

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### November 2002

Station: Westford  
 Latitude: 44° 37' 39" N Longitude: 73° 02' 29" W Elevation (Ground): 850 feet Time Zone: Eastern

| Date            | Temperature |         |                 |      |           | Humidity<br>Mean | Deg. Days         |                     | Precip Ty<br>1 fog<br>2 hvy fog<br>3 thunder<br>4 ice plt<br>5 hail<br>6 glaze<br>7 duststm<br>8 smk, hz<br>9 blw snw | Snow Cvr                       | Precip           |                  | Pressure<br>Adj. to Sea Level |         |   | Wind         |              |            |       |     |        | Sun |     |
|-----------------|-------------|---------|-----------------|------|-----------|------------------|-------------------|---------------------|---|--------------------------------|------------------|------------------|-------------------------------|---------|---|--------------|--------------|------------|-------|-----|--------|-----|-----|
|                 | Maximum     | Minimum | Average         | Mean | Dew Point |                  | Heating Base 65°F | Cooling Base 65°F   |   |                                | Water Equivalent | Ice Pellets Snow | Maximum                       | Minimum | Mean  | Avg<br>Speed | Res<br>Speed | Res<br>Dir | Peak  |     | Minute |     |     |
|                 |             |         |                 |      |           |                  |                   |                     |   |                                |                  |                  |                               |         |   |              |              |            | Speed | Dir | Speed  |     | Dir |
| 1               | 2           | 3       | 4A              | 4B   | 5         | 6                | 7                 | 8                   |   | 11                             | 12               | 13               | 14                            | 15      | 16  | 17           | 18           | 19         | 20    | 21  | 22     | 23  |     |
| 1               | 38.0        | 23.0    | 30.5            | 31.0 | 0         | 0                | 34                | 0                   | .....   | 0                              | 0.13             | T                | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 2               | 30.0        | 16.0    | 23.0            | 23.0 | 0         | 0                | 42                | 0                   | .....   | 0                              | T                | 0.00             | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| 3               | 31.0        | 13.0*   | 22.0*           | 22.0 | 0         | 0                | 43                | 0                   | .....   | 0                              | 0.00             | 0.0              | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| 4               | 39.0        | 21.0    | 30.0            | 30.0 | 0         | 0                | 35                | 0                   | .....   | 0                              | 0.03             | T                | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 5               | 38.0        | 33.0    | 35.5            | 36.0 | 0         | 0                | 29                | 0                   | .....   | 0                              | 0.00             | 0.0              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 6               | 39.0        | 33.0    | 36.0            | 36.0 | 0         | 0                | 29                | 0                   | .....   | 0                              | 0.21             | T                | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 7               | 34.0        | 15.0    | 24.5            | 25.0 | 0         | 0                | 40                | 0                   | .....   | 0                              | 0.04             | T                | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 8               | 46.0        | 20.0    | 33.0            | 33.0 | 0         | 0                | 32                | 0                   | .....   | 0                              | T                | 0.00             | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| 9               | 56.0        | 43.0    | 49.5            | 50.0 | 0         | 0                | 15                | 0                   | .....   | 0                              | 0.01             | 0.0              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 10              | 63.0        | 50.0    | 56.5            | 57.0 | 0         | 0                | 8                 | 0                   | .....   | 0                              | 0.00             | 0.0              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 11              | 69.0*       | 48.0    | 58.5*           | 59.0 | 0         | 0                | 6                 | 0                   | .....   | 0                              | T                | 0.0              | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| 12              | 49.0        | 37.0    | 43.0            | 43.0 | 0         | 0                | 22                | 0                   | .....   | 0                              | 0.21             | 0.0              | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| 13              | 44.0        | 37.0    | 40.5            | 41.0 | 0         | 0                | 24                | 0                   | .....   | 0                              | 0.14             | 0.0              | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| 14              | 45.0        | 30.0    | 37.5            | 38.0 | 0         | 0                | 27                | 0                   | .....   | 0                              | 0.00             | 0.0              | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| 15              | 46.0        | 22.0    | 34.0            | 34.0 | 0         | 0                | 31                | 0                   | .....   | 0                              | 0.06             | 0.2              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 16              | 31.0        | 20.0    | 25.5            | 26.0 | 0         | 0                | 39                | 0                   | .....   | 0                              | 0.02             | 0.3              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 17              | 34.0        | 26.0    | 30.0            | 30.0 | 0         | 0                | 35                | 0                   | .....6  | 0                              | 0.79             | 1.7              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 18              | 33.0        | 26.0    | 29.5            | 30.0 | 0         | 0                | 35                | 0                   | .....   | 0                              | 1.03             | 9.8              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 19              | 35.0        | 21.0    | 28.0            | 28.0 | 0         | 0                | 37                | 0                   | .....   | 0                              | 0.07             | 0.6              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 20              | 42.0        | 33.0    | 37.5            | 38.0 | 0         | 0                | 27                | 0                   | .....   | 0                              | 0.00             | 0.0              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 21              | 45.0        | 36.0    | 40.5            | 41.0 | 0         | 0                | 24                | 0                   | .....   | 0                              | 0.01             | 0.0              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 22              | 45.0        | 34.0    | 39.5            | 40.0 | 0         | 0                | 25                | 0                   | .....   | 0                              | 0.31             | 0.0              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 23              | 36.0        | 23.0    | 29.5            | 30.0 | 0         | 0                | 35                | 0                   | .....   | 0                              | 1.05             | 7.0              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 24              | 37.0        | 26.0    | 31.5            | 32.0 | 0         | 0                | 33                | 0                   | .....   | 0                              | T                | T                | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 25              | 39.0        | 26.0    | 32.5            | 33.0 | 0         | 0                | 32                | 0                   | .....   | 0                              | 0.02             | 0.2              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 26              | 35.0        | 25.0    | 30.0            | 30.0 | 0         | 0                | 35                | 0                   | .....   | 0                              | 0.08             | 0.7              | 0.00                          | 0.00    | 0.000   | 0.0          | 0.0          | 0          | 0     | N   | 0      | 0   |     |
| 27              |             |         |                 |      |           |                  |                   |                     |   |                                |                  |                  |                               |         |   |              |              |            |       |     |        |     |     |
| 28              |             |         |                 |      |           |                  |                   |                     |   |                                |                  |                  |                               |         |   |              |              |            |       |     |        |     |     |
| 29              |             |         |                 |      |           |                  |                   |                     |   |                                |                  |                  |                               |         |   |              |              |            |       |     |        |     |     |
| 30              |             |         |                 |      |           |                  |                   |                     |   |                                |                  |                  |                               |         |   |              |              |            |       |     |        |     |     |
| Sum             | Sum         | -----   | -----           | ---  | ----      |                  | Ttl               | Ttl                 |   |                                |                  |                  |                               |         | For the month:  |              |              |            |       |     | ---    |     |     |
| 1079            | 737         |         |                 |      |           |                  | 774               | 0                   | Number of Days  | 4.21                           | 20.5             | 0.00             | 0.00                          | 0.000   | 0.0   | 0.0          | 0            | 0          | N     | 0   | 0      |     |     |
| Avg             | Avg         | Avg     | Mean            | Avg  | Avg       | ----             | ----              |                     | Precip  | Season Ttl                     | Date             | Date             | -----                         | ----    | ----  | ---          | Date         | Date       | Avg   |     |        |     |     |
| 41.5            | 28.3        | 34.9    | 35.2            | 0    | 0.0       | ----             | ----              |                     | ≥.01 inch   | 17                             | 48.49            | 20.5             | 1+                            | 1+      | -----   | ----         | ----         | ---        | 1+    | 1+  |        |     |     |
| Number of Days  |             |         |                 |      |           |                  | Season to Date    | Snow, Ice ≥1.0 inch | 3   | Greatest in 24 Hours and Dates |                  |                  |                               |         | Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date |              |              |            |       |     |        |     |     |
| Max Temperature |             |         | Min Temperature |      |           | 1624             | 393               | Thunder             | 0   | Precipitation                  |                  |                  | Snow, Ice Plts                |         |   |              |              |            |       |     |        |     |     |
| ≥ 90°F          | ≤ 32°F      | ≤ 32°F  | ≤ 0°F           | ---- | ----      | Heavy Fog        | 0                 | 0.00                | -   | 9.8                            | 18               | 0                | -                             |         |   |              |              |            |       |     |        |     |     |
| 0               | 3           | 16      | 0               | ---- | ----      | Clear            | 26                | Partly Cloudy       | 0   | Cloudy                         | 0                |                  |                               |         |   |              |              |            |       |     |        |     |     |

NOTES:  
 Units are: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.  
 Data in column 4A are (MAX+MIN) ÷ 2, whereas columns 4B, 5, 6, 15, 16, 23 are means via continuous observations for 24 hours.  
 Column 5: Dew point is calculated from temperature and humidity and is continuously averaged for 24 hours.  
 Data in columns 9, 10, 12 are entered manually by the station observer.  
 Columns 17-18: Resultant wind is calculated by the vector sum of continuous wind observations.  
 Column 23: Sunshine index is measured in Watts/m<sup>2</sup> and is continuously averaged for 24 hours.  
 Data in columns 4B, 5, 6, 15, 16, 23 are updated continuously, there by achieving a "true" mean.