

# Renewable Energy Research Laboratory

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# Data Update for Mt. Tom, Holyoke, MA January 2007

Prepared for Massachusetts Technology Collaborative 75 North Drive, Westborough, MA 01581

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### **Monthly Data Summary for January 2007**

This update summarizes the monthly data results for the Mt. Tom monitoring site in Holyoke, MA, at 42° 14′ 59.2″ N, 72° 38′ 42.2″ W (NAD83). More information on the sensors and site, including the data, can be found at <a href="http://www.ceere.org/rerl/rerl\_resourcedata.html">http://www.ceere.org/rerl/rerl\_resourcedata.html</a>.

Height	Wind Speed				Prevailing	Power Law
	Mean [m/s]	Max [m/s]	Turbulence Intensity	Good Data [%]	Wind Direction	Shear Exponent
24 m	7.59	16.84	0.21	8.533	180°, S	0.33
37 m	8.77	18.46	0.16	8.443	202.5°, SSW	

The data reported here are based only on the percentages of good data indicated; missing data may skew these values. The 37 m data has a lower percentage of good data because of icing conditions.

#### **Data Recovery**

All raw wind data are subjected to a series of tests and filters to identify data that are faulty or corrupted. The gross percentage of data recovered (ratio of the number of raw data points received to data points expected) and net data recovered (ratio of raw data points which passed all QA control tests to data points expected) are shown below.

Gross Data Recovered [%]	9.028
Net Data Recovered [%]	8.852

The gross data and net data recovery percentage is less than 100% due to missing data points as the main cable, which connects the logger to the main tower was cut by unidentified person(s). The data above is for a few days only.

# **Maintenance Issues and Changes to Site Configuration**

The cable connecting the main tower and logger was cut by unidentified person(s) on January 3rd. This problem was detected and repaired during the month of February.

## **Monthly Data Time Series**

Seen below is a graph of wind speed at Mt. Tom for the month of January 2007, at the anemometer height of 37 m.

