# LOCAL CLIMATOLOGICAL DATA

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

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION -- ENVIRONMENTAL DATA SERVICE

RICHMOND, VIRGINIA
BYRD FIELD
SEPTEMBER 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 Sleet, 5 Hail, 6 Glaze, 7 Duststorm, 8 Smoke, Haze, 9 Blowing Snow, x Heavy fog) | 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 | 74 | 54 | 64 | -10 | 51 | 1 | | 0 | 0 | 0 | 30.02 | 01 | 11.1 | 11.4 | 18 | N | 9.3 | 72 | 5 | 5 | 1 |
| 2 | 76 | 50 | 63 | -11 | 51 | 2 | | 0 | 0 | 0 | 30.06 | 36 | 6.9 | 7.6 | 13 | N | 13.0 | 100 | 1 | 0 | 2 |
| 3 | 80 | 48 | 64 | -10 | 52 | 1 | | 0 | 0 | 0 | 30.04 | 34 | 1.7 | 2.9 | 6 | NW | 12.8 | 99 | 1 | 1 | 3 |
| 4 | 80 | 50 | 65 | -9 | 58 | 0 | 1 | 0 | 0 | 0 | 30.05 | 35 | 2.2 | 4.2 | 6 | NW | 10.5 | 81 | 10 | 8 | 4 |
| 5 | 85 | 56 | 71 | -3 | 62 | 0 | 1 8 | 0 | 0 | 0 | 30.08 | 04 | 2.4 | 3.3 | 6 | NE | 12.7 | 99 | 7 | 4 | 5 |
| 6 | 83 | 59 | 71 | -3 | 59 | 0 | 1 8 | 0 | 0 | 0 | 30.01 | 35 | 4.3 | 4.5 | 10 | N | 12.8 | 100 | 1 | 0 | 6 |
| 7 | 85 | 57 | 71 | -2 | 63 | 0 | 1 8 | 0 | 0 | 0 | 29.97 | 06 | 2.5 | 5.0 | 9 | NE | 12.4 | 97 | 2 | 1 | 7 |
| 8 | 83 | 58 | 71 | -2 | 64 | 0 | 2 8 | 0 | 0 | 0 | 29.98 | 15 | 4.8 | 5.0 | 10 | E | 6.6 | 52 | 8 | 8 | 8 |
| 9 | 76 | 64 | 70 | -3 | 67 | 0 | 2 8 | 0 | .13 | 0 | 29.90 | 16 | 2.5 | 4.6 | 8 | NW | 0.0 | 0 | 10 | 10 | 9 |
| 10 | 78 | 61 | 70 | -3 | 64 | 0 | 1 8 | 0 | .16 | 0 | 29.87 | 02 | 8.4 | 8.6 | 18 | NE | 3.9 | 31 | 9 | 10 | 10 |
| 11 | 66 | 49 | 58 | -14 | 50 | 7 | | 0 | 0 | 0 | 30.14 | 02 | 9.4 | 9.5 | 16 | N | 9.0 | 71 | 6 | 5 | 11 |
| 12 | 71 | 43 | 57 | -15 | 50 | 8 | | 0 | 0 | 0 | 30.15 | 04 | 5.5 | 6.8 | 12 | E | 11.1 | 88 | 7 | 6 | 12 |
| 13 | 75 | 49 | 62 | -10 | 52 | 3 | 1 | 0 | 0 | 0 | 30.09 | 04 | 6.3 | 6.8 | 11 | NE | 9.7 | 77 | 6 | 6 | 13 |
| 14 | 79 | 49 | 64 | -7 | 52 | 1 | | 0 | 0 | 0 | 30.02 | 03 | 6.2 | 7.1 | 14 | NE | 12.4 | 100 | 1 | 2 | 14 |
| 15 | 83 | 49 | 66 | -5 | 56 | 0 | 1 8 | 0 | 0 | 0 | 29.92 | 01 | 6.6 | 7.3 | 13 | N | 12.5 | 100 | 2 | 4 | 15 |
| 16 | 74 | 66 | 70 | -1 | 62 | 0 | 1 | 0 | .17 | 0 | 29.74 | 36 | 13.5 | 14.4 | 20 | N | 0.3 | 2 | 10 | 10 | 16 |
| 17 | 75 | 62 | 69 | -1 | 66 | 0 | 1 8 | 0 | T | 0 | 29.90 | 04 | 9.9 | 10.4 | 17 | NE | 1.9 | 16 | 10 | 9 | 17 |
| 18 | 85 | 56 | 71 | 1 | 63 | 0 | 2 8 | 0 | 0 | 0 | 29.87 | 04 | .5 | 3.5 | 5 | N | 10.1 | 82 | 4 | 4 | 18 |
| 19 | 85 | 60 | 73 | 3 | 66 | 0 | 1 8 | 0 | 0 | 0 | 29.87 | 07 | 1.0 | 3.7 | 7 | NE | 8.4 | 68 | 8 | 6 | 19 |
| 20 | 85 | 63 | 74 | 5 | 66 | 0 | 1 8 | 0 | 0 | 0 | 29.91 | 19 | 2.7 | 3.2 | 11 | S | 7.8 | 63 | 8 | 7 | 20 |
| 21 | 87* | 65 | 76 | 7 | 68 | 0 | 1 3 8 | 0 | .07 | 0 | 29.76 | 20 | 8.2 | 8.5 | 17 | SW | 7.5 | 61 | 7 | 7 | 21 |
| 22 | 76 | 54 | 65 | -3 | 57 | 0 | | 0 | T | 0 | 29.67 | 34 | 5.5 | 8.1 | 14 | NE | 7.4 | 61 | 7 | 6 | 22 |
| 23 | 68 | 43 | 56 | -12 | 44 | 9 | | 0 | 0 | 0 | 29.80 | 36 | 7.0 | 7.3 | 13 | N | 12.1 | 100 | 2 | 2 | 23 |
| 24 | 76 | 40 | 58 | -10 | 48 | 7 | | 0 | 0 | 0 | 29.74 | 25 | 5.0 | 7.2 | 16 | NW | 9.8 | 81 | 8 | 6 | 24 |
| 25 | 72 | 43 | 58 | -9 | 42 | 7 | | 0 | 0 | 0 | 29.97 | 02 | 4.5 | 5.6 | 13 | N | 12.1 | 100 | 1 | 1 | 25 |
| 26 | 76 | 40* | 58 | -9 | 48 | 7 | | 0 | 0 | 0 | 30.04 | 19 | 6.2 | 6.6 | 13 | S | 12.0 | 100 | 1 | 1 | 26 |
| 27 | 78 | 50 | 64 | -3 | 62 | 1 | 2 8 | 0 | 0 | 0 | 29.88 | 16 | 6.7 | 7.1 | 12 | S | 4.9 | 41 | 9 | 7 | 27 |
| 28 | 83 | 66 | 75 | 9 | 68 | 0 | 1 3 8 | 0 | .42 | 0 | 29.50 | 15 | 9.2 | 10.9 | 20 | SW | 2.9 | 24 | 9 | 10 | 28 |
| 29 | 77 | 55 | 66 | 0 | 58 | 0 | 1 | 0 | 0 | 0 | 29.54 | 25 | 6.8 | 9.9 | 17 | SW | 9.4 | 79 | 5 | 6 | 29 |
| 30 | 67 | 43 | 55 | -10 | 41 | 10 | | 0 | 0 | 0 | 29.86 | 25 | 6.7 | 7.8 | 15 | SW | 11.9 | 100 | 0 | 1 | 30 |

| Sum | Sum | | | | Total | Dep. | Temperature: Number of days | | | | Total | Total | For the month: | | | | | Total | % for month | Sum | Sum |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2338 | 1602 | | | | 64 | 28 | | | | | .95 | 0 | 29.91 | 02 | 2.1 | 6.9 | 20 SW | 267.2 | | 165 | 153 |
| Avg. | Avg. | Avg. | Dep. | Avg. | Season to date | | Max. ≤ 32° | Max. ≥ 90°‡ | Min. ≤ 32° | Min. ≤ 0° | Dep. | | | | | | Date: 28+ | Possible | | Avg. | Avg. |
| 77.9 | 53.4 | 65.7 | -4.5 | 57 | Total | Dep. | | | | | -2.70 | | | | | | | 372.7 | 72 | 5.5 | 5.1 |
| | | | | | 64 | 28 | 0 | 0 | 0 | 0 | | | | | | | | | | | |

| Greatest in 24 hours and dates | | Greatest depth on ground of snow, sleet or ice and date |
|---|---|---|
| Precipitation | Snow, Sleet | |
| .42 | 28 | 0 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 | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | T | T | T | T | T | .01 | .01 | .01 | .01 | .02 | .02 | .01 | T | .04 | 9 |
| 10 | .07 | .07 | .02 | T | T | | | | | | | T | T | T | T | T | | | | | | | | | 10 |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | 11 |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | 12 |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | 13 |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | 14 |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | 15 |
| 16 | | | | | | | | T | | | | | T | .01 | .02 | T | .02 | .02 | .08 | .01 | .01 | | | | 16 |
| 17 | | | | | | | | T | T | | | | | | | | | | | | | | | | 17 |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | 18 |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | 19 |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | | 20 |
| 21 | | | | | | | | | | | | | | | | | | | .04 | .03 | | | | T | 21 |
| 22 | T | | | | | | | | | | | | | | | | | | | | | | | | 22 |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | 23 |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | 24 |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | 25 |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | 26 |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | 27 |
| 28 | | | | | | | | | | T | T | T | | | .02 | | | .08 | .03 | .27 | .01 | T | .01 | | 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.

## 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 | 4 | 29.91 | 58 | 56 | 92 | 55 | 5.5 | 35 | 1.6 |
| 04 | 4 | 29.91 | 57 | 56 | 93 | 55 | 5.8 | 36 | 2.2 |
| 07 | 6 | 29.93 | 59 | 57 | 92 | 56 | 5.8 | 01 | 2.4 |
| 10 | 5 | 29.94 | 71 | 63 | 66 | 58 | 9.3 | 02 | 3.6 |
| 13 | 6 | 29.91 | 75 | 65 | 56 | 57 | 9.4 | 04 | 2.1 |
| 16 | 5 | 29.88 | 75 | 65 | 57 | 58 | 8.9 | 01 | 2.7 |
| 19 | 5 | 29.89 | 64 | 61 | 83 | 59 | 5.6 | 03 | 1.4 |
| 22 | 5 | 29.92 | 60 | 58 | 91 | 57 | 5.4 | 04 | 1.5 |

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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 | 10 | 60 | 12 | | | 62 | 58 | 81 | 56 | 02 | 12 |
| 04 | 10 | 40 | 12 | | | 61 | 56 | 72 | 52 | 03 | 13 |
| 07 | 10 | 40 | 12 | | | 59 | 54 | 70 | 49 | 01 | 12 |
| 10 | 7 | 90 | 12 | | | 62 | 56 | 67 | 51 | 36 | 13 |
| 13 | 3 | UNL | 12 | | | 71 | 60 | 49 | 51 | 01 | 11 |
| 16 | 1 | UNL | 15 | | | 73 | 59 | 41 | 48 | 02 | 8 |
| 19 | 0 | UNL | 12 | | | 61 | 55 | 67 | 50 | 36 | 5 |
| 22 | 0 | UNL | 12 | | | 55 | 53 | 86 | 51 | 34 | 5 |
| DAY 02 | | | | | | | | | | | |
| 0 | UNL | 15 | | | | 53 | 52 | 93 | 51 | 35 | 6 |
| 0 | UNL | 15 | | | | 52 | 51 | 93 | 50 | 36 | 5 |
| 0 | UNL | 15 | | | | 56 | 53 | 80 | 50 | 36 | 7 |
| 0 | UNL | 15 | | | | 71 | 61 | 55 | 54 | 36 | 9 |
| 2 | UNL | 15 | | | | 75 | 61 | 42 | 50 | 35 | 9 |
| 0 | UNL | 15 | | | | 75 | 60 | 39 | 48 | 34 | 10 |
| 0 | UNL | 12 | | | | 61 | 55 | 70 | 51 | 03 | 5 |
| 0 | UNL | 12 | | | | 53 | 52 | 93 | 51 | 15 | 2 |
| DAY 03 | | | | | | | | | | | |
| 0 | UNL | 15 | | | | 50 | 49 | 96 | 49 | 00 | |
| 0 | UNL | 12 | | | | 49 | 48 | 96 | 48 | 35 | 3 |
| 0 | UNL | 15 | | | | 54 | 53 | 93 | 52 | 00 | |
| 0 | UNL | 15 | | | | 71 | 59 | 48 | 50 | 26 | 4 |
| 1 | UNL | 15 | | | | 76 | 61 | 42 | 51 | 07 | 3 |
| 2 | UNL | 15 | | | | 78 | 62 | 39 | 51 | 29 | 4 |
| 1 | UNL | 12 | | | | 65 | 62 | 84 | 60 | 36 | 3 |
| 0 | UNL | 12 | | | | 57 | 56 | 93 | 55 | 01 | 3 |
| DAY 04 | | | | | | | | | | | |
| 0 | UNL | 15 | | | | 53 | 52 | 96 | 52 | 17 | 3 |
| 0 | UNL | 12 | | | | 52 | 51 | 96 | 51 | 35 | 4 |
| 10 | UNL | 5 | | | GF | 58 | 57 | 96 | 57 | 34 | 4 |
| 10 | UNL | 7 | | | | 75 | 65 | 56 | 58 | 01 | 7 |
| 10 | CIR | 7 | | | | 79 | 67 | 52 | 60 | 08 | 3 |
| 10 | CIR | 7 | | | | 77 | 66 | 56 | 60 | 34 | 5 |
| 10 | CIR | 7 | | | | 71 | 67 | 79 | 64 | 24 | 3 |
| 9 | CIR | 7 | | | | 64 | 63 | 93 | 62 | 00 | |
| DAY 05 | | | | | | | | | | | |
| 3 | UNL | 7 | | | | 60 | 59 | 97 | 59 | 27 | 2 |
| 2 | UNL | 7 | | | | 58 | 57 | 96 | 57 | 34 | 3 |
| 7 | CIR | 5 | | | GF | 60 | 60 | 100 | 60 | 00 | |
| 10 | CIR | 7 | | | | 76 | 69 | 69 | 65 | 04 | 4 |
| 10 | CIR | 10 | | | | 81 | 68 | 51 | 61 | 09 | 4 |
| 4 | UNL | 8 | | | | 82 | 70 | 55 | 64 | 05 | 4 |
| 0 | UNL | 7 | | | | 71 | 68 | 84 | 66 | 02 | 3 |
| 0 | UNL | 7 | | | | 65 | 64 | 93 | 63 | 04 | 3 |
| DAY 06 | | | | | | | | | | | |
| 0 | UNL | 5 | | | GF | 61 | 60 | 97 | 60 | 36 | 2 |
| 0 | UNL | 5 | | | GF | 61 | 60 | 97 | 60 | 34 | 3 |
| 0 | UNL | 4 | | | GF | 62 | 61 | 93 | 60 | 35 | 6 |
| 0 | UNL | 5 | | | H | 76 | 67 | 62 | 62 | 01 | 6 |
| 2 | UNL | 12 | | | | 81 | 66 | 42 | 56 | 34 | 5 |
| 0 | UNL | 10 | | | | 81 | 67 | 46 | 58 | 01 | 5 |
| 0 | UNL | 12 | | | | 68 | 63 | 76 | 60 | 34 | 4 |
| 0 | UNL | 12 | | | | 60 | 59 | 93 | 58 | 00 | |
| DAY 07 | | | | | | | | | | | |
| 0 | UNL | 7 | | | | 59 | 58 | 93 | 57 | 25 | 2 |
| 0 | UNL | 5 | | | GF | 58 | 57 | 96 | 57 | 34 | 2 |
| 0 | UNL | 4 | | | GF | 61 | 60 | 93 | 59 | 36 | 5 |
| 0 | UNL | 5 | | | H | 78 | 70 | 67 | 66 | 04 | 6 |
| 5 | UNL | 7 | | | | 82 | 71 | 56 | 65 | 06 | 5 |
| 4 | UNL | 5 | | | H | 80 | 72 | 67 | 68 | 05 | 5 |
| 5 | UNL | 5 | | | H | 69 | 67 | 90 | 66 | 16 | 5 |
| 0 | UNL | 5 | | | GFH | 65 | 64 | 93 | 63 | 13 | 5 |
| DAY 08 | | | | | | | | | | | |
| 0 | UNL | 2 | | | GFH | 60 | 60 | 100 | 60 | 18 | 3 |
| 0 | 0 | 0 | | | F | 62 | 62 | 100 | 62 | 17 | 3 |
| 0 | 0 | 0 | | | F | 64 | 64 | 100 | 64 | 16 | 3 |
| 8 | 1 | 8 | | | F | 69 | 68 | 93 | 67 | 18 | 3 |
| UNL | 5 | | | | H | 81 | 69 | 53 | 62 | 16 | 8 |
| CIR | 5 | | | | H | 81 | 70 | 56 | 64 | 14 | 5 |
| UNL | 7 | | | | | 70 | 66 | 79 | 63 | 13 | 5 |
| UNL | 6 | | | | GFH | 67 | 66 | 97 | 66 | 14 | 5 |
| DAY 09 | | | | | | | | | | | |
| 8 | UNL | 3 | | | GFH | 64 | 64 | 100 | 64 | 15 | 4 |
| 10 | 2 | 0 | 8 | | F | 66 | 66 | 100 | 66 | 19 | 4 |
| 10 | 3 | 0 | 12 | | F | 67 | 67 | 100 | 67 | 15 | 5 |
| 10 | 100 | 2 | | | H | 73 | 70 | 84 | 68 | 16 | 3 |
| 10 | 80 | 2 | | | RH | 75 | 71 | 82 | 69 | 18 | 5 |
| 10 | 22 | 2 | | | RH | 73 | 70 | 87 | 69 | 30 | 3 |
| 10 | 60 | 2 | 8 | | RH | 65 | 64 | 97 | 64 | 13 | 4 |
| 10 | 60 | 2 | | | RF | 65 | 65 | 100 | 65 | 01 | 4 |
| DAY 10 | | | | | | | | | | | |
| 01 | 10 | 8 | 2 | | RF | 65 | 65 | 100 | 65 | 01 | 3 |
| 04 | 10 | 3 | 2 | | RF | 65 | 65 | 100 | 65 | 02 | 4 |
| 07 | 10 | 16 | 3 | | F | 66 | 66 | 100 | 66 | 02 | 5 |
| 10 | 7 | CIR | 7 | | | 75 | 70 | 79 | 68 | 05 | 7 |
| 13 | 10 | 23 | 8 | | RW | 75 | 70 | 79 | 68 | 03 | 12 |
| 16 | 10 | 14 | 3 | | H | 67 | 64 | 84 | 62 | 01 | 12 |
| 19 | 10 | 30 | 12 | | | 65 | 61 | 81 | 59 | 02 | 7 |
| 22 | 10 | 30 | 15 | | | 64 | 59 | 75 | 56 | 01 | 10 |
| DAY 11 | | | | | | | | | | | |
| 10 | 27 | 15 | | | | 60 | 55 | 70 | 50 | 01 | 8 |
| 10 | 30 | 15 | | | | 56 | 52 | 78 | 49 | 01 | 9 |
| 3 | UNL | 15 | | | | 52 | 50 | 86 | 48 | 03 | 12 |
| 3 | UNL | 15 | | | | 61 | 55 | 67 | 50 | 02 | 11 |
| 9 | 50 | 15 | | | | 64 | 58 | 68 | 53 | 02 | 7 |
| 8 | 45 | 10 | | | | 65 | 58 | 63 | 52 | 03 | 10 |
| 1 | UNL | 12 | | | | 56 | 53 | 83 | 51 | 03 | 5 |
| 0 | UNL | 12 | | | | 51 | 50 | 96 | 50 | 03 | 4 |
| DAY 12 | | | | | | | | | | | |
| 0 | UNL | 12 | | | | 48 | 47 | 96 | 47 | 35 | 4 |
| 0 | UNL | 12 | | | | 45 | 45 | 100 | 45 | 34 | 4 |
| 2 | UNL | 7 | | | | 48 | 48 | 100 | 48 | 36 | 7 |
| 7 | UNL | 15 | | | | 65 | 57 | 59 | 50 | 05 | 9 |
| 9 | CIR | 15 | | | | 69 | 59 | 55 | 52 | 07 | 8 |
| 9 | CIR | 15 | | | | 67 | 58 | 59 | 52 | 08 | 8 |
| 9 | CIR | 15 | | | | 59 | 57 | 87 | 55 | 02 | 4 |
| 8 | CIR | 12 | | | | 54 | 53 | 96 | 53 | 05 | 3 |
| DAY 13 | | | | | | | | | | | |
| 01 | 3 | UNL | 12 | | | 51 | 50 | 96 | 50 | 36 | 2 |
| 04 | 7 | CIR | 10 | | | 51 | 51 | 100 | 51 | 04 | 5 |
| 07 | 9 | CIR | 4 | | GF | 53 | 52 | 96 | 52 | 02 | 5 |
| 10 | 7 | 23 | 12 | | | 67 | 62 | 73 | 58 | 03 | 7 |
| 13 | 3 | UNL | 15 | | | 72 | 60 | 48 | 51 | 07 | 8 |
| 16 | 7 | CIR | 15 | | | 74 | 61 | 45 | 51 | 07 | 9 |
| 19 | 7 | 120 | 15 | | | 60 | 56 | 78 | 53 | 03 | 5 |
| 22 | 6 | 120 | 15 | | | 56 | 54 | 90 | 53 | 04 | 6 |
| DAY 14 | | | | | | | | | | | |
| 1 | UNL | 12 | | | | 51 | 50 | 96 | 50 | 34 | 5 |
| 2 | UNL | 12 | | | | 51 | 50 | 93 | 49 | 34 | 5 |
| 5 | UNL | 7 | | | | 54 | 52 | 90 | 51 | 01 | 5 |
| 2 | UNL | 15 | | | | 70 | 60 | 53 | 52 | 05 | 10 |
| 0 | UNL | 15 | | | | 76 | 62 | 43 | 52 | 05 | 9 |
| 1 | UNL | 12 | | | | 77 | 63 | 43 | 53 | 04 | 8 |
| 1 | UNL | 10 | | | | 64 | 58 | 70 | 54 | 05 | 3 |
| 0 | UNL | 10 | | | | 52 | 52 | 100 | 52 | 35 | 4 |
| DAY 15 | | | | | | | | | | | |
| 0 | UNL | 10 | | | | 50 | 50 | 100 | 50 | 32 | 3 |
| 0 | UNL | 6 | | | GF | 50 | 50 | 100 | 50 | 34 | 4 |
| 1 | UNL | 6 | | | GF | 55 | 54 | 93 | 53 | 36 | 5 |
| 0 | UNL | 7 | | | | 75 | 66 | 60 | 60 | 04 | 9 |
| 1 | UNL | 12 | | | | 80 | 67 | 49 | 59 | 04 | 10 |
| 3 | UNL | 12 | | | | 81 | 67 | 47 | 59 | 01 | 8 |
| 9 | CIR | 12 | | | | 69 | 63 | 73 | 60 | 36 | 6 |
| 10 | CIR | 12 | | | | 68 | 63 | 73 | 59 | 34 | 6 |
| DAY 16 | | | | | | | | | | | |
| 01 | 8 | UNL | 12 | | | 67 | 59 | 63 | 54 | 35 | 11 |
| 04 | 10 | 80 | 12 | | | 67 | 59 | 61 | 53 | 34 | 10 |
| 07 | 10 | 50 | 12 | | | 69 | 62 | 68 | 58 | 35 | 9 |
| 10 | 10 | 30 | 10 | | | 72 | 66 | 71 | 62 | 35 | 18 |
| 13 | 10 | 20 | 2 | | R | 69 | 68 | 93 | 67 | 36 | 16 |
| 16 | 10 | 9 | 2 | | RF | 69 | 68 | 97 | 68 | 01 | 11 |
| 19 | 10 | 18 | 2 | | RF | 69 | 68 | 97 | 68 | 03 | 12 |
| 22 | 10 | 25 | 8 | | | 69 | 68 | 93 | 67 | 04 | 13 |
| DAY 17 | | | | | | | | | | | |
| 10 | 18 | 7 | | | | 69 | 67 | 90 | 66 | 02 | 15 |
| 10 | 14 | 7 | | | | 68 | 67 | 93 | 66 | 02 | 7 |
| 10 | 6 | 3 | | | F | 67 | 66 | 97 | 66 | 04 | 10 |
| 10 | 13 | 5 | | | F | 70 | 68 | 90 | 67 | 04 | 13 |
| 10 | 30 | 7 | | | | 73 | 70 | 84 | 68 | 06 | 10 |
| 10 | 11 | 10 | | | | 71 | 68 | 87 | 67 | 03 | 10 |
| 8 | CIR | 4 | | | H | 67 | 66 | 97 | 66 | 07 | 4 |
| 8 | CIR | 5 | | | H | 64 | 64 | 100 | 64 | 36 | 3 |
| DAY 18 | | | | | | | | | | | |
| 4 | UNL | 2 | | | GFH | 61 | 61 | 100 | 61 | 32 | 3 |
| 3 | UNL | 1 | | | GFH | 59 | 59 | 100 | 59 | 35 | 4 |
| 10 | 1 | 0 | 2 | | F | 61 | 61 | 100 | 61 | 00 | |
| 2 | UNL | 5 | | | H | 75 | 69 | 74 | 66 | 08 | 3 |
| 2 | UNL | 15 | | | | 82 | 69 | 51 | 62 | 24 | 3 |
| 2 | UNL | 12 | | | | 82 | 70 | 55 | 64 | 06 | 5 |
| 3 | UNL | 8 | | | | 68 | 67 | 93 | 66 | 21 | 3 |
| 4 | UNL | 8 | | | | 62 | 61 | 97 | 61 | 15 | 3 |
| DAY 19 | | | | | | | | | | | |
| 01 | 3 | UNL | 7 | | | 60 | 60 | 100 | 60 | 18 | 3 |
| 04 | 2 | UNL | 7 | | | 62 | 61 | 97 | 61 | 23 | 3 |
| 07 | 9 | 120 | 3 | | GF | 62 | 61 | 97 | 61 | 20 | 3 |
| 10 | 10 | CIR | 3 | | H | 78 | 71 | 71 | 68 | 03 | 3 |
| 13 | 9 | CIR | 4 | | H | 84 | 74 | 63 | 70 | 36 | 5 |
| 16 | 5 | UNL | 5 | | H | 83 | 73 | 63 | 69 | 06 | 4 |
| 19 | 8 | CIR | 4 | | H | 73 | 70 | 87 | 69 | 08 | 5 |
| 22 | 6 | UNL | 5 | | GFH | 68 | 67 | 97 | 67 | 00 | |
| DAY 20 | | | | | | | | | | | |
| 8 | 100 | 4 | | | GFH | 65 | 65 | 100 | 65 | 00 | |
| 8 | 100 | 4 | | | GFH | 65 | 65 | 100 | 65 | 00 | |
| 10 | 100 | 2 | | | GFH | 67 | 66 | 97 | 66 | 00 | |
| 10 | 100 | 1 | 8 | | H | 79 | 72 | 72 | 69 | 21 | 3 |
| 9 | 90 | 4 | | | H | 81 | 70 | 58 | 65 | 22 | 6 |
| 6 | 100 | 7 | | | | 82 | 70 | 55 | 64 | 21 | 5 |
| 7 | CIR | 5 | | | H | 69 | 68 | 93 | 67 | 15 | 4 |
| 3 | UNL | 5 | | | H | 67 | 66 | 97 | 66 | 15 | 4 |
| DAY 21 | | | | | | | | | | | |
| 3 | UNL | 2 | | | GFH | 66 | 66 | 100 | 66 | 15 | 4 |
| 2 | UNL | 2 | | | GFH | 66 | 66 | 100 | 66 | 19 | 5 |
| 8 | 100 | 2 | | | GFH | 67 | 67 | 100 | 67 | 20 | 7 |
| 3 | UNL | 5 | | | H | 78 | 72 | 74 | 69 | 21 | 11 |
| 8 | UNL | 7 | | | | 86 | 75 | 59 | 70 | 20 | 10 |
| 9 | CIR | 8 | | | | 83 | 73 | 63 | 69 | 20 | 11 |
| 10 | 35 | 4 | | | TRW | 75 | 72 | 85 | 70 | 19 | 4 |
| 8 | CIR | 10 | | | | 68 | 67 | 93 | 66 | 21 | 7 |
| DAY 22 | | | | | | | | | | | |
| 01 | 9 | 20 | 8 | | | 65 | 64 | 97 | 64 | 24 | 7 |
| 04 | 2 | UNL | 10 | | | 64 | 63 | 97 | 63 | 27 | 5 |
| 07 | 6 | 80 | 7 | | | 64 | 63 | 97 | 63 | 27 | 4 |
| 10 | 10 | 70 | 15 | | | 70 | 63 | 66 | 58 | 01 | 12 |
| 13 | 7 | 90 | 15 | | | 75 | 63 | 48 | 54 | 36 | 9 |
| 16 | 7 | 100 | 15 | | | 72 | 61 | 51 | 53 | 01 | 10 |
| 19 | 0 | UNL | 15 | | | 58 | 55 | 81 | 52 | 36 | 4 |
| 22 | 9 | 100 | 15 | | | 58 | 54 | 75 | 50 | 34 | 5 |
| DAY 23 | | | | | | | | | | | |
| 7 | 100 | 15 | | | | 53 | 50 | 80 | 47 | 01 | 5 |
| 3 | UNL | 15 | | | | 51 | 48 | 80 | 45 | 01 | 7 |
| 1 | UNL | 15 | | | | 50 | 47 | 80 | 44 | 02 | 6 |
| 0 | UNL | 15 | | | | 61 | 51 | 46 | 40 | 33 | 10 |
| 4 | UNL | 15 | | | | 66 | 54 | 43 | 43 | 35 | 11 |
| 1 | UNL | 15 | | | | 66 | 53 | 40 | 41 | 36 | 10 |
| 1 | UNL | 15 | | | | 50 | 48 | 89 | 47 | 36 | 2 |
| 0 | UNL | 15 | | | | 45 | 44 | 96 | 44 | 00 | |
| DAY 24 | | | | | | | | | | | |
| 0 | UNL | 8 | | | | 42 | 42 | 96 | 41 | 17 | 3 |
| 0 | UNL | 7 | | | | 43 | 43 | 96 | 42 | 23 | 3 |
| 4 | UNL | 7 | | | | 46 | 46 | 100 | 46 | 20 | 3 |
| 6 | UNL | 10 | | | | 65 | 56 | 54 | 48 | 25 | 8 |
| 9 | 100 | 15 | | | | 72 | 59 | 43 | 48 | 25 | 12 |
| 9 | UNL | 15 | | | | 73 | 61 | 48 | 52 | 26 | 10 |
| 10 | CIR | 12 | | | | 64 | 58 | 70 | 54 | 28 | 5 |
| 4 | UNL | 12 | | | | 59 | 56 | 81 | 53 | 03 | 6 |
| DAY 25 | | | | | | | | | | | |
| 01 | 2 | UNL | 15 | | | 52 | 48 | 72 | 43 | 36 | 5 |
| 04 | 0 | UNL | 15 | | | 46 | 43 | 80 | 40 | 35 | 5 |
| 07 | 2 | UNL | 15 | | | 50 | 45 | 66 | 39 | 01 | 5 |
| 10 | 0 | UNL | 15 | | | 62 | 51 | 45 | 40 | 02 | 7 |
| 13 | 1 | UNL | 15 | | | 67 | 54 | 39 | 41 | 05 | 10 |
| 16 | 0 | UNL | 15 | | | 70 | 54 | 34 | 40 | 36 | 4 |
| 19 | 0 | UNL | 12 | | | 54 | 52 | 86 | 50 | 15 | 3 |
| 22 | 0 | UNL | 12 | | | 48 | 46 | 89 | 45 | 00 | |
| DAY 26 | | | | | | | | | | | |
| 0 | UNL | 7 | | | | 45 | 45 | 100 | 45 | 22 | 4 |
| 0 | UNL | 7 | | | | 41 | 41 | 100 | 41 | 16 | 3 |
| 1 | UNL | 7 | | | | 46 | 46 | 100 | 46 | 00 | |
| 3 | UNL | 8 | | | | 68 | 58 | 53 | 50 | 20 | 10 |
| 0 | UNL | 15 | | | | 74 | 60 | 41 | 49 | 19 | 11 |
| 1 | UNL | 15 | | | | 75 | 61 | 42 | 50 | 21 | 9 |
| 0 | UNL | 15 | | | | 57 | 55 | 87 | 53 | 15 | 4 |
| 0 | UNL | 12 | | | | 51 | 50 | 96 | 50 | 18 | 5 |
| DAY 27 | | | | | | | | | | | |
| 0 | UNL | 7 | | | | 56 | 56 | 100 | 56 | 17 | 6 |
| 0 | UNL | 7 | | | | 54 | 54 | 100 | 54 | 15 | 4 |
| 9 | UNL | 0 | 2 | | F | 57 | 57 | 100 | 57 | 17 | 5 |
| 7 | CIR | 5 | | | H | 70 | 66 | 81 | 64 | 15 | 7 |
| 10 | 120 | 7 | | | | 75 | 68 | 69 | 64 | 20 | 7 |
| 10 | 80 | 3 | | | KH | 76 | 69 | 71 | 66 | 15 | 7 |
| 10 | 80 | 7 | | | | 68 | 67 | 93 | 66 | 13 | 4 |
| 10 | 60 | 8 | | | | 68 | 67 | 93 | 66 | 16 | 9 |
| DAY 28 | | | | | | | | | | | |
| 01 | 10 | 70 | 8 | | | 68 | 66 | 90 | 65 | 13 | 7 |
| 04 | 10 | 80 | 8 | | | 69 | 67 | 90 | 66 | 13 | 12 |
| 07 | 10 | 80 | 7 | | | 70 | 68 | 90 | 67 | 13 | 8 |
| 10 | 10 | 17 | 5 | | R | 75 | 71 | 82 | 69 | 13 | 12 |
| 13 | 10 | 16 | 7 | | R | 76 | 73 | 85 | 71 | 16 | 12 |
| 16 | 7 | CIR | 10 | | | 80 | 76 | 82 | 74 | 18 | 10 |
| 19 | 10 | 50 | 7 | | RW | 68 | 67 | 97 | 67 | 24 | 8 |
| 22 | 10 | 50 | 5 | | RW | 67 | 66 | 97 | 66 | 13 | 7 |
| DAY 29 | | | | | | | | | | | |
| 10 | 3 | 1 | 8 | | F | 67 | 67 | 100 | 67 | 17 | 4 |
| 10 | 3 | 5 | | | F | 67 | 67 | 100 | 67 | 21 | 4 |
| 8 | 23 | 4 | | | F | 66 | 66 | 100 | 66 | 18 | 5 |
| 6 | CIR | 12 | | | | 70 | 63 | 66 | 58 | 23 | 11 |
| 5 | UNL | 15 | | | | 75 | 62 | 46 | 53 | 22 | 10 |
| 3 | UNL | 15 | | | | 75 | 62 | 46 | 53 | 23 | 10 |
| 8 | 50 | 15 | | | | 66 | 58 | 61 | 52 | 29 | 12 |
| 4 | UNL | 15 | | | | 58 | 52 | 67 | 47 | 32 | 13 |
| DAY 30 | | | | | | | | | | | |
| 4 | UNL | 15 | | | | 52 | 46 | 64 | 40 | 28 | 7 |
| 2 | UNL | 15 | | | | 46 | 44 | 83 | 41 | 26 | 7 |
| 0 | UNL | 10 | | | | 46 | 43 | 80 | 40 | 26 | 5 |
| 0 | UNL | 15 | | | | 58 | 48 | 46 | 37 | 28 | 7 |
| 0 | UNL | 15 | | | | 65 | 51 | 36 | 37 | 23 | 7 |
| 0 | UNL | 15 | | | | 66 | 52 | 37 | 39 | 26 | 11 |
| 0 | UNL | 15 | | | | 49 | 47 | 89 | 46 | 18 | 4 |
| 0 | UNL | 15 | | | | 47 | 45 | 89 | 44 | 20 | 6 |

## 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