

# Renewable Energy Research Laboratory

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## Data Update for Bishop and Clerks, Nantucket Sound, MA June 2010

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

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## **Monthly Data Summary for June 2010**

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\_resourcedata.html">www.ceere.org/rerl/rerl\_resourcedata.html</a>.

	Wind Speed			Prevailing
Height	Mean [m/s]	Max [m/s]	Turbulence Intensity	Wind Direction
15 m	7.022	18.26	0.0795	S

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

#### **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
Net Data Recovered [%]	87.303

# Maintenance Issues and Changes to Site Configuration

Net data recovery in this period is low because the Voltage sensor stopped operating properly in December 2009.

A maintenance trip was taken to Bishop and Clerks on June 18, 2010. Measurements were taken new mounting hardware to the mast in a more secure location on the lighthouse. The iPack modem was removed for repair. Logger batteries and memory card were replaced. Sensors were not replaced.

## **Monthly Data Time Series**

Seen below is a graph of wind speed at Bishop and Clerks for the month of June 2010, measured at the anemometer height of 15 m.

