



# LOCAL CLIMATOLOGICAL DATA

U. S. DEPARTMENT OF COMMERCE - C. R. SMITH, Secretary

RICHMOND, VIRGINIA  
BYRD FIELD  
MARCH 1968

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION -- ENVIRONMENTAL DATA SERVICE

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

Date	Temperature (°F)						Weather types shown by code 1-9 on dates of occurrence 1 2 3 4 5 6 7 8 9 Fig. Fog X Thunderstorm Haze Sleet Hail Clare Duststorm Smoke, Haze Blowing Snow	Snow, Sleet, or Ice on ground at 07AM (In.)	Precipitation		Avg. station pressure (In.) Elev. 164 feet m.s.l.	Wind				Sunshine		Sky cover (Tenths)		Date	
	Maximum	Minimum	Average	Departure from normal	Average dew point	Degree days (Base 65°)			Total (Water equivalent) (In.)	Snow, sleet (In.)		Resultant direction	Resultant speed (m.p.h.)	Average speed (m.p.h.)	Fastest mile Speed (m.p.h.) Direction	Total (Hours and tenths)	Percent of possible	Sunrise to sunset	Midnight to midnight		
1	40	27	34	-9	21	31	1	4	.18	2.3	29.40	31	12.4	13.2	24	NW	9.7	86	5	5	1
2	58	30	44	1	25	21		2	0	0	29.49	25	10.6	12.2	23	SW	9.0	79	2	4	2
3	46	24	35	-8	11	30		0	0	0	29.72	33	14.3	15.0	26	NW	11.5	100	0	1	3
4	53	20*	37	-7	9	28		0	0	0	29.76	25	9.6	9.8	19	W	7.9	69	4	2	4
5	63	35	49	5	15	16		0	0	0	29.63	25	7.9	8.5	16	SW	10.3	90	4	3	5
6	56	28	42	-3	28	23		0	T	0	29.57	01	6.7	8.5	20	N	0.4	3	10	9	6
7	50	28	39	-6	18	26		0	0	0	30.07	01	8.1	9.8	16	NE	11.6	100	0	1	7
8	68	22	45	0	25	20		8	0	0	30.01	22	7.3	8.2	17	SW	10.1	87	5	5	8
9	78	46	62	16	39	3		0	0	0	29.64	23	8.9	10.1	21	W	8.9	76	6	7	9
10	71	52	62	16	54	3	1	8	.35	0	29.53	22	6.5	9.6	20	SW	3.3	28	9	9	10
11	64	46	55	9	39	10	1	0	T	0	29.87	02	8.4	9.1	15	N	10.9	92	3	5	11
12	48	42	45	-2	42	20	23	0	0	1.77	29.67	06	6.8	7.6	15	E	0.0	0	10	10	12
13	47	33	40	-7	31	25	2	0	.51	.5	29.58	33	10.6	11.4	27	NW	4.4	37	8	6	13
14	48	23	36	-11	15	29		0	0	0	30.37	04	2.2	6.3	10	NW	11.9	100	5	4	14
15	59	30	45	-3	29	20		8	0	0	30.45	17	7.4	8.2	16	SW	6.8	57	9	8	15
16	69	46	58	10	48	7		8	.08	0	30.20	17	9.1	9.5	16	S	3.6	30	10	10	16
17	57	48	53	5	48	12	1	0	.85	0	29.86	34	9.2	13.1	25	NW	0.0	0	10	10	17
18	57	46	52	3	40	13		0	.04	0	29.87	36	13.8	13.8	27	NW	1.1	9	9	8	18
19	72	43	58	9	43	7		0	0	0	30.00	01	4.7	7.1	12	N	12.1	100	5	3	19
20	80	40	60	11	46	5	1	8	0	0	29.92	17	6.3	6.5	12	S	10.3	85	8	6	20
21	90*	52	71	21	50	0		8	0	0	29.77	20	6.9	7.3	11	SW	9.4	78	9	7	21
22	89	60	75	25	47	0		0	0	0	29.73	18	11.3	11.5	28	S	10.8	89	6	6	22
23	71	36	54	4	39	11	1	0	.22	0	29.55	24	13.0	16.5	27	S	3.8	31	8	7	23
24	60	33	47	-4	18	18		0	0	0	29.77	28	12.5	14.5	25	NW	12.3	100	0	0	24
25	61	27	44	-7	27	21		0	0	0	30.06	15	2.2	4.0	9	NE	11.1	90	6	4	25
26	71	35	53	2	33	12		8	0	0	30.16	16	7.5	8.1	14	S	12.4	100	1	1	26
27	83	41	62	11	39	3		8	0	0	30.17	21	3.4	5.9	10	NW	11.1	90	2	2	27
28	82	44	63	11	42	2		0	0	0	30.04	22	6.3	6.9	18	W	9.3	75	9	6	28
29	85	49	67	15	46	0		8	0	0	29.88	24	6.7	7.1	16	W	10.4	83	3	2	29
30	77	54	66	14	46	0		0	T	0	29.90	13	3.3	6.9	16	NE	8.8	70	5	4	30
31	83	46	65	12	47	0		8	T	0	29.87	19	7.8	8.5	29	SW	8.5	68	9	8	31

\* 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 1/4 mile or less.

Sum 2036 1186 416 -130 4.00 2.8 29.85 26 2.8 9.5 29 SW 251.7 180 163  
 Avg. 65.7 38.3 52.0 4.3 34 3910 317 0 1 10 0 1.96 12-13 4.7 29-1 4 1 370.9 68 5.8 5.3

Greatest in 24 hours and dates: Precipitation 1.96 12-13; Snow, Sleet 4.7 29-1; Greatest depth on ground of snow, sleet or ice and date: 4 1

± ≤ 70° at Alaskan stations. + Also on an earlier date, or dates.

## HOURLY PRECIPITATION (Liquid in Inches)

Date	A. M. Hour ending at												P. M. Hour ending at												Date	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
1	.03	.07	.05	.02	.01	T	T																		1	
2																										2
3																										3
4																										4
5																										5
6																										6
7																										7
8																										8
9																										9
10																										10
11																										11
12	.01	.03	.02	.03	.02	.07	.08	.25	.19	.02	T	.31	.29	.15	.04	.22	.01	T	T	.02	.01	T			12	
13		.05	.20	T					.05	.11	.07	.02	.01	T	.04	.22	.01	T	T	.02	.01	T			13	
14																										14
15																										15
16																										16
17	.02	.03	.06	.05	.03	.04	.07	.03	.05	.02	.01	.03	.08	.11	.05	.04	.04	.01	.02	.05	.01	T	.02	.06	17	
18		T	.01	.01	.01	.01																			18	
19																										19
20																										20
21																										21
22																										22
23						.06	T	T	T	.01	.06	.08	.01												23	
24																										24
25																										25
26																										26
27																										27
28																										28
29																										29
30																										30
31																										31

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)	Sk. cover (In tenths)	Station press (In.)	Dry bulb (°F)	Wet bulb (°F)	Rel. hum. (%)	Dew point (°F)	Wind speed (m.p.h.)	Direction	Resultant wind speed (m.p.h.)
01	4	29.84	46	41	65	34	8.8	25	2.7
04	4	29.84	43	39	71	34	7.7	25	2.2
07	5	29.88	42	39	72	33	7.0	28	2.0
10	5	29.90	53	45	52	35	10.7	27	2.5
13	6	29.86	61	48	42	35	12.2	27	4.5
16	6	29.82	63	49	37	34	11.8	26	5.6
19	5	29.83	55	46	49	34	9.0	23	1.5
22	4	29.87	50	43	58	35	8.7	23	2.2

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*William J. Haggard*  
 Director, National Weather Records Center

OBSERVATIONS AT 3-HOUR INTERVALS

Main data table with columns for Hour, Sky Cover, Ceiling, Visibility, Weather, Dry Bulb, Wet Bulb, Relative Humidity, Dew Point, Wind, and Speed. It is organized into 31 days of 3-hour intervals.

REFERENCE NOTES

- CEILING COLUMN— UNL indicates an unlimited ceiling. CIR indicates a cirriform cloud ceiling of unknown height. WEATHER COLUMN— T Tornado Q Thunderstorm S Squall R Rain ZW Rain showers RW Freezing rain L Drizzle ZL Freezing drizzle SN Snow pellets IC Ice crystals SW Snow showers SG Snow grains E Sleet A Hail AP Small hail F Fog JF Ice fog GF Ground fog BD Blowing dust BN Blowing sand BS Blowing spray BY Blowing snow 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 film 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