

Renewable Energy Research Laboratory

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Data Update for Mt. Tom, Holyoke, MA May 2008

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

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Monthly Data Summary for May 2008

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 (NAD27). More information on the sensors and site, including the data, can be found at http://www.ceere.org/rerl/rerl_resourcedata.html.

	Wind Speed			Prevailing	Power
Height	Mean [m/s]	Max [m/s]	Turbulence Intensity	Wind Direction	Law Shear Exponent
24 m	4.66	14.1	0.23	-	0.37
37 m	5.48	17.94	0.18	205.5° SSW	0.57

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 [%]	91.304
Net Data Recovered [%]	90.679

The gross data and net data recovery percentage is less than 100% due to a malfunctioning vane sensor at a height of 24m and because of a few hours of fault and out of range failures in the anemometers. The data files were also corrupted for a few days i.e., May 4th, 15th, 16th and 18th.

Maintenance Issues and Changes to Site Configuration

The modem failed on May 10 and was replaced on May 30.

Monthly Data Time Series

Seen below is a graph of wind speed at Mt. Tom for the month of May 2008, at the anemometer height of 37 m.

Mt Tom Wind Speed Time Series, 37m

