



# Renewable Energy Research Laboratory

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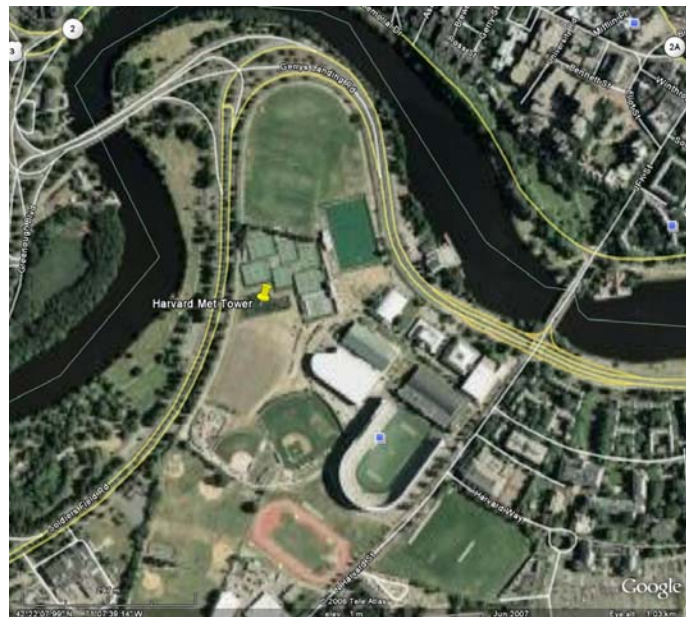


## Data Update for Harvard October 2008

### Monthly Data Summary for October 2008

#### Site Description

This update summarizes the monthly data results for the Harvard monitoring site in Boston, MA, at  $42^{\circ} 22' 08.33''$  N,  $71^{\circ} 07' 46.20''$  W (NAD 83)



#### Tower and Sensors

The wind monitoring equipment is mounted on a 50 m NRG Systems meteorological tower and includes:

- 4 counts of NRG #40 anemometers, two each at a height of 50 m and 35 m.
- 2 counts of NRG #200P wind vane, one each at a height of 50 m and 35 m.
- One NRG #110S temperature sensor at a height of 2 m

#### Data Summary Statistics

A summary of the data during the reporting period are included in the following table. The wind shear power law exponent is based on the mean wind speeds during the measurement period. For more information on wind shear and turbulence intensity, see: <http://www.ceere.org/rerl/publications/published/communityWindFactSheets/>.

Height	Wind Speed			Prevailing Wind Direction	Wind Shear Power Law Exponent
	Mean [m/s]	Max [m/s]	Mean Turbulence Intensity at 10 m/s		
50 m	4.27	14.0	0.19	WSW	0.37
35 m	3.74	12.7	0.20	WSW	

### Monthly Data Time Series

Seen below is a graph of 10 minute average wind speed at Harvard for the month of October 2008, at the highest anemometer height of 50 m.

**Harvard Wind Speed Time Series, 50 m**

