U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

# Summary of Monthly Normals
# 1991-2020

Generated on 11/11/2026

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 830 ft. Lat: 35.8983° N Lon: 83.9569° W

Station: **KNOXVILLE EXP STN, TN US USC00404946**

**Temperature (°F)**

| | Mean | | | | | | Cooling Degree Days | | | | | | Heating Degree Days | | | | Mean Number of Days | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Base (above) | | | | | | Base (above) | | | | | | | | | |
| Month | Daily Max | Daily Min | Mean | Long Term Max Std Dev | Long Term Min Std Dev | Long Term Avg Std Dev | 55 | 57 | 60 | 65 | 70 | 72 | 55 | 57 | 60 | 65 | Max >= 100 | Max >= 90 | Max >= 50 | Max <= 32 | Min <= 32 | Min <= 0 |
| 01 | 47.9 | 26.4 | 37.1 | 4.2 | 4.5 | 4.2 | 3.8 | 1.9 | 0.4 | 0.0 | 0.0 | 0.0 | 557.0 | 617.1 | 708.6 | 863.3 | 0.0 | 0.0 | 13.8 | 2.9 | 21.9 | 0.1 |
| 02 | 52.5 | 29.3 | 40.9 | 4.5 | 3.8 | 4.0 | 7.8 | 4.5 | 1.9 | 0.3 | 0.0 | 0.0 | 402.5 | 455.2 | 536.6 | 675.1 | 0.0 | 0.0 | 16.9 | 1.2 | 17.9 | 0.1 |
| 03 | 61.3 | 35.7 | 48.5 | 4.5 | 3.3 | 3.7 | 42.0 | 27.6 | 13.2 | 1.9 | 0.0 | 0.0 | 243.5 | 291.1 | 369.6 | 513.4 | 0.0 | 0.0 | 25.5 | 0.2 | 11.0 | 0.0 |
| 04 | 70.8 | 43.8 | 57.3 | 2.9 | 2.8 | 2.7 | 144.2 | 110.0 | 67.5 | 20.8 | 2.4 | 0.6 | 75.2 | 101.0 | 148.5 | 251.7 | 0.0 | 0.0 | 29.2 | 0.0 | 2.5 | 0.0 |
| 05 | 78.5 | 53.8 | 66.1 | 2.8 | 3.4 | 3.0 | 353.9 | 298.2 | 219.9 | 109.9 | 34.7 | 16.7 | 8.3 | 14.6 | 29.2 | 74.3 | 0.0 | 0.9 | 31.0 | 0.0 | 0.0 | 0.0 |
| 06 | 85.5 | 62.0 | 73.7 | 2.3 | 1.8 | 1.8 | 562.5 | 502.6 | 413.1 | 267.7 | 135.3 | 90.6 | 0.0 | 0.2 | 0.7 | 5.3 | 0.0 | 6.7 | 30.0 | 0.0 | 0.0 | 0.0 |
| 07 | 88.3 | 66.2 | 77.2 | 2.5 | 1.6 | 1.8 | 689.7 | 627.6 | 534.6 | 379.7 | 226.2 | 167.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 12.1 | 31.0 | 0.0 | 0.0 | 0.0 |
| 08 | 87.9 | 64.8 | 76.4 | 2.9 | 2.1 | 2.3 | 661.8 | 599.8 | 506.8 | 352.3 | 200.8 | 144.9 | 0.0 | 0.0 | 0.0 | 0.5 | 0.1 | 10.9 | 31.0 | 0.0 | 0.0 | 0.0 |
| 09 | 82.9 | 58.6 | 70.8 | 3.4 | 2.6 | 2.6 | 473.6 | 414.8 | 328.8 | 195.6 | 86.9 | 54.5 | 1.2 | 2.5 | 6.4 | 23.2 | 0.0 | 5.1 | 30.0 | 0.0 | 0.0 | 0.0 |
| 10 | 72.3 | 45.7 | 59.0 | 2.8 | 3.1 | 2.4 | 177.1 | 137.0 | 87.9 | 33.5 | 9.6 | 5.6 | 53.1 | 75.0 | 118.8 | 219.4 | 0.0 | 0.4 | 30.6 | 0.0 | 2.0 | 0.0 |
| 11 | 60.6 | 34.7 | 47.6 | 4.5 | 2.8 | 3.4 | 29.5 | 18.8 | 8.8 | 1.5 | 0.0 | 0.0 | 249.9 | 299.2 | 379.2 | 522.0 | 0.0 | 0.0 | 25.4 | 0.0 | 12.6 | 0.0 |
| 12 | 51.1 | 29.7 | 40.4 | 4.5 | 3.7 | 4.0 | 7.7 | 4.8 | 1.9 | 0.2 | 0.0 | 0.0 | 460.3 | 519.3 | 609.5 | 762.8 | 0.0 | 0.0 | 16.9 | 1.0 | 19.4 | 0.0 |
| Summary | 70.0 | 45.9 | 57.9 | 3.5 | 3.0 | 3.0 | 3154 | 2748 | 2185 | 1363 | 696 | 480 | 2051 | 2375 | 2907 | 3911 | 0.2 | 36.1 | 311.3 | 5.3 | 87.3 | 0.2 |

Empty or blank cells indicate data is missing or insufficient occurrences to compute value

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 830 ft. Lat: 35.8983° N Lon: 83.9569° W

Station: **KNOXVILLE EXP STN, TN US USC00404946**

| Precipitation (in.) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Totals | Mean Number of Days | | | | Precipitation Probabilities Probability that precipitation will be equal to or less than the indicated amount | | |
| | Means | Daily Precipitation | | | | Monthly Precipitation vs. Probability Levels | | |
| Month | Mean | >= 0.01 | >= 0.10 | >= 0.50 | >= 1.00 | 0.25 | 0.50 | 0.75 |
| 01 | 5.23 | 11.7 | 8.5 | 3.9 | 1.5 | 3.39 | 4.80 | 6.46 |
| 02 | 5.12 | 11.2 | 8.2 | 3.7 | 1.5 | 2.91 | 4.09 | 6.61 |
| 03 | 5.28 | 12.9 | 8.9 | 3.7 | 1.3 | 3.68 | 4.94 | 6.49 |
| 04 | 5.25 | 11.0 | 8.2 | 3.5 | 1.4 | 3.39 | 4.86 | 6.74 |
| 05 | 4.53 | 11.6 | 7.8 | 3.1 | 1.4 | 3.73 | 4.49 | 5.56 |
| 06 | 3.96 | 10.6 | 7.3 | 3.1 | 1.0 | 2.57 | 4.23 | 5.08 |
| 07 | 5.82 | 11.7 | 8.8 | 4.1 | 1.7 | 4.11 | 5.62 | 7.17 |
| 08 | 3.42 | 9.8 | 6.5 | 2.4 | 0.7 | 2.02 | 3.31 | 4.67 |
| 09 | 4.13 | 8.5 | 5.9 | 2.7 | 1.1 | 2.12 | 3.75 | 5.62 |
| 10 | 3.05 | 8.3 | 5.2 | 2.2 | 0.9 | 1.50 | 2.98 | 4.22 |
| 11 | 4.10 | 9.0 | 6.6 | 2.9 | 1.6 | 3.00 | 4.05 | 5.44 |
| 12 | 5.91 | 11.6 | 8.5 | 4.0 | 1.8 | 3.70 | 5.51 | 7.57 |
| Summary | 55.80 | 127.9 | 90.4 | 39.3 | 15.9 | 36.12 | 52.63 | 71.63 |

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Asheville, North Carolina 28801

Current Location: Elev: 830 ft. Lat: 35.8983° N Lon: 83.9569° W

Station: **KNOXVILLE EXP STN, TN US USC00404946**

| Growing Degree Units (Monthly) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Base** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** |
| **Growing Degree Units (Monthly)** | | | | | | | | | | | | |
| **Base** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** |
| 40 | 84.4 | 117.8 | 295.9 | 521.8 | 810.6 | 1012.4 | 1154.6 | 1126.7 | 922.3 | 590.1 | 254.7 | 118.8 |
| 45 | 36.7 | 57.0 | 183.3 | 379.4 | 655.6 | 862.4 | 999.6 | 971.8 | 772.3 | 439.4 | 148.6 | 56.6 |
| 50 | 14.0 | 23.4 | 97.3 | 250.1 | 501.8 | 712.4 | 844.6 | 816.8 | 622.4 | 298.4 | 73.6 | 23.0 |
| 55 | 3.8 | 7.8 | 42.0 | 144.2 | 353.9 | 562.5 | 689.7 | 661.8 | 473.6 | 177.1 | 29.5 | 7.7 |
| 60 | 0.4 | 1.9 | 13.2 | 67.5 | 219.9 | 413.1 | 534.6 | 506.8 | 328.8 | 87.9 | 8.8 | 1.9 |
| **Growing Degree Units for Corn (Monthly)** | | | | | | | | | | | | |
| 50/86 | 54.8 | 84.6 | 196.1 | 333.4 | 523.3 | 684.7 | 795.1 | 769.9 | 610.7 | 376.7 | 175.0 | 76.2 |
| | | | | | | | | | | | | |
| **Growing Degree Units (Accumulated Monthly)** | | | | | | | | | | | | |
| 40 | 84 | 202 | 498 | 1020 | 1830 | 2843 | 3998 | 5124 | 6046 | 6637 | 6891 | 7010 |
| 45 | 37 | 94 | 277 | 656 | 1312 | 2174 | 3174 | 4146 | 4918 | 5358 | 5506 | 5563 |
| 50 | 14 | 37 | 135 | 385 | 887 | 1599 | 2444 | 3260 | 3883 | 4181 | 4255 | 4278 |
| 55 | 4 | 12 | 54 | 198 | 552 | 1114 | 1804 | 2466 | 2939 | 3116 | 3146 | 3154 |
| 60 | 0 | 2 | 16 | 83 | 303 | 716 | 1251 | 1757 | 2086 | 2174 | 2183 | 2185 |
| **Growing Degree Units for Corn (Monthly Accumulated)** | | | | | | | | | | | | |
| 50/86 | 55 | 139 | 336 | 669 | 1192 | 1877 | 2672 | 3442 | 4053 | 4429 | 4604 | 4680 |

Note: For corn, temperatures below 50 are set to 50, and temperatures above 86 are set to 86.

Empty or blank cells indicate data is missing or insufficient occurrences to compute value.