

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 November 2006

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

By Melissa Elkinton

Monthly Data Summary for November 2006

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 83). More information on the sensors and site can be found at http://www.ceere.org/rerl/rerl resourcedata.html.

	Wind Speed				Prevailing	Power Law
Height	Mean [m/s]	Max [m/s]	Turbulence Intensity	Data Good [%]	Wind Direction	Shear Exponent
24 m	5.2	16.5	0.24	98.7	112.5°, ESE	0.36
37 m	5.6	18.2	0.20	87.6	247.5°, WSW	0.30

The data reported here are based only on the percentages of good data indicated; missing data may skew these values. The 37 m data has a lower percentage of good data because of icing conditions.

The data can be found at the Renewable Energy Research Laboratory web site: 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 [%]	99.98
Net Data Recovered [%]	94.77

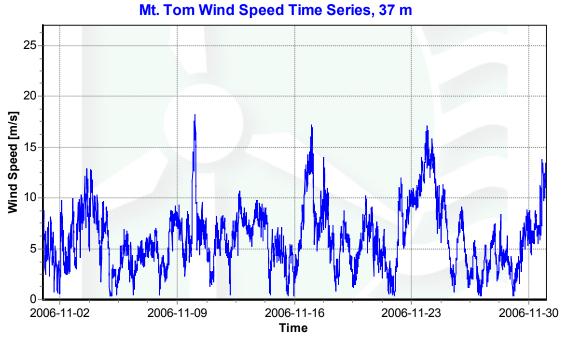
The gross data recovery percentage is less than 100% due to a missing data point resulting from swapping the memory card. Due to 523 hours of icing, mostly from the 37 m sensors, the net percentage of data recovered is only 94.77%.

Maintenance Issues and Changes to Site Configuration

No maintenance or equipment problems occurred during November 2006.

Monthly Data Time Series

Seen below is a graph of wind speed at Mt. Tom for the month of November 2006, at the anemometer height of 37 m.



Plot by DQMS3 - dqms@dqms.com