

**ATSUGI JP**

Latitude = 35.45 N

Longitude = 139.45 E

Period of Record = 1967 to 1996

WMO No. 476790

Elevation = 213 feet

Average Pressure = 29.68 inches Hg

**Design Criteria Data**

|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|--------------------------------------------------|---------------------|----------------------------------|-------------------------|------------------------|-----------------------------|
|                                                  |                     | Wet Bulb Temperature (°F)        | Humidity Ratio (gr/lb)  | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Dry Bulb Temperature (T)</b>                  | <b>(°F)</b>         |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 95                  | 79                               | 124                     | 10.1                   | S                           |
| 0.4% Occurrence                                  | 90                  | 78                               | 124                     | 10.5                   | S                           |
| 1.0% Occurrence                                  | 88                  | 77                               | 122                     | 10.5                   | S                           |
| 2.0% Occurrence                                  | 86                  | 76                               | 120                     | 10.6                   | S                           |
| Mean Daily Range                                 | 15                  | -                                | -                       | -                      | -                           |
| 97.5% Occurrence                                 | 32                  | 28                               | 16                      | 5.8                    | N                           |
| 99.0% Occurrence                                 | 28                  | 24                               | 13                      | 4.0                    | N                           |
| 99.6% Occurrence                                 | 26                  | 23                               | 12                      | 3.2                    | N                           |
| Median of Extreme Lows                           | 23                  | 20                               | 11                      | 2.3                    | N                           |
|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|                                                  |                     | Dry Bulb Temperature (°F)        | Humidity Ratio (gr/lb)  | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Wet Bulb Temperature (T<sub>wb</sub>)</b>     | <b>(°F)</b>         |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 81                  | 88                               | 147                     | 8.9                    | S                           |
| 0.4% Occurrence                                  | 80                  | 87                               | 141                     | 9.9                    | S                           |
| 1.0% Occurrence                                  | 78                  | 85                               | 134                     | 9.9                    | S                           |
| 2.0% Occurrence                                  | 77                  | 83                               | 130                     | 9.6                    | S                           |
|                                                  | <b>Design Value</b> | Mean Coincident (Average) Values |                         |                        |                             |
|                                                  |                     | Dry Bulb Temperature (°F)        | Vapor Pressure (in. Hg) | Wind Speed (mph)       | Prevailing Direction (NSEW) |
| <b>Humidity Ratio (HR)</b>                       | <b>(gr/lb)</b>      |                                  |                         |                        |                             |
| Median of Extreme Highs                          | 152                 | 84                               | 0.99                    | 11.5                   | S                           |
| 0.4% Occurrence                                  | 144                 | 82                               | 0.94                    | 9.4                    | S                           |
| 1.0% Occurrence                                  | 140                 | 82                               | 0.92                    | 7.1                    | S                           |
| 2.0% Occurrence                                  | 134                 | 82                               | 0.88                    | 9.1                    | S                           |
| <b>Air Conditioning/<br/>Humid Area Criteria</b> | <b># of Hours</b>   | T ≥ 93°F                         | T ≥ 80°F                | T <sub>wb</sub> ≥ 73°F | T <sub>wb</sub> ≥ 67°F      |
|                                                  |                     | 13                               | 717                     | 1040                   | 2084                        |

**Other Site Data**

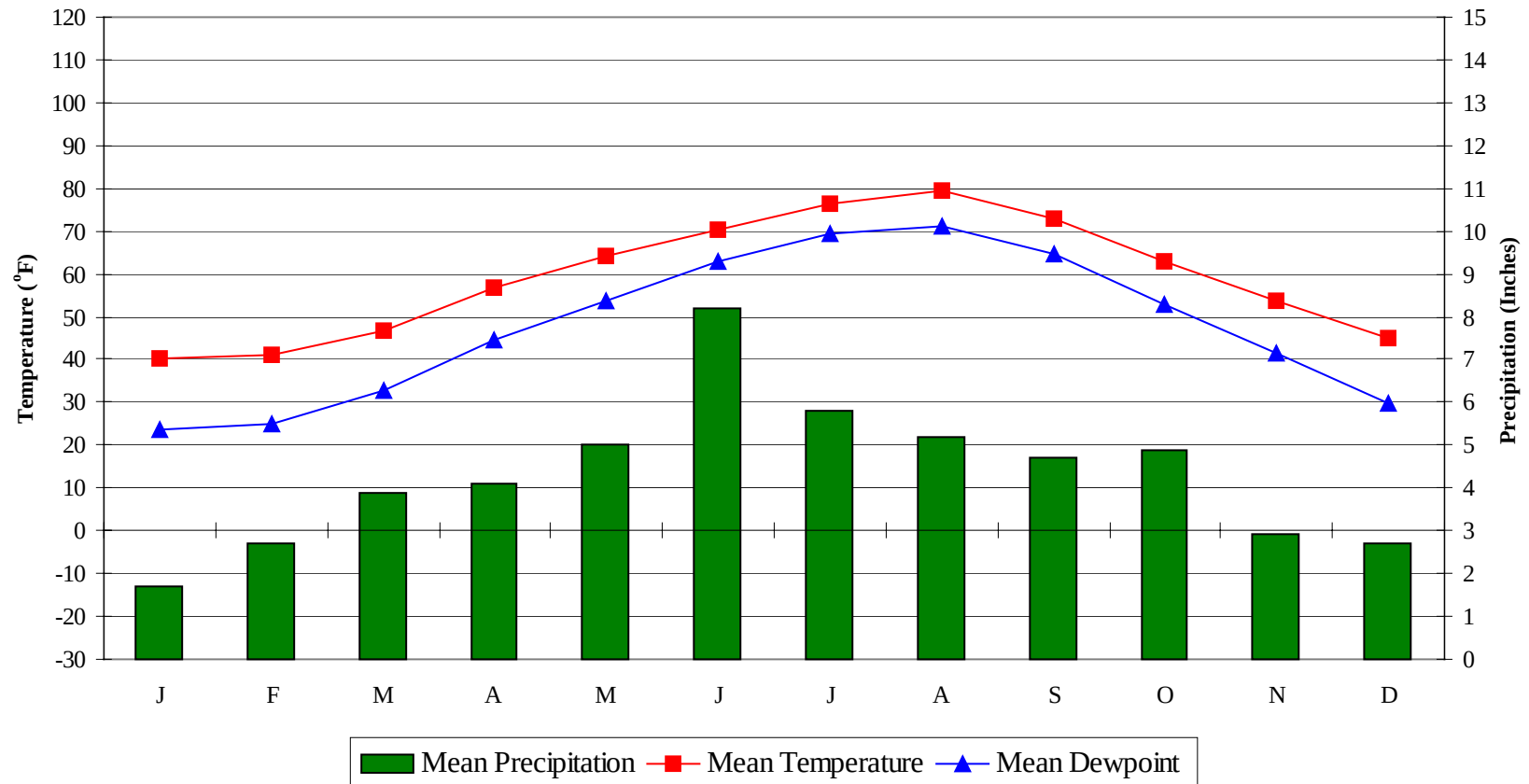
| Weather Region                                   | Rain Rate<br>100 Year Recurrence<br>(in./hr) | Basic Wind Speed<br>3 sec gust @ 33 ft<br>50 Year Recurrence (mph) | Ventilation Cooling Load Index<br>(Ton-hr/cfm/yr) Base 75°F-RH 60%<br>Latent + Sensible |
|--------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 8                                                | N/A                                          | N/A                                                                | 3.9 + 0.8                                                                               |
| Ground Water Temperature (°F)<br>50 Foot Depth * | Frost Depth<br>50 Year Recurrence<br>(in.)   | Ground Snow Load<br>50 Year Recurrence<br>(lb/ft <sup>2</sup> )    | Average Annual<br>Freeze-Thaw Cycles<br>(#)                                             |
| 61.6                                             | N/A                                          | N/A                                                                | 34                                                                                      |

\*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

ATSUGI JP

WMO No. 476790

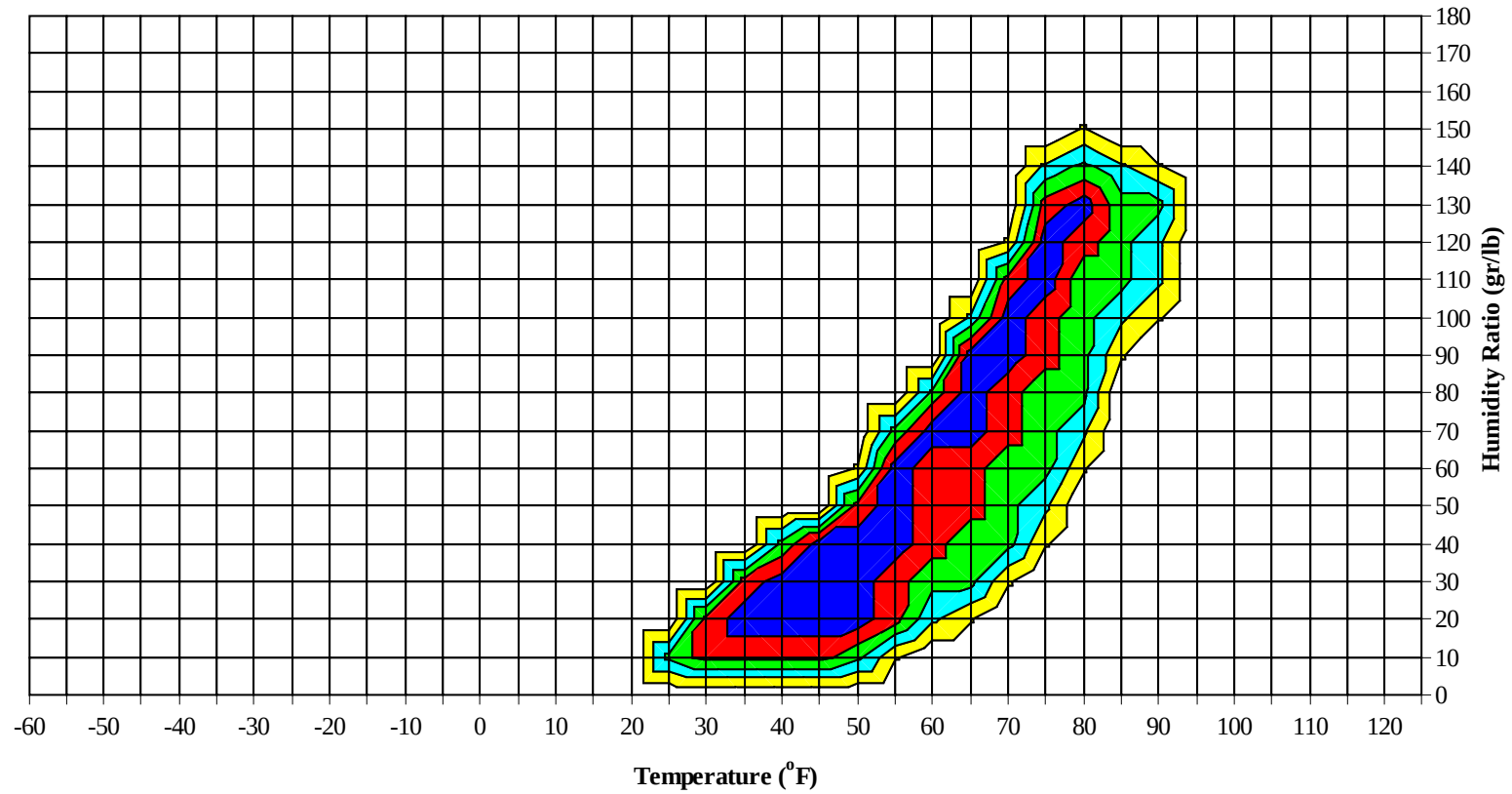
### Average Annual Climate



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WMO No. 476790

### Long Term Psychrometric Summary

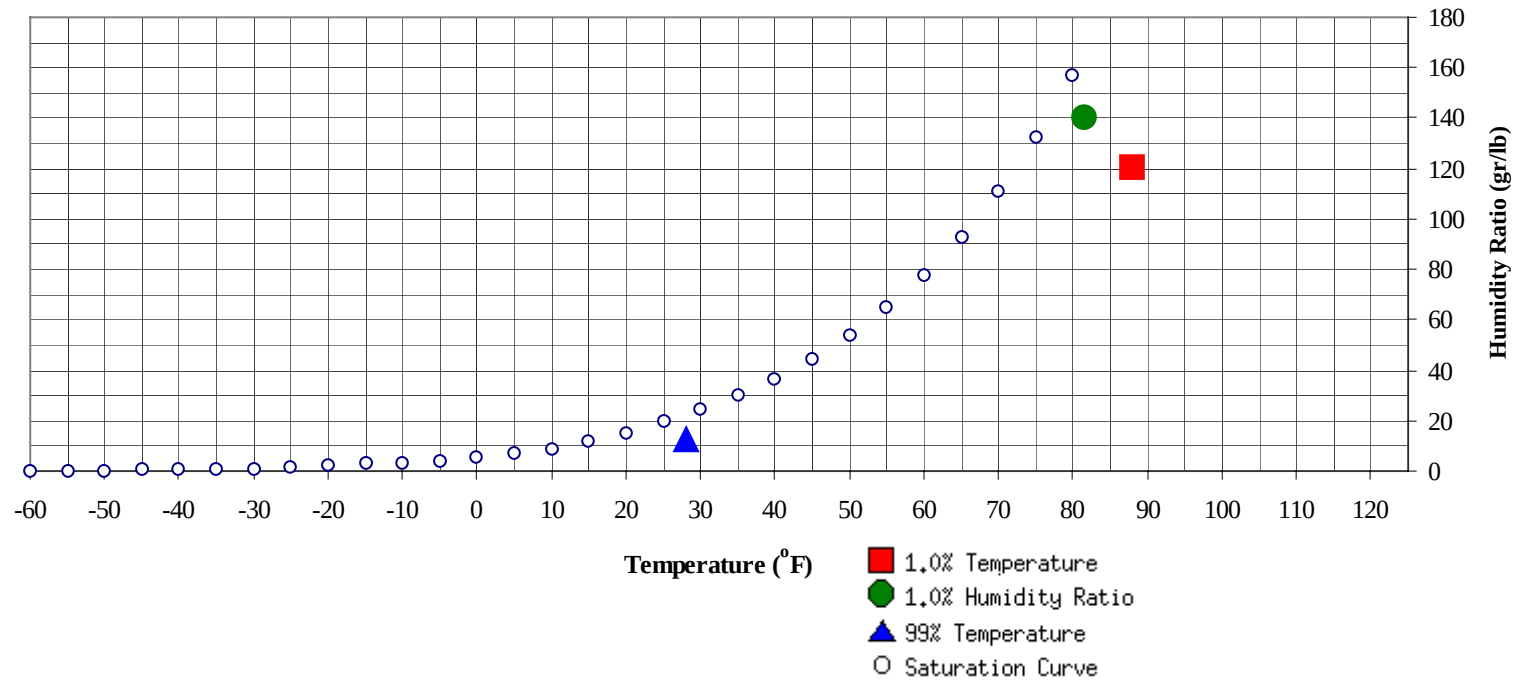


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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WMO No. 476790

### Psychrometric Summary of Peak Design Values



|              | (°F) | MCHR    | Enthalpy | 1.0% Humidity Ratio | (gr/lb) | MCDB | MCWB | MC Dewpt | Enthalpy |
|--------------|------|---------|----------|---------------------|---------|------|------|----------|----------|
|              |      | (gr/lb) | (btu/lb) |                     |         | (°F) | (°F) | (°F)     | (btu/lb) |
| 99% Dry Bulb | 28   | 13      | 8.7      | Ratio               | 140     | 81.5 | 77.8 | 76.3     | 41.5     |

| 1.0% Dry Bulb | (°F) | MCHR    | MCWB | Enthalpy |
|---------------|------|---------|------|----------|
|               |      | (gr/lb) | (°F) | (btu/lb) |
|               | 88   | 120.5   | 76.4 | 40.1     |

ATSUGI JP

WMO No. 476790

**Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | January             |                |                |              |                          | February            |                |                |              |                          | March               |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 95 / 99                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 90 / 94                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 85 / 89                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 80 / 84                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 75 / 79                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 70 / 74                      |                     |                |                |              |                          |                     | 0              |                | 0            | 60.7                     |                     | 0              | 2              | 0            | 2 58.3                   |
| 65 / 69                      |                     | 0              | 0              | 0            | 57.9                     | 0                   | 1              | 0              | 1            | 55.5                     | 0                   | 7              | 1              | 8            | 56.3                     |
| 60 / 64                      | 1                   | 5              | 1              | 7            | 52.7                     | 1                   | 6              | 2              | 9            | 53.7                     | 2                   | 23             | 7              | 32           | 52.8                     |
| 55 / 59                      | 1                   | 15             | 4              | 20           | 46.8                     | 1                   | 17             | 6              | 25           | 47.9                     | 7                   | 47             | 25             | 79           | 48.7                     |
| 50 / 54                      | 2                   | 48             | 13             | 63           | 42.0                     | 4                   | 46             | 19             | 69           | 42.6                     | 22                  | 68             | 57             | 146          | 44.5                     |
| 45 / 49                      | 12                  | 84             | 49             | 145          | 38.3                     | 14                  | 72             | 50             | 136          | 38.8                     | 55                  | 62             | 76             | 193          | 40.8                     |
| 40 / 44                      | 24                  | 51             | 59             | 133          | 35.3                     | 29                  | 44             | 53             | 125          | 35.8                     | 57                  | 25             | 43             | 124          | 37.4                     |
| 35 / 39                      | 75                  | 37             | 79             | 191          | 32.1                     | 72                  | 30             | 63             | 165          | 32.4                     | 66                  | 12             | 29             | 107          | 33.8                     |
| 30 / 34                      | 90                  | 9              | 37             | 135          | 28.1                     | 74                  | 9              | 26             | 109          | 28.4                     | 31                  | 3              | 8              | 42           | 29.7                     |
| 25 / 29                      | 38                  | 0              | 6              | 44           | 23.7                     | 26                  | 0              | 5              | 31           | 23.8                     | 8                   | 0              | 1              | 9            | 24.3                     |
| 20 / 24                      | 5                   |                | 0              | 5            | 19.7                     | 4                   |                | 0              | 4            | 19.8                     | 1                   |                |                | 1            | 19.6                     |
| 15 / 19                      | 0                   |                | 0              | 0            | 17.0                     |                     |                |                |              |                          |                     |                |                |              |                          |

**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

ATSUGI JP

WMO No. 476790

**Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | April               |                |                |              |                          | May                 |                |                |              |                          | June                |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 95 / 99                      |                     |                |                |              |                          |                     |                |                |              |                          |                     | 0              | 0              | 0            | 78.2                     |
| 90 / 94                      |                     |                |                |              |                          |                     |                |                |              |                          |                     | 1              | 0              | 1            | 75.8                     |
| 85 / 89                      |                     |                |                |              |                          |                     | 0              |                | 0            | 68.5                     |                     | 6              | 0              | 6            | 73.2                     |
| 80 / 84                      |                     | 0              |                | 0            | 61.7                     |                     | 9              | 1              | 10           | 65.9                     | 1                   | 36             | 5              | 42           | 70.8                     |
| 75 / 79                      | 0                   | 7              | 0              | 7            | 62.3                     | 1                   | 44             | 5              | 50           | 63.9                     | 11                  | 78             | 31             | 120          | 68.6                     |
| 70 / 74                      | 1                   | 31             | 5              | 37           | 59.7                     | 8                   | 84             | 34             | 127          | 62.1                     | 59                  | 74             | 100            | 232          | 66.7                     |
| 65 / 69                      | 5                   | 40             | 15             | 60           | 57.4                     | 28                  | 52             | 61             | 141          | 60.5                     | 82                  | 26             | 65             | 174          | 64.3                     |
| 60 / 64                      | 23                  | 67             | 57             | 148          | 55.1                     | 86                  | 40             | 93             | 220          | 58.0                     | 69                  | 17             | 34             | 120          | 60.6                     |
| 55 / 59                      | 56                  | 50             | 75             | 181          | 51.7                     | 83                  | 16             | 43             | 141          | 53.9                     | 15                  | 2              | 5              | 22           | 55.7                     |
| 50 / 54                      | 70                  | 30             | 54             | 154          | 47.4                     | 36                  | 4              | 10             | 50           | 49.7                     | 2                   | 0              | 1              | 3            | 52.3                     |
| 45 / 49                      | 53                  | 12             | 25             | 90           | 42.6                     | 5                   | 0              | 1              | 6            | 44.9                     |                     |                |                |              |                          |
| 40 / 44                      | 20                  | 2              | 6              | 28           | 38.3                     | 0                   |                |                | 0            | 40.3                     |                     |                |                |              |                          |
| 35 / 39                      | 10                  | 1              | 2              | 13           | 34.8                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 30 / 34                      | 1                   | 0              | 0              | 1            | 32.1                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 25 / 29                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 20 / 24                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 15 / 19                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

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ATSUGI JP

WMO No. 476790

**Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | July                |                |                |              |                          | August              |                |                |              |                          | September           |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 95 / 99                      |                     | 1              |                | 1            | 79.2                     |                     | 3              | 0              | 3            | 79.0                     |                     | 1              | 0              | 1            | 77.3                     |
| 90 / 94                      |                     | 19             | 1              | 20           | 78.2                     | 0                   | 39             | 2              | 41           | 78.0                     |                     | 7              | 0              | 7            | 75.8                     |
| 85 / 89                      | 1                   | 52             | 7              | 60           | 76.6                     | 1                   | 76             | 12             | 89           | 76.6                     | 0                   | 22             | 2              | 24           | 75.1                     |
| 80 / 84                      | 17                  | 69             | 50             | 136          | 74.8                     | 34                  | 78             | 86             | 197          | 75.3                     | 5                   | 54             | 21             | 80           | 73.0                     |
| 75 / 79                      | 88                  | 53             | 98             | 240          | 72.9                     | 133                 | 36             | 111            | 280          | 73.5                     | 42                  | 67             | 67             | 175          | 70.6                     |
| 70 / 74                      | 87                  | 38             | 66             | 191          | 69.1                     | 64                  | 15             | 30             | 108          | 69.2                     | 74                  | 53             | 82             | 209          | 67.0                     |
| 65 / 69                      | 38                  | 12             | 19             | 70           | 65.3                     | 14                  | 3              | 6              | 23           | 65.3                     | 67                  | 24             | 44             | 135          | 64.3                     |
| 60 / 64                      | 15                  | 4              | 6              | 25           | 61.4                     | 2                   | 0              | 1              | 3            | 62.9                     | 45                  | 12             | 20             | 77           | 60.3                     |
| 55 / 59                      | 1                   | 0              | 0              | 1            | 56.2                     |                     |                |                |              |                          | 7                   | 1              | 3              | 11           | 56.1                     |
| 50 / 54                      |                     |                |                |              |                          |                     |                |                |              |                          | 0                   |                |                | 0            | 53.0                     |
| 45 / 49                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 40 / 44                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 35 / 39                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 30 / 34                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 25 / 29                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 20 / 24                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 15 / 19                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

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ATSUGI JP

WMO No. 476790

**Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)**

Period of Record = 1967 to 1996

| Temperature<br>Range<br>(°F) | October             |                |                |              |                          | November            |                |                |              |                          | December            |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|---------------------|----------------|----------------|--------------|--------------------------|
|                              | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 95 / 99                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |
| 90 / 94                      |                     | 0              |                | 0            | 73.5                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 85 / 89                      |                     | 0              | 0              | 0            | 73.2                     |                     |                |                |              |                          |                     |                |                |              |                          |
| 80 / 84                      | 0                   | 5              | 0              | 5            | 68.9                     |                     | 0              |                | 0            | 68.0                     |                     |                |                |              |                          |
| 75 / 79                      | 1                   | 32             | 5              | 38           | 65.8                     |                     | 2              | 0              | 2            | 65.9                     |                     |                |                |              |                          |
| 70 / 74                      | 8                   | 64             | 30             | 103          | 62.7                     | 1                   | 15             | 2              | 18           | 60.0                     |                     | 1              |                | 1            | 57.9                     |
| 65 / 69                      | 22                  | 53             | 44             | 119          | 60.4                     | 2                   | 27             | 7              | 36           | 57.5                     | 0                   | 3              | 0              | 3            | 56.0                     |
| 60 / 64                      | 77                  | 63             | 90             | 230          | 57.7                     | 9                   | 60             | 30             | 99           | 54.4                     | 1                   | 16             | 3              | 21           | 52.6                     |
| 55 / 59                      | 83                  | 26             | 58             | 168          | 53.5                     | 41                  | 70             | 68             | 178          | 50.9                     | 4                   | 47             | 14             | 66           | 47.5                     |
| 50 / 54                      | 43                  | 4              | 17             | 64           | 48.5                     | 65                  | 47             | 72             | 184          | 46.9                     | 14                  | 73             | 42             | 128          | 43.7                     |
| 45 / 49                      | 10                  | 0              | 3              | 13           | 43.6                     | 66                  | 17             | 45             | 128          | 42.2                     | 37                  | 65             | 77             | 179          | 40.0                     |
| 40 / 44                      | 3                   |                | 0              | 3            | 40.3                     | 35                  | 3              | 13             | 52           | 38.0                     | 51                  | 28             | 55             | 134          | 36.7                     |
| 35 / 39                      |                     |                |                |              |                          | 17                  | 0              | 3              | 20           | 34.3                     | 84                  | 13             | 43             | 139          | 33.0                     |
| 30 / 34                      |                     |                |                |              |                          | 4                   |                | 0              | 4            | 29.6                     | 40                  | 2              | 12             | 54           | 28.7                     |
| 25 / 29                      |                     |                |                |              |                          |                     |                |                |              |                          | 16                  | 0              | 3              | 19           | 24.1                     |
| 20 / 24                      |                     |                |                |              |                          |                     |                |                |              |                          | 1                   |                |                | 1            | 20.7                     |
| 15 / 19                      |                     |                |                |              |                          |                     |                |                |              |                          |                     |                |                |              |                          |

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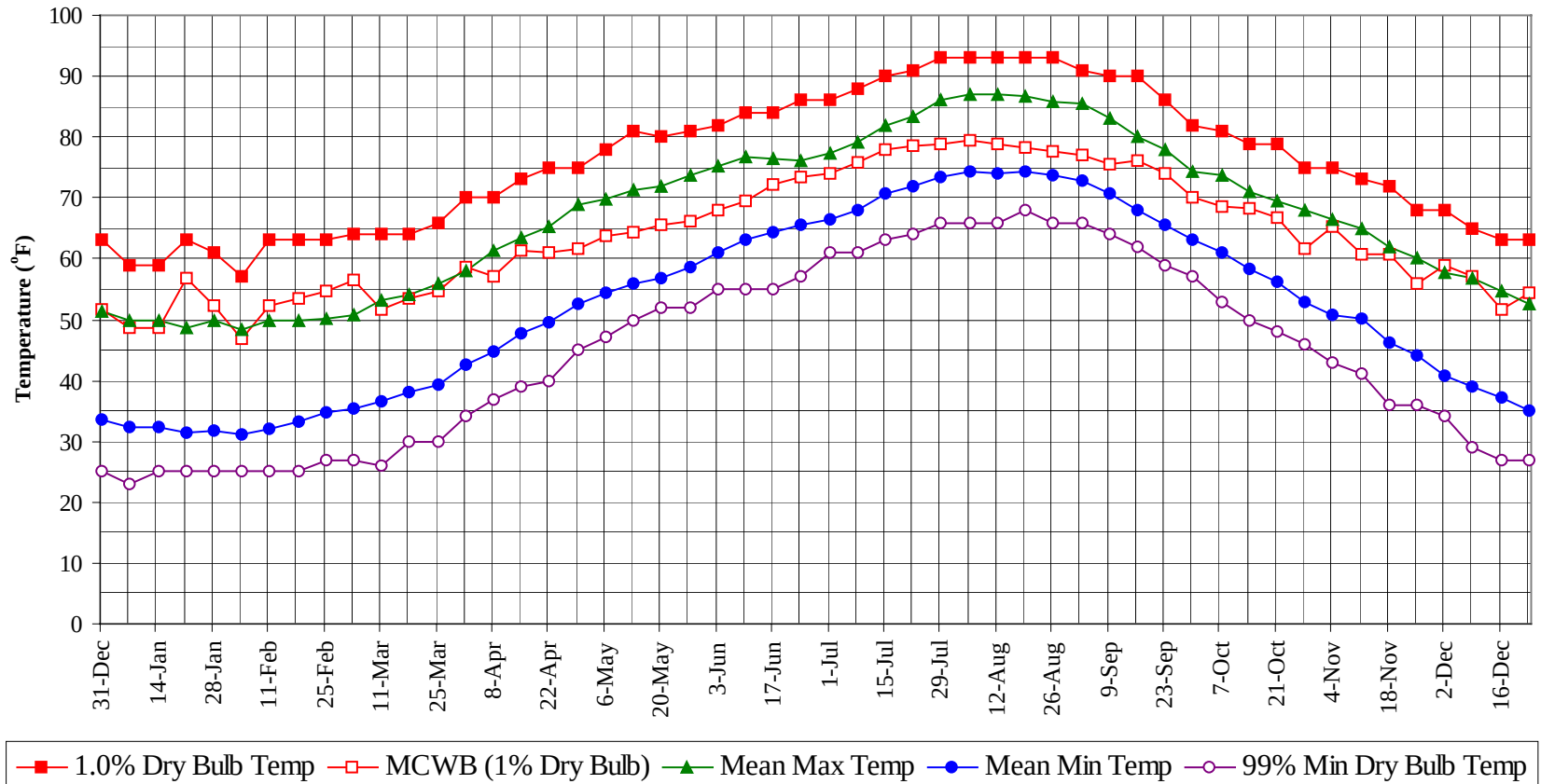
**Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)**

Period of Record = 1967 to 1996

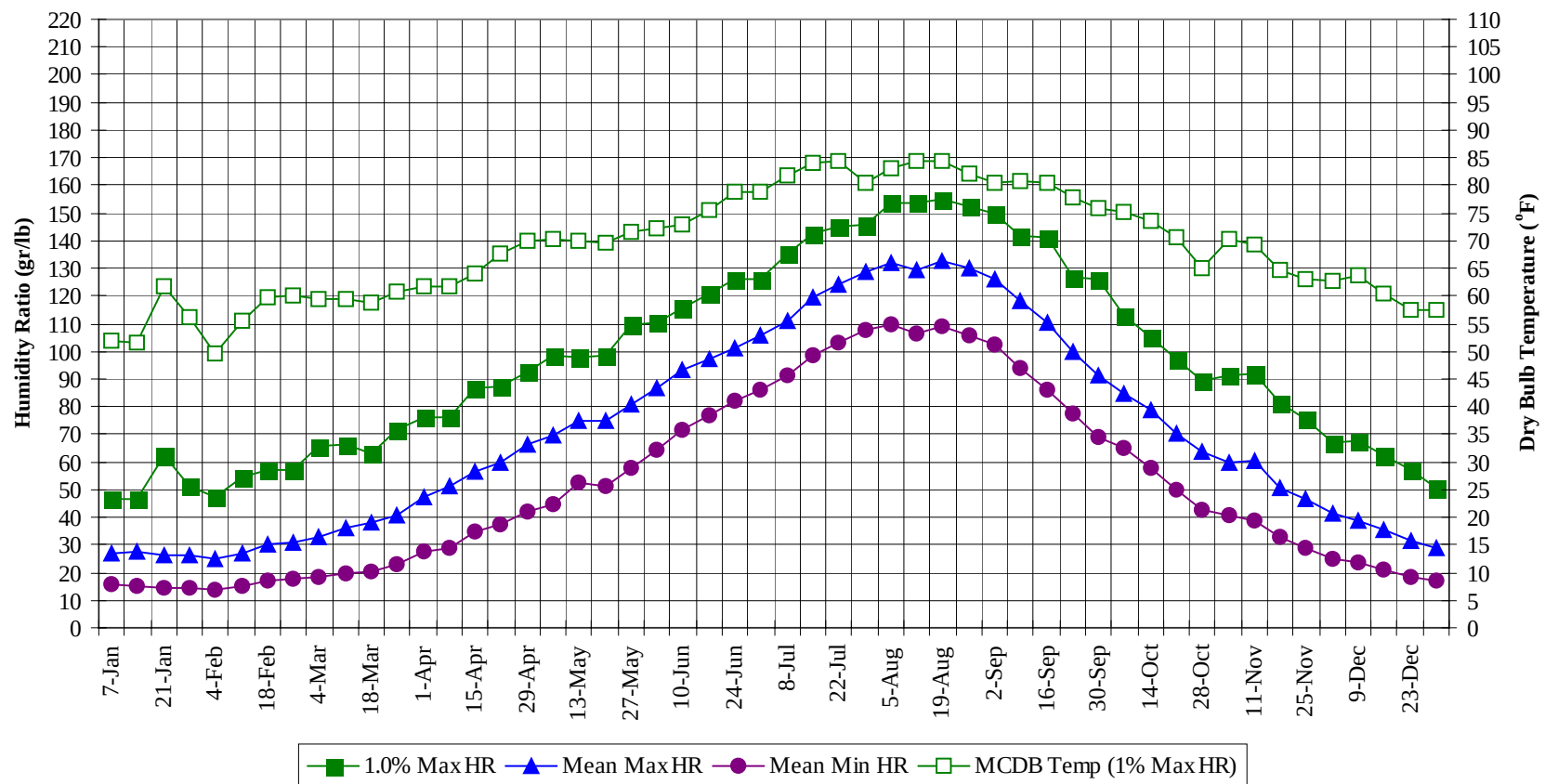
| Annual Totals                |                     |                |                |              |                          |
|------------------------------|---------------------|----------------|----------------|--------------|--------------------------|
| Temperature<br>Range<br>(°F) | Hour<br>Group (LST) |                |                | Total<br>Obs | M<br>C<br>W<br>B<br>(°F) |
|                              | 01<br>To<br>08      | 09<br>To<br>16 | 17<br>To<br>00 |              |                          |
| 95 / 99                      |                     | 4              | 0              | 4            | 78.8                     |
| 90 / 94                      | 0                   | 64             | 4              | 68           | 77.8                     |
| 85 / 89                      | 2                   | 154            | 21             | 177          | 76.3                     |
| 80 / 84                      | 56                  | 246            | 159            | 461          | 74.1                     |
| 75 / 79                      | 270                 | 317            | 310            | 897          | 71.1                     |
| 70 / 74                      | 296                 | 376            | 346            | 1017         | 66.0                     |
| 65 / 69                      | 259                 | 246            | 263            | 768          | 62.1                     |
| 60 / 64                      | 335                 | 312            | 346            | 993          | 57.4                     |
| 55 / 59                      | 303                 | 292            | 303            | 898          | 51.6                     |
| 50 / 54                      | 258                 | 322            | 287            | 867          | 45.6                     |
| 45 / 49                      | 252                 | 315            | 328            | 895          | 40.4                     |
| 40 / 44                      | 220                 | 156            | 231            | 607          | 36.5                     |
| 35 / 39                      | 327                 | 93             | 223            | 643          | 32.8                     |
| 30 / 34                      | 243                 | 22             | 84             | 349          | 28.5                     |
| 25 / 29                      | 89                  | 1              | 15             | 105          | 23.9                     |
| 20 / 24                      | 10                  |                | 0              | 10           | 19.8                     |
| 15 / 19                      | 0                   |                | 0              | 0            | 17.0                     |

**Caution:** This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

### Annual Summary of Temperatures



### Long Term Humidity and Dry Bulb Temperature Summary

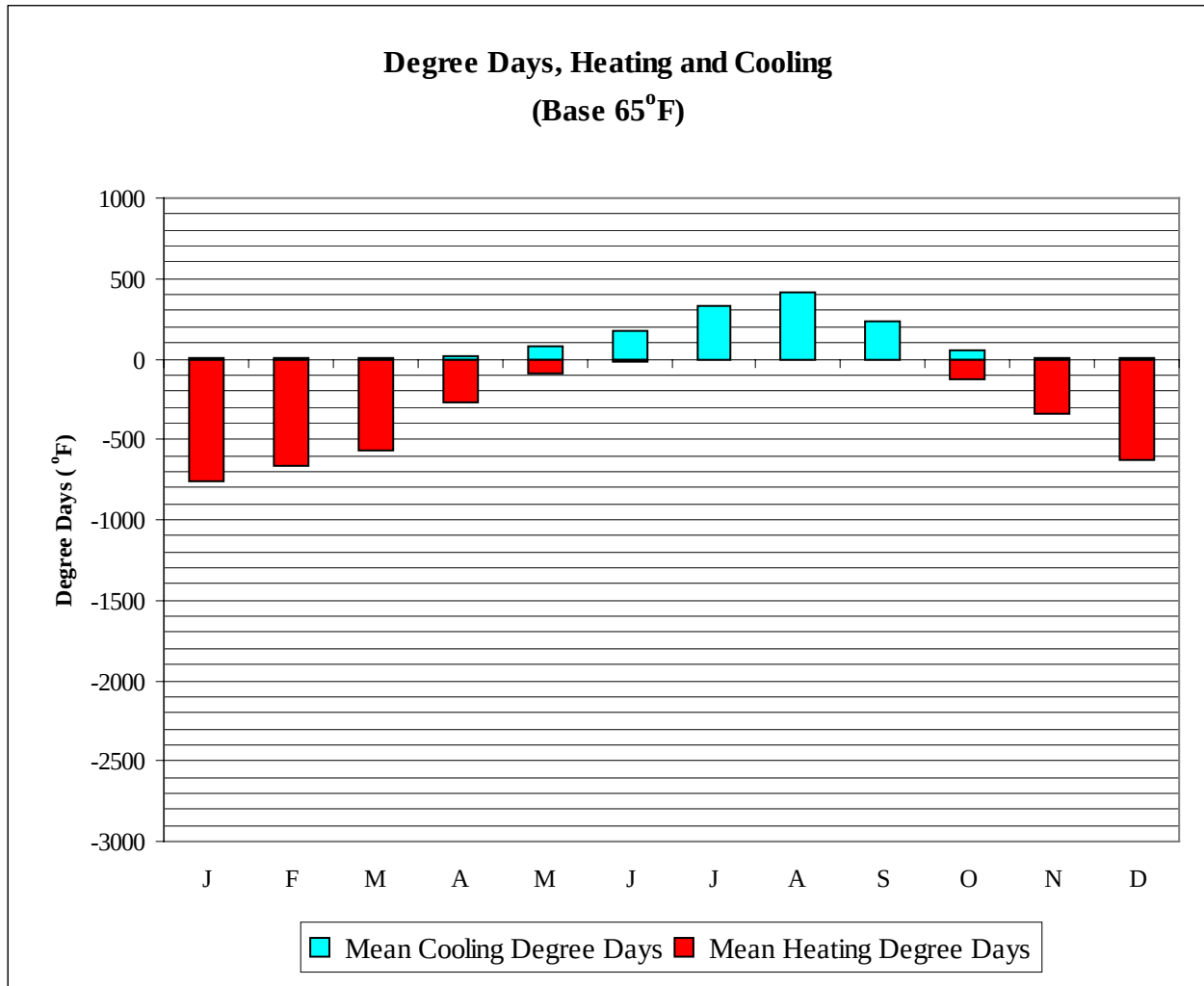


ATSUGI JP

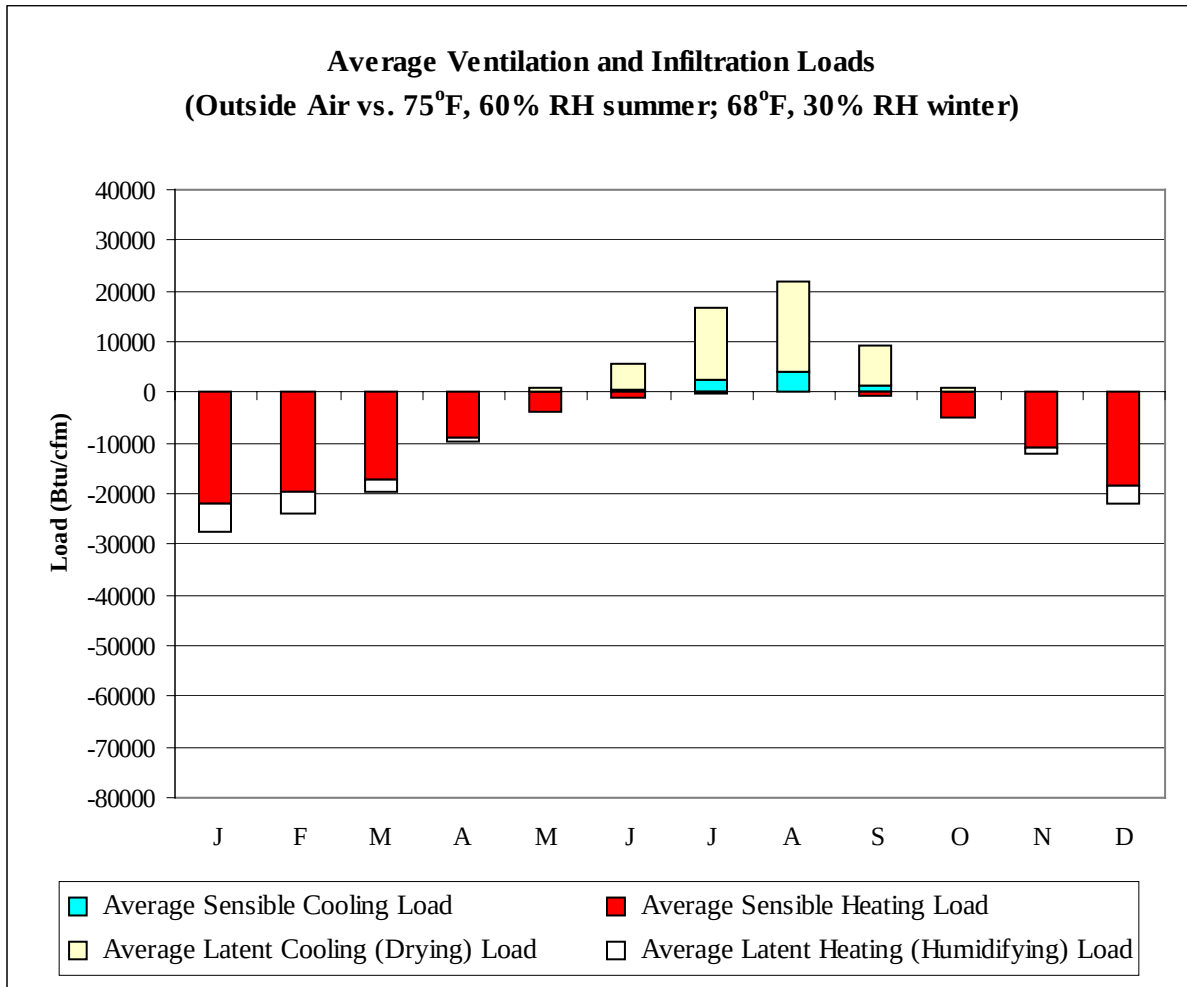
WMO No. 476790

**Long Term Dry Bulb Temperature and Humidity Summary**

| Week Ending | 1.0% Temp (°F) | MCWB @ 1% Temp (°F) | Mean Max Temp (°F) | Mean Min Temp (°F) | 99% Temp (°F) | 1.0% HR (gr/lb) | MCDB @ 1% HR (°F) | Mean Max HR (gr/lb) | Mean Min HR (gr/lb) |
|-------------|----------------|---------------------|--------------------|--------------------|---------------|-----------------|-------------------|---------------------|---------------------|
| 7-Jan       | 59.0           | 48.7                | 49.9               | 32.3               | 23.0          | 46.9            | 51.9              | 27.1                | 16.0                |
| 14-Jan      | 59.0           | 48.7                | 49.9               | 32.2               | 25.0          | 46.9            | 51.6              | 27.3                | 15.2                |
| 21-Jan      | 63.0           | 56.8                | 48.8               | 31.5               | 25.0          | 62.3            | 61.7              | 26.3                | 14.7                |
| 28-Jan      | 61.0           | 52.2                | 49.8               | 31.7               | 25.0          | 51.1            | 56.1              | 26.4                | 14.2                |
| 4-Feb       | 57.0           | 46.7                | 48.5               | 31.1               | 25.0          | 47.6            | 49.5              | 25.2                | 13.9                |
| 11-Feb      | 63.0           | 52.3                | 49.7               | 32.1               | 25.0          | 54.6            | 55.5              | 27.3                | 15.2                |
| 18-Feb      | 63.0           | 53.6                | 49.8               | 33.3               | 25.0          | 57.4            | 59.9              | 29.9                | 16.9                |
| 25-Feb      | 63.0           | 54.5                | 50.2               | 34.6               | 27.0          | 57.4            | 60.1              | 31.0                | 17.7                |
| 4-Mar       | 64.0           | 56.6                | 50.7               | 35.3               | 27.0          | 65.8            | 59.4              | 32.8                | 18.3                |
| 11-Mar      | 64.0           | 51.8                | 53.1               | 36.5               | 26.0          | 66.5            | 59.4              | 36.0                | 19.9                |
| 18-Mar      | 64.0           | 53.6                | 54.1               | 38.1               | 30.0          | 63.0            | 58.9              | 38.0                | 20.2                |
| 25-Mar      | 66.0           | 54.6                | 55.8               | 39.4               | 30.0          | 71.4            | 60.6              | 40.6                | 23.2                |
| 1-Apr       | 70.0           | 58.5                | 58.1               | 42.7               | 34.0          | 76.3            | 61.8              | 47.2                | 27.4                |
| 8-Apr       | 70.0           | 57.2                | 61.3               | 44.8               | 37.0          | 76.3            | 61.9              | 51.1                | 28.7                |
| 15-Apr      | 73.0           | 61.3                | 63.3               | 47.8               | 39.0          | 86.8            | 64.2              | 56.8                | 34.8                |
| 22-Apr      | 75.0           | 61.0                | 65.2               | 49.5               | 40.0          | 87.5            | 67.7              | 60.1                | 37.4                |
| 29-Apr      | 75.0           | 61.7                | 68.9               | 52.6               | 45.0          | 92.4            | 69.8              | 66.3                | 42.0                |
| 6-May       | 78.0           | 63.8                | 69.9               | 54.4               | 47.0          | 98.7            | 70.1              | 69.9                | 44.8                |
| 13-May      | 81.0           | 64.3                | 71.2               | 56.0               | 50.0          | 98.0            | 69.8              | 74.9                | 52.4                |
| 20-May      | 80.0           | 65.6                | 71.9               | 56.7               | 52.0          | 98.7            | 69.6              | 74.9                | 51.3                |
| 27-May      | 81.0           | 66.1                | 73.8               | 58.7               | 52.0          | 109.9           | 71.7              | 80.7                | 57.5                |
| 3-Jun       | 82.0           | 68.1                | 75.3               | 61.1               | 55.0          | 110.6           | 72.2              | 86.6                | 64.2                |
| 10-Jun      | 84.0           | 69.5                | 76.8               | 63.1               | 55.0          | 115.5           | 73.0              | 93.3                | 71.3                |
| 17-Jun      | 84.0           | 72.3                | 76.6               | 64.4               | 55.0          | 121.1           | 75.5              | 97.1                | 77.0                |
| 24-Jun      | 86.0           | 73.4                | 76.2               | 65.4               | 57.0          | 126.0           | 78.9              | 101.2               | 82.0                |
| 1-Jul       | 86.0           | 74.1                | 77.5               | 66.4               | 61.0          | 126.0           | 78.8              | 105.7               | 85.9                |
| 8-Jul       | 88.0           | 75.9                | 79.1               | 67.9               | 61.0          | 135.1           | 81.8              | 111.2               | 91.2                |
| 15-Jul      | 90.0           | 77.9                | 81.9               | 70.6               | 63.0          | 142.8           | 83.9              | 119.8               | 98.8                |
| 22-Jul      | 91.0           | 78.7                | 83.5               | 71.8               | 64.0          | 144.9           | 84.3              | 124.3               | 103.3               |
| 29-Jul      | 93.0           | 78.7                | 86.2               | 73.5               | 66.0          | 145.6           | 80.6              | 128.8               | 107.7               |
| 5-Aug       | 93.0           | 79.4                | 87.0               | 74.2               | 66.0          | 154.0           | 83.1              | 132.0               | 109.5               |
| 12-Aug      | 93.0           | 78.9                | 86.9               | 73.9               | 66.0          | 154.0           | 84.5              | 129.5               | 106.3               |
| 19-Aug      | 93.0           | 78.2                | 86.8               | 74.4               | 68.0          | 154.7           | 84.5              | 132.8               | 109.1               |
| 26-Aug      | 93.0           | 77.7                | 85.9               | 73.6               | 66.0          | 152.6           | 82.1              | 129.7               | 105.9               |
| 2-Sep       | 91.0           | 76.9                | 85.5               | 72.8               | 66.0          | 149.8           | 80.5              | 126.3               | 102.6               |
| 9-Sep       | 90.0           | 75.6                | 83.1               | 70.7               | 64.0          | 142.1           | 80.8              | 118.0               | 94.0                |
| 16-Sep      | 90.0           | 76.1                | 80.2               | 68.1               | 62.0          | 141.4           | 80.5              | 110.1               | 86.2                |
| 23-Sep      | 86.0           | 74.1                | 78.0               | 65.7               | 59.0          | 126.7           | 77.9              | 99.8                | 77.8                |
| 30-Sep      | 82.0           | 70.0                | 74.2               | 63.0               | 57.0          | 126.0           | 76.0              | 91.5                | 69.2                |
| 7-Oct       | 81.0           | 68.4                | 73.7               | 61.0               | 53.0          | 112.7           | 75.3              | 85.0                | 64.8                |
| 14-Oct      | 79.0           | 68.3                | 70.9               | 58.4               | 50.0          | 105.0           | 73.6              | 78.6                | 57.5                |
| 21-Oct      | 79.0           | 66.6                | 69.6               | 56.1               | 48.0          | 97.3            | 70.7              | 70.5                | 50.2                |
| 28-Oct      | 75.0           | 61.6                | 68.1               | 52.8               | 46.0          | 89.6            | 65.0              | 63.6                | 42.6                |
| 4-Nov       | 75.0           | 65.3                | 66.4               | 50.7               | 43.0          | 91.0            | 70.3              | 60.1                | 40.5                |
| 11-Nov      | 73.0           | 60.6                | 64.9               | 50.1               | 41.0          | 91.7            | 69.3              | 60.7                | 39.0                |
| 18-Nov      | 72.0           | 60.8                | 61.8               | 46.3               | 36.0          | 81.2            | 64.6              | 50.2                | 32.8                |
| 25-Nov      | 68.0           | 56.0                | 60.0               | 44.0               | 36.0          | 75.6            | 63.1              | 46.5                | 28.9                |
| 2-Dec       | 68.0           | 58.9                | 57.6               | 40.9               | 34.0          | 67.2            | 62.8              | 41.2                | 25.0                |
| 9-Dec       | 65.0           | 57.1                | 56.8               | 38.9               | 29.0          | 67.9            | 63.7              | 38.7                | 23.7                |
| 16-Dec      | 63.0           | 51.6                | 54.7               | 37.1               | 27.0          | 62.3            | 60.4              | 35.2                | 20.8                |
| 23-Dec      | 63.0           | 54.3                | 52.6               | 34.9               | 27.0          | 57.4            | 57.6              | 31.3                | 18.5                |
| 31-Dec      | 63.0           | 51.8                | 51.4               | 33.6               | 25.0          | 50.4            | 57.5              | 29.1                | 16.8                |



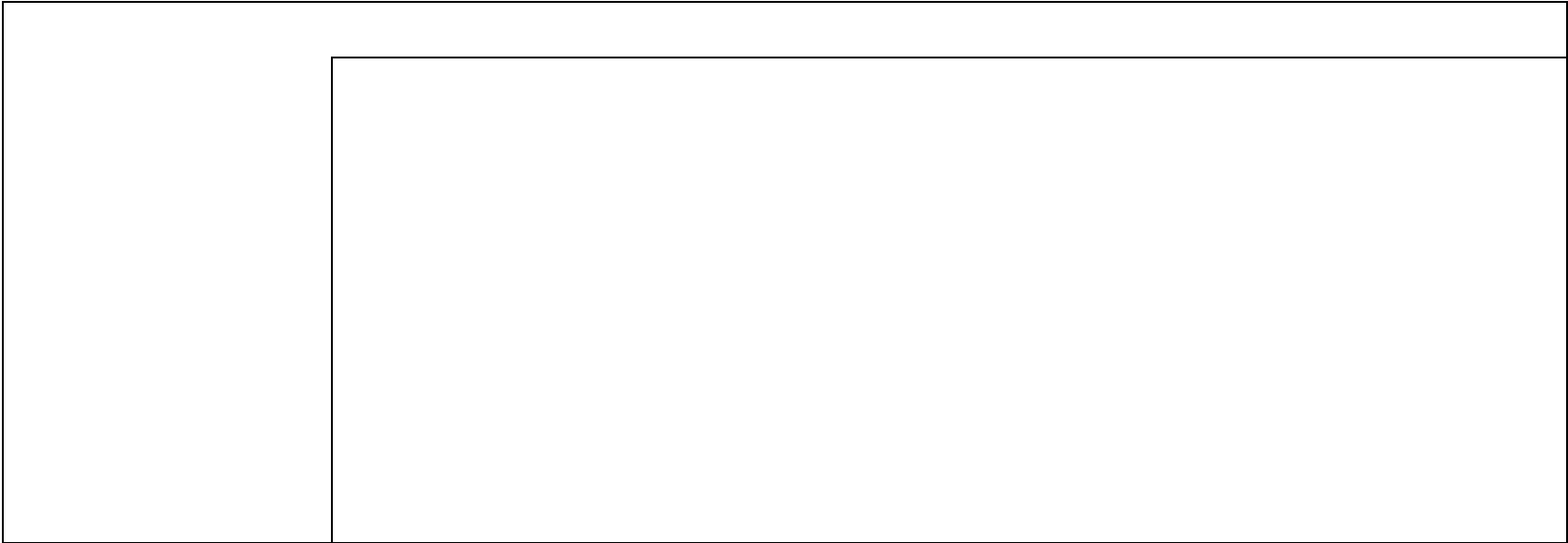
|     | Mean Cooling<br>Degree Days (°F) | Mean Heating<br>Degree Days (°F) |
|-----|----------------------------------|----------------------------------|
| JAN | 0                                | 761                              |
| FEB | 0                                | 668                              |
| MAR | 1                                | 571                              |
| APR | 17                               | 266                              |
| MAY | 72                               | 93                               |
| JUN | 168                              | 17                               |
| JUL | 332                              | 2                                |
| AUG | 419                              | 0                                |
| SEP | 229                              | 9                                |
| OCT | 54                               | 120                              |
| NOV | 7                                | 344                              |
| DEC | 0                                | 624                              |
| ANN | 1301                             | 3475                             |



|     | Average Sensible Cooling Load | Average Sensible Heating Load | Average Latent Cooling Load | Average Latent Heating Load |
|-----|-------------------------------|-------------------------------|-----------------------------|-----------------------------|
|     | (Btu/cfm)                     | (Btu/cfm)                     | (Btu/cfm)                   | (Btu/cfm)                   |
| JAN | 0                             | -22135                        | 0                           | -5415                       |
| FEB | 0                             | -19508                        | 0                           | -4492                       |
| MAR | 0                             | -17189                        | 4                           | -2555                       |
| APR | 8                             | -8976                         | 86                          | -624                        |
| MAY | 137                           | -3938                         | 656                         | -69                         |
| JUN | 606                           | -1072                         | 4922                        | 0                           |
| JUL | 2679                          | -199                          | 14157                       | 0                           |
| AUG | 4137                          | -30                           | 17876                       | 0                           |
| SEP | 1396                          | -649                          | 7989                        | 0                           |
| OCT | 93                            | -4806                         | 760                         | -50                         |
| NOV | 3                             | -11111                        | 64                          | -833                        |
| DEC | 0                             | -18578                        | 1                           | -3483                       |
| ANN | 9059                          | -108191                       | 46515                       | -17521                      |

**Average Annual Solar Radiation – Nearest Available Site**  
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

No Solar Radiation  
Data Available



**Average Annual Solar Heat and Illumination – Nearest Available Site**

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

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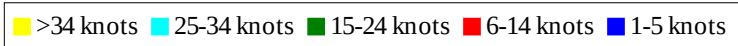
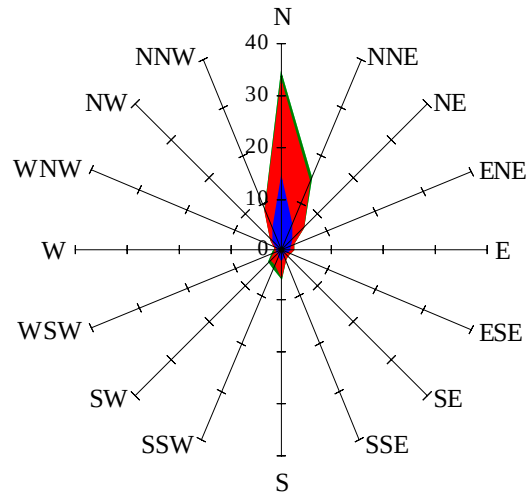
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### Wind Summary - December, January, and February

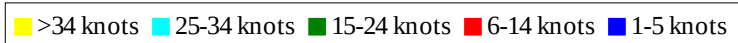
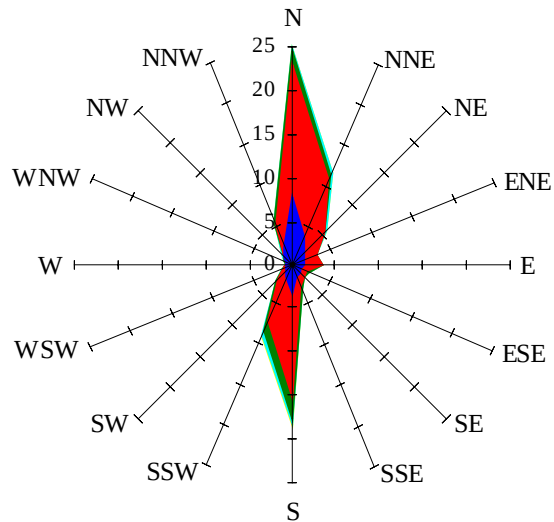
Labels of Percent Frequency on North Axis



Percent Calm = 8.01

### Wind Summary - March, April, and May

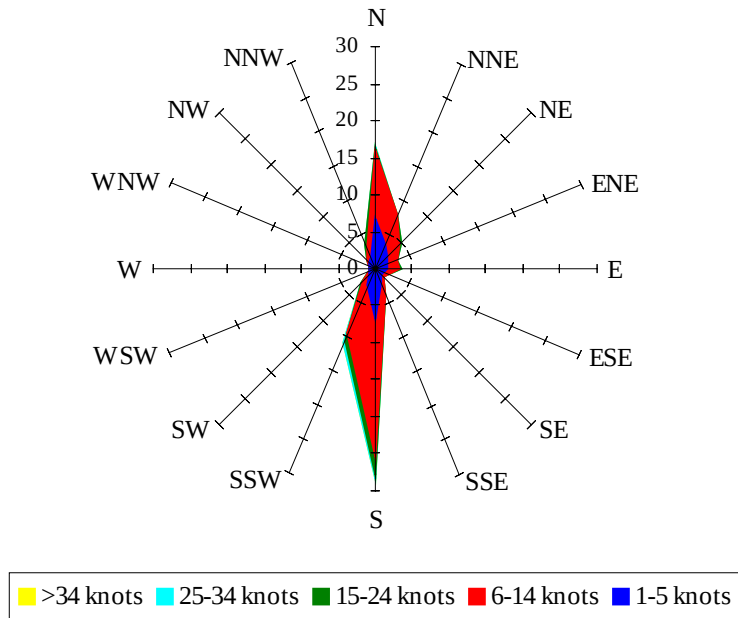
Labels of Percent Frequency on North Axis



Percent Calm = 5.67

### Wind Summary - June, July, and August

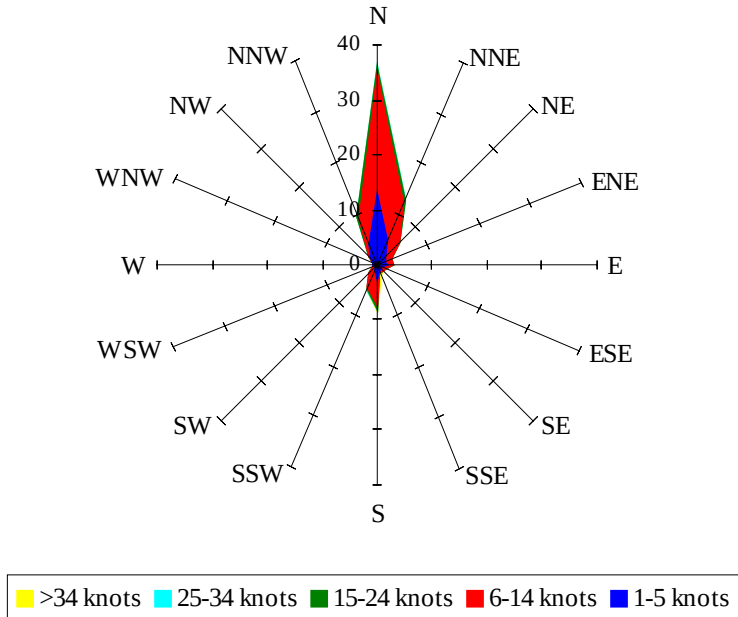
Labels of Percent Frequency on North Axis



Percent Calm = 7.71

### Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 5.82