



LOCAL CLIMATOLOGICAL DATA

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

RICHMOND, VIRGINIA
BYRD FIELD
JUNE 1967

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 Fog, Fog, X Thunderstorm Sleet Hail Glaze Duststorm Smoke, Haze Blowing Snow	Snow, Sleet, or Ice on ground at (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	Total (Hours and tenths)	Percent of possible	Sunrise to sunset		Midnight to midnight	
1	68	47	58	-14	49	7		0	T	0	30.09	07	3.2	4.9	8	E	4.2	28	10	9	1
2	77	40*	59	-13	45	6		0	0	0	30.08	12	2.2	4.2	9	SE	14.5	100	2	3	2
3	78	43	61	-11	53	4	2	0	0	0	30.09	13	5.9	6.5	15	SE	14.6	100	4	2	3
4	80	54	67	-6	57	0	1	8	0	0	30.13	10	8.0	8.6	18	SE	14.6	100	3	3	4
5	81	55	68	-5	57	0	1	0	0	0	30.11	09	7.5	8.5	15	E	13.8	95	3	2	5
6	81	53	67	-6	57	0	1	2	0	0	30.03	10	6.0	7.2	14	SE	10.9	74	8	6	6
7	82	53	68	-5	58	0	2	8	0	0	29.98	14	2.8	5.2	12	E	13.1	90	5	3	7
8	85	52	69	-5	58	0	1	8	0	0	29.96	17	4.4	4.8	9	SE	13.8	94	5	4	8
9	88	57	73	-1	60	0		0	0	0	29.93	20	4.9	6.0	11	SW	14.5	99	4	3	9
10	90	62	76	2	60	0		0	0	0	29.84	18	7.0	7.6	10	SW	14.7	100	0	0	10
11	92	59	76	2	61	0		0	0	0	29.85	18	6.5	6.9	12	S	14.5	99	1	1	11
12	90	63	77	2	64	0		0	0	0	29.90	19	5.0	6.3	9	SE	14.4	98	2	2	12
13	93	63	78	3	65	0		0	0	0	29.93	15	5.4	6.2	14	SE	14.1	96	3	2	13
14	77	65	71	-4	64	0	1	8	0	0	30.03	10	6.3	7.2	11	NE	4.6	31	10	9	14
15	88	63	76	1	64	0	1	8	0	0	29.93	15	4.0	5.6	10	S	10.9	74	8	7	15
16	91	63	77	1	67	0	1	8	0	0	29.83	17	4.9	5.8	10	SE	12.9	87	1	1	16
17	89	64	77	1	65	0		8	0	T	29.83	17	7.2	7.3	11	SW	12.0	81	9	8	17
18	89	70	80	4	70	0	1 3	8	0	.34	29.81	07	4.0	6.8	15	NE	4.4	30	9	9	18
19	80	65	73	-3	64	0	1	8	0	T	29.80	01	11.5	11.8	17	NE	4.4	30	9	8	19
20	84	63	74	-3	61	0	1	8	0	0	29.82	01	4.1	6.3	9	NW	9.9	67	7	6	20
21	91	64	78	1	67	0	1	8	0	0	29.74	21	6.9	7.2	13	SW	11.3	76	6	7	21
22	88	69	79	2	69	0	3	8	0	.45	29.74	19	8.7	10.1	17	SW	8.2	56	9	9	22
23	88	68	78	1	70	0	1 3	8	0	.70	29.77	20	4.1	5.9	23	N	8.9	60	8	8	23
24	92	67	80	3	68	0	1	8	0	0	29.83	35	1.8	4.8	9	SW	13.3	90	4	3	24
25	93*	70	82	4	70	0	3	8	0	2.06	29.74	23	7.4	8.2	30	W	11.1	75	9	9	25
26	80	60	70	-8	54	0		0	0	T	29.92	03	7.2	8.3	14	N	11.9	81	5	5	26
27	82	54	68	-10	56	0	1	8	0	0	29.96	13	2.9	5.0	12	SE	14.3	97	4	4	27
28	80	55	68	-10	56	0		0	0	0	29.96	10	5.6	7.1	12	E	14.7	100	4	3	28
29	81	56	69	-9	58	0		8	0	0	29.87	11	2.5	4.5	6	S	9.5	64	9	8	29
30	85	62	74	-4	65	0	1	8	0	.03	29.76	14	2.9	5.3	7	E	6.8	46	8	6	30

Sum	Sum	Total				Dep.	Temperature:				Total	Total	For the month:			Total	%	Sum	Sum
254.3	177.9	17	17	Number of days				3.58	0	29.91	14	2.6	6.7	30	W	340.8		16.9	150
Avg.	Avg.	Avg.	Dep.	Avg.	Season to date				Max.	Max.	Min.	Min.	Date: 25			Possible	for	Avg.	Avg.
84.8	59.3	72.1	-3.0	61	Total	Dep.	< 32°	> 90°	> 32°	< 0°				441.2	77	5.6	5.0		

* 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 1/4 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												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												T													1
2																									2
3																									3
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26	T																								26
27																									27
28																									28
29																									29
30																									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.

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William L. Haggard
 Director, National Weather Records Center

AVERAGES BY HOURS													Resultant wind	
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.)	Direction	Speed (m.p.h.)					
01	4	29.91	63	61	89	60	4.7	15	1.4					
04	4	29.90	61	60	91	59	5.1	15	.6					
07	6	29.93	66	63	84	61	6.6	13	.6					
10	6	29.94	76	67	63	62	7.3	13	1.5					
13	7	29.92	81	69	52	62	8.4	12	3.5					
16	5	29.88	82	69	50	61	8.5	14	5.5					
19	4	29.88	76	67	63	62	7.2	14	5.0					
22	3	29.90	66	63	84	61	5.4	15	3.2					

OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER (Tenths)	CEILING (Feet)	WIND (Mph)	WEATHER	DRY BULB (°F)	WET BULB (°F)	REL. HUM. (%)	DEW PT. (°F)	WIND SPEED (Knots)	SKY COVER (Tenths)	CEILING (Feet)	WIND (Mph)	WEATHER	DRY BULB (°F)	WET BULB (°F)	REL. HUM. (%)	DEW PT. (°F)	WIND SPEED (Knots)	SKY COVER (Tenths)	CEILING (Feet)	WIND (Mph)	WEATHER	DRY BULB (°F)	WET BULB (°F)	REL. HUM. (%)	DEW PT. (°F)	WIND SPEED (Knots)					
																												DAY 01	DAY 02	DAY 03	DAY 04	DAY 05
01	0	UNL	12		50	49	93	48	02	3	10	10	7		45	44	96	44	00	0	UNL	12		51	50	93	49	19	2			
04	0	UNL	10		51	50	96	50	36	3	9	9	5		45	44	96	44	00	0	UNL	12		51	50	93	49	11	3			
07	10	100	8		54	52	86	50	04	7	2	2	UNL	7	54	50	77	47	36	2	3	UNL	12		56	55	93	54	14	3		
10	10	100	8		61	54	65	49	11	3	4	4	UNL	8	69	58	51	50	02	2	5	4	UNL	10		71	59	48	50	12	5	
13	10	100	10		63	56	65	51	08	7	3	3	UNL	12	75	58	33	44	10	7	6	5	UNL	15		75	63	50	55	09	8	
16	10	100	10		67	56	49	47	06	5	1	1	UNL	12	75	58	32	44	10	7	6	5	UNL	15		76	64	52	57	16	8	
19	10	100	10		66	55	76	50	18	3	0	0	UNL	12	72	57	49	46	14	7	4	2	2	UNL	15		69	62	66	57	13	10
22	10	100	10		59	50	90	49	16	3	0	0	UNL	12	52	49	83	47	14	4	3	2	2	UNL	15		60	58	87	56	12	6

REFERENCE NOTES

- CEILING COLUMN—**
 UNL indicates an unlimited ceiling.
 CIR indicates a cirroform 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 cannot 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
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