



# APRIL 2014 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 11	1300 LST 12	2400 LST 13	2400 LST 14	AVERAGE STATION 15	AVERAGE SEA LEVEL 16	RESULTANT SPEED 17	RES DIR 18	AVERAGE SPEED 19	MAXIMUM					
																			3-SEC		2-MIN			
01	72	39	56	3	35	46	9	0			0.0	0.00	29.91	30.09	2.4	14	3.9	14	18	13	18	01		
02	78	45	62	9	40	51	3	0			0.0	0.00	29.85	30.05	4.5	06	5.8	22	05	15	04	02		
03	70	52	61	8	43	52	4	0	RA		0.0	T	29.86	30.03	4.4	09	5.4	28	30	21	31	03		
04	85*	51	68	15	49	56	0	3	RA HZ		0.0	0.01	29.64	29.80	1.3	15	6.3	36	22	28	23	04		
05	70	47	59	5	36	49	6	0	MIFG		0.0	0.00	29.72	29.96	5.8	33	7.7	22	35	18	35	05		
06	62	37	50	-4	26	40	15	0			0.0	0.00	30.03	30.21	4.1	09	5.9	21	05	16	04	06		
07	62	43	53	-1	46	50	12	0	RA BR		0.0	0.96	29.75	29.90	3.3	14	7.1	22	12	16	12	07		
08	70	53	62	7	46	54	3	0	RA BR		0.0	T	29.42	29.61	4.0	28	8.2	25	25	20	26	08		
09	69	50	60	5	34	47	5	0	RA		0.0	T	29.64	29.86	5.6	33	6.7	24	31	20	32	09		
10	74	42	58	3	34	48	7	0			0.0	0.00	29.97	30.17	7.7	20	8.1	28	19	22	21	10		
11	82	53	68	12	40	54	0	3			0.0	0.00	29.88	30.07	11.5	21	11.9	31	20	25	20	11		
12	79	54	67	10	48	56	0	2			0.0	0.00	29.98	30.18	5.0	13	8.2	22	13	17	13	12		
13	83	55	69	12	53	60	0	4			0.0	0.00	29.95	30.12	11.5	19	11.7	28	18	22	21	13		
14	81	62	72*	15	54	61	0	7	RA		0.0	T	29.81	29.97	13.5	19	13.9	32	20	24	20	14		
15	75	38	57	0	54	57	8	0	RA BR		0.0	0.57	29.54	29.75	5.1	19	17.9	43*	35	31*	36	15		
16	53	33	43*	-15	19	34	22	0			0.0	0.00	30.13	30.39	9.8	01	11.0	36	33	29	34	16		
17	60	33*	47	-11	31	40	18	0			0.0	0.00	30.37	30.57	6.3	06	7.2	21	06	16	05	17		
18	55	36	46	-12	34	41	19	0			0.0	0.00	30.24	30.42	3.6	04	5.0	16	06	13	04	18		
19	66	46	56	-2	40	48	9	0			0.0	0.00	30.06	30.26	5.7	05	6.2	25	03	20	06	19		
20	67	43	55	-4	34	45	10	0			0.0	0.00	30.11	30.31	10.3	04	10.8	28	04	21	04	20		
21	74	39	57	-2	35	46	8	0			0.0	0.00	29.93	30.08	2.9	02	5.1	16	34	12	36	21		
22	84	49	67	8	48	56	0	2	RA		0.0	T	29.55	29.71	3.8	23	5.8	29	30	22	31	22		
23	68	49	59	0	34	48	6	0			0.0	0.00	29.60	29.83	12.7	34	13.4	32	34	24	35	23		
24	69	41	55	-5	25	43	10	0			0.0	0.00	29.88	30.07	4.4	35	5.9	25	34	16	35	24		
25	77	46	62	2	50	54	3	0	TS TSRA RA BR		0.0	1.45	29.69	29.86	3.4	12	7.0	35	27	26	28	25		
26	80	52	66	6	44	55	0	1			0.0	0.00	29.66	29.86	7.5	25	9.7	26	24	22	24	26		
27	76	54	65	5	40	51	0	0			0.0	0.00	29.81	30.02	3.4	04	5.3	35	13	17	11	27		
28	61	50	56	-5	46	49	9	0	RA DZ BR		0.0	0.39	29.88	30.06	4.1	09	5.2	17	12	13	09	28		
29	63	51	57	-4	52	54	8	0	RA DZ FG BR		0.0	0.47	29.88	30.08	7.8	08	8.2	29	10	23	25	29		
30	77	63	70	9	66	67	0	5	TSRA RA DZ BR HZ		0.0	0.20	29.80	29.97	11.0	16	12.0	36	18	24	17	30		

71.4			46.9			59.1			☼	41.2		50.4		6.5		0.9		< MONTHLY AVERAGES   TOTALS >				0.0		4.05		29.85		30.04		0.9		11		8.2		< MONTHLY AVERAGES			
1.1			0.8			0.9				<----- DEPARTURE FROM NORMAL ----->												0.78		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3															
<b>DEGREE DAYS</b>										GREATEST 24-HR PRECIPITATION : 1.45 DATE : 25										SEA LEVEL PRESSURE				DATE TIME															
MONTHLY					SEASON TO DATE					GREATEST 24-HR SNOWFALL : 0.0 DATE :					MAXIMUM : 30.63				17 0954																				
TOTAL DEPARTURE					TOTAL DEPARTURE					GREATEST SNOW DEPTH : 0 DATE :					MINIMUM : 29.54				08 0610																				
HEATING :		194		-46		3760		68		NUMBER OF		MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 0		PRECIPITATION >= 0.01 INCH: 7																							
COOLING :		27		-9		29		-13		-> DAYS WITH		MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH: 6																							
										THUNDERSTORMS : 2		HEAVY FOG : 0		SNOWFALL >= 1.0 INCH : 0																									

**APRIL 2014  
RICHMOND, VA**

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA (KRIC)  
APRIL 2014

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	0.00	0.00	
02													02												02	0.00	0.00	
03		T											03	T	T									03	T	T		
04													04										T	0.01	04	0.01	0.01	
05													05												05	0.00	0.00	
06													06												06	0.00	0.00	
07													07	0.11	0.01										07	0.96	0.96	
08													08												08	T	T	
09													09												09	T	T	
10													10												10	0.00	0.00	
11													11												11	0.00	0.00	
12													12												12	0.00	0.00	
13													13												13	0.00	0.00	
14													14												14	T	T	
15													15				0.02	0.03	0.13	0.01	0.04	0.09	0.08		15	0.57	0.57	
16													16												16	0.00	0.00	
17													17												17	0.00	0.00	
18													18												18	0.00	0.00	
19													19												19	0.00	0.00	
20													20												20	0.00	0.00	
21													21												21	0.00	0.00	
22													22				T	T	T	T					22	T	T	
23													23												23	0.00	0.00	
24													24												24	0.00	0.00	
25													25				0.02	0.20	1.12	0.11	T	T	T		25	1.45	1.45	
26													26												26	0.00	0.00	
27													27												27	0.00	0.00	
28													28	0.01	0.09	0.13	0.10	0.05	T					0.01	T	T	0.39	0.39
29													29	T	T	0.01	0.11	0.12	0.08	0.01	0.01	T	0.01	0.04	T	0.47	0.47	
30	0.09	0.06	T										30	T		0.04	T	T							30	0.20	0.20	

\* 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)	0.31	0.44	0.54	0.73	1.04	1.10	1.12	1.22	1.29	1.34	1.41	1.45
Ending Date	25	25	25	25	25	25	25	25	25	25	25	25
Ending Time (Hr/Min)	1629	1634	1634	1630	1635	1645	1704	1645	1638	1654	1729	1738

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 APRIL 2014

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

Date	VISIBILITY (MILES)	
	MINIMUM	MAXIMUM
01	10.00	10.00
02	10.00	10.00
03	10.00	10.00
04	5.00	10.00
05	7.00	10.00
06	10.00	10.00
07	1.50	10.00
08	5.00	10.00
09	10.00	10.00
10	9.00	10.00
11	10.00	10.00
12	8.00	10.00
13	8.00	10.00
14	10.00	10.00
15	1.75	10.00
16	10.00	10.00
17	10.00	10.00
18	7.00	10.00
19	8.00	10.00
20	10.00	10.00
21	10.00	10.00
22	9.00	10.00
23	9.00	10.00
24	10.00	10.00
25	0.75	10.00
26	9.00	10.00
27	10.00	10.00
28	1.75	10.00
29	0.50	10.00
30	1.50	10.00
<b>AVGS</b>	7.39	10.00
<b>MINIMUM VISIBILITY (MILES)</b>		
<= .25	<= 3.0	>= 7.0
0	6	22





# OBSERVATIONS AT 3-HOURLY INTERVALS

**RICHMOND, VA**

**APRIL 2014**

**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		
SUNRISE: 0522					APR 25					SUNSET: 1854				
01	BKN	250	10.00		48	36	43	63	5	10	29.82	30.01		
04	OVC	250	10.00		48	40	44	74	5	12	29.82	30.01		
07	SCT	250	10.00		52	44	48	75	6	13	29.81	30.00		
10	BKN	250	10.00		68	49	58	51	8	15	29.76	29.95		
13	OVC	250	10.00		74	53	62	48	15	13	29.62	29.81		
16	BKN	075	2.00	-TSRA	64	58	60	81	6	07	29.53	29.72		
19	OVC	042	4.00	BR	59	57	58	93	5	09	29.50	29.69		
22	OVC	003	0.75	BR	61	59	60	93	8	31	29.54	29.73		
SUNRISE: 0521					APR 26					SUNSET: 1854				
01	SCT	007	9.00		58	55	56	90	10	30	29.59	29.78		
04	CLR	NC	10.00		53	42	48	66	7	30	29.64	29.83		
07	SCT	300	10.00		57	40	49	53	6	27	29.75	29.94		
10	FEW	300	10.00		69	40	54	35	8	26	29.76	29.95		
13	FEW	075	10.00		76	40	57	27	15	22	29.68	29.87		
16	BKN	090	10.00		80	42	59	26	21	24	29.63	29.82		
19	BKN	300	10.00		73	45	58	37	8	21	29.62	29.81		
22	BKN	130	10.00		69	46	57	44	8	25	29.66	29.85		
SUNRISE: 0519					APR 27					SUNSET: 1855				
01	FEW	120	10.00		61	46	53	58	5	03	29.73	29.92		
04	SCT	250	10.00		57	43	50	60	9	02	29.79	29.98		
07	SCT	250	10.00		57	35	47	44	8	36	29.86	30.05		
10	SCT	250	10.00		63	34	49	34	3	05	29.89	30.07		
13	CLR	NC	10.00		69	38	53	32	0	00	29.82	30.01		
16	FEW	300	10.00		75	40	57	28	5	VR	29.78	29.97		
19	BKN	300	10.00		65	44	54	47	10	11	29.83	30.02		
22	OVC	300	10.00		55	40	48	57	3	15	29.90	30.10		
SUNRISE: 0518					APR 28					SUNSET: 1856				
01	CLR	NC	10.00		52	43	48	72	3	09	29.90	30.09		
04	BKN	040	10.00		52	46	49	80	0	00	29.89	30.08		
07	OVC	045	10.00		54	45	49	72	3	05	29.90	30.10		
10	OVC	043	10.00		59	43	51	56	7	09	29.90	30.09		
13	OVC	035	5.00	-RA	58	44	51	60	7	06	29.87	30.06		
16	OVC	055	4.00	-RA BR	51	48	49	89	8	13	29.87	30.07		
19	OVC	009	10.00		51	47	49	86	3	11	29.84	30.04		
22	OVC	005	3.00	-DZ BR	51	48	49	89	5	VR	29.86	30.05		
SUNRISE: 0517					APR 29					SUNSET: 1857				
01	OVC	011	7.00		51	47	49	86	9	09	29.85	30.05		
04	OVC	007	10.00		51	46	49	83	8	07	29.85	30.04		
07	OVC	005	1.25	-DZ BR	51	48	49	89	9	09	29.91	30.11		
10	OVC	005	1.00	-DZ BR	54	51	52	90	6	05	29.93	30.13		
13	OVC	007	1.25	-DZ BR	56	53	54	90	14	09	29.88	30.07		
16	OVC	005	0.50	RA FG	57	54	55	90	3	VR	29.91	30.10		
19	OVC	006	1.75	-DZ BR	58	55	56	90	9	09	29.87	30.06		
22	OVC	002	1.00	-DZ BR	60	58	59	93	3	06	29.90	30.09		
SUNRISE: 0516					APR 30					SUNSET: 1858				
01	OVC	002	1.50	RA BR	64	62	63	93	5	11	29.88	30.08		
04	OVC	003	4.00	BR	65	63	64	93	13	14	29.82	30.01		
07	OVC	020	2.50	BR	68	66	67	93	9	15	29.85	30.04		
10	OVC	017	3.00	-RA BR	72	68	69	87	8	16	29.83	30.01		
13	BKN	037	7.00		76	70	72	82	11	16	29.77	29.96		
16	BKN	110	10.00		73	64	67	74	16	18	29.74	29.93		
19	OVC	180	10.00		70	66	67	87	11	15	29.72	29.91		
22	OVC	015	10.00		70	64	66	82	18	18	29.70	29.89		

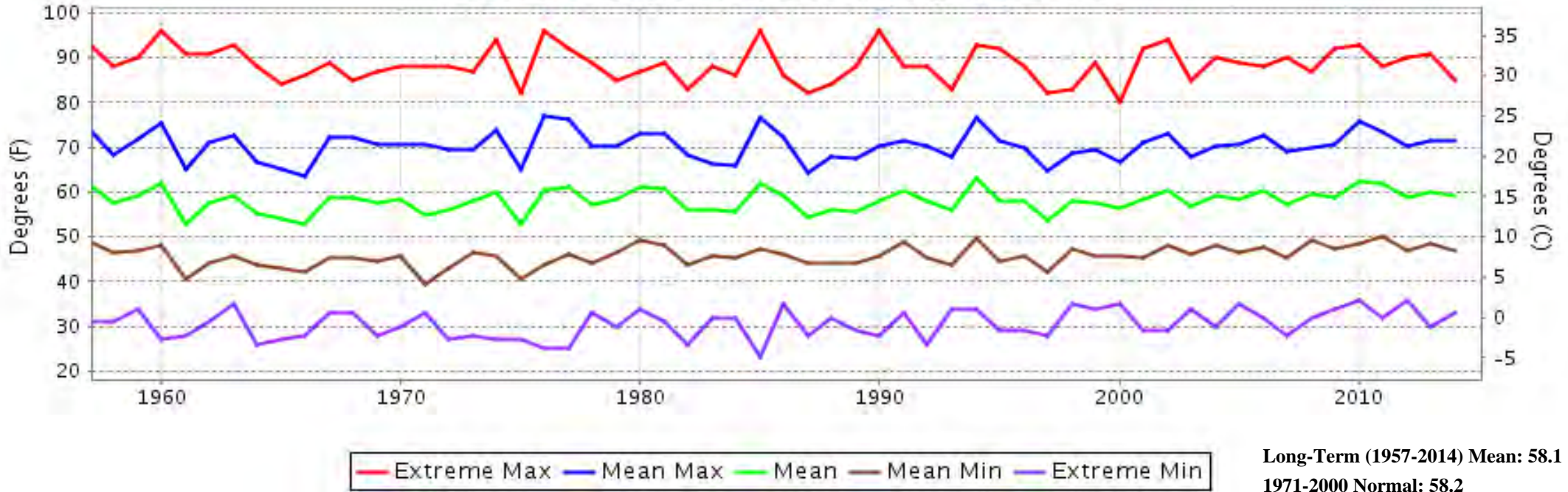
HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
					DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL

**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.

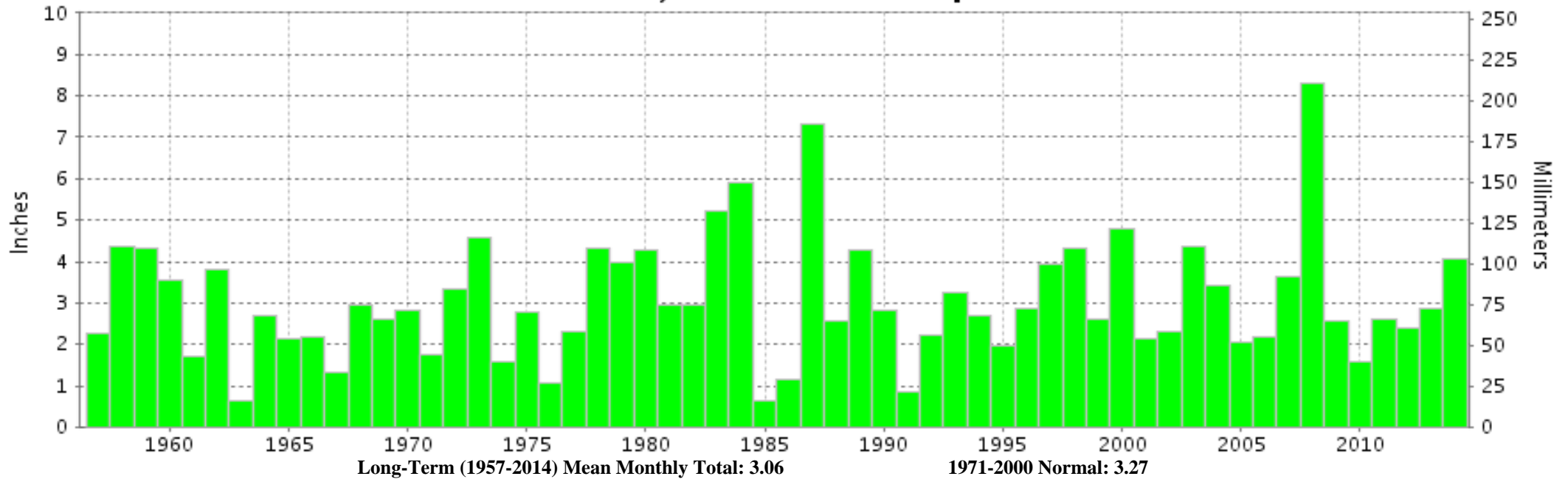
## SUMMARY BY HOUR

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	53	42	48	67	29.85	30.04	9.48	7	2	10
02	52	41	47	68	29.85	30.04	9.32	6	1	11
03	51	41	46	70	29.85	30.04	9.50	6	1	12
04	51	41	46	71	29.85	30.04	9.53	6	1	14
05	50	41	46	72	29.86	30.05	9.30	6	0	17
06	50	41	46	73	29.88	30.07	9.00	6	1	14
07	52	42	48	69	29.89	30.09	8.68	7	1	13
08	56	42	49	62	29.90	30.09	8.73	9	2	10
09	59	41	50	54	29.90	30.09	9.03	10	1	11
10	62	41	52	48	29.90	30.09	9.12	9	1	11
11	64	41	53	45	29.89	30.08	9.19	10	1	22
12	67	40	53	42	29.87	30.06	9.37	10	1	12
13	68	41	54	40	29.85	30.04	9.24	11	0	18
14	69	40	55	40	29.83	30.02	9.37	10	1	11
15	69	41	55	40	29.81	30.00	9.04	11	0	21
16	69	40	54	40	29.80	29.99	8.95	11	1	25
17	67	40	54	42	29.80	29.99	9.05	11	0	18
18	65	41	53	45	29.81	30.00	9.13	9	2	10
19	62	41	52	50	29.82	30.01	9.53	8	2	10
20	59	42	51	55	29.83	30.02	9.28	8	3	10
21	58	42	50	59	29.85	30.04	9.11	7	2	10
22	56	42	50	62	29.85	30.04	9.16	7	1	11
23	56	42	49	63	29.85	30.04	9.33	6	1	11
24	55	43	49	66	29.85	30.04	9.33	7	1	11

## RICHMOND, VA APRIL Temperatures



## RICHMOND, VA APRIL Precipitation





**APRIL 2014**  
**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**

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