

# Renewable Energy Research Laboratory

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

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

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#### **Monthly Data Summary for March 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 Wind Direction	Power Law Shear Exponent
	Mean	Max [m/s]	Turbulence		
	[m/s]	Max [III/8]	Intensity		
24 m	6.21	18.89	0.23	180° S	0.47
37 m	7.6	22.36	0.18	202.5° SSW	0.47

#### **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 [%]	99.866
Net Data Recovered [%]	89.723

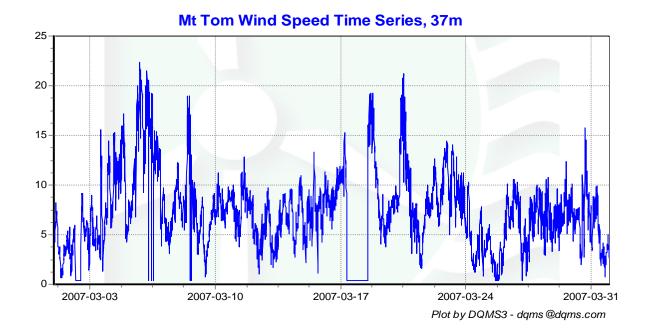
The net data recovered has a lower percentage because one of the sensors at height of 37m (anemometer37a) was not working and due to icing conditions and some sensors being out of range for few hours.

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

No maintenance issues arose during the month of March.

### **Monthly Data Time Series**

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





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