

# 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 Bishop and Clerks, Nantucket Sound, MA August 2006

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

By Chris Elkinton

### **Monthly Data Summary for August 2006**

This update summarizes the monthly data results for the Bishop and Clerks monitoring site in Nantucket Sound, MA, at 41° 34′ 27.6″ N, 70° 14′ 59.5″ W (NAD 83). More information on the sensors and site can be found at <a href="https://www.ceere.org/rerl/rerl">www.ceere.org/rerl/rerl</a> resourcedata.html.

	Wind Speed			Prevailing
Height	Mean [m/s]	Max [m/s]	Turbulence Intensity	Wind Direction
15 m	6.36	15.06	0.12	202.5, SSW

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

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 [%]	100.00
Net Data Recovered [%]	98.97

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

The following maintenance/equipment problems occurred during August 2006, and the following corrective action was taken:

• The data logger solar charging system was upgraded on August 17.

## **Monthly Data Time Series**

Seen below is a graph of wind speed at Bishop and Clerks for the month of August 2006, measured at the anemometer height of 15 m.

