



# Renewable Energy Research Laboratory

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## Data Update for Thompson Island, Boston Harbor, MA January 2008

Prepared for  
Massachusetts Technology Collaborative  
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### Monthly Data Summary for January 2008

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](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	*6.02	*17.58	*0.13	*325.91	*0.08
25 m	*5.8	*17.24	*0.14	*321.19	

\*These summaries are based on less than 90% of the reporting period, approximately 52% in each case.

The data can be found at the Renewable Energy Research Laboratory web site: [www.ceere.org/rerl/rerl\\_resourcedata.html](http://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](http://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 [%]	69.496
Net Data Recovered [%]	52.088

### Maintenance Issues and Changes to Site Configuration

The following maintenance/equipment problems occurred during January 2008, and the following corrective action was taken:

- The secondary Anemometer at each height stopped reporting during the tower raising on November 2<sup>nd</sup> probably due to damage to the sensor cables
- The vandalism, which occurred in November, to the logger and data cables was repaired on January 10<sup>th</sup>.

### Monthly Data Time Series

Seen below is a graph of wind speed at Thompson Island for the month of January 2008, at the highest anemometer height of 40 m.

