# FEBRUARY 1998
# LOCAL CLIMATOLOGICAL DATA
NOAA, National Climatic Data Center

# KNOXVILLE, TN
MC GHEE TYSON AIRPORT (TYS)
Lat: 35°49' N Long: 83°59' W Elev (Ground): 979 Feet
Time Zone: EASTERN WBAN: 13891 ISSN #:0198−4810

| DATE | TEMPERATURE °F MAXIMUM | MINIMUM | AVERAGE | DEP FROM NORMAL | AVERAGE DEW PT | AVERAGE WET BULB | DEG DAYS BASE 65° HEATING | COOLING | WEATHER | SNOW/ICE ON GND(IN) 0700 LST DEPTH | 1300 LST WATER EQUIV | PRECIPITATION (INCHES) 2400 LST SNOW−FALL | 2400 LST WATER EQUIV | PRESSURE (INCHES OF HG) AVERAGE STATION | AVERAGE SEA LEVEL | WIND SPEED = MPH DIR = TENS OF DEGREES RESULTANT SPEED | RES DIR | AVERAGE SPEED | MAXIMUM 5−SEC SPEED | 5−SEC DIR | MAXIMUM 2−MIN SPEED | 2−MIN DIR | DATE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 01 | 53 | 27* | 40 | 3 | 27 | 34 | 25 | 0 | | 0 | | 0.0 | 0.00 | 29.03 | 30.09 | 2.5 | 04 | 3.2 | 10 | 04 | 9 | 04 | 01 |
| 02 | 51 | 35 | 43 | 6 | 34 | 39 | 22 | 0 | RA | 0 | | 0.0 | 0.04 | 29.04 | 30.09 | 5.7 | 03 | 6.2 | 11 | 03 | 11 | 04 | 02 |
| 03 | 48 | 34 | 41 | 4 | 41 | 42 | 24 | 0 | RA SN PE BR | 0 | | T | 1.18 | 28.77 | 29.81 | 16.3 | 04 | 16.7 | 38 | 03 | 31 | 04 | 03 |
| 04 | 35 | 33 | 34 | −4 | 32 | 33 | 31 | 0 | RA SN PE BR | T | | 0.1 | 0.47 | 28.50 | 29.54 | 11.1 | 01 | 11.4 | 25 | 02 | 20 | 02 | 04 |
| 05 | 35 | 32 | 34* | −4 | 31 | 33 | 31 | 0 | FZDZ SN BR | 0 | | T | T | 28.69 | 29.75 | 4.5 | 26 | 4.8 | 11 | 29 | 10 | 28 | 05 |
| 06 | 40 | 32 | 36 | −2 | 32 | 34 | 29 | 0 | BR | 0 | | 0.0 | 0.00 | 28.84 | 29.89 | 2.7 | 05 | 3.4 | 11 | 04 | 10 | 02 | 06 |
| 07 | 48 | 37 | 43 | 5 | 35 | 38 | 22 | 0 | BR | 0 | | 0.0 | 0.00 | 28.84 | 29.89 | 4.4 | 02 | 6.0 | 14 | 01 | 11 | 28 | 07 |
| 08 | 46 | 35 | 41 | 3 | 35 | 38 | 24 | 0 | RA | 0 | | 0.0 | T | 28.91 | 29.97 | 1.9 | 01 | 2.5 | 11 | 01 | 9 | 01 | 08 |
| 09 | 50 | 38 | 44 | 5 | 38 | 42 | 21 | 0 | RA BR | 0 | | 0.0 | T | 29.02 | 30.07 | 0.8 | 36 | 2.5 | 9 | 07 | 7 | 06 | 09 |
| 10 | 57 | 35 | 46 | 7 | 39 | 43 | 19 | 0 | RA BR | 0 | | 0.0 | T | 29.05 | 30.10 | 1.6 | 04 | 1.9 | 8 | 02 | 7 | 04 | 10 |
| 11 | 61 | 41 | 51 | 12 | 42 | 47 | 14 | 0 | RA BR | 0 | | 0.0 | 0.22 | 28.72 | 29.75 | 11.1 | 22 | 14.5 | 39 | 25 | 33 | 25 | 11 |
| 12 | 45 | 40 | 43 | 4 | 37 | 40 | 22 | 0 | RA DZ | 0 | | 0.0 | T | 28.90 | 29.95 | 9.5 | 26 | 9.7 | 31 | 23 | 25 | 24 | 12 |
| 13 | 47 | 39 | 43 | 4 | 36 | 40 | 22 | 0 | RA | 0 | | 0.0 | T | 28.99 | 30.04 | 2.9 | 02 | 4.0 | 10 | 32 | 9 | 04 | 13 |
| 14 | 52 | 38 | 45 | 5 | 32 | 39 | 20 | 0 | RA HZ | 0 | | 0.0 | T | 29.12 | 30.18 | 5.5 | 05 | 6.8 | 18 | 03 | 15 | 07 | 14 |
| 15 | 58 | 32 | 45 | 5 | 30 | 38 | 20 | 0 | BR | 0 | | 0.0 | 0.00 | 29.13 | 30.19 | 6.3 | 05 | 7.0 | 18 | 15 | 15 | 15 | 15 |
| 16 | 67 | 44 | 56 | 16 | 43 | 48 | 9 | 0 | RA | 0 | | 0.0 | 0.03 | 28.80 | 29.84 | 7.8 | 04 | 9.6 | 24 | 16 | 20 | 15 | 16 |
| 17 | 61 | 47 | 54 | 13 | 45 | 49 | 11 | 0 | TSRA RA BR | 0 | | 0.0 | 0.36 | 28.44 | 29.46 | 8.6 | 22 | 14.6 | 48* | 23 | 39* | 23 | 17 |
| 18 | 51 | 44 | 48 | 7 | 42 | 44 | 17 | 0 | RA DZ BR | 0 | | 0.0 | 0.01 | 28.67 | 29.71 | 17.0 | 23 | 17.3 | 34 | 25 | 29 | 25 | 18 |
| 19 | 59 | 43 | 51 | 10 | 41 | 45 | 14 | 0 | | 0 | | 0.0 | 0.00 | 28.86 | 29.91 | 3.4 | 25 | 5.0 | 16 | 24 | 14 | 24 | 19 |
| 20 | 51 | 44 | 48 | 7 | 40 | 43 | 17 | 0 | RA DZ BR | 0 | | 0.0 | 0.04 | 28.87 | 29.91 | 5.7 | 25 | 6.1 | 23 | 25 | 20 | 26 | 20 |
| 21 | 55 | 39 | 47 | 5 | 34 | 41 | 18 | 0 | | 0 | | 0.0 | 0.00 | 29.01 | 30.06 | 2.6 | 26 | 5.0 | 14 | 29 | 10 | 27 | 21 |
| 22 | 52 | 32 | 42 | 0 | 36 | 41 | 23 | 0 | RA BR | 0 | | 0.0 | 0.03 | 28.87 | 29.92 | 7.3 | 05 | 7.5 | 21 | 06 | 18 | 06 | 22 |
| 23 | 46 | 40 | 43 | 1 | 41 | 43 | 22 | 0 | RA DZ BR | 0 | | 0.0 | 0.10 | 28.66 | 29.70 | 3.6 | 33 | 7.0 | 17 | 04 | 16 | 04 | 23 |
| 24 | 62 | 31 | 47 | 4 | 35 | 42 | 18 | 0 | BCFG BR | 0 | | 0.0 | 0.00 | 28.94 | 29.99 | 7.1 | 26 | 8.4 | 29 | 29 | 22 | 28 | 24 |
| 25 | 66 | 33 | 50 | 7 | 31 | 42 | 15 | 0 | | 0 | | 0.0 | 0.00 | 28.99 | 30.04 | 2.9 | 05 | 3.5 | 13 | 04 | 11 | 03 | 25 |
| 26 | 74* | 38 | 56 | 13 | 35 | 46 | 9 | 0 | RA BR | 0 | | 0.0 | 0.21 | 28.80 | 29.84 | 3.5 | 13 | 5.7 | 23 | 16 | 18 | 14 | 26 |
| 27 | 69 | 55 | 62* | 18 | 47 | 54 | 3 | 0 | RA | 0 | | 0.0 | T | 28.66 | 29.68 | 8.9 | 24 | 10.8 | 31 | 16 | 25 | 17 | 27 |
| 28 | 67 | 51 | 59 | 15 | 40 | 49 | 6 | 0 | RA | 0 | | 0.0 | 0.02 | 28.75 | 29.77 | 10.0 | 24 | 10.5 | 29 | 24 | 25 | 24 | 28 |
| | 53.8 | 38.2 | 46.0 | | 36.8 | 41.7 | 18.9 | 0.0 | < MONTHLY AVERAGES | TOTALS−> | | 0.1 | 2.71 | 28.85 | 29.90 | 1.3 | 31 | 7.6 | <− MONTHLY AVERAGES | | | | |
| | 2.9 | 9.1 | 5.9 | | <−−−−−−−−−−−−− DEPARTURE FROM NORMAL −−−−−−−−−−−−−> | | | | | | | | -1.35 | SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3 | | | | | | | | | |

FEBRUARY 1998
KNOXVILLE, TN

## DEGREE DAYS

| | MONTHLY TOTAL | MONTHLY DEPARTURE | SEASON TO DATE TOTAL | SEASON TO DATE DEPARTURE |
|---|---|---|---|---|
| HEATING: | 528 | −169 | 2855 | −258 |
| COOLING: | 0 | 0 | 0 | 0 |

GREATEST 24−HR PRECIPITATION: 1.27 DATE :03-04
GREATEST 24−HR SNOWFALL: 0.1 DATE :04
GREATEST SNOW DEPTH: T DATE : 04

| | SEA LEVEL PRESSURE | DATE | TIME |
|---|---|---|---|
| MAXIMUM : | 30.33 | 15 | 0901 |
| MINIMUM : | 29.32 | 17 | 0711 |

NUMBER OF DAYS WITH →

| | | | |
|---|---|---|---|
| MAXIMUM TEMP ≥ 90: | 0 | MINIMUM TEMP ≤ 32 : | 6 |
| MAXIMUM TEMP ≤ 32 : | 0 | MINIMUM TEMP ≤ 0 : | 0 |
| THUNDERSTORMS : | 1 | HEAVY FOG : | 0 |

| | |
|---|---|
| PRECIPITATION ≥ 0.01 INCH : | 12 |
| PRECIPITATION ≥ 0.10 INCH : | 6 |
| SNOWFALL ≥ 1.0 INCH : | 0 |

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

## KNOXVILLE, TN

**FEBRUARY 1998** TYS WBAN # 13891

| DATE | FOR HOUR (LST) ENDING AT | | | | | | | | | | | | DATE | FOR HOUR (LST) ENDING AT | | | | | | | | | | | | DATE | Sum if Different (See Note 2) | 2400 LST Water Equiv. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 01 | | | | | | | | | | | | | 01 | | | | | | | | | | | | | 01 | | 0.00 |
| 02 | | | | | | | | | | | | | 02 | | | | | | | | | | T | T | 0.04 | 02 | | 0.04 |
| 03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.15 | 0.15 | 0.18 | 0.14 | 0.08 | 0.03 | | 03 | | | 0.02 | 0.06 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.06 | 0.05 | 03 | 1.17 | 1.18 |
| 04 | 0.04 | 0.04 | 0.04 | 0.02 | 0.04 | T | 0.04 | 0.03 | | | T | 0.01 | 04 | | 0.03 | 0.01 | 0.01 | 0.02 | 0.01 | T | | T | T | T | T | 04 | 0.34 | 0.47 |
| 05 | T | T | T | T | T | T | T | | T | | | | 05 | | | | | | T | T | T | T | T | T | T | 05 | | T |
| 06 | | | | | | | | | | | | | 06 | | | | | | | | | | | | | 06 | | 0.00 |
| 07 | | | | | | | | | | | | | 07 | | | | | | | | | | | | | 07 | | 0.00 |
| 08 | | | | T | T | | | | | | | | 08 | | | | | | | | | | | | | 08 | | T |
| 09 | T | | | | | | | | | | | | 09 | | | | | | | | | | | | | 09 | | T |
| 10 | | | | | | | | | | | | | 10 | | | | | T | | | | | | | | 10 | | T |
| 11 | | | | | | | | | | 0.12 | 0.01 | 0.01 | 11 | | | | 0.02 | 0.03 | T | 0.02 | | | T | 0.01 | T | 11 | | 0.22 |
| 12 | T | T | | T | T | T | T | | | | | | 12 | | | | | | | | | | | | | 12 | | T |
| 13 | | | | | | | | | | | | | 13 | | | | | | | | | | | | T | 13 | | T |
| 14 | T | | | | T | T | | | | | | | 14 | | | | | | | | | | | | | 14 | | T |
| 15 | | | | | | | | | | | | | 15 | | | | | | | | | | | | | 15 | | 0.00 |
| 16 | | | T | T | 0.01 | | 0.01 | 0.01 | T | | | T | 16 | | | | | | | | | | | | | 16 | | 0.03 |
| 17 | | 0.01 | 0.01 | 0.01 | T | | | | T | 0.30 | 0.01 | | 17 | | | 0.01 | T | T | | | | | T | 0.01 | | 17 | | 0.36 |
| 18 | | | | T | | | T | 0.01 | T | T | T | | 18 | | T | T | | | T | T | | T | T | | | 18 | | 0.01 |
| 19 | | | | | | | | | | | | | 19 | | | | | | | | | | | | | 19 | | 0.00 |
| 20 | T | 0.01 | T | | | | | 0.01 | 0.01 | 0.01 | | | 20 | | | | | | | | | | | | | 20 | | 0.04 |
| 21 | | | | | | | | | | | | | 21 | | | | | | | | | | | | | 21 | | 0.00 |
| 22 | | | | | | | | | | | | | 22 | | | | T | 0.01 | | | | | T | 0.02 | | 22 | | 0.03 |
| 23 | T | | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | T | T | T | 0.02 | 0.01 | 23 | T | T | T | 0.01 | T | | | | | | | | 23 | | 0.10 |
| 24 | | | | | | | | | | | | | 24 | | | | | | | | | | | | | 24 | | 0.00 |
| 25 | | | | | | | | | | | | | 25 | | | | | | | | | | | | | 25 | | 0.00 |
| 26 | | | | | | | | | | | | | 26 | | | | | | | | | | 0.03 | 0.12 | 0.06 | 26 | | 0.21 |
| 27 | T | T | T | T | | | | | | | | | 27 | | | | | | | | | | | | | 27 | | T |
| 28 | | | | | | | | 0.02 | T | | | | 28 | | | | | | | | | | | T | T | 28 | | 0.02 |

## MAXIMUM SHORT DURATION PRECIPITATION (See Note 1)

| Time Period (Minutes) | 5 | 10 | 15 | 20 | 30 | 45 | 60 | 80 | 100 | 120 | 150 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Precipitation (Inches) | | | | | | | | | | | | |
| Ending Date | | | | | | | | | | | | |
| Ending Time (Hour/Min) | | | | | | | | | | | | |

Date and time are not entered for TRACE amounts.

Note 1: NCDC derives these data from one–minute ASOS values. The table is not printed when inconsistent with ASOS hourly totals.

Note 2: The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

# REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurence if more than one)
T = Trace precipitation amount
+ = also occurs on earlier date
FG+ = Heavy fog, visibility .25 miles or less
BLANK entries denote missing or unreported data

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' = calm, 'VR' = variable.

Precipitation is for the 24−hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1961−1990

### WEATHER NOTATIONS

| QUALIFIER | WEATHER PHENOMENA | | |
|---|---|---|---|
| DESCRIPTOR | PRECIPITATION | OBSCURATION | OTHER |
| BC Patches | DZ Drizzle | BR Mist | DS Duststorm |
| BL Blowing | GR Hail | DU Widespread Dust | FC Funnel Cloud |
| DR Low Drifting | GS Small Hail and/or Snow Pellets | FG Fog | +FC Tornado Waterspout |
| FZ Freezing | IC Ice Crystals | FU Smoke | PO Well−Developed Dust/Sand Whirls |
| MI Shallow | PE Ice Pellets | HZ Haze | SQ Squalls |
| PR Partial | RA Rain | PY Spray | SS Sandstorm |
| SH Shower(s) | SG Snow Grains | SA Sand | GL Glaze |
| TS Thunderstorm | SN Snow | VA Volcanic Ash | |
| VC In the Vicinity | UP Unknown Precipitation | | |

Intensity (as indicated on pages 4 to 6):
'+' = Heavy ' ' = Moderate '−' = Light

# KNOXVILLE, TN
# FEBRUARY 1998

Ceilometer (30−second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR−SS), or midnight to midnight (MN−MN).

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. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) 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 = 0−2 oktas, Partly Cloudy = 3−6 oktas, Cloudy = 7−8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

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 cooled at constant pressure by evaporation of moisture into it, to 100% relative humidity.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

| DATE | SUNSHINE | | CLOUDINESS (OKTAS) | | | | VISIBILITY (MILES) | | RESERVED |
|---|---|---|---|---|---|---|---|---|---|
| | | | SR−SS | | MN−MN | | | | |
| | TOTAL MINUTES | PERCENT POSSIBLE | CEILOMETER | SATELLITE | CEILOMETER | SATELLITE | MINIMUM | MAXIMUM | |
| 01 | 456 | | | | | | 8.00 | 10.00 | |
| 02 | 0 | | | | | | 7.00 | 10.00 | |
| 03 | 0 | 0 | | | | | 2.50 | 10.00 | |
| 04 | 0 | 0 | | | | | 1.50 | 10.00 | |
| 05 | 0 | 0 | | | | | 2.00 | 10.00 | |
| 06 | 0 | 0 | | | | | 6.00 | 10.00 | |
| 07 | 72 | | | | | | 5.00 | 10.00 | |
| 08 | 63 | | | | | | 7.00 | 10.00 | |
| 09 | 20 | | | | | | 6.00 | 10.00 | |
| 10 | 209 | 33 | | | | | 2.00 | 10.00 | |
| 11 | 86 | 1 | | | | | 3.00 | 10.00 | |
| 12 | 0 | 0 | | | | | 7.00 | 10.00 | |
| 13 | 0 | 0 | | | | | 7.00 | 10.00 | |
| 14 | 415 | | | | | | 6.00 | 10.00 | |
| 15 | 506 | | | | | | 7.00 | 10.00 | |
| 16 | 142 | | | | | | 9.00 | 10.00 | |
| 17 | 260 | | | | | | 7.00 | 10.00 | |
| 18 | 0 | 0 | | | | | 6.00 | 10.00 | |
| 19 | 45 | 0 | | | | | 8.00 | 10.00 | |
| 20 | 30 | 0 | | | | | 4.00 | 10.00 | |
| 21 | 445 | 67 | | | | | 9.00 | 10.00 | |
| 22 | 280 | | | | | | 8.00 | 10.00 | |
| 23 | 0 | | | | | | 2.00 | 10.00 | |
| 24 | 480 | | | | | | 2.50 | 10.00 | |
| 25 | 523 | | | | | | 10.00 | 10.00 | |
| 26 | 425 | 63 | | | | | 4.00 | 10.00 | |
| 27 | 411 | 60 | | | | | 10.00 | 10.00 | |
| 28 | 472 | 69 | | | | | 4.00 | 10.00 | |
| MONTHLY AVGS | | | | | | | 5.73 | 10.00 | |

**SUNSHINE** (MINUTES)

Total: 5340 Possible: 18324
Percent Possible: 29

**NUMBER OF DAYS WITH:**

**SKY CONDITION**

| CLR | PTLY CLDY | CLOUDY | MISSING |
|---|---|---|---|
| | | | 28 |

**MINIMUM VISIBILITY** (MILES)

| <=0.25 | <=3.0 | >=7.0 |
|---|---|---|
| 0 | 7 | 13 |

# OBSERVATIONS AT 3−HOURLY INTERVALS

# KNOXVILLE, TN

**FEBRUARY 1998** TYS WBAN # 13891

| HOUR (LST) | SKY COVER | CEILING 100'S OF FT | SATELLITE: OBSERVATION TIME (LST) | SATELLITE: EFF CLD AMT Oktas | 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: 0736** | **FEB 01** | | | **SUNSET: 1803** | | | | | |
| 01 | CLR | NC | | | 10.00 | | 31 | 24 | 28 | 76 | 5 | 05 | 29.04 | 30.11 |
| 04 | CLR | NC | | | 10.00 | | 29 | 24 | 27 | 82 | 8 | 04 | 29.03 | 30.09 |
| 07 | FEW | NC | | | 10.00 | | 28 | 23 | 26 | 81 | 7 | 03 | 29.04 | 30.10 |
| 10 | CLR | NC | | | 9.00 | | 33 | 26 | 30 | 75 | 5 | 08 | 29.09 | 30.16 |
| 13 | FEW | NC | | | 10.00 | | 46 | 30 | 39 | 54 | 0 | 00 | 29.05 | 30.11 |
| 16 | CLR | NC | | | 10.00 | | 52 | 29 | 42 | 41 | 0 | 00 | 28.98 | 30.04 |
| 19 | CLR | NC | | | 10.00 | | 48 | 30 | 40 | 50 | 0 | 00 | 29.01 | 30.07 |
| 22 | CLR | NC | | | 10.00 | | 41 | 30 | 36 | 65 | 0 | 00 | 29.01 | 30.07 |
| | | | | | **SUNRISE: 0735** | **FEB 02** | | | **SUNSET: 1804** | | | | | |
| 01 | CLR | NC | | | 10.00 | | 38 | 31 | 35 | 76 | 6 | 01 | 29.00 | 30.06 |
| 04 | CLR | NC | | | 10.00 | | 38 | 32 | 35 | 79 | 5 | 11 | 29.06 | 30.11 |
| 07 | OVC | 100 | | | 10.00 | | 39 | 31 | 36 | 73 | 8 | 05 | 29.05 | 30.11 |
| 10 | OVC | 048 | | | 10.00 | | 41 | 31 | 37 | 67 | 6 | 06 | 29.08 | 30.14 |
| 13 | BKN | 055 | | | 10.00 | | 47 | 33 | 41 | 59 | 8 | 04 | 29.05 | 30.11 |
| 16 | SCT | NC | | | 10.00 | | 50 | 34 | 43 | 54 | 8 | 03 | 29.01 | 30.06 |
| 19 | OVC | 075 | | | 10.00 | | 48 | 34 | 42 | 58 | 7 | 02 | 29.01 | 30.06 |
| 22 | OVC | 055 | | | 10.00 | | 46 | 38 | 42 | 73 | 7 | 01 | 29.01 | 30.06 |
| | | | | | **SUNRISE: 0735** | **FEB 03** | | | **SUNSET: 1805** | | | | | |
| 01 | OVC | 060 | | | 7.00 | -RA | 44 | 41 | 43 | 89 | 10 | 03 | 28.99 | 30.04 |
| 04 | OVC | 080 | | | 8.00 | | 43 | 41 | 42 | 93 | 10 | 05 | 28.92 | 29.97 |
| 07 | OVC | 007 | | | 2.50 | RA BR | 42 | 41 | 42 | 96 | 8 | 05 | 28.92 | 29.97 |
| 10 | OVC | 009 | | | 4.00 | -RA BR | 44 | 42 | 43 | 93 | 20 | 06 | 28.85 | 29.89 |
| 13 | OVC | 011 | | | 10.00 | | 47 | 44 | 46 | 90 | 21 | 06 | 28.71 | 29.75 |
| 16 | OVC | 038 | | | 4.00 | RA BR | 46 | 44 | 45 | 93 | 18 | 04 | 28.63 | 29.67 |
| 19 | OVC | 013 | | | 7.00 | -RA | 43 | 41 | 42 | 93 | 21 | 04 | 28.64 | 29.68 |
| 22 | OVC | 008 | | | 6.00 | -RA BR | 36 | 35 | 36 | 97 | 21 | 02 | 28.63 | 29.67 |
| | | | | | **SUNRISE: 0734** | **FEB 04** | | | **SUNSET: 1806** | | | | | |
| 01 | OVC | 007 | | | 1.75 | -SN BR | 33 | 33 | 33 | 100 | 15 | 03 | 28.55 | 29.59 |
| 04 | OVC | 017 | | | 5.00 | PE BR | 34 | 33 | 34 | 97 | 16 | 02 | 28.45 | 29.48 |
| 07 | OVC | 012 | | | 6.00 | -RAPE BR | 34 | 32 | 33 | 92 | 12 | 01 | 28.45 | 29.49 |
| 10 | OVC | 011 | | | 2.50 | -RA BR | 34 | 33 | 34 | 97 | 10 | 01 | 28.48 | 29.52 |
| 13 | OVC | 011 | | | 4.00 | -RAPE BR | 34 | 33 | 34 | 97 | 9 | 01 | 28.46 | 29.50 |
| 16 | OVC | 014 | | | 3.00 | -SN BR | 34 | 32 | 33 | 92 | 7 | 36 | 28.48 | 29.52 |
| 19 | OVC | 036 | | | 8.00 | | 34 | 30 | 32 | 85 | 12 | 36 | 28.53 | 29.57 |
| 22 | OVC | 018 | | | 8.00 | -SN | 34 | 29 | 32 | 82 | 12 | 01 | 28.55 | 29.60 |
| | | | | | **SUNRISE: 0733** | **FEB 05** | | | **SUNSET: 1807** | | | | | |
| 01 | OVC | 012 | | | 4.00 | -SN BR | 32 | 32 | 32 | 100 | 6 | 27 | 28.57 | 29.62 |
| 04 | OVC | 014 | | | 3.00 | -SN BR | 32 | 31 | 32 | 96 | 0 | 00 | 28.57 | 29.63 |
| 07 | OVC | 014 | | | 8.00 | | 32 | 31 | 32 | 96 | 6 | 24 | 28.63 | 29.68 |
| 10 | OVC | 019 | | | 10.00 | | 32 | 31 | 32 | 96 | 5 | 25 | 28.69 | 29.75 |
| 13 | OVC | 011 | | | 10.00 | | 34 | 32 | 33 | 92 | 5 | 25 | 28.70 | 29.76 |
| 16 | OVC | 017 | | | 10.00 | | 35 | 32 | 34 | 89 | 7 | 25 | 28.72 | 29.77 |
| 19 | OVC | 019 | | | 7.00 | -SN | 34 | 31 | 33 | 89 | 7 | 29 | 28.76 | 29.82 |
| 22 | OVC | 014 | | | 6.00 | -SN BR | 33 | 31 | 32 | 92 | 6 | 24 | 28.80 | 29.85 |
| | | | | | **SUNRISE: 0732** | **FEB 06** | | | **SUNSET: 1808** | | | | | |
| 01 | OVC | 014 | | | 7.00 | | 34 | 30 | 32 | 85 | 0 | 00 | 28.81 | 29.87 |
| 04 | OVC | 045 | | | 6.00 | BR | 33 | 31 | 32 | 92 | 0 | 00 | 28.80 | 29.86 |
| 07 | OVC | 044 | | | 7.00 | | 33 | 28 | 31 | 82 | 0 | 00 | 28.85 | 29.91 |
| 10 | OVC | 013 | | | 10.00 | | 34 | 30 | 32 | 85 | 3 | 02 | 28.87 | 29.93 |
| 13 | OVC | 017 | | | 10.00 | | 37 | 32 | 35 | 82 | 5 | 07 | 28.84 | 29.90 |
| 16 | OVC | 025 | | | 10.00 | | 40 | 32 | 37 | 73 | 5 | 07 | 28.83 | 29.88 |
| 19 | OVC | 038 | | | 10.00 | | 39 | 33 | 37 | 79 | 3 | 08 | 28.85 | 29.90 |
| 22 | OVC | 040 | | | 10.00 | | 38 | 34 | 36 | 86 | 7 | 03 | 28.85 | 29.90 |
| | | | | | **SUNRISE: 0731** | **FEB 07** | | | **SUNSET: 1809** | | | | | |
| 01 | OVC | 039 | | | 10.00 | | 37 | 34 | 36 | 89 | 5 | 36 | 28.86 | 29.91 |
| 04 | OVC | 041 | | | 8.00 | | 37 | 34 | 36 | 89 | 5 | 03 | 28.84 | 29.88 |
| 07 | OVC | 045 | | | 9.00 | | 37 | 35 | 36 | 93 | 6 | 04 | 28.84 | 29.89 |
| 10 | OVC | 045 | | | 5.00 | BR | 40 | 37 | 39 | 89 | 7 | 06 | 28.86 | 29.91 |
| 13 | OVC | 047 | | | 7.00 | | 45 | 38 | 42 | 77 | 8 | 07 | 28.82 | 29.87 |
| 16 | OVC | 030 | | | 10.00 | | 48 | 37 | 43 | 66 | 5 | 28 | 28.79 | 29.83 |
| 19 | BKN | 030 | | | 10.00 | | 44 | 36 | 40 | 73 | 9 | 36 | 28.83 | 29.88 |
| 22 | OVC | 048 | | | 10.00 | | 38 | 33 | 36 | 83 | 7 | 01 | 28.87 | 29.93 |
| | | | | | **SUNRISE: 0730** | **FEB 08** | | | **SUNSET: 1810** | | | | | |
| 01 | OVC | 017 | | | 10.00 | | 37 | 33 | 35 | 86 | 7 | 36 | 28.87 | 29.92 |
| 04 | OVC | 019 | | | 7.00 | -RA | 36 | 33 | 35 | 89 | 5 | 02 | 28.87 | 29.91 |
| 07 | OVC | 023 | | | 8.00 | | 36 | 32 | 34 | 86 | 3 | 01 | 28.88 | 29.94 |
| 10 | OVC | 018 | | | 7.00 | | 38 | 33 | 36 | 83 | 5 | 01 | 28.93 | 29.99 |
| 13 | OVC | 023 | | | 10.00 | | 42 | 34 | 39 | 73 | 0 | 00 | 28.92 | 29.98 |
| 16 | OVC | 031 | | | 10.00 | | 45 | 36 | 41 | 71 | 0 | 00 | 28.90 | 29.96 |
| 19 | OVC | 031 | | | 10.00 | | 44 | 37 | 41 | 76 | 0 | 00 | 28.94 | 29.99 |
| 22 | OVC | 029 | | | 9.00 | | 43 | 38 | 41 | 82 | 3 | 03 | 28.93 | 29.99 |
| | | | | | **SUNRISE: 0729** | **FEB 09** | | | **SUNSET: 1811** | | | | | |
| 01 | OVC | 023 | | | 10.00 | | 42 | 36 | 39 | 79 | 5 | 36 | 28.95 | 30.00 |
| 04 | OVC | 033 | | | 10.00 | | 41 | 35 | 38 | 79 | 0 | 00 | 28.95 | 30.01 |
| 07 | OVC | 070 | | | 8.00 | | 39 | 37 | 38 | 93 | 0 | 00 | 29.00 | 30.06 |
| 10 | OVC | 065 | | | 9.00 | | 44 | 38 | 41 | 79 | 6 | 06 | 29.03 | 30.08 |
| 13 | OVC | 060 | | | 10.00 | | 48 | 39 | 44 | 71 | 3 | 36 | 29.03 | 30.08 |
| 16 | OVC | 060 | | | 10.00 | | 49 | 38 | 44 | 66 | 0 | 00 | 29.02 | 30.07 |
| 19 | OVC | 060 | | | 10.00 | | 47 | 39 | 43 | 74 | 3 | 31 | 29.05 | 30.11 |
| 22 | OVC | 060 | | | 8.00 | | 45 | 41 | 43 | 86 | 0 | 00 | 29.09 | 30.14 |
| | | | | | **SUNRISE: 0728** | **FEB 10** | | | **SUNSET: 1812** | | | | | |
| 01 | OVC | 050 | | | 6.00 | BR | 44 | 41 | 43 | 89 | 0 | 00 | 29.08 | 30.13 |
| 04 | CLR | NC | | | 6.00 | BR | 39 | 38 | 39 | 96 | 0 | 00 | 29.06 | 30.11 |
| 07 | SCT | NC | | | 3.00 | BR | 36 | 36 | 36 | 100 | 0 | 00 | 29.10 | 30.15 |
| 10 | SCT | NC | | | 7.00 | | 41 | 40 | 41 | 96 | 0 | 00 | 29.14 | 30.19 |
| 13 | SCT | NC | | | 10.00 | | 52 | 39 | 46 | 61 | 0 | 00 | 29.10 | 30.15 |
| 16 | OVC | 100 | | | 10.00 | | 56 | 39 | 48 | 53 | 3 | 08 | 29.02 | 30.07 |
| 19 | SCT | NC | | | 10.00 | | 52 | 38 | 45 | 59 | 7 | 03 | 28.99 | 30.04 |
| 22 | FEW | NC | | | 10.00 | | 48 | 41 | 45 | 77 | 5 | 07 | 28.96 | 30.01 |
| | | | | | **SUNRISE: 0727** | **FEB 11** | | | **SUNSET: 1813** | | | | | |
| 01 | SCT | NC | | | 10.00 | | 45 | 38 | 42 | 77 | 6 | 08 | 28.89 | 29.94 |
| 04 | SCT | NC | | | 10.00 | | 42 | 38 | 40 | 85 | 6 | VR | 28.85 | 29.88 |
| 07 | SCT | NC | | | 10.00 | | 51 | 34 | 43 | 52 | 8 | 14 | 28.85 | 29.88 |
| 10 | OVC | 050 | | | 3.00 | -RA BR | 51 | 48 | 50 | 89 | 8 | 18 | 28.71 | 29.74 |
| 13 | BKN | 040 | | | 10.00 | | 57 | 46 | 51 | 67 | 18 | 21 | 28.63 | 29.67 |
| 16 | OVC | 045 | | | 6.00 | -RA BR | 53 | 49 | 51 | 86 | 24 | 25 | 28.59 | 29.62 |
| 19 | SCT | NC | | | 10.00 | | 50 | 46 | 48 | 86 | 20 | 25 | 28.63 | 29.66 |
| 22 | OVC | 032 | | | 10.00 | -RA | 47 | 42 | 45 | 83 | 22 | 24 | 28.70 | 29.73 |
| | | | | | **SUNRISE: 0726** | **FEB 12** | | | **SUNSET: 1814** | | | | | |
| 01 | OVC | 032 | | | 8.00 | -RA | 45 | 41 | 43 | 86 | 18 | 24 | 28.73 | 29.76 |
| 04 | OVC | 016 | | | 9.00 | -RA | 44 | 40 | 42 | 85 | 17 | 26 | 28.77 | 29.80 |
| 07 | OVC | 021 | | | 10.00 | | 42 | 38 | 40 | 85 | 9 | 27 | 28.83 | 29.87 |
| 10 | OVC | 021 | | | 10.00 | | 42 | 37 | 40 | 82 | 13 | 26 | 28.92 | 29.97 |
| 13 | OVC | 017 | | | 10.00 | | 41 | 36 | 39 | 82 | 13 | 26 | 28.94 | 29.99 |
| 16 | OVC | 017 | | | 10.00 | | 42 | 36 | 39 | 79 | 7 | 27 | 28.94 | 30.00 |
| 19 | OVC | 017 | | | 10.00 | | 41 | 36 | 39 | 82 | 6 | 30 | 28.98 | 30.04 |
| 22 | OVC | 014 | | | 8.00 | | 41 | 37 | 39 | 86 | 0 | 00 | 29.01 | 30.07 |

# OBSERVATIONS AT 3–HOURLY INTERVALS

## KNOXVILLE, TN

**FEBRUARY 1998** TYS WBAN # 13891

| HOUR (LST) | SKY COVER | CEILING 100'S OF FT | SATELLITE: OBSERVATION TIME (LST) | SATELLITE: EFF CLD AMT Oktas | 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: 0725** | **FEB 13** | | | **SUNSET: 1815** | | | | | |
| 01 | OVC | 029 | | | 10.00 | | 40 | 37 | 39 | 89 | 0 | 00 | 28.99 | 30.05 |
| 04 | OVC | 033 | | | 9.00 | | 40 | 37 | 39 | 89 | 3 | 01 | 28.95 | 30.01 |
| 07 | OVC | 035 | | | 8.00 | | 40 | 37 | 39 | 89 | 3 | 01 | 28.99 | 30.05 |
| 10 | OVC | 039 | | | 8.00 | | 43 | 38 | 41 | 82 | 6 | 07 | 29.02 | 30.07 |
| 13 | OVC | 041 | | | 10.00 | | 45 | 34 | 40 | 66 | 5 | 10 | 28.97 | 30.02 |
| 16 | OVC | 043 | | | 10.00 | | 46 | 34 | 41 | 63 | 7 | 33 | 28.95 | 30.00 |
| 19 | OVC | 049 | | | 10.00 | | 44 | 35 | 40 | 71 | 5 | 01 | 28.98 | 30.04 |
| 22 | OVC | 046 | | | 10.00 | | 42 | 35 | 39 | 76 | 3 | 01 | 29.01 | 30.06 |
| | | | | | **SUNRISE: 0724** | **FEB 14** | | | **SUNSET: 1816** | | | | | |
| 01 | OVC | 050 | | | 10.00 | | 41 | 34 | 38 | 76 | 3 | 31 | 29.00 | 30.06 |
| 04 | OVC | 041 | | | 8.00 | | 40 | 36 | 38 | 86 | 0 | 00 | 29.02 | 30.08 |
| 07 | OVC | 060 | | | 8.00 | | 39 | 35 | 37 | 86 | 5 | 01 | 29.09 | 30.15 |
| 10 | SCT | NC | | | 6.00 | HZ | 43 | 34 | 39 | 71 | 13 | 04 | 29.16 | 30.22 |
| 13 | FEW | NC | | | 10.00 | | 48 | 28 | 40 | 46 | 6 | 13 | 29.18 | 30.23 |
| 16 | CLR | NC | | | 10.00 | | 51 | 30 | 42 | 45 | 10 | 07 | 29.14 | 30.19 |
| 19 | CLR | NC | | | 10.00 | | 45 | 30 | 39 | 56 | 12 | 04 | 29.16 | 30.22 |
| 22 | CLR | NC | | | 10.00 | | 41 | 30 | 37 | 65 | 9 | 04 | 29.17 | 30.22 |
| | | | | | **SUNRISE: 0723** | **FEB 15** | | | **SUNSET: 1817** | | | | | |
| 01 | CLR | NC | | | 10.00 | | 38 | 29 | 34 | 70 | 7 | 03 | 29.17 | 30.23 |
| 04 | CLR | NC | | | 10.00 | | 35 | 28 | 32 | 76 | 5 | 05 | 29.17 | 30.23 |
| 07 | CLR | NC | | | 10.00 | | 33 | 27 | 31 | 78 | 3 | 04 | 29.22 | 30.29 |
| 10 | CLR | NC | | | 10.00 | | 39 | 30 | 35 | 70 | 3 | 08 | 29.25 | 30.32 |
| 13 | CLR | NC | | | 10.00 | | 52 | 30 | 42 | 43 | 9 | 04 | 29.18 | 30.23 |
| 16 | CLR | NC | | | 10.00 | | 58 | 28 | 45 | 32 | 7 | 10 | 29.07 | 30.12 |
| 19 | CLR | NC | | | 10.00 | | 53 | 32 | 44 | 45 | 6 | 15 | 29.06 | 30.12 |
| 22 | CLR | NC | | | 10.00 | | 45 | 30 | 39 | 56 | 9 | 05 | 29.02 | 30.07 |
| | | | | | **SUNRISE: 0722** | **FEB 16** | | | **SUNSET: 1818** | | | | | |
| 01 | SCT | NC | | | 10.00 | | 45 | 32 | 39 | 61 | 7 | 02 | 28.93 | 29.97 |
| 04 | OVC | 050 | | | 9.00 | -RA | 45 | 39 | 42 | 80 | 6 | 01 | 28.87 | 29.92 |
| 07 | OVC | 085 | | | 10.00 | -RA | 48 | 43 | 46 | 83 | 12 | 02 | 28.81 | 29.84 |
| 10 | BKN | 090 | | | 10.00 | | 51 | 45 | 48 | 80 | 5 | 02 | 28.83 | 29.86 |
| 13 | BKN | 090 | | | 10.00 | | 60 | 48 | 54 | 65 | 6 | 01 | 28.80 | 29.84 |
| 16 | SCT | NC | | | 10.00 | | 65 | 48 | 56 | 54 | 6 | 03 | 28.76 | 29.79 |
| 19 | SCT | NC | | | 10.00 | | 55 | 45 | 50 | 69 | 13 | 08 | 28.76 | 29.80 |
| 22 | CLR | NC | | | 10.00 | | 52 | 44 | 48 | 75 | 12 | 05 | 28.74 | 29.77 |
| | | | | | **SUNRISE: 0721** | **FEB 17** | | | **SUNSET: 1819** | | | | | |
| 01 | BKN | 095 | | | 10.00 | | 52 | 45 | 48 | 77 | 8 | 04 | 28.64 | 29.67 |
| 04 | BKN | 060 | | | 10.00 | -RA | 48 | 47 | 47 | 96 | 16 | 04 | 28.49 | 29.50 |
| 07 | SCT | NC | | | 10.00 | | 48 | 46 | 47 | 93 | 9 | 04 | 28.35 | 29.36 |
| 10 | BKN | 048 | | | 7.00 | -TSRA | 48 | 46 | 47 | 93 | 15 | 21 | 28.46 | 29.49 |
| 13 | BKN | 070 | | | 10.00 | | 59 | 46 | 52 | 62 | 22 | 22 | 28.39 | 29.41 |
| 16 | OVC | 050 | | | 10.00 | -RA | 55 | 47 | 51 | 74 | 20 | 23 | 28.40 | 29.42 |
| 19 | SCT | NC | | | 10.00 | | 54 | 40 | 47 | 59 | 15 | 22 | 28.43 | 29.45 |
| 22 | OVC | 045 | | | 10.00 | | 52 | 42 | 47 | 69 | 15 | 24 | 28.48 | 29.50 |
| | | | | | **SUNRISE: 0720** | **FEB 18** | | | **SUNSET: 1820** | | | | | |
| 01 | OVC | 033 | | | 10.00 | | 50 | 44 | 47 | 80 | 18 | 22 | 28.48 | 29.50 |
| 04 | OVC | 060 | | | 10.00 | | 48 | 43 | 46 | 83 | 18 | 24 | 28.51 | 29.53 |
| 07 | OVC | 034 | | | 9.00 | -RA | 45 | 41 | 43 | 86 | 17 | 26 | 28.59 | 29.63 |
| 10 | OVC | 018 | | | 10.00 | | 44 | 41 | 43 | 89 | 21 | 23 | 28.66 | 29.70 |
| 13 | OVC | 015 | | | 8.00 | | 44 | 41 | 43 | 89 | 17 | 23 | 28.70 | 29.74 |
| 16 | OVC | 019 | | | 10.00 | | 47 | 41 | 44 | 80 | 18 | 24 | 28.71 | 29.75 |
| 19 | OVC | 019 | | | 10.00 | | 46 | 41 | 44 | 83 | 9 | 25 | 28.79 | 29.83 |
| 22 | OVC | 021 | | | 9.00 | | 45 | 41 | 43 | 86 | 13 | 24 | 28.84 | 29.88 |
| | | | | | **SUNRISE: 0718** | **FEB 19** | | | **SUNSET: 1821** | | | | | |
| 01 | OVC | 022 | | | 9.00 | | 46 | 41 | 44 | 83 | 12 | 24 | 28.86 | 29.90 |
| 04 | OVC | 020 | | | 8.00 | | 45 | 42 | 44 | 90 | 6 | 24 | 28.84 | 29.88 |
| 07 | OVC | 029 | | | 8.00 | | 45 | 42 | 44 | 90 | 6 | 24 | 28.87 | 29.91 |
| 10 | OVC | 025 | | | 9.00 | | 47 | 42 | 45 | 83 | 5 | 24 | 28.90 | 29.95 |
| 13 | OVC | 023 | | | 10.00 | | 49 | 41 | 45 | 74 | 9 | 28 | 28.91 | 29.96 |
| 16 | BKN | 034 | | | 10.00 | | 54 | 40 | 47 | 59 | 0 | 00 | 28.87 | 29.90 |
| 19 | SCT | NC | | | 10.00 | | 48 | 40 | 44 | 74 | 3 | 33 | 28.85 | 29.89 |
| 22 | SCT | NC | | | 9.00 | | 46 | 39 | 43 | 77 | 3 | 07 | 28.86 | 29.89 |
| | | | | | **SUNRISE: 0717** | **FEB 20** | | | **SUNSET: 1822** | | | | | |
| 01 | OVC | 090 | | | 8.00 | -RA | 45 | 40 | 43 | 83 | 3 | 36 | 28.83 | 29.86 |
| 04 | OVC | 047 | | | 7.00 | | 44 | 42 | 43 | 93 | 0 | 00 | 28.80 | 29.83 |
| 07 | OVC | 036 | | | 7.00 | | 45 | 42 | 44 | 90 | 5 | 27 | 28.81 | 29.84 |
| 10 | OVC | 029 | | | 5.00 | BR | 46 | 43 | 45 | 89 | 8 | 25 | 28.85 | 29.89 |
| 13 | BKN | 033 | | | 10.00 | | 50 | 43 | 47 | 77 | 13 | 25 | 28.85 | 29.89 |
| 16 | OVC | 041 | | | 10.00 | | 47 | 37 | 42 | 69 | 12 | 25 | 28.87 | 29.92 |
| 19 | OVC | 046 | | | 10.00 | | 45 | 37 | 41 | 74 | 5 | 23 | 28.92 | 29.97 |
| 22 | OVC | 047 | | | 10.00 | | 45 | 37 | 41 | 74 | 5 | 26 | 28.95 | 30.00 |
| | | | | | **SUNRISE: 0716** | **FEB 21** | | | **SUNSET: 1823** | | | | | |
| 01 | OVC | 055 | | | 10.00 | | 43 | 37 | 40 | 80 | 5 | 23 | 28.94 | 29.98 |
| 04 | OVC | 050 | | | 10.00 | | 44 | 35 | 40 | 71 | 8 | 26 | 28.96 | 30.01 |
| 07 | OVC | 060 | | | 10.00 | | 43 | 36 | 40 | 76 | 5 | 25 | 28.99 | 30.05 |
| 10 | FEW | NC | | | 10.00 | | 48 | 35 | 42 | 61 | 6 | 30 | 29.03 | 30.07 |
| 13 | BKN | 045 | | | 10.00 | | 53 | 34 | 44 | 49 | 10 | 27 | 29.03 | 30.08 |
| 16 | BKN | 055 | | | 10.00 | | 53 | 32 | 44 | 45 | 3 | 13 | 29.01 | 30.05 |
| 19 | FEW | NC | | | 10.00 | | 49 | 32 | 42 | 52 | 5 | 09 | 29.03 | 30.08 |
| 22 | CLR | NC | | | 10.00 | | 43 | 33 | 39 | 68 | 6 | 03 | 29.06 | 30.11 |
| | | | | | **SUNRISE: 0715** | **FEB 22** | | | **SUNSET: 1824** | | | | | |
| 01 | CLR | NC | | | 10.00 | | 40 | 34 | 37 | 79 | 6 | 02 | 29.05 | 30.09 |
| 04 | CLR | NC | | | 8.00 | | 35 | 33 | 34 | 93 | 3 | 10 | 29.06 | 30.11 |
| 07 | CLR | NC | | | 10.00 | | 34 | 32 | 33 | 92 | 6 | 03 | 29.00 | 30.05 |
| 10 | FEW | NC | | | 10.00 | | 45 | 35 | 41 | 68 | 13 | 04 | 28.98 | 30.03 |
| 13 | FEW | NC | | | 10.00 | | 51 | 36 | 44 | 56 | 0 | 00 | 28.92 | 29.97 |
| 16 | OVC | 060 | | | 9.00 | -RA | 50 | 39 | 45 | 66 | 9 | 05 | 28.74 | 29.79 |
| 19 | OVC | 044 | | | 10.00 | | 49 | 38 | 44 | 66 | 13 | 05 | 28.68 | 29.72 |
| 22 | OVC | 049 | | | 10.00 | | 47 | 40 | 44 | 77 | 8 | 04 | 28.65 | 29.68 |
| | | | | | **SUNRISE: 0714** | **FEB 23** | | | **SUNSET: 1825** | | | | | |
| 01 | OVC | 100 | | | 10.00 | | 45 | 41 | 43 | 86 | 12 | 04 | 28.57 | 29.61 |
| 04 | OVC | 055 | | | 9.00 | -RA | 44 | 41 | 43 | 89 | 9 | 04 | 28.53 | 29.56 |
| 07 | OVC | 007 | | | 7.00 | -RA | 43 | 42 | 43 | 97 | 6 | 01 | 28.55 | 29.58 |
| 10 | OVC | 013 | | | 2.00 | DZ BR | 44 | 43 | 44 | 96 | 3 | 34 | 28.59 | 29.63 |
| 13 | OVC | 012 | | | 3.00 | DZ BR | 45 | 44 | 45 | 97 | 6 | 24 | 28.63 | 29.67 |
| 16 | OVC | 015 | | | 7.00 | -RA | 45 | 41 | 43 | 86 | 12 | 28 | 28.68 | 29.72 |
| 19 | OVC | 027 | | | 10.00 | | 44 | 38 | 41 | 79 | 7 | 31 | 28.77 | 29.81 |
| 22 | BKN | 035 | | | 10.00 | | 43 | 37 | 40 | 80 | 3 | VR | 28.83 | 29.88 |
| | | | | | **SUNRISE: 0712** | **FEB 24** | | | **SUNSET: 1826** | | | | | |
| 01 | OVC | 050 | | | 9.00 | | 40 | 37 | 39 | 89 | 7 | 25 | 28.87 | 29.92 |
| 04 | SCT | NC | | | 4.00 | BR | 35 | 34 | 35 | 96 | 0 | 00 | 28.90 | 29.96 |
| 07 | CLR | NC | | | 7.00 | BCFG | 33 | 33 | 33 | 100 | 3 | 23 | 28.95 | 30.00 |
| 10 | SCT | NC | | | 10.00 | | 43 | 35 | 40 | 74 | 12 | 24 | 28.98 | 30.03 |
| 13 | SCT | NC | | | 10.00 | | 54 | 38 | 46 | 55 | 16 | 24 | 28.93 | 29.98 |
| 16 | SCT | NC | | | 10.00 | | 62 | 36 | 49 | 38 | 20 | 30 | 28.88 | 29.92 |
| 19 | CLR | NC | | | 10.00 | | 58 | 34 | 47 | 41 | 10 | 30 | 28.93 | 29.98 |
| 22 | CLR | NC | | | 10.00 | | 53 | 31 | 43 | 43 | 5 | 27 | 28.99 | 30.04 |

# OBSERVATIONS AT 3−HOURLY INTERVALS

# KNOXVILLE, TN

**FEBRUARY 1998** TYS WBAN # 13891

| HOUR (LST) | SKY COVER | CEILING 100'S OF FT | SATELLITE: OBSERVATION TIME (LST) | SATELLITE: EFF CLD AMT Oktas | 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: 0711** | **FEB 25** | | | **SUNSET: 1827** | | | | | |
| 01 | CLR | NC | | | 10.00 | | 42 | 33 | 38 | 71 | 3 | 14 | 29.00 | 30.05 |
| 04 | CLR | NC | | | 10.00 | | 39 | 33 | 37 | 79 | 0 | 00 | 29.00 | 30.04 |
| 07 | CLR | NC | | | 10.00 | | 34 | 31 | 33 | 89 | 3 | 05 | 29.04 | 30.09 |
| 10 | CLR | NC | | | 10.00 | | 49 | 36 | 43 | 61 | 3 | VR | 29.07 | 30.11 |
| 13 | CLR | NC | | | 10.00 | | 61 | 30 | 47 | 31 | 0 | 00 | 29.04 | 30.08 |
| 16 | CLR | NC | | | 10.00 | | 66 | 26 | 48 | 22 | 8 | 03 | 28.95 | 29.99 |
| 19 | CLR | NC | | | 10.00 | | 58 | 28 | 45 | 32 | 3 | 08 | 28.93 | 29.98 |
| 22 | CLR | NC | | | 10.00 | | 51 | 30 | 42 | 45 | 5 | 06 | 28.92 | 29.96 |
| | | | | | **SUNRISE: 0710** | **FEB 26** | | | **SUNSET: 1828** | | | | | |
| 01 | CLR | NC | | | 10.00 | | 45 | 31 | 39 | 58 | 3 | 07 | 28.90 | 29.94 |
| 04 | CLR | NC | | | 10.00 | | 39 | 32 | 36 | 76 | 5 | 10 | 28.88 | 29.92 |
| 07 | FEW | NC | | | 10.00 | | 40 | 30 | 36 | 68 | 0 | 00 | 28.92 | 29.97 |
| 10 | SCT | NC | | | 10.00 | | 52 | 34 | 44 | 50 | 5 | 02 | 28.91 | 29.95 |
| 13 | FEW | NC | | | 10.00 | | 64 | 37 | 51 | 37 | 5 | VR | 28.84 | 29.87 |
| 16 | SCT | NC | | | 10.00 | | 73 | 37 | 54 | 27 | 12 | 16 | 28.67 | 29.70 |
| 19 | SCT | NC | | | 10.00 | | 67 | 33 | 50 | 29 | 12 | 13 | 28.67 | 29.70 |
| 22 | OVC | 043 | | | 7.00 | RA | 62 | 44 | 53 | 52 | 5 | 19 | 28.68 | 29.71 |
| | | | | | **SUNRISE: 0709** | **FEB 27** | | | **SUNSET: 1829** | | | | | |
| 01 | BKN | 095 | | | 10.00 | | 56 | 48 | 52 | 75 | 3 | VR | 28.62 | 29.64 |
| 04 | OVC | 046 | | | 10.00 | | 60 | 50 | 55 | 70 | 8 | 18 | 28.60 | 29.61 |
| 07 | BKN | 085 | | | 10.00 | | 56 | 50 | 53 | 81 | 9 | 29 | 28.64 | 29.66 |
| 10 | SCT | NC | | | 10.00 | | 62 | 53 | 57 | 73 | 9 | 30 | 28.68 | 29.70 |
| 13 | SCT | NC | | | 10.00 | | 68 | 50 | 58 | 53 | 22 | 24 | 28.66 | 29.68 |
| 16 | SCT | NC | | | 10.00 | | 68 | 43 | 55 | 41 | 17 | 27 | 28.65 | 29.67 |
| 19 | BKN | 080 | | | 10.00 | | 63 | 42 | 52 | 47 | 13 | 25 | 28.70 | 29.73 |
| 22 | SCT | NC | | | 10.00 | | 58 | 45 | 51 | 62 | 7 | 21 | 28.75 | 29.77 |
| | | | | | **SUNRISE: 0707** | **FEB 28** | | | **SUNSET: 1830** | | | | | |
| 01 | SCT | NC | | | 10.00 | | 55 | 45 | 50 | 69 | 8 | 25 | 28.73 | 29.75 |
| 04 | BKN | 080 | | | 10.00 | | 54 | 44 | 49 | 69 | 6 | 28 | 28.73 | 29.75 |
| 07 | OVC | 090 | | | 10.00 | | 51 | 44 | 48 | 77 | 5 | 21 | 28.76 | 29.78 |
| 10 | FEW | NC | | | 10.00 | | 58 | 46 | 52 | 65 | 8 | 21 | 28.77 | 29.80 |
| 13 | SCT | NC | | | 10.00 | | 65 | 38 | 51 | 37 | 18 | 25 | 28.75 | 29.77 |
| 16 | CLR | NC | | | 10.00 | | 66 | 32 | 50 | 28 | 21 | 24 | 28.73 | 29.75 |
| 19 | FEW | NC | | | 10.00 | | 57 | 34 | 46 | 42 | 7 | 25 | 28.72 | 29.75 |
| 22 | SCT | NC | | | 10.00 | | 52 | 32 | 43 | 47 | 6 | 23 | 28.73 | 29.76 |
| | | | | | **SUNRISE:** | **FEB 29** | | | **SUNSET:** | | | | | |
| | | | | | **SUNRISE:** | **FEB 30** | | | **SUNSET:** | | | | | |

| HOUR (LST) | SKY COVER | CEILING 100'S OF FT | SATELLITE: OBSERVATION TIME (LST) | SATELLITE: EFF CLD AMT Oktas | 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:** | **FEB 31** | | | **SUNSET:** | | | | | |

## 3−HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8−2/8, SCT = 3/8−4/8, BKN = 5/8−7/8, OVC = 8/8, VV = Vertical Visibilty = 8/8.
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC= No ceiling detected.
& = Original observation contained additional weather elements.
See page 3 for additional notes.

## SUMMARY BY HOUR

| 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 | | | 42 | 37 | 40 | 81 | 28.85 | 29.90 | 8.92 | 7 | 2 | 34 |
| 02 | | | 42 | 36 | 40 | 82 | 28.85 | 29.89 | 8.61 | 6 | 1 | 33 |
| 03 | | | 41 | 37 | 39 | 85 | 28.85 | 29.89 | 8.57 | 6 | 2 | 33 |
| 04 | | | 41 | 37 | 39 | 86 | 28.84 | 29.88 | 8.36 | 6 | 1 | 1 |
| 05 | | | 41 | 37 | 39 | 84 | 28.84 | 29.88 | 8.25 | 7 | 1 | 35 |
| 06 | | | 41 | 36 | 38 | 84 | 28.85 | 29.89 | 8.25 | 6 | 2 | 34 |
| 07 | | | 40 | 36 | 38 | 86 | 28.86 | 29.90 | 8.41 | 6 | 2 | 35 |
| 08 | | | 41 | 36 | 39 | 86 | 28.87 | 29.92 | 7.64 | 6 | 2 | 33 |
| 09 | | | 42 | 37 | 40 | 84 | 28.88 | 29.93 | 7.45 | 7 | 2 | 36 |
| 10 | | | 44 | 38 | 41 | 80 | 28.89 | 29.93 | 7.98 | 8 | 1 | 34 |
| 11 | | | 46 | 38 | 42 | 74 | 28.88 | 29.93 | 8.70 | 9 | 2 | 31 |
| 12 | | | 48 | 38 | 43 | 69 | 28.88 | 29.92 | 9.23 | 8 | 2 | 28 |
| 13 | | | 50 | 38 | 44 | 66 | 28.86 | 29.90 | 9.36 | 9 | 3 | 25 |
| 14 | | | 51 | 37 | 44 | 63 | 28.84 | 29.88 | 9.43 | 8 | 3 | 24 |
| 15 | | | 52 | 37 | 45 | 60 | 28.82 | 29.87 | 9.54 | 9 | 3 | 24 |
| 16 | | | 52 | 37 | 45 | 60 | 28.82 | 29.86 | 9.25 | 9 | 3 | 28 |
| 17 | | | 51 | 37 | 45 | 61 | 28.83 | 29.87 | 9.52 | 9 | 3 | 28 |
| 18 | | | 50 | 37 | 44 | 64 | 28.83 | 29.88 | 9.43 | 9 | 1 | 29 |
| 19 | | | 49 | 36 | 43 | 65 | 28.84 | 29.89 | 9.71 | 8 | 2 | 34 |
| 20 | | | 47 | 36 | 42 | 67 | 28.85 | 29.90 | 9.71 | 7 | 1 | 33 |
| 21 | | | 46 | 36 | 42 | 69 | 28.86 | 29.90 | 9.50 | 8 | 1 | 31 |
| 22 | | | 45 | 36 | 41 | 73 | 28.86 | 29.90 | 9.29 | 7 | 2 | 35 |
| 23 | | | 44 | 37 | 41 | 76 | 28.86 | 29.90 | 8.70 | 7 | 2 | 33 |
| 24 | | | 44 | 37 | 41 | 78 | 28.85 | 29.90 | 8.79 | 7 | 2 | 34 |

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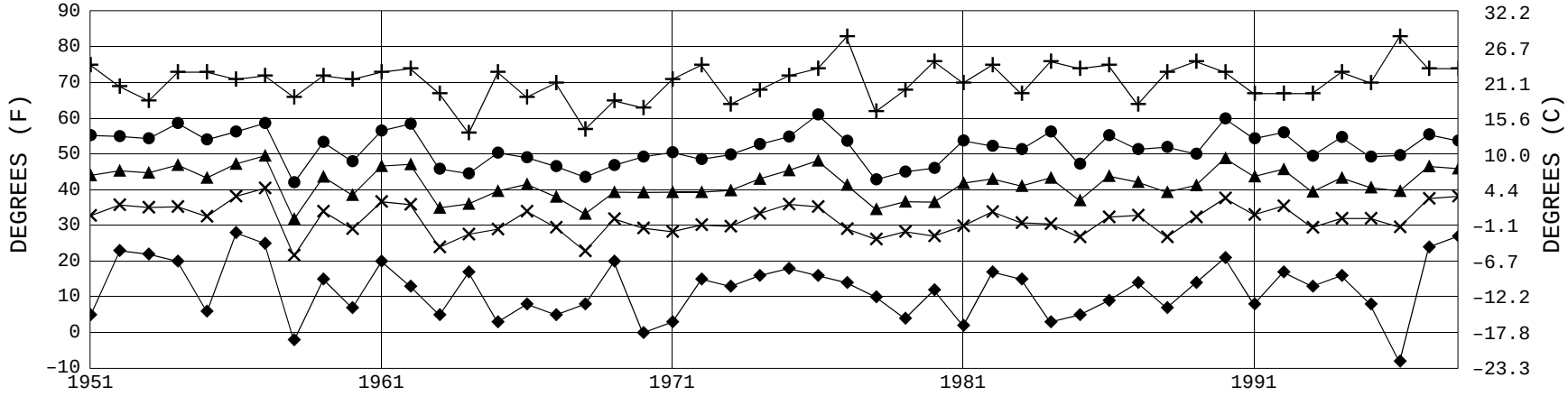
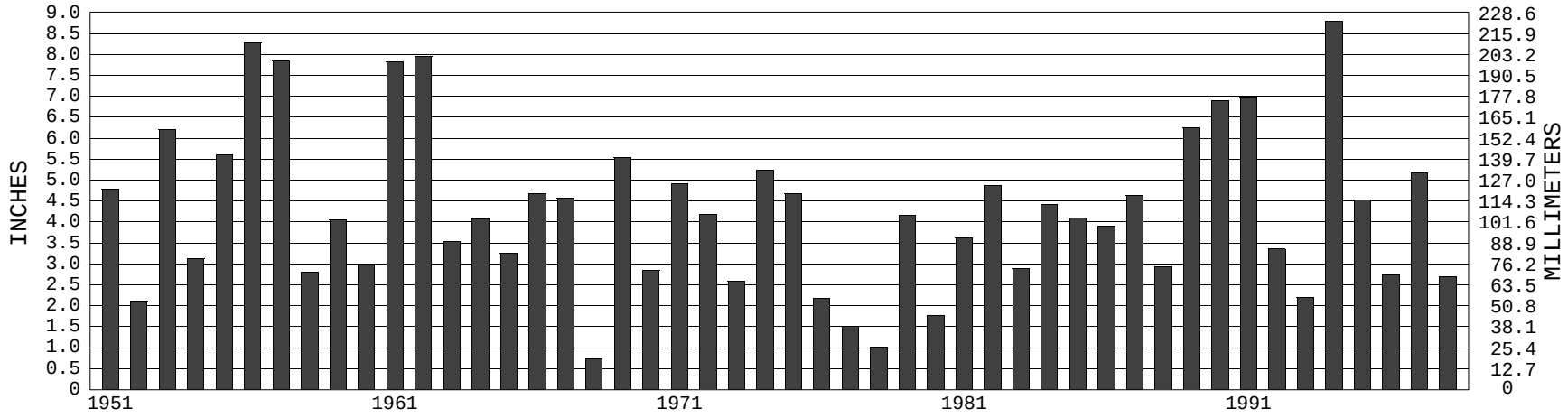
## KNOXVILLE, TN FEBRUARY TEMPERATURES




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

Long–Term (1951–1998) Mean: 41.8 1961–1990 Normal: 40.1

## KNOXVILLE, TN FEBRUARY PRECIPITATION




Long–Term (1951–1998) Mean Monthly Total: 4.30 1961–1990 Normal: 4.06

# FEBRUARY 1998
# KNOXVILLE, TN

# LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

*I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA—National Weather Service / Department Of Transportation—Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.*

ACTING DIRECTOR

**NOTICE**

Effective July 1, 1996, the National Weather Service & Federal Aviation Administration began using the METAR format for Hourly Observations.

We welcome your questions or comments, please contact us at
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