



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 Tisbury, Martha Vineyard, MA August 2007

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

By Puneet Malhotra

Monthly Data Summary for August 2007

This update summarizes the monthly data results for the Tisbury monitoring site in Martha Vineyard, MA, at 41° 26' 1.66" N, 70° 37' 18.06" W. More information on the sensors and site can be found at http://www.ceere.org/rerl/rerl_resourcedata.html.

Towers and sensors

There are two anemometers and one vane sensor each at a height of 49m and 35m.

Height	Wind Speed				Prevailing Wind Direction	Power Law Shear Exponent
	Mean [m/s]	Max [m/s]	Turbulence Intensity	Good Data [%]		
49m	4.22	12.8	0.26	100	225° SW	0.20
35 m	3.95	11.6	0.22	100	225° SW	

The data reported here are based only on the percentages of good data indicated; missing data may skew these values

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 [%]	100
Net Data Recovered [%]	88.366

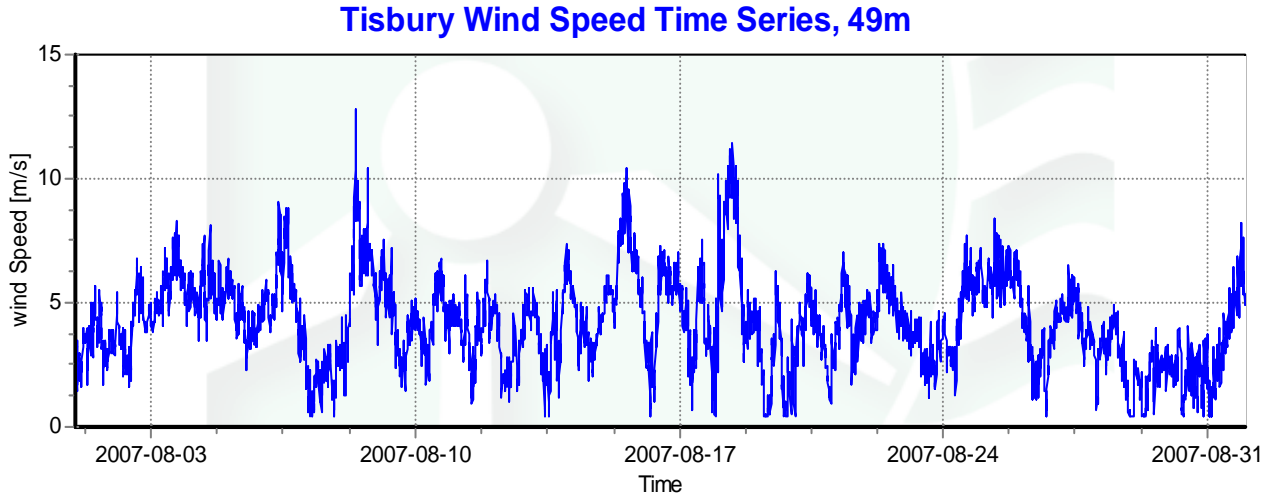
The net data recovery percentage is less than 100% because one of the anemometers at a height of 49m (Anemometer 49a) was not working properly and also due to few out of range hours detected on the anemometer & vane sensors.

Maintenance Issues and Changes to Site Configuration

No maintenance was conducted during the month of August.

Monthly Data Time Series

Seen below is a graph of wind speed at Tisbury site for the month of August 2007, at the anemometer height of 49 m.



Plot by DQMS3 - dqms@dqms.com