# LOCAL CLIMATOLOGICAL DATA

MAY 1996
RICHMOND, VA
R.E.BYRD INTERNATIONAL AP.

published by: National Climatic Data Center

LATITUDE: 37° 30′ N  LONGITUDE: 77° 20′ W  ELEVATION (GROUND): 164 FEET  TIME ZONE: EASTERN STANDARD

ISSN # 0198-537X
WBAN # 13740

| | TEMPERATURE° F | | | | | | DEG DAYS BASE 65° | | SIGNIFICANT WEATHER | SNOW/ICE ON GND(IN) | | PRECIPITATION (INCHES) | | PRESSURE (INCHES OF HG) | | WIND SPEED = MPH DIR = TENS OF DEGREES | | | | | | | SUNSHINE | | CLOUDINESS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 0700 LST | 1300 LST | 2400 LST | 2400 LST | | | | | | MAXIMUM | | | | | | SR-SS | | MN-MN | |
| DATE | MAXIMUM | MINIMUM | AVERAGE | DEP FROM NORMAL | AVERAGE DEW PT | AVERAGE WET BULB | HEATING | COOLING | | DEPTH | WATER EQUIV | SNOW-FALL | WATER EQUIV | AVERAGE STATION | AVERAGE SEA LEVEL | RESULTANT WIND SPEED | RES DIR | AVERAGE SPEED | 5-SEC SPEED | 5-SEC DIR | 2-MIN SPEED | 2-MIN DIR | TOTAL MINUTES | PERCENT POSSIBLE | CEILOMETER TENTHS | SATELLITE TENTHS | CEILOMETER TENTHS | SATELLITE TENTHS |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 01 | 67 | 36* | 52 | -10 | 40 | 47 | 13 | 0 | | | | | 0.00 | 29.86 | 30.06 | 7.0 | 19 | 7.5 | 23 | 18 | 20 | 17 | 829 | 100 | 0 | 0 | 0 | |
| 02 | 75 | 51 | 63 | 1 | 48 | 55 | 2 | 0 | | 0 | | 0.0 | 0.00 | 29.87 | 30.08 | 2.2 | 21 | 5.0 | 18 | 25 | 14 | 28 | 780 | 94 | 1 | | 2 | |
| 03 | 83 | 57 | 70 | 8 | 54 | 61 | 0 | 5 | R | | | | T | 29.85 | 30.04 | 10.1 | 20 | 10.4 | 26 | 21 | 22 | 21 | 734 | 89 | 1 | 2 | 2 | |
| 04 | 87 | 60 | 74 | 11 | 61 | 66 | 0 | 9 | | 0 | | 0.0 | 0.00 | 29.78 | 29.98 | 9.0 | 21 | 10.7 | 29 | 33 | 22 | 33 | 624 | 75 | 1 | | 1 | |
| 05 | 77 | 59 | 68 | 5 | 59 | 62 | 0 | 3 | TRF | 0 | | 0.0 | 0.27 | 29.90 | 30.10 | 4.5 | 10 | 9.9 | 25 | 15 | 22 | 15 | 588 | 71 | 4 | 4 | 4 | |
| 06 | 77 | 57 | 67 | 4 | 59 | 63 | 0 | 2 | TRFH | | | | 0.07 | 29.90 | 30.10 | 5.0 | 3 | 9.9 | 24 | 06 | 20 | 18 | 698 | 84 | 5 | | 6 | |
| 07 | 57 | 49 | 53 | -10 | 49 | 50 | 12 | 0 | RFH | | | | 0.43 | 30.20 | 30.41 | 5.3 | 7 | 6.4 | 24 | 07 | 21 | 06 | 0 | 0 | 10 | | 10 | |
| 08 | 64 | 52 | 58 | -6 | 54 | 56 | 7 | 0 | RF | | | | 0.11 | 30.02 | 30.23 | 3.4 | 14 | 5.4 | 15 | 12 | 13 | 12 | 545 | 65 | 10 | 5 | 10 | 6 |
| 09 | 73 | 58 | 66 | 2 | 60 | 61 | 0 | 1 | RF+H | 0 | | 0.0 | 0.02 | 30.02 | 30.22 | 5.1 | 8 | 7.1 | 17 | 07 | 14 | 08 | 673 | 80 | 7 | 5 | 7 | 5 |
| 10 | 84 | 56 | 70 | 6 | 60 | 63 | 0 | 5 | F | | | | 0.00 | 29.95 | 30.16 | 6.8 | 20 | 8.0 | 20 | 22 | 14 | 22 | 717 | 85 | 4 | 0 | 5 | 0 |
| 11 | 86 | 62 | 74 | 9 | 61 | 66 | 0 | 9 | TRFH | | | | 0.15 | 29.64 | 29.83 | 14.5 | 22 | 15.2 | 60 | 28 | 40 | 27 | 620 | 73 | 2 | 2 | 3 | 3 |
| 12 | 64 | 46 | 55 | -10 | 37 | 48 | 10 | 0 | R | | | | T | 29.72 | 29.93 | 13.8 | 30 | 14.1 | 33 | 29 | 28 | 28 | 834 | 99 | 2 | 1 | 1 | 0 |
| 13 | 62 | 40 | 51* | -14 | 35 | 44 | 14 | 0 | | 0 | | 0.0 | 0.00 | 29.98 | 30.19 | 2.4 | 2 | 5.2 | 21 | 29 | 15 | 26 | 753 | 89 | 3 | 1 | 4 | |
| 14 | 64 | 45 | 55 | -10 | 32 | 45 | 10 | 0 | | | | 0.0 | 0.00 | 30.15 | 30.35 | 3.6 | 5 | 6.3 | 17 | 02 | 13 | 11 | 779 | 92 | 1 | 0 | 3 | 2 |
| 15 | 61 | 46 | 54 | -12 | 40 | 47 | 11 | 0 | RF | | | | 0.48 | 30.17 | 30.37 | 5.9 | 16 | 6.4 | 17 | 14 | 14 | 14 | 405 | 48 | 7 | 9 | 6 | |
| 16 | 66 | 52 | 59 | -7 | 57 | 58 | 6 | 0 | RF | | | | 0.63 | 29.91 | 30.11 | 6.0 | 20 | 6.9 | 16 | 22 | 14 | 23 | 0 | 0 | 10 | | 9 | |
| 17 | 77 | 62 | 70 | 4 | 65 | 66 | 0 | 5 | RF+H | | | 0.0 | 0.01 | 29.80 | 30.00 | 3.1 | 11 | 4.2 | 13 | 14 | 10 | 13 | 613 | 72 | 7 | 6 | 8 | 6 |
| 18 | 88 | 62 | 75 | 8 | 67 | 69 | 0 | 10 | F+H | | | 0.0 | 0.00 | 29.78 | 29.98 | 3.5 | 20 | 4.8 | 17 | 21 | 15 | 22 | 728 | 85 | 3 | 0 | 4 | 1 |
| 19 | 94 | 65 | 80 | 13 | 65 | 70 | 0 | 15 | FH | | | 0.0 | 0.00 | 29.69 | 29.89 | 4.2 | 23 | 5.4 | 16 | 23 | 14 | 22 | 858 | 100 | 0 | 0 | 0 | |
| 20 | 95* | 65 | 80 | 13 | 67 | 72 | 0 | 15 | F | | | | 0.00 | 29.58 | 29.78 | 7.0 | 22 | 7.6 | 20 | 23 | 16 | 22 | 859 | 100 | | | | |
| 21 | 92 | 71 | 82* | 15 | 67 | 72 | 0 | 17 | RFH | | | | T | 29.49 | 29.69 | 7.9 | 23 | 10.5 | 23 | 36 | 20 | 01 | 860 | 100 | 0 | 0 | 1 | |
| 22 | 82 | 65 | 74 | 6 | 56 | 63 | 0 | 9 | | | | | 0.00 | 29.64 | 29.83 | 5.5 | 2 | 7.0 | 23 | 02 | 18 | 02 | 815 | 95 | 1 | 1 | 2 | 2 |
| 23 | 85 | 60 | 73 | 5 | 57 | 64 | 0 | 8 | | | | | 0.00 | 29.77 | 29.97 | 2.8 | 20 | 5.5 | 17 | 23 | 15 | 22 | 864 | 100 | 0 | 0 | 1 | 1 |
| 24 | 84 | 66 | 75 | 7 | 59 | 65 | 0 | 10 | R | 0 | | 0.0 | T | 29.82 | 30.02 | 1.7 | 31 | 8.0 | 20 | 21 | 16 | 21 | 678 | 78 | 1 | 3 | 2 | 3 |
| 25 | 68 | 56 | 62 | -7 | 54 | 58 | 3 | 0 | RF | 0 | | 0.0 | 0.59 | 29.92 | 30.12 | 5.7 | 2 | 6.9 | 17 | 02 | 15 | 02 | 393 | 45 | 10 | 6 | 10 | 6 |
| 26 | 64 | 53 | 59 | -10 | 52 | 55 | 6 | 0 | R | 0 | | 0.0 | 0.01 | 29.88 | 30.08 | 3.9 | 9 | 4.6 | 14 | 11 | 11 | 11 | 310 | 36 | 10 | 8 | 9 | |
| 27 | 61 | 55 | 58 | -11 | 56 | 57 | 7 | 0 | RF | | | | 0.34 | 29.79 | 29.99 | 6.5 | 8 | 7.1 | 21 | 08 | 16 | 09 | 0 | 0 | 10 | | 10 | |
| 28 | 62 | 56 | 59 | -10 | 57 | 57 | 6 | 0 | RF | | | | 0.05 | 29.75 | 29.95 | 6.0 | 6 | 6.8 | 15 | 09 | 13 | 08 | 0 | 0 | 10 | | 10 | |
| 29 | 62 | 55 | 59 | -11 | 57 | 57 | 6 | 0 | RF | 0 | | 0.0 | 0.02 | 29.68 | 29.88 | 4.3 | 6 | 6.3 | 17 | 04 | 14 | 03 | | | 10 | 4 | 10 | |
| 30 | 72 | 49 | 61 | -9 | 45 | 52 | 4 | 0 | R | | | | T | 29.85 | 30.05 | 9.4 | 0 | 9.9 | 25 | 36 | 20 | 01 | 680 | 78 | 1 | | 2 | |
| 31 | 73 | 46 | 60 | -10 | 45 | 52 | 5 | 0 | | 0 | | 0.0 | 0.00 | 30.06 | 30.26 | 2.0 | 12 | 3.2 | 15 | 34 | 10 | 35 | 914 | 100 | 0 | | 0 | |
| | 74.4 | 55.2 | 64.8 | -1.2 | 54.1 | 58.7 | <-------- MONTHLY AVERAGES --------> | | | | | | | 29.85 | 30.05 | 1.1 | 18 | 7.5 | <- MONTHLY AVERAGES -> | | | | | | 4 | 3 | 5 | |

DEPARTURE 20.2 -2.7

DEGREE DAYS

| | MONTHLY TOTAL | MONTHLY DEPARTURE | SEASON TO DATE TOTAL | SEASON TO DATE DEPARTURE |
|---|---|---|---|---|
| HEATING: | 122 | 61 | 4491 | 528 |
| COOLING: | 123 | 31 | 163 | 61 |

TOTAL SNOWFALL:
TOTAL PRECIPITATION: 3.18
PRECIP. DEPARTURE: -.66
GREATEST 24-HR PRECIPITATION: 1.05 15-16
GREATEST 24-HR SNOWFALL:
GREATEST SNOW DEPTH:

| | TOTAL | DATE |
|---|---|---|

SUNSHINE TOTALS: 18151 PERCENT POSSIBLE: 96
TOTAL POSSIBLE : 18845

| WIND | SPEED | DIRECTION | DATE |
|---|---|---|---|
| MAXIMUM 5-SECOND : | 60 | 28 | 11 |
| MAXIMUM 2-MINUTE : | 40 | 27 | 11 |

NUMBER OF DAYS WITH —>

| SKY CONDITIONS CLEAR | PARTLY CLOUDY | CLOUDY |
|---|---|---|
| 9 | 4 | 8 |

MAXIMUM TEMP ≥ 90 : 3
MAXIMUM TEMP ≤ 32 : 0
THUNDERSTORMS : 3

MINIMUM TEMP ≤ 32 : 0
MINIMUM TEMP ≤ 0 : 0
HEAVY FOG : 3

PRECIPITATION ≥ 0.01 INCH : 14
PRECIPITATION ≥ 0.10 INCH : 8
SNOWFALL ≥ 1.0 INCH : 0

<— NUMBER OF DAYS WITH

MAY 1996
RICHMOND, VA

# HOURLY PRECIPITATION
## (WATER EQUIVALENT IN INCHES)

MAY 1996 WBAN # 13740
RICHMOND, VA

| DATE | A.M. HOUR (L.S.T.) ENDING AT | | | | | | | | | | | | DATE | P.M. HOUR (L.S.T.) 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 | | |
| 01 | | | | | | | | | | | | | 01 | | | | | | | | | | | | | 01 | |
| 02 | | | | | | | | | | | | | 02 | | | | | | | | | | | | | 02 | |
| 03 | | | T | T | | | | | | | | | 03 | | | | | | | | | | | | | 03 | |
| 04 | | | | | | | | | | | | | 04 | | | | | | | | | | | | | 04 | |
| 05 | | | | | | | | | | | | | 05 | | | | | | | | | | | | 0.07 | 05 | * 0.07 |
| 06 | 0.10 | T | | | | | | | | | | | 06 | | | | | | | | | | | | | 06 | * 0.10 |
| 07 | | T | 0.05 | 0.01 | 0.02 | T | 0.02 | 0.05 | 0.04 | T | T | | 07 | T | 0.01 | 0.12 | 0.05 | 0.01 | | 0.02 | 0.01 | | T | 0.01 | 0.01 | 07 | |
| 08 | 0.01 | 0.06 | 0.02 | 0.02 | T | T | | | | | | | 08 | | | | | | | | | | | | | 08 | |
| 09 | | | | | 0.01 | 0.01 | T | T | | | | | 09 | | | | | | | | | | | | | 09 | |
| 10 | | | | | | | | | | | | | 10 | | | | | | | | | | | | | 10 | |
| 11 | | | | | | | | | | | | | 11 | | | T | | | 0.15 | T | | | T | T | T | 11 | |
| 12 | T | T | T | T | T | | | | | | | | 12 | | | | | | | | | | | | | 12 | |
| 13 | | | | | | | | | | | | | 13 | | | | | | | | | | | | | 13 | |
| 14 | | | | | | | | | | | | | 14 | | | | | | | | | | | | | 14 | |
| 15 | | | | | | | | | | | | | 15 | | | | | 0.01 | 0.05 | 0.07 | 0.04 | 0.05 | 0.06 | 0.13 | 0.07 | 15 | |
| 16 | 0.08 | 0.15 | 0.07 | 0.05 | 0.07 | 0.11 | 0.04 | T | T | | T | T | 16 | | | | | | | | | | 0.01 | 0.04 | 0.01 | 16 | |
| 17 | | | | | | T | | 0.01 | | | | | 17 | | | | | | | | | | | | | 17 | |
| 18 | | | | | | | | | | | | | 18 | | | | | | | | | | | | | 18 | |
| 19 | | | | | | | | | | | | | 19 | | | | | | | | | | | | | 19 | |
| 20 | | | | | | | | | | | | | 20 | | | | | | | | | | | | | 20 | |
| 21 | | | | | | | | | | | | | 21 | | | | | | | | | | | T | | 21 | |
| 22 | | | | | | | | | | | | | 22 | | | | | | | | | | | | | 22 | |
| 23 | | | | | | | | | | | | | 23 | | | | | | | | | | | | | 23 | |
| 24 | | | | | | | | | | | | | 24 | | T | | | | | | | | | | | 24 | |
| 25 | | | T | 0.24 | 0.31 | 0.04 | T | | | | | | 25 | | | | | | | | | | | | | 25 | |
| 26 | | | | | | | | | | | T | T | 26 | 0.01 | | | | T | T | | | | | | | 26 | |
| 27 | | | | | | 0.07 | T | 0.04 | | 0.03 | 0.01 | | 27 | | 0.01 | | | | 0.02 | 0.01 | T | 0.12 | 0.03 | | | 27 | |
| 28 | | | 0.02 | 0.01 | T | 0.01 | | | | | 0.01 | | 28 | T | | | | | T | | | | | | | 28 | |
| 29 | | | | | | | | | T | T | | | 29 | | | 0.01 | T | 0.01 | T | | | | | | | 29 | |
| 30 | | T | T | | | | | | | | | | 30 | | | | | | | | | | | | | 30 | |
| 31 | | | | | | | | | | | | | 31 | | | | | | | | | | | | | 31 | |

PUBLISHED BY: NCDC, ASHEVILLE, NC.

* The sum of the hourly totals follows the * when it disagrees with the daily total on page 1. NWS does not edit ASOS hourly precipitation but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

## MAXIMUM SHORT DURATION PRECIPITATION (MSDP) **

| TIME PERIOD (MINUTES) | 5 | 10 | 15 | 20 | 30 | 45 | 60 | 80 | 100 | 120 | 150 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRECIPITATION (INCHES) | | | | | | | | | | | | |
| ENDED: DATE | | | | | | | | | | | | |
| ENDED: TIME | | | | | | | | | | | | |

The time indicated is the ending time of the interval.
Date and time are not entered for trace amounts.

** NCDC derives MSDP data from one-Minute ASOS data. The MSDP data are not printed when inconsistent with ASOS hourly totals.

REFERENCE NOTES :

WFO = WEATHER FORECAST OFFICE.
ASOS = AUTOMATED SURFACE OBSERVING SYSTEM.
* = EXTREME FOR THE MONTH (LAST OCCURRENCE IF MORE THAN ONE).
T = TRACE PRECIPITATION AMOUNT.
\+ = ALSO OCCURS ON EARLIER DATES.
F+ = HEAVY FOG, VISIBILITY .25 MILES OR LESS.
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.
THE HEATING DEGREE DAY SEASON BEGINS JULY 1.
THE COOLING DEGREE DAY SEASON BEGINS JANUARY 1.
CEILOMETER (30-SECOND) DATA ARE USED TO DERIVE CLOUDINESS AT OR BELOW 12,000 FEET. THIS CLOUDINESS IS THE MEAN CLOUD COVER DETECTED DURING THE TIME INTERVAL (HOUR, SUNRISE TO SUNSET, OR MIDNIGHT TO MIDNIGHT).
SATELLITE DATA ARE USED TO DERIVE CLOUDINESS ABOVE 12,000 FEET. EFFECTIVE CLOUD AMOUNT IS BASED ON THE CLOUD COVER AND THE TRANSPARENCY OF THE CLOUDS WITHIN THE SATELLITE FIELD OF VIEW (APPROX. 50 x 50 KM).
SKY CONDITION IS BASED ON THE SUM (NOT TO EXCEED 10) OF THE SUNRISE TO SUNSET CLOUD COVER BELOW AND ABOVE 12,000 FEET. BOTH CEILOMETER AND SATELLITE DATA MUST BE PRESENT TO COMPUTE SKY CONDITION. CLEAR = 0 - 3 TENTHS, PARTLY CLOUDY = 4 - 7 TENTHS, AND CLOUDY = 8 - 10 TENTHS.
RESULTANT WIND IS THE VECTOR SUM OF THE WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS.
WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. '00' INDICATES CALM.
SR-SS = SUNRISE TO SUNSET. MN-MN = MIDNIGHT TO MIDNIGHT.
SNOWFALL IS FOR THE 24-HOUR PERIOD ENDING AT THE TIME INDICATED IN COLUMN HEADING.
*WATER EQUIVALENT OF SNOW ON THE GROUND IS REPORTED ONLY WHEN THE* DEPTH IS 2 OR MORE INCHES.
H, F, F+, P-, R, S, AND ZR ARE REPORTED FROM ASOS AUTOMATED SENSORS. OTHER WEATHER TYPES MAY BE ADDED TO THE REPORT BY STATION PERSONNEL OR BE PROVIDED BY THE WEATHER FORECAST OFFICE (WFO).

| | | | | | |
|---|---|---|---|---|---|
| A | HAIL | GL | GLAZE | SG | SNOW GRAINS |
| BD | BLOWING DUST | H | HAZE | SP | SNOW PELLETS |
| BN | BLOWING SAND | IC | ICE CRYSTALS | T | THUNDER |
| BS | BLOWING SNOW | IF | ICE FOG | V | VOLCANIC ASH |
| BY | BLOWING SPRAY | IP | ICE PELLETS | ZL | FREEZING DRIZZLE |
| D | DUST | K | SMOKE | ZR | FREEZING RAIN |
| F | FOG | L | DRIZZLE | & | TORNADO |
| F+ | HEAVY FOG | P- | UNKN. PRECIP. | &C | FUNNEL CLOUD |
| GF | GROUND FOG | R | RAIN | &W | WATERSPOUT |
| | | S | SNOW | | |

NORMALS ARE FOR THE YEARS 1961 - 1990.
A HEATING (COOLING) DEGREE DAY IS THE DIFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65°F.
DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100% RELATIVE HUMIDITY.
WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100% RELATIVE HUMIDITY.

TEMPERATURE - HUMIDITY INDEX (STEADMAN, 1979)

| TEMPERATURE °F \ RELATIVE HUMIDITY (PERCENT) | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 120 | 107 | 116 | 130 | 148 | | | | | | | |
| 115 | 103 | 111 | 120 | 135 | 151 | | | | APPARENT | | |
| 110 | 99 | 105 | 112 | 123 | 137 | 150 | | | TEMPERATURE | | |
| 105 | 95 | 100 | 105 | 113 | 123 | 135 | 149 | | | | |
| 100 | 91 | 95 | 99 | 104 | 110 | 120 | 132 | 144 | | | |
| 95 | 87 | 90 | 93 | 96 | 101 | 107 | 114 | 124 | 136 | | |
| 90 | 83 | 85 | 87 | 90 | 93 | 96 | 100 | 106 | 113 | 122 | |
| 85 | 78 | 80 | 82 | 84 | 86 | 88 | 90 | 93 | 97 | 102 | 108 |
| 80 | 73 | 75 | 77 | 78 | 79 | 81 | 82 | 85 | 86 | 88 | 91 |
| 75 | 69 | 70 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 70 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 70 | 71 | 71 | 72 |

WIND CHILL EQUIVALENT TEMPERATURE (SIPLE & PASSEL, 1945)

| TEMPERATURE °F \ WIND VELOCITY (MPH) | 4 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
|---|---|---|---|---|---|---|---|---|---|---|
| 45 | 45 | 43 | 34 | 29 | 26 | 23 | 21 | 20 | 19 | 18 |
| 40 | 40 | 37 | 26 | 23 | 19 | 16 | 13 | 12 | 11 | 10 |
| 35 | 35 | 32 | 22 | 16 | 12 | 8 | 6 | 4 | 3 | 2 |
| 30 | 30 | 27 | 16 | 9 | 4 | 1 | -2 | -4 | -5 | -6 |
| 25 | 25 | 22 | 10 | 2 | -3 | -7 | -10 | -12 | -13 | -14 |
| 20 | 20 | 16 | 3 | -5 | -10 | -15 | -18 | -20 | -21 | -22 |
| 15 | 15 | 11 | -3 | -11 | -17 | -22 | -25 | -27 | -29 | -30 |
| 10 | 10 | 6 | -9 | -18 | -24 | -29 | -33 | -35 | -37 | -38 |
| 5 | 5 | 0 | -15 | -25 | -31 | -36 | -41 | -43 | -45 | -46 |
| 0 | 0 | -5 | -22 | -31 | -39 | -44 | -49 | -52 | -53 | -54 |
| -5 | -5 | -10 | -27 | -38 | -46 | -51 | -56 | -58 | -60 | -62 |
| -10 | -10 | -15 | -34 | -45 | -53 | -59 | -64 | -67 | -69 | -70 |
| -15 | -15 | -21 | -40 | -51 | -60 | -66 | -71 | -74 | -76 | -78 |
| -20 | -20 | -26 | -46 | -58 | -67 | -74 | -79 | -82 | -84 | -85 |
| -25 | -25 | -31 | -52 | -65 | -74 | -81 | -86 | -89 | -92 | -93 |
| -30 | -30 | -36 | -58 | -72 | -81 | -88 | -93 | -97 | -100 | -102 |

ADDITIONAL INFORMATION :

# OBSERVATIONS AT 3-HOURLY INTERVALS

MAY 1996
RICHMOND, VA

WBAN # 13740

| HOUR (LST) | ≤ 12K FEET | | SATELLITE > 12K FT | | | | VISIBILITY (MILES) | WEATHER | TEMPERATURE °F | | | RELATIVE HUMIDITY (PCT) | WIND | | PRESSURE (INCHES,HG) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CEILOMETER TENTHS | CEILING 100'S OF FT | OBSERVATION TIME(LST) | EFF CLD AMT TENTHS | 100'S OF FT LOWEST CLOUD TOP | 100'S OF FT HIGHEST CLOUD TOP | | | DRY BULB | DEW POINT | WET BULB | | SPEED (MPH) | DIRECTION TENS OF DEG | STATION | SEA LEVEL |
| **SUNRISE: 0514** | | | | | | | | **MAY 01** | | | **SUNSET: 1860** | | | | | |
| 01 | 0 | NC | | | | | 10.00 | | 48 | 38 | 43 | 69 | 5 | 29 | 29.83 | 30.03 |
| 04 | 0 | NC | 0300 | 0 | NT | NT | 7.00 | | 39 | 38 | 39 | 96 | 0 | 00 | 29.86 | 30.06 |
| 07 | 0 | NC | 0600 | 0 | NT | NT | 10.00 | | 46 | 39 | 43 | 77 | 5 | 22 | 29.92 | 30.12 |
| 10 | 0 | NC | 0900 | 0 | NT | NT | 10.00 | | 58 | 36 | 48 | 44 | 5 | 21 | 29.92 | 30.13 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 10.00 | | 64 | 37 | 51 | 37 | 16 | 18 | 29.87 | 30.07 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 67 | 40 | 53 | 37 | 17 | 20 | 29.81 | 30.01 |
| 19 | 0 | NC | 1800 | 0 | NT | NT | 10.00 | | 60 | 43 | 51 | 54 | 8 | 17 | 29.80 | 30.01 |
| 22 | 0 | NC | | | | | 10.00 | | 54 | 45 | 50 | 72 | 6 | 17 | 29.85 | 30.05 |
| **SUNRISE: 0513** | | | | | | | | **MAY 02** | | | **SUNSET: 1900** | | | | | |
| 01 | 0 | NC | | | | | 10.00 | | 57 | 43 | 50 | 60 | 13 | 22 | 29.84 | 30.04 |
| 04 | 9 | 90 | | | | | 10.00 | | 54 | 45 | 50 | 72 | 0 | 00 | 29.87 | 30.07 |
| 07 | 0 | NC | | | | | 10.00 | | 54 | 48 | 51 | 80 | 0 | 00 | 29.91 | 30.11 |
| 10 | 2 | NC | | | | | 10.00 | | 62 | 49 | 55 | 63 | 3 | 18 | 29.92 | 30.12 |
| 13 | 0 | NC | | | | | 10.00 | | 71 | 48 | 58 | 44 | 6 | 30 | 29.88 | 30.09 |
| 16 | 0 | NC | 1506 | 7 | 300 | 440 | 10.00 | | 74 | 47 | 59 | 38 | 6 | 26 | 29.84 | 30.05 |
| 19 | 0 | NC | | | | | 10.00 | | 67 | 50 | 58 | 55 | 6 | 09 | 29.85 | 30.05 |
| 22 | 1 | NC | 2100 | 3 | 180 | 330 | 10.00 | | 59 | 50 | 54 | 72 | 7 | 12 | 29.89 | 30.09 |
| **SUNRISE: 0512** | | | | | | | | **MAY 03** | | | **SUNSET: 1900** | | | | | |
| 01 | 4 | NC | 0000 | 5 | 190 | 380 | 10.00 | | 58 | 53 | 55 | 84 | 0 | 00 | 29.88 | 30.08 |
| 04 | 9 | 75 | 0300 | 9 | 140 | 330 | 10.00 | | 60 | 55 | 57 | 84 | 0 | 00 | 29.88 | 30.08 |
| 07 | 0 | NC | 0600 | 3 | 130 | 210 | 10.00 | | 60 | 53 | 56 | 78 | 8 | 20 | 29.91 | 30.11 |
| 10 | 0 | NC | 0900 | 2 | 130 | 380 | 10.00 | | 74 | 53 | 62 | 48 | 15 | 21 | 29.88 | 30.08 |
| 13 | 0 | NC | 1200 | 3 | 130 | 440 | 10.00 | | 81 | 54 | 65 | 39 | 16 | 21 | 29.83 | 30.03 |
| 16 | 2 | NC | | | | | 10.00 | | 81 | 54 | 65 | 39 | 14 | 21 | 29.78 | 29.98 |
| 19 | 0 | NC | 1800 | 0 | NT | NT | 10.00 | | 74 | 55 | 63 | 52 | 9 | 20 | 29.80 | 30.00 |
| 22 | 0 | NC | | | | | 10.00 | | 68 | 57 | 62 | 68 | 9 | 19 | 29.84 | 30.04 |
| **SUNRISE: 0511** | | | | | | | | **MAY 04** | | | **SUNSET: 1901** | | | | | |
| 01 | 0 | NC | | | | | 10.00 | | 66 | 56 | 60 | 70 | 12 | 19 | 29.83 | 30.03 |
| 04 | 0 | NC | | | | | 10.00 | | 61 | 58 | 59 | 90 | 8 | 19 | 29.84 | 30.04 |
| 07 | 0 | NC | | | | | 10.00 | | 65 | 61 | 63 | 87 | 9 | 22 | 29.85 | 30.05 |
| 10 | 0 | NC | | | | | 10.00 | | 76 | 64 | 68 | 67 | 13 | 18 | 29.82 | 30.02 |
| 13 | 0 | NC | | | | | 10.00 | | 82 | 62 | 69 | 51 | 16 | 22 | 29.78 | 29.98 |
| 16 | 3 | NC | | | | | 10.00 | | 86 | 61 | 70 | 43 | 15 | 24 | 29.72 | 29.92 |
| 19 | 0 | NC | 1800 | 7 | 330 | 440 | 10.00 | | 79 | 63 | 69 | 58 | 6 | 17 | 29.71 | 29.91 |
| 22 | 0 | NC | 2100 | 6 | 330 | 440 | 10.00 | | 77 | 62 | 68 | 60 | 9 | 23 | 29.74 | 29.94 |
| **SUNRISE: 0509** | | | | | | | | **MAY 05** | | | **SUNSET: 1902** | | | | | |
| 01 | 3 | NC | 0000 | 6 | 130 | 300 | 10.00 | | 67 | 59 | 62 | 76 | 10 | 35 | 29.83 | 30.03 |
| 04 | 7 | 110 | 0300 | 4 | 130 | 380 | 10.00 | | 64 | 60 | 62 | 87 | 7 | 01 | 29.88 | 30.08 |
| 07 | 3 | NC | 0600 | 3 | 230 | 440 | 7.00 | | 64 | 60 | 62 | 87 | 8 | 01 | 29.95 | 30.16 |
| 10 | 1 | NC | 0900 | 3 | 130 | 380 | 10.00 | | 70 | 58 | 63 | 66 | 3 | 06 | 29.98 | 30.19 |
| 13 | 5 | NC | 1200 | 6 | 190 | 330 | 10.00 | | 74 | 58 | 64 | 58 | 5 | 11 | 29.93 | 30.14 |
| 16 | 10 | 44 | | | | | 10.00 | | 73 | 59 | 65 | 62 | 8 | 16 | 29.90 | 30.10 |
| 19 | 2 | NC | 1800 | 10 | 310 | 360 | 7.00 | | 65 | 57 | 60 | 76 | 16 | 13 | 29.85 | 30.05 |
| 22 | 8 | | | | | | | | | | | | | | | |
| **SUNRISE: 0508** | | | | | | | | **MAY 06** | | | **SUNSET: 1903** | | | | | |
| 01 | 7 | 110 | | | | | 5.00 | TRF | 61 | 58 | 59 | 90 | 9 | 17 | 29.76 | 29.96 |
| 04 | 3 | NC | | | | | 10.00 | | 63 | 61 | 62 | 93 | 9 | 24 | 29.75 | 29.95 |
| 07 | 3 | NC | | | | | 10.00 | | 65 | 63 | 64 | 93 | 7 | 33 | 29.82 | 30.02 |
| 10 | 8 | 14 | | | | | 7.00 | | 70 | 65 | 67 | 84 | 9 | 05 | 29.88 | 30.08 |
| 13 | 6 | 24 | | | | | 10.00 | | 74 | 63 | 67 | 69 | 6 | 36 | 29.90 | 30.09 |
| 16 | 5 | 55 | 1500 | 7 | 300 | 330 | 10.00 | | 75 | 61 | 66 | 62 | 8 | 04 | 29.89 | 30.09 |
| 19 | 8 | 31 | 1800 | 4 | 180 | 380 | 7.00 | | 68 | 61 | 64 | 78 | 16 | 08 | 30.00 | 30.20 |
| 22 | 10 | 29 | | | | | 10.00 | | 62 | 54 | 58 | 75 | 14 | 06 | 30.09 | 30.30 |

| HOUR (LST) | ≤ 12K FEET | | SATELLITE > 12K FT | | | | VISIBILITY (MILES) | WEATHER | TEMPERATURE °F | | | RELATIVE HUMIDITY (PCT) | WIND | | PRESSURE (INCHES,HG) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CEILOMETER TENTHS | CEILING 100'S OF FT | OBSERVATION TIME(LST) | EFF CLD AMT TENTHS | 100'S OF FT LOWEST CLOUD TOP | 100'S OF FT HIGHEST CLOUD TOP | | | DRY BULB | DEW POINT | WET BULB | | SPEED (MPH) | DIRECTION TENS OF DEG | STATION | SEA LEVEL |
| **SUNRISE: 0507** | | | | | | | | **MAY 07** | | | **SUNSET: 1904** | | | | | |
| 01 | 10 | 13 | | | | | 10.00 | | 53 | 49 | 51 | 86 | 12 | 06 | 30.16 | 30.37 |
| 04 | 10 | 55 | | | | | 7.00 | R | 50 | 49 | 50 | 96 | 7 | 04 | 30.18 | 30.39 |
| 07 | 10 | 6 | | | | | 7.00 | R | 49 | 48 | 49 | 96 | 7 | 05 | 30.25 | 30.46 |
| 10 | 10 | 7 | | | | | 10.00 | | 50 | 49 | 50 | 96 | 8 | 08 | 30.29 | 30.50 |
| 13 | 10 | 17 | | | | | 10.00 | R | 52 | 49 | 51 | 90 | 8 | 09 | 30.25 | 30.46 |
| 16 | 10 | 27 | | | | | 3.00 | R | 51 | 49 | 50 | 93 | 7 | 09 | 30.20 | 30.42 |
| 19 | 10 | 9 | | | | | 2.00 | RF | 51 | 50 | 51 | 96 | 7 | 10 | 30.14 | 30.35 |
| 22 | 10 | 5 | 2100 | 9 | 190 | 260 | 5.00 | RF | 51 | 51 | 51 | 100 | 0 | 00 | 30.12 | 30.33 |
| **SUNRISE: 0506** | | | | | | | | **MAY 08** | | | **SUNSET: 1905** | | | | | |
| 01 | 10 | 4 | 0000 | 10 | 220 | 230 | 10.00 | R | 52 | 51 | 52 | 96 | 6 | 29 | 30.07 | 30.28 |
| 04 | 10 | 5 | 0300 | 10 | 140 | 230 | 10.00 | R | 52 | 51 | 52 | 96 | 5 | 24 | 30.04 | 30.24 |
| 07 | 9 | 6 | 0600 | 8 | 140 | 260 | 10.00 | | 54 | 48 | 51 | 80 | 6 | 20 | 30.04 | 30.24 |
| 10 | 10 | 8 | 0900 | 9 | 290 | 330 | 7.00 | | 57 | 52 | 54 | 84 | 0 | 00 | 30.05 | 30.25 |
| 13 | 10 | 12 | 1200 | 0 | NT | NT | 7.00 | | 61 | 56 | 58 | 84 | 5 | 17 | 30.02 | 30.23 |
| 16 | 10 | 19 | 1500 | 7 | 130 | 260 | 10.00 | | 63 | 58 | 60 | 84 | 10 | 11 | 30.00 | 30.21 |
| 19 | 5 | NC | | | | | 5.00 | F | 61 | 57 | 59 | 87 | 8 | 12 | 30.00 | 30.20 |
| 22 | | 6 | 2100 | 9 | 130 | 230 | 7.00 | | 59 | 57 | 58 | 93 | 10 | 13 | 30.02 | 30.22 |
| **SUNRISE: 0505** | | | | | | | | **MAY 09** | | | **SUNSET: 1906** | | | | | |
| 01 | 10 | 2 | 0001 | 5 | 150 | 300 | 2.00 | F | 58 | 58 | 58 | 100 | 8 | 14 | 29.95 | 30.16 |
| 04 | 10 | 1 | 0300 | 10 | 170 | 230 | .25 | F | 59 | 59 | 59 | 100 | 0 | 00 | 29.96 | 30.17 |
| 07 | 10 | 1 | 0600 | 10 | 190 | 260 | <.25 | RF | 60 | 60 | 60 | 100 | 7 | 17 | 29.96 | 30.17 |
| 10 | 10 | 3 | 0900 | 3 | 150 | 440 | .50 | F | 66 | 64 | 65 | 93 | 7 | 02 | 30.02 | 30.23 |
| 13 | 10 | 9 | 1200 | 6 | 230 | 380 | 5.00 | H | 68 | 63 | 65 | 84 | 9 | 08 | 30.02 | 30.24 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 7.00 | | 72 | 63 | 66 | 73 | 10 | 07 | 30.04 | 30.24 |
| 19 | 0 | NC | | | | | 10.00 | | 64 | 58 | 61 | 81 | 8 | 07 | 30.05 | 30.25 |
| 22 | 10 | 9 | 2100 | 1 | 130 | 380 | 10.00 | | 59 | 56 | 57 | 90 | 6 | 08 | 30.09 | 30.29 |
| **SUNRISE: 0504** | | | | | | | | **MAY 10** | | | **SUNSET: 1907** | | | | | |
| 01 | 10 | 9 | 0001 | 1 | 130 | 330 | 10.00 | | 57 | 55 | 56 | 93 | 6 | 12 | 30.05 | 30.27 |
| 04 | 10 | 5 | 0300 | 0 | NT | NT | 10.00 | | 57 | 55 | 56 | 93 | 6 | 14 | 30.04 | 30.24 |
| 07 | 10 | 3 | 0600 | 1 | 130 | 380 | 1.50 | F | 57 | 56 | 56 | 97 | 3 | 15 | 30.07 | 30.27 |
| 10 | 10 | 7 | 0900 | 0 | NT | NT | 7.00 | | 63 | 59 | 61 | 87 | 7 | 24 | 30.05 | 30.25 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 7.00 | | 75 | 64 | 68 | 69 | 8 | 24 | 29.96 | 30.17 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 83 | 67 | 72 | 59 | 10 | 19 | 29.88 | 30.08 |
| 19 | 0 | NC | | | | | 10.00 | | 78 | 63 | 68 | 60 | 10 | 20 | 29.83 | 30.03 |
| 22 | 0 | NC | 2100 | 0 | NT | NT | 10.00 | | 76 | 60 | 66 | 58 | 13 | 21 | 29.83 | 30.03 |
| **SUNRISE: 0504** | | | | | | | | **MAY 11** | | | **SUNSET: 1908** | | | | | |
| 01 | 0 | NC | 0001 | 0 | NT | NT | 10.00 | | 72 | 60 | 65 | 66 | 12 | 21 | 29.78 | 29.98 |
| 04 | 7 | NC | 0300 | 1 | 130 | 130 | 10.00 | | 72 | 58 | 64 | 62 | 13 | 22 | 29.76 | 29.96 |
| 07 | 2 | NC | 0600 | 6 | 130 | 260 | 10.00 | | 72 | 60 | 65 | 66 | 10 | 21 | 29.75 | 29.95 |
| 10 | 0 | NC | 0900 | 0 | NT | NT | 10.00 | | 80 | 65 | 70 | 60 | 14 | 22 | 29.70 | 29.90 |
| 13 | 1 | NC | 1200 | 0 | NT | NT | 10.00 | | 85 | 62 | 70 | 46 | 25 | 22 | 29.58 | 29.78 |
| 16 | 1 | NC | 1500 | 0 | NT | NT | 10.00 | | 83 | 61 | 69 | 48 | 24 | 21 | 29.48 | 29.68 |
| 19 | 3 | NC | | | | | 10.00 | | 64 | 62 | 63 | 93 | 13 | 21 | 29.54 | 29.74 |
| 22 | 8 | 120 | 2101 | 10 | 260 | 340 | 7.00 | R | 67 | 60 | 63 | 78 | 14 | 25 | 29.57 | 29.77 |
| **SUNRISE: 0503** | | | | | | | | **MAY 12** | | | **SUNSET: 1909** | | | | | |
| 01 | 0 | NC | 0001 | 0 | NT | NT | 10.00 | R | 60 | 52 | 56 | 75 | 12 | 30 | 29.59 | 29.79 |
| 04 | 0 | NC | 0300 | 0 | NT | NT | 10.00 | R | 55 | 46 | 50 | 72 | 10 | 30 | 29.62 | 29.82 |
| 07 | 0 | NC | 0600 | 0 | NT | NT | 10.00 | | 55 | 41 | 48 | 60 | 13 | 31 | 29.68 | 29.88 |
| 10 | 1 | NC | 0900 | 0 | NT | NT | 10.00 | | 61 | 37 | 49 | 41 | 16 | 32 | 29.70 | 29.91 |
| 13 | 7 | 70 | 1200 | 0 | NT | NT | 10.00 | | 63 | 33 | 49 | 33 | 15 | 29 | 29.70 | 29.90 |
| 16 | 2 | NC | 1500 | 1 | 130 | 440 | 10.00 | | 63 | 32 | 49 | 31 | 21 | 28 | 29.72 | 29.93 |
| 19 | 2 | NC | | | | | 10.00 | | 58 | 30 | 46 | 35 | 14 | 29 | 29.80 | 30.00 |
| 22 | 0 | NC | | | | | 10.00 | | 52 | 33 | 44 | 49 | 7 | 30 | 29.88 | 30.08 |

# OBSERVATIONS AT 3-HOURLY INTERVALS

MAY 1996 RICHMOND, VA WBAN # 13740

| HOUR (LST) | ≤ 12K FEET: CEILOMETER TENTHS | ≤ 12K FEET: CEILING 100'S OF FT | SATELLITE > 12K FT: OBSERVATION TIME (LST) | SATELLITE > 12K FT: EFF CLD AMT TENTHS | SATELLITE > 12K FT: 100'S OF FT: LOWEST CLOUD TOP | SATELLITE > 12K FT: 100'S OF FT: HIGHEST CLOUD TOP | VISIBILITY (MILES) | WEATHER | TEMPERATURE °F: DRY BULB | TEMPERATURE °F: DEW POINT | TEMPERATURE °F: WET BULB | RELATIVE HUMIDITY (PCT) | WIND: SPEED (MPH) | WIND: DIRECTION TENS OF DEG | PRESSURE (INCHES,HG): STATION | PRESSURE (INCHES,HG): SEA LEVEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUNRISE: 0502** | | | | | | | | **MAY 13** | | | **SUNSET: 1909** | | | | | |
| 01 | 2 | NC | | | | | 10.00 | | 43 | 39 | 41 | 86 | 0 | 00 | 29.91 | 30.11 |
| 04 | 0 | NC | | | | | 10.00 | | 44 | 37 | 41 | 77 | 3 | 33 | 29.93 | 30.14 |
| 07 | 0 | NC | | | | | 10.00 | | 47 | 34 | 41 | 61 | 6 | 35 | 30.00 | 30.21 |
| 10 | 1 | NC | 0900 | 0 | NT | NT | 10.00 | | 53 | 31 | 43 | 43 | 7 | 02 | 30.02 | 30.24 |
| 13 | 5 | NC | 1200 | 0 | NT | NT | 10.00 | | 59 | 31 | 46 | 35 | 10 | 30 | 29.98 | 30.19 |
| 16 | | NC | 1500 | 1 | 130 | 260 | 10.00 | | 59 | 29 | 46 | 32 | 8 | 35 | 29.93 | 30.15 |
| 19 | 10 | 100 | 1800 | 3 | 130 | 440 | 10.00 | | 55 | 36 | 46 | 49 | 7 | 07 | 29.96 | 30.17 |
| 22 | 10 | 70 | 2100 | 4 | 130 | 180 | 10.00 | | 51 | 38 | 45 | 61 | 6 | 09 | 30.05 | 30.26 |
| **SUNRISE: 0501** | | | | | | | | **MAY 14** | | | **SUNSET: 1910** | | | | | |
| 01 | 10 | 60 | 0001 | 7 | 190 | 300 | 10.00 | | 50 | 39 | 45 | 66 | 3 | 05 | 30.07 | 30.28 |
| 04 | 10 | 65 | 0300 | 9 | 130 | 230 | 10.00 | | 49 | 33 | 42 | 54 | 5 | 03 | 30.11 | 30.31 |
| 07 | 7 | 90 | 0600 | 0 | NT | NT | 10.00 | | 50 | 39 | 45 | 66 | 3 | 01 | 30.16 | 30.36 |
| 10 | 0 | NC | 0900 | 0 | NT | NT | 10.00 | | 57 | 28 | 45 | 33 | 8 | 03 | 30.20 | 30.40 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 10.00 | | 62 | 29 | 47 | 29 | 10 | 03 | 30.16 | 30.37 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 64 | 29 | 48 | 27 | 0 | 00 | 30.14 | 30.34 |
| 19 | 0 | NC | | | | | 10.00 | | 57 | 36 | 47 | 46 | 10 | 10 | 30.12 | 30.33 |
| 22 | 0 | NC | 2100 | 4 | 150 | 440 | 10.00 | | 48 | 36 | 43 | 63 | 5 | 14 | 30.18 | 30.40 |
| **SUNRISE: 0500** | | | | | | | | **MAY 15** | | | **SUNSET: 1911** | | | | | |
| 01 | 0 | NC | 0000 | 4 | 230 | 440 | 10.00 | | 47 | 38 | 43 | 71 | 6 | 14 | 30.18 | 30.39 |
| 04 | 1 | NC | 0300 | 10 | 270 | 330 | 10.00 | | 48 | 39 | 44 | 71 | 3 | 18 | 30.20 | 30.40 |
| 07 | 3 | NC | 0600 | 10 | 260 | 330 | 10.00 | | 50 | 39 | 45 | 66 | 0 | 00 | 30.23 | 30.45 |
| 10 | 2 | NC | 0900 | 8 | 180 | 300 | 10.00 | | 58 | 33 | 47 | 39 | 10 | 15 | 30.23 | 30.43 |
| 13 | 5 | 100 | 1200 | 8 | 260 | 330 | 10.00 | | 61 | 35 | 49 | 38 | 12 | 15 | 30.16 | 30.37 |
| 16 | | 70 | 1500 | 10 | 310 | 380 | 10.00 | | 60 | 34 | 48 | 38 | 0 | 00 | 30.12 | 30.33 |
| 19 | 10 | 39 | | | | | 4.00 | RF | 50 | 48 | 49 | 93 | 6 | 13 | 30.12 | 30.33 |
| 22 | 10 | 5 | | | | | 3.00 | RF | 50 | 49 | 50 | 96 | 7 | 14 | 30.11 | 30.31 |
| **SUNRISE: 0459** | | | | | | | | **MAY 16** | | | **SUNSET: 1912** | | | | | |
| 01 | 10 | 2 | | | | | 3.00 | RF | 52 | 52 | 52 | 100 | 10 | 14 | 30.04 | 30.24 |
| 04 | 10 | 10 | | | | | 2.00 | RF | 53 | 53 | 53 | 100 | 5 | 16 | 30.00 | 30.20 |
| 07 | 10 | 4 | | | | | 10.00 | R | 55 | 54 | 55 | 97 | 7 | 18 | 29.98 | 30.19 |
| 10 | 9 | 8 | | | | | 10.00 | | 60 | 57 | 58 | 90 | 9 | 22 | 29.95 | 30.15 |
| 13 | 10 | 14 | 1200 | 7 | 210 | 260 | 7.00 | | 64 | 58 | 61 | 81 | 10 | 22 | 29.90 | 30.10 |
| 16 | 10 | 14 | 1500 | 0 | NT | NT | 7.00 | | 65 | 60 | 62 | 84 | 9 | 22 | 29.85 | 30.05 |
| 19 | 10 | 16 | 1800 | 0 | NT | NT | 5.00 | F | 65 | 61 | 63 | 87 | 6 | 18 | 29.84 | 30.04 |
| 22 | 7 | 65 | 2100 | 10 | 330 | 440 | 5.00 | RF | 63 | 62 | 62 | 97 | 3 | 15 | 29.85 | 30.05 |
| **SUNRISE: 0458** | | | | | | | | **MAY 17** | | | **SUNSET: 1913** | | | | | |
| 01 | 10 | 3 | 0001 | 5 | 150 | 440 | 3.00 | F | 63 | 62 | 62 | 97 | 6 | 21 | 29.80 | 30.00 |
| 04 | 10 | 1 | 0300 | 5 | 210 | 330 | .50 | F | 63 | 63 | 63 | 100 | 3 | 04 | 29.79 | 29.99 |
| 07 | | 1 | 0600 | 9 | 180 | 300 | .75 | F | 63 | 63 | 63 | 100 | 3 | 05 | 29.82 | 30.02 |
| 10 | 10 | 5 | 0900 | 4 | 260 | 440 | 2.00 | F | 67 | 64 | 65 | 90 | 5 | 12 | 29.83 | 30.03 |
| 13 | 10 | 13 | 1200 | 10 | 340 | 460 | 5.00 | H | 71 | 66 | 68 | 84 | 5 | 17 | 29.83 | 30.03 |
| 16 | 5 | 21 | | | | | 5.00 | H | 77 | 68 | 71 | 74 | 5 | 10 | 29.79 | 29.99 |
| 19 | 0 | NC | | | | | 3.50 | F | 72 | 68 | 69 | 87 | 8 | 12 | 29.77 | 29.97 |
| 22 | 8 | 75 | 2100 | 6 | 260 | 330 | 4.00 | F | 66 | 64 | 65 | 93 | 10 | 13 | 29.81 | 30.01 |
| **SUNRISE: 0458** | | | | | | | | **MAY 18** | | | **SUNSET: 1914** | | | | | |
| 01 | 10 | 2 | 0000 | 5 | 180 | 330 | 2.00 | F | 64 | 63 | 63 | 97 | 6 | 08 | 29.81 | 30.01 |
| 04 | 10 | 1 | 0300 | 1 | 130 | 440 | <.25 | F | 63 | 63 | 63 | 100 | 3 | 06 | 29.80 | 30.00 |
| 07 | 10 | 1 | 0600 | 0 | NT | NT | <.25 | F | 63 | 63 | 63 | 100 | 0 | 00 | 29.83 | 30.03 |
| 10 | 8 | 5 | 0900 | 0 | NT | NT | 3.50 | H | 72 | 67 | 69 | 84 | 0 | 00 | 29.85 | 30.05 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 7.00 | | 83 | 69 | 74 | 63 | 3 | 20 | 29.79 | 29.99 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 88 | 69 | 75 | 53 | 12 | 22 | 29.74 | 29.93 |
| 19 | 0 | NC | | | | | 10.00 | | 80 | 71 | 74 | 74 | 8 | 20 | 29.71 | 29.91 |
| 22 | 0 | NC | 2100 | 0 | NT | NT | 10.00 | | 75 | 69 | 71 | 82 | 8 | 21 | 29.72 | 29.92 |

| HOUR (LST) | ≤ 12K FEET: CEILOMETER TENTHS | ≤ 12K FEET: CEILING 100'S OF FT | SATELLITE > 12K FT: OBSERVATION TIME (LST) | SATELLITE > 12K FT: EFF CLD AMT TENTHS | SATELLITE > 12K FT: 100'S OF FT: LOWEST CLOUD TOP | SATELLITE > 12K FT: 100'S OF FT: HIGHEST CLOUD TOP | VISIBILITY (MILES) | WEATHER | TEMPERATURE °F: DRY BULB | TEMPERATURE °F: DEW POINT | TEMPERATURE °F: WET BULB | RELATIVE HUMIDITY (PCT) | WIND: SPEED (MPH) | WIND: DIRECTION TENS OF DEG | PRESSURE (INCHES,HG): STATION | PRESSURE (INCHES,HG): SEA LEVEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUNRISE: 0457** | | | | | | | | **MAY 19** | | | **SUNSET: 1914** | | | | | |
| 01 | 0 | NC | 0001 | 0 | NT | NT | 7.00 | | 74 | 67 | 70 | 79 | 6 | 24 | 29.72 | 29.91 |
| 04 | 0 | NC | 0300 | 0 | NT | NT | 7.00 | | 68 | 65 | 66 | 90 | 0 | 00 | 29.72 | 29.92 |
| 07 | 0 | NC | 0600 | 0 | NT | NT | 7.00 | | 73 | 68 | 70 | 84 | 0 | 00 | 29.75 | 29.95 |
| 10 | 0 | NC | 0900 | 0 | NT | NT | 10.00 | | 89 | 61 | 71 | 39 | 6 | 31 | 29.75 | 29.94 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 10.00 | | 92 | 61 | 72 | 36 | 9 | 22 | 29.70 | 29.89 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 93 | 62 | 73 | 36 | 14 | 22 | 29.65 | 29.85 |
| 19 | 0 | NC | 1800 | 0 | NT | NT | 10.00 | | 82 | 69 | 73 | 65 | 7 | 20 | 29.64 | 29.84 |
| 22 | 0 | NC | | | | | 10.00 | | 75 | 68 | 70 | 79 | 3 | 18 | 29.65 | 29.84 |
| **SUNRISE: 0456** | | | | | | | | **MAY 20** | | | **SUNSET: 1915** | | | | | |
| 01 | 0 | NC | | | | | 10.00 | | 72 | 67 | 69 | 84 | 3 | 20 | 29.62 | 29.81 |
| 04 | | NC | | | | | 10.00 | | 69 | 65 | 67 | 87 | 5 | 19 | 29.61 | 29.80 |
| 07 | | NC | | | | | 7.00 | | 68 | 65 | 66 | 90 | 5 | 26 | 29.63 | 29.83 |
| 10 | | NC | | | | | 10.00 | | 87 | 69 | 75 | 55 | 7 | 25 | 29.62 | 29.81 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 10.00 | | 93 | 68 | 76 | 44 | 9 | 21 | 29.58 | 29.78 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 95 | 68 | 76 | 41 | 10 | 22 | 29.54 | 29.74 |
| 19 | 0 | NC | 1800 | 0 | NT | NT | 10.00 | | 86 | 69 | 74 | 57 | 10 | 21 | 29.54 | 29.74 |
| 22 | 0 | NC | | | | | 10.00 | | 79 | 68 | 72 | 69 | 10 | 20 | 29.56 | 29.75 |
| **SUNRISE: 0456** | | | | | | | | **MAY 21** | | | **SUNSET: 1916** | | | | | |
| 01 | 0 | NC | | | | | 7.00 | | 78 | 67 | 71 | 69 | 9 | 23 | 29.54 | 29.73 |
| 04 | 0 | NC | | | | | 5.00 | F | 73 | 69 | 70 | 87 | 9 | 21 | 29.52 | 29.72 |
| 07 | 0 | NC | | | | | 4.00 | H | 76 | 70 | 72 | 82 | 9 | 23 | 29.53 | 29.73 |
| 10 | 0 | NC | 0900 | 0 | NT | NT | 7.00 | | 85 | 70 | 75 | 61 | 8 | 25 | 29.51 | 29.71 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 10.00 | | 90 | 66 | 74 | 45 | 14 | 24 | 29.47 | 29.67 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 7.00 | | 91 | 66 | 74 | 44 | 14 | 24 | 29.43 | 29.62 |
| 19 | 0 | NC | 1800 | 0 | NT | NT | 10.00 | | 82 | 69 | 73 | 65 | 8 | 20 | 29.43 | 29.62 |
| 22 | 9 | 95 | 2100 | 6 | 130 | 260 | 10.00 | | 81 | 66 | 71 | 60 | 10 | 02 | 29.51 | 29.70 |
| **SUNRISE: 0455** | | | | | | | | **MAY 22** | | | **SUNSET: 1917** | | | | | |
| 01 | 3 | 100 | 0000 | 6 | 140 | 440 | 10.00 | | 73 | 66 | 69 | 79 | 8 | 04 | 29.53 | 29.72 |
| 04 | 10 | 50 | 0300 | 4 | 150 | 380 | 10.00 | | 70 | 61 | 65 | 73 | 8 | 36 | 29.56 | 29.76 |
| 07 | 2 | NC | 0600 | 1 | 150 | 440 | 10.00 | | 70 | 59 | 63 | 68 | 14 | 36 | 29.63 | 29.83 |
| 10 | 0 | NC | 0900 | 0 | NT | NT | 10.00 | | 78 | 54 | 64 | 44 | 12 | 05 | 29.65 | 29.85 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 10.00 | | 80 | 50 | 63 | 35 | 9 | 02 | 29.64 | 29.84 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 81 | 48 | 62 | 32 | 3 | 10 | 29.63 | 29.83 |
| 19 | 0 | NC | | | | | 10.00 | | 74 | 55 | 63 | 52 | 3 | 13 | 29.65 | 29.85 |
| 22 | 0 | NC | 2100 | 0 | NT | NT | 10.00 | | 67 | 58 | 62 | 73 | 3 | 14 | 29.71 | 29.91 |
| **SUNRISE: 0454** | | | | | | | | **MAY 23** | | | **SUNSET: 1918** | | | | | |
| 01 | 3 | NC | 0000 | 1 | 130 | 190 | 10.00 | | 66 | 57 | 61 | 73 | 6 | 23 | 29.72 | 29.91 |
| 04 | 0 | NC | 0300 | 0 | NT | NT | 10.00 | | 62 | 58 | 60 | 87 | 3 | 30 | 29.73 | 29.93 |
| 07 | 0 | NC | 0600 | 0 | NT | NT | 10.00 | | 69 | 57 | 62 | 66 | 5 | 34 | 29.78 | 29.98 |
| 10 | 0 | NC | 0900 | 3 | 300 | 440 | 10.00 | | 79 | 54 | 64 | 42 | 6 | 03 | 29.82 | 30.02 |
| 13 | 0 | NC | 1200 | 0 | NT | NT | 10.00 | | 83 | 51 | 64 | 33 | 10 | 23 | 29.80 | 30.00 |
| 16 | 2 | NC | 1500 | 0 | NT | NT | 10.00 | | 82 | 56 | 66 | 41 | 9 | 24 | 29.75 | 29.95 |
| 19 | 0 | NC | | | | | 10.00 | | 76 | 61 | 67 | 60 | 6 | 19 | 29.75 | 29.95 |
| 22 | 0 | NC | 2100 | 0 | NT | NT | 10.00 | | 70 | 61 | 65 | 73 | 7 | 17 | 29.80 | 29.99 |
| **SUNRISE: 0454** | | | | | | | | **MAY 24** | | | **SUNSET: 1919** | | | | | |
| 01 | 5 | 110 | 0001 | 9 | 170 | 260 | 10.00 | | 72 | 58 | 64 | 62 | 9 | 19 | 29.78 | 29.98 |
| 04 | 0 | NC | 0300 | 4 | 140 | 440 | 10.00 | | 70 | 51 | 59 | 51 | 9 | 22 | 29.78 | 29.98 |
| 07 | | 80 | 0600 | 1 | 140 | 440 | 10.00 | | 69 | 55 | 61 | 61 | 7 | 22 | 29.81 | 30.01 |
| 10 | 0 | NC | 0900 | 0 | NT | NT | 10.00 | | 79 | 60 | 67 | 52 | 7 | 26 | 29.81 | 30.01 |
| 13 | 2 | NC | 1200 | 6 | 230 | 460 | 10.00 | | 82 | 63 | 70 | 53 | 9 | 35 | 29.84 | 30.04 |
| 16 | 0 | NC | 1500 | 6 | 130 | 230 | 10.00 | | 78 | 63 | 68 | 60 | 13 | 02 | 29.81 | 30.01 |
| 19 | 0 | NC | | | | | 10.00 | | 75 | 61 | 66 | 62 | 8 | 01 | 29.84 | 30.04 |
| 22 | | NC | 2100 | 1 | 150 | 380 | 10.00 | | 69 | 62 | 65 | 79 | 0 | 00 | 29.85 | 30.05 |

# OBSERVATIONS AT 3-HOURLY INTERVALS

MAY 1996
RICHMOND, VA

WBAN # 13740

| HOUR (LST) | ≤ 12K FEET: CEILOMETER TENTHS | ≤ 12K FEET: CEILING 100'S OF FT | SATELLITE > 12K FT: OBSERVATION TIME (LST) | SATELLITE > 12K FT: EFF CLD AMT TENTHS | SATELLITE > 12K FT: 100'S OF FT: LOWEST CLOUD TOP | SATELLITE > 12K FT: 100'S OF FT: HIGHEST CLOUD TOP | VISIBILITY (MILES) | WEATHER | TEMPERATURE °F: DRY BULB | TEMPERATURE °F: DEW POINT | TEMPERATURE °F: WET BULB | RELATIVE HUMIDITY (PCT) | WIND: SPEED (MPH) | WIND: DIRECTION TENS OF DEG | PRESSURE (INCHES, HG): STATION | PRESSURE (INCHES, HG): SEA LEVEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUNRISE: 0453 MAY 25 SUNSET: 1919** | | | | | | | | | | | | | | | | |
| 01 | 10 | 48 | 0001 | 9 | 300 | 380 | 10.00 | | 68 | 62 | 64 | 81 | 6 | 02 | 29.84 | 30.03 |
| 04 | 10 | 36 | 0300 | 10 | 320 | 330 | 1.75 | RF | 64 | 63 | 63 | 97 | 6 | 28 | 29.87 | 30.07 |
| 07 | 10 | 34 | 0601 | 10 | 260 | 300 | 3.00 | F | 64 | 63 | 63 | 97 | 6 | 03 | 29.91 | 30.11 |
| 10 | | 43 | 0900 | 8 | 140 | 300 | 10.00 | | 61 | 54 | 57 | 78 | 8 | 04 | 29.95 | 30.14 |
| 13 | 10 | 41 | 1200 | 5 | 130 | 330 | 10.00 | | 62 | 50 | 56 | 65 | 10 | 04 | 29.95 | 30.15 |
| 16 | 10 | 41 | 1500 | 1 | 130 | 210 | 10.00 | | 61 | 48 | 54 | 63 | 10 | 04 | 29.93 | 30.14 |
| 19 | 10 | 60 | 1800 | 1 | 150 | 150 | 10.00 | | 59 | 49 | 54 | 70 | 6 | 01 | 29.92 | 30.12 |
| 22 | 10 | 38 | 2100 | 0 | NT | NT | 10.00 | | 59 | 50 | 54 | 72 | 0 | 00 | 29.93 | 30.14 |
| **SUNRISE: 0453 MAY 26 SUNSET: 1920** | | | | | | | | | | | | | | | | |
| 01 | 0 | NC | 0001 | 0 | NT | NT | 10.00 | | 54 | 51 | 52 | 90 | 3 | 34 | 29.92 | 30.13 |
| 04 | 10 | 38 | 0300 | 4 | 130 | 230 | 10.00 | | 55 | 52 | 53 | 90 | 0 | 00 | 29.92 | 30.13 |
| 07 | 10 | 50 | 0601 | 4 | 150 | 440 | 10.00 | | 57 | 50 | 53 | 78 | 5 | 07 | 29.93 | 30.13 |
| 10 | 10 | 43 | 0900 | 8 | 180 | 330 | 10.00 | | 61 | 54 | 57 | 78 | 5 | 10 | 29.92 | 30.12 |
| 13 | 10 | 41 | 1200 | 8 | 260 | 330 | 10.00 | | 63 | 52 | 57 | 68 | 7 | 09 | 29.89 | 30.09 |
| 16 | 10 | 34 | 1500 | 9 | 150 | 260 | 10.00 | | 61 | 51 | 56 | 70 | 7 | 11 | 29.85 | 30.05 |
| 19 | 10 | 22 | | | | | 10.00 | | 60 | 53 | 56 | 78 | 5 | 06 | 29.81 | 30.01 |
| 22 | 10 | 22 | | | | | 10.00 | | 58 | 54 | 56 | 87 | 3 | 05 | 29.83 | 30.03 |
| **SUNRISE: 0452 MAY 27 SUNSET: 1921** | | | | | | | | | | | | | | | | |
| 01 | 10 | 10 | | | | | 10.00 | | 58 | 53 | 55 | 84 | 7 | 13 | 29.80 | 30.00 |
| 04 | 10 | 6 | | | | | 5.00 | F | 56 | 55 | 55 | 97 | 0 | 00 | 29.74 | 29.94 |
| 07 | 10 | 2 | | | | | 2.50 | F | 57 | 57 | 57 | 100 | 3 | 04 | 29.76 | 29.96 |
| 10 | 10 | 2 | | | | | 2.00 | F | 59 | 58 | 58 | 97 | 8 | 01 | 29.80 | 30.00 |
| 13 | 10 | 4 | | | | | 1.50 | F | 61 | 60 | 60 | 97 | 8 | 06 | 29.80 | 30.00 |
| 16 | 10 | 7 | | | | | 2.00 | F | 59 | 58 | 58 | 97 | 13 | 10 | 29.79 | 29.99 |
| 19 | 10 | 6 | 1800 | 6 | 300 | 440 | 2.00 | | 55 | 54 | 55 | 97 | 13 | 08 | 29.81 | 30.01 |
| 22 | 10 | 3 | | | | | 1.50 | | 55 | 55 | 55 | 100 | 10 | 11 | 29.81 | 30.01 |
| **SUNRISE: 0452 MAY 28 SUNSET: 1922** | | | | | | | | | | | | | | | | |
| 01 | | 5 | | | | | 10.00 | | 56 | 56 | 56 | 100 | 7 | 01 | 29.80 | 30.00 |
| 04 | 10 | 3 | | | | | 2.00 | R | 56 | 55 | 55 | 97 | 9 | 07 | 29.70 | 29.90 |
| 07 | 10 | | | | | | | | | | | | | | | |
| 10 | 10 | 5 | | | | | 7.00 | | 60 | 58 | 59 | 93 | 6 | 06 | 29.76 | 29.96 |
| 13 | | 14 | 1200 | 9 | 180 | 240 | 2.00 | F | 61 | 59 | 60 | 93 | 8 | 10 | 29.75 | 29.95 |
| 16 | 10 | 8 | 1500 | 9 | 190 | 300 | 10.00 | | 61 | 58 | 59 | 90 | 8 | 06 | 29.71 | 29.91 |
| 19 | 10 | 6 | 1800 | 8 | 210 | 300 | 10.00 | | 58 | 56 | 57 | 93 | 6 | 07 | 29.73 | 29.93 |
| 22 | 10 | 5 | 2100 | 4 | 130 | 380 | 10.00 | | 58 | 56 | 57 | 93 | 5 | 06 | 29.74 | 29.94 |
| **SUNRISE: 0451 MAY 29 SUNSET: 1922** | | | | | | | | | | | | | | | | |
| 01 | 10 | 4 | 0001 | 8 | 210 | 330 | 5.00 | F | 57 | 56 | 56 | 97 | 0 | 00 | 29.70 | 29.91 |
| 04 | 10 | 4 | 0300 | 9 | 260 | 330 | 10.00 | | 57 | 56 | 56 | 97 | 0 | 00 | 29.67 | 29.87 |
| 07 | 10 | 2 | 0600 | 7 | 200 | 380 | .75 | F | 57 | 56 | 56 | 97 | 7 | 10 | 29.65 | 29.85 |
| 10 | 10 | 4 | 0900 | 6 | 150 | 210 | 2.50 | | 58 | 56 | 57 | 93 | 6 | 11 | 29.66 | 29.86 |
| 13 | 10 | 7 | 1200 | 2 | 180 | 330 | 2.50 | F | 61 | 59 | 60 | 93 | 6 | 13 | 29.64 | 29.84 |
| 16 | 10 | 15 | 1500 | 1 | 130 | 180 | 1.00 | F | 60 | 59 | 59 | 97 | 12 | 02 | 29.66 | 29.86 |
| 19 | 10 | 5 | | | | | 2.00 | F | 57 | 56 | 56 | 97 | 15 | 04 | 29.71 | 29.91 |
| 22 | 10 | 6 | | | | | 10.00 | | 56 | 55 | 55 | 97 | 6 | 04 | 29.76 | 29.96 |
| **SUNRISE: 0451 MAY 30 SUNSET: 1923** | | | | | | | | | | | | | | | | |
| 01 | 9 | 80 | | | | | 7.00 | | 55 | 54 | 55 | 97 | 5 | 35 | 29.75 | 29.96 |
| 04 | | 100 | | | | | 10.00 | | 54 | 50 | 52 | 86 | 10 | 01 | 29.76 | 29.96 |
| 07 | 0 | NC | | | | | 10.00 | | 54 | 44 | 49 | 69 | 13 | 36 | 29.84 | 30.04 |
| 10 | 0 | NC | | | | | 10.00 | | 64 | 42 | 53 | 45 | 15 | 01 | 29.86 | 30.06 |
| 13 | 0 | NC | | | | | 10.00 | | 69 | 40 | 54 | 35 | 16 | 36 | 29.86 | 30.06 |
| 16 | 0 | NC | 1500 | 0 | NT | NT | 10.00 | | 71 | 42 | 56 | 35 | 13 | 36 | 29.84 | 30.04 |
| 19 | 0 | NC | 1800 | 0 | NT | NT | 10.00 | | 65 | 42 | 53 | 43 | 7 | 35 | 29.89 | 30.09 |
| 22 | 0 | NC | 2100 | 0 | NT | NT | 10.00 | | 56 | 42 | 49 | 60 | 5 | 09 | 29.93 | 30.15 |

| HOUR (LST) | ≤ 12K FEET: CEILOMETER TENTHS | ≤ 12K FEET: CEILING 100'S OF FT | SATELLITE > 12K FT: OBSERVATION TIME (LST) | SATELLITE > 12K FT: EFF CLD AMT TENTHS | SATELLITE > 12K FT: 100'S OF FT: LOWEST CLOUD TOP | SATELLITE > 12K FT: 100'S OF FT: HIGHEST CLOUD TOP | VISIBILITY (MILES) | WEATHER | TEMPERATURE °F: DRY BULB | TEMPERATURE °F: DEW POINT | TEMPERATURE °F: WET BULB | RELATIVE HUMIDITY (PCT) | WIND: SPEED (MPH) | WIND: DIRECTION TENS OF DEG | PRESSURE (INCHES, HG): STATION | PRESSURE (INCHES, HG): SEA LEVEL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUNRISE: 0450 MAY 31 SUNSET: 1924** | | | | | | | | | | | | | | | | |
| 01 | 0 | NC | 0001 | 0 | NT | NT | 10.00 | | 48 | 45 | 47 | 89 | 0 | 00 | 29.95 | 30.16 |
| 04 | 0 | NC | 0300 | 0 | NT | NT | 10.00 | | 46 | 44 | 45 | 93 | 6 | 36 | 29.98 | 30.19 |
| 07 | 0 | NC | | | | | 10.00 | | 55 | 46 | 50 | 72 | 0 | 00 | 30.05 | 30.25 |
| 10 | 0 | NC | | | | | 10.00 | | 65 | 43 | 54 | 45 | 3 | 07 | 30.09 | 30.31 |
| 13 | 0 | NC | | | | | 10.00 | | 71 | 41 | 55 | 34 | 0 | 00 | 30.07 | 30.28 |
| 16 | 0 | NC | | | | | 10.00 | | 73 | 40 | 56 | 30 | 5 | 18 | 30.05 | 30.26 |
| 19 | 0 | NC | | | | | 10.00 | | 66 | 48 | 56 | 53 | 6 | 13 | 30.05 | 30.26 |
| 22 | 0 | NC | 2100 | 0 | NT | NT | 10.00 | | 57 | 50 | 53 | 78 | 8 | 14 | 30.12 | 30.33 |

HOURLY SUMMARY NOTES

CEILING IS REPORTED IN HUNDREDS OF FEET (ABOVE GROUND LEVEL) FOR CLOUDS AT OR BELOW 12,000 FEET.
*CLOUD TOPS ARE REPORTED IN HUNDREDS OF FEET (ABOVE MEAN SEA LEVEL) FOR CLOUDS ABOVE 12,000 FEET.*
NC = A CEILING WAS NOT DETECTED AT OR BELOW 12,000 FEET.
NT = CLOUD TOPS WERE NOT DETECTED ABOVE 12,000 FEET.
SEE PAGE 3 FOR ADDITIONAL NOTES.

## SUMMARY BY HOURS

| HOUR (LST) | AVERAGES: CEILOMETER | EFF CLD AMT | DRY BULB | DEW POINT | WET BULB | RELATIVE HUMIDITY | PRESSURE (INCHES, HG): STATION | PRESSURE (INCHES, HG): SEA LEVEL | VISIBILITY (MILES) | WIND SPEED (MPH) | RESULTANT WIND (MPH): SPEED | RESULTANT WIND (MPH): DIRECTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 5 | | 60 | 54 | 57 | 83 | 29.84 | 30.04 | 8.42 | 7 | 1 | 19 |
| 02 | 5 | | 59 | 54 | 56 | 83 | 29.83 | 30.04 | 8.39 | 6 | 1 | 19 |
| 03 | 6 | | 59 | 54 | 56 | 83 | 29.84 | 30.04 | 7.73 | 6 | 1 | 24 |
| 04 | 6 | | 58 | 54 | 56 | 86 | 29.84 | 30.04 | 7.67 | 5 | 1 | 28 |
| 05 | 6 | | 57 | 53 | 55 | 88 | 29.85 | 30.05 | 7.39 | 5 | 0 | 0 |
| 06 | 5 | | 58 | 53 | 55 | 86 | 29.86 | 30.07 | 6.72 | 5 | 1 | 36 |
| 07 | 5 | | 60 | 57 | 54 | 82 | 29.88 | 30.08 | 7.36 | 6 | 1 | 31 |
| 08 | | | 62 | 54 | 58 | 77 | 29.88 | 30.08 | 7.58 | 7 | 1 | 33 |
| 09 | 5 | | 65 | 53 | 59 | 70 | 29.89 | 30.09 | 7.89 | 8 | 2 | 31 |
| 10 | 4 | | 67 | 54 | 60 | 66 | 29.89 | 30.09 | 8.24 | 8 | 1 | 3 |
| 11 | 4 | | 69 | 53 | 60 | 61 | 29.88 | 30.09 | 8.76 | 8 | 1 | 30 |
| 12 | 3 | | 70 | 54 | 61 | 60 | 29.87 | 30.07 | 8.55 | 8 | 1 | 21 |
| 13 | 4 | | 72 | 53 | 61 | 57 | 29.86 | 30.06 | 8.52 | 10 | 2 | 22 |
| 14 | 4 | | 72 | 54 | 62 | 56 | 29.84 | 30.05 | 8.79 | 10 | 2 | 22 |
| 15 | 4 | | 72 | 54 | 62 | 56 | 29.83 | 30.03 | 8.77 | 10 | 2 | 21 |
| 16 | 4 | | 73 | 54 | 62 | 55 | 29.82 | 30.02 | 8.77 | 10 | 2 | 21 |
| 17 | 4 | | 72 | 54 | 61 | 57 | 29.82 | 30.02 | 8.77 | 10 | 3 | 17 |
| 18 | 4 | | 70 | 54 | 61 | 62 | 29.82 | 30.02 | 8.90 | 8 | 2 | 15 |
| 19 | 4 | | 67 | 55 | 60 | 69 | 29.83 | 30.03 | 8.31 | 9 | 3 | 13 |
| 20 | 4 | | 64 | 55 | 59 | 74 | 29.84 | 30.04 | 8.95 | 7 | 4 | 14 |
| 21 | 4 | | 63 | 55 | 59 | 78 | 29.85 | 30.06 | 8.63 | 7 | 3 | 16 |
| 22 | 5 | | 63 | 55 | 58 | 78 | 29.86 | 30.06 | 8.75 | 7 | 3 | 15 |
| 23 | 5 | | 61 | 55 | 58 | 80 | 29.85 | 30.05 | 8.69 | 7 | 2 | 15 |
| 24 | 5 | | 61 | 55 | 57 | 81 | 29.85 | 30.05 | 8.71 | 7 | 2 | 20 |

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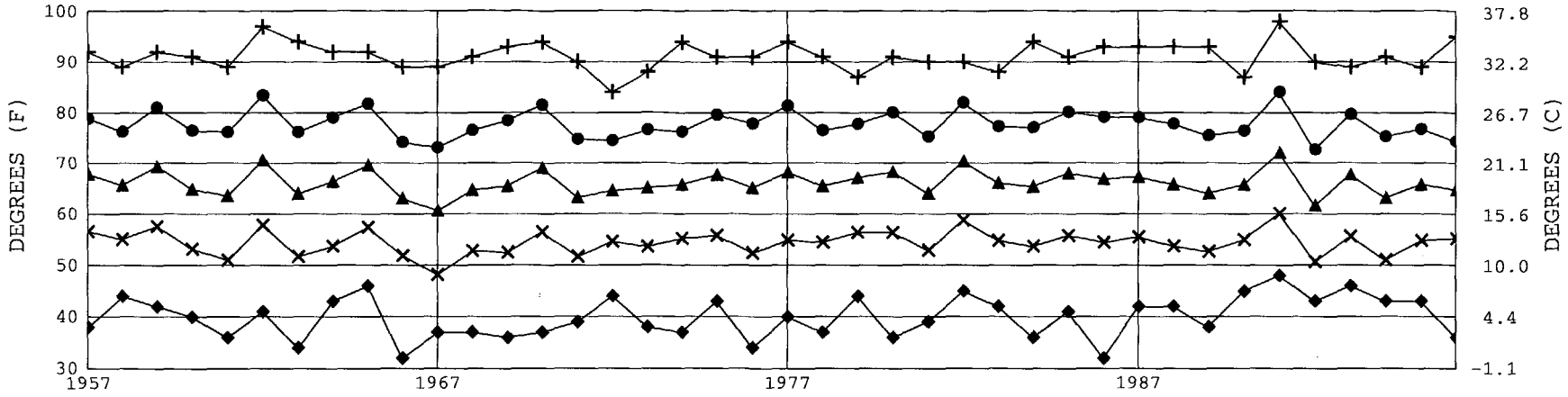
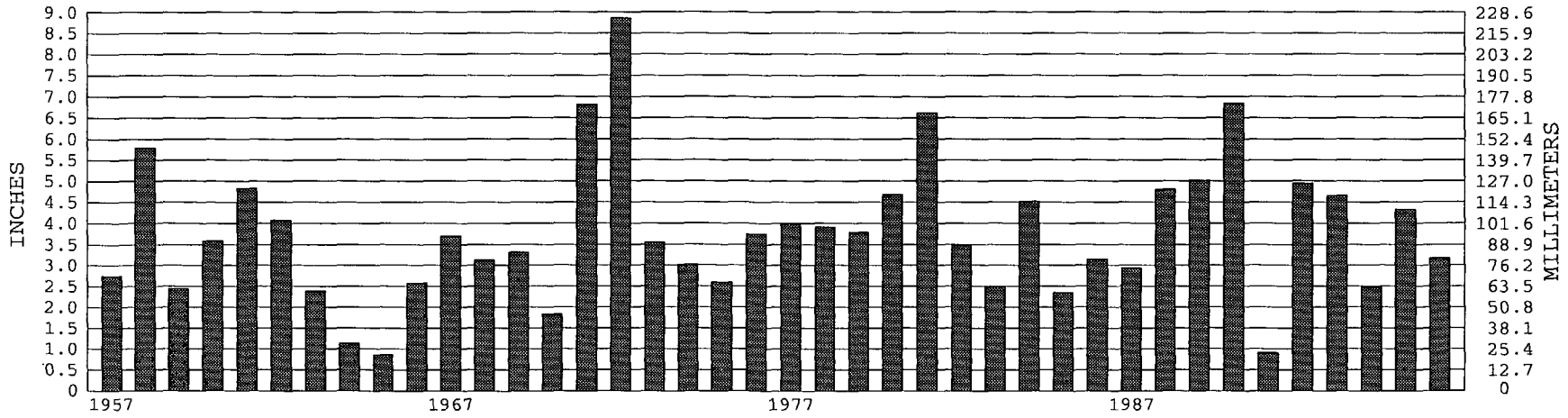
## RICHMOND, VA MAY TEMPERATURES




+ Extreme Max. ● Mean Max. ▲ Mean × Mean Min. ◆ Extreme Min.

Long-Term (1957-1996) Mean: 66.1 1961-1990 Normal: 66.0

## RICHMOND, VA MAY PRECIPITATION




Long-Term (1957-1996) Mean Monthly Total: 3.76 1961-1990 Normal: 3.84

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