Department of Mechanical & Industrial Engineering 160 Governors Drive, Amherst, MA 01003-9265 Tel: 413-545-4359 Fax: 577-1301 www.umass.edu/windenergy

# Data Update for Paxton, MA April, 2010

Prepared for Massachusetts Clean Energy Center, 55 Summer Street, 9th Floor, Boston, MA 02110 By Eric Morgan

## Monthly Data Summary for April, 2010

This update summarizes the monthly data results for the Paxton, MA monitoring site at 42° 18' 11.6" N, 71° 53' 50.9" W (WGS84). More information on the sensors and site can be found at <a href="http://www.ceere.org/rerl/rerl\_resourcedata.html">http://www.ceere.org/rerl/rerl\_resourcedata.html</a>.

Height	Wind Speed			Wind Direction
	Mean [m/s]	Max [m/s]	Turbulence	Prevailing
			Intensity	Direction
78m	7.72	20.18	0.09	NNW, 337.5

The data can be found at the Renewable Energy Research Laboratory web site: <a href="http://www.ceere.org/rerl/rerl\_resourcedata.html">http://www.ceere.org/rerl/rerl\_resourcedata.html</a>. 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.

#### **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 [%]	87.68
Net Data Recovered [%]	76.72

### **Maintenance Issues and Changes to Site Configuration**

No maintenance or data quality events took place during April, 2010.

#### **Monthly Data Time Series**

Below is a graph of wind speed at Paxton for the month of April, 2010 at the height of 78m. Paxton Wind Speed Time Series, 78m - 01-Apr-2010 through 30-Apr-2010

