



JANUARY 2009 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			
																		SPEED 20	DIR 21	SPEED 22	DIR 23			
01	36	21	29	-8	7	22	36	0			0.0	0.00	30.14	30.34	3.1	34	5.9	21	02	15	36	01		
02	43	22	33	-4	25	32	32	0	RA SN BR		T	0.06	29.83	30.03	9.2	23	9.9	30	23	23	21	02		
03	52	32	42	5	28	36	23	0			0.0	0.00	29.91	30.10	0.4	24	3.7	16	29	13	06	03		
04	49	28	39	2	33	38	26	0	RA BR		0.0	T	29.95	30.14	2.8	20	3.7	16	24	13	23	04		
05	56	45	51*	14	46	48	14	0	RA MIFG BR HZ		0.0	0.03	29.82	30.01	2.0	08	6.5	22	08	16	08	05		
06	45	36	41	5	35	36	24	0	RA DZ BR		0.0	0.35	29.72	29.92	5.3	05	5.8	15	04	13	03	06		
07	60	35	48	12	37	41	17	0	TS TSRA RA DZ FG+ FG BR		0.0	0.23	29.21	29.41	7.3	28	10.6	45*	27	33	27	07		
08	50	32	41	5	22	34	24	0			0.0	0.00	29.49	29.68	10.1	28	12.9	36	28	26	28	08		
09	44	27	36	0	16	28	29	0			0.0	0.00	29.97	30.17	5.4	29	7.1	22	27	17	27	09		
10	57	30	44	8	33	40	21	0	RA BR		0.0	0.10	29.91	30.10	7.0	21	7.2	28	23	22	22	10		
11	52	35	44	8	36	41	21	0	RA		0.0	0.05	29.76	29.94	4.1	02	9.2	23	03	18	01	11		
12	44	28	36	0	22	31	29	0			0.0	0.00	30.05	30.24	1.6	08	4.0	13	33	10	36	12		
13	41	27	34	-2	27	32	31	0			0.0	0.00	29.84	30.04	1.8	25	3.9	17	17	13	30	13		
14	37	26	32	-4	14	27	33	0			0.0	0.00	29.93	30.13	1.1	31	8.8	25	34	17	01	14		
15	36	16	26	-10	11	24	39	0			0.0	0.00	30.08	30.27	6.8	36	10.4	26	35	22	36	15		
16	23	11	17	-19	-6	13	48	0			0.0	0.00	30.42	30.62	6.5	35	7.3	21	35	16	33	16		
17	29	4*	17*	-19	0	14	48	0			0.0	0.00	30.30	30.50	5.3	20	6.1	23	21	16	19	17		
18	42	29	36	0	17	29	29	0			0.0	0.00	29.73	29.93	9.4	21	9.6	21	21	17	21	18		
19	45	27	36	0	29	33	29	0	RA SN FG+ BR		T	T	29.50	29.68	1.6	24	6.1	24	04	20	04	19		
20	34	23	29	-7	11	23	36	0			0.0	0.00	29.59	29.78	12.9	01	13.6	31	36	25	36	20		
21	36	15	26	-10	7	20	39	0			0.0	0.00	29.85	30.06	3.3	27	4.5	18	27	15	29	21		
22	50	16	33	-3	13	26	32	0			0.0	0.00	29.90	30.10	5.9	23	6.6	18	28	15	24	22		
23	61	27	44	8	25	36	21	0			0.0	0.00	29.82	29.99	8.6	22	9.2	25	23	21	23	23		
24	54	25	40	4	25	37	25	0			0.0	0.00	29.84	30.09	6.1	01	9.3	23	03	18	03	24		
25	34	19	27	-9	12	23	38	0			0.0	0.00	30.15	30.36	1.5	06	2.6	12	04	8	05	25		
26	37	31	34	-3	19	29	31	0	SN		T	T	30.21	30.41	2.0	10	2.9	14	17	8	06	26		
27	34	31	33	-4	29	31	32	0	RA DZ FZRA FZDZ SN PL BR		T	0.50	30.20	30.40	4.2	10	4.6	13	09	9	10	27		
28	65*	32	49	12	39	41	16	0	RA DZ FZDZ FG+ FG BR		0.0	0.17	29.69	29.91	5.8	24	8.6	39	31	35*	34	28		
29	44	27	36	-1	27	32	29	0			0.0	0.00	29.80	30.01	0.5	06	2.4	15	06	9	06	29		
30	47	24	36	-1	20	30	29	0	BR		0.0	0.00	29.79	29.99	5.9	31	7.0	25	32	21	33	30		
31	41	25	33	-4	10	26	32	0			0.0	0.00	29.91	30.12	6.4	28	8.0	23	26	18	28	31		

44.5	26.0	35.3	☼	21.6	30.7	29.5	0.0	< MONTHLY AVERAGES TOTALS >				T	1.49	29.88	30.08	1.8	28	7.0	< MONTHLY AVERAGES				
-0.8	-1.6	-1.1		-----DEPARTURE FROM NORMAL ----->								-2.06	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS								GREATEST 24-HR PRECIPITATION : 0.52 DATE : 27-28				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY								GREATEST 24-HR SNOWFALL : T DATE : 27+				MAXIMUM : 30.69				17 0106							
TOTAL DEPARTURE								GREATEST SNOW DEPTH : DATE :				MINIMUM : 29.21				07 1454							
SEASON TO DATE								NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 0				MINIMUM TEMP <= 32 : 27				PRECIPITATION >= 0.01 INCH : 8			
HEATING : 913 40 2247 -97								MAXIMUM TEMP <= 32 : 2				MINIMUM TEMP <= 0 : 0				PRECIPITATION >= 0.10 INCH : 5							
COOLING : 0 0 0 0								THUNDERSTORMS : 1				HEAVY FOG : 3				SNOWFALL >= 1.0 INCH : 0							

JANUARY 2009
RICHMOND, VA

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

RICHMOND, VA (KRIC)
JANUARY 2009

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												T	02	0.03	T										02	0.06	0.06	
03												T	03												03	0.00	0.00	
04													04												04	T	T	
05		T										T	05	0.03											05	0.03	0.03	
06	0.01	0.05	0.01	T	0.02	0.04	0.01	T	0.01	0.02	0.02	0.02	06	T	T	0.03	0.01	T	T	0.06	0.03	0.01	T	T	T	06	0.35	0.35
07	T	T	T	0.01	0.01	T			0.02	0.16	0.01	T	07	0.01			T	T	0.01	T				07	0.23	0.23		
08													08												08	0.00	0.00	
09													09												09	0.00	0.00	
10													10			T	0.02	0.03	0.02	0.01	T	0.01	0.01	10	0.10	0.10		
11			0.04	0.01	T								11												11	0.05	0.05	
12													12												12	0.00	0.00	
13													13												13	0.00	0.00	
14													14												14	0.00	0.00	
15													15												15	0.00	0.00	
16													16												16	0.00	0.00	
17													17												17	0.00	0.00	
18													18												18	0.00	0.00	
19					T								19			T	T				T			19	T	T		
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	T	T	
27													27	0.01	T	0.01	T	0.03	0.05	0.03	0.05	0.08	0.02	T	0.01	27	0.50	0.50
28	T	0.01	T	0.01	T	T	T	T	0.06	0.10	0.04	0.01	28			T	0.12	0.03						28	0.17	0.17		
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)	0.07	0.09	0.11	0.12	0.14	0.16	0.18	0.18	0.18	0.19	0.19	0.20
Ending Date	07	07	07	07	07	07	07	07	07	07	07	27
Ending Time (Hr/Min)	0928	0933	0933	0933	0942	0942	0948	0948	0948	1047	1047	1127

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 JANUARY 2009

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:

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							9.00	10.00	
03							10.00	10.00	
04							5.00	10.00	
05							0.75	10.00	
06							2.00	10.00	
07							0.25	10.00	
08							10.00	10.00	
09							10.00	10.00	
10							6.00	10.00	
11							9.00	10.00	
12							10.00	10.00	
13							7.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							7.00	10.00	
19							0.25	10.00	
20							9.00	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							9.00	10.00	
27							1.75	10.00	
28							0.25	10.00	
29							9.00	10.00	
30							3.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							7.33	10.00	
SUNSHINE (Minutes)									
Total : 0					Possible : 18462				
Percent Possible : 0									
NUMBER OF DAYS WITH : SKY CONDITION									
Clear		Partly CLDY			Cloudy			Missing	
MINIMUM VISIBILITY (MILES)									
<= .25			<= 3.0				>= 7.0		
3			7				22		

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

JANUARY 2009

KRIC

WBAN # 13740

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)																	
			Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)	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												
																														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: 0724													JAN 01			SUNSET: 1702					SUNRISE: 0724													JAN 07			SUNSET: 1707				
01	CLR	NC			10.00		26	4	20	39	9	33	30.06	30.25	01	OVC	002			0.50	-DZ	FG	36	35	36	96	0	00	29.48	29.67											
04	CLR	NC			10.00		24	6	19	46	9	31	30.12	30.32	04	OVC	002			2.00	-DZ	BR	36	35	36	96	10	34	29.39	29.59											
07	CLR	NC			10.00		21	7	17	55	7	34	30.18	30.38	07	OVC	001			0.50	FG		35	35	35	100	5	VR	29.23	29.42											
10	FEW	250			10.00		29	5	23	36	9	02	30.23	30.43	10	OVC	060			2.00	-RA	BR	37	37	37	100	3	VR	29.23	29.42											
13	FEW	250			10.00		34	6	26	31	7	01	30.18	30.38	13	OVC	250			1.50	BR		46	45	46	96	9	17	29.03	29.22											
16	SCT	250			10.00		36	4	27	26	0	00	30.15	30.35	16	OVC	250			10.00			54	46	50	75	16	28	29.06	29.24											
19	SCT	250			10.00		27	11	22	51	3	16	30.15	30.35	19	OVC	100			10.00	-TSRA		48	40	44	74	23	28	29.12	29.31											
22	SCT	250			10.00		24	12	21	60	6	18	30.10	30.29	22	CLR	NC			10.00			43	25	36	49	18	28	29.28	29.47											
SUNRISE: 0724													JAN 02			SUNSET: 1703					SUNRISE: 0724													JAN 08			SUNSET: 1708				
01	OVC	130			10.00		27	14	23	58	8	20	30.03	30.23	01	CLR	NC			10.00			41	27	35	58	11	25	29.33	29.52											
04	OVC	120			10.00		31	13	25	47	14	20	29.95	30.15	04	CLR	NC			10.00			40	26	35	57	14	26	29.41	29.61											
07	BKN	130			10.00		30	15	25	54	8	21	29.91	30.11	07	FEW	250			10.00			36	24	32	62	11	22	29.45	29.64											
10	OVC	110			10.00		36	16	29	44	23	22	29.86	30.06	10	SCT	080			10.00			44	27	37	51	14	24	29.47	29.65											
13	OVC	038			10.00	-RA	35	32	34	89	8	23	29.78	29.98	13	SCT	080			10.00			48	26	39	42	14	29	29.42	29.61											
16	OVC	250			10.00		42	35	39	76	7	26	29.72	29.91	16	FEW	070			10.00			47	16	36	29	17	34	29.47	29.65											
19	BKN	250			10.00		40	35	38	82	9	25	29.73	29.93	19	CLR	NC			10.00			40	16	32	38	9	33	29.58	29.78											
22	FEW	250			10.00		37	34	36	89	10	25	29.74	29.94	22	CLR	NC			10.00			36	16	29	44	10	32	29.67	29.87											
SUNRISE: 0724													JAN 03			SUNSET: 1704					SUNRISE: 0724													JAN 09			SUNSET: 1709				
01	CLR	NC			10.00		39	33	37	79	9	27	29.76	29.96	01	CLR	NC			10.00			33	15	27	48	11	33	29.73	29.93											
04	CLR	NC			10.00		37	32	35	82	3	28	29.79	29.99	04	CLR	NC			10.00			30	14	25	51	7	31	29.84	30.04											
07	CLR	NC			10.00		36	31	34	82	3	VR	29.89	30.09	07	CLR	NC			10.00			28	15	24	58	6	26	29.94	30.14											
10	FEW	200			10.00		41	28	36	60	9	10	29.97	30.16	10	CLR	NC			10.00			35	15	28	44	13	29	30.03	30.23											
13	CLR	NC			10.00		47	24	38	41	5	25	29.92	30.12	13	CLR	NC			10.00			41	15	32	35	11	24	29.98	30.18											
16	CLR	NC			10.00		51	26	41	38	0	00	29.91	30.10	16	SCT	200			10.00			43	15	33	32	8	28	29.99	30.19											
19	FEW	250			10.00		42	27	36	55	5	10	29.94	30.14	19	FEW	200			10.00			35	19	30	52	0	00	30.05	30.25											
22	BKN	250			10.00		36	27	33	70	3	11	29.98	30.17	22	SCT	200			10.00			32	20	28	61	3	13	30.08	30.28											
SUNRISE: 0724													JAN 04			SUNSET: 1704					SUNRISE: 0724													JAN 10			SUNSET: 1710				
01	BKN	250			10.00		33	27	31	79	0	00	29.98	30.18	01	BKN	160			10.00			31	22	28	69	3	16	30.05	30.25											
04	BKN	250			10.00		31	25	29	78	0	00	29.97	30.17	04	OVC	150			10.00			34	24	30	67	0	00	30.05	30.24											
07	OVC	055			10.00		35	26	32	70	3	10	29.99	30.19	07	BKN	140			10.00			35	23	31	62	3	19	30.04	30.24											
10	OVC	095			10.00		38	26	33	62	6	14	30.02	30.22	10	FEW	150			10.00			44	26	37	49	11	22	30.03	30.22											
13	OVC	030			10.00		43	30	38	60	6	18	29.93	30.13	13	SCT	250			10.00			54	30	44	40	13	20	29.89	30.08											
16	OVC	017			10.00		47	34	41	61	6	19	29.92	30.11	16	OVC	110			10.00			55	33	45	43	8	22	29.82	30.02											
19	OVC	011			10.00		46	40	43	80	5	20	29.91	30.11	19	OVC	055			6.00	-RA	BR	48	45	47	89	6	20	29.78	29.98											
22	OVC	005			6.00	BR	48	45	47	89	9	24	29.89	30.09	22	OVC	070			10.00	-RA		51	48	49	90	9	20	29.71	29.91											
SUNRISE: 0724													JAN 05			SUNSET: 1705					SUNRISE: 0724													JAN 11			SUNSET: 1711				
01	OVC	002			1.50	BR	49	48	48	96	7	24	29.84	30.03	01	OVC	100			10.00			51	46	48	83	8	20	29.61	29.80											
04	BKN	130			3.00	BR	50	49	49	96	7	22	29.81	30.00	04	OVC	060			10.00			51	47	49	86	10	26	29.62	29.81											
07	BKN	250			2.50	BR	49	48	48	96	5	20	29.80	29.99	07	OVC	200			10.00			50	44	47	80	9	26	29.67	29.86											
10	OVC	250			7.00		55	51	53	86	6	34	29.85	30.04	10	BKN	250			10.00			51	40	46	66	8	33	29.76	29.95											
13	OVC	250			9.00		53	49	51	86	3	08	29.80	29.99	13	OVC	250			10.00			47	33	41	58	13	05	29.78	29.97											
16	OVC	017			10.00		52	46	49	80	3	07	29.78	29.97	16	OVC	250			10.00			44	30	38	58	8	07	29.78	29.98											
19	OVC	015			10.00		49	43	46	80	8	07	29.82	30.01	19	OVC	045			10.00			39	26	34	60	11	05	29.84	30.03											
22	OVC	019			10.00		47	41	44	80	6	08	29.84	30.04	22	OVC	045			10.00			36	24	32	62	7	07	29.86	30.06											
SUNRISE: 0724													JAN 06			SUNSET: 1706					SUNRISE: 0724													JAN 12			SUNSET: 1712				
01	OVC	025			8.00	-RA	43	36	40	76	7	03	29.82	30.02	01	OVC	040			10.00			35	23	31	62	8	04	29.87	30.07											
04	OVC	029			10.00	-RA	40	36	38	86	3	09	29.82	30.01	04	OVC	044			10.00			33	21	29	61	7	02	29.94	30.14											
07	OVC	026			10.00	-RA	37	32	35	82	8	07	29.80	30.00	07	FEW	250			10.00			30	21	27	69	0	00	30.00	30.20											
10	OVC	023			9.00	-RA	36	33	35	89	7	07	29.81	30.00	10	FEW	250			10.00			36	19	30	50	3	05	30.10	30.30											
13	OVC	008			2.00	-RA	37	35	36	93	8	06	29.69	29.88	13	SCT	250			10.00			42	21	34	43	5	03	30.07	30.27											
16	OVC	006			2.00	BR	36	34	35	92	7	03	29.67	29.87	16	SCT	250			10.00			44	19	35	37	3	02	30.07	30.26											
19	OVC	004			2.00	-DZ	36	35	36	96	6	05	29.65	29.85	19	FEW	200			10.00			34	23	30	64	5	13	30.11	30.31											
22	OVC	004			2.00	-DZ	36	35	36	96	3	01	29.58	29.78	22	BKN	200			10.00			31	24	29	75	7	14	30.12	30.32											

OBSERVATIONS AT 3-HOURLY INTERVALS

RICHMOND, VA

JANUARY 2009

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		
																												DRY BULB	DEW POINT
SUNRISE: 0723						JAN 13						SUNSET: 1713																	
01	FEW	250			10.00	JAN 13	29	25	28	85	10	15	30.09	30.28	01	CLR	NC			6.00	BR	29	27	28	92	3	23	29.56	29.75
04	BKN	250			9.00		30	25	28	82	0	00	30.04	30.24	04	OVC	060			4.00	BR	31	30	31	96	0	00	29.53	29.72
07	OVC	250			10.00		29	24	27	82	0	00	29.99	30.19	07	OVC	001			0.75	BR	32	32	32	100	7	22	29.52	29.71
10	OVC	200			10.00		34	28	32	79	0	00	29.94	30.14	10	OVC	003			2.50	BR	34	33	34	96	8	24	29.52	29.71
13	OVC	030			10.00		39	29	35	67	0	00	29.80	29.99	13	BKN	095			10.00		41	33	38	73	8	23	29.44	29.63
16	OVC	150			10.00		41	28	36	60	0	00	29.71	29.91	16	BKN	060			10.00		43	29	37	58	6	25	29.41	29.61
19	OVC	150			10.00		38	29	34	70	6	27	29.66	29.86	19	SCT	075			10.00		34	26	31	73	7	04	29.45	29.65
22	BKN	150			10.00		38	29	34	70	11	30	29.66	29.85	22	BKN	075			7.00		31	26	29	82	14	05	29.52	29.70
SUNRISE: 0723						JAN 14						SUNRISE: 0721						JAN 19						SUNSET: 1719					
01	FEW	140			10.00		37	26	33	65	11	33	29.73	29.92	01	OVC	095			9.00		29	24	27	82	11	04	29.52	29.72
04	CLR	NC			10.00		32	14	26	47	11	34	29.84	30.04	04	OVC	042			10.00		27	12	23	53	15	02	29.52	29.72
07	CLR	NC			10.00		27	13	23	55	11	02	29.96	30.15	07	OVC	070			10.00		25	11	21	55	11	03	29.53	29.72
10	FEW	250			10.00		30	8	24	39	6	VR	30.05	30.24	10	OVC	250			10.00		26	11	22	53	14	01	29.60	29.80
13	SCT	250			10.00		32	9	25	38	5	17	30.00	30.20	13	OVC	250			10.00		32	10	25	40	17	35	29.53	29.72
16	SCT	110			10.00		36	13	29	39	9	19	29.94	30.14	16	BKN	250			10.00		32	9	25	38	15	36	29.53	29.72
19	BKN	110			10.00		35	15	28	44	9	18	29.93	30.13	19	CLR	NC			10.00		27	9	22	47	10	02	29.64	29.84
22	FEW	090			10.00		33	17	28	52	14	20	29.91	30.11	22	CLR	NC			10.00		25	9	21	51	13	35	29.73	29.92
SUNRISE: 0723						JAN 15						SUNRISE: 0720						JAN 21						SUNSET: 1721					
01	SCT	085			10.00		32	20	28	61	9	22	29.88	30.08	01	CLR	NC			10.00		22	9	19	57	3	31	29.76	29.96
04	CLR	NC			10.00		29	20	26	69	6	23	29.84	30.04	04	CLR	NC			10.00		20	9	17	62	5	29	29.80	29.99
07	FEW	080			10.00		32	20	28	61	6	33	29.92	30.12	07	CLR	NC			10.00		19	9	16	65	3	31	29.86	30.06
10	BKN	200			10.00		33	19	28	56	16	03	30.06	30.25	10	CLR	NC			10.00		26	10	21	51	3	06	29.92	30.12
13	BKN	250			10.00		34	13	27	42	11	01	30.08	30.27	13	FEW	080			10.00		33	7	25	33	8	27	29.87	30.06
16	SCT	055			10.00		31	3	24	30	17	02	30.13	30.33	16	BKN	250			10.00		35	3	26	26	8	31	29.87	30.06
19	SCT	070			10.00		23	-1	17	35	11	02	30.25	30.45	19	CLR	NC			10.00		25	6	20	44	6	22	29.89	30.09
22	CLR	NC			10.00		19	-2	15	39	0	00	30.31	30.51	22	CLR	NC			10.00		26	7	21	44	6	22	29.90	30.10
SUNRISE: 0722						JAN 16						SUNRISE: 0720						JAN 22						SUNSET: 1722					
01	FEW	070			10.00		17	1	13	49	5	01	30.32	30.52	01	CLR	NC			10.00		20	9	17	62	9	21	29.90	30.09
04	CLR	NC			10.00		17	-0	13	47	8	31	30.36	30.57	04	CLR	NC			10.00		22	9	19	57	3	22	29.91	30.11
07	CLR	NC			10.00		15	-4	11	42	9	32	30.42	30.63	07	CLR	NC			10.00		20	10	17	65	3	19	29.94	30.14
10	FEW	200			10.00		19	-8	14	29	13	36	30.49	30.69	10	SCT	200			10.00		32	14	26	47	7	29	29.96	30.16
13	CLR	NC			10.00		22	-13	16	20	8	33	30.43	30.63	13	SCT	200			10.00		44	13	33	28	11	25	29.88	30.08
16	SCT	250			10.00		22	-14	16	19	9	33	30.41	30.61	16	FEW	200			10.00		49	14	36	25	10	27	29.87	30.06
19	BKN	250			10.00		19	-12	14	24	6	35	30.43	30.63	19	CLR	NC			10.00		37	16	30	42	5	18	29.88	30.08
22	SCT	250			10.00		15	-6	11	38	5	04	30.46	30.66	22	CLR	NC			10.00		34	16	28	48	9	22	29.89	30.09
SUNRISE: 0722						JAN 17						SUNRISE: 0719						JAN 23						SUNSET: 1723					
01	CLR	NC			10.00		10	-2	8	58	0	00	30.47	30.68	01	CLR	NC			10.00		33	19	28	56	8	21	29.88	30.08
04	CLR	NC			10.00		8	-2	6	63	3	05	30.45	30.65	04	CLR	NC			10.00		30	19	26	64	6	16	29.88	30.07
07	CLR	NC			10.00		6	-1	5	73	0	00	30.46	30.66	07	CLR	NC			10.00		28	20	25	72	0	00	29.89	30.09
10	FEW	250			10.00		16	-0	13	49	3	19	30.47	30.67	10	CLR	NC			10.00		40	22	33	49	5	25	29.90	30.09
13	SCT	250			10.00		23	-3	17	32	0	00	30.31	30.52	13	FEW	250			10.00		56	26	43	32	9	20	29.78	29.98
16	OVC	250			10.00		27	-2	20	28	8	21	30.20	30.40	16	SCT	250			10.00		59	28	45	31	15	23	29.72	29.91
19	OVC	150			10.00		27	2	21	34	9	21	30.16	30.36	19	SCT	250			10.00		53	28	42	38	14	22	29.71	29.90
22	OVC	090			10.00		28	3	22	34	11	19	30.07	30.27	22	BKN	250			10.00		51	30	42	45	15	25	29.69	29.89
SUNRISE: 0722						JAN 18						SUNRISE: 0719						JAN 24						SUNSET: 1724					
01	OVC	060			10.00		29	3	22	33	11	20	29.98	30.18	01	OVC	200			10.00		54	34	45	47	11	26	29.68	29.87
04	OVC	070			10.00		31	4	24	32	11	20	29.89	30.09	04	OVC	150			10.00		52	35	44	53	7	28	29.70	29.89
07	OVC	075			10.00		32	9	25	38	9	20	29.84	30.04	07	OVC	120			10.00		50	36	44	59	0	00	29.75	29.94
10	OVC	090			10.00		34	15	28	46	13	20	29.80	30.00	10	OVC	130			10.00		49	24	39	38	10	03	29.87	30.06
13	OVC	080			10.00		40	18	32	41	11	23	29.66	29.85	13	OVC	150			10.00		49	24	39	38	14	02	29.90	30.09
16	OVC	095			10.00		41	22	34	47	10	21	29.60	29.80	16	SCT	200			10.00		46	21	37	37	11	04	29.93	30.12
19	SCT	250			10.00		32	26	30	79	6	21	29.60	29.79	19	FEW	200			10.00		36	18	30	48	9	03	30.04	30.24
22	SCT	200			9.00		32	29	31	89	9	22	29.60	29.80	22	SCT	250			10.00		29	12	24	49	9	03	30.12	30.32

OBSERVATIONS AT 3-HOURLY INTERVALS

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: 0718 JAN 25 SUNSET: 1725														
01	CLR	NC				25	10	21	53	5	03	30.15	30.35	
04	CLR	NC				22	10	19	60	5	04	30.17	30.37	
07	CLR	NC				20	10	17	65	3	01	30.18	30.38	
10	BKN	080				28	10	23	47	5	10	30.22	30.42	
13	OVC	075				31	11	25	43	0	00	30.14	30.33	
16	BKN	150				33	12	27	42	3	26	30.12	30.32	
19	OVC	150				31	15	26	51	0	00	30.14	30.34	
22	OVC	200				32	17	27	54	3	08	30.15	30.35	
SUNRISE: 0717 JAN 26 SUNSET: 1726														
01	OVC	200				31	17	26	56	0	00	30.16	30.36	
04	OVC	075				31	19	27	61	5	08	30.17	30.37	
07	OVC	090				31	18	27	59	0	00	30.21	30.40	
10	OVC	095			-SN	33	17	28	52	6	09	30.27	30.47	
13	OVC	070				35	17	29	48	3	23	30.23	30.42	
16	OVC	090				37	17	30	44	6	16	30.18	30.38	
19	OVC	070				37	18	31	46	0	00	30.23	30.43	
22	OVC	042				35	22	30	59	5	14	30.22	30.42	
SUNRISE: 0717 JAN 27 SUNSET: 1728														
01	OVC	050				34	27	31	76	6	16	30.21	30.41	
04	OVC	046				34	26	31	73	0	00	30.22	30.42	
07	OVC	040				33	26	30	75	0	00	30.24	30.44	
10	OVC	035			-RAPL BR	32	29	31	89	3	10	30.29	30.48	
13	OVC	006			-RA BR	33	31	32	92	7	10	30.23	30.42	
16	OVC	004			-RA BR	32	30	31	92	6	08	30.20	30.40	
19	OVC	008			-FZRA BR	32	30	31	92	7	11	30.19	30.39	
22	OVC	009			-FZRA BR	32	31	32	96	5	10	30.13	30.33	
SUNRISE: 0716 JAN 28 SUNSET: 1729														
01	OVC	004			-FZDZ BR	32	32	32	100	5	10	30.04	30.24	
04	OVC	003			-FZDZ BR	32	32	32	100	3	02	29.97	30.17	
07	OVC	001			-FZDZ BR	32	32	32	100	0	00	29.85	30.05	
10	VV	001			FG	34	34	34	100	5	19	29.73	29.93	
13	OVC	001			FG	53	53	53	100	16	20	29.52	29.71	
16	OVC	060				65	56	60	73	21	23	29.44	29.62	
19	BKN	100				49	43	46	80	13	29	29.58	29.77	
22	OVC	150				44	33	39	65	8	30	29.69	29.89	
SUNRISE: 0715 JAN 29 SUNSET: 1730														
01	SCT	200				38	31	35	76	5	29	29.73	29.93	
04	CLR	NC				31	28	30	89	0	00	29.79	29.98	
07	FEW	200				28	24	27	85	0	00	29.84	30.03	
10	FEW	250				36	25	32	64	6	08	29.89	30.09	
13	FEW	050				40	26	35	57	3	VR	29.82	30.01	
16	SCT	250				44	26	37	49	5	27	29.81	30.00	
19	FEW	250				34	28	32	79	0	00	29.83	30.02	
22	CLR	NC				32	27	30	82	3	18	29.84	30.03	
SUNRISE: 0714 JAN 30 SUNSET: 1731														
01	CLR	NC				30	27	29	89	0	00	29.81	30.01	
04	CLR	NC			BR	28	26	27	92	0	00	29.79	29.99	
07	SCT	250			BR	28	26	27	92	0	00	29.80	30.00	
10	BKN	250				39	27	34	62	7	28	29.81	30.01	
13	SCT	040				45	23	37	42	9	27	29.74	29.94	
16	SCT	070				45	13	34	27	15	32	29.73	29.93	
19	BKN	250				38	11	29	33	11	33	29.79	29.99	
22	SCT	250				32	11	26	42	6	34	29.84	30.03	

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: 0714 JAN 31 SUNSET: 1732														
01	CLR	NC				29	11	24	47	3	29	29.84	30.03	
04	CLR	NC				28	13	23	53	5	29	29.85	30.04	
07	CLR	NC				26	12	22	55	5	32	29.91	30.11	
10	CLR	NC				32	10	25	40	13	30	29.97	30.17	
13	CLR	NC				37	7	28	28	11	30	29.94	30.14	
16	CLR	NC				41	4	30	21	11	28	29.94	30.14	
19	FEW	250				38	7	29	27	8	26	29.96	30.16	
22	CLR	NC				29	12	24	49	7	22	29.95	30.15	

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.

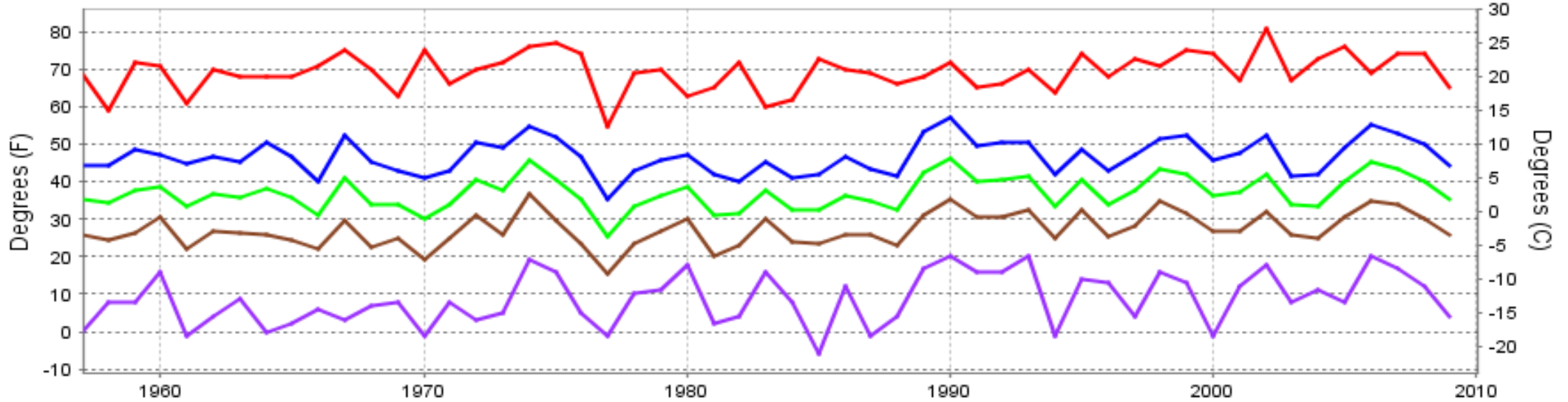
& = Original observation contained additional weather elements.

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			32	22	29	67	29.88	30.08	8.84	6	2	24
02			32	22	29	68	29.88	30.08	8.68	6	3	24
03			32	21	28	68	29.88	30.08	8.81	6	3	25
04			31	21	28	68	29.88	30.08	8.89	6	3	25
05			31	21	28	69	29.88	30.08	8.74	5	2	24
06			30	21	27	70	29.89	30.09	8.73	5	2	24
07			30	21	27	70	29.90	30.10	8.67	4	2	23
08			30	21	28	71	29.92	30.12	8.44	5	2	23
09			33	22	29	66	29.93	30.13	8.41	7	1	19
10			35	21	30	59	29.94	30.13	8.77	8	1	23
11			37	21	32	56	29.93	30.12	8.81	8	1	18
12			39	22	33	54	29.90	30.09	8.77	8	3	25
13			40	22	34	52	29.86	30.06	8.87	8	3	25
14			42	22	35	49	29.84	30.04	9.38	9	4	25
15			43	21	35	47	29.84	30.03	9.48	9	6	26
16			42	21	35	46	29.84	30.04	9.48	9	4	25
17			40	21	34	49	29.85	30.05	9.31	7	3	25
18			38	22	33	55	29.86	30.06	9.39	7	2	23
19			36	22	32	58	29.87	30.07	9.35	7	2	23
20			35	22	31	61	29.88	30.08	9.39	7	2	24
21			35	22	31	62	29.89	30.08	9.48	8	2	24
22			34	22	30	63	29.89	30.09	9.23	8	2	24
23			33	22	30	65	29.89	30.09	9.06	7	2	24
24			33	22	29	67	29.88	30.08	9.15	7	2	24

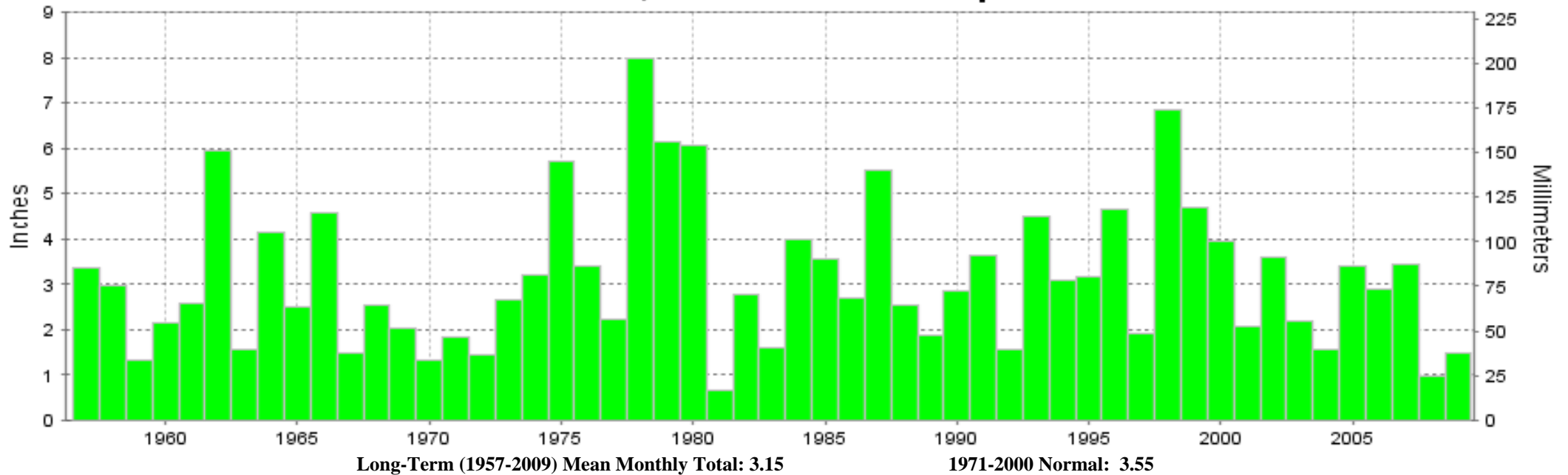
RICHMOND, VA JANUARY Temperatures



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

Long-Term (1957-2009) Mean: 37.0
1971-2000 Normal: 36.4

RICHMOND, VA JANUARY Precipitation



Long-Term (1957-2009) Mean Monthly Total: 3.15

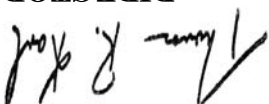
1971-2000 Normal: 3.55



**JANUARY 2009
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.



DIRECTOR

NCDC now offers an annual online subscription for the **Edited Local Climatological Data Publication**. When you purchase this subscription service, you will have **immediate online access** to all previous publications back to July 1996 and all publications thereafter until the expiration of the subscription. Your subscription is valid for one year after purchase. **The total cost for online delivery (including back issues) is significantly less than the cost for offline delivery.** To order this and other subscriptions online with your credit card, go to: **www.ncdc.noaa.gov** and choose subscriptions.

We welcome your questions or comments, please contact us at:

Toll Free Number (866) 742-3322 (voice)

Fax Number : (304) 726-4409

TDD : (828) 271-4010

or Email : ncdc.info@noaa.gov

Local Climatological Data is available at www.ncdc.noaa.gov

United States
Department of Commerce

National Oceanic and
Atmospheric Administration

National Environmental Satellite
and Atmospheric Administration

For address correction, please return a photocopy of this page to Subscription Services indicating changes

NCDC Subscription Services Center
310 State Route 956 Building 300
Rocket Center, WV 26726

OFFICIAL BUSINESS, PENALTY FOR PRIVATE USE \$300

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G-19