



Renewable Energy Research Laboratory

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Data Update for Mt. Tom, Holyoke, MA April 2006

Prepared for
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Monthly Data Summary for April 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 27). 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	Data Good [%]		
24 m	5.5	17.8	0.28	99.3	292.5°, WNW	0.38
37 m	6.4	19.9	0.22	99.5	--	

The data reported here are only based on the percentages of good data indicated; missing data may skew these values. The 37 m vane failed in August 2005, so the 37 m prevailing wind direction is not reported. For these data, the 24 m vane data have been used in the 37 m icing test definition.

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 [%]	99.79
Net Data Recovered [%]	99.36

The gross data recovery is slightly lower than 100% because the data card was replaced and maintenance was performed on the logger system on April 21, 2006, resulting in 90 minutes of missing data.

Maintenance Issues and Changes to Site Configuration

The logger power system was inspected in April 2006. No equipment problems occurred during this month, however the failed vane at the 37 m level still is scheduled to be replaced.

Monthly Data Time Series

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

