



# NOVEMBER 2012 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			
									DEPTH 11	WATER- EQUIV 12	SNOW- FALL 13	WATER EQUIV 14			SPEED 20	DIR 21	SPEED 22	DIR 23						
01	60	42	51	-2	36	43	14	0	RA	0		0.0	T	29.53	29.73	6.6	27	7.5	24	02	15	27	01	
02	59	36	48	-5	30	40	17	0		0		0.0	0.00	29.64	29.85	7.4	27	8.4	30	27	22	27	02	
03	56	31	44	-8	31	39	21	0		0		0.0	0.00	29.85	30.05	5.4	33	5.9	25	34	18	35	03	
04	56	39	48	-4	33	41	17	0	RA	0		0.0	T	29.88	30.07	3.0	01	4.0	25	36	15	01	04	
05	52	32	42	-10	28	36	23	0		0		0.0	0.00	29.90	30.11	6.1	36	6.4	23	36	20	36	05	
06	48	29	39	-13	29	35	26	0		0		0.0	0.00	29.93	30.11	7.8	01	7.9	20	36	14	01	06	
07	48	38	43	-8	32	38	22	0	RA	0		0.0	0.03	29.72	29.90	9.7	35	10.0	21	35	16	35	07	
08	61	40	51	0	18	37	14	0	RA	0		0.0	T	29.77	29.99	9.0	32	9.3	28	33	22	33	08	
09	61	31	46	-5	30	39	19	0		0		0.0	0.00	29.98	30.20	2.9	32	3.6	21	32	16	30	09	
10	72	34	53	2	37	45	12	0		0		0.0	0.00	30.11	30.32	1.8	17	2.6	11	16	9	16	10	
11	73	43	58	8	42	49	7	0		0		0.0	0.00	30.24	30.44	6.1	16	6.3	18	17	14	17	11	
12	74*	47	61*	11	54	58	4	0	MIFG BR	0		0.0	0.00	30.16	30.32	8.1	16	8.3	23	16	18	18	12	
13	65	37	51	1	42	45	14	0	RA BR	0		0.0	0.12	30.11	30.35	6.9	01	9.9	35*	01	25*	36	13	
14	50	33	42	-7	29	35	23	0		0		0.0	0.00	30.29	30.48	7.8	01	8.2	21	04	16	02	14	
15	50	34	42	-7	35	40	23	0	RA	0		0.0	T	30.15	30.34	6.9	01	7.1	25	04	12	01	15	
16	55	35	45	-4	33	40	20	0		0		0.0	0.00	30.14	30.35	5.1	36	5.3	24	02	15	36	16	
17	55	33	44	-5	32	39	21	0		0		0.0	0.00	30.31	30.52	8.6	02	8.9	21	03	16	03	17	
18	58	43	51	2	41	46	14	0		0		0.0	0.00	30.32	30.50	11.6	02	11.7	22	03	18	02	18	
19	53	47	50	1	41	46	15	0		0		0.0	0.00	30.16	30.33	11.2	01	11.4	23	02	17	02	19	
20	58	43	51	3	41	46	14	0		0		0.0	0.00	29.96	30.15	4.8	01	5.2	14	34	10	01	20	
21	59	36	48	1	33	40	17	0	BR	0		0.0	0.00	29.96	30.18	6.3	01	6.6	20	03	15	01	21	
22	61	33	47	0	28	38	18	0		0		0.0	0.00	30.01	30.22	5.5	36	5.7	21	01	14	01	22	
23	68	30	49	2	32	42	16	0		0		0.0	0.00	29.81	29.97	6.0	23	7.1	28	33	21	31	23	
24	54	33	44	-3	20	34	21	0		0		0.0	0.00	29.76	29.99	9.5	33	10.4	25	29	20	29	24	
25	49	26	38	-8	19	31	27	0		0		0.0	0.00	29.87	30.07	6.8	22	7.1	21	23	16	22	25	
26	63	34	49	3	26	39	16	0		0		0.0	0.00	29.93	30.15	1.3	16	3.7	12	13	9	12	26	
27	48	34	41	-5	37	41	24	0	RA BR	0		0.0	0.12	29.99	30.20	4.3	35	6.1	23	33	17	36	27	
28	50	28	39	-6	30	35	26	0	BR	0		0.0	0.00	30.10	30.32	3.0	35	4.8	21	30	15	32	28	
29	51	25*	38*	-7	27	33	27	0	BR HZ	0		0.0	0.00	30.22	30.42	1.0	18	2.0	14	17	10	17	29	
30	57	30	44	-1	33	38	21	0		0		0.0	0.00	30.15	30.35	1.1	17	2.1	14	21	7	20	30	

57.5	35.2	46.4	☼	32.6	40.3	18.4	0.0	< MONTHLY AVERAGES   TOTALS >				0.0	0.27	30.01	30.19	3.4	35	6.8	< MONTHLY AVERAGES			
-3.9	-4.2	-4.0		-----DEPARTURE FROM NORMAL -----								-2.97	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
<b>DEGREE DAYS</b>								GREATEST 24-HR PRECIPITATION : 0.12 DATE : 27+				SEA LEVEL PRESSURE				DATE TIME						
MONTHLY				SEASON TO DATE				GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.57 17 2158										
TOTAL DEPARTURE				TOTAL DEPARTURE				GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.69 01 1452										
HEATING :		553 110		755 79				NUMBER OF ->		MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 9		PRECIPITATION >= 0.01 INCH: 3								
COOLING :		0 -5		1744 196				DAYS WITH		MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH: 2								
										THUNDERSTORMS : 0		HEAVY FOG : 0		SNOWFALL >= 1.0 INCH : 0								

**NOVEMBER 2012  
RICHMOND, VA**

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA (KRIC)  
NOVEMBER 2012

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							04												04	T	T	
05													05												05	0.00	0.00	
06													06												06	0.00	0.00	
07			T	0.02	0.01					T			07		T										07	0.03	0.03	
08		T	T	T	T								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					0.01	0.04	0.03	T	0.01	0.01	0.01	0.01	13		T	T								13	0.12	0.12		
14													14												14	0.00	0.00	
15													15												15	T	T	
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												22	0.00	0.00	
23													23												23	0.00	0.00	
24													24												24	0.00	0.00	
25													25												25	0.00	0.00	
26													26												26	0.00	0.00	
27					T	0.01	T	T				T	27	T	T	0.04	0.07	T						27	0.12	0.12		
28													28												28	0.00	0.00	
29													29												29	0.00	0.00	
30													30												30	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)	0.01	0.02	0.03	0.03	0.05	0.06	0.07	0.09	0.10	0.11	0.11	0.11
Ending Date	27	27	27	27	27	27	27	27	27	27	27	27
Ending Time (Hr/Min)	1655	1621	1621	1631	1621	1643	1655	1655	1655	1655	1655	1655

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 1981-2010

## 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 NOVEMBER 2012

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:MMS, 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							10.00	10.00	
05							10.00	10.00	
06							8.00	10.00	
07							10.00	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							9.00	10.00	
12							4.00	10.00	
13							2.50	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							10.00	10.00	
21							3.00	10.00	
22							8.00	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							10.00	10.00	
27							3.00	10.00	
28							2.50	10.00	
29							5.00	10.00	
30							8.00	10.00	
MONTHLY AVGS							8.43	10.00	
<b>SUNSHINE (Minutes)</b>									
Total : 0					Possible : 18302				
Percent Possible : 0									
<b>NUMBER OF DAYS WITH : SKY CONDITION</b>									
Clear		Partly CLDY			Cloudy			Missing	
<b>MINIMUM VISIBILITY (MILES)</b>									
<= .25			<= 3.0				>= 7.0		
0			4				24		



# OBSERVATIONS AT 3-HOURLY INTERVALS

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
<b>SUNRISE: 0647 NOV 13 SUNSET: 1700</b> 01 OVC 240 10.00 04 OVC 090 10.00 07 OVC 030 3.00 -RA BR 10 OVC 021 7.00 -RA 13 OVC 055 10.00 16 BKN 050 10.00 19 FEW 055 10.00 22 CLR NC 10.00 01 CLR NC 10.00 04 CLR NC 10.00 07 FEW 300 10.00 10 SCT 300 10.00 13 SCT 300 10.00 16 OVC 300 10.00 19 BKN 250 10.00 22 BKN 250 10.00 <b>SUNRISE: 0648 NOV 14 SUNSET: 1660</b> 01 CLR NC 10.00 04 CLR NC 10.00 07 FEW 300 10.00 10 SCT 300 10.00 13 SCT 300 10.00 16 OVC 300 10.00 19 BKN 250 10.00 22 BKN 250 10.00 <b>SUNRISE: 0649 NOV 15 SUNSET: 1659</b> 01 OVC 250 10.00 04 OVC 023 10.00 07 OVC 027 10.00 10 OVC 043 10.00 13 OVC 047 10.00 16 OVC 045 10.00 19 OVC 200 10.00 22 OVC 040 10.00 -RA <b>SUNRISE: 0650 NOV 16 SUNSET: 1658</b> 01 OVC 110 10.00 04 OVC 075 10.00 07 SCT 300 10.00 10 SCT 300 10.00 13 FEW 300 10.00 16 FEW 300 10.00 19 FEW 250 10.00 22 CLR NC 10.00 <b>SUNRISE: 0651 NOV 17 SUNSET: 1658</b> 01 CLR NC 10.00 04 CLR NC 10.00 07 FEW 250 10.00 10 FEW 250 10.00 13 SCT 250 10.00 16 BKN 250 10.00 19 BKN 250 10.00 22 OVC 250 10.00 <b>SUNRISE: 0652 NOV 18 SUNSET: 1657</b> 01 BKN 037 10.00 04 FEW 029 10.00 07 BKN 250 10.00 10 BKN 250 10.00 13 BKN 250 10.00 16 OVC 033 10.00 19 OVC 042 10.00 22 OVC 025 10.00												<b>SUNRISE: 0653 NOV 19 SUNSET: 1656</b> 01 OVC 049 10.00 04 OVC 020 10.00 07 OVC 029 10.00 10 OVC 039 10.00 13 OVC 016 10.00 16 OVC 020 10.00 19 OVC 023 10.00 22 OVC 019 10.00 <b>SUNRISE: 0654 NOV 20 SUNSET: 1656</b> 01 OVC 038 10.00 04 OVC 037 10.00 07 OVC 038 10.00 10 OVC 038 10.00 13 OVC 200 10.00 16 OVC 200 10.00 19 OVC 170 10.00 22 OVC 034 10.00 <b>SUNRISE: 0655 NOV 21 SUNSET: 1655</b> 01 FEW 170 9.00 04 FEW 150 5.00 BR 07 CLR NC 4.00 BR 10 CLR NC 10.00 13 CLR NC 10.00 16 FEW 300 10.00 19 CLR NC 10.00 22 CLR NC 10.00 <b>SUNRISE: 0656 NOV 22 SUNSET: 1655</b> 01 CLR NC 10.00 04 CLR NC 10.00 07 FEW 300 10.00 10 FEW 250 10.00 13 CLR NC 10.00 16 CLR NC 10.00 19 CLR NC 10.00 22 CLR NC 10.00 <b>SUNRISE: 0657 NOV 23 SUNSET: 1654</b> 01 CLR NC 10.00 04 CLR NC 10.00 07 FEW 250 10.00 10 FEW 200 10.00 13 SCT 250 10.00 16 BKN 250 10.00 19 BKN 100 10.00 22 FEW 100 10.00 <b>SUNRISE: 0658 NOV 24 SUNSET: 1654</b> 01 FEW 050 10.00 04 CLR NC 10.00 07 SCT 250 10.00 10 FEW 050 10.00 13 FEW 050 10.00 16 FEW 065 10.00 19 CLR NC 10.00 22 CLR NC 10.00															

# OBSERVATIONS AT 3-HOURLY INTERVALS

## RICHMOND, VA

### NOVEMBER 2012 KRIC

### WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)				
			Observation Time (LST)	Eff Cld Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL	
<b>SUNRISE: 0659</b>						<b>NOV 25</b>							<b>SUNSET: 1653</b>		
01	CLR	NC				33	17	28	52	0	00	29.89	30.09		
04	BKN	250				28	18	25	66	0	00	29.91	30.11		
07	BKN	250				30	18	26	61	6	25	29.93	30.13		
10	BKN	250				40	19	33	43	10	23	29.93	30.13		
13	SCT	250				46	18	36	33	11	22	29.84	30.03		
16	SCT	250				47	18	36	31	8	22	29.82	30.01		
19	FEW	300				38	20	32	48	6	19	29.82	30.02		
22	CLR	NC				43	21	35	42	11	22	29.84	30.03		
<b>SUNRISE: 0700</b>						<b>NOV 26</b>							<b>SUNSET: 1653</b>		
01	FEW	250				39	22	33	51	7	22	29.84	30.03		
04	BKN	150				43	23	35	45	3	29	29.88	30.08		
07	SCT	150				36	25	32	64	5	19	29.93	30.13		
10	FEW	170				52	23	40	32	5	29	30.00	30.19		
13	CLR	NC				61	22	45	22	3	36	29.97	30.16		
16	CLR	NC				58	28	45	32	8	11	29.96	30.16		
19	CLR	NC				45	28	38	51	7	12	30.01	30.20		
22	OVC	095				44	35	40	71	3	13	30.02	30.22		
<b>SUNRISE: 0701</b>						<b>NOV 27</b>							<b>SUNSET: 1653</b>		
01	BKN	200				44	32	39	63	5	16	29.99	30.18		
04	OVC	090				45	33	40	63	3	15	29.96	30.16		
07	OVC	095				43	39	41	86	0	00	29.99	30.18		
10	OVC	085				47	40	44	77	0	00	29.98	30.18		
13	OVC	055			8.00	45	41	43	86	14	33	29.97	30.16		
16	OVC	060			3.00	43	40	42	89	10	34	30.00	30.19		
19	OVC	080			10.00	41	37	39	86	10	36	30.03	30.23		
22	SCT	250			6.00	37	35	36	93	6	35	30.06	30.26		
<b>SUNRISE: 0702</b>						<b>NOV 28</b>							<b>SUNSET: 1652</b>		
01	CLR	NC			3.00	35	33	34	92	3	33	30.06	30.26		
04	BKN	045			2.50	34	32	33	92	5	35	30.07	30.27		
07	OVC	045			10.00	37	31	35	79	6	03	30.10	30.30		
10	BKN	250			10.00	44	29	38	56	10	01	30.15	30.34		
13	FEW	041			10.00	48	29	40	48	7	VR	30.10	30.30		
16	FEW	043			10.00	49	29	41	46	6	31	30.09	30.29		
19	CLR	NC			10.00	37	30	34	76	5	13	30.14	30.34		
22	CLR	NC			10.00	31	26	29	82	0	00	30.19	30.38		
<b>SUNRISE: 0703</b>						<b>NOV 29</b>							<b>SUNSET: 1652</b>		
01	CLR	NC			6.00	30	27	29	89	0	00	30.20	30.40		
04	CLR	NC			6.00	27	25	26	92	0	00	30.21	30.41		
07	FEW	250			7.00	27	23	26	85	0	00	30.27	30.47		
10	FEW	250			10.00	42	29	37	60	3	15	30.30	30.50		
13	CLR	NC			10.00	49	27	40	43	6	17	30.25	30.44		
16	CLR	NC			10.00	50	27	41	41	7	19	30.19	30.38		
19	CLR	NC			10.00	38	29	34	70	0	00	30.20	30.40		
22	CLR	NC			10.00	31	26	29	82	3	14	30.21	30.40		
<b>SUNRISE: 0704</b>						<b>NOV 30</b>							<b>SUNSET: 1652</b>		
01	CLR	NC			10.00	35	27	32	73	3	19	30.18	30.37		
04	FEW	250			10.00	31	26	29	82	6	20	30.16	30.36		
07	BKN	250			10.00	33	28	31	82	0	00	30.17	30.37		
10	OVC	250			10.00	44	34	40	68	3	25	30.20	30.40		
13	OVC	250			10.00	55	35	46	47	0	00	30.13	30.33		
16	OVC	250			10.00	54	37	46	53	3	10	30.12	30.31		
19	OVC	300			9.00	45	36	41	71	3	03	30.14	30.34		
22	BKN	300			9.00	41	35	38	79	0	00	30.15	30.35		

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

**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.

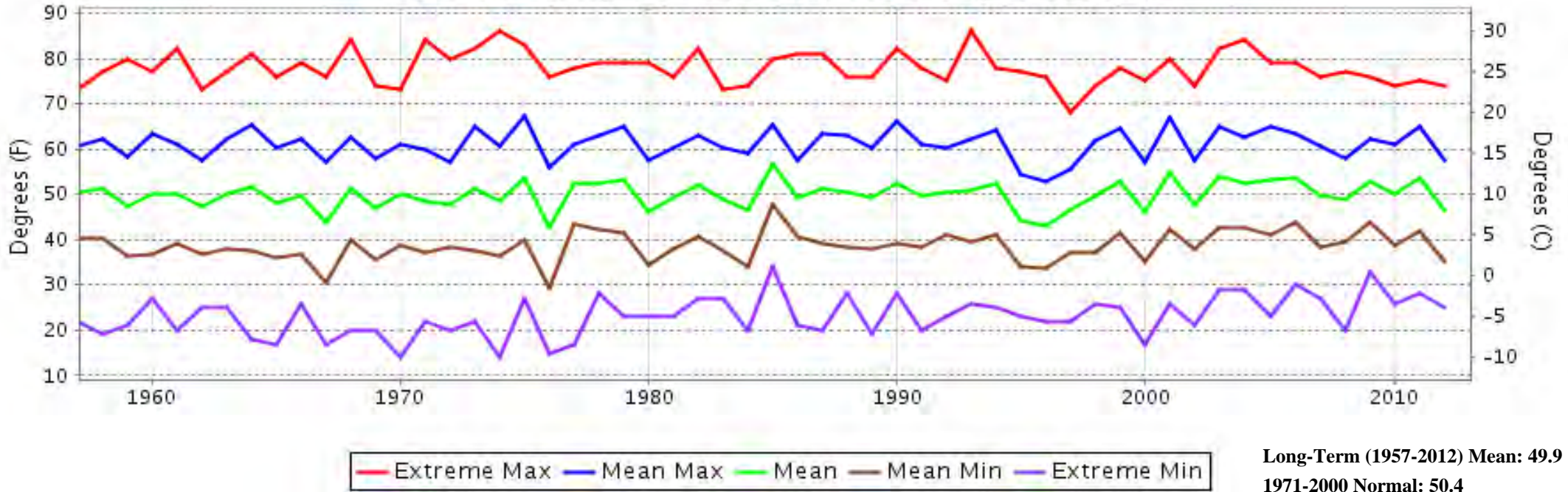
& = Original observation contained additional weather elements.

See page 3 for additional notes.

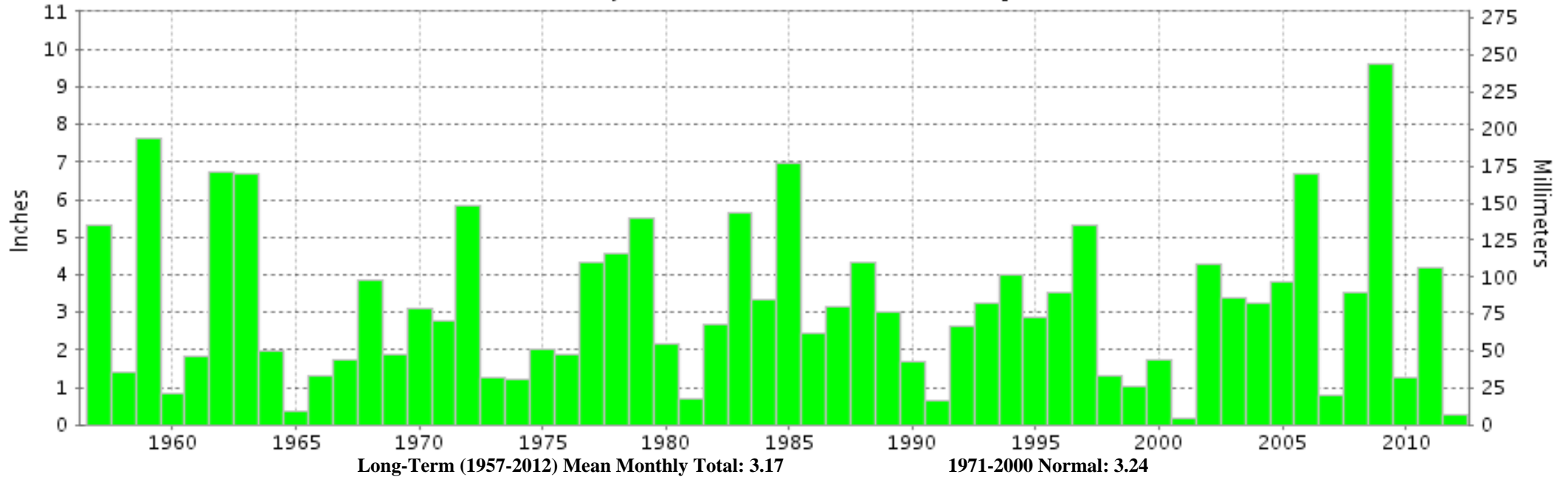
### SUMMARY BY HOUR

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			42	33	38	72	29.99	30.18	9.60	6	3	35
02			41	33	38	74	29.99	30.18	9.60	5	3	35
03			40	33	37	76	29.99	30.19	9.57	5	3	35
04			40	33	37	76	29.99	30.18	9.42	5	4	35
05			39	32	36	77	30.00	30.19	9.30	6	3	35
06			39	32	36	77	30.01	30.20	9.27	6	3	34
07			38	32	36	78	30.02	30.21	9.17	6	4	34
08			41	33	38	75	30.03	30.23	9.23	6	4	35
09			45	34	40	66	30.04	30.24	9.23	8	3	35
10			48	33	42	57	30.04	30.24	9.83	9	3	34
11			51	33	43	51	30.03	30.23	9.72	9	3	33
12			53	32	44	48	30.01	30.21	9.90	9	4	33
13			55	32	45	45	29.99	30.18	9.93	10	4	33
14			55	32	45	44	29.98	30.17	9.90	10	4	32
15			55	32	45	44	29.97	30.16	9.90	9	3	34
16			54	32	45	45	29.98	30.17	9.77	8	3	35
17			51	32	43	50	29.98	30.17	9.87	6	3	35
18			48	33	41	57	29.99	30.19	9.97	5	4	01
19			46	33	41	62	30.00	30.20	9.97	5	3	01
20			45	33	40	64	30.01	30.20	9.97	6	3	36
21			44	33	40	68	30.02	30.21	9.90	5	4	35
22			43	33	39	69	30.02	30.21	9.83	5	4	35
23			43	33	39	70	30.02	30.21	9.80	5	4	34
24			42	33	38	71	30.02	30.21	9.73	6	4	35

## RICHMOND, VA NOVEMBER Temperatures



## RICHMOND, VA NOVEMBER Precipitation





**NOVEMBER 2012  
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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(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