



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 June 2006

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

By Melissa Elkinton

Monthly Data Summary for June 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.

Height	Wind Speed				Prevailing Wind Direction	Power Law Shear Exponent
	Mean [m/s]	Max [m/s]	Turbulence Intensity	Data Good [%]		
24 m	4.4	17.4	0.27	90.7	112.5°, ESE	0.37
37 m	5.2	19.6	0.22	90.9	202.5°, SSW	

The data reported here are only based on the percentages of good data indicated; missing data may skew these values. Due to a full memory card, approximately two days of data are missing from this data set.

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 [%]	91.16
Net Data Recovered [%]	90.78

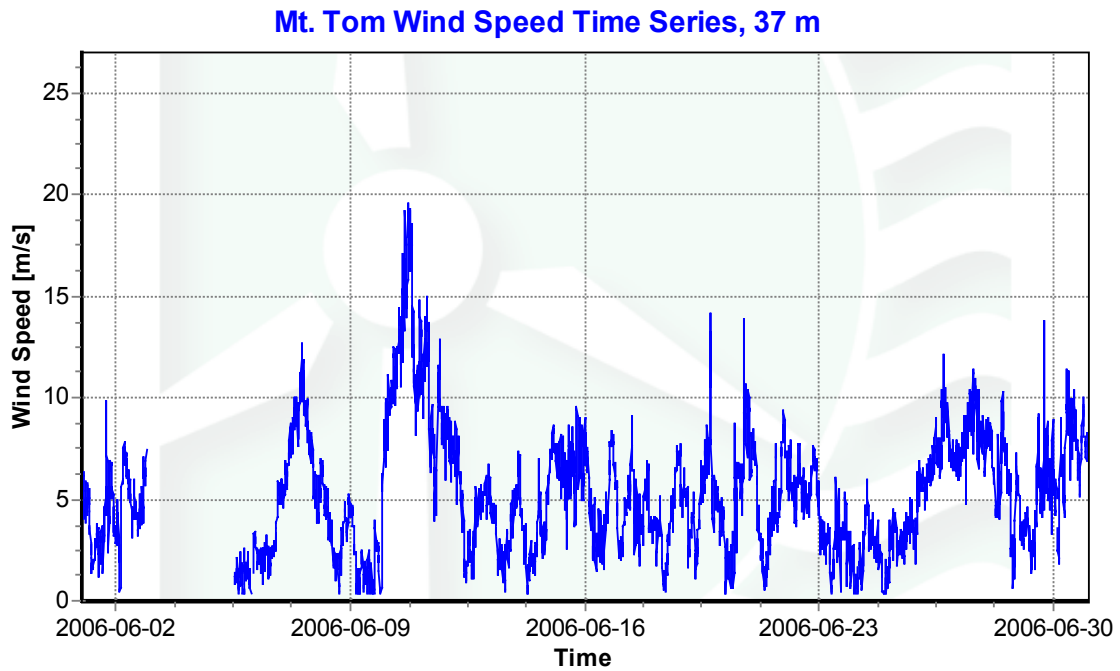
The gross data recovery percentage is less than 100% due to the missing days of data. The comparatively high net data recovery indicates the sensors and logger are performing well.

Maintenance Issues and Changes to Site Configuration

In June 2006, the failed 37 m level vane was replaced.

Monthly Data Time Series

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



Plot by DQMS3 - dqms@dqms.com