



# Renewable Energy Research Laboratory

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## Data Update for Thompson Island, Boston Harbor, MA November 2005

Prepared for  
Massachusetts Technology Collaborative  
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### Monthly Data Summary for November 2005

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			Prevailing Wind Direction
	Mean [m/s]	Max [m/s]	Turbulence Intensity	
40 m	6.09	16.75	0.15	225, SW
25 m	5.86	16.27	0.17	225, SW

The data can be found at the Renewable Energy Research Laboratory web site:  
[http://www.ceere.org/rerl/rerl\\_resourcedata.html](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 [%]	92.61

### Maintenance Issues and Changes to Site Configuration

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

- The primary anemometer at 40 m height, called Anem40a, failed on November 10, 2005. This failure is the cause of the lower than normal Net Data Recovery percentage. The secondary anemometer at 40 m, called

Anem40b, is now the only sensor contributing to the mean wind speed at 40 m. The failed sensor will be replaced during the spring of 2006.

### Monthly Data Time Series

Seen below is a graph of wind speed at Thompson Island for the month of November 2005, at the highest anemometer height of 40 m.

