



Bringing Climate Change Awareness to the Community

Grace Desrochers, Alexandria Simmons, and Kathy Hockman



Abstract:

Our goal this year was to establish a weather monitoring system and set up a data base for comparison to other existing data bases. The purpose of this year's project was to lay the groundwork for future work in collecting, analyzing, and sharing weather data as indicators of climate change in our area of Vermont, specifically the Northeast Kingdom. A long term goal is to be able to tie our data in with similar projects underway by Johnson State College and others.

Background:

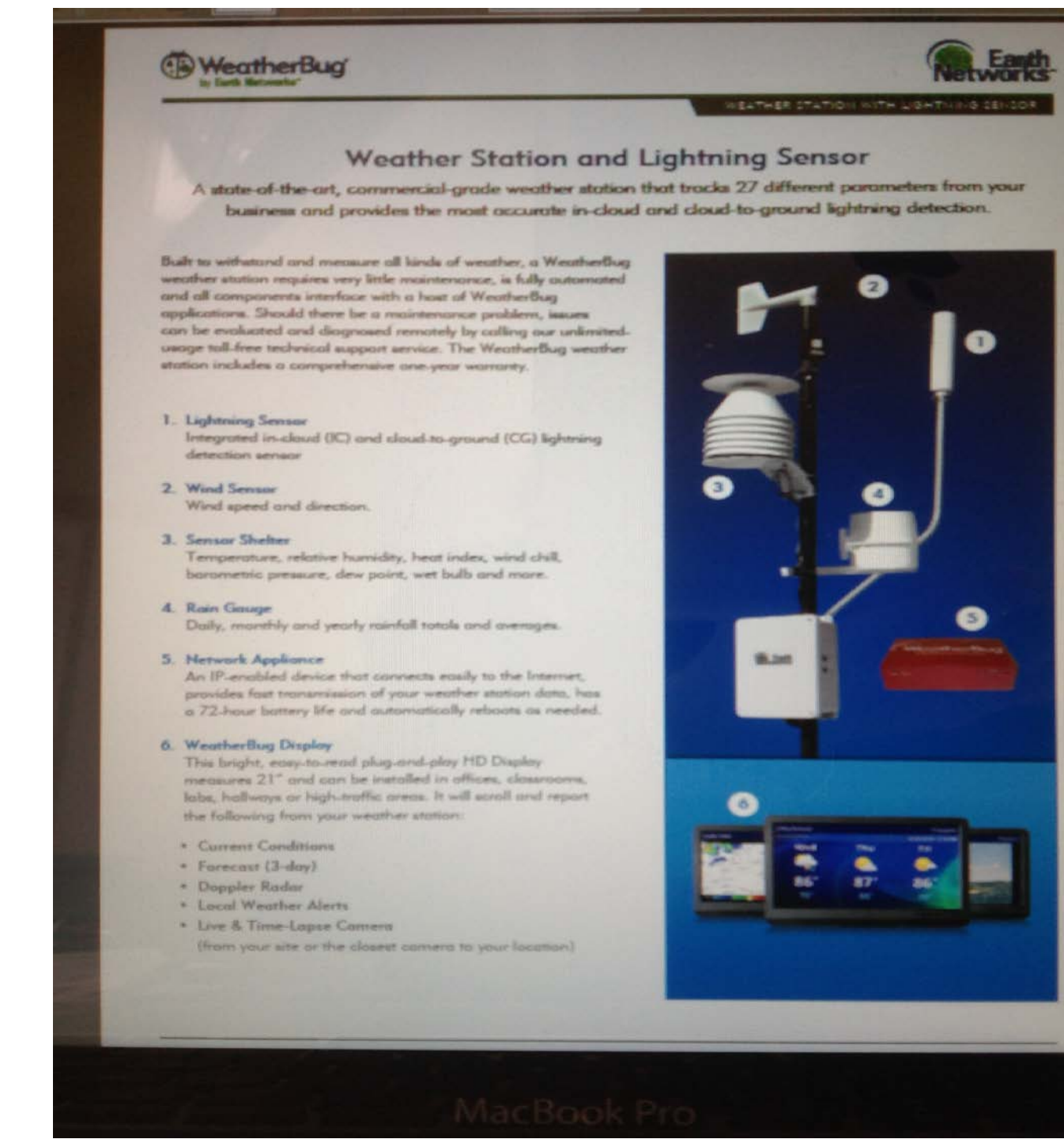
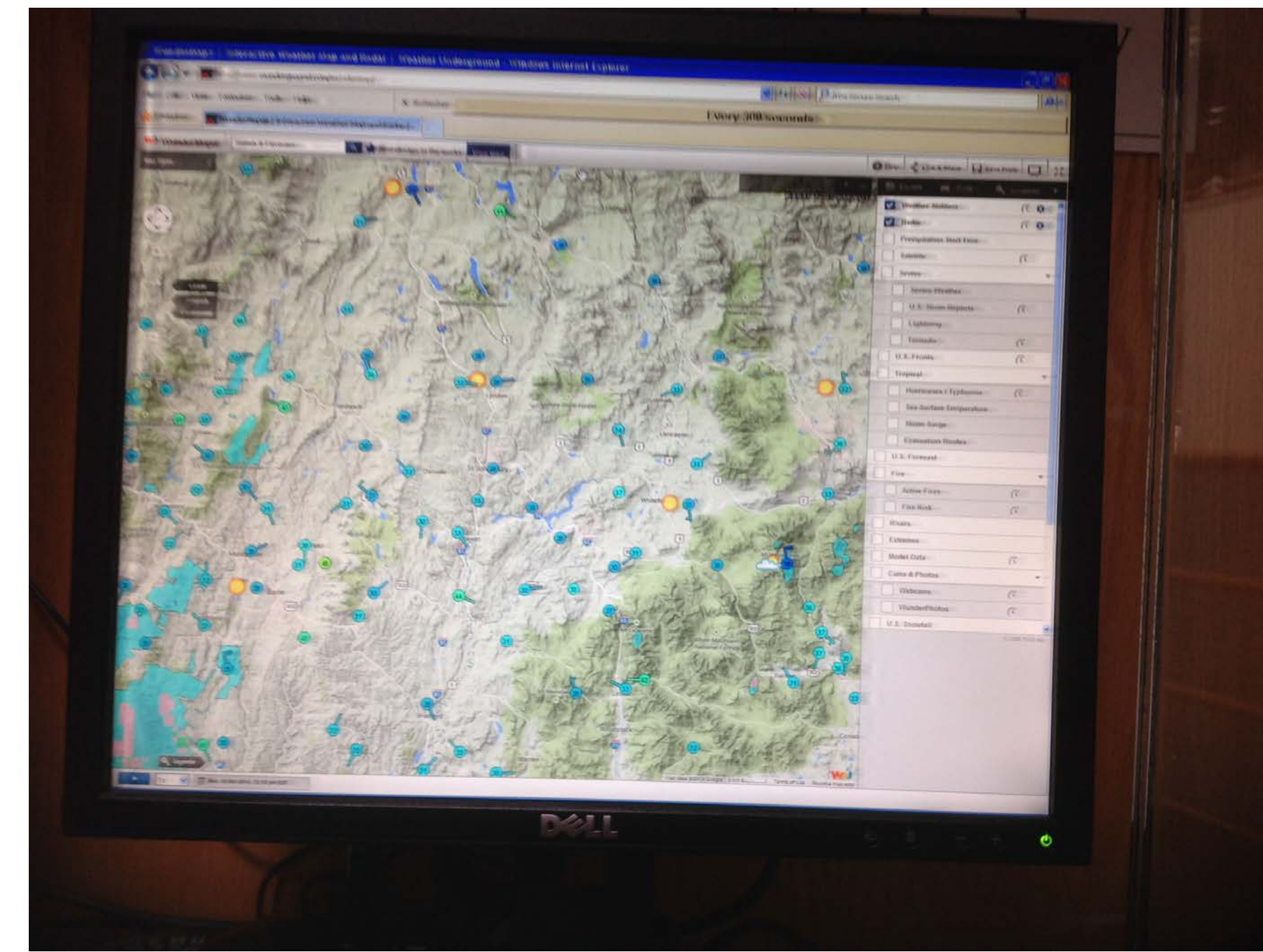
For many years St. Johnsbury Academy has had a WeatherBug weather station reporting live data displayed in Streeter Hall that is visible to every student who walks by. One of our goals with this project is to add another the weather bug display to enable daily class use of the functioning and recording piece of equipment in the classroom as well as the data. Our hope is that this will bring the data alive in a more relevant way for the students of St. Johnsbury Academy so that they will see the daily fluctuations in weather as part of the bigger pattern of our local climate.

With future data sets being used in classes, the students will begin to see the connection of local daily and seasonal fluctuations to the bigger global changes. We hope to begin to assimilate our work and data into the work being done by other groups on campus who are working at greening up our campus with respect to power consumption, carbon emissions, and efficiency of comparative energy sources, both green and traditional.

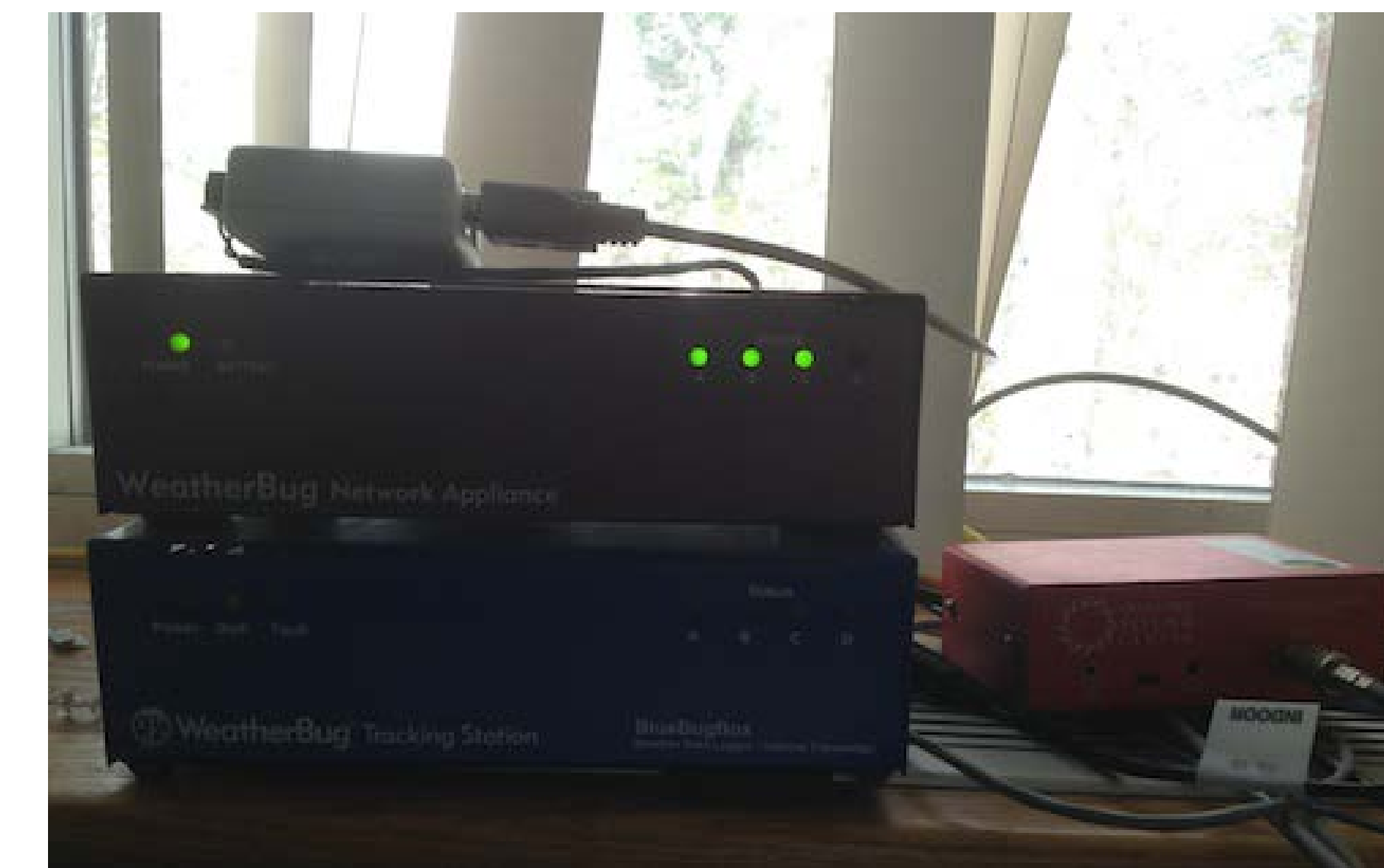
Methods:

Our methods were essentially simple. Locate the weather monitoring system on our campus. Determine if it was functional. Identify what data was being collected and where it was archiving, if at all. Access the data and download for analyzing.

In reality, the process was much more difficult than that. We were able to locate the collection system on the roof edge of Streeter Hall. We were able to locate the component parts of the system that were in the building – specifically the Red Box and the display monitor. But the system was not sending data to the WeatherBug server and had not been for months. The side effect of nobody at the Academy being responsible for monitoring it or using it.



Our Weather Data System



Future Plans and Goals:

Our future plans and goals include obtaining funding for a second monitor to be able to display the current weather in the classroom, in addition to the display in the hall.

The research questions that we hope to answer with future studies include:

- What climate change data is available in the St. Johnsbury area for our use?
- How can we raise awareness of climate change in the St. Johnsbury community?

The future brings many things and we wish to bring our community to a more climate conscious and climate friendly existence. We believe that through clear and effective scientific communication and presentation we can help move the school to a more self sustaining school community. This would be in conjunction with the many other greening programs and activities also under way at the Academy. We want to bring the WeatherBug station into the classroom to get the energy of the student body behind us by making climate conditions and weather a visual part of the academic day. With us doing this we hope to encourage local projects such as a garden or nature's classroom. Down the road this project will be used in many of the Science department classrooms and hand in hand with the Environmental Sciences program at the Academy.



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