

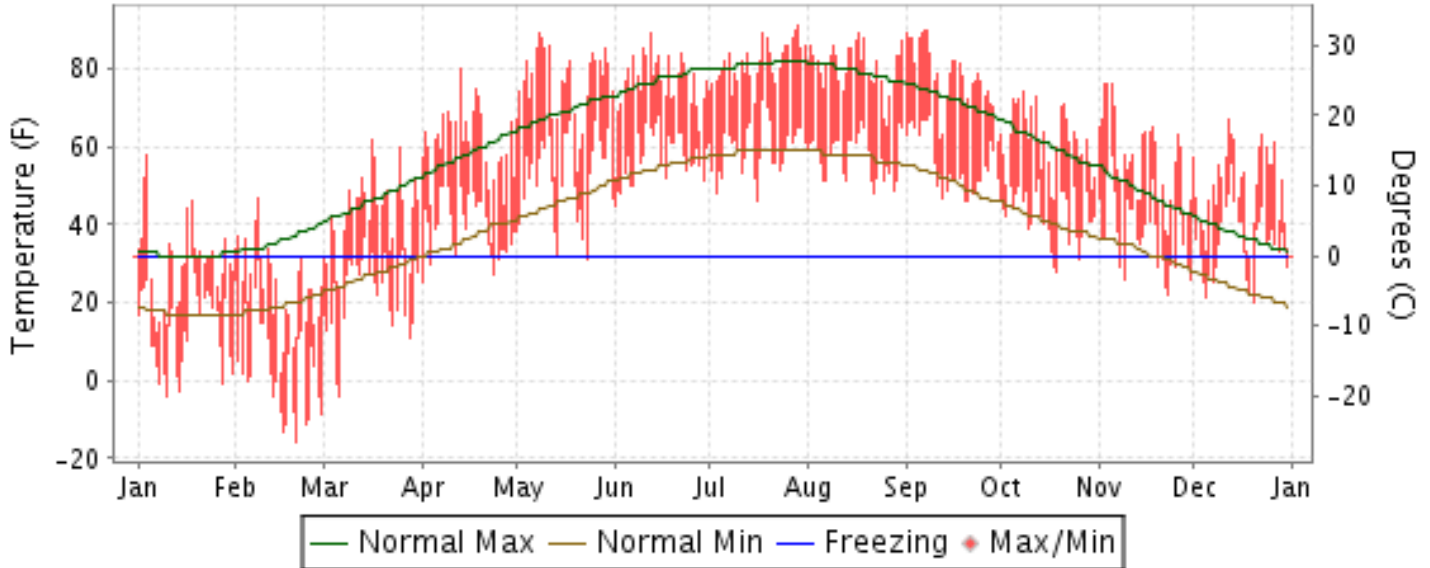


# 2015 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

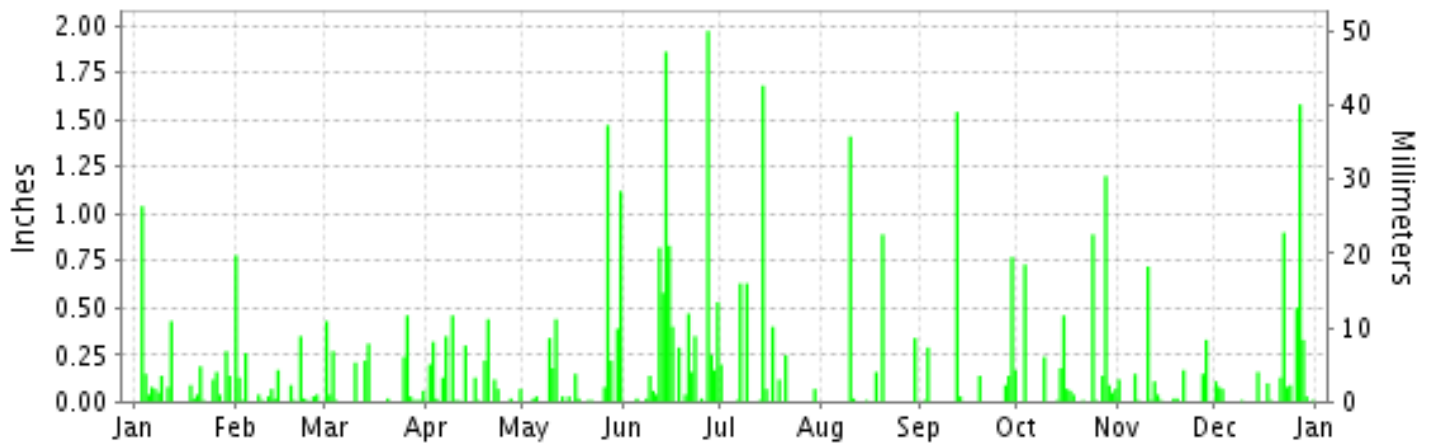
ISSN 0198-4039

## YOUNGSTOWN/WARREN, OHIO (KYN9)

### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



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NATIONAL CENTERS for  
ENVIRONMENTAL INFORMATION (NCEI)  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NCEI

# METEOROLOGICAL DATA FOR 2015

## YOUNGSTOWN/WARREN (KYNG)

LATITUDE: 41° 15'N      LONGITUDE: 80° 40'W      ELEVATION (FT): GRND: 1180 BARO: 1193      TIME ZONE: EASTERN (UTC -5)      WBAN: 14852

| ELEMENT              |                             | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV   | DEC    | YEAR      |   |
|----------------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----------|---|
| TEMPERATURE °F       | MEAN DAILY MAXIMUM          | 29.9  | 23.8  | 42.9  | 60.4  | 75.7  | 76.3  | 81.5  | 80.4  | 78.1  | 61.7  | 56.6  | 49.6   | 59.7      |   |
|                      | HIGHEST DAILY MAXIMUM       | 58    | 47    | 62    | 80    | 89    | 89    | 91    | 89    | 90    | 74    | 76    | 67     | 91        |   |
|                      | DATE OF OCCURRENCE          | 04    | 08    | 16    | 13    | 08    | 12    | 29    | 17    | 08+   | 08    | 05+   | 12     | JUL 29    |   |
|                      | MEAN DAILY MINIMUM          | 13.1  | 3.6   | 22.8  | 39.5  | 52.2  | 57.6  | 59.5  | 57.6  | 56.1  | 42.6  | 37.7  | 35.3   | 39.8      |   |
|                      | LOWEST DAILY MINIMUM        | -4    | -16   | -4    | 25    | 31    | 45    | 46    | 48    | 46    | 28    | 22    | 20     | -16       |   |
|                      | DATE OF OCCURRENCE          | 10    | 20    | 06    | 01    | 23    | 01    | 16    | 22    | 21+   | 19    | 23    | 20     | FEB 20    |   |
|                      | AVERAGE DRY BULB            | 21.5  | 13.7  | 32.9  | 50.0  | 64.0  | 67.0  | 70.5  | 69.0  | 67.1  | 52.1  | 47.2  | 42.5   | 49.8      |   |
|                      | MEAN WET BULB               | 20.4  | 12.8  | 29.4  | 44.0  | 57.2  | 62.8  | 64.5  | 62.7  | 61.0  | 47.6  | 42.0  | 40.0   | 45.4      |   |
|                      | MEAN DEW POINT              | 15.0  | 6.4   | 22.5  | 36.5  | 51.8  | 60.2  | 60.6  | 58.6  | 57.4  | 42.8  | 35.2  | 36.4   | 40.3      |   |
|                      | NUMBER OF DAYS WITH:        |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
|                      | MAXIMUM >= 90°              | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 2     | 0     | 2     | 0     | 0      | 0         | 4 |
|                      | MAXIMUM <= 32°              | 19    | 22    | 5     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1      | 47        |   |
| MINIMUM <= 32°       | 31                          | 28    | 27    | 6     | 2     | 0     | 0     | 0     | 0     | 3     | 10    | 10    | 117    |           |   |
| MINIMUM <= 0°        | 4                           | 12    | 2     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 18     |           |   |
| H/C                  | HEATING DEGREE DAYS         | 1343  | 1432  | 988   | 443   | 137   | 42    | 7     | 22    | 50    | 393   | 530   | 690    | 6077      |   |
|                      | COOLING DEGREE DAYS         | 0     | 0     | 0     | 0     | 112   | 110   | 185   | 153   | 119   | 0     | 2     | 0      | 681       |   |
| RH                   | MEAN (PERCENT)              | 74    | 70    | 68    | 64    | 67    | 80    | 73    | 72    | 75    | 73    | 65    | 79     | 72        |   |
|                      | HOUR 01 LST                 | 76    | 76    | 75    | 74    | 80    | 90    | 89    | 87    | 88    | 81    | 72    | 82     | 81        |   |
|                      | HOUR 07 LST                 | 80    | 79    | 76    | 69    | 72    | 84    | 78    | 81    | 83    | 82    | 76    | 84     | 79        |   |
|                      | HOUR 13 LST                 | 68    | 61    | 58    | 53    | 49    | 67    | 54    | 51    | 55    | 57    | 50    | 71     | 58        |   |
|                      | HOUR 19 LST                 | 72    | 68    | 64    | 64    | 68    | 79    | 72    | 71    | 78    | 74    | 65    | 79     | 71        |   |
| W/O                  | NUMBER OF DAYS WITH:        |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
|                      | HEAVY FOG(VISBY <= 1/4 MI)  | 4     | 6     | 4     | 1     | 1     | 1     | 0     | 0     | 1     | 1     | 0     | 4      | 23        |   |
|                      | THUNDERSTORMS               | 0     | 0     | 0     | 2     | 10    | 11    | 8     | 5     | 1     | 1     | 0     | 1      | 39        |   |
| PR                   | MEAN STATION PRESS. (IN.)   | 28.82 | 28.80 | 28.84 | 28.70 | 28.85 | 28.71 | 28.70 | 28.76 | 28.83 | 28.82 | 28.87 | 28.77  | 28.79     |   |
|                      | MEAN SEA-LEVEL PRESS. (IN.) | 30.15 | 30.14 | 30.15 | 29.98 | 30.11 | 29.96 | 29.94 | 30.01 | 30.09 | 30.10 | 30.16 | 30.06  | 30.07     |   |
| WINDS                | RESULTANT SPEED (MPH)       | 4.7   | 4.2   | 3.2   | 2.2   | 2.7   | 1.2   | 1.3   | 1.8   | 1.4   | 1.7   | 4.4   | 3.9    | 2.2       |   |
|                      | RES. DIR. (TENS OF DEGS.)   | 25    | 28    | 28    | 25    | 22    | 21    | 28    | 24    | 10    | 21    | 21    | 20     | 24        |   |
|                      | MEAN SPEED (MPH)            | 9.8   | 9.3   | 9.1   | 9.7   | 7.5   | 7.4   | 6.2   | 6.0   | 6.5   | 8.6   | 9.5   | 8.8    | 8.2       |   |
|                      | PREVAIL.DIR.(TENS OF DEGS.) | 24    | 21    | 33    | 32    | 22    | 12    | 21    | 21    | 08    | 26    | 13    | 17     | 24        |   |
|                      | MAXIMUM 2-MINUTE WIND       |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
|                      | SPEED (MPH)                 | 32    | 35    | 31    | 37    | 39    | 30    | 28    | 22    | 24    | 29    | 36    | 31     | 39        |   |
|                      | DIR. (TENS OF DEGS.)        | 24    | 33    | 33    | 24    | 23    | 32    | 33    | 34    | 32    | 24    | 26    | 12     | 23        |   |
|                      | DATE OF OCCURRENCE          | 04    | 14    | 17    | 21    | 11    | 23    | 14    | 12    | 19    | 29    | 12    | 28     | MAY 11    |   |
|                      | MAXIMUM 3-SECOND WIND:      |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
|                      | SPEED (MPH)                 | 41    | 41    | 39    | 49    | 52    | 40    | 41    | 34    | 31    | 41    | 45    | 41     | 52        |   |
| DIR. (TENS OF DEGS.) | 24                          | 33    | 33    | 24    | 23    | 32    | 32    | 29    | 32    | 11    | 25    | 13    | 23     |           |   |
| DATE OF OCCURRENCE   | 04                          | 14    | 17    | 21    | 11    | 23    | 17    | 03    | 19    | 28    | 12    | 28    | MAY 11 |           |   |
| PRECIPITATION        | WATER EQUIVALENT:           |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
|                      | TOTAL (IN.)                 | 3.16  | 2.07  | 2.33  | 2.88  | 4.54  | 9.02  | 4.07  | 2.83  | 3.18  | 4.25  | 1.86  | 4.19   | 44.38     |   |
|                      | GREATEST 24-HOUR (IN.)      | 1.10  | 0.89  | 0.53  | 0.65  | 1.69  | 2.07  | 1.75  | 1.43  | 1.54  | 1.33  | 0.72  | 2.08   | 2.08      |   |
|                      | DATE OF OCCURRENCE          | 03-04 | 01-02 | 13-14 | 19-20 | 27-28 | 27-28 | 14-15 | 10-11 | 12    | 27-28 | 10    | 26-27  | DEC 26-27 |   |
|                      | NUMBER OF DAYS WITH:        |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
| PRECIPITATION 0.01   | 19                          | 17    | 15    | 17    | 16    | 20    | 11    | 6     | 9     | 16    | 13    | 16    | 175    |           |   |
| PRECIPITATION 0.10   | 9                           | 5     | 7     | 10    | 8     | 14    | 7     | 4     | 6     | 7     | 7     | 8     | 92     |           |   |
| PRECIPITATION 1.00   | 1                           | 0     | 0     | 0     | 2     | 2     | 1     | 1     | 1     | 1     | 0     | 1     | 10     |           |   |
| SNOWFALL             | SNOW,ICE PELLETS,HAIL       |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
|                      | TOTAL (IN.)                 | 29.3  | 27.9  | 8.6   | 0.9   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.4   | T     | 0.8    | 67.9      |   |
|                      | GREATEST 24-HOUR (IN.)      | 4.3   | 7.2   | 6.8   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | T     | 0.7    | 7.2       |   |
|                      | DATE OF OCCURRENCE          | 12    | 01    | 01    | 23    |       |       |       |       |       | 18+   | 24+   | 03     | FEB 01    |   |
|                      | MAXIMUM SNOW DEPTH (IN.)    | 8     | 17    | 16    | T     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 1      | 17        |   |
|                      | DATE OF OCCURRENCE          | 31+   | 05    | 02    | 04    |       |       |       |       |       |       |       | 03     | FEB 05    |   |
|                      | NUMBER OF DAYS WITH:        |       |       |       |       |       |       |       |       |       |       |       |        |           |   |
| SNOWFALL >= 1.0      | 10                          | 7     | 1     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 18     |           |   |

# NORMALS, MEANS, AND EXTREMES YOUNGSTOWN/WARREN (KYNG)

LATITUDE: 41° 15'N      LONGITUDE: 80° 40'W      ELEVATION (FT): GRND: 1180 BARO: 1193      TIME ZONE: EASTERN (UTC -5)      WBAN: 14852

| ELEMENT                                  |   | POR  | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV   | DEC      | YEAR     |
|--|---|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----------|
| TEMPERATURE °F                           | NORMAL DAILY MAXIMUM                              | 30   | 32.5  | 36.1  | 45.8  | 59.0  | 68.9  | 77.4  | 81.4  | 79.9  | 72.4  | 60.6  | 48.9  | 36.5     | 58.3     |
|  | MEAN DAILY MAXIMUM                                | 87   | 33.3  | 34.7  | 45.5  | 57.4  | 69.8  | 77.9  | 82.4  | 80.8  | 73.5  | 62.1  | 48.5  | 37.2     | 58.6     |
|  | HIGHEST DAILY MAXIMUM                             | 72   | 71    | 73    | 82    | 88    | 92    | 99    | 100   | 97    | 99    | 87    | 80    | 76       | 100      |
|  | YEAR OF OCCURRENCE                                |      | 1950  | 2000  | 1986  | 1990  | 1962  | 1988  | 1988  | 1988  | 1954  | 2007  | 1961  | 1982     | JUL 1988 |
|  | MEAN OF EXTREME MAXS.                             | 106  | 55.4  | 56.8  | 70.4  | 80.0  | 84.7  | 89.7  | 91.2  | 89.6  | 86.8  | 78.4  | 69.0  | 58.5     | 75.9     |
|  | NORMAL DAILY MINIMUM                              | 30   | 19.0  | 20.7  | 27.7  | 38.0  | 46.7  | 55.4  | 59.7  | 58.3  | 51.4  | 41.5  | 33.9  | 24.0     | 39.7     |
|  | MEAN DAILY MINIMUM                                | 87   | 18.9  | 19.0  | 27.3  | 36.2  | 47.1  | 55.7  | 60.3  | 58.8  | 51.7  | 42.1  | 33.0  | 23.9     | 39.5     |
|  | LOWEST DAILY MINIMUM                              | 72   | -22   | -16   | -10   | 11    | 24    | 30    | 40    | 32    | 29    | 20    | 1     | -12      | -22      |
|  | YEAR OF OCCURRENCE                                |      | 1994  | 2015  | 1980  | 1950  | 1970  | 1972  | 2001  | 1982  | 1991  | 1988  | 1976  | 1989     | JAN 1994 |
|  | MEAN OF EXTREME MINS.                             | 106  | -2.1  | -0.5  | 8.2   | 21.6  | 31.5  | 40.6  | 47.0  | 45.0  | 36.6  | 27.4  | 17.1  | 5.7      | 23.2     |
|  | NORMAL DRY BULB                                   | 30   | 25.8  | 28.4  | 36.7  | 48.5  | 57.8  | 66.4  | 70.5  | 69.1  | 61.9  | 51.0  | 41.4  | 30.3     | 49.0     |
|  | MEAN DRY BULB                                     | 87   | 26.2  | 26.9  | 36.4  | 46.8  | 58.5  | 66.9  | 71.4  | 69.9  | 62.6  | 52.1  | 40.8  | 30.5     | 49.1     |
|  | MEAN WET BULB                                     | 32   | 22.7  | 23.8  | 30.8  | 40.5  | 50.9  | 59.9  | 63.5  | 62.5  | 56.4  | 45.6  | 35.9  | 27.7     | 43.4     |
|  | MEAN DEW POINT                                    | 32   | 21.3  | 21.9  | 28.9  | 38.4  | 49.2  | 58.4  | 62.2  | 61.4  | 55.2  | 44.0  | 34.5  | 26.3     | 41.8     |
|  | NORMAL NO. DAYS WITH:<br>MAXIMUM >= 90            | 30   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.9   | 2.2   | 1.7   | 0.2   | 0.0   | 0.0      | 5.0      |
|  | MAXIMUM <= 32                                     | 30   | 15.4  | 10.7  | 4.5   | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 1.7   | 10.9     | 43.5     |
| MINIMUM <= 32                            | 30  | 26.8 | 23.6  | 21.4  | 8.6   | 1.0   | 0.0   | 0.0   | 0.0   | 0.1   | 3.7   | 13.1  | 24.7  | 123.0    |          |
| MINIMUM <= 0                             | 30  | 2.1  | 0.9   | 0.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.6   | 3.7      |          |
| H/C                                      | NORMAL HEATING DEG. DAYS                          | 30   | 1217  | 1025  | 876   | 503   | 253   | 69    | 13    | 25    | 145   | 438   | 708   | 1077     | 6349     |
|  | NORMAL COOLING DEG. DAYS                          | 30   | 0     | 0     | 1     | 8     | 30    | 110   | 185   | 152   | 52    | 6     | 0     | 0        | 544      |
| RH                                       | NORMAL (PERCENT)                                  | 30   | 76    | 73    | 70    | 65    | 68    | 72    | 73    | 76    | 77    | 73    | 74    | 77       | 73       |
|  | HOURLY 01 LST                                     | 30   | 78    | 77    | 75    | 73    | 79    | 85    | 87    | 89    | 87    | 81    | 78    | 80       | 81       |
|  | HOURLY 07 LST                                     | 30   | 80    | 80    | 79    | 76    | 79    | 83    | 86    | 90    | 90    | 85    | 81    | 81       | 83       |
|  | HOURLY 13 LST                                     | 30   | 71    | 67    | 61    | 55    | 54    | 57    | 57    | 59    | 61    | 60    | 67    | 72       | 62       |
|  | HOURLY 19 LST                                     | 30   | 74    | 70    | 65    | 59    | 60    | 63    | 64    | 69    | 75    | 73    | 73    | 76       | 68       |
| S  | PERCENT POSSIBLE SUNSHINE                         |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
| W/O                                      | MEAN NO. DAYS WITH:<br>HEAVY FOG(VISBY <= 1/4 MI) | 52   | 1.8   | 1.9   | 1.7   | 1.1   | 2.0   | 1.8   | 2.0   | 3.5   | 3.0   | 2.2   | 1.9   | 2.4      | 25.3     |
|  | THUNDERSTORMS                                     | 68   | 0.4   | 0.4   | 1.6   | 3.3   | 5.2   | 7.1   | 7.3   | 5.5   | 3.4   | 1.3   | 0.7   | 0.2      | 36.4     |
| CLOUDINESS                               | MEAN:<br>SUNRISE-SUNSET (OKTAS)                   |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|  | MIDNIGHT-MIDNIGHT (OKTAS)                         |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|  | MEAN NO. DAYS WITH:<br>CLEAR                      |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
|  | PARTLY CLOUDY<br>CLOUDY                           |      |       |       |       |       |       |       |       |       |       |       |       |          |          |
| PR                                       | MEAN STATION PRESSURE(IN)                         | 32   | 28.76 | 28.76 | 28.76 | 28.71 | 28.74 | 28.73 | 28.76 | 28.79 | 28.81 | 28.80 | 28.80 | 28.79    | 28.77    |
|  | MEAN SEA-LEVEL PRES. (IN)                         | 32   | 30.07 | 30.07 | 30.06 | 29.98 | 30.00 | 29.98 | 30.00 | 30.03 | 30.07 | 30.07 | 30.09 | 30.09    | 30.04    |
| WINDS                                    | MEAN SPEED (MPH)                                  | 32   | 10.3  | 9.9   | 9.9   | 9.7   | 8.2   | 7.3   | 6.9   | 6.5   | 7.1   | 8.2   | 9.4   | 9.8      | 8.6      |
|  | PREVAIL.DIR.(TENS OF DEGS)                        | 41   | 25    | 25    | 32    | 32    | 22    | 23    | 23    | 24    | 19    | 23    | 24    | 25       | 25       |
|  | MAXIMUM 2-MINUTE:<br>SPEED (MPH)                  | 20   | 47    | 44    | 48    | 51    | 46    | 41    | 49    | 36    | 45    | 38    | 41    | 47       | 51       |
|  | DIR. (TENS OF DEGS)                               |      | 25    | 25    | 25    | 33    | 24    | 25    | 34    | 31    | 23    | 24    | 26    | 23       | 33       |
|  | YEAR OF OCCURRENCE                                |      | 2008  | 2012  | 2002  | 1996  | 1997  | 2005  | 1999  | 2009  | 2008  | 2001  | 2003  | 2006     | APR 1996 |
|  | MAXIMUM 3-SECOND<br>SPEED (MPH)                   | 20   | 58    | 59    | 63    | 63    | 57    | 58    | 66    | 52    | 61    | 51    | 53    | 63       | 66       |
|  | DIR. (TENS OF DEGS)                               |      | 26    | 24    | 23    | 26    | 25    | 26    | 31    | 34    | 21    | 27    | 28    | 23       | 31       |
| YEAR OF OCCURRENCE                       |   | 2012 | 2012  | 2002  | 2000  | 1997  | 2005  | 2006  | 2002  | 2008  | 2001  | 2003  | 2006  | JUL 2006 |          |
| PRECIPITATION                            | NORMAL (IN)                                       | 30   | 2.55  | 2.15  | 2.94  | 3.36  | 3.79  | 3.88  | 4.31  | 3.24  | 3.75  | 2.77  | 3.18  | 2.99     | 38.91    |
|  | MAXIMUM MONTHLY (IN)                              | 72   | 7.64  | 5.83  | 6.38  | 7.29  | 9.87  | 10.66 | 10.40 | 7.86  | 7.08  | 8.59  | 9.11  | 6.53     | 10.66    |
|  | YEAR OF OCCURRENCE                                |      | 1950  | 2008  | 2008  | 1998  | 1946  | 1986  | 2003  | 1956  | 2011  | 1954  | 1985  | 1990     | JUN 1986 |
|  | MINIMUM MONTHLY (IN)                              | 72   | 0.73  | 0.55  | 1.07  | 1.01  | 0.78  | 0.71  | 0.66  | 0.51  | 0.27  | 0.43  | 0.82  | 0.88     | 0.27     |
|  | YEAR OF OCCURRENCE                                |      | 1985  | 1987  | 1990  | 1982  | 1977  | 1988  | 1997  | 1969  | 1960  | 1953  | 2012  | 1958     | SEP 1960 |
|  | MAXIMUM IN 24 HOURS (IN)                          | 72   | 2.79  | 2.76  | 2.47  | 1.78  | 2.85  | 3.57  | 4.65  | 4.54  | 4.41  | 4.31  | 3.00  | 2.28     | 4.65     |
|  | YEAR OF OCCURRENCE                                |      | 1959  | 1959  | 1954  | 2000  | 1946  | 1986  | 2003  | 1994  | 2004  | 1954  | 1985  | 1979     | JUL 2003 |
|  | NORMAL NO. DAYS WITH:<br>PRECIPITATION >= 0.01    | 30   | 17.1  | 14.3  | 14.1  | 14.5  | 13.6  | 12.3  | 10.7  | 10.0  | 10.6  | 11.5  | 14.1  | 17.2     | 160.0    |
| PRECIPITATION >= 1.00                    | 30  | 0.2  | 0.1   | 0.3   | 0.6   | 0.6   | 0.8   | 1.2   | 0.7   | 1.0   | 0.4   | 0.3   | 0.3   | 6.5      |          |
| SNOWFALL                                 | NORMAL (IN)                                       | 30   | 16.6  | 12.8  | 10.9  | 3.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.8   | 3.6   | 15.0     | 62.7     |
|  | MAXIMUM MONTHLY (IN)                              | 71   | 36.4  | 36.3  | 30.9  | 14.8  | 5.4   | T     | T     | T     | T     | 7.7   | 30.6  | 53.1     | 53.1     |
|  | YEAR OF OCCURRENCE                                |      | 1999  | 2010  | 1993  | 1987  | 1966  | 2013  | 2012  | 2011  | 1994  | 1993  | 1950  | 2010     | DEC 2010 |
|  | MAXIMUM IN 24 HOURS (IN)                          | 71   | 17.5  | 13.4  | 15.3  | 12.4  | 5.4   | T     | T     | T     | T     | 5.2   | 20.7  | 14.8     | 20.7     |
|  | YEAR OF OCCURRENCE                                |      | 1948  | 1984  | 1993  | 1987  | 1966  | 2013  | 2012  | 2011  | 1994  | 1993  | 1950  | 1944     | NOV 1950 |
|  | MAXIMUM SNOW DEPTH (IN)                           | 66   | 18    | 18    | 16    | 10    | 2     | 0     | 0     | 0     | 0     | 3     | 25    | 15       | 25       |
|  | YEAR OF OCCURRENCE                                |      | 1948  | 1977  | 2015  | 1987  | 1966  |       |       |       |       | 1962  | 1950  | 2010     | NOV 1950 |
| NORMAL NO. DAYS WITH:<br>SNOWFALL >= 1.0 | 30  | 5.4  | 4.3   | 2.7   | 0.6   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.3   | 1.1   | 4.8   | 19.2     |          |

**PRECIPITATION (inches) 2015 YOUNGSTOWN/WARREN (KYNG)**

| YEAR            | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL   | AUG  | SEP  | OCT  | NOV  | DEC  | ANNUAL |
|-----------------|------|------|------|------|------|-------|-------|------|------|------|------|------|--------|
| 1986            | 0.87 | 2.29 | 1.38 | 2.03 | 3.62 | 10.66 | 8.31  | 1.72 | 5.83 | 3.05 | 2.92 | 3.42 | 46.10  |
| 1987            | 1.89 | 0.55 | 3.25 | 2.97 | 2.54 | 6.57  | 3.19  | 6.77 | 3.71 | 2.62 | 1.55 | 2.73 | 38.34  |
| 1988            | 1.05 | 2.60 | 1.62 | 2.43 | 3.39 | 0.71  | 5.31  | 3.43 | 3.50 | 2.62 | 3.04 | 1.93 | 31.63  |
| 1989            | 1.96 | 1.90 | 3.64 | 1.56 | 6.24 | 10.09 | 3.33  | 1.68 | 6.11 | 2.90 | 2.47 | 1.45 | 43.33  |
| 1990            | 2.06 | 4.56 | 1.07 | 3.21 | 4.60 | 3.05  | 6.93  | 3.04 | 5.19 | 4.23 | 2.24 | 6.53 | 46.71  |
| 1991            | 2.13 | 1.51 | 2.56 | 3.02 | 1.57 | 1.51  | 4.04  | 0.86 | 3.00 | 1.11 | 1.40 | 2.53 | 25.24  |
| 1992            | 2.22 | 1.66 | 3.60 | 3.94 | 2.03 | 0.99  | 9.68  | 3.86 | 4.60 | 2.48 | 4.21 | 3.50 | 42.77  |
| 1993            | 3.75 | 1.94 | 4.31 | 2.74 | 0.90 | 4.04  | 3.47  | 1.79 | 3.49 | 2.85 | 4.93 | 2.58 | 36.79  |
| 1994            | 2.77 | 1.48 | 3.91 | 6.06 | 1.77 | 2.21  | 2.49  | 6.60 | 3.30 | 1.74 | 2.60 | 2.99 | 37.92  |
| 1995            | 2.43 | 1.53 | 1.48 | 2.80 | 4.43 | 3.32  | 3.15  | 1.57 | 1.07 | 4.95 | 2.56 | 1.79 | 31.08  |
| 1996            | 2.84 | 2.05 | 3.02 | 5.12 | 3.91 | 4.05  | 3.19  | 1.93 | 6.35 | 3.66 | 2.75 | 2.86 | 41.73  |
| 1997            | 1.03 | 1.47 | 2.99 | 2.86 | 4.59 | 4.12  | 0.66  | 4.40 | 3.90 | 1.16 | 3.42 | 2.71 | 33.31  |
| 1998            | 4.88 | 1.85 | 2.84 | 7.29 | 1.94 | 3.44  | 1.83  | 3.36 | 2.37 | 3.41 | 1.99 | 2.36 | 37.56  |
| 1999            | 4.63 | 2.82 | 2.18 | 4.55 | 2.82 | 2.78  | 5.56  | 3.52 | 4.28 | 2.75 | 4.18 | 2.36 | 42.43  |
| 2000            | 2.32 | 1.82 | 1.85 | 4.60 | 4.04 | 4.72  | 4.10  | 2.76 | 3.18 | 2.28 | 1.80 | 3.16 | 36.63  |
| 2001            | 1.24 | 1.51 | 2.10 | 2.70 | 2.70 | 1.89  | 2.12  | 3.87 | 2.61 | 3.62 | 3.14 | 2.03 | 29.53  |
| 2002            | 2.44 | 2.20 | 3.17 | 3.86 | 6.20 | 3.75  | 4.14  | 4.13 | 2.72 | 2.01 | 3.18 | 2.92 | 40.72  |
| 2003            | 1.63 | 2.31 | 2.37 | 1.82 | 6.83 | 3.03  | 10.40 | 3.32 | 5.62 | 3.03 | 3.00 | 2.64 | 46.00  |
| 2004            | 3.60 | 1.01 | 3.75 | 3.29 | 7.03 | 3.46  | 4.23  | 4.07 | 6.67 | 2.03 | 2.46 | 3.62 | 45.22  |
| 2005            | 5.86 | 2.80 | 1.64 | 5.38 | 3.16 | 2.77  | 3.19  | 3.86 | 4.16 | 2.55 | 3.63 | 1.41 | 40.41  |
| 2006            | 2.71 | 1.97 | 1.71 | 2.51 | 5.69 | 5.97  | 7.06  | 2.75 | 6.73 | 5.85 | 2.46 | 2.93 | 48.34  |
| 2007            | 5.20 | 1.64 | 3.20 | 3.28 | 1.70 | 3.67  | 1.61  | 5.56 | 1.44 | 3.04 | 3.69 | 5.73 | 39.76  |
| 2008            | 2.62 | 5.83 | 6.38 | 2.29 | 3.95 | 3.18  | 6.67  | 2.63 | 3.11 | 2.25 | 3.18 | 3.63 | 45.72  |
| 2009            | 3.30 | 2.00 | 4.01 | 3.13 | 2.28 | 2.68  | 3.52  | 4.11 | 2.15 | 3.70 | 0.92 | 3.41 | 35.21  |
| 2010            | 2.78 | 2.91 | 2.56 | 1.93 | 5.32 | 4.09  | 3.17  | 2.48 | 2.14 | 3.16 | 4.45 | 3.81 | 38.80  |
| 2011            | 2.15 | 5.03 | 5.14 | 6.87 | 8.32 | 2.05  | 2.93  | 2.67 | 7.08 | 3.19 | 4.16 | 4.42 | 54.01  |
| 2012            | 4.51 | 3.21 | 2.37 | 1.60 | 3.54 | 2.72  | 6.01  | 4.48 | 4.79 | 5.85 | 0.82 | 5.19 | 45.09  |
| 2013            | 1.81 | 2.49 | 2.71 | 3.29 | 1.47 | 5.37  | 7.45  | 2.63 | 2.21 | 3.10 | 3.08 | 3.52 | 39.13  |
| 2014            | 2.43 | 2.26 | 1.94 | 4.91 | 3.55 | 4.80  | 3.41  | 6.26 | 1.90 | 3.09 | 2.40 | 2.32 | 39.27  |
| 2015            | 3.16 | 2.07 | 2.33 | 2.88 | 4.54 | 9.02  | 4.07  | 2.83 | 3.18 | 4.25 | 1.86 | 4.19 | 44.38  |
| POR=<br>105 YRS | 2.68 | 2.18 | 2.98 | 3.32 | 3.54 | 3.70  | 3.99  | 3.34 | 3.21 | 2.72 | 2.71 | 2.78 | 37.15  |

WBAN : 14852

**AVERAGE TEMPERATURE (°F) 2015 YOUNGSTOWN/WARREN (KYNG)**

| YEAR           | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  | OCT  | NOV  | DEC  | ANNUAL |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1986           | 25.9 | 28.6 | 39.1 | 50.5 | 60.2 | 65.2 | 70.8 | 66.9 | 64.2 | 52.6 | 39.1 | 31.4 | 49.5   |
| 1987           | 26.0 | 29.1 | 39.0 | 49.4 | 61.6 | 68.9 | 74.1 | 68.2 | 61.9 | 45.6 | 44.5 | 33.5 | 50.2   |
| 1988           | 24.4 | 26.0 | 36.4 | 47.1 | 59.0 | 66.2 | 73.9 | 71.7 | 61.2 | 45.1 | 42.4 | 29.7 | 48.6   |
| 1989           | 33.0 | 24.8 | 37.9 | 44.2 | 56.1 | 66.0 | 71.8 | 69.1 | 62.8 | 52.6 | 39.1 | 18.1 | 48.0   |
| 1990           | 35.0 | 34.0 | 41.5 | 49.7 | 55.1 | 66.0 | 69.3 | 68.3 | 61.9 | 53.5 | 44.6 | 35.1 | 51.2   |
| 1991           | 26.6 | 31.8 | 40.8 | 52.1 | 66.2 | 69.4 | 72.1 | 71.7 | 62.3 | 54.0 | 39.2 | 32.5 | 51.6   |
| 1992           | 28.8 | 31.6 | 35.1 | 47.8 | 56.8 | 62.9 | 69.8 | 65.5 | 60.8 | 47.9 | 40.8 | 32.2 | 48.3   |
| 1993           | 31.1 | 24.8 | 34.2 | 47.3 | 57.7 | 66.1 | 73.2 | 71.2 | 59.8 | 49.3 | 40.4 | 29.3 | 48.7   |
| 1994           | 18.4 | 25.7 | 34.8 | 50.2 | 53.4 | 68.9 | 71.9 | 67.1 | 60.9 | 50.9 | 45.4 | 35.0 | 48.6   |
| 1995           | 29.5 | 24.9 | 39.7 | 45.7 | 58.2 | 70.2 | 73.4 | 75.5 | 59.7 | 53.4 | 35.9 | 24.8 | 49.2   |
| 1996           | 23.8 | 25.8 | 31.1 | 45.9 | 56.0 | 67.9 | 67.5 | 67.8 | 61.4 | 50.8 | 34.6 | 33.4 | 47.2   |
| 1997           | 24.9 | 32.8 | 37.0 | 44.3 | 51.4 | 66.7 | 68.8 | 66.0 | 60.7 | 51.7 | 37.5 | 32.3 | 47.8   |
| 1998           | 34.1 | 37.0 | 39.9 | 48.8 | 63.2 | 65.5 | 69.2 | 71.1 | 65.1 | 52.0 | 42.7 | 36.0 | 52.1   |
| 1999           | 25.9 | 32.6 | 33.0 | 50.1 | 60.0 | 67.3 | 74.1 | 66.9 | 62.4 | 50.3 | 44.3 | 32.0 | 49.9   |
| 2000           | 25.8 | 32.5 | 42.4 | 47.7 | 60.2 | 67.3 | 67.0 | 67.3 | 61.4 | 53.6 | 38.6 | 21.7 | 48.8   |
| 2001           | 26.9 | 31.9 | 32.8 | 51.2 | 58.8 | 66.8 | 69.6 | 71.6 | 60.4 | 53.5 | 47.7 | 35.7 | 50.6   |
| 2002           | 33.5 | 32.6 | 37.6 | 50.1 | 54.5 | 68.6 | 73.1 | 71.5 | 65.5 | 49.0 | 39.5 | 29.1 | 50.4   |
| 2003           | 19.3 | 22.7 | 37.9 | 49.4 | 56.1 | 63.7 | 69.0 | 69.9 | 60.8 | 48.9 | 44.9 | 31.7 | 47.9   |
| 2004           | 19.2 | 28.0 | 39.3 | 48.7 | 61.8 | 64.6 | 68.7 | 66.2 | 63.5 | 51.4 | 42.7 | 30.2 | 48.7   |
| 2005           | 25.8 | 28.9 | 32.3 | 49.2 | 53.7 | 70.5 | 72.7 | 71.6 | 65.2 | 52.7 | 43.7 | 26.8 | 49.4   |
| 2006           | 36.8 | 28.9 | 37.0 | 51.3 | 57.2 | 64.4 | 72.4 | 70.2 | 60.3 | 48.7 | 44.0 | 37.3 | 50.7   |
| 2007           | 29.9 | 18.1 | 39.5 | 45.3 | 61.3 | 67.4 | 68.9 | 71.4 | 65.0 | 58.4 | 39.8 | 31.6 | 49.7   |
| 2008           | 29.2 | 26.4 | 33.1 | 51.9 | 54.9 | 68.9 | 71.5 | 67.8 | 63.9 | 49.8 | 39.3 | 30.7 | 49.0   |
| 2009           | 18.8 | 29.5 | 38.6 | 50.0 | 58.9 | 65.4 | 67.4 | 70.3 | 63.5 | 49.4 | 46.6 | 29.5 | 49.0   |
| 2010           | 25.0 | 27.1 | 42.8 | 55.1 | 61.9 | 68.3 | 72.8 | 71.9 | 63.2 | 51.5 | 41.1 | 24.4 | 50.4   |
| 2011           | 21.6 | 28.0 | 34.6 | 49.0 | 61.0 | 66.9 | 74.8 | 69.6 | 63.7 | 50.8 | 46.3 | 35.8 | 50.2   |
| 2012           | 31.2 | 34.1 | 49.6 | 47.4 | 64.5 | 68.7 | 74.8 | 68.8 | 60.8 | 51.8 | 38.6 | 36.3 | 52.2   |
| 2013           | 29.3 | 26.1 | 33.3 | 48.6 | 61.2 | 66.8 | 71.4 | 68.1 | 61.6 | 53.5 | 37.3 | 30.5 | 49.0   |
| 2014           | 19.8 | 20.9 | 29.9 | 48.9 | 59.9 | 68.9 | 68.1 | 68.4 | 61.8 | 52.4 | 37.1 | 34.6 | 47.6   |
| 2015           | 21.5 | 13.7 | 32.9 | 50.0 | 64.0 | 67.0 | 70.5 | 69.0 | 67.1 | 52.1 | 47.2 | 42.5 | 49.8   |
| POR=<br>87 YRS | 26.2 | 26.9 | 36.4 | 46.8 | 58.5 | 66.9 | 71.4 | 69.9 | 62.6 | 52.1 | 40.8 | 30.5 | 49.1   |

**HEATING DEGREE DAYS (base 65°F) 2015 YOUNGSTOWN/WARREN (KYNG)**

| YEAR    | JUL | AUG | SEP | OCT | NOV | DEC  | JAN  | FEB  | MAR  | APR | MAY | JUN | TOTAL |
|---------|-----|-----|-----|-----|-----|------|------|------|------|-----|-----|-----|-------|
| 1987-88 | 6   | 44  | 118 | 594 | 611 | 971  | 1252 | 1123 | 878  | 532 | 206 | 91  | 6426  |
| 1988-89 | 11  | 29  | 134 | 618 | 675 | 1086 | 983  | 1119 | 837  | 618 | 306 | 48  | 6464  |
| 1989-90 | 0   | 20  | 130 | 382 | 772 | 1446 | 925  | 863  | 731  | 488 | 306 | 75  | 6138  |
| 1990-91 | 20  | 6   | 141 | 357 | 603 | 918  | 1183 | 927  | 745  | 399 | 102 | 26  | 5427  |
| 1991-92 | 0   | 3   | 165 | 360 | 766 | 999  | 1115 | 960  | 919  | 515 | 264 | 108 | 6174  |
| 1992-93 | 12  | 55  | 168 | 523 | 721 | 1005 | 1044 | 1121 | 950  | 526 | 239 | 70  | 6434  |
| 1993-94 | 3   | 8   | 192 | 481 | 732 | 1099 | 1438 | 1091 | 929  | 452 | 364 | 58  | 6847  |
| 1994-95 | 5   | 39  | 156 | 429 | 581 | 922  | 1096 | 1113 | 776  | 572 | 213 | 20  | 5922  |
| 1995-96 | 20  | 0   | 169 | 353 | 869 | 1238 | 1273 | 1134 | 1043 | 567 | 318 | 33  | 7017  |
| 1996-97 | 29  | 12  | 141 | 434 | 904 | 971  | 1236 | 894  | 862  | 617 | 415 | 52  | 6567  |
| 1997-98 | 19  | 45  | 148 | 435 | 817 | 1007 | 951  | 781  | 790  | 478 | 111 | 106 | 5688  |
| 1998-99 | 2   | 7   | 83  | 401 | 663 | 892  | 1208 | 902  | 987  | 439 | 170 | 76  | 5830  |
| 1999-00 | 7   | 21  | 139 | 450 | 614 | 1016 | 1208 | 936  | 697  | 515 | 197 | 65  | 5865  |
| 2000-01 | 28  | 33  | 175 | 350 | 785 | 1334 | 1174 | 921  | 990  | 427 | 205 | 66  | 6488  |
| 2001-02 | 27  | 1   | 171 | 360 | 511 | 902  | 968  | 898  | 844  | 479 | 337 | 39  | 5537  |
| 2002-03 | 6   | 8   | 68  | 511 | 758 | 1108 | 1412 | 1179 | 834  | 466 | 275 | 96  | 6721  |
| 2003-04 | 7   | 13  | 135 | 491 | 597 | 1028 | 1412 | 1066 | 788  | 498 | 160 | 90  | 6285  |
| 2004-05 | 7   | 52  | 85  | 417 | 661 | 1074 | 1209 | 1005 | 1008 | 467 | 347 | 26  | 6358  |
| 2005-06 | 0   | 8   | 42  | 386 | 631 | 1178 | 866  | 1005 | 862  | 403 | 270 | 73  | 5724  |
| 2006-07 | 7   | 3   | 150 | 498 | 626 | 851  | 1082 | 1307 | 786  | 585 | 158 | 47  | 6100  |
| 2007-08 | 12  | 17  | 87  | 247 | 747 | 1026 | 1100 | 1115 | 984  | 387 | 316 | 32  | 6070  |
| 2008-09 | 0   | 16  | 72  | 465 | 767 | 1056 | 1427 | 989  | 811  | 471 | 209 | 53  | 6336  |
| 2009-10 | 18  | 19  | 80  | 472 | 548 | 1098 | 1233 | 1056 | 682  | 320 | 153 | 30  | 5709  |
| 2010-11 | 11  | 7   | 119 | 414 | 711 | 1252 | 1341 | 1032 | 935  | 478 | 185 | 48  | 6533  |
| 2011-12 | 0   | 10  | 111 | 431 | 553 | 900  | 1042 | 892  | 479  | 527 | 101 | 41  | 5087  |
| 2012-13 | 0   | 6   | 184 | 406 | 785 | 882  | 1097 | 1082 | 974  | 494 | 190 | 56  | 6156  |
| 2013-   | 13  | 25  | 151 | 369 | 824 | 1062 |      |      |      |     |     |     |       |
| 2013-14 | 13  | 25  | 151 | 369 | 824 | 1062 | 1395 | 1229 | 1078 | 476 | 205 | 28  | 6855  |
| 2014-15 | 28  | 24  | 141 | 388 | 829 | 933  | 1343 | 1432 | 988  | 443 | 137 | 42  | 6728  |
| 2015-   | 7   | 22  | 50  | 393 | 530 | 690  |      |      |      |     |     |     |       |

WBAN : 14852

**COOLING DEGREE DAYS (base 65°F) 2015 YOUNGSTOWN/WARREN (KYNG)**

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 1986 | 0   | 0   | 2   | 9   | 44  | 97  | 196 | 136 | 90  | 5   | 0   | 0   | 579   |
| 1987 | 0   | 0   | 0   | 5   | 84  | 167 | 294 | 153 | 33  | 0   | 1   | 0   | 737   |
| 1988 | 0   | 0   | 0   | 0   | 27  | 136 | 295 | 246 | 25  | 7   | 0   | 0   | 736   |
| 1989 | 0   | 0   | 4   | 0   | 37  | 84  | 219 | 153 | 71  | 8   | 0   | 0   | 576   |
| 1990 | 0   | 0   | 10  | 35  | 9   | 112 | 159 | 117 | 56  | 8   | 0   | 0   | 506   |
| 1991 | 0   | 0   | 0   | 18  | 144 | 165 | 227 | 216 | 89  | 23  | 0   | 0   | 882   |
| 1992 | 0   | 0   | 0   | 5   | 16  | 52  | 166 | 75  | 49  | 0   | 0   | 0   | 363   |
| 1993 | 0   | 0   | 0   | 0   | 18  | 111 | 261 | 209 | 41  | 1   | 0   | 0   | 641   |
| 1994 | 0   | 0   | 0   | 15  | 12  | 182 | 224 | 112 | 39  | 0   | 0   | 0   | 584   |
| 1995 | 0   | 0   | 0   | 0   | 9   | 185 | 287 | 332 | 16  | 0   | 0   | 0   | 829   |
| 1996 | 0   | 0   | 0   | 0   | 46  | 128 | 116 | 107 | 37  | 0   | 0   | 0   | 434   |
| 1997 | 0   | 0   | 0   | 0   | 0   | 110 | 143 | 86  | 28  | 30  | 0   | 0   | 397   |
| 1998 | 0   | 0   | 19  | 0   | 61  | 128 | 139 | 201 | 95  | 3   | 0   | 0   | 646   |
| 1999 | 0   | 0   | 0   | 0   | 21  | 152 | 298 | 84  | 66  | 0   | 0   | 0   | 621   |
| 2000 | 0   | 0   | 0   | 0   | 56  | 141 | 95  | 113 | 76  | 2   | 0   | 0   | 483   |
| 2001 | 0   | 0   | 0   | 20  | 21  | 125 | 177 | 214 | 41  | 8   | 0   | 0   | 606   |
| 2002 | 0   | 0   | 0   | 38  | 20  | 155 | 266 | 220 | 89  | 21  | 0   | 0   | 809   |
| 2003 | 0   | 0   | 0   | 5   | 8   | 62  | 138 | 170 | 17  | 0   | 1   | 0   | 401   |
| 2004 | 0   | 0   | 0   | 14  | 65  | 86  | 128 | 96  | 47  | 0   | 0   | 0   | 436   |
| 2005 | 0   | 0   | 0   | 0   | 2   | 195 | 244 | 220 | 51  | 11  | 0   | 0   | 723   |
| 2006 | 0   | 0   | 0   | 0   | 37  | 62  | 244 | 173 | 16  | 0   | 0   | 0   | 532   |
| 2007 | 0   | 0   | 1   | 0   | 51  | 123 | 141 | 224 | 93  | 51  | 0   | 0   | 684   |
| 2008 | 0   | 0   | 0   | 2   | 10  | 155 | 210 | 110 | 51  | 0   | 0   | 0   | 538   |
| 2009 | 0   | 0   | 0   | 28  | 26  | 72  | 100 | 189 | 42  | 0   | 0   | 0   | 457   |
| 2010 | 0   | 0   | 0   | 30  | 65  | 137 | 262 | 226 | 72  | 1   | 0   | 0   | 793   |
| 2011 | 0   | 0   | 0   | 5   | 68  | 110 | 309 | 160 | 79  | 0   | 0   | 0   | 731   |
| 2012 | 0   | 0   | 7   | 5   | 89  | 154 | 309 | 130 | 64  | 3   | 0   | 0   | 761   |
| 2013 | 0   | 0   | 0   | 7   | 81  | 118 | 220 | 126 | 57  | 21  | 0   | 0   | 630   |
| 2014 | 0   | 0   | 0   | 0   | 55  | 153 | 130 | 139 | 53  | 3   | 0   | 0   | 533   |
| 2015 | 0   | 0   | 0   | 0   | 112 | 110 | 185 | 153 | 119 | 0   | 2   | 0   | 681   |

**SNOWFALL (inches) 2015 YOUNGSTOWN/WARREN (KYNG)**

| YEAR           | JUL | AUG | SEP | OCT | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY | JUN | TOTAL |
|----------------|-----|-----|-----|-----|------|------|------|------|------|------|-----|-----|-------|
| 1987-88        | 0.0 | 0.0 | 0.0 | 0.2 | 4.6  | 29.5 | 10.4 | 17.4 | 14.4 | 1.2  | 0.0 | 0.0 | 77.7  |
| 1988-89        | 0.0 | 0.0 | 0.0 | 0.9 | 2.4  | 13.0 | 3.7  | 9.6  | 11.1 | 1.9  | 0.3 | 0.0 | 42.9  |
| 1989-90        | 0.0 | 0.0 | 0.0 | 2.3 | 3.0  | 14.6 | 11.7 | 8.4  | 2.3  | 3.5  | T   | 0.0 | 45.8  |
| 1990-91        | 0.0 | 0.0 | T   | 0.0 | 0.5  | 6.6  | 9.3  | 12.2 | 1.6  | 0.4  | 0.0 | 0.0 | 30.6  |
| 1991-92        | T   | 0.0 | 0.0 | 0.0 | 2.3  | 8.3  | 18.3 | 3.0  | 21.1 | 1.5  | 0.0 | 0.0 | 54.5  |
| 1992-93        | 0.0 | 0.0 | 0.0 | 4.0 | 6.8  | 14.0 | 8.7  | 17.6 | 30.9 | 0.5  | 0.0 | 0.0 | 82.5  |
| 1993-94        | 0.0 | 0.0 | 0.0 | 7.7 | 1.4  | 17.4 | 27.2 | 15.6 | 9.2  | 2.5  | 0.0 | 0.0 | 81.0  |
| 1994-95        | 0.0 | 0.0 | T   | 0.0 | 1.5  | 3.6  | 8.8  | 12.4 | 6.3  | 1.1  | T   | 0.0 | 33.7  |
| 1995-96        | 0.0 | 0.0 | 0.0 | 0.0 |      | 18.6 | 13.9 | 5.6  | 4.9  | 2.8  |     |     |       |
| 1996-97        |     |     |     |     |      |      |      |      |      |      |     |     |       |
| 1997-98        |     |     |     | 0.8 | 8.2  | 13.5 | 6.3  | T    | 14.3 | T    | 0.0 | T   |       |
| 1998-99        | 0.0 | 0.0 | T   | T   | 0.1  | 10.0 | 36.4 | 8.8  | 14.3 | T    | 0.0 | 0.0 | 69.6  |
| 1999-00        | 0.0 | 0.0 | 0.0 | 0.0 | 7.2  | 8.3  | 15.0 | 7.7  | 3.0  | 1.7  | 0.0 | 0.0 | 42.9  |
| 2000-01        | 0.0 | 0.0 | 0.0 | 0.6 | 6.6  | 19.7 | 9.2  | 6.2  | 11.1 | 1.1  | 0.0 | 0.0 | 54.5  |
| 2001-02        | T   | 0.0 | 0.0 | 1.6 | 0.3  | 2.4  | 12.7 | 14.7 | 10.6 | 0.8  | T   | 0.0 | 43.1  |
| 2002-03        | 0.0 | 0.0 | 0.0 | 0.3 | 5.8  | 14.1 | 25.5 | 26.4 | 5.1  | 0.3  | T   | 0.0 | 77.5  |
| 2003-04        | 0.0 | 0.0 | 0.0 | 0.1 | 2.5  | 19.2 | 30.3 | 4.6  | 13.9 | 3.0  | 0.0 | 0.0 | 73.6  |
| 2004-05        | 0.0 | 0.0 | 0.0 | 0.0 | 0.4  | 20.7 | 18.2 | 16.4 | 10.7 | 14.8 | T   | 0.0 | 81.2  |
| 2005-06        | 0.0 | 0.0 | 0.0 | 0.0 | 8.0  | 17.1 | 10.0 | 14.8 | 2.3  | 1.0  | 0.0 | 0.0 | 53.2  |
| 2006-07        | T   | 0.0 | 0.0 | 0.6 | 0.6  | 9.2  | 31.5 | 23.9 | 10.4 | 14.0 | 0.0 | 0.0 | 90.2  |
| 2007-08        | 0.0 | T   | 0.0 | 0.0 | 5.2  | 23.3 | 20.9 | 31.7 | 21.7 | T    | T   | 0.0 | 102.8 |
| 2008-09        | T   | 0.0 | 0.0 | 2.6 | 17.3 | 13.7 | 35.8 | 13.5 | 2.0  | 1.6  | 0.0 | 0.0 | 86.5  |
| 2009-10        | 0.0 | 0.0 | 0.0 | 0.6 | 0.2  | 12.6 | 24.9 | 36.3 | 1.1  | T    | T   | 0.0 | 75.7  |
| 2010-11        | 0.0 | 0.0 | 0.0 | 0.0 | T    | 53.1 | 30.0 | 20.6 | 14.4 | 0.6  | T   | 0.0 | 118.7 |
| 2011-12        | 0.0 | T   | 0.0 | T   | 2.4  | 7.7  | 26.2 | 16.0 | 3.0  | 1.2  | 0.0 | 0.0 | 56.5  |
| 2012-13        | T   | 0.0 | 0.0 | 0.0 | 2.9  | 24.3 | 12.7 | 20.3 | 19.9 | 0.6  | T   | T   | 80.7  |
| 2013-          | 0.0 | 0.0 | 0.0 | 1.2 | 12.9 | 20.5 |      |      |      |      |     |     |       |
| 2013-14        | 0.0 | 0.0 | 0.0 | 1.2 | 12.9 | 20.5 | 23.0 | 23.4 | 7.9  | 1.2  | T   | 0.0 | 90.1  |
| 2014-15        | 0.0 | 0.0 | 0.0 | T   | 11.6 | 0.7  | 29.3 | 27.9 | 8.6  | 0.9  | 0.0 | 0.0 | 79.0  |
| 2015-          | 0.0 | 0.0 | 0.0 | 0.4 | T    | 0.8  |      |      |      |      |     |     |       |
| POR=<br>71 YRS | T   | T   | T   | 0.6 | 4.9  | 12.3 | 14.5 | 11.9 | 9.8  | 2.4  | 0.1 | T   | 56.5  |

WBAN : 14852

**REFERENCE NOTES :**

|   |  |
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| <p>PAGE 1:<br/>THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3:<br/>H/C INDICATES HEATING AND COOLING DEGREE DAYS.<br/>RH INDICATES RELATIVE HUMIDITY<br/>W/O INDICATES WEATHER AND OBSTRUCTIONS<br/>S INDICATES SUNSHINE.<br/>PR INDICATES PRESSURE.<br/>CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL:<br/>T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE.<br/>+ INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES.<br/>BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.<br/>ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM.<br/>PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH.<br/>POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING.<br/>WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED.<br/>0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05.<br/>CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET<br/>CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS.</p> <p>GENERAL CONTINUED:<br/>WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH.<br/>RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION.<br/>AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2.<br/>SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN</p> | <p>PRECIPITATION, INCLUDING HAIL.<br/>A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F.<br/>DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR.<br/>DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY.<br/>WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.<br/>ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.<br/>STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED SATION HISTORY INFORMATION GO TO "Historical Observing Metadata Repository", URL IS:<br/><a href="http://www.ncdc.noaa.gov/homr/">http://www.ncdc.noaa.gov/homr/</a><br/>SNOWFALL STOPPED MONTH &amp; YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.</p> <p><b>NOTE:</b><br/>The "Period of Record:(POR)" for all "averages" is based on "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p> |
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# 2015 YOUNGSTOWN/Warren OHIO (KYNG)

The Youngstown Municipal Airport is located in northeastern Ohio approximately 8 miles north of the city of Youngstown in Trumbull County. Airport elevation is 1,178 feet, about 200 feet higher than most communities in the Mahoning and Shenango River Valleys. There are numerous natural and man-made lakes in the region, including Lake Erie, 45 miles to the north. Drainage from the area flows southward through the Mahoning and Shenango Rivers which join to form the Beaver River at New Castle, Pennsylvania. The Beaver empties into the Ohio River at Rochester, Pennsylvania.

This entire area experiences frequent outbreaks of cold Canadian air masses which may be modified by passage over Lake Erie. This effect produces widespread cloudiness especially during the cool months of the year. The winter months are characterized by persistent cloudiness and intermittent snow flurries. The daily temperature range during most winter days is quite small. During most winters, the bulk of the snow falls as flurries of 2 inches or less per occurrence, although several snowstorms per year will produce amounts in the 4- to 10-inch range.

Destructive storms seldom occur, and tornadoes are not common. During recent years flood control projects have all but eliminated the threat of serious river flooding. Flash flooding of small streams and creeks rarely affects residential areas. Certain communities have well known areas of urban flooding during periods of prolonged heavy thunderstorms.

The climate of the Youngstown district has had an important role in the growth and development of this industrial area. Temperatures seldom reach extreme values especially during the summer months. However, high humidity during most days of the year tends to accentuate the temperature. Rainfall, reasonably well distributed throughout the year, provides a more than adequate supply of water for agriculture, industrial, and residential

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 14 and the average last occurrence in the spring is May 6.

# Station History

YOUNGSTOWN/WARREN, OH

| NAME                    | Begin Date | End Date   | Latitude | Longitude | Elevation Feet | Relocation | Platform      |
|-------------------------|------------|------------|----------|-----------|----------------|------------|---------------|
| YOUNGSTOWN MUNICIPAL AP | 1948-01-01 | 1969-01-01 | 41° 15'  | -80° 40'  | 1178           |            | AIRWAYS, COOP |
| YOUNGSTOWN MUNICIPAL AP | 1981-12-31 | 1988-02-04 | 41° 15'  | -80° 40'  | 1178           |            | COOP          |
| YOUNGSTOWN MUNICIPAL AP | 1969-01-01 | 1981-12-31 | 41° 15'  | -80° 40'  | 1178           |            | COOP, WXSVC   |
| YOUNGSTOWN MUNICIPAL AP | 1941-07-01 | 1948-01-01 | 41° 16'  | -80° 40'  | 1178           |            | AIRWAYS       |
| YOUNGSTOWN MUNICIPAL AP | 1988-02-04 | 1995-09-01 | 41° 15'  | -80° 40'  | 1180           |            | COOP          |
| YOUNGSTOWN REGIONAL AP  | 1995-09-01 | Present    | 41° 15'  | -80° 40'  | 1180           |            | ASOS, COOP    |

# Element History

| Element | Begin Date | End Date   | Frequency | Time Of Observation | Equipment * | Equipment * Modifications | Equipment Exposure |
|---------|------------|------------|-----------|---------------------|-------------|---------------------------|--------------------|
| TEMP    | 1941-07-01 | 1970-10-01 | DAILY     | 2400                |             |                           |                    |
| PRECIP  | 1988-02-04 | 1995-07-01 | HOURLY    | 2400                |             |                           |                    |
| TEMP    | 1988-02-04 | 1995-07-01 | DAILY     | 2400                | HYGR        |                           |                    |
| PRECIP  | 1995-09-01 | 2008-09-08 | DAILY     | 2400                | UNIV        | RCRD                      |                    |
| PRECIP  | 2008-09-08 | Present    | DAILY     | 2400                | UNIV        | RCRD                      |                    |
| PRECIP  | 1988-02-04 | 1995-07-01 | DAILY     | 2400                | UNIV        | RCRD                      |                    |
| TEMP    | 1970-10-01 | 1988-02-04 | DAILY     | 2400                |             |                           |                    |
| PRECIP  | 1995-07-01 | 1995-09-01 | DAILY     | 2400                | UNIV        | RCRD                      |                    |
| TEMP    | 1995-09-01 | 2008-09-08 | DAILY     | 2400                | HYGR        |                           |                    |
| PRECIP  | 2008-09-08 | Present    | HOURLY    | 2400                | UNIV        | RCRD                      |                    |
| WIND    | 2008-09-08 | Present    | HOURLY    | UNKN                | ANEMSONIC   |                           |                    |
| PRECIP  | 1995-09-01 | 2008-09-08 | HOURLY    | 2400                | UNIV        | RCRD                      |                    |
| PRECIP  | 1970-10-01 | 1988-02-04 | DAILY     | 2400                | UNIV        | RCRD                      |                    |
| PRECIP  | 1995-07-01 | 1995-09-01 | HOURLY    | 2400                | UNIV        | RCRD                      |                    |
| TEMP    | 2008-09-08 | Present    | DAILY     | 2400                | HYGR        |                           |                    |
| PRECIP  | 1970-10-01 | 1988-02-04 | HOURLY    | 2400                |             |                           |                    |
| WIND    | 1995-09-01 | 2008-09-08 | HOURLY    | UNKN                | ANEMCUP     |                           |                    |
| PRECIP  | 1941-07-01 | 1970-10-01 | DAILY     | 2400                | UNIV        | RCRD                      |                    |
| TEMP    | 1995-07-01 | 1995-09-01 | DAILY     | 2400                | HYGR        |                           |                    |

\* For explanation of codes and abbreviations see Station Metadata link below.

Other Station Information can be found at:

ASOS Implementation by NWS: <http://www.nws.noaa.gov/ops2/Surface/asosimplementation.htm>

Station Metadata website: <http://www.ncdc.noaa.gov/homr>

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Visit our Web Site for other weather data: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)