LOCAL CLIMATOLOGICAL DATA

U. S. DEPARTMENT OF COMMERCE - ALEXANDER B. TROWBRIDGE, Acting Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION -- ENVIRONMENTAL DATA SERVICE

RICHMOND, VIRGINIA
BYRD FIELD
APRIL 1967

Latitude 37° 30' N Longitude 77° 20' W Elevation (ground) 164 ft. Standard time used: EASTERN

Date	Temperature (°F) Maximum	Minimum	Average	Departure from normal	Average dew point	Degree days (Base 65°)	Weather types shown by code 1-9 on dates of occurrence (1 Fog, 2 Heavy Fog, 3 Thunderstorm, 4 x, 5 Sleet, 6 Hail, 7 Glaze, 8 Duststorm, 9 Smoke, Haze, Blowing Snow)	Snow, Sleet, or Ice on ground at 07AM (In.)	Precipitation Total (Water equivalent) (In.)	Snow, sleet (In.)	Avg. station pressure (In.) - - - Elev. 164 feet m.s.l.	Wind Resultant direction	Resultant speed (m.p.h.)	Average speed (m.p.h.)	Fastest mile Speed (m.p.h.)	Direction	Sunshine Total (Hours and tenths)	Percent of possible	Sky cover (Tenths) Sunrise to sunset	Midnight to midnight	Date
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	80	37	59	6	44	6		0	0	0	30.19	17	5.6	6.0	10	SW	12.6	100	2	3	1
2	89	51	70	17	48	0	8	0	0	0	29.95	23	6.1	7.9	15	W	12.6	100	3	2	2
3	89	54	72	18	47	0		0	0	0	29.77	29	8.3	10.5	25	NW	10.8	85	6	4	3
4	60	39	50	-4	23	15		0	0	0	30.15	06	4.0	10.6	24	NE	12.7	100	0	0	4
5	67	38	53	-1	47	12	1 8	0	.36	0	29.96	19	7.9	8.9	13	SW	2.2	17	10	9	5
6	81	55	68	13	56	0	1 8	0	T	0	29.69	22	7.2	9.1	19	SW	3.1	24	10	9	6
7	89	52	71	16	48	0	8	0	0	0	29.61	31	5.9	11.2	26	NE	8.7	68	8	5	7
8	63	42	53	-3	36	12		0	0	0	30.08	04	7.0	10.2	19	N	11.7	91	3	4	8
9	65	37	51	-5	39	14	8	0	0	0	30.10	19	8.1	8.3	17	SW	7.5	58	9	7	9
10	73	56	65	8	51	0	1	0	.05	0	29.71	23	9.2	12.2	17	SW	0.9	7	10	9	10
11	61	34	48	-9	28	17		0	0	0	29.92	02	9.7	10.4	19	NE	13.0	100	1	1	11
12	64	33*	49	-8	22	16		0	0	0	30.14	03	5.7	7.3	10	NE	13.1	100	0	1	12
13	52	34	43	-14	33	22	8	0	T	0	30.23	18	5.0	5.0	12	SE	0.6	5	10	8	13
14	85	48	67	9	53	0	8	0	0	0	30.00	21	7.4	8.2	17	W	13.1	100	4	5	14
15	89	63	76	18	54	0	8	0	0	0	29.74	24	8.3	9.4	17	W	9.8	74	8	6	15
16	89*	57	73	14	47	0	8	0	0	0	29.80	04	1.6	6.6	11	N	10.0	76	8	7	16
17	81	54	68	9	58	0	23 8	0	.14	0	29.72	16	7.7	7.9	17	SW	5.0	38	9	7	17
18	77	52	65	5	48	0	1	0	0	0	29.57	33	8.5	11.1	18	NW	12.8	96	4	4	18
19	64	40	52	-8	36	13		0	0	0	29.82	36	11.9	12.4	24	N	12.9	97	5	3	19
20	72	41	57	-3	36	8		0	0	0	29.96	35	6.4	7.6	17	NE	13.4	100	1	1	20
21	72	43	58	-3	47	7		0	T	0	29.82	20	6.8	7.2	17	SW	4.2	32	9	8	21
22	81	62	72	11	53	0	1	0	.06	0	29.58	23	12.3	12.8	22	SW	8.8	65	7	6	22
23	72	50	61	0	33	4		0	0	0	29.72	28	5.0	8.6	15	SW	12.3	91	8	5	23
24	73	46	60	-1	43	5		0	0	0	29.69	31	3.0	12.1	26	N	11.8	87	4	4	24
25	63	34	49	-13	26	16		0	0	0	30.10	36	8.1	9.1	18	N	13.5	100	0	1	25
26	51	44	48	-14	46	17	1 8	0	.52	0	29.93	13	5.2	7.2	16	SE	0.0	0	10	10	26
27	51	44	48	-14	42	17	1	0	.19	0	29.70	35	10.7	11.1	26	NW	0.5	4	10	8	27
28	64	40	52	-11	27	13		0	0	0	29.97	35	13.5	13.7	27	N	13.6	100	2	1	28
29	69	37	53	-10	29	12		0	0	0	30.05	35	5.5	6.9	17	N	12.9	94	4	4	29
30	76	46	61	-2	46	4		0	T	0	29.93	16	1.0	4.3	7	SW	6.8	49	9	9	30
	Sum 2162	Sum 1363	—	—	—	Total 230	Dep. 11	Temperature: Number of days	Total 1.32	Total 0	For the month: 29.89	29	1.8	9.1	27	N	Total 270.9	% for month	Sum 174	Sum 151	
	Avg. 72.1	Avg. 45.4	Avg. 58.8	Dep. 0.7	Avg. 41	Season to date Total 4008	Dep. 196	Max. ≥ 32° 0	Max. ≥ 90°‡ 0	Min. ≤ 32° 0	Min. ≤ 0° 0	Dep. -1.83					Date: 28	Possible 395.0	69	Avg. 5.8	Avg. 5.0

Greatest in 24 hours and dates

Precipitation		Snow, Sleet
.71	26-27	0

Greatest depth on ground of snow, sleet or ice and date: 0

* Extreme for the month. May be the last of more than one occurrence.

\- Below zero temperatures or negative departure from normal.

T In columns 9, 10, and 11 and in the Hourly Precipitation table indicates an amount too small to measure.

X Heavy fog — visibility ¼ mile or less.

‡ ≥ 70° at Alaskan stations. + Also on an earlier date, or dates.

HOURLY PRECIPITATION (Liquid in Inches)

Date	A. M. Hour ending at 1	2	3	4	5	6	7	8	9	10	11	12	P. M. Hour ending at 1	2	3	4	5	6	7	8	9	10	11	12	Date
1																									1
2																									2
3																									3
4																									4
5						.01	.10	.13	.05	.04	.01	T	T	T							.02				5
6																						T	T		6
7																									7
8																									8
9																									9
10										.01	.01	.03	T	T	T	T	T								10
11																									11
12																									12
13											T	T	T	T	T	T			T	T	T				13
14																									14
15																									15
16																									16
17															.03	.08	T	.03	T						17
18																									18
19																									19
20																									20
21											T	T													21
22				T	.01	.01	.01	.03			T	T	T	T											22
23																									23
24																									24
25																									25
26								T	T	.02	.07	.08	.05	.10	.11	.04	.05	T	T	T	T				26
27		.01	.09	.09	T		T	T				T													27
28																									28
29																									29
30																		T	T	T					30

Data in columns 6, 12, 13, 14, and 15 are based on 8 observations per day at 3-hour intervals. Wind directions are those from which the wind blows. Resultant wind is the vector sum of wind directions and speeds divided by the number of observations. Figures for directions are tens of degrees from true North; i.e., 09 = East, 18 = South, 27 = West, 36 = North, and 00 = Calm. When directions are in tens of degrees in Col. 17, entries in Col. 16 are fastest observed 1-minute speeds. If the / appears in Col. 17, speeds are gusts. Any errors detected will be corrected and changes in summary data will be annotated in the annual Summary if published.

AVERAGES BY HOURS

Hour (Local time)	Sky cover (In tenths)	Station press. (In.)	Dry bulb (°F)	Wet bulb (°F)	Rel. hum. %	Dew point (°F)	Wind speed (m.p.h.)	Resultant wind Direction	Resultant wind Speed (m.p.h.)
01	3	29.89	53	47	67	40	8.1	26	1.4
04	5	29.88	50	46	71	40	8.1	27	2.0
07	5	29.92	52	47	69	41	9.2	31	1.2
10	6	29.93	61	52	53	43	11.0	29	3.0
13	6	29.88	68	55	43	42	10.8	29	3.8
16	6	29.85	70	55	39	41	10.8	29	4.1
19	5	29.85	62	52	51	42	7.4	05	.3
22	4	29.89	55	49	63	42	7.6	14	.4

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William H. Haggard

Director, National Weather Records Center

OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER (Tenths)	CEILING (Hnds. of ft.)	VISIBILITY WHOLE MILES	VISIBILITY 16th MI.	WEATHER	DRY BULB (°F)	WET BULB (°F)	REL. HUM. (%)	DEW PT. (°F)	WIND DIR.	WIND SPEED (Knots)
DAY 01											
01	8	CIR	10			43	41	86	39	15	5
04	9	UNL	10			39	39	96	38	16	4
07	3	UNL	8			43	42	93	41	18	8
10	1	UNL	8			62	54	58	47	21	5
13	2	UNL	8			73	59	41	48	18	8
16	0	UNL	8			80	61	30	46	18	4
19	0	UNL	8			68	57	51	49	13	4
22	0	UNL	10			59	53	65	47	14	4
DAY 02											
01	0	UNL	10			56	51	72	47	19	5
04	0	UNL	10			52	49	83	47	19	6
07	0	UNL	5		H	53	51	86	49	19	6
10	0	UNL	6		H	75	62	46	53	29	5
13	0	UNL	7			86	63	26	47	29	9
16	8	UNL	10			89	64	22	45	25	10
19	8	UNL	10			74	59	40	48	20	6
22	0	UNL	12			70	57	42	46	23	8
DAY 03											
01	0	UNL	12			68	56	44	45	25	7
04	0	UNL	10			66	54	42	42	26	6
07	6	UNL	10			65	54	47	44	24	7
10	7	CIR	10			81	63	35	51	27	10
13	7	CIR	10			85	66	35	54	27	10
16	2	UNL	10			85	66	35	54	32	12
19	5	UNL	10			73	60	44	50	32	12
22	0	UNL	15			61	49	41	37	36	9
DAY 04											
01	0	UNL	15			50	39	32	21	02	15
04	0	UNL	15			44	35	40	21	02	10
07	0	UNL	15			41	34	45	21	02	9
10	0	UNL	15			49	38	33	21	04	10
13	0	UNL	15			53	40	29	21	21	3
16	0	UNL	15			58	43	24	21	22	6
19	1	UNL	12			48	41	52	31	14	12
22	0	UNL	12			41	37	65	30	16	9
DAY 05											
01	0	UNL	12			39	35	70	30	19	10
04	9	120	12			40	37	79	34	20	9
07	10	50	7		R	41	40	93	39	19	10
10	10	50	2		RF	48	47	96	47	21	8
13	10	50	3		F	58	56	87	54	21	8
16	10	120	4		H	66	60	70	56	20	8
19	10	100	4		H	62	58	81	56	12	5
22	10	80	5		GF	59	58	97	58	12	4
DAY 06											
01	5	UNL	3		GF	55	55	100	55	17	3
04	5	UNL	5		GF	60	59	93	58	20	7
07	10	CIR	4		GF	62	60	90	59	20	6
10	10	120	5		H	71	65	73	62	21	8
13	10	CIR	10			80	66	47	58	23	14
16	10	120	12			81	64	38	53	23	10
19	8	120	10			75	62	45	52	21	6
22	10	60	10		RW	69	59	55	52	32	9
DAY 07											
01	3	UNL	10			63	56	65	51	23	7
04	6	UNL	10			66	58	59	51	26	8
07	10	100	10			66	59	63	53	04	6
10	10	100	10			72	64	64	59	19	6
13	8	CIR	10			85	69	41	59	27	14
16	4	UNL	12			88	58	12	30	32	14
19	0	UNL	10			67	55	44	44	01	10
22	0	UNL	15			56	47	51	38	36	13
DAY 08											
01	1	UNL	15			52	45	55	36	01	10
04	10	50	15			51	44	59	37	01	10
07	0	UNL	7			47	42	68	37	01	9
10	6	50	12			53	44	49	34	03	13
13	0	UNL	15			60	48	39	35	03	7
16	6	UNL	15			62	49	35	34	04	6
19	6	UNL	15			52	45	57	37	13	9
22	0	UNL	15			44	41	80	38	15	7
DAY 09											
01	7	UNL	12			40	38	86	36	17	4
04	6	UNL	10			37	36	92	35	18	4
07	9	120	6		H	41	39	86	37	19	4
10	9	120	6		H	53	46	57	38	20	11
13	10	120	10			62	51	46	41	22	8
16	9	100	10			64	52	43	41	18	12
19	8	120	10			60	51	54	43	18	4
22	0	UNL	12			58	50	55	42	19	11
DAY 10											
01	7	CIR	10			60	51	52	42	20	15
04	10	120	10			62	54	56	46	22	11
07	10	120	10			62	54	58	47	23	12
10	10	100	10		RW	63	58	73	54	23	11
13	10	90	7			72	66	71	62	24	9
16	10	90	7		R	71	64	68	60	24	13
19	10	90	6		H	67	62	76	59	31	7
22	5	UNL	12			59	48	41	35	02	7
DAY 11											
01	2	UNL	10			55	46	47	35	03	13
04	0	UNL	10			46	40	61	33	02	9
07	0	UNL	10			42	37	60	29	02	12
10	0	UNL	15			49	40	44	28	02	8
13	0	UNL	15			56	43	29	24	06	8
16	0	UNL	15			60	44	22	21	35	13
19	0	UNL	15			51	40	35	24	05	4
22	0	UNL	15			38	34	70	29	02	5
DAY 12											
01	0	UNL	10			35	32	76	28	34	5
04	0	UNL	10			35	30	57	21	02	6
07	0	UNL	10			37	31	50	20	01	7
10	0	UNL	15			48	37	30	18	01	6
13	0	UNL	15			55	41	23	18	03	9
16	0	UNL	15			63	44	16	16	03	8
19	2	UNL	15			53	41	30	22	08	4
22	5	UNL	15			43	38	60	30	13	6
DAY 13											
01	0	UNL	10			36	34	79	30	00	
04	0	UNL	10			36	34	82	31	00	
07	10	100	10			41	37	68	31	18	5
10	10	70	7			52	42	40	28	18	8
13	10	30	7		R	49	42	54	33	19	7
16	10	50	10			51	43	48	32	18	7
19	10	40	7		R	50	44	64	38	19	3
22	10	30	12			51	45	64	39	18	5
DAY 14											
01	10	26	12			52	47	66	41	19	7
04	10	20	10			52	47	66	41	20	8
07	3	UNL	6		H	53	49	77	46	20	6
10	2	UNL	8			71	64	66	59	24	12
13	3	UNL	10			81	68	49	60	18	4
16	2	UNL	10			84	69	44	60	27	6
19	3	UNL	10			76	65	54	58	21	6
22	4	UNL	12			72	64	64	59	21	8
DAY 15											
01	0	UNL	12			65	61	81	59	20	8
04	10	CIR	10			67	63	78	60	22	7
07	10	120	6		H	67	63	78	60	22	7
10	9	120	7			75	66	62	61	25	8
13	8	CIR	10			85	65	31	51	29	11
16	9	50	12			86	64	27	48	24	13
19	1	UNL	12			78	60	31	45	23	6
22	0	UNL	12			66	56	51	47	21	5
DAY 16											
01	0	UNL	12			68	56	44	45	33	7
04	8	CIR	12			67	56	47	46	31	6
07	8	120	8			62	56	70	52	05	3
10	8	UNL	15			77	59	32	45	04	8
13	8	UNL	15			83	61	25	44	10	5
16	5	UNL	15			86	61	21	42	30	4
19	9	120	15			72	60	50	52	13	5
22	8	120	12			66	57	57	50	16	8
DAY 17											
01	2	UNL	12			60	55	70	50	15	6
04	5	UNL	8			54	51	83	49	14	6
07	8	CIR	8			59	56	81	53	14	6
10	10	100	4		H	68	63	78	60	17	11
13	10	100	6		H	78	68	60	63	16	11
16	10	50	3		TRWH	69	68	93	67	16	7
19	8	100	2		KH	62	61	93	60	15	3
22	4	UNL	1		GF	64	64	100	64	19	5
DAY 18											
01	9	5	5		F	65	65	100	65	22	5
04	8	5	5		F	64	64	100	64	27	7
07	0	UNL	8			62	54	60	48	32	8
10	5	UNL	15			69	56	41	44	32	10
13	8	30	15			73	57	35	44	30	13
16	6	40	15			75	57	31	42	35	10
19	0	UNL	15			64	52	42	40	35	12
22	3	UNL	15			55	48	57	40	02	12
DAY 19											
01	0	UNL	12			51	45	61	38	31	7
04	0	UNL	12			44	41	76	37	35	6
07	0	UNL	10			46	42	71	37	01	9
10	8	28	10			54	44	45	33	36	15
13	8	28	10			60	48	39	35	36	13
16	5	UNL	12			63	50	37	36	36	15
19	7	60	10			54	45	49	35	02	10
22	0	UNL	15			48	42	59	34	36	11
DAY 20											
01	0	UNL	15			46	40	61	33	36	11
04	0	UNL	15			45	40	63	33	35	8
07	0	UNL	12			47	41	61	34	36	10
10	0	UNL	15			58	48	44	36	36	10
13	0	UNL	12			65	51	34	36	36	5
16	3	UNL	15			72	54	26	35	28	6
19	2	UNL	15			65	51	34	36	24	3
22	2	UNL	12			49	45	74	41	00	
DAY 21											
01	0	UNL	12			46	44	83	41	18	3
04	4	UNL	10			46	44	83	41	18	6
07	6	100	10			53	49	74	45	20	6
10	10	100	10			67	56	47	46	23	10
13	10	100	10			67	57	51	48	21	7
16	10	60	10			70	60	53	52	18	5
19	10	100	8			65	59	68	54	18	5
22	10	100	10			67	58	59	52	18	8
DAY 22											
01	10	100	12			69	59	53	51	21	12
04	10	100	10		RW	65	60	73	56	21	11
07	10	80	7		R	63	61	87	59	21	8
10	10	100	7			68	64	78	61	21	10
13	10	28	7		RW	75	66	62	61	24	15
16	1	UNL	15			80	64	41	54	24	15
19	0	UNL	15			75	59	37	47	24	11
22	0	UNL	15			70	52	25	32	25	7
DAY 23											
01	0	UNL	15			65	49	28	31	31	8
04	0	UNL	15			61	45	25	25	29	8
07	6	UNL	15			58	47	42	35	36	6
10	10	120	15			63	48	30	31	34	8
13	10	120	15			67	49	24	29	30	8
16	9	120	15			71	52	24	32	23	8
19	2	UNL	15			62	50	40	37	20	6
22	1	UNL	15			59	50	54	42	20	8
DAY 24											
01	3	UNL	15			56	53	80	50	20	10
04	6	80	15			52	51	93	50	18	8
07	8	70	12			56	53	80	50	22	13
10	7	20	15			70	59	51	51	27	10
13	7	50	15			71	55	31	39	35	15
16	1	UNL	15			66	52	36	38	36	11
19	0	UNL	12			55	45	45	34	03	10
22	0	UNL	12			48	41	56	33	03	7
DAY 25											
01	0	UNL	15			42	36	58	28	01	5
04	0	UNL	15			36	33	76	29	01	6
07	0	UNL	15			43	35	45	23	36	15
10	0	UNL	12			50	39	36	24	32	12
13	2	UNL	12			57	43	27	23	36	8
16	0	UNL	12			62	46	23	24	35	10
19	0	UNL	10			53	43	41	30	06	4
22	4	UNL	10			42	37	63	30	06	3
DAY 26											
01	10	110	10			44	40	74	36	17	3
04	10	100	10			47	45	83	42	18	5
07	10	100	5		H	49	46	80	43	16	8
10	10	40	2	8	RF	49	48	93	47	17	7
13	10	5	2		RF	50	49	96	49	15	7
16	10	11	1	8	RF	50	49	96	49	09	8
19	10	6	4		RF	50	50	100	50	05	5
22	10	3	2		F	50	50	100	50	08	7
DAY 27											
01	10	3	1		F	50	50	100	50	00	
04	10	5	2		RF	50	50	100	50	34	7
07	10	6	7		L	49	48	96	48	35	10
10	10	22	15			49	46	77	42	36	14
13	10	25	15			48	42	74	38	36	18
16	10	35	8			48	43	66	37	35	15
19	3	UNL	10			48	43	66	37	34	8
22	1	UNL	10			44	40	74	36	30	5
DAY 28											
01	0	UNL	15			46	39	52	29	35	12
04	0	UNL	15			43	36	51	26	34	13
07	0	UNL	15			44	37	51	27	34	12
10	0	UNL	15			55	43	34	27	36	16
13	6	UNL	15			61	46	26	26	34	16
16	2	UNL	15			63	46	24	25	35	14
19	0	UNL	15			56	43	32	26	35	7
22	0	UNL	15			43	38	65	32	33	5
DAY 29											
01	0	UNL	15			47	39	48	28	34	8
04	0	UNL	15			37	34	70	28	35	6
07	0	UNL	15			47	39	48	28	36	8
10	0	UNL	15			57	43	29	25	36	10
13	4	UNL	15			64	47	23	25	03	6
16	8	120	15			67	49	21	26	25	7
19	7	120	12			63	47	26	27	36	3
22	10	100	12			52	47	69	42	00	
DAY 30											
01	10	100	10			52	48	74	44	00	
04	10	100	10			50	47	77	43	14	3
07	9	100	8			51	47	74	43	14	4
10	9	UNL	7			67	54	42	43	18	6
13	10	CIR	7			71	57	41	46	31	6
16	10	60	7			72	58	40	46	35	5
19	10	100	8		RW	65	57	59	50	16	3
22	10	100	10			60	54	67	49	11	3

RICHMOND VA 67 04

REFERENCE NOTES

CEILING COLUMN—
UNL indicates an unlimited ceiling.
CIR indicates a cirriform cloud ceiling of unknown height.

WEATHER COLUMN—

*	Tornado
T	Thunderstorm
Q	Squall
R	Rain
RW	Rain showers
ZR	Freezing rain
L	Drizzle
ZL	Freezing drizzle
S	Snow
SP	Snow pellets
IC	Ice crystals
SW	Snow showers
SG	Snow grains
E	Sleet
A	Hail
AP	Small hail
F	Fog
IF	Ice fog
GF	Ground fog
BD	Blowing dust
BN	Blowing sand
BS	Blowing snow
BY	Blowing spray
K	Smoke
H	Haze
D	Dust

WIND COLUMNS—

Directions are those from which the wind blows, indicated in tens of degrees from true North; i. e., 09 for East, 18 for South, 27 for West. Entry of 00 in the direction column indicates calm.

Speed is expressed in knots; multiply by 1.15 to convert to miles per hour.

ADDITIONAL DATA

Other observational data contained in records on file can be furnished at cost via microfilm or microfiche copies of the original records. Inquiries as to availability and costs should be addressed to:

Director
National Weather Records Center
Federal Building
Asheville, N. C. 28801