



# Renewable Energy Research Laboratory

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## Data Update for Mt. Tom, Holyoke, MA February 2008

Prepared for  
Massachusetts Technology Collaborative  
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### Monthly Data Summary for February 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](http://www.ceere.org/rerl/rerl_resourcedata.html).

Height	Wind Speed				Prevailing Wind Direction	Power Law Shear Exponent
	Mean [m/s]	Max [m/s]	Turbulence Intensity	Good Data [%]		
24 m	4.81	17.39	0.19	87.811	-	0.45
37 m	5.84	23.21	0.15	88.170	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 [%]	83.412
Net Data Recovered [%]	74.130

The gross data recovered is less than 100 % due to a malfunctioning vane sensor at a height of 24m. The net data recovery percentage is less because of a few hours of fault and out of range hours in the anemometers, a malfunctioning external temperature sensor and due to a few days of icing conditions as seen in the graph below, where the anemometer and vane sensors seems to have stopped working.

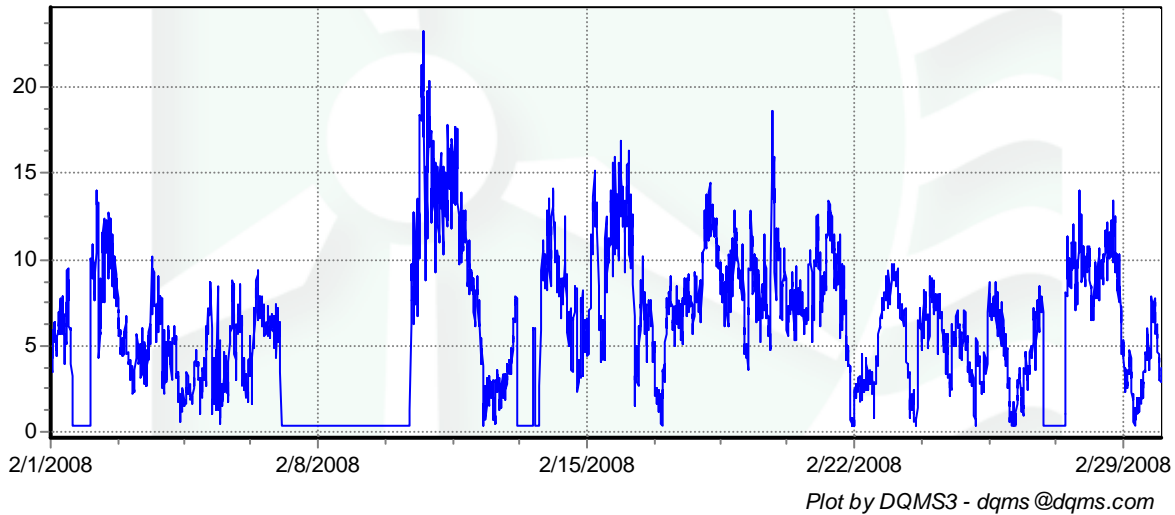
### Maintenance Issues and Changes to Site Configuration

No maintenance issues were reported during the month.

### Monthly Data Time Series

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

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



The data for the period from Feb 7<sup>th</sup> to the Feb 10<sup>th</sup> morning was determined to be faulty due to icing.