



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 March 2007

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

By Puneet Malhotra

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 (NOMAD 2). More information on the sensors and site can be found at 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	6.21	18.89	0.23	92.155	180° S	0.47
37 m	7.6	22.36	0.18	99.537	202.5° SSW	

The data reported here are based only on the percentages of good data indicated; missing data may skew these values.

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 [%]	99.861
Net Data Recovered [%]	89.205

The gross data is less than 100% because one of the sensors at height of 37 m (anemometer37a) was not working and net data recovered has a lower percentage 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.

Mt Tom Wind Speed Time Series, 37m

