



JULY 2015

LOCAL CLIMATOLOGICAL DATA

NOAA, National Centers for Environmental Information

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				
11	12	13	14	15	16	17	18	19	20	21	22	23	24												
01	88	68	78	1	66	70	0	13	TS TSRA RA BR	0		0.0	0.66	29.70	29.89	6.9	23	8.2	22	22	17	22	01		
02	83	68	76	-1	69	71	0	11	RA BR HZ	0		0.0	0.37	29.70	29.89	1.4	29	5.3	18	01	15	36	02		
03	84	67	76	-1	66	69	0	11	RA BR HZ	0		0.0	0.24	29.77	29.95	4.5	10	5.0	16	12	13	12	03		
04	85	68	77	0	69	71	0	12	TS TSRA RA FG BR	0		0.0	1.21	29.73	29.93	3.4	26	5.5	46	34	40	34	04		
05	85	69	77	0	70	72	0	12	RA FG+ FG BR	0		0.0	0.15	29.91	30.11	3.8	10	4.4	26	03	12	14	05		
06	88	71	80	3	71	73	0	15	TS TSRA RA BR	0		0.0	0.42	29.91	30.09	3.7	18	5.4	26	27	21	28	06		
07	91	71	81	4	71	74	0	16		0		0.0	0.00	29.88	30.06	7.2	21	7.5	23	22	17	22	07		
08	89	75	82	5	72	75	0	17	RA	0		0.0	T	29.85	30.03	9.3	23	9.9	23	24	20	23	08		
09	95*	78	87*	10	71	75	0	22		0		0.0	0.00	29.82	30.00	8.8	25	9.7	26	21	18	22	09		
10	91	74	83	5	70	74	0	18	TS RA BR	0		0.0	0.05	29.83	30.03	3.7	32	6.1	24	36	16	35	10		
11	78	70	74	-4	70	72	0	9	RA DZ BR	0		0.0	0.67	29.88	30.07	5.3	03	5.7	21	32	16	32	11		
12	85	67	76	-2	65	69	0	11	BR	0		0.0	0.00	29.86	30.04	1.7	04	3.4	12	04	8	11	12		
13	85	69	77	-1	70	72	0	12	TS TSRA RA BR	0		0.0	0.93	29.70	29.86	4.7	16	5.5	20	19	16	19	13		
14	87	71	79	1	71	73	0	14	RA	0		0.0	0.02	29.49	29.66	8.3	21	8.9	24	11	17	20	14		
15	88	73	81	3	67	72	0	16	RA	0		0.0	T	29.51	29.73	7.2	32	8.7	22	31	17	31	15		
16	83	65	74*	-4	64	67	0	9		0		0.0	0.00	29.82	30.03	4.3	02	5.7	17	02	14	02	16		
17	86	65	76	-2	67	71	0	11		0		0.0	0.00	29.88	30.06	4.0	16	4.6	14	15	12	18	17		
18	92	74	83	4	72	75	0	18		0		0.0	0.00	29.80	29.98	5.4	20	6.6	23	18	18	18	18		
19	92	72	82	3	73	76	0	17	TS TSRA RA SQ	0		0.0	0.71	29.71	29.89	2.8	17	3.8	53*	34	44*	35	19		
20	94	74	84	5	73	76	0	19	BR	0		0.0	0.00	29.60	29.78	3.0	22	5.4	23	21	18	21	20		
21	92	76	84	5	74	77	0	19	RA	0		0.0	0.06	29.51	29.70	4.4	27	6.1	29	29	23	23	21		
22	87	68	78	-1	60	67	0	13		0		0.0	0.00	29.67	29.88	4.7	36	5.9	20	01	15	01	22		
23	86	67	77	-2	64	69	0	12		0		0.0	0.00	29.77	29.96	3.6	06	4.2	13	07	10	02	23		
24	88	67	78	0	61	67	0	13		0		0.0	0.00	29.78	29.97	4.5	02	5.2	18	02	13	02	24		
25	88	63*	76	-2	63	68	0	11		0		0.0	0.00	29.81	30.01	4.1	14	4.8	17	20	13	13	25		
26	90	69	80	2	65	70	0	15		0		0.0	0.00	29.82	30.01	5.6	17	6.0	22	15	14	18	26		
27	89	74	82	4	72	74	0	17	TS TSRA RA	0		0.0	0.25	29.82	30.00	5.5	16	6.8	17	19	14	19	27		
28	87	73	80	2	73	75	0	15	TS TSRA RA BR	0		0.0	0.15	29.82	30.00	3.6	17	4.0	23	20	18	21	28		
29	87	73	80	2	73	75	0	15	RA	0		0.0	T	29.82	30.00	4.0	19	4.8	16	22	15	22	29		
30	93	74	84	6	73	76	0	19		0		0.0	0.00	29.75	29.92	4.9	19	6.3	26	21	15	22	30		
31	91	72	82	4	63	70	0	17		0		0.0	0.00	29.74	29.93	4.5	36	5.8	22	36	15	35	31		
										< MONTHLY AVERAGES TOTALS >				0.0	5.89	29.76	29.95	1.6	21	6.0	< MONTHLY AVERAGES				
										<-----DEPARTURE FROM NORMAL ----->				1.38	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS										GREATEST 24-HR PRECIPITATION : 1.45 DATE : 03-04				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY										GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.16				05 1119							
SEASON TO DATE										GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.57				14 2330							
TOTAL DEPARTURE										NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 10				MINIMUM TEMP <= 32 : 0				PRECIPITATION >= 0.01 INCH: 14			
HEATING : 0 0 0 0										MAXIMUM TEMP <= 32 : 0				MINIMUM TEMP <= 0 : 0				PRECIPITATION >= 0.10 INCH: 11							
COOLING : 449 6 1112 193										THUNDERSTORMS : 8				HEAVY FOG : 1				SNOWFALL >= 1.0 INCH : 0							

JULY 2015
RICHMOND, VA

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA (KRIC)
JULY 2015

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	0.58	0.08											01												01	0.66	0.66	
02					T	T	0.01		T				02	0.07	0.29			T	T						02	0.37	0.37	
03													03					T	T						03	0.24	0.24	
04	0.03	T				T							04			0.07		1.06	0.05	T	0.01	0.16	0.04	0.03	04	1.21	1.21	
05													05					T	0.01	0.11	0.03	T	T		05	0.15	0.15	
06	0.01	0.03											06			0.13	0.21	0.04							06	0.42	0.42	
07													07												07	0.00	0.00	
08												T	08	T											08	T	T	
09													09												09	0.00	0.00	
10													10			T	T	0.03	0.02	T					10	0.05	0.05	
11	T	T	T			0.01	0.03	0.04	T	0.06	0.06	0.47	11	T	T	T	T								11	0.67	0.67	
12													12												12	0.00	0.00	
13													13			T	0.18	0.75	T						13	0.93	0.93	
14		T	T								0.02		14												14	0.02	0.02	
15													15		T	T									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			0.06	T	0.65							19	0.71	0.71	
20													20												20	0.00	0.00	
21													21	T	T	0.06									21	0.06	0.06	
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													27					0.03	0.19	0.03	T				27	0.25	0.25	
28	T	T											28	0.14	0.01										28	0.15	0.15	
29								T	T	T			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)	0.29	0.50	0.67	0.82	1.01	1.09	1.11	1.11	1.11	1.11	1.11	1.11
Ending Date	13	04	04	04	04	04	04	04	04	04	04	04
Ending Time (Hr/Min)	1629	1737	1742	1746	1755	1810	1817	1817	1817	1817	1817	1817

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 JULY 2015

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.

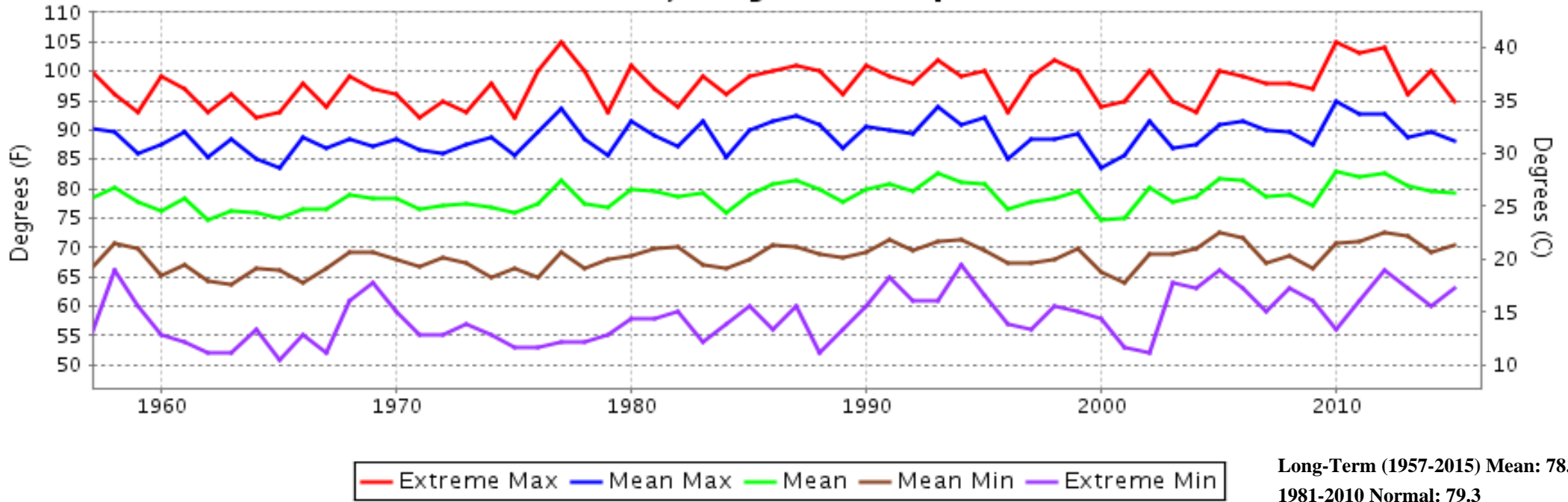
NORMALS ARE FOR THE YEARS 1981-2010

ADDITIONAL NOTES & ERRATA:

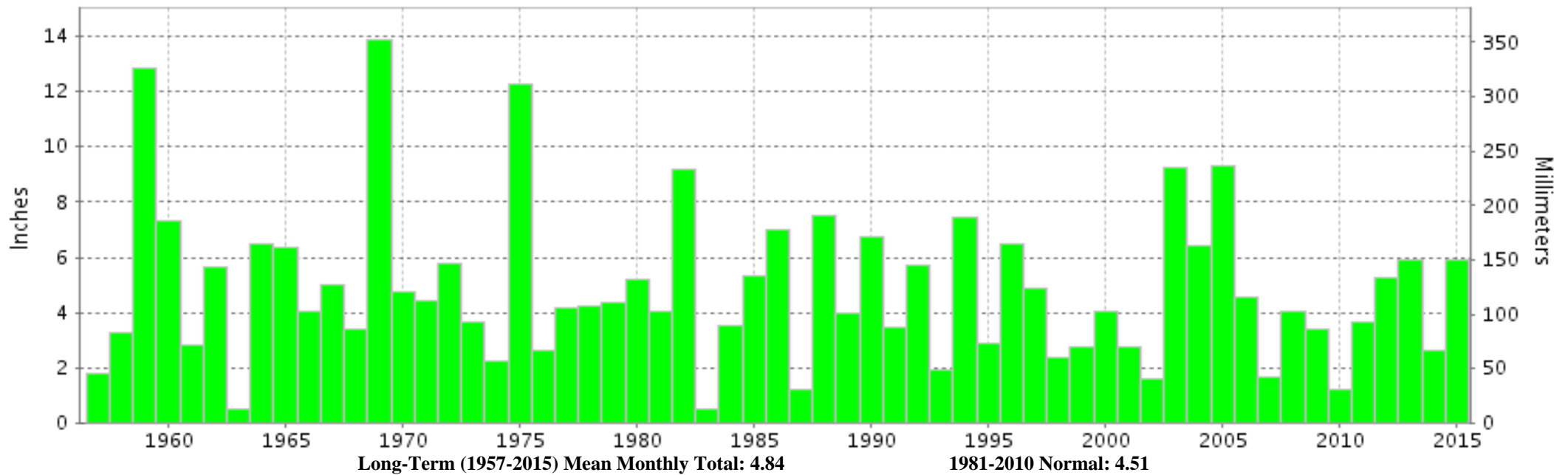
Station Augmentation-SANDSTON COOP
Lat/Lon:37.54417/-77.27583 Elevation:165
Distance:4 MI Dir:E
Augmented Elements:Temp, Precip, Snow
Equipment:MMTS, SRG, Snowboard

Date	VISIBILITY (MILES)	
	MINIMUM	MAXIMUM
01	3.00	10.00
02	2.00	10.00
03	2.50	10.00
04	1.50	10.00
05	0.25	10.00
06	0.75	10.00
07	7.00	10.00
08	10.00	10.00
09	10.00	10.00
10	7.00	10.00
11	4.00	10.00
12	6.00	10.00
13	1.25	10.00
14	10.00	10.00
15	10.00	10.00
16	10.00	10.00
17	8.00	10.00
18	10.00	10.00
19	7.00	10.00
20	5.00	10.00
21	9.00	10.00
22	10.00	10.00
23	10.00	10.00
24	10.00	10.00
25	10.00	10.00
26	10.00	10.00
27	8.00	10.00
28	2.00	10.00
29	9.00	10.00
30	10.00	10.00
31	10.00	10.00
AVGS	6.88	10.00
MINIMUM VISIBILITY (MILES)		
<= .25	<= 3.0	>= 7.0
1	8	20

RICHMOND, VA JULY Temperatures



RICHMOND, VA JULY Precipitation





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RICHMOND, VA

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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 Centers for Environmental Information (NCEI), Asheville, North Carolina 28801.

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

DIRECTOR

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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 : ncei.orders@noaa.gov

NOAA, National Centers for Environmental Information
Attn: Customer Engagement Branch
151 Patton Avenue
Asheville, NC 28801-5001