



# MAY 2013

## LOCAL CLIMATOLOGICAL DATA

### NOAA, National Climatic Data Center

**RICHMOND, VA**  
**RICHMOND INTERNATIONAL AIRPORT (KRIC)**  
 Lat:37° 30'N Long: 77° 19'W Elev (Ground) 164 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			
20	21	22	23	24																				
01	70	52	61	0	48	54	4	0	RA DZ	0		0.0	T	30.12	30.33	8.7	04	9.6	23	10	20	05	01	
02	70	50	60	-1	49	53	5	0		0		0.0	0.00	30.18	30.37	5.1	04	5.9	17	07	13	10	02	
03	69	46	58	-3	44	50	7	0		0		0.0	0.00	30.12	30.32	8.4	07	9.1	25	10	21	09	03	
04	67	44	56	-5	45	49	9	0		0		0.0	0.00	30.04	30.23	7.3	06	8.5	24	10	17	10	04	
05	63	45	54	-7	46	50	11	0	BR	0		0.0	0.00	29.98	30.16	8.8	05	9.6	21	02	17	02	05	
06	72	54	63	1	57	58	2	0	RA DZ BR	0		0.0	0.31	29.86	30.04	10.2	07	10.8	32	12	23	11	06	
07	74	57	66	3	59	61	0	1	TS TSRA RA DZ BR	0		0.0	0.76	29.73	29.92	6.6	10	8.0	25	17	20	08	07	
08	70	52	61	-2	55	57	4	0	RA FG+ FG BR	0		0.0	0.44	29.78	29.98	1.5	17	4.1	21	21	16	15	08	
09	79	54	67	4	56	60	0	2	FG+ FG BR	0		0.0	0.00	29.80	30.00	4.0	27	5.6	23	27	16	27	09	
10	87	57	72	8	59	64	0	7		0		0.0	0.00	29.80	29.98	6.6	20	7.1	25	20	18	20	10	
11	83	62	73	9	61	66	0	8	RA	0		0.0	0.09	29.65	29.83	8.4	22	10.0	31	31	23	20	11	
12	73	51	62	-2	46	55	3	0	RA	0		0.0	0.08	29.65	29.88	7.2	30	8.3	24	27	20	27	12	
13	65	41	53*	-11	32	45	12	0		0		0.0	0.00	29.91	30.11	5.0	31	5.7	30	26	23	26	13	
14	69	41*	55	-10	34	47	10	0		0		0.0	0.00	29.98	30.16	2.2	22	4.8	20	26	16	31	14	
15	88	55	72	7	54	62	0	7		0		0.0	0.00	29.75	29.91	11.9	21	12.4	29	21	23	22	15	
16	90	67	79	14	60	66	0	14	TS TSRA RA	0		0.0	0.03	29.68	29.88	6.2	26	7.2	46*	30	37*	30	16	
17	84	63	74	9	56	63	0	9	RA	0		0.0	T	29.86	30.08	3.0	10	5.7	16	13	14	14	17	
18	67	60	64	-2	62	63	1	0	TS TSRA RA FG BR	0		0.0	0.53	29.99	30.18	4.0	09	5.5	15	32	13	32	18	
19	78	63	71	5	65	67	0	6	RA FG+ FG BR	0		0.0	0.22	29.96	30.15	1.7	15	2.9	23	21	18	21	19	
20	82	65	74	8	67	69	0	9	RA BR	0		0.0	0.03	29.90	30.07	7.4	18	7.8	21	17	18	17	20	
21	83	68	76	9	68	70	0	11	BR	0		0.0	0.00	29.81	29.99	7.0	20	7.5	17	20	13	21	21	
22	86	70	78	11	68	71	0	13	RA BR	0		0.0	T	29.76	29.95	10.7	19	11.1	24	18	18	19	22	
23	79	68	74	6	67	69	0	9	TS RA	0		0.0	0.01	29.71	29.88	7.4	18	8.2	20	18	16	18	23	
24	69	50	60	-9	49	55	5	0	RA BR	0		0.0	T	29.73	29.97	10.7	34	11.9	36	35	29	35	24	
25	72	45	59	-10	33	46	6	0		0		0.0	0.00	29.99	30.18	10.6	32	11.2	31	28	24	27	25	
26	76	47	62	-7	37	50	3	0		0		0.0	0.00	30.01	30.21	4.0	31	5.6	21	26	16	36	26	
27	79	45	62	-7	49	56	3	0	RA	0		0.0	T	30.06	30.24	1.2	24	3.7	23	25	14	22	27	
28	88	60	74	5	61	66	0	9		0		0.0	0.00	29.98	30.17	11.2	20	11.4	24	21	20	19	28	
29	90	67	79	9	63	69	0	14		0		0.0	0.00	29.96	30.16	10.2	21	10.4	24	20	18	23	29	
30	90	66	78	8	65	69	0	13		0		0.0	0.00	30.01	30.20	8.5	21	8.9	23	20	16	21	30	
31	92*	67	80*	10	64	70	0	15		0		0.0	0.00	29.96	30.15	8.8	20	9.2	28	21	20	19	31	

77.5	55.9	66.7	☼	54.2	59.7	2.7	4.7	< MONTHLY AVERAGES   TOTALS >				0.0	2.50	29.89	30.09	1.5	20	8.0	< MONTHLY AVERAGES			
-0.4	0.9	0.3		-----DEPARTURE FROM NORMAL -----								-1.28	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

<b>DEGREE DAYS</b>				<b>GREATEST 24-HR PRECIPITATION :</b> 1.00 <b>DATE :</b> 06-07				<b>SEA LEVEL PRESSURE</b>			
<b>MONTHLY</b>				<b>GREATEST 24-HR SNOWFALL :</b> 0.0 <b>DATE :</b>				<b>MAXIMUM :</b> 30.43 <b>DATE</b> 02 <b>TIME</b> 1025			
<b>SEASON TO DATE</b>				<b>GREATEST SNOW DEPTH :</b> 0 <b>DATE :</b>				<b>MINIMUM :</b> 29.76 <b>DATE</b> 12 <b>TIME</b> 0201			
<b>TOTAL DEPARTURE</b>		<b>TOTAL DEPARTURE</b>		<b>NUMBER OF -&gt; DAYS WITH</b>		<b>MAXIMUM TEMP &gt;= 90 :</b> 4		<b>MINIMUM TEMP &lt;= 32 :</b> 0		<b>PRECIPITATION &gt;= 0.01 INCH :</b> 10	
<b>HEATING :</b> 85		11		3690		-76		<b>MAXIMUM TEMP &lt;= 32 :</b> 0		<b>MINIMUM TEMP &lt;= 0 :</b> 0	
<b>COOLING :</b> 147		28		213		52		<b>THUNDERSTORMS :</b> 4		<b>HEAVY FOG :</b> 3	
								<b>PRECIPITATION &gt;= 0.10 INCH :</b> 5			
								<b>SNOWFALL &gt;= 1.0 INCH :</b> 0			

**MAY 2013**  
**RICHMOND, VA**

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA (KRIC)  
MAY 2013

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	T												01												01	T	T	
02													02												02	0.00	0.00	
03													03												03	0.00	0.00	
04													04												04	0.00	0.00	
05													05												05	0.00	0.00	
06	T		T	T			T	T	T	T		06					0.02	0.04	0.01		0.01	0.22	0.01	06	0.31	0.31		
07	0.02	0.01	0.18	0.12	0.27							07				T	T	0.03	0.09	0.04	T			07	0.76	0.76		
08												08		0.08	0.03	0.03	0.02	0.03	0.24	T	0.01			08	0.44	0.44		
09												09												09	0.00	0.00		
10												10												10	0.00	0.00		
11	T		T					0.02				11			T	T					0.01	0.08	T	11	0.09	0.09		
12			0.04	0.02	T	T	0.02					12												12	0.08	0.08		
13												13												13	0.00	0.00		
14												14												14	0.00	0.00		
15												15												15	0.00	0.00		
16												16				0.03	T							16	0.03	0.03		
17												17											T	17	T	T		
18		T	0.02	0.25	0.11	T	0.03	0.03	T			18	0.04	0.03	T		0.02			T	T			18	0.53	0.53		
19												19				T		0.12	0.10					19	0.22	0.22		
20			0.02	0.01								20					T		T					20	0.03	0.03		
21												21												21	0.00	0.00		
22												22										T		22	T	T		
23												23	T	T	T		0.01	T			T	T		23	0.01	0.01		
24												24												24	T	T		
25												25												25	0.00	0.00		
26												26												26	0.00	0.00		
27												27						T	T					27	T	T		
28												28												28	0.00	0.00		
29												29												29	0.00	0.00		
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)	0.15	0.20	0.22	0.23	0.27	0.37	0.39	0.39	0.41	0.52	0.57	0.57
Ending Date	06	06	06	07	07	07	07	07	07	07	07	07
Ending Time (Hr/Min)	2241	2241	2241	0413	0430	0430	0430	0430	0428	0430	0430	0430

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.

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).

## 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	
VC In the Vicinity	UP Unkown Precipitation		GL Glaze

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

# RICHMOND, VA MAY 2013

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet.

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.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

**NORMALS ARE FOR THE YEARS 1981-2010**

### ADDITIONAL NOTES & ERRATA:

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

Beginning with the January 2013 LCD, monthly mean temperature calculations have changed to the National Data Stewardship Team standard. Monthly maximum and minimum temperature are not rounded until after monthly mean temperature is calculated. This is the most accurate outcome, but may be slightly different from the mean derived from rounded monthly maximum and minimum.

Date	VISIBILITY (MILES)	
	MINIMUM	MAXIMUM
01	9.00	10.00
02	8.00	10.00
03	8.00	10.00
04	10.00	10.00
05	6.00	10.00
06	1.50	10.00
07	2.50	10.00
08	0.12	10.00
09	0.12	10.00
10	10.00	10.00
11	7.00	10.00
12	8.00	10.00
13	10.00	10.00
14	10.00	10.00
15	10.00	10.00
16	6.00	10.00
17	10.00	10.00
18	0.50	10.00
19	0.25	10.00
20	5.00	10.00
21	5.00	10.00
22	6.00	10.00
23	5.00	10.00
24	2.00	10.00
25	10.00	10.00
26	10.00	10.00
27	10.00	10.00
28	10.00	10.00
29	10.00	10.00
30	10.00	10.00
31	9.00	10.00
<b>AVGS</b>	6.74	10.00
<b>MINIMUM VISIBILITY (MILES)</b>		
<= .25	<= 3.0	>= 7.0
3	7	18

# OBSERVATIONS AT 3-HOURLY INTERVALS

# RICHMOND, VA

## MAY 2013

## KRIC

## WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)					
					DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL						DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL				
<b>SUNRISE: 0515</b>					<b>MAY 01</b>					<b>SUNSET: 1859</b>					<b>SUNRISE: 0508</b>					<b>MAY 07</b>					<b>SUNSET: 1904</b>				
01	OVC	008	9.00		56	54	55	93	9	02	30.05	30.24	01	OVC	036	10.00			62	60	61	93	9	09	29.77	29.96			
04	OVC	025	10.00		55	52	53	90	10	02	30.06	30.26	04	OVC	042	2.50	TS+RA BR		62	60	61	93	10	08	29.73	29.92			
07	BKN	040	10.00		56	51	53	84	10	04	30.11	30.30	07	OVC	012	8.00			62	60	61	93	8	07	29.73	29.93			
10	SCT	090	10.00		65	52	58	63	14	01	30.15	30.35	10	BKN	085	10.00			68	62	64	81	11	12	29.75	29.94			
13	OVC	065	10.00		67	46	56	47	16	04	30.14	30.33	13	OVC	250	10.00			73	59	64	62	10	13	29.71	29.90			
16	OVC	045	10.00		65	43	54	45	11	09	30.17	30.36	16	OVC	250	10.00			71	61	65	71	8	10	29.66	29.85			
19	BKN	035	10.00		62	42	52	48	5	07	30.18	30.37	19	OVC	080	5.00	-TSRA BR		61	57	59	87	6	19	29.73	29.92			
22	FEW	045	10.00		55	41	48	59	6	05	30.21	30.40	22	OVC	250	10.00			59	57	58	93	0	00	29.77	29.96			
<b>SUNRISE: 0513</b>					<b>MAY 02</b>					<b>SUNSET: 1860</b>					<b>SUNRISE: 0507</b>					<b>MAY 08</b>					<b>SUNSET: 1904</b>				
01	OVC	007	10.00		54	50	52	87	8	02	30.20	30.39	01	BKN	100	5.00	BR		57	56	56	96	6	07	29.77	29.96			
04	OVC	006	10.00		54	51	52	90	6	02	30.19	30.38	04	SCT	095	0.25	FG		53	52	52	96	0	00	29.75	29.94			
07	OVC	008	8.00		54	50	52	87	9	05	30.20	30.39	07	OVC	003	0.75	BR		55	54	54	96	0	00	29.81	30.00			
10	OVC	014	10.00		58	50	54	75	7	04	30.23	30.43	10	BKN	150	10.00			66	57	61	73	5	22	29.83	30.02			
13	BKN	300	10.00		63	48	55	58	8	02	30.20	30.40	13	OVC	095	10.00			68	52	59	57	16	19	29.79	29.98			
16	SCT	250	10.00		69	49	58	49	5	VR	30.14	30.33	16	OVC	090	6.00	-RA BR		62	58	60	86	0	00	29.78	29.97			
19	BKN	250	10.00		60	48	54	65	3	08	30.13	30.32	19	OVC	060	4.00	-RA BR		60	58	59	93	7	08	29.76	29.96			
22	BKN	250	10.00		53	49	51	86	0	00	30.14	30.33	22	BKN	045	10.00			59	57	58	93	0	00	29.80	29.99			
<b>SUNRISE: 0512</b>					<b>MAY 03</b>					<b>SUNSET: 1901</b>					<b>SUNRISE: 0506</b>					<b>MAY 09</b>					<b>SUNSET: 1905</b>				
01	SCT	300	10.00		49	47	48	93	3	07	30.11	30.30	01	VV	001	0.12	FG		56	56	56	100	0	00	29.78	29.98			
04	FEW	300	10.00		48	46	47	93	7	04	30.10	30.29	04	OVC	003	1.25	BR		55	55	55	100	5	22	29.77	29.97			
07	OVC	032	9.00		53	51	52	93	8	05	30.14	30.33	07	OVC	006	0.25	FG		54	54	54	100	7	29	29.82	30.01			
10	OVC	250	10.00		65	50	57	59	11	08	30.15	30.35	10	BKN	250	10.00			67	57	61	71	7	26	29.84	30.03			
13	BKN	250	10.00		68	38	53	33	16	06	30.12	30.32	13	SCT	250	10.00			74	57	64	56	11	25	29.82	30.01			
16	BKN	250	10.00		63	40	52	43	14	07	30.11	30.30	16	SCT	100	10.00			77	54	63	45	7	26	29.79	29.98			
19	BKN	250	10.00		55	41	48	59	8	07	30.13	30.32	19	FEW	250	10.00			71	59	64	66	5	19	29.81	30.00			
22	SCT	250	10.00		49	43	46	80	6	05	30.13	30.32	22	FEW	250	10.00			64	58	60	81	0	00	29.85	30.04			
<b>SUNRISE: 0511</b>					<b>MAY 04</b>					<b>SUNSET: 1901</b>					<b>SUNRISE: 0505</b>					<b>MAY 10</b>					<b>SUNSET: 1906</b>				
01	FEW	250	10.00		45	42	44	90	7	03	30.09	30.28	01	FEW	100	10.00			63	58	60	84	0	00	29.84	30.03			
04	FEW	250	10.00		44	42	43	93	10	02	30.07	30.26	04	FEW	120	10.00			60	56	58	86	5	19	29.84	30.03			
07	OVC	010	10.00		49	45	47	86	8	02	30.08	30.27	07	BKN	300	10.00			63	59	61	87	5	18	29.85	30.04			
10	OVC	020	10.00		57	47	52	69	10	04	30.07	30.26	10	BKN	300	10.00			79	60	67	52	5	19	29.85	30.04			
13	OVC	024	10.00		59	49	54	69	10	07	30.03	30.22	13	BKN	300	10.00			85	58	68	40	11	22	29.80	29.98			
16	BKN	250	10.00		65	46	55	51	13	08	29.99	30.18	16	OVC	250	10.00			86	58	68	39	16	22	29.75	29.94			
19	BKN	250	10.00		58	43	50	58	8	09	29.99	30.18	19	OVC	250	10.00			75	61	66	62	7	18	29.74	29.93			
22	BKN	250	10.00		50	43	47	77	3	05	30.02	30.21	22	OVC	250	10.00			72	60	65	66	8	18	29.74	29.93			
<b>SUNRISE: 0510</b>					<b>MAY 05</b>					<b>SUNSET: 1902</b>					<b>SUNRISE: 0504</b>					<b>MAY 11</b>					<b>SUNSET: 1907</b>				
01	BKN	250	10.00		45	39	42	80	8	04	29.99	30.18	01	OVC	160	10.00			69	62	65	78	5	19	29.74	29.93			
04	OVC	024	10.00		45	41	43	86	6	01	29.97	30.16	04	OVC	180	10.00			68	62	64	81	6	19	29.70	29.88			
07	SCT	026	10.00		50	44	47	80	10	03	29.99	30.18	07	OVC	180	10.00			70	62	65	76	10	19	29.69	29.88			
10	OVC	028	10.00		57	46	51	67	14	04	30.00	30.19	10	BKN	200	10.00			79	62	68	56	15	21	29.67	29.85			
13	OVC	034	10.00		61	48	54	63	10	04	29.98	30.17	13	BKN	200	10.00			82	61	69	49	15	22	29.61	29.80			
16	OVC	030	10.00		62	49	55	62	10	06	29.95	30.14	16	OVC	200	10.00	-RA		78	62	68	58	14	25	29.59	29.78			
19	OVC	028	10.00		59	50	54	72	7	09	29.95	30.14	19	BKN	250	10.00			74	62	66	67	7	22	29.58	29.77			
22	OVC	030	10.00		56	50	53	81	8	07	29.96	30.16	22	OVC	090	7.00	-RA		68	58	62	70	18	32	29.62	29.81			
<b>SUNRISE: 0509</b>					<b>MAY 06</b>					<b>SUNSET: 1903</b>					<b>SUNRISE: 0503</b>					<b>MAY 12</b>					<b>SUNSET: 1908</b>				
01	OVC	011	6.00	BR	54	51	52	90	6	05	29.93	30.12	01	OVC	140	10.00			62	60	61	93	6	23	29.58	29.77			
04	OVC	008	8.00		54	51	52	90	9	05	29.90	30.09	04	OVC	100	10.00			63	61	62	93	0	00	29.61	29.80			
07	OVC	004	1.50	-DZ BR	56	54	55	93	9	05	29.90	30.09	07	BKN	090	10.00			61	58	59	90	8	05	29.63	29.82			
10	OVC	006	10.00		61	57	59	87	13	06	29.90	30.09	10	SCT	046	10.00			68	49	58	51	10	32	29.66	29.85			
13	OVC	020	10.00		65	59	61	81	14	04	29.85	30.04	13	BKN	090	10.00			71	46	57	41	8	26	29.66	29.85			
16	OVC	250	10.00		71	56	62	59	17	10	29.78	29.98	16	SCT	075	10.00			72	37	54	28	14	30	29.68	29.86			
19	OVC	100	10.00	-RA	63	61	62	93	6	08	29.80	29.99	19	BKN	090	10.00			66	31	50	27	9	32	29.75	29.94			
22	OVC	070	10.00		61	59	60	93	11	08	29.81	30.00	22	CLR	NC	10.00			56	33	46	42	6	33	29.85	30.05			

# OBSERVATIONS AT 3-HOURLY INTERVALS

**RICHMOND, VA**  
MAY 2013

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)					
					DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL						DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL				
<b>SUNRISE: 0502</b>					<b>MAY 13</b>					<b>SUNSET: 1909</b>					<b>SUNRISE: 0457</b>					<b>MAY 19</b>					<b>SUNSET: 1914</b>				
01	CLR	NC	10.00		49	38	44	66	0	00	29.88	30.07	01	VV	002	0.50	FG	64	63	63	96	5	03	29.98	30.17				
04	CLR	NC	10.00		42	38	40	85	0	00	29.90	30.09	04	VV	002	1.00	BR	64	63	63	96	0	00	29.97	30.16				
07	SCT	250	10.00		53	39	46	59	0	00	29.94	30.14	07	OVC	002	2.00	BR	65	64	64	97	5	36	29.99	30.18				
10	BKN	250	10.00		60	28	46	30	7	30	29.95	30.14	10	OVC	023	9.00		71	66	68	84	3	15	30.01	30.20				
13	BKN	250	10.00		63	30	48	29	9	34	29.91	30.10	13	OVC	110	10.00		76	67	70	74	7	17	29.96	30.15				
16	BKN	110	10.00		63	30	48	29	13	31	29.87	30.06	16	OVC	110	10.00		76	67	70	74	5	17	29.92	30.11				
19	BKN	110	10.00		57	30	45	36	7	29	29.90	30.09	19	BKN	100	4.00	-RA	72	67	69	84	15	21	29.92	30.11				
22	SCT	110	10.00		51	31	42	46	7	34	29.98	30.17	22	OVC	160	10.00		67	65	66	93	0	00	29.96	30.15				
<b>SUNRISE: 0501</b>					<b>MAY 14</b>					<b>SUNSET: 1910</b>					<b>SUNRISE: 0457</b>					<b>MAY 20</b>					<b>SUNSET: 1915</b>				
01	CLR	NC	10.00		46	33	40	61	0	00	30.00	30.19	01	OVC	140	6.00	BR	66	65	66	93	6	14	29.92	30.11				
04	CLR	NC	10.00		41	33	38	73	5	33	30.01	30.21	04	OVC	060	5.00	-RA BR	67	65	66	93	3	16	29.90	30.09				
07	SCT	250	10.00		49	35	43	59	0	00	30.05	30.24	07	OVC	007	6.00	BR	69	67	68	93	8	19	29.93	30.12				
10	SCT	250	10.00		59	26	45	28	9	28	30.05	30.24	10	BKN	025	10.00		76	69	71	79	10	19	29.93	30.12				
13	BKN	250	10.00		65	33	50	31	7	27	29.99	30.18	13	SCT	055	10.00		80	69	73	69	10	17	29.88	30.06				
16	BKN	250	10.00		68	33	51	27	3	21	29.92	30.11	16	FEW	038	10.00		80	67	71	64	10	18	29.84	30.03				
19	BKN	150	10.00		64	39	52	40	6	16	29.89	30.08	19	BKN	150	10.00		73	68	70	84	8	18	29.86	30.04				
22	BKN	120	10.00		61	41	51	48	7	16	29.90	30.09	22	OVC	180	10.00		70	68	69	93	6	17	29.85	30.04				
<b>SUNRISE: 0501</b>					<b>MAY 15</b>					<b>SUNSET: 1911</b>					<b>SUNRISE: 0456</b>					<b>MAY 21</b>					<b>SUNSET: 1916</b>				
01	BKN	100	10.00		60	41	51	50	9	17	29.85	30.04	01	OVC	005	7.00		69	67	68	93	7	20	29.84	30.03				
04	SCT	100	10.00		56	42	49	60	7	19	29.81	30.00	04	OVC	011	6.00	BR	69	67	68	93	10	21	29.82	30.01				
07	FEW	250	10.00		60	45	52	58	10	22	29.81	30.00	07	OVC	015	10.00		71	67	68	87	5	19	29.85	30.04				
10	BKN	250	10.00		71	53	61	53	9	21	29.79	29.98	10	OVC	019	10.00		75	67	70	76	9	21	29.84	30.03				
13	FEW	250	10.00		84	60	69	44	17	21	29.72	29.91	13	OVC	028	10.00		78	68	71	71	8	20	29.80	29.99				
16	SCT	250	10.00		87	59	69	39	18	21	29.62	29.81	16	BKN	250	10.00		82	69	73	65	6	VR	29.76	29.95				
19	FEW	250	10.00		82	61	69	49	13	20	29.60	29.79	19	SCT	250	10.00		78	69	72	74	6	17	29.74	29.93				
22	FEW	250	10.00		79	61	68	54	13	22	29.64	29.83	22	FEW	250	10.00		72	69	70	91	8	17	29.75	29.94				
<b>SUNRISE: 0460</b>					<b>MAY 16</b>					<b>SUNSET: 1911</b>					<b>SUNRISE: 0455</b>					<b>MAY 22</b>					<b>SUNSET: 1916</b>				
01	CLR	NC	10.00		76	61	67	60	9	23	29.64	29.83	01	FEW	250	10.00		71	68	69	90	9	20	29.76	29.95				
04	CLR	NC	10.00		72	60	65	66	8	24	29.64	29.83	04	BKN	007	7.00		70	68	69	93	10	19	29.74	29.93				
07	SCT	250	10.00		75	58	65	55	9	27	29.68	29.87	07	OVC	012	7.00		73	68	70	84	11	21	29.80	29.99				
10	SCT	250	10.00		85	53	66	33	13	27	29.70	29.88	10	BKN	250	10.00		77	68	71	74	10	23	29.80	29.99				
13	OVC	250	10.00		89	58	69	35	6	30	29.68	29.87	13	BKN	250	10.00		84	70	74	63	11	19	29.76	29.95				
16	OVC	300	9.00		87	59	69	39	17	26	29.67	29.85	16	BKN	300	10.00		84	68	73	59	14	18	29.71	29.90				
19	OVC	170	10.00		69	63	65	81	7	21	29.72	29.91	19	SCT	300	10.00		80	67	71	64	9	18	29.72	29.91				
22	OVC	220	10.00		69	63	65	81	3	29	29.77	29.96	22	BKN	300	10.00		74	68	70	82	8	19	29.77	29.96				
<b>SUNRISE: 0459</b>					<b>MAY 17</b>					<b>SUNSET: 1912</b>					<b>SUNRISE: 0455</b>					<b>MAY 23</b>					<b>SUNSET: 1917</b>				
01	SCT	250	10.00		64	62	63	93	3	18	29.75	29.94	01	BKN	150	10.00		73	68	70	84	7	19	29.76	29.95				
04	BKN	140	10.00		67	62	64	84	3	32	29.81	30.00	04	BKN	014	10.00		70	66	67	87	11	18	29.74	29.93				
07	BKN	150	10.00		69	62	65	78	5	01	29.89	30.08	07	SCT	250	10.00		73	67	69	81	10	19	29.75	29.94				
10	SCT	180	10.00		76	58	65	54	7	09	29.93	30.12	10	OVC	250	10.00		77	67	70	71	8	20	29.75	29.94				
13	FEW	250	10.00		81	56	66	42	8	09	29.91	30.10	13	BKN	100	5.00	-RA	75	70	72	84	8	16	29.70	29.89				
16	SCT	100	10.00		83	53	65	36	6	16	29.88	30.07	16	SCT	100	10.00		77	68	71	74	7	14	29.64	29.83				
19	BKN	300	10.00		75	48	60	39	13	13	29.90	30.09	19	BKN	120	10.00		70	67	68	90	8	16	29.64	29.83				
22	OVC	300	10.00		67	50	58	55	7	14	29.95	30.14	22	OVC	110	10.00	-RA	70	67	68	90	8	20	29.63	29.82				
<b>SUNRISE: 0458</b>					<b>MAY 18</b>					<b>SUNSET: 1913</b>					<b>SUNRISE: 0454</b>					<b>MAY 24</b>					<b>SUNSET: 1918</b>				
01	OVC	100	10.00		63	55	58	76	7	13	29.96	30.15	01	BKN	250	7.00		66	64	65	93	6	22	29.61	29.80				
04	OVC	090	4.00	RA BR	61	59	60	93	7	07	29.97	30.16	04	BKN	250	10.00		65	61	63	87	5	29	29.60	29.79				
07	OVC	075	5.00	-RA BR	61	60	60	97	5	10	30.01	30.20	07	OVC	110	10.00		67	62	64	84	3	31	29.64	29.83				
10	OVC	009	8.00		66	62	64	87	6	VR	30.03	30.22	10	OVC	048	8.00	-RA	56	51	53	84	21	36	29.76	29.95				
13	OVC	095	2.00	-RA BR	65	64	64	97	5	07	30.01	30.20	13	BKN	100	10.00		65	47	55	52	20	35	29.78	29.97				
16	OVC	008	10.00		67	64	65	91	8	08	29.98	30.17	16	OVC	070	10.00		63	43	53	48	20	33	29.83	30.02				
19	OVC	025	10.00		65	63	64	93	5	07	29.99	30.18	19	FEW	065	10.00		58	36	48	44	14	34	29.90	30.09				
22	OVC	004	7.00		65	63	64	93	5	02	29.99	30.18	22	FEW	060	10.00		52	35	44	53	13	35	29.98	30.17				

# OBSERVATIONS AT 3-HOURLY INTERVALS

**RICHMOND, VA**  
MAY 2013

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
					DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL		
<b>SUNRISE: 0453</b>					<b>MAY 25</b>					<b>SUNSET: 1919</b>				
01	CLR	NC	10.00		48	33	41	56	11	35	29.99	30.19		
04	CLR	NC	10.00		46	31	40	56	13	32	30.02	30.21		
07	CLR	NC	10.00		51	32	43	48	13	33	30.05	30.24		
10	BKN	250	10.00		59	33	47	38	14	33	30.01	30.20		
13	BKN	250	10.00		62	33	48	34	16	31	29.98	30.18		
16	SCT	300	10.00		70	36	53	29	8	26	29.93	30.12		
19	SCT	300	10.00		66	32	50	28	9	33	29.96	30.15		
22	SCT	300	10.00		53	39	46	59	6	36	29.99	30.19		
<b>SUNRISE: 0453</b>					<b>MAY 26</b>					<b>SUNSET: 1920</b>				
01	SCT	300	10.00		56	36	47	47	6	33	30.01	30.20		
04	BKN	300	10.00		50	38	44	63	3	34	30.01	30.21		
07	BKN	300	10.00		58	38	48	48	7	34	30.05	30.24		
10	FEW	300	10.00		67	33	51	28	11	31	30.07	30.27		
13	FEW	300	10.00		72	36	54	27	9	24	30.01	30.20		
16	SCT	300	10.00		75	32	54	21	7	30	29.97	30.17		
19	BKN	300	10.00		71	34	53	26	5	VR	29.98	30.17		
22	BKN	300	10.00		56	44	50	65	0	00	30.03	30.22		
<b>SUNRISE: 0452</b>					<b>MAY 27</b>					<b>SUNSET: 1920</b>				
01	BKN	250	10.00		52	45	49	77	6	01	30.06	30.25		
04	CLR	NC	10.00		49	45	47	86	0	00	30.06	30.25		
07	BKN	250	10.00		57	46	51	67	0	00	30.10	30.29		
10	BKN	250	10.00		72	45	57	38	3	VR	30.09	30.28		
13	OVC	140	10.00		76	47	60	36	9	23	30.06	30.25		
16	BKN	250	10.00		77	52	62	42	10	26	30.01	30.20		
19	BKN	250	10.00		69	54	60	59	7	05	30.01	30.20		
22	BKN	120	10.00		66	54	59	65	0	00	30.03	30.22		
<b>SUNRISE: 0452</b>					<b>MAY 28</b>					<b>SUNSET: 1921</b>				
01	BKN	250	10.00		61	54	57	78	5	18	30.01	30.20		
04	BKN	100	10.00		63	54	58	73	9	20	30.00	30.19		
07	SCT	250	10.00		67	57	61	71	11	20	30.04	30.22		
10	BKN	250	10.00		78	62	68	58	13	20	30.02	30.21		
13	BKN	250	10.00		86	64	72	48	14	21	29.96	30.15		
16	BKN	250	10.00		85	65	72	51	14	19	29.93	30.12		
19	BKN	250	10.00		81	64	70	57	11	19	29.93	30.12		
22	SCT	250	10.00		74	64	68	71	9	19	29.96	30.15		
<b>SUNRISE: 0451</b>					<b>MAY 29</b>					<b>SUNSET: 1922</b>				
01	SCT	200	10.00		72	63	66	73	11	20	29.97	30.15		
04	CLR	NC	10.00		68	62	64	81	7	20	29.98	30.17		
07	FEW	250	10.00		73	63	67	71	11	23	29.98	30.17		
10	FEW	250	10.00		83	65	71	55	11	24	30.00	30.18		
13	SCT	250	10.00		89	65	73	45	15	22	29.98	30.16		
16	SCT	055	10.00		88	64	72	45	15	21	29.95	30.14		
19	FEW	090	10.00		82	62	69	51	9	20	29.95	30.14		
22	FEW	100	10.00		75	63	67	66	9	20	29.97	30.16		
<b>SUNRISE: 0451</b>					<b>MAY 30</b>					<b>SUNSET: 1923</b>				
01	CLR	NC	10.00		70	62	65	76	5	20	30.00	30.19		
04	CLR	NC	10.00		69	63	65	81	11	21	30.01	30.20		
07	CLR	NC	10.00		72	64	67	76	11	22	30.05	30.24		
10	FEW	250	10.00		83	66	72	57	10	23	30.05	30.24		
13	SCT	250	10.00		89	64	72	43	14	21	30.02	30.20		
16	SCT	300	10.00		89	65	73	45	9	21	29.98	30.17		
19	BKN	300	10.00		81	66	71	61	7	19	29.98	30.17		
22	SCT	300	10.00		72	65	68	79	7	20	29.99	30.18		

HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
					DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL		
<b>SUNRISE: 0450</b>					<b>MAY 31</b>					<b>SUNSET: 1923</b>				
01	CLR	NC	10.00		70	63	66	79	3	17	29.99	30.17		
04	FEW	300	10.00		68	64	66	87	6	20	30.01	30.19		
07	SCT	300	10.00		73	66	69	79	8	20	30.02	30.21		
10	SCT	300	10.00		85	67	73	55	8	22	30.01	30.19		
13	SCT	050	10.00		90	65	73	44	11	20	29.97	30.16		
16	SCT	300	10.00		90	64	73	42	14	19	29.91	30.10		
19	SCT	300	10.00		84	63	70	49	10	20	29.90	30.09		
22	CLR	NC	10.00		74	64	68	71	6	20	29.91	30.10		

## 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.

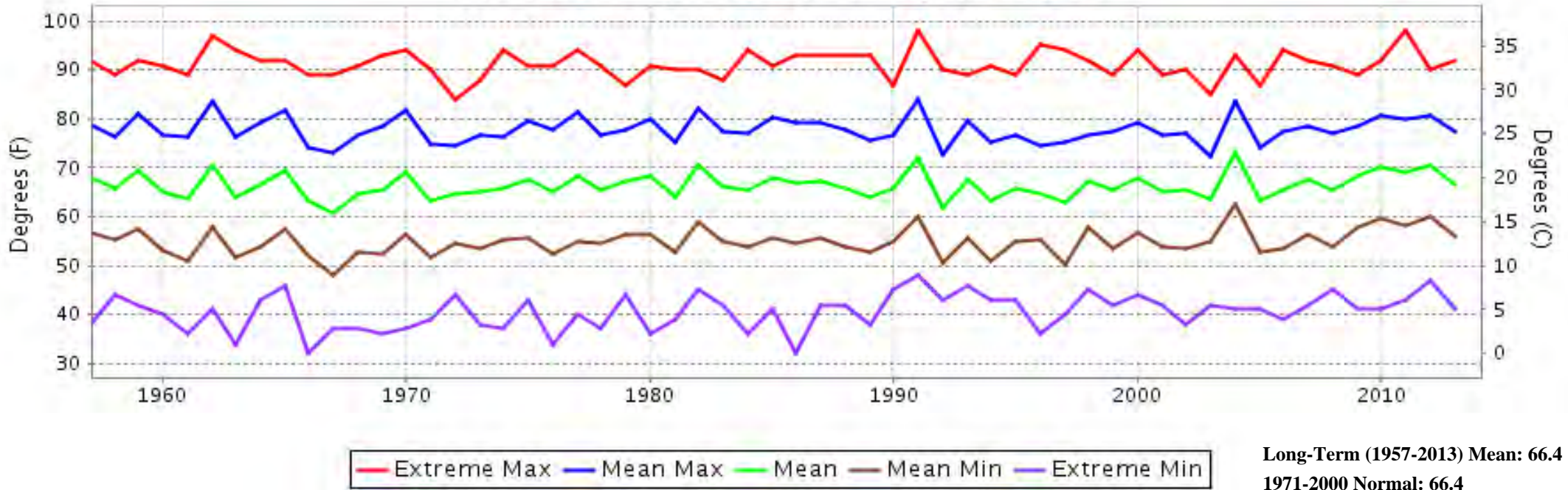
& = Original observation contained additional weather elements.

See page 3 for additional notes.

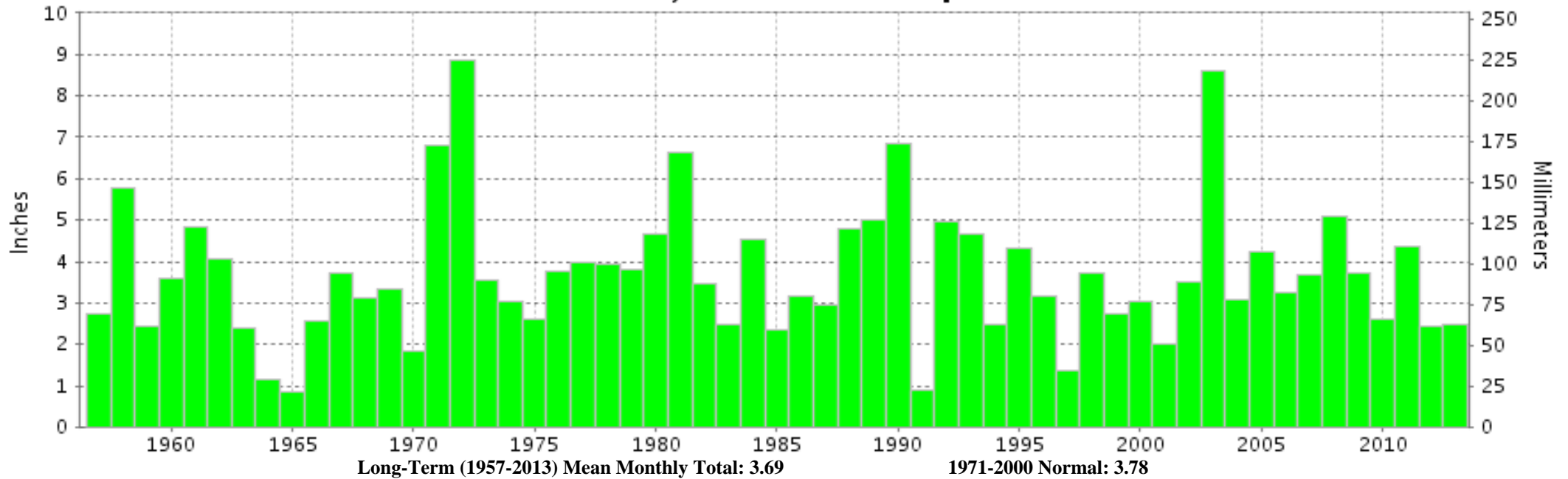
## SUMMARY BY HOUR

HOUR (LST)	AVERAGES								RESULTANT WIND (MPH)	
	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (Inches, HG)		VISIBILITY (Miles)	WIND SPEED (MPH)	SPEED	DIRECTION
					STATION	SEA LEVEL				
01	60	54	57	81	29.90	30.09	8.73	6	2	16
02	59	54	56	83	29.89	30.08	9.00	7	1	18
03	59	54	56	84	29.89	30.08	8.48	6	2	22
04	59	54	56	85	29.89	30.08	8.23	6	2	20
05	58	54	56	86	29.90	30.09	8.54	6	1	19
06	59	55	57	85	29.91	30.10	8.29	6	2	21
07	62	55	58	79	29.92	30.11	8.31	7	1	20
08	65	55	59	73	29.93	30.12	8.82	8	2	21
09	67	55	60	68	29.93	30.12	8.94	8	2	20
10	70	54	61	61	29.93	30.12	9.84	10	2	23
11	71	54	62	57	29.92	30.11	9.94	9	2	23
12	73	54	62	54	29.91	30.10	9.97	10	2	23
13	74	54	63	52	29.90	30.09	9.58	11	2	23
14	75	54	63	51	29.88	30.07	9.84	11	3	24
15	75	54	63	50	29.87	30.06	9.68	11	2	24
16	75	54	63	50	29.86	30.05	9.84	11	2	23
17	74	54	62	53	29.86	30.05	9.77	11	1	18
18	72	54	62	56	29.86	30.05	9.65	9	1	19
19	69	54	61	61	29.87	30.06	9.45	8	1	16
20	66	54	60	67	29.88	30.07	9.65	7	2	15
21	65	54	59	71	29.89	30.08	9.71	5	2	15
22	64	54	59	73	29.90	30.09	9.81	6	2	18
23	63	54	58	76	29.90	30.09	9.35	6	1	19
24	62	54	58	77	29.90	30.09	9.06	5	2	18

## RICHMOND, VA MAY Temperatures



## RICHMOND, VA MAY Precipitation







**MAY 2013  
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.*

A handwritten signature in black ink, appearing to read "Thomas R. Karl".

**DIRECTOR**

NCDC now offers free online access to the **Edited Local Climatological Data Publication**. Go to : [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov) and choose Most Popular.

We welcome your questions or comments, please contact us at:  
(828) 271-4800, option 2  
Fax Number : 828-271-4876  
TDD : (828) 271-4010  
or Email : [ncdc.orders@noaa.gov](mailto:ncdc.orders@noaa.gov)

NOAA\National Climatic Data Center  
Attn: User Engagement & Services Branch  
151 Patton Avenue  
Asheville, NC 28801-5001