

# Local Climatological Data



## MONTHLY SUMMARY

LATITUDE 37° 30' N LONGITUDE 77° 20' W ELEVATION (GROUND) 164 FT. STANDARD TIME USED: EASTERN WBAN #13740

DATE	TEMPERATURE °F			DEGREE DAYS		WEATHER TYPES ON DATES OF OCCURRENCE	SNOW-ICE PELLETS OF GROUND AT 07AM	PRECIPITATION		WIND		SUNSHINE		SKY COVER TENTHS		DATE				
	MAXIMUM	MINIMUM	AVERAGE	HEATING FROM NORMAL	AVERAGE DEW POINT			WATER	SNOW	RESULTANT	FASTEST	MINUTES	PERCENT	SUNRISE TO SUNSET	MIDNIGHT TO MIDNIGHT					
1	42	34	38	1	34	27	0	.01	T	29.80	25	2.0	6.2	12	SW	198	34	10	9	1
2	42	30	36	-1	20	28	0	0	0	29.76	28	10.3	11.4	21	NW	497	86	2	1	2
3	40	23	32	-5	13	33	0	0	0	30.02	28	5.1	7.5	13	NW	579	100	0	0	3
4	41	15	28	-6	17	37	0	0	0	30.30	18	2.4	4.8	10	S	580	100	2	1	4
5	54	24	39	-6	21	26	0	0	0	30.14	18	4.6	5.5	8	SH	449	77	8	7	5
6	50	33	42	0	37	23	0	.38	0	29.95	03	2.8	3.7	7	S	316	54	9	10	6
7	44	39	42	0	42	23	0	.01	0	30.02	35	1.5	3.3	6	SE	0	0	10	10	7
8	66	42	55*	18	50	10	0	1.18	0	29.72	15	7.5	8.3	22	NW	376	6	5	10	8
9	64	13	38	-1	26	28	0	.77	0	29.80	26	11.5	17.1	25	NW	586	100	0	0	9
10	28	12	23	-14	19	42	0	0	0	30.17	27	5.6	7.2	13	NW	587	100	0	0	10
11	34	10*	25	-12	15	40	0	0	0	30.14	14	3.9	4.3	10	S	588	100	8	6	11
12	33	29	31	-6	31	34	0	1.60	T	29.73	03	8.1	8.5	13	NE	0	0	10	10	12
13	42	31	37	0	34	28	0	.03	T	29.40	30	5.0	7.2	11	NW	403	68	9	10	13
14	34	26	30	-7	25	35	0	.03	T	29.74	32	4.2	8.8	13	NW	341	58	10	8	14
15	37	16	27	-11	16	38	0	0	0	30.15	18	2.1	6.0	8	NW	511	86	7	6	15
16	46	30	38	0	32	27	0	1.11	T	29.80	05	2.9	7.2	26	NW	0	0	10	10	16
17	51	30	41	3	33	24	0	0	0	29.85	32	3.7	7.1	16	NW	519	87	3	4	17
18	34	27	31	-7	25	34	0	.93	T	30.04	04	9.2	9.6	14	NE	315	53	10	8	18
19	34	31	33	-5	33	32	0	.37	0	29.52	34	5.3	8.2	13	NW	0	0	10	8	19
20	39	26	33	-5	27	32	0	0	0	29.89	27	5.8	6.0	14	NW	600	100	1	0	20
21	34	19	27	-11	22	38	0	0	0	30.22	36	3.0	4.5	8	NE	413	68	8	5	21
22	42	18	30	-8	22	35	0	0	0	30.28	13	.4	3.2	7	E	603	100	0	0	22
23	46	18	32	-6	24	33	0	0	0	30.09	18	3.9	4.5	8	S	427	71	8	7	23
24	67	34	51	13	43	14	0	1.16	0	28.48	13	3.6	6.0	18	SE	0	0	10	10	24
25	69*	25	47	8	28	18	0	.38	T	29.09	23	22.1	23.9	42	SW	508	83	5	9	25
26	41	25	33	-5	16	32	0	0	0	29.57	24	17.2	17.4	25	SW	611	100	5	2	26
27	34	17	26	-12	12	39	0	0	0	29.75	30	8.9	9.2	18	NW	569	83	4	3	27
28	32	19	26	-12	10	38	0	0	0	29.82	30	10.3	10.5	15	NW	546	88	3	3	28
29	35	16	26	-12	12	38	0	0	0	30.03	30	5.1	6.5	13	NW	546	88	3	3	29
30	34	13	24	-14	15	41	0	0	0	30.02	33	5.6	7.2	16	NW	417	67	8	7	30
31	34	13	24	-14	15	41	0	0	0	30.02	33	5.6	7.2	16	NW	417	67	8	7	31
SUM	1332	735	374	-74	0	0	0	7.97	1.3	29.87	27	3.2	8.2	42	SW	12140	FOR 191	171		
AVG.	43.0	23.7	33.4	-4.1	24	121	0	0.26	0.04	29.87	27	3.2	8.2	42	SW	12140	FOR 191	171		
NO. OF DAYS	31	31	31	31	31	31	0	13	5	11	13	13	13	13	13	13	13	13	13	13
NUMBER OF DAYS	MAXIMUM TEMP. ≥ 90°		MINIMUM TEMP. ≤ 32°		DEP. ≥ 0°		THUNDERSTORMS		PRECIPITATION ≥ 1.0 INCH		GREATEST IN 24 HOURS AND DATES		GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE		SUM		SUM			
	0	2	26	0	59	0	0	9	3	1.88	8-9	.7	9	1	15+	66	6.2	5.5		

JANUARY 1978 RICHMOND, VIRGINIA

\* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.  
 T TRACE AMOUNT.  
 \* ALSO ON AN EARLIER DATE, OR DATES.  
 HEAVY FOG - VISIBILITY 1/4 MILE OR LESS.  
 FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM.  
 DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR

MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS.  
 FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.  
 ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

### SUMMARY BY HOURS

HOUR	LOCAL TIME	SKY COVER TENTHS	AVERAGES					RESULTANT WIND	
			STATION PRESSURE IN.	AIR °F	NET WIND BULB °F	DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	DIRECTION
01	5	29.84	32	30	25	78	7.4	25	1.9
04	5	29.85	29	28	24	83	7.0	29	3.4
07	6	29.87	27	26	22	84	6.4	30	2.2
10	6	29.92	32	29	23	71	9.8	29	3.2
13	6	29.86	38	33	24	61	9.7	28	5.2
16	6	29.85	38	33	23	60	9.6	27	5.4
19	5	29.87	34	31	24	71	7.9	25	2.8
22	4	29.87	32	30	24	74	8.0	26	2.7

### HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT												P. M. HOUR ENDING AT											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
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*Daniel B. Mitchell*  
 DIRECTOR, NATIONAL CLIMATIC CENTER

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# OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER				VISIBILITY	TEMPERATURE				WIND	TEMPERATURE				WIND	TEMPERATURE																		
	CEILING	FEET	LOW	HIGH		AIR	WET BULB	DEW	REL. HUM.		AIR	WET BULB	DEW	REL. HUM.		AIR	WET BULB	DEW	REL. HUM.															
01	0	UNL	10	10		37	35	33	75	35	4	4	UNL	10	7		40	39	37	89	26	6	0	UNL	15	15		30	25	14	51	28	6	
04	0	UNL	10	10		38	35	31	76	33	6	4	UNL	10	7		38	33	23	55	30	15	0	UNL	15	15		25	23	16	69	26	5	
07	0	UNL	10	10		35	33	29	78	36	6	0	UNL	15	15		35	30	19	52	29	10	0	UNL	15	15		23	21	15	71	26	5	
10	0	UNL	10	10		36	34	30	78	37	4	1	UNL	15	15		38	31	17	43	31	12	0	UNL	15	15		32	26	10	40	30	8	
13	0	UNL	10	10		42	38	32	68	23	4	2	UNL	15	15		41	32	16	36	31	11	0	UNL	15	15		37	29	10	33	29	10	
16	0	UNL	10	10		40	38	37	68	22	4	1	UNL	15	15		42	33	15	33	27	9	0	UNL	15	15		0	UNL	10	08	28	29	13
19	0	UNL	10	10		40	39	38	63	21	6	0	UNL	15	15		34	28	13	50	22	5	0	UNL	15	15		26	23	15	63	13	5	
22	0	UNL	10	10		41	40	39	63	24	9	0	UNL	15	15		33	28	16	50	26	11	0	UNL	15	15		26	23	16	66	04	7	
01	0	UNL	15	15		23	21	15	71	05	5	0	UNL	15	15		30	26	19	64	16	4	10	35	12	12		40	37	34	78	13	5	
04	0	UNL	15	15		17	17	14	88	35	4	0	UNL	15	15		28	26	20	72	18	5	10	35	12	12		42	38	32	68	00	0	
07	0	UNL	15	15		19	15	13	92	00	0	0	UNL	15	15		28	26	20	72	18	5	10	35	12	12		36	35	34	69	00	0	
10	0	UNL	15	15		27	23	14	58	14	4	7	250	12	12		36	30	20	52	19	5	10	35	12	12		44	39	33	65	04	5	
13	7	UNL	15	15		35	30	19	52	17	6	10	50	12	12		48	38	21	34	26	6	10	60	10	10		49	42	34	56	03	4	
16	2	UNL	15	15		40	33	19	43	19	6	4	UNL	15	15		52	40	22	31	21	5	10	30	2	4	RF	43	43	42	66	01	3	
19	0	UNL	15	15		31	27	18	59	18	5	8	250	15	15		36	31	23	59	15	4	10	20	4	4	RF	42	42	42	100	02	4	
22	0	UNL	15	15		30	27	20	66	18	3	10	55	10	10		41	35	25	53	19	4	10	2	1	4	RF	42	42	42	100	36	5	
01	0	UNL	15	15		41	41	41	100	31	6	10	2	1	12	RF	44	44	44	100	16	4	10	16	5	12		64	62	61	90	17	21	
04	0	UNL	15	15		40	40	40	100	33	6	10	2	1	12	F	43	43	43	100	16	3	10	13	12	12		56	54	53	90	27	12	
07	0	UNL	15	15		40	40	40	100	36	4	10	2	1	12	F	44	44	44	100	13	4	10	6	12	12		39	38	38	96	36	10	
10	0	UNL	15	15		41	41	41	100	00	0	10	2	1	8	RF	45	45	45	100	26	4	10	5	0	8	S	27	27	27	100	30	18	
13	0	UNL	15	15		42	42	42	100	00	0	10	5	2	8	RF	49	49	49	100	15	7	1	UNL	15	15	15		30	29	29	96	03	7
16	0	UNL	15	15		43	43	43	100	00	0	10	50	3	0		56	55	55	96	13	6	1	UNL	10	10	10		28	23	10	47	26	13
19	0	UNL	15	15		44	44	44	100	09	3	10	80	7	7	RF	64	61	59	84	16	14	0	UNL	10	10	10		22	18	05	49	25	15
22	0	UNL	15	15		44	44	44	100	14	4	10	20	7	7	RF	65	63	61	87	16	16	0	UNL	10	10	10		16	13	00	49	28	16
01	0	UNL	15	15		13	11	00	56	28	14	0	UNL	15	15		17	13	-09	30	32	8	0	UNL	15	15		14	13	10	84	17	3	
04	0	UNL	15	15		12	10	-01	56	27	15	0	UNL	15	15		14	11	-04	44	29	9	0	UNL	15	15		12	12	10	92	00	0	
07	0	UNL	15	15		11	09	-03	53	25	10	0	UNL	15	15		13	10	-04	46	28	5	0	UNL	15	15		11	11	09	92	00	0	
10	0	UNL	15	15		16	13	01	51	25	16	2	UNL	15	15		20	16	-01	39	30	5	4	UNL	12	12		28	24	13	53	08	4	
13	0	UNL	15	15		24	18	00	35	23	13	0	UNL	15	15		28	22	05	37	25	7	8	UNL	12	12		37	30	18	46	14	9	
16	0	UNL	15	15		28	21	00	30	26	12	0	UNL	15	15		33	26	07	33	23	7	10	120	12	12		38	30	15	39	17	5	
19	0	UNL	15	15		25	25	00	33	27	10	0	UNL	15	15		24	21	11	58	19	10	0	UNL	15	15		21	15	10	58	13	5	
22	0	UNL	15	15		21	18	10	62	23	4	0	UNL	15	15		21	18	10	62	23	4	0	UNL	15	15		32	29	24	72	12	4	
01	0	UNL	15	15		32	30	25	75	00	0	10	5	2	8	LF	33	33	33	100	36	7	10	16	10	10		33	31	28	82	04	7	
04	0	UNL	15	15		30	30	29	86	06	0	10	7	1	8	LF	32	32	32	100	32	7	10	18	10	10		31	29	26	82	01	7	
07	0	UNL	15	15		31	31	31	100	36	9	19	10	7	8	LF	34	34	34	100	32	6	10	10	10	10		28	28	28	96	03	7	
10	0	UNL	15	15		32	32	32	100	03	8	7	250	10	10		34	34	34	100	34	6	10	10	1	8	S	27	27	25	92	05	5	
13	0	UNL	15	15		32	32	32	100	03	8	10	25	10	10		39	37	34	82	30	12	10	15	2	5	30	29	27	80	26	4		
16	0	UNL	15	15		32	32	32	100	04	8	10	80	12	12		40	38	35	82	26	4	10	80	7	7	32	30	26	79	29	14		
19	0	UNL	15	15		32	32	32	100	02	9	10	14	12	12		38	37	35	89	22	3	6	45	15	10	30	26	19	64	25	10		
22	0	UNL	15	15		33	33	33	100	01	10	10	15	7	7	S	36	34	32	85	06	3	0	UNL	15	15		28	25	17	63	26	7	
01	0	UNL	15	15		25	22	14	63	29	9	10	50	12	12		32	29	22	67	18	3	10	4	5	F	35	35	35	100	26	5		
04	0	UNL	15	15		18	18	15	88	19	5	10	30	12	12		31	28	25	78	07	4	10	40	5	F	34	34	34	100	18	3		
07	0	UNL	15	15		17	17	16	96	05	3	10	25	5	5		31	30	28	92	08	5	10	7	5	F	33	33	33	100	19	3		
10	0	UNL	15	15		27	23	14	58	33	4	10	20	2	2	RF	33	33	33	100	10	8	0	UNL	7	7		40	38	36	86	33	16	
13	0	UNL	15	15		34	28	14	46	18	10	10	2	1	8	RF	33	33	33	100	03	8	0	UNL	15	15		30	24	16	54	30	13	
16	0	UNL	15	15		35	28	14	42	13	5	10	1	1	8	RF	38	38	38	100	07	8	0	UNL	15	15		47	41	32	56	33	9	
19	0	UNL	15	15		33	28	18	54	16	7	10	8	8	8		44	44	44	100	30	7	0	UNL	15	15		36	34	31	82	03	6	
22	0	UNL	15	15		32	28	21	64	15	6	10	4	5	5	F	36	36	35	96	29	7	0	UNL	15	15		33	30	25	72	06	5	
01	3	UNL	15	15		30	28	23	75	02	7	10	6	3	3	RF	34	34	34	100	05	7	0	UNL	5	5	F	31	31	30	96	00	0	
04	0	UNL	15	15		28	27	23	78	02	7	10	6	3	3	RF	33	33	33	100	03	10	0	UNL	5	5	F	29	29	28	86	00	0	
07	0	UNL	15																															