



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 September 2007

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

By Puneet Malhotra

Monthly Data Summary for September 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 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		
24 m	4.28	12.93	0.25	-	0.39
37 m	5.07	15.48	0.21	67.5° ENE	

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 [%]	84.731
Net Data Recovered [%]	76.374

The gross data recovered is less than 100% because the data logger failed and there was no data collected for the last few days of the month and due to malfunctioning vane sensor at a height of 24m. The net data recovery percentage is less because of a few hours of fault in the anemometers and a malfunctioning external temperature sensor.

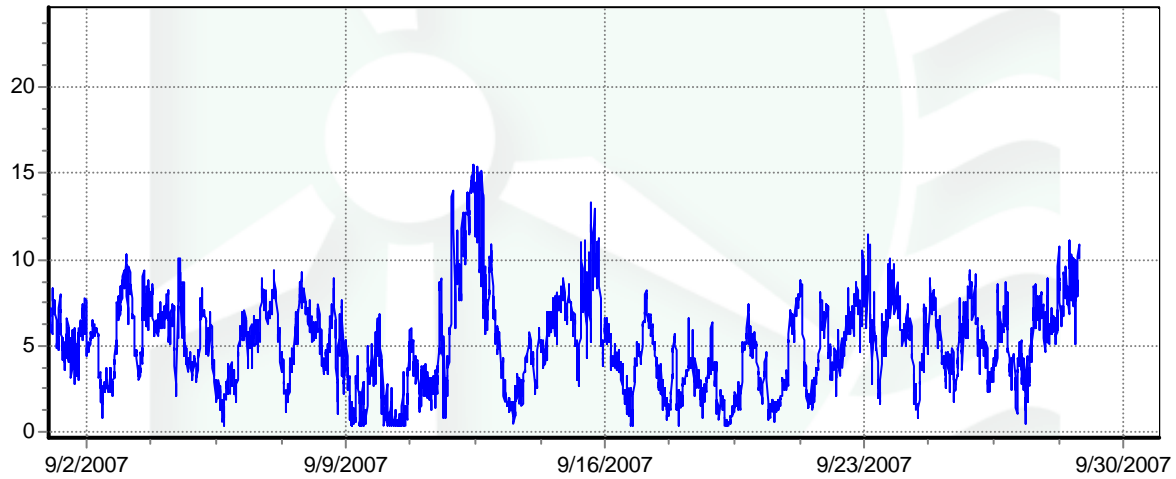
Maintenance Issues and Changes to Site Configuration

No maintenance issues were reported during the month.

Monthly Data Time Series

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

Mt Tom Wind Speed Time Series, 37m



Plot by DQMS3 - dqms@dqms.com