



# Build the Maryland All-Sky Network!

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## College Park scholars

### Background

This project was done for the University of Maryland Observatory under the guidance of Elizabeth Warner of the UMD Astronomy department. The reasoning behind purchasing the cameras was that while there is some camera coverage in Maryland, not all of the Maryland sky is covered and only some of the cameras are all-sky cameras. Thus our plan was to fill this "dark spot" and provide the image data to the general public through the internet using all-sky cameras.

### Purpose

The purpose of my Capstone project was to raise money for and help set up the required camera systems for the University of Maryland Observatory's All-Sky Camera Network.

### What is an All-Sky Camera?

An all-sky camera is a type of camera designed for taking high quality pictures of the sky and uploading them to the Internet twenty four hours a day. These can be used to watch for celestial lights and check sky quality.

The specific camera that we raise money for was the Oculus All-Sky Camera which provided 150° to 180° coverage of the night sky, depending on the lense used, and uses a 1.4 megapixel camera.



A screenshot from the movie we created

### Method

We chose to use UMD's own crowd-sourced funding platform, LaunchUMD, to raise money for the project. To raise awareness about the project we also created a short movie explaining the problem, posted fliers for the project around campus, and got in contact with potential donors.

After purchasing the cameras we then set then located the best places to install them using Google Maps, star-charts, and input from our donors.

### Results

We raised over \$2500 in the first two days and ended with \$8745, surpassing both our starting goal and stretch goal. Thanks to generosity of our donors and the help of GRAD-MAP and Montgomery College we were able to successfully fill the "dark spot" of camera footage of the Maryland sky and provide free access to the data we collect with the cameras.

From this experience we learned that running a month long fund raising campaign requires a lot more effort than one might think and that the project generated a lot of public interest.



An example Oculus All-Sky Camera Setup



**Build the Maryland All-Sky Network**

By Elizabeth M Warner

Observe the sky above College Park and Rockville, Maryland from the comfort of your couch by helping us build the Maryland All-sky Camera Network.

**\$8,745**

**174%** Funded    **103** Donors    **0** Days

### References

<http://www.sxccd.com/oculus-all-sky-camera>

With Special Thanks To Elizabeth Warner, GRAD-MAP, AstroTerps, and all our donors