

# **Renewable Energy Research Laboratory**

Department of Mechanical and Industrial Engineering University of Massachusetts 160 Governor's Drive Amherst, MA 01003-9265 Phone: 413-545-4359 Fax: 413-577-1301 www.ceere.org/rerl rerl@ecs.umass.edu



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

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

By Puneet Malhotra

## Monthly Data Summary for April 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 <u>http://www.ceere.org/rerl/rerl\_resourcedata.html</u>.

Height	Wind Speed			Prevailing Wind Direction	Power Law Shear Exponent
	Mean	Max	Turbulence		
	[m/s]	[m/s]	Intensity		
24 m	5.53	19.46	0.24	180° S	0.31
37 m	6.32	22.49	0.19	202.5° SSW	

#### **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 [%]	100
Net Data Recovered [%]	90.236

The net data recovery percentage is less than 100% due to icing conditions and fault in one of the anemometer sensors at a height of 37m.



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Maintenance Issues and Changes to Site Configuration

No maintenance issues arose during the month of April.

#### **Monthly Data Time Series**

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



#### Mt Tom Wind Speed Time Series, 37m