



# Renewable Energy Research Laboratory

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## Data Update for Mt. Tom, Holyoke, MA December 2005

Prepared for  
Massachusetts Technology Collaborative  
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### Monthly Data Summary for December 2005

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 (NAD 27). More information on the sensors and site 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
	Mean [m/s]	Max [m/s]	Turbulence Intensity	
24 m	5.8	16.6	0.23	247.5°, WSW
37 m	--	--	--	--

More than 10% of the December data at 37 m were flagged for icing, so the monthly summary data for the 37 m sensors has not been reported.

The data can be found at the Renewable Energy Research Laboratory web site:  
[http://www.ceere.org/rerl/rerl\\_resourcedata.html](http://www.ceere.org/rerl/rerl_resourcedata.html).

### 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 [%]	100.00
Net Data Recovered [%]	85.87

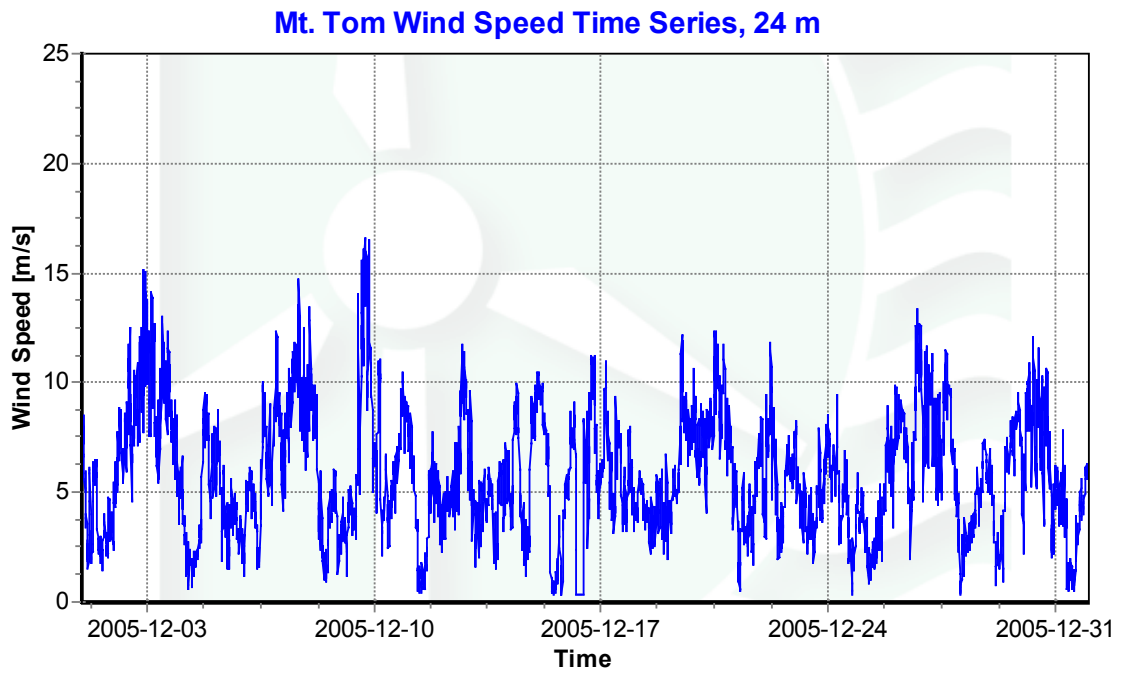
Due to 1862 hours of icing for the 37 m sensors, the net percentage of data recovered is only 85.87%. Approximately 98% of the 24 m data passed the QA control tests, compared to 60% of the 37 m data. For this reason, only data from the 24 m sensors were reported.

### Maintenance Issues and Changes to Site Configuration

No maintenance or equipment problems occurred during December 2005.

### Monthly Data Time Series

Seen below is a graph of wind speed at Mt. Tom for the month of December 2005 at the anemometer height of 24 m.



Plot by DQMS3 - dqms@dqms.com