Distance:4 MI Dir:E
Augmented Elements:Temp, Precip, Snow
Equipment:MMTS, SRG, Snowboard

Date	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			Sky Cover	Satellite	Sky Cover	Satellite			
01							10.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							2.00	10.00	
05							10.00	10.00	
06							6.00	10.00	
07							6.00	10.00	
08							6.00	10.00	
09							9.00	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							2.50	10.00	
14							0.50	10.00	
15							5.00	10.00	
16							0.25	10.00	
17							2.00	10.00	
18							3.00	10.00	
19							3.00	10.00	
20							9.00	10.00	
21							5.00	10.00	
22							5.00	10.00	
23							6.00	10.00	
24							4.00	10.00	
25							7.00	10.00	
26							4.00	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							4.00	10.00	
30							5.00	10.00	
31							5.00	10.00	
MONTHLY AVGS							6.10	10.00	
SUNSHINE (Minutes)									
Total : 0					Possible : 26382				
Percent Possible : 0									
NUMBER OF DAYS WITH : SKY CONDITION									
Clear		Partly CLDY		Cloudy		Missing			
MINIMUM VISIBILITY (MILES)									
<= .25			<= 3.0			>= 7.0			
1			7			12			

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MAY 2011

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)							
			Observation Time (LST)	Eff Cld Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)				STATION	SEA LEVEL		Observation Time (LST)	Eff Cld Amt Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	STATION	SEA LEVEL		
																												WEATHER	WEATHER
SUNRISE: 0515						MAY 01						SUNSET: 1859																	
01	BKN	150			10.00		50	46	48	86	0	00	30.08	30.27	01	FEW	250			9.00	BR	51	49	50	93	6	19	29.76	29.95
04	SCT	250			10.00		50	46	48	86	0	00	30.06	30.25	04	FEW	250			6.00	BR	49	47	48	93	5	24	29.75	29.94
07	BKN	250			10.00		54	48	51	80	0	00	30.12	30.32	07	FEW	250			10.00		57	49	53	75	0	00	29.78	29.98
10	BKN	250			10.00		64	44	54	48	9	20	30.14	30.33	10	SCT	250			10.00		69	45	56	42	10	31	29.79	29.98
13	OVC	250			10.00		67	43	55	42	7	18	30.12	30.31	13	SCT	250			10.00		74	41	57	31	5	VR	29.75	29.94
16	BKN	250			10.00		68	45	56	44	6	15	30.05	30.24	16	SCT	250			10.00		76	38	56	25	10	27	29.70	29.89
19	OVC	250			10.00		64	49	56	58	7	09	30.05	30.24	19	BKN	250			10.00		68	49	58	51	6	20	29.70	29.89
22	OVC	150			10.00	-RA	59	46	52	62	8	14	30.09	30.28	22	OVC	075			10.00		60	55	57	84	0	00	29.77	29.96
SUNRISE: 0513						MAY 02						SUNSET: 1860																	
01	BKN	250			10.00		56	46	51	69	6	15	30.05	30.24	01	OVC	080			10.00		58	55	56	90	7	22	29.75	29.94
04	OVC	150			10.00		56	49	52	78	7	16	30.04	30.23	04	OVC	130			8.00		58	55	56	90	0	00	29.72	29.91
07	BKN	150			10.00		60	52	56	75	10	18	30.06	30.26	07	OVC	080			10.00		59	54	56	84	5	21	29.73	29.92
10	BKN	250			10.00		69	55	61	61	8	21	30.07	30.26	10	BKN	250			10.00		64	56	59	75	8	02	29.75	29.95
13	SCT	250			10.00		79	59	67	50	15	21	29.98	30.17	13	BKN	060			10.00		69	52	59	55	3	05	29.72	29.92
16	BKN	250			10.00		82	57	67	43	17	22	29.92	30.11	16	BKN	080			10.00		71	50	59	48	7	02	29.70	29.89
19	BKN	250			10.00		73	58	64	59	9	20	29.93	30.12	19	FEW	085			10.00		66	53	59	63	0	00	29.74	29.93
22	SCT	250			10.00		66	58	61	76	6	18	29.95	30.14	22	CLR	NC			10.00		57	54	55	90	0	00	29.77	29.96
SUNRISE: 0512						MAY 03						SUNSET: 1901																	
01	CLR	NC			10.00		65	59	61	81	8	19	29.91	30.10	01	CLR	NC			9.00		55	52	53	90	0	00	29.76	29.95
04	CLR	NC			10.00		63	59	61	87	9	19	29.91	30.10	04	CLR	NC			10.00		56	53	54	90	0	00	29.77	29.96
07	BKN	250			10.00		67	61	63	81	10	20	29.92	30.11	07	CLR	NC			10.00		61	52	56	72	8	33	29.82	30.01
10	OVC	250			10.00		76	63	68	64	15	21	29.93	30.11	10	CLR	NC			10.00		72	51	60	48	9	30	29.82	30.01
13	BKN	250			10.00		83	63	70	51	22	20	29.85	30.04	13	BKN	250			10.00		74	44	58	34	15	35	29.78	29.96
16	OVC	250			10.00		83	61	69	48	21	19	29.78	29.97	16	SCT	250			10.00		76	42	58	30	3	VR	29.75	29.93
19	OVC	250			10.00		78	61	67	56	11	20	29.77	29.96	19	FEW	250			10.00		68	43	55	41	5	01	29.76	29.95
22	OVC	250			10.00		70	60	64	71	8	19	29.78	29.97	22	CLR	NC			10.00		57	47	52	69	0	00	29.79	29.98
SUNRISE: 0511						MAY 04						SUNSET: 1901																	
01	OVC	080			10.00		69	54	60	59	7	31	29.80	29.98	01	CLR	NC			10.00		54	47	50	77	0	00	29.80	29.99
04	OVC	028			2.50	TSRA BR	62	60	61	93	5	29	29.83	30.02	04	CLR	NC			10.00		51	46	49	83	3	34	29.80	30.00
07	BKN	045			6.00	-RA BR	50	47	48	90	15	34	29.89	30.09	07	BKN	250			10.00		58	46	52	65	7	01	29.85	30.05
10	OVC	045			2.50	-RA	48	45	47	89	11	34	29.91	30.11	10	BKN	250			10.00		69	44	56	41	6	02	29.86	30.05
13	BKN	041			10.00		56	46	51	69	13	35	29.91	30.11	13	BKN	250			10.00		74	45	58	36	8	32	29.81	30.00
16	SCT	045			10.00		62	43	52	50	9	34	29.90	30.09	16	BKN	250			10.00		76	45	59	33	7	02	29.77	29.96
19	FEW	045			10.00		56	43	50	62	7	33	29.94	30.13	19	SCT	250			10.00		69	46	57	44	3	09	29.78	29.97
22	FEW	100			10.00		50	42	46	74	6	36	30.01	30.20	22	OVC	150			10.00		62	49	55	63	0	00	29.81	30.00
SUNRISE: 0510						MAY 05						SUNSET: 1902																	
01	SCT	090			10.00		48	39	44	71	6	33	30.04	30.23	01	BKN	250			10.00		58	48	53	70	3	13	29.78	29.97
04	CLR	NC			10.00		47	37	43	68	9	30	30.04	30.23	04	SCT	250			10.00		52	46	49	80	3	23	29.80	29.99
07	CLR	NC			10.00		50	37	44	61	13	30	30.07	30.26	07	OVC	090			10.00		56	50	53	80	5	12	29.86	30.06
10	CLR	NC			10.00		61	36	49	39	10	33	30.05	30.24	10	OVC	090			10.00		61	53	57	75	9	12	29.88	30.08
13	SCT	080			10.00		65	31	49	28	14	30	29.98	30.17	13	SCT	250			10.00		72	48	59	43	3	VR	29.86	30.05
16	FEW	080			10.00		68	31	51	25	14	27	29.91	30.11	16	SCT	250			10.00		74	51	61	45	8	15	29.84	30.03
19	CLR	NC			10.00		62	34	49	35	7	22	29.89	30.08	19	SCT	250			10.00		68	55	60	63	9	11	29.86	30.05
22	CLR	NC			10.00		51	40	46	66	6	20	29.91	30.10	22	CLR	NC			10.00		57	53	55	87	8	13	29.92	30.11
SUNRISE: 0509						MAY 06						SUNSET: 1903																	
01	CLR	NC			10.00		50	39	45	66	5	18	29.89	30.08	01	FEW	250			10.00		53	51	52	93	0	00	29.92	30.11
04	CLR	NC			10.00		44	40	42	86	0	00	29.87	30.06	04	OVC	100			10.00		52	50	51	93	0	00	29.92	30.11
07	SCT	250			10.00		52	44	48	74	5	19	29.88	30.07	07	OVC	250			10.00		57	52	54	83	0	00	29.91	30.11
10	FEW	250			10.00		67	45	55	45	14	20	29.85	30.04	10	OVC	055			10.00		64	53	58	68	3	VR	29.91	30.11
13	BKN	250			10.00		69	43	55	39	17	23	29.76	29.96	13	OVC	250			10.00		70	55	61	59	6	15	29.86	30.06
16	BKN	250			10.00		69	42	55	38	15	22	29.71	29.90	16	BKN	150			10.00		72	56	63	57	8	17	29.80	29.99
19	FEW	110			10.00		57	53	55	87	5	19	29.74	29.93	19	OVC	060			10.00		69	57	62	66	5	17	29.78	29.98
22	CLR	NC			10.00		54	52	53	93	7	21	29.75	29.94	22	OVC	250			10.00		65	58	61	78	7	21	29.79	29.98

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MAY 2011

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)			
			Observation Time (LST)	Eff Cld Amt Oktas			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	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	028			10.00		63	59	61	87	6	17	29.77	29.96	01	FEW	100			5.00	BR	59	57	58	93	0	00	29.70	29.89
04	OVC	011			10.00		62	59	60	90	5	12	29.76	29.95	04	FEW	070			3.00	BR	56	54	55	93	3	14	29.74	29.93
07	OVC	007			8.00		62	58	60	87	7	16	29.75	29.94	07	BKN	250			10.00		61	57	59	87	3	19	29.79	29.98
10	OVC	009			9.00		65	60	62	84	7	14	29.73	29.92	10	OVC	250			10.00		71	53	61	53	7	21	29.82	30.01
13	OVC	011			4.00	-DZ BR	65	61	63	87	5	11	29.71	29.91	13	SCT	250			10.00		74	50	60	43	11	24	29.81	30.00
16	OVC	015			5.00	BR	65	62	63	90	9	14	29.65	29.84	16	BKN	250			10.00		75	53	62	46	15	22	29.80	29.99
19	OVC	012			2.50	BR	63	61	62	93	6	10	29.64	29.83	19	BKN	150			10.00		71	52	60	51	9	24	29.82	30.01
22	OVC	015			6.00	BR	62	60	61	93	7	12	29.67	29.86	22	BKN	200			10.00		67	54	60	63	0	00	29.85	30.04
SUNRISE: 0501 MAY 14 SUNSET: 1910														SUNRISE: 0457 MAY 20 SUNSET: 1915															
01	OVC	015			6.00	RA BR	61	58	59	90	5	11	29.63	29.82	01	SCT	250			10.00		60	57	58	90	0	00	29.84	30.03
04	OVC	013			8.00		61	59	60	93	0	00	29.60	29.79	04	SCT	250			10.00		57	55	56	93	0	00	29.85	30.04
07	OVC	005			2.00	BR	62	60	61	93	0	00	29.60	29.79	07	BKN	150			10.00		63	57	60	81	5	30	29.87	30.06
10	OVC	003			2.00	BR	66	64	65	93	6	12	29.60	29.79	10	BKN	250			10.00		71	53	61	53	8	24	29.86	30.05
13	OVC	022			6.00	HZ	74	66	69	76	5	VR	29.53	29.72	13	BKN	250			10.00		75	53	62	46	5	29	29.82	30.01
16	OVC	250			10.00		77	68	71	74	6	06	29.47	29.66	16	BKN	150			10.00		74	55	63	52	8	30	29.79	29.98
19	OVC	140			10.00		65	64	64	97	6	02	29.47	29.66	19	BKN	250			10.00		72	56	63	57	6	28	29.79	29.98
22	BKN	110			6.00	BR	64	63	63	97	0	00	29.45	29.64	22	SCT	130			10.00		65	58	61	78	0	00	29.82	30.01
SUNRISE: 0501 MAY 15 SUNSET: 1911														SUNRISE: 0456 MAY 21 SUNSET: 1916															
01	OVC	130			7.00		63	62	62	97	3	15	29.44	29.62	01	CLR	NC			8.00		59	57	58	93	0	00	29.81	29.99
04	OVC	024			5.00	BR	63	62	62	97	3	18	29.41	29.59	04	CLR	NC			8.00		60	57	58	90	0	00	29.79	29.98
07	OVC	005			6.00	BR	65	63	64	93	8	22	29.42	29.60	07	SCT	250			10.00		66	59	62	78	5	32	29.83	30.02
10	OVC	032			10.00		69	63	65	81	8	18	29.42	29.61	10	SCT	250			10.00		75	58	65	56	3	VR	29.85	30.04
13	BKN	033			10.00		74	63	67	69	10	20	29.39	29.57	13	SCT	250			10.00		80	57	66	45	9	01	29.82	30.01
16	SCT	150			9.00		77	62	67	60	8	21	29.34	29.52	16	OVC	250			10.00		81	55	65	41	7	02	29.79	29.98
19	BKN	110			10.00	-TSRA	69	58	62	68	14	27	29.39	29.57	19	OVC	250			10.00		76	57	65	52	0	00	29.81	30.00
22	OVC	100			10.00	-RA	63	62	62	97	3	10	29.39	29.58	22	BKN	250			10.00		67	61	63	81	0	00	29.84	30.03
SUNRISE: 0460 MAY 16 SUNSET: 1911														SUNRISE: 0455 MAY 22 SUNSET: 1916															
01	FEW	095			0.75	BR	62	61	61	97	0	00	29.37	29.56	01	SCT	250			10.00		64	59	61	84	0	00	29.84	30.03
04	OVC	100			1.50	BR	60	59	59	97	0	00	29.41	29.59	04	FEW	250			6.00	BR	61	59	60	93	3	20	29.84	30.03
07	OVC	120			2.00	BR	63	62	62	97	0	00	29.45	29.64	07	SCT	250			7.00		66	62	64	87	3	20	29.88	30.07
10	BKN	250			10.00		72	61	65	68	7	09	29.47	29.65	10	BKN	250			10.00		80	60	67	51	6	18	29.89	30.08
13	BKN	250			10.00		77	62	68	60	7	15	29.45	29.64	13	BKN	250			10.00		83	59	68	44	9	17	29.87	30.06
16	OVC	100			10.00	-RA	73	63	67	71	5	03	29.44	29.62	16	SCT	150			10.00		83	61	69	48	11	15	29.84	30.02
19	BKN	250			10.00		72	65	68	79	7	07	29.44	29.62	19	FEW	250			10.00		77	62	68	60	7	12	29.82	30.01
22	OVC	250			10.00		66	59	62	78	5	10	29.47	29.66	22	SCT	250			10.00		70	63	66	79	6	13	29.85	30.03
SUNRISE: 0459 MAY 17 SUNSET: 1912														SUNRISE: 0455 MAY 23 SUNSET: 1917															
01	OVC	250			10.00		65	61	63	87	5	08	29.47	29.65	01	OVC	090			10.00	-RA	73	63	67	71	13	25	29.85	30.04
04	OVC	005			7.00		64	62	63	93	8	09	29.45	29.63	04	BKN	250			6.00	BR	68	65	66	90	5	12	29.79	29.98
07	OVC	030			10.00		64	62	63	93	8	12	29.47	29.65	07	BKN	250			10.00		70	65	67	84	7	17	29.81	30.00
10	BKN	055			10.00		72	63	66	73	9	13	29.47	29.66	10	SCT	250			10.00		78	65	70	64	7	26	29.83	30.01
13	OVC	060			2.00	-RA BR	62	58	60	87	14	19	29.49	29.69	13	BKN	250			10.00		85	68	74	57	14	20	29.75	29.94
16	OVC	150			10.00		72	59	64	64	14	12	29.47	29.65	16	OVC	250			10.00		84	69	74	61	17	21	29.70	29.89
19	BKN	250			10.00		66	62	64	87	8	10	29.49	29.68	19	OVC	250			8.00		79	71	74	77	6	20	29.68	29.87
22	OVC	110			10.00		65	61	63	87	11	10	29.52	29.71	22	BKN	250			10.00		75	68	70	79	9	18	29.72	29.91
SUNRISE: 0458 MAY 18 SUNSET: 1913														SUNRISE: 0454 MAY 24 SUNSET: 1918															
01	FEW	110			10.00		62	60	61	93	6	13	29.55	29.74	01	FEW	250			7.00		71	67	68	87	8	20	29.70	29.89
04	CLR	NC			7.00		59	58	58	97	3	14	29.56	29.75	04	SCT	250			4.00	BR	73	70	71	90	7	23	29.68	29.87
07	SCT	250			10.00		64	60	62	87	5	21	29.62	29.81	07	BKN	250			6.00	BR	75	71	72	87	8	23	29.71	29.90
10	BKN	250			10.00		69	58	62	68	8	15	29.64	29.83	10	BKN	250			10.00		86	66	73	51	7	23	29.69	29.88
13	BKN	250			10.00		75	55	63	50	7	17	29.61	29.80	13	BKN	250			10.00		91	64	73	41	15	26	29.68	29.86
16	BKN	250			10.00		76	50	61	40	11	25	29.58	29.77	16	OVC	250			10.00		82	70	74	67	0	00	29.63	29.82
19	BKN	055			10.00	-TSRA	63	61	62	93	15	13	29.67	29.86	19	BKN	250			10.00		82	63	70	53	7	26	29.68	29.87
22	BKN	250			10.00		60	58	59	93	0	00	29.69	29.88	22	OVC	110			10.00		75	67	70	76	23	23	29.75	29.94

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

MAY 2011

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)			
			Observation Time (LST)	Eff Cl'd Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL
SUNRISE: 0453 MAY 25 SUNSET: 1919														
01	BKN	140				70	62	65	76	6	26	29.70	29.89	
04	SCT	250				64	62	63	93	5	21	29.73	29.92	
07	FEW	060				70	63	66	79	3	28	29.76	29.95	
10	FEW	250				82	65	71	56	6	VR	29.76	29.95	
13	SCT	250				84	61	69	46	6	22	29.74	29.93	
16	SCT	250				87	65	72	48	8	17	29.71	29.90	
19	SCT	250				81	68	72	65	9	15	29.71	29.89	
22	SCT	250				75	67	70	76	8	14	29.71	29.90	
SUNRISE: 0453 MAY 26 SUNSET: 1920														
01	FEW	250			6.00	72	68	69	87	3	14	29.69	29.88	
04	CLR	NC			5.00	71	69	70	93	5	19	29.70	29.88	
07	FEW	150			7.00	76	68	71	76	9	20	29.72	29.91	
10	FEW	250			10.00	86	65	72	50	14	21	29.73	29.91	
13	BKN	250			10.00	92	62	72	37	15	22	29.70	29.88	
16	BKN	250			10.00	91	62	72	38	15	20	29.68	29.86	
19	FEW	250			10.00	83	65	71	55	8	18	29.66	29.85	
22	FEW	250			10.00	78	64	69	62	9	17	29.72	29.91	
SUNRISE: 0452 MAY 27 SUNSET: 1920														
01	CLR	NC			10.00	75	65	69	71	14	20	29.76	29.94	
04	SCT	250			10.00	71	65	67	81	9	19	29.76	29.95	
07	BKN	250			10.00	74	67	69	79	9	17	29.79	29.98	
10	BKN	250			10.00	79	67	71	67	14	19	29.82	30.01	
13	BKN	250			10.00	85	64	71	49	14	18	29.77	29.96	
16	BKN	200			10.00	83	68	73	61	9	18	29.75	29.94	
19	BKN	150			10.00	71	60	64	68	6	18	29.77	29.96	
22	BKN	250			10.00	67	61	63	81	0	00	29.81	30.00	
SUNRISE: 0452 MAY 28 SUNSET: 1921														
01	BKN	250			10.00	65	61	63	87	5	11	29.81	29.99	
04	BKN	250			10.00	62	60	61	93	3	13	29.80	29.99	
07	BKN	250			10.00	68	63	65	84	6	14	29.84	30.03	
10	BKN	250			10.00	78	67	71	69	8	15	29.85	30.04	
13	BKN	095			10.00	82	63	70	53	11	13	29.81	30.00	
16	BKN	110			10.00	74	69	71	84	7	16	29.83	30.02	
19	SCT	250			10.00	75	68	70	79	5	17	29.82	30.01	
22	BKN	250			10.00	71	69	70	93	0	00	29.88	30.07	
SUNRISE: 0451 MAY 29 SUNSET: 1922														
01	SCT	250			10.00	69	67	68	93	6	16	29.87	30.06	
04	SCT	250			10.00	67	65	66	93	5	20	29.88	30.07	
07	OVC	006			7.00	70	68	69	93	7	19	29.94	30.13	
10	OVC	011			6.00	73	69	70	87	6	20	29.96	30.15	
13	BKN	030			10.00	80	71	74	74	7	17	29.95	30.14	
16	BKN	250			10.00	84	70	74	63	9	19	29.90	30.09	
19	OVC	250			10.00	81	70	74	69	6	20	29.93	30.12	
22	SCT	250			9.00	74	70	71	87	3	16	29.96	30.15	
SUNRISE: 0451 MAY 30 SUNSET: 1923														
01	FEW	250			8.00	70	68	69	93	0	00	29.93	30.12	
04	FEW	250			7.00	70	68	69	93	6	21	29.92	30.11	
07	FEW	200			10.00	75	71	72	87	5	22	29.96	30.15	
10	SCT	200			10.00	86	70	75	59	0	00	29.98	30.16	
13	BKN	250			10.00	95	68	76	41	6	VR	29.96	30.14	
16	SCT	065			10.00	94	69	77	44	7	18	29.93	30.11	
19	SCT	250			10.00	87	70	75	57	3	04	29.94	30.13	
22	CLR	NC			8.00	78	72	74	82	0	00	29.98	30.16	

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)			
			Observation Time (LST)	Eff Cl'd Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL
SUNRISE: 0450 MAY 31 SUNSET: 1923														
01	CLR	NC			7.00	75	70	72	85	0	00	29.96	30.14	
04	CLR	NC			6.00	75	70	72	85	0	00	29.95	30.14	
07	FEW	250			9.00	82	70	74	67	8	34	29.98	30.17	
10	FEW	250			9.00	91	71	77	52	8	01	29.99	30.17	
13	SCT	050			10.00	96	69	77	42	11	35	29.98	30.17	
16	FEW	060			10.00	96	70	78	43	9	36	29.96	30.14	
19	BKN	250			7.00	89	73	78	59	5	VR	29.97	30.16	
22	BKN	250			8.00	79	72	74	79	6	14	30.00	30.19	

3-HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, W = Vertical Visibility = 8/8

Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No Ceiling detected.

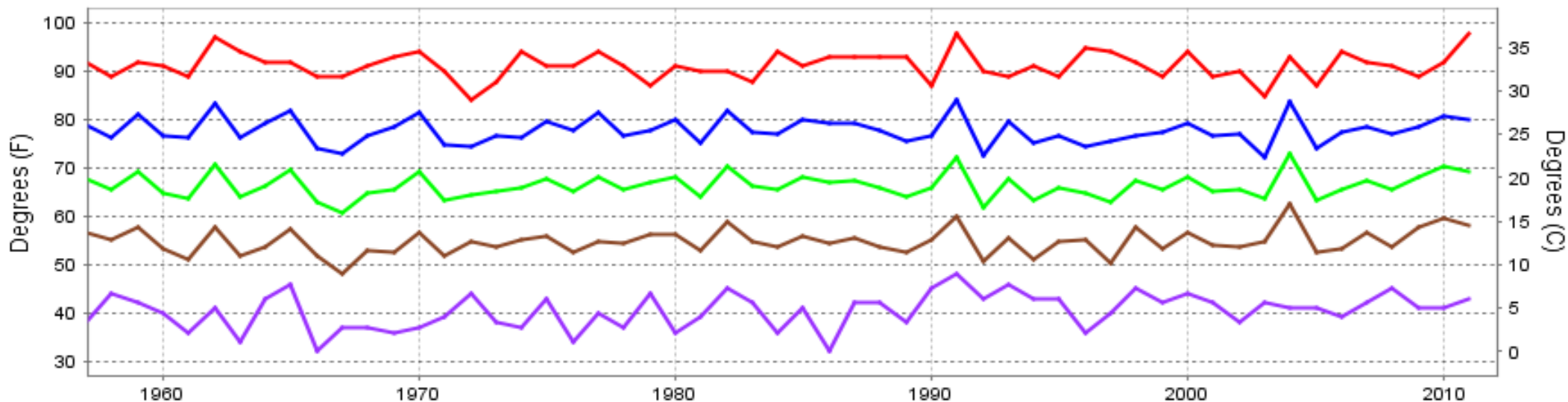
& = Original observation contained additional weather elements.

See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (Inches, HG)		VISIBILITY (Miles)	WIND SPEED (MPH)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			62	57	59	84	29.78	29.97	8.80	4	3	19
02			61	57	59	86	29.77	29.96	8.72	4	3	19
03			61	57	59	88	29.77	29.96	8.61	4	3	18
04			60	57	58	89	29.78	29.97	7.74	4	3	19
05			60	57	58	90	29.78	29.98	7.74	4	3	18
06			61	57	59	88	29.80	29.99	7.95	5	3	19
07			64	58	61	82	29.81	30.00	8.71	6	3	21
08			67	58	62	74	29.82	30.01	9.27	7	3	22
09			69	58	63	69	29.82	30.01	9.11	7	2	21
10			72	58	64	62	29.82	30.01	9.31	8	2	21
11			74	57	64	58	29.81	30.00	9.65	8	3	22
12			75	57	64	54	29.80	29.99	9.87	8	4	23
13			77	56	65	51	29.78	29.97	9.42	10	4	23
14			78	56	65	50	29.77	29.96	9.87	9	3	22
15			78	57	65	51	29.75	29.94	9.87	9	2	20
16			78	57	65	51	29.74	29.93	9.81	10	3	22
17			77	57	65	52	29.74	29.93	9.58	8	2	21
18			75	57	64	57	29.75	29.94	9.36	9	3	22
19			72	58	64	65	29.76	29.95	9.60	7	2	17
20			69	59	63	72	29.77	29.96	9.47	5	3	14
21			67	59	62	76	29.78	29.97	9.37	5	3	14
22			65	59	62	80	29.79	29.98	9.58	5	3	16
23			64	58	61	81	29.79	29.98	9.45	5	3	16
24			64	58	60	83	29.79	29.97	9.29	4	3	17

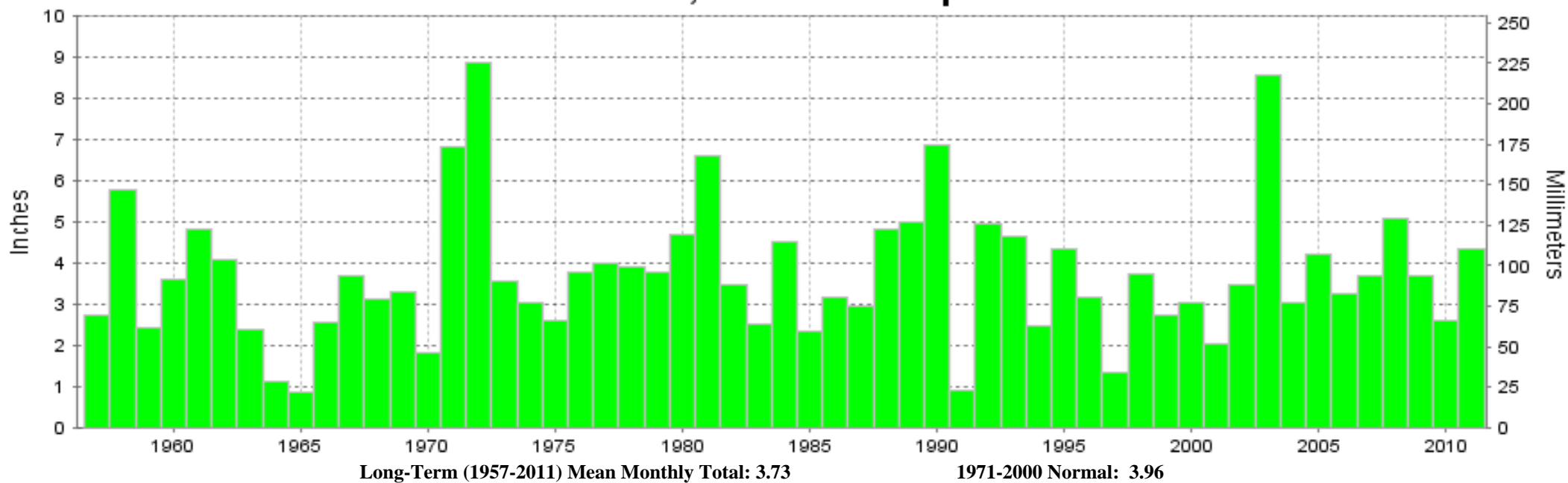
RICHMOND, VA MAY Temperatures



— Extreme Max
 — Mean Max
 — Mean
 — Mean Min
 — Extreme Min

Long-Term (1957-2011) Mean: 66.3
1971-2000 Normal: 65.4

RICHMOND, VA MAY Precipitation



Long-Term (1957-2011) Mean Monthly Total: 3.73

1971-2000 Normal: 3.96



MAY 2011
RICHMOND, VA

LOCAL CLIMATOLOGICAL DATA NOAA, National Climatic Data Center

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