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 Thompson Island, Boston Harbor, MA
December 2007

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

By Fred Letson

Monthly Data Summary for December 2007

This update summarizes the monthly data results for the Thompson Island monitoring site in Boston Harbor, MA, at 42° 18' 56" N, 71° 0' 40" 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		Turbulence Intensity	Prevailing Wind Direction	Power Law Shear Exponent
	Mean [m/s]	Max [m/s]			
40 m	-	-	-	-	
25 m	-	-	-	-	-

The data can be found at the Renewable Energy Research Laboratory web site: www.ceere.org/rerl/rerl_resourcedata.html. It is important to note that summary data are only reported when the monthly net data recovery (see below) is at least 90%. This requirement ensures that the values reported here are comparable with values from other months.

Additional information about interpreting the data presented in this report can be found in the Fact Sheet, "Interpreting Your Wind Resource Data," produced by RERL and the Massachusetts Technology Collaborative (MTC). This document is found through the RERL website:
www.ceere.org/rerl/about_wind/RERL_Fact_Sheet_6_Wind_resource_interpretation.pdf.

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 [%]	00
Net Data Recovered [%]	00

Maintenance Issues and Changes to Site Configuration
The following maintenance/equipment problems occurred during December 2007, and the following corrective action was taken:

- The secondary Anemometer at each height stopped reporting during the tower raising on November 2nd probably due to damage to the sensor cables

- Due to vandalism in November, the data quality in December was too low to report any summary data. The Time series plot below is empty for this reason.

Monthly Data Time Series
Seen below is a graph of wind speed at Thompson Island for the month of December 2007, at the highest anemometer height of 40 m.