



Renewable Energy Research Laboratory

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Data Update for Mt. Tom, Holyoke, MA September 2005

Prepared for
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Monthly Data Summary for September 2005

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
	Mean [m/s]	Max [m/s]	Turbulence Intensity	
24 m	4.8	14.7	0.26	292.5, WNW
37 m	5.6	17.6	0.21	90, E

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 [%]	99.78

The gross percentage of data recovered is less than 100% because the data card was manually swapped on September 14, 2005.

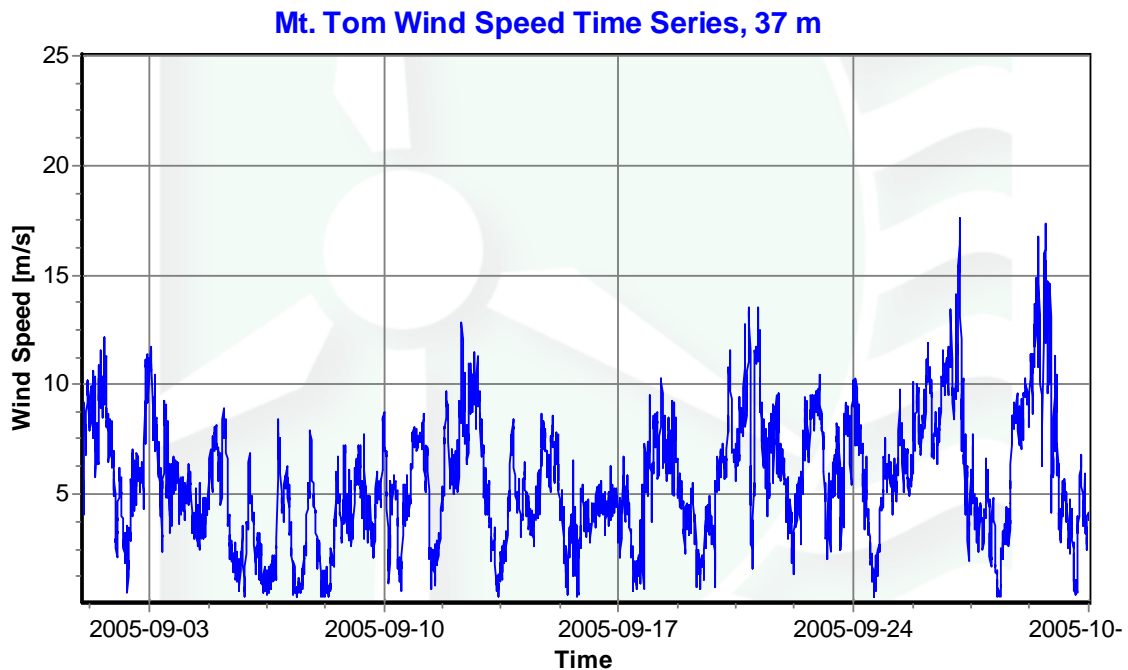
Maintenance Issues and Changes to Site Configuration

The following maintenance/equipment problems occurred during September 2005, and the following corrective action was taken:

- During the first half of September 2005, the logger cell phone made several calls to the RERL in order to download the wind data. Each of these download attempts was unsuccessful. On September 14, 2005, the data card was manually swapped.
- It is likely that the communications towers on Mt. Tom are interfering with the logger cell phone's attempts to transfer the data. In order to decrease this interference, the logger cell phone was re-programmed to call the RERL each week at 2:00 AM EST. With this modified schedule, the data was successfully downloaded via logger cell calls on September 21 and October 5, 2005.

Monthly Data Time Series

Seen below is a graph of wind speed at Mt. Tom for the month of September 2005, at the highest anemometer height of 37 m.



Plot by DQMS3 - dqms@dqms.com